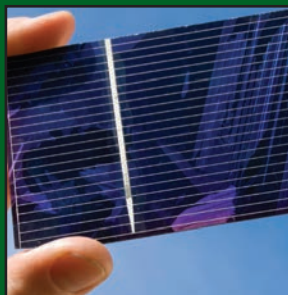


# WIRELESS PRODUCT SELECTOR GUIDE



FALL 2012

[www.silabs.com](http://www.silabs.com)



## Complete Family of Wireless Solutions

Silicon Labs offers a broad portfolio of low-power wireless solutions – from single-chip sub-GHz ISM band receivers, transmitters, transceivers and wireless MCUs designed to support a wide range of wireless applications to high-performance 2.4 GHz ZigBee solutions for mesh networking applications.



## Robust Tools, Software and Support

Complete tools help you throughout the entire development cycle, including in-depth documentation, development hardware, and robust software platforms to help you easily set up, configure and monitor your system.



## Perfect for Your Application

Optimized for power efficiency, the high-performance, low-power, mixed-signal wireless family reduces system cost, improves reliability and enables new features for a variety of end equipment solutions.

FALL 2012

Smart solutions for metering, home automation, industrial, consumer and medical applications

[www.silabs.com/wireless](http://www.silabs.com/wireless)

  
SILICON LABS

Engineering for a mixed-signal world.

## Wireless Products

REQUEST SAMPLES AND DOWNLOAD DOCUMENTATION AT [www.silabs.com/wireless](http://www.silabs.com/wireless)

### EZRadio® Universal ISM Band RF ICs: [www.silabs.com/ezradio](http://www.silabs.com/ezradio)

Fully integrated, low-power, low data rate, low cost transmitter, receiver and transceiver ICs

PART NUMBER	TYPE	MODULATION SCHEME (MAX KBPS)		FREQUENCY BANDS (MHz)				OUTPUT POWER MAX (dBm)		SUPPLY VOLTAGE (V)	SENSITIVITY (dBm)	PACKAGE
		FSK	OOK	315	434	868	915	868 MHz BAND	434 MHz BAND			
Si4010	MCU +TX	100	50	27 - 960				10		1.8-3.6	—	MSOP10/SOIC14
Si4012	TX	100	50	27 - 960				10		1.8-3.6	—	MSOP10/SOIC14
Si4313	RX	256	40	•	•	•	•			1.8-3.6	-118/-107	QFN20
Si4355	RX	500	120	•	•	•	•			1.8-3.6	-116	QFN20
Si4455	TRX	500	—	•	•	•	•	12	13	1.8-3.6	-116	QFN20

### EZRadioPRO® Radio with Enhanced Features: [www.silabs.com/ezradiopro](http://www.silabs.com/ezradiopro)

Sub-GHz radios supporting continuous frequency tuning from 119 to 1050 MHz and output power up to +20 dBm

PART NUMBER	TYPE	MODULATION SCHEME (MAX KBPS)		FREQUENCY RANGE (MHz)	OUTPUT POWER RANGE (dBm)	SENSITIVITY (dBm)		RX CURRENT (mA)	TX CURRENT (mA)				PACKAGE
		FSK	OOK			(2.0 KBPS) (FSK)	(4.8 KBPS) (OOK)		0	+11 (dBm)	+13	+20	
Si4030	TX	256	40	900-960	-8 to +13	—	—	—	18		30		QFN20
Si4031	TX	256	40	240-930	-8 to +13	—	—	—	18		30		QFN20
Si4032	TX	256	40	240-930	+1 to +20	—	—	—		35		85	QFN20
Si4060	TX	1000	120	142-1050 Major Bands	-40 to +13	—	—	—		18			QFN20
Si4063	TX	1000	120	142-1050 Major Bands	-20 to +20	—	—	—				85	QFN20
Si4330	RX	256	40	240-960	—	-121	-110	18.5 mA					QFN20
Si4362	RX	1000	120	142-1050 Major Bands	—	-124	-110	10/13 mA					QFN20
Si4430	TRX	256	40	900-960	-8 to +13	-121	-110	18.5 mA	18		30		QFN20
Si4431	TRX	256	40	240-930	-8 to +13	-121	-110	18.5 mA	18		30		QFN20
Si4432	TRX	256	40	240-930	+1 to +20	-121	-110	18.5 mA		35		85	QFN20
Si4460	TRX	1000	120	142-1050 Major Bands	-40 to +13	-124	-110	10/13 mA		18	25		QFN20
Si4461	TRX	1000	120	142-1050 Major Bands	-40 to +16	-124	-110	10/13 mA			29		QFN20
Si4463	TRX	1000	120	142-1050 Major Bands	-20 to +20	-124	-110	10/13 mA				85	QFN20
Si4464	TRX	1000	120	119-960	-20 to +20	-124	-110	10/13 mA				85	QFN20

