

PRELIMINARY

August 1997

Dual 10-Bit, 40/60 MSPS A/D Converter with Internal Voltage Reference

Features

- Sampling Rate 60 MSPS
- 8.3 Bits at $f_{IN} = 10\text{MHz}$
- Low Power at 60 MSPS 600mW
- Wide Full Power Input Bandwidth 250MHz
- On-Chip Sample and Holds
- Internal Band-gap Voltage Reference 2.5V
- Fully Differential or Single-Ended Analog Inputs
- Single Supply Voltage +5V
- TTL/CMOS Compatible Digital Inputs
- CMOS Compatible Digital Outputs 3.0/5.0V
- Offset Binary Digital Data Output Format

Applications

- Wireless Local Loop
- I/Q Demodulation
- Medical Imaging
- High Speed Data Acquisition

Description

The HI5762 is a monolithic, dual 10-bit, analog-to-digital converter fabricated in a CMOS process. It is designed for high speed applications where wide bandwidth and low power consumption are essential. Its 40 and 60 MSPS speed is made possible by a fully differential pipelined architecture with both an internal sample and hold and internal band-gap voltage reference.

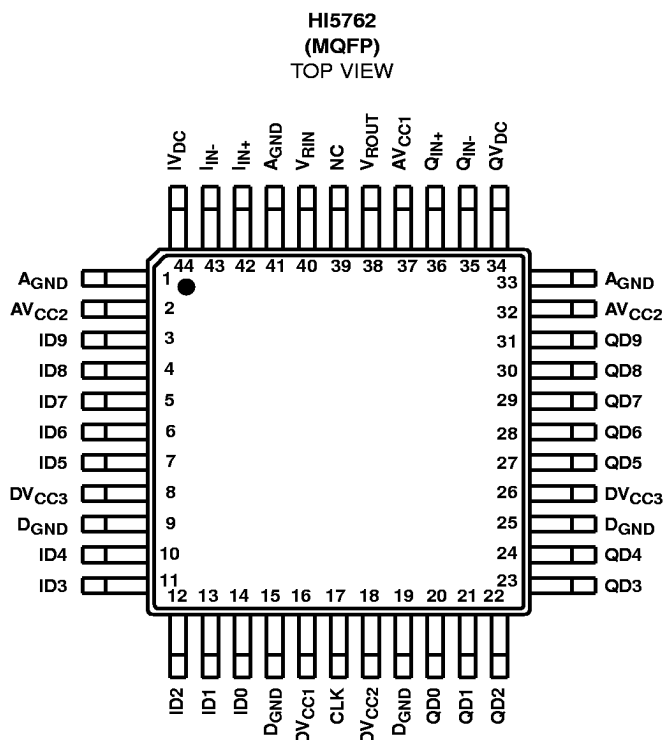
The HI5762 has excellent dynamic performance while consuming only 600mW power at 60 MSPS. Data output latches are provided which present valid data to the output bus with a latency of 7 clock cycles.

Refer to the HI5662 data sheet for 8-bit resolution.

Ordering Information

PART NUMBER	TEMP. RANGE (°C)	PACKAGE	PKG. NO.
HI5762/4IN	-40 to 85	44 Ld MQFP	Q44.10x10
HI5762/6IN	-40 to 85	44 Ld MQFP	Q44.10x10
HI5762EVAL1	25	Evaluation Board	

Pinout



CAUTION: These devices are sensitive to electrostatic discharge. Users should follow proper IC Handling Procedures.

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