

28V 6A Bidirectional Load Switch with Dual Port Independent Current Limit Setting

Description

The MT7232 is an advanced 28V 6A rated bidirectional load switch which provides overload, short circuit, input voltage surge, excessive inrush current and over-temperature protections to power the system. The built-in 24mΩ ultra low R_{DS(ON)} power switch helps reducing power loss during normal operation. The device features two input/output ports, VBUS1 and VBUS2, which are rated at 28V Absolute Maximum. Each port has independent enable, external current limit setting and discharge control pins. The integrated two N-channel power switch M1 and M2 in-series configuration blocks any leakage between VBUS1 and VBUS2 two ports when the device is disabled. The MT7232 is available in low profile 16 leads QFN 2.5mm x 3.2mm package.

Features

- Wide Supply Voltage Range from 3V to 24V
- 28V Tolerance on Port VBUS1 and VBUS2
- Integrate a 24mΩ Ultra Low On Protection Switch
- External Adjustable Soft-Start Time
- External Adjustable Input Over-Voltage Threshold
- Short-circuit Protection
- Fault Indicator
- Thermal Shutdown Protection and Auto Recovery
- Each Port VBUS1/VBUS2 Independent Control
 - ◆ External Adjustable Current Limit
 - ◆ Enable Interface Pin
 - ◆ Port Discharge Interface Pin
- IEC/UL Safety approvals:
 - Conditions: 20V_{in} and 3.2A continues load current
 - Protective Current Limit Rating: 5A
 - IEC/UL 62368-1, 3rd Edition, File no. E521699
- QFN 2.5mmx3.2mm_16L Packages
- Pb-Free ROHS compliant

Application

- Notebook, Desktop, Servers and Tablets
- Dongle and Docking Stations
- Power Accessories
- Thunderbolt/USB Type-C PD power switch

Typical Application (For IEC/UL Safety Approval)

