

A

A

Nordic Semiconductor ASA

nRF52832 Bluetooth Smart/ANT/2.4GHz RF Development Board (PCA10040)

Sheet 1: Cover

Sheet 2: nRF Radio

Sheet 3: Interface MCU

Sheet 4: Buttons and LEDs

Sheet 5: Connectors

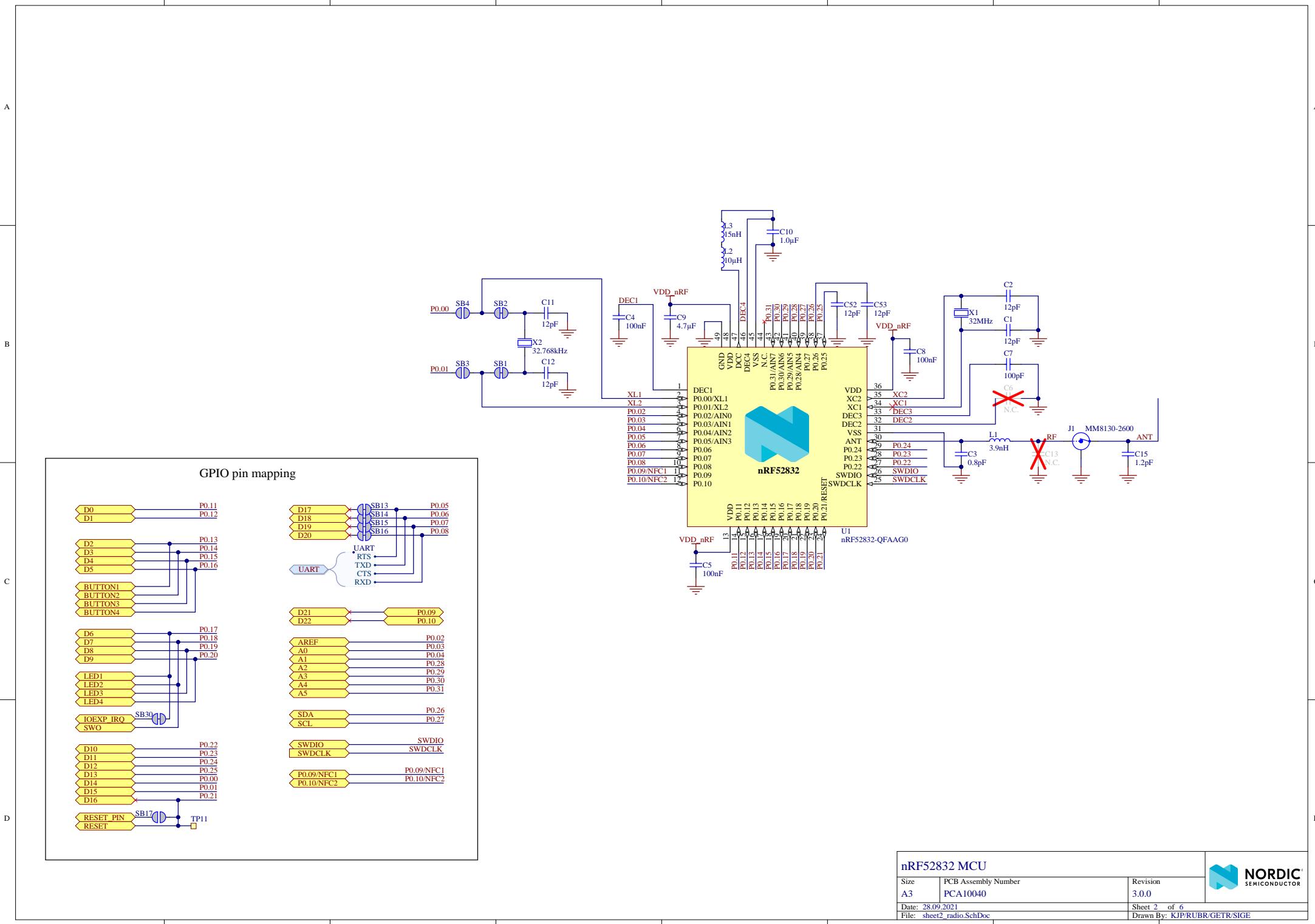
Sheet 6: Power Supply

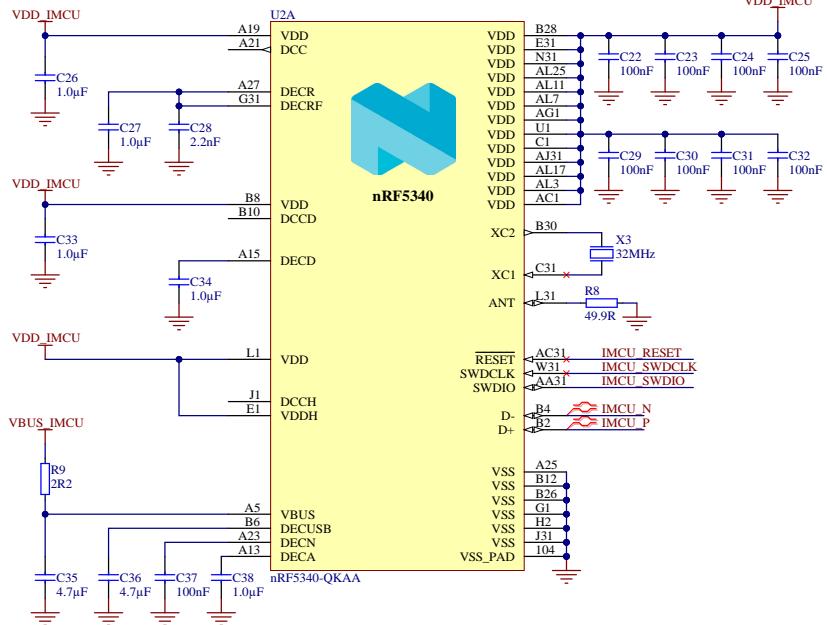
- ✖ The No ERC object is a design directive.
This directive is placed on a node in the circuit to suppress reported warnings and/or error violation conditions that are detected when the schematic project is compiled.
