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Device Configuration Without FM Radio Option

Associated Part Family: CYW4330

This document is a reference for internal and external hardware, software, and test engineers when testing the CYW4330 or integrating it into mobile or handheld wireless systems.

1 Introduction

BlueTool is a proprietary Cypress software tool for exercising, testing, scripting, debugging, and programming devices that use Cypress Bluetooth chips. BlueTool runs on a standard PC running the Microsoft® Windows® operating system. BlueTool interfaces with the Cypress Bluetooth chips at the HCI protocol layer. The HCI UART is supported.

1.1 Cypress Part Numbering Scheme

Cypress is converting the acquired IoT part numbers from Broadcom to the Cypress part numbering scheme. Due to this conversion, there is no change in form, fit, or function as a result of offering the device with Cypress part number marking. The table provides Cypress ordering part number that matches an existing IoT part number.

Table 1. Mapping Table for Part Number between Broadcom and Cypress

Broadcom Part Number	Cypress Part Number
BCM4330	CYW4330

1.2 Acronyms and Abbreviations

In most cases, acronyms and abbreviations are defined upon first use. For a more complete list of acronyms and other terms used in Cypress documents, go to: <http://www.cypress.com/glossary>.

2 IoT Resources

Cypress provides a wealth of data at <http://www.cypress.com/internet-things-iot> to help you to select the right IoT device for your design, and quickly and effectively integrate the device into your design. Cypress provides customer access to a wide range of information, including technical documentation, schematic diagrams, product bill of materials, PCB layout information, and software updates. Customers can acquire technical documentation and software from the Cypress Support Community website (<http://community.cypress.com/>).

3 Configuration If the FM Radio Option Is Not Used

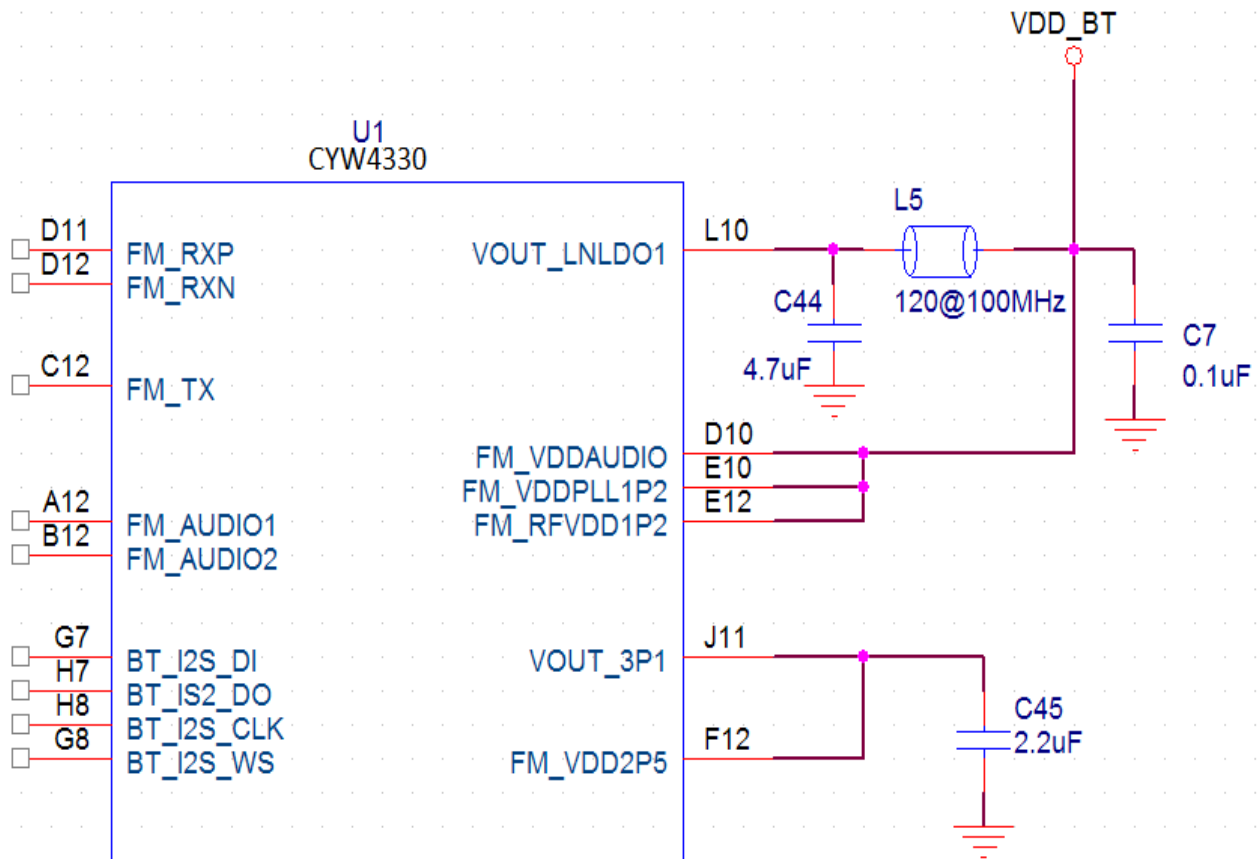
This document describes how the CYW4330 is configured if the FM radio option is not used.

If the FM option on the CYW4330 is not used, the pin configuration in the following table applies. See also [Figure 1](#), which is a schematic drawing of the CYW4330 electrical circuit without the FM radio option.

Table 2. CYW4330 Pin Configuration Without the FM Option

Pin No.	Pin Name	Pin Description	Configuration if FM Rx/FM Tx Not Supported
D11	FM_RXP	FM Rx Radio RF antenna port	No connect
D12	FM_RXN	FM Rx Radio RF antenna port	No connect
C12	FM_TX	FM Tx Radio RF antenna port	No connect
A12	FM_AOUT1	FM analog audio output ch1	No connect
B12	FM_AOUT2	FM analog audio output ch2	No connect
G7	BT_I2S_DI	I2S_DI	No connect
H7	BT_I2S_DO	I2S_DO	No connect
G8	BT_I2S_WS	I2S_WS	No connect
H8	BT_I2S_CLK	I2S_CLK	No connect
D10	FM_VDDAUDIO	FM Supply	Connect to VDD_BT (connect VOUT_LNLD01 to 120 ohm at 100 MHz ferrite bead to these FM supplies).
E12	FM_RFVDD1P2	FM Supply	
E10	FM_VDDPLL1P2	FM Supply	
F12	FM_VDD2P5	FM Supply	Connect to VOUT_3P1.
J11	VOUT_3P1	LDO3P1 output	Connect to FM_VDD2P5.

Figure 1. Schematic Drawing of the CYW4330 Electrical Circuit Without an FM Option



4 References

The references in this section may be used in conjunction with this document.

Note: Cypress provides customer access to technical documentation and software through its Customer Support Portal (CSP) and Downloads & Support site (see [IoT Resources](#)).

Document (or Item) Name	Number	Source
Broadcom Items		
[1] Single Chip IEEE 802.11™ a/b/g/n MAC/Baseband/ Radio with Integrated Bluetooth® 4.0 + HS and FM Transceiver	4330-DS3XX-R	Community.cypress.com

Document History Page

Document Title: AN214932 - Device Configuration Without FM Radio Option				
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Rev.	ECN No.	Orig. of Change	Submission Date	Description of Change
**	-	-	08/16/2010	4330-AN200-R Initial Release
*A	-	-	11/15/2011	4330-AN201-R Updated: Figure 1: "Schematic Drawing of the BCM4330 Electrical Circuit Without an FM Option"
*B	5466084	UTSV	10/05/2016	Added Cypress Part Numbering Scheme. Updated to Cypress template
*C	5882432	AESATMP8	09/13/2017	Updated logo and Copyright.

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