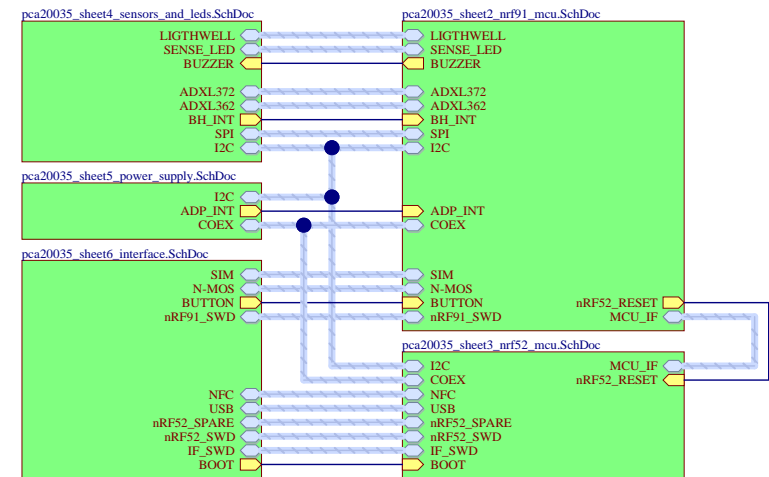



Nordic Semiconductor ASA

Thingy:91 Board

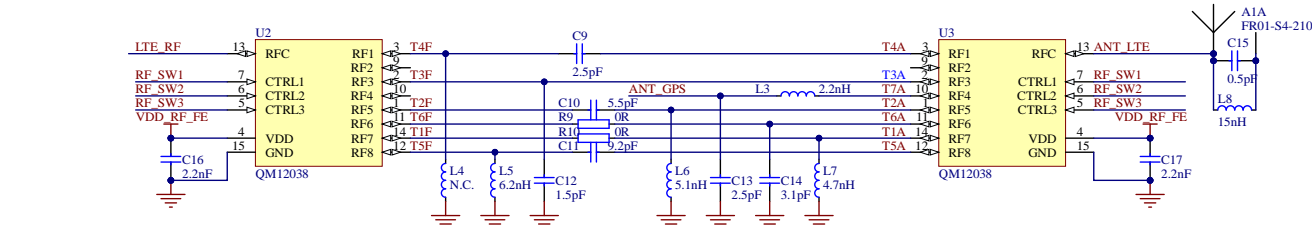
Sheet 1:	Connections
Sheet 2:	nRF9160 MCU
Sheet 3:	nRF52840 MCU
Sheet 4:	Sensors and LEDs
Sheet 5:	Power Supply
Sheet 6:	Interface



Thingy:91 Connections

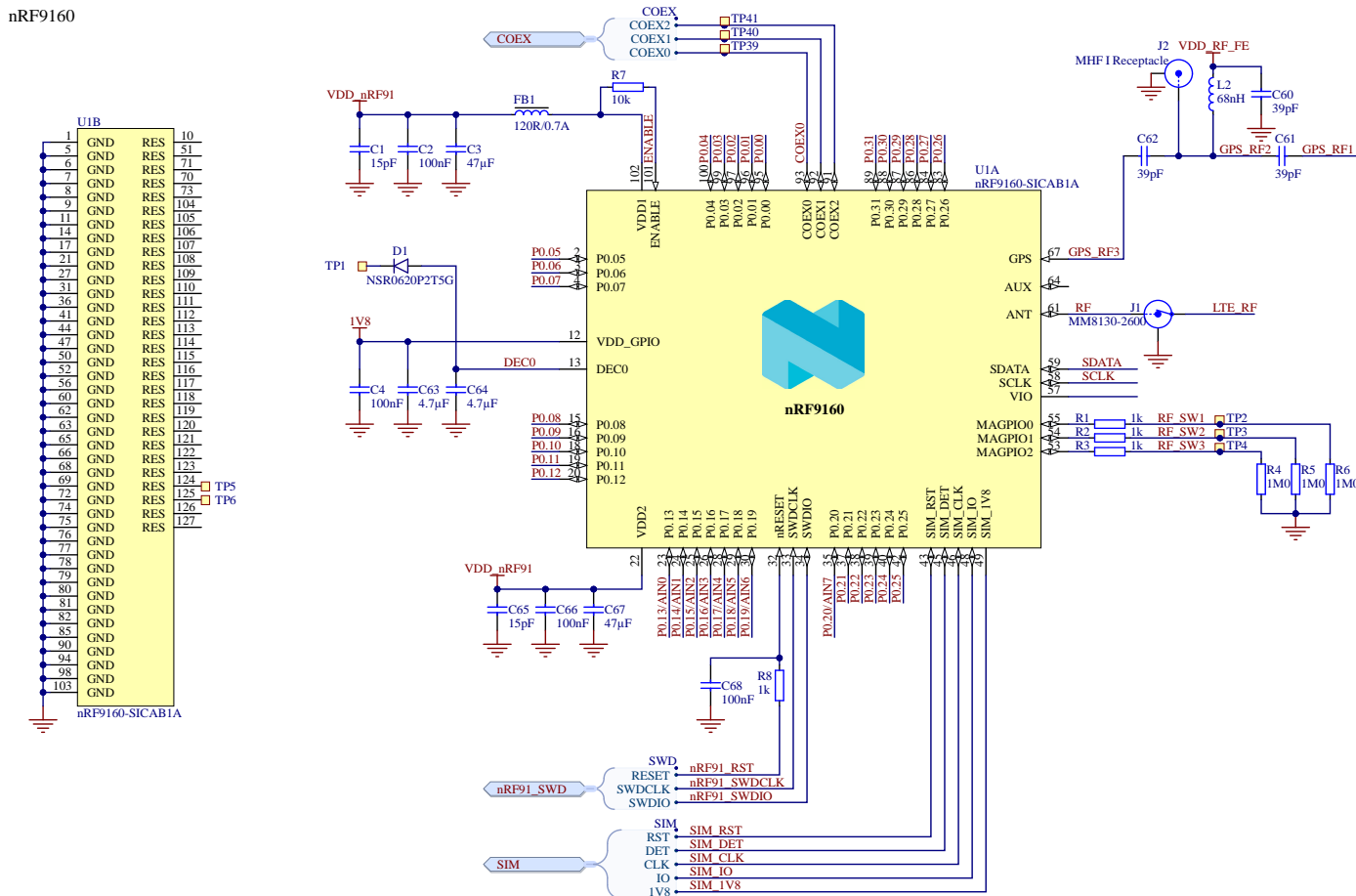
Size	Project Number	Revision	
A3	PCA20035	1.6.0	
Date: 21.01.2021		Sheet 1 of 6	
File: pca20035_sheet1_connections.SchDoc		Drawn By: RUBR	

Antenna tuning

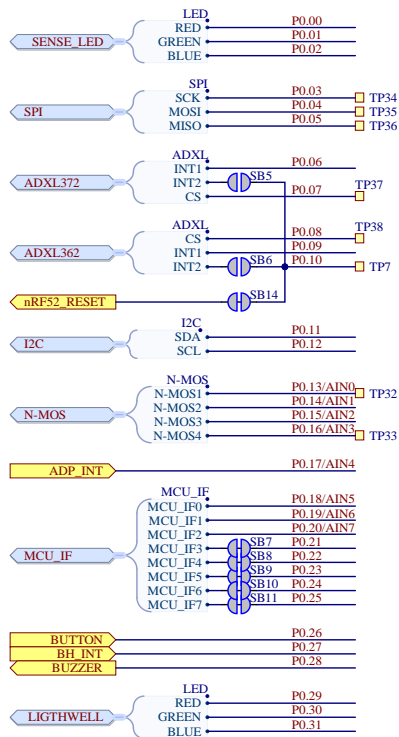


RF SW3	RF SW2	RF SW1	State	Band	Frequency	Components
0	0	0	RF2 - RFC	Not used	N.A.	
0	0	1	RF7 - RFC	13U/D, 28D	746 MHz ~ 803 MHz	R10, L7
0	1	0	RF5 - RFC	12U/D, 17U/D, 28U	698 MHz ~ 748 MHz	C10, L6
0	1	1	RF3 - RFC	1U/D, 2U/D, 3U/D, 4U/D, 25U/D	1710 MHz ~ 2200 MHz	
1	0	0	RF1 - RFC	5D, 20U, 26D	824 MHz ~ 894 MHz	C12
1	0	1	RF8 - RFC	8U/D	880 MHz ~ 960 MHz	L4, C9
1	1	0	RF6 - RFC	5U, 20D, 26U	791 MHz ~ 849 MHz	L5, C11
1	1	1	RF4 - RFC	Not used	Not used	R9, C14
1	1	1	GP8	GP8	1574 MHz ~ 1577 MHz	C13, L3

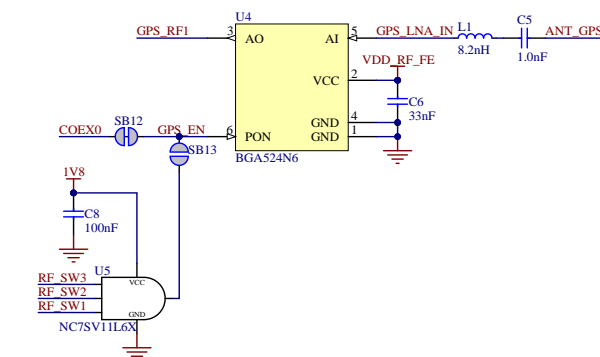
nRF9160



nRF91 GPIO pin mapping

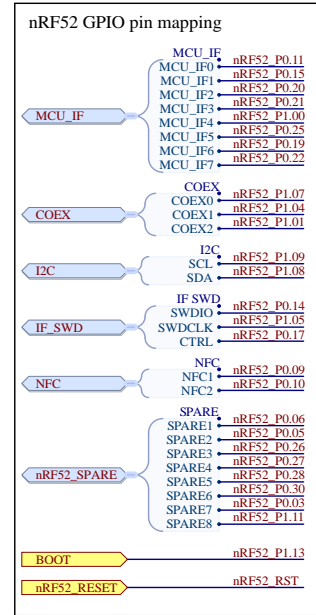


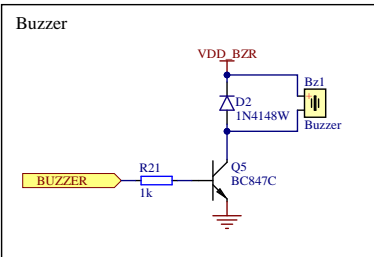
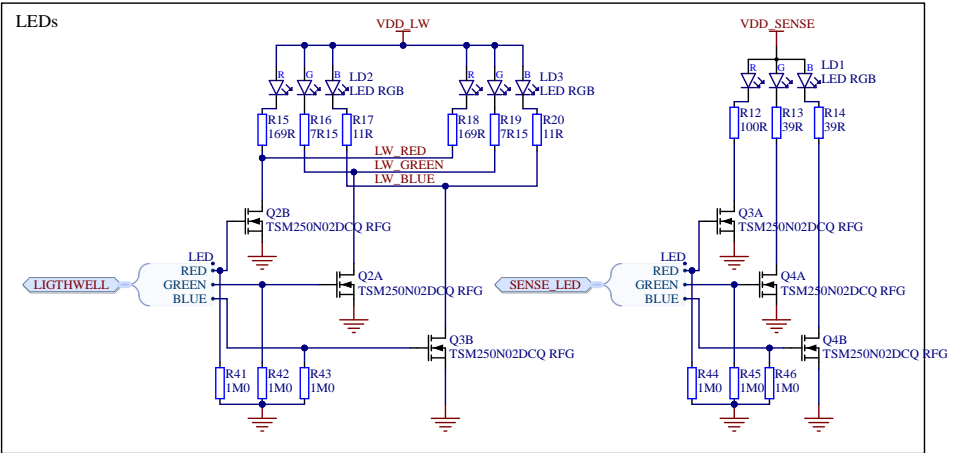
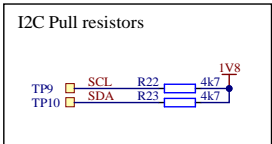
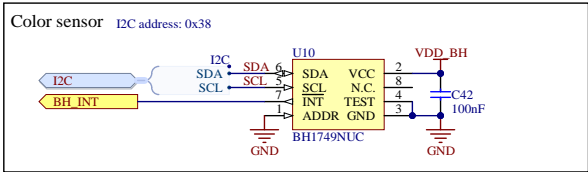
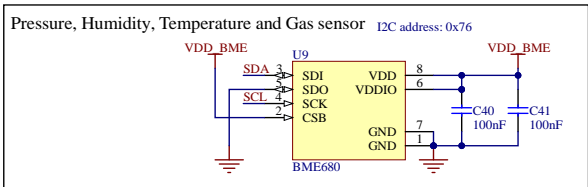
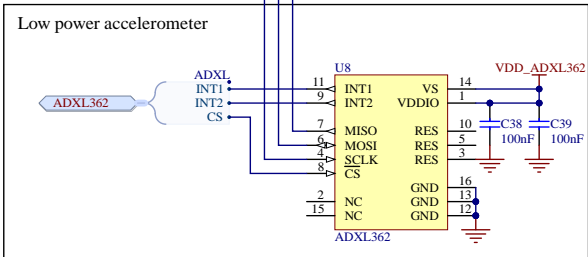
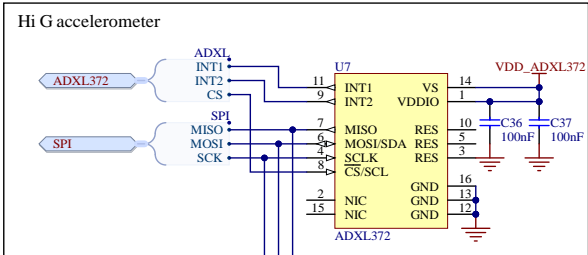
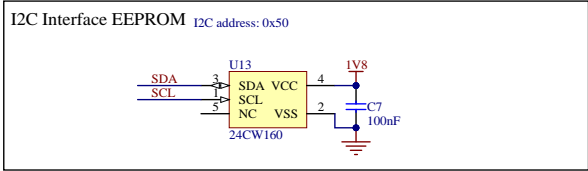
GPS LNA




Thingy:91 nRF9160 MCU

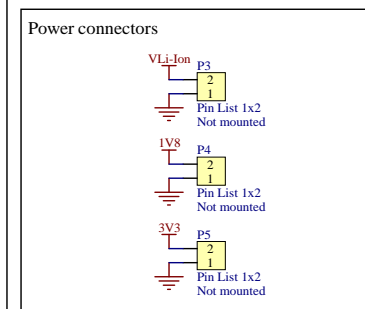
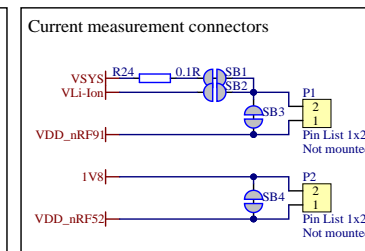
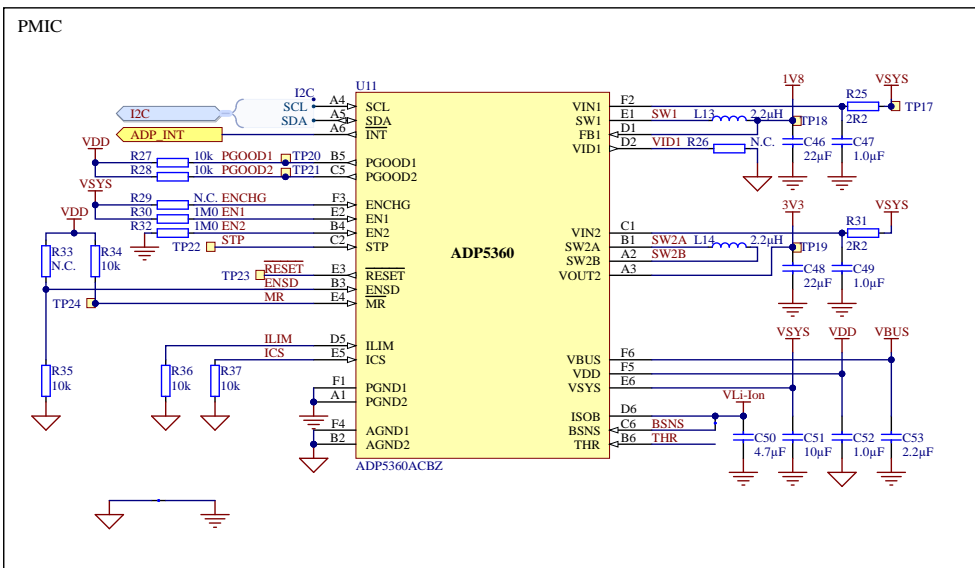
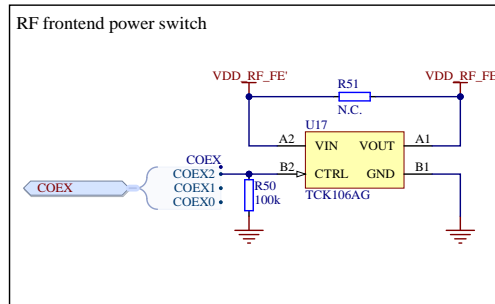
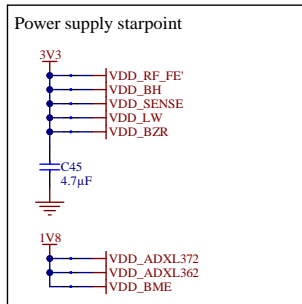
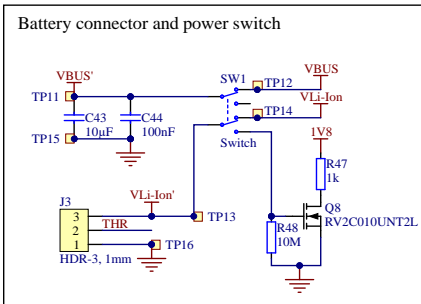
Size	Project Number	Revision	NORDIC SEMICONDUCTOR
A3	PCA20035	1.6.0	
Date: 21.01.2021	File: pca20035_sheet2_nrf91_mcu.SchDoc	Sheet 2 of 6	
		Drawn By: RUBR	





Thingy:91 Sensors and LEDs

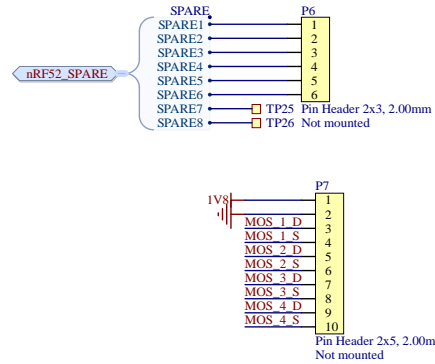
Size	Project Number	Revision	
A3	PCA20035	1.6.0	
Date: 21.01.2021		Sheet 4 of 6	
File: pca20035_sheet4_sensors_and_leds.SchDoc		Drawn By: RUBR	



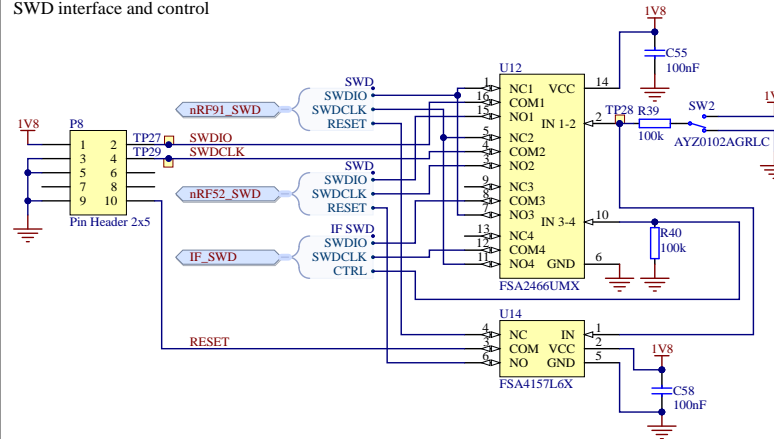
Thingy:91 Power Supply

Size A3	Project Number PCA20035	Revision 1.6.0	
Date: 21.01.2021	File: pca20035_sheet5_power_supply.SchDoc	Sheet 5 of 6	
		Drawn By: RUBR	

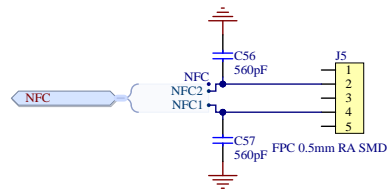
Interface connectors



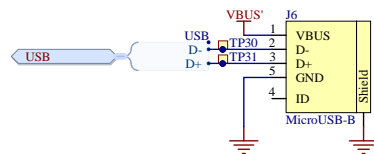
SWD interface and control



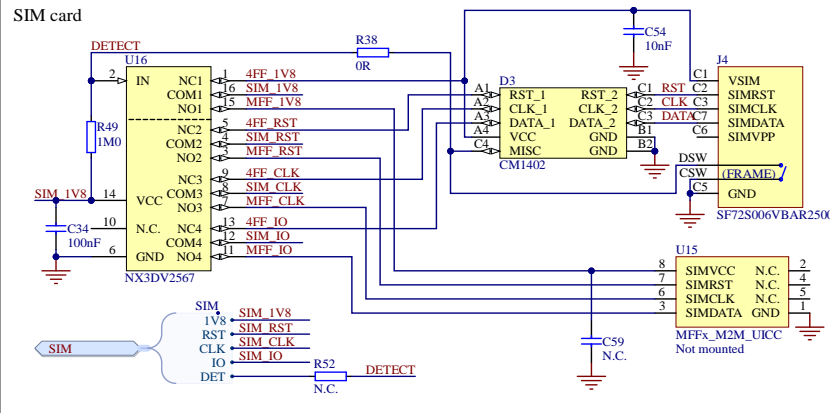
NFC antenna connector



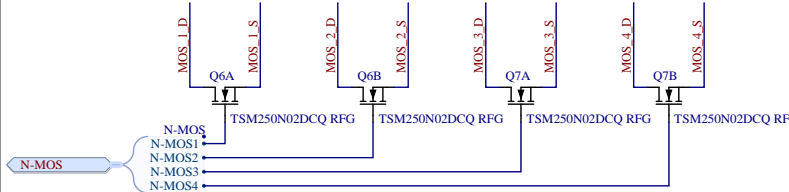
USB connector



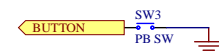
SIM card



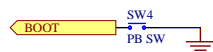
N-MOS transistors



Button



Boot



Thingy:91 Interface

Size	Project Number	Revision	
A3	PCA20035	1.6.0	
Date: 21.01.2021	Sheet 6 of 6	Drawn By: RUBR	

H1	H2	H3
3mm,N,P	3mm,N,P	3mm,N,P

