



Infineon AIROC™ Wi-Fi and Bluetooth® IoT partner module selection guide

Infineon AIROC™ 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®/ Bluetooth® LE to ease onboarding of cloud-connected IoT devices via a mobile app.
- › Infineon provides AIROC™ Wi-Fi connectivity processors and PSoC™ Bluetooth® MCUs with Bluetooth® LE.



- › More than 1 billion Wi-Fi devices in the field
- › High-performance RF architecture provides 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, and 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

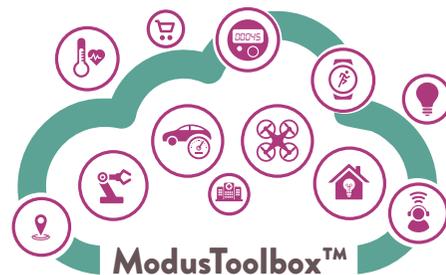


Infineon provides reliable and consistently updated software development platforms for flexible and rapid development of your connected product.

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 Eclipse IDE for ModusToolbox™, or 3rd-party IDEs such as Visual Studio Code, IAR Embedded Workbench, and Keil μVision.
- › Extensive support for 3rd-party cloud ecosystems including our own cloud management solution using the ultra-low-power AIROC™ Wi-Fi connectivity processors.



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



Wi-Fi 6 (802.11ax) + Dual-Mode Bluetooth® combo partner module portfolio

Partner	PN	Wi-Fi/ Bluetooth® PN	Wi-Fi/Bluetooth® Support	WLAN Stream	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Azurewave	AW-XH325	CYW55571	11a/b/g/n/ac/ax Tri-Band	1T1R	10 x 10	No plan so far	Y	SDIO/PCIe+UART	XTAL inside; MP in Q2'23
Azurewave	AW-XB325MA	CYW55571	11a/b/g/n/ac/ax Tri-Band	1T1R	22 x 30	No plan so far	Y	SDIO/PCIe+UART	XTAL inside; SiP on FR4; MP in Q2'23
USI	WM-BAC-CYW-51	CYW55572	2.4/5 GHz, 802.11a/ac/ax/b/g/n, Bluetooth®/ Bluetooth® LE v5.2	2T2R	11 x 11	No plan so far	Y	SDIO/PCIe+UART	MP in Q2'23
Azurewave	AW-XH327	CYW55572	11a/b/g/n/ac/ax Dual Band	2T2R	10 x 10	No plan so far	Y	SDIO/PCIe+UART	XTAL inside; MP in Q2'23
Azurewave	AW-XB327MA	CYW55572	11a/b/g/n/ac/ax Dual Band	2T2R	22 x 30	No plan so far	Y	SDIO/PCIe+UART	XTAL inside; SiP on FR4; MP in Q3'22
Azurewave	AW-XM612	CYW55572 (WLBGA)	11a/b/g/n/ac/ax Dual Band	2T2R	13 x 15	No plan so far	Y	SDIO/PCIe+UART	XTAL inside; MP in Q4'23
Murata	Type 2EA (LBEE5XV2EA-802)	CYW55573	2.4/5GHz/6 GHz, 802.11a/b/g/n/ac /ax MIMO, Bluetooth®/Bluetooth® LE	2T2R	12.5 x 9.4	CE/FCC/IC/ TELEC	Y	WLAN: PCIe/ SDIO Bluetooth®: UART/PCM	2x2 MIMO 11ac + Bluetooth® solution (Bluetooth® 5.3) Support Wi-Fi6E (6GHz), -40°C to +85°C
Laird Connectivity	Sona IF573	CYW55573	2.4/5/6 GHz, 802.11a/ac/ax/b/g/n, Bluetooth®/ Bluetooth® LE , v5.4	2T2R	13 x 18mm (M.2 1318 SMT)	FCC,ISED, CE, UKCA, MIC, & Bluetooth® SIG	Y	SDIO, PCIe, UART, I²S, PCM	Industrial temperature Range (-40°C to +85°C) RF Trace Antenna (Tape & Reel)
Laird Connectivity	Sona IF573	CYW55573	2.4/5/6 GHz, 802.11a/ac/ax/b/g/n, Bluetooth®/ Bluetooth® LE , v5.4	2T2R	13 x 18mm (M.2 1318 SMT)	FCC,ISED, CE, UKCA, MIC, & Bluetooth® SIG	Y	SDIO, PCIe, UART, I²S, PCM	Industrial temperature Range (-40°C to +85°C) MHF4 Antenna (Tape & Reel)
Laird Connectivity	Sona IF573	CYW55573	2.4/5/6 GHz, 802.11a/ac/ax/b/g/n, Bluetooth®/ Bluetooth® LE , v5.4	2T2R	13 x 18mm (M.2 1318 SMT)	FCC,ISED, CE, UKCA, MIC, & Bluetooth® SIG	Y	SDIO, PCIe, UART, I²S, PCM	Industrial temperature Range (-40°C to +85°C) RF Trace Antenna (Cut Tape)
Laird Connectivity	Sona IF573	CYW55573	2.4/5/6 GHz, 802.11a/ac/ax/b/g/n, Bluetooth®/ Bluetooth® LE , v5.4	2T2R	13 x 18mm (M.2 1318 SMT)	FCC,ISED, CE, UKCA, MIC, & Bluetooth® SIG	Y	SDIO, PCIe, UART, I²S, PCM	Industrial temperature Range (-40°C to +85°C) MHF4 Antenna (Cut Tape)
Laird Connectivity	Sona IF573	CYW55573	2.4/5/6 GHz, 802.11a/ac/ax/b/g/n, Bluetooth®/ Bluetooth® LE , v5.4	2T2R	22 x 30mm (M.2 2230 Plug In Card)	FCC,ISED, CE, UKCA, MIC, & Bluetooth® SIG	Y	SDIO, UART, I²S, PCM	Industrial temperature Range (-40°C to +85°C) MHF4 Antenna (Carton)
Laird Connectivity	Sona IF573	CYW55573	2.4/5/6 GHz, 802.11a/ac/ax/b/g/n, Bluetooth®/ Bluetooth® LE , v5.4	2T2R	22 x 30mm (M.2 2230 Plug In Card)	FCC,ISED, CE, UKCA, MIC, & Bluetooth® SIG	Y	PCIe, UART, I²S, PCM	Industrial temperature Range (-40°C to +85°C) MHF4 Antenna (Carton)
USI	WM-BAC-CYW-61	CYW55573	2.4/5/6 GHz, 802.11a/ac/ax/b/g/n, Bluetooth®/ Bluetooth® LE v5.2	2T2R	11 x 11	No plan so far	Y	SDIO/PCIe+UART	MP in Q2'23
Azurewave	AW-XH323	CYW55573	11a/b/g/n/ac/ax Tri-Band	2T2R	10 x 10	No plan so far	Y	SDIO/PCIe+UART	XTAL inside; MP in Q2'23
Azurewave	AW-XB583	CYW55573	11a/b/g/n/ac/ax Tri-Band	2T2R	22 x 30	No plan so far	Y	SDIO/PCIe+UART	XTAL inside; SiP on FR4; MP in Q2'23

