

TFT LCM Approval Sheet

Product Specification

Customer: _____

ModelName: **W050P40PH01** _____

Date: _____

Version: _____

☒ Preliminary Specification

☐ Final Specification

For Customer's Acceptance

Approved by	Comment

Approved by	Reviewed by	Prepared by

Contents

1.Record of Revision.....	3
2 .General Specifications.....	4
3 .Input/Output Terminals	5
4. Absolute Maximum Ratings	6
5 .Electrical Characteristics	6
6 .Interface Timing.....	7
7. Optical Characteristics	11
8 . Environmental / Reliability Tests	17
9. Mechanical Drawing.....	18
1 0.Packing.....	19
11. Precautions For Use of LCD modules	20

2 General Specifications

Feature		Spec
Characteristics	Size	5.0inch
	Resolution	800(horizontal)*480(Vertical)
	Interface	RGB-24bit
	Connect type	Connector
	Color Depth	16.7M
	Technology type	a-Si
	Pixel pitch (mm)	0.045 x 0.135
	Pixel Configuration	R.G.B. Vertical Stripe
	Display Mode	Normally White
	LCD Driver IC	ILI5960+ILI6122
	Viewing Direction	12 O'clock
	Gray Scale Inversion Direction	6 O'clock
Mechanical	LCM (W x H x D) (mm)	120.7*75.9*3
	Active Area(mm)	108 x 64.80
	With /Without TSP	Without
	Weight (g)	TBD
	LED Numbers	12LEDs

Note 1: Viewing direction is following the data which measured by optics equipment.

Note 2: Requirements on Environmental Protection: RoHS

Note 3: LCM weight tolerance: +/- 5%

3 Input/Output Terminals

No.	Symbol	Description
1	VBL-	Backlight LED Cathode
2	VBL+	Backlight LED Anode.
3	GND	System Ground
4	VCC	Power supply for logic operation
5~12	R0~R7	Data bus
13~20	G0~G7	Data bus
21~28	B0~B7	Data bus
29	GND	System Ground
30	CLK	Pixel clock signal
31	DISP	Display on/off control
32	HSYNC	Horizontal Sync signal
33	VSYNC	Vertical Sync signal
34	DEN	Data Enable
35	NC	No connect
36	GND	System Ground
37	XR(NC)	The right side signal of TP
38	YD(NC)	The down side signal of TP
39	XL(NC)	The left side signal of TP
40	YU(NC)	The up side signal of TP

7 Optical Characteristics

Items		Symbol	Condition	Min.	Typ.	Max.	Unit	Remark
Viewing angles		θ_T	Center CR≥10	40	50	-	Degree.	Note2
		θ_B		60	70	-		
		θ_L		60	70	-		
		θ_R		60	70	-		
Contrast Ratio		CR	$\Theta = 0$	500	600	-	-	Note1, Note3
Response Time		T _{ON}	25°C	-	20	30	ms	Note1, Note4
		T _{OFF}		-	20	30		
Chromaticity	White	X _W	Backlight is on	0.324	0.326	0.328	-	Note1, Note5
		Y _W		0.364	0.366	0.368	-	
	Red	X _R		0.611	0.613	0.615	-	
		Y _R		0.333	0.335	0.337	-	
	Green	X _G		0.305	0.307	0.309	-	
		Y _G		0.558	0.560	0.562	-	
	Blue	X _B		0.133	0.135	0.137	-	
		Y _B		0.158	0.160	0.162	-	
Uniformity		U		80	-	-	%	Note1, Note6
NTSC					50		%	Note5
Luminance		.		200	220			Note1, Note7

Test Conditions:

1. IF= 20mA(one channel),the ambient temperature is 25°C.
2. The test systems refer to Note 1 and Note 2.

Note 1: Definition of optical measurement system.

The optical characteristics should be measured in dark room. After 5 minutes operation, the optical Properties are measured at the center point of the LCD screen. All input terminals LCD panel must be ground when measuring the center area of the panel.

9. Mechanical Drawing

