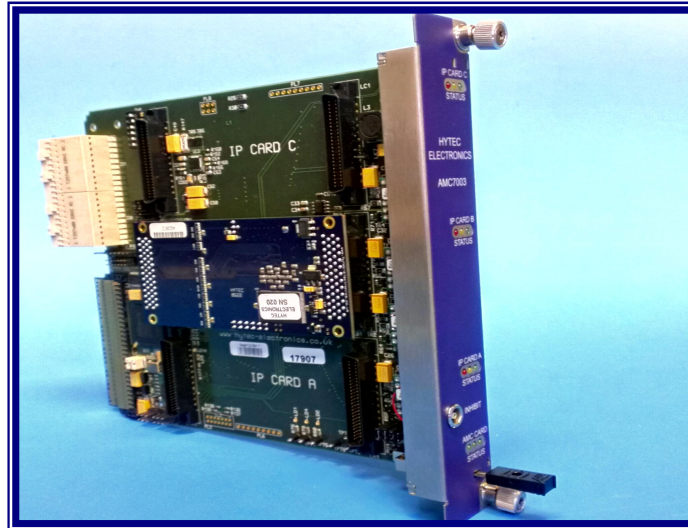


# AMC7003

## Advanced Mezzanine Card

### 3 Slot Industry Pack Carrier For MTCA.4

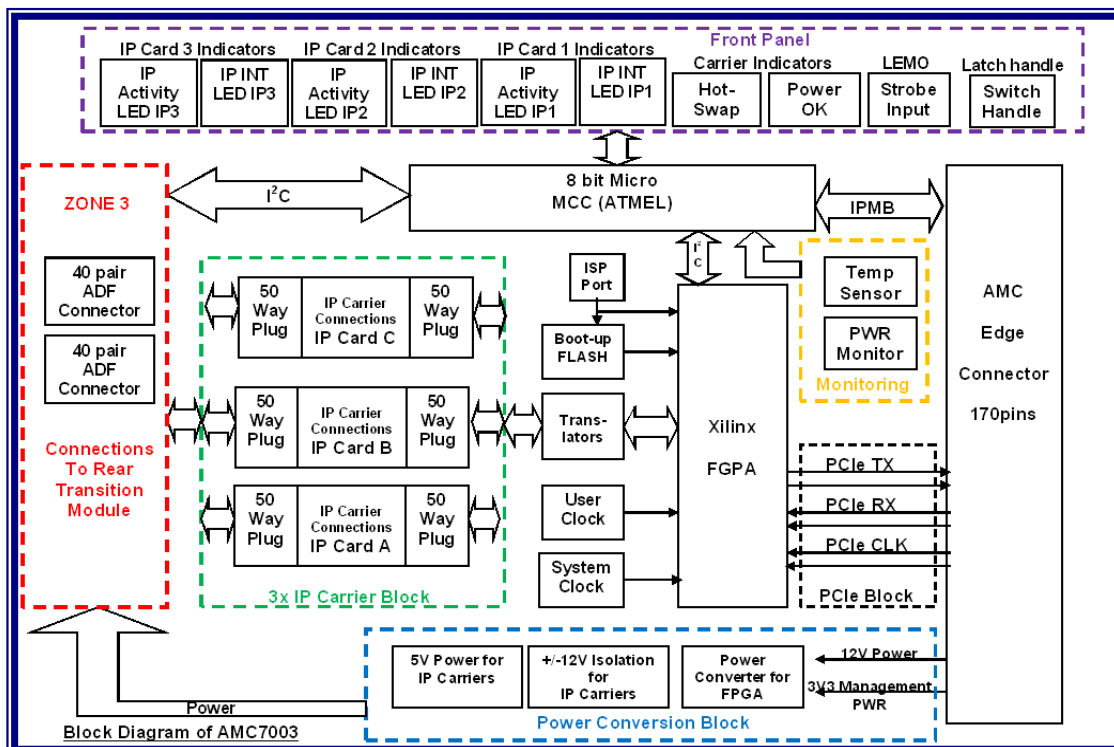
The AMC7003 is an AMC.1 PCI-Express single lane Micro-TCA carrier card that can accommodate up to three Industry Packs (IP) on a Double Full-size board. The AMC7003 is an MTCA.4 compliant carrier card with Rear Transition Module (RTM) facility. The RTM has the added advantage of allowing signal conditioning to be applied to the IP cards on the carrier.



