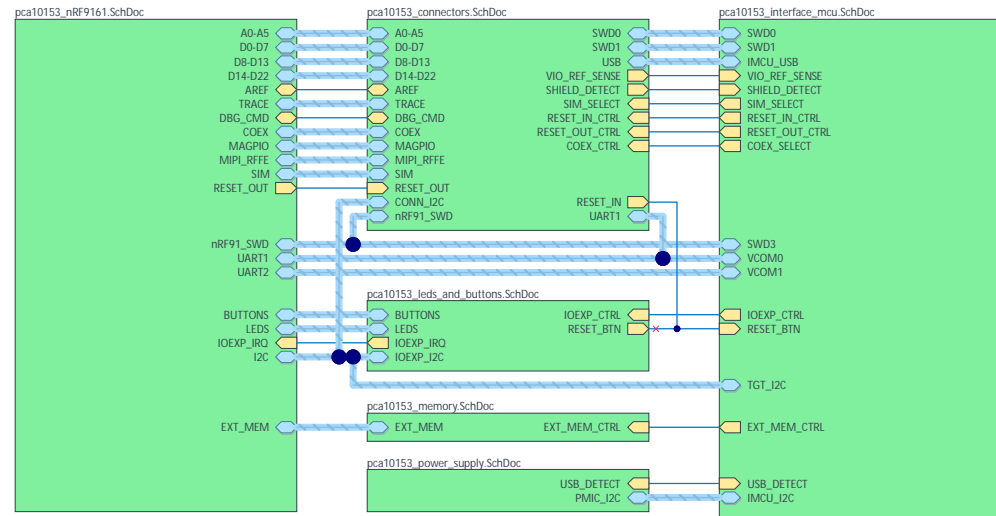


Nordic Semiconductor ASA

nRF9161 Development Kit (PCA10153)

Sheet 1:	Top Level
Sheet 2:	nRF9161
Sheet 3:	Interface MCU
Sheet 4:	LEDs and Buttons
Sheet 5:	IO Expander
Sheet 6:	Memory
Sheet 7:	Connectors
Sheet 8:	Power Supply
Sheet 9:	Analog Switch 1
Sheet 10:	Analog Switch 2



× 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.

PCA10153
Rev. 0.9.0
#year.week
#serial number

Title nRF9161 Development Kit - Top Level			
Size A3	PCB Assembly Number PCA10153	Revision 0.9.0	
Date: 20/06/2023	File: pca10153_top_level.SchDoc	Sheet 1 of 10	
Classification: CONFIDENTIAL	Drawn By: RUBR/KOD1		

A

B

C

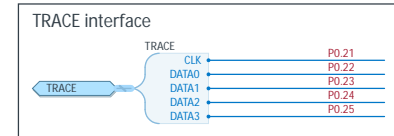
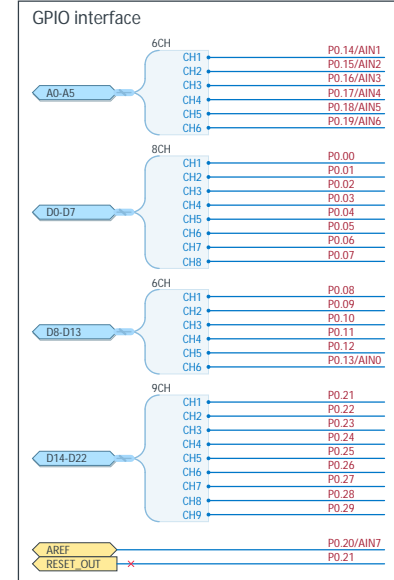
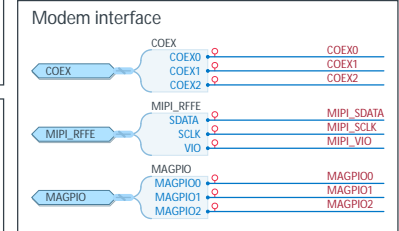
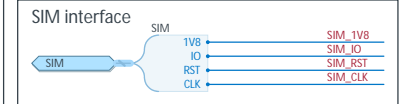
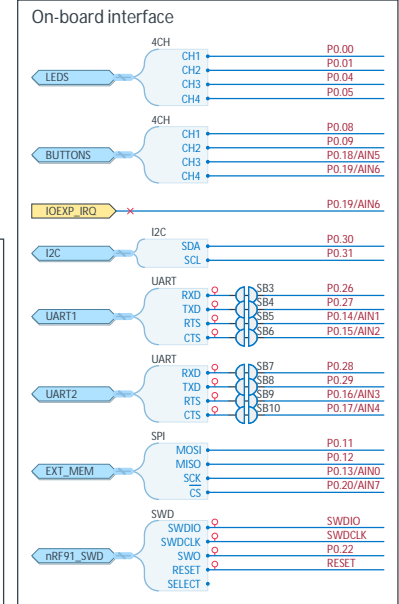
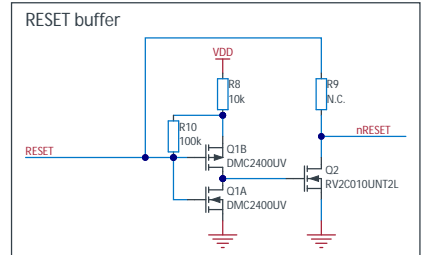
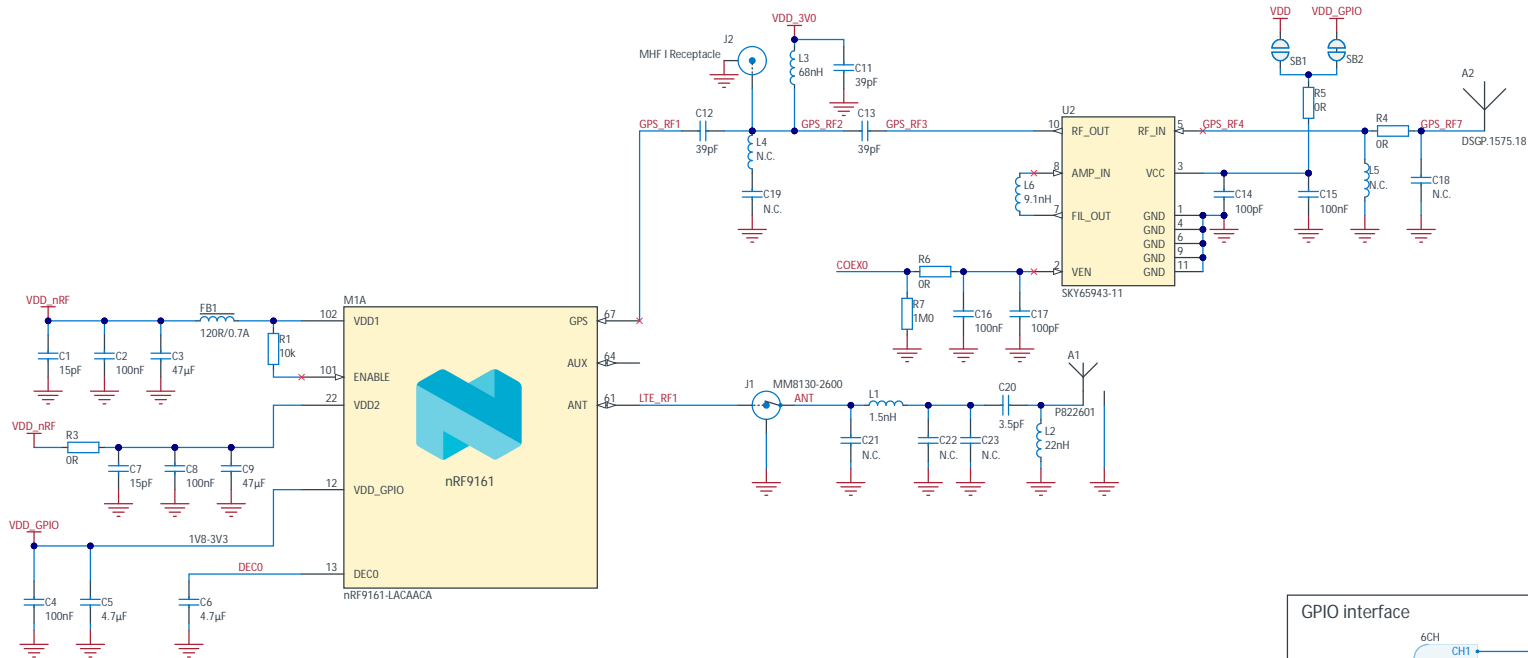
D

