

High speed Serdes PHY macro Datasheet

SATA PHY for TSMC 28nm HPC+

Overview

The Renesas SerDes PHY is useful analog transceiver hard macro for various high speed serial interface PHY layer of TSMC 28nm HPC+ process. This macro is designed for Serial ATA Revision 3.1.

Key Features

- Renesas SerDes PHY can be used for analog transceiver of following interface.
 - Serial ATA Revision 3.1 (compliant with "Serial ATA Revision 3.1")
- Technology is TSMC 28nm HPC+ 1p10M (5x2y2r).
- Supply voltage can be applied 0.90V for nominal and 1.0V for overdrive of core voltage,
 1.8V for IO voltage.
- 2Tap FIR filter for Tx equalizer / Tunable peaking amplifier for Rx equalizer.
- Built-in differential input buffer for clean reference clock.

Block Diagram

SATA PHY Digital SerDes PHY Analog Macro Link Layer Batton Bias PLL Ref. clock

^{*}This IP is contract design IP. Please contact for detail.

^{*1} There are some restrictions for use case of these standards. Please contact and consult to Renesas Electronics for detail information before purchasing product.