

Programmer Manual



VM5000 **Automatic Video Measurement Set** **071-1574-01**

This document applies to Option SD/HD software version 2.X and above.

This document applies to Option VGA software version 1.X and above.

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Appendix

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Remote Commands

Remote Commands

You can control the VM5000 through the GPIB interface using commands and queries. The remote commands have the same functionalities as the menus and buttons in the user interface. You can see the effect of the commands on the interface as they are received.

NOTE. All oscilloscope platform GPIB commands are supported on the VM5000 instrument. For documentation on these commands, please refer to the TDS5000B GPIB Online Programmer Guide provided on the TDS5000 product software CD (063-3692-XX); see the installation instructions in the CD booklet.

This section covers the following information:

- *Syntax*, page 1-1
- *Remote Startup and Exit of the Instrument*, page 1-4
- *Compatibility of VM5000 Option HD with the VM5000HD*, page 1-5

The Option SD/HD section covers the following information:

- *Option SD/HD Command Groups*, page 2-1
- *Option SD/HD Commands*, page 2-9

The Option VGA section covers the following information:

- *Option VGA Command Groups*, page 3-1
- *Option VGA Commands*, page 3-37

Syntax

Commands consist of set commands and query commands (usually called commands and queries). Commands modify the VM5000 settings or tell the instrument to perform a specific action. Queries cause the VM5000 to return data and information about its status.

Most commands have both a set and a query form, although some commands only have a query form.

Command Structure

VM5000 instrument commands have the following structure:

:VARIABLE:VALUE "<Command>", "<Argument>"

- You can abbreviate VARIable:VALue to VARI:VAL if desired, and it is not case sensitive.
- There are no abbreviated versions of the “<Command>”, “<Argument>” part of the VM5000 commands; you must enter the full name of this part of a command.
- The <Command> field is case sensitive, and use of incorrect command case spelling can result in an unexpected response from the instrument.
- All commands have a single <Argument>, which is case insensitive and cannot be the empty string “”.
- Arguments are limited to a maximum of 60 characters. Arguments longer than 60 characters should be avoided since they can cause unexpected behavior of the instrument and may require the application to be restarted.
- The comma character (,), the colon character (:), and the double quote character (”) are special characters and should not be used in the argument, otherwise unexpected behavior can result. All other printable characters are permitted in the argument.
- Commands that accept numeric arguments accept either integer or floating point values, with or without an exponent. This is equivalent to GPIB standard numeric format <NR1>.
- The VM5000 instrument does not support using a semicolon character (;) to concatenate commands.

Query Structure

VM5000 instrument queries have the following structure:

:VARIable:VALue? “<Command>”

- You can abbreviate VARIable:VALue? to VARI:VAL? if desired, and it is not case sensitive.
- There are no abbreviated versions of the “<Command>” part of the VM5000 queries; you must enter the full name of a query.
- The <Command> field is case sensitive, and use of incorrect command case spelling can result in in an unexpected response from the instrument.
- The VM5000 instrument does not support using a semicolon character (;) to concatenate queries.
- Query responses are always in upper case.
- The units and precision of result queries are identical to those in the user interface and those produced by generating a report.

- In the current version (1.X) of the software, fractional numbers are not rounded as they were in the previous software version. If you enter a fractional number for a line number instead of whole number, you will receive an error.
- When specifying a name for a file (ReportGenerate or SaveSettings), you must include the file extension (.rtf, .pdf, .csv, or .vmset) or an error will occur.
- A 50 ms delay must occur between GPIB Set commands to ensure that the GPIB control program does not overflow the internal command buffer of the instrument. See *OpComplete* for more information on page 2-115.

Remote Startup and Exit of the Instrument

To start the application using remote commands, use the following command for Option SD/HD:

```
application:activate "VM5000 HD and SD Video"
```

To start the application using remote commands, use the following command for Option VGA:

```
application:activate "VM5000 VGA Video"
```

To exit the application using remote commands, use the following command:

```
VARIABLE:VALUE "application", "exit"
```

You can check whether or not the VM5000 application is running using the following query:

```
VARIABLE:VALUE? "application"
```

If the application is running, this query will return "VM5000". However, if the application is not currently running, it will return the empty string "".

Compatibility of the VM5000 Option HD with the VM5000HD

If you are upgrading an existing VM5000HD, you should note that some default settings and command functionality have changed.

GPIB command differences

The changes to the GPIB commands are as follows:

- Default commands set status.
- Sync command results for the bi-level sync are the same format as the tri-level sync (for your convenience). The fields that do not apply to a bi-level sync return dashes. For example, bi-level sync does not have a positive going sync, so the positive sync width will be dashes.
- Sync command has three items added to the end.

Table 1-1: Compatibility of the VM5000 Option HD and SD with the VM5000HD

Description of setting	OLD	NEW
Default trigger channel	CH1	CH4
Operation menu setting "Run Mode" default	Continuously	Once



Option SD/HD Remote Commands

Option SD/HD Remote Commands

Command Groups

Table 2-1 through Table 2-9 lists the commands organized by functional group. (Refer to the *Table of Contents* for a list of all the commands in alphabetical order.)

Table 2-1: Configuration commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
AutoScale	Set or query whether to use auto scale during measurement
AutoScaleInit	Set or query specifies the starting value used by the AutoScale command
ChannelDelaySet	Set or query whether to measure Channel Delay upon Execute
ColorBarsSet	Set or query whether to measure Color Bars upon Execute
ColorSpace	Set or query the video color space to use for measurement
Display	Set or Query the Picture, Vectorscope, or Noise Spectrum display
Error	Reset error to 0 or query error value
Format	Set or query the video format to use for measurement
FrequencyResponseMeasLocation	Set or query the location at which the Frequency Response measurement is made
FrequencyResponseSet	Set or query whether to measure Frequency Response measurement is enabled
LogErrors	Set or query whether errors are logged to a file
MultiBurstSet	Set or query whether to measure Multiburst upon Execute
NoiseCursorPos	Set or query the cursor position for the Noise Spectrum display
NoiseSet	Set or query whether to measure Noise upon Execute
NonLinearitySet	Set or query whether to measure Non-Linearity upon Execute
PixAspectRatio	Set or query Picture aspect ratio
PixLine	Set or query Picture line number to bright up
PopupWarnings	Set or query if Pop-up warnings appear on screen
RunMode	Set or query run mode to use for measurement
SetupAndOrRun	Set or query setup mode to use for measurement
ShortTimeDistortionSet	Set or query. whether to measure short time distortion upon execute
SyncSet	Set or query whether to measure Sync upon Execute
Trigger	Set or query the video trigger to use for measurement
VectorscopeGrat	Set or query Vectorscope graticule

Table 2-1: Configuration commands (Option SD/HD) (Cont.)

Header	Description
VectorscopeLine	Set or query Vectorscope Line number to bright up
VectorscopeScale	Set or query Vectorscope scale
Warning	Reset warning to 0 or query warning value.
WarningReportingMeasure	Set or query whether measurement warnings create a warning message
WarningReportingResults	Set or query whether results warnings are to create a warning message
WarningReportingSignal	Set or query whether signal warnings create a warning message

Table 2-2: Miscellaneous commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
AppStatus	Query whether Application Status is: Configure, Measuring, Done, or Reported
ID?	Query the ID/Version of the application

Table 2-3: Reports commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	Specifies the file type to be used when ReportGenerate is invoked.
ReportCSVType	Generates a measurement report of the specified type (if a measurement has been run and results are available), and saves it in the specified file
ReportGenerate	Generates a measurement report of the specified type (if a measurement has been run and results are available), and saves it in the specified file
ReportMeasurements	Set or query the measurements to write to the report when ReportGenerate is called
ReportString	Set or query any additional information to write to the report when ReportGenerate is called

Table 2-4: Measurement Setup commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
ChannelDelayAverage	Set or query the number of samples over which to average the Channel Delay measurement
ChannelDelayLine	Set or query line number that is to be used for the Channel Delay measurement

Table 2-4: Measurement Setup commands (Option SD/HD) (Cont.)

Header	Description
ColorBarsAverage	Set or query the number of samples over which to average the Color Bars measurement
ColorBarsLine	Set or query line number that is to be used for the Color Bars measurement
FrequencyResponseAverage	Set or query frequency response average
FrequencyResponseFilterBW	Set or query the bandwidth used in the RMS distortion field in the Frequency Response measurement
FrequencyResponseFreq	Set or query frequency response frequency
FrequencyResponseLine	Set or query frequency response line number
FrequencyResponseTime	Set or query frequency response time
MultiburstAverage	Set or query the number of samples over which to average the Multiburst measurement
MultiburstLine	Set or query line number that is to be used for the Multiburst measurement
NoiseAverage	Set or query the number of samples over which to average the Noise measurement
NoiseBW	Set or query bandwidth of noise filter that is to be used for Noise measurement, if the unweighted noise filter is selected
NoiseCursorPos	Set or query the position of the cursor in the noise spectrum display
NoiseFilter	Set or query type of noise filter that is to be used for Noise measurement
NoiseLine	Set or query line number that is to be used for the Noise measurement
NonLinearityAverage	Set or query the number of samples over which to average the Non-Linearity measurement
NonLinearityLine	Set or query line number that is to be used for the Non-Linearity measurement
ShortTimeDistortionAverage	Set or query Short Time Distortion average
ShortTimeDistortionLine	Set or query Short Time Distortion line number
SyncAverage	Set or query the number of samples over which to average the Sync measurement
SyncLine	Set or query line number that is to be used for the Sync measurement

Table 2-5: Results commands (Option SD/HD)

Header	Description
:VARiable:VALue:	
ChannelDelayAll?	Query all three delay measurements performed by Channel Delay
ChannelDelayCh1Ch2?	Query the Ch1Ch2 delay measurement performed by Channel Delay
ChannelDelayCh1Ch3?	Query the Ch1Ch3 delay measurement performed by Channel Delay
ChannelDelayCh2Ch3?	Query the Ch2Ch3 delay measurement performed by Channel Delay

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
ChannelDelayPassAll?	Query all three channel delay measurements for pass/fail status
ChannelDelayPassCh1Ch2?	Query the Ch1Ch2 channel delay measurement for pass/fail status
ChannelDelayPassCh1Ch3?	Query the Ch1Ch3 channel delay measurement for pass/fail status
ChannelDelayPassCh2Ch3?	Query the Ch2Ch3 channel delay measurement for pass/fail status
ChannelDelayRelAll?	Query all three channel delay relative results
ChannelDelayRelCh1Ch2?	Query the relative results for the Ch1Ch2 channel delay measurement
ChannelDelayRelCh1Ch3?	Query the relative results for the Ch1Ch3 channel delay measurement
ChannelDelayRelCh2Ch3?	Query the relative results for the Ch2Ch3 channel delay measurement
ColorBarsmVCh[1..3]?	Query all eight level values resulting from Color Bars measurement for the specified channel
ColorBarsmVCh[1..3]Val[1..8]?	Query the value resulting from the specified Color Bars channel and value measurement
ColorBarsPassCh[1..3]?	Query the pass/fail status of all eight level values resulting from the Color Bars measurement for the specified channel
ColorBarsPassCh[1..3]Val[1..8]?	Query the pass/fail status from the Color Bars measurement for the specified channel and value
ColorBarsRelmVCh[1..3]?	Query all eight level values resulting from Color Bars relative measurement for the specified channel in mV
ColorBarsRelmVCh[1..3]Val[1..8]?	Query the relative results value resulting from the specified Color Bars channel and value measurement in mV
ColorBarsRelPctmVCh[1..3]?	Query all eight level values resulting from Color Bars relative measurement for the specified channel in Percent
ColorBarsRelPctmVCh[1..3]Val[1..8]?	Query the value resulting from the Color Bars relative result for the specified channel and value in Percent
FrequencyResponseCh[1..3]?	Query all five values resulting from the Frequency Response measurement for the specified channel
FrequencyResponseCh[1..3]Val[1..5]?	Query the value resulting from the specified Frequency Response channel and value measurement
FrequencyResponsePassCh[1..3]?	Query the pass/fail status for all five values resulting from the Frequency Response relative results for the specified channel
FrequencyResponsePassCh[1..3]Val[1..5]?	Query the pass/fail status resulting from the Frequency Response relative results for the specified channel and value measurement
FrequencyResponseRelCh[1..3]?	Query all five pass/fail statuses resulting from the Frequency Response relative results for the specified channel
FrequencyResponseRelCh[1..3]Val[1..5]?	Query the value resulting from the Frequency Response relative results for the specified channel and value measurement
FrequencyResponseRelPctCh[1..3]?	Query all five values resulting from the Frequency Response Percent relative results for the specified channel

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
FrequencyResponseRelPctCh[1..3]Val[1..5]?	Query the value resulting from the Frequency Response Percent relative results for the specified channel and value measurement
MultiburstAmpdBCh[1..3]?	Query all six amplitude values resulting from the specified Multiburst channel measurement
MultiburstAmpdBCh[1..3]Val[1..6]?	Query the amplitude value resulting from the specified Multiburst channel and value measurement
MultiburstFlagmVCh[1..3]?	Query the Flag value resulting from the Multiburst measurement for the specified channel
MultiburstFreqCh[1..3]?	Query all six frequency values resulting from the specified Multiburst channel measurement
MultiburstFreqCh[1..3]Val[1..6]?	Query the frequency value resulting from the specified Multiburst channel and value measurement
MultiburstPassAmpdBCh[1..3]?	Query the pass/fail status for all six amplitude values resulting from the specified Multiburst channel measurement
MultiburstPassAmpdBCh[1..3]Val[1..5]?	Query the pass/fail status resulting from the Multiburst relative results for the specified channel and value measurement
MultiburstPassFlagmVCh[1..3]?	Query the pass/fail status for the Flag value resulting the from Multiburst measurement for the specified channel
MultiburstPassFreqCh[1..3]?	Query the pass/fail status for all six frequency values resulting from the specified Multiburst channel measurement
MultiburstPassFreqCh[1..3]Val[1..6]?	Query the pass/fail status for the frequency value resulting from the specified Multiburst channel and value measurement
MultiburstRelAmpdBCh[1..3]?	Query all six amplitude values resulting from the Multiburst relative results for the specified channel
MultiburstRelAmpdBCh[1..3]Val[1..6]?	Query the amplitude value resulting from the specified Multiburst relative channel and value measurement
MultiburstRelFlagmVCh[1..3]?	Query the Flag value resulting from the Multiburst relative measurement for the specified channel
MultiburstRelFreqCh[1..3]?	Query all six frequency values resulting from the specified Multiburst relative channel measurement
MultiburstRelFreqCh[1..3]Val[1..6]?	Query the frequency value resulting from the specified Multiburst relative channel and value measurement
MultiburstRelPctAmpdBCh[1..3]?	Query all six amplitude values resulting from the Multiburst Percent relative results for the specified channel
MultiburstRelPctAmpdBCh[1..3]Val[1..6]?	Query the amplitude value resulting from the specified Multiburst Percent relative channel and value measurement
MultiburstRelPctFlagmVCh[1..3]?	Query the value for the Flag value resulting from the Multiburst Percent relative measurement for the specified channel
MultiburstRelPctFreqCh[1..3]?	Query all six frequency values resulting from the specified Multiburst Percent relative channel measurement

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
MultiburstRelPctFreqCh[1..3]Val[1..6]?	Query the frequency value resulting from the specified Multiburst Percent relative channel and value measurement
NoiseAmpdBCh[1..3]?	Query amplitude value (in dB) resulting from Noise measurement for the specified channel
NoiseAmpmVCh[1..3]?	Query amplitude value (in mV) resulting from Noise measurement for the specified channel
NoisePassdBCh[1..3]?	Query the pass/fail status for the amplitude value (in dB) resulting from the specified Noise channel measurement
NoisePassmVCh[1..3]?	Query the pass/fail status for the amplitude value (in mV) resulting from the specified Noise channel measurement
NoiseRelAmpdBCh[1..3]?	Query amplitude value (in dB) resulting from the Noise relative result for the specified channel
NoiseRelAmpmVCh[1..3]?	Query amplitude value (in mV) resulting from the Noise relative result for the specified channel
NonLinearityPassCh[1..3]?	Query the pass/fail status for all six non-linearity values resulting from the Non-Linearity measurement for the specified channel
NonLinearityPassCh[1..3]Max?	Query the pass/fail status for the maximum value resulting from the Non-Linearity measurement for the specified channel
NonLinearityPassCh[1..3]Val[1..5]?	Query the pass/fail status for the value resulting from the Non-Linearity measurement for the specified channel and value
NonLinearityPctCh[1..3]?	Query all six Non-linearity values resulting from the Non-Linearity measurement for the specified channel
NonLinearityPctCh[1..3]Max?	Query the maximum Non-linearity value for the specified channel
NonLinearityPctCh[1..3]Val[1..5]?	Query the maximum Non-linearity value for the specified channel and value
NonLinearityRelPctCh[1..3]?	Query all six non-linearity values resulting from the Non-Linearity relative measurement for the specified channel
NonLinearityRelPctCh[1..3]Max?	Query the maximum Non-linearity relative value for the specified channel
NonLinearityRelPctCh[1..3]Val[1..5]?	Query the maximum Non-linearity relative value for the specified channel and value
ShortTimeDistortionCh[1..3]?	Query all six values resulting from the specified Short Time Distortion channel measurement
ShortTimeDistortionCh[1..3]Val[1..6]?	Query the value resulting from the specified Short Time Distortion channel and value measurement
ShortTimeDistortionK2T?	Query the result for the K2T value resulting from the Short Time Distortion measurement
ShortTimeDistortionPassCh[1..3]?	Query the pass/fail status for all six values resulting from the specified Short Time Distortion channel measurement
ShortTimeDistortionPassCh[1..3]Val[1..6]?	Query the pass/fail status for the value resulting from the specified Short Time Distortion channel and value measurement

Table 2-5: Results commands (Option SD/HD) (Cont.)

Header	Description
ShortTimeDistortionPassK2T?	Query the pass/fail status for the K2T value resulting from the Short Time Distortion measurement
ShortTimeDistortionRelCh[1..3]?	Query all six values resulting from the specified Short Time Distortion relative channel measurement
ShortTimeDistortionRelCh[1..3]Val[1..6]?	Query the value resulting from the specified Short Time Distortion relative channel and value measurement
ShortTimeDistortionRelK2T?	Query the K2T value resulting from the Short Time Distortion relative measurement
ShortTimeDistortionResults?	Query all values resulting from the Short Time Distortion measurement
SyncLevelsmV?	Query all synchronization levels resulting from the Sync measurement
SyncLevelsmVVal[1..3]?	Query the specified synchronization level resulting from the Sync measurement
SyncPassLevelsmV?	Query the pass/fail status for all synchronization levels resulting from the Sync measurement
SyncPassLevelsmVVal[1..3]?	Query the pass/fail status for the specified synchronization level resulting from the Sync measurement
SyncPassTimes?	Query the pass/fail statuses for all synchronization times resulting from the Sync measurement
SyncPassTimesVal[1..10]?	Query the pass/fail status for the specified synchronization time resulting from the Sync measurement
SyncRelLevelsmV?	Query the relative values for all synchronization levels
SyncRelLevelsmVVal[1..3]?	Query the relative value for the specified synchronization level
SyncRelTimes?	Query the relative values for all synchronization times
SyncRelTimesVal[1..10]?	Query the relative value for the specified synchronization time
SyncTimes?	Query all synchronization times resulting from the Sync measurement
SyncTimesVal[1..10]?	Query the specified synchronization time resulting from the Sync measurement

Table 2-6: Run commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
Execute	Execute or stop the current set measurement(s), or query whether any measurement is currently being executed
OPComplete	Controls VM5000 GPIB scripts by ensuring that the previous command is ready before either querying its value or calling the next command.
StoponError	Set or query whether Stop on Error is enabled

Table 2-7: Settings commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
DefaultSettings	Restore default (factory) settings
RecallSettings	Recall settings stored in the specified path/filename
SaveSettings	Save current settings in the specified path/filename

Table 2-8: Status commands (Option SD/HD)

Header	Description
ChannelDelayStatus	Query the status of the Channel Delay measurement
ColorBarsStatus	Query the status of the Color Bars measurement
FrequencyResponseStatus	Query the status of the Frequency Response measurement
MultiburstStatus	Query the status of the Multiburst measurement
NoiseStatus	Query the status of the Noise measurement
NonLinearityStatus	Query the status of the NonLinearity measurement
ShortTimeDistortionStatus	Query the status of the Short Time Distortion measurement
SyncStatus	Query the status of the Sync measurement

Table 2-9: Reference and Limit Testing commands (Option SD/HD)

Header	Description
:VARIABLE:VALue	
LimitFileLoad	Specifies Limit file to be loaded for Limit Testing
LimitSet	Set or query whether Limit Testing is performed upon Execute
ReferenceFileLoad	Specifies Reference file to be loaded for Relative to Reference testing
ReferenceFileSave	Saves the current measurement results to a Reference file that can be used for Relative to Reference testing
ReferenceSet	Set or query whether Reference Testing is enabled or disabled

Commands

The following remote commands are listed in alphabetical order.

AppStatus

Query whether Application Status is: Configure, Measuring, Done, or Reported.

Syntax VARIable:VALue? "AppStatus"

Group Miscellaneous

Returns Query returns the application status as Configure, Measuring, Done, or Reported.

Examples VARIable:VALue? "AppStatus"

Query may return: "AppStatus CONFIGURE"

AutoScale <setting>

Set or query whether to use auto scale during measurement.

Syntax VARIable:VALue “AutoScale”, “<setting>”
 VARIable:VALue? “AutoScale”

Group Configuration

Arguments <setting> specifies auto scale setting that is to be used.
 Valid settings are: OFF, ON, 0, 1.

Returns Query returns the current specified setting.

Examples VARIable:VALue “AutoScale”, “ON”
 VARIable:VALue? “AutoScale”

Query may return: “AutoScale 0”

AutoScaleInit <setting>

AutoScaleInit specifies the starting values used by the AutoScale command. Loading specific starting values can speed up the process of taking measurements.

Syntax	VARIABLE:VALUE "AutoScaleInit", "[LastMeas PreStored Default]" VARIABLE:VALUE? "AutoScaleInit"
Group	Configuration
Arguments	<p>Valid settings are: LastMeas, PreStored, and Default.</p> <p>LastMeas loads the final AutoScale values set at the end of the last measurement taken.</p> <p>PreStored loads the initial values specified by the last .vmset loaded. If no .vmset has been loaded since the software was started, PreStored loads the values saved the last time the software was exited. Default loads the factory default settings. Default acts only once.</p> <p>When you issue AutoScaleInit Default, the program loads the factory default settings and then reverts to the previous state. LastMeas and PreStored are settings and Default is not a setting. The next time Auto Scale is run, it will begin with either the settings from the last measurement or the settings loaded with the last .vmset, it will not begin with the factory default settings.</p>
Returns	Query returns the current specified setting.
Examples	<p>VARIABLE:VALUE "AutoScaleInit", "InitMeas" VARIABLE:VALUE? "AutoScaleInit"</p> <p>Query may return: "AutoScaleInit InitMeas"</p>

ChannelDelayAll?

Query all three delay measurements performed by Channel Delay.

Syntax VARIABLE:VALUE? "ChannelDelayAll"

Group Results

Arguments None

Related Commands ChannelDelayCh1Ch2?
ChannelDelayCh1Ch3?
ChannelDelayCh2Ch3?

Returns Returns all three delay measurements (in nanoseconds) performed by Channel Delay, in this order: Ch1Ch2 Ch1Ch3 Ch2Ch3.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayAll"

Query may return: "ChannelDelayAll 1.84 0.04 -1.54"

ChannelDelayAverage <samples>

Set or query the number of samples over which to average the Channel Delay measurement.

Syntax VARIable:VALue “ChannelDelayAverage”, “<samples>”
 VARIable:VALue? “ChannelDelayAverage”

Group Setup

Related Commands ChannelDelayLine

Arguments <samples> can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current number of samples for Channel Delay measurement.

Examples VARIable:VALue “ChannelDelayAverage”, “8”
 VARIable:VALue? “ChannelDelayAverage”

Query may return: “ChannelDelayAverage 8”

ChannelDelayCh1Ch2?

Query the Ch1Ch2 delay measurement performed by Channel Delay.

Syntax VARIABLE:VALUE? "ChannelDelayCh1Ch2"

Group Results

Arguments None

Related Commands ChannelDelayAll?
ChannelDelayCh1Ch3?
ChannelDelayCh2Ch3?

Returns Returns the Ch1Ch2 delay measurement (in nanoseconds) performed by Channel Delay.

Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ChannelDelayCh1Ch2"

Query may return: "ChannelDelayCh1Ch2 1.84"

ChannelDelayCh1Ch3?

Query the Ch1Ch3 delay measurement performed by Channel Delay.

Syntax VARIable:VALue? "ChannelDelayCh1Ch3"

Group Results

Arguments None

Related Commands ChannelDelayAll?
ChannelDelayCh1Ch2?
ChannelDelayCh2Ch3?

Returns Returns the Ch1Ch3 delay measurement (in nanoseconds) performed by Channel Delay.

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "ChannelDelayCh1Ch3"

Query may return: "ChannelDelayCh1Ch3 0.04"

ChannelDelayCh2Ch3?

Query the Ch2Ch3 delay measurement performed by Channel Delay.

Syntax VARIABLE:VALUE? "ChannelDelayCh2Ch3"

Group Results

Arguments None

Related Commands ChannelDelayAll?
ChannelDelayCh1Ch2?
ChannelDelayCh1Ch3?

Returns Returns the Ch2Ch3 delay measurement (in nanoseconds) performed by Channel Delay.

Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ChannelDelayCh2Ch3"

Query may return: "ChannelDelayCh2Ch3 -1.54"

ChannelDelayLine <linenumber>

Set or query line number that is to be used for the Channel Delay measurement.

Syntax VARIable:VALue “ChannelDelayLine”, “<linenumber>”
 VARIable:VALue? “ChannelDelayLine”

Group Setup

Related Commands ChannelDelayAverage

Arguments <linenumber> can only be whole numbers. Values outside the range will be adjusted to be within range.

Returns Query returns the current line number for Channel Delay measurement.

Examples VARIable:VALue “ChannelDelayLine”, “200”
 VARIable:VALue? “ChannelDelayLine”

Query may return: “ChannelDelayLine 200”

ChannelDelayPassAll?

Query all three channel delay measurements for pass/fail status.

Syntax VARIABLE:VALUE? "ChannelDelayPassAll"

Group Results

Arguments None

Related Commands ChannelDelayPassCh1Ch2?
ChannelDelayPassCh1Ch3?
ChannelDelayPassCh2Ch3?

Returns Returns all three delay measurements (in nanoseconds) performed by Channel Delay, in this order: Ch1Ch2 Ch1Ch3 Ch2Ch3.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayPassAll"

Query may return: "ChannelDelayPassAll....."

ChannelDelayPassCh1Ch2?

Query the Ch1Ch2 channel delay measurement for pass/fail status.

Syntax VARIable:VALue? "ChannelDelayPassCh1Ch2"

Group Results

Arguments None

Related Commands ChannelDelayPassAll?
ChannelDelayPassCh1Ch3?
ChannelDelayPassCh2Ch3?

Returns Returns all pass/fail status performed by Channel Delay for the Ch1Ch2 delay

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "ChannelDelayPassCh1Ch2"

Query may return: "ChannelDelayPassCh1Ch2 1"

ChannelDelayPassCh1Ch3?

Query the Ch1Ch3 channel delay measurement for pass/fail status.

Syntax VARIABLE:VALUE? "ChannelDelayPassCh1Ch3"

Group Results

Arguments None

Related Commands ChannelDelayPassAll?
ChannelDelayPassCh1Ch2?
ChannelDelayPassCh2Ch3?

Returns Returns pass/fail status performed by Channel Delay for the Ch1Ch3 delay

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayPassCh1Ch3"

Query may return: "ChannelDelayPassCh1Ch3 1"

ChannelDelayPassCh2Ch3?

Query the Ch2Ch3 channel delay measurement for pass/fail status.

Syntax VARIable:VALue? "ChannelDelayPassCh2Ch3"

Group Results

Arguments None

Related Commands ChannelDelayPassAll?
ChannelDelayPassCh1Ch2?
ChannelDelayPassCh1Ch3?

Returns Returns pass/fail status performed by Channel Delay for the Ch2Ch3 delay

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "ChannelDelayPassCh2Ch3"

Query may return: "ChannelDelayPassCh2Ch3 1"

ChannelDelayRelAll?

Query all three channel delay relative results. The relative results are calculated from values defined in the specified reference file.

Syntax VARIABLE:VALUE? "ChannelDelayRelAll"

Group Results

Arguments None

Related Commands ChannelDelayRelCh1Ch2?
ChannelDelayRelCh1Ch3?
ChannelDelayRelCh2Ch3?

Returns Returns all three relative delay measurements (in nanoseconds) performed by Channel Delay, in this order: Ch1Ch2 Ch1Ch3 Ch2Ch3.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayRelAll"

Query may return: "ChannelDelayRelAll 1.0 0.8 -1.1"

ChannelDelayRelCh1Ch2?

Query the relative results for the Ch1Ch2 channel delay measurement. The relative result is calculated from values defined in the specified reference file.

Syntax VARIABLE:VALUE? "ChannelDelayRelCh1Ch2"

Group Results

Arguments None

Related Commands ChannelDelayRelAll?
ChannelDelayRelCh1Ch3?
ChannelDelayRelCh2Ch3?

Returns Return the relative delay measurement (in nanoseconds) performed by Channel Delay for the Ch1Ch2 delay

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayRelCh1Ch2"

Query may return: "ChannelDelayRelCh1Ch2 1.5"

ChannelDelayRelCh1Ch3?

Query the relative results for the Ch1Ch3 channel delay measurement. The relative result is calculated from values defined in the specified reference file.

Syntax VARIABLE:VALUE? "ChannelDelayRelCh1Ch3"

Group Results

Arguments None

Related Commands ChannelDelayRelAll?
ChannelDelayRelCh1Ch2?
ChannelDelayRelCh2Ch3?

Returns Return the relative delay measurement (in nanoseconds) performed by Channel Delay for the Ch1Ch3 delay

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayRelCh1Ch3"

Query may return: "ChannelDelayRelCh1Ch3 1.5"

ChannelDelayRelCh2Ch3?

Query the relative results for the Ch2Ch3 channel delay measurement. The relative result is calculated from values defined in the specified reference file.

Syntax VARIABLE:VALUE? "ChannelDelayRelCh2Ch3"

Group Results

Arguments None

Related Commands ChannelDelayRelAll?
 ChannelDelayRelCh1Ch2?
 ChannelDelayRelCh1Ch3?

Returns Return the relative delay measurement (in nanoseconds) performed by Channel Delay for the Ch2Ch3 delay

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ChannelDelayRelCh2Ch3"

Query may return: "ChannelDelayRelCh2Ch3 1.5"

ChannelDelaySet <linenumber>

Set or query whether to measure Channel Delay upon Execute.

Syntax VARIABLE:VALue “ChannelDelaySet”, “<setting>”
 VARIABLE:VALue? “ChannelDelaySet”

Group Configuration

Arguments <setting> specifies whether to perform Channel Delay measurement upon Execute.
 Valid values are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1 depending on whether ChannelDelaySet measurement is selected.

Examples VARIABLE:VALue “ChannelDelaySet”, “ON”
 VARIABLE:VALue? “ChannelDelaySet”
 Query may return: “ChannelDelaySet 1”

ChannelDelayStatus

Query the status of the Channel Delay measurement.

Syntax VARIable:VALue? "ChannelDelayStatus", [--- | Done | Stopped | Pass | Fail]

Group Status

Related Commands Execute
ExecuteReport
ChannelDelaySet

Returns Query returns [--- | Done | Stopped | Pass | Fail] status of the Channel Delay measurement.

Examples VARIable:VALue? "ChannelDelayStatus"

Query may return: "ChannelDelayStatus Pass"

ColorBarsAverage <samples>

Set or query the number of samples over which to average the Color Bars measurement.

Syntax VARIABLE:VALue “ColorBarsAverage”, “<samples>”
 VARIABLE:VALue? “ColorBarsAverage”

Group Setup

Related Commands ColorBarsLine

Arguments <samples> can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current number of samples for Color Bars measurement.

Examples VARIABLE:VALue “ColorBarsAverage”, “1”
 VARIABLE:VALue? “ColorBarsAverage”

Query may return: “ColorBarsAverage 8”

ColorBarsLine <linenumber>

Set or query line number that is to be used for the Color Bars measurement.

Syntax VARIable:VALue “ColorBarsLine”, “<linenumber>”
 VARIable:VALue? “ColorBarsLine”

Group Setup

Related Commands ColorBarsAverage

Arguments <linenumber> can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current line number for Color Bars measurement.

Examples VARIable:VALue “ColorBarsLine”, “200”
 VARIable:VALue? “ColorBarsLine”

Query may return: “ColorBarsLine 325”

ColorBarsmVCh[1..3]?

Query all eight level values (in mV) resulting from Color Bars measurement for the specified channel.

Syntax VARIABLE:VALue? “ColorBarsmVCh[1..3]”

Group Results

Arguments None

Related Commands ColorBarsmVCh[1..3]Val[1..8]?

Returns Returns all eight delay measurements (in mV) performed by Color Bars, in this order: White Yellow Cyan Green Magenta Red Blue Black.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsmVCh1”

Query may return:

“ColorBarsmVCh1 699.76 650.52 552.75 501.98 201.89 150.74 52.11 0.49”

ColorBarsmVCh[1..3]Val[1..8]?

Query the value (in mV) resulting from the specified Color Bars channel and value measurement.

Syntax VARIable:VALue? “ColorBarsmVCh[1..3]Val[1..8]”

Group Results

Arguments None

Related Commands ColorBarsmVCh[1..3]?

Returns Returns the specified Color Bars value (in mV).

Values must be in the range: 1..8

Values must designate the following colors:

1-White 2-Yellow 3-Cyan 4-Green 5-Magenta 6-Red 7-Blue 8-Black.

Returns “---” if no valid measurement is currently available

Examples VARIable:VALue? “ColorBarsmVCh2Val6”

Query may return: “ColorBarsmVCh2Val6 -78.89”

ColorBarsPassCh[1..3]?

Query the pass/fail status of all eight level values (in mV) resulting from the Color Bars measurement for the specified channel. The values used to define pass or fail are defined in the Limits file.

Syntax VARIABLE:VALue? “ColorBarsPassCh[1..3]”

Group Results

Related Commands ColorBarsPassCh[1..3]Val[1..8]?

Returns Returns the pass/fail test status for all eight delay measurements (in mV) performed by Color Bars, in this order: White Yellow Cyan Green Magenta Red Blue Black.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsPassCh1”

Query may return:
“ColorBarsPassCh1 1 1 1 0 0 1 1 1”

ColorBarsPassCh[1..3]Val[1..8]?

Query the pass/fail status resulting from the Color Bars measurement for the specified channel and the values used to define pass or fail are defined in the Limits file.

Syntax VARIABLE:VALUE? "ColorBarsPassCh[1..3]Val[1..8]"

Group Results

Arguments None

Related Commands ColorBarsPassCh[1..3]?

Returns Returns the pass/fail test status for the Color Bars value.

Values must be in the range: 1..8

Values must designate the following colors:

1-White 2-Yellow 3-Cyan 4-Green 5-Magenta 6-Red 7-Blue 8-Black.

Returns "---" if no valid measurement is currently available

Examples VARIABLE:VALUE? "ColorBarsPassCh2Val6"

Query may return: "ColorBarsPassCh2Val6 1"

ColorBarsRelmVCh[1..3]?

Query all eight level values resulting from Color Bars relative measurement for the specified channel in mV. The value to which the eight level values are compared is defined in the selected Reference file.

Syntax VARIABLE:VALue? “ColorBarsRelmVCh[1..3]”

Group Results

Arguments None

Related Commands ColorBarsRelmVCh[1..3]Val[1..8]?
ColorBarsRelPctmVCh[1..3]?
ColorBarsRelPctmVCh[1..3]Val[1..8]?

Returns Returns the values for all eight Color Bars relative measurements (in mV) performed by Color Bars, in this order: White Yellow Cyan Green Magenta Red Blue Black.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRelmVCh1”

Query may return:
“ColorBarsRelmVCh1 -2.66 1.58 0.97 1.27 -0.52 0.66 0.88 0.77”

ColorBarsRelmVCh[1..3]Val[1..8]?

Query the relative results value resulting from the specified Color Bars channel and value measurement in mV. The value to which the level value is compared is defined in the selected Reference file.

Syntax VARIABLE:VALue? “ColorBarsRelmVCh[1..3]Val[1..8]”

Group Results

Arguments None

Related Commands ColorBarsRelmVCh[1..3]?
 ColorBarsRelPctmVCh[1..3]?
 ColorBarsRelPctmVCh[1..3]Val[1..8]?

Returns Returns the value for the Color Bars relative measurement (in mV) for the specified channel and value, in this order: White Yellow Cyan Green Magenta Red Blue Black.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRelmVCh1Val4”

Query may return:
 “ColorBarsRelmVCh1Val4 1.27”

ColorBarsRelPctmVCh[1..3]?

Query all eight level values resulting from the Color Bars relative measurement, in percent, for the specified channel. The value to which the eight level values are compared is defined in the selected Reference file.

Syntax VARIABLE:VALue? “ColorBarsRelPctmVCh[1..3]”

Group Results

Arguments None

Related Commands ColorBarsRelPctmVCh[1..3]Val[1..8]?
ColorBarsRelmVCh[1..3]?
ColorBarsRelmVCh[1..3]Val[1..8]?

Returns Returns the values for all eight Color Bars relative measurements (in percent) performed by Color Bars, in this order: White Yellow Cyan Green Magenta Red Blue Black.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRelPctmVCh1”

Query may return:
“ColorBarsRelPctmVCh1 -0.16 0.28 0.17 0.13 -0.05 0.01 0.08 0.07”

ColorBarsRelPctmVCh[1..3]Val[1..8]?

Query the value resulting from the Color Bars relative result for the specified channel and value in Percent. The value to which the level value is compared is defined in the selected Reference file.

Syntax VARIABLE:VALue? “ColorBarsRelPctmVCh[1..3]Val[1..8]”

Group Results

Arguments None

Related Commands ColorBarsRelPctmVCh[1..3]?
ColorBarsRelmVCh[1..3]?
ColorBarsRelmVCh[1..3]Val[1..8]?

Returns Returns the value for the Color Bars relative measurement (in percent) for the specified channel and value, in this order: White Yellow Cyan Green Magenta Red Blue Black.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “ColorBarsRelmVCh1Val4”

Query may return:
“ColorBarsRelPctmVCh1Val4 0.27”

ColorBarsSet <setting>

Set or query whether to measure Color Bars upon Execute.

Syntax VARIable:VALue “ColorBarsSet”, “<setting>”
 VARIable:VALue? “ColorBarsSet”

Group Configuration

Arguments <setting> specifies whether to perform Color Bars measurement upon Execute.
 Valid values are: OFF, ON, 0, 1

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1 depending on whether ColorBarsSet measurement is
 selected.

Examples VARIable:VALue “ColorBarsSet”, “ON”
 VARIable:VALue? “ColorBarsSet”

 Query may return: “ColorBarsSet 1”

ColorBarsStatus

Query the status of the Color Bars measurement.

Syntax VARIable:VALue? "ColorBarsStatus", [--- | Done | Stopped | Pass | Fail]

Group Status

Related Commands Execute
ExecuteReport
ColorBarsSet

Returns Query returns [--- | Done | Stopped | Pass | Fail] status of the Color Bars measurement.

Examples VARIable:VALue? "ColorBarsStatus"

Query may return: "ColorBarsStatus Done"

ColorSpace <colorspace>

Set or query video color space to use for measurement.

Syntax VARIABLE:VALue “ColorSpace”, “<colorspace>”
 VARIABLE:VALue? “ColorSpace”

Group Configuration

Arguments <colorspace> specifies color space that is to be set.
 Valid color spaces are: YPbPr, RGB

Returns Query returns the current specified color space

Examples VARIABLE:VALue “ColorSpace”, “YPbPr”
 VARIABLE:VALue? “ColorSpace”

Query may return: “ColorSpace YPbPr”

DefaultSettings

Restores default (factory) settings.

Syntax VARIable:VALue "DefaultSettings", "1"
 VARIable:VALue? "DefaultSettings"

Group Settings

Arguments Valid value is 1.

Returns Query returns "OK" unless the command is still being processed, in which case it returns "1".

Examples VARIable:VALue "DefaultSettings", "1"
 VARIable:VALue? "DefaultSettings"

Query may return: "DefaultSettings OK"

Display <None|Picture|Vectorscope|NoiseSpectrum|Minimized>

Set or query the Picture, Vectorscope, or Noise Spectrum display.

Syntax VARIable:VALue “Display”, “[None|Picture|Vectorscope|NoiseSpectrum|Minimized]”
VARIable:VALue? “Display”

Group Configuration

Arguments [None|Picture|Vectorscope|NoiseSpectrum|] None selects the normal display. Picture places the Picture display on top of all other displays. Vectorscope places the Vectorscope display on top of all other displays. NoiseSpectrum places the Noise Spectrum display on top of all other displays. Minimized option minimizes the display and reports whether the display is minimized.

Returns The display on top of all other displays.

Examples VARIable:VALue “Display”, “Picture”
VARIable:VALue? “Display”

Query may return: “Display None”

Error <setting>

Reset error to 0 or query error value. Command can be used to reset Error to “0”. Query returns the most recent error reported by the application, or “0” if no errors have occurred since Error was last reset.

Initialized to “0” on startup.

Syntax VARIable:VALue “Error”, “<setting>”
 VARIable:VALue? “Error”

Group Configuration

Arguments <setting> resets Error to “0”.
 Valid values are: OFF, 0.

Returns Returns the most recent error reported by the application. Returns “0” if no error has occurred since the Error command was last reset.

Examples VARIable:VALue “Error”, “OFF”
 VARIable:VALue? “Error”

Query may return: “Error No measurement Selected”

Execute <setting>

Execute or stop the current set measurement(s), or query whether any measurement is currently being executed. If the measurement is already in the mode specified by the setting, the command has no effect. For example, if a measurement is already running and “VARIABLE:VALUE “Execute”, “1” is received, the measurement will continue to run.

Syntax VARIABLE:VALUE “Execute”, “<setting>”
VARIABLE:VALUE? “Execute”

Group Run

Arguments <setting> Valid settings are: OFF, 0, ON, 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands ChannelDelaySet
ColorBarSet
FrequencyResponseSet
MultiburstSet
NoiseSet
NonLinearitySet
ShortTimeDistSet
SyncSet

Returns Query returns 1 if any measurement is currently being executed, otherwise it returns 0.

Examples VARIABLE:VALUE “Execute”, “1”
VARIABLE:VALUE? “Execute”

Query may return: “Execute 1”

Format <format>

Set or query the video format to use for measurement. No defaults.

If you get the error message, “Invalid Argument”, make sure that you specified a valid format.

Syntax	VARIABLE:VALUE “Format”, “<format>” VARIABLE:VALUE? “Format”
Group	Configuration
Arguments	<format> specifies format that is to be set. Valid HD formats are: HD720P60, HD720P50, HD1080I60, HD1080I50. Valid SD formats are: SD480I60, SD576I50.
Returns	Query returns the current specified format.
Examples	VARIABLE:VALUE “Format”, “HD1080I50” VARIABLE:VALUE? “Format” Query may return: “Format HD1080I50” VARIABLE:VALUE “Format”, “SD480I60” VARIABLE:VALUE? “Format” Query may return: “Format SD480I60”

NOTE. HD formats are available only if option HD is purchased SD formats are available only if option SD is purchased.

FrequencyResponseAverage

Set or query frequency response average.

Syntax VARIable:VALue "FrequencyResponseAverage", "<nrl>"
 VARIable:VALue? "FrequencyResponseAverage"

Group Setup

Arguments <samples> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Related Commands FrequencyResponseMeasLocation
 FrequencyResponseFreq
 FrequencyResponseLine
 FrequencyResponseTime

Returns Returns the current number of samples for the Frequency Response measurement.

Examples VARIable:VALue "FrequencyResponseAverage", "50"
 VARIable:VALue? "FrequencyResponseAverage"

Query may return:
"FrequencyResponseAverage 50"

FrequencyResponseCh[1..3]?

Query all five values resulting from the Frequency Response measurement for the specified channel.

Syntax VARIable:VALue? "FrequencyResponseCh[1..3]"

Group Results

Arguments None

Related Commands FrequencyResponseCh[1..3]Val[1..5]?
FrequencyResponseFilterBW
FrequencyResponseMeasLocation

Returns Returns the values for all five Frequency Response measurements performed in this order: Frequency (MHz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).

Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "FrequencyResponseCh1"

Query may return:
"FrequencyResponseCh1 10 12.57 417.23 1.92 3.5"

FrequencyResponseCh[1..3]Val[1..5]?

Query the value resulting from the specified Frequency Response channel and value measurement.

Syntax VARIABLE:VALue? "FrequencyResponseCh[1..3]Val[1..5]"

Group Results

Arguments None

Related Commands FrequencyResponseCh[1..3]?
FrequencyResponseFilterBW
FrequencyResponseMeasLocation

Returns Returns the value for the specified Frequency Response measurements performed as selected from the following: Frequency (MHz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).

Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALue? "FrequencyResponseCh1Val3"

Query may return:
"FrequencyResponseCh1Val3 417.23"

FrequencyResponseFilterBW <bandwidth>

Set or query the bandwidth used in the RMS Distortion field in the Frequency Response measurement.

Syntax VARIABLE:VALUE "FrequencyResponseFilterBW", "<bandwidth>"
 VARIABLE:VALUE? "FrequencyResponseFilterBW"

Group Setup

Arguments <bandwidth> specifies bandwidth of the Frequency Response filter, in Hz. Can be integer or floating point. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Related Commands FrequencyResponseAverage
 FrequencyResponseLine
 FrequencyResponseMeasLocation
 FrequencyResponseTime

Returns Query returns the current unweighted Frequency Response filter bandwidth, in Hz.

Examples VARIABLE:VALUE? "FrequencyResponseFilterBW"

Query may return:
"FrequencyResponseFilterBW 297000000"

FrequencyResponseFreq?

Set or query frequency response frequency.

Syntax VARIABLE:VALue "FrequencyResponseFreq", "<frequency>"
 VARIABLE:VALue? "FrequencyResponseFreq"

Group Setup

Arguments <frequency> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Related Commands FrequencyResponseAverage
 FrequencyResponseLine
 FrequencyResponseMeasLocation
 FrequencyResponseTime

Returns Returns the current frequency at which the measurement is taken.

 Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALue "FrequencyResponseFreq", "3710000"
 VARIABLE:VALue "FrequencyResponseFreq", "3.71E6"
 VARIABLE:VALue? "FrequencyResponseFreq"

Query may return:
"FrequencyResponseMeasLocation Frequency"

FrequencyResponseLine

Set or query frequency response line number.

Syntax VARIable:VALue "FrequencyResponseLine", "<linenumber>"
 VARIable:VALue? "FrequencyResponseLine"

Group Measurement Setup

Arguments <linenumber> Can be integer. Fractional numbers will return errors. Floating point notation is allowed.

Related Commands FrequencyResponseAverage
 FrequencyResponseFreq
 FrequencyResponseMeasLocation
 FrequencyResponseTime

Returns Returns the time at which the measurement is taken.

Examples VARIable:VALue "FrequencyResponseLine", "229"
 VARIable:VALue? "FrequencyResponseLine"

Query may return:
"FrequencyResponseLine 229"

FrequencyResponseMeasLocation [Freq444 | Freq422 | Time]

Set or query the location at which the Frequency Response measurement is taken. You can specify the measurement location by either time or frequency. Set the measurement location to Time to have the instrument measure frequency response at a specified (elapsed) time or set the measurement location to Frequency to have the instrument take the measurement at a specified frequency. Freq444 uses the same frequency (set by FrequencyResponseFreq) for the measurement location on all three signals (CH1 (Y/G), CH2(Pb/B) and CH3(Pr/R)); it is the best option for RGB (GBR) signals. Freq422 uses the full frequency (FrequencyResponseFreq) for CH1 and half that frequency for CH2 and CH3. It is the best option for YPbPr signals.

Syntax VARIABLE:VALue “FrequencyResponseMeasLocation”, “[Freq444 | Freq422 |Time]”
VARIABLE:VALue? “FrequencyResponseMeasLocation”

Group Results

Arguments [Freq444 | Freq422 |Time] If Freq444 is specified, the frequency at which the frequency response measurement is taken is the same for Y/G, Pb/B, and Pr/R. If Freq422 is specified, the frequency at which the frequency response measurement is taken for Pb/B and Pr/R is half the frequency used for Y/G. FrequencyResponseFreq is the command used to specify the frequency at which this measurement is taken.

Related Commands FrequencyResponseAverage
FrequencyResponseFreq
FrequencyResponseLine
FrequencyResponseTime

Returns Returns the location at which the measurement is taken.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue “FrequencyResponseMeasLocation”, “Freq444”
VARIABLE:VALue? “FrequencyResponseMeasLocation”

Query may return:
“FrequencyResponseMeasLocation Time”

FrequencyResponsePassCh[1..3]?

Query the pass/fail status of all five values resulting from the Frequency Response relative results for the specified channel. The values used to define pass or fail are defined in the Limits file.

Syntax VARIABLE:VALUE? "FrequencyResponsePassCh[1..3]"

Group Results

Arguments None

Related Commands FrequencyResponseCh[1..3]Val[1..8]?

Returns Returns the pass/fail test status for all five frequency response measurements, in this order: Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "FrequencyResponsePassCh1"

Query may return:

"FrequencyResponsePassCh1 1 1 1 0 0"

FrequencyResponsePassCh[1..3]Val[1..5]?

Query the pass/fail status of the value resulting from the Frequency Response relative results for the specified channel and value measurement. The values used to define pass or fail are defined in the Limits file.

Syntax VARIABLE:VALue? “FrequencyResponsePassCh[1..3]Val[1..5]”

Group Results

Arguments None

Related Commands FrequencyResponsePassCh[1..3]?

Returns Returns the pass/fail test status for the specified frequency response measurement, as selected from the following values: Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “FrequencyResponsePassCh1”

Query may return:
“FrequencyResponsePassCh1 1 1 1 0 0”

FrequencyResponseRelCh[1..3]?

Query all five pass/fail status resulting from the Frequency Response relative results for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? "FrequencyResponseRelCh[1..3]"

Group Results

Arguments None

Related Commands FrequencyResponseRelCh[1..3]Val[1..5]?

Returns Returns all five frequency response relative measurements, in this order:
Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).

Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "FrequencyResponseRelCh1"

Query may return:

"FrequencyResponseRelCh1 0.0 0.03 0.68 -0.05 0.0"

FrequencyResponseRelCh[1..3]Val[1..5]?

Query the value resulting from the Frequency Response relative results for the specified channel and value measurement. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALue? “FrequencyResponseRelCh[1..3]Val[1..5]”

Group Results

Arguments None

Related Commands FrequencyResponseRelCh[1..3]?

Returns Returns the value for the specified frequency response relative measurement, as selected from the following values: Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “FrequencyResponseRelCh1Val3”

Query may return:
“FrequencyResponseRelCh1Val3 0.68 ”

FrequencyResponseRelPctCh[1..3]?

Query all five values resulting from the Frequency Response Percent relative results for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? "FrequencyResponseRelPctCh[1..3]"

Group Results

Arguments None

Related Commands FrequencyResponseRelPctCh[1..3]Val[1..5]?

Returns Returns all five frequency response relative measurements in percent, in this order: Frequency (Mhz), Time (us), Flag (mV), Amplitude (dB), RMS Distortion (%).

Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "FrequencyResponseRelPctCh1"

Query may return:
"FrequencyResponseRelPctCh1 1 1 1 0 0"

FrequencyResponseRelPctCh[1..3]Val[1..5]?

Query the value resulting from the Frequency Response Percent relative results for the specified channel and value measurement. The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? “FrequencyResponseRelCh[1..3]Val[1..5]”

Group Results

Arguments None

Related Commands FrequencyResponseRelPctCh[1..3]?

Returns Returns the value for the specified frequency response relative measurement in percent, as selected from the following values: Frequency (Mhz), Time (μ s), Flag (mV), Amplitude (dB), RMS Distortion (%).

Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “FrequencyResponseRelPctCh1Val3”

Query may return:
“FrequencyResponseRelPctCh1Val3 0.03 ”

FrequencyResponseSet

Set or query whether to measure Frequency Response measurement is enabled.

Syntax VARIable:VALue “FrequencyResponseSet”, “<settings>”
 VARIable:VALue? “FrequencyResponseSet”

Group Configuration

Arguments <setting> specifies whether to perform Frequency Response measurement upon Execute.
 Valid values are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1 depending on whether the FrequencyResponseSet measurement is selected.

Examples VARIable:VALue “FrequencyResponseSet”, “ON”
 VARIable:VALue? “FrequencyResponseSet”

 Query may return: “FrequencyResponseSet 1”

FrequencyResponseStatus

Query the status of the Frequency Response measurement.

Syntax VARIable:VALue? “FrequencyResponseStatus”, “[--- | Done | Stopped | Pass | Fail]”

Group Status

Related Commands Execute
ExecuteReport

Returns Query returns [--- | Done | Stopped | Pass | Fail] status of the Frequency Response measurement.

Examples VARIable:VALue? “FrequencyResponseStatus”

Query may return: “FrequencyResponseStatus Pass”

FrequencyResponseTime

Set or query frequency response time.

Syntax VARIable:VALue “FrequencyResponseFreq”, “<time>”
 VARIable:VALue” “FrequencyResponseTime”

Group Setup

Arguments <time> specifies the frequency response time. <time> must be in the form of an integer or a floating point value with an exponent.

Related Commands FrequencyResponseAverage
 FrequencyResponseFreq
 FrequencyResponseLine
 FrequencyResponseMeasLocation

Returns Returns the frequency response time.

Examples VARIable:VALue “FrequencyResponseTime”, “0.0000125”
 VARIable:VALue “FrequencyResponseTime”, “12.5E-6”
 VARIable:VALue? “FrequencyResponseTime”

Query may return:
“FrequencyResponseTime 12.5E-6”

ID?

Query the ID/Version of the application.

Syntax VARIable:VALue? "ID"

Group Miscellaneous

Arguments None

Returns Returns the application's ID

Examples VARIable:VALue? "ID"

Query may return: "ID Tek/VM5000 FW: 2.x"

LimitFileLoad <pathstring>

Specifies Limit file to be loaded for Limit Testing.

Syntax VARIable:VALue “LimitFileLoad”, “<pathstring>”

Group Setup

Arguments <pathstring> specifies the path/filename with extension where the Limit file is located. Can either be (1) the full path and filename with extension, or (2) just the filename, and the default path “c:\VM5000TV\RefLimFiles” will be used. The file extension must be “.csv”. You have to specify the extension for the filename. The command does not append the filename extension automatically. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands LimitSet

Returns None

Examples VARIable:VALue “LimitFileLoad c:\VM5000TV\RefLimFiles\Default-Lim1080iYPbPr.csv”

LimitSet

Set or query whether Limit Testing is performed upon Execute.

Syntax VARIABLE:VALue "LimitSet", "<setting>"
 VARIABLE:VALue? "LimitSet"

Group Configuration

Arguments <setting> specifies whether to perform Limit testing upon Execute.
 Valid values are: OFF, ON, 0, 1.

Related Commands Execute

Returns Query returns 0 or 1 depending on whether the LimitSet is enabled or disabled.

Examples VARIABLE:VALue "LimitSet", "ON"
 VARIABLE:VALue? "LimitSet"

 Query may return:
 "LimitSet 1 "

LogErrors

Set or query whether errors are logged to a file. If enabled, errors are logged in the C:\VM5000TV\Log.txt file.

When enabled, LogErrors will append warnings to the existing log file until the file reaches 1MB in size. When this occurs, the file is renamed "logold.txt" and a new log.txt file is created. When the log file reaches 1MB in size again, it is renamed logold.txt and overwrites the existing logold.txt file. Thus, if the customer wants to save the old file, they must rename it before it is overwritten. There is only one "old" file.

Syntax VARIABLE:VALUE "LogErrors", "<setting>"
 VARIABLE:VALUE? "LogErrors"

Group Configuration

Arguments <setting> specifies whether to log errors to the Log.txt file.
 Valid values are: OFF, ON, 0, 1.

Related Commands Execute

Returns Query returns 0 or 1 depending on whether the LogErrors is enabled or disabled.

Examples VARIABLE:VALUE "LogErrors", "ON"
 VARIABLE:VALUE? "LogErrors"

Query may return:
"LogErrors 1 "

MultiburstAmpdBCh[1..3]?

Query all six amplitude values (in dB) resulting from Multiburst measurement for the specified channel.

Syntax VARIABLE:VALue? "MultiburstAmpdBCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstAmpdBCh[1..3]Val[1..6]

Returns Returns all six amplitude values (in dB) in burst order.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALue? "MultiburstAmpdBCh2"

Query may return:

"MultiburstAmpdBCh2 -0.09 -0.18 -0.14 -0.13 -0.08 -0.02"

MultiburstAmpdBCh[1..3]Val[1..6]?

Query the amplitude value (in dB) resulting from Multiburst measurement for the specified channel and value.

Syntax VARIable:VALue? "MultiburstAmpdBCh[1..3]Val[1..6]"

Group Results

Arguments None

Related Commands MultiburstAmpdBCh[1..3]

Returns Returns the specified Multiburst value (in dB).
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "MultiburstAmpdBCh1Val2"
Query may return: "MultiburstAmpdBCh1Val2 - 0.26"

MultiburstAverage <samples>

Set or query the number of samples over which to average the Multiburst measurement.

Syntax VARIABLE:VALUE "MultiburstAverage", "<samples>"
 VARIABLE:VALUE? "MultiburstAverage"

Group Setup

Related Commands MultiburstLine

Arguments <samples> can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current number of samples for Multiburst measurement.

Examples VARIABLE:VALUE "MultiburstAverage", "1"
 VARIABLE:VALUE? "MultiburstAverage"

Query may return: "MultiburstAverage 8"

MultiburstFlagmVCh[1..3]?

Query the Flag value (in mV) resulting from Multiburst measurement for the specified channel.

Syntax VARIable:VALue? "MultiburstFlagmVCh[1..3]"

Group Results

Arguments None

Returns Returns the Flag value (in mV).

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "MultiburstFlagmVCh3"

Query may return: "MultiburstFlagmVCh3 428.01"

MultiburstFreqCh[1..3]?

Query all six frequency values resulting from Multiburst measurement for the specified channel.

Syntax VARIABLE:VALue? “MultiburstFreqCh[1..3]”

Group Results

Arguments None

Related Commands MultiburstFreqCh[1..3]Val[1..6]

Returns Returns all six frequency values (in MHz) in burst order.

Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALue? “MultiburstFreqCh1”

Query may return:

“MultiburstFreqCh1 10.00 12.00 14.00 16.00 18.01 20.00”

MultiburstFreqCh[1..3]Val[1..6]?

