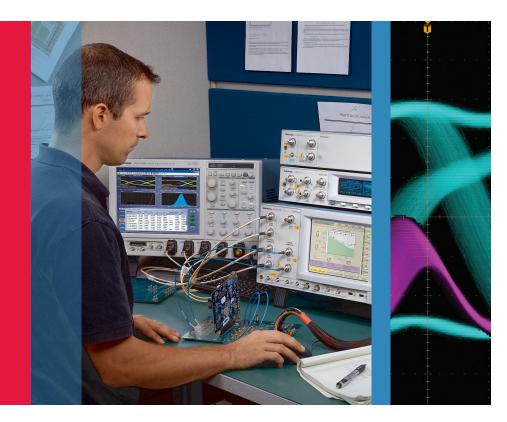
2012 Product Catalog

Test & Measurement Solutions







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Tektronix: The World's Standard in Oscilloscopes

8 out of 10 engineers around the world trust Tektronix to help them speed debug and test of tomorrow's designs. With the broadest portfolio of scopes available, the richest set of product features, the most extensive analysis capability and our award-winning service and support, Tektronix has the right oscilloscope to meet your need. Innovators like you, committed to using the best, have made Tektronix the dominant provider of oscilloscopes around the world for more than 65 years.

- Basic Oscilloscopes for lowest cost signal visualization and troubleshooting.
- Bench Oscilloscopes up to 1 GHz bandwidth for debug and analysis of embedded system designs with analog, digital, RF, and serial signals.
- Performance Oscilloscopes for analysis, characterization and automated compliance test of 1st and 2nd generation serial data standards, memory and RF devices including up to 33 GHz bandwidth for 3rd generation serial data standards and the fastest optical and electrical technologies.

Tektronix Online:

www.tektronix.com

Tektronix website is a reliable resource for the latest information on products, application and technology solutions, with online selection tools to guide you to the appropriate product to fulfill your need. You will also find a library of educational materials to help you master the challenges of your application and get the best out of your tools, including Primers, How-To Videos and Webinars.

Technical Content

Enhance your understanding of technology, application and product with the latest resources covering fundamentals and advanced topics.

www.tektronix.com/techpapers

Service

- Online look-up Tool
- Calibration

www.tektronix.com/service

MyTekResources

- Download Manuals
- Access to Software and Drivers
- Check on Order Status
- Review Service Status
- My Product Support
- Webinars

www.tektronix.com/mytek

Product Demos

Test-drive products on-line.

www.tektronix.com

Webinars

Learn the latest tips and tricks to address your application challenges.

www.tektronix.com/tutorials

Videos

See and hear expert demonstrations and discussions. www.tektronix.com

Tektronix RSS Feeds

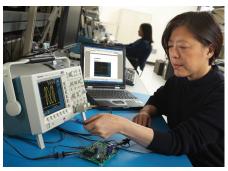
RSS

All the latest information when you want it.

www.tektronix.com/rss







TDS2000C Series TPS2000 Series TDS3000C Series

Basic Oscilloscope Product Selection

To accurately visualize the intricate details of fast changing signals, you need an oscilloscope with uncompromised performance. Tektronix basic oscilloscopes feature digital real-time sampling with at least x5 oversampling on all channels, all the time, to precisely capture today's complex signals.

| | TDS1000C-EDU | TDS2000C | TPS2000 | THS3000 | TDS3000C |
|-------------------------------|--|--|---|--|---|
| Channels | 2 | 2, 4 | 2, 4 (isolated) | 4 (isolated) | 2, 4 |
| Bandwidth | 40 MHz to 100 MHz | 50 MHz to 200 MHz | 100 MHz to 200 MHz | 100 MHz to 200 MHz | 100 MHz to 500 MHz |
| Rise Time | 8.4 ns to 3.5 ns | 7.0 ns to 2.1 ns | 3.5 ns to 2.1 ns | 3.5 ns to 1.7 ns | 3.5 ns to 700 ps |
| Sample Rate | 500 MS/s to 1 GS/s | 500 MS/s to 2 GS/s | 1 GS/s to 2 GS/s | 2.5 GS/s to 5 GS/s | 1.25 GS/s to 5 GS/s |
| Max Record Length | 2.5 k points | 2.5 k points | 2.5 k points | 10 k points | 10 k points |
| Trigger Types | Edge, Pulse (width), Video | Edge, Pulse (width), Video | Edge, Pulse (width), Video | Edge, Pulse (width), Event, Video, Non-interlaced | Edge, Logic (Pattern, State), Pulse (Glitch, Width, Runt, Slew Rate), Video, Extended Video*, Comm* |
| Connectivity | USB Host, USB Device, GPIB* | USB Host, USB Device, GPIB* | RS-232, Centronics, CompactFlash | USB Host, USB Device | USB Host, LAN (10Base-T Ethernet), GPIB*, RS-232*, Video Out* |
| Waveform Math and Analysis | 16 Automated Measurements, Arithmetic Waveform Math, FFT | 16 Automated Measurements, Arithmetic Waveform Math, FFT, Waveform Limit Testing, Automated Datalogging | 11 Automated Measurements, Arithmetic Waveform Math, FFT | 21 Automated Measurements, Arithmetic Waveform Math, FFT | 25 Automated Measurements, Arithmetic Waveform Math, FFT, Advanced Math* *Optional |
| Software | Educator Classroom and Lab Resource CD included Standard. PC Communications Software: OpenChoice® Desktop | PC Communications Software: OpenChoice® Desktop, NI LabVIEW SignalExpress™ Tektronix Edition | PC Communications Software: OpenChoice® Desktop, NI LabVIEW SignalExpress™ Tektronix Edition | PC Communications Software: OpenChoice® Desktop | PC Communications Software: OpenChoice® Desktop, NI LabVIEW SignalExpress™ Tektronix Edition |
| Applications | Education and Training Design and Debug Manufacturing Test Troubleshooting and Fault Anlaysis | Design and Debug Education and Training Manufacturing Test and Quality Control Service and Repair | Portable Power Trouble-shooting Electronics Design and Installation Automotive Electronics Education | Embedded Analog and Digital Design Power Devices and Electronics Automotive & Avionics Industrial Equipment Field Test and Service | Design and Debug Video Design and Service Telecomm Mask Testing and Manufacturing Manufacturing Test and Quality Control Service and Repair |

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MSO/DPO3000 Series

MSO/DPO4000B Series

Bench Oscilloscope Product Selection

With the MSO/DPO Series of bench oscilloscopes, you can analyze analog and digital signals with a single instrument. Combine that with automated serial and parallel bus analysis, innovative Wave Inspector® controls for rapid waveform navigation, and automated power measurements, and the MSO/DPO Series provides the feature-rich tools you need to simplify and speed debug of your complex design.

| | MSO/DPO2000 | MSO/DPO3000 | MSO/DPO4000B | MDO4000 |
|---|--|--|--|--|
| Channels | 2, 4 analog channels; 16 digital channels (MSO Series) | 2, 4 analog channels; 16 digital channels (MSO Series) | 4 analog channels; 16 digital channels (MSO Series) | 4 analog channels; 16 digital channels; 1 RF channel |
| Bandwidth | 100 MHz and 200 MHz | 100 MHz to 500 MHz | 350 MHz to 1 GHz | 500 MHz to 1 GHz (analog) 3-6 GHz (RF Input Frequency Range) |
| Rise Time | 3.5 ns to 2.1 ns | 3.5 ns to 700 ps | 1 ns to 350 ps | 700 ps to 350 ps |
| Sample Rate | 1 GS/s (analog), 1 GS/s (digital, only 1 pod), 500 MS/s (digital, both pods) | 2.5 GS/s (analog), 121.2 ps (8.25 GS/s) MagniVU™ (digital) | 2.5 GS/s to 5 GS/s (analog), 60.6 ps (16.5 GS/s) MagniVU™ (digital) | 2.5 GS/s to 5 GS/s (analog), 60.6 ps (16.5 GS/s) MagniVU™ (digital) |
| Max Record Length | 1 M points | 5 M points | 20 M points | 20 M |
| Trigger Types | Edge, Logic, Pulse Width, Runt, Set-up and Hold, Rise/Fall Time, Video, I*C*, SPI*, CAN*, LIN*, RS-232/422/485/UART*, Parallel (MSO2000) | Edge, Sequence, Logic, Pulse Width, Runt, Set-up and Hold, Rise/Fall Time, Video, Extended Video*, I*C*, SPI*, CAN*, LIN*, RS-232/422/485/UART*, I*S/LJ/RJ/TDM*, Parallel (MSO3000) | Edge, Sequence, Logic, Pulse Width, Timeout, Runt, Set-up and Hold, Rise/Fall Time, Video, Extended Video*, I°C*, SPI*, USB*, Ethernet*, CAN*, LIN*, FlexRay*, RS-232/422/485/UART*, I°S/LJ/RJ/TDM*, MIL-STD-1553*, Parallel (MSO4000B) | Edge, Sequence (B-trigger), Pulse Width, Timeout, Runt, Logic, Setup and Hold, Rise/Fall Time, Video, Parallel, Extended Video*, I*C*, SPI*, USB*, Ethernet*, CAN*, LIN*, FlexRay*, RS-232/422/485/UART*, MIL-STD-1553*, I*S/LJ/RJ/TDM* |
| Optional Serial Bus Decode and Analysis | DPO2AUTO: CAN and LIN DPO2COMP: RS-232/422/485/UART DPO2EMBD: I ² C, SPI | DPO3AUDIO: I°S, LJ, RJ, TDM DPO3AUTO: CAN and LIN DPO3COMP: RS-232/422/485/UART DPO3EMBD: I°C, SPI | DPO4AERO: MIL-STD-1553 DPO4AUDIO: I*S, LJ, RJ, TDM DPO4AUTO: CAN and LIN DPO4AUTOMAX: CAN, LIN and FlexRay DPO4COMP: RS-232/422/485/UART DPO4EMBD: I*C, SPI; DPO4ENET: Ethernet; DPO4USB: USB | DPO4AERO: MIL-STD-1553 DPO4AUDIO: I*S, LJ, RJ, TDM DPO4AUTO: CAN and LIN DPO4AUTOMAX: CAN, LIN and FlexRay DPO4COMP: RS-232/422/485/UART DPO4EMBD: I*C, SPI; DPO4ENET: Ethernet; DPO4USB: USB |
| Connectivity | USB Host, USB Device, GPIB*, LAN (10/100 Base-T Ethernet)*, Video Out* | USB Host (x2), USB Device, LAN (10/100 Base-T Ethernet), Video Out, GPIB* | USB Host (x4), USB Device, LAN (10/100/1000 Base-T Ethernet), Video Out, GPIB* | USB Host (x4), USB Device, LAN (10/100/1000 Base-T Ethernet), Video Out, GPIB* |
| Waveform Math and Analysis | 29 Automated Measurements, Waveform and Screen Cursors, Arithmetic Waveform Math, FFT | 29 Automated Measurements, Waveform and Screen Cursors, Arithmetic Waveform Math, FFT, Advanced Math, Measurement Statistics, Power Analysis* | 41 Automated Measurements, Waveform and Screen Cursors, Arithmetic Waveform Math, FFT, Advanced Math, Measurement Statistics, Waveform Histograms, Limit and Mask Testing*, Power Analysis* "Optional | 41 Automated Measurements, Waveform and Screen Cursors, Arithmetic Waveform Math, FFT, Advanced Math, Measurement Statistics, Waveform Histograms, Limit and Mask Testing*, Power Analysis* 'Optional |
| Software | PC communications software: OpenChoice® Desktop, NI LabVIEW Signal Express™ Tektronix Edition | PC Communications Software: OpenChoice® Desktop, NI LabVIEW Signal Express™ Tektronix Edition | PC Communications Software: OpenChoice® Desktop, NI LabVIEW Signal Express™ Tektronix Edition | PC Communications Software: OpenChoice® Desktop, NI LabVIEW Signal Express™ Tektronix Edition |
| Applications | Mixed Signal Design and Debug Embedded Design and Debug Investigation of Transient Phenomena Automotive Electronics Manufacturing Test and Quality Control | Mixed Signal Design and Debug Embedded Design and Debug Investigation of Transient Phenomena Power Measurements Video Design and Debug Automotive Electronics Manufacturing Test and Quality Control | Mixed Signal Design and Debug Embedded Design and Debug Investigation of Transient Phenomena Power Measurements Video Design and Debug Automotive Electronics Manufacturing Test and Quality Control | Mixed Signal Design and Debug Wireless Embedded Design and Debug Investigation of Transient Phenomena Power Measurements EMI and Noise Debug Automotive Electronics Manufacturing Test and Quality Control |

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MSO/DPO5000 Series

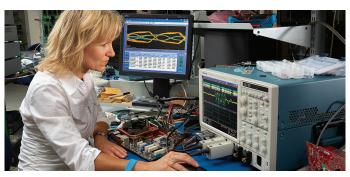
MSO70000 Series

Performance Oscilloscope Product Selection

Tektronix Performance Oscilloscopes contain the analysis tools needed to speed up critical Serial and RF Design verification & debugging. The DPO/DSA Performance Oscilloscopes and MSO Mixed Signal Oscilloscopes have access to many different analysis and debugging packages.

| | MSO/DPO5000 | DPO7000C |
|-----------------------------|--|---|
| Channels | 4 (+ 16 Digital with MSO5000) | 4 |
| Bandwidth | 350 MHz to 2 GHz | 500 MHz to 3.5 GHz |
| Rise Time | 175 ps to 1 ns | 95 ps to 310 ps |
| Sample Rate | Up to 10 GS/s | Up to 40 GS/s |
| Max Record Length | Up to 250 M | Up to 500 M |
| Trigger Types | Edge, Logic (Pattern State/Setup/Hold), Pulse (Glitch, Width, Runt, Timeout, Transition), I*C*, SPI*, RS-232/422/485/UART*, USB (Low, Full, High)*, Visual Trigger* | Pinpoint Triggering, Edge, Logic (Pattern State/Setup/Hold), Pulse (Glitch, Width, Runt, Timeout, Transition), Comm*, Serial Pattern*, I ² C*, SPI*, RS-232*, CAN*, USB 2.0 (LS, FS)*, Visual Trigger* |
| Connectivity | USB, VGA, LAN (10/100/1000 Base-T Ethernet), Open Access to Windows Platform | RS-232, GPIB, DVI, LAN (10/100/1000 Base-T Ethernet), Open Access to Windows Platform, USB Host, CD-RW/DVD-R |
| Waveform Math and Analysis | Advanced Waveform Math, FFT, 53 Automated Measurements, Measurement Statistics, Waveform Histograms, Jitter Essentials, Compatability with Windows Analysis and Productivity Software | Advanced Waveform Math, FFT, 53 Automated Measurements, Measurement Statistics, Waveform Histograms, Jitter Essentials, Compatability with Windows Analysis and Productivity Software |
| Software see pages 28-35 | DPOJET, PWR, ET3, USB2, VNM, DDRA, MTM, SR-EMBD, SR-COMP, SR-USB, SVE, SVM, SVP, SVT, LT, SR-CUST, VET | DPOJET, PWR, D-PHY, DVI, ET3, LT, SR-COMP, SR-CUST, SR-DPHY, SR-EMBD, SR-USB, ST1G, VET, USB2, DDRA, LSA, MTM, SVE, SVM, SVO, SVP, SVT |
| Applications | Signal Integrity, Jitter, and Timing Analysis Verification, Debug and Characterization of Sophisticated Designs Long Record Search and Mark Limit and Mask Testing Identify and trigger on DDR read and writes Debugging and Compliance Testing of Serial Data Streams for Telecom and Data Industry Standards Investigation of Transient Phenomena Power Measurements and Analysis Spectral Analysis Ethernet and USB 2.0 Compliance Testing Radar/EW | Signal Integrity, Jitter, and Timing Analysis Verification, Debug and Characterization of Sophisticated Designs Long Record Search and Mark Limit and Mask Testing Debugging and Compliance Testing of Serial Data Streams for Telecom and Data Industry Standards Investigation of Transient Phenomena Power Measurements and Analysis Spectral Analysis Ethernet and USB 2.0 Compliance Testing Low Speed Serial Analysis for I²C, SPI, RS-232, CAN, LIN, MIPI, and USB 2.0 Radar/EW |

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MSO/DPO/DSA70000 Series

DSA8300 Series

Performance Oscilloscope Product Selection

Tektronix Performance Oscilloscopes with bandwidths up to 80 GHz, industry-best signal fidelity and the lowest noise floor provide you with the measurement accuracy to perform critical rise-time, jitter and noise measurements with confidence.