- ✖ The DIFFPAIR object is a design directive.
This directive is placed on a differential pair so that they are routed accordingly.
- ✖✖ These are fiducial marks

Cover

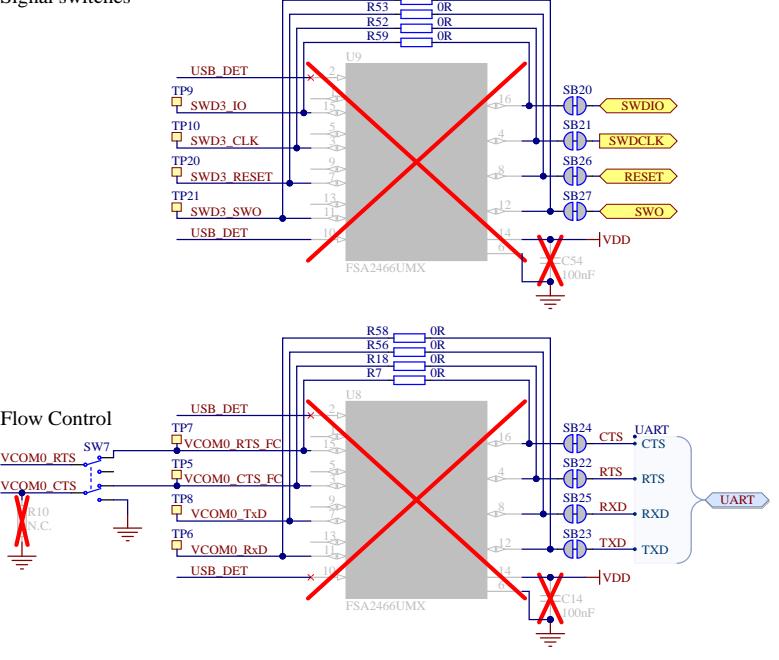
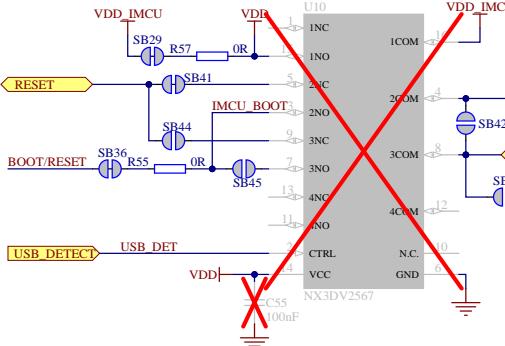
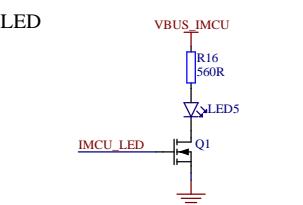
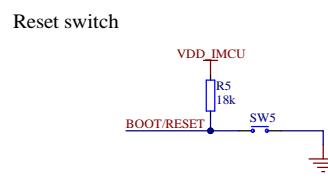
Size A3	PCB Assembly Number PCA10040	Revision 3.0.0
Date: 28.09.2021	Sheet 1 of 6	
File: sheet1_cover.SchDoc		Drawn By: KJPRUBR/GETR/SIGE





