

Product Overview

NCP348: Positive Overvoltage Protection Circuit with Internal Low R_{on} NMOS FET and Status Flag

For complete documentation, see the data sheet.

The NCP348 is able to disconnect the systems from its output pin in case wrong input operating conditions are detected. The system is positive overvoltage protected up to +28 V. Due to this device using internal NMOS, no external device is necessary, reducing the system cost and the PCB area of the application board. The NCP348 is able to instantaneously disconnect the output from the input, due to integrated Low Ron Power NMOS (80 m Ω , if the input voltage exceeds the overvoltage threshold (6.4 V) or undervoltage threshold, of 3.25 V (UVLO). At powerup (EN(BAR) pin = low level), the Vout turns on 50 ms after the Vin exceeds the undervoltage threshold. The NCP348 provides a negative going flag (FLAG(BAR)) output, which alerts the system that a fault has occurred. In addition, the device has ESD-protected input (15 kV Air) when bypassed with a 1.0 μ F or larger capacitor.

Features

- Overvoltage Protection up to 28 V
- On-Chip Low RDS(on) NMOS Transistor: 80 m Ω
- Internal Charge Pump
- Overvoltage Lockout (OVLO)
- Undervoltage Lockout (UVLO)
- Internal 50 ms Startup Delay
- Alert FLAG(BAR) Output
- Shutdown EN(BAR) Input
- Compliance to IEC61000-4-2 (Level 4), 8.0 kV (Contact), and 15 kV (Air)
- ESD Ratings: Machine Model = B, Human Body Model = 3

For more features, see the data sheet

Applications

- Cell Phones, Camera Phones, Digital Still Cameras, Personal Digital Applications, and MP3 Players

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

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