CYPRESS PRODUCT SELECTOR GUIDE
INTERNET OF THINGS (IoT) SOLUTIONS

CYPRESS®
EMBEDDED IN TOMORROW™

WIRELESS CONNECTIVITY

Internet of Things

Connectivity

Wearables

Wi Fi

Bluetooth®

Everything Connected
to the Network

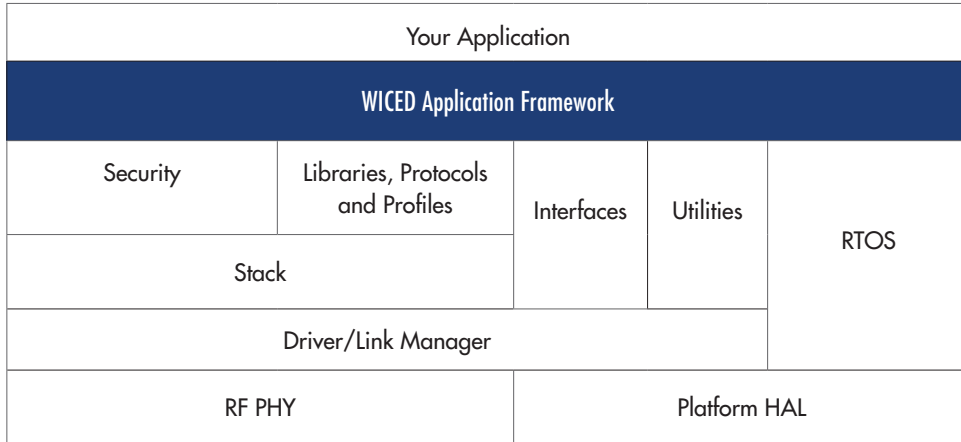Smart Devices
Control and Analyze

Body-Borne Computing
and Sensors

WICED® STUDIO THE ONLY SDK THAT INTEGRATES BLUETOOTH AND WI-FI

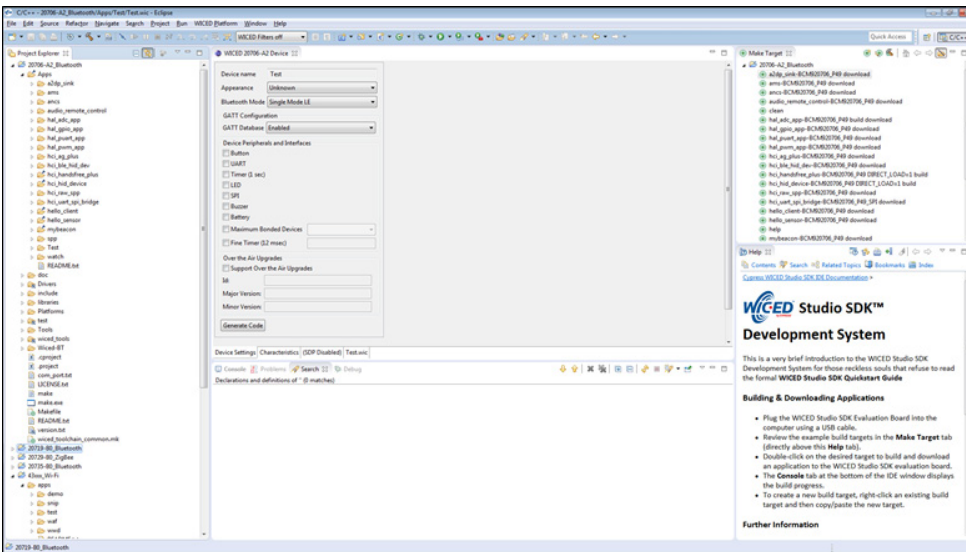**WICED® APIs and Application Framework abstract complexity**

Your Application				
WICED Application Framework				
Security	Libraries, Protocols and Profiles	Interfaces	Utilities	RTOS
Stack				
Driver/Link Manager				
RF PHY		Platform HAL		

Extensive support for industry standards

An intuitive graphical IDE simplifies development

HIGHLIGHTS

- Runs on Windows, OS X, and Linux through Eclipse-based integrated development environment (IDE)
- Single installer package with support for:
  - Wi-Fi
  - Bluetooth (BR/EDR and BLE)
- Sample applications for many popular use cases
- Code snippets for understanding WICED APIs
- Applications for manufacturing and certification
- Applications support for leveraging low-level drivers
- WICED Studio standardizes on tools, naming conventions, and structure from previous WICED SDKs
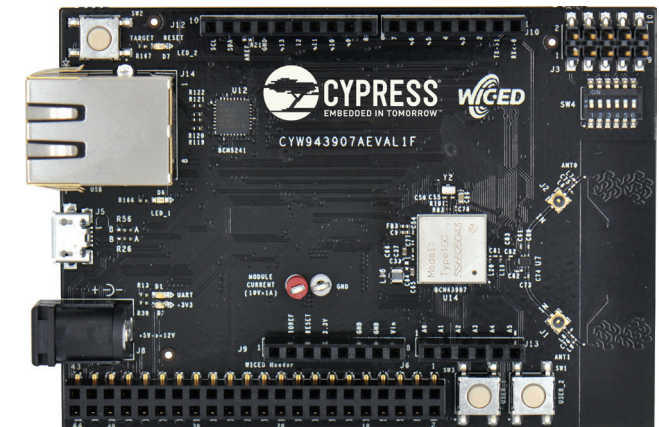
WICED Wi-Fi/Combo

WICED Wi-Fi/Combo. Cypress provides a full-featured WICED Development Kit and is working with partners to deliver turnkey hardware solutions of various form factors to readily enable Wi-Fi connectivity in system designs. The following reference WICED boards are available for development and device prototyping:

- **BCM943362WCD4_EVB:** The BCM943362WCD4 SIP module is mounted on a full-featured USB-based evaluation and development board that is fully compatible with the WICED Wi-Fi Software Development Kit (SDK). The onboard SIP module leverages the CYW43362 802.11n 2.4 GHz Wi-Fi controller with integrated antennas and diversity to improve the quality and reliability of a wireless link, plus the STM32F205 32-bit Arm® microcontroller.

- **BCM943364WCD1_EVB:** The BCM943364WCD1 SIP module is mounted on a full-featured USB-based evaluation and development board that is fully compatible with the WICED Wi-Fi Software Development Kit (SDK). Designed to be a lower cost alternative to the popular CYW43362, the onboard SIP module leverages the CYW43364 2.4 GHz WLAN IEEE 802.11b/g/n MAC/baseband/radio. In addition, the module integrates a power amplifier (PA) that meets the output power requirements of most handheld systems, a low-noise amplifier (LNA) for best-in-class receiver sensitivity, and an internal transmit/receive (iTR) RF switch, further reducing the overall solution cost and printed circuit board area. Powered by the STM32F411 32-bit Arm microcontroller.

- **CYW94343WWCD1_EVB:** The CYW94343WWCD1 SIP module is mounted on a full-featured USB-based evaluation and development board that is fully compatible with the WICED Wi-Fi SDK. Designed to be a lower cost alternative to the popular CYW4334X series, the onboard SIP module leverages the CYW4343W featuring an 802.11b/g/n MAC/baseband /radio and Bluetooth 4.x support. In addition, the module integrates a power amplifier (PA) that meets the output power requirements of most handheld systems, a low-noise amplifier (LNA) for best-in-class receiver sensitivity, and an internal transmit/ receive (iTR) RF switch, further reducing the overall solution cost and printed circuit board area. Powered by the STM32F411 32-bit Arm microcontroller.

- **CYW943907AEVAL1F:** The CYW943907AEVAL1F is a full-featured USB-based evaluation and development board that is fully compatible with the latest version of WICED Studio. The onboard SIP module leverages the CYW43907 802.11n dual-band (2.4 GHz and 5 GHz) Wi-Fi SoC which features an internal 320-MHz Arm® Cortex®-R4 processor and support for various on-chip interfaces like Ethernet (RMII/MII), UART, SPI/QSPI and I2C. Additionally, the board offers Arduino compatible headers for hardware expansion.

HomeKit Support: Due to external MCU memory constraints on most WICED based evaluation boards, iCloud support under HomeKit is not supported. To leverage WICED Studio for iCloud support under HomeKit, please use CYW954907AEVAL1F or CYW943907AEVAL1. The BCM943362WCD4_EVB, BCM943364WCD1_EVB, CYW94343WWCD1_EVB, CYW920719Q40EVB-01 and CYW920706WCDEVAL evaluation boards will all support HomeKit when not used with iCloud. Also note that the Apple MFi Authentication Chip is not populated on WICED evaluation platforms.

The CYW943907AEVAL1F is a full-featured evaluation and development board that is fully compatible with the latest version of WICED Studio.

WICED Wi-Fi/Combo

WICED Wi-Fi/Combo. Cypress provides a full-featured WICED Development Kit and is working with partners to deliver turnkey hardware solutions of various form factors to readily enable Wi-Fi connectivity in system designs. The following reference WICED boards are available for development and device prototyping:

**WICED Wi-Fi Software Development Kit.**
The WICED Wi-Fi SDK includes the following:

- An open-source build system and toolchain based on GNU 'make'.

- A GUI development environment based on Eclipse CDT that seamlessly integrates with a JTAG programmer and single-step, thread-aware debugger based on OpenOCD and gdb.

- A comprehensive software stack with a choice of several RTOS/TCP stack options including Express Logic, ThreadX/NetX, ThreadX/NetX Duo, and FreeRTOS/LwIP*.

- Advanced security and networking features, incorporating SSL/TLS, IPv4/IPv6 networking, and mDNS (Bonjour) device discovery.

- WICED Application Framework incorporating production-ready features, including bootloader, Flash storage API, over-the-air (OTA) upgrades, factory reset, and system monitor.

- Production-ready sample applications and application snippets that demonstrate how to use the WICED API feature set, including examples of Wi-Fi to Bluetooth (BT/BLE) bridging and Apple HomeKit (requires MFi license).

- Support for Amazon Web Services (AWS), Alibaba Aliyun and IBM Bluemix.

- Various test applications to aid manufacturing and certification.

- Full documentation included in the SDK.