Interface MCU

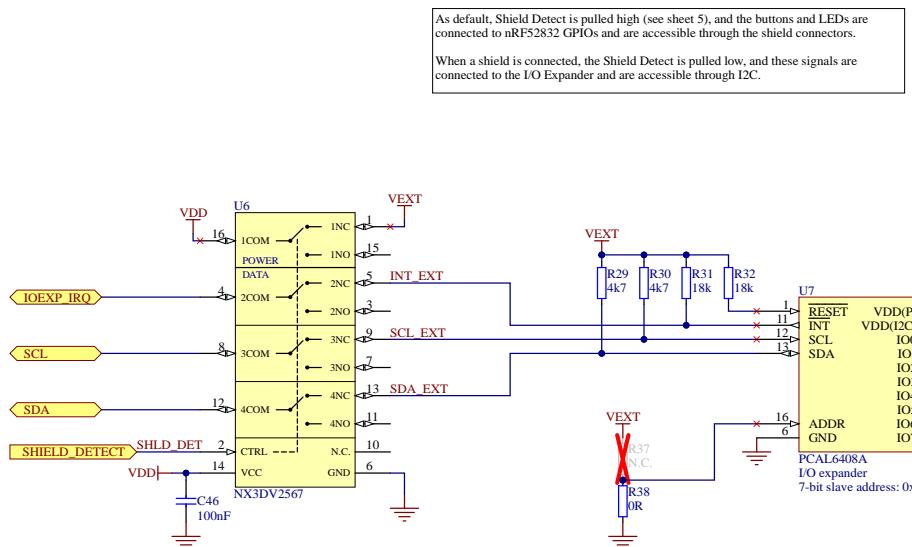
U2B	
SWD3_IO	P0.00/XL1
SWD3_CLK	P0.01/XL2
SWD3_SWO	P0.02/NFC1
SWD3_RESET	P0.03/NFC2
V	P0.04/AIN0
Y	P0.05/AIN1
AB	P0.06/AIN2
AD	P0.07/AIN3
AH	P0.08/TRACEDATA[3]
AK	P0.09/TRACEDATA[2]
AL	P0.10/TRACEDATA[1]
AK0	P0.11/TRACEDATA[0]
AL0	P0.12/TRACECLK
AK1	P0.13/QSPI[0]
AK2	P0.14/QSPI[1]
AK3	P0.15/QSPI[2]
AL3	P0.16/QSPI[3]
AK4	P0.17/QSPI_CLK
AK14	P0.18/QSPI_CS
AL14	P0.19
AK16	P0.20
AL16	P0.21
AK18	P0.22
AK20	P0.23
AL20	P0.24
AK22	P0.25/AIN4
IMCU_BOOT	P0.26/AIN5
SWD1_CLK	P0.27/AIN6
IMCU_LED	P0.28/AIN7
SWD1_IO	P0.29
VCOM0_TXD	P0.30
SWD0_SEL	P0.31
SWD0_RESET	
nRF5340-QKAA U2C	
M2	P1.00
P2	P1.01
AE	P1.02/I2C
AF	P1.03/I2C
AL19	P1.04
SWD1_RXD	P1.05
SWD1_SEL	P1.06
SWD1_RESET	P1.07
SWD1_SWO	P1.08
SWD0_SWO	P1.09
SWD0_SWO	R3
SWD0_CLK	P1.10
SWD0_IO	P1.11
SWD0_SEL	P1.12
SWD0_RESET	P1.13
SWD0_SEL	P1.14
SWD0_IO	P1.15

Signal switches**Reset conf.****LED****Reset switch****Interface MCU**

Size	PCB Assembly Number	Revision
A3	PCA10040	3.0.0
Date: 28.09.2021	Sheet 3 of 6	
File: sheet3_interface_mcu.SchDoc		Drawn By: KJP/RUBR/GETR/SIGE