| | MSO/DPO/DSA70000 | DSA8300 |
|----------------------------|--|---|
| Channels | 4 (+16 Logic with MSO70000) | Up to 8 |
| Bandwidth | 4 to 33 GHz | DC - 80+ GHz |
| Rise Time | 9 ps to 69 ps "User Selectable DSP enhanced. | 5 ps |
| Sample Rate | 25 GS/s across 4 channels on 4, 6, 8 GHz models; 50 GS/s across 4 channels on 12.5, 16, 20, 25, 33 GHz models; 100 GS/s across 2 channels on 12.5, 16, 20, 25, 33 GHz models | 200 kS/s (sequential) |
| Max Record Length | Up to 100 M on 4, 6, 8 GHz models; Up to 250 M on 12.5, 16, 20, 25, 33 GHz models | - |
| Trigger Types | Comm, Bus, I°C, SPI, RS-232/422/485/UART, USB, Edge, B Event Scan, Glitch, Pattern, Runt, 6.2 Gb , 8b10b, Serial Pattern, Setup/Hold, State, Timeout, Transition, Visual, Width, Window | Edges, Internal Clock, Clock Recovery |
| Connectivity | RS-232, GPIB, Centronic, Ethernet, LAN (10/100/1000 Base-T Ethernet), Open Access to Windows Platform, USB, DVD-ROM | RS-232, GPIB, Centronic, Ethernet, LAN, Open Access to Windows Platform, USB, PCMCIA, CD-ROM, DVD |
| Waveform Math and Analysis | Advanced Waveform Math, FFT or Spectral, Compatability with Windows | Analysis and Productivity Software |
| Software | MIPI® D-PHY Testing (D-PHY), DDR Memory Bus Analysis (DDRA), DPOJET Jitter And Eye Diagram Analysis (DJA), Ethernet Compliance Test Solution (ET3), HDMI Compliance Test Solution (HT3), PCI Express® Compliance Test Solution (PCE3), Serial Data Link Analysis Solution Software (SLE, SLA), SignalVu™ Vector Signal Analysis Software (SVE), USB 3.0 Compliance Test Solution (USB3), USB 2.0 Compliance Test Solution (USB2) | IConnect® 80SICON, 80SOCMX, 80SSPAR, 80SJNB |
| Applications | Signal Integrity, Jitter, and Timing Analysis Verification, Debug and Characterization of Sophisticated Designs Long Record Search and Mark Limit Testing Memory (DDR2/3) System Debug & Verification High Speed Serial and Wireless Compliance Testing Design, Development and Compliance Testing of Serial Data Streams up to 20 Gb/s Rates Serial Data Link Analysis (SDLA) RF Pulse Analysis RF Modulation Analysis | Design/Verification of Telecom and Datacom Components and Systems Manufacturing/Test of ITU/ANSI/IEEE/SONET/SDH Conformance High-Performance True Differential TDR Measurements Advanced Jitter, Noise, BER and Serial Data Link Analysis Impedance Characteristics and Network Analysis for Serial Data Applications Including S-parameters Channel & Eye diagram Simulation and Measurement-based SPICE Modeling Serial Data Link Analysis (SDLA) |

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Probe Selector Tool: Find the best probe for your needs at: www.tektronix.com/probes

TDS1000C-EDU Series



Applications

- Education and training
- Design and debug
- Manufacturing test
- Troubleshooting and fault analysis

www.tektronix.com/tds1000b

| Features | Benefits |
|--------------------------------|--|
| Education Resource CD | Help your students master the use of an oscilloscope with the included classroom labs and resources. |
| Digital real-time sampling | Accurately capture signals with at least 10X over-sampling on all channels, all the time with Tektronix proprietary sampling technology. |
| Bright color display | See your waveform and measurement results at a distance, at an angle or under dim lighting with the bright, active color display. |
| Built-in analysis tools | Simplify analysis of your device with 16 automated measurements, FFT analysis, waveform math and cursors. |
| Help menu | Get the help you need – when and where you need it – with the built-in, context- sensitive help system. |
| Dedicated front-panel controls | Spend less time learning and more time on your task with easy-to-use front- panel controls. |
| Front-panel USB host port | Quickly store and transfer your waveforms and settings. |
| USB PC connectivity | Easily connect to a personal computer with the rear-panel USB device port. |
| Direct Printing | Print your image directly to any PictBridge®-compatible printer to quickly document your lab results. |

TDS2000C Series



Applications

- Design and debug
- Education and training
- Manufacturing test and quality control
- Service and repair

www.tektronix.com/tds2000c

| Features | Benefits |
|--------------------------------|--|
| Digital real-time sampling | Accurately capture signals with at least 10X over-sampling on all channels, all the time with Tektronix proprietary sampling technology. |
| Built-in analysis tools | Simplify analysis of your device with 16 automated measurements, FFT analysis, waveform math and cursors. |
| Waveform limit testing | Eliminate mistakes with the pass/fail summary table that clearly shows how many waveforms are within the limits of your specified template. |
| Help menu | Get the help you need – when and where you need it – with the built-in, context- sensitive help system. |
| Dedicated front-panel controls | Spend less time learning and more time on your task with easy-to-use front-panel controls. |
| Front-panel USB host port | Quickly store and transfer your waveforms and settings. |
| USB PC connectivity | Easily connect to a personal computer with the rear-panel USB device port; Use NI Lab- VIEW SignalExpress™ software to control your scope, log data, and to simply transfer and document your results. |
| Lifetime warranty* | Reduce your cost of ownership with the standard, Lifetime Warranty. |

^{*}Limitations apply. For terms and conditions, visit www.tektronix.com/lifetimewarranty

Take the TDS2000C for a spin, right from your desk.

Try the 360 degree interactive product demo at: www.tektronix.com/tds2000demo

TPS2000B Series



Applications

- Design and debug
- Industrial power design and debug
- Installation and maintenance
- Service and repair

www.tektronix.com/tps2000

| Features | Benefits |
|--|---|
| Four isolated channels | Safely and easily make 4-channel floating measurements, including 3-phase power measurements. |
| Digital real-time sampling | Accurately capture signals with at least 10X over-sampling on all channels, all the time. |
| Dedicated front-panel controls | Spend less time learning and more time on your task with easy-to-use front- panel controls. |
| Front-panel CompactFlash™ port | Quickly store and transfer your waveforms. |
| Hot-Swappable battery pack | Work where you need to with up to 8 hours of continuous battery operation*. |
| Just 6 lbs (2.7 kg) | Easily transport from lab-to-lab or into the field with the lightweight and compact design. |
| Power measurement and analysis application module (optional) | Quickly make automatic measurements of real and apparent power, phase angle measurements, harmonics, and switching loss. |
| PC Connectivity | Easily connect to a personal computer using the RS-232 port and the included USB adapter cable; Use NI LabVIEW SignalExpress software to control your oscilloscope, log data, and to simply transfer and document your results. |

^{*}Comes standard with one battery. Each battery provides 4 hours of operation.

THS3000 Series

Applications

- Portable design and debug
- Industrial power measurements
- Installation and maintenance
- Service, calibration and repair

www.tektronix.com/ths

| Features | Benefits |
|--|---|
| Four isolated channels, 600 V CAT III rated inputs | Safely and easily make 4-channel floating or differential measurements, including 3-phase power measurements in industrial power environments. |
| 10 K points record length per channel | Capture more signal information at higher sample rates to clearly see signal details. |
| Digital real-time sampling | Accurately capture signals with up to 25X oversampling (1-channel) |
| Waveform limit testing | Automatically monitor up to four signals and evaluate pass or fail results determined by predefined boundaries. |
| Data logging features | Quickly find signal anomalies by using the TrendPlot™ function or by capturing multiple waveform screens for playback and review |
| 7 hour battery | Work where you need to with up to 7 hours of continuous battery operation. |
| 4.8 lbs (2.2 kg), IP41 rating | Easily transport from the lab to the field with the light-weight, compact and ruggedized design. |
| USB host port for external storage and USB mini port for PC connectivity | Quickly and easily save instrument settings, screenshots, and waveform data onto a flash device or transfer the data directly to a PC using OpenChoice™ Desktop software. |

TDS3000C Series



Applications

- Design and debug
- Video design and development
- Manufacturing test and quality control
- Service and repair

www.tektronix.com/tds3000c

| Features | Benefits |
|----------------------------------|---|
| Digital real-time sampling | Accurately capture signals with at least 5X over-sampling on all channels, all the time. |
| Digital phosphor display | Quickly capture and visualize glitches and infrequent events with a high waveform capture rate and intensity-graded display. |
| Advanced triggering | Capture digital signal anomalies with runt, glitch, rise/fall-time, and setup/hold violation triggers. |
| Dedicated front-panel controls | Spend less time learning and more time on the task at hand with easy-to-use front panel controls. |
| Front-panel USB host port | Quickly store and transfer your waveforms. |
| PC connectivity | Simply transfer, analyze and document results with NI LabVIEW SignalExpress™ TE and Tektronix OpenChoice® Desktop software. |
| Just 5.9 inches (149 mm) deep | Free up valuable bench-top space. |
| Battery pack (optional) | Work where you need to with up to three-hours of portable battery operation. |
| Application modules (optional) | Transform your oscilloscope into a specialized instrument for limit testing, telecom mask testing, and video troubleshooting. |

MSO/DPO2000 Series

Applications

- Design and debug of embedded systems
- Investigation of transient phenomena
- Visualization of signals masked by noise

www.tektronix.com/mso2000

| | Features | Benefits |
|--|---|---|
| | Up to 4 analog and 16 digital channels | Analyze analog and digital signals on a single instrument for system-level troubleshooting of complex designs. |
| | Digital phosphor display | Quickly discover glitches and infrequent events with greater than 5,000 wfm/s maximum waveform capture rate and intensity-graded display. |
| | Complete set of triggers | Rapidly capture signal anomalies with over 125 available trigger combinations, including setup/hold, serial packet content and parallel data. |
| | Wave Inspector® controls | Easily search, mark and navigate long record lengths to find all occurrences of your event. |
| | Automated Measurements | Simplify analysis of your device with 29 automated measurements and FFT analysis. |
| | Parallel bus triggering and analysis (MSO Series) | Quickly debug your parallel bus with automated trigger, decode and search. |
| | Serial triggering and analysis options | Quickly debug common serial buses with automated trigger, decode and search – I ² C, SPI, CAN, LIN and RS-232/422/485/UART. |
| | FilterVu™ variable low-pass filter | Easily filter out unwanted noise without losing sight of important anomalies or glitches with the innovative peak detect glitch capture. |

MSO/DPO3000 Series



Applications

- Design and debug of embedded systems
- Investigation of transient phenomena
- Power supply design and analysis

www.tektronix.com/mso3000

| Features | Benefits |
|---|--|
| Up to 4 analog and 16 digital channels | Analyze analog and digital signals on a single instrument for system-level troubleshooting of complex designs. |
| Digital phosphor display | Quickly discover glitches and infrequent events with a greater than 50,000 wfm/s maximum waveform capture rate and intensity-graded display. |
| Complete set of triggers | Rapidly capture signal anomalies with over 125 available trigger combinations, including setup/hold, serial packet content and parallel data. |
| Wave Inspector® controls | Easily search, mark and navigate long record lengths to find all occurrences of your event. |
| Automated Measurements | Simplify analysis of your device with 29 automated measurements, FFT analysis, measurement statistics, and advanced waveform math. |
| Parallel bus triggering and analysis (MSO Series) | Quickly debug your parallel bus with automated trigger, decode and search. Capture fast transitions with timing resolution up to 121.2 ps. |
| Serial triggering and analysis options | Quickly debug common serial buses with automated trigger, decode and search – I ² C, SPI, CAN, LIN, RS-232/422/485/UART and I ² S/LJ/RJ/TDM. |
| Power analysis option | Achieve fast, accurate results with integrated automated power measurements. |

MSO/DPO4000B Series



Applications

- Design and debug of embedded systems
- Investigation of transient phenomena
- Power supply design and analysis

www.tektronix.com/mso4000

| F | eatures | Benefits | |
|------------------------|---|---|--|
| | analog and 16 igital channels | Analyze analog and digital signals on a single instrument for system-level troubleshooting of complex designs. | |
| D | igital phosphor display | Quickly discover glitches and infrequent events with a greater than 50,000 wfm/s maximum waveform capture rate and intensity-graded display. | |
| С | complete set of triggers | Rapidly capture signal anomalies with over 125 available trigger combinations, including setup/hold, serial packet content and parallel data. | |
| V | Vave Inspector® controls | Easily search, mark and navigate long record lengths to find all occurrences of your event. | |
| Automated Measurements | | Simplify analysis of your device with 41 automated measurements, FFT analysis, measurement statistics, waveform histograms, and advanced waveform math. | |
| | arallel bus triggering and nalysis (MSO Series) | Quickly debug your parallel bus with automated trigger, decode and search. Capture fast transitions with timing resolution up to $60.6~\rm ps.$ | |
| | erial triggering and nalysis options | Quickly debug common serial buses with automated trigger, decode and search – IPC, SPI, USB, Ethernet, CAN, LIN, FlexRay, RS-232/422/485/UART, MIL-STD-1553, and IPS/LJ/RJ/TDM. | |
| P | ower analysis option | Achieve fast, accurate results with integrated automated power measurements. | |
| | ow-capacitance, passive oltage | Four probes with industry-best 4pF capacitive loading are included standard to ensure accurate measurements. | |

Try the Tektronix Bench Oscilloscopes for yourself. With interactive product controls and 360 degree product views. Simply go to: www.tektronix.com/virtualmso

MDO4000 Series



Applications

- Wireless Embedded Design and Debug
- Investigation of transient phenomena
- Mixed Signal Design and Debug

www.tektronix.com/mdo4000

| Features | Benefits |
|---|---|
| Dedicated RF input | Accurately analyze your RF signals with -60 dBc (typical) dynamic range. |
| Time-correlated display | See what's happening in your design at any instant with the time-correlated display of your analog, digital and RF signals |
| Spectrum Time | Investigate how your RF spectrum is changing over time or with device state by moving Spectrum Time through your acquisition. |
| Wide-capture bandwidth | See your whole spectrum of interest at any point in time with the ≥1 GHz ultra-wide capture bandwidth. |
| Advanced RF triggers | Quickly capture specific RF events with advanced RF power triggers - pulse width, runt, logic and more. |
| Automated and manual RF markers | Simply define threshold and excursion values to automatically mark all peaks that meet your criteria. Or mark hyour own points in the spectrum. |
| RF vs. time traces | Easily see amplitude, frequency or phase vs. time for your RF signal displayed in the time domain; easily measure RF/systems latencies. |
| Serial and parallel bus triggering and analysis | Quickly debug your parallel bus and/or common serial buses with automated trigger, decode and search. |
| Built-on the MSO4000B platform | Debug your device fast with comprehensive tools from the award-winning platform – DPO Technology, Wave Inspector®, and more. |

| Medicange: MONISTER Stand Square Confirmings | |
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MSO/DPO5000 Series

Applications

- Design and debug of embedded systems
- Investigation of transient phenomena
- Serial debug and analysis

www.tektronix.com/mso5000

| Features | Benefits |
|--|---|
| 8 Models with bandwidths from 350 MHz to 2 GHz | Pick the performance level that fits your signals and your budget. Analyze analog and digital signals on a single instrument for system-level troubleshooting of complex designs. |
| FastAcq with Digital Phosphor display | Quickly discover glitches and infrequent events with Tektronix proprietary FastAcq™ technology. A maximum capture rate of >250,000 waveforms/s shows elusive anomalies fast. |
| Complete set of triggers | Rapidly capture signal anomalies with over 350 available trigger combinations, including setup/hold, serial packet and parallel data. |
| Wave Inspector® controls | Easily search, mark and navigate long record lengths to find all occurrences of your event. |
| Built-in Analysis Tools | Analyze your device with 53 automated measurements, measurement statistics, histograms, and advanced waveform math. |
| Low-capacitance, passive voltage | Four probes with industry-best 4pF capacitive loading are included standard to ensure accurate measurements. |

DPO7000C Series



Applications

- Design and debug of digital systems (I2C, SPI, RS-232, CAN/LIN, MIPI, USB 2.0)
- Switched mode power supply design and verification
- Electrical design verification to industry standards (e.g., Ethernet, MIPI, USB, 2.0, DDR)

www.tektronix.com/dpo7000

| Features | Benefits |
|--|---|
| 4 Models with bandwidths from 500 MHz to 3.5 GHz including user-selectable limits | Achieves more accurate characterization of designs by optimizing the oscilloscope performance individually by channel, based on the frequency content of the signal being measured. |
| Sample rate up to 40 GS/s on one channel, 10 GS/s on 4 channels simultaneously. | Improves design validation by accurately sampling the signal to ensure that all frequency content is being acquired and displayed. |
| Long record length up to 500 M points on one channel, 125 M per channel on 4 channels | Measurement on a large population for Compliance Verification is required by many standards test systems. |
| FastAcq mode with >250,000 waveforms per second continuous waveform capture rate | Shortens debugging time by quickly finding intermittent (rare) faults or events. |
| Pinpoint® triggering with Low-Speed Serial | Over 1400 trigger combinations enable capture of signals that are "bad" among many that are good. Speeds up debugging of lower speed chip to chip communications buses through standards-based trigger functions. |
| Powerful set of built in analysis features | Faster understanding of signal behavior using waveform limit testing (LT), advanced measurement analysis (DJE), and advanced event search and mark (ASM). |
| Full suite of compliance tools | Saves time with pre-determined reporting and analysis steps for Compliance Verification of different communications systems (MIPI D-PHY, Ethernet, USB, etc.). |

Probe Selector Tool: Find the best probe for your needs at: www.tektronix.com/probes

MSO70000 Series



Applications

- DDR Memory Verification & Debug
- High Speed Embedded System Debugging
- Multi-channel acquisitions
- RF Vector Signal Analysis

www.tektronix.com/mso70000

Features Benefits

Highest performance MSO at 20 GHz Bandwidth on 4 analog channels and 2.5 GHz on 16 logic channels Best combination of high performance analog acquisition and fast digital inputs provide mixed signal insight into your design. View high speed PCle3.0 signals while monitoring time-correlated digital channels.

iCapture to view analog characteristics on any connected digital channel with up to 50 GS/s sampling Enables a quick check of any of the 16 logic signals' timing and amplitude without having to use a separate analog probe.

