Silicon Labs Product Area

	Series-1	Series-2		
	BG12	BG22	FG23 | ZG23	MG24
	Bluetooth®	Bluetooth®	Proprietary Z-WAVE	zigbee THREAD
Die Size (mm^2)	18.90	5.40	7.02	9.29

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.

Our Mission: To empower developers to create wirelessly connected devices that transform industries, grow economies and improve lives.

Silicon Labs constantly innovate to improve our products and services for energy efficiency and productivity. Our products are reduced in die size to improve production yields, further reduce the energy consumption footprint, and optimizing manufacturing processes for source reductions.

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Silicon Labs Product Energy Efficiency

Operating Mode	Series-1	Series-2			
	BG12 **Bluetooth**	BG22 **Bluetooth**	FG23 | ZG23 Proprietary Z-WAVE	MG24 zigbee THREAD	RS9116 WiFi
TX | Transmit	8.5 mA @ 0 dBm	4.1 mA @ 0dBm	25 mA @ 14dBm	5 mA @ 0dBm	130 mA @ 8dBm
RX | Receive	10 mA	3.6 mA	4.0 mA	4.4 mA	20 mA
EM0 | Active	130 µA/MHz	22 µA/MHz	26 µA/MHz	31 µA/MHz	55 µA (1 sec)
EM2 | Deep Sleep	2.9 µA	1.2 µA	1.2 µA	1.3 µA	0.9 µA
EM2 | Wake up	3.2 µs	5.1 µs	5.1 µs	5.1 µs	2.5ms

Product Example

ESL removes usage of paper from pricing labels in retail. BG22 enables ESL to operate +7 years on a coin cell battery

Product Example

Energy providers integrate wireless in metering to e.g., balance the load of the grid and inform energy users with insights to better manage its energy footprint
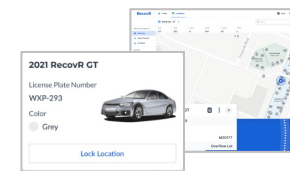
Product Example

Smart light bulbs enables residents and commercial buildings to automate and manage lighting from remote to reduce energy consumptions.

Product Example

RecovR enables efficient fleet management with real-time location of vehicles in preparation for transactions, reducing the carbon footprint for green business environment

Silicon Labs Series-2 enables developers to create low power IoT devices

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Environmental Friendly / Recycled Materials

- **Silicon Labs suppliers declares "*Material Declaration of Conformance Instructions*" in compliance with Substance Management and Reporting (SR2001) in accordance with the following standards, directives and regulations:**

  - Directive 2006/122/EC | EU PFOS/PFOA

  - IEC 61249-2-21 | IEC definition of Halogen Free

  - JIG-101 | Joint Industry Guide Material Composition Declaration for Electronic Products

  - Regulation(EC) No1907/2006 | EU REACH (including REACH annex xvii substances)

  - RMI Conflict Minerals Reporting Templat | http://www.conflictfreesmelter.org/ConflictMineralsReportingTemplateDashboard.htm

- **Carrier tape, moisture barrier bag & carton box are RoHS compliant**

- **Silicon Labs and its suppliers use recyclable carton boxes for shipment our products**

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