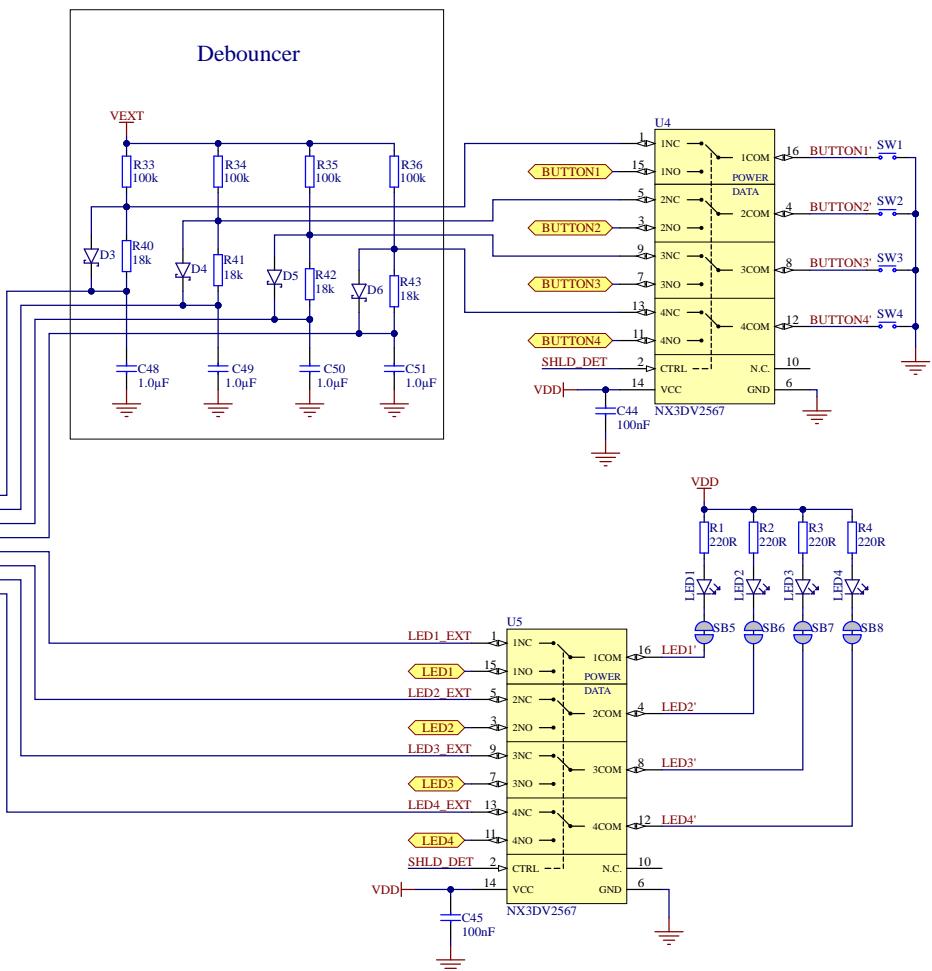
A

A



B

B



C

C

Buttons and LEDs

Size	PCB Assembly Number	Revision
A3	PCA10040	3.0.0

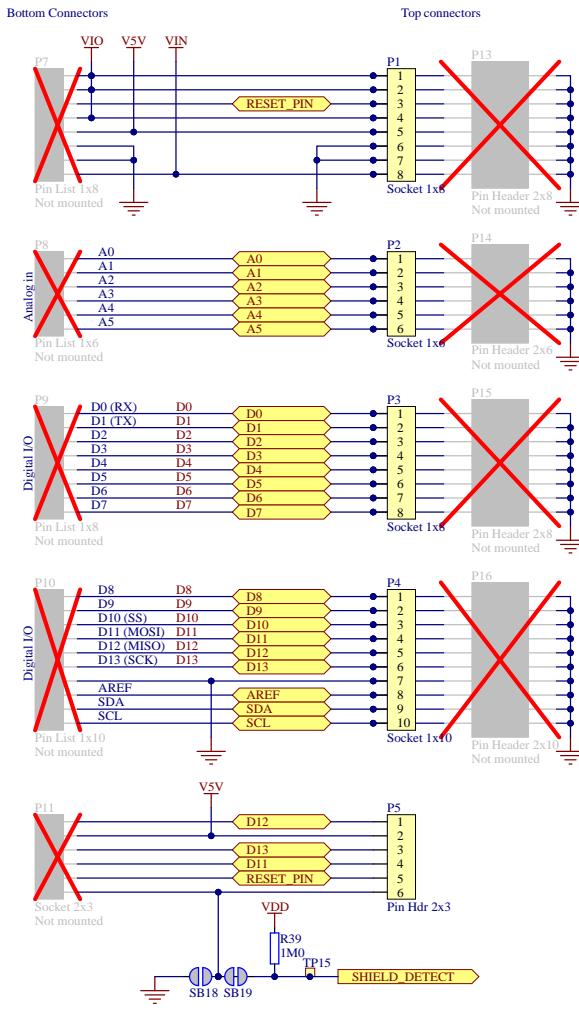
Date: 28.09.2021
File: sheet4_buttons_and_leds.SchDoc



