CC2564 Dual-Mode Bluetooth® Module With Integrated Antenna BoosterPack™ Plug-In Module

This document provides an overview of the BOOST-CC2564MODA board and describes the required hardware and software tools. This quick start guide shows the basic settings for the BOOST-CC2564MODA board. For further details, see the *Dual-Mode Bluetooth CC2564 Module With Integrated Antenna BoosterPack Plug-in Module User's Guide*.

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1 Introduction

The BOOST-CC2564MODA board is intended to extend the functionality of the TI LaunchPad™ Development Kit with the dual-mode Bluetooth CC2564 module with integrated antenna that supports Bluetooth classic and Bluetooth low energy. The BOOST-CC2564MODA board works with TI's LaunchPad development kits such as MSP43x, TM4C, Connectivity, and others.

The BoosterPack Plug-in Module lets users explore different applications with a broad range of application-specific BoosterPack plug-in modules available from both TI and third parties. The BoosterPack plug-in modules can plug into a single LaunchPad development kit to greatly enhance the functionality of any wireless connectivity design. The TI CC256x Bluetooth device on the board is a complete BR/EDR/LE HCI solution that reduces design effort and enables fast time to market. Based on TI's seventh-generation core, the device brings a product-proven solution that supports 4.1 dual-mode protocols. Figure 1 shows the BOOST-CC2564MODA board.

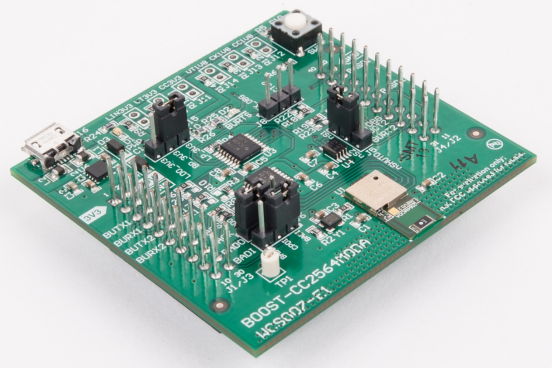


Figure 1. BOOST-CC2564MODA Board

2 LaunchPad™ Development Kit Contents

The LaunchPad Development Kit contains the following:

One BOOST-CC2564MODA board that has a TI dual-mode Bluetooth CC2564 module with an integrated antenna.

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3 Requirements

The following hardware and software tools are required in combination with the BOOST-CC2564MODA board for a complete evaluation. Figure 2 shows examples of how to set up the hardware.

Hardware

- One MSP432 LaunchPad – Sold separately
  - MSP-EXP432P401R LaunchPad Development Kit
- One BoosterPack for audio and voice application (optional) – Sold separately
  - CC3200AUDBOOST BoosterPack Plug-in Module
- One BoosterPack for RF testing and debugging purposes (optional) – Sold separately
  - CC31XXEMUBOOST BoosterPack Plug-in Module

Software

- TI dual-mode Bluetooth stack
  - On MSP432 MCUs: CC2564CMSP432BTBLESW

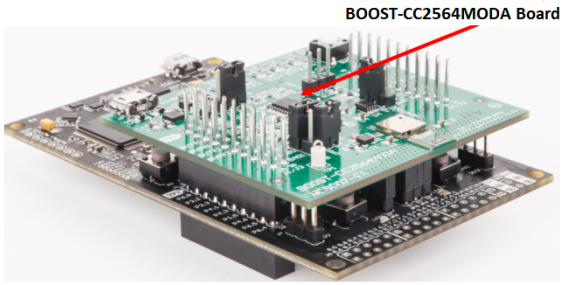


Figure 2. Hardware Setup Examples

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4 Overview

The BOOST-CC2564MODA board has four BoosterPack connectors, J1–J4. The board also has I/O connectors, J5–J10. BoosterPack connectors are at 3.3 V. Figure 3 is a high-level block diagram of the BoosterPack Plug-in Module. Figure 4 shows an overview of the front of the BOOST-CC2564MODA and shows the default setting for the I/O connectors. Figure 5 shows the back connectors of the board for the BOOST-CC2564MODA.

