Infineon Wi-Fi and Bluetooth IoT partner module selection guide

www.infineon.com

Infineon Wi-Fi and Bluetooth wireless connectivity

Delivering differentiated capabilities purpose-built for the IoT

Industry's broadest portfolio of Wi-Fi and Wi-Fi + Bluetooth combo devices

- Infineon has the ideal Wi-Fi solution for any application providing both single and dual band 802.11n/ac/ax SISO and MIMO devices
- Infineon provides Wi-Fi + Bluetooth combo chipsets – integrating our world-class Wi-Fi with powerful Bluetooth/BLE to ease on-boarding of cloud-connected IoT devices via a mobile app
- Infineon also provides Wi-Fi only chipsets, and Wi-Fi MCUs with integrated applications processors

- More than 1 billion Wi-Fi devices in the field
- High-performance RF architecture pro vides longer range and better interference rejection

- Ultra low power – very low sleep, transmit, and receive current
- Continuous improvements to battery life via a unique visibility into real-world power consumption

- Most widely vetted Wi-Fi / Bluetooth devices on the market, with security researchers extensively focused on Infineon
- Deep domain knowledge and processes to help customers secure products throughout the lifecycle

Infineon wireless module partner ecosystem

Our global partner ecosystem enables development of IoT applications on time, on budget, amd with minimized risk

- **Hardware:** Avoid complicated and costly chip-down designs with a pre-built wireless module providing multiple antenna options and services
- **Software:** Take advantage of pre-configured connectivity software for common MPUs, operating systems, and development tools
- **Certifications:** Don't worry about multiple global regulatory bodies with full modular and reference certified RF modules (CE, IC, FCC, etc.)
- **Support:** Get to production with partner support and services including antenna and plastics design, EMC testing and more

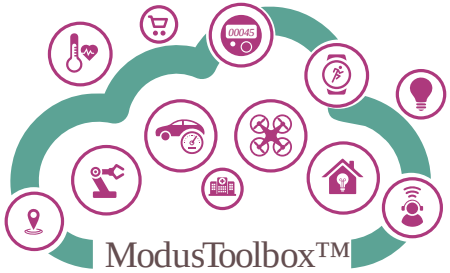
Infineon IoT software solutions

Infineon provides reliable, and consistently updated software development platforms for flexible and rapid development of your connected product.

Solutions for RTOS designs

Infineon delivers compute, connectivity, and HMI capabilities in a single unified platform: The ModusToolbox™ software environment

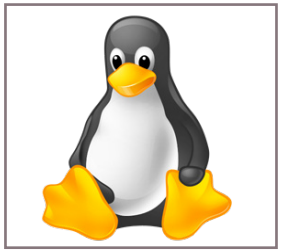
- ModusToolbox is a set of multi-platform tools and a suite of middleware libraries enabling industry-leading feature-sets like CapSense™ capacitive-sensing, mesh, and system power optimization
- Enables an immersive development experience for Infineon MCU and wireless devices. You can use our ModusToolbox Eclipse IDE, or 3rd party IDEs such as: Visual Studio Code, IAR Embedded Workbench, and Keil µVision
- Extensive support for 3rd party cloud ecosystems as well as our own AnyCloud cloud management solution using the ultra-low-power, secure PSoC™ 6 MCU and robust Wi/Fi Bluetooth SoCs



Solutions for Linux/Android designs

Delivering integrated wireless products for Linux and Android designs Infineon Partners with the open source community to provide quality and secure connectivity

- Enabling a broad set of Wi-Fi and Bluetooth / Bluetooth LE advanced feature sets for a wide variety of designs
- Supporting the latest Linux and Android distributions along with backward compatibility for previous versions
- Infineon RF and regulatory tools bring your Linux or Android based prototype to production faster than ever



802.11ac Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Azurewave	AW-AH306	CYW43012	2.4/5GHz, 802.11a/b/g/n with ac friendly, BT/BLE	N/A	N/A	8.5 x 7	N	Y	SDIO,UART	BT 5.0, WLCSP, Ultra-Low Power
Azurewave	AW-AM497	CYW43012	2.4/5GHz, 802.11a/b/g/n with ac friendly, BT/BLE	N/A	N/A	12 x 12	N	Y	SDIO, UART	BT 5.0, WLBGA, Ultra-Low Power
Azurewave	AW-CH303	CYW43455	2.4/5GHz, 802.11a/b/g/n with ac friendly, BT/BLE	N/A	N/A	7.9 x 7.3	N	Y	SDIO, UART	Performance 802.11ac
Azurewave	AW-CH639	CYW4339	2.4/5GHz, 802.11a/b/g/n with ac friendly, BT/BLE	Radio only	N/A	10 x 10	N	Y	SDIO, UART	SDIO interface WiFi and BT/BLE Radio only
Azurewave	AW-CM256SM	CYW43455	2.4/5GHz, 802.11a/b/g/n with ac friendly, BT/BLE	Radio only	N/A	12 x 12	N	Y	SDIO, UART	SDIO interface, Radio only
Azurewave	AW-CM390SM	CYW43455	2.4/5GHz, 802.11a/b/g/n with ac friendly, BT/BLE	Radio only	N/A	12 x 12	FCC/CE	Y	SDIO, UART	Performance 802.11ac, Includes xtal
Azurewave	AW-CU359	CYW54907 CYW20707	2.4/5GHz, 802.11a/b/g/n with ac friendly, BT/BLE	Arm Cortex-R4-Internal	160/320 MHz	36 x 17.3	N	Y	SPI, UART, I²C, I²S, USB, SDIO	2 MB RAM,Module Certification, Adds 802.11ac
B-Link	BL-6255	CYW43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio only	N/A	12 x 12	FCC/CE	Y	SDIO	Certified radio only module with Linux support
Inventek	ISM54907-WBM-L170	CYW54907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	11 x 11	N	N	UART, SPI, USB	Supported with WICED SDK
Iton	CW2455-44P	CYW43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio only	N/A	12 x 12	N	Y	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
Laird Connectivity	Sterling-LWB5 (450-0162)	CYW43353	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	10 x 10 (SiP only, no antenna)	FCC/IC/CE/ ETSI	Y	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° C 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 Connectivity	Sterling-LWB5 (450-0168)	CYW43353	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	Y	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° C 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.

