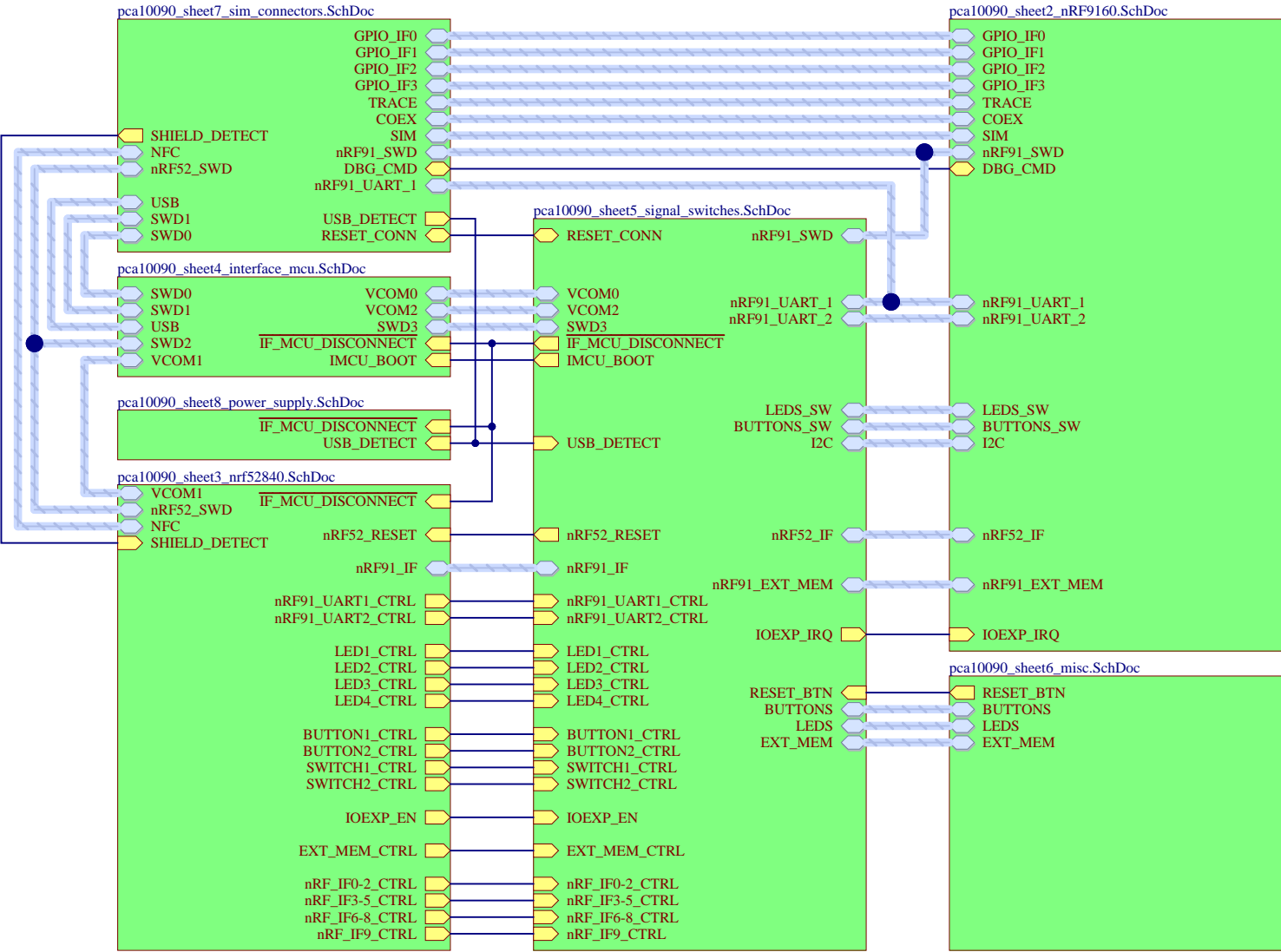


Nordic Semiconductor ASA

nRF9160 Development Kit (PCA10090)

Sheet 1:	Connections
Sheet 2:	nRF9160
Sheet 3:	nRF52840
Sheet 4:	Signal Switches
Sheet 5:	Interface MCU
Sheet 6:	Buttons and LEDs
Sheet 7:	SIM & Connectors
Sheet 8:	Power Supply

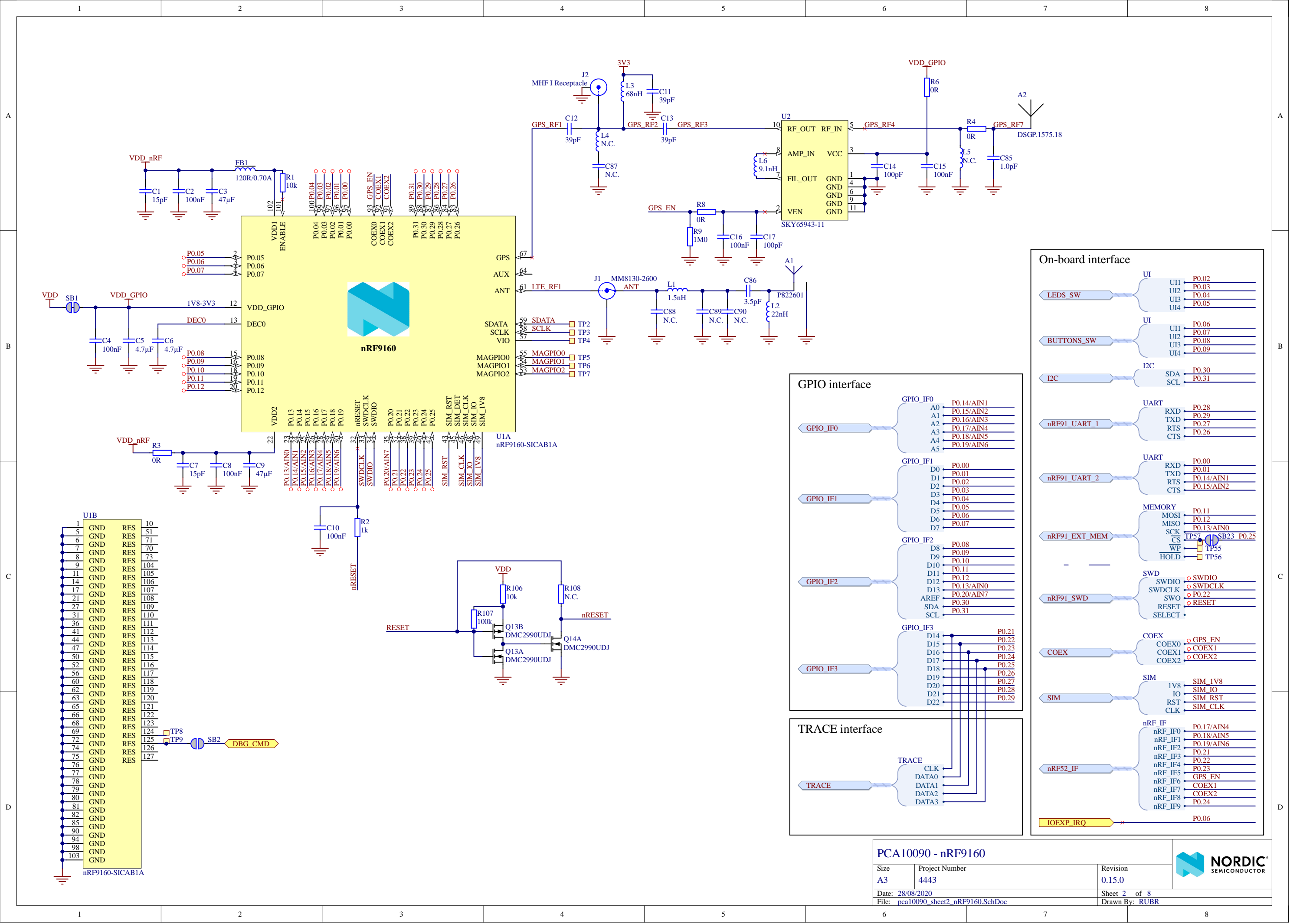


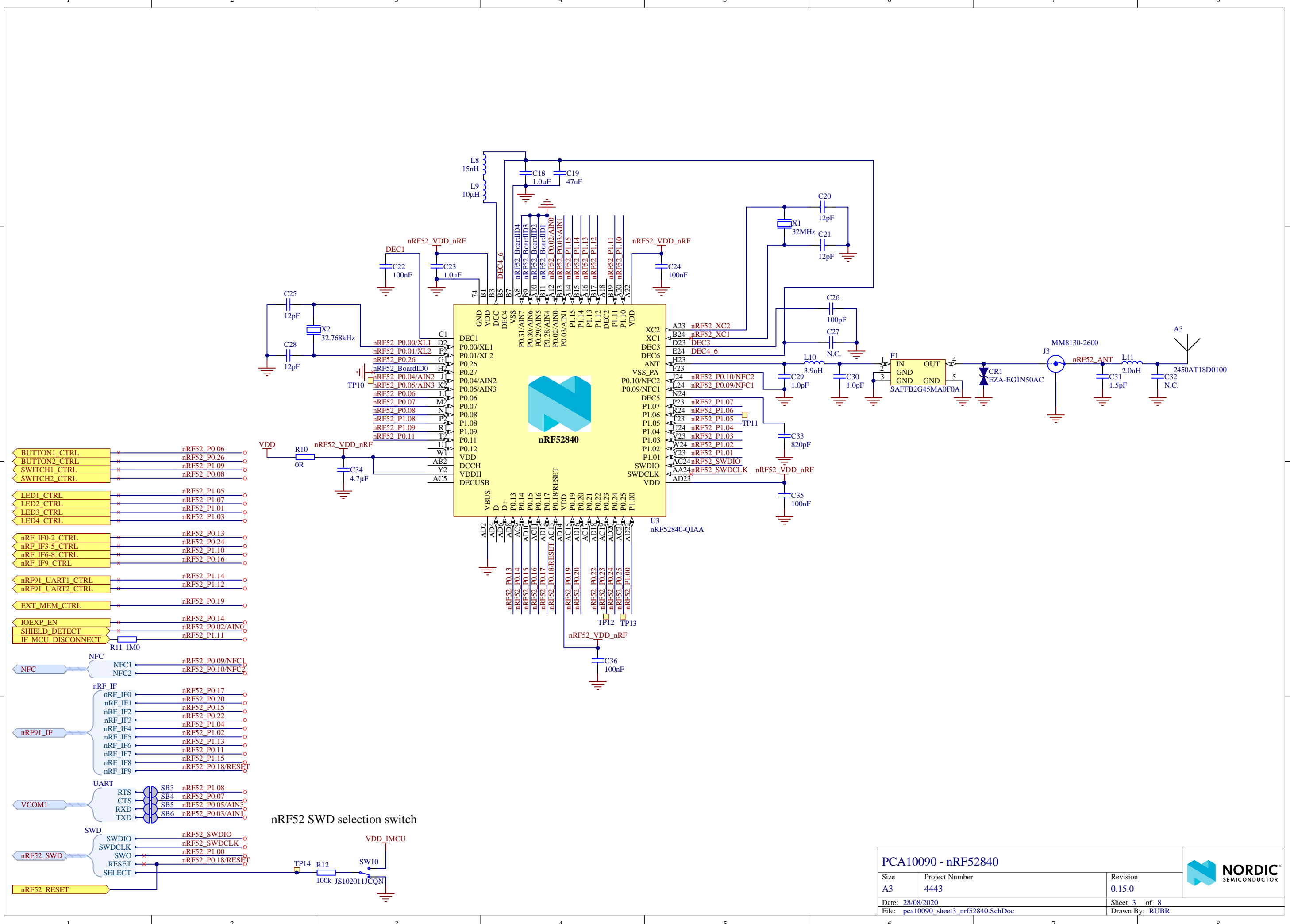
✖ The No ERC object is a design directive.
This directive is placed on a node in the circuit to suppress harmless warnings and/or error violation conditions that are detected when the schematic project is compiled.

PCA10090 - Connections

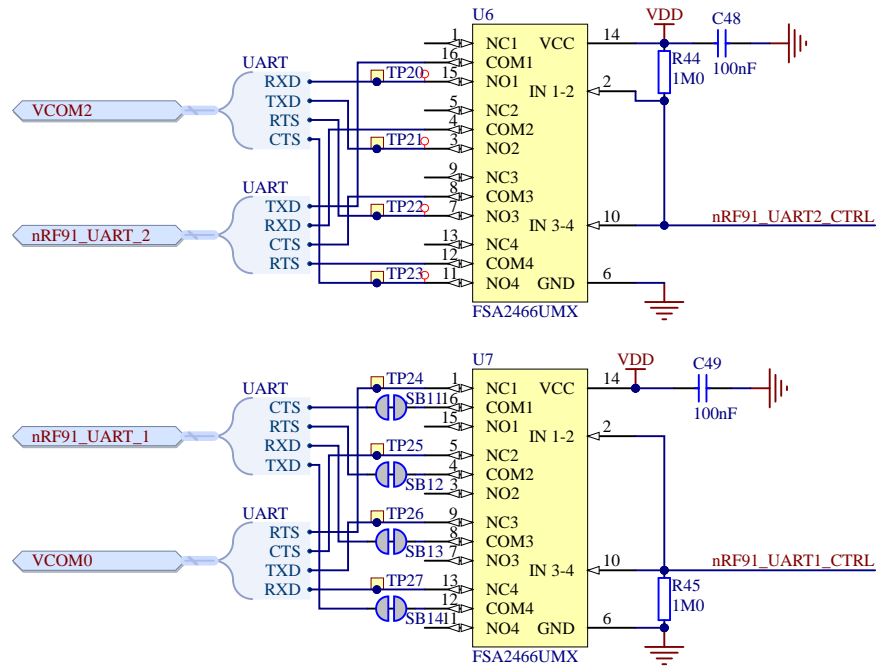
Size A3	Project Number 4443	Revision 0.15.0
Date: 28/08/2020	Sheet 1 of 8	
File: pcal0090_sheet1_connections.SchDoc	Drawn By: RUBR	



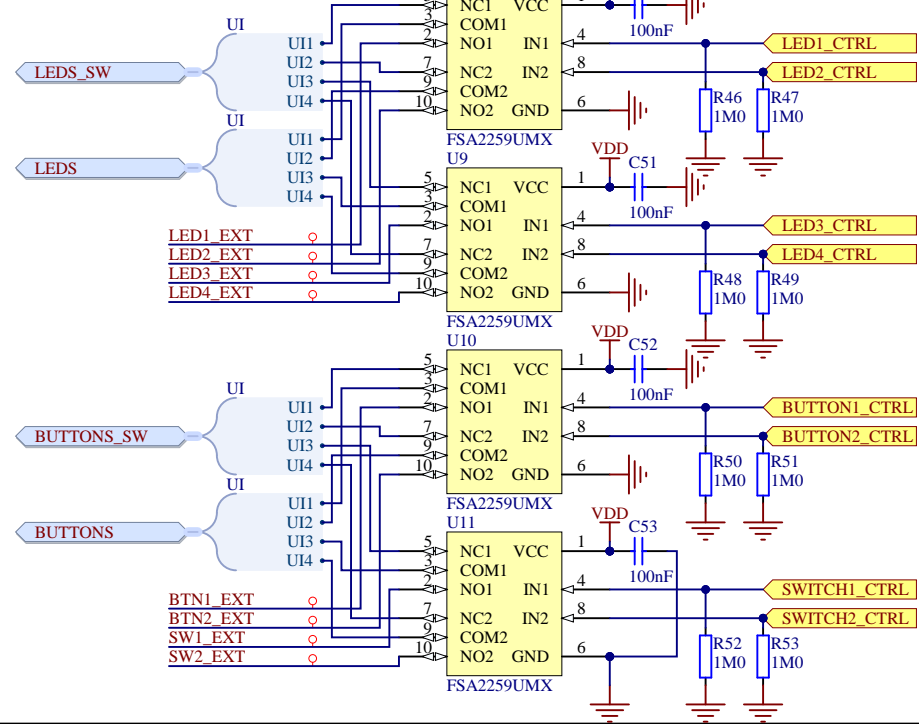




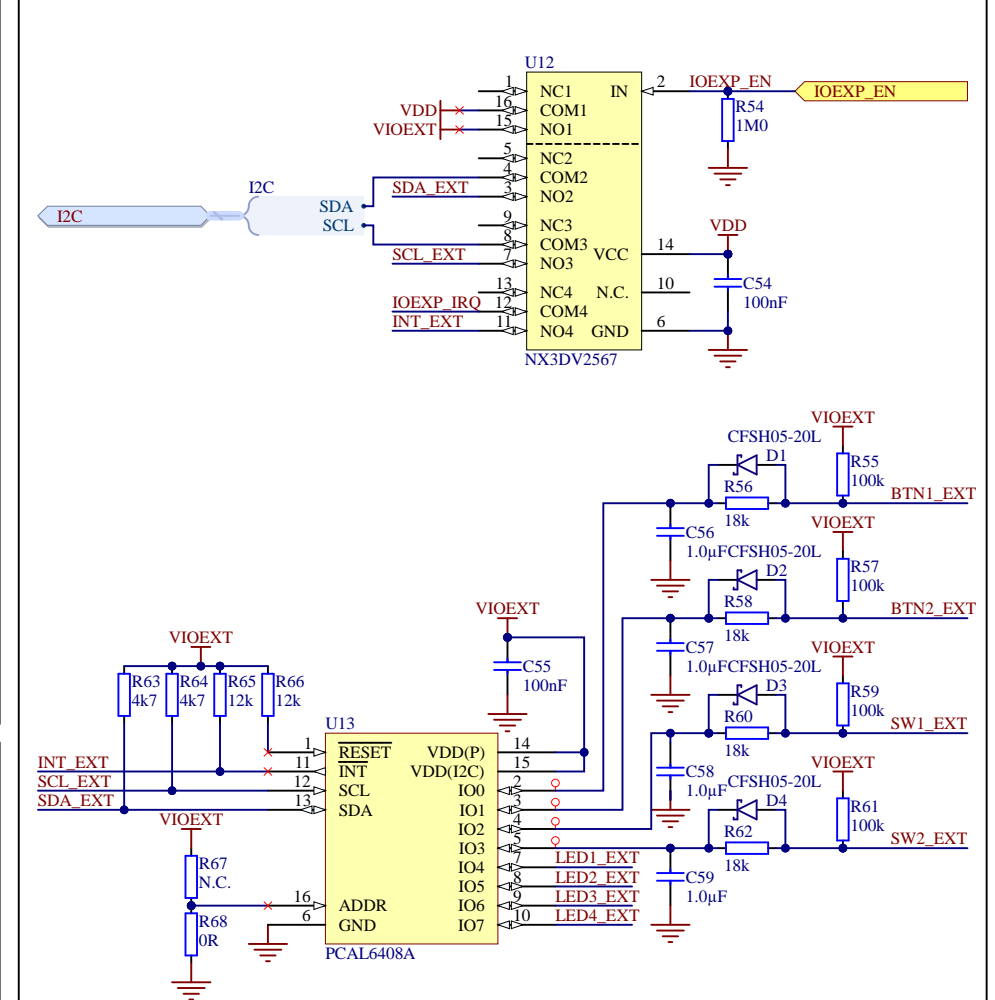
UART control



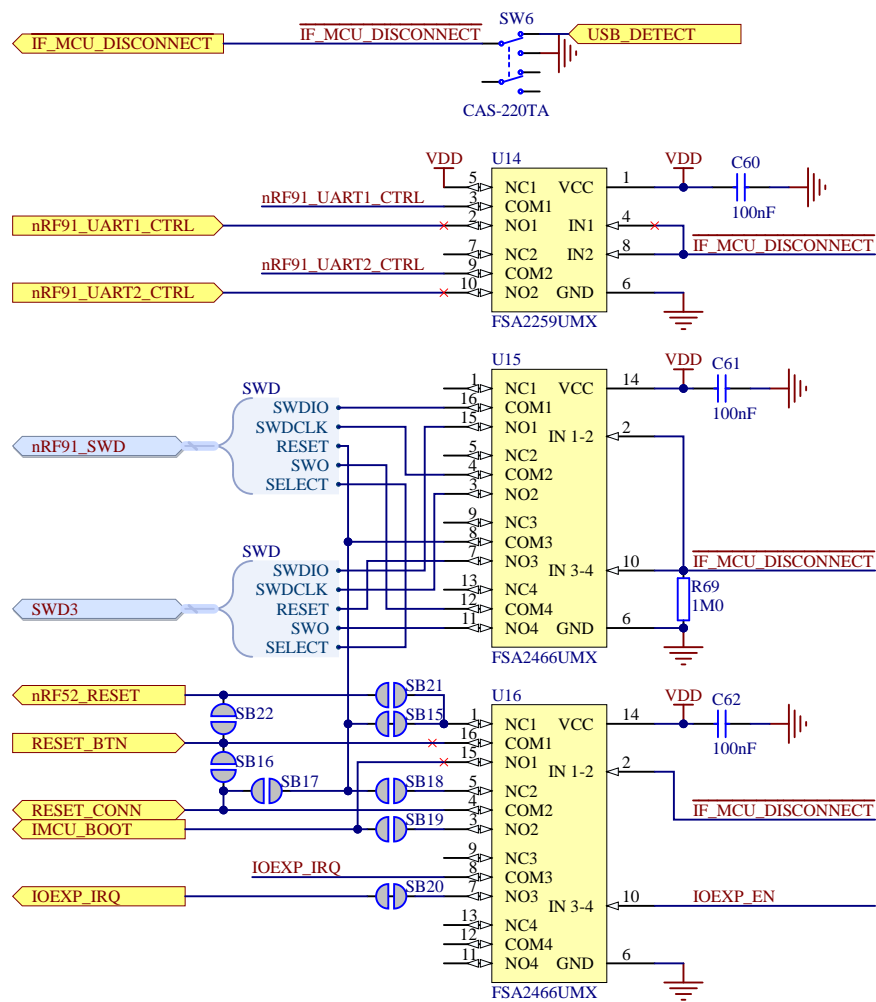
