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**REVISION HISTORY:**

A01	Initial Release
A02	Level shifter (U202) connections update, Star power routing, Load caps for Y2 (32KHz)
A03	RF match update, Load caps for Y1, Removed TP1 Placeholders for RF_AVDD&RF_VABTT, Shield mount

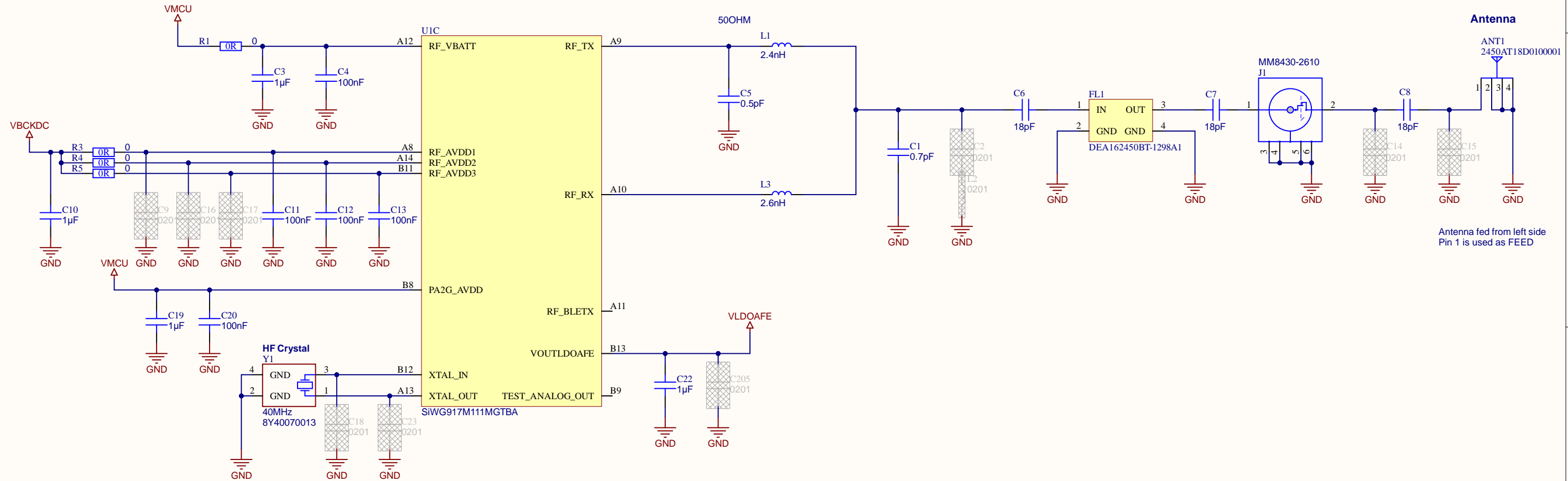
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PCB4342A A03

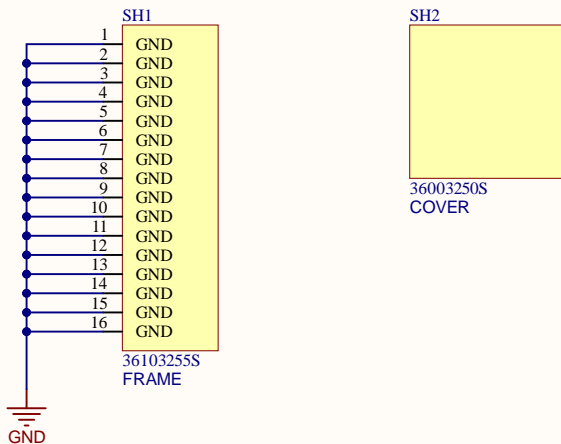
 <b>SILICON LABS</b>		Board name	
		<b>SiWG917 Wi-Fi and BLE SoC Radio Board                  Int.Flash, Ext.PSRAM &amp; Int.RF Switch</b>	
Designed	Approved	Page Title	
MSV	RGU	Table of Contents and Revision History	
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# SiWG917 RF Frontend (Internal RF Switch + BPF)



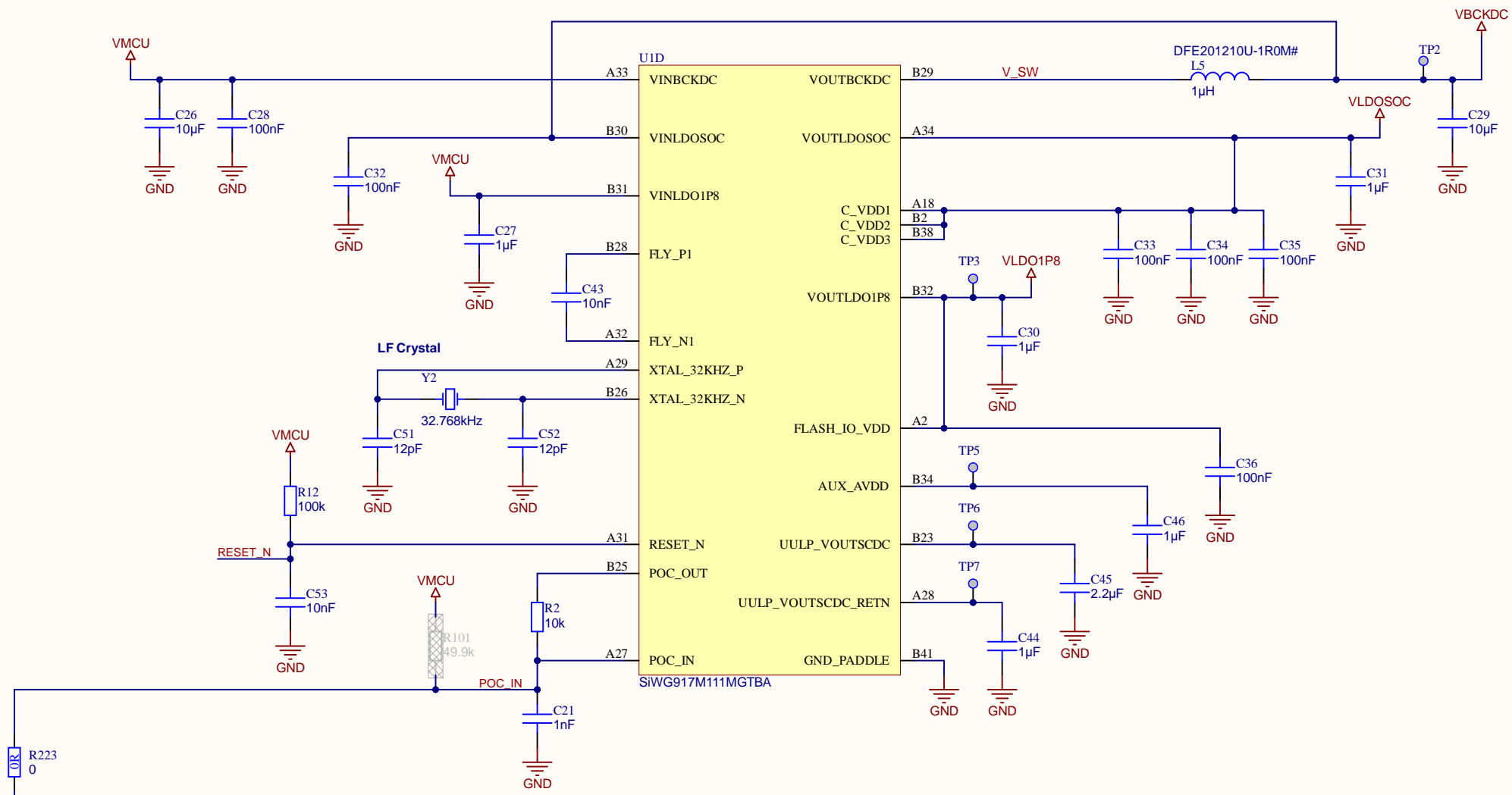
Antenna fed from left side  
Pin 1 is used as FEED

## EMI Shield

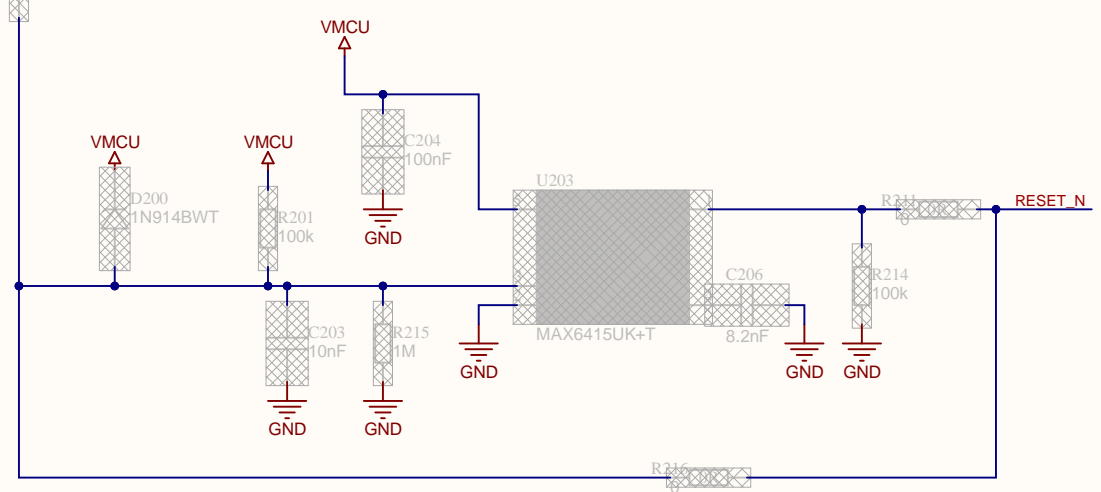


		Board name	
		<b>SiWG917 Wi-Fi and BLE SoC Radio Board</b> <b>Int.Flash, Ext.PSRAM &amp; Int.RF Switch</b>	
Designed	Approved	Page Title	
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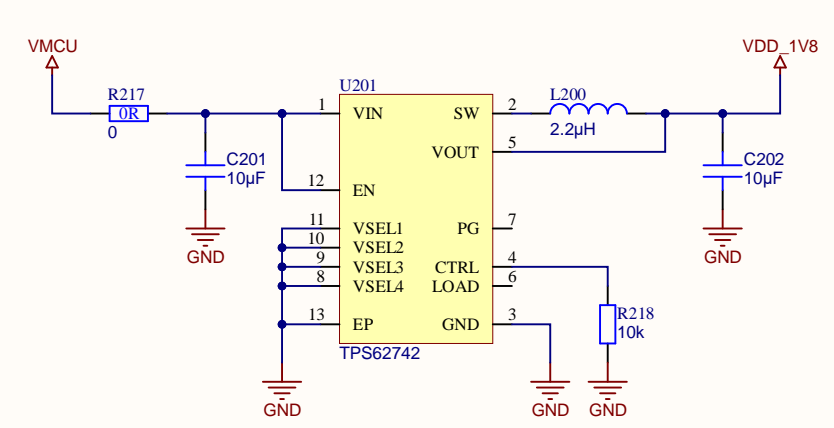
# SiWG917 Power



## Optional Reset Circuit



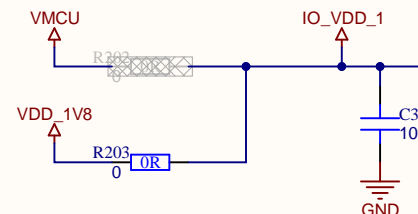
## DC/DC Regulator for 1.8V Supply



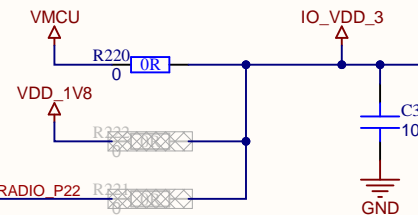
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		Designed MSV	Approved RGU	Page Title Power Section
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IO\_VDD\_1 Configuration

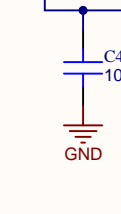
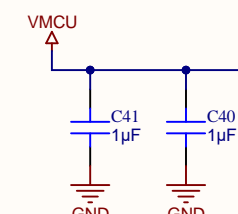
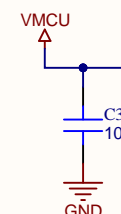
SiWG917 Pin Assignment



