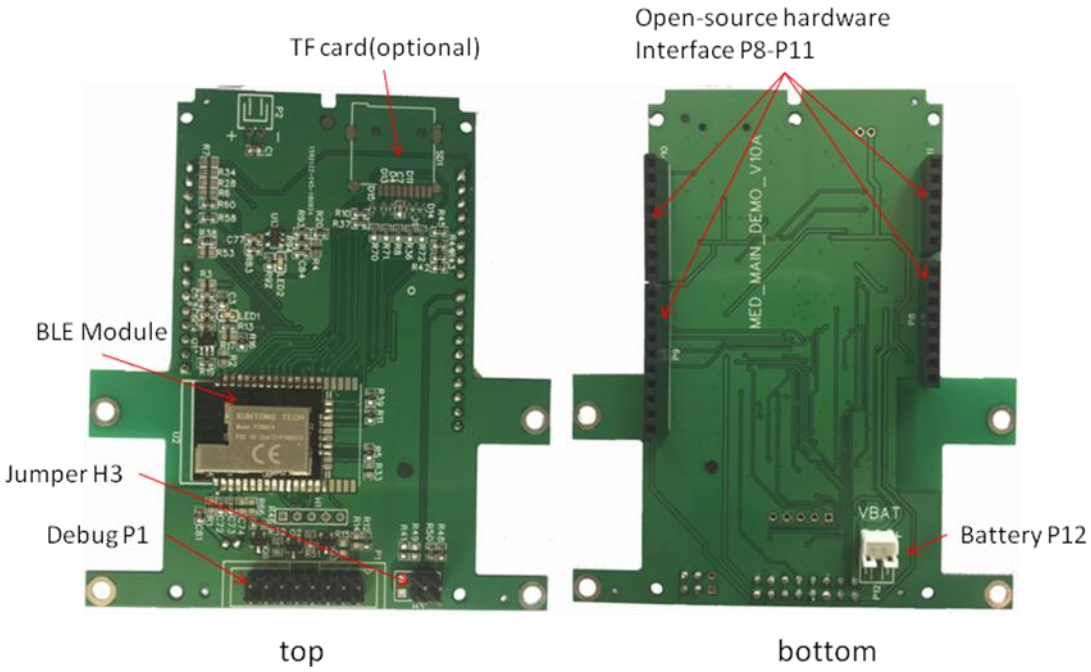
1. Introduce

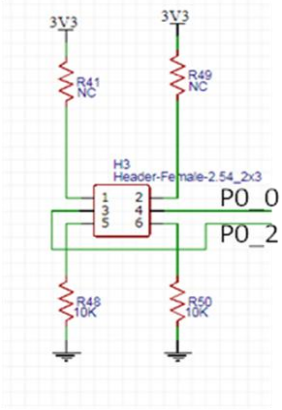
The mainboard uses Bluetooth chipset(NRF52832) to support either I2C, SPI or UART to connect the Bio-module(M001A); connects the PC-side windows evaluation software through UART; and connects the mobile APP through Bluetooth BLE.
Mainboard SCH and PCB open-project：
https://lceda.cn/seanfan/med_main_nrf

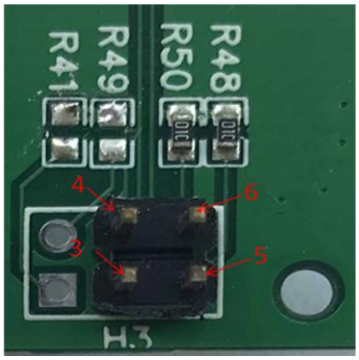


2. Interface switch for Bio-module

Through the interface switch H3, jumper to determine the level of Bio-module P0_2, P0_0 during reset, confirming the interface about UART, I2C or SPI; The details refer to Bio-module user's manual.

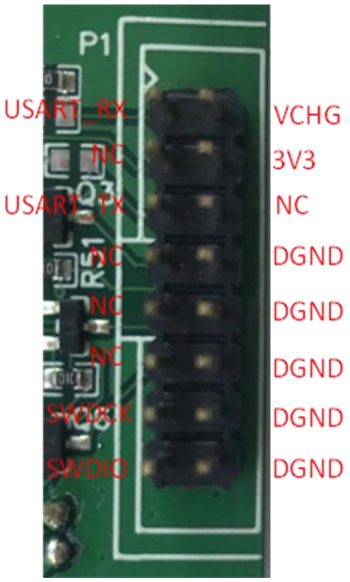
As shown in the following figure, the module P0 2, P0 default internal pull-up, so the external need not pull-up; by short 3-5, 4-6 or floating to select the interface mode.

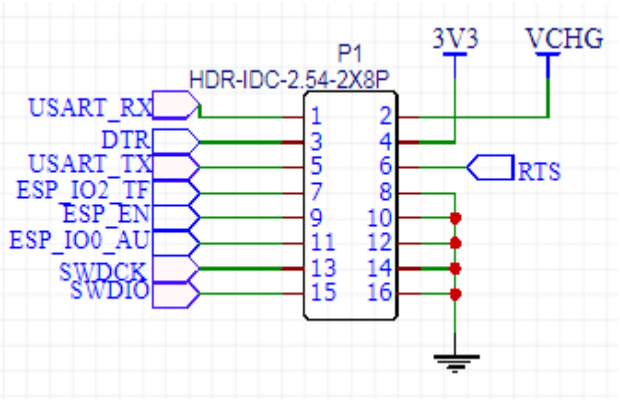




3. Debug Connector : P1

The Connector P1 includes SDW, UART and Power. The SDW is used to debug NRF52; desktop evaluation tool is connected by UART; P1 also supports 3.3V output and 5V input for charging .





3. Bluetooth BLE Module with NRF52832

For Bluetooth BLE module, please refer to this document:
http://www.freqchina.com/uploads/soft/201801/PTR9618_CN%20V1.4.pdf