

ADVANCE INFORMATION

First Page of Data Sheet in Preparation



High-Speed, 8-Bit ADCs with 8/4 Simultaneous T/Hs and Reference

General Description

The MAX155/MAX156 are high-speed, multi-channel 8-bit analog-to-digital converters (ADC) with simultaneous Track-and-Hold (T/H) and 8 x 8 dual-port RAM. The MAX155 has 8 analog input channels, and the MAX156 has 4 analog input channels. Each channel has a separate T/H that holds the signal for the internal ADC. The ADC converts each channel in 3.6 μ s and stores the result in the RAM. The MAX155/MAX156 also feature a 2.5V on-chip reference, forming a complete high-speed data acquisition system.

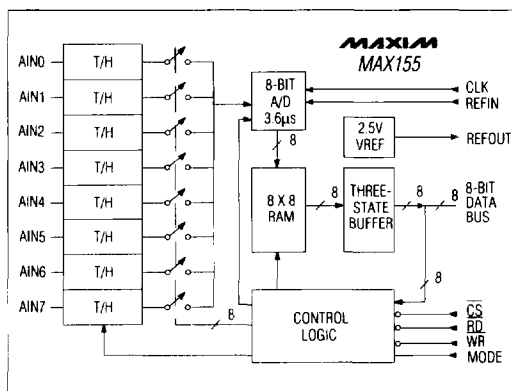
These devices can be used with a single 5V supply and perform unipolar or bipolar conversions with single-ended or differential inputs. For applications where an extended input range or bipolar conversion about ground is important, an optional negative supply pin (labeled VSS) is provided.

Conversions are initiated with a \overline{WR} pulse, and data is accessed with a \overline{RD} pulse. Bidirectional Input/Output pins can be used to update the chip's command register. Hard-wired modes of operation, which bypass the command register, are also provided.

Applications

- Digital Oscilloscope
- Vibration Analysis
- Input for DSP
- Digital-Strip Chart Recorder
- High-Speed Phase-Sensitive Data Acquisition

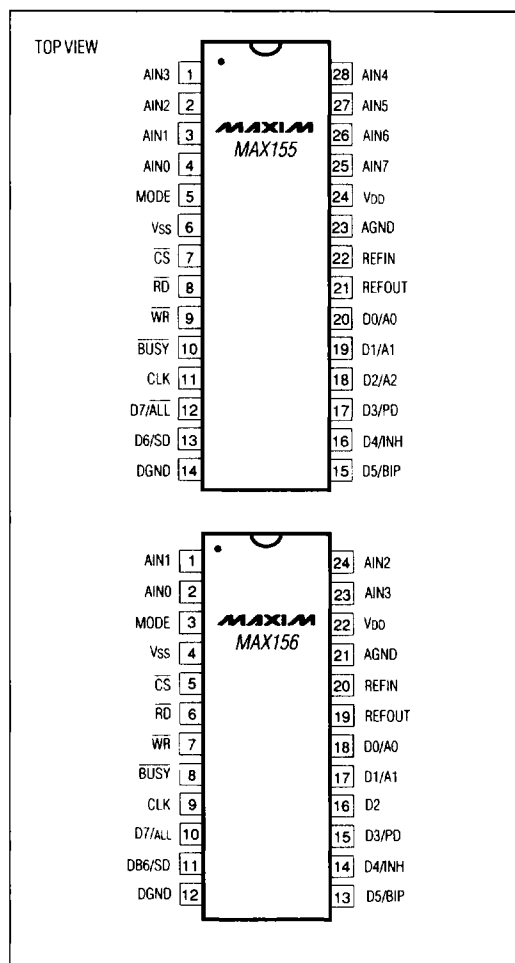
Functional Diagram



Features

- ◆ One-Chip Data Acquisition System
- ◆ 8 or 4 Analog Input Channels
- ◆ Single-Ended or Differential Inputs
- ◆ Simultaneous T/H
- ◆ 3.6 μ s Conversion Time per Channel
- ◆ On-Chip 8 x 8 Dual-Port RAM
- ◆ Internal 2.5V Reference
- ◆ Single +5V Supply Operation

Pin Configurations



MAX155/MAX156

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