

SXGA-1012-SD-HRC

HDMI Ribbon Cable SXGA OLED Driver

Features and Benefits

HDMI Ribbon Cable

- No bulky HDMI Over-molding
- Custom HDMI Cable Length
- Extremely Flexible HDMI Cable

Two OLED Positions

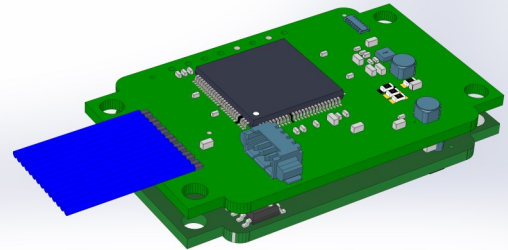
OLED Brightness and Color Control
 Digital Stereo Audio (via HDMI port)
 Built in EDID

Built-in DC/DC Power Conversion

Low Input Voltage Range

USB Calibration Software Via PC

Compatibility: WLLV Wireless Video Products*



SXGA -1012SD- HRC OLED Driver

The SXGA-1012SD-HRC OLED driver board for the eMagin SXGA OLED is designed for monocular, binocular and stereoscopic applications where each display engine must move independently and/or receive a different video signal.

The HDMI Ribbon cable is available in custom lengths and eliminates the mechanical problems that are typical found when using off-the-shelf HDMI cables. This allows for a relatively simple mechanical board placement and mounting within the optical cavity. A 50 pin 3mm stacking height Hirose DF12 micro connector provides the input video and power signals.

The SXGA-1012SD-HRC is designed such that the OLEDs can be located up to 5 feet away from the main driver board. The interface board for the OLEDs is the same as the OLED and thus, allows the SXGA-1012SD to solve the most challenging packaging and space limited requirements.

The SXGA-1012SD -HRC is also available with a plus options which includes Video Scaling, Test Images, and much more. [Contact Us](#) for more info.

The SXGA-1012-HRC- driver is available with a micro controller to allow for custom applications features, such as the addition of dials, push buttons etc.

Our USB base PC application and configuration cable provides calibration adjustment for, color gain/offset, brightness, image orientation, firmware upgrades and other register values.

Power Consumption

Input Voltage	3.5 – 5.5 V DC
Power Consumption	350mW (Depends on Configuration)

Input Video Format

HDMI or DVI	1280 x 1024 @ 60-85 Hz
	1280 x 720 @ 60- 85 Hz
	1024 x 768 @ 60-85Hz

EDID

Default	1280 x 1024 @ 60Hz
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Software Configuration

USB - PC Application	Control Brightness
	Gamma Updates
	Firmware Upgrades
	Auxiliary Input/Outputs

Mechanicals

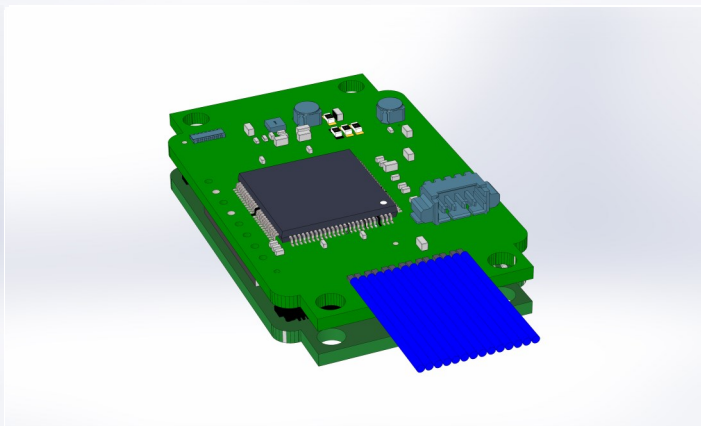
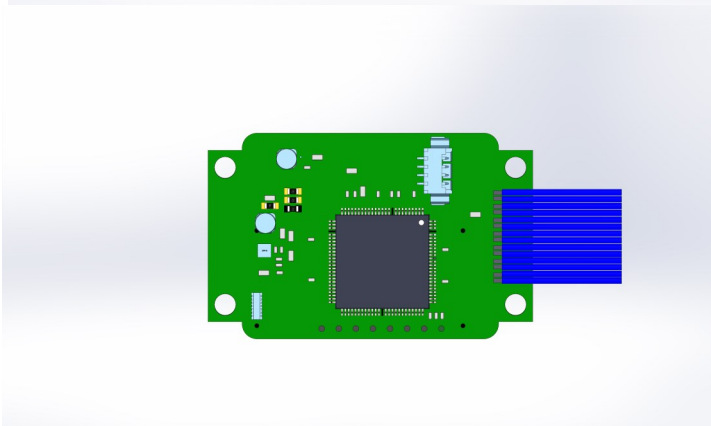
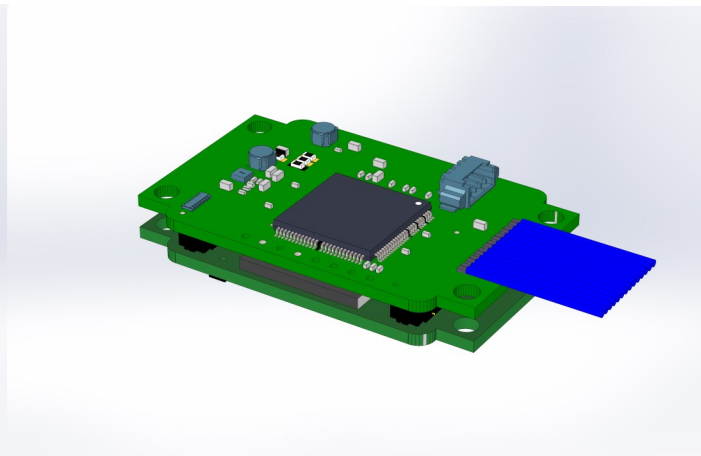
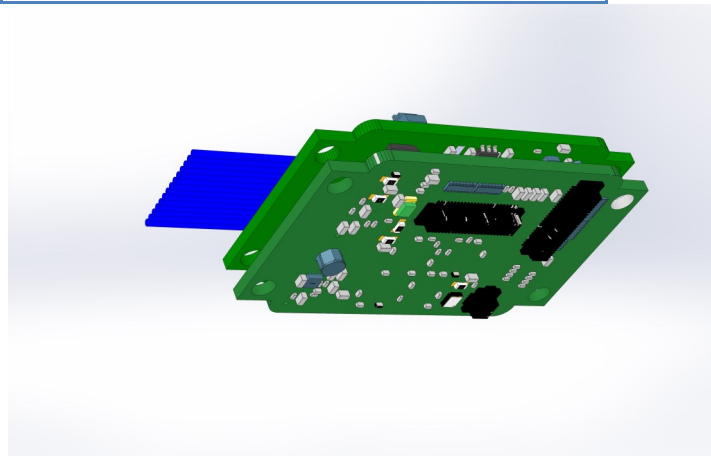
Dimension (L x W)	1.2 x 1.5 inches
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Auxiliary Features

3 Analog/ Digital Inputs/Outputs

Additional Software Features via On board Micro-controller

Power and Configuration Cable	
Pin #	Description
1	5 Volts
2	UART Tx (3.3V CMOS)
3	UART Rx (3.3V CMOS)
4	Ground
Connector	MOLEX-0532610471



Wireless Low Latency Video (WLLV)

Wireless Low Latency Video – Make your OLED based product wireless by using MRA Digital wireless video technology. Transmitting up to 1080p with 1-2 frame of latency at ranges over 100 meters with Wi-Fi and miles using microwave or Wi-Fi Max. Contact us for more info.

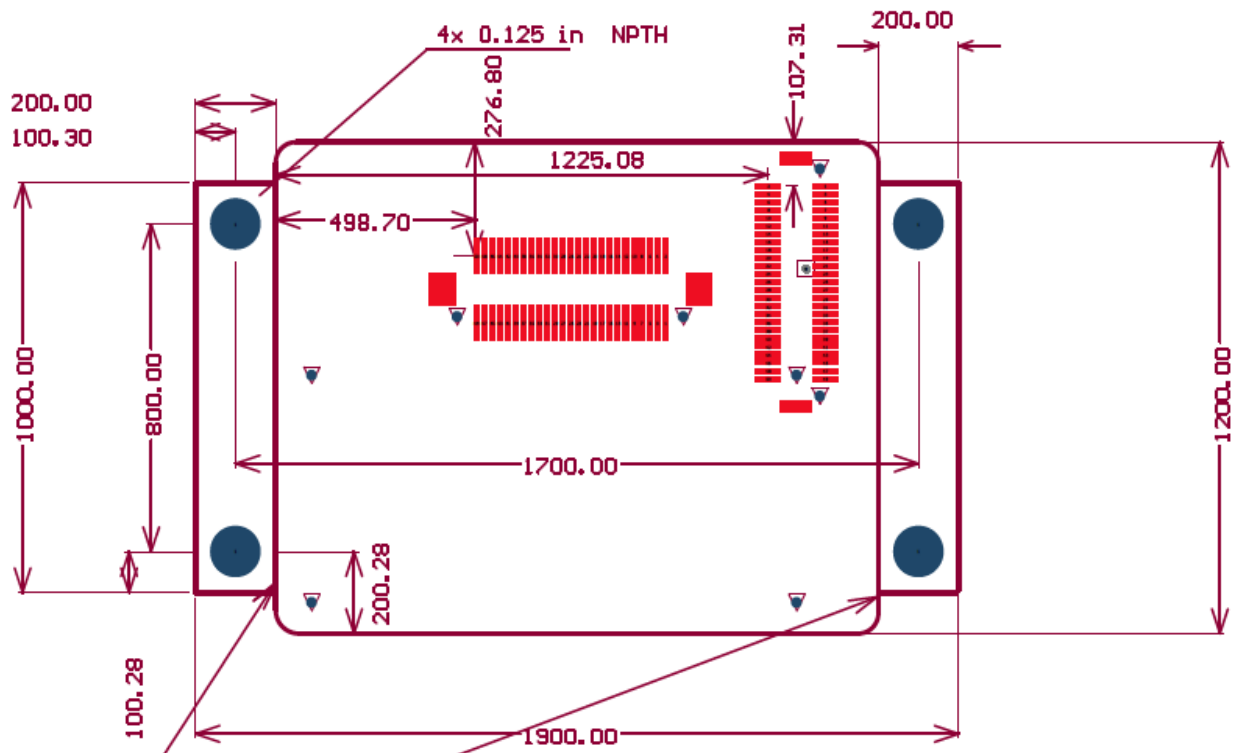
Ordering Information (partial listing, see our [website](#) for more products)

Part Number	Description
SXGA-1012SD-HRC-XXXX	Single Input OLED Driver with HDMI Ribbon Cable
XXXX	HDMI Cable Length in millimeters (304.8mm in standard)
C-USB-POWER-CONFIG-01	USB Power and Configuration Cable

www.mradigital.com - sales@mradigital.com 443-224-8955

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Mechanicals— Board 1 of 2

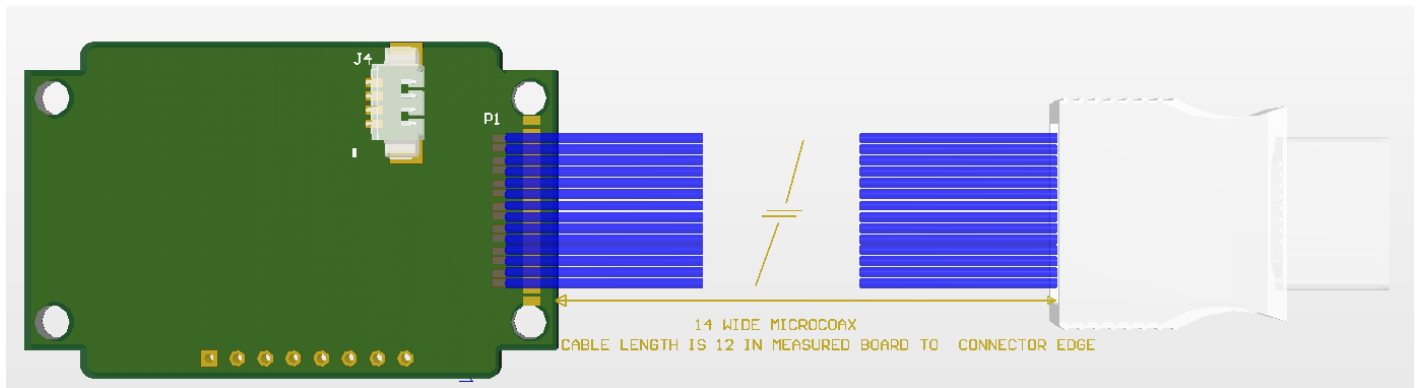
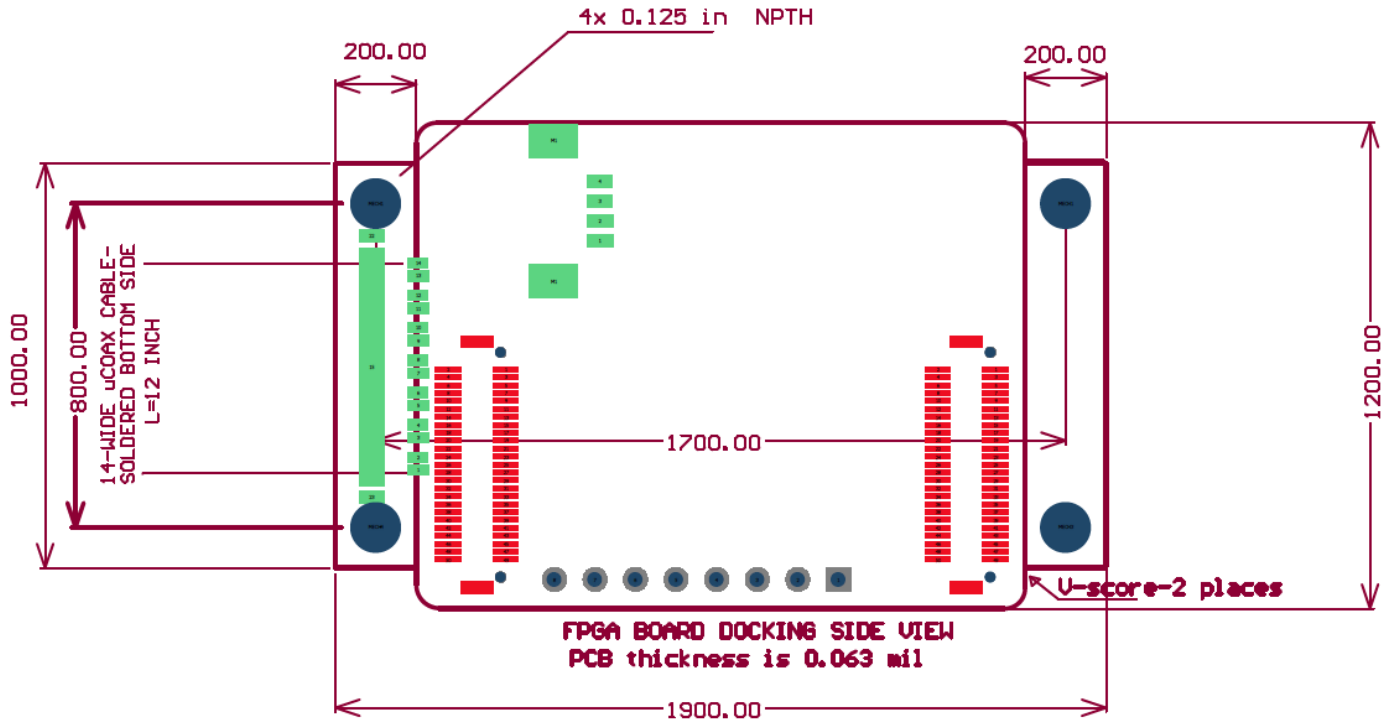


U-score-2 places
PCB thickness is 0.063 mil

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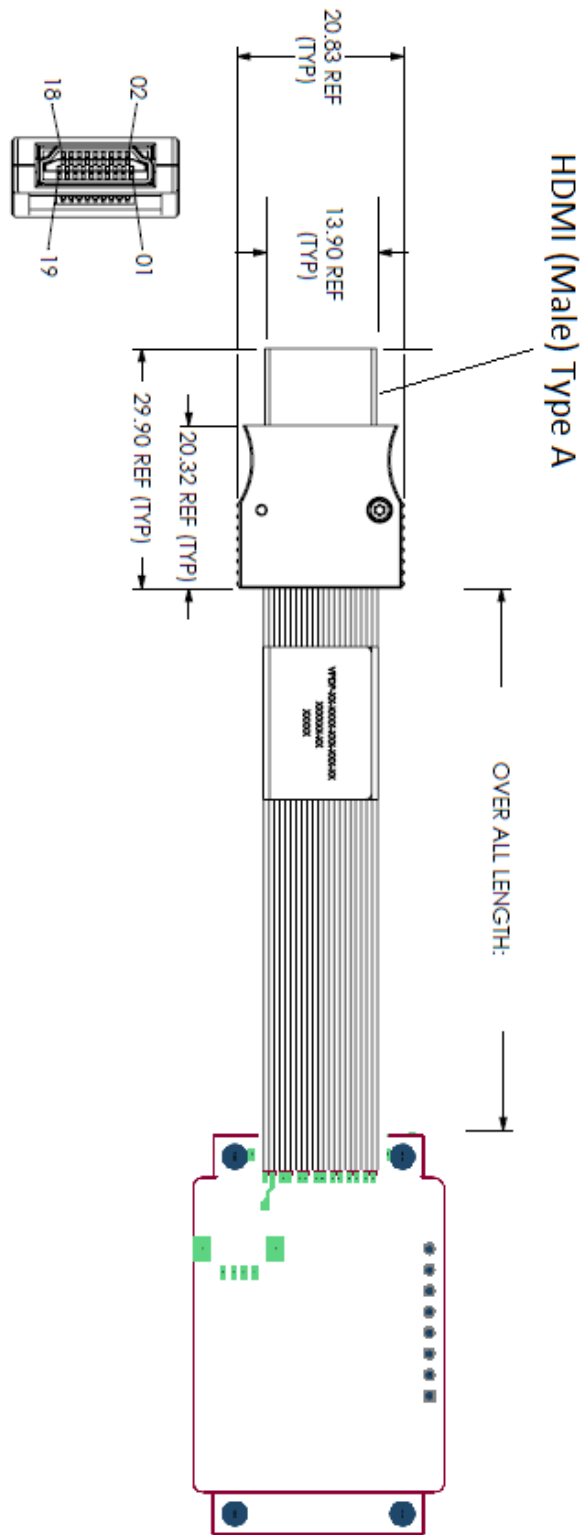
Mechanicals— Board 2 of 2



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Mechanicals— Board 2 of 2 (Micro-Coax HDMI Cable)



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