Query the frequency value resulting from Multiburst measurement for the specified channel and value.

Syntax VARIable:VALue? “MultiburstFreqCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstFreqCh[1..3]

Returns Returns the specified Multiburst frequency (in MHz).
Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “MultiburstFreqCh1 Val2”
Query may return: “MultiburstFreqCh1 Val2 12.00”

MultiburstLine <linenumber>

Set or query line number that is to be used for the Multiburst measurement.

Syntax VARIABLE:VALue "MultiburstLine", "<linenumber>"
 VARIABLE:VALue? "MultiburstLine"

Group Setup

Related Commands MultiburstAverage

Arguments <linenumber> can be an integer. Fractional numbers will return errors. Floating point notation is allowed.

Returns Query returns the current line number for Multiburst measurement.

Examples VARIABLE:VALue "MultiburstLine", "200"
 VARIABLE:VALue? "MultiburstLine"

Query may return: "MultiburstLine 325"

MultiburstPassAmpdBCh[1..3]?

Query the pass/fail status for all six amplitude values (in dB) resulting from the Multiburst measurement for the specified channel. The values used for the limit comparison are defined in the Limits file.

Syntax VARIable:VALue? "MultiburstPassAmpdBCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstAmpdBCh[1..3]Val[1..6]

Returns Returns pass/fail test status for all six amplitude values (in dB) in burst order.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "MultiburstPassAmpdBCh2"

Query may return:

"MultiburstPassAmpdBCh2 1 1 1 1 1 0"

MultiburstPassAmpdBCh[1..3]Val[1..6]?

Query the pass/fail status resulting from the Multiburst relative results for the specified channel and value measurement. The value used for the limit comparison is defined in the Limits file.

Syntax VARIABLE:VALue? “MultiburstPassAmpdBCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstPassAmpdBCh[1..3]

Returns Returns the pass/fail test status for the the specified Multiburst value.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns “---” if no valid measurement is currently available.

Examples VARIABLE:VALue? “MultiburstPassAmpdBCh1Val2”

Query may return: “MultiburstPassAmpdBCh1Val2 1”

MultiburstPassFlagmVCh[1..3]?

Query the pass/fail status for the Flag value resulting from the Multiburst measurement for the specified channel. The values used for the limit comparison are defined in the Limits file.

Syntax	VARIABLE:VALUE? "MultiburstPassFlagmVCh[1..3]"
Group	Results
Arguments	None
Returns	Returns the pass/fail test status of the Flag value. A returned value of 1 means Pass; a returned value of 0 means Fail. Returns "---" if no valid measurement currently available.
Examples	VARIABLE:VALUE? "MultiburstPassFlagmVCh3" Query may return: "MultiburstPassFlagmVCh3 0"

MultiburstPassFreqCh[1..3]?

Query the pass/fail status of all six frequency values resulting from the Multiburst measurement for the specified channel. The values used for the limit comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? "MultiburstPassFreqCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstPassFreqCh[1..3]Val[1..6]

Returns Returns the pass/fail test status of all six frequency values in burst order.

A returned status of 1 means Pass; a returned status of 0 means Fail.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "MultiburstPassFreqCh1"

Query may return:

"MultiburstPassFreqCh1 1 1 1 1 1 1"

MultiburstPassFreqCh[1..3]Val[1..6]?

Query the pass/fail status for the frequency value resulting from the Multiburst measurement for the specified channel and value. The values used for the limit comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? "MultiburstPassFreqCh[1..3]Val[1..6]"

Group Results

Arguments None

Related Commands MultiburstPassFreqCh[1..3]

Returns Returns the pass/fail test status of the specified Multiburst frequency value.

A returned status of 1 means Pass; a returned status of 0 means Fail.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "MultiburstPassFreqCh1Val2"

Query may return: "MultiburstPassFreqCh1Val2 1"

MultiburstRelAmpdBCh[1..3]?

Query all six amplitude values resulting from the Multiburst relative results for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALue? "MultiburstRelAmpdBCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstRelAmpdBCh[1..3]Val[1..6]

Returns Returns values for all six amplitude values (in dB) in burst order.
Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALue? "MultiburstRelAmpdBCh2"

Query may return:
"MultiburstRelAmpdBCh2 0.0 -0.01 -0.22 -0.42 -0.66 -1.02"

MultiburstRelAmpdBCh[1..3]Val[1..6]?

Query the amplitude value resulting from the Multiburst measurement for the specified channel and value. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? “MultiburstRelAmpdBCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstRelAmpdBCh[1..3]

Returns Returns the values for the specified Multiburst relative value.
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “MultiburstRelAmpdBCh1Val2”
Query may return: “MultiburstRelAmpdBCh1Val2 -0.01”

MultiburstRelFlagmVCh[1..3]?

Query the Flag value resulting from the Multiburst relative measurement for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALue? “MultiburstRelFlagmVCh[1..3]”

Group Results

Arguments None

Returns Returns the Flag value of the Multiburst relative measurement.
Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALue? “MultiburstRelFlagmVCh3”
Query may return: “MultiburstRelFlagmVCh3 -0.33”

MultiburstRelFreqCh[1..3]?

Query all six frequency values resulting from the specified Multiburst relative channel measurement. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? “MultiburstRelFreqCh[1..3]”

Group Results

Arguments None

Related Commands MultiburstRelFreqCh[1..3]Val[1..6]

Returns Returns the values for all six frequency relative values in burst order.
Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “MultiburstRelFreqCh1”

Query may return:
“MultiburstRelFreqCh1 0.01 0.01 0.01 0.02 0.01 0.01”

MultiburstRelPctAmpdBCh[1..3]?

Query the frequency value resulting from the Multiburst relative measurement for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALue? “MultiburstRelFreqCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstRelFreqCh[1..3]

Returns Returns the value of the specified relative Multiburst frequency value.
Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALue? “MultiburstRelFreqCh1Val2”
Query may return: “MultiburstRelFreqCh1Val2 0.01”

MultiburstRelPctAmpdBCh[1..3]Val[1..6]?

Query the amplitude value resulting from the specified Multiburst Percent relative channel and value measurement. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? “MultiburstPctAmpdBCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstRelPctAmpdBCh[1..3]

Returns Returns the values, in percent difference, for the specified Multiburst relative value.

Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “MultiburstRelPctAmpdBCh1Val2”

Query may return: “MultiburstRelPctAmpdBCh1Val2 0.0”

MultiburstRelPctFlagmVCh[1..3]?

Query the value for the Flag value resulting from the Multiburst Percent relative measurement for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? “MultiburstRelPctFlagmVCh[1..3]”

Group Results

Arguments None

Returns Returns the Flag value, in percent difference, of the Multiburst relative measurement.

Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “MultiburstRelPctFlagmVCh3”

Query may return: “MultiburstRelPctFlagmVCh3 -0.01”

MultiburstRelPctFreqCh[1..3]?

Query all six frequency values resulting from the specified Multiburst Percent relative channel and value measurement. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? "MultiburstPctFreqCh[1..3]"

Group Results

Arguments None

Related Commands MultiburstRelPctFreqCh[1..3]Val[1..6]

Returns Returns the values, in percent difference, for all six frequency relative values in burst order.

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "MultiburstRelPctFreqCh1"

Query may return:

"MultiburstRelPctFreqCh1 0.01 0.01 0.01 0.02 0.01 0.01"

MultiburstRelPctFreqCh[1..3]Val[1..6]?

Query the frequency value resulting from the specified Multiburst Percent relative channel and value measurement. The values used for the relative comparison are defined in the Reference file.

Syntax VARIable:VALue? “MultiburstRelPctFreqCh[1..3]Val[1..6]”

Group Results

Arguments None

Related Commands MultiburstRelPctFreqCh[1..3]

Returns Returns the value, in percent difference, of the specified relative Multiburst frequency value.

Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “MultiburstRelPctFreqCh1Val2”

Query may return: “MultiburstRelPctFreqCh1Val2 0.0”

MultiburstSet <setting>

Set or query whether to measure Multiburst upon Execute.

Syntax VARIable:VALue “MultiburstSet”, “<setting>”
 VARIable:VALue? “MultiburstSet”

Group Configuration

Arguments <setting> specifies whether to perform Multiburst measurement upon Execute.
 Valid values are: OFF, ON, 0, 1

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1 depending on whether MultiburstSet measurement is
 selected.

Examples VARIable:VALue “MultiburstSet”, “ON”
 VARIable:VALue? “MultiburstSet”

 Query may return: “MultiburstSet 1”

MultiburstStatus

Query the status of the Multiburst measurement.

Syntax VARIable:VALue? “MultiburstStatus”, [--- | Done | Stopped | Pass | Fail]

Group Status

Related Commands Execute
ExecuteReport

Returns Query returns [--- | Done | Stopped | Pass | Fail] status of the Multiburst measurement.

Examples VARIable:VALue? “MultiburstStatus”

Query may return: “MultiburstStatus Pass”

NoiseAmpdBCh[1..3]?

Query amplitude value (in dB) resulting from Noise measurement for the specified channel.

Syntax VARIable:VALue? "NoiseAmpdBCh[1..3]"

Group Results

Arguments None

Returns Returns amplitude value (in dB).

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "NoiseAmpdBCh2"

Query may return: "NoiseAmpdBCh2 66.43"

NoiseAmpmVCh[1..3]?

Query amplitude value (in mV) resulting from Noise measurement for the specified channel.

Syntax VARIABLE:VALue? "NoiseAmpmVCh[1..3]"

Group Results

Arguments None

Returns Returns amplitude value (in mV).

Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALue? "NoiseAmpmVCh2"

Query may return: "NoiseAmpmVCh2 0.33"

NoiseAverage <samples>

Set or query the number of samples over which to average the Noise measurement.

Syntax VARIable:VALue "NoiseAverage", "<samples>"
 VARIable:VALue? "NoiseAverage"

Group Setup

Related Commands NoiseBW
 NoiseFilter
 NoiseLine
 NoiseCursorPos?

Arguments <samples> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current number of samples for Noise measurement.

Examples VARIable:VALue "NoiseAverage", "1"
 VARIable:VALue? "NoiseAverage"

Query may return: "NoiseAverage 8"

NoiseBW <bandwidth>

Set or query bandwidth of noise filter that is to be used for noise measurement, if the unweighted noise filter is selected.

Syntax VARIABLE:VALUE "NoiseBW", "<bandwidth>"
 VARIABLE:VALUE? "NoiseBW"

Group Setup

Related Commands NoiseAverage
 NoiseFilter
 NoiseLine
 NoiseCursorPos?

Arguments <bandwidth> specifies bandwidth of unweighted noise filter, in Hz. Can be integer or floating point. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Related Commands NoiseFilter

Returns Query returns the current unweighted noise filter bandwidth, in Hz.

Examples VARIABLE:VALUE "NoiseBW", "30000000"
 VARIABLE:VALUE "NoiseBW", "3.2E7"
 VARIABLE:VALUE? "NoiseBW"

Query may return: "NoiseBW 50000000"

NoiseCursorPos

Set or query the position of the cursor in the Noise Spectrum display.

Syntax VARIable:VALue "NoiseCursorPos", "<frequency>"
 VARIable:VALue? "NoiseCursorPos?"

Group Setup

Related Commands NoiseAverage
 NoiseBW
 NoiseFilter
 NoiseLine

Arguments <frequency> specifies the position of the cursor, in Hz. Can be integer or floating point. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the frequency of the cursor position in the Noise measurement.

Examples VARIable:VALue "NoiseCursorPos", "3710000"
 VARIable:VALue "NoiseCursorPos", "3.71E6"
 VARIable:VALue? "NoiseCursorPos"

Query may return: "NoiseCursorPos 3.71E6"

NoiseFilter <noisefilter>

Set or query type of noise filter that is to be used for noise measurement.

Syntax VARIable:VALue “NoiseFilter”, “<noisefilter>”
 VARIable:VALue? “NoiseFilter”

Group Setup

Arguments <noisefilter> specifies type of noise filter that is to be used for noise measurement. Valid noise filters are: Off, Unified, Unweighted.

Related Commands NoiseAverage
 Noise BW
 NoiseCursorPos?
 NoiseLine

Returns Query returns the current specified noise filter.

Examples VARIable:VALue “NoiseFilter”, “Unified”
 VARIable:VALue? “NoiseFilter”

Query may return: “NoiseFilter Off”

NoiseLine <linenumber>

Set or query line number that is to be used for Noise measurement.

Syntax VARIable:VALue "NoiseLine", "<linenumber>"
 VARIable:VALue? "NoiseLine"

Group Setup

Related Commands NoiseAverage
 Noise BW
 NoiseCursorPos?
 NoiseFilter

Arguments <linenumber> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current line number for Noise measurement.

Examples VARIable:VALue "NoiseLine", "200"
 VARIable:VALue? "NoiseLine"

Query may return: "NoiseLine 325"

NoisePassdBCh[1..3]?

Query the pass/fail status for the amplitude value (in dB) resulting from the Noise measurement for the specified channel. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "NoisePassdBCh[1..3]"

Group Results

Arguments None

Returns Returns amplitude value (in dB).

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "NoisePassdBCh2"

Query may return: "NoisePassdBCh2 1"

NoisePassmVCh[1..3]?

Query the pass/fail status for the amplitude value (in mV) resulting from a Noise measurement for the specified channel. The value used for the relative comparison is defined in the Limits file.

Syntax	VARIABLE:VALUE? "NoisePassmVCh[1..3]"
Group	Results
Arguments	None
Returns	Returns pass/fail test status for the amplitude value (in mV) on the specified channel. A returned status of 1 means Pass; a returned status of 0 means Fail. Returns "---" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "NoisePassmVCh2" Query may return: "NoisePassmVCh2 0"

NoiseRelAmpdBCh[1..3]?

Query amplitude value (in dB) resulting from the Noise relative result for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALUE? "NoiseRelAmpdBCh[1..3]"

Group Results

Arguments None

Returns Returns the amplitude value (in dB) on the specified channel.
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "NoiseRelAmpdBCh2"
Query may return: "NoiseRelAmpdBCh2 0.08"

NoiseRelAmpmVCh[1..3]?

Query amplitude value (in mV) resulting from the Noise relative result for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax	VARIABLE:VALUE? "NoiseRelAmpmVCh[1..3]"
Group	Results
Arguments	None
Returns	Returns the amplitude value (in mV) on the specified channel. Returns "---" if no valid measurement is currently available.
Examples	VARIABLE:VALUE? "NoiseRelAmpmVCh2" Query may return: "NoiseRelAmpmVCh2 -0.15"

NoiseSet <setting>

Set or query whether to measure Noise upon Execute.

Syntax VARIable:VALue “NoiseSet”, “<setting>”
 VARIable:VALue? “NoiseSet”

Group Configuration

Arguments <setting> specifies whether to perform Noise measurement upon Execute.
 Valid values are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1 depending on whether NoiseSet measurement is selected

Examples VARIable:VALue “NoiseSet”, “ON”
 VARIable:VALue? “NoiseSet”

 Query may return: “NoiseSet 1”

NoiseStatus

Query the status of the Noise measurement.

Syntax VARIable:VALue “NoiseStatus”, [--- | Done | Stopped | Pass | Fail]
 VARIable:VALue? “NoiseStatus”

Group Status

Related Commands Execute
 NoiseMeasurements

Returns Query returns [--- | Done | Stopped | Pass | Fail] status of the
 Noise measurement.

Examples VARIable:VALue? “NoiseStatus”

 Query may return: “NoiseStatus Pass”

NonLinearityAverage <samples>

Set or query the number of samples over which to average the Non-Linearity measurement.

Syntax VARIABLE:VALUE “NonLinearityAverage”, “<samples>”
VARIABLE:VALUE? “NonLinearityAverage”

Group Setup

Related Commands NonLinearityLine

Arguments <samples> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current number of samples for Non-Linearity measurement.

Examples VARIABLE:VALUE “NonLinearityAverage”, “1”
VARIABLE:VALUE? “NonLinearityAverage”

Query may return: “NonLinearityAverage 8”

NonLinearityLine <linenumber>

Set or query line number that is to be used for the Non-Linearity measurement.

Syntax VARIable:VALue “NonLinearityLine”, “<linenumber>”
 VARIable:VALue? “NonLinearityLine”

Group Setup

Related Commands NonLinearityAverage

Arguments <linenumber> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current line number for Non-Linearity measurement.

Examples VARIable:VALue “NonLinearityLine”, “200”
 VARIable:VALue? “NonLinearityLine”

Query may return: “NonLinearityLine 325”

NonLinearityPass[1..3]?

Query the pass/fail status for all six non-linearity values resulting from the Non-Linearity measurement for the specified channel. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "NonLinearityPassCh[1..3]"

Group Results

Arguments None

Related Commands NonLinearityPassCh[1..3]Max
NonLinearityPassCh[1..3]Val[1..5]

Returns Returns pass/fail test status for all six non-linearity values in this order:
Maximum Step1 Step2 Step3 Step4 Step5.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement is currently available

Examples VARIABLE:VALUE? "NonLinearityPassCh3"

Query may return:
"NonLinearityPctCh3 1 0 1 1 1 1"

NonLinearityPass[1..3]Max?

Query pass/fail status for the maximum value resulting from the Non-Linearity measurement for the specified channel. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "NonLinearityPassCh[1..3]Max"

Group Results

Arguments None

Related Commands NonLinearityPassCh[1..3]
NonLinearityPassCh[1..3]Val[1..5]

Returns Returns the pass/fail test status of the maximum non-linearity value for the specified channel.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "NonLinearityPassCh3Max"

Query may return: "NonLinearityPassCh3Max 1"

NonLinearityPassCh[1..3]Val[1..5]?

Query the pass/fail status for the value resulting from the Non-Linearity measurement for the specified channel and value. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "NonLinearityPassCh[1..3]Val[1..5]"

Group Results

Arguments None

Related Commands NonLinearityPassCh[1..3]
NonLinearityPassCh[1..3]Max

Returns Returns the pass/fail test status of the non-linearity value for the specified channel and step.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "NonLinearityPassCh3Val4"

Query may return: "NonLinearityPassCh3Val4 0"

NonLinearityPctCh[1..3]?

Query all six Non-linearity values resulting from the Non-Linearity measurement for the specified channel.

Syntax VARIable:VALue? "NonLinearityPctCh[1..3]"

Group Results

Arguments None

Related Commands NonLinearityPctCh[1..3]Max
NonLinearityPctCh[1..3]Val[1..5]

Returns Returns all six non-linearity values (as a percentage) in this order: Maximum
Step1 Step2 Step3 Step4 Step5.

Returns "---" if no valid measurement is currently available

Examples VARIable:VALue? "NonLinearityPctCh3"

Query may return:

"NonLinearityPctCh3 0.82 0.00 0.82 0.69 0.21 0.28"

NonLinearityPctCh[1..3]Max?

Query the maximum Non-linearity value for the specified channel.

Syntax VARIABLE:VALUE? "NonLinearityPctCh[1..3]Max"

Group Results

Arguments None

Related Commands NonLinearityPctCh[1..3]
NonLinearityPctCh[1..3]Val[1..5]

Returns Returns maximum non-linearity value (as a percentage) for specified channel.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "NonLinearityPctCh3Max"

Query may return: "NonLinearityPctCh3Max 0.82"

NonLinearityPctCh[1..3]Val[1..5]?

Query the maximum Non-linearity value for the specified channel and value.

Syntax VARIable:VALue? “NonLinearityPctCh[1..3]Val[1..5]”

Group Results

Arguments None

Related Commands NonLinearityPctCh[1..3]
NonLinearityPctCh[1..3]Max

Returns Returns non-linearity value (as a percentage) for specified channel and step.
Returns “---” if no valid measurement is currently available.

Examples VARIable:VALue? “NonLinearityPctCh3Val4”
Query may return: “NonLinearityPctCh3Val4 0.21”

NonLinearityRelPctCh[1..3]?

Query all six non-linearity values resulting from the Non-Linearity relative measurement for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALUE? "NonLinearityRelPctCh[1..3]"

Group Results

Arguments None

Related Commands NonLinearityRelPctCh[1..3]Max
NonLinearityRelPctCh[1..3]Val[1..5]

Returns Returns all five relative non-linearity step values (as a percentage) in this order:
Step1 Step2 Step3 Step4 Step5.

Returns "---" if no valid measurement is currently available

Examples VARIABLE:VALUE? "NonLinearityRelPctCh3"

Query may return:
"NonLinearityRelPctCh3 0.59 0.0 1.24 0.4 0.4"

NonLinearityRelPctCh[1..3]Max?

Query the maximum Non-linearity relative value for the specified channel. The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? “NonLinearityRelPctCh[1..3]Max”

Group Results

Arguments None

Related Commands NonLinearityRelPctCh[1..3]
NonLinearityRelPctCh[1..3]Val[1..5]

Returns Returns maximum non-linearity relative value (as a percentage) for the specified channel.

Returns “---” if no valid measurement currently available.

Examples VARIable:VALue? “NonLinearityRelPctCh3Max”

Query may return: “NonLinearityRelPctCh3Max 0.82”

NonLinearityRelPctCh[1..3]Val[1..5]?

Query the maximum Non-linearity relative for the specified channel and value. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALUE? "NonLinearityRelPctCh[1..3]Val[1..5]"

Group Results

Arguments None

Related Commands NonLinearityRelPctCh[1..3]
NonLinearityRelPctCh[1..3]Max

Returns Returns non-linearity relative value (as a percentage) for the specified channel and step.

Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "NonLinearityRelPctCh3Val4"

Query may return: "NonLinearityRelPctCh3Val4 0.21"

NonLinearitySet <setting>

Set or query whether to measure Non Linearity upon Execute.

Syntax VARIable:VALue “NonLinearitySet”, “<setting>”
 VARIable:VALue? “NonLinearitySet”

Group Configuration

Related Commands Execute
 ReportMeasurements

Arguments <setting> specifies whether to perform Non-Linearity measurement upon Execute.

Valid values are: OFF, ON, 0, 1.

Returns Query returns 0 or 1 depending on whether NonLinearitySet measurement is selected.

Examples VARIable:VALue “NonLinearitySet”, “ON”
 VARIable:VALue? “NonLinearitySet”

Query may return: “NonLinearitySet 1”

NonLinearityStatus

Query the status of the Non Linearity Status measurement.

Syntax VARIABLE:VALUE? "NonLinearityStatus", [--- | Done | Stopped | Pass | Fail]

Group Status

Related Commands Execute
 ExecuteReport

Returns Query returns [--- | Done | Stopped | Pass | Fail] status of the
 Non Linearity measurement.

Examples VARIABLE:VALUE? "NonLinearityStatus"

 Query may return: "NonLinearityStatus Pass"

OPComplete <setting>

Controls VM5000 GPIB scripts by ensuring that the previous command is ready before either querying its value or calling the next command.

OPComplete is set to “1” whenever a VM5000 GPIB command has been received and processed and a new command is ready to be processed (except for the resetting of OPComplete itself, which sets OPComplete to “0”).

OPComplete can only be reset to “0” by the user, and it can only be set to “1” when a command has been sent and the next command is ready to be input.

OPComplete is designed to control VM5000 GPIB scripts by ensuring that the previous command was accepted before either (1) querying its potentially updated value or (2) calling the next command. Setting and checking this variable may be used in lieu of the 50 ms delay*. So long as the handshake is performed on every command.

If a command sets its value to the same value that it is currently set to, OPComplete will not be set to “1”. To avoid this, either set Header to “ON”, or use all lowercase arguments for text (such as “hd480p60” and “on”), and floating-point input for numeric values (such as 21.0 instead of 21). This will always cause OPComplete to be set.

Initialized to “0” on startup.

For the Execute command, OPComplete is set to ”1” after execution begins, not when execution stops.

Syntax	VARIABLE:VALUE “OPComplete”, “<setting>” VARIABLE:VALUE? “OPComplete”
Group	Run
Arguments	<setting> - resets OPComplete so it is ready for the next command. Valid values are: OFF, 0.
Returns	Query returns “1” if a command has been completed since OPComplete was last reset, otherwise it returns “0”

* See Command Structure on page 1.

Examples

```
VARIABLE:VALUE "OPComplete", "OFF"  
VARIABLE:VALUE? "OPComplete"
```

Query may return: "OPComplete 1"

A typical general-case usage of OPComplete might be:

```
VARIABLE:VALUE "OPComplete", "OFF"  
// reset first so we know it is set to "0"
```

```
VARIABLE:VALUE "Command1", "Argument1"  
// call first command
```

```
While ((VARIABLE:VALUE? "OPComplete") == "0") (  
    Wait;  
)  
// wait till first command is ready before calling next command
```

// Now repeat the same process for the next command:

```
VARIABLE:VALUE "OPComplete", "OFF"
```

```
// reset first so we know it is set to "0"  
VARIABLE:VALUE "Command2", "Argument2"  
// call next command
```

```
While ((VARIABLE:VALUE? "OPComplete") == "0") (  
    Wait;  
)  
// wait till this command is ready before calling next command  
// and so on for subsequent commands
```

PixAspectRatio <Auto|4x3|16x9>

Set or query Picture aspect ratio.

Syntax VARIable:VALue "PixAspectRatio", "[Auto|4x3|16x9]"
VARIable:VALue? "PixAspectRatio"

Group Results

Arguments [Auto|4x3|16x9] Auto allows the instrument to select the aspect ratio based on the selected format. 4x3 sets the aspect ratio to standard definition. 16x9 sets the aspect ratio to high definition ratio.

Related Commands

Returns Returns the display aspect ratio.

Examples VARIable:VALue "PixAspectRatio", "Auto"
VARIable:VALue? "PixAspectRatio"

Query may return:
"PixAspectRatio 16x9"

PixLine <linenumber>

Set or query Picture line number to bright up. VectorscopeLine and PixLine change the same setting. Thus, if you set VectorscopeLine to 250, then PixLine will also be 250. Likewise, if you set PixLine to 300, Vectorscope Line will be set to 300.

Syntax VARIABLE:VALue "PixLine", "<linenumber>"
 VARIABLE:VALue? "PixLine"

Group Configuration

Arguments <linenumber> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Related Commands VectorscopeLine

Returns Returns the line number for the picture display.

Examples VARIABLE:VALue "PixLine", "165"
 VARIABLE:VALue? "PixLine"

Query may return:
"PixLine 1070"

PopupWarnings <setting>

Set or query if Pop-up warnings appear on screen.

Syntax VARIable:VALue "PopupWarnings", "<setting>"
 VARIable:VALue? "PopupWarnings"

Group Configuration

Arguments <setting> specifies whether or not to display pop-up warnings.
 Valid values are: OFF, ON, 0, 1.

Related Commands VectorscopeLine

Returns Returns setting for whether or not warnings are displayed.

Examples VARIable:VALue "PopupWarnings", "OFF"
 VARIable:VALue? "PopupWarnings"

Query may return:
"PopupWarnings 1"

RecallSettings <pathstring>

Recall settings stored in the specified path/filename.

Command recalls settings stored in the specified path/filename.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you only specify the filename with extension, the default path “c:\VM5000TV” is used. The file specified in pathstring must have the default extension “.vmset”. You have to specify the extension for the filename. The command does not append the filename extension automatically.

If you get the error message, “Invalid Filename”, confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALUE “RecallSettings”, “<pathstring>”
 VARIABLE:VALUE? “RecallSettings”

Group Settings

Arguments <pathstring> specifies the path/filename where the setup file is stored. Can either be (1) the full path and filename, or (2) just the filename, and the default path “c:\VM5000TV” will be used. The default extension “.vmset” will be appended if it is not specified. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

NOTE. *The VM5000HD allowed filenames without extensions. This is no longer allowed. A filename without an extension will return an error.*

Related Commands SaveSettings

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “RecallSettings”, “c:\VM5000TV\Tek1.vmset”
 VARIABLE:VALUE “RecallSettings”, “Tek2.vmset”
 VARIABLE:VALUE? “RecallSettings”

Query may return: “RecallSettings OK”

ReferenceFileLoad <pathstring>

Specifies Reference file to be loaded for Relative to Reference testing.

Syntax VARIable:VALue “ReferenceFileLoad”, “<pathstring>”

Group Setup

Arguments <pathstring> specifies the path/filename with extension where the Reference file is located. Can either be (1) the full path and filename with extension, or (2) just the filename with extension, and the default path “c:\VM5000TV\RefLimFiles” will be used. The file extension must be “.csv”. You have to specify the extension for the filename. The command does not append the filename extension automatically. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands ReferenceSet

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIable:VALue “ReferenceFileLoad c:\VM5000TV\RefLimFiles\DefaultRef1080i60-YPbPr.csv”

ReferenceFileSave <pathstring>

Saves the current measurement results to a Reference file that can be used for Relative to Reference testing.

Syntax VARIABLE:VALUE "ReferenceFileSave", "<pathstring>"

Group Setup

Arguments <pathstring> path/filename with extension where file is to be stored. Can either be (1) the full path and filename with extension, or (2) just the filename with extension, and the default path "c:\VM5000TV\RefLimFiles" will be used. You have to specify the extension for the filename. The command does not append the filename extension automatically. The default extension ".csv" will be appended if it is not specified. The specified directory will be created if it doesn't exist. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands ReferenceSet

Returns Returns OK after the file is written.

Examples VARIABLE:VALUE "ReferenceFileSave c:\VM5000TV\RefLimFiles\DU-TRef1080i60-YPbPr.csv"

ReferenceSet

Set or query whether Reference Testing is enabled or disabled.

Syntax VARIable:VALue “ReferenceSet”, “<setting>”
 VARIable:VALue? “ReferenceSet”

Group Limit Testing

Arguments <setting> specifies whether to perform Relative to Reference testing upon Execute.

Valid values are: OFF, ON, 0, 1.

Returns Query returns 0 or 1 depending on whether NonLinearitySet measurement is selected.

Examples VARIable:VALue “ReferenceSet”, “ON”
 VARIable:VALue? “ReferenceSet”

Query may return: “ReferenceSet 1”

ReportCSVType [VM5000|Legacy]

Specifies the file type to be used when ReportGenerate is invoked.

Syntax VARIable:VALue “ReportCSVType”, “[VM5000|Legacy]”
VARIable:VALue? “ReportCSVType”

Group Setup

Arguments [VM5000|Legacy] specifies the type of data which is written to the report. VM5000 includes additional data (data for all new measurement functions) compared to the Legacy format which is identical to the format used by the VM5000HD (and does not include any data for new measurement functions). The Legacy file type is provided for compatibility with VM5000HD file processing systems.

Related Commands ReportGenerate

Returns The file type used by the ReportGenerate command.

Examples VARIable:VALue “ReportCSVType”, “VM5000”

Query may return:
“ReportCSVType Legacy”

ReportGenerate <pathstring>

Generates a measurement report of the specified type (if a measure has been run and results are available), and saves it in the file specified by pathstring.

You have to specify the extension for the filename. The command does not append the filename extension automatically. The type of file (.rtf, .csv or .pdf) is determined by the file extension in the pathstring. If the extension does not match one of these endings, an error is returned.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you get the error message “Invalid Filename,” confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALUE “ReportGenerate”, “<pathstring>”
 VARIABLE:VALUE? “ReportGenerate”

Group Reports

Arguments <pathstring> path/filename where file is to be stored. Can either be (1) the full path and filename with extension or (2) just the filename with extension, and the default path “C:\VM5000TV\Reports” will be used. You have to specify the extension for the filename. The specified directory will be created if it doesn’t currently exist. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands ReportString
 ReportMeasurements

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “ReportGenerate”, “J:\netpath\colorbars.csv”
 VARIABLE:VALUE “ReportGenerate”, “noise02”
 VARIABLE:VALUE? “ReportGenerate”

Query may return: “ReportGenerate OK”

ReportMeasurements <setting>

Set or query the measurements to write to the report when ReportGenerate is called.

Set to "All" when application starts.

Syntax VARIable:VALue "ReportMeasurements", "[All | Selected]"
VARIable:VALue? "ReportMeasurements"

Group Reports

Arguments Valid measurement mode values are All and Selected. All reports all current valid measurements results, while Selected reports only those measurements that are currently set.

Related Commands ChannelDelaySet
ColorBarsSet
FrequencyResponseSet
MultiburstSet
NoiseSet
NonLinearitySet
ReportGenerate
ShortTimeDistSet
SyncSet

Returns Query returns the current specified report measurement mode.

Examples VARIable:VALue "ReportMeasurements", "All"
VARIable:VALue? "ReportMeasurements"

Query may return: "ReportMeasurements Selected"

ReportString <string>

Set or query any additional information to write to the report when ReportGenerate is called.

Initialized to empty string "" on startup.

Syntax VARIable:VALue "ReportString", "<string>"
 VARIable:VALue? "ReportString"

Group Reports

Arguments <string> can be up to 46 characters in length. The comma and double quote characters are not permitted and their usage may result in unexpected program behavior. All other printable characters are permitted.

Related Commands ReportGenerate

Returns Query returns the currently specified report string.

Examples VARIable:VALue "ReportString", "Tested by Joe P - DUT A1"
 VARIable:VALue? "ReportString"

Query may return: "ReportString Tested by Joe P - DUT A1"

If assigning consecutive long strings to ReportString, truncation of the second string may occur if the length of the consecutive strings exceeds a limit (67 characters if Header is ON). For example:

VARIable:VALue "ReportString", "This is a long string which has 45 characters"

VARIable:VALue? "ReportString"
 "ReportString This is a long string which has 45 characters"

VARIable:VALue "ReportString", "This string will be truncated, it is 45 chars"

VARIable:VALue? "ReportString"
 "ReportString This string will be tr"

To avoid this truncation, send a short string to ReportString prior to sending the second string.

```
VARIABLE:VALUE "ReportString", "This is a long string which has 45 characters"  
VARIABLE:VALUE? "ReportString"  
"ReportString This is a long string which has 45 characters"
```

```
VARIABLE:VALUE "ReportString", "short"  
VARIABLE:VALUE? "ReportString"  
"ReportString short"
```

```
VARIABLE:VALUE "ReportString", "This string won't be truncated, it is 46 chars"  
VARIABLE:VALUE? "ReportString"  
"ReportString This string won't be truncated, it is 46 chars"
```


RunMode <runmode>

Set or query run mode to use for measurement.

Syntax VARIable:VALue “RunMode”, “[Once | Continuously | OnceAndReport]”
VARIable:VALue? “RunMode”

Group Configuration

Arguments <runmode> specifies the run mode that is to be used.
Valid run modes are: Once, Continuously.

Returns Query returns the currently specified run mode.

Examples VARIable:VALue “RunMode”, “Once”
VARIable:VALue? “RunMode”

Query may return: “RunMode Continuously”

SaveSettings <pathstring>

Save current settings in the specified path/filename.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you only specify the filename, the default path “c:\VM5000TV” is used. You have to specify the extension (.vmset) for the filename.

The command does not append the filename extension automatically.

If you get the error message “Invalid Filename,” confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALue “SaveSettings”, “<pathstring>”
 VARIABLE:VALue? “SaveSettings”

Group Settings

Arguments <pathstring> specifies the path/filename where the file is to be stored. Can either be (1) the full path and filename, or (2) just the filename, and the default path “c:\VM5000TV” will be used. The default extension “.vmset” will be appended if it is not specified. The specified directory will be created if it doesn’t currently exist. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Related Commands RecallSettings

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALue “SaveSettings”, “c:\VM5000TV\Tek1.vmset”
 VARIABLE:VALue “SaveSettings”, “Tek2.vmset”
 VARIABLE:VALue? “SaveSettings”

Query may return: “SaveSettings OK”

SetupAndOrRun <setuprunmode>

Set or query the setup mode to use for measurement.

Syntax VARIable:VALue "SetupAndOrRun", "<setuprunmode>"
 VARIable:VALue? "SetupAndOrRun"

Group Configuration

Arguments <setuprunmode> specifies how to perform setup when performing a measurement. Valid modes are: SetupAndRun, SetupOnly, RunOnly.

Returns Query returns the current specified setuprunmode.

Examples VARIable:VALue "SetupAndOrRun", "SetupAndRun"
 VARIable:VALue? "SetupAndOrRun"

Query may return: "SetupAndOrRun", "SetupAndRun"

ShortTimeDistortionAverage

Set or query Short Time Distortion average.

Syntax VARIABLE:VALue "ShortTimeDistortionAverage", "<samples>"
 VARIABLE:VALue? "ShortTimeDistortionAverage"

Group Setup

Arguments <samples> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Related Commands ShortTimeDistortionLine

Returns Returns the current number of samples for the Short Time Distortion measurement.

Examples VARIABLE:VALue "ShortTimeDistortionAverage", "50"
 VARIABLE:VALue? "ShortTimeDistortionAverage"

Query may return:
"ShortTimeDistortionAverage", "10"

ShortTimeDistortionCh[1..3]?

Query all six values resulting from the Short Time Distortion measurement for the specified channel.

Syntax VARIABLE:VALUE? "ShortTimeDistortionCh[1..3]"

Group Results

Arguments None

Related Commands ShortTimeDistortionCh[1..3]Val[1..6]

Returns Returns all six values in the following order.

Rise (ns), Fall (ns), Overshoot (%), Undershoot (%), Settling Rise (ns), Settling Fall (ns)

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ShortTimeDistortionCh2"

Query may return:

"ShortTimeDistortionCh2 30.74 25.37 1.33 3.52 0.0 0.0"

ShortTimeDistortionCh[1..3]Val[1..6]?

Query the value resulting from the Short Time Distortion measurement for the specified channel and value.

Syntax VARIABLE:VALUE? "ShortTimeDistortionCh[1..3]Val[1..6]"

Group Results

Arguments None

Related Commands ShortTimeDistortionCh[1..3]

Returns Returns the specified value according to the following list.

1-Rise (ns), 2-Fall (ns), 3-Overshoot (%), 4-Undershoot (%), 5-Settling Rise (ns), 6-Settling Fall (ns)

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ShortTimeDistortionCh2Val2"

Query may return:
"ShortTimeDistortionCh2Val3 25.37"

ShortTimeDistortionK2T?

Query the result for the K2T value resulting from the Short Time Distortion measurement.

Syntax VARIable:VALue? "ShortTimeDistortionK2T"

Group Results

Related Commands ShortTimeDistortionCh[1..3]
ShortTimeDistortionResults?

Arguments None

Returns Returns the K2T value in percent.

Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ShortTimeDistortionK2T"

Query may return:
"ShortTimeDistortionK2T 2.56"

ShortTimeDistortionLine <linenumber>

Set or query Short Time Distortion line number.

Syntax VARIABLE:VALue "ShortTimeDistortionLine", "<linenumber>"
 VARIABLE:VALue "ShortTimeDistortionLine"

Group Setup

Arguments <linenumber> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Related Commands ShortTimeDistortionAverage

Returns Returns the time at which the measurement is taken.

Examples VARIABLE:VALue "ShortTimeDistortionLine", "165"
 VARIABLE:VALue? "ShortTimeDistortionLine"

Query may return:
"ShortTimeDistortionLine 165"

ShortTimeDistortionPassCh[1..3]?

Query the pass/fail status for all six values resulting from the Short Time Distortion measurement for the specified channel. The values used for the relative comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? "ShortTimeDistortionPassCh[1..3]"

Group Results

Arguments None

Related Commands ShortTimeDistortionPassCh[1..3]Val[1..6]

Returns Returns the pass/fail test status for all six values of the Short Time Distortion measurement.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement currently available.

ShortTimeDistortionPassCh[1..3]Val[1..6]?

Query the pass/fail status for the value resulting from the Short Time Distortion measurement for the specified channel and value. The values used for the relative comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? "ShortTimeDistortionPassCh[1..3]Val[1..6]"

Group Results

Arguments None

Related Commands ShortTimeDistortionPassCh[1..3]

Returns Returns the pass/fail test status for the specified channel and value.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ShortTimeDistortionPassCh2Val2"

Query may return:

"ShortTimeDistortionPassCh2Val3 1"

ShortTimeDistortionPassK2T?

Query the pass/fail status for the K2T value resulting from the Short Time Distortion measurement. The value used for the relative comparison is defined in the Limits file.

Syntax VARIable:VALue? "ShortTimeDistortionPassK2T"

Group Results

Arguments None

Related Commands ShortTimeDistortionPassCh[1..3]

Returns Returns pass/fail test status of the K2T value.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ShortTimeDistortionPassK2T"

Query may return:

"ShortTimeDistortionPassK2T 1"

ShortTimeDistortionRelCh[1..3]?

Query all six values resulting from the Short Time Distortion relative measurement for the specified channel. The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALUE? "ShortTimeDistortionRelCh[1..3]"

Group Results

Arguments None

Related Commands ShortTimeDistortionRelCh[1..3]Val[1..6]

Returns Returns all six relative values in the following order.

Rise (ns), Fall (ns), Overshoot (%), Undershoot (%), Settling Rise (ns), Settling Fall (ns)

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "ShortTimeDistortionRelCh2"

Query may return:

"ShortTimeDistortionRelCh2 0.52 0.13 0.17 0.17 0.0 0.0"

ShortTimeDistortionRelCh[1..3]Val[1..6]?

Query the value resulting from the Short Time Distortion relative measurement for the specified channel and value. The value used for the relative comparison is defined in the Reference file.

Syntax VARIable:VALue? "ShortTimeDistortionRelCh[1..3]Val[1..6]"

Group Results

Arguments None

Related Commands ShortTimeDistortionRelCh[1..3]
ShortTimeDistortionRelK2T

Returns Returns the specified relative value according to the following list.

1-Rise (ns), 2-Fall (ns), 3-Overshoot (%), 4-Undershoot (%), 5-Settling Rise (ns), 6-Settling Fall (ns)

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "ShortTimeDistortionRelCh2Val2"

Query may return:
"ShortTimeDistortionCh2Val2 0.13"

ShortTimeDistortionRelK2T?

Query the K2T value resulting from the Short Time Distortion relative measurement. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALUE? "ShortTimeDistortionRelK2T"

Group Results

Arguments None

Related Commands ShortTimeDistortionRelCh[1..3]
ShortTimeDistortionRelCh[1..3]Val[1..6]

Returns Returns the K2T relative value in percent.

Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ShortTimeDistortionRelK2T"

Query may return:
"ShortTimeDistortionRelK2T 0.42"

ShortTimeDistSet

Set or query whether to measure Short Time Distortion upon Execute.

Syntax VARIable:VALue “ShortTimeDistortionSet”, “<setting>”
VARIable:VALue? “ShortTimeDistortionSet”

Group Configuration

Arguments <setting> specifies whether to perform Short Time Distortion measurement upon Execute. Valid values are: OFF, ON, 0, 1.

Related Commands Execute
ReportMeasurements

Returns Query returns 0 or 1 depending on whether ShortTimeDistortionSet measurement is selected.

Examples VARIable:VALue “ShortTimeDistortionSet”, “ON”
VARIable:VALue? “ShortTimeDistortionSet”

Query may return: “ShortTimeDistortionSet 1”

ShortTimeDistortionStatus

Query the status of the Short Time Distortion measurement.

Syntax VARIable:VALue “ShortTimeDistortionStatus”, [--- | Done | Stopped | Pass | Fail]
VARIable:VALue? “ShortTimeDistortionStatus”

Group Status

Related Commands Execute
ExecuteReport

Returns Query returns [--- | Done | Stopped | Pass | Fail] status of the Short Time Distortion measurement.

Examples VARIable:VALue? “ShortTimeDistortionStatus”

Query may return: “ShortTimeDistortionStatus Pass”

StopOnError <setting>

Set or query Stop on Error is enabled.

Syntax VARIable:VALue "StopOnError", "<setting>"
 VARIable:VALue? "StopOnError"

Group Run

Arguments <setting> specifies whether or not to stop testing if limits are exceeded.
 Valid values are: OFF, ON, 0, 1.

Related Commands

Returns Returns setting for whether or not the VM5000 will stop testing on an error.

Examples VARIable:VALue "StopOnError", "OFF"
 VARIable:VALue? "StopOnError"

Query may return:
"StopOnError 0"

SyncAverage <samples>

Set or query the number of samples over which to average the Sync measurement.

Syntax VARIable:VALue “SyncAverage”, “<samples>”
 VARIable:VALue? “SyncAverage”

Group Setup

Related Commands SyncLine
 SyncTimes?

Arguments <samples> can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current number of samples for Sync measurement.

Examples VARIable:VALue “SyncAverage”, “1”
 VARIable:VALue? “SyncAverage”

Query may return: “SyncAverage 8”

SyncLevelsMv?

Query all synchronization levels resulting from the Sync measurement. For Tri-Level Sync, this returns three levels. For Bi-Level Sync, this returns two levels.

Syntax VARIable:VALue? "SyncLevelsMv"

Group Results

Arguments None

Related Commands SyncLevelsMvVal[1..3]

Returns Returns all synchronization levels (in mV) in this order:
For Tri-Level: FrontPorchLevel NegativeSyncLevel PositiveSyncLevel.
For Bi-Level: FrontPorchLevel SyncLevel.

Returns "---" if no valid measurement currently available.

Examples VARIable:VALue? "SyncLevelsMv"

Query may return: "SyncLevelsMv 0.89 -298.31 299.11"

SyncLevelsmV[1..3]?

Query all synchronization levels resulting from a Sync measurement. For Tri-Level Sync, this returns three levels. For Bi-Level Sync, this returns two levels.

Syntax VARIABLE:VALue? "SyncLevelsmV[1..3]"

Group Results

Arguments None

Returns Returns all synchronization levels (in mV) in this order:
For Tri-Level: FrontPorchLevel NegativeSyncLevel PositiveSyncLevel.
For Bi-Level: FrontPorchLevel SyncLevel.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALue? "SyncLevelsmV1"

Query may return: "SyncLevelsmV1 299.11"

SyncLevelsmVVal[1..3]?

Query the specified synchronization level resulting from a Sync measurement.

Syntax VARIable:VALue? "SyncLevelsmVVal[1..3]"

Group Results

Arguments None

Returns Returns specified synchronization level (in mV).

Values must be in the following ranges:

For Tri-Level, 1..3

For Bi-Level, 1..2

Values must designate the following levels:

For Tri-Level: 1. FrontPorchLevel, 2. NegativeSyncLevel, 3. PositiveSyncLevel.

For Bi-Level: 1. FrontPorchLevel, 2. SyncLevel.

Returns "---" if no valid measurement currently available

Examples VARIable:VALue? "SyncLevelsmVVal3"

Query may return: "SyncLevelsmVVal3 299.11"

SyncLine <linenumber>

Set or query line number that is to be used for Sync measurement.

Syntax VARIable:VALue “SyncLine”, “<linenumber>”
 VARIable:VALue? “SyncLine”

Group Setup

Arguments <linenumber> can be an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Returns Query returns the current line number for Sync measurement.

Examples VARIable:VALue “SyncLine”, “200”
 VARIable:VALue? “SyncLine”

Query may return: “SyncLine 325”

SyncPassLevelsMv

Query the pass/fail status for all synchronization levels. For Tri-Level Sync, this returns three values.

For Bi-Level Sync, this also returns three values but with “---” returned for the third value (instead of a pass/fail indicator).

The values used for the relative comparison are defined in the Limits file.

Syntax VARIABLE:VALUE? “SyncPassLevelsMv”

Group Results

Arguments None

Related Commands SyncPassLevelsMvVal[1..3]

Returns Returns the pass/fail status all synchronization levels in this order:
For Tri-Level: FrontPorchLevel, NegativeSyncLevel, PositiveSyncLevel.
For Bi-Level: FrontPorchLevel, SyncLevel.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALUE? “SyncPassLevelsMv”

Query may return: “SyncPassLevelsMv 1 1 ---”

SyncPassLevelsmVVal[1..3]?

Query pass/fail status for the specified synchronization level. The value used for the relative comparison is defined in the Limits file.

Syntax VARIABLE:VALUE? "SyncPassLevelsmVVal[1..3]"

Group Results

Arguments None

Related Commands SyncPassLevelsmV

Returns Returns the pass/fail status of the specified synchronization level.

Values must be in the following ranges:

For Tri-Level, 1..3

For Bi-Level, 1..2

Values designate the following levels:

For Tri-Level: 1. FrontPorchLevel, 2. NegativeSyncLevel, 3. PositiveSyncLevel.

For Bi-Level: 1. FrontPorchLevel, 2. SyncLevel.

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement currently available

Examples VARIABLE:VALUE? "SyncPassLevelsmVVal3"

Query may return: "SyncPassLevelsmVVal3 1"

SyncPassTimes?

Query the pass/fail status for all synchronization times. The values used for the pass/fail test determination are defined in the Limits file.

For Tri-Level Sync, this returns ten times.
For Bi-Level Sync, this returns eight times.

Syntax VARIable:VALue? "SyncPassTimes"

Group Results

Arguments None

Related Commands SyncPassTimesVal[1..7]

Returns Returns the pass/fail status for all synchronization times in the order:
For Tri-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Positive Sync Width (ns),
6. Positive Sync Fall (ns), 7. Back Porch (ns), 8. Total Line Time (μ s),
9. Start of Addressable Video (μ s), 10. End of Addressable Video (μ s).
For Bi-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Back Porch (ns),
6. Total Line Time (μ s), 7. Start of Addressable Video (μ s),
8. End of Addressable Video (μ s).

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement currently available

Examples VARIable:VALue? "SyncPassTimes"

Query may return:
"SyncPassTimes 1 1 1 1 1 1 1 1 1 1"

SyncPassTimesVal[1..10]?

Query the pass/fail status for the specified synchronization time. The value used for the pass/fail test determination is defined in the Limits file.

Syntax VARIABLE:VALUE? "SyncPassTimesVal[1..10]"

Group Results

Arguments None

Related Commands SyncTimes

Returns Returns specified synchronization time.

Values must be in these ranges:

For Tri-Level 1..10

For Bi-Level 1..8

Values designate the following times:

For Tri-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Positive Sync Width (ns),
6. Positive Sync Fall (ns), 7. Back Porch (ns), 8. Total Line Time (μs),
9. Start of Addressable Video (μs), 10. End of Addressable Video (μs).

For Bi-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Back Porch (ns),
6. Total Line Time (μs), 7. Start of Addressable Video (μs),
8. End of Addressable Video (μs).

A returned value of 1 means Pass; a returned value of 0 means Fail.

Returns "---" if no valid measurement currently available.

Examples VARIABLE:VALUE? "SyncTimesVal2"

Query may return: "SyncTimesVal2 0"

SyncRelLevelsM?V?

Query the relative values for all synchronization levels. For Tri-Level Sync, this returns three values.

For Bi-Level Sync, this also returns three values but with “---” returned for the third value.

The values used for the relative comparison are defined in the Reference file.

Syntax VARIABLE:VALUE? “SyncRelLevelsM?”

Group Results

Arguments None

Related Commands SyncRelLevelsMVal[1..3]

Returns Returns the relative values for all synchronization levels in this order:
For Tri-Level: Front Porch Level, Negative Sync Level, Positive Sync Level.
For Bi-Level: Front Porch Level, Sync Level.

Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALUE? “SyncRelLevelsM?”

Query may return: “SyncPassLevelsM 0.36 1.06 -1.57”

SyncRelLevelsmVVal[1..3]?

Query relative values for the specified synchronization level. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALUE? "SyncRelLevelsmVVal[1..3]"

Group Results

Arguments None

Related Commands SyncRelLevelsmV

Returns Returns the relative values of the specified synchronization level.

Values must be in the following ranges:

For Tri-Level, 1..3

For Bi-Level, 1..2

Values designate the following levels:

For Tri-Level: 1. Front Porch Level, 2. Negative Sync Level,
3. Positive Sync Level.

For Bi. Level: 1. Front Porch Level, 2. Sync Level.

Returns "---" if no valid measurement currently available

Examples VARIABLE:VALUE? "SyncRelLevelsmVVal3"

Query may return: "SyncRelLevelsmVVal3 -1.57"

SyncRelTimes?

Query the relative values for all synchronization times. The values used for the relative comparison are defined in the Reference file.

For Tri-Level Sync, this returns ten times.
For Bi-Level Sync, this returns eight times.

Syntax VARIable:VALue? "SyncRelTimes"

Group Results

Arguments None

Related Commands SyncRelTimesVal[1..7]

Returns Returns the relative values for all synchronization times in the order:
For Tri-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Positive Sync Width (ns),
6. Positive Sync Fall (ns), 7. Back Porch (ns), 8. Total Line Time (μ s),
9. Start of Addressable Video (μ s), 10. End of Addressable Video (μ s).
For Bi-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Back Porch (ns),
6. Total Line Time (μ s), 7. Start of Addressable Video (μ s),
8. End of Addressable Video (μ s).

Returns "---" if no valid measurement currently available

Examples VARIable:VALue? "SyncRelTimes"

Query may return:
"SyncRelTimes 40.34 1.47 0.21 -0.76 1.01 1.19 39.95 0.0 0.04 -0.04"

SyncRelTimesVal[1..10]?

Query the relative values of the specified synchronization time. The value used for the relative comparison is defined in the Reference file.

Syntax VARIABLE:VALUE? “SyncRelTimesVal[1..10]”

Group Results

Arguments None

Related Commands SyncRelTimes

Returns Returns relative time for the specified synchronization time.

Values must be in these ranges:

For Tri-Level 1..10

For Bi-Level 1..8

Values designate the following times:

For Tri-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Positive Sync Width (ns),
6. Positive Sync Fall (ns), 7. Back Porch (ns), 8. Total Line Time (μs),
9. Start of Addressable Video (μs), 10. End of Addressable Video (μs).

For Bi-Level: 1. Front Porch (ns), 2. Negative Sync Fall (ns),
3. Negative Sync Width (ns), 4. Sync Rise (ns), 5. Back Porch (ns),
6. Total Line Time (μs), 7. Start of Addressable Video (μs),
8. End of Addressable Video (μs).

Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALUE? “SyncRelTimesVal2”

Query may return: “SyncRelTimesVal2 1.47”

SyncSet <setting>

Set or query whether to measure Sync upon Execute.

Syntax VARIable:VALue “SyncSet”, “<setting>”
 VARIable:VALue? “SyncSet”

Group Configuration

Arguments <setting> specifies whether to perform Sync measurement upon Execute. Valid values are: OFF, ON, 0, 1.

Related Commands Execute
 ReportMeasurements

Returns Query returns 0 or 1 depending on whether SyncSet measurement is selected.

Examples VARIable:VALue “SyncSet”, “ON”
 VARIable:VALue? “SyncSet”

Query may return: “SyncSet 1”

SyncStatus

Query the status of the Sync measurement.

Syntax VARIable:VALue? “SyncStatus”, [--- | Done | Stopped | Pass | Fail]

Group Status

Returns Query returns [--- | Done | Stopped | Pass | Fail] status of the Sync measurement.

Examples VARIable:VALue? “SyncStatus”
Query may return: “SyncStatus Pass”

SyncTimes?

Query all synchronization times resulting from the Sync measurement.

For Tri-Level Sync, this returns seven times.

For Bi-Level Sync, this returns five times.

Syntax VARIable:VALue? "SyncTimes"

Group Results

Arguments None

Related Commands SyncTimesVal[1..7]

Returns Returns all synchronization times in the order:
For Tri-Level: 1. FrontPorch, 2. NegativeSyncFall, 3. NegativeSyncWidth
4. SyncRise, 5. PositiveSyncWidth, 6. PositiveSyncFall, 7. BackPorch.
For Bi-Level: 1. FrontPorch, 2. NegativeSyncFall, 3. NegativeSyncWidth
4. SyncRise, 5 BackPorch.

Returns "---" if no valid measurement currently available

Examples VARIable:VALue? "SyncTimes"

Query may return:

"SyncTimes 3822.39 59.03 592.01 52.61 590.40 55.24 1995.19"

SyncTimesVal[1..10]?

Query the specified synchronization time resulting from the Sync measurement.

Syntax VARIABLE:VALue? “SyncTimesVal[1..7]”

Group Results

Arguments None

Related Commands SyncTimes

Returns Returns specified synchronization time.

Values must be in these ranges:

For Tri-Level 1..7

For Bi-Level 1..5

Values must designate the following times:

For Tri-Level: 1. FrontPorch, 2. NegativeSyncFall, 3. NegativeSyncWidth, 4. SyncRise, 5. PositiveSyncWidth, 6. PositiveSyncFall, 7. BackPorch.

For Bi-Level: 1. FrontPorch, 2. NegativeSyncFall, 3. NegativeSyncWidth, 4. SyncRise, 5. BackPorch.

Returns “---” if no valid measurement currently available.

Examples VARIABLE:VALue? “SyncTimesVal2”

Query may return: “SyncTimesVal2 59.03”

Trigger <trigger>

Set or query video trigger to use for measurement.

Syntax VARIable:VALue "Trigger", "<trigger>"
 VARIable:VALue? "Trigger"

Group Configuration

Arguments <trigger> specifies trigger that is to be used.
 Valid triggers are: Ch1, Ch4.

Returns Query returns the current specified trigger.

Examples VARIable:VALue "Trigger", "Ch4"
 VARIable:VALue? "Trigger"

Query may return: "Trigger Ch4"

VectorscopeGrat [Auto|709-HD|601-SD]

Set or query Vectorscope graticule. VectorscopeLine and PixLine change the same setting. Thus, if you set VectorscopeLine to 250, then PixLine will also be 250. Likewise, if you set PixLine to 300, Vectorscope Line will be set to 300.

Syntax VARIABLE:VALUE "VectorscopeGrat", "[Auto|709-HD|601-SD]"
VARIABLE:VALUE "VectorscopeGrat"

Group Configuration

Arguments [Auto|709-HD|601-SD] Auto allows the instrument to select the graticule. 709-HD selects the graticule for HD signals. 601-Sd selects the graticule for SD signals.

Related Commands VectorscopeLine
 VectorscopeScale

Returns Returns the graticule type used for Vectorscope display.

Examples VARIABLE:VALUE "VectorscopeGrat", "709-HD"
VARIABLE:VALUE? "VectorscopeLine"

Query may return:
"VectorscopeLine Auto"

VectorscopeLine <linenumber>

Set or query Vectorscope Line number to bright up.

Syntax VARIable:VALue "VectorscopeLine", "<linenumber>"
 VARIable:VALue? "VectorscopeLine"

Group Configuration

Arguments <linenumber> Can be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Floating point notation is allowed.

Related Commands PixLine
 VectorscopeGrat
 VectorscopeScale

Returns Returns the line number used for the Vectorscope display.

Examples VARIable:VALue "VectorscopeLine", "165"
 VARIable:VALue? "VectorscopeLine"

Query may return:
"VectorscopeLine 1070"

VectorscopeScale [Auto|75Pct|100Pct]

Set or query Vectorscope scale.

Syntax VARIABLE:VALue “VectorscopeScale”, “[Auto|75Pct|100Pct]”
VARIABLE:VALue” “VectorscopeScale”

Group Configuration

Arguments [Auto|75Pct|100Pct] Auto allows the instrument to select the scale. 75Pct selects the 75% scale. 100Pct selects the 100% scale.

Related Commands VectorscopeGrat
VectorscopeLine

Returns Returns the display scale used for the Vectorscope display.

Examples VARIABLE:VALue “VectorscopeGrat”, “709-HD”
VARIABLE:VALue? “VectorscopeLine”

Query may return:
“VectorscopeLine Auto”

Warning <string>

Reset warning to 0 or query warning value.

