PC-TFT-7PA-WV

Interface Board

Features

• Used for TFT-LCD display: 7" AND-TFT-7PA-WV

• Ultra Compact

• DC/DC, DC/AC, Video Decoder All in one

• NTSC/PAL Auto-Switch

• 16:9 and 4:3 Screen Mode Selection

• Wide Viewing Angle

• Single Operation Voltage +12V

The PC-TFT-7PA-WV is designed to work with the AND-TFT-7PA-WV color TFT display which is suitable for security, video game, door phone, video phone, portable TV, and instrument display applications.

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.

Panel Backlight Data

Item	Symbol	Min.	Typ.	Max.	Unit	Remarks
Lamp Voltage	V_L	474	527	580	Vrms	$I_L = 3mA$
Lamp Current	I_L	3	6	8	mArms	–
Brightness	–	350	400	–	cd/m^2	

Absolute Maximum Rating

Item	Symbol	Remarks	Min.	Max.	Unit
Input Voltage	Vin	–	+9	+14	V
Video Input Signal	Video in	@75Ω	0.5	2.0	Vp-p
Digital Input Signal	TTL	–	+0.3	+5.3	V
Operating Temperature	–	–	-10	60	°C
Relative Humidty	–	–	5	90	%RH
Storage Temperature	–	–	-25	80	°C
Relative Humidity	–	–	0	90	%RH

Electronic Characteristics

Item	Symbol	Remarks	Input/Output	Min.	Typ.	Max.	Unit
Input Voltage	Vin	–	Input	+11	+12	+13	V
Total Current	Iin	–	Input	–	500	–	mA
Power Consumption	–	@+12V	Input	–	6	–	W
Video Input Signal	Video in	@75Ω	Input	–	1.0	–	Vp-p
Output Voltage	+5V	–	Output	–	+5V	–	V

Block Diagram

Purdy Electronics Corporation • 720 Palomar Avenue • Sunnyvale, CA 94085
5/25/06   Tel: 408.523.8200 • Fax: 408.733.1287 • sales@purdyelectronics.com   1
www.purdyelectronics.com
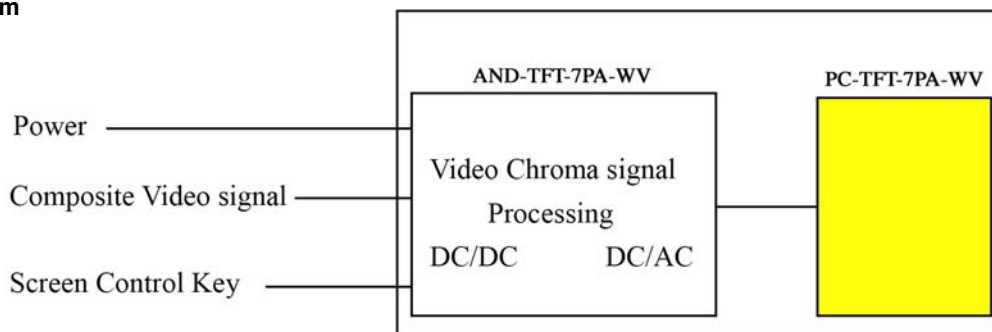
J301: LCD Panel I/O Terminals (FPC 30 pin, 0.5mm below contact type.)

