CMOS, 24-Bit Signal Conditioning ADC with Current Source; Package: SOIC - Wide; No of Pins: 24; Temperature Range: Commercial

| | |
|---|---|
| Manufacturers | Analog Devices, Inc |
| Package/Case | SOIC-24 |
| Product Type | Data Conversion ICs |
| RoHS | Pb-free Halide free |
| Lifecycle | |

Images are for reference only

Please submit RFQ for AD7710ARZ or Email to us: sales@ovaga.com We will contact you in 12 hours.     RFQ

## General Description

The part features two differential analog inputs and a differential reference input. Normally, one of the channels will be used as the main channel with the second channel used as an auxiliary input to periodically measure a second voltage. It can be operated from a single supply (by tying the VSS pin to AGND) provided that the input signals on the analog inputs are more positive than -30 mV. By taking the VSS pin negative, the part can convert signals down to -VREF on its inputs. The AD7710 thus performs all signal conditioning and conversion for a single or dual channel system.

The AD7710 is ideal for use in smart, microcontroller based systems. Input channel selection, gain settings and signal polarity can be configured in software using the bidirectional serial port. The AD7710 contains self-calibration, system calibration and background calibration options and also allows the user to read and write the on-chip calibration registers.

CMOS construction ensures low power dissipation and a software programmable power down mode reduces the standby power consumption to only 7 mW typical. The part is available in a 24-pin, 0.3 inch-wide, plastic and hermetic dual-in-line package (DIP) as well as a 24-lead small outline (SOIC) package.

# Features

Charge Balancing ADC24 Bits, No Missing Codes±0.0015% Nonlinearity

2-Channel Programmable Gain Front EndGains from 1 to 128Differential Inputs

Low-Pass Filter with Programmable Filter Cutoffs

Ability to Read/Write Calibration Coefficients

Bidirectional Microcontroller Serial Interface

Internal/External Reference Option

Single- or Dual-Supply Operation

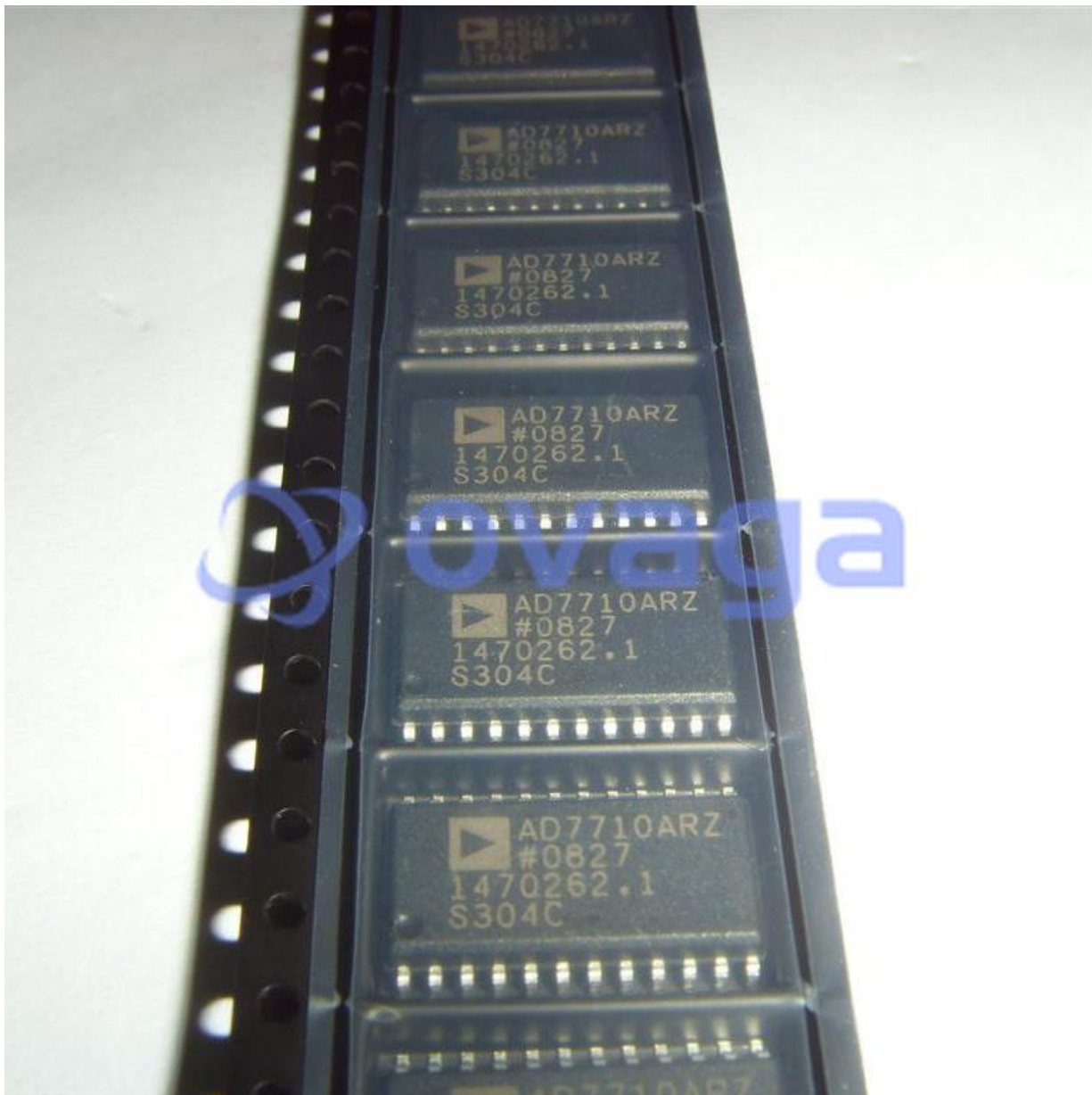Low Power (25 mW Typ) with Power-Down Mode (7 mW Typ)

# Application
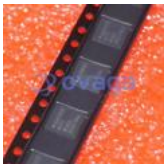
Weigh Scales

Thermocouples

Process Control

Smart Transmitters
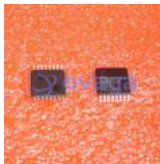
Chromatography

**Related Products**



[ADAS3022BCPZ](#)

Analog Devices, Inc

LFCSP-40



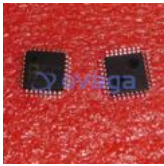[AD7266BSUZ](#)

Analog Devices, Inc

TQPF-32



[AD574AJNZ](#)

Analog Devices, Inc

PDIP-28



[AD7401YRWZ](#)

Analog Devices, Inc

SOIC-16

**AD7938BSUZ**

Analog Devices, Inc

TQFP-32

**AD7192BRUZ-REEL**

Analog Devices, Inc

TSSOP-24

**AD7124-8BCPZ-RL7**

Analog Devices, Inc

LFCSP-32

**AD9680BCPZ-500**

Analog Devices, Inc

LFCSP-64