802.11ac Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Laird Connectivity	Sterling-LWB5 (450-0169)	CYW43353	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	Y	SDIO, UART, I²S	Industry leading dual-band Wi-Fi/Combo module that supports 802.11 ac for ultra-high data rate applications, broad country cerfifications and multiple certified antenna options, Industrial Temp Rated: -40° C 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 Connectivity	Sterling-LWB5+ (453-00045C)	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	12 x 17	FCC/IC/ETSI/ Giteki/RCM	Y	SDIO, UART, USB	Next-gen dual band wireless IoT with 802.11ac. Industrial temperature (-40° C to +85°C), variety of different modular form factors, and industry-leading RF performance. Integrated Chip Antenna (Cut Tape)
Laird Connectivity	Sterling-LWB5+ (453-00045R)	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	12 x 17	FCC/IC/ETSI/ Giteki/RCM	Y	SDIO, UART, USB	Next-gen dual band wireless IoT with 802.11ac. Industrial temperature (-40°C to +85°C), variety of different modular form factors, and industry-leading RF performance. Integrated Chip Antenna (Tape and Reel)
Laird Connectivity	Sterling-LWB5+ (453-00046C)	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	12 x 17	FCC/IC/ETSI/ Giteki/RCM	Y	SDIO, UART, USB	Next-gen dual band wireless IoT with 802.11ac. Industrial temperature (-40°C to +85°C), variety of different modular form factors, and industry-leading RF performance. MHF4 (Cut Tape)
Laird Connectivity	Sterling-LWB5+ (453-00046R)	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	12 x 17	FCC/IC/ETSI/ Giteki/RCM	Y	SDIO, UART, USB	Next-gen dual band wireless IoT with 802.11ac. Industrial temperature (-40°C to +85°C), variety of different modular form factors, and industry-leading RF performance. MHF4 (Tape and Reel)
Laird Connectivity	Sterling-LWB5+ (453-00047C)	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	12 x 17	FCC/IC/ETSI/ Giteki/RCM	Y	SDIO, UART, USB	Next-gen dual band wireless IoT with 802.11ac. Industrial temperature (-40°C to +85°C), variety of different modular form factors, and industry-leading RF performance. MHF4 (Cut Tape)
Laird Connectivity	Sterling-LWB5+ (453-00047R)	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	12 x 17	FCC/IC/ETSI/ Giteki/RCM	Y	SDIO, UART, USB	Next-gen dual band wireless IoT with 802.11ac. Industrial temperature (-40°C to +85°C), variety of different modular form factors, and industry-leading RF performance. MHF4 (Tape and Reel)
Laird Connectivity	Sterling-LWB5+ (453-00048)	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	22 x 30	FCC/IC/ETSI/ Giteki/RCM	Y	SDIO, UART	Next-gen dual band wireless IoT with 802.11ac. Industrial temperature (-40°C to +85°C), variety of different modular form factors, and industry-leading RF performance. M.2 (E-Key) with SDIO (Wi-Fi) and UART (BT)

802.11ac Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Laird Connectivity	Sterling-LWB5+ (453-00049)	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio Only	N/A	22 x 30	FCC/IC/ETSI/ Giteki/RCM	Y	USB	Next-gen dual band wireless IoT with 802.11ac. Industrial temperature (-40°C to +85°C), variety of different modular form factors, and industry-leading RF performance. M.2 (E-Key) with USB for Wi-Fi and BT
Lantronix	PW205010001B	CYW4339	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm9-AT-91SAM9G25	400 MHz	47 x 47	FCC/IC/CE/ TELEC/SRRC	Y	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	2.4GHz/5GHz, 802.11a/b/g/n/ac, BT 2.1 EDR, BLE 4.2	Arm9-AT-91SAM9G25	400 MHz	47 x 47	FCC/IC/CE/ TELEC/SRRC	Y	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	PW205030001B	CYW4373E	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm9-AT-91SAM9G25	400 MHz	47 x 51.2	FCC/IC/CE/ TELEC/SRRC	Y	UART x 2, Eth (with PHY), 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

802.11ac Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Lantronix	XPC270100B	CYW54907 CYW20707	2.4GHz / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	25 x 17	FCC/IC/CE	N	UART x 1, Eth (RMII), USB (Host or Device), SPI Master, SDIO, I²C, 11 GPIOs	Smallest embedded embedded IoT gateway with 802.11ac 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 and Wi-Fi
Lantronix	XPC270100S	CYW54907 CYW20707	2.4GHz / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	25 x 17	FCC/IC/CE	N	UART x 1, Eth (RMII), USB (Host or Device), SPI Master, SDIO, I²C, 11 GPIOs	Smallest embedded embedded IoT gateway with 802.11ac 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 and Wi-Fi
Lantronix	XPC270300B	CYW54907 CYW20707	2.4GHz / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	35 x 22	FCC/IC/CE	N	UART x 1, Eth (RMII), USB (Host or Device), SPI Master, SDIO, I²C, 11 GPIOs	Smallest embedded embedded IoT gateway with 802.11ac 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 and Wi-Fi
Lantronix	XPC270300S	CYW54907 CYW20707	2.4GHz / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	25 x 17	FCC/IC/CE	N	UART x 1, Eth (RMII), USB (Host or Device), SPI Master, SDIO, I²C, 11 GPIOs	Smallest embedded embedded IoT gateway with 802.11ac 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 and Wi-Fi

802.11ac Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Murata	Type 1HK (LBEH5HY1HK-089)	CYW43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio only	N/A	7.9 x 7.3	N	Y	WLAN: SDIO BT: UART	High throughput on 11ac, -20°C to +75°C
Murata	Type 1LV (LBEE59B1LV-278)	CYW43012	2.4/5GHz, 802.11a/b/g/n with ac friendly, BT/BLE	Radio only	N/A	10 x 7.2	CE/FCC/IC/ TELEC	Y	WLAN: SDIO BT: UART	1x1 SISO 11ac + Bluetooth solution with SDIO interface, -20°C to +70°C, BT 5.0
Murata	Type 1MW (LBEE5HY1MW-230)	CYW43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio only	N/A	7.9 x 7.3	CE/FCC/IC/ TELEC	Y	WLAN: SDIO BT: UART	High throughput on 11ac, -20°C to +75°C
Murata	Type 1QX (LBEE5WQ1QX-277)	CYW54907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	11 x 11	CE/FCC/IC	N	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 1VA (LBEE5XV1VA-TEMP)	CYW88359	2.4 / 5GHz, 802.11a/b/g/n + ac MIMO/RSDB, BT/BLE	Radio only	N/A	11.4 x 8.9	FCC/IC/CE/ TELEC	Y	WLAN: PCIe BT: UART	2x2 MIMO RSDB + Bluetooth solution with SDIO interface, -30°C to +85°C
Murata	Type 1XA	CYW54591	2.4 / 5GHz, 802.11a/b/g/n + ac MIMO/RSDB, BT/BLE	Radio only	N/A	11.4 x 8.9	FCC/IC/CE/ TELEC	Y	WLAN: PCIe BT: UART	2x2 MIMO RSDB + Bluetooth solution with SDIO interface, -30°C to +85°C
USI	WM-BAC-BM-25	CYW43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio only	N/A	9.5 x 15	FCC/CE/IC	Y	SPI, UART, I²C, I²S, USB, SDIO	SDIO interface WiFi only SiP
USI	WM-BAC-BM-28	CYW43455	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Radio only	N/A	7.9 X 7.3	N	Y	SDIO interface, Radio only SiP	SDIO interface WiFi only SiP
USI	WM-BAC-CYW-50	PSoC6 CYW43012	2.4 / 5GHz, 802.11a/b/g/n + ac, BT/BLE	Arm Cortex-M4 + Cortex-M0 Internal	150/100 MHz	10.9 X10.9	N	N	SDIO interface, Radio only SiP	1MB MCU FLASH+ 288KB RAM

