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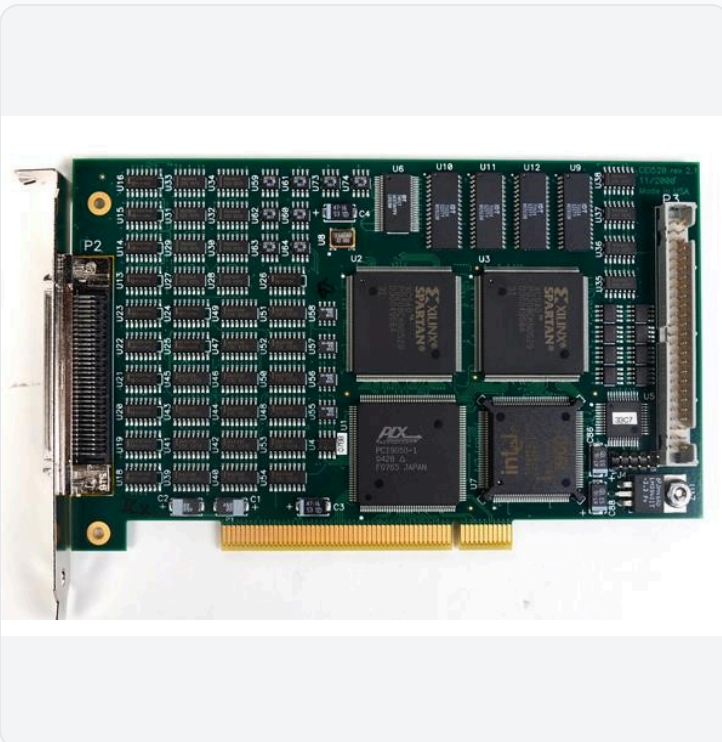
Data Sheet

August 15, 2026

ABACO SYSTEMS / CONDOR ENGINEERING

Abaco Systems / Condor Engineering CEI520A-88 ARINC Interface for PCI

Abaco Systems / Condor Engineering CEI520A-88 ARINC 429 Interface for PCI The Condor Engineering (Abaco) CEI520A-88 is an intelligent ARINC 429 PCI interface in the CEI-520/CEI-520A family. OEM CEI-520/CEI-520A datasheet GFA-752B rates this ordering configuration for 8 receive and 8 transmit ARINC 429 channels with data rates 12.5 kHz or 100 kHz, 100 MHz Intel 80960 processing, 512 KB shared memory, and PCI short-card mechanics 6.8 in by 4.2 in. ARINC 429 lab simulation test and embedded avionics integration on PCI hosts needing scheduled and burst messaging with label filtering. The Condor Engineering (Abaco) CEI520A-88 is an intelligent ARINC 429 PCI interface in the CEI-520/CEI-520A family. OEM CEI-520/CEI-520A datasheet GFA-752B rates this ordering configuration for 8 receive and 8 transmit ARINC 429 channels with data rates 12.5 kHz or 100 kHz, 100 MHz Intel 80960 processing, 512 KB shared memory, and PCI short-card mechanics 6.8 in by 4.2 in. ARINC 429 lab simulation test and embedded avionics integration on PCI hosts needing scheduled and burst messaging with label filtering.



MODEL

**Abaco Systems /
Condor
Engineering
CEI520A-88**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

CEI520A-88

LISTING

<https://aumictechlabs.com/products/cei520a-88-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Abaco Systems / Condor Engineering CEI520A-88 is a PCI short-card ARINC interface for avionics databus monitoring, simulation, and testing. This intelligent processor-based card delivers dual-protocol support for ARINC 429 and ARINC 717, plus compatibility with additional 2-wire avionics protocols including ARINC 419, 561, 571, 573, 575, 582, and CSDB. The card integrates on-board message scheduling, label and SDI filtering, multiple buffering modes, 48-bit time-tagging at 100 ns resolution, and error injection/detection for comprehensive databus validation across laboratory, embedded, and ruggedized platforms.

