Next Vision Display
Brighten The Future

NEXT VISION DISPLAY

SPECIFICATION

CUSTOMER : _____

MODULE NO.: NT121-C001PT

Version	001
Engineer	
Date	2023-12-12

Next Vision Display
Brighten The Future

Customer:
Approved by

NEXT VISION DISPLAY CO., LTD.

地址: 中國上海小木橋路600號
ADD: 600 XIAO MU QIAO ROAD, SHANGHAI, CHINA

WEB: www.nextvisiondisplay.com

TECHNICAL: technical@nextvisiondisplay.com
MARKETING: marketing@nextvisiondisplay.com
SALES: sales@nextvisiondisplay.com

Represented by:

first FC components
FIRST Components s.r.l.
www.first-components.com
sales@first-components.com
+39 0332 1888005

SPECIFICATIONS

Features

Item	Standard Value
Screen Size(Inch)	12.1(Diagonal)
Resolution	1280* (R、G、B) * 800 Dots
Display Mode	Full Viewing Angle、Transmissive、Normally Black
Color	16.7M
Weight	-
Interface	8 bit LVDS
ROHS	THIS PRODUCT CONFORMS THE ROHS OF PTC

Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	305.0(W) * 200.0(L) * 11.4(H)	mm

Next Vision Display
Brighten The Future

LCD Panel

Item	Standard Value	Unit
View Area	262.12(W) * 164.2(L)	mm
Active Area	261.12(W) * 163.2(L)	mm

Note : For detailed information please refer to LCM drawing.

Absolute Maximum Ratings

Item	Symbol	Condition	Min.	Max.	Unit	Remark
Logic Supply Voltage	V_{DD}	GND=0V	-0.3	3.6	V	-
Operating Temperature	T_{OP} (Ts)	Note 1	-20	+70	°C	
Storage Temperature	T_{ST} (Ta)	Note 2	-30	+80	°C	
Storage Humidity	H_D	Ta<60°C	10	+90	%RH	

The absolute maximum rating values of this product are not allowed to be exceeded at any times. Should a module be used with any of the absolute maximum ratings exceeded, the characteristics of the module may not be recovered, or in an extreme case, the module may be permanently destroyed.

Note 1：Ts is the temperature of panel's surface.

Note 2：Ta is the ambient temperature of samples.

DC Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Power Supply Voltage for LCD Driver	VDD	-	3.0	3.3	3.6	V
Power Supply Current	IDD	VDD=3.3V	-	(130)	-	mA

Next Vision Display
Brighten The Future

Optical Characteristics

TFT LCD Panel VDD=3.3V, Ta=25°C

Item		Symbol	Condition	Min.	Typ.	Max.	Unit	-
Response Time		Tr + Tf	-	-	30	35	ms	Note2
Viewing Angle	Top	ΘY+	CR ≥ 10	-	85	-	Deg.	Note4
	Bottom	ΘY-		-	85	-		
	Left	ΘX-		-	85	-		
	Right	ΘX+		-	85	-		
Contrast Ratio		CR	Ta = 25°C θX , θY = 0°	1000	1200	-	-	Note3
Color of CIE Coordinate	White	X		-	(0.32)		-	Note1
		Y		-	(0.35)			
	Red	X		-	(0.64)			
		Y		-	(0.35)			
	Green	X		-	(0.31)			
		Y		-	(0.61)			
	Blue	X		-	(0.13)			
		Y		-	(0.06)			
Average Brightness Pattern=white display (With LCD&CTP)*1		IF	If=200mA	-	(850)	-	cd/m2	Note1
Luminance Uniformity (With LCD&CTP)*2		△B	If=200mA	70	-	-	%	Note1

Next Vision Display
Brighten The Future

Interface Pin Description

LCM Interface

Pin No.	Symbol	Description
1	NC	No Connection.
2	VDD	Power Supply.
3	VDD	Power Supply.
4	VDD	Power Supply.
5	NC	No Connection.
6	GND	Ground.
7	GND	Ground.
8	RIN0-	-LVDS Differential Data Input.
9	RIN0+	+LVDS Differential Data Input.
10	GND	Ground.
11	RIN1-	-LVDS Differential Data Input.
12	RIN1+	+LVDS Differential Data Input.
13	GND	Ground.
14	RIN2-	-LVDS Differential Data Input.
15	RIN2+	+LVDS Differential Data Input.
16	GND	Ground.
17	LVDS_CLK-	-LVDS Differential Clock Input.
18	LVDS_CLK+	+LVDS Differential Clock Input.
19	GND	Ground.
20	RIN3-	-LVDS Differential Data Input.
21	RIN3+	+LVDS Differential Data Input.
22	GND	Ground.
23	NC	No Connection.
24	NC	No Connection.
25	GND	Ground.
26	SDA	Serial data input/output for I2C interface
27	SCL	Clock input for I2C interface

Next Vision Display
Brighten The Future

Pin No.	Symbol	Description
28	GND	Ground.
29	NC	No Connection.
30	NC	No Connection.
31	GND	Ground.
32	GND	Ground.
33	GND	Ground.
34	NC	No Connection.
35	NC	No Connection.
36	NC	No Connection.
37	NC	No Connection.
38	NC	No Connection.
39	NC	No Connection.
40	NC	No Connection.

