



Asset tracking

Sensor to cloud applications

Asset tracking applications and
ST positioning



NFC Sensor Tag
STEVAL-SMARTAG1



SensorTile.box
STEVAL-MKSBOX1V1



ST Asset Tracking App
DSH-ASSETTRACKING





MORE INFO

Asset tracking application types

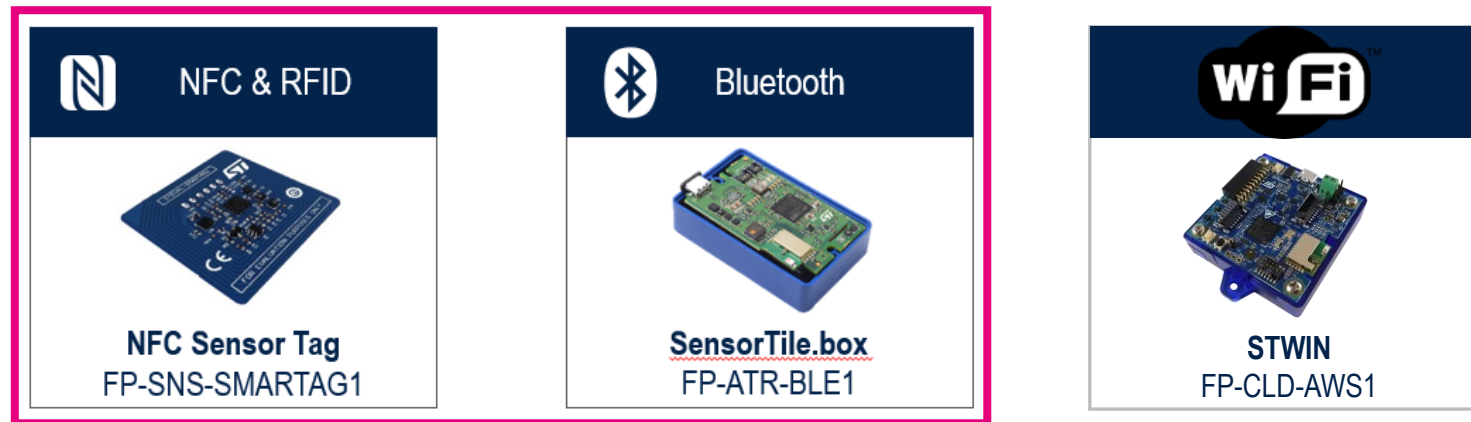
	Processing & Security	Sensing	Connectivity	Power Management	Complexity (number of sensors, connectivity)
Outdoor Real-Time Monitoring 	Dedicated MCU Dedicated secure chip	HI-G 	 	 	
Indoor localization & warehouse logistics 	Dedicated MCU Embedded security	HI-G 	 		
Good guarantee 	Dedicated MCU Embedded security	HI-G ToF	 		
Disposable 	Sensor with processing Embedded security	 	 		



ST offering for asset tracking



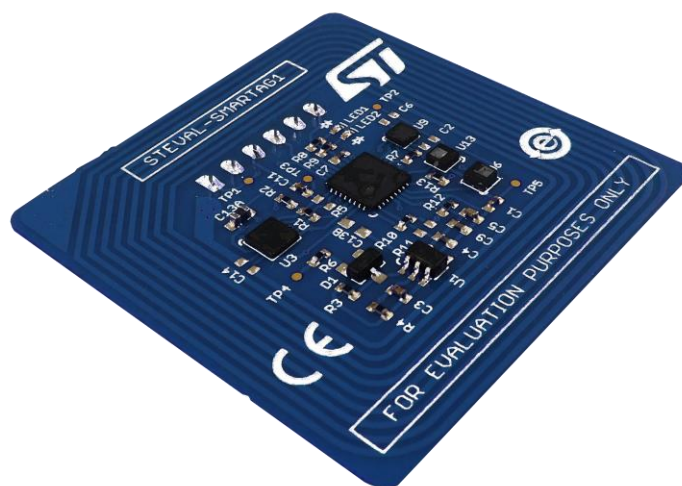
ST offers components and evaluation platforms that are suitable for all asset tracking use cases





