

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP 82324 HP-IB High Performance Measurement Coprocessor

HP 82324 High Performance HP-IB Measurement Coprocessor The HP 82324 (82324A/82324B) is a full-size ISA plug-in that turns an HP Vectra or compatible PC into a multiprocessing HP BASIC test workstation. Hardware is leveraged from the HP 9000 Model 332: a 16 MHz MC68030 CPU with integral MMU, optional socketed MC68882 floating-point unit, custom DMA, and an on-board HP-IB (IEEE-488 / IEC 625) controller. Plug-in RAM boards of 1 MB and 4 MB allow 1, 2, 4, 5, or 8 MB. Built-in HP DIO reaches companion GPIO and Shared Resource Manager cards. Display, keyboard, timer, speaker, and serial I/O of the 332 are omitted and emulated by the PC. Software is HP BASIC/DOS (BASIC 5.14 on Release II-A; BASIC 6.2 on Release III). Predecessor is the HP 82300 language-processor family. Manufacturer: Hewlett Packard (Agilent / Keysight lineage) Instrument Type: ISA HP-IB measurement coprocessor FPU Option: Motorola MC68882 socketed (Model 82327) DMA: custom DMA controller on 82324 (not on 82300)



MODEL

**Keysight / Agilent /
HP 82324**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

82324

LISTING

<https://aumictechlabs.com/products/82324-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight/Agilent/HP 82324 HP-IB High Performance Measurement Coprocessor is a plug-in card for compatible HP computers that delivers accelerated calculation and instrument control

performance in test and measurement workstations. Built around a 32-bit MC68030 processor with MC68882 floating-point coprocessor, the 82324 leverages proven design elements from the HP 9000 Model 332 to provide increased speed, improved HPIB throughput, and Direct Memory Access (DMA) for enhanced system bandwidth. The card installs in an ISA slot and interfaces via HPIB (IEEE-488) and 24-pin parallel port connectors, operating under DOS with HP BASIC programming support. Technical Specifications Processor: MC68030 32-bit microprocessor Floating-point coprocessor: MC68882 Primary interface: HPIB (IEEE-488) Secondary interface: 24-pin female parallel port Hardware configuration: Selectable primary/secondary addressing and system controller status via configuration switch Default primary address: 250h (reconfigurable to 280h) Form factor: ISA slot plug-in card Power supply: Host computer supplied Key Features Direct Memory Access (DMA) support for optimized system throughput Configurable HPIB addressing for multi-instrument networks MC68882 floating-point unit socket (may ship empty, user-installable) Hardware configuration switch for flexible deployment scenarios DOS environment operation with HP BASIC compatibility Typical Applications Automated test equipment (ATE) control and data acquisition HPIB/IEEE-488 instrument communication and coordination High-speed measurement computation and signal processing Multi-instrument test station management Compatibility & Integration Designed for HP Vectra and compatible PC platforms. Requires DOS drivers and HP BASIC interpreter. Unique HP keyboard command sets may benefit from dedicated keyboard overlays during operation.

Features & description

From manufacturer datasheet

Features

- 16 MHz 68030 versus the slower 82300 language processor

82324 Characteristics / Specifications

PARAMETER	VALUE
Model	82324
Manufacturer	Hewlett Packard (Agilent / Keysight lineage)
Instrument Type	ISA HP-IB measurement coprocessor
Alias	82324; 82324A; 82324B; HP 82324
Host Bus	ISA full size PC I/O card
CPU	Motorola MC68030
CPU Clock	16 MHz
CPU Width	32 bit with integral MMU
FPU Option	Motorola MC68882 socketed (Model 82327)
DMA	custom DMA controller on 82324 (not on 82300)
RAM Board Sizes	1 MB and 4 MB
RAM Configurations	1 MB, 2 MB, 4 MB, 5 MB, 8 MB (one or two RAM boards)
HP IB Interface	on board IEEE 488 / IEC 625
DIO Bus	built in HP DIO for GPIO and SRM companion cards
Memory Boards	HP 82325 and 82326
Predecessor	HP 82300A/B/C/D measurement coprocessor
BASIC Release IIA	BASIC 5.14 with 82324A
BASIC Release III	BASIC 6.2 (HP BASIC/DOS 6.2) with 82324B
Extra HP IB Cards	HP 82335 and HP 82990 at select codes 24 and 25
DMA Versus 823	DMA supported only on 82324 family
Dual Card	Release III allows 82300 and 82324 together
Emulated By PC	display, keyboard, timer, speaker, serial I/O
Omitted Versus 3	memory parity circuitry
Boot Path	MMU remaps RAM downloaded from the PC (no 332 boot ROMs)
Host OS	MS-DOS environment

