

USB Transceiver 1TR 480Mbps 32-Pin VQFN EP T/R

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: VQFN32

Product Type: Interface ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

TUSB1210BRHBR Image

Images are for reference only

[Inquiry](#)

General Description

The TUSB1210 is a USB2.0 transceiver chip, designed to interface with a USB controller through a ULPI interface. The device supports all USB2.0 data rates (high-speed 480 Mbps, full-speed 12 Mbps, and low-speed 1.5 Mbps), and is compliant to both host and peripheral modes. The device additionally supports a UART mode and legacy ULPI serial modes. TUSB1210 also supports the OTG (Ver1.3) optional addendum to the USB 2.0 Specification, including HNP and SRP.

The DP/DM external component compensation in the transmitter compensates for variations in the series impedance in order to match with the data line impedance and the receiver input impedance, to limit data reflections and thereby improve eye diagrams.

Information in the following applications sections is not part of the TI component specification, and TI does not warrant its accuracy or completeness. TI's customers are responsible for determining suitability of components for their purposes. Customers should validate and test their design implementation to confirm system functionality.

Key Features

USB2.0 PHY Transceiver Chip, Designed to Interface With a USB Controller Through a ULPI Interface, Fully Compliant With: Universal Serial Bus Specification Rev. 2.0

On-The-Go Supplement to the USB 2.0 Specification Rev. 1.3

UTMI+Low Pin Interface (ULPI) Specification Rev. 1.1

ULPI 12-pin SDR Interface

DP/DM Line External Component Compensation (Patent #US7965100 B1)

Interfaces to Host, Peripheral and OTG Device Cores; Optimized for Portable Devices or System ASICs With Built-in USB OTG Device Core

Complete USB OTG Physical Front-End That Supports Host Negotiation Protocol (HNP) and Session Request Protocol (SRP)

VBUS Overvoltage Protection Circuitry Protects VBUS Pin in Range -2 V to 20 V

Internal 5-V Short-Circuit Protection of DP, DM, and ID Pins for Cable Shorting to VBUS Pin

ULPI Interface:

I/O Interface (1.8 V) Optimized for Nonterminated 50-Ω Line Impedance

ULPI CLOCK Pin (60 MHz) Supports Both Input and Output Clock Configurations

Fully Programmable ULPI-Compliant Register Set

Full Industrial Grade Operating Temperature Range From -40°C to 85°C

Available in a 32-Pin Quad Flat No Lead [QFN (RHB)] Package

APPLICATIONS

Mobile Phones

Portable Computers

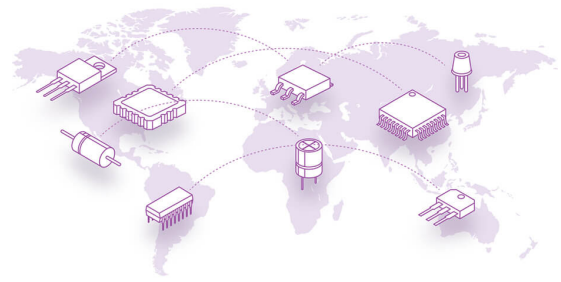
Tablet Devices

Video Game Consoles

Desktop Computers

Portable Music Players

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Recommended For You

TUSB2077APTR

Texas Instruments, Inc

LQFP48

TUSB1002RGER

Texas Instruments, Inc

QFN

TUSB1105RTZR

Texas Instruments, Inc

WQFN-16

TUSB211QRWBRQ1

Texas Instruments, Inc

X2QFN-12

TUSB4041IPAPRQ1

Texas Instruments, Inc

HTQFP-64

TUSB212QRWBRQ1

Texas Instruments, Inc

X2QFN12

TUSB319IDRFRQ1

Texas Instruments, Inc

WSON8

TUSB1211A1ZRQ

Texas Instruments, Inc

BGA

TUSB4020BIPHP

Texas Instruments, Inc

TQFP48

TUSB1105RGIR

Texas Instruments, Inc

VQFN16

TUSB321RWBR

Texas Instruments, Inc

X2QFN12

TUSB8020BPHP

Texas Instruments, Inc

TQFP48

TUSB1002AIRGET

Texas Instruments, Inc

VQFN-24

TUSB3210PM

Texas Instruments, Inc

QFP64

TUSB214IRWBT

Texas Instruments, Inc

X2QFN-12