Volatile Digital Potentiometer, 5 kohm, Single, I2C, Serial, ± 30%, 2.7 V

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-10
Product Type	Data Acquisition - Digital Potentiometers
RoHS	Rohs
Lifecycle	
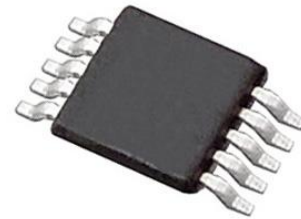
Images are for reference only

Please submit RFQ for AD5161BRMZ5 or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

The AD5161 provides a compact 3 mm × 4.9 mm packaged solution for 256-position adjustment applications. These devices perform the same electronic adjustment function as mechanical potentiometers or variable resistors, with enhanced resolution, solid-state reliability, and superior low temperature coefficient performance.

The wiper settings are controllable through a pin selectable SPI or I2C compatible digital interface, which can also be used to read back the wiper register content. When the SPI mode is used, the device can be daisy-chained (SDO to SDI), allowing several parts to share the same control lines. In the I2C mode, address pin AD0 can be used to place up to two devices on the same bus. In this same mode, command bits are available to reset the wiper position to midscale or to shut down the device into a state of zero power consumption.

Operating from a 2.7 V to 5.5 V power supply and consuming less than 5 µA allows for usage in portable battery-operated applications.

Features

256-position

End-to-end resistance 5 kΩ, 10 kΩ, 50 kΩ, 100 kΩ

Compact MSOP-10 (3 mm × 4.9 mm) package

Pin selectable SPI/I2C compatible interface

Extra package address decode pin AD0

Full read/write of wiper register

Power-on preset to midscale

Single supply 2.7 V to 5.5 V

Low temperature coefficient 45 ppm/°C

Low power,>

Wide operating temperature −40°C to +125°C

SDO output allows multiple device daisy-chaining

Evaluation board available

Application

Mechanical potentiometer replacement in new designs

Transducer adjustment of pressure, temperature, position, chemical, and optical sensors

RF amplifier biasing

Gain control and offset adjustment

Related Products
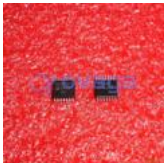
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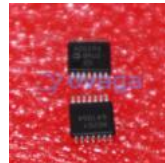14TSSOP

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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
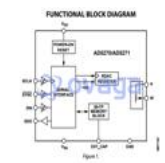
AD5270BRMZ-20
Analog Devices, Inc
MSOP-10