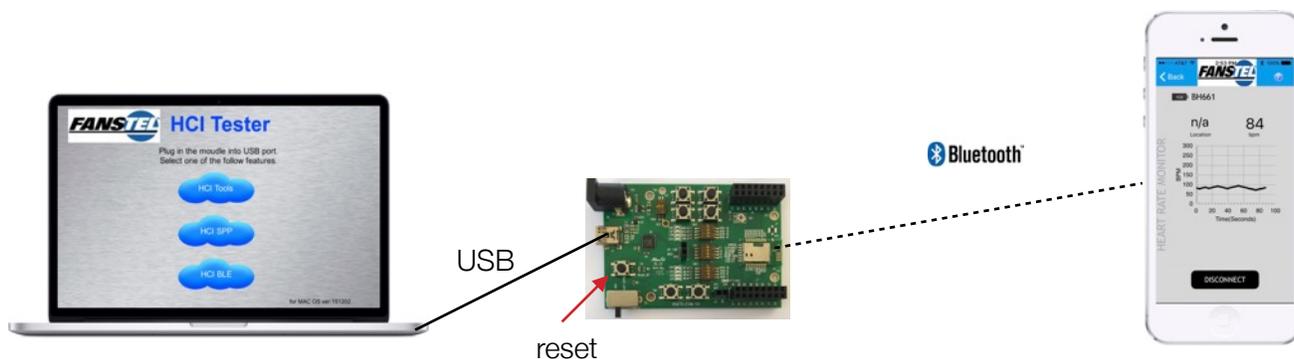


BlueFan HCI Evaluation Board Quick Start Guides



HCI Commands Evaluation

Toshiba SOCs support HCI (Host Controller Interface) commands. An evaluation board is connected to an USB port of Windows PC or MAC. Evaluation software for Windows PC is available at: <https://dl.dropboxusercontent.com/u/54939426/BlueFanHCIwin.rar>

Evaluation software for MAC is available at: <https://dl.dropboxusercontent.com/u/54939426/BlueFanHCImac.zip>

After unzipping, it becomes an executable file. Use MENU to open for the first time. Then, you can double click to open.

Apps to demonstrate communication from a PC/MAC to a BlueFan module to a smartphone are available at Apple App and Google Play Stores. Please search for BlueFan and download.

BLE Evaluation using MAC and iOS

1. Connect an evaluation board to a MAC using the included USB cable.
2. Press the **reset** button.
3. Double clicks **BlueFanHCImac** icon on your MAC.
4. Press the **BlueFan BLE** icon on iOS device.
5. Click **HCI BLE** icon on MAC, followed by **Scan COM Port**, followed by the **USB device name** found on serial port icon (in light green shadow), followed by **Initial** icon. When shown, click **Advertise** icon to transmit BLE data packs.
6. Press **HRM** icon on iOS device followed by **CONNECT**. Then, select device.
7. A simulated Heart Rate Monitor is displayed on MAC. Press the + or the - symbol to change heart rate.
8. Simulated heart rate figure is displayed on the iOS device.

BLE Evaluation using MAC and Android

1. Connect an evaluation board to a MAC using the included USB cable.

2. Press the **reset** button.
3. Double clicks **BlueFanHCImac** icon on your MAC.
4. Press the **BlueFan BLE** icon on iOS device.
5. Click **HCI BLE** icon on MAC and followed by **Scan COM Port**, followed by the **USB device name** found on serial port icon (in light green shadow), followed by **Initial** icon. When shown, click **Advertise** icon to transmit BLE data packs.
6. Click **Setting** icon on Android device. A list of available devices are displayed. Press **Fanstel** if displayed. If not, press **SCAN** icon.
7. A simulated Heart Rate Monitor is displayed on MAC. Press the + or the - symbol to change heart rate.
8. Press **Heart Rate Service** followed by **Heart Rate Measurement**. Simulated heart rate is displayed on the Android device after "Data:".

SPP Evaluation using MAC and Android

1. Connect an evaluation board to a MAC using the included USB cable.
2. Press the **reset** button.
3. Double clicks **BlueFanHCImac** icon on your MAC.
4. Press the **BlueFan SPP** icon on Android device.
5. Click **HCI SPP** icon on MAC and followed by **Scan COM Port**, followed by the **USB device name** found on serial port icon (in light green shadow), followed by **Initial** icon.
6. Click **Start** icon on Android device. A list of available devices are displayed. Press **BH661**, followed by **Pair**.
7. Clicks **Confirm** icon on MAC. MAC and Android device is paired.
8. Text can be sent from Android phone or MAC to the other side.

BLE Evaluation using PC and iOS

1. Connect an evaluation board to a PC using the included USB cable.
2. Press the **reset** button.
3. Double clicks BlueFanHClwin icon on your PC.
4. Press the **BlueFan BLE** icon on iOS device.
5. Click HCI BLE icon on PC, followed by Scan COM Port, select the COM port for USB Serial Port (found in Device Manager), followed by Initial icon. When shown, click Advertise icon to transmit BLE data packs.
6. Press HRM icon on iOS device followed by CONNECT. Then, select device.
7. A simulated Heart Rate Monitor is displayed on PC. Press the + or the - symbol to change heart rate.
8. Simulated heart rate figure is displayed on the iOS device.

BLE Evaluation using PC and Android

1. Connect an evaluation board to a PC using the included USB cable.
2. Press the **reset** button.
3. Double clicks BlueFanHClwin icon on your PC.
4. Press the **BlueFan BLE** icon on iOS device.
5. Click HCI BLE icon on PC and followed by Scan COM Port, select the COM port for USB Serial Port (found in Device Manager), followed by Initial icon. When shown, click Advertise icon to transmit BLE data packs.
6. Click Setting icon on Android device. A list of available devices are displayed. Press Fanstel if displayed. If not, press SCAN icon.
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8. Press Heart Rate Service followed by Heart Rate Measurement. Simulated heart rate is displayed on the Android device after "Data:".

SPP Evaluation using PC and Android

1. Connect an evaluation board to a PC using the included USB cable.
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7. Clicks Confirm icon on PC. PC and Android device is paired.
8. Text can be sent from Android phone or PC to the other side.

Application Development

If a host MCU is used, HCI command sequences developed with PC or MAC can be reused in the host. A host is connected to module via an UART port.

For standalone applications, IAR toolchain can be used to develop codes for module . Firmware is downloaded into flash ROM using J-LINK.

Android and iOS Apps

Apps to demonstrate communication from a PC/ MAC to a BlueFan module to a smartphone are available at Apple App and Google Play Stores. Please search for BlueFan and download.

Source codes for BlueFan apps are available to users of BlueFan evaluation board