



**THINK**  
**ON.**



# RSL10 Sensor Development Kit

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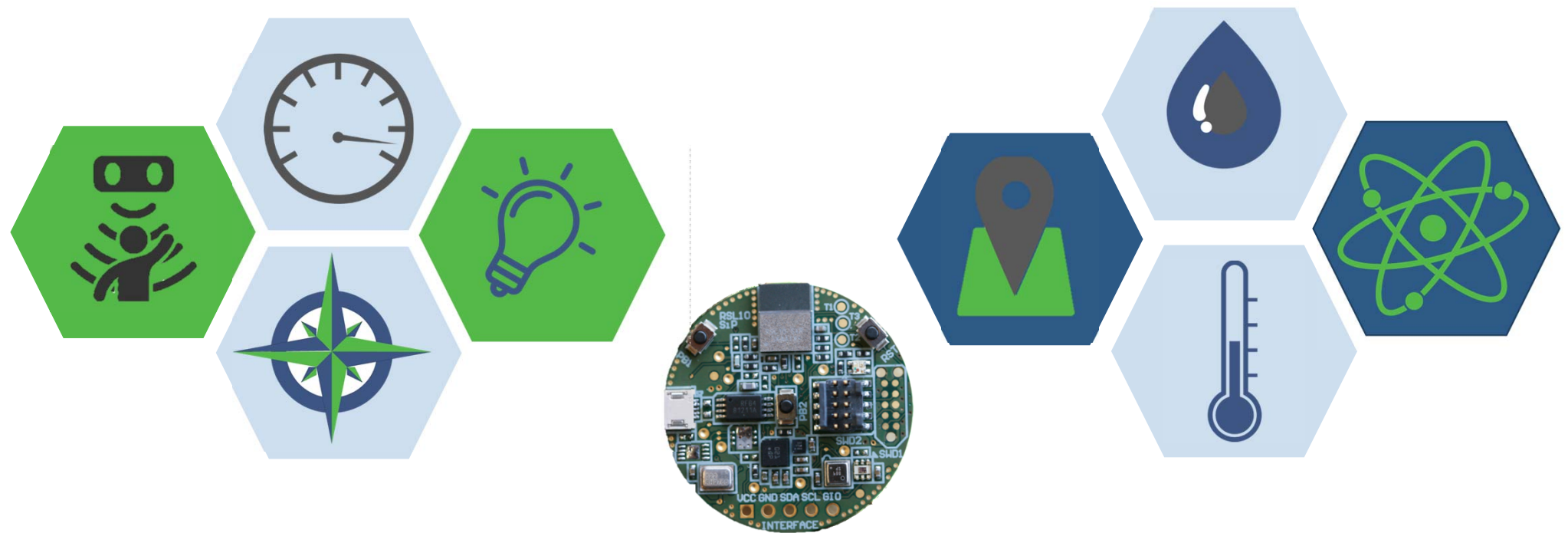
**ON Semiconductor**<sup>®</sup>



