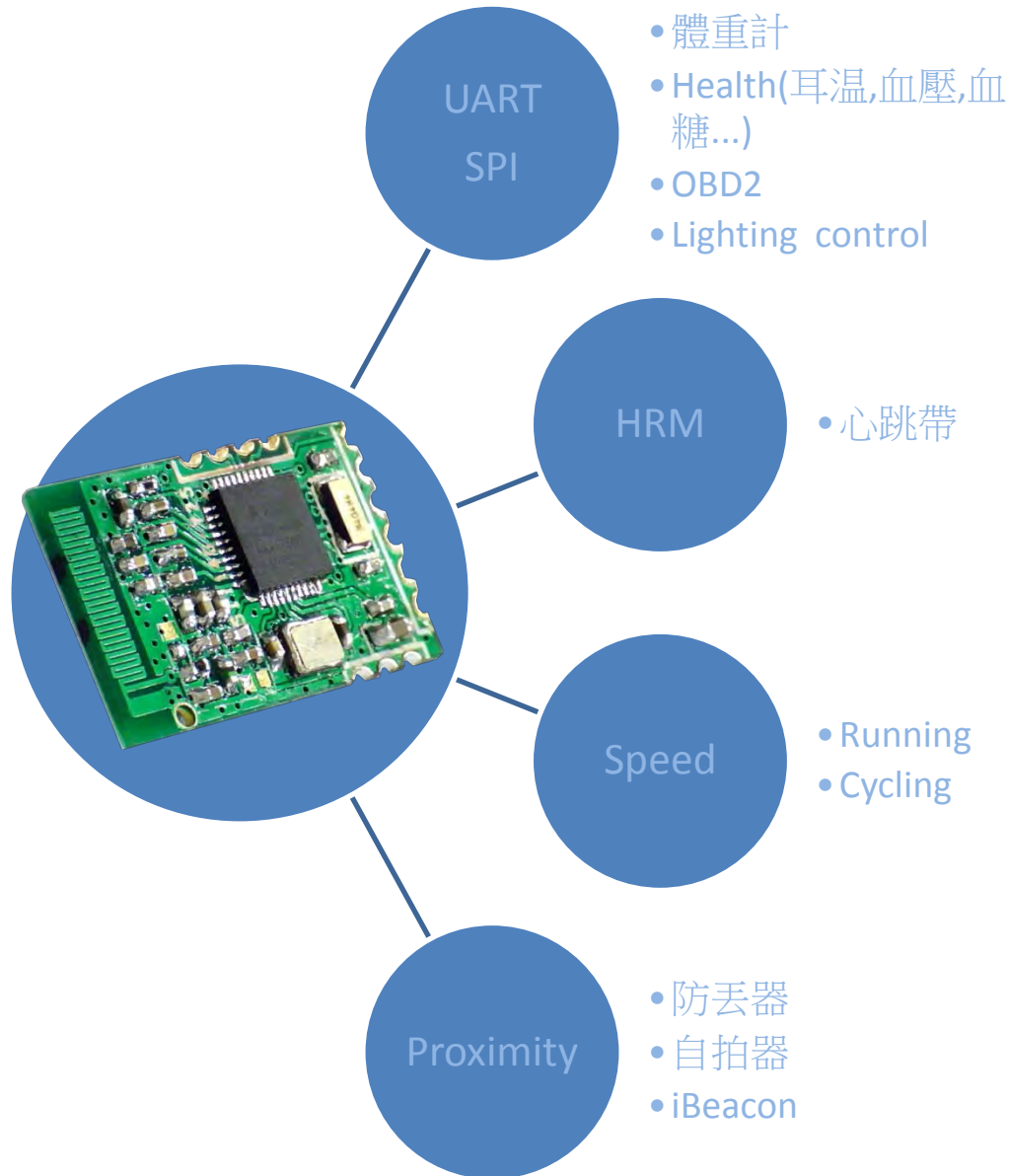
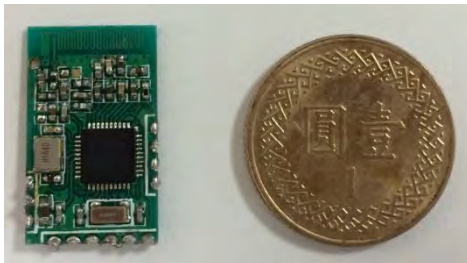
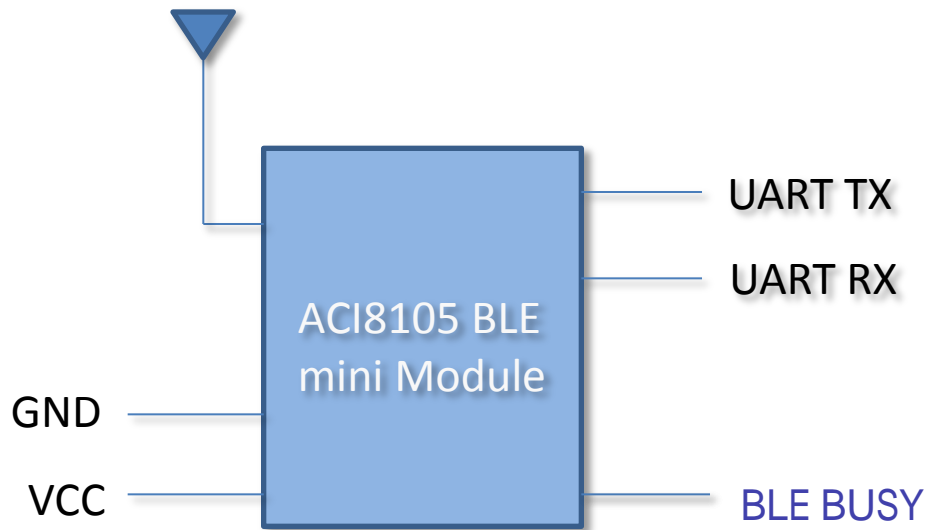
