General Features

The ACC-1 and ACC-2 are members of AIM's new family of 64bit extended PMC Carrier Boards. The ACC-1 is a single slot, single height (3U) CompactPCI module with one PMC slot to plug in a standard PMC module, whilst the ACC-2 is a single slot, double height (6U) CompactPCI module to plug in two standard PMC modules. Both implement a PCI-to-PCI Bridge using the industry standard INTEL device.

The ACC-1 and ACC-2 fulfil 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/ ACC-2 are designed to plug all standard PMC modules with a maximum PCIbus width of 64bit and a PCIbus operation up to 66 MHz.

The ACC-1/ ACC-2 carrier board is of Universal I/O signaling 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 signaling 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.
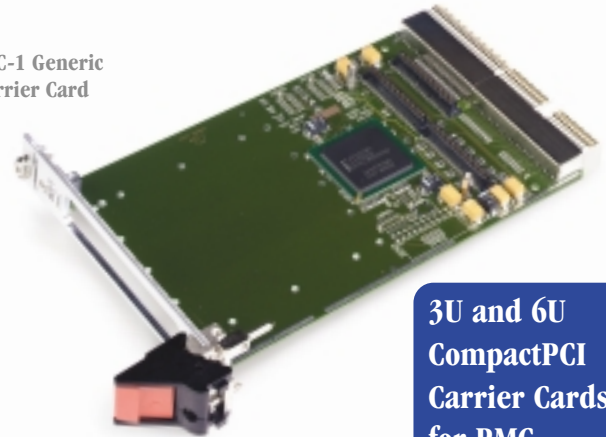
Key Features

- Easily configured with any AIM PMC Databus Module: AFDX/ARINC664, ARINC429, MIL-STD-1553 or any standard Third Party PMC module
- Mix and Match different Databus Modules with the ACC-2
- Rear I/O available for ACC-2
- 66Mhz operation for +3.3V environments
- +5.0V signaling environment available
- 64 bit PCI bus extension
- Fully compliant to CompactPCI Specification
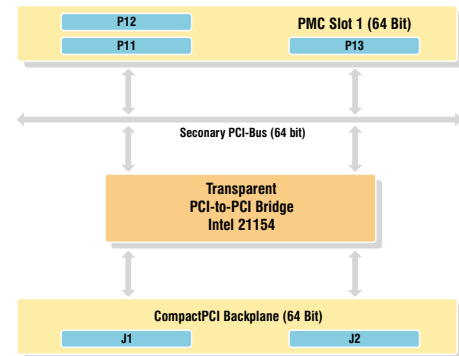- Hosts PMC interface designed to PMC standard P1386.1/Draft 2.4

data sheet

ACC-1/ACC-2

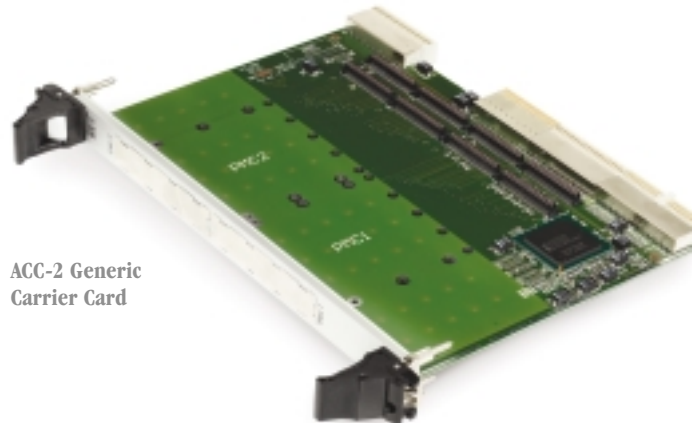**CompactPCI Generic Carrier Cards for PMC (PCIbus Mezzanine Card) modules**

ACC-1 Generic Carrier Card

3U and 6U CompactPCI Carrier Cards for PMC

ACC-1

| P12 | PMC Slot 1 (64 Bit) |
| P11 | P13 |

Seconary PCI-Bus (64 bit)

Transparent PCI-to-PCI Bridge Intel 21154

CompactPCI Backplane (64 Bit)
| J1 | J2 |

ACC-2 Generic Carrier Card

ACC-2

PMC 1		PMC 2	
P12 (32 Bit)	P14 (RIO)	P22 (32 Bit)	P24 (RIO)
P11 (32 Bit)	P13 (64 Bit)	P21 (32 Bit)	P23 (64 Bit)

Seconary PCI-Bus (64 bit)

Transparent PCI-to-PCI Bridge Intel 21154

PMC1 Rear-IO

PMC2 Rear-IO

| J1 | J2 | J3 | 6U CompactPCI Backplane (64 Bit) | J5 |
| CompactPCI Backplane Rear IO | | J3 | | J5 |
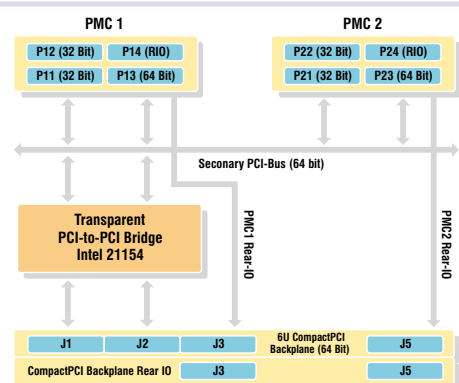
Avionics Databus Solutions

ACC-1/ACC-2

CPCI (3U and 6U)
Generic Carrier Cards for PMC
(PCIbus Mezzanine Card)
modules

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Right on Target

Technical Data

CPCI Interface

- Fully compliant to CompactPCI specification, PICMG 2.0 R3.0
- Supports +5V and +3.3V signaling voltage • CPCI Databus width of 32bit / 64bit
- CPCI Databus operation of up to 66MHz
- INTEL 21154 PCI-to-PCI Bridge Controller between CPCIbus and PCIbus

PMC Interface

- ACC-1 Host Carrier board provides one PMC slot
- ACC-2 Host Carrier board provides two PMC slots
- Fully compliant to PCI Mezzanine card standardisation P1386.1 / Draft 2.4
- Supports +5V or +3.3V signaling voltage • PMC Databus width of 32bit / 64bit
- PMC Databus operation of up to 66MHz

PCI Bus

- Provides connections between CompactPCI Interface and the PMC slot/ slots
- Fully compliant to PCIbus Specification Rev 2.1
- Supports either +5V or +3.3V VIO voltage, protected by PMC Keying Code
- PCIbus width of 32bit / 64bit • PCIbus operation of up to 66MHz
- Priority based PCIbus Arbiter

Connectors:	**ACC-1**
• CompactPCI:	J1 Primary 32bit Bus / J2 Primary 64bit Bus
• PMC:	P11 Secondary 32bit Bus / P12 Secondary 32bit Bus
	P13 Secondary 64bit Bus
Connectors:	**ACC-2**
• CompactPCI:	J1 Primary 32bit Bus / J2 Primary 64bit Bus
	J3 I/O (PMC 1) / J5 I/O (PMC 2)
• PMC:	P11 Secondary 32bit Bus / P12 Secondary 32bit Bus
	P13 Secondary 64bit Bus / P14 I/O
	P21 Secondary 32bit Bus / P22 Secondary 32bit Bus
	P23 Secondary 64 bit Bus / P24 I/O

Front Panel:	PMC-Bezel standard Breakout
Dimensions:	**ACC-1:** 3U Board: 100mm x 160mm
	ACC-2: 6U Board: 233mm x 160mm
Power Dissipation:	**ACC-1:** 2.2 Watt maximum: full BusLoad (excludes PMC dissipation)
	ACC-2: 2.2 Watt maximum: full BusLoad (excludes PMC dissipation)
Temperature:	0 to +70°C Standard Operating
	-40 to +85°C Extended Temperature
	-55 to +125°C Storage
Humidity:	5 to 95% non-condensing

Ordering Information

ACC-1:	CPCI (3U) Carrier Module with one PMC slot
ACC-1-5V:	CPCI (3U) Carrier Module with one PMC slot (5V version)
ACC-2:	CPCI (6U) Carrier Module with two PMC slots
ACC-2-5V:	CPCI (6U) Carrier Module with two PMC slots (5V version)