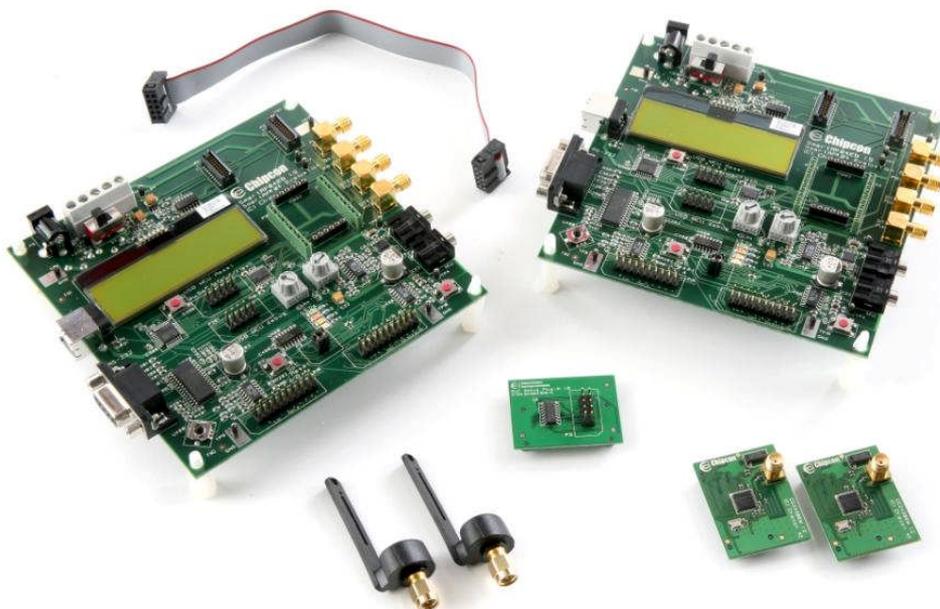


CC2430 Development Kit

The CC2430DK is a powerful tool in the market for developing applications based on the IEEE 802.15.4 network standard. The kit includes all required hardware and software to evaluate, demonstrate, prototype and develop various applications based on the 802.15.4 network standard.

The CC2430DK is a very flexible kit that can be used to develop everything from simple light switches to advanced nodes with many peripherals. A set of sample applications and 802.15.4 MAC (Media Access Control) software is included with the kit to allow users to test performance right out of the box. A set of hardware interface library software is included to speed up development with the CC2430



CC2430DK Contents

- 2 x SmartRF04EB Evaluation Boards
- 2 x CC2430EM Evaluation Modules
- 2 x 2.4GHz Antennas
- 2 x USB cables
- 1 x system-on-chip debug plug-in board
- 1 x 10-wire flat cable for using SmartRF04EB as emulator for external target
- 1 x evaluation version of IAR Embedded Workbench for 8051

Using the Development Kit

The two SmartRF04EB Evaluation Boards combined with CC2430EM Evaluation Modules and 2.4GHz antennas can be used to perform a number of tests out of the box and operate as a basis for software development and evaluation of the radio

CC2430EM Evaluation Module



The CC2430EM is the realization of the CC2430 reference design available on the web.

The CC2430EM includes an SMA connector allowing the user to easily test RF range with various SMA based antenna types.

The SMA connector on the CC2430EM can be connected to any 50Ω test instrument, e.g. signal generators and spectrum analyzers, for easy evaluation of key RF parameters such as output power and sensitivity.

SmartRF04EB Evaluation Board



The SmartRF04EB is a platform for development and testing of both hardware and software.

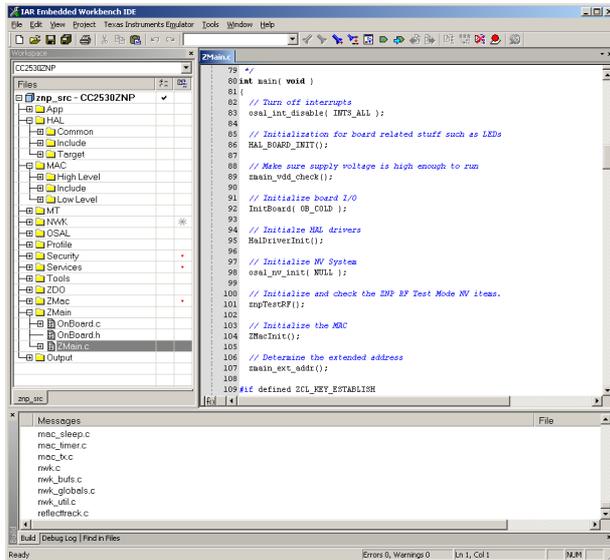
The EB operates as a debugger probe to the CC2430, allowing single stepping and debugging of software running on the CC2430 when using e.g. IAR EW8051. Similarly, the board can be used as a programming tool for the CC2430.

The SmartRF04EB includes an LCD panel, pushbuttons, joystick and 2 LEDs to give a simple and intuitive user interface. A potentiometer is included for analog measurements, and an audio filter and amplifier enabling transmission and reception of audio signals.

All I/O signals are available on header connectors on the SmartRF04EB to allow easy access for connecting external target boards or oscilloscope probes and logic analyzers.

When connected with USB cable to a PC the SmartRF04EB and CC2430EM hardware accompanied by Texas Instruments' SmartRF Packet Sniffer can be used to monitor RF traffic on the air. In addition, SmartRF Studio can be used to configure, read and write registers and test the CC2430 devices.

IAR EW8051 C-compiler with C-SPY debugger



The CC2430DK is supported by IAR EW8051, which is used with all the software provided by Texas Instruments (TIMAC, Z-Stack, SimpliciTI and application examples).

A copy of the free 30-day evaluation version of IAR EW8051 is included in the kit. By contacting a local IAR representative, a 30-day extension of the license will be given.

For more information about the CC2430DK, please visit the product web page at <http://focus.ti.com/docs/toolsw/folders/print/cc2430dk.html>

IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

Products		Applications	
Amplifiers	amplifier.ti.com	Audio	www.ti.com/audio
Data Converters	dataconverter.ti.com	Automotive	www.ti.com/automotive
DLP® Products	www.dlp.com	Communications and Telecom	www.ti.com/communications
DSP	dsp.ti.com	Computers and Peripherals	www.ti.com/computers
Clocks and Timers	www.ti.com/clocks	Consumer Electronics	www.ti.com/consumer-apps
Interface	interface.ti.com	Energy	www.ti.com/energy
Logic	logic.ti.com	Industrial	www.ti.com/industrial
Power Mgmt	power.ti.com	Medical	www.ti.com/medical
Microcontrollers	microcontroller.ti.com	Security	www.ti.com/security
RFID	www.ti-rfid.com	Space, Avionics & Defense	www.ti.com/space-avionics-defense
RF/IF and ZigBee® Solutions	www.ti.com/lprf	Video and Imaging	www.ti.com/video
		Wireless	www.ti.com/wireless-apps

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2010, Texas Instruments Incorporated