NFC Dynamic TAG for asset tracking with multi sensing capabilities

NFC Sensor Tag: STEVAL-SMARTAG1



Motion and Environmental Sensors

- LIS2DW12 High-performance accelerometer
- LPS22HB Altimeter / Pressure sensor
- HTS221 Temperature and Humidity sensor



Processing and connectivity

- STM32L031K6 low-power MCU
- ST25DV64K Dynamic NFC Tag



Power Management

- STLQ015 Voltage regulator





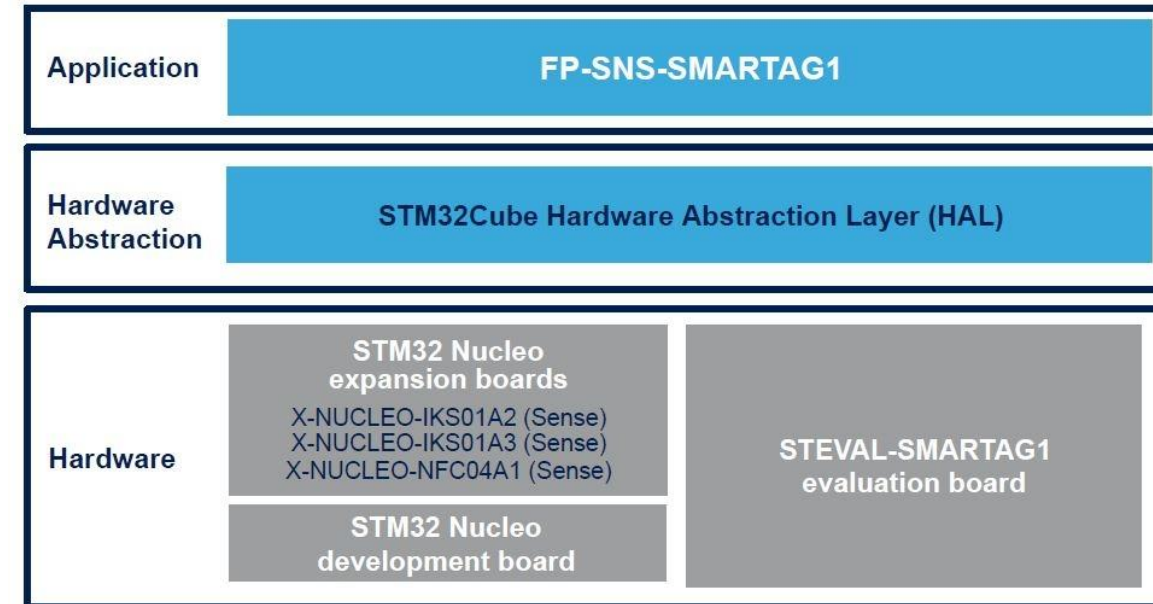
FP-SNS-SMARTAG1

Smart Tag Asset Function Pack

- FP-SNS-SMARTAG1 is an STM32Cube function pack for reading motion and environmental sensor data on your IoT node via an NFC enabled reader such as a mobile phone or a tablet

Key features

- Complete firmware to access data from an IoT node with dynamic NFC tag, environmental and motion sensors
- Compatible with the STAssetTracking application for Android/iOS for reading data logs from the NFC tag and for sending them to the DSH-ASSETTRACKING cloud-based dashboard





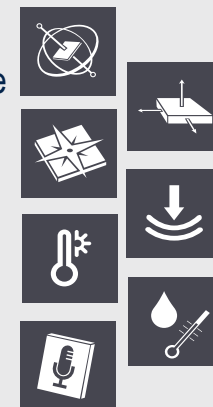
Bluetooth® Low Energy Sensor Development Kit app for IoT applications

SensorTile.box: **STEVAL-MKSBOX1V1**



Motion and Environmental Sensors

- **LSM6DSOX** Low-power 6-axis IMU, with Machine Learning Core
- **LIS3DHH & LIS2DW12** High-performance and low power accelerometers
- **LIS2MDL** Magnetometer
- **LPS22HH** Altimeter / Pressure sensor
- **STTS751** Accurate temperature sensor
- **HTS221** Humidity sensor
- **MP23ABS1** Analog wide-band microphone



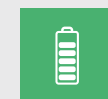
Processing and connectivity

- **STM32L4R9ZIJ6** Ultra-low-power MCU
- **BlueNRG-M2** Bluetooth Low Energy Module



Power Management

- **STBC02** Battery charger





Play with Sensors Entry Mode

Log data and explore
new sensor
functionalities



Proof of Concept Expert Mode

Test and validate your
ideas by customizing
the App



Rapid Prototyping Pro Mode

Customize, write code
and make it yours

Get Familiar with Sensors and Speed Up your Development



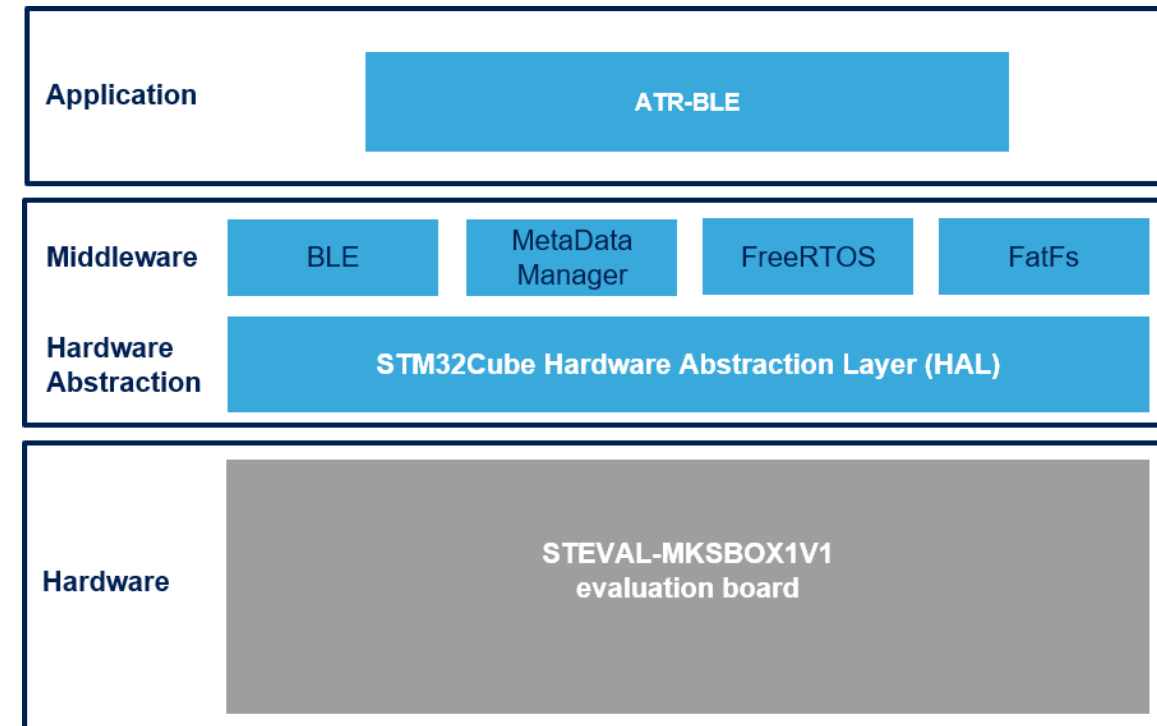
FP-ATR-BLE1

Asset Tracking Function Pack

- The FP-ATR-BLE1 is a STM32Cube Function Pack for low power asset tracking using BLE connectivity for the SensorTile.box

Key features

- Complete sample application on how to create one asset tracking application controlled by BLE connectivity
- microSD DataLogging
- Wake-up, Tilt and Orientation detection by the on-board accelerometer





End to end ST sensors development kits to cloud application

STEVAL-SMARTAG1
with
FP-SNS-SMARTAG1
firmware

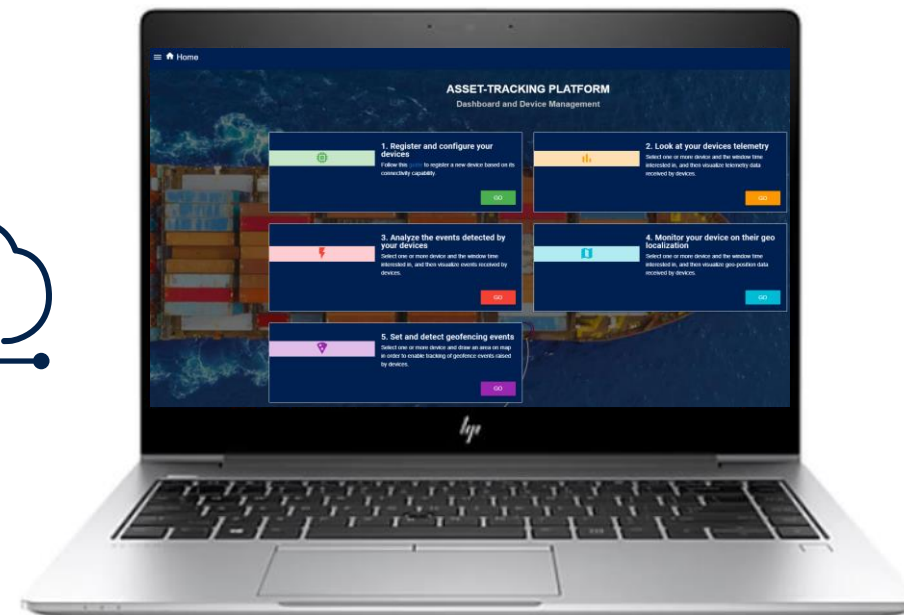


ST Asset Tracking app

STEVAL-MKSBOX1V1
with FP-ATR-BLE1
firmware



Laptop with DSH-ASSETTRACKING
dashboard on Chrome browser

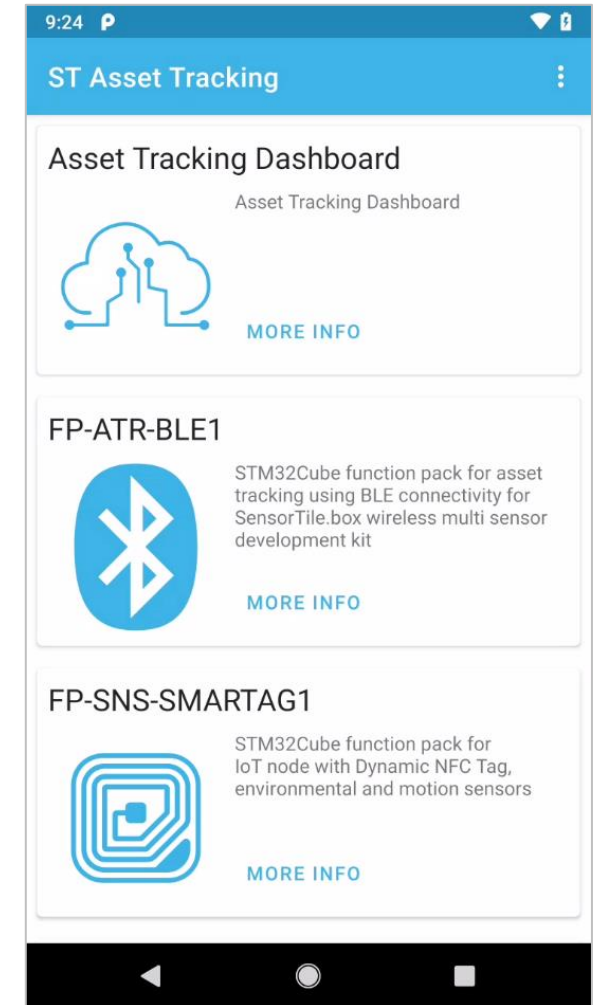




STAssetTracking

ST Asset Tracking application for Android and iOS

- The ST Asset Tracking app allows you to remotely configure a **BLE asset tracking node** from a compatible mobile device with Bluetooth connectivity. It provides the functionality to enable data logging for specific sensors and set threshold triggers to start and stop logging activity.
- Mobile device running **ST Asset Tracking** client application
- Collect and display sensors data:
 - Wake-up, tilt and orientation detection by the on-board accelerometer
 - Environmental sensor data and inertial data saved on SD card





DSH-ASSETTRACKING

- **DSH-ASSETTRACKING** cloud application providing intuitive interface tailored for the collection, visualization and analysis of asset tracking position as well as data from motion and environmental from compatible ST devices such as NFC Sensor Tag, Sensortile.box and STWIN

powered by
aws

