## E32R28T&E32N28T

# 2.8inch ESP32-32E Display Module Quick Start Manual





#### 1. Power on the product

Use the Type-C cable with power supply and data transmission function to connect the computer to the product and power the product. As shown in the picture below:



Figure 1 Powering on the product

#### 2. Install the USB-to-serial port driver

- A. Locate the **USB-SERIAL\_CH340.zip** package in the "**7-**工具软件\_**Tool\_software**" folder and decompress it.
- B. go to the folder after decompression, double-click "CH341SER.EXE" executable program, pop up the installation window, and then click "Install" button to continue the installation, as shown in the following picture:



Figure 2 Installing the CH340C driver

C. After the installation is successful, click the window OK button to exit. Connect the computer USB to the development board and power on, and then enter the computer device manager, you can see that the CH340 port is identified under the port, as shown in the following picture:



Figure 3 Identifying CH340 ports

#### 3. Burn the bin file

A. Open the "Flash\_Download" folder in "8-快速使用\_Quick\_Start", locate the "flash\_download\_tool" folder, open the folder, and double-click the exe executable file of flash\_download\_tool. As shown in the picture below:



Figure 4 Opening flash\_download\_tool

B. After opening the Flash download tool, ChipType select "ESP32", WorkMode select "Develop", LoadMode keep the default (UART), and then click "OK" button, as shown below:



Figure 5 flash\_download\_tool Setup 1

C. Enter the Flash download tool interface, first select the bin file to burn, bin file in the data package "8-快速使用\_Quick\_Start /bin" directory, as shown in the following figure:



Figure 6 Bin file location

D. Click the button with three dots in the middle to select the bin file in the above steps.

After the selection, check the box in the front and set the burning address as "0", as shown in the following picture:

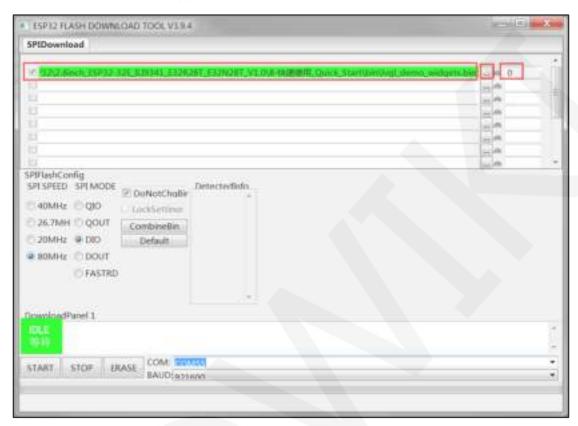


Figure 7 Select the Bin file

E. Set SPI SPEED to "80MHz", SPI MODE to "DIO", and keep other Settings default, as shown in the following figure:

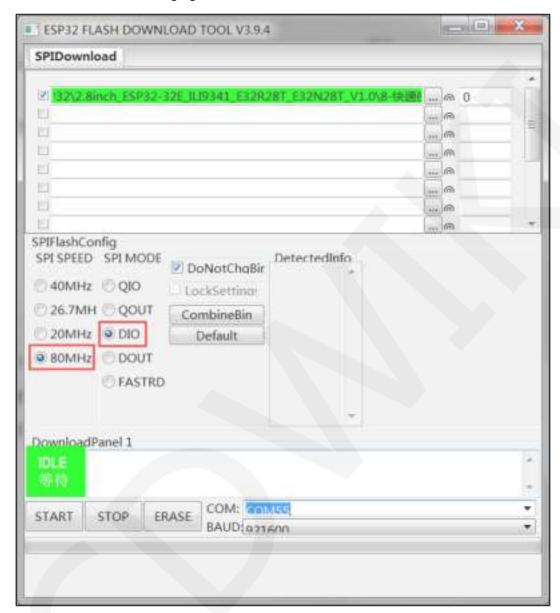


Figure 8 flash\_download\_tool Setup 2

F. Set COM, as long as the product is normally connected to the computer, COM port will be automatically recognized, click the drop-down menu to select. Set BAUD, click the drop-down menu to select, the larger the value, the faster the burning speed, but can not exceed the maximum transmission rate supported by the USB-to-serial chip. As shown in the picture below:

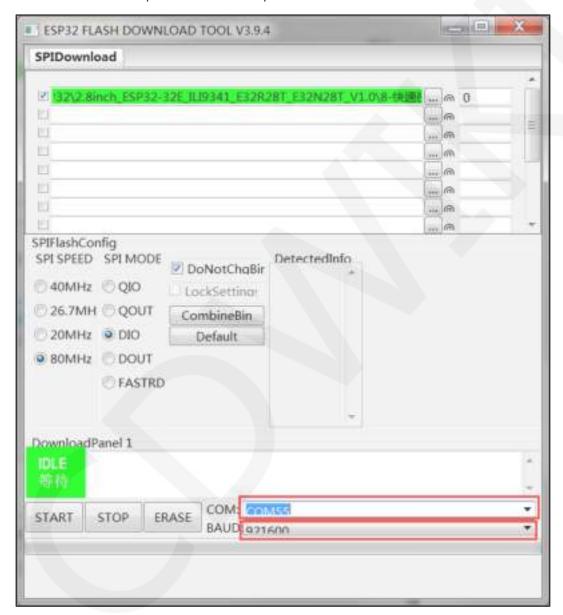


Figure 9 flash\_download\_tool Setup 3

G. Click the "START" button to enter the burning state. During the burning process, the status changes: "Waiting for synchronous power-on" -> "Downloading" -> "FINISH", and the progress bar will also be loaded, as shown in the following picture:

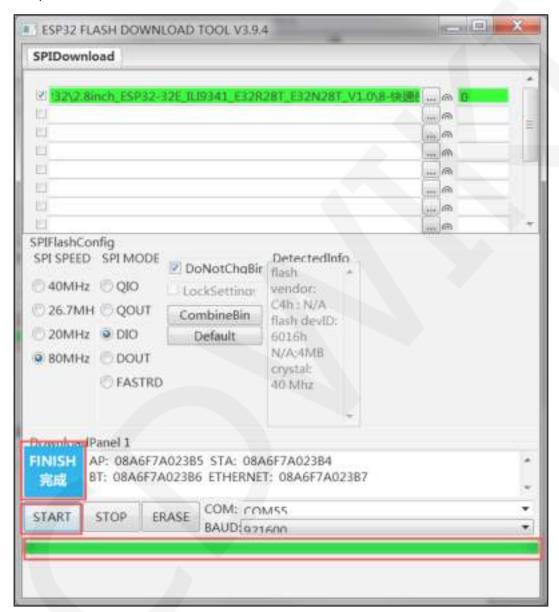


Figure 10 Burning Bin file

### 4. Run the program

After the Bin file is burned, press the reset button of the product or power on the product again, and you can see the operation effect of the program, as shown in the figure below:

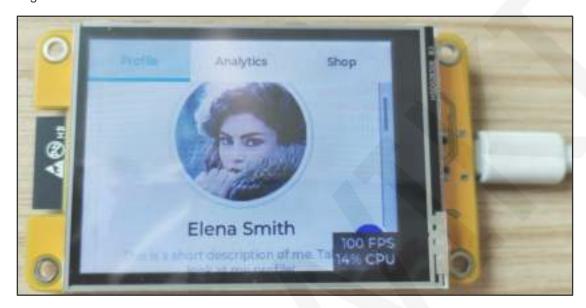


Figure 11 Run the program