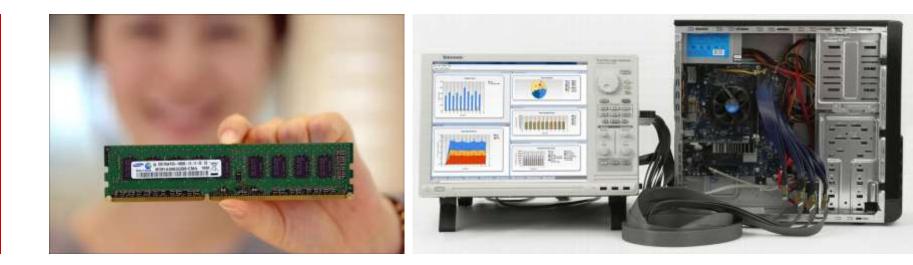
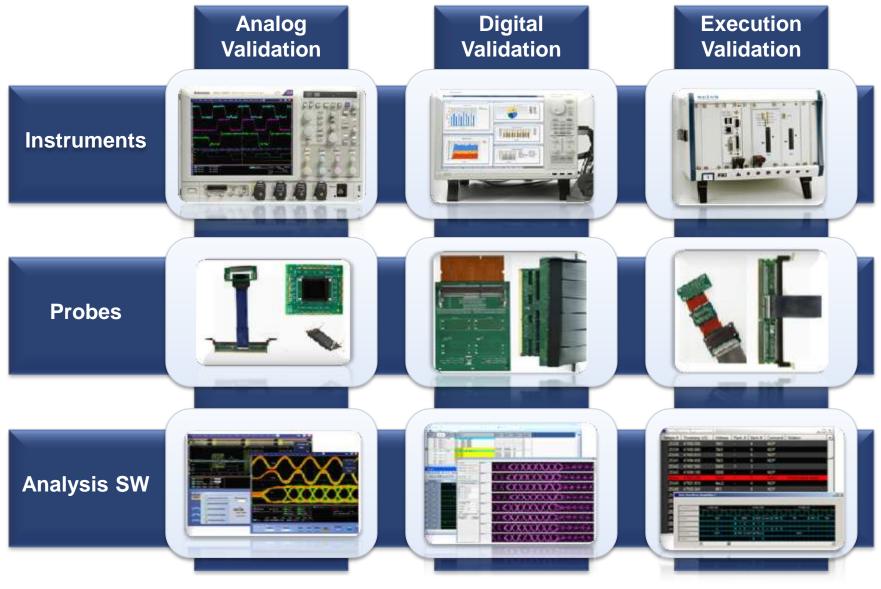
Memory Interface Verification and Debug

Digital Validation Presentation





Memory Validation Continuum



Tektronix[®]

Key differentiators

- Instruments capable of supporting all the DDR3/4 debug and validation needs available
- High Fidelity Probing solutions preserve the analog characteristics and bridge different stages of validation
- A large portfolio of probing solutions for various applications.
 - Slot Interposers for various form factors
 - ACC & ACCD types
 - Socketed and solder down Memory Component Interposers for different package types

Tektron

- Unique capabilities with Industry leading specification for Logic Debug and Protocol validation
 - Analog Mux (quickly scan through all the signals on the DDR bus)
 - 50GHz (20ps) High Speed Timing (MagniVu) across all channels
 - Any channel can be used as a clock*
- Execution / Compliance validation
 - On TLA : CMD/ADDR/DATA Post capture
 - On MCA; CMD/ADDR Real-Time+Post capture
 - Single probe enables TLA, MCA or both simultaneously
- Correlation across different validation phases
 - Common Probing
 - iView and Analog Mux
 - Compliance Analysis common to both TLA and MCA

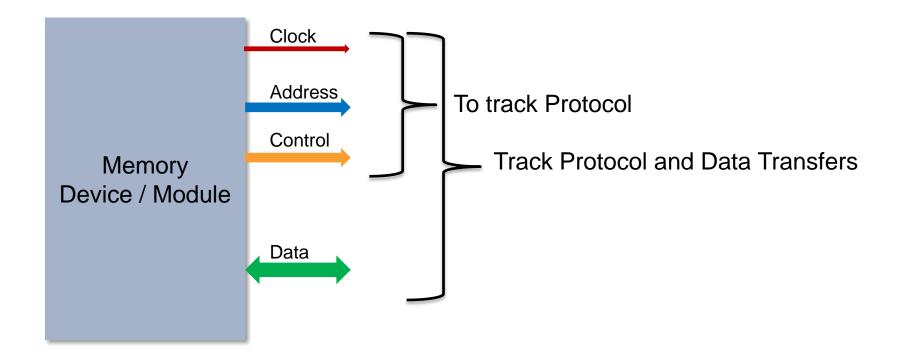
* needs a custom support package

Memory Probing



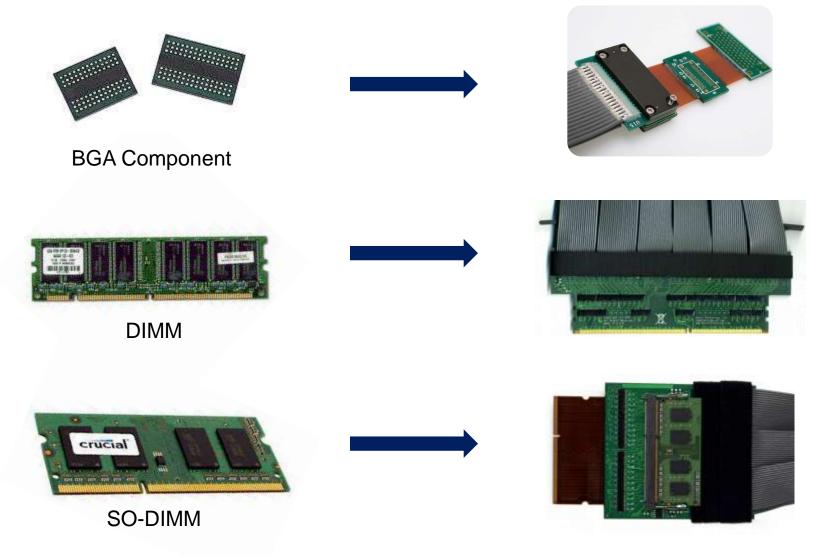


Memory Probing





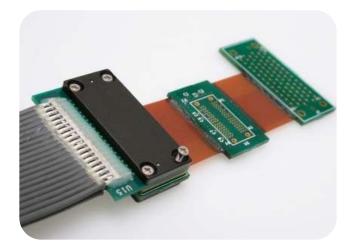
DDR3/4 Memory Form Factors and Probing Solutions

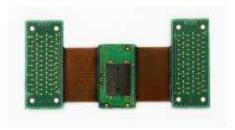




DDR3/4 Memory Component Interposers

- MCI's are used for probing signals from individual Memory Components
- Comes with a Custom Socket that needs to be soldered to Target system
- Quickly swap TLA & oscilloscope interposers on the same target. Quickly move interposers to different target.
- No special footprints or special routing requirements
- Memory Component Interposer Types
 - Logic Analyzer and Oscilloscope
 - Direct Attach or Socketed interposers
 - x4/x8 and x16 Memory Component types

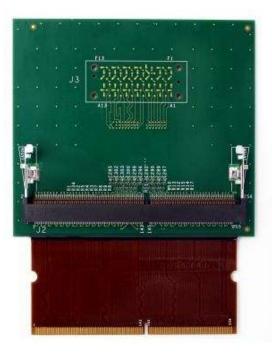






DDR3/4 ACC Interposers

- Protocol / Execution Validation
 - DIMM and SODIMM Interposers
 - Targeted for protocol compliance analysis
 - Automated Setup
 - Use with Nexus Compliance Analysis S/W
 - Compatible with P6960HCD or NEX-PRB1XL







Introducing New DDR3/4 High Speed Interposer

Next Generation DDR3 Probing Technology

Gain Unprecedented Visibility Into Your DDR3/4 Signal Activity





DIMM Interposer

SODIMM Interposer

Collaborative design combining years of Logic Analyzer acquisition and DDR3/4 probing experience between Tektronix and Nexus Technology



New DDR3/4 High Speed Interposer

Next Generation DDR3/4 Probing Technology

- Provides significant performance improvements to DDR3 probing
 - Integrates Tektronix ultra-high performance SiGe Hybrid ASIC technology
 - Compensation for platform trace loss on writes
- Improved interposer input impedance (5.2k to 0.73V)
 - Reduces load on target with minimal effect on bus
 - Provides an accurate representation of the signal on the target
- Enables probing DDR3/4 speeds at 2400MT/s and beyond
- Enables probing lower voltage signals on LVDDR3/4
- Interposers compatible with UDIMM, RDIMM, LRDIMM

