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Data Sheet

August 15, 2026

ABACO SYSTEMS / GE

Abaco Systems / GE QPCX-1553-G2-2MW High-Density PCI Interface Module

The Abaco Systems / GE QPCX-1553-G2-2MW is a high-density PCI interface module for MIL-STD-1553 bus applications. This card delivers simultaneous multi-function operation as a Bus Controller, up to 31 Remote Terminals, and Bus Monitor. The two dual-redundant channels support comprehensive bus analysis, simulation, and data logging in both commercial and ruggedized deployments. Typical Applications Airborne and ground-based avionics platforms requiring real-time MIL-STD-1553 bus control, monitoring, and analysis. Ideal for test benches, system integration environments, and applications demanding simultaneous BC/RT/BM operation. Compatibility & Integration Designed for PCI backplane integration in 5 V and 3.3 V environments. Abstract API software accelerates application development and reduces integration time. Available in commercial and ruggedized configurations. Aumictech offers NIST

**MODEL****Abaco Systems /
GE QPCX-1553-
G2-2MW****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****QPCX-1553-G2-
2MW****LISTING**[https://aumictechlabs.c
om/products/qpcx-1553
-g2-2mw-2/](https://aumictechlabs.com/products/qpcx-1553-g2-2mw-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

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Technical Specifications

Hardware Architecture

Interface: PCI Form Factor: PCI Card (6" × 3 7/8")

PCI Signaling: Universal (5 V or 3.3 V)

PCI Bus Speed: 66 MHz

Channels: Two dual-redundant channels

RAM per Channel: 1 Mbyte

Message Time-tagging: 64-bit, 25 nanosecond resolution

Signal Conditioning Coupling: Transformer or direct coupling (software selectable)

IRIG-B: Signal Receiver/Generator with GPS synchronization

On-board Test Bus: Yes

UUT Transformer Connection: Yes

Avionics-level Discretes: Yes

Key Features

- Bus Controller (BC) Programmable major and minor frame content and timing
- Extensive link-list structures
- Mode Codes, Broadcast, and single-shot messaging
- Real-time conditional branching
- Programmable time delays and aperiodic messaging methods
- Remote Terminal (RT) Supports simultaneous operation of up to 31 RTs
- Data wrapping and multiple RT buffers
- Programmable response time 1760 startup time with Busy bit set
- RT Map Monitoring and hardwired RT address lines
- Bus Monitor (BM) 100% monitoring of fully loaded buses
- error detection across multiple monitoring methods
- Error injection and detection capabilities
- Automatic or manual RT Status Bit control
- Mode Code response generation

Interface & Synchronization

Programmable input and output triggers

IRIG-B synchronization for time-critical operations

Typical Applications

Airborne and ground-based avionics platforms requiring real-time MIL-STD-1553 bus control, monitoring, and analysis. Ideal for test benches, system integration environments, and applications demanding simultaneous BC/RT/BM operation.

Compatibility & Integration

Designed for PCI backplane integration in 5 V and 3.3 V environments. Abstract API software accelerates application development and reduces integration time. Available in commercial and ruggedized configurations.

QPCX1553G22MW Characteristics / Specifications

PARAMETER	VALUE
Model	QPCX-1553-G2-2MW
Instrument Type	MIL-STD-1553 PCI module
Card Form Factor	PCI
Mil Std Protocol	MIL-STD-1553A/B Notice II
Dual Redundant Channels This Config	2
Family Channel Options	1 2 or 4
Ram Per Channel	1 Mbyte
Time Tag Width	64 bit
Time Tag Resolution	25 ns
Discrete Channels	10
Pci Clock Support	66 MHz
IrigBReceiver Generator	supported
On Board Test Bus	supported
Uut Transformer Connection	supported
Startup 1760 Busy Bit	supported
Hardwired Rt Address Lines	supported
Remote Terminals Emulated	up to 31
Error Injection Detection	supported
Operating Mode Family	single dual or multi-function
Temperature Classes	commercial and XT
Variable Voltage	yes
Analyzer Software Family	BusTools
Ordering Alias	QPCX-1553-G2-2MW

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 rate 1 2 or 4 dual-redundant MIL-STD-1553A/B Notice II channels, 1 Mbyte RAM per channel, 64-bit 25 ns message time-tagging, IRIG-B receiver/generator, on-board test bus, UUT transformer connection, 1760 startup with Busy bit set, hardwired RT address lines, 10 discretes, and 66 MHz PCI support.

Applications

High-performance MIL-STD-1553 lab simulation and test on PCI backplanes needing multi-function BC RT monitor roles with IRIG timing.

Key Features

Multi-function and dual-function versions

Simultaneous Bus Controller 31 Remote Terminals and Bus Monitor

Variable voltage support

BusTools analyzer software family

Reduced power and smaller footprint versus prior QPCI generation

Technical Specifications

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Hardwired Rt Address Lines	supported
Remote Terminals Emulated	up to 31
Error Injection Detection	supported
Operating Mode Family	single dual or multi-function

PARAMETER	VALUE
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Analyzer Software Family	BusTools

Ordering Alias: QPCX-1553-G2-2MW

Notes
From Abaco QPCX-1553 product specifications for RAM, 64-bit/25 ns time-tags, discretes, IRIG, 66 MHz PCI, and channel family options. G2-2MW denotes the Generation 2 two-channel multi-function order configuration in the queue.

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