802.11n Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Alinket	ALX830X	CYW43362	2.4GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100MHz	28 x 14.3	FCC/CE	N	UART, SPI, USB I^2S, I^2C, ADC, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP
Alinket	ALX850X	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100MHz	28 x 14.3	FCC/CE	N	UART, SPI, USB I^2S, I^4C, ADC, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP
Alinket	ALX870X	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F407	166MHz	32 x 16	FCC/CE	N	UART, SPI, USB I^2S, I^2C, ADC, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP, Bluetooth to Wi-Fi Bridge
Alinket	ALXC10	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	8 x 8	N	Y	SDIO, UART PCM	Custom Antenna Designs Supported, Host interfaces include SDIO/SPI for Wi-Fi, UART for Bluetooth
Alinket	ALXC10B	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	17 x 12	N	Y	SDIO, HCI PCM	External Antenna (with U.FL connector), Host interfaces include SDIO/SPI for Wi-Fi, HCI for Bluetooth
Alinket	ALXC12X	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100MHz	32 x 16	FCC/CE	N	UART, SPI I^2C, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP, Bluetooth to Wi-Fi Bridge
Alinket	ALXC20X	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100MHz	28 x 14.3	FCC/CE	N	UART, SPI, USB I^2S, I^2C, ADC, GPIO	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA & SoftAP mode, Fast Roaming & EAP, Bluetooth to Wi-Fi Bridge
Alinket	ALXC28	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Radio only	N/A	12 x 12	N	Y	SDIO, UART I^2S, PCM	Custom Antenna Designs Supported, Host interfaces include SDIO/SPI for Wi-Fi, UART for Bluetooth
Alinket	ALXC28B	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Radio only	N/A	17 x 12	N	Y	SDIO, HCI I^2S, PCM	External Antenna (with U.FL connector), Host interfaces include SDIO/SPI for Wi-Fi, HCI for Bluetooth
Alinket	ALXR10	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4 STM32F407	168MHz	129 x 62	FCC/CE	Y	Ethernet	Wi-Fi AP/STA, Fast Roaming, VPN/4G, ACM configuration, on-board or External Antenna, BTLE to WiFi Bridge, BTLE to 4G Bridge, Wi-Fi to 4G Bridge, Ethernet to Wi-Fi Bridge, Ethernet to 4G Bridge, BTLE to Ethernet Bridge, Smart Router
Avnet	AES-CYW4343W-M1-G	CYW4343W	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F411	100MHz	20 x 35	CE/FCC/IC	N	SPIx1, ADCx4, I^2Cx2, UARTx2, GPIOx6	512 KB FLASH + 128KB RAM, -40°C to 85°C, FCC/CE Certified

802.11n Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Azurewave	AW-AH640	CYW43340	2.4/5GHz, 802.11a/b/g/n, BT/BLE	Radio only	N/A	9 x 9	N	Y	SDIO,UART	SDIO interface WiFi and BT/BLE Radio only
Azurewave	AW-CU289	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100 MHz	16 x 32	N	N	SPI , I²S, USART, CAN	1 MB MCU FLASH+ 256 KB RAM, 2MB SFLASH, Printed Antenna, u.FL
Azurewave	AW-CU315	CYW43907 CYW20707	2.4/5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	160/320 MHz	36 x 17.3	N	Y	SPI, UART, I²C, I²S, USB, SDIO	2 MB RAM, Modular Certification
Azurewave	AW-NB197SM	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	12 x 12	N	Y	SDIO, UART	SDIO interface WiFi and BT/BLE Radio only
Azurewave	AW-NM230NF	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	M.2 1216	FCC/IC/NCC/CE	Y	SDIO, UART	SDIO interface WiFi and BT/BLE Radio only , Module Certification
Azurewave	AW-NM372SM	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	12 x 12	N	Y	SDIO, UART	Includes xtal
Azurewave	AW-NM459	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio only	N/A	7 x 7	N	Y	SDIO,UART	Includes xtal
Azurewave	AW-NM512	CYW43439	2.4GHz, 802.11b/g/n, BT/BLE	N/A	N/A	12 x 12	N	N	SDIO,UART	Low Cost Combo, 1x1 SISO, TCP Keep Alive, WPA-3
B-Link	BL-6212	CYW43438	2.4GHz, 802.11b/g/n, WIFI/BT	Radio only	N/A	12 x 12	FCC/CE	Y	SDIO	Certified radio only module with Linux support
Inventek	ISM43340-L77	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Radio only	N/A	13 x 14	FCC/IC/CE	Y	SDIO	Virtual WICED or Linux Drivers External Chip Antenna
Inventek	ISM43340-M4G-L44-10C/U	CYW43340	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-M4-STM32F405	168MHz	14.5 x 34	FCC/IC/CE/CCC	N	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
Inventek	ISM4343-WB-L151	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	10 x 10	FCC/IC/CE	Y	SDIO	Virtual WICED or Linux Drivers, Requires External Antenna
Inventek	ISM4343-WBM-L151	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100MHz	10 x 10	FCC/IC/CE	N	UART, SPI	Configurable though AT commands or WICED, Requires External Antenna
Inventek	ISM4343-WBM-L54C/U	CYW4343W	2.4 GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100MHz	14.5 x 30	FCC/IC/CE	N	UART, SPI	Configurable though AT commands or WICED, On-Board Chip Antenna or U.FL, 10 Additional I/O added for MFI
Inventek	ISM43907-WBM-L170	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	160/320 MHz	11 x 11	N	N	UART, SPI, USB	Configurable though Inventek's IWIN API (AT commands & Cloud Agent FW) or WICED, On-Board Chip Antenna or U.FL

802.11n Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Iton	CW2438-44P	CYW43438	2.4 GHz, 802.11b/g/n, BT/ BLE	Radio only	N/A	12 x 12 x 1.8	N	Y	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
Laird Connectivity	Sterling-LWB (450-0152)	CYW4343W	2.4 GHz, 802.11b/g/n, BT/ BLE	Radio only	N/A	15.5 x 21(Int. Antenna)	FCC/IC/CE/ Giteki/RCM	Y	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°C 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 Connectivity	Sterling-LWB (450-0148)	CYW4343W	2.4 GHz, 802.11b/g/n, BT/ BLE	Radio only	N/A	15.5 x 21(Ext. Antenna)	FCC/IC/CE/ Giteki/RCM	Y	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°C 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).
Laird Connectivity	Sterling-LWB (450-0159)	CYW4343W	2.4 GHz, 802.11b/g/n, BT/ BLE	Radio only	N/A	10x10 (SiP only, no antenna)	FCC/IC/CE/ Giteki/RCM	Y	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°C 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 Connectivity	Sterling-EWB (453-00012C)	CYW4343W	2.4GHz, 802.11b/g/n	ST Micro STM32F412 Cortex M4	48MHz	10x10	FCC/IC//ETSI/ Giteki/RCM	N	I²C, I²S, SPI, QSPI, UART, GPIO, JTAG	The Sterling-EWB is a high performance 2.4 GHz WLAN and Bluetooth combo module that makes it easy to gather data from sensors and wirelessly send it to cloud services. Based on latest-generation Cypress 4343W silicon with an integrated ST Micro STM32F412 Cortex M4 MCU, the Sterling-EWB offers power-conscious battery management that enables deployment in remote battery powered devices. The Sterling-EWB is also fully compatible with Cypress's WICED SDK

802.11n Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Laird Connectivity	Sterling-EWB (453-00012R)	CYW4343W	2.4GHz, 802.11b/g/n	ST Micro STM32F412 Cortex M4	48MHz	10x10	FCC/IC//ETSI/ Giteki/RCM	N	I²C, I²S, SPI, QSPI, UART, GPIO, JTAG	Based on latest-generation Cypress 4343W silicon with an integrated ST Micro STM32F412 Cortex M4 MCU, the Sterling-EWB offers power-conscious battery management that enables deployment in remote battery powered devices. The Sterling-EWB is also fully compatible with Cypress's WICED SDK. Coupled with Laird Connectivity's world-class support, customers can realize their IoT designs and get them to market quickly
Laird Connectivity	Sterling-EWB (453-00013C)	CYW4343W	2.4GHz, 802.11b/g/n	ST Micro STM32F412 Cortex M4	48MHz	16 x 21	FCC/IC//ETSI/ Giteki/RCM	N	I²C, I²S, SPI, QSPI, UART, GPIO, JTAG	Based on latest-generation Cypress 4343W silicon with an integrated ST Micro STM32F412 Cortex M4 MCU, the Sterling-EWB offers power-conscious battery management that enables deployment in remote battery powered devices. The Sterling-EWB is also fully compatible with Cypress's WICED SDK
Laird Connectivity	Sterling-EWB (453-00013R)	CYW4343W	2.4GHz, 802.11b/g/n	ST Micro STM32F412 Cortex M4	48MHz	16 x 21	FCC/IC//ETSI/ Giteki/RCM	N	I²C, I²S, SPI, QSPI, UART, GPIO, JTAG	Based on latest-generation Cypress 4343W silicon with an integrated ST Micro STM32F412 Cortex M4 MCU, the Sterling-EWB offers power-conscious battery management that enables deployment in remote battery powered devices. The Sterling-EWB is also fully compatible with Cypress's WICED SDK
Laird Connectivity	Sterling-EWB (453-00014C)	CYW4343W	2.4GHz, 802.11b/g/n	ST Micro STM32F412 Cortex M4	48MHz	16 x 21	FCC/IC//ETSI/ Giteki/RCM	N	I²C, I²S, SPI, QSPI, UART, GPIO, JTAG	Based on latest-generation Cypress 4343W silicon with an integrated ST Micro STM32F412 Cortex M4 MCU, the Sterling-EWB offers power-conscious battery management that enables deployment in remote battery powered devices. The Sterling-EWB is also fully compatible with Cypress's WICED SDK
Laird Connectivity	Sterling-EWB (453-00014R)	CYW4343W	2.4GHz, 802.11b/g/n	ST Micro STM32F412 Cortex M4	48MHz	16 x 21	FCC/IC//ETSI/ Giteki/RCM	N	I²C, I²S, SPI, QSPI, UART, GPIO, JTAG	Based on latest-generation Cypress 4343W silicon with an integrated ST Micro STM32F412 Cortex M4 MCU, the Sterling-EWB offers power-conscious battery management that enables deployment in remote battery powered devices. The Sterling-EWB is also fully compatible with Cypress's WICED SDK
Laird Connectivity	TiWi-C-W (450-0118)	CYW4390	2.4GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48MHz	10.5x 10.5	FCC/IC/CE/ ETSI	N	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°C to 85°C , Dev Kit featuring TiWiConnect available
Lantronix	XPC250100B	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n, BT/ BLE	Arm Cortex-R4-Internal	160/320MHz	25 x 17	FCC/IC/CE/ TELEC/SRRC	N	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

802.11n Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Lantronix	XPC250100B-02	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	25 x 17	FCC/IC/CE/ TELEC/SRRC	N	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 and Wi-Fi
Lantronix	XPC250300B	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/g/n, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	35 x 22	FCC/IC/CE/ TELEC/SRRC	N	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
Lantronix	XPC250300B-02	CYW43907 CYW20707	2.4GHz / 5GHz, 802.11n, BT/ BLE	Arm Cortex-R4-Internal	160/320MHz	35 x 22	FCC/IC/CE/ TELEC/SRRC	N	UART x 1, Eth (RMII), USB (Host or Device), SPI (Master and Slave), 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 and Wi-Fi
Lierda	LSDGCY-22NS0010	CYW43438	2.4GHz, 802.11b/g/n BT/BLE	Radio only	N/A	12.0x12.0	N	Y	SDIO UART	Wi-Fi transfer module with crystal oscillator, Wi-Fi SDIO Interface and BT/BLE, Linux support
Murata	Type 1DX (LBEE5KL1DX-883)	CYW4343W	2.4GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	6.95 x 5.15	CE/FCC/IC/ TELEC	Y	WLAN: SDIO BT: UART	-20°C to +75°C, Reference Certified. Use Future Electronics Nebula kit for WICED support

