

HLT-1920 LCD Controller Board for Full-HD

Compact LCD controller board suitable for harsher environments. The HLT-1920 supports three popular video 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
- » Conformal coating
- » Operating temperature -40°C to +80°C*
- » Part number: 4176401xx-3

Panel Connectivity

LVDS (dual channel):	up to 1920 x 1200 @60Hz
Panel resolutions:	supports standard panel resolutions from 640 x 480 up to 1920 x 1200. Customization options for other resolutions

Input

HDMI 1.3:	60Hz up to 1920 x 1200
DisplayPort 1.2a:	60Hz up to 1920 x 1200
VGA (ARGB):	60Hz up to 1920 x 1200

Reliability

Calculated MTBF:	In excess of 200,000 hours
Warranty:	3 years

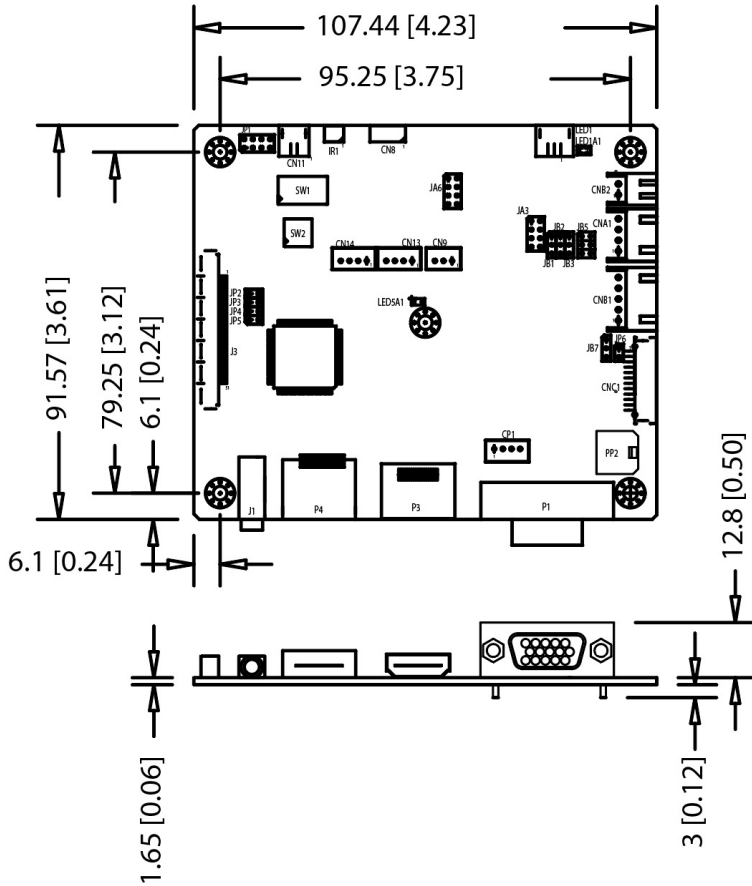
Features

Colors:	Up to 8 bit per color, ie 16.7m colors
Function Display:	On Screen Display (OSD) menu
Function Controls:	External buttons, Infra-Red control, Serial Port control, DDC/CI, optional Ethernet control with IP-60
Image Scaling:	Up / Down scaling to fit input to panel resolution
Image Control:	Black level, Contrast, Color Temperature, Sharpness, Clock, Phase, Gamma
Other Features:	System Information, Scaling to fill screen or scale to 4:3 format, Ambient light sensor support, OSD menu transparency, DDC-CI support, OSD menu orientation, OSD position, OSD timeout, Language, Auto picture setup, Auto RGB calibration, Load factory defaults, Auto source seek, Volume
Power:	+12VDC / +24VDC ±5%, 4W (controller only) Ceramic capacitors. Consumption: ~2.5W operating, 1.3~1.5W standby
Panel Power:	Supports 3.3V, 5V, 12V & 18V panels
Conformal Coating:	HumiSeal IB73, acrylic, spray application
Operating temp:	-40°C to +80°C*
Inverter Support:	DPMS Enable pin (3.3V or 5V), PWM
Plug & Play:	DDC 1,2/b compatible
Status Indicator:	Dual color LED support for controller status
Audio:	Digital Audio SPDIF Analog line-out, with volume control, no amplification
Custom options:	Panel timing, Splash screen, OSD menu items, Hardware changes, Conformal coatings

Note: * The Operating temperature is given for reference only, the controller should be tested and verified in the finished display product.

HLT-1920 LCD Controller for Harsher Environments

Mechanical Drawing



Connector Definitions

CN8	RS-232 serial control
CN9	Ambient light sensor connector (reserved)
CN11	SPDIF Audio output
CN13	Audio line-in (stereo)
CN14	Audio line-out (stereo)
CNA1	Auxiliary power output
CNB1	Backlight inverter
CNB2	Backlight status input connector
CNC1	OSD control
J1	Audio out, stereo, from HDMI, Displayport, CN13
J3	LVDS panel signal
IR1	Infra-red sensor connector
LED1	Dual color LED for controller status
P1	VGA (ARGB) input
P3	HDMI input
P4	Displayport input
PP2	Power input

Ordering Options

HLT-1920	P/N: 4176401xx-3
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:

www.digitalview.com/products/hlt-1920-lcd-controller.html

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>

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