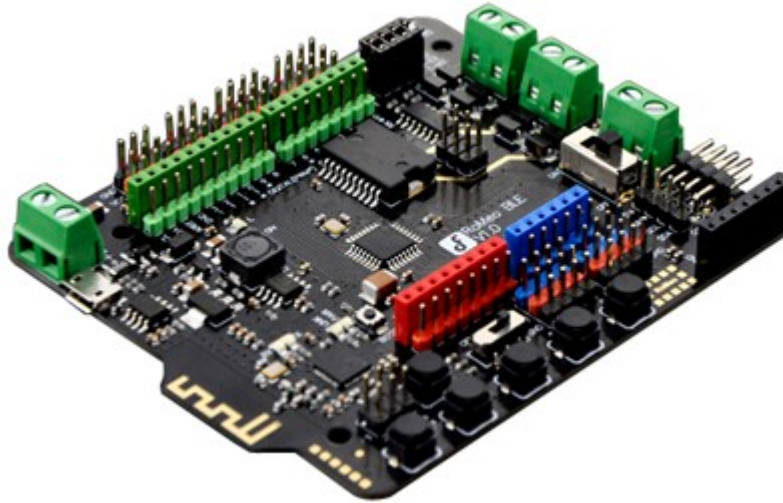**RB-Dfr-582**
DFRobot Romeo BLE All-in-one Microcontroller (ATMega 328)

Romeo is an All-in-One Arduino compatible microcontroller especially designed for robotics applications from DFRobot. It benefits from the Arduino open source platform, it is supported by thousands of open source codes, and can easily be expanded with your Arduino-comaptible shields. The integrated 2 way DC motor driver and wireless socket allows you to start your project immediatly without the need for an additional motor driver.

This RoMeo BLE controller inherits all functions of Romeo all-in-one controller, on the basis of which it integrates Bluetooth 4.0 wireless communication function. You can describe it as a control board specially designed for robot applications, carrying the gene of Bluetooth 4.0 and being compatible with Arduino.

Specifications
- Microcontroller: ATmega328P
- Bootloader: Arduino UNO
- On-board BLE chip: TI CC2540
- Transmission range: 70m in free space
- Support bluetooth remote update the Arduino program
- Support Bluetooth HID
- Support iBeacons
- Support AT command to config the BLE
- Support Transparent communication through Serial
- Support the master-salve machine switch
- Support usb update BLE chip program
- 14 digital I/O ports
- 6 PWM outputs (Pin11, Pin10, Pin9, Pin6, Pin5, Pin3)
- 8 10-bit analog input ports
- 3 I2Cs
- Two way H-bridged motor driver with 2A maximum current
- 5 buttons
- Support male and female pin header

- Integrated sockets for APC220 RF module
- Power supply port: USB or DC2.1
- External power supply range: 5-23V
- DC output: 5V/3.3V
- Auto sensing/switching external power input
- Size: 94mm x 80mm