Wi-Fi 5 (802.11ac) + Dual-Mode Bluetooth® combo partner module portfolio

Partner	PN	Wi-Fi/ Bluetooth® PN	Wi-Fi/Bluetooth® Support	WLAN Stream	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Azurewave	AW-CM467-USB-I	CYW4373E	2.4/5 GHz, 802.11a/b/g/n/ac, Bluetooth®/ Bluetooth® LE 5.2	1T1R	12 x 12	CE/FCC/IC/NCC/ Japan/AU/NZ	Y	WLAN: USB Bluetooth®: USB	XTAL inside; I-temp
Azurewave	AW-CM467-SUR-I	CYW4373E	11a/b/g/n/ac, Bluetooth® 5.2	1T1R	12 x 12	CE/FCC/IC/NCC/ Japan/AU/NZ	Y	WLAN: SDIO Bluetooth®: UART	XTAL inside; I-temp
Laird Connectivity	Sterling-LWB5+ (453-00045C)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	12 x 17	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	SDIO, UART, USB	Industrial temperature (-40° C to +85°C). Integrated chip antenna (Cut Tape)
Laird Connectivity	Sterling-LWB5+ (453-00045R)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	12 x 17	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	SDIO, UART, USB	Industrial temperature (-40°C to +85°C). Integrated chip antenna (Tape and Reel)
Laird Connectivity	Sterling-LWB5+ (453-00046C)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	12 x 17	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	SDIO, UART, USB	Industrial temperature (-40° C to +85°C). MHF4 (Cut Tape)
Laird Connectivity	Sterling-LWB5+ (453-00046R)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	12 x 17	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	SDIO, UART, USB	Industrial temperature (-40°C to +85°C). MHF4 (Tape and Reel)
Laird Connectivity	Sterling-LWB5+ (453-00047C)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	12 x 17	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	SDIO, UART, USB	Industrial temperature (-40°C to +85°C) RF Trace Pin (Cut Tape)
Laird Connectivity	Sterling-LWB5+ (453-00047R)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	12 x 17	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	SDIO, UART, USB	Industrial temperature (-40°C to +85°C) RF Trace Pin (Tape and Reel)
Laird Connectivity	Sterling-LWB5+ (453-00048)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	22 x 30	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	SDIO, UART	Industrial temperature (-40°C to +85°C). M.2 (E-Key) with SDIO (Wi-Fi) and UART (Bluetooth®)
Laird Connectivity	Sterling-LWB5+ (453-00049)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	22 x 30	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	USB	New Industrial temperature (-40°C to +85°C). M.2 (E-Key) with USB for Wi-Fi and Bluetooth®
Laird Connectivity	Sterling-LWB5+ (450-00137)	CYW4373E	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE v5.2	1T1R	17 x 47	FCC, ISCED, CE, MIC, UKCA, KCC, TW, BR, Bluetooth® SIG	Y	USB-A	New Industrial temperature range USB Dongle (-40°C to +85°C). USB-A w/Integrated Antenna

