



RAYSTAR

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## RFF70BQ-1IW-DBG SPECIFICATION

### General Specifications

- Size: 7.0 inch
- Dot Matrix: 800 x RGB x 480(TFT) dots
- Module dimension: 165.0(W) x 100.0(H) x 13.45(D) mm
- Active area: 154.08 x 85.92 mm
- Dot pitch: 0.0642 x 0.179 mm
- LCD type: TFT, Normally White, Transmissive
- View Direction: 12 o'clock
- Gray Scale Inversion Direction: 6 o'clock
- Aspect Ratio: 16:9
- Backlight Type: LED, Normally White
- Controller IC: SSD1963
- TFT Interface: Digital 8080 family MPU 8bit/16bit
- PCAP IC: ILI2130 or Equivalent
- PCAP Interface: I2C
- PCAP FW Version: 0x07.0x00.0x00.0x00.0x65.0x90.0x00.0x01
- PCAP Resolution:16384\*16384
- Touch Panel: Projected capacitive touch screen (PCAP)
- Surface: Glare

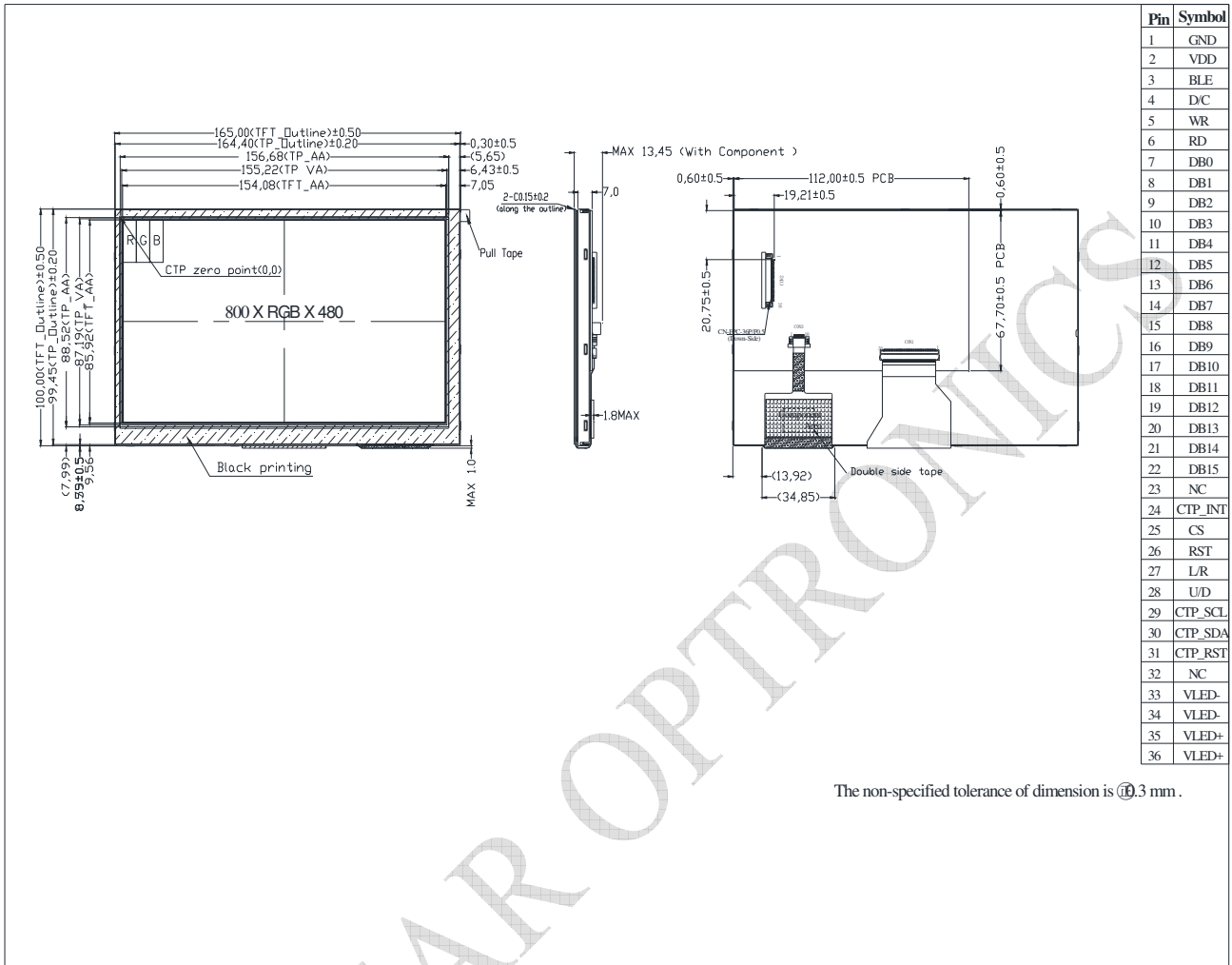
\*Color tone slight changed by temperature and driving voltage.

# Interface

## 1. LCM PIN Definition (CON2)

Pin	Symbol	Function
1	GND	System ground pin of the IC . Connect to system ground.
2	VDD	Power Supply : +3.3V
3	BLE	Backlight control signal , H: On \ L: Off
4	D/C	Data/Command select
5	WR	Write strobe signal
6	RD	Read strobe signal
7	DB0	Data bus
8	DB1	Data bus
9	DB2	Data bus
10	DB3	Data bus
11	DB4	Data bus
12	DB5	Data bus
13	DB6	Data bus
14	DB7	Data bus
15	DB8	Data bus (When select 8bits Mode, this pin is NC)
16	DB9	Data bus (When select 8bits Mode, this pin is NC)
17	DB10	Data bus (When select 8bits Mode, this pin is NC)
18	DB11	Data bus (When select 8bits Mode, this pin is NC)
19	DB12	Data bus (When select 8bits Mode, this pin is NC)
20	DB13	Data bus (When select 8bits Mode, this pin is NC)
21	DB14	Data bus (When select 8bits Mode, this pin is NC)
22	DB15	Data bus (When select 8bits Mode, this pin is NC)
23	NC	No connect
24	CTP_INT	CTP_ External interrupt to the host
25	CS	Chip select
26	RST	Hardware reset
27	L/R	Left / right selection; Default L/R=H
28	U/D	Up/down selection; ; Default U/D=L
29	CTP_SCL	CTP_SPI Slave mode, chip select, active low / I2C clock input
30	CTP_SDA	CTP_ SPI Slave mode, data input / I2C data input and output
31	CTP_RST	CTP_ External Reset, Low is active
32	NC	No connect
33	VLED-	Power for LED Driver IC(GND)
34	VLED-	Power for LED Driver IC(GND)
35	VLED+	Power for LED Driver IC(+5V)
36	VLED+	Power for LED Driver IC(+5V)

# 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

### 1. Operating conditions: (CON2.Pin1=GND, Pin2=VDD)

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VDD	—	3.0	3.1	3.3	V
Supply Current For LCM	IDD	—	—	310	460	mA

Note 1 : This value is test for VDD=3.3V , Ta=25°C only

### 2. Backlight driving conditions (CON2.Pin33,34=VLED-, Pin35,36=VLED+)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operation Current For LED Driver	VLED=5V	400	—	600	mA
Power Consumption	VLED=5V	2000	—	3000	mW
Supply Voltage For LED Driver	VLED+	—	5	—	V
LED Life Time	—	—	50,000	—	Hr