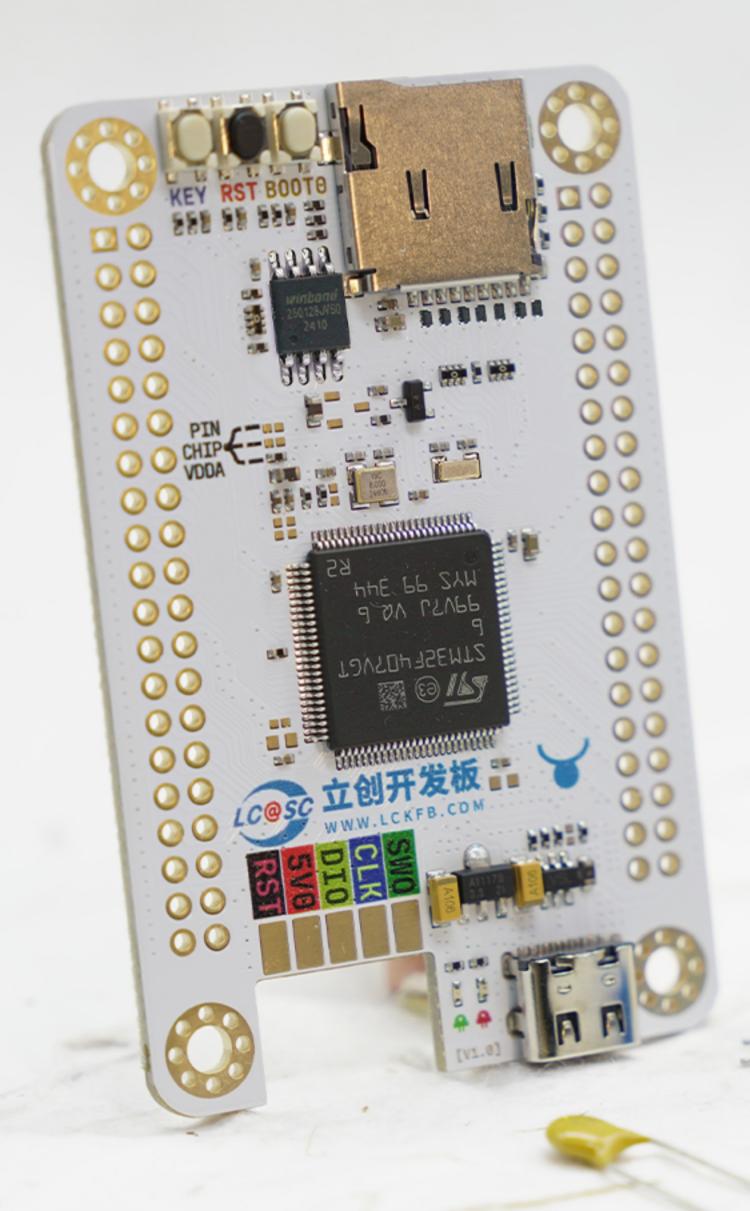


# **LCSC Sky Star Dev Board**

**High-end version STM32F407VET6** 

1111111



### Compatible with a variety of domestic and foreign 100-pin chips

a board compatible with a hundred core, innovation in more than one piece!

#### Help project development

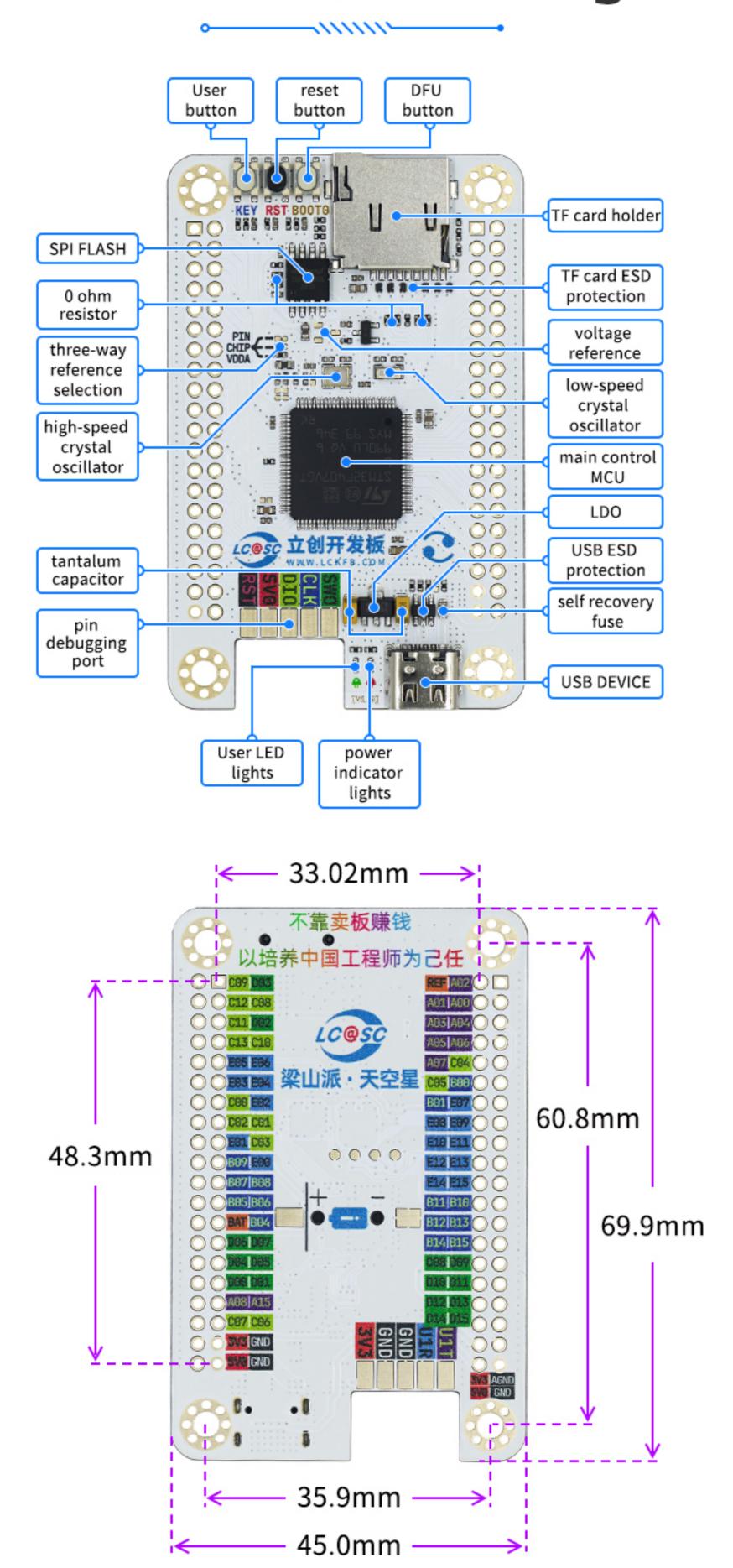
Pin-out 70PIN available IO, three-way voltage reference optional, to meet a variety of project development, suitable for electronic competitions, prototyping and DIY design for college students.

#### Colorful silkscreen

Silk-screened pins are clearly identifiable, so don't fumble when looking for pins.



# Development Board Resources, Dimensioned Drawings





# Hardware parameters

-//////



compatible with dozens of 100 pin chip microcontrollers



High speed crystal oscillator



Low-speed crystal oscillator



SPI FLASH



Self elastic TF card holder



TF card ESD protection device



LDO



Voltage reference



USB ESD protection device



Self healing fuse



Dual LED indicator lights (red and green)