Technical Specifications

Databus Channels & Protocols Up to 16 Rx and 16 Tx channels for ARINC 429 Data rates: 12.5 kHz or 100 kHz ARINC 429 input levels: ± 6.5 to ± 13 VDC (A to B); parametric: ± 0.1 to ± 13.5 VDC Output level: ± 10 VDC (A to B) standard; parametric: 0 to ± 10 VDC Parity options: Odd, even, or none ARINC 717 supported in conjunction with ARINC 429 capabilities

Processing & Memory Processor: 100 MHz Intel 80960 Shared memory: 512 KB RAM Message Handling Buffering modes: Buffered (per-channel circular), Merged (single time-sequenced), Dedicated (latest snapshot) Time-tagging: 48-bit resolution at 100 ns increments Error injection: Parity, gap, high/low bit count options for transmit simulation

I/O Configuration Discrete inputs: 0, 8, or 16 (avionics or TTL/CMOS levels) Discrete outputs: 0, 8, or 16 (low-side switches, 0.5 A sink capability per output)

Key Features Universal PCI signaling (3.3V or 5V) with PCI-X 1.0 compatibility Configurable label and SDI filtering Parity-based error reporting PCI short card form factor: 6.8 in. $\times$ 4.2 in. Power: +5 VDC @ 780 mA, +12 VDC @ 100 mA, -12 VDC @ 100 mA

Typical Applications Avionics system integration and test, databus simulation, message monitoring and filtering, error injection for fault tolerance validation.

Compatibility & Integration Compatible with standard PCI and PCI-X 1.0 slots supporting 3.3V or 5V signaling. Operating temperature: 0 to +70°C commercial; extended-temperature ruggedized variants available.

CEI520A Characteristics / Specifications

PARAMETER	VALUE
Model	CEI520A-88
Instrument Type	Intelligent ARINC 429 PCI interface
Card Form Factor	PCI short card 6.8 in x 4.2 in
Arinc Receive Channels This Config	8
Arinc Transmit Channels This Config	8
Discrete Inputs This Config	8
Discrete Outputs This Config	8
Family Receive Channel Maximum	up to 16
Family Transmit Channel Maximum	up to 16
Receive Data Rates	12.5 kHz or 100 kHz
Transmit Data Rates	12.5 kHz or 100 kHz
Standard Receive Input Levels	plus or minus 6.5 to plus or minus 13 VDCAtoBParametric Threshold Levels: plus or minus 0.1 to plus or minus 13.5 VDCAtoBStandard Transmit Output Level: plus or minus 10 VDCAtoBParametric Transmit Output Voltages: 0 to plus or minus 10 VDCAtoBReceive Filtering: label and or SDI
Parity Modes	odd even or none
Processor	100 MHz Intel 80960
Shared Memory	512 KB
Operating Temperature Standard	0 to plus 70 C
Extended Temperature Option	available
Discrete Output Sink Capability	0.5 A low-side switch each
Power Plus 5 Vdc Typical	780 mA
Power Plus 12 Vdc Typical	100 mA
Power Minus 12 Vdc Typical	100 mA
Pci Signaling This Product Class	Universal 3.3 V or 5 V PCI signaling CEI-520A
PciXCompatibility Cei520a	PCI-X 1.0 and PCI slots

PARAMETER	VALUE
Operating temperature	Standard: 0 to plus 70 C

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Standard: 0 to plus 70 C
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Operating Temperature Standard	0 to plus 70 C
Extended Temperature Option	available
Discrete Output Sink Capability	0.5 A low-side switch each
Power Plus 5 Vdc Typical	780 mA
Power Plus 12 Vdc Typical	100 mA
Power Minus 12 Vdc Typical	100 mA
Pci Signaling This Product Class	Universal 3.3 V or 5 V PCI signaling CEI-520A
PciXCompatibility Cei520a	PCI-X 1.0 and PCI slots

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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Pci Signaling This Product Class	Universal 3.3 V or 5 V PCI signaling CEI-520A

PARAMETER	VALUE
PciXCompatibility CeI520a	PCI-X 1.0 and PCI slots

Optional Protocols Family: ARINC 419 561 571 573 575 582 717 and CSDB

Notes

From GE Intelligent Platforms CEI-520/CEI-520A ARINC Interface for PCI datasheet (GFA-752B) ordering table and electrical specifications. Channel and discrete counts are the OEM ordering-row values for CEI520A-88; electrical limits are family-common.

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 ·
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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.