



Version	1
Total page	12
Date	2010/4/14

Product Specification

EK series TFT LCD Display Kit

Model : EK-070-81

7", 16:9, 800 X 480 WVGA RESOLUTION

CVBS Signal input

Approval

Issue by	R & D	QA	ME	Approve by

The content of this specification is subject to change without notice

All rights strictly reserved. Any portion of this paper shall not be reproduced, copied, or transformed to any other forms without permission from Linkface Tech. Inc.,

Linkface Technology, Inc.

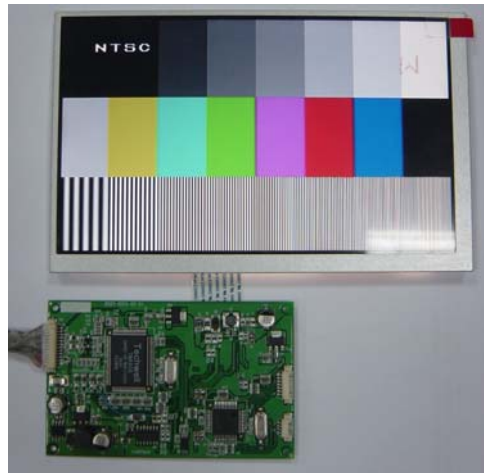
5F, No. 27, Lane 66, Jui-Kuang Rd, Nei-hu, Taipei, Taiwan

TEL : (02)2795-6800 FAX : (02)2795-4566 web:www.linkface.com.tw

EK-070-81

TFT LCD DISPLAY KIT

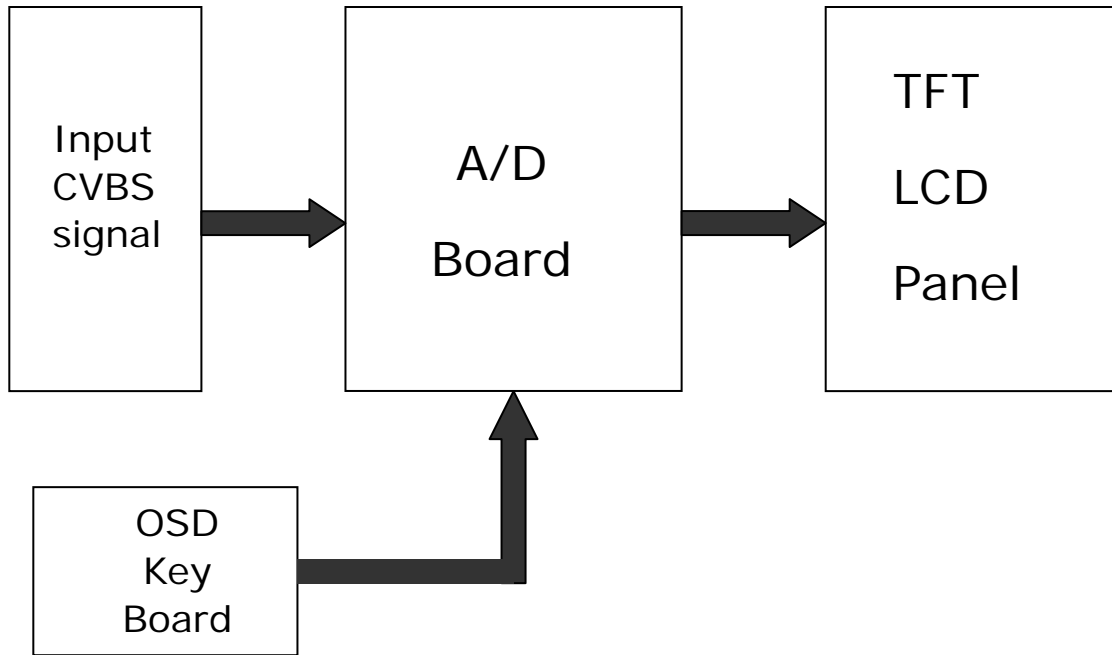
LED Back Light



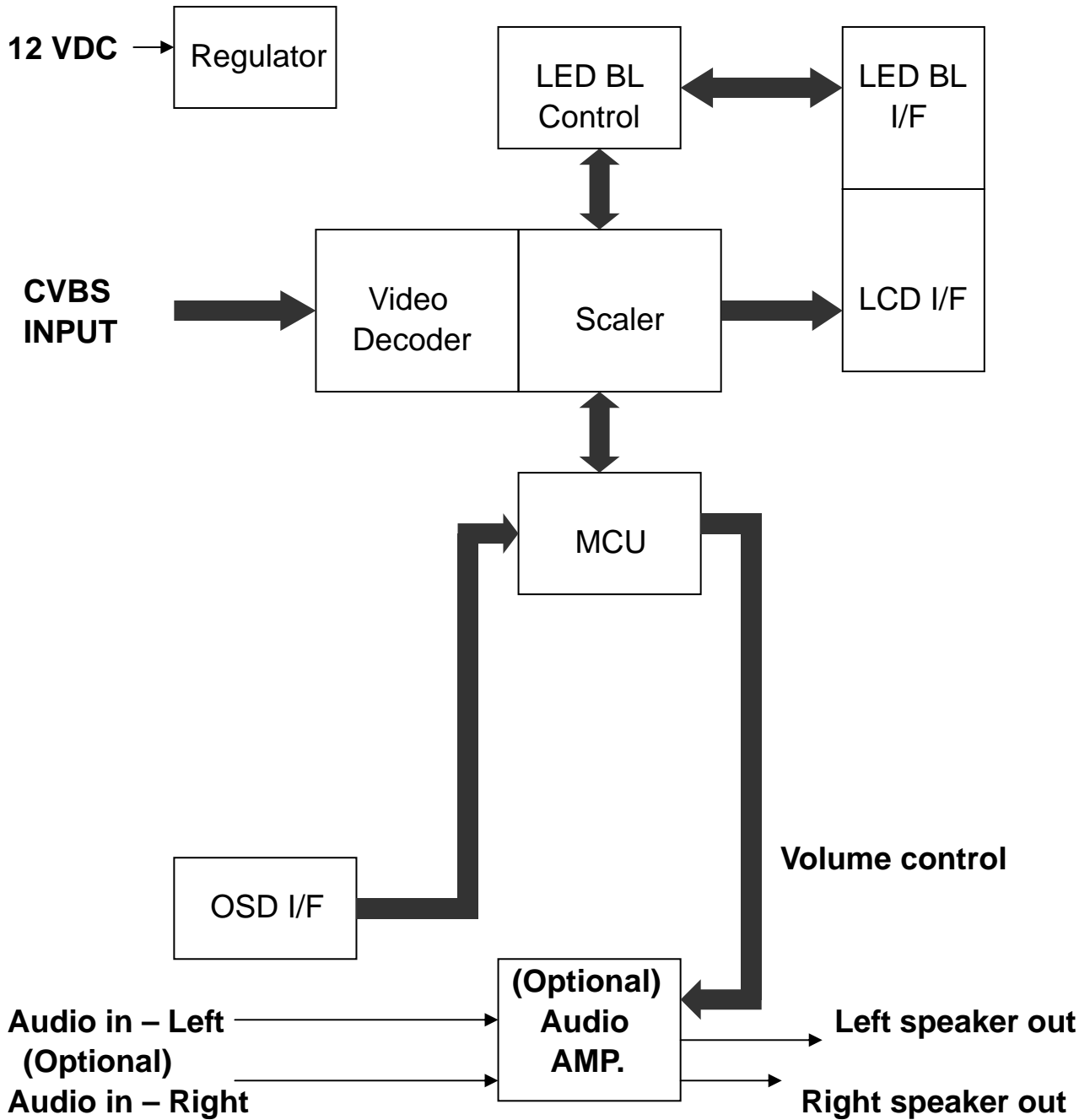
Specification

LCD Panel	LM-070-8WL V1
LCD Size	7.0 inch
Aspect Ratio	16 : 9
Input Signal	CVBS only.
Number of Pixels	800(H) x RGB x 480(V)
Pixel Pitch (mm)	0.1905 x 0.1905
Active Area (mm)	152.4(H) x 91.44(V)
Operation Temp.(°C)	0 ~ 50
Storage Temp. (°C)	-20 ~ 70
View Angle (U/D/L/R)	50/70/70/70
Brightness (nits)	300
Contrast Ratio	500
Response Time (msec)	25
LED Lamp Life (hrs)	20000 @ I _{LED} =20mA to half brightness
Power Consumption	2W
Supply Voltage (VDC)	10 ~ 14 VDC
On-Screen-Display (OSD)	Build in Key Board; control all relevant display and interface parameters.

Display Kit Block Diagram

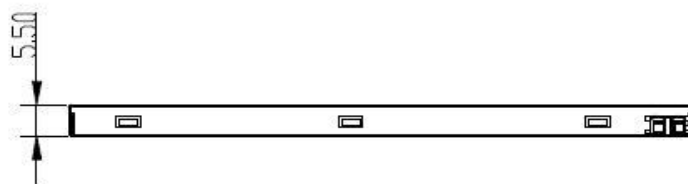
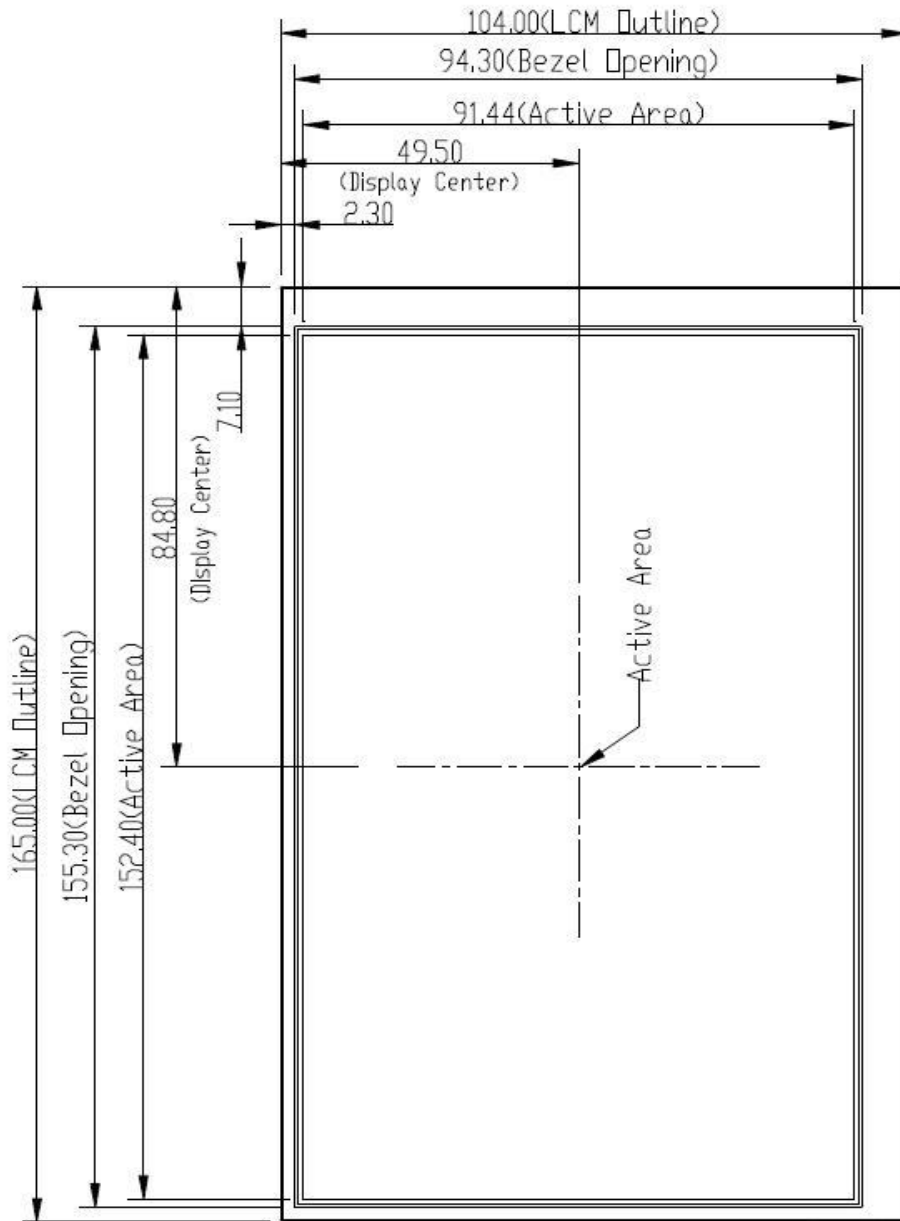


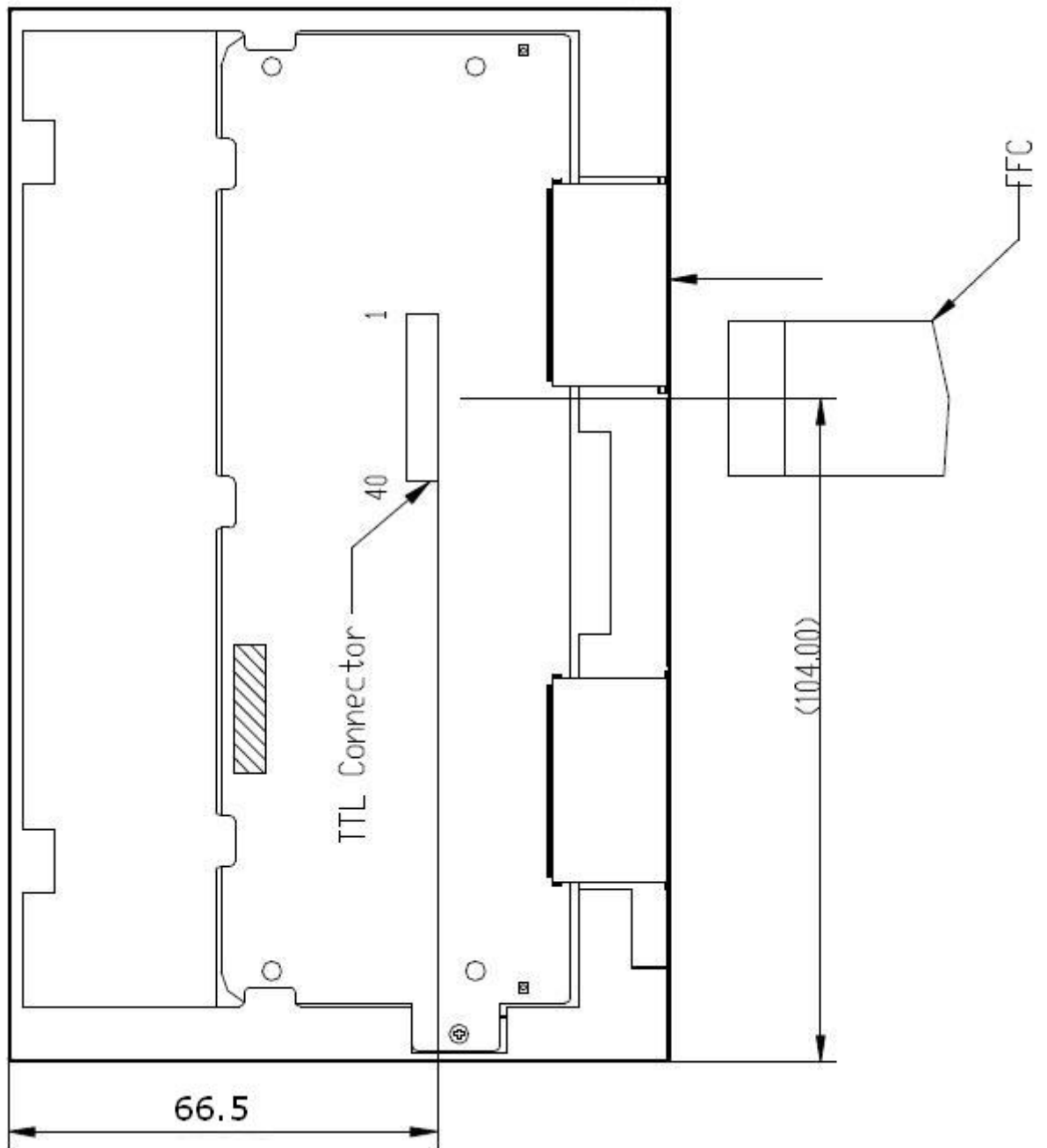
Block Diagram of Driver Board



All rights strictly reserved. Any portion of this paper shall not be reproduced, copied, or transformed to any other forms without permission from Linkface Tech. Inc.,

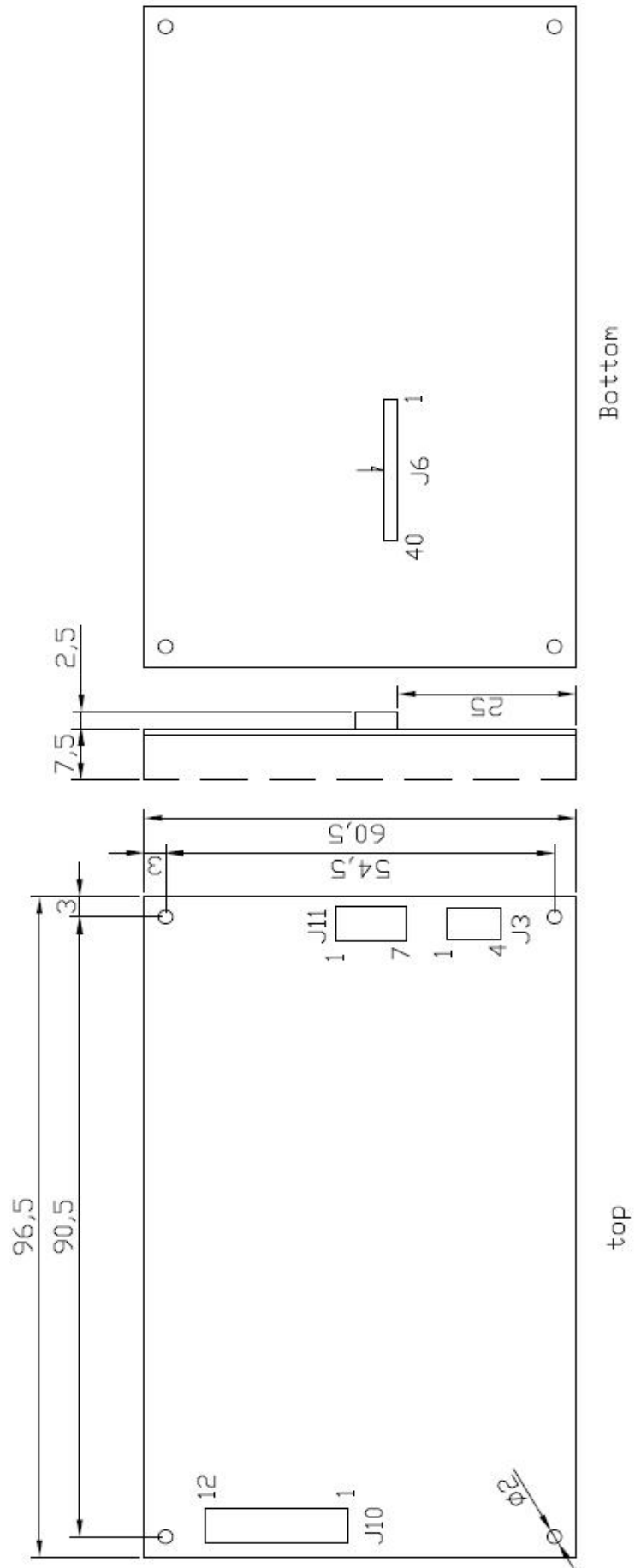
TFT LCD PANEL Dimensions (Front View) UNIT: mm





NOTE:
 1. TTL connector: FH19-40S-0.5SH;
 2. General tolerance: ± 0.3 .

Driver Board Dimensions (Top View) UNIT: mm



Driver Board Pin assignment

J10: Input Socket, Molex 51021-12,pitch 1.25 mm or EQ.

Pin	Function	Description
1	Vcc	12V DC power input
2	Vcc	12V DC power input
3	NC	No Connection
4	GND	Ground
5	NC	No Connection
6	NC	No Connection
7	GND	Ground
8	CVBS in	CVBS signal input
9	GND	Ground
10	NC	No Connection
11	NC	No Connection
12	NC	No Connection

J3: Loading port: Molex 51021-04,pitch 1.25 mm or EQ

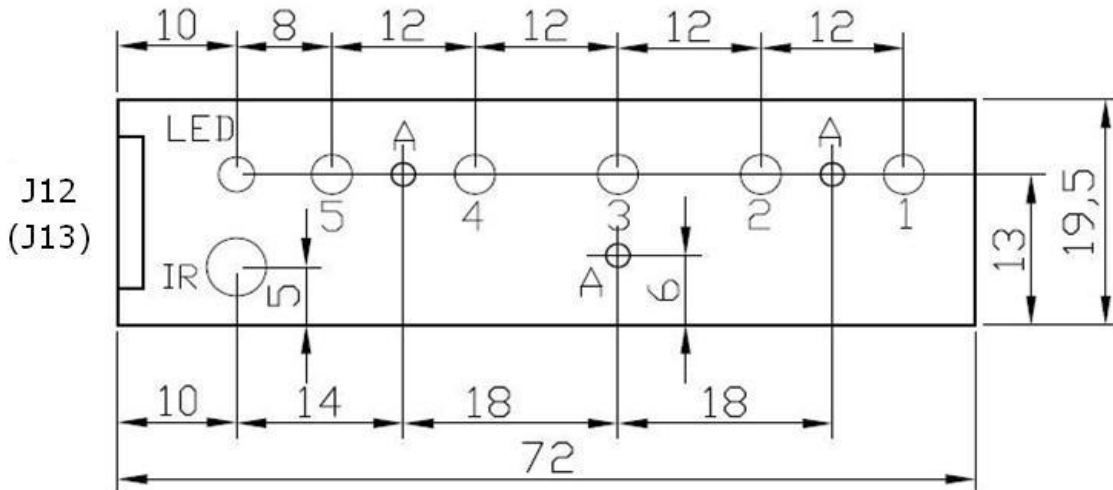
PIN	FUNCTION
1	TXD
2	RXD
3	RST
4	GND

J11: Key Board Connector (on A/D board):

Molex 51021-08,pitch 1.25 mm or EQ

PIN	FUNCTION
1	GND
2	UP/+ key
3	MENU key
4	Down/+ key
5	NC, No Connection
6	NC, No Connection
7	NC, No Connection

Key Board Dimensions (Top view)



OSD KEY BOARD, TOP VIEW, COMPONENT SIDE

A: Mounting Holes, 2 mm DIA.

LED: Optional LED indicator.

IR: Optional IR Receiver.

1~5: push button key

1: DOWN / + ,

2: Menu.

3: UP / - ,

4: spare key for custom design.

5: spare key for custom design.

J12(J13): (on OSD Key Board) Connector:

Molex 51021-10, pitch 1.25 mm or EQ

PIN	FUNCTION
1	Key No. 5, Spare key (reserved)
2	Key No. 4, Spare key (reserved).
3	Key No. 3, DOWN/- key
4	Key No. 2, MENU key
5	Key No. 1, UP/+ key
6	NC
7	NC
8	NC
9	NC
10	GND

J6: LCD Connector Pin Assignment

TTL Connector is used for the module electronics interface.

The recommended model is FH19SC-40S-0.5SH manufactured by Hirose.

Pin No.	Symbol	I/O	Function	Remark
1	V _{LED}	P	Power voltage for LED Driver	
2	V _{LED}	P	Power voltage for LED Driver	
3	ADJ	I	Adjust the LED brightness with PWM pulse	
4	G _{LED}	P	Ground for the LED circuit.	
5	G _{LED}	P	Ground for the LED circuit.	
6	VCC	P	Power voltage for digital circuit	
7	VCC	P	Power voltage for digital circuit	
8	MODE	I	DE or HV mode control	
9	DE	I	Data enable	
10	VS	I	Vsync signal input	
11	HS	I	Hsync signal input	
12	GND	P	Power ground	
13	B5	I	Blue data input (MSB)	
14	B4	I	Blue data input	
15	B3	I	Blue data input	
16	GND	P	Power ground	
17	B2	I	Blue data input	
18	B1	I	Blue data input	
19	B0	I	Blue data input (LSB)	
20	GND	P	Power ground	
21	G5	I	Green data input (MSB)	
22	G4	I	Green data input	
23	G3	I	Green data input	
24	GND	P	Power ground	
25	G2	I	Green data input	
26	G1	I	Green data input	
27	G0	I	Green data input (LSB)	
28	GND	P	Power ground	
29	R5	I	Red data input (MSB)	
30	R4	I	Red data input	
31	R3	I	Red data input	
32	GND	P	Power ground	
33	R2	I	Red data input	

34	R1	I	Red data input	
35	R0	I	Red data input (LSB)	
36	GND	P	Power ground	
37	DCLK	I	Sample Clock	
38	GND	P	Power ground	
39	L/R	I	Select left or right scanning direction	
40	U/D	I	Select up or down scanning direction	

I: input, O: output, P: power.