



**Description**

Cubeacon BLE (Bluetooth Low Energy) is based on Nordic chip nRF51822. It has iBeacon ready for firmware with programmable parameters (UUID, major value, minor value and some other).

Cubeacon integrated with SaaS (Software as a Service) to control and manage beacon operational or work as alone system.

**Key Features**

- Broadcast data packets based on Bluetooth LE® (4.0)
- Compatible with all Bluetooth 4.0 (BLE) devices
- Compatible with Apple iBeacon™ standard.
- Compact configurable parameters.
  - o Major and Minor values
- Standart Apple Advertising interval.
- Low power consumption.
- 2 Year battery stand by.

**Specification**

|                      |                              |
|----------------------|------------------------------|
| Power Supply         | : 3.3 VDC Max<br>1.8 VDC Min |
| Current              | : 0,1 mA Max<br>50 uA Min    |
| RF Power             | : - 93 dbm                   |
| Working frekuensi    | : 2.4 Ghz ISM Band           |
| Operating temp       | : -5 C Min<br>65 C Max       |
| Firmware             | : Open Beacon                |
| Advertising Interval | : 128 ms                     |
| Battery Model        | : CR2477 1000mAh             |
| Range Broadcast      | : 20 meters                  |
| Compatibel OS (Min): | iOs 7 & Android 4.3          |
| BLE Chip             | : nRF51822                   |
| Bluetooth Version    | : 4.0                        |

**Weight & Dimension Cubeacon**

|        |           |
|--------|-----------|
| Height | : 37mm    |
| Width  | : 37mm    |
| Length | : 37 mm   |
| Weight | : 42 gram |



### *Cubeacon parameter default setting*

#### Red

| Item           | Default Value                        |
|----------------|--------------------------------------|
| Proximity UUID | CB10023F-A318-3394-4199-A8730C7C1AEC |
| Major          | 0x0001                               |
| Minor          | 0x0284                               |

#### Green

| Item           | Default Value                        |
|----------------|--------------------------------------|
| Proximity UUID | CB10023F-A318-3394-4199-A8730C7C1AEC |
| Major          | 0x0002                               |
| Minor          | 0x0284                               |

#### Blue

| Item           | Default Value                        |
|----------------|--------------------------------------|
| Proximity UUID | CB10023F-A318-3394-4199-A8730C7C1AEC |
| Major          | 0x0003                               |
| Minor          | 0x0284                               |

### *Operation State & Power Consumption*

| State          | DC/DC Enable OFF (mA) | DC/DC Enable ON (mA) |
|----------------|-----------------------|----------------------|
| Wake-up        | 7.1                   | 5.4                  |
| Pre-processing | 8.4                   | 6.9                  |
| Pre-receiving  | 11.6                  | 10.7                 |
| Receiving      | 18.9                  | 15.4                 |
| Rx changed Tx  | 9.2                   | 5.8                  |
| Transmitting   | 18.3                  | 15.4                 |

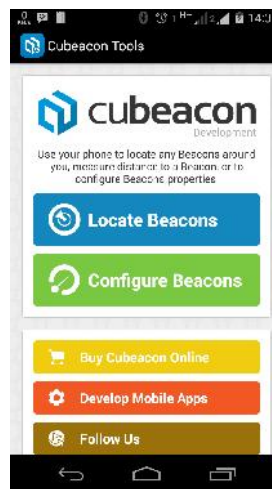
## Modify Cubeacon parameter

Modify Cubeacon™ Developer Kit parameter use the Cubeacon Tools Apps. Can you download at PlayStore for Android and App Store for IOS. After Downloading Cubeacon Tools Apps how can be seen as follows:

For the Andorid and IOS

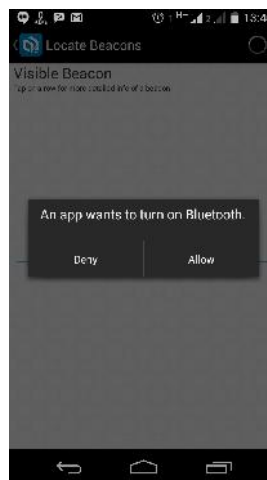
### 1. Checking cubeacon active :

Open Cubeacon Developer Kit (make sure batery divider is off. To pull off battery divider, you have to open Cubeacon Developer Kit case)  
Open Cubeacon Tools in your smartphone.



Pic 1. Cubeacon Tools Apps for Android

To see active beacon, choose Locate Beacons (make sure you have turned on your bluetooth).



Here is view of active beacons in Cubeacon Tools app.

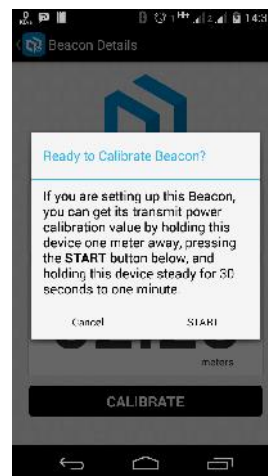


Pic 2. Locate Beacons

- If you want suitable distance, you can set the calibration first by choosing an active beacon and choose calibration.



