

Nordic Semiconductor ASA

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

- | | |
|----------|---------------|
| Sheet 1: | Cover |
| Sheet 2: | nRF Radio |
| Sheet 3: | Pin Map |
| Sheet 4: | Interface MCU |
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 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 A3	Project Number 4440	Revision 2.0.2
Date: 31.05.2021	Sheet 1 of 7	
File: pca10056_sheet1_cover.SchDoc		Drawn By: RUBR

A

A

B

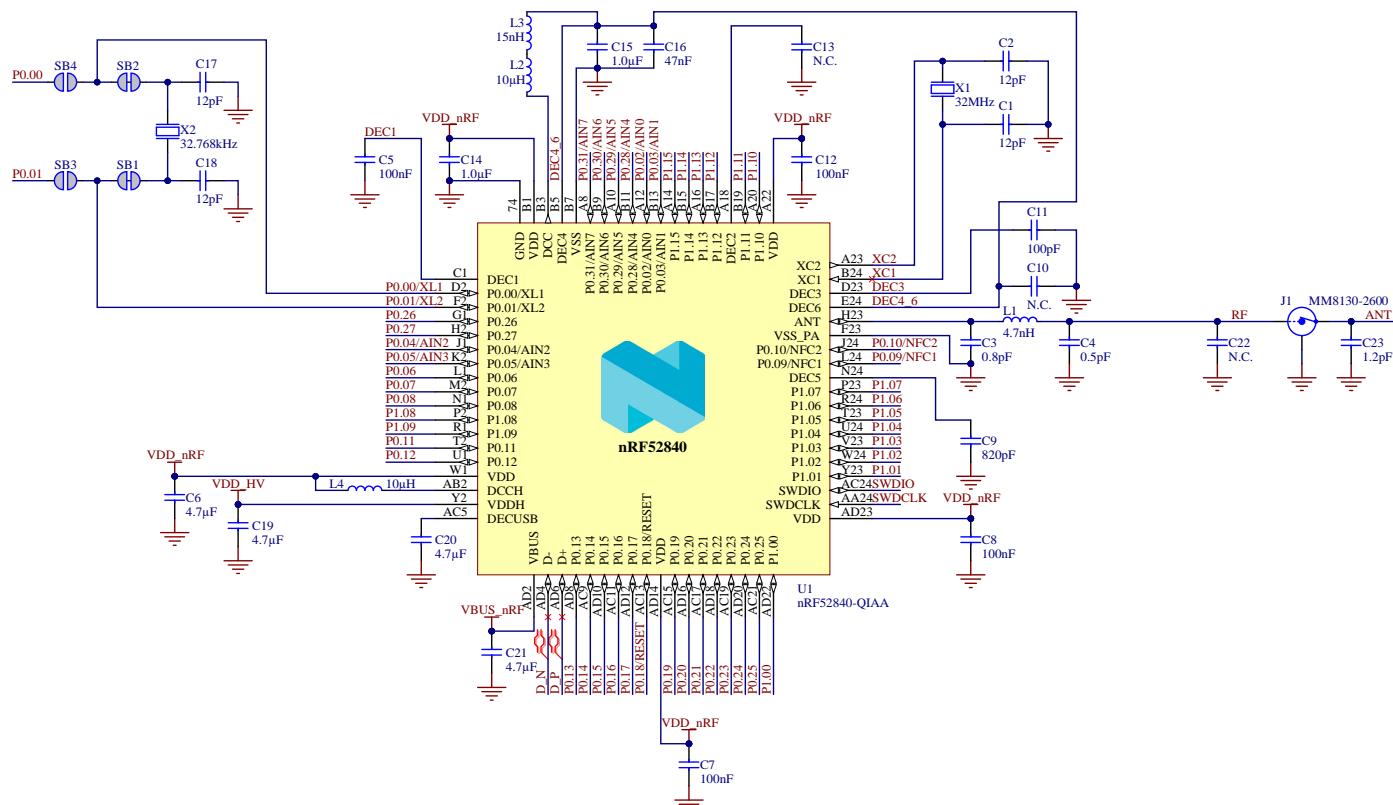
B

C

C

D

D



P.0.00	P.0.00
P.0.01	P.0.01
P.0.02/AIN0	P.0.02/AIN0
P.0.03/AIN1	P.0.03/AIN1
P.0.04/AIN2	P.0.04/AIN2
P.0.05/AIN3	P.0.05/AIN3
P.0.06	P.0.06
P.0.07	P.0.07
P.0.08	P.0.08
P.0.09/NFC1	P.0.09/NFC1
P.0.10/NFC2	P.0.10/NFC2
P.0.11	P.0.11
P.0.12	P.0.12