Syntax VARIable:VALue “Warning”, “<string>”

Group Setup

Arguments <string> is the warning message reported when a warning is generated.

Related Commands WarningLogSet
WarningReportingMeasure
WarningReportingResults
WarningReportingSignal

Returns None

Examples VARIable:VALue “Warning”, “An error has been generated”

WarningReportingMeasure <setting>

Set or query whether measurement warnings create a warning message.

Syntax VARIABLE:VALue "WarningReportingMeasure", "<setting>"
 VARIABLE:VALue? "WarningReportingMeasure"

Group Configuration

Arguments <setting> Valid settings are: OFF, ON, 0, 1.
 OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportResults
 WarningReportSignal

Returns Query returns the current specified setting.

Examples VARIABLE:VALue "WarningReportingMeasure", "ON"
 VARIABLE:VALue? "WarningReportingMeasure"

 Query may return: "WarningReportingMeasure 0"

WarningReportingResults <setting>

Set or query whether results warnings are to create a warning message.

Syntax VARIable:VALue “WarningReportingResults”, “<setting>”
 VARIable:VALue? “WarningReportingResults”

Group Configuration

Arguments <setting> valid settings are: OFF, 0, ON, 1.
 OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportingMeasure
 WarningReportingSignal

Returns Query returns the current specified setting.

Examples VARIable:VALue “WarningReportingResults”, “ON”
 VARIable:VALue? “WarningReportingResults”

 Query may return: “WarningReportingResults 0”

WarningReportingSignal <setting>

Set or query whether signal warnings create a warning message.

Syntax VARIABLE:VALue “WarningReportingSignal”, “<setting>”
 VARIABLE:VALue? “WarningReportingSignal”

Group Configuration

Arguments <setting> valid settings are: OFF, 0, ON, 1.
 OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportingMeasure
 WarningReportingResults

Returns Query returns the current specified setting.

Examples VARIABLE:VALue “WarningReportingSignal”, “ON”
 VARIABLE:VALue? “WarningReportingSignal”

 Query may return: “WarningReportingSignal 0”



Option VGA Remote Commands

Option VGA Remote Commands

Command Groups

Table 3-1 through Table 3-13 lists the commands organized by functional group. (Refer to the *Table of Contents* for a list of all the commands in alphabetical order.)

Table 3-1: Measurement Setup commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchAverage	Set or query the number of samples over which to average the Ch-Ch Mismatch measurement.
ChChMismatchLine	Set or query the line number used to perform the Ch-Ch Mismatch measurement.
ChChMismatchMultiLineEnd	Set or query the ending line number used to perform the Ch-Ch Mismatch measurement on multiple lines.
ChChMismatchMultiLineSet	Set or query whether to perform the Ch-Ch Mismatch measurement on multiple lines upon Execute.
ChChMismatchMultiLineStart	Set or query the starting line number used to perform the Ch-Ch Mismatch measurement on multiple lines.
ChChMismatchSet	Set or query whether to perform the Ch-Ch Mismatch measurement upon Execute.
ChChSkewAverage	Set or query the number of samples over which to average the Ch-Ch Skew measurement.
ChChSkewLine	Set or query the line number used to perform the Ch-Ch Skew measurement.
ChChSkewMultiLineEnd	Set or query the ending line number used to perform the Ch-Ch Skew measurement on multiple lines.
ChChSkewMultiLineSet	Set or query whether to perform the Ch-Ch Skew measurement on multiple lines upon Execute.
ChChSkewMultiLineStart	Set or query the starting line number used to perform the Ch-Ch Skew measurement on multiple lines.
ChChSkewSet	Set or query whether to perform the Ch-Ch Skew measurement upon Execute.
ColorBarsAverage	Set or query the total number of samples over which to average the Color Bars measurement.
ColorBarsLine	Set or query the line number used to perform the Color Bars measurement.
ColorBarsMultiLineEnd	Set or query the ending line number used to perform the Color Bars measurement on multiple lines.
ColorBarsMultiLineSet	Set or query whether to perform the Color Bars measurement on multiple lines upon Execute.

Table 3-1: Measurement Setup commands (Option VGA) (Cont.)

Header	Description
ColorBarsMultiLineStart	Set or query the starting line number used to perform the Color Bars measurement on multiple lines.
ColorBarsSet	Set or query whether to perform the Color Bars measurement upon Execute.
HSyncAverage	Set or query the total number of samples over which to average the H Sync measurement.
HSyncLine	Set or query the line number used to perform the H Sync measurement.
HSyncMultiLineEnd	Set or query the ending line number used to perform the H Sync measurement on multiple lines.
HSyncMultiLineSet	Set or query whether to perform the H Sync measurement on multiple lines upon Execute.
HSyncMultiLineStart	Set or query the starting line number used to perform the H Sync measurement on multiple lines.
HSyncSet	Set or query whether to perform the H Sync measurement upon Execute.
HSyncJitterLine	Set or query the number of lines used to perform the H Sync Jitter measurement.
HSyncJitterSet	Set or query whether to perform the H Sync Jitter measurement upon Execute.
HTimingAverage	Set or query the total number of samples over which to average the H Timing measurement.
HTimingLine	Set or query the line number used to perform the H Timing measurement.
HTimingMultiLineEnd	Set or query the ending line number used to perform the H Timing measurement on multiple lines.
HTimingMultiLineSet	Set or query whether to perform the H Timing measurement on multiple lines upon Execute.
HTimingMultiLineStart	Set or query the starting line number used to perform the H Timing measurement on multiple lines.
HTimingSet	Set or query whether to perform the H Timing measurement upon Execute.
LinearityAverage	Set or query the total number of samples over which to average the Linearity measurement.
LinearityLine	Set or query the line number used to perform the Linearity measurement.
LinearityMultiLineEnd	Set or query the ending line number used to perform the Linearity measurement on multiple lines.
LinearityMultiLineSet	Set or query whether to perform the Linearity measurement on multiple lines upon Execute.
LinearityMultiLineStart	Set or query the starting line number used to perform the Linearity measurement on multiple lines.
LinearitySet	Set or query whether to perform the Linearity measurement upon Execute.
LumaLevelsAverage	Set or query the total number of samples over which to average the Luma Levels measurement.
LumaLevelsLine	Set or query the line number used to perform the Luma Levels measurement.

Table 3-1: Measurement Setup commands (Option VGA) (Cont.)

Header	Description
LumaLevelsMultiLineEnd	Set or query the ending line number used to perform the Luma Levels measurement on multiple lines.
LumaLevelsMultiLineSet	Set or query whether to perform the Luma Levels measurement on multiple lines upon Execute.
LumaLevelsMultiLineStart	Set or query the starting line number used to perform the Luma Levels measurement on multiple lines.
LumaLevelsSet	Set or query whether to perform the Luma Levels measurement upon Execute.
NoiseAverage	Set or query the total number of samples over which to average the Noise measurement.
NoiseLine	Set or query the line number performed by the Noise measurement.
NoiseSet	Set or query whether to perform the Noise measurement upon Execute.
VSyncAverage	Set or query the total number of samples over which to average the V Sync measurement.
VSyncLine?	Query the line number used to perform the V Sync measurement.
VSyncSet	Set or query whether to perform the V Sync measurement upon Execute.
VTimingAverage	Set or query the total number of samples over which to average the V Timing measurement.
VTimingLine?	Query the line number used to perform the V Timing measurement.
VTimingSet	Set or query whether to perform the V Timing measurement upon Execute.
VideoTransientAverage	Set or query the total number of samples over which to average the Video Transient measurement.
VideoTransientLine	Set or query the line number used to perform the Video Transient measurement.
VideoTransientMultiLineEnd	Set or query the ending line number used to perform the Video Transient measurement on multiple lines.
VideoTransientMultiLineSet	Set or query whether to perform the Video Transient measurement on multiple lines upon Execute.
VideoTransientMultiLineStart	Set or query the starting line number used to perform the Video Transient measurement on multiple lines.
VideoTransientSet	Set or query whether to perform the Video Transient measurement upon Execute.

Table 3-2: Configuration Commands (Option VGA)

Header	Description
:VARiable:VALue	
AutoScale	Set or query whether to use auto scale during measurement.

Table 3-2: Configuration Commands (Option VGA) (Cont.)

Header	Description
AutoScaleInit	AutoScaleInit specifies the starting values used by the AutoScale command. Loading specific starting values can speed up the process of taking measurements.
Format	Set or query the video format to use for measurement.
Display	Set or query the Picture display.
Noise500MHzFilterSet	Set or query whether to enable the 500 MHz filter for performing the Noise measurement.
SelectLine	Set or query the line mode to be used for the measurements.
SyncPolarityDetectSet	Set or query the Sync Polarity option which is performed automatically while running the measurements.
TimingStandardType	Set or query the timing standard used while performing the measurements.
UseMIUSet	Set or query, if the hardware accessory "RGBHV MIU" is connected, the VM5000 runs tests in an automatic mode that does not require user intervention. If the RGBHV MIU is not connected, the user must make manual connection changes when prompted by the VM5000.
UserFormatSet	Set or query a user defined format from the list of the currently available user defined formats. The list of the available user-defined formats can be queried by using the "UserFormatListAll" command.
UserFormatSave	Create/Update a user defined format. All of the input arguments must be specified and should not have any illegal characters. The arguments that correspond to an integer value should be within their respective maximum and minimum limits.
UserFormatDelete	Delete a user defined format from the list of the currently available user defined formats. The list of the available user-defined formats can be queried by using the "UserFormatListAll" command.
UserFormatDisplay?	Query the details of the various parameters of the currently selected user-defined format.
UserFormatListAll?	Query the list of the currently available user-defined formats from the instrument.

Table 3-3: Global commands (Option VGA)

Header	Description
:VARIABLE:VALue	
AppStatus?	Query whether the Application Status is: Configure, Measuring, Done, Reported.
DefaultSettings	Restores the default (factory) settings.

Table 3-3: Global commands (Option VGA) (Cont.)

Header	Description
Execute	Execute or stop the currently set measurement(s), or query whether any measurement is currently being executed. If the measurement is already in the mode specified by the setting, the command has no effect. For example, if a measurement is already running and VARIABLE:VALue "Execute", "1" is received, the measurement will continue to run.
ID?	Query the ID/Version of the application.
OPComplete	This command is used to ensure that the previous commands have been processed by the instrument before either querying its value or calling the next command. OPComplete is set to "1" whenever a GPIB command has been received and processed and a new command is ready to be processed. OPComplete can only be reset to "0" by the user, and it can only be set to "1", when a command has been sent and the next command is ready to be input. It is initialized to "0" on startup. For the "Execute" command, OPComplete is set to "1" after the execution begins.
RecallSettings	Recall the settings stored in the specified path/filename. Query returns "OK" unless the command is still being processed, in which case it returns the current pathstring argument.
SaveSettings	Save the current settings in the specified path/filename. Query returns "OK" unless the command is still being processed, in which case it returns the current pathstring argument.

Table 3-4: Operations commands (Option VGA)

Header	Description
:VARIABLE:VALue	
RunMode	Set or query the run mode to use for measurements.
SetupAndOrRun	Set or query the setup mode to use for measurements.

Table 3-5: Reference / Limits commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ReferenceFileSave	Saves the current measurement results to a Reference file that can be used for Relative to Reference testing.
ReferenceFileLoad	Specifies the Reference file to be loaded for Relative to Reference testing.
LimitFileLoad	Specifies the Limit file to be loaded for Limit Testing.
ReferenceSet	Set or query whether Reference Testing is enabled or disabled.

Table 3-5: Reference / Limits commands (Option VGA) (Cont.)

Header	Description
LimitSet	Set or query whether Limit Testing is performed upon Execute.
StopOnError	Set or query Stop on Error is enabled.

Table 3-6: Reporting commands (Option VGA)

Header	Description
:VARIABLE:VALue	
EmbedScreenCaptureSet	Set or query whether the screen capture of the instrument display is included in the report file for the measurements.
LogErrors	Set or query whether errors are logged to a file. If enabled, errors are logged in the "C:\VM5000PC\log.txt" file.
PopupWarnings	Set or query if Pop-up warnings appear on screen.
ReportFormatType	Specifies the file type to be used when ReportGenerate is called.
ReportGenerate	Generates a measurement report of the specified type (if a measurement has been run and results are available), and saves it in the file specified by the pathstring.
ReportMeasurements	Set or query the measurements to write to the report when ReportGenerate is called.
ReportString	Set or query any additional information to write to the report when ReportGenerate is called. This string is initialized to an empty string "" on startup.
WarningReportingMeasure	Set or query whether measurement warnings are reported. These settings are tied to the Warning Types Reported settings located on the Warnings tab.
WarningReportingResults	Set or query whether results warnings are reported. These settings are tied to the Warning Types Reported settings located on the Warnings tab.
WarningReportingSignal	Set or query whether signal warnings are reported. These settings are tied to the Warning Types Reported settings located on the Warnings tab.

Table 3-7: Pass/Fail Status Query commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchPassCh1Ch2?	Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 measurement.
ChChMismatchPassCh1Ch3?	Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 measurement.
ChChMismatchPassCh2Ch3?	Query the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 measurement.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
ChChMismatchPassPeakToPeakCh1Ch2?	Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 (%) Peak-Peak measurement.
ChChMismatchPassPeakToPeakCh1Ch3?	Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 (%) Peak-Peak measurement.
ChChMismatchPassPeakToPeakCh2Ch3?	Query the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 (%) Peak-Peak measurement.
ChChMismatchPassAll?	Query the pass/fail status for all the values of the Ch-Ch Mismatch measurement.
ChChSkewPassCh1Ch2?	Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 measurement.
ChChSkewPassCh1Ch3?	Query the pass/fail status of the Ch-Ch Skew Ch1Ch3 measurement.
ChChSkewPassCh2Ch3?	Query the pass/fail status of the Ch-Ch Skew Ch2Ch3 measurement.
ChChSkewPassPixelClockCh1Ch2?	Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 pixel clock measurement.
ChChSkewPassPixelClockCh1Ch3?	Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 pixel clock measurement.
ChChSkewPassPixelClockCh2Ch3?	Query the pass/fail status of the Ch-Ch Skew Ch2Ch3 pixel clock measurement.
ChChSkewPassAll?	Query the pass/fail status for all the values of the Ch-Ch Skew measurement.
ColorBarsPassCh[1..3]?	Query the pass/fail status for all the eight color bars resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val1?	Query the pass/fail status for the White color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val2?	Query the pass/fail status for the Yellow color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val3?	Query the pass/fail status for the Cyan color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val4?	Query the pass/fail status for the Green color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val5?	Query the pass/fail status for the Magenta color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val6?	Query the pass/fail status for the Red color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val7?	Query the pass/fail status for the Blue color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassCh[1..3]Val8?	Query the pass/fail status for the Black color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsPassAll?	Query the pass/fail status for all the color bars values resulting from the Color Bars measurement on all the channels.
HSyncPassPolarity?	Query the pass/fail status for the Polarity value resulting from the H Sync measurement.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
HSyncPassSyncPulseWidth?	Query the pass/fail status for the Pulse Width value resulting from the H Sync measurement.
HSyncPassSyncPeriod?	Query the pass/fail status for the Sync Period value resulting from the H Sync measurement.
HSyncPassFrequency?	Query the pass/fail status for the Frequency value resulting from the H Sync measurement.
HSyncPassRiseTime?	Query the pass/fail status for the Rise Time value resulting from the H Sync measurement.
HSyncPassFallTime?	Query the pass/fail status for the Fall Time value resulting from the H Sync measurement.
HSyncPassOvershoot?	Query the pass/fail status for the Overshoot value resulting from the H Sync measurement.
HSyncPassUndershoot?	Query the pass/fail status for the Undershoot value resulting from the H Sync measurement.
HSyncPassOvershootSettlingTime?	Query the pass/fail status for the Overshoot Settling Time value resulting from the H Sync measurement.
HSyncPassUndershootSettlingTime?	Query the pass/fail status for the Undershoot Settling Time value resulting from the H Sync measurement.
HSyncPassMonotonicRise?	Query the pass/fail status for the Monotonic Rise value resulting from the H Sync measurement.
HSyncPassMonotonicFall?	Query the pass/fail status for the Monotonic Fall value resulting from the H Sync measurement.
HSyncPassLogicLevel1Value1?	Query the pass/fail status for the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
HSyncPassLogicLevel0Value1?	Query the pass/fail status for the Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
HSyncPassLogicLevel1Value2?	Query the pass/fail status for the Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.
HSyncPassLogicLevel0Value2?	Query the pass/fail status for the Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.
HSyncPassAll?	Query the pass/fail status for all the values resulting from the H Sync measurement.
HSyncJitterPassTime?	Query the pass/fail status for the Time period resulting from the H Sync Jitter measurement.
HSyncJitterPassPixelClock?	Query the pass/fail status for the (%) Pixel Clock value resulting from the H Sync Jitter measurement.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
HSyncJitterPassAll?	Query the pass/fail status for all the values resulting from the H Sync Jitter measurement.
HTimingPassBackPorchCh[1..3]?	Query the pass/fail status for the Back Porch value resulting from the H Timing measurement on the specified channel.
HTimingPassLeftBorderCh[1..3]?	Query the pass/fail status for the Left Border value resulting from the H Timing measurement on the specified channel.
HTimingPassAddressableVideoCh[1..3]?	Query the pass/fail status for the Addressable Video value resulting from the H Timing measurement on the specified channel.
HTimingPassRightBorderCh[1..3]?	Query the pass/fail status for the Right Border value resulting from the H Timing measurement on the specified channel.
HTimingPassFrontPorchCh[1..3]?	Query the pass/fail status for the Front Porch value resulting from the H Timing measurement on the specified channel.
HTimingPassSyncPulseWidth?	Query the pass/fail status for the Sync Pulse Width value resulting from the H Timing measurement on the specified channel.
HTimingPassPixelClock?	Query the pass/fail status for the (%) Pixel Clock value resulting from the H Timing measurement on the specified channel.
HTimingPassAll?	Query the pass/fail status for all the values resulting from the H Timing measurement on the specified channel.
LinearityPassResolutionCh[1..3]?	Query the pass/fail status for the Resolution value resulting from the Linearity measurement on the specified channel.
LinearityPassMaxINLCh[1..3]?	Query the pass/fail status for the Max INL value resulting from the Linearity measurement on the specified channel.
LinearityPassMaxDNLCh[1..3]?	Query the pass/fail status for the Max DNL value resulting from the Linearity measurement on the specified channel.
LinearityPassMonotonicCh[1..3]?	Query the pass/fail status for the Monotonic value resulting from the Linearity measurement on the specified channel.
LinearityPassAll?	Query the pass/fail status for all the values resulting from the Linearity measurement on all the channels.
LumaLevelsPassAmpMaxCh[1..3]?	Query the pass/fail status for the maximum Amplitude value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsPassAmpMinCh[1..3]?	Query the pass/fail status for the minimum Amplitude value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsPassAll?	Query the pass/fail status for all the values resulting from the Luma Levels measurement on all the channels.
NoisePassmVCh[1..3]?	Query the pass/fail status of the Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.
NoisePassdBCh[1..3]?	Query the pass/fail status of the Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.
NoisePassrCh[1..3]?	Query the pass/fail status of the Inj Ratio (in %) value resulting from the Noise Inj Ratio measurement on the specified channel.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
NoisePassAll?	Query the pass/fail status for all the values resulting from the Noise Inj Ratio measurement on all the channels.
VSynPassPolarity?	Query the pass/fail status for the Polarity value resulting from the V Sync measurement.
VSynPassPulseWidth?	Query the pass/fail status for the Pulse Width value resulting from the V Sync measurement.
VSynPassSyncPeriod?	Query the pass/fail status for the Sync Period value resulting from the V Sync measurement.
VSynPassFrequency?	Query the pass/fail status for the Frequency value resulting from the V Sync measurement.
VSynPassRiseTime?	Query the pass/fail status for the Rise Time value resulting from the V Sync measurement.
VSynPassFallTime?	Query the pass/fail status for the Fall Time value resulting from the V Sync measurement.
VSynPassOvershoot?	Query the pass/fail status for the Overshoot value resulting from the V Sync measurement.
VSynPassUndershoot?	Query the pass/fail status for the Undershoot value resulting from the V Sync measurement.
VSynPassOvershootSettlingTime?	Query the pass/fail status for the Overshoot Settling Time value resulting from the V Sync measurement.
VSynPassUndershootSettlingTime?	Query the pass/fail status for the Undershoot Settling Time value resulting from the V Sync measurement.
VSynPassMonotonicRise?	Query the pass/fail status for the Monotonic Rise value resulting from the V Sync measurement.
VSynPassMonotonicFall?	Query the pass/fail status for the Monotonic Fall value resulting from the V Sync measurement.
VSynPassLogicLevel1Value1?	Query the pass/fail status for the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
VSynPassLogicLevel0Value1?	Query the pass/fail status for the Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
VSynPassLogicLevel1Value2?	Query the pass/fail status for the Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
VSynPassLogicLevel0Value2?	Query the pass/fail status for the Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
VSynPassAll?	Query the pass/fail status for all the values resulting from the V Sync measurement.

Table 3-7: Pass/Fail Status Query commands (Option VGA) (Cont.)

Header	Description
VTimingPassBackPorchCh[1..3]?	Query the pass/fail status for the Back Porch value resulting from the V Timing measurement on the specified channel.
VTimingPassTopBorderCh[1..3]?	Query the pass/fail status for the Top Border value resulting from the V Timing measurement on the specified channel.
VTimingPassAddressableLinesCh[1..3]?	Query the pass/fail status for the Addressable Lines value resulting from the V Timing measurement on the specified channel.
VTimingPassBottomBorderCh[1..3]?	Query the pass/fail status for the Bottom Border value resulting from the V Timing measurement on the specified channel.
VTimingPassFrontPorchCh[1..3]?	Query the pass/fail status for the Front Porch value resulting from the V Timing measurement on the specified channel.
VTimingPassSyncPulseWidth?	Query the pass/fail status for the Sync Pulse Width value resulting from the V Timing measurement.
VTimingPassAll?	Query the pass/fail status for all the values resulting from the V Timing measurement on all the channels.
VideoTransientPassVideoRiseTimeCh[1..3]?	Query the pass/fail status for the Video Rise Time resulting from the Video Transient measurement on the specified channel.
VideoTransientPassVideoFallTimeCh[1..3]?	Query the pass/fail status for the Video Fall Time resulting from the Video Transient measurement on the specified channel.
VideoTransientPassVideoRiseTime PercentageCh[1..3]?	Query the pass/fail status for the Video Rise Time (%) resulting from the Video Transient measurement on the specified channel.
VideoTransientPassVideoFallTime PercentageCh[1..3]?	Query the pass/fail status for the Video Fall Time (%) resulting from the Video Transient measurement on the specified channel.
VideoTransientPassOvershootCh[1..3]?	Query the pass/fail status for the Overshoot resulting from the Video Transient measurement on the specified channel.
VideoTransientPassUndershootCh[1..3]?	Query the pass/fail status for the Undershoot resulting from the Video Transient measurement on the specified channel.
VideoTransientPassOvershootSettling TimeCh[1..3]?	Query the pass/fail status for the Overshoot Settling Time resulting from the Video Transient measurement on the specified channel.
VideoTransientPassUndershootSettling TimeCh[1..3]?	Query pass/fail status for the Undershoot Settling Time resulting from the Video Transient measurement on the specified channel.
VideoTransientPassAll?	Query the pass/fail status for all the values resulting from the Video Transient measurement on all the channels.

Table 3-8: Results Summary Query Commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchStatus?	Query the status of the Ch-Ch Mismatch measurement.
ChChSkewStatus?	Query the status of the Ch-Ch Skew measurement.
ColorBarsStatus?	Query the status of the Color Bars measurement.
HSyncStatus?	Query the status of the H Sync measurement.
HSyncJitterStatus?	Query the status of the H Sync Jitter measurement.
HTimingStatus?	Query the status of the H Timing measurement.
LinearityStatus?	Query the status of the Linearity measurement.
LumaLevelsStatus?	Query the status of the Luma Levels measurement.
NoiseStatus?	Query the status of the Noise Inj Ratio measurement.
VSynStatus?	Query the status of the V Sync measurement.
VTimingStatus?	Query the status of the V Timing measurement.
VideoTransientStatus?	Query the status of the Video Transient measurement.

Table 3-9: Measured Results Query Commands (Option VGA)

Header	Description
:VARIABLE:VALue:	
ChChMismatchCh1Ch2?	Query the measured Ch1Ch2 voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchCh1Ch3?	Query the measured Ch1Ch3 voltage amplitude Mismatch resulting from for the Ch-Ch Mismatch measurement.
ChChMismatchCh2Ch3?	Query the measured Ch2Ch3 voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchPeakToPeakCh1Ch2?	Query the measured Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchPeakToPeakCh1Ch3?	Query the measured Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchPeakToPeakCh2Ch3?	Query the measured Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch resulting from the Ch-Ch Mismatch measurement.
ChChMismatchAll?	Query the measured values of all the Ch-Ch Mismatch measurements.
ChChSkewCh1Ch2?	Query the measured Ch1Ch2 Skew resulting from the Ch-Ch Skew measurement.
ChChSkewCh1Ch3?	Query the measured Ch1Ch3 Skew resulting from the Ch-Ch Skew measurement.
ChChSkewCh2Ch3?	Query the measured Ch2Ch3 Skew resulting from the Ch-Ch Skew measurement.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
ChChSkewPixelClockCh1Ch2?	Query the measured Ch1Ch2 (%) Pixel Clock resulting from the Ch-Ch Skew measurement.
ChChSkewPixelClockCh1Ch3?	Query the measured Ch1Ch3 (%) Pixel Clock resulting from the Ch-Ch Skew measurement.
ChChSkewPixelClockCh2Ch3?	Query the measured Ch2Ch3 (%) Pixel Clock resulting from the Ch-Ch Skew measurement.
ChChSkewAll?	Query the measured values of all the Ch-Ch Skew measurements.
ColorBarsCh[1..3]?	Query the values of all the eight color bars resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val1?	Query the value for the White color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val2?	Query the value for the Yellow color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val3?	Query the value for the Cyan color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val4?	Query the value for the Green color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val5?	Query the value for the Magenta color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val6?	Query the value for the Red color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val7?	Query the value for the Blue color bar resulting from the Color Bars measurement on the specified channel.
ColorBarsCh[1..3]Val8?	Query the value for the Black color bar resulting from the Color Bars measurement on the specified channel.
HSyncPolarity?	Query the measured Polarity resulting from the H Sync measurement.
HSyncPulseWidth?	Query the measured Pulse Width resulting from the H Sync measurement.
HSyncSyncPeriod?	Query the measured Sync Period resulting from the H Sync measurement.
HSyncFrequency?	Query the measured Frequency resulting from the H Sync measurement.
HSyncRiseTime?	Query the measured Rise Time resulting from the H Sync measurement.
HSyncFallTime?	Query the measured Fall Time resulting from the H Sync measurement.
HSyncOvershoot?	Query the measured Overshoot resulting from the H Sync measurement.
HSyncUndershoot?	Query the measured Undershoot resulting from the H Sync measurement.
HSyncOvershootSettlingTime?	Query the measured Overshoot Settling Time resulting from the H Sync measurement.
HSyncUndershootSettlingTime?	Query the measured Undershoot Settling Time resulting from the H Sync measurement.
HSyncMonotonicRise?	Query the measured Monotonic Rise value resulting from the H Sync measurement.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
HSyncMonotonicFall?	Query the measured Monotonic Fall value resulting from the H Sync measurement.
HSyncLogicLevel1Value1?	Query the Logic Level “1” at Value1 (Value1 represents the Logic Level “1” at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
HSyncLogicLevel0Value1?	Query the measured Logic Level “0” at Value1 (Value1 represents the Logic Level “0” at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
HSyncLogicLevel1Value2?	Query the measured Logic Level “1” at Value2 (Value2 represents the Logic Level “1” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.
HSyncLogicLevel0Value2?	Query the measured Logic Level “0” at Value2 (Value2 represents the Logic Level “0” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.
HSyncAll?	Query the measured values of all the H Sync measurements.
HSyncJitterTime?	Query the measured Time period resulting from the H Sync Jitter measurement.
HSyncJitterPixelClock?	Query the measured (%) Pixel Clock resulting from the H Sync Jitter measurement.
HSyncJitterAll?	Query the measured values of all the H Sync Jitter measurements.
HTimingBackPorchCh[1..3]?	Query the measured Back Porch resulting from the H Timing measurement on the specified channel.
HTimingLeftBorderCh[1..3]?	Query the measured Left Border resulting from the H Timing measurement on the specified channel.
HTimingAddressableVideoCh[1..3]?	Query the measured Addressable Video resulting from the H Timing measurement on the specified channel.
HTimingRightBorderCh[1..3]?	Query the measured Right Border resulting from the H Timing measurement on the specified channel.
HTimingFrontPorchCh[1..3]?	Query the measured Front Porch resulting from the H Timing measurement on the specified channel.
HTimingSyncPulseWidth?	Query the measured Sync Pulse Width resulting from the H Timing measurement.
HTimingPixelClock?	Query the measured Pixel Clock resulting from the H Timing measurement.
HTimingAll?	Query the measured values of all the H Timing measurements on all the channels.
LinearityResolutionCh[1..3]?	Query the measured Resolution resulting from the Linearity measurement on the specified channel.
LinearityMaxINLCh[1..3]?	Query the measured Max INL resulting from the Linearity measurement on the specified channel.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
LinearityMaxINLAtStepNumberCh[1..3]?	Query the step number at which the MaxINL occurs for the Linearity measurement on the specified channel.
LinearityMaxDNLCh[1..3]?	Query the measured Max DNL resulting from the Linearity measurement on the specified channel.
LinearityMaxDNLAtStepNumberCh[1..3]?	Query the step number at which the MaxDNL occurs for the Linearity measurement on the specified channel.
LinearityMonotonicCh[1..3]?	Query the measured Monotonic value resulting from the Linearity measurement on the specified channel.
LinearityMonotonicAtStepNumberCh[1..3]?	Query at which step number the maximum Monotonic value resulting from the Linearity measurement on the specified channel.
LumaLevelsAmpMaxCh[1..3]?	Query the measured maximum Amplitude resulting from the Luma Levels measurement on the specified channel.
LumaLevelsAmpMinCh[1..3]?	Query the measured minimum Amplitude resulting from the Luma Levels measurement on the specified channel.
LumaLevelsAll?	Query the measured values of all the Luma Levels measurements for all the channels.
NoisemVCh[1..3]?	Query the measured Noise value (in mV) resulting from the Noise Inj Ratio measurement on the specified channel.
NoisedBCh[1..3]?	Query the measured Noise value (in dB) resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseICh[1..3]?	Query the measured Inj Ratio (in %) resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseAll?	Query the measured values of all the Noise Inj Ratio measurements on all the channels.
VSynCPolarity?	Query the measured Polarity resulting from the V Sync measurement.
VSynCPulseWidth?	Query the measured Pulse Width resulting from the V Sync measurement.
VSynCSyncPeriod?	Query the measured Sync Period resulting from the V Sync measurement.
VSynCFrequency?	Query the measured Frequency resulting from the V Sync measurement.
VSynCRiseTime?	Query the measured Rise Time resulting from the V Sync measurement.
VSynCFallTime?	Query the measured Fall Time resulting from the V Sync measurement.
VSynCOvershoot?	Query the measured Overshoot resulting from the V Sync measurement.
VSynCUndershoot?	Query the measured Undershoot resulting from the V Sync measurement.
VSynCOvershootSettlingTime?	Query the measured Overshoot Settling Time resulting from the V Sync measurement.
VSynCUndershootSettlingTime?	Query the measured Undershoot Settling Time resulting from the V Sync measurement.
VSynCMonotonicRise?	Query the measured Monotonic Rise value resulting from the V Sync measurement.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
VSyncMonotonicFall?	Query the measured Monotonic Fall value resulting from the V Sync measurement.
VSyncLogicLevel1Value1?	Query the measured Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
VSyncLogicLevel0Value1?	Query the measured Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
VSyncLogicLevel1Value2?	Query the measured Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
VSyncLogicLevel0Value2?	Query the measured Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
VSyncAll?	Query the measured values of all the V Sync measurements.
VTimingBackPorchCh[1..3]?	Query the measured Back Porch resulting from the V Timing measurement on the specified channel.
VTimingTopBorderCh[1..3]?	Query the measured Top Border resulting from the V Timing measurement on the specified channel.
VTimingAddressableLinesCh[1..3]?	Query the measured Addressable Lines resulting from the V Timing measurement on the specified channel.
VTimingBottomBorderCh[1..3]?	Query the measured Bottom Border resulting from the V Timing measurement for specified channel.
VTimingFrontPorchCh[1..3]?	Query the measured Front Porch resulting from the V Timing measurement on the specified channel.
VTimingSyncPulseWidth?	Query the measured Sync Pulse Width resulting from the V Timing measurement.
VTimingAll?	Query all the measured values resulting from the V Timing measurements on all the channels.
VideoTransientVideoRiseTimeCh[1..3]?	Query the measured Video Rise Time resulting from the Video Transient measurement on the specified channel.
VideoTransientVideoFallTimeCh[1..3]?	Query the measured Video Fall Time resulting from the Video Transient measurement on the specified channel.
VideoTransientVideoRiseTimePercentageCh[1..3]?	Query the measured Video Rise Time percentage resulting from the Video Transient measurement on the specified channel.
VideoTransientVideoFallTimePercentageCh[1..3]?	Query the measured Video Fall Time percentage resulting from the Video Transient measurement on the specified channel.
VideoTransientOvershootCh[1..3]?	Query the measured Overshoot resulting from the Video Transient measurement on the specified channel.

Table 3-9: Measured Results Query Commands (Option VGA) (Cont.)

Header	Description
VideoTransientUndershootCh[1..3]?	Query the measured Undershoot resulting from the Video Transient measurement on the specified channel.
VideoTransientOvershootSettlingTimeCh[1..3]?	Query the measured Overshoot Settling Time resulting from the Video Transient measurement on the specified channel.
VideoTransientUndershootSettlingTimeCh[1..3]?	Query the measured Undershoot Settling Time resulting from the Video Transient measurement on the specified channel.

Table 3-10: Relative Results Query Commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchRelCh1Ch2?	Query the Ch1Ch2 voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelCh1Ch3?	Query the Ch1Ch3 voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelCh2Ch3?	Query the Ch2Ch3 voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelPeakToPeakCh1Ch2?	Query the Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelPeakToPeakCh1Ch3?	Query the Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelPeakToPeakCh2Ch3?	Query the Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch relative value resulting from the Ch-Ch Mismatch measurement.
ChChMismatchRelAll?	Query the Ch-Ch Mismatch measurement for all of its relative results.
ChChSkewRelCh1Ch2?	Query the Ch1Ch2 Skew relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelCh1Ch3?	Query the Ch1Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelCh2Ch3?	Query the Ch2Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelPixelClockCh1Ch2?	Query the Ch1Ch2 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelPixelClockCh1Ch3?	Query the Ch1Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelPixelClockCh2Ch3?	Query the Ch2Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
ChChSkewRelAll?	Query the Ch-Ch Skew measurement for all of its relative results.
ColorBarsRelCh[1..3]?	Query the relative values of all eight color bars resulting from the Color Bars measurement on the specified channel.

Table 3- 10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
ColorBarsRelCh[1..3]Val1?	Query the White color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val2?	Query the Yellow color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val3?	Query the Cyan color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val4?	Query the Green color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val5?	Query the Magenta color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val6?	Query the Red color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val7?	Query the Blue color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelCh[1..3]Val8?	Query the Black color bar relative value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]?	Query the relative percentage values of all eight color bars resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val1?	Query the relative percentage White color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val2?	Query the relative percentage Yellow color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val3?	Query the relative percentage Cyan color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val4?	Query the relative percentage Green color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val5?	Query the relative percentage Magenta color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val6?	Query the relative percentage Red color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val7?	Query the relative percentage Blue color bar value resulting from the Color Bars measurement on the specified channel.
ColorBarsRelPctCh[1..3]Val8?	Query the relative percentage Black color bar value resulting from the Color Bars measurement on the specified channel.
HSyncRelPolarity?	Query the Polarity relative value resulting from the H Sync measurement.
HSyncRelPulseWidth?	Query the Pulse Width relative value resulting from the H Sync measurement.
HSyncRelSyncPeriod?	Query the Sync Period relative value resulting from the H Sync measurement.
HSyncRelFrequency?	Query the Frequency relative value resulting from the H Sync measurement.
HSyncRelRiseTime?	Query the Rise Time relative value resulting from the H Sync measurement.
HSyncRelFallTime?	Query the Fall Time relative value resulting from the H Sync measurement.

Table 3-10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
HSyncRelOvershoot?	Query the Overshoot relative value resulting from the H Sync measurement.
HSyncRelUndershoot?	Query the Undershoot relative value resulting from the H Sync measurement.
HSyncRelOvershootSettlingTime?	Query the Overshoot Settling Time relative value resulting from the H Sync measurement.
HSyncRelUndershootSettlingTime?	Query the Undershoot Settling Time relative value resulting from the H Sync measurement.
HSyncRelMonotonicRise?	Query the Monotonic Rise relative value resulting from the H Sync measurement.
HSyncRelMonotonicFall?	Query the Monotonic Fall relative value resulting from the H Sync measurement.
HSyncRelLogicLevel1Value1?	Query the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) relative value resulting from H Sync measurement.
HSyncRelLogicLevel0Value1?	Query the Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement.
HSyncRelLogicLevel1Value2?	Query the Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from H Sync measurement.
HSyncRelLogicLevel0Value2?	Query the Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.
HSyncRelAll?	Query all the relative values resulting from the H Sync measurement.
HSyncJitterRelTime?	Query the relative Time period resulting from the H Sync Jitter measurement.
HSyncJitterRelPixelClock?	Query the (%) Pixel Clock relative value resulting from the H Sync Jitter measurement.
HSyncJitterRelAll?	Query the H Sync Jitter measurement for all of its relative values.
HTimingRelBackPorchCh[1..3]?	Query the Back Porch relative value resulting from the H Timing measurement on the specified channel.
HTimingRelLeftBorderCh[1..3]?	Query the Left Border relative value resulting from the H Timing measurement on the specified channel.
HTimingRelAddressableVideoCh[1..3]?	Query the Active Video relative value resulting from the H Timing measurement on the specified channel.
HTimingRelRightBorderCh[1..3]?	Query the Right Border relative value resulting from the H Timing measurement on the specified channel.
HTimingRelFrontPorchCh[1..3]?	Query the Front Porch relative value resulting from the H Timing measurement on the specified channel.
HTimingRelSyncPulseWidth?	Query the Sync Pulse Width relative value resulting from the H Timing measurement.
HTimingRelPixelClock?	Query the Pixel Clock relative value resulting from the H Timing measurement.

Table 3- 10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
HTimingRelAll?	Query all the relative values resulting from the H Timing measurement.
LinearityRelResolutionCh[1..3]?	Query the Resolution relative value resulting from the Linearity measurement on the specified channel.
LinearityRelMaxINLCh[1..3]?	Query the Max INL relative value resulting from the Linearity measurement on the specified channel.
LinearityRelMaxDNLCh[1..3]?	Query the Max DNL relative value resulting from the Linearity measurement on the specified channel.
LinearityRelMonotonicCh[1..3]?	Query the Monotonic relative value resulting from the Linearity measurement on the specified channel.
LumaLevelsRelAmpMaxCh[1..3]?	Query the Maximum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsRelAmpMinCh[1..3]?	Query the Minimum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsRelAll?	Query all the relative values resulting from the Luma Levels measurement for all channels.
LumaLevelsRelPctAmpMaxCh[1..3]?	Query the Maximum Amplitude relative percentage value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsRelPctAmpMinCh[1..3]?	Query the Minimum Amplitude relative percentage value resulting from the Luma Levels measurement on the specified channel.
LumaLevelsRelPctAll?	Query all the relative percentage values resulting from the Luma Levels measurement on all the channels.
NoiseRelmVCh[1..3]?	Query the Noise Inj Ratio (in mV) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseReldBCh[1..3]?	Query the Noise Inj Ratio (in dB) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseRelIrCh[1..3]?	Query the Inj Ratio (in %) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
NoiseRelAll?	Query all the relative values resulting from the Noise measurement on all the channels.
VSynRelPolarity?	Query the Polarity relative value resulting from the V Sync measurement.
VSynRelPulseWidth?	Query the Pulse Width relative value resulting from the V Sync measurement.
VSynRelSyncPeriod?	Query the Sync Period relative value resulting from the V Sync measurement.
VSynRelFrequency?	Query the Frequency relative value resulting from the V Sync measurement.
VSynRelRiseTime?	Query the Rise Time relative value resulting from the V Sync measurement.
VSynRelFallTime?	Query the Fall Time relative value resulting from the V Sync measurement.
VSynRelOvershoot?	Query the Overshoot relative value resulting from the V Sync measurement.
VSynRelUndershoot?	Query the Undershoot relative value resulting from the V Sync measurement.
VSynRelOvershootSettlingTime?	Query the Overshoot Settling Time relative value resulting from the V Sync measurement.

Table 3-10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
VSyncRelUndershootSettlingTime?	Query the Undershoot Settling Time relative value resulting from the V Sync measurement.
VSyncRelMonotonicRise?	Query the Monotonic Rise relative value resulting from the V Sync measurement.
VSyncRelMonotonicFall?	Query the Monotonic Fall relative value resulting from the V Sync measurement.
VSyncRelLogicLevel1Value1?	Query the Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) relative value resulting from V Sync measurement.
VSyncRelLogicLevel0Value1?	Query the Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) relative value resulting from V Sync measurement.
VSyncRelLogicLevel1Value2?	Query the Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from V Sync measurement.
VSyncRelLogicLevel0Value2?	Query the Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from V Sync measurement.
VSyncRelAll?	Query all the relative values resulting from the V Sync measurement.
VTimingRelBackPorchCh[1..3]?	Query the Back Porch relative value resulting from the V Timing measurement on the specified channel.
VTimingRelTopBorderCh[1..3]?	Query the Top Border relative value resulting from the V Timing measurement on the specified channel.
VTimingRelAddressableLinesCh[1..3]?	Query the Addressable Lines relative value resulting from the V Timing measurement on the specified channel.
VTimingRelBottomBorderCh[1..3]?	Query the Bottom Border relative value resulting from the V Timing measurement on the specified channel.
VTimingRelFrontPorchCh[1..3]?	Query the Front Porch relative value resulting from the V Timing measurement on the specified channel.
VTimingRelSyncPulseWidth?	Query the Sync Pulse Width relative value resulting from the V Timing measurement.
VTimingRelAll?	Query the V Timing measurement for all of its relative values.
VideoTransientRelVideoRiseTimeCh[1..3]?	Query the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelVideoFallTimeCh[1..3]?	Query the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelVideoRiseTimePercentageCh[1..3]?	Query the Video Rise Time Percentage relative value resulting from Video Transient measurement on the specified channel.
VideoTransientRelVideoFallTimePercentageCh[1..3]?	Query the Video Fall Time Percentage relative value resulting from Video Transient measurement on the specified channel.

Table 3- 10: Relative Results Query Commands (Option VGA) (Cont.)

Header	Description
VideoTransientRelOvershootCh[1..3]?	Query the Overshoot relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelUndershootCh[1..3]?	Query the Undershoot relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelOvershootSettlingTimeCh[1..3]?	Query the Overshoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.
VideoTransientRelUndershootSettlingTimeCh[1..3]?	Query the Undershoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.

Table 3- 11: Reference Values Query Commands (Option VGA)

Header	Description
:VARible:VALue	
ChChMismatchRefCh1Ch2?	Query the Ch1Ch2 voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefCh1Ch3?	Query the Ch1Ch3 voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefCh2Ch3?	Query the Ch2Ch3 voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefPeakToPeakCh1Ch2?	Query the Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefPeakToPeakCh1Ch3?	Query the Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefPeakToPeakCh2Ch3?	Query the Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch reference value specified in the Reference file.
ChChMismatchRefAll?	Query all the Ch-Ch Mismatch reference values specified in the Reference file.
ChChSkewRefCh1Ch2?	Query the Ch1Ch2 Skew reference value specified in the Reference file.
ChChSkewRefCh1Ch3?	Query the Ch1Ch3 Skew reference value specified in the Reference file.
ChChSkewRefCh2Ch3?	Query the Ch2Ch3 Skew reference value specified in the Reference file.
ChChSkewRefPixelClockCh1Ch2?	Query the Ch1Ch2 (%) Pixel Clock reference value specified in the Reference file.
ChChSkewRefPixelClockCh1Ch3?	Query the Ch1Ch3 (%) Pixel Clock reference value specified in the Reference file.
ChChSkewRefPixelClockCh2Ch3?	Query the Ch2Ch3 (%) Pixel Clock reference value specified in the Reference file.
ChChSkewRefAll?	Query all the Ch-Ch Skew reference values specified in the Reference file.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
ColorBarsRefCh[1..3]?	Query all the Color Bars reference values specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val1?	Query the Color Bars reference value for the White color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val2?	Query the Color Bars reference value for the Yellow color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val3?	Query the Color Bars reference value for the Cyan color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val4?	Query the Color Bars reference value for the Green color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val5?	Query the Color Bars reference value for the Magenta color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val6?	Query the Color Bars reference value for the Red color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val7?	Query the Color Bars reference value for the Blue color bar specified in the Reference file on the specified channel.
ColorBarsRefCh[1..3]Val8?	Query the Color Bars reference value for the Black color bar specified in the Reference file on the specified channel.
HSyncRefPolarity?	Query the H Sync Polarity reference value specified in the Reference file.
HSyncRefPulseWidth?	Query the H Sync Pulse Width reference value specified in the Reference file.
HSyncRefSyncPeriod?	Query the H Sync Sync Period reference value specified in the Reference file.
HSyncRefFrequency?	Query the H Sync Frequency reference value specified in the Reference file.
HSyncRefRiseTime?	Query the H Sync Rise Time reference value specified in the Reference file.
HSyncRefFallTime?	Query the H Sync Fall Time reference value specified in the Reference file.
HSyncRefOvershoot?	Query the H Sync Overshoot reference value specified in the Reference file.
HSyncRefUndershoot?	Query the H Sync Undershoot reference value specified in the Reference file.
HSyncRefOvershootSettlingTime?	Query the H Sync Overshoot Settling Time reference value specified in the Reference file.
HSyncRefUndershootSettlingTime?	Query the H Sync Undershoot Settling Time reference value specified in the Reference file.
HSyncRefMonotonicRise?	Query the H Sync Monotonic Rise reference value specified in the Reference file.
HSyncRefMonotonicFall?	Query the H Sync Monotonic Fall reference value specified in the Reference file.
HSyncRefLogicLevel1Value1?	Query the H Sync Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) reference value specified in the Reference file.
HSyncRefLogicLevel0Value1?	Query the H Sync Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
HSyncRefLogicLevel1Value2?	Query the H Sync Logic Level “1” at Value2 (Value2 represents the Logic Level “1” at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
HSyncRefLogicLevel0Value2?	Query the H Sync Logic Level “0” at Value2 (Value2 represents the Logic Level “0” at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
HSyncRefAll?	Query all the H Sync reference values specified in the Reference file.
HSyncJitterRefTime?	Query the H Sync Jitter reference Time period specified in the Reference file.
HSyncJitterRefPixelClock?	Query the H Sync Jitter (%) Pixel Clock reference value specified in the Reference file.
HSyncJitterRefAll?	Query all the H Sync Jitter reference values specified in the Reference file.
HTimingRefBackPorchCh[1..3]?	Query the H Timing Back Porch reference value specified in the Reference file on the specified channel.
HTimingRefLeftBorderCh[1..3]?	Query the H Timing Left Border reference value specified in the Reference file on the specified channel.
HTimingRefAddressableVideoCh[1..3]?	Query the H Timing Addressable Video reference value specified in the Reference file on the specified channel.
HTimingRefRightBorderCh[1..3]?	Query the H Timing Right Border reference value specified in the Reference file on the specified channel.
HTimingRefFrontPorchCh[1..3]?	Query the H Timing Front Porch reference value specified in the Reference file on the specified channel.
HTimingRefSyncPulseWidth?	Query the H Timing Sync Pulse Width reference value specified in the Reference file.
HTimingRefPixelClock?	Query the H Timing Pixel Clock reference value specified in the Reference file.
HTimingRefAll?	Query all the H Timing reference values specified in the Reference file.
LinearityRefResolutionCh[1..3]?	Query the Linearity Resolution reference value specified in the Reference file on the specified channel.
LinearityRefMaxINLCh[1..3]?	Query the Linearity Max INL reference value specified in the Reference file on the specified channel.
LinearityRefMaxDNLCh[1..3]?	Query the Linearity Max DNL reference value specified in the Reference file on the specified channel.
LinearityRefMonotonicCh[1..3]?	Query the Linearity Monotonic reference value specified in the Reference file on the specified channel.
LumaLevelsRefAmpMaxCh[1..3]?	Query the Luma Levels Amplitude Maximum reference value specified in the Reference file on the specified channel.
LumaLevelsRefAmpMinCh[1..3]?	Query the Luma Levels Amplitude Minimum reference value specified in the Reference file on the specified channel.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
LumaLevelsRefAll?	Query all the Luma Levels reference values specified in the Reference file on all the channels.
NoiseRefmVCh[1..3]?	Query the Noise Inj Ratio (in mV) reference value specified in the Reference file on the specified channel.
NoiseRefdBCh[1..3]?	Query the Noise Inj Ratio (in dB) reference value specified in the Reference file on the specified channel.
NoiseRefIRCh[1..3]?	Query the Noise Inj Ratio reference value specified in the Reference file on the specified channel.
NoiseRefAll?	Query all the Noise Inj Ratio reference values specified in the Reference file on all the channels.
VSynRefAll?	Query all the V Sync reference values specified in the Reference file.
VSynRefFallTime?	Query the V Sync Fall Time reference value specified in the Reference file.
VSynRefFrequency?	Query the V Sync Frequency reference value specified in the Reference file.
VSynRefLogicLevel0Value1?	Query the V Sync Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) reference value specified in the Reference file.
VSynRefLogicLevel0Value2?	Query the V Sync Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
VSynRefLogicLevel1Value1?	Query the V Sync Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) reference value specified in the Reference file.
VSynRefLogicLevel1Value2?	Query the V Sync Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
VSynRefMonotonicFall?	Query the V Sync Monotonic Fall reference value specified in the Reference file.
VSynRefMonotonicRise?	Query the V Sync Monotonic Rise reference value specified in the Reference file.
VSynRefOvershoot?	Query the V Sync Overshoot reference value specified in the Reference file.
VSynRefOvershootSettlingTime?	Query the V Sync Overshoot Settling Time reference value specified in the Reference file.
VSynRefPolarity?	Query the V Sync Polarity reference value specified in the Reference file.
VSynRefPulseWidth?	Query the V Sync Pulse Width reference value specified in the Reference file.
VSynRefRiseTime?	Query the V Sync Rise Time reference value specified in the Reference file.
VSynRefSyncPeriod?	Query the V Sync Sync Period reference value specified in the Reference file.
VSynRefUndershoot?	Query the V Sync Undershoot reference value specified in the Reference file.

Table 3- 11: Reference Values Query Commands (Option VGA) (Cont.)

Header	Description
VSyncRefUndershootSettlingTime?	Query the V Sync Undershoot Settling Time reference value specified in the Reference file.
VTimingRefBackPorchCh[1..3]?	Query the V Timing Back Porch reference value specified in the Reference file on the specified channel.
VTimingRefTopBorderCh[1..3]?	Query the V Timing Top Border reference value specified in the Reference file on the specified channel.
VTimingRefAddressableLinesCh[1..3]?	Query the V Timing Addressable Lines reference value specified in the Reference file on the specified channel.
VTimingRefBottomBorderCh[1..3]?	Query the V Timing Bottom Border reference value specified in the Reference file on the specified channel.
VTimingRefFrontPorchCh[1..3]?	Query the V Timing Front Porch reference value specified in the Reference file on the specified channel.
VTimingRefSyncPulseWidth?	Query the V Timing Sync Pulse Width reference value specified in the Reference file on the specified channel.
VTimingRefAll?	Query all the V Timing reference values specified in the Reference file on all the channels.
VideoTransientRefVideoRiseTimeCh[1..3]?	Query the Video Transient Video Rise Time reference value specified in the Reference file on the specified channel.
VideoTransientRefVideoFallTimeCh[1..3]?	Query the Video Transient Video Fall Time reference value specified in the Reference file on the specified channel.
VideoTransientRefVideoRiseTimePercentageCh[1..3]?	Query the Video Transient Video Rise Time reference value (in percent) specified in the Reference file on the specified channel.
VideoTransientRefVideoFallTimePercentageCh[1..3]?	Query the Video Transient Video Fall Time reference value (in percent) specified in the Reference file on the specified channel.
VideoTransientRefOvershootCh[1..3]?	Query the Video Transient Overshoot reference value specified in the Reference file on the specified channel.
VideoTransientRefUndershootCh[1..3]?	Query the Video Transient Undershoot reference value specified in the Reference file on the specified channel.
VideoTransientRefOvershootSettlingTimeCh[1..3]?	Query the Video Transient Overshoot Settling Time reference value specified in the Reference file on the specified channel.
VideoTransientRefUndershootSettlingTimeCh[1..3]?	Query the Video Transient Undershoot Settling Time reference value specified in the Reference file on the specified channel.

Table 3- 12: Maximum Limits Query Commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchMaxCh1Ch2?	Query the Ch1Ch2 voltage amplitude Mismatch maximum limit value specified in the Limits file.

Table 3- 12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
ChChMismatchMaxCh1Ch3?	Query the Ch1Ch3 voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxCh2Ch3?	Query the Ch2Ch3 voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxPeakToPeakCh1Ch2?	Query the Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxPeakToPeakCh1Ch3?	Query the Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxPeakToPeakCh2Ch3?	Query the Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch maximum limit value specified in the Limits file.
ChChMismatchMaxAll?	Query all the Ch-Ch Mismatch maximum limit values specified in the Limits file.
ChChSkewMaxCh1Ch2?	Query the Ch-Ch Skew Ch1Ch2 maximum limit value specified in the Limits file.
ChChSkewMaxCh1Ch3?	Query the Ch-Ch Skew Ch1Ch3 maximum limit value specified in the Limits file.
ChChSkewMaxCh2Ch3?	Query the Ch-Ch Skew Ch2Ch3 maximum limit value specified in the Limits file.
ChChSkewMaxPixelClockCh1Ch2?	Query the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock maximum limit value specified in the Limits file.
ChChSkewMaxPixelClockCh1Ch3?	Query the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.
ChChSkewMaxPixelClockCh2Ch3?	Query the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.
ChChSkewMaxAll?	Query all the Ch-Ch Skew maximum limit values specified in the Limits file.
ColorBarsMaxCh[1..3]?	Query all the Color Bars maximum limit values specified in the Limits file.
ColorBarsMaxCh[1..3]Val1?	Query the Color Bars White color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val2?	Query the Color Bars Yellow color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val3?	Query the Color Bars Cyan color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val4?	Query the Color Bars Green color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val5?	Query the Color Bars Magenta color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val6?	Query the Color Bars Red color bar maximum limit value specified in the Limits file on the specified channel.
ColorBarsMaxCh[1..3]Val7?	Query the Color Bars Blue color bar maximum limit value specified in the Limits file on the specified channel.

Table 3- 12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
ColorBarsMaxCh[1..3]Val8?	Query the Color Bars Black color bar maximum limit value specified in the Limits file on the specified channel.
HSyncMaxPolarity?	Query the H Sync Polarity maximum limit value specified in the Limits file.
HSyncMaxPulseWidth?	Query the H Sync Pulse Width maximum limit value specified in the Limits file.
HSyncMaxSyncPeriod?	Query the H Sync Sync Period maximum limit value specified in the Limits file.
HSyncMaxFrequency?	Query the H Sync Frequency maximum limit value specified in the Limits file.
HSyncMaxRiseTime?	Query the H Sync Rise Time maximum limit value specified in the Limits file.
HSyncMaxFallTime?	Query the H Sync Fall Time maximum limit value specified in the Limits file.
HSyncMaxOvershoot?	Query the H Sync Overshoot maximum limit value specified in the Limits file.
HSyncMaxUndershoot?	Query the H Sync Undershoot maximum limit value specified in the Limits file.
HSyncMaxOvershootSettlingTime?	Query the H Sync Overshoot Settling Time maximum limit value specified in the Limits file.
HSyncMaxUndershootSettlingTime?	Query the H Sync Undershoot Settling Time maximum limit value specified in the Limits file.
HSyncMaxMonotonicRise?	Query the H Sync Monotonic Rise maximum limit value specified in the Limits file.
HSyncMaxMonotonicFall?	Query the H Sync Monotonic Fall maximum limit value specified in the Limits file.
HSyncMaxLogicLevel1Value1?	Query the H Sync Logic Level "1" at Value1 (Value1 represents the Logic Level "1" at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
HSyncMaxLogicLevel0Value1?	Query the maximum Logic Level "0" at Value1 (Value1 represents the Logic Level "0" at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
HSyncMaxLogicLevel1Value2?	Query the maximum Logic Level "1" at Value2 (Value2 represents the Logic Level "1" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
HSyncMaxLogicLevel0Value2?	Query the maximum Logic Level "0" at Value2 (Value2 represents the Logic Level "0" at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
HSyncMaxAll?	Query all the H Sync maximum limit values specified in the Limits file.
HSyncJitterMaxTime?	Query the H Sync Jitter Time period maximum limit value specified in the Limits file.
HSyncJitterMaxPixelClock?	Query the H Sync Jitter (%) Pixel Clock maximum limit value specified in the Limits file.
HSyncJitterMaxAll?	Query all the H Sync Jitter maximum limit values specified in the Limits file.
HTimingMaxBackPorchCh[1..3]?	Query the H Timing Back Porch maximum limit value specified in the Limits file on the specified channel.