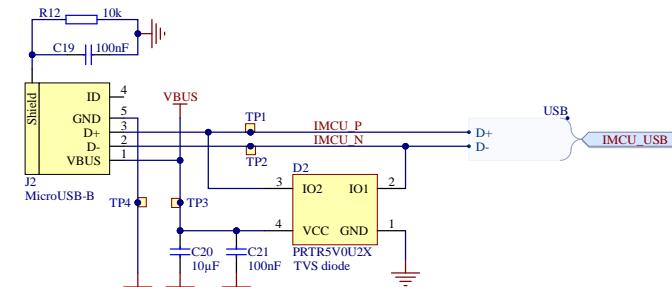
Sheet 4 of 6

Drawn By: KJP/RUBR/GETR/SIGE

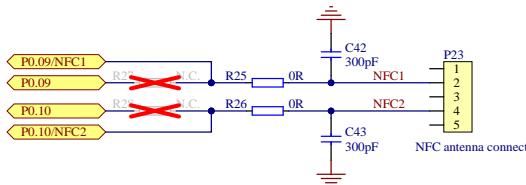
Arduino Interface Connectors



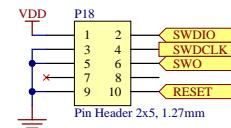
Interface MCU USB Connector



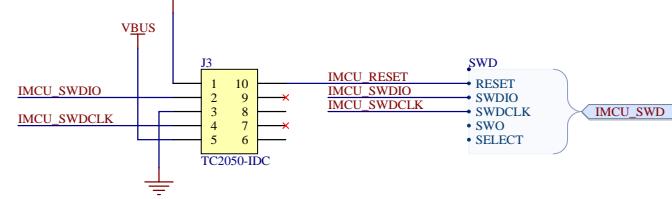
NFC pin configuration



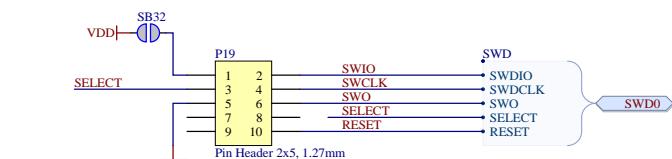
Debug IN Connector



Interface MCU Programming Connector



Debug OUT Connector

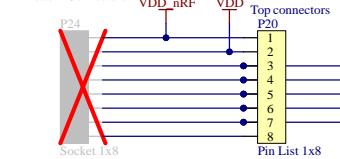


Auxiliary Connectors

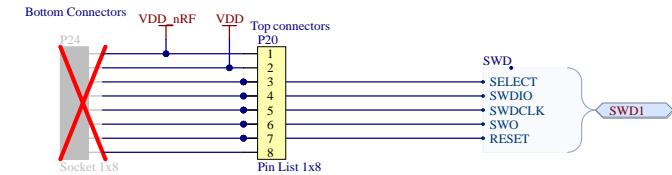
Bottom Connectors



Top connectors



Shield Debug and Current measurement Connector



Connectors

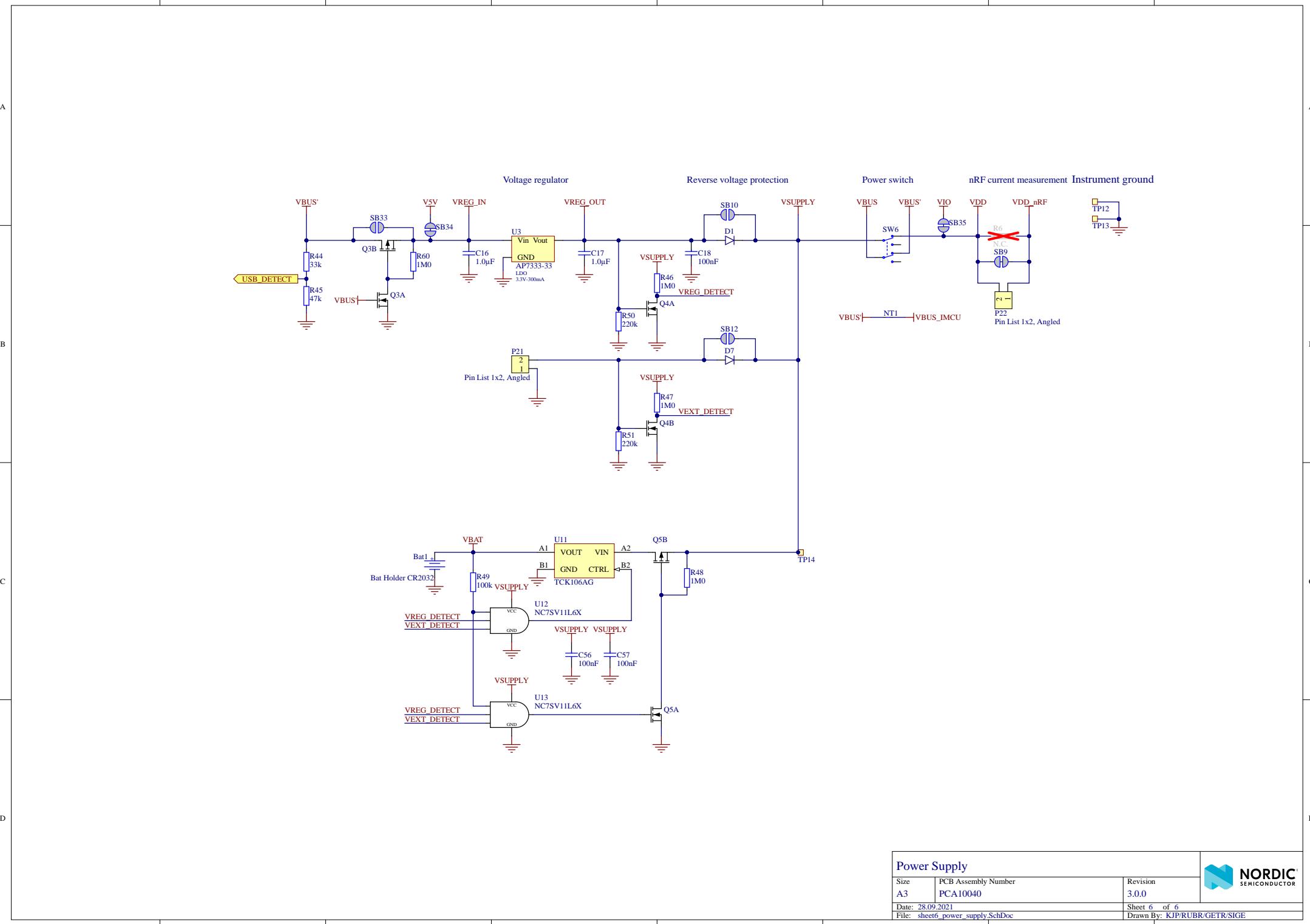
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A3	PCA10040

