

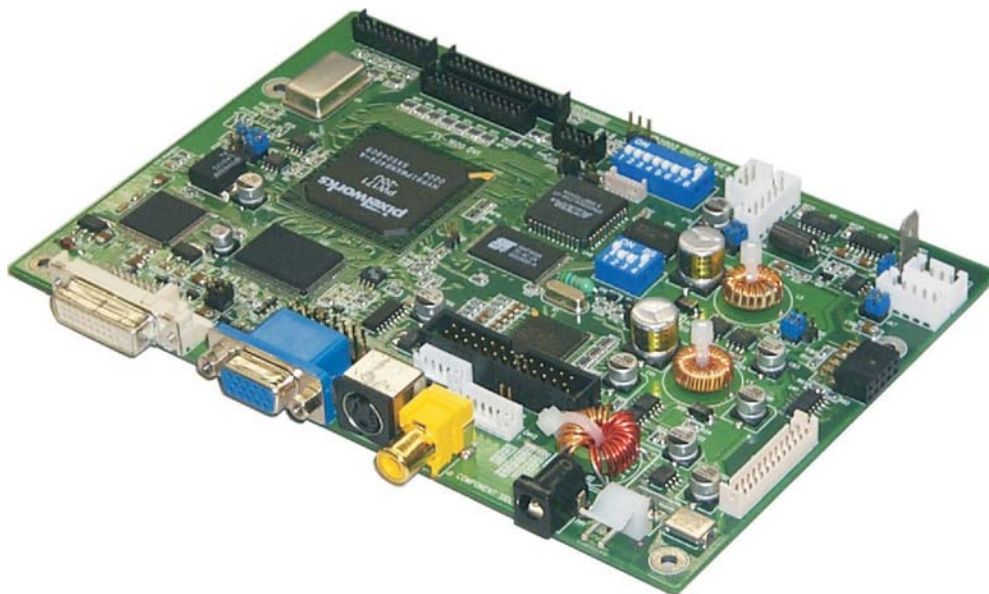
The Digital View DVI-1600 interface controller for OEM monitor and packaged flat panel display solutions.

**Panels:** 1600x1200, 1366x768, 1280x1024, 1280x768, 1280x600, 1024x768, 800x600, 640x480 TFT colour LCD & Plasma panel

**Input:** DVI-D, Analog UXGA, WXGA, SXGA, XGA, WSVGA, SVGA, VGA, Video (PAL, NTSC, SECAM) & other

The DVI-1600 is a fully buffered multi-sync interface controller for providing direct analog and digital connection for a wide range of TFT LCD panels and Plasma panel. It is capable of driving TFT colour LCD panel up to UXGA and features full screen image expansion. The DVI-1600 is a compact high performance single board solution.

Key features of Digital View flat panel interface controllers include excellent picture quality, ease of use, extensive features and cost effective performance.



## Features

### Panel Connectivity - TFT and PLASMA :

TFT : 1600x1200, 1366x768, 1280x1024, 1280x768, 1280x600, 1024x768, 800x600, 640x480

PLASMA : 852x480, 1024x1024, 1365x768, etc

### Input signal - Computer:

Analog RGB :

Up to 60Hz at UXGA, up to 75Hz at SXGA & up to 85Hz at XGA, SVGA & VGA

with auto detect of Digital Separate Sync, Sync-On-Green & Composite Sync.

Auto detects VGA~UXGA, interlaced & non-interlaced

DVI-D :

Up to 60Hz at UXGA, up to 75Hz at SXGA & up to 85Hz at XGA, SVGA & VGA

### Input signals - Video:

Interlaced video: NTSC, PAL/SECAM with input format of Composite video, S-video, Component video (YCrCb) and RGB video.

### Video Input sources - Primary and Secondary

Primary video: Composite, S-Video, Component (YCrCb)

Secondary video: Composite, S-Video, Component (YCrCb)/RGB Video (w composite sync)

### Input signals - Audio:

Optional (add-on board) stereo amplifier with volume control.

**Panel power:** 3.3V, 5V & 12V

**Panel signal:** TTL - LVDS & TMDS options (add-on board)

**Colors:** Up to 8 bit per colour, ie 16.7 million colors

**Functions display:** On Screen Display (OSD) menu of functions with multiple languages.

**Functions control:** Buttons, Infra-red, RS-232 serial.

### Image scaling:

Scale up/down a lower/higher resolution image to fit a higher/lower resolution panel, e.g. SVGA up to UXGA or UXGA down to XGA, non-linear expansion capability for 16:9 compatibility, etc.

### Picture in Picture:

Video (PAL/NTSC) display overlay on PC background.