Hytec Electronics also supplies the 7308 RTM to accommodate three independent SCSI connectors and our 9xxx series of plug in signal conditioning cards, for the three IP cards on the AMC7003 carrier.

#### Additional Information

The carrier has an IPMI compliant Module Management Controller (MMC) with temperature monitoring & hot-swap support, with the extra functionality to control and access the RTM plugged into. The module generates all required on-board supplies in addition to the logic power for the IP card. All voltage rails are protected by resettable fuses and with RF filters.



# AMC7003 Key Features/Details

## Front Panel LEDs

### Carrier Card IPMI Indicators

Blue Hot Swap  
Green Power on OK  
Red Fault/Error

### IP Card A Indicators

Green IP Power/OK  
Amber IP Activity  
Red IP Interrupt/Error

### IP Card B Indicators

Green IP Power/OK  
Amber IP Activity  
Red IP Interrupt/Error

### IP Card C Indicators

Green IP Power/OK  
Amber IP Activity  
Red IP Interrupt/Error

### Carrier Card Status Indicators

Green AMC OK  
Green RTM Inserted  
Green RTM OK

## AMC Module Connectors

Zone 1 AdvancedMC Plug Connector for  $\mu$ TCA, 170 pin to connect to the  $\mu$ TCA backplane  
Zone 3 2x 40 pair Advanced Differential Fabric (ADF) connectors to connect to the RTM  
Zone 3 Keying & Alignment, Safety key to indicate to the RTM the voltage levels present  
LEMO A single-pole LEMO size 00250 socket is fitted on the front panel. This can be used to send a trigger or inhibit signal to the Industry Packs

## Performance

IP sites: Can accommodate up to 3 IP cards  
Interface: Individually selectable 8 or 32MHz IP clocks with interrupts.  
IP memory space: 2Mbytes per IP Card  
Power Supply Power rails are protected by resettable fuses and have RF filters

## Fabric Interface

Signal standard: AMC.1 Type 1 compliant (1 x PCI-Express lane)  
Ports: Single lane on port 4 of the AMC connector, Zone 1  
IPMI: Version 1.5

## Mechanical

Double Full-Size AMC Module  
Board size: 180.6mm x 148.5mm

## RTM Connections

Connects to Hytec Electronics 7308 Rear Transition Module (RTM). This RTM has 3 independent SCSI-2 50-way connectors and allow different Hytec Electronics 9xxx series of signal conditioning cards to be plugged in, dependent upon the type of signal conditioning required. All 50 signals from each IP cards, 150 in total, on the AMC7003 carrier are fed to the RTM 3x SCSI connectors on the rear panel. The I/O connections on the RTM 50-way SCSI-2 type connectors are compatible with the range of 89xx DIN-rail mounted I/O termination and breakout assemblies supplied by Hytec Electronics

## Environment

Operating temperature: 0 to 40 degrees C

## Driver Support

Driver support is available for LINUX, RTEMS, Windows & EPICS environments

---

**Hytec Electronics Ltd** has been providing control and data acquisition system solutions for over 30 years. We design and manufacture high specification instrumentation and systems for the most demanding of industrial research environments. We pride ourselves on the level of hardware and software support provided to all our customers, both new and existing, ranging from detailed application consultancy based on the use of the very latest technology, through to maintaining products supplied over 30 years ago.

We design high specification analogue and digital modular instrumentation based on the stringent requirements of CAMAC, VME, PCI, VME64x and more recently AMC with Industry Packs, and implement software solutions ranging from system drivers in all the leading operating systems, to complete high-reliability turnkey system applications. Our expertise covers not only new technology systems, integrating process and management information, but also re-configuring and re-using existing plant, enabling legacy systems to live on with the latest generation hardware and software technology.



### **HYTEC ELECTRONICS LTD**

5 Cradock Road, Reading, Berkshire, RG2 0JT, England.  
Phone: +44 (0)118 9757770 Fax: +44 (0)118 9757566

Email: [sales@hytec-electronics.co.uk](mailto:sales@hytec-electronics.co.uk) Web: [www.hytec-electronics.co.uk](http://www.hytec-electronics.co.uk)

---