Table 3- 12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
HTimingMaxLeftBorderCh[1..3]?	Query the H Timing Left Border maximum limit value specified in the Limits file on the specified channel.
HTimingMaxAddressableVideoCh[1..3]?	Query the H Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.
HTimingMaxRightBorderCh[1..3]?	Query the H Timing Right Border maximum limit value specified in the Limits file on the specified channel.
HTimingMaxFrontPorchCh[1..3]?	Query the H Timing Front Porch maximum limit value specified in the Limits file on the specified channel.
HTimingMaxSyncPulseWidth?	Query the H Timing Sync Pulse Width maximum limit value specified in the Limits file.
HTimingMaxPixelClock?	Query the H Timing Pixel Clock maximum limit value specified in the Limits file.
HTimingMaxAll?	Query all the H Timing maximum limit values specified in the Limits file on all the channels.
LinearityMaxResolutionCh[1..3]?	Query the Linearity Resolution maximum limit value specified in the Limits file on the specified channel.
LinearityMaxMaxINLCh[1..3]?	Query the Linearity Max INL maximum limit value specified in the Limits file on the specified channel.
LinearityMaxMaxDNLCh[1..3]?	Query the Linearity Max DNL maximum limit value specified in the Limits file on the specified channel.
LinearityMaxMonotonicCh[1..3]?	Query the Linearity Monotonic maximum limit value specified in the Limits file on the specified channel.
LumaLevelsMaxAmpMaxCh[1..3]?	Query the Luma Levels Maximum Amplitude maximum limit value specified in the Limits file on the specified channel.
LumaLevelsMaxAmpMinCh[1..3]?	Query the Luma Levels Minimum Amplitude maximum limit value specified in the Limits file on the specified channel.
LumaLevelsMaxAll?	Query all the Luma Levels maximum limit values specified in the Limits file on all the channels.
NoiseMaxmVCh[1..3]?	Query the Noise Inj Ratio (in mV) maximum limit value specified in the Limits file on the specified channel.
NoiseMaxdBCh[1..3]?	Query the Noise Inj Ratio (in dB) maximum limit value specified in the Limits file on the specified channel.
NoiseMaxIrrCh[1..3]?	Query the Inj Ratio maximum limit value specified in the Limits file on the specified channel.
NoiseMaxAll?	Query all the Noise Inj Ratio maximum limit values specified in the Limits file on all the channels.
VSyncMaxPolarity?	Query the V Sync Polarity maximum limit value specified in the Limits file.
VSyncMaxPulseWidth?	Query the V Sync Pulse Width maximum limit value specified in the Limits file.
VSyncMaxSyncPeriod?	Query the V Sync Sync Period maximum limit value specified in the Limits file.
VSyncMaxFrequency?	Query the V Sync Frequency maximum limit value specified in the Limits file.
VSyncMaxRiseTime?	Query the V Sync Rise Time maximum limit value specified in the Limits file.

Table 3- 12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
VSyncMaxFallTime?	Query the V Sync Fall Time maximum limit value specified in the Limits file.
VSyncMaxOvershoot?	Query the V Sync Overshoot maximum limit value specified in the Limits file.
VSyncMaxUndershoot?	Query the V Sync Undershoot maximum limit value specified in the Limits file.
VSyncMaxOvershootSettlingTime?	Query the V Sync Overshoot Settling Time maximum limit value specified in the Limits file.
VSyncMaxUndershootSettlingTime?	Query the V Sync Undershoot Settling Time maximum limit value specified in the Limits file.
VSyncMaxMonotonicRise?	Query the V Sync Monotonic Rise maximum limit value specified in the Limits file.
VSyncMaxMonotonicFall?	Query the V Sync Monotonic Fall maximum limit value specified in the Limits file.
VSyncMaxLogicLevel1Value1?	Query the V Sync Logic Level “1” at Value1 (Value1 represents the Logic Level “1” at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
VSyncMaxLogicLevel0Value1?	Query the maximum Logic Level “0” at Value1 (Value1 represents the Logic Level “0” at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
VSyncMaxLogicLevel1Value2?	Query the maximum Logic Level “1” at Value2 (Value2 represents the Logic Level “1” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
VSyncMaxLogicLevel0Value2?	Query the maximum Logic Level “0” at Value2 (Value2 represents the Logic Level “0” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
VSyncMaxAll?	Query all the V Sync maximum limit values specified in the Limits file.
VTimingMaxBackPorchCh[1..3]?	Query the V Timing Back Porch maximum limit value specified in the Limits file on the specified channel.
VTimingMaxTopBorderCh[1..3]?	Query the V Timing Top Border maximum limit value specified in the Limits file on the specified channel.
VTimingMaxAddressableLinesCh[1..3]?	Query the V Timing Addressable Lines maximum limit value specified in the Limits file on the specified channel.
VTimingMaxBottomBorderCh[1..3]?	Query the V Timing Bottom Border maximum limit value specified in the Limits file on the specified channel.
VTimingMaxFrontPorchCh[1..3]?	Query the V Timing Front Porch maximum limit value specified in the Limits file on the specified channel.
VTimingMaxSyncPulseWidth?	Query the V Timing Sync Pulse Width maximum limit value specified in the Limits file on the specified channel.
VTimingMaxAll?	Query all the V Timing maximum limit values specified in the Limits file on all the channels.

Table 3- 12: Maximum Limits Query Commands (Option VGA) (Cont.)

Header	Description
VideoTransientMaxVideoRiseTimeCh[1..3]?	Query the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxVideoFallTimeCh[1..3]?	Query the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxVideoRiseTime PercentageCh[1..3]?	Query the Video Transient Video Rise Time maximum limit value (in percent) specified in the Limits file on the specified channel.
VideoTransientMaxVideoFallTime PercentageCh[1..3]?	Query the Video Transient Video Fall Time maximum limit value (in percent) specified in the Limits file on the specified channel.
VideoTransientMaxOvershootCh[1..3]?	Query the Video Transient Overshoot maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxUndershootCh[1..3]?	Query the Video Transient Undershoot maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxOvershootSettling TimeCh[1..3]?	Query the Video Transient Overshoot Settling Time maximum limit value specified in the Limits file on the specified channel.
VideoTransientMaxUndershootSettling TimeCh[1..3]?	Query the Video Transient Undershoot Settling Time maximum limit value specified in the Limits file on the specified channel.

Table 3- 13: Minimum Limits Query Commands (Option VGA)

Header	Description
:VARIABLE:VALue	
ChChMismatchMinCh1Ch2?	Query the Ch1Ch2 voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinCh1Ch3?	Query the Ch1Ch3 voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinCh2Ch3?	Query the Ch2Ch3 voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinPeakToPeakCh1Ch2?	Query the Ch1Ch2 (%) Peak-Peak voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinPeakToPeakCh1Ch3?	Query the Ch1Ch3 (%) Peak-Peak voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinPeakToPeakCh2Ch3?	Query the Ch2Ch3 (%) Peak-Peak voltage amplitude Mismatch minimum limit value specified in the Limits file.
ChChMismatchMinAll?	Query all the Ch-Ch Mismatch minimum limit values specified in the Limits file.
ChChSkewMinCh1Ch2?	Query the Ch-Ch Skew Ch1Ch2 channel skew minimum limit value specified in the Limits file.

Table 3- 13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
ChChSkewMinCh1Ch3?	Query the Ch-Ch Skew Ch1Ch3 channel skew minimum limit value specified in the Limits file.
ChChSkewMinCh2Ch3?	Query the Ch-Ch Skew Ch2Ch3 skew minimum limit value specified in the Limits file.
ChChSkewMinPixelClockCh1Ch2?	Query the Ch-Ch Skew Ch1Ch2 (%) pixel clock minimum limit value specified in the Limits file.
ChChSkewMinPixelClockCh1Ch3?	Query the Ch-Ch Skew Ch1Ch3 (%) pixel clock minimum limit value specified in the Limits file.
ChChSkewMinPixelClockCh2Ch3?	Query the Ch-Ch Skew Ch2Ch3 (%) pixel clock minimum limit value specified in the Limits file.
ChChSkewMinAll?	Query all the Ch-Ch Skew minimum limit values specified in the Limits file.
ColorBarsMinCh[1..3]?	Query all the Color Bars minimum limit values specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val1?	Query the Color Bars White color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val2?	Query the Color Bars Yellow color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val3?	Query the Color Bars Cyan color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val4?	Query the Color Bars Green color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val5?	Query the Color Bars Magenta color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val6?	Query the Color Bars Red color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val7?	Query the Color Bars Blue color bar minimum limit value specified in the Limits file on the specified channel.
ColorBarsMinCh[1..3]Val8?	Query the Color Bars Black color bar minimum limit value specified in the Limits file on the specified channel.
HSyncMinPolarity?	Query the H Sync Polarity minimum limit value specified in the Limits file.
HSyncMinPulseWidth?	Query the H Sync Pulse Width minimum limit value specified in the Limits file.
HSyncMinSyncPeriod?	Query the H Sync Sync Period minimum limit value specified in the Limits file.
HSyncMinFrequency?	Query the H Sync Frequency minimum limit value specified in the Limits file.
HSyncMinRiseTime?	Query the H Sync Rise Time minimum limit value specified in the Limits file.
HSyncMinFallTime?	Query the H Sync Fall Time minimum limit value specified in the Limits file.
HSyncMinOvershoot?	Query the H Sync Overshoot minimum limit value specified in the Limits file.
HSyncMinUndershoot?	Query the H Sync Undershoot minimum limit value specified in the Limits file.
HSyncMinOvershootSettlingTime?	Query the H Sync Overshoot Settling Time minimum limit value specified in the Limits file.

Table 3-13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
HSyncMinUndershootSettlingTime?	Query the H Sync Undershoot Settling Time minimum limit value specified in the Limits file.
HSyncMinMonotonicRise?	Query the H Sync Monotonic Rise minimum limit value specified in the Limits file.
HSyncMinMonotonicFall?	Query the H Sync Monotonic Fall minimum limit value specified in the Limits file.
HSyncMinLogicLevel1Value1?	Query the H Sync Logic Level “1” at Value1 (Value1 represents the Logic Level “1” at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
HSyncMinLogicLevel0Value1?	Query the minimum logic level “0” at Value1 (Value1 represents the Logic Level “0” at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
HSyncMinLogicLevel1Value2?	Query the minimum logic level “1” at Value2 (Value2 represents the Logic Level “1” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
HSyncMinLogicLevel0Value2?	Query the minimum logic level “0” at Value2 (Value2 represents the Logic Level “0” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
HSyncMinAll?	Query all the H Sync minimum limit values specified in the Limits file.
HSyncJitterMinTime?	Query the H Sync Jitter Time period minimum limit value specified in the Limits file.
HSyncJitterMinPixelClock?	Query the H Sync Jitter (%) Pixel Clock minimum limit value specified in the Limits file.
HSyncJitterMinAll?	Query all the H Sync Jitter minimum limit values specified in the Limits file.
HTimingMinBackPorchCh[1..3]?	Query the H Timing Back Porch minimum limit value specified in the Limits file on the specified channel.
HTimingMinLeftBorderCh[1..3]?	Query the H Timing Left Border minimum limit value specified in the Limits file on the specified channel.
HTimingMinAddressableVideoCh[1..3]?	Query the H Timing Addressable Video minimum limit value specified in the Limits file on the specified channel.
HTimingMinRightBorderCh[1..3]?	Query the H Timing Right Border minimum limit value specified in the Limits file on the specified channel.
HTimingMinFrontPorchCh[1..3]?	Query the H Timing Front Porch minimum limit value specified in the Limits file on the specified channel.
HTimingMinSyncPulseWidth?	Query the H Timing Sync Pulse Width minimum limit value specified in the Limits file.
HTimingMinPixelClock?	Query the H Timing Pixel Clock minimum limit value specified in the Limits file.
HTimingMinAll?	Query all the H Timing minimum limit values specified in the Limits file.

Table 3- 13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
LinearityMinResolutionCh[1..3]?	Query the Linearity Resolution minimum limit value specified in the Limits file on the specified channel.
LinearityMinMaxINLCh[1..3]?	Query the Linearity Max INL minimum limit value specified in the Limits file on the specified channel.
LinearityMinMaxDNLCh[1..3]?	Query the Linearity Max DNL minimum limit value specified in the Limits file on the specified channel.
LinearityMinMonotonicCh[1..3]?	Query the Linearity Monotonic minimum limit value specified in the Limits file on the specified channel.
LumaLevelsMinAmpMaxCh[1..3]?	Query the Luma Levels Maximum Amplitude minimum limit value specified in the Limits file on the specified channel.
LumaLevelsMinAmpMinCh[1..3]?	Query the Luma Levels Minimum Amplitude minimum limit value specified in the Limits file on the specified channel.
LumaLevelsMinAll?	Query all the Luma Levels minimum limit values specified in the Limits file on all the channels.
NoiseMinmVCh[1..3]?	Query the Noise Inj Ratio (in mV) minimum limit value specified in the Limits file on the specified channel.
NoiseMindBCh[1..3]?	Query the Noise Inj Ratio (in dB) minimum limit value specified in the Limits file on the specified channel.
NoiseMinrCh[1..3]?	Query the Inj Ratio minimum limit value specified in the Limits file on the specified channel.
NoiseMinAll?	Query all the Noise Inj Ratio minimum limit values specified in the Limits file on all the channels.
VSynMinPolarity?	Query the V Sync Polarity minimum limit value specified in the Limits file.
VSynMinPulseWidth?	Query the V Sync Pulse Width minimum limit value specified in the Limits file.
VSynMinSyncPeriod?	Query the V Sync Period minimum limit value specified in the Limits file.
VSynMinFrequency?	Query the V Sync Frequency minimum limit value specified in the Limits file.
VSynMinRiseTime?	Query the V Sync Rise Time minimum limit value specified in the Limits file.
VSynMinFallTime?	Query the V Sync Fall Time minimum limit value specified in the Limits file.
VSynMinOvershoot?	Query the V Sync Overshoot minimum limit value specified in the Limits file.
VSynMinUndershoot?	Query the V Sync Undershoot minimum limit value specified in the Limits file.
VSynMinOvershootSettlingTime?	Query the V Sync Overshoot Settling Time minimum limit value specified in the Limits file.
VSynMinUndershootSettlingTime?	Query the V Sync Undershoot Settling Time minimum limit value specified in the Limits file.
VSynMinMonotonicRise?	Query the V Sync Monotonic Rise minimum limit value specified in the Limits file.
VSynMinMonotonicFall?	Query the V Sync Monotonic Fall minimum limit value specified in the Limits file.

Table 3-13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
VSyncMinLogicLevel1Value1?	Query the V Sync Logic Level “1” at Value1 (Value1 represents the Logic Level “1” at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
VSyncMinLogicLevel0Value1?	Query the V Sync Logic Level “0” at Value1 (Value1 represents the Logic Level “0” at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
VSyncMinLogicLevel1Value2?	Query the V Sync Logic Level “1” at Value2 (Value2 represents the Logic Level “1” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
VSyncMinLogicLevel0Value2?	Query the V Sync Logic Level “0” at Value2 (Value2 represents the Logic Level “0” at \pm 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
VSyncMinAll?	Query all the V Sync minimum limit values specified in the Limits file.
VTimingMinBackPorchCh[1..3]?	Query the V Timing Back Porch minimum limit value specified in the Limits file on the specified channel.
VTimingMinTopBorderCh[1..3]?	Query the V Timing Top Border minimum limit value specified in the Limits file on the specified channel.
VTimingMinAddressableLinesCh[1..3]?	Query the V Timing Addressable Lines minimum limit value specified in the Limits file on the specified channel.
VTimingMinBottomBorderCh[1..3]?	Query the V Timing Bottom Border minimum limit value specified in the Limits file on the specified channel.
VTimingMinFrontPorchCh[1..3]?	Query the V Timing Front Porch minimum limit value specified in the Limits file on the specified channel.
VTimingMinSyncPulseWidth?	Query the V Timing Sync Pulse Width minimum limit value specified in the Limits file.
VTimingMinAll?	Query all the V Timing minimum limit values specified in the Limits file on all the channels.
VideoTransientMinVideoRiseTimeCh[1..3]?	Query the Video Transient Video Rise Time minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinVideoFallTimeCh[1..3]?	Query the Video Transient Video Fall Time minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinVideoRiseTimePercentageCh[1..3]?	Query the Video Transient Video Rise Time minimum limit value (in percent) specified in the Limits file on the specified channel.
VideoTransientMinVideoFallTimePercentageCh[1..3]?	Query the Video Transient Video Fall Time minimum limit value (in percent) specified in the Limits file on the specified channel.
VideoTransientMinOvershootCh[1..3]?	Query the Video Transient Overshoot minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinUndershootCh[1..3]?	Query the Video Transient Undershoot minimum limit value specified in the Limits file on the specified channel.

Table 3- 13: Minimum Limits Query Commands (Option VGA) (Cont.)

Header	Description
VideoTransientMinOvershootSettling TimeCh[1..3]?	Query the Video Transient Overshoot Settling Time minimum limit value specified in the Limits file on the specified channel.
VideoTransientMinUndershootSettling TimeCh[1..3]?	Query the Video Transient Undershoot Settling Time minimum limit value specified in the Limits file on the specified channel.

Commands

The following remote commands are listed in alphabetical order.

AppStatus?

Query whether the Application Status is: Configure, Measuring, Done, Reported.

Syntax VARIable:VALue? "AppStatus"

Group Global

Input Arguments None

Returns Query returns the application status as Configure, Measuring, Done, Reported.

Examples VARIable:VALue? "AppStatus"
Query may return: "AppStatus Configure"

AutoScale <setting>

Set or query whether to use auto scale during measurement.

Syntax VARIable:VALue "AutoScale", "<setting>"

VARIable:VALue? "AutoScale"

Group Configuration

Arguments <setting> specifies auto scale setting that is to be used.
Valid settings are: OFF (0), ON (1).

Return value Query returns the currently specified setting.

Examples VARIable:VALue "AutoScale", "ON"

VARIable:VALue? "AutoScale"
Query may return: "AutoScale 0"

AutoScaleInit <setting>

AutoScaleInit specifies the starting values used by the AutoScale command. Loading specific starting values can speed up the process of taking measurements.

Syntax VARIable:VALue “AutoScaleInit”, “[LastMeas | PreStored | Default]”
VARIable:VALue? “AutoScaleInit”

Group Configuration

Arguments “LastMeas” loads the values set at the end of the last measurement taken.

“PreStored” loads the values specified by the last loaded .vmset, that is the values that were last recalled by loading the settings (xxx.vmset) file. If no .vmset has been loaded since the software was started, then “PreStored” loads the values saved the last time the software was exited.

“Default” loads the factory default settings.

Returns Query returns the currently specified setting.

Examples VARIable:VALue “AutoScaleInit”, “LastMeas”

VARIable:VALue? “AutoScaleInit”
Query may return: “AutoScaleInit LastMeas”

ChChMismatchAll?

Query the measured values of all the Ch-Ch Mismatch measurements.

Syntax VARiable:VALue? "ChChMismatchAll"

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the Ch-Ch Mismatch measurements.
The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV), Ch1Ch2 (%),
Ch1Ch3 (%), and Ch2Ch3 (%).
Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "ChChMismatchAll"
Query may return: "ChChMismatchAll -1.44 73.97 73.97 -104.72 42.19 30.23"

ChChMismatchAverage <samples>

Set or query the number of samples over which to average the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue “ChChMismatchAverage”, “<samples>”
 VARIable:VALue? “ChChMismatchAverage”

Group Measurement Setup

Related Commands ChChMismatchLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned number of samples for the Ch-Ch Mismatch measurement.

Examples VARIable:VALue “ChChMismatchAverage”, “1”

 VARIable:VALue? “ChChMismatchAverage”
 Query may return: “ChChMismatchAverage 8”

ChChMismatchCh1Ch2?

Query the measured Ch1Ch2 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIABLE:VALue? "ChChMismatchCh1Ch2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch1Ch2 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "ChChMismatchCh1Ch2"
Query may return: "ChChMismatchCh1Ch2 -1.44"

ChChMismatchCh1Ch3?

Query the measured Ch1Ch3 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchCh1Ch3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch1Ch3 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.
The returned value is in millivolts (mV).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchCh1Ch3"
Query may return: "ChChMismatchCh1Ch3 73.97"

ChChMismatchCh2Ch3?

Query the measured Ch2Ch3 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? “ChChMismatchCh2Ch3”

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch2Ch3 voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.
The returned value is in millivolts (mV).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChMismatchCh2Ch3”
Query may return: “ChChMismatchCh2Ch3 73.97”

ChChMismatchLine<line number>

Set or query the line number used to perform the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue “ChChMismatchLine”, “<line number>”
 VARIable:VALue? “ChChMismatchLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Related Commands ChChMismatchAverage

Return value Query returns the currently assigned line number used to perform the Ch-Ch Mismatch measurement.

Examples VARIable:VALue “ChChMismatchLine”, “200”

 VARIable:VALue? “ChChMismatchLine”
 Query may return: “ChChMismatchLine 325”

ChChMismatchMaxAll?

Query all the Ch-Ch Mismatch maximum limit values specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMaxAll"

Group Maximum Limits Query

Arguments None

Return value Query returns all the Ch-Ch Mismatch maximum limit values specified in the Limits file.

The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV), Ch1Ch2 (%), Ch1Ch3 (%), and Ch2Ch3 (%).

Returns "---" if no value in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMaxAll"
Query may return: "ChChMismatchMaxAll -1.44 73.97 73.97 -104.72 42.19 30.23"

ChChMismatchMaxCh1Ch2?

Query the Ch1Ch2 voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMaxCh1Ch2"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch1Ch2 voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "--" if no maximum channel mismatch in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMaxCh1Ch2"
Query may return: "ChChMismatchMaxCh1Ch2 -1.44"

ChChMismatchMaxCh1Ch3?

Query the Ch1Ch3 voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChMismatchMaxCh1Ch3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch1Ch3 voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no maximum channel mismatch in the limits file is specified.

Examples VARIABLE:VALUE? "ChChMismatchMaxCh1Ch3"
Query may return: "ChChMismatchMaxCh1Ch3 73.97"

ChChMismatchMaxCh2Ch3?

Query the Ch2Ch3 voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMaxCh2Ch3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch2Ch3 voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "--" if no maximum channel mismatch in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMaxCh2Ch3"
Query may return: "ChChMismatchMaxCh2Ch3 73.97"

ChChMismatchMaxPeakToPeakCh1Ch2?

Query the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChMismatchMaxPeakToPeakCh1Ch2”

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no maximum channel mismatch in the limits file is specified.

Examples VARIable:VALue? “ChChMismatchMaxPeakToPeakCh1Ch2”
Query may return: “ChChMismatchMaxPeakToPeakCh1Ch2 -104.72”

ChChMismatchMaxPeakToPeakCh1Ch3?

Query the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMaxPeakToPeakCh1Ch3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "--" if no maximum channel mismatch in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMaxPeakToPeakCh1Ch3"
Query may return: "ChChMismatchMaxPeakToPeakCh1Ch3 42.19"

ChChMismatchMaxPeakToPeakCh2Ch3?

Query the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “ChChMismatchMaxPeakToPeakCh2Ch3”

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no maximum channel mismatch in the limits file is specified.

Examples VARIable:VALue? “ChChMismatchMaxPeakToPeakCh2Ch3”
Query may return: “ChChMismatchMaxPeakToPeakCh2Ch3 30.23”

ChChMismatchMinAll?

Query all the Ch-Ch Mismatch minimum limit values specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMinAll"

Group Minimum Limits Query

Arguments None

Return value Query returns all the Ch-Ch Mismatch minimum limit values specified in the Limits file.

The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV), Ch1Ch2 (%), Ch1Ch3 (%), and Ch2Ch3 (%).

Returns "---" if no value in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMinAll"
Query may return: "ChChMismatchMinAll -1.44 73.97 73.97 -104.72 42.19 30.23"

ChChMismatchMinCh1Ch2?

Query the Ch1Ch2 voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARiable:VALue? "ChChMismatchMinCh1Ch2"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch1Ch2 voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no minimum channel mismatch in the limits file is specified.

Examples VARiable:VALue? "ChChMismatchMinCh1Ch2"
Query may return: "ChChMismatchMinCh1Ch2 -1.44"

ChChMismatchMinCh1Ch3?

Query the Ch1Ch3 voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMinCh1Ch3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch1Ch3 voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "--" if no maximum channel mismatch in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMinCh1Ch3"
Query may return: "ChChMismatchMinCh1Ch3 73.97"

ChChMismatchMinCh2Ch3?

Query the Ch2Ch3 voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARiable:VALue? "ChChMismatchMinCh2Ch3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch2Ch3 voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no minimum channel mismatch in the limits file is specified.

Examples VARiable:VALue? "ChChMismatchMinCh2Ch3"
Query may return: "ChChMismatchMinCh2Ch3 73.97"

ChChMismatchMinPeakToPeakCh1Ch2?

Query the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMinPeakToPeakCh1Ch2"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "--" if no minimum channel mismatch in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMinPeakToPeakCh1Ch2"
Query may return: "ChChMismatchMinPeakToPeakCh1Ch2 -104.72"

ChChMismatchMinPeakToPeakCh1Ch3?

Query the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChMismatchMinPeakToPeakCh1Ch3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no minimum channel mismatch in the limits file is specified.

Examples VARIABLE:VALUE? "ChChMismatchMinPeakToPeakCh1Ch3"
Query may return: "ChChMismatchMinPeakToPeakCh1Ch3 42.19"

ChChMismatchMinPeakToPeakCh2Ch3?

Query the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChMismatchMinPeakToPeakCh2Ch3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "--" if no minimum channel mismatch in the limits file is specified.

Examples VARIable:VALue? "ChChMismatchMinPeakToPeakCh2Ch3"
Query may return: "ChChMismatchMinPeakToPeakCh2Ch3 30.23"

ChChMismatchMultiLineEnd<line number>

Set or query the ending line number used to perform the Ch-Ch Mismatch measurement on multiple lines.

Syntax VARIable:VALue “ChChMismatchMultiLineEnd”, “<line number>”

VARIable:VALue? “ChChMismatchMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned ending line number used to perform the Ch-Ch Mismatch measurement on multiple lines.

Examples VARIable:VALue “ChChMismatchMultiLineEnd”, “200”

VARIable:VALue? “ChChMismatchMultiLineEnd”

Query may return: “ChChMismatchMultiLineEnd 325”

ChChMismatchMultiLineSet

Set or query whether to perform the Ch-Ch Mismatch measurements on multiple lines upon Execute.

Syntax VARIable:VALue “ChChMismatchMultiLineSet”, “<setting>”

VARIable:VALue? “ChChMismatchMultiLineSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Ch-Ch Mismatch measurements on multiple lines upon Execute.
Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Ch-Ch Mismatch measurement on multiple lines is not selected.
Query returns “1” if the Ch-Ch Mismatch measurement on multiple lines is selected.

Examples VARIable:VALue “ChChMismatchMultiLineSet”, “ON”

VARIable:VALue? “ChChMismatchMultiLineSet”
Query may return: “ChChMismatchMultiLineSet 1”

ChChMismatchMultiLineStart<line number>

Set or query the starting line number used to perform the Ch-Ch Mismatch measurement on multiple lines.

Syntax VARIable:VALue “ChChMismatchMultiLineStart”, “<line number>”

VARIable:VALue? “ChChMismatchMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned starting line number used to perform the Ch-Ch Mismatch measurement on multiple lines.

Examples VARIable:VALue “ChChMismatchMultiLineStart”, “200”

VARIable:VALue? “ChChMismatchMultiLineStart”

Query may return: “ChChMismatchMultiLineStart 325”

ChChMismatchPassAll?

Query the pass/fail status for all the values of the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchPassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values of the Ch-Ch Mismatch measurement.

A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchPassAll"
Query may return: "ChChMismatchPassAll 1 1 1 0 0 1 "

ChChMismatchPassCh1Ch2?

Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 measurement.

Syntax VARIable:VALue? "ChChMismatchPassCh1Ch2"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ChChMismatchPassCh1Ch2"
Query may return: "ChChMismatchPassCh1Ch2 1"

ChChMismatchPassCh1Ch3?

Query the the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 measurement.

Syntax VARIable:VALue? "ChChMismatchPassCh1Ch3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ChChMismatchPassCh1Ch3"
Query may return: "ChChMismatchPassCh1Ch3 1"

ChChMismatchPassCh2Ch3?

Query the the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 measurement.

Syntax VARIable:VALue? “ChChMismatchPassCh2Ch3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChMismatchPassCh2Ch3”
Query may return: “ChChMismatchPassCh2Ch3 1”

ChChMismatchPassPeakToPeakCh1Ch2?

Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch2 (%) Peak-Peak measurement.

Syntax VARIable:VALue? "ChChMismatchPassPeakToPeakCh1Ch2"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Mismatch (%) Ch1Ch2 Peak-Peak measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchPassPeakToPeakCh1Ch2"
Query may return: "ChChMismatchPassPeakToPeakCh1Ch2 1"

ChChMismatchPassPeakToPeakCh1Ch3?

Query the pass/fail status of the Ch-Ch Mismatch Ch1Ch3 (%) Peak-Peak measurement.

Syntax VARIABLE:VALUE? "ChChMismatchPassPeakToPeakCh1Ch3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Mismatch (%) Ch1Ch3 Peak-Peak measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChMismatchPassPeakToPeakCh1Ch3"
Query may return: "ChChMismatchPassPeakToPeakCh1Ch3 1"

ChChMismatchPassPeakToPeakCh2Ch3?

Query the pass/fail status of the Ch-Ch Mismatch Ch2Ch3 (%) Peak-Peak measurement.

Syntax VARIable:VALue? "ChChMismatchPassPeakToPeakCh2Ch3"

Group Pass/Fail Query Status

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Mismatch (%) Ch2Ch3 Peak-Peak measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchPassPeakToPeakCh2Ch3"
Query may return: "ChChMismatchPassPeakToPeakCh2Ch3 1"

ChChMismatchPeakToPeakCh1Ch2?

Query the measured Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchPeakToPeakCh1Ch2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement. The returned value is in percent (%). Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchPeakToPeakCh1Ch2"
Query may return: "ChChMismatchPeakToPeakCh1Ch2 -104.72"

ChChMismatchPeakToPeakCh1Ch3?

Query the measured Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchPeakToPeakCh1Ch3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchPeakToPeakCh1Ch3"
Query may return: "ChChMismatchPeakToPeakCh1Ch3 42.19"

ChChMismatchPeakToPeakCh2Ch3?

Query the measured Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? “ChChMismatchPeakToPeakCh2Ch3”

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch value resulting from the Ch-Ch Mismatch measurement. The returned value is in percent (%). Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChMismatchPeakToPeakCh2Ch3”
Query may return: “ChChMismatchPeakToPeakCh2Ch3 30.23”

ChChMismatchRefAll?

Query all the Ch-Ch Mismatch reference values specified in the Reference file.

Syntax VARIable:VALue? "ChChMismatchRefAll"

Group Reference Values Query

Arguments None

Return value Query returns all the Ch-Ch Mismatch reference values specified in the Reference file.

The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV), Ch1Ch2 (%), Ch1Ch3 (%), and Ch2Ch3 (%) Peak-Peak.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRefAll"
Query may return: "ChChMismatchRefAll -1.44 73.97 73.97 -104.72 42.19 30.23"

ChChMismatchRefCh1Ch2?

Query the Ch1Ch2 voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "ChChMismatchRefCh1Ch2"

Group Reference Values Query

Arguments None

Return value Query returns the Ch1Ch2 voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ChChMismatchRefCh1Ch2"
Query may return: "ChChMismatchRefCh1Ch2 -1.44"

ChChMismatchRefCh1Ch3?

Query the Ch1Ch3 voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIable:VALue? "ChChMismatchRefCh1Ch3"

Group Reference Values Query

Arguments None

Return value Query returns the Ch1Ch3 voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "--" if no valid measurement is currently available.

Examples VARIable:VALue? "ChChMismatchRefCh1Ch3"
Query may return: "ChChMismatchRefCh1Ch3 73.97"

ChChMismatchRefCh2Ch3?

Query the Ch2Ch3 voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "ChChMismatchRefCh2Ch3"

Group Reference Values Query

Arguments None

Return value Query returns the Ch2Ch3 voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIABLE:VALUE? "ChChMismatchRefCh2Ch3"
Query may return: "ChChMismatchRefCh2Ch3 73.97"

ChChMismatchRefPeakToPeakCh1Ch2?

Query the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIable:VALue? "ChChMismatchRefPeakToPeakCh1Ch2"

Group Reference Values Query

Arguments None

Return value Query returns the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in percent (%).
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ChChMismatchRefPeakToPeakCh1Ch2"
Query may return: "ChChMismatchRefPeakToPeakCh1Ch2 -104.72"

ChChMismatchRefPeakToPeakCh1Ch3?

Query the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIable:VALue? "ChChMismatchRefPeakToPeakCh1Ch3"

Group Reference Values Query

Arguments None

Return value Query returns the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ChChMismatchRefPeakToPeakCh1Ch3"
Query may return: "ChChMismatchRefPeakToPeakCh1Ch3 42.19"

ChChMismatchRefPeakToPeakCh2Ch3?

Query the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.

Syntax VARIable:VALue? "ChChMismatchRefPeakToPeakCh2Ch3"

Group Reference Values Query

Arguments None

Return value Query returns the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid measurement is currently available.

Examples VARIable:VALue? "ChChMismatchRefPeakToPeakCh2Ch3"
Query may return: "ChChMismatchRefPeakToPeakCh2Ch3 30.23"

ChChMismatchRelAll?

Query all the relative values resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values resulting from the Ch-Ch Mismatch measurement.

The order is: Ch1Ch2 (mV), Ch1Ch3 (mV), Ch2Ch3 (mV),
Ch1Ch2 (%) Peak-Peak, Ch1Ch3 (%) Peak-Peak, and Ch2Ch3 (%) Peak-Peak.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelAll"
Query may return: "ChChMismatchRelAll -1.44 73.97 73.97 -104.72 42.19
30.23"

ChChMismatchRelCh1Ch2?

Query the Ch1Ch2 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelCh1Ch2"

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch2 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in millivolts (mV).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelCh1Ch2"
Query may return: "ChChMismatchRelCh1Ch2 -1.44"

ChChMismatchRelCh1Ch3?

Query the Ch1Ch3 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIABLE:VALUE? "ChChMismatchRelCh1Ch3"

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch3 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChMismatchRelCh1Ch3"
Query may return: "ChChMismatchRelCh1Ch3 73.97"

ChChMismatchRelCh2Ch3?

Query the Ch2Ch3 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelCh2Ch3"

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch3 voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in millivolts (mV).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelCh2Ch3"
Query may return: "ChChMismatchRelCh2Ch3 73.97"

ChChMismatchRelPeakToPeakCh1Ch2?

Query the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? “ChChMismatchRelPeakToPeakCh1Ch2”

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch2 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChMismatchRelPeakToPeakCh1Ch2”
Query may return: “ChChMismatchRelPeakToPeakCh1Ch2 -104.72”

ChChMismatchRelPeakToPeakCh1Ch3?

Query the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelPeakToPeakCh1Ch3"

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch3 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelPeakToPeakCh1Ch3"
Query may return: "ChChMismatchRelPeakToPeakCh1Ch3 42.19"

ChChMismatchRelPeakToPeakCh2Ch3?

Query the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchRelPeakToPeakCh2Ch3"

Group Relative Results Query

Arguments None

Return value Query returns the Ch2Ch3 (%) Peak-Peak voltage amplitude mismatch relative value resulting from the Ch-Ch Mismatch measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChMismatchRelPeakToPeakCh2Ch3"
Query may return: "ChChMismatchRelPeakToPeakCh2Ch3 30.23"

ChChMismatchSet?

Set or query whether to perform the Ch-Ch Mismatch measurement upon Execute.

Syntax VARIable:VALue “ChChMismatchSet”, “<setting>”

VARIable:VALue? “ChChMismatchSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Ch-Ch Mismatch measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Ch-Ch Mismatch measurement is not selected.
Query returns “1” if the Ch-Ch Mismatch measurement is selected.

Examples VARIable:VALue “ChChMismatchSet”, “ON”

VARIable:VALue? “ChChMismatchSet”

Query may return: “ChChMismatchSet 1”

ChChMismatchStatus?

Query the status of the Ch-Ch Mismatch measurement.

Syntax VARIable:VALue? "ChChMismatchStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "ChChMismatchStatus"
Query may return: "ChChMismatchStatus Pass"

ChChSkewAll?

Query the measured values of all the Ch-Ch Skew measurements.

Syntax VARIable:VALue? "ChChSkewAll"

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the Ch-Ch Skew measurements.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewAll"
Query may return: "ChChSkewAll 1.18 0.43 0.21 7.67 2.81 1.38"

ChChSkewAverage <setting>

Set or query the number of samples over which to average the Ch-Ch Skew measurement.

Syntax VARIable:VALue “ChChSkewAverage”, “<setting>”

VARIable:VALue? “ChChSkewAverage”

Group Measurement Setup

Related Commands ChChSkewLine

Arguments <setting> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the current assigned total number of samples for the Ch-Ch Skew measurement.

Examples VARIable:VALue “ChChSkewAverage”, “1”

VARIable:VALue? “ChChSkewAverage”

Query may return: “ChChSkewAverage 8”

ChChSkewCh1Ch2?

Query the measured Ch1Ch2 Skew value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewCh1Ch2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch1Ch2 Skew value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewCh1Ch2"
Query may return: "ChChSkewCh1Ch2 1.18"

ChChSkewCh1Ch3?

Query the measured Ch1Ch3 Skew value resulting from the Ch-Ch Skew measurement.

Syntax VARIABLE:VALue? "ChChSkewCh1Ch3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch1Ch3 Skew value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "ChChSkewCh1Ch3"
Query may return: "ChChSkewCh1Ch3 0.43"

ChChSkewCh2Ch3?

Query the measured Ch2Ch3 Skew value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewCh2Ch3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch2Ch3 Skew value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewCh2Ch3"
Query may return: "ChChSkewCh2Ch3 0.21"

ChChSkewLine

Set or query the line number used to perform the Ch-Ch Skew measurement.

Syntax VARIable:VALue “ChChSkewLine”, “<line number>”

VARIable:VALue? “ChChSkewLine”

Group Measurement Setup

Arguments <line number> can only be an integer. Fractional numbers will return errors.
Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number used to perform the
Ch-Ch Skew measurement.

Examples VARIable:VALue “ChChSkewLine”, “200”

VARIable:VALue? “ChChSkewLine”
Query may return: “ChChSkewLine 325”

ChChSkewPixelClockCh1Ch2?

Query the measured Ch1Ch2 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewPixelClockCh1Ch2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch1Ch2 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewPixelClockCh1Ch2"
Query may return: "ChChSkewPixelClockCh1Ch2 7.67"

ChChSkewPixelClockCh1Ch3?

Query the measured Ch1Ch3 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.

Syntax VARIABLE:VALUE? "ChChSkewPixelClockCh1Ch3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch1Ch3 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewPixelClockCh1Ch3"
Query may return: "ChChSkewPixelClockCh1Ch3 2.81"

ChChSkewPixelClockCh2Ch3?

Query the measured Ch2Ch3 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewPixelClockCh2Ch3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Ch2Ch3 (%) Pixel Clock value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewPixelClockCh2Ch3"
Query may return: "ChChSkewPixelClockCh2Ch3 1.38"

ChChSkewMaxAll?

Query all the Ch-Ch Skew maximum limit values specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewMaxAll”

Group Maximum Limits Query

Arguments None

Return value Query returns all the Ch-Ch Skew maximum limit values specified in the Limits file.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewMaxAll”
Query may return: “ChChSkewMaxAll 1.18 0.43 0.21 7.67 2.81 1.38”

ChChSkewMaxCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMaxCh1Ch2"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch2 maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMaxCh1Ch2"
Query may return: "ChChSkewMaxCh1Ch2 1.18"

ChChSkewMaxCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewMaxCh1Ch3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch3 maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewMaxCh1Ch3"
Query may return: "ChChSkewMaxCh1Ch3 0.43"

ChChSkewMaxCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMaxCh2Ch3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch2Ch3 maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMaxCh2Ch3"
Query may return: "ChChSkewMaxCh2Ch3 0.21"

ChChSkewMaxPixelClockCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMaxPixelClockCh1Ch2"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMaxPixelClockCh1Ch2"
Query may return: "ChChSkewMaxPixelClockCh1Ch2 7.67"

ChChSkewMaxPixelClockCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMaxPixelClockCh1Ch3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMaxPixelClockCh1Ch3"
Query may return: "ChChSkewMaxPixelClockCh1Ch3 2.81"

ChChSkewMaxPixelClockCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMaxPixelClockCh2Ch3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMaxPixelClockCh2Ch3"
Query may return: "ChChSkewMaxPixelClockCh2Ch3 1.38"

ChChSkewMinAll?

Query all the Ch-Ch Skew minimum limit values specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMinAll"

Group Minimum Limits Query

Arguments None

Return value Query returns all the Ch-Ch Skew minimum limit values specified in the Limits file.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMinAll"
Query may return: "ChChSkewMinAll 1.18 0.43 0.21 7.67 2.81 1.38"

ChChSkewMinCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewMinCh1Ch2"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch2 minimum limit value specified in the Limits file.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewMinCh1Ch2"
Query may return: "ChChSkewMinCh1Ch2 1.18"

ChChSkewMinCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMinCh1Ch3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch3 minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMinCh1Ch3"
Query may return: "ChChSkewMinCh1Ch3 0.43"

ChChSkewMinCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewMinCh2Ch3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch2Ch3 minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewMinCh2Ch3"
Query may return: "ChChSkewMinCh2Ch3 0.21"

ChChSkewMinPixelClockCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMinPixelClockCh1Ch2"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMinPixelClockCh1Ch2"
Query may return: "ChChSkewMinPixelClockCh1Ch2 7.67"

ChChSkewMinPixelClockCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewMinPixelClockCh1Ch3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewMinPixelClockCh1Ch3"
Query may return: "ChChSkewMinPixelClockCh1Ch3 2.81"

ChChSkewMinPixelClockCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewMinPixelClockCh2Ch3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewMinPixelClockCh2Ch3"
Query may return: "ChChSkewMinPixelClockCh2Ch3 1.38"

ChChSkewMultiLineEnd

Set or query the ending line number used to perform the Ch-Ch Skew measurement on multiple lines.

Syntax VARIable:VALue “ChChSkewMultiLineEnd”, “<line number>”
VARIable:VALue? “ChChSkewMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned ending line number used to perform the Ch-Ch Skew measurement on multiple lines.

Examples VARIable:VALue “ChChSkewMultiLineEnd”, “200”

VARIable:VALue? “ChChSkewMultiLineEnd”
Query may return: “ChChSkewMultiLineEnd 325”

ChChSkewMultiLineSet

Set or query whether to perform the Ch-Ch Skew measurement on multiple lines upon Execute.

Syntax VARIable:VALue “ChChSkewMultiLineSet”, “<setting>”
 VARIable:VALue? “ChChSkewMultiLineSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Ch-Ch Skew measurements on multiple lines upon Execute.
 Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Ch-Ch Skew measurement on multiple lines is not selected.
 Query returns “1” if the Ch-Ch Skew measurement on multiple lines is selected.

Examples VARIable:VALue “ChChSkewMultiLineSet”, “ON”

 VARIable:VALue? “ChChSkewMultiLineSet”
 Query may return: “ChChSkewMultiLineSet 1”

ChChSkewMultiLineStart

Set or query the starting line number used to perform the Ch-Ch Skew measurement on multiple lines.

Syntax VARIable:VALue “ChChSkewMultiLineStart”, “<line number>”
VARIable:VALue? “ChChSkewMultiLineStart”

Group Measurement Setup

Arguments <line number> should be integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned starting line number used to perform the Ch-Ch Skew measurement on multiple lines.

Examples VARIable:VALue “ChChSkewMultiLineStart”, “200”

VARIable:VALue? “ChChSkewMultiLineStart”
Query may return: “ChChSkewMultiLineStart 325”

ChChSkewPassAll?

Query the pass/fail status for all the values of the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewPassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values of the Ch-Ch Skew measurement.

A returned value of 1 means pass, a returned value of 0 means Fail.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewPassAll"

Query may return: "ChChSkewPassAll 1 1 0 1 1 0"

ChChSkewPassCh1Ch2?

Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 measurement.

Syntax VARIable:VALue? “ChChSkewPassCh1Ch2”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the the pass/fail status of the Ch-Ch Skew Ch1Ch2 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewPassCh1Ch2”
Query may return: “ChChSkewPassCh1Ch2 1”

ChChSkewPassCh1Ch3?

Query the pass/fail status of the Ch-Ch Skew Ch1Ch3 measurement.

Syntax VARIable:VALue? "ChChSkewPassCh1Ch3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Skew Ch1Ch3 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewPassCh1Ch3"
Query may return: "ChChSkewPassCh1Ch3 1"

ChChSkewPassCh2Ch3?

Query the pass/fail status of the Ch-Ch Skew Ch2Ch3 measurement.

Syntax VARIable:VALue? “ChChSkewPassCh2Ch3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Skew Ch2Ch3 measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewPassCh2Ch3”
Query may return: “ChChSkewPassCh2Ch3 1”

ChChSkewPassPixelClockCh1Ch2?

Query the pass/fail status of the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock measurement.

Syntax VARIable:VALue? "ChChSkewPassPixelClockCh1Ch2"

Group Pass/Fail Status Query

Arguments None

Return value Query returns pass/fail status of the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewPassPixelClockCh1Ch2"
Query may return: "ChChSkewPassPixelClockCh1Ch2 1"

ChChSkewPassPixelClockCh1Ch3?

Query the pass/fail status of the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock measurement.

Syntax VARIABLE:VALUE? "ChChSkewPassPixelClockCh1Ch3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewPassPixelClockCh1Ch3"
Query may return: "ChChSkewPassPixelClockCh1Ch3 1"

ChChSkewPassPixelClockCh2Ch3?

Query the pass/fail status of the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock measurement.

Syntax VARIable:VALue? "ChChSkewPassPixelClockCh2Ch3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock measurement.
A returned value of 1 means pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewPassPixelClockCh2Ch3"
Query may return: "ChChSkewPassPixelClockCh2Ch3 1"

ChChSkewRefAll?

Query all the Ch-Ch Skew reference values specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewRefAll"

Group Reference Values Query

Arguments None

Return value Query returns all the Ch-Ch Skew reference values specified in the Limits file.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewRefAll"
Query may return: "ChChSkewRefAll 1.18 0.43 0.21 7.67 2.81 1.38"

ChChSkewRefCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 reference value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewRefCh1Ch2"

Group Reference Values Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch2 reference value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRefCh1Ch2"
Query may return: "ChChSkewRefCh1Ch2 1.18"

ChChSkewRefCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 reference value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewRefCh1Ch3”

Group Reference Values Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch3 reference value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRefCh1Ch3”
Query may return: “ChChSkewRefCh1Ch3 0.43”

ChChSkewRefCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 reference value specified in the Limits file.

Syntax VARIable:VALue? “ChChSkewRefCh2Ch3”

Group Reference Values Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch2Ch3 reference value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRefCh2Ch3”
Query may return: “ChChSkewRefCh2Ch3 0.21”

ChChSkewRefPixelClockCh1Ch2?

Query the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock reference value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewRefPixelClockCh1Ch2"

Group Reference Values Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch2 (%) Pixel Clock reference value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRefPixelClockCh1Ch2"
Query may return: "ChChSkewRefPixelClockCh1Ch2 7.67"

ChChSkewRefPixelClockCh1Ch3?

Query the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock reference value specified in the Limits file.

Syntax VARIable:VALue? "ChChSkewRefPixelClockCh1Ch3"

Group Reference Values Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch1Ch3 (%) Pixel Clock reference value specified in the Limits file.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRefPixelClockCh1Ch3"
Query may return: "ChChSkewRefPixelClockCh1Ch3 2.81"

ChChSkewRefPixelClockCh2Ch3?

Query the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock reference value specified in the Limits file.

Syntax VARIABLE:VALUE? "ChChSkewRefPixelClockCh2Ch3"

Group Reference Values Query

Arguments None

Return value Query returns the Ch-Ch Skew Ch2Ch3 (%) Pixel Clock reference value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "ChChSkewRefPixelClockCh2Ch3"
Query may return: "ChChSkewRefPixelClockCh2Ch3 1.38"

ChChSkewRelAll?

Query all the relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewRelAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative value resulting from the Ch-Ch Skew measurement.

The order is: Ch1Ch2 (ns), Ch1Ch3 (ns), Ch2Ch3 (ns),
Ch1Ch2 (%) Pixel Clock, Ch1Ch3 (%) Pixel Clock, and
Ch2Ch3 (%) Pixel Clock.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRelAll"
Query may return: "ChChSkewRelAll 1.18 0.43 0.21 7.67 2.81 1.38"

ChChSkewRelCh1Ch2?

Query the Ch1Ch2 Skew relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIABLE:VALue? "ChChSkewRelCh1Ch2"

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch2 Skew relative value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "ChChSkewRelCh1Ch2"
Query may return: "ChChSkewRelCh1Ch2 1.18"

ChChSkewRelCh1Ch3?

Query the Ch1Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewRelCh1Ch3"

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRelCh1Ch3"
Query may return: "ChChSkewRelCh1Ch3 0.43"

ChChSkewRelCh2Ch3?

Query the Ch2Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIABLE:VALue? "ChChSkewRelCh2Ch3"

Group Relative Results Query

Arguments None

Return value Query returns the Ch2Ch3 Skew relative value resulting from the Ch-Ch Skew measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "ChChSkewRelCh2Ch3"
Query may return: "ChChSkewRelCh2Ch3 0.21"

ChChSkewRelPixelClockCh1Ch2?

Query the Ch1Ch2 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewRelPixelClockCh1Ch2"

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch2 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRelPixelClockCh1Ch2"
Query may return: "ChChSkewRelPixelClockCh1Ch2 7.67"

ChChSkewRelPixelClockCh1Ch3?

Query the Ch1Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? “ChChSkewRelPixelClockCh1Ch3”

Group Relative Results Query

Arguments None

Return value Query returns the Ch1Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “ChChSkewRelPixelClockCh1Ch3”
Query may return: “ChChSkewRelPixelClockCh1Ch3 2.81”

ChChSkewRelPixelClockCh2Ch3?

Query the Ch2Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewRelPixelClockCh2Ch3"

Group Relative Results Query

Arguments None

Return value Query returns the Ch2Ch3 (%) Pixel Clock relative value resulting from the Ch-Ch Skew measurement.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "ChChSkewRelPixelClockCh2Ch3"
Query may return: "ChChSkewRelPixelClockCh2Ch3 1.38"

ChChSkewSet <setting>

Set or query whether to perform the Ch-Ch Skew measurements upon Execute.

Syntax VARIable:VALue “ChChSkewSet”,“<setting>”

VARIable:VALue? “ChChSkewSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Ch-Ch Skew measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Ch-Ch Skew measurement is not selected.
Query returns “1” if the Ch-Ch Skew measurement is selected.

Examples VARIable:VALue “ChChSkewSet”, “ON”

VARIable:VALue? “ChChSkewSet”

Query may return: “ChChSkewSet 1”

ChChSkewStatus?

Query the status of the Ch-Ch Skew measurement.

Syntax VARIable:VALue? "ChChSkewStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "ChChSkewStatus"
Query may return: "ChChSkewStatus Pass"

ColorBarsAverage <samples>

Set or query the number of samples over which to average results from the Color Bars measurement.

Syntax VARIABLE:VALue “ColorBarsAverage”, “<samples>”

VARIABLE:VALue? “ColorBarsAverage”

Group Measurement Setup

Related Commands ColorBarsLine

Arguments <samples> should be an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned total number of samples over which to average results from the Color Bars measurement.

Examples VARIABLE:VALue “ColorBarsAverage”, “1”

VARIABLE:VALue? “ColorBarsAverage”
Query may return: “ColorBarsAverage 8”

ColorBarsCh[1..3]?

Query all the eight color bars level values resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1"
 VARIable:VALue? "ColorBarsCh2"
 VARIable:VALue? "ColorBarsCh3"

Group Measured Results Query

Arguments None

Return value Query returns all the eight color bars level values resulting from the Color Bars measurement on the specified channel, in this order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned value is in millivolts (mV).

The order is: White(Ch1) Yellow(Ch1) Cyan(Ch1) Green(Ch1) Magenta(Ch1) Red(Ch1) Blue(Ch1) Black(Ch1) White(Ch2) Yellow(Ch2) Cyan(Ch2) Green(Ch2) Magenta(Ch2) Red(Ch2) Blue(Ch2) Black(Ch2) White(Ch3) Yellow(Ch3) Cyan(Ch3) Green(Ch3) Magenta(Ch3) Red(Ch3) Blue(Ch3) Black(Ch3).

Returns "--" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1"
 Query may return: "ColorBarsCh1 700 700 700 700 0 0 0 0"

ColorBarsCh[1..3]Val1?

Query the measured White color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val1"
 VARIable:VALue? "ColorBarsCh2Val1"
 VARIable:VALue? "ColorBarsCh3Val1"

Group Measured Results Query

Arguments None

Return value Query returns the measured White color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val1"
 Query may return: "ColorBarsCh1Val1 700"

ColorBarsCh[1..3]Val2?

Query the measured Yellow color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val2"
 VARIable:VALue? "ColorBarsCh2Val2"
 VARIable:VALue? "ColorBarsCh3Val2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Yellow color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val2"
 Query may return: "ColorBarsCh1Val2 700"

ColorBarsCh[1..3]Val3?

Query the measured Cyan color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val3"
 VARIable:VALue? "ColorBarsCh2Val3"
 VARIable:VALue? "ColorBarsCh3Val3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Cyan color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val3"
 Query may return: "ColorBarsCh1Val3 700"

ColorBarsCh[1..3]Val4?

Query the measured Green color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val4"
 VARIable:VALue? "ColorBarsCh2Val4"
 VARIable:VALue? "ColorBarsCh3Val4"

Group Measured Results Query

Arguments None

Return value Query returns the measured Green color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val4"
 Query may return: "ColorBarsCh1Val4 700"

ColorBarsCh[1..3]Val5?

Query the measured Magenta color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val5"
 VARIable:VALue? "ColorBarsCh2Val5"
 VARIable:VALue? "ColorBarsCh3Val5"

Group Measured Results Query

Arguments None

Return value Query returns the measured Magenta color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val5"
 Query may return: "ColorBarsCh1Val5 0"

ColorBarsCh[1..3]Val6?

Query the measured Red color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val6"
 VARIable:VALue? "ColorBarsCh2Val6"
 VARIable:VALue? "ColorBarsCh3Val6"

Group Measured Results Query

Arguments None

Return value Query returns the measured Red color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val6"
 Query may return: "ColorBarsCh1Val6 0"

ColorBarsCh[1..3]Val7?

Query the measured Blue color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val7"
 VARIable:VALue? "ColorBarsCh2Val7"
 VARIable:VALue? "ColorBarsCh3Val7"

Group Measured Results Query

Arguments None

Return value Query returns the measured Blue color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val7"
 Query may return: "ColorBarsCh1Val7 0"

ColorBarsCh[1..3]Val8?

Query the measured Black color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsCh1Val8"
 VARIable:VALue? "ColorBarsCh2Val8"
 VARIable:VALue? "ColorBarsCh3Val8"

Group Measured Results Query

Arguments None

Return value Query returns the measured Black color bar resulting from the Color Bars measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsCh1Val8"
 Query may return: "ColorBarsCh1Val8 0"

ColorBarsLine <line number>

Set or query the line number used to perform the Color Bars measurement.

Syntax VARIable:VALue “ColorBarsLine”, “<line number>”
VARIable:VALue? “ColorBarsLine”

Group Measurement Setup

Related Commands ColorBarsAverage

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number used to perform the Color Bars measurement.

Examples VARIable:VALue “ColorBarsLine”, “200”

VARIable:VALue? “ColorBarsLine”
Query may return: “ColorBarsLine 325”

ColorBarsMaxCh[1..3]?

Query all the Color Bars maximum limit values specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1"
 VARIable:VALue? "ColorBarsMaxCh2"
 VARIable:VALue? "ColorBarsMaxCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns all the Color Bars maximum limit values specified in the Limits file on the specified channel.
 The order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1"
 Query may return: "ColorBarsMaxCh1 700 700 700 700 0 0 0 0"

ColorBarsMaxCh[1..3]Val1?

Query the Color Bars White color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val1"
 VARIable:VALue? "ColorBarsMaxCh2Val1"
 VARIable:VALue? "ColorBarsMaxCh3Val1"

Group Maximum Limits Query

Arguments None

Return value Query returns the Color Bars White color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val1"
 Query may return: "ColorBarsMaxCh1Val1 700"

ColorBarsMaxCh[1..3]Val2?

Query the Color Bars Yellow color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val2"
 VARIable:VALue? "ColorBarsMaxCh2Val2"
 VARIable:VALue? "ColorBarsMaxCh3Val2"

Group Maximum Limits Query

Arguments None

Return value Query returns the Color Bars Yellow color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val2"
 Query may return: "ColorBarsMaxCh1Val2 700"

ColorBarsMaxCh[1..3]Val3?

Query the Color Bars Cyan color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val3"
 VARIable:VALue? "ColorBarsMaxCh2Val3"
 VARIable:VALue? "ColorBarsMaxCh3Val3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Color Bars Cyan color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val3"
 Query may return: "ColorBarsMaxCh1Val3 700"

ColorBarsMaxCh[1..3]Val4?

Query the Color Bars Green color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val4"
 VARIable:VALue? "ColorBarsMaxCh2Val4"
 VARIable:VALue? "ColorBarsMaxCh3Val4"

Group Maximum Limits Query

Arguments None

Return value Query returns the Color Bars Green color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val4"
 Query may return: "ColorBarsMaxCh1Val4 700"

ColorBarsMaxCh[1..3]Val5?

Query the Color Bars Magenta color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “ColorBarsMaxCh1Val5”
 VARIable:VALue? “ColorBarsMaxCh2Val5”
 VARIable:VALue? “ColorBarsMaxCh3Val5”

Group Maximum Limits Query

Arguments None

Return value Query returns the Color Bars Magenta color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsMaxCh1Val5”
 Query may return: “ColorBarsMaxCh1Val5 0”

ColorBarsMaxCh[1..3]Val6?

Query the Color Bars Red color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val6"
 VARIable:VALue? "ColorBarsMaxCh2Val6"
 VARIable:VALue? "ColorBarsMaxCh3Val6"

Group Maximum Limits Query

Arguments None

Return value Query returns the Color Bars Red color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val6"
 Query may return: "ColorBarsMaxCh1Val6 0"

ColorBarsMaxCh[1..3]Val7?

Query the Color Bars Blue color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val7"
 VARIable:VALue? "ColorBarsMaxCh2Val7"
 VARIable:VALue? "ColorBarsMaxCh3Val7"

Group Maximum Limits Query

Arguments None

Return value Query returns the Color Bars Blue color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val7"
 Query may return: "ColorBarsMaxCh1Val7 0"

ColorBarsMaxCh[1..3]Val8?

Query the Color Bars Black color bar maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMaxCh1Val8"
 VARIable:VALue? "ColorBarsMaxCh2Val8"
 VARIable:VALue? "ColorBarsMaxCh3Val8"

Group Maximum Limits Query

Arguments None

Return value Returns the Color Bars Black color bar maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsMaxCh1Val8"
 Query may return: "ColorBarsMaxCh1Val8 0"

ColorBarsMinCh[1..3]?

Query all the Color Bars minimum limit values specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsMinCh1"
 VARIABLE:VALue? "ColorBarsMinCh2"
 VARIABLE:VALue? "ColorBarsMinCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns all the Color Bars minimum limit values specified in the Limits file on the specified channel.
 The order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIABLE:VALue? "ColorBarsMinCh1"
 Query may return: "ColorBarsMinCh1 700 700 700 700 0 0 0 0"

ColorBarsMinCh[1..3]Val1?

