

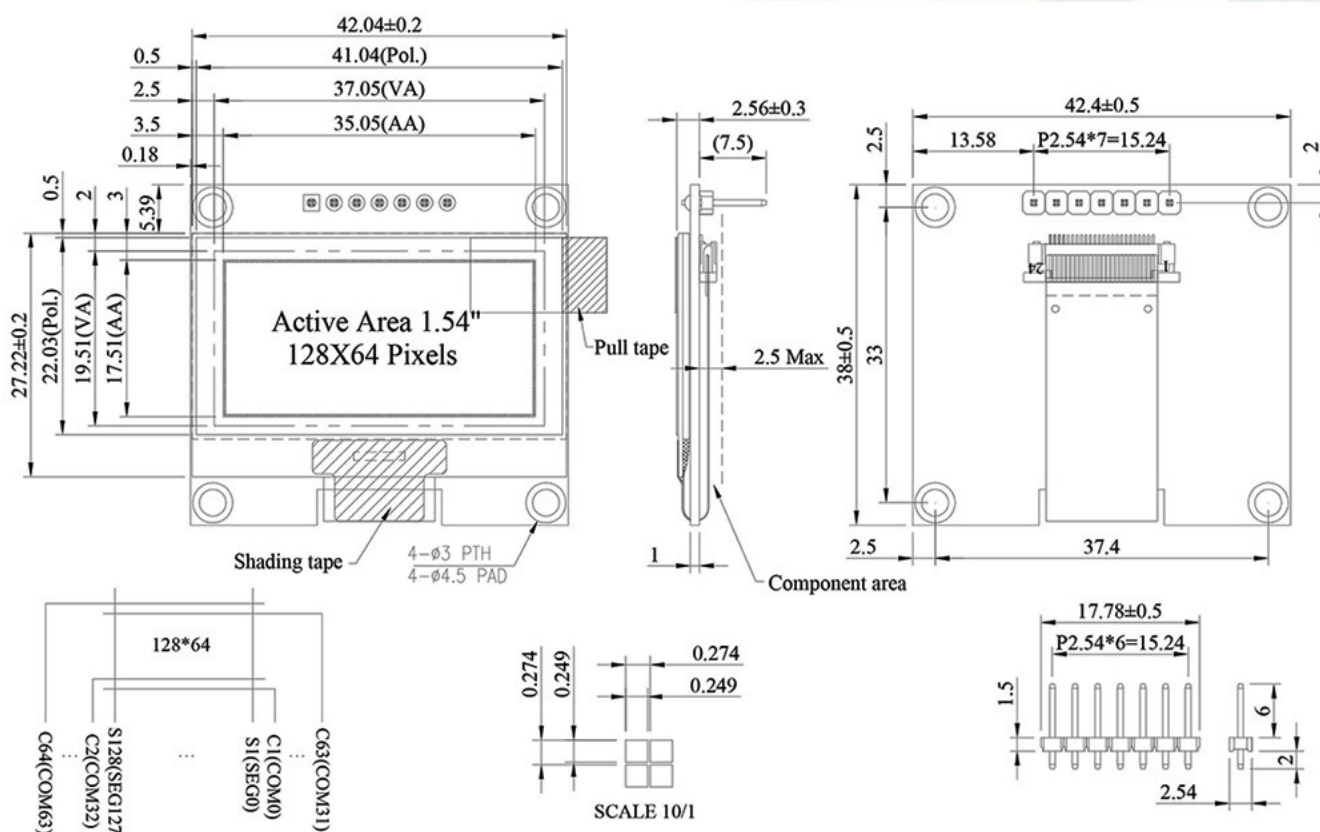
Feb. 2021

## 1.54 “ COG Graphic OLED WEA012864A with PCB

WEA012864A model is the extension item of WEO012864A which is having a PCB board on module; it's diagonal size 1.54 inch, made of 128x64 pixels. This PCB board with four mounting holes is an easy method for customers to fix modules on their applications. WEA012864A module is built in with SSD1309 IC; it supports 4-wire SPI interface; optional I2C interface, driving duty 1/64, supply voltage for logic is from 3.3V ~5V, I/O level 5V to 3V with conversion circuit, the display with 50% check board current is 80mA @3.3VDD (typical value).

