SILICON LABS | ✴ matter

Matter SoC and Module Selector Guide

Selecting the Right Matter Device for Your Applications

Alcom
Singel 3 | B-2550 Kontich | Belgium | Tel. +32 (0)3 458 30 33 | info@alcom.be | www.alcom.be
Rivium 1e straat 52 | 2909 LE Capelle aan den IJssel | The Netherlands | Tel. +31 (0)10 288 25 00 | info@alcom.nl | www.alcom.nl

Table of Contents

How Silicon Labs' Portfolio is Ideal for Matter Development

Hardware

Single-SoC Matter solutions

- **High-performance RF** enables reliable connectivity in every room of the house and beyond
- **Ultra-low-power** — Extend battery life and recharging interval
- **Fully integrated MCU** — Simplify product design, reduce BoM costs, improve profits
- **RF-Certified Modules** — Accelerate time-to-market by up to 9 months
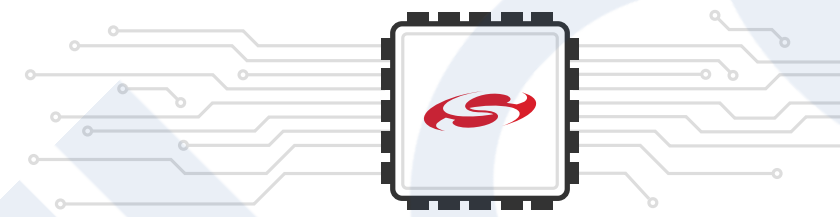
Software

**Pre-certified and tested Matter, Wi-Fi, Thread, and Bluetooth software**

- **Pre-certified** and tested Matter, Wi-Fi, Thread, and Bluetooth software
- **Full compliance** and maximum performance on Silicon Labs hardware
- **Reduce time and costs** of development and certification
- **Improve** product quality
- **The best SDK support** with 10 years of longevity

Security

**Fully Matter-compliant security**

- **Secure Vault** covers all mandatory, recommended, and optional security requirements
- **PSIRT** offers constant monitoring and rectification of vulnerabilities (Matter requirement)
- **MG24** — The highest PSA Level 3 certification
- **SiWx917** — The best-in-class IoT security in Wi-Fi
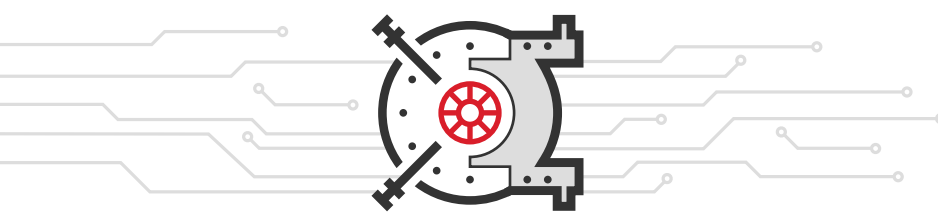
Secure Programming

**Securely program Matter certificates, security settings, keys, and flash software**

- **Prevent** counterfeiting and IP theft
- **Simplify** the creation of Matter QR codes
- **Reduce** manufacturing risks and costs
- **Accelerate** production time
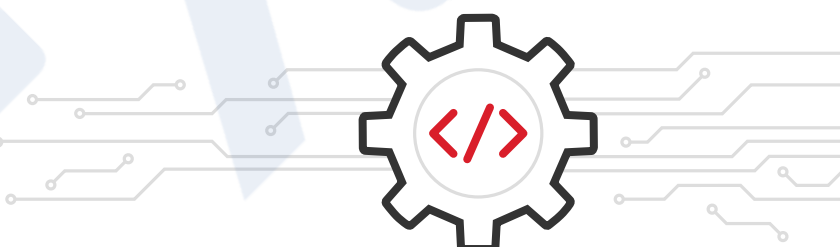
Developer Journey

Most comprehensive end-to-end guide for Matter

- **Reduces your Matter learning curve** to get you to market faster
- **Step by step guide** from learning to production
- **Includes information** on Ecosystems steps along the journey
- **Provides guidance** on hardware including ICs, Modules, and development hardware
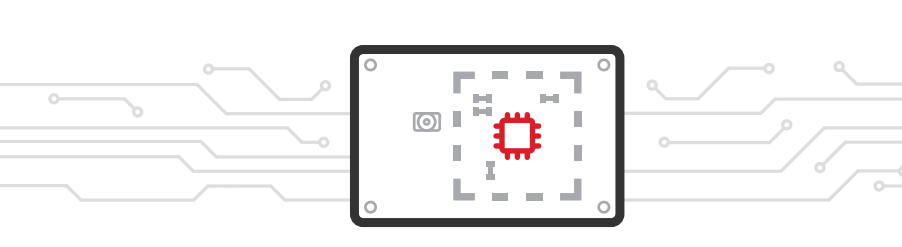
Most Complete

Most Complete Go-to-Market Solution for Matter

- **Enhance user experience** with high-performance wireless and ultra-low-power
- **Matter-compliant security** to protect devices, users, and brand reputation
- **Develop faster and reduce costs** with community support 24/7, developer journeys, and documentation
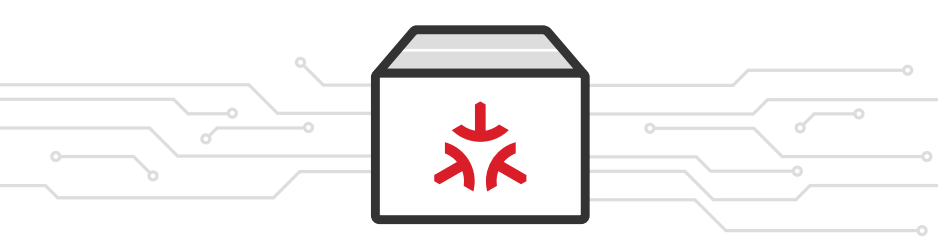
Wireless Hardware for Matter

Performance

Improve overall product quality, enhance user experience, reduce warranty returns, and minimize support costs through reliable wireless connectivity in every room of the house (and beyond)

Battery Life

Score better on product reviews and enhance user experience with extended battery life and improved recharging intervals on your devices

Security

Stay protected with the industry's most advanced IoT security solution, Secure Vault, which is fully compliant with the Matter specification

Costs & Simplicity

Simplify product designs, reduce BoM costs, and improve your profits using Silicon Labs Matter solutions based on single chip SoCs and modules

Pre-Certified Wireless Software for Matter

Our SDKs provide pre-certified and tested wireless protocol stacks for Wi-Fi, Thread, Bluetooth LE, and Matter application layer firmware.