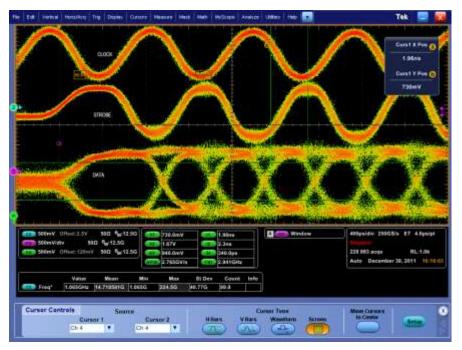


Scope Screenshots at DDR3 2133MT/s – Writes

OLD Interposer

w Exe Vencel Honsilics The Deser C	General Monstern Much Made My	Soge Avenue Laster Hele 🔂	Tek 🧮 🗱
\sim	100	\checkmark	Carat X Pro 0 2 Jána Canat Y Pro 0 1477
	TROL		
-		an an	art. der
	Alline - Mayo	Allen Allen	- Maria Maria M
Softwar Offwar Softwar Mail Mail	10 2721V 22 10 110.5erv 2	28m Trans. 536m Al Gitz	Augusta 1905 and Augusta Augusta 1905 and Augusta 1905 and Augusta
Vider Hain Frieg ¹ 1.057GHz 1.36527970 1		Count Web	
Cursor Controls Source Gursor 1 Ch 4 *	Gunar 3	Vibas Waveform Scree	te Carrer

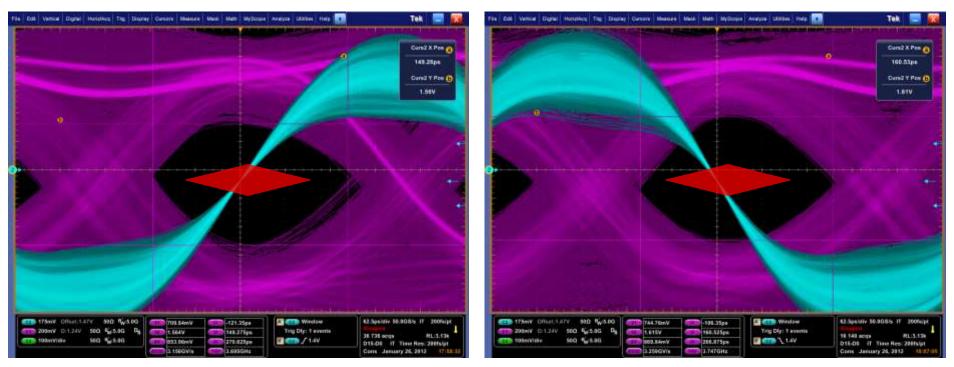
NEW Interposer







Write Data Eye - DDR3 2400MT/s



Write data eye, rising strobe edge, 853mV x 270ps Write data eye, falling strobe edge, 869mV x 266ps



Represents minimum TLA7BB4 eye size, 180ps x 200mV

NOTE: Signals probed via TLA7BB4 analog mux into a 70000C series real time scope.



Scope Screenshots at DDR3 2133MT/s - Reads

OLD Interposer

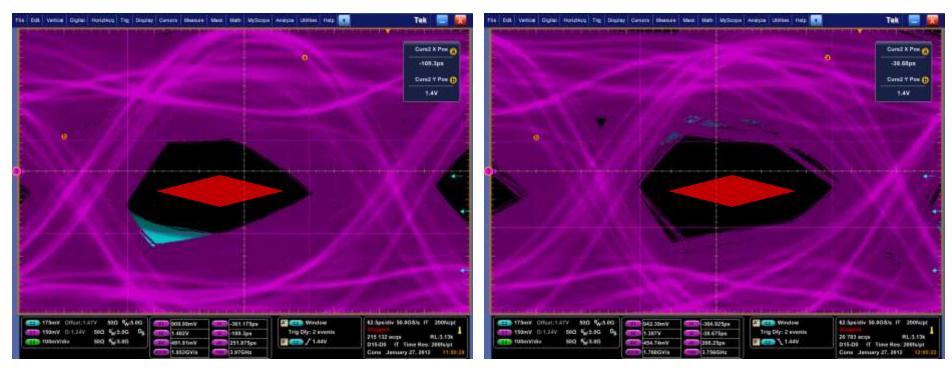
NEW Interposer





Tektronix[®]

Read Data Eye – DDR3 2400MT/s



Read data eye, rising strobe edge, 492mV x 252ps Read data eye, falling strobe edge, 454mV x 266ps



Represents minimum 7BB4 eye size, 180ps x 200mV

NOTE: Signals probed via TLA7BB4 analog mux into a 70000C series real time scope.



TLA

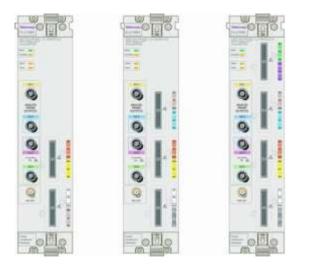




TLA7BBx Logic Analyzer Modules

Proven Technology for Analyzing DDR3 SDRAM

DIGITAL CHARACTERISTICS	TLA7BB2	TLA7BB3	TLA7BB4
Digital Channels	68	102	136
High Speed Timing (MagniVu)	5	50GS/s (20ps	5)
Deep Memory Timing	l	Jp to 6.4GS/	S
State Speed	Up to	1.4GHz/3.0	Gbps
Memory Depth	Standard	2Mb, Maxim	um 64Mb
Probes	All F	68xx and P6	69xx
iCapture (Analog Mux)		3 GHz	

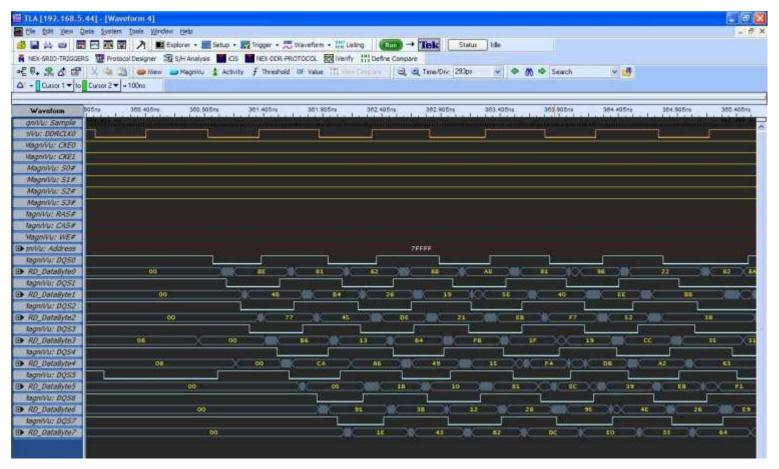


- Preserve investment in TLA7BBx modules
- Enable higher DDR3 speed support with new interposer



MagniVu 20ps (50 GS/s) High Speed timing

Industry Leading Sampling Resolution



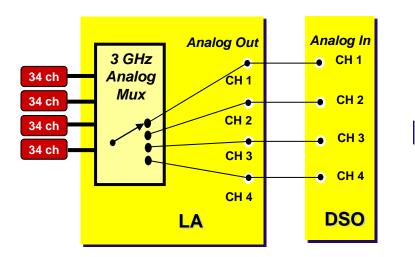
- 50GHz timing analysis on every channel
- Acquired simultaneously and time-correlated with state acquisition data
- Enables acquisition and debug of S/H violations, glitches, and other timing violations
- Reveals fly-by command/address/control bus timing



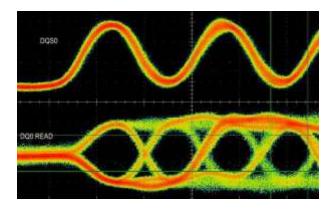
Analog Mux, iCapture

Enables Signal Integrity Troubleshooting





- Unrivaled capability of the TLA that provides single-point digital and analog probing
- No need to separately probe with a scope, as probing done through the interposer
- Walk through all the signals on your DDR bus in less than 15 minutes to review channel behavior and isolate any potential problems
- Quickly perform detailed analog characterization on signals of interest using a scope component interposer