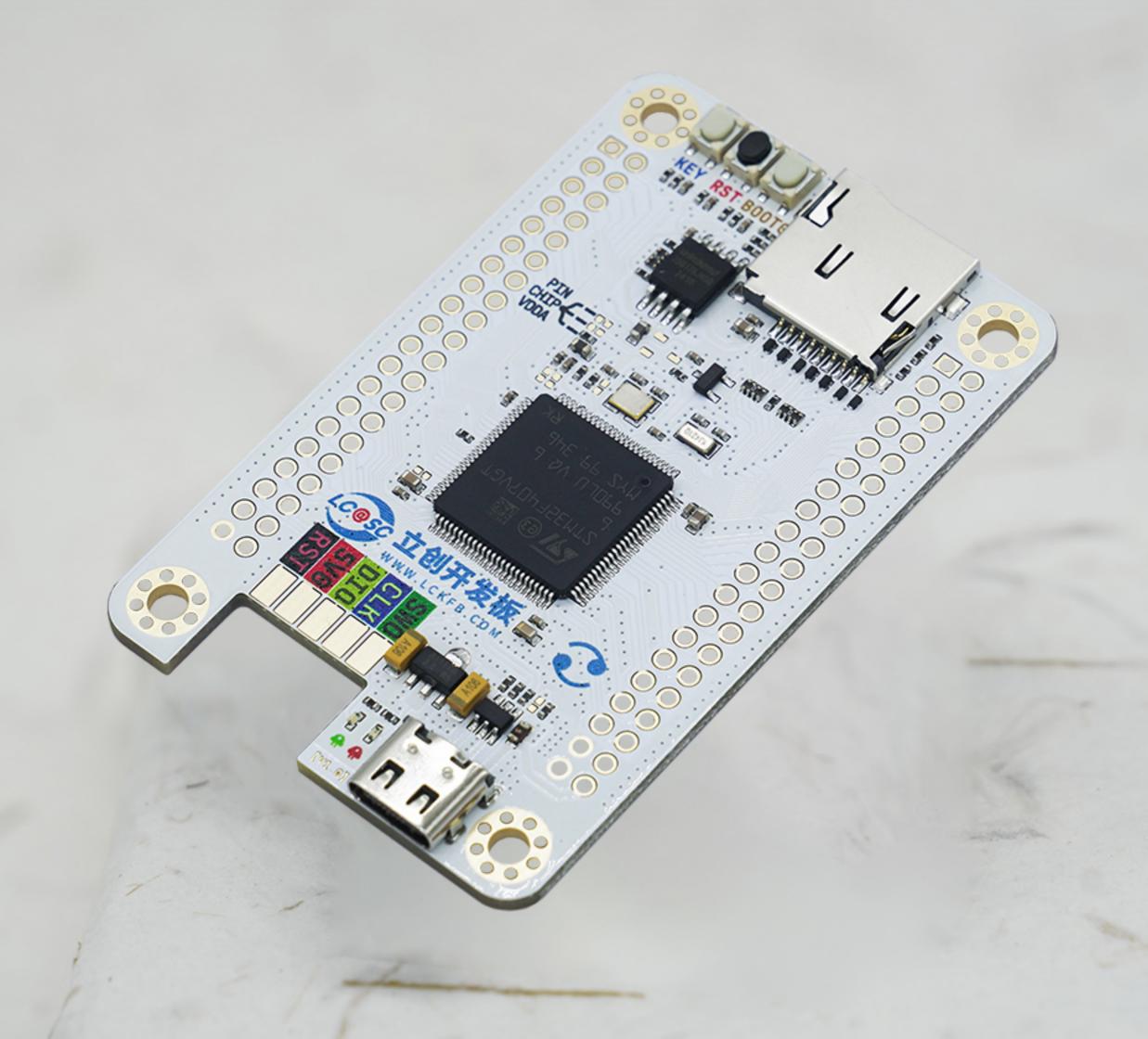
TYPE-C interface



Three touch switches

[4]

