

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

ABACO SYSTEMS / SBS

Abaco Systems / SBS ABI-PMC2-1 MIL-STD-1553 Single Channel Interface

The Abaco Systems ABI-PMC2-1 is a single-channel MIL-STD-1553 interface card in PCI Mezzanine Card (PMC) form factor for embedded defense and aerospace systems. It operates concurrently and independently as a Bus Controller (BC), Remote Terminal (RT), or Bus Monitor (BM), with dual-redundant 1553 channels supporting MIL-STD-1553A/B. The card integrates a high-speed DSP, programmable logic, and 256 kB dual-port RAM with flash-based firmware storage. It delivers PCI 2.1 compliance at up to 132 MB/sec with 16-bit and 32-bit transfer modes, operating at 5 V and 3.3 V signal levels. Typical Applications Mil-aerospace embedded systems requiring concurrent multi-role 1553 bus interface with independent operation across BC, RT, and BM functions. Compatibility & Integration Available in commercial, extended temperature, and conduction-cooled configurations. Programmable DMA controller supports

**MODEL****Abaco Systems /
SBS ABI-PMC2-1****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****ABI-PMC2-1****LISTING**<https://aumictechlabs.com/products/abi-pmc2-1-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Abaco Systems ABI-PMC2-1 is a single-channel MIL-STD-1553 interface card in PCI Mezzanine Card (PMC) form factor for embedded defense and aerospace systems. It operates

concurrently and independently as a Bus Controller (BC), Remote Terminal (RT), or Bus Monitor (BM), with dual-redundant 1553 channels supporting MIL-STD-1553A/B. The card integrates a high-speed DSP, programmable logic, and 256 kB dual-port RAM with flash-based firmware storage. It delivers PCI 2.1 compliance at up to 132 MB/sec with 16-bit and 32-bit transfer modes, operating at 5 V and 3.3 V signal levels.

Technical Specifications

MIL-STD-1553 Channels: 1 (dual redundant)

Form Factor: IEEE P1386 PMC

Memory: 256 kB dual-port RAM

Bus Interface: PCI 2.1, 132 MB/sec maximum, 16-bit and 32-bit transfer modes

Power: 5 V @ 1.5 A (98% bus activity), 1.0 A (bus inactive)

Signal Levels: 5 V and 3.3 V compatible

Key Features

Bus Controller: Programmable frame lists, BC-RT/RT-BC/RT-RT message types, mode codes, broadcasts, minor frame timing, intermessage gap selection, linked-list BC data buffers

Remote Terminal: 31 RT support across all subaddresses, programmable response time, no-response timeout configuration, linked-list RT data buffers

Bus Monitor: Dual monitoring modes - map monitoring with multiple linked buffers per subaddress, and sequential monitoring with 100% independent operation, double-buffered time-stamped messages (1 μ s 32-bit clock, optional 48-bit IRIG-B)

Error Monitoring: Comprehensive error table accessible by host processor

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

Connectors: 50-pin SCSI coupling

Typical Applications Mil-aerospace embedded systems requiring concurrent multi-role 1553 bus interface with independent operation across BC, RT, and BM functions.

Compatibility & Integration Available in commercial, extended temperature, and conduction-cooled configurations. Programmable DMA controller supports flexible memory architecture and on-the-fly data structure management.

ABIPMC2 Characteristics / Specifications

PARAMETER	VALUE
Model	ABI-PMC2-1
Instrument Type	MIL-STD-1553 PMC interface
Card Form Factor	PMC
Mil Std Protocol	MIL-STD-1553 dual redundant
Dual Redundant Channels This Config	1
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-PMC2-1
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	
Specifications	
PARAMETER	VALUE
Model	ABI-PMC2-1
Instrument Type	MIL-STD-1553 PMC interface
Card Form Factor	PMC
Mil Std Protocol	MIL-STD-1553 dual redundant
Dual Redundant Channels This Config	1
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-PMC2-1	
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

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.