

# The Embedded I/O Company

# **TPMC860** 4 Channel Isolated Serial Interface RS232



# **Application Information**

The TPMC860 is a standard single-width 32 bit PMC module with four channels of high performance RS232 asynchronous interface. Each of the four channels is isolated from the system and against each other by optocoupler and on board DC/DC converter per channel.

The serial channels are accessible through a DB25 connector mounted in the front panel and via P14 I/O. 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 transmitter and receivers. The FIFO trigger levels are programmable. The TPMC860 supports Receive Data (RxD), Transmit Data

(TxD), Ready-To-Send (RTS), Clear-To-Send (CTS) and isolated GND per channel. The baud rate is individually programmable up to 460.8 Kbaud for each channel. Interrupts are supported.

All channels generate interrupts on PCI interrupt INTA. For fast interrupt source detection the TPMC860 provides a special interrupt status register.

Each RS232 receiver input and transmitter output is protected against electrostatic discharge (ESD) up to +/-15kV according to IEC 1000-4-2.

Software Support (TPMC860-SW-xx) is available for different operating systems.

# **Technical Information**

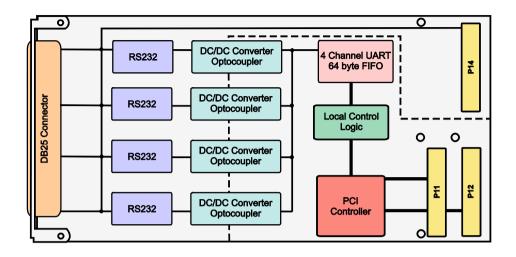
- Standard single-width 32 bit PMC module conforming to IEEE P1386.1
- O PCI 2.1 compliant interface
- O 3.3V and 5V PCI Signaling Voltage
- O Board size: 149 mm x 74 mm
- 4 channel RS232 asynchronous serial interface
- O Serial channels isolated from system and against each other
- O On board DC/DC converter per channel

- O Support of RxD,TxD and GND
- O Programmable baud rates up to 460.8 Kbaud
- O 64 byte transmit FIFO per channel
- O 64 byte receive FIFO per channel
- ESD protected transceiver (up to +/- 15KV according to IEC 1000-4-2)
- O Operating temperature -40°C to +85°C

TEWS TECHNOLOGIES GmbH keeps the right to change technical specification without further notice. All trademarks mentioned are property of their respective owners.

lssue 1.0.1 2017-08-31





#### **Order Information**

# **RoHS Compliant**

TPMC860-10R

4 Channel Isolated Serial Interface RS232, DB25

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

#### **Documentation**

TPMC860-DOC	User Manual
Software	
TPMC860-SW-25	Integrity Software Support
TPMC860-SW-42	VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
TPMC860-SW-65	Windows Software Support
TPMC860-SW-82	Linux Software Support
TPMC860-SW-95	QNX Software Support

For other operating systems please contact TEWS.

#### **Related Products**

TA303	Cable Kit for Modules with DB25 Female Connector
TPIM001	PIM I/O Module, HD50 connector

TEWS TECHNOLOGIES GmbH keeps the right to change technical specification without further notice. All trademarks mentioned are property of their respective owners. lssue 1.0.1 2017-08-31