

FREESCALE ZigBee™ Wireless Solutions and Kits



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FREESCALE ZIGBEE WIRELESS SOLUTIONS

Freescale Semiconductor offers an extensive set of low cost wireless networking solutions, hardware and software, to provide you "A fast start to wireless networking." Consider using Freescale Semiconductor's Transceiver or System-in-Package (SIP) solutions for the following applications. Application spaces include, but are not limited to:

- Residential and Commercial Automation
- Industrial Control Applications
- Healthcare Products
- Consumer Products

MC1320x Family of Generation II Transceivers

The MC1320x family is a series of short range, low power, 2.4 GHz ISM band second generation transceivers. The MC1320x family contains a complete packet data modem compliant with the IEEE® 802.15.4 standard PHY (Physical) layer. The solutions also offer an integrated TX/RX switch for fewer components and lower cost BOM. When combined with an appropriate MCU, the MC1320x family provides a cost-effective solution for short-range data links and networks.



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For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Channels	Package	Supply Voltage (V)	Frequency Band (GHz)	Serial Interface	Application	Communication Protocol	Price Each		
									1	25	100
841-MC13201FC	MC13201FC	16	1311 (QFN 32)	2 to 3.4V	2.4GHz	SPI	2.4GHz ISM	SIMPLE MAC	3.78	2.42	2.27
841-MC13202FC	MC13202FC	16	1311 (QFN 32)	2 to 3.4V	2.4GHz	SPI	2.4GHz ISM, 802.15.4	IEEE 802.15.4	5.06	3.55	3.24

MC1321x Family of System in a Package (SIP)

The MC1321x family is Freescale Semiconductor's ZigBee platform technology with a low power 2.4GHz RF transceiver and an 8-bit MCU in a 71-pin LGA package. The MC1321x family also offers broad range of integrated peripherals and interfaces including I2C, SCI, Timers/PWM, KBI, as well as an 8 channel 10-bit ADC. The combination of the radio and microcontrollers, as well as the incorporation of key peripherals and functions, in a small footprint package allows for a cost-effective solution.



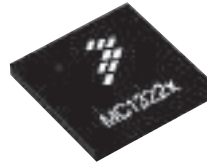
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MOUSER STOCK NO.	Freescale Part No.	Channels	Package	Supply Voltage (V)	Frequency Band (GHz)	MCU Memory	Application	Communication Protocol	Price Each		
									1	25	100
841-MC13211	MC13211	16	LGA , 71-pin	2 to 3.4V	2.4GHz	16KB	2.4GHz ISM	SIMPLE MAC	4.95	3.73	3.35
841-MC13212	MC13212	16	LGA , 71-pin	2 to 3.4V	2.4GHz	32KB	2.4GHz ISM, 802.15.4	IEEE 802.15.4	5.39	4.45	3.72
841-MC13213	MC13213	16	LGA , 71-pin	2 to 3.4V	2.4GHz	60KB	2.4GHz ISM, ZIGBEE	IEEE 802.15.4 or BeeStack	5.90	4.87	4.36

MC1322x Platform in a Package (PIP)

Freescale Semiconductor's third-generation 2.4 GHz IEEE® 802.15.4 platform takes a leap forward in processing power and system integration, while lowering power consumption up to 50% from previous generations. A fully functional 32-bit TDMI ARM7 processor with a combination of ROM, RAM and flash memory provides the highest level of integration and performance in the market today.



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MOUSER STOCK NO.	Freescale Part No.	Core	Flash	RAM / ROM	Channels	Package	Application	Communication Protocol	Price Each		
									1	25	100
841-MC13224V	MC13224V	ARM7	128K	96K / 80K	16	LGA, 99-pin	2.4GHz ISM Band	IEEE 802.15.4 MAC	5.13	4.95	4.45

FREESCALE ZIGBEE DEVELOPMENT KITS

Freescale Semiconductor provides a range of comprehensive yet cost-effective development tools designed to provide developers with the necessary hardware and software required to evaluate and develop wireless solutions ranging from simple point-to-point networks to ZigBee mesh networks.



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For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Description	BeeKit™ Included	Price Each
841-1320X-QE128-DSK	1320X-QE128-DSK	1320x QE Evaluation Kit	Yes	375.91
841-1320X-QE-DSK-BDM	1320X-QE-DSK-BDM	1320x QE Evaluation Kit w/BDM Cable	Yes	429.77
841-1320XRFC	1320XRFC	MC1320x RF Daughter Card	Yes	89.31
841-1321XDSK	1321XDSK	1321x Developer's Starter Kit	Yes	269.69
841-1321XDSK-BDM	1321XDSK-BDM	1321x Developer's Starter Kit with BDM	Yes	378.00
841-1321XNSK	1321XNSK	1321x Network Starter Kit	Yes	540.47
841-1321XNSK-BDM	1321XNSK-BDM	1321x Network Starter Kit with BDM	Yes	594.62
841-1321XEVK	1321XEVK	1321x Evaluation Kit	Yes	1888.05
841-1322XDSK-DBG	1322XDSK-DBG	1322x Developer's Starter Kit w/ J-LINK	Yes	402.69
841-1322XNSK-DBG	1322XNSK-DBG	1322x Network Starter Kit w/ J-LINK	Yes	615.19
841-1322XNSK-IAR	1322XNSK-IAR	1322x Network Starter Kit w/Baseline Version	Yes	2761.44
841-1322XUSB	1322XUSB	1322x USB Board	Yes	83.94

BeeKit™ Wireless Connectivity Toolkit

Freescale's BeeKit development environment for Windows operating systems provides a GUI in which users can create, modify, save and update wireless network solutions based on Freescale's Simple MAC (SMAC), IEEE 802.15.4 PHY/MAC and BeeStack ZigBee protocol stack. BeeKit provides a wizard and solution explorer that allows the user to quickly and easily configure parameters before creating the project, greatly reducing the need to sift through individual files and manually configure parameters. With the comprehensive code base of wireless networking libraries, application templates, and sample applications, the user generates the appropriate workspace files to be imported into an integrated development environment (IDE) for continued development and debugging. Download your complimentary BeeKit at www.Freescale.com/ZigBee