Extensive set of serial pattern, mixed analog+digital, logic pattern, and bus state triggers

Enhance debugging by capturing only the events of interest with triggers that look for bus cycles, specific serial words or patterns.

Simultaneous Analog and Digital Trace Display with precise timing resolution of 80 picoseconds Analog/Digital Probing with a variety of connectivity Improve system design integration with views of analog and digital signals simultaneously. Ensures discovery & capture of intermittent faults tied to bus contention, power, etc

support options

Flexible probing solutions for small component leads or board vias that remove the need for special fixturing/costs. Industry's only 2.5 GHz differential logic probe.

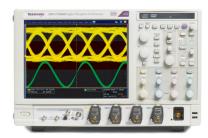
Automated Serial Trigger and Decode Options for I2C, SPI, RS-232/422/485/UART, USB 2.0, MIPI® D-PHY DSI-1 and CSI-2, 8b/10b

Enables automated capture and viewing of where control and data packets begin and end as well as identify subpacket components such as address, data, CRC, etc. for common serial bus traffic.

Great signal fidelity with industry's highest effective number of bits (ENOB) and very low instrument

Enables industry's best margin visibility of critical digital communications system designs. With a noise floor of less than 0.38% of full scale at 12 GHz, MSO70000 Series ensures clearer indication of true signal performance.

DPO/DSA70000 Series



Applications

- High speed serial data compliance test software
- Serial Data Link Analysis software
- DDR Memory Verification & Debug
- Signal integrity, jitter & timing analysis
- RF Vector Signal Analysis

www.tektronix.com/dsa70000

Features Benefits



Accurate characterization, jitter analysis and compliance testing of designs like 32 Gbaud Optical and PCle 3.0 with data rates up to 12.5 Gb/sec without DSP boosting.

Industry leading sample rate of 100 GS/s on 2 channels and 50 GS/s on 4 channels* (12.5 + 16 GHz models

Enables thorough analysis, channel to channel, and multilane measurements. Capture more details (ie, fast edges) and achieve 10 Terasamples/s using equivalent time sampling on 4 channels

Industry leading signal fidelity, minimum noise and highest number of effective bits (ENOB)

Industry's highest waveform capture rate

pattern triggering up to 6.25 Gb/s

Enables the ability to perform tests with more margin to accurately assess the performance of high frequency designs that typically have less available margin.

Pinpoint® triggering, Visual Trigger and high speed serial

Efficient discovery & capture of intermittent (rare) faults Speed up debug of buses like PCIe, SATA, DisplayPort and

others through standards-specific trigger functions

Comprehensive digital serial analysis solution - probing, triggering, decode and analysis

Faster design and compliance testing with a toolset engineered to automate setup, acquisition and analysis of high-speed serial data signals like SATA, Thunderbolt and DisplayPort.

Automated Serial Trigger and Decode Options for I2C, SPI, RS-232/422/485/UART, USB 2.0, MIPI® D-PHY DSI-1 and CSI-2, 8b/10b

Enables automated capture and viewing of where control and data packets begin and end as well as identify subpacket components such as address, data, CRC, etc. for common serial bus traffic.

DSA8300 Series



Applications

- TDR/S-Parameter analysis
- Serial Data Link Analysis
- Optical/Telecom standards compliance

www.tektronix.com/dsa8300

| Features | Benefits |
|---|--|
| Up to 4 true differential channels | Accurately characterize non-linear devices such as amplifiers with true differential TDR stimulus. |
| High bandwidth (50 GHz) Time Domain Reflectometry | Resolve impedance discontinuities down to 1mm with a 12ps incident step. |
| IConnect® signal integrity | Reduce measurement errors resulting from test fixture signal degradation with integrated TDR and S-Parameter measurements. |
| Serial data network analysis (SDNA) | Reduce cost of test by combining time and frequency domain analysis with a single instrument. Accurately analyze signal |

and BER analysis

path to predict signal crosstalk and jitter to ensure reliable system operation.

Determine precise causes of eye closure with jitter, noise,

Serial data link analysis (SDLA)

Remote sampling heads

Optimize signal fidelity and minimize the effects of probes, cables, and fixtures by bringing the TDR head close to the

Highly accurate 10/40/100GB/s Telecom Test Modules

Clock recovery support up to 44.5 GB/s and bandwidt capability up to 80GHz provides complete measurement support for telecom/datacom designs.









BERTScope BSA/CR/DPP Series alongside an MSO70000 oscilloscope

random BER errors

Bit Error Rate Testers Product Selection

| | BERTScope® BSA Series | BERTScope® CR Series | BERTScope® DPP Series | BERTScope® BA Series |
|------------------|--|---|--|--|
| Туре | Bit Error Rate Testing with the Insight of an Oscilloscope | Versatile Precision Clock Recovery and Analysis | Performance, Productivity, and Insight for Serial Data Signaling | Analysis to Find the Source of Bit Errors |
| Maximum Bit Rate | 8.5 Gb/s - 26 Gb/s | 12.5 Gb/s - 28.6 Gb/s | 12.5 Gb/s | 1.5 Gb/s - 1.6 Gb/s |
| Applications | ■ High Speed Digital Device Characterization and Design with Integrated pattern generation, error detection, and stress generation ■ Signal Integrity Analysis – BER Correlated Eye Diagram, Jitter Peak, Jitter Map, Measured and Extrapolated BER Contours, Mask Testing, and Q-Factor Analysis ■ Optional Integrated, Calibrated Stress Generation of SJ, SI, RJ, and BUJ for stressed eye and automated jitter tolerance testing for standards including: - 6, 11, & 25 G CEI - PCI Express 3.0 - USB 3.0 - Fibre Channel - 10/40/100 G Ethernet - SATA & SAS - SFP+/SFI & XFP/XFI | ■ Continuous clock recovery for data rates from 150 Mb/s to 12.5, 17.5, or 28.6 Gb/s ■ Existing and Next Generation Serial Data Standards' Compliant clock recovery including: 16XFC, 100GBASE-LR-4, CEI-28 G-SR, PCI-e Gen. 3, 10/40/100 G Ethernet, SAS, SATA ■ Continuous User selectable Phase Lock Loop (PLL) bandwidths from 200 kHz to 12 MHz, optionally to 24 MHz ■ Use stand alone, with existing test equipment, with the BERTScope family, or with the DSA8200 Series | Design Characterization for High-speed, Sophisticated Designs Certification Testing of Serial Data Streams for Industry Standards Design/Verification of High-speed I/O Components and Systems | Semiconductor Characterization Production Eye Mask, BER, and Jitter Testing Satellite Communications System Functional Testing Wireless Communications System Functional Testing Fiber Optic System and Component Testing Forward Error Correction Evaluation |

see page 13 see page 14 see page 14 see page 14

BERTScope® BSA Series Features Benefits Pattern Generation and Error Analysis, high speed BER The combination of generation and analysis in one instrument enables receiver BER compliance testing for today's 2nd and Measurements up to 26 Gb/s 3rd Generation Serial Standards Integrated Stress Generator for stressed eye sensitivity A test signal's data rate, applied stress, and data pattern can (SRS) and automated jitter tolerance compliance testing be changed on the fly, independent of each other; enabling a diverse set of signal variations for testing chipset/system sensitivity. Enhances the debug experience unlike other BERT's by Integrated, BER correlated eye diagram analysis with pass/fail masks for PCI Express, USB, SATA and other providing a familiar eye diagram of the test results to compare serial standards against astandards specific mask. Error Location and BER contour analysis on PRBS Provides a quick understanding of signal integrity in terms of BER. Error location provides detailed BER pattern signals up to 26 GB/sec **Applications** sensitivities to speed up identification of deterministic vs.

- Design Verification/ Characterization
- Serial Data Compliance Testing
- Signal Integrity Analysis
 - Electrical/Optical Stressed Receiver Testing
 - Automated CDR Jitter Tolerance Testing

| BERTScope® CR Series | Features | Benefits | |
|--|---|---|--|
| | Data Rate Range up to 28.6 Gb/s | Continuous data rate coverage for next generation I/Os including PCle 3.0, 10GBASE-KR, 16xFC, 25 & 28G CEl and 100GBASE-LR-4 & ER-4. | |
| | Independent control, measurement, and display of phase lock loop (PLL) BW, JTF (jitter transfer function) and peaking | Provides accurate "Golden PLL" response for transmitter jitter compliance testing and stressed receiver sensitivity test calibration. Provides full flexibility for device characterization. | |
| Applications | Clock Recovery Input Equalization | Enables clock recovery on high ISI signals without impacting the data stream under test. Recovered clock enables other analysis including "clean eye", application of FIR filtering to signal, and BER testing. | |
| Design Verification/ Characterization Clock recovery for Sampling Oscilloscopes & | 24 MHz PLL Bandwidth (Optional) | Meets the JTF bandwidth requirements of USB 3.0, 6 G SATA, and PCle 3. | |

- Clock recovery for Sampling Oscilloscopes & Bit Error Rate Analyzers
- Signal Integrity Analysis

www.tektronix.com/bertscope

| BERTScope® DPP Series | Features | Benefits |
|-----------------------|--|--|
| Thirrest DYTES | 1 to 12.5 Gb/s range of operation, with std. 3 tap configuration | High data rate support of hardware based equalization enables compliance testing for today's 2nd and 3rd Generation Serial Standards |
| | 3-Tap equalization evaluation on 8b/10b signaling greater than 5 Gb/sec (4-tap optional) | Supports compliance tests for 802.3ap, Serial Attached SCSI,10GBASE-KR backplanes, DisplayPort™, USB 3.0, PCI Express® Gen 3 |
| Applications | Flexible cursor position | Pre-cursor or post-cursor adjustment for optimized compensation of ISI and loss. |

Applications

- Design Verification/ Characterization
- Serial Data Compliance Testing

www.tektronix.com/bertscope

| BERTScope® BA Series | Features | Benefits |
|--|---|--|
| Manuel 11/00 Comments of the C | Pattern Generation and Error Analysis, high speed BER Measurements up to 1.6 Gb/s | The combination of generation and analysis in one instrument enables receiver BER compliance testing for today's electronic and communications systems |
| | Error Location and BER contour analysis on PRBS signals up to 1.6 Gb/s | Provides a quick understanding of signal integrity in terms of BER. Error location provides detailed BER pattern sensitivities to speed up identification of deterministic vs. random BER errors |
| | ANSI Jitter Measurements (RJ, DJ, and TJ) | Fast, effective method for determining long pattern PRBS31jitter composition with triangulation. Graphical representation makes jitter analysis more thorough, yet simpler to follow |

Applications

- Semiconductor Characterization
- Production Eye Mask, BER, and Jitter Testing
- Satellite and Wireless Communications System **Functional Testing**

www.tektronix.com/bertscope

Optical Modulation Analyzer

OM4000 Series



Applications

- Visualization & measurement of complex modulated signals
- Qualifying complex modulation transmitters
- Debugging complex modulation transceiver
- Development of integrated transmitter

www.tektronix.com/om4000

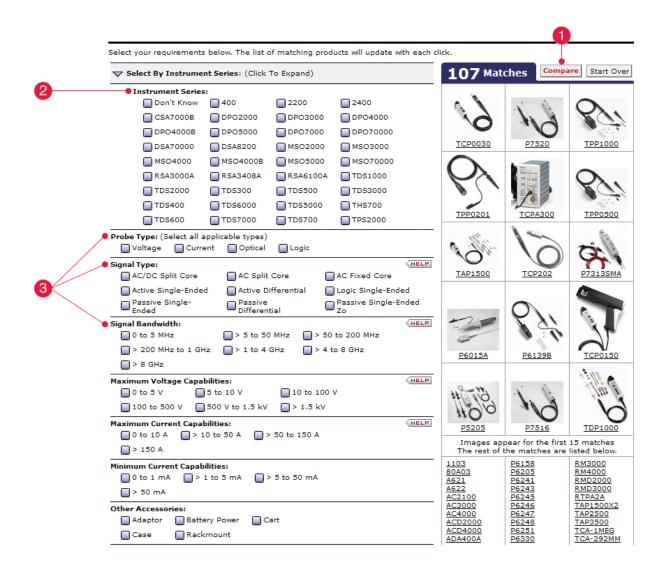
| Features | Benefits | |
|---|--|--|
| Complete characterization of signals up to 240 Gb/sec with DPO70000D Series 33 GHz Oscilloscope | Tight integration with Tektronix Oscilloscopes for calibrated system performance. | |
| Optimal signal processing algorithms for optical signals | No need to be a signal processing expert to get the best results. | |
| Detailed analysis of phase or amplitude modulated signals | Reports all metrics of signal quality: Q-Factor Plots, BER, EVM, extinction ratio, phase angle offsets, bias offsets, etc. | |
| Support for dual polarization transmission | Continuously tracks state of polarization; shows tributary polarization state and extinction ratio. | |
| Compatible with 3rd Party Coherent Receivers | OM1106 Software + OM2210 Calibration Source provides flexibility to support future & existing needs. | |
| Direct MATLAB Interface | Enables quick analysis based on any variable, and advanced users can customize signal processing for their application. | |
| Two ECDL lasers built into system | Assists in rapid calibration verification; use second laser for DUT. | |

Probe Selector Tool - Let the tool do the work for you!

To match one of over 100 different probes directly to the oscilloscope, signal type or testing application you need, go online to the Tektronix Probe Selector Tool. Located at www.tektronix.com/probes

Compare selected products and instantly create PDFs of your results! Select your probe by Instrument Series

- Sort Results by:
 - Probe Type Signal Type
 - Signal Bandwidth





Active Probes

Features

- Bandwidth up to 4 GHz
- True signal reproduction and fidelity
- Low input capacitances: < 0.5 pF
- Small Compact Probe Heads for Probing Small Geometry Circuit Elements
- DUT Attachment Accessories Enable Connection to SMDs as small as 0.5 mm Pitch
- Service, Durability and Reliability

Applications

- Verification, debug and characterization of high-speed designs
- Component design and characterization
- Design, development and compliance testing
- Signal integrity, jitter, timing analysis
- Manufacturing engineering and test
- Educational research



Differential Probes

Features

- TriMode™ probing provides differential, single-ended or common mode measurements with a signal probe (P7500 Series)
- Excellent signal fidelity, with high bandwidth to >20 GHz, excellent step response, low loading, and high CMRR
- Versatility to make differential or single-ended measurements with low cost TriMode accessories
- Tip-Clip[™] interchangeable probe tip system to configure your probe with the optimal tip for your application (P7300 Series)
- Differential TDR hand probe for high fidelity impedance measurements of differential transmission lines (P80318)

Applications

- Debug, validation and compliance testing of high speed serial designs
- Communications Systems
- Semiconductor characterization & validation



Passive Probes

Features

- DC to 1 GHz
- Wide range of performance to meet the demands of many applications
- Lightweight, ergonomic designs to fit your needs
- Wide range of probe tips for easier circuit access
- Modularity to provide lower cost of ownership (P613X)
- Compact size accessories to provide compatibility with existing adapters

Applications

- Mixture of high, medium and low frequency general purpose measurements
- Digital design
- Power device characterization
- Power supply design
- UPS systems, power converters
- Electronic ballast
- Mixed signal
- Service, manufacturing



Current Probes

Features

- Easy to use and accurate AC/DC current measurements
- DC up to 2 GHz
- Amplitude measurements from 1 mA to 20,000 A
- Split core and solid core constructions

Applications

- Switching power supplies
- Motor drives
- Disk drive
- Electronic ballasts
- Invertors
- Silicon characterization
- High-frequency analog design



High Voltage Probes

- Wide range of voltage measurements -Up to 40 kV peak (100 ms pulse)
- High voltage measurement capabilities
- Single-ended referenced to earth ground
- Differential non-ground referenced and ground referenced
- Bandwidths from DC to 1 GHz

Applications

- Power supplies
- Motor drives
- Electronic ballast DC to DC power converters
- Power device design and evaluation
- Switch mode control
- UPS systems



Logic Probes

Features

- 16 channel probe sets for digital channel acquisitions with Tektornix Mixed Signal Oscilloscopes.
- Differential logic probing up to 2.5 GHz for high signal fidelity with low device loading
- Color-coded tips match channels to signal traces on the oscilloscope display
- Variety of connectivity options available for device leads, solder-in, Traces, etc.

