

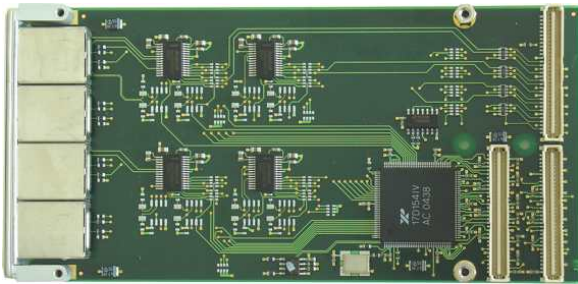
TPMC463 4 Channel Serial Interface RS232/RS422

Application Information

The TPMC463 is a standard single-width 32 bit PMC module and offers 4 channels of high performance asynchronous serial interface.

Three different standard modules are available: The TPMC463-10 provides 4 RS232 interfaces. The TPMC463-11 provides 4 RS422 interfaces. The TPMC463-12 provides 2 RS232 and 2 RS422 interfaces. The TPMC463-20 provides 4 RS232 interfaces with non standard RJ45 I/O pinout (as used on Motorola CPU boards).

Other configurations are available as factory build option on a per channel base.



All modules offer front panel I/O with four RJ45 connectors and P14 I/O. Each RS232 channel supports TxD, RxD, CTS, RTS, DTR, CD, DSR/RI and GND. Each RS422 channel supports RxD+/-, TxD+/- and GND on front and RxD+/-, TxD+/-, RTS+/-, CTS+/- and GND on back I/O.

Each channel has 64 byte transmit and receive FIFOs to significantly reduce the overhead required to provide data to and get data from the transmitters and receivers. The FIFO trigger levels are programmable and the baud rate is individually programmable up to 921.6 kbps for RS232 channels and 5.5296 Mbps for RS422 channels. The UART offers readable FIFO levels.

All channels generate interrupts on PCI interrupt INTA. For fast interrupt source detection the UART provides a special Global Interrupt Source Register.

All serial channels use ESD protected transceivers. ESD protection is up to ± 15 KV.

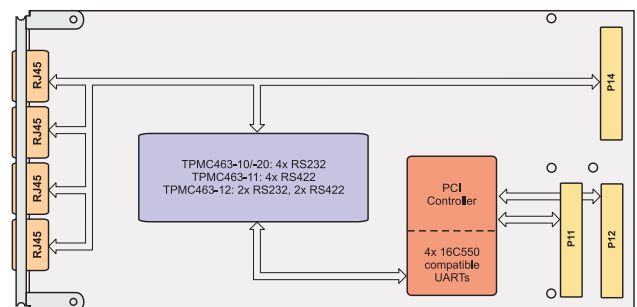
The TPMC463 can operate with 3.3V and 5.0V PCI I/O signaling voltage.

For First-Time-Buyers the Engineering Documentation TPMC463-ED is recommended. The Engineering Documentation includes TPMC463-DOC, schematics and data sheets of TPMC463.

Software Support (TDRV002-SW-xx) for different operating systems is available.

Technical Information

- Standard single-width 32 bit PMC module conforming to IEEE P1386.1
 - Target Chip: XR17D154 (Exar)
 - PCI 2.3 compliant interface
 - PCI I/O signaling voltage 5V and 3.3V
- Board size: 149 mm x 74 mm
- Asynchronous serial interface
- Quad UART: Exar XR17D154
- Support of RxD, TxD, RTS, CTS, DTR, DCD, DSR/RI and GND for each RS232 channel; RxD+/-, TxD+/- and GND on front and RxD+/-, TxD+/-, RTS+/-, CTS+/- and GND on back I/O for each RS422 channel
- Programmable baud rates:
 - RS232: up to 921.6 kbps
 - RS422: up to 5.5296 Mbps
- 64 byte transmit FIFO per channel
- 64 byte receive FIFO per channel
- Readable FIFO levels
- Global Interrupt Source Register
- General Purpose 16 bit Timer/Counter
- ESD protected transceiver (up to ± 15 KV)
- Operating temperature -40°C to +85°C



The Embedded I/O Company

Order Information

RoHS Compliant

TPMC463-10R	4 Channel Serial RS232, front panel and P14 I/O
TPMC463-11R	4 Channel Serial RS422, front panel and P14 I/O
TPMC463-12R	2 Channel Serial RS232, 2 Channel Serial RS422, front panel and P14 I/O
TPMC463-20R	4 Channel Serial RS232, front panel and P14 I/O (non standard RJ45 I/O pinout)

Other configurations are available as factory build option on a per channel base.

None RoHS Compliant

TPMC463-10	None RoHS compliant version of TPMC463-10R
TPMC463-11	None RoHS compliant version of TPMC463-11R
TPMC463-12	None RoHS compliant version of TPMC463-12R
TPMC463-20	None RoHS compliant version of TPMC463-20R

Documentation

TPMC463-DOC	User Manual
TPMC463-ED	Engineering Documentation (TPMC463-DOC, Schematics, Assembly Drawing, Data Sheets)

Software

TDRV002-SW-25	Integrity Software Support
TDRV002-SW-42	VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
TDRV002-SW-65	Windows XP/XPE/2000 Software Support
TDRV002-SW-72	LynxOS Software Support
TDRV002-SW-82	LiNIX Software Support
TDRV002-SW-95	QNX 6 Software Support

For other operating systems please contact TEWS.

Related Products

TPIM001	PIM I/O Module with HD50 SCSI-2 type connector
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