802.11n Wi-Fi + Dual-Mode Bluetooth combo partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Murata	Type 1LD (LBEE5PA1LD-005)	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100MHz	8.9 x 7.8	CE/FCC/IC/ TELEC	N	UART, SPI, I²C, I²S, GPIO	1024KB FLASH 256KB RAM WICED, Afero Security and Apple HomeKit support, Low current, -20°C to +75°C
Murata	Type 1LN (LBEE5KL1LN-081)	CYW4343W	2.4GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	6.95 x 5.15	CE/FCC/IC/ TELEC	Y	WLAN: SDIO BT: UART	-20°C to +85°C, Reference Certified, Supports 4wire coex(GPIO1~4)
Murata	Type 1QP (LBEE5WQ1QP-276)	CYW43907 CYW20707	2.4 / 5GHz, 802.11a/b/ g/n, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	11 x 11	CE/FCC/IC	N	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 Ayla	Type 1LD (LBEE5PA1LD-222)	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100MHz	8.9 x 7.8	CE/FCC/IC/ TELEC	N	UART, SPI, I²C, I²S, GPIO	1024KB FLASH 256KB RAM WICED, Apple HomeKit support, Low current, -20°C to +75°C
Murata imp	Type 1MD Imp004m (LBWA-1ZZ1MD-011)	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100MHz	21 x 17.5	CE/FCC/IC/ TELEC	N	UART, SPI, I²C, PWM, GPIO, ADC	1024KB FLASH 256KB RAM, ElectricImp Imp004m, Certified with embeded antenna, -20°C to +75°C
MXCHIP	EMW3239	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100MHz	32 x 16	CE/FCC	N	30 x GPIOS, 2 x UARTs, 1 x SPI/I²S, 3 x ADC INPUT, 1 x I²C	Pin compatible with the EMW3166
USI	WM-BAN-BM-16	CYW43340	2.4/5GHz, 802.11a/b/ g/n, BT/BLE	Radio Only	N/A	12 x 12	N	Y	SDIO interface, Radio only SiP	SDIO interface WiFi and BT/BLE Radio only SiP
USI	WM-BAN-BM-33	CYW43907 CYW20707	2.4/5GHz, 802.11a/b/ g/n, BT/BLE	Arm Cortex-R4-Internal	160/320MHz	11 x 11	N	N	SPI, UART, I²C, I²S, USB, SDIO	2MB RAM
USI	WM-BN-BM-22	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4-STM32F412	100MHz	12 x 11	N	N	SPI, ADC, UART, I²C, GPIO	1MB MCU FLASH+ 256KB RAM, 32KHz OSC
USI	WM-BN-BM-26_A	CYW43438	2.4GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	9.5 x 15	FCC/CE/IC	Y	SDIO interface, Radio only SiP	SDIO interface WiFi and BT/BLE Radio only SiP, PCB Antenna
USI	WM-BN-CYW-48	CYW43364 CYW20719	2.4GHz, 802.11b/g/n, BT/BLE	Radio Only	N/A	9 X 9	N	Y	SDIO interface, Radio only SiP	SDIO interface WiFi only SiP
USI	WM-BN-CYW-48-REF1	CYW43364 CYW20719	2.4GHz, 802.11b/g/n, BT/BLE	Arm Cortex-M4	96MHz	9 X 9	N	N	SPI, UART, I²C, I²S, USB, SDIO	512K RAM / 1M Flash

802.11n/ac Wi-Fi partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Alinket	ALX822x	CYW43362	2.4GHz 802.11 b/g/n	Arm Cortex-M4 STM32F411	100MHz	28 x 14.3	FCC/CE	Y	UART, SPI, USB I²S, I²C, ADC, GPIO	2.4G Wi-Fi L2 Mac Mesh functions, Flash Link configuration, supports SDK to extermal programming
Alinket	ALXB10	CYW43340	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-M4 STM32F407	168MHz	65 x 50	FCC/CE	Y	Ethernet	Ethernet to Wi-Fi Sta Bridge. Supports seucrity features, Fast Roaming & Flash Link Easy Configuration
Alinket	ALXB20	CYW43340	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-M4 STM32F407	168MHz	65 x 50	FCC/CE	Y	Ethernet	Ethernet to Wi-Fi softAP Bridge.Supports seucrity features, Fast Roaming & Flash Link Easy Configuration
Alinket	ALXG10	CYW43362	2.4GHz 802.11 b/g/n	Arm Cortex-M4 STM32F411	100MHz	70 x 45	FCC/CE	Y	RS232	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports RS232, Wi-Fi STA, ETH function
Alinket	ALXG20	CYW43438	2.4GHz, 802.11b/g/n	Arm Cortex-M4 STM32F411	100MHz	70 x 45	FCC/CE	Y	RS485	On-Board or External Antenna (with U.FL connector), 1MB Flash, supports STA mode, Fast Roaming, RS485 to Wi-Fi STA
Azurewave	AW-CU287	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F412	100MHz	16 x 32	N	N	SPI , I²S, USART, CAN	1 MB MCU FLASH+ 256 KB RAM, 2MB SFLASH, Printed Antenna, u.FL
Azurewave	AW-CU307	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F411	100MHz	16 x 32	N	N	SPI , I²S, USART, CAN	1 MB MCU FLASH+ 256 KB RAM, 2MB SFLASH, Printed Antenna, u.FL
Azurewave	AW-NH650	CYW43362	2.4GHz, 802.11b/g/n	Radio only	N/A	8 x 8	N	Y	SDIO,SPI	SDIO interface WiFi and BT/BLE Radio only
Azurewave	AW-NM288SM	CYW43362	2.4GHz, 802.11b/g/n	Radio only	N/A	12 x 12	N	Y	SDIO	SDIO interface, Radio only
B-Link	BL-6181	CYW43362	2.4GHz, 802.11b/g/n	Radio only	N/A	12 x 12	FCC/CE	Y	SDIO	Certified radio only module with Linux support
Inventek	ISM43362-M3G-L44-E/U	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	15 x 30	FCC/IC/CE/ TELEC	N	UART, SPI	Configurable through AT Commands or WICED, On-Board Antenna or U.FL
Inventek	ISM43364-W-L151	CYW43364	2.4GHz, 802.11b/g/n	Radio Only	N/A	10 x 10	FCC/IC/CE	N	SDIO	Virtual WICED or Linux Drivers
Inventek	ISM43364-WM-L54-C/U	CYW43364	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F412	100MHz	15 x 34	FCC/IC/CE	N	UART, SPI	Configurable through AT Commands or WICED, On-Board Antenna or U.FL
Inventek	ISM43903-R48-L54-E/U	CYW43903	2.4, 802.11b/g/n	Arm Cortex-R4-Internal	160MHz	14.5 x 30	FCC/IC/CE	N	UART	Supported with WICED SDK, 1MB RAM
Inventek	ISM43907-WM-L170	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	11 x 11	N	N	UART, SPI, USB	Supported with WICED SDK
Inventek	ISM54907-WM-L170	CYW54907	2.4 / 5GHz, 802.11a/b/g/n + ac	Arm Cortex-R4-Internal	160/300MHz	11 x 11	N	N	UART, SPI, USB	Supported with WICED SDK

