



ENCORE

LCD - AD-CONTROLLER BOARD

Model No. AB1920L-200XK

FUNCTIONAL DRAFT SPECIFICATION

(This document is meant for customers' approval)

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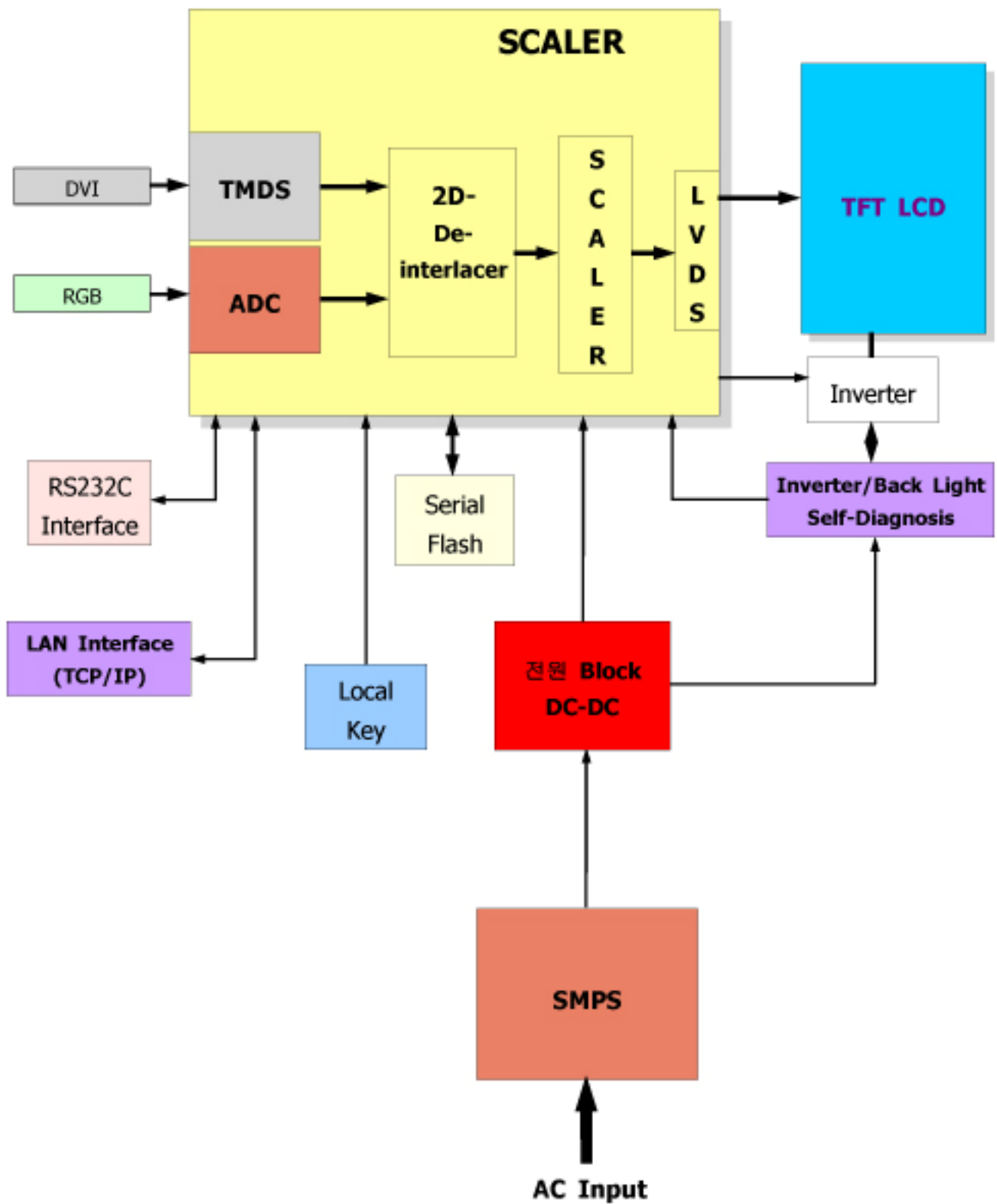
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1. Specification:

