

USB Transceiver, USB 2.0 at 480Mbps, 1.8 V, 3.3 V, 56-Pin QFN

Manufacturers	<a href="#">Microchip Technology, Inc</a>
Package/Case	VQFN-56
Product Type	Interface ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for USB3250-ABZJ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The USB3250 provides the Physical Layer (PHY) interface to a USB 2.0 Device Controller. The IC is available in a 56 pin QFN.

The USB3250 is a USB 2.0 physical layer transceiver (PHY) integrated circuit. Microchip's proprietary technology results in low power dissipation, which is ideal for building a bus powered USB 2.0 peripheral. The PHY can be configured for either an 8-bit unidirectional or a 16-bit bidirectional parallel interface, which complies with the USB Transceiver Macrocell Interface (UTMI) specification. It supports 480Mbps transfer rate, while remaining backward compatible with USB 1.1 legacy protocol at 12Mbps.

All required termination for the USB 2.0 Transceiver is internal. Internal 5.25V short circuit protection of DP and DM lines is provided for USB compliance.

While transmitting data, the PHY serializes data and generates SYNC and EOP fields. It also performs needed bit stuffing and NRZI encoding. Likewise, while receiving data, the PHY de-serializes incoming data, stripping SYNC and EOP fields and performs bit un-stuffing and NRZI decoding.

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# Features

## Features

USB-IF "Hi-Speed" Certified to USB 2.0 Electrical Specification

Interface Compliant with the UTMI Specification (60MHz 8-bit Unidirectional Interface and 30MHz 16-bit Bidirectional Interface)

Supports 480Mbps High Speed (HS) and 12Mbps Full Speed (FS) Serial Data Transmission Rates

Integrated 45 Ohm and 1.5k Ohm Termination Resistors Reduce External Component Count

Internal Short Circuit Protection of DP and DM Lines

On-Chip Oscillator Operates with Low Cost 12MHz Crystal

Robust and Low Power Digital Clock and Data Recovery Circuit

SYNC and EOP Generation on Transmit Packets and Detection on Receive Packets

NRZI Encoding and Decoding

Bit Stuffing and Unstuffing with Error Detection

Supports the USB Suspend State, HS Detection, HS Chirp, Reset and Resume

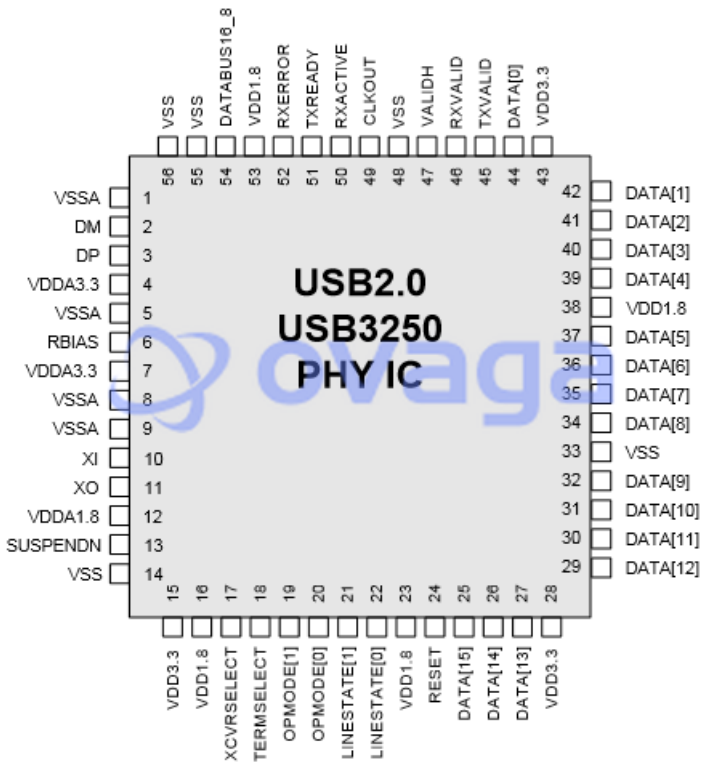
Support for All Test Modes Defined in the USB 2.0 Specification

Draws 72mA (185mW) Maximum Current Consumption in HS Mode - Ideal for Bus Powered Functions

On-Die Decoupling Capacitance and Isolation for Immunity to Digital Switching Noise

Available in a 56-Pin QFN Package

Full Industrial Operating Temperature Range from -40°C to +85°C (Ambient)



## Related Products



### [USB2512B-AEZG-TR](#)

Microchip Technology, Inc  
VQFN-36



### [USB2514B-AEZG](#)

Microchip Technology, Inc  
VQFN-36



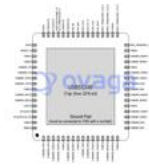
### [USB2512-AEZG](#)

Microchip Technology, Inc  
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### [USB2514-HZH](#)

Microchip Technology, Inc  
VQFN-48



### [USB5534B-5000JZX](#)

Microchip Technology, Inc  
QFN-64



### [USB2513B-AEZC](#)

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VQFN-36



### [USB2504A-JT](#)

Microchip Technology, Inc  
LQFP-64



### [USB5906-I/KD](#)

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VQFN-100