For additional information on WICED modules currently in production, go to:
http://community.Cypress.com/community/wiced-wifi

*FreeRTOS/LwIP support not available within WICED Studio 4.x.
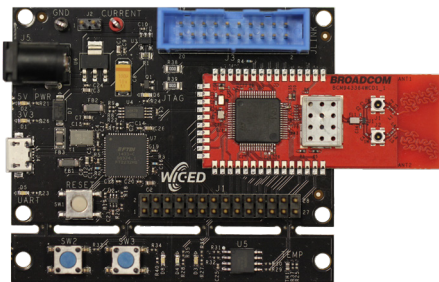
The BCM943364WCD1 WICED module mounted on a full-featured BCM943364WCD1_EVB development board.
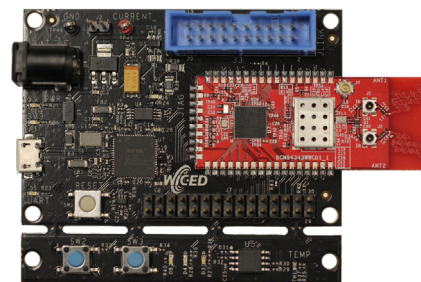
The CYW94343WWCD1 SIP module mounted on a full-featured CYW94343WWCD1_EVB evaluation board.

WICED Wi-Fi/Combo - New Releases

The Cypress CYW954907AEVAL1F Evaluation kit enables you to evaluate and develop single-chip Wi-Fi applications using the CYW54907 device. The kit uses a module based on CYW54907 device. CYW54907 is a single-chip 802.11ac dual-band (2.4 GHz and 5 GHz) Wi-Fi SoC that features 320-MHz Arm Cortex-R4 MCU for application subsystem and various on-chip interfaces like Ethernet (RMII/MII), UART, SPI/QSPI and I²C that in totality offers a very small-footprint IoT solution. This kit helps evaluate device functionality and develop applications quickly for faster time to market. Arduino compatibility allows to plug in off-the-shelf shields to expand hardware functionality for quick prototyping.
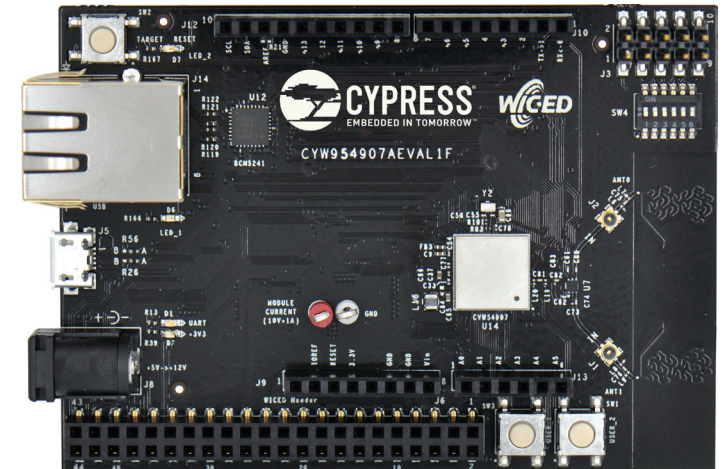
Kit Features:

- CYW54907 based module
- On-board PCB antenna with an option to connect external antenna
- Arduino compatible headers for hardware expansion
- Custom header to bring out additional GPIOs (WICED header)
- User switches and LEDs
- On-board programmer and debugger using USB interface and USB-UART bridge
- RJ45 connector for Ethernet
- 5 V to 12 V input using USB connector or power jack

Kit Contents:

- CYW954907AEVAL1F Evaluation board
- USB Standard-A to Micro-B cable
- Quick Start Guide

The PSoC® 6 WiFi-BT Pioneer Kit (CY8CKIT-062-WiFi-BT) is a low-cost hardware platform that enables design and debug of the PSoC 62 MCU and the Murata LBEE5KL1DX Module (CYW4343W WiFi + Bluetooth Combo Chip).

The PSoC 6 WiFi-BT Pioneer Kit features the PSoC 62 MCU: a single- or dual-core MCU, with an Arm Cortex-M4 and Arm Cortex-M0+, 1MB of Flash, 288KB of SRAM,104 GPIO, 7 programmable analog blocks, 56 programmable digital blocks, Full-Speed USB, a serial memory interface, a PDM-PCM digital microphone interface, and industry-leading capacitive-sensing with CapSense®.

PSoC Creator and WICED Studio are required to develop and design with the PSoC 6 WiFi-BT Pioneer Kit. PSoC Creator 4.2 or later is used to design standalone PSoC 6 MCU projects and WICED Studio 6.1 or later is used to design PSoC 6 + WiFi/BT projects.

To learn more about this kit, please refer to the User's Guide and other documentation located here
http://www.cypress.com/documentation/development-kitsboards/cy8ckit-062-wifi-bt-pioneer-kit

WICED Studio Bluetooth

Cypress's WICED Studio Bluetooth portfolio consists of dual-mode Bluetooth solutions that supports Bluetooth Classic i.e. Basic Rate (BR) and Enhanced Data Rate (EDR) as well as Bluetooth Low Energy (BLE). The Cypress WICED Studio Bluetooth portfolio includes Bluetooth 4.2 and Bluetooth 5.0 core specification-compliant, BR + EDR + BLE solutions that integrate Bluetooth standard profiles and protocols for embedded applications.

The Cypress CYW920719Q40EVB-01 Evaluation Kit enables you to evaluate and develop single-chip Bluetooth applications using the CYW20719, an ultra-low-power dual-mode Bluetooth 5.0 wireless MCU device. The CYW20719 is a stand-alone baseband processor with an integrated 2.4 GHz transceiver supporting BR/EDR/BLE. Manufactured using advanced CMOS low-power process, the CYW20719 employs the high of integration to reduce external components, thereby minimizing the device's footprint and cost. This kit helps evaluate device functionality and develop applications quickly for faster time-to-market.

The CYW20719 device and this evaluation kit are supported in WICED Studio 6.1 (or later).

Kit Features:

• 40-QFN CYW20719 Bluetooth 5.0-compliant BT/BLE wireless MCU

• Arduino compatible headers for hardware expansion

• On-board sensors - a 9-axis motion sensor (3D digital linear acceleration sensor, 3D digital angular rate sensor, and 3D digital magnetic sensor) and a thermistor

• User switches and LEDs

• USB connector for power, programming and USB-UART bridge
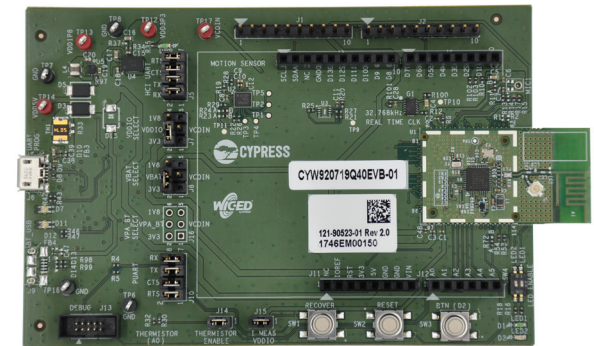
Kit Contents:

• CYW920719Q40EVB-01 Evaluation board

• USB Standard-A to Micro-B cable

• Quick Start Guide

The Cypress CYW920706WCDEVAL Evaluation Kit enables you to evaluate and develop single-chip Bluetooth applications using the CYW20706 device. The Cypress CYW20706 is a single-chip Bluetooth 4.2-compliant, stand-alone baseband processor with an integrated 2.4 GHz transceiver. This kit helps evaluate device functionality and develop applications quickly for faster time-to-market.

Kit Features:

• CYW20706 Bluetooth 4.2-compliant SoC

• Arduino compatible headers for hardware expansion

• User switches and LEDs

• USB connector for power, programming and USB-UART bridge

• The CYW20706 device and this evaluation kit are supported within WICED Studio
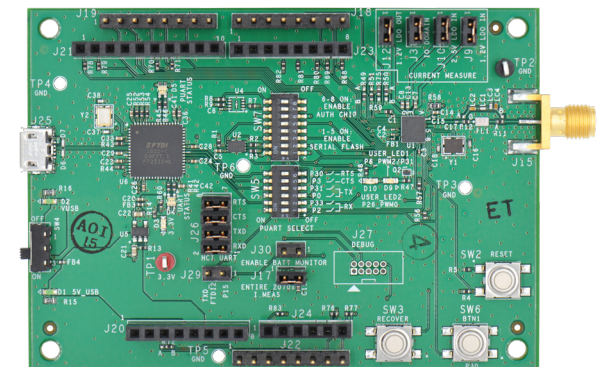
Kit Contents:

• CYW920706WCDEVAL Evaluation board

• USB Standard-A to Micro-B cable

• Quick Start Guide

WICED SMART

WICED SMART (Embedded Bluetooth Low Energy): WICED SMART is a very low-power family of pin-compatible modules that, when paired with the included SDK, vastly reduces the effort required to add "Bluetooth Smart" wireless connectivity and cable replacement capabilities to a range of embedded applications.

- Pin-Compatible Family: CYW20732, CYW20736 (Wireless Charging), and CYW20737 (RSA).

- BCM92073X_LE_KIT: A complete evaluation and development kit that includes the CYW20737, a fully integrated Bluetooth Smart SoC, and is configured for easy evaluation and software development.

- CYW20732S/CYW20736S/CYW20736E/CYW20737S/CYW20737L: A production module providing cable replacement functionality via an integrated Bluetooth Smart solution that includes onboard stack, crystal, antenna, and regulatory approvals (internal antenna and regulatory approvals not available on the CYW20736E).

- BCM92073X_LE_TAG4: Adds sensors for pressure, magnetometer, humidity, temperature, accelerometer, and gyroscope. Support for these products is available within the Cypress Support Community forums at: http://community.Cypress.com/welcome-wiced

WICED SMART Software Development Kit: Cypress provides a WICED SMART SDK and is working with partners to deliver turn key hardware solutions to enable Bluetooth Smart connectivity. Cypress's WICED SMART Development Kit eases development effort and simplifies the implementation of wireless connectivity in an array of consumer, medical, fitness, and home automation devices—especially those without existing networking support.

Developers use the WICED SMART Development Kit to create secure Bluetooth SMART wireless applications. The development kit contains the following:

- WICED SMART BCM92073X_LE_TAG4 small form-factor development board (includes coin cell holder) with added sensors for pressure, magnetometer, humidity, temperature, accelerometer, and gyroscope.

- SDK

- A full suite of documentation (data sheet, hardware user's guide, quick start guide, etc.).

- Integrated Eclipse-based IDE allowing access to peripherals, timers, stack, and profiles.

- Support for Arm RealView RVDS and CodeSourcery G++ Lite toolchains.

- Linux, OSX, or Windows development support.

