

## **Revision Record**

Date	Version	Rev	ision
3/16/2020	0.9.1	1.	Acquire enhancement:
			a) Added memory depth options: 5K(2CH), 10K(1CH),
			25K(2CH), 50K(1CH)
			b) Added the upper limit of Average to 65536, and optimized
			speed of Average
			c) Supported ERES in Roll mode
		2.	New Triggers: Nth edge, Setup/Hold and Delay
		3.	Math enhancement:
			a) Supported new math operators: Sign, Abs, Exp, Log, Identity
			and Negate
			b) Supported F1 and F2 as the source of Formula editor
			c) Supported Span-Center/Start-End mode in FFT
		4.	Measure: Supported setting maximum statistics number
		5.	Remote Control optimization:
			a) Optimized read speed of WF command
			b) Supported to export Math traces using WF command
		6.	Supported "Apply to AWG" in the "Cx -> Apply to" menu
		7.	Optimized SPO display
		8.	Supported saving .mat data format and bin2csv tool
		9.	Updated the Help information
		10.	Fixed several bugs
			a) Vertical measure error increases as offset increases
			b) Any operations when recalling default setting may cause UI
			abnormal
			c) The scope sometimes forgets the previous math settings
			d) Incorrect horizontal offset on reference of FFT trace
			e) AWG auto-zero fails in normal mode
10/9/2019	0.8.7R1B1	1.	Supported Power Analysis (optional) (Analysis   Power Analysis)
		2.	Supported Bode Plot (Analysis   Bode Plot)
		3.	Supported Totalizer (Analysis   Counter). Frequency and period
			parameters are moved from DVM to Counter
		4.	Supported 2 math traces and formula editor
		5.	Optimized FFT
			a) Optimized menu structure
			b) Supported peak and marker (Math   FFT   Tools)
		-	c) Supported setting max points (Math   FFT   Config)
		6.	Measurement enhanced
			a) Optimized the UI. In the "Basic" tab the items can be
			customized (long pressing an item to add to or delete from
			Basic tab)
			b) Added items: Median, Cycle median, -Bwidth, Time@max,



Date	Version	Revision				
		Time@min, 20-80%Rise, 80-20%Fall, +Area, -Area, Area,				
		AbsArea, Cycles, Rising Edges, Falling Edges, Edges, PPulses,				
		Npulses				
		c) Supported statistics on maximum 12 parameters at the same				
		time (M2);				
		d) Optimized measurement accuracy of Rise/fall				
		e) Supported Trend Plot of measurement items				
		7. Optimized UX of knobs				
		8. Set the default function of the universal knob as adjusting the				
		trace intensity				
		9. Optimized SPO display				
		10. Supported moving the location of the decode buses vertically				
		11. Supported single step back or forward in Navigator				
		12. Added bandwidth limit indicator below 2.45mV/div (1GHz,				
		500MHz)/1mV/div(350MHz				
		13. Supported Zone trigger in Sequence mode				
		14. Added entry for Zone trigger in the right side trigger menu				
		15. Mask Test: Supported failed history (Mask Test   Failure to				
		History)				
		16. Increased frequency setting digits of the AWG from 3 to 7				
		17. After gesture control of the vertical gain, the v/div knob still is in				
		the mode that has been used before with the gesture controls.				
		18. UART/LIN decode/trigger: supported baud rate > 5Mb/s				
		19. Reference position: Added user defined delay				
		20. Optimized UI in Zoom mode				
		21. Deleted the SCPI command which can start Telnet				
		22. Supported tapping on zone/histogram region to open the				
		corresponding menu				
		23. Fixed several bugs				
4/9/2019	0.8.2R1	1. Supported search across history frames				
		2. Optimized zone trigger and mask test accuracy in zoom mode;				
		3. Supported editing a trigger zone after creating it				
		4. Supported MIL-STD-1553B trigger				
		5. Improved the input frequency upper limit of holdoff by event				
		from 20 MHz to 120 MHz				
		6. Solved the defect that the scope possibly does not trigger on the				
		first edge of a burst train with carrier frequency above 120 MHz				
		7. Added Reboot and Shutdown function under "Utility" top bar				
		menu, so the instrument can be remotely rebooted and				
		shutdown by web				
		8. Supported saving the decode list as a CSV file				
		<ol> <li>Optimized response time of mask test when disabling/enabling it or changing the type</li> </ol>				
		or changing the type				



SDS5000X Firmware Revision Record and Upgrade Instructions

Date	Version	Revision					
		10. Optimized webserver response when dragging a trace in vertical					
		direction; Added alternative VNC port for webserver					
		11. Added automatic clear of measurement statistics when changing					
		horizontal/vertical/trigger settings					
		12. Supported editing selected measurement parameter					
		13. Fixed several bugs					
		a) Cursors: Unexpected jump when changing horizontal settings					
		14. Webserver: Incorrect mouse position with IE in full screen mode					
2/25/2019	0.8.0R1B5						