This OLED module is suitable for smart home application, medical device, smart control, meter, etc. WEA012864A module can be operating at temperatures from -40°C to +80°C; its storage temperatures range from -40°C to +85°C.

WEA012864A	Dimension
Dot Matrix	128 × 64
Module dimension	42.4 × 38 × 2.56 mm
Active Area	35.05 × 17.51 mm
Pixel Size	0.249 × 0.249 mm
Pixel Pitch	0.274 × 0.274 mm
Display Mode	Passive Matrix
Display Color	White/Yellow/Green
Drive Duty	1/64 Duty
IC	SSD1309
Interface	4-wire SPI / I2C Option
Size	1.54 inch



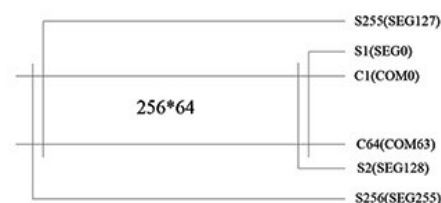
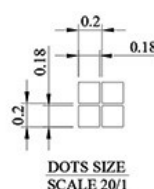
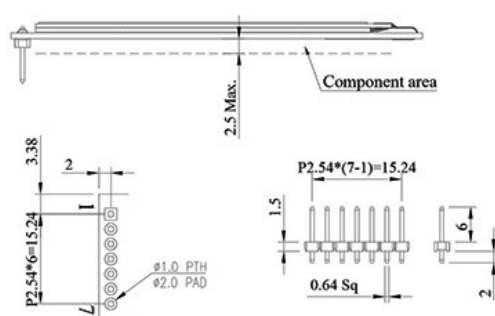
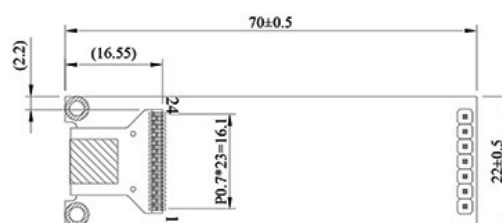
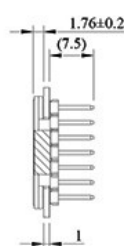
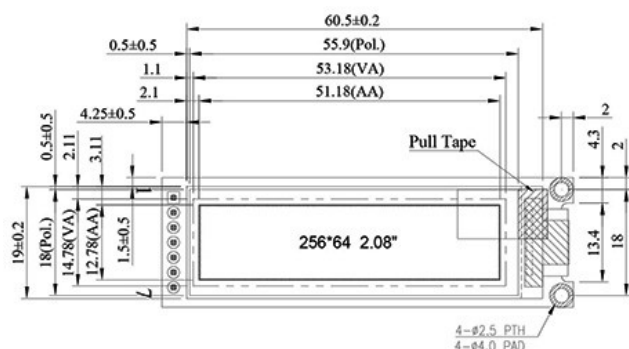
► [Link to Winstar WEA012864A web page](#)

## 2.08" Graphic OLED WEA025664A with PCB

WEA025664A is a COG Graphic OLED with PCB on module, which is made of resolution 256x64 pixels, diagonal size 2.08 inch. This PCB board with four mounting holes is easy-to-use for customers to fix modules on their applications. WEA025664A OLED module is equipped with SSD1362 driver IC that enables using SPI interface. This model is optional for integrating with a Font IC of GT21L16T1W which supports SPI interface. The GT21L16T1W is a 15x16 dots fonts chip; it supports Chinese standard GB12345 traditional Chinese character set, BIG5 traditional Chinese character basic set, Japanese standard JIS0208 Japanese character set (compatible with Unicode), and a total of 150 countries' character. The supply voltage for logic of WEA025664A is 3V or 5V, supports 16 gray scale (4bits), driving duty 1/64, the display with 50% check board current is 90mA @ 3.3VDD (typical value).