Silicon Labs wireless protocol stacks are tested and quality assured for full compliance, stability, and maximum performance to:
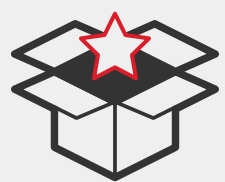
Increase overall product quality

Reduce development time and costs

Ensure that devices can pass final certifications on the first go

TESTED & PRE-CERTIFIED SOFTWARE

CSA

matter

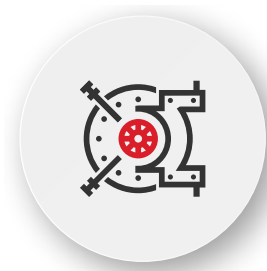| TCP	UDP

IPv6

Wi-Fi	Thread	Bluetooth Low Energy	Ethernet	Additional future network layers

Wi-Fi Alliance │ Thread Group
Bluetooth SIG

Matter Security Solutions

Fully Compliant

Secure Vault, PSIRT, and CPMS provide the functions needed to cover all mandatory, recommended, and optional security requirements of the Matter specification in one package

Most Advanced

Featuring advanced IoT security solutions, our MG24 supports the highest PSA Level 3 certification and SiWx917 features the IoT security

Always Up-to-Date

Continuously monitor vulnerabilities and receive timely security updates. With us, you get the best support service in the industry, with up to 10 years of longevity for software and security

Programmable

Safely program Matter certificates, keys, security settings, applications, and bootloaders on wireless SoCs to reduce risks, save costs, and accelerate production

Secure Programming

Ready to Ship

With CPMS, securely program all Matter certificates, security settings, keys, applications, and bootloaders. Onboarding Payload is provided for the QR code, so Matter products are ready to ship

Accelerate Production

Instead of separate programming and flashing (in-house/CM), Silicon Labs programs SoCs during production and can deliver Matter-related programming as part of the process; reduces risk, cost, and time-to-market

Reduce Risks

Wireless SoCs are delivered to the CM secured and programmed with an encrypted SW image, preventing counterfeiting and IP theft

Maximize Security

Achieve maximum protection with Silicon Labs Secure Vault, which is broadly recognized as the most advanced IoT security solution and is fully compliant with the Matter specification

## Most Complete Matter Development Solution

Learn in Advance

Access the most comprehensive Matter developer journeys for popular ecosystems like Google, Amazon, Apple, and SmartThings; these journeys help development teams learn the entire process in advance to avoid common mistakes and plan resources wisely
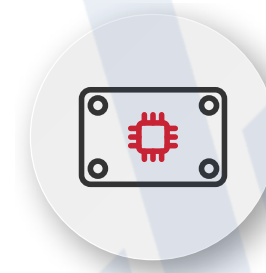
Kits for all Use-cases

Leverage development kits for all Matter use cases: Matter over Wi-Fi, Matter over Thread, Border Router, Matter Bridge, and more
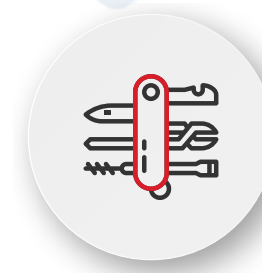
Tools for all

No Code to Pro Code, our Simplicity Studio can meet the demands of an RF specialist with no embedded code experience to a team of embedded developers

Advanced Development

Key features like our Packet Trace Interface for advanced network debug is critical for mesh networks like Matter over Thread, while our Energy Profiler can help deliver the lower power solution, extending battery life of both our Matter over Thread and Matter over Wi-Fi solutions

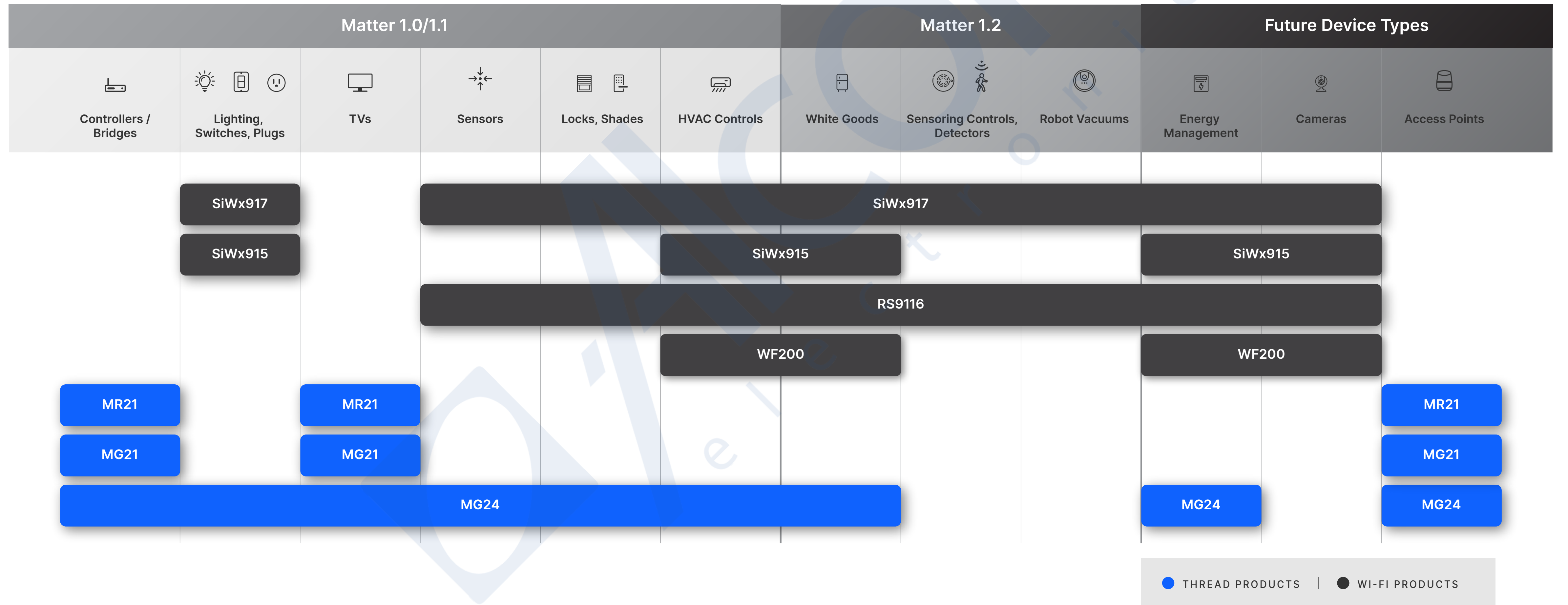# High-Performance, Low-Power Wireless SoCs for Thread and Wi-Fi

- Lowest power on the market for Wi-Fi
- Industry-leading wireless characteristics (TX power, RX sensitivity, etc.)
- Single-SoC Matter solutions with Bluetooth LE co-existence
- Integrated wireless MCUs with many add-ons: AI/ML, Sensor Hub, high-accuracy ADC, etc.
- Most advanced security with PSA Level 3 certification for Matter, Thread, Bluetooth LE

One of the first design considerations you'll encounter is what networking technologies best fit your application. Based on this, you then can decide if your project is best suited for a System-on-Chip (SOC) paradigm or a Network Coprocessor (NCP) paradigm and, for the NCP, what kind of serial communication to use for controlling the coprocessor. This design decision is critical because it will determine the requirements and constraints of both the software and the hardware.

For more information on how to approach this decision, you can read our Software Design Fundamentals User Guide.

THREAD

MG24
High-performance, low-power SoC for Matter over Thread and Multiprotocol

MG21
Thread RCP with Bluetooth LE and Multiprotocol for Matter gateways

MR21
Thread RCP with Bluetooth LE for Matter gateways

Wi-Fi

SiW915
Best security Wi-Fi 6 SoC for Matter line devices

SiW917
Lowest power, best security Wi-Fi 6 SoC for Matter battery devices

RS9116
Ultra-low-power Wi-Fi 4 NCP solution for Matter battery devices

Current and Future Application Support

	Matter 1.0/1.1						Matter 1.2			Future Device Types		
Controllers / Bridges	Lighting, Switches, Plugs	TVs	Sensors	Locks, Shades	HVAC Controls	White Goods	Sensing Controls, Detectors	Robot Vacuums	Energy Management	Cameras	Access Points

SiWx917 (Controllers/Bridges — Lighting, Switches, Plugs)
SiWx915 (Lighting, Switches, Plugs)

SiWx917 (Sensors through Access Points)
SiWx915 (HVAC Controls – Robot Vacuums)
SiWx915 (Energy Management – Cameras)
RS9116 (Sensors – Robot Vacuums)
WF200 (HVAC Controls – Robot Vacuums)
WF200 (Energy Management – Cameras)

MR21 (Controllers/Bridges)
MR21 (TVs)
MR21 (Cameras)

MG21 (Controllers/Bridges)
MG21 (TVs)
MG21 (Cameras)

MG24 (Controllers/Bridges – Robot Vacuums)
MG24 (Energy Management)
MG24 (Cameras)

● THREAD PRODUCTS | ● WI-FI PRODUCTS

Silicon Labs Thread Solutions

MG24

Reliable, low-latency, and long-range Thread connectivity for SoC and RCP solutions

- +19.5 dBm output power
- Increased RF sensitivity

Single-SoC Matter solution

- Integrated Bluetooth LE Co-ex for easy commissioning

Matter-compliant security

- Secure Vault™ High supports the Matter hardware and software security requirements with PSA/SESIP Certification Level 3

Higher accuracy for industrial sensors

- 20-bit ADC for more granular output values

Extend product lifetime

- Large memory facilitating more features, smooth OTA updates, and longer product lifetime

Reduce BOM and PCB footprint while simplifying design

Faster AI/ML processing with lower energy consumption

- Integrated AI/ML hardware accelerator enables 2-4X faster ML inferencing and up to 6X lower power compared to non-accelerated processors (depends on the algorithm and model)

Memory – Flash 1536 kB, RAM 256 kB

MG21

High-performance and reliable Thread RCP solution for Matter gateways

- +20 dBm output power
- High RF sensitivity

Multiprotocol

- Bluetooth LE co-ex for easy device commissioning
- Zigbee

Improved Wi-Fi blocking performance

- Prevent interference by filtering out Wi-Fi signals

Secure Vault™ High

- The most advanced IoT security with PSA/SESIP Level 3

Memory — Flash 1024 kB, RAM 96 kB

MR21

High-performance and reliable Thread RCP solution for Matter gateways

- +20 dBm output power
- Increased RF sensitivity

Multiprotocol

- Bluetooth LE co-ex for easy device commissioning

Improved Wi-Fi blocking performance

- Prevent interference by filtering out Wi-Fi signals

Secure Vault™ Mid

- The most advanced IoT security with PSA/SESIP Level 2

Memory — Flash 512 kB, RAM 64 kB

Silicon Labs Wi-Fi Solutions

SiWx917

Lowest-power Wi-Fi 6 SoC battery-powered devices

Minimal battery replacement and recharging hassle for users

- Always-on cloud connectivity with minimal power
- Doubling the Wi-Fi 6 battery life compared to the nearest competing SoCs

Improved user experience with superior wireless performance and easy device commissioning

- Bluetooth LE co-existence for commissioning

Devices, users, and brand are protected from cyber threats

- Best-in-Class Security for Wi-Fi

Fully integrated wireless MCU

- Dual core with an application-dedicated ARM core
- High memory, PSRAM
- AI/ML, ultra-low-power sensor hub

Maximum Wi-Fi gateway compatibility

- Independently tested
- Reduce user frustration, customer care costs, and improve brand loyalty
- Comprehensive networking stack (TCP/IP, HTTP/HTTPs, MQTT, etc.)

