

BCM94343WWCD2_1: BCM4343W WLBGA + STM32F412

Preliminary schematic, subject to changes

Page 1 - Revision and Notes

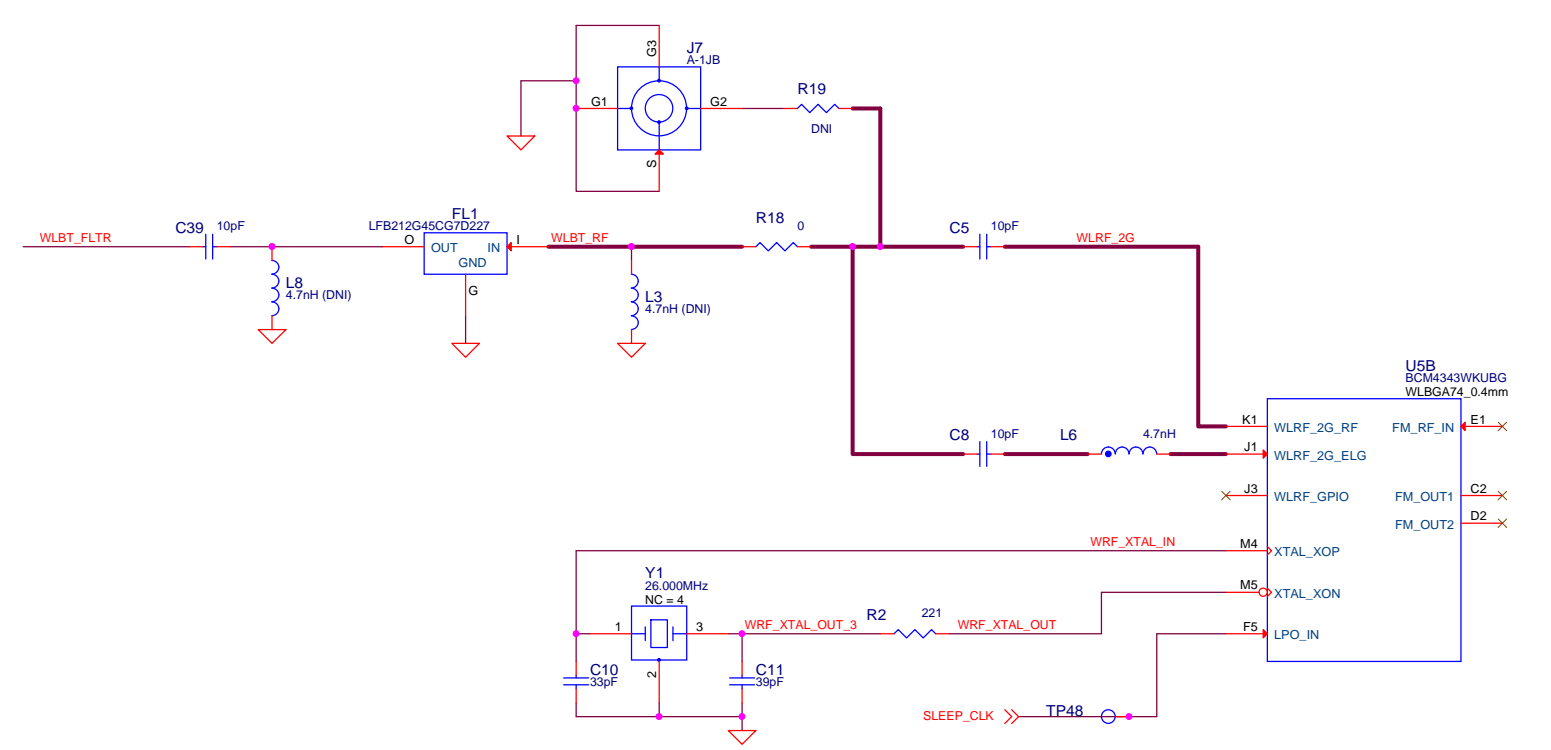
Page 2 - BCM4343W WLBGA Section

Page 3 - STM32F412 Section

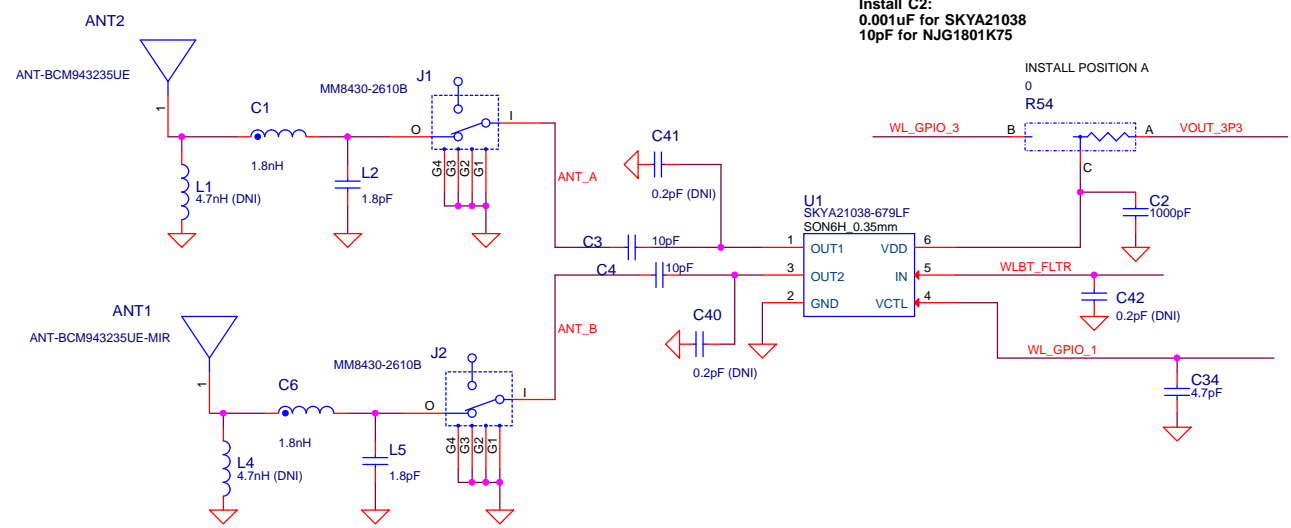
BOM ITEMS			
PCB			
<div>PCB NUMBER: 200-130058-0010 PCB NAME: BCM94343WWCD2_1</div>			
ASSEMBLY INSTRUCTIONS			
SHIELD			
SIP Shield: 210-128955-0010			<div>ZH1 210-128955-0010</div>

	Cypress Corporation			
	5300 California Avenue Irvine, CA 92617 Phone: (949) 926-5000			
	BCM94343WWCD2_1			
	Size	Custom	DWG NO 824-130058-0010	Rev 02
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WLAN: BCM4343W WLBGA



Stuffing option for Skyworks vs. JRC (Footprint Compatible):
Install R54:
Position AC (Default) for SKYA21038-679LF
Position BC for NJG1801K75
Install C2:
0.001uF for SKYA21038
10pF for NJG1801K75

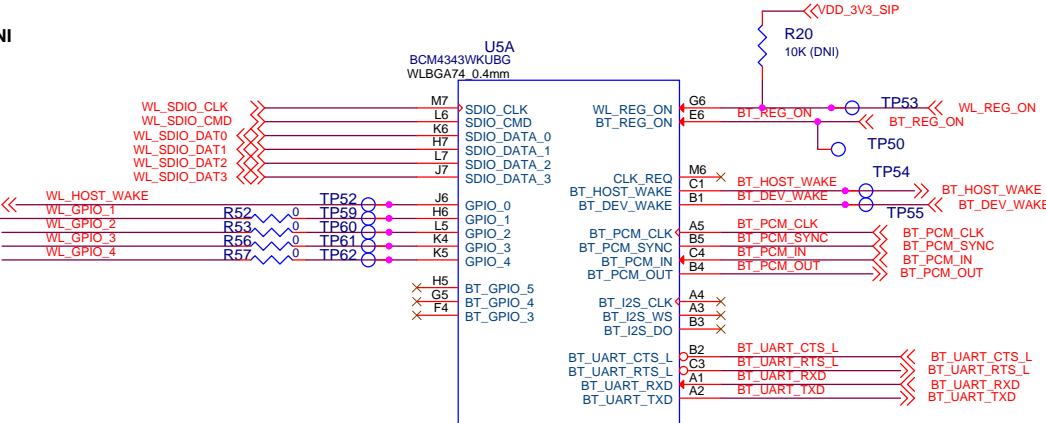


To use 3-Wire COEX:
Install J8
Install R53, R56, R57

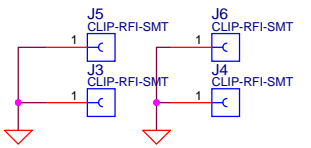
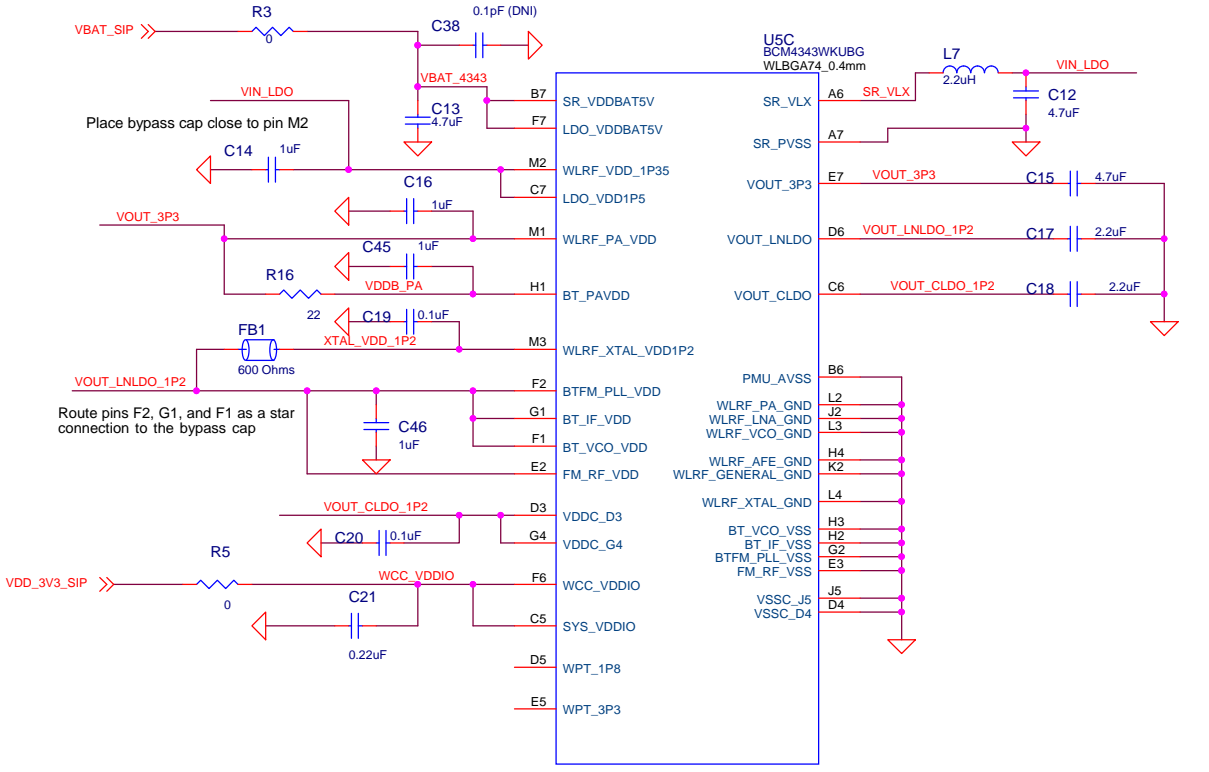


