Controller only BLE firmware binaries for SensorTile.box family

Applications & demonstrations	STSW-MKBOX-BLECO	BLE Applications
Middleware	ST Cryptographic Libarary	OTA
Hardware Abstraction	STM32Cube Hardware Abstraction Layer (HAL)	BLE Stack
Hardware	ST-MCU	ST CONTROLLER IC
	STEVAL-MKSBOX1V1 / STEVALMKBOXPRO	

Product summary

Controller only BLE firmware binaries for SensorTile.box family	STSW-MKBOX-BLECO
SensorTile.box wireless multi sensor development kit with user friendly app for IoT and wearable sensor applications	STEVAL-MKSBOX1V1
SensorTile.box PRO with multi-sensors and wireless connectivity for any intelligent IoT node	STEVAL-MKBOXPRO
Applications	IoT for Smart Things/IoT for Smart Home and City/Wearable

Features

- Link to GitHub repository containing controller-only firmware for different Bluetooth® Low Energy SoCs used on SensorTile.box boards family

Description

The SensorTile.box is a family of ready-to-use programmable wireless box kits for developing any IoT application based on remote data gathering and evaluation.

It exploits the full kit potential by leveraging both motion and environmental data sensing, along with a digital microphone.

It enhances connectivity and smartness in all environments thanks to a BlueNRG SoC implementing a Bluetooth® Low Energy wireless technology acting as network coprocessor.

The hardware node is a board that fits into the palm of your hand with a long-life rechargeable battery.

The Bluetooth® Low Energy protocol stack is composed by three different layers: the host, the controller, and the radio hardware. The user application interfaces directly to the Bluetooth® Low Energy host layer.

The network coprocessor can implement all the three layers. This configuration is the default when the board is released: Host + controller + radio layers running on network coprocessor/application running on MCU.

Alternatively, a network coprocessor can implement only two layers. This configuration is required by systems, like Zephyr RTOS, where the host layer is implemented as part of their Bluetooth® Low Energy stack solution: controller + radio layers running on network coprocessor / application + host layer running on MCU.

To support the latter configuration systems, the network coprocessor must be upgraded with a controller only Bluetooth® Low Energy firmware version.

The Bluetooth® Low Energy firmware binary images parts of this repo are of the controller only type and are currently available for STEVAL-MKSBOX1V1 and STEVAL-MKBOXPRO.

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For further information contact your local STMicroelectronics sales office.

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Revision history

Table 1. Document revision history

Date	Revision	Changes
04-Jun-2024	1	Initial release.

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