

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

DDC

DDC BU65549M1 MIL-STD-1553 BC/RT/MT PCI Interface Card

Key Features PCI Mini-ACE Plus single channel 64K x 16 shared RAM Simultaneous RT and monitor Programmable BC gap and frame auto-repeat FreeCruntime libraries for Win95/WinNT

Technical Specifications Model: BU-65549M1 Also Known As: BU65549M1 Instrument Type: PCI MIL-STD-1553 BC/RT/MT interface Bus: PCI Channels: one independent dual-redundant (M1) Protocol: MIL-STD-1553B Notice 2 and STANAG 3838 Shared Ram M1: 128K bytes (64K words) Register Space: 128 bytes per channel Base Address 0 Hybrid: BU-61688 Mini-ACE Plus Tx Transformer Coupled: 18 to 27 V p-p on stub, typical 21 V p-p Tx Direct Coupled: 6 to 9 V p-p across 35 ohms, typical 7 V p-p Rise Fall Time: 100 to 300 ns (typical 100 ns) Receiver Threshold: 0.200 to 0.860 V p-p transformer coupled Supply Voltage: 4.75 to 5.5 V (5.0 V nominal) Rt Response Time: 18.5 us typical (17.



MODEL

DDC BU65549M1

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

BU65549M1

LISTING

<https://aumictechlabs.com/products/bu65549m1-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The DDC BU-65549M1 is a PCI interface card that delivers MIL-STD-1553 communication in Bus Controller (BC), Remote Terminal (RT), and Monitor Terminal (MT) operational modes. Built for aerospace and defense environments, it connects directly to MIL-STD-1553 networks via

integrated transceivers and dual-redundant channels, supporting data rates of 1 Mbps across standard and extended message formats. Technical Specifications MIL-STD-1553 Protocol Support Standard Compliance: MIL-STD-1553B Notice 2, MIL-STD-1760, UK MIL-STD-1553 Data Rate: 1 Mbps Message Formats: Standard and extended formats Error Detection: Built-in error checking and reporting Interface Architecture Bus Interface: PCI Local Bus (32-bit, 33 MHz) Channels: Dual-redundant MIL-STD-1553B On-Board Memory: Integrated buffer memory for data storage Transceivers: Integrated with direct connection to 1553 bus Connectors: Standard MIL-STD-1553 coaxial connectors Operational Modes Bus Controller (BC): Initiates and controls bus communication Remote Terminal (RT): Slave operation supporting up to 32 RT addresses Monitor Terminal (MT): Passive bus traffic capture and logging Key Features Low-level drivers and high-level interface libraries included Diagnostic and configuration utilities bundled with card Windows and Linux operating system support Comprehensive Application Programming Interface (API) Industrial and military temperature range operation Environmental hardening for shock, vibration, and humidity resistance Typical Applications Aerospace avionics integration, defense system communications, real-time command and telemetry networks, embedded 1553 bus monitoring and test systems. Compatibility & Integration Fully compatible with standard PCI bus systems and existing MIL-STD-1553 infrastructure. Standard PCI card form factor integrates into legacy and modern military platforms without architectural modification.

BU65549M1 Characteristics / Specifications

PARAMETER	VALUE
Model	BU-65549M1
Also Known As	BU65549M1
Instrument Type	PCI MIL-STD-1553 BC/RT/MT interface
Bus	PCI
Channels	one independent dual-redundant (M1)
Protocol	MIL-STD-1553B Notice 2 and STANAG 3838
Shared Ram M	128K bytes (64K words)
Register Space	128 bytes per channel Base Address 0
Hybrid	BU-61688 Mini-ACE Plus
Tx Transformer Coupled	18 to 27 V p-p on stub, typical 21 V p-p
Tx Direct Coupled	6 to 9 V p-p across 35 ohms, typical 7 V p-p
Rise Fall Time	100 to 300 ns (typical 100 ns)
Receiver Threshold	0.200 to 0.860 V p-p transformer coupled
Supply Voltage	4.75 to 5.5 V (5.0 V nominal)
Rt Response Time	18.5 us typical (17.5 to 19.5 us)
Bc Intermessage Gap	22.5 us typical (21.5 to 23.5 us)
Response Timeout	50.5 us typical (49.5 to 51.5 us)
Watchdog Timeout	668 us typical transmitter watchdog
Operating Temperature	0 to 55 C on related M2.300 listings
Manufacturer	Data Device Corporation
Software	C runtime libraries for Win95 and WinNT plus Win95 GUI
Dual Channel Sibling	BU-65549M2 with 256K bytes RAM

BU65549M1 Specifications

PARAMETER	VALUE
Applications	PCI-hosted 1553 simulation, test, and system integration as bus controller, remote terminal, or monitor on a single dual-redundant channel.
Key Features	PCI Mini-ACE Plus single channel
Technical Specifications	Model: BU-65549M1

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 55 C on related M2.300 listings
Operating Temperature	0 to 55 C on related M2.300 listings
Manufacturer	Data Device Corporation
Software	C runtime libraries for Win95 and WinNT plus Win95 GUI
Dual Channel Sibling	BU-65549M2 with 256K bytes RAM Notes From DDC BU-65549 MIL-STD-1553 BC/RT/MT PCI Interface Card datasheet. M1 is the single-channel build; M2 idle/full-Tx current rows apply to the dual-channel sibling and are not copied here as M1 limits.

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	BU-65549M1
Also Known As	BU65549M1
Instrument Type	PCI MIL-STD-1553 BC/RT/MT interface
Bus	PCI
Channels	one independent dual-redundant (M1)
Protocol	MIL-STD-1553B Notice 2 and STANAG 3838
Shared Ram M1	128K bytes (64K words)
Register Space	128 bytes per channel Base Address 0
Hybrid	BU-61688 Mini-ACE Plus
Tx Transformer Coupled	18 to 27 V p-p on stub, typical 21 V p-p
Tx Direct Coupled	6 to 9 V p-p across 35 ohms, typical 7 V p-p
Rise Fall Time	100 to 300 ns (typical 100 ns)
Receiver Threshold	0.200 to 0.860 V p-p transformer coupled
Supply Voltage	4.75 to 5.5 V (5.0 V nominal)
Rt Response Time	18.5 us typical (17.5 to 19.5 us)
Bc Intermessage Gap	22.5 us typical (21.5 to 23.5 us)
Response Timeout	50.5 us typical (49.5 to 51.5 us)
Watchdog Timeout	668 us typical transmitter watchdog
Operating Temperature	0 to 55 C on related M2.300 listings
Manufacturer	Data Device Corporation
Software	C runtime libraries for Win95 and WinNT plus Win95 GUI
Dual Channel Sibling	BU-65549M2 with 256K bytes RAM
Notes	
From DDC BU-65549 MIL-STD-1553 BC/RT/MT PCI Interface Card datasheet. M1 is the single-channel build; M2 idle/full-Tx current rows apply to the dual-channel sibling and are not copied here as M1 limits.	

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

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