Query the Color Bars White color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val1"
 VARIable:VALue? "ColorBarsMinCh2Val1"
 VARIable:VALue? "ColorBarsMinCh3Val1"

Group Minimum Limits Query

Arguments None

Return value Query returns the Color Bars White color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val1"
 Query may return: "ColorBarsMinCh1Val1 700"

ColorBarsMinCh[1..3]Val2?

Query the Color Bars Yellow color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val2"
 VARIable:VALue? "ColorBarsMinCh2Val2"
 VARIable:VALue? "ColorBarsMinCh3Val2"

Group Minimum Limits Query

Arguments None

Return value Query returns the Color Bars Yellow color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val2"
 Query may return: "ColorBarsMinCh1Val2 700"

ColorBarsMinCh[1..3]Val3?

Query the Color Bars Cyan color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val3"
 VARIable:VALue? "ColorBarsMinCh2Val3"
 VARIable:VALue? "ColorBarsMinCh3Val3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Color Bars Cyan color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val3"
 Query may return: "ColorBarsMinCh1Val3 700"

ColorBarsMinCh[1..3]Val4?

Query the Color Bars Green color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val4"
 VARIable:VALue? "ColorBarsMinCh2Val4"
 VARIable:VALue? "ColorBarsMinCh3Val4"

Group Minimum Limits Query

Arguments None

Return value Query returns the Color Bars Green color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val4"
 Query may return: "ColorBarsMinCh1Val4 700"

ColorBarsMinCh[1..3]Val5?

Query the Color Bars Magenta color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val5"
 VARIable:VALue? "ColorBarsMinCh2Val5"
 VARIable:VALue? "ColorBarsMinCh3Val5"

Group Minimum Limits Query

Arguments None

Return value Query returns the Color Bars Magenta color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val5"
 Query may return: "ColorBarsMinCh1Val5 0"

ColorBarsMinCh[1..3]Val6?

Query the Color Bars Red color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val6"
 VARIable:VALue? "ColorBarsMinCh2Val6"
 VARIable:VALue? "ColorBarsMinCh3Val6"

Group Minimum Limits Query

Arguments None

Return value Query returns the Color Bars Red color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val6"
 Query may return: "ColorBarsMinCh1Val6 0"

ColorBarsMinCh[1..3]Val7?

Query the Color Bars Blue color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "ColorBarsMinCh1Val7"
 VARIable:VALue? "ColorBarsMinCh2Val7"
 VARIable:VALue? "ColorBarsMinCh3Val7"

Group Minimum Limits Query

Arguments None

Return value Query returns the Color Bars Blue color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid value is currently available.

Examples VARIable:VALue? "ColorBarsMinCh1Val7"
 Query may return: "ColorBarsMinCh1Val7 0"

ColorBarsMinCh[1..3]Val8?

Query the Color Bars Black color bar minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “ColorBarsMinCh1Val8”
 VARIable:VALue? “ColorBarsMinCh2Val8”
 VARIable:VALue? “ColorBarsMinCh3Val8”

Group Minimum Limits Query

Arguments None

Return value Query returns the Color Bars Black color bar minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid value is currently available.

Examples VARIable:VALue? “ColorBarsMinCh1Val8”
 Query may return: “ColorBarsMinCh1Val8 0”

ColorBarsMultiLineEnd

Set or query the ending line number used to perform the Color Bars measurement on multiple lines.

Syntax VARIable:VALue “ColorBarsMultiLineEnd”, “<line number>”
 VARIable:VALue? “ColorBarsMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned ending line number used to perform the Color Bars measurement on multiple lines.

Examples VARIable:VALue “ColorBarsMultiLineEnd”, “200”

 VARIable:VALue? “ColorBarsMultiLineEnd”
 Query may return: “ColorBarsMultiLineEnd 325”

ColorBarsMultiLineSet

Set or query whether to perform the Color Bars measurement on multiple lines upon Execute.

Syntax VARIable:VALue “ColorBarsMultiLineSet”, “<setting>”
VARIable:VALue? “ColorBarsMultiLineSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Color Bars measurements on multiple lines upon Execute.
Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Color Bars measurement on multiple lines is not selected.
Query returns “1” if the Color Bars measurement on multiple lines is selected.

Examples VARIable:VALue “ColorBarsMultiLineSet”, “ON”

VARIable:VALue? “ColorBarsMultiLineSet”
Query may return: “ColorBarsMultiLineSet 1”

ColorBarsMultiLineStart

Set or query the starting line number used to perform the Color Bars measurement on multiple lines.

Syntax VARIable:VALue “ColorBarsMultiLineStart”, “<line number>”
 VARIable:VALue? “ColorBarsMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned starting line number used to perform the Color Bars measurement on multiple lines.

Examples VARIable:VALue “ColorBarsMultiLineStart”, “200”

 VARIable:VALue? “ColorBarsMultiLineStart”
 Query may return: “ColorBarsMultiLineStart 325”

ColorBarsPassAll?

Query the pass/fail status for all the color bars resulting from the Color Bars measurement on all the channels.

Syntax VARIable:VALue? “ColorBarsPassAll”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the color bars resulting from the Color Bars measurement on all the channels.

A returned value of 1 means Pass, a returned value of 0 means Fail.

The order is: White (Ch1), Yellow (Ch1), Cyan (Ch1) , Green (Ch1), Magenta (Ch1), Red (Ch1), Blue (Ch1), Black (Ch1), White (Ch2), Yellow (Ch2), Cyan (Ch2), Green (Ch2), Magenta (Ch2), Red (Ch2), Blue (Ch2), Black (Ch2), White (Ch3), Yellow (Ch3), Cyan (Ch3), Green (Ch3), Magenta (Ch3), Red (Ch3), Blue (Ch3), and Black (Ch3).

Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsPassAll”
Query may return: “ColorBarsPassAll 1 0 0 0 1 0 1 1 1 0 0 0 1 0 1 1 1 0 0 0 1 0 1 1 1 0 0 0 1 0 1 1”

ColorBarsPassCh[1..3]?

Query the pass/fail status for all the eight color bars resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1"
 VARIable:VALue? "ColorBarsPassCh2"
 VARIable:VALue? "ColorBarsPassCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the eight color bars resulting from the Color Bars measurement.
 In this order: White Yellow Cyan Green Magenta Red Blue Black.

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "--" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1"
 Query may return: "ColorBarsPassCh1 1 1 1 0 0 1 1 1"

ColorBarsPassCh[1..3]Val1?

Query the pass/fail status for the White color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val1"
 VARIable:VALue? "ColorBarsPassCh2Val1"
 VARIable:VALue? "ColorBarsPassCh3Val1"

Group Pass/Fail Status Query

Arguments None

Return value Returns the pass/fail status for the White color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val1"
 Query may return: "ColorBarsPassCh1Val1 1"

ColorBarsPassCh[1..3]Val2?

Query the pass/fail status for the Yellow color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val2"
 VARIable:VALue? "ColorBarsPassCh2Val2"
 VARIable:VALue? "ColorBarsPassCh3Val2"

Group Pass/Fail Status Query

Arguments None

Return value Returns the pass/fail status for the Yellow color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val2"
 Query may return: "ColorBarsPassCh1Val2 1"

ColorBarsPassCh[1..3]Val3?

Query the pass/fail status for the Cyan color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsPassCh1Val3"
 VARIABLE:VALue? "ColorBarsPassCh2Val3"
 VARIABLE:VALue? "ColorBarsPassCh3Val3"

Group Pass/Fail Status Query

Arguments None

Return value Returns the pass/fail status for the Cyan color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIABLE:VALue? "ColorBarsPassCh1Val3"
 Query may return: "ColorBarsPassCh1Val3 1"

ColorBarsPassCh[1..3]Val4?

Query the pass/fail status for the Green color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val4"
 VARIable:VALue? "ColorBarsPassCh2Val4"
 VARIable:VALue? "ColorBarsPassCh3Val4"

Group Pass/Fail Status Query

Arguments None

Return value Returns the pass/fail status for the Green color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val4"
 Query may return: "ColorBarsPassCh1Val4 1"

ColorBarsPassCh[1..3]Val5?

Query the pass/fail status for the Magenta color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsPassCh1Val5"
 VARIABLE:VALue? "ColorBarsPassCh2Val5"
 VARIABLE:VALue? "ColorBarsPassCh3Val5"

Group Pass/Fail Status Query

Arguments None

Return value Returns the pass/fail status for the Magenta color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIABLE:VALue? "ColorBarsPassCh1Val5"
 Query may return: "ColorBarsPassCh1Val5 1"

ColorBarsPassCh[1..3]Val6?

Query the pass/fail status for the Red color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val6"
 VARIable:VALue? "ColorBarsPassCh2Val6"
 VARIable:VALue? "ColorBarsPassCh3Val6"

Group Pass/Fail Status Query

Arguments None

Return value Returns the pass/fail status for the Red color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val6"
 Query may return: "ColorBarsPassCh1Val6 1"

ColorBarsPassCh[1..3]Val7?

Query the pass/fail status for the Blue color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? “ColorBarsPassCh1Val7”
 VARIable:VALue? “ColorBarsPassCh2Val7”
 VARIable:VALue? “ColorBarsPassCh3Val7”

Group Pass/Fail Status Query

Arguments None

Return value Returns the pass/fail status for the Blue color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsPassCh1Val7”
 Query may return: “ColorBarsPassCh1Val7 1”

ColorBarsPassCh[1..3]Val8?

Query the pass/fail status for the Black color bar resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsPassCh1Val8"
 VARIable:VALue? "ColorBarsPassCh2Val8"
 VARIable:VALue? "ColorBarsPassCh3Val8"

Group Pass/Fail Status Query

Arguments None

Return value Returns the pass/fail status for the Black color bar resulting from the Color Bars measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsPassCh1Val8"
 Query may return: "ColorBarsPassCh1Val8 1"

ColorBarsRefCh[1..3]?

Query all the Color Bars reference values specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsRefCh1"
 VARIABLE:VALue? "ColorBarsRefCh2"
 VARIABLE:VALue? "ColorBarsRefCh3"

Group Reference Values Query

Arguments None

Return value Query returns all the Color Bars reference values specified in the Reference file on the specified channel.

The order: White Yellow Cyan Green Magenta Red Blue Black.

The returned value is in millivolts (mV).

Returns "-----" if no valid value is currently available.

Examples VARIABLE:VALue? "ColorBarsRefCh1"
 Query may return: "ColorBarsRefCh1 700 700 700 700 0 0 0 0"

ColorBarsRefCh[1..3]Val1?

Query the Color Bars reference value for the White color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "ColorBarsRefCh1Val1"
 VARIable:VALue? "ColorBarsRefCh2Val1"
 VARIable:VALue? "ColorBarsRefCh3Val1"

Group Reference Values Query

Arguments None

Return value Query returns the Color Bars reference value for the White color bar specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRefCh1Val1"
 Query may return: "ColorBarsRefCh1Val1 700"

ColorBarsRefCh[1..3]Val2?

Query the Color Bars reference value for the Yellow color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “ColorBarsRefCh1Val2”
 VARIable:VALue? “ColorBarsRefCh2Val2”
 VARIable:VALue? “ColorBarsRefCh3Val2”

Group Reference Values Query

Arguments None

Return value Query returns the Color Bars reference value for the Yellow color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRefCh1Val2”
 Query may return: “ColorBarsRefCh1Val2 700”

ColorBarsRefCh[1..3]Val3?

Query the Color Bars reference value for the Cyan color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "ColorBarsRefCh1Val3"
 VARIable:VALue? "ColorBarsRefCh2Val3"
 VARIable:VALue? "ColorBarsRefCh3Val3"

Group Reference Values Query

Arguments None

Return value Query returns the Color Bars reference value for the Cyan color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRefCh1Val3"
 Query may return: "ColorBarsRefCh1Val3 700"

ColorBarsRefCh[1..3]Val4?

Query the Color Bars reference value for the Green color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “ColorBarsRefCh1Val4”
 VARIable:VALue? “ColorBarsRefCh2Val4”
 VARIable:VALue? “ColorBarsRefCh3Val4”

Group Reference Values Query

Arguments None

Return value Query returns the Color Bars reference value for the Green color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRefCh1Val4”
 Query may return: “ColorBarsRefCh1Val4 700”

ColorBarsRefCh[1..3]Val5?

Query the Color Bars reference value for the Magenta color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "ColorBarsRefCh1Val5"
 VARIable:VALue? "ColorBarsRefCh2Val5"
 VARIable:VALue? "ColorBarsRefCh3Val5"

Group Reference Values Query

Arguments None

Return value Query returns the Color Bars reference value for the Magenta color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRefCh1Val5"
 Query may return: "ColorBarsRefCh1Val5 0"

ColorBarsRefCh[1..3]Val6?

Query the Color Bars reference value for the Red color bar specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? "ColorBarsRefCh1Val6"
 VARIABLE:VALue? "ColorBarsRefCh2Val6"
 VARIABLE:VALue? "ColorBarsRefCh3Val6"

Group Reference Values Query

Arguments None

Return value Query returns the Color Bars reference value for the Red color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIABLE:VALue? "ColorBarsRefCh1Val6"
 Query may return: "ColorBarsRefCh1Val6 0"

ColorBarsRefCh[1..3]Val7?

Query the Color Bars reference value for the Blue color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "ColorBarsRefCh1Val7"
 VARIable:VALue? "ColorBarsRefCh2Val7"
 VARIable:VALue? "ColorBarsRefCh3Val7"

Group Reference Values Query

Arguments None

Return value Query returns the Color Bars reference value for the Blue color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRefCh1Val7"
 Query may return: "ColorBarsRefCh1Val7 0"

ColorBarsRefCh[1..3]Val8?

Query the Color Bars reference value for the Black color bar specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “ColorBarsRefCh1Val8”
 VARIable:VALue? “ColorBarsRefCh2Val8”
 VARIable:VALue? “ColorBarsRefCh3Val8”

Group Reference Values Query

Arguments None

Return value Query returns the Color Bars reference value for the Black color bar specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRefCh1Val8”
 Query may return: “ColorBarsRefCh1Val8 0”

ColorBarsRelCh[1..3]?

Query all the relative values resulting from the Color Bars measurement on all the channels.

Syntax VARIable:VALue? "ColorBarsRelCh1"
 VARIable:VALue? "ColorBarsRelCh2"
 VARIable:VALue? "ColorBarsRelCh3"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values resulting from the Color Bars measurement on all the channels.
 The order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned values are in millivolts (mV)
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelCh1"
 Query may return: "ColorBarsRelCh1 700 700 700 700 0 0 0 0"

ColorBarsRelCh[1..3]Val1?

Query the relative value resulting from the Color Bars measurement for the White color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelCh1Val1”
 VARIable:VALue? “ColorBarsRelCh2Val1”
 VARIable:VALue? “ColorBarsRelCh3Val1”

Group Relative Results Query

Arguments None

Return value Returns the relative value resulting from the Color Bars measurement for the White color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelCh1Val1”
 Query may return: “ColorBarsRelCh1Val1 700”

ColorBarsRelCh[1..3]Val2?

Query the relative value resulting from the Color Bars measurement for the Yellow color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelCh1Val2"
 VARIable:VALue? "ColorBarsRelCh2Val2"
 VARIable:VALue? "ColorBarsRelCh3Val2"

Group Relative Results Query

Arguments None

Return value Query returns the relative value resulting from the Color Bars measurement for the Yellow color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelCh1Val2"
 Query may return: "ColorBarsRelCh1Val2 700"

ColorBarsRelCh[1..3]Val3?

Query the relative value resulting from the Color Bars measurement for the Cyan color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelCh1Val3”
 VARIable:VALue? “ColorBarsRelCh2Val3”
 VARIable:VALue? “ColorBarsRelCh3Val3”

Group Relative Results Query

Arguments None

Return value Query returns the relative value resulting from the Color Bars measurement for the Cyan color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelCh1Val3”
 Query may return: “ColorBarsRelCh1Val3 700”

ColorBarsRelCh[1..3]Val4?

Query the relative value resulting from the Color Bars measurement for the Green color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelCh1Val4"
 VARIable:VALue? "ColorBarsRelCh2Val4"
 VARIable:VALue? "ColorBarsRelCh3Val4"

Group Relative Results Query

Arguments None

Return value Returns the relative value resulting from the Color Bars measurement for the Green color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelCh1Val4"
 Query may return: "ColorBarsRelCh1Val4 700"

ColorBarsRelCh[1..3]Val5?

Query the relative value resulting from the Color Bars measurement for the Magenta color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelCh1Val5"
 VARIable:VALue? "ColorBarsRelCh2Val5"
 VARIable:VALue? "ColorBarsRelCh3Val5"

Group Relative Results Query

Arguments None

Return value Returns the relative value resulting from the Color Bars measurement for the Magenta color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelCh1Val5"
 Query may return: "ColorBarsRelCh1Val5 0"

ColorBarsRelCh[1..3]Val6?

Query the relative value resulting from the Color Bars measurement for the Red color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelCh1Val6"
 VARIable:VALue? "ColorBarsRelCh2Val6"
 VARIable:VALue? "ColorBarsRelCh3Val6"

Group Relative Results Query

Arguments None

Return value Returns the the relative value resulting from the Color Bars measurement for the Red color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelCh1Val6"
 Query may return: "ColorBarsRelCh1Val6 0"

ColorBarsRelCh[1..3]Val7?

Query the relative value resulting from the Color Bars measurement for the Blue color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelCh1Val7”
 VARIable:VALue? “ColorBarsRelCh2Val7”
 VARIable:VALue? “ColorBarsRelCh3Val7”

Group Relative Results Query

Arguments None

Return value Returns relative value resulting from the Color Bars measurement for the Blue color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelCh1Val7”
 Query may return: “ColorBarsRelCh1Val7 0”

ColorBarsRelCh[1..3]Val8?

Query the relative value resulting from the Color Bars measurement for the Black color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelCh1Val8"
 VARIable:VALue? "ColorBarsRelCh2Val8"
 VARIable:VALue? "ColorBarsRelCh3Val8"

Group Relative Results Query

Arguments None

Return value Returns the relative value resulting from the Color Bars measurement for the Black color bar on the specified channel.
 The returned value is in millivolts (mV).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelCh1Val8"
 Query may return: "ColorBarsRelCh1Val8 0"

ColorBarsRelPctCh[1..3]?

Query all the relative values (in percent) resulting from the Color Bars measurement on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelPctCh1"
 VARIable:VALue? "ColorBarsRelPctCh2"
 VARIable:VALue? "ColorBarsRelPctCh3"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values (in percent) resulting from the Color Bars measurement on the specified channel.
 The order: White Yellow Cyan Green Magenta Red Blue Black.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelPctCh1"
 Query may return: "ColorBarsRelPctCh1 97.65 97.65 97.65 97.65 0 0 0 0"

ColorBarsRelPctCh[1..3]Val1?

Query the relative value (in percent) resulting from the Color Bars measurement for the White color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelPctCh1Val1"
 VARIable:VALue? "ColorBarsRelPctCh2Val1"
 VARIable:VALue? "ColorBarsRelPctCh3Val1"

Group Relative Results Query

Arguments None

Return value Query returns the relative value (in percent) resulting from the Color Bars measurement for the White color bar on the specified channel.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelPctCh1Val1"
 Query may return: "ColorBarsRelPctCh1Val1 97.65"

ColorBarsRelPctCh[1..3]Val2?

Query the relative value (in percent) resulting from the Color Bars measurement for the Yellow color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelPctCh1Val2"
 VARIable:VALue? "ColorBarsRelPctCh2Val2"
 VARIable:VALue? "ColorBarsRelPctCh3Val2"

Group Relative Results Query

Arguments None

Return value Query returns the relative value (in percent) resulting from the Color Bars measurement for the Yellow color bar on the specified channel.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelPctCh1Val2"
 Query may return: "ColorBarsRelPctCh1Val2 97.65"

ColorBarsRelPctCh[1..3]Val3?

Query the relative value (in percent) resulting from the Color Bars measurement for the Cyan color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelPctCh1Val3"
 VARIable:VALue? "ColorBarsRelPctCh2Val3"
 VARIable:VALue? "ColorBarsRelPctCh3Val3"

Group Relative Results Query

Arguments None

Return value Query returns the relative value (in percent) resulting from the Color Bars measurement for the Cyan color bar on the specified channel.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelPctCh1Val3"
 Query may return: "ColorBarsRelPctCh1Val3 97.65"

ColorBarsRelPctCh[1..3]Val4?

Query the relative value (in percent) resulting from the Color Bars measurement for the Green color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelPctCh1Val4”
 VARIable:VALue? “ColorBarsRelPctCh2Val4”
 VARIable:VALue? “ColorBarsRelPctCh3Val4”

Group Relative Results Query

Arguments None

Return value Query returns the relative value (in percent) resulting from the Color Bars measurement for the Green color bar on the specified channel.
 The returned value is in percent (%).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctCh1Val4”
 Query may return: “ColorBarsRelPctCh1Val4 97.65”

ColorBarsRelPctCh[1..3]Val5?

Query the relative value (in percent) resulting from the Color Bars measurement for the Magenta color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelPctCh1Val5"
 VARIable:VALue? "ColorBarsRelPctCh2Val5"
 VARIable:VALue? "ColorBarsRelPctCh3Val5"

Group Relative Results Query

Arguments None

Return value Query returns the relative value (in percent) resulting from the Color Bars measurement for the Magenta color bar on the specified channel. The returned value is in percent (%). Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelPctCh1Val5"
 Query may return: "ColorBarsRelPctCh1Val5 97.65"

ColorBarsRelPctCh[1..3]Val6?

Query the relative value (in percent) resulting from the Color Bars measurement for the Red color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelPctCh1Val6”
 VARIable:VALue? “ColorBarsRelPctCh2Val6”
 VARIable:VALue? “ColorBarsRelPctCh3Val6”

Group Relative Results Query

Arguments None

Return value Query returns the relative value (in percent) resulting from the Color Bars measurement for the Red color bar on the specified channel.
 The returned value is in percent (%).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctCh1Val6”
 Query may return: “ColorBarsRelPctCh1Val6 97.65”

ColorBarsRelPctCh[1..3]Val7?

Query the relative value (in percent) resulting from the Color Bars measurement for the Blue color bar on the specified channel.

Syntax VARIable:VALue? "ColorBarsRelPctCh1Val7"
 VARIable:VALue? "ColorBarsRelPctCh2Val7"
 VARIable:VALue? "ColorBarsRelPctCh3Val7"

Group Relative Results Query

Arguments None

Return value Query returns the relative value (in percent) resulting from the Color Bars measurement for the Blue color bar on the specified channel.
 The returned value is in percent (%).
 Returns "-----" if no valid measurement is currently available.

Examples VARIable:VALue? "ColorBarsRelPctCh1Val7"
 Query may return: "ColorBarsRelPctCh1Val7 97.65"

ColorBarsRelPctCh[1..3]Val8?

Query the relative value (in percent) resulting from the Color Bars measurement for the Black color bar on the specified channel.

Syntax VARIable:VALue? “ColorBarsRelPctCh1Val8”
 VARIable:VALue? “ColorBarsRelPctCh2Val8”
 VARIable:VALue? “ColorBarsRelPctCh3Val8”

Group Relative Results Query

Arguments None

Return value Query returns the relative value (in percent) resulting from the Color Bars measurement for the Black color bar on the specified channel.
 The returned value is in percent (%).
 Returns “-----” if no valid measurement is currently available.

Examples VARIable:VALue? “ColorBarsRelPctCh1Val8”
 Query may return: “ColorBarsRelPctCh1Val8 97.65”

ColorBarsSet <setting>

Set or query whether to perform the Color Bars measurement upon Execute.

Syntax VARIable:VALue “ColorBarsSet”, “<setting>”
 VARIable:VALue? “ColorBarsSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Color Bars measurement upon Execute. Valid values are: OFF, ON, 0, 1

Return value Query returns “0” if the Color Bars measurement is not selected.
 Query returns “1” if the Color Bars measurement is selected.

Examples VARIable:VALue “ColorBarsSet”, “ON”

 VARIable:VALue? “ColorBarsSet”
 Query may return: “ColorBarsSet 1”

ColorBarsStatus?

Query the status of the Color Bars measurement.

Syntax VARIable:VALue? "ColorBarsStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "ColorBarsStatus"
Query may return: "ColorBarsStatus Pass"

DefaultSettings

Restores the default (factory) settings.

Syntax VARIable:VALue “DefaultSettings”, “1”
 VARIable:VALue? “DefaultSettings”

Group Global

Arguments Valid value is 1.

Returns Query returns “OK” unless the command is still being processed, in which case it returns “1”.

Examples VARIable:VALue “DefaultSettings”, “1”

 VARIable:VALue? “DefaultSettings”
 Query may return: “DefaultSettings OK”

Display <None|Picture>

Set or query the Picture display.

Syntax VARIable:VALue “Display”, “[None|Picture]”
 VARIable:VALue? “Display”

Group Configuration

Arguments None selects the normal display. Picture places the Picture display on top of all other displays.

Returns The display on top of all other displays.

Examples VARIable:VALue “Display”, “Picture”
 VARIable:VALue? “Display”

Query may return: “Display None”

EmbedScreenCaptureSet

Set or query whether a screen capture of the instrument display is included in the report file.

Syntax VARIable:VALue “EmbedScreenCaptureSet”, “<setting>”

VARIable:VALue? “EmbedScreenCaptureSet”

Group Reporting

Arguments Valid values for <setting> are: “OFF”, “ON”, “0”, “1”.
EmbedScreenCaptureSet is not available in Continuous mode.
EmbedScreenCaptureSet is available only in RTF format.

Return value Query returns “0” or “1” depending on whether the embed screen capture function is enabled or disabled.

Examples VARIable:VALue “EmbedScreenCaptureSet”, “ON”

VARIable:VALue? “EmbedScreenCaptureSet”
Query may return: “ EmbedScreenCaptureSet 1 ”

Execute <setting>

Execute or stop the current set measurement(s), or query whether or not any measurement is currently being executed. If the measurement is already in the mode specified by the setting, the command has no effect. For example, if a measurement is already running and "VARIABLE:VALUE "Execute", "1" is received, the measurement will continue to run.

Syntax VARIABLE:VALUE "Execute", "<setting>"

VARIABLE:VALUE? "Execute"

Group Global

Arguments <setting> Valid settings are: OFF, 0, ON, 1.
OFF is the same as 0, and ON is the same as 1.

Return value Query returns 1 if any measurement is currently being executed, otherwise it returns 0.

Examples VARIABLE:VALUE "Execute", "1"

VARIABLE:VALUE? "Execute"

Query may return: "Execute 1"

Format <format>

Set or Query the video format to use for measurement.

Syntax VARIable:VALue “Format”, “<format>”

VARIable:VALue? “Format”

Group Configuration

Arguments <format>to set the specified format

Valid format strings for the supported resolution, refresh rate, and timing standard are mentioned in the Table 3-14 as follows:

Table 3-14: Video Format, Refresh Rate, and Timing Standard

Resolution	DMT	CVT	CVT-R	GTF
640x480	640x480_60 640x480_72 640x480_75 640x480_85 640x480_100 640x480_120	640x480_60 640x480_72 640x480_75 640x480_85 640x480_100 640x480_120	640x480_60 640x480_72 640x480_75 640x480_85 640x480_100 640x480_120	640x480_60 640x480_72 640x480_75 640x480_85
800x600	800x600_60 800x600_72 800x600_75 800x600_85 800x600_100 800x600_120	800x600_60 800x600_72 800x600_75 800x600_85 800x600_100 800x600_120	800x600_60 800x600_72 800x600_75 800x600_85 800x600_100 800x600_120	800x600_60 800x600_72 800x600_75 800x600_85
1024x768	1024x768_60 1024x768_72 1024x768_75 1024x768_85 1024x768_100 1024x768_120	1024x768_60 1024x768_72 1024x768_75 1024x768_85 1024x768_100 1024x768_120	1024x768_60 1024x768_72 1024x768_75 1024x768_85 1024x768_100 1024x768_120	1024x768_60 1024x768_75 1024x768_85
1280x1024	1280x1024_60 1280x1024_70 1280x1024_75 1280x1024_85 1280x1024_100 1280x1024_120	-	-	1280x1024_60 1280x1024_75 1280x1024_85
1600x1024	1600x1024_60 1600x1024_70 1600x1024_75 1600x1024_76 1600x1024_85 1600x1024_100	-	-	-
1920x1080	1920x1080_50 1920x1080_60 1920x1080_75 1920x1080_85 1920x1080_100	-	-	-

Table 3-14: Video Format, Refresh Rate, and Timing Standard (Cont.)

Resolution	DMT	CVT	CVT-R	GTF
1600x1200	1600x1200_60 1600x1200_65 1600x1200_70 1600x1200_75 1600x1200_85 1600x1200_100	1600x1200_60 1600x1200_65 1600x1200_70 1600x1200_75 1600x1200_85 1600x1200_100	1600x1200_60 1600x1200_65 1600x1200_70 1600x1200_75 1600x1200_85 1600x1200_100	1920x1200_60 1920x1200_75 1920x1200_85
1920x1200	1920x1200_60 1920x1200_75 1920x1200_76 1920x1200_85 1920x1200_100	-	-	1600x1200_60 1600x1200_75 1600x1200_85
1920x1440	1920x1440_60 1920x1440_75 1920x1440_85	1920x1440_60 1920x1440_75 1920x1440_85	1920x1440_60 1920x1440_75 1920x1440_85	1920x1440_60 1920x1440_75
2048x1536	2048x1536_60 2048x1536_75 2048x1536_85	2048x1536_60 2048x1536_75 2048x1536_85	2048x1536_60 2048x1536_75 2048x1536_85	-
2048x2048	2048x1536_60	-	-	-

User Defined Format: To create a custom format, select the User Defined Format check box. Select Add and enter the horizontal parameters, vertical parameters that specify your format, set the sync polarity, and a refresh rate. Add a format name and save the new format.

For example: 1280x768_60.

Return value Query returns the current selected format.

Examples VARIABLE:VALue "Format", "640x480_60"

VARIABLE:VALue? "Format"

Query may return: "640x480_60"

HSyncAll?

Query the measured values of all the H Sync measurements.

Syntax VARiable:VALue? "HSyncAll"

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the H Sync measurements.

The order is: Polarity (Pos/Neg), Pulse Width (μ s), Sync Period (μ s), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "HSyncAll"
Query may return: "HSyncAll Pos 1.015 10.97 91.158 5 5 4.106 4.511 0 0 Yes
Yes 3191.7 3000 2820.3 464.8"

HSyncAverage <samples>

Set or query the total number of samples over which to average the H Sync measurement.

Syntax VARIable:VALue “HSyncAverage”, “<samples>”
 VARIable:VALue? “HSyncAverage”

Group Measurement Setup

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned total number of samples the H Sync measurement.

Examples VARIable:VALue “HSyncAverage”, “1”
 VARIable:VALue? “HSyncAverage”
 Query may return: “HSyncAverage 8”

HSyncFallTime?

Query the measured fall time value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncFallTime"

Group Measured Results Query

Arguments None

Return value Query returns the measured fall time value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncFallTime"
Query may return: "HSyncFallTime 7.1"

HSyncFrequency?

Query the measured frequency value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncFrequency"

Group Measured Results Query

Arguments None

Return value Query returns the measured frequency value resulting from the H Sync measurement.
The returned value is in kilohertz (kHz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncFrequency"
Query may return: "HSyncFrequency 53.6"

HSyncJitterAll?

Query the measured values of all the H Sync Jitter measurements.

Syntax VARIable:VALue? “HSyncJitterAll”

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the H Sync Jitter measurements.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterAll”
Query may return: “HSyncJitterAll 2.33 55.49”

HSyncJitterLine<line number>

Set or query the number of lines used to perform the H Sync Jitter measurement.

Syntax VARIable:VALue “HSyncJitterNoOfLines”, “<line number>”
 VARIable:VALue? “HSyncJitterLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the current value of the number of lines used to perform the H Sync Jitter measurement.

Examples VARIable:VALue “HSyncJitterLine”, “200”

 VARIable:VALue? “HSyncJitterLine”
 Query may return: “HSyncJitterLine 325”

HSyncJitterMaxAll?

Query all the H Sync Jitter maximum limit values specified in the Limits file.

Syntax VARIable:VALue? “HSyncJitterMaxAll”

Group Maximum Limits Query

Arguments None

Return value Query returns all the H Sync Jitter maximum limit values specified in the Limits file.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterMaxAll”
Query may return: “HSyncJitterMaxAll 2.33 55.49”

HSyncJitterMaxPixelClock?

Query the H Sync Jitter (%) Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncJitterMaxPixelClock"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Jitter (%) Pixel Clock maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterMaxPixelClock"
Query may return: "HSyncJitterMaxPixelClock 55.49"

HSyncJitterMaxTime?

Query the H Sync Jitter Time period maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncJitterMaxTime"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Jitter Time period maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterMaxTime"
Query may return: "HSyncJitterMaxTime 2.33"

HSyncJitterMinAll?

Query all the H Sync Jitter minimum limit values specified in the Limits file.

Syntax VARIable:VALue? “HSyncJitterMinAll”

Group Minimum Limits Query

Arguments None

Return value Query returns all the H Sync Jitter minimum limit values specified in the Limits file.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) Pixel Clock.

Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterMinAll”
Query may return: “HSyncJitterMinAll 2.33 55.49”

HSyncJitterMinPixelClock?

Query the H Sync Jitter (%) Pixel Clock minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncJitterMinPixelClock"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Jitter (%) Pixel Clock minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterMinPixelClock"
Query may return: "HSyncJitterMinPixelClock 55.49"

HSyncJitterMinTime?

Query the H Sync Jitter Time period minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncJitterMinTime"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Jitter Time period minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterMinTime"
Query may return: "HSyncJitterMinTime 2.33"

HSyncJitterPassAll?

Query the pass/fail status of all the H Sync Jitter measurements.

Syntax VARIABLE:VALUE? "HSyncJitterPassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of all the H Sync Jitter measurements.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) PixelClock.

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterPassAll"
Query may return: "HSyncJitterPassAll 1 1"

HSyncJitterPassPixelClock?

Query the pass/fail status for the (%) Pixel Clock resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterPassPixelClock"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the (%) Pixel Clock resulting from the H Sync Jitter measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterPassPixelClock"
Query may return: "HSyncJitterPassPixelClock 1"

HSyncJitterPassTime?

Query the pass/fail status for the Time period resulting from the H Sync Jitter measurement.

Syntax VARIABLE:VALue? "HSyncJitterPassTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Time period resulting from the H Sync Jitter measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncJitterPassTime"
Query may return: "HSyncJitterPassTime 1"

HSyncJitterPixelClock?

Query the measured (%) Pixel Clock resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterPixelClock"

Group Measured Results Query

Arguments None

Return value Query returns the measured (%) Pixel Clock resulting from the H Sync Jitter measurement.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterPixelClock"
Query may return: "HSyncJitterPixelClock 55.49"

HSyncJitterRefAll?

Query all the H Sync Jitter reference values specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncJitterRefAll"

Group Reference Values Query

Arguments None

Return value Query returns all the H Sync Jitter reference values specified in the Reference file.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) PixelClock.

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterRefAll"
Query may return: "HSyncJitterRefAll 2.33 55.49"

HSyncJitterRefPixelClock?

Query the H Sync Jitter (%) Pixel Clock reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncJitterRefPixelClock"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Jitter (%) Pixel Clock reference value specified in the Reference file.
The returned value is in percent (%).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterRefPixelClock"
Query may return: "HSyncJitterRefPixelClock 55.49"

HSyncJitterRefTime?

Query the H Sync Jitter Time period reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncJitterRefTime"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Jitter Time period reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterRefTime"
Query may return: "HSyncJitterRefTime 2.33"

HSyncJitterRelAll?

Query the relative values of all the H Sync Jitter measurements.

Syntax VARIable:VALue? "HSyncJitterRelAll"

Group Relative Results Query

Arguments None

Return value Query returns the relative values of all the H Sync Jitter measurements.

The order is: H Sync Jitter (ns) and H Sync Jitter (%) PixelClock.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterRelAll"
Query may return: "HSyncJitterRelAll 2.33 55.49"

HSyncJitterRelPixelClock?

Query the (%) Pixel Clock relative value resulting from the H Sync Jitter measurement.

Syntax VARIABLE:VALUE? "HSyncJitterRelPixelClock"

Group Relative Results Query

Arguments None

Return value Query returns the (%) Pixel Clock relative value resulting from the H Sync Jitter measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncJitterRelPixelClock"
Query may return: "HSyncJitterRelPixelClock 55.49"

HSyncJitterRelTime?

Query the relative Time period resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterRelTime"

Group Relative Results Query

Arguments None

Return value Query returns the relative Time period resulting from the H Sync Jitter measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncJitterRelTime"
Query may return: "HSyncJitterRelTime 2.33"

HSyncJitterSet <setting>

Set or query whether to perform the H Sync Jitter measurements on multiple lines upon Execute.

Syntax VARIABLE:VALue “HSyncJitterSet”,“<setting>”

VARIABLE:VALue? “HSyncJitterSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the H Sync Jitter measurements on multiple lines upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the H Sync Jitter measurement on multiple lines is not selected.

Query returns “1” if the H Sync Jitter measurement on multiple lines is selected.

Examples VARIABLE:VALue “HSyncJitterMultiLineSet”,“ON”

VARIABLE:VALue? “HSyncJitterMultiLineSet”

Query may return: “HSyncJitterMultiLineSet 1”

HSyncJitterStatus?

Query the status of the H Sync Jitter measurement.

Syntax VARIable:VALue? "HSyncJitterStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", or "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "HSyncJitterStatus"
Query may return: "HSyncJitterStatus Pass"

HSyncJitterTime?

Query the measured Time period resulting from the H Sync Jitter measurement.

Syntax VARIable:VALue? “HSyncJitterTime”

Group Measured Results Query

Arguments None

Return value Query returns the measured Time period resulting from the H Sync Jitter measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncJitterTime”
Query may return: “HSyncJitterTime 2.33”

HSyncLine

Set or query the line number used to perform the H Sync measurement.

Syntax VARIable:VALue “HSyncLine”, “<line number>”
 VARIable:VALue? “HSyncLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number used to perform the H Sync measurement.

Examples VARIable:VALue “HSyncLine”, “200”
 VARIable:VALue? “HSyncLine”
 Query may return: “HSyncLine 325”

HSyncLogicLevel0Value1?

Query the measured Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncLogicLevel0Value1"

Group Measured Results Query

Arguments None

Return value Query returns the measured Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncLogicLevel0Value1"
Query may return: "HSyncLogicLevel0Value1 1"

HSyncLogicLevel0Value2?

Query the measured Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncLogicLevel0Value2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncLogicLevel0Value2"
Query may return: "HSyncLogicLevel0Value2 1"

HSyncLogicLevel1Value1?

Query the measured Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncLogicLevel1Value1"

Group Measured Results Query

Arguments None

Return value Query returns the measured Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncLogicLevel1Value1"
Query may return: "HSyncLogicLevel1Value1 1"

HSyncLogicLevel1Value2?

Query the measured Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncLogicLevel1Value2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncLogicLevel1Value2"
Query may return: "HSyncLogicLevel1Value2 1"

HSyncMaxAll?

Query all the H Sync maximum limit values specified in the Limits file.

Syntax VARiable:VALue? "HSyncMaxAll"

Group Maximum Limits Query

Arguments None

Return value Query returns all the H Sync maximum limit values specified in the Limits file.

The order is: Polarity (Pos/Neg), Pulse Width (μ s), Sync Period (μ s), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "HSyncMaxAll"
Query may return: "HSyncMaxAll Pos 1.853 12.949 93.37 5.37 5.37 30.0 30.0 304.8 304.8 Yes Yes 5500 500 5500 500"

HSyncMaxFallTime?

Query the H Sync Fall Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxFallTime"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Fall Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxFallTime"
Query may return: "HSyncMaxFallTime 7.1"

HSyncMaxFrequency?

Query the H Sync Frequency maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxFrequency"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Frequency maximum limit value specified in the Limits file.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxFrequency"
Query may return: "HSyncMaxFrequency 53674"

HSyncMaxLogicLevel0Value1?

Query the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 termination resistance) maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxLogicLevel0Value1"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxLogicLevel0Value1"
Query may return: "HSyncMaxLogicLevel0Value1 1"

HSyncMaxLogicLevel0Value2?

Query the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMaxLogicLevel0Value2"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMaxLogicLevel0Value2"
Query may return: "HSyncMaxLogicLevel0Value2 1"

HSyncMaxLogicLevel1Value1?

Query the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMaxLogicLevel1Value1"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMaxLogicLevel1Value1"
Query may return: "HSyncMaxLogicLevel1Value1 1"

HSyncMaxLogicLevel1Value2?

Query the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMaxLogicLevel1Value2"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMaxLogicLevel1Value2"
Query may return: "HSyncMaxLogicLevel1Value2 1"

HSyncMaxMonotonicFall?

Query the H Sync Monotonic Fall maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxMonotonicFall"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Monotonic Fall maximum limit value specified in the Limits file.
The returned value is 1 which is represented by "Yes".
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxMonotonicFall"
Query may return: "HSyncMaxMonotonicFall Yes"

HSyncMaxMonotonicRise?

Query the H Sync Monotonic Rise maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "HSyncMaxMonotonicRise"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Monotonic Rise maximum limit value specified in the Limits file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncMaxMonotonicRise"
Query may return: "HSyncMaxMonotonicRise Yes"

HSyncMaxOvershoot?

Query the H Sync Overshoot maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxOvershoot"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Overshoot maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxOvershoot"
Query may return: "HSyncMaxOvershoot 15"

HSyncMaxOvershootSettlingTime?

Query the H Sync Overshoot Settling Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMaxOvershootSettlingTime”

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Overshoot Settling Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMaxOvershootSettlingTime”
Query may return: “HSyncMaxOvershootSettlingTime 7.1”

HSyncMaxPolarity?

Query the H Sync Polarity maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxPolarity"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Polarity maximum limit value specified in the Limits file.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxPolarity"
Query may return: "HSyncMaxPolarity Pos"

HSyncMaxPulseWidth?

Query the H Sync Pulse Width maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMaxPulseWidth”

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Pulse Width maximum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMaxPulseWidth”
Query may return: “HSyncMaxPulseWidth 1.13”

HSyncMaxRiseTime?

Query the H Sync Rise Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxRiseTime"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Rise Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxRiseTime"
Query may return: "HSyncMaxRiseTime 7.1"

HSyncMaxSyncPeriod?

Query the H Sync Sync Period maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMaxSyncPeriod”

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Sync Period maximum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMaxSyncPeriod”
Query may return: “HSyncMaxSyncPeriod 18.63”

HSyncMaxUndershoot?

Query the H Sync Undershoot maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMaxUndershoot"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Undershoot maximum limit value specified in the Limits file.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMaxUndershoot"
Query may return: "HSyncMaxUndershoot 15"

HSyncMaxUndershootSettlingTime?

Query the H Sync Undershoot Settling Time maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMaxUndershootSettlingTime"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Sync Undershoot Settling Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMaxUndershootSettlingTime"
Query may return: "HSyncMaxUndershootSettlingTime 7.1"

HSyncMinAll?

Query all the H Sync minimum limit values specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinAll"

Group Minimum Limits Query

Arguments None

Return value Query returns all the H Sync minimum limit values specified in the Limits file.

The order is: Polarity (Pos/Neg), Pulse Width (μ s), Sync Period (μ s), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinAll"
Query may return: "HSyncMinAll Neg 0.0 8.9 89.37 0.35 0.35 0.0 0.0 0.0 0.0
Yes Yes 2400 0 2400 0"

HSyncMinFallTime?

Query the H Sync Fall Time minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "HSyncMinFallTime"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Fall Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncMinFallTime"
Query may return: "HSyncMinFallTime 7.1"

HSyncMinFrequency?

Query the H Sync Frequency minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinFrequency"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Frequency minimum limit value specified in the Limits file.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinFrequency"
Query may return: "HSyncMinFrequency 53674"

HSyncMinLogicLevel0Value1?

Query the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMinLogicLevel0Value1"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMinLogicLevel0Value1"
Query may return: "HSyncMinLogicLevel0Value1 1"

HSyncMinLogicLevel0Value2?

Query the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinLogicLevel0Value2"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinLogicLevel0Value2"
Query may return: "HSyncMinLogicLevel0Value2 1"

HSyncMinLogicLevel1Value1?

Query the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMinLogicLevel1Value1"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMinLogicLevel1Value1"
Query may return: "HSyncMinLogicLevel1Value1 1"

HSyncMinLogicLevel1Value2?

Query the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMinLogicLevel1Value2"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMinLogicLevel1Value2"
Query may return: "HSyncMinLogicLevel1Value2 1"

HSyncMinMonotonicFall?

Query the H Sync Monotonic Fall minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMinMonotonicFall"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Monotonic Fall minimum limit value specified in the Limits file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMinMonotonicFall"
Query may return: "HSyncMinMonotonicFall Yes"

HSyncMinMonotonicRise?

Query the H Sync Monotonic Rise minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinMonotonicRise"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Monotonic Rise minimum limit value specified in the Limits file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinMonotonicRise"
Query may return: "HSyncMinMonotonicRise Yes"

HSyncMinOvershoot?

Query the H Sync Overshoot minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMinOvershoot"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Overshoot minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMinOvershoot"
Query may return: "HSyncMinOvershoot 15"

HSyncMinOvershootSettlingTime?

Query the H Sync Overshoot Settling Time minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinOvershootSettlingTime"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Overshoot Settling Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinOvershootSettlingTime"
Query may return: "HSyncMinOvershootSettlingTime 7.1"

HSyncMinPolarity?

Query the H Sync Polarity minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HSyncMinPolarity"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Polarity minimum limit value specified in the Limits file.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncMinPolarity"
Query may return: "HSyncMinPolarity Pos"

HSyncMinPulseWidth?

Query the H Sync Pulse Width minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinPulseWidth"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Pulse Width minimum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinPulseWidth"
Query may return: "HSyncMinPulseWidth 1.13"

HSyncMinRiseTime?

Query the H Sync Rise Time minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMinRiseTime”

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Rise Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMinRiseTime”
Query may return: “HSyncMinRiseTime 7.1”

HSyncMinSyncPeriod?

Query the H Sync Sync Period minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinSyncPeriod"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Sync Period minimum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinSyncPeriod"
Query may return: "HSyncMinSyncPeriod 18.63"

HSyncMinUndershoot?

Query the H Sync Undershoot minimum limit value specified in the Limits file.

Syntax VARIable:VALue? “HSyncMinUndershoot”

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Undershoot minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncMinUndershoot”
Query may return: “HSyncMinUndershoot 15”

HSyncMinUndershootSettlingTime?

Query the H Sync Undershoot Settling Time minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "HSyncMinUndershootSettlingTime"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Sync Undershoot Settling Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMinUndershootSettlingTime"
Query may return: "HSyncMinUndershootSettlingTime 7.1"

HSyncMonotonicFall?

Query the measured Monotonic Fall value resulting from the H Sync measurement.

Syntax VARIABLE:VALue? "HSyncMonotonicFall"

Group Measured Results Query

Arguments None

Return value Query returns the measured Monotonic Fall value resulting from the H Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncMonotonicFall"
Query may return: "HSyncMonotonicFall 1"

HSyncMonotonicRise?

Query the measured Monotonic Rise value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncMonotonicRise"

Group Measured Results Query

Arguments None

Return value Query returns the measured Monotonic Rise value resulting from the H Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncMonotonicRise"
Query may return: "HSyncMonotonicRise Yes"

HSyncMultiLineEnd <line number>

Set or query the ending line number used to perform the H Sync measurement on multiple lines upon Execute.

Syntax VARIABLE:VALue “HSyncMultiLineEnd”,“<line number>”

VARIABLE:VALue? “HSyncMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned ending line number used to perform the H Sync measurement on multiple lines.

Examples VARIABLE:VALue “HSyncMultiLineEnd”, “200”

VARIABLE:VALue? “HSyncMultiLineEnd”

Query may return: “HSyncMultiLineEnd 325”

HSyncMultiLineSet <setting>

Set or query whether to perform the H Sync measurement on multiple lines upon Execute.

Syntax VARIable:VALue “HSyncMultiLineSet”, “<setting>”

VARIable:VALue? “HSyncMultiLineSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the H Sync measurements on multiple lines upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the H Sync measurement on multiple lines is not selected.
Query returns “1” if the H Sync measurement on multiple lines is selected.

Examples VARIable:VALue “HSyncMultiLineSet”, “ON”

VARIable:VALue? “HSyncMultiLineSet”

Query may return: “HSyncMultiLineSet 1”

HSyncMultiLineStart <line number>

Set or query the starting line number used to perform the H Sync measurement on multiple lines upon Execute.

Syntax VARIable:VALue “HSyncMultiLineStart”, “<line number>”

VARIable:VALue? “HSyncMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned starting line number used to perform the H Sync measurement on multiple lines.

Examples VARIable:VALue “HSyncMultiLineStart”, “200”

VARIable:VALue? “HSyncMultiLineStart”
Query may return: “HSyncMultiLineStart 325”

HSyncOvershoot?

Query the measured Overshoot value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncOvershoot"

Group Measured Results Query

Arguments None

Return value Query returns the measured Overshoot value resulting from the H Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncOvershoot"
Query may return: "HSyncOvershoot 15"

HSyncOvershootSettlingTime?

Query the measured Overshoot Settling Time value resulting from the H Sync measurement.

Syntax VARIABLE:VALue? "HSyncOvershootSettlingTime"

Group Measured Results Query

Arguments None

Return value Query returns the measured Overshoot Settling Time value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncOvershootSettlingTime"
Query may return: "HSyncOvershootSettlingTime 7.1"

HSyncPassAll?

Query the pass/fail status of all H Sync measurements.

Syntax VARIable:VALue? “HSyncPassAll”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of all H Sync measurements.

The order is: Polarity, Pulse Width, Sync Period, Frequency, Rise Time, Fall Time, Overshoot, Undershoot, Overshoot S T, Undershoot S T, Monotonic Rise, Monotonic Fall, Logic Level 1 At Value1, Logic Level 0 At Value1, Logic Level 1 At Value2, and Logic Level 0 At Value2.

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncPassAll”
Query may return: “HSyncPassAll 1 1 1 0 0 0 1 0 0 1 1 1 0 1”

HSyncPassFallTime?

Query the pass/fail status for the Fall Time resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALUE? "HSyncPassFallTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Fall Time resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncPassFallTime"
Query may return: "HSyncPassFallTime 1"

HSyncPassFrequency?

Query the pass/fail status for the Frequency resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "HSyncPassFrequency"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Frequency resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncPassFrequency"
Query may return: "HSyncPassFrequency 1"

HSyncPassLogicLevel0Value1?

Query the pass/fail status for the Logic Level “0” at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARiable:VALue? “HSyncPassLogicLevel0Value1”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Logic Level “0” at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARiable:VALue? “HSyncPassLogicLevel0Value1”
Query may return: “HSyncPassLogicLevel0Value1 1”

HSyncPassLogicLevel0Value2?

Query the pass/fail status for the Logic Level “0” at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? “HSyncPassLogicLevel0Value2”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Logic Level “0” at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncPassLogicLevel0Value2”
Query may return: “HSyncPassLogicLevel0Value2 1”

HSyncPassLogicLevel1Value1?

Query the pass/fail status for the Logic Level “1” at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARiable:VALue? ”HSyncPassLogicLevel1Value1”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Logic Level “1” at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARiable:VALue? “HSyncPassLogicLevel1Value1”
Query may return: “HSyncPassLogicLevel1Value1 Pos”

HSyncPassLogicLevel1Value2?

Query the pass/fail status for the Logic Level “1” at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALUE? “HSyncPassLogicLevel1Value2”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Logic Level “1” at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALUE? “HSyncPassLogicLevel1Value2”
Query may return: “HSyncPassLogicLevel1Value2 1”

HSyncPassMonotonicFall?

Query the pass/fail status for the Monotonic Fall value resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HSyncPassMonotonicFall"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Monotonic Fall value resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassMonotonicFall"
Query may return: "HSyncPassMonotonicFall 1"

HSyncPassMonotonicRise?

Query the pass/fail status for the Monotonic Rise value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncPassMonotonicRise”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Monotonic Rise value resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncPassMonotonicRise”
Query may return: “HSyncPassMonotonicRise 1”

HSyncPassOvershoot?

Query the pass/fail status for the Overshoot resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HSyncPassOvershoot"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Overshoot resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassOvershoot"
Query may return: "HSyncPassOvershoot 1"

HSyncPassOvershootSettlingTime?

Query the pass/fail status for the Overshoot Settling Time resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "HSyncPassOvershootSettlingTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Overshoot Settling Time resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncPassOvershootSettlingTime"
Query may return: "HSyncPassOvershootSettlingTime 1"

HSyncPassPolarity?

Query the pass/fail status for the Polarity resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HSyncPassPolarity"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Polarity resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassPolarity"
Query may return: "HSyncPassPolarity 1"

HSyncPassPulseWidth?

Query the pass/fail status for the sync Pulse Width resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "HSyncPassPulseWidth"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the sync Pulse Width resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncPassPulseWidth"
Query may return: "HSyncPassPulseWidth 1"

HSyncPassRiseTime?

Query the pass/fail status for the Rise Time resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HSyncPassRiseTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Rise Time resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassRiseTime"
Query may return: "HSyncPassRiseTime 1"

HSyncPassSyncPeriod?

Query the pass/fail status for the Sync Period resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "HSyncPassSyncPeriod"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Sync Period resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncPassSyncPeriod"
Query may return: "HSyncPassSyncPeriod 1"

HSyncPassUndershoot?

Query the pass/fail status for the Undershoot resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HSyncPassUndershoot"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Undershoot resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncPassUndershoot"
Query may return: "HSyncPassUndershoot 1"

HSyncPassUndershootSettlingTime?

Query the pass/fail status for the Undershoot Settling Time resulting from the H Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "HSyncPassUndershootSettlingTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Undershoot Settling Time resulting from the H Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncPassUndershootSettlingTime"
Query may return: "HSyncPassUndershootSettlingTime 1"

HSyncPolarity?

Query the measured Polarity value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncPolarity"

Group Measured Results Query

Arguments None

Return value Query returns the measured Polarity value resulting from the H Sync measurement.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncPolarity"
Query may return: "HSyncPolarity Pos"

HSyncPulseWidth?

Query the measured Pulse Width value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncPulseWidth"

Group Measured Results Query

Arguments None

Return value Query returns the measured Pulse Width value resulting from the H Sync measurement.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncPulseWidth"
Query may return: "HSyncPulseWidth 1.13"

HSyncRefAll?

Query all the H Sync reference values specified in the Reference file.

Syntax VARiable:VALue? “HSyncRefAll”

Group Reference Values Query

Arguments None

Return value Query returns all the H Sync reference values specified in the Reference file.

The order is: Polarity (Pos/Neg), Pulse Width (μ s), Sync Period (μ s), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns “---” if no valid value is currently available.

Examples VARiable:VALue? “HSyncRefAll”
Query may return: “HSyncRefAll Pos 0.85 10.9 91.37 2.5 2.5 0 0 0 0 Yes Yes 3950 0 3950 0”

HSyncRefFallTime?

Query the H Sync Fall Time reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefFallTime"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Fall Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefFallTime"
Query may return: "HSyncRefFallTime 7.1"

HSyncRefFrequency?

Query the H Sync Frequency reference value specified in the Reference file.

Syntax VARIable:VALue? “HSyncRefFrequency”

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Frequency reference value specified in the Reference file.
The returned value is in kilohertz (kHz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRefFrequency”
Query the may return: “HSyncRefFrequency 53.6”

HSyncRefLogicLevel0Value1?

Query the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefLogicLevel0Value1"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefLogicLevel0Value1"
Query may return: "HSyncRefLogicLevel0Value1 1"

HSyncRefLogicLevel0Value2?

Query the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Syntax VARIABLE:VALue? "HSyncRefLogicLevel0Value2"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncRefLogicLevel0Value2"
Query may return: "HSyncRefLogicLevel0Value2 1"

HSyncRefLogicLevel1Value1?

Query the H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefLogicLevel1Value1"

Group Reference Values Query

Arguments None

Return value Query returns H Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefLogicLevel1Value1"
Query may return: "HSyncRefLogicLevel1Value1 1"

HSyncRefLogicLevel1Value2?

Query the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncRefLogicLevel1Value2"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRefLogicLevel1Value2"
Query may return: "HSyncRefLogicLevel1Value2 1"

HSyncRefMonotonicFall?

Query the H Sync Monotonic Fall reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefMonotonicFall"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Monotonic Fall reference value specified in the Reference file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefMonotonicFall"
Query may return: "HSyncRefMonotonicFall Yes"

HSyncRefMonotonicRise?

Query the H Sync Monotonic Rise reference value specified in the Reference file.

Syntax VARIABLE:VALue? "HSyncRefMonotonicRise"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Monotonic Rise reference value specified in the Reference file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HSyncRefMonotonicRise"
Query may return: "HSyncRefMonotonicRise Yes"

HSyncRefOvershoot?

Query the H Sync Overshoot reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefOvershoot"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Overshoot reference value specified in the Reference file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefOvershoot"
Query may return: "HSyncRefOvershoot 15"

HSyncRefOvershootSettlingTime?

Query the H Sync Overshoot Settling Time reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncRefOvershootSettlingTime"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Overshoot Settling Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRefOvershootSettlingTime"
Query may return: "HSyncRefOvershootSettlingTime 7.1"

HSyncRefPolarity?

Query the H Sync Polarity reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefPolarity"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Polarity reference value specified in the Reference file.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefPolarity"
Query may return: "HSyncRefPolarity Pos"

HSyncRefPulseWidth?

Query the H Sync Pulse Width reference value specified in the Reference file.

Syntax VARIable:VALue? “HSyncRefPulseWidth”

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Pulse Width reference value specified in the Reference file.
The returned value is in microseconds (μ s).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRefPulseWidth”
Query may return: “HSyncRefPulseWidth 1.13”

HSyncRefSyncPeriod?

Query the H Sync Sync Period reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefSyncPeriod"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Sync Period reference value specified in the Reference file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefSyncPeriod"
Query may return: "HSyncRefSyncPeriod 18.63"

HSyncRefRiseTime?

Query the H Sync Rise Time reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncRefRiseTime"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Rise Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRefRiseTime"
Query may return: "HSyncRefRiseTime 7.1"

HSyncRefUndershoot?

Query the H Sync Undershoot reference value specified in the Reference file.

Syntax VARIable:VALue? "HSyncRefUndershoot"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Undershoot reference value specified in the Reference file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRefUndershoot"
Query may return: "HSyncRefUndershoot 15"

HSyncRefUndershootSettlingTime?

Query the H Sync Undershoot Settling Time reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HSyncRefUndershootSettlingTime"

Group Reference Values Query

Arguments None

Return value Query returns the H Sync Undershoot Settling Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRefUndershootSettlingTime"
Query may return: "HSyncRefUndershootSettlingTime 7.1"

HSyncRelAll?

