

R2P

PC & Video interface for TFT panels



R2P interface controller for OEM monitor and packaged flat panel display solutions.

Panels: 1280x1024,1024x768,800x600,640x480 TFT color LCD & other

Input: Analog VGA, Video(PAL,NTSC), DVI-D,D-Sub,VGA & other

This AD board generates all the necessary control signals and the panel data to drive TFT-LCDs. It performs image scaling on 24-bit RGB or YUV data stream and feeds the scaled pixels to LCD panel. It accepts standard DVI and analog RGB and SYNC (CRT like) signals from any VGA /SVGA/XGA/SXGA video controller. It also accepts NTSC/PAL video sources through a composite Video or S-Video connector. An OSD (On Screen Display) logic is embedded. The user interface includes Auto-Adjust, Phase, Brightness, Contrast, Horizontal and Vertical Position adjustment etc. An auto adjustment function provides automatic frequency, phase, H&V position, and white balance tuning.

Input Resolution

24V DC in

SXGA

DVI

WXGA

D-Sub

XGA

Composite Video

SVGA

S-Video

WVGA

Audio In

VGA



Features

- Separate RGB Video signal
- Composite Video Input ;Y/C Video & S-Video input
- NTSC/PAL Auto-switching control
- Build-in YUV to RGB color space converter & de-interlace
- Dual LVDS and two channel TTL interface Output
- On-Screen Display Control
- Support various panel from VGA to SXGA
- RGB input Maximum resolution 1280X1024 (SXGA) @ 75Hz
- Automatic mode detection
- Automatic input source detection
- Auto adjustment for frequency, phase, H/V position, and white balance
- On chip brightness, contrast and gamma correction
- VESA DDC1/2B: Software DDC1 and DDC 2B is supported
- Build-in stereo audio device
- Flexible firmware design to meet any custom design request
- DVI input maximum resolution 1280X1024 (SXGA) @ 75Hz
- Zoom scaling up and down
- Support 24V DC in
- Operating Temperature : 0 ~ + 50°C
- Storage Temperature : -20 ~ + 60°C



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Panel Compatibility Guide

Manufacture	Panel type
AU	TFT
CHI MEI	TFT
CPT	TFT
Fujitsu	TFT
Hitachi	TFT
Hydis	TFT
LG	TFT
Mitsubishi	TFT
NEC	TFT
Prime View	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 for placing order for specific compatibility.

A/D Board Drawing

J1	Power Jack
J2	DC 12V output
J3	DC 5V output
J5	Inverter output connector
J6	I ² C test connector
J10	8 Bits LVDS Signal Output
J11	Output Panel Power Select Jumper
J12	Line in
J13	Line in
J14	Line in
J15	IR Connector
J16	TTL Signal Output
JP1	S-VIDEO Connector
JP2	Composite Video Connector
CN1	OSD Control Connector
CON1	SPEAKER output connector
DB1	VGA Connector
DVI1	DVI Connector

Order Information

Item	Description
1	DVI Optional
2	Panel signal cable & connector kit
3	Backlight inverter & cables kit
4	Audio function optional
5	Video function optional
6	IR kits
7	AC/DC adapter with +24V DC output