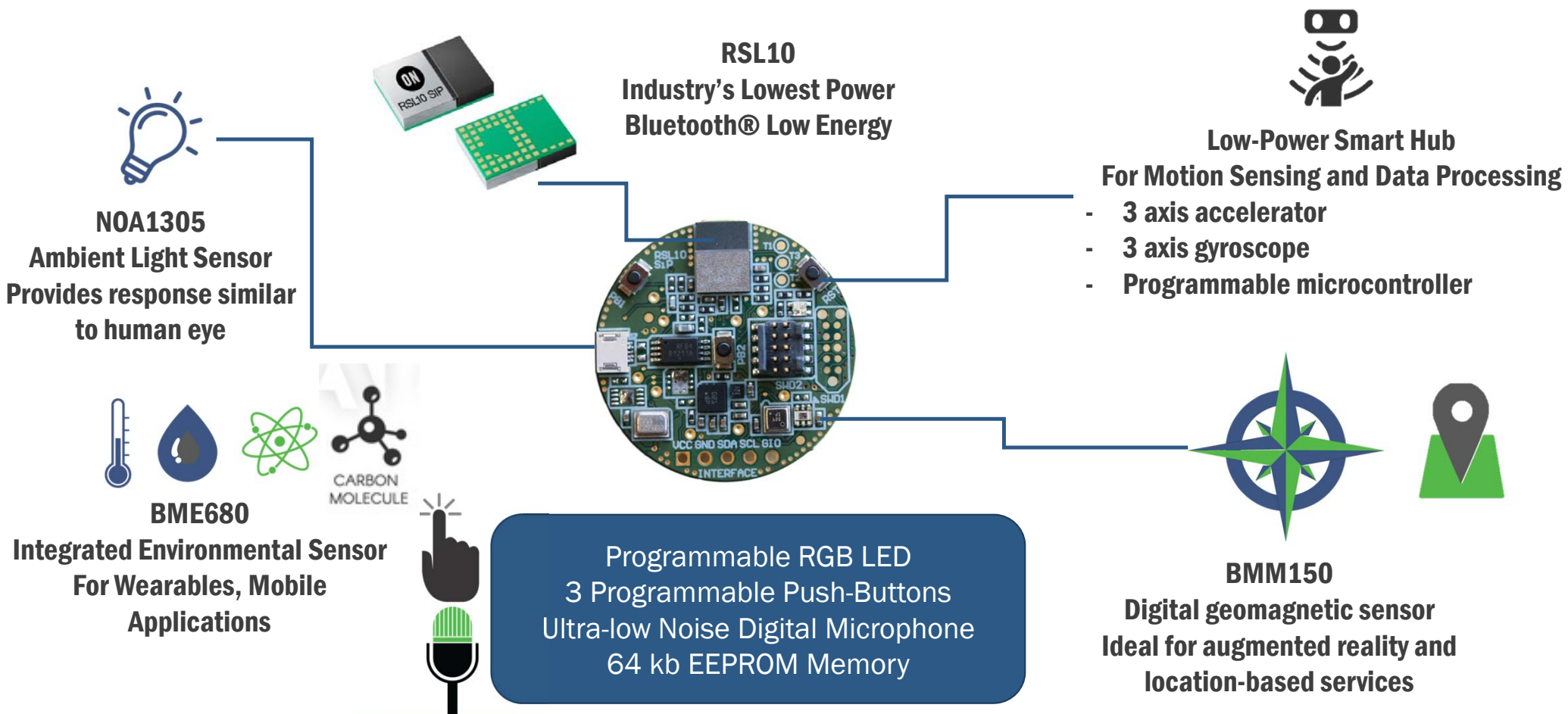
Public Information

# RSL10 Sensor Development Kit

## Cutting-Edge Sensor Technology Industry's Lowest Power Bluetooth® Low Energy



# Overview



# Summary

- The **RSL10 Sensor Development Kit** is a multi-sensor development kit, combining industry's lowest power BLE with cutting-edge sensor technology.
  - Based on the RSL10 SIP
  - Industry's lowest power



# What are We Providing?

## Hardware

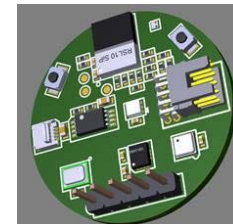
- Multi-sensor development kit based on the RSL10 SIP (industry's lowest power Bluetooth 5)
  - 3 programmable buttons
  - Programmable RGB LED
  - Microphone (functionality not supported at time of launch)
  - Multiple sensors (see overview on Slide 3)

## Design Tools

- Ready to use custom service protocol
- Use-cases (provided as part of the B-IDK, IDK)
- Can be customized using the B-IDK CMSIS Pack
- Mobile app providing support for cloud connectivity (AWS, Azure, Watson)
  - Configurable
- Documentation
  - User manual

## Other

- Supports multiple public clouds (provide examples)



# Key Features and benefits

- Based on RSL10 SIP
  - Industry's lowest power Bluetooth 5
  - Certification : <http://www.onsemi.com/pub/Collateral/TND6220-D.PDF>
  - 2 Mbps max data rate
  - Features integrated antenna, removing need for additional RF considerations (wiring, routing, etc.)
- Pre-programmed with custom service protocol
  - iOS, Android
- Customize firmware using the B-IDK CMSIS pack
- Compact Hardware
  - Features sensors, programmable push-buttons, built-in microphone and speakers to support audio features on one miniature board
- Complete range of cutting-edge environmental sensors
  - Ambient lighting, temperature, humidity, gas pressure, geomagnetic sensor)
- Supports cloud connectivity platforms



# Target Applications

Wearables/ Fitness Tracking  
Gaming/PC  
Building/Home Automation  
Consumer Electronics



# Key Terminology

- Bluetooth® 5
- IoT
- Bluetooth Low Energy
- Smart Sensor
- Cloud Connectivity

