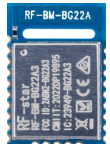
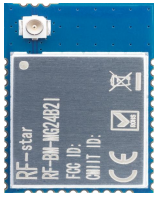
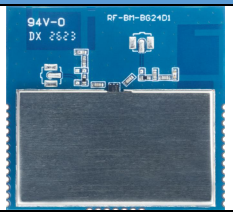
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Silicon Labs EFR32BG2X Wireless Gecko Series BLE Modules								
Part Number	**RF-BM-BG24B1**	**RF-BM-BG24B2**	**RF-BM-BG22A1**	**RF-BM-BG22A1I**	**RF-BM-BG22B1**	**RF-BM-BG22A3**	**RF-BM-BG22A3I**	**RF-BM-BG22C3**
Photo								
IC	EFR32BG24A010F1024IM48 -B	EFR32BG24A020F1024IM48 -B	EFR32BG22C112F352GM32 -C			EFR32BG22C224F512GM32 -C		
Core	76.8 MHz ARM® Cortex®-M33	76.8 MHz ARM® Cortex®-M33	38.4 MHz ARM® Cortex®-M33			76.8 MHz ARM® Cortex®-M33		
RAM	128 kB	128 kB	32 kB			32 kB		
Flash	1024 kB	1024 kB	352 kB			512 kB		
Max. TX Power	+10 dBm	+19.5 dBm	0 dBm			6 dBm		
Receiving Sensitivity	-105.7 dBm (125 kbps GFSK) -97.6 dBm (1 Mbit/s GFSK) -94.8 dBm (2 Mbit/s GFSK)	-105.7 dBm (125 kbps GFSK) -97.6 dBm (1 Mbit/s GFSK) -94.8 dBm (2 Mbit/s GFSK)	-98.9 dBm (1 Mbit/s GFSK) -96.2 dBm (2 Mbit/s GFSK)			-106.7 dBm (125 kbps GFSK) -98.9 dBm (1 Mbit/s GFSK) -96.2 dBm (2 Mbit/s GFSK)		
Protocols	BLE5.3, Proprietary, BLE 2M, BLE Long Range, Bluetooth Mesh, AoA/AoD		BLE5.3, Proprietary, BLE 2M			BLE5.3, Proprietary, BLE 2M, BLE Long Range, Bluetooth Mesh LPN, AoA/AoD		
UART Protocol	N/A	N/A	UART Master-slave, IIC Master-slave			UART Master-slave, IIC Master-slave, UART Masters-slaves		UART Master-slave
Antenna	PCB	PCB	PCB/Half-hole interface	IPEX/Half-hole interface	PCB	PCB/Half-hole interface	IPEX/Half-hole interface	Chip/Half-hole interface
GPIO	30	30	18	18	10	18	18	12
Transmission Range	230 m @ 1M PHY 450 m @ LE CODE	360 m @ 1M PHY 600 m @ LE CODE	105 m @ 1M PHY	440 m (external PCB antenna)	80 m @ 1M PHY	135 m @ 1M PHY 375 m @ LE CODE	External PCB antenna 475 m @ 1M PHY 660 m @ LE CODE	Chip antenna 105 m @ 1M PHY 142 m @ LE CODE
Dimension (mm)	23.35 x 17.0 x 2.2	23.35 x 17.0 x 2.2	16.5 x 11.6 x 2.06	16.5 x 11.6 x 2.06	16.6 x 11.2 x 2.06	16.5 x 11.6 x 2.06	16.5 x 11.6 x 2.06	8 x 8 x 1.82
Certifications	N/A	N/A	FCC, CE, SRRC, NCC	N/A	FCC, CE, SRRC	FCC, IC, CE, SRRC, TELEC, RCM	N/A	N/A
UART Protocol	N/A	N/A	BLE 5.0 Master-slave, 8 connections at most	BLE 5.0 Master-slave, 8 connections at most	BLE 5.0 slave	BLE 5.0 Master-slave, 8 connections at most	BLE 5.0 Master-slave, 8 connections at most	BLE 5.0 Master-slave, 8 connections at most
Power Supply	2.2 V ~ 3.8 V (DC-DC mode) 1.8 V ~ 3.8 V (Bypass mode) 3.3 V is recommended							
Working Temperature	-40 ℃ ~ +85 ℃							
Storage Temperature	-40 ℃ ~ +125 ℃							
Applications	ESL, Medical Electronics, Intelligent Vehicle, Consumer Electronics, IoT Industry 4., Logistics, Smart Home, Smart City, Smart Buildings							

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Silicon Labs EFR32MG24 Series Wireless Modules				
Part Number	**RF-BM-MG24B1**	**RF-BM-MG24B2**	**RF-BM-MG24B2I**	**RF-BM-MG24D1**
Photo				
IC	EFR32MG24A410F1536IM48-B	EFR32MG24A420F1536IM48-B	EFR32MG24A420F1536IM48-B	EFR32MG24A420F1536IM48-B
Max. TX Power	+10 dBm	+19.5 dBm	+19.5 dBm	+19.5 dBm
Transmission Range	240 m @ 1M PHY 470 m @ LE CODE 800 m @ 802.15.4	370 m @ 1M PHY 610 m @ LE CODE 1000 m @ 802.15.4	450 m @ 1M PHY 700 m @ LE CODE 1200 m @ 802.15.4	400 m @ 1M PHY
Antenna	PCB	PCB	IPEX Connector	Dual PCB
Dimension (mm)	23.35 x 17.0 x 2.2			32.0 x 32.5 x 2.2
GPIO	30			28
Core	76.8 MHz ARM® Cortex®-M33			
RAM	256 kB			
Flash	1536 kB			
Power Supply	2.2 V ~ 3.8 V (DC-DC mode) 1.8 V ~ 3.8 V (Bypass mode) 3.3 V is recommended			
Protocols	Matter, OpenThread, ZigBee, BLE5.3, Proprietary, Bluetooth Mesh, AoA/AoD, Channel Sounding			
Receiving Sensitivity	-105.7 dBm (125 kbps GFSK) -97.6 dBm (1 Mbit/s GFSK) -94.8 dBm (2 Mbit/s GFSK)			
Working Temperature	-40 ℃ ~ +85 ℃			
Storage Temperature	-40 ℃ ~ +125 ℃			
Applications	Gateway, home automation, direction			

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