

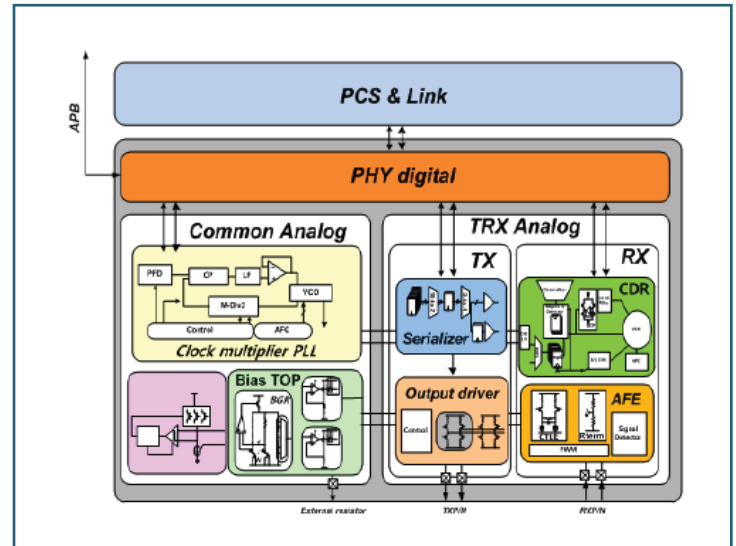
## MIPI M-PHY HS-G3 2-Lane

### Overview

The Samsung Foundry MIPI M-PHY IP is a hardmacro PHY for UFS protocol. 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

- 14nm low power CMOS device technology
- 1.8V, 0.85V dual power supply
- Compliant to MPHY 3.1 specification
- Supports HS-G1/HS-G2/HS-G3 Series A and B (Series A: 1.248G, 2.496G, 4.992 Gbps Series B: 1.456G, 2.912G, 5.824 Gbps)
- Supports PWM G1 to G4 (3 M to 72 Mbps)
- Channel Configuration for Data Lanes
- Common (CMN) and 2 Data Lanes
- Supports the following pre-emphasis levels
  - - 1.5/3/6dB
- 19.2M or 26MHz reference clock is required
- Built-in self test feature capable of producing and checking PRBS random patterns



### Deliverables

- Front-end DK : Timing LIB, Verilog model, Sample test bench
- Back-end DK : 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).

©Copyright Silvaco, Inc. All rights reserved. Silvaco is a registered trademark of Silvaco, Inc. Samsung Foundry is a trademark of Samsung Electronics Co. Ltd. All other names mentioned herein are trademarks or registered trademark of their respective owners.

All information provided is for reference purposes only and may be changed without notice.

# SILVACO

HEADQUARTERS  
2811 Mission College Boulevard, 6th Floor  
Santa Clara, CA 95054  
Phone: 408-567-1000  
Fax: 408-496-6080



CALIFORNIA

[sales@silvaco.com](mailto:sales@silvaco.com)  
408-567-1000

MASSACHUSETTS

[masales@silvaco.com](mailto:masales@silvaco.com)  
978-323-7901

TEXAS

[txsales@silvaco.com](mailto:txsales@silvaco.com)  
512-418-2929

JAPAN

[jpsales@silvaco.com](mailto:jpsales@silvaco.com)

EUROPE

[eusales@silvaco.com](mailto:eusales@silvaco.com)

FRANCE

[eusales@silvaco.com](mailto:eusales@silvaco.com)

KOREA

[krsales@silvaco.com](mailto:krsales@silvaco.com)

TAIWAN

[twsales@silvaco.com](mailto:twsales@silvaco.com)

SINGAPORE

[sgsales@silvaco.com](mailto:sgsales@silvaco.com)

CHINA

[cnsales@silvaco.com](mailto:cnsales@silvaco.com)

[WWW.SILVACO.COM](http://WWW.SILVACO.COM)