AD5144BRUZ10

Data Sheet

Non Volatile Digital Potentiometer, 10 kohm, Quad, SPI, Logarithmic, ± 8%, 1.8 V

Manufacturers	Analog Devices, Inc
Package/Case	TSSOP-20
Product Type	D/A Converters (DAC) ; Digital Potentiometers (DigiPOT)
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for AD5144BRUZ10 or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD5124/AD5144/AD5144A potentiometers provide a nonvolatile solution for 128-/256-position adjustment applications, offering guaranteed low resistor tolerance errors of ±8% and up to ±6 mA current density in the Ax, Bx, and Wx pins.

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

The linear gain setting mode allows independent programmingof 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 devicessuitable 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 andEEPROM contents.

The AD5124/AD5144/AD5144A are available in a compact, 24-lead, 4 mm × 4 mm LFCSP and a 20-lead TSSOP. The partsare guaranteed to operate over the extended industrial temperaturerange of −40°C to +125°C.

Features

10 kΩ and 100 kΩ 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 µs

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

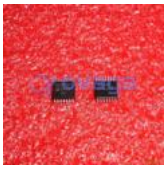
Portable electronics level adjustment

LCD panel brightness and contrast controls

Programmable filters, delays, and time constants

Programmable power supplies

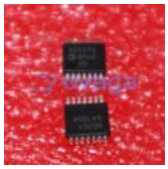
Related Products



AD5292BRUZ-20

Analog Devices, Inc

14TSSOP



AD5293BRUZ-20

Analog Devices, Inc

TSSOP-14

AD5242BRZ10

Analog Devices, Inc

SOIC-16

AD8403ARZ10

Analog Devices, Inc

SOIC-24

[AD5142ABCPZ10-RL7]

Analog Devices, Inc

LFCSP-16

[AD5254BRUZ10]

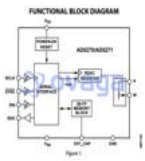
Analog Devices, Inc

TSSOP20

[AD8400ARZ10]

Analog Devices, Inc

SOIC-8



[AD5270BRMZ-20]

Analog Devices, Inc

MSOP-10