BCM943364WCD1_2: BCM43364 WLBGA + STM32F411

Preliminary schematic, subject to changes

History

Date	PCB Ver.	Description	ECO #
02/23/2015	-0010	Initial Release of BCM943364WCD1_1 layout	BCG-24254
04/14/2015	-0020	1. Added components C36, C37, C38, C39, C40, C41, C42 L3, L8, J7 R1, R16, R17, R18, R19, R20, R21, R22 2. Removed components: C7, R7, R8, TP8 3. Added WL JTAG interface to the module pins	
06/11/2015	-0020	Update BOM for Antenna matching C1, C6: 1.8nH L2, L5: 1.8pF	BCG-27181

BOM ITEMS

PCB

PCB NUMBER: 200-128955-0020
PCB NAME: BCM943364WCD1_2

ASSEMBLY INSTRUCTIONS

SHIELD

SIP Shield: 210-128955-0000

ZH1
210-128955-0000

Broadcom Corporation
5300 California Avenue
Irvine, CA 92617
Phone: (949) 926-5000

BCM943364WCD1_2

Size	DWG NO	Rev
Custom	824-128955-0020	03

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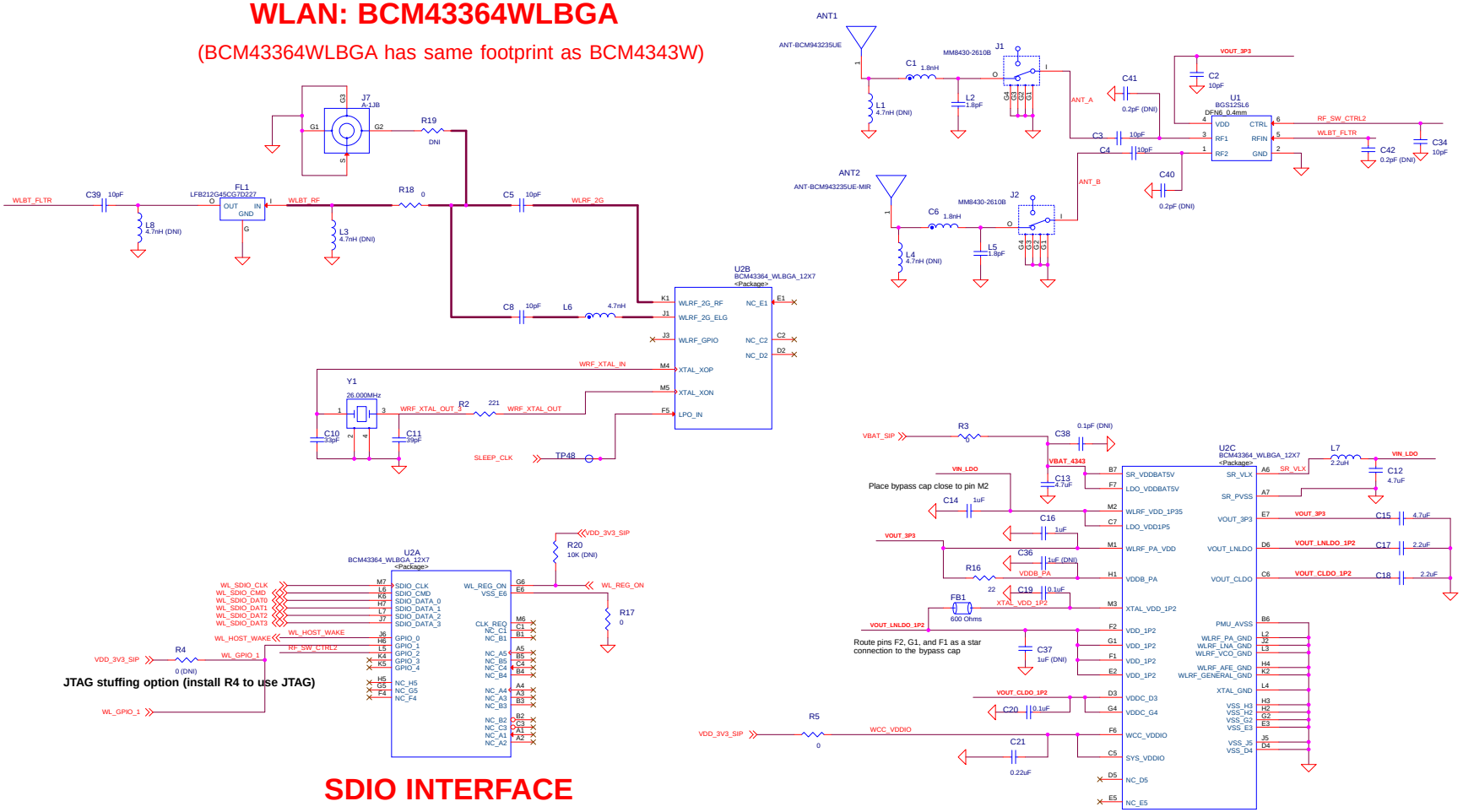
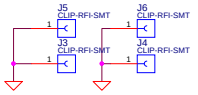
WLAN: BCM43364WLBGA

(BCM43364WLBGA has same footprint as BCM4343W)



SDIO INTERFACE



RF Shield Clip Landing Pads

Broadcom Corporation 5300 California Avenue Irvine, CA 92617 Phone: (949) 926-5000			
BCM943364WCD1_2			
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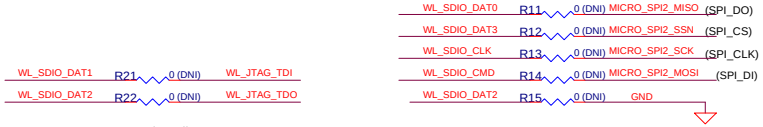