- Sample profiles include: Proximity, Heart Rate Monitor, Health Thermometer, Blood Pressure Monitor, Time, Automation I/O, Glucose Meter, Cycling Speed Cadence, Running Speed Cadence, I^2C Temperature Sensor, SPI Master and Slave, SPI Pressure Sensor, multiple beacons, OTA Firmware Upgrade, UART Firmware Upgrade, Indoor Position, Location and Navigation, Long Characteristics, Rezence-based (A4WP) Power Transmitting Unit (PTU) and Power Receiving Unit (PRU) profiles, support for Simultaneous Master/Slave, PWM tones (pwm_tones), the ability to test data transfer speed/throughput (speed_test), and a wearables (watch) sample (which includes Apple Notification Center Service, Find Me client, Time client, and HID service).

WICED SmartBridge/Bluetooth Internet Gateway:

A multiple-connection Bluetooth SmartBridge/Bluetooth Internet Gateway with the following features: whitelist, bond storage, attribute caching, GATT procedures, configurable maximum concurrent connections, directed advertisements, and device address initialization for seamless bridging between Wi-Fi and Bluetooth low energy products.
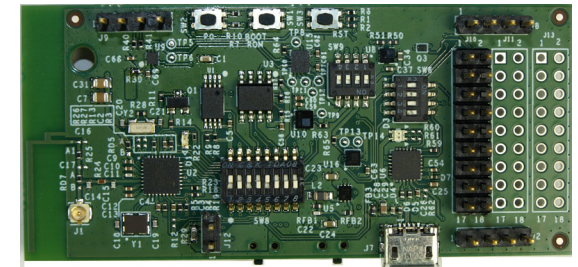
CYW20737 mounted on a BCM92073X_LE_TAG4 full-featured WICED SMART development board with sensors.

WICED SMART PRODUCT SELECTOR

WICED SMART (Embedded Bluetooth Low Energy): WICED SMART is a very low-power family of pin-compatible modules that, when paired with the included SDK, vastly reduces the effort required to add "Bluetooth Smart" wireless connectivity and cable replacement capabilities to a range of embedded applications.

	Devices	Description	Key Features	Software	Status
Value/Price	CYW20732	5 × 5 QFN	On-chip stack, Arm Cortex-M3, 1.2V operation.	Base device with embedded stack and key Bluetooth profiles preloaded in ROM. Supported by SDK 1.x.	Available
	CYW20732S	6.5 × 6.5 SIP Module (includes BT SMART, Crystal, EEPROM, BPF, Antenna, Passives, and Regulatory).			
	CYBLE-013025-00	PCB Module (includes BT silicon, Crystal, SFlash, Antenna, and Regulatory/Bluetooth compliance). 14 x 19 mm footprint.	On-chip stack, Arm Cortex-M3, simultaneous central and peripheral operation. Full modular certification for FCC, ISED, CE, and MIC. End Product qualified and listed against BT 4.1 specification.	Embedded stack and key Bluetooth profiles preloaded in ROM. Simultaneous Central, and Peripheral Operation.Supported by SDK 2.x. Preprogrammed with EZ-Serial FW platform to further decrease design cycle time.	Available
	CYBLE-013030-00	PCB Module (includes BT silicon, Crystal, Antenna, and Regulatory/Bluetooth compliance). 14 x 19 mm footprint.			
Value/Features	CYW20736	QFN	On-chip stack, Arm Cortex-M3, 1.2V operation, wireless charging, simultaneous central and peripheral operation.	Adds Wireless Charging, Simultaneous Central, and Peripheral Operation to BCM20732-based products. Supported by SDK 2.x.	Available
	CYW20736S	SIP Module (includes BT SMART, Crystal, EEPROM, BPF, Antenna, Passives, and Regulatory).			
	CYW20736E	SIP Module (includes BT SMART, Crystal, EEPROM, BPF, and Passives).			
Performance	CYW20737	QFN	On-chip stack, Arm Cortex-M3, 1.2V operation, wireless charging, simultaneous central and peripheral operation, NFC pairing, RSA security library, LE audio	Adds NFC Pairing, RSA Security Library, LE Audio, and Mesh Capabilities to BCM20736-based products. Supported by SDK 2.x.	Available
	CYW20737S	SIP Module (includes BT SMART, Crystal, EEPROM, BPF, Antenna, Passives, and Regulatory).			
	CYW20737L	SIP Module (includes BT SMART, Crystal, EEPROM, BPF, Antenna, Passives, and Regulatory). Supports an external DC-DC regulator to optimize power consumption.			
Evaluation	BCM920732_BLE_KIT	Full-featured development board for the CYW20732.	USB support for PC dev. Integrated Eclipse-based IDE.	Supported by SDK 1.x.	Available
	BCM92073X_LE_KIT	Full-featured development board for the CYW20737.	USB support for PC dev. Integrated Eclipse-based IDE.	Supported by SDK 2.x.	
	BCM92073X_LE_TAG4	Full-featured development board for the CYW20737 with added sensors for pressure, magnetometer, humidity, temperature, accelerometer, and gyroscope.	USB support for PC dev. Integrated Eclipse-based IDE.	Supported by SDK 2.x.	
	CYBLE-013025-EVAL	Evaluation board for CYBLE-0130xx-00 EZ-BLE module products.	USB support for PC development Arduino compatible.	Supported by SDK 2.x.	

CYPRESS BLUETOOTH MODULES

| | Cypress Module | Size (LxW, mm) | Availability | | IDE | EZ-Serial | Available User Resources/Features | | | | | Certification/Qualifications | | Tx/Rx | Range (meters) | Operating Temp |
			Samp. Qtr	Prod. Qtr			Flash (KB)	RAM (KB)	GPIO	Serial IO	Analog IO	Countries Certified	BT Sig Qualified			
Value	CYBLE-013030-00	14x19	Now	Now	WICED SMART	Yes	-	60	16	SPI/I²C/UART	ADC, PWM	FCC, IC, CE, MIC	Yes - 4.1	4dBm - 94dBm	70	-30~85C
	CYBLE-013025-00	14x19	Now	Now	WICED SMART	Yes	128	60	18	SPI/I²C/UART	ADC, PWM	FCC, IC, CE, MIC	Yes - 4.1	4dBm - 94dBm	70	-30~85C
	CYBLE-012011-00	14x19	Now	Now	Creator	Yes	128	16	23	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver	FCC, IC, CE, MIC, KC	Yes - 4.1	3dBm - 87dBm	50	-40~85C
	CYBLE-212019-00	14x19	Now	Now	Creator	Yes	256	32	23	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver	FCC, IC, CE, MIC, KC	Yes - 4.1	3dBm - 87dBm	50	-40~85C
	CYBLE-212020-01	14x19	Now	Now	Creator	Yes	256	32	23	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver	FCC, IC, CE, MIC, KC	Yes - 4.2	3dBm - 87dBm	50	-40~85C
Size	CYBLE-022001-00	10x10	Now	Now	Creator	Yes	128	16	16	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver	FCC, IC, CE, MIC, KC	Yes - 4.1	3dBm - 87dBm	50	-40~85C
	CYBLE-222005-00	10x10	Now	Now	Creator	Yesr	256	32	16	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver	FCC, IC, CE, MIC, KC	Yes - 4.1	3dBm - 87dBm	50	-40~85C
	CYBLE-222014-01	10x10	Now	Now	Creator	Yes	256	32	16	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver	FCC, IC, CE, MIC, KC	Yes - 4.2	3dBm - 87dBm	50	-40~85C
	CYW20737S/37L	6.5x6.5	Now	Now	WICED SMART	No	64	60	21	SPI/I²C/UART	ADC, PWM	Limited - FCC, IC, CE, MIC	Yes - 4.1	4dBm - 94dBm	70	-30~85C
	CYW20736S/36E	6.5x6.5	Now	Now	WICED SMART	No	64	60	21	SPI/I²C/UART	ADC, PWM	Limited - FCC, IC, CE, MIC	Yes - 4.1	4dBm - 94dBm	70	-30~85C

CYPRESS BLUETOOTH MODULES

	Cypress Module	Size (LxW, mm)	Availability		IDE	EZ-Serial	Available User Resources/Features					Certification/Qualifications		Tx/Rx	Range (meters)	Operating Temp
			Samp. Qtr	Prod. Qtr			Flash (KB)	RAM (KB)	GPIO	Serial IO	Analog IO	Countries Certified	BT Sig Qualified			
Long Range	CYBLE-202013-11	15x23	Now	Now	Creator	Yes	256	32	19	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver, Opamp, Comparator	Not Certified	Yes - 4.2	7.5dBm - 93dBm	400	-40~85C
	CYBLE-212006-01	15x23	Now	Now	Creator	Yes	256	32	19	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver, Opamp, Comparator	FCC, ISED, CE, MIC, KC	Yes - 4.2	7.5dBm - 93dBm	400	-40~85C
	CYBLE-202007-01	15x23	Now	Now	Creator	Yes	256	32	19	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver, Opamp, Comparator	FCC, ISED, CE, MIC, KC	Yes - 4.2	7.5dBm - 93dBm	400	-40~85C
	CYBLE-224110-00	9.5x15	Now	Now	Creator	Yes	256	32	25	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver, Opamp, Comparator , UDBs	FCC, ISED, CE, MIC, KC	Yes - 4.1	9.5dBm - 95dBm	400	-40~105C
	CYBLE-224116-01	9.5x15	Now	Now	Creator	Yes	256	32	25	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver, Opamp, Comparator , UDBs	FCC, ISED, CE, MIC, KC	Yes - 4.2	9.5dBm - 95dBm	400	-40~105C
Integration	CYBLE-014008-00	11x11	Now	Now	Creator	Yes	128	16	25	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver, Opamp, Comparator , UDBs	FCC, ISED, CE, MIC, KC	Yes - 4.1	3dBm - 87dBm	50	-40~85C
	CYBLE-214009-00	11x11	Now	Now	Creator	Yes	256	32	25	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver, Opamp, Comparator , UDBs	FCC, ISED, CE, MIC, KC	Yes - 4.1	3dBm - 87dBm	50	-40~85C
	CYBLE-214015-01	11x11	Now	Now	Creator	Yes	256	32	25	SPI/I²C/UART/I²S	CapSense, PWM, ADC, DAC, LCD Driver, Opamp, Comparator , UDBs	FCC, ISED, CE, MIC, KC	Yes - 4.2	3dBm - 87dBm	50	-40~85C
Dual-Mode	CYBT-343026-01	12x15.5	Now	Now	WICED STUDIO	Q3'18	512	352	11	SPI/I²C/PCM/I²S/UART	ADC, PWM	FCC, ISED, CE, MIC	Yes - 5.0	BT: 12 dBm BLE: 9 dBm Rx: -96.5dBm	200	-30~85C
Dual-Mode	CYBT-353027-02	9x9	Q2'18	Q2'18	WICED STUDIO	Q3'18	512	352	8	SPI/I²C/PCM/I²S/UART	ADC	FCC, ISED, CE, MIC	Yes - 5.0	BT: 12 dBm BLE: 9 dBm Rx: -96.5dBm	150	-30~85C
Dual-Mode	CYBT-423028-02	11x11	Q1'18	Q2'18	WICED STUDIO	Q3'18	1024	512	17	SPI/I²C/PCM/I²S/UART	ADC, PWM, PDM	FCC, ISED, CE, MIC	Yes - 5.0	BT: 4 dBm BLE: 4 dBm Rx: -95.5dBm	70	-30~85C

