ESP32 display-3.5 Inch HMI Display

Introduction

Elecrow ESP32 Display 3.5-inch module is a powerful HMI touch screen with a 320*480 resolution LCD display. It uses the ESP32-WROOM-32 module as the main control processor, with a dual-core 32-bit LX6 microprocessor, integrated WiFi and Bluetooth wireless functions, a main frequency of up to 240MHz, providing powerful performance and versatile applications, suitable for IoT application devices and other scenes.

The module includes a 3.5-inch LCD display and a driver board. The display screen uses resistive touch technology and comes with a resistive touch pen, making the screen usage more flexible. In addition, the board has reserved a TF card slot, multiple peripheral interfaces, USB interface, speaker interface, battery interface, etc., providing more expansion possibilities. It supports development environments such as Arduino IDE, Espressif IDF, Lua RTOS, and Micro Python, and is compatible with the LVGL graphics library. This enables developers to not only customize their own UI interfaces but also to create interesting projects quickly and easily, greatly shortening the development cycle.

The ESP32 Display 3.5-inch module is suitable for a wide range of scenes such as automotive HMI, medical equipment, industrial control, power, civil electronics, automation, GPS, new energy, and IoT application devices. Its various interfaces and expansion functions make it able to meet the needs of different fields, providing users with a more comprehensive solution.

Parameters

Size	3.5"
Resolution	480*320
Touch Type	Resistive Touch
Main Processor	ESP32-WROOM-32-N4
Frequency	240MHz
Flash	4MB
SRAM	520KB
ROM	448KB
PSRAM	/
Display Driver	ILI9488
Screen Type	TFT
Interface	1*UART0,1*UART1,1*I2C,1*GPIO,1*Battery
External power supply	DC 5V-2A
Speaker Jack	YES
TF Card Slot	YES
Active Area	48.96*73.44mm(W*H)
Weight	60g

Interface and button diagram
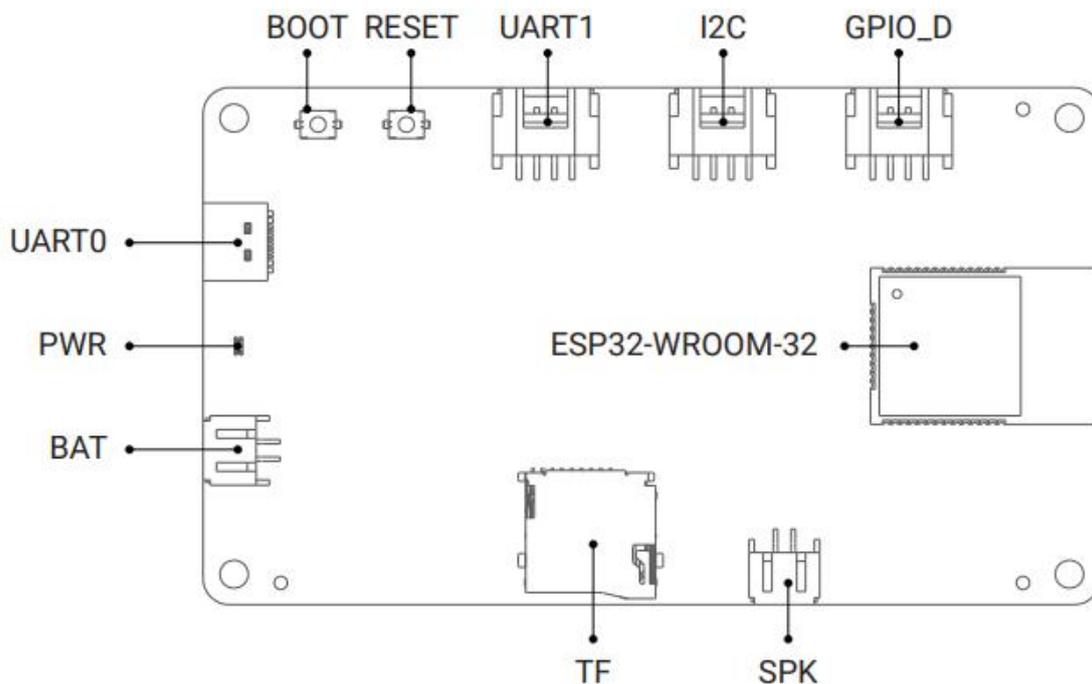
Dimensions
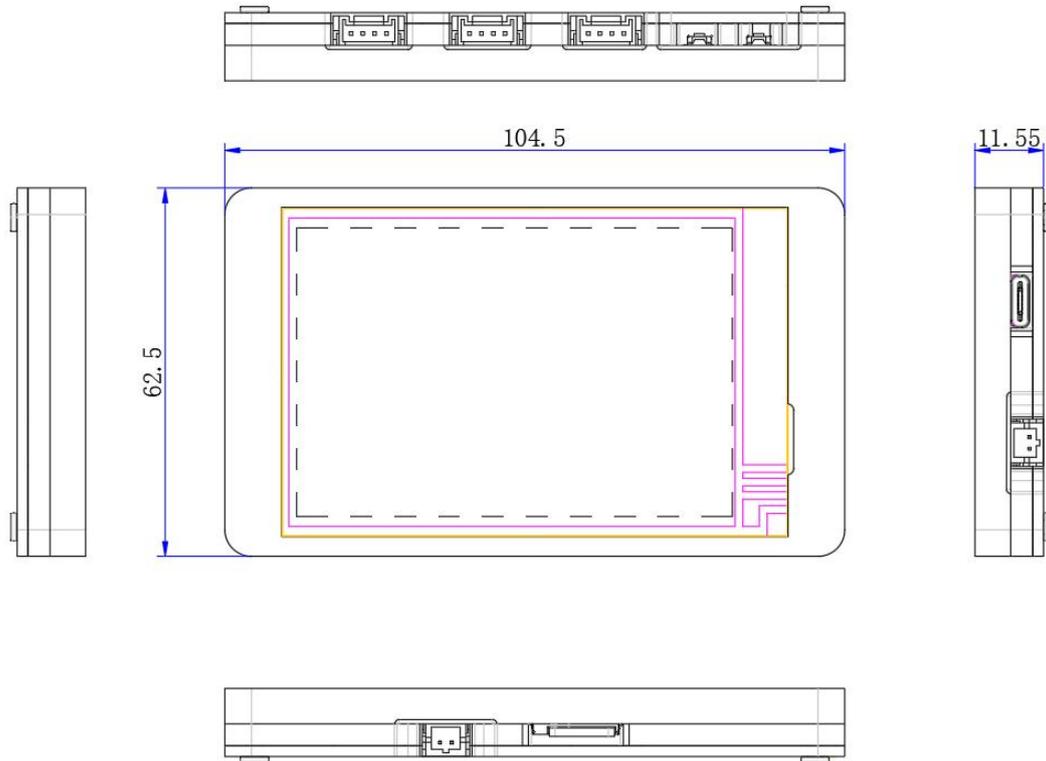
Safety Instructions

- Avoid exposing the screen to sunlight or strong light sources to prevent affecting its viewing effect and lifespan.
- Avoid pressing or shaking the screen hard during use to prevent loosening of internal connections and components.
- For screen malfunctions, such as flickering, color distortion, or unclear display, stop use and seek professional repair.
- Before repairing or replacing any equipment components, make sure to turn off the power and disconnect from the device.