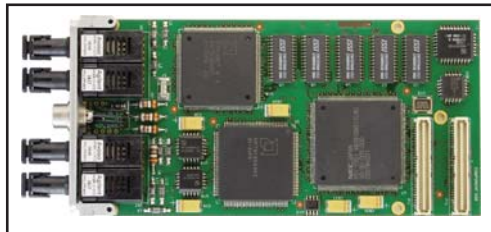


## ► FDDI and CDDI Adapters

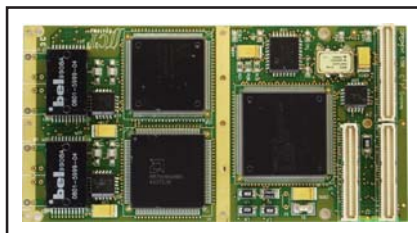
FDDI (Fibre Distributed Data Interface) are dual redundant 100 Mbps links with 4B/5B signalling over multimode fibre media or MLT-3 signalling over copper UTP media (CDDI (Copper Distributed Data Interface)).

The FDDI and CDDI Adapters are available in the following range of industry standard compliant formfactors :

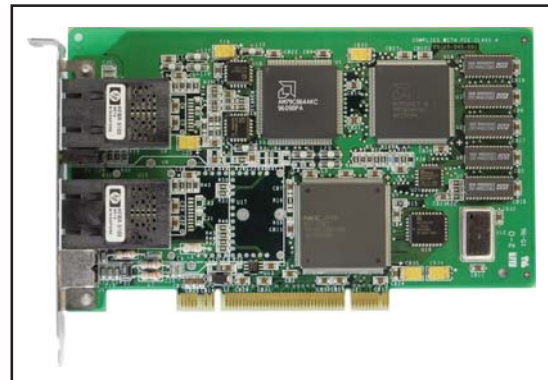
- PMC
  - Air-cooled PMC adapter with frontpanel I/O (IEEE Std 1386.1-2001)
  - Conduction-Cooled PMC (CCPMC) adapter with backplane I/O (ANSI/VITA 20-2001)
  - Conduction-Cooled PMC adapter with frontpanel I/O (requires modification to host carrier)
- PCI-104 (PCI-104 v2.0)
- PCI (PCI Local Bus Specification Rev. 2.3)



**FDDI PMC**



**CDDI CCPMC**



**FDDI PCI**

### Architecture

The FDDI and CDDI Adapters use the AMD Supernet 3 chipset. This chipset 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

### Applications

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



## ► FDDI and CDDI Adapters

Specifications	
<b>Bus Interface</b>	32-bit, 33/66 MHz Electrically : PCI Rev. 2.1, 3,3 V and 5,0 V signalling
<b>I/O Addresses</b>	Automatically assigned to the slot by PCI Rev. 2.1 Plug-and-Play
<b>EEPROM</b>	PCI INT A
<b>DMA</b>	Automatically depending on PCI slot
<b>LAN Controller</b>	AMD Supernet 3
<b>Network Interface</b>	FDDI : ANSI X3T12, ANSI X3.139 and ANSI X39.5 CDDI : ANSI X3T9.5
<b>Flash EPROM</b>	128 kBytes
<b>I/O Options</b>	FDDI : Frontpanel or rear facing I/O CDDI : Frontpanel and rear connector I/O options with various rear connector PMC Jn4 I/O pin assignments. Conduction-cooled version has rear connector I/O only
<b>Power</b>	5,0 V at 1,45 A
<b>Software Drivers</b>	Various software drivers offered including for VxWorks, Linux, LynxOS, Solaris, DOS, OS/2, Windows (95, 98, NT, 2000, XP and 2003) operating systems as standard; others are costed options
<b>Supporting Software</b>	Hardware Diagnostic Program for DOS
<b>Special Optional Services</b>	Synchronous Bandwidth Allocation (SBA) and End Station Support (ESS), Built-in Test (BIT), Network Time Protocol (NTP), Network Time Services (NTS)