Applications

- DDR Memory Electrical Verification
- High Speed Mixed Signal System Debugging
- Multi-channel acquisitions

Digital Multimeter Product Selection

| | DMM4020 | DMM4040 | DMM4050 |
|--------------------------------|---|---|--|
| Resolution | 5.5 digit | 6.5 digit | 6.5 digit |
| Basic V _{dc} Accuracy | Up to 0.015% | Up to 0.0035% | Up to 0.0024% |
| Measurements | V ac, V dc, I ac, I dc, Resistance, Continuity, Diode, Frequency | V ac, V dc, I ac, I dc, Resistance, Continuity, Diode, Frequency, Period | V ac, V dc, I ac, I dc, Resistance, Continuity, Diode, Frequency, Period, Temperature, Capacitance |
| Analysis Modes | Limit Compare | Trendplot, Statistics, Histogram | Trendplot, Statistics, Histogram |
| Connectivity | Rear panel: RS-232, RS-232 to USB adapter included | Front panel: USB host Rear panel: RS-232, RS-232 to USB adapter included, IEEE-488 and Ethernet | Front panel: USB host Rear panel: RS-232, RS-232 to USB adapter included, IEEE-488 and Ethernet |

DMM4020 Series



Applications

- Design and debug of embedded systems
- Automated Test
- Education

www.tektronix.com/dmm4020

| Features | Benefits | |
|----------------------------------|--|--|
| 5.5 digit resolution | Measure volts, ohms and amps with a basic V dc accuracy of 0.015%. | |
| Frequency measurements | Save cost and bench space by replacing a multifunction DMM and counter with one instrument. | |
| DC leakage current measurements | Make sensitive low current measurements with 1 nA resolution. | |
| Patented split terminal jacks | Make 4-wire resistance measurements with just two leads. | |
| Dual display | Measure two different parameters of the same signal from one test connection. | |
| Limit compare mode | Eliminate mistakes with pass/fail indicators that clearly show if a test passes or fails. | |
| Six setup buttons | Simplify complex measurements by saving the setup to a dedicated, front-panel button. Next time, simply press the appropriate setup button. | |
| Single button for every function | Reduce set up and evaluation time with dedicated front-panel buttons to access frequently used functions and parameters. | |
| PC connectivity | Easily connect to a personal computer using RS-232 or USB; Use NI LabVIEW SignalExpress™ software to control your DMM, log data, and to simply transfer and document your results. | |

DMM4050/DMM4040 Series



Applications

- Design and debug of embedded systems
- Automated Test
- Manufacturing test and quality control

www.tektronix.com/dmm4050

See virtual demo at www.tek.com/ products/digital-multimeter/dmm4050_ dmm4040/demo/

| Features | Benefits | |
|---|--|--|
| 6.5 digit resolution | Precisely measure volts, ohms and amps with a basic V dc accuracy of up to 0.0024%. | |
| Frequency, period, capacitance* and temperature* measurements | Save cost and bench space by replacing a multifunction DMM, counter, capacitance meter, and temperature meter with one versatile instrument. | |
| Patented split terminal jacks | Make 4-wire resistance measurements with just two leads. | |
| Trendplot™ paperless recorder mode | Plot measurement trends and graphically identify the extent of drift and intermittent events. | |
| Histogram mode | Discover stability or noise problems by viewing results as a histogram. | |
| Statistics mode | View multiple statistical values such as average, min, max and standard deviation to see how your signal is changing. | |
| Dual display | Measure two different parameters of the same signal from one test connection. | |
| Single button for every function | Reduce set up and evaluation time with dedicated front-panel buttons to access frequently used functions and parameters. | |
| USB host port | Conveniently store data and user settings to USB memory devices using the front-panel port. | |
| PC connectivity | Easily connect to a personal computer with multiple interface ports; Use NI LabVIEW SignalExpress™ software to control your DMM, log data, and to simply transfer and document your results. | |

*DMM4050 only

Power Supply Product Selection

| | PWS2000 | PWS4000 |
|------------------------|----------------------------------|---|
| Output Voltage/Current | ■ 18V/5A ■ 32V/6A | ■ 20V/5A ■ 60V/2.5A |
| | ■ 32V/3A ■ 72V/1.5A | ■ 30V/5A ■ 72V/1.2A |
| | | ■ 32V/3A |
| Basic Accuracy | ■ 0.05% Voltage ■ 0.2% Current | ■ 0.03% Voltage ■ 0.05% Current |
| Ripple and Noise | Less than 3 mV _{pp} | Less than 5 mV _{pp} |
| Features | ■ 20 Setup Memories | ■ 40 Setup Memories ■ Adjustable Overvoltage Protection |
| | ■ User-defined Password Lock Out | ■ User-defined Password Lock Out ■ Remote Sense |
| | | ■ List Mode |
| Connectivity | | ■ Rear panel: USB device port |
| • | | ■ PC communications software: NI LabVIEW SignalExpress™ Tektronix Edition |

PWS2000 Series



Applications

- Design and debug of embedded systems
- Education

www.tektronix.com/pws2000

| Features | Benefits | |
|--|---|--|
| Linear regulation | Deliver clean power - with less than 3 mV _{p-p} ripple and noise - to your device. | |
| Better than 0.05% basic voltage accuracy | Be confident in your power supply's output value with 0.05% voltage and 0.2% current basic accuracy. | |
| Up to 72 V Output Voltage | Generate the power you need for a wide variety of applications with a single power supply. | |
| Maximum Voltage Setting | Constrain the voltage setting to an appropriate level for your device under test. | |
| 20 setup memories | Simplify complex tests by saving your setup to an internal setup memory. Next time, simply recall that setting. | |
| Numeric keypad | Quickly set precise voltage and current values with the direct-entry keypad. | |
| Bright display | See your power supply's display at a distance, at an angle, or under dim lighting conditions. | |
| User-definable password | Prevent unwanted adjustments during critical tests by locking the front panel of your power supply. | |

PWS4000 Series



Applications

- Design and debug of embedded systems
- Automated test
- Education
- Manufacturing test and quality control

www.tektronix.com/pws4000

| Features | Benefits | |
|--|--|--|
| Linear regulation | Deliver clean power - with less than 5 mV _{p-p} ripple and noise - to your device. | |
| Better than 0.03% basic voltage accuracy | Be confident in your power supply's output value with 0.03% voltage and 0.05% current basic accuracy. | |
| Up to 72 V Output Voltage | Generate the power you need for a wide variety of applications with a single power supply. | |
| Overvoltage Protection (OVP) and maximum voltage setting | Protect your device under test from accidental damage with integrated OVP circuit and nicroprocessor-controlled maximum voltage setting. | |
| Remote sense inputs | Deliver accurate voltage to your device under test by eliminating the effect of voltage drop in your lead wires. | |
| List mode | Define up to 7 custom test sequences, each with up to 80 voltage and current steps, with the built-in list mode. | |
| 40 setup memories | Simplify complex tests by saving your setup to an internal setup memory. Next time you need to run the test, simply recall that setting. | |
| Numeric keypad | Quickly set precise voltage and current values with the direct-entry keypad. | |
| Bright display | See your power supply's meter readings and limits with a single glance; a bright display provides excellent readability. | |
| User-definable password | Prevent unwanted adjustments during critical tests by locking the front panel of your power supply. | |
| PC Connectivity | Easily connect to a personal computer using the USB device port; Use your preferred programming environment or included NI LabVIEW SignalExpress software to control your power supply remotely. | |

Try out the Tektronix power supplies with the virtual simulation at: www.tektronix.com/powersupply

Frequency Counter/Timer Product Selection

| | FCA3000 | FCA3100 | MCA3000 |
|-----------------|--|---|---|
| Frequency Range | 400 MHz, 3 GHz, 20 GHz | 400 MHz, 3 GHz, 20 GHz | 27 GHz, 40 GHz |
| Resolution | ■ 100 ps (time) ■ 12 digit/s (freq) | ■ 50 ps (time) ■ 12 digit/s (freq) | ■ 100 ps (time) ■ 12 digit/s (freq) |
| Data Transfer | 250 k Samples/sec (internal)5 k Samples/sec (block) | 250 k Samples/sec (internal)15 k Samples/sec (block) | ■ 250 k Samples/sec (internal) ■ 5 k Samples/sec (block) |
| Measurements | 13 Automated Measurements Frequency, Period, Ratio, Time Interval, Time Interval Error, Pulse Width, Rise/Fall Time, Phase Angle, Duty Cycle, V _{max} , V _{min} , V _{p-p} | 14 Automated Measurements Frequency, Period, Ratio, Time Interval, Time Interval Error, Pulse Width, Rise/Fall Time, Phase Angle, Duty Cycle, V _{max} , V _{min} , V _{p-p} , Totalize | 13 Automated Measurements Frequency, Period, Ratio, Time Interval, Time Interval Error, Pulse Width, Rise/Fall Time, Phase Angle, Duty Cycle, V _{max} , V _{min} , V _{p-p} + Integrated Power Meter |
| Analysis Modes | Trend Plot, Measurement Statistics, Allan Deviation, Histogram | Trend Plot, Measurement Statistics, Allan Deviation, Histogram | Trend Plot, Measurement Statistics, Allan Deviation, Histogram |
| Connectivity | Rear panel: USB device port, GPIB PC communications software: NI LabVIEW SignalExpress™ Tektronix Edition | Rear panel: USB device port, GPIB PC communications software: NI LabVIEW SignalExpress™ Tektronix Edition | Rear panel: USB device port, GPIB PC communications software: NI LabVIEW SignalExpress™ Tektronix Edition |

FCA3000/31000 Series



Applications

- Design and debug of embedded systems
- Design and manufacturing of oscillators, PLLs and more
- Education
- Calibration
- Radar and frequency hopping test
- Automated test

www.tektronix.com/fca3000

| Features | Benefits | |
|---|--|--|
| 12 digit/s frequency resolution | See small changes in frequency with industry-leading frequency resolution. | |
| Down to 50 ps time resolution | Accurately capture signal details with industry-leading single-shot time resolution. | |
| Trend Plot mode | Plot measurement trends and graphically identify the extent of drift and intermittent events. | |
| Histogram mode | Discover stability or noise problems by viewing results as a histogram. | |
| Statistics mode | View multiple statistical values such as average, min, max, standard and Allan deviation to see how your signal is changing. | |
| Optional TimeView [™] software | Transform your counter/timer into a modulation domain analyzer and see frequency changes over time to truly characterize your device's performance. | |
| USB and GPIB ports | Easily connect to a personal computer for further analysis or into an ATE system with t back-panel USB and GPIB ports; an emulation mode for legacy counter/timers further simplifies integrating into an existing ATE system. | |
| PC Connectivity | Control your counter/timer, log data, and simply transfer and document your results with the included copy of NI LabVIEW SignalExpress software. | |

See the latest offers on scopes, probes and more and buy online at: www.tektronix.com/store

MCA Series



Applications

- Design and debug of embedded systems
- Design and manufacturing of oscillators, PLLs and more
- Calibration
- Radar and frequency hopping test
- Automated test

www.tektronix.com/mca3000

| Features | Benefits | |
|---|--|--|
| 12 digit/s frequency resolution | See small changes in frequency with industry-leading frequency resolution. | |
| 100 ps time resolution | Accurately capture signal details with industry-leading single-shot time resolution. | |
| Trend Plot mode | Plot measurement trends and graphically identify the extent of drift and intermittent events. | |
| Histogram mode | Discover stability or noise problems by viewing results as a histogram. | |
| Statistics mode | View multiple statistical values such as average, min, max, standard and Allan deviation to see how your signal is changing. | |
| Integrated power meter | Measure frequency and power with a single connection, enabling you to analyze variations in signal power with 0.01 dBm resolution @ 100 ms acquisition time | |
| Optional TimeView [™] software | Transform your counter/timer into a modulation domain analyzer and see frequency changes over time to truly characterize your device's performance. | |
| USB and GPIB ports | Easily connect to a personal computer for further analysis or into an ATE system with the back-panel USB and GPIB ports; an emulation mode for legacy counter/timers further simplifies integrating into an existing ATE system. | |
| PC Connectivity | Control your counter/timer, log data, and simply transfer and document your results with the included copy of NI LabVIEW SignalExpress software. | |

Test the Tektronix frequency counter/timers with the virtual simulation at: www.tektronix.com/frequencycounter

PSM3000/4000/5000 Series



Applications

- Measuring pulse and radar signals
- Measuring Wireless Communication Signals
- Calibration
- Automated test

www.tektronix.com/rfpowersensors

| Features | Benefits | |
|--|---|--|
| Calibrated over Full temperature range | No zero or cal needed before making measurements, saving time and avoiding poor quality data. | |
| Average Power, Duty Cycle Corrected Pulse Power, Logging | Increased utility and functionality for basic power measurements with logging, trend graphing, and limit testing on all models. | |
| USB form factor and Windows Connectivity | Reduce rack space and need for separate controller. Runs on Tektronix Windows instruments. | |
| Read rates to 2000 reads /s | Decrease test time with fastest power measurements available in power meter/sensor. | |
| TTL Trigger Input and Output | t Synchronize testing with DUT or other ATE test equipment with complex trigger functionality. | |
| PSM4000/5000 Pulse Measurements | Characterize pulse signals with adjustable offset and duration. | |
| PSM5000 Pulse Profiling | Easy to use graphical interface adds time-gated pulse measurements and statistics such as PDF and CCDF with user defined filtering and bandwidth. | |
| PC Connectivity | Control your power meter, log data, and transfer measurement results with LabView drivers and Windows drivers. | |

Mixed/Analog Signal Generators

| | AFG3000 Series | AWG5000 Series | AWG7000 Series |
|---------------------------------------|-----------------|---|---------------------|
| Channels (maximum) | 1, 2 | 4 analog, 28 digital | 2 analog |
| Sample Rate (maximum) | 2.0 GS/s | 1.2 GS/s, Up to 370 MHz | 24 GS/s |
| Frequncy (maximum) | 240 MHz | 370 MHz | 9.6 GHz |
| Memory Depth (maximum) | 128 k | Up to 32 M | Up to 128 M |
| Vertical Resolution (bits) | 14 | 14 | 10 |
| Output Amplitude*1 (maximum) | 20 V p-p | 4.5 | 2 |
| Marker Outputs (maximum) | 1 (trigger out) | 4 | 4 |
| Parallel Digital Outputs (maximum) | - | 28'2 | - |
| Integrated Editors | Graphical, Text | Graphical, Sequence | Graphical, Sequence |
| Built-in Applications | - | RFXpress®, SerialXpress® & the Open Window-based system supports third-party software | |

see page 22 see page 21 see page 22

AFG3000 Series



Applications

- Replicate sensor signals or other missing system inputs
- Device stress testing
- Electronic design optimization
- Power semiconductor device test
- I/Q modulator test

www.tektronix.com/afg3000

| Features | Benefits | |
|---|--|--|
| Dual-channel models | Save cost and bench space by replacing two signal generators with one that offers two tightly synchronized or two completely independent signals. | |
| Up to 2 GS/s sample rate | Generate waveforms with fine timing resolution. | |
| Up to 20 Vp-p amplitude into 50 Ω load (AFG3011) | Save cost and set-up time by creating high amplitude signals without using an external power amplifier. | |
| 25 shortcut keys | Reduce set up and evaluation time with direct access to frequently used functions and parameters. | |
| Large 5.6" (142 mm) color display | Full confidence in your signal since all relevant settings and waveform graphs can be seen at a single glance. (Monochrome on AFG3021B). | |
| Only 6.6" (168 mm) deep | Free up valuable bench-top space. | |
| ArbExpress™ software | Create and modify waveforms with ease - import waveforms seamlessly from your Tektronix oscilloscope or create them via the equation editor, free hand, point draw or waveform math. | |

AWG5000 Series



Applications

- I/Q modulator test
- Consumer electronics
- Serial data
- RF Baseband Signal Generation

www.tektronix.com/awg5000

| Features | Benefits |
|--------------------------------|---|
| Multiple output types | Save cost and bench space by replacing multiple instruments with one, flexible signal generator capable of analog, digital and mixed signals. |
| 14-bit vertical resolution | Easily stress test your device by creating ideal, distorted or "real-world" signals with glitches and other signal impairments. |
| Up to 32 M point record length | Generate multiple, high resolution complex waveforms. |
| RFXpress® software | Quickly create digitally-modulated IQ and IF signals for both standard and custom applications with support for a wide range of modulation types. |
| Integrated PC | Seamlessly integrate to your network with LAN and USB ports. Easily save data with a built-in DVD, removable hard drive and USB ports on the front. |
| Intuitive user-interface | Shorten test time with an easy-to-use interface. |

AWG7000 Series

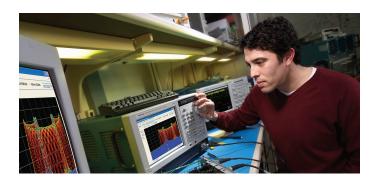


Applications

- Serial data validation and compliance testing
- Radar signal generation and environmental simulation
- Wideband analog and digital RF signal generation
- Disk drive validation and test

www.tektronix.com/awg7000

| Features | Benefits |
|---------------------------------|---|
| High speed interleaved sampling | Generate more accurate signals with lower jitter, utilizing higher oversampling with up to 24 GS/s on the AWG7122. |
| Waveform sequencing | Real-time sequencing creates infinite waveform loops, jumps, and conditional branches for longer pattern length generation suitable for replicating real world behavior of serial transmitters. |
| Bandwidth expansion filter | Rise time can be decreased by applying a bandwidth expansion filter to address the challenges of fast serial data signal generation. |
| SerialXpress® software | SerialXpress software enables creation of exact waveforms required for thorough and repeatable design validation, margin/ characterization and conformance testing of high speed serial data receivers. |
| RFXpress® software | Easily create and edit RF/IF/IQ signals for radar and radio comms testing. |
| Deep memory | Replicate low frequency events such as spread spectrum clocking on high speed serial signals which require long pattern lengths. |
| Superior RF frequency output | 9.6 GHz RF frequency output provides effective bandwidth for test of wide bandwidth RF technologies and support for 2nd/3rd generation serial standards. |





Spectrum Analyzers

Tektronix Spectrum Analyzers Deliver Confidence to Confront the Most Challenging Microwave and RF Designs

Effectively characterize time-varient signals and solve unexpected problems with DPX™ Live RF spectrum display. Standard on all Real Time Spectrum Analyzers ranging from handheld to high performance benchtop instruments.

