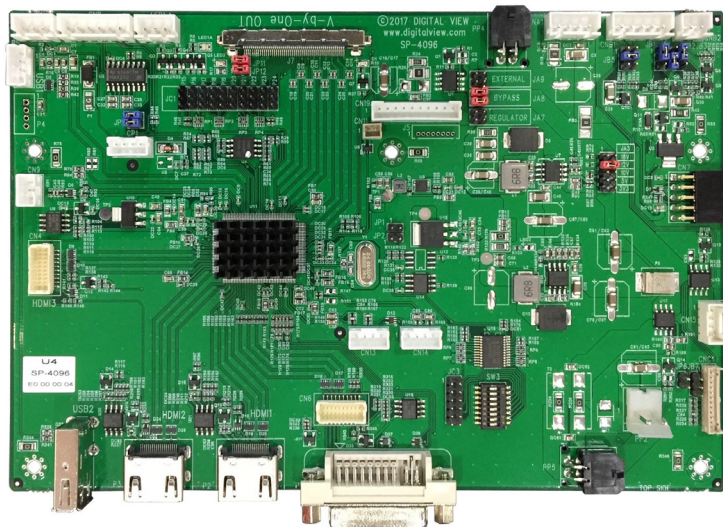




HSP-4096

4K Ultra-HD LCD Controller with Failover Messaging or Media

The HSP-4096 for commercial monitors & displays supporting LCD panels up to 4096 x 2160 resolution. Extended temperature range and conformal coating. Ideal for digital signage and industrial video displays.

Key Features:

- » Up to 4096 x 2160 video input / Up to 4096 x 2160 LCD panels
- » HDMI 2.0, HDMI 1.4, DVI-I
- » V-by-One panel connection @60Hz
- » Full frame memory buffer for enhanced image control
- » Conformal coating, acrylic resin type
- » RS-232, I2C for commands & control
- » Part Number: 41761001x-3

Panel Connectivity

V-by-One (8 channel):	up to 4096 x 2160 @60Hz
Panel resolutions:	4096 x 2160, 3840 x 2160, 2560 x 1440/1600 1920 x 1200, 1920 x 1080

Input

HDMI 2.0: (x2 connector)	60Hz up to 4096 x 2160 75Hz up to 1600 x 1200
HDMI 1.4: (x1 header)	30Hz up to 4096 x 2160 60Hz up to 2560 x 1600 75Hz up to 1600 x 1200
DVI-I Single Link: (x1 header)	60Hz up to 1920 x 1200 75Hz up to 1600 x 1200