**Wireless MCUs:** [www.silabs.com/wirelessmcu](http://www.silabs.com/wirelessmcu)

Industry's lowest power single-chip MCU with an integrated sub-GHz RF transceiver

PART NUMBER	FLASH MEMORY	MIPS (PEAK)	RAM (BYTES)	DIG. I/O	COMM.	FSK/GFSK (KBPS)	OOK (KBPS)	OUTPUT POWER (DBM)	2/4.8 KBPS SENSITIVITY	TX CURRENT (mA) +11 +13 +20 (dBm)		TIMERS (14-BIT)	PWM/PCA	INT OSC	ADC	COMP.	OTHER	PACKAGE	DEV KIT	
Si1020	128 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor, 128 LCD Segments	LGA85	Si1020DK
Si1024	128 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor, 128 LCD Segments	LGA85	Si1024DK
Si1030	128 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor	LGA85	Si1020DK
Si1034	128 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor	LGA85	Si1024DK
Si1021	64 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor, 128 LCD Segments	LGA85	Si1020DK
Si1025	64 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor, 128 LCD Segments	LGA85	Si1024DK
Si1031	64 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor	LGA85	Si1020DK
Si1035	64 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor	LGA85	Si1024DK
Si1000	64 kB	25	4352	22	I <sup>2</sup> C, SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	10-bit, 18-ch., 300 ksps	2	Temp Sensor, RTC, CRC, VREF	QFN42	Si1000DK
Si1002	64 kB	25	4352	22	I <sup>2</sup> C, SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	10-bit, 18-ch., 300 ksps	2	Temp Sensor, RTC, CRC, VREF	QFN42	Si1000DK
Si1004	64 kB	25	4352	19	I <sup>2</sup> C, SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	10-bit, 15-ch., 300 ksps	2	VREF, Temp Sensor, RTC, CRC, DC-DC	QFN42	Si1000DK
Si1022	32 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor, 128 LCD Segments	LGA85	Si1020DK
Si1026	32 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor, 128 LCD Segments	LGA85	Si1024DK
Si1032	32 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor	LGA85	Si1020DK
Si1036	32 kB	25	8448	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor	LGA85	Si1024DK
Si1001	32 kB	25	4352	22	I <sup>2</sup> C, SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	10-bit, 18-ch., 300 ksps	2	Temp Sensor, RTC, CRC, VREF	QFN42	Si1000DK
Si1003	32 kB	25	4352	22	I <sup>2</sup> C, SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	10-bit, 18-ch., 300 ksps	2	Temp Sensor, RTC, CRC, VREF	QFN42	Si1000DK
Si1005	32 kB	25	4352	19	I <sup>2</sup> C, SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	10-bit, 15-ch., 300 ksps	2	VREF, Temp Sensor, RTC, CRC, DC-DC	QFN42	Si1000DK
Si1023	16 kB	25	4352	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor, 128 LCD Segments	LGA85	Si1020DK
Si1027	16 kB	25	4352	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor, 128 LCD Segments	LGA85	Si1024DK
Si1033	16 kB	25	4352	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor	LGA85	Si1020DK
Si1037	16 kB	25	4352	53	I <sup>2</sup> C, 2 x SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 16-ch., 75 ksps	2	VREF, Temp Sensor	LGA85	Si1024DK
Si1010	16 kB	25	768	15	I <sup>2</sup> C, SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 11-ch., 75 ksps	2	Temp Sensor, RTC, CRC, VREF	QFN42	Si1010DK
Si1012	16 kB	25	768	15	I <sup>2</sup> C, SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 11-ch., 75 ksps	2	Temp Sensor, RTC, CRC, VREF	QFN42	Si1010DK
Si1014	16 kB	25	768	15	I <sup>2</sup> C, SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 11-ch., 75 ksps	2	VREF, Temp Sensor, RTC, CRC, DC-DC	QFN42	Si1010DK
Si1011	8 kB	25	768	15	I <sup>2</sup> C, SPI, UART	256	40	+1 to +20	-121/-110			85	4	6	±2%	12-bit, 11-ch., 75 ksps	2	Temp Sensor, RTC, CRC, VREF	QFN42	Si1010DK
Si1013	8 kB	25	768	15	I <sup>2</sup> C, SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 11-ch., 75 ksps	2	Temp Sensor, RTC, CRC, VREF	QFN42	Si1010DK
Si1015	8 kB	25	768	15	I <sup>2</sup> C, SPI, UART	256	40	-8 to +13	-121/-110	17	30		4	6	±2%	12-bit, 11-ch., 75 ksps	2	VREF, Temp Sensor, RTC, CRC, DC-DC	QFN42	Si1010DK