To use WLAN JTAG, install R4

To use SPI2 between BCM43364 and STM32F411, install R11, R12, R13, R14 and R15.
(R15 is used to select SPI mode for BCM43364)

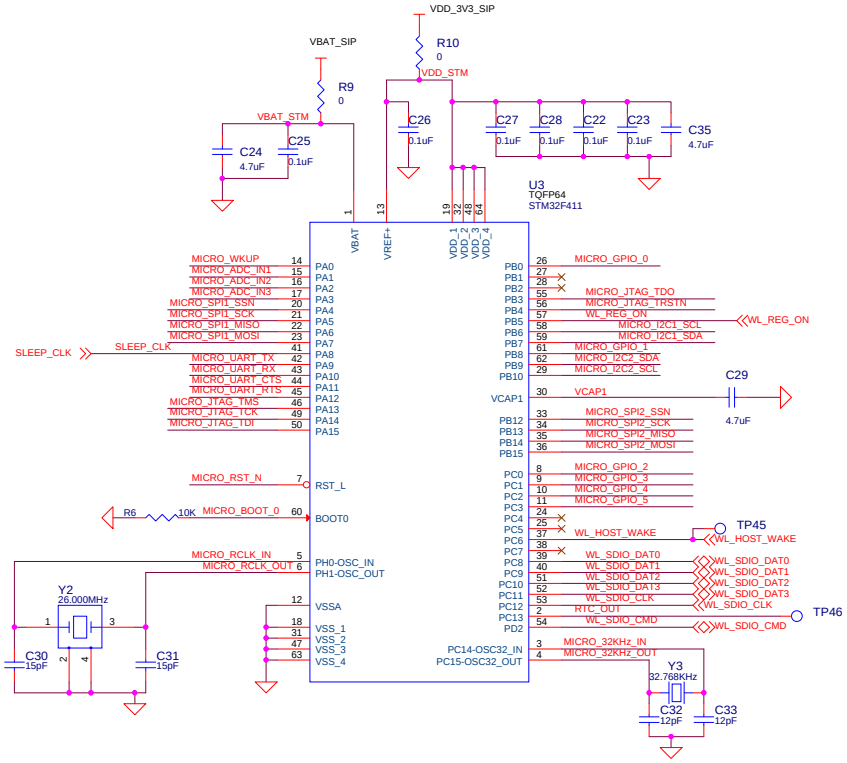
SDIO / SPI Interface Options:

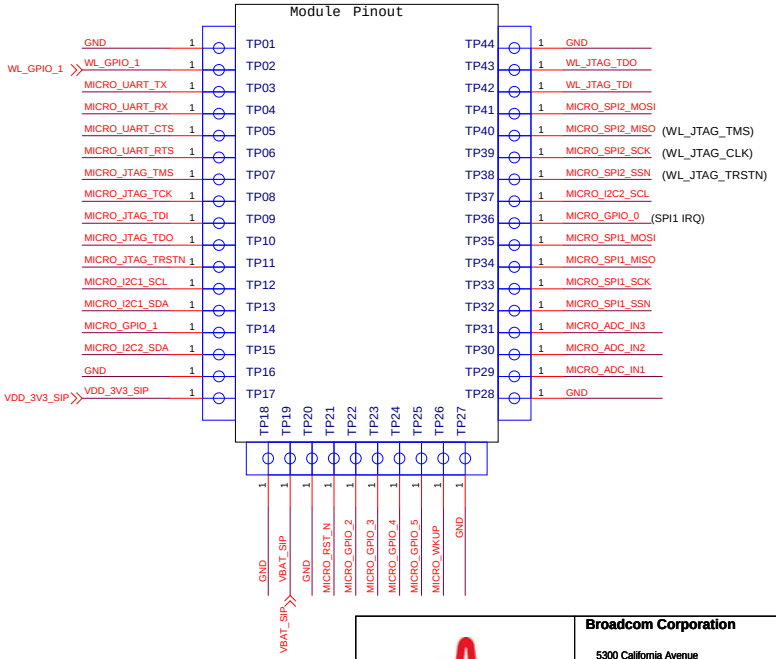
SDIO	STM32F411 Pin Number	STM32F411 Port/Pin		BCM43364 Pin Number	Function
	53	PC12	<--->	M7	SDIO_CLK
	54	PD2	<--->	L6	SDIO_CMD
	39	PC8	<--->	K6	SDIO_DATA_0
	40	PC9	<--->	H7	SDIO_DATA_1
	51	PC10	<--->	L7	SDIO_DATA_2
	52	PC11	<--->	J7	SDIO_DATA_3
SPI	**STM32F411 Pin Number**	**STM32F411 Port/Pin**		**BCM43364 Pin Number**	**Function**
	34	PB13	<--->	M7	SPI_CLK
	36	PB15	<--->	L6	SPI_MOSI
	35	PB14	<--->	K6	SPI_MISO
	52	PC11	<--->	J7	SPI_CS
	40	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.





Module Pinout

Broadcom Corporation		
5300 California Avenue Irvine, CA 92617 Phone: (949) 926-5000		
BCM943364WCD1_2		
Size: Custom	DWG NO: 824-128955-0020	Rev: 03
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	Cindy Cao	