P.0.13	P.0.13
P.0.14	P.0.14
P.0.15	P.0.15
P.0.16	P.0.16
P.0.17	P.0.17
P.0.18/RESET	P.0.18/RESET
P.0.19	P.0.19
P.0.20	P.0.20
P.0.21	P.0.21
P.0.22	P.0.22
P.0.23	P.0.23
P.0.24	P.0.24
P.0.25	P.0.25
P.0.26	P.0.26
P.0.27	P.0.27
P.0.28/AIN4	P.0.28/AIN4
P.0.29/AIN5	P.0.29/AIN5
P.0.30/AIN6	P.0.30/AIN6
P.0.31/AIN7	P.0.31/AIN7
P.1.00	P.1.00
P.1.01	P.1.01
P.1.02	P.1.02
P.1.03	P.1.03
P.1.04	P.1.04
P.1.05	P.1.05
P.1.06	P.1.06
P.1.07	P.1.07
P.1.08	P.1.08
P.1.09	P.1.09
P.1.10	P.1.10
P.1.11	P.1.11
P.1.12	P.1.12
P.1.13	P.1.13
P.1.14	P.1.14
P.1.15	P.1.15

D_N	D_N
D_P	D_P
SWDIO	SWDIO
SWDCLK	SWDCLK

PCA10056 - nRF52840 MCU

Size	Project Number	Revision
A3	4440	2.0.2
Date: 31.05.2021	Sheet 2 of 7	
File: pca10056_sheet2_nrf52840_mcu.SchDoc		Drawn By: RUBR



A

A

B

B

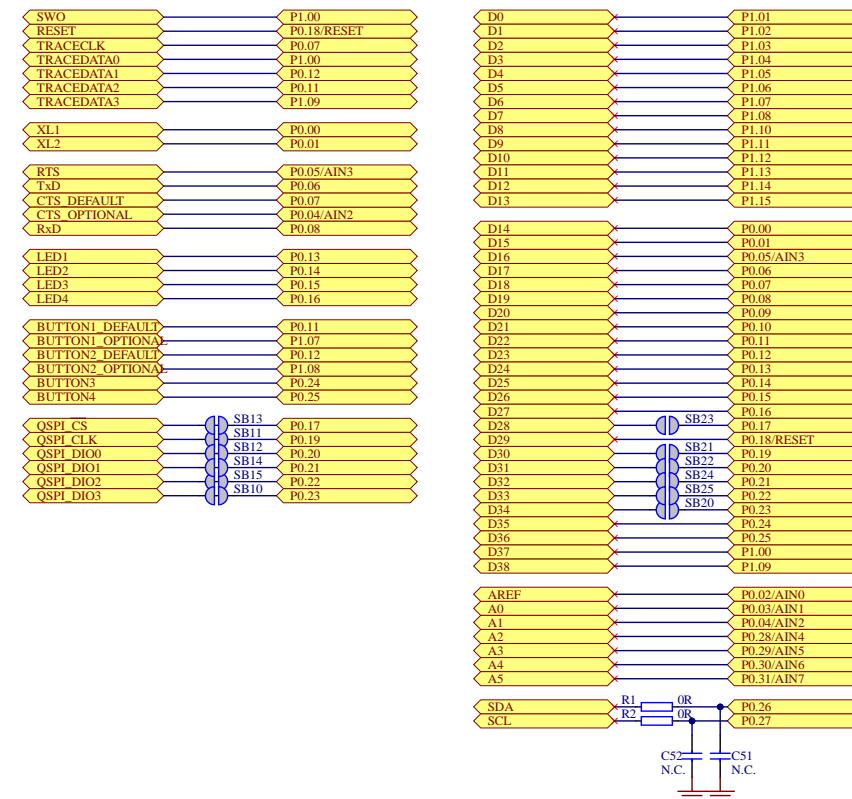
C

C

D

D

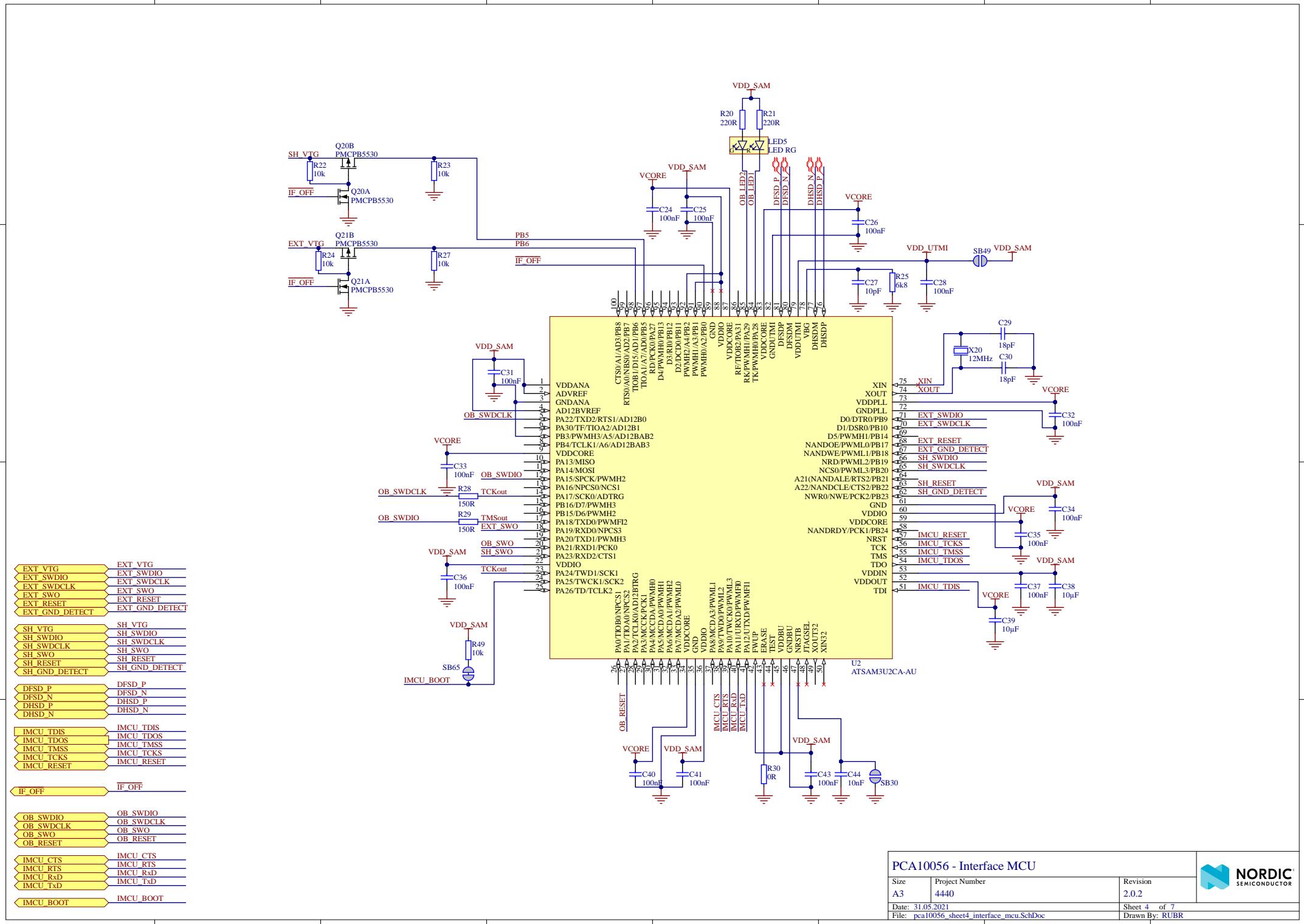
GPIO pin mapping



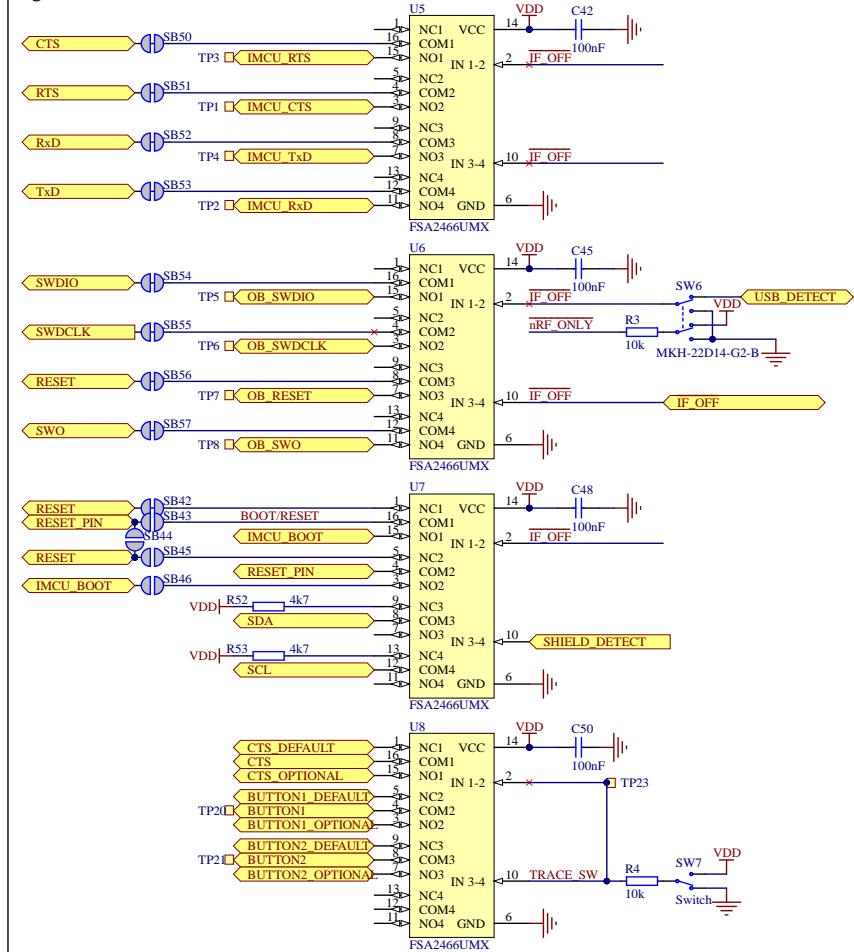
PCA10056 - Pin Map

Size	Project Number	Revision
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Date: 31.05.2021	Sheet 3 of 7	
File: pca10056_sheet3_pin_map.SchDoc		Drawn By: RUBR

