Rendere accessibile a tutti lo sviluppo di Smart Things abbassando tempi e costi di sviluppo

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SW Platforms & Cloud Director

18 FEBBRAIO 2016 CINECA

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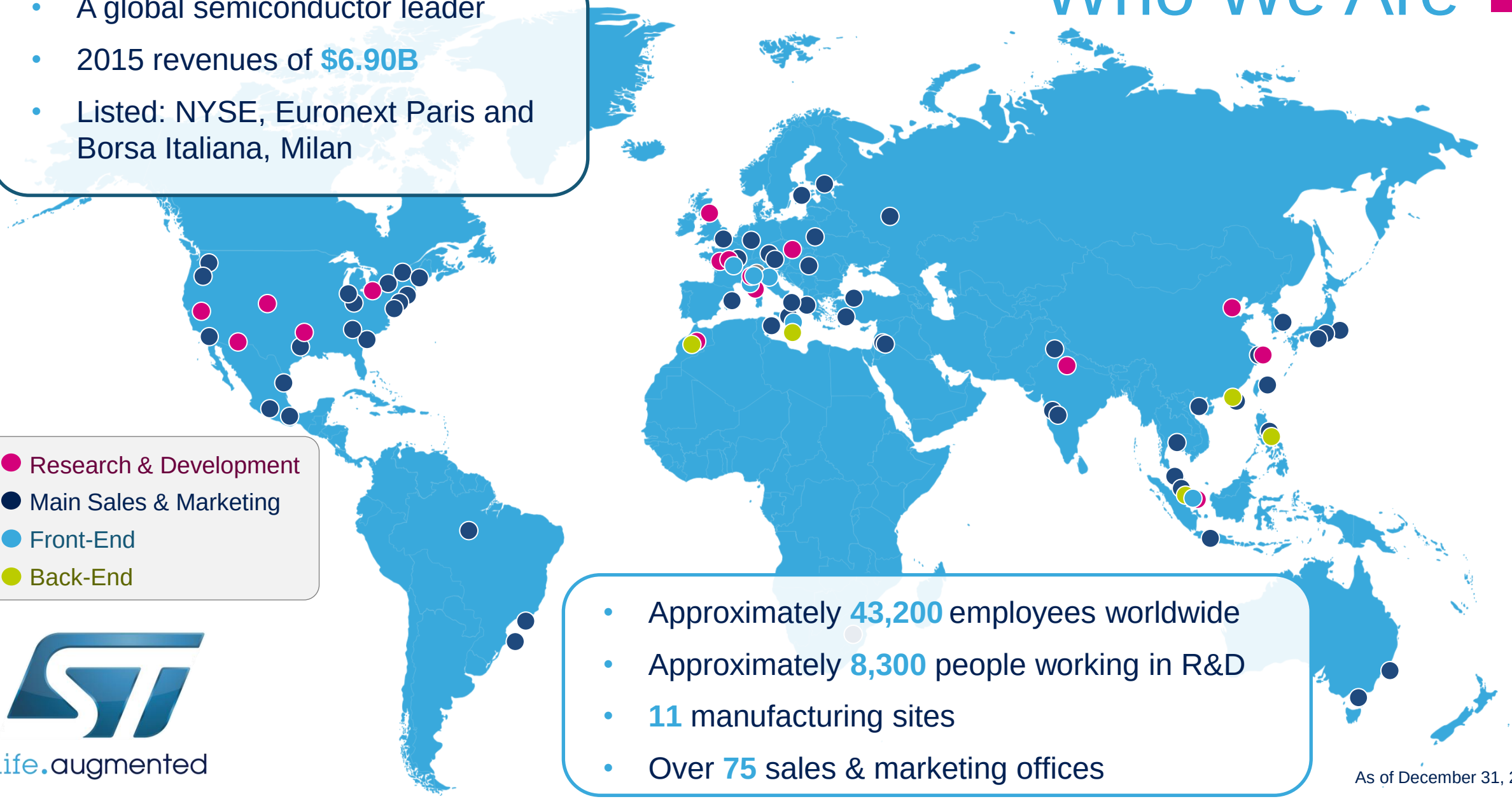
Who We Are

- A global semiconductor leader
- 2015 revenues of **$6.90B**
- Listed: NYSE, Euronext Paris and Borsa Italiana, Milan



- Research & Development
- Main Sales & Marketing
- Front-End
- Back-End

- Approximately **43,200** employees worldwide
- Approximately **8,300** people working in R&D
- **11** manufacturing sites
- Over **75** sales & marketing offices

As of December 31, 2015

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Where you find us

Making **driving** safer, greener and more connected

Making **homes** smarter, for better living, higher security, and less waste

Making everyday **things** smarter, connected and more aware of their surroundings

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Enabling the evolution of **industry** towards smarter, safer and more efficient factories and workplaces

Enabling **cities** to make more of available resources

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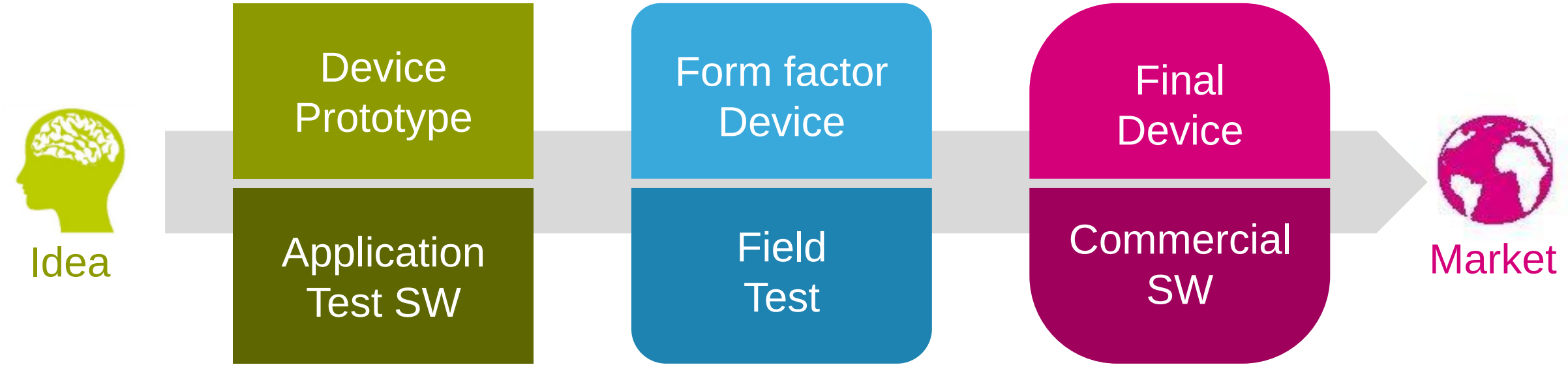
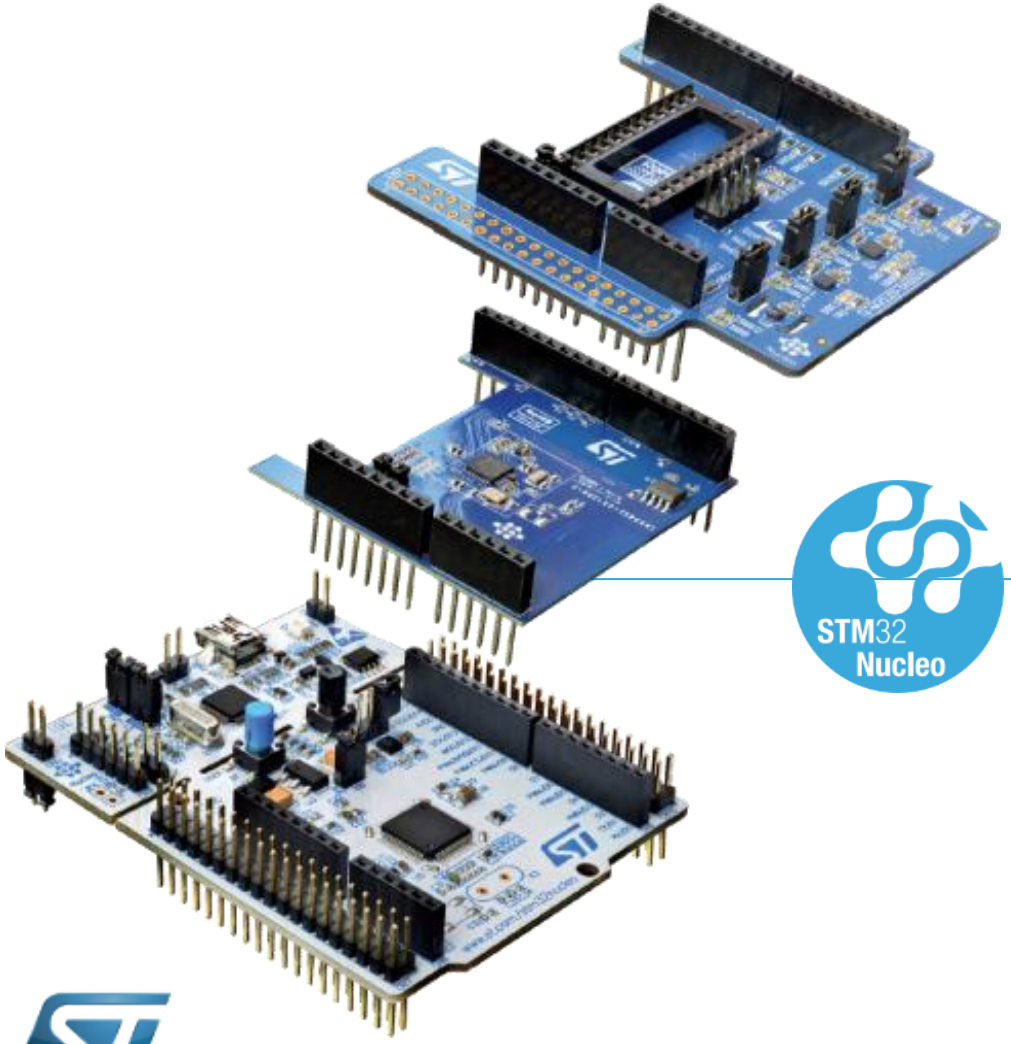
Lowering the Barriers for Developers



Fast, affordable prototyping with development continuity to final devices

STM32 Open Development Environment

Going beyond with STM32 Open Development Environment



STM32 Nucleo

Sense
Motion &
environmental sensors
Proximity sensor
Microphone

Connect
BLE
Wi-Fi
Sub-GHz
NFC

Power Drive
Power management
LED Boost

Move Actuate
Motor drive
Actuator

Translate
Audio
OpAmp

STM32 Cube

STM32 F0
STM32 F1
STM32 F2
STM32 F3
STM32 F4
STM32 F7
STM32 L0
STM32 L1
STM32 L4

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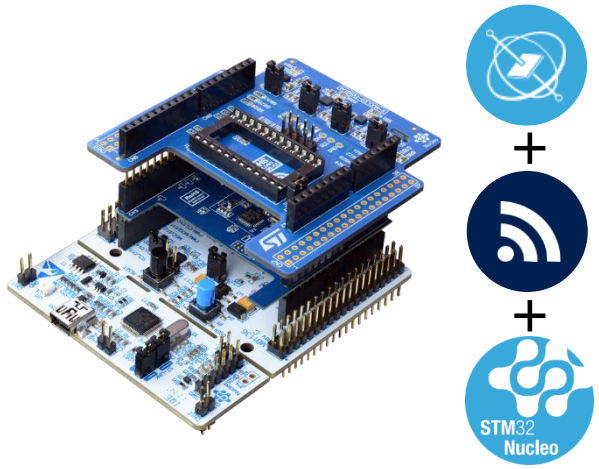
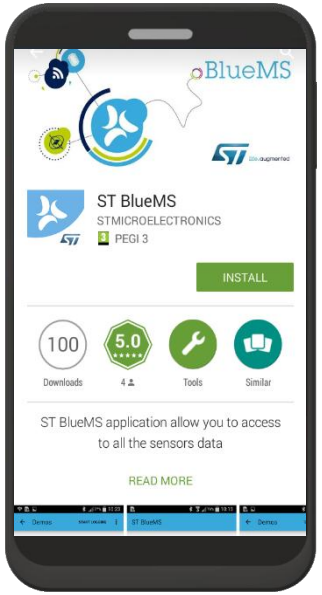
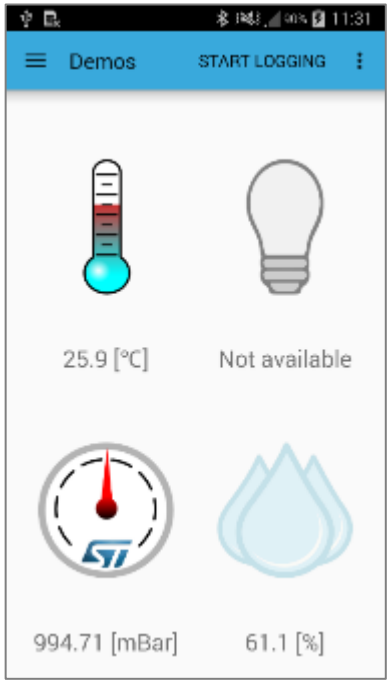
BlueMS Application and SDK

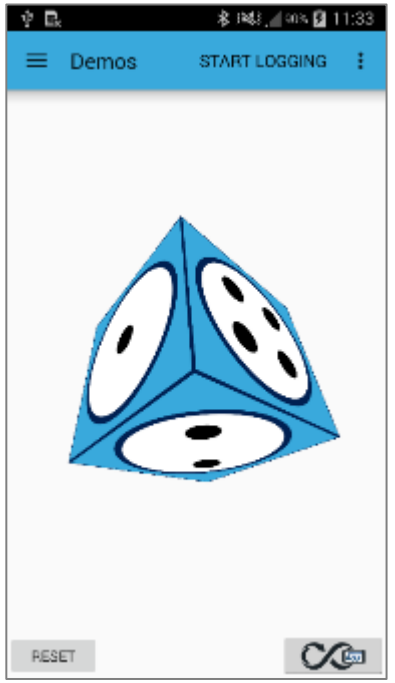
Simplified development of BLE applications for smartphones

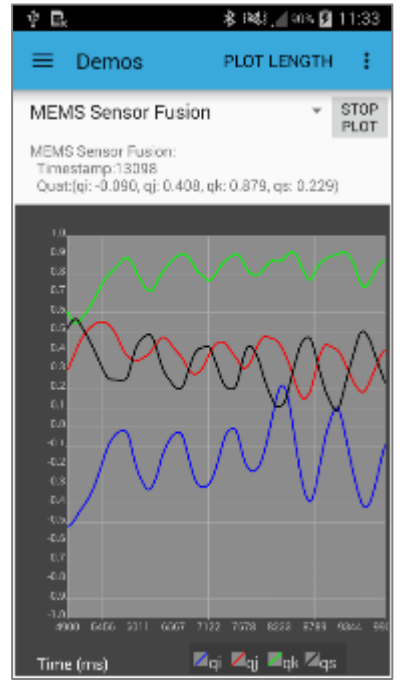




ST BlueMS
iOS & Android app available







App SDK freely available in source code on GitHub!
[iOS version]
[Android version]

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Cloud partners

end-to-end pre-integrated applications

NUCLEO-F401RE

STM32 Nucleo
(ARM Cortex® M4 core)

+

X-NUCLEO-IDW01M1

Wi-Fi

+

X-NUCLEO-IKS01A1

Sensors
motion & environmental

+

X-NUCLEO-NFC01A1

Dynamic NFC tag

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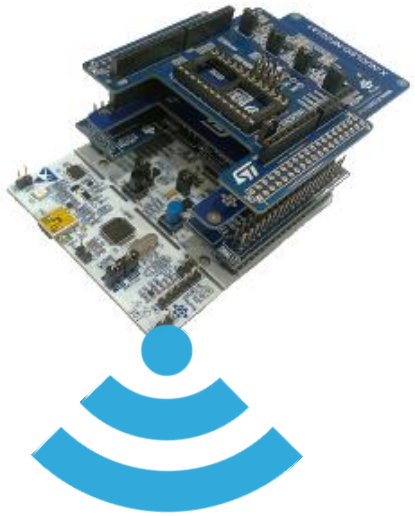
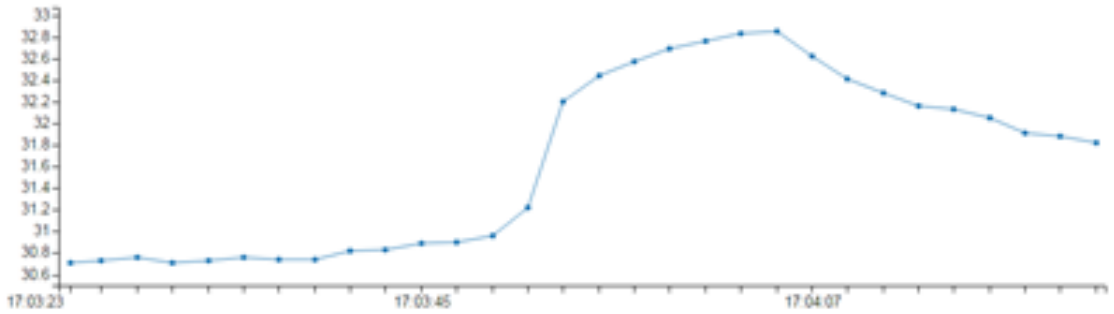
Common Use Case Behavior



https://quickstart.internetofthings.ibmcloud.com/#/device/0080E1B4FA39/sensor/

Nucleo

status.A_Temperature



Event	Datapoint	Value	Time Received
status	myName	Nucleo	16 Sep 2015 17:04:23
status	A_Temperature	31.82	16 Sep 2015 17:04:23
status	A_Humidity	67.86	16 Sep 2015 17:04:23
status	A_Pressure	986.81	16 Sep 2015 17:04:23
status	Acc-X	-3	16 Sep 2015 17:04:23
status	Acc-Y	2	16 Sep 2015 17:04:23
status	Acc-Z	1003	16 Sep 2015 17:04:23
status	GYR-X	490	16 Sep 2015 17:04:23
status	GYR-Y	-1120	16 Sep 2015 17:04:23

I've seen my data, what next?

Use your device in an application created with IBM Bluemix.

Click here for more details.

Go to your Bluemix account

SIGN UP LOG IN

Note: When you sign up for a trial you may have to wait up to 24 hours to receive your log-in information

Create an app using the Internet of Things Starter from the Catalog

CREATE APP

Note: You will have to name your app and wait for a few minutes for it to start running

When your app is running, select the app URL or type it into the browser to open the Node-RED flow editor

http://<appname>.mybluemix.net

Import the flow for your device into the Node-RED flow editor

IMPORT FLOW

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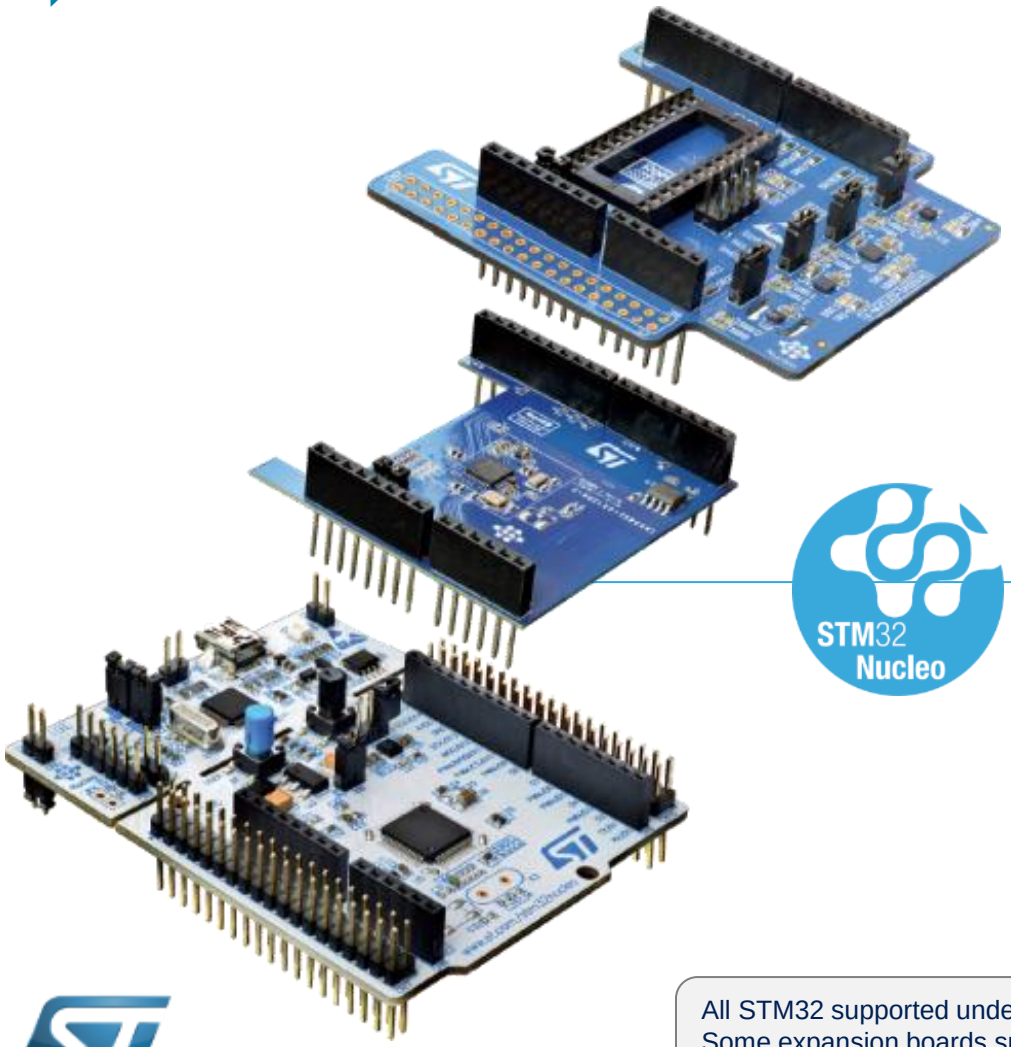
Going Beyond with ARM® mbed™



STM32 Nucleo

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Motion & environmental sensors
Proximity sensor
Microphone

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Power Drive
Power management
LED Boost

Move Actuate
Motor drive
Actuator

Translate
Audio
OpAmp

ARM® mbed™

STM32 F0 | STM32 F1 | STM32 F2 | STM32 F3 | STM32 F4 | STM32 F7

STM32 L0 | STM32 L1 | STM32 L4

All STM32 supported under mbed classic
Some expansion boards supported under mbed classic
Under porting on mbed OS

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