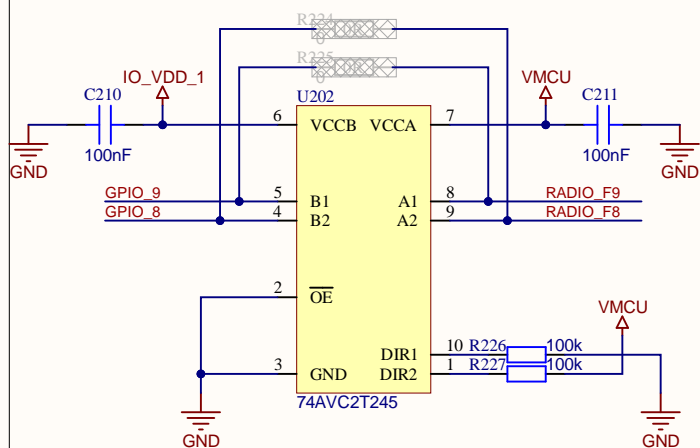
IO\_VDD\_3 Configuration



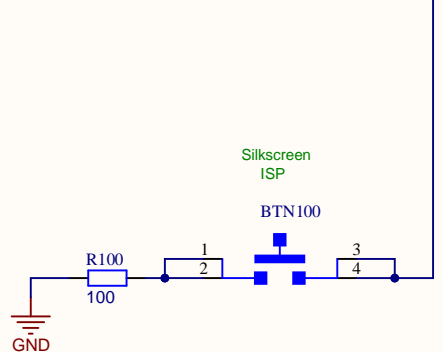
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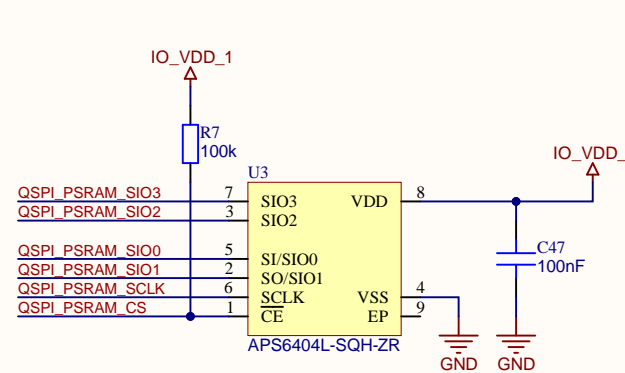
Level Shifter



ISP Mode Button



QSPI PSRAM



Mainboard Peripheral

SiWG917 Peripheral	Connection	Breakout Header Connection	EXP Header Connection
GPIO B20	GPIO	RADIO P19	
GPIO B19	GPIO	RADIO P20	
GPIO A20	TASS UART1 RX	RADIO F8	
GPIO A21	TASS UART1 TX	RADIO F9	
GPIO B3	GPIO	RADIO P40	
GPIO B4	GPIO	RADIO P41	
GPIO A4	MCU CLK OUT	RADIO P21	
GPIO A5	GPIO	RADIO P24	
GPIO A7	GPIO	RADIO P26	
GPIO B7	GPIO	RADIO P28	
GPIO B6	GPIO	RADIO P30	
GPIO A6	GPIO	RADIO P32	
GPIO B5	GPIO	RADIO P34	
GPIO A38	QSPI PSRAM SCLK		
GPIO B35	QSPI PSRAM SIO0		
GPIO A39	QSPI PSRAM SIO1		
GPIO B36	QSPI PSRAM CS		
GPIO A40	QSPI PSRAM SIO2		
GPIO B37	QSPI PSRAM SIO3		
GPIO A41	M4SS TRACE CLKIN	RADIO P23	
GPIO B40	CLK	RADIO P25	
GPIO A1	CMD	RADIO P27	
GPIO B39	D0	RADIO P29	
GPIO A44	D1	RADIO P31	
GPIO A43	D2	RADIO P33	
GPIO A42	D3	RADIO P35	
GPIO A42	JOYSTICK	RADIO P36	
GPIO A35	GPIO	RADIO P1	
GPIO B22	ULP SPI DOUT	DISP SI	RADIO F16
GPIO A37	GPIO	UIF LED0	RADIO F10
GPIO B21	GPIO	RADIO P3	
GPIO A19	GPIO	RADIO P5	
GPIO A22	ULP I2C SDA	SENSOR_SDA	EXP HEADER16
GPIO B18	ULP I2C SCL	SENSOR_SCL	EXP HEADER15
GPIO A36	ULP SPI CLK	DISP_SCLK	RADIO P15
GPIO A24	ULP UART RX	VCOM RX	RADIO F7
GPIO A23	ULP SPI CS0	DISP_SCS	RADIO P17
GPIO B17	ULP UART TX	VCOM TX	RADIO F6
GPIO B10	GPIO	DISP_ENABLE	RADIO P14
GPIO B27	GPIO	SENSOR_ENABLE	RADIO P37
GPIO B24	WAKEUP	UIF_BUTTON0	RADIO F12
GPIO A25	WAKEUP	DISP_EXTCOMIN	RADIO P18
GPIO A17	JTAG TCK/SWCLK	DBG TCK/SWCLK	RADIO F1
GPIO B16	JTAG TDI	DBG TDI	RADIO F3
GPIO A16	JTAG TMS/SWDIO	DBG TMS/SWDIO	RADIO F0
GPIO B15	JTAG TDO/SWO/ISP_ENABLE	DBG TDO/SWO	RADIO F2
GPIO A15	TRST		

- RADIO\_P0
- RADIO\_P1
- RADIO\_P2
- RADIO\_P3
- RADIO\_P4
- RADIO\_P5
- RADIO\_P6
- RADIO\_P7
- RADIO\_P8
- RADIO\_P9
- RADIO\_P10
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- RADIO\_P43
- RADIO\_P44
- RADIO\_P45

