

BCM943438WCD1_1: BCM43438 WLBGA + STM32F411

Preliminary schematic, subject to changes

Page 1 - Revision and Notes

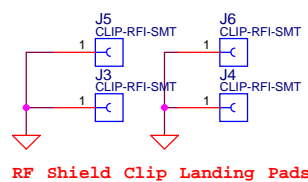
Page 2 - BCM43438 WLBGA Section

Page 3 - STM32F411 Section

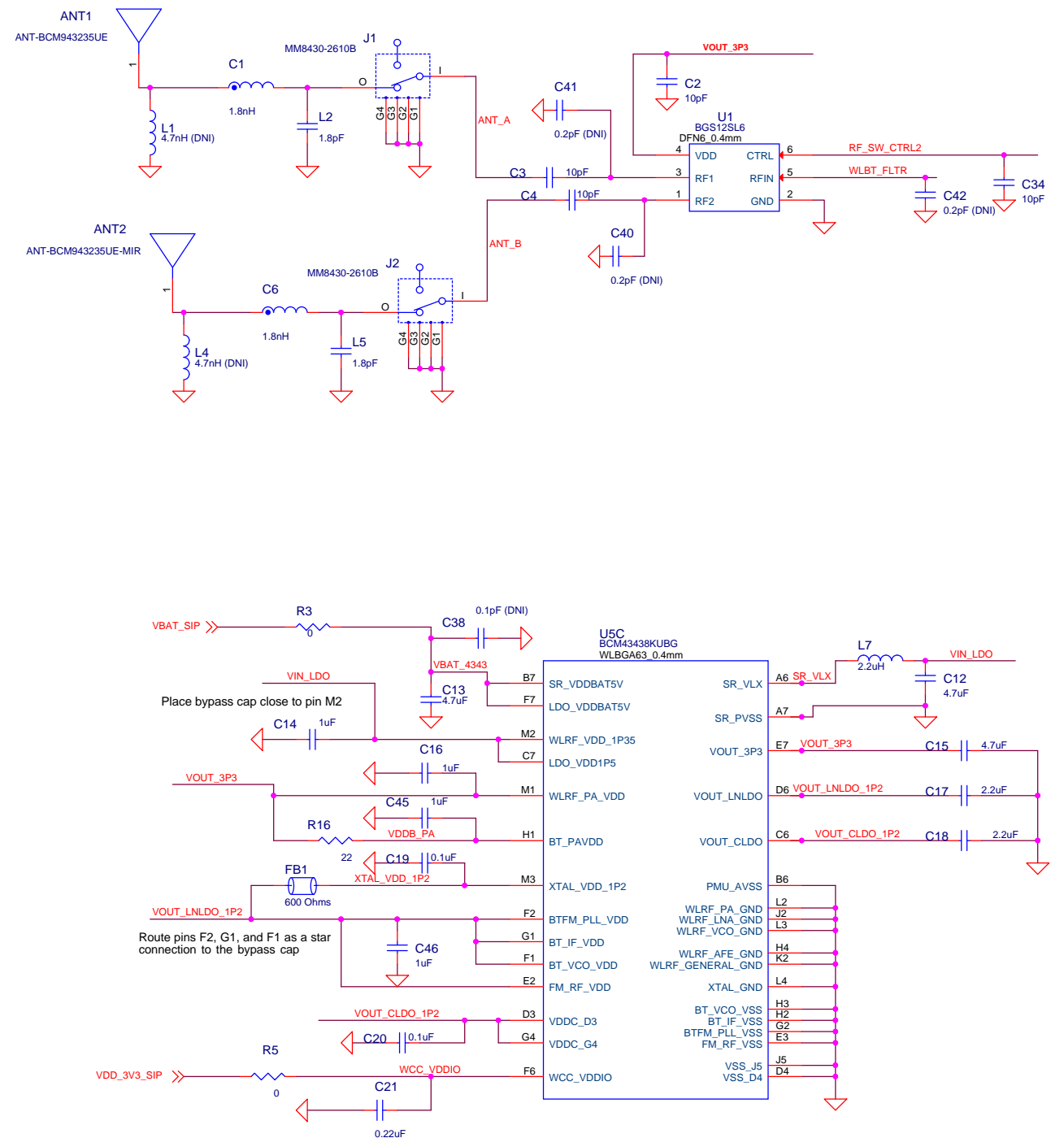
BOM ITEMS	
PCB	<div>PCB NUMBER: 200-129648-0010 PCB NAME: BCM943438WCD1_1</div>
ASSEMBLY INSTRUCTIONS	
SHIELD	<div>SIP Shield: 210-128955-0010</div> <div>ZH1 210-128955-0010</div>

