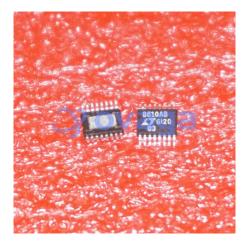


# LT8610ABEMSE#PBF

Data Sheet

Conv DC-DC 3.4V to 42V Synchronous Step Down Single-Out 0.97V 3.5A Automotive 16-Pin MSOP EP Tube

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-16
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT8610ABEMSE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

## **General Description**

The LT8610A/LT8610AB series are compact, high efficiency, high speed synchronous monolithic step-down switching regulators that consume only  $2.5\mu$ A of quiescent current. Compared to the LT8610, they have higher maximum output currents of 3.5A and a faster minimum switch-on time of 30ns. The LT8610A has the same low ripple burst mode performance of the LT8610, while the LT8610AB has even higher light load efficiency.

The other features of the LT8610 remain unchanged in the LT8610A/LT8610AB series. A SYNC pin allows synchronization to an external clock. The EN/UV pin has an accurate 1V threshold for VIN undervoltage lockout or shut down. A capacitor on the TR/SS pin programs the output voltage ramp rate during startup. The PG flag signals when VOUT is within  $\pm 9\%$  of the programmed output voltage as well as fault conditions.

FEEDBACK VOLTAGEMIN VINOUTPUT = 200kHz to 2.2MHzLT8610AB0.97V3.4V3.5AImproved Burst Mode EfficiencyLT8610AX0.97V3.4V3.5A175°C Max Junction TempLT8610A0.97V3.4V3.5AHigher Iout, 30ns Min On TimeLT86100.97V3.4V2.5A-

## Features

LT8610 Feature Set, Plus:

30ns Minimum Switch-On Time

Improved Burst Mode Efficiency (LT8610AB Only)

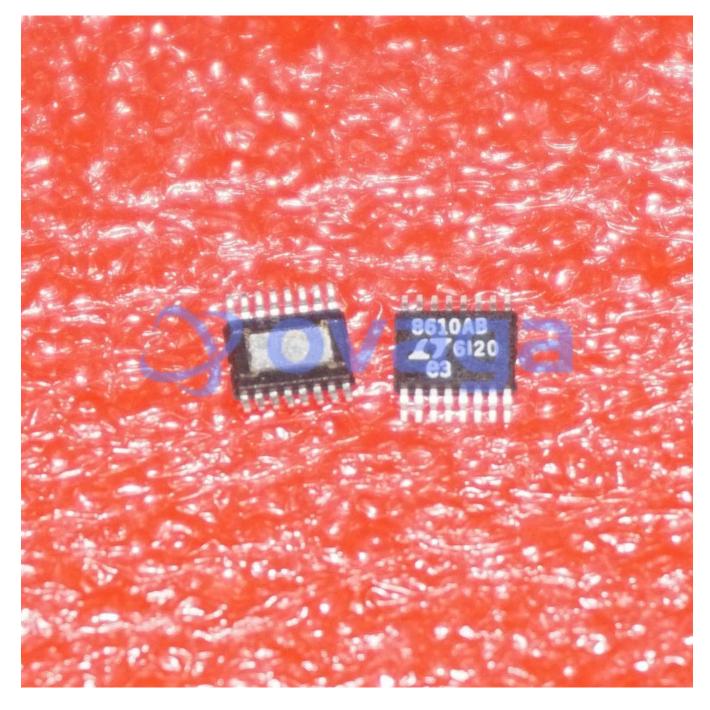
Improved EMI

- Wide Input Voltage Range: 3.4V to 42V
- Ultralow Quiescent Current Burst Mode® Operation:
- $2.5 \mu A$  IQ Regulating 12VIN to 3.3VOUT
- Fixed Output Voltages: 3.3V, 5V
- Output Ripple < 10mVP-P (LT8610A Only)
- High Efficiency Synchronous Operation:
- 95% Efficiency at 1A, 5VOUT from 12VIN
- 93% Efficiency at 1A, 3.3VOUT from 12VIN
- Low Dropout Under All Conditions: 200mV at 1A
- Safely Tolerates Inductor Saturation in Overload
- Adjustable and Synchronizable Frequency:
- 200kHz to 2.2MHz
- Accurate 1V Enable Pin Threshold
- Output Soft-Start and Tracking
- Small Thermally Enhanced 16-Lead MSOP Package

## Application

Automotive and Industrial Supplies

GSM Power Supplies



## **Related Products**



LT3763EFE Analog Devices, Inc TSSOP28



TSSOP28 LTC4417IUF

Analog Devices, Inc QFN-24





### LT1038CK

Analog Devices, Inc TO-3

## LTC3440EMS

Analog Devices, Inc MSOP10



#### 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