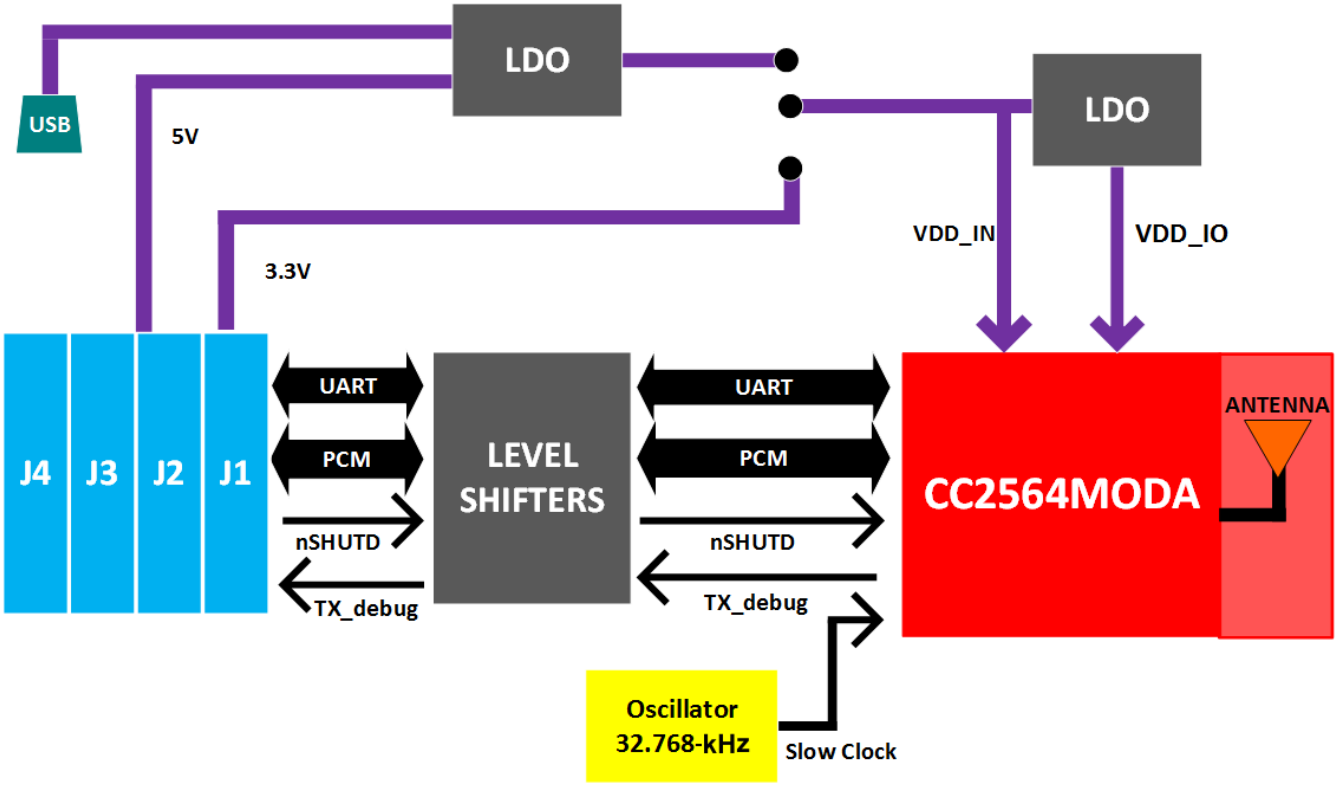


Figure 3. BOOST-CC2564MODA Block Diagram

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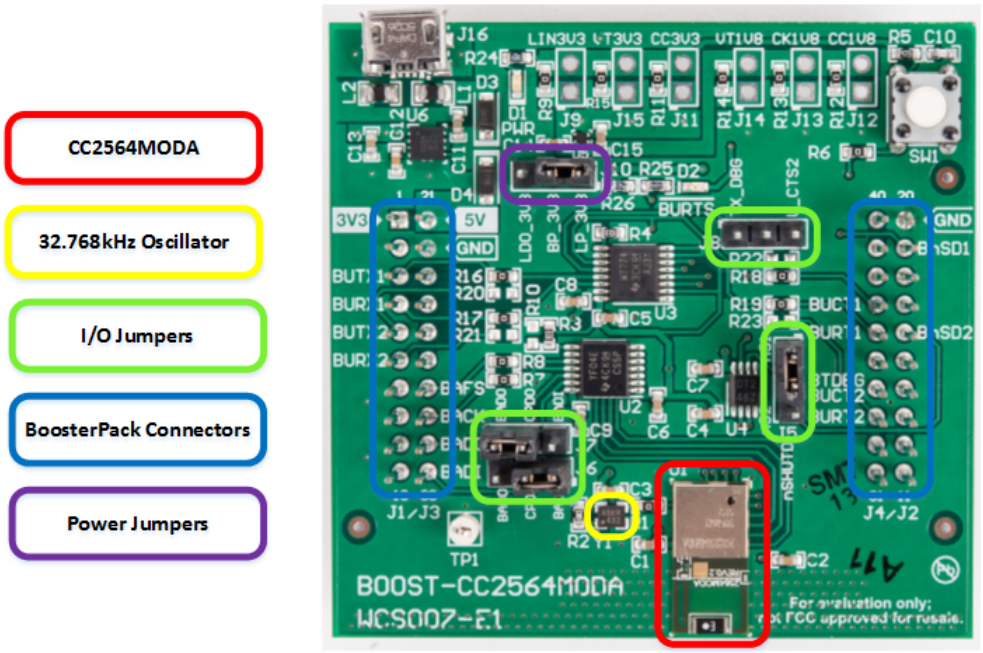


Figure 4. BOOST-CC2564MODA Board Front Overview

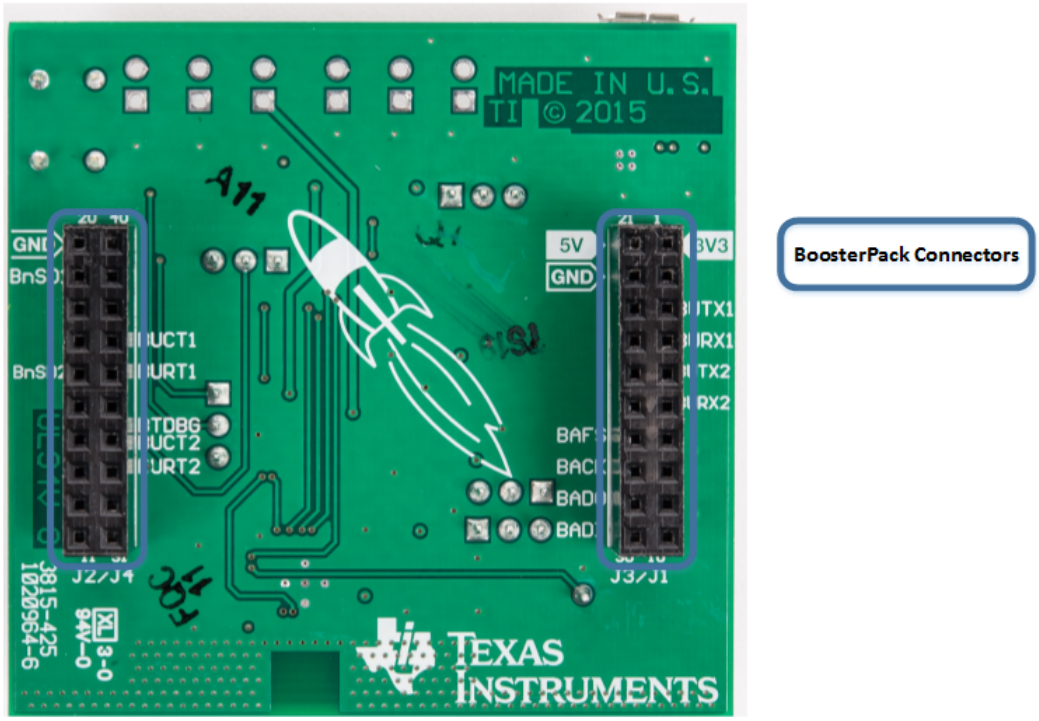


Figure 5. BOOST-CC2564MODA Board Back Overview

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5 BoosterPack Connector Settings

The BoosterPack connectors comply with the 40-pin BoosterPack standard and plug into a wide variety of LaunchPad development kits. Figure 6 shows the pin assignments for the BOOST-CC2564MODA.