**Battery base** 



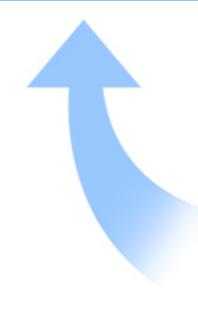


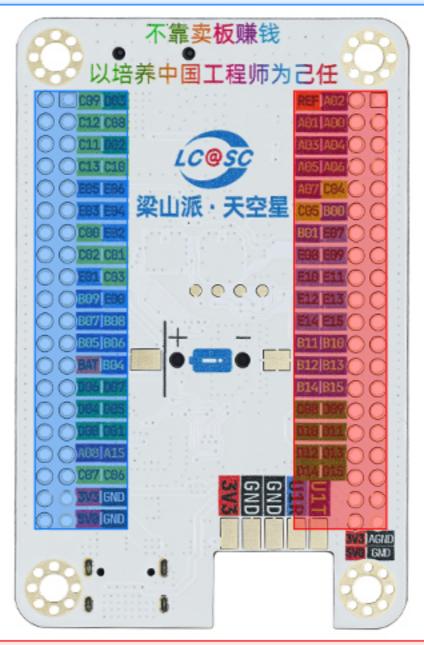
## **Pin Definitions**

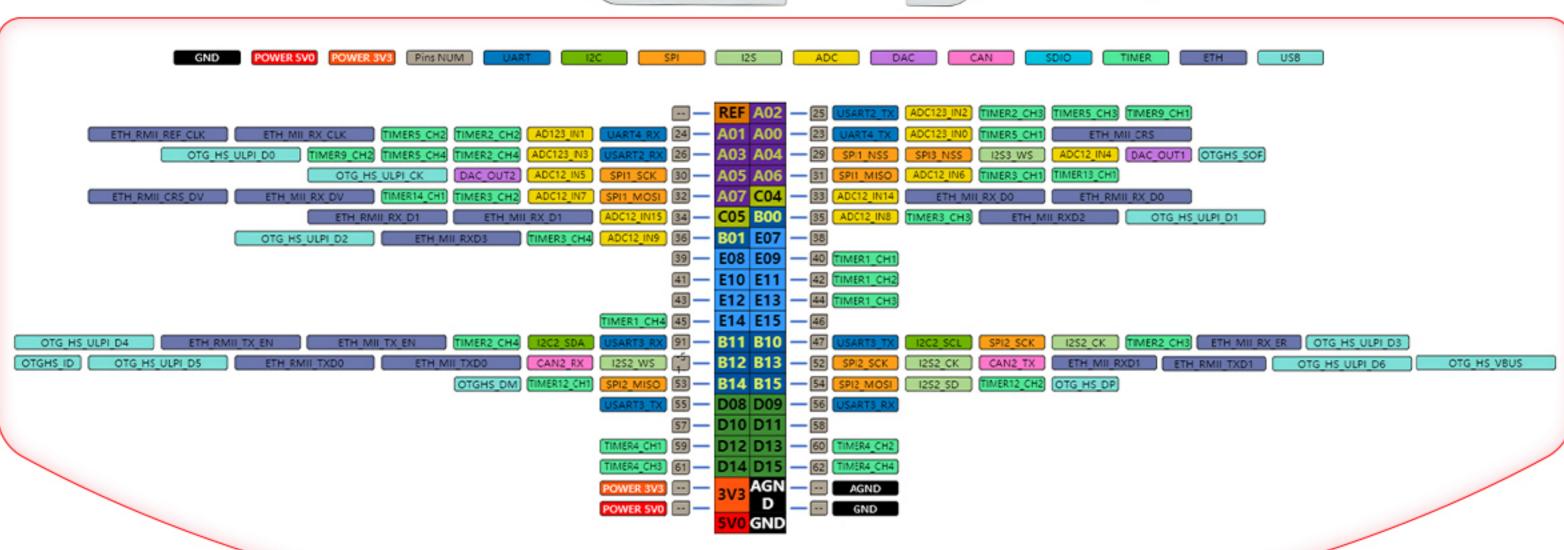
\_//////

GND POWER 5V0 POWER 3V3 Pins NUM 125 DAC CAN USB ADC C12 C08 C11 D02 C13 C10 TIMER9\_CH1 04 -E05 | E06 E03 | E04 C00 E02 ETH\_MII\_TXD3 C02 C01 - 18 SPI2 MOSI 1252 SD ADC123\_IN13 E01 C03 OTG HS ULPI NXT B09 E00 B07 B08 B05 B06 BAT B04 ART2\_RX 87 ---D06 D07 D04 D05 CAN1\_RX 81 D00 D01 A08 A15 1253 MCK SART6 TX 1252 MCK SDIO D6 (TIMER3 CH1) (TIMER8 CH1) POWER 3V3 - 3V3 GND - GND

