

1.14 inch TFT LCD



PROFILE

- Type: IPS TFT/Normally Black
- Display format: 135(RGB)×240
- Controller IC: ST7789V
- Interface: 4-wire SPI
- Input Voltage: 2.4~3.3V

FEATURES

NO.	ITEM	SPECIFICATION	UNIT
1	Panel Size	1.14	inch
2	Outline Dimension	17.6(W) x 31.00(H) x 1.60(T) (Excluding FPC)	mm
3	Active Area	14.86(H) x 24.91(V)	mm
4	Number of Pixels	135(H) × 3(RGB) × 240(V)	pixels
5	Dot pitch	0.1101(H) x 0.1038(V)	mm
6	Pixel arrangement	RGB vertical stripe	-
7	Display Mode	Normally Black	-
8	Viewing Direction	ALL	-
9	Interface	4-wire SPI	-
10	Backlight	White LED	-
11	Luminance	400(TYP.)	cd/m ²
12	Drive IC	ST7789V	-
13	Operation Temperature	-20~70	°C
14	Storage Temperature	-30~80	°C

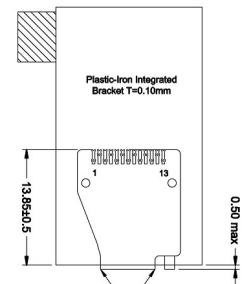
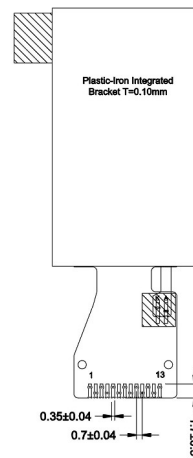
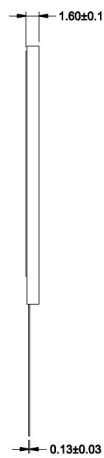
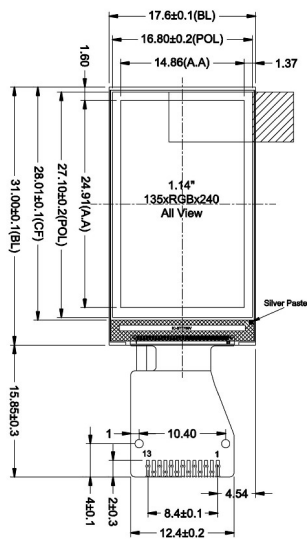
MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	17.6 x 31.00	mm
Active Area	14.86 x 24.91	
Height	1.60	

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Supply Voltage(I/O)	VDD	-0.3	-	4.6	V
Analog Supply Voltage	VDDIO	-0.3	-	4.6	
Logic Input Voltage	VIN	-0.3	-	VDD+0.3	

ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN	TYP	MAX	
System Voltage	VDD		2.4	2.8	3.3	V
Interface Operation Voltage	VDDIO		1.65	1.8	3.3	
Gate Driver High Voltage	VGH		12.2	-	14.97	
Gate Driver Low Voltage	VGL		-12.5	-	-7.16	
Voltage for LED backlight	VLED		2.9	3.0	3.1	
Operating Current for VDD	IDD		-	8	10	mA
Current for LED backlight	ILED	1 LED	-	20	-	
Brightness	Lbr		350	400	-	cd/m ²
Current of Sleep In Mode(VDD)	Idd		-	15	30	μA
Current of Sleep In Mode(VDDIO)	Iddio		-	5	10	

For detailed information, please refer to the “Product Numbering System” document.

PIN DESCRIPTION		
NO.	SYMBOL	FUNCTION
1	NC	No connection
2	NC	No connection
3	SDA	SPI interface input/output pin
4	SCL	This pin is used to be serial interface clock
5	RS	Display data/command selection pin in 4-line serial interface.
6	RESET	This signal will reset the device, signal is active low.
7	CS	Chip selection pin. Low enable; High disable.
8	GND	Power Ground
9	NC	No connection
10	VDD	Power Supply for Analog
11	LEDK	Backlight cathode
12	LEDA	Backlight anode
13	GND	Power Ground

DIMENSIONS in millimeters


FPC bending is out of the border of bracket,
please make sure to keep enough space.

FPC folding diagram

FPC unfolded for shipment

BACKLIGHT CIRCUIT DIAGRAM


BACKLIGHT DRIVING CONDITION:
If=20mA, Vf=3.0V

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