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REVISION HISTORY:

A01 Initial Release

A

A

B


B

C

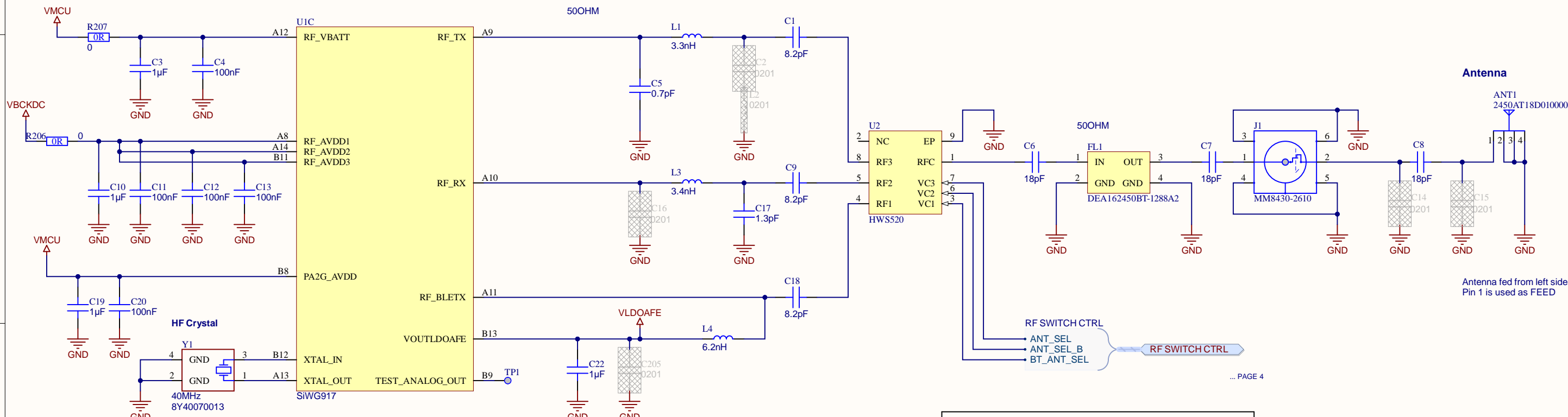
C

D

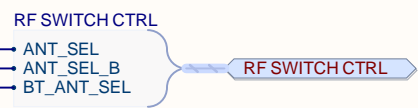
D

		Board name <b>SiWG917 Wi-Fi and BLE SoC Radio Board Int. Flash and Ext.RF switch</b>	
Designed ATC	Approved RGU	Page Title Table of Contents and Revision History	
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# SiWG917 RF Frontend ( External RF Switch + Band Pass Filter)



**Antenna**  
 ANTI 2450AT18D0100001  
 Antenna fed from left side  
 Pin 1 is used as FEED

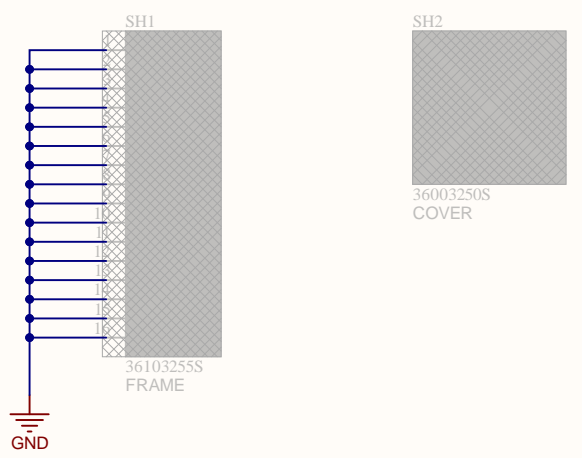


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Logic table for RF Switch (U2)

