Datasheet Brief KTU1001A

For full datasheet, click HERE.

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
- Switch Resistance to ground: 5MΩ typ
- 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

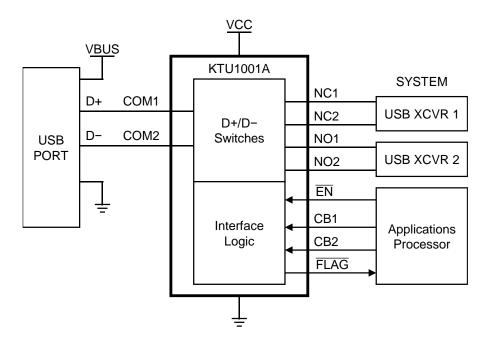
Brief Description

The KTU1001A 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 KTU1001A 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 $(\overline{\text{EN}})$ for shutdown mode. Additional features include low switch on resistance and capacitance along with a fault flag $(\overline{\text{FLAG}})$ to alert the system processor to overvoltage fault events.

Similar in features and performance to KTU1000, the KTU1001A adds reverse blocking MOSFET switch functionality.

The KTU1001A 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.

Typical Application





Ordering Information

Part Number	Marking ¹	Operating Temperature	Package
KTU1001AEVA-TR	LQXXYYZZZZ	-40°C to +85°C	WLCSP-12

^{1. &}quot;XXYYZZZZ" is the date code, assembly code and serial number.

Kinetic Technologies cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a Kinetic Technologies product. No intellectual property or circuit patent licenses are implied. Kinetic Technologies reserves the right to change the circuitry and specifications without notice at any time.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for USB Interface IC category:

Click to view products by Kinetic Technologies manufacturer:

Other Similar products are found below:

CY7C69356-48LTXC USB3319C-GJ-TR USB3370B-EZK-TR CYPD2120-24LQXI CYPD2122-20FNXIT CYPD2122-24LQXIT LIF-UC120-SWG36ITR50 UPD360-A/6HX CP2102NP1174GM CG8454AM DPO2039DABQ-13 PTN3816EWY CY7C68034-56LTXC TUSB213IRGYT TUSB213RGYT USB3503T-I/ML CY7C63310-SXC USB3316C-CP-TR USB3250-ABZJ FT220XS-R MAX3107ETG+NCP360SNT1G MAX14632EZK+T USB3300-EZK STUSB03EQR CYPD2120-24LQXIT USB5826-I/KD USB5826/KD USB5906/KD USB5916/KD USB5926/KD VNC2-32L1C-TRAY TUSB215QRGYTQ1 TUSB522PRGER NB7NPQ701MMTTBG TUSB213RGYR USB5926-I/KD USB5906-I/KD USB4640I-HZH-03 CY7C63813-SXC CY7C63823-SXC CY7C64215-28PVXC CY7C68013A-128AXC CY7C68013A-56LTXI CY7C68013A-56PVXC CY7C68013A-56PVXI CYPD1120-40LQXI CYUSB3014-BZXC AP43771VDKZ-13 AP43771VFBZ-13