



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



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### SPECIFICATION

**MODULE NO.: WF35QTIBCDBCA#**

### General Specifications

Item	Dimension	Unit
Size	3.5	inch
Dot Matrix	320 x RGBx240(TFT)	dots
Module dimension	93.5 x 66.44 x 8.56	mm
Active area	70.08 x 52.56	mm
Dot pitch	0.073 x 0.219	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	4:3	
Backlight Type	LED, Normally White	
Controller IC	SSD1963	
Interface	Digital 8080 family MPU 8bit/16bit	
Touch Panel	Projected Capacitive Touch Panel (PCAP)	
Surface	Glare	

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

# 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: (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	—	—	210	350	mA

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operation Current For LED Driver	VLED=3.3V	150	-	225	mA
Power Consumption	VLED=3.3V	495	-	742.5	mW
Supply Voltage For LED Driver	VLED+	3.3	-	5	V
LED Life Time		-	50,000	-	Hr

# Interface

## 9.1. 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	BL_E	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	External interrupt to the host
25	CS	Chip select
26	RST	Hardware reset
27	NC	No connect
28	NC	No connect
29	CTP_SCL	SPI Slave mode, chip select, active low I2C clock input
30	CTP_SDA	SPI Slave mode, data input I2C data input and output
31	CTP_RST	External Reset, Low is active
32	NC	No connect
33	VLED-	VLED- for B/L LED inverter (GND)
34	VLED-	VLED- for B/L LED inverter (GND)
35	VLED+	VLED+ for B/L LED inverter (+3.3V)
36	VLED+	VLED+ for B/L LED inverter (+3.3V)

# Contour Drawing

