

# Digital Potentiometer 50kOhm 32POS Volatile Linear 8-Pin uMAX

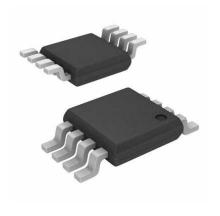
Manufacturer: Maxim Integrated

Package/Case: MSOP8

**Product Type:** Data Conversion ICs

RoHS Compliant/Lead free RoHS:

Lifecycle: Active



Images are for reference only

## **General Description**

The MAX5160/MAX5161 linear-taper digital potentiometers perform the same function as a mechanical potentiometer or a variable resistor. They consist of a fixed resistor and a wiper contact with 32 tap points that are digitally controlled by three lines for the 8-pin MAX5160 or by two lines for the 6-pin MAX5161. These parts are ideal for applications requiring digitally controlled resistors. Three resistance values are available for each part type:  $50k\Omega$ ,  $100k\Omega$ , and  $200k\Omega$ . A nominal resistor temperature coefficient of 50ppm/°C end-to-end and only 5ppm/°C ratiometric makes the MAX5160 ideal for applications requiring a lowtemperature-coefficient variable resistor, such as low-tempco, adjustable-gain circuit configurations. The MAX5160 is available in an 8-pin µMAX package, and the MAX5161 is available in a 6-pin SOT23 package. Both devices are guaranteed over the extended-industrial temperature range (-40°C to +85°C).

### **Application Key Features**

Supply voltage range is 2.7V to 5.5V

Operating temperature range from -40°C to 85°C

Supports serial interface, 3-wire serial data input

Resistance values is 50Kohm

32 tap positions

Wiper resistance of 400 ohm

Resistive tolerance of ±25%, 100nA supply current

±1LSB DNL, ±0.5LSB INL & ±2KV ESD protection

Power-on reset, wiper goes to midscale (position 16)

Glitchless switching between the resistor taps

LCD Screen Adjustment

Mechanical Potentiometer Replacements

Volume Control

## **Recommended For You**

MAX5481EUD+ MAX5436EUB+ MAX5477EUD+

Maxim Integrated Maxim Integrated Maxim Integrated Maxim Integrated

TSSOP14 MSOP10 TSSOP14

MAX5427EUA+ MAX5419NETA+ MAX5497ETE+

Maxim Integrated Maxim Integrated Maxim Integrated

MSOP8 TDFN TQFN16

MAX5489EUD+ MAX5406EUM+T MAX5406EUM+

Maxim Integrated Maxim Integrated Maxim Integrated

TSSOP 48-TSSOP 48-TSSOP

MAX5422ETA+T MAX5388NAUB+ MAX5495ETE+

Maxim Integrated Maxim Integrated Maxim Integrated

QFN8 50 DFN

MAX5529GUA+ MAX5395LATA+T MAX5387MAUD+

Maxim Integrated Maxim Integrated Maxim Integrated

MSOP8 TDFN-8 TSSOP14