

# SDS1000X SERIES

## Digital Oscilloscope

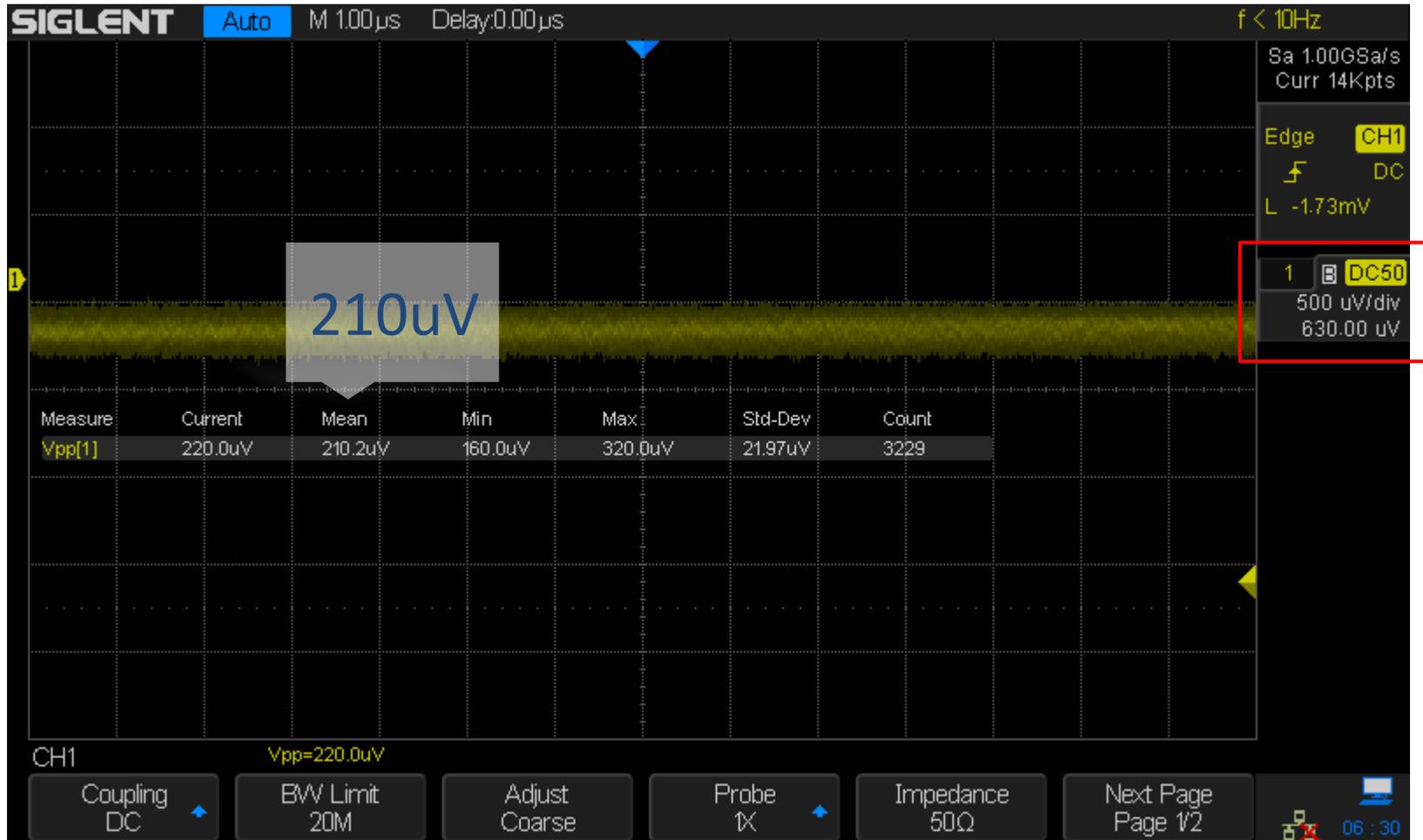


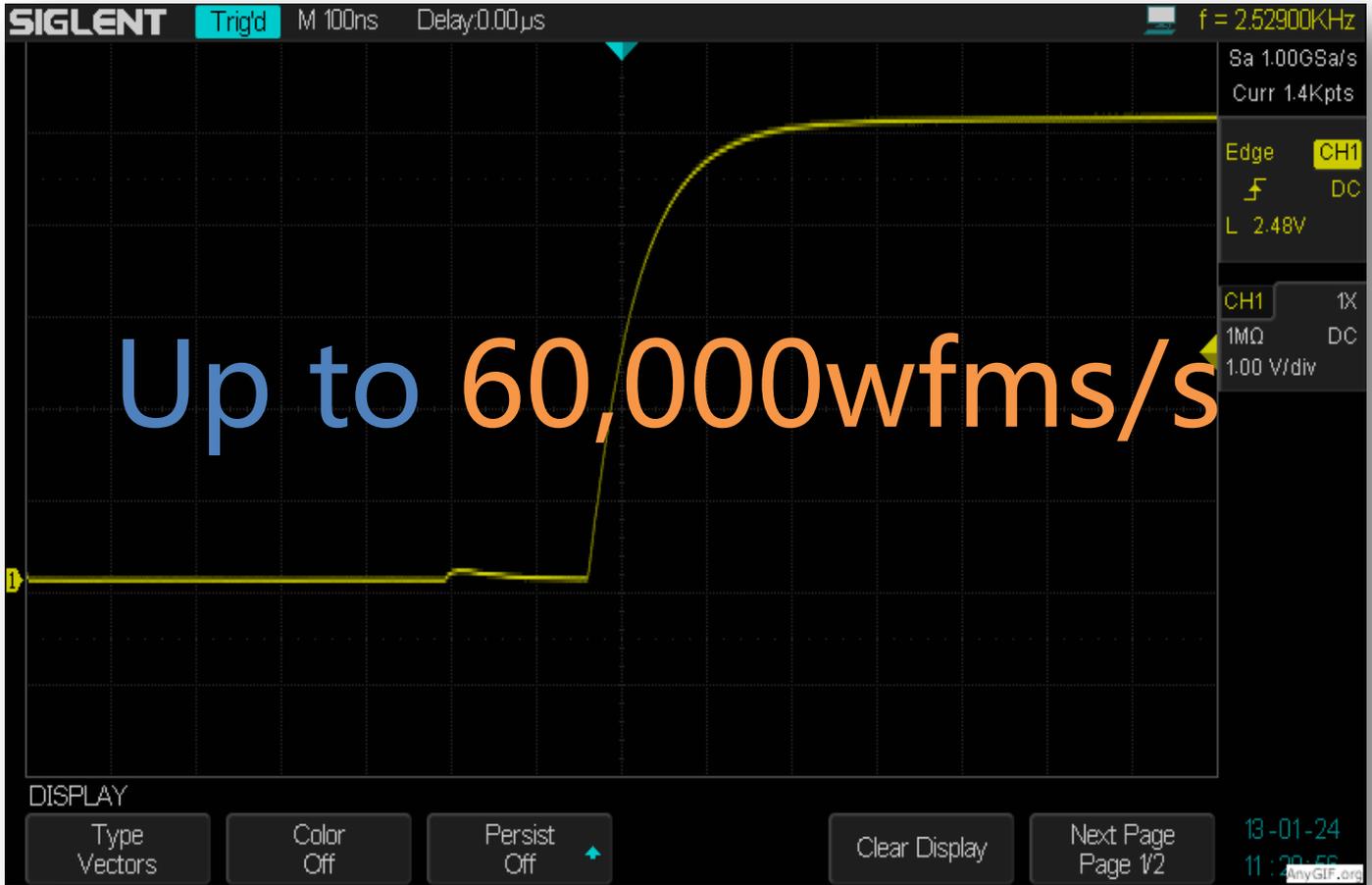
# New SPO Tech

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Excellent signal fidelity

- Low background noise
- Min vertical scale  $500\mu\text{V}/\text{div}$





Sa 50.0MSa/s  
Curr 14Mpts  
Runt CH1  
DC  
L1 294mV  
L2 102mV  
1 DC1M  
100 mV/div  
-156.00 mV



