

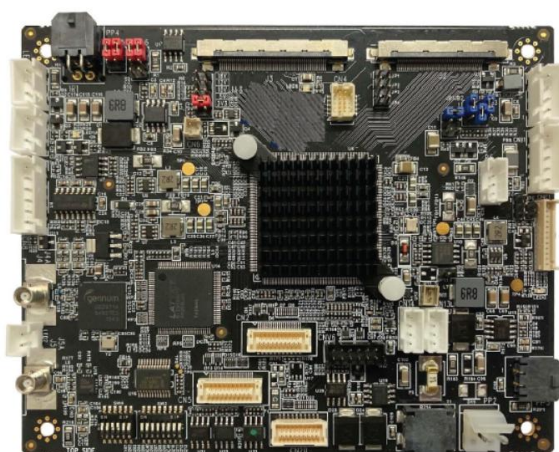
ADM-H1901

10-Bit Controller Board

Features

- Headers: 2x HDMI (1.4), VGA, DisplayPort
- Micro BNC: 3G/HD-SDI Input, Re-Clocked Loop-Through Output
- LVDS Panel Connection
- Panel Support: 10-Bit, 2560 x 1600 WQXGA @60Hz
- RS-232, I2C
- Image Flip (Horizontal & Vertical)
- Dimension: 127.0 mm x 101.6 mm (5" x 4")

Appearance





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10-Bit Controller Board

Revision Table

Date	Revision	Content	By
2025/5/14	0.1	First Draft	Elio
2025/5/16	0.2	Added Accessories: 1) Remote Control, 2) IR Kit	Elio

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10-Bit Controller Board

Specification

LCD Panel Connectivity	
Panel Connection	LVDS (4 Channel), 60Hz Panels up to 2560 x 1600
Panel Resolution	Supports up to 2560 x 1600
Colors	Up to 10-Bit Per Color, ie 1.06 Billion Colors
Panel Power	Supports 3.3V, 5V, 10V, 12V, 18V
Power	+12/+24VDC $\pm 5\%$, 5W (Controller Only)
Backlight Inverter/Driver Support	Analog or 12 Bit PWM Brightness Control via Serial Port Controller
Inverter Support	DPMS Enable Pin (3.3V or 5V) , PWM
I/O Ports	2 x HDMI(1.4) 1 x DisplayPort 1 x VGA 2 x Micro BNC (1 x 3G/HD-SDI Input, 1 x 3G/HD-SDI Reclocked Loop through Output)
Audio	Digital Audio SPDIF & Analog Line-Out
Functions	
Function	On Screen Display (OSD) Menu
Function Controls (Options)	External Buttons, Infra-Red Controls, Serial Port Control
Image Scaling	Up/Down Scaling to Fit Input to Panel Resolution
Image Control	Auto Configuration, Black Level, Backlight Brightness, Contrast, Clock, Phase, Color Temperature, Image position, Sharpness, Hue, Saturation, Gamma, Aspect Ratio
Image Flip	Vertical and Horizontal
Status Indicator	Dual Color LED Support
Plug & Play	DDC 1,2/b Compatible
Mechanical	
Dimension	127.0 mm x 101.6 mm (5" x 4")

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Specification

Connector Definitions	
CN1	HDMI 1 Input
CN5	HDMI 2 Input
CN6	Ambient Light Sensor Connector
CN8	RS-232 Serial Connector
CN11	SPDIF Audio Output
CN13	Analog (Stereo) Audio in
CN14	Analog (Stereo) Audio out
CN20	DisplayPort Signal Input
CNA1	Auxiliary Power Output
CNB1	Backlight Inverter Connector
CNC1	OSD Control
CNV6	VGA Input
IR1	Infra-Red Sensor Connector
J2	LVDS Panel Signal Output 1
J3	LVDS Panel Signal Output 2
J4A	3G/HD-SDI Input
J5A	3G/HD-SDI Re-Clock Output
PP2	Power Input
PP4	External Panel Power Input
PP5	Power Input
LED1	Controller Status LED
LED2	SDI Input Status LED

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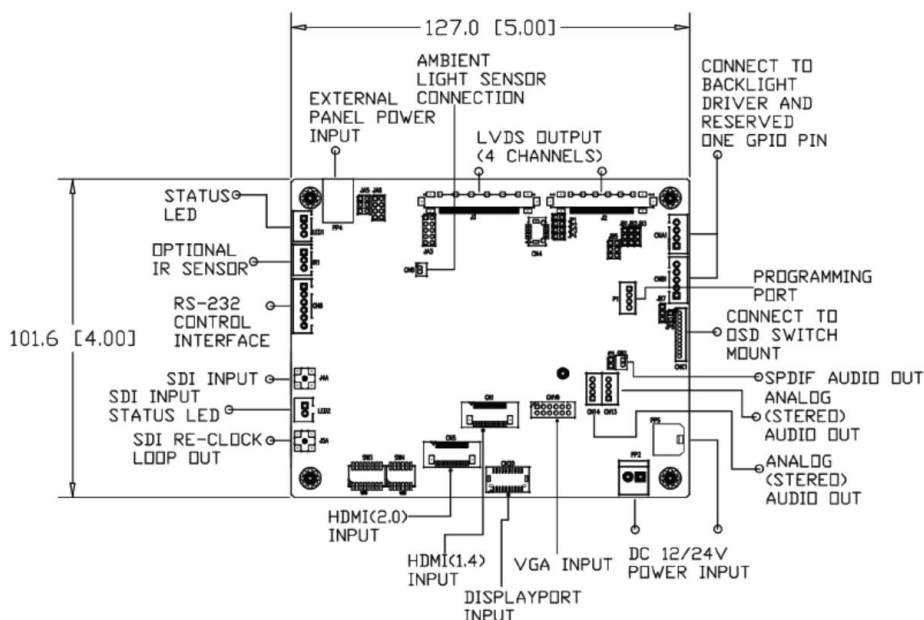
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Environment Compliance

Operating Temp.	- 40°C to 80°C
Humidity	5% - 95% RH, Non-Condensing

Environmental performance may vary according to the integration method or final integration scenario.

Block Diagram





ADM-H1901

10-Bit Controller Board

Deliverables

1	10-Bit Controller Board
2	Remote Control (Optional)
3	IR Kit (Optional)

Ordering Information

Model Name	Description	Unit
ADM-H1901	10-Bit Controller Board	1

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