

ALM00G6

HD Display Board

Product Model : ALM00G6
V 2.0

Content

Page	Item
1	Content
1	Revision History
2	General Description
2	Features
3	Function Layout

Revision History

Vision	Date	Page	Description	Author
1.0	20120601	All	First Issued	Robinson

1. General Description

ALM00G6 is a control board of Display, it supports LCD panels with LVDS interface. Supported HDMI, PC-RGB , with 1920x1200 resolution and option for Ypbpr @ 1080p, CVBS and SVideo with external Audio input. USB interface could be FW upgrade and supported Photo, Video, MP3 media playback.

2. Features

OSD Language	English, Simplified/Traditional Chinese, Korean, Japan		
Panel	Interface	Single / Dual LVDS	
	Resolution	Up to 1920 x 1200 @ 60 Hz	
USB	FW Upgrade Photo, Video, MP3 Media Playback		
Video Input	HDMI	1080p @ 60 Hz	
	PC-RGB	Up to 1920 x 1200 @ 60 Hz	
	YPbPr	External Board	1080p @ 60 Hz
	SVideo	External Board	
	CVBS	External Board	NTSC, PAL, SECAM 480i, 576i, 50hz, 60hz
Audio Output	L/R	10W x 2	
	External Board	Head Set Audio Output	
Audio Input	External Board	Analog L/R	
	Ear Jack		
Power	Input	DC 12V (+ / - 0.6V)	
	To Panel	3.3V, 5V, 12V	
Key Function	Source, Menu, VOL + / -, Power		

Configuration and General Precautions

Relative humidity: ≤ 80%.

Storage temperature: -10~+60 °C.

Operation temperature: 0~+40 °C.

Protect the control board from static, it may cause damage to the IC.

Do not drop any metal on the control board when it is working.

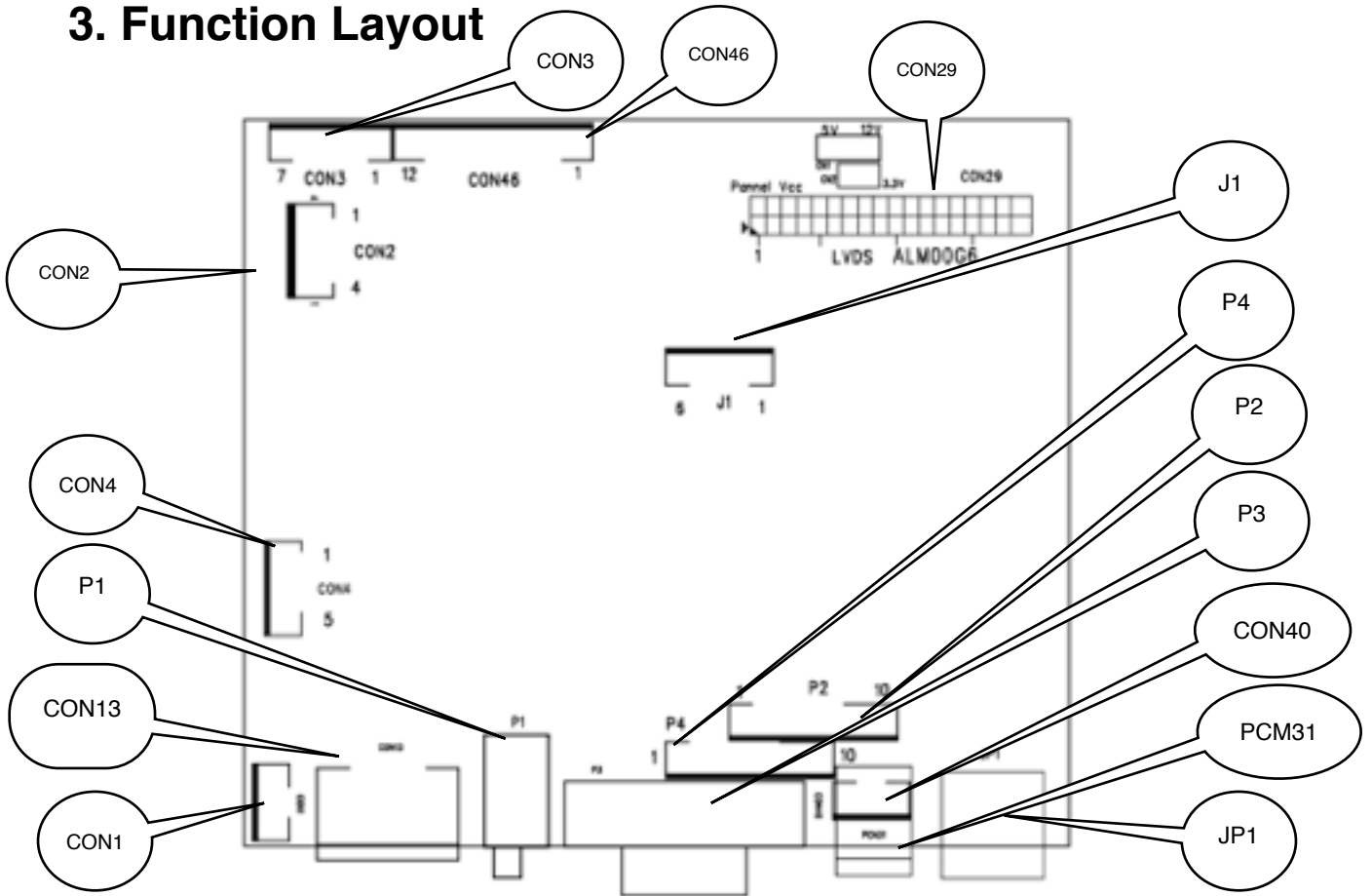
Do not push or pull the connector when the control board is working.

Do not disassemble the module.

If the surface or the control board is dirty, clean it with soft dry cloth.

Can't be pressed and distorted.

3. Function Layout



No.	Description	No.	Description
CON3	Inverter	CON13	HDMI
CON46	IR and Key Pad	P3	VGA
CON29	LVDS	CON40	12 DC Input
CON2	Audio Output L/R	JP1	USB
CON1	RS232	J1	Head Set Audio Output
P4	YPbPr, Audio Input	PCM31	12 DC Input
P2	CVBS, SVideo, Audio Input	CON4	I2C and GPIO

Connector Define

CON3:(7PIN/2.0MM) INVERTER CONNECTOR		
Pin Define	SYMBOL	DESCRIPTION
1	12V	12V POWER SUPPLY
2	GND	GROUND
3	BL_ADJ	BACKLIGHT BRIGHTNESS ADJUSTMENT
4	FSB-ON	NC
5	BL_ON/OFF	BACKLIGHT ON/OFF CONTROL
6	5V	5V POWER SUPPLY
7	GND	GROUND
CON46:(12PIN/2.0MM) IR & KEY CONNECTOR		
Pin Define	SYMBOL	DESCRIPTION
1	LED_R	RED_STBANDBY INSTRUCTIONS
2	LED_G	GREEN_ BOOT INSTRUCTIONS
3	POWER	POWER KEY
4	K1	OK KEY
5	K2	MENU KEY
6	K4	LEFT KEY
7	K5	RIGHT KEY
8	GND	GROUND
9	NC	NC
10	GND	GROUND
11	IR_IN	IR RECEIVER
12	5VU	5V STBANDBY
P4:(10PIN/2.0MM) YPBPR+AUDIO SIGNAL CONNECTOR (Option)		
Pin Define	SYMBOL	DESCRIPTION
1	PB	YPBPR_PB INPUT
2	GND	GROUND
3	Y	YPBPR_Y INPUT
4	GND	GROUND
5	PR	YPBPR_PR INPUT
6	GND	GROUND
7	L	YPBPR LEFT AUDIO CHANNEL INPUT
8	GND	GROUND
9	R	YPBPR RIGHT AUDIO CHANNEL INPUT
10	GND	GROUND
P2:(10PIN/2.0MM) CVBS+YC+AUDIO CONNECTOR (option)		
Pin Define	SYMBOL	DESCRIPTION
1	CVBS	CVBS SIGNAL INPUT
2	GND	GROUND

3	Y	YC_Y SIGNAL INPUT
4	GND	GROUND
5	C	YC_C SIGNAL INPUT
6	GND	GROUND
7	L	LEFT AUDIO CHANNEL INPUT
8	GND	GROUND
9	R	RIGHT AUDIO CHANNEL INPUT
10	GND	GROUND

CON4:(5PIN/2.0MM) I2C & GPIO (option)

Pin Define	SYMBOL	DESCRIPTION
1	GND	GROUND
2	SDA	I2C_SDA
3	SCL	I2C_SCL
4	GPIO1	I/O
5	GPIO2	I/O

J1:(6PIN/2.0MM) EAR AUDIO CONNECTOR (option)

Pin Define	SYMBOL	DESCRIPTION
1	GND	GROUND
2	5V	5V POWER SUPPLY
3	MUTE	MUTE OUTPUT
4	R	RIGHT AUDIO CHANNEL OUTPUT
5	L	LEFT AUDIO CHANNEL OUTPUT
6	GND	GROUND

CON2:(4PIN/2.54MM) SPEAKER CONNECTOR

Pin Define	SYMBOL	DESCRIPTION
1	ROUT+	AUDIO RIGHT+ CHANNEL OUTPUT
2	ROUT-	AUDIO RIGHT- CHANNEL OUTPUT
3	LOUT-	AUDIO LEFT- CHANNEL OUTPUT
4	LOUT+	AUDIO LEFT+ CHANNEL OUTPUT

CON29:(36PIN/2.0MM) LVDS CONNECTOR

Pin Define	SYMBOL	DESCRIPTION
1	VCC	POWER SUPPLY FOR PANEL
2	VCC	
3	VCC	
4	GND	GROUND
5	GND	
6	GND	
7	RX00-	LVDS CHANNEL1,SIGNAL0-
8	RX00+	LVDS CHANNEL1,SIGNAL0+
9	RX01-	LVDS CHANNEL1,SIGNAL1-

10	RXO1+	LVDS CHANNEL1,SIGNAL1+
11	RXO2-	LVDS CHANNEL1,SIGNAL2-
12	RXO2+	LVDS CHANNEL1,SIGNAL2+
13	GND	GROUND
14	GND	
15	RXOC-	LVDS CHANNEL1,SIGNAL CIOCK-
16	RXOC+	LVDS CHANNEL1,SIGNAL CIOCK+
17	RXO3-	LVDS CHANNEL1,SIGNAL 3-
18	RXO3+	LVDS CHANNEL1,SIGNAL 3+
19	RXE0-	LVDS CHANNEL2,SIGNAL 0-
20	RXE0+	LVDS CHANNEL2,SIGNAL 0+
21	RXE1-	LVDS CHANNEL2,SIGNAL 1-
22	RXE1+	LVDS CHANNEL2,SIGNAL 1+
23	RXE2-	LVDS CHANNEL2,SIGNAL 2-
24	RXE2+	LVDS CHANNEL2,SIGNAL 2+
25	GND	GROUND
26	GND	
27	RXEC-	LVDS CHANNEL2,SIGNAL CLOCK-
28	RXEC+	LVDS CHANNEL2,SIGNAL CLOCK+
29	RXE3-	LVDS CHANNEL2,SIGNAL 3-
30	RXE3+	LVDS CHANNEL2,SIGNAL 3+
31	RXO4-	LVDS CHANNEL1,SIGNAL 4-
32	RXO4+	LVDS CHANNEL1,SIGNAL 4+
33	RXE4-	LVDS CHANNEL2,SIGNAL 4-
34	RXE4+	LVDS CHANNEL2,SIGNAL 4+
35	GND	GROUND
36	GND	GROUND

Mechanical Size