Wi-Fi 5 (802.11ac) + Dual-Mode Bluetooth® combo partner module portfolio

Partner	PN	Wi-Fi/Bluetooth® PN	Wi-Fi/Bluetooth® Support	WLAN Stream	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Murata	Type 2AE (LBEE5PK2AE-564)	CYW4373E	2.4/5GHz, 802.11a/b/g/n + ac Bluetooth®/ Bluetooth® LE	1T1R	8.0 x 7.8	CE/FCC/IC/TELEC	Y	WLAN: SDIO Bluetooth®: UART	1x1 SISO 11ac + Bluetooth® solution (Bluetooth® 5.2) High throughput on 11ac, -40°C to +85°C
Murata	Type 2BC (LBEE5PK2BC-771)	CYW4373I	2.4/5GHz, 802.11a/b/g/n + ac Bluetooth®/ Bluetooth® LE	1T1R	8.0 x 7.8	CE/FCC/IC/TELEC	Y	WLAN: SDIO (USB) Bluetooth®: UART (USB)	1x1 SISO 11ac + Bluetooth® solution (Bluetooth® 5.2) High throughput on 11ac, -20°C to +70°C
Azurewave	AW-CM467-SUR	CYW4373I	2.4/5 GHz, 802.11a/b/g/n/ac, Bluetooth®/ Bluetooth® LE 5.2	1T1R	12 x 12	FCC/CE	Y	WLAN: SDIO Bluetooth®: UART	Support SDIO or USB for Wi-Fi, UART or USB for Bluetooth®
Azurewave	AW-CM467-USB	CYW4373I	2.4/5 GHz, 802.11a/b/g/n/ac, Bluetooth®/ Bluetooth® LE 5.2	1T1R	12 x 12	FCC/CE	Y	WLAN: USB Bluetooth®: UART	Support SDIO or USB for Wi-Fi, UART or USB for Bluetooth®
Azurewave	AW-CM555-SUR	CYW4373I	2.4/5 GHz, 802.11a/b/g/n/ac, Bluetooth®/ Bluetooth® LE 5.2	1T1R	12 x 12	FCC/CE	Y	WLAN: SDIO Bluetooth®: UART	XTAL inside; 3-wire co-ex w/ Zigbee
Azurewave	AW-CM572	CYW54590	2.4/5GHz, 802.11a/b/g/n/ac, 2x2, RSDB/MIMO, Bluetooth®/ Bluetooth® LE 5.1	2T2R	13 x 15	N	Y	WLAN: SDIO Bluetooth®: UART	XTAL inside; VSDB
Murata	Type 2BZ (LBEE5XV2BZ-883)	CYW54590	2.4/5GHz, 802.11a/b/g/n/ac, 2x2, RSDB/MIMO, Bluetooth®/ Bluetooth® LE 5.1	2T2R	11.4 x 8.9	FCC/IC/CE/TELEC	Y	WLAN: SDIO Bluetooth®: UART	2x2 MIMO 11ac + Bluetooth® solution (Bluetooth® 5.2) SDIO interface for WLAN, -40°C to +85°C
Azurewave	AW-CM590	CYW54590	2.4/5GHz, 802.11a/b/g/n/ac, 2x2, RSDB/MIMO, Bluetooth®/ Bluetooth® LE 5.1	2T1R	13 x 15	CE/FCC/IC/NCC/ Japan/AU/NZ	Y	WLAN: PCIe Bluetooth®: UART	XTAL inside; VSDB
Azurewave	AW-CB511NF	CYW54591	2.4/5GHz, 802.11a/b/g/n/ac, 2x2, RSDB/MIMO, Bluetooth®/ Bluetooth® LE 5.1	1T1R	22 x 30	CE/FCC/IC/ NCC/ Japan/AU/NZ	Y	WLAN: PCIe Bluetooth®: UART	XTAL inside; RSDB; WW Certs; BPF optional
Azurewave	AW-CM590-RSDB	CYW54591	2.4/5GHz, 802.11a/b/g/n/ac, 2x2, RSDB/MIMO, Bluetooth®/ Bluetooth® LE 5.1	2T1R	13 x 15	China (SRRC) in July, 2023	Y	WLAN: PCIe Bluetooth®: UART	XTAL inside; VSDB
Azurewave	AW-CM572-RSDB	CYW54591	2.4/5GHz, 802.11a/b/g/n/ac, 2x2, RSDB/MIMO, Bluetooth®/ Bluetooth® LE 5.1	2T1R	13 x 15	China (SRRC) in July, 2023	Y	WLAN: SDIO Bluetooth®: UART	XTAL inside; VSDB
Murata	Type 1XA (LBEE5XV1XA-540)	CYW54591	2.4/5GHz, 802.11a/b/g/n/ac, 2x2, RSDB/MIMO, Bluetooth®/ Bluetooth® LE 5.1	2T1R	11.4 x 8.9	FCC/IC/CE/TELEC	Y	WLAN: PCIe Bluetooth®: UART	2x2 MIMO 11ac + Bluetooth® solution (Bluetooth® 5.2) Support RSDB, PCIe interface for WLAN, -40°C to +85°C
Quectel	FC80A	CYW54591	2.4/5GHz, 802.11a/b/g/n/ac, 2x2, RSDB/MIMO, Bluetooth®/ Bluetooth® LE 5.1	1T1R	13 x 15 x 2.2	FCC/CE/ROHS	Y	SDIO, UART	External Antenna, supports STA & SoftAP mode, Fast Roaming & EAP
Inventek	ISM54907-WBM-L170	CYW54907 CYW20707	2.4/5GHz, 802.11a/b/g/n/ac, Bluetooth®/ Bluetooth® LE	N/A	11 x 11	N	N	UART, SPI, USB	Supported with SDK; Arm® Cortex®- R4-Internal; 160/320Mhz

