GP2 4-Port Gigabit SFP PHY Line Card

- **100/1000 Mbps SFP modules supported**
- **FX / SX / LX / ZX modules supported**
- **4 SFP cages**
- **LEDs for link and activity status**
- **-40 to +85°C with qualified components**
- **EN 50155 classTx (railways)**
- **PICMG CPCI-S.0 CompactPCI® Serial**

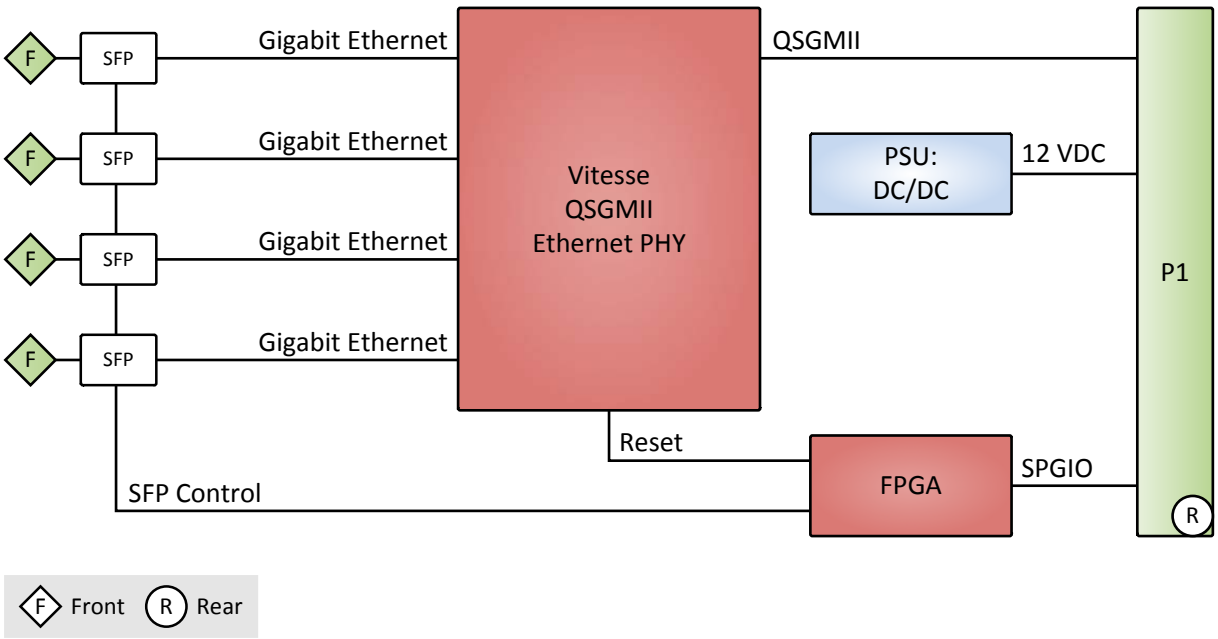
The GP2 is a 3U Gigabit Ethernet PHY line card implemented as a CompactPCI® Serial board. It occupies one peripheral slot using a 4 HP front panel with four Gigabit Ethernet ports on SFP cages.

The GP2 is designed to work in combination with the G101 CompactPCI® Serial managed industrial Ethernet switch.

The GP2 provides four cages for 100BASE-FX, 1000BASE-SX, 1000BASE-LX and 1000BASE-ZX SFP modules. Each interface supports a data transfer rate of 1 Gbit/s max, and provides two LEDs to indicate the link and activity status.

The GP2 operates with a primary voltage supply of +12 V, which is provided via the rear CompactPCI® serial connector. All additional required voltages are generated onboard. It is fully compliant with the EN 50155 railway standard, qualified for a -40 to +85°C operation temperature and ready for coating.

Diagram



Technical Data

Key Features	■ Four 100/1000 Mbps SFP cages at front panel
Supported Protocols and Standards	■ IEEE 802.3 standard
Tested SFP Types	■ CISCO GLC-SX-MM, 1 Gbps BASE-SX, 220/500 m, 0 to +70°C ■ AVAGO ABR-5710 ALZ, 1 Gbps BASE-SX, 250/550 m, -40 to +85°C ■ Finisar FTLF8519P3BTL, 1 Gbps BASE-SX, 300/500 m, -40 to +85°C ■ Finisar FTLF1318P3BTL, 1 Gbps BASE-LH, 10 km, -40 to +85°C ■ Finisar FTLF1518P1BTL, 1 Gbps BASE-ZX, 80 km, -40 to +85°C ■ AVAGO ABR-57R5APZ, 4.25 Gbps BASE-SX, 300 m @ 2.125 Gbps, -10 to +85°C
Front Interfaces	■ Ethernet □ Four SFP slots, 1000BASE-SX/LX/ZX (1 Gbit/s) ■ Status LEDs □ Two LEDs for each SFP slot □ Signal link status □ Signal link activity
Rear Interfaces	■ Serial GPIO (SGPIO) ■ Quad Serial Gigabit Interface (QSGMII)
Backplane Standard	■ CompactPCI® Specification PICMG CPCI-S.0 □ Peripheral slot with extensions (QSGMII)
Supervision and Control	■ BITE Voltage Supervision ■ Voltage monitoring
Electrical Specifications	■ Supply voltages □ +12 V (±10%) ■ Power consumption □ 5 W (max. 15 W depending on SFP modules)
Mechanical Specifications	■ Dimensions: 3U, 4 HP ■ Weight: 136 g
Environmental Specifications	■ Temperature range (operation): □ -40°C to +85°C □ Airflow 1.5m/s ■ Temperature range (storage): -40°C to +85°C ■ Relative humidity (operation): max. 95% non-condensing ■ Relative humidity (storage): max. 95% non-condensing ■ Altitude: -300 m to +2000 m ■ Shock: 50 m/s², 30 ms ■ Vibration (Function): 1 m/s², 5 Hz to 150 Hz (EN 61373) ■ Vibration (Lifetime): 7.9 m/s², 5 Hz to 150 Hz (EN 61373) ■ Conformal coating on request
Reliability	■ MTBF: 250.000 h @ 40°C according to IEC/TR 62380 (RDF2000)
Safety	■ Flammability □ UL 94V-0 ■ Electrical Safety □ EN 50155 (Insulation) □ EN 50155 (Voltage)
EMC	■ EN 55022 (radio disturbance) ■ EN 61000-4-2 (ESD Immunity) ■ EN 61000-4-4 (burst)

Ordering Information

Standard GP2 4-Port Gigabit SFP PHY Line Card Models	**02GP02-00**	3U CompactPCI® Serial, QSGMII to 4 x SFP 1GB port extender EEE and Sync-E support, -40 to +85°C
Related Hardware	**02G101-00**	25-Port Gigabit Ethernet Managed Switch, 2x RJ45 + 1x SFP 2.5 Gbps on front, 10x GE + 3x QSGMII links on backplane, -40 to +85°C with qualified components
	02G101-01	24-Port Gigabit Ethernet Managed Switch, 3x M12 on front, 9x GE + 3x QSGMII links on backplane, -40 to +85°C with qualified components

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