

# **Featured**



Secure, intelligent wireless technology for a more connected world



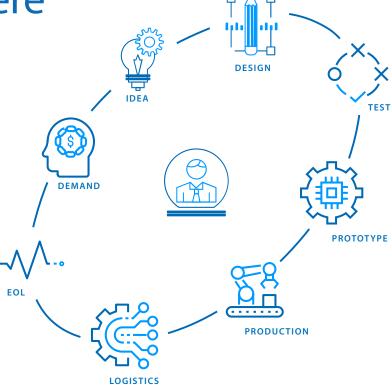


# Silicon Labs & Alcom



We are a leader in secure, intelligent wireless technology for a more connected world. Our integrated hardware and software platform, intuitive development tools, unmatched ecosystem and robust support make us the ideal long-term partner in building advanced industrial, commercial, home and life applications. We make it easy for developers to solve complex wireless challenges throughout the product lifecycle and get to market quickly with innovative solutions that transform industries, grow economies and improve lives.

Co-creation starts here



Alcom considers everybody an indispensable added value in the collaborative chain with all of its partners.

# **Applications & Markets**



**INDUSTRIAL IOT** 



**SMART CITY** 



**SMART HOME** 



**SMART MEDICAL** 



**SMART RETAIL** 





**ELECTRICAL SUBMETERING** 

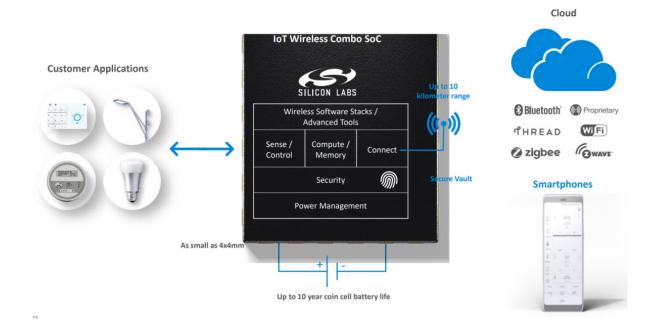


**SMART WEARABLE DEVICES** 



**SMART HOME SENSORS** 

## **IoT Wireless Combo SoC**



### **Product Overview**

#### **Bluetooth**

Include the latest Bluetooth Low Energy (LE) and Bluetooth Mesh standards for a variety of applications, from smart home to smart industry. We offer an extensive range of SoCs, modules and software tools.

# **Bluetooth**

#### **Multiprotocol**

Designed for the simple implementation of multiple protocols on a single chip. Multiprotocol connectivity provides the ability to run two or more protocols in the same devices on multiple frequency bands.



#### **Proprietary**

Provides maximum flexibility for developers looking to implement distinct wireless capabilities or features in their applications. Our proprietary products provide compatibility to legacy protocols, sub-GHz long-range connectivity and application optimized solutions not covered by industry standards for a variety of devices.



#### **Thread**

Thread solves the challenges of IP connectivity from the edge to the cloud, by leveraging self-healing mesh features, native IPv6 based connectivity and state of the art security with a multitude of application-layer choices for connected devices.



#### Wi-Fi

Our Wi-Fi solutions address the challenge of providing secure IP and cloud connectivity on existing networks. With built-in advanced security features, our low-power IC and certified modules are designed to extend battery life for a wide variety of applications.



#### Wi-Sun

Wireless Smart Ubiquitous Network (Wi-SUN) is the leading IPv6 sub-GHz mesh technology for smart city and smart utility applications. Built to scale with long-range capabilities, high-data throughput and IPv6 support, Wi-SUN simplifies wireless infrastructure and the evolution of smart cities.



#### **Z-Wave**

Z-Wave helps you create smart home, hospitality and MDU solutions by leveraging an easy-to-use, secure and interoperable ecosystem of products. Designed to maintain interoperability, Z-Wave is backward compatible, regardless of product type, brand, manufacturer or version of the Z-Wave protocol stack.



#### Zigbee

We are the vendor of choice for IoT innovators developing Zigbee networking into their smart home and connected building ecosystems. We offer the largest deployed, most integrated, complete and feature-rich Zigbee solution available.



### **Product Overview**

#### Microcontrollers

Our 32-bit MCUs enable high functioning, low-power systems by leveraging an EFM32™ ARM® Cortex®. While our EFM8™ 8051-based MCUs deliver the industry's fastest speeds and lowest power.



#### **Interface ICs**

The mixed-signal IC products span different technologies and standards to enable quick and effective communication between two devices or functionalities.

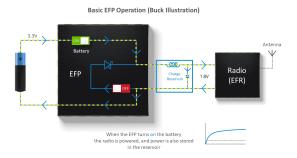


#### **Sensors**

Our diverse sensor product portfolio includes optical sensors, digital I<sup>2</sup>C relative humidity and temperature sensor ICs, magnetic hall effect sensors and capacitive touch sense microcontroller devices for a variety of applications.