CYPRESS BLUETOOTH MODULES: EVALUATION KITS

Dev/Eval Kit Part Number		Description	Associated Modules/Silicon
Development/Evaluation Kits	BCM920732_BLE_KIT	Full-featured development board for the CYW20732	CYW20732
	BCM92073X_LE_KIT	Full-featured development board for the CYW20737	CYW2073x
	BCM92073X_LE_TAG4	Full-featured development board for the CYW20737 with added sensors for pressure, magnetometer, humidity, temperature, accelerometer, and gyroscope.	CYW2073x
	CYBLE-012011-EVAL	Evaluation board for CYBLE-012011-00 and CYBLE-012012-10 modules; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-012011-00, CYBLE-012012-10
	CYBLE-212019-EVAL	Evaluation board for CYBLE-212019-00 and CYBLE-212023-10 modules; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-212019-00, CYBLE-212023-10
	CYBLE-212020-EVAL	Evaluation board for CYBLE-212020-01 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-212020-01
	CYBLE-013025-EVAL	Evaluation board for CYBLE-013025-00 module	CYBLE-013025-00, CYBLE-013030-00
	CYBLE-022001-EVAL	Evaluation board for CYBLE-022001-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-022001-00
	CYBLE-222005-EVAL	Evaluation board for CYBLE-222005-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-222005-00
	CYBLE-222014-EVAL	Evaluation board for CYBLE-222014-01 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-222014-01
	CYBLE-224110-EVAL	Evaluation board for CYBLE-224110-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-224110-00
	CYBLE-212006-EVAL	Evaluation board for CYBLE-212006-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-212006-01

CYPRESS BLUETOOTH MODULES: EVALUATION KITS

	Dev/Eval Kit Part Number	Description	Associated Modules/Silicon
Development/Evaluation Kits	CYBLE-202007-EVAL	Evaluation board for CYBLE-202007-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-202007-01
	CYBLE-202013-EVAL	Evaluation board for CYBLE-202013-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-202013-11
	CYBLE-224116-EVAL	Evaluation board for CYBLE-224116-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-224116-01
	CYBLE-014008-EVAL	Evaluation board for CYBLE-014008-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-014008-00
	CYBLE-214009-EVAL	Evaluation board for CYBLE-214009-00 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-214009-00
	CYBLE-214015-EVAL	Evaluation board for CYBLE-214015-01 module; Use stand-alone or with CY8CKIT-042-BLE base	CYBLE-214015-01
	CYBT-343026-EVAL	Evaluation board for CYBT-343026-01 module	CYBT-343026-01
	CYBLE-022001-PROG	Programming Kit for CYBLE-x220xx-0x modules; Use with CY8CKIT-042-BLE base	CYBLE-022001-00, CYBLE-222005-00, CYBLE-222014-00
	CYBLE-012011-PROG	Programming Kit for CYBLE-x120xx-xx module; Use with CY8CKIT-042-BLE base	CYBLE-012011-00, CYBLE-012012-10, CYBLE-212019-00, CYBLE-212023-10, CYBLE-212020-01
	CYBLE-224110-PROG	Programming Kit for CYBLE-22411x-0x modules; Use with CY8CKIT-042-BLE base	CYBLE-224110-00, CYBLE-224116-01
	CYBLE-014008-PROG	Programming kit for CYBLE-x140xx-0x modules; Use with CY8CKIT-042-BLE base	CYBLE-014008-00, CYBLE-214009-00, CYBLE-214015-01
	CYBLE-212006-PROG	Programming kit for CYBLE-2x20xx-xx modules; Use with CY8CKIT-042-BLE base	CYBLE-212006-01, CYBLE-202007-01, CYBLE-202013-11
	CYBLE-212019-SHIELD	Arduino compatible shield using CYBLE-212019-00 module with pre-loaded EZ-Serial Firmware Platform	CYBLE-212019-00

WICED WI-FI AND BLUETOOTH PARTNER MODULES

Partner	PN	Status	Wi-Fi /BT PN	Wi-Fi /BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
Alinket	ALX41X	Prod	CYW20736	BLE	Arm Cortex-M3-Internal	24MHz	19 x 13.5 x 1.8	FCC/CE/ROHS	No	No	UART, SPI ADC, GPIO	PCB Antenna, 1MB Flash, BLE MIDI Support, Master mode (up to 8 Slaves) & Bridge mode (Slave - Master - Slave)
Alinket	ALX420	Prod	CYW20706	BT/BLE	Arm Cortex-M3-Internal	96MHz	8 x 8 x 2	No	No	No	HCI UART, PUART SPI, I²S, I²C, ADC, GPIO	BT 4.2, Custom Antenna Designs Supported, Supports Master/Slave mode, A2DP SRC & SNK & iAP2, MFi (HomeKit)
Alinket	ALX420A	Prod	CYW20706	BT/BLE	Arm Cortex-M3-Internal	96MHz	16 x 10 x 2	FCC/CE/ROHS	No	Yes	HCI UART, PUART SPI, I²S, I³C, ADC, GPIO	BT 4.2, On-Board Antenna, 1MB Flash, Supports Master/Slave mode, A2DP SRC & SNK & iAP2, MFi (HomeKit)
Alinket	ALX421A	Prod	CYW20707	BT/BLE	Arm Cortex-M4-STM32F411	100MHz	19 x 12 x 2.4	FCC/CE/ROHS	No	Yes	UART, SPI, USB, SDIO I²S, I²C, ADC, GPIO	BT 4.2, On-Board Antenna, 1MB Flash, Supports Master/Slave mode, A2DP SRC & SNK & iAP2, MFi (HomeKit)
Alinket	ALX422A	Prod	CYW20707	BT/BLE	Arm Cortex-M4-STM32F412	100MHz	21 x 12 x 2.4	FCC/CE/ROHS	No	Yes	UART, SPI, USB, SDIO I²S, I³C, ADC, GPIO	BT 4.2, On-Board Antenna, 1MB Flash, Support both Slave & Master mode, A2DP SRC & SNK, HFP & iAP2, MFi (HomeKit)
Alinket	ALX830X	Prod	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F411	100MHz	28 x 14.3 x 2.2	FCC/CE/ROHS	No	Yes	UART, SPI, USB, SDIO I²S, I³C, ADC, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP
Alinket	ALXC12X	Prod	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100MHz	32 x 16 x 3.1	FCC/CE/ROHS	No	Yes	UART, SPI I²C, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP, Bluetooth to WiFi Bridge
Alinket	ALXC10	Prod	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	8 x 8 x 1.6	No	No	Yes	SDIO, UART PCM	Custom Antenna Designs Supported, Host interfaces include SDIO/SPI for Wi-Fi, UART for Bluetooth
Alinket	ALX850X	Prod	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100 MHz	28 x 14.3 x 2.2	FCC/CE/ROHS	No	No	UART, SPI, USB I²S, I⁴C, ADC, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP
Alinket	ALXC20X	Prod	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100 MHz	28 x 14.3 x 2.2	FCC/CE/ROHS	No	No	UART, SPI, USB I²S, I²C, ADC, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP, Bluetooth to WiFi Bridge
Alinket	ALX870X	Prod	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F407	166MHz	32 x 16 x 3.1	FCC/CE/ROHS	No	No	UART, SPI, USB I²S, I²C, ADC, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP, Bluetooth to WiFi Bridge
Alinket	ALXC28	Prod	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Radio only	N/A	12 x 12 x 1.5	No	No	Yes	SDIO, UART I²S, PCM	Custom Antenna Designs Supported, Host interfaces include SDIO/SPI for Wi-Fi, UART for Bluetooth

WICED WI-FI AND BLUETOOTH PARTNER MODULES

Partner	PN	Wi-Fi /BT PN	Wi-Fi /BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
Azurewave	AW-BT304	CYW20719	BT/BLE	Arm Cortex-M4-Internal	96 MHz	6.0 x 5.2	None	No	Yes	UART	UART interface, BT 5.0
Azurewave	AW-NH650	CYW43362	2.4GHz, 802.11b/g/n,	Radio only	N/A	8 x 8	None	No	Yes	SDIO,SPI	SDIO interface WiFi and BT/BLE Radio only
Azurewave	AW-CU307	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M4-STM32F411	100 MHz	16 x 32 x 3.1	None	No	No	SPI , I²S, USART, CAN	1 MB MCU FLASH+ 256 KB RAM, 2MB SFLASH, Printed Antenna, u.FL
Azurewave	AW-NM288SM	CYW43362	2.4 GHz, 802.11b/g/n	Radio only	N/A	12 x 12	None	No	Yes	SDIO	SDIO interface, Radio only
Azurewave	AW-CU287	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F412	100 MHz	16 x 32 x 3.1	None	No	No	SPI , I²S, USART, CAN	1 MB MCU FLASH+ 256 KB RAM, 2MB SFLASH, Printed Antenna, u.FL
Azurewave	AW-AH640	CYW43340	2.4/5GHz, 802.11a/b/g/n, BT/BLE	Radio only	N/A	9 x 9	None	No	Yes	SDIO,UART	SDIO interface WiFi and BT/BLE Radio only
Azurewave	AW-NB197SM	CYW43438	2.4 GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	12 x 12	None	No	Yes	SDIO,UART	SDIO interface WiFi and BT/BLE Radio only
Azurewave	AW-NM230NF	CYW43438	2.4 GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	M.2 1216	FCC/IC/NCC/CE	Yes	Yes	SDIO,UART	SDIO interface WiFi and BT/BLE Radio only , Module Certification
Azurewave	AW-CU289	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100 MHz	16 x 32 x 3.1	None	No	No	SPI , I²S, USART, CAN	1 MB MCU FLASH+ 256 KB RAM, 2MB SFLASH, Printed Antenna, u.FL
Azurewave	AW-CM256SM	CYW43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio only	N/A	12 x 12	None	No	Yes	SDIO,UART	SDIO interface, Radio only
Azurewave	AW-CH639	CYW4339	2.4/5GHz, 802.11 ac/a/b/g/n, BT/BLE	Radio only	N/A	10 x 10	None	No	Yes	SDIO,UART	SDIO interface WiFi and BT/BLE Radio only
Azurewave	AW-CU315	CYW43907 CYW20707	2.4/5GHz, 802.11a/b/g/n, BT/ BLE (BT4.2)	Arm Cortex-R4-Internal	160/320 MHz	36 x 18	CE/FCC	Yes	Yes	SPI, UART, I²C, I²S, USB, SDIO	2 MB RAM,Module Certification, BT 4.2

WICED WI-FI AND BLUETOOTH PARTNER MODULES (Cont.)

