



16-bit 510KSPS 8-channel Analog-to-Digital Converter (ADC)

1 Main features:

- ◆ Conversion bits: 16Bit
- ◆ Throughput rate: 510 KSPS
- ◆ Low power consumption: 390mW
- ◆ INL: $\pm 3.5LSB$ Low power consumption: 390mW
- ◆ SNDR: 90dB@10kHz input
- ◆ THD: -94dB@10kHz input
- ◆ Signal input range: $\pm 5V, \pm 10V$ (VREF=2.5V)
- ◆ Pipeline-free delay
- ◆ Serial interface: SPI compatible
- ◆ Encapsulation: QFP64

2. Typical applications

- ◆ Power supply equipment
- ◆ Servo control system
- ◆ Automatic test equipment
- ◆ Data acquisition
- ◆ Medical instrument

3 Product Description

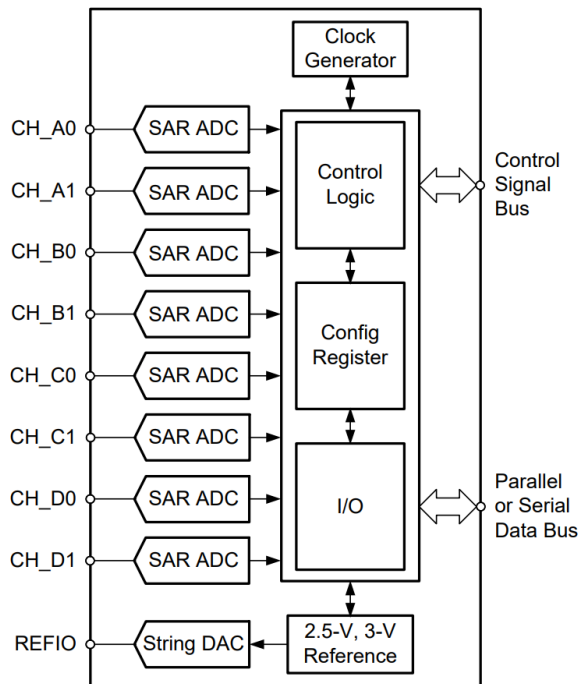
HL8568 is an eight-channel synchronous sampling, 16-bit precision, 250KSPS conversion rate successive approximation analog-to-digital converter chip. The HL8568 can be configured to quantify input signals in the $\pm 5V, \pm 10V$ range,

5 Compared with similar foreign products

	precision	Conversion rate	Data port	Power dissipation	SNDR	THD	Encapsulation form
ADS8568 (TI)	16-bit	510KSPS	Serial/parallel port	390mW	90dB@10kHz	-94dB@10kHz	QFP-64
HL8568	16-bit	510KSPS	Serial/parallel port	390mW	90dB@10kHz	-94dB@10kHz	QFP-64

and can be selected for parallel or serial interface communication.

HL8568 and foreign products ADS8568 pin compatible, can be replaced, the functional structure of the chip block diagram as shown below:



4 Product Highlights

- ◆ Supports multiple ADCs Daisy chain connection
- ◆ Power consumption and throughput change linearly
- ◆ Simultaneous sampling
- ◆ Compatible with serial/parallel interfaces