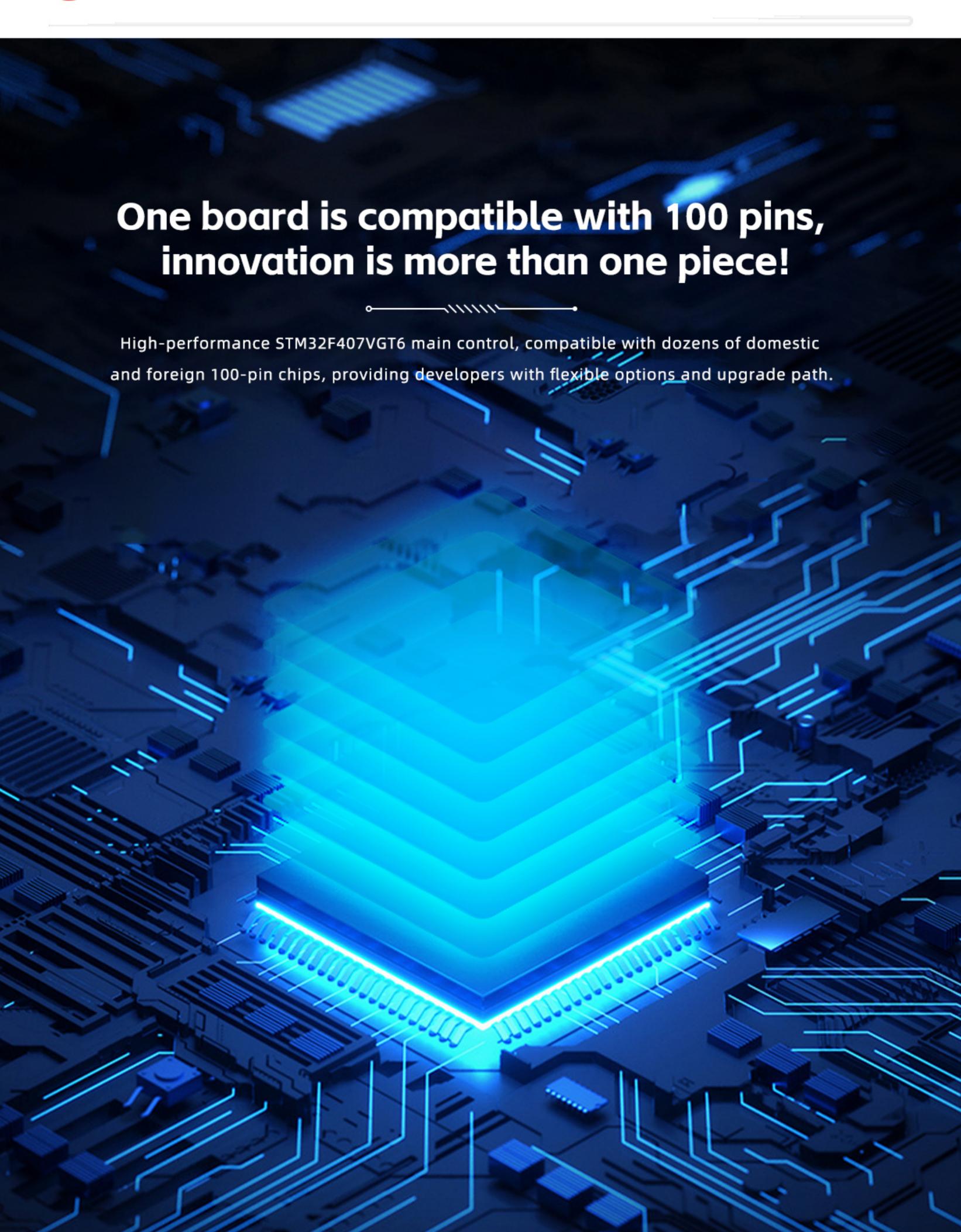
GND













# One board with multi-functions, made for projects

## Three-way reference power supply options

Three different reference voltage options are provided, which can be switched by 0 ohm resistors to meet users' needs for higher precision ADC acquisition.



#### **Multiple circuit protection**

comprehensive circuit protection design, USB data port electrostatic protection, clamp (overvoltage) protection, overcurrent protection, 5V anti-reverse connection.

## Separate pin-outs for SWD and serial ports

Dual LED indicators, TYPE-C connector, and three flick switches provide an intuitive operating experience.



# [100脚芯片核心] [100脚芯片核心] [100mmin [100mm] [100mm

## Hierarchical schematic, intuitive view of resources

a clear display of the development board resources and pin assignment, easy to understand and use.

#### **Expandable storage**

Onboard TF card and SPI-FLASH

(youth version is not affixed) provide
unlimited storage space for creativity.





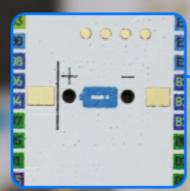
### Stable power management

the use of LDO and reserved SOT-23 package high-precision voltage reference, equipped with capacitors to ensure the stability and efficiency of the power supply.

