

Product Specification

LVDS / TTL Panel

TFT-LCD Driver Board

FOR APPROVAL

MODEL NO.: AT718-V1.0

PCB NO.: AT718-V1.0

Customer's Approval

Customer:	
Date:	
By:	

Confirmed By	Prepared By	Manufacture NO	
		Version	1.0
		Date	Jan, 2009

Record of Specification Version

Version	Revise Date	Page	Content	Remark
Ver 1.0	2009/1/16		First Draft	

Features

- Support HD components (YPBPR) input
- VGA (Analog RGB) D-Sub input
- Analog RGB input resolution
 - i. 640x400
 - ii. 720x400
 - iii. VGA 640x480
 - iv. SVGA 800x600
 - v. XGA 1024x768
 - vi. SXGA 1280x1024
 - vii. WSXGA 1440x900
- Optional audio input and amplified output
- Support both LVDS and TTL interface panels with pixels
 - i. 640x480
 - ii. 800x600
 - iii. 1024x768
 - iv. 1280x1024
- Support LVDS interface panels
 - i. 8.4"
 - ii. 10.4"
 - iii. 12.1"
 - iv. 15"
 - v. 17"
 - vi. 19"

Mechanical Specification

Board Dimension

Dimension	Specification	Unit
Length	139.0	mm
Width	80.0	mm
Thickness	15.0	mm

Video Input Signal

Video-Composite signal 1.0 Vp-p 75Ω

Operating Temperature

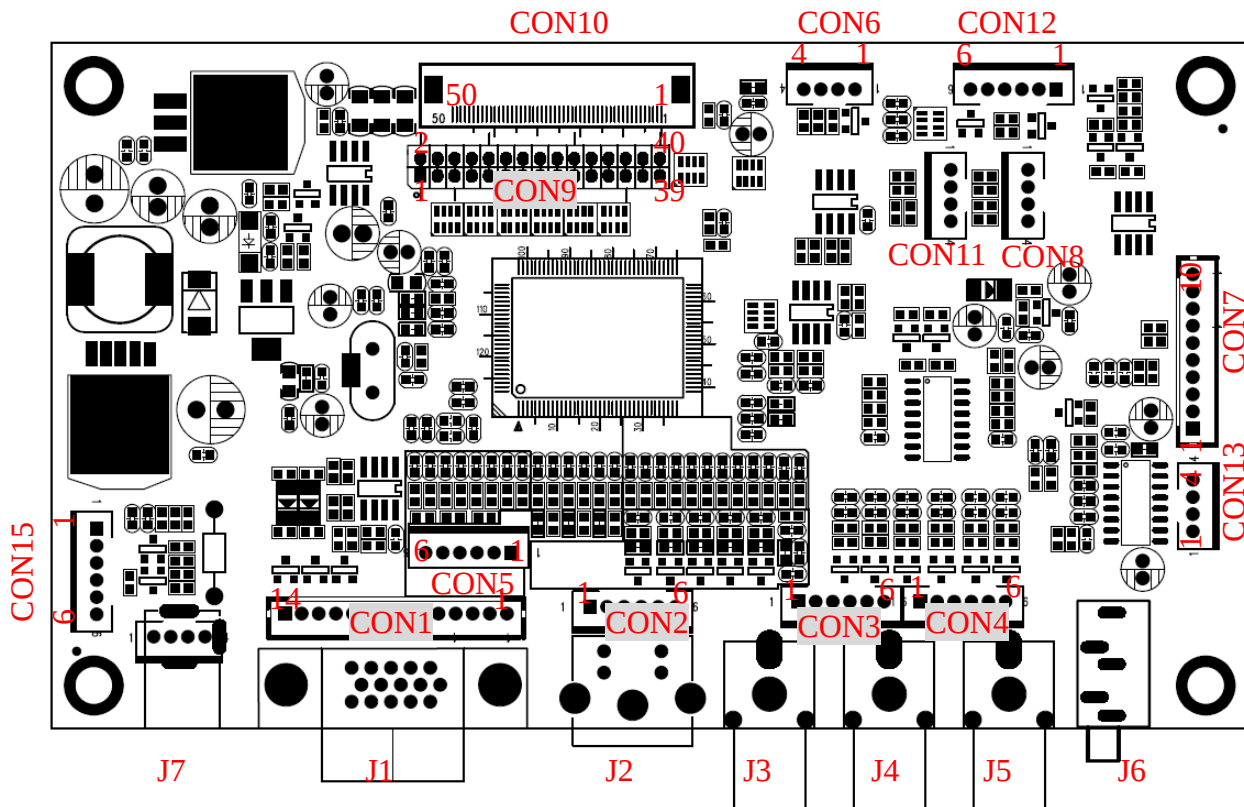
0°C ~ 70°C

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit	Remark
Supply Voltage	Vcc	GND = 0		12		V	
Supply Current	Icc	Vcc = 12		< 800		mA	

Driver Board Specification

Terminal Drawing



CON1	Component Video Input	
PIN	Connection	Description
1	Y	Luma (brightness) (Green Cable)
2	GND	Ground
3	PB	Difference between blue and Luma (Blue Cable)
4	GND	Ground
5	PR	Difference between Red and Luma (Red Cable)
6	GND	Ground

CON2	VGA Input	
PIN	Connection	Description
1	GND	Ground
2	VS	Vertical Synchronization
3	HS	Horizontal Synchronization
4	GND	Ground
5	R+	Red Component Input
6	GND	Ground
7	G+	Green Component Input
8	GND	Ground
9	B+	Blue Component Input
10	GND	Ground
11	SDA	I2C Data
12	SCL	I2C Clock
13	GND	Ground
14	5V	Voltage Output 5V

CON3	DVD Video / Audio Connection	
PIN	Connection	Description
1	DVD-L	DVD Left Audio Input
2	GND	Ground
3	DVD-R	DVD Right Audio Input
4	GND	Ground
5	DVD-Y	DVD Y Signal Input
6	DVD-C	DVD C Signal Input

CON4	S-Video / Video	
PIN	Connection	Description
1	GND	Ground
2	AV1-C	S-Video C Signal Input
3	AV1-Y	S-Video Y Signal Input
4	GND	Ground
5	AV1-V	AV Video Input
6	GND	Ground

CON5	Audio Input (AV / Headphone)	
PIN	Connection	Description
1	AV1-L	AV1 Left Audio Input
2	GND	Ground
3	AV1-R	AV1 Right Audio Input
4	HDL	Headphone Left Audio Input
5	GND	Ground
6	HDR	Headphone Right Audio Input

CON6	DVD Control Interface	
PIN	Connection	Description
1	D-IR	DVD IR Receiver Output
2	GND	Ground
3	D-PW	DVD Power Control Pin
4	5V	5V Voltage Output

CON7	(Optional) TV Tuner Interface	
PIN	Connection	Description
1	12VA	12V Voltage Output
2	GND	Ground
3	5VA	5V Voltage Output
4	GND	Ground
5	SCL	I2C Clock
6	SDA	I2C Data
7	GND	Ground
8	TV-V	TV Video Input
9	GND	Ground
10	TV-A	TV Audio Input

CON8	N.C.	
PIN	Connection	Description
1	N.C.	No Connection
2	N.C.	No Connection
3	N.C.	No Connection
4	N.C.	No Connection

CON9	LVDS Interface		
PIN	Connection	PIN	Connection
1	LCD-VDD	16	RXOC+
2	LCD-VDD	17	RXO3-
3	LCD-VDD	18	RXO3+
4	GND	19	RXE0-
5	GND	20	RXE0+
6	GND	21	RXE1-
7	RXO0-	22	RXE1+
8	RXO0+	23	RXE2-
9	RXO1-	24	RXE2+
10	RXO1+	25	GND
11	RXO2-	26	GND
12	RXO2+	27	RXEC-
13	GND	28	RXEC+
14	GND	29	RXE3-
15	RXOC-	30	RXE3+

CON10			
PIN	Connection	PIN	Connection
1	NC	26	DR1
2	NC	27	DR2
3	GND	28	DR3
4	GND	29	GND
5	DB0	30	DR4
6	DB1	31	DR5
7	DB2	32	DR6
8	DB3	33	DR7
9	GND	34	GND
10	DB4	35	DLCK
11	DB5	36	GND
12	DB6	37	DEO
13	DB7	38	GND
14	GND	39	Vsync
15	DG0	40	Hsync
16	DG1	41	GND
17	DG2	42	LCD-VDD
18	DG3	43	LCD-VDD
19	GND	44	LCD-VDD
20	DG4	45	LCD-VDD
21	DG5	46	GND
22	DG6	47	GND
23	DG7	48	NC
24	GND	49	NC
25	DR0	50	NC

CON11	N.C.	
PIN	Connection	Description
1	N.C.	No Connection
2	N.C.	No Connection
3	N.C.	No Connection
4	N.C.	No Connection

CON12	Keypad	
PIN	Connection	Description
1	GND	Ground
2	K1	Keypad Input 1
3	K0	Keypad Input 0
4	GND	Ground
5	5V	5V Voltage Output
6	IR	IR Receiver Input

CON13	Speakers Output	
PIN	Connection	Description
1	Audio-L	Left Speaker
2	GND	Ground
3	GND	Ground
4	Audio-R	Right Speaker

CON15	Inverter / Backlight	
PIN	Connection	Description
1	GND	Ground
2	GND	Ground
3	ADJ	Adjustment
4	ON/OFF	Inverter On/Off control
5	12V	12V Voltage Output
6	12V	12V Voltage Output

JACK INPUT	
J1- J7	Description
J1	VGA Input -- D-SUB 15 Pin
J2	S-Video Input
J3	AV Video Input
J4	AV Left Audio Input
J5	AV Right Audio Input
J6	Headphone Jack Audio Input
J7	DC 12V Input

Outline Drawing