Default: J8 is DNI

To use JTAG: Install R4

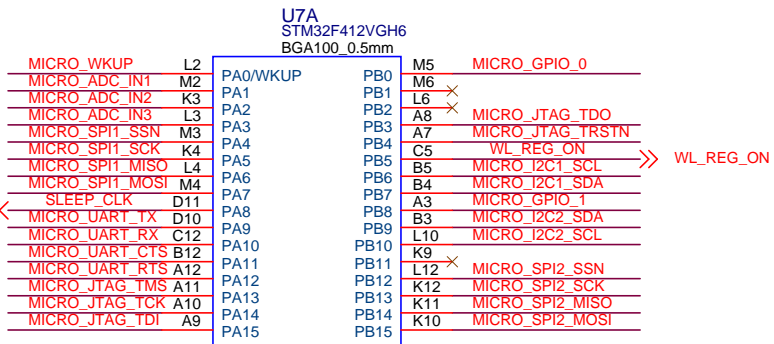


SDIO INTERFACE

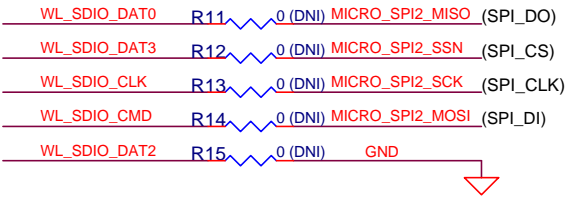


RF Shield Clip Landing Pads

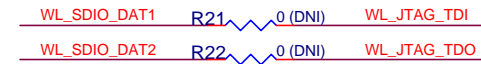
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To use SPI2 between BCM4343W and STM32F412:
Install R11, R12, R13, R14 and R15.
(R15 is used to select SPI mode for BCM4343W)

