

R5W

PC & Video interface for TFT panels



R5W 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),D-Sub,VGA & other

This AD board generates all the necessary control signals and the panel data to drive TFT-LCD panels. It performs image scaling on 24-bit RGB or YUV datastream and feeds the scaled pixels to LCD panel. It accepts standard analog signal from any VGA /SVGA/XGA/SXGA video controller. It also accepts NTSC/PAL video sources through a composite Video or S-Video connector. 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.

Resolution

Input

SXGA

POWER

WXGA

D-Sub

XGA

Composite Video

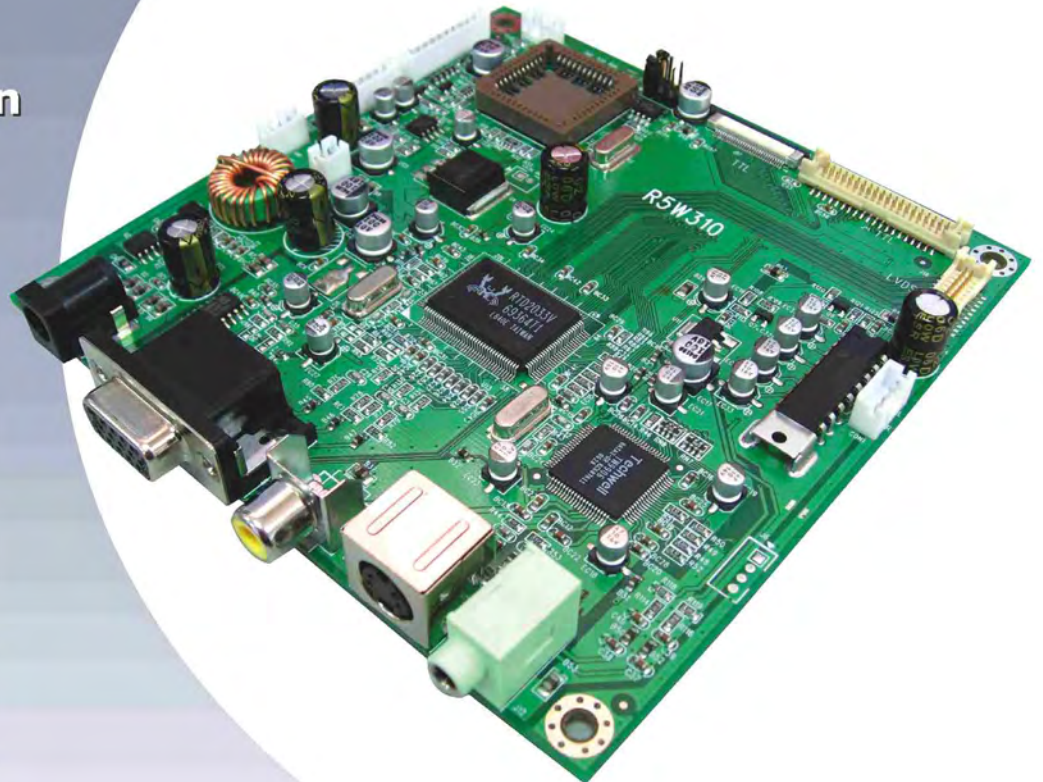
SVGA

S-Video

WVGA

Audio In

VGA



Features

- Separate RGB Video signal.
- Composite Video Input; Y/C Video (S-Video) input. (Optional)
- NTSC/PAL Auto-switching control.
- Build-in YUV to RGB color space converter.
- 8 bit triple-channel 140MHz ADC/PLL.
- TTL interface and Dual LVDS interface.
- On-Screen Display Control.
- Support various panel from VGA to SXGA.
- Maximum resolution 1280x1024 (SXGA)
- Automatic mode detection.
- 16Mbits frame buffer and de-interlace control.
- Automatic input source detection.
- Auto adjustment for frequency, phase, H/V position, and white balance.
- On chip brightness, contrast and gamma correction.
- Embedded dual DDC can support DDC1, DDC2B, and DDC/CI.
- Support auto-alignment.
- Build-in stereo audio device.
- Flexible firmware design to meet any custom design request.
- 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
Torisan	TFT

Order Information

Item	Description
1	Panel signal cable & connector kit
2	Backlight inverter & cables kit
3	Audio function optional
4	Video function optional
5	IR kits
6	AC/DC adapter with +12V DC output

A/D Board Drawing

J1	Power Jack
J5	Inverter Output Connector
J10	2 Channel LVDS Connector
J12	Line in
J16	DF13 TTL Signal Output
J17	FFC TTL Signal Output
J18	LVDS Connector(Single Port)
JP1	S-Video Connector
CN1	OSD Control Connector
DB1	VGA Connector
JP2	Composite Video Connector

