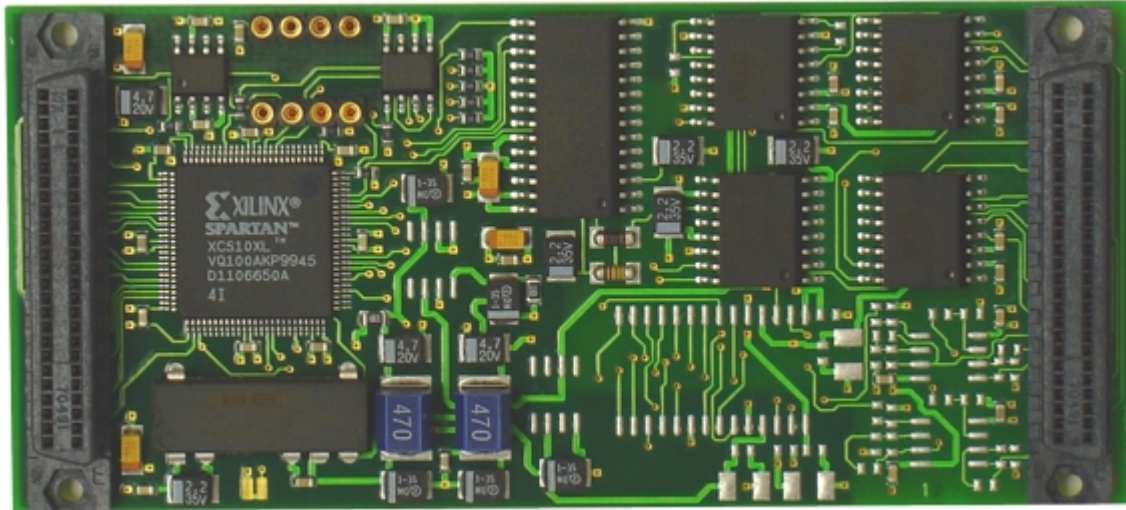# TIP840 8 (16) Channels of 12 bit A/D Conversion

Application Information

The TIP840 is an IndustryPack® compatible module and provides 8 (16) single-ended channels of 12 bit A/D conversion. The data acquisition and conversion time is up to 10µs without channel / gain change and up to 62µs with channel / gain change.

The input multiplexer offers analog overvoltage protection of up to 70Vpp. A programmable gain amplifier allows gains of 1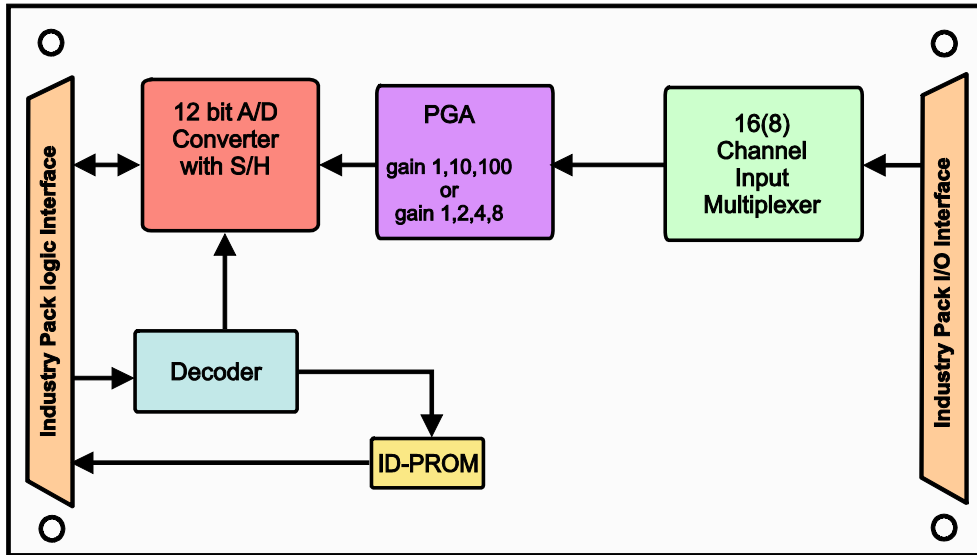, 10, 100 or 1, 2, 4, 8. The full-scale input range is +/-10V. An interrupt can be generated at end-of-conversion supporting an 8 bit vector.

Each TIP840 is factory calibrated. The calibration information is stored in the Identification-PROM unique to each IP.

Software Support (TIP840-SW-xx) is available for different operating systems.

Technical Information

- Interface according to IndustryPack specification
- Identification-PROM supports auto-configuration
- Single Size IndustryPack
- 8 (16) single-ended or (8) differential channels of 12 bit A/D conversion
- ESD protected input multiplexer
- Programmable gain amplifier, gain 1, 10, 100 or gain 1, 2, 4, 8

- 12 bit A/D converter with internal S/H and reference
- Full-scale input range +/- 10V (gain = 1)
- Interrupt capability at end-of-conversion
- Factory calibrated, calibration information in Identification-PROM unique to each IP
- Operating temperature -40°C to +85°C

Order Information

RoHS Compliant

TIP840-10R	8 Channel multiplexed 12 bit A/D, gain 1,10,100, +/-10V
TIP840-11R	8 Channel multiplexed 12 bit A/D, gain 1,2,4,8, +/-10V
TIP840-20R	16 Channel multiplexed 12 bit A/D, gain 1,10,100, +/-10V
TIP840-21R	16 Channel multiplexed 12 bit A/D, gain 1,2,4,8, +/-10V

For the availability of non-RoHS compliant (leaded solder) products please contact TEWS.

Documentation

TIP840-DOC	User Manual

Software

TIP840-SW-42	VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
TIP840-SW-65	Windows Software Support
TIP840-SW-82	Linux Software Support
TIP840-SW-95	QNX Software Support

For other operating systems please contact TEWS.

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