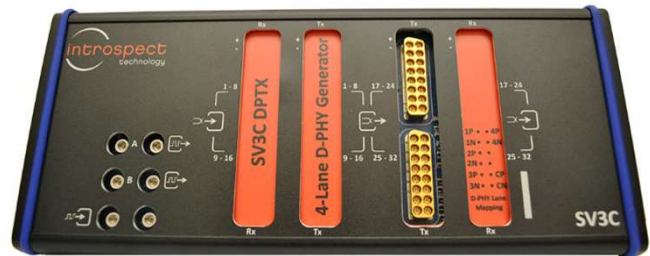


4-Lane, up to 6.5 Gbps Instrument for MIPI D-PHY Generation

The SV3C-DPTX MIPI D-PHY Generator is an ultra-portable, high-performance instrument that enables exercising and validating MIPI D-PHY receiver ports. Capable of generating any traffic and being completely data-rate agile, the D-PHY generator includes analog parameter controls that enable gaining deep insights into receiver sensitivity performance and skew / jitter tolerance. Featuring 4 lanes which enables testing of an entire MIPI physical layer receiver port and full protocol testing of both CSI and DSI packets.



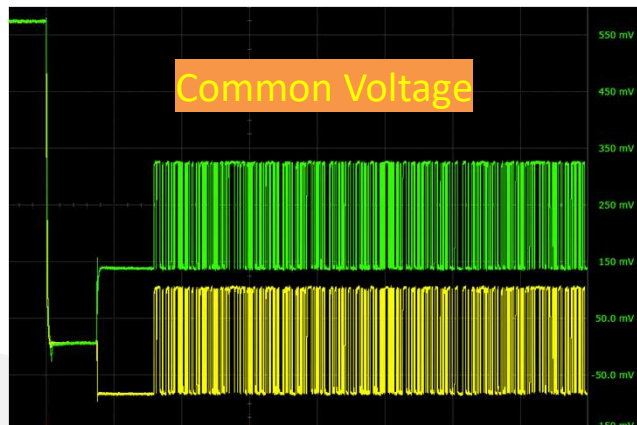
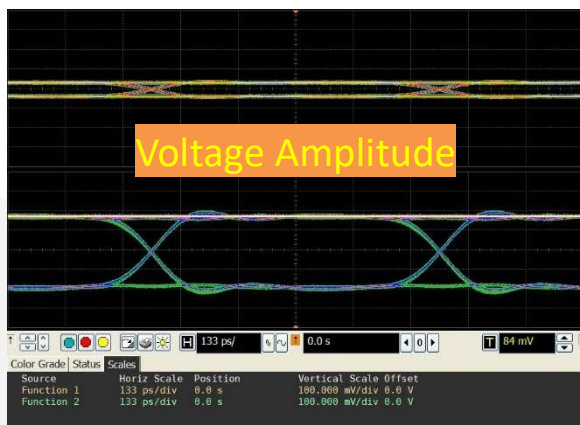
Key Features:

- **Data rates:** 80 Mbps to 6.5 Gbps fully-continuous operating range, including automatically generating and handling LP and HS data.
- **Lanes:** 4 Tx and 1 Clock
- **Signal impairments:** each pattern generator channel offers independent voltage, timing and jitter injection.
- **Pattern Generation:** Generate traffic including DSI and CSI, color-bar and active image frames.
- **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 SV3C 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 SV3C 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 Stressing



For Developing • For Verifying • For Shipping

Transmitter Parameters

Parameter	Value	Description
Number of Differential Transmitters	4+1	4 data lanes plus 1 clock lane
HS Differential Voltage Swing	20 – 600 mV	
LP Differential Voltage Swing	650 – 1300 mV -100 – 600 mV	Logic High Range Logic Low Range
Transmitter Skew Adjust	+/- 20 UI	
Total Memory Space	4 GByte	Space allocated to transmit patterns and images

Pattern Generator Functions

Feature	Description	Benefit
Pattern Generators	Pre-built image formats, RAW, RGB, and YUV, HS-Only, HS-Only+PRBS, and packet loop pattern sequencers	Allows for flexible stimulus generation (e.g. training sequences or compliance patterns)
Analog Controls	Polarity inversion, voltage swing, transmit pre-emphasis, duty cycle, bit-slip	Provides deep receiver stress characterization with truly independent multi-variable analysis
Synthesis Capability	Sinusoidal jitter injection, random jitter injection, de-emphasis generation	Allows for comprehensive receiver testing with internally synthesized noise sources

