



HIGHNESSTM

LCD - AD-CONTROLLER BOARD
Model No. **AB1920TL-2010AT**



Release Date
15th Nov 2019

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1. Specification:

Model No.	AB1920TL-2010AT	
Chipset	2033	
Supported Resolution	PC-RGB	VGA : 640 X 480 / 720 X 400
		SVGA : 800 X 600
		XGA: 1024 X 768
		SXGA: 1280 X 1024
		1920 X 1440
Audio Input	PC-RGB	Left & Right Audio Input
Power Supply	Power Requirement	Input Power 12V
	To Supply	3.3V, 5V, 12V
	Manage	Low Power Consumable mode: Standby<2W
Key Functions	Exit, Menu, Vol- Vol+, Auto, ON/OFF, Select,	
Audio Output	2 x 2W (8 OHM)	
Terminal Input	PC-RGB Input	1D-SUB 15pin terminal blue color
	PC-RGB Audio input	1 Earphone Terminal Black Color
Technical's Output	To Panel	FCC
Output Interface	18 / 24-bit LVDS	
Operating Temperature	0 - +40°C	
Storage Temperature	-10 - +60°C	
Humidity	≤80% (Non-Condensing)	
Size	110.1 x 82.3 mm	

3. Ad-Board Picture:

(i) Top View:



(ii) OSD:



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	LCD PWR	9	ATX 1-	17	ATX3-	25	GND
2	LCD PWR	10	ATX 1+	18	ATX 3+	26	GND
3	LCD PWR	11	ATX 2-	19	BTX0-	27	BTCK-
4	GND	12	ATX 2+	20	BTX0+	28	BTCK +
5	GND	13	GND	21	BTX1-	29	BTX3-
6	GND	14	GND	22	BTX1+	30	BTX3+
7	ATX0-	15	ATCK-	23	BTX2-		
8	ATX0+	16	ATCK +	24	BTX2+		

4.2 Input Interface Details:

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

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		

(II) Speaker Interface Details (Connector 4pin) CN 12

Pin	Function	Pin	Function
1	SK_L	3	GND
2	GND	4	SK_R

(III) OSD Interface Details (Connector 9pin):CN15

Pin	Function	Pin	Function
1	EXIT	6	GND
2	MENU	7	Green _ LED
3	AUTO	8	Red _ LED
4	LEFT	9	ON/OFF
5	RIGHT		

5. Inverter Interface Details (Connector 6 pin):CN17

Pin	Function	Pin	Function
1	GND	4	BLL ON/OFF
2	GND	5	+12V
3	BK LADJ	6	+12V

6. Resolution Support:

640x350
720x400
640x480
640x480
640x480
640x480
640x480
640x480
832x624
800x600
800x600
800x600
800x600
1024x768
1024x768
1024x768
1280x768
1280x1024
1280x1024
1366X768
1920 X 1440

7. Power Selection Jumpers:

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