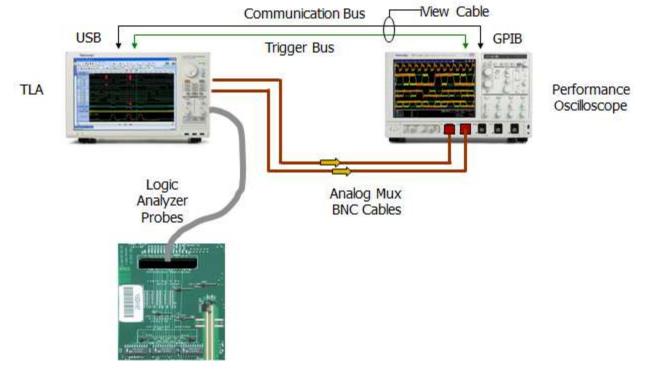




iView

View Correlated Analog & Digital Characteristics in the Same Display

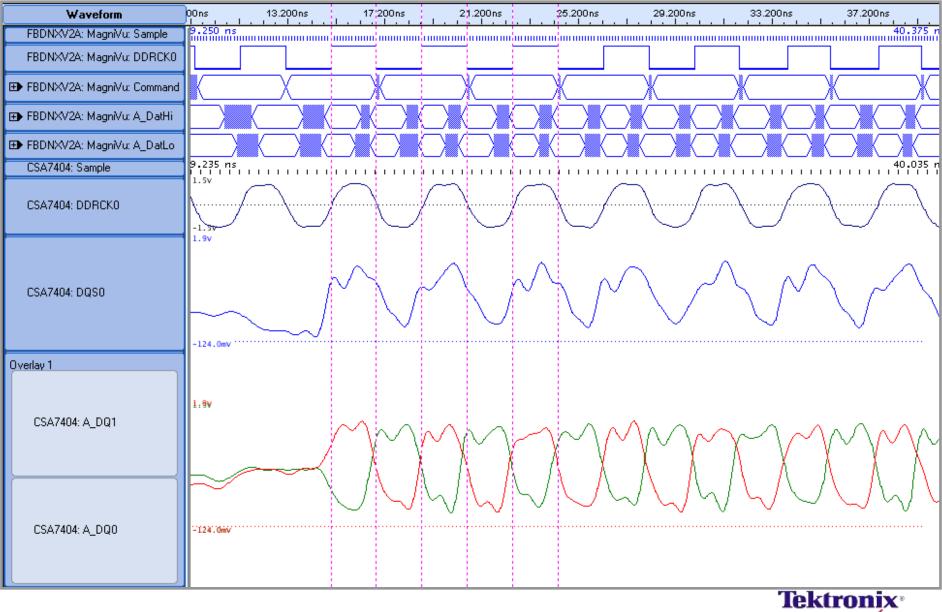
- Unique capability on the TLA that provides time correlated state acquisition, high-speed MagniVu timing acquisition, and analog scope capture results on the same screen.
- Capture events that occur in analog or digital domain through cross triggering
- Enables cross domain analysis by quickly capturing and isolating potential problems





iView

Correlated High-Speed MagniVu Acquisition & Scope Capture Data Example



TLA - Single GUI & Frame Supports 1-6 Buses



Desktop PC motherboard target system

Tektronix[®]

x16 PCI Express 3.0 + DDR3-2133 Solution Shown (2 additional module slots available for probing additional buses; up to 8 frames supported)

TLA Setup and Analysis





TLA - Initial Setup

- New Fast & Easy Setup
 - Quick and easy connection
 - Fast software setup
 - No calibration needed for CMD/ADDR/CTRL
 - Automated and graphical DQ data calibration
 - Up and running acquiring ALL data in 15-30 minutes!
 - Identify problem channels at the same time!



- Load the TLA Software
- Load the Support Package
- Ready to Acquire CMD / ADDR / CTRL!

System 7(A)264-264	
Long PLATE Long PLATE Desta	
Deaths 0a and T	
Open Talka Window 42	
Default Module	
Load Mutuke- Sans Motoka	
Save Nickde 45.	
Load Support Package	
Revenue Properties	
Duplicate Module Corbig	



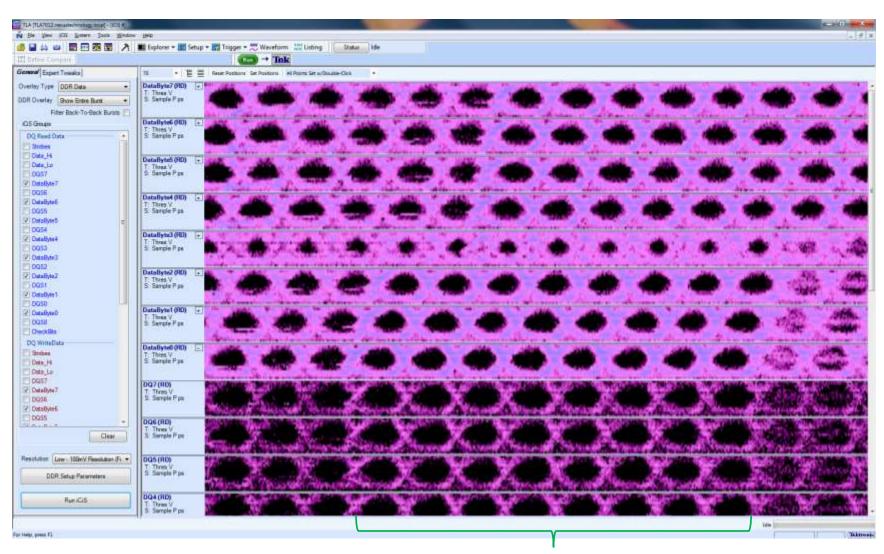
iCis Overview

- Goals of iCiS
 - Make LA memory tuning easier and quicker
 - Less dependency on platform specific DQ valid regions
 - Less dependency on DQS placement
 - Put more power in the users hands
 - Allow both Vth and sample point to be determined at same time
 - Quick check of signal integrity on the memory bus
 - Allow tuning of address and command signals
 - Simultaneous tuning of Read and Write sample points
 - Double mouse click method to set Vth and sample point for all signals
 - Single tuning tool leveraged for DDR3, DDR4, LPDDR2/3
- User control
 - DDR bus parameters
 - Voltage sweep step size
 - Voltage sweep range
 - Which signals to tune
 - Address bit(s)
 - Command bit(s)
 - DQ-byte lane or individual DQ
 - Read & Write, read only, write only



DDR3 Sweep

100mV Resolution, Full Burst Mode / 8 DQ Eyes, Reads



8 valid DQ eyes

Tektronix[®]

