

May 2016

Welcome to read Winstar Newsletter issue no.90. In this issue, we will introduce Winstar new products; they are including TFT 3.5 inch WF35R, OLED 0.96 inch WEO012864C and STN Graphic WO256128A.

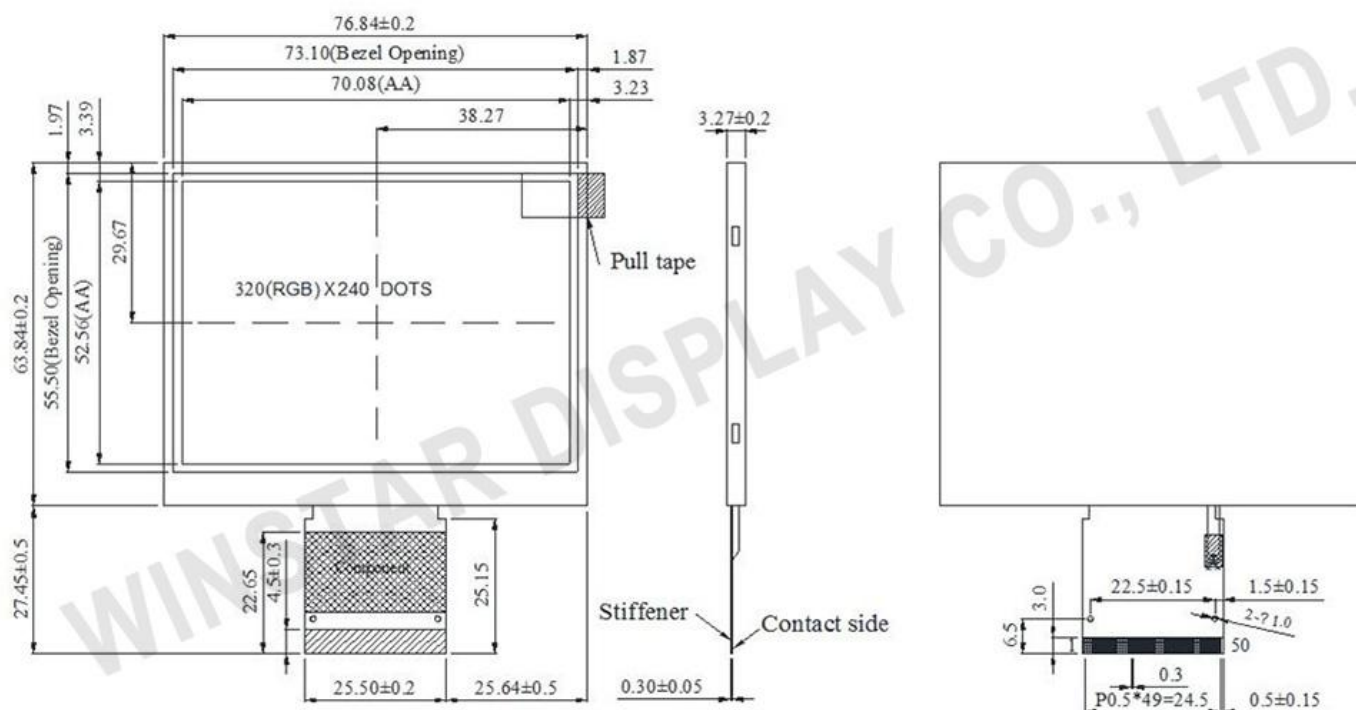
Product Introduction - 3.5 inch TFT WF35R

Winstar WF35R is a 3.5 inch diagonal full color QVGA 320x240 TFT LCD module. This module is built in with SSD2119 IC; it includes the controller and driver IC functions and supports lots of different interfaces: 8/9/ 16/ 18-bit 6800-series and 8080-series parallel interface, 3-wire or 4-wire SPI, 18-bit/6-bit RGB interface. Since the WF35R doesn't require control-board to drive MCU parallel and SPI interface, the advantage of WF35R is having competitive price than other TFT models which are require control-board on module. Below is the basic spec information for WF35R, please contact with us if you need further detailed information.

Item-WF35R	Dimension	Unit
Size	3.5	inch
Dot Matrix	320 x RGBx240(TFT)	dots
Module dimension	76.84(W) x 63.84(H) x 3.27(D)	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	
Backlight Type	LED, Normally White	
IC	SSD2119	
Interface	RGB/MCU/SPI	
Touch Panel	CTP and RTP option	
Surface	Anti-Glare	



Drawing and pin define for WF35R



No.	Symbol	Description	No.	Symbol	Description
1~2	VCI	Booster input voltage pin	15~32	D17~D0	Data bus
3	VSS	Ground	33	VSS	Ground
4	VDDIO	Voltage input pin for logic	34	DOTCLK	Dot-clock signal and oscillator source
5	VSS	Ground	35	HSYNC	Line Synchronous Signal
6	RESET	Reset Signal pin ("Low" is enable)	36	VSYNC	Frame Synchronous Signal
7	DC/SDC	Data or Command select PIN.	37	DE	Display enable pin for controller
8	E/RD	6800 system: E(enable signal) 8080 system : RD(read strobe signal) Serial mode: Not use and should be connected to VDDIO or VSS	38	VSS	Ground
9	WR	6800 system : RW (indicates read cycle when high ,write cycle when low) 8080 system : WR (write strobe signal)	39~42	PS0~PS3	Interface select PIN
10	CS	Chip select	43	VSS	Ground
11	SCL	Serial Clock.	44~47	NC	NC
12	SD0	Serial Data output	48	VSS	Ground
13	SDI	Serial Data Input	49	LEDK	Backlight LED Cathode
14	WSYNC	Ram write synchronization output. Leave it OPEN when not used.	50	LEDA	Backlight LED Anode.

