



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 AXIe 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

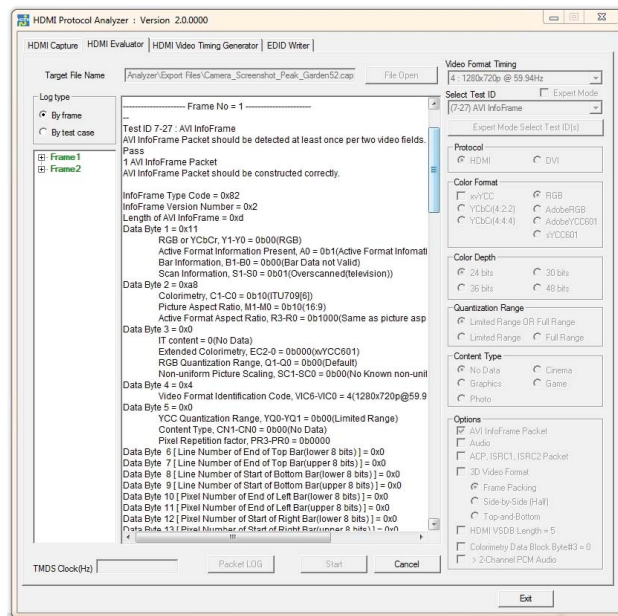


Figure 1. Review the evaluation results and get PASS/FAIL confirmation.

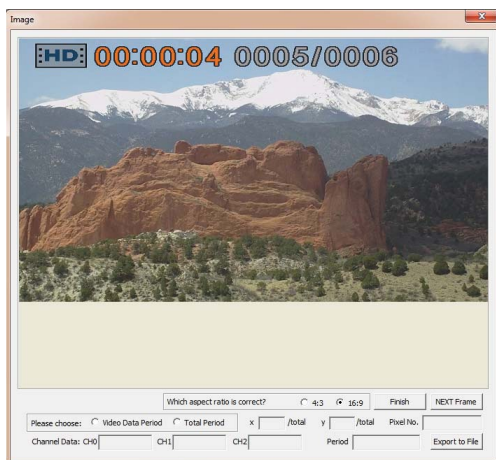


Figure 2. The video image window allows you to visually inspect the video image.

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 AXIe chassis (Requires either external host PC or M9536A AXIe embedded PC controller)
M9045A	Connection to Laptop PCIe ExpressCard adaptor: Gen 1
Y1200A	PCIe cable: x4 to x8, 2.0m

Related products

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

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