# KL5KUSB200

## USB2.0 Transceiver

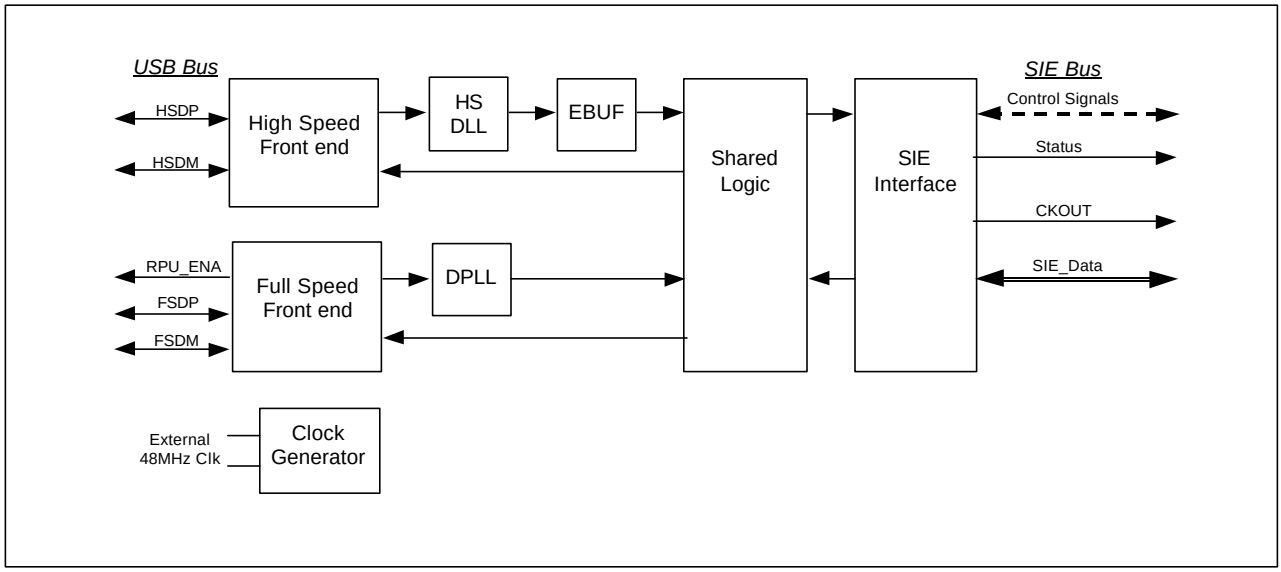
## General Description

The Kawasaki USB 2.0 Compliant Transceiver is the interface between the high performance USB serial bus and the 16-bit SIE bus. The high-speed analog interface and the digital serial bit processing feature of the USB 2.0 transceiver enables a highly integrated USB 2.0 device. The transceiver is controlled by input signals from the SIE bus which is synchronized with the 30MHz clock output. The Kawasaki Transceiver also provides output signals to monitor the USB bus status. The Kawasaki Transceiver, SIE, and logic design are combined to create Kawasaki's USB chip solutions for peripheral devices or can be used as IP with our ASIC technology.

