

Bluetooth® Comparison Chart

Quick Reference Guide

Microcontrollers

	Core	Max Operating Frequency (MHz)	Flash	RAM	GPIO	Bluetooth® Version	Bluetooth Long Range	Bluetooth 2M PHY	Bluetooth Multi-Link and Multi-Role	Thread Vesion	Zigbee Version	TX Output Power (Max) (dBm)	RX Sensitivity (dBm)	Antenna Types	ADC (channels/bits)	DAC (channels/bits)	Analog Comparators	PWM Outputs	SERCOM	UART	I ² C	SPI	QSPI	Secure Boot	Security	Automotive (AEC-Q100 Grade 1)	Functional Safety Ready (FuSa)	Regulatory Certifications	Package Size (mm)	
Modules																														
WBZ451H	Arm® Cortex® M4F	64	1024	128	26	5.2	Y	Y	Y	1.3.0	3.0	20	-104	PCB, U,FL	8/12	-	2	3	4	4	4	4	4	1	-	AES-256, SHA-224, SHA-256, SHA1, TRNG	Y	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	15.5 x 26.8
WBZ451	Arm Cortex M4F	64	1024	128	29	5.2	Y	Y	Y	1.3.0	3.0	12	-103	PCB, U,FL	8/12	-	2	3	4	4	4	4	1	-	AES-256, SHA-224, SHA-256, SHA1, TRNG	Y	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	15.5 x 20.7	
WBZ450	Arm Cortex M4F	64	1024	128	16	5.2	Y	Y	Y	1.3.0	3.0	5	-103	PCB, U,FL	6/12	-	1	3	2	2	2	2	1	-	AES-256, SHA-224, SHA-256, SHA1, TRNG	Y	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	13.4 x 18.7	
WBZ351	Arm Cortex M4F	64	512	96	27	5.2	Y	Y	Y	-	3.0	11	-108	PCB, U,FL	8/12	1/7	2	3	3	3	3	3	1	Y	AES-256, SHA-384, PKA, TRNG	Y	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	15.5 x 20.7	
WBZ350	Arm Cortex M4F	64	512	96	14	5.2	Y	Y	Y	-	3.0	11	-108	PCB, U,FL	4/12	1/7	-	3	2	2	2	2	1	Y	AES-256, SHA-384, PKA, TRNG	Y	Y	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	13.4 x 18.7	
SoCs																														
PIC32CX1012BZ25048	Arm Cortex M4F	64	1024	128	29	5.2	Y	Y	Y	1.3.0	3.0	12	-103	-	8/12	-	2	3	4	4	4	4	1	-	AES-256, SHA-224, SHA-256, SHA1, TRNG	Y	Y	-	7 x 7	
PIC32CX1012BZ24032	Arm Cortex M4F	64	1024	128	16	5.2	Y	Y	Y	1.3.0	3.0	5	-103	-	6/12	-	1	3	2	2	2	2	1	-	AES-256, SHA-224, SHA-256, SHA1, TRNG	Y	Y	-	5 x 5	
PIC32CX5109BZ31048	Arm Cortex M4F	64	512	96	27	5.2	Y	Y	Y	-	3.0	11	-108	-	8/12	1/7	2	3	3	3	3	3	1	Y	AES-256, SHA-384, PKA, TRNG	Y	Y	-	6 x 6	
PIC32CX5109BZ31032	Arm Cortex M4F	64	512	96	14	5.2	Y	Y	Y	-	3.0	11	-108	-	4/12	1/7	-	3	2	2	2	2	1	Y	AES-256, SHA-384, PKA, TRNG	Y	Y	-	5 x 5	

Controllers

	Bluetooth Version	UART Interface	Linux® Support	Tx Output Power (dBm)	Rx Sensitivity (dBm)	Long Range	2M PHY	Multi-Link	Multi-Role	Serial Port Profile	Antenna Type	Operating Temperature (°C)	Deep-Sleep Current (µA)	Certifications	Package Size (mm)
RNBD451	5.2	ASCII	Y	12	-102	Y	Y	Y	Y	_	PCB	-40 to 85	1.5	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	15.5 × 20.7
RNBD350	5.2	ASCII	Y	11	-108	Y	Y	Y	Y	_	PCB, U.FL	-40 to 85	1.5	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea	13.4 × 18.7
RN4678	5.0 + Classic	ASCII	_	1.5	-92	_	_	Y	_	Y	Chip	-20 to 70	130	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea, India	12 × 22
BM78	5.0 + Classic	Binary	_	1.5	-92	_	_	Y	_	Y	Chip	-20 to 70	130	EU, UK, USA, Canada, Japan, China, Taiwan, South Korea, India	12 × 22