

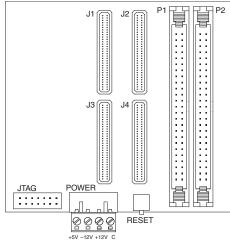
PMC Module Carriers

APMC4110 Busless PMC Module Carrier Card









Holds one PMC module ◆ Delivers power to PMC module ◆ Enables a trouble-free start-up sequence

Description

This PMC module carrier card allows use of a PMC module in an independent stand-alone mode. The carrier card delivers power to the PMC module and regulates the PCI bus start-up sequence to prevent a system lock-up by the connection to the local bus.

As a non-intelligent carrier, the board acts simply as an adapter to route signals to and from the PMC module. The user has full access to the field I/O via two 50-pin ribbon cable connectors.

Using an external power supply, this carrier card allows use of any industry-standard PMC module. The on-board DC-DC converter creates +3.3VDC from the external +5VDC source, lowering the number of external power connections required.

For troubleshooting, a 14-pin Xilinx JTAG connector facilitates boundary scan debugging. Also, a manual reset button allows the user to force an RST# signal when needed.

Key Features & Benefits

- Single-slot PMC carrier card
- Stand-alone design does not require expensive card cage or other computer chassis
- Ideal for custom computing solutions based on configurable FPGA modules
- On-board DC-DC converter provides +3.3V DC to the PMC module from a +5V power source
- Users can optionally provide a ±12V DC source
- Manual reset button initiates a PCI reset at user's discretion
- Voltage monitor designed to prevent code execution errors during power-up, powerdown, or potential brown-out conditions when +5V DC supply dips too low
- A standard 14-pin Xilinx JTAG connection is available for utilizing the TDI, TDO, TCK, and TMS signals
- Front or rear connection I/O access





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Performance Specifications

■ PMC Compatibility

Pin assignment conforms to PCI Bus Specification, Revision 3.0.

Physical

Physical Configuration

Height: 3.300 inches (83.820 mm).

Depth: 3.520 inches (89.408 mm).

Board Thickness: 0.063 inches (1.600 mm).

Unit Weight: 0.107 lbs. (0.053 kg).

Connectors

P1, P2 (Field I/O): 50-pin, ribbon cable, male receptacle headers.

P3: 4-pin power header.

P4: 14-pin Xilinx JTAG port.

J1 - J4: 64-pin PMC module connectors.

Environmental

Operating temperature -40 to 85°C.

Storage temperature

-55 to 120°C.

Relative humidity

5 to 95% non-condensing.

Power

- +5V (±5%): 66mA, typical.
- +12V (±10%): 0mA, used by PMC module only.
- -12V (±10%): 0mA, used by PMC module only. Note that 3.3V is generated from the 5V supply. Power requirements do not include the PMC module.

±12.0V DC is optional based on user's needs.

Isolation

Non-Isolated. PCI interface and field commons have a direct electrical connection.

MTBF

Contact the factory.

Ordering Information

Carrier Card

APMC4110

Stand-alone powered PMC module carrier card.

Accessories

5025-550-x

Flat ribbon cable, non-shielded, 50-pin connector at both ends. Specify x = length, in feet (12ft. max.).

5025-551-x

Flat ribbon cable, shielded, 50-pin connector at both ends. Specify x = length, in feet (12ft. max.).

5025-552

Termination panel, DIN rail-mount, 50 screw terminals, 50-pin ribbon cable connector.

PMC Modules

See www.acromag.com for more information.

Software Development Tools

See www.acromag.com for more information.