Wi-Fi 5 (802.11ac) + Dual-Mode Bluetooth® combo partner module portfolio

Partner	PN	Wi-Fi/ Bluetooth® PN	Wi-Fi/Bluetooth® Support	WLAN Stream	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Lantronix	XPC270100B	CYW54907 CYW20707	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE	N/A	25 x 17	FCC/IC/CE	N	UART x 1, Eth (RMII), USB (Host or Device), SPI Master, SDIO, I ² C, 11 GPIOs	XPICO 270 embedded IoT gw, 802.11a/b/g/n + ac Wi-Fi, ETH, Bluetooth®, dual U.FL, ind. temp, LGA, 250 pc. Arm® Cortex® R4-Internal ; 160/320MHz
Lantronix	XPC270100S	CYW54907 CYW20707	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE	N/A	25 x 17	FCC/IC/CE	N	UART x 1, Eth (RMII), USB (Host or Device), SPI Master, SDIO, I ² C, 11 GPIOs	XPICO 270 embedded IoT gw, 802.11a/b/g/n + ac Wi-Fi, ETH, Bluetooth®, dual U.FL, ind. temp, LGA, 25 pc. Arm® Cortex® R4-Internal ; 160/320MHz
Lantronix	XPC270300B	CYW54907 CYW20707	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE	N/A	35 x 22	FCC/IC/CE	N	UART x 1, Eth (RMII), USB (Host or Device), SPI Master, SDIO, I ² C, 11 GPIOs	XPICO 270 embedded IoT gw, 802.11a/b/g/n + ac Wi-Fi, ETH, Bluetooth®, dual U.FL, ind. temp, LGA, 100 pc. Arm® Cortex® R4-Internal ; 160/320MHz
Lantronix	XPC270300S	CYW54907 CYW20707	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth®/ Bluetooth® LE	N/A	25 x 17	FCC/IC/CE	N	UART x 1, Eth (RMII), USB (Host or Device), SPI Master, SDIO, I ² C, 11 GPIOs	XPICO 270 embedded IoT gw, 802.11a/b/g/n + ac Wi-Fi, ETH, Bluetooth®, dual U.FL, ind. temp, LGA, 250 pc. Arm® Cortex® R4-Internal ; 160/320MHz
USI	WM-BA-CYW-50	PSoC™ 6 CYW43012	2.4/5 GHz, 802.11a/b/g/n + ac, Bluetooth® 5.2	1T1R	11 x 11	N	N	SDIO interface, Radio only SiP	1MB MCU FLASH+ 288KB RAM; Arm® Cortex®-M4 + Cortex-M0 Internal;150/100 MHz

