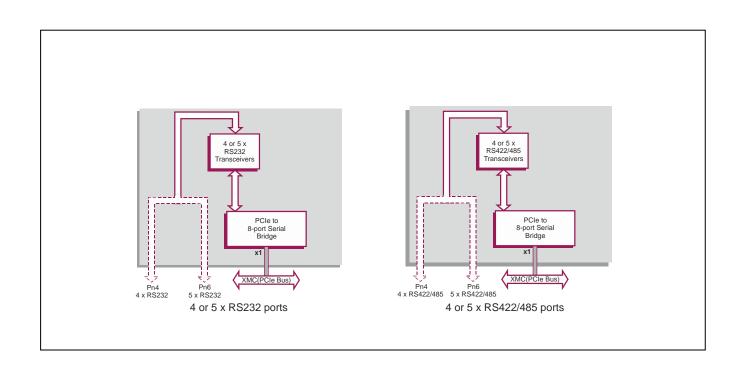
# Rugged Multi-Channel, RS232/RS422/RS485 XMC Module

# **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<sup>®</sup>, Windows<sup>®</sup> and VxWorks<sup>®</sup>







Concurrent Technologies Plc. 4 Gilberd Court, Colchester, Essex, CO4 9WN, UK

Inc 400 W/4

Tel: +44 (0)1206 752626 Fax: +44 (0)1206 751116

Concurrent Technologies Inc.

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

# **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 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<sup>®</sup>, Windows<sup>®</sup> and VxWorks<sup>®</sup>

# **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