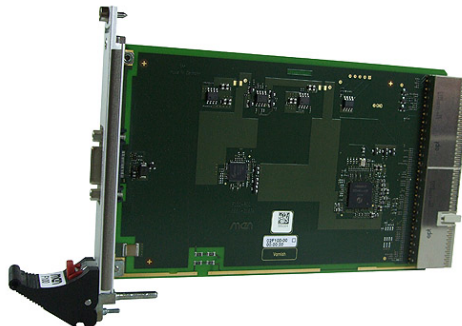


F100 – 3U CompactPCI® to CompactPCI® Serial Interface Card

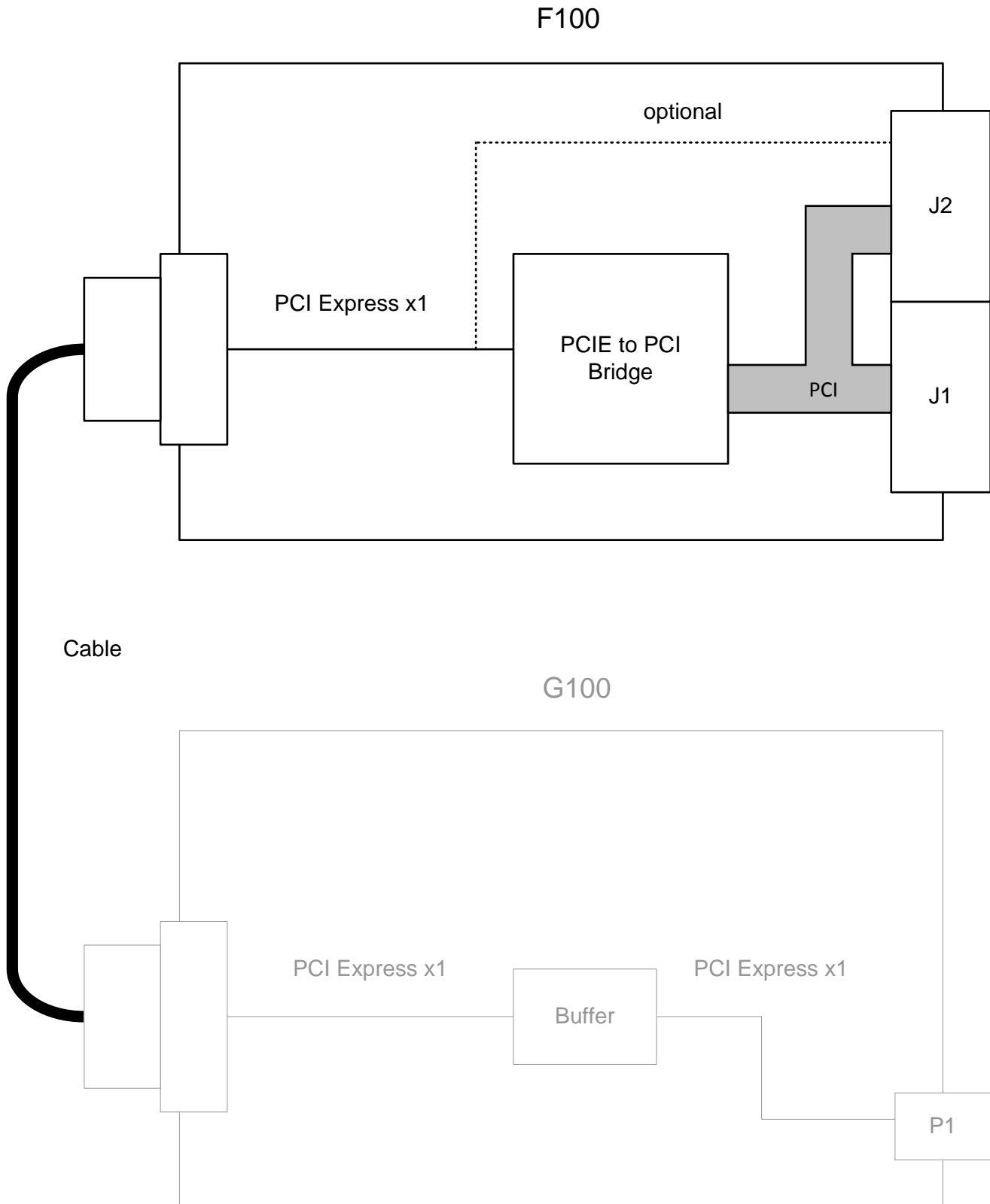
- **4 HP 32-bit/33-MHz CompactPCI®**
- **Replaces system slot card**
- **For operation together with G100 peripheral slot card for CompactPCI® Serial**
- **1 PCI Express® x1 link**

The F100 is used in combination with the G100 to connect a CompactPCI® Serial system to a CompactPCI® system. The CompactPCI® Serial backplane and the CompactPCI® backplane can either be located in one housing or in two separate ones. The F100 is plugged into the system slot of the CompactPCI® system. It is equipped with a PCI-Express-to-PCI bridge which acts as a master for up to 7 PCI devices. It supports 32-bit and 33-MHz.