DDR3 Sweep

100mV Resolution, Acq Eyes Only Mode / 2 DQ Eyes, Reads

Dafine Company	orbanin . Without .	Trigger ▼ 💥 Wave	and a second sec	Statun Ide							
neraf Expert Tweeks	50 + E 🚍	Reset Posttons Set Postto	na All Painta Set w Double	-Dei •							
ertay Type (DOR Data •	DataByte7 (RD)	-	-	-	-	-	-	and the second	-	a series	-
R Overlay Show Ang Eyes .	S. Serple Ppe	100 million (100 m	and the second s	1000			1	Same -	and the second s	al and	
Filter Back-To-Back Bursts 🧾	DataBytel (RD) +	inter and	-		Links in		(martine)	11000			1000
S Groups	T: Three V S: Sample P pa	A100	Summer Street	Sector 1	A		Sec.	1000		Carlos and Carlos	12165
DQ Read Data	DataByte5 (HD)	-	Contraction of the local division of the loc	1000	-	and the second second				-	
States Date_H	T: Thres V S: Sample P ps	State of the state	Same.	1000	100		- 1	1017) - 190	2	1000	
Detalla	DataByte4 (RD) +										
0057	T. Three V		(100 Contraction of the local section of the local					1210 (201)		(10)	1750
DataByte7 DQS6	S. Sample P ps										
DataByte6	DataByte3 (HD) T. Thres V S. Sample P ps						A	a (d)			
0055	and the second										
DataByte5	DataByte2 (RD) +	-	-	484 4			4000	-	1000	and a state	1000 C
Oxtablyte4	T Three V S. Sample P ps	a series of the						and the second	1000		
0053	DataByte1 (RD)	1000	100 M	-	100 March 100	1000	100		Trans 1		- Cong
OutaByte7 DQS2	T. Thres V S. Sample P pa		100		-	10000			2010	And I The	
DataByte2	DQ15(RD)		-		and the second second	100	-	-	-		
0051	T. Three V 5. Sample Pipe					-	AND ALL A	1000			
DetaByte1 DGS0	DQ 14 (RD)	and a second second		and the second s		All of the local division of the local divis	AND THE LOCAL			And the second sec	
DataBytell	T: Threa V S: Sample Pipe		-			-			-	prove dia	A 429
0058	0013(80)	-110				Barrist -	11. 1 A. 11.		COL AND ST	statute of the local	
DeckSta	T. Thres V S. Sample Pips		-			400- 1		A Martingly	-	1550	1
Q WebsDate			The Maria	The strength	All of the second	the star white	COMPANY AND ADDR	- AND COMPANY	M. Therework	100 Mar 19	Contract of the
Date_H	DQ12(RD) T. Three V		-			400	100 A 400	- C.S.	4823 4	100 A.	14 da
مزولات	T. Three V S. Semple Pipe	and the second	Come Streets	and interest	and and the second	and the second	Distant annual states	- ALL DOOR	and the same	Lotter - Lotter -	Conception of the
DQS7 DataByte7	0Q11(RD)					100 4	100 AV	ALLER.	100	100	
0056	7. Thres V S. Sample P.ps	and all the second second	PIPE ANNAL	All and Post		and the second second	IN STREET		- Contractor	Comp Comp	and the second second
Datallyteli DQSS-	BQ10(RD)	-	-			-	-	-	-		A
*	T: Three V S: Sample P pa	And I want on	interest of the	and the second	- Courts			-		alter we	
Clean	009(80)	and the second	A DECEMBER OF THE OWNER	and the second se	and the state of the	and the second se	AND T LOOK		1000		-
	T. Three V S. Sample Pipe	ALL DOG TO THE OWNER			-	100		-	VILLE T	100	Part Street
iolution Love - 100mV Resolution (Far 🔻	DQ8 (RD)	Contraction of the second	a for the second second			An opposite and the second			annual scatters a		-CEA
DOR Setus Parameters	T Three V S Sample Pips	-				-	10	A HEALT	4000		A Par
	and the second se	te de de la	Stands. Converse	ALL STREET	and the second second	A	AN AN AN	A DOCTORNEL A	B	and the second	C. States
Run /Cr5	DataByteD (RD) + T: Three V S: Sample P pe	-			-			(1000)	100		1
	S: Sarple P pa	100 March 100 Ma	And the second second	A CONTRACTOR OF		and prove the second	State of the second	1000 C	and the second second		State of the second

2 valid DQ eyes

Tektronix[®]

DDR3 Sweep

100mV Resolution, Acq Eyes Only Mode / 2 DQ Eyes, Writes

LATEL2 neuroschnology (acal) - (IC) Be (ICS System Toole)		G
	➤ ■ Explorer * ■ Strip * ■ Tripger * ™ Waveform Status Ide	
ina Company		
Expert Tweaks	E E face Portors Set Portors Set Portors Set Portors	
A STATE OF A	S Sorger ps	-
Type DDR Date •	3. Songle P ps	
vertary Show Acq. Eyes .	DataByth2 (RD) +	
ter Beck-To-Beck Burste 🛅	Than V S Sargie Pa	
rsupe	Datallyth2 (RD)	
Read Date		
nobes ma_H		
n la		
057		-
##Byte7	Data Navad (ND)	-
256 StaBytwii		-
955	DataByte/ (WP)	
eutyre5 e		-
QS4 #xExte4	DQ63(WR)	
Eacyte4 053	Time V 9 Sarple P ps	-
Entyles	of many of the second of many of the	
952	Dog String	
meByte2 QS1	1 Three V S: Songle P gs	
zalitel	DQ61 (WR)	
950	1. Three Y 3. Sergie Pps	
tall/ml	DQset With	
OSI heckBta	1 Thes V 3 Sorgie P as	
WiteDate	the second of se	
ntes	Digas (win)	-
eu,H	1 Three Y 5 Sample P ga	
es_la 057	DQS8 (WR)	
us) auByte7	Three V 3: Sample Fise	
0.96	DQ57/WP	
saByte5	1 Trives V 3 Serple Paul	
955	the second water of the second water of the second of the	
Cear	DODSEWIN) T: Threak Y 9: Sample Pan	
	and the second water of the	
ution Rul - SmV Resolute: +	Database (MR) +	
TOD Day I Day and		
DDR Setup Parameters	Datatiyati (Wile) .	
	They starte Pa	
Rukicis	Datallyter (WP) +	
	Neuroinado//1/2	
and D	line	10
pest FL		

2 valid DQ eyes



TLA Data Analysis

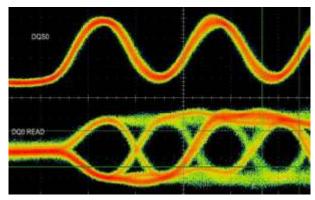


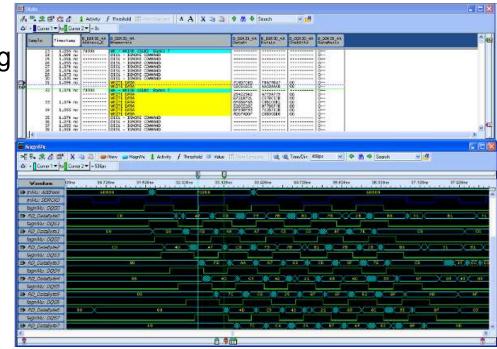


TLA Data Analysis

- State, MagniVu timing, & analog mux at your fingertips
- Compliance analysis tools
 - Fast setup
 - Comprehensive coverage and violation detection

	Min.(ps)	Max.(ps)	Average(ps)	Margin(%)	Spec. v
R2 RI R0	NA	NA	NA	NA	959,880
R2 RI RO		10,273,985	2,106,353		26,250
e re ri <mark>ro</mark>	7,441	878,808	123,227	3.3	7,200
5 R2 R1 R0					5,625
E RZ RI RO	NA	NA	NA	NA	70,200,000
8 R2 R1 R0	1,855	8,189,726	945,496	-85.9	13,125
e re ri <mark>ro</mark>	114,121	8,169,101	6,001,631	3.7	110,000
8 R2 R1 <mark>R0</mark>	42,969	2,839,180		14.6	
e re ri <mark>ro</mark>	42,969	2,839,180	267,945	-99.9	70,200,000
5 R2 R1 <mark>R0</mark>	18,652		20,254		13,125
I EZ RI <mark>RO</mark>	13,066	316,308	170,537	16.1	11,250
2 RI RO					20,625
T RO	37,383	326,054	162,946	10.8	33,750









TLA- Example State / MagniVu Display

- Command / Address / Control
- DQ Read and Write Data
- Up to 64M-sample state memory
- Simultaneous
 50GHz MagniVu timing