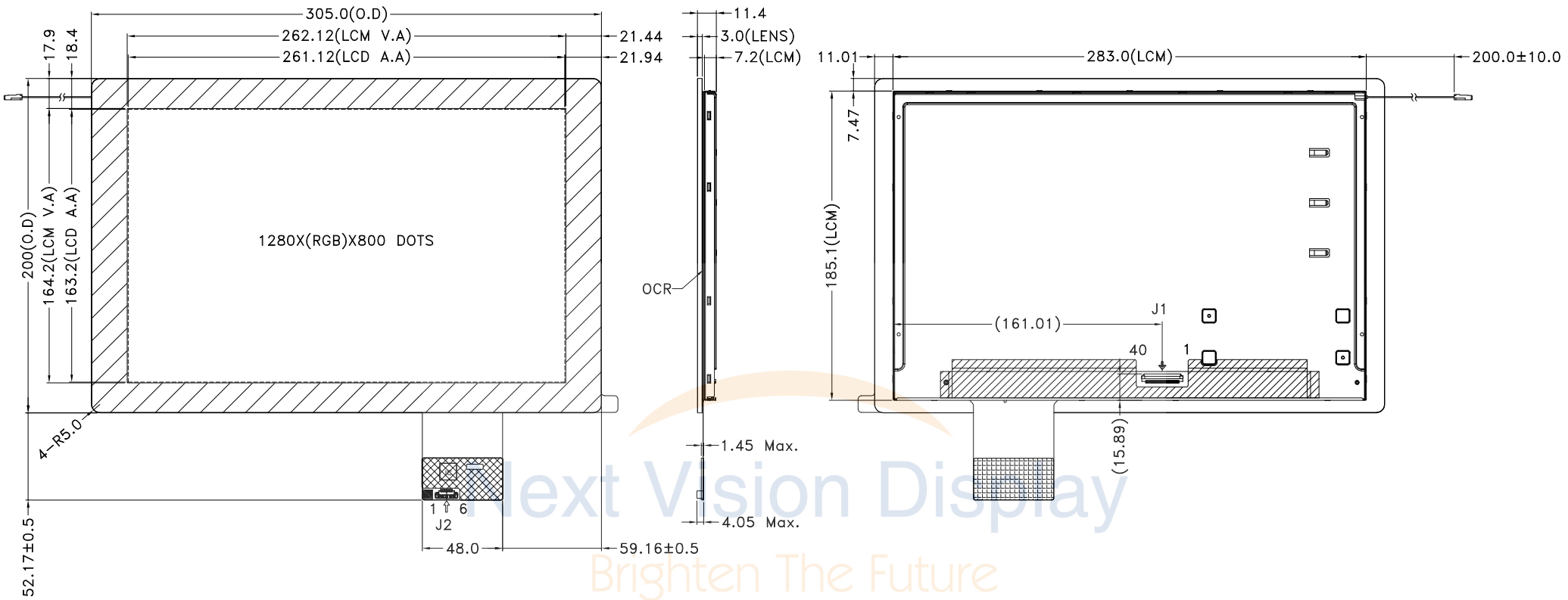
CN1 : LED Backlight Interface

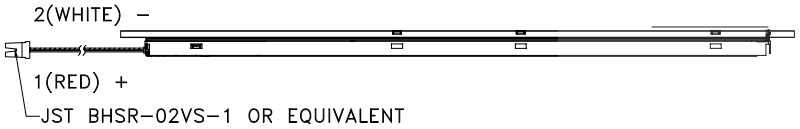
Pin No.	Symbol	Description
1	LED+	Power Supply for LED Backlight anode input
2	LED-	Power Supply for LED Backlight cathode input

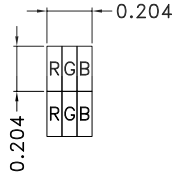
Next Vision Display
Brighten The Future

Touch Panel interface

Pin No.	Symbol	Description
1	GND	Ground.
2	SDA	I2C Data
3	SCL	I2C Clock
4	INT	Active Low
5	RESET	Active low global reset signal input.
6	VDD_3.3V	Power Supply Voltage (3.3V)







DOTS DETAIL
SCALE: 100/1

NOTE:
1.LCD TYPE: TFT LCD
2.LCD DISPLAY:Normally Black/TRANSMISSIVE
3.VIEW DIRECTION:FULL VIEWING ANGLE
4.The tolerance unless classfle ±0.5mm
5.J1: JS AFC01-S40FCA-00 (0.5pitch ; 40pin) or compatible
6.J2: CviLux CI4406M1H00 (1.25pitch ; 6pin) or compatible

Next Vision Display
Brighten The Future

REV	REV BY	REVISER	DATE
007			
006			
005			
004			
003			
002			
001	NEW DRAWING	Stone	2023/12/11

www.nextvisiondisplay.com

PART NO: NT121-C001PT

DRAWING NAME :

TITLE: LCD MODULE NT121-C001PT

Design	Stone	(3)	Surface		
Check	Rex	Unit	MM	Material	
Approve	Rex	Scale	1:1	Thickness	
		Page	1/1	Quantity	

Next Vision Display
Brighten The Future

Precision / Tolerance / Length(Min) (mm)	
1 ~ 4	-
4 ~ 16	-
16 ~ 63	-
63 ~ 250	-
250 ~ 1000	-