

## LTC3862HFE#PBF

Data Sheet

Multi-Phase Current Mode Step-Up DC/DC Controller

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

Package/Case 24-Lead TSSOP w/ EP

Product Type Power Management ICs

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for LTC3862HFE#PBF or <a href="mailto:sales@ovaga.com"><u>Emailto:sales@ovaga.com</u></a> We will contact you in 12 hours.

**RFO** 

## **General Description**

The LTC3862 is a two phase constant frequency, current mode boost and SEPIC controller that drives N-channel power MOSFETs. Two phase operation reduces system filtering capacitance and inductance requirements.

The operating frequency can be set with an external resistor over a 75kHz to 500kHz range and can be synchronized to an external clock using the internal PLL. Multi-phase operation is possible using the SYNC input, the CLKOUT output and the PHASEMODE control pin allowing 2-, 3-, 4-, 6- or 12-phase operation.

Other features include an internal 5V LDO with undervoltage lockout protection for the gate drivers, a precision RUN pin threshold with programmable hysteresis, soft-start and programmable leading edge blanking and maximum duty cycle.

Part NumberVin RangeINTVccUV+UV-LTC38624V to 36V5V3.3V2.9VLTC3862-18.5V to 36V10V7.5V7.0VLTC3862-25.5V to 36V10V4.4V3.9V

**Features** 

Wide VIN Range: 4V to 36V Operation

2-Phase Operation Reduces Input and Output Capacitance

Fixed Frequency, Peak Current Mode Control

5V Gate Drive for Logic-Level MOSFETs

Adjustable Slope Compensation Gain

Adjustable Max Duty Cycle (Up to 96%)

Adjustable Leading Edge Blanking

Programmable Operating Frequency with One External Resistor (75kHz to 500kHz)

Phase-Lockable Fixed Frequency 50kHz to 650kHz

SYNC Input and CLKOUT for 2-, 3-, 4-, 6- or 12-Phase Operation (PHASEMODE Programmable)

Internal 5V LDO Regulator

24-Lead Narrow SSOP Package

 $5 \text{mm} \times 5 \text{mm}$  QFN with 0.65 mm Lead Pitch and 24-Lead Thermally Enhanced TSSOP 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



Automotive, Telecom and Industrial Power Supplies



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN