

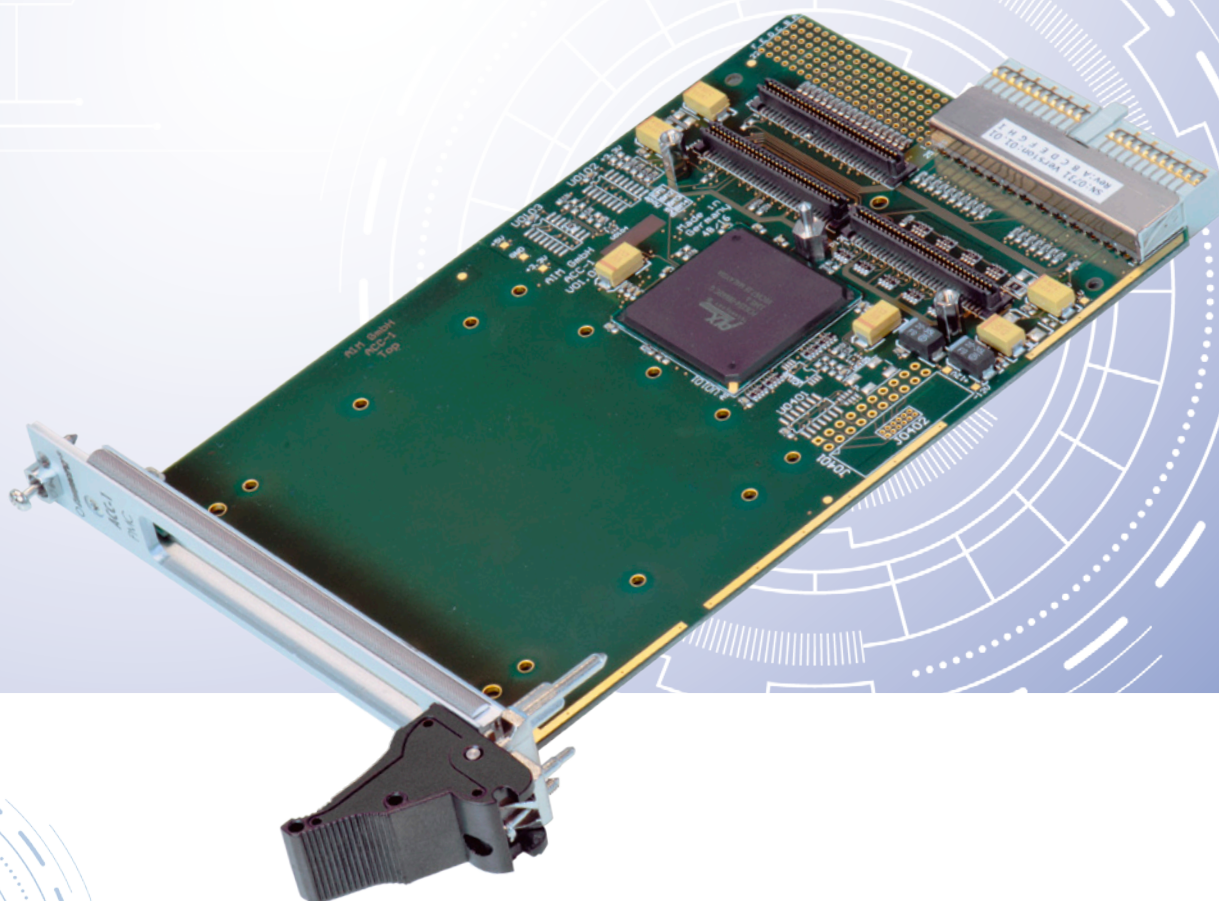


Avionics Databus  
Solutions

# ACC-1

CompactPCI (3U) Generic Carrier Card  
for PMC (PCIbus Mezzanine Card)  
Modules

Data  
Sheet



## General Features

The ACC-1 is a single slot, single height (3U) CompactPCI module with 1 PMC slot to plug in a standard PMC module.

The ACC-1 implements a PCI-to-PCI bridge using an industry standard device.

The ACC-1 fulfills the requirements of the CompactPCI specification as well as the requirements of the PCIbus standard both primary and secondary sides. The PMC slot is in conformance with the draft standard physical and environmental layers for PCI mezzanine cards (P1386.1/Draft 2.4).