This OLED module is suitable for smart home application, medical device, smart control and etc. WEA025664A module can be operating at temperatures from -40°C to +80°C; its storage temperatures range from -40°C to +85°C.

WEA025664A	Dimension
Dot Matrix	256 × 64 Dots
Module dimension	70.0 × 22.0 × 1.76 mm
Active Area	51.18 × 12.78 mm
Pixel Size	0.18 × 0.18 mm
Pixel Pitch	0.20 × 0.20 mm
Display Mode	Passive Matrix
Display Color	White/Yellow
Drive Duty	1/64 Duty
Gray Scale	4 Bits
IC	SSD1362
Font IC	GT21L16T1W
Interface	3-wire SPI
Size	2.08 inch



## 3.9" Smart Display CAN Series TFT

WL0F00039000QGAAASA00 is a 3.9" Smart Display CAN series TFT which is defined as a slave device, that is controlled by master device via CAN bus command to render display content on the display screen and return touch event data with protocol objects. WL0F00039000QGAAASA00 is integrated with a standard 3.9 inch Bar TFT module WF39QTIBSDBG0 and 4-layers PCBA with built-in firmware code which is developed by Winstar. This 3.9" Smart Display CAN series TFT is an easy-to-use product which allows customers to develop projects rapidly in cost-effective way. This 3.9" Smart Display can use computer with USB2CAN dongle or Raspberry Pi interface (PiCAN2) as HOST platform. Winstar already developed a Windows IDE for Smart Display GUI design. Winstar GUI builder software is designed for customers to simulate their GUI design in advance by using the drag-and-drop Widget preview function; furthermore, customers can create their ideal GUI by themselves by using this software. Winstar GUI builder software is supporting Windows system only; it can fulfill What You See Is What You Get (WYSIWYG).

Winstar Smart Display CAN Series offers an out-of-the-box CANopen development experience that will lower your development costs and speed your time-to-market expectations. The CanTFT comes with standard UI objects to get customers project off the ground quickly. If customers need custom UI objects support, our engineers are here to help. Send over your contents in PNG/JPG format, we will customize a new set of UI objects to you. Below are what included in our Smart Display Can Series TFT:

## Winstar Smart Display CAN Series TFT

### Hardware Platform

(Container)

Physical Layer including  
MCU/Flash/Display



### Firmware code

(Data contents)

Presentation Layer  
including Splash  
/application/UI



### Software code

(Support tools)

Application Layer  
including PC+AP /  
Interface Dongle to  
configure or update Smart  
Display contents.





## 3.9" Smart Display CAN Series TFT

Winstar Smart Display Can Series is really a “smart” choice for customers. There are many important features and functions for the new released 3.9” smart display CAN TFT as below:

- ▶ DC 5V working voltage
- ▶ 3.9“ Bar TFT WF39QTIBSDBG0.
- ▶ Supports PCAP touch screen.
- ▶ Power-On Self-Test & Splash screen.
- ▶ CAN bus Interface.
- ▶ Supports CANopen protocol, default baud rate at 250KB.
- ▶ Built in flash memory, store the font and Object Dictionary Data.
- ▶ Long transmission distance.
- ▶ Strong anti-interference ability.
- ▶ Built-in Buzzer.
- ▶ Meets the 1U size for rack mounting.
- ▶ Operating temperature -10℃~70℃
- ▶ Supports Multi-master controlled.

We provide below three kinds of demo scenarios for optional. For more details, please check our website or contact Winstar sales persons.



WL0F00039000QGAAASB00 (Industrial Application)



WL0F00039000QGAAASC00 (Vehicle Application)



WL0F00039000QGAAASD00 (Medical Application)