Partner	PN	Wi-Fi /BT PN	Wi-Fi /BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
B-Link	BL-6181	CYW 43362	2.4GHz, 802.11b/g/n	Radio only	N/A	12 x 12	FCC/CE	No	Yes	SDIO	Certified radio only module with Linux support.
B-Link	BL-6212	CYW 43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	12 x 12	FCC/CE	No	Yes	SDIO	Certified radio only module with Linux support.
B-Link	BL-6255	CYW 43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio only	N/A	12 x 12	FCC/CE	No	Yes	SDIO	Certified radio only module with Linux support.
Inventek	ISM 43362-L36	CYW 43362	2.4 GHz, 802.11b/g/n	Radio Only	NA	14.5 × 24	FCC/IC/ CE/TELEC	No	Yes	SDIO	Virtual WICED or Linux drivers
Inventek	ISM43362-M3G-L44-E/U	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	15 × 30	FCC/IC/ CE/TELEC	No	No	UART, SPI	Configurable through AT Commands or WICED, OnBoard Antenna, or U.FL.
Inventek	ISM43362-B81	CYW43362	2.4 GHz, 802.11b/g/n	Radio Only	N/A	8 × 8	None	No	Yes	SDIO	Virtual WICED or Linux drivers
Inventek	ISM43364-WM-L44 -C/U	CYW43364	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-STM32F411	100 MHz	15 × 34	FCC/IC/CE	No	No	UART	Configurable through AT Commands or WICED, OnBoard Antenna, or U.FL.
Inventek	ISM4390-L57	CYW4390	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48MHz	10.5 × 10.5	None	Yes	No	UART	Configurable through AT commands or WICED
Inventek	ISM4390-M3H -L44-ED	CYW4390	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48MHz	14.5 × 30	FCC/IC/CE	Yes	No	UART	Configurable though AT commands or WICED, On-Board Etched Antenna and U.FL
Inventek	ISM43340 -M4G-L44-C/U	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F405	168MHz	14.5 × 34	FCC/IC/CE	No	No	UART, SPI	Configurable though AT commands or WICED, On-Board Chip Antenna or U.FL
Inventek	ISM43340-M4G-L44-10C/U	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F405	168MHz	14.5 × 34	FCC/IC/CE	No	No	UART, SPI	Configurable though AT commands or WICED, On-Board Chip Antenna or U.FL 10 Additional I/O added for MFI (LGA44+10) etc

Partner Evaluation Kits: https://community.cypress.com/community/wiced-wifi/wiced-wifi-partners

WICED WI-FI AND BLUETOOTH PARTNER MODULES (Cont.)

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
Inventek	ISM43340-L77	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Radio Only	NA	13 x 14	FCC/IC/CE	No	No	SDIO	Virtual WICED or Linux Drivers External Chip Antenna
Inventek	ISM4343-WBM-L44-10C/U	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100MHz	14.5 x 30	FCC/IC/CE	No	No	UART, SPI	Configurable though AT commands or WICED, On-Board Chip Antenna or U.FL, 10 Additional I/O added for MFI
Inventek	ISM4343-WBM-L151	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100MHz	10 x 10	FCC/IC/CE	No	No	UART, SPI	Configurable though AT commands or WICED
Inventek	ISM4343-WBM-L44-C/U	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100MHz	15 x 34	FCC/IC/CE	No	No	UART	Configurable through AT Commands or WICED, On-Board Antenna or U.FL
Inventek	ISM4343-L77	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Radio Only	NA	13 x 14	FCC/IC/CE	No	Yes	SDIO	Virtual WICED or Linux Drivers
Inventek	ISM4343-L151	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Radio Only	NA	10 x 10	FCC/IC/CE	No	Yes	SDIO	Virtual WICED or Linux Drivers
Inventek	ISM43907-WM-L170	CYW43907	2.4/5 GHz, 802.11b/g/n	Arm Cortex-R4-Internal	160/300MHz	11 x 11	FCC/IC/CE	No	No	UART, SPI, USB	Configurable though AT commands or WICED
Inventek	ISM43907-WM-L44	CYW43907	2.4/5 GHz, 802.11b/g/n	Arm Cortex-R4-Internal	160/300MHz	14.5 x 30	FCC/IC/CE	No	No	UART, SPI, USB	Configurable though AT commands or WICED, On-Board Chip Antenna or U.FL
Inventek	ISM43907-WBM-L170	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	160/300MHz	11 x 11	FCC/IC/CE	No	No	UART, SPI, USB	Configurable though Inventek's IWIN API (AT commands & Cloud Agent FW) or WICED, On-Board Chip Antenna or U.FL
Inventek	ISM43903-R48-L54-E/U	CYW43903	2.4/5 GHz, 802.11b/g/n	Arm Cortex-R4-Internal	160/300MHz	14.5 x 30	FCC/IC/CE	No	No	UART, SPI, USB	Configurable though AT commands or WICED, On-Board Chip Antenna or U.FL
Inventek	ISM20732S	CYW20732	BLE	Arm Cortex-M3-Internal	24MHz	6.5 x 6.5	FCC/IC/CE	No	No	SPI, I^{2}C, JTAG	Lowest Cost BLE SiP Module Solution
Inventek	ISM20736S	CYW20736	BLE	Arm Cortex-M3-Internal	24MHz	6.5 x 6.5	FCC/IC/CE	No	No	SPI, I^{2}C, JTAG	Wireless charging, simultaneous central and peripheral operation
Inventek	ISM20706A2S	CYW20706	BT/BLE	Arm Cortex-M3-Internal	96MHz	6.0 x 8.6	FCC/IC/CE	No	No	SPI, I^{2}C, JTAG	Embedded Antenna BT4.2+HS SIP Module
Iton	CW2438-44P	CYW43438	2.4 GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	12 x 12 x 1.8	No	No	Yes	SDIO, SPI, UART	Host interface: SDIO for Wi-Fi, UART for BT, 2.4GHz 11n Wi-Fi and BT/BLE 4.2 combo, Radio only.
Iton	CW2455-44P	CYW43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	12 x 12 x 1.8	No	No	Yes	SDIO, UART, PCM	Host interface: SDIO for Wi-Fi, UART and PCM for BT, 2.4G and 5G DB Wi-Fi, BT 4.2 802.11ac, Radio only.

Partner Evaluation Kits: https://community.cypress.com/community/wiced-wifi/wiced-wifi-partners

WICED WI-FI AND BLUETOOTH PARTNER MODULES (Cont.)

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
Lantronix	XPCW1002100B	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120 MHz	26.1 x 18.3	FCC/IC/CE/TELEC	No	No	UART ×2, SPI, USB, 8 GPIOs	U.FL Antenna, 1MB+8MB Flash and 128KB RAM, Production Ready S/W, Filesystem, OTA, Config, SDK, Serial to Wi-Fi, Ethernet over USB to Wi-Fi.
Lantronix	XPCW1003100B	CYW43362	2.4 GHz, 802.11n	Arm Cortex-M3-STM32F205	120 MHz	30.1 x 18.3	FCC/IC/CE/TELEC	No	No	UART ×2, SPI, USB, 8 GPIOs	On Module Antenna, 1MB+8MB Flash and 128KB RAM, Production Ready S/W, Filesystem, OTA, Config, SDK, Serial to Wi-Fi, Ethernet over USB to Wi-Fi.
Lantronix	XPW100100B-01	CYW43362	2.4 GHz, 802.11n	Arm Cortex-M3-STM32F205	120 MHz	24 x 16.5	FCC/IC/CE/TELEC	No	No	UART ×2, SPI, USB, 8 GPIOs	U.FL Antenna, 1 MB + 8 MB Flash and 128 KB RAM, production-ready S/W, file system, OTA, config, SDK, Serial-to-Wi-Fi, Ethernet-over-USB to Wi-Fi.
Lantronix	PW205010001B	CYW4339	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm9 ™ -AT91SAM9G25	400 MHz	47 x 47	FCC/IC/CE/TELEC/SRRC	Yes	Yes	UART x 2, Eth (with PHY), USB (2x Host, 1x Device), SPI, I²C, 17 GPIOs	Only Industrial Grade 802.11ac Embedded Wi-Fi Gateway and System-on-Module (Dual u.fl Antennas) 1) Fully certified Wi-Fi and Connection Manager Stack 2) Device Local Management via CLI, XML, HTTP and Cloud enabled Remote Management and Application Deployment (MACH10) 3) Enterprise Wi-Fi Security, Secure Boot, Secure Upgrade, Secure Key Storage 4) Yocto Linux Support 5) Various Operating Modes - Bridge, Gateway, Concurrent AP/STA
Lantronix	PW205020001B	CYW4339	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm9-AT91SAM9G25	400 MHz	47 x 47	FCC/IC/CE/TELEC/SRRC	Yes	Yes	UART x 2, Eth (with PHY), USB (2x Host, 1x Device), SPI, I²C, 17 GPIOs	Only Industrial Grade 802.11ac Embedded Wi-Fi Gateway and System-on-Module (u.fl + On-module antenna) 1) Fully certified Wi-Fi and Connection Manager Stack 2) Device Local Management via CLI, XML, HTTP and Cloud enabled Remote Management and Application Deployment (MACH10) 3) Enterprise Wi-Fi Security, Secure Boot, Secure Upgrade, Secure Key Storage 4) Yocto Linux Support 5) Various Operating Modes - Bridge, Gateway, Concurrent AP/STA
Lantronix	XPC240100B	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	320 MHz	25 x 17	FCC/IC/CE/TELEC/SRRC	Yes	No	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I²C, 11 GPIOs	Smallest embedded IoT gateway for secure connected products 1) Essential Connectivity Applications (Serial/USB to Wi-Fi, Ethernet to Wi-Fi) 2) Comprehensive Device Security (TruPort Security, Enterprise Wi-Fi Security) 3) Cloud-Enabled Remote Management and Data-access (MACH10) 4) SDK Customization (Hosted and Hostless Microcontroller modes) 5) LGA, Dual u.fl Antenna, 8MB Flash and 2MB RAM
Lantronix	XPC240200B	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	320 MHz	25 x 17	FCC/IC/CE/TELEC/SRRC	Yes	No	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I²C, 11 GPIOs	Smallest embedded IoT gateway for secure connected products 1) Essential Connectivity Applications (Serial/USB to Wi-Fi, Ethernet to Wi-Fi) 2) Comprehensive Device Security (TruPort Security, Enterprise Wi-Fi Security) 3) Cloud-Enabled Remote Management and Data-access (MACH10) 4) SDK Customization (Hosted and Hostless Microcontroller modes) 5) LGA, Dual u.fl Antenna, 8MB Flash and 2MB RAM
Lantronix	XPC240300B	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	320 MHz	35 x 22	FCC/IC/CE/TELEC/SRRC	Yes	No	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I²C, 11 GPIOs	Smallest embedded IoT gateway for secure connected products 1) Essential Connectivity Applications (Serial/USB to Wi-Fi, Ethernet to Wi-Fi) 2) Comprehensive Device Security (TruPort Security, Enterprise Wi-Fi Security) 3) Cloud-Enabled Remote Management and Data-access (MACH10) 4) SDK Customization (Hosted and Hostless Microcontroller modes) 5) Edge Connector, Dual u.fl Antenna, 8MB Flash and 2MB RAM

