



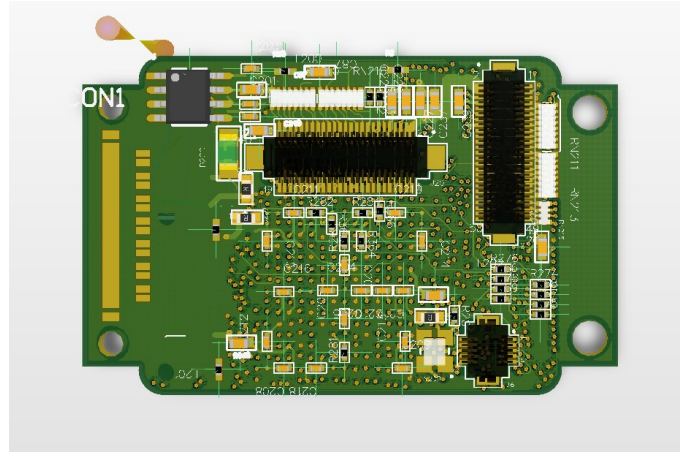
# SXGA-1012SD-S-HDMI

## Single SXGA OLED Driver Board

### Datasheet (Rev 1.0)

#### Features and Benefits

- Single PCB (1.2 x 1.5 inches)
- Built-in HDMI Decoder
- Built-in HDMI Cable with customizable length
- Mounting Holes
- OLED Brightness and Color Control
- Built in EDID
- Built-in DC/DC Power Conversion
- Low Input Voltage Range
- USB Calibration Software Via PC
- Low Power



#### SXGA -1012-SD-S-HDMI

The SXGA-1012SD-S-HDMI OLED driver board for the eMagin SXGA OLED is the worlds smallest driver board that is HDMI enabled on a single PCB with a size of 1.2 x 1.5 inches. Designed for monocular applications in which size, weight and power (SWaP) are important design constraints, the SXGA-1012SD-S-HDMI is positioned to meet or exceed most design requirements.

The SXGA-1012SD-S-HDMI is also available with a dual video output option in which a single video input can be displayed on two OLEDs. Our built-in FPGA enables us to develop custom features that will ensure that all of your application requirements are met.

The SXGA-1012SD-S-HDMI is also with a plus options which includes the following capabilities:

1. Image cropping and shifting (up to 250 pixels each side)
2. Content viewable screen saver
3. Video Scaling
4. Test Images
5. Custom Video Processing (Picture-in-Picture, Split Screen, etc)

The SXGA-1012SD-S-HDMI 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, 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

## 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)

Part Number	Description
SXGA-1012SD-S-HDMI	Single Input OLED Driver (HDMI/DVI inputs)
C-1012SD-S-USB-POWER-CONFIG-01	USB Power and Configuration Cable

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