

## 12-Bit, 100 kHz, Sampling A/D Converters

### Features

- Monolithic CMOS A/D Converter
  - 2  $\mu$ s Track/Hold Amplifier
  - 8  $\mu$ s A/D Converter
  - 3 V Voltage Reference
  - Internal Clock
  - Parallel, Serial and Byte Outputs
  
- 12-Bit ADC and Reference Accuracy
  - Linearity: 0.5 LSB
  - SNR: 73 dB
  
- Input Ranges
  - $\pm 3$  V for CS7870
  - 0 to +5 V for CS7875
  
- Low Power: 75 mW

### General Description

The CS7870 and CS7875 are complete monolithic CMOS analog-to-digital converters providing 100kHz throughput. The capacitive DAC has been calibrated at the factory to ensure 12-bit performance.

The CS7870/CS7875 have a high speed digital interface with three-state data outputs and standard control inputs allowing easy interfacing to common microprocessors and digital signal processors. Conversion results are available in either 12-bit parallel, two 8-bit bytes, or serial data.

The CS7870/CS7875 are available in a 24-pin, 0.3" plastic dual-in-line package (PDIP), and a 28-pin PLCC package.

The CS7870/CS7875 are pin compatible replacements for the AD7870/7875 with equal or better performance.

**ORDERING INFORMATION:** Page 23

