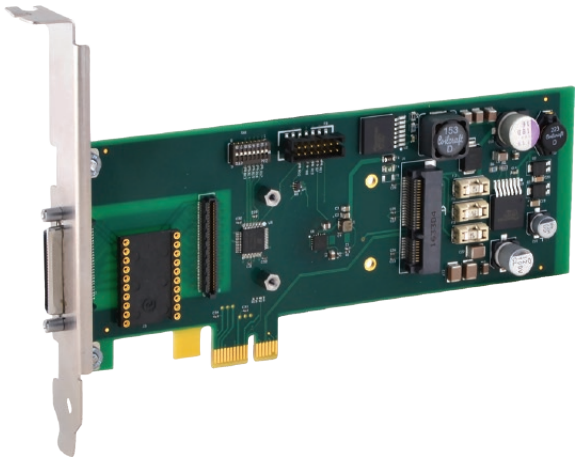
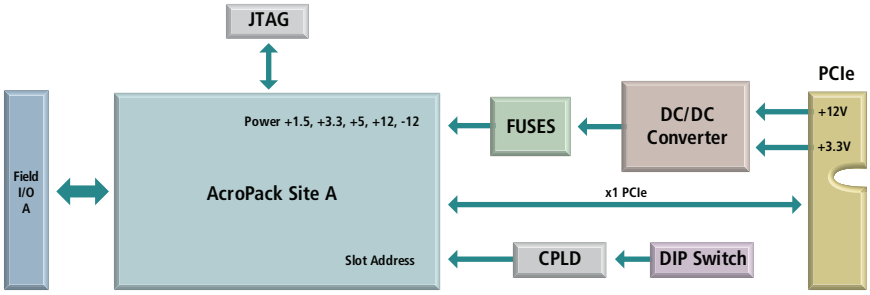
AcroPack® I/O Module Carriers

APCe7000 Series PCI Express Carrier Cards for AcroPack® Modules

CE 2 YEAR WARRANTY RoHS Compliant





One AcroPack or mini-PCIe mezzanine module slot ◆ Non-Intelligent carrier card ◆ PCIe x4 interface

Description

Model: APCe7010E-LF

The AcroPack® product line updates our popular Industry Pack I/O modules with a PCIe interface format. This tech-refresh design offers a compact size, low-cost I/O, the same functionality and memory map of the existing Industry Pack modules.

This board interfaces one AcroPack mezzanine module to a PCI Express bus on a PC-based computer system.

Select I/O modules from Acromag's offering or use most third-party mPCIe compliant modules.

Key Features & Benefits

- One AcroPack or mini-PCIe module slot
- PCI Express compliant
- Plug-and-play carrier configuration and interrupt support
- Fused +1.5V, +3.3V, +5V, +12V, and -12V DC power is provided. A fuse is present on each supply line serving each AcroPack module.
- Front panel SCSI-2 connectors for field I/O signals
- Optional isolated power supplies. Support for AcroPacks requiring ±12 Volt isolated power.
- Extended temperature range
- DIP switch card identification
- Standard 14-pin Xilinx JTAG programming header
- Software development tools for VxWorks, Linux, and Windows environments

Acromag® THE LEADER IN INDUSTRIAL I/O

Tel 248-295-0310 ■ Fax 248-624-9234 ■ solutions@acromag.com ■ www.acromag.com ■ 30765 Wixom Rd, Wixom, MI 48393 USA

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Performance Specifications

PCI Express Bus Compliance

This device meets or exceeds all written PCI Express specifications per revision 2.1.

The host port consists of four PCIe lanes, each of the mini-PCIe sites have one lane each.

I/O Interface

Front I/O
Connector: 50-pin 0.8 mm Champ cable connection. Pin assignments are defined by the installed AcroPack or mini-PCIe module.

The field side connector of the AcroPack I/O module mates to a Samtec SS5-50-3.00-L-D-K-TR socket connector P2 on the carrier board.

Gold plating in the connection area, M2.5 screws and spacers provide excellent connection integrity and stability for harsh environments.

Ease of Use

A standard 14-pin Xilinx JTAG programming header is provided for programming and debugging the FPGA on some AcroPack modules.

Physical

Physical Configuration
PCIe x4 lane
Length: 5.158 inches (131.01 mm).
Height: 2.711 inches (68.86 mm).

Field I/O Connector
50-pin male header; 1 mini-PCIe connector, 1 field I/O Champ connector; 1 PCI Express bus interface connector.

Environmental

Operating temperature
-40 to +85°C

Storage temperature
-55 to +125°C.

Relative humidity
5 to 95% non-condensing.

Power
+3.3 Volts (±10%): 0.55mA typical
+12 Volts (±5%): 25mA Typical

The APCe7010E-LF has one DC/DC converters to provide the power supply voltages to the AcroPack modules that are not present at the host interface. The +1.5 Volt supply is sourced from the +3.3 Volt host power. The +5 Volt and -12 Volt supply is sourced from +12 Volt host power.

Ordering Information

Carrier Card

APCe7010E-LF
AcroPack carrier card for AcroPack or mPCIe modules, one module slot.

Accessories

5028-372
Round cable, shielded, SCSI-2 to CHAMP. 0.8mm, 2 meters long.

5028-378
Termination panel, SCSI-2 connector, 50 screw terminals

AcroPack® Modules

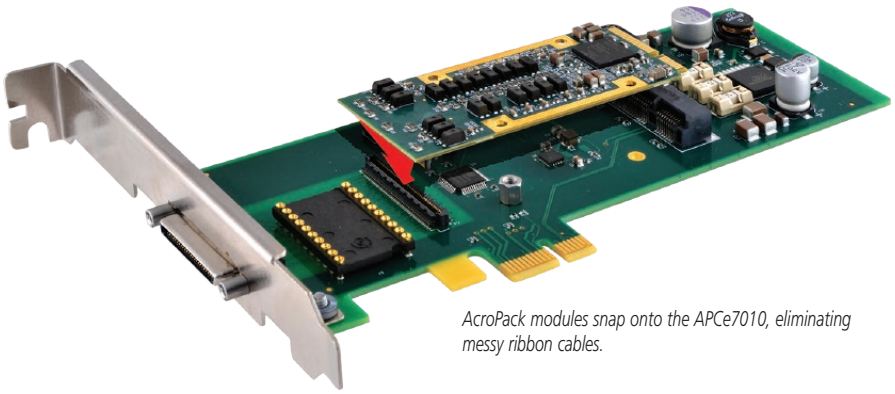
See www.Acromag.com/AcroPacks for more information.

Software Development Tools

APSW-API-VXW
VxWorks® software support package

APSW-API-WIN
Windows® DLL driver software support package

APSW-API-LNX
Linux® support (website download only)



AcroPack modules snap onto the APCe7010, eliminating messy ribbon cables.

ISO9001
AS9100
MADE IN USA

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