PARAMETER	VALUE
Form	single full size PC coprocessor card
Related GPIO	HP GPIO interface on DIO
Related SRM	HP Shared Resource Manager on DIO Notes Specs from HP Journal April 1992 82324A article and HP 82324 porting guides (Releases II-A and III). Confirm 82324A versus 82324B, installed RAM (1 to 8 MB), and whether 82327 FPU and 82326 memory daughterboard are populated. Notageneric GPIB PC card; it runs HP BASIC on its own 68030.

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.

Performance HP-IB Measurement Coprocessor

Overview

The HP 82324 (82324A/82324B) isa full-size ISA plug-in that turns an HP Vectra or compatible PC into a multiprocessing HP BASIC test workstation. Hardware is leveraged from the HP 9000 Model 332: a 16 MHz MC68030 CPU with integral MMU, optional socketed MC68882 floating-point unit, custom DMA, and an on-board HP-IB (IEEE-488 / IEC 625) controller. Plug-in RAM boards of 1 MB and 4 MB allow 1, 2, 4, 5, or 8 MB. Built-in HP DIO reaches companion GPIO and Shared Resource Manager cards. Display, keyboard, timer, speaker, and serial I/O of the 332 are omitted and emulated by the PC. Software is HP BASIC/DOS (BASIC 5.14 on Release II-A; BASIC 6.2 on Release III). Predecessor is the HP 82300 language-processor family.

Applications

HP BASIC instrument control from MS-DOS PCs; faster HP-IB and DMA than 82300; dual 82300 plus 82324 in one PC under Release III; GPIO/SRM expansion via DIO daughter paths.

Key Features

- 16 MHz 68030 versus the slower 82300 language processor
- On-board HP-IB; additional 82335 / 82990 HP-IB at select codes 24 and 25
- DMA only on 82324, not on 82300
- 82325/82326 memory boards and 82327 FPU option
- BASIC 6.2 (Release III) or BASIC 5.14 (Release II-A)

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	82324
Manufacturer	Hewlett Packard (Agilent / Keysight lineage)
Instrument Type	ISA HP-IB measurement coprocessor

Specifications

PARAMETER	VALUE
Alias	82324; 82324A; 82324B; HP 82324
Host Bus	ISA full size PC I/O card
CPU	Motorola MC68030

Specifications

PARAMETER	VALUE
CPU Clock	16 MHz
CPU Width	32 bit with integral MMU
FPU Option	Motorola MC68882 socketed (Model 82327)

Specifications

PARAMETER	VALUE
DMA	custom DMA controller on 82324 (not on 82300)
RAM Board Sizes	1 MB and 4 MB
RAM Configurations	1 MB, 2 MB, 4 MB, 5 MB, 8 MB (one or two RAM boards)

Specifications

PARAMETER	VALUE
HP IB Interface	on board IEEE 488 / IEC 625
DIO Bus	built in HP DIO for GPIO and SRM companion cards
Memory Boards	HP 82325 and 82326

Specifications

PARAMETER	VALUE
Predecessor	HP 82300A/B/C/D measurement coprocessor
BASIC Release IIA	BASIC 5.14 with 82324A
BASIC Release III	BASIC 6.2 (HP BASIC/DOS 6.2) with 82324B

Specifications

PARAMETER	VALUE
Extra HP IB Cards	HP 82335 and HP 82990 at select codes 24 and 25
DMA Versus 82300	DMA supported only on 82324 family
Dual Card	Release III allows 82300 and 82324 together

Specifications

PARAMETER	VALUE
Emulated By PC	display, keyboard, timer, speaker, serial I/O
Omitted Versus 332	memory parity circuitry
Boot Path	MMU remaps RAM downloaded from the PC (no 332 boot ROMs)

Specifications

PARAMETER	VALUE
Host OS	MS-DOS environment
Form	single full size PC coprocessor card
Related GPIO	HP GPIO interface on DIO

Related SRM: HP Shared Resource Manager on DIO

Notes

Specs from HP Journal April 1992 82324A article and HP 82324 porting guides (Releases II-A and III). Confirm 82324A versus 82324B, installed RAM (1 to 8 MB), and whether 82327 FPU and 82326 memory daughterboard are populated. Notageneric GPIB PC card; it runs HP BASIC on its own 68030.

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 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.