**Image control:** Auto setup, Brightness, Contrast, Phase, Colour temperature, Image position, Tint (video), Sharpness.

**Other features:** System information, OSD position, Digital zoom, Gamma adjust, Freeze frame, Display orientation, Volume controls, Set gamma data for user defined gamma curve via RS-232

**Dimensions:** 179mm x 120.4mm (7" x 4.74") approximately.

**Connectors:** Embedded & external type.

**Power requirements:** 12V DC.

**Power saving:** VESA DPMS compatible.

**Power/signal protection:** Fuse and power sequencing.

**Inverter support:** 5 & 12V, Enable pin.

**Plug & Play:** DDC 1, 2/b compatible

**Status indicator:** Dual colour LED support.

**PLASMA**
**UXGA**
**WXGA**
**SXGA**
**XGA**
**SVGA**
**VGA**

## Panel Compatibility Guide

Ref	Panel type
Fujitsu	TFT / PLASMA
Hitachi	TFT
IBM	TFT
LG	TFT
Mitsubishi/ADI	TFT
NEC	TFT / PLASMA
Philips/Hosiden	TFT
Samsung	TFT
Sharp	TFT
Toshiba	TFT

## Order Information

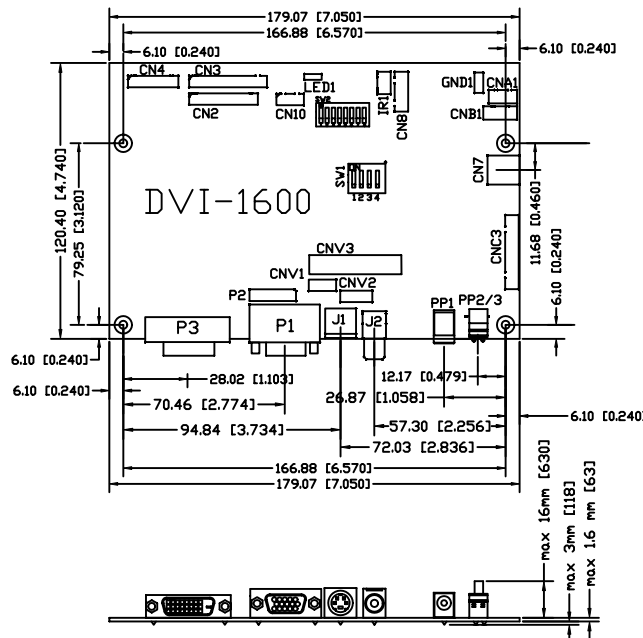
Item	Description
1	DVI-1600 controller
2	Panel signal cable & connector kit
3	Backlight inverter & cables kit
4	Function controls & cables kit
5	LVDS, TMDS interface options
6	Audio input & amplifier board option
7	Status LED kit
8	IR sensor kits
9	AC/DC adapter with + 12V DC output

Support for the above panels (and more as they become available) is being introduced progressively, please check at time of placing order for specific compatibility.

Connection for up to UXGA resolution TFT type LCD panels and PLASMA panel with standard & optional LVDS/TMDS

Consistent mounting holes, connector types and general layout with other Digital View controllers

Primary and Secondary video input connectors for external type connection.



Connection for panel backlight inverters and auxiliary power for touch screens.

User control options include buttons, infra-red & RS-232.

Input connectors for both embedded and external type connection.

### Connector reference

CN2	Panel signal: Hirose DF11-28DP-2DSA	CN7	Audio board: header pin socket 5x2 right
CN3	Panel signal: Hirose DF11-32DP-2DSA	CN8	RS-232 serial: JST B6B-XH-A
CN4	Panel signal: Hirose DF11-20DP-2DSA	LED1	Dual colour status LED: 3-pin header
CN10	Panel signal: Hirose DF11-10DP-2DSA	IR1	IR sensor: JST B3B-XH-A
CNA1	Auxiliary power output: JST B4B-XH-A	P1/P2	15 way VGA signal input
CNB1	Inverter: JST B5B-XH-A	P3	DVI-D signal input
CNC3	Function controls: JST B26B-PHDSS dual row	J1	S-video in: mini din 4-way
CNV1	Alternate video in: JST B5B-PH-K	J2	Composite video in: RCA jack (yellow)
CNV2	Component video in: JST B6B-PH-K	PP1	Power input: 5.5mm jack for 12V supply
CNV3	Auxiliary video input connector, DIL socket header 13x2	PP2/3	Alternative power input

### Notes:

- Dimensions are in mm and (mil).
- PCB mounting holes connect to ground.
- PCB mounting holes are 3.2mm.
- Other mounting holes for inverter are not grounded.
- Drawing is not to scale.

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