

Dual Ultra-Low On-Resistance Load Switch with Controlled Turn-On

Features

- Integrated Dual Channel Load Switch
- Input Voltage Range: 0.8V to 5.5V
- Dual Ultra-low ON-Resistance (16mΩ)
- 6A Continuous Switch Current per channel
- Low Threshold Control Inputs
- Adjustable Slew-rate Control
- Quick Output Discharge Transistor
- 14 Pin TDFN Package with Thermal Pad

Applications

- Notebooks / Netbooks
- Tablet PCs
- **■** Consumer Electronics
- Set-Top-Boxes
- Industrial Systems
- Telecom Systems

General Description

The G5016 is dual N-channel MOSFET power switch designed for high-side load-switching applications, and the device has a typical $R_{\text{DS(ON)}}$ of $16\mathrm{m}\,\Omega$ and the output current is limited to 6A. Each switch is independently controlled by an on/off input (EN1, EN2), which is capable of interfacing directly with low-voltage GPIO control signals.

In the G5016, a 250Ω on-chip load resistor is added for quick output discharge (QOD) when the switch is turned off. The rise time of the device is internally controlled in order to avoid in-rush current and can be adjusted using a ceramic capacitor on the CTx pins.

The G5016 is available in 14 pin TDFN package.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G5016KD1U	5016	-40°C to 85°C	TDFN2X3-14

Note: KD: TDFN2X3-14 1: Bonding Code U: Tape & Reel

Pin Configuration

G5016 OUT1 IN1 14 OUT1 IN₁ 2 13 EN1 3 12 CT1 **VBIAS** 4 11 **GND** CT2 EN2 5 10 IN2 9 OUT2 6 OUT2 IN2 8 TDFN2x3-14

Typical Application Circuit

