

LT8645SEV#PBF

Data Sheet

IC REG BUCK ADJ 7A 65V 32LQFN

Manufacturers Analog Devices, Inc

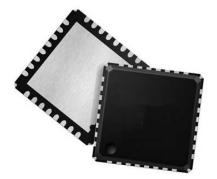
Package/Case LQFN-32

Product Type Power Management ICs

RoHS

Lifecycle

Please submit RFQ for LT8645SEV#PBF or Email to us; sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

RFO

General Description

The LT8645S synchronous step-down regulator features second generation Silent Switcher architecture designed to minimize EMI/EMC emissions while delivering high efficiency at high switching frequencies. This includes the integration of bypass capacitors to optimize all the fast current loops inside and make it easy to achieve advertised EMI performance by eliminating layout sensitivity. This performance makes the LT8645S ideal for noise sensitive applications and environments.

The fast, clean, low-overshoot switching edges enable high efficiency operation even at high switching frequencies, leading to a small overall solution size. Peak current mode control with a 40ns minimum on-time allows high step down ratios even at high switching frequencies.

Burst Mode operation enables ultralow standby current consumption, pulse-skipping mode allows full switching frequency at lower output loads, or spread spectrum operation can further reduce EMI/EMC emissions. Soft-start and tracking functionality is accessed via the TR/SS pin, and an accurate input voltage UVLO threshold can be set using the EN/UV pin. A CLKOUT pin enables synchronizing other regulators to the LT8645S.

Features

Silent Switcher® 2 Architecture

Ultralow EMI/EMC Emissions on Any PCB

Eliminates PCB Layout Sensitivity

Internal Bypass Capacitors Reduce Radiated EMI

Optional Spread Spectrum Modulation

High Efficiency at High Frequency

Up to 95% Efficiency at 1MHz, 12VIN to 5VOUT

Up to 94% Efficiency at 2MHz, 12VIN to 5VOUT

Wide Input Voltage Range: 3.4V to 65V

Ultralow Quiescent Current Burst Mode® Operation

2.5µA IQ Regulating 12VIN to 3.3VOUT

Output Ripple < 10mVP-P

External Compensation: Fast Transient Response and Current Sharing (LT8646S)

Fast Minimum Switch On-Time: 40ns

Low Dropout Under All Conditions: 60mV at 1A

Adjustable and Synchronizable: 200kHz to 2.2MHz

Peak Current Mode Operation

Output Soft-Start and Tracking

Small 32-Lead 6mm \times 4mm LQFN Package

Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



Analog Devices, Inc TO-3

LT1038CK



LTC3440EMS
Analog Devices, Inc
MSOP10

Application

Automotive and Industrial Supplies

General Purpose Step-Down

GSM Power Supplies

Ovaga Technologies Limited



LTC1966CMS8#PBF

Analog Devices, Inc MSOP-8P



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LTM8045EY#PBF

Analog Devices, Inc BGA40



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN