

24-bit 470SPS Three-channel Analog-to-Digital Converter (ADC)

1 Main features:

- ◆ Conversion Bits: 24 Bits
- ◆ Throughput rate: 4.17SPS to 470SPS
- ◆ Operating voltage: 2.7V to 5.25V
- ◆ Working current: 400uA
- ◆ Root-mean-square noise : 40nV@4.17SPS
- ◆ SPI serial interface
- ◆ Package: 16-pin TSSOP
- ◆ Temperature range: -40°C to +105°C

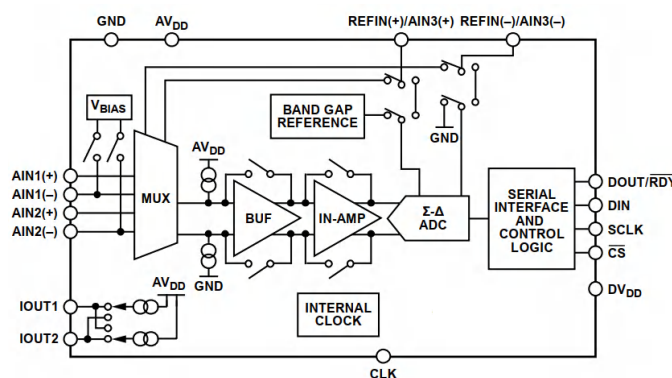
2. Typical applications

- ◆ Instrumentation measurement
- ◆ Gas analysis
- ◆ Industrial process control
- ◆ Chemical analysis

3 Product Description

This chip is a 24-bit Sigma-Delta analog-to-digital converter (ADC) with low power consumption, low noise and high precision. The chip has three differential analog inputs, and the low noise amplifier in the chip can play large and small signal inputs.

The chip integrates high precision band gap reference with low drift and low noise, programmable current source, oscillator and bias voltage source. The chip is compatible with the foreign product AD7793 pin and can be replaced. The functional structure block diagram of the chip is shown as follows:



4 Product Highlights

- ◆ Low power consumption, low noise design
- ◆ Three channel signal input
- ◆ High integration

5 Compared with similar foreign products

	precision	Conversion rate	Data port	Working current	LOSS-free code	Root-mean-square noise	Encapsulation form
AD7793 (ADI)	24-bit	470SPS	serial	400uA	24bits	40nV@4.17SPS	TSSOP
HL7793	24-bit	470SPS	serial	400uA	24bits	40nV@4.17SPS	TSSOP