Query all the relative values resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values resulting from the H Sync measurement.

The order is: Polarity (Pos/Neg), Pulse Width (μ s), Sync Period (μ s), Frequency (kHz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S T (ns), Undershoot S T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelAll"

Query may return: "HSyncRelAll Pos 0.162 0.026 -0.217 5 5 4.1 4.5 0 0 Yes Yes -758.29 400 1129.65 464.8"

HSyncRelFallTime?

Query the Fall Time relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelFallTime"

Group Relative Results Query

Arguments None

Return value Query returns the Fall Time relative value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelFallTime"
Query may return: "HSyncRelFallTime 7.1"

HSyncRelFrequency?

Query the Frequency relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelFrequency"

Group Relative Results Query

Arguments None

Return value Query returns the Frequency relative value resulting from the H Sync measurement.
The returned value is in kilohertz (kHz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelFrequency"
Query may return: "HSyncRelFrequency 53.6"

HSyncRelLogicLevel0Value1?

Query the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelLogicLevel0Value1"

Group Relative Results Query

Arguments None

Return value Query returns the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelLogicLevel0Value1"
Query may return: "HSyncRelLogicLevel0Value1 1"

HSyncRelLogicLevel0Value2?

Query the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelLogicLevel0Value2"

Group Relative Results Query

Arguments None

Return value Query returns the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelLogicLevel0Value2"
Query may return: "HSyncRelLogicLevel0Value2 1"

HSyncRelLogicLevel1Value1?

Query the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelLogicLevel1Value1"

Group Relative Results Query

Arguments None

Return value Query returns the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) relative value resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelLogicLevel1Value1"
Query may return: "HSyncRelLogicLevel1Value1 1"

HSyncRelLogicLevel1Value2?

Query the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelLogicLevel1Value2"

Group Relative Results Query

Arguments None

Return value Query returns the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301Ω termination resistance without the MIU connected) relative value resulting from the H Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelLogicLevel1Value2"
Query may return: "HSyncRelLogicLevel1Value2 1"

HSyncRelMonotonicFall?

Query the Monotonic Fall relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncRelMonotonicFall”

Group Relative Results Query

Arguments None

Return value Query returns the Monotonic Fall relative value resulting from the H Sync measurement.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRelMonotonicFall”
Query may return: “HSyncRelMonotonicFall Yes”

HSyncRelMonotonicRise?

Query the Monotonic Rise relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelMonotonicRise"

Group Relative Results Query

Arguments None

Return value Query returns the Monotonic Rise relative value resulting from the H Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelMonotonicRise"
Query may return: "HSyncRelMonotonicRise Yes"

HSyncRelOvershoot?

Query the Overshoot relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncRelOvershoot”

Group Relative Results Query

Arguments None

Return value Query returns the Overshoot relative value resulting from the H Sync measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncRelOvershoot”
Query may return: “HSyncRelOvershoot 15”

HSyncRelOvershootSettlingTime?

Query the Overshoot Settling Time relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelOvershootSettlingTime"

Group Relative Results Query

Arguments None

Return value Query returns the Overshoot Settling Time relative value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelOvershootSettlingTime"
Query may return: "HSyncRelOvershootSettlingTime 7.1"

HSyncRelPolarity?

Query the Polarity relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelPolarity"

Group Relative Results Query

Arguments None

Return value Query returns the Polarity relative value resulting from the H Sync measurement.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelPolarity"
Query may return: "HSyncRelPolarity Pos"

HSyncRelPulseWidth?

Query the Pulse Width relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelPulseWidth"

Group Relative Results Query

Arguments None

Return value Query returns the Pulse Width relative value resulting from the H Sync measurement.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelPulseWidth"
Query may return: "HSyncRelPulseWidth 1.13"

HSyncRelRiseTime?

Query the Rise Time relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelRiseTime"

Group Relative Results Query

Arguments None

Return value Query returns the Rise Time relative value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelRiseTime"
Query may return: "HSyncRelRiseTime 7.1"

HSyncRelSyncPeriod?

Query the Sync Period relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelSyncPeriod"

Group Relative Results Query

Arguments None

Return value Query returns the Sync Period relative value resulting from the H Sync measurement.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelSyncPeriod"
Query may return: "HSyncRelSyncPeriod 18.63"

HSyncRelUndershoot?

Query the Undershoot relative value resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRelUndershoot"

Group Relative Results Query

Arguments None

Return value Query returns the Undershoot relative value resulting from the H Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRelUndershoot"
Query may return: "HSyncRelUndershoot 15"

HSyncRelUndershootSettlingTime?

Query the Undershoot Settling Time relative value resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncRelUndershootSettlingTime"

Group Relative Results Query

Arguments None

Return value Query returns the Undershoot Settling Time relative value resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncRelUndershootSettlingTime"
Query may return: "HSyncRelUndershootSettlingTime 7.1"

HSyncRiseTime?

Query the measured Rise Time resulting from the H Sync measurement.

Syntax VARIABLE:VALUE? "HSyncRiseTime"

Group Measured Results Query

Arguments None

Return value Query returns the measured Rise Time resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HSyncRiseTime"
Query may return: "HSyncRiseTime 7.1"

HSyncSet <setting>

Set or query whether to perform the H Sync measurement upon Execute.

Syntax VARIable:VALue “HSyncSet“,“<setting>”
VARIable:VALue? “HSyncSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the H Sync measurements upon Execute.
Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the H Sync measurement is not selected.
Query returns “1” if the H Sync measurement is selected.

Examples VARIable:VALue “HSyncSet”, “ON”

VARIable:VALue? “HSyncSet”
Query may return: “HSyncSet 1”

HSyncStatus?

Query the status of the H Sync measurement.

Syntax VARIable:VALue? "HSyncStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", or "Fail".
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "HSyncStatus"
Query may return: "HSyncStatus Pass"

HSyncSyncPeriod?

Query the measured Sync Period resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncSyncPeriod"

Group Measured Results Query

Arguments None

Return value Query returns the measured Sync Period resulting from the H Sync measurement.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HSyncSyncPeriod"
Query may return: "HSyncSyncPeriod 18.63"

HSyncUndershoot?

Query the measured Undershoot resulting from the H Sync measurement.

Syntax VARIable:VALue? “HSyncUndershoot”

Group Measured Results Query

Arguments None

Return value Query returns the measured Undershoot resulting from the H Sync measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HSyncUndershoot”
Query may return: “HSyncUndershoot 15”

HSyncUndershootSettlingTime?

Query the measured Undershoot Settling Time resulting from the H Sync measurement.

Syntax VARIable:VALue? "HSyncUndershootSettlingTime"

Group Measured Results Query

Arguments None

Return value Query returns the measured Undershoot Settling Time resulting from the H Sync measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "HSyncUndershootSettlingTime"
Query may return: "HSyncUndershootSettlingTime 7.1"

HTimingAll?

Query the measured values of all the H Timing measurements on all the channels.

Syntax VARIABLE:VALue? "HTimingAll"

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the H Timing measurements on all the channels.

The order is: Back Porch (Ch1) in μ s, Left Border (Ch1) in μ s, Addressable Video (Ch1) in μ s, Right Border (Ch1) in μ s, Front Porch (Ch1) in μ s, Back Porch (Ch2) in μ s, Left Border (Ch2) in μ s, Addressable Video (Ch2) in μ s, Right Border (Ch2) in μ s, Front Porch (Ch2) in μ s, Back Porch (Ch3) in μ s, Left Border (Ch3) in μ s, Addressable Video (Ch3) in μ s, Right Border (Ch3) in μ s, Front Porch (Ch3) in μ s, Sync Pulse Width in μ s, and Pixel Clock (MHz).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HTimingAll"

Query may return: "HTimingAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"

HTimingAddressableVideoCh[1..3]?

Query the measured Addressable Video resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? "HTimingAddressableVideoCh1"
 VARIable:VALue? "HTimingAddressableVideoCh2"
 VARIable:VALue? "HTimingAddressableVideoCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Addressable Video resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingAddressableVideoCh1"
 Query may return: "HTimingAddressableVideoCh1 14.22"

HTimingAverage <samples>

Set or query the number of samples over which to average the H Timing measurement.

Syntax VARIABLE:VALUE “HTimingAverage”, “<samples>”

VARIABLE:VALUE? “HTimingAverage”

Group Measurement Setup

Related Commands HTimingLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned total number of samples the H Timing measurement.

Examples VARIABLE:VALUE “HTimingAverage”, “1”

VARIABLE:VALUE? “HTimingAverage”

Query may return: “HTimingAverage 8”

HTimingBackPorchCh[1..3]?

Query the measured Back Porch resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? "HTimingBackPorchCh1"
 VARIable:VALue? "HTimingBackPorchCh2"
 VARIable:VALue? "HTimingBackPorchCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Back Porch resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingBackPorchCh1"
 Query may return: "HTimingBackPorchCh1 2.70"

HTimingFrontPorchCh[1..3]?

Query the measured Front Porch resulting from the H Timing measurement on the specified channel.

Syntax VARIABLE:VALUE? "HTimingFrontPorchCh1"
 VARIABLE:VALUE? "HTimingFrontPorchCh2"
 VARIABLE:VALUE? "HTimingFrontPorchCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Front Porch resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingFrontPorchCh1"
 Query may return: "HTimingFrontPorchCh1 0.56"

HTimingLeftBorderCh[1..3]?

Query the measured Left Border resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? "HTimingLeftBorderCh1"
 VARIable:VALue? "HTimingLeftBorderCh2"
 VARIable:VALue? "HTimingLeftBorderCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Left Border resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingLeftBorderCh1"
 Query may return: "HTimingLeftBorderCh1 0"

HTimingLine<line number>

Set or query the line number used to perform the H Timing measurement.

Syntax VARIABLE:VALue “HTimingLine”, “<line number>”

VARIABLE:VALue? “HTimingLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number used to perform the H Timing measurement.

Examples VARIABLE:VALue “HTimingLine”, “200”

VARIABLE:VALue? “HTimingLine”
Query may return: “HTimingLine 325”

HTimingMaxAll?

Query all the H Timing maximum limit values specified in the Limits file on all the channels.

Syntax VARIable:VALue? "HTimingMaxAll"

Group Maximum Limits Query

Arguments None

Return value Query returns all the H Timing maximum limit values specified in the Limits file on all the channels.

The order is: Back Porch (Ch1) in μs , Left Border (Ch1) in μs , Addressable Video (Ch1) in μs , Right Border (Ch1) in μs , Front Porch (Ch1) in μs , Back Porch (Ch2) in μs , Left Border (Ch2) in μs , Addressable Video (Ch2) in μs , Right Border (Ch2) in μs , Front Porch (Ch2) in μs , Back Porch (Ch3) in μs , Left Border (Ch3) in μs , Addressable Video (Ch3) in μs , Right Border (Ch3) in μs , Front Porch (Ch3) in μs , Sync Pulse Width (in μs), and Pixel Clock (in MHz).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMaxAll"

Query may return: "HTimingMaxAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"

HTimingMaxAddressableVideoCh[1..3]?

Query the H Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “HTimingMaxAddressableVideoCh1”
 VARIABLE:VALue? “HTimingMaxAddressableVideoCh2”
 VARIABLE:VALue? “HTimingMaxAddressableVideoCh3”

Group Maximum Limits Query

Arguments None

Return value Query returns the H Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingMaxAddressableVideoCh1”
 Query may return: “HTimingMaxAddressableVideoCh1 14.22”

HTimingMaxBackPorchCh[1..3]?

Query the H Timing Back Porch maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "HTimingMaxBackPorchCh1"
 VARIable:VALue? "HTimingMaxBackPorchCh2"
 VARIable:VALue? "HTimingMaxBackPorchCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Timing Back Porch maximum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMaxBackPorchCh1"
 Query may return: "HTimingMaxBackPorchCh1 2.70"

HTimingMaxFrontPorchCh[1..3]?

Query the H Timing Front Porch maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingMaxFrontPorchCh1"
 VARIABLE:VALUE? "HTimingMaxFrontPorchCh2"
 VARIABLE:VALUE? "HTimingMaxFrontPorchCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Timing Front Porch maximum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMaxFrontPorchCh1"
 Query may return: "HTimingMaxFrontPorchCh1 0.56"

HTimingMaxLeftBorderCh[1..3]?

Query the H Timing Left Border maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "HTimingMaxLeftBorderCh1"
 VARIable:VALue? "HTimingMaxLeftBorderCh2"
 VARIable:VALue? "HTimingMaxLeftBorderCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Timing Left Border maximum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMaxLeftBorderCh1"
 Query may return: "HTimingMaxLeftBorderCh1 0"

HTimingMaxPixelClock?

Query the H Timing Pixel Clock maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HTimingMaxPixelClock"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Timing Pixel Clock maximum limit value specified in the Limits file.
The returned value is in megahertz (MHz).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMaxPixelClock"
Query may return: "HTimingMaxPixelClock 56.25"

HTimingMaxRightBorderCh[1..3]?

Query the H Timing Right Border maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "HTimingMaxRightBorderCh1"
 VARIable:VALue? "HTimingMaxRightBorderCh2"
 VARIable:VALue? "HTimingMaxRightBorderCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Timing Right Border maximum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMaxRightBorderCh1"
 Query may return: "HTimingMaxRightBorderCh1 0"

HTimingMaxSyncPulseWidth?

Query the H Timing Sync Pulse Width maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HTimingMaxSyncPulseWidth"

Group Maximum Limits Query

Arguments None

Return value Query returns the H Timing Sync Pulse Width maximum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMaxSyncPulseWidth"
Query may return: "HTimingMaxSyncPulseWidth 1.13"

HTimingMinAll?

Query all the H Timing minimum limit values specified in the Limits file on all the channels.

Syntax VARIable:VALue? "HTimingMinAll"

Group Minimum Limits Query

Arguments None

Return value Query returns all the H Timing minimum limit values specified in the Limits file on all the channels.

The order is: Back Porch (Ch1) in μs , Left Border (Ch1) in μs , Addressable Video (Ch1) in μs , Right Border (Ch1) in μs , Front Porch (Ch1) in μs , Back Porch (Ch2) in μs , Left Border (Ch2) in μs , Addressable Video (Ch2) in μs , Right Border (Ch2) in μs , Front Porch (Ch2) in μs , Back Porch (Ch3) in μs , Left Border (Ch3) in μs , Addressable Video (Ch3) in μs , Right Border (Ch3) in μs , Front Porch (Ch3) in μs , Sync Pulse Width (in μs), and Pixel Clock (in MHz).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMinAll"

Query may return: "HTimingMinAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"

HTimingMinAddressableVideoCh[1..3]?

Query the H Timing Addressable Video minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingMinAddressableVideoCh1"
 VARIABLE:VALUE? "HTimingMinAddressableVideoCh2"
 VARIABLE:VALUE? "HTimingMinAddressableVideoCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Timing Addressable Video minimum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMinAddressableVideoCh1"
 Query may return: "HTimingMinAddressableVideoCh1 14.22"

HTimingMinBackPorchCh[1..3]?

Query the H Timing Back Porch minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "HTimingMinBackPorchCh1"
 VARIable:VALue? "HTimingMinBackPorchCh2"
 VARIable:VALue? "HTimingMinBackPorchCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Timing Back Porch minimum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMinBackPorchCh1"
 Query may return: "HTimingMinBackPorchCh1 2.70"

HTimingMinFrontPorchCh[1..3]?

Query the H Timing Front Porch minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “HTimingMinFrontPorchCh1”
 VARIable:VALue? “HTimingMinFrontPorchCh2”
 VARIable:VALue? “HTimingMinFrontPorchCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the H Timing Front Porch minimum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “HTimingMinFrontPorchCh1”
 Query may return: “HTimingMinFrontPorchCh1 0.56”

HTimingMinLeftBorderCh[1..3]?

Query the H Timing Left Border minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "HTimingMinLeftBorderCh1"
 VARIable:VALue? "HTimingMinLeftBorderCh2"
 VARIable:VALue? "HTimingMinLeftBorderCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Timing Left Border minimum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMinLeftBorderCh1"
 Query may return: "HTimingMinLeftBorderCh1 0"

HTimingMinPixelClock?

Query the H Timing Pixel Clock minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HTimingMinPixelClock"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Timing Pixel Clock minimum limit value specified in the Limits file.
The returned value is in megahertz (MHz).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMinPixelClock"
Query may return: "HTimingMinPixelClock 56.25"

HTimingMinRightBorderCh[1..3]?

Query the H Timing Right Border minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "HTimingMinRightBorderCh1"
 VARIable:VALue? "HTimingMinRightBorderCh2"
 VARIable:VALue? "HTimingMinRightBorderCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Timing Right Border minimum limit value specified in the Limits file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingMinRightBorderCh1"
 Query may return: "HTimingMinRightBorderCh1 0"

HTimingMinSyncPulseWidth?

Query the H Timing Sync Pulse Width minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "HTimingMinSyncPulseWidth"

Group Minimum Limits Query

Arguments None

Return value Query returns the H Timing Sync Pulse Width minimum limit value specified in the Limits file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingMinSyncPulseWidth"
Query may return: "HTimingMinSyncPulseWidth 1.13"

HTimingMultiLineEnd <line number>

Set or query returns the currently assigned ending line number used to perform the H Timing measurement on multiple lines.

Syntax VARIable:VALue “HTimingMultiLineEnd”, “<line number>”
VARIable:VALue? “HTimingMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned ending line number used to perform the H Timing measurement on multiple lines.

Examples VARIable:VALue “HTimingMultiLineEnd”, “200”

VARIable:VALue? “HTimingMultiLineEnd”
Query may return: “HTimingMultiLineEnd 325”

HTimingMultiLineSet <setting>

Set or query whether to measure H Timing measurements on multiple lines upon Execute.

Syntax VARIABLE:VALUE "HTimingMultiLineSet","<setting>"

VARIABLE:VALUE? "HTimingMultiLineSet"

Group Measurement Setup

Arguments <setting> specifies whether to perform the H Timing measurements on multiple lines upon Execute.

Valid values are: "OFF", "ON", "0", "1"

Return value Query returns "0" if the H Timing measurement on multiple lines is not selected.
Query returns "1" if the H Timing measurement on multiple lines is selected.

Examples VARIABLE:VALUE "HTimingMultiLineSet", "ON"

VARIABLE:VALUE? "HTimingMultiLineSet"
Query may return: "HTimingMultiLineSet 1"

HTimingMultiLineStart <line number>

Set or query returns the currently assigned starting line number used to perform the H Timing measurement on multiple lines.

Syntax VARIable:VALue “HTimingMultiLineStart”, “<line number>”
 VARIable:VALue? “HTimingMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned starting line number used to perform the H Timing measurement on multiple lines.

Examples VARIable:VALue “HTimingMultiLineStart”, “200”

 VARIable:VALue? “HTimingMultiLineStart”
 Query may return: “HTimingMultiLineStart 325”

HTimingPassAll?

Query the pass/fail status for all the values resulting from the H Timing measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIABLE:VALue? “HTimingPassAll”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values resulting from the H Timing measurement on all the channels.

The order is: Back Porch (Ch1), Left Border (Ch1), Addressable Video (Ch1), Right Border (Ch1), Front Porch (Ch1), Back Porch (Ch2), Left Border (Ch2), Addressable Video (Ch2), Right Border (Ch2), Front Porch (Ch2), Back Porch (Ch3), Left Border (Ch3), Addressable Video (Ch3), Right Border (Ch3), Front Porch (Ch3), Sync Pulse Width, and Pixel Clock.

A returned value of 1 means Pass, a returned value of 0 means Fail. Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingPassAll”
Query may return: “HTimingPassAll 1 0 0 0 1 1 1 0 1 0 1 1 1 1 1 1 1”

HTimingPassAddressableVideoCh[1..3]?

Query the pass/fail status for the Addressable Video resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "HTimingPassAddressableVideoCh1"
 VARIABLE:VALue? "HTimingPassAddressableVideoCh2"
 VARIABLE:VALue? "HTimingPassAddressableVideoCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Addressable Video resulting from the H Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "HTimingPassAddressableVideoCh1"
 Query may return: "HTimingPassAddressableVideoCh1 1"

HTimingPassBackPorchCh[1..3]?

Query the pass/fail status for the Back Porch resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “HTimingPassBackPorchCh1”
 VARIABLE:VALue? “HTimingPassBackPorchCh2”
 VARIABLE:VALue? “HTimingPassBackPorchCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Back Porch resulting from the H Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingPassBackPorchCh1”
 Query may return: “HTimingPassBackPorchCh1 1”

HTimingPassFrontPorchCh[1..3]?

Query the pass/fail status for the Front Porch resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "HTimingPassRightBorderCh1"
 VARIable:VALue? "HTimingPassRightBorderCh2"
 VARIable:VALue? "HTimingPassRightBorderCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Front Porch resulting from the H Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingPassFrontPorchCh1"
 Query may return: "HTimingPassFrontPorchCh1 1"

HTimingPassLeftBorderCh[1..3]?

Query the pass/fail status for the Left Border resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “HTimingPassLeftBorderCh1”
 VARIABLE:VALue? “HTimingPassLeftBorderCh2”
 VARIABLE:VALue? “HTimingPassLeftBorderCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Left Border resulting from the H Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingPassLeftBorderCh1”
 Query may return: “HTimingPassLeftBorderCh1 1”

HTimingPassPixelClock?

Query the pass/fail status for the Pixel Clock resulting from the H Timing measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALUE? "HTimingPassPixelClock"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Pixel Clock resulting from the H Timing measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingPassPixelClock"
Query may return: "HTimingPassPixelClock 1"

HTimingPassRightBorderCh[1..3]?

Query the pass/fail status for the Right Border resulting from the H Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “HTimingPassRightBorderCh1”
 VARIABLE:VALue? “HTimingPassRightBorderCh2”
 VARIABLE:VALue? “HTimingPassRightBorderCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Right Border resulting from the H Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingPassRightBorderCh1”
 Query may return: “HTimingPassRightBorderCh1 1”

HTimingPassSyncPulseWidth?

Query the pass/fail status for the Sync Pulse Width resulting from the H Timing measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "HTimingPassSyncPulseWidth"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Sync Pulse Width resulting from the H Timing measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingPassSyncPulseWidth"
Query may return: "HTimingPassSyncPulseWidth 1"

HTimingPixelClock?

Query the measured Pixel Clock resulting from the H Timing measurement.

Syntax VARIABLE:VALUE? "HTimingPixelClock"

Group Measured Results Query

Arguments None

Return value Query returns the measured Pixel Clock resulting from the H Timing measurement.
The returned value is in megahertz (MHz).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingPixelClock"
Query may return: "HTimingPixelClock 56.25"

HTimingRefAll?

Query all the H Timing reference values specified in the Reference file.

Syntax VARIable:VALue? "HTimingRefAll"

Group Reference Values Query

Arguments None

Return value Query returns all the H Timing reference values specified in the Reference file.

The order is: Back Porch (Ch1) in μs , Left Border (Ch1) in μs ,
Addressable Video (Ch1) in μs , Right Border (Ch1) in μs ,
Front Porch (Ch1) in μs , Back Porch (Ch2) in μs , Left Border (Ch2) in μs ,
Addressable Video (Ch2) in μs , Right Border (Ch2) in μs ,
Front Porch (Ch2) in μs , Back Porch (Ch3) in μs , Left Border (Ch3) in μs ,
Addressable Video (Ch3) in μs , Right Border (Ch3) in μs ,
Front Porch (Ch3) in μs , Sync Pulse Width (in μs), and Pixel Clock (in MHz).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRefAll"

Query may return: "HTimingRefAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0
0.569 2.702 0 14.222 0 0.569 1.13 56.25"

HTimingRefAddressableVideoCh[1..3]?

Query the H Timing Addressable Video reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALUE? "HTimingRefAddressableVideoCh1"
 VARIABLE:VALUE? "HTimingRefAddressableVideoCh2"
 VARIABLE:VALUE? "HTimingRefAddressableVideoCh3"

Group Reference Values Query

Arguments None

Return value Query returns the H Timing Addressable Video reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRefAddressableVideoCh1"
 Query may return: "HTimingRefAddressableVideoCh1 14.22"

HTimingRefBackPorchCh[1..3]?

Query the H Timing Back Porch reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "HTimingRefBackPorchCh1"
 VARIable:VALue? "HTimingRefBackPorchCh2"
 VARIable:VALue? "HTimingRefBackPorchCh3"

Group Reference Values Query

Arguments None

Return value Query returns the H Timing Back Porch reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRefBackPorchCh1"
 Query may return: "HTimingRefBackPorchCh1 2.70"

HTimingRefFrontPorchCh[1..3]?

Query the H Timing Front Porch reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “HTimingRefFrontPorchCh1”
 VARIABLE:VALue? “HTimingRefFrontPorchCh2”
 VARIABLE:VALue? “HTimingRefFrontPorchCh3”

Group Reference Values Query

Arguments None

Return value Query returns the H Timing Front Porch reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “HTimingRefFrontPorchCh1”
 Query may return: “HTimingRefFrontPorchCh1 0.56”

HTimingRefLeftBorderCh[1..3]?

Query the H Timing Left Border reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "HTimingRefLeftBorderCh1"
 VARIable:VALue? "HTimingRefLeftBorderCh2"
 VARIable:VALue? "HTimingRefLeftBorderCh3"

Group Reference Values Query

Arguments None

Return value Query returns the H Timing Left Border reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRefLeftBorderCh1"
 Query may return: "HTimingRefLeftBorderCh1 0"

HTimingRefPixelClock?

Query the H Timing Pixel Clock reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HTimingRefPixelClock"

Group Reference Values Query

Arguments None

Return value Query returns the H Timing Pixel Clock reference value specified in the Reference file.
The returned value is in megahertz (MHz).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRefPixelClock"
Query may return: "HTimingRefPixelClock 56.25"

HTimingRefRightBorderCh[1..3]?

Query the H Timing Right Border reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "HTimingRefRightBorderCh1"
 VARIable:VALue? "HTimingRefRightBorderCh2"
 VARIable:VALue? "HTimingRefRightBorderCh3"

Group Reference Values Query

Arguments None

Return value Query returns the H Timing Right Border reference value specified in the Reference file on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRefRightBorderCh1"
 Query may return: "HTimingRefRightBorderCh1 0"

HTimingRefSyncPulseWidth?

Query the H Timing Sync Pulse Width reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "HTimingRefSyncPulseWidth"

Group Reference Values Query

Arguments None

Return value Query returns the H Timing Sync Pulse Width reference value specified in the Reference file.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRefSyncPulseWidth"
Query may return: "HTimingRefSyncPulseWidth 1.13"

HTimingRelAll?

Query all the relative values resulting from the H Timing measurement on all the channels.

Syntax VARIABLE:VALUE? "HTimingRelAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values resulting from the H Timing measurement on all the channels.

The order is: Back Porch (Ch1) in μs , Left Border (Ch1) in μs , Addressable Video (Ch1) in μs , Right Border (Ch1) in μs , Front Porch (Ch1) in μs , Back Porch (Ch2) in μs , Left Border (Ch2) in μs , Addressable Video (Ch2) in μs , Right Border (Ch2) in μs , Front Porch (Ch2) in μs , Back Porch (Ch3) in μs , Left Border (Ch3) in μs , Addressable Video (Ch3) in μs , Right Border (Ch3) in μs , Front Porch (Ch3) in μs , Sync Pulse Width (in μs), and Pixel Clock (in MHz).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRelAll"

Query may return: "HTimingRelAll 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 2.702 0 14.222 0 0.569 1.13 56.25"

HTimingRelAddressableVideoCh[1..3]?

Query the Addressable Video relative value resulting from the H Timing measurement on the specified channel.

Syntax VARIABLE:VALUE? "HTimingRelAddressableVideoCh1"
 VARIABLE:VALUE? "HTimingRelAddressableVideoCh2"
 VARIABLE:VALUE? "HTimingRelAddressableVideoCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Addressable Video relative value resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRelAddressableVideoCh1"
 Query may return: "HTimingRelAddressableVideoCh1 14.22"

HTimingRelBackPorchCh[1..3]?

Query the Back Porch relative value resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? "HTimingRelBackPorchCh1"
 VARIable:VALue? "HTimingRelBackPorchCh2"
 VARIable:VALue? "HTimingRelBackPorchCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Back Porch relative value resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRelBackPorchCh1"
 Query may return: "HTimingRelBackPorchCh1 2.70"

HTimingRelFrontPorchCh[1..3]?

Query the Front Porch relative value resulting from the H Timing measurement on the specified channel.

Syntax VARIABLE:VALUE? "HTimingRelFrontPorchCh1"
 VARIABLE:VALUE? "HTimingRelFrontPorchCh2"
 VARIABLE:VALUE? "HTimingRelFrontPorchCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Front Porch relative value resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRelFrontPorchCh1"
 Query may return: "HTimingRelFrontPorchCh1 0.56"

HTimingRelLeftBorderCh[1..3]?

Query the Left Border relative value resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? "HTimingRelLeftBorderCh1"
 VARIable:VALue? "HTimingRelLeftBorderCh2"
 VARIable:VALue? "HTimingRelLeftBorderCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Left Border relative value resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRelLeftBorderCh1"
 Query may return: "HTimingRelLeftBorderCh1 0"

HTimingRelPixelClock?

Query the Pixel Clock relative value resulting from the H Timing measurement.

Syntax VARIable:VALue? "HTimingRelPixelClock"

Group Relative Results Query

Arguments None

Return value Query returns the Pixel Clock relative value resulting from the H Timing measurement.
The returned value is in megahertz (MHz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRelPixelClock"
Query may return: "HTimingRelPixelClock 56.25"

HTimingRelRightBorderCh[1..3]?

Query the Right Border relative value resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? "HTimingRelRightBorderCh1"
 VARIable:VALue? "HTimingRelRightBorderCh2"
 VARIable:VALue? "HTimingRelRightBorderCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Right Border relative value resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRelRightBorderCh1"
 Query may return: "HTimingRelRightBorderCh1 0"

HTimingRelSyncPulseWidth?

Query the Sync Pulse Width relative value resulting from the H Timing measurement.

Syntax VARIABLE:VALUE? "HTimingRelSyncPulseWidth"

Group Relative Results Query

Arguments None

Return value Query returns the Sync Pulse Width relative value resulting from the H Timing measurement.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingRelSyncPulseWidth"
Query may return: "HTimingRelSyncPulseWidth 1.13"

HTimingRightBorderCh[1..3]?

Query the measured Right Border resulting from the H Timing measurement on the specified channel.

Syntax VARIable:VALue? "HTimingRightBorderCh1"
 VARIable:VALue? "HTimingRightBorderCh2"
 VARIable:VALue? "HTimingRightBorderCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Right Border resulting from the H Timing measurement on the specified channel.
 The returned value is in microseconds (μ s).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "HTimingRightBorderCh1"
 Query may return: "HTimingRightBorderCh1 0"

HTimingSet <setting>

Set or query whether to perform the H Timing measurements upon Execute.

Syntax VARIable:VALue “HTimingSet”, “<setting>”

VARIable:VALue? “HTimingSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the H Timing measurements upon Execute.
Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the H Timing measurement is not selected.
Query returns “1” if the H Timing measurement is selected.

Examples VARIable:VALue “HTimingSet”, “ON”

VARIable:VALue? “HTimingSet”
Query may return: “HTimingSet 1”

HTimingStatus?

Query the status of the H Timing measurement.

Syntax VARIable:VALue? "HTimingStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid values are currently available.

Examples VARIable:VALue? "HTimingStatus"
Query may return: "HTimingStatus Pass"

HTimingSyncPulseWidth?

Query the measured Sync Pulse Width resulting from the H Timing measurement.

Syntax VARIABLE:VALUE? "HTimingSyncPulseWidth"

Group Measured Results Query

Arguments None

Return value Query returns the measured Sync Pulse Width resulting from the H Timing measurement.
The returned value is in microseconds (μ s).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "HTimingSyncPulseWidth"
Query may return: "HTimingSyncPulseWidth 1.13"

ID?

Query the ID/Version of the application.

Syntax VARIable:VALue? "ID"

Group Global

Arguments None

Returns Returns the application's ID.

Examples VARIable:VALue? "ID"
Query may return: "ID Tek/VM5000PC Version 0.96"

LimitFileLoad <pathstring>

Loads the Limit file to be used for Limit (pass/fail test) testing.

Syntax VARIABLE:VALUE "LimitFileLoad", "<pathstring>"

Group Reference and Limits

Arguments <pathstring> specifies the path/filename where the limits file is located. Can either be (1) the full path and filename, or (2) just the filename, and the default path "C:\VM5000PC\RefLimFiles\DMT" will be used for the DMT timing standard. The file extension must be csv. The pathstring must be less than 60 characters in length, otherwise the command may not be completed successfully.

Return value Query returns "OK" unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE "LimitFileLoad",
 "C:\VM5000PC\RefLimFiles\DMT\DefaultLimit1024X768@75-RGB.csv"

LimitSet

Set or query whether Limit Testing is performed upon Execute.

Syntax VARIable:VALue “LimitSet”, “<setting>”
 VARIable:VALue? “LimitSet”

Group Reference and Limits

Arguments <setting> specifies whether to perform the Limit testing upon Execute.
 Valid values are: OFF, ON, 0, 1.

Return value Query returns 0 or 1 depending on whether the LimitSet is enabled or disabled.

Examples VARIable:VALue “LimitSet”, “ON”

 VARIable:VALue? “LimitSet”
 Query may return: “LimitSet 1 ”

LinearityAverage <samples>

Set or query the total number of samples over which to average the Linearity measurement.

Syntax VARIABLE:VALUE "LinearityAverage", "<samples>"

VARIABLE:VALUE? "LinearityAverage"

Group Measurement Setup

Related Commands LinearityLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within range. Values must be in the range: 1..64.

Return value Query returns the currently assigned total number of samples the Linearity Measurement.

Examples VARIABLE:VALUE "LinearityAverage", "1"

VARIABLE:VALUE? "LinearityAverage"

Query may return: "LinearityAverage 8"

LinearityMaxDNLAtStepNumberCh[1..3]?

Query the step number at which the Max INL occurs for the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityMaxDNLAtStepNumberCh1"
 VARIable:VALue? "LinearityMaxDNLAtStepNumberCh2"
 VARIable:VALue? "LinearityMaxDNLAtStepNumberCh3"

Group Measured Results Query

Arguments None

Return value Query returns the step number at which the Max DNL is measured resulting from the Linearity measurement on the specified channel.
 Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMaxDNLAtStepNumberCh1"
 Query may return: "LinearityMaxDNLAtStepNumberCh1 23"

LinearityMaxDNLCh[1..3]?

Query the measured Max DNL resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALUE? "LinearityMaxDNLCh1"
 VARIABLE:VALUE? "LinearityMaxDNLCh2"
 VARIABLE:VALUE? "LinearityMaxDNLCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Max DNL resulting from the Linearity measurement on the specified channel.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityMaxDNLCh1"
 Query may return: "LinearityMaxDNLCh1 0.0"

LinearityMaxINLAtStepNumberCh[1..3]?

Query the step number at which the MaxINL occurs for the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityMaxINLAtStepNumberCh1"
 VARIable:VALue? "LinearityMaxINLAtStepNumberCh2"
 VARIable:VALue? "LinearityMaxINLAtStepNumberCh3"

Group Measured Results Query

Arguments None

Return value Query returns the step number at which the Max INL is measured resulting from the Linearity measurement on the specified channel.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMaxINLAtStepNumberCh1"
 Query may return: "LinearityMaxINLAtStepNumberCh1 13"

LinearityMaxINLCh[1..3]?

Query the measured Max INL resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALue? "LinearityMaxINLCh1"
 VARIABLE:VALue? "LinearityMaxINLCh2"
 VARIABLE:VALue? "LinearityMaxINLCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Max INL resulting from the Linearity measurement on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "LinearityMaxINLCh1"
 Query may return: "LinearityMaxINLCh1 0.0"

LinearityLine<line number>

Set or query the line number used to perform the Linearity measurement.

Syntax VARIable:VALue “LinearityLine”, “<line number>”
 VARIable:VALue? “LinearityLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number used to perform the Linearity measurement.

Examples VARIable:VALue “LinearityLine”, “200”

 VARIable:VALue? “LinearityLine”
 Query may return: “LinearityLine 325”

LinearityMaxMaxDNLCh[1..3]?

Query the Linearity Max DNL maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "LinearityMaxMaxDNLCh1"
 VARIABLE:VALUE? "LinearityMaxMaxDNLCh2"
 VARIABLE:VALUE? "LinearityMaxMaxDNLCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Linearity Max DNL maximum limit value specified in the Limits file on the specified channel.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityMaxMaxDNLCh1"
 Query may return: "LinearityMaxMaxDNLCh1 0.0"

LinearityMaxMaxINLCh[1..3]?

Query the Linearity Max INL maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LinearityMaxMaxINLCh1"
 VARIable:VALue? "LinearityMaxMaxINLCh2"
 VARIable:VALue? "LinearityMaxMaxINLCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Linearity Max INL maximum limit value specified in the Limits file on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMaxMaxINLCh1"
 Query may return: "LinearityMaxMaxINLCh1 0.0"

LinearityMaxMonotonicCh[1..3]?

Query the Linearity Monotonic maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "LinearityMaxMonotonicCh1"
 VARIABLE:VALUE? "LinearityMaxMonotonicCh2"
 VARIABLE:VALUE? "LinearityMaxMonotonicCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Linearity Monotonic maximum limit value specified in the Limits file on the specified channel.
 The value can be either 1 or 0.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityMaxMonotonicCh1"
 Query may return: "LinearityMaxMonotonicCh1 1"

LinearityMaxResolutionCh[1..3]?

Query the Linearity Resolution maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LinearityMaxResolutionCh1"
 VARIable:VALue? "LinearityMaxResolutionCh2"
 VARIable:VALue? "LinearityMaxResolutionCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Linearity Resolution maximum limit value specified in the Limits file on the specified channel.
 The value represents the number of bits of resolution of the input signal.
 The returned value is in Bits.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMaxResolutionCh1"
 Query may return: "LinearityMaxResolutionCh1 7"

LinearityMinMaxDNLCh[1..3]?

Query the Linearity Max DNL minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "LinearityMinMaxDNLCh1"
 VARIABLE:VALUE? "LinearityMinMaxDNLCh2"
 VARIABLE:VALUE? "LinearityMinMaxDNLCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Linearity Max DNL minimum limit value specified in the Limits file on the specified channel.
 The returned value is in LSB (Least Significant Bit)
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityMinMaxDNLCh1"
 Query may return: "LinearityMinMaxDNLCh1 0.0"

LinearityMinMaxINLCh[1..3]?

Query the Linearity Max INL minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LinearityMinMaxINLCh1"
 VARIable:VALue? "LinearityMinMaxINLCh2"
 VARIable:VALue? "LinearityMinMaxINLCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Linearity Max INL minimum limit value specified in the Limits file on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMinMaxINLCh1"
 Query may return: "LinearityMinMaxINLCh1 0.0"

LinearityMinMonotonicCh[1..3]?

Query the Linearity Monotonic minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “LinearityMinMonotonicCh1”
 VARIable:VALue? “LinearityMinMonotonicCh2”
 VARIable:VALue? “LinearityMinMonotonicCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the Linearity Monotonic minimum limit value specified in the Limits file on the specified channel.
 The value can be either 1 or 0.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “LinearityMinMonotonicCh1”
 Query may return: “LinearityMinMonotonicCh1 1”

LinearityMinResolutionCh[1..3]?

Query the Linearity Resolution minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LinearityMinResolutionCh1"
 VARIable:VALue? "LinearityMinResolutionCh2"
 VARIable:VALue? "LinearityMinResolutionCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Linearity Resolution minimum limit value specified in the Limits file on the specified channel.
 The value represents the number of bits of resolution of the input signal.
 The returned value is in Bits.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMinResolutionCh1"
 Query may return: "LinearityMinResolutionCh1 7"

LinearityMonotonicAtStepNumberCh[1..3]?

Query the step number at which the maximum Monotonic value is measured resulting from the Linearity measurement on the specified channel.

Syntax VARIable:VALue? “LinearityMonotonicAtStepNumberCh1”
 VARIable:VALue? “LinearityMonotonicAtStepNumberCh2”
 VARIable:VALue? “LinearityMonotonicAtStepNumberCh3”

Group Measured Results Query

Arguments None

Return value Query returns the step number at which the maximum Monotonic value is measured resulting from the Linearity measurement on the specified channel. The value can be either 1 or 0. Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “LinearityMonotonicAtStepNumberCh1”
 Query may return: “LinearityMonotonicAtStepNumberCh1 1”

LinearityMonotonicCh[1..3]?

Query the measured Monotonic value resulting from the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityMonotonicCh1"
 VARIable:VALue? "LinearityMonotonicCh2"
 VARIable:VALue? "LinearityMonotonicCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Monotonic value resulting from the Linearity measurement on the specified channel.
 The value can be either 1 or 0.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityMonotonicCh1"
 Query may return: "LinearityMonotonicCh1 1"

LinearityMultiLineEnd <line number>

Set or query the ending line number used to perform the Linearity measurement on multiple lines.

Syntax VARIable:VALue “LinearityMultiLineEnd”, “<line number>”

VARIable:VALue? “LinearityMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned ending line number used to perform the Linearity measurement on multiple lines.

Examples VARIable:VALue “LinearityMultiLineEnd”, “200”

VARIable:VALue? “LinearityMultiLineEnd”
Query may return: “LinearityMultiLineEnd 325”

LinearityMultiLineSet <setting>

Set or query whether to perform the Linearity measurements on multiple lines upon Execute.

Syntax VARIable:VALue “LinearityMultiLineSet”, “<setting>”

VARIable:VALue? “LinearityMultiLineSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Linearity measurements on multiple lines upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Linearity measurement is not selected.

Query returns “1” if the Linearity measurement is selected.

Examples VARIable:VALue “LinearityMultiLineSet”, “ON”

VARIable:VALue? “LinearityMultiLineSet”

Query may return: “LinearityMultiLineSet 1”

LinearityMultiLineStart <line number>

Set or query the starting line number used to perform the Linearity measurement on multiple lines.

Syntax VARIable:VALue “LinearityMultiLineStart”,“<line number>”

VARIable:VALue? “LinearityMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned starting line number used to perform the Linearity measurement on multiple lines.

Examples VARIable:VALue “LinearityMultiLineStart”, “200”

VARIable:VALue? “LinearityMultiLineStart”
Query may return: “LinearityMultiLineStart 325”

LinearityPassAll?

Query the pass/fail status for all the values resulting from the Linearity measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIABLE:VALUE? "LinearityPassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values resulting from the Linearity measurement on all the channels.

The order is: Resolution in Bits (Ch1), Max INL (Ch1), Max INL @ Step No (Ch1), Max DNL (Ch1), Max DNL @ Step No (Ch1), Monotonic Y/N (Ch1), Monotonic @ Step No (Ch1), Resolution in Bits (Ch2), Max INL (Ch2), Max INL @ Step No (Ch2), Max DNL (Ch2), Max DNL @ Step No (Ch2), Monotonic Y/N (Ch2), Monotonic @ Step No (Ch2), Resolution in Bits (Ch3), Max INL (Ch3), Max INL @ Step No (Ch3), Max DNL (Ch3), Max DNL @ Step No (Ch3), Monotonic Y/N (Ch3), Monotonic @ Step No (Ch3).

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityPassAll"
Query may return: "LinearityPassAll 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1"

LinearityPassMaxDNLCh[1..3]?

Query the pass/fail status for the Max DNL resulting from the Linearity measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “LinearityPassMaxDNLCh1”
 VARIABLE:VALue? “LinearityPassMaxDNLCh2”
 VARIABLE:VALue? “LinearityPassMaxDNLCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Max DNL resulting from the Linearity measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “LinearityPassMaxDNLCh1”
 Query may return: “LinearityPassMaxDNLCh1 1”

LinearityPassMaxINLCh[1..3]?

Query the pass/fail status for the Max INL resulting from the Linearity measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "LinearityPassMaxINLCh1"
 VARIable:VALue? "LinearityPassMaxINLCh2"
 VARIable:VALue? "LinearityPassMaxINLCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Max INL resulting from the Linearity measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityPassMaxINLCh1"

 Query may return: "LinearityPassMaxINLCh1 1"

LinearityPassMonotonicCh[1..3]?

Query the pass/fail status for the Monotonic value resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALUE? "LinearityPassMonotonicCh1"
 VARIABLE:VALUE? "LinearityPassMonotonicCh2"
 VARIABLE:VALUE? "LinearityPassMonotonicCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Monotonic value resulting from the Linearity measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityPassMonotonicCh1"
 Query may return: "LinearityPassMonotonicCh1 1"

LinearityPassResolutionCh[1..3]?

Query the pass/fail status for the resolution resulting from the Linearity measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "LinearityPassResolutionCh1"
 VARIable:VALue? "LinearityPassResolutionCh2"
 VARIable:VALue? "LinearityPassResolutionCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the resolution resulting from the Linearity measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityPassResolutionCh1"
 Query may return: "LinearityPassResolutionCh1 1"

LinearityRefMaxDNLCh[1..3]?

Query the Linearity Max DNL reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALUE? "LinearityRefMaxDNLCh1"
 VARIABLE:VALUE? "LinearityRefMaxDNLCh2"
 VARIABLE:VALUE? "LinearityRefMaxDNLCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Linearity Max DNL reference value specified in the Reference file on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityRefMaxDNLCh1"
 Query may return: "LinearityRefMaxDNLCh1 0.0"

LinearityRefMaxINLCh[1..3]?

Query the Linearity Max INL reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "LinearityRefMaxINLCh1"
 VARIable:VALue? "LinearityRefMaxINLCh2"
 VARIable:VALue? "LinearityRefMaxINLCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Linearity Max INL reference value specified in the Reference file on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityRefMaxINLCh1"
 Query may return: "LinearityRefMaxINLCh1 0.0"

LinearityRefMonotonicCh[1..3]?

Query the Linearity Monotonic reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALUE? "LinearityRefMonotonicCh1"
 VARIABLE:VALUE? "LinearityRefMonotonicCh2"
 VARIABLE:VALUE? "LinearityRefMonotonicCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Linearity Monotonic reference value specified in the Reference file on the specified channel.
 The value can be either 1 or 0.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityRefMonotonicCh1"
 Query may return: "LinearityRefMonotonicCh1 1"

LinearityRefResolutionCh[1..3]?

Query the Linearity Resolution reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "LinearityRefResolutionCh1"
 VARIable:VALue? "LinearityRefResolutionCh2"
 VARIable:VALue? "LinearityRefResolutionCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Linearity Resolution reference value specified in the Reference file on the specified channel.
 The value represents the number of bits of resolution of the input signal.
 The returned value is in Bits.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityRefResolutionCh1"
 Query may return: "LinearityRefResolutionCh1 7"

LinearityRelMaxDNLCh[1..3]?

Query the Max DNL relative value resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALUE? "LinearityRelMaxDNLCh1"
 VARIABLE:VALUE? "LinearityRelMaxDNLCh2"
 VARIABLE:VALUE? "LinearityRelMaxDNLCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Max DNL relative value resulting from the Linearity measurement on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityRelMaxDNLCh1"
 Query may return: "LinearityRelMaxDNLCh1 0.0"

LinearityRelMaxINLCh[1..3]?

Query the Max INL relative value resulting from the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityRelMaxINLCh1"
 VARIable:VALue? "LinearityRelMaxINLCh2"
 VARIable:VALue? "LinearityRelMaxINLCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Max INL relative value resulting from the Linearity measurement on the specified channel.
 The returned value is in LSB (Least Significant Bit).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityRelMaxINLCh1"
 Query may return: "LinearityRelMaxINLCh1 0.0"

LinearityRelMonotonicCh[1..3]?

Query the Monotonic relative value resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALUE? "LinearityRelMonotonicCh1"
 VARIABLE:VALUE? "LinearityRelMonotonicCh2"
 VARIABLE:VALUE? "LinearityRelMonotonicCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Monotonic relative value resulting from the Linearity measurement on the specified channel.
 The returned value can be either "Yes" or "No".
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LinearityRelMonotonicCh1"
 Query may return: "LinearityRelMonotonicCh1 Yes"

LinearityRelResolutionCh[1..3]?

Query the Resolution relative value resulting from the Linearity measurement on the specified channel.

Syntax VARIable:VALue? "LinearityRelResolutionCh1"
 VARIable:VALue? "LinearityRelResolutionCh2"
 VARIable:VALue? "LinearityRelResolutionCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Resolution relative value resulting from the Linearity measurement on the specified channel.
 The returned value is in bits.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LinearityRelResolutionCh1"
 Query may return: "LinearityRelResolutionCh1 7"

LinearityResolutionCh[1..3]?

Query the measured Resolution resulting from the Linearity measurement on the specified channel.

Syntax VARIABLE:VALue? "LinearityResolutionCh1"
 VARIABLE:VALue? "LinearityResolutionCh2"
 VARIABLE:VALue? "LinearityResolutionCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Resolution resulting from the Linearity measurement on the specified channel.
 The returned value is in Bits.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "LinearityResolutionCh1"
 Query may return: "LinearityResolutionCh1 7"

LinearitySet <setting>

Set or query whether to perform the Linearity measurements upon Execute.

Syntax VARIable:VALue “LinearitySet”, “<setting>”
 VARIable:VALue? “LinearitySet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Linearity measurements upon Execute.
 Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Linearity measurement is not selected.
 Query returns “1” if the Linearity measurement is selected.

Examples VARIable:VALue “LinearitySet”, “ON”

 VARIable:VALue? “LinearitySet”
 Query may return: “LinearitySet 1”

LinearityStatus?

Query the status of the Linearity measurement.

Syntax VARIable:VALue? "LinearityStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail".
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "LinearityStatus"
Query may return: "LinearityStatus Pass"

LogErrors

Set or query whether errors are logged to a file. If enabled, errors are logged in the "C:\VM5000PC\log.txt" file.

Syntax VARIable:VALue "LogErrors", "<setting>"
 VARIable:VALue? "LogErrors"

Group Reporting

Arguments <setting> specifies whether to log errors to the log.txt file.
 Valid values are: OFF, ON, 0, 1.

Return value Query returns 0 or 1 depending on whether the LogErrors is enabled or disabled.

Examples VARIable:VALue "LogErrors", "ON"

 VARIable:VALue? "LogErrors"
 Query may return: "LogErrors 1 "

LumaLevelsAverage <samples>

Set or query the total number of samples over which to average the Linearity measurement.

Syntax VARIable:VALue “LumaLevelsAverage”, “<samples>”

VARIable:VALue? “LumaLevelsAverage”

Group Measurement Setup

Related Commands LumaLevelsLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned total number of samples resulting from the Linearity measurement.

Examples VARIable:VALue “LumaLevelsAverage”, “1”

VARIable:VALue? “LumaLevelsAverage”
Query may return: “LumaLevelsAverage 8”

LumaLevelsAll?

Query the measured values of all the Luma Levels measurements on all the channels.

Syntax VARIable:VALue? "LumaLevelsAll"

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the Luma Levels measurements on all the channels.

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsAll"
Query may return:
"LumaLevelsAll 699.32 119.33 699.32 119.33 699.32 119.33"

LumaLevelsAmpMaxCh[1..3]?

Query the measured Maximum Amplitude resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsAmpMaxCh1"
 VARIable:VALue? "LumaLevelsAmpMaxCh2"
 VARIable:VALue? "LumaLevelsAmpMaxCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measuredMaximum Amplitude resulting from the Luma Levels measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsAmpMaxCh1"
 Query may return: "LumaLevelsAmpMaxCh1 699.32"

LumaLevelsAmpMinCh[1..3]?

Query the measured Minimum Amplitude resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsAmpMinCh1"
 VARIable:VALue? "LumaLevelsAmpMinCh2"
 VARIable:VALue? "LumaLevelsAmpMinCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Minimum Amplitude resulting from the Luma Levels measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsAmpMinCh1"
 Query may return: "LumaLevelsAmpMinCh1 119.33"

LumaLevelsLine<line number>

Set or query the line number used to perform the Luma Levels measurement.

Syntax VARIable:VALue “LumaLevelsLine”, “<line number>”

VARIable:VALue? “LumaLevelsLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number used to perform the Luma Levels measurement.

Examples VARIable:VALue “LumaLevelsLine”, “200”

VARIable:VALue? “LumaLevelsLine”

Query may return: “LumaLevelsLine 325”

LumaLevelsMaxAll?

Query all the Luma Levels maximum limit values specified in the Limits file on all the channels.

Syntax VARIable:VALue? "LumaLevelsMaxAll"

Group Maximum Limits Query

Arguments None

Return value Query returns all the Luma Levels maximum limit values specified in the Limits file on all the channels.

The returned value is in millivolts (mV).

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMaxAll"

Query may return: "LumaLevelsMaxAll 699.32 119.33 699.32 119.33 699.32 119.33"

LumaLevelsMaxAmpMaxCh[1..3]?

Query the Luma Levels Maximum Amplitude maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LumaLevelsMaxAmpMaxCh1"
 VARIable:VALue? "LumaLevelsMaxAmpMaxCh2"
 VARIable:VALue? "LumaLevelsMaxAmpMaxCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Luma Levels Maximum Amplitude maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMaxAmpMaxCh1"
 Query may return: "LumaLevelsMaxAmpMaxCh1 699.32"

LumaLevelsMaxAmpMinCh[1..3]?

Query the Luma Levels Minimum Amplitude maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LumaLevelsMaxAmpMinCh1"
 VARIable:VALue? "LumaLevelsMaxAmpMinCh2"
 VARIable:VALue? "LumaLevelsMaxAmpMinCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Luma Levels Minimum Amplitude maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMaxAmpMinCh1"
 Query may return: "LumaLevelsMaxAmpMinCh1 119.33"

LumaLevelsMinAll?

Query all the Luma Levels minimum limit values specified in the Limits file on all the channels.

Syntax VARIable:VALue? "LumaLevelsMinAll"

Group Minimum Limits Query

Arguments None

Return value Query returns all the Luma Levels minimum limit values specified in the Limits file on all the channels.

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

The returned value is in millivolts (mV).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMinAll"
Query may return: "LumaLevelsMinAll 699.32 119.33 699.32 119.33 699.32 119.33"

LumaLevelsMinAmpMaxCh[1..3]?

Query the Luma Levels Maximum Amplitude minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LumaLevelsMinAmpMaxCh1"
 VARIable:VALue? "LumaLevelsMinAmpMaxCh2"
 VARIable:VALue? "LumaLevelsMinAmpMaxCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Luma Levels Maximum Amplitude minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMinAmpMaxCh1"
 Query may return: "LumaLevelsMinAmpMaxCh1 699.32"

LumaLevelsMinAmpMinCh[1..3]?

Query the Luma Levels Minimum Amplitude minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "LumaLevelsMinAmpMinCh1"
 VARIable:VALue? "LumaLevelsMinAmpMinCh2"
 VARIable:VALue? "LumaLevelsMinAmpMinCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Luma Levels Minimum Amplitude minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsMinAmpMinCh1"
 Query may return: "LumaLevelsMinAmpMinCh1 119.33"

LumaLevelsMultiLineEnd <line number>

Set or query the ending line number used to perform the Luma Levels measurement on multiple lines.

Syntax VARIable:VALue “LumaLevelsMultiLineEnd”, “<line number>”

VARIable:VALue? “LumaLevelsMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned ending line number used to perform the Luma Levels measurement on multiple lines.

Examples VARIable:VALue “LumaLevelsMultiLineEnd”, “200”

VARIable:VALue? “LumaLevelsMultiLineEnd”

Query may return: “LumaLevelsMultiLineEnd 325”

LumaLevelsMultiLineSet <setting>

Set or query whether to perform the Luma Levels measurements on multiple lines upon Execute.

Syntax VARIable:VALue “LumaLevelsMultiLineSet”, “<setting>”

VARIable:VALue? “LumaLevelsMultiLineSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Luma Levels measurements on multiple lines upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Luma Levels measurement is not selected.

Query returns “1” if the Luma Levels measurement is selected.

Examples VARIable:VALue “LumaLevelsMultiLineSet”, “ON”

VARIable:VALue? “LumaLevelsMultiLineSet”

Query may return: “LumaLevelsMultiLineSet 1”

LumaLevelsMultiLineStart <line number>

Set or query the starting line number used to perform the Luma Levels measurement on multiple lines.

Syntax VARIable:VALue “LumaLevelsMultiLineStart”, “<line number>”

VARIable:VALue? “LumaLevelsMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned starting line number used to perform the Luma Levels measurement on multiple lines.

Examples VARIable:VALue “LumaLevelsMultiLineStart”, “200”

VARIable:VALue? “LumaLevelsMultiLineStart”

Query may return: “LumaLevelsMultiLineStart 325”

LumaLevelsPassAll?

Query the pass/fail status for all the values resulting from the Luma Levels measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIABLE:VALue? "LumaLevelsPassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values resulting from the Luma Levels measurement on all the channels.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "LumaLevelsPassAll"
Query may return: "LumaLevelsPassAll 1 1 1 0 1 1"

LumaLevelsPassAmpMaxCh[1..3]?

Query the pass/fail status for the maximum amplitude resulting from the Luma Levels measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "LumaLevelsPassAmpMaxCh1"
 VARIable:VALue? "LumaLevelsPassAmpMaxCh2"
 VARIable:VALue? "LumaLevelsPassAmpMaxCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the maximum amplitude resulting from the Luma Levels measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsPassAmpMaxCh1"
 Query may return: "LumaLevelsPassAmpMaxCh1 0"

LumaLevelsPassAmpMinCh[1..3]?

Query the pass/fail status for the minimum amplitude resulting from the Luma Levels measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "LumaLevelsPassAmpMinCh1"
 VARIABLE:VALue? "LumaLevelsPassAmpMinCh2"
 VARIABLE:VALue? "LumaLevelsPassAmpMinCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the minimum amplitude resulting from the Luma Levels measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "LumaLevelsPassAmpMinCh1"
 Query may return: "LumaLevelsPassAmpMinCh1 1"

LumaLevelsRefAll?

Query all the Luma Levels reference values specified in the Reference file on all the channels.

Syntax VARIable:VALue? "LumaLevelsRefAll"

Group Reference Values Query

Arguments None

Return value Query returns all the Luma Levels reference values specified in the Reference file on all the channels.

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRefAll"
Query may return: "LumaLevelsRefAll 699.32 119.33 699.32 119.33 699.32 119.33"

LumaLevelsRefAmpMaxCh[1..3]?

Query the Luma Levels Maximum Amplitude reference value specified in the Reference on the specified channel.

Syntax VARIABLE:VALUE? "LumaLevelsRefAmpMaxCh1"
 VARIABLE:VALUE? "LumaLevelsRefAmpMaxCh2"
 VARIABLE:VALUE? "LumaLevelsRefAmpMaxCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Luma Levels Maximum Amplitude reference value specified in the Reference on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LumaLevelsRefAmpMaxCh1"
 Query may return: "LumaLevelsRefAmpMaxCh1 699.32"

LumaLevelsRefAmpMinCh[1..3]?