Seamless integration with Silicon Labs development solutions

- Simplicity Studio 5 streamlines the development process, reducing costs and time-to-revenue

SiWx915

Energy-efficient Wi-Fi 6 SoC for line-powered devices

Improve user experience with exceptional wireless performance and easy device commissioning

- Always-on cloud connectivity
- Wi-Fi 6 for improved connectivity in high-density environments
- Better coverage for devices in every room of the house and beyond (2.4 GHz)
- Bluetooth LE co-ex for easy commissioning

Protect devices, users, brand, and revenue from cyber-threats

- Best-in-class security for Wi-Fi

Maximum Wi-Fi gateway compatibility, independently tested

- Reduce user frustration, customer care costs, and improve brand loyalty

Seamless integration with Silicon Labs development solutions

- Simplicity Studio 5 streamlines the development process, reducing cost and time-to-revenue

RS9116

Ultra-low-power for Wi-Fi 4 on battery devices

- 55 µA stand-by associated current at 1 sec

NCP Matter solutions only

Integrated Bluetooth LE Co-ex for easy commissioning

High-performance Wi-Fi connectivity

- +20 dBm TX, -98 dBm RX, 72 Mbps bandwidth with less power than competitors

Maximum Wi-Fi access point compatibility

- Independently tested across 100s of Wi-Fi access points for exceptional interoperability

Enterprise-level security
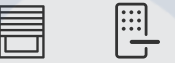
- TLS 1.0, TTLS, PEAP, WPA2/WPA3

Pre-certified stack by Wi-Fi Alliance

- Making your end-product certification easier (Est. Q1 2023)

Comprehensive networking stack

- Offloads the main MCU with TCP/IP (IP v4), SSL 3.0/TLS 1.2, HTTP/HTTPS, Web sockets, DHCP, MQTT Client

Matter 1.0/1.1 Device Types

Controllers / Bridges	Lighting, Switches, Plugs	TVs	Sensors	Locks, Shades	HVAC Controls
MG24	SiWx917	**MG24**	SiWx917	SiWx917	SiWx917
High-perf Thread RCP, Bluetooth LE co-ex	Single-SoC Matter solution	High-perf Thread RCP, Bluetooth LE co-ex	Single-SoC Matter solution	Lowest-power Wi-Fi 6 for battery devices	Single-SoC Matter solution
Low power, long battery life	Lowest-power Wi-Fi 6 for battery devices	Long-range, +19.5 dBm TX	Lowest-power Wi-Fi 6 for battery devices	Single-SoC Matter solution	Lowest-power Wi-Fi 6 for battery devices
Long-range, +19.5 dBm TX	Bluetooth LE co-ex	AI/ML	Bluetooth LE co-ex	Bluetooth LE co-ex	AI/ML
AI/ML	Best Wi-Fi IoT security	High PSA L3 security	AI/ML	AI/ML	Best Wi-Fi IoT security
High PSA L3 security	AI/ML		Best Wi-Fi IoT security	Best Wi-Fi IoT security	ULP Sensor Hub
	CA Title 20		ULP Sensor Hub		
			16-bit ADC		
MG21		**MG21**		SiWx915	SiWx915
Thread RCP for gateways		Thread RCP for gateways		Single-SoC Matter solution	Single-SoC Matter solution
Bluetooth LE co-ex & Multiprotocol		Bluetooth LE co-ex & Multiprotocol		Wi-Fi 6 for line devices	Wi-Fi 6 for line devices
Long range, +20 dBm TX		Long range, +20 dBm TX		Bluetooth LE co-ex	Bluetooth LE co-ex
Low power, long battery life		High PSA L3 security		Best Wi-Fi IoT security	Best Wi-Fi IoT security
High PSA L3 security					
MR21	SiWx915	**MR21**	**MG24**	RS9116	RS9116
Thread RCP for gateways	Wi-Fi 6 for line devices	Thread RCP for gateways	Thread SoC for battery devices	Lowest power Wi-Fi 4 & Bluetooth LE co-ex for battery devices	Lowest power Wi-Fi 4 & Bluetooth LE co-ex for battery devices
Bluetooth LE co-ex	Single-SoC Matter solution	Bluetooth LE co-ex	Low power, long battery life	Matter NCP solution	Matter NCP solution
Low power, long battery life	Bluetooth LE co-ex	Long range, +20 dBm TX	Long-range, +19.5 dBm TX	Comprehensive networking stack	Comprehensive networking stack
Long range, 20 dBm TX	Best Wi-Fi IoT security	Secure Vault Mid	Bluetooth LE co-ex		
Secure Vault Mid	CA Title 20		AI/ML	WF200	WF200
			High PSA L3 security	Low-power Wi-Fi 4 only for battery & line devices	Low-power Wi-Fi 4 only for battery & line devices
			High-accuracy ADC	Matter RCP solution	Matter RCP solution
				MCU offload	MCU offload
				Small 4 × 4 mm	Small 4 × 4 mm
				MG24	**MG24**
				Thread SoC for battery devices	Single-SoC Matter/Thread solution
				Low power, Long battery life	Low power, long battery life
				Long-range, +19.5 dBm TX	Long-range, +19.5 dBm TX
				Bluetooth LE co-ex	Bluetooth LE co-ex
				AI/ML	AI/ML
				High PSA L3 security	High PSA L3 security
					High-accuracy ADC

