

LTC3603IMSE#PBF

Data Sheet

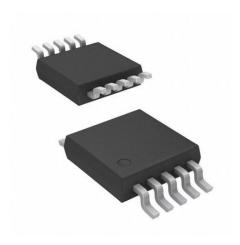
LTC3603 - 2.5A, 15V, Monolithic Synchronous Step-Down Regulator; Package: MSOP; Number of Pins: 16; Temperature Range: -40°C to 85°C

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

Package/Case 16-TFSOP (0.118, 3.00mm Width)

Product Type Power Management ICs

RoHS



Images are for reference only

Please submit RFQ for LTC3603IMSE#PBF or Final to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LTC3603 is a high efficiency, monolithic synchronous step-down DC/DC converter utilizing a constant-frequency, current mode architecture. It operates from an input voltage range of 4.5V to 15V and provides an adjustable regulated output voltage from 0.6V to 14.5V while delivering up to 2.5A of output current. The internal synchronous power switch with $45m\Omega$ on-resistance increases efficiency and eliminates the need for an external Schottky diode. The switching frequency can either be set by an external resistor or synchronized to an external clock. OPTI-LOOP® compensation allows the transient response to be optimized over a wide range of loads and output capacitors.

The LTC3603 can be configured for either Burst Mode operation or forced continuous operation. Forced continuous operation reduces noise and RF interference, while Burst Mode operation provides the highest efficiency at light loads. In Burst Mode operation, external control of the burst clamp level allows the output voltage ripple to be adjusted according to the requirements of the application.

Features

Wide Input Voltage Range: 4.5V to 15V

2.5A Output Current

Low RDS(ON) Internal Switches: $45m\Omega$ and $85m\Omega$

Programmable Frequency: 300kHz to 3MHz

Low Quiescent Current: 75µA

0.6V ±1% Reference Allows Precise,

Low Output Voltage

99% Maximum Duty Cycle

Adjustable Burst Mode® Clamp

Synchronizable to External Clock

Power Good Output Voltage Monitor

Overtemperature Protection

Overvoltage Protection

Available in 16-Lead Thermally Enhanced MSOP and 4mm × 4mm QFN Packages

Related Products



LT3763EFE

Analog Devices, Inc TSSOP28



LTC4417IUF

Analog Devices, Inc QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc MSOP-8P



LTM8045EY#PBF

Analog Devices, Inc

BGA40



Point-of-Load Supplies

Portable Instruments

Communications Infrastructure



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc

10MSOP



LT4295IUFD#PBF

Analog Devices, Inc

28-WFQFN