

PC-TFT-35PA

Interface Board

Features

- Used for TFT-LCD Display: 3.5" AND-TFT-35PA
- DC/DC DC/AC Video Decoder All In One
- NTSC/PAL Video input Switch
- Up/Down Display Reverse
- Left/Right Display Reverse
- Single Operation Voltage +12V
- **RoHS Compliant**

The PC-TFT-35PA interface board is designed to work with the **AND-TFT-35PA** color TFT 3.5" display and together is suitable for security, video games, door phone, video phone, portable TV, and instrument display applications.

Mechanical Characteristics

Parameter	Specification	Unit
Screen Size	3.5(diagonal)	inch
Display Format	160x234	dot
Active Area	71.6 x 52.7	mm
Dot Pitch	0.149 (W)x0.225 (H)	mm
Pixel Configuration	Delta	-
Weight	58±3	g
Outline Dimension	84(W) x 69(H) x 7(D)	mm
Contrast Ratio:	350:1	ratio
View Angle	(V) +15° C/ -35° C (H) ± 50° C	deg.
Color	Full Color	-
Brightness	250	cd/m ²

Absolute Maximum Rating

Parameter	Sym	Min	Max	Unit
Input Voltage	V _{in}	+10	+14	V
Video Input Signal	Video in	0.5	2.0	V _{p-p}
Digital Input Signal	TTL	+0.3	+5.3	V
Operating Temp.	-	-10	60	°C
Relative Humidity	-	5	90	%RH
Storage Temp	-	-25	80	°C
Relative Humidity	-	0	90	%RH

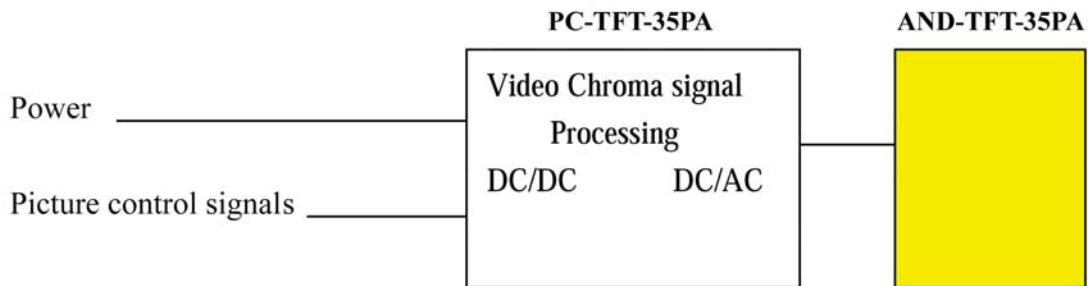
Electrical Characteristics

Parameter	Symbol	I/O	Min	Typ	Max	Unit	Remark
Input Voltage	V _{in}	I	+10	+12	+14	V	
Total Current	I _{in}	I	-	TBD	-	mA	
Power Consumption	-	I	-	TBD	-	W	@+12V
Video Input Signal	Video in	I	-	1.0	-	V _{p-p}	@75Ω
Output Voltage	+5V	O	-	+5V	-	V	
Brightness Adjust	Bright	I	+1.60	+2.20	+2.50	V	
Contrast Adjust	Contrast	I	+1.60	+1.80	+2.50	V	
Color Adjust	Color	I	+0.60	+1.40	+1.80	V	
Tint Adjust	Tint (NTSC only)	I	+1.40	+1.90	+2.40	V	
Video Auto Detect	NTSC/PAL	I	-	TTL	-	V	
Screen Reverse	Left/Right	I	-	TTL	-	V	
Screen Reverse	Up/Down	I	-	TTL	-	V	

