XM RS2/20x-RC

RC - Series

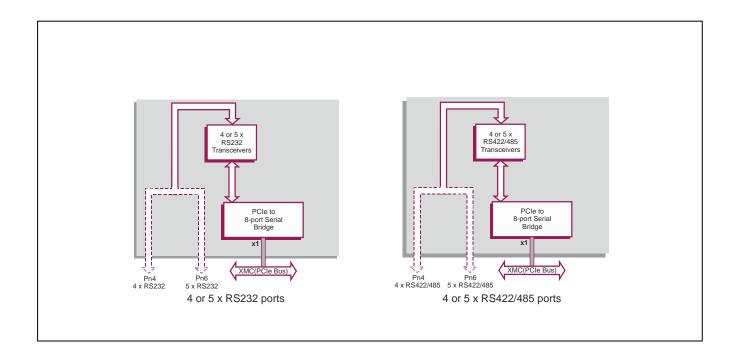
Rugged Multi-Channel, RS232/RS422/RS485 XMC Module

Key Features

XM RS2/20x is designed for rugged 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 rear I/O combinations
- Suitable for long life-cycle deployments
- RS232, RS422 or RS485 modes of operation
- Air-cooled versions available
- Support for Linux[®], Windows[®] and VxWorks[®]





CONCURRENT ?? TECHNOLOGIES

Concurrent Technologies Inc.

Concurrent Technologies Plc. 4 Gilberd Court, Colchester, Essex, CO4 9WN, UK Tel: +44 (0)1206 752626 Fax: +44 (0)1206 751116 400 West Cummings Park, Suite 1300, Woburn, MA 01801, USA Tel: (781) 933 5900 Fax: (781) 933 5911 email:info@gocct.com http://www.gocct.com

All companies and product names are trademarks of their respective organizations. Specification subject to change; E and OE.

Specification

Rugged XMC Module

- conduction-cooled to ANSI/VITA 20-2001 (R2005)
- conformally coated
- air-cooled variants available:
- → see separate XM RS2/20x datasheet

Serial Communications

- XM RS2/20x multi-channel XMC serial communications module supports various factory build options
- rear I/O via PMC/XMC I/O connector, options for:
 up to 5 x RS232 ports
 - → up to 5 X K5232 ports
 - → up to 5 x RS422/485 ports
- the serial ports are implemented by a PCI Express[®] (PCIe[®]) to 8-port Serial Bridge

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 (5 x RS232 ports via Pn6 connector):
 - → +5V @ less than 200 mA or
 - → +12V @ less than 100 mA
- current figures (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 temperature
 - → VITA 47 Class CC4, -40°C to +85°C→ conduction-cooled
- non-operating temperature:
- → VITA 47 Class C4, -55°C to +105°C
- operating altitude:
- → -1,000 to 50,000 feet (-305 to 15,240 meters)
- 5% to 95% Relative Humidity, non condensing

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

