

Quick Start Instructions

CC2420DK Development Kit

Introduction

The CC2420 single-chip RF transceiver provides a highly integrated, flexible low-cost solution for applications using the worldwide unlicensed 2.4 GHz frequency band. The CC2420DK development kit is a powerful and flexible tool specifically designed to make it fast and easy for the user to evaluate the RF performance of the CC2420.

The Development Kit includes two CC2400EB Evaluation Boards and two CC2420EM Evaluation Modules. The CC2420EM contains the CC2420 chip and required external components. The CC2420EM can also be used for prototyping together with a microcontroller.

The CC2400EB serves as a motherboard for the CC2420EM Evaluation Module. The CC2400EB provides a USB port, buttons, LEDs, voltage regulation, configuration jumpers and connectors to make it easy to interface the CC2420 with SmartRF[®] Studio and various test equipment.

The hardware is documented in the CC2420DK User Manual, while SmartRF[®] Studio is documented in its own User Manual. All documentation and software should be downloaded from Chipcon's web site. Please visit Chipcon's web site regularly for updates to the documentation and software.

Getting started

1. Plug a CC2420EM into a CC2400EB. Connect the CC2400EB to an external power supply. When shipped, the CC2400EB is configured for use with a 4-7 V power supply. If you need to change the voltage settings, please see the CC2420DK User Manual for further details.
2. If you are going to measure the current consumption of the CC2420, insert an amperemeter between the appropriate terminals of the power connector. If not, make sure that a jumper is inserted between these terminals.
3. Install version 5.1 or later of SmartRF[®] Studio on a PC if this is not already done. Follow the instructions given by the installation program. The PC must be running Windows 98 or newer (the CC2420DK will not work with Windows 95 or Windows NT due to lack of USB support).
4. Use the supplied USB cable to connect the CC2400EB to the PC.
5. Start SmartRF[®] Studio.
6. You can now test the RF performance of the CC2420 chip. It is also possible to set up a link between two PCs. Please turn to the SmartRF[®] Studio User Manual for more information.

