# **Industry Pack Modules**



# AcPC8630 CompactPCI®, Non-intelligent, 3U IP Carrier Card

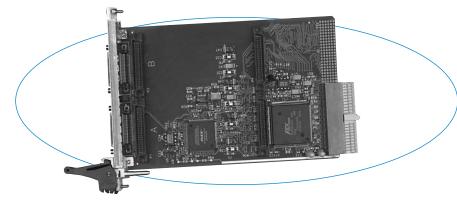
The AcPC8630 is a non-intelligent slave board that interfaces two IP modules to the CompactPCI<sup>®</sup> (cPCI) bus. All 100 I/O points are brought out the front connectors for easy cable access.

### **Features**

- Two industry-standard IP module slots
- Board resides in memory space
- Supports IP module I/O, ID and INT spaces
- 100 I/O points with front access
- High-density front connectors
- Compatible with all CompactPCI CPUs
- Compatible with 32-bit and 64-bit CompactPCI<sup>®</sup> and PXI<sup>™</sup> 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
- ActiveX/OLE controls available for easy software integration (sold separately)

## **Benefits**

- Easy access to I/O cables.
- Quick development of custom I/O boards.
- Flexibility to mix and match I/O functions as requirements change.



Mix and match plug-in modules with different I/O functions to quickly create custom I/O boards.

## **Operation**

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

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

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

# **Specifications**

#### IP Compliance (ANSI/VITA 4)

Meets IP specs per ANSI/VITA 4-1995 (8MHz operation only) and IP I/O mapping to the front panel.

- Electrical/mechanical interface: Supports single or double size IP modules. 32-bit IP modules are not supported.
- IP Module I/O space, ID space, and INT space supported.
- IP Module Memory space: Not supported.

Interrupts: Supports two interrupt requests per IP module and interrupt acknowledge cycles via access to IP INT space.

### **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 autoconfiguration process (plug & play) maps the carrier's base address (for a 1K byte block of memory) into the PCI bus 32-bit memory space.

#### Environmental

Operating temperature: 0 to 70°C (AcPC8630 model) or -40 to 85°C (AcPC8630E model).

Storage temperature: -55 to 100°C.

Relative humidity: 5 to 95% non-condensing.

### Power:

- +5V (±5%): 200mA maximum. ±12V (±5%): 0mA (not used).
- Plus IP module load.

MTBF: Consult factory.

## **Ordering Information**

### **Industry Pack Carriers**

AcPC8630 CompactPCI carrier. Holds two IP modules.

AcPC8630E

Same as AcPC8630 with extended temperature range.

Software (see Page 81) IPSW-API-VXW

VxWorks® software support package

IPSW-API-QNX QNX<sup>®</sup> software support package

#### IPSW-ATX-PCI

ActiveX<sup>®</sup>/OLE Controls 2.0 software package

#### IPSW-LINUX

Linux<sup>™</sup> support (website download only)

#### Accessories (see Page 87)

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