

LDO Regulator Pos 0V to 36V 0.5A Automotive 6-Pin DFN EP T/R

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	DFN6
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LT3085EDCB#TRMPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT3085 is a 500mA low dropout linear regulator that can be paralleled to increase output current or spread heat on surface mounted boards. Designed as a precision current source and voltage follower, this new regulator finds use in many applications requiring high current, adjustability to zero, and no heat sink. The device also brings out the collector of the pass transistor to allow low dropout operation—down to 275mV—when used with a second supply.

A key feature of the LT3085 is the capability to supply a wide output voltage range. By using a reference current through a single resistor, the output voltage is programmed to any level between zero and 36V. The LT3085 is stable with 2.2 $\mu$ F of capacitance on the output, and the IC uses small ceramic capacitors that do not require additional ESR as is common with other regulators.

Internal protection circuitry includes current limiting and thermal limiting. The LT3085 is offered in the 8-lead MSOP and a low profile (0.75mm) 6-lead 2mm  $\times$  3mm DFN package (both with an Exposed Pad for better thermal characteristics).

## Features

Outputs May be Paralleled for Higher Current and Heat Spreading

Output Current: 500mA

Single Resistor Programs Output Voltage

1% Initial Accuracy of SET Pin Current

Output Adjustable to 0V

Current Limit Constant with Temperature

Low Output Noise: 40 $\mu$ VRMS (10Hz to 100kHz)

Wide Input Voltage Range: 1.2V to 36V

Low Dropout Voltage: 275mV

Minimum Load Current: 0.5mA

Stable with Minimum 2.2 $\mu$ F Ceramic Capacitor

Current Limit with Foldback and Overtemperature Protected

8-Lead MSOP, and 6-Lead 2mm  $\times$  3mm DFN Packages

## Application

High Current All Surface Mount Supply

High Efficiency Linear Regulator

Post Regulator for Switching Supplies

Low Parts Count Variable Voltage Supply

Low Output Voltage Power Supplies

## Related Products



### [LT3763EFE](#)

Analog Devices, Inc  
TSSOP28



### [LTC4417IUF](#)

Analog Devices, Inc  
QFN-24



### [LTC1966CMS8#PBF](#)

Analog Devices, Inc  
MSOP-8P



### [LTM8045EV#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