

### TIP866 8 Channel Serial Interface RS232 / TTL / RS422



#### Application Information

The TIP866 is an IndustryPack® compatible module providing eight channels of high performance asynchronous serial interface. Three different modules are available. The TIP866-10R provides RS232 interface, the TIP866-11R offers TTL level interface and the TIP866-20R provides RS422 interface. Each channel has a 64 byte transmit FIFO and a 64 byte receive FIFO to significantly reduce the overhead required to provide data to and get data from the transmitters and receivers. The FIFO trigger levels are programmable.

The TIP866-10R and -11R support RxD, TxD, RTS, CTS and GND for each of the eight RS232 channels. The TIP866-20R supports RxD+/-, TxD+/- and GND for each of the eight RS422 channels.

The baud rate is individually programmable up to 115.2 kbaud for the TIP866-10R and up to 460.8 kbaud for the TIP866-11R and -20R. The TIP866-10R and -20R use ESD protected transceivers (up to +/-15KV according to IEC 1000-4-2).

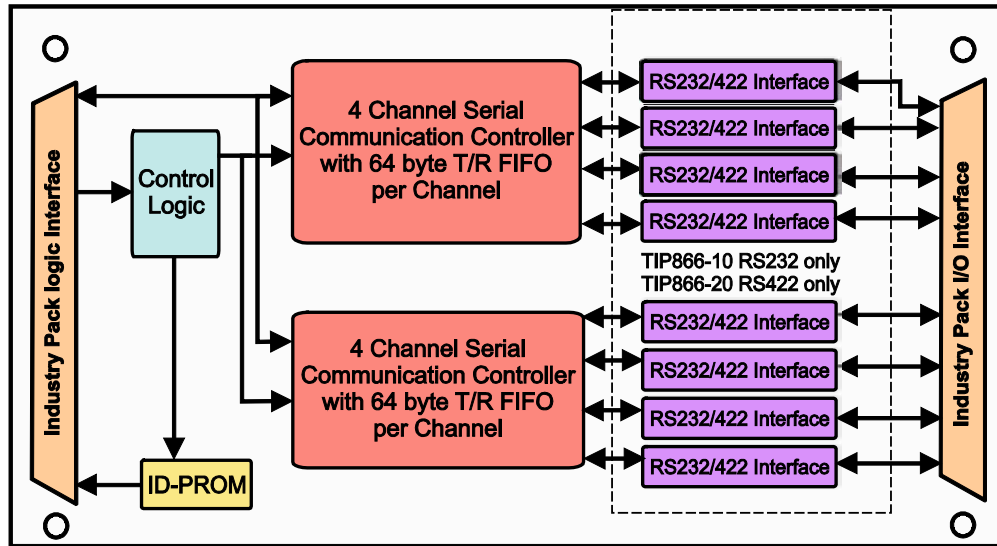
The module versions TIP866-xx-ET are designed for the extended operating temperature from -40°C to +85°C.

The Transition Module TIP866-TM-10R provides 8 DB25 connectors mounted in a 6U 8TE front panel. The TIP866-TM-20R provides 8 RJ45 connectors mounted in a 6U 4TE front panel. The TIP866-TM-30R provides 16 4-pin RJ connectors mounted in a 6U 4TE front panel.

Serial line driver software TIP866-SW-xx is available for different operating systems.

#### Technical Information

- Interface according to IndustryPack specification
- Identification-PROM supports auto-configuration
- Single Size IndustryPack
- 8 channels asynchronous serial interface
- Support of RxD, TxD, RTS, CTS, GND per channel for TIP866-10R and -11R; support of RXD+/-, TXD+/- and GND for TIP866-20R
- Programmable baud rates up to 115.2 KBaud for TIP866-10R and up to 460.8 KBaud for TIP866-11R and -20R
- 64 byte transmit FIFO per channel
- 64 byte receive FIFO per channel
- ESD protected RS232 and RS422 interface (up to +/-15KV according to IEC 1000-4-2)
- Operating temperature:  
0°C to +70°C (TIP866-10R,-11R,-20R)  
-40°C to +85°C (TIP866-xx-ET)



### Order Information

#### RoHS Compliant

<b>TIP866-10R</b>	8 Channel Serial RS232, ST16C654
<b>TIP866-10R-ET</b>	8 Channel Serial RS232, ST16C654, ext. temp.
<b>TIP866-11R</b>	8 Channel Serial TTL, ST16C654
<b>TIP866-11R-ET</b>	8 Channel Serial TTL, ST16C654, ext. temp.
<b>TIP866-20R</b>	8 Channel Serial RS422, ST16C654
<b>TIP866-20R-ET</b>	8 Channel Serial RS422, ST16C654, ext. temp.
<b>TIP866-TM-10R</b>	8 Channel Transition Module (DB25)
<b>TIP866-TM-20R</b>	8 Channel Transition Module (RJ45)
<b>TIP866-TM-30R</b>	16 Channel Transition Module (4-pin RJ connectors)
<b>TIP866-IO-10R</b>	Mounting Rail I/O Module

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

#### Documentation

<b>TIP866-DOC</b>	User Manual for TIP866-10R
<b>TIP866-TM-10-DOC</b>	User Manual for TIP866-TM-10R-DOC
<b>TIP866-TM-20-DOC</b>	User Manual for TIP866-TM-20R-DOC
<b>TIP866-TM-30-DOC</b>	User Manual for TIP866-TM-30R-DOC
<b>TIP866-IO-10-DOC</b>	User Manual for TIP866-IO-10R-DOC

#### Software

<b>TIP866-SW-42</b>	VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
<b>TIP866-SW-65</b>	Windows Software Support
<b>TIP866-SW-82</b>	Linux Software Support
<b>TIP866-SW-95</b>	QNX Software Support

For other operating systems please contact TEWS.