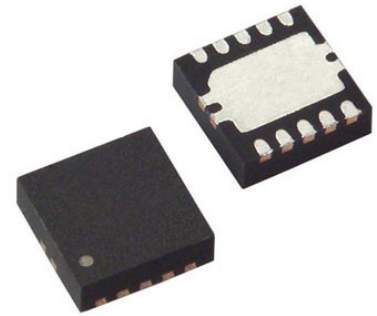


Hi-Speed USB Host, Device or OTG PHY With UTMI+ Interface, Interface - Specialized
USB 2.0 PHY UTMI

Manufacturers	Microchip Technology, Inc
Package/Case	VQFN-56
Product Type	Interface ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for USB3500-ABZJ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The USB3500 is a stand-alone Hi-Speed USB Physical Layer Transceiver (PHY). The USB3500 uses a UTMI+ interface to connect to an SOC or FPGA or custom ASIC. The USB3500 provides a flexible alternative to integrating the analog PHY block for new designs.

The USB3500 provides a fully compliant USB 2.0 interface, and supports High-Speed (HS), Full-Speed (FS), and Low-Speed (LS) USB. The USB3500 supports all levels of the UTMI+ specification.

The USB3500 can also, as an option, fully support the On-the-Go (OTG) protocol defined in the On-The-Go Supplement to the USB 2.0 Specification. On-the-Go allows the Link to dynamically configure the USB3500 as host or peripheral configured dynamically by software. For example, a cell phone may connect to a computer as a peripheral to exchange address information or connect to a printer as a host to print pictures. Finally the OTG enabled device can connect to another OTG enabled device to exchange information. All this is supported using a single low profile Mini-AB USB connector.

Designs not needing OTG can ignore the OTG feature set.

*The USBCheck online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Features

Features

USB-IF "Hi-Speed" certified to the Universal Serial Bus Specification Rev 2.0

Interface compliant with the UTMI+ Specification, Revision 1.0

Includes full support for the optional On-The-Go (OTG) protocol detailed in the On-The-Go Supplement Revision 1.0a specification

Functional as a host, device or OTG PHY

Supports HS, FS, and LS data rates

Supports FS pre-amble for FS hubs with a LS device attached (UTMI+ Level 3)

Supports HS SOF and LS keep alive pulse

Supports Host Negotiation Protocol (HNP) and Session Request protocol (SRP)

Internal comparators support OTG monitoring of VBUS levels

Low Latency Hi-Speed Receiver (43 Hi-Speed clocks Max)

Internal 1.8 volt regulators allow operation from a single 3.3 volt supply

Internal short circuit protection of ID, DP and DM lines to VBUS or ground

Integrated 24MHz Crystal Oscillator supports either crystal operation or 24MHz external clock input

Internal PLL for 480MHz Hi-Speed USB operation

Supports USB 2.0 and legacy USB 1.1 devices

55mA Unconfigured Current (typical) - ideal for bus powered applications

83uA suspend current (typical) - ideal for battery powered applications

Full Commercial operating temperature range from 0°C to +70°C

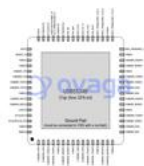
56 Pin QFN RoHS compliant package (8 x 8 x 0.90 mm height)

Related Products



[USB2512B-AEZG-TR](#)

Microchip Technology, Inc
VQFN-36



[USB5534B-5000JZX](#)

Microchip Technology, Inc
QFN-64



[USB3250-ABZI](#)

Microchip Technology, Inc
VQFN-56



[USB2514B-AEZG](#)

Microchip Technology, Inc
VQFN-36



[USB2513B-AEZC](#)

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VQFN-36



[USB2512-AEZG](#)

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[USB2504A-JT](#)

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LQFP-64



[USB2514-HZH](#)

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VQFN-48