Partner Evaluation Kits: https://community.cypress.com/community/wiced-wifi/wiced-wifi-partners

WICED WI-FI AND BLUETOOTH PARTNER MODULES (Cont.)

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
Lantronix	XPC240400B	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	320 MHz	35 x 22	FCC/IC/CE/TELEC/SRRC	No	No	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I²C, 11 GPIOs	Smallest embedded IoT gateway for secure connected products 1) Essential Connectivity Applications (Serial/USB to Wi-Fi, Ethernet to Wi-Fi) 2) Comprehensive Device Security (TruPort Security, Enterprise Wi-Fi Security) 3) Cloud-Enabled Remote Management and Data-access (MACH10) 4) SDK Customization (Hosted and Hostless Microcontroller modes) 5) Edge Connector, On-module Antenna, 8MB Flash and 2MB RAM
Lantronix	XPC250100B	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	320 MHz	25 x 17	FCC/IC/CE/TELEC/SRRC	No	No	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I²C, 11 GPIOs	Smallest embedded IoT gateway for secure connected products 1) Essential Connectivity Applications (Serial/USB to Wi-Fi, Ethernet to Wi-Fi, BLE to Wi-Fi, BT/BLE to Host Controller) 2) Comprehensive Device Security (TruPort Security, Enterprise Wi-Fi Security) 3) Cloud-Enabled Remote Management and Data-access (MACH10) 4) SDK Customization (Hosted and Hostless Microcontroller modes) 5) LGA, Dual u.fl Antenna, 8MB Flash and 2MB RAM 6) Independent Antennas for BT 4.2 and Wi-Fi
Lantronix	XPC250300B	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	320 MHz	35 x 22	FCC/IC/CE/TELEC/SRRC	No	No	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I²C, 11 GPIOs	Smallest embedded IoT gateway for secure connected products 1) Essential Connectivity Applications (Serial/USB to Wi-Fi, Ethernet to Wi-Fi, BLE to Wi-Fi, BT/BLE to Host Controller) 2) Comprehensive Device Security (TruPort Security, Enterprise Wi-Fi Security) 3) Cloud-Enabled Remote Management and Data-access (MACH10) 4) SDK Customization (Hosted and Hostless Microcontroller modes) 5) Edge Connector, Dual u.fl Antenna, 8MB Flash and 2MB RAM 6) Independent Antennas for BT 4.2 and Wi-Fi
Laird	TiWi-C-W (450-0118)	CYW 4390	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48 MHz	10.5 x 10.5	FCC/IC/CE/ETSI	Yes	No	I²C, USB, JTAG	Pre-integrated cloud agent for TiWiConnect IoT Platform (www.tiwiconnect.com), Multiple 2.4 GHz antenna options: SMT Chip, Dipole, FlexPIFA™, Industrial Temp Rated: -40 to 85 C, Dev Kit featuring TiWiConnect available.
Laird	Sterling-LWB (450-0152)	CYW 4343W	2.4 GHz 802.11b/g/n, BLE/BT	Radio Only	N/A	15.5 x 21 (Int. Antenna)	FCC/IC/CE/Giteki/RCM	No	Yes	SDIO, UART, I²S	On-Module Antenna Version with advanced chip antenna with greater resistance to de-tuning vs. other chip or trace antennas, Nearly 60% lower Active Rx power consumption vs. LSR's current TiWi-BLE module, Multiple 2.4 GHz antenna options: SMT Chip, Dipole, FlexPIFA™ & FlexNotch™, Industrial Temp Rated: -40 to +85° C, On-Module version with U.FL external antenna port (Item # 450-0148) also available. Sterling-LWB for WICED' reference platform enables Sterling-LWB to be used for embedded MCU applications, validated with STM32F411 (Evaluation board 450-0173).
Laird	Sterling-LWB (450-0148)	CYW 4343W	2.4 GHz 802.11b/g/n, BLE/BT	Radio Only	N/A	15.5 x 21 (Int. Antenna)	FCC/IC/CE/Giteki/RCM	No	Yes	SDIO, UART, I²S	On-Module version with U.FL external antenna port for simplified integration, Nearly 60% lower Active Rx power consumption vs. LSR's current TiWi-BLE module, Multiple 2.4 GHz antenna options: SMT Chip, Dipole, FlexPIFA™ & FlexNotch™, Industrial Temp Rated: -40 to +85° C, On-Module Antenna Version (Item # 450-0152) also available, with advanced chip antenna with greater resistance to de-tuning vs. other chip or trace antennas. Sterling-LWB for WICED' reference platform enables Sterling-LWB to be used for embedded MCU applications, validated with STM32F411 (Evaluation board 450-0173).

Partner Evaluation Kits: https://community.cypress.com/community/wiced-wifi/wiced-wifi-partners

WICED WI-FI AND BLUETOOTH PARTNER MODULES (Cont.)

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
Laird	Sterling-LWB (450-0159)	CYW 4343W	2.4 GHz 802.11b/g/n, BLE/BT	Radio Only	N/A	10 x10 (SiP only, no antenna)	FCC/IC/ CE/ Giteki/ RCM	No	Yes	SDIO, UART, I²S	Nearly 60% lower Active Rx power consumption vs. LSR's current TiWi-BLE module, Multiple 2.4 GHz antenna options: SMT Chip, Dipole, FlexPIFA™ & FlexNotch™, Industrial Temp Rated: -40 to +85° C, On-Module Antenna Version available (Item # 450-0152), with advanced chip antenna with greater resistance to de-tuning vs. other chip or trace antennas, On-Module version with U.FL external antenna port (Item # 450-0148) also available. Sterling-LWB for WICED' reference platform enables Sterling-LWB to be used for embedded MCU applications, validated with STM32F411 (Evaluation board 450-0173).
Laird	Sterling-LWB5 (450-0162)	CYW 43353	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	10 x10 (SiP only, no antenna)	FCC/IC/ CE/ETSI	No	Yes	SDIO, UART, I²S	Industry leading dual-band Wi-Fi/Combo module that supports 802.11 ac for ultra-high data rate applications, broad country certifications and multiple certified antenna options, Industrial Temp Rated: -40 to 85 C. Similar to Sterling-LWB, also comes in configurations that include on-module chip antennas OR U.FL connectors. Module versions (450-0168, 450-0169) are pin and footprint compatible with the Sterling-LWB.
Laird	Sterling-LWB5 (450-0169)	CYW 43353	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	15.5 x 21 (Int. Antenna)	FCC/IC/ CE/ETSI	No	Yes	SDIO, UART, I²S	Industry leading dual-band Wi-Fi/Combo module that supports 802.11 ac for ultra-high data rate applications, broad country certifications and multiple certified antenna options, Industrial Temp Rated: -40 to 85 C. Similar to Sterling-LWB, also comes in configurations that include on-module chip antennas OR U.FL connectors. Module versions (450-0168, 450-0169) are pin and footprint compatible with the Sterling-LWB.
Laird	Sterling-LWB5 (450-0168)	CYW 43353	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	15.5 x 21 (Ext. Antenna)	FCC/IC/ CE/ETSI	No	Yes	SDIO, UART, I²S	Industry leading dual-band Wi-Fi/Combo module that supports 802.11 ac for ultra-high data rate applications, broad country certifications and multiple certified antenna options, Industrial Temp Rated: -40 to 85 C. Similar to Sterling-LWB, also comes in configurations that include on-module chip antennas OR U.FL connectors. Module versions (450-0168, 450-0169) are pin and footprint compatible with the Sterling-LWB.
Lierda	LSD1WF-WIFISUQI	CYW43364	2.4GHz, 802.11b/g/n	Radio Only	N/A	12.0 x 12.0	No	No	Yes	SDIO	WiFi transfer module with crystal oscillator, WiFi SDIO Interface, Linux support
Lierda	LSD1WF-WIFISUQI	CYW 43438	2.4GHz,802.11b/g/n BT/BLE	Radio Only	N/A	12.0 x 12.0	No	No	Yes	SDIO UART	WiFi transfer module with crystal oscillator, WiFi SDIO Interface and BT/BLE, Linux support
Murata	Type 1PA (LBCA1KU1PA-279)	CYW 20719	BT/BLE	Arm Cortex-M4-Internal	N/A	5.9 x 5.1 x 1.1	CE/FCC/ IC	N/A	No	UART, SPI	BT 5.0
Murata	Type 1GR (LBCA1ZZ1GR-084)	CYW 20736	BLE	Cortex-M3 (Internal)	N/A	9.0 x 7.0 x 1.2	CE/FCC/ IC	External	No	UART, SPI	Bluetooth 4.1, with Antenna,
Murata	Type 1BW (LBEH5DU1BW-777)	CYW 43340	2.4 / 5GHz, 802.11a/b/g/n, BT/ BLE	Radio Only	N/A	8 x 7.5	No	External	Yes	WLAN: SDIO BT: UART	Part of i.MX6 platform with Linux drivers integrated in NXP/Freescale Linux distribution, -20 to +75° C
Murata	Type 1CD Imp003 (LBWA1ZV1CD-716)	CYW 43362	2.4 G, b/g/n	Arm Cortex-M4-STM32F405	168 MHz	10 x 7.9	CE/FCC/ IC	External	No	UART, SPI	Same as YD but with Electric Imp Cloud support. Modular Cert., -20 °C to +70 °C
Murata	Type YDD (LBWB1ZZYDZ-683)	CYW 43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120 MHz	33 x 18	CE/FCC/ IC/TELEC	No	No	UART, SPI	Ayla Cloud Support,1024KB FLASH 128KB RAM 32KHZ OSC, -40 °C to +85 °C
Murata	Type 1FX (LBWA1KL1FX-875)	CYW 43364	2.4 GHz, 802.11b/g/n	Radio Only	N/A	6.95 x 5.15	CE/FCC/ IC	External	Yes	SDIO, SPI	Pin to Pin compatible to 1DX. Diversity w/ SW control pins.Part of i.MX6 platform with Linux drivers integrated in NXP/Freescale Linux distribution, -20 °C to +75 °C. Reference Certified