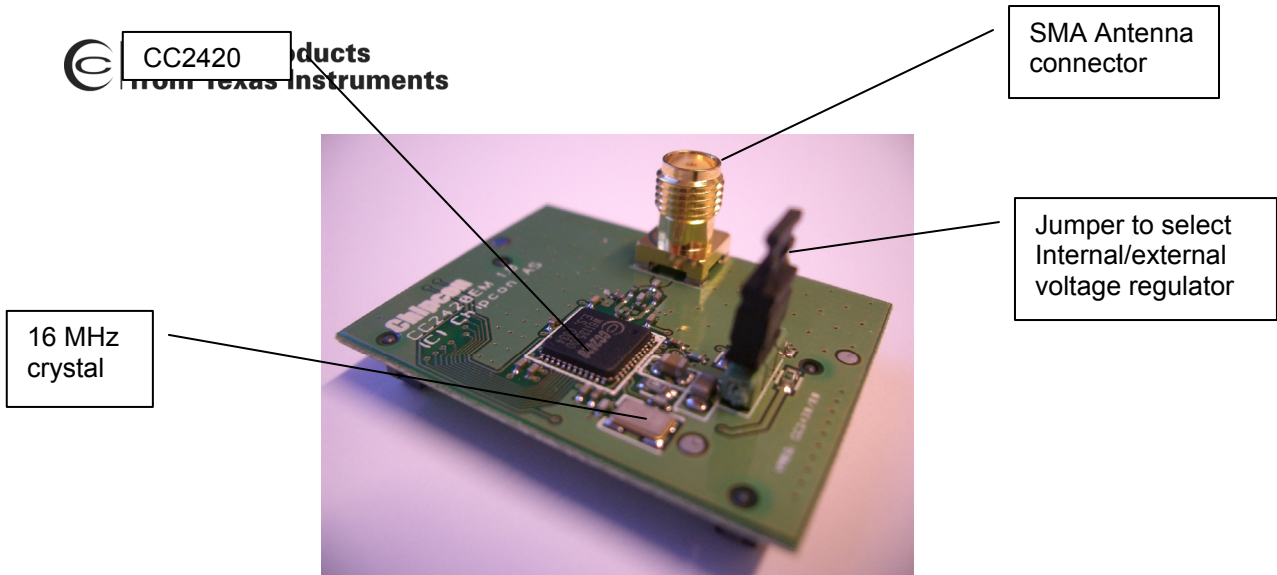


Figure 1: CC2420EM Evaluation Module

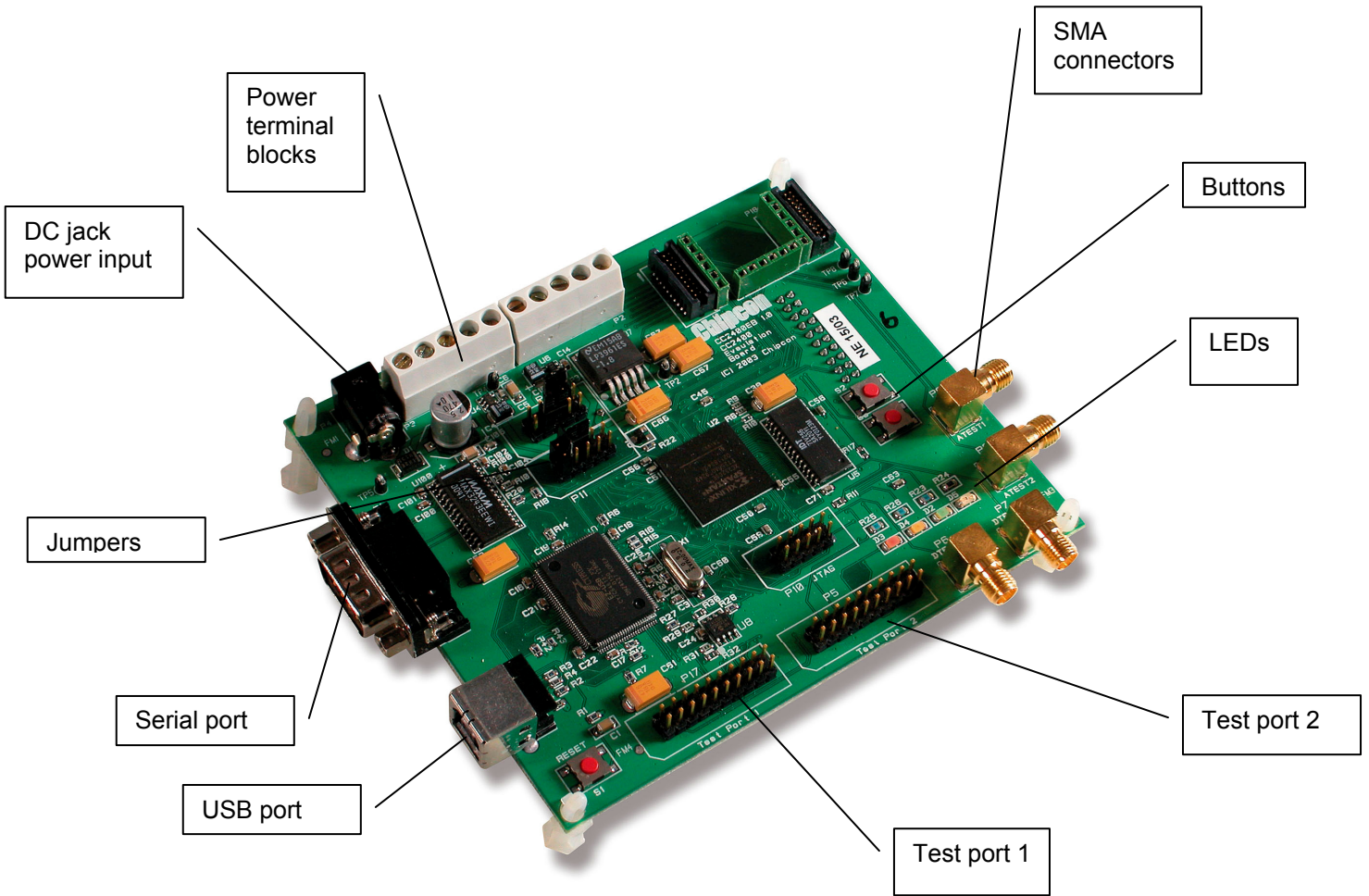


Figure 2: CC2400EB Evaluation Board

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 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.

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.

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
DSP	dsp.ti.com	Broadband	www.ti.com/broadband
Interface	interface.ti.com	Digital Control	www.ti.com/digitalcontrol
Logic	logic.ti.com	Military	www.ti.com/military
Power Mgmt	power.ti.com	Optical Networking	www.ti.com/opticalnetwork
Microcontrollers	microcontroller.ti.com	Security	www.ti.com/security
		Telephony	www.ti.com/telephony
		Video & Imaging	www.ti.com/video
		Wireless	www.ti.com/wireless

Mailing Address: Texas Instruments
Post Office Box 655303 Dallas, Texas 75265

Copyright © 2006, Texas Instruments Incorporated