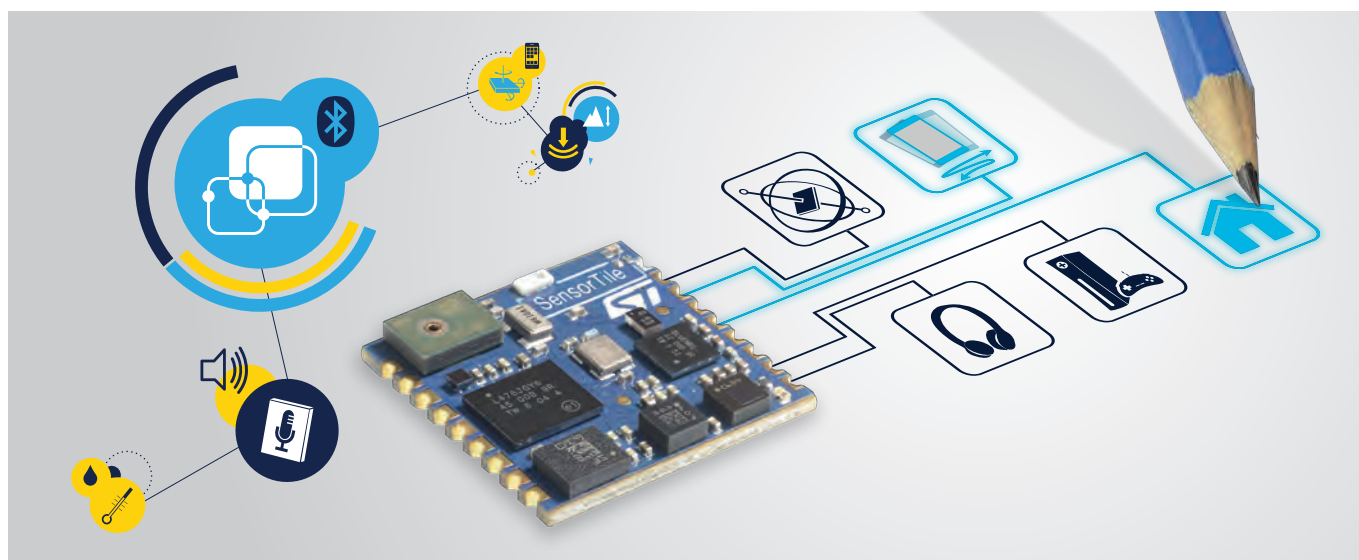


SensorTile

An IoT design lab on the tip of a pencil



An integrated development platform engineered for makers

SensorTile is a tiny, square-shaped IoT module that packs powerful processing capabilities leveraging an 80 MHz STM32L476 ultra-low power microcontroller and Bluetooth Low Energy connectivity based on our BlueNRG network processor as well as a wide spectrum of motion and environmental MEMS sensors, including a microphone. SensorTile can snugly fit into your IoT hub or sensor network node and be at the core of your own solution.

The STEVAL-STLKT01V1 development kit comes with a set of cradle boards enabling hardware scalability as well as software and firmware libraries and tools. Alongside its ready-to-use app, SensorTile is a real IoT design lab.

KEY FEATURES & BENEFITS

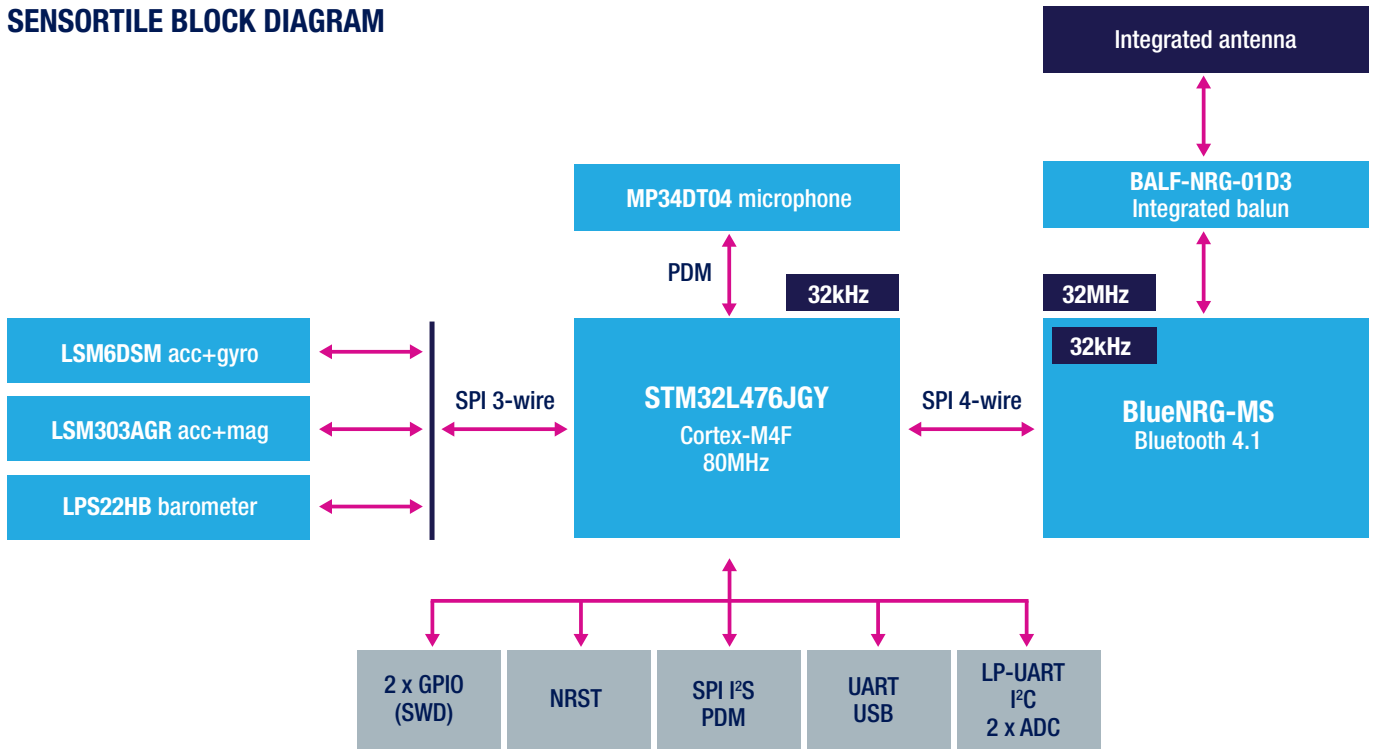
- Integrated sensor node that is ready out-of-the-box for fast and effective prototyping
- FCC (ID: S9NSTILE01) and IC (IC: 8976C-STILE01) certified
- Very small 13.5 x 13.5 mm footprint can be soldered or plugged onto a PCB to add remote sensor and connectivity capability to any IoT design right away
- Rich set of motion and environmental sensors provides a universal platform that can be easily scaled up or down
- Ultra-low-power yet powerful STM32L4 microcontroller enables highly demanding applications
- Comprehensive set of firmware and software libraries and tools enables the easiest path to product development
- Supports OTA firmware upgrades
- Apps and SDK for easy iOS and Android development

KEY APPLICATIONS

Internet of Things

- Smart Industry
- Smart City
- Smart Home
- Smart Things

SENSORTILE BLOCK DIAGRAM



SENSORTILE DEVELOPMENT KIT

- SensorTile module
- SensorTile cradle expansion board with audio DAC, USB port, STM32-Nucleo and Arduino UNO R3 connectors. Quickly expand its capabilities or tap into a wide selection of STM32 Nucleo development and expansion boards. Can also be used for programming via the on-board SWD connector.
- 100 mAh Li-Ion battery
- Plastic box for housing SensorTile, cradle and battery



- SWD programming cable
- SensorTile cradle with battery charger, humidity and temperature sensor, SD memory card slot and USB port. Provides storage, power management and wire connectivity capabilities to enable stand-alone use of a SensorTile soldered on it. Can also be used for programming via a break-away SWD connector.

HARDWARE AND SOFTWARE RESOURCES

Ordering code	Description
STEVAL-STLKT01V1	SensorTile development kit
STSW-STLKT01	Basic firmware application for STEVAL-STLKT01V1
FP-SNS-ALLMEMS1	STM32 ODE function pack for Bluetooth Low Energy and sensor software expansion for STM32Cube
FP-SNS-MOTENV1	Bluetooth Low Energy and sensors software expansion for STM32Cube
BLUEMICROSYSTEM1	Bluetooth Low Energy and sensors software expansion for STM32Cube
BLUEMICROSYSTEM2	Bluetooth Low Energy and sensors software expansion for STM32Cube
BlueMS	BlueMS Application for Android and iOS
BlueST-SDK	Bluetooth Low Energy and Sensors Technology Software Development Kit (SDK)