

# Product Specification

Product Type : LCD AD Board

Model : V59.AV

<http://www.sanming.com.tw/>

## 1. Brief

The V59.AV LCD AD board is designed for multi-purpose vehicle LCD solution. It can directly drive the LCD panel with LVDS interface and supports 1920x1080 and below resolutions.

The V59.AV has four input ports: one VGA port, HDMI port and dual AV ports, in addition, there is a USB port for multimedia purpose.

## 2. Features

- (1) One VGA port.
- (2) One HDMI port. (HDMI 1.3/1.4, HDCP 1.2)
- (3) Dual AV port.
- (4) Parking assistant control signal.
- (5) Wide input voltage between 10V ~ 24V.
- (6) Standard LVDS signal output, it supports single 6/8, dual 6/8 and can drive the panel with 3.3V, 5V and 12V.

## 3. Description of Interfaces and Connectors

Symbol	Description	Note
CON10	Input Voltage	
CN1	HDMI port	
CON5	LED indicator, keypad and IR	
CON8	Inverter	
CONE2	Jump for panel with 12V	Refer to the SPEC of LCD panel
CONE1	Jump for panel with 3.3V or 5V	
CON6	LVDS	
J4	Audio out	
J10	Dual AV input and parking assistant control	
J7	AV1 input	

J6	AV2 input	
CON2	USB	
P3	Audio jack	
CON1	VGA input	

#### 4. VGA Mode

640X480	Support
800X600	Support
1024X768	Support
1024X600	Support
1280X1024	Support
1366X768	Support
1440X900	Support
.....	.....
1920X1080	Support

#### 5. AV

NTSC	Support
PAL	Support

#### 6. Environment

Working Temperature : 0~+50 °C

Storage Temperature : 0~+50 °C

#### 7. Connectors

HDMI Input: CN1			
Pin	Symbol	Description	Note
1-19		HDMI Standard	Standard Cable

VGA Input: CON1			
Pin	Symbol	Description	Note
1-15	D-15	Standard	Standard VGA Cable

Audio Input: P3			
Pin	Symbol	Description	Note
1-5		Standard Audio Jack	

<b>USB : CON2</b>			
Pin	Symbol	Description	Note
1-8		Standard	

<b>AV and Parking Assistant: J10</b>			
Pin	Symbol	Description	Note
1	GND	GND	
2	AV2	AV 2	
3	GND	GND	
4	AV1	AV 1	
5	AOC	Parking assistant control.	When +12V, the channel will force change to AV 2

<b>AV 1 Input: J7</b>			
Pin	Symbol	Description	Note
1-4		Standard	Standard

<b>AV 2 Input: J6</b>			
Pin	Symbol	Description	Note
1-4		Standard	Standard

<b>Audio Out: J4</b>			
Pin	Symbol	Description	Note
1	LOUT -	Left Output -	
2	LOUT +	Left Output +	
3	ROUT +	Right Output +	
4	ROUT -	Right Output -	

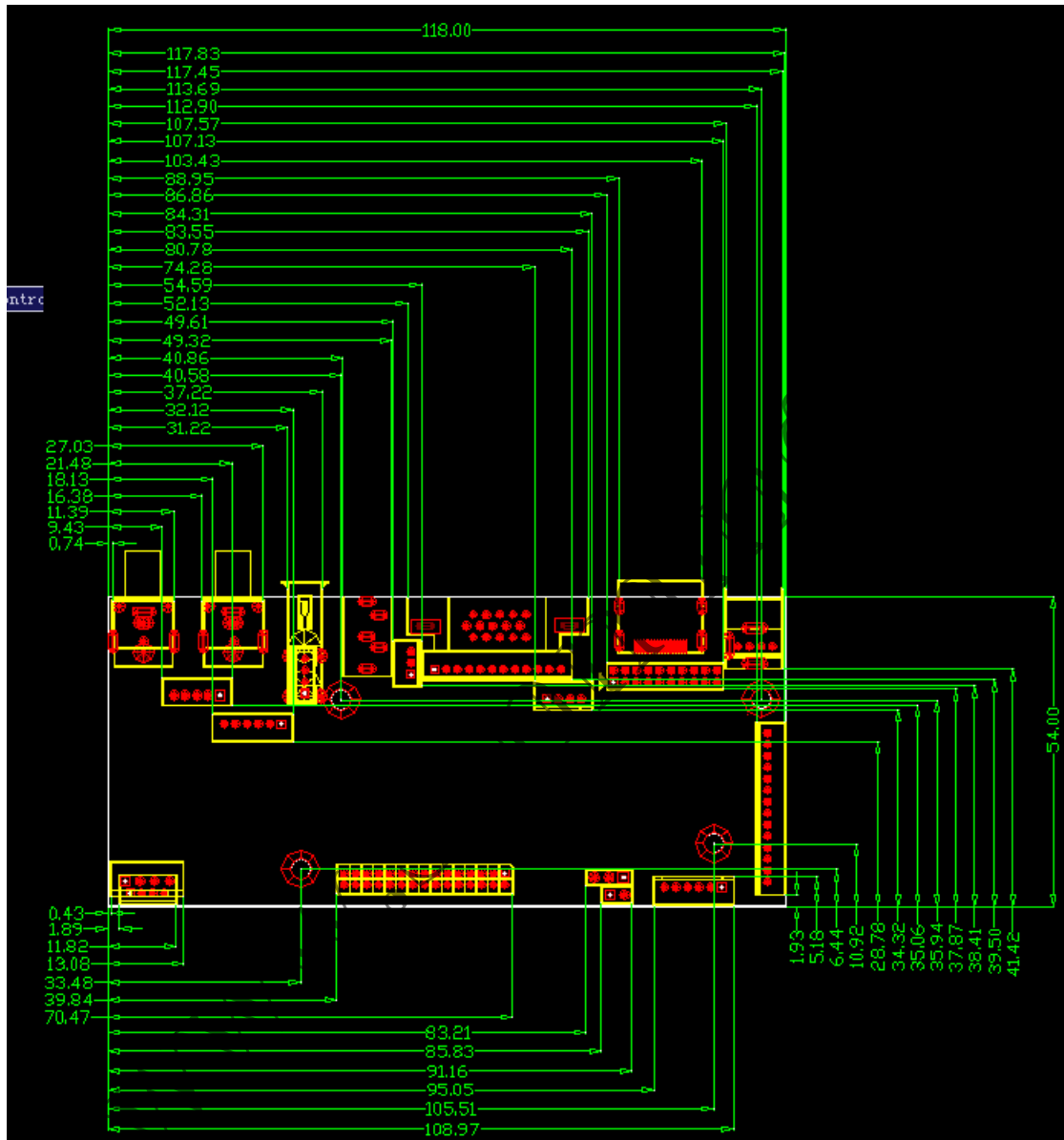
<b>LVDS Interface: CON6</b>			
Pin	Symbol	Description	Note
1	VCC	Panel Power	
2	VCC	Panel Power	
3	NC	No connect	
4	NC	No connect	
5	GND	GND	
6	GND	GND	
7	RO0-	LVDS0- Signal ODD	
8	RO0+	LVDS0+ Signal ODD	
9	RO1-	LVDS1- Signal ODD	
10	RO1+	LVDS1+ Signal ODD	
11	RO2-	LVDS2- Signal ODD	
12	RO2+	LVDS2+ Signal ODD	
13	GND	GND	

14	GND	GND	
15	OCK-	LVDS Clock- signal ODD	
16	OCK+	LVDS Clock+ signal ODD	
17	RO3-	LVDS3- Signal ODD	
18	RO3+	LVDS3+ Signal ODD	
19	RE0-	LVDS0- Signal EVEN	
20	RE0+	LVDS0+Signal EVEN	
21	RE1-	LVDS1- Signal EVEN	
22	RE1+	LVDS1+Signal EVEN	
23	RE2-	LVDS2- Signal EVEN	
24	RE2+	LVDS2+Signal EVEN	
25	GND	GND	
26	GND	GND	
27	ECK-	LVDS Clock- signal EVEN	
28	ECK+	LVDS Clock+ signal EVEN	
29	RE3-	LVDS3- Signal EVEN	
30	RE3+	LVDS3+Signal EVEN	

<b>LED indicator, keypad and IR: CON5</b>			
Pin	Symbol	Description	Note
1	+5V	Remoter +5V	
2	IR	IR	
3	GND	GND	
4	K0	Power On/Off	
5	LEDR	LED Indicator Red	
6	LEDG	LED Indicator Green	
7	GND	GND	
8	K1	Vol +	
9	K2	Vol -	
10	K3	Source	
11	K4	Menu	
12	K5	Up	
13	K6	Down	
14	K7	None	

## 8. Outline

Unit: mm, Tolerance:  $\pm 0.3\text{mm}$



## 9. Picture