● THREAD PRODUCTS | ● WI-FI PRODUCTS

Matter 1.2

Future Device Types

White Goods	Robot Vacuums	Sensing Controls, Detectors	Energy Management	Cameras	Access Points
SiWx917 Lowest-power Wi-Fi 6 for battery devices 86 Mbps Single-SoC Matter solution Bluetooth LE co-ex AI/ML Best Wi-Fi IoT security ULP Sensor Hub q	**SiWx917** Lowest-power Wi-Fi 6 for battery devices Single-SoC Matter solution Bluetooth LE co-ex AI/ML Best Wi-Fi IoT security	**SiWx917** Lowest-power Wi-Fi 6 for battery devices Single-SoC Matter solution Bluetooth LE co-ex AI/ML Best Wi-Fi IoT security ULP Sensor Hub 16-bit ADC	**SiWx917** Lowest-power Wi-Fi 6 for battery devices 86 Mbps Single-SoC Matter solution Bluetooth LE co-ex AI/ML Best Wi-Fi IoT security ULP Sensor Hub	**SiWx917** Lowest-power Wi-Fi 6 for battery devices 86 Mbps Single-SoC Matter solution Bluetooth LE co-ex AI/ML Best Wi-Fi IoT security ULP Sensor Hub	**MG24** High-perf Thread RCP, Bluetooth LE co-ex Low power, long battery life Long-range, +19.5 dBm TX AI/ML High PSA L3 security
SiWx915 Wi-Fi 6 for line devices 86 Mbps Single-SoC Matter solution Bluetooth LE co-ex Best Wi-Fi IoT security		**MG24** Thread SoC for battery devices Low power, long battery life Long-range, +19.5 dBm TX Bluetooth LE co-ex AI/ML High PSA L3 security High-accuracy ADC	**SiWx915** Wi-Fi 6 for line devices 86 Mbps Single-SoC Matter solution Bluetooth LE co-ex Best Wi-Fi IoT security	**SiWx915** Wi-Fi 6 for line devices 86 Mbps Single-SoC Matter solution Bluetooth LE co-ex Best Wi-Fi IoT security	**MG21** Thread RCP for gateways Bluetooth LE co-ex and Multiprotocol Long range, +20 dBm TX Low power, long battery life Secure Vault High
RS9116 Lowest power Wi-Fi 4 and Bluetooth LE co-ex for battery devices Matter NCP solution Comprehensive networking stack 72 Mbps	**RS9116** Thread SoC for battery devices Low power, long battery life Long-range, +20 dBm TX Bluetooth LE co-ex AI/ML High PSA L3 security		**RS9116** Lowest power Wi-Fi 4 & Bluetooth LE co-ex for battery devices Matter NCP solution Comprehensive networking stack 72 Mbps	**RS9116** Lowest power Wi-Fi 4 & Bluetooth LE co-ex for battery devices Matter NCP solution Comprehensive networking stack 72 Mbps	**MR21** Thread RCP for gateways Bluetooth LE co-ex Low power, long battery life Long range, 20 dBm TX Secure Vault Mid
WF200 Low-power Wi-Fi 4 only for battery and line devices Matter RCP solution MCU offload 72 Mbps Small 4 × 4 mm			**WF200** Low-power Wi-Fi 4 only for battery and line devices Matter RCP solution MCU offload 72 Mbps Small 4 × 4 mm	**WF200** Low-power Wi-Fi 4 only for battery and line devices Matter RCP solution MCU offload 72 Mbps Small 4 × 4 mm	

● THREAD PRODUCTS | ● WI-FI PRODUCTS

MG24 vs. MG21 vs. MR21

	MG24	MG21	MR21
Protocol Support	RCP SoC - Dynamic Multiprotocol w/ Bluetooth LE Supports OTA with internal flash	Multiprotocol, Proprietary Bluetooth, Thread, and Zigbee (NCP and SoC) Matter (RCP only)	Bluetooth (HCI) OpenThread (RCP multi-PAN) Zigbee1 (RCP - requires separate license for Zigbee stack) Matter over Thread (RCP multi-PAN + BT HCI)
Frequency Bands	2.4 GHz	2.4 GHz	2.4 GHz
Core	Cortex-M33 (78 MHz)	Cortex-M33 (80 MHz)	Cortex-M33 (80 MHz)
Max Flash	1536 kB	1024 kB	512 kB
Max RAM	256 kB	96 kB	64 kB
Security	Secure Vault Mid Secure Vault High	Secure Vault Mid Secure Vault High	Secure Vault Mid
Rx Sensitivity (15.4)	-105.4 dBm	-104.5 dBm	-104.3 dBm
Rx Sensitivity (Bluetooth LE 1Mbps)	-97.6 dBm	-97.5 dBm	-97.1 dBm
Active Current	33.4 µA/MHz	59.8 µA/MHz	59.7 µA/MHz
Sleep Current (EM2, 16 kB ret)	1.3 µA	4.5 µA	25 µA
TX Current @ +0 dBm (2.4 GHz)	5.0 mA	9.3 mA	9.3 mA
TX Current @ +10 dBm (2.4 GHz)	19.1 mA	34 mA	60.8 mA (+20 dBm OPN)
TX Current @ +20 dBm (2.4 GHz)	156.8 mA	185 mA	186.5 mA
RX Current (802.15.4)	5.1 mA	9.5 mA	9.5 mA
RX Current (Bluetooth LE 1 Mbps)	4.4 mA	8.8 mA	8.8 mA
Serial Peripherals	USART, EUSART, I2C	USART, I2C	USART
Analog Peripherals	20-bit ADC, ACMP, VDAC	12-bit ADC, ACMP	
Other	Die Temp Sensor	Die Temp Sensor	Die Temp Sensor
Operating Voltage	1.71 to 3.8 V	1.71 to 3.8 V	1.71 to 3.8 V
GPIO	26, 28/32	20	20
Package	5×5 QFN40, 6×6 QFN48 12.9×15.0 PCB Module	4×4 QFN32	4×4 QFN32

917 vs.
915 vs.
RS9116

| Parameter	SiWx917	SiWx915	RS9116
Sampling / In-Production	Sampling now, Q4 2023	Sampling/IP: Q1, 2024	In production
RF Bands (GHz)	2.4 GHz	2.4 GHz	2.4 GHz, 5 GHz (Modules)
Wi-Fi Generation / Bandwidth	Wi-Fi 6 / 20 MHz (OFDMA, MU-MIMO, TWT)	Wi-Fi 6 / 20 MHz (OFDMA, MU-MIMO, TWT)	Wi-Fi 4 / 20 MHz
Bluetooth Support	Bluetooth LE 5.1	Bluetooth LE 5.1	BT (SPP, A2DP), Bluetooth LE 5
Modes of Operation	RCP, NCP, SoC	RCP, NCP, SoC	RCP, NCP
Temperature Range	-40 to 105º C	-40 to 85º C	-40 to 85º C
PSRAM, AI/ML	Yes	No	No
Embedded SRAM and FLASH	672 kB and up to 8 MB; opt ext. flash	672 kB and up to 4 MB; opt ext. flash	384 kB and 4 MB
NWP Type / Speed (MHz)	TA-4T / 160 MHz	TA-4T / 160 MHz	TA-4T / 160 MHz
MCU Type / Speed (MHz)	Cortex M4F / 180 MHz	Cortex M4F / 180 MHz	N/A
Security	WPA2/WPA3, SSL/TLS 1.3 PSA-L2 TRNG, PUF, Secure Boot, Secure OTA, Secure Zone, Secure XIP (AES-XTS), Advanced Crypto	WPA2/WPA3, SSL/TLS 1.3 PSA-L2 TRNG, PUF, Secure Boot, Secure OTA, Secure Zone (TEE), Secure XIP (AES-XTS), Advanced Crypto	WPA2/WPA3, SSL/TLS 1.2
Max GPIO (GPIO Multiplexer)	46	22	N/A
IC Pkg	7×7 QFN84, PCB Module	6×6 QFN52, PCB Module	7×7 QFN84, SiP and PCB Modules
WLAN Max Tx Power / Rx Sens	21 dBm / -98 dBm	21 dBm / -98 dBm	20 dBm / -98 dBm
Power Modes	Ultra-Low-Power	Low-Power	Ultra-Low-Power
Target Applications	Door Locks, HVAC, Portable Medical, Sensors, Cameras, Switches, Power Tools, Asset Monitoring, Fleet Management, Clinical Medical, Metering	Appliances, HVAC, Portable Medical, Cameras, Switches, Power Tools, Asset Monitoring, Fleet Management, Clinical Medical, Metering	Speakers, Door Locks, HVAC, Portable Medical, Wearables, Power Tools, Asset Monitoring, Fleet Management, Clinical Medical

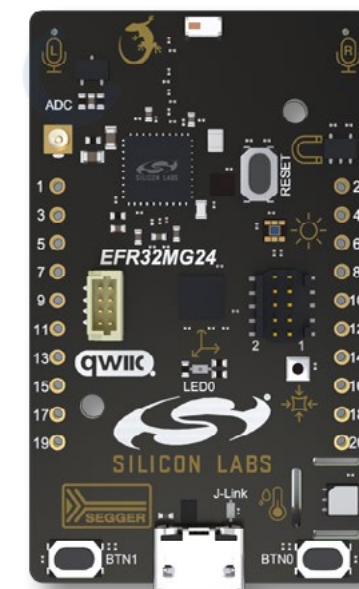# Solutions for Matter Over Thread

Pro Kit
EFR32xG24

Pro Kit with the MG24 SoC and BRD4187C Radio Board is THE development tool for Matter innovators! All tools for developing wireless applications. Enhance with Add-on radio boards!
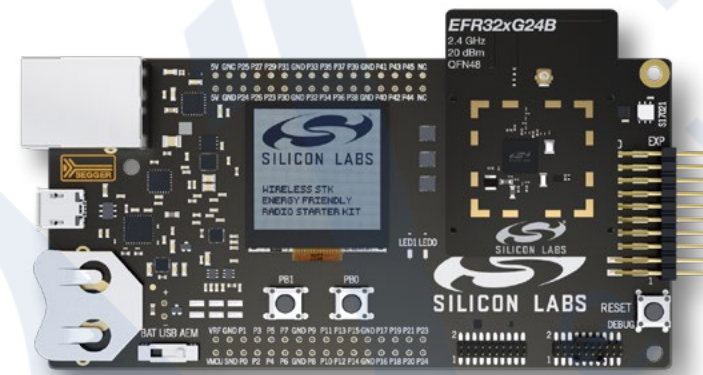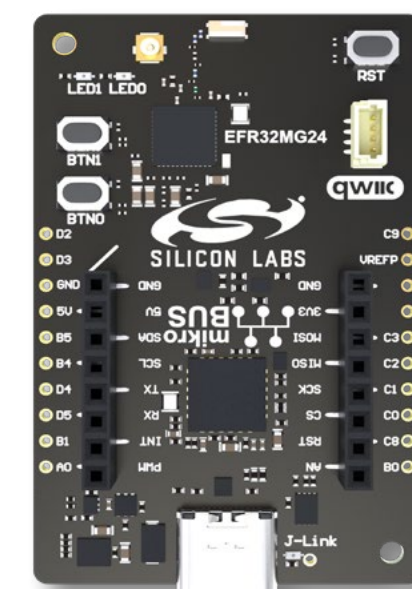
Dev Kit
EFR32xG24

A small, cost-effective, and feature-rich development kit based on the MG24 SoC for prototyping and experimenting with energy-friendly Matter devices; supports Qwik and Ada Fruit boards

Explorer Kit
EFR32xG24

An ultra-low-cost board for rapid Matter prototyping and concept creation on the MG24 SoC

Solutions for Matter Over Thread

Pro Kit Add-Ons

Radio Board

+10 dBm EFR32xG24 Wireless 2.4 GHz

Works with the MG24 Pro Kit; supports Bluetooth LE, Thread, Matter, and other protocols