A

B

C

D



Title
nRF9161 Development Kit - nRF9161

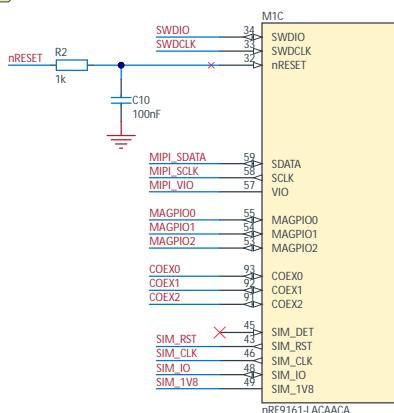
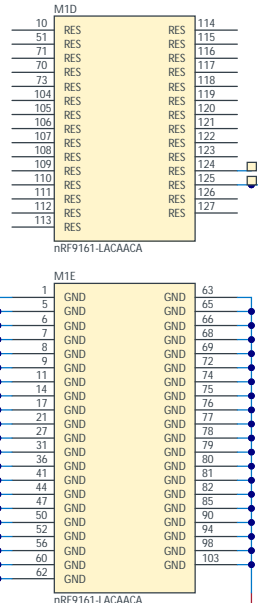
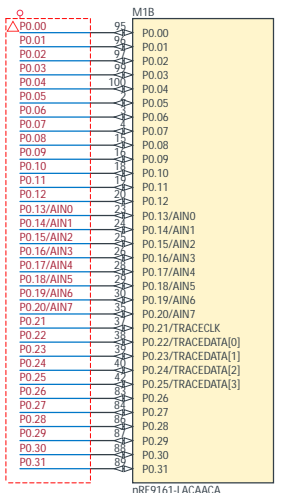
Size
A3

PCB Assembly Number
PCA10153

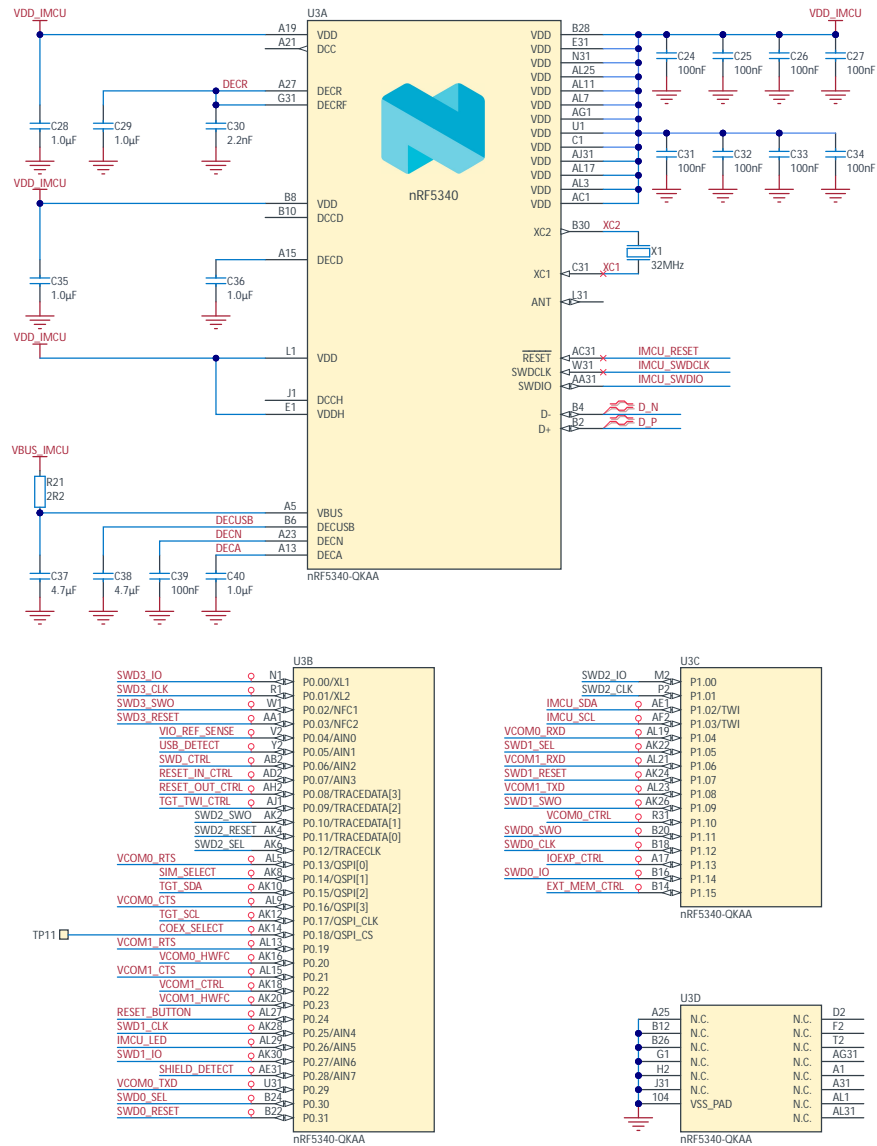
Date: 19/06/2023
File: pca10153_nrf9161_SchDoc
Classification: CONFIDENTIAL