Hardware Based Zoom

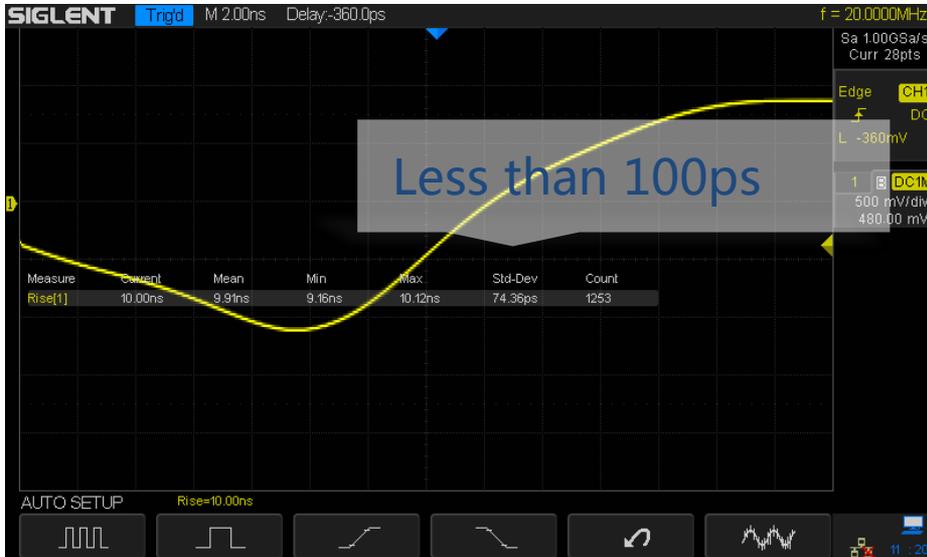
Up to 14Mpts Record Length

TRIGGER

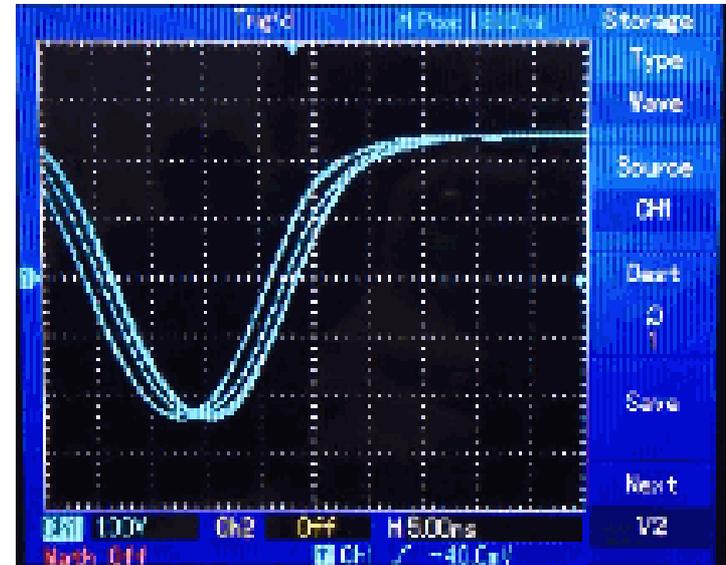
Type Runt	Lower Upper 102mV 294mV	Coupling DC	Noise Reject Off	Next Page Page 2/2	11:08
Runt Lbs	102mV 294mV Lower Upper	DC Coupling	Off Noise Reject	Next Page	11:08

TRIGGER

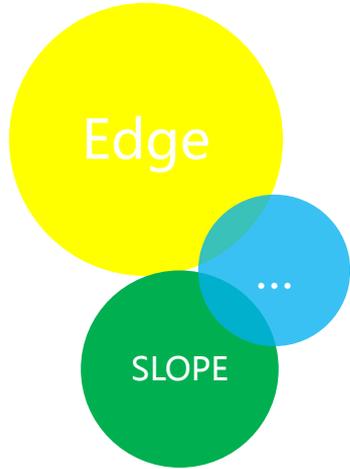
## SDS1000X ( Digital trigger )



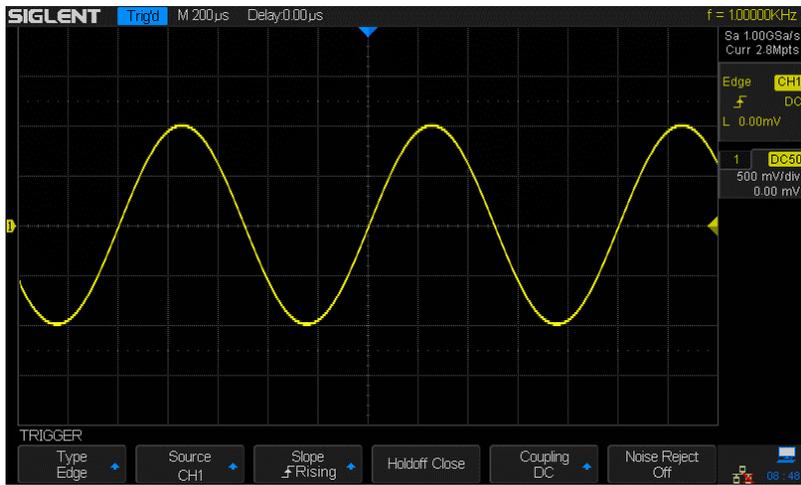
## DSO ( Analog trigger )



SDS1000X uses digital trigger tech , Trigger jitter is less than 100ps.



