

RemoTI[™] CC2530 Development Kit - Quick Start Guide

STEP 1 - Download and Install the RemoTl Software

This Quick Start Guide provides instructions for software installation, configuration and the procedure to run the out-of-the-box ZigBee RF4CE remote control demo

The RemoTITM development kit components are pre-programmed with the appropriate sample applications

The demo requires a PC tool and driver that are included in The RemoTITM software installer. To register and download, go to http://focus.ti.com/docs/toolsw/folders/print/remoti.html and download RemoTI-CC2530DK-

Install the software by following the install instructions. The default Installation directory is C:\Texas Instruments\RemoTI-CC2530DK-<version>\...



STEP 2 - Connect the Target Board to the PC



Plug the CC2530EM into the target board EM connector and connect the antenna

Connect the mini-USB cable to the target board and to an USB port on the PC

Note. The CC2531 USB dongle in this kit can be used instead of the target board. See Section 4.2 in the **Target Emulator User's Guide (SWRU202)** for instructions. The remainder of this Quick Start Guide provides the instructions for the target board

STEP 3 - Associate the Target Board with an USB Driver



After the driver is installed the target module will be assigned a COM port. To see the COM port number, open the Windows Control panel – System – Hardware – Device Manager and check the COM port number under Ports (COM and LPT). The target board will be listed as a **TUSB3410 Device**, (COM69 in this example)

The first time the target board is connected to a PC the new USB device will be detected

Windows will start the "New Hardware Found Wizard" and try to associate the device with an USB driver

When prompted, select "Install from a list or specific location"

On the next screen select the driver located at: C:\Texas Instruments\RemoTI-CC2530DK-</ri>

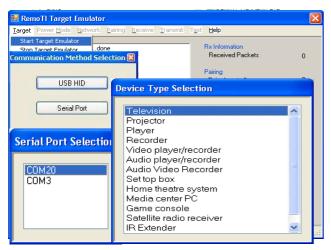
The RemoTl Hardware User's Guide (SWRU211) contains more information about the driver installation process





STEP 4 - Start the Target Emulator

Start the TargetEmulator.exe located at: C:\Texas Instruments\RemoTI-CC2530DK-<version>\bin



To connect to the target board go to the **Target** menu and select "Start Target Emulator" and select "Serial Port" as the communication method selection

Select the COM port for the target board. If you do not find the COM port, please check the RemoTI Hardware User's Guide (SWRU211)

The remote control is pre-programmed to control **Television**, **Video player/recorder**, **Set top box** and **Media center PC** device types. The target emulator must be instantiated with a matching device type to enable pairing between the remote control and the target emulator

The RemoTl Controller Simulation Window will now be displayed



STEP 5 - Pairing the Remote Control and the Target Board

Insert batteries into the remote control

The final step is to pair the remote control and the target board. To pair the devices, press in any order the **Pair** button on the PC emulator and the **Pair** (**Zoom**) button on the remote control within 30 seconds

After successful pairing the target emulator will display the number of **Paired**





STEP 6 – Using the Remote Control and Next Steps

A key press on the remote control will flash the corresponding key in the RemoTl Controller Simulation window. The message will also be displayed in the log window of the target emulator.

Note that in normal operation, the TV/DVD/STB/AUX buttons will not send data over-the-air, The "Frz" button is use to start the advanced test mode and should not be used in normal operation. See section 4.1.1 and 4.5 of the RemoTI Sample Application User's Guide (SWRU201) for more information about these functions

Further information and next steps:

- 1. Install the IAR Embedded Workbench at www.iar.com/ew8051
- 2. Follow the RemoTl Sample Application User's Guide to get started with the development environment
- 3. Install the CC debugger, please follow the quick start guide included with the CCdebugger
- 4. The **RemoTl Resource Guide** (available on the start menu of the RemoTl installation) is a consolidated starting point for documentation, reference designs, support information etc.
- 5. Check frequently for updates and new application notes at www.ti.com/remoTI
- 6. Meet other RemoTl developers and get technical support at www.ti.com/lprf-forum

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:

Applications Products Amplifiers amplifier.ti.com Audio www.ti.com/audio Data Converters Automotive www.ti.com/automotive dataconverter.ti.com DLP® Products Broadband www.dlp.com www.ti.com/broadband DSP Digital Control dsp.ti.com www.ti.com/digitalcontrol Clocks and Timers www.ti.com/clocks Medical www.ti.com/medical Military Interface www.ti.com/military interface.ti.com Optical Networking Logic logic.ti.com www.ti.com/opticalnetwork Power Mgmt power.ti.com Security www.ti.com/security Telephony Microcontrollers microcontroller.ti.com www.ti.com/telephony Video & Imaging www.ti-rfid.com www.ti.com/video RF/IF and ZigBee® Solutions www.ti.com/lprf Wireless www.ti.com/wireless

> Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2009, Texas Instruments Incorporated