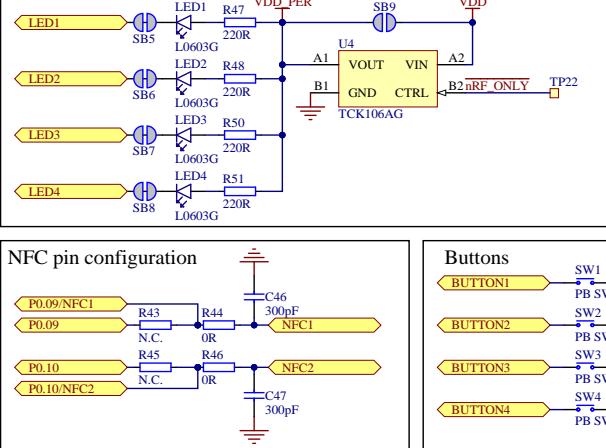




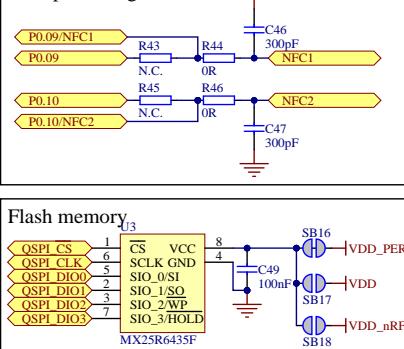
Signal switches



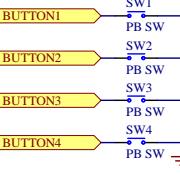
LEDs



NFC pin configuration



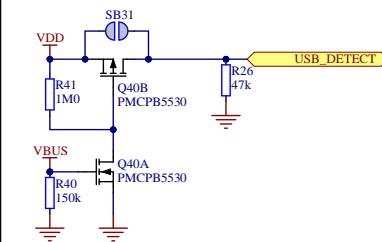
Buttons



Flash memory

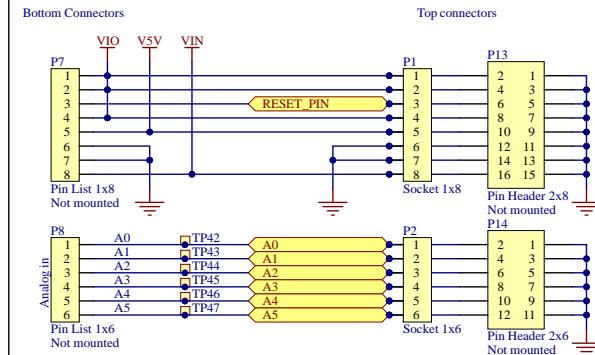
Boot/Reset button

USB detect switch

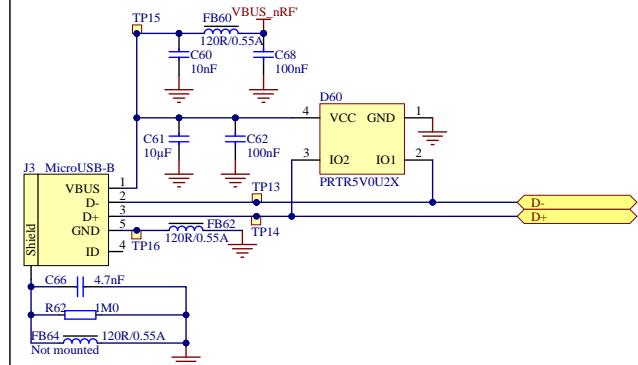


Extra Op-amp

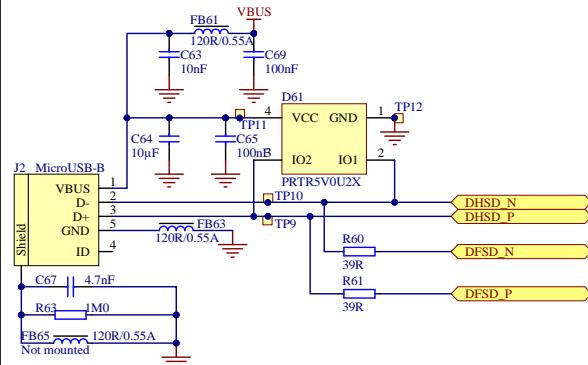
Arduino Interface Connectors



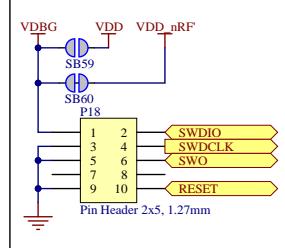
nRF USB Connector



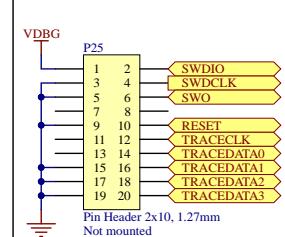
Interface MCU USB Connector



