

USB D+/D- Hi-Speed or SBU1/2 Switch with Fault Protection

Features

- Operating Range: 2.7V to 5.5V
- For USB D+/D- Hi-Speed or SBU1/2 signals
- USB Hi-Speed Dual SPDT Switch/MUX
 - ▶ Reverse blocking back-to-back MOSFETs
 - ▶ >1GHz -3db Bandwidth
 - ▶ Low 6Ω Switch On-Resistance
 - ▶ Typical 4.0pF Switch On-Capacitance
- Overvoltage Protection
 - ▶ Up to +20VDC
 - ▶ Surge Protection Up to +25V
- FLAG open drain output overvoltage indicator
- EN to disable switch output
- WLCSP34-12 package (1.17mm x 1.57mm)
- -40°C to +85°C Temperature Range

Applications

- Smartphones
- USB Type-C
- Mobile Internet Devices
- Tablet Computers
- Peripherals

Brief Description

The KTU1001 is a Hi-Speed (up to 480Mbps) USB dual SPDT (single-pole/double-throw) switch with overvoltage protection. This device operates over a 2.7V to 5.5V input supply range with over voltage fault protection up to 20V. USB Type-C features high voltage charging where the KTU1001 protects USB data lines from short circuit and surge events that can permanently damage the mobile system. The device features independent control bits for each switch pair and an on/off enable (EN) for shutdown mode. Additional features include low switch on resistance and capacitance along with a fault flag (FLAG) to alert the system processor to overvoltage fault events.

Similar in features and performance to KTU1000, the KTU1001 adds reverse blocking MOSFET switch functionality.

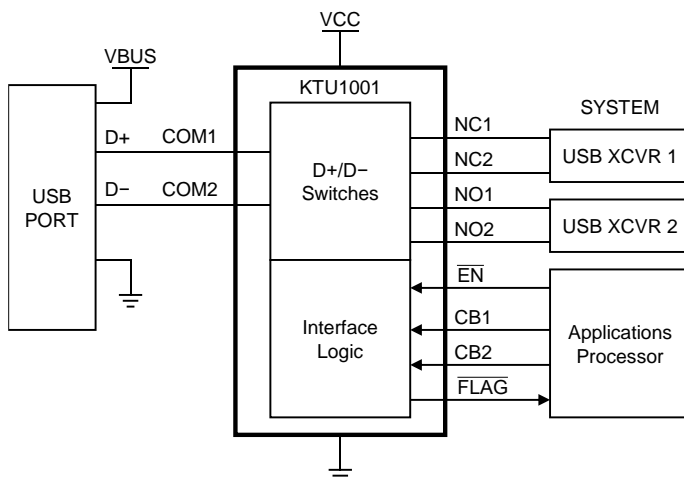
The KTU1001 has low power consumption and is available in an ultra-small 12-Bump 1.17mm x 1.57mm WLCSP package making it an ideal solution for USB interface switching and protection in mobile applications.

Ordering Information

Part Number	Marking ¹	Operating Temperature	Package
KTU1001EVA-TR	LOXXYYZZZZ	-40°C to +85°C	WLCSP-12

1. "XXYYZZZZ" is the date code, assembly code and serial number.

Typical Application





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