Antenna Diversity
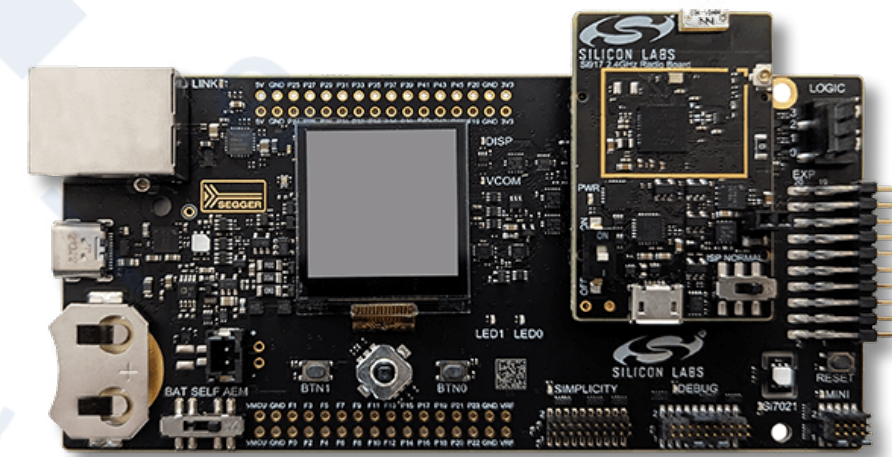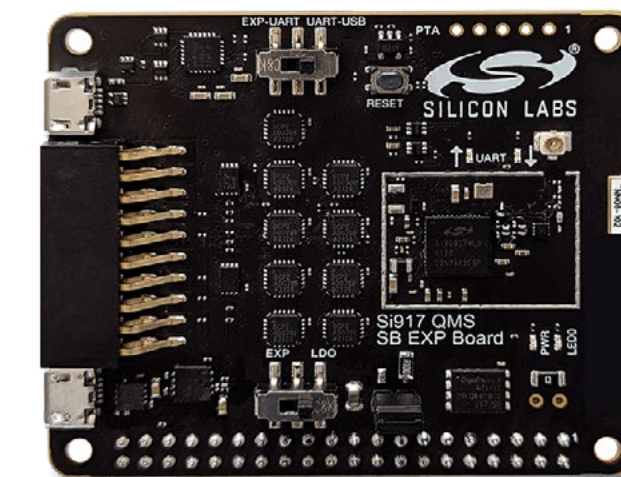
+20 dBm EFR32xG24 Wireless 2.4 GHz

Established for antenna diversity development; designed for managing multipath fading on the MG24 Pro Kit (includes reference)
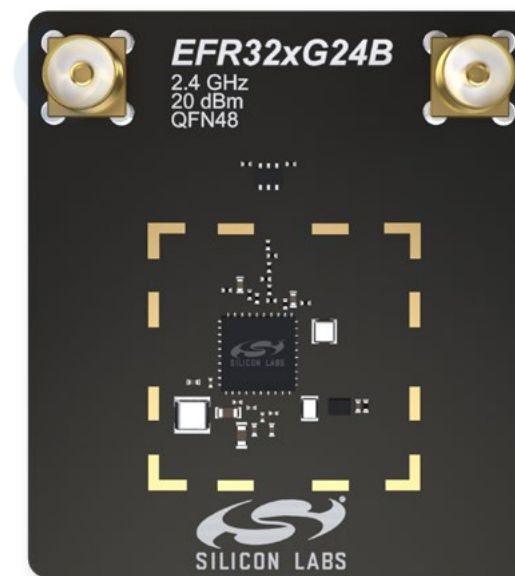
Radio Board

+20 dBm EFR32xG24 Wireless 2.4 GHz

Works with the MG24 Pro Kit to support Bluetooth LE, Thread, Matter, and other protocols
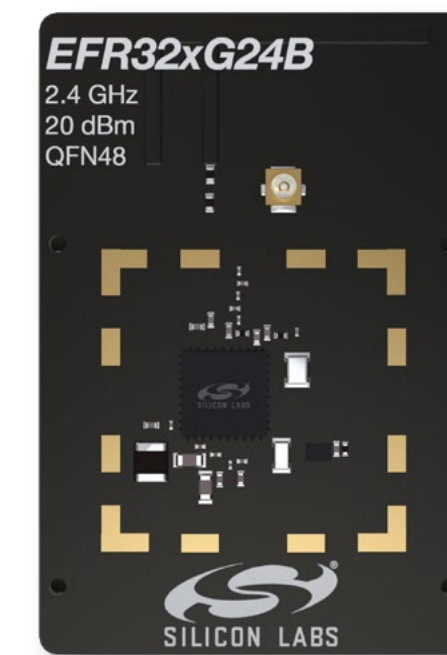
Solutions for Matter Over Wi-Fi

SiWx917 Dev Kit for SoC Mode

Radio board with SiWx917 that plugs into the Pro Kit baseboard; radio board provides access to the SiWx917 MCU peripherals and the internal application MCU for development using Simplicity Studio IDE and Debugger

SiWx917 Dev Kit for NCP/RCP Modes

For RCP and NCP hosted modes of operation, the expansion board plugs into an existing EFR32MG24 Pro Kit to enable the development of hosted applications, including Matter on the MG24
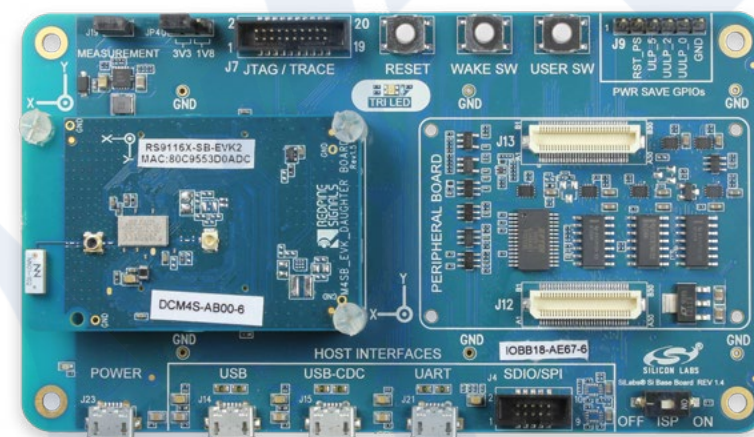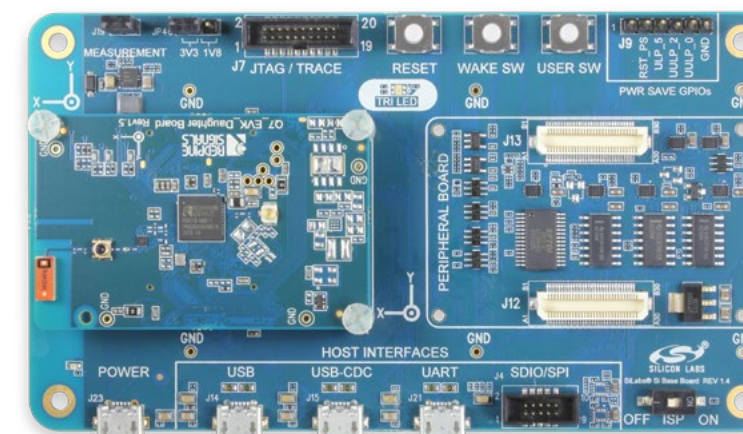
Solutions for Matter Over Wi-Fi

RS9116X EVK2 Wi-Fi + Bluetooth Dev Kit

Works with the MG24 Pro Kit; supports Bluetooth LE, Thread, Matter, and other protocols

RS9116X EVK1 Wi-Fi + Bluetooth Dev Kit

Established for antenna diversity development; designed for managing multipath fading on the MG24 Pro Kit (includes reference)

RS9116X Dual Band Wi-Fi + Bluetooth Development Kit (CC1 Module)

Supports Dual Band Wi-Fi 4 802.11 a/b/g/n on the 2.4 & 5 GHz bands and dual-mode Bluetooth, allowing designers to develop applications for the RS9116 CCx modules
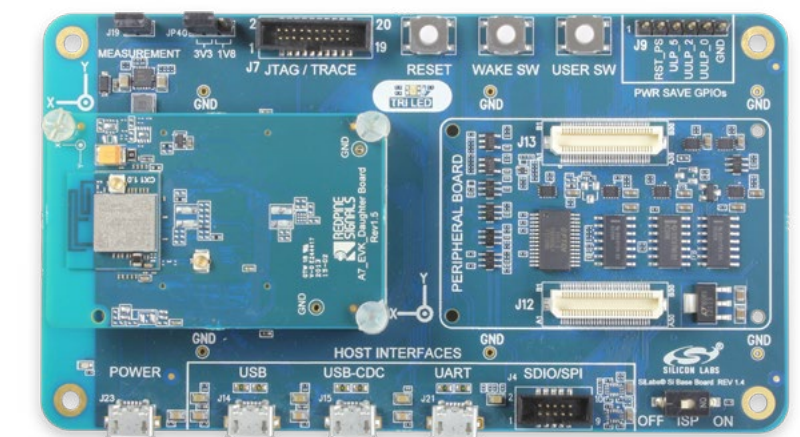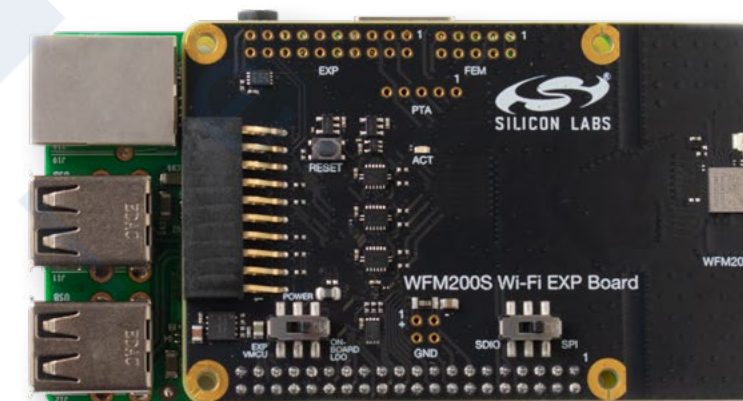
Solutions for Matter Over Wi-Fi

SLEXP8022C - WF200 Wi-Fi Expansion Kit with Raspberry Pi

Allows development on the WF200 Series of Wi-Fi Transceiver SoCs; includes a built-in Raspberry Pi Connector to get started immediately with Linux development and an EXP Connector to enable development on Silicon Labs' MCUs and Wireless MCUs

SLEXP8023C - WFM200S Wi-Fi Expansion Kit with Raspberry Pi

Enables development for the WFM200S Wi-Fi Transceiver modules
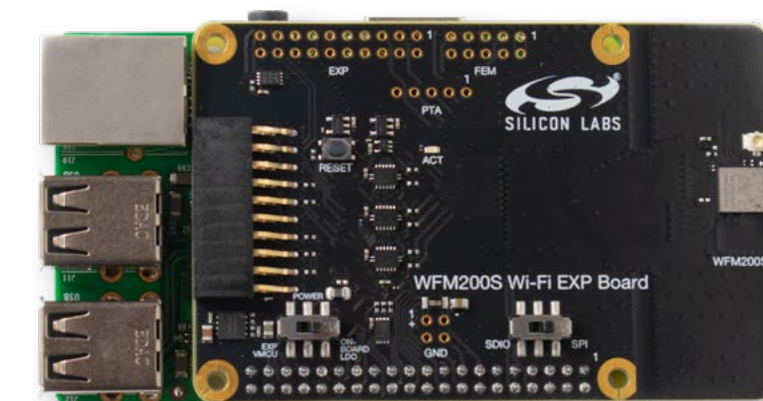
About
Silicon Labs

Silicon Labs is the leading provider of silicon, software, and solutions for a smarter, more connected world. Our industry-leading wireless solutions feature a high level of functional integration. Multiple complex mixed-signal functions are integrated into a single IC or system-on-chip (SoC) device, saving valued space, minimizing overall power consumption requirements, and improving products' reliability. We are the trusted partner for the world-leading consumer and industrial brands. Our customers develop solutions for a wide range of applications, from medical devices to smart lighting to building automation, and much more.