\*See Wireless MCU Kit Table for full part number and frequency options

**Ember® ZigBee™ Wireless Mesh Networking:** [www.silabs.com/zigbee](http://www.silabs.com/zigbee)

High performance 2.4 GHz low-power wireless solutions, supported by best-in-class development tools

PART NUMBER	FLASH (kB)	RAM (kB)	DATA RATE	FREQ. RANGE (MHz)	SENSITIVITY (boost)	ADJ CHANNEL REJECTION (15.4)	ALT CHANNEL REJECTION (15.4)	802.11g REJECTION +12/-13 MHz	TX POWER (boost)	TOTAL LINK BUDGET (boost)	DEEP SLEEP CURRENT	RX CURRENT	TX CURRENT (at +3 dBm)	CRYSTAL FREQ.	VOLTAGE (V)	PACKAGE
EM351	128	12	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB	400 nA	26.5 mA	31 mA	24 MHz	2.1 to 3.6	QFN48
EM357	192	12	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB	400 nA	26.5 mA	31 mA	24 MHz	2.1 to 3.6	QFN48

## Turnkey Support

FIND THE EVALUATION TOOLS AND REFERENCE DESIGNS TO HELP YOU GET STARTED: [www.silabs.com/wireless](http://www.silabs.com/wireless)

### Sub-GHz EZRadio Development Support

Silicon Labs offers complete tools to help designers throughout the entire project. The EZRadio®, EZRadioPRO® and wireless solutions offer hardware and software platforms to easily set up and configure, compile and debug a project. Full documentation and a broad range of third-party compilers and development tools are available. Software stacks provide networking support for multi-node metering networks. Software simulation tools can estimate power consumption and determine expected battery life.

Complete development/prototyping system includes the following:

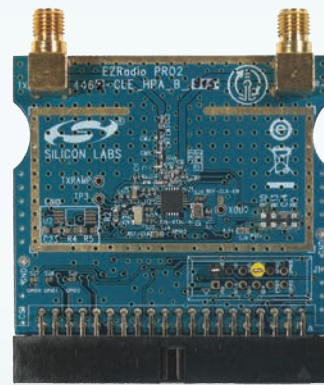
- Prototyping/demonstration board
- USB adapter for in-system programming and debugging
- Silicon Laboratories IDE
- MCU configuration wizard



**Si4431/  
C8051F342  
EZRadioPRO®  
USB DONGLE**



**Si1000 TARGET BOARD  
WITH EZRadio® TEST CARD**



**Si4463 UNIFIED  
DEVELOPMENT PLATFORM  
915 MHz RADIO TEST CARD**



**Si4355/Si4010 ONE-WAY  
SUB-GHZ KEY FOB TO LED  
RECEIVER STICK**

## EZMac® Embedded Media Access Control Software Demo Code

EZMac® media access control software is developed in C code for use with our ISM transceiver products and Wireless MCUs to help create simple point-to-point and star networks. Transceiver application designers can use the EZMac software as a demonstration of a simplified interface to the physical radio layer that manages the delivery of signals and their associated packets from the transmitter to the receiver, between nodes. [www.silabs.com/EZMac](http://www.silabs.com/EZMac)