ampla Vinesta	B 108 BL 44 Address 0	6_EER 30_44 Wreath 125	0,108 ML 4	S.DOF.30_44 Outaid	Diska the	S.DOR SD. 44 Distantic	
21 1.055 24 1.094	ns 70308	DESL - INTER COLAR Banks I			Vananaa	0	A
26 1.064 26 1.055	15	DESL - IQNORE COMMIND DESL - IQNORE COMMIND	********			0	
21 1.055 24 1.094 24 1.054 26 1.055 27 1.074 29 1.075 29 1.075 20 1.075 20 1.075 20 1.075 20 1.075 20 1.075	na	DESL - DONOR COMMAND DESL - TONORS COMMAND	1000 0 0 10 0 0 0 0		********	0	
29 1.075		DESL - IGNORE COMMAND DESL - IGNORE COMMAND				0	
30 1.035 21 1.094	110	METTE DATA	70407040 C6050605	FEATYEAT ARCOANCO	00	0	
32 1.074	ma 70300	WE WITT COAL Banks 7	A product of the second s		00	0	
52 Y21227		WRITE DATA.	25422542 87218721	A779A779 C\$79C\$79	00	Q	
33 1.074			67086768 E20CE20C	07780778	00	0	
24 1.055		WRITE DATA	BF93EF93 A007A007	76207620 09900880	00	0	
35 1.074 26 1.074 27 1.055 38 1.054	ng ========	DESL - IGNORE COMMAND DESL - IGNORE COMMAND	1.01000000				
37 1.055 38 1.054		DESL - TONDES COMMAND DESL - TONDES COMMAND			+	0	
8. R. C @ 1	and the second se	Men 🖬 Magnilu 🛔 Activity 🖌 Thre	shold Of Value (7) The Car	- 20	4 line/Dic 4	06pr 🖓	🕈 🕅 🕈 Search 🛛 🖌 🎯
F. R & d 1 1 • Curror 1 ★ to 0 0 Waynfoon	ecor 2 🕶 = 536pc	Dras 31.528rw 32.328rv	0 0 	(2, 0	34.728 or	00pr 👾 	• 6 • Search • 6
F. S. & C. C. Curror 1 + to C Waveform Co roW// Address	ecor 2 🕶 = 536pc		0 0		Teologia I I I		• • • • • • • • • • • • • • • • • • •
9. R. S. C. D. • Currer 1 + Inc. D. Wavefloce PNM: Address PNM: ODROID	ecor 2 🕶 = 536pc	Dras 31.528rw 32.328rv	0 0 		Teologia I I I		• 6 • Search • 6
9. R. S. C. D. Currer 1 + Iro D. Wavefloca PMU: Address PMU: SDRCHD Sagniku: SDRCHD	ecor 2 🕶 = 536pc	Pre 21.528rw 32.328re	23.100m	9.920 me	3432818	36.52	◆ ▲ ◆ Search → ▲ Bat 26.320m 37.120m 37.920m 40000
K. S. C. D Current 1 to D Warvefrom 120 Warvefrom	ecor 2 🕶 = 536pc	Dras 31.528rw 32.328rv	20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -	9.920 ne	Teologia I I I		• 6 • Search • 6
8. 8. 6 10 Current * 10 Varentosa 10 VALVADES 10	nor 2 • + 536pt - 30.77 - 60	Bres 21.628res 32.328re	0 00 00 00 000 000 000 000 000 0	9.920 ne	34.728 m	36.52	◆ ▲ ◆ Search → ▲ Bat 26.320m 37.120m 37.920m 40000
	nor 2 • + 536pt - 30.77 - 60	Bras 31.628rw 22.228re	0 00 00 00 000 000 000 000 000 0	3 820 me	34.728 m		Search S
	nor 2 • + 536pt - 30.77 - 60	Bras 31.628rw 22.228re	0 00 00 00 000 000 000 000 000 0	2 820 me 8 7 70 7 70 CT	24728 ar		Search S
Fe Se Carson 1 100 Carson 1 100 Carson 1 100 Wavefloom Carson 1 Carson 1 Carson 1 Souther Carson 1 Carson 1 Carson 1 Carson 1 Souther Carson 1 Carson 1 Carson 1 Carson 1 Souther Carson 1 Carson 1 Carson 1 Carson 1 Souther Carson 1 Carson 1 Carson 1 Carson 1 Souther Carson 1 Carson 1 Carson 1 Carson 1 Souther Carson 1 Carson 1 Carson 1 Carson 1	nor 2 • + 536pt - 30.77 - 60	Pre 21628rw 22.228rv 00 00 00 00 10 10	23 128 res 23 128 res C 20 C 0 C 0 C 0 C 0 C 0 C 0 C 0 C 0	2 820 me 8 7 70 7 70 CT	24728 ar		• • • • • • • • • • • • • • • • • • •
F+ R Canor 1 10 D • Canor 1 10 D D • Canor 1 Canor 1 Canor 1 D • Canor 1 Canor 1 Canor 1 D • Canor 1 Canor 1 Canor 1 Canor 1 • Canor 1 Canor 1 Canor 1 Canor 1 •	nor 2 • + 536pt - 30.77 - 60	Dre 31626rs 32.526rs	23. Com	2.520 me 2.520 me 2.72	34 728 H		• 61 • Search • 62 Bas 26.320xs 27.120xc • 60 31 81 • 75 • 60 31 • 75 • 60 23
F+ S. C C • Canor 1 ★ In C • Canor 1 ★ C C • Canor 2 C C	nor 2 • + 536pt - 30.77 - 60	Pre 21628rw 22.228rv 00 00 00 00 10 10	23 128 res 23 128 res C 20 C 0 C 0 C 0 C 0 C 0 C 0 C 0 C 0	2 820 me 8 7 70 7 70 CT	24728 ar		• • • • • • • • • • • • • • • • • • •
F. S. C. CD Currer 1 * In Currer 1 * In Currer 1 * In Wavenform PNV// Address	nor 2 • + 536pt - 30.77 - 60	Bras 31.628rw 22.328rv 500 50 50 50 50 50 50 50 50 50 50 50 50	23.120 m/s	2 920 mm	34.720 st 0 0 0 70 0 0 0 0 0 0 0 0 0 0 0		• •
** * Cane 1 * 10 D * Cane 1 * 10 D D * Cane 1 * 10 D D * Marchae FP FP D * Marchae FP FP FP * Marchae FP FP FP FP * Marchae FP FP </td <td>nor 2 • + 536pt - 30.77 - 60</td> <td>Dre 31626rs 32.526rs</td> <td>23. Com</td> <td>2 920 mm</td> <td>34 728 H</td> <td></td> <td>• 00 <td< td=""></td<></td>	nor 2 • + 536pt - 30.77 - 60	Dre 31626rs 32.526rs	23. Com	2 920 mm	34 728 H		• 00 • 00 <td< td=""></td<>
• S. 6 G • Caser 1 * 10 G • Som Re: 0000 G Som Re: 0000 G G Som Re: 0000 G G SogmRe: 0000 G G	nor 2 • + 536pt - 30.77 - 60	Dre 31626rs 32.326rs	23 (Q)	3.820 Her.	34 728 x	255 52 78 00 00 00 00 00 00 00 00 00 00 00 00 00	• M • Search • M Bss 26.320xs 27.120xc 37.520xc • 28 80 31 81 • 28 80 31 81 • 28 80 31 81 • 28 80 31 81 • 28 80 31 81 • 28 80 31 81 • 28 80 75 61 • 28 80 73 61 • 28 80 73 61 • 76 C0 42 62 • 60 33 07 63 43
▼ S Carsor 3 ★ 10 D ■ Carsor 3 ★ 10 D D ■ MARCONS S S S S ■ D Ostadyned S S S S #D Dostadyned S	nor 2 • + 536pt - 30.77 - 60	Bras 31.628rw 22.328rv 500 50 50 50 50 50 50 50 50 50 50 50 50	23.120 m/s	3.820 Her.	34.720 st 0 0 0 70 0 0 0 0 0 0 0 0 0 0 0	255 52 78 00 00 00 00 00 00 00 00 00 00 00 00 00	• 0. • Search • 0. bas 26.220xs 27.120xs 27.520xs • 00000 • 00000 • 00000 • 00000 • 28 80 • 31 81 • 70 • 60 • 31 81 • 70 • 60 • 33 • 6 • 70 • 60 • 33 • 6 • 70 • 60 • 73 • 6 • 70 • 60 • 73 • 74
F+ R. 6. 50 • Canor 1 * 10 • Canor 1 * 10 <tr< td=""><td>ecce 2 ♥ + 536pe +</td><td>Bine 314.28rs 22.226rs 300 60 60 60 60 60 60</td><td>10 33.100 500 500 500 500 500 500 500</td><td>2.201sc 2.201sc 2.20 2.20 2.20 2.20 2.00 2.00 2.00 2.0</td><td></td><td></td><td>• •</td></tr<>	ecce 2 ♥ + 536pe +	Bine 314.28rs 22.226rs 300 60 60 60 60 60 60	10 33.100 500 500 500 500 500 500 500	2.201sc 2.201sc 2.20 2.20 2.20 2.20 2.00 2.00 2.00 2.0			• •
V • Luna 1 • ID C Wavefloes >	nor 2 • + 536pt - 30.77 - 60	Dre 31626rs 32.326rs	23 (Q)	3.820 Her.	34 728 x	255 52 78 00 00 00 00 00 00 00 00 00 00 00 00 00	• M • Search • M Bss 26.320xs 27.120xc 37.520xc • 28 80 31 81 • 28 80 31 81 • 28 80 31 81 • 28 80 31 81 • 28 80 31 81 • 28 80 31 81 • 28 80 75 61 • 28 80 73 61 • 28 80 73 61 • 76 C0 42 62 • 60 33 07 63 43
9. St. C. C. C. Vernices mil/u: Address MD, Dateleytes MD, Dateleytes MD, Dateleytes RD, Dateleytes MD, Dateleytes	ecce 2 ♥ + 536pe +	Bine 314.28rs 22.226rs 300 60 60 60 60 60 60	10 33.100 500 500 500 500 500 500 500	2.201sc 2.201sc 2.20 2.20 2.20 2.20 2.00 2.00 2.00 2.0			• •