Revision
0.9.0

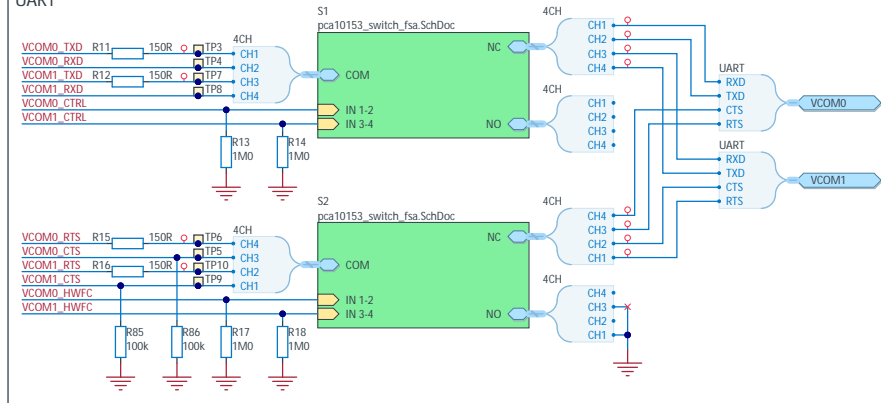
Sheet 2 of 10
Drawn By: RUBR/KOD1



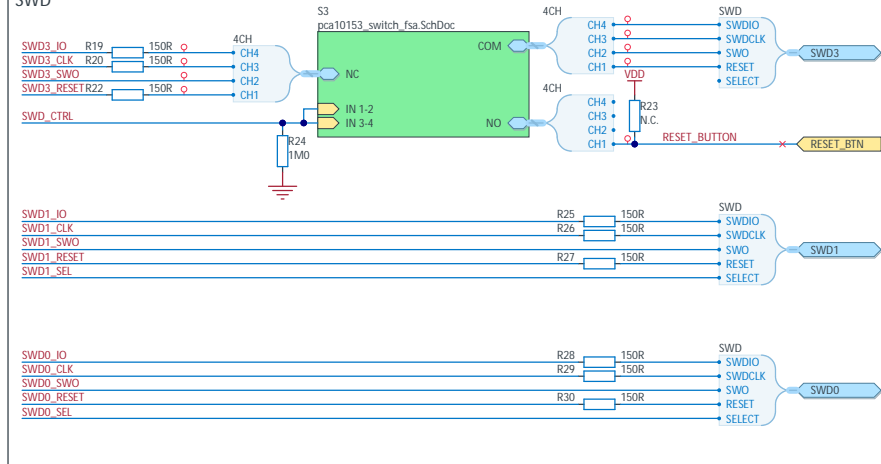
Interface MCU



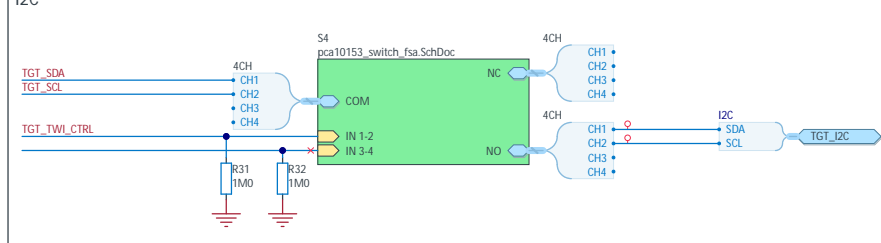
UART



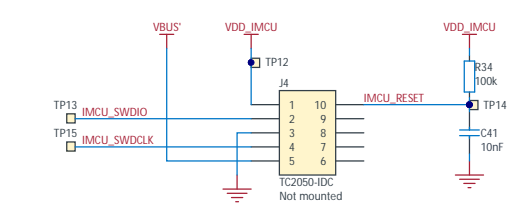
SWD



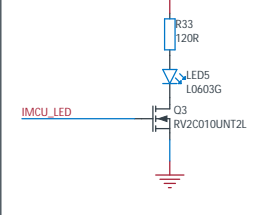
I2C



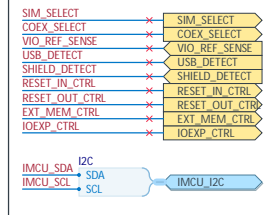
Interface MCU Programming Connector