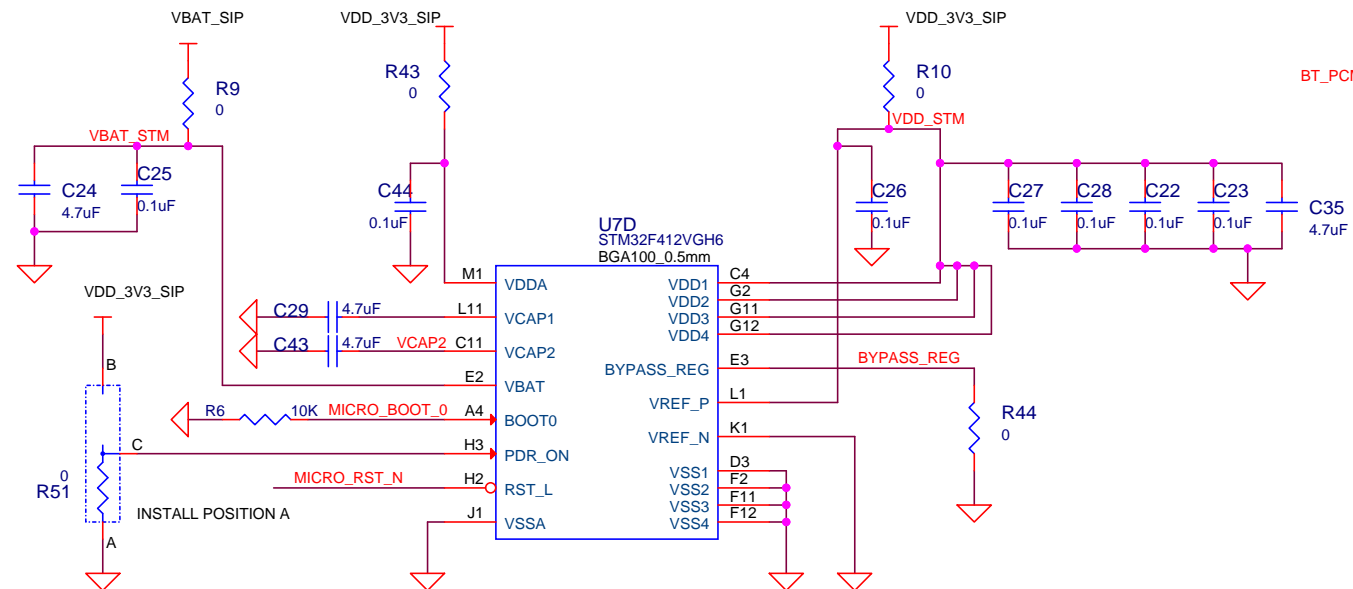
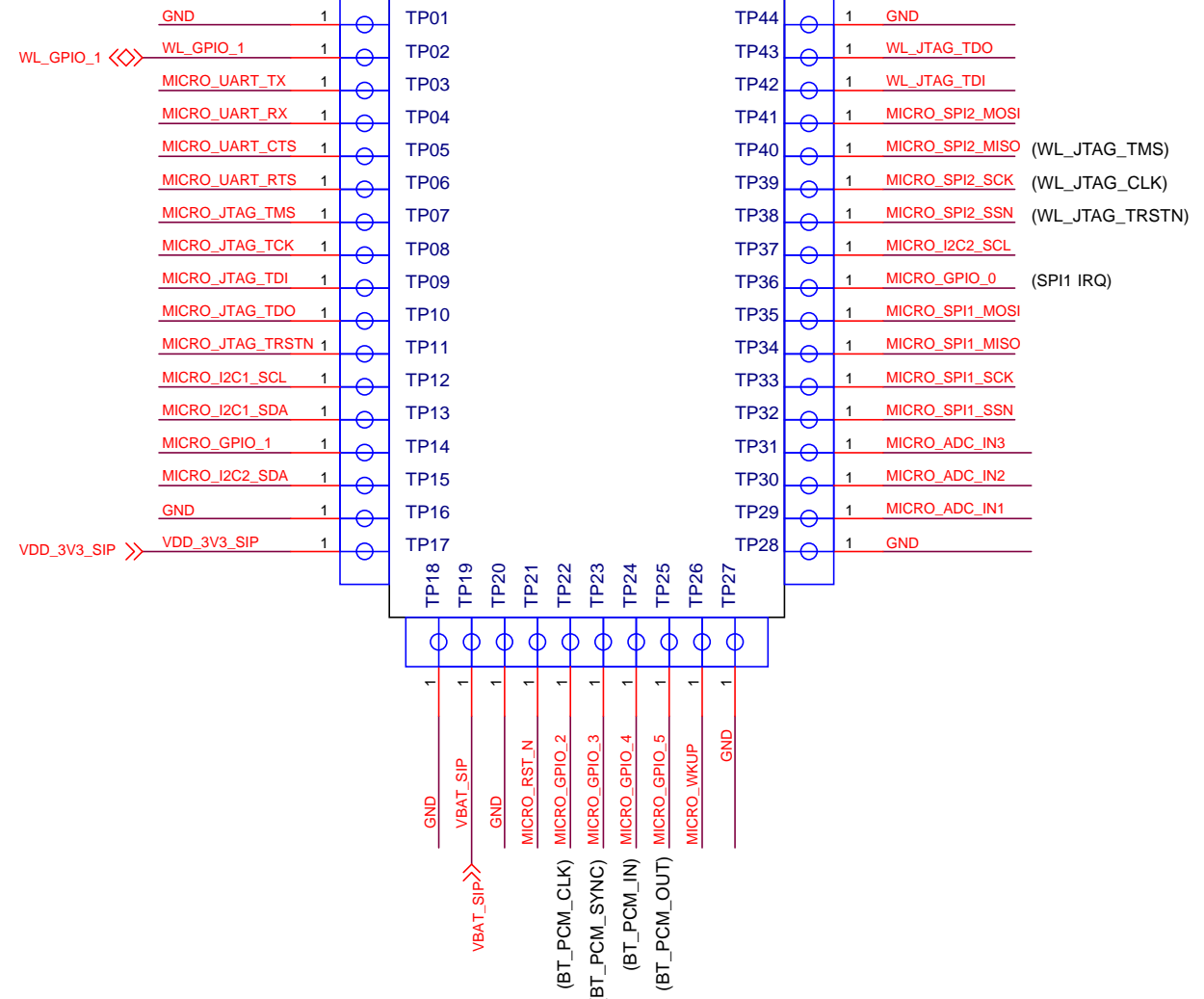
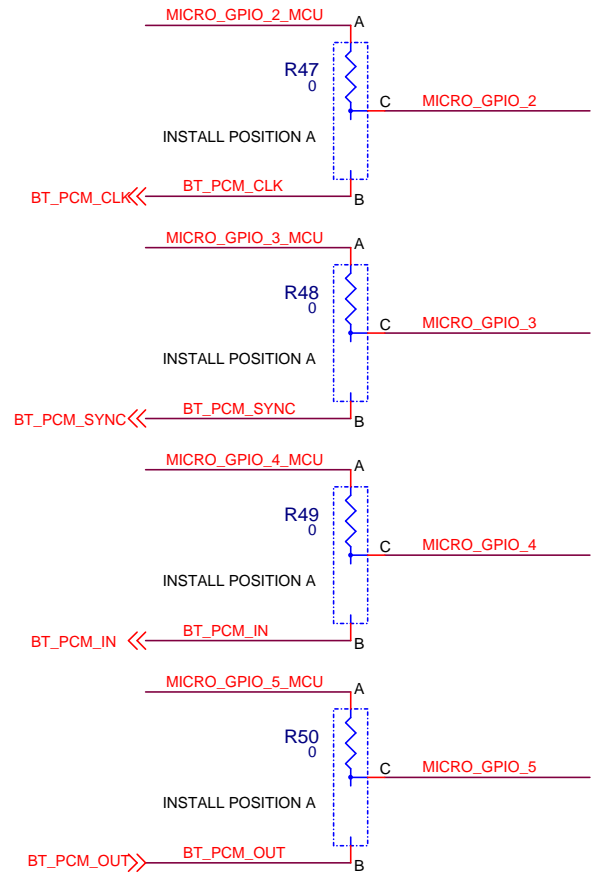
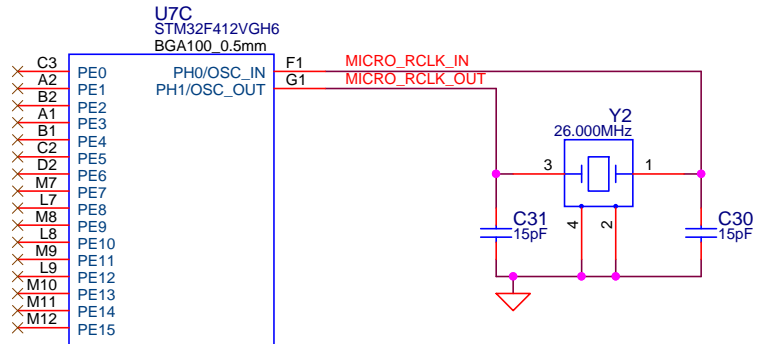
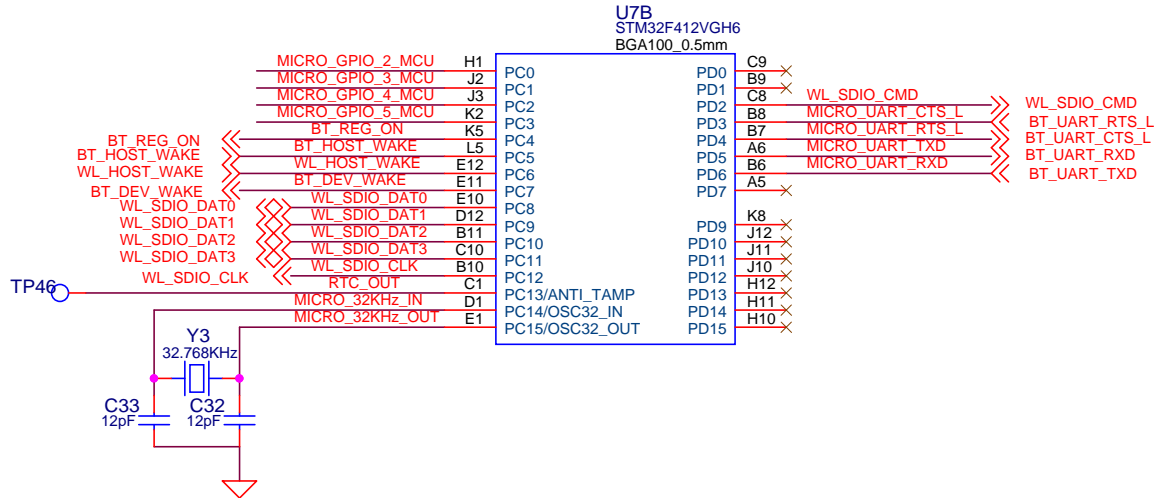


To use WLAN JTAG, Install R4



To use GPIO Signals to STM32F412, Install Position AC.

To use BT PCM Signals directly to BCM4343W, Install Position BC (Default).



SDIO / SPI Interface Options:

SDIO	STM32F412 Pin Number	STM32F412 Port/Pin		BCM4343W Pin Number	Function
	B10 C8 E10 D12 B11 C10	PC12 PD2 PC8 PC9 PC10 PC11	<---> <---> <---> <---> <---> <--->	M7 L6 K6 H7 L7 J7	SDIO_CLK SDIO_CMD SDIO_DATA_0 SDIO_DATA_1 SDIO_DATA_2 SDIO_DATA_3
SPI	STM32F412 Pin Number	STM32F412 Port/Pin		BCM4343W Pin Number	Function
	K12 K10 K11 C10 D12	PB13 PB15 PB14 PC11 PC9	<---> <---> <---> <---> <--->	M7 L6 K6 J7 H7	SPI_CLK SPI_MOSI SPI_MISO SPI_CS 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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