

LT8645SIV#PBF

Data Sheet

IC REG BUCK ADJ 7A 65V 32LQFN

Manufacturers	Analog Devices, Inc		
Package/Case	32-TFQFN		
Product Type	Power Management ICs	AND A LOUGH AN LOUGH AND A LOUGH AND AND AND A LOUGH AND AND A	
RoHS			
Lifecycle		Images are for reference only	
Please submit RFQ for LT8645SIV#PBF or Email to us: sales@oyaga.com We will contact you in 12 hours.			FO

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
- $2.5 \mu A$ 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 × 4mm LQFN Package

Related Products



<u>LT3763EFE</u>

Analog Devices, Inc TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24

LT1038CK

TO-3

Analog Devices, Inc

LTC3440EMS

MSOP10

Analog Devices, Inc



Automotive and Industrial Supplies

General Purpose Step-Down

GSM Power Supplies

Application



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