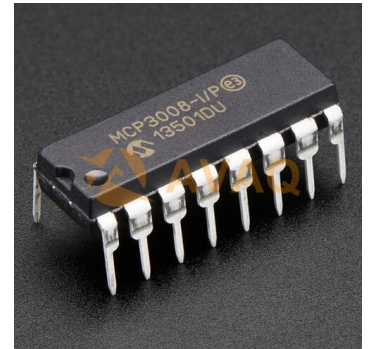


8-Channel Single ADC SAR 200ksps 10-bit Serial Automotive 16-Pin PDIP Tube



Images are for reference only

[Inquiry](#)

Manufacturer: [Microchip Technology, Inc](#)

Package/Case: DIP-16

Product Type: Data Conversion ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The MCP3008 10-bit Analog-to-Digital Converter (ADC) combines high performance and low power consumption in a small package, making it ideal for embedded control applications. The MCP3008 features a successive approximation register (SAR) architecture and an industry-standard SPI serial interface, allowing 10-bit ADC capability to be added to any PIC® microcontroller. The MCP3008 features 200k samples/second, 8 input channels, low power consumption (5nA typical standby, 425µA typical active), and is available in 16-pin PDIP and SOIC packages. Applications for the MCP3008 include data acquisition, instrumentation and measurement, multi-channel data loggers, industrial PCs, motor control, robotics, industrial automation, smart sensors, portable instrumentation and home medical appliances.

Key Features

10-bit resolution

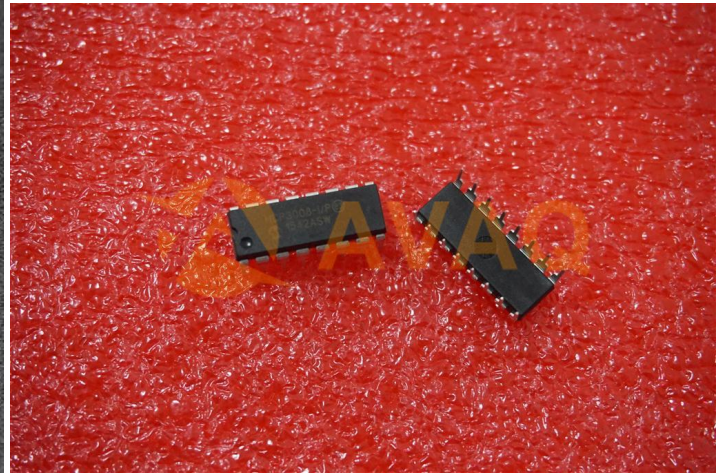
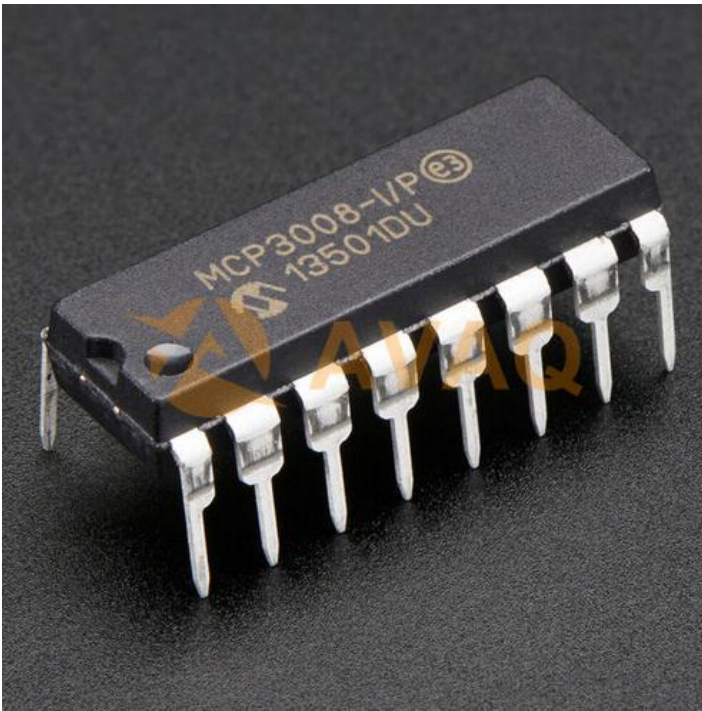
± 1 LSB max DNL

± 1 LSB max INL

Analogue inputs programmable as single-ended or pseudo-differential pairs

On-chip sample and hold

Low power CMOS technology



Recommended For You

MCP3911A0-E/SS

Microchip Technology, Inc
SSOP20

MCP3201T-CI/SN

Microchip Technology, Inc
SOP8

MCP3208-CI/P

Microchip Technology, Inc
DIP

MCP3001-I/SN

Microchip Technology, Inc
SOP8

MCP3208-BI/P

Microchip Technology, Inc
DIP-16

MCP4822-E/P

Microchip Technology, Inc
DIP-8

MCP3421A0T-E/CH

Microchip Technology, Inc
SOT23-6

MCP3425A0T-E/CH

Microchip Technology, Inc
SOT23-6

MCP3427-E/UN

Microchip Technology, Inc
MSOP10

MCP3550-50E/SN

Microchip Technology, Inc
SOP8

MCP3422A0-E/SN

Microchip Technology, Inc
SOP-8

MCP3553-E/SN

Microchip Technology, Inc
SOP8

MCP3422A1-E/SN

Microchip Technology, Inc
SOP-8

MCP3208T-CI/SL

Microchip Technology, Inc
SOP

MCP3204-BI/P

Microchip Technology, Inc
DIP14