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Data Sheet
August 2, 2026

ASTRONICS / BALLARD TECHNOLOGY

Astronics / Ballard Technology LP1553-5/2M MIL-STD-1553 PCI Interface Card

Astronics / Ballard Technology Embedded Test Systems. Channels: ** Up to 4 independent.

MODEL Astronics / Ballard Technology LP1553-5/2M	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU LP1553-5/2M	LISTING https://aumictechlabs.com/products/lp1553-5-2m-2/

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

This unit

The Astronics/Ballard Technology LP1553-5/2M is a PCI interface card that enables avionics databus communication, simulation, testing, and monitoring via MIL-STD-1553. Built on a 5th generation protocol engine with bus mastering architecture, this half-size PCI card delivers multi-channel 1553 capability for demanding aerospace applications. The card supports MIL-STD-1553A/B, 1760, Link-16, and SADL protocols while maintaining compatibility with modern desktop and embedded systems through universal PCI and PCIe interfaces. Technical Specifications Channels: Up to 4 independent, dual-redundant MIL-STD-1553 channels Protocol Support: MIL-STD-1553A/B, 1760, Link-16, SADL Channel Functionality: Single-function (BC, BM, or up to 32 RTs) or multi-function (simultaneous BC, BM, and up to 32 RTs with protocol error injection) Memory: 32 MB on-board; optional 1 MByte 32-bit High Speed QDR RAM per channel Time Tagging: 48-bit resolution at 1 µSec granularity Avionics I/O: 16 avionics-level input/output

discretes (general-purpose or databus-triggered) Time Synchronization: IRIG A/B PWM and AM support; onboard IRIG-B encoder/decoder in select models Coupling: Direct or transformer-coupled; 75 Ω terminating resistors with jumper selection Power: Backplane-powered; no auxiliary cabling required Form Factor: Standard half-size PCI card Status Indicators: Two user-controllable onboard LEDs Key Features Passes SAE AS4111/4112 protocol compliance testing BTIDriver™ universal API enables code portability across compatible platforms 48-bit hardware time-tagging supports synchronization across multiple channels Simultaneous multi-function operation within single channels reduces card slot requirements Optional CoPilot® analyzer software provides interactive databus analysis and simulation Typical Applications Avionics integration and subsystem testing Real-time MIL-STD-1553 bus monitoring and recording Protocol simulation and hardware-in-the-loop testing Multi-channel databus fault injection and diagnostics Compatibility & Integration Operating system support includes Linux, Windows 9x/2000/XP, Windows NT, Windows Server 2003, and Windows Vista. Runtime drivers and libraries enable rapid application development. The universal PCI/PCIe design integrates into most modern computing platforms without platform-specific adapters.

Features & description

From manufacturer datasheet

Features

• PCI MIL-STD-1553 interface (LP1553-5 family) • Two dual-redundant multi-function 1553 channels • Concurrent BC, RT, and monitor on multi-function channels • 32 MB on-board memory • 16 avionics discrete I/O • IRIG A/B PWM and AM • 48-bit, 1 us hardware time-tagging • LFH60 front connectors • BTIDriver API; optional CoPilot software • Maximum throughput on all channels (family)

LP155352M Characteristics / Specifications

PARAMETER	VALUE
Model	LP1553-5/2M
Manufacturer	Astronics Ballard Technology
Instrument Type	PCI MIL-STD-1553 interface card
Protocol	MIL-STD-1553B
Host Bus	PCI (PLX PCI 9056 bridge class)
Channels	2 dual-redundant multi-function MIL-STD-1553
Functions	BC and RT(s) and monitor concurrent (multi-function)
Memory	32 MB SDRAM on-board (family manual)
Flash	4 MB (family manual)
Discretes	16 avionics level I/O
IRIG	A/B input/output (AM, PWM); synchronize hardware time-tags
Time Tag	48-bit, 1 us resolution
Connector	LFH60
MTBF	2,000,000+ hours (LP1553-5 PCI family manual class)
Software	BTIDriver; optional CoPilot (CP- prefix)
Related	LE1553-5/2M PCIe; LP1553-3 legacy PCI family Standard Operating Conditions Install in compatible PCI slot with adequate +3.3 V/+12 V supply per manual. Use approved 1553 transformers/cabling and termination. Install Ballard drivers before operation.

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

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Model	LP1553-5/2M
Manufacturer	Astronics Ballard Technology
Instrument Type	PCI MIL-STD-1553 interface card
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IRIG	A/B input/output (AM, PWM); synchronize hardware time-tags
Time Tag	48-bit, 1 us resolution
Connector	LFH60
MTBF	2,000,000+ hours (LP1553-5 PCI family manual class)
Software	BTIDriver; optional CoPilot (CP- prefix)
Related	LE1553-5/2M PCIe; LP1553-3 legacy PCI family

Standard Operating Conditions
Install in compatible PCI slot with adequate +3.3 V/+12 V supply per manual. Use approved 1553 transformers/cabling and termination. Install Ballard drivers before operation.

Operational Notes
Confirm LP1553-5/2M multi-function vs /2S single-function siblings. PCIe hosts use LE1553-5 equivalents. Part numbers in dealer listings (example 18063) may bundle configuration–verify channel count and connector type on receipt.

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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