# Multi Trigger Types



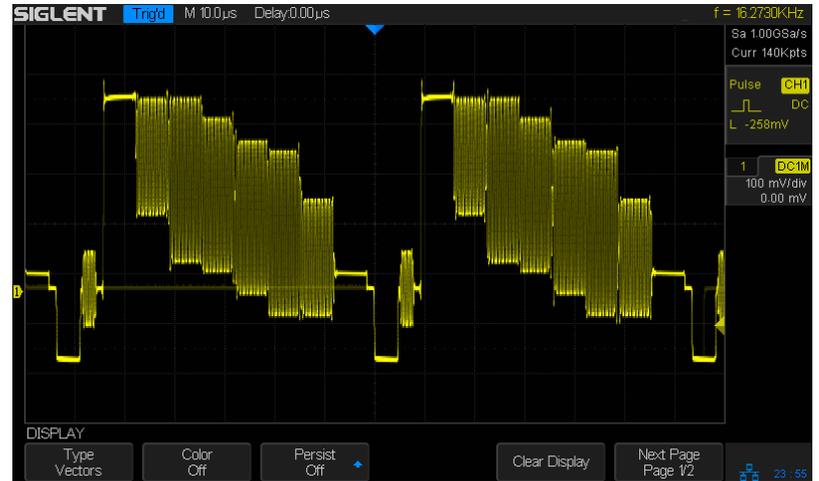
Edge



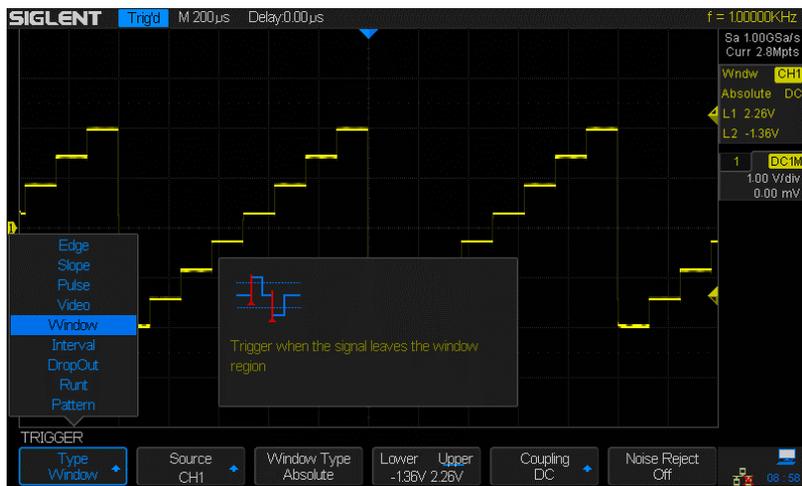
Slope



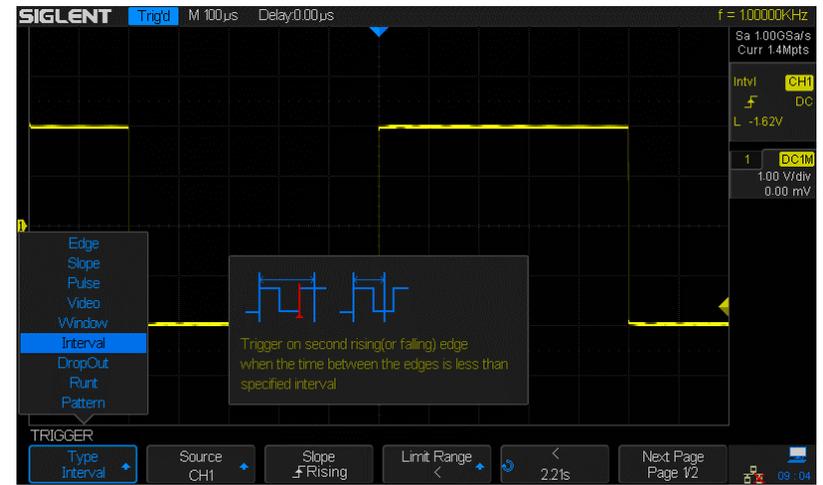
Pulse



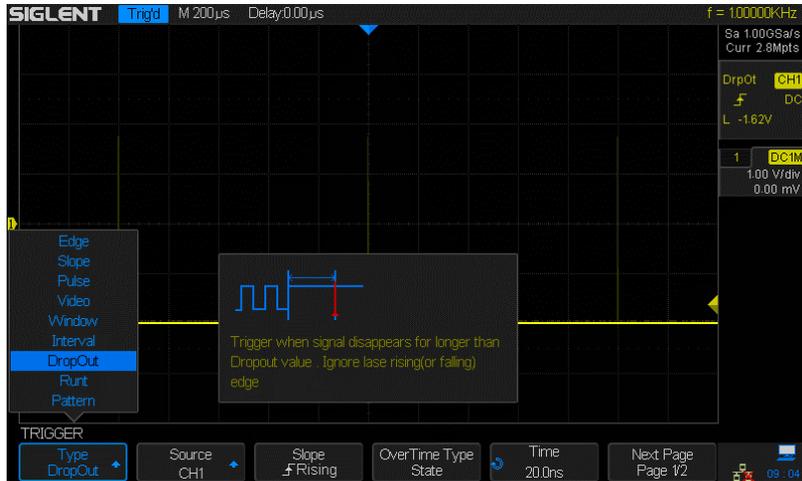
Video



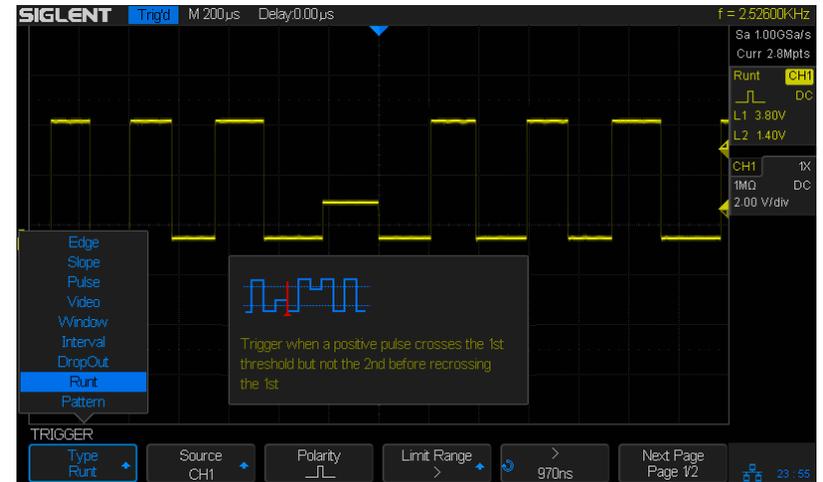
Window



Interval



Dropout



Runt



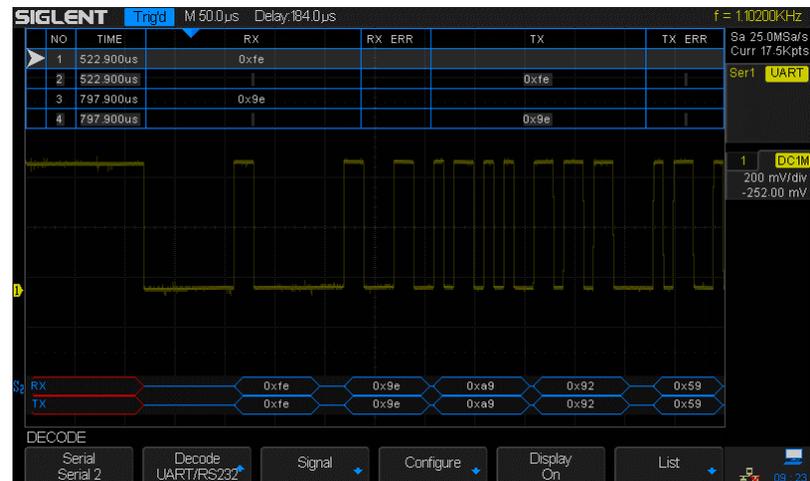
Patten



IIC



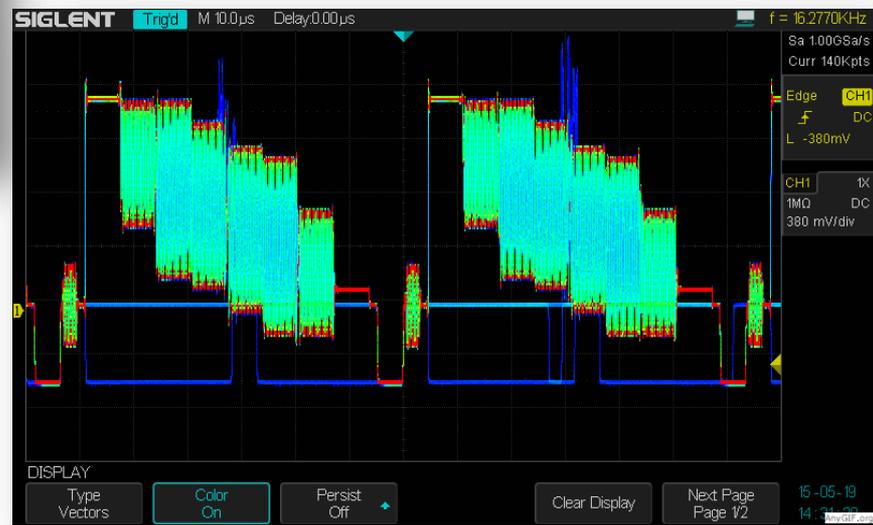
SPI



UART



256-level intensity grading



color temperature display



Sa 500MSa/s  
Curr 14Kpts

Edge CH1

DC

L 248mV

1 DC1M

200 mV/div

156.00 mV

2 DC1M

1.00 V/div

0.00 mV

CH1

- |   |                               |                                 |                                |                                     |                                    |
|---|-------------------------------|---------------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <input checked="" type="checkbox"/> Vpp | <input type="checkbox"/> Vmax | <input type="checkbox"/> Vmin   | <input type="checkbox"/> Vamp  | <input type="checkbox"/> Vtop       | <input type="checkbox"/> Vbase     |
| <input type="checkbox"/> Mean           | <input type="checkbox"/> Vmea | <input type="checkbox"/> ST-DEV | <input type="checkbox"/> Vstd  | <input type="checkbox"/> Vrms       | <input type="checkbox"/> Crms      |
| <input type="checkbox"/> FOV            | <input type="checkbox"/> FPRE | <input type="checkbox"/> ROV    | <input type="checkbox"/> RPRE  |                                     |                                    |
| <input type="checkbox"/> Period         | <input type="checkbox"/> Freq | <input type="checkbox"/> +Wid   | <input type="checkbox"/> -Wid  | <input type="checkbox"/> Rise Time  | <input type="checkbox"/> Fall Time |
| <input type="checkbox"/> BWid           | <input type="checkbox"/> +Dut | <input type="checkbox"/> -Dut   | <input type="checkbox"/> Delay | <input type="checkbox"/> Time@Level |                                    |

Channel Delay

 CH1-CH2

- |   |                              |                              |                              |                              |                              |
|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <input checked="" type="checkbox"/> Phase | <input type="checkbox"/> FRR | <input type="checkbox"/> FRF | <input type="checkbox"/> FFR | <input type="checkbox"/> FFF | <input type="checkbox"/> LRR |
| <input type="checkbox"/> LRF              | <input type="checkbox"/> LFR | <input type="checkbox"/> LFF |                              |                              |                              |



Phase

Calculate the phase difference between two edges

Adjust Knob:  $\leftrightarrow$ Trigger Level Knob:  $\updownarrow$ 

Measure

+Wid[1]

Phas[1-2]

