

## ADP1741ACPZ-R7

Data Sheet

2 A, Low Dropout, CMOS Linear Regulator; 2 A, Low Dropout, CMOS Linear Regulator

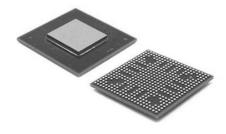
Manufacturers <u>Analog Devices, Inc</u>

Package/Case LFCSP-16

Product Type Power Management ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADP1741ACPZ-R7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The ADP1740/ADP1741 are CMOS, low dropout linear regulators that operate from 1.6~V to 3.6~V and provide up to 2~A of output current. These Low VIN / VOUT LDOs are ideal for regulation of nanometer FPGA geometries operating from 2.5V down to 1.8V I/O rails, and powering core voltages down to 0.75V. Using an advanced proprietary architecture, they provide high power supply rejection, low noise, and achieve excellent line and load transient response with just a small  $4.7~\mu F$  ceramic output capacitor.

The ADP1740 is available in seven fixed output voltage options. The ADP1741 is an adjustable version that allows output voltages ranging from 0.75 V to 3.3 V via an external divider. The ADP1740/ADP1741 allow an external soft start capacitor to be connected to program the startup. A digital power-good output allows power system monitors to check the health of the output voltage.

The ADP1740/ADP1741 are available in a 16-lead,  $4 \text{ mm} \times 4 \text{ mm}$  LFCSP, making them not only very compact solutions, but also providing excellent thermal performance for applications that require up to 2 A of output current in a small, low profile footprint.

**Features** 

Maximum output current: 2 A

Input voltage range: 1.6 V to 3.6 V

Low shutdown current:  $2 \,\mu A$ 

Low dropout voltage: 160 mV @ 2 A load

Initial accuracy: ±1%

Accuracy over line, load, and temperature:  $\pm 2\%$ 

7 fixed output voltage options with soft start (ADP1740): 0.75 V to 2.5 V

Adjustable output voltage options with soft start (ADP1741): 0.75 V to 3.3 V

High PSRR65 dB @ 1 kHz65 dB @ 10 kHz54 dB @ 100 kHz

 $23 \mu V \text{ rms}$  at 0.75 V output

Stable with small 4.7 µF ceramic output capacitor

Excellent load and line transient response

Current-limit and thermal overload protection

See data sheet for additional features

## **Application**

Server computers

Memory components

Telecommunications equipment

Network equipment

DSP/FPGA/microprocessor supplies

Instrumentation equipment/data acquisition systems

## **Related Products**



ADP3336ARMZ-REEL7

Analog Devices, Inc

MSOP-8



ADP3367ARZ

Analog Devices, Inc

SOIC-8



**ADP3330ARTZ3.3-RL7** 

Analog Devices, Inc

SOT-23-6



ADR421ARZ

Analog Devices, Inc

SOP-8



AD737JRZ

Analog Devices, Inc

SOP-8



**AD636JH** 

Analog Devices, Inc

TO-100-10



ADR434BRZ

Analog Devices, Inc

SOIC-8



ADR3412ARJZ-R7

Analog Devices, Inc

SOT-23-6