AD51 Doppler Fetal HR BLE Communication Protocol

1. BLE Service and Characteristic UUID

BLE Device Name: *MD1000AF4*

Service UUID：0x00005500-D102-11E1-9B23-00025B00A5A5

Write Characteristic UUID：0x00005501-D102-11E1-9B23-00025B00A5A5 [write,notify]

Notify Characteristic UUID：0x00005502-D102-11E1-9B23-00025B00A5A5   [read]

2. BLE command

the Master device

1. set notify to Notify characteristic
2. send `START command` to write characteristic
3. you can get data from the device
4. send `STOP command` to write characteristic

2.1 START command

```
typedef struct {
    unsigned char header;           0xFF
    unsigned char header;           0xFD
    unsigned char serial[8];        8 0x00
    unsigned char  checksum;        crc8
};
```

2.2 Data package

```
typedef struct {
    unsigned char header;           0xFF
    unsigned char header;           0xFC
    unsigned char dev_type;         0x04
    unsigned char dev_serial[8];    SN
    unsigned char reading0[2];      HR, 2Hz
    unsigned char reading1[2];      Reserved
    unsigned char reading2[1];      Reserved
    unsigned char checksum;         crc8
};
```

2.3 STOP command

```
0x FF FA 0A 0A
```