

# ADP7118ACPZN3.3-R7

Data Sheet

20 V, 200 mA, Low Noise, CMOS LDO Linear Regulator

Manufacturers <u>Analog Devices, Inc</u>

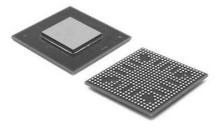
Package/Case 6-Lead LFCSP (2mm x 2mm w/ EP)

Product Type Power Management ICs

RoHS

Lifecycle

Please submit RFQ for ADP7118ACPZN3.3-R7 or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

**RFO** 

### **General Description**

The ADP7118 is a CMOS, low dropout (LDO) linear regulator that operates from 2.7 V to 20 V and provides up to 200 mA of output current. This high input voltage LDO is ideal for the regulation of high performance analog and mixed-signal circuits operating from 20 V down to 1.2 V rails. Using an advanced proprietary architecture, the device provides high power supply rejection, low noise, and achieves excellent line and load transient response with a small 2.2  $\mu$ F ceramic output capacitor. The ADP7118 regulator output noise is 11  $\mu$ V rms independent of the output voltage for the fixed options of 5 V or less.

The ADP7118 is available in 16 fixed output voltage options. The following voltages are available from stock: 1.2 V (adjustable), 1.8 V, 2.5 V, 3.3 V, 4.5 V, and 5.0 V.

Additional voltages available by special order are 1.5 V, 1.85 V, 2.0 V, 2.2 V, 2.75 V, 2.8 V, 2.85 V, 3.8 V, 4.2 V, and 4.6 V.

Each fixed output voltage can be adjusted above the initial set point with an external feedback divider. This allows the ADP7118to provide an output voltage from 1.2 V to VIN – VDO with high PSRR and low noise.

User programmable soft start with an external capacitor is available in the LFCSP and SOIC packages.

The ADP7118 is available in a 6-lead,  $2 \text{ mm} \times 2 \text{ mm}$  LFCSP making it not only a very compact solution, but it also provides excellent thermal performance for applications requiring up to 200 mA of output current in a small, low profile footprint. The ADP7118 is also available in a 5-lead TSOT and an 8-lead SOIC.

#### **Features**

Low noise: 11 µV rms independent of fixed output voltage

PSRR of 88 dB at 10 kHz, 68 dB at 100 kHz, 50 dB at 1 MHz, VOUT ≤ 5 ADC and DAC circuits, precision amplifiers, power for VCO

V,>

Input voltage range: 2.7 V to 20 V

Maximum output current: 200 mA

Initial accuracy: ±0.8%

Accuracy over line, load, and temperature

Low dropout voltage: 200 mV (typical) at a 200 mA load, >

User programmable soft start (LFCSP and SOIC only)

Low quiescent current,>

Low shutdown current:  $1.8 \mu A$  at = 20 V

Stable with a small 2.2 µF ceramic output capacitor

Fixed output voltage options: 1.8 V, 2.5 V, 3.3 V, 4.5 V, and 5.0 V

16 standard voltages between 1.2 V and 5.0 V are available

Adjustable output from 1.2 V to VIN – VDO, output can be adjusted above

initial set point

Precision enable

2 mm × 2 mm, 6-lead LFCSP, 8-Lead SOIC, 5-Lead TSOT

AEC-Q100 qualified for automotive applications

## **Application**

Regulation to noise sensitive applications

VTUNE control

Communications and infrastructure

Medical and healthcare

Industrial and instrumentation

Supported by ADIsimPower too

#### **Related Products**



ADP3336ARMZ-REEL7

Analog Devices, Inc

MSOP-8



Analog Devices, Inc

SOIC-8



AD737JRZ

Analog Devices, Inc

SOP-8



**AD636JH** 

Analog Devices, Inc

TO-100-10



<u>ADP3330ARTZ3.3-RL7</u>

Analog Devices, Inc SOT-23-6



ADR434BRZ
Analog Devices, Inc

SOIC-8



ADR421ARZ
Analog Devices, Inc
SOP-8



ADR3412ARJZ-R7
Analog Devices, Inc

SOT-23-6