



Product Specification For TFT Module

Model Name	XF090HD01A-ILHL
Customer	
Note	

☒ Preliminary Specification

☐ Final Specification

☐ CUSTOMER'S APPROVAL
BY:
DATE:
Comment

PRESENTED BY

1.0 GENERAL DESCRIPTION

1.1 Introduction

XF090HD01A-ILHL is a color active matrix thin film transistor (TFT) liquid crystal display (LCD) that uses amorphous silicon TFT as a switching device. This model is composed of a TFT LCD panel, a driving circuit and a back light system. This TFT LCD has a 9" (16:9) inch diagonally measured active display area with HD (1280 horizontal by 720 vertical pixel) resolution.

1.2 Features

- 9 (16:9 diagonal) inch configuration
- 16.7M color by 8 bit
- ROHS / Halogen Free Compliance

1.3 Applications

- Automotive
- Multimedia applications and Others AV system

1.4 General information

Item		Specification	Unit
Outline Dimension		210.7(H) x 124.1(V) x 6.2 (Typ.)	mm
Display area		198.912(H) x 111.888(V)	mm
Number of Pixel		1280 RGB (H) x 720(V)	pixels
Pixel pitch		0.1554(H) x 0.1554(V)	mm
Pixel arrangement		RGB Vertical stripe	
Display mode		Normally Black	
NTSC		70 (Typ.)	%
Surface treatment		AG, Hard-Coating (3H)	
Weight		225 (Typ.)	g
Back-light		27pcs (9S3P)	
Power Consumption	Logic System	2 (Max)	W
	B/L System	7.344 (Max.)	W

1.5 Mechanical Information

Item		Min.	Typ.	Max.	Unit
Module Size	Horizontal (H)	210.4	210.7	211.0	mm
	Vertical (V)	123.8	124.1	124.4	mm
	Depth (D)	5.9	6.2	6.5	mm
Weight		—	225	235	g

2.0 ABSOLUTE MAXIMUM RATINGS

2.1 Electrical Absolute Rating

2.1.1 TFT LCD Module

Parameters	Symbol	Min	Max.	Unit	Note
Power Supply Voltage	VDD	-0.3	5	V	
	AVDD	-0.5	15	V	
	VGH	-0.3	42	V	
	VGL	-20	0.3	V	
	VGH-VGL	-0.3	40	V	

2.2 Environment Absolute Rating

Item	Symbol	Min.	Max.	Unit	Note
Operating Temperature	T _{opa}	-40	85	°C	
Storage Temperature	T _{stg}	-40	90	°C	

3.0 OPTICAL CHARACTERISTICS

3.1 Optical specification

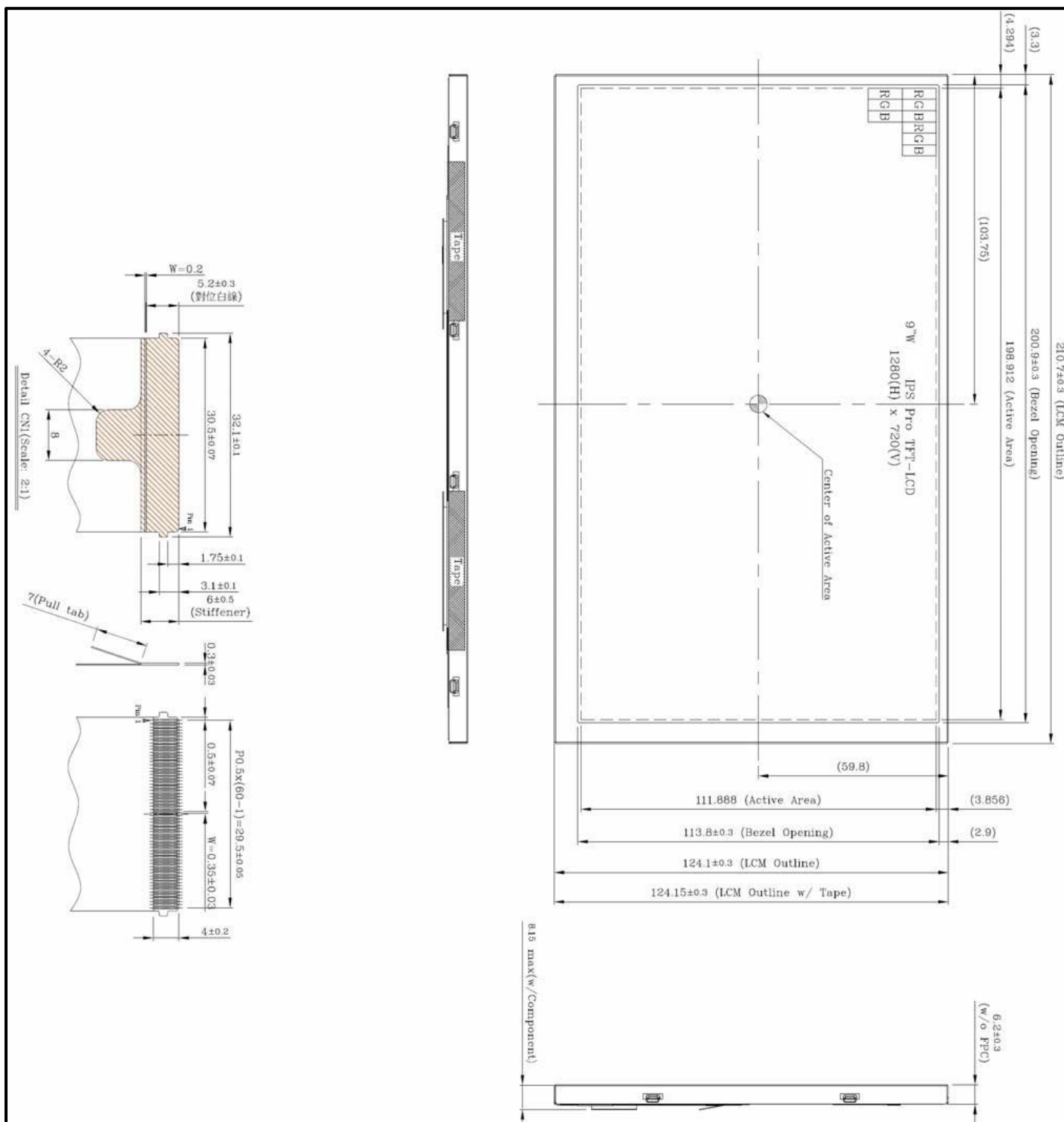
Item		Symbol	Condition	Min.	Typ.	Max.	Unit	Note
Contrast		CR	$\Theta=0$ Normal viewing angle	600	900	—		(1)(2)
Response time		TR +TF		—	30	40	msec	(1)(3)
White luminance (Center)		YL		650	800	—	—	(1)(4) (IL=240mA)
Color chromaticity (CIE1931)	White	W _x		0.263	0.303	0.343		(1)(4)
		W _y		0.283	0.323	0.363		
	Red	R _x		0.619	0.649	0.679		
		R _y		0.302	0.332	0.362		
	Green	G _x		0.264	0.294	0.324		
		G _y		0.580	0.610	0.640		
	Blue	B _x		0.118	0.148	0.178		
		B _y	0.025	0.055	0.085			
Viewing angle	Hor.	Θ_L	CR>10	75	85	—		
		Θ_R		75	85	—		
	Ver.	Θ_U		75	85	—		
		Θ_D		75	85	—		
Brightness uniformity		BUNI	$\Theta=0$	70	80	—	%	(5)
Optima View Direction		Free						(6)

