

WUXGA-1915-SM/DM/DS Full 3D-HD WUXGA OLED Driver Board Datasheet rev 1.0

Features and Benefits

Multiple Video Inputs (full 3D-HD)

- Dual HDMI
- Dual DVI
- Display Port

OLED Brightness and Color Control Automatic Gamma Updates Built in EDID Built-in DC/DC Power Conversion Powered using Micro USB Cable

WUXGA-1915-SM/DM/DS OLED Driver

The WUXGA-1915-SM/DM/DS OLED driver board for the eMagin WUXGA (1920x1200) High Definition OLED is designed for monocular, binocular and stereoscopic applications where each display must move independently and/or receive a different video signal.

With dual on board Micro HDMI connectors, the WUXGA-1915DS supports full 3D HD video where each WUXGA OLED displays 1920 x 1200 @ 60Hz. Full 3D HD Video is also possible using a single Display Port cable in which the input video resolution will be 1092 x 1080 @ 120Hz. Using a single HDMI video input will also provide 3D video but at 30Hz. Custom video processing can be added based on your application requirements.

The DM version of the product allows you to use a single video input with two WUXGA OLEDs.

The WUXGA-1915-SM/DM/DS is designed such that the WUXGA OLEDs can be located up to 5 feet away from the main driver board. The interface board for the OLEDs is the same size as the OLED and thus, allows the WUXGA-1915-SM/DM/DS to solve the most challenging packaging and space limited requirements.

Video alignment is now easier because the video image can now be adjusted up to 150 pixel in all directions. Mounting tabs are available to aid with mounting and positioning. however if they are not required the mounting tabs can be removed.

The WUXGA-1915-SM/DM/DS is also with a plus options which includes the following capabilities:

- 1. Image cropping and shifting
- 2. Content viewable Screen saver
- 3. Video Scaling, Picture-in-Picture, On Screen Display
- 4. Split Screens (top/bottom, left/right), Alpha Blending



Power Consumption

Input Voltage 3.5 - 5.5 V DC

Power Consumption 350mW (Depends on Configuration)

Input Video Format

HDMI or DVI 1920 x 1200 @ 60Hz 1920 x 1080 @ 60Hz Display Port 1920 x 1080 @ 120Hz

EDID

Default 1920 x 1200 @ 60Hz

Software Configuration

USB - PC Application Control Brightness

Gamma Updates

Firmware Upgrades

Auxiliary Input/Outputs

Mechanicals

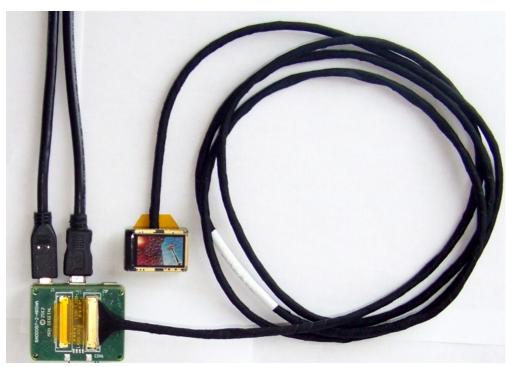
Main Board Dimension (L x W) 1.2 x 1.5 inches

WUXGA—Eye Module Same Size as WUXGA OLED

Auxiliary Features

Additional Software Features via On board Microcontroller





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 10ms of latency at ranges over 100 meters with Wi-Fi and miles using microwave or Wi--Max. Contact us for more info.

Ordering Information	
Part Number	Description
WUXGA-1912SM	Single Video Input Driving One OLED
WUXGA-1912DM	Single Video Input Driving Two OLEDs
WUXGA-1912DS	Dual Video Input Driving Two OLEDs Independently
Plus Option	Custom image distortion correction and other image processing can be done on Board in real-time.
MUSB-PWR-Config	Micro USB Power and Configuration Cable
Contact Information	
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