



# IoT Development Kit



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

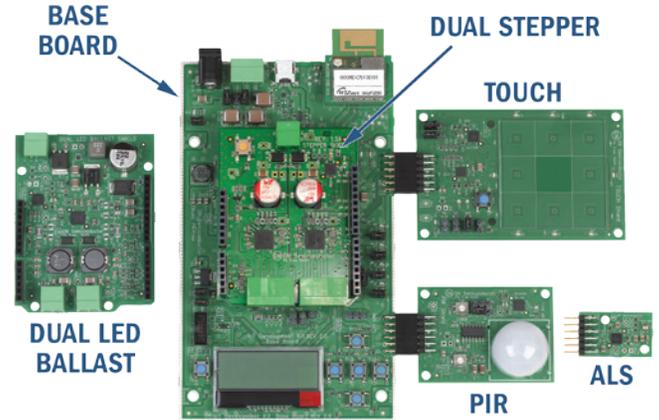


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## IoT Development Kit

### 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



### Markets & Applications



Motor Control



Climate & Sense Control



Lighting & Sense Control



Process Control



Motion Control



Position Control



Patient Monitoring



Healthcare

### Modules Capabilities

<b>Baseboard</b>	<a href="#">BB-GEVK</a>
<b>Wireless Connectivity: SIGFOX™</b>	<a href="#">SIGFOX-GEVB</a>
<b>Wired Connectivity: Power over Ethernet</b>	<a href="#">POE-GEVB</a>
<b>Wired Connectivity: CAN</b>	<a href="#">CAN-GEVB</a>
<b>Wireless Connectivity: Thread™</b>	Pending 2H17
<b>Wireless Connectivity: BLE</b>	Pending 2H17

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

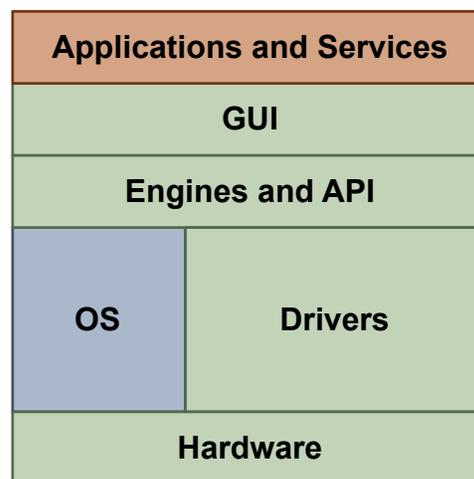
## IoT Development Kit

### Software Development Tool

<b>Development Environment (IDE)</b>	Eclipse (Mars) + CDT + GNU ARM® for Eclipse
<b>Supported Operating Systems</b>	Windows®
<b>Baseboard Processor</b>	ARM Cortex®-M3
<b>Shield Boards</b>	Connectivity, Sensors, Actuators
<b>Operating System / RTOS</b>	ARM mBed™
<b>Toolchain</b>	GNU tools for ARM
<b>Debugger</b>	gdb
<b>Libraries</b>	mBed, ON shield board libraries
<b>IoT/Cloud Platform Support</b>	Carriots, more to come...
<b>IoT Protocols</b>	REST, MQTT
<b>Connectivity Protocols</b>	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



For videos, tools, and more information visit

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