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# MEMS and Sensors

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# Sensor Evolution and Proliferation



Pressure



Temperature



Accelerometers



MEMS  
Microphones



Gyroscopes



Ranging



Digital  
Compasses



Humidity



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# The IoT Movement



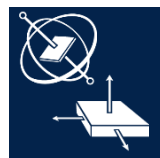




# 20 Years of MEMS at ST



Accelerometer



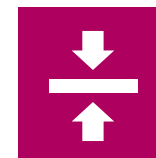
Inertial module



Pressure sensor



Micro-mirror actuators



Piezo actuators



Fluidic Micro-actuators



Gyroscope



Magnetometer



Microphone



Humidity sensor



Water Proof Pressure Sensor

2000

2005

2010

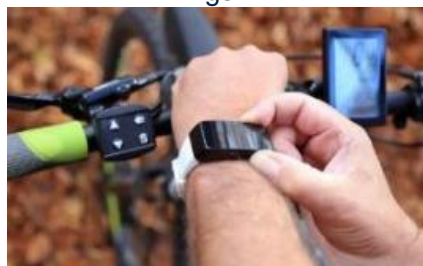
2015

2019

2020



Smart Things



Smart Home & City



Smart Industry



Smart Driving

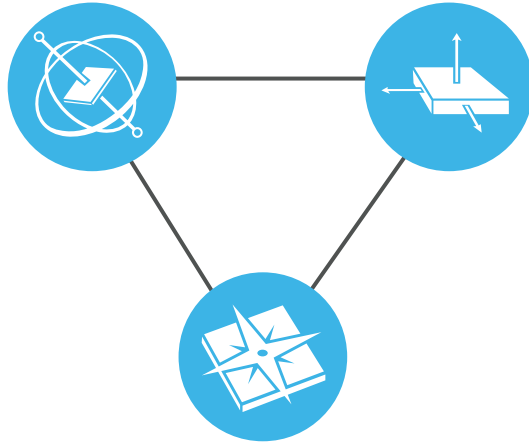


# A Wide Sensor Portfolio

## A new wave of sensors boosting cloud and IoT potentialities

IoT is creating a mesh of sensors monitoring variety of information

The **1<sup>st</sup>** wave of sensors measured the **motion** inside the environment



A **new** wave of sensors is enabling **contextual awareness** and intelligent sensor nodes