# Version Compatibility

Source Version	Object Version	Compatibility
0.8.7R1B1	0.9.1	Tested
0.8.2R1	0.9.1	Tested
0.8.0R1B5	0.9.1	Tested
0.8.2R1	0.8.7R1B1	Tested
0.8.0R1B5	0.8.7R1B1	Tested
0.8.0R1B5	0.8.2R1	Tested

### **Upgrade Instructions**

#### Upgrade from a U-disk (USB Memory device)

#### WARNING: DO NOT shut off the instrument until the update is completed.

- 1. Copy the update file (\*.ads) to a FLASH type U-disk, and then insert the U-disk into one of the USB host ports of the instrument. The firmwares after x.x.0.8.0 support both NTFS and FAT32 format.
- Press the Utility button on the front panel, and press "System Setting -> Upgrade". The following the menu should pop up and allow you to select the upgrade file

Upgrade	X
File Path	
File Path	Browse
Package Info	
Please select upgrade file	
	Upgrade

3. Click *Browse* in the menu above, and then select the correct update file (\*.ads) in the pop-up resource manager

Please select upgrade file				×
			Back	Reload
Name	Size	Туре	Date Modified	^
SDS5000X-V0.7.8R1.ADS	38762 KB	ADS	Sat Dec 29 15:07:0	00 2018
SDS5000X-V0.7.9.ADS	39168 KB	ADS	Fri Jan 11 17:00:38	3 2019
SDS5000X-V0.7.9R1.ADS	39193 KB	ADS	Tue Jan 15 14:02:2	20 2019
SDS5000X-V0.8.0R1B5.ADS	39215 KB	ADS	Mon Feb 18 10:01	:56 2019
SDS5000X-V0.8.1R1.ADS	39468 KB	ADS	Mon Feb 25 11:31	:02 2019 🗸
			Cancel	ок

4. Click OK in the interface above and return to the upgrade dialog. Click Upgrade to



perform the upgrade operation:

Upgrade	
File Path	2
File Path /U-disk0/sds5kx/SDS5000X-V0.8.0R1B5.ADS	Browse
Package Info	
Please select upgrade file	
	Upgrade

5. The system will first copy and verify the upgrade package. After the upgrade package is validated, the following interface will appear. Click *Reboot* to continue the upgrade, or click *Cancel* to cancel it.

Upgrade	
File Path	
File Path /U-disk0/sds5kx/SDS5000X-V0.8.0R1B5.ADS	Browse
Package Info	
Version: 0.8.0R1B5	
Description : 0.8.0R1B5	
System will reboot later, or you can cancel the upgrading! Reboot(20)	Cancel

6. After the instrument reboots, check the version number through the Utility->System Setting->System Status to confirm if the upgrade is successful.



System Status	×
Software Version:	4.6.0.8.0R1B5
FPGA Version:	2019-01-23
CPLD Version:	11
Hardware Version:	04-00
MCU Version:	18053101
Scope ID:	1255-91e1-ce5b-c83a
Serial No. :	SDS5XDAX2R0052
Model:	SDS5054X

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#### Upgrade from the Web Server

A built-in web server provides an approach to control the instrument by web browser. This process doesn't require any additional software to be installed on the controlling computer. Set the LAN port correctly (see the User Manual for details), input the IP address of the instrument in the browser address bar, and then the user can browse and control the instrument on the web.

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	trument Infomatio	nB	
Home	Instrument Model	SDS5034X	
(Ö)	Manufacturer	Siglent Technologies	
LAN Configuration	Serial Number	SDS5XBAX2R0001	
	LXI Extended Functions	Null	
Instrument Control	LXI Version	1.5 LXI Core 2017	
	MAC Address	00:01:b2:0c:00:01	
C: \ -	TCP/IP Address	10. 11. 11. 232	
SCPI	Software Version	4.4.0.6.8R1	
	Instrument Address String	TCPIP::10.11.11.232::INSTR	
		95i glent	: Technologies Co., Ltd. 2017
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#### WARNING: DO NOT shut off the instrument until the update is completed.

1. Click the "FirmwareUpdate" button in the web interface



錄 Utility	🖵 Display	rfi Acquire	🏲 Trigger	# Cursors	📐 Measure	e 🕅 Math	<u>ট</u> ে Analysi	is <b>SIGLENT</b> f < 2.0H	Auto z	C4
4										
C4 DC11 1.00V/di 1X 0.00V	/							Timebase 0.00s 2.00ms/div 10.0Mpts 500MSa/s	Auto 250	4 DC 业品 DmV 14:05:20 sing 2019/2/26
ScreenS	hot	aveform Save	Bin_to_CS	SV_Tool	rmWareUpdate					

2. Select the correct update file (\*.ads) stored on the computer. The instrument will automatically download the update file and perform the upgrade once the file is specified.

WARNING: DO NOT shut off the instrument until the update is completed.