TFT DISPLAY SPECIFICATION

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RFU800G-AYH-MNS

General Specifications

- Size：8.0 inch
- Dot Matrix：800× 3(RGB) ×1280 dots
- Module dimension：115.74 × 184.93 × 7.35 mm
- Active area：107.64 × 172.224 mm
- Pixel pitch：0.13455 x 0.13455 mm
- LCD type：TFT, Normally Black, Transmissive
- Viewing angle：85/85/85/85 (IPS)
- Drive IC：ILI9881C
- Interface：4-Lanes MIPI
- Aspect Ratio：10：16
- Backlight Type：LED ,Normally White
- Touch Panel：Resistive Touch Panel, RTP
- Surface：Anti-Glare

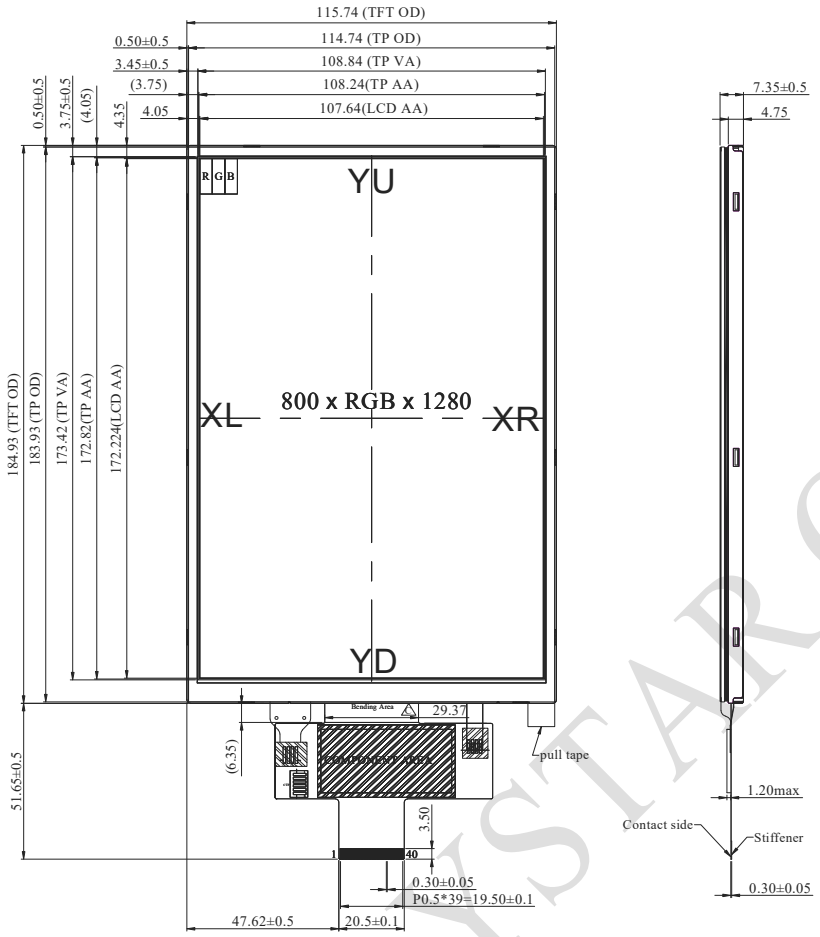
Interface

LCM PIN Definition

Pin	Symbol	Function
1-5	NC	No connection
6	YU	Top electrode
7	XL	Left electrode
8	YD	Bottom electrode
9	XR	Right electrode
10-11	VCI	Power supply for analog circuits. Connect to an external power supply of 3.0V to 3.6V
12-13	NC	No connection
14	RESET	The external reset input (RESX) Initializes the chip with a low input. Be sure to execute a power-on reset after supplying power. Fix to IOVCC level when not in use.
15	TE	Tearing effect output pin. Leave the pin open when not in use.
16	NC	No connection (LED PWM)
17-18	GND	Power ground
19-20	IOVCC	Power supply for analog circuits. Connect to an external power supply of 1.65V to 3.6V
21	GND	Power ground
22	D3P	MIPI DSI differential data pair. (Data lane 3)
23	D3N	
24	GND	Power ground
25	D2P	MIPI DSI differential data pair. (Data lane 2)
26	D2N	
27	GND	Power ground
28	CLKP	MIPI DSI differential clock pair
29	CLKN	
30	GND	Power ground
31	D1P	MIPI DSI differential data pair. (Data lane 1)
32	D1N	
33	GND	Power ground
34	D0P	MIPI DSI differential data pair. (Data lane 0)
35	D0N	

36	GND	Power ground
37	VLED1+	Power for LED1 backlight anode
38	VLED2+	Power for LED2 backlight anode
39	VLED1-	Power for LED1 backlight cathode
40	VLED2-	Power for LED2 backlight cathode

Contour Drawing



PIN No.	SYMBOL	PIN No.	SYMBOL
1	NC	21	GND
2	NC	22	D3P
3	NC	23	D3N
4	NC	24	GND
5	NC	25	D2P
6	YU	26	D2N
7	XL	27	GND
8	YD	28	CLKP
9	XR	29	CLKN
10	VCI	30	GND
11	VCI	31	D1P
12	NC	32	D1N
13	NC	33	GND
14	RESET	34	D0P
15	TE	35	D0N
16	NC(LEDPWM)	36	GND
17	GND	37	VLED1+
18	GND	38	VLED2+
19	IOVCC	39	VLED1-
20	IOVCC	40	VLED2-

The non-specified tolerance of dimension is ±0.3 mm .

Absolute Maximum Ratings

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

Electrical Characteristics

Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power supply for analog circuit	VCI	3.0	3.3	3.6	V
Power supply for logic circuit	IOVCC	1.65	1.8	3.6	V
Current for Driver	I_{VCI}	-	45	70	mA
	I_{IOVCC}	-	20	30	mA

Backlight Driving Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current for VLED1+	ILED1	-	240	-	mA
LED voltage for VLED1+	VLED1	8.1	9.0	10.2	V
LED current for VLED2+	ILED2	-	240	-	mA
LED voltage for VLED2+	VLED2	8.1	9.0	10.2	V
LED Life Time		-	50,000	-	Hr