

ADVANCE INFORMATION

November 1993

12-Bit, 5MHz A/D Converter

Features

- 200ns Conversion Time
- 12-Bit No Missing Codes Over Temperature
- 0.5 LSB DNL/1.0 LSB INL
- High Input Bandwidth
- Precision Voltage Reference
- $\pm 2.5V$ Input Signal Range
- Zero Latency/No Pipeline Delay

Applications

- High Speed Data Acquisition Systems
- Medical Imaging
- Radar Signal Analysis
- Document and Film Scanners
- Vibration/Waveform Spectrum Analysis
- Digital Servo Control

Description

The HI5801 is a monolithic, 12-bit, Analog-to-Digital Converter fabricated in the HBC10 BiCMOS process. It is a complete subsystem containing voltage reference, two-step subranging A/D, error correction, control logic, and timing generator. The HI5801 is designed for high speed applications where wide bandwidth, accuracy and low distortion are essential.

The HI5801 is available in Commercial and Industrial temperature ranges and is offered in a 40 pin ceramic DIP and a 44 pin PLCC package.

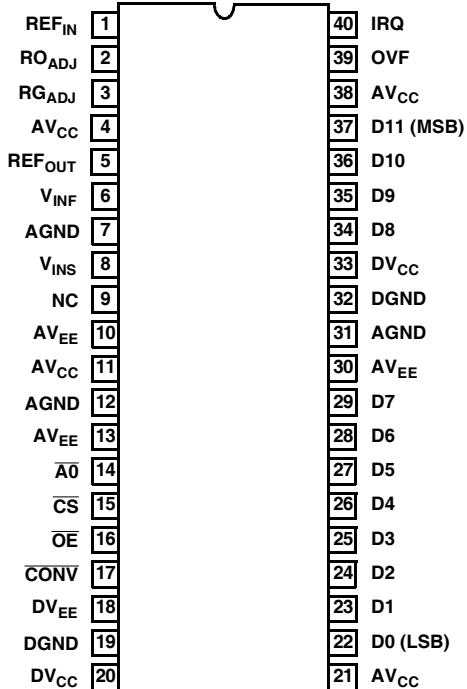
Ordering Information

| PART NUMBER | LINEARITY | TEMP. RANGE | PACKAGE |
|-------------|-------------|----------------|---------------|
| HI5801AIJ | ± 2 LSB | -40°C to +85°C | 40 Pin CERDIP |
| HI5801BIJ | ± 1 LSB | -40°C to +85°C | 40 Pin CERDIP |
| HI5801JCM* | ± 2 LSB | 0°C to +75°C | 44 Pin PLCC |
| HI5801KCM* | ± 1 LSB | 0°C to +75°C | 44 Pin PLCC |

* Consult Factory for Availability

Pinout

40 PIN CERDIP
TOP VIEW



Functional Block Diagram

