Datasheet Brief
KTU1120

For full datasheet, click **HERE**.

USB Type-C Port Protector for CC and SBU Pins

Features

- Over-Voltage Protection
  - 24VDC Tolerance on CC1/2, SBU1/2
  - CC1/2 OVP = 5.8V
  - SBU1/2 OVP = 3.83V
  - Ultra-Fast 15ns Response Time
- IEC61000-4-5 Surge Protection
  - ±40V Surge Tolerance on CC1/2
  - ±30V Surge Tolerance on SBU1/2
- IEC61000-4-2 ESD Protection
  - ±15kV air gap on CC1/2, SBU1/2
  - ±8kV contact on CC1/2, SBU1/2
  - ±2kV HBM on all pins (JEDEC JS-001-2017)
- CC Switches:
  - 1.25A, 270mΩ, 40pF, 140MHz
  - Automatic 5.1kΩ dead battery pull-down
- SBU Switches:
  - 3Ω, 11pF, 800MHz
- 2.5V to 5.5V Operating Supply Voltage Range
- -40°C to 85°C Operating Temperature Range
- 16-bump WLCSP 1.7mmx1.7mm (0.4mm pitch)
- RoHS and Green Compliant

Brief Description

The KTU1120 provides four conducting paths with over-voltage protection (OVP) for USB Type-C, CC, and SBU signals. Once an over-voltage event is detected, it will shut down all paths to protect circuits in system side, like PD controller from damage.

All the SBU and CC switches have very low on-capacitance for broad bandwidth to allow high-speed signal passing through without loss. The CC1/2 switches have low on-resistance for passing V_{CONN} power up to 1.25A.

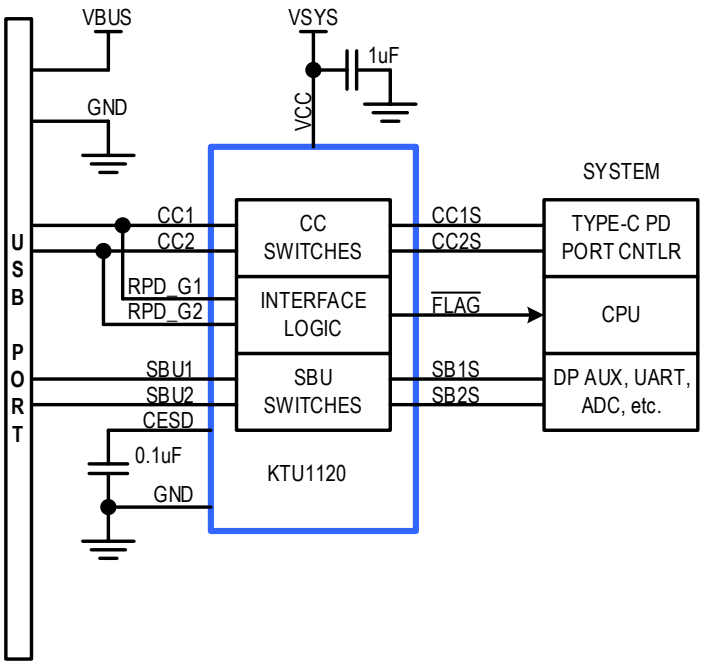
During dead battery conditions, internal 5.1kΩ resistors automatically pull down on CC1/2 to ensure that the up-stream source provides 5V on VBUS.

The KTU1120 is packaged in RoHS and Green compliant 16-bump WLCSP 1.7mmx1.7mm package.

Applications

- Notebook PCs, Netbooks, Tablets, Monitors, TVs
- Gaming Devices, Set-Top Boxes, Networking

Typical Application



Ordering Information

Part Number	Marking[1]	Operating Temperature	Package
KTU1120EGAB-TA	RMXXYYZZZZ	-40°C to +85°C	WLCSP44-16

1. XX = Date Code, YY = Assembly Code, ZZZZ = Serial Number