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Data Sheet

August 13, 2026

KEITHLEY / METRABYTE

Keithley / MetraByte PIO-12 Digital I/O Module

Keithley MetraByte PIO-12 24 Bit ISA Parallel Digital I/O Board The Keithley MetraByte PIO-12 is a 24-line parallel digital I/O board for IBM PC/XT, PC AT, and compatibles. An 8255 (later 82C55 CMOS) programmable peripheral interface provides three TTL/CMOS ports: A and B as 8-bit input or output, and C as two 4-bit halves. Ten-bit I/O address decode uses four consecutive addresses; factory default base is 300h. One interrupt input with enable can be steered to any of six PC interrupt levels. +5 V, -5 V, +12 V, and -12 V from the PC appear on the 37-pin connector. Post-November 1996 boards with 82C55 include internal pull-ups that can source about 400 uA at power-up. The Keithley MetraByte PIO-12 is a 24-line parallel digital I/O board for IBM PC/XT, PC AT, and compatibles. An 8255 (later 82C55 CMOS) programmable peripheral interface provides three TTL/CMOS ports: A and B as 8-bit input or output, and C as two 4-bit halves. Ten-bit I/O address decode uses four consecutive addresses; factory default base is 300h. One interrupt input with enable can be steered to any of six PC interrupt levels. +5 V, -5 V, +12 V, and -12 V from the PC appear on the 37-pin connector. Post-November 1996 boards with 82C55 include internal pull-ups that can source about 400 uA at power-up. TTL/CMOS parallel control of instruments and displays; SSIO-24 solid-state module racks; ERB-24 / ERA-01 relay panels;



MODEL

**Keithley /
MetraByte PIO-12**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

PIO-12

LISTING

[https://aumictechlabs.c
om/products/pio-12/](https://aumictechlabs.com/products/pio-12/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley/MetraByte PIO-12 is a 24-line parallel digital I/O interface board for IBM PC and compatible systems. It has configurable TTL/CMOS-compatible input and output channels via three 8-bit ports, with interrupt capability and flexible address decoding for industrial automation, laboratory research, and educational applications. Technical Specifications Digital I/O Channels: 24 lines across three ports Port Configuration: Port A and Port B are byte-wide (8 bits each), independently configurable as inputs or outputs. Port C is byte-wide and partitionable into Port C Lower and Port C Upper (4 bits each), each independently configurable as input or output Logic Levels: TTL/CMOS-compatible with input logic low -0.5V to 0.8V and input logic high 2.0V to 5.0V Sink Current: 1.7 mA Source Current: -200 μ A Bus Interface: ISA slot Address Decoding: 10-bit I/O address decode; uses four consecutive I/O addresses Interrupt Support: Six interrupt levels available on PC bus with active-low enable line Power Requirements: $\pm$ 5V, $\pm$ 12V from computer supply; +5VDC @ 1.6A typical Operating Temperature: 0 to 50°C (32 to 122°F) Storage Temperature: 0 to 70°C (32 to 158°F) Humidity: 20 to 90% non-condensing Key Features 37-pin D-type connector CMOS pull-up capability via external 10k Ω resistor to +5V Compact form factor: 13.2 in L $\times$ 4.25 in H $\times$ 0.75 in D (335mm $\times$ 108mm $\times$ 19mm) Typical Applications Industrial automation, laboratory instrumentation, real-time device monitoring and control, educational embedded systems development. Compatibility & Integration Compatible with IBM PC/XT, PC AT, and compatible computers. Supports DriverLINX software framework with LabVIEW, TestPoint, VisualSCOPE, and ExceLINX drivers. Accessory panels include screw-terminal connectors (STC-37), electromechanical relay boards (ERB-24, ERA-01), and ribbon cable assemblies (C-1800).

