

Agilent U4998A HDMI 1.4a Protocol Analyzer and Generator Module

DISCOVER the Alternatives...

Industries and Applications

- HDMI Authorized Test Centers (ATCs)
- HDMI chipset debug and validation
- Consumer computer video devices incorporating HDMI debug and validation

Product Description

The Agilent U4998A HDMI 1.4a Protocol Audio Video analyzer and generator module enables you to test your devices to ensure they are HDMI 1.4a CTS compliant. The module supports source and sink compliance testing of video formats, including 4K x 2K, 3D, and deep color, up to the maximum data rate of 3.4 Gbps.

The U4998A's wide range of capabilities enable you to test legal codes, basic protocol, packet type, pixel encoding, video format timing, AVI Infoframe, ACR, audio sample packet jitter, deep color, 3D video format and more.

Product photo shows U4998A module installed in M9502A chassis.



... Agilent **Modular** Products

Models

U4998A HDMI 1.4a Analyzer/Generator module

Main Features and Benefits

| Product features | Your benefits |
|--|--|
| Maximum data rate of 3.4 Gbps | Most complete coverage of HDMI data rates. Supports 4K x 2K, 3D and deep color video formats |
| HDMI 1.4a capture and generation with compliance tests | Gain confidence in obtaining CTS certification of HDMI source and sink devices |
| Passive monitoring with pass-through and mirror capabilities (<i>optional</i>) | Monitor the output of a source device so you can debug and troubleshoot source and sink issues. |
| Remote control via COM commands | Automate your HDMI testing and remotely control the U4998A using the COM server embedded in the application software |

Chassis compatibility: AXIe

Specifications and Characteristics

Hardware

| | |
|-----------------------------------|--|
| Size | 1-slot AXIe module |
| Maximum data rate | 3.4 Gbps |
| Memory depth | 4 GB |
| HDMI 1.4a compliance test support | Source Tests: 7-16 through 7-19, 7-23 through 7-40 Sink Tests: 8-16, 8-21, 8-23, 8-25*, 8-29, 8-30*, 8,31, (*with E4887A Signal Generator) |
| HPD (Hot Plug Detect) | Emulate removal and connection of HDMI cable between tests |
| Internal frequency counter | Automatically detects clock frequency without external equipment |
| Operating modes | Capture/compliance Generate/compliance Passive Monitoring (pass-through/mirror) |



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Software Information

The U4998A module's graphical user interface is included in the U4000 Series application software. The software is downloadable from the product's web page on Agilent.com. The software requires that only U4000A Series modules are installed in the AXle chassis.

| | |
|-----------------------------|--|
| Supported operating systems | Microsoft Windows® XP (32-bit) Microsoft Windows® Vista (32/64-bit) Microsoft Windows® 7 (32/64-bit) |
| Standard compliant drivers | N/A |
| Application software | U4000 Series Application Software (includes embedded COM server) HDMI 1.4a Evaluator Software |
| Agilent IO Libraries | N/A |

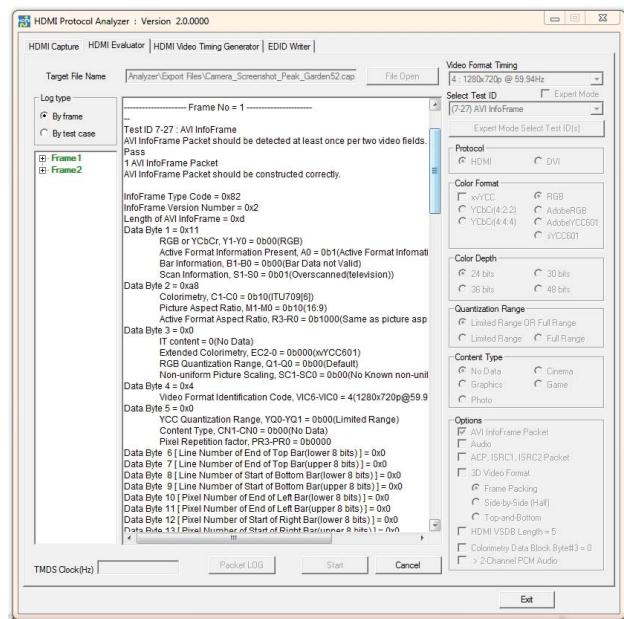


Figure 1. Review the evaluation results and get PASS/FAIL confirmation.

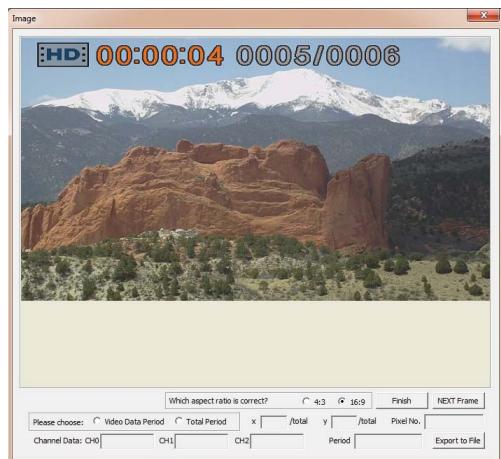


Figure 2. The video image window allows you to visually inspect the video image.

Ordering Information

Typical Product Configuration

| Model | Description |
|------------------|---|
| U4998A | HDMI 1.4a Protocol Analyzer & Generator Module |
| U4998A-PSV | Passive monitoring (pass through/mirror) |
| M9502A | 2-slot AXle chassis (Requires either external host PC or M9536A AXle embedded PC controller) |
| M9045A Y1202A | <u>Connection to Laptop</u> PCIe ExpressCard adaptor: Gen 1 PCIe cable: x4 to x8, 2.0m |

Related products

| | |
|------------------|---|
| M9536A | AXle embedded PC controller |
| M9047A Y1202A | <u>Connection to Desktop</u> PCIe desktop PC adapter: Gen2, x8 PCIe cable: x8, 2.0m |
| N5998U-DBG | Software license. Export HDMI captured data for further evaluation/analysis |

Advantage Services: Warranty

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