6 Series B MSO Mixed Signal Oscilloscopes

FACTSHEET

***More bandwidth** with up to 10 GHz bandwidth*

***More channels** with 4, 6, or 8 inputs*

***Less noise.** Now with even lower input noise*

- 12-bit ADCs and low-noise preamps for accurate measurements
- 4, 6, or 8 inputs. Each FlexChannel™ input can be used as 8 digital channels for added visibility
- Intuitive user interface with 15.6” HD touch display
- TekVPI™ probe interfaces support a wide range of probes
- Powerful built-in measurements, statistics and trend plots
- Application-specific measurements and automated testing
- Optional built-in arbitrary/function generator
- DVM and frequency counter – free with registration
- Optional Windows operating system
- Upgradeable bandwidth, record length, and instrument options

Key Specifications	
Bandwidth	1 GHz, 2.5 GHz, 4 GHz, 6 GHz, 8 GHz, 10 GHz
Channels	*4, 6 or 8*
Vertical resolution	*12-bits*
Noise	*< 55 µV at 1mV/div and 1 GHz* *<1.25 mV at 50mV/div and 10 GHz*
Sample Rate	2 channels: 50 GS/s 4 channels: 25 GS/s 6 or 8 channels: 12.5 GS/s
Record Length	62.5 M (standard), 125 M, 250 M, 500 M, or 1 G

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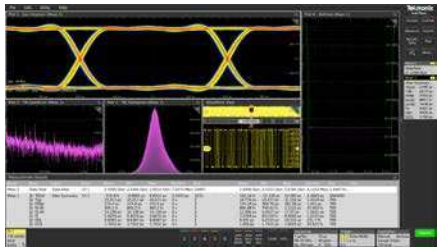
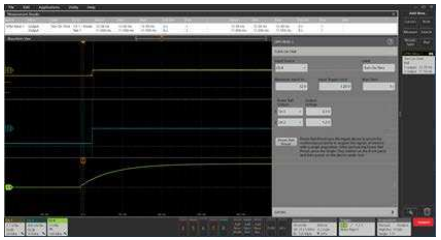
High Speed Clocks and Data



- Low noise, high ENOB, high sample rate
- Advanced jitter analysis
- >23 standards for serial decode and analysis
- Full suite of automated compliance test
- Broadest range of probes and accessories

Power Integrity



- Lowest noise
- 8 channels for PMIC / power sequencing
- 5 GHz on 8 channels for hunting sources of interference on power rails
- Digital Power Management measurements
- Multi-channel mask testing
- Power rail probes

Automotive

- CAN, CAN-FD, LIN, FlexRay, SENT, PSI-5, 100BASE-T1 decoding
- 10/100/1000BASE-T1 Automotive Ethernet compliance test
- Signal separation and PAM 3 analysis for Automotive Ethernet
- Up to 10 GHz to detect and measure high-frequency noise

Aerospace and Defense

- Low noise, high ENOB, high sample rate
- MIL-STD-1553, ARINC429 and SpaceWire decoding
- Multi-channel spectrum analysis
- Removable storage for easy movement in/out of secure environments
- Comprehensive programming commands with translation from legacy commands

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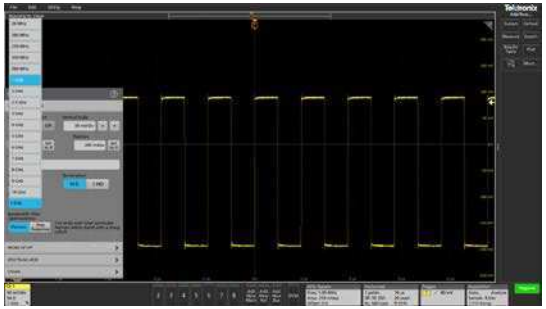
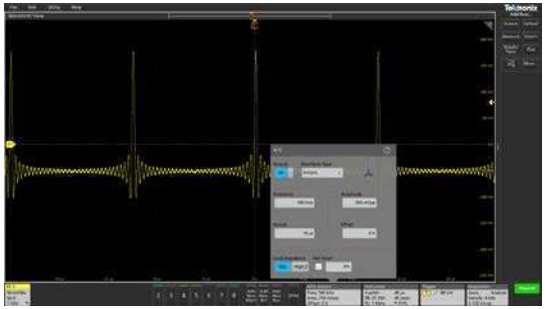
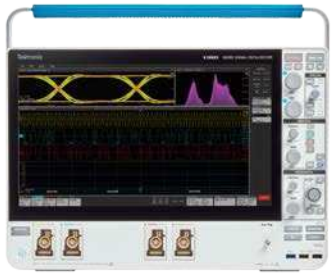


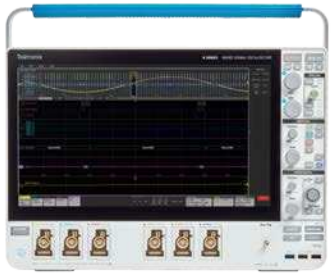
Add capabilities, including bandwidth and record length, without sending for service

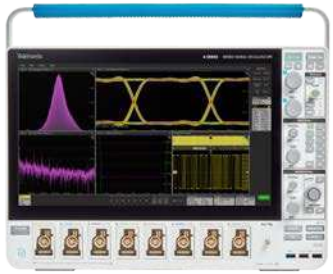


Built-in arbitrary / function generator provides flexible signals up to 50 MHz

Instrument Options	
MSO6xB 6-BW-1000	1 GHz
MSO6xB 6-BW-2500	2.5 GHz
MSO6xB 6-BW-4000	4 GHz
MSO6xB 6-BW-6000	6 GHz
MSO6xB 6-BW-8000	8 GHz
MSO6xB 6-BW-10000	10 GHz
6-AFG	Arbitrary function generator
6-RL-1	Extend record length to 125 M/ch
6-RL-2	Extend record length to 250 M/ch
6-RL-3	Extend record length to 500 M/ch
6-RL-4	Extend record length to 1 G/ch
6-SEC	Enhanced security. Password protects ports and firmware
6-SV-BW-1	2 GHz spectrum capture bandwidth
6-SV-RFVT	RF versus time analysis and trigger
6-WIN	Removable solid-state drive with Windows 10







