## SIGLENT<sup>®</sup>

### Higher Bandwidth SDS7000A Series Releases 6GHz Model

November 11, 2024

On November 12, 2024, SIGLENT launchs its 6GHz bandwidth high-resolution oscilloscope with 12-bit ADC, 1 Gpts memory depth, and protocal compliance tests like MIPI D-PHY, DDR. This product further enriches SIGLENT's high-resolution and high-sampling rate digital oscilloscope product line, which can be widely used in embedded design, automotive electronics and other related fields.



#### Ensuring signal quality

The SDS7604A H12 combines low noise, high DC gain accuracy and channel isolation. The SDS7000A has a noise of only 300  $\mu$ Vrms at 6 GHz bandwidth. The DC gain accuracy of all SIGLENT's high-resolution oscilloscopes is 1.5% at lower ranges, and 0.5% at ranges  $\geq$ 5 mV/div. The SDS7000A series offers CH to CH isolation up to 60 dB. Up to now, SIGLENT offers high resolution oscilloscopes from 70 MHz to 6 GHz, with extensive experience and excellent performance in solving signal integrity problems.

# Used for high-speed signal testing

Test signal quality and determine transmission reliability. Ensure accurate data transmission to improve product quality and stability.

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#### Serial Protocol Analysis

Oscilloscopes play an integral role in serial protocol analysis. Using an oscilloscope, serial signals can be accurately captured and displayed in real time, and specific data can be captured using trigger functions. It can decode protocols, convert waveforms into easy-to-understand content, and analyze protocol parameters. In troubleshooting, it can detect abnormal signals and analyze noise. It can also assess signal integrity, provide basis for performance optimization, and help guarantee the accuracy and reliability of serial communication. SIGLENT provides automated serial protocol analysis tools. One-button operation eliminates complicated operations and high testing technology barriers, making tests more efficient.

錄 Utility	🖵 Di	splay 🗂 Acquire	e 🏲 Trigger	‡ Cursors	📐 Measure 🕅 N	Nath 街 Analysis			SIGLENT Stop   1(C1) = 1.548000kHz	SYSTEM SETTINGS
-	Result		Test name		Min Value	Max Value	Worst	Pass Rate	Pass Limit	
Pas		CLK Input High Level Voltage			3.295V	3.295V	3.295V			^
Pas		CS Input High Level Voltage			3.296V	3.296V	3.296V	100.00%	2.310V <= Value <= 3.800V	
Pas		MISO Input High Level Voltage			3.305V	3.305V	3.305V	100.00%	2.310V <= Value <= 3.800V	
Pas		MOSI Input High Level Voltage			3.305V	3.305V	3.305V	100.00%	2.310V <= Value <= 3.800V	
Pas		CLK Input Low Level Voltage			156.130mV	156.130mV	156.130mV	100.00%	-0.500V <= Value <= 0.990V	
Pas		CS Input Low Level Voltage			21.471mV	21.471mV	21.471mV	100.00%	-0.500V <= Value <= 0.990V	
Pas		MISO Input Low Level Voltage			7.157mV	7.157mV	7.157mV	100.00%	-0.500V <= Value <= 0.990V	
Pas		MOSI Input Low Level Voltage			7.157mV	7.157mV	7.157mV	100.00%	-0.500V <= Value <= 0.990V	
Pas		CLK Frequency			998.565kHz	1.001MHz	998.565kHz	100.00%	Value >= 1.000kHz	~
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Pass	Rate		100.00%			Image: Control interview Image:			: 	418 bat 80
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1X FULL	1.46V/ 1.97V			1.46V/ 200ns/ -1.68V 4.40ms	1.46V/ 200ns/ -1.97V 4.40ms		1.46V/ 1.68V		4.45ms 20.0us/div Stop 100Mpts 10.0GSa/s Edge	1.65V 06:14:47 Rising 2024/10/11

#### More protocol compliance analysis

The SDS7000A supports various protocol compliance tests such as MIPI D-PHY, DDR2, Industrial Ethernet, Automotive Ethernet, USB2.0. These compliance test analysis functions can help engineers conduct electrical performance and functional tests before mass production to ensure product quality and reliability. SIGLENT's compliance analysis solutions can perform multiple tests and guide users through the connections. The SDS7000A can be set automatically for each test. It can display detailed information of each test and generate HTML or XML test reports.







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