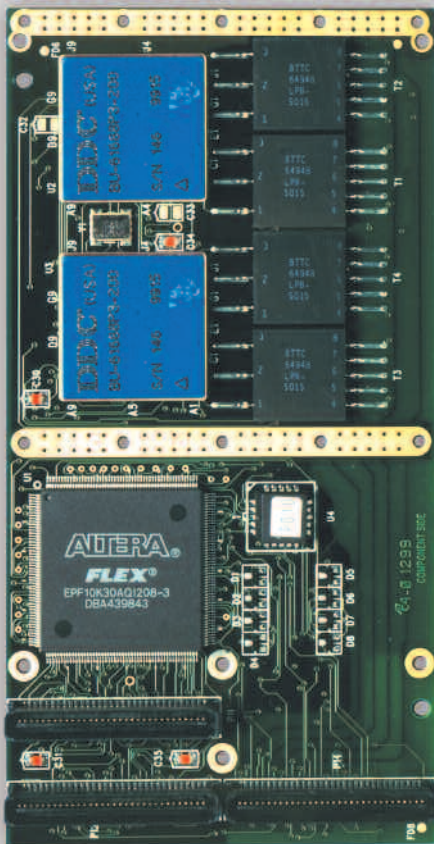




MIL-STD-1553B PCI Mezzanine Card (PMC)



- > Two Independent Dual Redundant MIL-STD-1553B Channels
- > Bus Controller (BC), Remote Terminal (RT), and Monitor Terminal (MT)
- > Support for Transformer-Coupled and Direct-Coupled Interfaces
 - Interfaces Compliant with 1553A, 1553B Notice 2, and STANAG 3838
 - Front Panel I/O Connectors or Rugged Rear Panel builds
- > Single PCI Mezzanine (PMC) format (149 mm x 74 mm)
- > Fully compliant with Revision 2.1 of the PCI Local Bus Specification

MIL-STD-1553B PCI Mezzanine Card

Technical Data

The Thales Computers' PMC-1553 provides one or two dual-redundant MIL-STD-1553B interfaces and an 8-bit TTL parallel I/O port on a single PMC module. A complete interface between a host processor and the MIL-STD-1553B bus is implemented using an ILC-DDC BU-61688 Advanced Communication Engine (ACE) device for each channel.

MIL-STD-1553 Interface Features

- > 64 kB x 16 shared RAM
- > Fully integrated MIL-STD-1553 A/B
- > Bus Controller (BC)/Remote Terminal (RT)/Monitor Terminal (MT) configurable through software

- > Direct- or transformer-coupled interfaces
- > Internal time tag register
- > Interrupt status register

Bus Controller

- > Automatic retries
- > Programmable intermessage gap times
- > Automatic frame repetition
- > Flexible interrupt generation

RT Functionality

- > RT address selected via PMC connector
- > Full software control of RT Status and Built-in-Test (BIT) words
- > Double buffer and circular buffer options programmable by subaddresses
- > Internal command illegalization

Monitor Terminal

- > Three modes: word monitor, selective message monitor, and a combined RT/selective monitor

Overall Dimensions

Single PMC	149 x 74 mm - One slot (FP Version)
	144 x 74 mm - One slot (RC Version)

Software

LynxOS 3.0.1, 3.1 and 4.0	Available
VxWorks for Tornado 2	Available

PCI bus Interface

32-bit/33 MHz Revision 2.1 compliant

Please Contact Thales Computers for validated configurations

ENVIRONMENTAL SPECIFICATIONS

	SA	WA	RA	RC
Temperature range				
Airflow	1.2 m/s	1.5 m/s	1.8 m/s	NA
Operating	0° to +55°C	-20° to +65°C	-40° to +75°C	-40° to +85°C
Storage	-45° to +85°C	-45° to +85°C	-45° to +100°C	-45° to +100°C
Conformal Coating	Optional	Standard	Standard	Standard
Relative Humidity	90% noncondensing	95% 10 cycles 240 hours	95% 10 cycles 240 hours	95% 10 cycles 240 hours
Mechanical				
Vibration Sine	5-200 Hz - 2g Peak	5-200 Hz - 2g Peak	5-2000 Hz - 2.5g Peak	5-2000 Hz - 5g Peak
Vibration	0.01 g ² /Hz 10-40 Hz	0.01 g ² /Hz 10-40 Hz	0.04 g ² /Hz	0.1 g ² /Hz
Random	0.0007 g ² /Hz 100-200 Hz - 0.00005 g ² /Hz 2000 Hz		with a flat response to 1,000 Hz 6 dB/Oct roll-off from 1 KHz-2 KHz	
Shock	10g Peak 16 ms Half Sine Pulse		40g Peak 20 ms Half Sine Pulse	
Bumps			40g Peak 6 ms Half Sine Pulse	
			3 bumps/sec and 1,000 bumps/direction	
Altitude	-1,000 to 15,000 ft	-1,000 to 33,000 ft	-1,000 to 33,000 ft	-1,000 to 50,000 ft

ORDER CODE

		SA	WA	RA	RC	
I/O	Front Panel	X	X	X		F
	Rear I/O	X	X	X	X	R
Environment Class	SA	X				I
	WA		X			R
	RA			X		R
	RC				X	M
Number of Channels	Single redundant	X	X	X	X	1
	Dual redundant	X	X	X	X	2

CPMC-1553

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With AFAQ ISO 9001
2000 Version
Certification,
Thales Computers
guarantees Total
Customer Satisfaction.