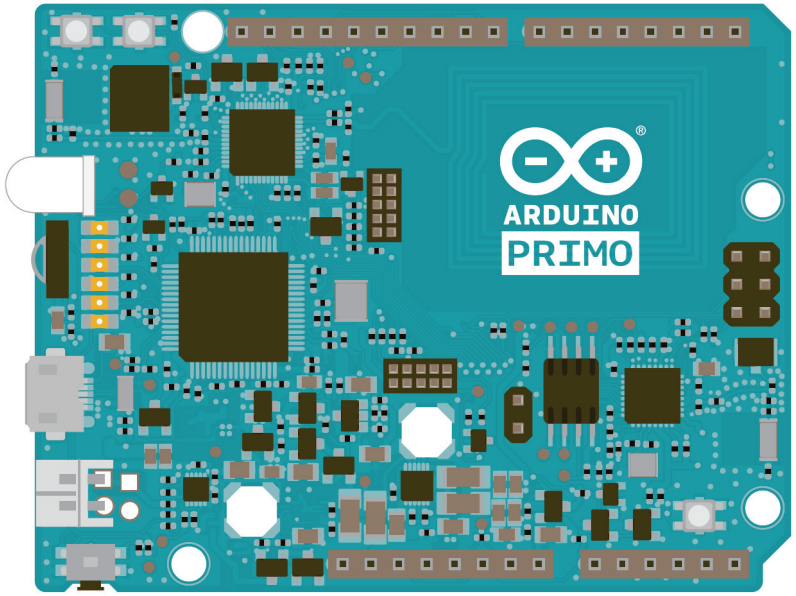
ARDUINO

Arduino **PRIMO**



PRIMO is the first Arduino board featuring a Nordic nRF52 processor with WiFi.

The PRIMO combines the processing power from the Nordic nRF52 processor, an Espressif ESP8266 for WiFi, as well as several on-board functions and a battery charger. The nRF52 includes NFC-A tag (Near Field Communication) and Bluetooth Smart .
The board includes one RESET and two USER buttons, LEDs , Buzzer and infrared receiver and transmitter .

INTERMEDIATE

Arduino **PRIMO**

ARDUINO MICROCONTROLLER

Microcontroller	Nordic nRF52 832 ARM® Cortex®-M4 32-bit processor with FPU, 64 MHz
Operating Voltage	3.3V
Flash Memory	512 KB
SRAM	64KB
DC Current per I/O	14 mA
Digital I/O Pins	20, with 12 PWM
Analog Input Pins	6
Interfaces	1x I2C, 1xI2S, 1x SPI, 1xUART
Bluetooth Smart (BLE 4.0)	TX power up to +4dBm-96dBm sensitivity in BLE mode

NFC-A LISTEB MODE OPERATION

13.56 MHz input frequency
Bit rate 106 kbps
Wake-on-field low power field detection (SENSE) mode

WIFI MICROCONTROLLER

Processor	ESP8266
Architecture	Tensilica Xtensa LX106 32bit
Flash Memory	4 MB
Operating Voltage	3.3V
Clock Speed	80 MHz
WiFi	802.11 b/g/n 2.4 GHz , supports WPA/WPA2
Wake up time	< 2ms

SERVICE MICROCONTROLLER

Microcontroller	STM32F103RBT6
Main features:	USB/Uart converter CMSIS-DAP GPIO expander Board power management IrDA

GENERAL

Input Voltage	5 V
Power Consumption	94.4(Max.)~0.936(Min.)mA
Other Features	Battery input and charger
PCB size	53 x 68.5 mm
Weight	20 g
Product Code	A000135

DEVELOPED WITH dog hunter

NORDIC SEMICONDUCTOR

Arduino **PRIMO**

USB port - Used for powering your Arduino, uploading your sketches to your Arduino, and for communicating with your Arduino sketch.

Battery Connector - Used for powering the board through the Battery.

User button - The user button is at user disposal.

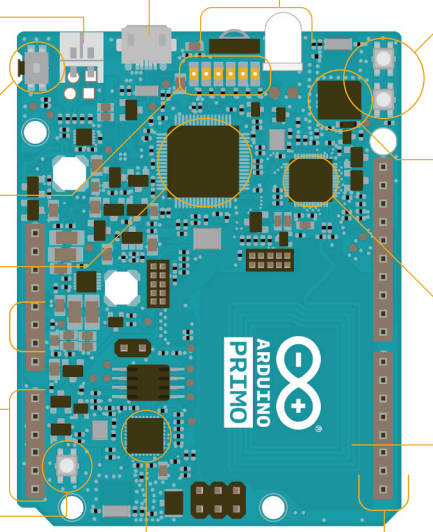
LEDs - ON, L9, USER2, WIFI, BLE and CHG Leds. Also useful for debugging.

STM32 - minor microcontroller. Used to upload the sketch to your Arduino.

Analog in - Use these pins with analogRead().

ESP B/L button - used to enter the ESP8266 in bootloader mode and upgrade the chip if needed.

WIFI ESP8266 - This chip allows to communicate via Wi-Fi with sensors or actuators to create your IoT System.



Infrared - both reception and transmission modules.

Reset button and user button - Resets all the microcontrollers. The user button is at user disposal.

Buzzer - Piezoelectric signal generator which produces a buzz or beep.

nRF52 - The main board microcontroller, managing the BLE and the NFC.

NFC tag - Data that can be read by an NFC device.

Digital pins - Use these pins for digitalRead(), digitalWrite(), and analogWrite().