

MCP41HV51-104E/ST

Data Sheet

<u>RFO</u>

Volatile Digital Potentiometer, 100 kohm, Single, SPI, Linear, \pm 20%, 1.8 V

Manufacturers	Microchip Technology, Inc	
Package/Case	TSSOP-14	A CONTRACT AND
Product Type	Digital Potentiometer ICs	TITTY .
RoHS		
Lifecycle		Images are for reference only

Please submit RFQ for MCP41HV51-104E/ST or Email to us: sales@ovaga.com We will contact you in 12 hours.

General Description

MCP41HV51 is a single-channel, high voltage digital potentiometer (Digipot) family that supports $10V \sim 36V$ or +/-5V to +/-18V power rails. It features 8-bit resolution with SPI interface. This family is available in TSSOP-14 and QFN-20 (5x5) packages and has $5k\Omega$, $10 k\Omega$, $50 k\Omega$, and $100 k\Omega$ end-to-end resistance(RAB) options . All parts are guaranteed to operate over $-40^{\circ}C$ to $+125^{\circ}C$ extended temperature range. Microchip's MCP41HVX1 and MCP45HVX1 digital potentiometer (Digipot) families offer the widest operating voltage range that is currently available on the market.

Features
High-Voltage Analog Support:
Wide Operating Voltage:
Analog: 10V to 36V (specified performance)
Digital: 2.7V to 5.5V
Resistor Network Resolution
8-bit: 255 Resistors (256 Taps)
RAB Resistance Options:
5kΩ
10kΩ
50kΩ

$100 \mathrm{k}\Omega$

High Terminal/Wiper Current (IW) Support:

 $25 \text{ mA} (\text{for } 5 \text{k}\Omega)$

 $12.5 \text{ mA} (\text{for } 10 \text{ k}\Omega)$

6.5 mA (for 50 k Ω and 100 k $\Omega)$

Zero-Scale to Full-Scale Wiper Operation

Low Wiper Resistance: 75Ω (Typical)

Low Tempco:

Absolute (Rheostat): 50 ppm Typical(0°C to +70°C)

Ratiometric (Potentiometer): 15 ppm Typical

SPI Serial Interface (10 MHz, Modes 0,0 and 1,1)

Resistor Network Terminal Disconnect Via:

Shutdown Pin (SHDN)

Terminal Control (TCON) Register

Write Latch (WLAT) Pin to control update of Volatile Wiper Register (such as Zero Crossing)

Power-On Rest / Brown-Out Reset for both:

Digital Supply (VL/DGND); 1.5V Typical

Analog Supply (V+ / V-); 3.5V Typical

Serial Interface Inactive Current (3 µA Typical)

500 kHz Typical Bandwidth (-3 dB) Operation(5.0 kΩ Device)

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

Package Types: TSSOP-14 and QFN-20 (5x5)

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

MCP41HV51-103E/ST



Microchip Technology, Inc TSSOP-14



MCP4461-103E/ST

Microchip Technology, Inc TSSOP-20



MCP42100-I/SL

Microchip Technology, Inc SOIC-14

MCP4362-503E/ST



Microchip Technology, Inc TSSOP-14