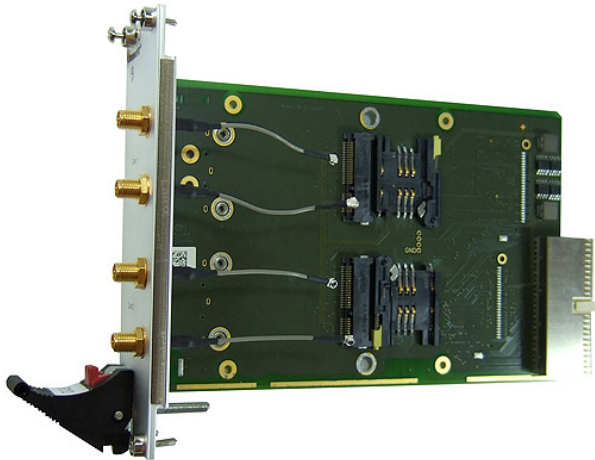


# F212 - 3U CompactPCI® PCIe MiniCard Carrier



- 8 HP 32-bit/33-MHz CompactPCI®
- Up to 2 PCI Express® MiniCards
- Optional 2 Express Cards 34 or 54
- For cards with internal USB interface
- For HF applications
- -40 to +85°C with qualified components

The F212 is a rugged single Eurocard CompactPCI® carrier board supporting the PCI Express® MiniCard standard or, as an option, the ExpressCard standard. ExpressCard is the successor of the CardBus standard and offers different construction sizes as well as connection via PCI Express® or USB 2.0.

The standard version of the F212 offers two PCI Express® MiniCard slots with USB connection. It allows to use all types of cards for HF applications, for example GPS, WLAN, UMTS, GSM, or HSDPA. Each card is connected to two robust redundant external SMA antenna connectors at the front panel of the F212.

Using these standard cards that give access to the whole world of common notebook PC expansions is a fast and easy way to extend the functionality of a CompactPCI® system as well.

The F212 is designed for -40 to +85°C operation temperature using qualified components and prepared for conformal coating in order to be used also in harsh and mobile environments. The final environmental qualification depends on the respective cards used on the carrier.

## Technical Data

### Card Interfaces

- Two PCI Express® Mini Cards or
- Two ExpressCards type 34 or
- One ExpressCard type 54
- SIM card holder
- USB interface
- Please note that MEN does not offer SIM cards or mobile telephony contracts!

### PCI-to-USB Bridge

- USB 2.0
- 48MHz

### Front Connections

- Four Reverse SMA antenna connectors

### CompactPCI® Bus

- Compliance with CompactPCI® Core Specification PICMG 2.0 R3.0
- Peripheral slot
- 32-bit/33-MHz PCI-to-USB bridge
- V(I/O): +3.3V (+5V tolerant)

### Electrical Specifications

- Supply voltage/power consumption:
  - +5V (-3%/+5%), depending on plugged card, tbd max. w/o card
  - +3.3V and 1.5V supply voltage for cards generated onboard
- MTBF: tbd @ 40°C according to IEC/TR 62380 (RDF 2000)

### Mechanical Specifications

- Dimensions: conforming to CompactPCI® specification for 3U boards
- Front panel: 8HP with ejector
- Weight: 172g (without cards)

### Environmental Specifications

- Temperature range (operation):
  - -40..+85°C (screened, only carrier, depending on configuration)
  - Airflow: min. 10m<sup>3</sup>/h
- Temperature range (storage): -40..+85°C
- Relative humidity (operation): max. 95% non-condensing
- Relative humidity (storage): max. 95% non-condensing
- Altitude: -300m to + 3,000m
- Shock: 15g/11ms
- Bump: 10g/16ms
- Vibration (sinusoidal): 1g/10..150Hz
- Conformal coating on request

### Safety

- PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers

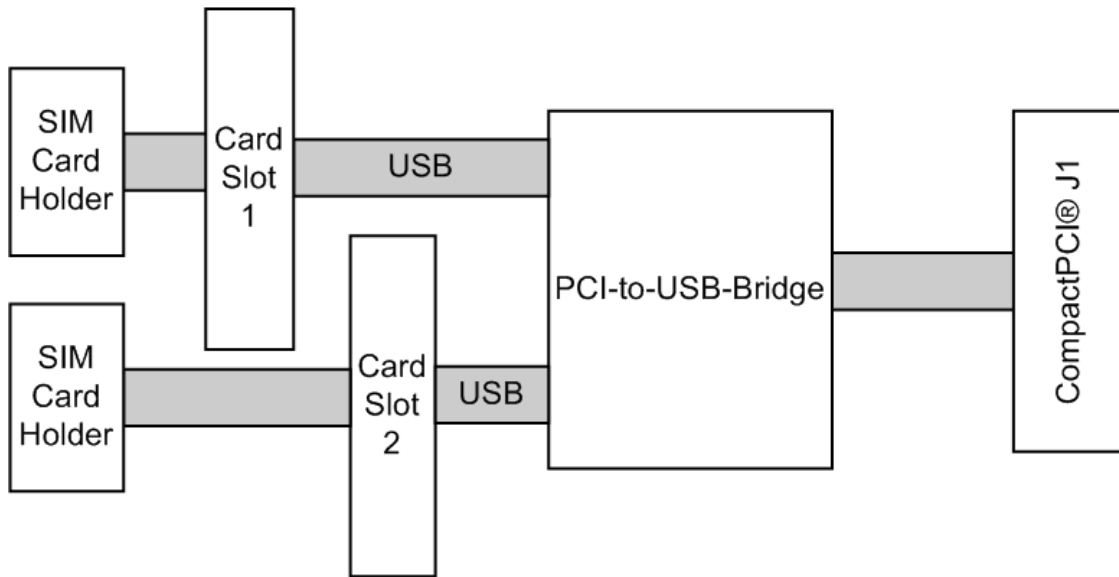
### EMC

- Conforming to EN 55022 (radio disturbance), IEC1000-4-2 (ESD) and IEC1000-4-4 (burst)

### Software Support

- ExpressCard drivers as supported

**Diagram**



## Configuration & Options

### Standard Configurations

Article No.	Card Slots	Front Panel	Operation Temperature
02F212-05	2 PCIe® MiniCards	4 SMA connectors	-40..+85°C

### Options

#### Card Slots

- Two PCI Express® Mini Cards
- Two ExpressCards type 34
- One ExpressCard type 54

**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 Hardware

**02F212-05** 2 PCI Express® MiniCard slots with USB interface, 4 SMA connectors, -40..+85°C with qualified components (carrier only)

For the most up-to-date ordering information and direct links to other data sheets and downloads, see the F212 online data sheet under » [www.men.de](http://www.men.de).

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