

AD5144BCPZ10-RL7

Data Sheet

Non Volatile Digital Potentiometer, 10 kohm, Quad, I2C, SPI, Logarithmic, ± 8%, 2.3 V

Manufacturers

Analog Devices, Inc

Package/Case

LFCSP-24

Product Type

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

RoHS

Rohs

Please submit RFQ for AD5144BCPZ10-RL7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

Images are for reference only

General Description

Lifecycle

The AD5124/AD5144A potentiometers provide a nonvolatile solution for 128-/256-position adjustment applications, offering guaranteed low resistor tolerance errors of $\pm 8\%$ and up to ± 6 mA current density in the Ax, Bx, and Wx 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 the RAW and RWB string resistors, allowing very accurate resistor matching.

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

The low wiper resistance of only 40 Ω at the ends of the resistor array allow for pin-to-pin connection.

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

The AD5124/AD5144A are available in a compact, 24-lead, 4 mm \times 4 mm LFCSP and a 20-lead TSSOP. The partsare guaranteed to operate over the extended industrial temperature of -40° C to $+125^{\circ}$ C.

Features

 $10~k\Omega$ and $100~k\Omega$ 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: $1.8\ V$ to $5.5\ V$

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

4 mm × 4 mm package option

AD5144-EP Supports defense and aerospace applications (AQEC standard)

Military temperature range (-55°C to +125°C)

Controlled manufacturing baseline

One assembly/test site

One fabrication site

Product change notification

Qualification data available on request

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



AD5293BRUZ-20

Analog Devices, Inc TSSOP-14



AD8403ARZ10

Analog Devices, Inc

SOIC-24



AD5142ABCPZ10-RL7

Analog Devices, Inc LFCSP-16



AD5254BRUZ10

Analog Devices, Inc TSSOP20



AD8400ARZ10
Analog Devices, Inc
SOIC-8



<u>AD5270BRMZ-20</u>

Analog Devices, Inc MSOP-10