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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP E1458A 96-Channel Digital Input/Output Module

HP Agilent E1458A 96-Channel Digital Input/Output VXI Module The HP E1458A isaC-size VXI 96-channel digital I/O module for high-density digital stimulus/response in automated test. Channels are organized as ports for input or output. Register-based; SCPI via E1406A. Pairs with terminal blocks or flying-lead fixtures. VXI digital pattern I/O; fixture control and UUT static digital pins; high-channel-count digital readback; mixed analog/digital ATE with mux and DMM cards. The HP E1458A isaC-size VXI 96-channel digital I/O module for high-density digital stimulus/response in automated test. Channels are organized as ports for input or output. Register-based; SCPI via E1406A. Pairs with terminal blocks or flying-lead fixtures. VXI digital pattern I/O; fixture control and UUT static digital pins; high-channel-count digital readback; mixed analog/digital ATE with mux and DMM cards.



MODEL

**Keysight / Agilent /
HP E1458A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E1458A

LISTING

[https://aumictechlabs.c
om/products/e1458a-2/](https://aumictechlabs.com/products/e1458a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight E1458A is a C-size VXI module providing 96 digital channels through twelve 8-bit bi-directional data ports arranged in three banks. Each port is individually configurable for positive or negative true logic and read/write or tri-state operation, supporting flexible data transmission from single or multiple ports up to 32-bit long words. The module delivers 325 kb/s block transfer rates

and integrates six GPIO handshake protocols - none, leading edge, trailing edge, pulse, partial, and strobe - with dedicated FLAG, CTL, and I/O status lines per port. Three additional control lines (PIR, /RES, STS) enable custom handshaking and interrupt functions via register-based programming. TTL-compatible at 5V maximum, the E1458A suits digital subassembly testing, data acquisition, and control applications requiring high-density I/O in VXIbus systems. Technical Specifications Module Type: VXI, C-size, 1-slot, register-based Digital Channels: 96 total across twelve 8-bit bi-directional ports Port Organization: Three banks of four ports; ports combinable for 8-bit, 16-bit, or 32-bit transfers Block Transfer Rate: 325 kb/s (32-bit transfers) Logic Levels: TTL compatible, 5V maximum Output (High): -5.2 mA @ 2.5V (pull-up enabled) Output (Low): 48 mA @ 0.5V Key Features Individual port configuration for logic polarity and directional control Six handshake protocol options for flexible synchronization Per-port status monitoring (FLAG, CTL, I/O lines) Peripheral interrupt, reset, and status control lines Single or multi-port simultaneous data transmission Typical Applications Digital subassembly functional testing High-density digital I/O control Data acquisition and system synchronization Compatibility & Integration SCPI command set compatible with E1330B; supports additional readback and monitoring queries VXIplug&play driver support on C-SCPI/I-SCPI platforms Available as downloadable driver for Keysight E1406A command modules

Features & description

From manufacturer datasheet

Features

- 96 digital channels in one C-size slot

E1458A Characteristics / Specifications

PARAMETER	VALUE
Model	E1458A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	VXI Digital Input/Output Module
Alias	E1458A; HP E1458A
Digital Channels	96
Direction	programmable I/O by port
VXI Size	C-size
Slot Count	1
Device Type	register-based
Command Path	E1406A SCPI
Logic Family	TTL class digital I/O (confirm levels on sheet)
Port Organization	96 bits grouped into ports
Handshaking	family handshake/strobe (confirm)
Trigger	VXI TTL trigger
Host	C-size VXI mainframe
Terminal	screw/QUIC digital terminal block
Isolation	channel-to-backplane per DIO family
Sink/Source	per E1458A output driver rating
Cooling	VXI C-size airflow
Status	HP E1458A EOL
Related E13	B-size digital I/O family
Related Z2404A	64-channel isolated DI (different bus)
Not Analog Mux	digital I/O not E1476A
Software	SCPI DIGital subsystem
Power	VXI +5 V backplane for logic

PARAMETER	VALUE
Protection	observe voltage limits on pins
Use	static/byte digital I/O (not a timing analyzer)
Memory	pattern/readback per programming manual Notes 96-channel VXI DIO identity from HP E1458A product literature. Exact VIH/VIL sink current and clamp voltages are on the E1458A specifications page: do not invent TTL milliamp ratings.

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	E1458A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	VXI Digital Input/Output Module
Specifications	
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Alias	E1458A; HP E1458A
Digital Channels	96
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Specifications

PARAMETER	VALUE
Terminal	screw/QUIC digital terminal block
Isolation	channel-to-backplane per DIO family
Sink/Source	per E1458A output driver rating

Specifications

PARAMETER	VALUE
Cooling	VXI C-size airflow
Status	HP E1458A EOL
Related E1330	B-size digital I/O family

Specifications

PARAMETER	VALUE
Related Z2404A	64-channel isolated DI (different bus)
Not Analog Mux	digital I/O not E1476A
Software	SCPI DIGital subsystem

Specifications

PARAMETER	VALUE
Power	VXI +5 V backplane for logic
Protection	observe voltage limits on pins
Use	static/byte digital I/O (not a timing analyzer)

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Notes

96-channel VXI DIO identity from HP E1458A product literature. Exact VIH/VIL sink current and clamp voltages are on the E1458A specifications page: do not invent TTL milliamp ratings.

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.