

40V, 2.1A Low Dropout Adjustable Linear Regulator with Monitoring and Cable Drop Compensation

Manufacturers	Analog Devices, Inc
Package/Case	16-Lead TSSOP w/ EP
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3086MPFE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT3086 is a multi-feature, low dropout, low noise 2.1A linear regulator that operates over a 1.4V to 40V input supply range. Dropout voltage at 2.1A is typically 330mV. One resistor sets output voltage from 0.4V to 32V. Output voltage tolerance is guaranteed to $\pm 2\%$ over line, load and temperature. The LT3086 is stable with ceramic output capacitors, requiring a minimum of 10 μ F.

The LT3086's programmable cable drop compensation cancels output voltage errors caused by resistive connections to the load. A master/slave configuration allows paralleling of multiple devices for higher load current and heat spreading without external ballast resistor requirements.

Output current and temperature monitoring along with a power good flag provide system diagnostic and debug capability. Internal fault circuitry includes thermal shutdown and current limit with foldback. Thermal limit and current limit are also externally programmable.

Packages include the thermally enhanced 16-lead (5mm \times 4mm) DFN, 16-lead TSSOP, 7-lead DD-Pak and 7-lead TO-220.

Features

Wide Input Voltage Range: 1.4V to 40V

1 Resistor Sets Output Voltage: 0.4V to 32V

Output Current: 2.1A

Output Current Monitor:>

Temperature Monitor with Programmable Thermal Limit

Programmable Cable Drop Compensation

Parallel Multiple Devices for Higher Current

Dropout Voltage: 330mV

1 Capacitor Soft-Starts Output and Decreases Noise

Low Output Noise: 40 μ VRMS (10Hz to 100kHz)

Precision, Programmable External Current Limit

Power Good Flag with Programmable Threshold

Ceramic Output Capacitors: 10 μ F Minimum

Quiescent Current in Shutdown: <1 μ A

Reverse-Battery, -Current and -Output Protection

Available in 5mm \times 4mm 16-Lead DFN, 16-Lead TSSOP, 7-Lead DD-Pak and 7-Lead TO-220.

Application

Programmable Linear Regulator

Post Regulator for Switching Supplies

USB Power Supplies

High Reliability Power Supplies

Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EY#PBF](#)

Analog Devices, Inc
BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN