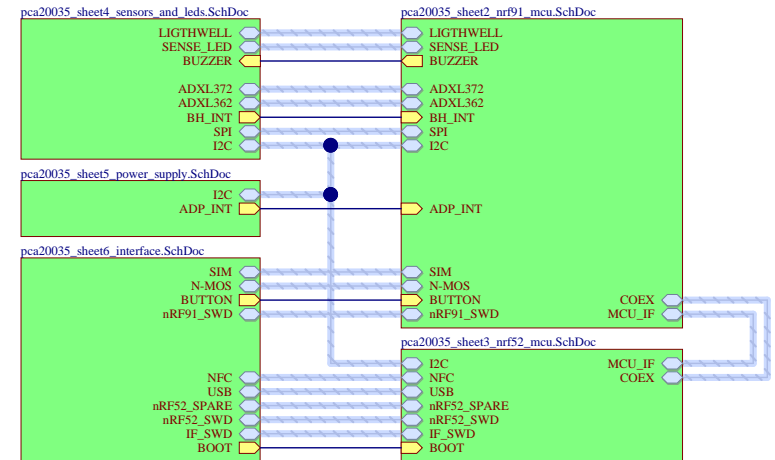


# Nordic Semiconductor ASA

## 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

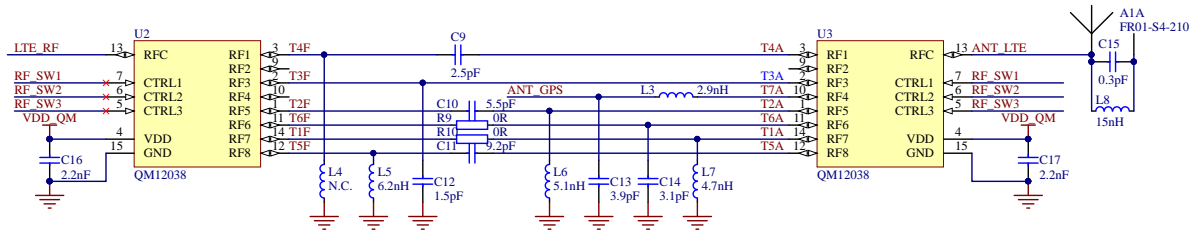


### Thingy:91 Connections

Size	Project Number	Revision
A3	4457	1.0.0
Date: 2019.05.20	Sheet 1 of 6	
File: pca20035_sheet1_connections.SchDoc	Drawn By: RÜBR	

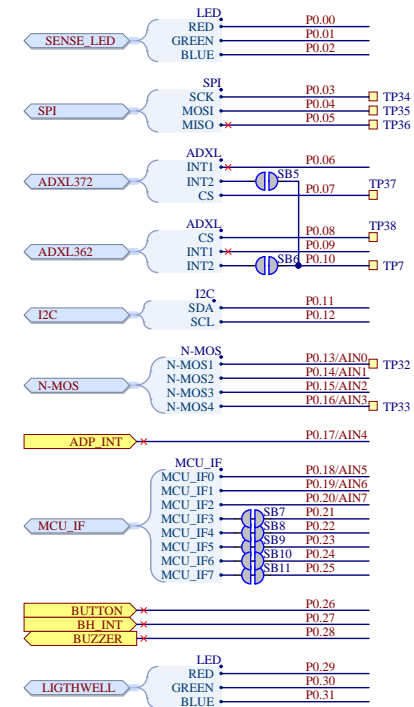


Antenna tuning

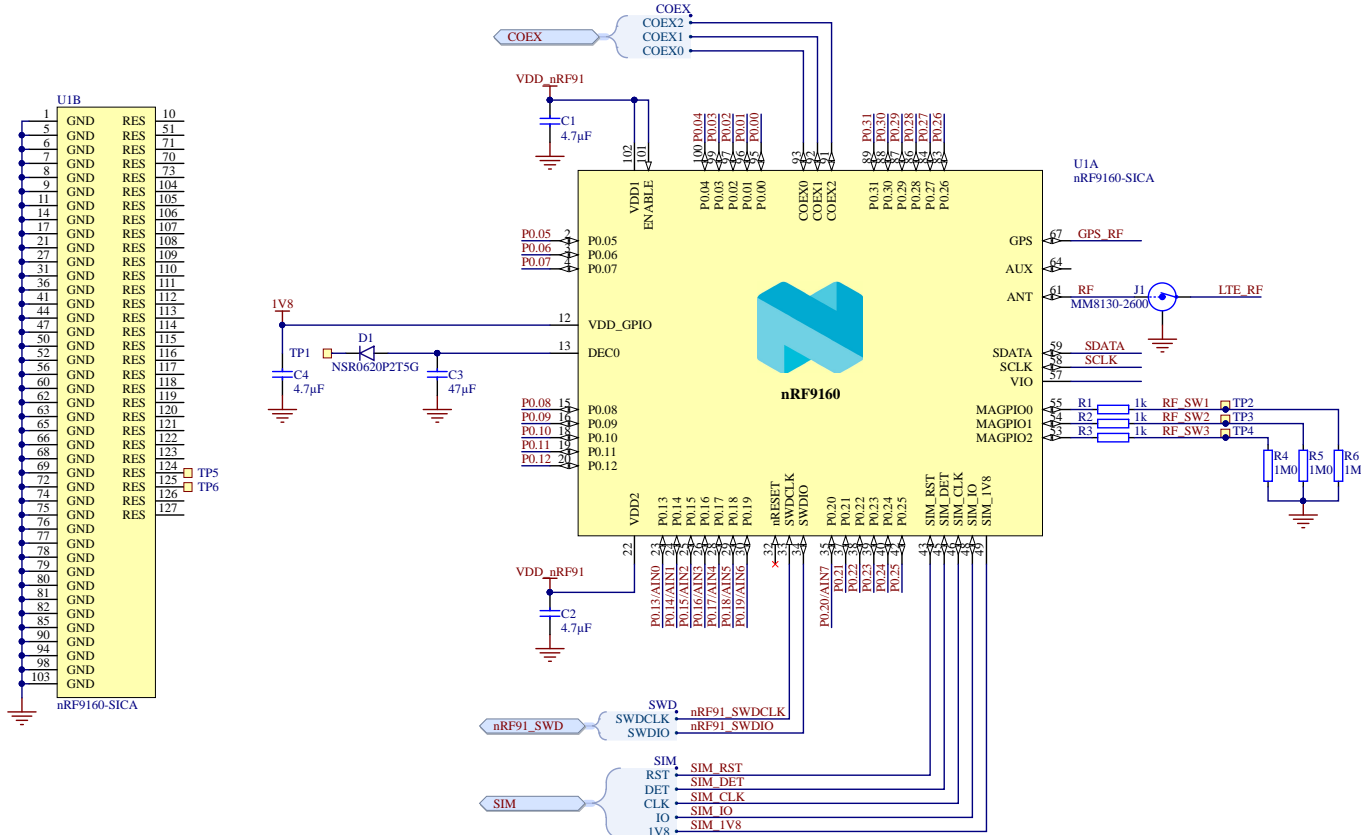


RF SW3	RF SW2	RF SW1	State	Band	Frequency	Components
0	0	0	RF2 - RFC	Not used	Not used	N.A.
0	0	1	RF7 - RFC	13U/D, 28D	746 MHz - 803 MHz	R10, L7
0	1	0	RF5 - RFC	12U/D, 17U/D, 28U	698 MHz - 748 MHz	C10, L6
				1U/D, 2U/D, 3U/D, 4U/D, 25U/D	1710 MHz - 2200 MHz	
0	1	1	RF3 - RFC	5D, 20U, 26D	824 MHz - 894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

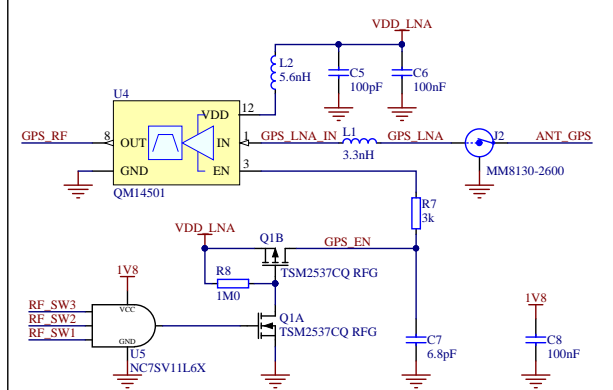
nRF91 GPIO pin mapping



nRF9160



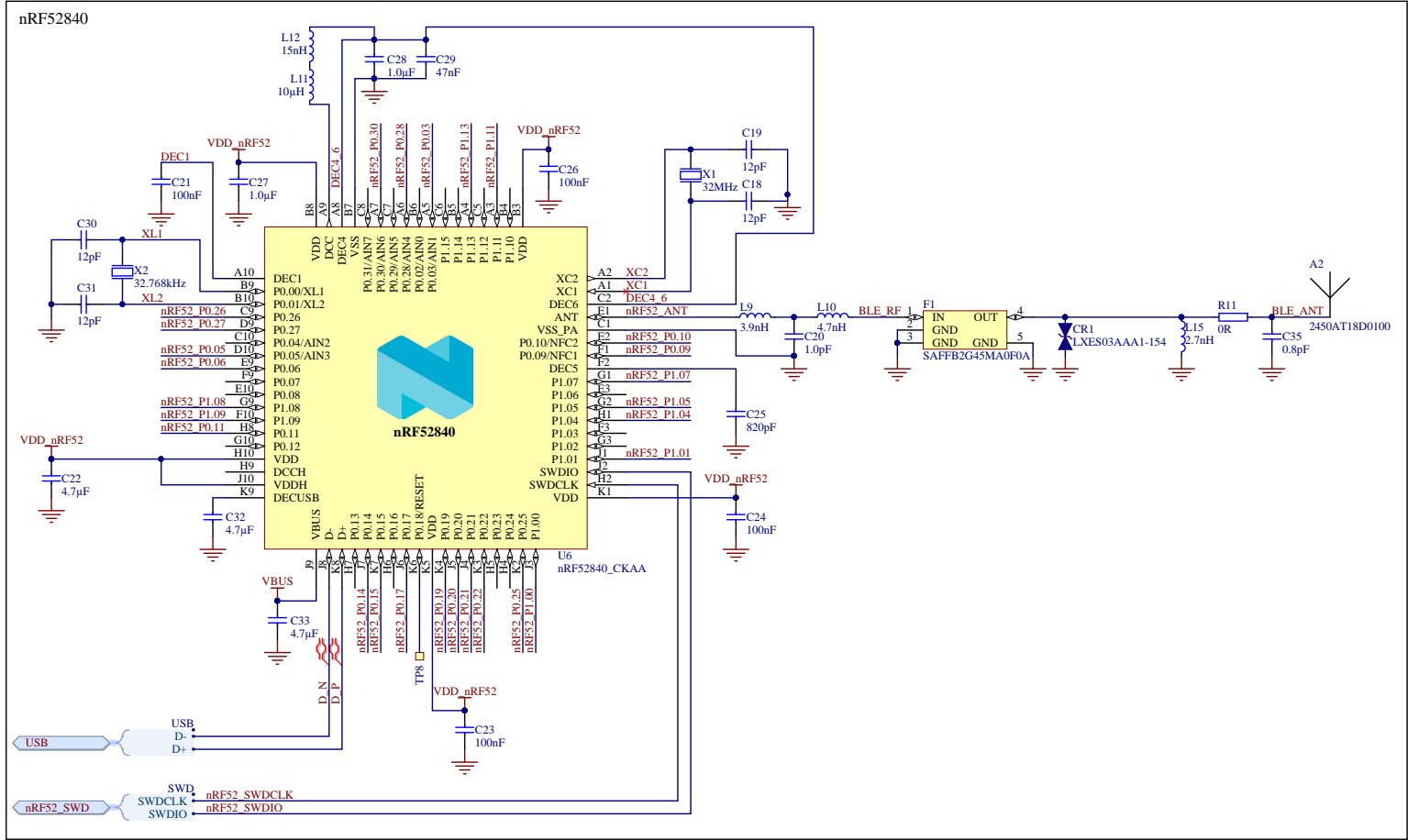
GPS LNA



Thingy:91 nRF9160 MCU

Size	Project Number	Revision
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Date: 2019.05.08	Sheet 2 of 6	Drawn By: RUBR
File: pca20035_sheet2_nrf91_mcu.SchDoc		



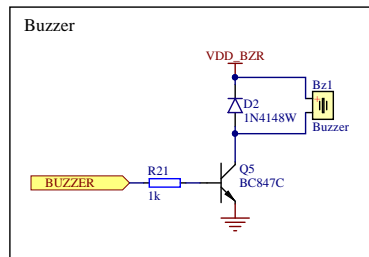
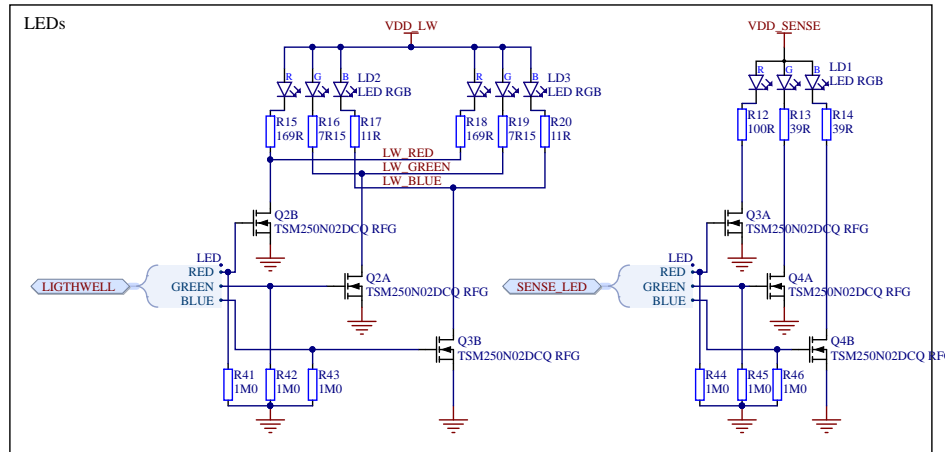
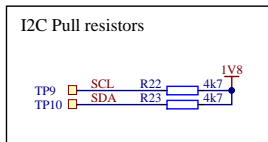
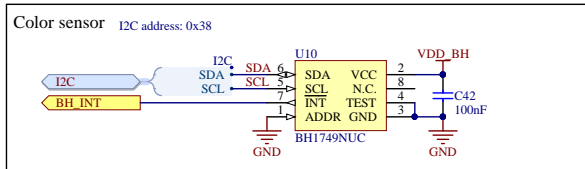
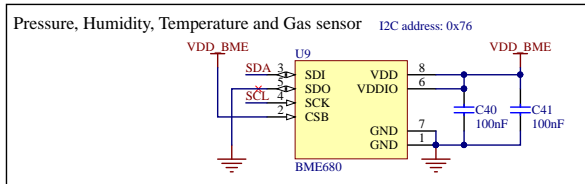
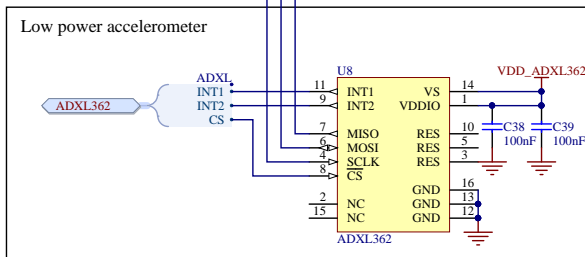
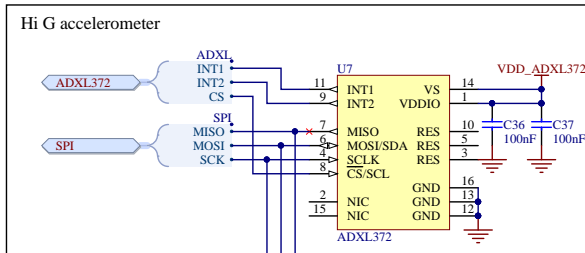


### nRF52 GPIO pin mapping

MCU_IF	MCU_IF0	nRF52_P0.11
	MCU_IF1	nRF52_P0.15
	MCU_IF2	nRF52_P0.20
	MCU_IF3	nRF52_P0.21
	MCU_IF4	nRF52_P1.00
	MCU_IF5	nRF52_P0.25
	MCU_IF6	nRF52_P0.19
MCU_IF7	nRF52_P0.22	
COEX	COEX0	nRF52_P1.07
	COEX1	nRF52_P1.04
	COEX2	nRF52_P1.01
I2C	I2C	nRF52_P1.09
	SDA	nRF52_P1.08
IF SWD	IF SWD	nRF52_P0.14
	SWDIO	nRF52_P1.05
	SWDCLK	nRF52_P0.17
NFC	NFC1	nRF52_P0.09
	NFC2	nRF52_P0.10
nRF52_SPARE	SPARE	nRF52_P0.06
	SPARE1	nRF52_P0.05
	SPARE2	nRF52_P0.26
	SPARE3	nRF52_P0.27
	SPARE4	nRF52_P0.28
	SPARE5	nRF52_P0.30
	SPARE6	nRF52_P0.03
	SPARE7	nRF52_P1.11
SPARE8	nRF52_P1.13	
BOOT		nRF52_P1.13

### Thingy:91 nRF52840 MCU

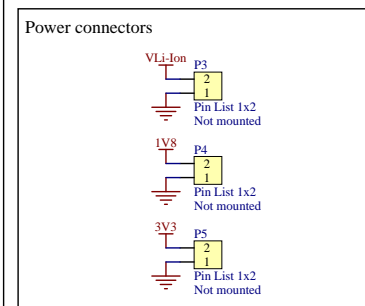
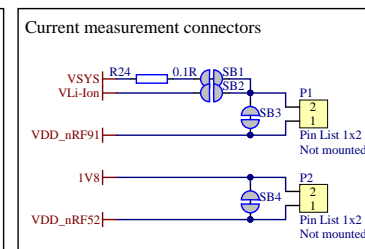
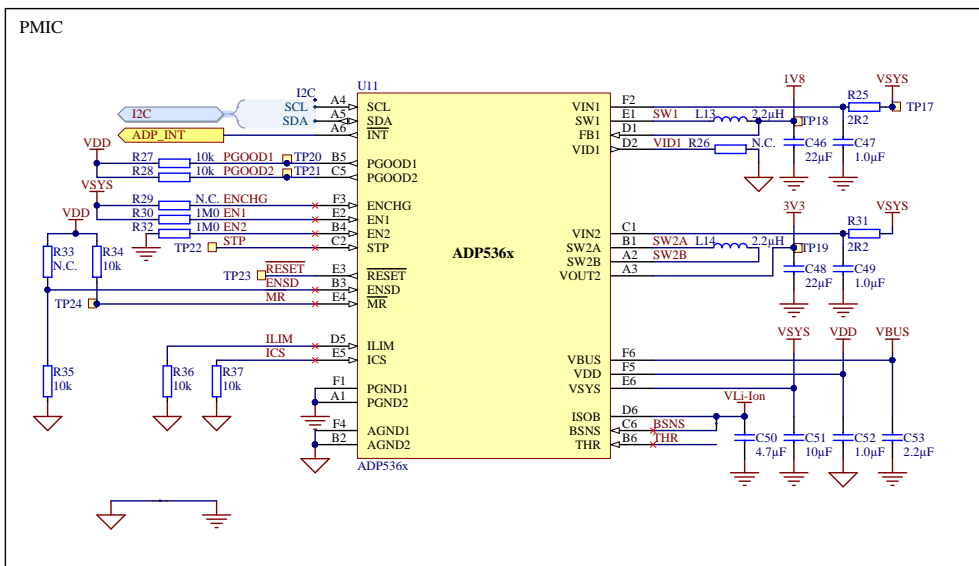
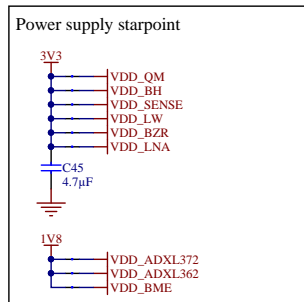
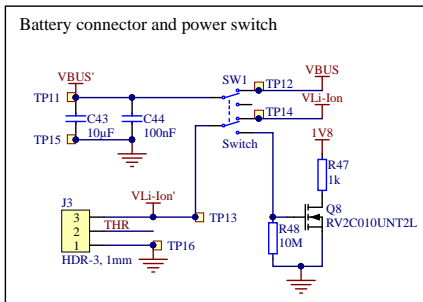
Size A3	Project Number 4457	Revision 1.0.0	
Date: 2019.05.20	Sheet 3 of 6		
File: pca20035_sheet3_nrf52_mcu.SchDoc	Drawn By: RUBR		

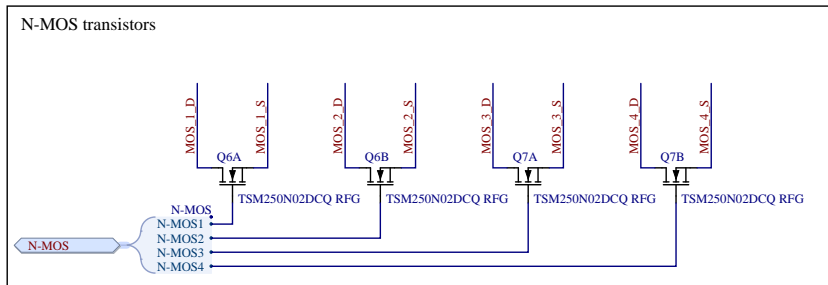
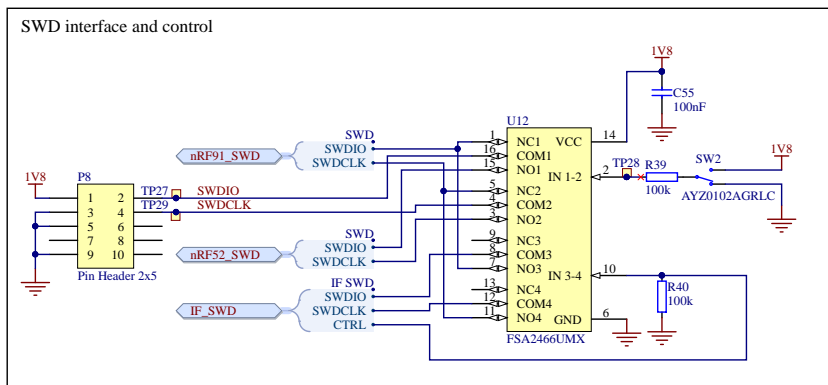
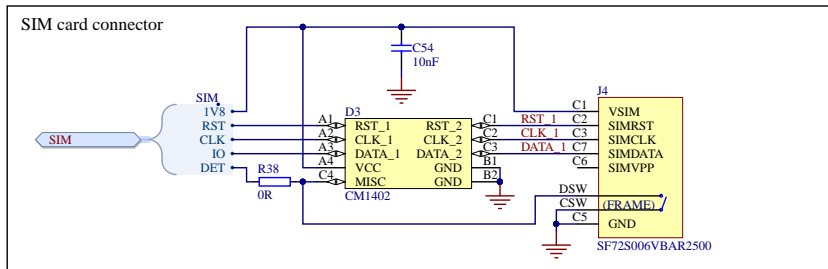
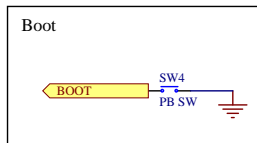
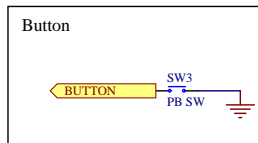
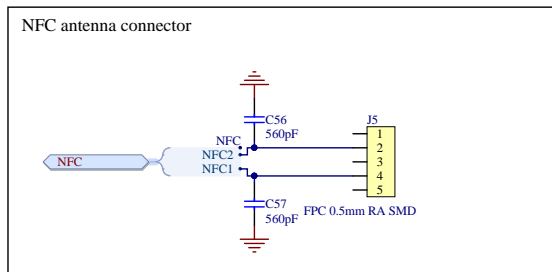
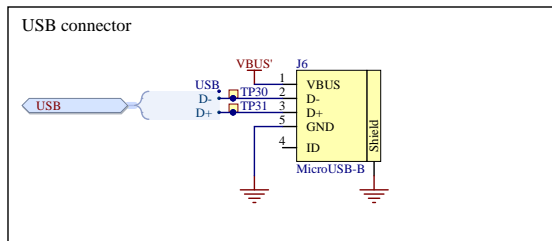
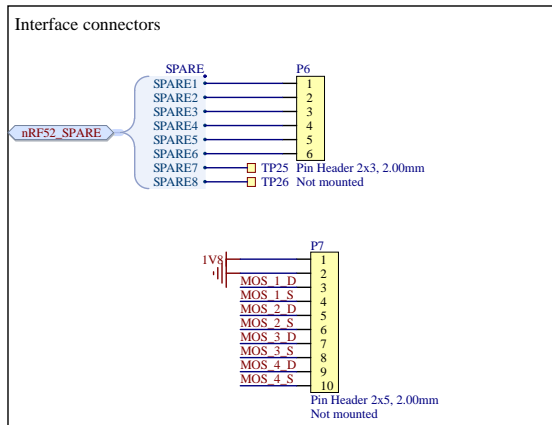


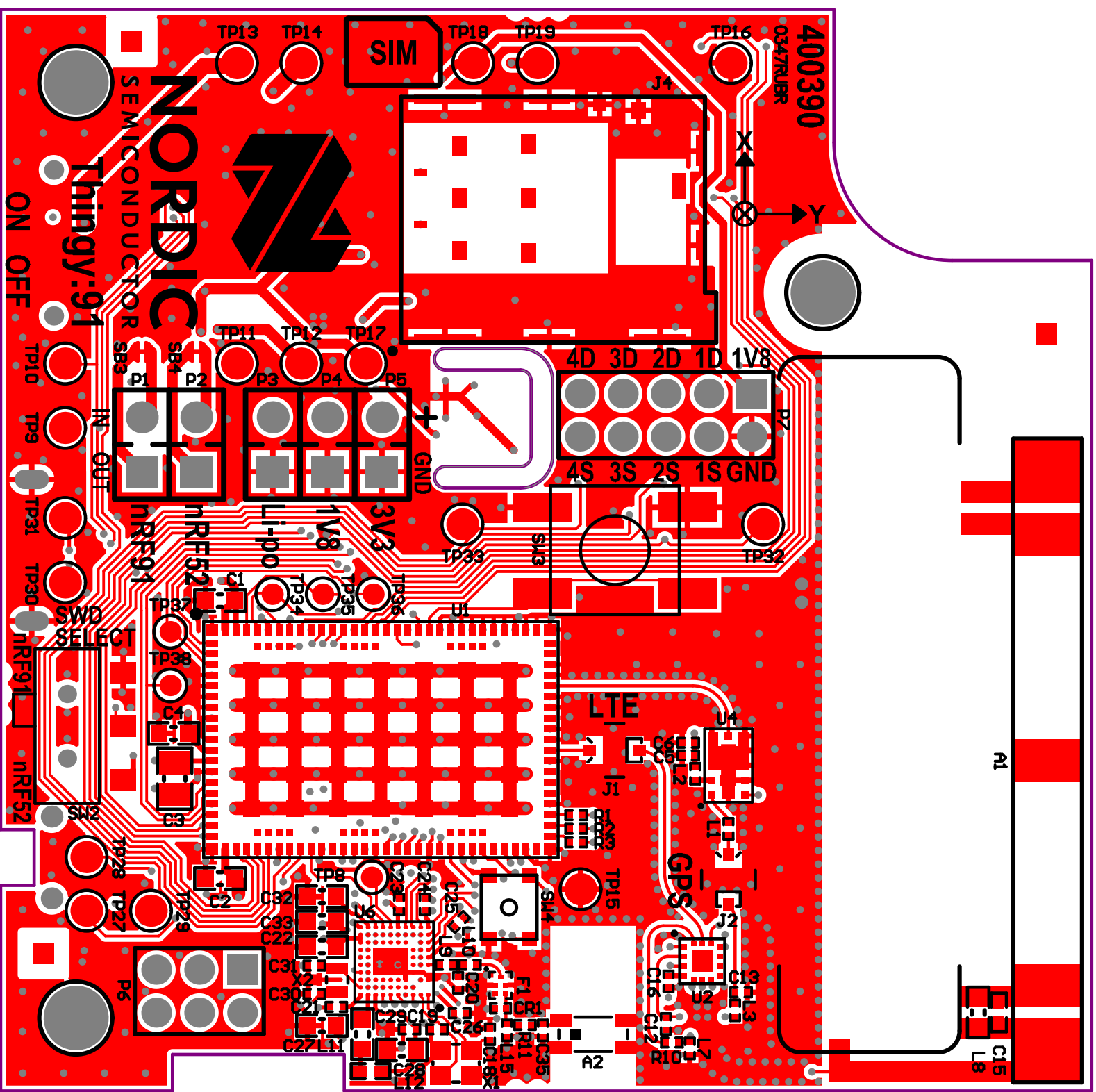
## Thingy:91 Sensors and LEDs

Size	Project Number	Revision
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File: pca20035_sheet4_sensors_and_leds.SchDoc	Drawn By: RUBR	









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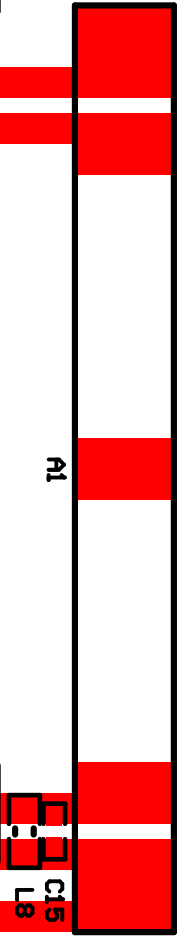
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Thingy:91

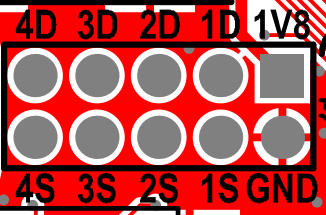
ON OFF



A1

L8

C15



1V8

1D

2D

3D

4D

1S

2S

3S

4S

GND

J4

BZ

SL3

LTE

GPS

TP11 TP12 TP17

P2

P3

P4

P5

GND

TP33

TP34

TP35

TP36

TP37

TP38

TP39

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