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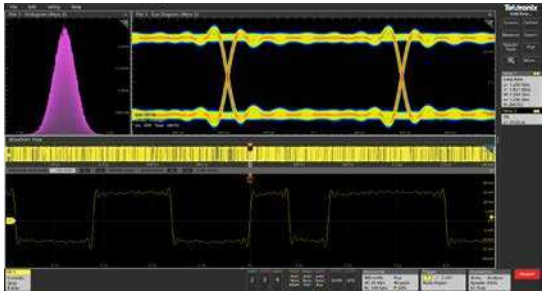
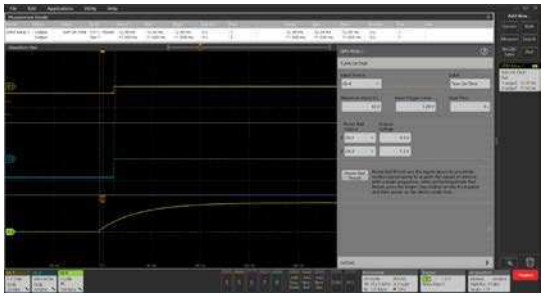


Advanced jitter analysis



Power rail measurements

Automated compliance testing to the 1000BASE-T1 Automotive Ethernet standard

Advanced Measurements and Analysis	
6-DBDDR3	DDR3 and LPDDR3 memory automated measurements
6-DBLVDS	Low voltage differential signaling (LVDS) automated measurements
6-DJA	Advanced jitter and eye analysis
6-DPM	Digital power management, power rail measurements
6-MTM	Mask and limit testing
6-PAM3	PAM3 measurements and analysis
6-AUTOEN-SS	Automotive Ethernet signal separation
6-PWR	Power supply measurements and analysis
6B-IMDA	3-phase inverters and motor drive measurements and analysis
6B-IMDA-DQ	DQ0 Feature for Inverter Motor Drive Analysis
6-VID	Analog video trigger (NTSC, PAL, SECAM)

Automated Compliance Testing	
6-CMAUTOEN	Automotive Ethernet (100BASE-T1, 1000BASE-T1) compliance testing
6-CMAUTOEN10	Automotive Ethernet (10BASE-T1S Short Reach) compliance testing
6-CMDDR3	DDR3 and LPDDR compliance testing
6-CMDPHY	MIPI D-PHY v1.2 compliance testing
6-CMENET	Ethernet (1000BASE-T, 100BASE-T) compliance testing
6-CMINDUEN10	Industrial Ethernet (10BASE-T1L Long Reach) compliance testing
6-CMNBASET	2.5G and 5G BASE-T Ethernet compliance testing
6-CMUSB2	USB2.0 compliance testing
6-CMXGBT	10G BASE-T Ethernet compliance testing

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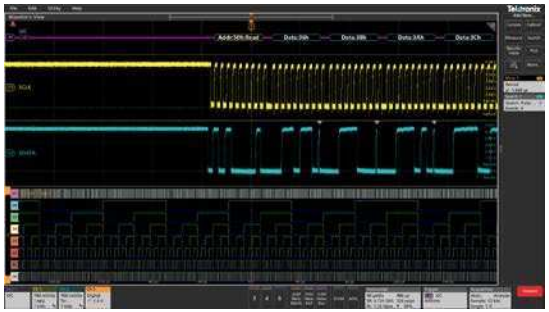
FACTSHEET

100BASE-T Ethernet decoding and triggering with results table



I²C decoding synchronized with digital waveforms from a TLA058 logic probe

Serial Decoding for Faster Debugging	
6-SRAERO	Aerospace serial triggering and analysis (MIL-STD-1553, ARINC429)
6-SRAUDIO	Audio serial triggering and analysis (I2S, LJ, RJ, TDM)
6-SRAUTO	Automotive serial triggering and analysis (CAN, CAN-FD, LIN, FlexRay)
6-SRAUTOEN1	Automotive Ethernet serial analysis (100BASE-T1)
6-SRAUTOSEN	SENT serial triggering and analysis (SENT)
6-SRCOMP	Computer serial triggering and analysis (RS-232/422/485/UART)
6-SRDPHY	MIPI D-PHY serial analysis (DSI-1, CSI-2)
6-SREMBD	Embedded serial triggering and analysis (I2C, SPI)
6-SRENET	Ethernet serial triggering and analysis (10BASE-T, 100BASE-TX)
6-SRI3C	MIPI I3C serial analysis
6-SR8B10B	8b/10b serial analysis
6-SRMDIO	MDIO serial analysis
6-SRNRZ	NRZ serial analysis
6-SRPM	SPMI serial analysis
6-SRPSI5	PSI5 serial analysis
6-SRSPACEWIRE	SpaceWire serial analysis
6-SRSVID	SVID serial analysis
6-SRUSB2	USB serial triggering and analysis (USB 2.0 LS, FS, HS)
6-SREUSB2	Embedded USB2 (eUSB2) serial analysis

Characterize and debug state-of-the-art designs with greater confidence.

More bandwidth. More channels. Less noise.

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