

Digital Potentiometer 10kOhm 256POS Non-Volatile Linear Automotive 20-Pin TSSOP Tube

Manufacturers	Microchip Technology, Inc
Package/Case	TSSOP-20
Product Type	Digital Potentiometer ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for MCP4461-103E/ST or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The MCP446X devices are non-volatile, 8-bit (257 wiper steps) digital potentiometers with EEPROM and an I2C compatible interface. The MCP446X family is available with end-to-end resistor values of 5K Ω , 10K Ω , 50k Ω and 100K Ω . These devices offer WiperLock™ Technology which allows the user unlimited reprogramming and locking of the wiper setting. It is useful for equipment that requires factory trimming or recalibration. The MCP446X devices offer a variety of configurations simplifying design while minimizing cost, package size and pin count.

Features

Quad Resistor Network

Potentiometer or Rheostat configuration options

Resistor Network Resolution:

8-bit: 256 Resistors (257 Taps)

Four RAB Resistances options:

5k Ω

10k Ω

50k Ω

100k Ω

Zero-scale to Full-scale Wiper Operation

Low Wiper Resistance – 75Ω typical

Low Tempco:

Absolute (Rheostat) – 50 ppm typical (0°-70°C)

Ratiometric (Potentiometer) – 15 ppm typical

Non-volatile Memory

Automatic Recall of Saved Wiper Setting

WiperLock™ Technology

I2C™Compatible Serial Interface Support:

100 kHz

400 kHz

3.4 MHz

Serial Protocol Allows :

High-Speed Read/Write to wiper

Read/Write to EEPROM

Write Protect to be enabled/disable

WiperLock to be enabled/disabled

Resistor Network Terminal Disconnect Feature via Terminal Control (TCON) Register

Reset Input Pin

Write Protect Feature:

Hardware Write Protect (WP) Control pin

Software Write Protect (WP) Configuration bit

Brown-out Reset Protection – 1.5V typical

Serial Interface Inactive Current – 2.5 uA typical

High-Voltage Tolerant Digital Inputs Up to 12.5V

Supports Split Rail Applications

Wide Operating Voltage:

2.7V to 5.5V - Device Characteristics Specified

1.8V to 5.5V - Device Operation

Wide Bandwidth (-3 dB) Operation – 2 MHz typical for 5.0Ω Device

Extended Temperature Range (-40°C to +125°C)

Package Types: 4x4 QFN-20 and TSSOP-20

AEC-Q100 Grade 1 qualified

Related Products



[MCP4352T-104E/ST](#)

Microchip Technology, Inc
TSSOP-14



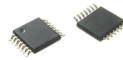
[MCP4661T-103E/ML](#)

Microchip Technology, Inc
QFN-16



[MCP45HV51-503E/ST](#)

Microchip Technology, Inc
TSSOP-14



[MCP45HV51-502E/ST](#)

Microchip Technology, Inc
TSSOP-14



[MCP41HV51-104E/ST](#)

Microchip Technology, Inc
TSSOP-14



[MCP41HV51-103E/ST](#)

Microchip Technology, Inc
TSSOP-14



[MCP42100-I/SL](#)

Microchip Technology, Inc
SOIC-14



[MCP4362-503E/ST](#)

Microchip Technology, Inc
TSSOP-14