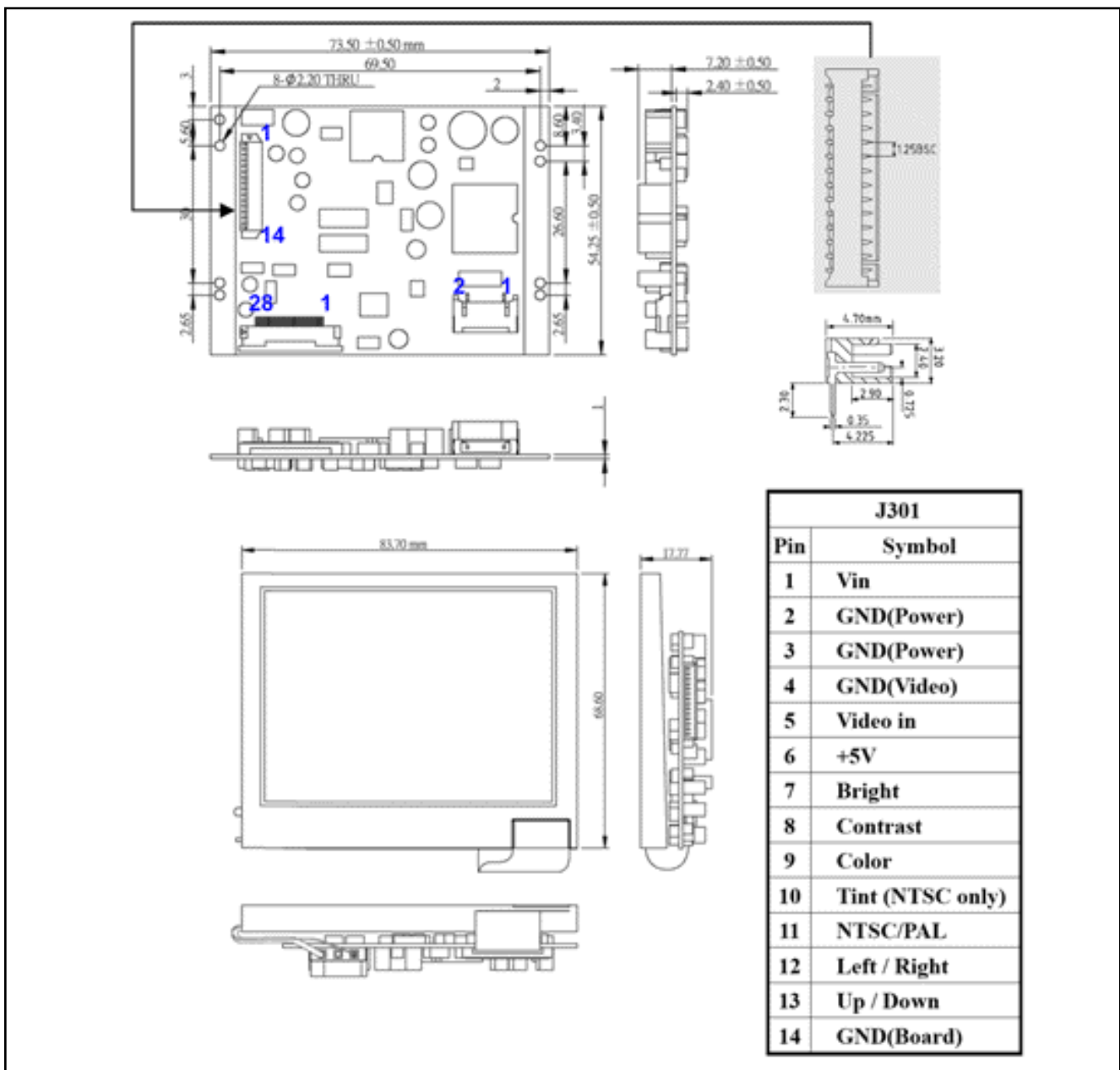
Product specifications contained herein may be changed without prior notice.

It is therefore advisable to contact Purdy Electronics before proceeding with the design of equipment incorporating this product.

Block Diagram



Outline Dimensions (General Tolerance $\pm 0.50\text{mm}$)



Pin Assignment of Signal Input (pitch 1.25mm, side entry type)

Pin No	Symbol	I/O	Description	Remark
1	Vin	I	+12V Voltage DC Input	
2	GND	I	Power Ground	
3	GND	I	Power Ground	
4	GND	I	Signal Ground	
5	Video in	I	Video Input	
6	+5V	O	+5V Voltage DC Output	Note 1
7	Bright	I	Brightness Control	
8	Contrast	I	Contrast Control	
9	Color	I	Color Control	
10	Tint	I	Tint Control	Note 2
11	NTSC / PAL	O	Auto detect system output	Note 3
12	Left / Right	I	Left / Right Reverse	Note 4
13	Up / Down	I	Up / Down Reverse	Note 4
14	GND	I	Power Ground	

Note1 : The +5V power supply external control circuit.(Max. output is 5mA)

Note2 : The TINT is only operating in NTSC system.

Note3 : The output High level for NTSC mode and Low level for PAL mode.

Note4 : Default is reversed scanning(High) and Low is for normal scanning.
Please do force this pin to ground for normal scan.

Output For LCD Panel Backlight

Pin No	Symbol	I/O	Description	Remark
1	HV+	O	High Voltage Terminal for Backlight	Connect to Pink Wire
2	HV-	-	Return Terminal for Backlight	Connect to White Wire

Panel Backlight Data

Parameter	Symbol	Min	Typ	Max	Unit	Remark
Lamp Voltage	VL	-	265	-	Vrms	IL = 3mA
Lamp Current	IL	-	3	-	mArms	
Brightness	-	200	250	-	cd/m ²	

Inverter Data (Ta=25°C @+12V)

Parameter	Symbol	Min	Typ	Max	Unit	Remark
Lamp Voltage	VL	-	TBD	-	Vrms	IL = mA
Lamp Current	IL	-	TBD	-	mArms	