Characteristics			
Formfactor	Dimensions		Weight
PMC (IEEE Std 1386.1-2001)	FDDI : CDDI :	149,00 mm x 74,00 mm, conforming to CMC height envelope	105 g ± 10 g 125 g ± 10 g
CCPMC (ANSI/VITA 20-2001)	FDDI : CDDI :	143,65 mm x 74,00 mm, conforming to VITA 20 height envelope	105 g ± 10 g 125 g ± 10 g
PCI-104 (PCI-104 v1.0)	FDDI : CDDI :	95,89 mm x 90,17 mm x 23,80 mm	110 g ± 10 g 130 g ± 10 g
PCI (PCI Local Bus Specification Rev. 2.1)	FDDI : CDDI :	174,80 mm x 106,68 mm x 17,30 mm	125 g ± 10 g 145 g ± 10 g

Reliability				
MTBF	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	20 000 hrs 28 000 hrs 21 000 hrs



## ► FDDI and CDDI Adapters

Environmental Specifications			
	Commercial Grade	Industrial Grade	Ruggedised/Conduction-Cooled Grade
<b>Temperature</b> - Operating - Storage	0 C to +55 C -40 C to +85 C	-15 C to +75 C -40 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

Part Selector					
Part Designation	Formfactor	Grade	Attachment	Media	Connector
CCII/FDDI/PMC/DAS/ST/COM	PMC	Commercial	Dual	Fibre	ST
CCII/FDDI/PMC/DAS/ST/IND	PMC	Industrial	Dual	Fibre	ST
CCII/FDDI/PMC/DAS/ST/RGD	PMC	Ruggedised	Dual	Fibre	ST
CCII/FDDI/PMC/DAS/ST/CC	CCPMC	Conduction-Cooled	Dual	Fibre	ST
CCII/FDDI/PMC/DAS/ST/COM	PMC	Commercial	Dual	Fibre	SC
CCII/FDDI/PMC/DAS/ST/IND	PMC	Industrial	Dual	Fibre	SC
CCII/CDDI/PMC/DAS/HR10/COM	PMC	Commercial	Dual	Copper	HR10
CCII/CDDI/PMC/DAS/HR10/IND	PMC	Industrial	Dual	Copper	HR10
CCII/CDDI/PMC/DAS/HR10/RGD	PMC	Ruggedised	Dual	Copper	HR10
CCII/CDDI/PMC/DAS/BP/CC	CCPMC	Conduction-Cooled	Dual	Copper	Backplane I/O
CCII/FDDI/PC104/DAS/ST/COM	PCI-104	Commercial	Dual	Fibre	ST
CCII/FDDI/PC104/DAS/ST/IND	PCI-104	Industrial	Dual	Fibre	ST
CCII/FDDI/PC104/DAS/ST/RGD	PCI-104	Ruggedised	Dual	Fibre	ST
CCII/FDDI/PC104/DAS/RJ45/COM	PCI-104	Commercial	Dual	Copper	RJ-45
CCII/FDDI/PC104/DAS/RJ45/IND	PCI-104	Industrial	Dual	Copper	RJ-45
CCII/FDDI/PC104/DAS/RJ45/RGD	PCI-104	Ruggedised	Dual	Copper	RJ-45
SysKnect Part Numbers					
SK-5544, FDDI-LP	32-bit PCI	Commercial	Dual	Fibre	SC
SK-5543, FDDI-LP	32-bit PCI	Commercial	Single	Fibre	SC
SK-5522, FDDI-UP	32-bit PCI	Commercial	Dual	Copper	RJ-45
SK-5521, FDDI-UP	32-bit PCI	Commercial	Single	Copper	RJ-45
SK-5844, FDDI-LP	64-bit PCI	Commercial	Dual	Fibre	SC
SK-5843, FDDI-LP	64-bit PCI	Commercial	Single	Fibre	SC
SK-5822, FDDI-UP	64-bit PCI	Commercial	Dual	Copper	RJ-45
SK-5821, FDDI-UP	64-bit PCI	Commercial	Single	Copper	RJ-45