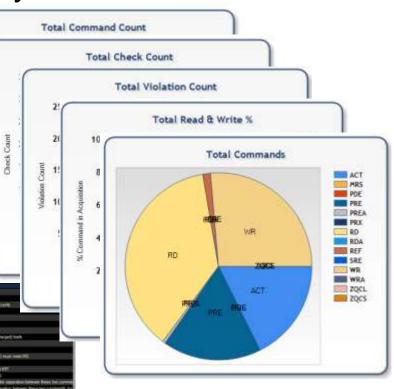
Tektronix[®]

Acquired Data - Compliance Analysis

Command Count

- Automated acquisition and measurement for analysis of intermittent or infrequent events
- Flexible & easy to configure
- Analysis of over 43 JEDEC compliance parameters
- Powerful in-application graphical and tabular analysis results

math	on Parameters					-	-		-	the second s	
at Non		Dearrow	n Melaferr	Theres.		Marget)	Merriger	deres geige	(Margin(W)	April: Vallengel	
100	CAD wall OFF Res			All and a					Contraction of the		Report & mark Aven INCRUITS comment out the accuracy and the end of the second
- 4.45	DEVICTIN	-						-	1		Descented stack. A Sell Fullyon Serie (SFE) comment can led accor on an active sent.
	MIS work? Reit						- 100		140 M		Degended check. As Mean Register Set (MCD) commend part and occur an an antime tank.
	ROOM CE dans ME							-	100.0		Descented much, A read 21D or 7024 on wells 3-17 or 1874, someward tee rest accord Average rest. Mill capits
	CMD elei/O Paek		-			Ç	14	16	14		Separated check. A new SCP2025 command can set not at a parented stort rank
	REALINE WATER Fire						1.0	14	1.00	u.	Regardial check. A real PEAC or serie (VPEAE constraint carried occur during bank inform.
	ACTIVE WHICH BAR					2	.00	-00	11	-	Segandal check. A activate IACT or rebeats (FET) command can not occur on all active lands.
	RF watchfast										beganter desk Alehant (HDF) comministered incomer er er beine kant titel is inseleg in antrog
	ROOGN/ROOM SHITT THIS			_		2		R.	1	16	Departial dept. A read (1000) is write (14932) contract part on excer therapid an event of precharged them
-						2 M 10	HOME OF	1000		171884	The second line between any feat activity (4,7) conservable to the same limit must pred trible: Prese: Some that (POXPRD) in any odd converged (PREAD/MPACTMRD) must read 00*
10	POX has had	_				£	44	-	14	¢.80	Set Rebot Car SWIND transport on search provide a labor CL PECARE ALTERCIPE must neer 20
11	aut a	111					No. 1	and the statement	11		The research the between the proved IC-T conversion that and (201)
14.1	MOA Text Selle		_						11.4	10.00	However, the second is a set of the second in the second s
- 22	THE Serve SPE	-				. i	÷		-		Sequences that have a finite comment of the contract of the part of the head of \$200 to \$200 to \$200 to \$200 to
	STE Searcher from Thirds		_				-	44	-	(Inter-	If the test valid comment incomend before a self-inductive entry CDFE units and prochange PRECAL than the organization formum
11	SPE Separate Port ALE					8 - i -	- R	- T		100	The last still commit moving board a service of the service of the provided of the second of the sec
-	the backet in the lat							-		100	The last unit reveals formed being a self-stand over (ME) and a strong OCT. For the second in bottom has
	STE Separate the sets						1.0				If the had which conversely received before a set index at any CPED was a much require well MED, then the required before the
-	SPE Searchin See (18)	-		_					100	100	If the fact and consume records factor a set of sets of a factor of a factor factor for the regarding factors factor for
71	SPE Separation from while						10			1.00	The last wild comment received before a self-refract entry (572) and a write whole precharge (5752, then The segment
11.	SPE Swanter Hot POCK								100	HAR	The last valid conversed received before a well-reliant sales (DFE) was a read (FDV)?, that the separation between these
	APT Tank					8 i -				ALC: NO.	However, they have not made register and (HTT), command in any other orbit command that is not an APT, must now HTT).
24.00	Without .								1.00		Munset has being to the aut and advances how regime on (MS) common cast and PMS
- 20	LINE I CONTRACTOR						100	1.0	-	100	The training a present of lots of self-self-self (CODI).
10	Miller		100			4.00	2.56.00	127.00		1441	The memory around at two determination (VFUI) contravels many reset 6.2.2
27	NO WATER IMPORT						tir and	100	dit.	100	The memory ensured that between and PCC and write (off-b) to ensure the track that the PPC's
	POX Bin Ent					1			1.00	1000	Fromer Canada Sale (FOXOFICE) They East (1975), 412 for land in road (1925)); conversion received received (1925).
20	Fuel DLI Paser ISTOON						14		100		Past (1504) rest vel CLU Are und
	OF STREET, Same	100	100	10000		1 1 Inc.	LOBOT		11	1000	The remove encoded from between only CME and used DESAU commands must here MonTE
11	RU Save	100	11			÷	LL MUT THE		412	Aller	The newsyn around of time futureser read (POUS) comments must more (CCD
22.1	and Test Mile	100				10.0	THE CO.	-	1.000		The memory around all one is not must play to answer some PCE to PCO must and PCAse
21	APTI Lines Max	-					12.0		a second	The second second	The maximum entrust of time to task car what is presenteen (PDE to PDE) to PDE to PDE
34	PREDU Live Settle	11.04	100				C INCIDENTIAL			111.00	Human the horis PRUM commutes are said command at the care belt real time.
	after Tores						1 LTL DO	All PROPERTY AND INCOME.			The names around it loss in retaint must user BTC
100	sect finality	ALC: N	1				COLUMN TO A	THE RE	-212	March 1	The memory accurated have a bell must also also (ALT to PREAD must need this time.
21	satif free Max	1122				10.00	12000		the second		The maximum evolution frame is bank our other patient UKCT to PREAM must meet PREAM
	ACT IN RECORD MORE	ALL DO				100	-	-	- 24	110mg	The reservest armost of the form and take (ACT) constant to a teal (ROCC) or sets (MCC) constant read near \$225
21	NO IN PRESS				-						The manual second of time has a read (72) conversed to a precharge (PROA) conversal must need table
-	REARCT					1000	ing page 1	TEAM		1114	The reserves ansated little little is read (VC) command is a schools 34(1) contrainit read year) MMA
41	Mitty-Hotsup	16.107	1.14			1 1 TO		54.556	4.6	1.00	The norman arrest of this hon a wris (VE) command to a prechage (VE)(4) constant must their
41	Winds? 1					1.1	HOEAH	COLUMN 1	1962		The meanury arrests of time bars is note (TPT) communities a balloude (DCT) contrasts must filled.
43	Didle Signal Adar (1), Name	18					and the	14	lan.	- 1.0	Fank CHDr must remain Sight DCLIF lines where a DEL Trends
_						-					
1000	A CONTRACTOR OF									2017	NAME AND ADDRESS OF A DRESS OF A D
	Acquisition Details	22.000	NON-THE O			STATISTICS.	NOR DOWN	ALL REAL PROPERTY.	MOACH INCOM		Bind Vislatur Details
i Ban	e Time 0	Kanana .	Vicleman in	and the second second		Minipil 3	designit . Ar	errageiget 3	langle(Wei - 2e	· · · · · · · · · · · · · · · · · · ·	Environment Rank Rank Othership Cond. Valuering: MarglarMit



	Min.(ps)	Max.(ps)	Average(ps)	Margin(%)	Spec. v
R2 R1 R0	NA	NA	NA	NA	959,880
8 R2 R1 R0		10,273,985	2,106,353		26,250
B R2 R1 <mark>R0</mark>	7,441	878,808	123,227	3.3	7,200
5 R2 R1 R0					5,625
3 R2 R1 R0	NA	NA	NA	NA	70,200,000
3 R2 R1 R0	1,855	8,189,726	945,496	-85.9	13,125
B R2 R1 <mark>R0</mark>	114,121	8,169,101	6,001,631	3.7	110,000
8 R2 R1 <mark>R0</mark>	42,969	2,839,180			37,500
B R2 R1 <mark>R0</mark>	42,969	2,839,180	267,945	-99.9	70,200,000
5 R2 R1 <mark>R0</mark>			20,254		13,125
RE RI RO	13,066	316,308	170,537	16.1	11,250
2 R1 R0					20,625
RO	37,383	326,054	162,946	10.8	33,750