### Requirement :: Development Support

- Supports ISM band transceivers
- Internal baud rate generator
- 16 byte payload per packet
- Dedicated crystal oscillator for exact timing
- DQD (data quality detector) for FSK fast frequency hopping
- Configurable packet filtering
- Multiple error detection

## Wireless Development Suite

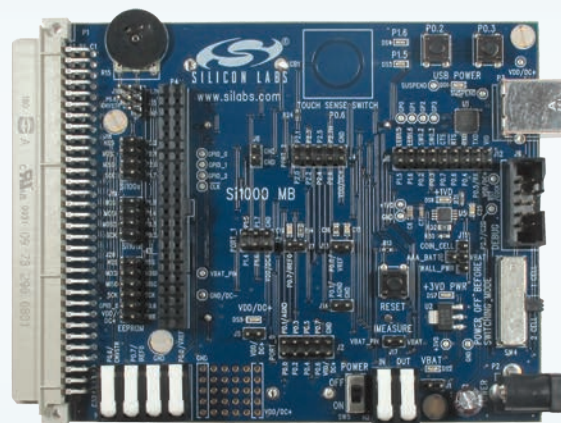
The Wireless Development Suite (WDS) provides developers a comprehensive toolset to quickly and easily create and deploy efficient, robust and low-cost wireless applications. WDS can be used for demonstrating part capabilities, testing performance, and prototyping application examples, with little or no RF design and measurement experience. [www.silabs.com/WDS](http://www.silabs.com/WDS)

### Requirement :: Prototyping and Test

- Supports a family of TX, RX and TRX test cards
- Device config, save, and restore
- Custom scripting API
- Online device documentation
- Terminal window
- PC interface to evaluation boards



Si4010 EZRadio®  
KEY FOB TRANSMITTER



Si1000 WIRELESS MCU  
TARGET BOARD



EZRadio® Si4010/Si4355  
ONE-WAY AES  
DEVELOPMENT KIT

## Development Kits

FIND THE EVALUATION TOOLS AND REFERENCE DESIGNS TO HELP YOU GET STARTED: [www.silabs.com/wireless-devkits](http://www.silabs.com/wireless-devkits)

### Wireless MCU Development Kits

PART NUMBER	DESCRIPTION	PRICE
Si1000DK	Si1000 Wireless MCU Development Kit	\$49.99
Si1010DK	Si1010 Wireless MCU Development Kit	\$150.00
Si1020-915-A-SDK	Si1020 915 MHz Software Development Kit	\$299.00
Si1020-915-A-DK	Si1020 915 MHz Wireless Development Kit	\$829.00
Si1024-868-A-SDK	Si1024 868 MHz Software Development Kit	\$299.00
Si1024-868-A-DK	Si1024 868 MHz Wireless Development Kit	\$829.00

### Wireless MCU Development Kit Test Cards

PART NUMBER	TYPE	FREQUENCY	ANTENNA CONFIGURATION	PRICE
1000-TCB1 C 915	Si1000 TRX Testcard	915 MHz	Single Switch Antenna Rev c/B1; +20 dBm	\$70.00
1000-TCB1 C 470	Si1000 TRX Testcard	470 MHz	Single Switch Antenna Rev c/B1; +20 dBm	\$70.00
1002-TCB1 D 868	Si1002 TRX Testcard	868 MHz	Single Tied Antenna Rev c/B1; +13 dBm	\$70.00
1002-TCB1 D 434	Si1002 TRX Testcard	470 MHz	Single Tied Antenna Rev c/B1; +13 dBm	\$70.00
1004-TCB1 D 868	Si1004 TRX Testcard	868 MHz	Single Tied Antenna Rev d/B1; +13 dBm, dc-dc	\$70.00
1004-TCB1 D 434	Si1004 TRX Testcard	434 MHz	Single Tied Antenna Rev d/B1; +13 dBm, dc-dc	\$70.00
1010-TAB1 C 915	Si1010 TRX Testcard	915 MHz	Single Switch Antenna Rev c/B1; +20 dBm	\$70.00
1010-TCB1 C 470	Si1010 TRX Testcard	470 MHz	Single Switch Antenna Rev c/B1; +20 dBm	\$70.00
1012-TAB1 D 868	Si1012 TRX Testcard	868 MHz	Single Tied Antenna Rev d/B1; +13 dBm	\$70.00
1012-TAB1 D 434	Si1012 TRX Testcard	434 MHz	Single Tied Antenna Rev d/B1; +13 dBm	\$70.00
1014-TAB1 D 868	Si1014 TRX Testcard	868 MHz	Single Tied Antenna Rev d/B1; +13 dBm, dc-dc	\$70.00
1014-TAB1 D 434	Si1014 TRX Testcard	434 MHz	Single Tied Antenna Rev d/B1; +13 dBm, dc-dc	\$70.00