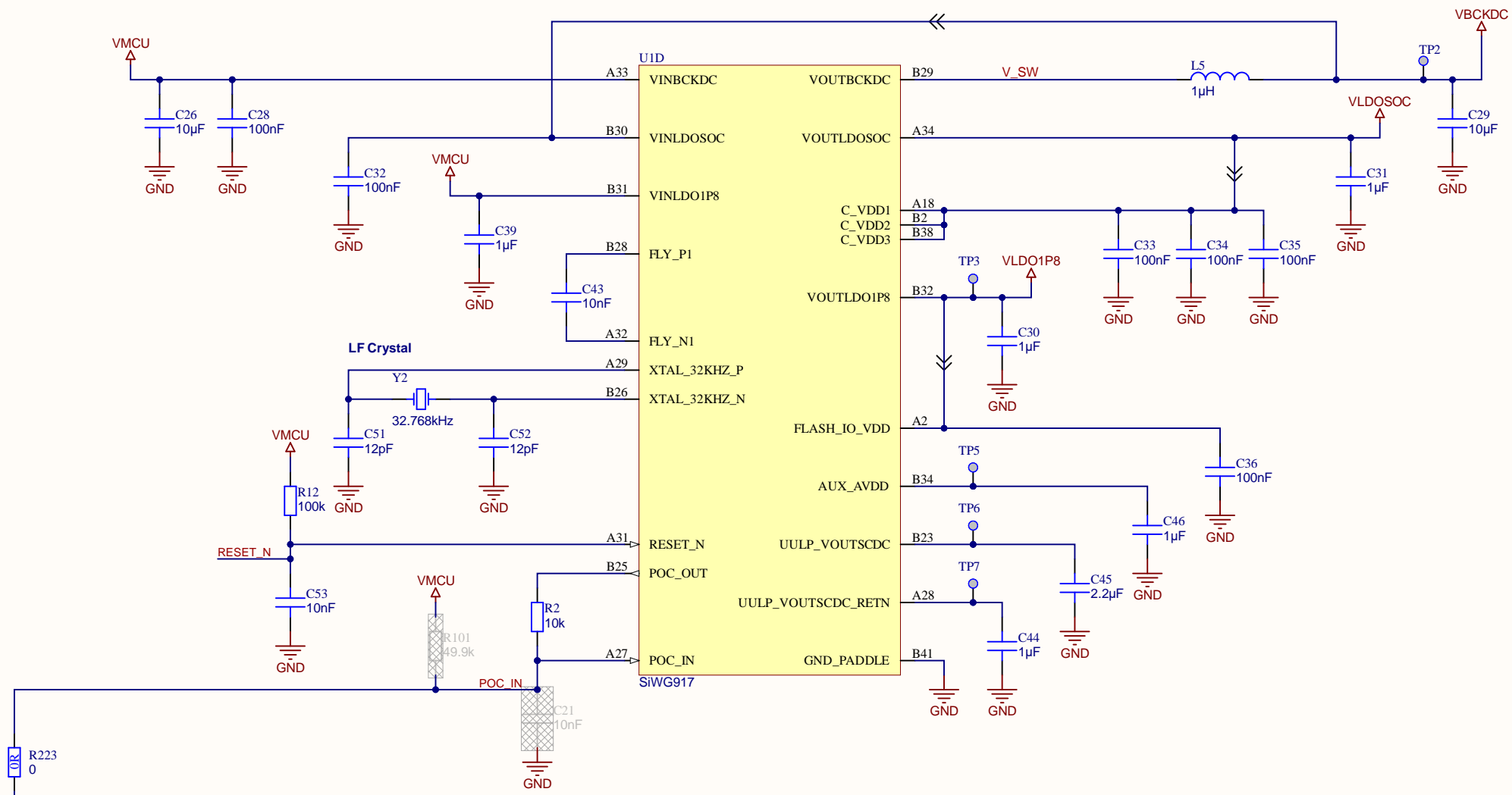
BT_ANT_SEL	ANT_SEL_B	ANT_SEL	RFC
1	0	0	RF_BTTX
0	1	0	RF_RX
0	0	1	RF_TX

## EMI Shield

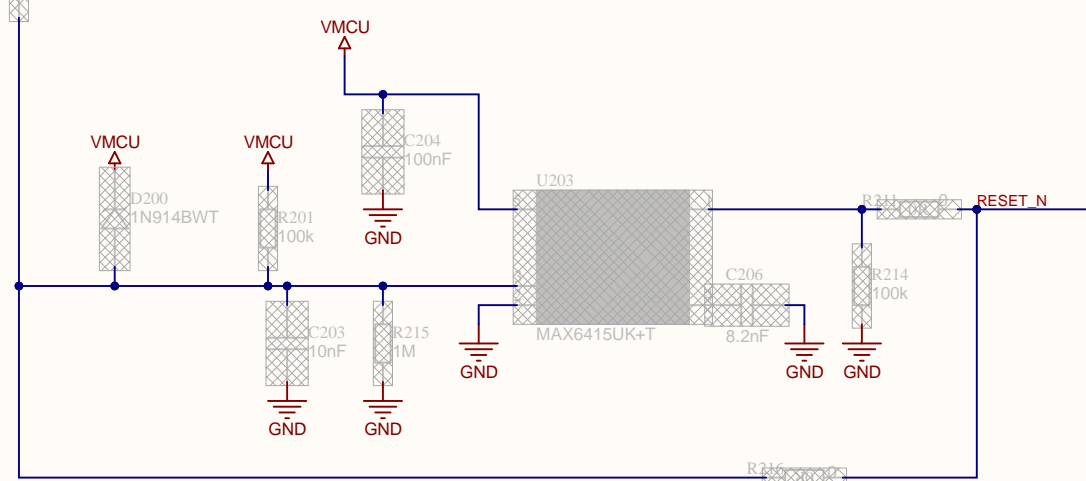


		Board name	
		<b>SiWG917 Wi-Fi and BLE SoC Radio Board</b> <b>Int. Flash and Ext.RF switch</b>	
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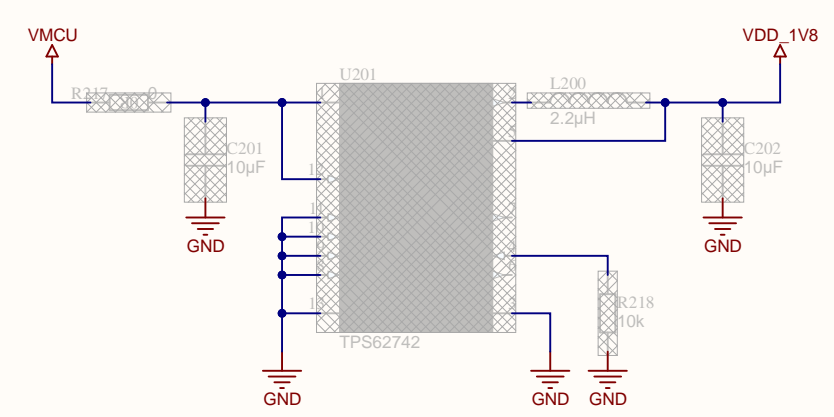
# SiWG917 Power



## Optional Reset Circuit

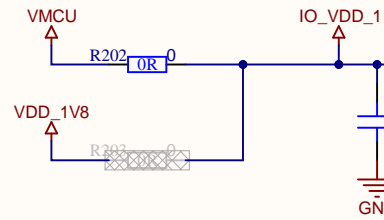


## Optional DC/DC Regulator for 1.8V Supply



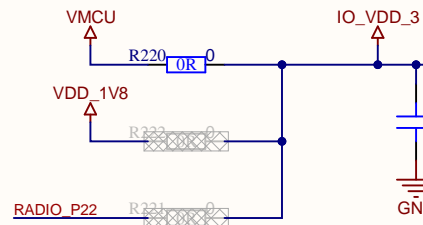
		Board name	
		<b>SiWG917 Wi-Fi and BLE SoC Radio Board</b> <i>Int. Flash and Ext.RF switch</i>	
Designed	Approved	Page Title	
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### IO\_VDD\_1 Configuration