- Zero calibration needed
- Build c issues
- Automa
- Automa

	eeded					No.	ale in the	tallin Carl	211			0 0 0
						R Se	Compliance Te	and and all the same			· Att Del	
Build custom test issues	runs to	o zero in on	com	olianc	Э	2 8 8 8	Compliance I Snable Comp Set, None (2) 1 CMD	S.91			Bun Canteal Bun Canteal Bun Canteal Bundaria Details Concepts & Analyse 10	New of the second se
Automated acquis	sition						(9) a HIRS (9) 4 RD9	wsACT Rask WRACtions wsPD Rask	1		Aquire & Analyze Acquire & Analyze	10 Totes
Automated analys	sis						(8) 7. ACT.	o/WROQ winke REF winACT B winACT Bank			 Rue Unit Any Datas Acquisition Data Do Not Seen 	Volution
Memory controller	N DOR Compliance		eters	A DDf Covelan	Arielynes - Correct	3	(2) 3 RD9 (2) 12 809 (2) 11 PD1 (2) 12 90	Cried Elec	000		Seve Al Acquistione	ntarring Ottical Volations
Compliance Setue: of Start Run III Check Acq. Marrory	and the second se	tage (gil Start Ruer, 🔝 Check Acq. Memory (c= 1.)	1000	Compliance S	nde Windew fog 23 Start fan		(R) 55 AU	7 ((A) Name Settle / Before SPIE E Separation from	i.		Menury	(res.)
Nota R_0000_1A • 204 Sear 0045213 • 68. Specific riner 0255213A. • 68. Condexes Tell 46. 68. 68.	UDP Seas Speed in (Per Conjures Te	008 System Server System Name 0005 System 0005 1000 0007 System 0009 System 0000 System 0000 System 0000 System 0000 System 0000 System 0	• Facil Wess 8 • • 7 • • • Act	A Served and	P. DORUD_14 DORUD2121 (DORUD2122) a Tentog Pasamata Mere 20040-2112), 2	6	(2) 17 540 (2) 18 540 (2) 18 540 (2) 20 540	E Separation Hun E Separation Hun E Separation Hun E Separation Hun	ACT D ACT D ARS D		67108864	el deck result to store per bank al velations to display (per display
		Crue Selection SU2 Main - Toor Addressed in Spoon Main - Data tool (CO) Mathemany Langer Mathemany Langer Cold Heaping Solution visit	A → CAI CAI	 Косо 	4 1540 512 25 38 4 15 5 70205 36 005 1 1 70205		1266 90 Ga 10 Ga 20 Ga 20 Fib Fib Fib Fib		007012 013 050700 05070 05070 05070 05070 05070 05070	Jil Derved Derved Derved Derved Derved Derved Derved		
	AND DECK	and the second se		6.41.00								

DDR. Compliance Analyzer - Connected TLA S&D21.0 Els your Josh gindow Help Compliance Setup 168 Start Fun 100 Check Acq Monory 100000 (i) and a

- Quickly navigate through multiple acquisitions
- Zero in on compliance problems right inside a listing or waveform window
- Listing and waveform windows with compliance violations built in
- Add cursors, jump to violations, see min/max measurements, lock data windows and more!

Consulting	on Parameters										file second s
tel No.		from the	Visitation	Trains.		Marcher()	Mexiliant	descent in	T. Margariter	Terri, Yalangeo	Description
100	CAD and UNIT Page								and the second se	100	Regardia check Aven NOPCES commerciale net avan de s sell reference celle
	DE HORT THE					1					Decement clients A Swit Party of Comp (2012) commend uses not accord on an active sets.
	Million Million	-				1.0	and the		1.0		Insurantial check. As Must Register Set (MCC) serviced can not occur as an extent tark.
- 400	POLICY/CK-during MPT									-	Descent deck Area 100 a 204 a sets 3/0 a 105 percent to related Area ret WO cold
	CME) weePO Flook										Industrial check. A num-MCPDIS command can net occur or a present down task
	POST POST working here										Sequential oberts A read (PDAC or series POPOL) constrained are not accept theme thereing bank whereas
	ACTIVE WARCH BAR					1.0					Sequential check, A activate UKT) or refresh (PET) conversed are not occur as what extended.
	RU watching										beginning short A tabash (MP) command tan ed torse al an attrict lack ted is insiding of arting
	ROOG/WHOO at sPITE Tave					19					Departial class. A read (10030) or write (14934) commond claricot coor during on an investive givenhaged that
	HAT					0.25.01	HOURS	and a			The second contract from the contract of the automatic (CT) commands to the come with must prest fitting
11	PCO: Free: Truet		-			144	144	-	140	\$.80	Prover, Cover, End (PCCCPPD) to any valid conversed (PPE), URLP 32: 738852, must read 00*.
- 11 11	9014	-						-	1.1.646	10.00	Set Pakes Col STANYO & an University of Seture 10. 2010 AUG AUG AUG AUG AUG AUG
11	467	1.001	-					100105		1.00	The nearran bire between two actives (ICT) conversity road and (IPD)
41	PROATING Select	-							- 561	100 0	Harry the fun a PELL community are relationships be pare rest (MELCEC must next TT)
1	NEF Seture SHE						96	5.6	140	10	Expended cleak. At least way related. (FS7) command is segared between and wheehed (SRX to (FE)).
8 .	STE Separation from PTROAL						100	146		1000	If the heat valid command received before a self-releast entry (DFE) was any problem (PTE) 12 then the repersion fermionic flows from the
	SFE Separative Horn PEF		-				198		141	1010	The last valid conversed received before a self-velocit asky (SFE) was a rational (FEF), then the separation between these the conversed
	UR banan bei 27									100	The bal with prevent internal being a cell intent way (ME) and a strong (XCI). For the superiors between basis between being
1	SVE Sepretarities #FE						44		La	11.000	The fast said comment recorded before a self-releast army (DPD) was a most require set(MPD) than the sequention belows there in
- 20	SPE Searchin Low (SP)			-					Contraction of the local division of the loc		If the field odd conversed research before a self-self-active (1945) over a selfer (1945), then the separation the best services the
10	SPE Search Hon HOUR	-					14	-	14	SHEET.	He lad valid convert received before 4 and refract entry (SPE) are a write wight greatery (VED). Her the regardion behaves the
	And Party and									1100	The fait satisfactorial control before a well what any DEC was a read (KDV), that the topologic because been less control of Receiver long has an investment of RETs invested in one offer only control of the to the RET must need RETs.
24.0	Million .	-							-	11.000	Harvar has been a reading the set and advected have been and 2000 commonly read and 2000.
- 51	Credit Low					÷.,				100	The research sector is the fact and advected read need CXCVP
10	Miller	-				480	-				The reserves are used of the between while Tell Up of Party II. In an inset CCTL
1	IC SHALL MAN					100	127 8 10	100	411	100	The neuronal amount of the between and UPCs and antis (VPS to conversity and next Ref.)
-	POX Sim Ent	-								1000	From Sea by (FOCFIC) the Del SHI ATTA Lat is not FICE on one was not feel (FCE).
- 20	Face DLI Paser to FOXU						100			100	Part (FGOG) Part and CLL/ Are want
	PHI IS HERE SHORE	100		-		11.00	LOBOTO		14	1000	The summary annual of time between only CVFC and read (RCMC) commands must here REVTE
11	NU form		811			1.0	TALINA TRA	I I I I I I I	12	A	The neuroph propert of time features read (2008) commands road rever (CCD
100	all Tree Big	10					THE COL		1.000		The manufacture areas of done is not must story to prove must UVLE to FOXy evant west UVLEss
11	off the flat	-					2.5		1.0	The second second	The supervise events of the band our site is greater than 1750 in 1750 and read PSC-sec.
24.1	PRODUZINE Gette	11.04	1000				THE DOCTOR			100.00	Human time from a PREAL community are valid command on the come best must been RPF.
	STAT THE	1-11				1000	1 Division	COLUMN TWO IS NOT	11	the second second	The number answer of land to establish read using 4010.
10	DICT Time Mar.	ALC: NO.				10.0	A DATE OF	THE R.	-21	Mark .	The minimum empirity have a best metricle and reacting PREASE must need the Demi
11	section the	1125				1000	Constant of		the second	111 100	The maximum evenest of time is bank our day pulses (UCT to PTEAM must next PATIEnts)
	ACT IN PEODON/ROAL	11.00					-	10 Aug	- 21	110mg	The reservant arritery of time from a particular (ACT) increment to a teach (ROOC) or some CVPUID surround read need \$228.0
-	NO IN PRESS	1.0				1.0	1,00.010	10.000	42.1	1.160	The reserved second of time have a read (202) conversed to a precision (252)(4) conversal must read table
-	REART						Million .	TEMA		11.194	The name ansat of the live a real (KD commond is a activate SACT) constant real real ARTA
41	Mitto History	16.357	1.1			1000	1000	51.598	4.6	1144	The newspark areast of time from a write YoFE command to a precharge (WECA) command must revel SW/P
41	WinAS?					120.0	THORAH !!	Catholie III	1.444		The memory arready of time from a noise (ME) community a solution (ACT) command must invest MAA.
43	Dida Signal Adm (01) Report				-	1. 1					Rank CHDr mutriaman high CLLR line after a TLL Next.
						-					
1.55	Accuration Details				_	-				the second	Black Volutions Dotads
		20 N N		-	-	A POPULATION OF	ACCOUNTS ON A	ALC: NO. OF THE OWNER.	ALCOST 111		
a Rat	* Time O	Krassani U	heberbaan it	10.00		Harpi A	Excupit N	erregeiget 3	dargeetts - 2e	T B hangin ?	Encourage Rank Rook Officiality Cast Valueport Narghettin