No.	Pin Name	I/O	Pin Description	No.	Pin Name	I/O	Pin Description
1	GND	–	Ground for logic circuit	16	STHL	I/O	Start pulse for source driver
2	V_{CC}	I	Supply voltage of logic countrol circuit for gate driver	17	V_{SS2}	–	Ground for analog circuit
3	NC	–	No connection	18	V_R	I	Video input R
4	V_{EE}	I	Negative power gate driver	19	V_G	I	Video input G
5	NC	–	No connection	20	V_B	I	Video input B
6	V_{GH}	I	Positive power for gate driver	21	V_{SS1}	–	Ground for digital circuit
7	NC	–	No connection	22	V_{DD2}	I	Supply power for analog circuit
8	STVD	I/O	Vertical start pulse	23	CPH1	I	Sampling & shift clock for source driver
9	STVU	I/O	Vertical start pulse	24	CPH2	I	Sampling & shift clock for source driver
10	CKV	I	Shift clock for gate driver	25	CPH3	I	Sampling & shift clock for source driver
11	U/D	I	Up/down control for gate driver	26	V_{DD1}	I	Supply power for digital circuit
12	OE3	I	Output enable for gate driver	27	R/L	I	Left/right control for source driver
13	OE2	I	Output enable for gate driver	28	NC	I	No connection
14	OE1	I	Output enable for gate driver	29	OEH	I	Output enable for source driver
15	V_{COM}	I	Common electrode voltage	30	STHR	I/O	Start pulse for source driver

J101: Pin Assignment of Signal Input (Pitch 1.25mm 8P, Side Entry Type)

Pin No.	Symbol	I/O	Description
1	GND	–	Ground
2	Down	I	OSD Down Key
3	Up	I	OSD Up Key
4	Select	I	OSD Select Key
5	Menu	I	OSD Menu Key
6	NC	–	No Connection
7	Power On/Off	I	Panel On/Off
8	NC	–	No Connection

J102: Pin Assignment of Signal Input (Pitch 1.25mm 10P, Side Entry Type)

Pin No.	Symbol	I/O	Description
1	VCC	–	+12V Volts DC Input
2	VCC	–	+12V Volts DC Input
3	NC	–	No Connection
4	Video In	I	Video input (1Vp-p/75Ω)
5	NC	–	No Connection
6	NC	–	No Connection
7	GND	–	Ground
8	GND	–	Ground
9	GND	–	Ground
10	GND	–	Ground

CN1: Output for LCD Panel Backlight

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

Driver Board Outline Drawing
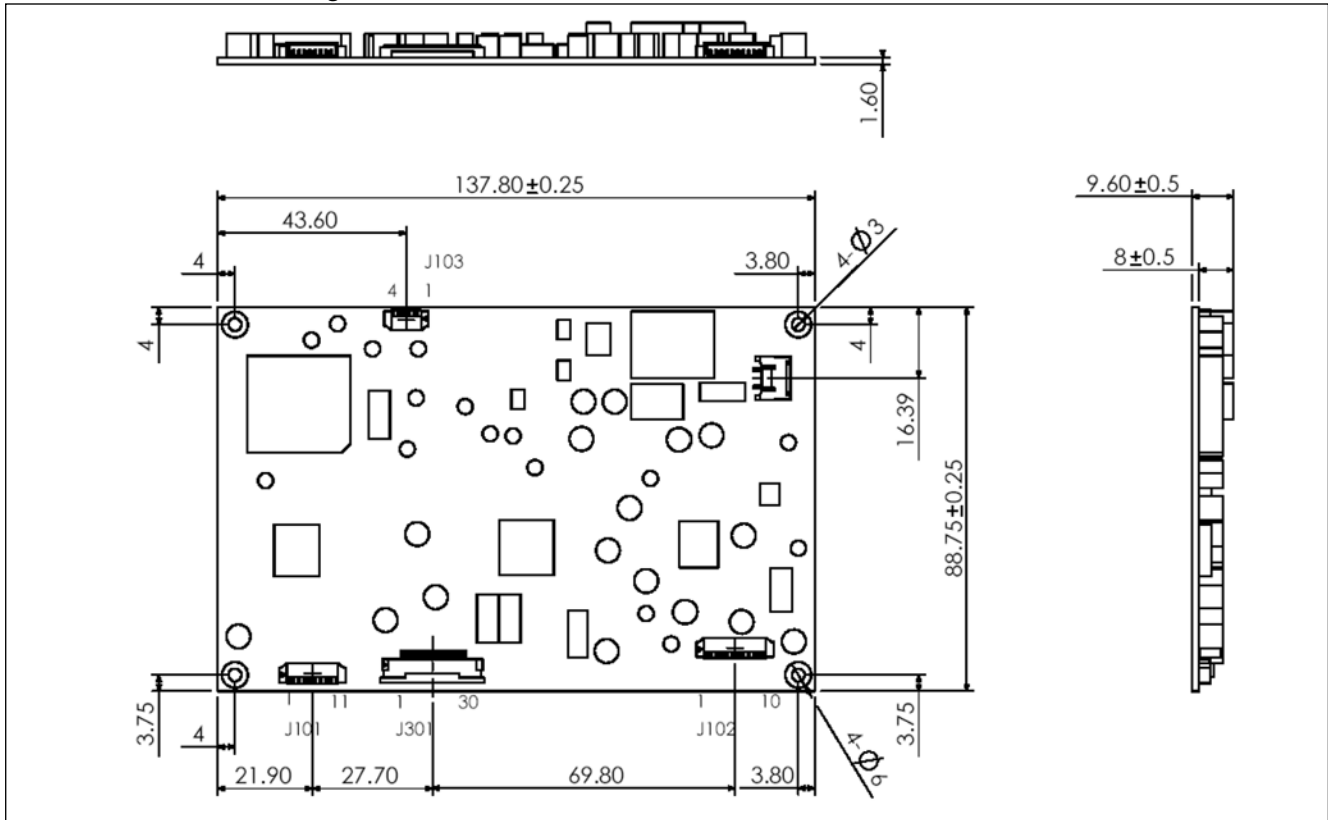
Panel Specifications

