Digital IP Cell

USB Bus Interface IP Cell USB1.1



General Description

The PE_USB1.1 features full protocol compatibility according to the standard. The technology independent USB BUS interface allows fast turn around times for the integration of USB functionality.

Features

- USB 1.1 standard compliant
- low/full speed support
- supports all transfer types
- variable packet sizes
- up to 7 end points

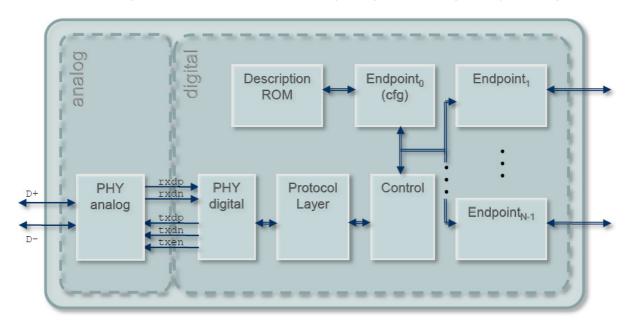
Applications

- variety of bus type transfer (i.e.USB to RS232, USB to FIFO a.o.)
- device interface to USB bus applications
- IP cell for fast turn around ASIC implementation

Ratings, Parameters and Conditions

	maximum data rate	12 Mbit/s
	silicon area (0.35μ CMOS) ¹⁾	< 1.5 mm2
•	silicon area (0.18μ CMOS) ¹⁾	< 0.2 mm2
•	operating frequency	48 MHz
•	maximum frequency	150 MHz

¹⁾ Includes 8kbit configuration RAM. Size can be reduced depending on max. configuration packet length.



Internal building blocks