

## LT3030EFE#TRPBF

Data Sheet

Dual 750mA/250mA Low Dropout, Low Noise, Micropower Linear Regulator

Manufacturers Analog Devices, Inc

Package/Case 20-Lead TSSOP w/ EP

Product Type Power Management ICs

**RoHS** 

Lifecycle

Please submit RFQ for LT3030EFE#TRPBF or <a href="mailto:Email



Images are for reference only

**RFO** 

## **General Description**

The LT3030 is a dual, micropower, low noise, low dropout linear regulator. The device operates with either common or independent input supplies for each channel, over a 1.7V to 20V input voltage range. Output 1/Output 2 supply 750mA/250mA respectively with a typical dropout voltage of 300mV. With an external 10nF bypass capacitor, output noise is only  $20\mu VRMS$  over a 10Hz to 100kHz bandwidth. Designed for use in battery-powered systems, the low  $120\mu A/75\mu A$  quiescent current makes it an ideal choice. In shutdown, quiescent current drops to less than  $1\mu A$ . Shutdown control is independent for each channel and its precision logic threshold allows for voltage lockout functionality. The LT3030 includes a PWRGD flag for each channel to indicate output regulation.

The LT3030 optimizes stability and transient response with low ESR ceramic output capacitors, requiring a minimum of only  $10\mu F/3.3\mu F$ .

Internal circuitry provides reverse-battery protection, reverse-current protection, current limiting with foldback and thermal shutdown with hysteresis. The adjustable output voltage device has a 1.220V reference voltage. The LT3030 is offered in the thermally enhanced 20-lead TSSOP and 28-lead, low profile (4mm  $\times$  5mm  $\times$  0.75mm) QFN packages.

**Features** 

Output Current: 750mA/250mA

Low Dropout Voltage: 300mV

Low Noise: 20µVRMS (10Hz to 100kHz)

Low Quiescent Current: 120µA/75µA

Wide Input Voltage Range: 1.7V to 20V

Adjustable Output: 1.220V Reference Voltage

Shutdown Quiescent Current: <1 µA

Stable with  $10\mu F/3.3\mu F$  Minimum Output Capacitor

Stable with Ceramic, Tantalum or Aluminum Electrolytic Capacitors

Precision Threshold for Shutdown Logic or UVLO Function

PWRGD Flag for each Output

Reverse Battery and Reverse Output-to-Input Protection

Current Limit with Foldback and Thermal Shutdown

Thermally Enhanced 20-Lead TSSOP and 28-Lead (4mm × 5mm) QFN 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

## **Application**

General Purpose Linear Regulator

Battery-Powered Systems

Microprocessor Core/Logic Supplies

Post Regulator for Switching Supplies

Tracking/Sequencing 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