



Product Overview

NCP362: USB Positive Overvoltage and Overcurrent Protection with TVS

For complete documentation, see the [data sheet](#)

Product Description

The NCP362 disconnects systems at its output when wrong VBUS operating conditions are detected at its input. The system is positive overvoltage protected up to +20 V, overcurrent protected up to 750 mA, and receives protection from ESD diodes for the high speed USB data and VBUS lines. Thanks to an integrated PMOS FET, no external device is necessary, reducing the system cost and the PCB area of the application board. The NCP362 is able to instantaneously disconnect the output from the input if the input voltage exceeds the overvoltage threshold OVLO. Thanks to an overcurrent protection, the integrated PMOS turns off when the charge current exceeds the current limit (see options in ordering information). The NCP362 provides a negative going flag (FLAG) output, which alerts the system that voltage, current or over temperature faults have occurred. In addition, the device integrates ESD diodes for VBUS and data lines which are IEC61000-4-2, level 4 compliant. The ESD diodes for D+ and D- are compatible with high speed USB thanks to an ultra low capacitance of 0.5 pF.

Features

- Very Fast Protection, Up to 20 V, with 25 A Current Consumption
- On-chip PMOS Transistor
- Overvoltage Lockout (OVLO)
- Undervoltage Lockout (UVLO)
- Overcurrent Protection.
- Alert FLAG Output
- Transient Voltage Suppressor for VBUS Pin
- Ultra Low Capacitance ESD for Data Lines
- 10 Lead UDFN 2x2.5 mm Package
- EN Enable Pin

Applications

- Personal Digital Assistant
- USB applications
- Mobile Phones
- Computing

For more information please contact your local sales support at www.onsemi.com

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