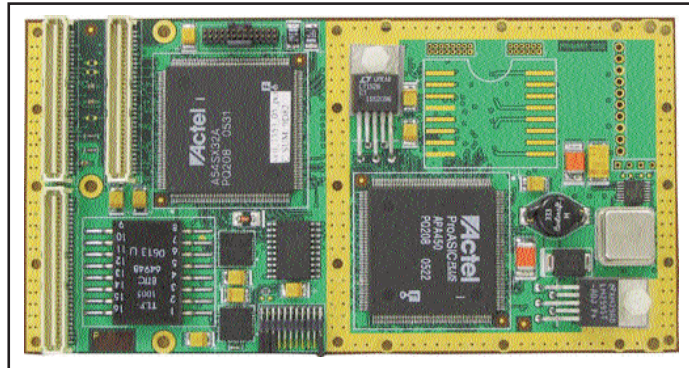


► MIL-STD-1553B Adapter

The MIL-STD-1553B Adapter provides validated MIL-STD-1553B communications. They are extremely rugged, with a high MTBF and is available in the following industry standard compliant formfactors :

- PMC (IEEE Std 1386.1-2001)
- Conduction-Cooled PMC (CCPMC) (ANSI/VITA 20-2001)



MIL-STD-1553B Conduction-Cooled PMC

Architecture

The MIL-STD-1553B Adapter makes use of a state-of-the-art high-speed ASIC design to minimise obsolescence problems. It employs industry standard MIL-STD-1553B transceivers and uses a validated 1553 protocol for maximum interoperability.

Features

- Remote Terminal (RT) / Bus Controller (BC) / Bus Monitor (BM) options
- Validated MIL-STD-1553 protocol
- Comprehensive Built-In Test (BIT) and JTAG compatibility provide diagnostics that give confidence in subsystem integrity
- Transformer-coupled short or long stub coupling
- VxWorks drivers available
- Forced-air and conduction-cooled versions available
- Cost-effective

Applications

- Distributed real-time applications in harsh environments
- Mission-critical applications
- Avionics

► MIL-STD-1553B Adapter

MIL-STD-1553B Adapter Specifications

Bus Interface	32-bit, 33 MHz Electrically : PCI Rev.2.2, 3,3 V signalling (5,0 V compatible)		
I/O Addresses	Automatic assigned to the slot by PCI Rev. 2.2 Plug-and-Play.		
Interrupts	PCI INT A		
I/O Options	PMC : Front-panel I/O, sub-miniature twinaxial connectors, 3 lug, "P" keying ("R", "W", "FL" or threaded keying optional) CCPMC : Rear-panel PMC Pn4 connector		
Bit Rates	1 Mbit/s, in accordance with MIL-STD-1553B		
Output	- Transformer-coupled I/O - Long or short stub coupling		
Power	5,0 V at 0,8 A		
MTBF	Figures according to MIL-HDBK-217F, Parts Count Method (Predicted) :		
	Ground, Mobile	T _i = 65 C	T _a = 45 C
	Naval, Sheltered	T _i = 60 C	T _a = 40 C
	Airborne, Inhabited	T _i = 75 C	T _a = 75 C
	Cargo		
Software Drivers	<ul style="list-style-type: none"> VxWorks 		
Options	<ul style="list-style-type: none"> Other software drivers Can be combined with other serial I/O, e.g. RS232, RS422, RS485, CANbus, Gigabit Ethernet, Fibre Channel, etc. 		

Physical Characteristics

Formfactor	Dimensions	Weight
PMC (IEEE Std 1386.1-2001)	149,00 mm x 74,00 mm, conforming to CMC height envelope	TBD
CCPMC (ANSI/VITA 20-2001)	143,65 mm x 74,00 mm, conforming to VITA 20 height envelope	85 g ± 10 g

Environmental Specifications

	Commercial	Industrial	Ruggedised/Conduction-Cooled
Temperature			
- Operating	0 C to +55 C	-15 C to +75 C	-40 C to + 85 C
- Storage	-40 C to +85 C	-40 C to +85 C	-55 C to +125 C
Humidity	0% to 90%	0% to 95%	0% to 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



► MIL-STD-1553B Adapter

Part Designations

Part Number	Formfactor	Grade	Attachment	Connector
CCII/1553/PMC/1/23/COM	PMC	Commercial	Dual	Sub-Miniature Twinax
CCII/1553/PMC/1/23/IND	PMC	Industrial	Dual	Sub-Miniature Twinax
CCII/1553/PMC/1/23/RGD	PMC	Ruggedised	Dual	Sub-Miniature Twinax
CCII/1553/PMC/1/BP/CC	CCPMC	Commercial	Dual	Rear-panel PMC Jn4

1 : One of RT, BC or BM, denoting Remote Terminal, Bus Controller or Bus Monitor respectively

2 : One of P, R, W or FL, specifying the connecting keying for channel A

3 : One of P, R, W or FL, specifying the connecting keying for channel B

For Example : CCII/1553/PMC/BM/PFL/COM is a Bus Monitor with P keying on channel A and FL keying on channel B.