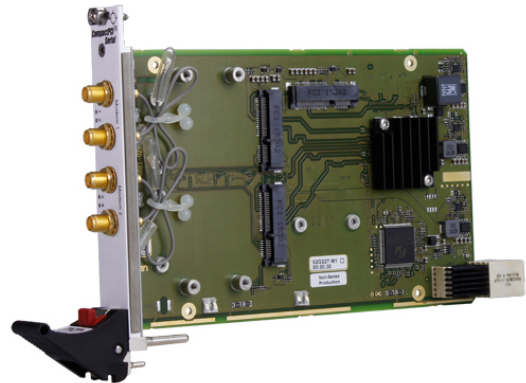


G227

3U CompactPCI Serial PCIe Mini Card Carrier for Wireless Functions

- » 2 PCI Express Mini Card slots for LTE, UMTS, GSM, HSPA communication
- » 2 external antennas per module (reverse SMA)
- » 1 PCI Express Mini Card slot for WLAN, GPS, virtual SIM card, audio codec
- » 1 external antenna optional
- » 10 microSIM card slots
- » Software tool for switching SIM cards and remote power up/down of modems
- » -40 to +85°C screened, conformal coating
- » PICMG CPCI-S.0 CompactPCI Serial peripheral card



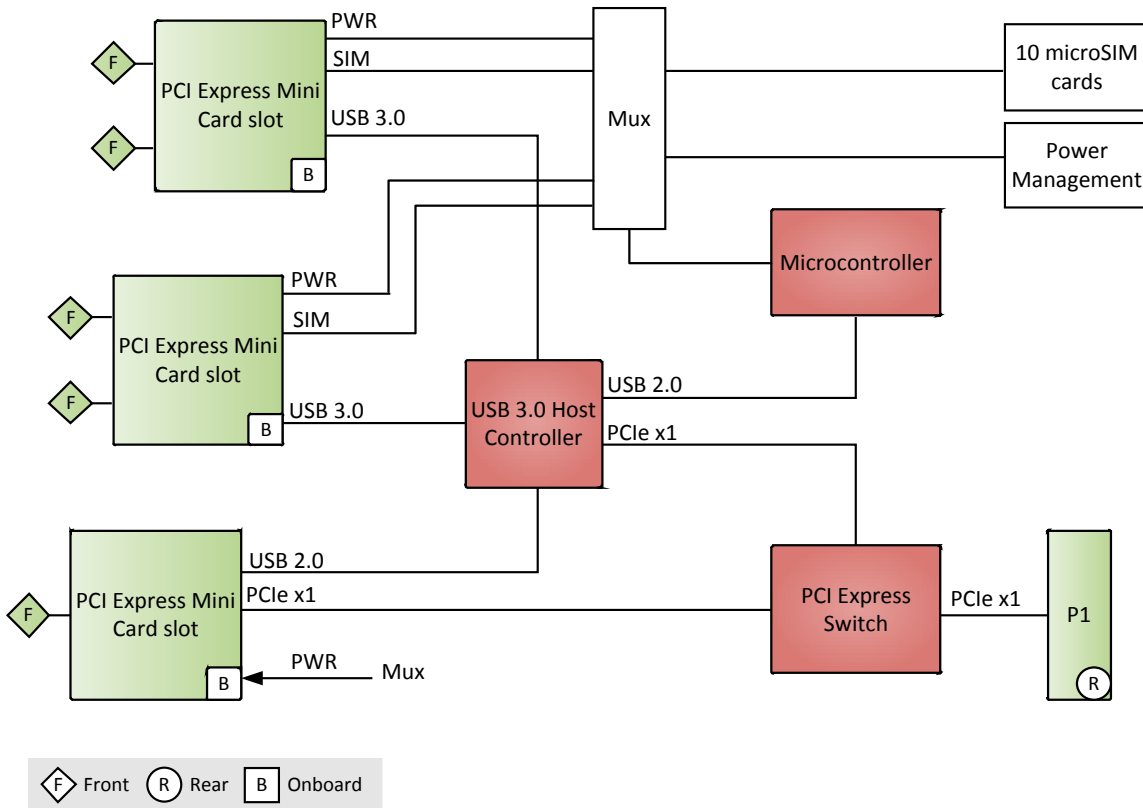
The G227 is a rugged single slot CompactPCI Serial carrier board for up to three PCI Express Mini Cards. It provides connectivity solutions to cellular networks by adding LTE, UMTS, GSM or other types of wireless modems. Each modem slot is equipped with two RP-SMA antenna connectors / cables by default. Other types of antenna connectors are available on request.

A third PCI Express Mini Card slot is available for GNSS (MEN PX1N module), a WLAN module, a virtual SIM card or an audio codec for processing voice data. The third module slot may also include an antenna connector if required.

The G227 is intended for use in various train connectivity applications including onboard WLAN, passenger

infotainment and fleet management systems. In the train communication system architecture, the G227 is typically located at the front end where it communicates directly with a cellular network. To optimize the connection and network coverage, the G227 features up to ten micro SIM cards slots.

MEN provides a user friendly software tool designed for interacting with the G227. The user is able to remotely control which micro SIM cards are connected to the modems. Remote power reset is also possible for each modem and the third optional PCIe Mini Card module. The G227 is designed for -40 to +85°C operating temperature and prepared for conformal coating in order to be used also in harsh and mobile environments. The final environmental qualification depends on the respective PCIe Mini Cards used with the carrier.



Card Interfaces

- Two PCI Express Mini Card slots (only full size)
 - USB 3.0 interface
 - For UMTS, GSM, HSPA, LTE functionality
- One PCI Express Mini Card slot (only full size)
 - USB 2.0 interface
 - PCI Express interface
 - For WLAN, GPS, GLONASS, audio, virtual SIM functionality
- 10 microSIM card holders
- Individual reset and power on/off for each PCI Express Mini Card
 - Via software
- Please note that MEN does not offer SIM cards or mobile telephony contracts!

Front Connections

- Four Reverse SMA antenna connectors or
- Five Reverse SMA antenna connectors (on request)
- Four HF cables
- One power LED and one user LED for each PCI Express Mini card

CompactPCI Serial

- Compliance with CompactPCI Serial PICMG CPCI-S.0 Specification
- Peripheral slot
- Host interface: one PCI Express x1 link

Electrical Specifications

- Supply voltage/power consumption:
 - +12V (-10%/+10%), depending on plugged card

Mechanical Specifications

- Dimensions: conforming to CompactPCI Serial specification for 3U boards
- Front panel: 4HP with ejector
- Weight: 172 g (without cards)

Environmental Specifications

- Temperature range (operation):
 - -40..+85°C (screened, only carrier, depending on configuration)
 - Airflow: min. 1.5 m/s
- Temperature range (storage): -40..+85°C
- Humidity (operation): EN 60068-2-30, EN 50155
- Shock: EN 50155
- Vibration: EN 50155
- Conformal coating on request

MTBF

- MTBF: tbd @ 40°C according to IEC/TR 62380 (RDF 2000)

Safety

- Electrical Safety
 - EN 62368-1 (former EN 60950-1)
 - EN 50155
 - EN 50153
- Flammability
 - UL 94V-0

EMC

- Radiated Emission: EN 55022 class B, EN 50121-3-2
- Immunity: EN 55024, EN 50121-3-2

Software Support

- Software for controlling microSIM cards and PCI Express Mini Cards
- PCIe Mini Card drivers as supported

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Up-to-date information, documentation and ordering information:

www.men.de/products/g227/

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