### Wireless MCU Development Kit Pico Cards

PART NUMBER	FREQUENCY	DESCRIPTION	PRICE
UPPI1020GM-A-915EK	915 MHz	Si1020-GM 915 +20 dBm T/R switch pico board	\$49.00
UPPI1024GM-A-868EK	868 MHz	Si1024-GM 868 +13 dBm direct tie pico board	\$42.00
UPPI1024GM-A-434EK	434 MHz	Si1024-GM 434 +13 dBm direct tie pico board	\$42.00

## Ember ZigBee Development Kits

PART NUMBER	DESCRIPTION	PRICE
EM35x-DEV	EM351 and EM357 Development Kit with 30-day trial license for IAR Embedded Workbench for ARM	\$2,500.00
EM35x-DEV-IAR	EM351 and EM357 Development Kit with a full standalone Cortex-M3 licence for IAR Embedded Workbench for ARM	\$5,200.00
EM35x-NCP-ADD-ON-S	Network co-processor development with an existing EM35x Development kit	\$405.00

## EZRadio Development Kits

PART NUMBER	DESCRIPTION	PRICE
4010-KFOBDEV-434	Si4010/Si4355 Key Fob Development Kit; 434 MHz Frequency	\$150.00
4010-KFOBDEV-868	Si4010/Si4355 Key Fob Development Kit; 868 MHz Frequency	\$150.00
4010-KFOBDEV-915	Si4010/Si4355 Key Fob Development Kit; 915 MHz Frequency	\$150.00
4010-AESK1W-315	Si4010/Si4355 One-Way AES Development Kit; 315 MHz Frequency	\$50.00
4010-AESK1W-434	Si4010/Si4355 One-Way AES Development Kit; 434 MHz Frequency	\$50.00
4010-AESK1W-868	Si4010/Si4355 One-Way AES Development Kit; 868 MHz Frequency	\$50.00
4010-AESK1W-915	Si4010/Si4355 One-Way AES Development Kit; 915 MHz Frequency	\$50.00
4012-LCDK1W-434	Si4355 One-Way LCD Development Kit; 434 MHz Frequency	\$50.00
4012-LCDK1W-915	Si4355 One-Way LCD Development Kit; 915 MHz Frequency	\$50.00
EZR-LEDK1W-434	Si4010/Si4355 One-Way Sub-GHz Key Fob to LED Receiver Stick; 434 MHz Frequency	\$20.00
EZR-LEDK1W-868	Si4010/Si4355 One-Way Sub-GHz Key Fob to LED Receiver Stick; 868 MHz Frequency	\$20.00
EZR-LEDK1W-915	Si4010/Si4355 One-Way Sub-GHz Key Fob to LED Receiver Stick; 915 MHz Frequency	\$20.00
EZR-LEDK2W-434	Si4455 Two-Way Sub-GHz Key Fob to LED Receiver Stick; 434 MHz Frequency	\$40.00
EZR-LEDK2W-868	Si4455 Two-Way Sub-GHz Key Fob to LED Receiver Stick; 868 MHz Frequency	\$40.00
EZR-LEDK2W-915	Si4455 Two-Way Sub-GHz Key Fob to LED Receiver Stick; 915 MHz Frequency	\$40.00
EZR-LCDK2W-434	Si4455 Two-Way LCD Development Kit; 434 MHz Frequency	\$100.00
EZR-LCDK2W-868	Si4455 Two-Way LCD Development Kit; 868 MHz Frequency	\$100.00
EZR-LCDK2W-915	Si4455 Two-Way LCD Development Kit; 915 MHz Frequency	\$100.00
RF-to-USB-RD	Two board RF to USB Reference Design	\$49.99
Si4463-915-DK	Si4463 Wireless Kit - 915 MHz Development Kit	\$799.00
Si4461-868-DK	Si4461 Wireless Kit - 868 MHz Development Kit	\$799.00

## EZRadioPRO Development Kit Test Cards

PART NUMBER	TYPE	FREQUENCY	ANTENNA CONFIGURATION	PRICE
4432-T-B1 A 915	Si4432 TRX Testcard	915 MHz	Two antennas mounted at 90°; used to evaluate the embedded antenna diversity algorithm	\$75.00
4432-T-B1 B 915	Si4432 TRX Testcard	915 MHz	Separate TX and RX designed for lab testing (not recommended for range testing)	\$70.00
4432-T-B1 C 915	Si4432 TRX Testcard	915 MHz	Single tied antenna implemented with RF switch	\$65.00
4432-T-B1 C 868	Si4432 TRX Testcard	868 MHz	Single tied antenna implemented with RF switch	\$65.00
4432-T-B1 B 470	Si4432 TRX Testcard	470 MHz	Separate TX and RX designed for lab testing (not recommended for range testing)	\$70.00
4432-T-B1 C 470	Si4432 TRX Testcard	470 MHz	Single tied antenna implemented with RF switch	\$65.00
4432-T-B1 D 470	Si4432 TRX Testcard	470 MHz	Single tied antenna implemented with RF switch	\$50.00
4431-T-B1 B 868	Si4431 TRX Testcard	868 MHz	Separate TX and RX designed for lab testing (not recommended for range testing)	\$65.00
4431-T-B1 D 868	Si4431 TRX Testcard	868 MHz	Single tied antenna implemented without RF switch	\$60.00
4431-T-B1 B 434	Si4431 TRX Testcard	434 MHz	Separate TX and RX designed for lab testing (not recommended for range testing)	\$65.00
4431-T-B1 D 434	Si4431 TRX Testcard	434 MHz	Single tied antenna implemented without RF switch	\$60.00
4430-T-B1 B 950	Si4430 TRX Testcard	950 MHz	Separate TX and RX designed for lab testing (not recommended for range testing)	\$50.00
4430-T-B1 D 950	Si4430 TRX Testcard	950 MHz	Single Antenna implemented without RF switch	\$50.00
4330-T-B1 B 434	Si4430 RX Testcard	434 MHz	Single tied antenna	\$50.00
4330-T-B1 B 470	Si4430 RX Testcard	470 MHz	Single tied antenna	\$50.00
4330-T-B1 B 868	Si4430 RX Testcard	868 MHz	Single tied antenna	\$50.00
4330-T-B1 B 915	Si4430 RX Testcard	915 MHz	Single tied antenna	\$50.00
4330-T-B1 B 950	Si4430 RX Testcard	950 MHz	Single tied antenna	\$50.00
4032-T-B1 B 915	Si4430 TX Testcard	915 MHz	Single tied antenna	\$50.00
4032-T-B1 B 470	Si4430 TX Testcard	470 MHz	Single tied antenna	\$50.00
4031-T-B1 B 868	Si4430 TX Testcard	868 MHz	Single tied antenna	\$50.00
4031-T-B1 B 434	Si4430 TX Testcard	434 MHz	Single tied antenna	\$50.00
4461-TSC14D868-EK	Si4461 TRX Testcard	868 MHz	Si4461 +14 dBm radio test card	\$50.00
4460-TCE10D868-EK	Si4460 TRX Testcard	868 MHz	Si4460 +10 dBm radio test card	\$50.00
4463-TCE20C868-EK	Si4463 TRX Testcard	868 MHz	Si4463 +20 dBm radio test card	\$50.00
4463-TCE27F868-EK	Si4463 TRX Testcard	868 MHz	Si4463 +27 dBm radio test card	\$50.00
4463-TSQ20D169-EK	Si4463 TRX Testcard	169 MHz	Si4463 +20 dBm radio test card	\$50.00
4463-TSQ27F169-EK	Si4463 TRX Testcard	169 MHz	Si4463 +27 dBm radio test card	\$50.00
4460-TCE10D434-EK	Si4460 TRX Testcard	434 MHz	Si4460 +10 dBm radio test card	\$50.00
4463-TCE20B460-EK	Si4463 TRX Testcard	460 MHz	Si4463 +20 dBm SPLIT radio test card	\$50.00
4463-TCE20C460-EK	Si4463 TRX Testcard	460 MHz	Si4463 +20 dBm RFSWITCH radio test card	\$50.00
4463-TCE20C915-EK	Si4463 TRX Testcard	915 MHz	Si4463 +20 dBm radio test card	\$50.00
4463-TCE30E915R-EK	Si4463 TRX Testcard	915 MHz	Si4463 RFMD +30 dBm radio test card	\$50.00
4460-TCE30E915S-EK	Si4463 TRX Testcard	915 MHz	Si4463 Skyworks +30 dBm radio test card	\$50.00