Item	Specifications	Unit
Screen Size	7.0 (16.9 diagonal)	inch
Display Format	1440 (H) x 234 (V)	dot
Active Area	154.08 (H) x 87.05 (V)	mm
Dot Pitch	0.107 (W) x 0.372 (H)	mm
Pixel Configuration	Stripe	–
Outline Dimension	166.0 (W) x 100.0 (H) x 7.2 (D)	mm
Weight	180 ± 10	g
Contrast Ratio:	150:1	–
Viewing Angle	(V) +40º / -50º (H) ±60º	–
Color	Full Color	
Brightness	400	cd/m^2

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OSD Key Pad:

FDT IR Key-CC
291141SC
Ver 1.1 (B)

| Power On/Off | SW OSD | 8 Wire cable | Menu | Down | Up |
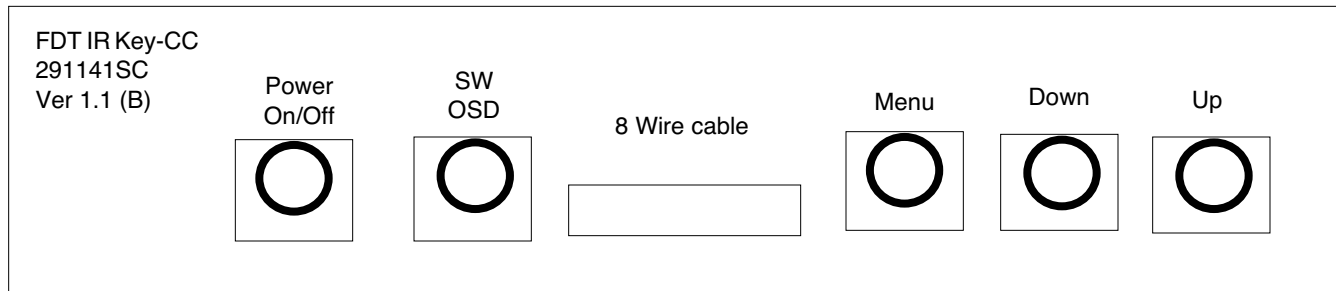
OSD Functions:
Power: On/Off

SW: Sharpness
      Tint
      Color
      Contrast
      Brightness
      Display Mode
      Reset
      Save

Menu: Select

Up: Increase

Down: Descrease