Partner Evaluation Kits: https://community.cypress.com/community/wiced-wifi/wiced-wifi-partners

WICED WI-FI AND BLUETOOTH PARTNER MODULES (Cont.)

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
Murata	Type 1CK (LBEE5ZZ1CK-982)	CYW 4339	2.4 GHz, 802.11b/g/n	Radio Only	N/A	33 x 18	FCC/IC	External	Yes	WLAN: SDIO BT: UART	Part of i.MX6 platform with Linux drivers integrated in NXP/Freescale Linux distribution, -20 to +75° C This is a daughter card based on ZP module with on board antenna
Murata	Type ZP (LBEH5HMZPC-869)	CYW4339	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	7.8 x 7.4	No	External	Yes	WLAN: SDIO BT: UART	Part of i.MX6 platform with Linux drivers integrated in NXP/Freescale Linux distribution, -20 to +75 deg.C
Murata	Type 1HD (LBWA1ZZ1HD-004)	CYW43438	2.4 GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100 MHz	21 x 17.5	CE/FCC/IC/TELEC	External	No	UART, SPI	1024KB FLASH 256KB RAM WICED, Apple HomeKit support, Low current, Certified with embedded antenna, -20 °C to +75 °C
Murata	Type 1LD (LBEE5PA1LD-005)	CYW43438	2.4 GHz, 802.11b/g/n	Arm Cortex-M4-STM32F412	100 MHz	8.9 x 7.8	CE/FCC/IC/TELEC	External	No	UART, SPI, I²C, I²S, GPIO	1024KB FLASH 256KB RAM WICED, Apple HomeKit support, Low current, -20 °C to +75 °C
Murata	Type 1MD Imp004m (LBWA1ZZ1MD-011)	CYW43438	2.4 GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100 MHz	21 x 17.5	CE/FCC/IC/TELEC	External	No	UART, SPI, I²C, PWM, GPIO, ADC	1024KB FLASH 256KB RAM, ElectricImp Imp004m, Certified with embeded antenna, -20 °C to +75 °C
Murata Ayla	Type 1VD (LBEE5ZZ1VD-225)	CYW43438	2.4GHz, 802.11b/g/n+BLE	Arm Cortex-M4-STM32F412	100 MHz	21 x 17.5	CE/FCC/IC/TELEC	External	No	UART, SPI	1024KB FLASH 256KB RAM Supported by Ayla Apple HomeKit support, Low current, Certified with embedded antenna, -20 °C to +75 °C
Murata	Type 1DX (LBEE5KL1DX-883)	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	6.95 x 5.15	CE/FCC/IC	External	Yes	WLAN: SDIO BT: UART	Part of i.MX6 platform with Linux drivers integrated in NXP/Freescale Linux distribution, -20 °C to +75 °C, Reference Certified Use Future Electronics Nebula kit for WICED support.
Murata	Type 1LN (LBEE5KL1LN-081)	CYW 4343W	2.4GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	6.95 x 5.15	CE/FCC/IC/TELEC	External	Yes	WLAN: SDIO BT: UART	Part of i.MX6 platform with Linux drivers integrated in NXP/Freescale Linux distribution, -20 °C to +85 °C, Reference Certified, Supports 4wire coex(GPIO1~4)
Murata	Type 1MW (LBEE5HY1MW-230)	CYW 43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	7.9 x 7.3	CE/FCC/IC	External	Yes	WLAN: SDIO BT: UART	Part of i.MX6 platform with Linux drivers integrated in NXP/Freescale Linux distribution, High throughput on 11ac, -20 to +75° C
Murata	Type 1AD (LBWA1CS1AD-806)	CYW 4390	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48 MHz	9.4 x 8.9	CE/FCC/IC/TELEC	External	No	I²C, USB, JTAG	Lowest cost cloud enabled module CYW4390. 2MB FLASH and 448KB SRAM Supported with Ayla software only. Modular Cert., -30 °C to +85 °C
Murata	Type 1AD-D (LBWB1ZZ1AD-812)	CYW 4390	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48 MHz	33 x 18	CE/FCC/IC/TELEC	External	No	I²C, USB, JTAG	Same as 1AD but with Antenna. For Japan markets, -30 °C to +85 °C
Murata	Type 1GC (LBWA1UZ1GC-958)	CYW 43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	320 MHz	10 x 10	CE/FCC/IC	External	No	UART, SPI, I²C, I²S, PWM, GPIO, USB, Ethernet	WICED, High performance CPU. Gateway for WLAN and Ethernet. Audio streaming. Modular Cert. RAM 2MB, -20 °C to +70 °C
Murata	Type 1GC Imp005 (LBWA1UZ1GC-901)	CYW 43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	320 MHz	10 x 10	CE/FCC/IC	External	No	UART, SPI, I²C, I²S, PWM, GPIO, USB, Ethernet	Electric Imp, High performance CPU. Gateway for WLAN and Ethernet. Audio streaming. Modular Cert. RAM 2MB. ElectricImp Imp005,-20 °C to +70 °C
Murata	Type 1QP (LBEE5WQ1QP-276)	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n + BT/BLE	Arm Cortex-R4-Internal	320 MHz	11 x 11	CE/FCC/IC	External	No	UART, SPI, I²C, I²S, PWM, GPIO, USB, Ethernet	WICED, High performance CPU. Gateway for WLAN and Ethernet. Audio streaming. Modular Cert. RAM 2MB, -20 °C to +70 °C
Murata	Type 1PS (LBWA1UZ1PS-241)	CYW 54907	2.4 / 5GHz, 802.11a/b/g/n + ac	Arm Cortex-R4-Internal	320 MHz	10 x10	CE/FCC/IC	External	No	UART, SPI, I²C, I²S, PWM, GPIO, USB, Ethernet	WICED, High performance CPU. Gateway for WLAN and Ethernet. Audio streaming. Modular Cert. RAM 2MB, -20 °C to +70 °C

Partner Evaluation Kits: https://community.cypress.com/community/wiced-wifi/wiced-wifi-partners

WICED WI-FI AND BLUETOOTH PARTNER MODULES (Cont.)

