

BDE-BDM209A Dual-Mode Bluetooth Stack User Guide

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BDE-BDM209A Quick Start Quick Start Guide – BDE-BDM209A

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Introduction

This document is a quick guide for how to connect the BDE-BDM209A module with MSP432P401R LaunchPad (MSP-EXP432P401R) and CC3200 AUDIO BOOSTER PACK (CC3200AUDBOOST) to run the demos in “CC2564C TI Dual-mode Bluetooth Stack on MSP432 MCUs” SDK. It provides instructions on how to modify the Demo source code to run the Demos on BDE-BDM209A modules.

Connection Designator	BDM209A Pin	MSP-EXP432P401R Pin
3V3 Power	VDD	XDSET-VCCTARGET
Ground	GND	XDSET-GND
RST	nRST	XDSET-RESET-OUT
TMS	SWDIOTMS	XDSET-TMS-SWDIO
TCK	SWCLKTCK	XDSET_TCK_SWCLK
TDO	TDO/PJ.5	XDSET_TDO_SWO
TDI	TDI/PJ.4	XDSET_TDI
RXD	P1.2	XDSET_TXD
TXD	P1.3	XDSET_RXD

Figure 3: Pin Matching between BDE-BDM209A and MSP-EXP432P401R

Download SDK

CC2564C TI Dual-mode Bluetooth Stack on MSP432 MCUs SDK includes many profiles and demo codes.

Download SDK from the following link:

<https://www.ti.com/tool/CC2564CMSP432BTBLESW>

Part Number	Buy from Texas Instruments or Third Party	Alert Me	Status	Current Version	Version Date
CC2564CMSP432BTBLESW1: CC2564C TI Dual-mode Bluetooth® Stack on MSP432 MCUs	Download	Alert Me	ACTIVE	v4.2.1.1	24-JUL-2018

User's Guide for the SDK: 'CC2564C TI Dual-Mode Bluetooth® Stack on MSP432TM MCUs'. Please follow the above User's Guide when developing or evaluating with MSP-EXP432P401R and CC256XCQFN-EM.

After your code is able to run on MSP-EXP432P401R and CC256XCQFN-EM, please follow the following steps to make your code run on BDE-BDM209A.

4. Run the Demos in the CC2564CMSP432BTBLESW SDK on BDE- BDM209A

To run the sample Demo codes in the CC2564CMSP432BTBLESW SDK on BDE-BDM209A, please take the following step.

1. Find the HRDWCFG.h file, change the I2C pins to P1.6 and P1.7

#define HRDWCFG_I2C_MODULE	EUSCI_B0_BASE
#define HRDWCFG_I2C_SDA_PORT_NUM #define HRDWCFG_I2C_SDA_PIN_NUM	GPIO_PORT_P1 GPIO_PIN6
#define HRDWCFG_I2C_SCL_PORT_NUM #define HRDWCFG_I2C_SCL_PIN_NUM	GPIO_PORT_P1 GPIO_PIN7

5. Run Bluetooth Stereo Audio Streaming Demo on BDE-BDM209A

CC2564CMSP432BTBLESW SDK provides two A3DP demos for Audio streaming: A3DP Sink Demo and A3DP Source Demo.

Before trying to run the demos on BDE-BDM209A, please make sure you can run the demos on MSP-EXP432P401R and CC3200AUDBOOST (follow the user guide CC2564C TI Dual-Mode Bluetooth® Stack on MSP432TM MCUs: <https://www.ti.com/lit/ug/swru497a/swru497a.pdf>)

You will need two BDE-BDM209A and two CC3200AUDBOOST boards to run Audio streaming from A3DP Source to A3DP Sink.

