The Digital View AC-1280 interface controller for OEM monitor and packaged LCD solutions.

| | |
|---|---|
| **Panels:** | 1280 x 1024 TFT colour LCD & other. |
| **Input:** | Analog SXGA, XGA, SVGA, VGA & other |

The AC-1280 is a fully buffered multi-sync interface providing direct analog connection for a wide range of TFT LCD panels with a resolution of 1280x1024, 1024x768, 800x600 & 648x480 and features full screen image expansion for VGA SVGA & XGA modes. The AC-1280 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.
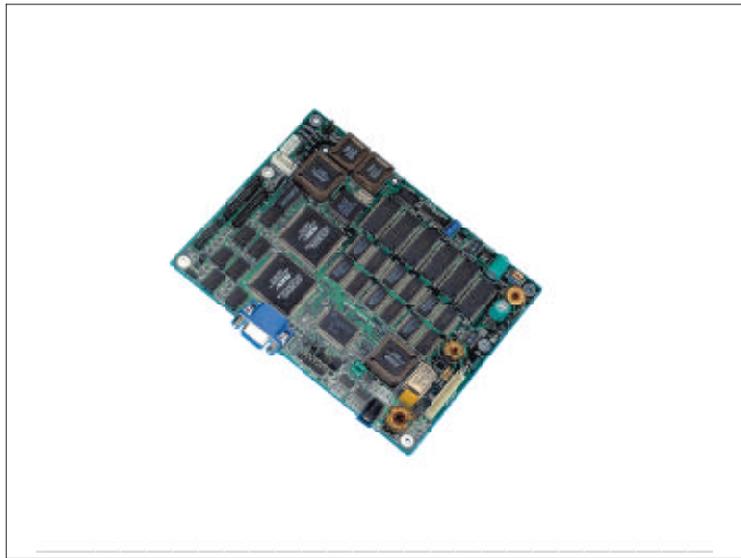
**SXGA**

**XGA**

**SVGA**

**VGA**



## Features

- **Panel Connectivity:** Primarily designed for 1280x1024 resolution TFT panels.
- **Input signals:** Analog VGA, SVGA, XGA & SXGA with full screen  image expansion, with separate sync, sync-on-green & composite sync (auto detect). Pixel clock to 135MHz, vertical refresh rate to 75Hz at SXGA resolutions.
- **Computer graphics modes:** VGA~SXGA auto detect. Interlaced & non-interlaced.
- **Panel power:** 3.3V, 5V & 12V
- **Panel signal:** TTL - LVDS & TMDS options.
- **Colors:** Up to 8 bit per colour, ie 16.7 million colors (even on 3 x 6 bit panels).
- **Functions display:** On Screen Display (OSD) of functions.
- **Functions control:** Buttons, Infra-red, RS-232.
- **Image control:** Auto setup, Brightness, Contrast, Tuning, Size, Individual RGB adjust, Expansion On/Off, Image position.
- **Other features:** System information, Run-time counter, OSD position, Signal level.
- **Dimensions:** 179mm x 139.7mm (7" x 5.5") approx.
- **Mounting holes & layout:** Digital View standard.
- **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.
- Auxilliary power output connector.

**PC interface for SXGA TFT panels**

## Panel Compatibility Guide

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

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.

## Order Information

| Item | Description |
|---|---|
| 1 | AC-1280 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 | PC to controller graphics cable |
|  | AC/DC adapter with +12V DC output |

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

Connection for 1280x1024 resolution TFT type LCD panels with standard & optional LVDS/TMDS
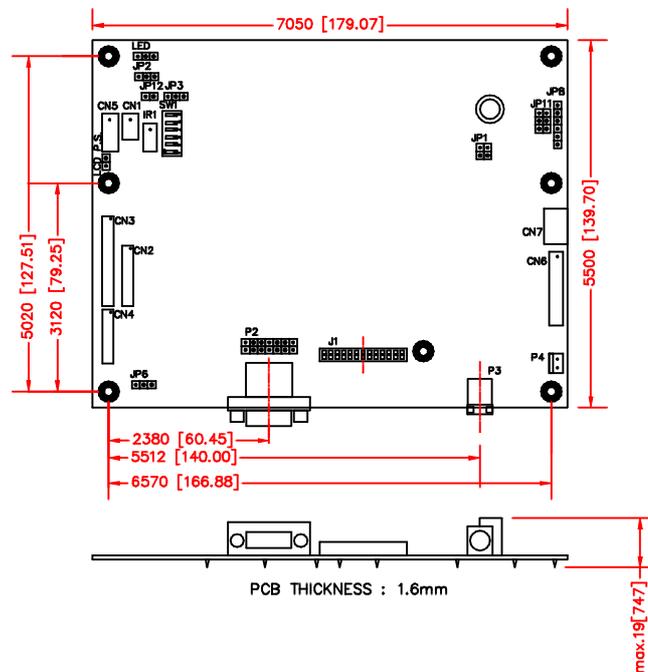
Connection for panel backlight inverters and auxiliary power for touch screens.

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

Input connectors for both embedded and external type connection.



PCB THICKNESS : 1.6mm

**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.

### Connector reference

| | | | |
|---|---|---|---|
| CN1 | Auxiliary power output: JST B4B-XH-A | JP8 | RS-232 serial: 6-pin header |
| CN2 | Panel signal: Hirose DF11-28DP-2DSA | LED11 | Dual colour status LED: 3-pin header |
| CN3 | Panel signal: Hirose DF11-32DP-2DSA | IR1 | IR sensor: JST B3B-XH-A |
| CN4 | Panel signal: Hirose DF11-20DP-2DSA | P1 | 15 way VGA signal input |
| CN5 | Inverter: JST B5B-XH-A | P2 | Alternate VGA signal input, 15-pin header |
| CN6 | Function controls: JST B12B-XH-A | P3 | Power input: 5.5mm jack for 12V supply |
| CN7 | Audio board: DIL socket header 5x2 right angle | P4 | Alternative power input |