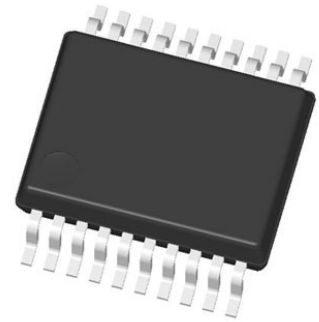


## AFE General Purpose 2 ADC 16bit 3.6V/5V 20-Pin SSOP Tube



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Microchip Technology, Inc](#)

**Package/Case:** SSOP20

**Product Type:** Data Conversion ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The MCP3901 dual channel analog front end features high accuracy 16/24-bit delta-sigma A/D converters, internal programmable gain amplifiers, an internal voltage reference, and phase-delay compensation with up to 91 dB SINAD. Communication with the MCP3901 is done via the SPI interface enabling control of the PGAs, oversampling ratio for control of the output data rate (up to 64 ksps), resolution, dithering, shutdown and other communication features.

For product comparison, please consider: MCP3911

### Key Features

91dB SINAD, -104dBc Total harmonic distortion (THD) (up to 35th harmonic)

109dB Spurious-free dynamic range (SFDR) for each channel

Programmable data rate up to 64ksps

Ultra low-power shutdown mode with  $<2\mu\text{A}$

-133dB Crosstalk between the two channels

12ppm/°C Low drift internal voltage reference

Differential voltage reference input pins

High gain PGA on each channel (up to 32V/V)

Phase delay compensation between the two channels with 1 $\mu\text{s}$  time resolution

Separate modulator outputs for each channel

High-speed, addressable 20MHz SPI Interface with Mode 0,0 and 1,1 compatibility

### 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