

Dual Power Distribution Switch

Features

- 87mΩ High-Side MOSFET
- Available with 4 Versions of Current Limits with Foldback
- Operating Range: 2.7V to 5.5V
- 400μS Typical Rise Time
- Under voltage Lockout
- 65μA Quiescent Supply Current
- 1μA Maximum Shutdown Supply Current
- Logic Level Enable Pin, Available with Active-High or Active-Low Version
- No Reverse Current to VIN when Power Off
- VOUT OFF Discharge
- Deglitched Open-Drain Over-Current Flag Output (OC)
- SOP-8 Package and TDFN3X3-8 Package
- UL Approved #E232223
- Nemko IEC 60950-1 CB/CCA_scheme certification Report #67291
- CSA Approved #230321

General Description

The G5258 is an integrated dual channel 87mΩ power switch for self-powered and bus-powered Universal Serial Bus (USB) applications.

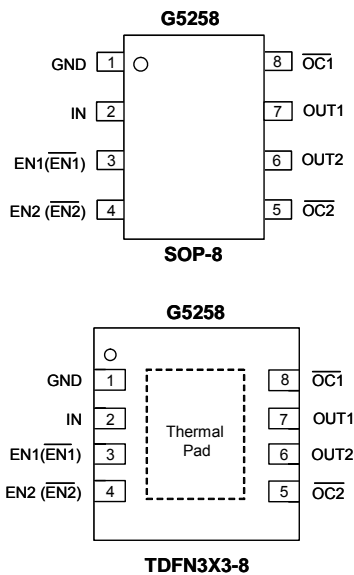
Several Protection features include current limiting with foldback, and thermal shutdown to prevent catastrophic switch failure caused by increasing power dissipation when continuous heavy loads or short circuit occurs. And a built-in charge pump is used to drive the N-channel MOSFET that is free of parasitic body diode to eliminate any reversed current flow across the switch when it is powered off.

OC is open-drain output report over-current or over-temperature event and has typical 9ms deglitch timeout period.

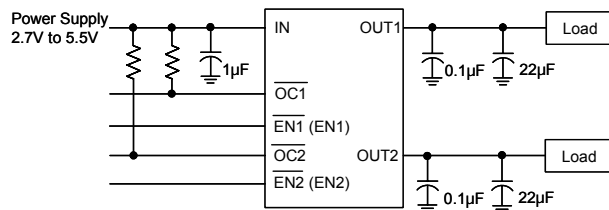
Applications

- High-Side Power Protection Switch
- USB Power Management
- USB Host and Self-Powered Bubs
- USB Bus-Powered Hubs
- Hot Plug-In Power Supplies
- Battery-Charger Circuits

Pin Configuration



Typical Application Circuit



Note: Recommend connecting the Thermal Pad to the GND for excellent power dissipation.



UL Recognized Component