Features & description

From manufacturer datasheet

Features

- 8255 PPI mode 0 port direction via control word at base plus 3
- Power-up default: all ports inputs
- Interrupt enable (active low) plus six IRQ choices
- C-1800 cable to STA-U, STC-37, SSIO-24, ERB-24, ERA-01
- DriverLINUX Windows programming (not DOS register poking under Win32)

PIO Characteristics / Specifications

PARAMETER	VALUE
Model	PIO-12
Manufacturer	Keithley MetraByte
Instrument Type	ISA 24 bit parallel digital I/O board
Alias	PIO-12; PIO12; MetraByte PIO-12
Host Bus	ISA 8 bit peripheral
Digital Lines	24
Port A	8 bit input or output
Port B	8 bit input or output
Port C	8 bit or two 4 bit halves independently or OPPI Chip: 8255A / 71055C original; 82C55 after November 1996
Address Decode	10 bit
Address Map	4 consecutive I/O locations
Default Base Address	300h
Control Register	base plus 3
Interrupt Inputs	1 with enable
Interrupt Levels	any of 6 PC IRQ lines
Connector	37 pin D type male
Mating Connector	SFC-37 37 pin female
Output Drive	1 TTL (74 series) load or 4 LSTTL (74LS) loads
CMOS Pullup	10 kohm from output to plus 5 V
Later Chip Powerup Pullup	up to 400 uA source to plus 5 V (82C55 boards)
Power Rails On Connector	plus 5 V, minus 5 V, plus 12 V, minus 12 V
Bus Loading Current	170 mA
Operating Temperature	0 C to 50 C
Storage Temperature	minus 40 C to 100 C
Humidity	0 to 90 percent noncondensing

PARAMETER	VALUE
Dimensions	5 inLby 4.25 inHby 0.75 in (12.7 cm by 10.8 cm by 1.9 cm)
Weight	4 oz (113 g)
Relay Accessory ERB	3 A at 120 V class via C-1800
Relay Accessory ERA	8 SPDT, 3 A at 120 V
SSIO Accessory	SSIO-24 solid state I/O module panel
Software	DriverLINX
Powerup Port State	all ports inputs until control word written

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to 100 C
Operating temperature	0 C to 50 C
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Weight	4 oz (113 g)
Relay Accessory ERB	3 A at 120 V class via C-1800
Relay Accessory ERA	8 SPDT, 3 A at 120 V
SSIO Accessory	SSIO-24 solid state I/O module panel
Software	DriverLINX
Powerup Port State	all ports inputs until control word written Notes Specs from Keithley PIO-12 User's Guide (64190 Rev F) Tables A-1/A-2 and 82C55 design note PA-612A. Confirm 8255 versus 82C55 if power-up high on connected relays matters. Table A-1 TTL voltage/current limits are in the printed appendix; do not substitute DASCard-PIO12 PCMCIA numbers.

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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Model	PIO-12
Manufacturer	Keithley MetraByte
Instrument Type	ISA 24 bit parallel digital I/O board
Alias	PIO-12; PI012; MetraByte PIO-12
Host Bus	ISA 8 bit peripheral
Digital Lines	24
Port A	8 bit input or output
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Address Map	4 consecutive I/O locations
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Interrupt Inputs	1 with enable
Interrupt Levels	any of 6 PC IRQ lines
Connector	37 pinDtype male
Mating Connector	SFC-37 37 pin female
Output Drive	1 TTL (74 series) load or 4 LSTTL (74LS) loads
CMOS Pullup	10 kohm from output to plus 5 V
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Operating Temperature	0 C to 50 C
Storage Temperature	minus 40 C to 100 C
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PARAMETER	VALUE
Dimensions	5 inLby 4.25 inHby 0.75 in (12.7 cm by 10.8 cm by 1.9 cm)
Weight	4 oz (113 g)
Relay Accessory ERB24	3 A at 120 V class via C-1800
Relay Accessory ERA01	8 SPDT, 3 A at 120 V
SSIO Accessory	SSI0-24 solid state I/O module panel
Software	DriverLINX
Powerup Port State	all ports inputs until control word written

Notes

Specs from Keithley PIO-12 User's Guide (64190 Rev F) Tables A-1/A-2 and 82C55 design note PA-612A. Confirm 8255 versus 82C55 if power-up high on connected relays matters. Table A-1 TTL voltage/current limits are in the printed appendix; do not substitute DASCard-PIO12 PCMCIA numbers.

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.