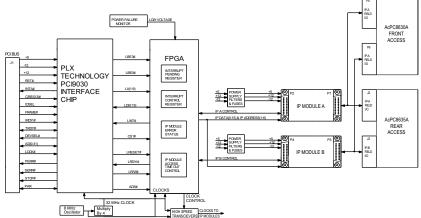


Industry Pack Carrier Cards

AcPC8635A CompactPCI Carrier Cards for Industry Pack Modules







Two Industry Pack mezzanine module slots ◆ Non-Intelligent carrier card ◆ CompactPCI bus interface

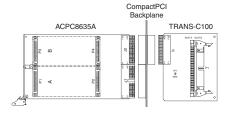
Description

The AcPC8635A is a nonintelligent slave board that interfaces two IP modules to the CompactPCI® (cPCI) bus. All 100 I/O points are brought out the rear J2 connector. This convenience eliminates messy cables from hanging out the front of the cage. In addition to a more efficient cage wiring design, it is also much easier to insert and replace boards.

Key Features & Benefits

- Two industry-standard IP module slots
- Board resides in memory space
- Supports IP module I/O, ID, INT, and MEM spaces
- Supports 8 and 32 MHz operation
- 100 I/O points with rear access
- High-density rear connectors
- Compatible with 32-bit CompactPCI® backplane
- Plug-and-play carrier configuration and interrupt support
- Two interrupt channels per IP module
- Front panel LEDs
- Supervisory circuit for reset generation
- Individually filtered and fused power to each IP
- Ruggedized with ESD strip and EMC front panel
- Easily integrate IPs with your software using RTOS VxWorks, Linux, or Win DLL for Windows® 2000/XP/Vista/7 32-bit systems.
- Clean system cabling.

- Easy board replacement as I/O needs change.
- Simplified debugging with status LEDs.
- Quick development of custom I/O boards.
- Flexibility to mix and match I/O functions as requirements change.







Industry Pack Carrier Cards

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Performance Specifications

General

Acromag's carrier boards provide full data access to the IP module's I/O, ID and interrupt spaces. With full access to the programmable registers, you can easily configure and control the operation of the IP modules from the cPCI bus.

Up to two interrupt requests are supported for each IP module. All board interrupts are mapped to PCI bus

Individual passive filters on each IP power supply line provide optimum filtering and noise isolation between the IP modules and the carrier board.

IP Compliance (ANSI/VITA 4)

Meets IP specs per ANSI/VITA 4-1995 (8MHz operation only) and IP I/O mapping to J2 per PICMG 2.4 R1.0.

Electrical/mechanical interface

Supports single or double size IP modules.

IP Module I/O space, ID space, INT, and MEM space supported.

Supports two interrupt requests per IP module and interrupt acknowledge cycles via access to IP INT

CompactPCI bus Compliance

Meets PCI spec. V2.1 and PICMG 2.0, R2.1.

Data transfer bus

Slave with 32-bit, 16-bit, and 8-bit data transfer operation. 32-bit read/write accesses are implemented as two 16-bit transfers to the IPs.

Interrupts

CompactPCI bus INTA# interrupt signal. Up to two requests sourced from each IP mapped to INTA#. Interrupts come from IP modules via access to IP module INT space.

32-bit memory space

Upon power-up, the system auto-configuration process (plug & play) maps the carrier's base address (for a 1K byte block of memory) into the PCI bus 32-bit memory space.

Power Requirements

+3.3V (±5%): 300mA maximum. +5V (±5%): 30mA maximum. ±12V (±5%): 0mA (not used). Plus IP module load.

MTBF

Contact factory

Environmental

Operating temperature 0 to 70°C (AcPC8635A model) or -40 to 85°C (AcPC8635AE model).

Storage temperature -55 to 100°C.

Relative humidity

5 to 95% non-condensing.

Ordering Information

Carrier Cards

AcPC8635A

CompactPCI carrier. Holds two IP modules.

AcPC8635AE

Same as AcPC8635A with extended temperature

Accessories

5025-550

Cable, unshielded, 50-pin header both ends

5025-551

Same as 5025-550 except shielded

5025-552

Termination panel, 50-pin connector, 50 screw terminals

TRANS-C100

Transition module

See www.acromag.com for more information.

Software Development Tools

IPSW-API-VXW

VxWorks® software support package

IPSW-API-WIN32

32-bit Windows® DDL driver and demo software

IPSW-API-WIN64

64-bit Windows® DDL driver and demo software

IPSW-API-LINUX

Linux[™] support (website download only)

See www.acromag.com for more information.

