



16-bit 6MSPS single-channel Analog-to-Digital Converter (ADC)

1 Main features:

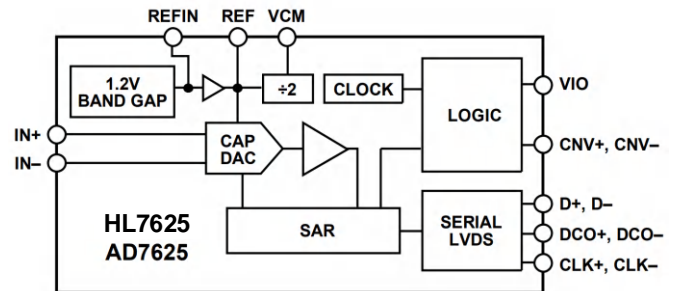
- ◆ Conversion bits: 16 bits
- ◆ Throughput rate: 6 MSPS
- ◆ Power consumption: 135mW
- ◆ INL: $\pm 1\text{LSB}$ (Typical value)
- ◆ SNR: 93dB@10kHz input
- ◆ THD: -105dB@10kHz input
- ◆ Differential input range: $\pm V_{\text{REF}}$
($V_{\text{REF}}=4.096$)
- ◆ Pipeline-free delay
- ◆ LVDS interface
- ◆ Encapsulation: QFN32

2. Typical applications

- ◆ Test equipment
- ◆ Frequency analyzer
- ◆ receiver
- ◆ Digital image processing
- ◆ High speed data acquisition

3 Product Description

This chip is a 16-bit, 6MSPS successive approximation analog-to-digital converter (ADC), which can achieve signal-to-noise ratio characteristics above 93dB and linearity characteristics within 1LSB. This chip is compatible with foreign products AD7625 pin, which can be replaced. The functional structure block diagram of the chip is shown below:



4 Product Highlights

- ◆ On-chip integrated reference voltage
- ◆ High throughput
- ◆ High precision

5 Compared with similar foreign products

	precision	Conversion rate	Data port	Power dissipation	SNDR	THD	Encapsulation form
AD7625 (ADI)	16-bit	6MSPS	LVDS	135mW	93dB@10 kHz	-105dB@10kHz	QFN32
HL7625	16-bit	6MSPS	LVDS	135mW	93dB@10 kHz	-105dB@10kHz	QFN32