

Digital Storage Oscilloscope auto-measurements test

v1.1

Determines if scope makes auto-measurements based on main sample memory or secondary buffer.

Buffer size and auto-measurements accuracy across timebases can be deduced from test data. Test idea by MrWolf@EEVblog forum.

Equipment must be warmed up (30 min). Stats must be reset when changing ranges. Averaging (if applied) must not affect Min/Max.

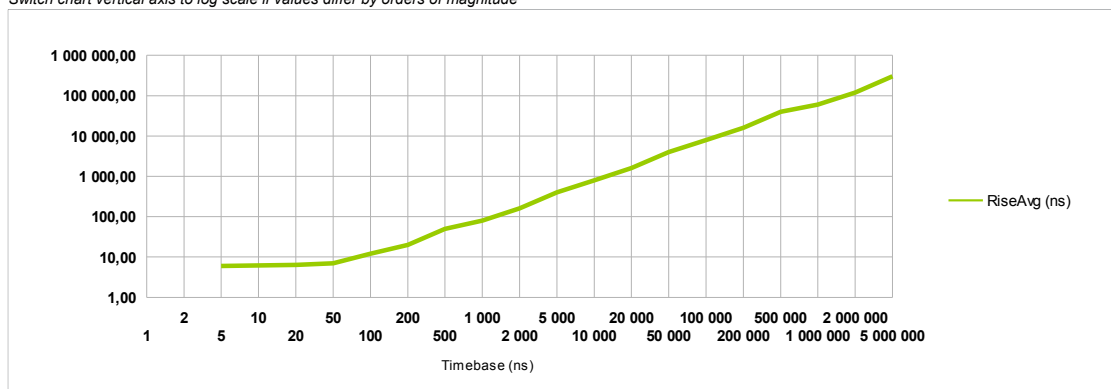
Test conducted by:
Date:

Oscilloscope under test:
Production year:
Calibration date:
Hardware version:
Firmware version etc:
Vertical setting (V/div):
Channels in use:
Channel coupling:
Comments:

Test waveform:
Frequency:
Risetime:
Jitter:
Amplitude:
Signal generator:
Comments:

horizontal setting	as reported by DSO	90%/10%	90%/10%	90%/10%			
Timebase (ns/div)	Sampling rate (MSa/s)	RiseMin (ns)	RiseAvg (ns)	RiseMax (ns)	PeriodMin (us)	PeriodAvg (us)	PeriodMax (us)
1							
2							
5	1 000		6.00				
10	1 000		6.20				
20	1 000		6.40				
50	500		7.00				
100	500		12.00				
200	250		20.00				
500	100		50.00				
1 000	100		80.00				
2 000	100		160.00				
5 000	100		400.00			30.40	
10 000	100		800.00			30.40	
20 000	100		1 600.00			30.40	
50 000	100		4 000.00			30.00	
100 000	100		8 000.00			28.00	
200 000	100		16 000.00			40.00	
500 000	50		40 000.00			100.00	
1 000 000	20		60 000.00			200.00	
2 000 000	2		120 000.00			400.00	
5 000 000	5		300 000.00			1 000.00	

Switch chart vertical axis to log scale if values differ by orders of magnitude



Switch chart vertical axis to log scale if values differ by orders of magnitude

