

12-Bit DACs with Internal VREF and SPI[®] Interface, Counter Shift Registers Single 12-bit DAC

Manufacturers	Microchip Technology, Inc
Package/Case	SOIC-8
Product Type	Data Conversion ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for MCP4821-E/SN or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

MCP4821 is a single channel 12-bit Digital-to-Analog converter (DAC) with internal voltage reference. This device offers high accuracy and low power consumption, and is available in various packages. Communication with the device is accomplished via a simple serial interface using SPI protocols. The MCP4821 device is a part of the MCP4801/MCP4811/MCP4821 product family, which are single channel 8-bit/10-bit/12-bit DACs with internal voltage reference (VREF). These devices provide very high accuracy and low noise performance, and are suitable for consumer and industrial applications, such as set point control, offset adjustment and sensor calibration applications. The low power consumption and small package options make these devices very attractive for many portable and battery-powered applications. If two outputs are needed then the MCP4802/4812/4822 dual channel product family can be used.

Features

12-bit Resolution

Single Channel Voltage Output

2.7V to 5.5V Operation

Operating Current 330 μ A (typ)

Internal Voltage Reference 2.048V

Selectable Unity or 2x Gain Output

INL \pm 2 LSB (typ)

DNL \pm 0.75 LSB (max)

Output Settling Time 4.5 μ s

SPI Interface

8-pin PDIP, SOIC, MSOP and 2x3 DFN packages

Temperature Range -40°C to +125°C

AEC-Q100 Grade 1 qualified

Related Products



[MCP4706A0T-E/CH](#)

Microchip Technology, Inc
SOT-23-6



[MCP4922-E/SL](#)

Microchip Technology, Inc
SOIC-14



[MCP4716A0T-E/MAY](#)

Microchip Technology, Inc
DFN-6



[MCP3903-I/SS](#)

Microchip Technology, Inc
SSOP-28



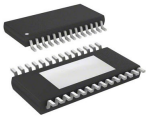
[MCP48CVB21-E/UN](#)

Microchip Technology, Inc
10-TFSOP, 10-MSOP (0.118, 3.00mm Width)



[MCP4728A1T-E/UN](#)

Microchip Technology, Inc
DFN-10



[MCP3564RT-E/ST](#)

Microchip Technology, Inc
TSSOP-20



[MCP3204-CI/ST](#)

Microchip Technology, Inc
TSSOP-14