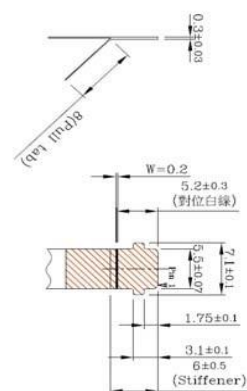
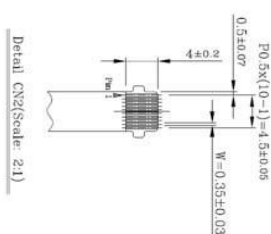
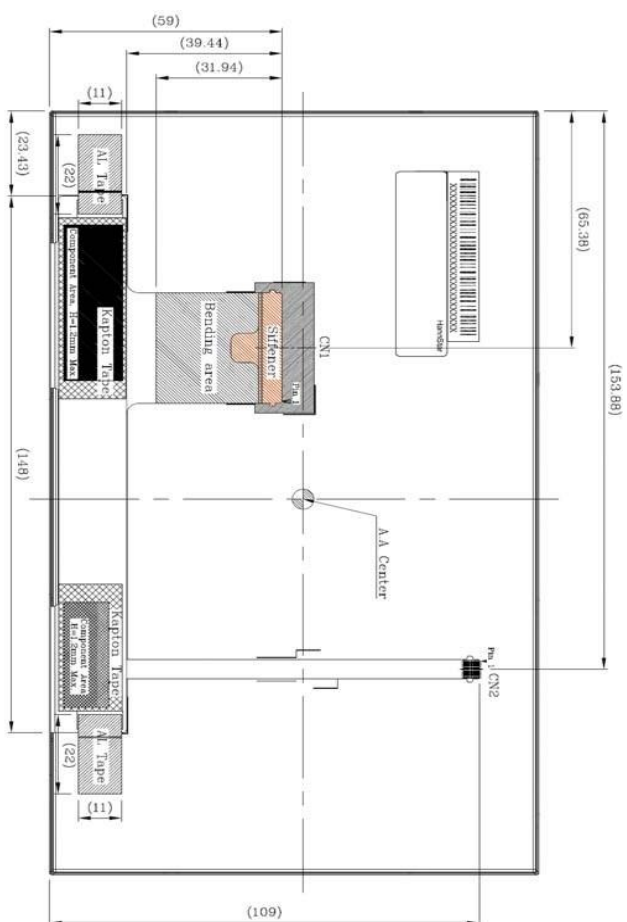
3.2 Measuring Condition

- Measuring surrounding: dark room
- LED current I_L: 240mA
- Ambient temperature: 25±2°C
- 15min. warm-up time.

4.0 OUTLINE DIMENSION

Unit : mm





Pin No	Symbol
1	A
2	A
3	A
4	NC
5	NC
6	NC
7	NC
8	NC
9	NC
10	NC