

The STM32 family of 32-bit Flash microcontrollers based on the ARM® Cortex®-M processor is designed to offer new degrees of freedom to MCU users. It offers a 32-bit product range that combines very high performance, real-time capabilities, digital signal processing, and low-power, low-voltage operation, while maintaining full integration and ease of development.

The unparalleled and large range of STM32 devices, based on an industry-standard core and accompanied by a vast choice of tools and software, makes this family of products the ideal choice, both for small projects and for entire platform decisions.

**Features:**

1. supporting chip STM32F103ZET6 , more resources for the F3 series chips. All pins are drawn, and marked with the port number for easy expansion.
2. onboard functions MAX3232 serial UART hardware circuit can be used as serial communication experiment and ISP program download, also available USB to TTL serial communication line ISP program download.
3. onboard a MINI USB interface circuit , can be USB communication experiment, supporting the program can be virtually a U disk and TF card as another U disk, and can be displayed on a computer and can read and write files in any operation TF card Please use about 1G TF card test.
4. The integrated circuit TF card , the TF card into the TF card slot, indicator lights, indicating TF card is plugged in
5. To prevent the RTC can not afford ST vibration problems, this development board official recommended crystal parameters and matching capacitance through the testing and project long-term use, RTC selection and matching of the development board is reliable, so you The date when the minutes and seconds and never strike. Such as the use of the cylinder 32.768K crystal, absolutely can not afford to have the vibration situation.
6. The development board supports the 3.2-inch TFT LCD touch screen , the shop sold the LCD screen without the cottage icon.
7. Power supports USB power and external input 5-9V DC power supply , you can simply switch jumper.
8. BOOT startup mode hop hat switch , using official development board model ST.
9. a power indicator .
10. The two user LEDs .
11. The standard 20-pin JTAG socket , you can connect STLINK, JLINK, ULINK and other emulators.
12. 8M crystal work , the official parameters, internal chip PLL frequency multiplier, the maximum chip frequency 72M.
13. CR1220 clock battery holder 1, the battery has been installed when shipped.
- 14.1 reset button , providing hardware external reset function.
- 15.2 user keys .
16. The wireless communication module block RF24L01 jack , optional wireless module. (Note to buy two development boards and two wireless modules to communication)
- 17.1 external pin serial port , you can directly download the program module with serial TTL voltage level 3.3V, 5V Jieke
18. One ASM1117-3.3 regulator , providing 3.3V power supply board work, the use of expensive tantalum capacitor filter , to ensure stability of the system.
19. All our products are within the Company's production line , refusing Weld weld caused by manual processing.