- Performance Spectrum Analyzers integrate revolutionary DPX™ Live RF spectrum display with the industry-leading dynamic range and bandwidth combination.
- Mid-Range Spectrum Analyzers deliver performance capabilities, including DPX™ Live RF spectrum display and frequency masked trigger, for complete time-correlated analysis in the frequency, time and modulation domains.
- Handheld Spectrum Analyzers scan the RF environment, reliably classify signals, and locate signals with the industry's only integrated mapping solution.

Tektronix' DPX technology lets you see what others don't. Learn more at www.tektronix.com/rsa

| | RSA6000 Series | RSA5000 Series | RSA3000 Series | H600/SA2600 Series |
|--|-----------------------|-----------------------|----------------------|----------------------|
| Frequency Range | 9 kHz to 20 GHz | 1 Hz to 6.2 GHz | DC to 8 GHz | 10 kHz to 6.2 GHz |
| Capture Bandwidth | Up to 110 MHz | Up to 85 MHz | Up to 36 MHz | 20 MHz |
| Minimum Event Duration for 100% Probability of Intercept (POI) | As brief as 3.7 μs | As brief as 5.8 μs | As brief as 20 μs | As brief as 125 μs |
| SFDR (typical) | Down to -78 dBc | Down to -78 dBc | Down to -73 dBc | Down to -70 dBc |
| DANL (equivalent at 1 Hz RBW) | Down to -170 dBm/Hz | Down to -167 dBm/Hz | Down to -151 dBm/Hz | Down to -163 dBm/Hz |
| Phase Noise (typical at 10 kHz offset) | ≤ -110 dBc/Hz | ≤ -112 dBc/Hz | ≤ -112 dBc/Hz | ≤ -95 dBc/Hz |
| Phase Noise (typical at 1 MHz offset) | ≤ -134 dBc/Hz | ≤ -139 dBc/Hz | ≤ -135 dBc/Hz | ≤ -110 dBc/Hz |
| DPX Live RF Spectrum Display | > 292,000 Spectrums/s | > 292,000 Spectrums/s | > 48,000 Spectrums/s | > 10,000 Spectrums/s |

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H600/SA2600 Series



Applications

- Spectrum Monitoring and Surveillance
- Interference Detection
- Signal Hunting
- Signal Identification
- Homeland Security

| www.tektronix.com/sa260 | 0 |
|-------------------------|---|
|-------------------------|---|

| Features | Benefits |
|--|--|
| DPX® Live RF spectrum display | Discover previously unseen signal behavior. Improve test confidence and find elusive signals missed by conventional spectrum analyzers. |
| DPX spectrum mask | Capture small signals in the presence of large signals with a user- definable mask drawn in the frequency domain. |
| Integrated and GPS-enabled mapping | Locate outdoor signals faster with simple integrated tools in a portable, battery-operated package. No external PC required for plotting measurements on a map. |
| Signal database, classification and IQ data export | Quickly recognize the presence of new unwanted signals by comparing current results against previously saved spectrum surveys. Built-in classification tools enable you to efficiently categorize signals as desirable or undesirable. |
| Rugged designed for field use | Test longer with extended battery life and industry's only hot swap power system. LAN interface for remote control and unattended monitoring stations for spectrum awareness. |

RSA3000 Series



Applications

- Radio/Satellite Communications
- Spectrum Management
- Radar/EW
- RF Debug
- Wireless Communications

www.tektronix.com/RSA3000

| Features | Benefits |
|---|--|
| DPX® Spectrum Display 100% Probability of Intercept (POI) | Improve test confidence and catch very short duration transients missed by conventional spectrum analyzers. Discover signal behavior previously unseen. |
| Frequency Mask Trigger 100% POI | Save time by isolating signal faults and efficiently utilizing memory with a unique frequency domain trigger. Isolate hardware and software anomalies with cross domain triggering between multiple instruments. |
| Seamless data capture into deep memory or external recording system | Observe the entire duration of signal events, like frequency hopping sequences, PLL settling times, turn on transients, and multiple pulses. |
| Time-correlated data analysis with automatic domain correlation and linked markers | Accelerate troubleshooting and analysis by pinpointing the root cause of problems in multiple domains. |
| One box multi-function design for spectrum analysis, vector signal analysis, pulse analysis, baseband analysis, signal source analysis, audio distortion analysis, and wireless standard analysis | Simplify test and save test time with multiple measurements on the same captured data. Reduce cost of test with a versatile single instrument that replaces multiple test sets. |

RSA5000 Series



Applications

- Radio/Satellite Communications
- EMI Diagnostics
- Spectrum Management
- RF Debug
- Radar/EW

www.tektronix.com/RSA5000

| Features | Benefits |
|---|---|
| DPX® Live RF spectrum display | Discover previously unseen signal behavior. Improve test confidence and catch very short duration transients missed by conventional spectrum analyzers. |
| Triggering expertise | Save time by isolating signal anomalies that other instruments can't even trigger on. Isolate hard to find hardware and software anomalies with cross domain triggering between multiple instruments. |
| Seamless data capture | Observe the entire duration of signal events, like frequency hopping sequences, PLL settling times, turn on transients, and multiple pulses. |
| Multi-domain time correlation | Accelerate troubleshooting and analysis by pinpointing the root cause of problems in multiple domains. Analyze captured data in any/all domains at any time with correlated markers. |
| Automatic pulse measurement and detection | Simplify test and save test time with multiple measurements on the same captured data. Reduce cost of test with a versatile single instrument that replaces multiple test sets. |

RSA6000 Series



Applications

- Radar/EW
- Spectrum Management
- Radio/Satellite Communications
- RF Debug
- EMI Diagnostics

www.tektronix.com/RSA6000

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|---|---|
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Logic Analyzer Product Selection

With Tektronix Logic Analyzers, you can acquire fast edges with the industry's highest acquisition speed. Support packages tuned to your specific application makes it easier for you to probe, acquire, decode, analyze, and validate the performance of your microprocessor, FPGA or memory design.

| | TLA6xxx | TLA7ACx | TLA7Bxx | TLA7SAxx |
|---|--|---|--|--|
| Channels | 68, 102, 136 | 68, 102, 136 | 68, 102, 136 | 8, 16 |
| Maximum Channels per Timebase (merge) | 136 | 272 in TLA7012, 408 in TLA7016 | 272 in TLA7012, 408 in TLA7016 | - |
| Maximum Channels per Mainframe | 136 | 272 in TLA7012, 816 in TLA7016 | 272 in TLA7012, 816 in TLA7016 | 32 in TLA7012, 96 in TLA7016 |
| Maximum Channels per System | 136 | | (with eight in TLA7012s and one TLA (with eight in TLA7016s and one TLA | |
| Maximum Independent Buses per System | 1 | | vith eight in TLA7012s and one TLA70 vith eight in TLA7016s and one TLA70 | |
| State Clock Rate | 235 MHz std; 450 MHz opt. | 235 MHz std; 450 MHz opt. | 750 MHz std; 1.4 GHz opt. | Up to 8.0 GT/s |
| Maximum State Clock Rate | 800 MHz (half channel mode) | 800 MHz (half channel mode) | up to 1.4 GHz | Up to 8.0 GT/s |
| Maximum State Data Rate | 1,250 Mb/s | 1,250 Mb/s | 3.0 Gb/s | - |
| MagniVu™ Timing (all channels, all the time) | 125 ps (8 GHz) with 16 Kb depth | 125 ps (8 GHz) with 16 Kb depth | 20 ps (50 GHz) | - |
| Simultaneous State and Timing Through Same Probe | yes | yes | yes | no |
| Analog Measurements Through Same Probe | optional | optional | yes | Yes. Requires the use of an adapter probe P67UHDSMA to connect the probe to an oscilloscope |
| Timing | 500 ps (2 GHz)/1 ns (1 GHz)/2 ns (500 GHz)/(quarter/ half/full channels) | 500 ps (2 GHz)/1 ns (1 GHz)/2 ns (500 GHz)/(quarter/ half/full channels) | 156.25 ps/312.5 ps/625 ps to 50 ns(quarter/half/ full channels) | - |
| Analog Outputs (four per module - analog MUX) | optional | optional | yes | no |
| Record Length | 8/4/2 Mb to 512/256/ 128 Mb (quarter/half/full channels with timestamp) | 8/4/2 Mb to 512/256/ 128 Mb (quarter/half/full channels with timestamp) | 4/2 Mb to 256/128 Mb (half/full channels with with timestamp) | Up to 160M symbols/ differential input 8 GB physical memory total (16 GB for a x16 configuration) |
| Source Synchronous Clocking | yes | yes | yes | no |

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Logic Analyzer Probes and Interconnect Systems

No test and measurement solution is complete without addressing probing and considering its impact on your system and your measurement time. You can depend on Tektronix probes to protect the integrity of your signal, whether you need simultaneous digital-analog acquisition, an economical compression probe or a high-fidelity general-purpose probe.

www.tektronix.com/logic_analyzers/probes

TLA6000 Series

Applications

- FPGA
- Processor and Bus Debug and Verification
- Signal integrity
- DDR2

www.tektronix.com/tla6000

| Features | Benefits | |
|--|--|--|
| Glitch Trigger, Capture and Display | Quickly find signal integrity problems by triggering on common problems such as crosstalk and termination errors. Exclusive glitch display removes need to manually search all channels by showing both the time and channel where any signal integrity problems occurred. | |
| iCapture [™] multiplexing | Eliminate double probing and see both digital and analog acquisitions through a single logic analyzer probe. | |
| iView [™] display | Gain complete system visibility with time-correlated, iintegrated analog and digital data on one display. | |
| MagniVu™ acquisition | Accurately determine signal relationships with high sampling resolution (125 ps) on all channels. | |
| Automated measurements | Easily summarize your design's performance with sophisticated measurements such as: frequency, period, pulse width, duty cycle, and edge count. | |
| Drag & drop triggers | Quickly isolate events through simple and intuitive trigger setup. Triggers include: Channel Edge, Channel Value, Bus Value, Multi-Group Value, Glitch, Setup and Hold Violation, or Trigger on Anything | |

TLA7000 Series



Applications

- Signal integrity
- Memory
- **FPGA**
- Serial data
- MIPI

www.tektronix.com/tla7000

| Features | Benefits | |
|-------------------------------|---|--|
| MagniVu™ acquisition | Avoid missing events completely in either timing or state acquisition mode with higher sampling resolution (up to 20 ps) on all channels. | |
| iCapture™ multiplexing | Eliminate double probing with simultaneous digital and analog acquisition through a single logic analyzer probe. | |
| iView [™] display | Gain complete system visibility with time-correlated, integrated analog and digital data on one display. | |
| iVerify [™] analysis | Quickly find signal integrity issues with multi-channel bus analysis using oscilloscope- generated eye diagram. | |
| Automated measurements | Easily summarize your design's performance with sophisticated measurements such as: frequency, period, pulse width, duty cycle, and edge count. | |
| Drag & drop triggers | Quickly isolate events through simple and intuitive trigger setup. Triggers include: Channel Edge, Channel Value, Bus Value, Multi-Group Value, Glitch, Setup and Hold Violation, or Trigger on Anything. | |

TLA7SA00 Series

Applications

- PCI Express Debug & Protocol Analysis
- Silicon Validation
- Computer System Validation
- Embedded System Integration, Debug and Validation
- Processor/Bus Debug and Verification

www.tektronix.com/tlsa

| Features | Benefits | |
|---|--|--|
| OpenEYE Equalization | You can probe anywhere on the bus thanks to OpenEYE Technology with automatic tuning and equalization circuitry. | |
| ScopePHY Probing | Quickly gain confidence that your setup is correct and the PCle signal meets probe input requirements by routing any signal directly to a high bandwidth oscilloscope. | |
| FastSYNC | Guaranteed resynchronization time is <12 FTS1 (PCle2) or <4 FTS2 (PCle3) regardless of the Electrical Idle time for Advanced Power State Management performance. | |
| Data Storage and HW Accelerated Search | Get access to data and execute searches on any pattern in seconds regardless of record length. | |
| Comprehensive Trigger System | Quickly build a trigger definition to trigger on the most elusive PCIe events occurring on Link. | |
| Innovative Data Views | Get unprecedented visibility into your data from Protocol to Physical layer | |
| | Observe and Analyze Link based behavior of protocol elements (transactions, packets, fields, ordered sets) with the Transaction Window | |
| | - Get high-ground visibility of system issues involving flow control with Unique Bird's Eye View integrated into the Transaction window | |
| | - Get a data rich statistics based view of all PCle protocol elements through summary Profile Window | |
| | - Get insight into physical layer details with the unique Listing window showing packet details as well as lane by lane symbol decode | |
| MultiBus Correlation | Get full system visibility of multiple busses (DDR, PCle, QPI, etc) as well as other system level activity through the legacy power of the Logic Analyzer functionality. | |

PG3 Series



Applications

- Peripheral/ASIC emulation and stimulation
- Setup/hold verification
- Production test
- Small-scale ATE
- Digital stimulus & stress testing

www.tektronix.com/pg3

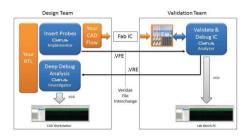
| Features | Benefits |
|---|--|
| 300 Mb/s and 600 Mb/s data rates | Supports higher speed logic such as FPGAs, embedded microprocessors, memory, and serial I/O buses. |
| Expandable up to 256 bit width | Simultaneously stimulate several inputs to the device under test, including buses, serial inputs, and control lines. |
| Variable voltage levels and byte wide timing adjustments | Provides fine adjustments in timing and voltage levels for "corner case" system testing. |
| External clock input and external trigger inputs | Synchronize the pattern generator output to the system under test. |
| Capture logic analyzer data and export it to the PG for play back | Simple process allows the customer to quickly recreate data patterns. |
| Application software creates files with breaks, loops, and conditional execution based on external events | Broad flexibility in the output patterns while conserving pattern generator memory. |
| Pre-programmed patterns for common tests | Saves time that would be spent generating common patterns. |
| Wide variety of Probes | Covers many different application needs for stimulus. |

Embedded Instrumentation

Tektronix Embedded Instrumentation solutions greatly improve your productivity every step of the way to market. We enable the validation of correct operation and the determination of the root cause of any issues to be achieved faster and without distracting key staff from other essential design tasks.

Our systems approach enables the user to control the level of highly efficient capture circuits added and automatically document the result. No longer are validation teams unclear of ad-hoc features, our tool gives them easy to use and fast systematic observability into the chip. No other tools deliver validation and debug so quickly!

Clarus: ASIC Validation



Features

Deeper Captures

Arbitrary Re-targetable Signal Selection

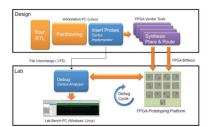
Design for Validation

Reduces Time to Market

Maximized Visibility for the Maximum Area

Fast DFV Implementation

Certus: FPGA Prototyping



Features

Synchronized view of the complete ASIC design

Views across multiple clock domains and FPGAs

Seamless integration with FPGA vendor CAD flows

Operation on a wide range of proven prototyping hardware and I/O cards

Zoom from system view to clock cycle accurate detailed data

Any observed signal, any time avoiding frequent FPGA re-synthesis

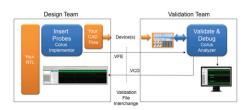
Complex triggering

Interworking with Tektronix test equipment and software debuggers

Cross triggered views across software, subsystems, and devices

Fast and easy capture probe insertion in FPGAs

Corus: FPGA System Validation



Features

Very wide signal range with extensive compression to optimize depth

Synchronized view, on-chip across multiple clock domains and across FPGAs

Zoom from system view to clock cycle accurate detailed data

Any observed signal, any time avoiding frequent FPGA re-synthesis

Complex triggering and cross triggering with test equipment and software debuggers

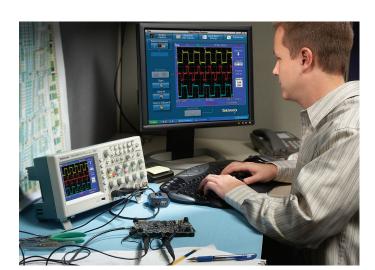
Enables remote debug in the field solutions**

Fast and easy capture probe insertion in FPGAs

Software to Expand your Tektronix Instrument Capability

Automate your testing, simplify execution and speed evaluation of your most challenging system designs with these software solutions. For a minimal investment increase your design insight by taking advantage of the latest software, options, and upgrades.

Here is a representative list of the most popular application software packages available. There are over 40 packages from Tektronix. For a more complete list or application software packages for a specific instrument, please consult the product home pages listed at www.tektronix.com/products/accessories/application_software.



Easier PC Connectivity from Tektronix

Tektronix OpenChoice® Software - The freedom to analyze, document and present your data any way you choose.

OpenChoice® Desktop software solutions deliver simple, seamless integration between the instrument and the PC. OpenChoice® provides you with multiple choices to easily generate, capture, transfer, document and analyze your measurement results, according to your application environment and preference.

www.tektronix.com/openchoice

Software to Expand your Tektronix Instrument Capability

Automate your testing, simplify execution and speed evaluation of your most challenging system designs with these software solutions. For a minimal investment increase your design insight by taking advantage of the latest software, options, and upgrades.

Here is a representative list of the most popular application software packages available. There are over 40 packages from Tektronix. For a more complete list of application software packages for a specific instrument, please consult the product home pages listed at www.tektronix.com/products/accessories/application_software.

