

# LT3024IDE#PBF

Data Sheet

LDO Regulator Pos 1.22V to 20V 0.1A/0.5A Automotive 12-Pin DFN EP Tube

Manufacturers	Analog Devices, Inc	11111
Package/Case	DFN-12	
Product Type	Power Management ICs	
RoHS	Pb-free Halide free	
Lifecycle		Images are for reference only

Please submit RFQ for LT3024IDE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

### **General Description**

The LT3024 is a dual, micropower, low noise, low dropout regulator. With an external 0.01 µF bypass capacitor, output noise drops to 20µVRMS over a 10Hz to 100kHz bandwidth. Designed for use in battery-powered systems, the low 30µA quiescent current per output makes it an ideal choice. In shutdown, quiescent current drops to less than 0.1µA. Shutdown control is independent for each output, allowing for flexibility in power management. The device is capable of operating over an input voltage range of 1.8V to 20V. The device can supply 100mA of output current from Output 2 with a dropout voltage of 300mV. Output 1 can supply 500mA of output current with a dropout voltage of 300mV. Quiescent current is well controlled in dropout.

The LT3024 regulator is stable with output capacitors as low as  $1\mu$ F for the 100mA output and  $3.3\mu$ F for the 500mA output. Small ceramic capacitors can be used without the series resistance required by other regulators.

Internal protection circuitry includes reverse-battery protection, current limiting, thermal limiting and reverse current protection. The device is available as an adjustable device with a 1.22V reference voltage. The LT3024 regulator is available in the thermally enhanced 16-lead TSSOP and 12-lead, low profile (4mm x 3mm x 0.75mm) DFN packages.

### Features

- Low Noise: 20µVRMS (10Hz to 100kHz)
- Low Quiescent Current: 30µA/Output
- Wide Input Voltage Range: 1.8V to 20V
- Output Current: 100mA/500mA
- Very Low Shutdown Current: <0.1µA
- Low Dropout Voltage: 300mV at 100mA/500mA
- Adjustable Outputs from 1.22V to 20V
- Stable with  $1\mu F/3.3\mu F$  Output Capacitor
- Stable with Aluminum, Tantalum or Ceramic Capacitors
- Reverse-Battery Protected
- No Reverse Current
- No Protection Diodes Needed
- Overcurrent and Overtemperature Protected
- Thermally Enhanced 16-Lead TSSOP and 12-Lead (4mm x 3mm) DFN Packages

#### **Related Products**



LT3763EFE Analog Devices, Inc

TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24







LTM8045EY#PBF Analog Devices, Inc BGA40

# A Standard







# Application

Cellular Phones

Pagers

Battery-Powered Systems

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Analog Devices, Inc TO-3

## LTC3440EMS

**LT1038CK** 

Analog Devices, Inc MSOP10

### LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

### LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN