

Roundtable



Complete ecosystem offering by ST

All building blocks
for IoT devices

Lower barriers for
developers getting started

Lower barriers from
prototyping to first product

Enable product & service
commercialization

Microcontrollers



Secure solutions



Sensors & actuators



Connectivity solutions



Power management



Motor control



Analog components



Stackable boards
& modular SW



STM32 Nucleo Development
& Expansion Boards

Form-factor boards



Discovery Kit
IoT Node



SensorTile Wireless
Industrial Node



NFC Dynamic Tag
Sensor Node



SensorTile.box

Pre-integrated software
for vertical applications



Smart Things



Smart Home
& City



Smart Industry

Development ecosystem



Code generators



Prototyping
software



Development
environments



Artificial
Intelligence
toolbox



Debug
solutions

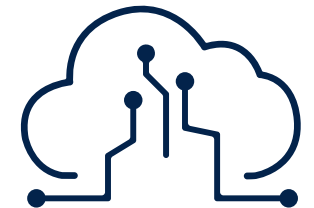


Simulation
and analysis tools



On-line
design tools

Integration of Cloud Provider SDKs



Partner Program and ST community



SensorTile.box STEVAL-MKSBOX1V1

A ready-to-go IoT Node



Available Software

FP-SNS-STBOX1
FP-AI-SENSING1
FP-ATR-BLE1

Mobile App

ST BLE Sensor
ST Asset Tracking



Motion Sensors



Low-power 6-axis IMU, with
Machine Learning Core
LSM6DSOX



High-performance and low
power accelerometers
LIS3DHH & LIS2DW12



Magnetometer
LIS2MDL

IP54-compliant casing
500 mA-h Li-Po battery

Environmental Sensors



Altimeter / Pressure sensor
LPS22HH



Accurate temperature
sensor
STTS751



Humidity sensor
HTS221



Analog wide-band
microphone
MP23ABS1

Processing



STM32L4 low-power MCU
STM32L4R9ZIJ6

Connectivity



Bluetooth Low Energy
Module

Power management



Battery charger
STBC02

www.st.com/sensortilebox

STWIN STEVAL-STWINKT1

SensorTile Wireless Industrial Node



Available Software

FP-IND-PREDMNT1

Mobile App

ST BLE Sensor



Cloud App

DSH-PREDMNT

Industrial Motion Sensors



High-performance 6-axis IMU,
embedding Machine Learning Core
ISM330DHCX



Ultra-wide bandwidth, low noise
3-axis digital vibration sensor
IIS3DWB



Ultra-low power, high performance
3-axis accelerometer
IIS2DH



Magnetometer
IIS2MDC

Environmental Sensors



Altimeter / Pressure sensor
LPS22HH



Accurate temperature sensor
STTS751



Humidity sensor
HTS221



Analog wide-band microphone
MP23ABS1



Industrial Digital microphone
IMP34DT05

Processing



STM32L4 low-power MCU
STM32L4R9ZIJ6

Connectivity



Bluetooth Low Energy
Module



RS485 Transceiver

Connectivity Expansion



Wi-Fi, LTE,
Industrial Ethernet

NFC Sensor Tag STEVAL-SMARTAG1

NFC Dynamic sensor TAG for asset tracking



Available Software
FP-SNS-SMARTAG1

Mobile App
ST NFC Sensor



Motion & Environmental Sensors



Low power accelerometer
LIS2DW12



Altimeter / Pressure sensor
LPS22HH



Humidity and temperature sensor
HTS221

Processing



STM32L0 low-power MCU
STM32L031K6

Connectivity



Dynamic NFC Tag
ST25DV64K

RFID

Power management

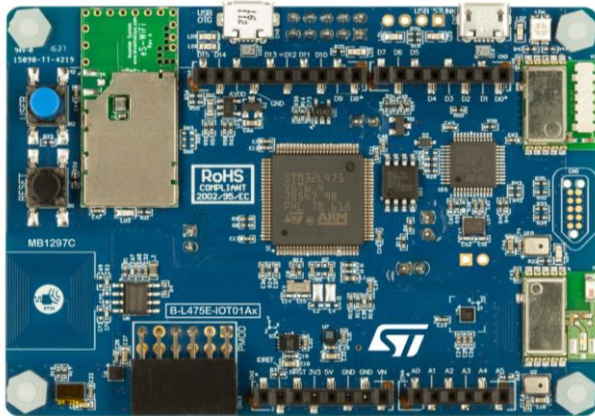


Voltage regulator
STLQ015

IoT Discovery Kit IoT Node

B-L475E-IOT01A and B-L4S5I-IOT01A

Cloud Connected Sensor Node



Available Software

X-CUBE-AZURE

X-CUBE-AWS

X-CUBE-GCP

X-CUBE-WATSON

FP-AI-SENSING1

Sensors



Low-power 6-axis IMU,
LSM6DSL



Magnetometer
LIS3MDL



Time-of-Flight and
gesture-detection sensor
VL53LOX



Altimeter / Pressure sensor
LPS22HB



Humidity and Temperature
sensor
HTS221



Digital Microphone
Microphones (2x)
MP34DT01

Processing



STM32L4 low-power MCU
STM32L475VGT6
STM32L4S5VIT6

Security (B-L4S5I)



Secure Element
STSAFA110S8SPL02

Connectivity



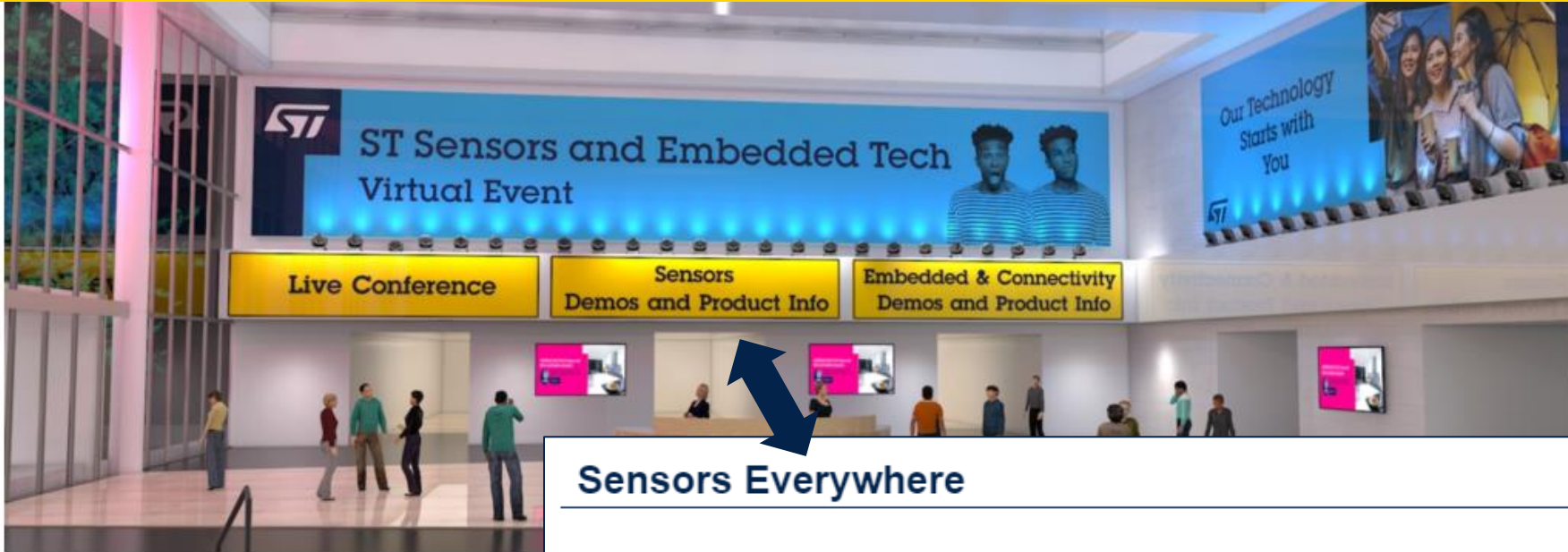
Bluetooth Low Energy
Module



802.11 b/g/n Wi-Fi® module
ISM43362-M3G-L44



Dynamic NFC Tag
ST25DV04K



Sensors Everywhere



SensorTile.box Ready-to-Go IoT Node

ST makes IoT sensing easy with a certified and ready-to-connect device. The SensorTile.box development kit enables users with any level of experience with sensors to learn, prototype and develop IoT sensor nodes embedding our IMUs with Machine Learning core.

Applications: Wearable, Asset tracking, Distributed intelligence

Application boards: [STEVAL-MKSBOX1V1](#)

ST parts: [LSM6DSO](#), [LIS2DW12](#), [LIS3DHH](#), [LIS2MDL](#), [LPS27HHW](#), [STTS22H](#), [MP23ABS1](#), [FP-ATR-BLE1](#)

- ▶ SensorTile.box - A Ready-to-Go IoT Node
- ▶ SensorTile.box: Basic mode
- ▶ SensorTile.box: Expert mode
- ▶ SensorTile.box: Pro mode
- ▶ Webinar - Sensors in action: Exploring new applications with SensorTile.box

Additional Opportunities to Connect

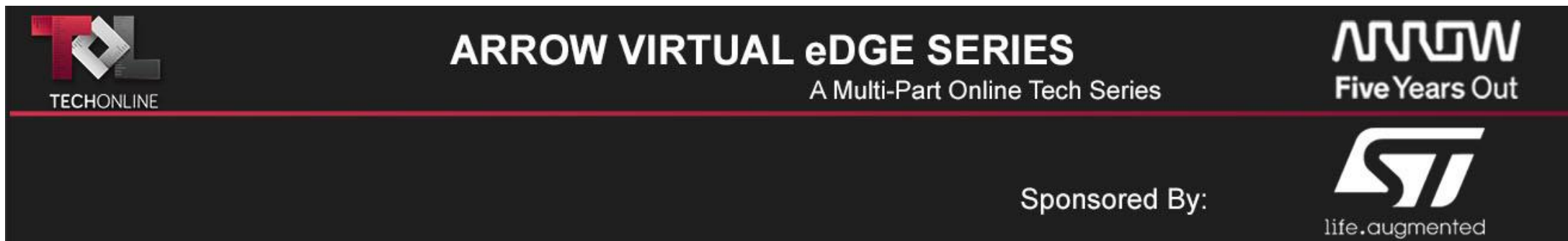
Sensors Innovation Week – July 17th



<https://www.fiercedigitaltechevents.com/sensors-innovation-week>



Webinar– Monday, July 20



How to Bring Power-Efficient AI Applications to the Edge

A Sensor with an embedded Machine Learning Core can improve the overall system efficiency by significantly reducing power consumption while increasing accuracy with contextual awareness.

In this webinar you will learn how to run a classification engine on the Machine Learning Core embedded in an iNEMO™ inertial module, and how to quickly and easily design power-efficient decision trees using the AlgoBuilder Graphical User Interface

Attendees will also learn:

- How to program a sensor with a Machine Learning Core without writing a single line of code
- The 5 key steps behind sensors Machine Learning with a practical example
- How to use and benefit AlgoBuilder and Unico GUIs

Speaker



Thiago Reis
Product Marketing Engineer
STMicroelectronics

Internet of Things World

AUGUST 11 - 13, 2020 | 8:30 AM - 5:30 PM PT



PLATINUM
SPONSOR

IoT World Virtual Conference & Expo

- **8 Tracks of Content** (ST participation)
- **Many Networking Opportunities:**
 - Schedule Video meetings
 - Live chat with our product experts
 - Video chat with VIP's in Networking lounges
 - Attend Speaker Roundtables and Q&A Sessions

• **August 11**

- **Industrial IoT**
- 5G & IoT Connectivity
- Edge Computing & AI
- **Developing for IoT**

• **August 12**

- **IoT Security**
- **Smart Environments**
- Business Resiliency
- Smart Mobility

Thank You!

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BREAK

Q&A will stay active during break

Join us at 2:00 ET for Embedded & Connectivity Sessions

Time (ET)	Title	Presenter
2:00 PM	Welcome to Afternoon Session	Loris Valenti
2:10 PM	Bringing AI to the Edge	Markus Mayr
2:30 PM	Enhancing the User Experience with Graphics	Mike Hartmann
2:50 PM	Securing Connected Devices	Greg Proehl
3:10 PM	Get Connected! Explore Bluetooth, 802.15.4 and SubGHz System On Chip Solutions	Colin Ramrattan
3:30 PM	Contact-Less Connectivity NFC is in your phone and your watch - Where else?	James Barlow
3:50 PM	Closing Remarks	Loris Valenti