

## HLR-1920

### LCD Controller for Harsher Environments

Based on the ALR-1920 LCD controller the HLR-1920 adds extended temperature range and resilience in harsher environments.

#### Key Features:

- » Up to 1920 x 1200 input / Up to 1920 x 1200 LCD panels
- » HDMI 1.4, DisplayPort 1.1a, VGA (ARGB)
- » LVDS panel connection @60Hz
- » Line memory buffer provides low latency
- » RS-232, USB\*, I2C for commands & control

#### Panel Connectivity

|                           |  |
|---------------------------|--|
| <b>LVDS (8 channel):</b>  | up to 1920 x 1200 @60Hz  |
| <b>Panel resolutions:</b> | supports standard panel resolutions from 640 x 480 up to 1920 x 1200 and customization options for other resolutions |

#### Input

|                          |                        |
|--------------------------|------------------------|
| <b>HDMI 1.4:</b>         | 60Hz up to 1920 x 1200 |
| <b>DisplayPort 1.1a:</b> | 60Hz up to 1920 x 1200 |
| <b>VGA (ARGB):</b>       | 60Hz up to 1920 x 1200 |

#### Reliability

|                         |                            |
|-------------------------|----------------------------|
| <b>Calculated MTBF:</b> | In excess of 100,000 hours |
| <b>Warranty:</b>        | 3 years                    |

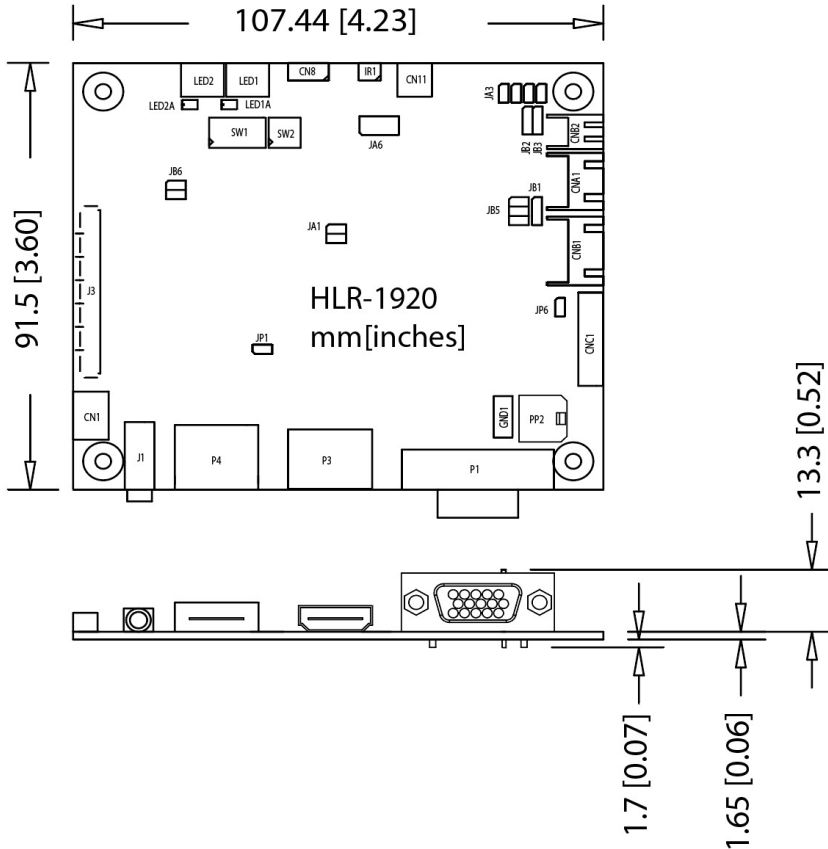
#### Features

|                           |  |
|---------------------------|--|
| <b>Colors:</b>            | Up to 8 bit per color, ie 16.7m colors   |
| <b>Function Display:</b>  | On Screen Display (OSD) menu   |
| <b>Function Controls:</b> | External buttons, Infra-Red controls, Serial Port control, USB*, optional Ethernet control with IP-60  |
| <b>Image Scaling:</b>     | Up / Down scaling to fit input to panel resolution   |
| <b>Image Control:</b>     | Brightness, Contrast, Color Temperature, Hue, Sharpness  |
| <b>Other Features:</b>    | System Information, Scaling to fill screen and fill to aspect ratio, Programmable hotkeys, Factory Reset, Picture in Picture, Picture by Picture, Ambient light sensor support, Enable frame buffer for FRC image enhancement, OSD menu transparency, DDC-CI support |
| <b>Power:</b>             | +12VDC / +24VDC ±5%, 4W (controller only)  |
| <b>Panel Power:</b>       | Supports 3.3V, 5V, 12V & 18V panels  |
| <b>Inverter Support:</b>  | DPMS Enable pin (3.3V or 5V), PWM  |
| <b>Plug &amp; Play:</b>   | DDC 1,2/b compatible   |
| <b>Status Indicator:</b>  | Dual color LED support   |
| <b>Audio:</b>             | Digital Audio SPDIF & Analog line-out  |

\*with optional converter for USB to RS-232

# HLR-1920 LCD Controller for Harsher Environments

## Mechanical Drawing



## Connector Definitions

|             |  |
|-------------|--|
| <b>CN1</b>  | Audio out, stereo, from HDMI, Displayport, amp |
| <b>CN8</b>  | RS-232 serial control                          |
| <b>CN11</b> | SPDIF Audio output                             |
| <b>CNA1</b> | Auxiliary power output                         |
| <b>CNB1</b> | Backlight inverter                             |
| <b>CNB2</b> | Backlight status input connector               |
| <b>CNC1</b> | OSD control                                    |
| <b>J1</b>   | Audio out, stereo, from HDMI, Displayport      |
| <b>J3</b>   | LVDS panel signal                              |
| <b>IR1</b>  | Infra-red sensor connector                     |
| <b>LED1</b> | Power status LED (optional)                    |
| <b>LED2</b> | Backlight status LED (optional)                |
| <b>P1</b>   | VGA (ARGB) input                               |
| <b>P3</b>   | HDMI input                                     |
| <b>P4</b>   | Displayport input                              |
| <b>PP2</b>  | Power input (alternative)                      |

## Ordering Options

|                               |                         |
|-------------------------------|-------------------------|
| <b>HLR-1920</b>               | <b>P/N: 44-----XX-3</b> |
| OSD digital button board      | Kit 67110-3             |
| OSD membrane kit - Vertical   | Kit 67134-3 CHECK       |
| OSD membrane kit - Horizontal | Kit 67135-3 CHECK       |
| Inverter interface            | P/N 416040010-3         |
| IR remote control             | P/N 559000106-3         |

## Drawings

- » 2D (jpg)
- » 3D (SLDPRT)

### Download at:

<http://www.digitalview.com/products/hlr-1920-lcd-controller>

## Available Resources

- » Instruction manual
  - » Revision control documentation
  - » Firmware upgrade manual\*\*
  - » Mechanical drawings
  - » Custom engineering: Splash screen, OSD menu, coatings, & more...
- \*\* Available on request

### Controller Solution Generator

<http://www.digitalview.com/csg>

### USA

18440 Technology Drive, Morgan Hill, CA 95037, USA  
t: +1 (408) 782-7773

### EUROPE

The Lake House, Knebworth Park, Herts, SG3 6PY, UK  
t: +44 (0) 20-7631-2150

### ASIA

2/F Bamboos Centre, 52 Hung To Rd, Kwun Tong, Hong Kong  
t: (852) 2861-3615



The QR code above links to the product page on the website