

Version : 1.2

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TECHNICAL SPECIFICATION

MODEL NO.: PD104SL6

Customer's Confirmation

Customer Name _____

Date _____

By _____

PVI's Confirmation

Confirmed By _____

Prepared By _____

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This technical specification is subject to change without notice.
Please contact with PVI for more detail information about this specification sheet.

1.) Application

This data sheet applies to a color TFT LCD module, PD104SL6.

PD104SL6 module applies to notebook PC, sub-note-book PC and other OA product, which require high quality flat panel display. **This module is not designed for aerospace, avionics, medical, F/A, transportation, car or any other products, which require extreme level of reliability.**

Prime View assume no responsibility for any damage resulting from the use of the device which dose not comply with the instructions and the precautions in these specification sheet.

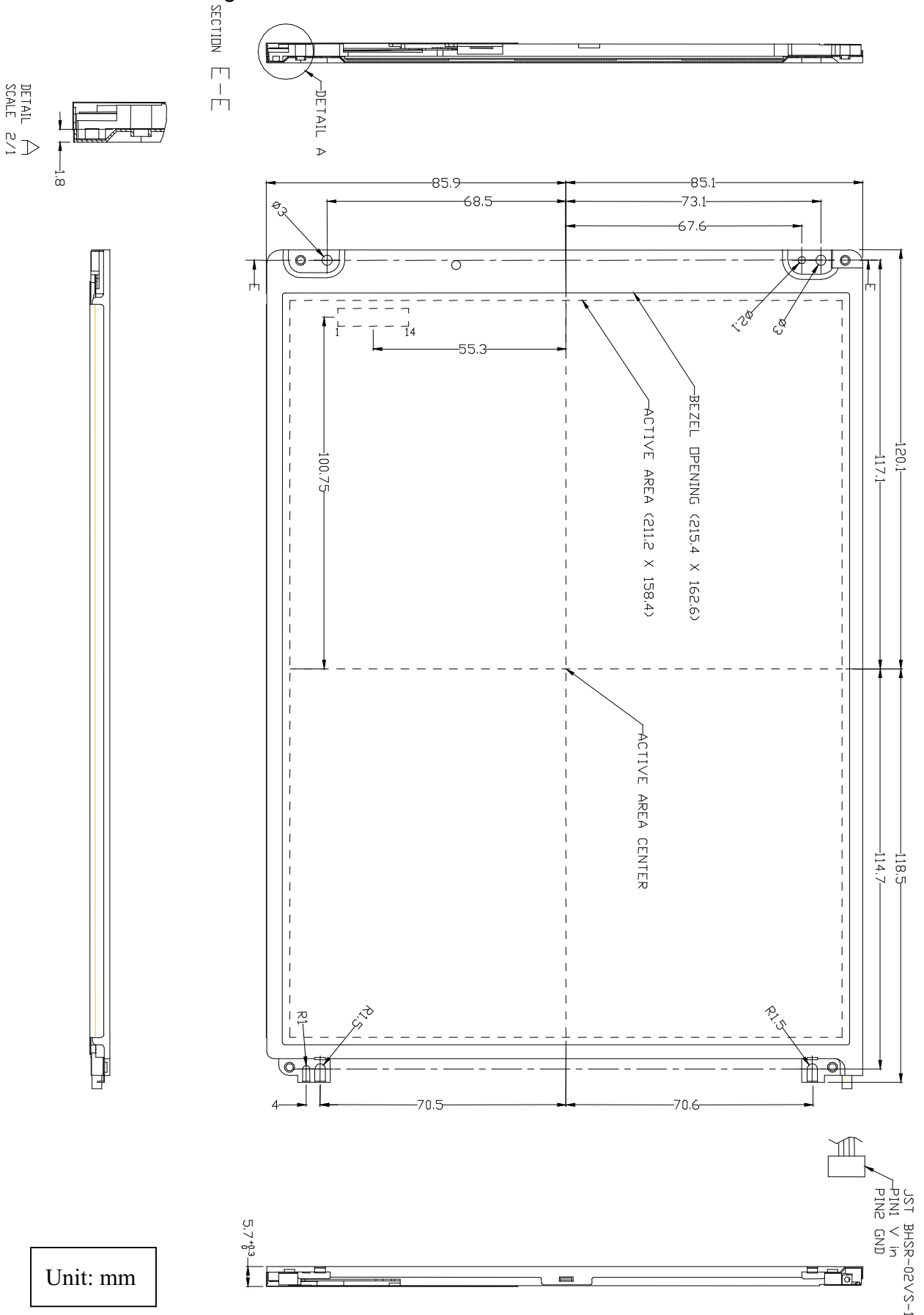
2. Features

- . Amorphous silicon TFT LCD panel with back-light unit
- . Pixel in stripe configuration
- . Slim and compact, designed for O/A application
- . Display Colors : 262,144 colors
- . Optimum Viewing Direction : 12 o'clock
- . 3.3V LVDS interface standard: DS90CF364 as receiver
- . +3.3V DC supply voltage for TFT LCD panel driving
- . Backlight driving DC/AC inverter not included in this module
- . Wide Viewing Angle

