

# Wi-Fi® Product Comparison Chart

## Quick Reference Guide

### Microcontrollers

	Core	Max Operating Frequency (MHz)	Flash	RAM	GPIO	Wi-Fi® Version	SoftAP Client Count	TX Output Power (Max) (dBm)	RX Sensitivity (dBm)	Antenna Types	ADC (channels/bits)	Analog Comparators	Motor Control PWM Outputs	Ethernet (10/100)	USB (Full Speed)	CAN	CAN FD	UART	I²C	SPI	QSPI	Touch Input Channels	Trust&GO	Wi-Fi Security	Class B Safety Library	Regulatory Certifications	Package Size (mm)	
<b>Modules</b>																												
<b>WFI32E04</b>	MIPS32® M-Class	200	2048	640	60	802.11 b/g/n	8	21.5	-93	U.FL	20/12	2	1	1	1	1	1	3	2	2	1	18	Y	WPA, WPA2, WPA3, Enterprise	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	24.5 × 22.5	
<b>WFI32E03</b>	MIPS32 M-Class	200	2048	640	37	802.11 b/g/n	8	21.5	-93	PCB, U.FL	12/12	2	1	1	1	1	1	1	3	1	2	0	11	Y	WPA, WPA2, WPA3, Enterprise	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	24.5 × 20.5
<b>WFI32E02</b>	MIPS32 M-Class	200	1024	320	60	802.11 b/g/n	8	21.5	-93	U.FL	20/12	2	1	1	1	1	1	1	3	2	2	1	18	Y	WPA, WPA2, WPA3, Enterprise	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	24.5 × 22.5
<b>WFI32E01</b>	MIPS32 M-Class	200	1024	320	37	802.11 b/g/n	8	21.5	-93	PCB, U.FL	12/12	2	1	1	1	1	1	1	3	1	2	0	11	Y	WPA, WPA2, WPA3, Enterprise	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	24.5 × 20.5
<b>SoCs</b>																												
<b>PIC32MZ2051W104132</b>	MIPS32 M-Class	200	2048	640	60	802.11 b/g/n	8	21.5	-93	-	20/12	2	1	1	1	1	1	1	3	2	2	1	19	-	WPA, WPA2, WPA3, Enterprise	Y	-	10 × 10
<b>PIC32MZ1025W104132</b>	MIPS32 M-Class	200	1024	320	60	802.11 b/g/n	8	21.5	-93	-	20/12	2	1	1	1	1	1	1	3	2	2	1	19	-	WPA, WPA2, WPA3, Enterprise	Y	-	10 × 10

# Controllers

	Interface	Operating System	Recommended Host	Wi-Fi® Version	Bluetooth® Version	TCP/IP Stack Location	Number of TCP/UDP Sockets	SoftAP Client Count	Concurrent Mode (STA + AP)	TX Output Power (Max) (dBm)	RX Sensitivity (dBm)	Antenna Types	Downlink Throughput	Uplink Throughput	Secure Boot	Trust&GO	Wi-Fi Security	Regulatory Certifications	Package Size (mm)
<b>Plug-and-Play</b>																			
<b>RNWF11</b>	ASCII Over UART	-	8, 16- or 32-bit MCU	802.11 b/g/n	-	Device	No Max	8	-	20.5	-93	PCB	-	-	-	Y	WPA, WPA2, WPA3	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	24.5 × 20.5
<b>RNWF02</b>	ASCII Over UART	-	8, 16- or 32-bit MCU	802.11 b/g/n	-	Device	Up to 8	8	-	20	-97	PCB, U.FL	-	-	Y	Y	WPA, WPA2, WPA3	EU, UK, USA, Canada	21.7 × 14.7
<b>Network Controllers</b>																			
<b>WINCS02</b>	SPI	-	16- or 32-bit MCU	802.11 b/g/n	-	Device	Up to 8	8	-	20	-97	PCB, U.FL	-	-	Y	Y	WPA, WPA2, WPA3	EU, UK, USA, Canada	21.7 × 14.7
<b>ATWINC3400</b>	SPI	-	16- or 32-bit MCU	802.11 b/g/n	5.0	Device	TCP: 7 UDP: 4	1	-	17.5	-90	Chip, U.FL	TCP: 3 UDP: 6	TCP: 5 UDP: 5	-	-	WPA, WPA2, Enterprise	70+ Countries	22.43 × 14.73
<b>ATWINC15x0</b>	SPI	-	16- or 32-bit MCU	802.11 b/g/n	-	Device	TCP: 6 UDP: 4	1	-	18.5	-95	PCB, U.FL	TCP: 11 UDP: 19	TCP: 10 UDP: 12	-	-	WPA, WPA2, Enterprise	EU, USA, Canada	21.7 × 14.7
<b>Link Controllers</b>																			
<b>WILCS02</b>	SPI/SDIO	Linux®	MPU	802.11 b/g/n	-	Host	No Max	8	-	20	-97	PCB, U.FL	-	-	Y	-	WPA, WPA2, WPA3, Enterprise	EU, UK, USA, Canada	21.7 × 14.7
<b>ATWILC3000</b>	SPI/SDIO, UART	Linux, FreeRTOS	MPU	802.11 b/g/n	5.0	Host	No Max	8	Y	18.5	-90	Chip, U.FL	TCP: 28 UDP: 46	TCP: 20 UDP: 24	-	-	WPA, WPA2, Enterprise	EU, USA, Canada	22.4 × 14.7
<b>ATWILC1000</b>	SPI/SDIO	Linux, FreeRTOS	MPU	802.11 b/g/n	-	Host	No Max	8	Y	18.6	-94	PCB, U.FL	TCP: 26 UDP: 46	TCP: 20 UDP: 25	-	-	WPA, WPA2, Enterprise	EU, USA, Canada, Japan, China, Taiwan, South Korea	21.7 × 14.7