

## ALT-1920 LCD Controller Board for Full-HD

Compact, highly reliable and supporting three popular input formats up to Full-HD for LCD panels with a resolutions of up to Full-HD.

### Key Features:

- » Inputs: HDMI, DisplayPort, VGA (ARGB)
- » Up to 1920 x 1200 input / Up to 1920 x 1200 LCD panels
- » LVDS panel connection @60Hz
- » Low latency, line memory buffer
- » RS-232, IR for commands & control
- » Size: 107.44mm(4.23") x 91.57mm(3.61")
- » Mounting: 5 points, grounded
- » Part number: 41764001x-3

### Panel Connectivity

|                             |  |
|-----------------------------|--|
| <b>LVDS (dual 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.<br>Customization options for other resolutions |

### Input

|                          |                        |
|--------------------------|------------------------|
| <b>HDMI 1.3:</b>         | 60Hz up to 1920 x 1200 |
| <b>DisplayPort 1.2a:</b> | 60Hz up to 1920 x 1200 |
| <b>VGA (ARGB):</b>       | 60Hz up to 1920 x 1200 |

### Reliability

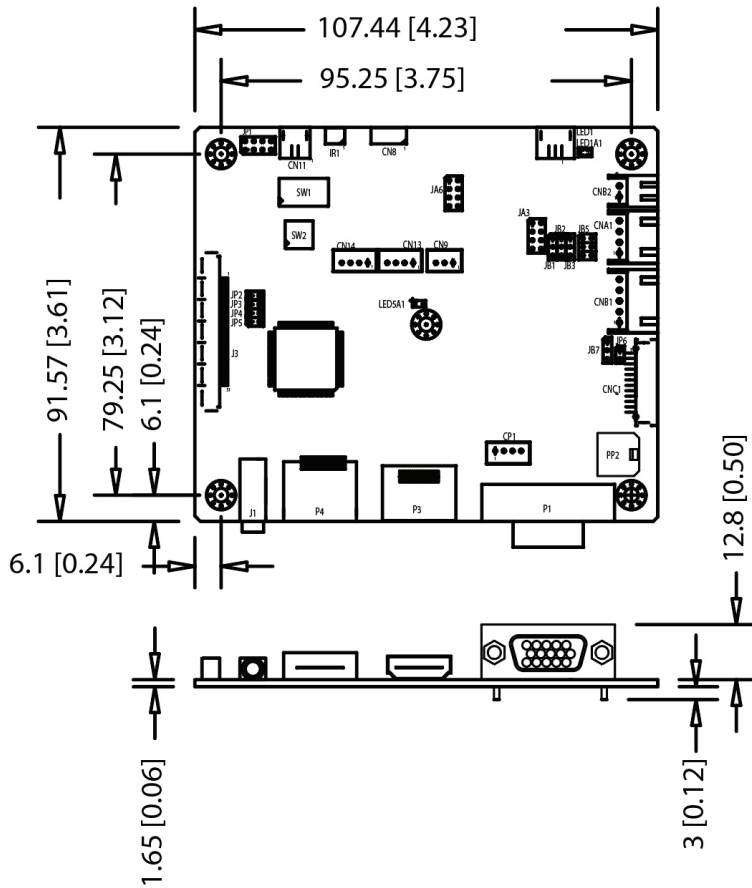
|                         |                            |
|-------------------------|----------------------------|
| <b>Calculated MTBF:</b> | In excess of 200,000 hours |
| <b>Warranty:</b>        | 3 years                    |

### 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 control, Serial Port control, DDC/CI, optional Ethernet control with IP-60   |
| <b>Image Scaling:</b>     | Up / Down scaling to fit input to panel resolution   |
| <b>Image Control:</b>     | Black level, Contrast, Color Temperature, Sharpness, Clock, Phase, Gamma   |
| <b>Other Features:</b>    | System Information, Scaling to fill screen or scale to 4:3 format, Programmable hotkeys, Factory Reset, Ambient light sensor support, OSD menu transparency, DDC-CI support, OSD menu orientation, OSD position, Language, Auto picture setup, Auto RGB calibration, Load factory defaults, Auto source seek, Volume |
| <b>Power:</b>             | +12VDC / +24VDC ±5%, 4W (controller only)<br>Ceramic capacitors.<br>Consumption: ~2.5W operating, 1.3~1.5W standby   |
| <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 for controller status   |
| <b>Audio:</b>             | Digital Audio SPDIF<br>Analog line-out, with volume control, no amplification  |
| <b>Custom options:</b>    | Panel timing, Splash screen, OSD menu items, Hardware changes, Conformal coatings  |

# ALT-1920 LCD Controller Board

## Mechanical Drawing



Mounting: 5 grounded mounting holes

## Connector Definitions

|             |   |
|-------------|---|
| <b>CN8</b>  | RS-232 serial control                           |
| <b>CN9</b>  | Ambient light sensor connector (reserved)       |
| <b>CN11</b> | SPDIF Audio output                              |
| <b>CN13</b> | Audio line-in (stereo)                          |
| <b>CN14</b> | Audio line-out (stereo)                         |
| <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, CN13 |
| <b>J3</b>   | LVDS panel signal                               |
| <b>IR1</b>  | Infra-red sensor connector                      |
| <b>LED1</b> | Dual color LED for controller status            |
| <b>P1</b>   | VGA (ARGB) input                                |
| <b>P3</b>   | HDMI input                                      |
| <b>P4</b>   | Displayport input                               |
| <b>PP2</b>  | Power input                                     |

## Ordering Options

|                               |                         |
|-------------------------------|-------------------------|
| <b>ALT-1920</b>               | <b>P/N: 41764001x-3</b> |
| OSD digital button board      | Kit 67110-3             |
| OSD membrane kit - Vertical   | Kit 67135-3             |
| OSD membrane kit - Horizontal | Kit 67134-3             |
| OSD 5 button switch mount     | Kit 67204-3             |
| IR remote control             | P/N 559000106-3         |

## Drawings

- » 2D (jpg)
- » 3D (SLDPRT)

### Download at:

<https://www.digitalview.com/products/alt-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

705-708 Texwood Plaza, 8 How Ming St, Kwun Tong, Hong Kong  
t: (852) 2861-3615



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