Query the Luma Levels Minimum Amplitude reference value specified in the Reference on the specified channel.

Syntax VARIable:VALue? "LumaLevelsRefAmpMinCh1"
 VARIable:VALue? "LumaLevelsRefAmpMinCh2"
 VARIable:VALue? "LumaLevelsRefAmpMinCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Luma Levels Minimum Amplitude reference value specified in the Reference on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRefAmpMinCh1"
 Query may return: "LumaLevelsRefAmpMinCh1 119.33"

LumaLevelsRelAll?

Query all the relative values resulting from the Luma Levels measurement on all the channels.

Syntax VARIABLE:VALUE? "LumaLevelsRelAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values resulting from the Luma Levels measurement on all the channels.

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "LumaLevelsRelAll"
Query may return: "LumaLevelsRelAll 699.32 119.33 699.32 119.33 699.32 119.33"

LumaLevelsRelAmpMaxCh[1..3]?

Query the Maximum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsRelAmpMaxCh1"
 VARIable:VALue? "LumaLevelsRelAmpMaxCh2"
 VARIable:VALue? "LumaLevelsRelAmpMaxCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Maximum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRelAmpMaxCh1"
 Query may return: "LumaLevelsRelAmpMaxCh1 699.32"

LumaLevelsRelAmpMinCh[1..3]?

Query the Minimum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsRelAmpMinCh1"
 VARIable:VALue? "LumaLevelsRelAmpMinCh2"
 VARIable:VALue? "LumaLevelsRelAmpMinCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Minimum Amplitude relative value resulting from the Luma Levels measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRelAmpMinCh1"
 Query may return: "LumaLevelsRelAmpMinCh1 119.33"

LumaLevelsRelPctAll?

Query all the relative values (in percent) resulting from the Luma Levels measurement on all the channels.

Syntax VARIable:VALue? "LumaLevelsRelPctAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values (in percent) resulting from the Luma Levels measurement on all the channels.

The order is: Max (Ch1), Min (Ch1), Max (Ch2), Min (Ch2), Max (Ch3), and Min (Ch3).

The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRelPctAll"
Query may return: "LumaLevelsRelPctAll 99.32 19.33 99.32 19.33 99.32 19.33"

LumaLevelsRelPctAmpMaxCh[1..3]?

Query the Maximum Amplitude relative value (in percent) resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsRelPctAmpMaxCh1"
 VARIable:VALue? "LumaLevelsRelPctAmpMaxCh2"
 VARIable:VALue? "LumaLevelsRelPctAmpMaxCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Maximum Amplitude relative value (in percent) resulting from the Luma Levels measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRelPctAmpMaxCh1"
 Query may return: "LumaLevelsRelPctAmpMaxCh1 99.32"

LumaLevelsRelPctAmpMinCh[1..3]?

Query the Minimum Amplitude relative value (in percent) resulting from the Luma Levels measurement on the specified channel.

Syntax VARIable:VALue? "LumaLevelsRelPctAmpMinCh1"
 VARIable:VALue? "LumaLevelsRelPctAmpMinCh2"
 VARIable:VALue? "LumaLevelsRelPctAmpMinCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Minimum Amplitude relative value (in percent) resulting from the Luma Levels measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "LumaLevelsRelPctAmpMinCh1"
 Query may return: "LumaLevelsRelPctAmpMinCh1 19.33"

LumaLevelsSet <setting>

Set or query whether to perform the Luma Levels measurements upon Execute.

Syntax VARIable:VALue “LumaLevelsSet”,“<setting>”

VARIable:VALue? “LumaLevelsSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Luma Levels measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Luma Levels measurement is not selected.
Query returns “1” if the Luma Levels measurement is selected.

Examples VARIable:VALue “LumaLevelsSet”, “ON”

VARIable:VALue? “LumaLevelsSet”

Query may return: “LumaLevelsSet 1”

LumaLevelsStatus?

Query the status of the Luma Levels measurement

Syntax VARIable:VALue? "LumaLevelsStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "LumaLevelsStatus"
Query may return: "LumaLevelsStatus Pass"

Noise500MHzFilterSet <setting>

Set or query whether to enable the 500 MHz filter for performing the Noise measurement.

Syntax VARIable:VALue “Noise500MHzFilterSet”, “<setting>”
VARIable:VALue? “Noise500MHzFilterSet”

Group Configuration

Arguments <setting> specifies whether to enable the 500 MHz filter for performing the Noise measurement. Valid values are: 0, 1, ON, OFF.

Return value Query returns the current specified setting.

Examples VARIable:VALue “Noise500MHzFilterSet”, “OFF”

VARIable:VALue? “Noise500MHzFilterSet”
Query may return: “Noise500MHzFilterSet 1”

NoiseAll?

Query the measured values of all the Noise Inj Ratio measurements on all the channels.

Syntax VARIable:VALue? "NoiseAll"

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the Noise Inj Ratio measurements on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseAll"
Query may return: "NoiseAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseAverage <samples>

Set or query the number of samples over which to average the Noise Inj Ratio measurement.

Syntax VARIable:VALue “NoiseAverage”, “<samples>”

VARIable:VALue? “NoiseAverage”

Group Measurement Setup

Related Commands NoiseLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned total number of samples for the Noise Inj Ratio measurement.

Examples VARIable:VALue “NoiseAverage”, “1”

VARIable:VALue? “NoiseAverage”

Query may return: “NoiseAverage 8”

NoisedBCh[1..3]?

Query the measured Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoisedBCh1"
 VARIable:VALue? "NoisedBCh2"
 VARIable:VALue? "NoisedBCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in decibels (dB).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoisedBCh1"
 Query may return: "NoisedBCh1 17.5"

NoiseIrCh[1..3]?

Query the measured Inj Ratio resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoiseIrCh1"
 VARIable:VALue? "NoiseIrCh2"
 VARIable:VALue? "NoiseIrCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Inj Ratio resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseIrCh1"
 Query may return: "NoiseIrCh1 2.5"

NoiseLine<line number>

Set or query the line number used for the Noise Inj Ratio measurement.

Syntax VARIable:VALue “NoiseLine”, “<line number>”
 VARIable:VALue? “NoiseLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number for the Noise Inj Ratio measurement.

Examples VARIable:VALue “NoiseLine”, “200”

 VARIable:VALue? “NoiseLine”
 Query may return: “NoiseLine 325”

NoiseMaxAll?

Query all the Noise Inj Ratio maximum limit values specified in the Limits file on all the channels.

Syntax VARIable:VALue? "NoiseMaxAll"

Group Maximum Limits Query

Arguments None

Return value Query returns all the Noise Inj Ratio maximum limit values specified in the Limits file on all the channels.

The order is: mV (Ch1), dB (Ch1), Inj Ratio (Ch1) %, mV (Ch2), dB (Ch2), Inj Ratio (Ch2) %, mV (Ch3), dB (Ch3), Inj Ratio (Ch3) %.

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMaxAll"
Query may return: "NoiseMaxAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseMaxdBCh[1..3]?

Query the Noise Inj Ratio (in dB) maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMaxdBCh1"
 VARIable:VALue? "NoiseMaxdBCh2"
 VARIable:VALue? "NoiseMaxdBCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Noise Inj Ratio (in dB) maximum limit value specified in the Limits file on the specified channel.
 The returned value is in decibels (dB).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMaxdBCh1"
 Query may return: "NoiseMaxdBCh1 17.5"

NoiseMaxIrCh[1..3]?

Query the Noise Inj Ratio maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMaxIrCh1"
 VARIable:VALue? "NoiseMaxIrCh2"
 VARIable:VALue? "NoiseMaxIrCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Noise Inj Ratio maximum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMaxIrCh1"
 Query may return: "NoiseMaxIrCh1 2.5"

NoiseMaxmVCh[1..3]?

Query the Noise Inj Ratio (in mV) maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMaxmVCh1"
 VARIable:VALue? "NoiseMaxmVCh2"
 VARIable:VALue? "NoiseMaxmVCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Noise Inj Ratio (in mV) maximum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMaxmVCh1"
 Query may return: "NoiseMaxmVCh1 -65"

NoiseMinAll?

Query all the Noise Inj Ratio minimum limit values specified in the Limits file on all the channels.

Syntax VARIABLE:VALue? "NoiseMinAll"

Group Minimum Limits Query

Arguments None

Return value Query returns all the Noise Inj Ratio minimum limit values specified in the Limits file on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "NoiseMinAll"
Query may return: "NoiseMinAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseMindBCh[1..3]?

Query the Noise Inj Ratio (in dB) minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMindBCh1"
 VARIable:VALue? "NoiseMindBCh2"
 VARIable:VALue? "NoiseMindBCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Noise Inj Ratio (in dB) minimum limit value specified in the Limits file on the specified channel.
 The returned value is in decibels (dB).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMindBCh1"
 Query may return: "NoiseMindBCh1 17.5"

NoiseMinIrCh[1..3]?

Query the Noise Inj Ratio minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “NoiseMinIrCh1”
 VARIable:VALue? “NoiseMinIrCh2”
 VARIable:VALue? “NoiseMinIrCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the Noise Inj Ratio minimum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “NoiseMinIrCh1”
 Query may return: “NoiseMinIrCh1 2.5”

NoiseMinmVCh[1..3]?

Query the Noise Inj Ratio (in mV) minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "NoiseMinmVCh1"
 VARIable:VALue? "NoiseMinmVCh2"
 VARIable:VALue? "NoiseMinmVCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Noise Inj Ratio (in mV) minimum limit value specified in the Limits file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseMinmVCh1"
 Query may return: "NoiseMinmVCh1 -65"

NoisemVCh[1..3]?

Query the measured Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoisemVCh1"
 VARIable:VALue? "NoisemVCh2"
 VARIable:VALue? "NoisemVCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoisemVCh1"
 Query may return: "NoisemVCh1 -65"

NoisePassAll?

Query the pass/fail status for all the values resulting from the Noise Inj Ratio measurement on all the channels.

Syntax VARIable:VALue? "NoisePassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values resulting from the Noise Inj Ratio measurement on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoisePassAll"
Query may return: "NoisePassAll 1 1 1 0 0 1 0 1 0"

NoisePassdBCh[1..3]?

Query the pass/fail status of the Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoisePassdBCh1"
 VARIable:VALue? "NoisePassdBCh2"
 VARIable:VALue? "NoisePassdBCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Noise Inj Ratio (in dB) value resulting from the Noise Inj Ratio measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoisePassdBCh1"
 Query may return: "NoisePassdBCh1 1"

NoisePassIrCh[1..3]?

Query the pass/fail status of the Inj Ratio resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoisePassIrCh1"
 VARIable:VALue? "NoisePassIrCh2"
 VARIable:VALue? "NoisePassIrCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Inj Ratio resulting from the Noise Inj Ratio measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoisePassIrCh1"
 Query may return: "NoisePassIrCh1 1"

NoisePassmVCh[1..3]?

Query the pass/fail status of the Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIABLE:VALue? "NoisePassmVCh1"
 VARIABLE:VALue? "NoisePassmVCh2"
 VARIABLE:VALue? "NoisePassmVCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status of the Noise Inj Ratio (in mV) value resulting from the Noise Inj Ratio measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "NoisePassmVCh1"
 Query may return: "NoisePassmVCh1 1"

NoiseRefAll?

Query all the Noise Inj Ratio reference values specified in the Reference file on all the channels.

Syntax VARIable:VALue? "NoiseRefAll"

Group Reference Values Query

Arguments None

Return value Query returns all the Noise Inj Ratio reference values specified in the Reference file on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRefAll"
Query may return: "NoiseRefAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseRefdBCh[1..3]?

Query the Noise Inj Ratio (in dB) reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "NoiseRefdBCh1"
 VARIable:VALue? "NoiseRefdBCh2"
 VARIable:VALue? "NoiseRefdBCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Noise Inj Ratio (in dB) reference value specified in the Reference file on the specified channel.
 The returned value is in decibels (dB).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRefdBCh1"
 Query may return: "NoiseRefdBCh1 17.5"

NoiseRefIrCh[1..3]?

Query the Noise Inj Ratio reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "NoiseRefIrCh1"
 VARIable:VALue? "NoiseRefIrCh2"
 VARIable:VALue? "NoiseRefIrCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Noise Inj Ratio reference value specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRefIrCh1"
 Query may return: "NoiseRefIrCh1 2.5"

NoiseRefmVCh[1..3]?

Query the Noise Inj Ratio (in mV) reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "NoiseRefmVCh1"
 VARIable:VALue? "NoiseRefmVCh2"
 VARIable:VALue? "NoiseRefmVCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Noise Inj Ratio (in mV) reference value specified in the Reference file on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRefmVCh1"
 Query may return: "NoiseRefmVCh1 -65"

NoiseRelAll?

Query all the relative values resulting from the Noise Inj Ratio measurement on all the channels.

Syntax VARIABLE:VALue? "NoiseRelAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values resulting from the Noise Inj Ratio measurement on all the channels.

The order is: Ch1(mV), Ch1(dB), Ch1(Inj Ratio), Ch2(mV), Ch2(dB), Ch2(Inj Ratio), Ch3(mV), Ch3(dB), Ch3(Inj Ratio).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "NoiseRelAll"
Query may return: "NoiseRelAll -65 17.5 2.5 -65 17.5 2.5 -65 17.5 2.5"

NoiseReIdBCh[1..3]?

Query the Noise Inj Ratio (in dB) relative value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoiseReIdBCh1"
 VARIable:VALue? "NoiseReIdBCh2"
 VARIable:VALue? "NoiseReIdBCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Noise Inj Ratio (in dB) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseReIdBCh1"
 Query may return: "NoiseReIdBCh1 17.5"

NoiseRelIrCh[1..3]?

Query the Inj Ratio relative value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoiseRelIrCh1"
 VARIable:VALue? "NoiseRelIrCh2"
 VARIable:VALue? "NoiseRelIrCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Inj Ratio relative value resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRelIrCh1"
 Query may return: "NoiseRelIrCh1 2.5"

NoiseRelmVCh[1..3]?

Query the Noise Inj Ratio (in mV) relative value resulting from the Noise Inj Ratio measurement on the specified channel.

Syntax VARIable:VALue? "NoiseRelmVCh1"
 VARIable:VALue? "NoiseRelmVCh2"
 VARIable:VALue? "NoiseRelmVCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Noise Inj Ratio (in mV) relative value resulting from the Noise Inj Ratio measurement on the specified channel.
 The returned value is in millivolts (mV).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseRelmVCh1"
 Query may return: "NoiseRelmVCh1 -65"

NoiseSet <setting>

Set or query whether to measure Noise Inj Ratio upon Execute.

Syntax VARIable:VALue “NoiseSet”, “<setting>”

VARIable:VALue? “NoiseSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Noise Inj Ratio measurement upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Noise Inj Ratio measurement is not selected.
Query returns “1” if the Noise Inj Ratio measurement is selected.

Examples VARIable:VALue “NoiseSet”, “ON”

VARIable:VALue? “NoiseSet”

Query may return: “NoiseSet 1”

NoiseStatus?

Query the status of the Noise Inj Ratio measurement

Syntax VARIable:VALue? "NoiseStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "NoiseStatus"
Query may return: "NoiseStatus Pass"

OPComplete <setting>

This command is used for ensuring that the previous commands have been processed by the instrument, before either querying its value or calling the next command. OPComplete is set to “1” whenever a GPIB command has been received and processed and a new command is ready to be processed. OPComplete can only be reset to “0” by the user, and it can only be set to “1”, when a command has been sent and the next command is ready to be input. It is initialized to “0” on startup. For the “Execute” command, OPComplete is set to “1” after the execution begins.

Syntax	VARIABLE:VALUE “OPComplete”, “<setting>” VARIABLE:VALUE? “OPComplete”
Group	Global
Arguments	<setting> resets OPComplete so it is ready for the next command. Valid values are: OFF, 0.
Returns	Query returns “1” if a command has been completed since OPComplete was last reset, otherwise it returns “0”.
Examples	VARIABLE:VALUE “OPComplete”, “OFF” VARIABLE:VALUE? “OPComplete” Query may return: “OPComplete 1”

PopupWarnings

Set or query if Pop-up warnings appear on screen.

Syntax VARIABLE:VALue "PopupWarnings", "<setting>"
 VARIABLE:VALue "PopupWarnings"

Group Reporting

Arguments <setting> specifies whether or not to display pop-up warnings.
 Valid values are: OFF, ON, 0, 1.

Return value Returns setting for whether or not warnings are displayed.

Examples VARIABLE:VALue "PopupWarnings", "OFF"

 VARIABLE:VALue? "PopupWarnings"
 Query may return:"PopupWarnings 1"

RecallSettings <pathstring>

Recall settings recalls the settings stored in the specified path/filename.

If you only specify the filename with extension, the default path “C:\VM5000PC” is used. The file specified in pathstring must have the default extension “.vmset”. You have to specify the extension for the filename. The command does not append the filename extension automatically.

If you get the error message, “Invalid Filename”, confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALue “RecallSettings”, “<pathstring>”
 VARIABLE:VALue? “RecallSettings”

Group Global

Arguments <pathstring> specifies the path/filename where the setup file is stored. Can either be the full path and filename, or just the filename.

Related Commands SaveSettings

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALue “RecallSettings”, “C:\VM5000PC\Tek1.vmset”

 VARIABLE:VALue? “RecallSettings”
 Query may return: “RecallSettings OK”

ReferenceFileLoad <pathstring>

Specifies Reference file to be loaded for Relative to Reference testing.

Syntax VARIABLE:VALUE “ReferenceFileLoad”, “<pathstring>”

Group Reference and Limits

Arguments <pathstring> specifies the path/filename with extension where the Reference file is located. Can either be the full path and filename with extension, or just the filename with extension.

Return value Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “ReferenceFileLoad”
 “C:\VM5000PC\RefLimFiles\DMT\DefaultReference1024X768@75-RGB.csv”

ReferenceFileSave <filepath>

Saves the current measurement results to a Reference file that is used for Relative to Reference testing.

Syntax VARIable:VALue “ReferenceFileSave”, “<filepath>”

Group Reference and Limits

Arguments <filestring> path/filename with extension where file is to be stored. Can either be the full path and filename with extension, or just the filename with extension.

Return value Returns OK after the file is written.

Examples VARIable:VALue “ReferenceFileSave”
 “C:\VM5000PC\RefLimFiles\DMT\New_DefaultReference1024X768@75-RGB.csv”

ReferenceSet

Set or query whether Reference Testing is enabled or disabled.

Syntax VARIable:VALue “ReferenceSet”, “<setting>”
 VARIable:VALue? “ReferenceSet”

Group Reference and Limits

Arguments <setting> specifies whether to perform Relative to Reference testing upon Execute.
 Valid values are: OFF, ON, 0, 1.

Return value Query returns 0 or 1 depending on whether Reference Testing is selected.

Examples VARIable:VALue “ReferenceSet”, “ON”

 VARIable:VALue? “ReferenceSet”
 Query may return: “ReferenceSet 1”

ReportFormatType <setting>

Specifies the file type to be used when ReportGenerate is invoked.

Syntax VARIable:VALue “ReportFormatType”, <setting>
 VARIable:VALue? “ReportFormatType”

Group Reporting

Arguments Valid values for <setting> are: “PDF”, “RTF”, “CSV”

Returns The file type used by the ReportGenerate command.

Examples VARIable:VALue “ReportFormatType”, “PDF”

 VARIable:VALue? “ReportFormatType”
 Query may return: “ReportFormatType PDF”

ReportGenerate <pathstring>

Generates a measurement report of the specified type (if a measure has been run and results are available), and saves it in the file specified by pathstring.

You have to specify the extension for the filename. The command does not append the filename extension automatically. The type of file (.rtf, .csv or .pdf) is determined by the file extension in the pathstring. If the extension does not match one of these endings, an error is returned.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you get the error message “Invalid Filename,” confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALUE “ReportGenerate”, “<pathstring>”
 VARIABLE:VALUE? “ReportGenerate”

Group Reporting

Arguments <pathstring> path/filename where file is to be stored. Can either be the full path and filename with extension or just the filename with extension.

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALUE “ReportGenerate”, “C:\colorbars.csv”

VARIABLE:VALUE? “ReportGenerate”
Query may return: “ReportGenerate OK”

ReportMeasurements <setting>

Set or query the measurements to write to the report when ReportGenerate is called.

Syntax VARIable:VALue “ReportMeasurements”, “<setting>”
 VARIable:VALue? “ReportMeasurements”

Group Reporting

Arguments Valid values for <setting> are: “All” and “Selected”.
 “All” reports all of the currently available valid measurements results, while
 “Selected” reports only those measurement results that are currently selected.

Related Commands ChChMismatchSet
 ChChSkewSet
 ColorBarsSet
 HSyncSet
 HSyncJitterSet
 HTimingSet
 LinearitySet
 LumaLevelsSet
 NoiseSet
 VSyncSet
 VTimingSet
 VideoTransientSet

Returns Query returns the current specified report measurement mode.

Examples VARIable:VALue “ReportMeasurements”, “All”

 VARIable:VALue? “ReportMeasurements”
 Query may return: “ReportMeasurements Selected”

ReportString <string>

Set or query any additional information to write to the report when ReportGenerate is called. This string is initialized to empty string "" on startup.

Syntax VARIABLE:VALUE "ReportString", "<string>"
 VARIABLE:VALUE? "ReportString"

Group Reporting

Arguments <string> can be up to 46 characters in length. The comma and double quote characters are not permitted and their usage may result in unexpected program behavior. All other printable characters are permitted.

Returns Query returns the currently specified report string.

Examples VARIABLE:VALUE "ReportString", "Tested by Me"

 VARIABLE:VALUE? "ReportString"
 Query may return: "ReportString Tested by Me"

RunMode <runmode>

Set or query run mode to use for measurement.

Syntax VARIable:VALue "RunMode","<runmode>"
 VARIable:VALue? "RunMode"

Group Configuration

Arguments <runmode> specifies the run mode that is to be used.
 Valid run modes are: "Once", "Continuously", "OnceAndReport".
 When you select Multi Lines, "Once" and "Continuously" are not available.

Return value Query returns the currently specified run mode.

Examples VARIable:VALue "RunMode", "Once"

 VARIable:VALue? "RunMode"
 Query may return: "RunMode Continuously"

SaveSettings <pathstring>

Save current settings in the specified path/filename.

Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

If you only specify the filename, the default path “C:\VM5000PC” is used. You have to specify the extension (.vmset) for the filename.

The command does not append the filename extension automatically.

If you get the error message “Invalid Filename,” confirm that you typed the correct path and that your path is no more than 60 characters.

Syntax VARIABLE:VALue “SaveSettings”, “<pathstring>”
 VARIABLE:VALue? “SaveSettings”

Group Global

Arguments <pathstring> specifies the path/filename where the file is to be stored. Can either be the full path and filename, or just the filename.

Returns Query returns “OK” unless the command is still being processed, in which case it returns the current pathstring argument.

Examples VARIABLE:VALue “SaveSettings”, “C:\VM5000PC\Tek1.vmset”

 VARIABLE:VALue? “SaveSettings”
 Query may return: “SaveSettings OK”

SelectLine <linemode>

Set or query the line mode to be used for the measurements.

Syntax VARIable:VALue "SelectLine", "<linemode>"
 VARIable:VALue? "SelectLine"

Group Configuration

Arguments <linemode> specifies if the measurements are done on a single line or multiple lines.
 Valid line modes are: "SingleLine", "MultiLine"

Return value Query returns the currently selected line mode.

Examples VARIable:VALue "SelectLine", "MultiLine"

 VARIable:VALue? "SelectLine"
 Query may return: "SelectLine MultiLine"

SetupAndOrRun <setuprunmode>

Set or query the setup mode to use for measurement.

Syntax VARIable:VALue “SetupAndOrRun”, “<setuprunmode>”
 VARIable:VALue? “SetupAndOrRun”

Group Operations

Arguments <setuprunmode> specifies how to perform setup when performing a measurement. Valid modes are: SetupAndRun, SetupOnly, RunOnly. When you select Multi Lines, SetupOnly and RunOnly are not available.

Return value Query returns the current specified setup mode.

Examples VARIable:VALue “SetupAndOrRun”, “SetupOnly”

 VARIable:VALue? “SetupAndOrRun”
 Query may return: “SetupAndOrRun SetupOnly”

StopOnError <setting>

Set or query Stop on Error is enabled.

Syntax VARIable:VALue “StopOnError”, “<setting>”
 VARIable:VALue “StopOnError”

Group Run

Arguments <setting> specifies whether or not to stop testing if limits are exceeded.
 Valid values are: OFF, ON, 0, 1.

Return value Returns setting for whether or not the VM5000 will stop testing on an error.

Examples VARIable:VALue “StopOnError”, “OFF”

 VARIable:VALue? “StopOnError”
 Query may return: “StopOnError 0”

SyncPolarityDetectSet

Set or query the Sync Polarity option which is performed automatically while running the measurements.

The specified polarities for the H Sync and V Sync signals vary between the timing standards. In the absence of the MIU and with Auto Detect selected, the VM5000 will prompt you to connect the H and V Sync signals to automatically determine the polarities. If you use the MIU, the VM5000 will automatically determine the H and V Sync polarities.

Once the sync signal polarities are determined, the measurement cycle begins. This "polarity test" is performed at the beginning of every measurement cycle. To prevent this test from running at the beginning of every measurement cycle, take any measurement once with Auto Detect selected. Once a measurement cycle has been completed with Auto Detect selected, you can deselect Auto Detect. The VM5000 remembers the polarity of the sync signals. Any time you change the format set-up for the device-under-test, you should complete a measurement cycle with Auto Detect selected.

Syntax VARIABLE:VALUE "SyncPolarityDetectSet", "<setting>"
 VARIABLE:VALUE? "SyncPolarityDetectSet"

Group Configuration

Arguments <setting> specifies whether to perform Sync Polarity detection while running the measurements.
 Valid values are: OFF, ON, 0, 1.

Return value Query returns 0 or 1 depending on whether the Sync Polarity Detection is enabled or disabled.

Examples VARIABLE:VALUE "SyncPolarityDetectSet", "ON"

 VARIABLE:VALUE? "SyncPolarityDetectSet"
 Query may return: " SyncPolarityDetectSet 1"

TimingStandardType

Set or query the timing standard used while performing the measurements.

Syntax VARIable:VALue "TimingStandardType", "<TimingStandard>"
 VARIable:VALue? "TimingStandardType"

Group Configuration

Arguments <TimingStandard> specifies the timing standard used for performing the measurement.
 The valid/supported timing standards are: DMT, CVT, CVTR and GTF.

Return value Query returns the currently configured timing standard.

Examples VARIable:VALue "TimingStandardType", "CVTR"
 VARIable:VALue? "TimingStandardType"

Query may return: "TimingStandardType DMT"

UseMIUSet <setting>

Set or query, if the hardware accessory "RGBHV MIU" is connected, the VM5000 runs tests in an automatic mode that does not require user intervention. If the RGBHV MIU is not connected, the user must make manual connection changes when prompted by the VM5000.

Syntax VARIABLE:VALUE "UseMIUSet","<setting>"
 VARIABLE:VALUE? "UseMIUSet"

Group Configuration

Arguments Valid values for <setting> are: "OFF", "ON", "0", "1".

Return value Query returns the current setting on the instrument's front panel UI.

Examples VARIABLE:VALUE "UseMIUSet","ON"

 VARIABLE:VALUE? "UseMIUSet"
 Query may return: "UseMIUSet 1"

UserFormatDelete <user-format-name>

Delete a user defined format from the list of the currently available user defined formats. The list of the available user-defined formats can be queried by using the “UserFormatListAll” command.

Syntax VARIable:VALue “UserFormatDelete”, “<user-format-name>”

Group Configuration

Arguments < user-format-name > is a string corresponding to the name of a user-defined format.

Return value None

Examples VARIable:VALue “UserFormatDelete”, “myTekUserCustomFormat”

UserFormatDisplay?

Query the details of the various parameters of the currently selected user-defined format.

Syntax VARIABLE:VALue? "UserFormatDisplay"

Group Configuration

Arguments None

Return value Query will return an array of values, delimited by a space (" ") character; in the following order:
" <user-format-name> <H-Address Time> <H-Blank Time>
<H-Back Porch Time> <H-Border Time> <H-Sync Time> <V-Address Time>
<V-Blank Time> <V-Back Porch Time> <V-Border Time> <V-Sync Time>
<Refresh Rate> <H-Sync Polarity> <V-Sync Polarity>"

The list of values correspond to the following parameter settings of the user-defined format:

<user-format-name> is the name of the new user-defined format.

<H-Address Time> specifies the total number of pixels for H-Address.

<H-Blank Time> specifies the total number of pixels for H-Blank.

<H-Back Porch Time> specifies the total number of pixels for H-Back Porch.

<H-Border Time> specifies the total number of pixels for H-Border.

<H-Sync Time> specifies the total number of pixels for H-Sync.

<V-Address Time> specifies the total number of lines for V-Address.

<V-Blank Time> specifies the total number of lines for V-Blank.

<V-Back Porch Time> specifies the total number of lines for V-Back Porch.

<V-Border Time> specifies the total number of lines for V-Border.

<V-Sync Time> specifies the total number of lines for V-Sync.

<Refresh Rate> specifies the refresh rate for the format.

<H-Sync Polarity> The setting can be: "Pos" for positive H-Sync polarity and "Neg" for negative H-Sync polarity.

<V-Sync Polarity> The setting can be: "Pos" for positive V-Sync polarity and "Neg" for negative V-Sync polarity.

Examples The following command will display the details, if a user-format named as "myCustomFormat" has been selected.
VARIABLE:VALue? "UserFormatDisplay"

Query may return: VARIABLE:VALue "UserFormatDisplay myCustomFormat
2000 700 300 0 200 1500 70 60 0 4 86 Pos Neg"

UserFormatListAll

Query the list of the currently available user-defined formats from the instrument.

Syntax VARIable:VALue? "UserFormatListAll"

Group Configuration

Arguments None

Return value Query returns a list of the names of the currently available user-defined format. The individual names are separated/delimited by a space (" ") character. E.g. "user1 user2 user3"

Examples VARIable:VALue? "UserFormatListAll"
Query may return: "UserFormatListAll myCustomFormat1 myCustomFormat2 myCustomFormat3"

UserFormatSave <user-format-name>

Create / update a user defined format All of the input arguments must be specified. The arguments that correspond to an integer value, should be within their respective maximum and minimum limits.

Syntax VARIABLE:VALUE “UserFormatSave”, “<user-format-name>
<H-Address Time> <H-Blank Time> <H-Back Porch Time>
<H-Border Time> <H-Sync Time> <V-Address Time> <V-Blank Time>
<V-Back Porch Time> <V-Border Time> <V-Sync Time> <Refresh Rate>
<H-Sync Polarity> <V-Sync Polarity>”

Group Configuration

Arguments <user-format-name> identifies the new user-defined format and should be a string of length 20.
<H-Address Time> specifies the total number of pixels for H-Address and the valid value range is 100..2048.
<H-Blank Time> specifies the total number of pixels for H-Blank and the valid value range is 0..(H-Address-Time).
<H-Back Porch Time> specifies the total number of pixels for H-Back Porch and the valid value range is 0..(H-Address-Time).
<H-Border Time> specifies the total number of pixels for H-Border and the valid value range is 0..(H-Address-Time).
<H-Sync Time> specifies the total number of pixels for H-Sync and the valid value range is 0..(H-Address-Time).
<V-Address Time> specifies the total number of lines for V-Address and the valid value range is 100..2048.
<V-Blank Time> specifies the total number of lines for V-Blank and the valid value range is 0..(V-Address-Time).
<V-Back Porch Time> specifies the total number of lines for V-Back Porch and the valid value range is 0..(V-Address-Time).
<V-Border Time> specifies the total number of lines for V-Border and the valid value range is 0..(V-Address-Time).
<V-Sync Time> specifies the total number of lines for V-Sync and the valid value range is 0..(V-Address-Time).
<Refresh Rate> specifies the refresh rate for the format and should be a valid positive integer ranging from 50 .. $\left(\frac{2048 \times 2048 \times 60}{V_{addressTime} \times H_{addressTime}}\right)$
<H-Sync Polarity> The valid values can be: “Pos” for positive H-Sync polarity and “Neg” for negative H-Sync polarity.
<V-Sync Polarity> The valid values can be: “Pos” for positive V-Sync polarity and “Neg” for negative V-Sync polarity.

Return value None

Examples The following command will create a new user-defined format named as “myCustomFormat”.

```
VARIABLE:VALUE “UserFormatSave”,“myCustomFormat 2000 700 300 0 200  
1500 70 60 0 4 86 Pos Neg”
```

UserFormatSet <user-format-name>

Set or query a user defined format from the list of the currently available user defined formats. The list of the available user-defined formats can be queried by using the “UserFormatListAll” command.

Syntax VARIABLE:VALue “UserFormatSet”, “<user-format-name>”

VARIABLE:VALue? “UserFormatSet”

Group Configuration

Arguments < user-format-name > must be a string corresponding to the name of a user-defined format already present on the instrument.

Return value Query returns the currently selected user-defined format.

Examples VARIABLE:VALue “UserFormatSet”, “myTekUserCustomFormat”

VARIABLE:VALue? “UserFormatSet”

Query may return: “UserFormatSet myTekUserCustomFormat”

VideoTransientAverage <samples>

Set or Query the the total number of samples over which to average the Video Transient measurement.

Syntax VARIable:VALue “VideoTransientAverage”, “<samples>”

VARIable:VALue? “VideoTransientAverage”

Group Measurement Setup

Related Commands VideoTransientLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned total number of samples for the Video Transient measurement.

Examples VARIable:VALue “VideoTransientAverage”, “1”

VARIable:VALue? “VideoTransientAverage”

Query may return: “VideoTransientAverage 8”

VideoTransientLine <line number>

Set or query the line number resulting from the Video Transient measurement.

Syntax VARIABLE:VALue “VideoTransientLine”, “<line number>”

VARIABLE:VALue? “VideoTransientLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number resulting from the Video Transient measurement.

Examples VARIABLE:VALue “VideoTransientLine”, “200”

VARIABLE:VALue? “VideoTransientLine”

Query may return: “VideoTransientLine 325”

VideoTransientMaxOvershootCh[1..3]?

Query the Video Transient Overshoot maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMaxOvershootCh1"
 VARIable:VALue? "VideoTransientMaxOvershootCh2"
 VARIable:VALue? "VideoTransientMaxOvershootCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Video Transient Overshoot maximum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMaxOvershootCh1"
 Query may return: "VideoTransientMaxOvershootCh1 1.06"

VideoTransientMaxOvershootSettlingTimeCh[1..3]?

Query the Video Transient Overshoot Settling Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientMaxOvershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientMaxOvershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientMaxOvershootSettlingTimeCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Video Transient Overshoot Settling Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientMaxOvershootSettlingTimeCh1"
 Query may return: "VideoTransientMaxOvershootSettlingTimeCh1 2.66"

VideoTransientMaxUndershootCh[1..3]?

Query the Video Transient Undershoot maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMaxUndershootCh1"
 VARIable:VALue? "VideoTransientMaxUndershootCh2"
 VARIable:VALue? "VideoTransientMaxUndershootCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Video Transient Undershoot maximum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMaxUndershootCh1"
 Query may return: "VideoTransientMaxUndershootCh1 1.06"

VideoTransientMaxUndershootSettlingTimeCh[1..3]?

Query the Video Transient Undershoot Settling Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientMaxUndershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientMaxUndershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientMaxUndershootSettlingTimeCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Video Transient Undershoot Settling Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientMaxUndershootSettlingTimeCh1"
 Query may return: "VideoTransientMaxUndershootSettlingTimeCh1 2.66"

VideoTransientMaxVideoFallTimeCh[1..3]?

Query the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMaxVideoFallTimeCh1"
 VARIable:VALue? "VideoTransientMaxVideoFallTimeCh2"
 VARIable:VALue? "VideoTransientMaxVideoFallTimeCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMaxVideoFallTimeCh1"
 Query may return: "VideoTransientMaxVideoFallTimeCh1 1.77"

VideoTransientMaxVideoFallTimePercentageCh[1..3]?

Query the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMaxVideoFallTimePercentageCh1"
 VARIable:VALue? "VideoTransientMaxVideoFallTimePercentageCh2"
 VARIable:VALue? "VideoTransientMaxVideoFallTimePercentageCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Video Transient Video Fall Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMaxVideoFallTimePercentageCh1"
 Query may return: "VideoTransientMaxVideoFallTimePercentageCh1 1.77"

VideoTransientMaxVideoRiseTimeCh[1..3]?

Query the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMaxVideoRiseTimeCh1"
 VARIable:VALue? "VideoTransientMaxVideoRiseTimeCh2"
 VARIable:VALue? "VideoTransientMaxVideoRiseTimeCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMaxVideoRiseTimeCh1"
 Query may return: "VideoTransientMaxVideoRiseTimeCh1 1.77"

VideoTransientMaxVideoRiseTimePercentageCh[1..3]?

Query the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VideoTransientMaxVideoRiseTimePercentageCh1”
 VARIable:VALue? “VideoTransientMaxVideoRiseTimePercentageCh2”
 VARIable:VALue? “VideoTransientMaxVideoRiseTimePercentageCh3”

Group Maximum Limits Query

Arguments None

Return value Query returns the Video Transient Video Rise Time maximum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientMaxVideoRiseTimePercentageCh1”
 Query may return: “VideoTransientMaxVideoRiseTimePercentageCh1 1.77”

VideoTransientMinOvershootCh[1..3]?

Query the Video Transient Overshoot minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMinOvershootCh1"
 VARIable:VALue? "VideoTransientMinOvershootCh2"
 VARIable:VALue? "VideoTransientMinOvershootCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Video Transient Overshoot minimum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMinOvershootCh1"
 Query may return: "VideoTransientMinOvershootCh1 1.06"

VideoTransientMinOvershootSettlingTimeCh[1..3]?

Query the Video Transient Overshoot Settling Time minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “VideoTransientMinOvershootSettlingTimeCh1”
 VARIABLE:VALue? “VideoTransientMinOvershootSettlingTimeCh2”
 VARIABLE:VALue? “VideoTransientMinOvershootSettlingTimeCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the Video Transient Overshoot Settling Time minimum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientMinOvershootSettlingTimeCh1”
 Query may return: “VideoTransientMinOvershootSettlingTimeCh1 2.66”

VideoTransientMinUndershootCh[1..3]?

Query the Video Transient Undershoot minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMinUndershootCh1"
 VARIable:VALue? "VideoTransientMinUndershootCh2"
 VARIable:VALue? "VideoTransientMinUndershootCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Video Transient Undershoot minimum limit value specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMinUndershootCh1"
 Query may return: "VideoTransientMinUndershootCh1 1.06"

VideoTransientMinUndershootSettlingTimeCh[1..3]?

Query the Video Transient Undershoot Settling Time minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VideoTransientMinUndershootSettlingTimeCh1”
VARIable:VALue? “VideoTransientMinUndershootSettlingTimeCh2”
VARIable:VALue? “VideoTransientMinUndershootSettlingTimeCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the Video Transient Undershoot Settling Time minimum limit value specified in the Limits file on the specified channel.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientMinUndershootSettlingTimeCh1”
Query may return: “VideoTransientMinUndershootSettlingTimeCh1 2.66”

VideoTransientMinVideoFallTimeCh[1..3]?

Query the Video Transient Video Fall Time minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMinVideoFallTimeCh1"
 VARIable:VALue? "VideoTransientMinVideoFallTimeCh2"
 VARIable:VALue? "VideoTransientMinVideoFallTimeCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Video Transient Video Fall Time minimum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMinVideoFallTimeCh1"
 Query may return: "VideoTransientMinVideoFallTimeCh1 1.77"

VideoTransientMinVideoFallTimePercentageCh[1..3]?

Query the Video Transient Video Fall Time minimum limit value (in percent) specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VideoTransientMinVideoFallTimePercentageCh1”
 VARIable:VALue? “VideoTransientMinVideoFallTimePercentageCh2”
 VARIable:VALue? “VideoTransientMinVideoFallTimePercentageCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the Video Transient Video Fall Time minimum limit value (in percent) specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientMinVideoFallTimePercentageCh1”
 Query the may return: “VideoTransientMinVideoFallTimePercentageCh1 1.77”

VideoTransientMinVideoRiseTimeCh[1..3]?

Query the Video Transient Video Rise Time minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VideoTransientMinVideoRiseTimeCh1"
 VARIable:VALue? "VideoTransientMinVideoRiseTimeCh2"
 VARIable:VALue? "VideoTransientMinVideoRiseTimeCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the Video Transient Video Rise Time minimum limit value specified in the Limits file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientMinVideoRiseTimeCh1"
 Query may return: "VideoTransientMinVideoRiseTimeCh1 1.77"

VideoTransientMinVideoRiseTimePercentageCh[1..3]?

Query the Video Transient Video Rise Time minimum limit value (in percent) specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VideoTransientMinVideoRiseTimePercentageCh1”
 VARIable:VALue? “VideoTransientMinVideoRiseTimePercentageCh2”
 VARIable:VALue? “VideoTransientMinVideoRiseTimePercentageCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the Video Transient Video Rise Time minimum limit value (in percent) specified in the Limits file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientMinVideoRiseTimePercentageCh1”
 Query may return: “VideoTransientMinVideoRiseTimePercentageCh1 1.77”

VideoTransientMultiLineEnd <line number>

Set or query the ending line number used to perform the Video Transient measurement on multiple lines.

Syntax VARIable:VALue “VideoTransientMultiLineEnd”, “<line number>”

VARIable:VALue? “VideoTransientMultiLineEnd”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned ending line number used to perform the Video Transient measurement on multiple lines.

Examples VARIable:VALue “VideoTransientMultiLineEnd”, “200”

VARIable:VALue? “VideoTransientMultiLineEnd”

Query may return: “VideoTransientMultiLineEnd 325”

VideoTransientMultiLineSet <setting>

Set or query whether to perform the Video Transient measurements on multiple lines upon Execute.

Syntax VARIable:VALue “VideoTransientMultiLineSet”, “<setting>”

VARIable:VALue? “VideoTransientMultiLineSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Video Transient measurements on multiple lines upon Execute.
Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Video Transient measurement is not selected.
Query returns “1” if the Video Transient measurement is selected.

Examples VARIable:VALue “VideoTransientMultiLineSet”, “ON”

VARIable:VALue? “VideoTransientMultiLineSet”
Query may return: “VideoTransientMultiLineSet 1”

VideoTransientMultiLineStart <line number>

Set or query the starting line number used to perform the Video Transient measurement on multiple lines.

Syntax VARIable:VALue “VideoTransientMultiLineStart”, “<line number>”

VARIable:VALue? “VideoTransientMultiLineStart”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range. The value for the starting line number must be less than or equal to the ending line number.

Return value Query returns the currently assigned starting line number used to perform the Video Transient measurement on multiple lines.

Examples VARIable:VALue “VideoTransientMultiLineStart”, “200”

VARIable:VALue? “VideoTransientMultiLineStart”

Query may return: “VideoTransientMultiLineStart 325”

VideoTransientOvershootCh[1..3]?

Query the measured Overshoot resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientOvershootCh1"
 VARIable:VALue? "VideoTransientOvershootCh2"
 VARIable:VALue? "VideoTransientOvershootCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Overshoot resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientOvershootCh1"
 Query may return: "VideoTransientOvershootCh1 1.06"

VideoTransientOvershootSettlingTimeCh[1..3]?

Query the measured Overshoot Settling Time resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientOvershootSettlingTimeCh1"
 VARIable:VALue? "VideoTransientOvershootSettlingTimeCh2"
 VARIable:VALue? "VideoTransientOvershootSettlingTimeCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Overshoot Settling Time resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientOvershootSettlingTimeCh1"
 Query may return: "VideoTransientOvershootSettlingTimeCh1 2.66"

VideoTransientPassAll?

Query the pass/fail status for all the values resulting from the Video Transient measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIABLE:VALue? "VideoTransientPassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values resulting from the Video Transient measurement on all the channels.

The order is: Video Rise Time (Ch1), Video Fall Time (Ch1), Video Rise Time Percentage (Ch1), Video Fall Time Percentage (Ch1), Overshoot (Ch1), Undershoot (Ch1), Overshoot Settling Time (Ch1), Undershoot Settling Time (Ch1), Video Rise Time (Ch2), Video Fall Time (Ch2), Video Rise Time (Ch2), Video Fall Time (Ch2), Overshoot (Ch2), Undershoot (Ch2), Overshoot Settling Time (Ch2)s, Undershoot Settling Time (Ch2)s, Video Rise Time (Ch3), Video Fall Time (Ch3), Video Rise Time (Ch3), Video Fall Time (Ch3), Overshoot (Ch3), Undershoot (Ch3), Overshoot Settling Time (Ch3), Undershoot Settling Time (Ch3).

A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientPassAll"
Query may return: "VideoTransientPassAll 1 1 1 0 0 1 0 1 0 1 0 1 1 1 1 0 1 0"

VideoTransientPassOvershootCh[1..3]?

Query the pass/fail status for the Overshoot value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "VideoTransientPassOvershootCh1"
 VARIable:VALue? "VideoTransientPassOvershootCh2"
 VARIable:VALue? "VideoTransientPassOvershootCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Overshoot value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientPassOvershootCh1"
 Query may return: "VideoTransientPassOvershootCh1 1"

VideoTransientPassOvershootSettlingTimeCh[1..3]?

Query the pass/fail status for the Overshoot Settling Time value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "VideoTransientPassOvershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientPassOvershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientPassOvershootSettlingTimeCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Overshoot Settling Time value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientPassOvershootSettlingTimeCh1"
 Query may return: "VideoTransientPassOvershootSettlingTimeCh1 1"

VideoTransientPassUndershootCh[1..3]?

Query the pass/fail status for the Undershoot value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "VideoTransientPassUndershootCh1"
 VARIable:VALue? "VideoTransientPassUndershootCh2"
 VARIable:VALue? "VideoTransientPassUndershootCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Undershoot value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientPassUndershootCh1"
 Query may return: "VideoTransientPassUndershootCh1 1"

VideoTransientPassUndershootSettlingTimeCh[1..3]?

Query the pass/fail status for the Overshoot Settling Time value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "VideoTransientPassUndershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientPassUndershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientPassUndershootSettlingTimeCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Overshoot Settling Time value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientPassUndershootSettlingTimeCh1"

 Query may return: "VideoTransientPassUndershootSettlingTimeCh1 1"

VideoTransientPassVideoFallTimeCh[1..3]?

Query the pass/fail status for the Video Fall Time value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "VideoTransientPassVideoFallTimeCh1"
 VARIABLE:VALue? "VideoTransientPassVideoFallTimeCh2"
 VARIABLE:VALue? "VideoTransientPassVideoFallTimeCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Video Fall Time value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientPassVideoFallTimeCh1"
 Query may return: "VideoTransientPassVideoFallTimeCh1 1"

VideoTransientPassVideoFallTimePercentageCh[1..3]?

Query the pass/fail status for the Video Fall Time (%) value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VideoTransientPassVideoFallTimePercentageCh1”
 VARIABLE:VALue? “VideoTransientPassVideoFallTimePercentageCh2”
 VARIABLE:VALue? “VideoTransientPassVideoFallTimePercentageCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Video Fall Time (%) value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientPassVideoFallTimePercentageCh1”
 Query may return: “VideoTransientPassVideoFallTimePercentageCh1 1”

VideoTransientPassVideoRiseTimeCh[1..3]?

Query the pass/fail status for the Video Rise Time value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? "VideoTransientPassVideoRiseTimeCh1"
 VARIABLE:VALue? "VideoTransientPassVideoRiseTimeCh2"
 VARIABLE:VALue? "VideoTransientPassVideoRiseTimeCh3"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Video Rise Time value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientPassVideoRiseTimeCh1"
 Query may return: "VideoTransientPassVideoRiseTimeCh1 1"

VideoTransientPassVideoRiseTimePercentageCh[1..3]?

Query the pass/fail status for the Video Rise Time (%) value resulting from the Video Transient measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VideoTransientPassVideoRiseTimePercentageCh1”
 VARIABLE:VALue? “VideoTransientPassVideoRiseTimePercentageCh2”
 VARIABLE:VALue? “VideoTransientPassVideoRiseTimePercentageCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Video Rise Time (%) value resulting from the Video Transient measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientPassVideoRiseTimePercentageCh1”
 Query may return: “VideoTransientPassVideoRiseTimePercentageCh1 1”

VideoTransientRefOvershootCh[1..3]?

Query the Video Transient Overshoot reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "VideoTransientRefOvershootCh1"
 VARIable:VALue? "VideoTransientRefOvershootCh2"
 VARIable:VALue? "VideoTransientRefOvershootCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Video Transient Overshoot reference value specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRefOvershootCh1"
 Query may return: "VideoTransientRefOvershootCh1 1.06"

VideoTransientRefOvershootSettlingTimeCh[1..3]?

Query the Video Transient Overshoot Settling Time reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientRefOvershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientRefOvershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientRefOvershootSettlingTimeCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Video Transient Overshoot Settling Time reference value specified in the Reference file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientRefOvershootSettlingTimeCh1"
 Query may return: "VideoTransientRefOvershootSettlingTimeCh1 2.66"

VideoTransientRefUndershootCh[1..3]?

Query the Video Transient Undershoot reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "VideoTransientRefUndershootCh1"
 VARIable:VALue? "VideoTransientRefUndershootCh2"
 VARIable:VALue? "VideoTransientRefUndershootCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Video Transient Undershoot reference value specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRefUndershootCh1"
 Query may return: "VideoTransientRefUndershootCh1 1.06"

VideoTransientRefUndershootSettlingTimeCh[1..3]?

Query the Video Transient Undershoot Settling Time reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “VideoTransientRefUndershootSettlingTimeCh1”
 VARIable:VALue? “VideoTransientRefUndershootSettlingTimeCh2”
 VARIable:VALue? “VideoTransientRefUndershootSettlingTimeCh3”

Group Reference Values Query

Arguments None

Return value Query returns the Video Transient Undershoot Settling Time reference value specified in the Reference file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientRefUndershootSettlingTimeCh1”
 Query may return: “VideoTransientRefUndershootSettlingTimeCh1 2.66”

VideoTransientRefVideoFallTimeCh[1..3]?

Query the Video Transient Video Fall Time reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "VideoTransientRefVideoFallTimeCh1"
 VARIable:VALue? "VideoTransientRefVideoFallTimeCh2"
 VARIable:VALue? "VideoTransientRefVideoFallTimeCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Video Transient Video Fall Time reference value specified in the Reference file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRefVideoFallTimeCh1"
 Query may return: "VideoTransientRefVideoFallTimeCh1 1.77"

VideoTransientRefVideoFallTimePercentageCh[1..3]?

Query the Video Transient Video Fall Time reference value (in percent) specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “VideoTransientRefVideoFallTimePercentageCh1”
 VARIable:VALue? “VideoTransientRefVideoFallTimePercentageCh2”
 VARIable:VALue? “VideoTransientRefVideoFallTimePercentageCh3”

Group Reference Values Query

Arguments None

Return value Query returns the Video Transient Video Fall Time reference value (in percent) specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientRefVideoFallTimePercentageCh1”
 Query may return: “VideoTransientRefVideoFallTimePercentageCh1 1.77”

VideoTransientRefVideoRiseTimeCh[1..3]?

Query the Video Transient Video Rise Time reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "VideoTransientRefVideoRiseTimeCh1"
 VARIable:VALue? "VideoTransientRefVideoRiseTimeCh2"
 VARIable:VALue? "VideoTransientRefVideoRiseTimeCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Video Transient Video Rise Time reference value specified in the Reference file on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRefVideoRiseTimeCh1"
 Query may return: "VideoTransientRefVideoRiseTimeCh1 1.77"

VideoTransientRefVideoRiseTimePercentageCh[1..3]?

Query the Video Transient Video Rise Time reference value (in percent) specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientRefVideoRiseTimePercentageCh1"
 VARIABLE:VALue? "VideoTransientRefVideoRiseTimePercentageCh2"
 VARIABLE:VALue? "VideoTransientRefVideoRiseTimePercentageCh3"

Group Reference Values Query

Arguments None

Return value Query returns the Video Transient Video Rise Time reference value (in percent) specified in the Reference file on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientRefVideoRiseTimePercentageCh1"
 Query may return: "VideoTransientRefVideoRiseTimePercentageCh1 1.77"

VideoTransientRelOvershootCh[1..3]?

Query the Overshoot relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientRelOvershootCh1"
 VARIable:VALue? "VideoTransientRelOvershootCh2"
 VARIable:VALue? "VideoTransientRelOvershootCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Video Fall Time relative value (in percent) resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRelOvershootCh1"
 Query may return: "VideoTransientRelOvershootCh1 1.06"

VideoTransientRelOvershootSettlingTimeCh[1..3]?

Query the Overshoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientRelOvershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientRelOvershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientRelOvershootSettlingTimeCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Overshoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientRelOvershootSettlingTimeCh1"
 Query may return: "VideoTransientRelOvershootSettlingTimeCh1 2.66"

VideoTransientRelUndershootCh[1..3]?

Query the Undershoot relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientRelUndershootCh1"
 VARIable:VALue? "VideoTransientRelUndershootCh2"
 VARIable:VALue? "VideoTransientRelUndershootCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Undershoot relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRelUndershootCh1"
 Query may return: "VideoTransientRelUndershootCh1 1.06"

VideoTransientRelUndershootSettlingTimeCh[1..3]?

Query the Undershoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALue? “VideoTransientRelUndershootSettlingTimeCh1”
 VARIABLE:VALue? “VideoTransientRelUndershootSettlingTimeCh2”
 VARIABLE:VALue? “VideoTransientRelUndershootSettlingTimeCh3”

Group Relative Results Query

Arguments None

Return value Query returns the Undershoot Settling Time relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VideoTransientRelUndershootSettlingTimeCh1”
 Query may return: “VideoTransientRelUndershootSettlingTimeCh1 2.66”

VideoTransientRelVideoFallTimeCh[1..3]?

Query the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientRelVideoFallTimeCh1"
 VARIable:VALue? "VideoTransientRelVideoFallTimeCh2"
 VARIable:VALue? "VideoTransientRelVideoFallTimeCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRelVideoFallTimeCh1"
 Query may return: "VideoTransientRelVideoFallTimeCh1 1.77"

VideoTransientRelVideoFallTimePercentageCh[1..3]?

Query the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientRelVideoFallTimePercentageCh1"
 VARIable:VALue? "VideoTransientRelVideoFallTimePercentageCh2"
 VARIable:VALue? "VideoTransientRelVideoFallTimePercentageCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Video Fall Time relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRelVideoFallTimePercentageCh1"
 Query may return: "VideoTransientRelVideoFallTimePercentageCh1 1.77"

VideoTransientRelVideoRiseTimeCh[1..3]?

Query the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientRelVideoRiseTimeCh1"
 VARIable:VALue? "VideoTransientRelVideoRiseTimeCh2"
 VARIable:VALue? "VideoTransientRelVideoRiseTimeCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientRelVideoRiseTimeCh1"
 Query may return: "VideoTransientRelVideoRiseTimeCh1 1.77"

VideoTransientRelVideoRiseTimePercentageCh[1..3]?

Query the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientRelVideoRiseTimePercentageCh1"
 VARIABLE:VALue? "VideoTransientRelVideoRiseTimePercentageCh2"
 VARIABLE:VALue? "VideoTransientRelVideoRiseTimePercentageCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Video Rise Time relative value resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientRelVideoRiseTimePercentageCh1"
 Query may return: "VideoTransientRelVideoRiseTimePercentageCh1 1.77"

VideoTransientSet <setting>

Set or query whether to perform the Video Transient measurements upon Execute.

Syntax VARIable:VALue “VideoTransientSet”, “<setting>”

VARIable:VALue? “VideoTransientSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the Video Transient measurements upon Execute.

Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the Video Transient measurement is not selected.

Query returns “1” if the Video Transient measurement is selected.

Examples VARIable:VALue “VideoTransientSet”, “ON”

VARIable:VALue? “VideoTransientSet”

Query may return: “VideoTransientSet 1”

VideoTransientStatus?

Query the status of the Video Transient measurement.

Syntax VARIable:VALue? "VideoTransientStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail".
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "VideoTransientStatus"
Query may return: "VideoTransientStatus Pass"

VideoTransientUndershootCh[1..3]?

Query the measured Undershoot resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientUndershootCh1"
 VARIable:VALue? "VideoTransientUndershootCh2"
 VARIable:VALue? "VideoTransientUndershootCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Undershoot resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientUndershootCh1"
 Query may return: "VideoTransientUndershootCh1 1.06"

VideoTransientUndershootSettlingTimeCh[1..3]?

Query the measured Undershoot Settling Time resulting from the Video Transient measurement on the specified channel.

Syntax VARIABLE:VALue? "VideoTransientUndershootSettlingTimeCh1"
 VARIABLE:VALue? "VideoTransientUndershootSettlingTimeCh2"
 VARIABLE:VALue? "VideoTransientUndershootSettlingTimeCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Undershoot Settling Time resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VideoTransientUndershootSettlingTimeCh1"
 Query may return: "VideoTransientUndershootSettlingTimeCh1 2.66"

VideoTransientVideoFallTimeCh[1..3]?

Query the measured Video Fall Time resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientVideoFallTimeCh1"
 VARIable:VALue? "VideoTransientVideoFallTimeCh2"
 VARIable:VALue? "VideoTransientVideoFallTimeCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Video Fall Time resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientVideoFallTimeCh1"
 Query may return: "VideoTransientVideoFallTimeCh1 1.77"

VideoTransientVideoFallTimePercentageCh[1..3]?

Query the measured Video Fall Time (in percent) resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? “VideoTransientVideoFallTimePercentageCh1”
 VARIable:VALue? “VideoTransientVideoFallTimePercentageCh2”
 VARIable:VALue? “VideoTransientVideoFallTimePercentageCh3”

Group Measured Results Query

Arguments None

Return value Query returns the measured Video Fall Time (in percent) resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientVideoFallTimePercentageCh1”
 Query may return: “VideoTransientVideoFallTimePercentageCh1 1.77”

VideoTransientVideoRiseTimeCh[1..3]?

Query the measured Video Rise Time resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? "VideoTransientVideoRiseTimeCh1"
 VARIable:VALue? "VideoTransientVideoRiseTimeCh2"
 VARIable:VALue? "VideoTransientVideoRiseTimeCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Video Rise Time resulting from the Video Transient measurement on the specified channel.
 The returned value is in nanoseconds (ns).
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VideoTransientVideoRiseTimeCh1"
 Query may return: "VideoTransientVideoRiseTimeCh1 1.77"

VideoTransientVideoRiseTimePercentageCh[1..3]?

Query the measured Video Rise Time (in percent) resulting from the Video Transient measurement on the specified channel.

