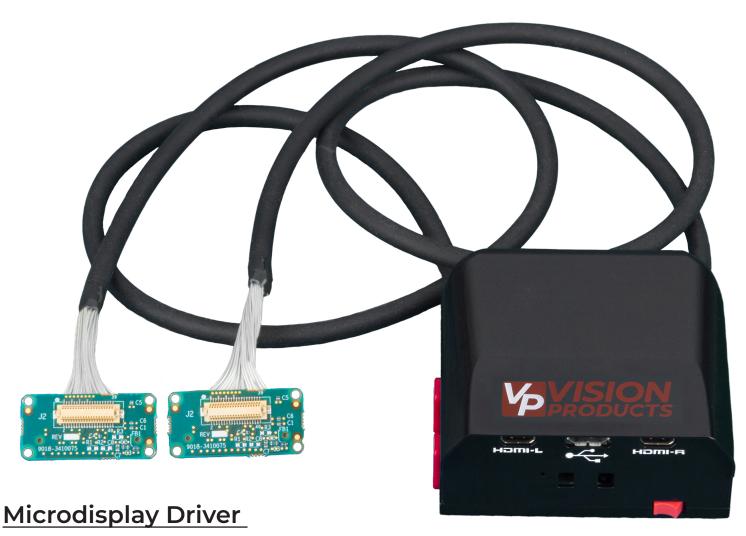
## **WUXGA**OLED MICRODISPLAY ELECTRONICS



An electronics package designed to accept two independent 1920 x 1200 60 Hz HDMI video inputs and drive two 1920 x 1200 eMagin WUXGA OLED microdisplays.



## WUXGA OLED MICRODISPLAY ELECTRONICS

The Vision Products' WUXGA OLED Microdisplay driver electronics are designed to accept two independent HDMI video inputs of 1920 x 1200 at 60 Hz. The electronics drive two 1920 x 1200 24-bit color eMagin WUXGA OLED microdisplays. The design consists of a three board stack: an HDMI board, an FPGA board, and a dual OLED board.

The WUXGA driver electronics package has ESD protection and input voltage clamping on all external customer ports, HDMI cable equalization for long cable inputs, external brightness control via user buttons, external microdisplay power down control, a simple and stable COM terminal interface, high frame rate HDMI receivers, HDCP capability, general purpose input/output (I/O) port for future expansion, and is available in single or dual video channel configurations.

The electronics package is available in two configurations: in an enclosure with heat sinks, as shown on the front of this datasheet, or as a printed circuit board (PCB) set, as shown below, which an OEM can integrate into their own enclosure. The cable length between the driver and the OLEDs can be up to 96 inches.

Vision Products is a pioneer in the development and deployment of innovative photonics solutions for military and commercial markets. Vision Products personnel have been designing head mounted displays for over 30 years and have built some of the world's most successful HMDs for use in extremely challenging environments.

| SPECIFICATIONS |                                    |
|----------------|------------------------------------|
| Parameter      | WUXGA Drive Electronics            |
| Video Input    | 1920 x 1200 @ 60 Hz                |
| Video Output   | eMagin WUXGA OLED<br>Microdisplays |
| Board Size     | 50 mm x 50 mm                      |
| Stack Height   | 17 mm                              |

