

DATA SHEET

Lily-TV (Rev.0.1)

Part No. : SMLM05010

May, 2005

Lily-TV (Rev. 0.1)

CONTENTS

1.	Revisions of History	-----	3
2.	General Descriptions	-----	4
3.	Features	-----	4
4.	Block Diagram	-----	5
5.	Outline Dimensions	-----	6
6.	Connectors Information	-----	10
7.	Reference Data	-----	15
8.	Input Formats	-----	16
9.	On Screen Display	-----	21
10.	Operation Message	-----	30
11.	Customization	-----	31
12.	Supportable Panel List	-----	32

The information presented in this document may form a part of quotation or contract under the agreement of both parties. Otherwise, this datasheet is subject to change without prior notice.

Lily-TV (Rev. 0.1)

1. Revisions of History

Revision No.	Date	Page	Description	Actionee
Ver. 0.1	May. 05 '05	ALL	Preliminary Specification	Injoon Lee

2. General Descriptions

LILY-TV is an advanced TFT LCD Monitor/ TV (Analog RGB/DVI/Video/S-Video/TV) Control Board.

This design enables a full conventional CRT monitor and Video, S-Video, TV and audio Replacement with a large size active matrix TFT LCD module.

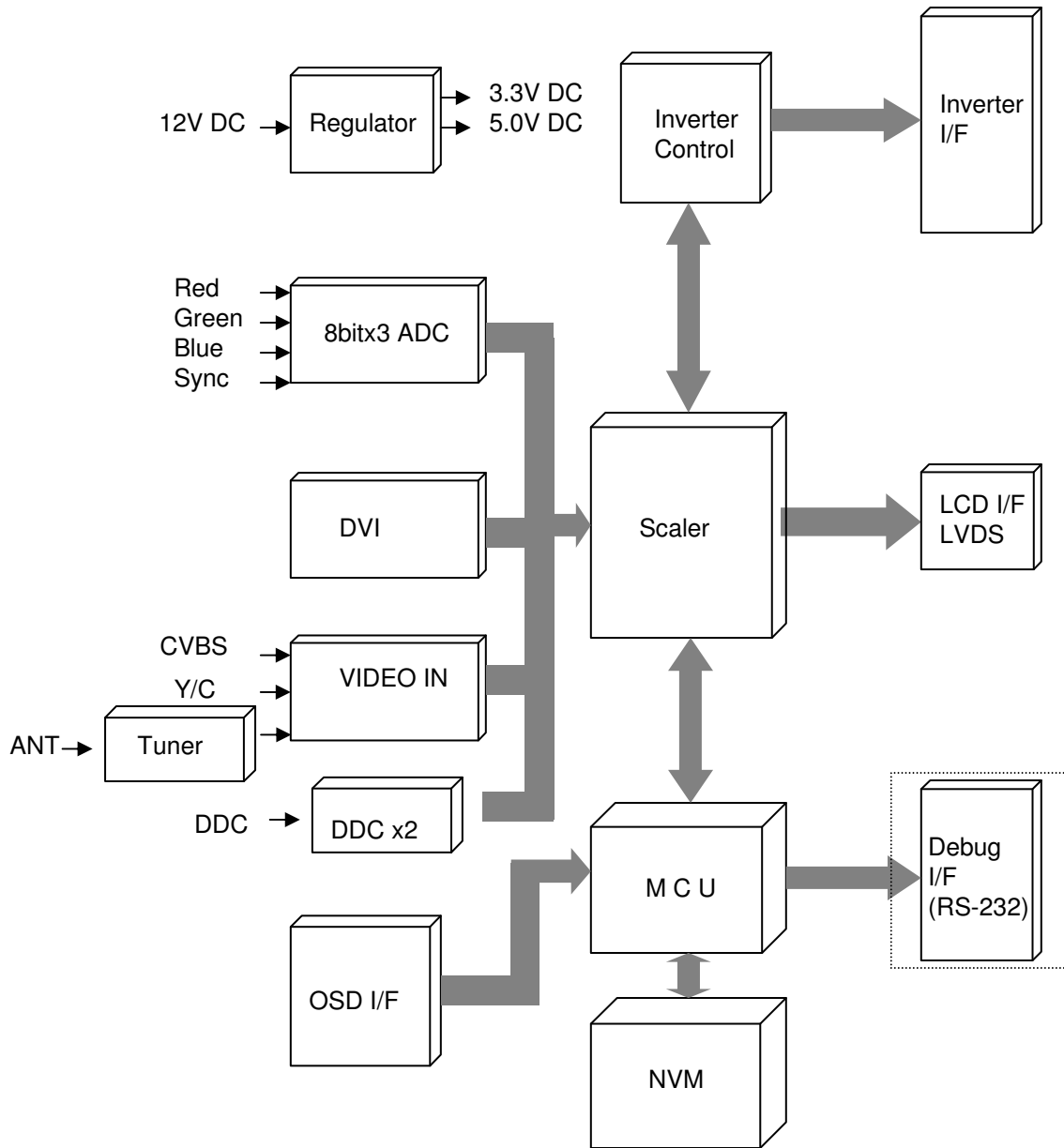
It is suitable for video resolution up to SXGA @ 75Hz in all video modes, the full display area of the module is used. The LILY-TV is designed to act as a full monitor and Video, TV, S-Video and audio interface.

LILY-TV is designed to support various TFT LCDs up to SXGA resolution by BIOS option, as shown in item 13 "Supportable Panel List" on page 33.

3. Features

- Designed to give state-of-the-art picture quality
- Analog RGB / DVI (Digital Video Interface) / Composite video / Y/C input and TV
- Optional input combination, e.g., PC monitor only
- Full CRT multi-sync monitor compatibility
- Multi-sync capability up to SXGA resolution @ 75Hz, compatible standard SVGA, XGA and SXGA VESA timing
- Expand DOS, VGA, SVGA and SXGA to full screen display
- True color (16.7M) data processing and display driving
- Single control operated & transparent On-Screen-Display (hereafter 'OSD') user interface
- Full control of all relevant display and interface parameters via OSD
- Multi-language
- VESA DDC 1/2B compliant
- Compatible with VESA DPMS power saving modes
- Form factor: 185mm (L) x 85mm (W) x 16.1mm(H)
- +12V DC single power: 48watts AC/DC power adapter recommended
- Operating temperature: 0°C to 50°C
- OSD & Power Switch Board : SMLM0000x

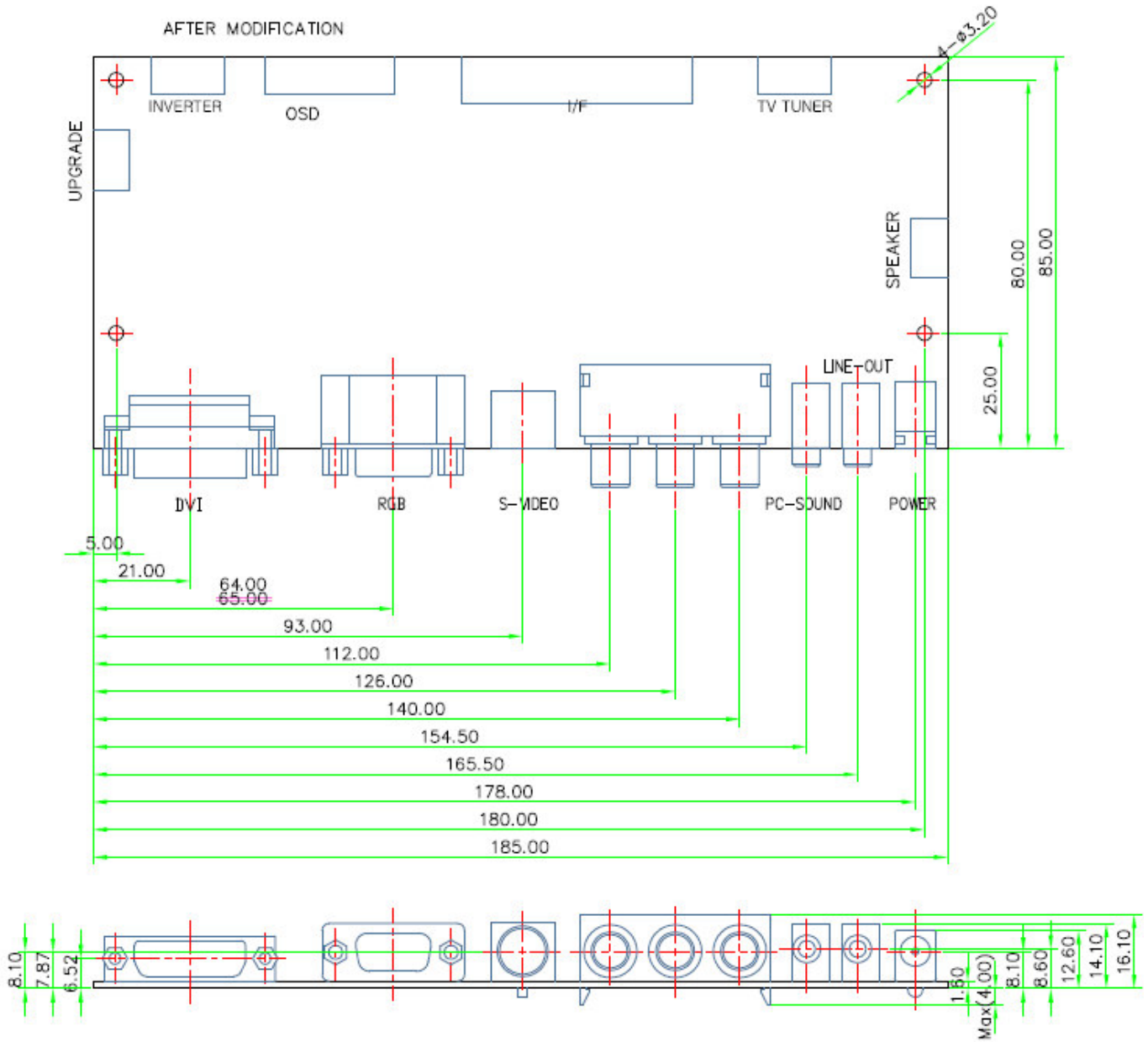
4. Block Diagram



Lily-TV (Rev. 0.1)

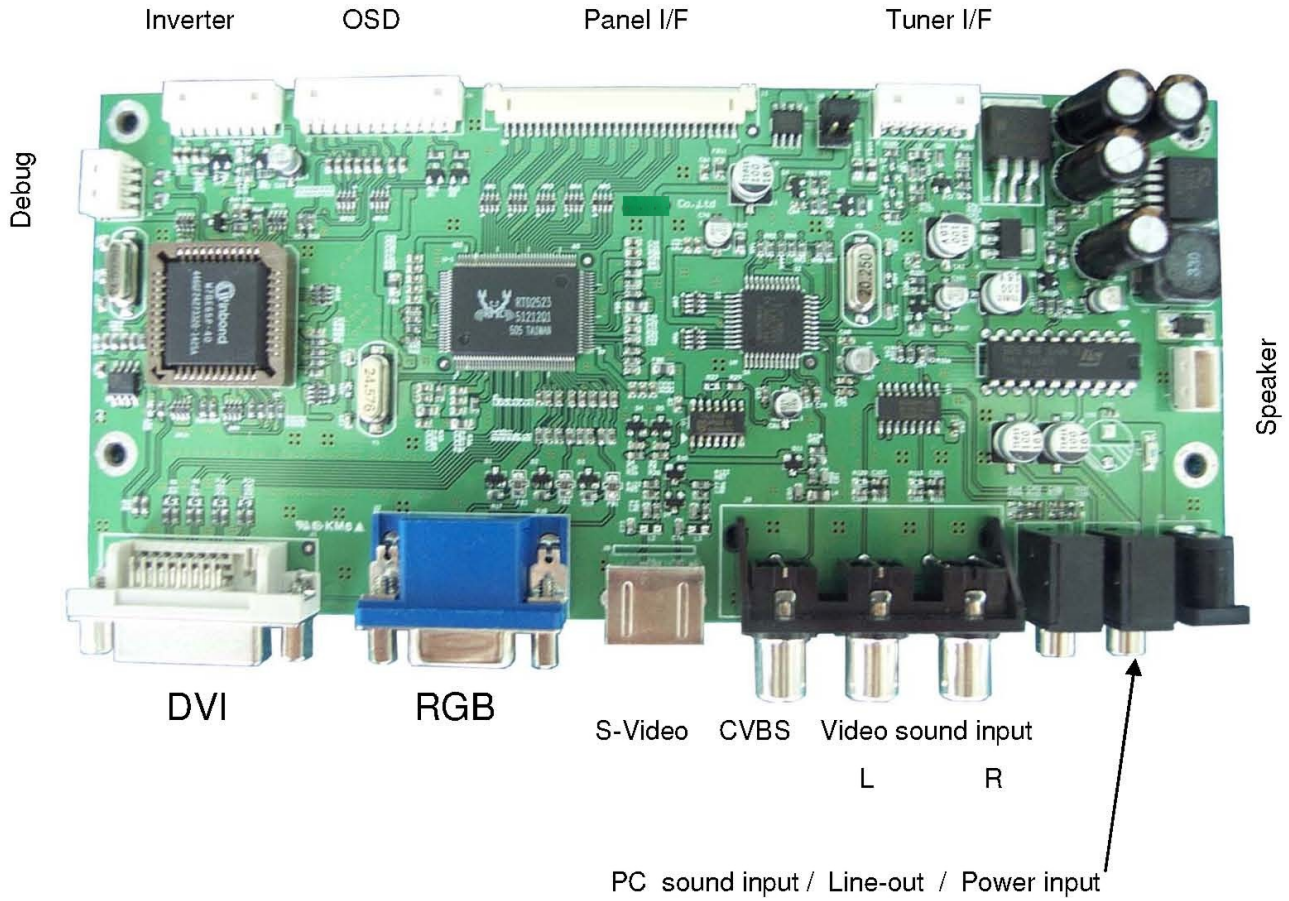
5. Outline Dimensions

5.1 Main Board ● Dimension : 185mm (L) x 85mm (W) x 16.1mm(H)



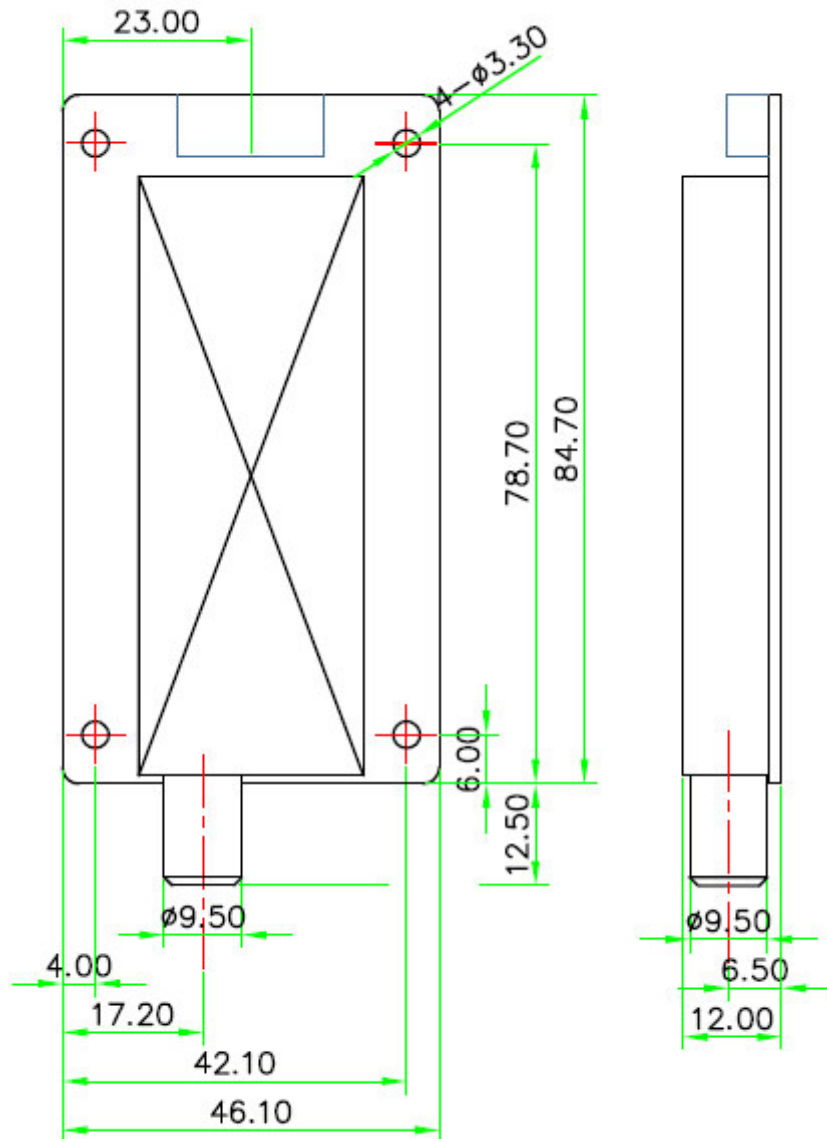
Lily-TV (Rev. 0.1)

- **Picture**



5.2 Tuner board

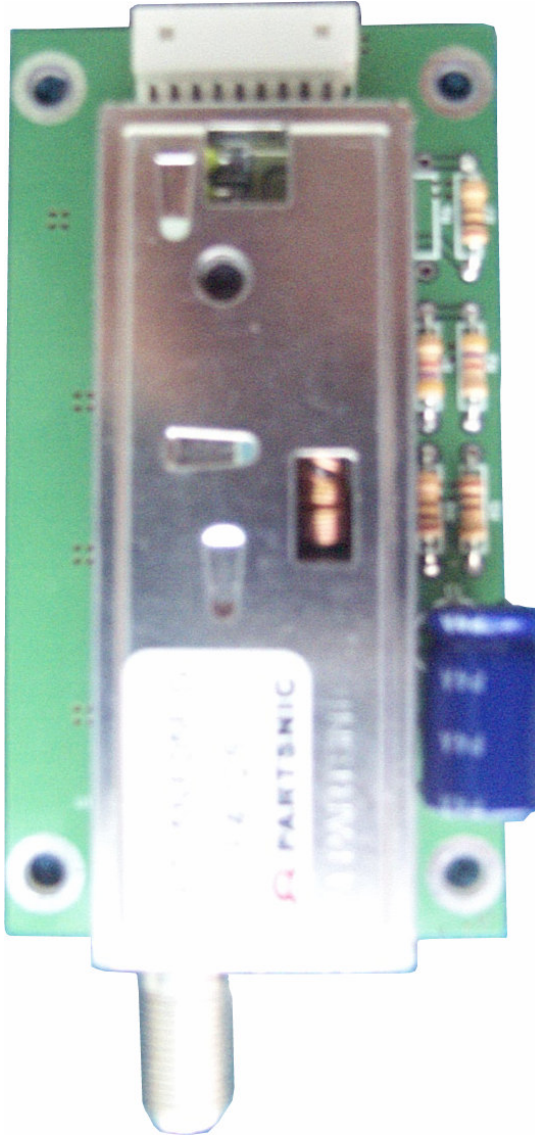
- Dimension : 46.1mm (L) x 84.7mm (W) x 12mm(H)



Lily-TV (Rev. 0.1)

● **Picture**

CVBS/Audio Control



ANT
In

6. Connectors Information

6.1 Input Connectors

- Power Input Connector

Connector : DC12V Jack (J4)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1,2	GND	Ground	3	Vin	+12V DC

- Analog RGB Input Connector
Connector : Mini D-Sub 15pin(J2)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	RED	Analog Red	9	NC	+5Vdc
2	GREEN	Analog Green	10	SGND	Sync GND
3	BLUE	Analog Blue	11	NC	No Connection
4	GND	No Connection	12	SDA	DDC Serial Data
5	GND	Digital GND	13	HSYNC	Horizontal Sync
6	RGND	Red Return	14	VSYNC	Vertical Sync.
7	GGND	Green Return	15	SCL	DDC Data Clock
8	BGND	Blue Return			

Lily-TV (Rev. 0.1)

● DVI-D Input Connector

Connector : DVI-D (J1)

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2/4 Shield	11	T.M.D.S. Data1/3 Shield	19	T.M.D.S. Data0/5 Shield
4	T.M.D.S. Data4-	12	T.M.D.S. Data3-	20	T.M.D.S. Data5-
5	T.M.D.S. Data4+	13	T.M.D.S. Data3+	21	T.M.D.S. Data5+
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground	23	T.M.D.S. Clock+
			(Return for +5V, H-Sync, and V-Sync)		
8	Analog Vertical Sync	16	Hot Plug Detect	24	T.M.D.S. Clock-

● S-VIDEO input Connector

Connector : Din 4Pin (J8)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	GND1	GND1	4	S-VIDEO	CHROMA
2	GND2	GND2	5	GND3	GND3
3	S-VIDEO	LUMINANCE			

Lily-TV (Rev. 0.1)

- Composite-VIDEO Connector

Video input Connector : RCA Jack x3 (J9)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	CVBS	Video Signal	2	GND	GND
3	L-sound	Left sound	4	GND	GND
5	R-sound	Right sound	6	GND	GND

- Sound Connector

Input Connector : STERO Jack (J12)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	GND	GND	4	NC	NO CONNECTION
2	NC	NO CONNECTION	5	AUDIO	External Audio-R
3	AUDIO	External Audio-L			

Output Connector : STERO Jack (J11)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	GND	GND	4	NC	NO CONNECTION
2	NC	NO CONNECTION	5	AUDIO	Audio out_R
3	AUDIO	Audio out_L			

Speaker Connector : Molex 53014-0410 (J13) **(Alternative of J11)**

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	AUDIO	Audio out_R+	3	GND	GND
2	GND	GND	4	AUDIO	Audio out_L+

Lily-TV (Rev. 0.1)

● OSD, LED Interface Connector :

Connector : Molex 53015-1210 (J6)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	LED 1	LED 1	7	KEY2	Increase
2	LED 0	LED 0	8	KEY3	Decrease
3	Vcc	Vcc 5V	9	KEY4	Exit (Hot Key : Auto Config)
4	RCVR	Remote Control	10	KEY5	Menu
5	GND	GND	11	KEY6	Source Select
6	KEY1	Power	12	KEY7	Up (Not Use)

● Tuner Interface Connector :

Connector : Molex 53015-0710 (J10)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	AUD TV	TV AUDIO	5	SDA	SDA
2	GND	GND	6	VCC	VCC
3	VIDTV	TV VIDEO	7	VCC	VCC
4	SCL	SCL			

● Debug Connector :

Connector : Molex 53015-0410 (J5)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	GND	GND	3	TX	RXD
2	RX	TXD	4	VCC	5V

Lily-TV (Rev. 0.1)

6.2 Output Connectors

- LVDS Output Connector : Connector : Yeonho 12507WR-30 (J3)

Pin No.	LVDS		Pin No.	LVDS	
1	VCC		16	Tx1-(ODD)	
2	VCC		17	Tx0+(ODD)	
3	VCC		18	Tx0-(ODD)	
4	VCC		19	GND	
5	GND		20	Tx3+(EVEN)	
6	N/C		21	Tx3-(EVEN)	
7	GND		22	TxCLK+(EVEN)	
8	Tx3+(ODD)		23	TxCLK-(EVEN)	
9	Tx3-(ODD)		24	Tx2+(EVEN)	
10	TxCLK+(ODD)		25	Tx2-(EVEN)	
11	TxCLK-(ODD)		26	GND	
12	Tx2+(ODD)		27	Tx1+(EVEN)	
13	Tx2-(ODD)		28	Tx1-(EVEN)	
14	GND		29	Tx0+(EVEN)	
15	Tx1+(ODD)		30	Tx0-(EVEN)	

- Backlight Power Connector :

Connector : Yeonho 12505WR-12 (J8)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	GND	Ground	7	BRIGHT	Brightness Adjustment
2	VCC	+12V DC	8	N/C	No Connect
3	N/C	+5V DC	9	VCC	+12V DC
4	N/C	No Connect	10	VCC	+12V DC
5	N/C	No Connect	11	GND	Ground
6	ON/OFF	Back-light On/Off	12	GND	Ground
13	N/C	No Connect			

7. Reference Data

Video Input Timing:

Supported vertical refresh rates for each mode are as follow:

640 x 350	70Hz
640 x 400	70Hz
720 x 350	70Hz
720 x 400	70Hz
640 x 480	60~75Hz
800 x 600	60~75Hz
1024 x 768	60~75Hz
1152 x 864	60~75Hz
1280 x 960	60Hz
1280 x 1024	60~75Hz

Sync. : H/V Separated TTL

● Electrical Parameters

Reference SMLM05xxx at 25°C

Symbol	Description	Min	Typ	Max	Unit
V _{DD}	+12V DC Power Supply	10.8	12.0	13.2	V
V _{i(RGB)}	Video Input Signal (w.r.t. GND)	0.5	0.7	1.0	V _{PP}
f _S	Video Sample Rate			80	MHz
f _{HS}	Horizontal Sync Frequency	30		80	KHz
f _{vs}	Vertical Sync Frequency	56		75	Hz
F _{SIH}	Sync Input High Level	2.5			V
V _{SIL}	Sync Input Low Level			0.8	VDC
I _{DD2}	Supply Current +12V (with LCD & Inverter)			3.5	A

Note : Power consumption measuring condition is 2 pixel checkboard pattern @ XGA 75Hz and maximum brightness with Samsung LTM170E4 & inverter at t_A 25°C.

8. Input Formats

8.1 Video Mode Support

The SMLM05xxx series can support any video mode within the following input constraints:

- Signal sample frequency with the input $\leq 80\text{MHz}$
- Horizontal sync frequency between 30KHz and 80KHz

The modes are detected with the presentation of the input and previous alignments for setup are automatically recalled. The emulation of a true multi-sync monitor is implemented.

The factory preset supported modes are as follows:

Mode	Resolution	Refresh Rate	H-Freq.	Pixel Freq.	Remarks
VGA	640 x 350	70Hz	31.47KHz	25.175MHz	VESA Standard
VGA	720 x 400	59.940HZ	31.469KHZ	25.175MHZ	IBM VGA 3H
VGA	640 x 480	60Hz	31.5KHz	25.175MHz	Industry Standard
VGA	640 x 480	72Hz	37.9KHz	31.500MHz	VESA Standard
VGA	640 x 480	75HZ	37.5KHZ	31.500MHZ	VESA Standard
SVGA	800 x 600	60Hz	37.9KHz	40.000MHz	VESA Guidelines
SVGA	800 x 600	72Hz	48.1KHz	50.000MHz	VESA Standard
SVGA	800 x 600	75HZ	46.9KHZ	49.500MHZ	VESA Standard
XGA	1024 x 768	60Hz	48.4KHz	65.000MHz	VESA Guidelines
XGA	1024 x 768	70Hz	56.5KHz	75.000MHz	VESA Standard
XGA	1024 x 768	75HZ	60KHZ	78.750MHZ	VESA Standard
SXGA	1280 x 1024	60Hz	64KHZ	108.000 MHZ	VESA Standard
SXGA	1280 x 1024	75HZ	80KHZ	135.000 MHZ	VESA Standard

Notes:

1. All mentioned modes are non-interlaced. The maximum and minimum frame rates are decided by the TFT-LCD.
2. Factory preset modes are overwritten by additional user alignments for automatic recall. The factory preset modes can be recalled at any time.

8.2 LCD Panel & I/O Support

The SMLM05xxx is an advanced and general application for a TFT-LCD Monitor/TV Control Board. Therefore, the application of this board is not limited to panel manufacturers or models.

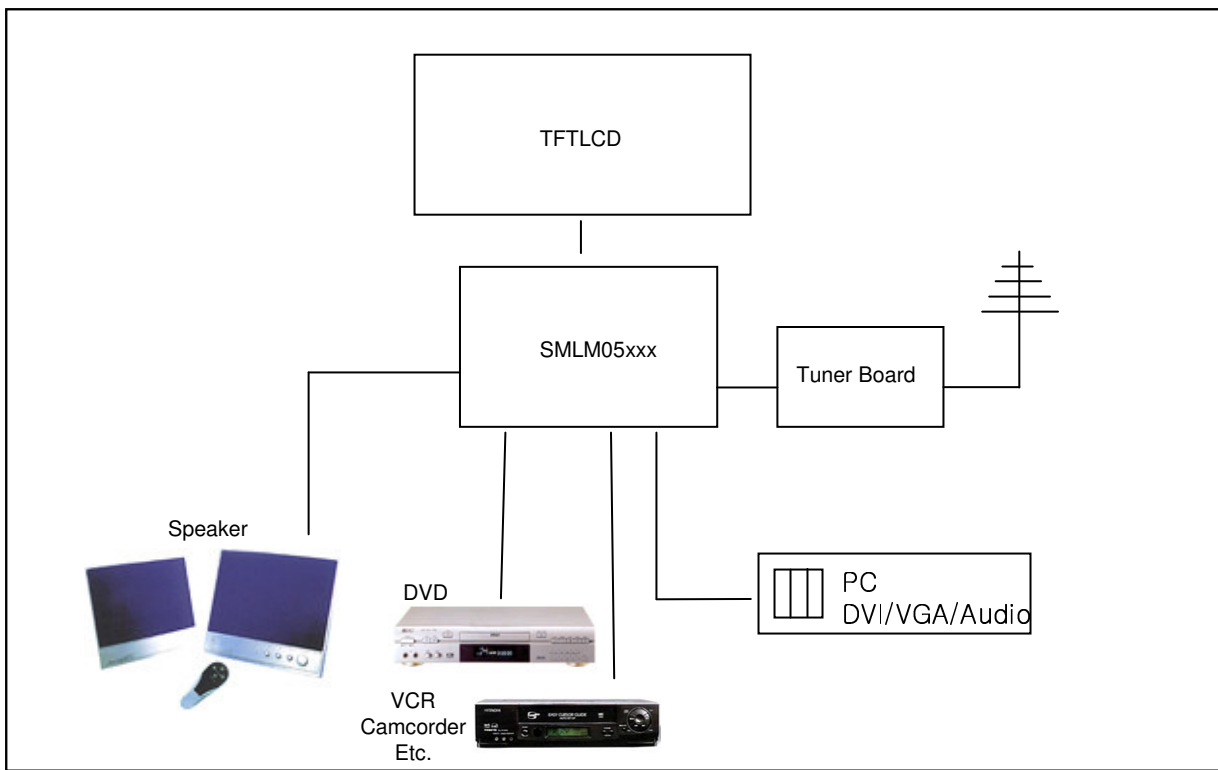
Furthermore, this board operates with any LVDS/TTL interface panel ranging from VGA to SXGA that can be driven with three or less timing signals. The usual timing signals to a panel are H-sync, V-sync and Data Enable.

For backlight intensity control mechanism, a built-in DC dimming drive signal is installed into the CCFL inverter control port. The CCFL inverter DC power, generally 12V DC, is attached to the same port. Users can design their own key pad board by using OSD & power tact switch as well as a two-color LED. On/off power switch and OSD input signal are detected and executed by the micro controller.

8.3 DVI (Digital Video Interface)

The SMLM05xxx has one DVI input port which complies with VESA DVI standard. Therefore, users can make direct interface to the DVI output of Digital VGA cards. The signal source can be switched through OSD.

High-end Multi-media Display System



Lily-TV (Rev. 0.1)

8.4 TV Channel Frequency Table

1) Air

CH No.	CH Name	Picture Carrier Frequency
1	1	49.25
2	2	55.25
3	3	61.25
4	4	67.25
5	5	77.25
6	6	83.25
7	7	175.25
8	8	181.25
9	9	187.25
10	10	193.25
11	11	199.25
12	12	205.25
13	13	211.25
14	14	471.25
15	15	477.25
16	16	483.25
17	17	489.25
18	18	495.25
19	19	501.25
20	20	507.25
21	21	513.25
22	22	519.25
23	23	525.25
24	24	531.25
25	25	537.25
26	26	543.25
27	27	549.25
28	28	555.25
29	29	561.25
30	30	567.25

CH No.	CH Name	Picture Carrier Frequency
31	31	573.25
32	32	579.25
33	33	585.25
34	34	591.25
35	35	597.25
36	36	603.25
37	37	609.25
38	38	615.25
39	39	621.25
40	40	627.25
41	41	633.25
42	42	639.25
43	43	645.25
44	44	651.25
45	45	657.25
46	46	663.25
47	47	669.25
48	48	675.25
49	49	681.25
50	50	687.25
51	51	693.25
52	52	699.25
53	53	705.25
54	54	711.25
55	55	717.25
56	56	723.25
57	57	729.25
58	58	735.25
59	59	741.25
60	60	747.25

CH No.	CH Name	Picture Carrier Frequency
61	61	753.25
62	62	759.25
63	63	765.25
64	64	771.25
65	65	777.25
66	66	783.25
67	67	789.25
68	68	795.25
69	69	801.25

Lily-TV (Rev. 0.1)

2) Cable

CH No.	CH Name	Picture Carrier Frequency	CH No.	CH Name	Picture Carrier Frequency	CH No.	CH Name	Picture Carrier Frequency
1	5A	73.25	31	R	265.25	61	W+25	445.25
2	2	55.25	32	S	271.25	62	W+26	451.25
3	3	61.25	33	T	277.25	63	W+27	457.25
4	4	67.25	34	U	283.25	64	W+28	463.25
5	5	77.25	35	V	289.25	65	W+29	469.25
6	6	83.25	36	W	295.25	66	W+30	475.25
7	7	175.25	37	W+1	301.25	67	W+31	481.25
8	8	181.25	38	W+2	307.25	68	W+32	487.25
9	9	187.25	39	W+3	313.25	69	W+33	493.25
10	10	193.25	40	W+4	319.25	70	W+34	499.25
11	11	199.25	41	W+5	325.25	71	W+35	505.25
12	12	205.25	42	W+6	331.25	72	W+36	511.25
13	13	211.25	43	W+7	337.25	73	W+37	517.25
14	A	121.25	44	W+8	343.25	74	W+38	523.25
15	B	127.25	45	W+9	349.25	75	W+39	529.25
16	C	133.25	46	W+10	355.25	76	W+40	535.25
17	D	139.25	47	W+11	361.25	77	W+41	541.25
18	E	145.25	48	W+12	367.25	78	W+42	547.25
19	F	151.25	49	W+13	373.25	79	W+43	553.25
20	G	157.25	50	W+14	379.25	80	W+44	559.25
21	H	163.25	51	W+15	385.25	81	W+45	565.25
22	I	169.25	52	W+16	391.25	82	W+46	571.25
23	J	217.25	53	W+17	397.25	83	W+47	577.25
24	K	223.25	54	W+18	403.25	84	W+48	583.25
25	L	229.25	55	W+19	409.25	85	W+49	589.25
26	M	235.25	56	W+20	415.25	86	W+50	595.25
27	N	241.25	57	W+21	421.25	87	W+51	601.25
28	O	247.25	58	W+22	427.25	88	W+52	607.25
29	P	253.25	59	W+23	433.25	89	W+53	613.25
30	Q	265.25	60	W+24	439.25	90	W+54	619.25

Lily-TV (Rev. 0.1)

2) Cable (Next)

CH No.	CH Name	Picture Carrier Frequency
91	W+55	625.25
92	W+56	631.25
93	W+57	637.25
94	W+58	643.25
95	A-5	91.25
96	A-4	97.25
97	A-3	103.25
98	A-2	109.25
99	A-1	115.25
100	W+59	649.25
101	W+60	655.25
102	W+61	664.25
103	W+62	667.25
104	W+63	673.25
105	W+64	679.25
106	W+65	703.25
107	W+66	691.25
108	W+67	697.25
109	W+68	703.25
110	W+69	709.25
111	W+70	715.25
112	W+71	721.25
113	W+72	727.25
114	W+73	733.25
115	W+74	739.25
116	W+75	745.25
117	W+76	751.25
118	W+77	757.25
119	W+78	763.25
120	W+79	769.25

CH No.	CH Name	Picture Carrier Frequency
121	W+80	775.25
122	W+81	781.25
123	W+82	787.25
124	W+83	793.25
125	W+84	799.25

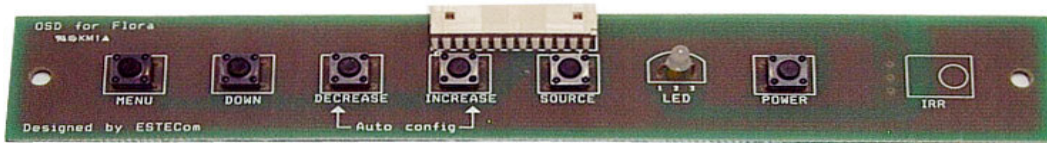
9. OSD (On Screen Display)

9.1 OSD Board Dimension

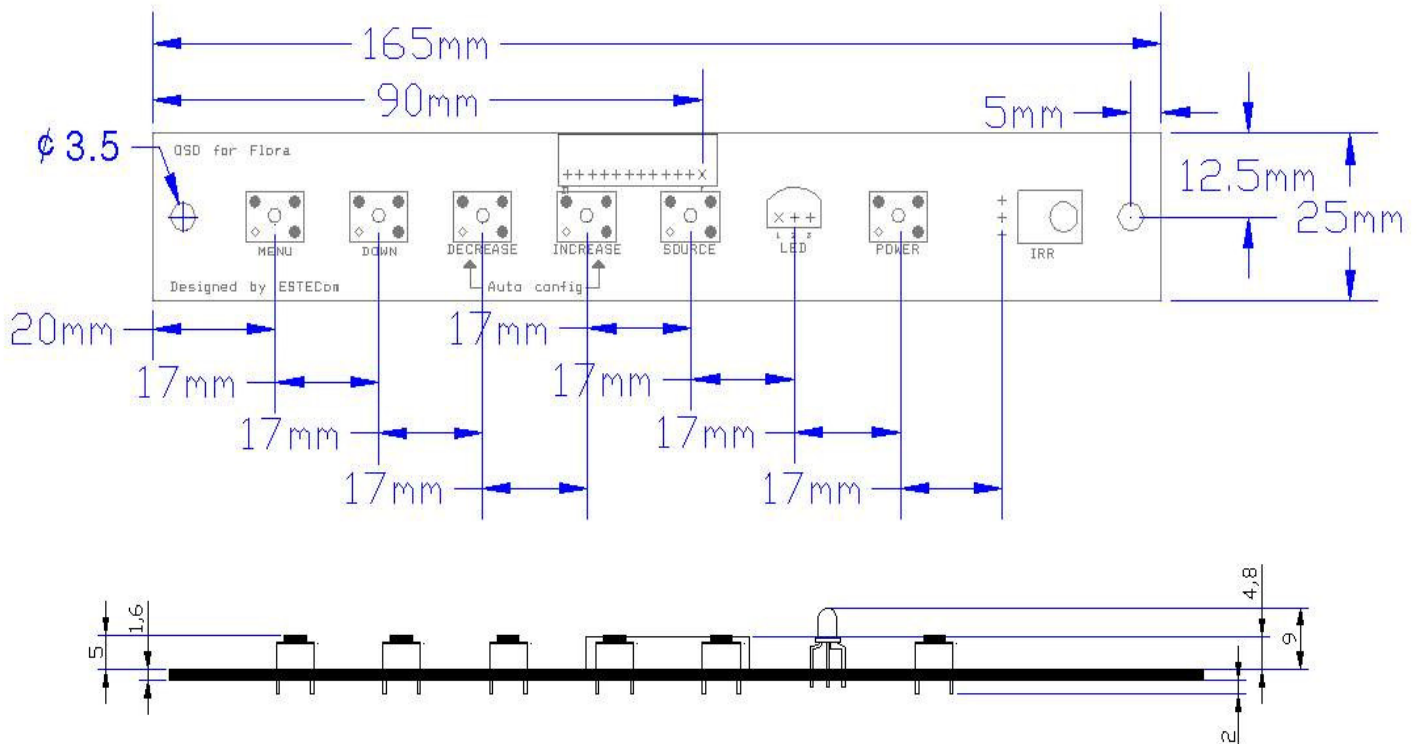
9.1.1 OSD Board with 6 Buttons

Part number : FOSD-T01

(Samsung Smart Panel Accessory Kit – Option on page 25~30)



Menu / Down / Decrease / Increase / Source Select / Power
(Auto Config)



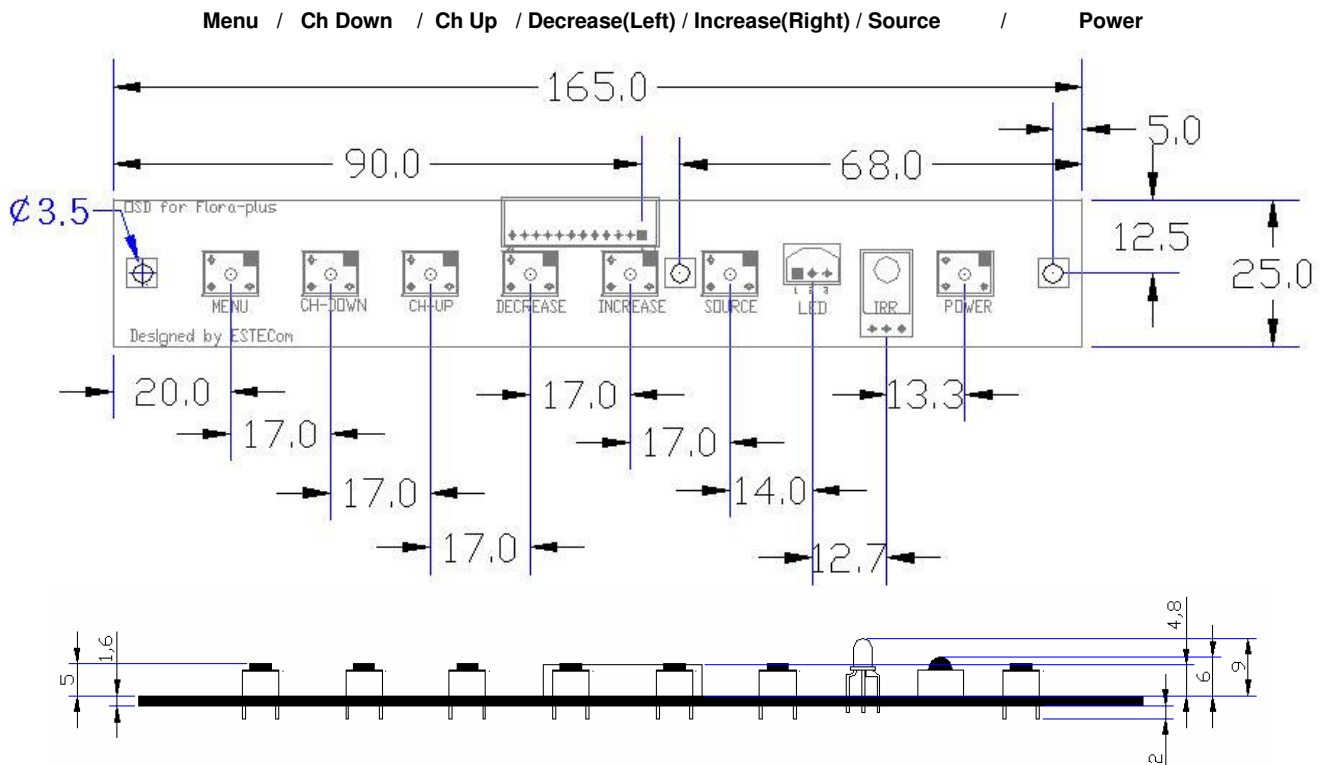
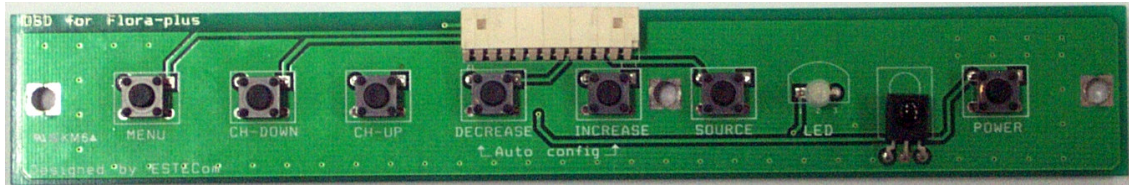
OSD Key Description

- MENU : Menu Key
- DOWN (EXIT): Exit Key (HOT Key : Auto Config.)
- DECREASE : Decrease Key, Left Key (HOT Key : Audio Decrease)
- INCREASE : Increase Key, Right Key (HOT Key : Audio Increase)
- SOURCE : Source Select HOT Key : Source Select [Analog – DVI] [– Composite – S-Video {option}])

Lily-TV (Rev. 0.1)

9.1.2 OSD Board with 7 Buttons & IR Sensor

Part number : FOSD-T02

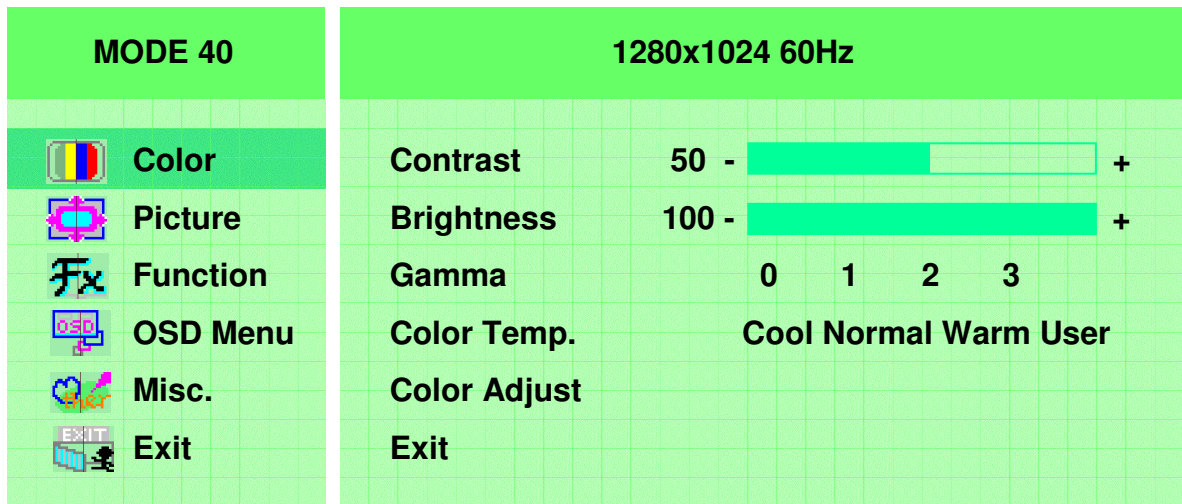


OSD Key Description

- POWER : Power ON/OFF Key
- MENU : Menu Key
- DOWN : Down Key(HOT Key : Channel Decrease)
- UP : UP Key(HOT Key : Channel increase)
- DECREASE : Decrease Key, Left Key (HOT Key : Audio Decrease)
- INCREASE : Increase Key, Right Key (HOT Key : Audio Increase)
- SOURCE : Source Select HOT Key : Source Select [Analog RGB – DVI – Composite Video – S-Video – TV]







Lily-TV (Rev. 0.1)

9.2 OSD menu enables user to manipulate the image and settings.









Main Menu	Sub Menu	Operation
Color Available Mode - Analog RGB - DVI - Video - S-Video - TV	Contrast	- Contrast is ratio of luminance between black and white. - Adjust distinction. (Analog RGB Only)
	Brightness	- Adjust Brightness of the screen. (used to PWM control)
	Gamma	- RGB gain option.
	Color Temp	- Choice of Warm, Normal, Cool and user's option is chosen, RGB can be adjusted. - User : Able to adjust the color by controlling Red, Green, and Blue. - Warm : Red-tinged screen. - Normal : Green-tinged screen. - Cool : Blue-tinged screen.
	Color Adjust	- If the menu of Color Temp is set in user mode, the color can be controlled freely.
	Exit	- Go back to main menu.

Lily-TV (Rev. 0.1)

MODE 40	1280x1024 60Hz
 Color	H.Position 50 - <input style="width: 150px;" type="text"/> +
 Picture	V.Position 100 - <input style="width: 150px;" type="text"/> +
 Function	Phase 0 - <input style="width: 150px;" type="text"/> +
 OSD Menu	Clock 50 - <input style="width: 150px;" type="text"/> +
 Misc.	Sharpness 1 2 3 4 5
 Exit	Exit







Main Menu	Sub Menu	Operation
Picture <u>Available</u> <u>Mode</u> - Analog RGB	H.Position	- Move screen horizontally.
	V.Position	- Move screen vertically.
	Phase	- Adjust Phase of screen. Used when noise or overlapped lines are shown on the screen. Caution : Do not make manual adjustment when the picture is in its normal Shape or you will create problem on it.
	Clock	- Adjust horizontal size of the screen by increasing or decreasing the number of picture elements. Caution : Perform this adjustment just in the case of having horizontallyUnmatched picture after operation the " Auto Adjustment "
	Sharpness	- Adjust sharpness of pictures in 5 levels.
	Exit	- Go back to main menu.

Lily-TV (Rev. 0.1)

MODE 40	1280x1024 60Hz		
 Color	Auto Adjust	YES	NO
 Picture	Auto Color	YES	NO
 Function	Exit		
 OSD Menu			
 Misc.			
 Exit			







Main Menu	Sub Menu	Operation
Function <u>Available Mode</u> - Analog RGB	Auto Adjust	-Auto configuration of geometry. - Automatically adjusted items are : 1) Clock 2) Phase 3) Position is centered
	Auto Color	Color automatically set from strange input signal.
	Exit	- Go back to main menu.

Lily-TV (Rev. 0.1)

MODE 40	1280x1024 60Hz		
 Color	Language		
 Picture	OSD H.Pos	92 - <input type="text" value="92"/>	+
 Function	OSD V.Pos	92 - <input type="text" value="92"/>	+
 OSD Menu	OSD Timer	20 - <input type="text" value="20"/>	+
 Misc.	Translucent	1 - <input type="text" value="1"/>	+
 Exit	Exit		


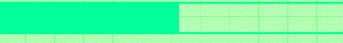

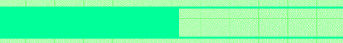

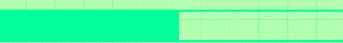

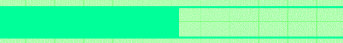

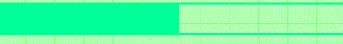

Main Menu	Sub Menu	Operation
OSD Menu <u>Available Mode</u> - Analog RGB - DVI Video - S-Video - TV	Language	- Select the language of OSD menu. English / Français / Deutsch / Japanese
	OSD H.Pos	- Adjust horizontal position of OSD menu by value.
	OSD V.Pos	- Adjust vertical position of OSD menu by value.
	OSD Timer	- The range of controlling the duration time of the OSD menu (OSD turn-off time).
	Translucent	- Choose between “translucent” and “opaque” for the basic color Of OSD menu.
	Exit	- Go back to main menu

Lily-TV (Rev. 0.1)

MODE 40	1280x1024 60Hz
 Color	Signal Source
 Picture	Mode Select 640x400 720x400
 Function	Reset YES NO
 OSD Menu	Volume 30 - <input style="width: 150px; height: 15px;" type="text"/> +
 Misc.	Exit
 Exit	







Main Menu	Sub Menu	Operation
Misc.	Signal Source	- Select input signal source. Analog RGB / DVI / Composite Video / S-Video / TV
<u>Available Mode</u>	Mode Select	- Select DOS 640(Graphic) or DOS 720(Text) input mode.
- Analog RGB	Reset	- Initial set-up, preset by the factory before forwarding.
- DVI Video	Volume	- Adjust volume.
- S-Video - TV	Exit	- Go back to main menu.

Lily-TV (Rev. 0.1)

MODE 61	N T S C 60Hz			
 Color	Contrast	50 -		+
 Video	Bright	50 -		+
 Function	Hue	0 +		+
 OSD Menu	Saturation	50 -		+
 Misc.	Sharpness	57 -		+
 Exit	Exit			

Main Menu	Sub Menu	Operation
Video <u>Available Mode</u> - Video - S-Video - TV	Contrast	- Contrast is ratio of luminance between black and white. - Adjust distinction.
	Bright	- Adjust white offset.
	Hue	- Adjust between green tone and purple tone.
	Saturation	- Adjust color intensity.
	Sharpness	- Adjust sharpness of pictures in 7 levels.
	Exit	- Go back to main menu.

Lily-TV (Rev. 0.1)

MODE 61	N T S C 60Hz		
 Color	Channel Add	YES	NO
 Video	Channel Del	YES	NO
 TV	Channel Tune	- 537 . 50MHz +	
 OSD Menu	Channel Scan	YES	NO
 Misc.	TV System	AIR	CATV
 Exit	Exit		

Main Menu	Sub Menu	Operation
TV <u>Available</u> <u>Mode</u> - TV	Channel Add	- Save current channel.
	Channel Del	- Delete current channel.
	Channel Tune	- Fine tune current channel.
	Channel Scan	- Select YES to start auto scan. <u>Note</u> : To stop auto scan, press Menu key.
	TV System	- Select channel system. AIR / CATV
	Exit	- Go back to main menu.

10. Operation Message

AUTO TRACKING (Analog RGB mode)

- Execute Auto Function

AUTO TRACKING

Self Diagnostics (Analog RGB mode)

- Input Signal is not present after power on with power switch. This message is disappeared after 10 sec or activity of input signal

NO SIGNAL

Self Diagnostics(Video/S-Video Mode)

- Input Signal is not present after power on with power switch. This message is disappeared activity of input signal

**COMPOSITE VIDEO /
S-VIDEO**

Out of Range

- Input Signal is over the supporting range

NO SUPPORT

Channel Scan

- Execute Channel auto scan

Auto	55.25 MHz
CH	2/69
EXIT	MENU KEY

11. Customization

Based on a customer's request, customizes the SMLM0500x board configuration, harness connection & length, Remote Controller, DDC and OSD menu. Generally, it requires MOQ (minimum order quantity) and a 1 month lead time after finalizing customization of the specification. Details should be agreed by both parties.