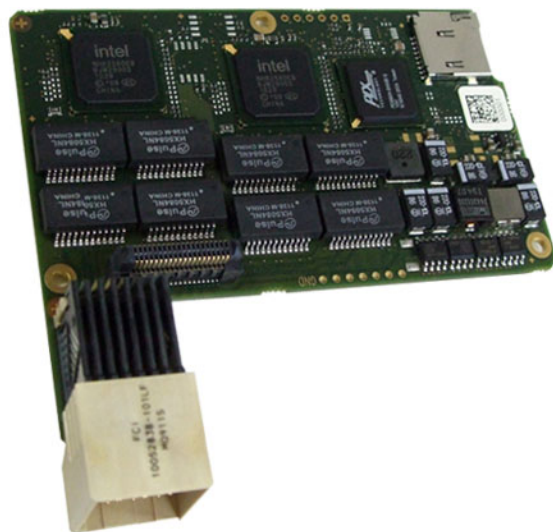


GM2 – Octal Gigabit Ethernet Rear I/O Card

- Mezzanine card for CompactPCI® Serial CPU boards
- Eight 10/100/1000Base-T Ethernet channels
- Support of full mesh and star architecture
- Wake-on-LAN
- Fully integrated to comply with IEEE802.3u
- TCP/IP checksum offload

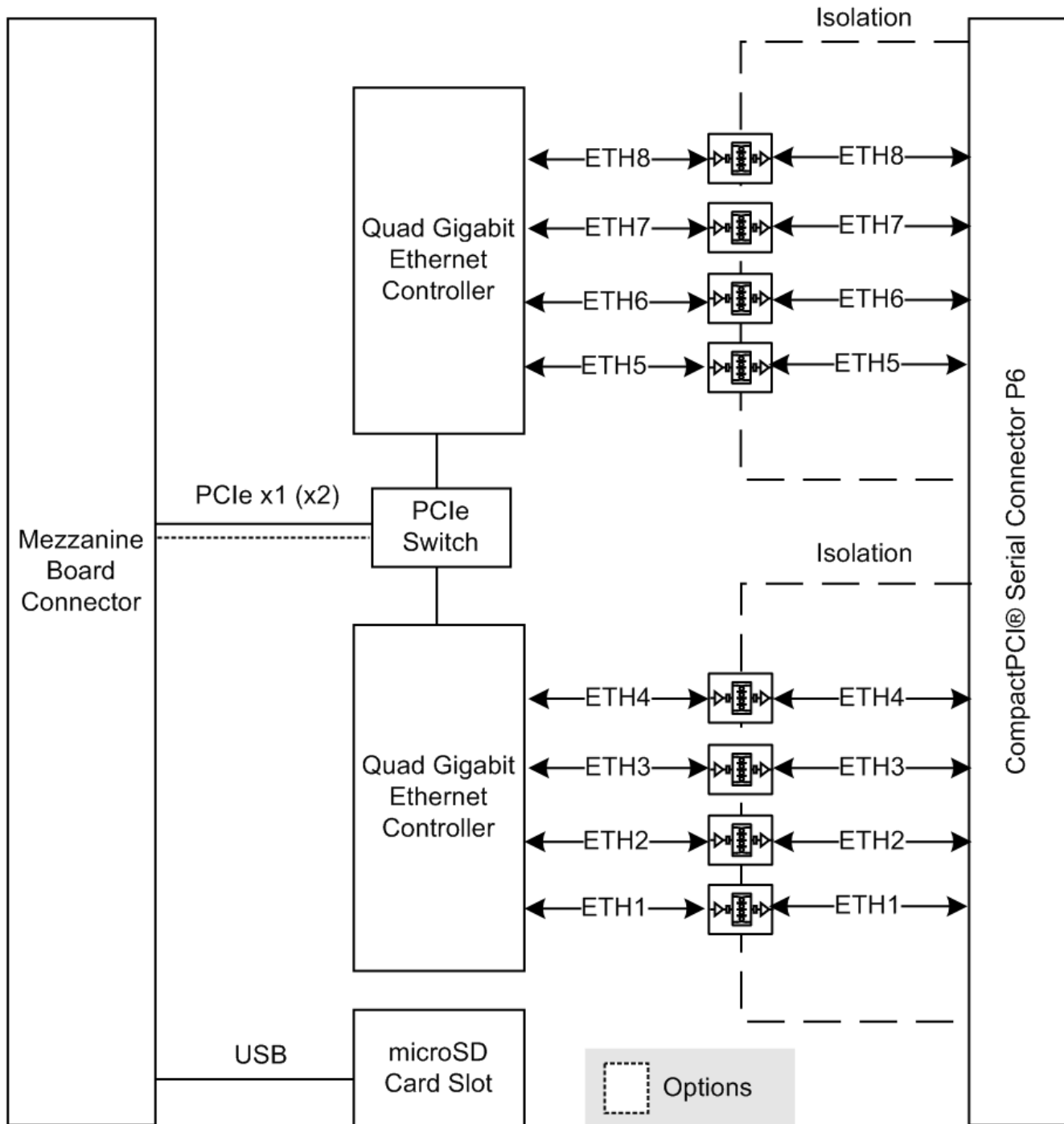


The GM2 is a mezzanine card which is plugged onto CompactPCI® Serial CPU boards to implement eight Ethernet interfaces on the backplane.

