SV3C – DPRX MIPI D-PHY Analyzer

Product Brief

4-Lane, up to 3.5 Gbps Instrument for MIPI D-PHY Analysis

The SV3C-DPRX D-PHY Analyzer is an ultra-portable, high-performance instrument for exercising and validating MIPI D-PHY transmitters as well as probing live MIPI D-PHY links. The Analyzer is data-rate agile, making it ideal for the capture and analysis of MIPI transmitters used in cameras, displays, and other devices. It also includes integrated LP and HS receivers, dynamic termination, and offers sophisticated capture, compare, and analysis modes. Featuring 4 lanes which enables testing of an entire MIPI physical layer transmitter port and full protocol testing.

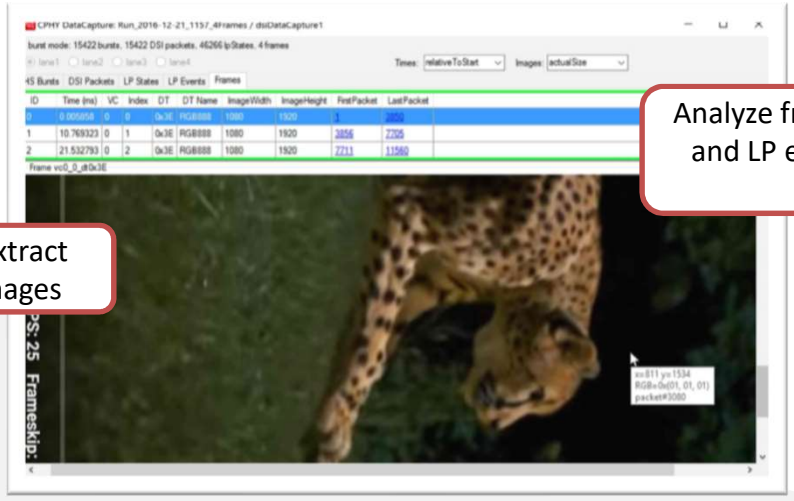
Key Features:

- Data rates: 80 Mbps to 3.5 Gbps fully-continuous operating range, including LP and HS handling.
- Lanes: 4 Rx and 1 Clock
- Signal analysis: each receiver channel offers independent timing and packet analysis
- Waveform measurements: analog waveform capture
- Easy to Use: Introspect ESP enables interactive operation or full automation

Key Benefits:

- Parallel: Complete protocol analysis suite including video frame extraction and continuous monitor for long term error checking 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: Image Analysis



Capture and extract CSI and DSI images

Analyze frames, packets, bursts and LP events with precision timestamps

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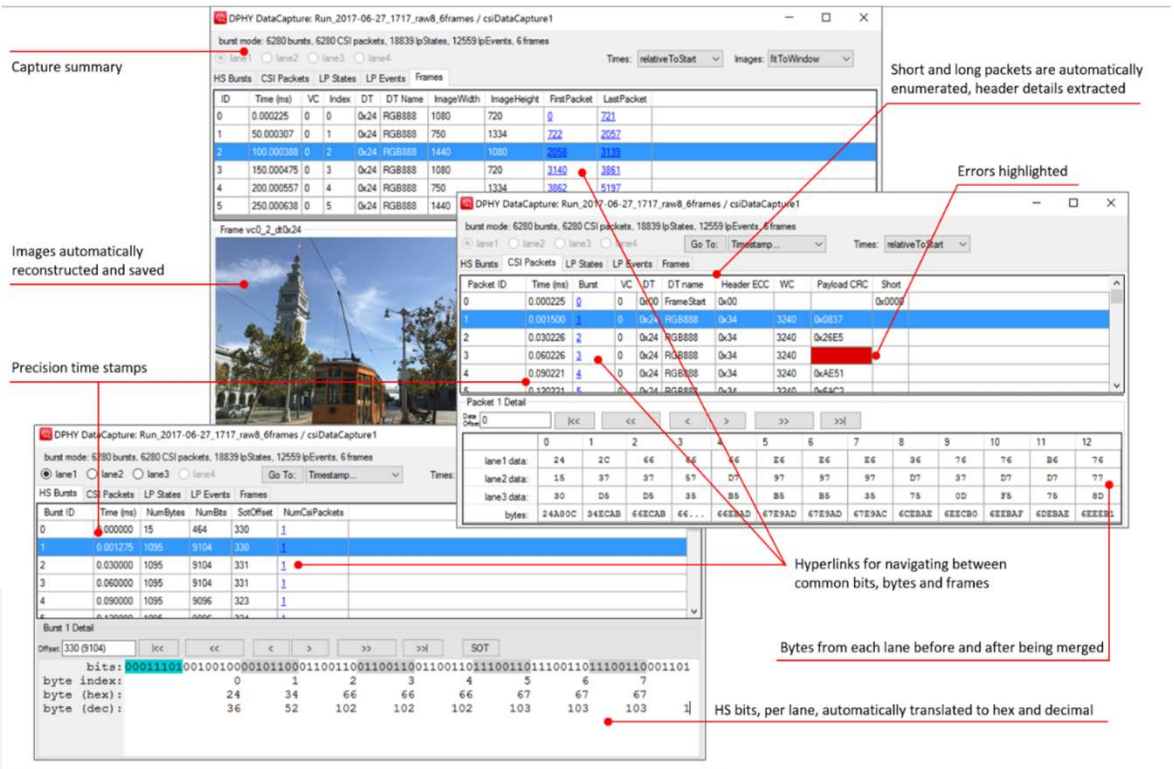
Receiver Parameters

Parameter	Value	Description
Number of Differential Receivers	4+1	4 data lanes plus 1 clock lane
HS Differential Detectable / Allowable Voltage Swing	90 – 600 mV	
LP Differential Programmable Threshold Voltage Swing	-100 –1500 mV	
Total Memory Space	4 GByte	Space allocated to transmit patterns and images

Environment and Control

Feature	Description	Benefit
DUT Control Interface	JTAG Control Port and I2C Control Port	Access and set the DUT SerDes control registers via the DUT JTAG Controller Port
User Interface	Introspect ESP GUI allows for interoperation with embedded instruments, FPGA instruments, and other lab tools	Enables full lab automation; provides a scalable, future-proof solution
Scripting	Data logging; automatic report generation	Suited for performing optimization sweeps



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Published on September 19, 2018
MK-D020E-E-18261

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