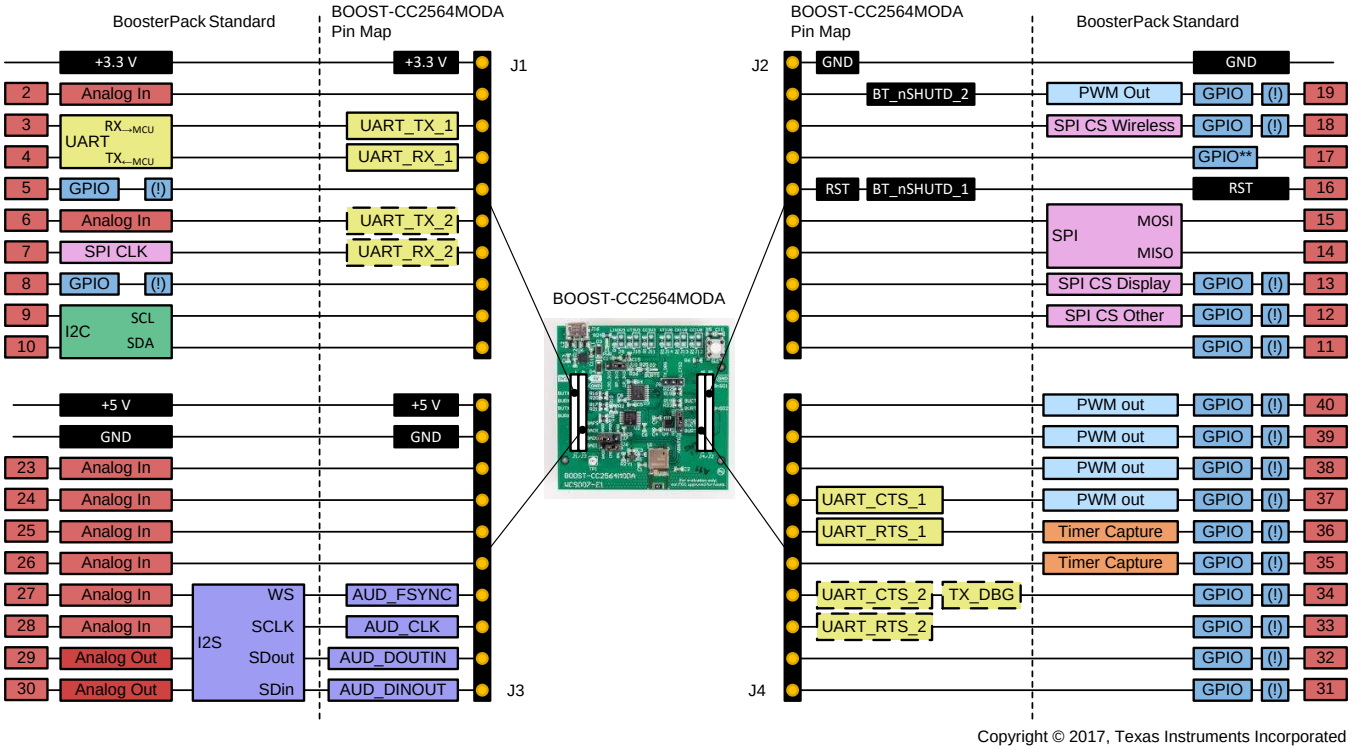


Figure 6. BOOST-CC2564MODA BoosterPack™ Connectors

NOTE: The dashed outline on the pins specifies those pins are not connected or enabled by default.

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Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from A Revision (November 2017) to B Revision	Page
• Updated Hardware Setup Examples image	3

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