



## ► Dual ATM Adapter

The Dual ATM Adapter provides dual 155 Mbit/s communications links. The adapter is available in the following industry standard compliant formfactors :

- PMC
  - Air-cooled PMC with frontpanel I/O (IEEE Std 1386.1-2001)
  - Conduction-Cooled PMC (CCPMC) with backplane I/O (ANSI/VITA 20-2001)

### Architecture

The Dual ATM Adapter uses a Motorola PowerQUICC II Integrated PowerPC Microprocessor as communication controller. The PowerQUICC II processor can easily be configured to implement user protocols and/or user application specific functions, thus allowing the Dual ATM PMC Adapter to keep up with technological advances.

The dual intelligent communication processor remove protocol processing overhead from the host carrier processor thus allowing for higher network data throughput.

### Features

High data transmission rate, efficiency and cost-effectiveness make this card ideal for high throughput communication links. A Motorola PowerQUICC II processor acts as the communication front-end and allows the use of a wide range of communication protocols, as well as intelligent management and status reporting of interfaces.

### Applications

- Distributed real-time applications in harsh environments
- Mission-critical applications
- Avionics
- Vetronics
- High-speed sensor integration
- Multimedia applications
- Distributed digital voice and video applications



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Specifications	
<b>Bus Interface</b>	32-bit, 33/66 MHz Electrically : PCI Rev.2.2, 3,3 V signalling
<b>I/O Addresses</b>	Automatically assigned to the slot by PCI Rev. 2.2 Plug-and-Play
<b>EEPROM</b>	EEPROM for board ID (Plug-and-Play) and configuration options
<b>Interrupt</b>	PCI INT A
<b>DMA</b>	Automatic depending on PCI slot
<b>I/O Interfaces</b>	Dual 155 Mbit/s fibre optic or copper interfaces
<b>Protocols</b>	- MAC - AAL5, AAL1, AAL0 - Various additional operating system network protocols using supplied standard software driver - Optional : UNI V3.x and V4.0 signalling
<b>CPU</b>	Motorola PowerQUICC II Integrated PowerPC Microprocessor INTIME IME6500 MPEG4 CODEC
<b>Software Drivers</b>	- VxWorks - Linux - Optional : Solaris, QNX, AIX, Windows 2000, LynxOS
<b>Software</b>	Sample driver usage software (C/C++ source code)

Characteristics		
Formfactor	Dimensions	Weight
PMC (IEEE Std 1386.1-2001)	149,00 mm x 74,00 mm, conforming to CMC envelope	100 g +/- 10 g
CCPMC (ANSI/VITA 20-2001)	143,65 mm x 74,00 mm, conforming to VITA 20 envelope	95 g +/- 10 g

Reliability				
<b>MTBF</b>	Figures according to MIL-HDBK-217F, Parts Stress Method			
	Ground, Mobile Naval, Sheltered Airborne, Inhabited Cargo	T <sub>j</sub> = 65 C T <sub>j</sub> = 60 C T <sub>j</sub> = 75 C	T <sub>a</sub> = 45 C T <sub>a</sub> = 40 C T <sub>a</sub> = 55 C	30 000 hours (Approx) 40 000 hours (Approx) 30 000 hours (Approx)



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<b>Environmental Specifications</b>			
	<b>Commercial Grade</b>	<b>Industrial Grade</b>	<b>Conduction-Cooled/Ruggedised Grade</b>
<b>Temperature</b> - Operating - Storage	0 C to +55 C -40 C to +85 C	-15 C to +75 C -50 C to +85 C	-40 C to + 85 C -60 C to +125 C
<b>Humidity</b>	0% - 90%	0% - 95%	0% - 95%
<b>Shock</b>	N/A	30 g peak for 11 ms	40 g peak for 11 ms
<b>Vibration</b> - Sine - Random	2 g (peak) 10 Hz to 100 Hz 0,04 g²/Hz at 15 Hz to 2 kHz	10 g (peak) 5 Hz to 2 kHz 0,1 g²/Hz at 15 Hz to 2 kHz	10 g (peak) 5 Hz to 2 kHz 0,1 g²/Hz at 15 Hz to 2 kHz

<b>Part Selector</b>				
<b>Part Designation</b>	<b>Formfactor</b>	<b>Grade</b>	<b>Interface Media</b>	<b>Connector</b>
CCII/ATM/PMC/2P/SC/COM	PMC	Commercial	Fibre	SC
CCII/ATM/PMC/2P/SC/IND	PMC	Industrial	Fibre	SC
CCII/ATM/PMC/2P/SC/RGD	PMC	Ruggedised	Fibre	SC
CCII/ATM/PMC/2P/RJ/COM	PMC	Commercial	Copper (UTP)	RJ-45
CCII/ATM/PMC/2P/RJ/IND	PMC	Industrial	Copper (UTP)	RJ-45
CCII/ATM/PMC/2P/RJ/RGD	PMC	Ruggedised	Copper (UTP)	RJ-45
CCII/ATM/PMC/2P/BP/CC	CCPMC	Conduction-Cooled	Copper (UTP)	Backplane I/O