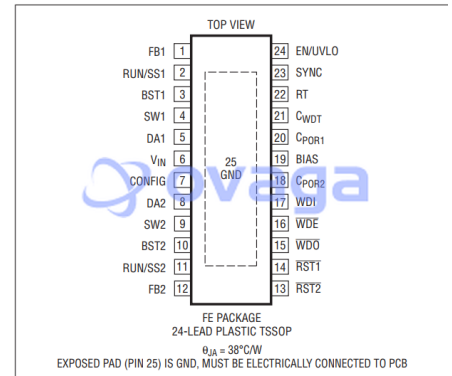


Conv DC-DC 3.8V to 36V Step Down Dual-Out 0.8V to 32.4V 0.8A/0.8A Automotive 24-Pin TSSOP EP Tube

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	24TSSOP
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3688EFE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT3688 is an adjustable frequency (350kHz to 2.2MHz) dual monolithic step-down switching regulator with two power-on reset timers and a watchdog timer. The regulator operates off inputs up to 36V. Low ripple Burst Mode® operation maintains high efficiency at low output current while keeping output ripple below 25mV in a typical application, with input quiescent current of just 115µA. Shutdown circuitry reduces input supply current to less than 1µA while EN/UVLO is pulled low.

The reset and watchdog timeout periods are both adjustable using external capacitors. Tight accuracy specifications and glitch immunity ensure reliable reset operation without false triggering. The open collector RST pins will pull down if the monitored output voltage drops 10% below the programmed value. The LT3688 watchdog timer monitors for watchdog falling edges grouped too close together or too far apart.

The LT3688 is available in 24-Pin TSSOP and 4mm × 4mm QFN packages, each with an exposed pad for low thermal resistance.

## Features

Wide Input Range:

Operation from 3.8V to 36V

Low Ripple (<25mVP-P ) Burst Mode>

Programmable, Defeatable Window Watchdog Timer

Two Independently Programmable Power-On-Reset Timers

Synchronizable, Adjustable 350kHz-2.2MHz Switching Frequency

Two 800mA Output Switching Regulators with Internal Power Switches

Programmable Input Undervoltage Lockout with Hysteresis

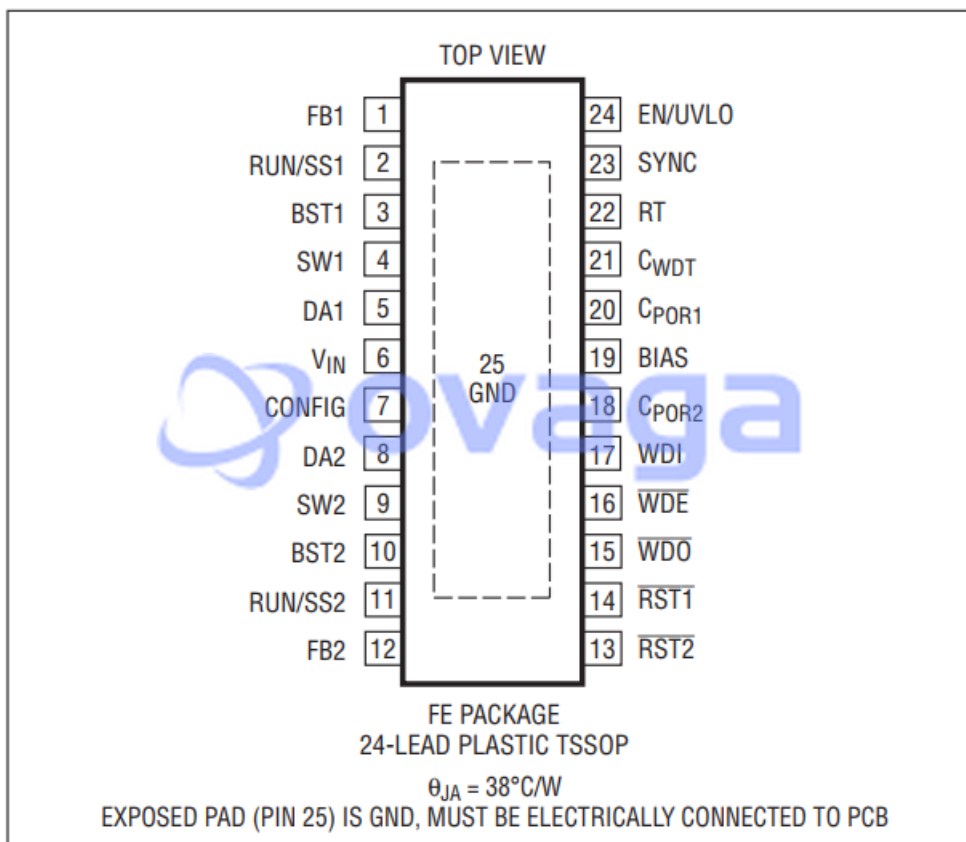
Thermally Enhanced 24-Pin TSSOP and 4mm × 4mm QFN Packages

