Testmode Config Pin Setting

Overview

DL_EN	LOW (GND)	**Download Mode For WIFI(GPS)**
	NC	

| **I2C DBG** | Use or Not Use (Pull Up or NC) | **Normal Mode** |

GPIOs
0: STATE0
1: WKUP

SCL : NC or Low
SDA : High

- 0:NC or Low / 1:NC or Low → **Not Assigned**
- 0:NC or Low / 1:High → **BLE DTM**
- 0:High / 1:NC or Low → **WIFI Test**
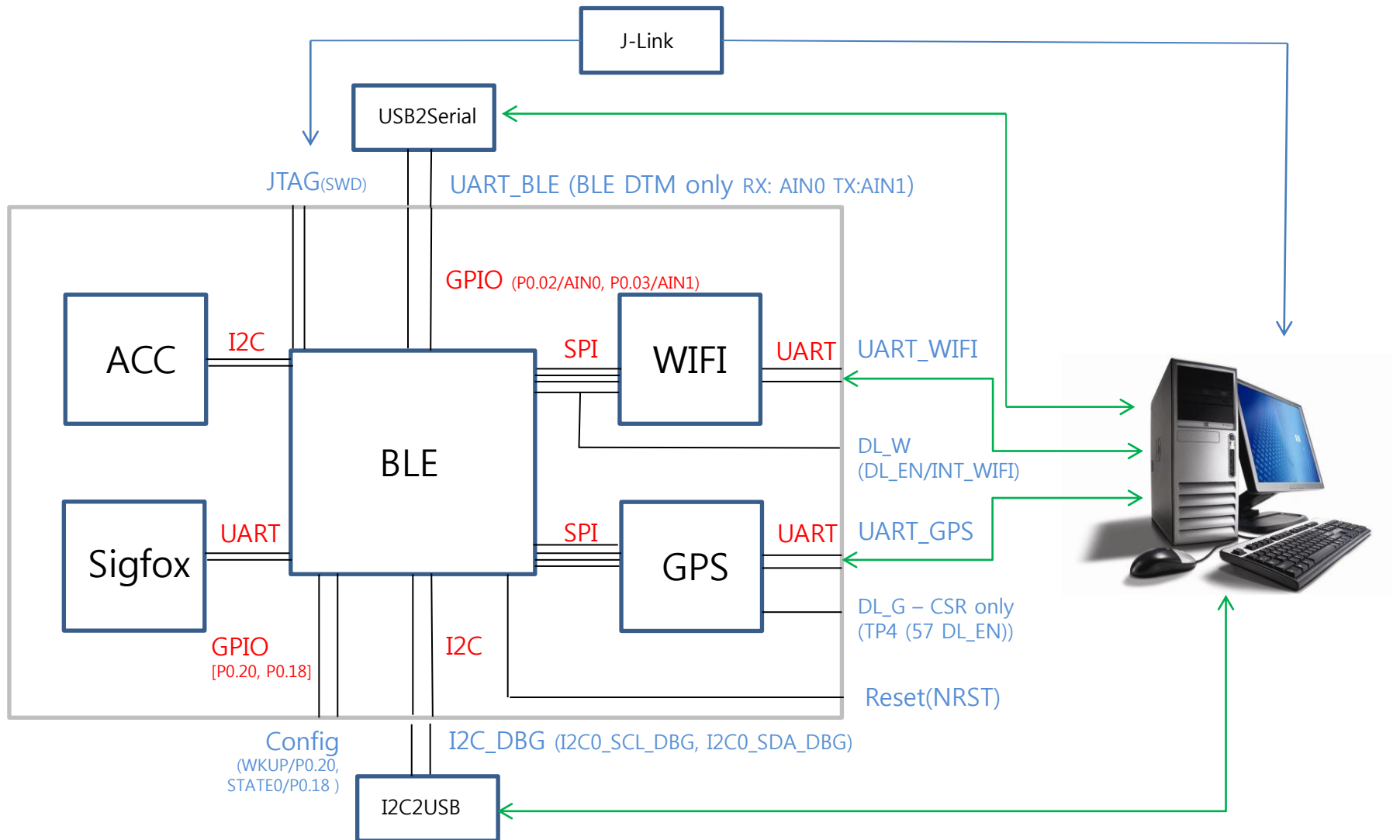- 0:High / 1:High → **Not Assigned**

