F2O5 – 3U CompactPCI[®] M-Module Carrier Board

- 1 CompactPCI[®] bus slot
- 2 M-Module slots
- -40 to +85°C versions with qualified components



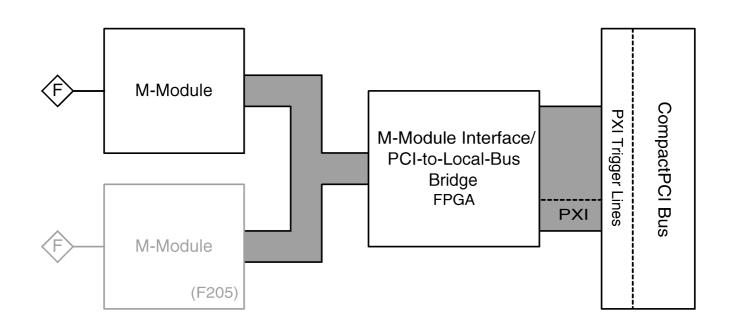
The F205 is a 3U M-Module carrier board for universal I/O on the CompactPCI[®] bus. It allows high flexibility in applications such as data acquisition or process control. The F205 is slightly higher than standard 3U format, providing enough space for two M-Modules while staying compatible with CompactPCI[®] housings

through special guide rails already included in the delivery. M-Modules are screwed tightly on the board and require no separately mounted transition panel.

The F205 offers developers instant access to more than 70 different M-Modules for I/O in fields such as process I/O, measurement, instrumentation, motion control, communication, and development.



Diagram



Technical Data

| M-Module Slots | Two M-Module slots Compliant with M-Module standard Characteristics: A08, A24, D08, D16, D32, INTA, TRIGI, TRIGO | | |
|------------------------------|---|--|--|
| Peripheral Connections | Via front panel | | |
| CompactPCI [®] Bus | Compliance with CompactPCI[®] Specification 2.0 R2.1 Only one slot required on the 3U CompactPCI[®] bus 32-bit/33-MHz PCI-to-M-Module bridge FPGA-based Compliant with PCI Specification 2.2 Target on PCI bus V(I/O): +3.3 V (+5 V tolerant) | | |
| Electrical Specifications | Supply voltage/power consumption: +5 V (-3%/+5%), 20 mA typ. +3.3 V (-3%/+5%), 20 mA typ. MTBF: 1 046 000 h @ 50°C (derived from MIL-HDBK-217F) | | |
| Mechanical Specifications | Dimensions: 111.7 mm x 160 mm standard Front panel: aluminum without handles, cut-outs for front connectors of 2 M-Modules Weight: 125 g (without M-Modules) | | |
| Environmental Specifications | Temperature range (operation): 0+60°C or -40+85°C Airflow: min. 10m³/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 + 3 000 m Shock: 15 g, 11 ms Bump: 10 g, 16 ms Vibration (sinusoidal): 2 g, 10150 Hz Conformal coating on request | | |
| Safety | PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers | | |
| EMC | Tested according to EN 55022 (radio disturbance), IEC61000-4-2 (ESD) and IEC61000-4-4 (burst) | | |
| Software Support | M-Module drivers for Windows[®], VxWorks[®], Linux, QNX[®], OS-9[®] as supported Basic board driver included in MDIS system package for the respective operating system | | |

Configuration & Options

Standard Configurations

| Article No. | M-Module Slots | M-Module Characteristics | Operation Temperature |
|-------------|----------------|--------------------------|-----------------------|
| 02F204-00 | 1 | A08/D16 | 0+60°C |
| 02F204-01 | 1 | A08/D16 | -40+85°C |
| 02F204-02 | 1 | A24/D32 | -40+85°C |
| 02F205-00 | 2 | A08/D16 | 0+60°C |
| 02F205-01 | 2 | A08/D16 | -40+85°C |
| 02F205-05 | 2 | A24/D32 | -40+85°C |

Options

| M-Module Slots | ■ 1 or 2 |
|--------------------------|---|
| M-Module Characteristics | A08/D16 or A24/D32 support |
| Operation Temperature | ■ 0+60°C ■ -40+85°C |
| 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 F205 Models | 02F205-00 | M-Module carrier board for 2 M-Modules, 0+60°C | | |
|---|---|---|--|--|
| | 02F205-01 | M-Module carrier board for 2 M-Modules, -40+85°C screened | | |
| | 02F205-05 | M-Module carrier board, 2 slots, A24 access, -40+85°C with qualified components | | |
| Miscellaneous Accessories | 05M000-15 | Front-panel cover for M-Module cut-outs at front panels, snap-in, 10 pcs | | |
| | 05M000-17 | 25 mounting screw sets to fix M-Modules on carrier boards | | |
| Software: Miscellaneous | Driver software for Windows [®] , Linux, VxWorks [®] , QNX [®] , RTX and OS-9 [®] is available for the different M- Modules. Please refer to the M-Module/s of your choice for information and download. | | | |
| | A basic board driver for this carrier card is included in the MDIS system package for the respective operating system. You can find an overview of available packages for download under www.men.de/mdis. | | | |
| For operating systems not mentioned here contact MEN sales. | | | | |
| Documentation | Compare Chart 3U CompactPCI® / PlusIO CPU cards » Download | | | |
| | Compare Chart 3U CompactPCI® / PlusIO peripheral cards » Download | | | |
| | 20APPN001 | Application Note: +5V cPCI Boards with +3.3V V(I/O) | | |
| | 20F204-00 | F204/F205 User Manual | | |

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