SP25: Instruction V2

Release: 2015-8-1
Update: 2015-9-16

History:

2015-9-16: Delete the CALIBRATION_SERVICE

ON-OFF

Power-ON: Press the button once

Power-OFF: Press and hold the button until the torch on and then off

(SP25 don't support auto power off yet . It must be off manually in order not to run out the battery)

Discharge

1 Switch on the sp25

2 Press the button once to start discharging

Charge

1 Full charge: Connect to USB adaptor until all LED is bright

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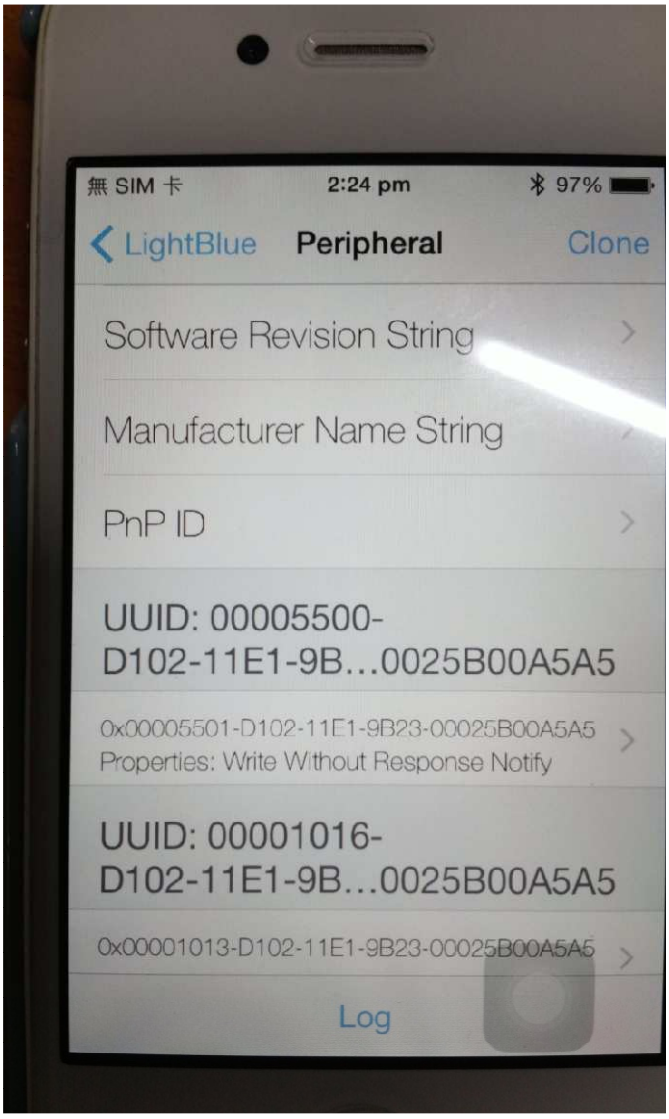


SERIAL_SERVICE

UUID_SERIAL_SERVICE 0x00005500D10211E19B2300025B00A5A5

UUID_SERIAL_DATA_TRANSFER 0x00005501D10211E19B2300025B00A5A5

BATTERY_CONTROL_SERVICE

BATTERY_CONTROL_SERVICE_UUID 0x00002016d10211e19b2300025b00a5a5

BATTERY_CONTROL_DISCHG_USB1_UUID 0x00002013d10211e19b2300025b00a5a5

Length: 8 bytes Data format: string Byte[0 – 3]: voltage Byte[4 – 7]: Current

Example：USB voltage is5.120V and the current from USB is 1.980A

The string is “51201980”

BATTERY_CONTROL_DISCHG_USB2_UUID 0x00002018d10211e19b2300025b00a5a5

Length: 8 bytes Data format: string Byte[0 – 3]: voltage Byte[4 – 7]: Current

BATTERY_CONTROL_BAT_CHG_UUID 0x00002014d10211e19b2300025b00a5a5

Length: 8 bytes Data format: string Byte[0 – 3]: voltage Byte[4 – 7]: Current

BATTERY_CONTROL_QUALITY_UUID 0x00002011d10211e19b2300025b00a5a5

Length:2 bytes Data format: uint16 Low byte first

(This value will be updated after the charging cycle)

FIND_ME_UUID 0x00002012d10211e19b2300025b00a5a5

Length:2 bytes Data format: uint16 write: 0x0000 (Stop this function) , 0x00xx (wake up in xx hour)

(This characteristic could be read and write., The firmware only provide this Characteristic, it don’t handle this characteristic yet)

Usage：Step 1: write 0x00 xx hr (up to 20 hrs)

Step 2: then press and hold the button to off SP25.

