

S2A—UHD and 10bits panel support



S2A is a powerful graphics processing board, providing high-quality images for TFT panels. S2A supports 8/10-bit LVDS/eDP panels up to UHD (3840x2160) and can be used in a variety of systems.

Input: D-Sub, DVI-D, HDMI 1.4a, Display Port 1.2 Port, Audio, Composite (option), S-Video (option), Output: Speaker Out, Line Out

The S2A is a dual channel graphics A/D board for Liquid Crystal Display (LCD) monitors incorporating 10 bits panel support, Picture in Picture and up to UHD output resolutions.

The S2A provides all key A/D board functions required for image capture, processing and display timing control.

Functions include a high-speed triple-ADC and PLL, DVI receiver, high quality zoom and shrink scaling engines, Motion Adaptive De-Interlacing (MADI), Low Angle Diagonal Interpolation (LADI), an exquisite on-screen display (OSD), With all these functions integrated onto a single board, the S2A reduces the cost of high-end multimedia LCD monitors while Maintaining a high degree of flexibility and quality.

Input Resolution

POWER	UHD
Audio	WQXGA
Composite Video (optional)	QXGA
S-Video (optional)	WVXGA
DVI	UXGA
D-Sub	SXGA
HDMI	XGA
Display Port	SVGA
	VGA

Key Features:

- Super High Resolution support: Max to UHD (3840x2160)
- 10bits panel Support
- LVDS & eDP interface panel compatible
- Varied signal input (VGA \ DVI \ HDMI \ Display Port)
- Video \ S-Video (with optional control board)
- 12/24V input (with Jump)



Features

- 10 bits panel support
- Zoom and shrinking scaling
- Real Color controls provides RGBYMC compliance
- PWM back light intensity control
- Low EMI and power saving features
- Infrared inputs supporting various remote controls
- 32-bit frame store DDR2 memory for high-speed image capture and processing
- Horizontal and Vertical flip of display image
- Picture in Picture(PIP), Graphics on Video, Video on Graphics, split screen
- HDMI Input
- Display Port Input
- High-Quality Advanced Scaling
- Analog RGB Input
- DVI Input
- Optional S-Video input (with extension board)
- Optional Composite input via RCA (with extension board)
- Versatile On-Screen Display (OSD) design
- Real Color Technology
- LVDS & eDP Output Format
- Auto-Configuration/Auto-Detection
- Audio amplifier that supports up to 5W
- Operating Temperature : 0 ~ + 60°C
- Storage Temperature : -10 ~ + 60°C

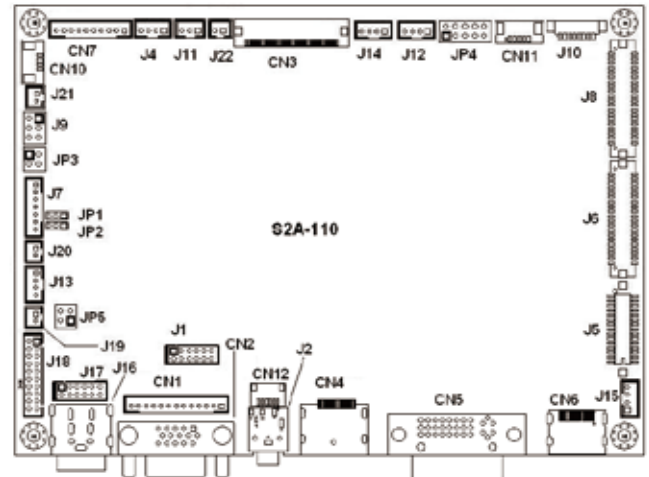


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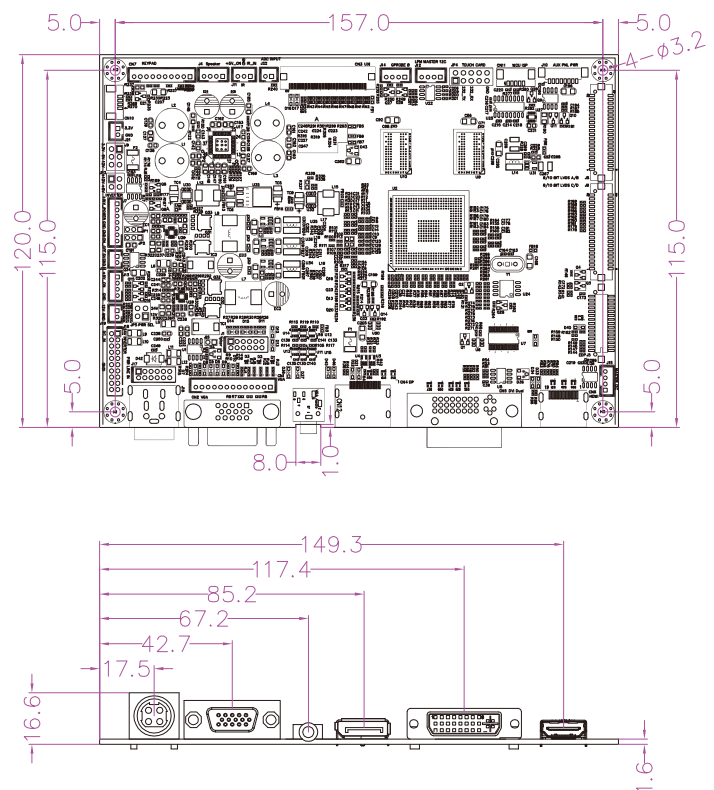


S2A I/O&Connectors Guide

Connector	Description
J1	YPbPr Wafer Input
J2	3.5mm Stereo Input
J4	Speaker Output
J5	eDP Output
J6	LVDS Output Channel C/D
J7	To Backlight Unit
J8	LVDS Output Channel A/B
J9	Panel Power Selector
J10	Auxiliary Panel Power
J11	IR Sensor
J12	Reserved LPM I2C
J13	LPM Console Port
J14	Console Port B
J15	Reserved I2C
J16	Power Din 4 Pin Input
J17	Power Wafer Input
J18	Power Wafer Output
J19	12V/1A Output
J20	5V/1A Output
J21	3.3V/1A Output
J22	Reserved LBADC
J23	EDID Writing for Factory
CN1	VGA Wafer Input
CN2	VGA D-Sub Input
CN3	24bit Digital Video Input
CN4	Display Port 1.2 Input
CN5	DVI Dual Input
CN6	HDMI 1.4 Input
CN7	Keypad
CN10	Reserved
CN11	MCU Debug Port
CN12	Stereo Line Output
JP1	5V/3.3V Selector for BLU Control Line
JP2	DC/PWM Selector for BLU Adjust Type
JP3	12V/5V Selector for BLU Power
JP4	3-Wire RS-232
JP5	24V/12V Selector for Power Input



S2A Board Dimension



Order Information

Pin No.	Description
1	Video/S-Video input Extension Board
2	Component input Extension Board
3	Panel Signal cables Kit
4	Backlight Driving Board & cables Kit
5	IR Remote controller
6	OSD Board Kit
7	RS232 Extension Board Kit