

LCD Controller Board - ST-100 Series

The ST-150 series LCD controller board (A/D board) provides analog and digital connection for wide range of TFT LCD monitor/flat panel display from VGA (640 x 480) to UXGA (1600 x 1200). Embedded with complete signal input ports (computer RGB, DVI, and video interfaces) video interface (Composite, S_Video, and YPbPr). The ST-150 series is an ideal device for the applications of medical equipment, bank industrial, international trade show, transportations, and entertainment.



Features

- Compatibility with standard VESA mode.
- Support wide variety ranges of TFT LCDs from VGA (640 x 480) to UXGA (1600 x 1200).
- Customization for specific application requirements (ODM).
- Automatic image scaling and contrast enhancement.
- Support color: 6/8 bit TFT LCD.
- Screen Scaling: Up / Down scaling to fit input to panel format.
- Dual Backlight functions: CCFL / LED.

Model Number

- LCD Controller Board ST-100 (A/D Board, VGA & DVI input)
- LCD Controller Board ST-110 (A/D Board, VGA input)
- LCD Controller Board ST-150 (A/D Board, VGA, DVI & Video ((CVBS / S-Video / YCbCr <SD>))

Specifications

Panel Connectivity - Resolution:

TFT VGA 640 x 480
TFT SVGA 800 x 600
TFT WVGA 800 x 480
TFT WSVGA 1024 x 600
TFT XGA 1024 x 768
TFT WXGA 1280 x 720
TFT WXGA 1280 x 768
TFT WXGA 1280 x 800
TFT WXGA 1366 x 768
TFT WXGA+ 1440 x 900
TFT SXGA 1280 x 1024
TFT WSXGA+ 1680 x 1050
TFT UXGA 1600 x 1200

Input Interface:

Analog RGB: 60Hz at WSXGA+, UXGA
75Hz at SXGA, WXGA, XGA, SVGA, VGA
DVI-D / HDMI: 60Hz
(Please use HDMI to DVI connector/ cable, not support HDCP)
Composite Video, S-video
SD Component YCbCr
HD Component YPbPr (Option)

Color:

6/8 bit TFT LCD

Function:

On Screen Display (OSD) menu

Function Control:

External buttons, Infra-Red controls,
Serial Port control, Serial port module

Image Scaling:

Up / Down scaling to fit input to panel format

Image Control:

Auto configuration, Brightness, Contrast, Clock, Phase,
Color temperature, Image position, Saturation, Hue, Black level.

OSD (On Screen Display):

Auto setup, Factory reset, OSD position, Timeout, Scaling to fill screen
and fill to aspect, ACC / ACM-II color enhancement & Contrast adjustment

Power Requirements:

+12VDC / +24VDC $\pm 5\%$, 10W

Panel Power:

Supports 3.3V, 5V, 12V, 18V & 24V panels (Vin must be 18V or 24V)

Panel Signal:

Dual channel LVDS support

Panel Connection:

One 30-pin LVDS connector / One 40-pin TTL connector

Inverter Support:

DPMS Enable pin (3.3V or 5V)

Plug & Play:

DDC 1,2/b compatible

Status Indicator:

Dual Color LED support