Connect BDE-BDM209A and CC3200AUDBOOST board

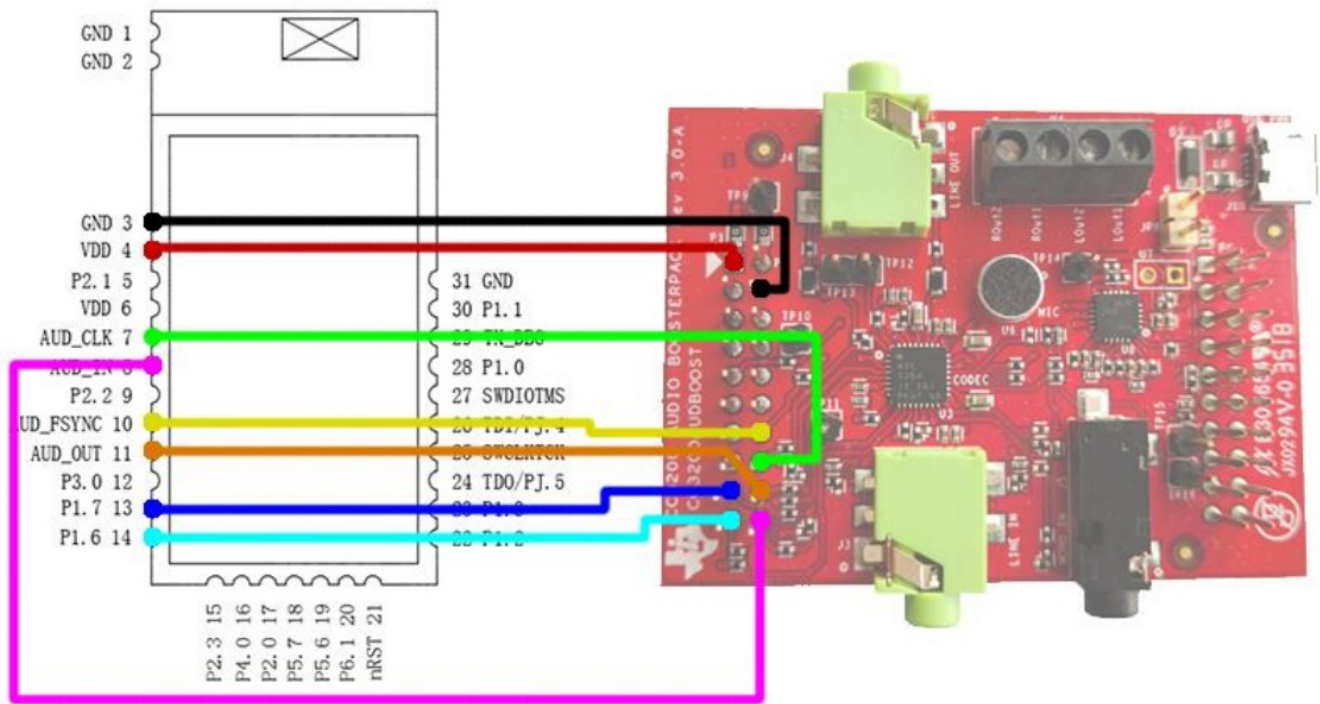


Figure 4: Connection between BDE-BDM209A and CC3200AUDBOOST

Connection Designator	BDM209A Pin	CC3200AUDBOOST Pin
Ground	GND	J1-4
3V3 Power	VDD	J1-1
AUD_CLK	AUD_CLK	J1-16
AUD_IN	AUD_IN	J1-20
AUD_FSYNC	AUD_FSYNC	J1-14
AUD_OUT	AUD_OUT	J1-18
I2C_SCL	P1.7	J1-17
I2C_SDA	P1.6	J1-19

Figure 5: Pin Matching between BDE-BDM209A and CC3200AUDBOOST

A3DP Sink Demo code location: CC256x MSP432 Bluetopia SDKv4.2.1.1SamplesA3DPDemo_SNK

A3DP demo sink wiki:

https://processors.wiki.ti.com/index.php/CC256x_TI_Bluetooth_Stack_AssistedA2DPSinkDemo_App

A3DP Source Demo code location: CC256x MSP432 Bluetopia SDKv4.2.1.1SamplesA3DPDemo_SRC

A3DP demo source wiki:

https://processors.wiki.ti.com/index.php/CC256x_TI_Bluetooth_Stack_AssistedA2DPSourceDemo_App

NOTE: To run any demo in the SDK on BDE-BDM209A, you need to make the code modification in Step 4: Run the Demos in the CC2564CMSP432BTBLESW SDK on BDE-BDM209A

More Questions:

Please search existing answers on TI E2E support forums

Contact your local TI sales representative.

Or, Contact BDE Technology, Inc.

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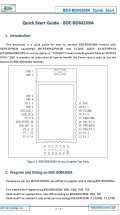
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Documents / Resources

	BDE BDE-BDM209A Dual-Mode Bluetooth Stack [pdf] User Guide BDE-BDM209A Dual-Mode Bluetooth Stack, BDE-BDM209A, Dual-Mode Bluetooth Stack
	BDE BDE-BDM209A Dual-Mode Bluetooth Stack [pdf] User Guide BDE-BDM209A Dual-Mode Bluetooth Stack, BDE-BDM209A, Dual-Mode Bluetooth Stack

References

-  [BDE Technology Inc.](#)
-  [_____](#)
-  [CC2564CMSP432BTBLESW Driver or library | TI.com](#)