F2061 - 3U CompactPCI®-ISA PC/104 Carrier Board



- 1 CompactPCI® slot 32-bit/33-MHz (opt. 66 MHz)
- 4 HP closed front panel
- 1 to 4 PC/104 slots
- PCI-to-ISA bridge
- FPGA 12,000 LEs (approx.144,000 gates)
- -40 to +85°C with qualified components

The F206I is a 3U 8HP CompactPCI® bus card which provides a PC/104 interface supporting PC/104 extension boards. An on-board PCI-to-ISA bridge links the ISA bus of the PC/104 module with the 32-bit/33-MHz CompactPCI® bus.

The F206I can be configured to work with most PC/104 modules. By default, PCI accesses are translated to 0xDxxxx, so that PC/104 modules which can be jumpered or configured to that address will work without software modification.

For other PC/104 modules, software modifications or modified F206I FPGA content may be necessary. For detailed information as to whether your PC/104 module works with F206I, see the user manual or ask MEN support.

Memory as well as I/O access is possible. The

interrupt routing can be done in a very flexible way. DMA on the ISA bus is currently not supported but can be made available as an option.

The PCI-to-ISA bridge is realized by means of an FPGA which is loaded automatically after power-up out of a 2MB standard NOR Flash device.

The F206I is delivered with one closed 4HP front panel. Depending on the PC/104 module/s used on the F206I it might be necessary to adapt the required front panels (see MEN accessories) and to provide specific cabling to connect the PC/104 module to the front (please contact PC/104 module manufacturer). The F206I is designed for use in rugged environments. For example, all components are specified for an operation temperature of -40 to +85°C.



Technical Data

CompactPCI® to PC/104 bridge

- 1 to 4 PC/104 slots
- FPGA-controlled

CompactPCI® Bus

- Compliance with CompactPCI® Core Specification PICMG 2.0 R3.0
- Peripheral slot
- V(I/O): +3.3V

Electrical Specifications

- Supply voltage/power consumption:
 - +5V (-3%/+5%), current depends only on mounted PC/104 modules
 - \Box +3.3V (-3%/+5%), > 500mA typ.
- MTBF: 316,000h @ 40°C (derived from MIL-HDBK-217F)

Mechanical Specifications

- Dimensions: conforming to CompactPCI® specification for 3U boards
- Single 3U front panel slot (additional slots may be required for mounted PC/104 boards)
- Front panel: aluminum with 1 handle
- Weight: 95g

Environmental Specifications

- Temperature range (operation):
 - □ -40..+85°C (qualified components)
 - □ 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: -300m to + 3,000m
- Shock: 15g/11ms
- Bump: 10g/16ms
- Vibration (sinusoidal): 2g/10..150Hz
- Conformal coating on request

Safety

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

EMC

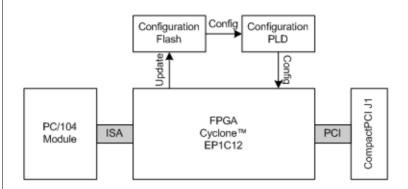
 Tested according to EN 55022 (radio disturbance), IEC1000-4-2 (ESD) and IEC1000-4-4 (burst)

Software Support

PC/104 drivers as supported



Diagram





Ordering Information

Standard Hardware

02F206I00 F206I, CompactPCI 3U, 2-slot carrier board

for 1 PC/104 module with 1-slot closed front panel mounted, operation temperature

-40..+85°C

Documentation

20F206I00 F206I User Manual

For the most up-to-date ordering information and direct links to other data sheets and downloads, see the F2061 online data sheet under » www.men.de.

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