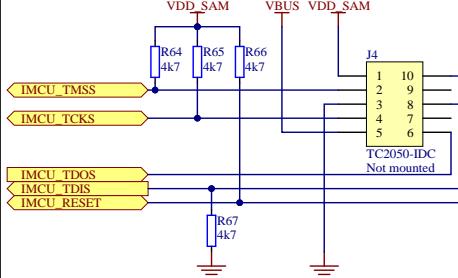
Debug IN Connector



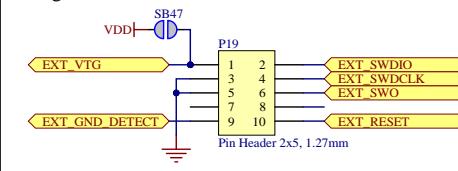
Trace connector



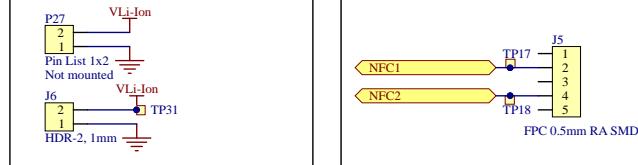
Interface MCU Programming Connector



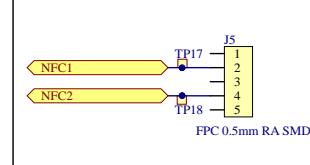
Debug OUT Connector



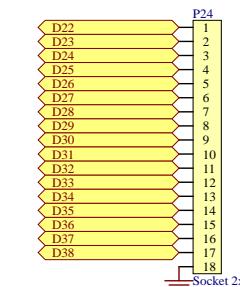
Li-ion connector



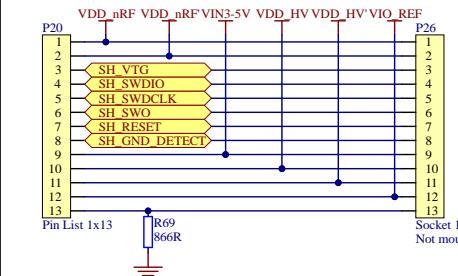
NFC Antenna Connector



Auxiliary Connectors

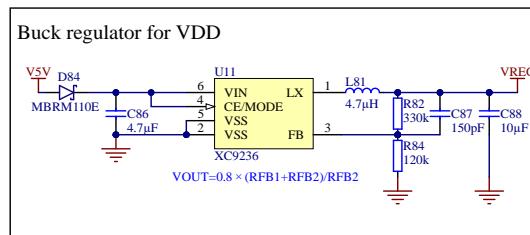
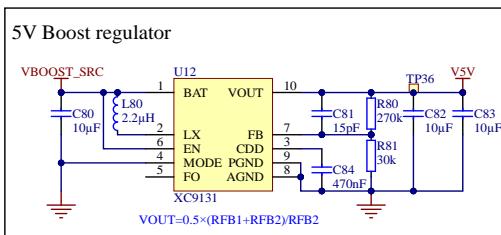
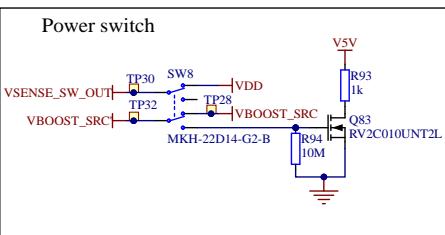
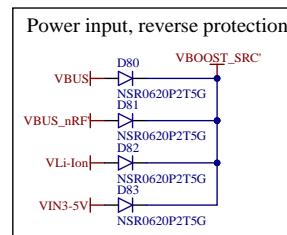