Syntax VARIable:VALue? “VideoTransientVideoRiseTimePercentageCh1”
 VARIable:VALue? “VideoTransientVideoRiseTimePercentageCh2”
 VARIable:VALue? “VideoTransientVideoRiseTimePercentageCh3”

Group Measured Results Query

Arguments None

Return value Query returns the measured Video Rise Time (in percent) resulting from the Video Transient measurement on the specified channel.
 The returned value is in percent (%).
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VideoTransientVideoRiseTimePercentageCh1”
 Query may return: “VideoTransientVideoRiseTimePercentageCh1 1.77”

VSyncAll?

Query the measured values of all the V Sync measurements.

Syntax VARIable:VALue? "VSyncAll"

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the V Sync measurements.

The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T(ns), Undershoot S.T(ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncAll"

Query may return:

"VSyncAll Pos 1 11.76 85.03 5 5 4.45 5.22 3.8 0.0 Yes Yes 3188.5 400 2820.695 464.411"

VSyncAverage <samples>

Set or query the number of samples over which to average the V Sync measurement.

Syntax VARIABLE:VALue “VSyncAverage”, “<samples>”
 VARIABLE:VALue? “VSyncAverage”

Group Measurement Setup

Related Commands VSyncLine

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned total number of samples for the V Sync measurement.

Examples VARIABLE:VALue “VSyncAverage”, “1”

 VARIABLE:VALue? “VSyncAverage”
 Query may return: “VSyncAverage 8”

VSyncFallTime?

Query the measured Fall Time resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncFallTime"

Group Measured Results Query

Arguments None

Return value Query returns the measured Fall Time resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncFallTime"
Query may return: "VSyncFallTime 1"

VSyncFrequency?

Query the measured Frequency resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncFrequency”

Group Measured Results Query

Arguments None

Return value Query returns the measured Frequency resulting from the V Sync measurement.
The returned value is in Hertz (Hz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncFrequency”
Query may return: “VSyncFrequency 85”

VSyncline <line number>

Query the line number of samples resulting from the V Sync measurement.

Syntax VARIable:VALue “VSyncline”, “<line number>”
 VARIable:VALue? “VSyncline”

Group Measurement Setup

Related Commands VSynclineAverage

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number used to perform the V Sync measurement.

Examples VARIable:VALue? “VSyncline”
 Query may return: “VSyncline 325”

VSyncLogicLevel0Value1?

Query the measured Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncLogicLevel0Value1"

Group Measured Results Query

Arguments None

Return value Query returns the measured Logic Level 0 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncLogicLevel0Value1"
Query may return: "VSyncLogicLevel0Value1 1"

VSyncLogicLevel0Value2?

Query the measured Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncLogicLevel0Value2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement. The returned value is in millivolts (mV). Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncLogicLevel0Value2"
Query may return: "VSyncLogicLevel0Value2 1"

VSyncLogicLevel1Value1?

Query the measured Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncLogicLevel1Value1"

Group Measured Results Query

Arguments None

Return value Query returns the measured Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncLogicLevel1Value1"
Query may return: "VSyncLogicLevel1Value1 1"

VSyncLogicLevel1Value2?

Query the measured Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncLogicLevel1Value2"

Group Measured Results Query

Arguments None

Return value Query returns the measured Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301Ω termination resistance without the MIU connected) resulting from the V Sync measurement. The unit of the value is millivolts (mV). Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncLogicLevel1Value2"
Query may return: "VSyncLogicLevel1Value2 1"

VSyncMaxAll?

Query all the V Sync maximum limit values specified in the Limits file.

Syntax VARiable:VALue? "VSyncMaxAll"

Group Maximum Limits Query

Arguments None

Return value Query returns all the V Sync maximum limit values specified in the Limits file.

The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T(ns), Undershoot S.T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "VSyncMaxAll"
Query may return: "VSyncMaxAll Pos 1.033 13.765 86.0 5.37 5.37 30.0 30.0 304.8 304.8 Yes Yes 5500.0 500 5500.0 500"

VSyncMaxFallTime?

Query the V Sync Fall Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxFallTime"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Fall Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxFallTime"
Query may return: "VSyncMaxFallTime 7.1"

VSyncMaxFrequency?

Query the V Sync Frequency maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMaxFrequency”

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Frequency maximum limit value specified in the Limits file.
The returned value is in Hertz (Hz).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMaxFrequency”
Query may return: “VSyncMaxFrequency 85”

VSyncMaxLogicLevel0Value1?

Query the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMaxLogicLevel0Value1"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMaxLogicLevel0Value1"
Query may return: "VSyncMaxLogicLevel0Value1 1"

VSyncMaxLogicLevel0Value2?

Query the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMaxLogicLevel0Value2"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMaxLogicLevel0Value2"
Query may return: "VSyncMaxLogicLevel0Value2 1"

VSyncMaxLogicLevel1Value1?

Query the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMaxLogicLevel1Value1"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) maximum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMaxLogicLevel1Value1"
Query may return: "VSyncMaxLogicLevel1Value1 1"

VSyncMaxLogicLevel1Value2?

Query the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMaxLogicLevel1Value2"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) maximum limit value specified in the Limits file.

The returned value is in millivolts (mV).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMaxLogicLevel1Value2"
Query may return: "VSyncMaxLogicLevel1Value2 1"

VSyncMaxMonotonicFall?

Query the V Sync Monotonic Fall maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxMonotonicFall"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Monotonic Fall maximum limit value specified in the Limits file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxMonotonicFall"
Query may return: "VSyncMaxMonotonicFall Yes"

VSyncMaxMonotonicRise?

Query the V Sync Monotonic Rise maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMaxMonotonicRise"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Monotonic Rise maximum limit value specified in the Limits file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMaxMonotonicRise"
Query may return: "VSyncMaxMonotonicRise Yes"

VSyncMaxOvershoot?

Query the V Sync Overshoot maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxOvershoot"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Overshoot maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxOvershoot"
Query may return: "VSyncMaxOvershoot 15"

VSyncMaxOvershootSettlingTime?

Query the V Sync Overshoot Settling Time maximum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMaxOvershootSettlingTime"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Overshoot Settling Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMaxOvershootSettlingTime"
Query may return: "VSyncMaxOvershootSettlingTime 7.1"

VSyncMaxPolarity?

Query the V Sync Polarity maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxPolarity"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Polarity maximum limit value specified in the Limits file.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxPolarity"
Query may return: "VSyncMaxPolarity Pos"

VSyncMaxPulseWidth?

Query the V Sync Pulse Width maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMaxPulseWidth”

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Pulse Width maximum limit value specified in the Limits file.
The returned value is in millisecondss (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMaxPulseWidth”
Query may return: “VSyncMaxPulseWidth 0.05”

VSyncMaxRiseTime?

Query the V Sync Rise Time maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxRiseTime"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Rise Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxRiseTime"
Query may return: "VSyncMaxRiseTime 7.1"

VSyncMaxSyncPeriod?

Query the V Sync Sync Period maximum limit value specified in the Limits file.

Syntax VARIable:VALue? “VSyncMaxSyncPeriod”

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Sync Period maximum limit value specified in the Limits file.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncMaxSyncPeriod”
Query may return: “VSyncMaxSyncPeriod 11.75”

VSyncMaxUndershoot?

Query the V Sync Undershoot maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMaxUndershoot"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Undershoot maximum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMaxUndershoot"
Query may return: "VSyncMaxUndershoot 15"

VSynMaxUndershootSettlingTime?

Query the V Sync Undershoot Settling Time maximum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSynMaxUndershootSettlingTime"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Sync Undershoot Settling Time maximum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSynMaxUndershootSettlingTime"
Query may return: "VSynMaxUndershootSettlingTime 7.1"

VSyncMinAll?

Query all the V Sync minimum limit values specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinAll"

Group Minimum Limits Query

Arguments None

Return value Query returns all the V Sync minimum limit values specified in the Limits file.

The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T (ns), Undershoot S.T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinAll"
Query may return: "VSyncMinAll Neg 0.0 9.765 84.0 0.35 0.35 0.0 0.0 0.0 0.0
Yes Yes 2400.0 0.0 2400.0 0.0"

VSyncMinFallTime?

Query the V Sync Fall Time minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinFallTime"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Fall Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinFallTime"
Query may return: "VSyncMinFallTime 7.1"

VSyncMinFrequency?

Query the V Sync Frequency minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinFrequency"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Frequency minimum limit value specified in the Limits file.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinFrequency"
Query may return: "VSyncMinFrequency 85"

VSyncMinLogicLevel0Value1?

Query the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinLogicLevel0Value1"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinLogicLevel0Value1"
Query may return: "VSyncMinLogicLevel0Value1 1"

VSyncMinLogicLevel0Value2?

Query the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMinLogicLevel0Value2"

Group Minimum Limits Query

Arguments None

Return value Query returns V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMinLogicLevel0Value2"
Query may return: "VSyncMinLogicLevel0Value2 1"

VSyncMinLogicLevel1Value1?

Query the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinLogicLevel1Value1"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinLogicLevel1Value1"
Query may return: "VSyncMinLogicLevel1Value1 1"

VSyncMinLogicLevel1Value2?

Query the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMinLogicLevel1Value2"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) minimum limit value specified in the Limits file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMinLogicLevel1Value2"
Query may return: "VSyncMinLogicLevel1Value2 1"

VSyncMinMonotonicFall?

Query the V Sync Monotonic Fall minimum limit value specified in the Limits file.

Syntax VARIABLE:VALUE? "VSyncMinMonotonicFall"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Monotonic Fall minimum limit value specified in the Limits file.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncMinMonotonicFall"
Query may return: "VSyncMinMonotonicFall Yes"

VSyncMinMonotonicRise?

Query the V Sync Monotonic Rise minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinMonotonicRise"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Monotonic Rise minimum limit value specified in the Limits file.
The returned value is either "Yes" or "No".
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinMonotonicRise"
Query may return: "VSyncMinMonotonicRise Yes"

VSyncMinOvershoot?

Query the V Sync Overshoot minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinOvershoot"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Overshoot minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinOvershoot"
Query may return: "VSyncMinOvershoot 15"

VSyncMinOvershootSettlingTime?

Query the V Sync Overshoot minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinOvershootSettlingTime"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Overshoot minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinOvershootSettlingTime"
Query may return: "VSyncMinOvershootSettlingTime 7.1"

VSyncMinPolarity?

Query the V Sync Polarity minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinPolarity"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Polarity minimum limit value specified in the Limits file.
The returned value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinPolarity"
Query may return: "VSyncMinPolarity Pos"

VSyncMinPulseWidth?

Query the V Sync Pulse Width minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinPulseWidth"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Pulse Width minimum limit value specified in the Limits file.
The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinPulseWidth"
Query may return: "VSyncMinPulseWidth 0.05"

VSyncMinRiseTime?

Query the V Sync Rise Time minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinRiseTime"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Rise Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinRiseTime"
Query may return: "VSyncMinRiseTime 7.1"

VSyncMinSyncPeriod?

Query the V Sync Period minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinSyncPeriod"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Period minimum limit value specified in the Limits file.
The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinSyncPeriod"
Query may return: "VSyncMinSyncPeriod 11.75"

VSyncMinUndershoot?

Query the V Sync Undershoot minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VSyncMinUndershoot"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Undershoot minimum limit value specified in the Limits file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMinUndershoot"
Query may return: "VSyncMinUndershoot 15"

VSyncMinUndershootSettlingTime?

Query the V Sync Undershoot Settling Time minimum limit value specified in the Limits file.

Syntax VARIable:VALue? "VSyncMinUndershootSettlingTime"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Sync Undershoot Settling Time minimum limit value specified in the Limits file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMinUndershootSettlingTime"
Query may return: "VSyncMinUndershootSettlingTime 7.1"

VSyncMonotonicFall?

Query the measured Monotonic Fall value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncMonotonicFall"

Group Measured Results Query

Arguments None

Return value Query returns the measured Monotonic Fall value resulting from the V Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncMonotonicFall"
Query may return: "VSyncMonotonicFall Yes"

VSyncMonotonicRise?

Query the measured Monotonic Rise value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncMonotonicRise"

Group Measured Results Query

Arguments None

Return value Query returns the measured Monotonic Rise value resulting from the V Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncMonotonicRise"
Query may return: "VSyncMonotonicRise Yes"

VSyncOvershoot?

Query the measured Overshoot resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncOvershoot”

Group Measured Results Query

Arguments None

Return value Query returns the measured Overshoot resulting from the V Sync measurement.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncOvershoot”
Query may return: “VSyncOvershoot 1”

VSyncOvershootSettlingTime?

Query the measured Overshoot Settling Time resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncOvershootSettlingTime"

Group Measured Results Query

Arguments None

Return value Query returns the measured Overshoot Settling Time resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "VSyncOvershootSettlingTime"
Query may return: "VSyncOvershootSettlingTime 1"

VSyncPassAll?

Query the pass/fail status for all the values resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values resulting from the V Sync measurement.

The order is: Polarity, Pulse Width, Sync Period, Frequency, Rise Time, Fall Time, Overshoot, Undershoot, Overshoot S.T, Undershoot S.T, Monotonic Rise, Monotonic Fall, Logic Level 1 At Value1, Logic Level 0 At Value1, Logic Level 1 At Value2, and Logic Level 0 At Value2.

A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassAll"
Query may return: "VSyncPassAll 1 1 1 0 0 0 1 0 0 1 1 1 0 1"

VSyncPassFallTime?

Query the pass/fail status for the Fall Time value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassFallTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Fall Time value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassFallTime"
Query may return: "VSyncPassFallTime 1"

VSyncPassFrequency?

Query the pass/fail status for the Frequency value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassFrequency"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Frequency value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassFrequency"
Query may return: "VSyncPassFrequency 1"

VSyncPassLogicLevel0Value1?

Query the pass/fail status for the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassLogicLevel0Value1"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassLogicLevel0Value1"
Query may return: "VSyncPassLogicLevel0Value1 1"

VSyncPassLogicLevel0Value2?

Query the pass/fail status for the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassLogicLevel0Value2"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement. The value used for the relative comparison is defined in the limits file.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassLogicLevel0Value2"
Query may return: "VSyncPassLogicLevel0Value2 1"

VSyncPassLogicLevel1Value1?

Query the pass/fail status for the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncPassLogicLevel1Value1"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncPassLogicLevel1Value1"
Query may return: "VSyncPassLogicLevel1Value1 1"

VSyncPassLogicLevel1Value2?

Query the pass/fail status for the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassLogicLevel1Value2"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassLogicLevel0Value2"
Query may return: "VSyncPassLogicLevel0Value2 1"

VSyncPassMonotonicFall?

Query the pass/fail status for the Monotonic Fall value resulting from the V Sync measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? "VSyncPassMonotonicFall"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Monotonic Fall value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassMonotonicFall"
Query may return: "VSyncPassMonotonicFall 1"

VSyncPassMonotonicRise?

Query the pass/fail status for the Monotonic Rise value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassMonotonicRise"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Monotonic Rise value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassMonotonicRise"
Query may return: "VSyncPassMonotonicRise 1"

VSyncPassOvershoot?

Query the pass/fail status for the Overshoot value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassOvershoot"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Overshoot value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassOvershoot"
Query may return: "VSyncPassOvershoot 1"

VSyncPassOvershootSettlingTime?

Query the pass/fail status for the Overshoot Settling Time value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassOvershootSettlingTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Overshoot Settling Time value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassOvershootSettlingTime"
Query may return: "VSyncPassOvershootSettlingTime 1"

VSyncPassPolarity?

Query the pass/fail status for the Polarity value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassPolarity"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Polarity value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassPolarity"
Query may return: "VSyncPassPolarity 1"

VSyncPassPulseWidth?

Query the pass/fail status for the Pulse Width value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassPulseWidth"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Pulse Width value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassPulseWidth"
Query may return: "VSyncPassPulseWidth 1"

VSyncPassRiseTime?

Query the pass/fail status for the Rise Time value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassRiseTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Rise Time value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassRiseTime"
Query may return: "VSyncPassRiseTime 1"

VSyncPassSyncPeriod?

Query the pass/fail status for the Sync Period value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassSyncPeriod"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Sync Period value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassSyncPeriod"
Query may return: "VSyncPassSyncPeriod 1"

VSyncPassUndershoot?

Query the pass/fail status for the Undershoot value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPassUndershoot"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Undershoot value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPassUndershoot"
Query may return: "VSyncPassUndershoot 1"

VSyncPassUndershootSettlingTime?

Query the pass/fail status for the Undershoot Settling Time value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncPassUndershootSettlingTime"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Undershoot Settling Time value resulting from the V Sync measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncPassUndershootSettlingTime"
Query may return: "VSyncPassUndershootSettlingTime 1"

VSyncPolarity?

Query the measured Polarity resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncPolarity"

Group Measured Results Query

Arguments None

Return value Query returns the measured Polarity resulting from the V Sync measurement.
The returned value is either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncPolarity"
Query may return: "VSyncPolarity Pos"

VSyncPulseWidth?

Query the measured Pulse Width resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncPulseWidth”

Group Measured Results Query

Arguments None

Return value Query returns the measured Pulse Width resulting from the V Sync measurement.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncPulseWidth”
Query may return: “VSyncPulseWidth 1”

VSyncRefAll?

Query all the V Sync reference values specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefAll"

Group Reference Values Query

Arguments None

Return value Query returns all the V Sync reference values specified in the Reference file.

The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T(ns), Undershoot S.T(ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefAll"

Query may return: "VSyncRefAll Pos 0.033 11.765 85.0 2.51 2.51 0 0 0 0 Yes
Yes 3950.0 0.0 3950.0 0.0"

VSyncRefFallTime?

Query the V Sync Fall Time reference value specified in the Reference file.

Syntax VARIABLE:VALue? "VSyncRefFallTime"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Fall Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRefFallTime"
Query may return: "VSyncRefFallTime 7.1"

VSyncRefFrequency?

Query the V Sync Frequency reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefFrequency"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Frequency reference value specified in the Reference file.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefFrequency"
Query may return: "VSyncRefFrequency 85"

VSyncRefLogicLevel0Value1?

Query the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "VSyncRefLogicLevel0Value1"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRefLogicLevel0Value1"
Query may return: "VSyncRefLogicLevel0Value1 1"

VSyncRefLogicLevel0Value2?

Query the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "VSyncRefLogicLevel0Value2"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRefLogicLevel0Value2"
Query may return: "VSyncRefLogicLevel0Value2 1"

VSynRefLogicLevel1Value1?

Query the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) reference value specified in the Reference file.

Syntax VARIable:VALue? "VSynRefLogicLevel1Value1"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSynRefLogicLevel1Value1"
Query may return: "VSynRefLogicLevel1Value1 1"

VSyncRefLogicLevel1Value2?

Query the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.

Syntax VARIABLE:VALUE? "VSyncRefLogicLevel1Value2"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) reference value specified in the Reference file.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRefLogicLevel1Value2"
Query may return: "VSyncRefLogicLevel1Value2 1"

VSyncRefMonotonicFall?

Query the V Sync Monotonic Fall reference value specified in the Reference file.

Syntax VARIABLE:VALue? “VSyncRefMonotonicFall”

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Monotonic Fall reference value specified in the Reference file.
The returned value is either “Yes” or “No”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncRefMonotonicFall”
Query may return: “VSyncRefMonotonicFall Yes”

VSyncRefMonotonicRise?

Query the V Sync Monotonic Rise reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefMonotonicRise"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Monotonic Rise reference value specified in the Reference file.
The returned value is either "Yes" or "No".
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefMonotonicRise"
Query may return: "VSyncRefMonotonicRise Yes"

VSyncRefOvershoot?

Query the V Sync Overshoot reference value specified in the Reference file.

Syntax VARIABLE:VALue? "VSyncRefOvershoot"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Overshoot reference value specified in the Reference file.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRefOvershoot"
Query may return: "VSyncRefOvershoot 15"

VSyncRefOvershootSettlingTime?

Query the V Sync Overshoot Settling Time reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefOvershootSettlingTime"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Overshoot Settling Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefOvershootSettlingTime"
Query may return: "VSyncRefOvershootSettlingTime 7.1"

VSyncRefPolarity?

Query the V Sync Polarity reference value specified in the Reference file.

Syntax VARIABLE:VALue? “VSyncRefPolarity”

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Polarity reference value specified in the Reference file.
The returned value can be either “Pos” or “Neg”.
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncRefPolarity”
Query may return: “VSyncRefPolarity Pos”

VSyncRefPulseWidth?

Query the V Sync Pulse Width reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefPulseWidth"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Pulse Width reference value specified in the Reference file.
The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefPulseWidth"
Query may return: "VSyncRefPulseWidth 0.05"

VSyncRefRiseTime?

Query the V Sync Rise Time reference value specified in the Reference file.

Syntax VARIABLE:VALue? "VSyncRefRiseTime"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Rise Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRefRiseTime"
Query may return: "VSyncRefRiseTime 7.1"

VSyncRefSyncPeriod?

Query the V Sync Sync Period reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefSyncPeriod"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Sync Period reference value specified in the Reference file.
The returned value is in milliseconds (ms).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefSyncPeriod"
Query may return: "VSyncRefSyncPeriod 11.75"

VSyncRefUndershoot?

Query the V Sync Undershoot reference value specified in the Reference file.

Syntax VARIABLE:VALue? “VSyncRefUndershoot”

Group Reference Values Query

Arguments None

Return value Query returns V Sync Undershoot reference value specified in the Reference file.
The returned value is in percent (%).
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncRefUndershoot”
Query may return: “VSyncRefUndershoot 15”

VSyncRefUndershootSettlingTime?

Query the V Sync Undershoot Settling Time reference value specified in the Reference file.

Syntax VARIable:VALue? "VSyncRefUndershootSettlingTime"

Group Reference Values Query

Arguments None

Return value Query returns the V Sync Undershoot Settling Time reference value specified in the Reference file.
The returned value is in nanoseconds (ns).
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRefUndershootSettlingTime"
Query may return: "VSyncRefUndershootSettlingTime 7.1"

VSyncRelAll?

Query all the relative values resulting from the V Sync measurement.

Syntax VARiable:VALue? "VSyncRelAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values resulting from the V Sync measurement.

The order is: Polarity (Pos/Neg), Pulse Width (ms), Sync Period (ms), Frequency (Hz), Rise Time (ns), Fall Time (ns), Overshoot (%), Undershoot (%), Overshoot S.T (ns), Undershoot S.T (ns), Monotonic Rise (Y/N), Monotonic Fall (Y/N), Logic Level 1 At Value1 (mV), Logic Level 0 At Value1 (mV), Logic Level 1 At Value2 (mV), and Logic Level 0 At Value2 (mV).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "VSyncRelAll"
Query may return: "VSyncRelAll Pos 1 -0.005 0,034 5 5 4.458 5.226 3.8 0.0
Yes Yes -761.48 -400 -1129.3 464.4"

VSyncRelFallTime?

Query the Fall Time relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelFallTime"

Group Relative Results Query

Arguments None

Return value Query returns the Fall Time relative value resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelFallTime"
Query may return: "VSyncRelFallTime 7.1"

VSyncRelFrequency?

Query the Frequency relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncRelFrequency"

Group Relative Results Query

Arguments None

Return value Query returns the Frequency relative value resulting from the V Sync measurement.
The returned value is in Hertz (Hz).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRelFrequency"
Query may return: "VSyncRelFrequency 85"

VSyncRelLogicLevel0Value1?

Query the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelLogicLevel0Value1"

Group Relative Results Query

Arguments None

Return value Query returns the Logic Level 0 at Value1 (Value1 represents the Logic Level 0 at 2.21 k Ω termination resistance) relative value resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelLogicLevel0Value1"
Query may return: "VSyncRelLogicLevel0Value1 1"

VSyncRelLogicLevel0Value2?

Query the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301Ω termination resistance without the MIU connected) relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncRelLogicLevel0Value2"

Group Relative Results Query

Arguments None

Return value Query returns the Logic Level 0 at Value2 (Value2 represents the Logic Level 0 at ± 8 mA with the MIU connected or 301Ω termination resistance without the MIU connected) relative value resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRelLogicLevel0Value2"
Query may return: "VSyncRelLogicLevel0Value2 1"

VSyncRelLogicLevel1Value1?

Query the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelLogicLevel1Value1"

Group Relative Results Query

Arguments None

Return value Query returns the Logic Level 1 at Value1 (Value1 represents the Logic Level 1 at 2.21 k Ω termination resistance) relative value resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelLogicLevel1Value1"
Query may return: "VSyncRelLogicLevel1Value1 1"

VSyncRelLogicLevel1Value2?

Query the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALUE? "VSyncRelLogicLevel1Value2"

Group Relative Results Query

Arguments None

Return value Query returns the Logic Level 1 at Value2 (Value2 represents the Logic Level 1 at ± 8 mA with the MIU connected or 301 Ω termination resistance without the MIU connected) relative value resulting from the V Sync measurement.
The returned value is in millivolts (mV).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VSyncRelLogicLevel1Value2"
Query may return: "VSyncRelLogicLevel1Value2 1"

VSyncRelMonotonicFall?

Query the Monotonic Fall relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelMonotonicFall"

Group Relative Results Query

Arguments None

Return value Query returns the Monotonic Fall relative value resulting from the V Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelMonotonicFall"
Query may return: "VSyncRelMonotonicFall Yes"

VSynRelMonotonicRise?

Query the Monotonic Rise relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSynRelMonotonicRise"

Group Relative Results Query

Arguments None

Return value Query returns the Monotonic Rise relative value resulting from the V Sync measurement.
The returned value is either "Yes" or "No".
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSynRelMonotonicRise"
Query may return: "VSynRelMonotonicRise Yes"

VSyncRelOvershoot?

Query the Overshoot relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelOvershoot"

Group Relative Results Query

Arguments None

Return value Query returns the Overshoot relative value resulting from the V Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelOvershoot"
Query may return: "VSyncRelOvershoot 15"

VSyncRelOvershootSettlingTime?

Query the Overshoot Settling Time relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSyncRelOvershootSettlingTime"

Group Relative Results Query

Arguments None

Return value Query returns the Overshoot Settling Time relative value resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSyncRelOvershootSettlingTime"
Query may return: "VSyncRelOvershootSettlingTime 7.1"

VSyncRelPolarity?

Query the Polarity relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelPolarity"

Group Relative Results Query

Arguments None

Return value Query returns the Polarity relative value resulting from the V Sync measurement.
The value can be either "Pos" or "Neg".
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelPolarity"
Query may return: "VSyncRelPolarity Pos"

VSyncRelPulseWidth?

Query the Pulse Width relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncRelPulseWidth”

Group Relative Results Query

Arguments None

Return value Query returns the Pulse Width relative value resulting from the V Sync measurement.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncRelPulseWidth”
Query may return: “VSyncRelPulseWidth 0.05”

VSyncRelRiseTime?

Query the Rise Time relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelRiseTime"

Group Relative Results Query

Arguments None

Return value Query returns the Rise Time relative value resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelRiseTime"
Query may return: "VSyncRelRiseTime 7.1"

VSyncRelSyncPeriod?

Query the Sync Period relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncRelSyncPeriod”

Group Relative Results Query

Arguments None

Return value Query returns the Sync Period relative value resulting from the V Sync measurement.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncRelSyncPeriod”
Query may return: “VSyncRelSyncPeriod 11.75”

VSyncRelUndershoot?

Query the Undershoot relative value resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRelUndershoot"

Group Relative Results Query

Arguments None

Return value Query returns the Undershoot relative value resulting from the V Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRelUndershoot"
Query may return: "VSyncRelUndershoot 15"

VSynRelUndershootSettlingTime?

Query the Undershoot Settling Time relative value resulting from the V Sync measurement.

Syntax VARIABLE:VALue? "VSynRelUndershootSettlingTime"

Group Relative Results Query

Arguments None

Return value Query returns the Undershoot Settling Time relative value resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VSynRelUndershootSettlingTime"
Query may return: "VSynRelUndershootSettlingTime 7.1"

VSyncRiseTime?

Query the measured Rise Time resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncRiseTime"

Group Measured Results Query

Arguments None

Return value Query returns the measured Rise Time resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncRiseTime"
Query may return: "VSyncRiseTime 1"

VSyncSet <setting>

Set or query whether to measure V Sync upon Execute.

Syntax VARIABLE:VALue "VSyncSet", "<setting>"

VARIABLE:VALue? "VSyncSet"

Group Measurement Setup

Arguments <setting> specifies whether to perform the V Sync measurements upon Execute.
Valid values are: "OFF", "ON", "0", "1"

Return value Query returns "0" if the V Sync measurement is not selected.
Query returns "1" if the V Sync measurement is selected.

Examples VARIABLE:VALue "VSyncSet", "ON"

VARIABLE:VALue? "VSyncSet"
Query may return: "VSyncSet 1"

VSyncStatus?

Query the status of the V Sync measurement.

Syntax VARIable:VALue? "VSyncStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIable:VALue? "VSyncStatus"
Query may return: "VSyncStatus Pass"

VSyncSyncPeriod?

Query the measured Sync Period resulting from the V Sync measurement.

Syntax VARIable:VALue? “VSyncSyncPeriod”

Group Measured Results Query

Arguments None

Return value Query returns the measured Sync Period resulting from the V Sync measurement.
The returned value is in milliseconds (ms).
Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VSyncSyncPeriod”
Query may return: “VSyncSyncPeriod 1”

VSyncUndershoot?

Query the measured Undershoot resulting from the V Sync measurement.

Syntax VARIable:VALue? "VSyncUndershoot"

Group Measured Results Query

Arguments None

Return value Query returns the measured Undershoot resulting from the V Sync measurement.
The returned value is in percent (%).
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VSyncUndershoot"
Query may return: "VSyncUndershoot 1"

VSyncUndershootSettlingTime?

Query the measured Undershoot Settling Time resulting from the V Sync measurement.

Syntax VARIABLE:VALue? “VSyncUndershootSettlingTime”

Group Measured Results Query

Arguments None

Return value Query returns the measured Undershoot Settling Time resulting from the V Sync measurement.
The returned value is in nanoseconds (ns).
Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VSyncUndershootSettlingTime”
Query may return: “VSyncUndershootSettlingTime 1”

VTimingAddressableLinesCh[1..3]?

Query the measured Addressable Video resulting from the V Timing measurement on the specified channel.

Syntax VARIable:VALue? "VTimingAddressableLinesCh1"
 VARIable:VALue? "VTimingAddressableLinesCh2"
 VARIable:VALue? "VTimingAddressableLinesCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Addressable Video resulting from the V Timing measurement on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingAddressableLinesCh1"
 Query may return: "VTimingAddressableLinesCh1 600"

VTimingAll?

Query the measured values of all the V Timing measurements.

Syntax VARiable:VALue? "VTimingAll"

Group Measured Results Query

Arguments None

Return value Query returns the measured values of all the V Timing measurements.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns "---" if no valid value is currently available.

Examples VARiable:VALue? "VTimingAll"
Query may return: "VTimingAll 47 0.0 1023.0 0.0 2.0 47 0.0 1023.0 0.0 2.0 47 0.0 1023.0 0.0 2.0 47 0.0 1023.0 0.0 2.0 3.0"

VTimingAverage <samples>

Set or query the total number of samples over which to average the V Timing measurement.

Syntax VARIable:VALue “VTimingAverage”, “<samples>”

VARIable:VALue? “VTimingAverage”

Group Measurement Setup

Arguments <samples> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned total number of samples for the V Timing measurement

Examples VARIable:VALue “VTimingAverage”, “1”

VARIable:VALue? “VTimingAverage”

Query may return: “VTimingAverage 8”

VTimingBackPorchCh[1..3]?

Query the measured Back Porch resulting from the V Timing measurement on the specified channel.

Syntax VARIABLE:VALue? "VTimingBackPorchCh1"
 VARIABLE:VALue? "VTimingBackPorchCh2"
 VARIABLE:VALue? "VTimingBackPorchCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Back Porch resulting from the V Timing measurement on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingBackPorchCh1"
 Query may return: "VTimingBackPorchCh1 27"

VTimingBottomBorderCh[1..3]?

Query the measured Bottom Border resulting from the V Timing measurement on the specified channel.

Syntax VARIable:VALue? “VTimingBottomBorderCh1”
 VARIable:VALue? “VTimingBottomBorderCh2”
 VARIable:VALue? “VTimingBottomBorderCh3”

Group Measured Results Query

Arguments None

Return value Query returns the measured Bottom Border resulting from the V Timing measurement on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingBottomBorderCh1”
 Query may return: “VTimingBottomBorderCh1 0”

VTimingFrontPorchCh[1..3]?

Query the measured Front Porch resulting from the V Timing measurement on the specified channel.

Syntax VARIABLE:VALue? "VTimingFrontPorchCh1"
 VARIABLE:VALue? "VTimingFrontPorchCh2"
 VARIABLE:VALue? "VTimingFrontPorchCh3"

Group Measured Results Query

Arguments None

Return value Query returns the measured Front Porch resulting from the V Timing measurement on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingFrontPorchCh1"
 Query may return: "VTimingFrontPorchCh1 1"

VTimingLine <line number>

Query the line number resulting from the V Timing measurement.

Syntax VARIable:VALue “VTimingLine”, “<line number>”

VARIable:VALue? “VTimingLine”

Group Measurement Setup

Arguments <line number> is an integer. Fractional numbers will return errors. Values outside the range will be adjusted to be within the range.

Return value Query returns the currently assigned line number resulting from the V Timing measurement.

Examples VARIable:VALue? “VTimingLine”
Query may return: “VTimingLine 325”

VTimingMaxAddressableLinesCh[1..3]?

Query the V Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “VTimingMaxAddressableLinesCh1”
 VARIABLE:VALue? “VTimingMaxAddressableLinesCh2”
 VARIABLE:VALue? “VTimingMaxAddressableLinesCh3”

Group Maximum Limits Query

Arguments None

Return value Query returns the V Timing Addressable Video maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingMaxAddressableLinesCh1”
 Query may return: “VTimingMaxAddressableLinesCh1 600”

VTimingMaxAll?

Query all the V Timing maximum limit values specified in the Limits file on all the channels.

Syntax VARIable:VALue? "VTimingMaxAll"

Group Maximum Limits Query

Arguments None

Return value Query returns all the V Timing maximum limit values specified in the Limits file on all the channels.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingMaxAll"
Query may return: "VTimingMaxAll 48.0 1.0 1025.0 1.0 2.0 48.0 1.0 1025.0 1.0 2.0 48.0 1.0 1025.0 1.0 2.0 4.0"

VTimingMaxBackPorchCh[1..3]?

Query the V Timing Back Porch maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? "VTimingMaxBackPorchCh1"
 VARIABLE:VALue? "VTimingMaxBackPorchCh2"
 VARIABLE:VALue? "VTimingMaxBackPorchCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Timing Back Porch maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingMaxBackPorchCh1"
 Query may return: "VTimingMaxBackPorchCh1 27"

VTimingMaxBottomBorderCh[1..3]?

Query the V Timing Bottom Border maximum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VTimingMaxBottomBorderCh1"
 VARIable:VALue? "VTimingMaxBottomBorderCh2"
 VARIable:VALue? "VTimingMaxBottomBorderCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Timing Bottom Border maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingMaxBottomBorderCh1"
 Query may return: "VTimingMaxBottomBorderCh1 0"

VTimingMaxFrontPorchCh[1..3]?

Query the V Timing Front Porch maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "VTimingMaxFrontPorchCh1"
 VARIABLE:VALUE? "VTimingMaxFrontPorchCh2"
 VARIABLE:VALUE? "VTimingMaxFrontPorchCh3"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Timing Front Porch maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingMaxFrontPorchCh1"
 Query may return: "VTimingMaxFrontPorchCh1 1"

VTimingMaxSyncPulseWidth?

Query the V Timing Sync Pulse Width maximum limit value specified in the Limits file.

Syntax VARIable:VALue? "VTimingMaxSyncPulseWidth"

Group Maximum Limits Query

Arguments None

Return value Query returns the V Timing Sync Pulse Width maximum limit value specified in the Limits file.
The returned value is a line number.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingMaxSyncPulseWidth"
Query may return: "VTimingMaxSyncPulseWidth 3"

VTimingMaxTopBorderCh[1..3]?

Query the V Timing Top Border maximum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALue? “VTimingMaxTopBorderCh1”
 VARIABLE:VALue? “VTimingMaxTopBorderCh2”
 VARIABLE:VALue? “VTimingMaxTopBorderCh3”

Group Maximum Limits Query

Arguments None

Return value Query returns the Top Border maximum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingMaxTopBorderCh1”
 Query may return: “VTimingMaxTopBorderCh1 0”

VTimingMinAddressableLinesCh[1..3]?

Query the V Timing Addressable Lines minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? "VTimingMinAddressableLinesCh1"
 VARIable:VALue? "VTimingMinAddressableLinesCh2"
 VARIable:VALue? "VTimingMinAddressableLinesCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Timing Addressable Lines minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingMinAddressableLinesCh1"
 Query may return: "VTimingMinAddressableLinesCh1 600"

VTimingMinAll?

Query all the V Timing minimum limit values specified in the Limits file on all the channels.

Syntax VARIABLE:VALUE? "VTimingMinAll"

Group Minimum Limits Query

Arguments None

Return value Query returns all the V Timing minimum limit values specified in the Limits file on all the channels.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingMinAll"
Query may return: "VTimingMinAll 46.0 0.0 1023.0 0.0 0.0 46.0 0.0 1023.0 0.0 0.0 46.0 0.0 1023.0 0.0 0.0 2.0"

VTimingMinBackPorchCh[1..3]?

Query the V Timing Back Porch minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VTimingMinBackPorchCh1”
 VARIable:VALue? “VTimingMinBackPorchCh2”
 VARIable:VALue? “VTimingMinBackPorchCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the V Timing Back Porch minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingMinBackPorchCh1”
 Query may return: “VTimingMinBackPorchCh1 27”

VTimingMinBottomBorderCh[1..3]?

Query the V Timing Bottom Border minimum limit value specified in the Limits file on the specified channel.

Syntax VARIABLE:VALUE? "VTimingMinBottomBorderCh1"
 VARIABLE:VALUE? "VTimingMinBottomBorderCh2"
 VARIABLE:VALUE? "VTimingMinBottomBorderCh3"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Timing Bottom Border minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingMinBottomBorderCh1"
 Query may return: "VTimingMinBottomBorderCh1 0"

VTimingMinFrontPorchCh[1..3]?

Query the V Timing Front Porch minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VTimingMinFrontPorchCh1”
 VARIable:VALue? “VTimingMinFrontPorchCh2”
 VARIable:VALue? “VTimingMinFrontPorchCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the V Timing Front Porch minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingMinFrontPorchCh1”
 Query may return: “VTimingMinFrontPorchCh1 1”

VTimingMinSyncPulseWidth?

Query the V Timing Sync Pulse Width minimum limit value specified in the Limits file.

Syntax VARIABLE:VALue? "VTimingMinSyncPulseWidth"

Group Minimum Limits Query

Arguments None

Return value Query returns the V Timing Sync Pulse Width minimum limit value specified in the Limits file.
The returned value is a line number.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingMinSyncPulseWidth"
Query may return: "VTimingMinSyncPulseWidth 3"

VTimingMinTopBorderCh[1..3]?

Query the V Timing Top Border minimum limit value specified in the Limits file on the specified channel.

Syntax VARIable:VALue? “VTimingMinTopBorderCh1”
 VARIable:VALue? “VTimingMinTopBorderCh2”
 VARIable:VALue? “VTimingMinTopBorderCh3”

Group Minimum Limits Query

Arguments None

Return value Query returns the V Timing Top Border minimum limit value specified in the Limits file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingMinTopBorderCh1”
 Query may return: “VTimingMinTopBorderCh1 0”

VTimingPassAddressableLinesCh[1..3]?

Query the pass/fail status for the Addressable Lines value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VTimingPassAddressableLinesCh1”
 VARIABLE:VALue? “VTimingPassAddressableLinesCh2”
 VARIABLE:VALue? “VTimingPassAddressableLinesCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Addressable Lines value resulting from the V Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingPassAddressableLinesCh1”
 Query may return: “VTimingPassAddressableLinesCh1 1”

VTimingPassAll?

Query the pass/fail status for all the values resulting from the V Timing measurement on all the channels. The values used for the relative comparison are defined in the limits file.

Syntax VARIABLE:VALue? "VTimingPassAll"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for all the values resulting from the V Timing measurement on all the channels.

The order is: Back Porch (Ch1), Top Border (Ch1), Addressable Video (Ch1), Bottom Border (Ch1), Front Porch (Ch1), Back Porch (Ch2), Top Border (Ch2), Addressable Video (Ch2), Bottom Border (Ch2), Front Porch (Ch2), Back Porch (Ch3), Top Border (Ch3), Addressable Video (Ch3), Bottom Border (Ch3), Front Porch (Ch3), and Sync Pulse Width.

A returned value of 1 means Pass, a returned value of 0 means Fail. Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingPassAll"
Query may return: "VTimingPassAll 1 0 0 0 1 1 1 0 1 0 1 1 1 1 1 1 1"

VTimingPassBackPorchCh[1..3]?

Query the pass/fail status for the Back Porch value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VTimingPassBackPorchCh1”
 VARIABLE:VALue? “VTimingPassBackPorchCh2”
 VARIABLE:VALue? “VTimingPassBackPorchCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Back Porch value resulting from the V Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingPassBackPorchCh1”
 Query may return: “VTimingPassBackPorchCh1 1”

VTimingPassBottomBorderCh[1..3]?

Query the pass/fail status for the Bottom Border value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIable:VALue? “VTimingPassBottomBorderCh1”
 VARIable:VALue? “VTimingPassBottomBorderCh2”
 VARIable:VALue? “VTimingPassBottomBorderCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Bottom Border value resulting from the V Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingPassBottomBorderCh1”
 Query may return: “VTimingPassBottomBorderCh1 1”

VTimingPassFrontPorchCh[1..3]?

Query the pass/fail status for the Front Porch value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VTimingPassFrontPorchCh1”
 VARIABLE:VALue? “VTimingPassFrontPorchCh2”
 VARIABLE:VALue? “VTimingPassFrontPorchCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Front Porch value resulting from the V Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingPassFrontPorchCh1”
 Query may return: “VTimingPassFrontPorchCh1 1”

VTimingPassSyncPulseWidth?

Query the pass/fail status for the Sync Pulse Width value resulting from the V Timing measurement. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALUE? "VTimingPassSyncPulseWidth"

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Sync Pulse Width value resulting from the V Timing measurement.
A returned value of 1 means Pass, a returned value of 0 means Fail.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingPassSyncPulseWidth"
Query may return: "VTimingPassSyncPulseWidth 1"

VTimingPassTopBorderCh[1..3]?

Query the pass/fail status for the Top Border value resulting from the V Timing measurement on the specified channel. The value used for the relative comparison is defined in the limits file.

Syntax VARIABLE:VALue? “VTimingPassTopBorderCh1”
 VARIABLE:VALue? “VTimingPassTopBorderCh2”
 VARIABLE:VALue? “VTimingPassTopBorderCh3”

Group Pass/Fail Status Query

Arguments None

Return value Query returns the pass/fail status for the Top Border value resulting from the V Timing measurement on the specified channel.
 A returned value of 1 means Pass, a returned value of 0 means Fail.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingPassTopBorderCh1”
 Query may return: “VTimingPassTopBorderCh1 1”

VTimingRefAddressableLinesCh[1..3]?

Query the V Timing Addressable Lines reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “VTimingRefAddressableLinesCh1”
 VARIable:VALue? “VTimingRefAddressableLinesCh2”
 VARIable:VALue? “VTimingRefAddressableLinesCh3”

Group Reference Values Query

Arguments None

Return value Query returns the V Timing Addressable Lines reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingRefAddressableLinesCh1”
 Query may return: “VTimingRefAddressableLinesCh1 600”

VTimingRefAll?

Query all the V Timing reference value specified in the Reference file on all the channels.

Syntax VARIABLE:VALUE? "VTimingRefAll"

Group Reference Values Query

Arguments None

Return value Query returns all the V Timing reference value specified in the Reference file on all the channels.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingRefAll"

Query may return: "VTimingRefAll 47.0 0.0 1024.0 0.0 1.0 47.0 0.0 1024.0 0.0 1.0 47.0 0.0 1024.0 0.0 1.0 3.0"

VTimingRefBackPorchCh[1..3]?

Query the V Timing Back Porch reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “VTimingRefBackPorchCh1”
 VARIable:VALue? “VTimingRefBackPorchCh2”
 VARIable:VALue? “VTimingRefBackPorchCh3”

Group Reference Values Query

Arguments None

Return value Query returns the V Timing Back Porch reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingRefBackPorchCh1”
 Query may return: “VTimingRefBackPorchCh1 27”

VTimingRefBottomBorderCh[1..3]?

Query the V Timing Bottom Border reference value specified in the Reference file on the specified channel.

Syntax VARIABLE:VALue? “VTimingRefBottomBorderCh1”
 VARIABLE:VALue? “VTimingRefBottomBorderCh2”
 VARIABLE:VALue? “VTimingRefBottomBorderCh3”

Group Reference Values Query

Arguments None

Return value Query returns the V Timing Bottom Border reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingRefBottomBorderCh1”
 Query may return: “VTimingRefBottomBorderCh1 0”

VTimingRefFrontPorchCh[1..3]?

Query the V Timing Front Porch reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? "VTimingRefFrontPorchCh1"
 VARIable:VALue? "VTimingRefFrontPorchCh2"
 VARIable:VALue? "VTimingRefFrontPorchCh3"

Group Reference Values Query

Arguments None

Return value Query returns the V Timing Front Porch reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingRefFrontPorchCh1"
 Query may return: "VTimingRefFrontPorchCh1 1"

VTimingRefSyncPulseWidth?

Query the V Timing Sync Pulse Width reference value specified in the Reference file.

Syntax VARIABLE:VALue? "VTimingRefSyncPulseWidth"

Group Reference Values Query

Arguments None

Return value Query returns the V Timing Sync Pulse Width reference value specified in the Reference file.
The returned value is a line number.
Returns "---" if no valid value is currently available.

Examples VARIABLE:VALue? "VTimingRefSyncPulseWidth"
Query may return: "VTimingRefSyncPulseWidth 3"

VTimingRefTopBorderCh[1..3]?

Query the V Timing Top Border reference value specified in the Reference file on the specified channel.

Syntax VARIable:VALue? “VTimingRefTopBorderCh1”
 VARIable:VALue? “VTimingRefTopBorderCh2”
 VARIable:VALue? “VTimingRefTopBorderCh3”

Group Reference Values Query

Arguments None

Return value Query returns the V Timing Top Border reference value specified in the Reference file on the specified channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIable:VALue? “VTimingRefTopBorderCh1”
 Query may return: “VTimingRefTopBorderCh1 0”

VTimingRelAddressableLinesCh[1..3]?

Query the Addressable Lines relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIABLE:VALUE? "VTimingRelAddressableLinesCh1"
 VARIABLE:VALUE? "VTimingRelAddressableLinesCh2"
 VARIABLE:VALUE? "VTimingRelAddressableLinesCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Addressable Lines relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingRelAddressableLinesCh1"
 Query may return: "VTimingRelAddressableLinesCh1 600"

VTimingRelAll?

Query all the relative values resulting from the V Timing measurement on all the channels.

Syntax VARIABLE:VALUE? "VTimingRelAll"

Group Relative Results Query

Arguments None

Return value Query returns all the relative values resulting from the V Timing measurement on all the channels.

The order is: Back Porch (Ch1) Line, Top Border (Ch1) Line, Addressable Video (Ch1) Line, Bottom Border (Ch1) Line, Front Porch (Ch1) Line, Back Porch (Ch2) Line, Top Border (Ch2) Line, Addressable Video (Ch2) Line, Bottom Border (Ch2) Line, Front Porch (Ch2) Line, Back Porch (Ch3) Line, Top Border (Ch3) Line, Addressable Video (Ch3) Line, Bottom Border (Ch3) Line, Front Porch (Ch3) Line, and Sync Pulse Width (Line).

Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingRelAll"
Query may return: "VTimingRelAll 1 0.0 -1.0 0.0 1.0 1 0.0 -1.0 0.0 1.0 1 0.0 -1.0 0.0 1.0 0.0"

VTimingRelBackPorchCh[1..3]?

Query the Back Porch relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIABLE:VALUE? "VTimingRelBackPorchCh1"
 VARIABLE:VALUE? "VTimingRelBackPorchCh2"
 VARIABLE:VALUE? "VTimingRelBackPorchCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Back Porch relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingRelBackPorchCh1"
 Query may return: "VTimingRelBackPorchCh1 27"

VTimingRelBottomBorderCh[1..3]?

Query the Bottom Border relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIable:VALue? "VTimingRelBottomBorderCh1"
 VARIable:VALue? "VTimingRelBottomBorderCh2"
 VARIable:VALue? "VTimingRelBottomBorderCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Bottom Border relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingRelBottomBorderCh1"
 Query may return: "VTimingRelBottomBorderCh1 0"

VTimingRelFrontPorchCh[1..3]?

Query the Front Porch relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIABLE:VALue? “VTimingRelFrontPorchCh1”
 VARIABLE:VALue? “VTimingRelFrontPorchCh2”
 VARIABLE:VALue? “VTimingRelFrontPorchCh3”

Group Relative Results Query

Arguments None

Return value Query returns the Front Porch relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingRelFrontPorchCh1”
 Query may return: “VTimingRelFrontPorchCh1 1”

VTimingRelSyncPulseWidth?

Query the Sync Pulse Width relative value resulting from the V Timing measurement.

Syntax VARIable:VALue? "VTimingRelSyncPulseWidth"

Group Relative Results Query

Arguments None

Return value Query returns the Sync Pulse Width relative value resulting from the V Timing measurement.
The returned value is a line number.
Returns "---" if no valid value is currently available.

Examples VARIable:VALue? "VTimingRelSyncPulseWidth"
Query may return: "VTimingRelSyncPulseWidth 3"

VTimingRelTopBorderCh[1..3]?

Query the Top Border relative value resulting from the V Timing measurement on a specific channel.

Syntax VARIABLE:VALUE? "VTimingRelTopBorderCh1"
 VARIABLE:VALUE? "VTimingRelTopBorderCh2"
 VARIABLE:VALUE? "VTimingRelTopBorderCh3"

Group Relative Results Query

Arguments None

Return value Query returns the Top Border relative value resulting from the V Timing measurement on a specific channel.
 The returned value is a line number.
 Returns "---" if no valid value is currently available.

Examples VARIABLE:VALUE? "VTimingRelTopBorderCh1"
 Query may return: "VTimingRelTopBorderCh1 0"

VTimingSet <setting>

Set or query whether to perform the V Timing measurements upon Execute.

Syntax VARIable:VALue “VTimingSet”, “<setting>”
VARIable:VALue? “VTimingSet”

Group Measurement Setup

Arguments <setting> specifies whether to perform the V Timing measurements upon Execute.
Valid values are: “OFF”, “ON”, “0”, “1”

Return value Query returns “0” if the V Timing measurement is not selected.
Query returns “1” if the V Timing measurement is selected.

Examples VARIable:VALue “VTimingSet”, “ON”

VARIable:VALue? “VTimingSet”
Query may return: “VTimingSet 1”

VTimingStatus?

Query the status of the V Timing measurement.

Syntax VARIABLE:VALue? "VTimingStatus"

Group Results Summary Query

Arguments None

Return value Query may return one of these values: "Done", "Stopped", "Pass", "Fail"
Query returns Done when the measurement is completed without limit testing.
Query returns Stopped when the measurement is halted before completion.
Returns "---" if no valid value are currently available.

Examples VARIABLE:VALue? "VTimingStatus"
Query may return: "VTimingStatus Pass"

VTimingSyncPulseWidth?

Query the measured Sync Pulse Width resulting from the V Timing measurement.

Syntax VARIable:VALue? "VTimingSyncPulseWidth"

Group Measured Results Query

Arguments None

Return value Query returns the measured Sync Pulse Width resulting from the V Timing measurement.
The returned value is in Line.
Returns "--" if no valid value is currently available.

Examples VARIable:VALue? "VTimingSyncPulseWidth"
Query may return: "VTimingSyncPulseWidth 3"

VTimingTopBorderCh[1..3]?

Query the measured Top Border resulting from the V Timing measurement on the specified channel.

Syntax VARIABLE:VALue? “VTimingTopBorderCh1”
 VARIABLE:VALue? “VTimingTopBorderCh2”
 VARIABLE:VALue? “VTimingTopBorderCh3”

Group Measured Results Query

Arguments None

Return value Query returns the measured Top Border resulting from the V Timing measurement on the specified channel.
 The returned value is in Line.
 Returns “---” if no valid value is currently available.

Examples VARIABLE:VALue? “VTimingTopBorderCh1”
 Query may return: “VTimingTopBorderCh1 0”

WarningReportingMeasure <setting>

Set or query whether measurement warnings create a warning message.

Syntax VARIable:VALue “WarningReportingMeasure”, “<setting>”

VARIable:VALue? “WarningReportingMeasure”

Group Reporting

Arguments <setting> Valid settings are: OFF, ON, 0, 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportResults
WarningReportSignal

Return value Query returns the current specified setting.

Examples VARIable:VALue “WarningReportingMeasure”, “ON”

VARIable:VALue? “WarningReportingMeasure”
Query may return: “WarningReportingMeasure 0”

WarningReportingResults <setting>

Set or query whether results warnings are to create a warning message.

Syntax VARIABLE:VALue “WarningReportingResults”, “<setting>”

VARIABLE:VALue? “WarningReportingResults”

Group Reporting

Arguments <setting> valid settings are: OFF, 0, ON, 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportingMeasure
WarningReportingSignal

Return value Query returns the current specified setting.

Examples VARIABLE:VALue “WarningReportingResults”, “ON”

VARIABLE:VALue? “WarningReportingResults”
Query may return: “WarningReportingResults 0”

WarningReportingSignal <setting>

Set or query whether signal warnings create a warning message.

Syntax VARIable:VALue “WarningReportingSignal”, “<setting>”

VARIable:VALue? “WarningReportingSignal”

Group Reporting

Arguments <setting> valid settings are: OFF, 0, ON, 1.
OFF is the same as 0, and ON is the same as 1.

Related Commands WarningReportingMeasure
WarningReportingResults

Return value Query returns the current specified setting.

Examples VARIable:VALue “WarningReportingSignal”, “ON”

VARIable:VALue? “WarningReportingSignal”
Query may return: “WarningReportingSignal 0”

WarningReportingResults

Set or query whether results warnings are to create a warning message.

Syntax VARIable:VALue “WarningReportingResults”, “<setting>”
 VARIable:VALue? “WarningReportingResults”

Group Reporting

Arguments <setting> valid settings are: OFF, 0, ON, 1.
 OFF is the same as 0, and ON is the same as 1.

Return value Query returns the current specified setting.

Examples VARIable:VALue “WarningReportingResults”, “ON”

 VARIable:VALue? “WarningReportingResults”
 Query may return: “WarningReportingResults 0”



Appendix

Appendix A: Programming the VM5000

The VM5000 product software CD contains several files of example host controller code to help you get started programming the VM5000. You can view these files to see how to write your code to ensure consistent and reliable operation with the VM5000. The files included are:

- `colorbars.c` -- Example program to make measurements using the Tektronix VM5000. It is expected you will restructure this file to fit your project's needs, changing the error reporting boundaries to fit your product.
- `control.h` -- These timeouts are "safety nets", so the code will not hang if there is an unexpected problem.
- `decl--32.h` -- Win32 include file for accessing the 32--bit GPIB DLL (`gpib--32.dll`).
- `lib.c` -- Example program to make measurements using the Tektronix VM5000. It is expected you will restructure this to fit your project's needs changing the error reporting boundaries to fit your product.
- `lib.h` -- Header file for `lib.c`.
- `tolerances.h` -- This file contains the tolerances used in the GPIB example controller program for the VM5000, `main.c`. Option VGA does not have this file.

Sending GPIB Commands

The time required for a command to transfer from the platform to the VM5000 Java application can vary.

In previous versions of this product, we recommended a 50 ms delay between each command to allow time for the instrument to fully process commands. However, due to the more sophisticated signal processing present in the latest version of the instrument, the 50 ms delay can occasionally be inadequate. Thus, we have developed a different solution that is both reliable and also faster. The solution is after every COMMAND you send to the instrument, QUERY the same GPIB variable until you see the command in the value.

Option SD/HD

For example, to turn on the sync measurement you send:

```
VARI:VAL "SyncSet", "1"
```

If you send the query:

```
VARI:VAL? "SyncSet"
```

while the command is still being processed (note the added question mark), the response is "1". When the command is fully ingested, the response is:

```
"SyncSet 1"
```

The addition of the command name in the response lets you know the command is processed.

Example code that illustrates this method is presented below:

```
// VARI:VAL
//
// Example usage: sendCommand("SyncSet", "1");
//
void sendCommand(const char *variable, const char *setValue)
{
    char sendBuf[BUFSIZ], receiveBuf[BUFSIZ];

    // Formulate a VARI:VAL command, and send it to the VM5000
    sprintf(sendBuf, "VARI:VAL \"%s\" \"%s\"", variable, setValue);
    gpibSend(sendBuf);

    // Reformulate to make a VARI:VAL query of the same variable
    sprintf(sendBuf, "VARI:VAL? \"%s\"", variable);

    // Send the query & receive the result. Return when variable is in the
    // value
    do {
        gpibSend(sendBuf);
        gpibReceive(receiveBuf, sizeof(receiveBuf));
    } while ( !strstr(receiveBuf, variable) );
}
```

Option VGA

Example code is as follows:

```
// Send a query to the VM5000 platform and get the response, the ID and
// version No.
strcpy(outString, "VARI:VAL? \"ID\"");
printf("Query response to VARI:VAL? \"ID\" is %s\n",
queryVM5000(outString, readBuf));

/* set the VM5000 to its default setting to provide
 * a known starting setup. Note color Bars is enabled by default
 */
doDefaultSettings();

printf("Selecting HSync Measurement\n\n");
```

```
strcpy(outString, "VARI:VAL \"ColorBarsSet\", \"0\"\n");
sendCommandToVM5000(outString);

strcpy(outString, "VARI:VAL \"HSyncSet\", \"1\"\n");
sendCommandToVM5000(outString);

strcpy(outString, "VARI:VAL? \"HSyncSet\"\n");
printf("Query response to \"HSyncSet\" is %s\n",
queryVM5000(outString, readBuf));

// Select format type & get the response.
strcpy(outString, "VARI:VAL \"Format\",
\"1280x1024_60\"\n");
sendCommandToVM5000(outString);
strcpy(outString, "VARI:VAL? \"Format\"\n");
printf("Query response to \"Format\" is %s\n", quer-
yVM5000(outString, readBuf));

printf("Configure the Measurement SETUP Parameters: \n\n");
```

The code above takes advantage of the fact that the VM5000 always adds the command back into each GPIB value as it processes it.

You can see the actual file to get the complete list of the code in the VM5000 product software CD.

NOTE. This method is required only for *COMMANDS* sent through the *GPIB*. There is no limitation on how fast you can *QUERY* the *VM5000*.



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