TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.

華凌光電股份有限公司

Represented by:

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

SPECIFICATION

MODULE NO.: WFN0300SA3#0P0-FC

General Specifications

Item	Dimension	Unit
Size	3.0	inch
Dot Matrix	320 x Mono x 120(TFT)	dots
Module dimension	86.347 (W) x 35.89 (H) x 7.2(D) Max	mm
Active area	72.0 (W) x 27.0 (H)	mm
Pixel pitch	0.225 x 0.225	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle(L/R/U/D)	80°/80°/80°/80°	
Driver IC	ST7512 or Equivalent	
TFT Interface	SPI (3 line)	
Backlight Type	LED, Normally White	
Touch Panel	Without Touch Panel	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

1. Operating conditions:

Item	Symbol	Condition	Min	Type	Max	Unit
Power supply voltage	VCC		3.0	3.3	3.6	V
Input high voltage	Vih		0.8VCC	-	VCC	V
Input low voltage	Vil		GND	-	0.2VCC	V
Output high voltage	Voh	IOL=-1.0mA	0.8 VCC	-	VCC	V
Output low voltage	Vol	IOL =1.0mA	GND	-	0.2 VCC	V
Current consumption	I_{CC}	-	-	10	15	mA

This value is test for VCC=3.3V , Ta=25 ℃ only

2. LED driving conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED current	—	—	2*20		mA
LED voltage	LED+	1.6	2.65	3.4	V
LED Life Time	—	50000		—	Hr

Interface

LCM PIN Definition

NO	Symbol	Function	I/O
1	GND	GND	—
2	GND	GND	—
3	RSTB	Reset input pin. Active when it is low. This pin is effective when RSTEN pin is “H”. Initialization is executed when this pin is set to “L”. SWRESET command must be required after initialization.	I
4	NC	NC	—
5	CSB	Chip select input pin. Interface access is enabled when CSB is “L” in parallel, SPI interface. When CSB is non-active (CSB=“H”), D[7:0] pins are high impedance	I
6	VSYNCO	Vertical synchronization signal output pin.	O
7	NC	NC	—
8	NC	NC	—
9	NC	NC	—
10	NC	NC	—
11	NC	NC	—
12	NC	NC	—
13	NC	NC	—
14	SDA	Serial interface : Serial data input / output	I/O
15	SCL	Serial interface : connecting the SCL signal	I
16	GND	GND	—
17	NC	NC	I
18	C86	Serial interface: “L” 3wire 9bit serial interface Please do not change input level for this terminal while operating”	—
19	NC	NC	—
20	VCC	Power supply	P
21	VCC	Power supply	P
22	GND	GND	—
23	NC	NC	—
24	LED1_C	LED cathode 1	P

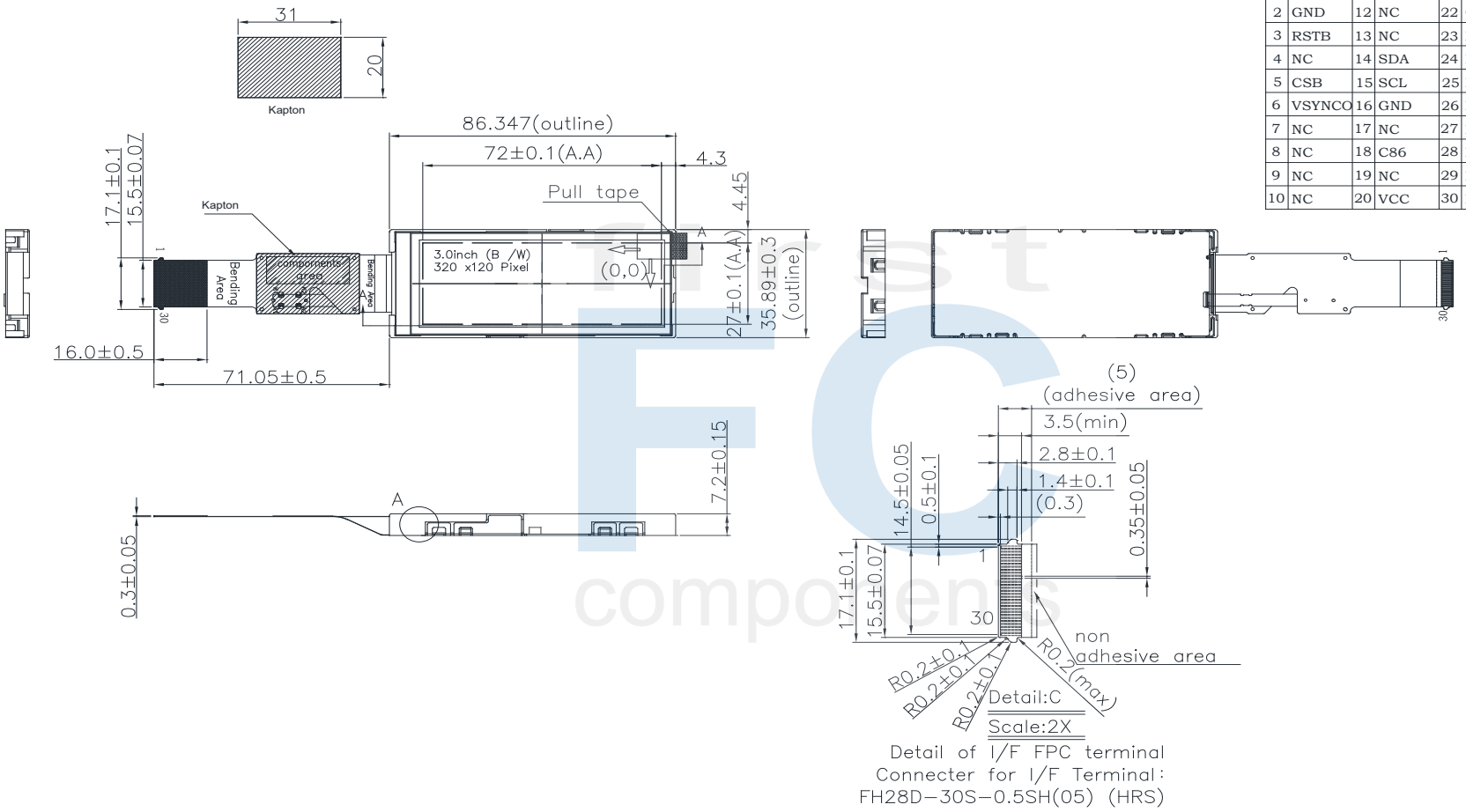
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25	LED2_C	LED cathode 2	P
26	NC	NC	—
27	NC	NC	—
28	LED1_A	LED anode 1	P
29	LED2_A	LED anode 2	P
30	NC	NC	—

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Contour Drawing

TFT-LCD PIN FUNCTION					
1	GND	11	NC	21	VCC
2	GND	12	NC	22	GND
3	RSTB	13	NC	23	NC
4	NC	14	SDA	24	LED1_C
5	CSB	15	SCL	25	LED2_C
6	VSYNCO	16	GND	26	NC
7	NC	17	NC	27	NC
8	NC	18	C86	28	LED1_A
9	NC	19	NC	29	LED2_A
10	NC	20	VCC	30	NC



Detail of I/F FPC terminal
Connecter for I/F Terminal:
FH28D−30S−0.5SH(05) (HRS)

The non-specified tolerance of dimension is ±0.5mm.