

Instructions



Memory Erasure and Memory Parts List DPO4000 Series Digital Phosphor Oscilloscopes

071-1847-00

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Contacting Tektronix

Tektronix, Inc.
14200 SW Karl Braun Drive
P.O. Box 500
Beaverton, OR 97077
USA

For product information, sales, service, and technical support:

- In North America, call 1-800-833-9200.
- Worldwide, visit www.tektronix.com to find contacts in your area.

Memory Erasure and Memory Parts List

The DPO4000 Series instruments contain a proprietary architecture based on a PowerPC microprocessor and the Linux operating system.

Instrument code and calibration settings reside in nonvolatile flash memory. Instrument setups and reference waveforms may also be stored in flash memory or on CompactFlash and USB drives connected to the instrument.

If you have any questions, contact the Tektronix Technical Support Center at <http://www.tektronix.com/support>.

Memory Erasure

The DPO4000 Series instruments have three USB host ports (one on the front panel and two on the rear panel) and one CompactFlash port on the front panel. Any USB flash devices or CompactFlash cards can be removed and stored or destroyed.

To erase setup and reference waveform data stored in internal flash memory, use the TekSecure function. The TekSecure function does the following:

- Replaces all waveforms in all reference memories with null sample values
- Replaces the current front-panel setup and all stored setups with the default setup values
- Calculates the checksums of all reference waveform memory and setup memory locations to verify successful completion of waveform and setup erasure
- Displays a dialog indicating whether the secure erase was successful or unsuccessful

NOTE. *TekSecure does not erase or change factory calibration constants or Ethernet settings.*

To use TekSecure:

1. Push the front-panel **Utility** button.
2. Push the **System** lower bezel button repeatedly until you select **Config**.
3. Push the **TekSecure Erase Memory** lower bezel button.
4. Push the **OK Erase Setup & Ref Memory** side bezel button. Wait for the “TekSecure operation complete” dialog box to display.
5. Push the **Menu Off** button to close the dialog box.

To reset the instrument RAM:

1. Power off the oscilloscope; then power on the oscilloscope.

Disable LAN Ethernet Connectivity

To disable LAN Ethernet connectivity:



CAUTION. *If you need to restore network connectivity at a later date, make sure to write down all setting values before clearing them.*

1. Push the front-panel **UTILITY** button.
2. Push the **System** lower bezel button repeatedly until you select **I/O**.
3. Push the **USB** lower bezel button.
4. Push the **Disabled (Off Bus)** side bezel button to disable the USB device port.
5. Push the **Ethernet Network Settings** lower bezel button.
6. Push the **Change Instrument Settings** side bezel button.
7. Push the **Clear** lower bezel button to clear all settings.
8. Push the **OK Accept** side bezel button.

The LAN system is disabled and no longer allows data traffic in or out.

Memory Parts List for the DPO4000 Series Instruments

- DPO4104—Acquisition Board, Tektronix part number 672-5843-xx
- DPO4054 and DPO4034—Acquisition Board, Tektronix part number 672-5959-xx
- DPO4032—Acquisition Board, Tektronix part number 672-5960-xx

The memory parts used in the DPO4000 Series oscilloscopes are shown in the following tables.

Table 1: Nonvolatile Memory Parts

Tektronix part number	Reference designator	Description	Use
156-9364-00	U0431	CMOS, EEPROM; 128 X 8, SERIAL; 24C01A, SOIC8	EEPROM: contains PowerPC hardware configuration
156-9573-00	U820, U821, U832, U840	CMOS, FLASH; 16 M X 8 OR 8M X 16, 128 MBIT, 150 NS, 3 V, QFLASH; MT28F128J3FS-15, BGA64	Flash: contains the instrument firmware, calibration constants, reference waveforms, and instrument setups
156-8302-00	U822	CMOS, FLASH; 512 K X 8, 3.0 V, 90 N S, BOTTOM SECTOR; AM29LV040B-90JC, PLCC32	Flash: contains the instrument boot code

Table 2: Volatile Memory Parts

Tektronix part number	Reference designator	Description	Use
167-0233-00	U150*, U160*, U162**, U171**, U451*, U461* U470, U480, U0151*, U0161*, U0170**, U0180**, U0450*, U0460*, U0462, U0471	CMOS, SDRAM, 32 M X 16, 512 MB DDR2, 1.8 V, 333 MHZ (EFFECTIVE 667 MHZ); MT47H32M16FT-3 REBAL	DDR memory: contains waveform acquisition data during operation
156-9193-00	U730, U741, U0731, U0742	CMOS, DDR; 16 MB X 16, 256 M, 10 NS, 2.5 V; MT46V16M16TG-8, TSOP66, DS3	DDR memory: contains instrument code and data during operation
156-9742-00	U542	CMOS, PERIPHERAL; VIDEO ACCELERATOR, INTERNAL SDRAM, XGA, PCI, AGP, ATI M6C16H ,BGA696	Display ASIC: includes SDRAM, which contains display images during operation

* Omitted from Acquisition Boards, Tektronix part numbers 672-5959-xx and 672-5960-xx.

** Omitted from Acquisition Board, Tektronix part number 672-5960-xx.