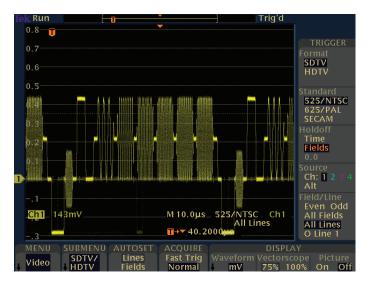
Bench and Performance Oscilloscopes



Common Serial Bus Triggering and Analysis

Speed debug of your serial bus with automated trigger, decode and search for common serial standards, such as I²C, SPI, USB, Ethernet, CAN, LIN, FlexRay, RS-232/422/485/UART, MIL-STD-1553 and I²S/LJ/RJ/TDM.

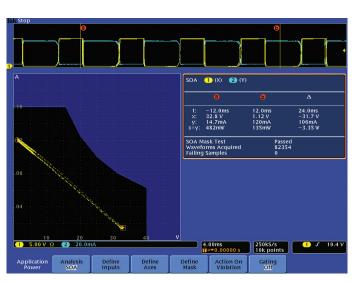
www.tektronix.com/products/accessories/application_software



HDTV and Custom Video Analysis

Simplify debug of video signals. Provides video quickmenu, autoset, hold, line count trigger, video picture mode, vectorscope mode, HDTV format trigger graticules and more.

www.tektronix.com/products/accessories/application_software



Power Analysis

Improve the efficiency of your switching power supply. Provides automated measurements for analyzing power quality, current harmonics, switching loss, safe operating area, slew rate, modulation, and ripple.

www.tektronix.com/products/accessories/application_software

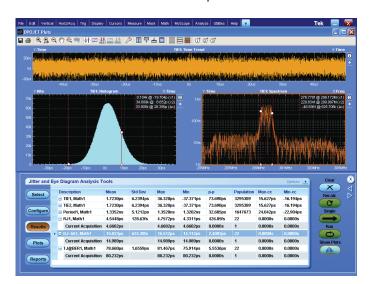


Easier PC Connectivity from Tektronix

Tektronix OpenChoice® Software -The freedom to analyze, document and present your data any way you choose.

OpenChoice® Desktop software solutions deliver simple, seamless integration between the instrument and the PC. OpenChoice® provides you with multiple choices to easily generate, capture, transfer, document and analyze your measurement results, according to your application environment and preference.

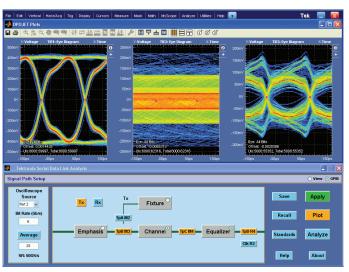
www.tektronix.com/openchoice



DPOJET Jitter and Eye Diagram Analysis

Simplify identifying signal integrity concerns, jitter, and their related sources with DPOJET software. DPOJET provides jitter separation capability that speeds up root cause analysis of timing issues.

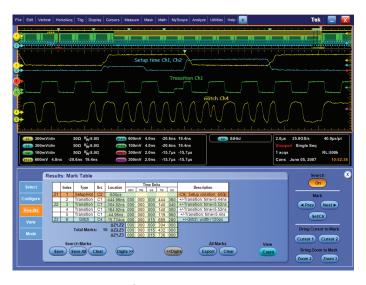
www.tektronix.com/products/accessories/application software



Serial Data Link Analysis

Analyze link performance while modifying transmitter emphasis and receiver settings incorporating feed forward and decisionfeedback equalization. Improve accuracy with the ability to de-embed fixture and other channel effects from the measurements.

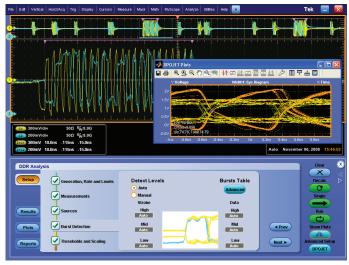
www.tektronix.com/products/accessories/application_software



Advanced Event Search and Mark

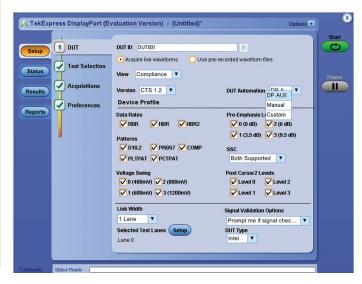
Ease the tedious task of examining captured waveform data by highlighting important events, skipping the unimportant ones and enhancing the comprehension of event relationships on your Tektronix oscilloscope. Navigate between events of interest effortlessly to get to the source of your measurement task.

www.tektronix.com/products/accessories/application_software



DDR Memory Bus Analysis

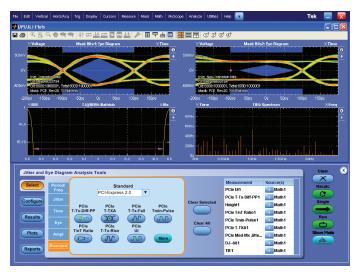
Automatically identify DDR1, LPDDR, LPDDR2, DDR2, DDR3 and GDDR3 Reads and Writes to clearly see how analog anomalies are affecting your DDR/Memory. When combined with the DPO-JET timing analysis and DPX® technology, DDRA is the fastest way to solve complex memory signaling issues.



DisplayPort 1.2 Automated Conformance Test Solution

The DP12 Physical Layer Measurement and Automation system provides the setup and automated execution of the core measurements found in the DisplayPort Version 1.2 Compliance Test Specification or CTS. When the software and oscilloscope are combined with a DP-AUX device control component, designers can speed up DisplayPort-based silicon or computer system compliance testing.

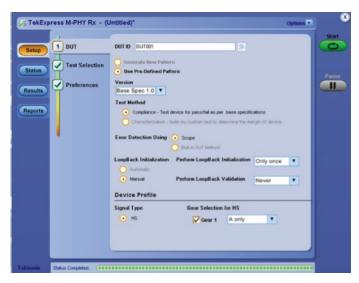
www.tektronix.com/products/accessories/application_software



PCI Express Compliance Test Solution

Analyze the performance of your PCI-Express Rev 1.0, 2.0 or 3.0 design with comprehensive test support. Option PCE 3.0 enables tests that conform to PCI-SIG standards using the powerful DPOJET analysis package. With DPO/DSA70000 Series Oscilloscopes, view critical timing margins for PCI-Express Rev 3.0 signaling.

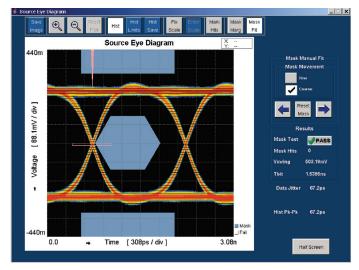
www.tektronix.com/products/accessories/application_software



MIPI DPHY and MPHY Debug and Compliance **Test Solutions**

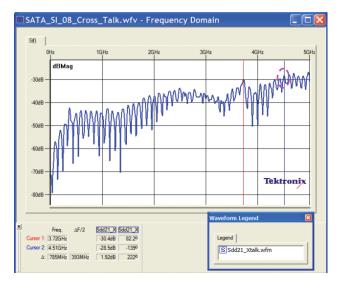
A broad level of support for MIPI specifications with trigger, decode and search for MIPI CSI-2 and DSI-1 serial buses on all Windows-based Oscilloscopes. Also available are full-automation toolset for one-button conformance testing of MIPI D-PHY Tx/Rx and M-PHY Rx test specs.

www.tektronix.com/products/accessories/application_software



HDMI and MHL Compliance Test Solutions

Fast, efficient solutions for HDMI and MHL compliance measurement challenges, no matter if you are working on a Source, Cable, or Sink solution. These applications provide HDMI and MHL compliance test solutions that ensure quality and interoperability to HDMI CTS1.3c and CTS1.4b test specification. The MHL test solution provides support for the MHL Compliance Test Specification (CTS) 1.1 released in June, 2011.



IConnect® MeasureXtractor™ Signal Integrity TDR and S-parameter

Efficient, easy-to-use, and cost-effective solution for measurementbased performance evaluation of gigabit interconnect links and devices, including signal integrity analysis, impedance, S-parameter and eye diagram tests, and fault isolation.

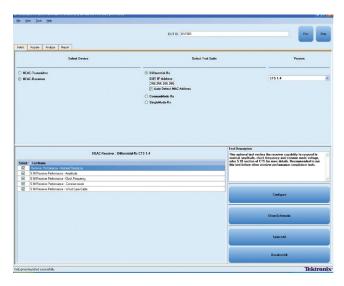
www.tektronix.com/products/accessories/application_software



Ethernet Compliance Test Solutions

Receive full PHY layer electrical test support for Ethernet variants from 10BASE-T to 10GBASE-T with a set of comprehensive. integrated Ethernet tool sets. Analog verification, device characterization and automated compliance solutions are available as options, including compliance test support for SFP+.

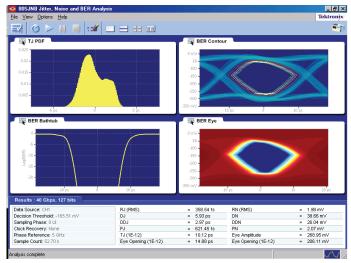
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TekExpress[™] Automated Serial Compliance Test Software

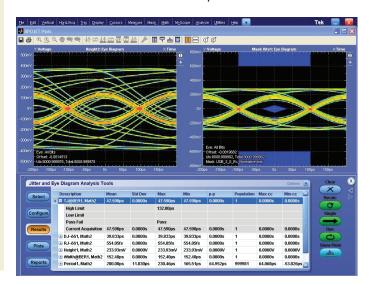
Reduce your compliance test time on 10GBASE-T, MIPI, MHL, SATA, SAS, USB and DisplayPort standards-based designs by approximately 70% with the simple, efficient testing and automation of all required testing suites provided by TekExpress software. Also included is auto-recognition of required test equipment like Tektronix 70000 Series Oscilloscopes and precise DUT/Host control one-button testing.

www.tektronix.com/products/accessories/application_software



Jitter, Noise & BER Analysis Software (80SJNB)

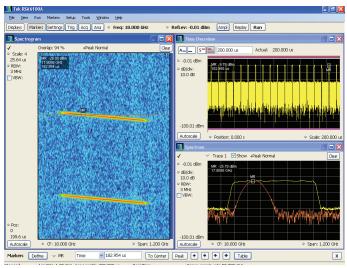
Characterize Jitter, Noise and BER performance of high-speed serial designs from 1 Gb/s to 60 Gb/s data rates; Characterize advanced links using FFE/DFE equalization, and with TWDP and DDPWS measurements; Link budgeting and "What-if" analysis with emulation of a range of channels with just-one transmitter measurement.



USB 3.0 Transmitter Testing

Verify, characterize and debug SuperSpeed USB designs with pass/fail testing for all USB 3.0 measurements. USB3 with DPOJET provides the fastest method to resolve complex USB signal integrity issues. For compliance tests, TekExpress USB 3.0 provides an automated, simple and efficient way to test USB 3.0 Transmitter hosts and devices consistent with the requirements of the SuperSpeed Universal Serial Bus Electrical Compliance Test Specification.

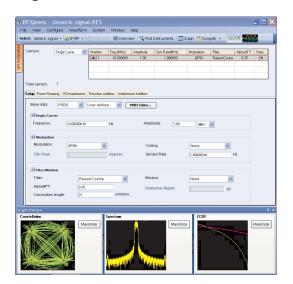
www.tektronix.com/products/accessories/application_software



SignalVu™ Vector Signal Analysis

Easily characterize wideband spectral events and verify designs such as wideband radar, high data rate satellite links or frequency-hopping radios. SignalVu combines the functionality of a vector signal analyzer, a spectrum analyzer and the powerful triggering capabilities of Tektronix oscilloscopes – all in a single package.

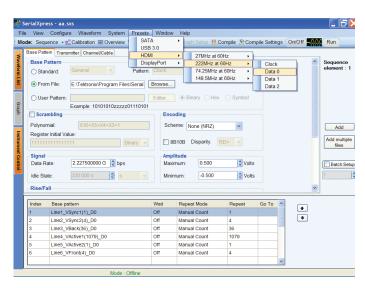
Signal Generators



RFXpress[®] Software for the AWG5000, AWG7000 (RFX100)

If you are doing RF Designs requiring signal modulation, Tektronix' RFXpress software for the AWG series delivers advanced capabilities to synthesize digitally modulated baseband, IF and RF/microwave signals supporting a wide range of modulation schemes. RFXpress simplifies waveform creation. Special options are available for Radar, OFDM, S-Parameter, and UWB signals specifically.

www.tektronix.com/products/accessories/application_software



SerialXpress® Software for the AWG5000, AWG7000 (SDX100)

Recreate exact waveforms required for thorough and repeatable design validation, margin/characterization and conformance testing with SerialXpress and AWG Series signal generators. SerialXpress' easy to use graphical user interface allows for a combination of test signals and various impairments including Inter Symbol Interferences (ISI), Duty Cycle Distortion (DCD), Spread Spectrum Clocking (SSC), Pre-emphasis and noise.

www.tektronix.com/products/accessories/application_software

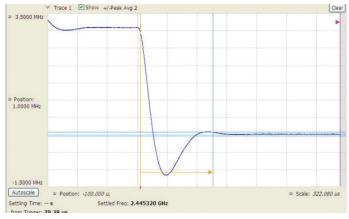
Spectrum Analyzers RSA5000/6000 Series



Phase Noise and Jitter Measurements for the RSA5000/6000 Series (Option 11)

Make important phase noise measurements faster than any other spectrum analyzer on the market. Identify timing issues with advanced jitter measurement capability like Timing Interval Error (TIE) and other jitter analysis plots.

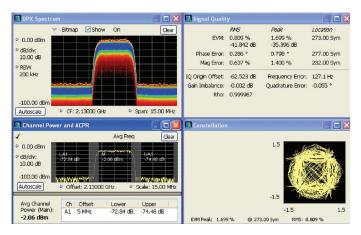
www.tektronix.com/products/accessories/application_software



Settling Time (Frequency and Phase) Analysis RSA5000/6000 Series (Option 12)

Easily select measurement bandwidth, tolerance bands, reference frequency (auto or manual), and establish up to 3 tolerance bands vs. time for Pass/Fail testing. Settling time may be referenced to external or internal trigger, and from the last settled frequency or phase.

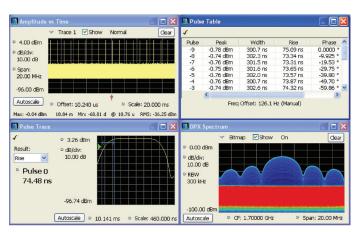
Spectrum Analyzers RSA5000/6000 Series



General Modulation Analysis for the RSA5000/6000 Series (Option 21)

Now you can have Digital Signal Analysis on up to 22 different modulation types including QPSK, 128 QAM, and FSK - all loaded on your RSA6000 Series spectrum analyzer. This also includes basic analysis on items such as Symbol Table and Constellation, Eye, Trellis, and Demodulated IQ Diagrams.

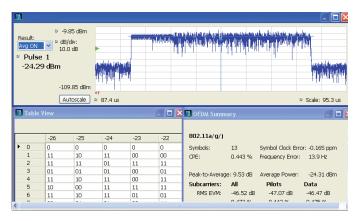
www.tektronix.com/products/accessories/application_software



Advanced Signal Analysis for the RSA5000/6000 Series (Option 20)

Characterize pulsed signals within a 110 MHz bandwidth with over 20 automatic pulse width measurements such as Rise Time, Duty Cycle, Pulse Ripple and Droop. Improve your ability to gain insight into important pulsed signals with a pulse table of all results, pulse traces of specific single pulse parameters, and pulse trend information on data for the whole pulse train. Includes vector measurement analysis as well!

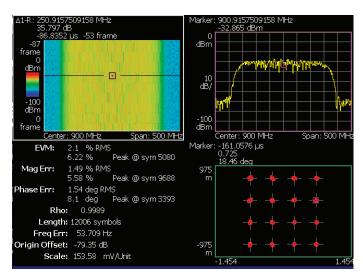
www.tektronix.com/products/accessories/application_software



Flexible OFDM Analysis Software RSA5000/6000 Series (Option 22)

In addition to standards analysis for IEEE 802.11a/g/j and WiMax IEEE 802.16-2004, the Flexible OFDM software enables customer defined modulation analysis. This includes controls of all carrier and subcarrier physical layer parameters. The analysis views include Constellation, Scalar Measurement summary, EVM or Power vs. Carrier and Symbol Table (Binary or Hexadecimal).

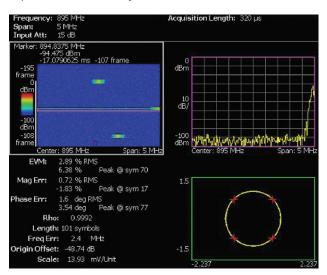
www.tektronix.com/accessories/application_software



RSAVu Offline Analysis Software

RSAVu software enables offline analysis of data captured from Tektronix Real-Time Spectrum Analyzers (RTSAs) and oscilloscopes. The software offers users the same demodulation and analysis capabilities included in the RSA3408B software option suite. From 3G wireless standards to the latest RFID formats and pulsed-signal analysis, RSAVu is a tool designers can use to analyze signals without having acquisition hardware connected.

