

**Aumictech**

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Data Sheet

August 15, 2026

DDC

DDC BU65549M2 MIL-STD-1553 BC/RT/MT PCI Interface Card

Key Features PCI Mini-ACE Plus single or dual channel 64K x 16 shared RAM per channel Simultaneous RT and monitor Programmable BC gap and frame auto-repeat FreeCruntime libraries Technical Specifications Model: BU-65549M2 Also Known As: BU65549M2 Instrument Type: PCI MIL-STD-1553 BC/RT/MT interface Bus: PCI Channels: two independent dual-redundant (M2); M1 is single channel Protocol: MIL-STD-1553B Notice 2 and STANAG 3838 Shared Ram M2: 256K bytes (64K words per channel) Shared Ram M1: 128K bytes (64K words) Register Space: 128 bytes per channel Base Address 0 Hybrid: BU-61688 Mini-ACE Plus per channel 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.



MODEL

DDC BU65549M2

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

BU65549M2

LISTING

<https://aumictechlabs.com/products/bu65549m2-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The DDC BU65549M2 is a PCI interface card that bridges standard PCI buses to one or two independent, dual-redundant MIL-STD-1553B data buses. It operates as a Bus Controller (BC), Remote Terminal (RT), or Monitor Terminal (MT) with full MIL-STD-1553A and B compliance,

STANAG 3838 certification, and support for McAir protocols A3818, A5232, and A5690. Each channel integrates DDC's Mini-ACE Plus hybrid with dual transceivers and complete protocol encoding/decoding for real-time simulation, testing, and system integration tasks. Technical Specifications Interface: PCI Bus MIL-STD-1553 Compliance: MIL-STD-1553A and B Notice 2, STANAG 3838 Channels: Single or dual channel configuration Operating Modes: Bus Controller (BC), Remote Terminal (RT), Monitor Terminal (MT) Shared RAM: 64K words per channel (256K bytes total for dual-channel configuration) Time Tag Resolution: 16-bit counter with programmable resolution (2, 4, 8, 16, 32, or 64 μ s per LSB) BC Frame Timing: 100 μ s/LSB resolution (Frame Time Remaining), 1 μ s/LSB resolution (Message Time Remaining) Built-In-Test: Wrap-around BIT Interrupt Control: Register programmable level with flexible generation modes; supports interrupt and polling operation Key Features Dual transceivers per channel for redundant bus operation RT mode memory management with circular buffer options (128 to 8192 words) and broadcast/non-broadcast data separation BC mode stack for multi-message frame scheduling with real-time chronology logging Software-programmable RT address selection and command illegalization Monitor modes: word monitor, selective message monitor, combined RT/selective message monitor, with simultaneous RT/Monitor capability Monitor command filtering Typical Applications MIL-STD-1553B network testing and validation Real-time avionics system simulation Multi-terminal system integration Redundant bus monitoring and diagnostics Compatibility & Integration Includes free "C" software subroutine library. Operates on standard PCI bus platforms supporting MIL-STD-1553A/B protocols and STANAG 3838 requirements.

BU65549M2 Characteristics / Specifications

PARAMETER	VALUE
Model	BU-65549M2
Also Known As	BU65549M2
Instrument Type	PCI MIL-STD-1553 BC/RT/MT interface
Bus	PCI
Channels	two independent dual-redundant (M2); M1 is single channel
Protocol	MIL-STD-1553B Notice 2 and STANAG 3838
Shared Ram M	256K bytes (64K words per channel)
Register Space	128 bytes per channel Base Address 0
Hybrid	BU-61688 Mini-ACE Plus per channel
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)
Idle Current M	0.48 A typical, 0.8 A max
Full Tx Current M	1.48 A typical, 2.00 A max at 100 percent transmitter duty
Idle Dissipation M	2.40 W typical, 4.40 W max
Full Tx Dissipation M	4.80 W typical, 8.40 W max
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 M2.300 listings
Manufacturer	Data Device Corporation
Software	C runtime libraries for Win95 and WinNT plus Win95 GUI

BU65549M2 Specifications

PARAMETER	VALUE
Applications	PCI-hosted 1553 simulation, test, and system integration as BC, RT, or monitor.
Key Features	PCI Mini-ACE Plus single or dual channel
Technical Specifications	Model: BU-65549M2

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 55 C on M2.300 listings
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Manufacturer	Data Device Corporation
Software	C runtime libraries for Win95 and WinNT plus Win95 GUI Notes From DDC BU-65549 MIL-STD-1553 BC/RT/MT PCI Interface Card datasheet (Table 1 electrical and power). M2 is dual-channel; M1 is the single-channel sibling. Confirm channel population and temperature dash number.

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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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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.