	Broadcom Corporation 5300 California Avenue Irvine, CA 92617 Phone: (949) 926-5000			
	BCM943438WCD1_1			
	Size	DWG NO	Rev	
	Custom	824-129648-0010	01	
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SDIO INTERFACE



RF Shield Clip Landing Pads



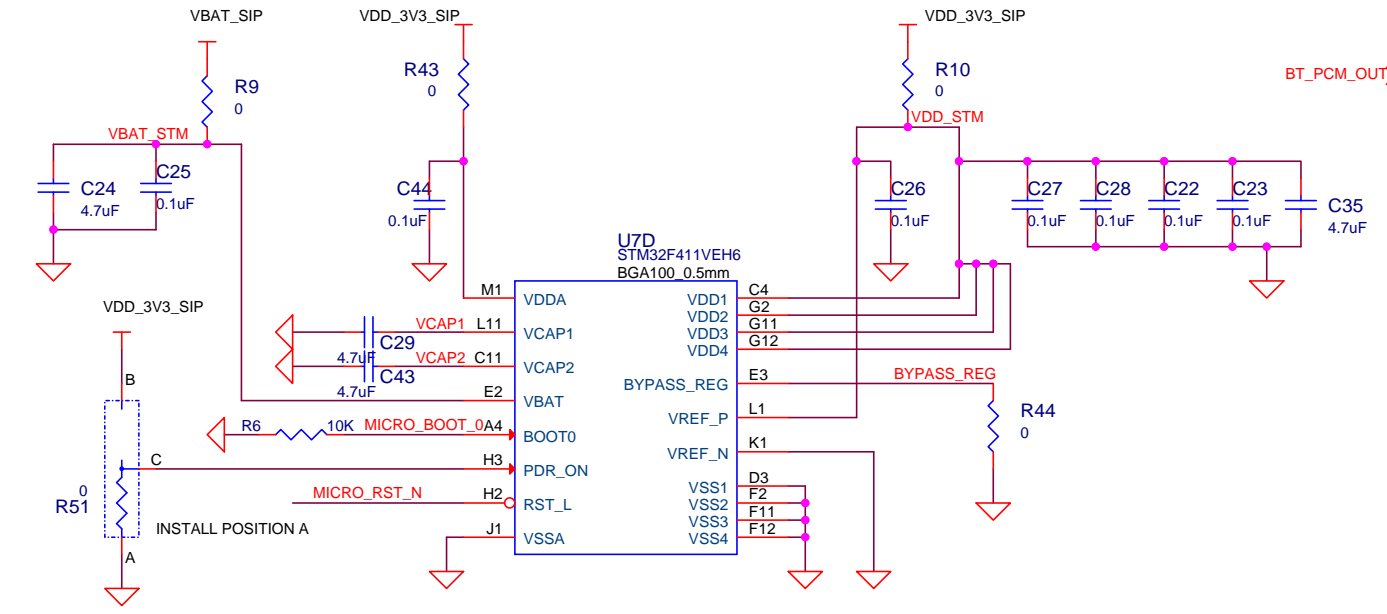
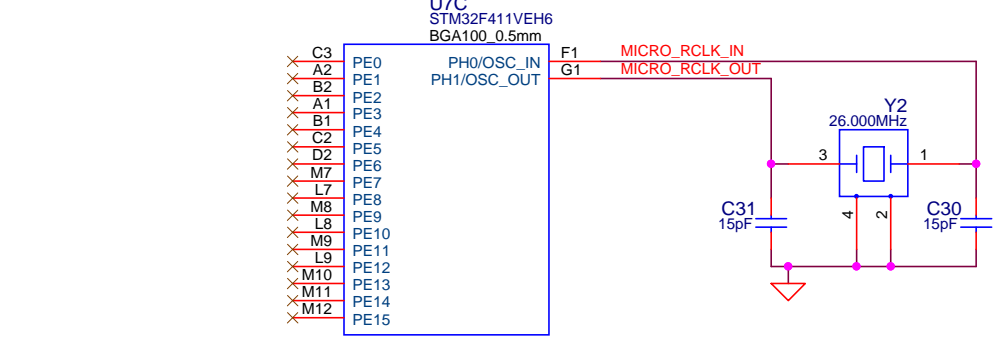
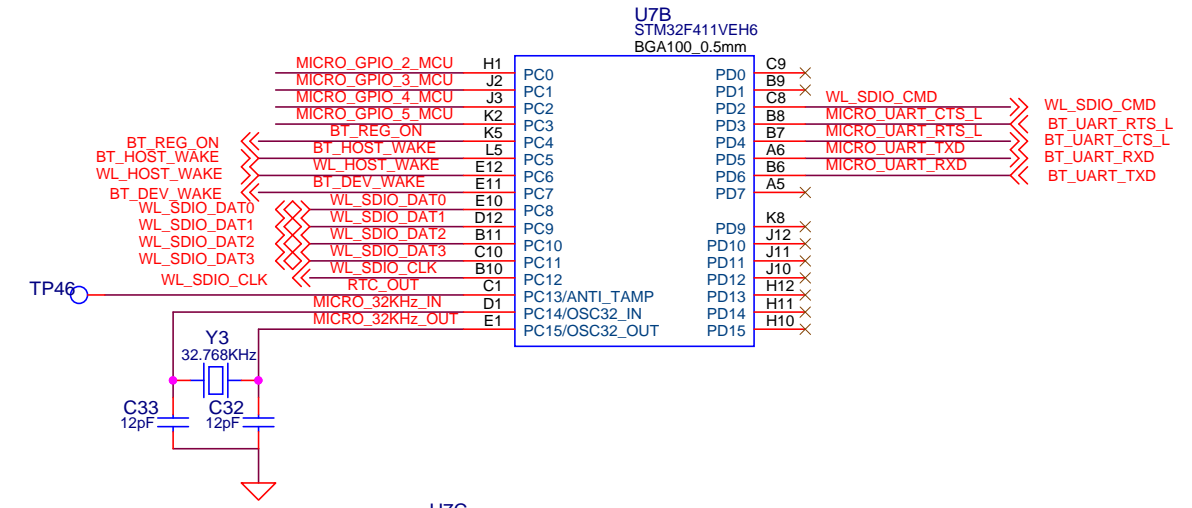