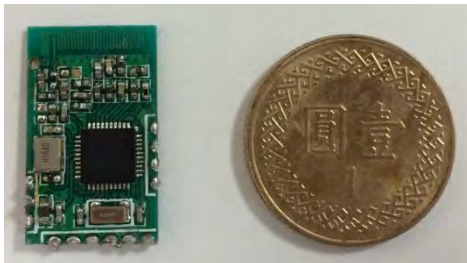
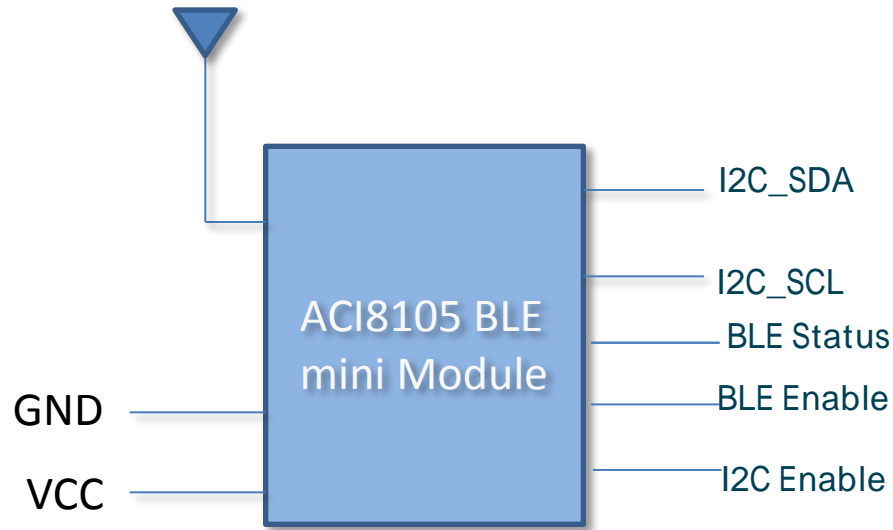