The CompactPCI® Serial standard defines up to eight Ethernet interfaces which can be connected in a star or

in full mesh architecture via the backplane and which equip the CPU board with even more options for multi computing and computer clusters. The GM2 is used to implement eight Gigabit Ethernet interfaces which are led to the backplane via CompactPCI® Serial connector P6. All eight interfaces are controlled by two Ethernet controllers which support the IEEE 802.3x standard. In addition, the GM2 offers the possibility to plug a microSD™ card.

Diagram



Technical Data

Ethernet Interfaces	<ul style="list-style-type: none"> ■ Eight 10/100/1000Base-T interfaces ■ IEEE802.3x support <ul style="list-style-type: none"> □ Full-duplex flow control □ 400 Mbit/s data transfer rate for each interface when all interfaces are used simultaneously □ 600 Mbit/s data transfer rate for each interface when two interfaces are used simultaneously ■ TCP/IP checksum offload ■ Wake-on-LAN support
MicroSD card slot	<ul style="list-style-type: none"> ■ Support of class 6 devices ■ Data transfer rate up to 48 Mbit/s (depends on media and host)
CompactPCI® Serial	<ul style="list-style-type: none"> ■ Compliance with CompactPCI® Serial PICMG CPCI-S.0 Specification ■ Ethernet interfaces via CompactPCI® Serial connector P6
PCI Express®	<ul style="list-style-type: none"> ■ One x1 link to operate the two Ethernet controllers ■ PCIe® 2.0 support ■ Data rate 1000 MB/s in each direction (5 Gbit/s per lane)
Electrical Specifications	<ul style="list-style-type: none"> ■ Supply voltage/power consumption: <ul style="list-style-type: none"> □ +3.3 V (-10%/+10%) from CPU board, 13.74 W max.
Mechanical Specifications	<ul style="list-style-type: none"> ■ Dimensions: 80 mm x 95 mm (without P6 connector) ■ Weight: 49 g
Environmental Specifications	<ul style="list-style-type: none"> ■ Temperature range (operation): <ul style="list-style-type: none"> □ -40..+55°C (screened) □ Airflow: min. 1.5 m/s ■ Temperature range (storage): -40..+55°C ■ Relative humidity (operation): max. 95% non-condensing ■ Relative humidity (storage): max. 95% non-condensing ■ Altitude: -300 m to +3,000 m ■ Shock: 50 m/s², 30 ms ■ Vibration (Function): 1 m/s², 5 Hz - 150 Hz ■ Vibration (Lifetime): 7.9 m/s², 5 Hz - 150 Hz ■ Conformal coating on request
MTBF	<ul style="list-style-type: none"> ■ 1 463 691 h @ 40°C according to IEC/TR 62380 (RDF 2000)
Safety	<ul style="list-style-type: none"> ■ PCB manufactured with a flammability rating of UL94V-0 by UL recognized manufacturers
EMC	<ul style="list-style-type: none"> ■ Conforming to EN 55022 (radio disturbance)
Software Support	<ul style="list-style-type: none"> ■ Windows® ■ Linux

Configuration & Options

Options

- | | |
|---------------------|---|
| PCI Express® | ■ One x2 link to operate the two Ethernet controllers |
|---------------------|---|

Please note that some of these options may only be available for large volumes. Please ask our sales staff for more information.

Ordering Information

Standard GM2 Models	Please note that the GM2 (08GM02-xx) is not supported by G20 boards (02G020-xx) with revisions lower than Rev. 01.01.00.	
	08GM02-00	CompactPCI® Serial 8x Gigabit Ethernet rear I/O card, -40..+85°C screened
Related Hardware	02G020-02	Intel® Core™ i7-620UE, 1.06 GHz, 2 GB DDR3 DRAM with ECC, mSATA and uSD socket, -40..+85°C Tx screened (-40..+70°C, with up to +85°C for 10 minutes)
	02G020-03	Intel® Core™ i7-610E, 2.53 GHz, 4 GB DDR3 DRAM with ECC, mSATA and uSD socket, 0..+60°C
	Please note that the GM2 (08GM02-xx) is not supported by G20 boards (02G020-xx) with revisions lower than Rev. 01.01.00.	
	08GM01-00	CompactPCI® Serial 4x Gigabit Ethernet rear I/O mezzanine card, -40..+85°C screened
Memory	0751-0046	MicroSD card, 2 GB, -40..+85°C
	0751-0052	MicroSD card, 4 GB, -40..+85°C
Software: Linux	This product is designed to work under Linux. See below for potentially available separate software packages from MEN.	
	13T001-90	Linux network driver (MEN) for G211, G211F, GM1, GM2 and GM3
Software: Windows®	This product is designed to work under Windows®. See below for potentially available separate software packages from MEN.	
	13T010-70	Windows® 32-bit network driver (Intel®) for XM1, XM1L, XM2, MM2, F11S, F18, F18E, F19P, F21P, F22P, G20, G22, GM1, GM2, GM3, G211, G211F, SC24, BC50I, BC50M and BL50W
	13T020-70	Windows® 64-bit network driver (Intel®) for F18, F18E, F19P, F21P, F22P, G20, G22, GM1, GM2, GM3, G211, G211F, XM2, SC24, BC50I, BC50M and BL50W
For operating systems not mentioned here contact MEN sales .		
Documentation	20GM02-00	GM2 User Manual

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