

TFT DISPLAY SPECIFICATION



RAYSTAR

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RFN01800A2A0XHSNC00

General Specification

- Size: 1.77-inch
- Dot Matrix: 128 x RGB x 160(TFT) dots
- Module Dimension: 36.5(W) x 47.0(H) x 4.73 (D) mm
- Active Area: 28.032 x 35.040 mm
- Pixel Pitch: 0.219 x 0.219 mm
- LCD Type: TFT, Normally Black, Transmissive
- View Angle: 80/80/80/80
- Aspect Ratio: Portrait
- TFT IC: NV3023B
- TFT Interface: SPI
- PCAP IC: FT6336U
- PCAP Support Operation: Support single-finger touch & gesture
- PCAP Interface: I2C
- PCAP FW Version: 0x02
- PCAP Resolution: 128*160
- Backlight Type: LED, Normally White
- Touch Panel: Projected Capacitive Touch Panel, PCAP
- Surface: Glare

Interface

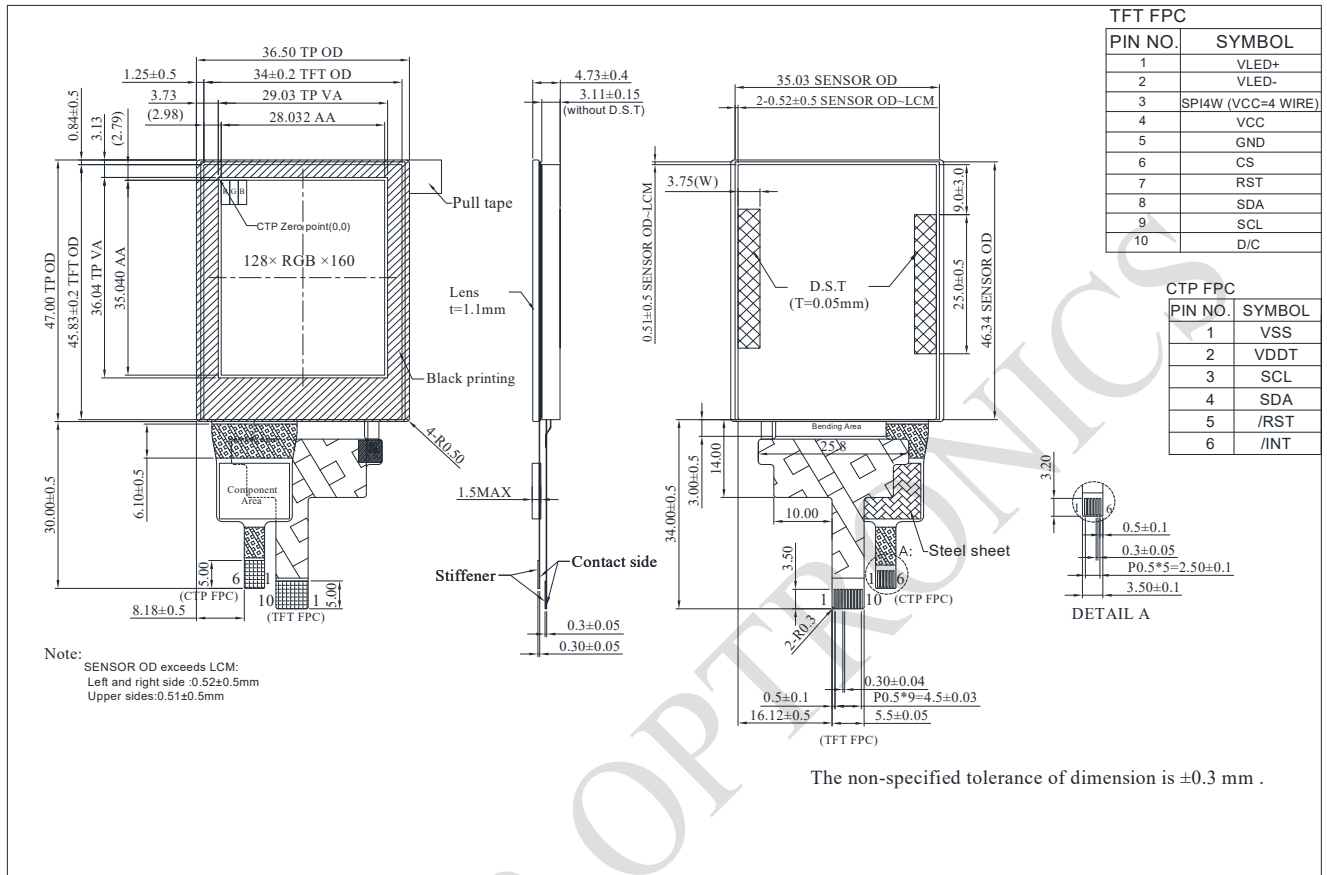
LCM PIN Definition

Pin no	Symbol	Function
1	VLED+	Back light anode
2	VLED-	Back light cathode
3	SPI4W (VCC=4 WIRE)	SPI4W='1', SPI 4 Wire Serial SPI4W='0', SPI 3 Wire Serial
4	VCC	Power Supply.
5	GND	Ground
6	CS	Chip enable (CSX)
7	RST	Reset signal (RESX)
8	SDA	Serial input/output signal in serial interface mode.
9	SCL	In Serial Interface, this is used as SCL.
10	D/C	Data/ command selection. (D/CX)

PCAP PIN Definition

Pin no	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply
3	SCL	I2C clock input I2C clock input
4	SDA	I2C data input and output
5	/RST	External reset signal, active low
6	/INT	External interrupt to the host

Contour Drawing



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	Min	Typ	Max	Unit
Supply Voltage	VCC	2.8	3.3	3.6	V
Supply LCM Current	ICC	—	7	10.5	mA
Supply Voltage For Touch	VDDT	2.8	-	3.3	V
	IDDT		4	6	mA

LED Driving Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED Current	—	—	80	—	mA
LED Voltage	VLED+	2.7	2.9	3.3	V
LED Life Time	—	50,000	—	—	Hr