Non Volatile Digital Potentiometer, 10 kohm, Single, I2C, Serial, Linear, ± 30%, 2.7 V

PIN CONFIGURATION AND FUNCTION DESCRIPTIONS

Figure 4. Pin Configuration

Table 4. Pin Function Descriptions

Images are for reference only

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

Please submit RFQ for AD5258BRMZ10 or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

The AD5258 provides a compact, nonvolatile 3 mm × 4.9 mm packaged solution for 64-position adjustment applications. These devices perform the same electronic adjustment function as mechanical potentiometers* or variable resistors, but with enhanced resolution and solid-state reliability.

The wiper settings are controllable through an I2C-compatible digital interface that is also used to read back the wiper register and EEPROM content in addition, resistor tolerance is stored within EEPROM, providing an end-to-end tolerance accuracy of 0.1%. There is also a software write protection function that ensures data cannot be written to the EEPROM register.

A separate VLOGIC pin delivers increased interface flexibility. For users who need multiple parts on one bus, Address Bit AD0 and Address Bit AD1 allow up to four devices on the same bus.

Features

Nonvolatile memory maintains wiper settings

64-position digital potentiometer

Compact MSOP-10 (3 mm × 4.9 mm)

I2C-compatible interface

VLOGIC pin provides increased interface flexibility

End-to-end resistance 1 kΩ, 10 kΩ, 50 kΩ, 100 kΩ

Resistance tolerance stored in EEPROM (0.1% accuracy)

Power-on EEPROM refresh time <1 ms

Software write protect command

Address Decode Pin AD0 and Address Decode Pin AD1 allow four packages per bus

100-year typical data retention at 55°C

Wide operating temperature −40°C to +85°C

Application

LCD panel VCOM adjustment

LCD panel brightness and contrast control

Mechanical potentiometer replacement in new designs

Programmable power supplies

RF amplifier biasing

Automotive electronics adjustment

Gain control and offset adjustment

Fiber to the home systems

Electronics level settings

Data Sheet, Rev. A, 3/07

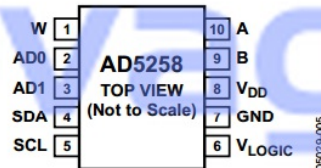# PIN CONFIGURATION AND FUNCTION DESCRIPTIONS

Figure 4. Pin Configuration
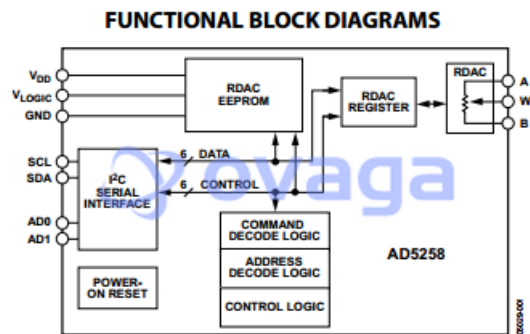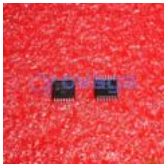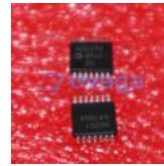
Table 4. Pin Function Descriptions

FUNCTIONAL BLOCK DIAGRAMS

Figure 1. Block Diagram

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

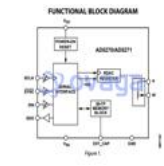SOIC-24

AD5142ABCPZ10-RL7

Analog Devices, Inc

LFCSP-16

AD5254BRUZ10

Analog Devices, Inc

TSSOP20

AD8400ARZ10

Analog Devices, Inc

SOIC-8

AD5270BRMZ-20

Analog Devices, Inc

MSOP-10