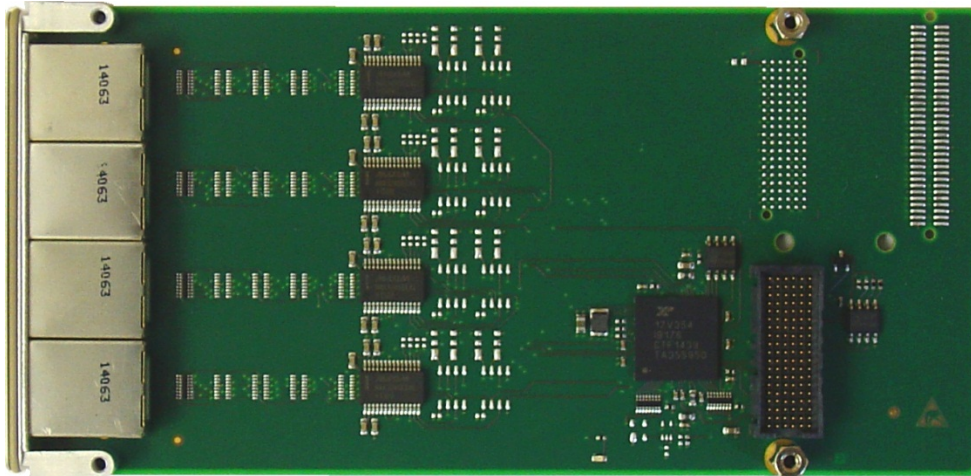


## TXMC463 4 Channel Serial Interface RS232/RS422



### Application Information

The TXMC463 is a standard Switched Mezzanine Card (XMC) compatible module offering 4 channels of high performance asynchronous serial interface.

All modules offer front panel I/O with four RJ45 connectors. Four different standard modules are available: The TXMC463-10R and -15R provide 4 RS232 interfaces. The TXMC463-11R provides 4 RS422 interfaces. The TXMC463-12R provides 2 RS232 and 2 RS422 interfaces. The TXMC463-15R uses a 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.

Each RS232 channel supports Tx/D, Rx/D, CTS, RTS, DTR, CD, DSR/RI and GND. Each RS422 channel supports Rx/D+/-, Tx/D+/- and GND.

Each channel has 256 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 1 Mbps for RS232 channels and 16 Mbps for RS422 channels. The UART offers readable FIFO levels.

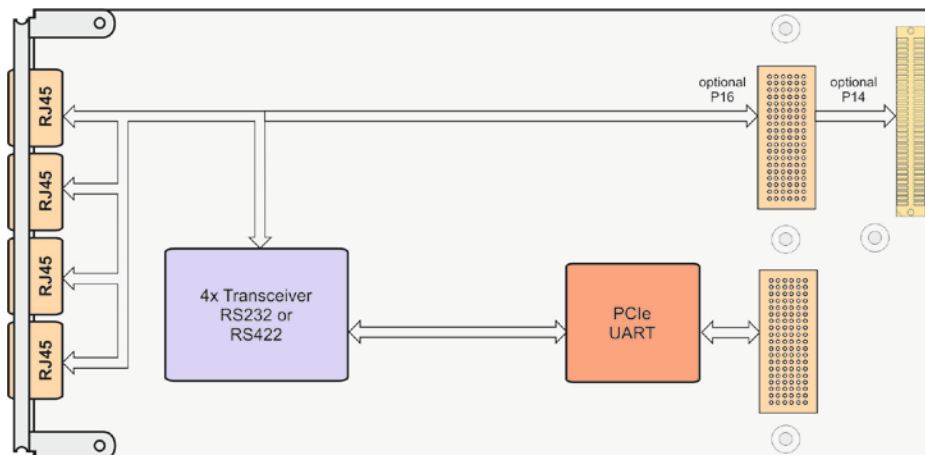
All serial channels use ESD protected transceivers. ESD protection is up to  $\pm 15$ KV.

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

## The Embedded I/O Company

### Technical Information

- Form Factor: Standard single-width XMC module conforming to ANSI/VITA 42.0-2008
  - Board size: 149 mm x 74 mm
  - x1 PCI Express (Base Specification 2.0 Gen 1) compliant interface conforming to ANSI/VITA 42.3-2006
  - IPMI resource: FRU hardware definition information stored in on-board EEPROM
- Asynchronous serial interface
- Quad UART: Exar XR17V354
- 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 1 Mbps
  - RS422: up to 16 Mbps
- 256 byte transmit FIFO per channel
- 256 byte receive FIFO per channel
- Readable FIFO levels
- Global Interrupt Source Register
- General Purpose 16 bit Timer/Counter
- ESD protected transceiver (up to ± 15KV)
- Operating temperature -40°C to +85°C
- MTBF (MIL-HDBK217F/FN2 GB 20°C) TXMC463: 740.000 h



### Order Information

#### RoHS Compliant

<b>TXMC463-10R</b>	4 Channel RS232, RJ45
<b>TXMC463-11R</b>	4 Channel RS422, RJ45
<b>TXMC463-12R</b>	2 Channel RS232, 2 Channel RS422, RJ45
<b>TXMC463-15R</b>	4 Channel RS232, RJ45 (Motorola compatible pinout)

Additional P14 or P16 back I/O is available on request.

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

#### Documentation

<b>TXMC463-DOC</b>	User Manual
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#### Software

<b>TDRV002-SW-25</b>	Integrity Software Support
<b>TDRV002-SW-42</b>	VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
<b>TDRV002-SW-65</b>	Windows Software Support
<b>TDRV002-SW-82</b>	Linux Software Support
<b>TDRV002-SW-95</b>	QNX Software Support

For other operating systems please contact TEWS.