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
MXCHIP	EMW3162	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120 MHz	38 x 23	CE/FCC/NCC/SRRC	No	No	32 x GPIOS, 2 x UARTs, 1 x SPI/I²S, 8 x ADC INPUT, 2 x DAC OUTPUT, 1 x USB OTG, 2 x CAN, 1 x I²C	Integrated/ external antenna, 1 MHz Flash + 128 KB RAM, -40°C to 85°C, Fully FCC/CE/NCC/SRRC Certified, Shielded
MXCHIP	EMW3166	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F412	100MHz	32 x 16	CE/FCC	No	No	30 x GPIOS, 2 x UARTs, 1 x SPI/I²S, 3 x ADC INPUT, 1 x I²C	Same radio and size as the EMW3165: MCU upgraded from STM32F411 to STM32F412
MXCHIP	EMW3165	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M4-STM32F411	100 MHZ	32 x 16	CE/FCC/NCC/SRRC/TELEC	No	No	22 x GPIOS, 2 x UARTs, 1 x SPI/I²S, 8 x ADC INPUT, 1 x I²C	Integrated/ external antenna, 2MHz SPI flash + 512KHz Flash + 128 KB RAM, -40°C to 85°C, Fully FCC/CE/NCC/SRRC/TELEC Certified, Shielded
MXCHIP	EMW3239	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100 MHZ	32 x 16	CE/FCC	No	No	30 x GPIOS, 2 x UARTs, 1 x SPI/I²S, 3 x ADC INPUT, 1 x I²C	Pin compatible with the EMW3166
SPIL	SCBLES09	CYW20719	BT/BLE	Arm Cortex-M3-Internal	96 MHz	6 x 8.6	No	No	No	UART, SPI, I²C,PWM,GPIO	512kB SRAM, 1MB on chip flash, 4Mbit SPI flash, -40 to 85 C
SPIL	SB-BLE-S06	CYW20706	BT 4.2	Arm Cortex-M3-Internal	96 MHz	6 x 8.6	No	No	No	SPI, UART, I²S, PCM,	4Mbit flash, -40 to 85 C, BQB/FCC/CE/IC Pre-Cert, Shielded, APAC availability only
SPIL	SSBW MN01	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-STM32F207	120 MHz	10 × 10	No	External	No	SPI, ADC, I²C, I²S, CAN, USB	1MB FLASH; 128KB RAM, -40 to 85 C, Shielded, FCC/CE Pre-Cert, APAC availability only
SPIL	SSBW MN02	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M4-STM32F407	168 MHz	10 × 10	No	External	No	SPI, SRAM, ADC, I²C, I²S, CAN 8-bit Camera, USB, LCD	1MB FLASH; 192KB RAM, FCC/CE Pre-Cert, Shielded, -40 to 85 C, APAC availability only
SPIL	SBWM N09	CYW43364	2.4 GHz, 802.11b/g/n	Radio Only	N/A	10 × 10	No	External	Yes	SDIO/gSPI	FCC/CE/IC Pre-Cert, Shielded, -40 to 85 C, APAC availability only
SPIL	SSBW MN09	CYW43364	2.4 GHz, 802.11b/g/n	Arm Cortex-M4-STM32F411	100 MHz	10 × 10	No	External	No	SPI ×3, ADC ×4, I²C, I²S, UART ×3	512KB FLASH ; 128KB RAM, Include Sleep CLK, -40 to 85 C, FCC/CE/IC Pre-Cert, Shielded, APAC availability only
SPIL	SCWB MN13	CYW43364 CYW20719	2.4GHz, 802.11b/g/n, BLE/BT	Arm Cortex-M3-Internal	96 MHz	10 × 10	No	External	No	UART, SPI, I²C,PWM,GPIO	512kB SRAM, 1MB on chip flash, -40 to 85 C
SPIL	SBWB MN08	CYW4343W	2.4 GHz, 802.11b/g/n, BLE/BT	Radio Only	N/A	10 × 10	No	External	Yes	SDIO/gSPI, UART	FCC/CE/IC Pre-Cert, Shielded, -40 to 85 C, APAC availability only
SPIL	SSBW BMN08	CYW4343W	2.4 GHz, 802.11b/g/n, BLE/BT	Arm Cortex-M4-STM32F411	100 MHz	10 × 10	No	External	No	SPI ×3, ADC ×4, I²C, I²S, UART ×3	512KB FLASH ; 128KB RAM,Include Sleep CLK, APAC availability only, APAC availability only
SPIL	SSBW MN12	CYW4343W	2.4GHz, 802.11b/g/n, BLE/BT	Arm Cortex-M4-STM32F412	100 MHz	10 × 10	No	External	No	SPIx3, ADCx4, I²C, i2s, UARTx3 Q-SPI	1MB FLASH ; 256KB RAM,Include Sleep CLK, -40 to 85 C, FCC/CE/IC Pre-Cert, Shielded, APAC availability only
SPIL	SBWM N03	CYW4390	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48 MHz	10.5× 10.5	No	Yes	No	SPI, I²C, UART	2MB FLASH, 32KHz OSC, Sleep CLK, -40 to 85 C, APAC availability only
SPIL	SBWM N04	CYW4390	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48 MHz	10 x 10	No	External	No	SPI, I²C, UART	2MB FLASH, 32KHz OSC, no Sleep CLK, -40 to 85 C, APAC availability only
SPIL	SBWM N07	CYW43907	2.4/5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320MHz	11 x 11	No	External	No	SPI, UART, I²C, I²S, USB, SDIO	2MB RAM, -40 to 85 C, FCC/CE/IC Pre-Cert, Shielded, APAC availability only
SPIL	SBWBM N07	CYW43907 CYW20707	2.4/5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320MHz	11 x 11	No	External	No	SPI, UART, I²C, I²S, USB, SDIO	2MB RAM, -40 to 85 C, BQB/FCC/CE/IC Pre-Cert, Shielded, APAC availability only

Partner Evaluation Kits: https://community.cypress.com/community/wiced-wifi/wiced-wifi-partners

WICED WI-FI AND BLUETOOTH PARTNER MODULES (Cont.)

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU	Area (mm)	Regulatory	Diversity	Linux	Interfaces	Highlights
SPIL	SCWMC02	CYW54907	2.4/5GHz, 802.11a/b/g/n + ac	Arm Cortex-R4-Internal	160/320 MHz	11 x 11	None	External	No	SPI, UART, I²C, i2s, USB, SDIO,RMII/MII	2MB RAM, -40 to 85 C, FCC/CE/IC Pre-Cert, Shielded, Ethernet support, APAC availability only
SPIL	SCWBMC01	CYW54907 CYW20707	2.4/5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-R4-Internal	160/320 MHz	11 x 11	None	External	No	SPI, UART, I²C, i2s, USB, SDIO,BT_I²S/PCM	2MB RAM, -40 to 85 C, BQB/FCC/CE/IC Pre-Cert, Shielded, APAC availability only
SPIL	SCWBMC02	CYW54907 CYW20707	2.4/5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-R4-Internal	160/320 MHz	11 x 11	None	External	No	SPI, UART, I²C, i2s, USB, SDIO,RMII/MII,BT_I²S/PCM	2MB RAM, -40 to 85 C, BQB/FCC/CE/IC Pre-Cert, Shielded, Ethernet support, APAC availability only
USI	WM-N-BM-14a	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120 MHz	28 × 20	FCC/CE/IC	No	No	SPI, ADC, UART, I²C, GPIO	Same as WM-N-BM-14 with Ayla Cloud agent support.
USI	WM-N-BM-09	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120 MHz	11 x 12	None	External	Yes	SPI, ADC, UART, I²C, GPIO	1 MB MCU FLASH + 128 KB RAM, 32 kHz OSC.
USI	WM-N-BM-02	CYW43362	2.4 GHz, 802.11b/g/n	Radio Only	N/A	8.8 × 7.2	None	External	No	SDIO/SPI interface Wi-Fi only SiP	SDIO/SPI interface Wi-Fi-only SiP.
USI	WM-N-BM-14	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120 MHz	20 × 28	FCC/CE/IC	No	No	SPI, ADC, UART, I²C, GPIO	1MB MCU FLASH+ 128KB RAM, 1MB SFLASH, 32KHz OSC, Printed Antenna, u.FL
USI	WM-N-BM-30	CYW43362	2.4 GHz, 802.11b/g/n	Arm Cortex-M4-STM32F411	100 MHz	20 × 28	FCC/CE/IC	No	No	SPI, ADC, UART, I²C, GPIO	512KB MCU FLASH+ 128KB RAM, 1MB SFLASH, 32KHz OSC, Printed Antenna, u.FL
USI	WM-N-BM-22-REF2	CYW43364	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F412	100 MHz	12 x 11	None	No	No	SPI, ADC, UART, i2c, GPIO	1MB MCU FLASH+ 256KB RAM, 32KHz OSC
USI	WM-N-BM-26A-REF1	CYW43364	2.4 GHz, 802.11b/g/n	Radio Only	N/A	9.5 × 15	TBD	No	No	SDIO interface, Radio only SiP	SDIO interface WiFi only SiP
USI	WM-BN-CYW-43	CYW43364 CYW20719	2.4GHz, 802.11b/g/n BT/BLE	Radio Only	N/A	9 × 9	None	No	Yes	SDIO interface, Radio only SiP	SDIO interface WiFi only SiP
USI	WM-BAN-BM-16	CYW43340	2.4 GHz/5 GHz, 802.11a/b/g/n, BT/BLE	Radio Only	N/A	12 × 12	None	External	Yes	SDIO interface, Radio only SiP	SDIO interface WiFi and BT/BLE Radio only SiP
USI	WM-BN-BM-26_A	CYW43438	2.4 GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	9.5 × 15	FCC/CE/IC	No	Yes	SDIO interface, Radio only SiP	SDIO interface WiFi and BT/BLE Radio only SiP, Print Antenna
USI	WM-BN-BM-22	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100 MHz	12 x 11	None	No	No	SPI, ADC, UART, i2c, GPIO	1MB MCU FLASH+ 256KB RAM, 32KHz OSC
USI	WM-BAC-BM-25	CYW43455	2.4 GHz, 802.11ac/b/g/n	Radio Only	N/A	9.5 × 15	FCC/CE/IC	No	Yes	SDIO interface, Radio only SiP	SDIO interface WiFi only SiP
USI	WM-BAC-BM-28	CYW43455	2.4/5GHz, 802.11ac/a/b/g/n,BT/BLE	Radio Only	N/A	7.9 × 7.3	None	External	Yes	SDIO interface, Radio only SiP	SDIO interface WiFi only SiP
USI	WM-AN-BM-23	CYW43907	2.4 GHz/5 GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	10 × 10	None	External	No	QSPI, PWM, USB, SDIO, UART, I²C, I²S, MII, RMII	2 MB RAM
USI	WM-BAN-BM-33	CYW43907 CYW20707	2.4 G/5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	11 x 11	None	External	No	SPI, UART, I²C, I²S, USB, SDIO	2 MB RAM
USI	WM-AC-CYW-23	CYW54907	2.4/5GHz, 802.11ac/a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	10 × 10	None	External	No	QSPI, PWM, USB, SDIO, UART, I²C, I²S, MII, RMII	2 MB RAM
USI	WM-BAC-CYW-33	CYW54907 CYW20707	2.4/5GHz, 802.11ac/a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	11 x 11	None	External	No	SPI, UART, I²C, I²S, USB, SDIO	2 MB RAM

Partner Evaluation Kits: https://community.cypress.com/community/wiced-wifi/wiced-wifi-partners

CONTACT US

CYPRESS HEADQUARTERS

Cypress Semiconductor Corporation
198 Champion Court
San Jose, CA 95134 USA
Tel: +1 (408) 943-2600
Fax: +1 (408) 943-6848
Toll-free: +1 (800) 858-1810 (U.S. only)

www.cypress.com

DEVICES AND MODULES:

Wi-Fi + Bluetooth Combos:
http://www.cypress.com/products/wi-fi-bluetooth-combos

Wi-Fi:
http://www.cypress.com/products/wi-fi

Wireless MCUs:
http://www.cypress.com/products/wireless-mcu

BLE & Bluetooth:
http://www.cypress.com/products/ble-bluetooth

EZ-BLE and EZ-BT Modules:
http://www.cypress.com/products/ez-ble-and-ez-bt-bluetooth-modules

Automotive Wireless:
http://www.cypress.com/products/automotive-wireless

SOFTWARE AND SUPPORT:

WICED SDK:
http://www.cypress.com/products/wiced-software

Cypress Developer Community:
https://community.cypress.com/

WICED Training Videos:
https://community.cypress.com/community/training-videos

PARTNER SOLUTIONS:

IoT Partner Solutions:
https://community.cypress.com/community/partners

IoT Designs:
https://community.cypress.com/community/iot-designs

ABOUT CYPRESS

Cypress' advanced system-level solutions are Embedded in Tomorrow™. We target markets growing faster than the broader semiconductor industry, including automotive, industrial and consumer electronics markets. Our world-class, secure wireless technology—along with our MCUs, memories, analog ICs and USB controllers—give us an unparalleled competitive advantage in the Internet of Things, and a jump on emerging markets, including connected appliances and autonomous cars.

Visit Cypress online at **www.cypress.com**.