

TFT DISPLAY SPECIFICATION



RAYSTAR

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RFA401280B-AYW-DNF1

General Specifications

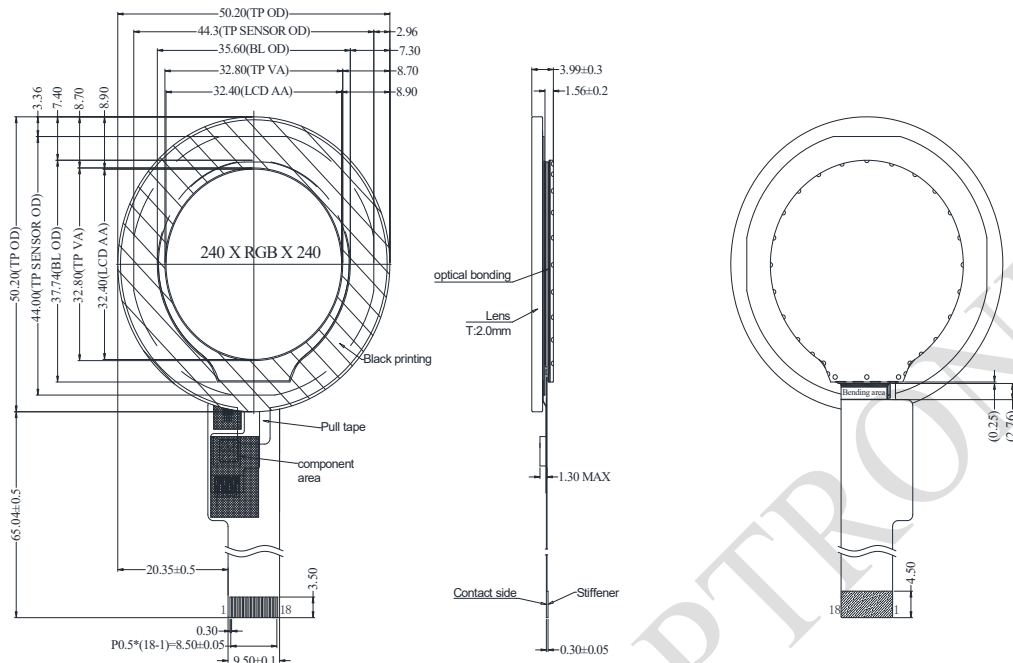
- Size: 1.28 inch
- Dot Matrix: 240 x RGB x 240 (TFT) dots
- Module dimension: 50.20 x 50.20 x 3.99 mm
- Active area: 32.40 x 32.40 mm
- Dot pitch: 0.043 X 0.135 mm
- LCD type: TFT, Normally Black, Transmissive
- Viewing Angle: 80/80/80/80 (IPS)
- Interface: SPI
- Backlight Type: LED ,Normally White
- Driver IC: GC9A01
- PCAP Driver IC: CTS816
- PCAP FW Version: 0X1
- PCAP Resolution: 240*240
- Touch Panel: Projected Capacitive Touch Panel, PCAP
- Surface: Glare

Interface

LCM PIN Definition

Pin	Symbol	Function
1	TP_INT	INTERUPT SIGNAL
2	TP_SDA	IIC DATA
3	TP_SCL	IIC CLOCK
4	TP_RESET	TP RESET SIGNAL
5	TP_GND	Ground
6	TP_VDD3.3V	CTP POWER SUPPLY
7	VLED+	Backlit positive
8	VLED-	Backlit negative
9	GND	Ground
10	CS	Chip select signal
11	SCL	Serial clock
12	SDA	Serial data signal
13	RS	Register select signal
14	TE	TE signal
15	RESET	LCD RESET Signal
16	VCI3.3V	LCD Power supply
17	NC	No connection
18	GND	Ground

Contour Drawing



PIN NO.	SYMBOL
1	TP_INT
2	TP_SDA
3	TP_SCL
4	TP_RESET
5	TP_GND
6	TP_VDD3.3V
7	VLED+
8	VLED-
9	GND
10	CS
11	SCL
12	SDA
13	RS
14	TE
15	RESET
16	VCI3.3V
17	NC
18	GND

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

Absolute Maximum Ratings

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

Electrical Characteristics

Operating conditions

Item	Symbol	Conditions	Standard Value			Unit
			Min	Typ	Max	
Power Supply Voltage for Analog	VCI	Ta= +25°C	2.65	2.8	3.3	V
Supply PCAP	TP_VDD3.3	Ta= +25°C	2.65	2.8	3.3	V
	ICTP	Ta= +25°C	-	3.0	4.5	mA
Input High Voltage for LCD	VIH	-	0.8Iovcc	-	Iovcc	V
Input Low Voltage for LCD	VIL	-	Vss	-	0.2 Iovcc	V
Output High Voltage for LCD	VOH	-	0.8Iovcc	-	Iovcc	V
Output Low Voltage for LCD	VOL	-	Vss	-	0.2 Iovcc	V

LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	-	-	40	-	mA
LED voltage	VLED+	3.0	3.2	3.4	V
LED Life Time	-	-	20,000	-	Hr