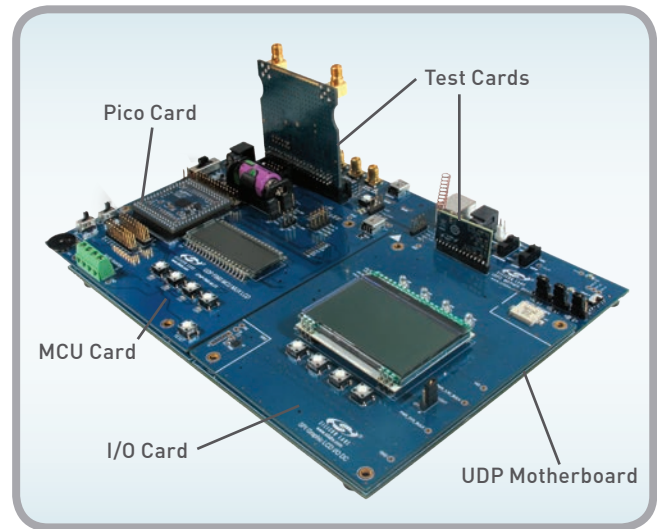


## Unified Development Platform

Silicon Labs offers an innovative approach in hardware support with the Unified Development Platform (UDP), featuring a unified mother board, modular boards, integrated LCD and ample real estate for prototyping, expansion and integration. The UDP provides a standalone demonstration and software development platform for the EZRadioPRO Wireless devices, Wireless MCU devices and MCU products. Kits include UDP base boards and RF test cards. Additional test cards may be ordered if the included 915 MHz or 868 MHz test cards don't satisfy the requirements for the end application. [www.silabs.com/UDP](http://www.silabs.com/UDP)

The UDP platform supports all of the following:

- MCU code and firmware development (IDE, configuration wizard, example codes, etc.)
- RF design and optimization (Wireless Development Suite support, automatic board detection and firmware download, sample RF code, run-time PHY interface, etc.)
- Networks and protocol stacks (such as the wireless M-Bus stack)

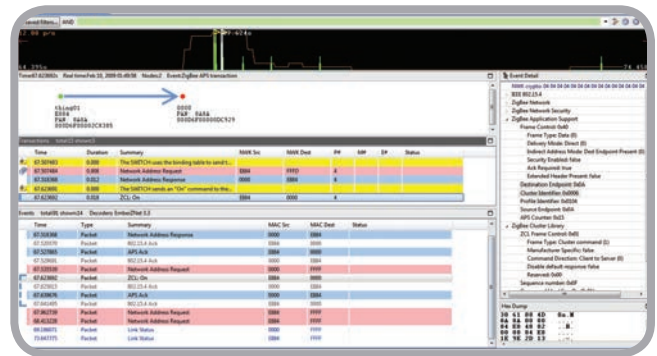


## ZigBee Development Tools

The EM35x development environment dramatically shortens design cycles by joining sophisticated network development and debugging tools. It begins with the silicon-based packet trace port, a collection of minimally-intrusive hardware debugging features on the EM35x system-on-chip (SoC) and network co-processor (NCP). Debug adapters bridge the packet trace port to the developer's PCs via an Ethernet connection, where the Desktop Network Analyzer enables rapid development and debugging. The Ember AppBuilder is an easy-to-use graphical tool providing the fastest path to certifiable products using ZigBee standard public application profiles.

