SAMPLE APPROVAL SHEET

FOR APPROVAL

MODEL NO： 35-BTM-00100

Ver. ：V1.0

DATE： 2017-08-06

History of Version：

Date	Contents
06.AUG.2017	Initial Release

Contents

1. GENERAL DESCRIPTION

35-BTM-00100 is a Bluetooth 4.2 Low Energy module, designed based on Nordic nRF52832 SOC solution.It is designed especially for fitness application.

2. FEATURES

1. Bluetooth 4.2 Compliant.
2. Include BT proprietary service for user data communication.
3. Include BT fitness machine profile.
4. include BT device information service.
5. include BT battery service.
6. support BLE Heartrate sensor connection.
7. support BLE Running Speed and Cadence sensor connection.
8. support BLE Cycling Speed and Cadence sensor connection.
9. support ANT+ Heartrate sensor connection.
10. support ANT+ Cycling Speed and Cadence combined sensor connection.
11. support ANT+ Cycling Speed sensor connection.
12. support ANT+ Cycling Cadence sensor connection.

3. DIMENSION

35-BTM-00100
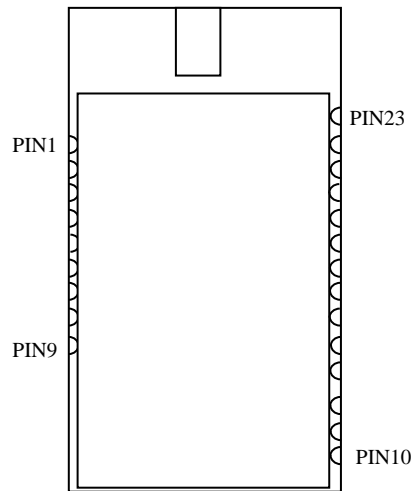
SIZE 20(L) x 10(W) x 2.5(H) mm

4.Pin Assignment

35-BTM-00100

Pin No.	Name	Pin function	Desciption
1	GND	ground	The pad must be connected to a solid ground plane
2	VCC	Power	Power-supply pin
3	P0.27	Digital I/O	General-purpose digital I/O
4	P0.28	Digital I/O	General-purpose digital I/O
5	P0.29	Digital I/O	General-purpose digital I/O
6	P0.30	Digital I/O	General-purpose digital I/O
7	P0.31	Digital I/O	General-purpose digital I/O
8	GND	ground	The pad must be connected to a solid ground plane
9	VCC	Power	Power-supply pin
10	P0.09	Digital I/O	General-purpose digital I/O
11	P0.10	Digital I/O	General-purpose digital I/O
12	GND	ground	The pad must be connected to a solid ground plane
13	VCC	Power	Power-supply pin
14	P0.12	Digital I/O	General-purpose digital I/O
15	P0.13	Digital I/O	General-purpose digital I/O
16	P0.14	Digital I/O	General-purpose digital I/O
17	P0.15	Digital I/O	General-purpose digital I/O
18	P0.16	Digital I/O	General-purpose digital I/O
19	P0.17	Digital I/O	General-purpose digital I/O
20	nRESET		system reset pin
21	SWCLK		Programming pin
22	SWDIO		Programming pin
23	GND	ground	The pad must be connected to a solid ground plane

5. TECHNICAL SPECIFICATION

Parameter	Min	Type	Max	Unit
Operating Voltage VCC 35-BTM-00100		3	3.6	V
Operating Voltage VCC 35-BTM-00100 with motherboard		3	5	V
Voltage on any digital pin	-0.3		VDD+0.3<3.6	V
Current Consumption @ RX mode	-	13	-	mA
Current Consumption @ TX mode		16		mA
Current Consumption @ Low MCU activity, 16MHz crystal on, No radio		0.4		mA
Standby Current Consumption @ low power mode		10		uA
TX Power		0		dBm
Operating Temperature	-20	-	70	℃
UART Setting	Baud Rate : 115200, Data Bit : 8, Parity : none, Stop Bit : 1, Handshaking : none			

6. FCC WARNING

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
NOTE: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Note 1: Compliance of this device in all final host configurations is the responsibility of the Grantee.
OEM integrators are responsible to satisfy RF exposure requirements. SAR evaluation is valid for portable, mobile and fixed applications.

Note 2: Any modifications made to the module will void the Grant of Certification, this module is limited to OEM installation only and must not be sold to end-users, end-user has no manual instructions to remove or install the device, only software or operating procedure shall be placed in the end-user operating manual of final products.

Note 3: The device must not transmit simultaneously with any other antenna or transmitter.

Note 4: To ensure compliance with all non-transmitter functions the host manufacturer is responsible for ensuring compliance with the module(s) installed and fully operational. For example, if a host was previously authorized as an unintentional radiator under the Declaration of Conformity procedure without a transmitter certified module and a module is added, the host manufacturer is responsible for ensuring that the after the module is installed and operational the host continues to be compliant with the Part 15B unintentional radiator requirements. Since this may depend on the details of how the module is integrated with the host, ALATECH Technology Limited shall provide guidance to the host manufacturer for compliance with the Part 15B requirements.

Note 5: FCC ID label on the final system must be labeled with "Contains FCC ID: YQO35BTM00100"