## Application

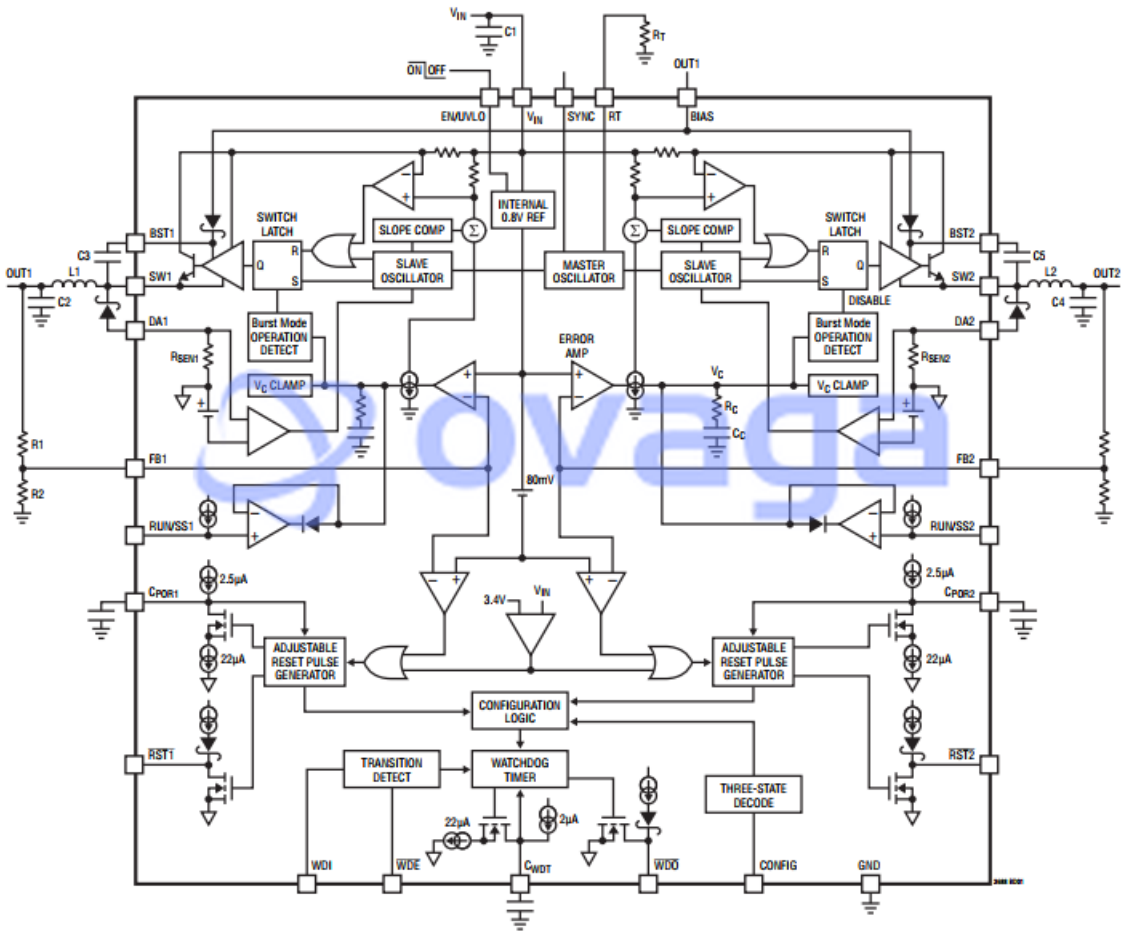
Automotive Electronic Control Units

Industrial Power Supplies

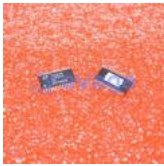
High-Reliability  $\mu$ Processor Systems



# BLOCK DIAGRAM



## Related Products



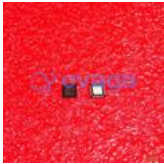
[LT3763EFE](#)

Analog Devices, Inc  
TSSOP28



[LT1038CK](#)

Analog Devices, Inc  
TO-3



[LTC4417IUF](#)

Analog Devices, Inc  
QFN-24



[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