### 3.9" Smart Display CAN Series TFT

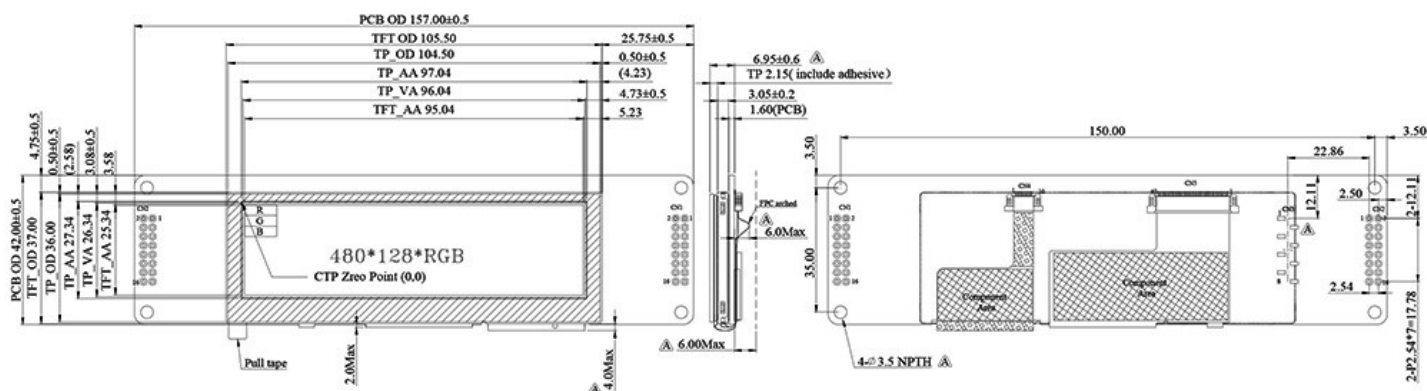
Below is the mechanical data and TFT-LCD module information for reference:

#### Mechanical Data:

Item	Standard Value	Unit
LCD panel	105.5(W) × 37.0(H) × 5.13	mm
PCB	157(W) × 42(H) × 1.6	mm
Housing outline	NA	mm

#### TFT module Information:

Item	Standard Value	Unit
Operating voltage	5	VDC
Communication Interface	CAN bus differential ± 3.3	Vpp
LCD display size	3.9	inch
Dot Matrix	480 × 128 × RGB (TFT)	dot
Module dimension	105.5(W) × 37.0(H) × 5.13	mm
Active area	95.04 × 25.34	mm
Dot pitch	0.066(W) × 0.198(H)	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	6 o'clock	
Aspect Ratio	Bar Type	
Touch Panel	Projected capacitive touch screen (PCAP)	
Surface	Glare	



- ▶ [Link to WL0F00039000QGAAASB00 \( Industrial Application\) web page](#)
- ▶ [Link to WL0F00039000QGAAASC00 \(Vehicle Application\) web page](#)
- ▶ [Link to WL0F00039000QGAAASD00 \(Medical Application\) web page](#)

## Smart Display GUI Builder Introduction

Winstar developed a Windows IDE (Integrated Development Environment) for Smart Display GUI design. There are many important key advantages for Winstar GUI Builder software as below:

### ► Drag-and-drop Widget Preview Function:

Winstar GUI Builder software is designed for customers to simulate their GUI designs in advance by using the drag-and-drop Widget preview function; furthermore, customers can create their ideal GUI designs by themselves. This GUI builder software is supporting Windows system only; it can fulfill What You See Is What You Get (WYSIWYG). It will lower your development costs and speed your time-to-market expectations.

### ► Simulator Function:

Customers can preview the display effects and functions through the simulator function of Winstar GUI Builder before purchasing the hardware (Winstar Smart Display module). You can try before you buy, just contact us to download our GUI Builder Software (App).

In the development stage, customers can simulate the display images on the PC side, without downloading to the hardware device to check the display effect; it can save a lot of development time.

### ► Change or create GUI designs at user side:

Customers can change GUI design or data by themselves by using our GUI Builder; do not need to create Graphic objects through Winstar design team. We still can provide custom UI objects support if customers need, our engineers are here to help.

### ► Supporting Size:

Currently, Winstar GUI Builder software can support 5", 7" and 3.9" Smart Display. You can try Winstar GUI Builder before you buy our Smart Display modules; you are more welcome to buy our display modules to explore the fantastic performance of Winstar Smart Display.

