# G211

## Quad Gigabit Ethernet Interface Board, RJ45 or M12-A

## 3U CompactPCI Serial

- » Four 10/100/1000BASE-T Ethernet channels
- » Intel i82580 Server Chipset with support for 8 virtual machines
- » Full-duplex or half-duplex
- » RJ45 or robust M12 A-coded connectors
- » Fully integrated to comply with IEEE802.3u
- » 1500 V isolation voltage
- » -40 °C to +85 °C
- » PICMG CPCI-S.0 CompactPCI Serial peripheral card



## **Quad Gigabit Ethernet Board**

The G211 quad Ethernet interface is a rugged single Eurocard CompactPCI Serial peripheral board. It can be used in combination with a CompactPCI Serial or CompactPCI PlusIO CPU board in a CompactPCI Serial or hybrid system.

#### Flexible Front Connectors

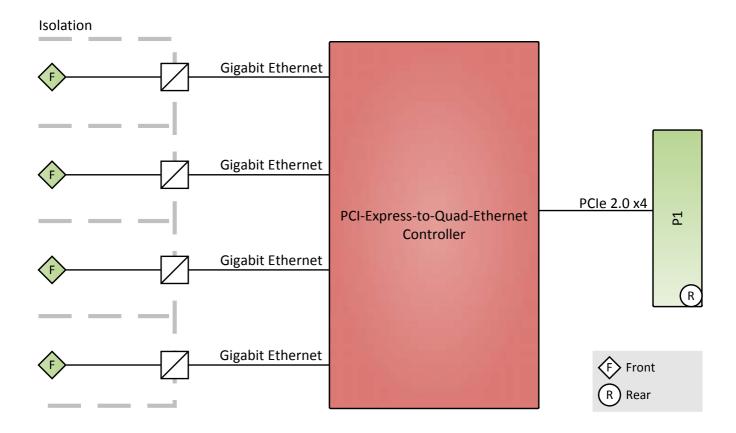
It provides four Gigabit Ethernet interfaces at the front panel which can be accessed either on four RJ45 or four A-coded M12 connectors making it especially suited for applications in harsh environments.

All four interfaces are controlled by one Ethernet controller which is connected to the backplane via a x4 PCI Express link and supports the IEEE 802.3x standard. Each interface supports a data transfer rate of 1Gbit/s, even if all interfaces are used simultaneously. Two LEDs show the link and activity status of every interface.

## **Rugged Environments**

The G211 is designed for extended operating temperature and prepared for conformal coating for use in harsh and mobile environments.







#### Interfaces

- Ethernet
  - □ 4x 10/100/1000BASE-T, M12, A-coded, receptacle
  - □ 4x 10/100/1000BASE-T, RJ45
- PCI Express
  - □ 1x PCle 2.0, x4, backplane
- LED
  - Ethernet: activity, link

#### **Product Standard**

- CompactPCI Serial: CompactPCI Serial PICMG CPCI-S.0 Specification
- Peripheral slot

## **Electrical Specifications**

- Supply voltage
  - □ +12 V (-10 %/+10 %)
- Power consumption
  - □ 6 W max. (with all links up)
- Isolation voltage
  - □ 1500 V AC

### **Mechanical Specifications**

- Dimensions
  - □ 3U, 4 HP
- Weight: 240 g (with heat sink)
- Cooling
  - □ Air cooling, forced convection, airflow 1.0 m/s

## **Product Compliance: Rail**

- Rolling Stock
- Operating temperature: -40 °C to +85 °C (EN 50155:2007, class TX, board)
- Storage temperature: -40 °C to +85 °C (EN 60068-2-1:2007, Ab; EN 60068-2-2:2007, Bb)
- Altitude: -300 m to +3000 m
- Humidity: +55 °C and +25 °C, 90 % to 100 % RH (EN 50155:2007)
- Shock: 50 m/s2 / 30 ms (EN 61373:2010, vehicle body, cat. 1, class B)
- Vibration: 10 min @ 1.01 m/s2 and 5 h @ 5.72 m/s2 (EN 61373:2010, vehicle body, cat. 1, class B)
- Electrical safety:
  - □ EN 50124-1:2001 + A1:2003 + A2:2005
  - □ EN 50153:2014
  - □ EN 50155:2007
- Fire protection: EN 45545-2:2013 + A1:2015, HL3
- EMC
  - □ Radiated emission: EN 50121-3-2:2015
  - □ Conducted emission: EN 50121-3-2:2015
  - □ Immunity: EN 50121-3-2:2015

### Reliability

MTBF: 324 639 h @ 40 °C according to IEC/TR 62380 (RDF 2000)

## Software Support

- Linux
- Windows
- VxWorks
- QNX
- For more information on supported operating system versions and drivers see Software.



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