ON Semiconductor® **ON**

Energy Efficient Innovations

IoT Development Kit

Configurable rapid prototyping platform for Industrial IoT, Smart City/Building, and mHealth applications from ON Semiconductor.
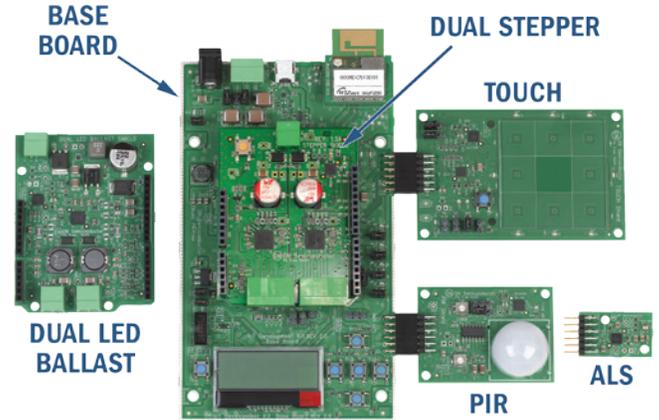
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IoT Development Kit

Features

- Comprehensive portfolio of sensors, connectivity and actuator devices
- Individual API for each and every device
- Complex C Code examples adapted to multiple applications
- Integrated development environment
- Full documentation of system hardware and software design
- Cloud software
- Ready to use for fast turnaround from concept to production

BASE BOARD • DUAL STEPPER • TOUCH • DUAL LED BALLAST • PIR • ALS

Markets & Applications

Motor Control • Climate & Sense Control • Lighting & Sense Control • Process Control • Motion Control • Position Control • Patient Monitoring • Heatlhcare

Modules Capabilities

Baseboard	**BB-GEVK**
Wireless Connectivity: SIGFOX™	**SIGFOX-GEVB**
Wired Connectivity: Power over Ethernet	**POE-GEVB**
Wired Connectivity: CAN	**CAN-GEVB**
Wireless Connectivity: Thread™	**Pending 2H17**
Wireless Connectivity: BLE	**Pending 2H17**

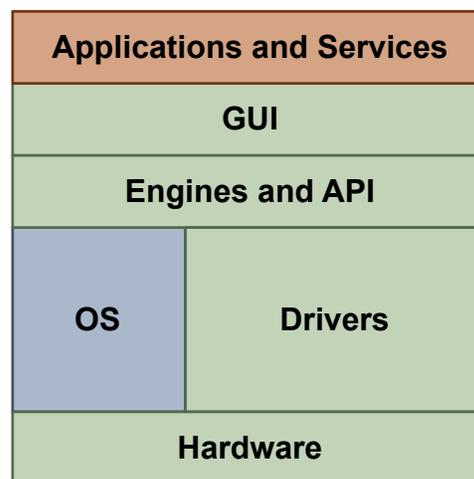|	
Sensor: PIR motion	**PIR-GEVB**
Sensor: Ambient light	**ALS-GEVB**
Sensor: Touch/proximity/level	**TS-GEVB**
Sensor: Smart Passive Sensor	**Pending 2H17**
Actuator: Dual stepper motor	**D-STPR-GEVK**
Actuator: Dual LED + ballast	**D-LED-B-GEVK**
Actuator: BLDC motor control + power stage	**BLDC-GEVB**
Medical Sensor: Heart Rate Monitor	**Upon Request**
Medical Sensor: Data Acquisition (Struix)	**Upon Request**

IoT Development Kit

Software Developement Tool

Development Environment (IDE)	Eclipse (Mars) + CDT + GNU ARM® for Eclipse
Supported Operating Systems	Windows®
Baseboard Processor	ARM Cortex®-M3
Shield Boards	Connectivity, Sensors, Actuators
Operating System / RTOS	ARM mBed™
Toolchain	GNU tools for ARM
Debugger	gdb
Libraries	mBed, ON shield board libraries
IoT/Cloud Platform Support	Carriots, more to come…
IoT Protocols	REST, MQTT
Connectivity Protocols	SIGFOX, Thread, EnOcean, BLE, MBUS, PoE, Wi-Fi, CAN, SPI, I2C, UART

APIs and Examples

- 21 Application Programming Interfaces (API)

- 28 simple application examples

- 12 complex application examples

Applications and Services	
GUI	
Engines and API	
OS	Drivers
Hardware	

For videos, tools, and more information visit

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