

LT3071EUFD#PBF

Data Sheet

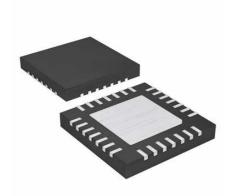
LDO Regulator Pos 0.8V to 1.8V 5A Automotive 28-Pin QFN EP Tube

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

Package/Case QFN-28

Product Type Power Management ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LT3071EUFD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LT3071 is a low voltage, UltraFastTM transient response linear regulator. The device supplies up to 5A of output current with a typical dropout voltage of 85 mV. A $0.01 \mu\text{F}$ reference bypass capacitor decreases output voltage noise to $25 \mu\text{VRMS}$. The LT3071's high bandwidth permits the use of low ESR ceramic capacitors, saving bulk capacitance and cost. The LT3071's features make it ideal for high performance FPGAs, microprocessors or sensitive communication supply applications.

Output voltage is digitally selectable in 50mV increments over a 0.8V to 1.8V range. An analog margining function allows the user to adjust system output voltage over a continuous $\pm 10\%$ range. The IC incorporates a unique tracking function to control a buck regulator powering the LT3071's input. This tracking function drives the buck regulator to maintain the LT3071's input voltage to VOUT + 300mV, minimizing power dissipation.

Internal protection includes UVLO, reverse-current protection, precision current limiting with power foldback and thermal shutdown. The LT3071 regulator is available in a thermally enhanced 28-lead, 4mm \times 5mm QFN package.

Features

Output Current: 5A

Dropout Voltage: 85mV Typical

Digitally Programmable VOUT: 0.8V to 1.8V

Analog Output Margining: ±10% Range

Low Output Noise: 25µVRMS (10Hz to 100kHz)

Parallel Multiple Devices for 10A or More

Precision Current Limit: ±20%

Output Current Monitor:>

Stable with Low ESR Ceramic Output Capacitors (15µF Minimum)

High Frequency PSRR: 30dB at 1MHz

Enable Function Turns Output On/Off

VIOC Pin Controls Buck Converter to Maintain Low Power Dissipation and Optimize Efficiency

PWRGD/UVLO/Thermal Shutdown Flag

Current Limit with Foldback Protection

Thermal Shutdown

28-Lead (4mm × 5mm × 0.75mm) QFN Package

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

Application

FPGA and DSP Supplies

Servers and Storage Devices

ASIC and Microprocessor Supplies

Post Buck Regulation and Supply Isolation



LTC3440EMS Analog Devices, Inc MSOP10



LTC2990IMS#PBF Analog Devices, Inc 10MSOP



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN