

## 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