802.11n/ac Wi-Fi partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Lantronix	XPC240100B	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	25 x 17	FCC/IC/ CE/TELEC/ SRRC	N	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	XP-C240100B-02	CYW43907	2.4GHz / 5GHz, 802.11n	Arm Cortex-R4-Internal	160/320 MHz	25 x 17	FCC/IC/ CE/TELEC/ SRRC	N	UART x 1, Eth (RMII), USB (Host or Device), SPI (Master and Slave), 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	160/320 MHz	25 x 17	FCC/IC/ CE/TELEC/ SRRC	N	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, On-module antenna, 8MB Flash and 2MB RAM
Lantronix	XP-C240200B-02	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	25 x 17	FCC/IC/ CE/TELEC/ SRRC	N	UART x 1, Eth (RMII), USB (Host or Device), SPI (Master and Slave), 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, On-module antenna, 8MB Flash and 2MB RAM
Lantronix	XPC240300B	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	35 x 22	FCC/IC/ CE/TELEC/ SRRC	N	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

802.11n/ac Wi-Fi partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Lantronix	XP-C240300B-02	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	25 x 17	FCC/IC/CE/TELEC/SRRC	N	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	XPC240400B	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	25 x 17	FCC/IC/CE/TELEC/SRRC	N	UART x 1, Eth (RMII), USB (Host or Device), SPI (Master and Slave), 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	XP-C240400B-02	CYW43907	2.4 / 5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320 MHz	25 x 17	FCC/IC/CE/TELEC/SRRC	N	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, On-module antenna, 8MB Flash and 2MB RAM
Lantronix	XPC-W1002100B	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	26.1 x 18.3	FCC/IC/CE/TELEC	N	UART x 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	XPC-W1003100B	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	30.1 x 18.3	FCC/IC/CE/TELEC	N	UART x 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	XP-W100100B-01	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	24 x 16.5	FCC/IC/CE/TELEC	N	UART x 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
Lierda	LSDGCY-22NS0011	CYW43364	2.4GHz, 802.11b/g/n	Radio only	N/A	12.0 x 12.0	N	Y	SDIO	Wi-Fi transfer module with crystal oscillator, Wi-Fi SDIO Interface, Linux support

802.11n/ac Wi-Fi partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Murata	Type 1AD (LBWA1CS1AD-806)	CYW4390	2.4GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48MHz	9.4 X 8.9	CE/FCC/IC/ TELEC	N	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)	CYW4390	2.4GHz, 802.11b/g/n	Arm Cortex-M3-Internal	48MHz	33 X 18	CE/FCC/IC/ TELEC	N	I²C, USB, JTAG	Same as 1AD but with Antenna. For Japan markets, -30°C to +85°C
Murata	Type 1CD Imp003 (LBWA1ZV1CD-716)	CYW43362	2.4G, b/g/n	Arm Cortex-M4-STM32F405	168MHz	10 x 7.9	CE/FCC/IC	N	UART, SPI	Same as YD but with Electric Imp Cloud support. Modular Cert, -20°C to +70°C
Murata	Type 1FX (LBWA1KL1FX-875)	CYW43364	2.4GHz, 802.11b/g/n	Radio Only	N/A	6.95 x 5.15	CE/FCC/IC	Y	SDIO, SPI	Pin to Pin compatible to 1DX. Diversity w/ SW control pins. -20°C to +75°C. Reference Certified
Murata	Type 1GC (LB-WA1UZ1GC-958)	CYW43907	2.4 / 5GHz, 802.11a/b/ g/n	Arm Cortex-R4-Internal	160/320MHz	10 x 10	CE/FCC/IC	N	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, Arrow Quicksilver EVK Support
Murata	Type 1HD (LBWA1ZZ1HD-004)	CYW43438	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F412	100MHz	21 x 17.5	CE/FCC/IC/ TELEC	N	UART, SPI	1024KB FLASH 256KB RAM WICED, Apple HomeKit support, Low current, Certified with embedded antenna, -20°C to +75°C
Murata	Type 1PS (LB-WA1UZ1PS-241)	CYW54907	2.4 / 5GHz, 802.11a/b/ g/n + ac	Arm Cortex-R4-Internal	160/320MHz	10 x 10	CE/FCC/IC	N	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, Pin Compatible with Type 1GC (adds 802.11ac)
Murata imp	Type 1GC Imp005 (LBWA1UZ1GC-901)	CYW43907	2.4 / 5GH, 802.11a/b/ g/n	Arm Cortex-R4-Internal	160/320MHz	10 x 10	CE/FCC/IC	N	UART, SPI, I²C, 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
MXCHIP	EMW3162	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	38 x 23	CE/FCC/NCC/ SRRC	N	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	EMW3165	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F411	100MHz	32 x 16	CE/FCC/NCC/ SRRC/TELEC	N	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	EMW3166	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F412	100MHz	32 x 16	CE/FCC	N	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

