



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



# Winstar Display Co., LTD

## 華凌光電股份有限公司



WEB: <http://www.winstar.com.tw> E-mail: sales@winstar.com.tw

### SPECIFICATION

**MODULE NO.: WF28ETLAJDNN0#**

### General Specifications

Item	Dimension	Unit
Size	2.8	inch
Dot Matrix	240 x RGB x 320(TFT)	dots
Module dimension	50.0(W) x 69.2(H) x 2.3(D)	mm
Active area	43.2 x 57.6	mm
Dot pitch	0.06 x 0.18	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	6 o'clock	
Gray Scale Inversion Direction	12 o'clock	
Aspect Ratio	Portrait	
Backlight Type	LED, Normally White	
With /Without TP	Without TP	
Surface	Glare	

## Absolute Maximum Ratings

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

## Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Analog	VCI	—	2.5		3.3	V
Supply Voltage For Logic	IOVCC		1.65		3.3	V
Supply Current For LCM	ICC	—	—	10	15	mA

# Interface

## LCM PIN Definition

NO	Symbol	Function	I/O
1~4	DB8~DB11	Data bus	I/O
5	GND	Ground	P
6	IOVCC	power supply	P
7	/CS	Chip select signal.	I
8	RS	register select	I
9	/WR	Write data when WRX is Low.	I
10	/RD	Read strobe signal. Read out data when RDX is Low.	I
11	GND	Ground	P
12	NC	No connection	-
13	NC	No connection	-
14	NC	No connection	-
15	NC	No connection	-
16	LEDA	Anode of LED backlight.	P
17~20	LEDK1~4	Cathode of LED backlight.	P
21	IM0	IM0=0 8Bit DB8-15; IM0=1 16Bit DB0-DB15;	P
22	DB12	Data bus	I/O
23~30	DB0~DB7	Data bus	I/O
31	/RESET	System reset pin.	I
32~33	VCI	power supply	P
34	GND	Ground	P
35~37	DB13~DB15	Data bus	I/O

# Contour Drawing

