

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.

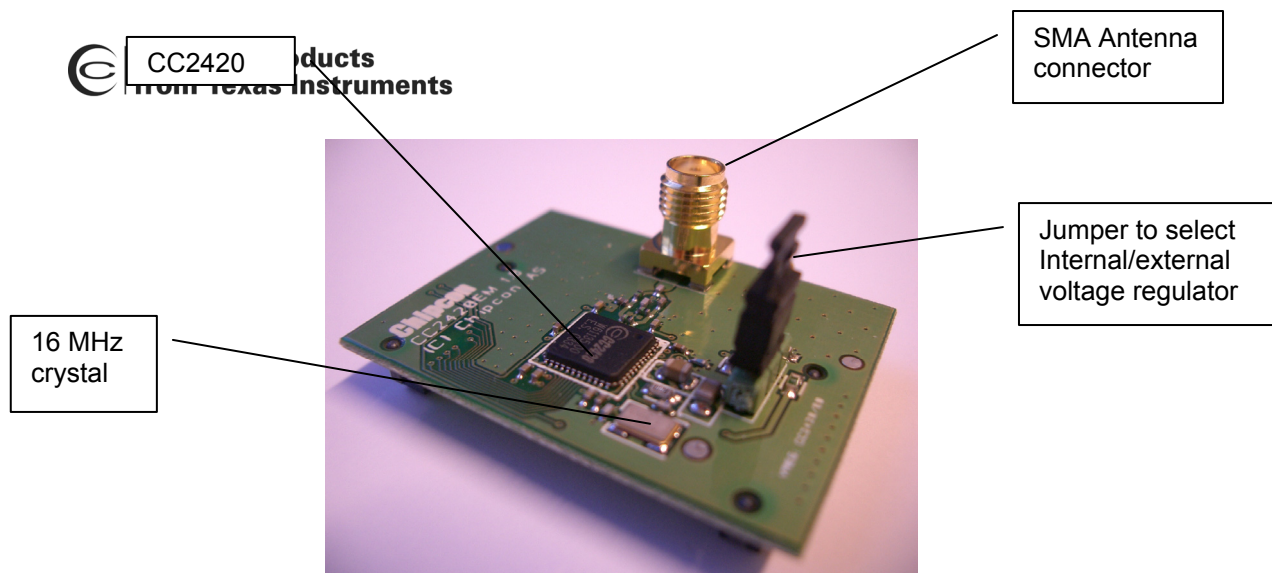


Figure 1: CC2420EM Evaluation Module

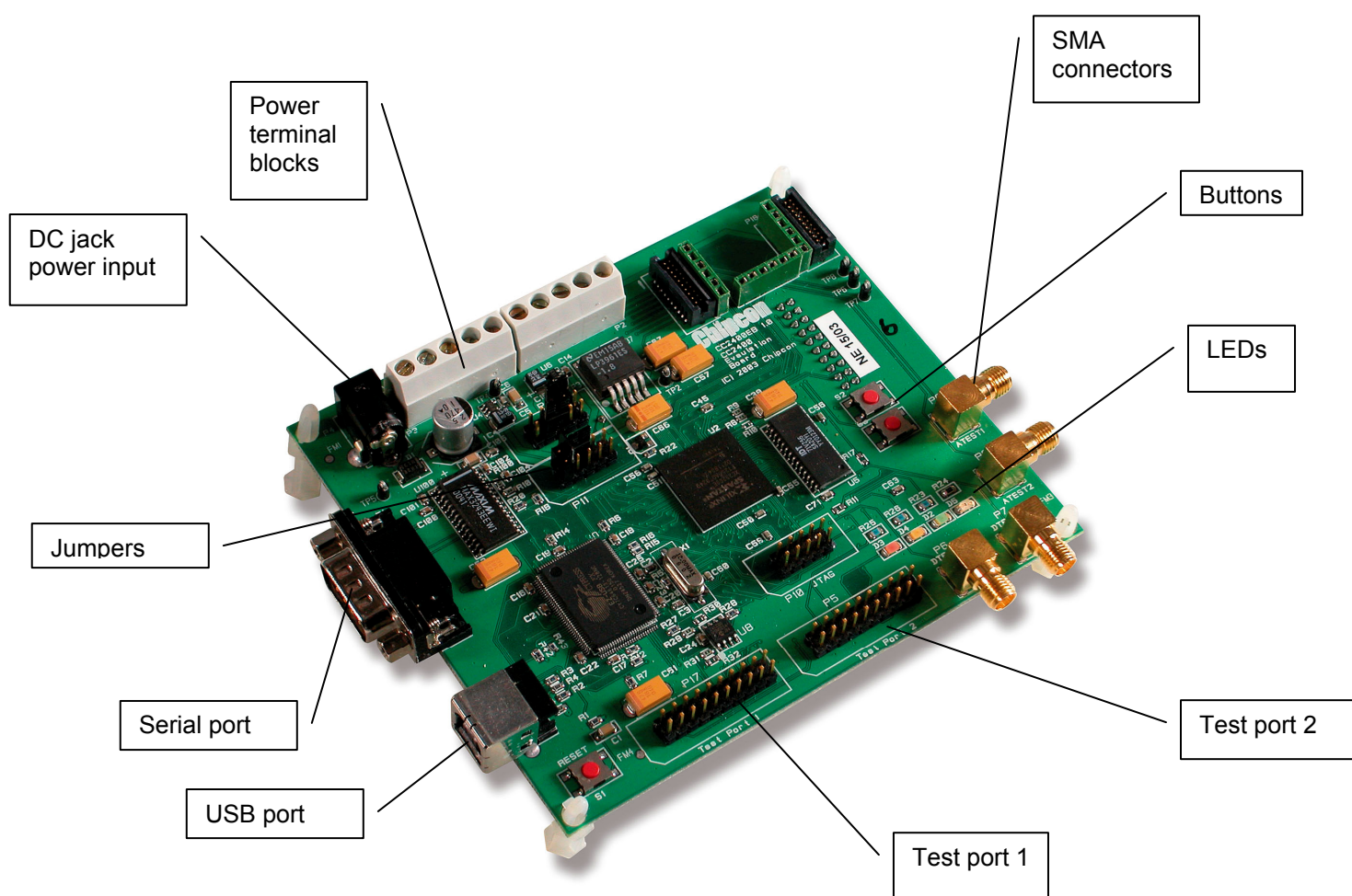


Figure 2: CC2400EB Evaluation Board

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