Pic 3. Beacons Details



Pic4. Beacons Calibration Confirmation

Wait until the calibration is finished.

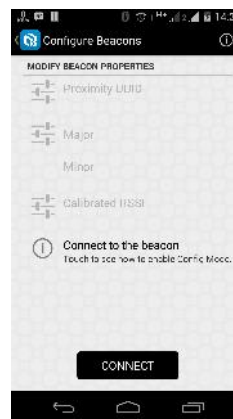


2. Setting UUID, Major, Minor dan RSSI  
Choose Configure Beacons in Cubeacon Tools.

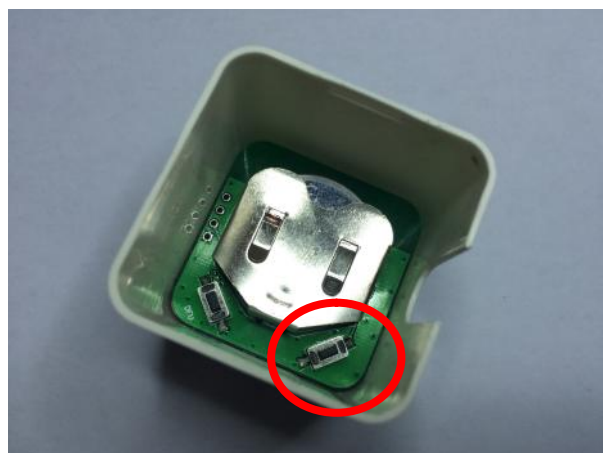


Pic 1. Cubeacon Tools Apps for Android

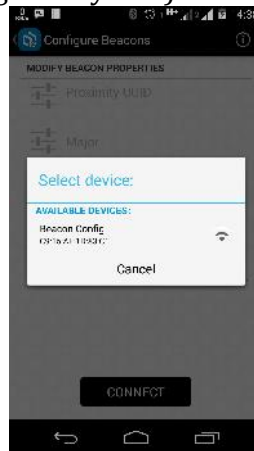
Configure Beacons



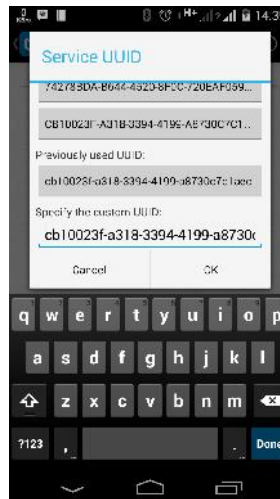
Before setting Beacons configuration, choose Connect. Then open Cubeacon case and push the K2 button.



- The beacon that is being set will be detected. Then choose the detected beacon (recommended to do the setting one by one).



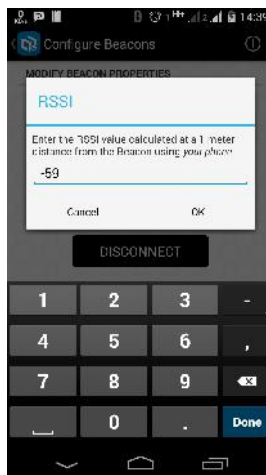
Set the UUID.



- Set the Major and Minor.



- Set RSSI.

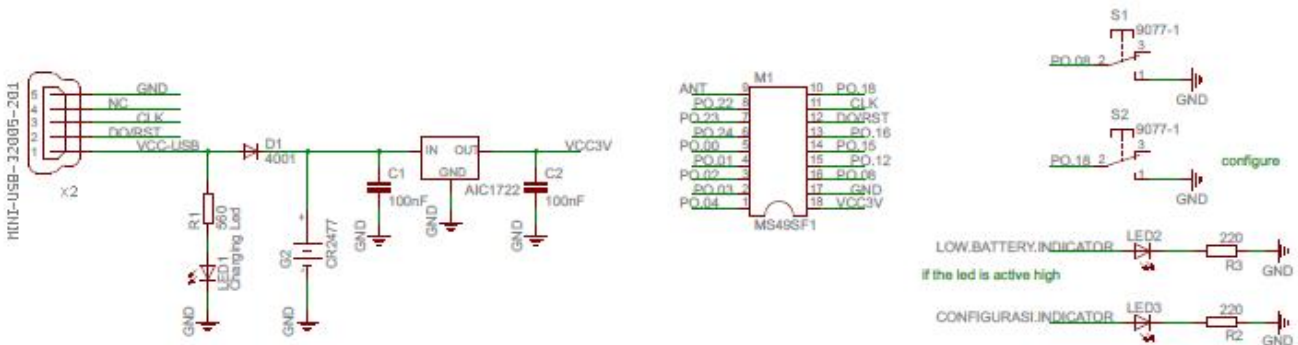
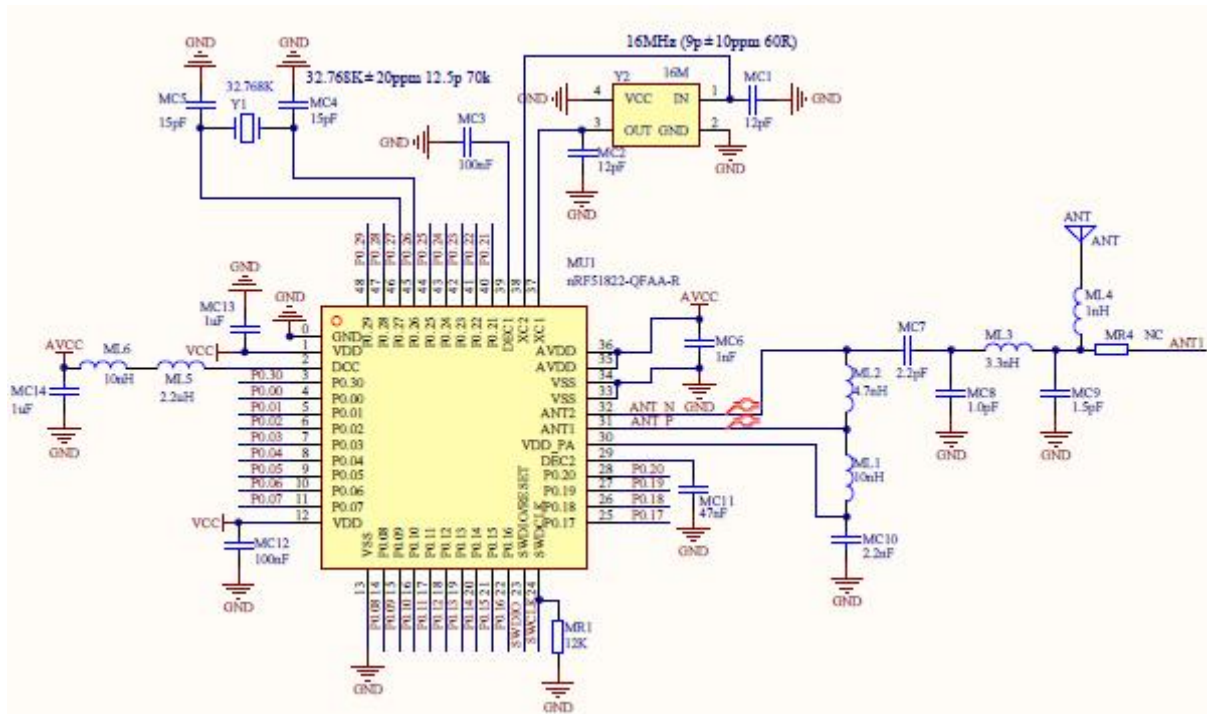


- After all is set, choose disconnect.

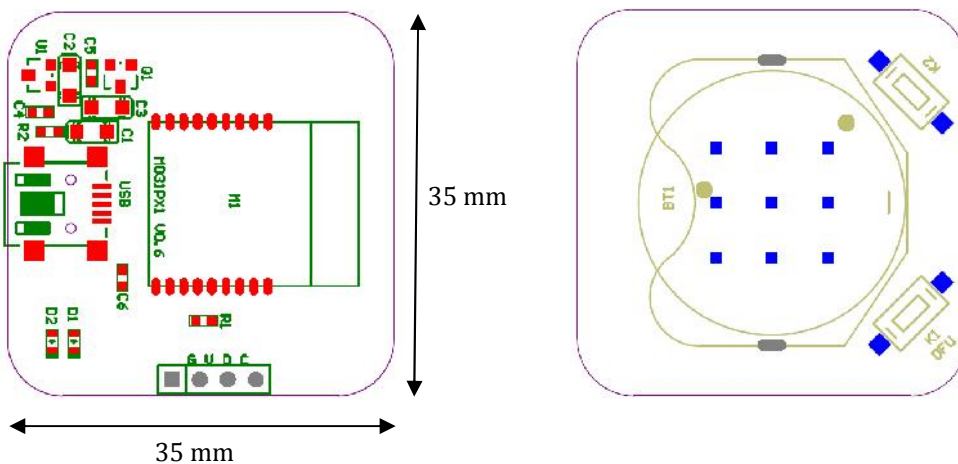


- Finished.

Schematic Cubeacon



Layout PCB Cubeacon





*Packing Information*



| Details      | Minimum Package | Carton                        |
|--------------|-----------------|-------------------------------|
| Quantity     | 3 pcs           | 36 pcs Min. Package (108 pcs) |
| Net Weight   | 126 gram        | 5.4 Kg                        |
| Gross Weight | 300 gram        | 6 Kg                          |
| Size         | 13 x 13 x 5 cm  | 42 x 45 x 25 cm               |