## PMC Module Interface

The ACC-1 is designed to plug all standard ► **PMC modules** with a maximum PCIbus width of 64-bit and a PCIbus operation up to 66MHz.

The ACC-1 carrier board is of universal I/O signalling voltage type and can be plugged in either a +3.3V or +5.0V cPCI chassis. On the secondary PCIbus side the PMC slot is configured to support +3.3V, I/O signalling voltage for use with +3.3V PMC modules.

For +5.0V PMC modules the carrier is identified by a different part number.

The use of a voltage keying pin protects against false PMC assembly.

## Key Features

- Easily configured with any AIM PMC Databus Module: ► **AFDX®/ARINC664P7, ARINC429, MIL-STD-1553** or any standard 3rd party PMC Module
- 66Mhz operation for +3.3V environments
- +5.0V signalling environment available
- 64-bit PCIbus Extension (optional)
- Fully compliant to CompactPCI Specification
- Hosts PMC Interface designed to PMC standard P1386.1/Draft 2.4

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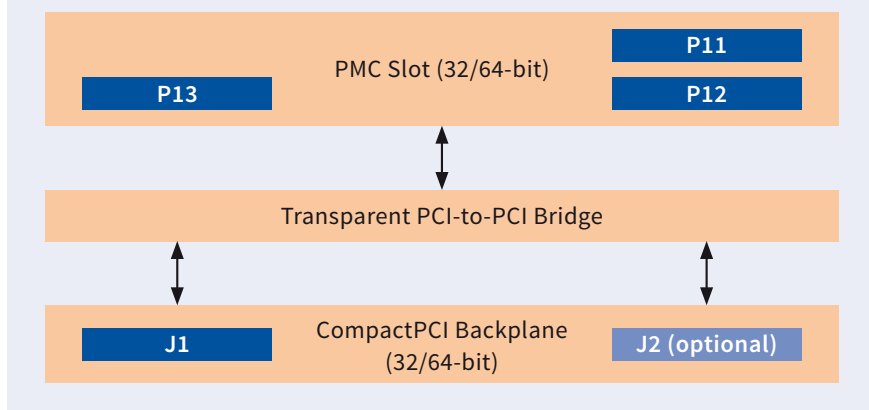
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ACC-1 Block Diagram

## Technical Data

### cPCI Interface:

- Fully compliant to CompactPCI Specification, PICMG 2.0 R3.0
- Supports +5V and +3.3V Signalling Voltage
- cPCI Databus Width of 32/64-bit (optional)
- cPCI Databus Operation of up to 66MHz
- PCI-to-PCI Bridge Controller between cPCIbus and PCIbus

### PMC Interface:

- ACC-1 Host Carrier Board provides 1 PMC Slot
- Fully compliant to PCI Mezzanine Card Standardization P1386.1/Draft 2.4
- Supports +5V or +3.3V Signalling Voltage
- PMC Databus Width of 32/64-bit (optional)
- PMC Databus Operation of up to 66MHz

### PCIbus:

- Provides connections between cPCI Interface and the PMC Slot
- Fully compliant to PCIbus Specification rev 2.1
- Supports either +5V or +3.3V VIO Voltage, protected by PMCKeys Code
- PCIbus Width of 32/64-bit (optional)
- PCIbus Operation of up to 66MHz
- Priority based PCIbus Arbiter

### Connectors

- cPCI: J1 primary 32-bit bus/J2 primary 64-bit Bus (only optionally assembled)
- PMC: P11 secondary 32-bit Bus/ P11/12 secondary 32-bit Bus/ P13 secondary 64-bit Bus

### Front Panel

PMC-Bezel standard Breakout Panel

### Dimensions

100mm x 160mm

### Power Consumption

2.2W maximum: full bus load (excludes PMC Consumption)

### Operating Temp. Range

0°C to +70°C standard Operating Range  
-40°C to +85°C extended Temperature Range  
-55°C to +125°C Storage Range

### Humidity

5 to 95% non-condensing

## Ordering Information

### ACC-1

cPCI (3U) carrier module with 1 PMC slot

### ACC-1-5V

cPCI (3U) carrier module with 1 PMC slot (5V version)

By default, only J1 (32-bit) is assembled on the ACC-1. Please specify on order if J2 for 64-bit PCIbus support is required to be assembled