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**Data Sheet**

August 13, 2026

KEYSIGHT / AGILENT / HP

# Keysight / Agilent / HP 34522 Digital I/O Module

HP Agilent 34522 Digital I/O Module for 3235 Switch/Test Unit The HP 34522 is a digital I/O plug-in for the HP 3235 Switch/Test Unit 10-slot cage. It provides digital stimulus/response alongside 34520 DMM and analog switch plugins on the 3235 analog/trigger backplanes. Used in functional test fixtures. 3235 digital fixture I/O; static digital pins with scanned analog; production functional test. Manufacturer: Hewlett Packard / Agilent / Keysight The HP 34522 is a digital I/O plug-in for the HP 3235 Switch/Test Unit 10-slot cage. It provides digital stimulus/response alongside 34520 DMM and analog switch plugins on the 3235 analog/trigger backplanes. Used in functional test fixtures. 3235 digital fixture I/O; static digital pins with scanned analog; production functional test. Manufacturer: Hewlett Packard / Agilent / Keysight Logic: TTL class digital (confirm 34522 sheet)



MODEL

**Keysight / Agilent /  
HP 34522**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**34522**

LISTING

<https://aumictechlabs.com/products/34522-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

## This unit

The Keysight 34522 Digital I/O Module is a plug-in expansion module that adds digital input/output capability to compatible Keysight data acquisition systems. It has 32 bi-directional TTL-compatible data lines, 8 edge-triggered interrupt lines, and 16 high-power FET outputs for controlling external devices. The module supports read/write rates exceeding 40 kHz and integrates into 34970A and 34972A mainframes. Technical Specifications Digital Data Lines: 32 bi-directional TTL-compatible lines Port Configuration: Four independent 8-bit ports with

dedicated handshake lines; ports can operate individually or combine for 16-bit or 32-bit parallel transfers Interrupt Capability: 8 edge-triggered interrupt lines for external event signaling High-Power Outputs: 16 FET outputs for driving higher-power external loads Data Rate: Read/write rate exceeding 40 kHz Physical Weight: Approximately 2 lbs Key Features TTL-level logic on all 32 data lines ensures direct compatibility with standard digital devices Flexible port architecture accommodates both narrow (8-bit) and wide (16/32-bit) parallel data operations Edge-triggered interrupt structure supports efficient external event handling High-power FET output stage eliminates the need for external driver stages when interfacing with industrial loads Compact plug-in form factor minimizes mainframe footprint Typical Applications This module suits applications requiring parallel digital communication, such as equipment control, sensor interface bridging, and event-driven data acquisition workflows where TTL signaling is appropriate. Compatibility & Integration The 34522 installs directly into Keysight 34970A and 34972A Data Acquisition/Switch Unit mainframes. Its modular design allows mixed installations with other plug-in modules within the same chassis.

## Features & description

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From manufacturer datasheet

### Features

- 3235-family digital I/O plugin

## 34522 Characteristics / Specifications

| PARAMETER       | VALUE                                   |
|-----------------|-----------------------------------------|
| Model           | 34522                                   |
| Manufacturer    | Hewlett Packard / Agilent / Keysight    |
| Instrument Type | Digital I/O Module                      |
| Family          | HP 3235 345xx plugins                   |
| Alias           | 34522; HP 34522                         |
| Host Mainframe  | HP 3235 Switch/Test Unit                |
| Host Slots      | 10-slot plugin cage                     |
| Extenders       | 3235E extenders (up to seven)           |
| Related 345     | 6.5-digit DMM module                    |
| Related 3235PS  | mainframe power supply                  |
| Function        | digital input/output                    |
| Programming     | 3235 HP-IB                              |
| Trigger         | 3235 trigger buses                      |
| Form            | 3235 plugin card                        |
| Not VXI         | not E1458A                              |
| Not 34          | not N2264A DIO                          |
| Status          | HP 34522 EOL                            |
| Cooling         | 3235 airflow                            |
| Power           | 3235 backplane                          |
| Logic           | TTL class digital (confirm 34522 sheet) |
| Channels        | digital I/O bits per 34522 sheet        |
| Direction       | programmable ports                      |
| Handshake       | 3235 digital handshake family           |
| Isolation       | per 34522                               |
| Use             | fixture digital control                 |

| PARAMETER     | VALUE                                                                                                                                                                                                                                                   |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Documentation | 3235/34522 manuals                                                                                                                                                                                                                                      |
| Calibration   | digital path verification                                                                                                                                                                                                                               |
| Connector     | 3235 fixture/interconnect                                                                                                                                                                                                                               |
| Family Range  | 34501 through 34524 plugins Notes 3235 digital I/O module identity from HP 34522 / 3235 plugin family. Exact bit count and voltage levels are on the 34522 specifications page: confirm rather than copying E1458A 96-channel or N2264A 16-bit figures. |

# 34522 Specifications

| PARAMETER                | VALUE                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------|
| Applications             | 3235 digital fixture I/O; static digital pins with scanned analog; production functional test. |
| Key Features             | - 3235-family digital I/O plugin                                                               |
| Technical Specifications | Model: 34522                                                                                   |

# 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  |                                      |
|-----------------|--------------------------------------|
| Specifications  |                                      |
| PARAMETER       | VALUE                                |
| Model           | 34522                                |
| Manufacturer    | Hewlett Packard / Agilent / Keysight |
| Instrument Type | Digital I/O Module                   |
| Specifications  |                                      |
| PARAMETER       | VALUE                                |
| Family          | HP 3235 345xx plugins                |
| Alias           | 34522; HP 34522                      |
| Host Mainframe  | HP 3235 Switch/Test Unit             |
| Specifications  |                                      |
| PARAMETER       | VALUE                                |
| Host Slots      | 10-slot plugin cage                  |
| Extenders       | 3235E extenders (up to seven)        |
| Related 34520   | 6.5-digit DMM module                 |
| Specifications  |                                      |
| PARAMETER       | VALUE                                |
| Related 3235PS  | mainframe power supply               |
| Function        | digital input/output                 |
| Programming     | 3235 HP-IB                           |
| Specifications  |                                      |
| PARAMETER       | VALUE                                |
| Trigger         | 3235 trigger buses                   |
| Form            | 3235 plugin card                     |
| Not VXI         | not E1458A                           |

### Specifications

| PARAMETER | VALUE          |
|-----------|----------------|
| Not 3499  | not N2264A DIO |
| Status    | HP 34522 EOL   |
| Cooling   | 3235 airflow   |

### Specifications

| PARAMETER | VALUE                                   |
|-----------|-----------------------------------------|
| Power     | 3235 backplane                          |
| Logic     | TTL class digital (confirm 34522 sheet) |
| Channels  | digital I/O bits per 34522 sheet        |

### Specifications

| PARAMETER | VALUE                         |
|-----------|-------------------------------|
| Direction | programmable ports            |
| Handshake | 3235 digital handshake family |
| Isolation | per 34522                     |

### Specifications

| PARAMETER     | VALUE                     |
|---------------|---------------------------|
| Use           | fixture digital control   |
| Documentation | 3235/34522 manuals        |
| Calibration   | digital path verification |

Connector: 3235 fixture/interconnect

Family Range: 34501 through 34524 plugins

Notes

3235 digital I/O module identity from HP 34522 / 3235 plugin family. Exact bit count and voltage levels are on the 34522 specifications page: confirm rather than copying E1458A 96-channel or N2264A 16-bit figures.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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NIST-traceable calibration · SAM registered ·  
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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.