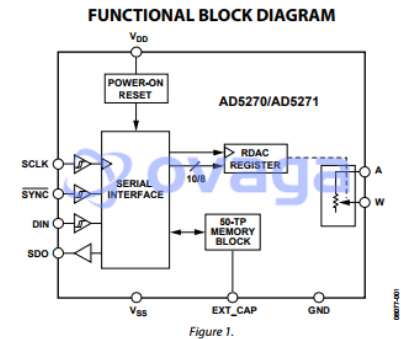


Non Volatile Digital Potentiometer, 20 kohm, Single, Serial, SPI, Linear, $\pm 1\%$, 2.7 V

Manufacturers	<u>Analog Devices, Inc</u>
Package/Case	MSOP-10
Product Type	D/A Converters (DAC) ; Digital Potentiometers (DigiPOT)
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD5270BRMZ-20 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD5270/AD5271 are single-channel, 1024-/256-position digital rheostats that combine industry leading variable resistor performance with nonvolatile memory (NVM) in a compact package.

The AD5270/AD5271 ensure less than 1% end-to-end resistor tolerance error and offer 50-times programmable (50-TP) memory.

The guaranteed industry leading low resistor tolerance error feature simplifies open-loop applications as well as precision calibration and tolerance matching applications.

The AD5270/AD5271 device wiper settings are controllable through the SPI digital interface. Unlimited adjustments are allowed before programming the resistance value into the 50-TP memory. The AD5270/AD5271 do not require any external voltage supply to facilitate fuse blow and there are 50 opportunities for permanent programming. During 50-TP activation, a permanent blow fuse command freezes the resistance position (analogous to placing epoxy on a mechanical trimmer).

The AD5270/AD5271 are available in a 3 mm x 3 mm, 10-lead LFCSP package and in a 10-lead MSOP package. The parts are guaranteed to operate over the extended industrial temperature range of -40°C to $+125^{\circ}\text{C}$.

Features

Single-channel, 1024-/256-position resolution

20 k Ω , 50 k Ω and 100 k Ω nominal resistance

Maximum $\pm 1\%$ nominal resistor tolerance error

50-times programmable (50-TP) wiper memory

Rheostat mode temperature coefficient: 5 ppm/ $^{\circ}\text{C}$

2.7 V to 5.5 V single-supply operation

SPI-compatible interface

Wiper setting readback

Power on refreshed from 50-TP memory

Thin LFCSP, 10-lead, 3 mm \times 3 mm \times 0.8 mm package

Compact MSOP, 10-lead, 3 mm \times 4.9 mm \times 1.1 mm package

Application

Mechanical potentiometer replacements

Op-amp: variable gain control

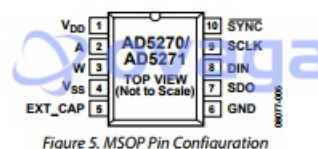
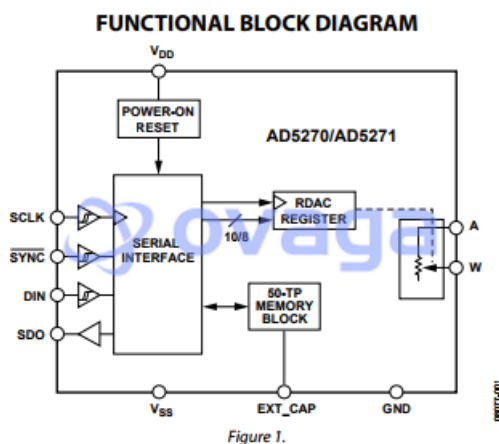
Instrumentation: gain, offset adjustment

Programmable voltage-to-current conversions

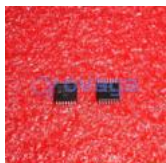
Programmable filters, delays, time constants

Programmable power supply

Sensor calibration

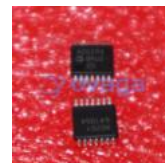


Related Products



[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



[AD5258BRMZ10](#)

Analog Devices, Inc
MSOP-10