Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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PERICOM®

PI5USB2546
USB Charging Port Controller and Load Detection Power Switch

Description

The PI5USB2546 is a USB charging port controller and power switch with an integrated USB 2.0 high-speed data line (D+/D–) switch. PI5USB2546 provides the electrical signatures on D+/D– to support charging schemes listed under device feature section. This part is compatible with both popular BC1.2 compliant and non-BC1.2 compliant devices.
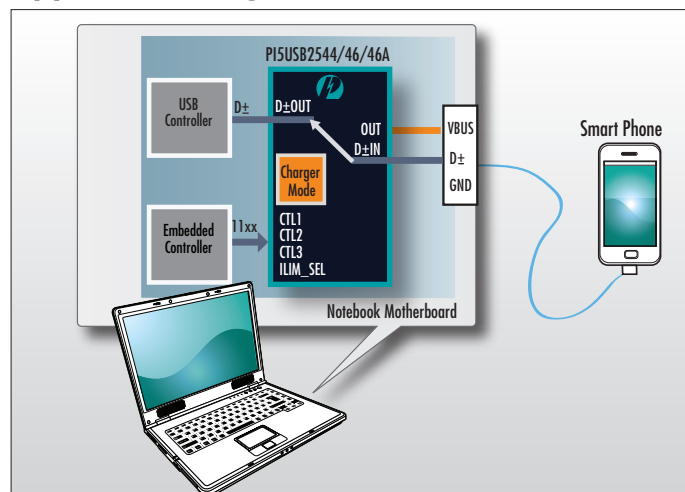
System wake up (from S3) with a mouse/keyboard (both low speed and full speed) is fully supported in the PI5USB2546. Additionally, PI5USB2546 supports two distinct power management features, namely, power wake and port power management (PPM) through /STATUS pin. Power wake allows for power supply control in S4/S5 charging and PPM manages port power in a multi-port application.

The PI5USB2546 73-mΩ power-distribution switch is intended for applications where heavy capacitive loads and short-circuits are likely to be encountered. Two programmable current thresholds provide flexibility for setting current limits and load detect thresholds

Applications

➔ USB Ports (Host and Hubs)
➔ Notebook and Desktop PCs
➔ Universal Wall Charging Adapters

Application Diagram

Features

➔ Supports CDP/DCP Modes per USB Battery Charging Specification 1.2

➔ Supports Shorted Mode per Chinese Telecommunication Industry Standard YD/T1591-2009

➔ Supports non-BC1.2 Charging Modes by Automatic Selection
  • Divider-1A mode
  • Divider-2A mode
  • DCP-1.2V mode

➔ Supports Sleep-Mode Charging and Mouse/Keyboard Wake up

➔ Automatic SDP/CDP Switching for Devices that do not request for the CDP Ports

➔ Load Detection for Power Supply Control in S4/S5 Charging and Port Power Management in all Charge Modes

➔ Compatible with USB 2.0/3.0 Power Switch requirements

➔ Integrated 73-mΩ (Typ.) High-Side MOSFET

➔ Adjustable Current-Limit up to 3A(Typ.)

➔ Operating Range:4.5V to 5.5V

➔ Max Device Current
  • 2μA at Device Disabled
  • 270μA at Device Enabled

➔ Device Package: TQFN 3.0x3.0-16L

➔ UL Listed and CB File No. E341484