Next Vision Display
Brighten The Future

NT028-N001PT

1. SPECIFICATIONS

1.1 Features

Main LCD panel

Item	Standard Value
Display Type	240(R、G、B) * 320 Dots
LCD Type	Normally white , Transmissive type
Screen size(inch)	2.8 inch
Viewing Direction	12 O'clock
Color configuration	RGB-Strip
Interface	80-16bit parallel I/F Ⅱ
Other(controller/driver IC)	Sitronix: ST7789VI
ROHS	THIS PRODUCT CONFORMS THE ROHS OF PTC

1.2 Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	50.0(W) * 69.2 (L) * 3.05 (H)max	mm

LCD panel

Item	Standard Value	Unit
Active Area	43.2 (W) * 57.6 (L)	mm

1.3 Absolute Maximum Ratings

Module

Item	Symbol	Condition	Min.	Max.	Unit
System Power Supply Voltage	VCC	-	-0.3	+4.6	V
	VGH ~ VGL	-	-0.3	+30	V
Input Voltage	VIN	-	-0.3	VCC+0.5	V
Operating Temperature	T_{OP}	-	-20	+70	°C
Storage Temperature	T_{ST}	-	-30	+80	°C
Storage Humidity	H_D	Ta ≦ 40 °C	20	90	%RH

1.4 DC Electrical Characteristics

Module GND = 0V, Ta = 25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Power Supply Voltage1	VCC	-	2.4	2.8	3.6	V
Input High Voltage	V_{IH}	-	0.7 VCC	-	VCC	V
Input Low Voltage	V_{IL}	-	GND	-	0.3 VCC	V
Output High Voltage	V_{OH}	I_{OH}=-0.1mA	0.8*VCC	-	VCC	V
Output Low Voltage	V_{OL}	I_{OL}=0.1mA	GND	-	0.2*VCC	V
Supply Current	ICC	VCC = 2.8V	-	8	12	mA

Note1:Maximum current display

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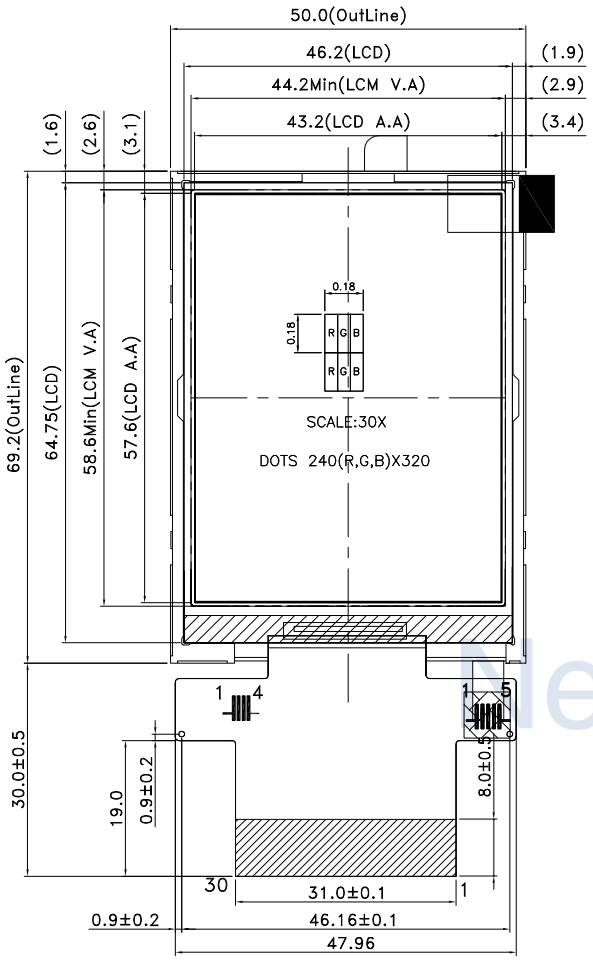
2.2 Interface Pin Description

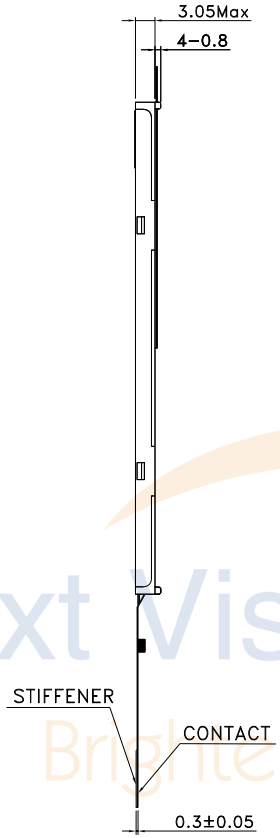
Pin No.	Symbol	Function
1	LEDK1-4	Power supply for LED Backlight Cathode input
2	LEDA	Power supply for LED Backlight Anode input
3	GND	Signal ground.(0V)
4	RESET	Reset input pin for TFT LCD. When RESET is “L”, initialization is executed.
5	DB17	Bi-directional data bus
6	DB16	
7	DB15	
8	DB14	
9	DB13	
10	DB12	
11	DB11	
12	DB10	
13	DB8	
14	DB7	
15	DB6	
16	DB5	
17	DB4	
18	DB3	
19	DB2	
20	DB1	
21	RD	Read signal input，active at Low.
22	WR/SCL	Write signal input，active at Low.
23	RS	When RS = 0: Command. When RS = 1: Display data.
24	CS	Chip select signal , Active at ”L”
25	XR	NC

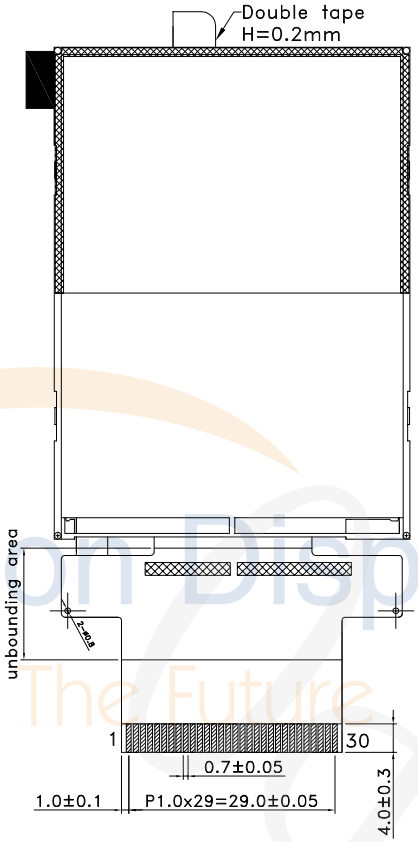
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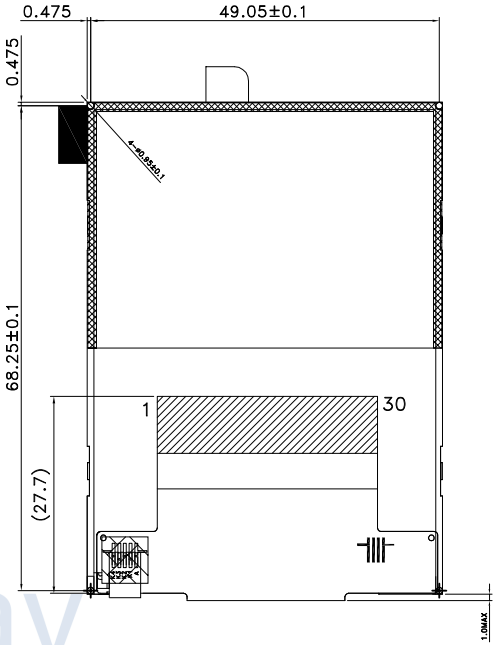
Pin No.	Symbol	Function
26	YD	NC
27	XL	
28	YU	
29	GND	Signal ground.(0V)
30	2.8 /VCC	Power supply for the internal logic circuit.

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NOTES:

1.)LCD TYPE:a-Si TFT

2.)LCD DISPLAY: POSITIVE/TRANSMISSIVE

3.)VIEWING DIRECTION:12 O'CLOCK

4.)THE TOLERANCE UNLESS CLASSFIED ±0.3mm
THE R FOR NOT ASSIGNED 0.5±0.1mm

5.) ▨COMPONENT AREA HEIGHT 1.0 MAX.

6.)FPC suggested connector : KYOCERA(00-6200 307 032 800) or compatible.

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REV	REV BY	REVISER	DATE
007			
006			
005			
004			
003			
002			
001			

PART NO: NT028-N001PT

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TITLE:

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

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