TIP830 8 Channel 12 (16) bit Simultaneous Sampling A/D

Application Information

The TIP830 family are IndustryPack® compatible modules with 8 independent channels of high resolution 12 bit or 16 bit analog-to-digital conversion. Each channel consists of a Sample and Hold and a 12 bit or 16 bit A/D converter. The maximum time for sample and convert is 25µs for all channels. The full-scale input range is +/-10V.

A start-of-conversion is initiated by software command or via the trigger I/O pin. All eight channels of the TIP830 sample and convert simultaneous.

By connecting the trigger I/O pins of several modules it is possible to expand the simultaneous sample and convert feature to several TIP830 modules.

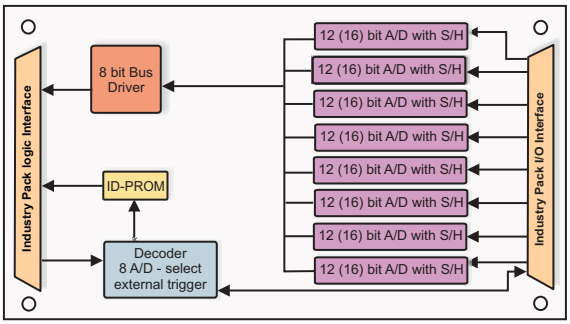


For First-Time-Buyers the engineering documentation TIP830-ED is recommended. The engineering documentation includes TIP830-DOC, schematics and data sheets.

Driver support (TIP830-SW-xx) is available for different operating systems.

Technical Information

- Interface according to IndustryPack specification
- Identification-PROM supports auto-configuration
- Single Size IndustryPack
- Eight 12 bit (16 bit) A/D converter (ADS7806/7)
  - Complete 12 bit (16 bit) sampling A/D converter with internal reference
  - +/- 10 V input, impedance 45 KW
  - Integral linearity error: +/- 0.9LSB (+/- 3LSB)
  - Differential linearity error: +/- 0.9LSB (+3/-2LSB)
  - No missing codes: 12 bits (15 bits)
  - 25 µs maximum for sample and convert
- Factory calibration of gain and offset for each channel, correction parameters stored in ID-PROM
- Sample and convert simultaneous for all 8 channels, expandable to other TIP830 by external trigger I/O pin



Order Information

TIP830-10	Eight 12 bit A/D channels, single-ended simultaneous sampling and converting
TIP830-20	Eight 16 bit A/D channels, single-ended simultaneous sampling and converting
TIP830-DOC	User Documentation
TIP830-ED	Engineering Documentation, includes TIP830-DOC
TIP830-SW-12	OS-9 Software Support
TIP830-SW-32	pSOS Software Support
TIP830-SW-42	VxWorks Software Support
TIP830-SW-62	Windows NT 4.0 Software Support
TIP830-SW-72	LynxOS Software Support
TIP830-SW-82	LiNUX Software Support
TIP830-SW-92	QNX 4 Software Support
TIP830-SW-95	QNX 6 Software Support

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