

SPECIFICATION

SFM102WX2-ADV

Customer Approved

Customer _____

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Sunful's Confirmation

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GENERAL DESCRIPTION

◆ APPLY TO MULTIPLE LCD MODULE: PM102WX1,PM102WX2

◆ VGA AND VIDEO AND S-VIDEO INPUT SYSTEM

f_H : 48.1 KHz f_H :37.9Khz f_H :35.1Khz f_H :31.5Khz

f_V : 85Hz f_V : 75Hz f_V : 72Hz f_V : 60 Hz f_V : 56 Hz

DOT CLK: 50Mhz DOT CLK: 40Mhz DOT CLK: 36Mhz DOT CLK: 25.175Mhz

◆ POWER SOURCE DC 12V

◆ POWER CONSUMPTION 700 mA , 8.4W Max.

◆ OPERATING TEMPERATURE 0°C ~ 60°C

◆ STORAGE TEMPERATURE -20°C ~ 80°C

◆ WEIGHT 280 ±3g

FEATURES

◆ VGA OR SVGA INPUTS

◆ 6-BIT RGB OUTPUT

◆ CONVENIENTLY ADJUST IMAGE BY OPERATING KEYBOARD

◆ SUPPORT INTERGRATED PLL TECHNOLOGY

◆ LOW POWER COMSUMPTION

APPLICATION SCOPE

- SECURITY
- PC MONITOR
- INDUSTRY CONTROL MONITOR
- POS

DRIVER BOARD INTRODUCTION

1. Brief Diagram (Refer Appendix Page For Details)

2. Port Definition

- a) CN12A -----Connection port of Driver Board with LCD connector (50FPC);
- b) CN12B-----Connection port of Driver Board with LCD connector (30*2FPC);
- c) CN3 -----Keyboard operation port;
- d) CN4A -----Power input port (DC12V) (2PIN)
- e) CN4B-----Power input port (DC12V)
- f) CN5 -----Output port for inverter.
- g) CN6 -----Analog VGA input port (12 pin);
- h) CN7-----Analog VGA input port (15 pin);
- i) CN8 -----Video & S-Video input;
- j) CN9 -----VIDEO;
- k) CN10-----S-VIDEO;
- l) CN14A-----Connection port of AUDIO IN;
- m) CN14B-----Connection port of AUDIO IN;
- n) CN14C-----Connection port of AUDIO IN;
- o) CN15A -----Connection port of SPEAKER OUT;
- p) CN15B-----Connection port of EARPHONE OUT;

*** All ports define square pad as the first position in this book.**

3. PIN ASSIGNMENT

CN12B: TTL Connector (Face down: ELCO 6210-50pin or compatibility)

1	DIO1	14	G1	27	POL	40	U/D
2	GND	15	G2	28	DIO2	41	CKV
3	VDD1	16	G3	29	GND	42	STVU
4	CLK	17	G4	30	V3	43	STVD
5	R/L	18	G5	31	V5	44	VGG
6	R0	19	B0	32	V7	45	GND
7	R1	20	B1	33	V8	46	VCC
8	R2	21	B2	34	V10	47	VEE
9	R3	22	B3	35	V12	48	VLED
10	R4	23	B4	36	GND	49	GLED2
11	R5	24	B5	37	VDD2	50	GLED1
12	GND	25	LD	38	VCOM		
13	G0	26	REV	39	OE		



CN12A: TTL Connector (Face down: ELCO 6210-30pin or compatibility)

CN12A-1				CN12A-2			
1	DIO1	16	G2	1	GND	16	V14
2	GND	17	G3	2	V1	17	GND
3	VDD1	18	G4	3	V2	18	VDD2
4	CLK	19	G5	4	V3	19	VCOM
5	GND	20	GND	5	V4	20	XON
6	R/L	21	B0	6	V5	21	OE
7	R0	22	B1	7	V6	22	U/D
8	R1	23	B2	8	V7	23	CKV
9	R2	24	B3	9	GND	24	STVU
10	R3	25	B4	10	V8	25	STVD
11	R4	26	B5	11	V9	26	VGG
12	R5	27	LD	12	V10	27	GND
13	GND	28	REV	13	V11	28	VCC
14	G0	29	POL	14	V12	29	GND
15	G1	30	DIO2	15	V13	30	VEE

CN3: Key Connector (JST B10B-XH-A or compatibility)

Pin NO	DEF.	Pin NO	DEF.	Pin NO	DEF.
1	GND	5	MENU	9	REMOTE
2	POWER	6	LEFT-	10	VCC (+5v)
3	RED	7	RIGHT+		
4	GREEN	8	ENTER		

CN5: Inverter Connector (JST B3B-XH-A or compatibility)

Pin NO	DEF	Pin NO	DEF	Pin NO	DEF
1	+12V	2	GND	3	On/Off

CN15A: SPEAKER OUT Connector (JST B4B-XH-A or compatibility)

Pin NO	DEF.	Pin NO	DEF.	Pin NO	DEF.
1	GND	3	GND		
2	R-OUT	4	L-OUT		

CN15B: EARPHONE OUT Connector

Pin NO	DEF.	Pin NO	DEF.	Pin NO	DEF.
1	GND	3	GND		
2	R-OUT	4	L-OUT		

CN6: 12PIN VGA Connector (JST B12B-PH-K-S or compatibility)

Pin NO	DEF	Pin NO	DEF	Pin NO	DEF	Pin NO	DEF
1	GND	4	GREEN	7	GND	10	CON
2	RED	5	GND	8	HD	11	SDA
3	GND	6	BLUE	9	VD	12	SCL

CN7: 15PIN VGA Connector

Pin NO	DEF.	Pin NO	DEF.	Pin NO	DEF.
1	RED	6	GND	11	NC
2	GREEN	7	GND	12	SDA
3	BLUE	8	GND	13	HD
4	NC	9	NC	14	VD
5	GND	10	CON	15	SCL

CN8: VIDEO AND S-VIDEO (JST B5B-PH-K-S or compatibility)

Pin	DEF.	Pin	DEF.	Pin	DEF.	Pin	DEF.	Pin	DEF.
1	GND	2	VIDEO	3	GND	4	Y-IN	5	C-IN

CN3: Power Connector (JST B2B-XH-A or compatibility)

Pin NO	DEF	Pin NO	DEF
1	+12V	2	GND

CN14A: AUDIO IN Connector

Pin NO	DEF.	Pin NO	DEF.	Pin NO	DEF.
1	L-IN	2	GND		

CN14B: AUDIO IN Connector

Pin NO	DEF.	Pin NO	DEF.	Pin NO	DEF.
1	R-OUT	2	GND		

CN14C: AUDIO IN Connector (JST B4B-XH-A or compatibility)

Pin NO	DEF.	Pin NO	DEF.	Pin NO	DEF.
1	GND	3	GND		
2	L-IN	4	R-IN		

INVERTER BOARD INTRODUCTION
1. Brief Diagram (Refer Appendix Page For Details)
2. Port Definition

- CNH1**—— High Voltage Output terminal Connected to Back Lamp.
- CNH2**—— High Voltage Output terminal Connected to Back Lamp.
- CN5** —— Inverter Input port connected to Inverter Output Port of Driver.

***CNH1、CNH2 Terminals Supply AC High Voltage For Back Lamp Which Brightens The LCD Module.**

3. Pin Assignment
CNH1: Output connector adapter to JST BHR-02VS-1

Pin NO	DEF	Pin NO	DEF
1	Lv	2	Hv 550v

CN5: Input Connector (JST S4B-XH-A or compatibility)

Pin NO	DEF	Pin NO	DEF	Pin NO	DEF	Pin NO	DEF
1	DC +12V	2	GND	3	ON/OFF	4	Vbrt

KEY BOARD INTRODUCTION
1. Brief Diagram (Refer Appendix Page For Details)
2. Connector Definition

CN3—This connector connected to key operation port of driver board.

3. OSD Function Description

If you want to get the best effect, an adjustment of keyboard is required.

When first press the “menu” key, OSD enter the menu operation status (the fist item is picture), called nonadjustable status; press enter key, enter the adjustment status and you can adjust the value of the highlight submenu item by press “left” or “right” key; press the “enter” key again you can exit the adjustment status and save the value at the same time. In the nonadjustable status, press the “menu” key could switch menu items. The different menu displayed when input different signal source. The menus item shown as following:

Analog VGA input status:

MENU ITEM	SUBMENU	DESCRIPTION
Picture	Brightness	Adjust the display brightness
	Contrast	Adjust the picture contrast
	Focus	Adjust the picture scan mode
	Clock	Adjust the clock frequency
	H-Position	Adjust the picture horizontal position
	V-Position	Adjust the picture vertical position
Color Setting	Native	Setting the color temperature
	C9300	
	C6500	
	User	
Function	Input Signal	Select the input signal source: PC-VGA; AV1; AV2; TV.
	Language	Select the OSD language: Chinese; English.
	OSD H-Position	Adjust the OSD display horizontal position
	OSD V-Position	Adjust the OSD vertical position
	Reset	Reset the factory defaults

Analog Video or S-video signal input:

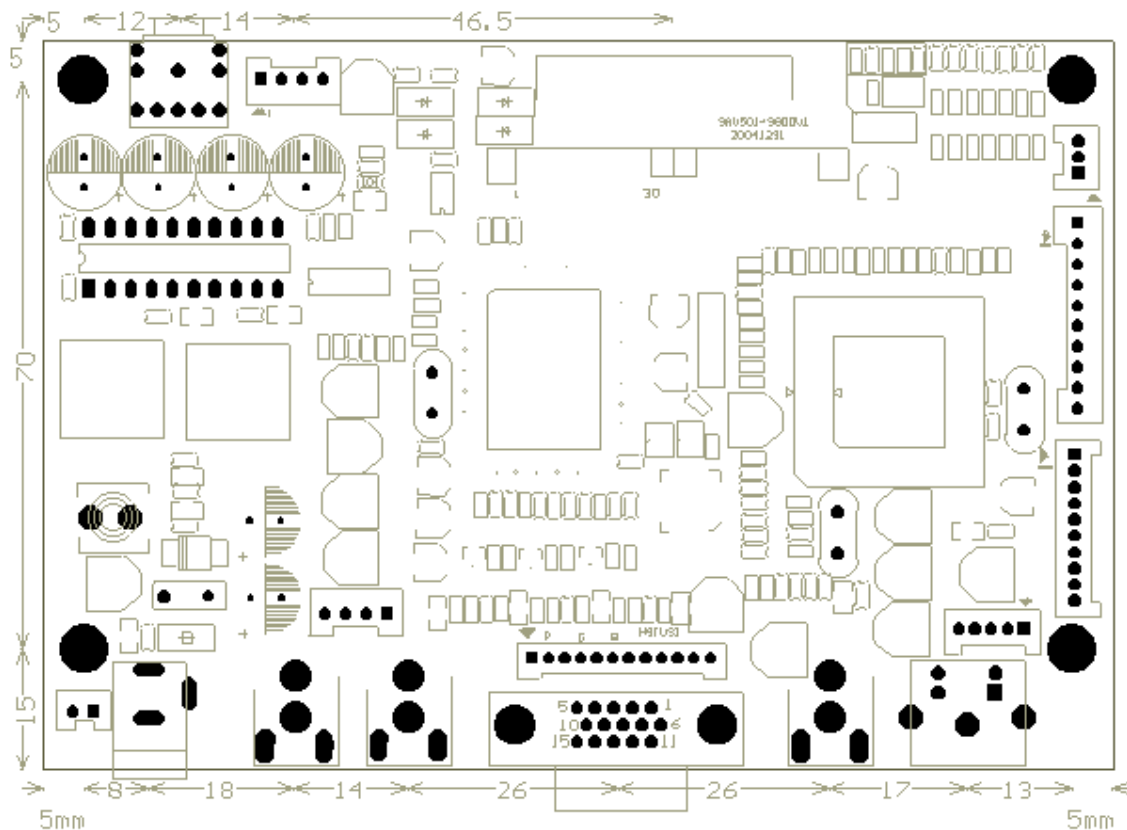
MENU ITEM	SUBMENU	DESCRIPTION
Picture	Brightness	Adjust the display brightness
	Contrast	Adjust the picture contrast
	Color	Adjust the picture color
	Tint	Adjust the picture tint
	Sharpness	Adjust the picture sharpness
Sound	Volume	Adjust the Audio output AMP
System setting	Input Signal	Select the input signal source: PC-VGA; AV1; AV2; TV.
	Language	Select the OSD language: Chinese; English.
	Blue screen	ON: Non-signal display blue screen. OFF: Non-signal display white screen
	Rotation	Adjust the OSD display position: Mirror and flip
	Wide screen	Switch between 16:9 and 4:3

TV signal input:

MENU ITEM	SUBMENU	DESCRIPTION
TV Setting	Channel	Adjust the TV channel
	Color system	Adjust the color
	Sound	Select the audio frequency band
	Auto search	Auto search TV

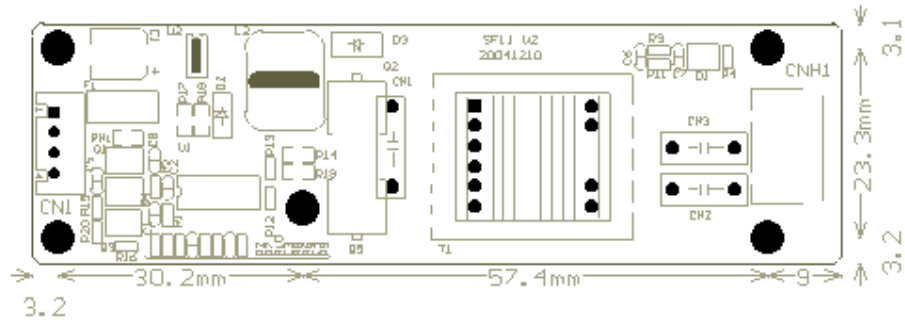
Notes:

- Do as foregoing description if want to get favorite image. But the best state is set before shipment
- Occasional flare of Image may occur when starting the LCD Monitor, it is normal phenomena because of auto adjustment internal.
- Particularly there are snow-flare and bad pictures because that timing does not match with the sequence, please do an auto or handle adjustment.

MECHANICAL DRAWING
Driver Board


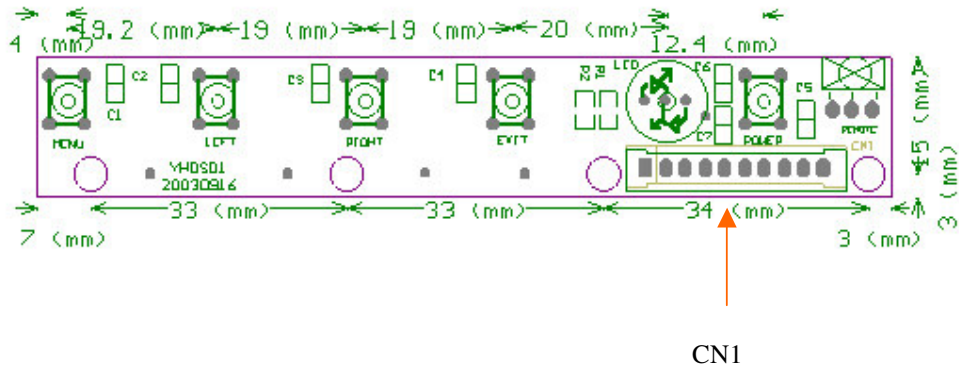
Outline: 132.0*90.0*17.1mm
 Top Layer High (Max): 13.0 mm
 Bottom Layer High (Max): 2.5 mm
 Board Thickness: 1.6mm
 Screws: D3.0mm*4

Inverter Board



Outline: 99.8*29.6*11.1 mm
 Top layer High (Max): 9.5 mm
 Board Thickness: 1.6 mm
 Screw: D3.0mm

Key Board



Outline: 110.0*18.0*7.1mm
 Top layer High (Max): 5.5 mm
 Board Thickness: 1.6 mm
 Screw: D3.0mm