

MCU 供电接口

VIN 仅支持 5V

DC_5V

DC_3V3

MCU USB 接口

UMCU

USB_5V

USB- MCU USB N

USB+ MCU USB P

D-

D+

ID

GND

SCN

Micro USB B

DC_3V3

USB_5V

CRYSTAL

PC14

PC15

32.768khz nc

* RTC 晶振，默认不焊接

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The diagram illustrates the hardware connections for an STM32F103RBT6 microcontroller. Key components and connections include:

- MCU (STM32F103RBT6):** The central component with pins labeled for VBAT, NRST, SWD, and various I/O pins (PA0-PA15, PB0-PB15, PC0-PC15).
- Power Supply:** A DC 3V3 supply connected to the MCU's VBAT pin and the Arduino's DC 3V3 pin.
- UserKey:** A push button connected to the MCU's NRST pin and the Arduino's NRST/SWD pin.
- Buzzer:** A buzzer connected to the MCU's PC13 pin and the Arduino's PC13 pin.
- Color LED:** A 3528RGB LED connected to the MCU's PC9, PC8, PC6, and PC7 pins.
- Arduino Connector:** A 25-pin connector (CN3) connecting the MCU's SWD pins to the Arduino's SWD pins.
- DAPLINK CDC:** A section for the DAPLINK CDC, showing the connection between the MCU's PA3 pin and the MLINK TX pin.
- A4/A5 SEL:** A section for the A4/A5 SEL, showing the connection between the MCU's PB8 pin and the A4/A5 SEL pin.

The diagram illustrates the hardware connections for an STM32F103RBT6 microcontroller. Key components and connections include:

- MCU (STM32F103RBT6):** The central component with pins labeled for VBAT, NRST, SWD, and various I/O pins (PA0-PA15, PB0-PB15, PC0-PC15).
- Power Supply:** A DC 3V3 supply connected to the MCU's VBAT pin and the Arduino's DC 3V3 pin.
- UserKey:** A push button connected to the MCU's NRST pin and the Arduino's NRST/SWD pin.
- Buzzer:** A buzzer connected to the MCU's PC13 pin and the Arduino's PC13 pin.
- Color LED:** A 3528RGB LED connected to the MCU's PC9, PC8, PC6, and PC7 pins.
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- MCU (STM32F103RBT6):** The central component with pins labeled for VBAT, NRST, SWD, and various I/O pins (PA0-PA15, PB0-PB15, PC0-PC15, PD0-PD15).
- Power Supply:** A DC 3V3 supply connected to the VBAT pin and the DC 3V3 pin on the Arduino connector. A 100k resistor (R8) and a 0.1uF capacitor (C3) are connected to the VBAT pin.
- UserKey:** A push button connected to the NRST pin (pin 1) and ground (pin 2).
- Buzzer:** A buzzer connected to the buzzer-pwm3-4 pin (pin 1) and ground (pin 2).
- Color LED:** A 3528RGB LED connected to the LED-3528RGB pins (pins 1, 2, 3, 4) and ground (pin 5).
- Arduino Connector:** A 6-pin connector (CN3) connected to the MCU's SWD pins (pins 1, 2, 3, 4, 5, 6).
- DAPLINK CDC:** A section for the DAPLINK CDC, showing the connection between the MCU's PA3 pin and the MLINK TX pin.
- A4/A5 SEL:** A section for the A4/A5 SEL, showing the connection between the MCU's PB8 pin and the A4/A5 SEL pin.

USER LED

DC_3V3

R15 510R

Blue D4

U3 D G S 2N7002

PA5/SCK/D13

USER BUTTON

DC_3V3

R42 2k

NRST/SWD_RST

R18 10k

MLINK_DTR

FTDI_DTR * optional for Arduino Mode

C11 0.1uF

B2 RESET TARGET

BUZZER

DC_3V3

BZ1 Buzzer

PB1 R13 1k

Q2 MMBT3904

R14 10k

D0/D1 SEL

U2 TX PA2 RX PC0

R41 330R

MLINK_RX

MLINK_TX

DO-RXD D1-TXD

PC11 PC10

USART_IO

ICSP/SPI1

DC_3V3

PA7/MOSI/D11

PA5/SCK/D13

PA6/MISO/D12

SPI IO

Title

Arduino V1.2

Size A3

Number <http://dotware.cn>

Revision v1.2

Date: 2016/8/30

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USER LED

USER BUTTON

BUZZER

D0/D1 SEL

ICSP/SPI1

DC_3V3

R15 510R

D4

Blue

U3

G

S

2N7002

DC_3V3

R42 2k

NRST/SWD_RST

R18

MLINK_DTR

FTDL_DTR * optional for Arduino Mode

C11 0.1uF

B2

RESET TARGET

DC_3V3

PB1

R13 1K

Q2

MMBT3904

R14 10K

BZ1

Buzzer

U2 TX PA2

R41 330R

MLINK_RX

330R

MLINK_TX

D0-RXD

D1-TXD

PC11/RX

PC10/TX

USART_IO

PA7/MOSI/D11

PA5/SCK/D13

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ICSP

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DC_3V3

R15 510R

Blue D4

U3 D G S 2N7002

PA5/SCK/D13

USER BUTTON

DC_3V3

R42 2k

NRST/SWD_RST

R18 10k

MLINK_DTR

FTDL_DTR * optional for Arduino Mode

NC

C11 0.1uF

B2 RESET TARGET

对于非 mlink 供电, nrst 必须上拉, 否则 mcu 被强制循环复位

BUZZER

DC_3V3

BZ1 Buzzer

PB1 R13 1k

Q2 MMBT3904

R14 10k

D0/D1 SEL

U2 TX PA2 330R MLINK_RX

PC11/RX PC11

P1 D0-RXD 3 4 5 6 D1-TXD

MLINK_TX

PC10 PC10/TX

USART_IO

ICSP/SPI1

DC_3V3

PA7/MOSI/D11

PA5/SCK/D13

PA6/MISO/D12

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