

## **Romeo BLE mini - Small Control Board for Robot - Arduino Compatible - Bluetooth 4.0**

SKU:DFR0351



## INTRODUCTION

Romeo BLE mini is a simplified version of <u>Romeo</u> family. It inherits all functions of <u>Romeo BLE</u>. Moreover, IT GOT A SMALLER SIZE! Yes, you got it all. It has 8 Digital pins, 4 analog pins and integrates <u>Bluetooth 4.0 wireless communication</u> function. And it can easy to drive the mobile platform using two 1.2A H-bridged Motor Driver to meet the needs of small scale robots. We hope Romeo BLE mini will be a good assistant to makers. You may also check <u>Bluetooth Microcontrollor</u> <u>Selection Guide</u> to get more information.

**Version Update:** V2.0 has upgraded its motor driver IC, it replaces HR8833 with TB6612 motor driver chip. TB6612 has the same control logic with L298 motor driver. The code will be compatible with Romeo robot control board. And it finally breakouts 2 interrupt pins now! You can connect encoders to make PID motor control.

## FEATURES

• Support <u>Gravity</u>-3Pin interface, color-coded, compatible with servos and Gravity sensors & modules



• Support external power supply automatically switch, can simultaneously USB and external power supply

- Support wireless download program / wireless communication function
- Support mobile phone APP control
- Two-way H-bridged Motor Driver
- Support servo external power input
- Supports AT commands to configure BLE
- Support serial transmission
- Support master and slave switch

## **SPECIFICATION**

- BLE chip: TI CC2540
- Transmission distance: 30m (open area)
- Microprocessor: ATmega328P
- Board selection: Arduino UNO
- Flash: 32 KB (ATmega328P) of which 0.5 KB used by bootloader
- SRAM2: KB (ATmega328P)
- EEPROM: 1 KB (ATmega328P)
- Clock Frequency: 16 MHz
- Digital I/O Pins: 8
- PWM Digital I/O Pins: 4 (D3, D9, D10, D11)
- Analog Input Pins: 4
- Output current: 1.2A single-channel continuous drive current
- Start / Peak Current: 2A (continuous pulse) / 3.2A (single pulse)
- Motor Drive Pins: D4, D5, D6, D7
- microUSB connector
- 2x2A H-bridge motor driver
- Size: 45x38.5mm