

## 12-Bit, 20 MHz A/D Converter

### Features

- Monolithic 20 MSPS CMOS ADC
- On-chip Track/Hold
- On-chip Voltage Reference
- +5V Power Supply Only
  
- Dynamic Performance ( $f_{in}=4.97\text{MHz}$ ):
- SNR: 62 dB
- THD: 66 dB
- SFDR: 70 dB
  
- Analog Input Range:
- Single-ended Input:  $1.2\text{V}_{\text{p-p}}$
- Differential Input:  $2.4\text{V}_{\text{p-p}}$
  
- Low Power: 225 mW

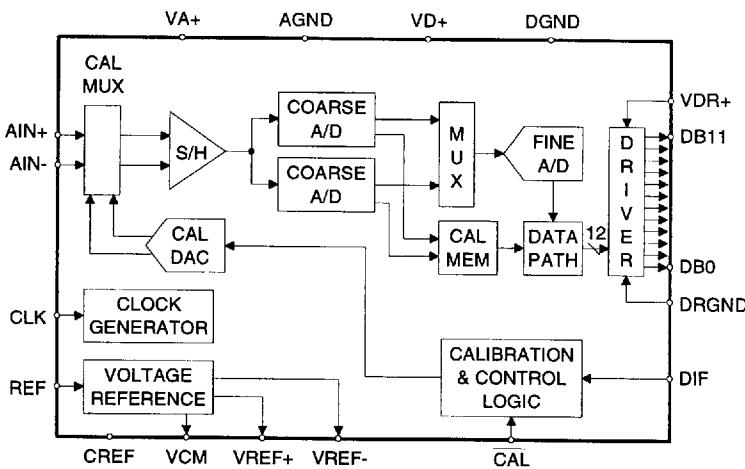
### General Description

The CS5490 is a monolithic 12-bit sampling analog-to-digital converter capable of 20 MSPS conversion rate. To achieve high throughput, the CS5490 uses a fully pipelined architecture. Unique self-calibration circuitry ensures excellent linearity with no missing codes over the entire operating temperature range.

Digital inputs are CMOS and TTL compatible. Digital outputs are CMOS compatible. The analog input can be driven by either a differential  $2.4\text{ V}_{\text{p-p}}$  signal, or a  $1.2\text{ V}_{\text{p-p}}$  single-ended signal. Output data is available in offset binary format.

The CS5490 advanced CMOS construction provides low power consumption and the inherent reliability of monolithic devices.

**For more information contact  
Crystal Semiconductor**



### Product Preview

This document contains information for a new product. Crystal Semiconductor reserves the right to modify this product without notice.

**Crystal Semiconductor Corporation**  
P.O. Box 17847, Austin, TX 78760  
(512) 445 7222 Fax: (512) 445 7581

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