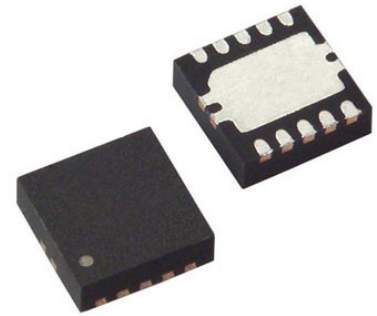Low Speed/Full Speed/High Speed/Super Speed Hub Controller USB 2.0/USB 3.1 3.3V
Tray 56-Pin VQFN EP

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

Images are for reference only

Please submit RFQ for USB5744/2G or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

Microchip's USB5744 SmartHub™ IC is a 4 port, SuperSpeed (SS)/Hi-Speed (HS), low power, low pin count configurable and fully compliant with the USB 3.1 Gen 1 specification. The USB5744 also supports Full Speed (FS) and Low Speed (LS) USB signaling, offering complete coverage of all defined USB operating speeds. The new SuperSpeed hubs operate in parallel with the USB 2.0 controller, so 5 Gbps SuperSpeed data transfers are not affected by slower USB 2.0 traffic. The USB5744 is in a 0.4mm pitch, 56 pin QFN. It's the smallest 4 port USB 3.1 Gen 1 hub in the industry. Functionality was reduced to optimize pin count and provide a cost effective solution. SmartHub ICs are defined as a USB hub that integrates system levels functions typically associated with a separate MCU or processor. Microchip's USB5744 Smart Hub support custom configurations of external ports and GPIO pins. MPLAB Connect Configurator, Microchip's proprietary software utility, can be used to program On-chip One Time Programmable (OTP) ROM which stores required register settings to ensure the desired start up configuration at power on. All port control signal pins and GPIOs are under firmware control, allowing for maximum operational flexibility. However, for even more simplicity, the USB5744 can be configured through a series of external low-cost resistor bootstraps. No OTP programming required.

Download a free copy of MPLAB Connect Configurator™ NOW

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

Features

Highlights

Four downstream USB3.1 Gen1/2.0 ports

56pin (7 x 7 mm) 0.4mm ptich, SQFN lead-free, RoHS compliant package

Simultaneous data transfer for 2500 mA of High Speed charging

Enables charging from a mobile platform that is powered-off

Integrated Hub Feature Controller (HFC) enabling port and GPIO configuration through OTP

Port Config Straps: Predefined configuration of port settings – Battery Charging, Non-Removable, Disable

MPLAB Connect Configurator™: Tool enabling enhanced OEM configuration options through either One-Time Programmable (OTP) (8Kbit) or external SPI ROM

Manufacturing line programming tool and field update capabilities

USB Link Power Management (LPM) support

IETF RFC 4122 compliant 128-bit UUID

Compatible with Microsoft® Windows® 8/8.1 and other major OS's

Industrial grade temperature support (-40°C to +85°C)

Target Applications

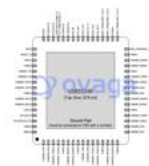Expansion Hubs

Docking Stations

LCD Monitors

HDTVs

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

Microchip Technology, Inc

VQFN-36

USB2512-AEZG

Microchip Technology, Inc

VQFN-36

USB2504A-JT

Microchip Technology, Inc

LQFP-64

USB2514-HZH

Microchip Technology, Inc

VQFN-48