



16-bit 64KSPS 6-channel analog Front-end Analog-to-Digital Converter (ADC)

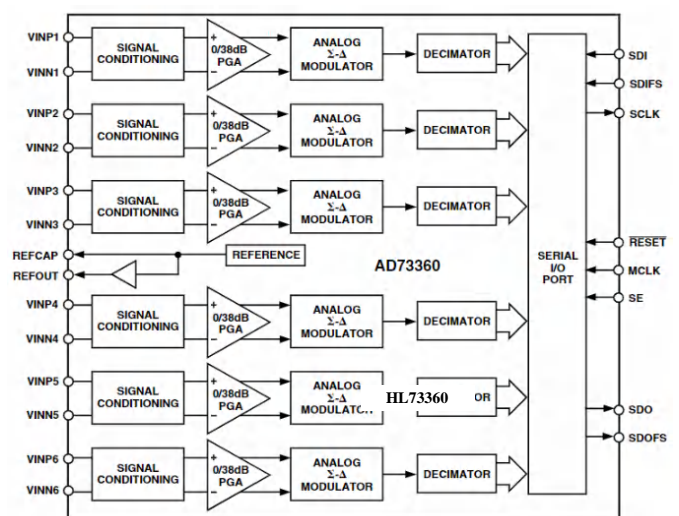
1 Main features:

- ◆ Number of channels: 6
- ◆ Conversion bits: 16Bit
- ◆ Maximum sampling rate: 64KSPS
- ◆ Power supply voltage: 2.7~5.5V
- ◆ Clock rate: 256/512/768 x Fs
- ◆ Signal to noise ratio: 77dB@8KHz
- ◆ PGA configuration range: 0 to 38dB
- ◆ Group delay: 25μs/ADC channel
- ◆ Maximum power consumption: 80mW @2.7V
- ◆ Encapsulation : SOIC28/TQFP44

This chip is particularly suitable for industrial power metering because the channels are sampled simultaneously, which reduces the time (phase) delay between conversions to extremely low levels. The chip is compatible with the foreign product AD73360 pin and can be replaced. The functional structure block diagram of the chip is shown as follows:

2. Typical applications

- ◆ Universal analog input
- ◆ Industrial power measurement
- ◆ Motor control
- ◆ Synchronous sampling application



3 Product Description

This chip is a 6-channel analog input front end (AFE) processor for general purpose applications such as industrial power metering or multi-channel analog input. Equipped with six 16-bit A/D conversion channels, each channel can achieve a signal-to-noise ratio of 77dB under the vocal cord signal bandwidth. A programmable input gain amplifier (PGA) is also integrated and the gain Settings are divided into 8 stages: from 0 dB to 38 dB.

4 Product Highlights

- ◆ Six 16-bit ADCs
- ◆ Programmable input sampling rate
- ◆ Low group delay
- ◆ Flexible serial port

5 Compared with similar foreign products

	precision	Maximum sampling rate	Data port	Power dissipation	Signal -to-noise ratio	Number of channels	Group delay
AD73360 (ADI)	16-bit	64KSPS	serial	80mW@2.7V	77dB@8KHz	6	25μs/ADC channel
HL73360	16-bit	64KSPS	serial	80mW@2.7V	77dB@8KHz	6	25μs/ADC channel