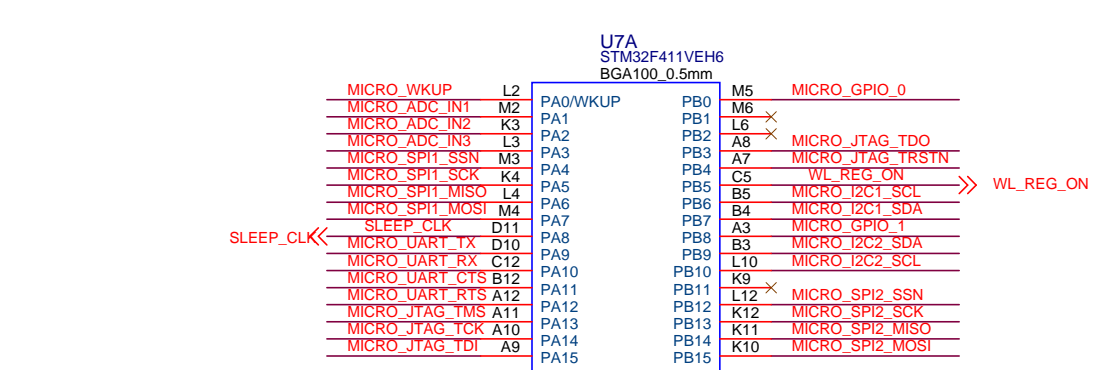
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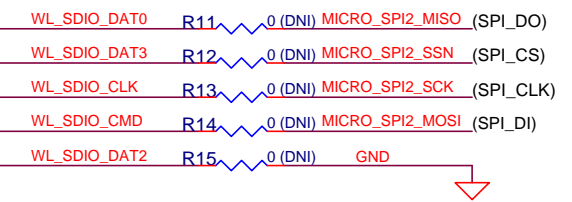
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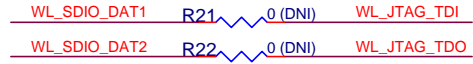
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To use SPI2 between BCM43438 and STM32F411:
Install R11, R12, R13, R14 and R15.
(R15 is used to select SPI mode for BCM43438)