#### **Power Management**

The EFP01 Energy Friendly Power Management IC (PMIC) is an extremely flexible, highly-efficient, multi-output power management IC, providing complete system power and primary cell battery Coulomb counting for EFM32 and EFR32 devices.



#### Matter

Matter drives the convergence between the major IoT ecosystems to create one easy, reliable, and secure wireless protocol to connect all IoT devices and networks.



#### Security

Protecting your product in a connected world is a necessity as customer data and modern online business models are increasingly targets for costly hacks and corporate brand damage.

To stay secure, device makers need an underlying security platform in the hardware, software, network, and cloud. We've got you covered.

#### **Machine learning**

Bringing machine learning (ML) to IoT applications reduces bandwidth requirements, saves power, and increases a device's ability to make smarter decisions.



#### **Amazon Sidewalk**

Silicon Labs can accelerate the development of Amazon Sidewalk devices by making it possible for manufacturers to focus more of their resources on innovation and less on testing and integration.



## New product releases

#### WI-FI 6 PLUS BLUETOOTH LOW ENERGY 5.1 WIRELESS SOCS

The SiWx917 SoC is ideal for ultra-low power IoT wireless devices using Wi-Fi, Bluetooth, Matter, and IP networking for secure cloud connectivity. SiWx917 SoC includes an ultra-low power Wi-Fi 6 plus Bluetooth Low Energy (LE) 5.1 wireless CPU subsystem, and an integrated microcontroller (MCU) application subsystem, security, peripherals and power management subsystem all in a single 7x7 mm QFN package.





#### FAST-TRACK PROTOTYPING OF WIRELESS IOT

Silicon Labs' xG24 kits are based on their EFR32™ Wireless Gecko Systemon-Chip (SoC). Each product within their xG24 line is a powerful tool for connecting and enhancing wireless designs, but developers should consider intended applications before selecting between the xG24 development kit and their xG24 Wireless Pro Kits.

#### SILICON LABS Z-WAVE 800 SERIES

The Z-Wave 800 series is the latest edition of the world's most popular Z-Wave wireless IoT mesh protocols for smart homes. The Z-Wave 800 series enables device makers to develop exceptional smart home experiences through reliable Sub-GHz wireless, robust security, battery friendly power consumption, and easy Smart Start commissioning.



#### SUB-GHZ SOC FOR SMART CITIES & LONG-RANGE DEPLOYMENTS



The FG25 is the ideal SoC (system on chip) for long-range, low-power transmissions, capable of broadcasting up to 3km with minimal data loss in dense, urban canyon environments when coupled with the Silicon Labs EFF01 Front End Module.

#### INTELLIGENT SENSORS

We provide intelligent sensor solutions characterized by low power, superb reliability, compact size, high levels of integration and unmatched ease of use.

Our diverse sensor product portfolio includes optical sensors, digital  $I^2C$  relative humidity and temperature sensor ICs, magnetic hall effect sensors and capacitive touch sense microcontroller devices for a variety of applications.





#### BRING ALAND MACHINE LEARNING TO THE EDGE

Silicon Labs announced the BG24 and MG24 families of 2.4 GHz wireless SoCs for Bluetooth and Multiple-protocol operations, respectively, and a new software toolkit. This new co-optimized hardware and software platform will help bring Al/ML applications and wireless high performance to battery-powered edge devices.

## Alcom product portfolio

| ELECTRONIC COMPONENT SOLUTIONS | WIRELESS EMBEDDED<br>CONNECTIVITY & SENSORS | WIRELESS & INDUSTRIAL CONTROLS NETWORKING | DISPLAY & TOUCH                       |
|--------------------------------|---|---|---------------------------------------|
| LED & SOLID STATE LIGHTING     | POWER & EMC                                 | RUGGED MOBILE COMPUTING                   | EMBEDDED SYSTEMS, AI & EDGE COMPUTING |

- Semiconductors
- Frequency & timing
- Power managementCircuit protection & discretes
- Magnetics
  Passives & electromechanical
- Connectors & cable assembliesPhotonics

- Routers & gateways Wireless embedded computers Industrial ethernet and IP variations Wired & wireless machine networking
- Antenna's
- Device to cloud solutions
- Connectivity & remote management services Networking & connectivity

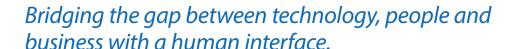
Wireless modulesAntenna'sSensors

Touch screensOptical bondingTotal display solutions

- AC/DC power supplies DC/DC converters
- Power management modules
- Wireless charging E-mobility solutions
- Transformers & power inductors
- EMC filters

- Computer-on-modulesEmbedded boardsIndustrial PC & automationSystem integration









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