

LT3684EDD#PBF

Data Sheet

36V, 2A, 2.8MHz Step-Down Switching Regulator; Package: DFN; No of Pins: 10; Temperature Range: -40°C to +125°C

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

Package/Case QFN-10

Product Type Power Management ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LT3684EDD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LT3684 is an adjustable frequency (300kHz to 2.8MHz) monolithic buck switching regulator that accepts input voltages up to 34V (36V maximum). A high efficiency 0.18Ω switch is included on the die along with a boost Schottky diode and the necessary oscillator, control and logic circuitry. Current mode topology is used for fast transient response and good loop stability. The LT3684's high operating frequency allows the use of small, low cost inductors and ceramic capacitors resulting in low output ripple while keeping total solution size to a minimum. The low current shutdown mode reduces input supply current to less than 1μ A while a resistor and capacitor on the RUN/SS pin provide a controlled output voltage ramp (soft-start). A power good flag signals when VOUT reaches 90% of the programmed output voltage. The LT3684 is available in 10-Pin MSOP and $3mm \times 3mm$ DFN packages with Exposed Pads for low thermal resistance.

Features

Wide Input Range: 3.6V to 34V Operating, 36V Maximum

2A Maximum Output Current

Adjustable Switching Frequency: 300kHz to 2.8MHz

Low Shutdown Current: $IQ < 1\mu A$

Integrated Boost Diode

Power Good Flag

Saturating Switch Design: 0.18Ω On-Resistance

1.265V Feedback Reference Voltage

Output Voltage: 1.265V to 20V

Soft-Start Capability

Small 10-Pin Thermally Enhanced MSOP and (3mm × 3mm) DFN Packages

Application

Automotive Battery Regulation

Power for Portable Products

Distributed Supply Regulation

Industrial Supplies

Wall Transformer Regulation

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



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc

10MSOP



LT4295IUFD#PBF

Analog Devices, Inc

28-WFQFN