

## AD5121BCPZ10-RL7

Data Sheet

Digital Potentiometer 10kOhm 128POS Non-Volatile 16-Pin LFCSP EP T/R

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

Package/Case LFCSP-16

Product Type D/A Converters (DAC); Digital Potentiometers (DigiPOT)

RoHS Rohs

Lifecycle Images are for reference only

Please submit RFQ for AD5121BCPZ10-RL7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

### **General Description**

The AD5121/AD5141 potentiometers provide a nonvolatile solution for 128-/256-position adjustment applications, offering guaranteed 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 coefficients implify 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: ±6 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:  $1.8~\mathrm{V}$  to  $5.5~\mathrm{V}$ 

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

3 mm × 3 mm LFCSP

Qualified for automotive applications

# Application

Portable electronics level adjustment

LCD panel brightness and contrast controls

Programmable filters, delays, and time constants

Programmable power supplies

### **Related Products**



**AD5292BRUZ-20** 

Analog Devices, Inc 14TSSOP



**AD5242BRZ10** 

Analog Devices, Inc SOIC-16



AD5142ABCPZ10-RL7

Analog Devices, Inc LFCSP-16



AD8400ARZ10

Analog Devices, Inc

SOIC-8



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