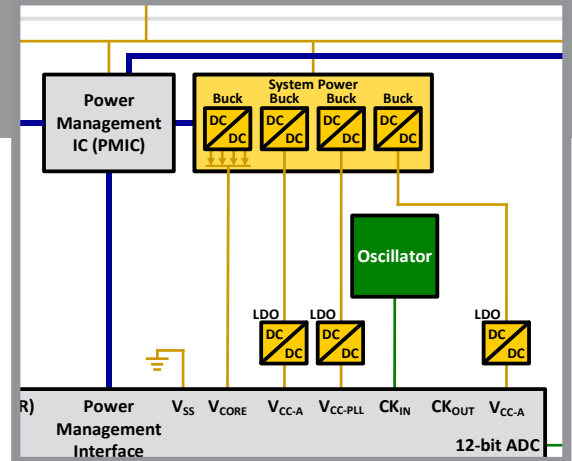
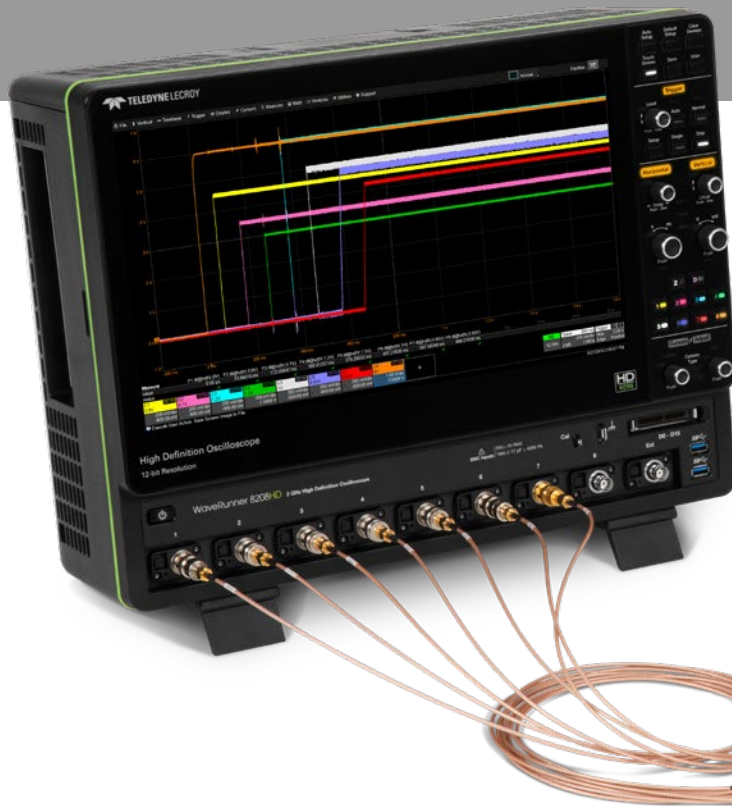


Power Integrity and Power Sequencing



WaveRunner 8000HD 12-bit oscilloscopes' high resolution, long memory and high channel count let you validate and debug all aspects of power supply, delivery and consumption - for complete confidence.

Accurate PDN measurements

Make sensitive measurements like rail collapse characterization with total confidence thanks to WaveRunner 8000HD's high dynamic range and 0.5% gain accuracy. Its HD4096 architecture means an exceptionally low noise floor, for easily pinpointing noise sources.

Specialized power probes

Combine WaveRunner 8000HD with the RP4030 4 GHz Power Rail Probe for unsurpassed insight into PDN behavior. The variety of probe tips ensures easy connectivity, and its low loading characteristics minimize disruption to the device under test.

Power sequencing

8 analog channels with 12-bit resolution and high offset capability give full visibility into power sequencing behavior - with 16 digital inputs available to decode and trigger on SPMI and other power management interfaces. Up to 5 Gpts of acquisition memory to capture every detail.

		Teledyne LeCroy WaveRunner 8000HD		Tektronix MSO58 (5 Series)
Analog Channels	✓	8 (16 with OscilloSYNC™)	✗	8 (without digital)
Digital Channels	✓	16 (with MSO option)	✗	8 to 64 (optional) Each 8 digital channels consumes 1 analog channel
Resolution	✓	12 bits	✗	12-bit ADC but 8-bit real-world noise performance
Bandwidth	✓	350 MHz - 2 GHz	✗	350 MHz - 2 GHz Resolution is 8 bits at 2 GHz
Sample Rate	✓	10 GS/s	✗	6.25 GS/s
Memory	✓	50 Mpts/Ch standard 1.25 Gpts/Ch maximum	✗	62.5 Mpts/Ch standard 125 Mpts/Ch maximum
Display Size / Resolution	✓	15.6", 1920 x 1080 pixels Supports UHD (4096 x 2304) external monitor	✓	15.6", 1920 x 1080 pixels Supports HD (1920 x 1080) external monitor
Baseline Noise (rms, 2 GHz)	✓	330 uV @ 50 mV/div	✗	1848 uV @ 50 mV/div (measured)
Gain Accuracy	✓	±(0.5%) of full scale	✗	±(0.6%) of full scale
Offset Range	✓	±8 V at 10 mV/div, ±160 V at 1 V/div	✗	±1 V at 10 mV/div, ±100 V at 1 V/div
Rail Probe	✓	Yes	✗	Yes
Digital Power Management Application Package	✓	Yes	✗	No
Power Management Serial Data Support	✓	SPMI	✓	SPMI

A complete power sequencing and power integrity toolkit

Teledyne LeCroy's HD4096 technology provides 12-bit resolution all the time. With 8 analog inputs and the most complete set of probes, triggers and software tools, the WaveRunner 8000HD gives unmatched insight into system power behavior.

Probe

Teledyne LeCroy's RP4030 Active Voltage Rail probe provides pristine reproduction of rail behavior with extremely low loading, taking full advantage of low-noise HD4096 technology.



Capture

TDME (Trigger, Decode, Measure/Graph & Eye Diagram) options for all common power management interfaces make triggering on, capturing and viewing power sequencing events easy.



Analyze

The Digital Power Management software option enables powerful analysis of PDN behaviors such as load transient response, ground bounce and voltage rail noise.

