Mixed Signal Oscilloscope

4CH Oscilloscope, 8CH Logic Analyzer

MSO5054F(G)/DSO5000E Series

Feature

- 4 Channels Oscilloscope; 60-300MHz Bandwidth;
- 32K/1M Record Length; 1GS/s / 2GS/s Sample Rate;
- 32 automotive measurement; with the FFT function;
- 8 Channels Logic Analyzer,
- 7 inch 64K color LCD, high resolution 800x480;
- 25MHz Arb. Waveform Generator;

Specifications

	Model	DSO5304E	DSO5204E	DSO5104E	DSO5064E	MSO5054FG	MSO5054F
Horizontal	Bandwidth	300MHz	200MHz	100MHz	60MHz	50MHz	
	Sampling Rate Range	2GSa/s				1GS/s	
	Memory Depth (Sample Points)	32K				1M	
	SEC/DIV Range	2ns~40s/div		4ns/div~40s/div			
	Sampling Rate and Delay Time Accuracy	±50ppm in any ≥1ms time intervals					
	Delta Time Measurement Accuracy (full bandwidth)	Single-shot, "sampling" mode, ± (1 sampling interval + 100ppm × readings + 0.6 ns) > 16 times above average, ± (1 sampling interval + 100ppm × readings + 0.4 ns) Sampling interval = SEC/DIV÷200					
Vertical	A/D Converter	8-bit resolution, each channel sampled simultaneously					
	VOLTS/DIV Range	2mV/div ~ 5V/div at input BNC					
	Position Range	±400mV (2mV/div ~20mV/div); ±2V (50mV/div ~200mV/div) ±40V (500mV/div ~2V/div); ±50V (5V/div)					
	Optional Analog Bandwidth Limit (typical)	20MHz					
	Low Frequency Response (-3db)	≤10Hz at output BNC					
	Rise Time	1.2ns	1.7ns	3.5ns	5.8ns	≤5ns	
	Vertical Gain Accuracy	±3% for sample or average acquisition mode, 5V/div to 10mV/div; ±4% for sample or average acquisition mode, 5mV/div to 2mV/div					
Trigger	Trigger Type	Video, Edge, Pluse Width, Slope, Overtime, Code-type, Duration, Queue, Repeat, Alternate					
	Trigger Level Range	CH1, CH2, CH3, CH4: ±8 divisions from center of screen; EXT: ±1.2V; EXT/5: ±6V					
	Typical accuracy for signals having rise and fall time ≥ 20ns)	CH1, CH2, CH3, CH4: ±(0.2div × V/div) (within ±4 divisions from center of screen); EXT: ±(6% of setting+40mV); EXT/5: ±(6% of setting+200mV)					
	Holdoff Range	100ns- 10s					
	Set Trigger Level to 50% (typical)	For the input signals ≥ 50Hz					
Acquisition	Normal, Peak Detect	Upon single acquisition on all channels simultaneously					
	Average	After N acquisitions on all channels simultaneously, N can be set to 4, 8, 16, 32, 64 or 128					
Input	Input Coupling	DC, AC or GND					
	Input Impedance, DC coupled	1MΩ±2% for 20pF±3 pF					
	Probe Attenuation	1X, 10X,					
	Supported Probe Attenuation Factor	1X, 10X,100X, 1000X					
Measurement	Cursors	The difference between voltage cursors △V; the difference between time cursors △T; 1/△T calculated by Hz.					
	Automatic	Frequency, Period, Mean, Pk-Pk, Cycli RMS, Minimum, Maximum, Rise time, Fall Time, +Pulse Width, -Pulse Width, Delay1-2Rise, Delay1-2Fall, +Duty, -Duty, Vbase, Vtop, Vmid, Vamp, Overshoot, Preshoot, Preiod Mean, Preiod RMS, FOVShoot, RPREShoot, BWIDTH, FRF, FFR, LRR, LRF, LFR, LFF					
General Feature	Display	7 inch 64K color LCD, 800x480 pixels, adjustable (16 gears) with the progress bar					
	Voltage	100-120VACRMS(±10%),45Hz to 440Hz, CAT Ⅱ ;120-240VACRMS(±10%),45Hz to 66Hz, CAT Ⅱ					
	Size & Weight	313mm(L)x108mm(W)x142mm(H); 2.08KG(without Packing)					
Logic Analyzer	Sampled Channels	8				8	
	Max. Input Impedance	200K (C=10p)				200K (C=10p)	
	Input Voltage Range	0~3V				0~3V	
	Logic Threshold Range	0~3V				0~3V	
	Max. Sample Rate	1GSa/s				500MSa/s	
	Compatible Input	TTL, CMOS, ECL				TTL, CMOS, ECL	
	Sample Depth	32K				1M	
	Measurement	Period and Frequency				Period and Frequency	
Arbitrary Waveform Generator	Waveform Frequency	DC~25MHz					–
	DAC clock	2K~200MHz adjustable					–
	Frequency Resolution	0.1%					–
	Waveform Depth	4KSa					–
	Vertical Resolution	12bit					–
	Frequency Stability	<30ppm					–