

ADP7156ACPZ-3.3-R7

Data Sheet

1.2 A, Ultralow Noise, High PSRR, Fixed Output, RF Linear Regulator

Manufacturers Analog Devices, Inc

Package/Case 10-Lead LFCSP (3mm x 3mm)

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ADP7156ACPZ-3.3-R7 or Final to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The ADP7156 is a linear regulator that operates from 2.3 V to 5.5 V and provides up to 1.2 A of output current. Using an advanced proprietary architecture, it provides high power supply rejection and ultralow noise, achieving excellent line and loadtransient response with only a $10~\mu F$ ceramic output capacitor.

There are 16 standard output voltages for the ADP7156. The following voltages are available from stock: 1.2 V, 1.8 V, 2.0 V, 2.5 V, 2.8 V, 3.0 V and 3.3 V. Additional voltages available by special order are 1.3 V, 1.5 V, 1.6 V, 2.2 V, 2.6 V, 2.7 V, 2.9 V, 3.1 V, and 3.2 V.

The ADP7156 regulator typical output noise is $0.9 \,\mu\text{V}$ rms from $100 \,\text{Hz}$ to $100 \,\text{kHz}$ and $1.7 \,\text{nV}/\sqrt{\text{Hz}}$ for noise spectral density from $10 \,\text{kHz}$ to $1 \,\text{MHz}$. The ADP7156 is available in a 10-lead, $3 \,\text{mm} \times 3 \,\text{mm}$ LFCSP and 8-lead SOIC packages, making it not only a very compact solution, but also providing excellent thermal performance for applications requiring up to $1.2 \,\text{A}$ of output current in a small, low profile footprint.

Features

Application

Input voltage range: 2.3 V to 5.5 V

Regulation to noise sensitive applications: phase-locked loops (PLLs), voltage controlled oscillators (VCOs), and PLLs with integrated VCOs

16 standard voltages between 1.2 V and

3.3 V available

Communications and infrastructure

Maximum load current: 1.2 A

Backhaul and microwave links

Low noise

 $0.9~\mu V$ rms total integrated noise from 100 Hz to 100~kHz

 $1.6~\mu V$ rms total integrated noise from 10 Hz to 100~kHz

Noise spectral density: 1.7 nV/ $\sqrt{\text{Hz}}$ from 10 kHz to 1 MHz

Power supply rejection ratio (PSRR)

80~dB from 1 kHz to 100~kHz , 60~dB at 1 MHz, $=4.0~\mathrm{V}$

Dropout voltage: 120 mV typical at = 3.3

V

Initial accuracy: $\pm 0.6\%$ at>

Initial accuracy over line, load, and

temperature: $\pm 1.5\%$

Quiescent current:>

Low shutdown current: 0.2 µA

Stable with a 10 μF ceramic output capacitor

10-lead, 3 mm × 3 mm LFCSP and 8-lead SOIC packages

Precision enable

Supported by ADIsimPower tool



Related Products



ADP3336ARMZ-REEL7

Analog Devices, Inc MSOP-8



ADP3367ARZ

Analog Devices, Inc SOIC-8



AD737JRZ

Analog Devices, Inc SOP-8



AD636JH

Analog Devices, Inc TO-100-10



ADP3330ARTZ3.3-RL7

Analog Devices, Inc SOT-23-6



Analog Devices, Inc SOIC-8

ADR434BRZ



Analog Devices, Inc SOP-8



ADR3412ARJZ-R7

Analog Devices, Inc SOT-23-6