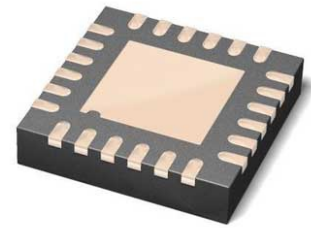



Hub Controller Serial Interface 3.3V Automotive 24-Pin QFN EP T/R



Images are for reference only

[Inquiry](#)

Manufacturer:	Microchip Technology, Inc
Package/Case:	SQFN24
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

General Description

The Microchip USB2422 hub is a low-power, single transaction translator, hub controller IC with two downstream ports for embedded USB solutions. The Microchip hub controller can attach to an upstream port as a Hi-Speed and Full-Speed hub or as a Full-Speed only hub. The Microchip hub supports Low-Speed, Full-Speed, and Hi-Speed (when configured as a Hi-Speed hub) downstream devices on the enabled downstream ports.

All required resistors on the USB ports are integrated into the hub. This includes all series termination resistors on D+ and D- pins and all required pull-down and pull-up resistors on D+ and D- pins. The over-current sense inputs for the downstream facing ports have internal pull-up resistors.

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

Key Features

Highlights

High performance, low-power, small footprint hub controller IC with two downstream ports

Fully compliant with the USB 2.0 Specification

Optimized for minimal bill-of-materials and low-cost designs

Features

Supports the USB Battery Charging Specification, Revision 1.1

Fully integrated USB termination and pull-up/pulldown resistors

Supports a single external 3.3 V supply source; internal regulators provide 1.2 V internal core voltage

On-chip driver for 24 MHz crystal resonator or external 24 MHz clock input

ESD protection up to 6 kV on all USB pins

Supports self-powered operation

Microchip hub contains a built-in default configuration; no external configuration options or components are required

Downstream ports as non-removable ports

Downstream port power control and over-current detection on an individual or ganged basis

Supports compound devices on a port-by-port basis

24-pin SQFN (4x4 mm), RoHS-compliant package

Commercial temperature range support: 0°C to +70°C

Industrial temperature range support: -40°C to +85°C

Target Applications

LCD Monitors and TVs

Multi-function USB Peripherals

PC motherboards

Set-top boxes, DVD players, DVR/PVR

Printers and scanners

PC media drive bay

Portable hub boxes

Mobile PC docking

Embedded systems

Gaming consoles

Cable/DSL modems

HDD enclosures

KVM switches

Server front panels

Point-of-Sale (POS) systems

IP telephony

Automobile/home audio systems

Thin client terminals

Recommended For You

USB320C-EZK-TR

Microchip Technology, Inc

QFN32

USB3343-CP-TR

Microchip Technology, Inc

QFN24

USB3318-CP-TR

Microchip Technology, Inc

QFN24

USB2513B-I/M2

Microchip Technology, Inc

QFN36

USB3315

Microchip Technology, Inc

QFN

USB2504-JT

Microchip Technology, Inc

QFP64

USB3318

Microchip Technology, Inc
QFN

USB3318C-CP-TR

Microchip Technology, Inc
QFN24

USB3340-EZK-TR

Microchip Technology, Inc
QFN32

USB3503AI-1-GL-TR

Microchip Technology, Inc
WLCSP25

USB2660I-JZX-03

Microchip Technology, Inc
QFN

USB2507-ADT

Microchip Technology, Inc
QFP

USB2641-HZH-02

Microchip Technology, Inc
QFN

USB3317C-CP-TR

Microchip Technology, Inc
QFN24

USB3370B-EZK-TR

Microchip Technology, Inc
32-VFQFN