

Getting Started With NB-IoT Development Board

1 Getting started

Before starting the user should:

1. Check the jumper position on the board, JP1(Vcc 3.3V) and JP2(Vcc NB) on selected.
2. Use the preferred debugger/programmer, connect P4 with SWD interface and GND on CN2(Figure 1 shows the connection with ST-Link).
3. Install the preferred Integrated Development Environment (IDE).
4. Check the NB-IoT module's name of U1. B8: 900MHz(China Mobile, China Unicom), B5: 850MHz(China Telecom). Insert a SIM card of the corresponding carrier.
5. Use a DC adapter(5V 2A) to connect P5 to provide power.
6. The demonstration software and several software examples on how to use the NB-IoT development board features are available at [here](#).
7. Develop the application using the available examples.
8. You can also debug the NB-IoT module with AT command by connecting P2 with an UART to USB converter.



Figure 1. Connection with ST-Link

2 System Requirement

- Windows® OS(XP, 7, 8, 10) or Linux 64-bit or Mac OS® X
- DC adapter 5V 2A, with 3.5mm*1.35mm plug
- Debugger/Programmer such as:
 - ◆ ST-Link
 - ◆ J-Link
- IDEs such as:
 - ◆ ARM® Keil®:MDK-ARM
 - ◆ IAR™ EWARM
 - ◆ GCC-based IDEs

3 Hardware layout and configuration

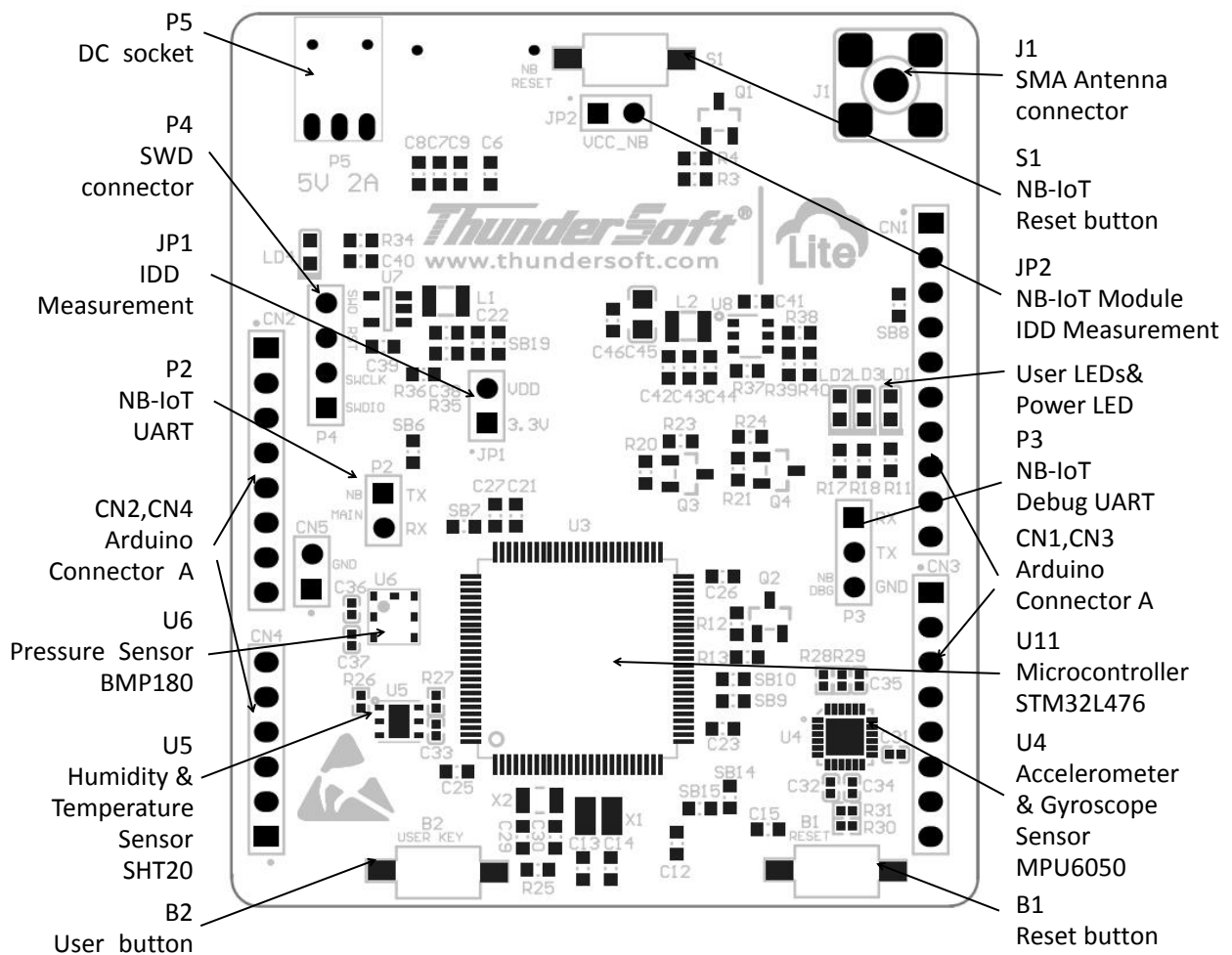


Figure 2. top layout of NB-IoT development board

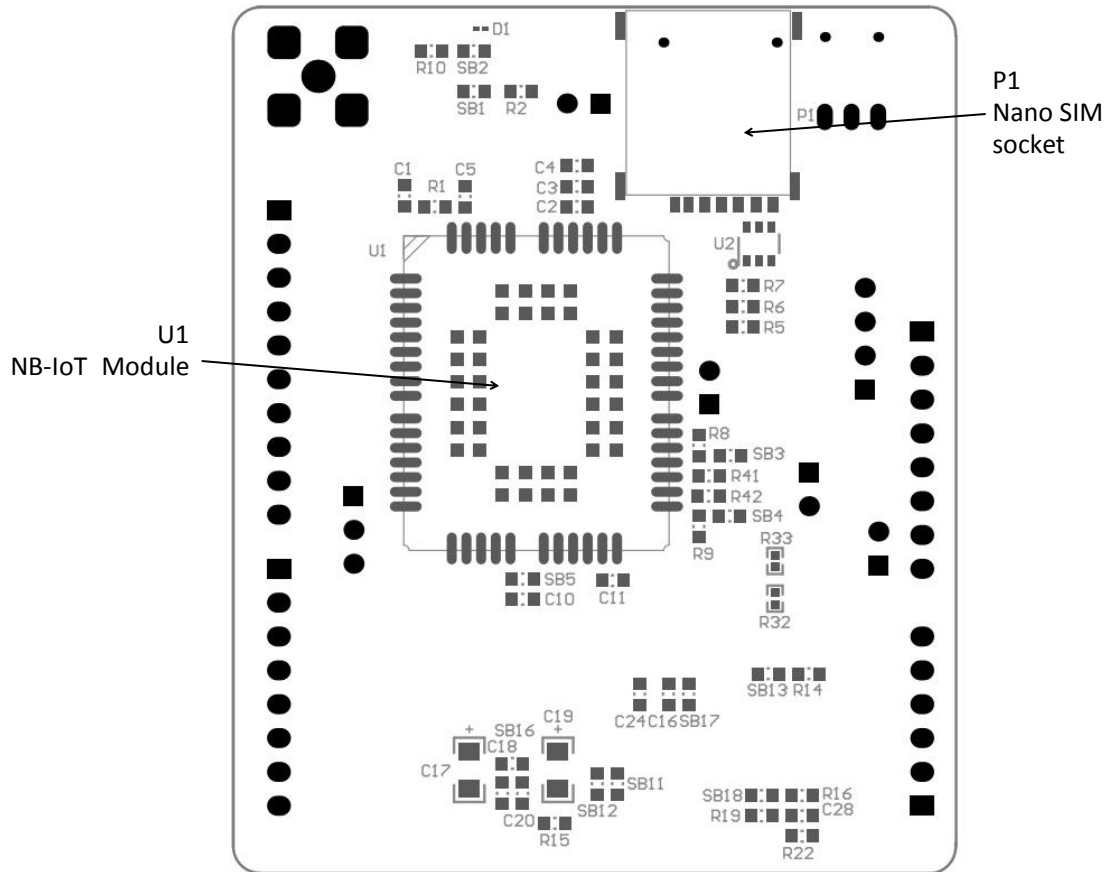


Figure 3. bottom layout of NB-IoT development board

4 Extension connectors

Figure 4 shows the signals connected by default to Arduino Uno V3 connectors A(CN1, CN2, CN3, CN4) .

Extension connectors

Arduino Uno compatible

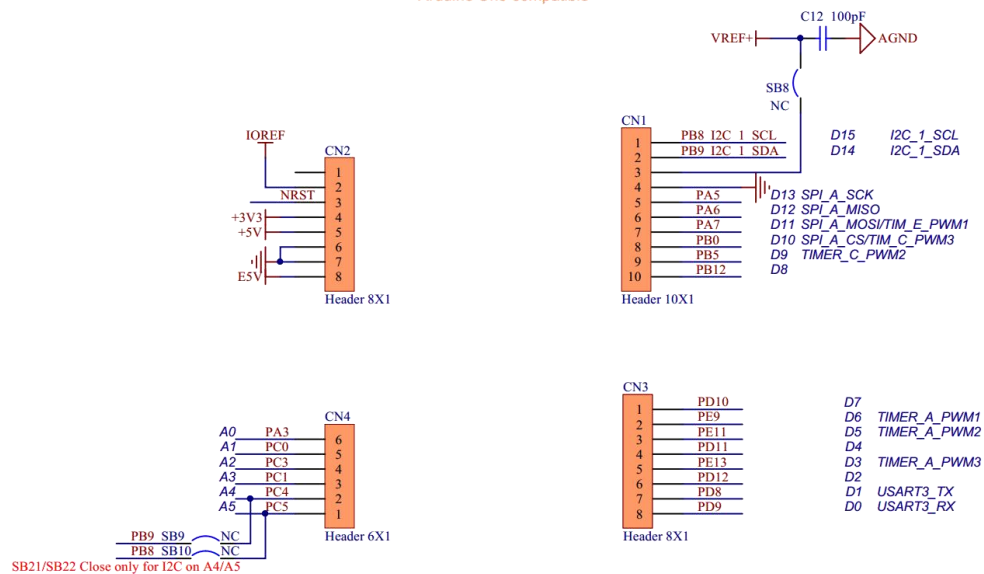


Figure 4. Signals to connectors A