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 $100m\Omega$ 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

Typical Application Circuit

EN1 (EN1)

EN2 (EN2)

OC2

Pin Configuration

OC2 3

EN2 (EN2) 4

G556 EN1(ĒN1) 1 ○ 8 OUT1 Power Supply 7 IN OC1 2 7 IN

6 GND

5 OUT2

SOP-8

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