

Linear Regulators - Standard 500mA Low Dropout Linear Regulators

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-8
Product Type	Power Management ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADP1715ARMZ-1.0-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADP1715/ADP1716 are low dropout, CMOS linear regulators that operate from 2.5 V to 5.5 V and provide up to 500 mA of output current. Using an advanced proprietary architecture, they provide high power supply rejection and achieve excellent line and load transient response with just a small 2.2 μ F ceramic output capacitor.

Three versions of this part are available, one with fixed output voltage options and variable soft start (ADP1715), one with adjustable output voltage and fixed soft start (ADP1715 Adjustable), and one with voltage tracking in fixed output voltage options (ADP1716). The fixed output voltage options are internally set to one of sixteen values between 0.75 V and 3.3 V; the adjustable output voltage can be set to any value between 0.8 V and 5.0 V by an external voltage divider connected from OUT to ADJ. The variable soft start uses an external capacitor at SS to control the output voltage ramp. Tracking limits the output voltage to the at-or-below voltage at the TRK pin.

The ADP1715/ADP1716 are available in 8-lead thermally enhanced MSOP packages, making them not only a very compact solution but also providing excellent thermal performance for applications requiring up to 500 mA of output current in a small, low profile footprint.

Features

Maximum output current: 500 mA

Input voltage range: 2.5 V to 5.5 V

Low shutdown current: $<1 \mu\text{A}$

Low dropout voltage:

250 mV @ 500 mA load

50 mV @ 100 mA load

Initial accuracy: $\pm 1\%$

Accuracy over line, load, and temperature: $\pm 3\%$

16 Fixed Output Voltage Options with soft start from 0.75V to 3.3V

Adjustable Output Voltage from 0.8V to 5.0V

Stable with small 2.2 μF ceramic output capacitor

Excellent load/line transient response

Current limit & thermal overload protection

Logic controlled enable

Application

Notebook computers

Memory components

Telecommunications equipment

Network Equipment

DSP/FPGA/ μP supplies

Instrumentation equipment/data acquisition systems



TYPICAL APPLICATION CIRCUITS

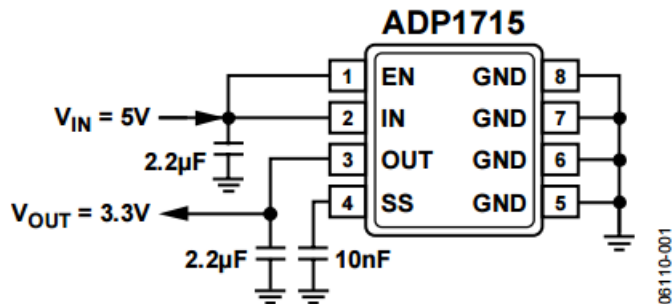


Figure 1. ADP1715 with Fixed Output Voltage, 3.3 V

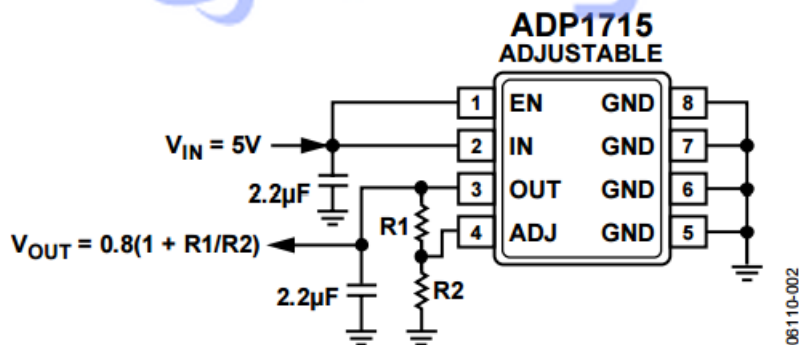


Figure 2. ADP1715 with Adjustable Output Voltage, 0.8 V to 5.0 V

Related Products



[ADP3336ARMZ-REEL7](#)

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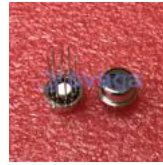
[AD737JRZ](#)

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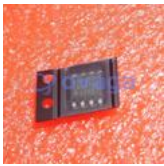
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