# G100 – 3U CompactPCI<sup>®</sup> Serial to CompactPCI<sup>®</sup> Interface Card

- For operation together with F100 system slot card for CompactPCI<sup>®</sup>
- 1 PCI Express<sup>®</sup> x1 link
- -40 to +85°C with qualified components
- PICMG CPCI-S.0 CompactPCI<sup>®</sup> Serial peripheral card



The G100 is used in combination with the F100 to connect a CompactPCI<sup>®</sup> Serial system to a CompactPCI<sup>®</sup> system. The CompactPCI<sup>®</sup> Serial backplane and the CompactPCI<sup>®</sup> backplane can either be located in one housing or in two separate ones. The G100 is plugged into a peripheral slot of a CompactPCI<sup>®</sup> Serial system and is connected to the F100 via a PCI Express<sup>®</sup> cable at the front which can have a length of up to 7 m. The F100 functions as the system slot in the CompactPCI<sup>®</sup> system.

The G100 uses one PCI Express<sup>®</sup> x1 link from the backplane and leads it to the front to an 18-pin PCI Express<sup>®</sup> connector.

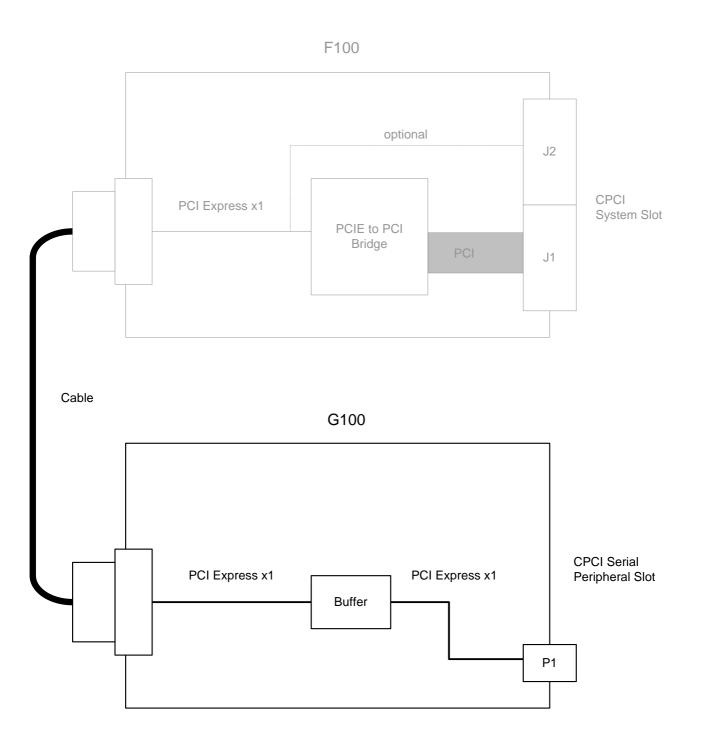
The board is qualified for operation in the extended temperature range of -40 up to  $+85^{\circ}$ C.



#### Embedded Solutions for Transportation and Industrial Markets

www.men.de/products/02G100-.html

### Diagram



#### **Technical Data**

General Functionality	<ul> <li>Used in combination with F100 as an interface from a CompactPCI<sup>®</sup> Serial system to a CompactPCI<sup>®</sup> system</li> </ul>
PCI Express®	<ul> <li>One x1 link on 18-pin front connector</li> <li>According to PCI Express® Cabling Specification Rev. 1.0</li> <li>PCI Express® buffer</li> <li>For decoupling the backplane PCI Express® interface from the front interface</li> <li>Data rate up to 250 MB/s in each direction (2.5 Gbit/s per lane)</li> </ul>
CompactPCI <sup>®</sup> Serial	<ul> <li>Compliance with CompactPCI<sup>®</sup> Serial PICMG CPCI-S.0 Specification</li> <li>Peripheral slot</li> <li>Host interface: one PCI Express<sup>®</sup> lane</li> </ul>
Electrical Specifications	<ul> <li>Supply voltage/power consumption:</li> <li>+12V (-10%/+10%), 50 mA typ.</li> </ul>
Mechanical Specifications	<ul> <li>Dimensions: conforming to CompactPCI<sup>®</sup> Serial specification for 3U boards</li> <li>Weight: 116 g</li> </ul>
Environmental Specifications	<ul> <li>Temperature range (operation): <ul> <li>-40+85°C (qualified components)</li> <li>Airflow: min. 1.0 m/s</li> </ul> </li> <li>Temperature range (storage): -40+85°C</li> <li>Relative humidity (operation): max. 95% non-condensing</li> <li>Relative humidity (storage): max. 95% non-condensing</li> <li>Altitude: -300 m to + 3,000 m</li> <li>Shock: 15 g, 11 ms</li> <li>Bump: 10 g, 16 ms</li> <li>Vibration (sinusoidal): 1 g, 10150 Hz</li> <li>Conformal coating on request</li> </ul>
MTBF	2,585,957 h @ 40°C according to IEC/TR 62380 (RDF 2000)
Safety	PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers
EMC	Conforming to EN 55022 (radio disturbance), IEC1000-4-2 (ESD) and IEC1000-4-4 (burst)

#### **Configuration & Options**

#### Options

**Cooling Concept** 

Also available with conduction cooling in MEN CCA frame

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 G100 Models	02G100-00	3U CompactPCI <sup>®</sup> Serial peripheral card, PCI Express <sup>®</sup> x1 cable interface, -40+85°C with qualified components (only in combination with F100; PCI Express <sup>®</sup> cable to be ordered separately)
Related Hardware	02F100-00	3U CompactPCI <sup>®</sup> system slot card, PCI Express <sup>®</sup> x1 to PCI bridge via cable, -40°C+85°C with qualified components (only in combination with G100; PCI Express <sup>®</sup> cable to be ordered separately)
Miscellaneous Accessories	05G100-00	PCI Express <sup>®</sup> cable, 1m, 18-pin connector
Documentation	compare Chart 3U CompactPCI® Serial CPU and I/O cards » Download	
	20G100-00	G100/F100 User Manual

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