



MHL MODULE MODEL A222908

Chroma A222908 MHL module is a test equipment that supports the Mobile High-definition Link (MHL™) signal, which is able to work with the Chroma Video Pattern Generator for extending MHL signal output, in order to provide the solutions for display industry.

The A222908 supports the specification of MHL v2.0 which can expand 1 set of HDMI signal to 2 sets of MHL signal and HDMI signal. Its main features are as the following.

Standard MHL signal output:

It provides two sets of standard MHL signal output that supports up to 1080P 60Hz (PackedPixel mode) and 8-channel audio signal transmission.

3D standard format signal output:

Supporting MHL defined 3D format (Frame packing / Top-and-Bottom / Left-Right) that works with the 3D Video Pattern Generator of Chroma to output 3D test pattern for 3D display application.

Multiple signal port output function concurrently:

The A222908 is equipped with signal output function of 2 sets of MHL and 2 sets of HDMI simultaneously that comply with multiple input port display test application nowadays.

HDCP/EDID test function:

Working with the Video Pattern Generator of Chroma that can display HDCP and EDID test results on the test pattern for getting quick testing function.

Cbus test function:

MHL specification provides Remote Control Protocol (RCP) to support RCP display for users control smart phone via the remote controller to select the film to be viewed and perform control functions of play, fast forward or rewind. Chroma A222908 works with the Video Pattern Generator of Chroma to provide RCP detection function and fast judge remote control function of MHL display.

Vbus measurement function:

Working with the Video Pattern Generator of Chroma that can provide MHL Vbus voltage measurement function. Fast judge Vbus function by reading the measured voltage and current value on the test pattern.

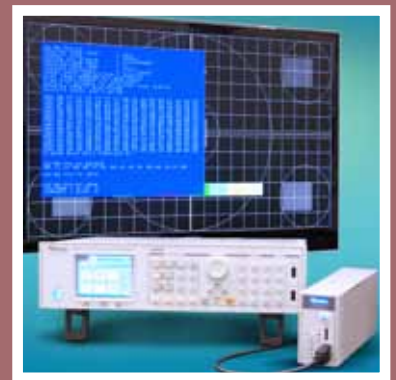
In the aspect of operation, the A222908 provides users simple and rapid setting management, easy operation interface and complete test function via Chroma control editing software (VPGMaster, need work with the Video Pattern Generator of Chroma). It is applicable for research and development, production test and quality verification application of all MHL related video industry.

MHL Module

MODEL A222908

Key Features:

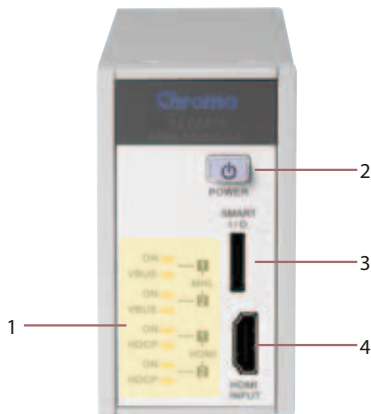
- Compliant with MHL 2.0 standard
- MHL pixel rate support up to 150MHz
 - 1080p 60Hz
 - 3D format
- Cbus (RCP) test function
- Vbus test function
 - Active load 500/900mA
 - Voltage & current measurement
- EDID / HDCP linking test
- Test result on screen display
- 8 channel audio
- 2 MHL ports output
- 2 HDMI ports output
- ESD protection
- High cost-performance value
- Compliant with chroma 22/23/24 series



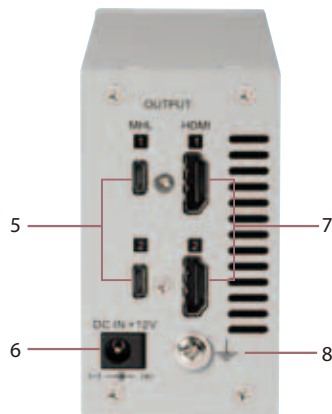
Chroma

PANEL DESCRIPTIONS

Front View



Rear View



- 1.Guiding light
- 2.Power switch
- 3.SMART I/O (Communicate with VPG)
- 4.HDMI input
- 5.MHL x 2 output
- 6.DC power input
- 7.HDMI x 2 output
- 8.Grounding screw

SPECIFICATIONS

MHL VIDEO OUTPUT

Version	MHL v2.0
Pixel rate	25 ~ 150MHz
Color space	RGB / YCbCr

HDMI VIDEO OUTPUT

Version	HDMI v1.4
Pixel rate	25 ~ 165MHz
Color space	RGB / YCbCr

MHL / HDMI AUDIO OUTPUT

Sample Rate	32, 44.1, 48, 88.2, 96, 176.4, 192KHz
Number of Channel	8 Channel

MHL FUNCTION

Vbus test	Voltage / Current
Message Display	Cbus (RCP) / Device Capability / HDCP / EDID

CONNECTOR

MHL	Micro USB 5 pin x 2
HDMI	HDMI TYPE A 19 Pin x3 (Input x 1 / Output x 2)
SMART I/O	Smart I/O x 1

OTHERS

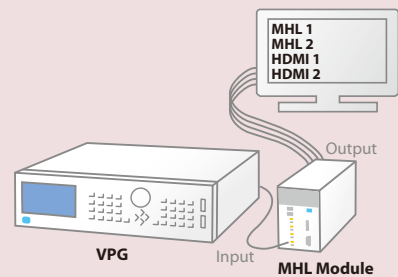
DC Input	12V / 2.5A (With Chroma adapter only)
Temperature(Operation/Storage)	+5~+40 deg.C / -20~+60 deg.C
Humidity	20 ~ 90%

Dimension & Weight

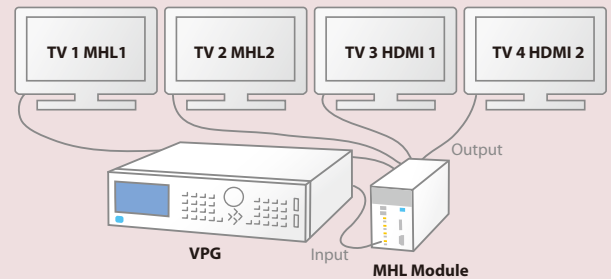
A222908 (HxWxD)	88x45x200mm / 3.46x1.77x7.87 inch
	750g / 1.65lbs

APPLICATION

MHL Module Application 1:



MHL Module Application 2:



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Developed and Manufactured by :

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