

Digital Potentiometer 10kOhm 256POS Non-Volatile 16-Pin LFCSP EP T/R

Manufacturers	Analog Devices, Inc
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 AD5142ABCPZ10-RL7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD5122A/AD5142A 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 coefficient 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 RAW and RWB the string resistors, allowing very accurate resistor matching.

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

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

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

The AD5122A/AD5142A are available in a compact, 16-lead, $3 \text{ mm} \times 3 \text{ mm}$ LFCSP and a 16-lead TSSOP. The parts are guaranteed to operate over the extended industrial temperature range of -40°C to $+125^\circ\text{C}$.

Features

10 k Ω and 100 k Ω resistance options

Resistor tolerance: 8% maximum

Wiper current: ± 6 mA

Low temperature coefficient: 35 ppm/ $^{\circ}$ C

Wide bandwidth: 3 MHz

Fast start-up time < 75 μ 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 $+125^{\circ}$ C

3 mm \times 3 mm package option

Qualified for automotive applications

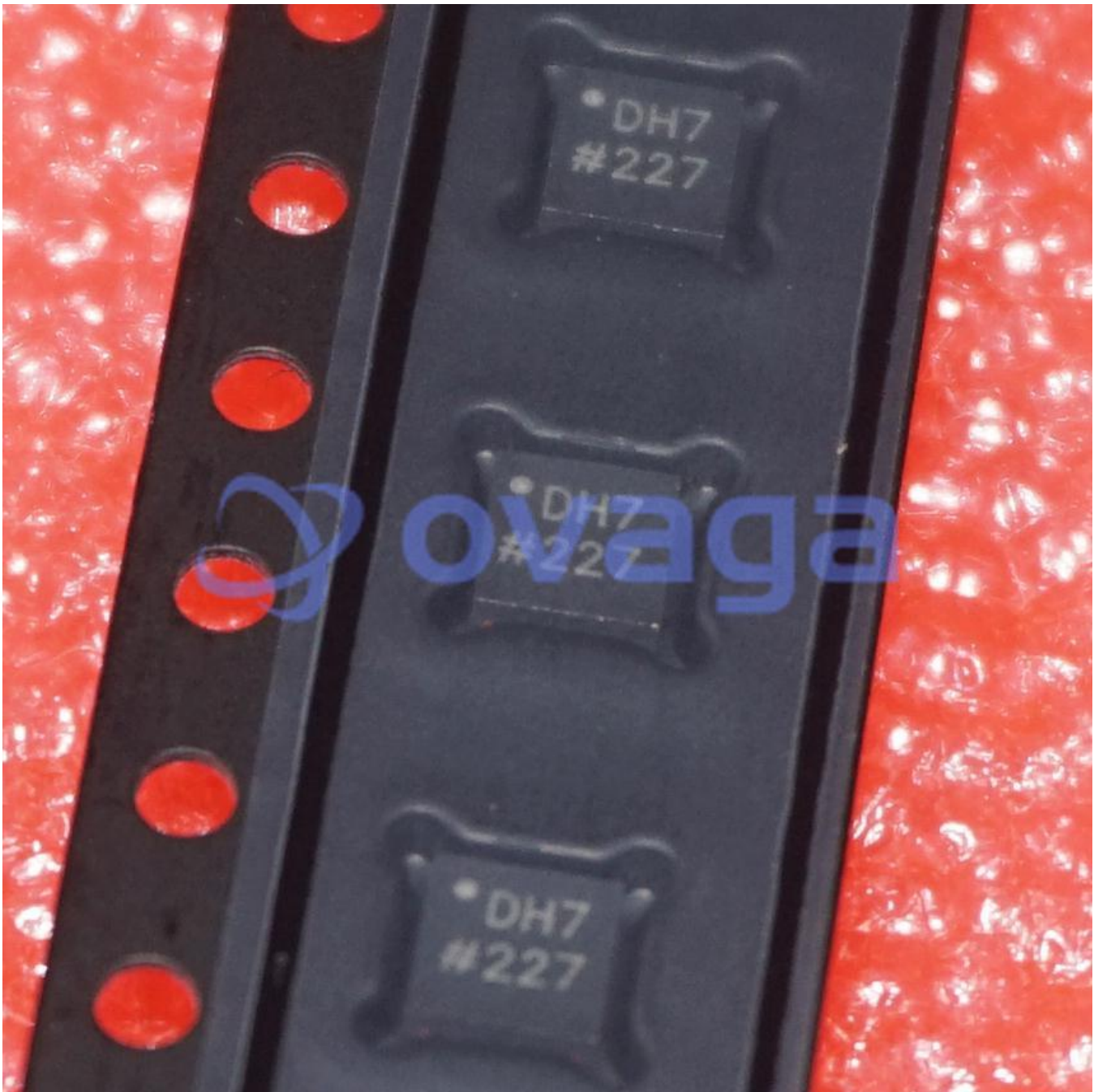
Application

Portable electronics level adjustment

LCD panel brightness and contrast controls

Programmable filters, delays, time constants

Programmable power supplies

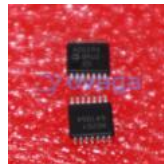


Related Products



[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

