

## HX-1920v3 PRELIMINARY High-Resolution Controller

### Key Features :

- > DVI Link, HDMI (1.4), VGA (DB15), Component,
- > LVDS
- > 10-Bit, 1920 x 1200 WUXGA @60Hz
- > Image Flip (Horizontal & Vertical)
- > RS-232, Ethernet Control, I2C

The HX-1920v3 is a fully buffered multi-sync interface controller for providing analog and digital connection for a wide range of TFT LCD panels up to WUXGA resolution. It is a true 10-bit board that gives 10-bit color deep on a 10-bit panel.

Advanced features include full screen image expansion, on screen PIP and image flip function. The HX-1920v3 is part of Digital View's "Professional Class" video controller family featuring advanced capabilities, support and custom development paths for OEM clients.

### Panel Connectivity

1920 x 1200	1440 x 900	1024 x 768
1920 x 1080	1366 x 768	1024 x 600
1680 x 1050	1280 x 1024	800 x 600
1600 x 1200	1280 x 800	800 x 480
1600 x 900	1280 x 768	640 x 480

### Input

<b>Analog RGB:</b>	60Hz at WUXGA, UXGA 75/60Hz at SXGA, WXGA, XGA, SVGA, VGA With auto detect of Digital Separate Sync, Sync-On-Green & composite Sync. Auto detects VGA-WUXGA, interlaced & non-interlaced
<b>DVI Dual Link:</b>	60Hz at WUXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA
<b>HDMI 1.4:</b>	60Hz at WUXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA
<b>Video:</b>	SD Component (YCbCr) HD Component (YPbPr)

### Reliability

Calculated Mean Time Between Failures - In excess of 100,000 hours  
Warranty: 3 years

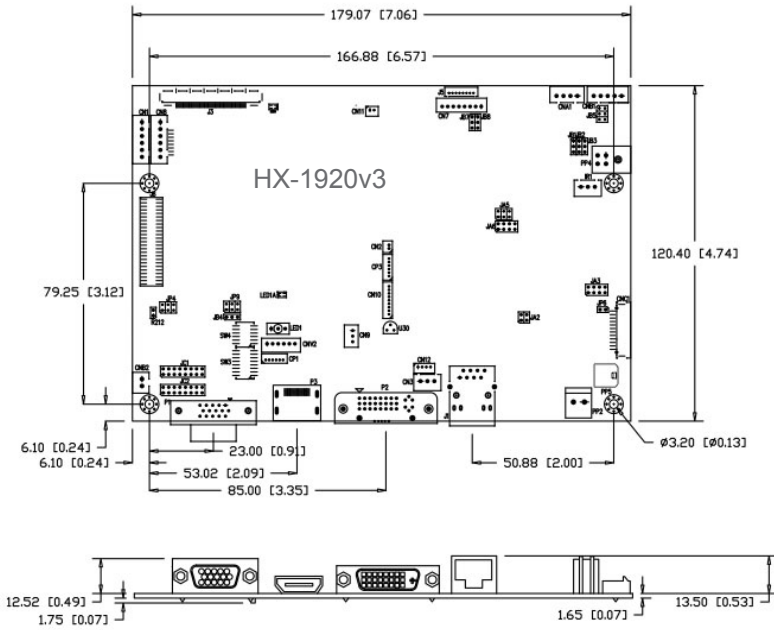
### Features

<b>Colors:</b>	Up to 10 bit per color, ie 1.06 billion colors
<b>Functions :</b>	On Screen Display (OSD) menu
<b>Function Controls:</b>	External buttons, Infra-Red controls, Serial Port control, Ethernet Control
<b>Image Scaling :</b>	Up / Down scaling to fit input to panel format
<b>Image Control :</b>	Auto configuration, Brightness, Contrast, Clock, Phase, Color Temperature, Image position, Hue, Saturation, Sharpness
<b>Other Features :</b>	System Information, OSD position, Scaling to fill screen and Letterbox Expand, OSD timeout, Factory Reset, Picture in Picture variable position Picture by Picture, Programmable hot keys, Ambient light sensor, Display real-time clock, OSD menu transparency, DDC-CI support, CEC support on HDMI.
<b>Image Flip:</b>	Vertical and Horizontal
<b>Ext Communication:</b>	I2C, RS-232, Ethernet
<b>Power:</b>	+12VDC ±5%, 10W (controller only)
<b>Panel Power:</b>	Supports 3.3V, 5V, 12V & 18V panels
<b>Temperature:</b>	-40°C to +80°C
<b>Panel Signal:</b>	Dual Channel
<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
<b>Options:</b>	Infra-Red Remote Handset

# HX-1920v3

## HIGH-RESOLUTION CONTROLLER

### Mechanical Drawing



### Connector Definitions

- CN1** Second RS-232 serial control
- CN4** Panel Control Signal Connector
- CN7** Reserved for Audio Line-Out
- CN8** RS-232 Serial Control
- CN9** Ambient Light Sensor Connector
- CN11** SPDIF Audio Output
- CNA1** Auxiliary Power Output
- CNB1** Backlight Status Input Connector
- CNB2** Backlight Status Input Connector
- CNC1** OSD Control
- CNV2** HD/SD Component Video in
- CP1** Reserved for internal programming
- CP3** Reserved for internal programming
- IR1** Infra-Red Sensor Connector
- J1** Ethernet for Network Connection
- J3** Panel Signal for LVDS Panel
- J5** Panel Power Output
- LED1** Dual Color LED Connector
- P1** VGA Analog Input
- P2** DVI-D Input
- P3** HDMI Input
- PP2** Power Input ( alternative )
- PP4** External Panel Power Input
- PP5** Power Input

### Ordering Options

<b>HX-1920v3</b>	<b>P/N 41744022XXX TBA</b>
Inverter Interface board	P/N 416040010-3
IR Remote Control	P/N 559000106-3
OSD Button Board	Kit 67110-3
OSD Vertical Membrane Kit	Kit 67134-3
OSD Horizontal Membrane Kit	Kit 67135-3
Power Input Cable	P/N 426013800-3
Power Supply	Kit 80100-3
Composite Video Input	Add-on Board - Coming Soon

### Drawings

- > Includes 2D (jpg)
  - > 3D (SLDPRT)
- Please download at:**  
[www.digitalview.com/products/HX-1920v3](http://www.digitalview.com/products/HX-1920v3)

### Available Resources

- > Instruction Manual
  - > Revision Control Documentation\*\*
  - > Firmware Upgrade Manual\*\*
  - > Mechanical Drawing
- \*\* Available on Request

**Controller Solution Generator**  
<http://www.digitalview.com/csg>

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