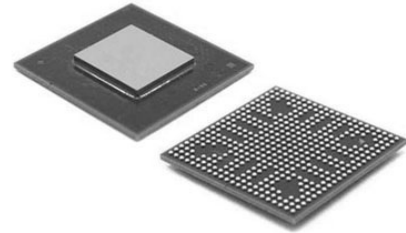


LDO Regulator Neg -0.5V to -5V -0.5A 8-Pin LFCSP EP T/R

Manufacturers	Analog Devices, Inc
Package/Case	8-UFDNFN, CSP
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADP7185ACPZN-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADP7185 is a complementary metal oxide semiconductor (CMOS), low dropout (LDO) linear regulator that operates from -2.0 V to -5.5 V and provides up to -500 mA of output current. This high output current LDO is ideal for regulation of high performance analog and mixed signal circuits operating from -0.5 V down to -4.5 V . Using an advanced proprietary architecture, the ADP7185 provides high power supply rejection ratio (PSRR) and low noise, and it achieves excellent line and load transient response with a small $4.7\text{ }\mu\text{F}$ ceramic output capacitor.

The ADP7185 is available in 15 fixed output voltage options. The following voltages are available from stock: -0.5 V , -1.0 V , -1.2 V , -1.5 V , -1.8 V , -2.0 V , -2.5 V , -3.0 V , and -3.3 V .

Additional voltages available by special order are -0.8 V , -0.9 V , -1.3 V , -2.8 V , -4.2 V , and -4.5 V . An adjustable version is also available which allows output voltages that range from -0.5 V to $-V_{IN} + 0.5\text{ V}$ with an external feedback divider.

The enable logic feature is capable of interfacing with positive or negative logic levels for maximum flexibility.

The ADP7185 regulator output noise is $4\text{ }\mu\text{V rms}$ independent of the output voltage. The ADP7185 is available in an 8-lead, $2\text{ mm} \times 2\text{ mm}$ LFCSP, making it 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

Input voltage range: -2.0 V to -5.5 V

Maximum output current: -500 mA

Fixed output voltage options: -0.5 V to -4.5 V

Adjustable output from -0.5 V to $-V_{IN} + 0.5\text{ V}$

Low output noise: $4\text{ }\mu\text{V rms}$ from 100 Hz to 100 kHz

Noise spectral density: $20\text{ nV}/\sqrt{\text{Hz}}$, 10 kHz to 1 MHz

PSRR at -500 mA load

68 dB at 10 kHz

50 dB at 100 kHz

40 dB at 1 MHz

Low dropout voltage: -190 mV typical at -500 mA load

Initial output voltage (VOUT) accuracy: $\pm 0.5\%$

Output voltage accuracy over line, load, and temperature: $\pm 2.2\%$

Operating supply current (IGND): -0.6 mA typical at no load

Low shutdown current: $-2\text{ }\mu\text{A}$ typical at $>$

Stable with small $4.7\text{ }\mu\text{F}$ ceramic input and output capacitor

Positive or negative enable logic

Current-limit and thermal overload protection

8-lead, $2\text{ mm} \times 2\text{ mm}$ LFCSP package

Supported by ADIsimPOWER voltage regulator design tool

Application

Regulation to noise sensitive applications: analog-to-digital converters (ADCs), digital-to-analog converters (DACs), precision amplifiers

Communications and infrastructure

Medical and healthcare

Industrial and instrumentation

Related Products



[ADP3336ARMZ-REEL7](#)

Analog Devices, Inc
MSOP-8



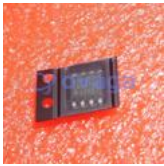
[ADP3367ARZ](#)

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[ADP3330ARTZ3.3-RL7](#)

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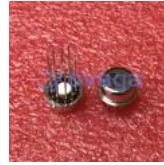
[ADR421ARZ](#)

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