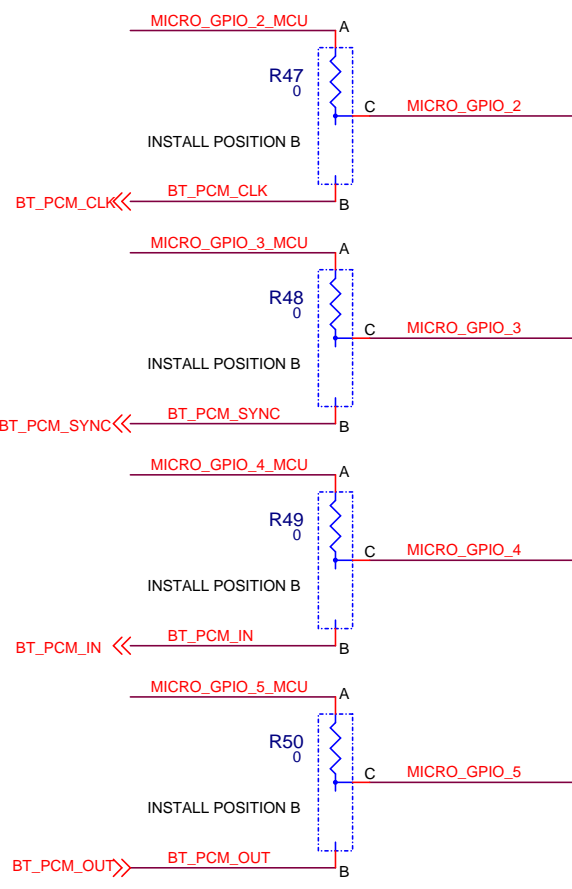


To use WLAN JTAG, Install R4



To use GPIO Signals to STM32F411, Install Position AC.