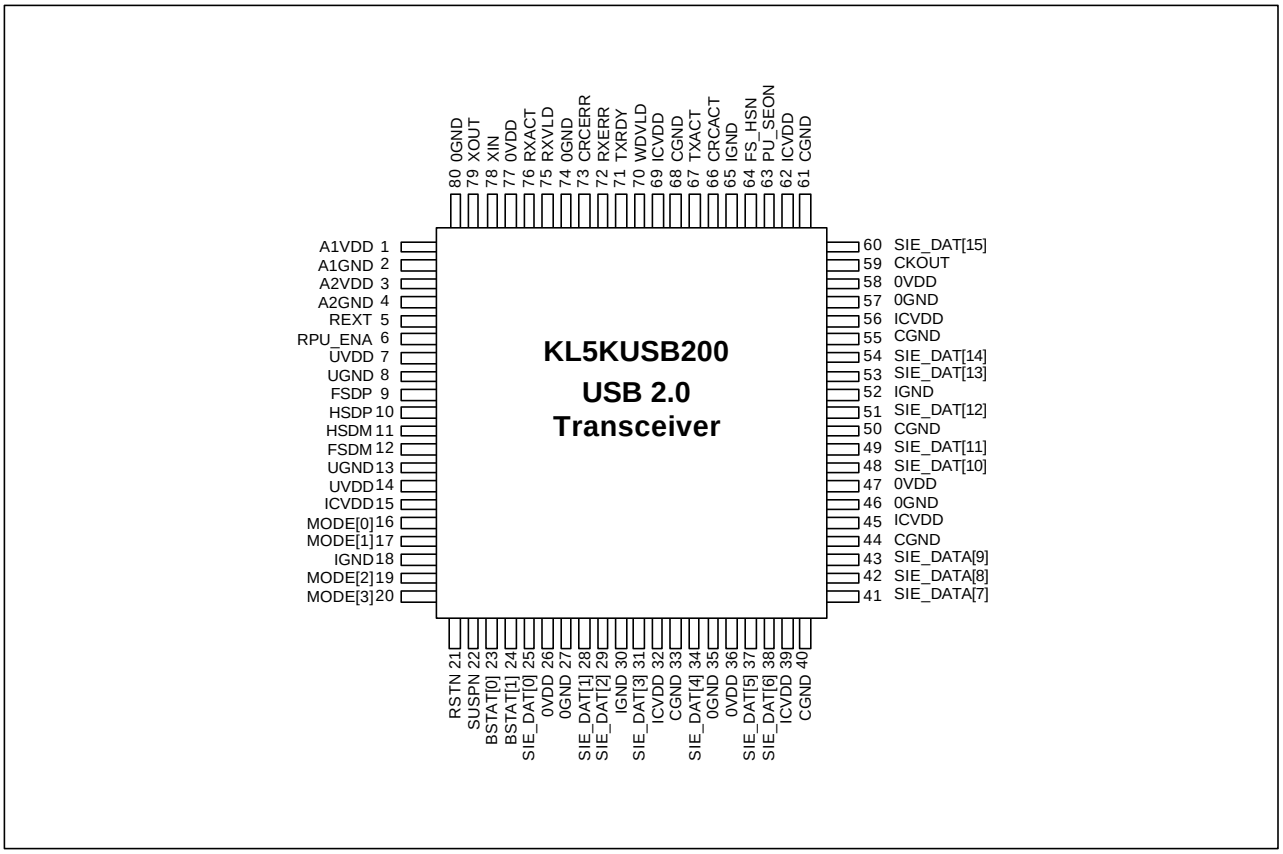
## Features

- USB 2.0 compliant transceiver
- UTMI based design (USB 2.0 Transceiver Macro cell Interface)
- Generates 48MHz to 480MHz input
- Full Speed / High Speed capabilities
- Supports “Chirp” for High Speed recognition
- Support Reset and Suspend
- Operational mode selection
- Status signals for monitoring USB bus
- Optional CRC verification/generation logic
- Mode bit expansion for device test
- 16 bit Bi-directional SIE bus
- TX data packet abort
- ASIC IP supports High speed SIE with ASIC IP
- 80 pin LQFP package (12 $mm^2$)

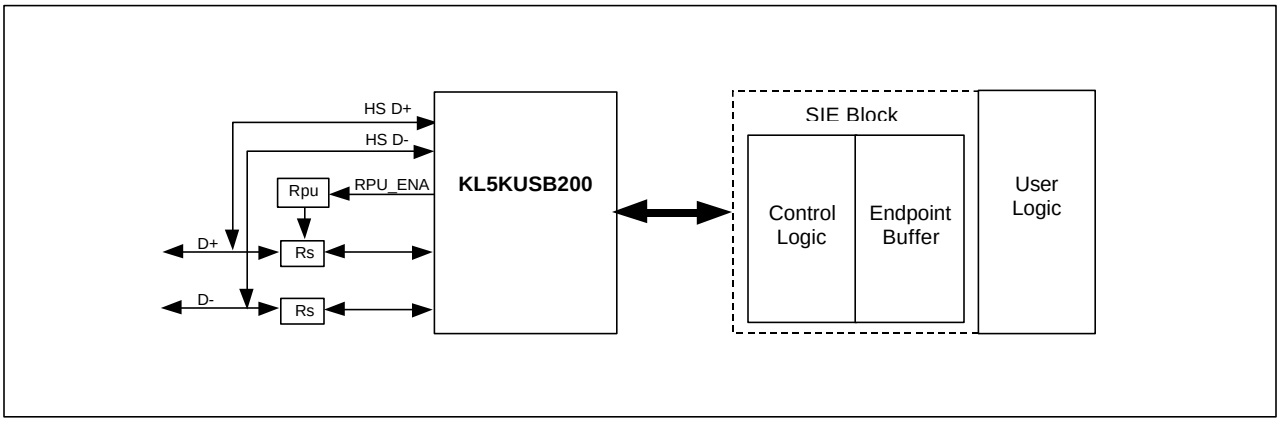
## Block Diagram



## Pin Diagram 80LQFP




## Application Block Diagram

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