MEASURE

+Wid=3.08 $\mu$ s

Phas[1-2]=\*\*\*\*

Source

CH1

Type

Clear

Statistics

On

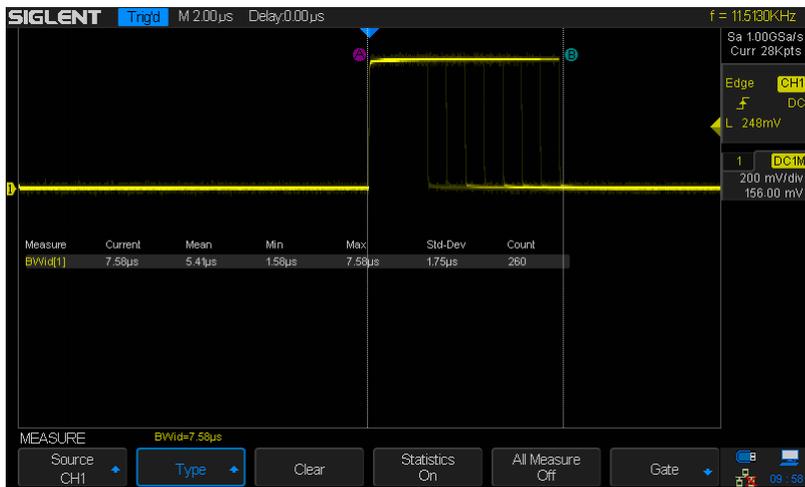
All Measure

Off

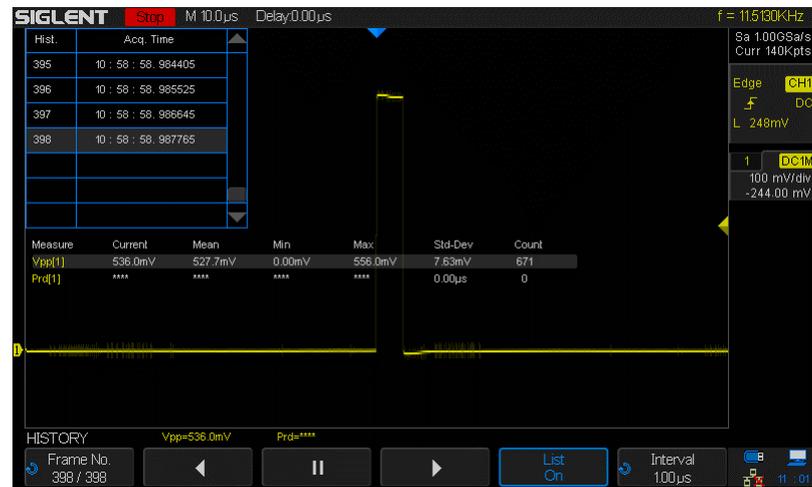
Gate

B

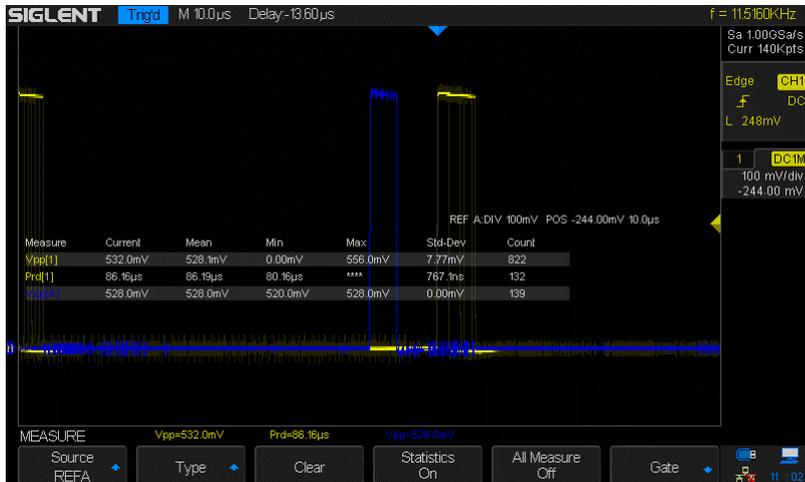
09:55



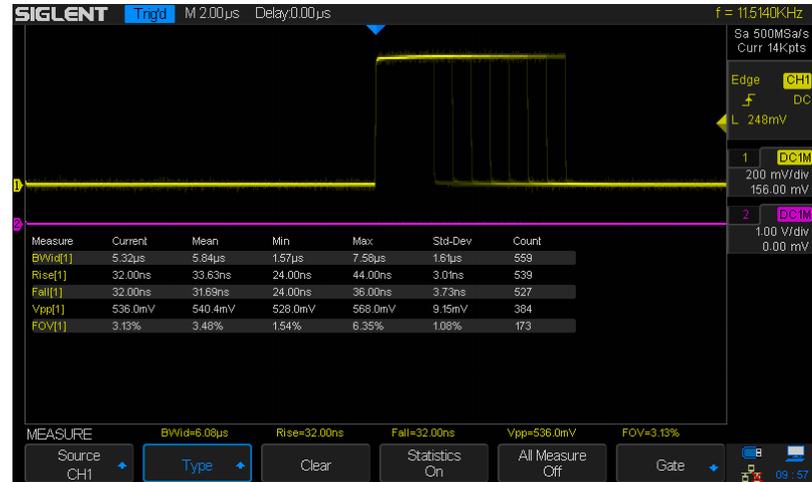
Gating Measurement



History Measurement



Ref Measurement



Math Measurement

Hist.	Acq. Time	
3971	05 : 01 : 59. 926692	▲
3972	05 : 01 : 59. 926951	
3973	05 : 01 : 59. 927123	
3974	05 : 01 : 59. 927382	
3975	05 : 01 : 59. 927554	
3976	05 : 01 : 59. 927726	▼
3977	05 : 01 : 59. 927985	▼

