

LT8602IUJ#PBF

Data Sheet

Conv DC-DC 3V to 42V Synchronous Step Down Quad-Out 1V 1.5A/1.8A/1.8A/2.5A Automotive 40-Pin QFN EP Tube

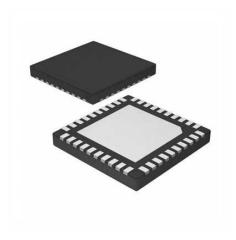
Manufacturers <u>Analog Devices, Inc</u>

Package/Case QFN40

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LT8602IUJ#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

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 250 kHz to 2.2 MHz. The LT8602 can be configured for micropower Burst Mode operation or pulse-skipping operation at light load. Micropower operation results in quiescent current of $30 \mu A$ 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

Distributed Supply Regulation

Industrial Controls and Power Supplies



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS

Analog Devices, Inc

MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN