VS DISPLAY TECHNOLOGY (HK) LTD

SPECIFICATION FOR LCD MODULE

Model No.: VS-D717-N4

ORGANIZED BY	CHECKED BY	APPROVED BY
RAJU PAU	JOHNSON	CRISTAL RAMY

COMPANY CONTACT:

TEL: 86-755-82508603 **FAX: 86-755-27839264**

518100 11B No.1, JINHUI BUILDING, BAOAN DISTRICT, SHENZHEN CITY, GUANGDONG PROVINCE, CHINA.

URL: WWW.VSLCD.COM

Catalogue

1. Application

The 717 general driver board is mainly designed for TTL and LVDS panel. It is used for driving PVI PD035VX2 LCD Panels. It belongs to 717 Series drive board. The input signal can be AV signal, and VGA signal.It is stable performance, which can be widely used in Digital Photo Frame, the advertising machine, the doorbell visualization, visual telephone, monitoring equipment and other devices.

2、Principal characteristic

Input signal：	VGA,CVBS1,CVBS2
Support mode：	640*480
Control key：	Key board，remote control(optional)
OSD menu：	POWER, MENU, SOURCE, LEFT, RIGHT
power：	5 V（+/-0.2V）（DC）
size：	84mm(L)*64mm(W)*10mm(H)
Plug-and-play function：	support

3、The picture of AD driver

4、Connection definition and Connection electricity request（Appendix 3）

5、Structure size （Appendix 2）

PCB size、Specification of Control board

(1) PCB Thickness + highest components altitude=10 mm

(2) PCB length= 84.00 mm

(3) PCB width = 64.00 mm

Screw aperture specification: Diameter 3.5 mm, The hole position size and the coordinates see the structure drawing

6、Transportation, storage and operation requirements

1. Don't be subjected to heavy pressure and bend to fold to transform
2. Anti-electrostatic
3. Relative humidity:≤ 80%
4. Saving temperature:-20 ～s+70 ℃
5. Use temperature:-10 ～s+60 ℃

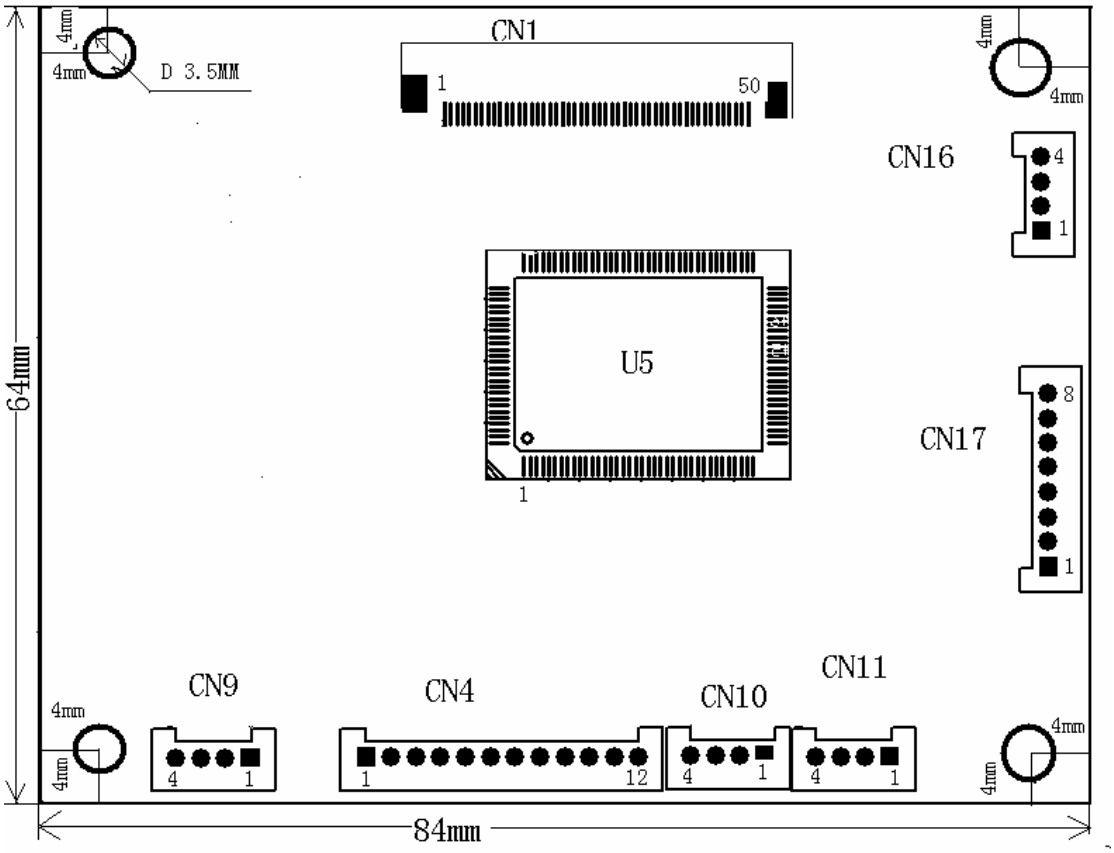
7、 Appendix

Appendix 1: Main Electronic Components

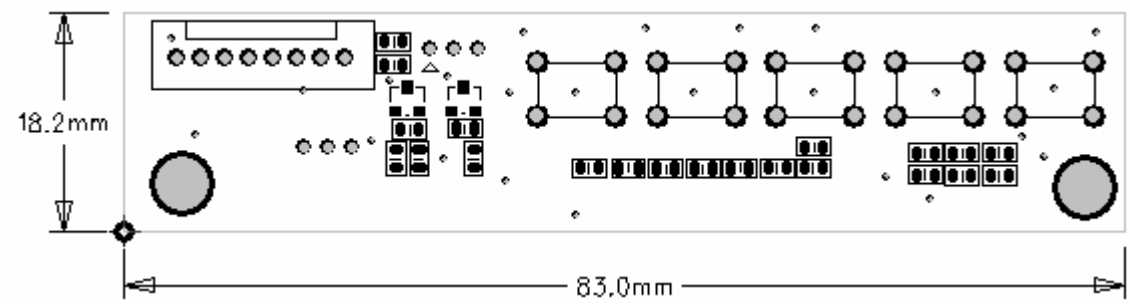
No	Name	Specifications	Manufactures	Amount	Notes
1	Main IC	MST717C	Mstar	1pcs	U5
		AT24C16AN		1pcs	U6
		PM25LV010		1pcs	U7
2	Crystal	12.000MHZ		1pcs	Y1

Appendix 2: Structure size

Unit:mm



Structure size of 717 board(1)



Structure size of key board(2)

Appendix 3:Connection definition

CN10(Signal input) 4PIN/2.0

pin	define	description
1	AV1	AV1
2	GND	Ground
3	AV2	AV2 input
4	GND	Ground

CN4(VGA input) 12PIN/2.0

pin	define	description
1	SCL	I2C channels
2	SDA	I2C channels
3	GND	Ground
4	B+	Blue data +
5	B-	Blue data ground
6	G+	Green data +
7	G-	Green data ground
8	R+	Red data+
9	R-	Red data ground
10	HS	Horizontal sync signal
11	VS	Field sync signal
12	GND	Ground

CN17(Key board define) 8PIN/2.0

pin	define	description
1	VCC +5V	Key board power
2	GND	Ground
3	IR INT	Infrared accept
4	LED GREEN	Key board LED
5	LED RED	Key board LED
6	GND	Ground
7	SAR0	Key board AD interface
8	SAR1	Key board AD interface

CN9 （Power）4PIN/2.0

pin	define	description
1	+12V	Power
2	+12V	Power
3	GND	Ground
4	GND	Ground

CON16 （Debug interface）4PIN/2.0

pin	define	description
1	+5V	Debug Power
2	GND	Ground
3	TX	Serial port out put
4	RX	Serial port out put

CN1 (panel 50p-0.5)

pin	define	description
1	DIO1	Horizontal Start Pulse Signal Input or Output 1
2	VSS2	Ground
3	VDD1	Power Supply
4	CLK	Horizontal Shift Clock
5	R/L	Left/Right Selection
6	R0	Red Data (LSB)
7	R1	Red Data
8	R2	Red Data
9	R3	Red Data
10	R4	Red Data
11	R5	Red Data (MSB)
12	VSS2	Ground

13	G0	Green Data (LSB)
14	G1	Green Data
15	G2	Green Data
16	G3	Green Data
17	G4	Green Data
18	G5	Green Data (MSB)
19	B0	Blue Data (LSB)
20	B1	Blue Data
21	B2	Blue Data
22	B3	Blue Data
23	B4	Blue Data
24	B5	Blue Data (MSB)
25	LD	Load output signal
26	REV	Data invert control
27	POL	Polarity selection
28	DIO2	Horizontal Start Pulse Signal Input or Output
29	VSS2	Ground
30	V3	Gamma Voltage 3
31	V5	Gamma Voltage 5
32	V7	Gamma Voltage 7
33	V8	Gamma Voltage 8
34	V10	Gamma Voltage 10
35	V12	Gamma Voltage 12
36	VSS2	Ground
37	VDD2	Voltage for analog circuit
38	VCOM	Common Voltage
39	OE	Output Enable
40	U/D	Up/Down Selection
41	CKV	Vertical Shift Clock
42	STVU	Vertical Shift Pulse Signal Input or Output
43	STVD	Vertical Shift Pulse Signal Input or Output
44	VGG	Gate On Voltage
45	VSS1	Ground
46	VCC	Voltage for logic circuit
47	VEE	Gate Off Voltage
48	VLED	Supply voltage for LED backlight
49	GLED2	Ground for LED backlight
50	GLED1	Ground for LED backlight

Appendix 4：OSD function

1.keys description

The are POWER,MENU,SOURCE/UP,LEFT,RIGHT five buttons

1.1 Definition

POWER:press " POWER" to control it on/off
SOURCE/UP:it's source while there is no OSD menu,it's up while it's have.
MENU :PICTURE,OPTION,SYSTEM,CLOCK ,EXIT
LEFT:volmue-/date-
RIGHT:volmue+/date+

1.2 MENU's definition in the AV/S-VIDEO state

The meun have PICTURE,AUDIO,FUNCTION,SYSTEM AND their functions are as follows:
PICTURE
BRIGHTNESS:adjust the photo brightness
CONTRAST:adjust the photo contrast
COLOR:adjust the
ENGLISH:select the language.
OPTION
NORMAL:image flip up/down
SYSTEM
AV:AV/VGA
CLOCK
SLEEP:Sleep and turn over
TIME:clock
OFF-TIME:the time of turn off
ON-TIME:the time of trun on

1.3 The menu's Definition with the VGA state

The menu have PICTURE,AUDIO,FUNCTION,SYSTEM and their functions are as follows:
PICTURE
BRIGHTNESS:adjust the photo's brightness
CONTRAST:adjust the photo's contrast
ENGLISH:select the language.
OPTION
NORMAL:flip image up/down
HPOSITION:hposition adjust the image
VPOSITION:vposition adjust the image
AUTO:adjust image auto
SYSTEM
VGA:AV/VAG
CLOCK
SLEEP:Sleep and turn over

TIME:clock
OFF-TIME:the time of turn off
ON-TIME:the time of trun on

1.4 Description

Press”MENU”press“SOURCE/UP”to select while it will be show red .Press”LEFT/RIGHT”can adjust the information

In the PICTURE window ,select BRIGHTNESS CONTRAST COLOR press ”LEFT/RIGHT” to adjust.

In the OPTION Window, press”LEFT/RIGHT” to adjust NORMAL /UP/HPOSITION/VPOSITION/AUTO

In the SYSTEM,It’s valid in theAV/S-VIDEO statewindowpress”LEFT/RIGHT”to select AV/VGA.

2. The description of the remote

The remote have POWER,MENU,LEFT,RIGHT,UPDOWN five buttonsits operation are the same as the buttons.