

Nordic Semiconductor ASA

nRF52840 Bluetooth Low Energy/ANT/802.15.4/2.4GHz RF Development Board (PCA10056)

- | | |
|----------|---------------|
| Sheet 1: | Cover |
| Sheet 3: | Pin Map |
| Sheet 2: | nRF Radio |
| Sheet 4: | Interface MCU |
| Sheet 5: | Miscellaneous |
| Sheet 6: | Connectors |
| Sheet 7: | 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.

• •

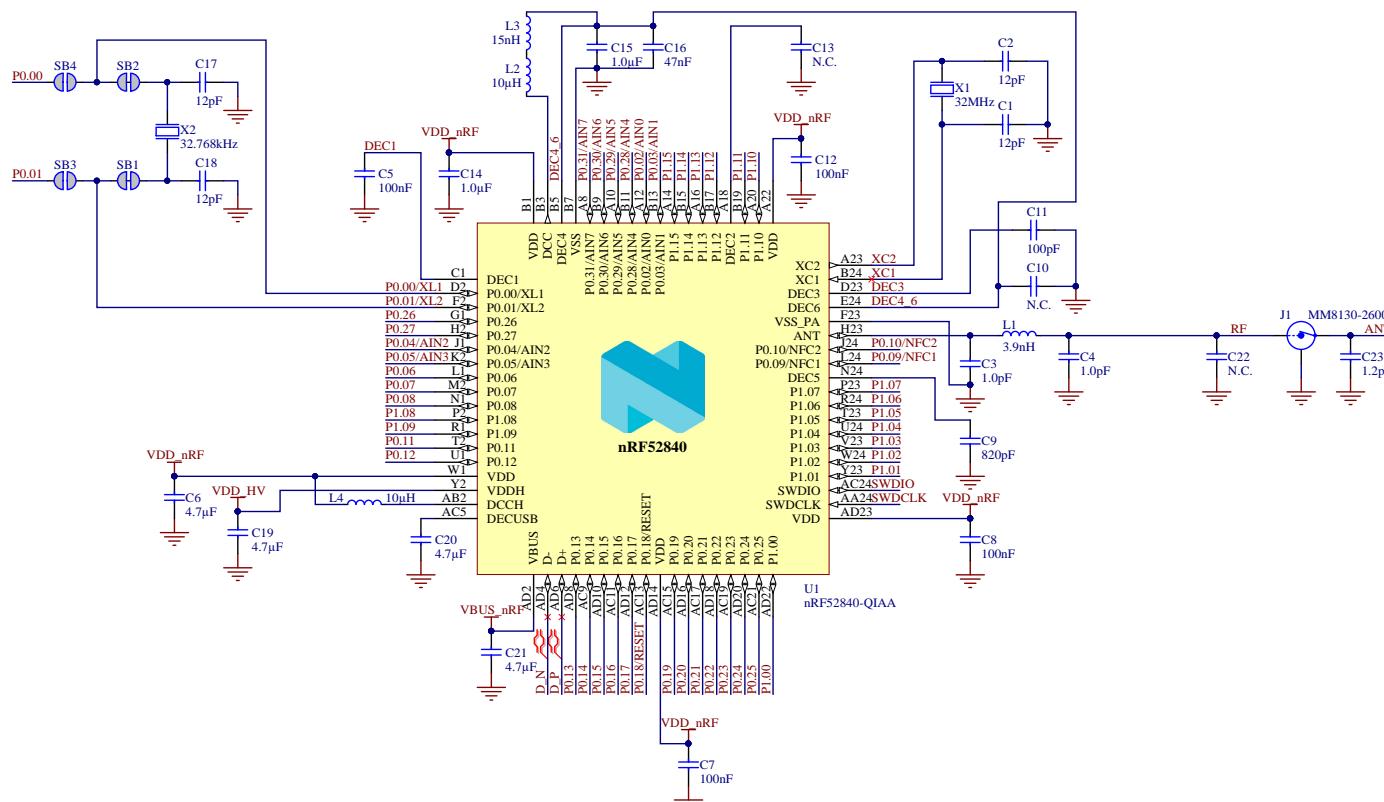
PCA10056 - Cover

Size	Project Number	Revision
A3	4440	1.0.0
Date:	16.03.2018	Sheet 1 of 7
File:	pca10056_sheet1_cover.SchDoc	Drawn By: RUBR



A

A



P0.00	P0.01
P0.02/AIN0	P0.03/AIN0
P0.03/AIN1	P0.04/AIN1
P0.04/AIN2	P0.05/AIN2
P0.05/AIN3	P0.06
P0.06	P0.07
P0.07	P0.08
P0.08	P0.09/NFC1
P0.09/NFC1	P0.10/NFC2
P0.10/NFC2	P0.11
P0.11	P0.12
P0.12	P0.13
P0.13	P0.14
P0.14	P0.15
P0.15	P0.16
P0.16	P0.17
P0.17	P0.18/RESET
P0.18/RESET	P0.19
P0.19	P0.20
P0.20	P0.21
P0.21	P0.22
P0.22	P0.23
P0.23	P0.24
P0.24	P0.25
P0.25	P0.26
P0.26	P0.27
P0.27	P0.28/AIN4
P0.28/AIN4	P0.29/AIN5
P0.29/AIN5	P0.30/AIN6
P0.30/AIN6	P0.31/AIN7

D_N	D_P
SWDIO	SWDIO
SWDCLK	SWDCLK

PCA10056 - nRF52840 MCU

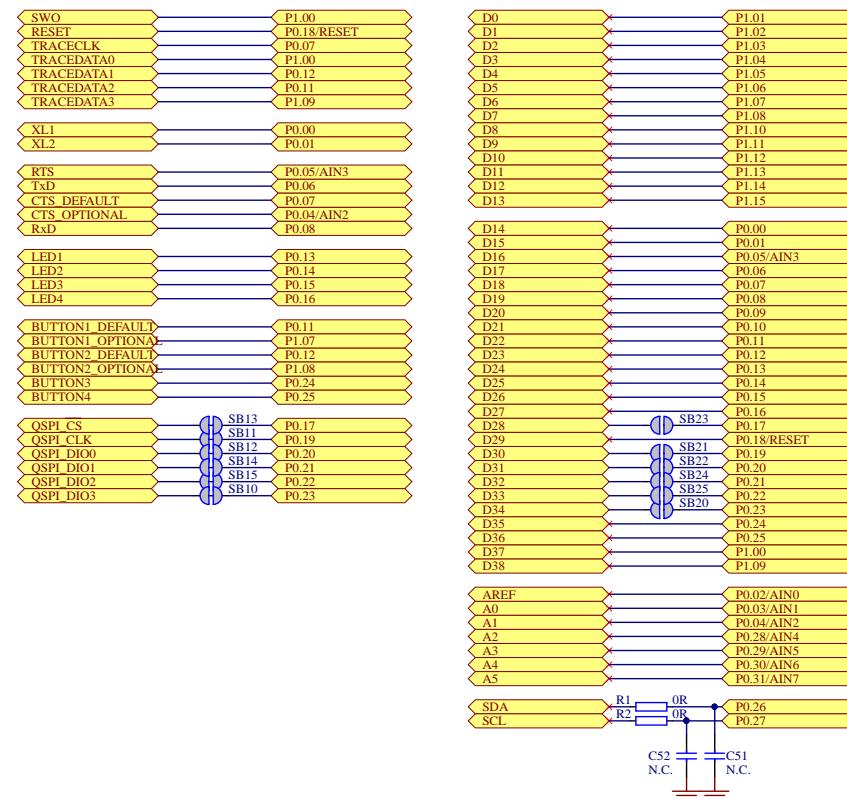
Size	Project Number	Revision
A3	4440	1.0.0
Date: 16.03.2018	Sheet 2 of 7	
File: pca10056_sheet2_nrf52840_mcu.SchDoc		Drawn By: RUBR



A

A

GPIO pin mapping



B

B

C

C

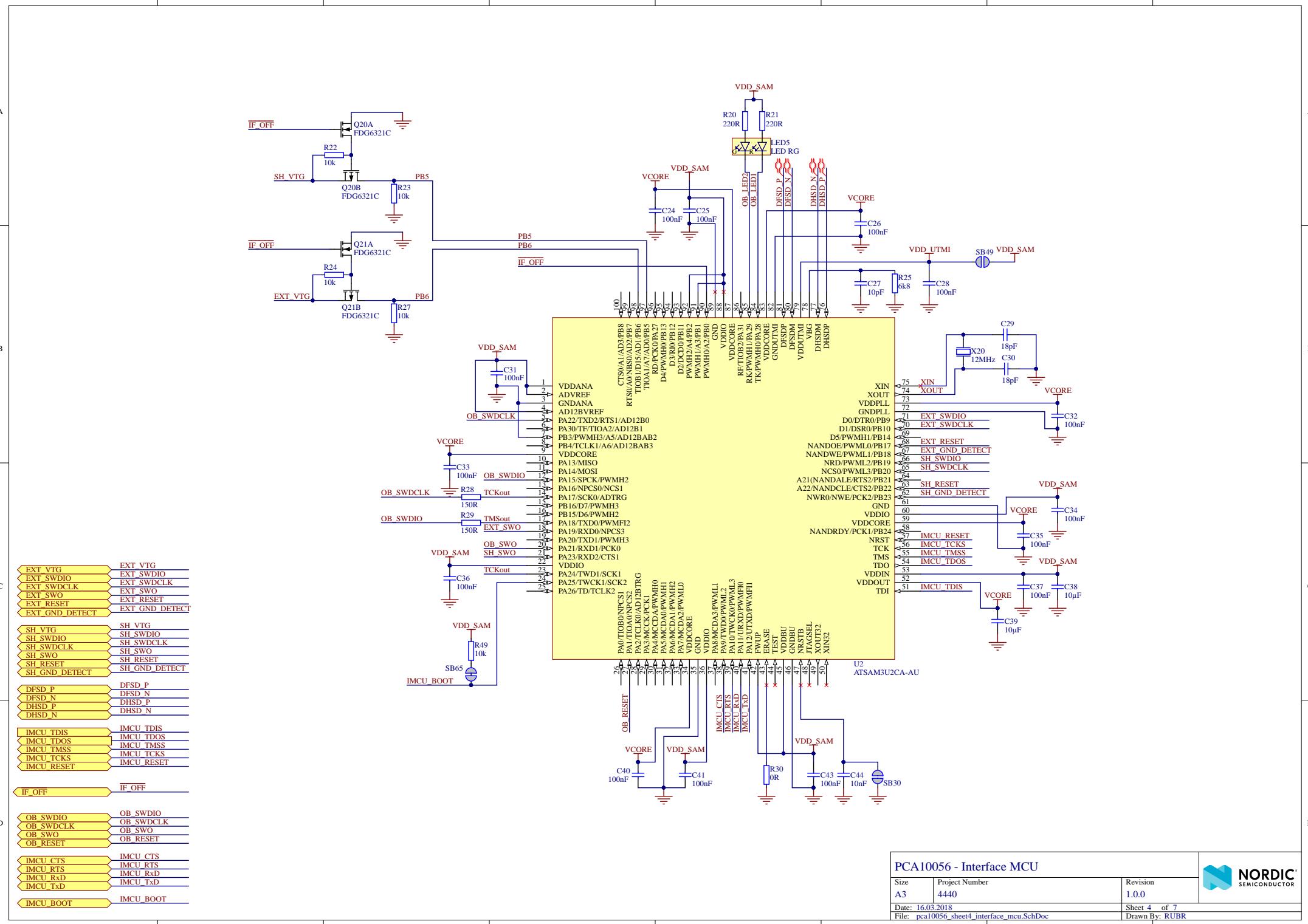
D

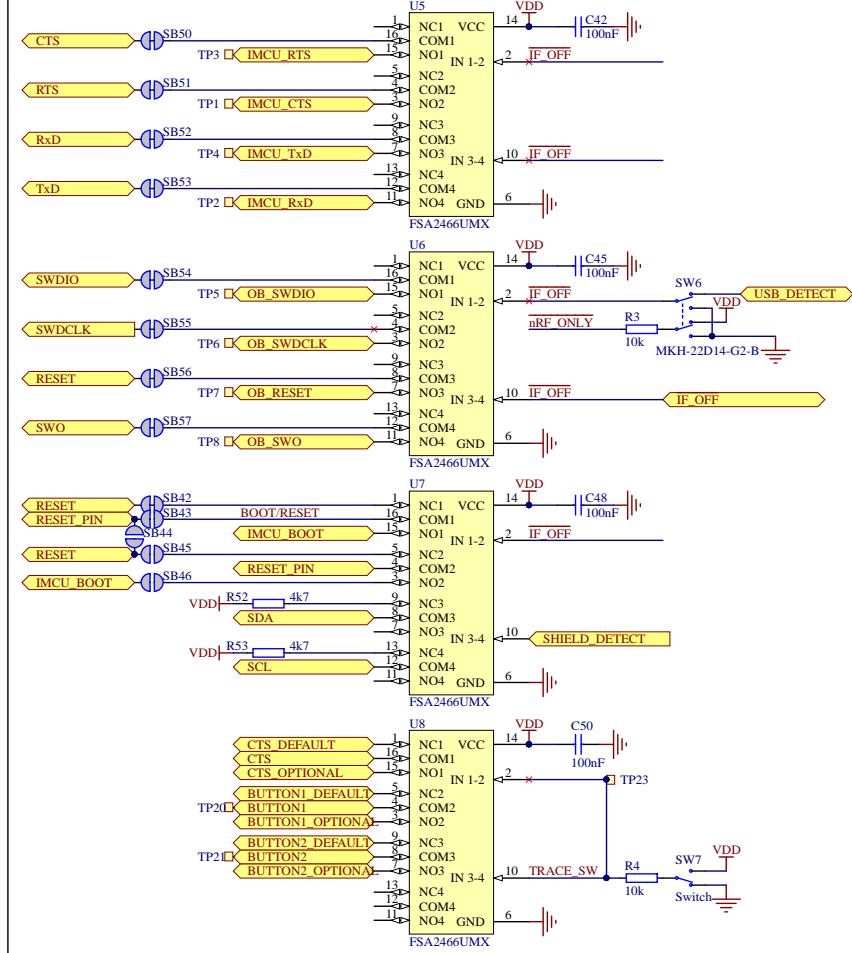
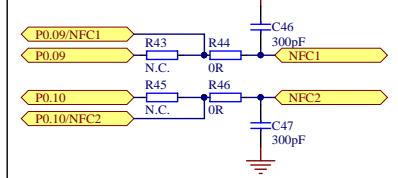
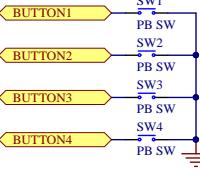
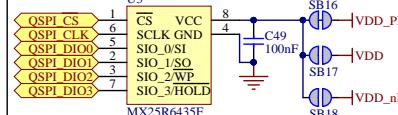
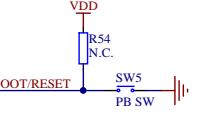
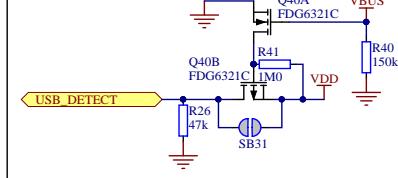
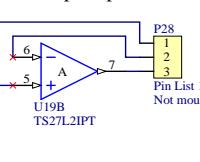
D

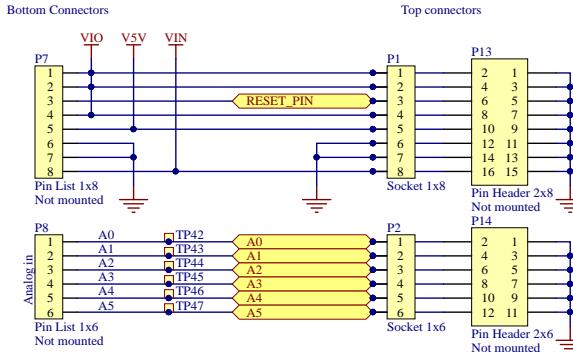
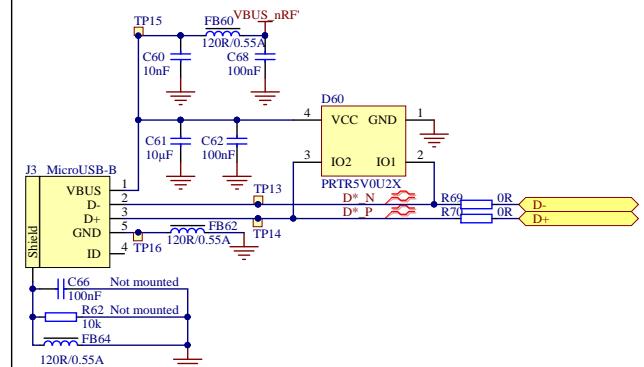
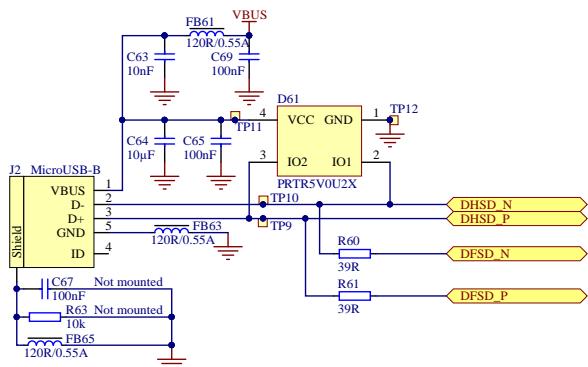
PCA10056 - Pin Map

Size	Project Number	Revision
A3	4440	1.0.0
Date: 16.03.2018	Sheet 3 of 7	
File: pca10056_sheet3_pin_map.SchDoc		Drawn By: RUBR





Signal switches**LEDs****NFC pin configuration****Buttons****Flash memory****Boot/Reset button****USB detect switch****Extra Op-amp****PCA10056 - Miscellaneous**Size **A3** Project Number **4440**Revision **1.0.0**Date: **16.03.2018**Sheet **5** of **7**File: **pca10056 sheet5 misc.SchDoc**Drawn By: **RUBR**

Arduino Interface Connectors**nRF USB Connector****Interface MCU USB Connector**

A

A

B

B

C

C

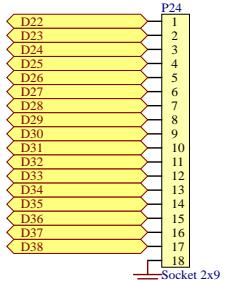
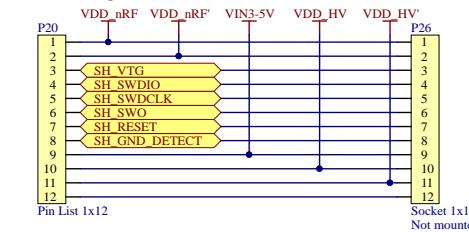
Auxiliary Connectors

Bottom Connectors

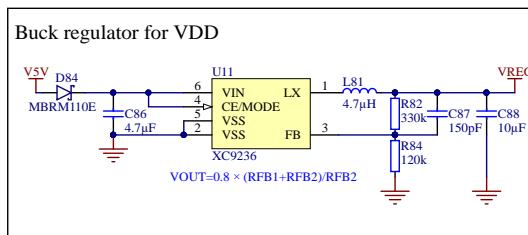
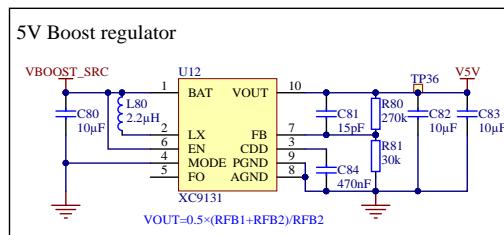
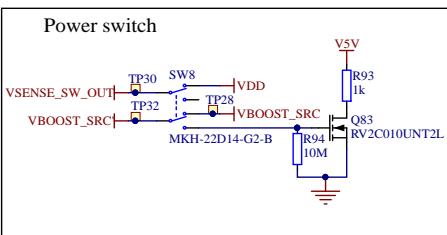
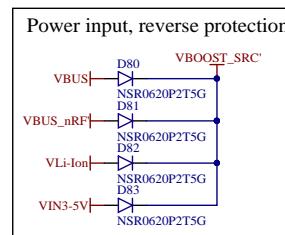
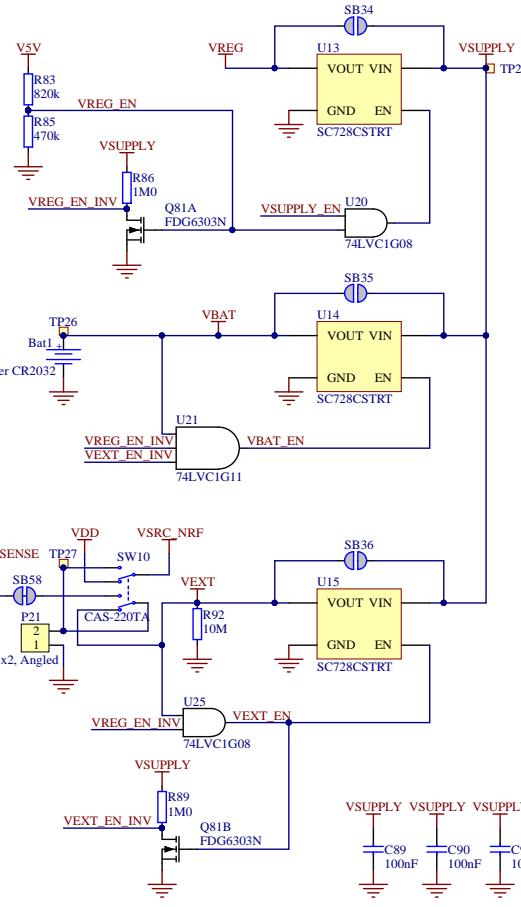
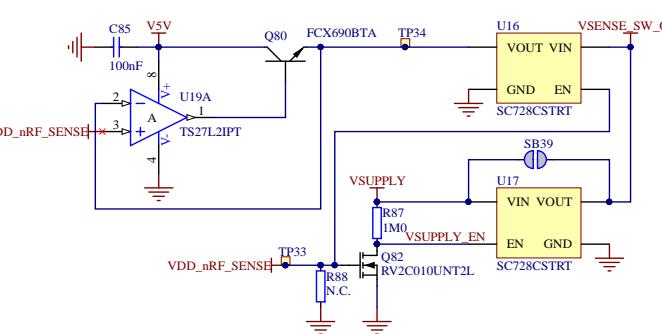
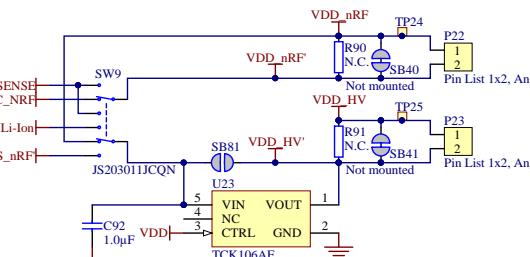
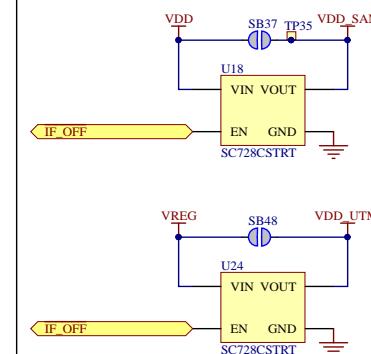
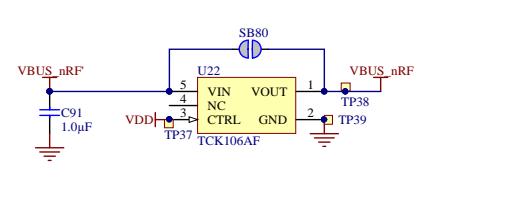
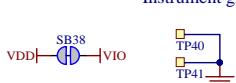
P12: 1, 2, 3, 4, 5, 6, 7, 8
Pin List 1x8 Not mounted
D14, D15, D16, D17, D18, D19, D20, D21
P6: 1, 2, 3, 4, 5, 6, 7, 8
Socket 1x8
P17: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
Pin Header 2x8 Not mounted

Top connectors

P17: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
Pin Header 2x8 Not mounted

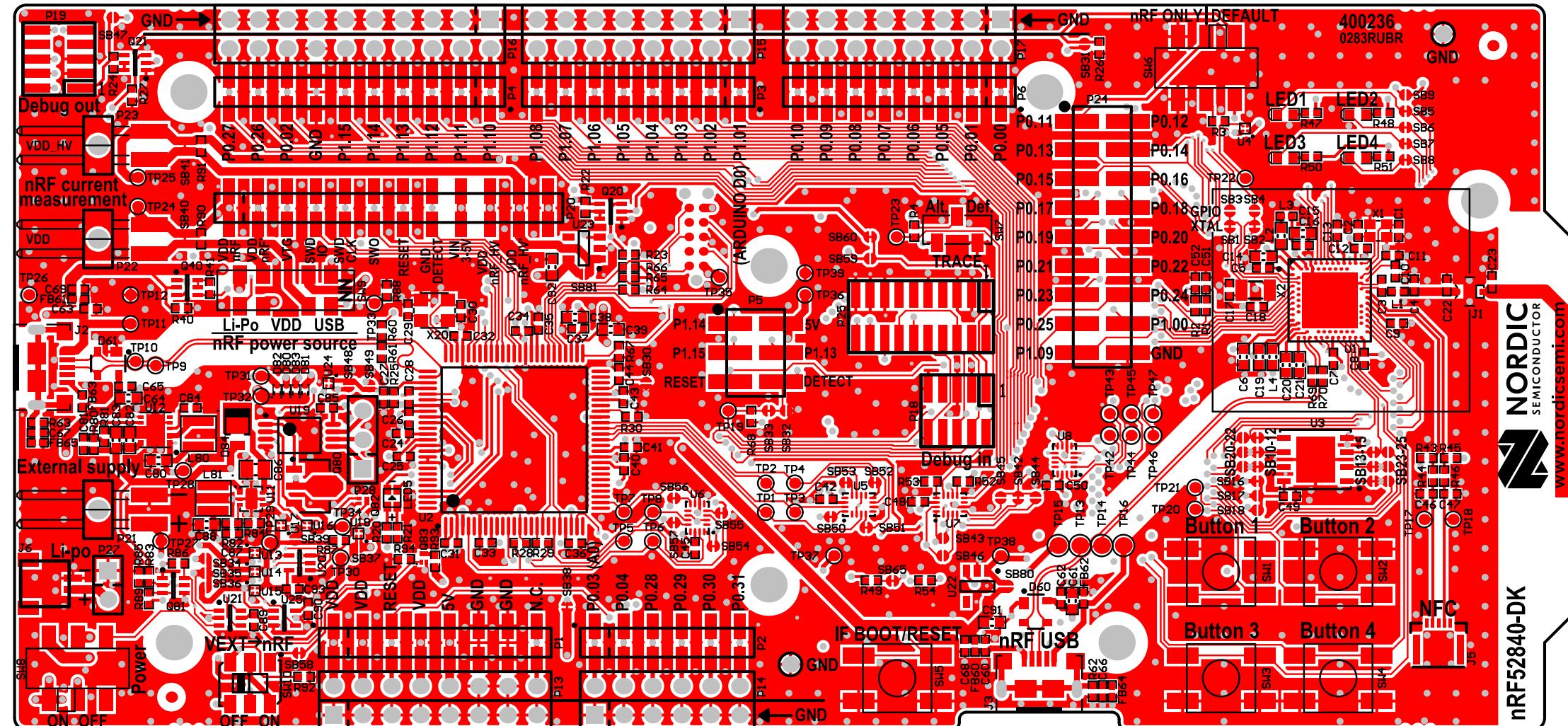
**Shield Debug and Current measurement Connector****PCA10056 - Connectors**

Size	Project Number	Revision
A3	4440	1.0.0
Date: 16.03.2018	Sheet 6 of 7	
File: pca10056_sheet6_connectors.SchDoc		Drawn By: RUBR

**Power sources and switches****VDD_nRF sense buffer and switch****nRF power source select and current measurement****Interface MCU power switch****VBUS_nRF switch****Instrument ground****PCA10056 - Power Supply**

Size	Project Number	Revision
A3	4440	1.0.0
Date: 16.03.2018	Sheet 7 of 7	
File: pca10056_sheet7_power_supply.SchDoc		Drawn By: RUBR





nRF52840-DK

NORDIC
SEMICONDUCTOR
Z www.nordicsemi.com