SCL : NC or Low
SDA : High → **Not Assigned**
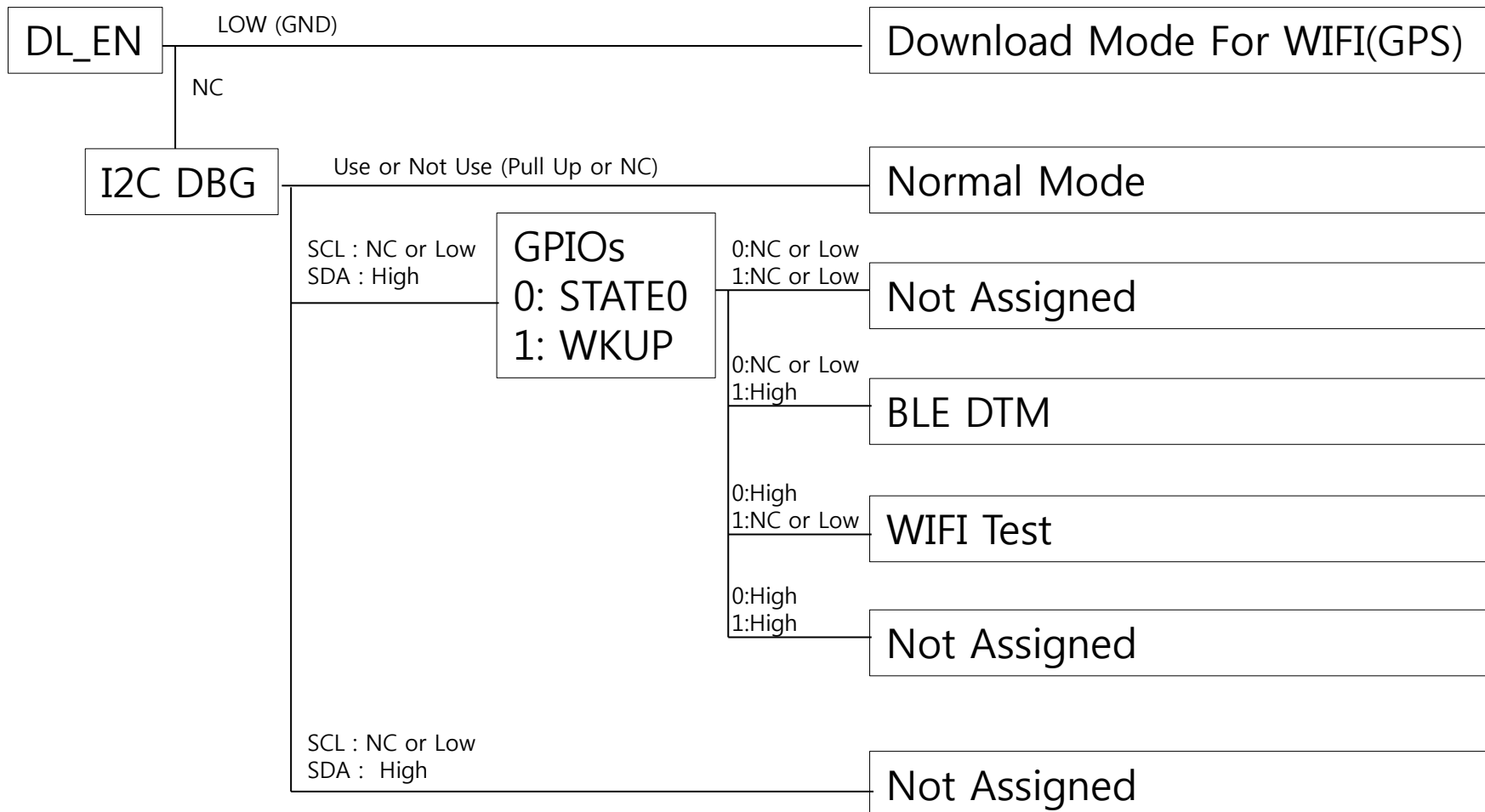