

USB2.0 to PCI BUS with 2.0 Transceiver

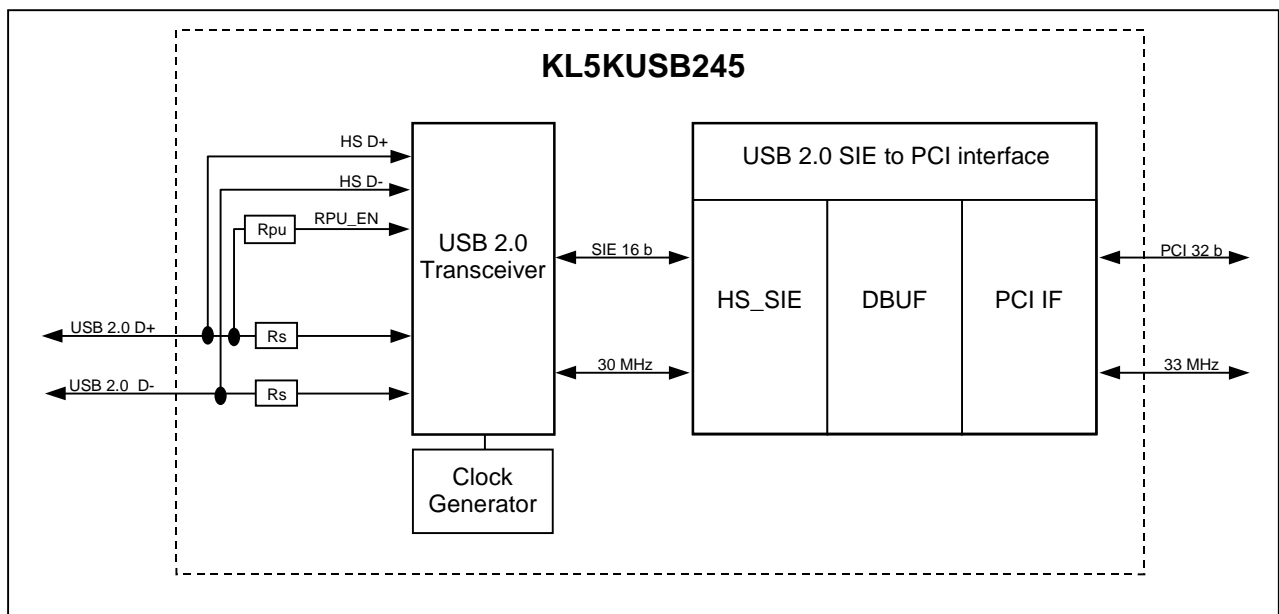
General Description

The Kawasaki KL5KUSB245 is a high performance device that transfers data between the USB2.0 high-speed BUS and the PCI 33MHz, 32 bit BUS. This 1 chip solution has USB 2.0 transceiver embedded reducing space and cost. The KL5KUSB245 is an ideal solution to convert a PCI device to a USB2.0 Transceiver, HS_SIE USB2.0 Transceiver interface, 4 sets of high-speed bulk packet size buffers, PCI interface and PCI master 2DMA channel support.

Features

- 33MHz PCI interface
- USB 2.0 standard embedded transceiver.
- 30MHz USB 2.0 SIE BUS for High-Speed SIE operation
- Double packet buffer - 512x2 HS, 64Bx2 FS
- Internal DMA operation between the High-Speed SIE and Double Buffer
- High-Speed chirp protocol
- High-Speed/Full-Speed compatibility
- USB basic operation and transaction control
- Up to 5 endpoints
- PCI interface for Target and Master (2 DMA) modes
- Page and Descriptor DMA Modes
- USB data access by PCI target or DMA
- 0.18u Std cell technology
- $V_{dd} = 3.3V$, $T_a = 0\sim 70^{\circ}C$

Block Diagram





KL5KUSB245

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