Wi-Fi 4(802.11n) + Dual-Mode Bluetooth® combo partner module portfolio

Partner	PN	Wi-Fi/Bluetooth® PN	Wi-Fi/Bluetooth® Support	WLAN Stream	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Laird Connectivity	Sterling-LWB+ (453-00083R)	CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE	1T1R	12 x 12 x 3 (SiP module)	FCC/IC/CE/Giteki/RCM	Y	SDIO, UART, I²S	Industrial temperature Range (-40°C to +85°C) RF Trace Antenna (Tape & Reel)
Laird Connectivity	Sterling-LWB+ (453-00084R)	CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE	1T1R	21 x 15 x 4 mm (PCB module)	FCC/IC/CE/Giteki/RCM	Y	SDIO, UART, I²S	Industrial temperature Range (-40°C to +85°C) MHF4 Antenna (Tape & Reel)
Laird Connectivity	Sterling-LWB+ (453-00085R)	CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE	1T1R	21 x 15 x 4 mm (PCB module with chip antenna)	FCC/IC/CE/Giteki/RCM	Y	SDIO, UART, USB	Industrial temperature Range (-40°C to +85°C) Onboard Chip Antenna (Tape & Reel)
Laird Connectivity	Sterling-LWB+ (453-00141)	CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE v5.2	1T1R	22x30 mm (M.2 Plug-in Card)	FCC,ISED, CE, UKCA, MIC, KCC, BR & Bluetooth® SIG	Y	SDIO, UART	Industrial temperature Range (-40°C to +85°C) MHF Antenna (Carton)
Murata	Type 1YN (LBEE5K-L1YN)	CYW43439	802.11b/g/n, Bluetooth® LE	1T1R	6.95 x 5.15 x 1.1	FCC/IC/CE/TELECOM	Y	WLAN: SDIO Bluetooth®: UART, PCM	1x1 SISO 11n + Bluetooth® solution (Bluetooth® 5.2) Small form factor, high-performance module with up to 65Mbps PHY data rate on Wi-Fi® and 3Mbps PHY data rate on Bluetooth®
Quectel	FC909A	CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE	1T1R	12 x 12 x 1.95	FCC/CE/ROHS	Y	SDIO, UART, PCM	External Antenna, supports STA & SoftAP mode, Fast Roaming & EAP
USI	WM-BN-BM-26_REF1	CYW43439	11bgn/Bluetooth® 5.2	1T1R	15 x 9.5	N	Y	SDIO (WPA3)	XPICO 240 embedded IoT gw, 802.11a/b/g/n + ac, ETH, dual U.FL, ind. temp., LGA, 250 pc
Azurewave	AW-NM512	CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE	1T1R	12 x 12	N	N	SDIO, UART	Low cost combo, 1x1 SISO, TCP keepalive, WPA-3
Azurewave	AW-AH306(WLCSP)	CYW43012	2.4/5 GHz, 802.11a/b/g/n with ac friendly, Bluetooth®/ Bluetooth® LE 5.2	1T1R	8.5 x 7	N	Y	SDIO, UART	Bluetooth® 5.0, WLCSP, Ultra-Low Power
Azurewave	AW-AM497(WLBGA)	CYW43012	2.4/5 GHz, 802.11a/b/g/n with ac friendly, Bluetooth®/ Bluetooth® LE 5.2	1T1R	12 x 12	N	Y	SDIO, UART	Bluetooth® 5.0, WLBGA, Ultra-Low Power
Murata	Type 1LV (LBEE59B1LV-278)	CYW43012	2.4/5 GHz, 802.11a/b/g/n with ac friendly, Bluetooth®/ Bluetooth® LE	1T1R	10 x 7.2	CE/FCC/IC/TELECOM	Y	WLAN: SDIO Bluetooth®: UART	1x1 SISO 11ac-friendly + Bluetooth® (Bluetooth® 5.0) Low power module, -20°C to +70°C
USI	WM-BAC-CYW-12	CYW43012	11bgn/Bluetooth® 5.2	1T1R	6.5 x 5.8	N	Y	SDIO/UART	-

