

## 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.

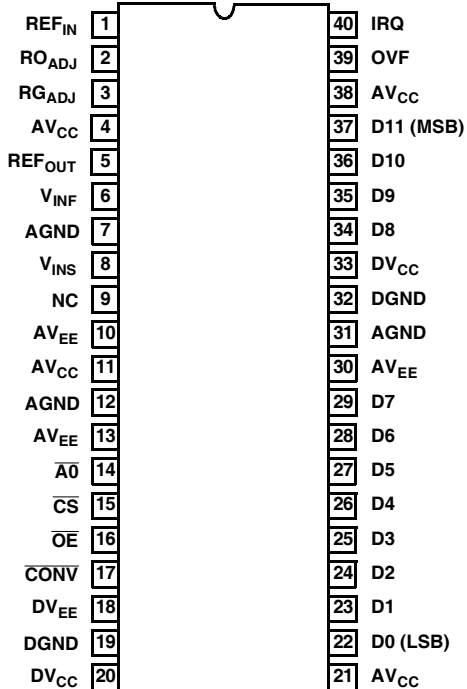
### Ordering Information

PART NUMBER	LINEARITY	TEMP. RANGE	PACKAGE
HI5801AIJ	$\pm 2LSB$	$-40^{\circ}C$ to $+85^{\circ}C$	40 Pin CERDIP
HI5801BIJ	$\pm 1LSB$	$-40^{\circ}C$ to $+85^{\circ}C$	40 Pin CERDIP
HI5801JCM*	$\pm 2LSB$	$0^{\circ}C$ to $+75^{\circ}C$	44 Pin PLCC
HI5801KCM*	$\pm 1LSB$	$0^{\circ}C$ to $+75^{\circ}C$	44 Pin PLCC

\* Consult Factory for Availability

### Pinout

40 PIN CERDIP  
TOP VIEW



### Functional Block Diagram

