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Data Sheet

August 2, 2026

ASTRONICS / BALLARD TECHNOLOGY

Astronics / Ballard Technology LP1553-3C PCI to MIL-STD-1553 Interface Board

Astronics / Ballard Technology LP1553-3C PCI to MIL-STD-1553 Interface Board The Astronics / Ballard Technology LP1553-3C (LP15533C) isaPCI interface board in the LP1553-3 family for dual-redundant MIL-STD-1553B avionics databus communication. The LP1553-3 series spans single-terminal emulation through multi-terminal simulation with error injection and concurrent bus monitor capability. On-board RAM is typically 256 KB to 1 MB depending on configuration. The board uses plug-and-play PCI with a programmable 32-bit time-stamp. LP1553-3C is a specific configuration within the LP1553-3 family; related models include LP1553-3A and later LP1553-5 / LE1553-5 PCI/PCIe families. The Astronics / Ballard Technology LP1553-3C (LP15533C) isaPCI interface board in the LP1553-3 family for dual-redundant MIL-STD-1553B avionics databus communication. The LP1553-3 series spans single-terminal emulation through multi-terminal simulation with error injection and concurrent bus monitor capability. On-board RAM is typically 256 KB to 1 MB depending on configuration. The board uses plug-and-play PCI with a programmable 32-bit time-stamp. LP1553-3C is a specific configuration within the LP1553-3 family; related models include LP1553-3A and later LP1553-5 / LE1553-5 PCI/PCIe families. MIL-STD-1553B test and simulation on PCI host computers; concurrent BC/RT/monitor avionics lab work; multi-terminal simulation



MODEL Astronics / Ballard Technology LP1553-3C	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU LP1553-3C	LISTING https://aumictechlabs.com/products/lp1553-3c-2/

- NIST-traceable cal
- SAM registered
- 30-day returns
- NAICS 423690 · 811210 · 541380

This unit

The Astronics/Ballard Technology LP1553-3C is a PCI interface board that bridges standard computer systems with MIL-STD-1553B avionics data buses. This card enables seamless integration of aerospace and military legacy systems into modern test, development, and simulation environments by offloading all protocol processing to a dedicated DSP core, freeing host CPU resources. Technical Specifications Interface Type: PCI Protocol: MIL-STD-1553B On-Board RAM: 256KB to 1MB Time-Stamp Resolution: Programmable 32-bit Front Connector: BNC type Form Factor: PCI Card Key Features The LP1553-3C supports multiple operational modes within a single interface. Operate as Bus Controller (BC), Remote Terminal (RT), or Bus Monitor (BM). The card handles single-terminal emulation through multi-terminal simulation without requiring firmware changes. Programmable data buffers and deep built-in memory maintain data integrity across high-message-rate scenarios. Concurrent monitoring allows passive bus observation while simultaneously executing BC or RT functions. Advanced variants include selective protocol error injection for fault tolerance testing. Dedicated DSP processing eliminates protocol overhead from the host, enabling the PC to focus on application logic. Flexible message buffering schemes adapt to varying traffic patterns and capture requirements. Typical Applications This interface supports aerospace avionics development, military system integration, MIL-STD-1553B bus simulation, protocol conformance testing, and real-time data acquisition from fielded aircraft and defense platforms. Compatibility & Integration OS drivers ship for Windows 95/98/NT/Me/2000/XP. Linux and VxWorks driver support is available separately. The BTIDriver API supports C/C++, C#, Visual Basic, VB.Net, and LabVIEW development environments. Ballard's CoPilot 1553 graphical software provides BC schedule creation, RT simulation, and bus monitoring without custom code. The LP1553-3C is part of the dual-redundant LP1553-3x series and

supports future feature upgrades. Manufactured by Astronics/Ballard Technology under AS9100 and ISO 9001 certification.

Features & description

From manufacturer datasheet

Features

- PCI to MIL-STD-1553B interface (LP1553-3 family)
- Dual-redundant 1553 architecture
- Concurrent BC, RT, and monitor capability (family)
- Error injection and multi-terminal simulation (family)
- On-board RAM about 256 KB to 1 MB (configuration dependent)
- Programmable 32-bit time-stamp
- Plug-and-play PCI
- Related: LP1553-3A; LP1553-5 series

LP15533C Characteristics / Specifications

PARAMETER	VALUE
Model	LP1553-3C (LP15533C)
Manufacturer	Astronics Ballard Technology (Ballard Technology)
Instrument Type	PCI MIL-STD-1553 interface board
Protocol	MIL-STD-1553B
Functions	Bus Controller, Remote Terminal, Monitor (configuration dependent)
Memory	about 256 KB to 1 MB on-board RAM (config dependent)
Host Bus	PCI (plug-and-play)
Time Stamp	programmable 32-bit
Architecture	dual-redundant MIL-STD-1553
Related Models	LP1553-3A; LP1553-5 / LE1553-5 PCI/PCIe families Standard Operating Conditions Install incompatible PCI slot. Use approved 1553 transformers/cabling and bus termination. Observe host power and ESD practices for avionics interface cards.
Related	LP1553-3A; LP1553-5 series

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

PARAMETER	VALUE
Model	LP1553-3C (LP15533C)
Manufacturer	Astronics Ballard Technology (Ballard Technology)
Instrument Type	PCI MIL-STD-1553 interface board
Protocol	MIL-STD-1553B
Functions	Bus Controller, Remote Terminal, Monitor (configuration dependent)
Memory	about 256 KB to 1 MB on-board RAM (config dependent)
Host Bus	PCI (plug-and-play)
Time Stamp	programmable 32-bit
Architecture	dual-redundant MIL-STD-1553
Related Models	LP1553-3A; LP1553-5 / LE1553-5 PCI/PCIe families

Standard Operating Conditions

Install incompatible PCI slot. Use approved 1553 transformers/cabling and bus termination. Observe host power and ESD practices for avionics interface cards.

Operational Notes

Confirm LP1553-3C vs 3A terminal count and RAM on the unit label and OEM configuration part number. Match connector type and simultaneous terminal capability to the application. Do not assume 3C matches 3A without verification.

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

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.