

# USB3803C-1-GL-TR

Data Sheet

#### USB Interface IC ULTRA SMALL USB 2.0 PORTABLE 3 PORT HUB

Manufacturers <u>Microchip Technology</u>, Inc

Package/Case WLCSP-25

Product Type Interface ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for USB3803C-1-GL-TR or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

As mobile devices continue to add more features and the complexity of connectivity increases, it has become necessary to have a flexible hub which can be used in multiple ways as USB port expansion in portable applications like tablets, or as a purely embedded device to seamlessly bridge complex mobile architectures. Microchip's extremely small size USB3803 USB 2.0 hub controller offers three downstream ports with highly integrated portable features specifically designed for mobile embedded applications where more than one USB port is required. The USB3803 can easily attach to an upstream port as a Full-Speed or Full/Hi-Speed USB hub, while supporting Low, Full and Hi-Speed (if operating as a Hi-Speed hub) downstream devices on all enabled downstream ports. Additionally, extremely low current standby and bypass mode features make the device well-suited for mobile, battery-powered embedded systems where power consumption, small package size, minimal BOM and Battery Charger (BC) detection capabilities are critical design requirements.

The USB3803 integrates BC detection circuitry and supports both USB-IF 1.1 and legacy charger specifications, while flexible power regulators facilitate simple design into battery-powered devices. Microchip's complimentary and confidential USBCheck<sup>TM</sup> online design review service is available for customers who select the USB3803 for their application design-in.\*

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

### **Features**

Highlights

Integrated USB 2.0-compatible 3-port hub

Advanced power saving features including 1µA standby current

Bypass Switch for low power, single port operation

USB-IF BC 1.1 detection

Supports Single or Multi-TT configurations for Full and Low-Speed connections

Enhanced configuration options available through serial I2C slave port

Internal default configuration option when serial I2C host is not available

Incorporates proprietary Microchip technologies: MultiTRAK™, PortMap, PortSwap, PHYBoost, VariSense™ and flexPWR®

External 12, 19.2, 26 or 38.4MHz clock inputs

Internal 3.3V and 1.2V voltage regulators for single supply operation

USB Port ESD Protection (DP/DM) up to  $\pm 15$ kV (IEC 61000-4-2)

Commercial (0° to 70°C) and industrial (-40° to 85°C) temperature range options

25-ball WLCSP, RoHS-compliant package

Target Applications

Mobile Phones

Tablet Computers

Ultra-mobile PCs

e-Readers

Digital Still Cameras

Digital Video Camcorders

Gaming Consoles

Mobile Accessory Docks

Portable Media Players

GPS Personal Navigation Devices

Media Players/Viewers

Wireless Modem Dongles/Cards

### **Related Products**



USB2512B-AEZG-TR

Microchip Technology, Inc

VQFN-36



USB5534B-5000JZX

Microchip Technology, Inc

OFN-64



USB3250-ABZJ

Microchip Technology, Inc

VQFN-56



USB2514B-AEZG Microchip Technology, Inc VQFN-36



USB2513B-AEZC

Microchip Technology, Inc
VQFN-36



USB2504A-JT

Microchip Technology, Inc
LQFP-64



USB2512-AEZG Microchip Technology, Inc VQFN-36



USB2514-HZH
Microchip Technology, Inc
VQFN-48