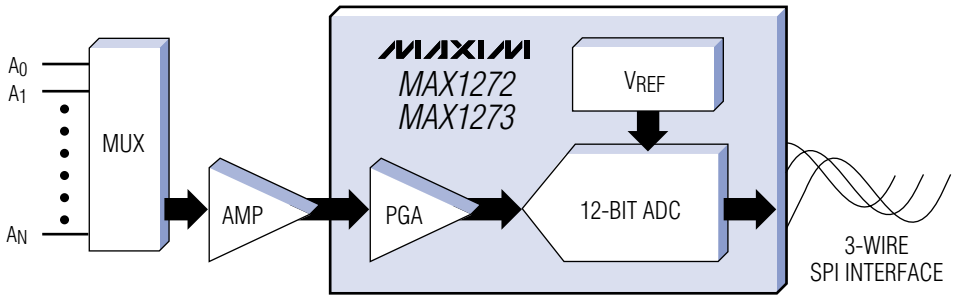
# MULTIRANGING 12-BIT ADCs FEATURE FAULT PROTECTION

## Have Four Software-Selectable Input Ranges: ±10V, +10V, ±5V, +5V

It's hard to beat Maxim's new ADCs for saving board space! Built-in active clamping circuitry on each analog input provides overvoltage fault protection for "off" channels, and limits fault currents to 1mA for the "on" channel.




- **14-Bits of Effective Dynamic Range**
- **Full Scale Inputs Up to ±10V**
- **Single +5V Supply Operation**
- **Internal Voltage Reference**
- **Two Power-Down Modes**

## Choose the Ideal Multirange 12-Bit ADC for Your Application

| Part | Input Channels | Sample Rate (kHz max) | Input Range (V) | Data-Bus Interface | Fault Protection | Pin-Package |
|---|---|---|---|---|---|---|
| MAX1272 | 1 | 87.5 | ±10, 0 to +10, ±5, 0 to +5 | Serial SPI™/QSPI™ | Yes | 8-DIP |
| MAX1273 | 1 | 87.5 | ±$V_{REF}$, 0 to $V_{REF}$, ±$V_{REF}$/2, 0 to $V_{REF}$/2 | Serial SPI/QSPI | Yes | 8-DIP |
| MAX1270 | 8 | 100 | ±10, 0 to +10, ±5, 0 to +5 | Serial SPI/QSPI | Yes | 24-Narrow DIP, 28-SSOP |
| MAX1271 | 8 | 100 | ±$V_{REF}$, 0 to $V_{REF}$, ±$V_{REF}$/2, 0 to $V_{REF}$/2 | Serial SPI/QSPI | Yes | 24-Narrow DIP, 28-SSOP |
| MAX127 | 8 | 8 | ±10, 0 to +10, ±5, 0 to +5 | Serial 2-wire | Yes | 24-Narrow DIP, 28-SSOP |
| MAX128 | 8 | 8 | ±$V_{REF}$, 0 to $V_{REF}$, ±$V_{REF}$/2, 0 to $V_{REF}$/2 | Serial 2-wire | Yes | 28-Narrow DIP, 28-Wide SO, 28-SSOP |
| MAX196 | 6 | 100 | ±10, 0 to +10, ±5, 0 to +5 | Parallel µP/12 | Yes | 28-Narrow DIP, 28-Wide SO, 28-SSOP |
| MAX197 | 8 | 100 | ±10, 0 to +10, ±5, 0 to +5 | Parallel µP/8 + 4 | Yes | 28-Narrow DIP, 28-Wide SO, 28-SSOP |
| MAX198 | 6 | 100 | ±4, 0 to +4, ±2, 0 to +2 | Parallel µP/12 | Yes | 28-Narrow DIP, 28-Wide SO, 28-SSOP |
| MAX199 | 8 | 100 | ±4, 0 to +4, ±2, 0 to +2 | Parallel µP/8 + 4 | Yes | 28-Narrow DIP, 28-Wide SO, 28-SSOP |

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