#### ■ Demo scenario for 3.9" Smart Display:

WL0F00039000QGAAASB00 (Industrial Application)  
 WL0F00039000QGAAASC00 (Vehicle Application)  
 WL0F00039000QGAAASD00 (Medical Application)

#### ■ Demo scenario for 5" Smart Display:

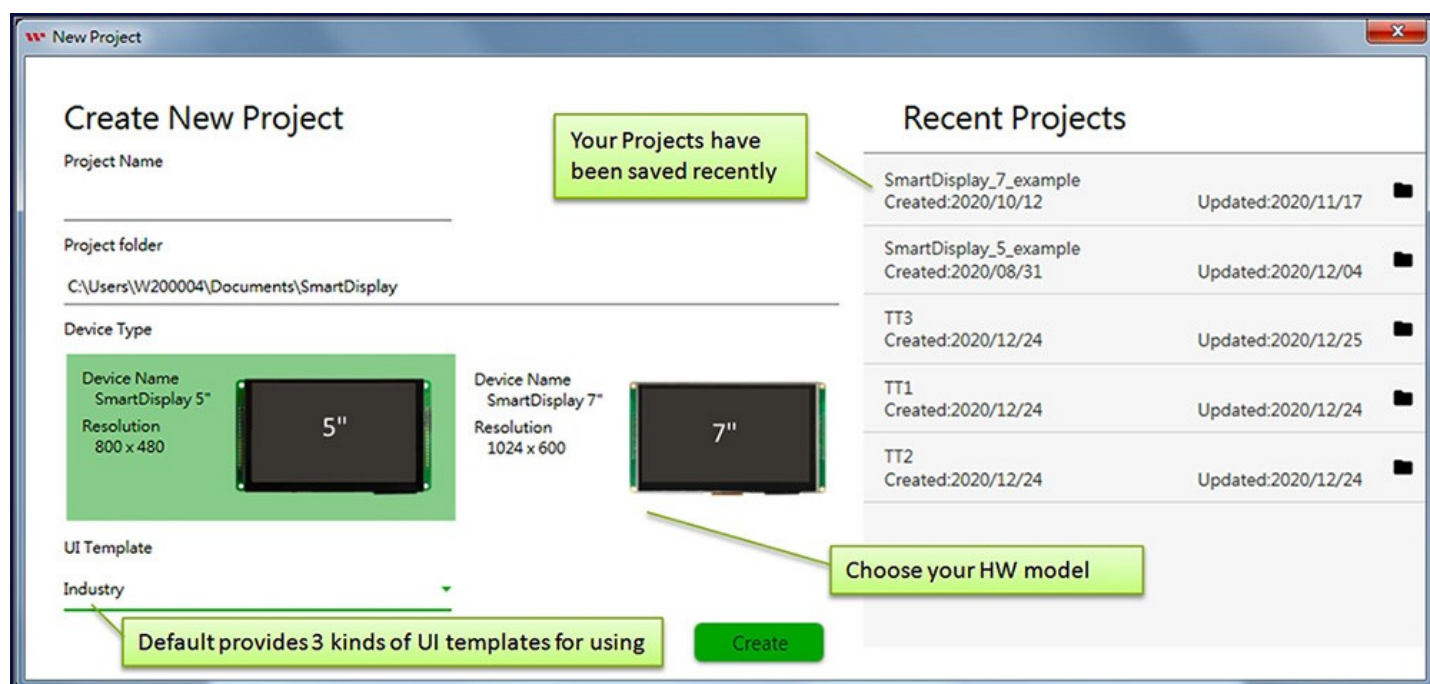
WL0F00050000FGAAASB00 (Industrial Application)  
 WL0F00050000FGAAASC00 (Vehicle Application)  
 WL0F00050000FGAAASD00 (Medical Application)

#### ■ Demo scenario for 7" Smart Display:

WL0F0007000A8GAAASB00 (Industrial Application)  
 WL0F0007000A8GAAASC00 (Vehicle Application)  
 WL0F0007000A8GAAASD00 (Medical Application)

Here are some example pages for Smart Display GUI Builder Software as reference:

### Example: Start Page of Winstar Smart Display GUI Builder



### Example: Edit Page of Winstar Smart Display GUI Builder