#### Stable clock system

Equipped with 8MHz high-speed crystal and 32.768KHz low-speed crystal to ensure the accuracy and stability of the system clock (youth version of the low-speed crystal is not affixed).





#### Reserved backup battery holder

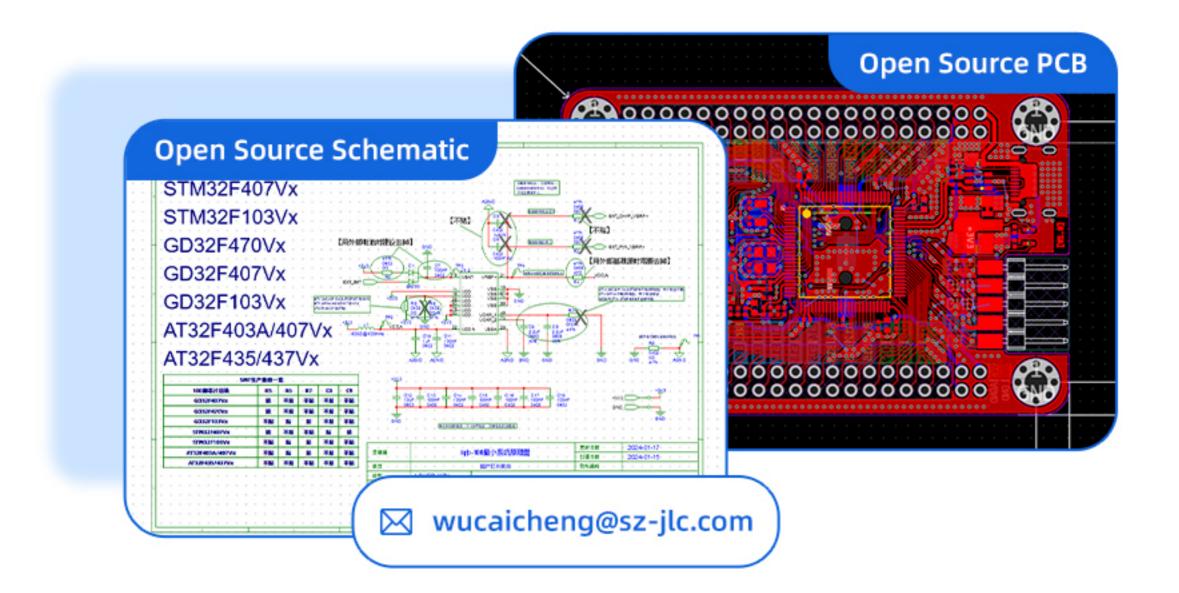
Provide backup power for the development board, convenient for RTC power-down time.



# Abundant hardware and software reference materials

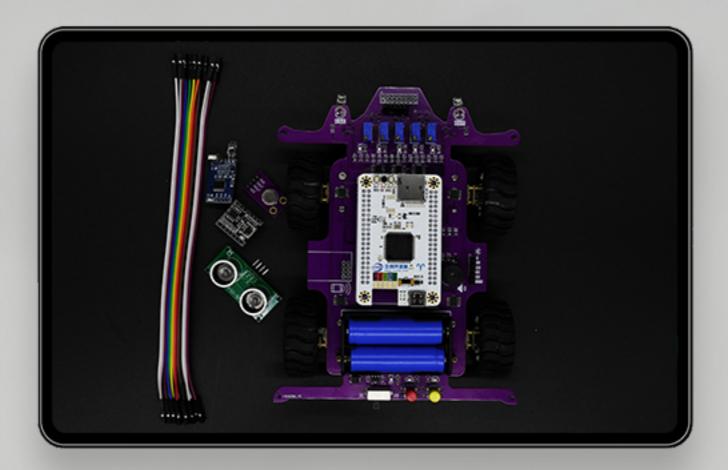
All supporting materials are provided free of charge, to help you grow every step of the way!

-111111



## Project-based learning

Combination of hardware and software, through personal participation in the demand analysis, hardware design, programming, and 3D shell design. You can experience the whole process of the project, to master the project-style development. Solve the difficulty of project implementation, so that every idea becomes reality.

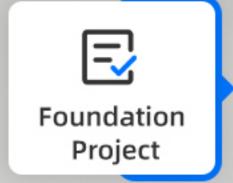








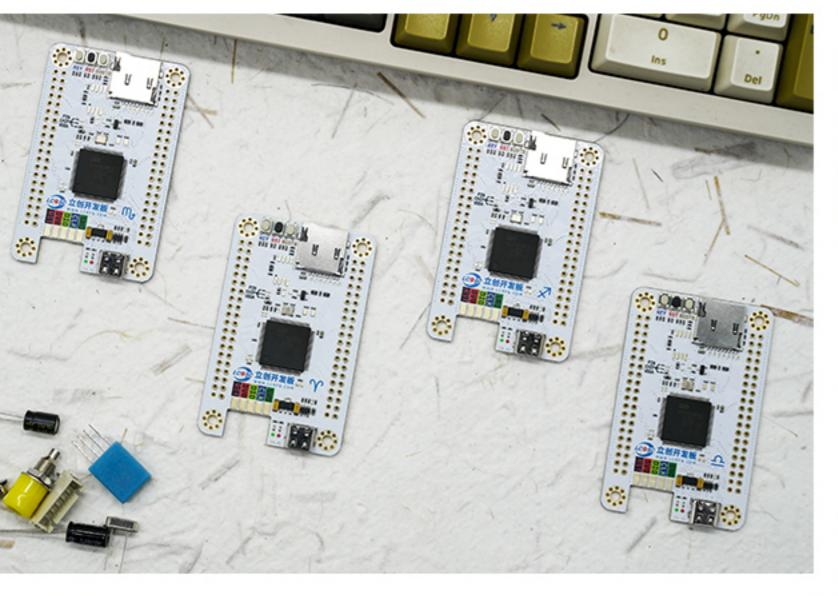




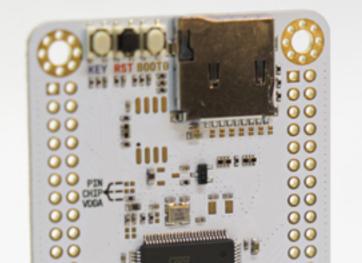


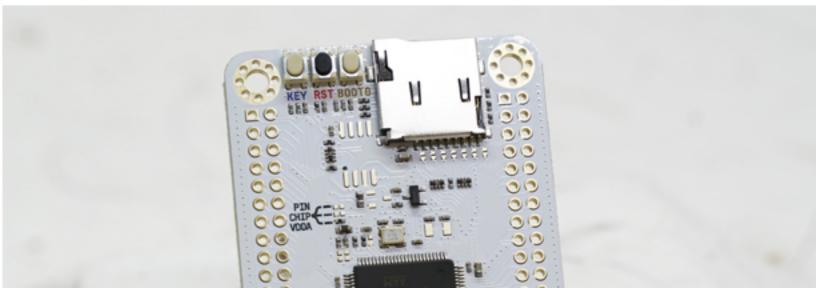


## **Product Showcase**











# **Bonus Scene**

The 12 signs of the Zodiac are included in the package, which is unique and full of personality.



Icon copyright: IconPark @ Apache-2.0 license

https://github.com/bytedance/iconpark



## **SkyStar STM32F407 Version Shipment Details**

差异物料名称	天空星青春版	天空星高配版			
[1] SPI FLASH	不贴不送	贴			
【2】 TF卡ESD防护	不贴不送	贴			
【3】低速外部高精度晶振	不贴不送	贴			
【4】左外扩排针P1 2*20PIN排针	不焊不送	不焊不送			
【5】右外扩排针P2 2*20PIN排针	不焊不送	不焊不送			
【6】调试排针2*5PIN排针	不焊不送	不焊不送			
【7】电压基准芯片	不贴不送	贴			
【8】RTC电池座CR1220	不焊不送	不焊不送			
※以实际活动为准					

## **SMT Production Compatible List**

100脚芯片目录	R5	R6	R7	C8	<b>C</b> 9
GD32F407Vx	贴	不贴	不贴	不贴	不贴
GD32F470Vx	贴	不贴	不贴	不贴	不贴
GD32F103Vx	不贴	贴	贴	不贴	不贴
STM32F407Vx	贴	不贴	不贴	贴	贴
STM32F103Vx	不贴	贴	贴	不贴	不贴
AT32F403A/407Vx	不贴	贴	贴	不贴	不贴
AT32F435/437Vx	不贴	不贴	不贴	不贴	不贴