



## SP-1600 RoHS

### The Digital View SP-1600 interface controller for multi-input, general purpose OEM monitor applications.

The SP-1600 is a fully buffered, multi-sync interface controller providing direct analog and digital connection to a wide range of TFT LCD panels up to UXGA resolution. Key features include a flexible port architecture that provides inputs for DVI, dual VGA channels, Composite, S-Video and Component video. Supporting a wide range of 4:3 and 16:9 format panels, the SP-1600 provides exceptional video performance via a new generation video controller coupled with guaranteed high-reliability.

The SP-1600 is part of Digital View's "Professional Class" video controller family featuring advanced capabilities, support and custom development paths for OEM clients.

#### PANEL CONNECTIVITY

TFT:	1600x1200	1280 x 800	800 x 600
	1366 x 768	1280 x 768	800 x 480
	1280 x 1024	1024 x 768	640 x 480

#### INPUT

Analog RGB:	60Hz @ UXGA 75Hz @ SXGA, WXGA, SVGA, VGA 1152 x 900 @ 66Hz (SUN) 1152 x 900 @ 76Hz (SUN) 1280 x 1024 @ 76Hz (SUN)
	With auto detect of Digital Separate Sync, Sync-On-Green & Composite Sync. Auto detects VGA ~ UXGA interlaced & non-interlaced.
DVI-I	60Hz @ UXGA 75Hz @ SXGA, WXGA, XGA, SVGA, VGA
Video:	NTSC / PAL / SECAM (Interlaced) Composite Video S-Video Component (YCbCr)

#### RELIABILITY

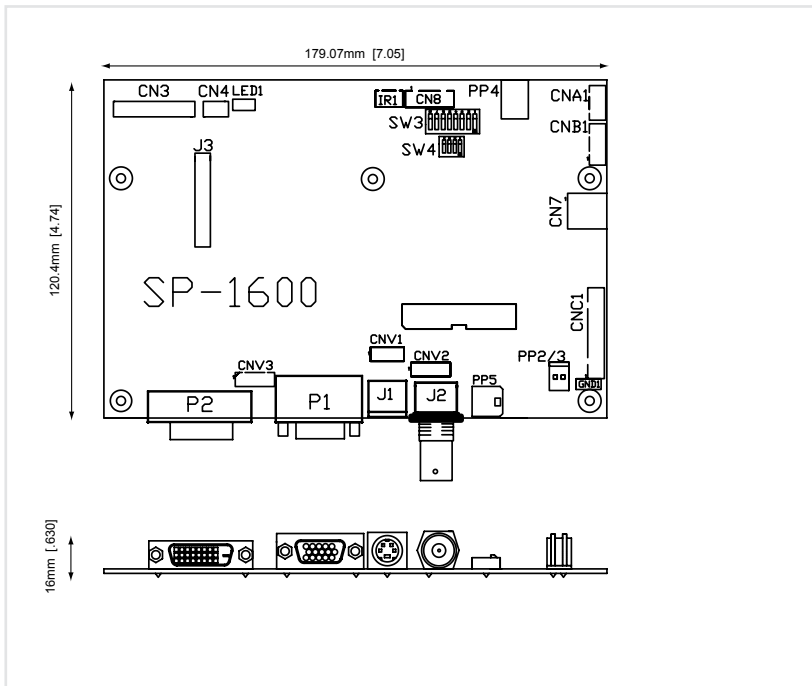
Calculated Mean Time Between Failures  
In excess of 100,000 hours. Warranty - 3 years.

#### CUSTOM ENGINEERING SERVICES

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

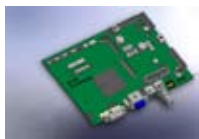
#### FEATURES

Colors :	Up to 8-bit per color, 16.7 million colors.
Functions :	On Screen Display (OSD) menu.
Function Controls :	External buttons, Infra-Red controls, Serial Port Control.
Image Scaling :	Up / down scaling to fit input to panel resolution.
Image Control :	Brightness, Contrast, Saturation, Hue, Frequency, Phase, Color temperature, Image position, Hue, Gamma.
Other Features :	Auto Picture Setup, Auto Color Gain, Auto Power, OSD Timeout Position and Transparency, Hot Keys, Auto Source Seek.
Dimensions:	179mm x 120.4mm (7" x 4.74")
Form Factor:	DV Standard & Mounting Holes
Power Requirements :	12V / 24VDC ±5%, 10w (controller only)
Panel Power :	Supports 3.3V, 5V, 12V & 18V panels.
Panel Signal :	TTL (Single Pixel) & LVDS
Inverter Support :	DPMS Enable pin (3.3v or 5v).
Plug & Play:	DDC 1,2/b compatible
Status Indicator :	Dual color LED support.



## CONNECTOR DEFINITIONS

CN3	TTL Panel Signal
CN4	TTL Panel Signal
CN7	Audio Board Connector
CN8	Serial control (for firmware programming or serial control use only)
CNA1	Auxiliary Power Output
CNB1	Backlight Inverter
CNC1	OSD Function Controls
CNV1	Alternate Video-In
CNV2	Component Video-In
CNV3	ARGB 2 Input
J1	S-Video In
J2	Composite Video-In
J3	Panel Signal for LVDS Panel
IR1	Infra-Red Sensor Connector
LED1	Dual color LED connector
P1	VGA analog input
P2	DVI-I input
PP2/3	Power Input (Alternative)
PP4	External Panel Power Input
PP5	Main Power Input##



## Ready-made 3D drawing files

**File Type: SLDPRT** Save time and effort for your system volumetric analysis design. Includes jpg file previews. <http://www.digitalview.com/controllers/products.php>

## ACCESSORIES

Kit 60110-3:	OSD Digital Button Board Kit
Kit 60121-3:	OSD Vertical Membrane Kit
Kit 60125-3:	OSD Horizontal Membrane Kit
416040010-3:	Inverter Interface board
416940020-3:	Audio Amplifier
559000104-3:	IR remote control
426013800-3:	Power-Input Cable##
416090200-3:	RS-232 Cable

\*\* Available upon request.

## AVAILABLE DOCUMENTATION

Instruction Manual  
 Revision Control Documentation\*\*  
 Firmware Upgrade Manual\*\*  
 MTBF Analysis\*\*  
 Mechanical Drawing

## MECHANICAL DRAWING

Dimensions: 179mm x 120.4mm (7" x 4.74")  
 Form Factor: DV standard & mounting holes

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