Bluetooth Low Energy

A8105 mini module



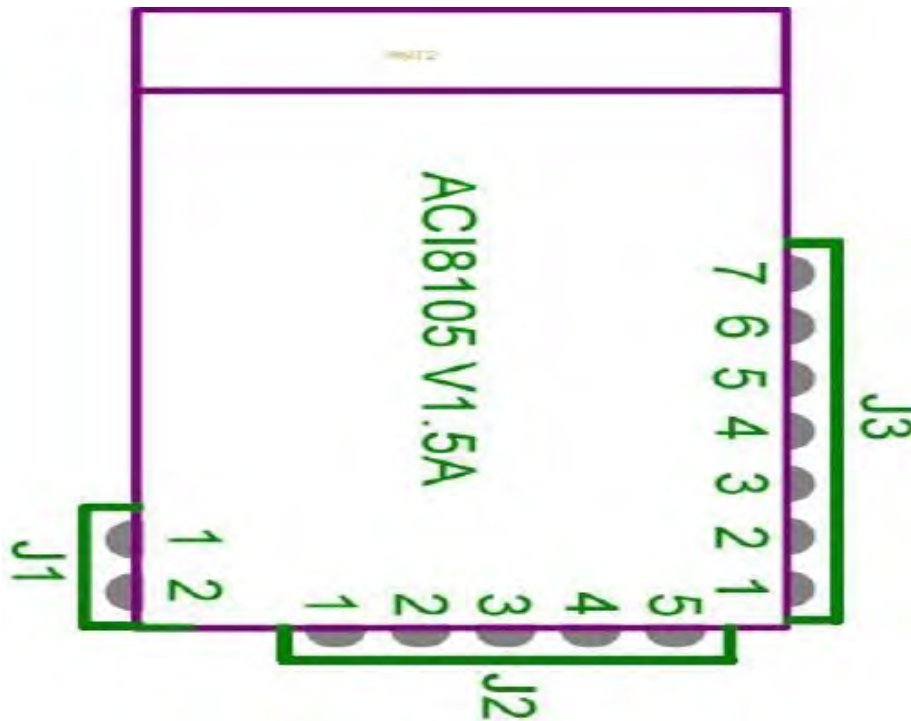


Baud Rate :	9600
Data bit :	8
Parity :	N
Stop bit :	1
Link pin low :	Normal mode
Link pin high :	Link mode



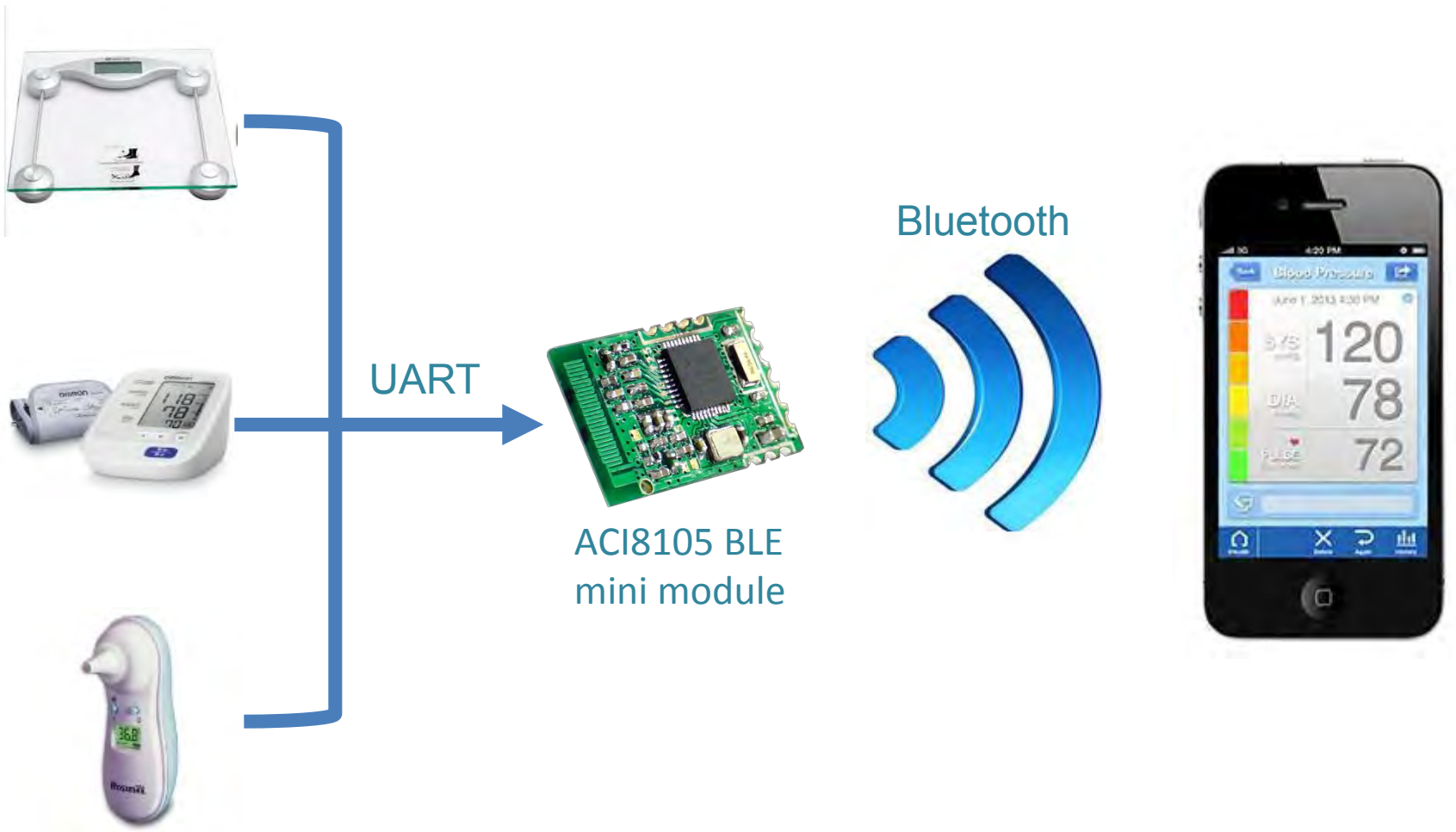
Interface

Pin No.	Symbol	I/O	Function Description
J1-1	GND	DIO	GND
J1-2	REGI	AI	REGI
J2-1	P0.4	DIO	GPIO/ICE mode / Debug EN
J2-2	P0.5	DIO	I2C_SCL
J2-3	P0.6	DIO	I2C_SDA
J2-4	P0.7	DIO	INT2 / GIO1 (BLE status Busy/Idle ,High/Low)
J2-5	P1.3	DIO	INT4 / CKO
J3-1	P1.4	DIO	TTAG_TTDIO (Programming pin)
J3-2	P1.5	DIO	TTAG_TTCK (Programming pin)
J3-3	P1.6	DIO	PWM0 / ADC4(BLE enable/Sleep low/high)
J3-4	P3.0	DIO	UART0_RX / ADC6
J3-5	P3.1	DIO	UART0_TX / ADC7
J3-6	P3.2	DIO / AI	I2C enable pin(always high , 當要丟資料時請 , 先給 1ms 的 low , 結束後 , 再開始丟 I2C 的資料)
J3-7	RESET	DIO	RESET



Interface

Pin No.	Symbol	I/O	Function Description
J1-1	GND	DIO	GND
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J3-4	P3.0	DIO	UART0_RX / ADC6
J3-5	P3.1	DIO	UART0_TX / ADC7
J3-6	P3.2	DIO / AI	BLE Wake up pin
J3-7	RESENT	DIO	RESENT

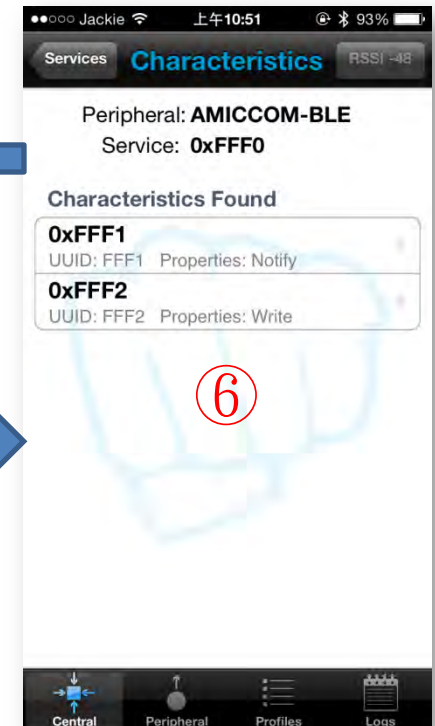
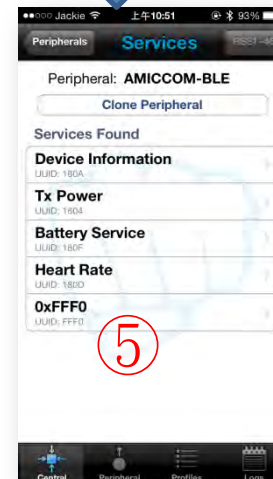
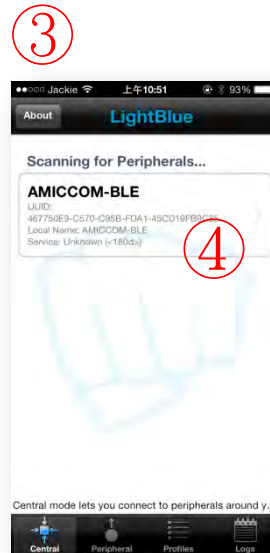


- ① Connection module to PC
- ② Open UART testing software
- ③ Open APP by **LightBlue**
- ④ Scan & choose BLE device
- ⑤ Choose 0xFFFF for UART test
- ⑥ Choose Write or Notify
- ⑦ PC receive data or send data



Youtube demo video:
<http://youtu.be/P5TOfBcltzM>

Baud Rate :	9600
Data bit :	8
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◆ UART Data Format

- UART 最大每次輸入資料量為 300 Byte，~~含第一個 Byte 前導碼定義資料長度。~~

BLE Module UART 最大輸入 BUFFER 可以到300Bytes, 程式會自動判斷 是否有資料持續從UART 丟入, Timer out 後 開始丟給APP

EX. : ~~0x03~~, Data1 , Data2 , Data3

EX. : ~~0x05~~, Data1 , Data2 , Data3 , Data 4 , Data5

EX. : ~~0x13~~, Data1 , Data2Data19.....

APP 對 BLE Module 傳送最大 payload 標準為 20bytes/packet

Youtube demo video:
<http://youtu.be/P5TOfBcltzM>

Youtube 上的BLE Module接法 是

Hyper terminal S/W PC<==>USB to RS-232 cable<==>RS232 轉TTL UART 版<==> UART to BLE Module -----手機 APP

USB

232電壓準位

TTL電壓準位

BLE

BLE TO UART APP



LightBlue



BLE tools

A8105 BLE Compatibility Testing List

測試裝置

型號	OS
iPhone 4S	iOS7.1.1
iPhone 5	iOS7.0.4, iOS 8.0.2, iOS 8.1.2
iPad	iOS6.1.3 / 7.1.X
iPad mini	iOS7.1.1
MacBook Air	OS X 10.9.2
iPod	iOS7.1.1
Samsung Note2	Android 4.3
Samsung S4	Android 4.4.2
LG G Pro	Android 4.4.2
LG G2	Android 4.4.2
HTC One(M7)	Android 4.3
HTC One(M7)	Android 4.4.2
Google Nexus 4	Android 4.4.2
Google Nexus 5	Android 4.4.2
Google Nexus 7	Android 4.4.2
Sony Z1	Android 4.4.2
Sony Z2	Android 4.4.2
InFocus	Android 4.4.2
紅米HM1SW	Android 4.3
iPad mini2	iOS 8.0.2 / iOS 8.1.2
LG G2	Android 4.4.2
華為 榮耀 6	Android 4.4.2
華為 MATE	不詳
iPhone 5C	iOS 7.1.0
紅米 3	Android 4.4.2