

# IoT Development Kit



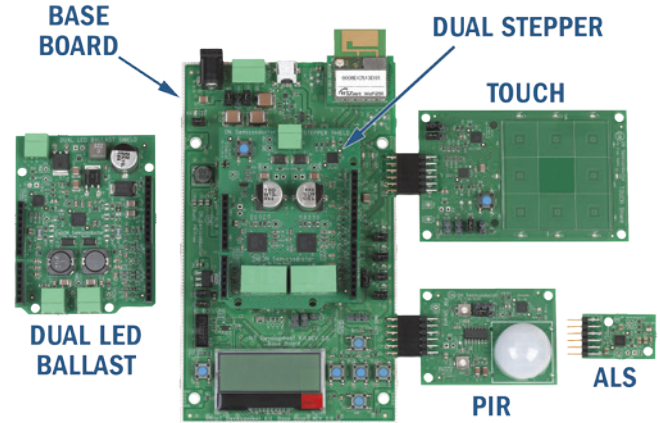
[www.onsemi.com](http://www.onsemi.com)

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

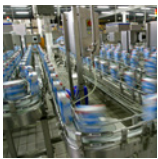
## IoT Development Kit

### 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



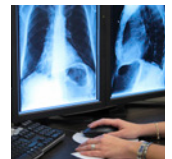
Motion Control



Position Control



Patient Monitoring



Healthcare

### Modules Capabilities

Baseboard	<a href="#">BB-GEVK</a>	Sensor: PIR motion	<a href="#">PIR-GEVB</a>
Wireless Connectivity: SIGFOX™	<a href="#">SIGFOX-GEVB</a>	Sensor: Ambient light	<a href="#">ALS-GEVB</a>
Wired Connectivity: Power over Ethernet	<a href="#">POE-GEVB</a>	Sensor: Touch/proximity/level	<a href="#">TS-GEVB</a>
Wired Connectivity: CAN	<a href="#">CAN-GEVB</a>	Actuator: Dual stepper motor	<a href="#">D-STPR-GEVK</a>
Wireless Connectivity: EnOcean®	Pending 2Q17	Actuator: Dual LED + ballast	<a href="#">D-LED-B-GEVK</a>
Wireless Connectivity: Thread™	Pending 2Q17	Actuator: BLDC motor control + power stage	<a href="#">BLDC-GEVB</a>
Wireless Connectivity: Wireless Mbus	Pending 2Q17	Medical Sensor: Heart Rate Monitor	Upon Request
Wireless Connectivity: BLE	Pending 3Q17	Medical Sensor: Data Acquisition (Struix)	Upon Request

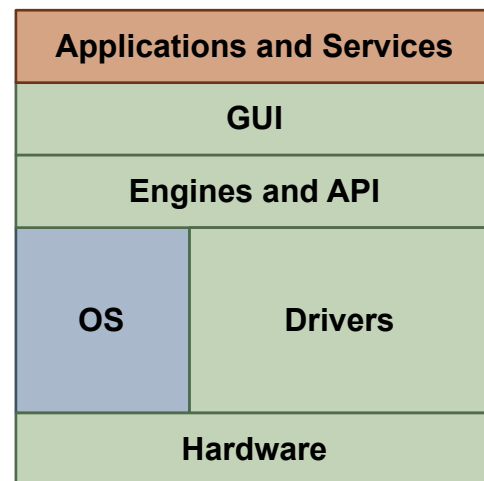
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### Software Development Tool

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

### APIs and Examples

- 21 Application Programming Interfaces (API)
- 28 simple application examples
- 12 complex application examples



For videos, tools, and more information visit

[www.onsemi.com/idk](http://www.onsemi.com/idk)