

16-Lane, 17.4 Gbps Instrument for SerDes Development and Test

The SV5C is a massively parallel tester that meets the emerging test and validation requirements of increasingly complex electronic component and board designs. Featuring 16 independent pattern generators and 16 independent signal/data analyzers, the SV5C addresses – with relative ease – the growing need for parallel, system-oriented testing methodology. It is able to provide unprecedented insight into crosstalk, concurrent test, and channel-to-channel variations.



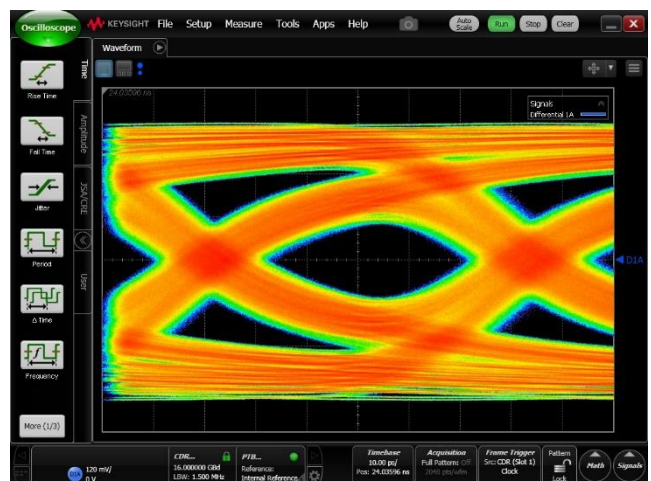
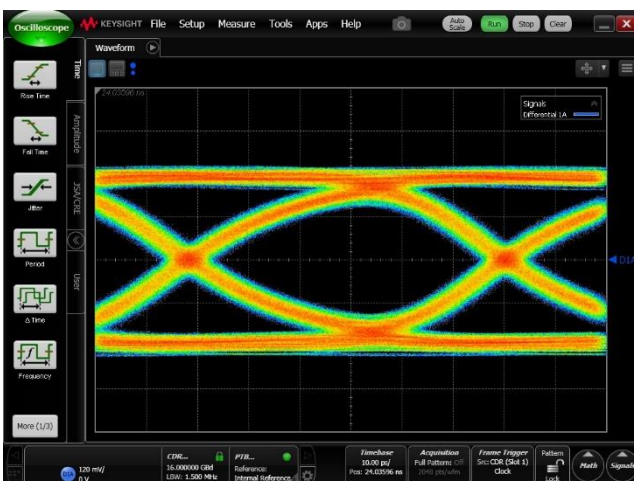
Key Features:

- **Data rates:** 80 Mbps to 17.4 Gbps fully-continuous operating range, including channel to channel data rate offset programmability
- **Lanes:** 16 Tx and 16 Rx, operable in either a single-ended or differential manner
- **Signal impairments:** pattern generators channels offer voltage, timing, and noise injection controls
- **Waveform measurements:** eye diagram, EQ, analog waveform, and jitter separation
- **Easy to Use:** Introspect ESP enables interactive operation or full automation

Key Benefits:

- **Parallel:** with increasing crosstalk issues, a truly parallel system allows for the most comprehensive “stress test” that is possible. The SV5C tests all your lanes simultaneously
- **Self Contained:** an all-in-one system reduces bench space and helps create a portable test and measurement environment; the SV5C integrates multiple tools into one
- **Automated:** scripting capability is ideal for debug tasks, firmware verification, and full-fledged production screening of devices and system modules.

Typical application: Receiver Stressed Eye Generation



Ports

Parameter	Value	Description
Number of Differential Transmitters	16	
Number of Differential Receivers	16	
Number of Dedicated Clocks	1	One reference clock input and one output
Number of External GPIO Pins	32	Configurable as differential LVDS or single ended

Transmitter & Receiver Parameters

Parameter	Value	Description
Transmitter Differential Voltage Range	0 – 400 mV	Includes per lane differential mode noise injection
Transmitter Common Mode Range	0 – 500 mV	Includes per lane common mode noise injection
Transmitter Per-Lane Skew Range	+/- 0.5 UI	Per-lane skew injection is only available on SV5C-12
Receiver Differential Voltage Range	90 – 1200 mV	Includes DC gain correction and AC equalization
Receiver Common Mode Range	0 – 500 mV	

Ordering Information

Part Number	Name	Key Differentiators
5712	SV5C-12 SerDes Tester	Per channel skew and jitter injection control, 12.5 Gbps maximum data rate
5717	SV5C-17 SerDes Tester	Two-bank skew and jitter injection control, 17.4 Gbps maximum data rate

