

Digital Potentiometer 100kOhm 256POS Non-Volatile 20-Pin TSSOP Tube

Manufacturers	<a href="#">Analog Devices, Inc</a>
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 AD5144BRUZ100 or [Email to us: sales@ovaga.com](mailto: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  $\pm 8\%$  and up to  $\pm 6$  mA current density in the Ax, Bx, and Wx pins.

The low resistor tolerance and low nominal temperature coefficients simplify 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  $40 \Omega$  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/AD5144/AD5144A are available in a compact, 24-lead,  $4 \text{ mm} \times 4 \text{ mm}$  LFCSP and a 20-lead TSSOP. The parts are guaranteed to operate over the extended industrial temperature range of  $-40^\circ\text{C}$  to  $+125^\circ\text{C}$ .

## Features

10 k $\Omega$  and 100 k $\Omega$  resistance options

Resistor tolerance: 8% maximum

Wiper current:  $\pm 6$  mA

Low temperature coefficient: 35 ppm/ $^{\circ}$ 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:  $-40^{\circ}$ C to  $+125^{\circ}$ C

4 mm  $\times$  4 mm package option

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

Military temperature range ( $-55^{\circ}$ C to  $+125^{\circ}$ C)

Controlled manufacturing baseline

One assembly/test site

One fabrication site

Product change notification

Qualification data available on request

## Application

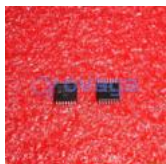
Portable electronics level adjustment

LCD panel brightness and contrast controls

Programmable filters, delays, and time constants

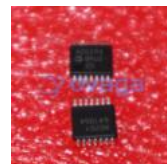
Programmable power supplies

## 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



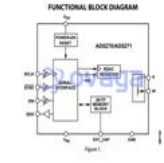
[AD5254BRUZ10](#)

Analog Devices, Inc  
TSSOP20



[AD8400ARZ10](#)

Analog Devices, Inc  
SOIC-8



[AD5270BRMZ-20](#)

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MSOP-10