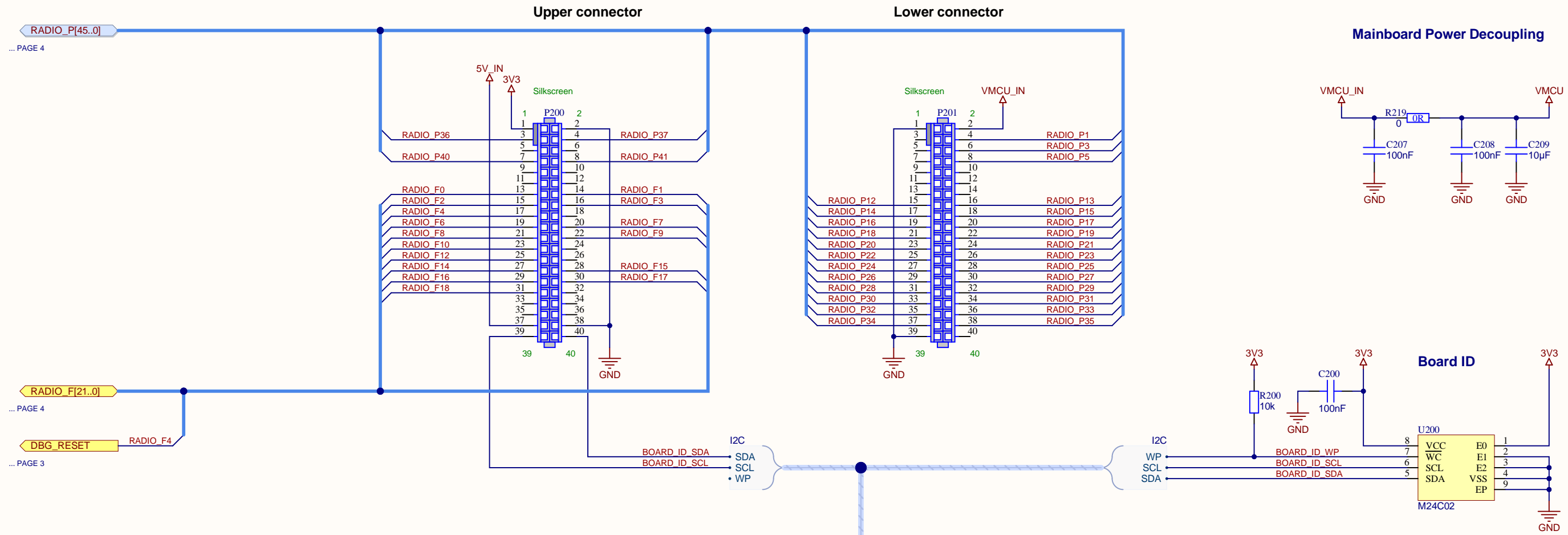
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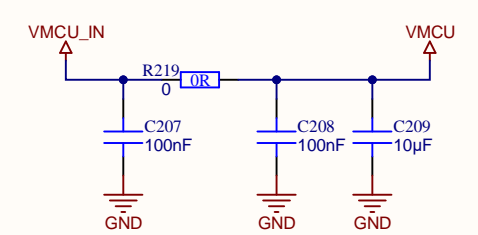
- RADIO\_F0
- RADIO\_F1
- RADIO\_F2
- RADIO\_F3
- RADIO\_F4
- RADIO\_F5
- RADIO\_F6
- RADIO\_F7
- RADIO\_F8
- RADIO\_F9
- RADIO\_F10
- RADIO\_F11
- RADIO\_F12
- RADIO\_F13
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- RADIO\_F16
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- RADIO\_F18
- RADIO\_F19
- RADIO\_F20
- RADIO\_F21

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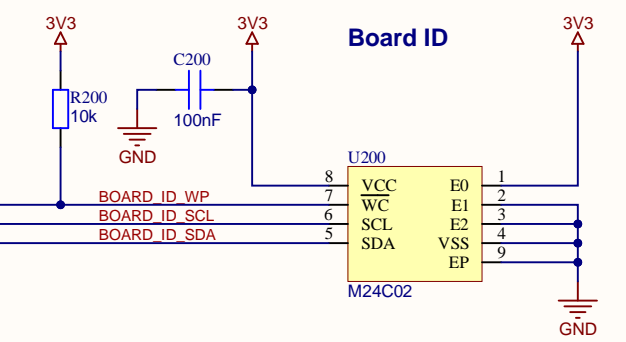
# Radio Board Socket



## Mainboard Power Decoupling



## Board ID



## Production Test Points

