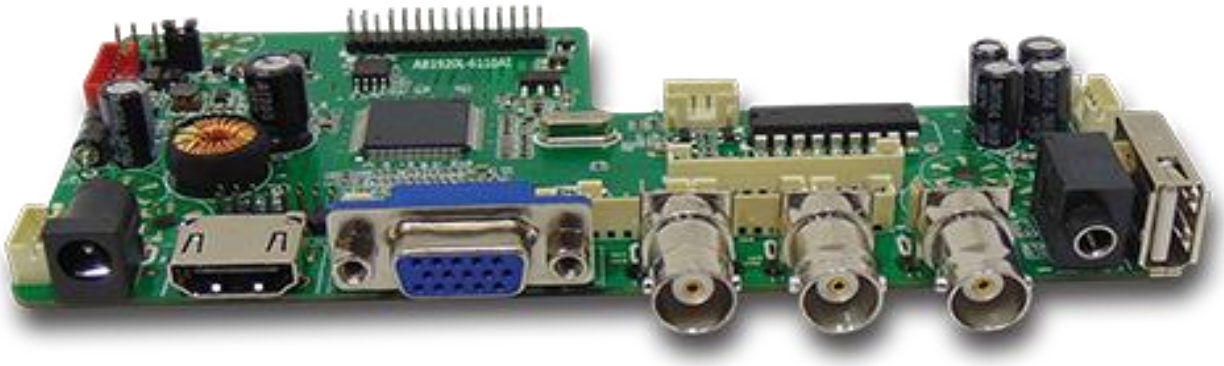
LCD - AD-CONTROLLER BOARD

Model No. **AB1920L-6110AT**



Release Date
24th Jan 2019

THIS DOCUMENT CONTAINS PROPRIETORY INFORMATION WHICH IS SOLELY OWNED BY 'HIGHNESS MICROELECTRONICS PVT LTD'. ANY UNAUTHORISED COPY OR PRINTING OR PUBLISHING OF INFORMATION IN THIS DOCUMENT IN PART OR IN COMPLETE IS RESTRICTED.

HIGHNESS MICROELECTRONICS PVT LTD.

Email: sales@highnessmicro.com, URL: www.highnessmicro.com

Index:

1} Specification of Ad-Board……..3

2} Dimensions of Ad- Board ……..4

3} Picture of Ad-Board ……..5

4} Connector & Pin assignment……6

5} Output Connector……..6

6} Input Connector……..7

7} Inverter Interface Details……..8

8} Frequency Details……8

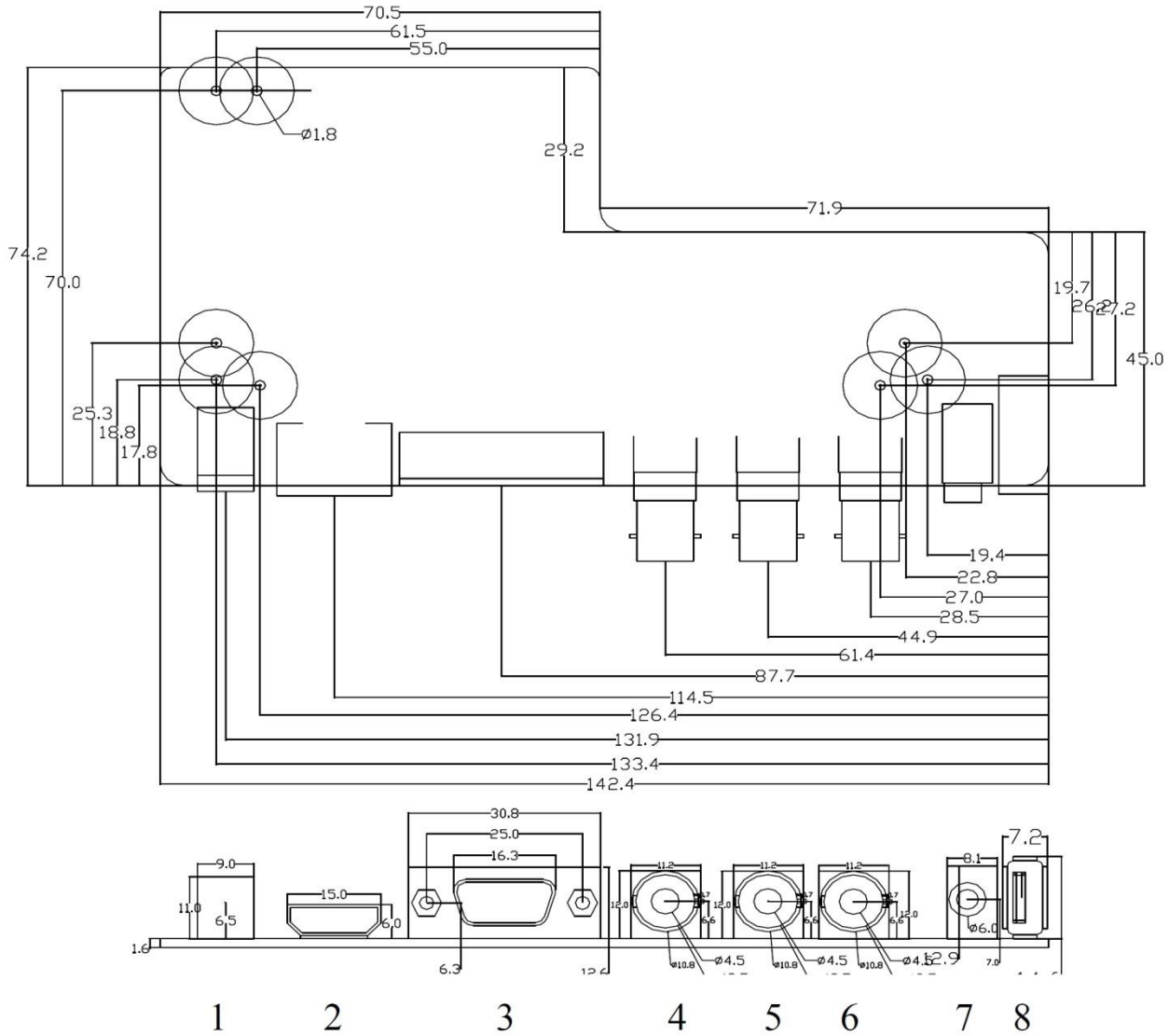
9} Power Selection Jumper……8

1. Specification:

Model No.		**AB1920L-6110AT**
Chipset		SUTS9
Supported Resolution	PC-RGB	VGA: 640 X 480 / 720 X 400
		SVGA: 800 X 600
		XGA: 1024 X 768
		SXGA: 1280 X 1024
		WXGA: 1680 X 1050
		HD: 1920 X 1080
Power Supply	Power Requirement	Input Power 12V, Maximum16V
	To Supply	3.3V, 5V, 12V
	Manage	Low Power Consumable mode: Standby<0.3W
Key Functions		CH-, CH+, MENU, VOL-, VOL+, SOURCE, ON/OFF
Audio Output		2 x 2W (8 OHM)
Terminal Input	PC-RGB Input	1D-SUB 15pin terminal blue color
	CVBS	2 BNC terminal
	HDMI	HDMI terminal
	PC-RGB AUDIO	1 Earphone Terminal Black Color
Terminal Output	CVBS	1 BNC terminal
	Audio Output	PH connector
	To Panel	LVDS 2 x 15 30pin Jack (Pitch 2.0mm) 18/24bit
Output Interface		18 / 24-bit LVDS
Operating Temperature		0 - +40°C
Storage Temperature		-10 - +60°C
Humidity		≤80% (Non-Condensing)
Size		142.4 x 74.2 (mm)