Wi-Fi 4(802.11n) + Dual-Mode Bluetooth® combo partner module portfolio

Partner	PN	Wi-Fi/ Bluetooth® PN	Wi-Fi/Bluetooth® Support	WLAN Stream	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Lantronix	XPC240100B-02	CYW43907	2.4/5 GHz, 802.11n	N/A	25 x 17	FCC/IC/CE/TELEC/ SRRC	N	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I ² C, 11 GPIOs	XPICO 240 embedded IoT gw, 802.11a/b/g/n + ac , ETH, dual U.FL, ind. temp., LGA, 250 pc. Arm® Cortex®-R4-Internal; 160/ 320 MHz
Lantronix	XPC240200B-02	CYW43907	2.4/5 GHz, 802.11a/b/g/n	N/A	25 x 17	FCC/IC/CE/TELEC/ SRRC	N	UART x 1, Eth (RMII), USB (Host or Device), SPI (Master and Slave), SDIO, I ² C, 11 GPIOs	XPICO 240 embedded IoT gw, 802.11a/b/g/n, ETH, 0n-module ant, ind. temp., LGA, 250 pc. Arm® Cortex®- R4-Internal; 160/ 320 MHz
Lantronix	XPC240300B-02	CYW43907	2.4/5 GHz, 802.11a/b/g/n	N/A	25 x 17	FCC/IC/CE/TELEC/ SRRC	N	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I ² C, 11 GPIOs	XPICO 240 embedded IoT gw, 802.11a/b/g/n, ETH, dual U.FL, ind. temp., edge conn, 100 pc tray Arm® Cortex®-R4-Internal; 160/ 320 MHz
Lantronix	XPC240400B-02	CYW43907	2.4/5 GHz, 802.11a/b/g/n	N/A	25 x 17	FCC/IC/CE/TELEC/ SRRC	N	UART x 1, Eth (RMII), USB (Host or Device), SPI, SDIO, I ² C, 11 GPIOs	XPICO 240 embedded IoT gw, 802.11a/b/g/n, ETH, 0n-module ant, ind. temp., edge conn, 100 pc tray Arm® Cortex®- R4-Internal; 160/ 320 MHz
Murata	Type 1GC (LB- WA1UZ1GC-958)	CYW43907	2.4/5 GHz, 802.11a/b/g/n	N/A	10 x 10	CE/FCC/IC	N	UART, SPI, I ² C, I ² S, PWM, GPIO, USB, Ethernet	High performance CPU. Gateway for WLAN and Ethernet. Audio streaming. Modular Cert. RAM 2 MB, -20°C to +70°C, Arrow Quicksilver EVK support. Arm® Cortex®- R4-Internal; 160/ 320 MHz
Murata imp	Type 1GC Imp005 (LBWA1UZ1GC-901)	CYW43907	2.4/5 GHz, 802.11a/b/g/n	N/A	10 x 10	CE/FCC/IC	N	UART, SPI, I ² C, PWM, GPIO, USB, Ethernet	Electric Imp, High performance CPU. Gateway for WLAN and Ethernet. Audio streaming. Modular Cert. RAM 2 MB. ElectricImp Imp005, -20°C to +70°C. Arm® Cortex®- R4-Internal; 160/ 320 MHz
USI	WM-AN-BM-23	CYW43907	2.4/5 GHz, 802.11a/b/g/n	N/A	10 x 10	CE/FCC/IC	N	QSPI, PWM, USB, SDIO, UART, I ² C, I ² S, MII, RMII	2 MB RAM; Arm® Cortex®- R4-Internal; 160/ 320 MHz
USI	WM-BAN-BM-33	CYW43907 + CYW20707	802.11 a/b/g/n/Bluetooth® 4.2	N/A	11 x 11	N	Y	Configurable	Arm® Cortex®- R4-Internal; 160/ 320 MHz
Murata	Type 1PS (LB- WA1UZ1PS-241)	CYW54907	2.4/5 GHz, 802.11a/b/g/n + ac	N/A	10 x 10	CE/FCC/IC	N	UART, SPI, I ² C, I ² S, PWM, GPIO, USB, Ethernet	High performance CPU. Gateway for WLAN and Ethernet. Audio streaming. Modular Cert. RAM 2 MB, -20°C to +70°C, Pin compatible with type 1GC (adds 802.11ac) Arm® Cortex®- R4-Internal; 160/ 320 MHz
USI	WM-AC-CYW-23	CYW54907	2.4/5GHz, 802.11a/b/g/n	N/A	10 x 10	N	Y	Configurable	Arm® Cortex®- R4-Internal; 160/ 320 MHz
Azurewave	AW-CU544-E-21	P64 + CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE 5.2	1T1R	36 x 18	FCC/IC	N	UART	1M Flash; Ext. Antenna; WW Certs Arm® Cortex®-M4F / Cortex®M0+; 150/ 100 MHz
Azurewave	AW-CU544-P-21	P64 + CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE 5.2	1T1R	36 x 18	FCC/IC	N	UART	1M Flash; PCB Antenna; WW Certs Arm® Cortex®-M4F / Cortex®M0+; 150/ 100 MHz
Azurewave	AW-CU544-E-22	P64 + CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE 5.2	1T1R	36 x 18	FCC/IC	N	UART	2M Flash; Ext. Antenna; WW Certs Arm® Cortex®-M4F / Cortex®M0+; 150/ 100 MHz
Azurewave	AW-CU544-P-22	P64 + CYW43439	2.4 GHz, 802.11b/g/n, Bluetooth®/ Bluetooth® LE 5.2	1T1R	36 x 18	FCC/IC	N	UART	2M Flash; PCB Antenna; WW Certs Arm® Cortex®-M4F / Cortex®M0+; 150/ 100 MHz