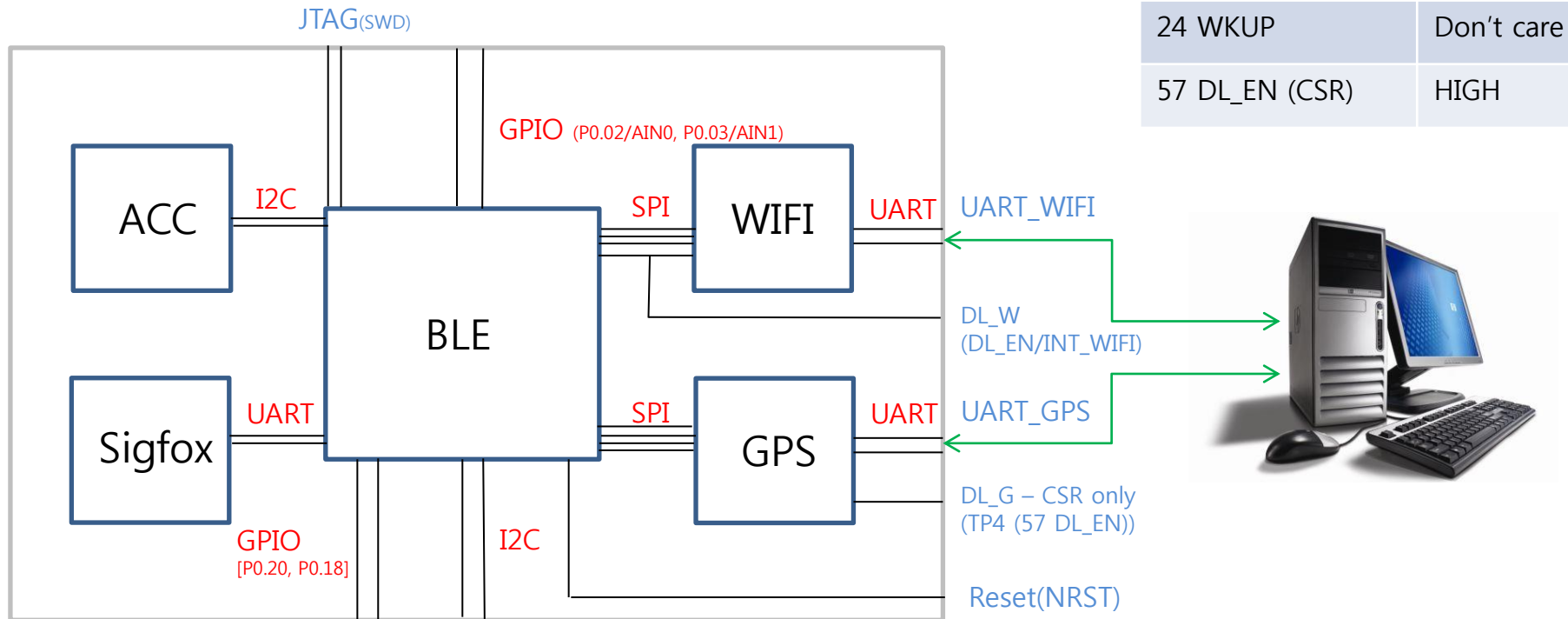
Module Interface configuration