Bundles of these tools and development boards are available for each of the Ember ZigBee chipsets.

[www.silabs.com/zigbee-devkits](http://www.silabs.com/zigbee-devkits)



## EM35x Series Development Kit

(EM35X-DEV or EM35X-DEV-IAR)

Customers starting new ZigBee SoC projects should choose the EM35x Development Kit as their starting point. There are two variants:

- EM35X-DEV with a 30-day trial license of IAR Embedded Workbench for ARM
- EM35X-DEV-IAR includes a full standalone Cortex-M3 licence for IAR Embedded Workbench for ARM

An IAR EWARM license (P/N: EM35X-DEV-UPG-IAR) for use with the EM35x development kit may be purchased separately

## EM35x Family as a Network Co-Processor (NCP)

(EM35X-NCP-ADD-ON-S)

Silicon Labs' Ember EM35x NCP add-on kit allows designers to take maximum advantage of the superior power consumption, radio performance and CPU performance of the Ember EM35x series chips in a network co-processor configuration.

# Buy or Sample Wireless Products

QUICKLY BUY OR SAMPLE PRODUCTS ON OUR WEBSITE AT [www.silabs.com/buy](http://www.silabs.com/buy)

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The Silicon Labs' wireless product selector online utility helps identify the right wireless product for the application. Simply make the selections that best describe the design, and the appropriate product with all supporting documentation, development software and hardware will be displayed. Enter the design specifications below and in less than a minute we'll match you to the right wireless product for the project. You will receive product match(es), data sheet(s), application notes, development hardware and software.

1 Standard/certification

2 Frequency spectrum

3 One-way or two-way link

**PRODUCTS**

- EZRadio
- EZRadioPRO
- RF Synthesizers
- Wireless MCUs
- ZigBee

**TOOLS**

- Wireless Chip Selector
- Development Tools
- Reference Designs
- Test Cards
- Wireless M-Bus

**SOFTWARE**

- Wireless Development Suite

**MODULES**

- Wireless Modules

This tool will help you identify the right wireless product for your application. Simply make the selections that best describe your design, and the appropriate product with all supporting documentation, development software and hardware will be displayed.

In less than a minute, we'll match you to the right wireless product for your project!

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Answer Summary:

1) Please select the appropriate standard:

- FCC (e.g. US market)
- ARIB (e.g. Japan market)
- ETSI (e.g. Europe market)
- China
- Brazil

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**Cross-Reference Utility:** [www.silabs.com/cross-reference](http://www.silabs.com/cross-reference)

Silicon Labs' cross reference utility allows you to type in a competitor's part number (full or partial) and if we have a cross-match, our part number pops up. Results are automatically filtered as you type and can be exported to excel so you can e-mail or save results.

Silicon Labs > Support > Competitor Cross Reference

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**Search For Competitor:**

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**Compatibility:**

 Drop-in     Footprint     Functional

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Competitor Part Number	Competitor Name	Silicon Labs Part Number	Compatibility	Description	Documents	Buy/Sample
A7102C	Amicom	<a href="#">Si4455</a>	Functional	Sub-GHz OOK/(G)FSK Transceiver	<a href="#">Data Sheet</a>	<a href="#">Sample</a> <a href="#">Buy</a>
A7103A	Amicom	<a href="#">Si4455</a>	Functional	Sub-GHz OOK/(G)FSK Transceiver	<a href="#">Data Sheet</a>	<a href="#">Sample</a> <a href="#">Buy</a>

Silicon Labs' products are designed and manufactured to ISO 9001, ISO 14001 and ISO/TS 16949 standards.



**ISO 9001**

Quality Management System  
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**ISO 14001**

Environmental Management System  
Design and Manufacture of Integrated Circuits  
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recycled wood or fiber

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