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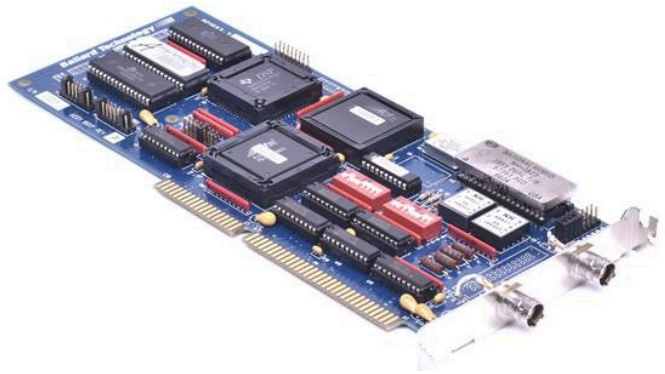
Data Sheet
August 2, 2026

ASTRONICS / BALLARD TECHNOLOGY

Astronics / Ballard Technology PC1553-3A MIL-STD-1553 Interface

The Astronics/Ballard Technology PC1553-3A is a PCI-based MIL-STD-1553 interface card delivering dual-redundant bus connectivity for aerospace and defense applications. It operates as a Bus Controller, Remote Terminal, and Bus Monitor simultaneously, supporting all MIL-STD-1553 message types with programmable 32-bit time-stamping and comprehensive error injection capabilities. The card integrates into PCI bus systems for hardware development, integration testing, and databus simulation. Aumictech offers NIST-traceable calibration and repair for the Astronics / Ballard Technology PC1553-3A. Calibration covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate and timing accuracy, and trigger and synchronization bus functional verification. NI CompactRIO and PXI chassis also undergo backplane trigger



MODEL	CALIBRATION
Astronics / Ballard Technology PC1553-3A	Available on request
CONDITION	**STATUS**
Used	In stock
RFQ / SKU	**LISTING**
PC1553-3A	https://aumictechlabs.com/products/pc1553-3a-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

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a Bus Controller, Remote Terminal, and Bus Monitor simultaneously, supporting all MIL-STD-1553 message types with programmable 32-bit time-stamping and comprehensive error injection capabilities. The card integrates into PCI bus systems for hardware development, integration testing, and databus simulation. Technical Specifications Protocol: MIL-STD-1553 (all message types supported) Bus Configuration: Dual-redundant MIL-STD-1553 interface Time-Stamping: Programmable 32-bit resolution Host Interface: PCI bus Data Throughput: Maximum data throughput on all 1553 channels Memory: Up to 32 MB built-in buffering (related products) Power: Host bus powered (PCI) Key Features Bus Controller (BC) functionality Remote Terminal (RT) operation - up to 32 RTs in applicable configurations Bus Monitor (BM) with concurrent monitoring Error injection for validation testing Software compatible with PC1553-2 for system upgrades Universal BTIDriver API supporting C/C++, C#, VB, VB.Net, and LabVIEW Windows and Linux driver support Optional CoPilot analysis software for interactive databus testing Typical Applications System integration and development in avionics platforms, flight test instrumentation, and MIL-STD-1553 bus emulation. The dual-redundant architecture supports monitoring and real-time error simulation for validation of flight-critical software and hardware. Compatibility & Integration Designed for PCI form factor installations. Operates within MIL-STD-1553 communication architectures. Related product variants include ISA bus implementations and discrete avionics I/O channels with IRIG time synchronization support.

Features & description

From manufacturer datasheet

Features

• Legacy ISA/PC-class MIL-STD-1553 interface (PC1553-3 family) • Dual-redundant 1553 architecture • Concurrent bus controller, remote terminal, and monitor • Error injection capability (family) • Programmable 32-bit time-stamp • On-board RAM about 256 KB to 1 MB (configuration dependent) • Software compatible with PC1553-2 • Related: PC1553-3C; LP1553-3A PCI class

PC15533A Characteristics / Specifications

PARAMETER	VALUE
Model	PC1553-3A
Manufacturer	Astronics Ballard Technology
Instrument Type	ISA MIL-STD-1553 interface board
Protocol	MIL-STD-1553B
Host Bus	ISA (PC/AT compatible)
Functions	Bus Controller, Remote Terminal, Monitor (concurrent class)
Memory	about 256 KB to 1 MB on-board RAM (config dependent)
Time Stamp	programmable 32-bit
Terminals	single/multiple simultaneous terminals (config dependent; example listing 32 terminals / 1 MB)
Ordering Example	18017 Rev. A (dealer listing)
NSN Example	5998-01-476-4931
Related	LP1553-3A (PCI successor family) Standard Operating Conditions Install in compatible ISA/PC slot. Use approved 1553 coupling transformers, cabling, and bus termination. Observe host power and ESD practices for avionics interface cards.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

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Standard Operating Conditions
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Operational Notes
Confirm PC1553-3A vs PC1553-3C terminal/RAM configuration on the unit label—family listings span wide capability levels. Legacy ISA product; verify driver/OS support before deployment.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: **sales@aumictech.com** · +1 (484) 841-9341

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