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

Partner	PN	Wi-Fi/ Bluetooth® PN	Wi-Fi/Bluetooth® Support	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Laird Connectivity	Bluetooth®-850-SA	CYW20704	Bluetooth®/ Bluetooth® LE	8.5 x 13	FCC/IC/CE/ RCM/Giteki/ Korea	Y	USB, HCI, I²S, PCM, GPIO	The Bluetooth® 85x series of USB HCI modules and adapters that leverages the CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both classic Bluetooth® and Bluetooth® LE support. The Bluetooth® v5 core specification shortens your development time and provides enhanced throughput, security and privacy. The Bluetooth® 850 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 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	Bluetooth®-850-ST	CYW20704	Bluetooth®/ Bluetooth® LE	8.5 x 13	FCC/IC/CE/ RCM/Giteki/ Korea	Y	USB, HCI, I²S, PCM, GPIO	The Bluetooth® 85x series of USB HCI modules and adapters that leverages the CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both classic Bluetooth® and Bluetooth® LE support. The Bluetooth® v5 core specification shortens your development time and provides enhanced throughput, security and privacy. The Bluetooth® 850 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 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	Bluetooth® 851	CYW20704	Bluetooth®/ Blue- tooth® LE	17.4 x 46.75	FCC/IC/CE/ RCM/Giteki	Y	USB, HCI, I²S, PCM, GPIO	The Bluetooth® 851 is a packaged USB adapter that leverages the CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both classic Bluetooth® and Bluetooth® LE support. The Bluetooth® v5 core specification shortens your development time and provides enhanced throughput, security and privacy.
Laird Connectivity	Bluetooth® -860-SA	CYW20704	Bluetooth®/ Blue- tooth® LE	8.5 x 12.85	FCC/IC/CE/ RCM/Giteki	Y	UART, HCI, I²S, PCM, GPIO	The Bluetooth® 86x series of UART HCI modules that leverages the CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both Classic Bluetooth® and Bluetooth® LE support. The Bluetooth® v5 core specification shortens your development time and provides enhanced throughput, security and privacy. The Bluetooth® 860 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 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	Bluetooth®-860-ST	CYW20704	Bluetooth®/ Blue- tooth® LE	8.5 x 12.85	FCC/IC/CE/ RCM/Giteki	Y	UART, HCI, I²S, PCM, GPIO	The Bluetooth® 86x series of UART HCI modules that leverages the CYW20704 A2 chipset to provide exceptionally low power consumption with outstanding range for OEMs needing both Classic Bluetooth® and Bluetooth® LE support. The Bluetooth® v5 core specification shortens your development time and provides enhanced throughput, security and privacy. The Bluetooth® 860 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 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/ Bluetooth® PN	Wi-Fi/Bluetooth® Support	Area (mm)	Regulatory	Linux	Interfaces	Highlights
Alinket	ALX420	CYW20706	Bluetooth®/ Bluetooth® LE	8 x 8	N	N	HCI UART, PUART SPI, I²S, I²C, ADC	Custom Antenna Designs Supported, Supports Master/Slave mode, A2DP SRC & SNK & iAP2, MFi (HomeKit). Arm® Cortex®-M3-Internal; 96 MHz
Alinket	ALX420A	CYW20706	Bluetooth®/ Bluetooth® LE	16 x 10	FCC/CE	N	HCI UART, PUART SPI, I²S, I²C, ADC	On-Board Antenna, 1MB Flash, Supports Master/Slavemode, A2DP SRC & SNK & iAP2, MFi (HomeKit). Arm® Cortex®-M3-Internal ; 96 MHz
Alinket	ALXG30	CYW20706	Bluetooth®/ Bluetooth® LE	80 x 55	FCC/CE	Y	RS485	On-Board or External Antenna (with U.FL connector), 1MBFlash, Supports Bluetooth® Slave mode, SPP ,MFi , RS485 to Bluetooth®, RS485 to 2G. Arm® Cortex®-M4-STM32F411; 100 MHz
Inventek	ISM20706A2S	CYW20706	Bluetooth®/ Bluetooth® LE	6.0 x 8.6	N	N	SPI, I²C, JTAG	Embedded Antenna Bluetooth®4.2+HS SiP module.Arm® Cortex®-M3-Internal; 96 MHz
Pairlink	Dragon-B	CYW20706	Bluetooth®/ Bluetooth® LE	11 x 16.8	BQB/MIC/FCC/ IC/CE/ROHS	N	UART, 4*PWM, MFi, IIS	Chip antenna, 1 MB Flash, supports Connected Mesh, SIG mesh. Arm® Cortex®-M3-Internal; 96 MHz
Pairlink	Dragon-C	CYW20706	Bluetooth®/ Bluetooth® LE	11 x 16.8	BQB/MIC/FCC/ IC/CE/ROHS	N	UART, 4*PWM, MFi, IIS	IPEX connector, 1 MB Flash, supports Connected Mesh, SIG mesh. Arm® Cortex®-M3-Internal; 96 MHz
Alinket	ALX421A	CYW20707	Bluetooth®/ Bluetooth® LE	19 x 12	FCC/CE	N	UART, SPI, USB, SDIO, I²S, I²C	On-Board Antenna, 1MB Flash, Supports Master/Slavemode, A2DP SRC & SNK & iAP2, MFi (HomeKit). Arm® Cortex®-M4-STM32F411; 100 MHz
Alinket	ALX422A	CYW20707	Bluetooth®/ Bluetooth® LE	21 x 12	FCC/CE	N	UART, SPI, USB, SDIO, I²S, I²C	Bluetooth® 4.2, On-Board Antenna, 1MB Flash, Support both Slave & Master mode, A2DP SRC & SNK, HFP & iAP2, MFi (HomeKit). Arm® Cortex®-M4-STM32F412 ; 100 MHz
Iton	BB2706-30	CYW20707	Bluetooth®/ Bluetooth® LE	15 x 12	N	Y	SPI, UART, I²C	Bluetooth® 4.2, supported profile: HFP with WBS, HID, SPP, GATT, AVRCP, HOGP, A2DP, HID, etc; supports SIG Bluetooth® LE mesh, customized flow control for portable printers
Azurwave	AW-BT315W	CYW20721	Bluetooth® 5.2	4 x 4	N	Y	UART	The small form-factor BT SiP Module. Arm® Cortex® - M4; 96 MHz
Murata	Type1WA	CYW20721	Bluetooth®/ Bluetooth® LE	5.9 x 5.1	FCC/IC/CE	Y	UART, SPI	Bluetooth® 5.1, Performance Audio. Arm® Cortex®-M4-Internal
Inventek	ISM20732S	CYW20732	Bluetooth® LE	6.5 x 6.5	FCC/IC/CE	N	SPI, I²C, JTAG	Lowest cost Bluetooth® LE SiP module solution. Arm® Cortex®-M3-Internal; 24 MHz
Alinket	ALX41X	CYW20736	Bluetooth® LE	19 x 13.5	FCC/CE	N	UART, SPI ADC, GPIO	PCB Antenna, 1MB Flash, Bluetooth® MIDI Support, Master mode (up to 8 Slaves) & Bridge mode (Slave - Master - Slave). Arm® Cortex®-M3-Internal; 24 MHz
Inventek	ISM20736S	CYW20736	Bluetooth® LE	6.5 x 6.5	FCC/IC/CE	N	SPI, I²C, JTAG	Wireless charging, simultaneous central and peripheral operation. Arm® Cortex®-M3-Internal; 24 MHz
Murata	Type 1GR (LBCA1Z1GR-084)	CYW20736	Bluetooth® LE	9.0 x 7.0	CE/FCC/IC	N	UART, SPI	Bluetooth® 4.1, includes antenna. Arm® Cortex®-M4-Internal; 24 MHz
Pairlink	Mouselet-B	CYW20736	Bluetooth® LE	14 x 18	BQB/MIC	N	UART, 4*PWM	Chip antenna, 512 KB Flash, supports Connected Mesh. Arm® Cortex®-M3-Internal; 24 MHz
Pairlink	Mouselet-C	CYW20736	Bluetooth® LE	14 x 18	BQB/MIC	N	UART, 4*PWM	IPEX connector, 512 KB Flash, supports Connected Mesh. Arm® Cortex®-M3-Internal; 24 MHz
Azurwave	AW-BT321W Matters	CYW30739	Bluetooth® 5.2	4 x 4	N	Y	UART	Arm® Cortex® - M4; 96 MHz