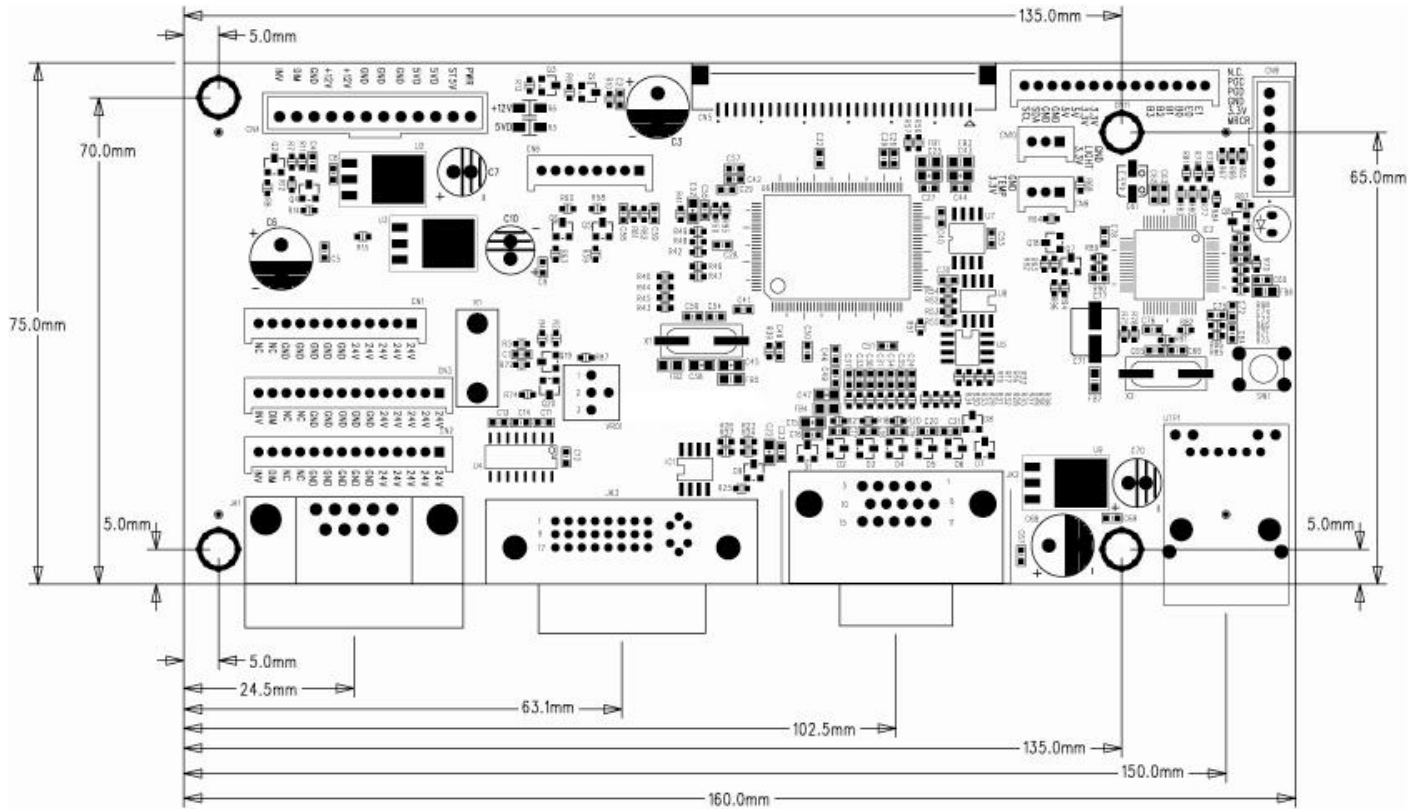
Model No.		AB1920L-200XK
Chipset		TSUMU58
Supported Resolution	PC-RGB	VGA : 640 X 480 / 720 X 400
		SVGA : 800 X 600
		XGA: 1024 X 768
		SXGA: 1280 X 1024
		WXGA: 1680 X 1050
	DVI	DVI-I /DVI-D DDC HD:1920 X 1080
Audio Input	PC-RGB	PH Connector input
Power Supply	Power Requirement	Input Power 12V
	To Supply	5V, 12V
	Manage	Low Power Consumable mode: Standby<3W
OSD Language (Optional)		English (Chinese, French, Spanish)
Key Functions		Auto, Menu, Left, Right, Select, Exit
Audio Output		2 x 2W (8 OHM)
Terminal Input	PC-RGB Input	1D-SUB 15pin terminal blue color
	DVI Input	1DVI 24pin Jack white color
	PC-RGB Audio input	1 Earphone Terminal Black Color
Technical's Output	To Panel	LVDS 2 x 15 30pin Jack (Pitch 2.0mm) 18/24bit
Output Interface		18 / 24-bit LVDS
Operating Temperature		0 - +50°C
Storage Temperature		-20 - +80°C
Humidity		≤80% (Non-Condensing)
Size		160 X 75 mm

2. Block Diagram:

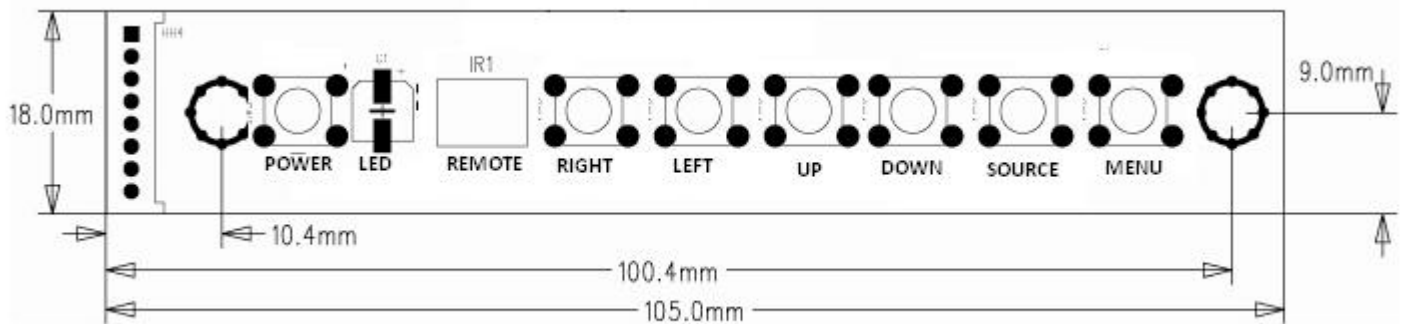


3. Dimension:

(i) Ad-Board:



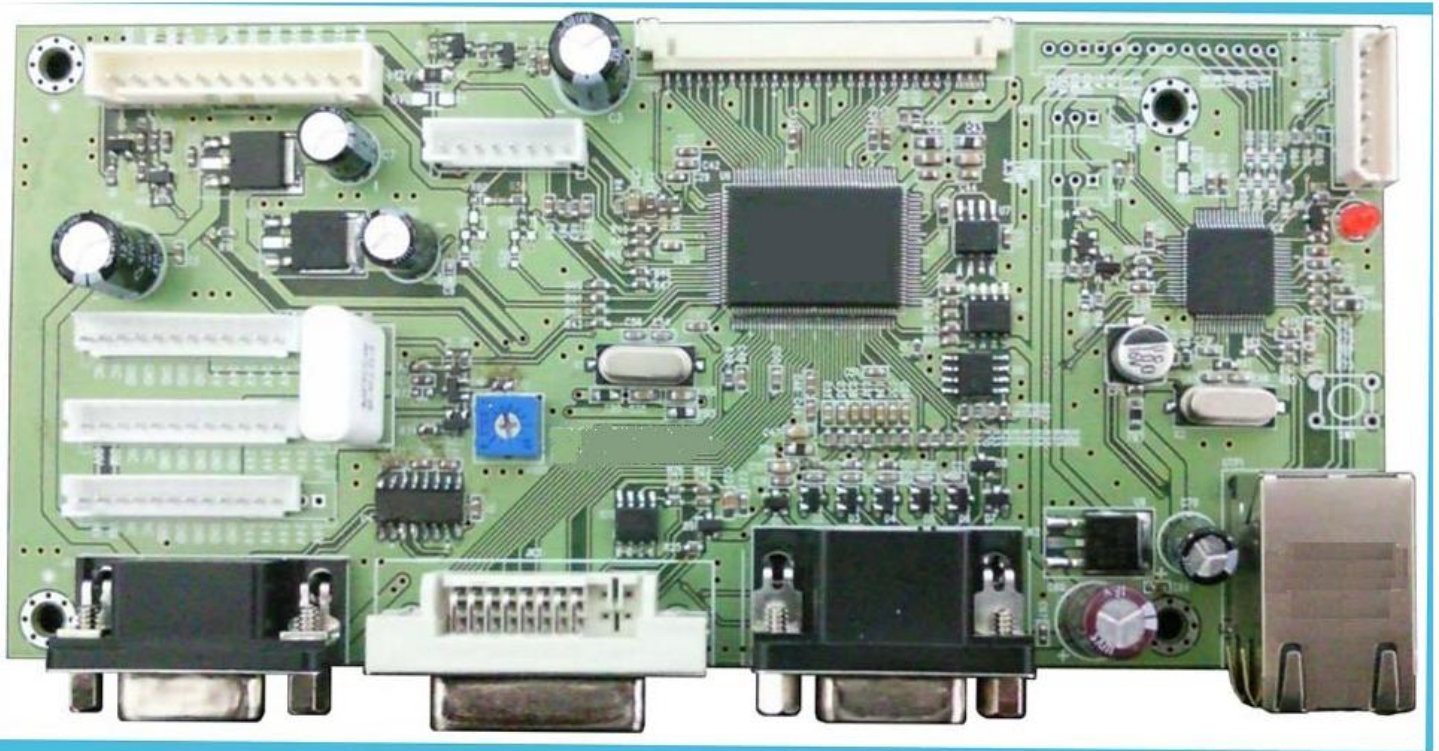
(ii) OSD:



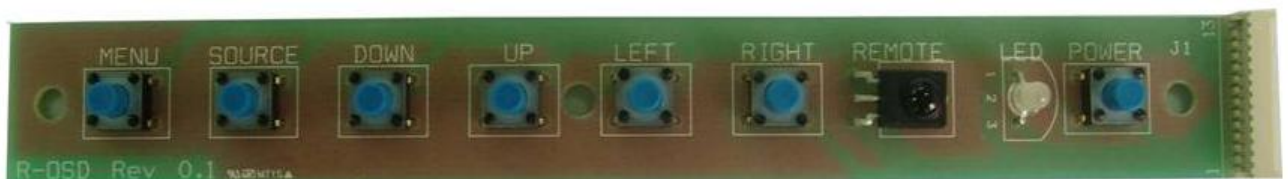
Keypad key indication: Menu / Source / Down / Up / Left / Right / Power.

4. Ad-Board Picture:

(i) Top View:



(ii) OSD:



5. Connector & Pin assignment:

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

Pin	Function	Pin	Function	Pin	Function	Pin	Function
1	VCC	9	RXE3-	17	GND	25	RXO2+
2	VCC	10	RXEC+	18	RXE0+	26	RXO2-
3	VCC	11	RXEC-	19	RXE0-	27	RXO1+
4	NC	12	RXE2+	20	RXO3+	28	RXO1-
5	NC	13	RXE2-	21	RXO3-	29	RXO0+
6	NC	14	GND	22	RXOC-	30	RXO0-
7	GND	15	RXE1+	23	RXOC-		
8	RXE3+	16	RXE1-	24	GND		

5.2 Input Interface Details:

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

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

(II) DVI-D Connection (24 pin DVI Connector):

Pin	Function	Pin	Function	Pin	Function	Pin	Function
1	TMDS Data 2-	7	DDC Data	13	TMDS Data 3+	19	TMDS Data 0/5
2	TMDS Data 2+	8	TMDS Data 1-	14	5V Power	20	TMDS Data 5-
3	TMDS Data 2/4	9	TMDS Data 1+	15	GND	21	TMDS Data 5+
4	TMDS Data 4-	10	TMDS Data 1+	16	Hot Plug Detect	22	TMDS Clock Shld
5	TMDS Data 4+	11	TMDS Data 1/3	17	TMDS Data 0-	23	TMDS Clock-
6	DDC Clock	12	TMDS Data 3-	18	TMDS Data 0+	24	TMDS Clock+

(III) RS232C Control : (DSUB9 Pin)

Pin	Function	Pin	Function	Pin	Function
1	NC	4	RXCN	7	NC
2	TX	5	GND	8	NC
3	RX	6	DDC2_SCL	9	NC

(IV) PC Audio Input

Pin	Function	Pin	Function	Pin	Function
1	GND	3	Sound – R	5	Sound – R
2	Sound – L	4	Sound – L		

(V) Component & Sound L/R (CN4) (Option)

Pin	Function	Pin	Function	Pin	Function	Pin	Function
1	GND	3	Y	5	GND	7	Sound – L
2	Pb	4	Pr	6	Sound – R	8	GND

6. Interface Details:

(I) Inverter Interface Details (Connector 6 pin):

Pin	Function	Pin	Function	Pin	Function
1	+12V	3	On/Off	5	GND
2	+12V	4	Dimmer	6	GND

(II) Power Interface Details (Connector 4 pin):

Pin	Function	Pin	Function
1	+12V	3	GND
2	+12V	4	GND

(III) Speaker Interface Details (Connector 4pin):

Pin	Function	Pin	Function
1	L – Out	3	R + Out
2	L + Out	4	R - Out

(IV) OSD Interface Details (Connector 9pin):

Pin	Function	Function	Pin	Function	Function
1	KEY 1	Power	7	KEY 7	Left
2	KEY 2	Menu	8	KEY 8	LED Red
3	KEY 3	Source	9	KEY 9	LED Green
4	KEY 4	Up	10	KEY 10	IR Data
5	KEY 5	Down	11	KEY 11	STB +5V
6	KEY 6	Right	12	KEY 12	GND

7. 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
1920x1200	60Hz

8. Power Selection Jumpers:

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