Boot Strap Pin Configuration
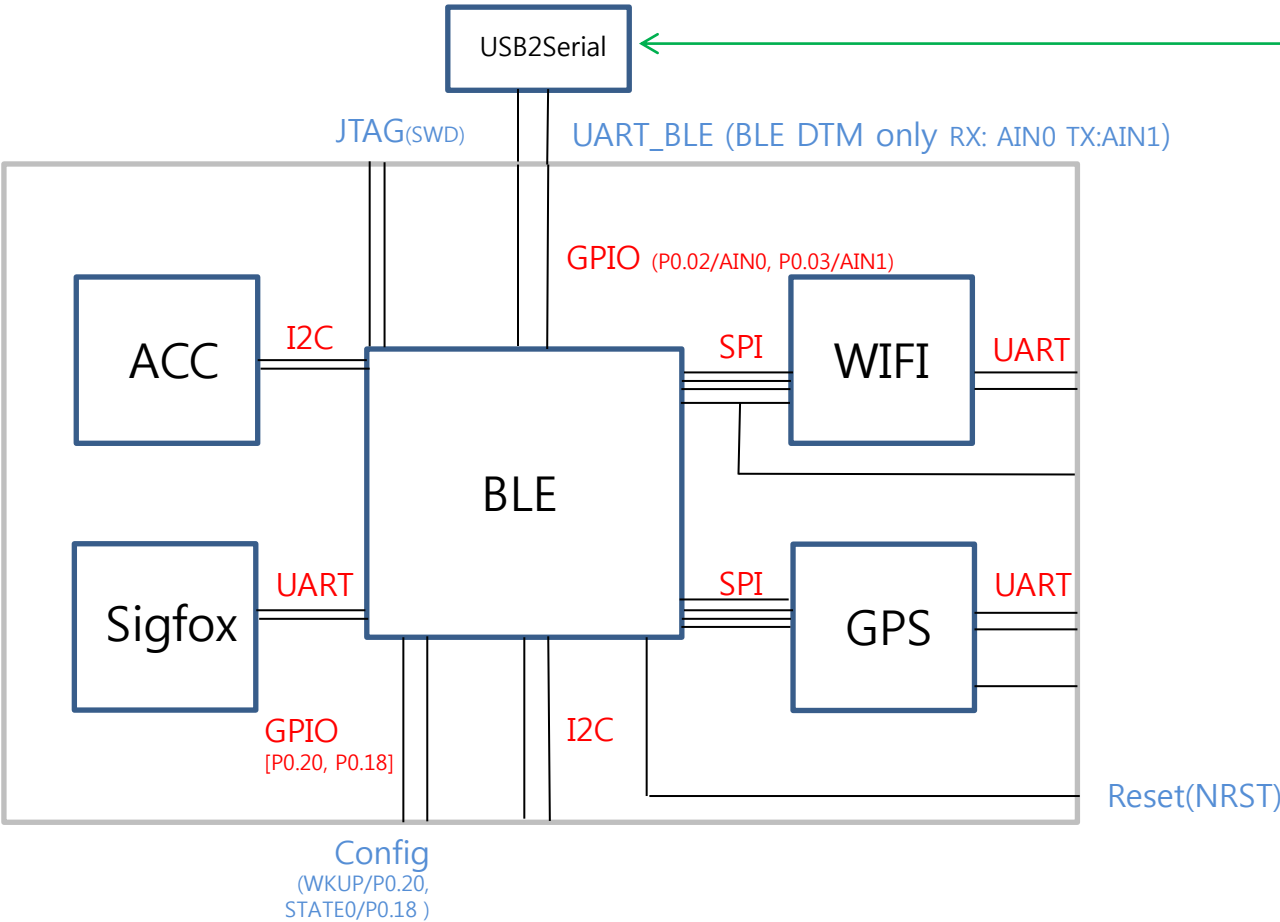
Main Boot Strap Pins
1. 47 DL_EN/INT_WIFI : Download mode control (GND or NC)
2. 22 I2C0_SCL_DBG : Bootmode control #1
3. 21 I2C0_SDA_DBG : Bootmode control #2

47 DL_EN/INT_WIFI	22 I2C0_SCL_DBG	21 I2C0_SDA_DBG	23 STATE0	24 WKUP	57 DL_EN (CSR)	MODE
LOW (GND)	don't care	don't care	don't care	don't care	HIGH	download mode
NC	HIGH (PULL UP)	HIGH (PULL UP)	don't care	don't care	NC	Working
NC	NC	NC	don't care	don't care	NC	Working
NC	LOW or NC	HIGH	LOW or NC	LOW or NC	NC	not assigned
NC	LOW or NC	HIGH	LOW or NC	HIGH	NC	BLE Test(DTM, UART RX:40 AIN0 TX:39 AIN1)
NC	LOW or NC	HIGH	HIGH	LOW or NC	NC	WIFI Test(always on)
NC	LOW or NC	HIGH	LOW or NC	LOW or NC	NC	not assigned
NC	HIGH	LOW or NC	-	-	NC	not assigned

WIFI/GPS Download Mode

Pin	State
47 DL_EN/INT_WIFI	Low (GND)
22 I2C0_SCL_DBG	Don't care
21 I2C0_SDA_DBG	Don't care
23 STATE0	Don't care
24 WKUP	Don't care
57 DL_EN (CSR)	HIGH

JTAG(SWD)

GPIO (P0.02/AIN0, P0.03/AIN1)

ACC — I2C — BLE — SPI — WIFI — UART — UART_WIFI

DL_W (DL_EN/INT_WIFI)

Sigfox — UART — SPI — GPS — UART — UART_GPS

DL_G – CSR only (TP4 (57 DL_EN))

GPIO [P0.20, P0.18]

I2C

Reset(NRST)

BLE Test Mode

Pin	State
47 DL_EN/INT_WIFI	NC
22 I2C0_SCL_DBG	LOW
21 I2C0_SDA_DBG	HIGH
23 STATE0	LOW
24 WKUP	HIGH
57 DL_EN (CSR)	NC

USB2Serial

JTAG(SWD)

UART_BLE (BLE DTM only RX: AIN0 TX:AIN1)

GPIO (P0.02/AIN0, P0.03/AIN1)

ACC

I2C

BLE

SPI

WIFI

UART

Sigfox

UART

SPI

GPS

UART

GPIO
[P0.20, P0.18]

I2C

Reset(NRST)

Config
(WKUP/P0.20,
STATE0/P0.18)

WIFI Test mode (WIFI always on)
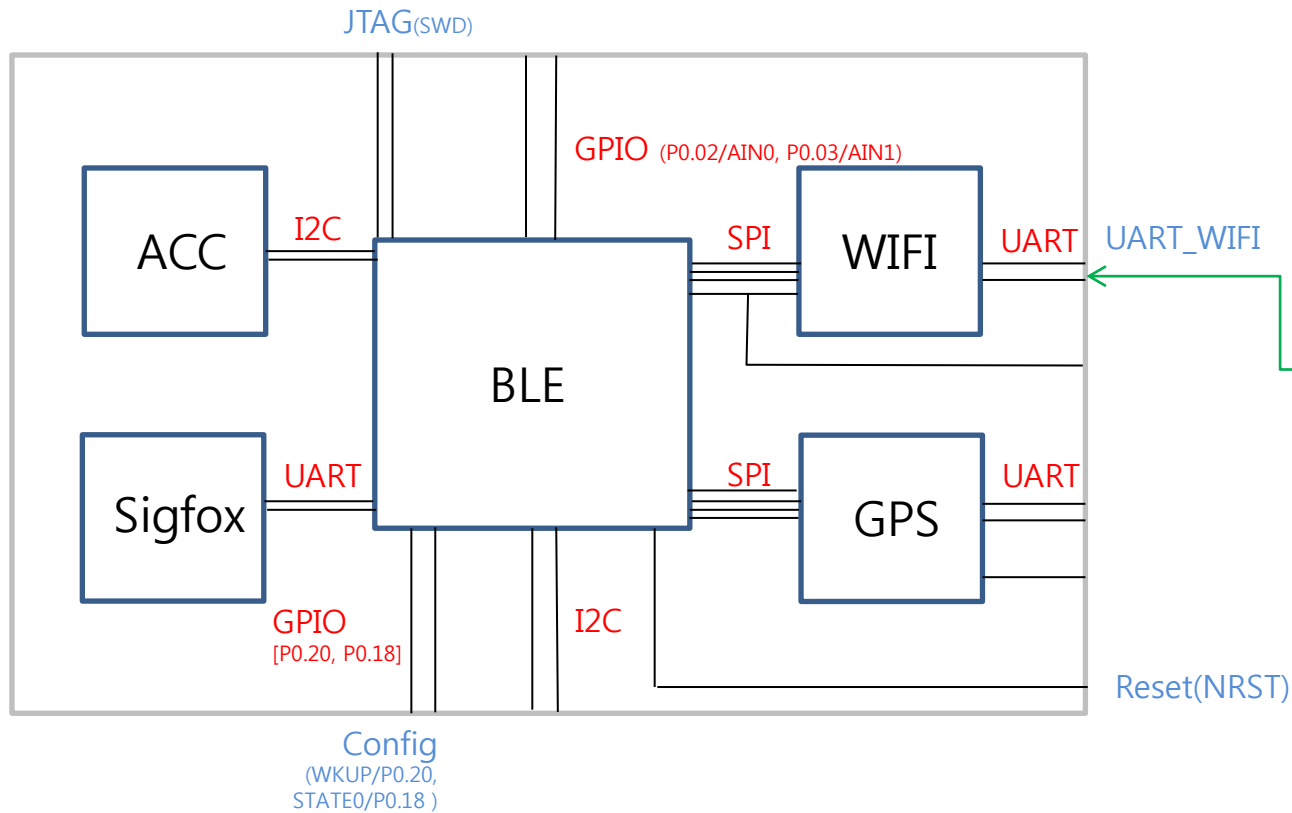
Pin	State
47 DL_EN/INT_WIFI	NC
22 I2C0_SCL_DBG	LOW
21 I2C0_SDA_DBG	HIGH
23 STATE0	HIGH
24 WKUP	LOW
57 DL_EN (CSR)	NC
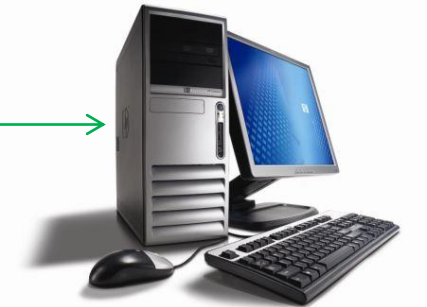
Work Mode (for PC Tool)

Mode Change by PC Tool
1. Sigfox bypass mode : Sigfox Test
2. GPS Test mode : GPS Test

Pin	State
47 DL_EN/INT_WIFI	NC
22 I2C0_SCL_DBG	
21 I2C0_SDA_DBG	Use I2C
23 STATE0	Don't care
24 WKUP	Don't care
57 DL_EN (CSR)	NC

JTAG(SWD)

GPIO (P0.02/AIN0, P0.03/AIN1)

ACC — I2C — BLE — SPI — WIFI — UART

Sigfox — UART — BLE — SPI — GPS — UART

GPIO [P0.20, P0.18]

I2C

Reset(NRST)

Config (WKUP/P0.20, STATE0/P0.18)

I2C_DBG (I2C0_SCL_DBG, I2C0_SDA_DBG)

I2C2USB