802.11n/ac Wi-Fi partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Particle	P0	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	11 x 12	CE/FCC/IC/TELEC	N	Digital, Analog (ADC), Analog (DAC), SPI, I²S, I²C, CAN, USB, PWM	1MB flash, 128KB RAM
Particle	P1	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	28 x 20	CE/FCC/IC/TELEC	N	Digital, Analog (ADC), Analog (DAC), SPI, I²S, I²C, CAN, USB, PWM Spare (x4)	1MB flash, 128KB RAM 1MB external SPI flash
Particle	PHOTON	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	36.58 x 20.32	CE/FCC/IC	N	Digital, Analog (ADC), Analog (DAC), SPI, I²S, I²C, CAN, USB, PWM	1MB flash, 128KB RAM
USI	WM-AN-BM-23	CYW43907	2.4/5GHz, 802.11a/b/g/n	Arm Cortex-R4-Internal	160/320MHz	10 x 10	CE/FCC/IC	N	QSPI, PWM, USB, SDIO, UART, I²C, I²S, MII, RMII	2MB RAM
USI	WM-N-BM-02	CYW43362	2.4GHz, 802.11b/g/n	Radio Only	N/A	8.8 x 7.2	CE/FCC/IC	N	SDIO/SPI interface, WiFi only SiP	SDIO/SPI interface Wi-Fi only SiP
USI	WM-N-BM-09	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	11 x 12	CE/FCC/IC/TELEC	Y	SPI, ADC, UART, I²C, GPIO	1MB MCU FLASH + 128KB RAM, 32KHz OSC
USI	WM-N-BM-14	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	20 x 28	CE/FCC/IC	N	SPI, ADC, UART, I²C, GPIO	1MB MCU FLASH+ 128KB RAM, 1MB SFLASH, 32KHz OSC, PCB Antenna, u.FL
USI	WM-N-BM-14A	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M3-STM32F205	120MHz	20 x 28	CE/FCC/IC	N	SPI, ADC, UART, I²C, GPIO	1MB MCU FLASH + 128KB RAM, 1MB SFLASH, 32KHz OSC, PCB Antenna, u.FL, same as WM-N-BM-14, but with Ayla Cloud agent
USI	WM-N-BM-22-REF2	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F412	100MHz	12 x 11	CE/FCC/NCC/SRRC	N	SPI, ADC, UART, I²C, GPIO	1MB MCU FLASH+ 256KB RAM, 32KHz OSC
USI	WM-N-BM-26A-REF1	CYW43364	2.4GHz, 802.11b/g/n	Radio Only	N/A	9.5 X 15	CE/FCC/NCC/SRRC/TELEC	Y	SDIO	SDIO interface Wi-Fi only SiP
USI	WM-N-BM-30	CYW43362	2.4GHz, 802.11b/g/n	Arm Cortex-M4-STM32F411	100MHz	20 x 28	CE/FCC	N	SPI, ADC, UART, I²C, GPIO	512KB MCU FLASH+ 128KB RAM, 1MB SFLASH, 32KHz OSC, PCB Antenna, u.FL

Bluetooth & Bluetooth LE (Dual-Mode) partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Alinket	ALX41X	CYW20736	BLE	Arm Cortex-M3-Internal	24MHz	19 x 13.5	FCC/CE	N	UART, SPI ADC, GPIO	PCB Antenna, 1MB Flash, BLE MIDI Support, Master mode (up to 8 Slaves) & Bridge mode (Slave - Master - Slave)
Alinket	ALX420	CYW20706	BT/BLE	Arm Cortex-M3-Internal	96MHz	8 x 8	N	N	HCI UART, PUART SPI, I²S, I²C, ADC, GPIO	Custom Antenna Designs Supported, Supports Master/Slave mode, A2DP SRC & SNK & iAP2, MFi (HomeKit)
Alinket	ALX420A	CYW20706	BT/BLE	Arm Cortex-M3-Internal	96MHz	16 x 10	FCC/CE	N	HCI UART, PUART SPI, I²S, I³C, ADC, GPIO	On-Board Antenna, 1MB Flash, Supports Master/Slave mode, A2DP SRC & SNK & iAP2, MFi (HomeKit)
Alinket	ALX421A	CYW20707	BT/BLE	Arm Cortex- M4-STM32F411	100MHz	19 x 12	FCC/CE	N	UART, SPI, USB, SDIO, I²S, I²C, ADC, GPIO	On-Board Antenna, 1MB Flash, Supports Master/Slave mode, A2DP SRC & SNK & iAP2, MFi (HomeKit)
Alinket	ALX422A	CYW20707	BT/BLE	Arm Cortex- M4-STM32F412	100MHz	21 x 12	FCC/CE	N	UART, SPI, USB, SDIO, I²S, I²C, ADC, GPIO	BT 4.2, On-Board Antenna, 1MB Flash, Support both Slave & Master mode, A2DP SRC & SNK, HFP & iAP2, MFi (HomeKit)
Alinket	ALXG30	CYW20706	BT/BLE	Arm Cortex- M4-STM32F411	100MHz	80 x 55	FCC/CE	Y	RS485	On-Board or External Antenna (with U.FL connector), 1MB Flash, Supports BT Slave mode, SPP ,MFi , RS485 to BT, RS485 to 2G
Inventek	ISM20706A2S	CYW20706	BT/BLE	Arm Cortex-M3-Internal	96MHz	6.0 x 8.6	N	N	SPI, I²C, JTAG	Embedded Antenna BT4.2+HS SIP Module
Inventek	ISM20732S	CYW20732	BLE	Arm Cortex-M3-Internal	24MHz	6.5 x 6.5	FCC/IC/CE	N	SPI, I²C, JTAG	Lowest Cost BLE SiP Module Solution
Inventek	ISM20736S	CYW20736	BLE	Arm Cortex-M3-Internal	24MHz	6.5 x 6.5	FCC/IC/CE	N	SPI, I²C, JTAG	Wireless charging, simultaneous central and peripheral operation
Iton	BB2706-30	CYW20707	BT/BLE	Radio only	N/A	15 x 12	N	Y	SPI, UART, I²C	BT 4.2, Supported profile: HFP with WBS, HID, SPP, GATT, AVRCP, HOGP, A2DP, HID, etc; Support SiG BLE Mesh, cutomized flow control for portable printers
Laird Connectivity	BT-850-SA	CYW20704	BT/BLE	Radio Only	N/A	8.5 x 13	FCC/IC/CE/ RCM/Giteki/ Korea	Y	USB, HCI, I²S, PCM, GPIO	The BT85x series of USB HCI modules and Adapter leverage the Cypress CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both Classic Bluetooth and Bluetooth Low Energy support. The Bluetooth v5 core specification shortens your development time and provides enhanced throughput, security and privacy. The BT850 modules are ideal when designers need both performance and minimum size. For maximum flexibility in integration, they support a host USB interface, I²S and PCM audio interfaces, GPIO, and Cypress'GCI coexistence (2-Wire). The modules provide excellent RF performance and identical footprint options for integrated antenna or an external antenna via a trace pin.