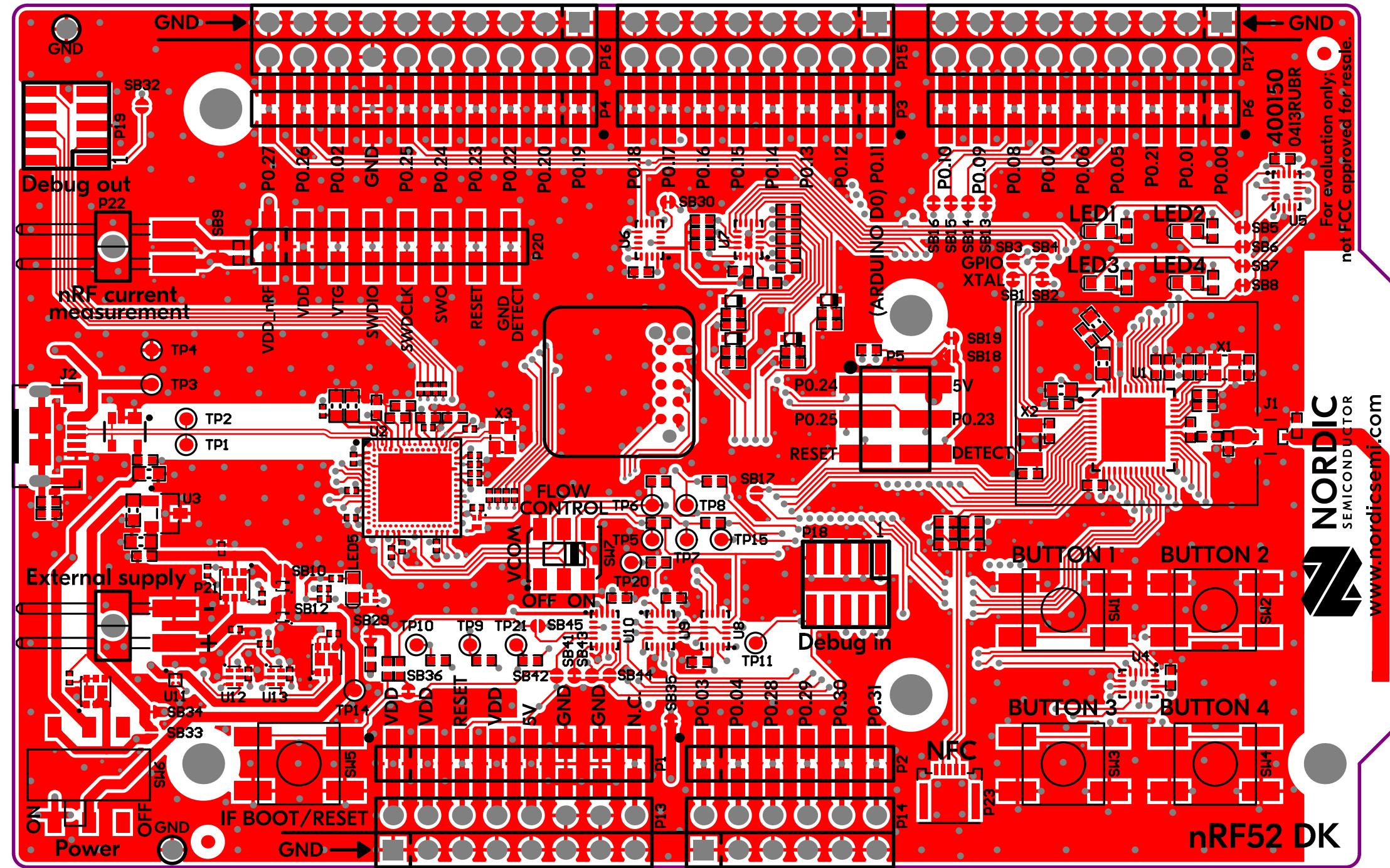
Revision
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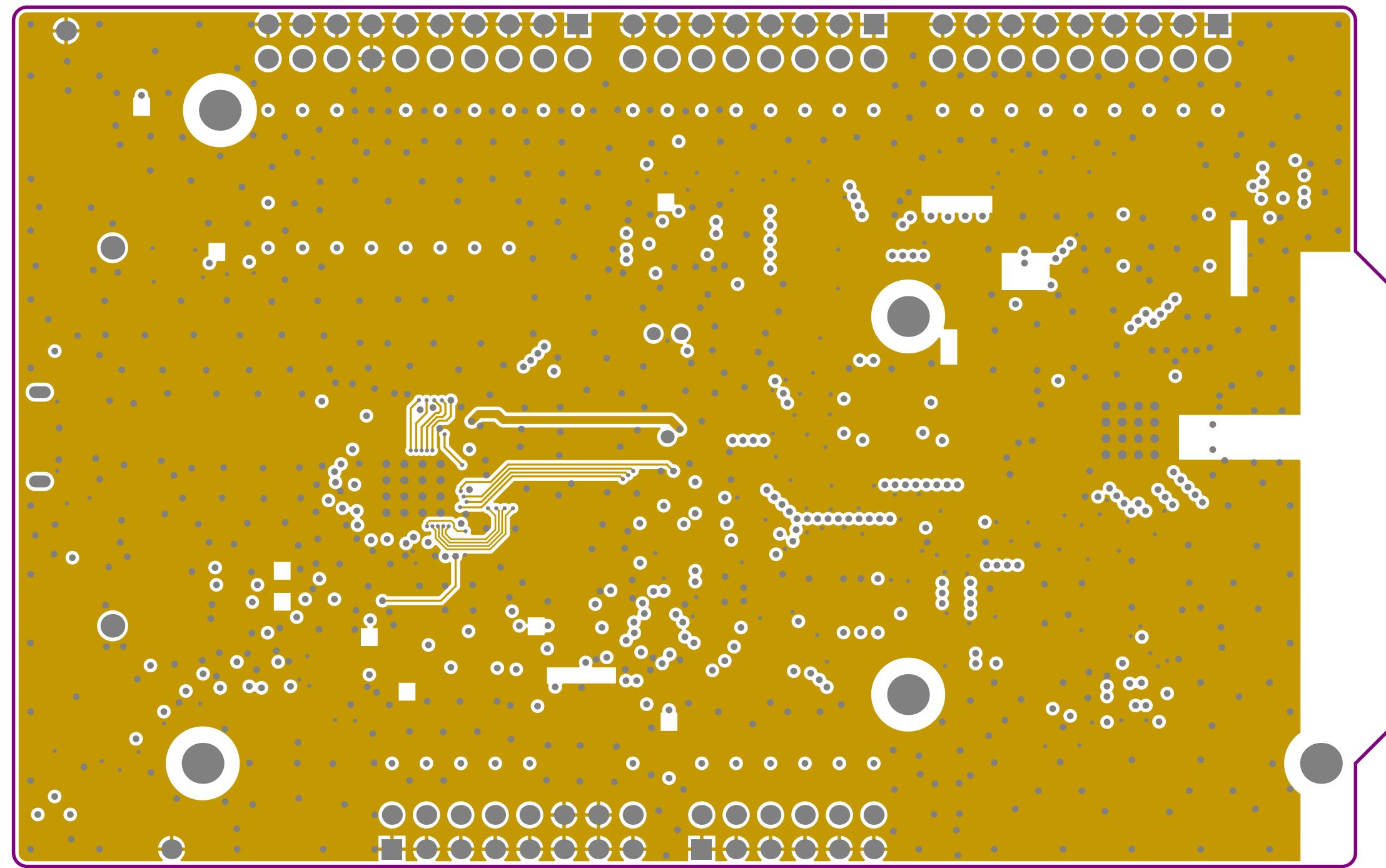
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