

USB2.0 Datasheet

USB2.0 Transceiver for TSMC 28nm HPC+

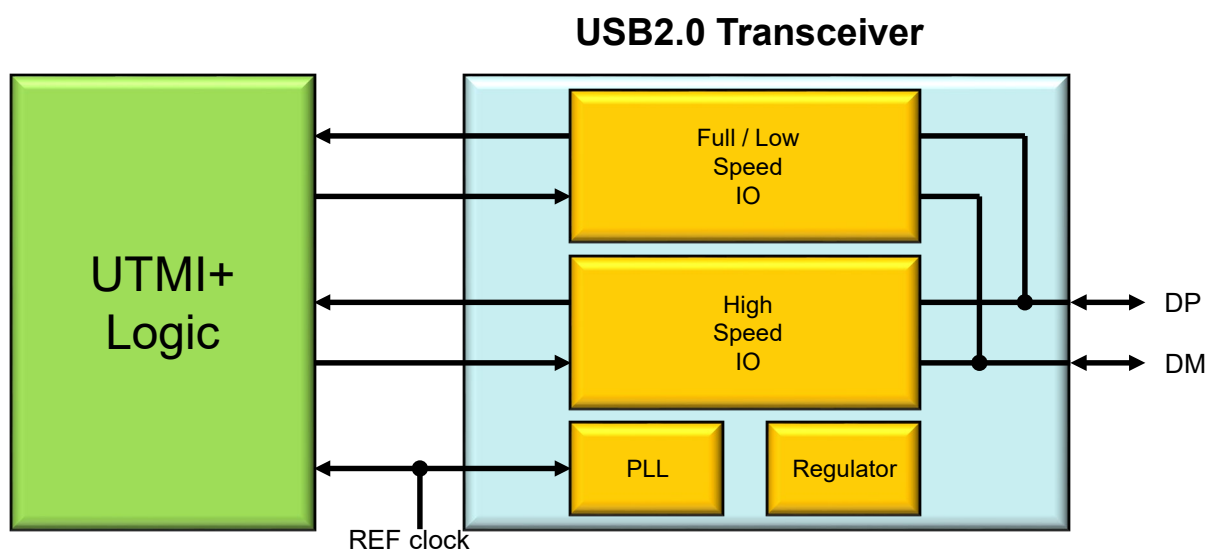
Overview

The Renesas USB2.0 Transceiver is useful analog Multi port transceiver hard macro for UTMI+ (USB2.0 Transceiver Macro cell Interface) + Level3 of TSMC 28nm HPC+ process. This macro can be configured to operate as a USB2.0 peripheral or USB2.0 host controller.

Key Features

- Renesas USB2.0 Transceiver can be used for analog transceiver of following interface .
 - Universal Serial Bus Specification Revision 2.0
 - Battery Charging Specification Revision 1.2
- Supports Multi-port. (1 / 2 / 3 / 4 port type are available)
- Technology is TSMC 28nm HPC+ 1p10M (5x2y2z).
- Supply voltage can be applied 0.90V for nominal and 1.0V for overdrive of core voltage, 1.8V and 3.3V for IO voltage.
- USB transfer mode is high-speed (480 Mbps), full-speed (12 Mbps), and low-speed (1.5 Mbps) modes.
- A terminal resistance, pull-up resistor, and pull-down resistor are included.
- Input reference clock is 48MHz, 30MHz, 24MHz and 20MHz.

Block Diagram



**This IP is contract design IP. Please contact for detail.*

*Before purchasing or using any Renesas Electronics products listed herein, please refer to the latest product manual and/or data sheet in advance.