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Data Sheet

August 15, 2026

ABACO SYSTEMS / SBS

Abaco Systems / SBS ABI-PMC2-2 MIL-STD-1553 Dual Channel Interface

The Abaco Systems ABI-PMC2-2 is a dual-channel MIL-STD-1553 PMC interface card delivering full-function bus control, remote terminal emulation, and bus monitoring in a single module. Built on Advanced Bus Interface (ABI) architecture, it enables concurrent and independent operation of a Bus Controller, up to 31 Remote Terminals, and dual-function Bus Monitor across one or two dual-redundant MIL-STD-1553 channels. The card complies with both MIL-STD-1553A and MIL-STD-1553B standards and uses pointer-driven transmit and receive buffers with link-list memory architecture for efficient data handling. Typical Applications System-level integration, laboratory environments, simulation platforms, and test equipment development. Compatibility & Integration Includes host processor device drivers and application layer software. Driver support: F201 (Full Function Standard I4), F203 (Full Function



MODEL

**Abaco Systems /
SBS ABI-PMC2-2**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

ABI-PMC2-2

LISTING

<https://aumictechlabs.com/products/abi-pmc2-2-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Abaco Systems ABI-PMC2-2 is a dual-channel MIL-STD-1553 PMC interface card delivering full-function bus control, remote terminal emulation, and bus monitoring in a single module. Built

on Advanced Bus Interface (ABI) architecture, it enables concurrent and independent operation of a Bus Controller, up to 31 Remote Terminals, and dual-function Bus Monitor across one or two dual-redundant MIL-STD-1553 channels. The card complies with both MIL-STD-1553A and MIL-STD-1553B standards and uses pointer-driven transmit and receive buffers with link-list memory architecture for efficient data handling.

Technical Specifications

Interface: MIL-STD-1553 Dual Channel PMC (PCI Mezzanine Card)

Channels: 1 or 2 dual-redundant MIL-STD-1553 channels

Standards: MIL-STD-1553A and MIL-STD-1553B

Buffer Architecture: Pointer-driven transmit and receive buffers with link-list memory

Host Memory: 128 kB dual-port RAM for setup, monitoring, and data structure changes

Interrupts: Extensive programmable event interrupts

Optional Interfaces: 28-channel discrete I/O, 4-channel RS-422, 48-bit IRIG-B clock input

Weight: 2.44 oz to 3.84 oz

Key Features

Bus Controller supports linked command lists (BC-to-RT, RT-to-BC, RT-to-RT, mode code, broadcast, time delay block transmissions)

Remote Terminal simulation uses pointer-based RT definition tables linked to control data buffers

Bus Monitor operates in Map and Sequential modes with time-stamping and double-buffering options

Comprehensive error table generation and monitoring

Available in Commercial, Extended Temperature (XT), and Conduction Cooled versions

Typical Applications

System-level integration, laboratory environments, simulation platforms, and test equipment development.

Compatibility & Integration

Includes host processor device drivers and application layer software. Driver support: F201 (Full Function Standard I4), F203 (Full Function IRIG I2), and F205 (Full Function Custom F3). BusTools/1553-API and Core API Software available.

ABIPMC2 Characteristics / Specifications

PARAMETER	VALUE
Model	ABI-PMC2-2
Instrument Type	MIL-STD-1553 PMC interface
Card Form Factor	PMC
Mil Std Protocol	MIL-STD-1553 dual redundant
Dual Redundant Channels This Config	2
Abi Family Variant	ABI-PMC2
Remote Terminals Emulated	up to 31
Bus Controller Mode	concurrent supported
Bus Monitor Mode	dual-function BM supported
Mass Abi Pmc	3.24 oz
Temperature Classes Abi Pmc	commercial extended temperature and conduction cooled
Operating Mode Class	ABI full function
Application Class	lab simulation test
Irig Time Code Option	yes
Ordering Alias	ABI-PMC2-2
Form Factor Class	PMC mezzanine
Concurrent Bc Operation	supported
Concurrent Rt Count Maximum	31
Dual Function Bus Monitor	supported
Restricted Production Phase Date	July 1 2010
Mass Rating	3.24 oz

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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PARAMETER	VALUE
Model	ABI-PMC2-2
Instrument Type	MIL-STD-1553 PMC interface
Card Form Factor	PMC
Mil Std Protocol	MIL-STD-1553 dual redundant
Dual Redundant Channels This Config	2
Abi Family Variant	ABI-PMC2
Remote Terminals Emulated	up to 31
Bus Controller Mode	concurrent supported
Bus Monitor Mode	dual-function BM supported
Mass Abi Pmc	3.24 oz
Optional Rs422 Channels: 4 Optional Discrete Io Channels: 28 Optional IrigBClock: 48 bit input	
Specifications	
PARAMETER	VALUE
Temperature Classes Abi Pmc2	commercial extended temperature and conduction cooled
Operating Mode Class	ABI full function
Application Class	lab simulation test
Irig Time Code Option	yes
Ordering Alias: ABI-PMC2-2	
Specifications	
PARAMETER	VALUE
Form Factor Class	PMC mezzanine
Concurrent Bc Operation	supported
Concurrent Rt Count Maximum	31
Dual Function Bus Monitor	supported

Optional IrigBWidth: 48 bit
Optional Rs422 Count: 4
Optional Discrete Io Count: 28
Restricted Production Phase Date: July 1 2010
Mass Rating: 3.24 oz

Notes

From Abaco ABI-PMC product specifications for concurrent BC/31 RT/BM operation, optional RS-422 discrete and IRIG resources, and 3.24 oz mass. Channel count follows the queue ABI-PMC / ABI-PMC2 order codes.

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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<https://aumictechlabs.com>

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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.