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Data Sheet
August 15, 2026

ACROMAG

Acromag IP-1K110-0024 Reconfigurable FPGA IndustryPack Module

The Acromag IP-1K110-0024 is a reconfigurable FPGA IndustryPack module designed for a variety of industrial applications. It features a powerful FPGA for custom logic implementation and flexible I/O interfaces for seamless integration with existing systems.

MODEL Acromag IP-1K110-0024	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU IP-1K110-0024	LISTING https://aumictechlabs.com/products/ip-1k110-0024-2/

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This unit

The Acromag IP-1K110-0024 is a reconfigurable FPGA IndustryPack module that implements custom logic and flexible I/O control in industrial systems. Built around an Altera EP1K100 FPGA, it allows engineers to develop and deploy their own instruction sets directly into the device via the IP bus. The module manages up to 48 TTL or 24 differential RS485 I/O signals - or any combination - with independent directional control.An internal CPLD acts as bus controller during initialization and configuration, then relinquishes control to the user-programmed FPGA. Onboard resources include 64K × 16 static RAM, a programmable interval timer, and a PLL-based clock synthesizer with external LVTTL clock input capability.Technical Specifications FPGA: Altera EP1K100, FPGA-programmable via IP bus I/O: Up to 48 TTL signals (5V tolerant) or up to 24 differential RS485 signals, mixed configurations supported IP Bus: 8 MHz or 32 MHz clock

frequenciesID space read: 0 wait states (250 ns cycle)Register read/write: 1 wait state (500 ns cycle) Memory: 64K × 16 local static RAM under FPGA control Clocking: Programmable PLL clock synthesizer; external LVTTL clock input routed to FPGA global clock pin Timers: User-programmable interval timer Interface: IP bus per ANSI/VITA 4-1995; supports IOSel*, IDSel*, and INTSel* cycle typesKey Features TTL channels controlled in groups of 8; RS485 channels in groups of 4 RS485/RS422 transceivers rated for 32-node networks, 4000 feet cable distance Pre-programmed CPLD manages power-up sequence and bitstream download VHDL reference design provided for IP bus interfaceTypical Applications Specialized communication systems, test fixture simulation, and adaptive computing requiring custom mathematical processing or protocol implementation.Compatibility & Integration Standard single-size IndustryPack form factor. Compliant with ANSI/VITA 4-1995 specification.

IP1K1100024 Characteristics / Specifications

PARAMETER	VALUE
Model	IP-1K110
Configuration Example	IP-1K110-0024
Instrument Type	reconfigurable FPGA IndustryPack
Ttl Io Maximum	48
Rs485 Io Maximum	24
Form Factor	single-wide IndustryPack
Download Path	IP bus into FPGA
Power Up Controller	preprogrammed CPLD then FPGA takes IP bus
Io Mix	TTL and RS485 combinable
Carrier Bus	IndustryPack
Use Case	adaptive computing mezzanine
Manufacturer	Acromag
Related Module	IP-1K100 ACEX EP1K100 FPGA IP
Protocol Examples	RS422/485 specialized communications
Ttl Use	test fixture simulation of switched lines
Math Use	user formulas including MATLAB-class algorithms
Bus After Download	FPGA owns IP bus, CPLD disabled
Initialization	CPLD limited to power-up and download
Iosignals	up to 48 TTL or 24 RS485
Module Family	Acromag FPGA IndustryPack
Operating Use	custom IP I/O
Logical Address Class	IP memory/IO space per carrier
Interrupt Class	user FPGA design dependent
Reset Behavior	CPLD then FPGA takeover
Cooling	carrier slot cooling

IP1K1100024 Specifications

PARAMETER	VALUE
Applications	RS422/485 custom protocols, TTL fixture simulation, and FPGA math on IndustryPack carriers.
Reconfigurable FPGA on IndustryPack	Up to 48 TTL or 24 RS485 I/O
Technical Specifications	Model: IP-1K110

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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Notes

From Acromag IP-1K110 product description (48 TTL / 24 RS485, IP-bus download, CPLD then FPGA). FPGA family density belongs on the IP-1K110 datasheet matching the fitted device.

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

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