

## SGX-1920

### High Definition LCD Controller Board

**Key Features :**

- > 10-Bit, 1920 x 1200
- > Dual Digital inputs
- > RS-232 Ethernet Command Control
- > Picture in Picture

The SGX-1920 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. The board supports two digital video input and featuring full screen image expansion, on screen PIP, image marker and supports an option 3G HD-SDI converter board (HD-3000/HD-3000S) through digital input port for professional and broadcast video applications.

#### Panel Connectivity

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

#### Input

<b>Analog RGB:</b>	60Hz at WUXGA, UXGA 75Hz 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-D / HDMI:</b>	60Hz at WUXGA, UXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA 480p, 576p, 720p, 1080i, 1080p
<b>Video:</b>	NTSC /PAL/SECAM (Interlaced) Composite Video, S-video HD/SD Component (YPbPr / CbCr)

#### Reliability

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

#### Custom Engineering Services

Custom input timing, panel timing, splash screen, OSD Menu, conformal coatings, layouts etc

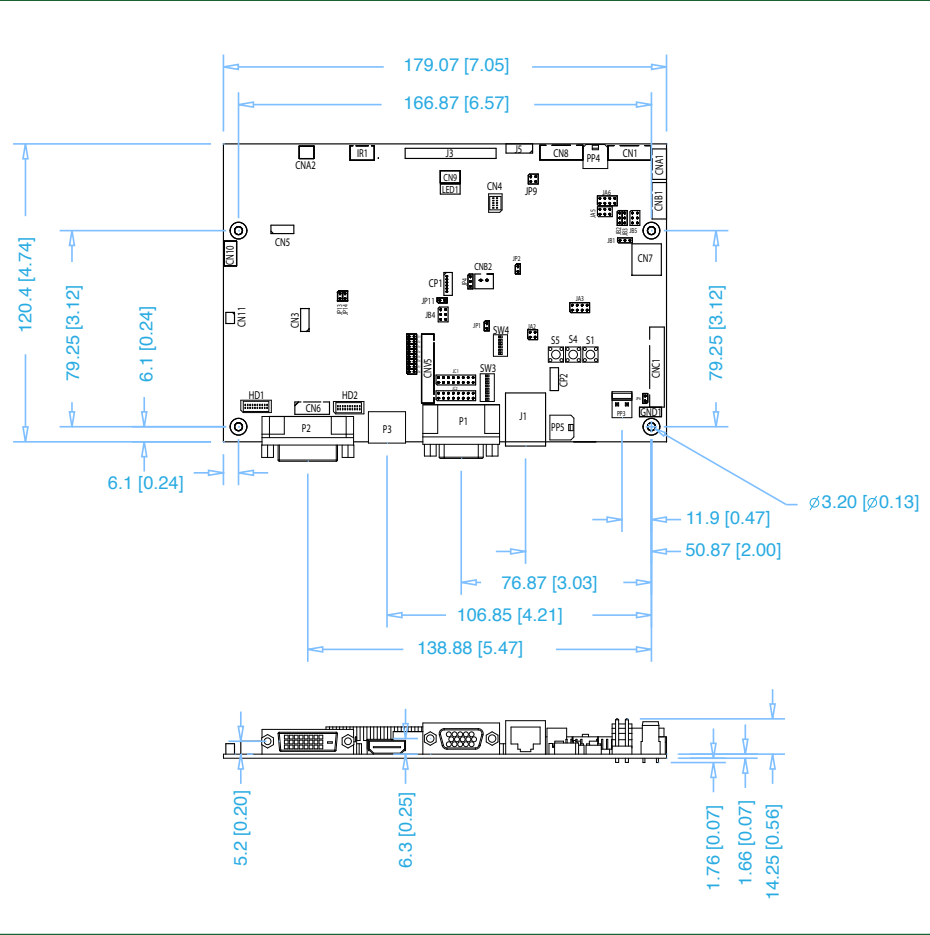
#### Features

<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, Saturation, Hue, Gamma.
<b>Other Features :</b>	System Information, OSD position, Scaling to fill screen and fill to aspect ratio, OSD timeout, Factory reset, OSD menu transparency, Picture in Picture - variable position with 18 sizes selection and Picture by Picture, Programmable hot keys, Ambient light sensor, Display real time clock.
<b>Power :</b>	+12VDC / +24VDC ±5%,10W
<b>Panel Power :</b>	Supports 3.3V, 5V, 12V & 18V panels.
<b>Panel Signal :</b>	Dual channel LVDS support.
<b>Inverter Support :</b>	DPMS Enable pin (3.3V or 5V)
<b>Plug &amp; Play :</b>	DDC 1,2/b compatible
<b>Status Indicator :</b>	Dual Color LED support.

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### Mechanical Drawing



### Connector Definitions

<b>CN1</b>	Second RS-232 serial control
<b>CN3</b>	Reserved for factory use
<b>CN4</b>	Panel control signal connector
<b>CN5</b>	Reserved for factory use
<b>CN6</b>	No function
<b>CN7</b>	Audio board connector
<b>CN8</b>	RS-232 serial control
<b>CN9</b>	Ambient light sensor connector
<b>CN10</b>	HDMI audio (Stereo) output
<b>CN11</b>	SPDIF Audio output
<b>CP1</b>	Reserved for factory use
<b>CP2</b>	Reserved for factory use
<b>CNA1</b>	Auxiliary power output
<b>CNA2</b>	Auxiliary +5VDC output
<b>CNB1</b>	Backlight inverter
<b>CNB2</b>	Backlight status input connector
<b>CNC1</b>	OSD controls
<b>CNV5</b>	Auxiliary video input
<b>HD1</b>	Auxiliary digital input connector – HD1
<b>HD2</b>	Auxiliary digital input connector – HD2
<b>J1</b>	Ethernet for network connection
<b>J3</b>	Panel signal for LVDS panel
<b>J5</b>	External panel power output
<b>IR1</b>	Infra-Red sensor connector
<b>LED1</b>	Dual color LED connector
<b>P1</b>	VGA analog input
<b>P2</b>	DVI-D input
<b>P3</b>	HDMI input
<b>PP2/PP3</b>	Power input (alternative)
<b>PP4</b>	External panel power input
<b>PP5</b>	Power input

### Ordering Options

<b>SGX-1920 Controller Board</b>	<b>P/N 4172500xx-3</b>
OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 559000106-3

#### HD-SDI Adaptors :

Single Channel (HD-1000)	P/N 4160134xx-3
Dual Channel (HD-2000)	P/N 4160133xx-3

#### 3G HD-SDI Adaptors :

Single Channel (HD-3000S)	P/N 4160164xx-3
Dual Channel (HD-3000)	P/N 4160160xx-3

### 3D Drawings (SLDPRT)

Save time and effort for your system volumetric analysis design. Includes jpg file previews.

Please download at [www.digitalview.com/products/sgx-1920-lcd-controller](http://www.digitalview.com/products/sgx-1920-lcd-controller)

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