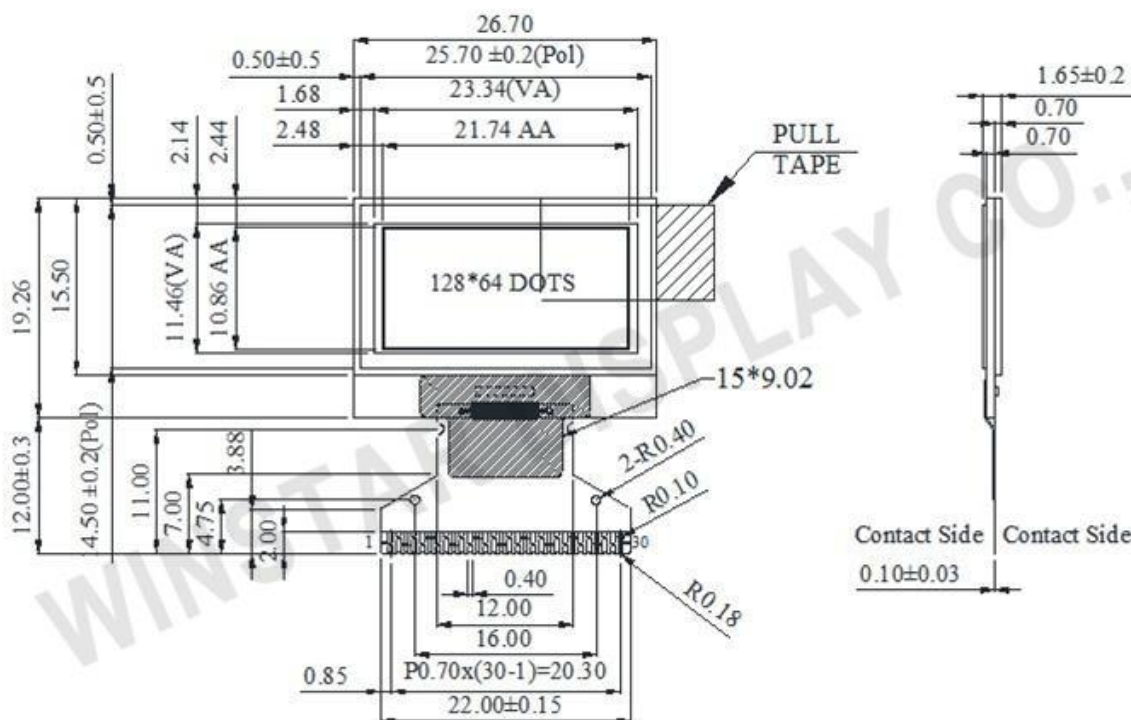


Product Introduction - 0.96" OLED WEO012864C

Winstar WEO012864C is a small OLED display which is made of 128x64 pixels, diagonal size only 0.96 inch. The WEO012864C has the outline dimension of 26.70 x19.26 mm and AA size 21.74 x10.86 mm; it is built in with SH1106G controller IC and it communicates via 6800/8080 8-bit parallel, I2C and 4-wire serial interface. The WEO012864C is a small COG OLED display which is ultra thin (only 1.65mm); lightweight and low power consumption. It is suitable for handheld instruments, meters, mp3, wearable device, IoT, etc. The standard emitting color for this item is yellow, but options are available in white and sky blue.

WEO012864C module can be operating at temperatures from -40°C to +80°C; its storage temperatures range from -40°C to +80°C. Below is the basic specification of WEO012864C as reference. For any further information such as samples or quotation, please contact with our sales rep.

Item-WEO012864C	Dimension
Dot Matrix	128 x 64
Module dimension	26.70 × 19.26 × 1.65 mm
Active Area	21.74 × 10.86 mm
Pixel Size	0.148 × 0.148 mm
Pixel Pitch	0.170 × 0.170 mm
Display Mode	Passive Matrix
Display Color	Yellow/Sky Blue/White
Drive Duty	1/64 Duty
Controller IC	SH1106G
Interface	6800/8080/4-wire SPI/I2C



Product Introduction - Graphic COG LCD WO256128A

WO256128A is a monochrome graphic LCD module made of 256x128 pixels, diagonal size 2.9 inch. This LCD Module WO256128A is built in with ST75256 controller IC, it supports 6800 8-bit, 8080 8-bit parallel and 4-wire serial SPI and I2C interface. The WO256128A is having the same outline dimension, and VA size and same power supply 3.3V as WO12864D3, but is having a much higher resolution and performance. The WO125128A is an upgrade version of WO12864D3 to meet with the customers' requirement on higher resolution and the best thing is that the customers don't have to change the mechanical design for their applications.

This module can be operating at temperatures from -20°C to +70°C; its storage temperatures range from -30°C to +80°C. The WO256128A is available for different LCD mode options, STN Negative, FSTN Negative (Double film) and FSTN positive and with LED backlight options, like white LED. Please contact with us if you need different LCD type and LED combination.

Item-WO256128A	Dimension
Number of dots	256 x 128
Module dimension	80.0 x 54.0 mm
View area	70.7 x 38.8 mm
Active area	66.54 x 33.26 mm
Dot size	0.24 x 0.24 mm
Dot pitch	0.26 x 0.26 mm
LCD type (available)	STN Negative, Blue Transmissive FSTN Negative (Double film) Transmissive FSTN Positive Transflective
Drive Method	1/128 DUTY, 1/12 BIAS
View direction	6 o'clock
Backlight Type	LED, White
IC	ST75256
Interface	6800/8080/SPI/I2C