The F100 is connected to the G100 via a PCI Express® cable at the front panel which can have a length of up to 7 m. The G100 is located in a peripheral slot of the CompactPCI® system. Optionally the F100 can also be used without the G100 if the PCI Express® x1 link is led to the board via the backplane. For this, a special backplane is needed, however. Another possibility is to directly control a CompactPCI® system using an external PC (e.g. a notebook) for evaluating or programming the application. The board is qualified for operation in the extended temperature range of -40 up to +85°C.

Diagram



Technical Data

General Functionality	<ul style="list-style-type: none"> ■ Used in combination with G100 as an interface from a CompactPCI® Serial system to a CompactPCI® system
PCI Express®	<ul style="list-style-type: none"> ■ One x1 link on 18-pin front connector (optionally from the backplane) <ul style="list-style-type: none"> □ According to PCI Express® Cabling Specification Rev. 1.0 ■ PCI-Express-to-PCI bridge <ul style="list-style-type: none"> □ Supports up to 7 PCI slots as a master ■ Data rate up to 250 MB/s in each direction (2.5 Gbit/s per lane)
CompactPCI® Bus	<ul style="list-style-type: none"> ■ Compliance with CompactPCI® Core Specification PICMG 2.0 R3.0 ■ System slot ■ 32-bit/33-MHz PCI-Express-to-PCI bridge ■ V(I/O): +3.3 V (+5 V tolerant)
Electrical Specifications	<ul style="list-style-type: none"> ■ Supply voltage/power consumption: <ul style="list-style-type: none"> □ +5 V (+/-10%), 5 mA typ. □ +3.3 V (+/-10%), 700 mA typ.
Mechanical Specifications	<ul style="list-style-type: none"> ■ Dimensions: conforming to CompactPCI® specification for 3U boards ■ Weight: 132 g
Environmental Specifications	<ul style="list-style-type: none"> ■ Temperature range (operation): <ul style="list-style-type: none"> □ -40..+85°C (qualified components) □ Airflow: min. 1.0 m/s ■ Temperature range (storage): -40..+85°C ■ Relative humidity (operation): max. 95% non-condensing ■ Relative humidity (storage): max. 95% non-condensing ■ Altitude: -300 m to + 3,000 m ■ Shock: 15 g, 11 ms ■ Bump: 10 g, 16 ms ■ Vibration (sinusoidal): 1 g, 10..150 Hz ■ Conformal coating on request
MTBF	<ul style="list-style-type: none"> ■ 1,763,401 h @ 40°C according to IEC/TR 62380 (RDF 2000)
Safety	<ul style="list-style-type: none"> ■ PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers
EMC	<ul style="list-style-type: none"> ■ Conforming to EN 55022 (radio disturbance), IEC1000-4-2 (ESD) and IEC1000-4-4 (burst)

Configuration & Options

Standard Configurations

Article No.	PCI Express Link
02F100-00	Via Front

Options

PCI Express®	<ul style="list-style-type: none"> ■ PCI Express® link from rear I/O connector J2 (requires special backplane)
CompactPCI® Bus	<ul style="list-style-type: none"> ■ 66 MHz with support for up to 4 PCI slots
Cooling Concept	<ul style="list-style-type: none"> ■ 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 F100 Models	02F100-00	3U CompactPCI® system slot card, PCI Express® x1 to PCI bridge via cable, -40°C..+85°C with qualified components (only in combination with G100; PCI Express® cable to be ordered separately)
Related Hardware	02G100-00	3U CompactPCI® Serial peripheral card, PCI Express® x1 cable interface, -40..+85°C with qualified components (only in combination with F100; PCI Express® cable to be ordered separately)
Miscellaneous Accessories	05G100-00	PCI Express® cable, 1m, 18-pin connector
Documentation		Compare Chart 3U CompactPCI® / PlusIO CPU cards » Download Compare Chart 3U CompactPCI® / PlusIO peripheral cards » Download 20G100-00 G100/F100 User Manual

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