

# AD5162BRMZ10

## Digital Potentiometer 10kOhm 256POS Volatile Linear 10-Pin MSOP Tube

Manufacturer:	Analog Devices, Inc	
Package/Case:	MSOP10	
Product Type:	Data Conversion ICs	
RoHS:	RoHS Compliant/Lead free RoHS	Images are for reference only
Lifecycle:	Active	Inquiry

#### **General Description**

The AD5162 provides a compact 3 mm x 4.9 mm packaged solution for dual 256 position adjustment applications. This device performs the same electronic adjustment function as a 3-terminal mechanical potentiometer. Available in four different end-to-end resistance values ( $2.5 \text{ k}\Omega$ ,  $10 \text{ k}\Omega$ ,  $50 \text{ k}\Omega$ ,  $100 \text{ k}\Omega$ ), this low temperature coefficient device is ideal for high accuracy and stability-variable resistance adjustments.

The wiper settings are controllable through the SPI compatible digital interface. The resistance between the wiper and either end point of the fixed resistor varies linearly with respect to the digital code transferred into the RDAC latch1.

Operating from a 2.7 V to 5.5 V power supply and consuming less than 6 µA allows the AD5162 to be used in portable battery-operated applications. For applications that program the AD5162 at the factory, Analog Devices offers device programming software running on Windows® NT/2000/XP operating systems. This software effectively replaces the need for external SPI controllers, which in turn enhances the time to market of systems. An AD5162 evaluation kit and software are available. The kit includes a cable and instruction manual.

1 The terms digital potentiometer, VT, and RDAC are used interchangeably.

# **Key Features**

### Application

2-Channel, 256-position potentiometer	Systems calibrations			
End-to-End Resistance	Electronics level settings			
2.5kΩ, 10kΩ, 50kΩ, 100kΩ	Mechanical trimmers replacement in new designs			
Compact 10-lead MSOP (3 mm x 4.9 mm) package				
Fast settling time:>	Permanent factory PCB setting			
Full read/write of wiper register	Transducer adjustment of pressure, temperature, position, chemical, and optical sensors			
Power-On preset to midscale	RF amplifier biasing			
Single Supply: 2.7 V to 5.5 V	Automotive electronics adjustment			
Low Temperature	Gain control and offset adjustment			
Coefficient 35 ppm/°C				
Low power,>				
Wide operating temperature: -40°C to +125°C				
Evaluation board available				
Qualified for automotive applications				

### **Recommended For You**

AD5262BRUZ200	AD8402ARUZ50	AD5160BRJZ50-RL7
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
TSSOP16	TSSOP-14	SOT23-8
AD8400ARZ50	AD5280BRUZ20	AD5262BRUZ50
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
SOP8	TSSOP14	TSSOP16
AD5204BRUZ10	AD5207BRUZ10	AD5160BRJZ10-R2
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
TSSOP24	TSSOP14	SOT23-8
AD5200BRMZ10	AD5220BNZ100	AD5259BRMZ100-R7
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc

MSOP10

8-PDIP

MSOP10

#### AD5143BCPZ10-RL7

Analog Devices, Inc

16-LFCSP

### AD8402ARUZ1

Analog Devices, Inc

AD5263BRUZ200

Analog Devices, Inc

TSSOP-14

TSSOP24