

### AD5141BCPZ100-RL7

Data Sheet

Digital Potentiometer 100kOhm 256POS Non-Volatile 16-Pin LFCSP EP T/R

Manufacturers	Analog Devices, Inc	
Package/Case	16-LFCSP	
Product Type	D/A Converters (DAC) ; Digital Potentiometers (DigiPOT)	
RoHS	Rohs	
Lifecycle		Images are for reference only

Please submit RFQ for AD5141BCPZ100-RL7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

#### **General Description**

The AD5121/AD5141 potentiometers provide a nonvolatilesolution for 128-/256-position adjustment applications, offeringguaranteed low resistor tolerance errors of  $\pm 8\%$  and up to  $\pm 6$  mAcurrent density in the A, B, and W pins.

The low resistor tolerance and low nominal temperature coefficientsimplify open-loop applications as well as applications requiring tolerance matching.

The linear gain setting mode allows independent programming of the resistance between the digital potentiometer terminals, through RAW and RWB string resistors, allowing very accurateresistor matching.

The high bandwidth and low total harmonic distortion (THD)ensure optimal performance for ac signals, making it suitablefor filter design.

The low wiper resistance of only 40  $\Omega$  at the ends of the resistorarray allows for pin-to-pin connection.

The wiper values can be set through an SPI-/I2C-compatible digitalinterface that is also used to read back the wiper register and EEPROM contents.

The AD5121/AD5141 is available in a compact, 16-lead, 3 mm  $\times$ 3 mm LFCSP. The devices are guaranteed to operate over the extended industrial temperature range of -40°C to +125°C.

#### Features

 $10 \text{ k}\Omega$  and  $100 \text{ k}\Omega$  resistance options

Resistor tolerance: 8% maximum

Wiper current:  $\pm 6 \text{ mA}$ 

Low temperature coefficient: 35 ppm/°C

Wide bandwidth: 3 MHz

Fast start-up time  $< 75 \ \mu s$ 

Linear gain setting mode

Single- and dual-supply operation

Independent logic supply: 1.8 V to 5.5 V

Wide operating temperature: -40°C to +125°C

 $3 \text{ mm} \times 3 \text{ mm} \text{LFCSP}$ 

Qualified for automotive applications

#### **Related Products**



AD5292BRUZ-20 Analog Devices, Inc 14TSSOP



AD5242BRZ10 Analog Devices, Inc SOIC-16



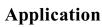
AD5142ABCPZ10-RL
Analog Devices, Inc
LECOD 1



## LFCSP-16

Analog Devices, Inc SOIC-8

AD8400ARZ10



Portable electronics level adjustment

LCD panel brightness and contrast controls

Programmable filters, delays, and time constants

Programmable power supplies



#### AD5293BRUZ-20

Analog Devices, Inc TSSOP-14

#### AD8403ARZ10

Analog Devices, Inc SOIC-24

#### AD5254BRUZ10

Analog Devices, Inc TSSOP20

#### AD5270BRMZ-20

Analog Devices, Inc MSOP-10

# AD5142ABCPZ10-RL7

