

USB Engine Controller

General Description

The USB1 Engine Controller is a single chip that provides the capability to interface to a peripheral device to the Universal Serial Bus (USB). The USB1 Engine Controller consists of a central 16-bit processor. The SIE is fully compatible with the USB specification. The USB1 has been specifically designed to provide a simple and fast method of designing interfaces for peripheral devices to the USB port. The USB1 is ideally suited to interface the USB to simple peripheral devices such as printers and serial devices. Higher functions are easily achieved with other members of the KLSI product family.

Features

- Advanced 16 Bit processor for USB transaction processing and control data processing
- Low cost external crystal circuitry required
- 1.5K x 16 Internal RAM buffer
- USB interface ver 1.0/1.1 compliant
- Built-in transceivers and SIE (Serial Interface Engine)
- 5K user programmable gates

Block Diagram