Shield Debug and Current measurement Connector

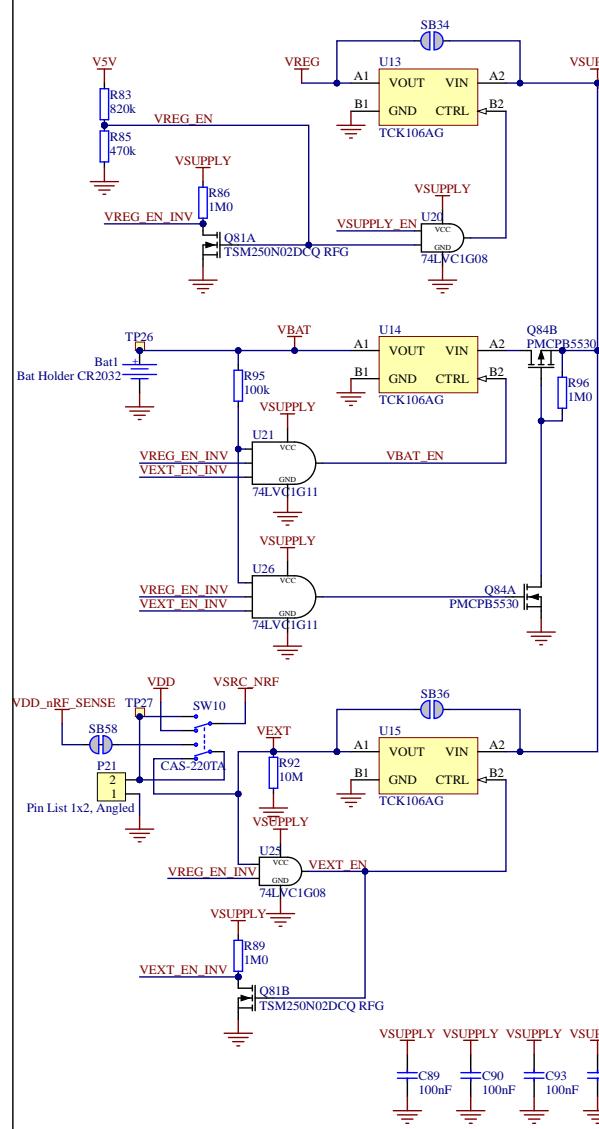


PCA10056 - Connectors

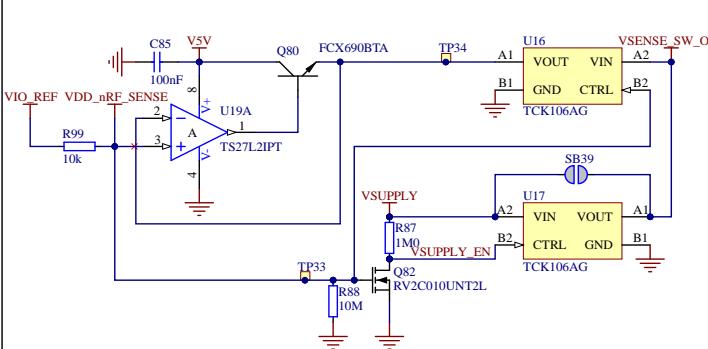
Size	Project Number	Revision
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Date:	31.05.2021	Sheet 6 of 7
File:	pca10056_sheet6_connectors.SchDoc	Drawn By: RUBR



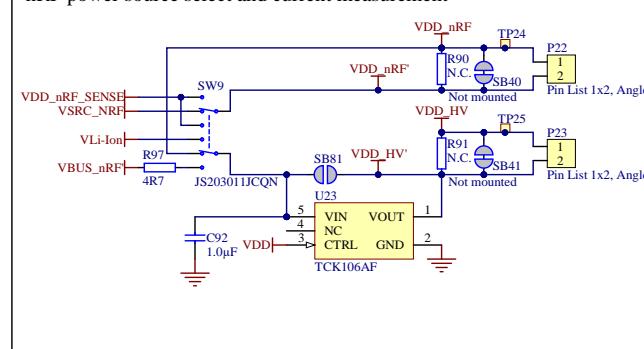
Power sources and switches



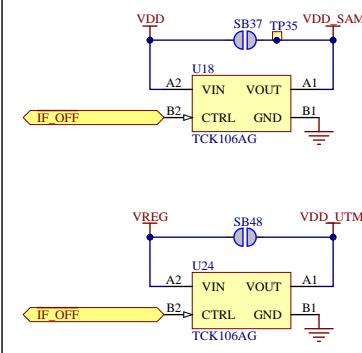
VDD_nRF sense buffer and switch



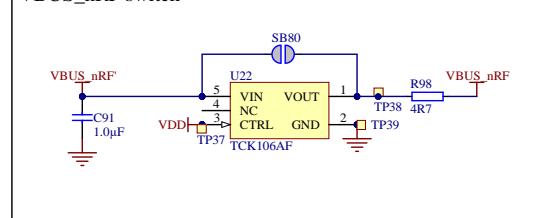
nRF power source select and current measurement



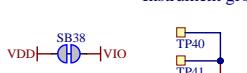
Interface MCU power switch



VBUS_nRF switch



Instrument ground



PCA10056 - Power Supply

Size	Project Number	Revision
A3	4440	2.0.2
Date: 31.05.2021		Sheet 7 of 7
File: pca10056_sheet7_power_supply.SchDoc		Drawn By: RUBR