3.Mechanical Specifications

Parameter	Specifications	Unit
Screen Size	26.4(diagonal)	cm
	10.4 (diagonal)	inch
Display Format	800× (R, G, B)× 600	dot
Display Colors	262,144	
Active Area	211.2(H)× 158.4 (V)	mm
Pixel Pitch	0.264 (H)× 0.264 (V)	mm
Pixel Configuration	Stripe	
Outline Dimension	238.6 (w)× 171.0(H)× 6.0(typ.) (D)	mm
Weight	310(typ.),320(max.)	g
Back-light	Single CCFL, side-light type	
Surface treatment	Anti-glare and hard-coating	
Display mode	Normally white	

4. Mechanical Drawing of TFT-LCD Module



Unit: mm

6. Absolute Maximum Ratings:

GND=0V, Ta=25°C

Parameters	Symbol	MIN.	MAX.	Unit	Remark
Supply Voltage	VDD	-0.3	+4.0	V	
Input Signals Voltage	V _{IN}	-0.3	VDD+0.3	V	Note 6-1
Backlight Driving Voltage	V _L	-	2000	V	
Backlight Driving Frequency	F _L	0	100	KHz	
Storage Temperature	T _{ST}	-20	+70	°C	
Operating Temperature	T _{OP}	0	+60	°C	

Note 6-1: LVDS signal

7. Electrical Characteristics

7-1) Recommended Operating Conditions:

GND = 0V , Ta = 25°C

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Supply Voltage	VDD	3.0	3.3	3.6	V	
Current Dissipation	I _{DD}	-	350	450	mA	Note 7-1
LVDS Differential input high threshold	V _{TH}	-	-	100	mV	Note 7-2
LVDS Differential input low threshold	V _{TL}	-100	-	-		
Lamp Current	I _{FL}	3.0	7.0	-	mA	Note 7-3 Note 7-5
Lamp Voltage	V _L	500	550	600	Vrms	Note 7-3
Lamp Initial Voltage	V _{SFL}	-	1200	-	Vrms	at Ta=25°C
		1000				at Ta=0°C
Lamp Driving Frequency	F _L	-	45	-	KHz	
Total power consumption (at I _{FL} =7mA)		-	5.01	-	W	Note 7-4

Note 7-1 : To test the current dissipation of VDD, using the “color bars” testing pattern shown as below

1	2	3	4	5	6	7	8
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1. White
2. Yellow
3. Cyan
4. Green
5. Magenta
6. Red
7. Blue
8. Black

I_{DD} current dissipation testing pattern

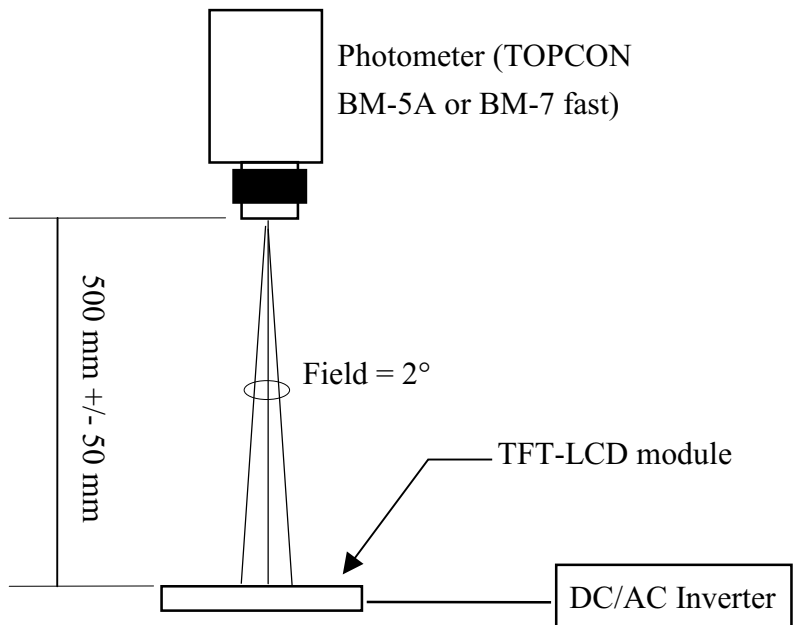
9.) Optical Characteristics

9-1) Specification:

Ta = 25°C

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit	Remarks
Viewing Angle	Horizontal	θ	± 55	± 60	-	deg	Note 9-1
	Vertical	θ (to 12 o'clock)	50	55	-	deg	
		θ (to 6 o'clock)	35	40	-	deg	
Contrast Ratio	CR	Optimum direction	100	180	-	-	Note 9-2
Response time	Rise	Tr	-	15	30	ms	Note 9-4
	Fall	Tf	-	25	50	ms	
Luminance	L	$\theta = 0^\circ / \varphi = 0^\circ$	200	220	-	cd/m ²	I _{FL} =7mA, Note 9-3
Luminance Uniformity	U		55	80	-	%	Note 9-5
White Chromaticity	x		0.266	0.316	0.366	-	
	y		0.293	0.343	0.393	-	
	Tc		6400	6600	6800	K	
Lamp Life Time			10000	-	-	hr	I _{FL} =7mA
Cross Talk Ratio	CTK		-	-	3.5	%	Note 9-6

All the optical measurement shall be executed 30 minutes after backlight being turn-on. The optical characteristics shall be measured in dark room (ambient illumination on panel surface less than 1 Lux). The measuring configuration shows as following figure.



Optical characteristics measuring configuration