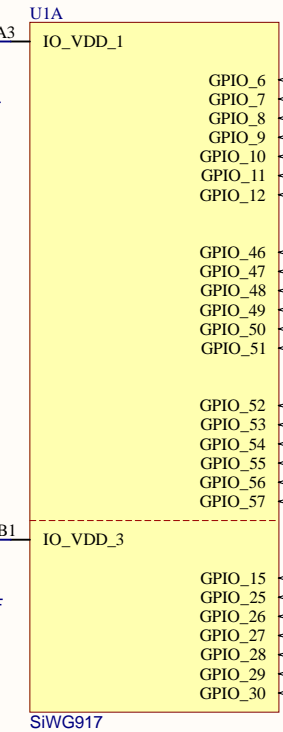


NOTE: remove R204 if IO\_VDD\_1 and IO\_VDD\_3 are selected from different sources

### IO\_VDD\_3 Configuration



## SiWG917 Pin Assignment

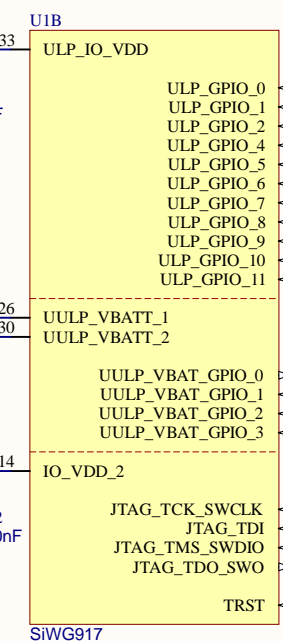
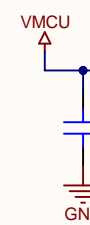


SiWG917 Peripheral	Connection	Breakout Header Connection
GPIO_6	B20	RADIO_P19
GPIO_7	B19	RADIO_P20
GPIO_8	A20	RADIO_F8
GPIO_9	A21	RADIO_F9
GPIO_10	B3	RADIO_F11
GPIO_11	B4	RADIO_F13
GPIO_12	A4	RADIO_P21
MCU_CLK_OUT	A4	RADIO_P21
GPIO_46	A5	RADIO_P24
GPIO_47	A7	RADIO_P26
GPIO_48	B7	RADIO_P28
GPIO_49	B6	RADIO_P30
GPIO_50	A6	RADIO_P32
GPIO_51	B5	RADIO_P34
GPIO_52	A38	RADIO_P40
GPIO_53	B35	RADIO_P41
GPIO_54	A39	RADIO_P42
GPIO_55	B36	RADIO_P43
GPIO_56	A40	RADIO_P44
GPIO_57	B37	RADIO_P45
M4SS_TRACE_CLK	B35	ETM_TRACECLK
M4SS_TRACE_D0	A39	ETM_TRACE0
M4SS_TRACE_D1	B36	ETM_TRACE1
M4SS_TRACE_D2	A40	ETM_TRACE2
M4SS_TRACE_D3	B37	ETM_TRACE3
M4SS_TRACE_CLKIN	A41	RADIO_P23
SDIO_CLK	B40	RADIO_P25
SDIO_CMD	A1	RADIO_P27
SDIO_D0	B39	RADIO_P29
SDIO_D1	A44	RADIO_P31
SDIO_D2	A43	RADIO_P33
SDIO_D3	A42	RADIO_P35
JOYSTICK	A42	RADIO_P36

EXP Header Connection
RADIO_P0
RADIO_P1
RADIO_P2
RADIO_P3
RADIO_P4
RADIO_P5
RADIO_P6
RADIO_P7
RADIO_P8
RADIO_P9
RADIO_P10
RADIO_P11
RADIO_P12
RADIO_P13
RADIO_P14
RADIO_P15
RADIO_P16
RADIO_P17
RADIO_P18
RADIO_P19
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RADIO_P42
RADIO_P43
RADIO_P44
RADIO_P45

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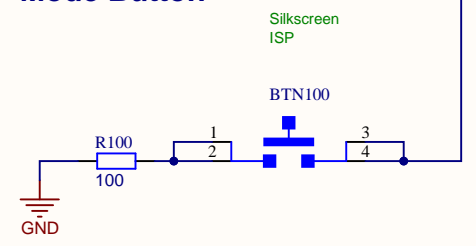
### RF SWITCH CTRL



SiWG917 Peripheral	Connection	Breakout Header Connection
ULP_GPIO_0	A35	RADIO_P16
ULP_GPIO_1	B22	RADIO_F16
ULP_GPIO_2	A37	RADIO_F10
ULP_GPIO_4	B21	RADIO_P13
ULP_GPIO_5	A19	RADIO_P12
ULP_GPIO_6	A22	RADIO_F15
ULP_GPIO_7	B18	RADIO_P15
ULP_GPIO_8	A36	RADIO_F7
ULP_GPIO_9	A24	RADIO_P17
ULP_GPIO_10	A23	RADIO_F6
ULP_GPIO_11	B17	RADIO_F14
ULP_SPI_DOUT	A35	RADIO_P16
GPIO	B22	RADIO_F10
ULP_I2C_SDA	A22	EXP HEADER16
ULP_I2C_SCL	B18	EXP HEADER15
ULP_SPI_CLK	A36	RADIO_P15
ULP_UART_RX	A24	RADIO_F7
ULP_SPI_CS0	A23	RADIO_P17
ULP_UART_TX	B17	RADIO_F6
GPIO	B10	RADIO_P14
GPIO	B27	RADIO_P37
GPIO	B24	RADIO_F12
GPIO	A25	RADIO_P18
JTAG_TCK/SWCLK	A17	RADIO_F1
JTAG_TDI	B16	RADIO_F3
JTAG_TMS/SWDIO	A16	RADIO_F0
JTAG_TDO/SWO/ISP_ENABLE	B15	RADIO_F2
TRST	A15	RADIO_F2

