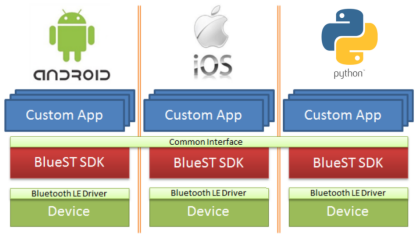
BlueST-SDK

Data brief

Bluetooth Low Energy and sensor technology software development kit (SDK)



Features

- Multi-platform library (Android/iOS/Python) that enables easy access to data exported via the Bluetooth Low energy protocol
- Easily extensible to support new data types
- Common programming model for all supported platforms
- Sample application available for a quick start
- Supports data logging
- Includes serial console (stdout/stdin/stderr) over Bluetooth
- Includes board configuration service
- BSD license terms
- Used for ST BlueMS and ST SensNet (Android/iOS) applications available on the respective stores

Product summary	
Bluetooth low energy and sensor technology SDK	BlueST-SDK
BlueMS Application for Android and iOS	BlueMS

Description

BlueST-SDK is a multi-platform library (Android/iOS/Python) that enables easy access to the data exported by a Bluetooth Low Energy (BLE) device implementing the BlueST protocol.

The BlueST protocol is easily extensible to support user-defined data.

The protocol already defines various data coming from different sensors such as inertial sensors (accelerometer, magnetometer, and gyroscope), environmental sensors (luminosity, temperature, pressure, humidity), battery information (voltage, current, charge state), and DC and stepper motors (state and commands).

It also implements a serial console over Bluetooth allowing stdint/stdout/stderr functionality and defines a configuration service to control the settings of connected boards.

By using a common programming model for the supported platforms, BlueST-SDK makes it easy to develop applications on Android, IOS and Linux (with Python installed) systems, and includes applications examples to show you how to use the SDK.

The Python release of the BlueST SDK makes use of the bluepy Python library available on Linux® to connect to BLE devices.

The data managed by the SDK can be logged in a CSV (coma-separated values) file.

The BlueST-SDK is released under BSD (3-clause) license terms.

The BlueST SDK is used with the ST BlueMS mobile application for displaying all the information exported by compatible expansion software for STM32Cube, like the FP-SNS-MOTENV1. ST BlueMS is freely available on the respective Android and iOS application stores.

1 Order codes

Table 1. BlueST-SDK order codes

Order code	Description
BlueST-SDK-Aar	Android version of BlueST-SDK library that allows easy access to the data exported by a Bluetooth Low Energy (BLE) device implementing the BlueST protocol
BlueST-SDK-Ipa	iOS version of BlueST-SDK library that allows easy access to the data exported by a Bluetooth Low Energy (BLE) device implementing the BlueST protocol
BlueST-SDK-Pyt	Python version of BlueST SDK library that allows easy access to the data exported by a Bluetooth Low Energy (BLE) device that implements the BlueST protocol.

Revision history

Table 2. **Document revision history**

Date	Version	Changes
19-Nov-2015	1	Initial release.
17-May-2016	2	Update figure on the cover page.
29-Aug-2018	3	Added information regarding BueST-SDK support for Python.