Reliability

Calculated MTBF:	In excess of 100,000 hours
Warranty:	3 years

Features

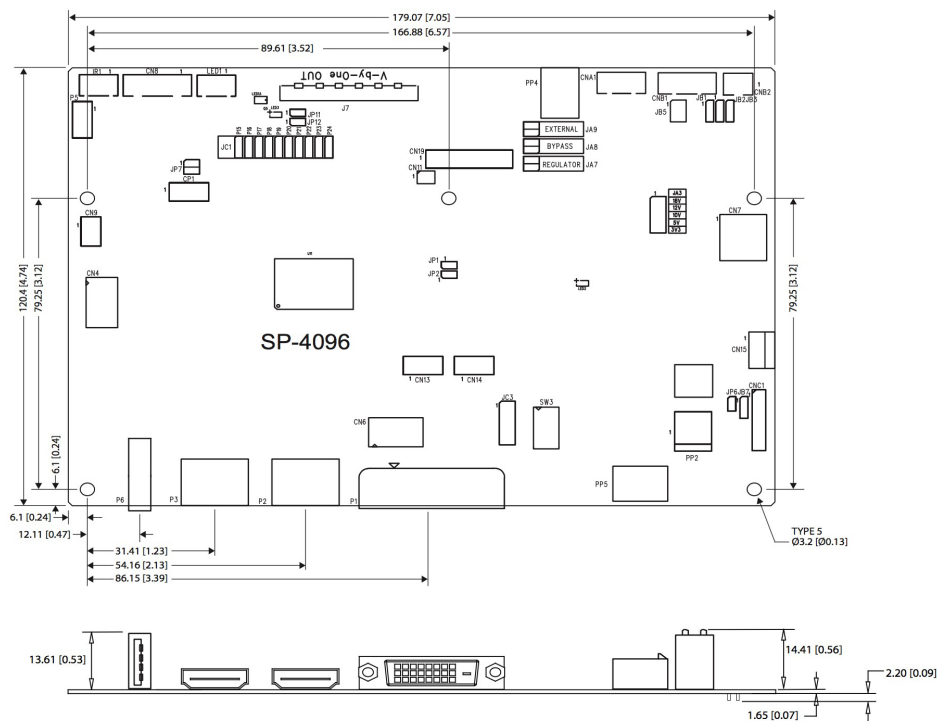
Colors:	Up to 10 bit per color, ie 1.06 billion colors
Function Display:	On Screen Display (OSD) menu
Function Controls:	External buttons, Infra-Red controls, Serial Port control
Image Scaling:	Up / Down scaling to fit input to panel resolution
Image Control:	Brightness, Contrast, Color Temperature, Gamma, Image position, Saturation, Hue, Sharpness
Input Failover:	Auto-play a message or media file if input source fails, with auto-restore.
Other Features:	System information, Scaling to fill screen and fill to aspect ratio, Programmable hotkeys, Factory reset, Ambient light sensor support, DDC-CI support
Communication:	RS-232, I2C
Conformal Coating:	HumiSeal IB73, acrylic, spray application
Input Power:	+12VDC / +24VDC $\pm 5\%$, 10W (controller only)
Panel Power:	Supports 3.3V, 5V, 10V, 12V & 18V panels
Operating temp:	-20°C to 80°C
Backlight Support:	DPMS Enable pin (3.3V or 5V), PWM
Plug & Play:	DDC 1,2/b compatible
Status Indicator:	Dual color LED support
Audio:	Digital Audio SPDIF, stereo line-out, optional DV audio board add-on

Custom Splash-screen: The HSP-4096 supports custom splash- screen when powering on. This requires custom firmware.

Firmware upgrade: The HSP-4096 firmware version can be upgraded via the USB port. Contact Digital View or distribution partner for details.

HSP-4096 4K, Ultra-HD LCD Controller

Mechanical Drawing



Connector Definitions

CN4	On board internal connector for HDMI (HDMI3)
CN6	On board internal connector for DVI
CN7	Audio board connector
CN8	RS-232 serial control
CN9	Ambient light sensor connector
CN11	SPDIF Audio output
CN13	Audio Line in
CN14	Audio line out
CN15	Power connector for IE-2000
CN19	Additional panel power output
CNA1	Auxiliary power output
CNB1	Backlight inverter
CNB2	Backlight status input connector
CNC1	OSD control
CP1	Reserved
IR1	Infra-red sensor connector
J7	V-by-One panel signal output
LED1	Power LED connector
P1	DVI-I (single link)
P2	HDMI 2.0 (HDMI1)
P3	HDMI 2.0 (HDMI2)
P5	USB1
P6	USB2
PP2	Power input (alternative)
PP4	External panel power input
PP5	12V/24VDC input power
SW3	Panel timing selection

Ordering Options

HSP-4096

P/N: 4176001xx-3

Inverter interface board	[subject to panel model]
IR remote control	P/N: 559000106-3
OSD digital button board	Kit 67110-3
OSD membrane kit - Vertical	Kit 67134-3
OSD membrane kit - Horizontal	Kit 67135-3
AVD-1000, composite add-on	Kit 71300-3
HD-3000, 3G-SDI adaptor	P/N: 4160160XX-3
Audio Add-on board	P/N: 4169400XX-3

Drawings

- » 2D (jpg)
- » 3D (SLDPRT)

Download at:

<http://www.digitalview.com/products/hsp-4096-lcd-controller>

Available Resources

- » Instruction manual
 - » Revision control documentation
 - » Firmware upgrade manual**
 - » Mechanical drawing
 - » 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, 6 How Ming St, Kwun Tong, Hong Kong
t: (852) 2861-3615



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

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