Data Living, Acquisito	m3				TANK MAD	141		
engle # Timestamp (rd)	Address	Fank #	Bek F	Conmend Volation		- *		
913469 929774-100	10		7	NOP				
912470 929775 500	1045			NOP				
812472 825777.600	305		- 1	NOP				
912473 929778,200	\$9b0	đ	3	100				
112474 829779.656	106.0		1	MOF				
912475 829780 300			1	NOP				
912475 929781 655			2	NOP				
812477 829782.290			1	NOP				
912428 929783.600			7	NOF				
112479 829764 300			1	NOF NOF				
W12480 828/85 700				NOP NOP				
112411 \$29764.500 112402 \$29767.700	-		7	NOF				
112483 525788 400		-	ú –	hor				
112404 323785 600	-	-	÷	NOF				
12425 529750 400			÷.	TOP				
112430 323701 000			Ť.	NOT				
CONTRACTOR OF THE OWNER.	_	_	- i	and a				
						177		
Data Weistory, Acque Descarge I/D Clock Atthew Rate # Bank #	029775-500 X 3045 + X X 1	×339	EX B				197 (B)	

Tektron

Multi-acquisition data management

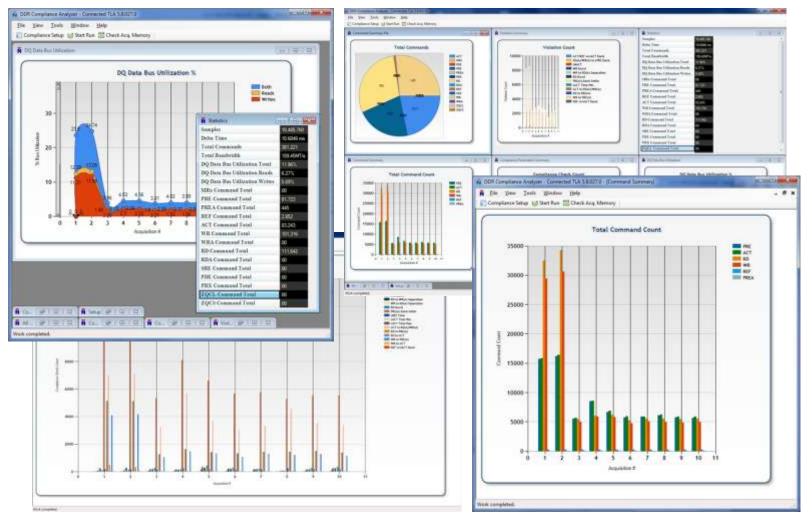
• Example display of multiple acquisitions at once

	🕺 🕺 Data Listing, Acquisition 6	N Data Listing, Acquisition 2	0.0
	Sample # Timestamp (nS) Address Rank # Bank # Command Volation *	Sample # Timestamp (nS) Address Rank # Bank #	Command Violation
Timestano (n5) 198556.000 198560.700	723790 737511.300 IIII - 7 NOP 723791 737511.900 IIII - 7 NOP	194873 198554.600 1545 - 5 154874 198556.000 1545 0 5	NOP
	723792 737513.300 HI - 7 NOP		NOP
Address 1545 X HI X 1605	723793 737513.900 0140 - 6 NOP	194876 198558.000 HH - 7	NOP
	723794 737515 400 0140 0 6 723795 737515 900 0140 5 NOP		NOP
Rock II (5 X 7 X 1	723795 737515 900 0140 5 NOP 723796 737517.400 IIII - 7 NOP		NOP
	723797 737518.000 🗰 · 7 NOP -		NOP
Command NOP X ACT X NOP X ACT X			
Data Waveform, Acquisition 1	Data Listing, Acquisition 5	Tota Listing, Acquisition 10	60
Let 102.00	Sample # Timestamp (nS) Address Rank # Bank # Command Volation		Command Wolation
			NOR
Timestarp (15) 94556 150 94561 640	436131 444388 200 01a8 - 3 NOP	566046 576780.100 1ar0 0 5	A.T.
	436132 444389 600 IIII - 7 NOP 436133 444390 300 0150 - 3 NOP	566047 575780 700 1df8 - 7 566048 576782 100 0088 0 3	NOP
Address 0000 X 3# X 00	436134 444391 700 0160 0 3 100		NOP
Raik # X A X A X A X A X A X A X A X A X A X	436135 444392 300 0160 - 3 NOP	566050 576784.100 HH - 7	NOP
Bark 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	436136 444393 700 IIII - 7 NOP 436137 444394 300 IIII - 7 NOP	566051 576784.700 0090 - 1 566052 575786.200 0090 0 1	NOP
Command NOP: XPREX NOP.	438137 444334 300 mm	000002-075786-200 0000 0 1	
Websiter			
Data Listing, Acquisition 8 🛛 😨 😨		Data Listing, Acquisition 9	
ample # Timestamp (nS) Address Rank # Bank # Command Volation * 222335 225554.600 mm - 7 NOP	* Sample # Timestamp (nS) Address Rank # Bank # Command Volation * 491806 501124.800 19ec 5 NOP	Sample # Timestamp (nS) Address Rank # Bank #	Command Violation
222336 226556 000 mm - 7 NOP	491809 501124 800 19ec 0 5 Mile	519644 525501 400 0200 - 3 519645 529502.000 0200 0 3	N/F
222337 226556 600 MI - 7 NOP	491808 501126 800 19ec - 5 NOP	519646 529503.400 0200 - 3	NOP
222338 226558.000 0390 0 NOP	491809 501127.500 HH - 7 NOP 491810 501128.900 HH - 7 NOP		NOP
222340 226560.000 0390 · 0 NOP	491810 501128 900 IIII - 7 NOP 491811 501129 500 IIII - 7 NOP	and the second sec	WR
222341 226560.700 2c51 - 2 NOP	491812 501130.900 19ec - 3 NOP	519650 529607.600 0230 - 5	NOP
222342 226562.100 2e51 0 2	- 491813 501131 600 19ec 0 3 FRE -	519651 529508 200 mm - 7	NOP
Data Listing, Acquisition 7 👘 🔂 🔂	The second	Tata Listing, Acquisition 1	
mple # Timestamp (n5) Address Rank # Bank # Command Violation * 185559 1891122008 mil - 7 NOP	* Sample # Timestamp (n5) Address Rank # Bank # Command Volation * 435136 444421100 03a8 - 7 NOP	Sample # Timestamp (nS) Address Rank # Bank # 92094 94555530 mm - 7	Command Violation
	436137 444423.800 0368 0 7 WB		NOP
185588 189113.600 MM - 7 NOP	436138 444425.200 03a8 · 7 NOP	92796 94557 560 🛲 - 7	NOP
185589 189114 300 HT - 7 NOP	436139 444425 800 IIII - 7 NOP		NOP
		02700 04550 500 00-0	
185589 189114 300 mm - 7 NOP	436140 444427.200 🖮 - 7 NOP	92756 54559.590 08+8 - 4	NOP ME WENTERED
185583 189114.300 HT - 7 NOP 185550 189115.700 HDc - 6 NOP	436140 444427.200 🕮 - 7 NOP	92800 94561 640 0000 · 4	NOP ME WILL RELAX

Tektronix

Work completed

Example displays of statistics and charts



Tektronix*

Thank You