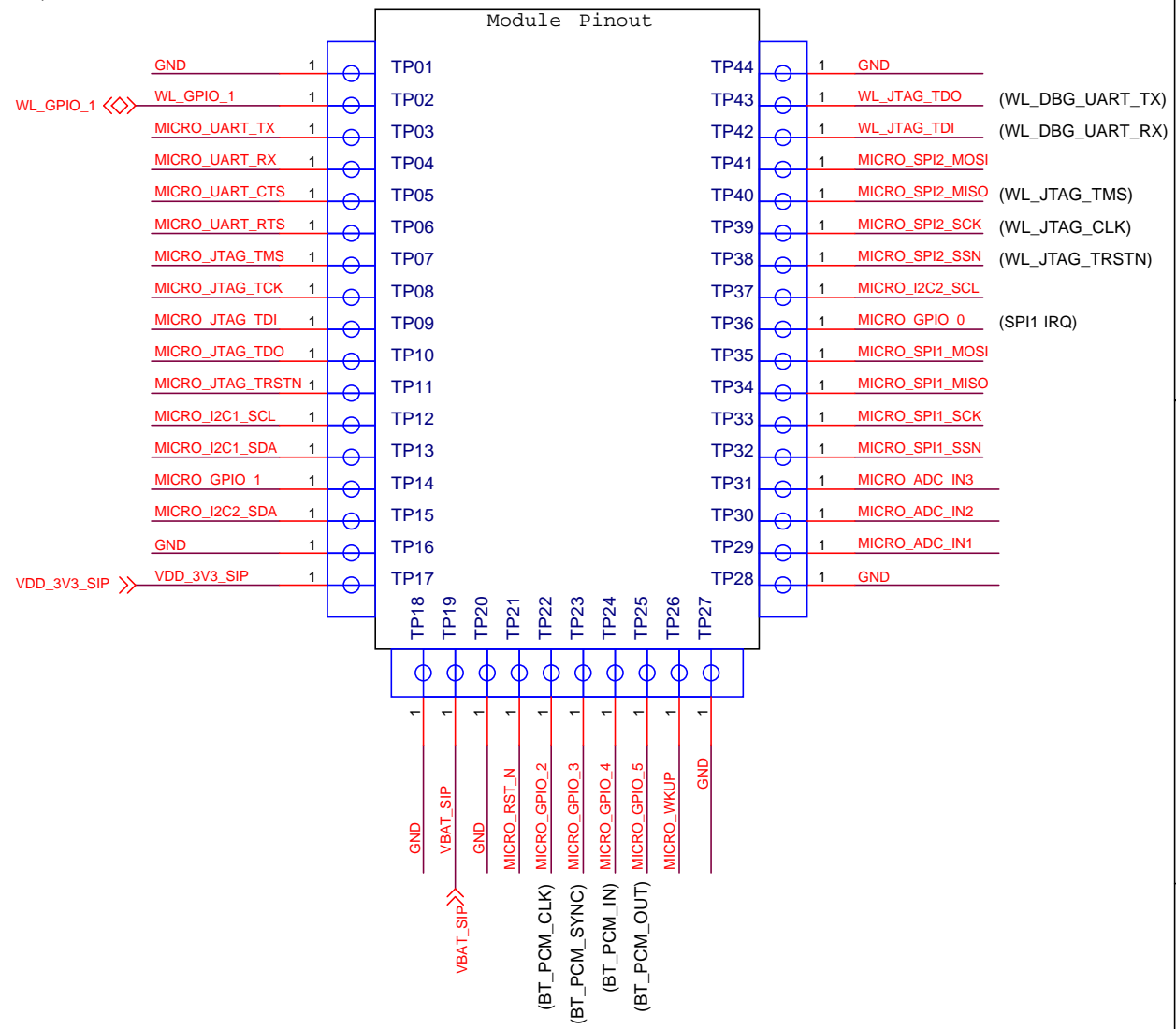
To use BT PCM Signals directly to BCM43438, Install Position BC (Default).



SDIO / SPI Interface Options:

SDIO	STM32F411 Pin Number	STM32F411 Port/Pin		BCM43438 Pin Number	Function
	B10	PC12	<-->	M7	SDIO_CLK
	C8	PD2	<-->	L6	SDIO_CMD
	E10	PC8	<-->	K6	SDIO_DATA_0
	D12	PC9	<-->	H7	SDIO_DATA_1
	B11	PC10	<-->	L7	SDIO_DATA_2
	C10	PC11	<-->	J7	SDIO_DATA_3
SPI	STM32F411 Pin Number	STM32F411 Port/Pin		BCM43438 Pin Number	Function
	K12	PB13	<-->	M7	SPI_CLK
	K10	PB15	<-->	L6	SPI_MOSI
	K11	PB14	<-->	K6	SPI_MISO
	C10	PC11	<-->	J7	SPI_CS
	D12	PC9	<-->	H7	SPI_IRQ

Note: Only one set of communication lines are required to be connected between the microcontroller and wlan device (either SDIO or SPI). Please select one set based on the table above. It is NOT necessary to connect both SPI and SDIO.





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