Sa 1.00GSa/s  
Curr 14Kpts

Edge CH1

F DC

L 2.48V

1 B DC1M

1.00 V/div

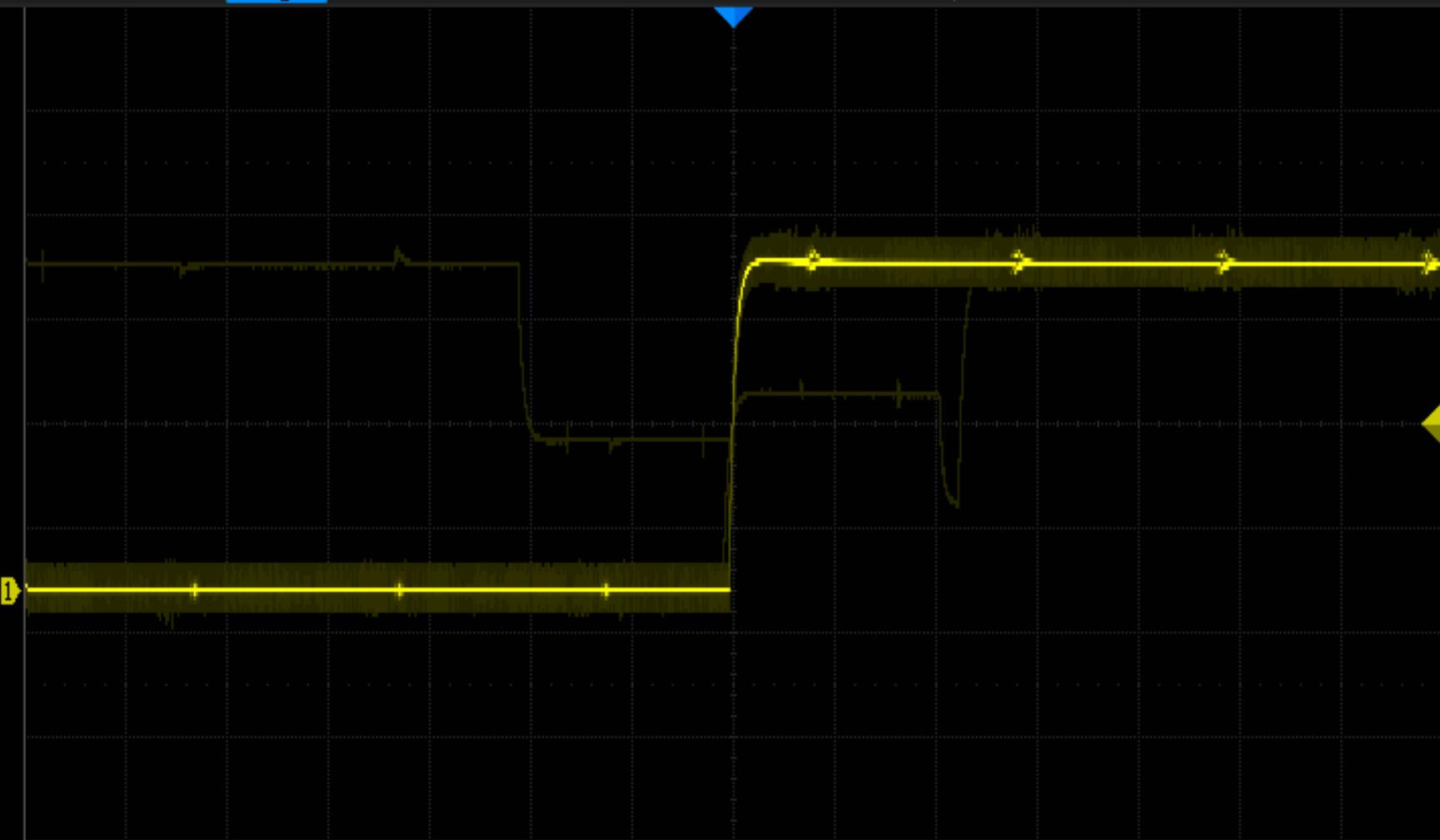
-2.08 V



## HISTORY

Frame No.  
3974 / 3982List  
OnInterval  
1.00  $\mu$ s

05 : 02

Sa 1.00GSa/s  
Curr 140Kpts

Edge CH1

f DC

L 160mV

1 DC1M

100 mV/div

-160.00 mV

DISPLAY

Type  
VectorsColor  
OffPersist  
Infinite

Clear Persist

Clear Display

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SIGLENT

SDS 1202X  
Digital Storage Oscilloscope

SPO  
Super Phosphor Oscilloscope

200MHz  
1GSa/s

8" TFT-LCD Display

800\*480

8\*14 Grids

Menu

Cursors Acquire Save Recall Wave Gen

Intensity Adjust

Select Default Clear Sweeps History Digital

Vertical Horizontal Trigger

Math Ref Position Zero

1 2

Ext Cal

All Inputs 1M $\Omega$ /18pF 400V<sub>pk</sub> CAT I 50 $\Omega$   $\leq$  5V<sub>rms</sub>



<http://www.siglent.com>