
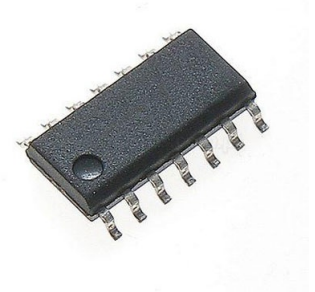


## 4-Channel Single ADC Delta-Sigma 3.75sps 18-bit Serial Automotive 14-Pin SOIC N Tube

<b>Manufacturer:</b>	<a href="#">Microchip Technology, Inc</a>
<b>Package/Case:</b>	SOP14
<b>Product Type:</b>	Data Conversion ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The MCP3424 is a four channel low-noise, high accuracy delta-sigma A/D converter with differential inputs and up to 18 bits of resolution. The on-board precision 2.048V reference voltage enables an input range of  $\pm 2.048V$  differentially. The device uses a two-wire I2C™ compatible serial interface and operates from a single power supply ranging from 2.7V to 5.5V. The MCP3424 device performs conversions at rates of 3.75, 15, 60 or 240 samples per second depending on user controllable configuration bit settings using the two-wire I2C™ compatible serial interface. The I2C™ address is user configurable with two address selection pins. This device has an onboard programmable gain amplifier (PGA). User can select the PGA gain of x1, x2, x4, or x8 before the analog-to-digital conversion takes place. This allows the MCP3424 device to convert a smaller input signal with high resolution. The device has two conversion modes: (a) Continuous mode and (b) One-Shot mode. In One-Shot mode, the device enters a low current standby mode automatically after one conversion. This reduces current consumption greatly during idle periods. The MCP3424 device can be used for various high accuracy analog-to-digital data conversion applications where ease of use, low power consumption and small footprint are major considerations.

### Key Features

- Differential input operation
- Onboard voltage reference with 15ppm/°C drift
- Onboard PGA
- INL 10ppm of FSR maximum
- 135µA at 3V Low current consumption
- One-shot or continuous conversion options
- Onboard oscillator

### Recommended For You

#### MCP3911A0-E/SS

Microchip Technology, Inc

SSOP20

#### MCP3008-I/P

Microchip Technology, Inc

DIP-16

#### 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