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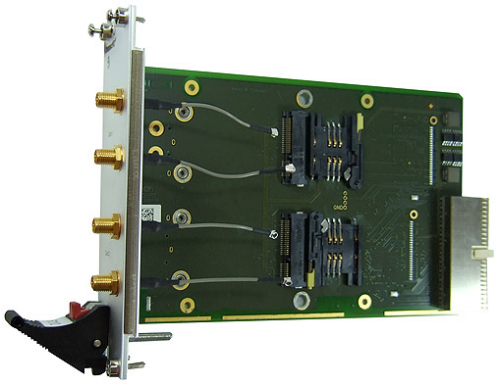
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Find the *MEN Micro / Mikro Elektronik F212* at our website: *Click HERE*

F212 – 3U CompactPCI® PCIe® Mini Card Carrier for Wireless Functions

- **4 HP 32-bit/33-MHz CompactPCI®**
- **Up to 2 PCI Express® Mini Cards**
- **ExpressCard®/34 or 54 modules optional**
- **For cards with internal USB interface**
- **For HF applications (WLAN, UMTS, GPS, GSM, HSDPA)**
- **-40 to +85°C with qualified components**



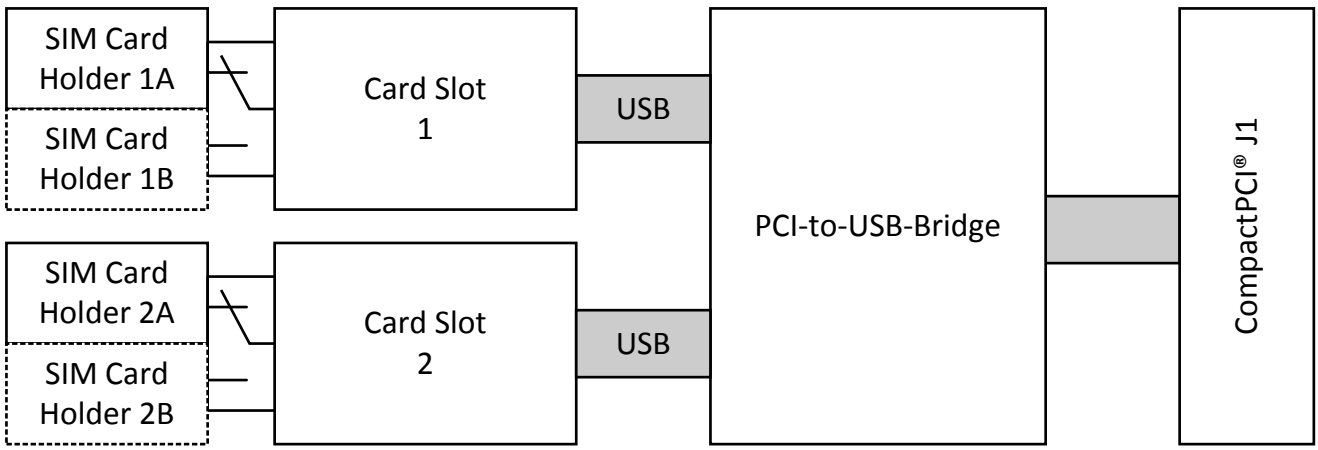
The F212 is a rugged single Eurocard CompactPCI® carrier board supporting the PCI Express® Mini Card standard or, as an option, the ExpressCard® standard. ExpressCard® is the successor of the CardBus standard and offers different construction sizes as well as connection via PCI Express® or USB 2.0.

The standard version of the F212 offers two PCI Express® Mini Card 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.

Diagram



Technical Data

Card Interfaces	■ For Two PCI Express® Mini Cards □ With two SIM card holders (one for each PCI Express® Mini Card) ■ USB interface ■ Please note that MEN does not offer SIM cards or mobile telephony contracts!
PCI-to-USB Bridge	■ USB 2.0 ■ 48 MHz
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): +3.3 V (+5 V tolerant)
Electrical Specifications	■ Supply voltage/power consumption: □ +5 V (-3%/+5% depending on plugged card), tbd max. w/o card □ +3.3 V and 1.5 V supply voltage for cards generated onboard
Mechanical Specifications	■ Dimensions: conforming to CompactPCI® specification for 3U boards ■ Front panel: 4HP or 8HP with ejector ■ Weight: 172 g (without cards)
Environmental Specifications	■ Temperature range (operation): □ -40..+85°C (screened, only carrier, depending on configuration) □ Airflow: min. 10 m³/h ■ Temperature range (storage): -40..+85°C ■ Relative humidity (operation): max. 95% non-condensing ■ Relative humidity (storage): max. 95% non-condensing ■ Altitude: -300 m to +3000 m ■ Shock: 15 g/11 ms ■ Bump: 10 g/16 ms ■ Vibration (sinusoidal): 1 g/10..150 Hz ■ Conformal coating on request
MTBF	■ 2 038 459 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)
Software Support	■ PCI Express® Mini Card and ExpressCard® drivers as supported

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	■ For two PCI Express® Full-Mini or Half-Mini Cards (dual-use sockets) □ With four SIM card holders (two for each PCI Express® Mini Card) ■ For two ExpressCard®/34 modules ■ For one ExpressCard®/54 module
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 F212 Models	**02F212-05**	2 PCI Express® Mini Card slots with USB interface, 4 SIM card sockets, 4 SMA connectors, -40..+85°C with qualified components (carrier only)
Related Hardware	**15PX01-00**	GLONASS & GPS PCI Express® MiniCard (full size), 3-axis Gyro sensor, -40..+85°C with qualified components
	15PX04-00	Audio interface for mobile wireless cards, with SIM card holder, -40..+85°C screened
Miscellaneous Accessories	**6100-0244**	Telit HE910 PCI Express® Mini Card module GSM/GPRS/EDGE: 850, 900, 1800, 1900 MHz, UMTS/HSDPA: 800/850, 900, AWS1700, 1900, 2100 MHz, HSDPA+ GPS/A-GPS (SUPL 1.0)
Documentation	Compare Chart 3U CompactPCI® / PlusIO CPU cards » Download	
	Compare Chart 3U CompactPCI® / PlusIO peripheral cards » Download	
	20F212-00	F212 User Manual

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