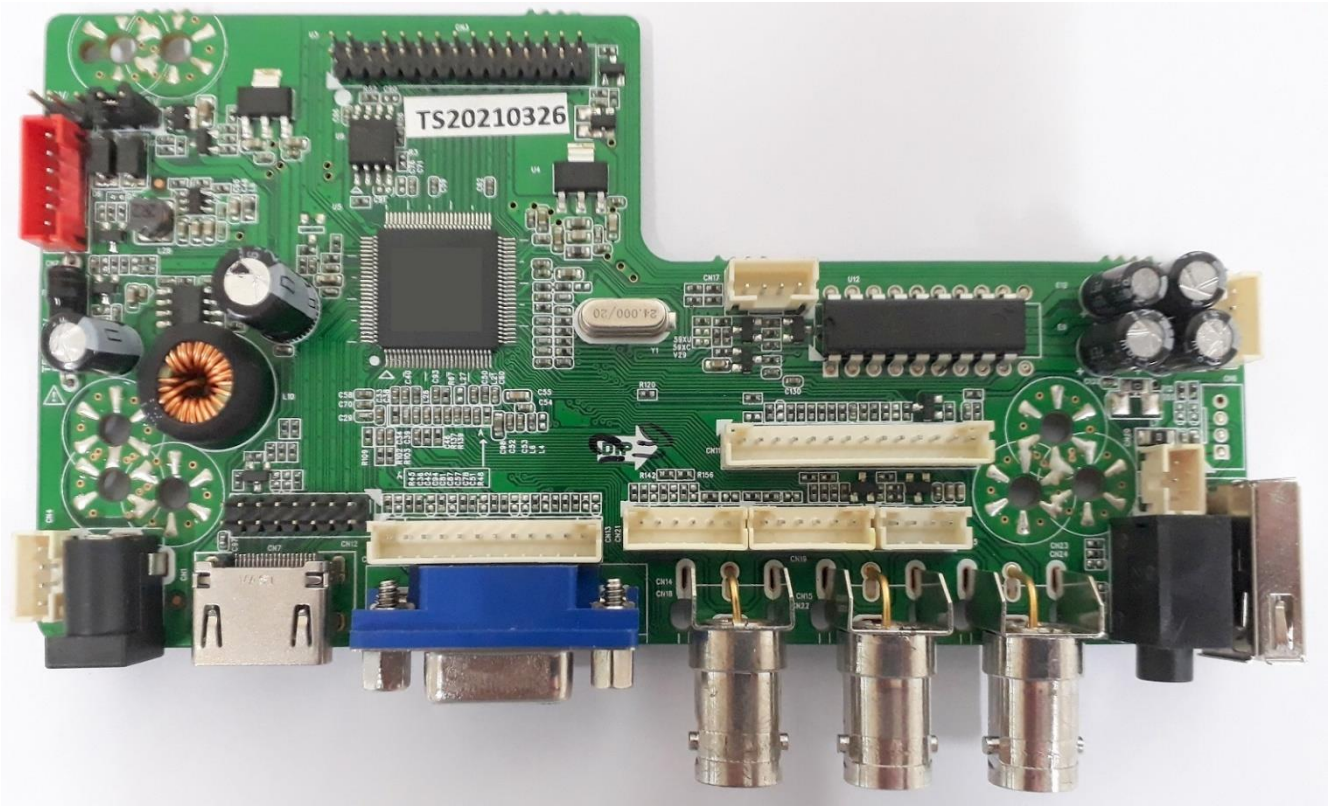
2. Dimension:

(i) Ad-Board:

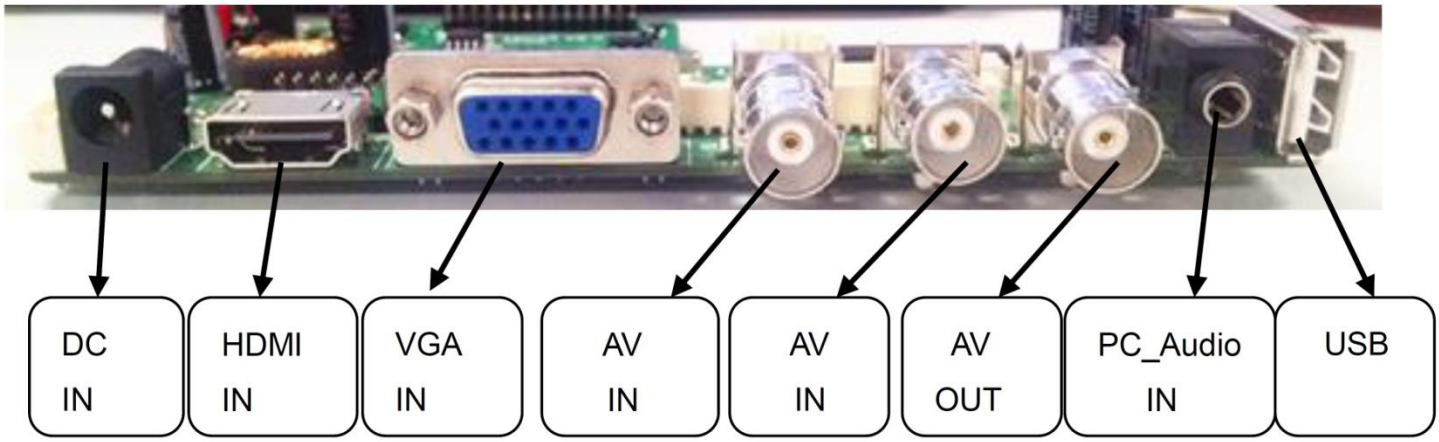


3. Ad-Board Picture:

(i) Top View:



(ii) Port View:



4. Connector & Pin assignment:

4.1 Output Connection: (LVDS Connector 2x 15pin Pitch=2.0mm):CN3

Pin	Function	Pin	Function	Pin	Function	Pin	Function
1	LCDPWR	9	RX01-	17	RX03-	25	GND
2	LCDPWR	10	RX01+	18	RX03+	26	GND
3	LCDPWR	11	RX02-	19	RXE0-	27	RXEC-
4	GND	12	RX02+	20	RXE0+	28	RXEC+
5	GND	13	GND	21	RXE1-	29	RXE3-
6	GND	14	GND	22	RXE1+	30	RXE3+
7	RX00-	15	RX0C-	23	RXE2-		
8	RX00+	16	RX0C+	24	RXE2+		

4.2 Input Interface Details:

(I) VGA Interface Details (15 pin VGA Connector): CN13

Pin	Function	Pin	Function
1	Red	9	No Connection
2	Green	10	Ground- Sync
3	Blue	11	No Connection
4	No Connection	12	Data (SDA)
5	Ground	13	Horizontal Sync
6	Ground- Red	14	Vertical Sync
7	Ground- Green	15	Clock (SCL)
8	Ground- Blue		

(I) HDMI Interface Details (16 pin HDMI Connector): CN12

Pin	Function	Pin	Function
1	GND	9	CLKN
2	GND	10	CLKP
3	2N	11	SCL
4	2P	12	CEC
5	1N	13	HPD
6	1P	14	SDA
7	0N	15	GND
8	OP	16	5V

(II) AV IN (6 pin): CN19

Pin	Function	Pin	Function
1	AV1	4	GND
2	GND	5	AV-L
3	AV2	6	AV-R

(IV)AV OUT (4 pin): CN25

Pin	Function	Pin	Function
1	AV-VOUT	3	AV-LOUT
2	GND	4	AV-ROUT

(V) USB (4 PIN): CN6

Pin	Function	Pin	Function
1	5V	3	D+
2	D-	4	GND

(VI) AMPLIFER AUDIO OUTPUT (4pin Connector): CN16

Pin	Function	Pin	Function
1	R	3	GND
2	GND	4	L

(VII) OSD Interface Details (Connector 14pin): CN11

Pin	Function	Pin	Function
1	GND	8	CH+
2	NC	9	S
3	ON/OFF	10	GND
4	M	11	IR
5	V-	12	G
6	V+	13	R
7	CH-	14	VCC

5. Inverter Interface Details (Connector 6 pin):

Pin	Function	Pin	Function
1	GND	4	ON/OFF
2	GND	5	+12V
3	ADJ	6	+12V

6. Frequency Details:

640x350	70Hz
720x400	70Hz
640x480	60Hz
640x480	60Hz
640x480	67Hz
640x480	72Hz
640x480	75Hz
832x624	75Hz
800x600	56Hz
800x600	60Hz
800x600	72Hz
800x600	75Hz
1024x768	60Hz
1024x768	70Hz
1024x768	75Hz
1280x768	60Hz
1280x1024	60Hz
1280x1024	75Hz
1366X768	60Hz
1600x1200	60Hz
1680x1050	60Hz
1920x1080	60Hz

7. Power Selection Jumpers:

Pin	Function	Pin	Function
1	3.3V	3	5V
2	GND		