



► CDDI PCI-104 Adapter

The CDDI (Copper Distributed Data Interface) PCI-104 Adapter provides dual-redundant 100 Mbps communication links with MLT-3 signalling over copper UTP media and is ideally suited to real-time embedded platforms. These adapters use the AMD Supernet 3 FDDI Chipset as communication controller and offer dual attached (DAS) or single attached (SAS) I/O options. They feature VxWorks software drivers as standard for certain platforms, as well as a wide range of compatible and qualified third party software drivers.

The CDDI PCI-104 Adapter is available in three air-cooled versions : ruggedised, industrial and commercial. The ruggedised adapters are ideally suited for environments with high temperature, shock and vibration levels.

Architecture

The CDDI PCI-104 Adapters use the AMD Supernet 3 chipset which offers advanced features such as Synchronous Bandwidth Allocation (SBA) and End Station Support (ESS). The adapter has an advanced ASIC onboard that performs buffer management and PCI interfacing, thereby achieving high throughput.

Features

- Dual-(DAS) or Single-(SAS) Attachment Station options available.
- Optical Bypass Switch Control.
- Fully software configurable.
- Offers I/O over either twisted pair copper or fibre media.

Ruggedised PCI-104 Adapters

The CDDI PCI-104 Adapter is intended for very rough use and is exceptionally resistant to shock and vibration. The adapters contain an internal heat equilisation layer and can operate in ambient temperatures of -40 C to +85 C.

Applications

- Distributed real-time applications
- SAFENET applications
- Vetronics applications
- Mission-critical applications
- SCADA applications

Availability in Other Formfactors

The CDDI PCI-104 Adapters are also available in the PMC and PCI formfactors.

In the PMC formfactor, they are available in conduction-cooled (-40 C to +85 C) and air-cooled versions : ruggedised (-40 C to +85 C), industrial (-15 C to +75 C) and commercial (0 C to +55 C).

In the PCI formfactor, they are available in air-cooled versions : ruggedised (-15 C to +75 C) and commercial (0 C to +55 C).



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CDDI PCI-104 Plus Adapter Specifications

Bus Interface	Interfaces to 32-bit, 33/66 MHz PCI-bus Complies with PCI-104 Version 1.0 specification												
Network Interface	ANSI X3T9.5												
LAN Controller	AMD Supernet 3												
RAM	128 kBytes CMOS static												
Flash EPROM	128 kBytes												
I/O Addresses	Automatic assigned to the slot by PCI Rev. 2.2 Plug-and-Play												
Dimensions	95,89 mm x 90,17 mm x 23,80 mm in accordance with PC104 Plus V2.0												
Power Requirement	+5 V at 1,45 A												
MTBF	Figures according to MIL-HDBK-217F, Parts Stress Method : <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Ground, Mobile</td> <td style="width: 15%;">T_j = 65 C</td> <td style="width: 15%;">T_a = 45 C</td> <td style="width: 10%;">20 000 hrs</td> </tr> <tr> <td>Naval, Sheltered</td> <td>T_j = 60 C</td> <td>T_a = 40 C</td> <td>28 000 hrs</td> </tr> <tr> <td>Airborne, Inhabited Cargo</td> <td>T_j = 75 C</td> <td>T_a = 55 C</td> <td>21 000 hrs</td> </tr> </table>	Ground, Mobile	T _j = 65 C	T _a = 45 C	20 000 hrs	Naval, Sheltered	T _j = 60 C	T _a = 40 C	28 000 hrs	Airborne, Inhabited Cargo	T _j = 75 C	T _a = 55 C	21 000 hrs
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Software Drivers	Various software drivers offered including for VxWorks, Linux, Solaris, Windows 2000, Windows XP and Windows 2003 operating systems as standard; others are costed options.												
Supporting Software	Hardware Diagnostic Program for DOS												
Special Optional Services	<ul style="list-style-type: none"> • Synchronous Bandwidth Allocation (SBA) • End Station Support (ESS) • Built-in Test (BIT) • Network Time Protocol (NTP) • Network Time Services (NTS) 												

Environmental Specifications

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

Designations

	Grade	Attachment	Connector	Medium
CCII/CDDI/PC104/DAS/RJ45/COM	Commercial	Dual	RJ45	Copper
CCII/CDDI/PC104/DAS/RJ45/IND	Industrial	Dual	RJ45	Copper
CCII/CDDI/PC104/DAS/RJ45/RGD	Ruggedised	Dual	RJ45	Copper