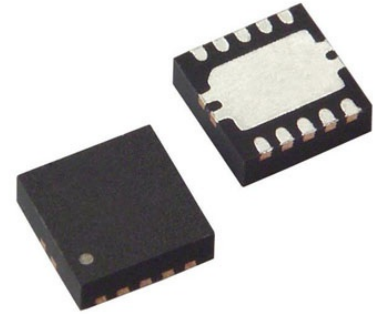


USB Interface, USB Hub Controller, USB 2.0, 2.97 V, 3.63 V, QFN, 56 Pins

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



Images are for reference only

Please submit RFQ for USB2524-ABZJ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

USB2524 is the industry's first USB switching hub that combines a USB Hi-Speed hub and switching functionality in a single device. Equipped with two upstream ports and four downstream ports, USB2524 enables USB device sharing and switching between two USB hosts without "cable swapping". Requiring no more than standard USB hub driver support, the USB2524 appears as a 4-port USB hub to either USB host system and supports standard USB topology.

Device Sharing and Switching

High Throughput

Minimum Software Overhead

Ease of Integration

Applications

USB2524 USB MultiSwitch hub may be used in a number of applications:

Features

Per-port switching provides maximum device sharing functionality

Flexible switching modes ease system design

Programmable auto-switch mode enables unique applications

MultiTRAK architecture provides dedicated TT for every downstream port

Maximum USB full-speed data rate at 12 Mbps per port even under full load

Aggregate 960 Mbps maximum data rate when both Hi-Speed hosts are active

Appears as a standard USB 2.0 hub controller on either host system

Requires no more than standard USB hub-class driver support already native in most operating systems

Standard USB connect and disconnect behavior as device switched from one host to the other

Small 8x8 mm 56QFN package occupies minimum PCB space

Flexible configuration options ease embedded system design

USB-IF certified silicon building block ensures full USB compliance

Desktop PC drive-bays

Mobile PC dock stations and port replicators

All-in-one and photo printers

LCD monitors

KVM switches

USB device sharing peripherals

Set-top boxes

DVD/HDD recorders and players

Any USB dual-role host and device systems

Compliant with USB 2.0 Specification

Hub controller IC with two upstream ports and four downstream ports

MultiTRAK™ technology provides one transaction translator per port

Default configuration with pin selectable options

Four flexible downstream port switching modes

Flexible OEM configuration options

56-pin QFN RoHS Compliant Package

Integrated 1.8V regulator

Integrated termination and pull-up/pull-down resistors

Internal short circuit protection of DP and DM lines

On-chip oscillator uses low cost 24MHz crystal

Supports individual over-current protection and power control

3.3V I/O with 5V tolerance

Customize vendor ID, product ID, device ID, and product string

Port switching modes and host ownership of downstream ports

Select whether the hub is part of a compound device(When any downstream port is permanently hardwired to a USB peripheral device, the hub is part of a compound device)

Programmable LEDs to support standard green/amber port status or port speed (HS/FS/LS)

Select the presence of a permanently hardwired USB peripheral device on a port by port basis

Configure the delay time for filtering the over-current sense inputs

Configure the delay time for turning on downstream port power

Configure the polarity of down stream port power control signals

Indicate the maximum current that the 4-port hub consumes from the USB upstream port

Indicate the maximum current required for the hub controller

Select downstream ports as non-removable ports

Select downstream ports as disabled ports

Enable/disable downstream port LED indicators

Select downstream port power control and over-current detection on a ganged or individual basis

Select downstream port power control polarity

Compliant with USB 2.0 Specification

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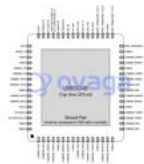
Select downstream port power control polarity

Related Products



[USB2512B-AEZG-TR](#)

Microchip Technology, Inc
VQFN-36



[USB5534B-5000JZX](#)

Microchip Technology, Inc
QFN-64



[USB3250-ABZJ](#)

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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[USB2514-HZH](#)

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VQFN-48