30mΩ R_{ON} 12V Octal Electronic Circuit Breaker with SPI Interface

FEATURES

- **Eight Channels – 8× SPST**
- **Circuit Breaker Threshold Up to 1.5A Programmable in 50mA Increments**
- **20% Accurate Threshold**
- **30mΩ On Resistance**
- Operating Range: 0V to 13.2V
- SPI Interface with Daisy-Chain Mode
- Common Open-Drain FAULT Status Output
- 24-Lead 3mm × 5mm QFN

APPLICATIONS

- ATE Wafer Probe Electronics
- Scope Probe Protection
- Industrial Control
- Relay Replacement

DESCRIPTION

The LTC®4246 contains eight switches, each with an independent circuit breaker function. It is particularly well suited for extremely space constrained designs. Each switch can operate completely autonomously or be arbitrarily grouped with other switches that will respond together to the fault of any single device within its group. Optionally, channel grouping may be extended to multiple LTC4246 devices by selecting the FIN# (fault input) pin as part of a channel group. A required bias supply between 2.5V to 5V allows the switches to independently operate from 13.2V down to 0V. The LTC4246 provides an SPI serial interface to enable, disable and configure the timing and current thresholds of each channel as well as provide status to each channel's fault state.

A common open-drain FAULT status output indicates if any switch has opened due to a circuit breaker event.

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TYPICAL APPLICATION

Startup with Fault on Channel 3

Rev. SpA

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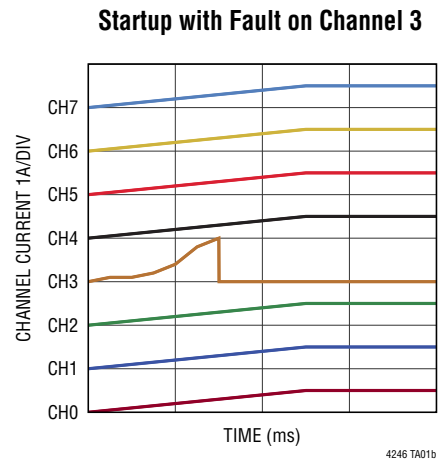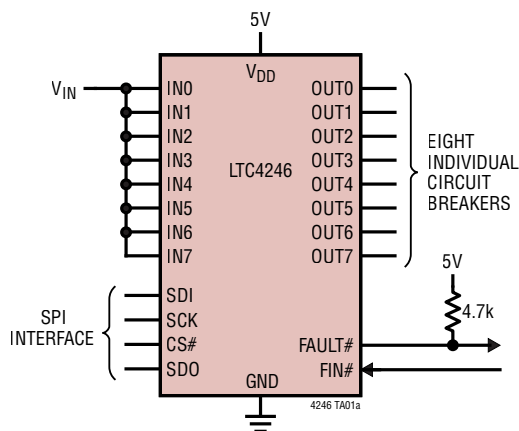
For more information on the LTC4246, visit the LTC4246 product page.

Rev. SpA

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