AD5263BRUZ50

Digital Potentiometer 50kOhm 256POS Volatile Linear Automotive 24-Pin TSSOP Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	TSSOP24
Product Type:	Data Conversion ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The AD5263 is the industry's first quad-channel, 256-position, digital potentiometer1 with a selectable digital interface. This device performs the same electronic adjustment function as mechanical potentiometers or variable resistors, with enhanced resolution, solid-state reliability, and superior low temperature coefficient performance.

Each channel of the AD5263 offers a completely programmable value of resistance between the A terminal and the wiper or between the B terminal and the wiper. The fixed A-to-B terminal resistance of 20 kΩ, 50 kΩ, or 200 kΩ has a nominal temperature coefficient of ±30 ppm/°C and a ±1% channel-to-channel matching tolerance. Another key feature of this part is the ability to operate from +4.5 V to +15 V, or at ±5 V.

Wiper position programming presets to midscale upon power-on. Once powered, the VR wiper position is programmed by either the 3-wire SPI or 2-wire I2C-compatible interface. In the I2C mode, additional programmable logic outputs enable users to drive digital loads, logic gates, and analog switches in their systems.

The AD5263 is available in a narrow body, 24-lead TSSOP. All parts are guaranteed to operate over the automotive temperature range of –40°C to +125°C.

For single- or dual-channel applications, refer to the AD5260/AD5280 or AD5262/AD5282 data sheets.

Key Features

256-position, 4-channel

End-to-end resistance 20 kΩ, 50 kΩ, 200 kΩ

Pin-selectable SPI®- or I2C®-compatible interface

Power-on preset to midscale

Two package address decode pins AD0 and AD1

Rheostat mode temperature coefficient 30 ppm/°C

Voltage divider temperature coefficient 5 ppm/°C

Wide operating temperature range –40°C to +125°C

10 V to 15 V single supply; ±5 V dual supply

Application

Mechanical potentiometer replacement

Optical network adjustment

Instrumentation: gain, offset adjustment

Stereo channel audio level control

Automotive electronics adjustment

Programmable power supply

Programmable filters, delays, time constants

Line impedance matching

Low resolution DAC/trimmer replacement

Base station power amp biasing

Sensor calibration

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

Recommended For You

AD5262BRUZ200

Analog Devices, Inc

TSSOP16

AD8402ARUZ50

Analog Devices, Inc

TSSOP-14

AD5160BRJZ50-RL7

Analog Devices, Inc

SOT23-8

AD8400ARZ50

Analog Devices, Inc

SOP8

AD5280BRUZ20

Analog Devices, Inc

TSSOP14

AD5262BRUZ50

Analog Devices, Inc

TSSOP16

AD5204BRUZ10

Analog Devices, Inc

TSSOP24

AD5207BRUZ10

Analog Devices, Inc

TSSOP14

AD5160BRJZ10-R2

Analog Devices, Inc

SOT23-8

AD5200BRMZ10

Analog Devices, Inc

MSOP10

AD5220BNZ100

Analog Devices, Inc

8-PDIP

AD5259BRMZ100-R7

Analog Devices, Inc

MSOP10

AD5143BCPZ10-RL7

Analog Devices, Inc

16-LFCSP

AD8402ARUZ1

Analog Devices, Inc

TSSOP-14

AD5263BRUZ200

Analog Devices, Inc

TSSOP24