1，9轴传感器测试，测试前先确认屏蔽箱中的芯片模块必须为焊接元器件的一面冲上平放，蓝牙连接成功之后，发送一条加速度值读取指令 AA 17 00 C1 ，通过命令返回值，返回值如下：

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | | 3 | | 4 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 0xAA | 0x97 | | 0x06 | | 加速度X 轴加速度 | | | | | 加速度Y轴加速度 | | | |
| 12 | 13 | | 14 | | 15 | | | 16 | | 17 | | 18 | 19 |
| 加速度Z轴速度 | | | | | | | | 陀螺仪Y轴角速度 | | | | | |
| 20 | | 21 | | 22 | | 23 | |  | |  | |  |  |
| 融合角度 | | | | | | | |  | | | | | |

传感器的返回值都是Float数，4个字节，获得返回值以后，

加速度：当X,Y轴数值：趋近于0，±0.5；Z轴数值：9.85±1表示正常。

陀螺仪：Y轴数值：趋近于0，±0.5；表示正常

融合角度： 与正北夹角,水平旋转一周时,360度变化表示正常

2，写SN号：15位，15个字节

设置SN号，使用手机扫描打印的二维码获取SN号后，将组装并打印好二维码的芯片模块以及蓝牙dongle一起放入屏蔽箱中，蓝牙连接成功后，通过写设备ID指令（指令如下表所示）下发芯片SN号地址

写设备ID指令：发送20个字节

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 0x0b | 0xff | 0xff | 0xff | 0xff | Sn号,举例: AS017518ECG0004 | | | | | | | | | | | | | | |

BLE返回值:写成功返回0bff01 失败返回0bff00

3.写入mac地址

写设备ID指令:发送11个字节

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 0x0a | 0xff | 0xff | 0xff | 0xff | Mac地址,举例:19 00 80 ca ea 80 | | | | | |

BLE返回值:写成功返回0aff01 失败返回0aff00

注意: 写sn和mac的操作要先调用写sn的接口,然后调用写mac接口.写完mac后设备会自动重启.