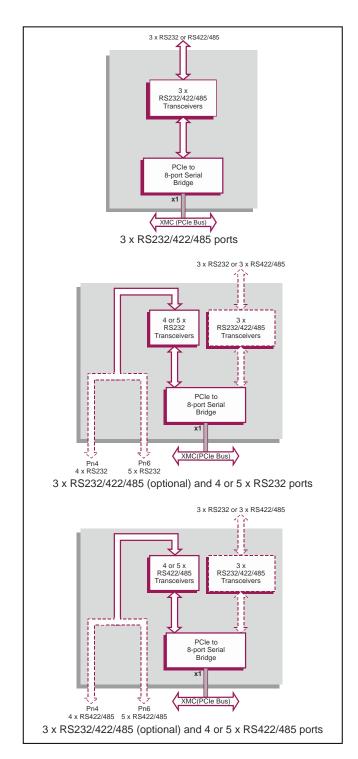
Multi-Channel, RS232/RS422/RS485 XMC Module

Key Features

XM RS2/20x is designed for applications that need multiple serial expansion ports for the defense, industrial control, transportation and communications markets.

- Suitable for use on any board with an XMC expansion slot
- Available with front and/or rear I/O combinations
- Suitable for long life-cycle deployments
- RS232, RS422 or RS485 modes of operation
- Extended temperature and rugged versions available
- Support for Linux[®], Windows[®] and VxWorks[®]







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Specification

Serial Communications

- XM RS2/20x multi-channel XMC serial communications module supports various factory build options
- front I/O via micro D-type connectors, options for:
 - → 3 x RS232/422/485 ports
 - → blank front panel (connectors not fitted)
- rear I/O via PMC/XMC I/O connector, options for:
 - → up to 5 x RS232 ports
 - → up to 5 x RS422/485 ports
 - → I/O connector not fitted
- the serial ports are implemented by a PCI Express[®] (PCIe[®]) to 8-port Serial Bridge
- for rugged versions, see separate datasheet:
 - → rear plug compatible
 - → conduction-cooled: XM RS2/20x-RC

Front I/O Option: 3 x RS232/422/485 Ports

- 3 x RS232/422/485 ports via three 9-way micro D-type connectors on the front panel supports:
 - → TXD, RXD, CTS, RTS, DCD, DSR, DTR and RI (RS232 mode)
 - → TXD and RXD (RS422/485 mode)
 - → an onboard user switch selects between the RS232 and the RS422/485 transceivers
- factory build option available for a blank front panel:
 - → rear I/O options only (RS232 or RS422/485)

Rear I/O Option: 4 or 5 x RS232 Ports

- 4 x RS232 ports via Pn4 or 5 x RS232 ports via Pn6, rear I/O supports:
 - → TXD, RXD, CTS, RTS, DCD, DSR, DTR and RI* *Note: the RI signal is not provided on one of the serial ports on the Pn6 connector
- factory build option for a Pn4 or Pn6 I/O connector

Rear I/O Option: 4 or 5 x RS422/485 Ports

- 4 x RS422/485 via Pn4 ports or 5 x RS422/485 ports via Pn6 rear I/O supports:
 - → TXD, RXD, CTS, RTS, DCD, DSR, DTR and RI* *Note: the RI signal is not provided on one of the serial ports on the Pn6 connector
- rear I/O RS485 mode supports:
 - simplex or duplex bus
 - → selectable RXD resistor termination
 - → master/slave selection accessible via software
 - → channel flow control selectable by DTR or RTS
- factory build option for a Pn4 or Pn6 I/O connector

XMC Interface

- interface complies with PCI Express 2.0:
 - → x1 PCI Express port (Gen 1)

Electrical Specification

- current figures (3 x RS232 ports via front panel):
 - → +5V @ less than 190 mA or
 - → +12V @ less than 100 mA
- current figures (3 x RS232 ports via front panel and 5 x RS232 ports via Pn6 connector):
 - → +5V @ less than 200 mA or
 - → +12V @ less than 100 mA
- current figures (3 x RS232 ports via front panel and 5 x RS422/RS485 ports via Pn6 connector):
 - → +5V @ less than 300 mA or
 - → +12V @ less than 200 mA
- VPWR voltage +5% / -5%

Software Support

Linux[®], Windows[®] and VxWorks[®]

Environmental Specification

- operating temperatures:
 - → 0°C to +55°C (N-Series)
 - → -25°C to +70°C (E-Series)
 - → -40°C to +85°C (K-Series)
- non-operating temperature: -40°C to +85°C
- 5% to 95% Relative Humidity, non-condensing:
 - → K-Series includes humidity sealant

Mechanical Specification

- single-width CMC (Common Mezzanine Card)
 IEEE 1386 form factor: (74mm x 149mm)
- 10mm height stack module

Safety

 PCB (PWB) manufactured with flammability rating of UL94V-0