

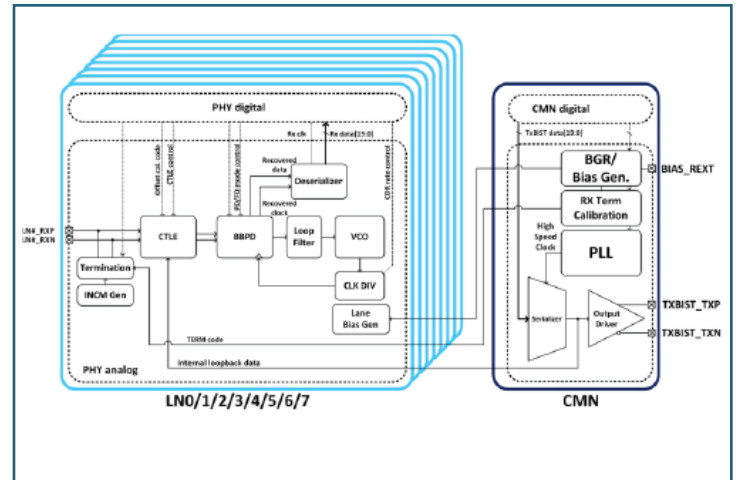
## V-by-One HS RX 8-Lane

### OVERVIEW

The V-by-One RX PHY IP is a hardmacro PHY for high speed data transmission of video signals. IO pads and ESD structures are included with extensive built-in self test features such as loopback and scan support. It offers a cost-effective and low-power solution. It builds on silicon-proven designs that are in volume production.

### KEY FEATURES

- Samsung Foundry 14nm low power CMOS device technology
- 1.8V, 0.9V dual power supply
- Compliant to V-by-One HS Standard v1.4 (up to 4Gbps)
- Supports 36/30/24/18bpp and RGB/YCbCr444 color mode
- Channel Configuration for Data Lanes
  - Common (CMN) and 2/4/8 Data Lanes
- Includes CTLE (Continuous-Time Linear Equalizer) with 16 control steps
- Built-in self test feature capable of producing and checking PRBS random patterns



### DELIVERABLES

- Front-end: Timing LIB, Verilog model, Sample test bench
- Back-end: Physical view LEF, GDSII layout, DRC, LVS
- Documentation: Datasheet and User's guide

# SAMSUNG Foundry

For more information, please contact us at [IP@silvaco.com](mailto:IP@silvaco.com).

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