LED, button and switch control



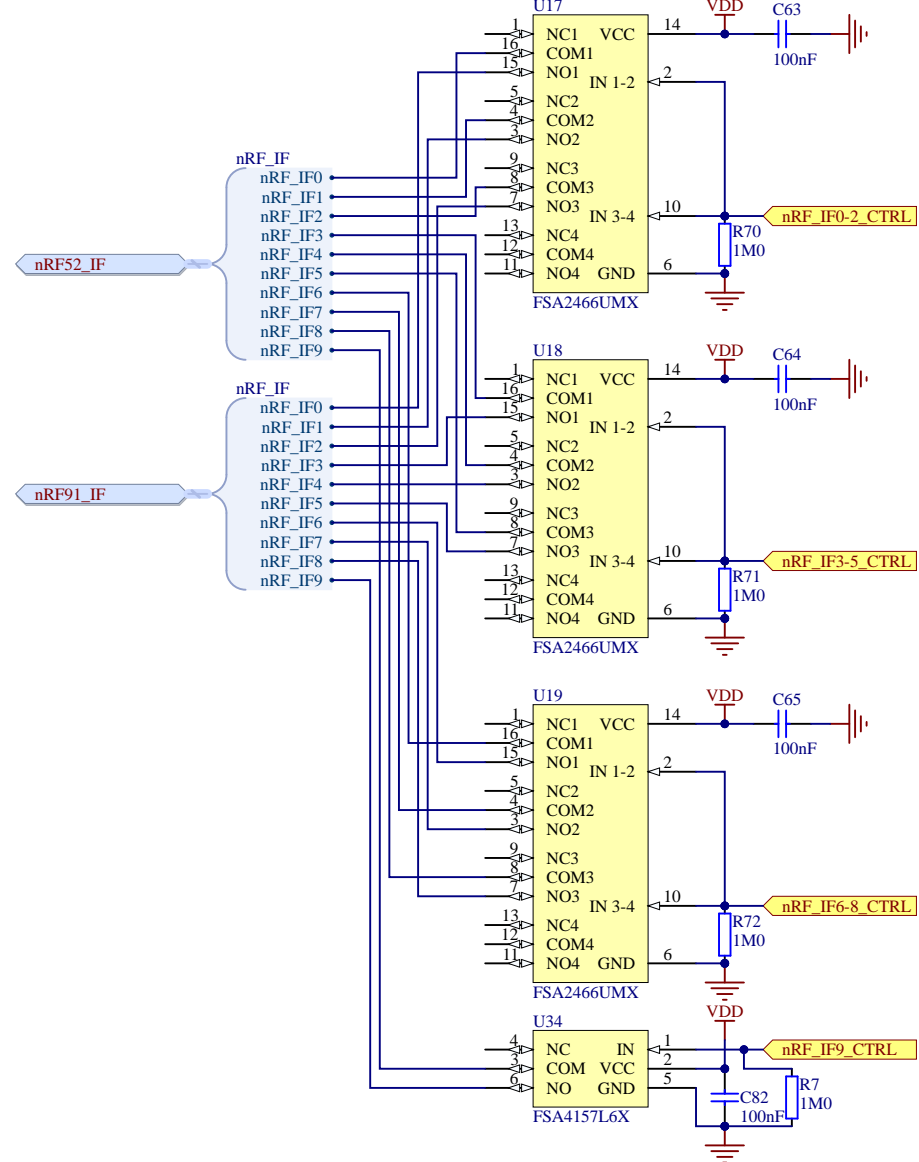
IO expander for LEDs, buttons and switches



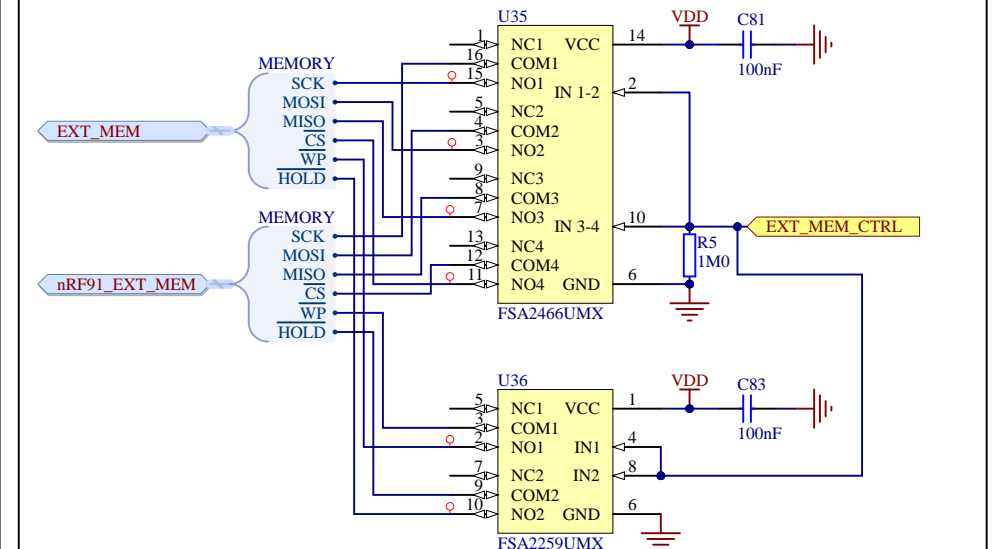
Interface MCU disconnect switches



nRF interface and COEX control

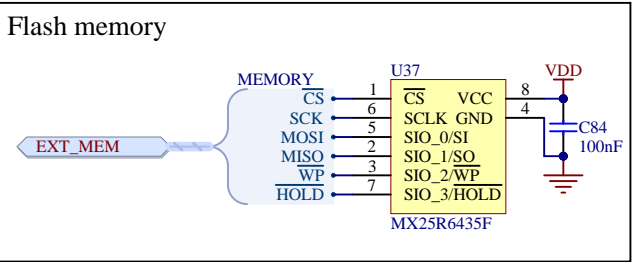
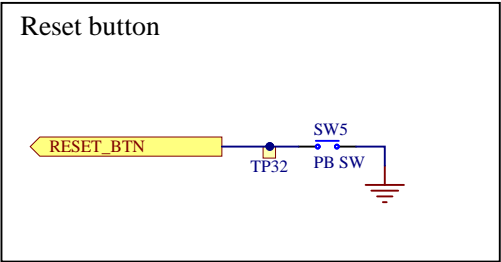
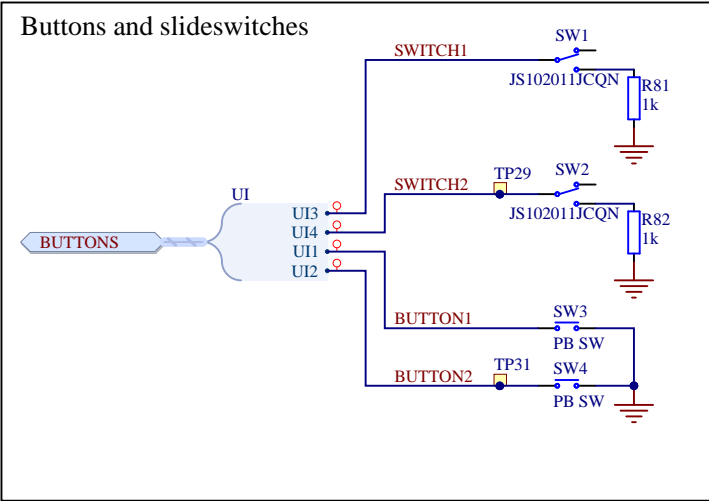
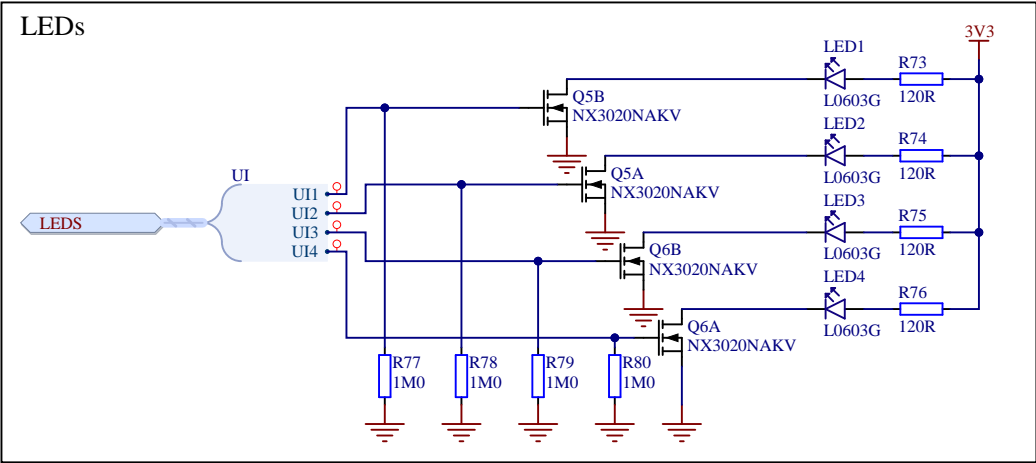


SPI memory control

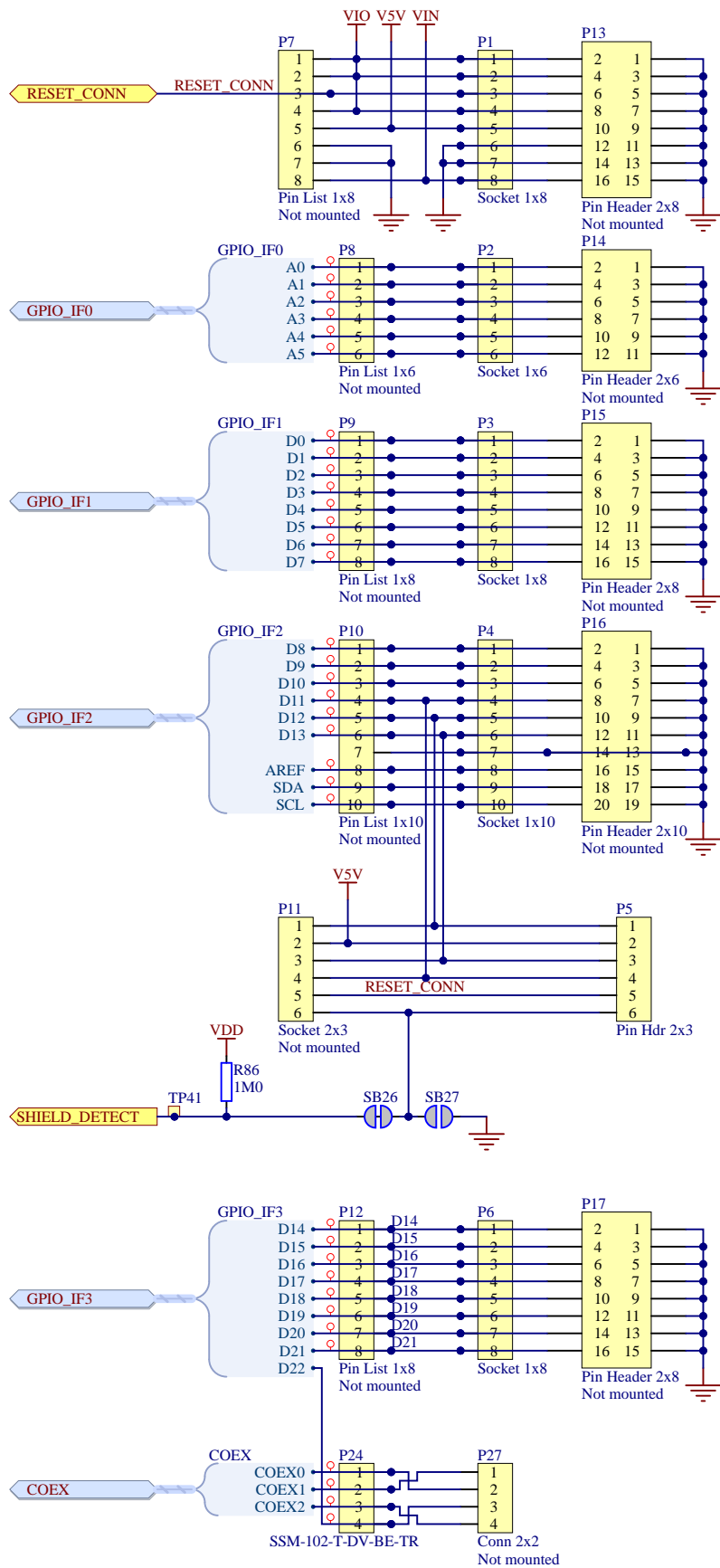


PCA10090 - Signal switches

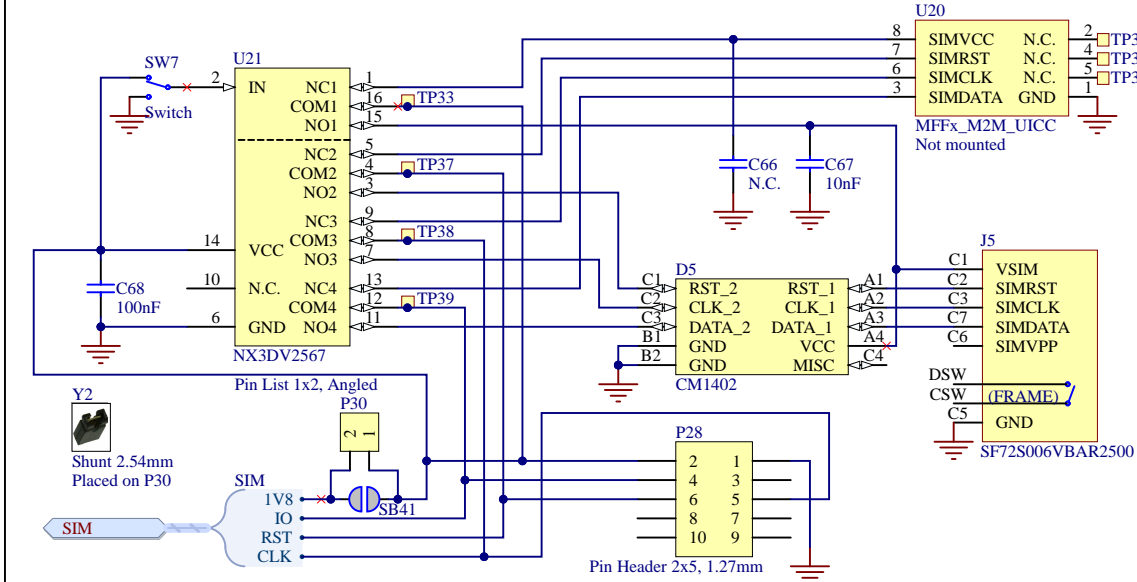
Size	Project Number	Revision	
A3	4443	0.15.0	
Date: 28/08/2020	File: pca10090_sheet5_signal_switches.SchDoc	Sheet 5 of 8	
		Drawn By: RUBR	



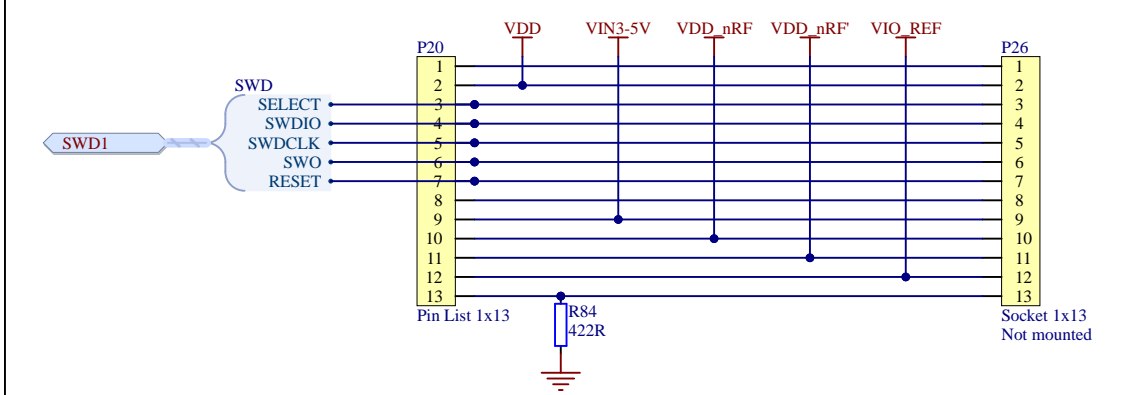
Interface connectors



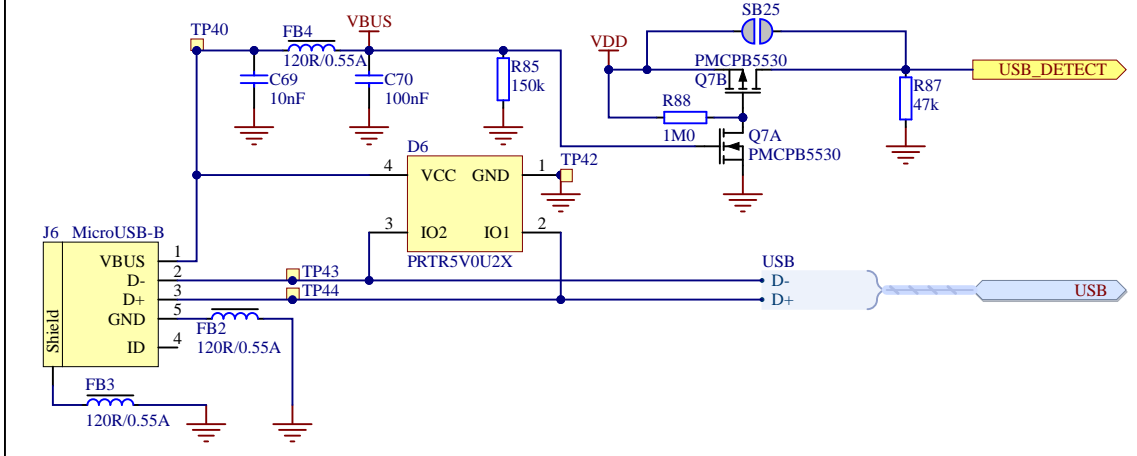
SIM card connector, eSIM and selection switch



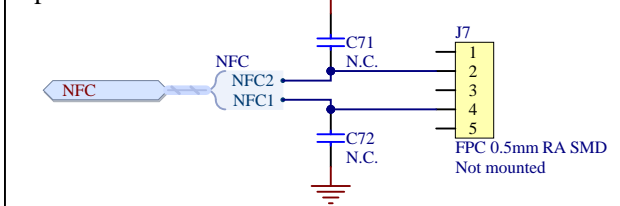
Shield debug and current measurement connector



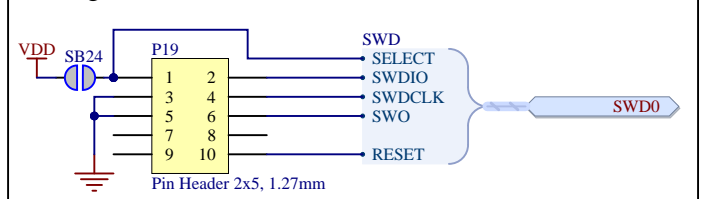
USB connector and USB detect



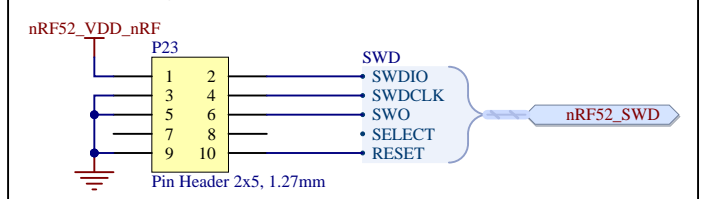
Optional NFC connector



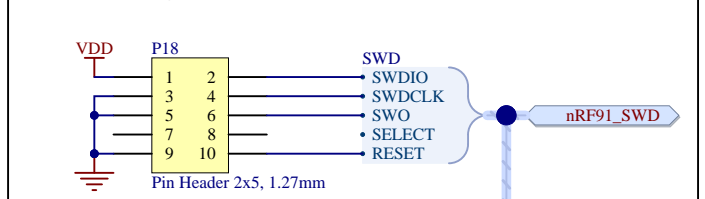
Debug OUT connector



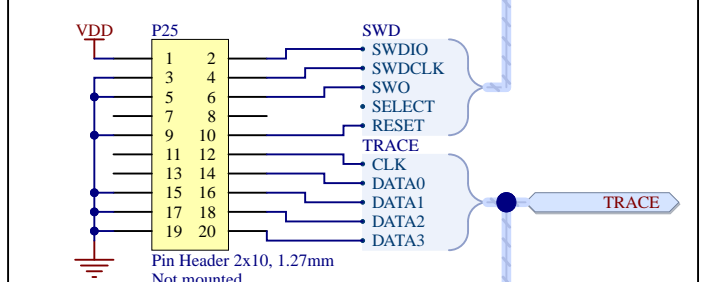
nRF52 debug IN connector



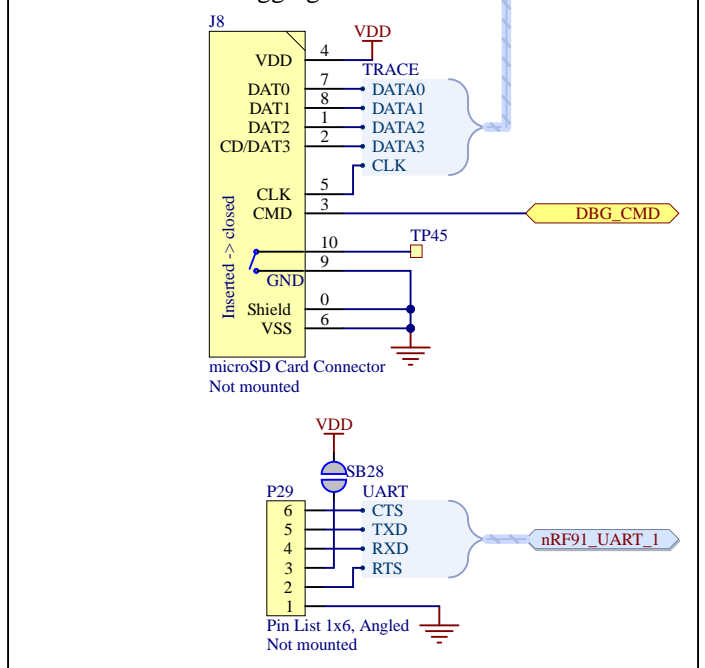
nRF91 debug IN connector



Trace connector



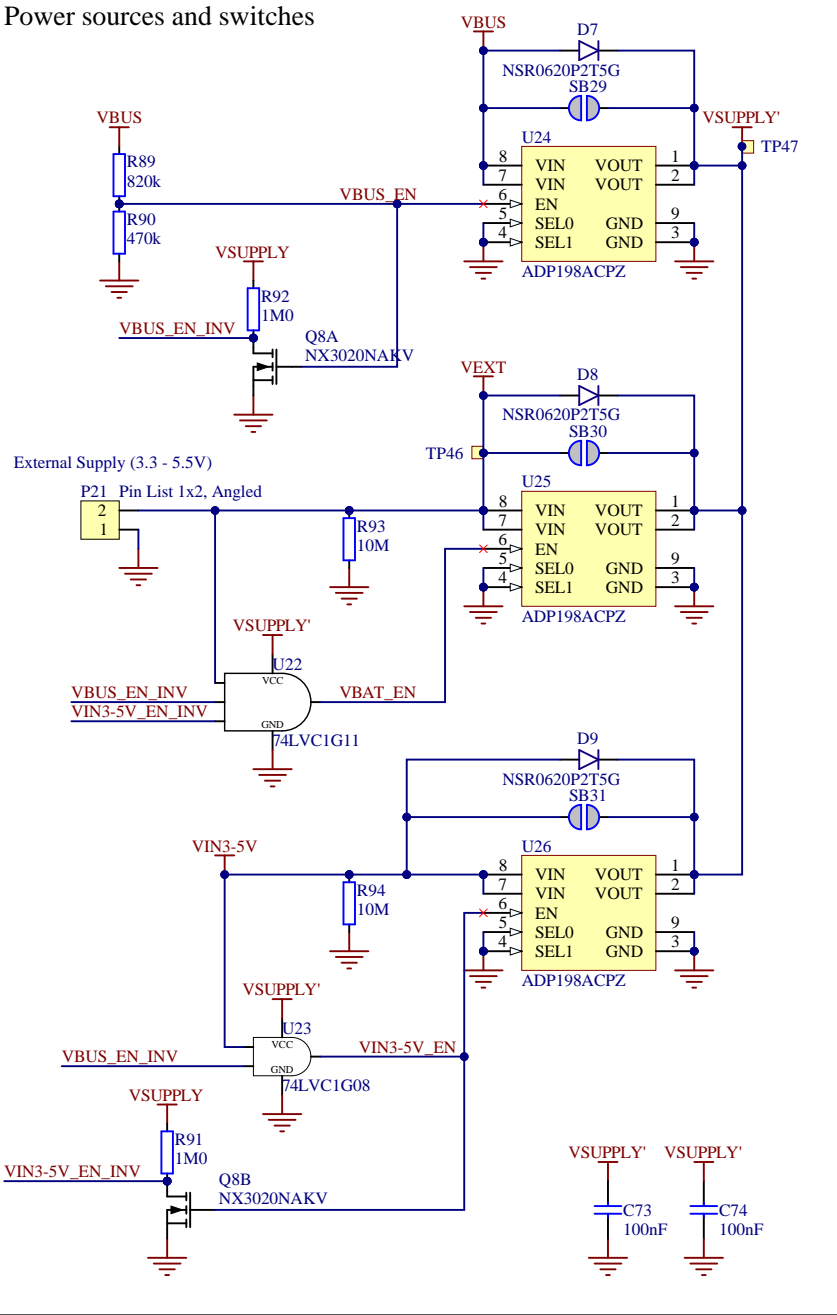
Nordic internal debugging interface



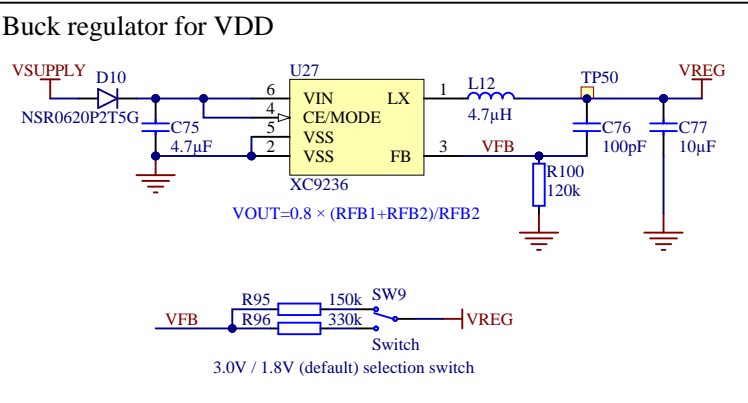
PCA10090 - SIM & Connectors

Size	Project Number	Revision
A3	4443	0.15.0
Date: 28/08/2020	Sheet 7 of 8	
File: pca10090_sheet7_sim_connectors.SchDoc	Drawn By: RUBR	

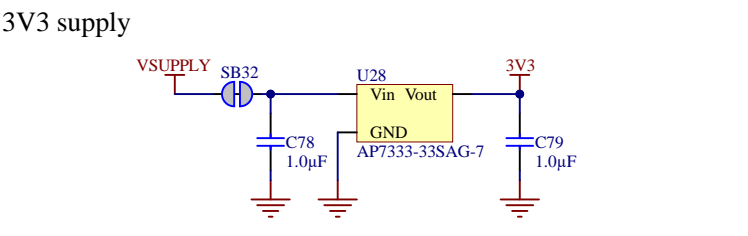
Power sources and switches



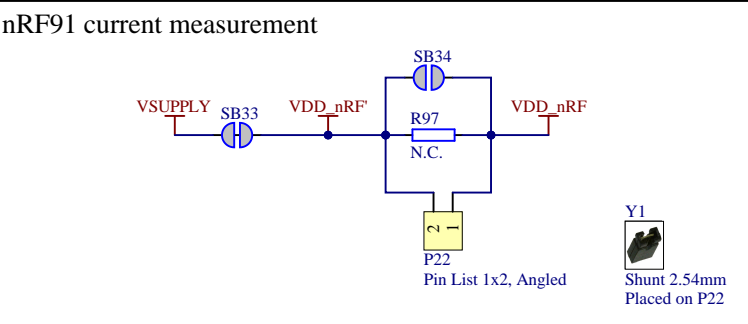
Buck regulator for VDD



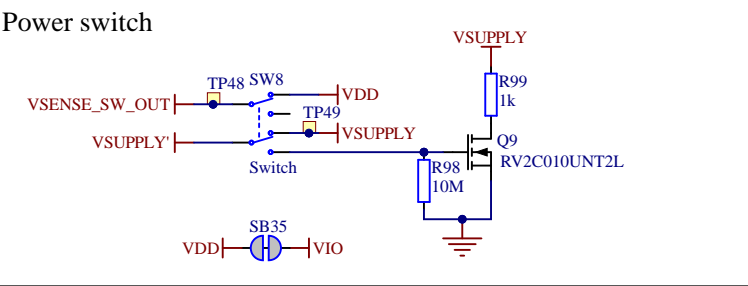
3V3 supply



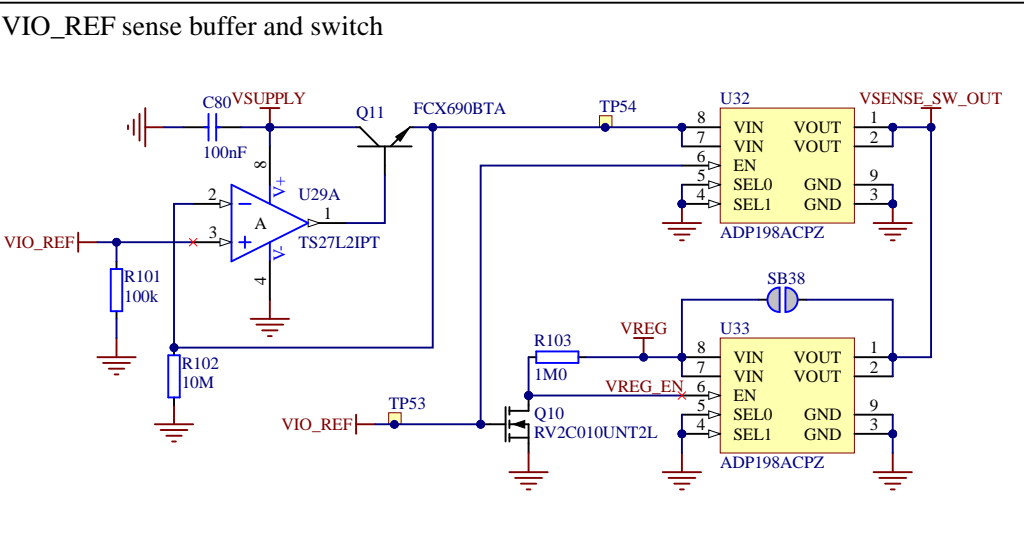
nRF91 current measurement



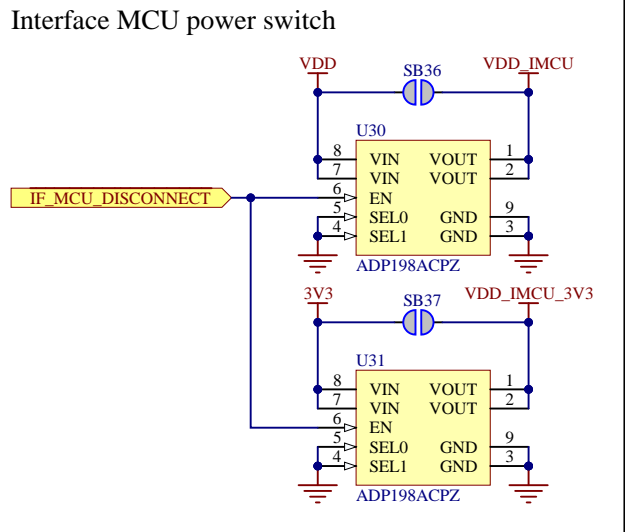
Power switch



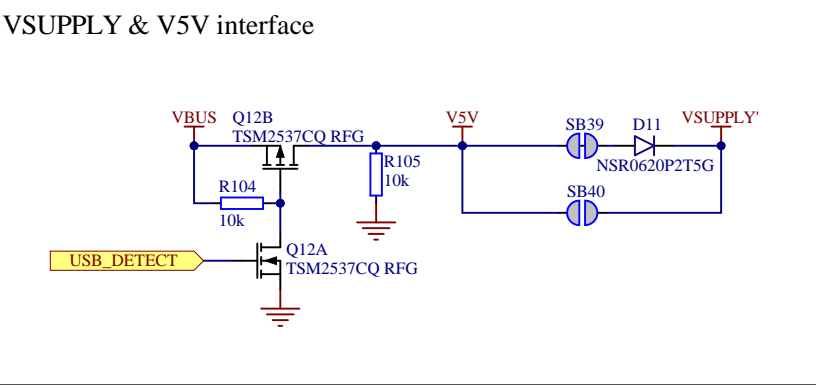
VIO_REF sense buffer and switch



Interface MCU power switch




VSUPPLY & V5V interface



Instrument ground



PCA10090 - Power Supply

Size A3	Project Number 4443	Revision 0.15.0	
Date: 28/08/2020		Sheet 8 of 8	
File: pca10090_sheet8_power_supply.SchDoc		Drawn By: RUBR	