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TECHNOLOGY GROUP

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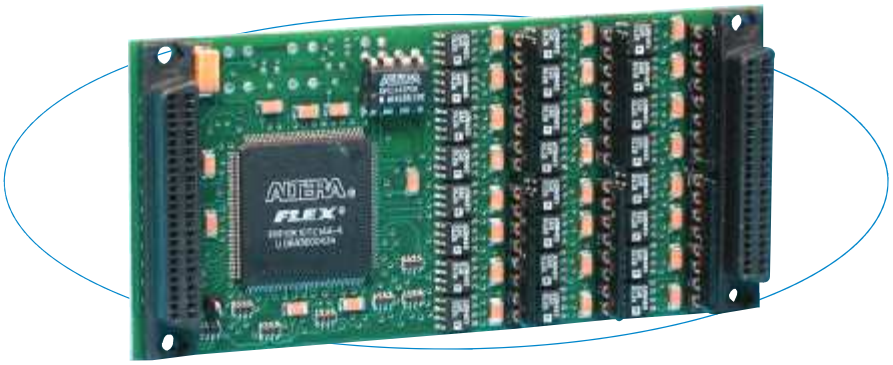
Expert team | Trust guarantee | 100% satisfaction

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Find the *Acromag IP409* at our website: ***Click HERE***

Acromag
THE LEADER IN INDUSTRIAL I/O

IP409
Differential
Digital Input/Output



The IP409 has 24 channels with interrupts for reliable, high-speed serial or parallel data transfer across noisy environments.

The IP409 provides 24 differential I/O channels with interrupts. Each channel is programmable as an input or an output on a bit basis, in any combination. All channels can generate change-of-state (COS), low, or high level transition interrupts.

Each channel uses a robust RS485/422A transceiver that supports bi-directional data transfer in one direction at a time (half-duplex). Differential data transmission enables reliable, high speed communication across distances of up to 4000 feet, even through noisy environments. Differential transmission nullifies the effects of ground shifts and noise signals which appear as common-mode voltages on the line.

Features

- 24 digital input and/or output channels
- Output channels support readback monitoring
- Socketed termination resistors
- Ruggedized RS422A/485 transceivers
- Interrupt support on all channels
  - change-of-state
  - high or low level transition
- Positive and negative current limiting
- Parallel I/O for up to 24 bits

Benefits

- All channels programmable as inputs or outputs.
- Differential data transmission is ideal for high-speed, long distance communication in noisy environments.

Specifications

RS485 Transceivers

Bus common mode range: -7 to 12V.

Channel configuration: 24 independent, non-isolated RS485/422A serial ports with a common signal return connection.

Data rate: 250K bits/second, maximum.

Cable length: 4000 feet, maximum. Use of a signal repeater can extend transmission distances.

Termination resistors: 120 ohm resistors installed in board sockets at network endpoints only.

Differential output voltage: 5V, maximum. 1.5V minimum (with 27 ohm load).

Common mode output voltage: 3V, maximum.

Output short circuit current: 250mA, maximum.

Rise/fall time: 250nS, minimum, 800nS, typical. 2000nS, maximum.

Receiver input impedance: 12K ohms.

IP Compliance (ANSI/VITA 4)

Meets IP specifications per ANSI/VITA 4-1995.

IP data transfer cycle types supported: Input/output (IOSel*), ID read (IDSel*).

Access Time (8MHz clock): 0 wait states (250nS cycle).

Interrupt handling format: An 8-bit vector is provided during interrupt acknowledge cycles on D0 - D7.

Environmental

Operating temperature: 0 to 70°C (IP409) or -40 to 85°C (IP409E).

Storage temperature: -55 to 125°C (all models).

Relative Humidity: 5 to 95% non-condensing

Power:
+5V (±5%): 50mA maximum.
±12V (±5%) from P1: Not used.

MTBF: 5,258,978 hrs at 25°C, MIL-HDBK-217F, Notice 2.

Ordering Information

Industry Pack Modules

IP409
Differential digital I/O module

IP409E
Same as IP409 plus extended temperature range

Acromag offers a wide selection of Industry Pack Carrier Cards.

Software *(see software documentation for details)*

IPSW-API-VXW
VxWorks® software support package

IPSW-API-QNX
QNX® software support package

IPSW-API-WIN
Windows® DLL driver software support package

IPSW-LINUX
Linux™ support (website download only)

See accessories documentatin for additional information.

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Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

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