

LT8602EUJ#PBF

Data Sheet

Conv DC-DC 3V to 42V Suchronous Step Down Quad-Out IV 1.5A/1.8A/1.8A/2.5A Automotive 40-Pin QFN EF Tube Manufacturers Analog Devices, Inc Package/Case QFN-40 Product Type Power Management ICs RoHS Lifecycle Integes are for reference only Pease submit RFQ for LTS602EUJ#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

General Description

The LT8602 is a quad channel, current mode, monolithic buck switching regulator with a programmable power-on reset. All regulators are synchronized to a single oscillator with an adjustable frequency from 250kHz to 2.2MHz. The LT8602 can be configured for micropower Burst Mode operation or pulse-skipping operation at light load. Micropower operation results in quiescent current of 30μ A with all four regulators operating in the application below.

The high voltage channels are synchronous buck regulators that operate from an input of 3V to 42V. The output currents are up to 1.5A (OUT1) and 2.5A (OUT2). The low voltage channels operate from an input of 2.6V to 5.5V. Internal synchronous power switches provide high efficiency with output currents up to 1.8A. The LT8602 uses a 2-phase clock with channels 1 and 3 operating 180° from channels 2 and 4 to reduce input ripple current on both HV and LV inputs. All channels have cycle-by-cycle current limit, providing protection against shorted outputs. Thermal shutdown provides additional protection.

The LT8602 is available in a 40-lead 6mm × 6mm QFN package.

Features

Flexible Power Supply System Providing Four Outputs with a Wide Input Range

Two High Voltage Synchronous Buck Regulators:

- 3V to 42V Input Voltage Range
- Output Currents Up to 2.5A and 1.5A
- High Efficiency Up to 93%
- Two Low Voltage Synchronous Buck Regulators:
- 2.6V to 5.5V Input Voltage Range
- Output Currents Up to 1.8A and 94% Efficiency
- Resistor Programmable and Synchronizable 250kHz to 2.2MHz Switching Frequency
- Low Ripple Burst Mode® Operation:
- 30µA IQ at 12VIN
- Output Ripple < 15mV
- Programmable Power-On Reset
- Power Good Indicators
- 2-Phase Clock Reduces Input Current Ripple
- Available in Thermally Enhanced 40-Lead QFN (6mm × 6mm) Package

Related Products



LT3763EFE

Analog Devices, Inc TSSOP28





LTC4417IUF Analog Devices, Inc QFN-24

LTC1966CMS8#PBF Analog Devices, Inc MSOP-8P







Automotive Systems

Application

Distributed Supply Regulation

Industrial Controls and Power Supplies

Analog Devices, Inc MSOP10

LTC3440EMS

Analog Devices, Inc

LT1038CK

TO-3

LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LTM8045EY#PBF

Analog Devices, Inc BGA40



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Analog Devices, Inc 28-WFQFN