

Interface IP

USB2.0 Full-Speed Transceiver for TSMC 22nm ULL

Overview

The Renesas USB2.0 FS(Full-Speed) Transceiver is useful analog 1port transceiver hard macro for TSMC 22nm ULL process. This macro can be configured to operate as a USB2.0 Full/Low Speed peripheral or host controller.

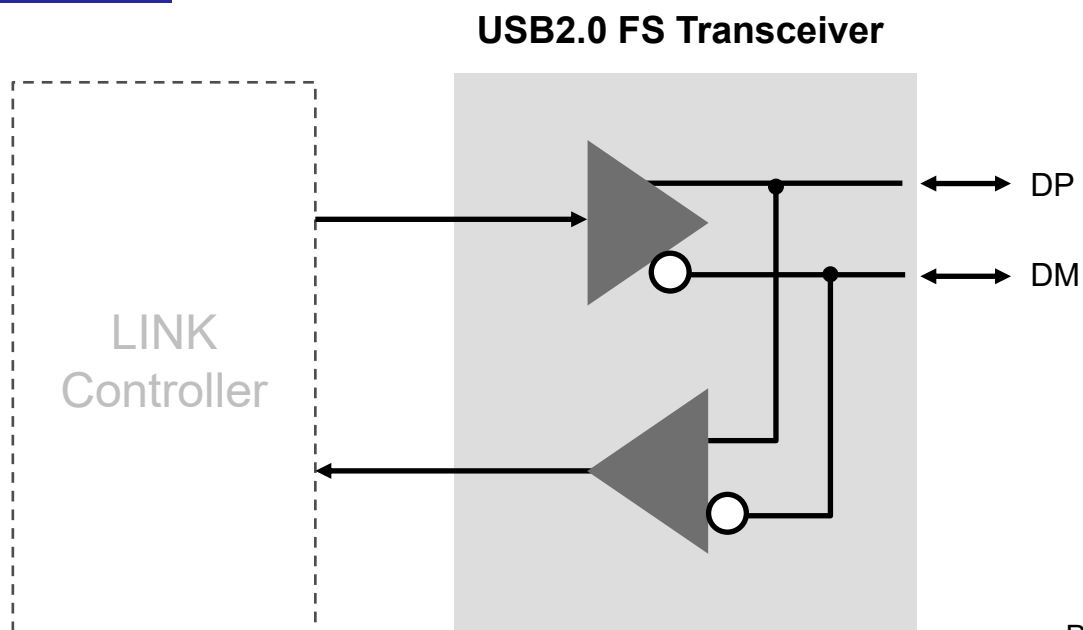
For this IP, only the parts required for Full-Speed(FS:12Mbps) and Low-Speed(LS:1.5Mbps) are cut out from the USB2.0 PHY IP.

When High-Speed(HS:480Mbps) is not required, we can provide the optimum solution in terms of area and power consumption.

Features

- Renesas USB2.0 FS Transceiver can be used for analog transceiver of following interface .
- Universal Serial Bus Specification Revision 2.0 Full/Low-Speed
- Technology is TSMC 40nm LP 1p9M (6x2r).
- Supply voltage can be applied 1.1V for core voltage and 3.3V for IO voltage.
- USB transfer mode is Full-Speed (12 Mbps), and Low-Speed (1.5 Mbps) modes.
- A terminal resistance, pull-up resistor, and pull-down resistor are included.

Block Diagram



PMO-25-035
R06PF0068EJ0102