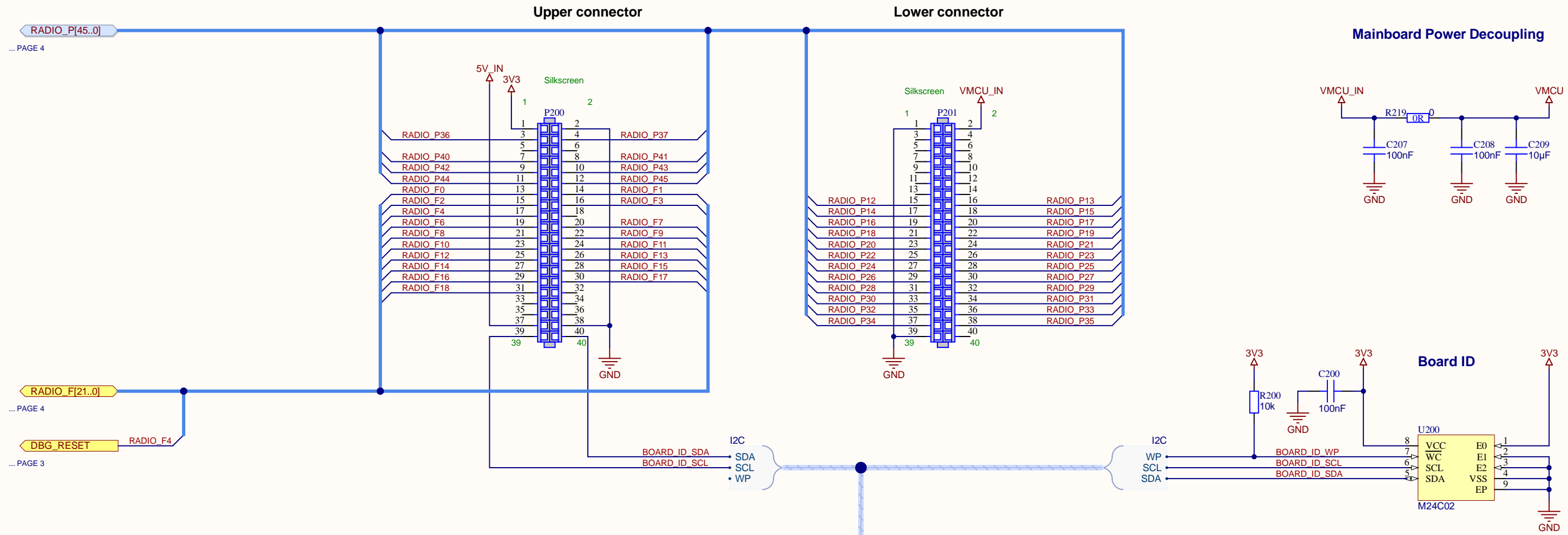
EXP Header Connection
RADIO_P16
RADIO_F10
RADIO_P13
RADIO_P12
RADIO_F15
RADIO_P15
RADIO_F7
RADIO_P17
RADIO_F6
RADIO_F14
RADIO_P37
RADIO_F12
RADIO_P18
RADIO_F1
RADIO_F3
RADIO_F0
RADIO_F2

### ISP Mode Button



	Board name <b>SiWG917 Wi-Fi and BLE SoC Radio Board</b> <b>Int. Flash and Ext.RF switch</b>		
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# Radio Board Socket

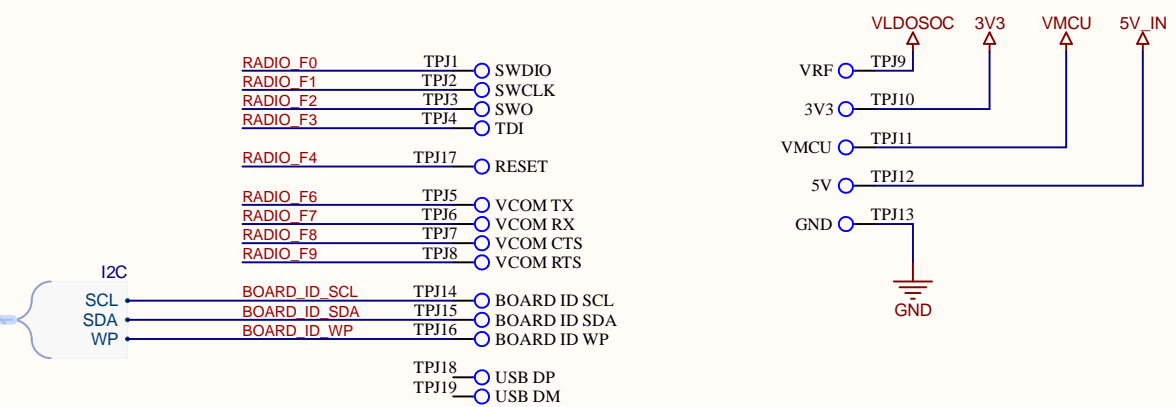


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## Production Test Points



LOGO1  
 SILICON LABS  
 LOGO SILABS 14MM

MARK1  
 RoHS

MARK2  
 ESD

MARK3  
 Pb-free

MARK4  
 BOARD INFO FRAME

		Board name <b>SiWG917 Wi-Fi and BLE SoC Radio Board</b> <b>Int. Flash and Ext.RF switch</b>	
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