

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

ABACO SYSTEMS / CONDOR ENGINEERING

Abaco Systems / Condor Engineering CEI520-22 ARINC Interface for PCI

Abaco Systems / Condor Engineering CEI520-22 ARINC 429 Interface for PCI The Condor Engineering (Abaco) CEI520-22 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 2 receive and 2 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) CEI520-22 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 2 receive and 2 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
CEI520-22**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

CEI520-22

LISTING

<https://aumictechlabs.com/products/cei520-22/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Abaco Systems / Condor Engineering CEI520-22 is a PCI bus interface card providing ARINC 429 and ARINC 717 connectivity for aerospace and defense databus applications. Built around an Intel 80960 processor, it delivers message scheduling, label filtering, multi-mode buffering, time-tagging, and error detection. The card supports up to 16 receive and 16 transmit ARINC 429 channels at 12.5 kHz or 100 kHz data rates, with configurable input thresholds (± 0.1 to ± 13.5 VDC) and adjustable transmit voltages (0 to ± 10 VDC). Additional protocol support includes ARINC 419, 561, 568, 571, 573, 575, 582, CSDB, and RS-422/423. Technical Specifications Processor & Memory Intel 80960 CPU 512 kB shared RAM ARINC 429 Channels Up to 16 receive channels, 12.5 kHz or 100 kHz Receive input levels: ± 6.5 to ± 13 VDC (standard), ± 0.1 to ± 13.5 VDC (parametric) 2 kByte buffering per receive channel Up to 16 transmit channels, 12.5 kHz or 100 kHz Transmit output: ± 10 VDC standard, 0 to ± 10 VDC parametric 2 kByte buffering per transmit channel Label and SDI filtering; parity (odd, even, none) Simultaneous scheduled and burst mode messaging Discrete I/O 0, 8, or 16 discrete inputs (avionics-level or TTL/CMOS) 0, 8, or 16 discrete outputs (low-side switches, 0.5 A per output) Protocols Supported ARINC 429, 419, 561, 568, 571, 573, 575, 582; ARINC 717; CSDB; RS-422/423 Power Requirements +5 VDC: 780 mA typical ± 12 VDC: 100 mA each typical Physical PCI short card form factor (6.8 in. $\times$ 4.2 in.) Operating temperature: 0 to +70°C Key Features Onboard message scheduling and error injection Multiple receive buffering modes (buffered, merged, dedicated) PCI or PCI-X 1.0 compatible (CEI520A supports 3.3V and 5V signaling) Extended temperature range available Compatibility & Integration High-level APIs and drivers for Windows (32/64-bit), Linux, and VxWorks. Sample code provided in C/C++, C#.NET, Visual Basic, and LabWindows/CVI. Optional Solaris drivers and LabVIEW support available.

CEI520 Characteristics / Specifications

PARAMETER	VALUE
Model	CEI520-22
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	2
Arinc Transmit Channels This Config	2
Discrete Inputs This Config	0
Discrete Outputs This Config	0
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	5 V signaling CEI-520 only
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
Operating Temperature	Standard: 0 to plus 70 C
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	5 V signaling CEI-520 only
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	
Specifications	
PARAMETER	VALUE
Model	CEI520-22
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	2
Arinc Transmit Channels This Config	2
Discrete Inputs This Config	0
Discrete Outputs This Config	0
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	
Specifications	
PARAMETER	VALUE
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	5 V signaling CEI-520 only

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 CEI520-22; 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 ·
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.