Connectivity devices:

Wi-Fi + Bluetooth® Combo Devices
www.infineon.com/wi-fi-and-bluetooth-combos

Software and support:

ModusToolbox™ software environment
www.infineon.com/modustoolbox

Infineon Partner Network
www.infineon.com/partnerfinder

Infineon Developer Community
<https://community.infineon.com>

Wi-Fi MCU devices
www.infineon.com/wi-fi-mcu

Bluetooth® and Bluetooth® LE devices
www.infineon.com/airoc-bluetooth-le-bluetooth-multiprotocol

Technical forum for ModusToolbox™
www.infineon.com/modustoolbox-community

Technical forum for Linux
www.infineon.com/wi-fi-bluetooth-linux-drive-community



www.infineon.com

Published by
Infineon Technologies AG
81726 Munich, Germany

© 2023 Infineon Technologies AG.
All Rights Reserved.

Document Number: 002-33054 Rev. *A
Date: 06 / 2023

Please note!

This document is for information purposes only and any information given herein shall in no event be regarded as a warranty, guarantee or description of any functionality, conditions and/or quality of our products or any suitability for a particular purpose. With regard to the technical specifications of our products, we kindly ask you to refer to the relevant product data sheets provided by us. Our customers and their technical departments are required to evaluate the suitability of our products for the intended application.

We reserve the right to change this document and/or the information given herein at any time.

Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.

Any sales transactions involving the partner modules referenced herein, including their terms and conditions, are between you and the partner.