Step 3: SP25 will wake up itself in xx hour.

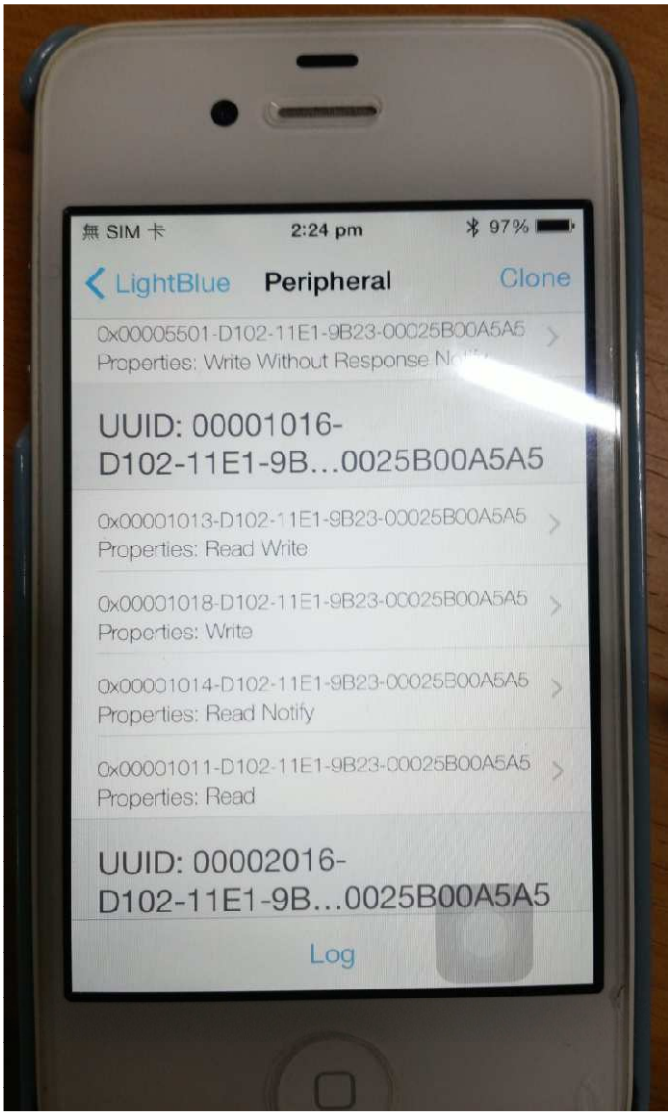
Step 4: SP25 will reset the value to 0x0000.

BATTERY SERVICE

UUID_BATTERY_SERVICE 0x180f

UUID_BATTERY_LEVEL 0x2a19

OTA_UPDATE_SERVICE



CSR_OTA_UPDATE_SERVICE_UUID 0x00001016d10211e19b2300025b00a5a5

CSR_OTA_CURRENT_APP_UUID 0x00001013d10211e19b2300025b00a5a5

CSR_OTA_READ_CS_BLOCK_UUID 0x00001018d10211e19b2300025b00a5a5

CSR_OTA_DATA_TRANSFER_UUID 0x00001014d10211e19b2300025b00a5a5

CSR_OTA_VERSION_UUID 0x00001011d10211e19b2300025b00a5a5

CALIBRATION_SERVICE

CALIBRATION_SERVICE_UUID 0x00012016d10211e19b2300025b00a6a6
CALIBRATION_BATTERY_VOLTAGE_UUID 0x00012013d10211e19b2300025b00a6a7
Length:2 bytes read write Data format: uint16
CALIBRATION_AIO_UUID 0x00012018d10211e19b2300025b00a6a8
Length:2 bytes read write Data format: uint16
How to use:

1. Read these two values before OTA process
2. Subsequently run the OTA process
3. Write back these two values after OTA process

AUTO_CALIBRATION_UUID 0x00012013d10211e19b2300025b00a6a9
Length:2 bytes write Data format: uint16
How to use:

1. Write a value 4200 to start the calibration process automatically
2. The result could be read from CALIBRATION_BATTERY_VOLTAGE_UUID and CALIBRATION_AIO_UUID, respectively.