Spectrum Analyzers RSA3000 Series

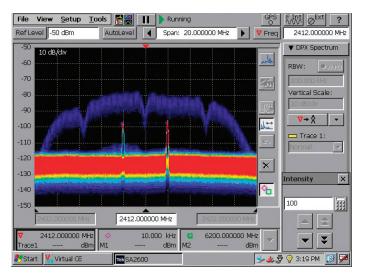


General Demodulation Analysis, RFID and Signal Source Analysis for the RSA3000 Series (Option 21)

Get more efficient use of your RSA3000 Series with Signal Source Analysis that includes Automated Frequency Settling Time Measurements, Comprehensive Phase Noise and a Jitter Measurement Suite. This popular analysis suite includes RFID conformance, and compliance and interoperability tests, all supporting the latest ISO 18000-7 standard.

www.tektronix.com/products/accessories/application_software

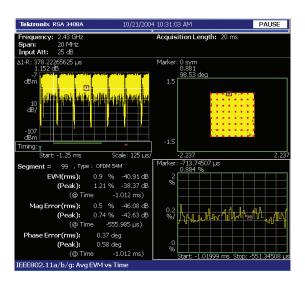
SA2600/H600 Series



Enhanced DPX™ Live RF for the SA2600 Series (Option EP1)

Enhances SA2600 Series DPX™ Live RF spectrum display to 10,000 spectrums/s and 125 µs minimum signal duration for 100% Probability of Intercept (POI), typical.

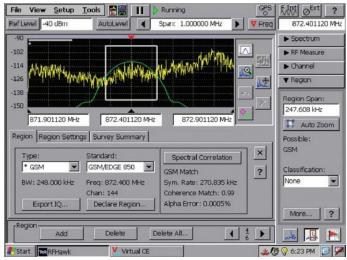
www.tektronix.com/products/accessories/application_software



802.11a/b/g/n Analysis (RSA3408B only) (Option 29)

With integrated support for the a wide variety of WLAN standards, the RSA3000 Series spectrum analyzer can help with the most challenging design and compliance challenges. With DPX™ Live RF spectrum display, patented Frequency Mask Triggering for event isolation, and unique MIMO measurements for link analysis, you gain the insight necessary to ensure your WLAN designs will operate successfully.

www.tektronix.com/products/accessories/application_software



Signal Classification for the SA2600 Series (Option SC1)

Enhances SA2600 Series by adding signal classification capability. www.tektronix.com/products/accessories/application_software

The latest digital video technologies are faster and often more complex than prior generations and require video test equipment capable of greater performance and more extensive analysis. Tektronix mission critical test, measurement and monitoring tools help you preserve signal integrity, reduce production time, reduce operating costs, ensure standards compliance and optimize system performance.

Picture Quality Analyzer



PQA600 Applications

- CODEC Design, Optimization, and Verification
- Conformance Testing, Transmission Equipment, and System Evaluation
- Digital Consumer Product Development and Manufacturing

www.tektronix.com/video

Features Benefits

Objective perceptual measurements based on an accurate human vision system model

- Ensure measurement results match viewers' subjective ratings.
- Achieve and verify differentiated picture quality with cost-effective and time-efficient repeatable assessments.
- Reduce the time and effort needed to detect, diagnose and correct picture quality problems.
- Optimize video processing algorithm performance.
- Clearly state the quality acceptance criteria for video products, systems or content.
- Easily share the conformance measurements and results throughout the organization or with suppliers.
 Unique tools for optimizing video processing algorithms and video distribution systems.

Attention modeling software and attention-weighted picture quality measurements

Measurements for artifact detection, artifact-weighted picture quality and classic

Measurements for artifact detection,

artifact-weighted picture quality and

classic PSNR

PSNR

Help isolate and correct quality problems and evaluate quality tradeoffs.

Picture Quality Analysis Software



PQASW Applications

- Encoder Design & Evaluation
- Transcoder Design & Evaluation
- Set Top Box Design & Evaluation

www.tektronix.com/video

| Features | Benefits |
|--|--|
| Objective perceptual measurements based on an accurate human vision system model | - Ensure measurement results match viewers' subjective ratings - Achieve and verify differentiated picture quality with cost-effective and time-efficient repeatable assessment - Reduce the time and effort needed to detect, diagnose and correct picture quality problems - Optimize video processing algorithm performance - Clearly state the quality acceptance criteria for video products, systems or content - Easily share the conformance measurements and results throughout the organization or with suppliers |
| Attention modeling software and attention-weighted picture quality measurements | Unique tools for optimizing video processing algorithms and video distribution systems |

Help isolate and correct quality problems and evaluate quality tradeoffs

MPEG Generator



| | Features | Benefits |
|--|---|---|
| | Compliance verification with the encoding standard | Confirm the stream will be correctly decoded by all compliant receivers in the market place |
| | Multiple displays and overlays of codec information | Diagnose errors introduced by the encoder algorithms |
| | Buffer analysis | Confirm the stream will cause receiver under or overflow errors without needing to test all receivers in market place |

MTX100B Applications

- Equipment manufacturers research & development
- Manufacturing test
- Broadcasters and network operators troubleshooting

www.tektronix.com/video

MPEG Analyzer



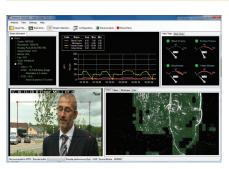
MTS430MPEG Applications

- Detect Video and Audio Quality Impairments (QoE)
- Picture Quality and Bandwidth Tradeoffs
- Intermittent Stream Error Capture & Analysis
- Isolate inter-operability issues
- Establish a design environment for Encoders and
- Set up an inter-operability evaluation/Bake-off

www.tektronix.com/video

| Features | Benefits |
|--|---|
| Analyze multiple RF and IP (GigE and 10Gig) signals in parallel in real-time | Diagnose problems anywhere in the network environment, whether that be transmission links (RF or IP layer) or content processing (TS layer) |
| Incorporates both Picture Quality and Video & Audio QoE software on the same platform | Supports both Reference based and non-reference based (live) Quality Of Experience testing |
| Wide range of DTV stan- dards are supported | Analyze any Terrestrial, Cable, Satellite or Telco transport stream |
| ES analyzer provides deep- dive down to the DCT, pixel, or motion vector | All aspects of video and audio analyzed making it easy to determine interoperability |
| Integrated cross layer fault analysis and logging | Reduces time to insight when troubleshooting and diagnosing problems |
| H.264 buffer analysis, multi- plexing and ES compliance checking | Suite of tools for creation and analysis of transport streams containing next generation video content |

Video and Audio QoE Software



| VQS1000 Ap | oplications |
|------------|-------------|

- Affordable QoE Monitoring
- Network performance optimization
- Remote diagnostics of broadcast delivery issues

www.tektronix.com/video

| Features | Benefits |
|--|--|
| Reliable and accurate video artifact measurement by performing a full decode on the video stream | Allows operators to determine if the source of a problem is in the content source (for example over-compression) or in network distribution. |
| Can be used with all Tektronix DTV monitoring probe configurations using robust private backhauled video from the monitoring probes. | Identify systemic issues that are otherwise hard to track down and optimize network configuration and equipment settings to deliver the best viewing experience possible within bandwidth constraints to their customers |
| Multiple instances can be run per license (dependent on PC processing power and video content type) | Enables service comparison at different network locations |

Video Elementary Stream Analyzer



MTS4EA Applications

- Equipment manufacturers research & development
- Manufacturing test
- Broadcasters and network operators troubleshooting

www.tektronix.com/video

| Features | Benefits |
|---|---|
| Compliance verification with the encoding standard | Confirm the stream will be correctly decoded by all compliant receivers in the market place |
| Multiple displays and overlays of codec information | Diagnose errors introduced by the encoder algorithms |
| Buffer analysis | Confirm the stream will cause receiver under or overflow errors without needing to test all receivers in market place |

MPEG Analysis Software



| Features | Benefits |
|---|---|
| Real time (IP) and deferred time Transport Stream (TS) analysis | Analyze streams either received via the PC's Ethernet interface (TSCR) or stored on hard disk (TSCA) |
| Wide range of DTV standards are supported, including MPEG, DVB, ATSC and ISDB | Analyze any terrestrial, cable, satellite or Telco TS |
| CaptureVu™ technology together with PCR measurement and graphing capabilities | Analyze system events in real time and deferred time to debug intermittent and complex problems missed by traditional analyzers |

MTS4SA Applications

- Equipment manufacturers research & development
- Manufacturing test
- Broadcasters and network operators troubleshooting

www.tektronix.com/video

| Video Signal Generator | Features | Benefits |
|--|--|--|
| | Standard test signals | Provides precise test patterns for testing and verifying color reference, display geometry, frequency response, signal timing, and signal performance. |
| | Complete set of Serial Digital Interface formats | Supports all major SDI formats and frame rates: 270 Mb/s 525/625 SD-SDI, 1.5 Gb/s 720/1080 HD-SDI, dual link HD-SDI, and 3G-SDI. Supports RGB and XYZ color spaces, 10 or 12 bit sampling, and 2K raster size for dual link and 3G interfaces. |
| | Composite and component analog video formats | Supports composite NTSC and PAL formats, including timing pulses, subcarrier and black burst signals. Supports YPbBr and RGB component analog formats for 525/625 SD and 720/1080 HD. |
| T0700 A . I'. I' | Modular form factor | Flexibility to choose the right set of video output modules for your application, and to easily upgrade your TG700 system in the future. |
| ■ Digital and Analog Broadcast Video Product | PC connectivity | Remotely configure and control the TG700 via the LAN interface, and download custom test patterns, logos, and frame pictures. |
| Development and Manufacturing www.tektronix.com/video | Automated test sequences | Use Tcl scripts and SCPI commands for program control of the TG700, simplifying tasks such as automated regression testing. |

Advanced Waveform Monitor Features



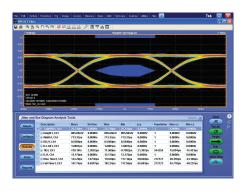
| realures | Derients |
|--|--|
| The most comprehensive physical layer monitoring and measurements available (including 3Gb/s SDI signals with Option 3G) | Makes it easier and faster to track down SDI signal path problems with automated physical layer measurements |
| ANC Data Inspector | Automatically detects and displays the presence, absence and status for all ANC data types |
| A/V Delay Measurement | Helps prevent Lip-Sync problems with fast, accurate and repeatable out-of- service A/V delay measurements |

WFM8300 Applications

- Monitoring and Compliance Checking in Content Distribution and Broadcast
- Quality Control in Content Production and Post Production
- Equipment/System Qualification and Troubleshooting for Installation and Maintenance of Content Creation and Distribution Facilities
- Research and Development of Professional Video Equipment







Technology and Application Solutions

Keep up-to-date on the latest technologies and applications. www.tektronix.com/applications

Serial Data



Embedded Systems



RF/Microwave

DDR SE

Digital Video



PCI Express®

PCI Express Design Challenges Need Fast, Accurate Answers

PCI Express 3.0 testing requires dual-port acquisition and 1 million unit interval analysis. Tektronix oscilloscopes provide full sample rate and deep memory on all channels required for compliance testing. The DPO70000 features channel emulation, equalization and up to 33 GHz Bandwidth which enables accurate measurements on 3rd generation data rates beyond 8 Gb/s.

Recommended Products:

Oscilloscopes and Application Software:

- DSA70000 Series Real Time Oscilloscopes
- PCE3 Automated Compliance & Debug Software
- DSA8300 Sampling Oscilloscope with 80F08 module
- IConnect® S-parameters and Z-Line software 80SSPAR

Probing:

- P7300SMA Series SMA Differential Probing System
- P7300 and P7500 Series TriMode Differential Probes
- P80318 TDR hand Probes

Logic Analyzers:

- TLA7000 Series
- TLASAXX Series Logic Protocol Analyzer Module
- P67SA00 Series of Slot Interposers, Midbus and Solder Down Probes

Bit Error Rate Analyzers:

BSA85C, DPP125, CR125

Signal Generators:

AWG7000 Series, AFG3000 Series

Spectrum Analyzers:

■ RSA6000 Series

For more information visit: www.tektronix.com/pci_express

Serial ATA/SAS

Powerful Serial ATA/SAS Automated Compliance Toolset Saves Time and Effort

Serial ATA/SAS test requirements are some of the most complex among current serial data standards. With a full toolset for characterization you will know how much margin your design really has. Tektronix' one-

button solution for device state control and test automation allows you to focus your attention on other priorities.

Recommended Products:

Oscilloscopes and Application Software:

- DSA70000 Series Real Time Oscilloscopes
- TekExpress SATA/SAS Compliance Automation software
- DPOJET Jitter and Eye Analysis software

Signal Generators:

AWG7000 Series Arbitrary Waveform Generators

Bit Error Rate Analyzers:

■ BSA125C

For more information visit: www.tektronix.com/serial_data

DisplayPort®

Powerful, Efficient Solution for DisplayPort Compliance Measurement Challenges

DisplayPort compliance testing for CTS v.1.2 requires timing/jitter measurements for Source validation, impedance tests for cables and confirming clock recovery with low bit error rates on Sink tests. Simplify your DisplayPort tests for CTS v.1.2 with Tektronix automated toolset for Source, Sink and Cable. Tektronix' suite of oscilloscopes, signal sources and signal analysis tools enable you to resolve design challenges quickly and efficiently.

Recommended Products:

Source Testing:

- MSO/DPO/DSA70000 Series Real Time Oscilloscopes
- DP12 Compliance Automation software
- DPOJET Jitter and Eye Diagram Analysis Tool
- P7380SMA Probes
- TF-DP-TPA-x Test Fixtures

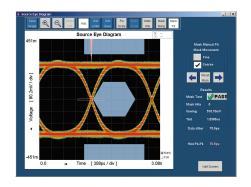
Sink Testing:

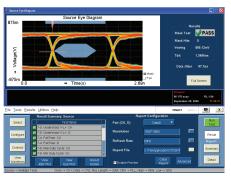
- BSA85C with Opt STR Bit Error Rate Tester
- DSA70000 Series Real Time Oscilloscopes
- DP12 Compliance Automation Software
- DPOJET Jitter and Eye Diagram Analysis Tool
- TF-DP-TPA-x Test Fixtures, Attenuators

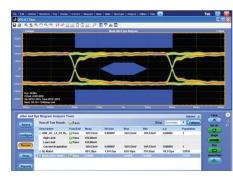
Cable Testing (Passive & Active):

- DSA8300 Sampling Oscilloscope
- TDR Module 80E04
- Pattern Sync Module 80A06
- TDR and S-Parameter software 80SSPAR
- Jitter Analysis software 80SJNB
- TF-DP-TPA-x Test Fixtures

For more information visit: www.tektronix.com/displayport







HDMI

Complete HDMI Compliance Test Solution for CTS V1.4a

Tektronix' comprehensive automated sink, source and cable test solution addresses all requirements of the latest revision of the HDMI test specification CTS V1.4a and MHL specifications. Four channel testing capability enables faster and more reliable testing with the results easily generated in a consolidated HTML report.

Recommended Products:

Oscilloscopes and Application Software:

- MSO/DPO/DSA70000 Series Real Time Oscilloscope with TDSHT3 Compliance Test software for HDMI and Option MHD for MHL Compliance testing.
- DSA8300 Sampling Oscilloscope
- TDR and S-Parameter software 80SSPAR
- Pattern Sync Module 80A06
- Jitter Analysis software 80SJNB

Probina:

P7313SMA Differential Probe

Signal Generators:

AWG7000 Series Arbitrary Waveform Generator

Test Fixtures:

- TF-HDMIE-TPA-KIT for HDMI
- MHL-TPA-x-xxxx for MHL

For more information visit: www.tektronix.com/hdmi

Memory

Verification and Debug of DDR-Based Memory Designs

Engineers integrating DDR devices into their designs face many challenges, like separating read/write bursts and debugging protocol violations.

The sophisticated triggering and software analysis packages available on the DPO Series Oscilloscopes and integrated DDR support in the Tektronix TLA Logic Analyzers enable designers to quickly validate and debug DDR designs.

Shrinking package size and type have also created enormous access challenges. Tektronix probing and fixture solutions simplify DDR testing with minimal system loading.

Recommended Products:

Logic Analyzers:

- TLA7000 Series
- TLA7BB4 Logic Analyzer Module

Oscilloscopes:

- MSO/DPO/DSA70000 Series Real Time Oscilloscope with Option Visual Trigger
- DDR Analysis Option (Opt. DDRA)
- DPOJET Jitter and Eye Diagram Analysis Tool

Probing & Fixtures:

- P7500 TriModeTM Differential Probes
- P6780 Differential Logic Probes
- NEX-DDR3MP78BSC or NEX-DDR3MP78BSCSK Chip Interposers for Oscilloscopes

For more information visit: www.tektronix.com/memory

MIPI®

Simple Setups, with Automated to Flexible Toolsets for M-PHY and D-PHY, Saves Time and Efforts.

M-PHY characterization and conformance testing requires a breadth of tests, including Power Spectral Density, PWM measurements and Bit-Error counting, validated in different configurations of test modes, data rates, amplitudes, and terminations.

Tektronix M-PHY Transmitter Essentials provides Simple One-box setup, with Power Spectral Density tests integrated on the Oscilloscope itself. Tektronix M-PHY Receiver is Simple Two-box automated test setup, based on integrated Error Detector on an Oscilloscope itself.

