

## Overview and Key Features

The BLE002 module has been designed to allow OEMs to easily add Bluetooth wireless connectivity in their product offering. The BLE002 module incorporates GEMHCI protocol software specifically designed to enable fitness machines such as treadmills, exercise bikes, ellipticals, rowers, stair climbers and step machines to wirelessly communicate exercise data with smart phones, tablets, and leaderboard software systems.

The BLE002 module is based on Nordic Semiconductor's nRF52832 multiprotocol Bluetooth chipset. The BLE002 maximum transmit power of +4dBm. This manual is intended to assist hardware integration of the BLE002 module into a given design.

### 1-1. Product name: Bluetooth module

1-2. Bluetooth module: BLE002

1-3. Bluetooth specification: Bluetooth 4.2, Class2

1-4. MCU: Nordic nRF51822 SoC solution

1-5. Operation voltage: DC1.7~3.3V

1-6. Communication type: GPIO, UART, SPI, I2C, PWM, ADC

### FCC Warning:

"THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES AND INDUSTRY CANADA LICENSE-EXEMPT RSS STANDARD(S). 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 UNDESIRE OPERATION.

THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

FCC radiation exposure statement

This device complies with FCC radiation exposure limits for uncontrolled environments.

(1) the module is limited to OEM installation ONLY

(2) the OEM integrator is responsible for ensuring that the end-user has no manual instructions to remove or install module.

(3) the module is limited to installation in mobile or fixed application.

(4) the separate approval is required for all other operating configuration, including portable configurations with respect to Part 2.1093 and different antenna configurations.

(5) Labeling instruction of finished product. Please refer to KDB 784748 D01

### Industry Canada (IC) Warning:

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.