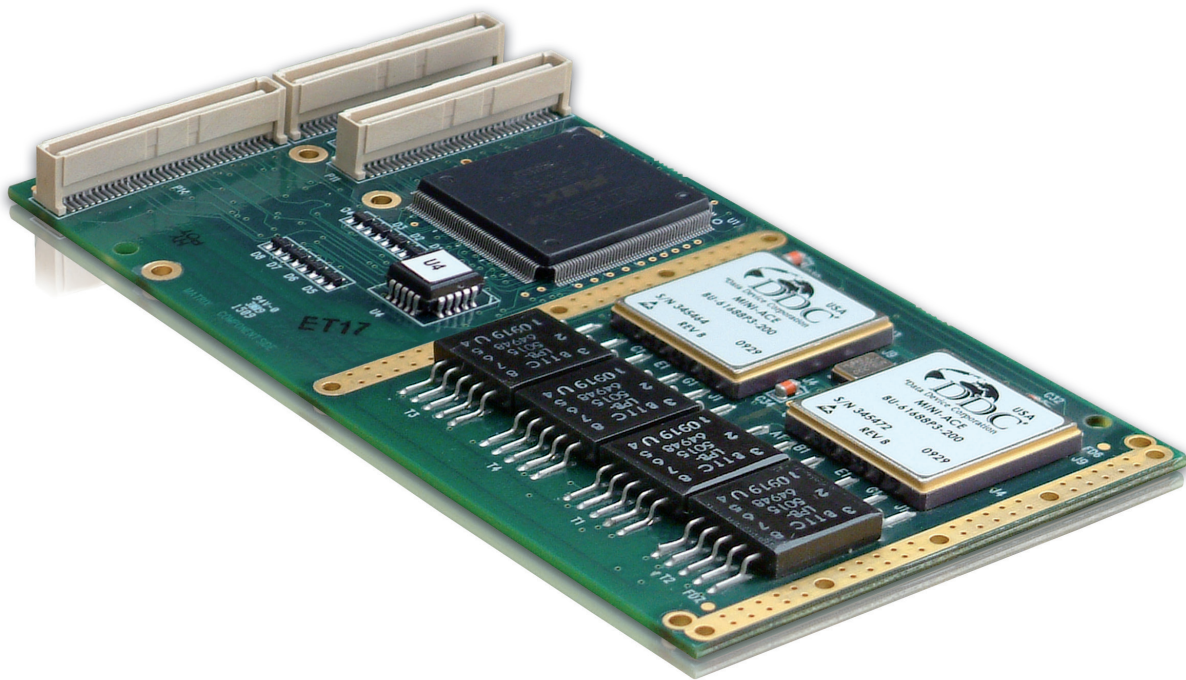


# » PMC-1553 «



## 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
- » Fully compliant with Revision 2.1 of the PCI Local Bus Specification

# Product Overview

Kontron PMC-1553 provides 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)

### Terminal (MT) configurable through software

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

### Bus Controller

- » Automatic retries
- » Programmable inter-message 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 sub-addresses
- » Internal command illegalization Monitor Terminal
- » Three modes: word monitor, selective message monitor, and a combined RT/selective monitor

## Technical Information

PCI Bus Interface	32-bit/33 MHz Revision 2.1 compliant
Software Support	LynxOS 3.0.1, 3.1 and 4.0 - VxWorks for Tornado 2
Dimensions	74 mm x 144 mm - One slot (RA and RC version)

## Environmental Specifications

	SA Standard Commercial	WA Extended Temperature	RA Rugged Air-Cooled	RC Rugged Conduction-Cooled
Conformal Coating	Optional	Standard	Standard	Standard
Airflow	1.2 m/s	1.5 m/s	1.8 m/s	NA
Temperature	VITA 47-Class AC1	VITA 47-Class AC2	VITA 47-Class AC3	VITA 47-Class CC4
Cooling Method	Convection	Convection	Convection	Conduction
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
Vibration Sine (Operating)	5-200 Hz - 2g Peak	5-200 Hz - 2g Peak	5-200 Hz - 2g Peak	5-200 Hz - 5g Peak
Random	VITA 47-Class V1	VITA 47-Class V1	VITA 47-Class V2	VITA 47-Class V3
Shock (Operating)	10g/16 ms Half Sine	10g/16 ms Half Sine	40g/20 ms Half Sine	40g/20 ms Half Sine
Altitude (Operating)	-1,000 to 15,000 ft	-1,000 to 33,000 ft	-1,000 to 33,000 ft	-1,000 to 50,000 ft
Relative Humidity	90% without condensation	95% 10 cycles 240 hours	95% 10 cycles 240 hours	95% 10 cycles 240 hours

## Ordering Information

Article	Part.-No.	Description
PMC-1553	CPMC-1552R-M2	PMC-1553 Rugged Conduction-Cooled Build, Dual Channel 1553b PMC Module, I/O on rear panel only*

\* for other versions, please contact Kontron [support-kom-sa@kontron.com](mailto:support-kom-sa@kontron.com) or your Kontron Sales representative.

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