D-PHY characterization and conformance testing requires accurately identifying the low power and high speed test regions, for a breadth of measurements in different configurations of test modes, data rates, terminations, multiple-lanes and temperature oven. Tektronix D-PHY One-button unmatched automation allows you test your designs faster, accurate, and more efficient.

Recommended Products:

Oscilloscopes and Application Software:

- MSO/DPO/DSA70000 Series Real Time Oscilloscopes
 - Essentials Software Opt.D-PHY and Opt.M-PHY
 - Automated Software Opt.D-PHTY and Opt.M-PHYRX
 - Decode or Verification Software Opt.SR-DPHY

Probing:

- P7300, and P7500 Series TriMode Differential
- P7300SMA Series SMA Differential Probes

Logic Analyzers:

■ TLA7000 Series

Signal Generators:

- AWG7000 Series Arbitrary Waveform Generators
- PG3A Series Patterns Generators

For more information visit: www.tektronix.com/mipi



Jitter/Noise Analysis

Solving Jitter Debug and Analysis Challenges Made Easy

Tektronix offers jitter measurement solutions for signals ranging from low-speed digital to ultra-high speed serial data. DPO/DSA70000 Series real-time oscilloscopes provide electrical measurement and debug capability to support standards up to 20 Gb/s.

For electrical standards above 20 Gb/s, Tektronix offers the DSA8300 Series sampling oscilloscope with optical and electrical capabilities for 40 Gigabit OC-768 and beyond as well as the BERTScope Bit Error Rate Analyzers for speeds up to 26 Gb/sec.

For solving jitter problems on low level and low noise signals, or for measuring the very small amounts of jitter often found on clocks, Tektronix offers Real Time Spectrum Analyzers (RTSA) that enable engineers to measure and characterize jitter over a wide dynamic range.

Recommended Products:

Oscilloscopes and Application Software:

- MSO/DPO/DSA70000 Series Real-time Oscilloscopes
- DPOJET Jitter and Eye Diagram and Analysis Tools
- DSA8300 Sampling Oscilloscopes
- 80SJNB Jitter, Noise and BER Analysis software
- IConnect® and MeasureXtractor™ Signal Integrity TDR and S-parameter software

Bit Error Rate Analyzers:

- BSA Series Bit Error Rate Analyzers
- CR Series Clock Recovery Modules

Probing:

- P7313/P7313SMA Differential Probes
- P7500 TriMode Probes

Real-Time Spectrum Analyzers:

■ RSA3000 Series

For more information visit: www.tektronix.com/jitter



Signal Integrity, Time Domain Reflectometry (TDR) and S-parameter Measurements

Improve Connector and Channel Visibility

Signal integrity measurements are a critical step in the process of developing digital systems. The task of isolating and eliminating signal integrity problems anywhere in the system is challenging. These solutions let you quickly locate and trace faults back to their source, eliminating schedule delays and reliability issues.

Recommended Products:

Oscilloscopes and Application Software:

- DSA8300 Sampling Oscilloscope
- IConnect® advanced and MeasureXtractor™ Signal Integrity TDR and S-parameter software
- 80SJNB Jitter, Noise and BER Analysis software

Probing:

 P8018 Single Ended/P80318 Differential TDR Probes

For more information visit: www.tektronix.com/signal_integrity



Receiver Testing

Overcoming RX Testing Challenges

As a designer specializing in receiver test, you seek easy signal generation of very complex serial data signals. Tektronix offers a variety of solutions that deliver the ultimate in signal and impairment generation.

Recommended Products:

Bit Error Rate Analyzers:

- BERTScope BSA Series up to 26 Gb/sec
- DPP Series for Digital Pre-Emphasis (3/4 TAP)

Signal Generators:

- AWG7000/AWG5000 Series Arbitrary Waveform Generator
- RFXpress® software for RF/IF/IQ waveform creation and editing
- SerialXpress® software for high speed serial data signal creation and editing

Oscilloscopes and Application software:

- DSA70000 Series Real-time Oscilloscopes
- DPOJET Jitter and Eye Diagram and Analysis Tools

Probing:

- P7313/P7313SMA Differential Probes
- P7500 TriMode Probes

For more information visit: www.tektronix.com/receiver_test

I²C, SPI, USB, Ethernet, RS-232, CAN, LIN, FlexRay, MIL-STD-1553, I²S

Comprehensive Solutions for Fast Debug of Serial Buses

Serial buses are pervasive in today's embedded systems. Now, troubleshooting a system level problem often requires decoding a complex serial data signal. Tektronix offers integrated serial triggering, protocol decoding and comprehensive analysis capabilities to help you speed the debug of your design.

Recommended Products:

Oscilloscopes and Application Software:

- MSO/DPO2000, MSO/DPO3000, MSO/DPO4000B or MDO4000 Series
 - DPO4AERO Aerospace Serial Triggering and Analysis Modul (MIL-STD-1553)*1
 - DPO4AUTOMAX Extended Automotive Serial Triggering and Analysis Module (CAN, LIN, FlexRay)*
 - DPO4USB USB Serial Triggering and Analysis Module (Low-speed, Full-speed and Highspeed USB 2.0)*1
 - DPO2AUTO, DPO3AUTO, and DPO4AUTO -Automotive Serial Triggering and Analysis Module (CAN, LIN)
 - DPO2EMBD, DPO3EMBD, and DPO4EMBD -Embedded Serial Triggering and Analysis Module (I2C, SPI)
 - DPO4ENET Ethernet Serial Triggering and Analysis Module (10BASE-T and 100BASE-TX)*1
 - DPO2COMP, DPO3COMP and DPO4COMP -Computer Serial Triggering and Analysis Module (RS-232/422/485/UART)
 - DPO3AUDIO and DPO4AUDIO Audio Serial Triggering and Analysis Module (I2S/LJ/RJ/ TDM)*2



MSO/DPO5000 Series

- DDRA DDR Memory Bus Analysis
- DPOJET Jitter and Eye Diagram Analysis - Advanced
- TDSET3 Ethernet Compliance Test Software
- SR-COMP Computer Serial Triggering and Analysis (RS-232/422/485/UART)
- SR-CUST Custom Serial Analysis Kit for Developers
- SR-EMBD Embedded Serial Triggering and Analysis (I2C, SPI)
- SR-USB USB Serial Triggering and Analysis (LS, FS, HS)
- TDSUSB2 USB 2.0 Compliance Testing Software
- TDSVNM CAN and LIN Timing and Protocol Decode software

DPO7000C Series

- DDRA DDR Memory Bus Analysis
- DPOJET Jitter and Eye Diagram Analysis -Advanced
- D-PHY MIPI D-PHY Essentials
- DVI Digital Visual Interface Compliance
- TDSET3 Ethernet Compliance Test Software
- SR-CUST Custom Serial Analysis Kit for Developers
- SR-COMP Computer Serial Triggering and Analysis (RS-232/422/485/UART)
- SR-EMBD Embedded Serial Triggering and Analysis (I2C, SPI)
- SR-USB USB Serial Triggering and Analysis (LS. FS. HS)
- TDSUSB2 -USB 2.0 Compliance Testing Software
- LSA CAN Trigger, CAN/LIN Decode and Analysis

Probing:

- P6139B Passive Probes
- TPP0500 and TPP1000 Series Passive Probes
- TDP0500 and TDP1000 Series Differential Probes

Logic Analyzers:

- TLA6000 Series
- TLA7000 Series
- Microprocessor/Bus Support

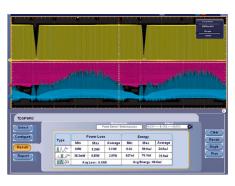
Signal Generators:

- AFG3000 Series Arbitrary Function Generator
- AWG5000 Series Arbitrary Waveform Generator

For more information visit: www.tektronix.com/serialdebug

*1 MSO/DPO4000B and MDO4000 Series Only

*2 MSO/DPO4000B, MDO4000 and MSO/DPO3000 Series Only



Power Measurement and Analysis

Transform Your Tektronix Oscilloscope Into an Ideal Tool for Power Analysis

Today's power supplies are driving to a level of efficiency never seen before, requiring design engineers to perform numerous specialized power measurements that are time-consuming and complex. Tektronix offers an array of power measurement solutions to help you achieve fast, accurate and repeatable results for your specific application.

Recommended Products:

Oscilloscopes and Application Software:

- TPS2000 Series
 - TPS2PWR1 Power Measurement and Analysis software
- MSO/DPO3000 Series
 - DPO3PWR Power Analysis Module
- MSO/DPO4000B Series
 - DPO4PWR Power Analysis Module
- MDO4000 Series
 - DPO4PWR Power Analysis Module
- MSO/DPO5000 Series
 - DPOPWR Power Measurement and Analysis software
- DPO7000, MSO/DPO/DSA70000 Series
 - DPOPWR Power Measurement and Analysis software

Probing:

- TCP0030 / TCP0150 AC/DC Current Probes
- TCP202 Current Probe
- TCPA300/400 Series Current Probes and Amplifiers
- P5100 Passive High Voltage Probes
- TMDP0200/THDP0200, THDP0100 High Voltage Differential Probes
- TDP0500/TDP1000 High Voltage Differential Probes

Signal Generators:

AFG3000 Series Arbitrary Function Generator

For more information visit: www.tektronix.com/power



FPGA Validation

Tools to Optimize Real-Time FPGA Debug

Field Programmable Gate Arrays (FPGAs) continue to grow in performance and flexibility. However, increasing gate counts, advanced logic programming, and increasing signal frequencies with tighter timing margins make debug and design verification a challenging process when implementing an FPGA-based design.

Tektronix mixed signal oscilloscopes (MSOs) and logic analyzers with FPGAView™ enable you to correlate internal FPGA signal activity to board-level signals and instantly move probe points within Altera and Xilinx FPGAs without the need to recompile your design.

Recommended Products:

Logic Analyzers:

- TLA6000 Series
- TLA7000 Series

Mixed Signal Oscilloscopes:

- MSO2000 Series
- MSO3000 Series
- MSO4000B Series
- MDO4000 Series
- MSO5000 SeriesMSO70000 Series

Application Software:

■ FPGAView[™] software

For more information visit: www.tektronix.com/fpga



Microprocessor Validation

System-Level Troubleshooting for Fast Design Verification and Test of Microcontrollers and Microprocessors

The number and types of microprocessors and microcontrollers enable powerful embedded system performance but can make design verification and debugging a test challenge. The growing combination of signal processing variables increases the number of communication paths in the design, adding to system complexity. Tektronix instruments provide a better system view of mixed signal performance, enabling you to speed up the design verification and test of microcontrollers and microprocessors in your embedded system.

Recommended Products:

Logic Analyzers:

- TLA6000 Series
- TLA7000 Series
- P6400 & P6800/P6900 Series Probes
- Microprocessor/Bus Support

Oscilloscopes:

- MSO/DPO2000 Series
- MSO/DPO3000 Series
- MDO4000 Series
- MSO/DPO4000B Series
- MSO/DPO5000 Series
- DPO7000 Series
- MSO/DPO/DSA70000 Series

Probing:

- TDP0500/TDP1000/TDP1500/TDP3500/ TMDP0200/THDP0200/THDP0100 High Voltage Differential Probes
- TAP1500/TAP2500/TAP3500 Active Probes

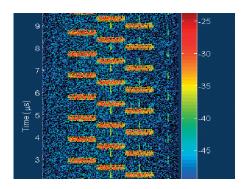
Signal Generators:

- AFG3000 Series Arbitrary/Function Generator
- AWG5000 Series Arbitrary Waveform Generator
- AWG7000 Series Arbitrary Waveform Generator

Application Software:

- DPOJET Jitter and Timing Analysis software
- iLink™ Logic Analyzer/Oscilloscope Integration Package

For more information visit: www.tektronix.com/microprocessor



To Center Peak • • • Ta I Off Frequency

WiMedia UWB

Faster, Easier, and More Affordable **Ultra-Wideband Designs**

Recommended Products:

Receiver Testing:

AWG7000 Series Arbitrary Waveform Generator with RFXpress Software

Transmitter Testing:

MSO/DPO/DSA70000 Series Oscilloscope with SignalVu Software Option

For more information visit: www.tektronix.com/wimediaPerformance

Radar/EW

Performance, Precision and Insight for Your Radar/Electronic Warfare Design

With today's rapid advances in radar/electronic warfare technology, developing and manufacturing highly specialized and innovative electronic products requires leading-edge technology and tools. Our innovative test equipment reduces uncertainty during the design process and delivers confidence in the integrity of increasingly complex designs.

Recommended Products:

Receiver/Stimulus Test:

- AWG5000 Series Arbitrary Waveform Generator with RFXpress® software
- AWG7000 Series Arbitrary Waveform Generator with RFXpress® software

Transmitter Analysis:

- RSA6100 Series Spectrum Analyzer
- RSA5000 Series Spectrum Analyzer
- RSA3000 Series Spectrum Analyzer
- DPO/DSA70000B Series Oscilloscope with SignalVu™ software
- DPO5000/7000 Series Oscilloscope with SignalVu™ software

For more information visit: www.tektronix.com/radar

Spectrum Management

Accuracy and Insight All Across the Spectrum

Solve today's demanding signal detection and exploitation challenges with world-class instrumentation for detection, identification, mapping, and hunting down signals or sources of interference. DPX™ Live RF spectrum display will change the way you search and discover elusive signals.

Recommended Products:

Spectrum Management:

- H600/SA2600 Series Handheld Spectrum Analyzer
- RSA3000 Series Spectrum Analyzer
- RSA5000 Series Spectrum Analyzer
- RSA6000 Series Spectrum Analyzer

For more information visit: www.tektronix.com/surveillance



Your Tektronix Service Advantage

Tektronix is a recognized service leader for both Tektronix and non-Tektronix product calibration and repair. We offer unequalled expertise, global reach and a customer-centric approach to ensure the optimal performance of all your test and measurement instruments.

Summary of Service Care Plans

| Silver Care Plan | Gold Care Plan | Platinum Care Plan | Multi-Vendor Service |
|--|--|--|---|
| Save money with multi-year coveragePriority service | ■ Eliminate unplanned service costs over coverage period | Identically configured dedicated spare products | Service for over 140,000 products from more than 9,000 manufacturers |
| Covers equipment, parts, labor and transportation | ■ Loaner product of equal or higher performance shipped within 24 hours if product fails | Flexible contract duration and payment terms Priority access to technical support | ■ Broadest scope of accreditation – manage 100% of repairs and calibrations |
| Applicable software, safety and reliability updates | Priority access to Tektronix Customer Care Center for fast technical support | - Thomas decease to too minear cappent | 100+ global points of service1 million calibrations annually |
| | Coverage of customer-caused damage including EOS and ESD | | ■ CalWeb® Asset Management System |

■ Tektronix Factory Experts

Access to the engineering expertise that designed and built your products to ensure they are in peak performance. Our support engineers hold an average of 20 years of training and experience.

■ Comprehensive and Thorough Treatment

Software updates, safety and reliability modifications, and cosmetic enhancements are included if applicable. Products are returned to you in "like-new" condition. The Tektronix network of service centers offers worldwide support.

■ Efficiency and Convenience

Our team of professionals focus on getting your instruments back to you as soon as possible, minimizing your downtime and increasing your operating efficiency.

Flexible Repair and Calibration Service

Tektronix offers you the choice of a cost effective, flexible service package to meet your business needs.

For further details visit: www.tektronix.com/service



Multi-Vendor Service

Comprehensive Calibration and Related Services for All Your Test, Measurement and Control Equipment

- Service for more than 140,000 instruments from over 9,000 manufacturers
- 100+ global points of service
- 1 million calibrations annually

Performance

Calibration is the cornerstone of measurement confidence. Now Tektronix can manage 100% of your calibration and repairs, irrespective of product, brand or origin. Our multi-vendor service tools simplify your calibration management program, minimize downtime and improve operational efficiency.

Optimize Asset Availability & Utilization

Tektronix provides industry-leading calibration and repair turnaround time on more than 140,000 products from over 9,000 manufacturers. The CalWeb® Asset Management System allows you to actively schedule and manage equipment maintenance and provides you with online, enterprise-wide instrument visibility.

Global Reach with Local Presence

Tektronix has the most extensive global network of resources. With more than 100 points of service and 1,000 highly trained experts, our unmatched suite of capabilities and services are available locally to most of the world's research and manufacturing centers.

Quality & Accuracy

Our comprehensive quality system is unmatched. Choose from multiple NIST traceable certificate options, including ANSI Z540.1, ISO/IEC 17025 and ISO 9001:2008. Our customers have direct access to the quality they expect from Tektronix' 65 years as an industry leader in test, measurement and monitoring solutions.

Industry Leader

Tektronix is the industry leading provider of calibration services for the life science, aerospace, and defense industries. With consistent high quality and comprehensive service, customers have turned to Tektronix, making us the first choice for their outsourced calibration needs.

Services can be custom-tailored to meet every client's specific requirements. Our specialized industry expertise includes:

- Aerospace/Aviation
- Automotive
- Communications
- Defense Contractors
- Energy
- General Manufacturing
- Government
- Medical Equipment
- Pharmaceutical/Biotech
- Semiconductor/Electronics

For more information on Tektronix multi-vendor service, visit: service-solutions.tektronix.com

Or call us at 1-800-438-8165

Notes

2012 Product Catalog, Volume 1

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Contact List Updated 10 February 2011

For Further Information

Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit www.tektronix.com



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