

ADC16061

Self-Calibrating 16-Bit, 2.5 MSPS, 390 mW A/D Converter

General Description

The ADC16061 is a self-calibrating 16-bit, 2.5 Megasample per second analog to digital converter. It operates on a single +5V supply, consuming just 390mW (typical).

The ADC16061 provides an easy and affordable upgrade from 12 bit and 14 bit converters. The ADC16061 may also be used to replace many hybrid converters with a resultant saving of space, power and cost.

The ADC16061 operates with excellent dynamic performance at input frequencies up to ½ the clock frequency. The calibration feature of the ADC16061 can be used to get more consistent and repeatable results over the entire operating temperature range. On-command self-calibration reduces many of the effects of temperature-induced drift, resulting in more repeatable conversions.

The Power Down feature reduces power consumption to less than 2mW.

The ADC16061 comes in a TQFP and is designed to operate over the commercial temperature range of 0°C to +70°C.

Features

- Single +5V Operation
- Self Calibration
- Power Down Mode

Key Specifications

■ Resolution 16 Bits■ Conversion Rate 2.5 Msps (min)

■ DNL
 1.0 LSB (typ)
 ■ SNR (f_{IN} = 500 kHz)
 80 dB (typ)

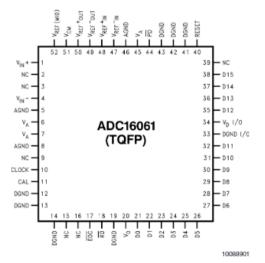
■ Supply Voltage +5V ±5%
■ Rever Consumption 200mW (5 m)

■ Power Consumption 390mW (typ)

Applications

- PC-Based Data Acquisition
- Document Scanners
- Digital Copiers
- Film Scanners
- Blood Analyzers
- Sonar/Radar

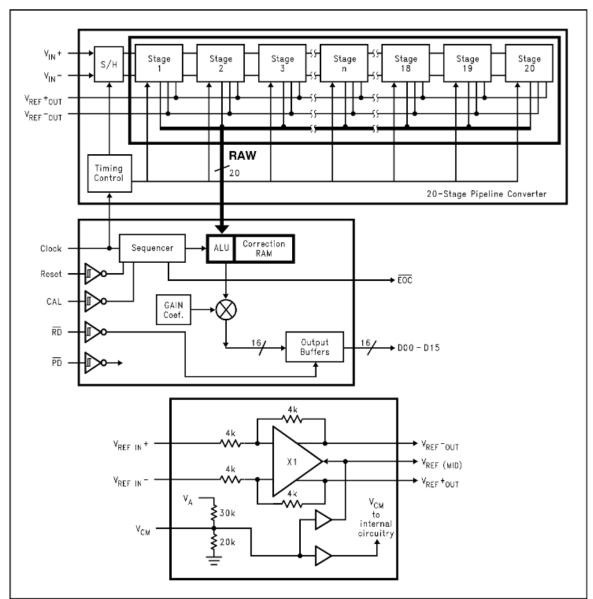
Connection Diagram



Ordering Information

| Commercial $(0^{\circ}C \leq T_{A} \leq +70^{\circ}C)$ | Package |
|--|-----------------------------------|
| ADC16061CCVT | VEG52A 52 Pin Thin Quad Flat Pack |
| ADC16061EVAL | Evaluation Board |

Block Diagram



10088902