

LDO Regulator Pos 1.2V to 19.5V 1.1A Automotive

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP-8
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LT1965EMS8E#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT1965 series are low-noise, low-dropout linear regulators. The devices supply 1.1A of output current with a 310mV typical dropout voltage. The quiescent operating current is 500 $\mu$ A for the adjustable version, reducing to <1 $\mu$ A in shutdown. Quiescent current is well controlled; it does not rise in dropout like many other regulators. The LT1965 regulators have very low output noise, which makes them ideal for sensitive RF and DSP supply applications.

Output voltage ranges from 1.20V to 19.5V. The LT1965 regulators are stable with output capacitors as low as 10 $\mu$ F. Internal protection circuitry includes reverse-battery protection, current limiting with foldback, thermal limiting, and reverse-current protection. The LT1965 series are available in fixed output voltages of 1.5V, 1.8V, 2.5V, and 3.3V and as an adjustable device with a 1.20V reference voltage. The package offerings include the 5-lead TO-220 and 5-lead DD-Pak, the thermally enhanced 8-lead MSOP, and low profile (0.75mm) 8-lead 3mm  $\times$  3mm DFN.

## Features

Output Current: 1.1A

Dropout Voltage: 310mV

Low Noise: 40 $\mu$ V<sub>RMS</sub> (10Hz to 100kHz)

500 $\mu$ A Quiescent Current (Adjustable Version)

Wide Input Voltage Range: 1.8V to 20V

No Protection Diodes Needed

Controlled Quiescent Current in Dropout

Adjustable Output from 1.20V to 19.5V

Fixed Output Voltages: 1.5V, 1.8V, 2.5V, 3.3V

Stable with 10 $\mu$ F Output Capacitor

Stable with Ceramic or Tantalum Capacitors

Reverse-Battery Protection

No Reverse Current

Current Limit with Foldback Protection

Thermal Limiting

5-Lead TO-220, DD-Pak, Thermally Enhanced 8-Lead MSOP, and 8-Lead 3mm  $\times$  3mm DFN Packages

## Application

Logic Power Supplies

Post Regulator for Switching Supplies

Low Noise Instrumentation



## 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



### [LT1038CK](#)

Analog Devices, Inc  
TO-3



### [LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



### [LTC2990IMS#PBF](#)

Analog Devices, Inc  
10MSOP



### [LT4295IUFD#PBF](#)

Analog Devices, Inc  
28-WFQFN