Bluetooth & Bluetooth LE (Dual-Mode) partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Laird Connectivity	BT-850-ST	CYW20704	BT/BLE	Radio Only	N/A	8.5 x 13	FCC/IC/CE/ RCM/Giteki/ Korea	Y	USB, HCI, I²S, PCM, GPIO	The BT85x series of USB HCI modules and Adapter leverage the Cypress CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both Classic Bluetooth and Bluetooth Low Energy support. The Bluetooth v5 core specification shortens your development time and provides enhanced throughput, security and privacy. The BT850 modules are ideal when designers need both performance and minimum size. For maximum flexibility in integration, they support a host USB interface, I²S and PCM audio interfaces, GPIO, and Cypress'GCI coexistence (2-Wire). The modules provide excellent RF performance and identical footprint options for integrated antenna or an external antenna via a trace pin
Laird Connectivity	BT851	CYW20704	BT/BLE	Radio Only	N/A	17.4 x 46.75	FCC/IC/CE/ RCM/Giteki	Y	USB, HCI, I²S, PCM, GPIO	The BT851 is a Packaged USB Adapter leverage the Cypress CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both Classic Bluetooth and Bluetooth Low Energy support. The Bluetooth v5 core specification shortens your development time and provides enhanced throughput, security and privacy
Laird Connectivity	BT-860-SA	CYW20704	BT/BLE	Radio Only	N/A	8.5 x 12.85	FCC/IC/CE/ RCM/Giteki	Y	UART, HCI, I²S, PCM, GPIO	The BT86x series of UART HCI modules leverage the Cypress CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both Classic Bluetooth and Bluetooth Low Energy support. The Bluetooth v5 core specification shortens your development time and provides enhanced throughput, security and privacy. The BT860 modules are ideal when designers need both performance and minimum size. For maximum flexibility in integration, they support a host UART interface, I²S and PCM audio interfaces, GPIO, and Cypress' GCI coexistence(2-Wire). The modules provide excellent RF performance and identical footprint options for integrated antenna or an external antenna via a trace pin

Bluetooth & Bluetooth LE (Dual-Mode) partner module portfolio

Partner	PN	Wi-Fi/BT PN	Wi-Fi/BT Support	MCU	CPU (MHz)	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Laird Connectivity	BT-860-ST	CYW20704	BT/BLE	Radio Only	N/A	8.5 x 12.85	FCC/IC/CE/ RCM/Giteki	Y	UART, HCI, I²S, PCM, GPIO	TThe BT86x series of UART HCI modules leverage the Cypress CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both Classic Bluetooth and Bluetooth Low Energy support. The Bluetooth v5 core specification shortens your development time and provides enhanced throughput, security and privacy. The BT860 modules are ideal when designers need both performance and minimum size. For maximum flexibility in integration, they support a host UART interface, I²S and PCM audio interfaces, GPIO, and Cypress' GCI coexistence(2-Wire). The modules provide excellent RF performance and identical footprint options for integrated antenna or an external antenna via a trace pin
Murata	Type 1GR (LBCA1ZZ1GR-084)	CYW20736	BLE	Arm Cortex-M3-Internal	24MHz	9.0 x 7.0	CE/FCC/IC	N	UART, SPI	Bluetooth 4.1, includes antenna
Murata	Type 1PA (LBCA1KU1PA-279)	CYW20719	BT/BLE	Arm Cortex-M4-Internal	N/A	5.9 x 5.1	N	N	UART, SPI	BT 5.0
Murata	Type1WA	CYW20721	BT/BLE	Arm Cortex-M4-Internal	N/A	5.9 x 5.1	FCC/IC/CE	Y	UART, SPI	BT 5.1, Performance Audio
Pairlink	Dragon-B	CYW20706	BT/BLE	Arm Cortex-M3-Internal	96MHz	11 x 16.8	BQB/MIC/ FCC/IC/CE/ ROHS	N	UART, 4*PWM, MFi, IIS	Chip Antenna, 1MB Flash, Supports Connected Mesh, SIG Mesh
Pairlink	Dragon-C	CYW20706	BT/BLE	Arm Cortex-M3-Internal	96MHz	11 x 16.8	BQB/MIC/ FCC/IC/CE/ ROHS	N	UART, 4*PWM, MFi, IIS	IPEX Connecter, 1MB Flash, Supports Connected Mesh, SIG Mesh
Pairlink	Mouselet-B	CYW20736	BLE	Arm Cortex-M3-Internal	24MHz	14 x 18	BQB/MIC	N	UART, 4*PWM	Chip Antenna, 512KB Flash, Supports Connected Mesh
Pairlink	Mouselet-C	CYW20736	BLE	Arm Cortex-M3-Internal	24MHz	14 x 18	BQB/MIC	N	UART, 4*PWM	IPEX Connecter, 512KB Flash, Supports Connected Mesh
Pairlink	Tigerkin-B	CYW20735	BLE	Arm Cortex-M4-Internal	96MHz	14 x 23	BQB/MIC/ FCC/IC/CE/ ROHS	N	UART, 6*PWM, MFi	Chip Antenna, 1MB Flash, Supports Connected Mesh, SIG Mesh
Pairlink	Tigerkin-C	CYW20735	BLE	Arm Cortex-M4-Internal	96MHz	14 x 23	BQB/MIC/ FCC/IC/CE/ ROHS	N	UART, 6*PWM, MFi	IPEX Connecter, 1MB Flash, Supports Connected Mesh, SIG Mesh

Cypress is now a part of Infineon Technologies

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.
With the acquisition by Infineon Technologies, the combined company of Infineon and Cypress will be listed among the top 10 semiconductor manufacturers in the world.

How customers benefit:

Industry-leading portfolio: Cypress adds a differentiated portfolio of microcontrollers, connectivity components, software ecosystems and high-performance memories. All this is highly complementary to Infineon's leading power semiconductors, automotive microcontrollers, sensors and security solutions. Combining these technology assets enables advanced solutions for high-growth applications.

Enhanced global footprint: The combination of Cypress and Infineon will lead to a denser network of sales offices, R&D centers, manufacturing sites and distribution partnerships.

Strong technical support & know-how: Infineon offers its customers a state-of-the-art technical support and deep know-how. The enhanced technological expertise will further accelerate time-to-market

Connectivity devices:

Wi-Fi + Bluetooth Combo Devices
www.cypress.com/products/wi-fi-bluetooth-combos

Wi-Fi only devices www.cypress.com/products/wi-fi

Wi-Fi MCU devices
www.cypress.com/products/wi-fi-mcus

Bluetooth and Bluetooth LE devices
www.cypress.com/products/ble-bluetooth

Software and support:

ModusToolbox™ software environment
www.cypress.com/modus

WICED Studio
www.cypress.com/wiced

Infineon Partner Network
www.infineon.com/partnerfinder

Cypress/Infineon Developer Community
community.cypress.com

Technical forum for ModusToolbox™
community.cypress.com/t5/ModusToolbox/ct-p/ModusToolbox

Technical forum for WICED Studio
community.cypress.com/t5/ModusToolbox/ct-p/ModusToolbox

Technical forum for Linux
https://community.cypress.com/t5/Wi-Fi-Bluetooth-for-Linux/bd-p/WiFiBluetoothLinux

Cypress Semiconductor Corporation - An Infineon Technologies Company
198 Champion Court San Jose, CA 95134 USA Tel: +1 (408) 943-2600
Toll-free: +1 (800) 858-1810 (U.S. only)
www.cypress.com
www.infineon.com