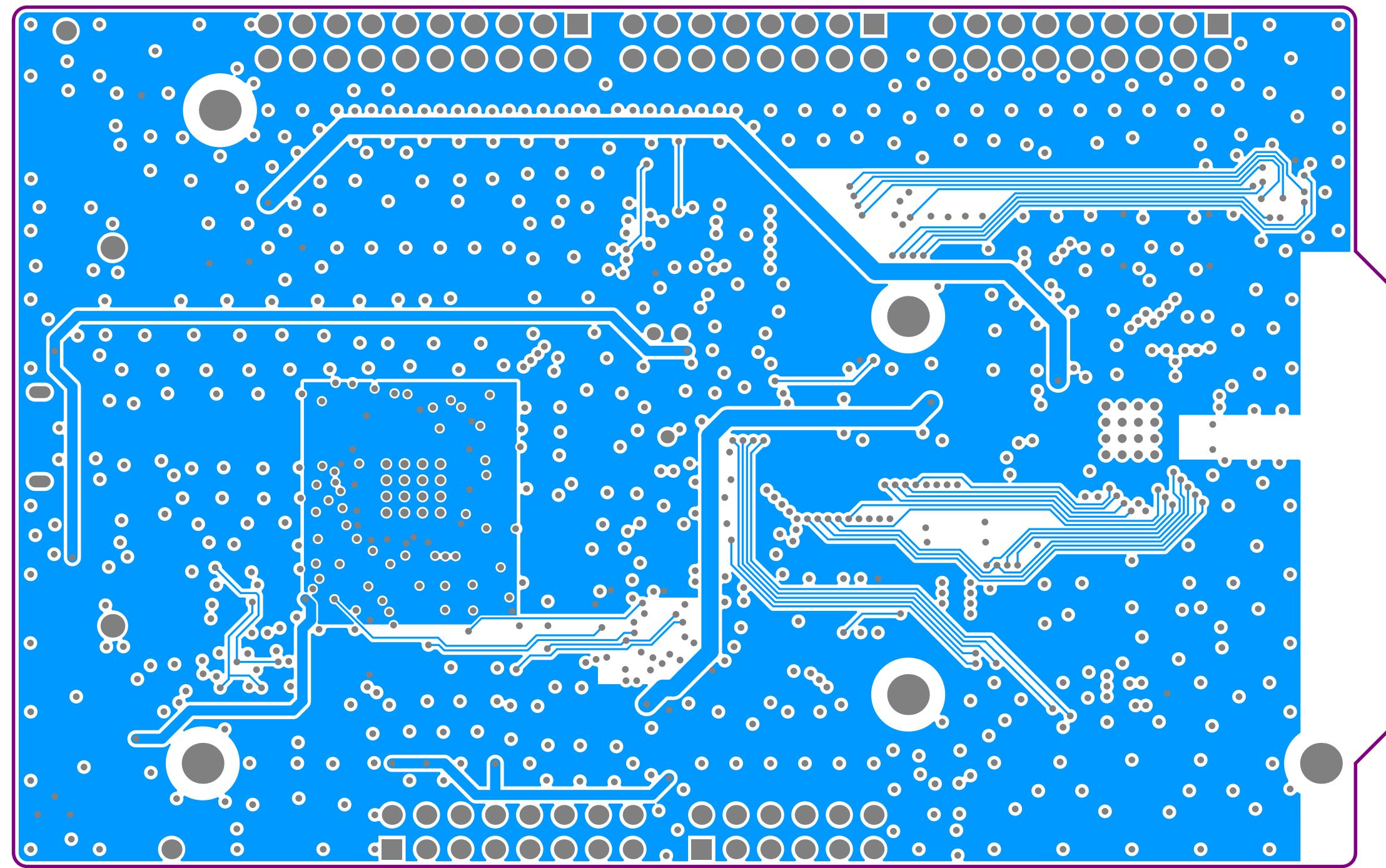


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9.05	K2SEL	281	9.06
9.05	FED4	288	9.07
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9.08	FED5	2B2	9.09
9.09	FED1	2B2	9.10
9.10	FED2	2B3	9.11
9.11	FED6	2B3	9.12
9.12	FED7	2B3	9.13
9.13	FED8	2B3	9.14
9.14	FED9	2B3	9.15
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