

# Dual Power Distribution Switch

## Features

- 100mΩ 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 when Power Off
- Deglitched Open-Drain Over-Current Flag Output (OC)
- SOP-8 Package

## 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

## General Description

The G556 is an integrated dual channel 100mΩ power switch for self-powered and bus-powered Universal Serial Bus (USB) applications.

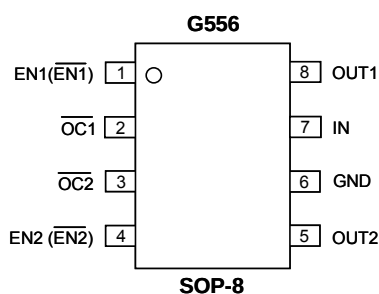
Several Protection features include current limiting with foldback, and thermal shutdown to prevent catastrophic switch failure caused by increasing power dissipation when continuous heavy loads or short circuit occurs. And a built-in charge pump is used to drive the N-channel MOSFET that is free of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

## Ordering Information

| ORDER NUMBER | MARKING | ENABLE      | Current Limit | TEMP. RANGE    | PACKAGE (Green) |
|--------------|---------|-------------|---------------|----------------|-----------------|
| G556A1P1U    | G556A1  | Active High | 2A            | -40°C to +85°C | SOP-8           |
| G556A2P1U    | G556A2  | Active Low  | 2A            | -40°C to +85°C | SOP-8           |
| G556B1P1U    | G556B1  | Active High | 1.5A          | -40°C to +85°C | SOP-8           |
| G556B2P1U    | G556B2  | Active Low  | 1.5A          | -40°C to +85°C | SOP-8           |
| G556C1P1U    | G556C1  | Active High | 1A            | -40°C to +85°C | SOP-8           |
| G556C2P1U    | G556C2  | Active Low  | 1A            | -40°C to +85°C | SOP-8           |
| G556D1P1U    | G556D1  | Active High | 0.75A         | -40°C to +85°C | SOP-8           |
| G556D2P1U    | G556D2  | Active Low  | 0.75A         | -40°C to +85°C | SOP-8           |

## Pin Configuration



## Typical Application Circuit