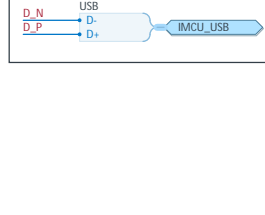
LED



Board control



USB

Title
nRF9161 Development Kit - Interface MCUSize
A3PCB Assembly Number
PCA10153

Date: 14/04/2023

File: pca10153_interface_mcu_SchDoc

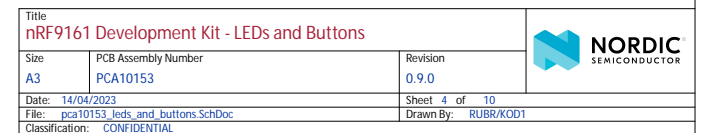
Classification: CONFIDENTIAL

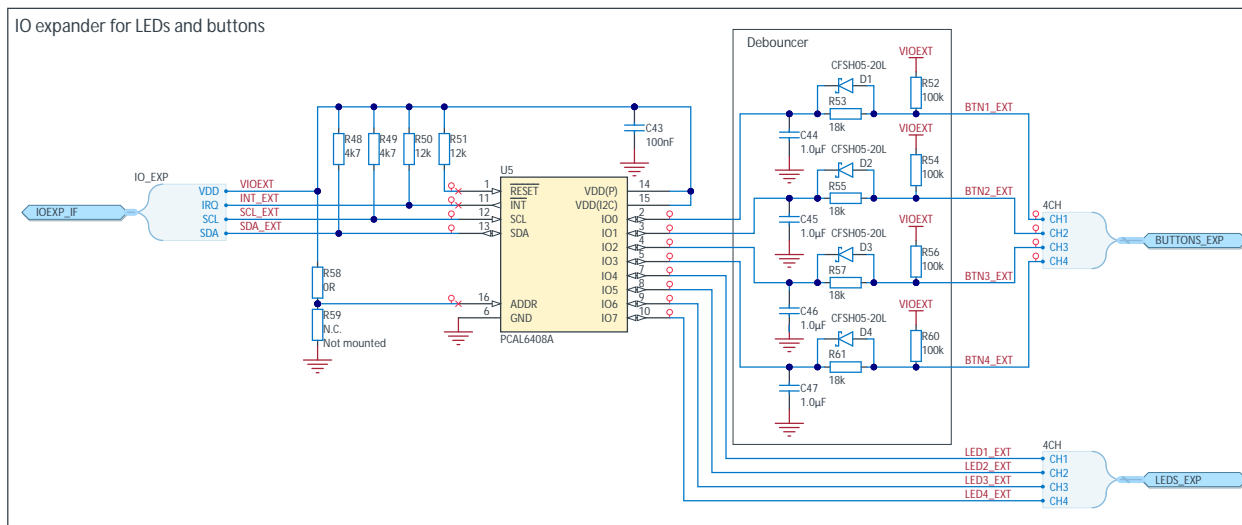
Revision
0.9.0

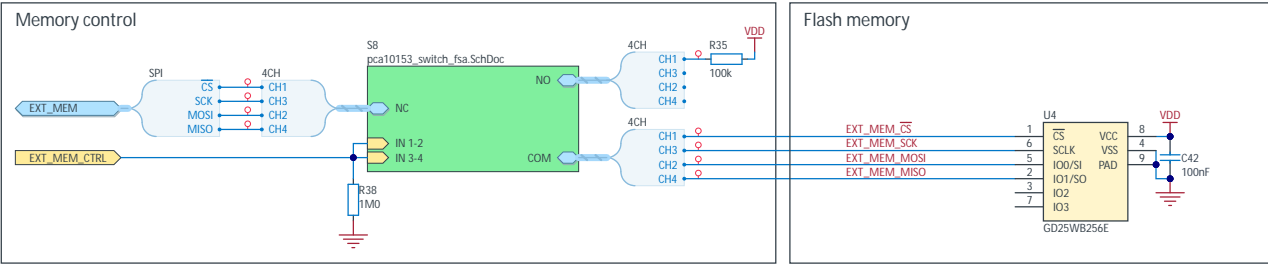
Sheet 3 of 10

Drawn By: RUBR/KOD1

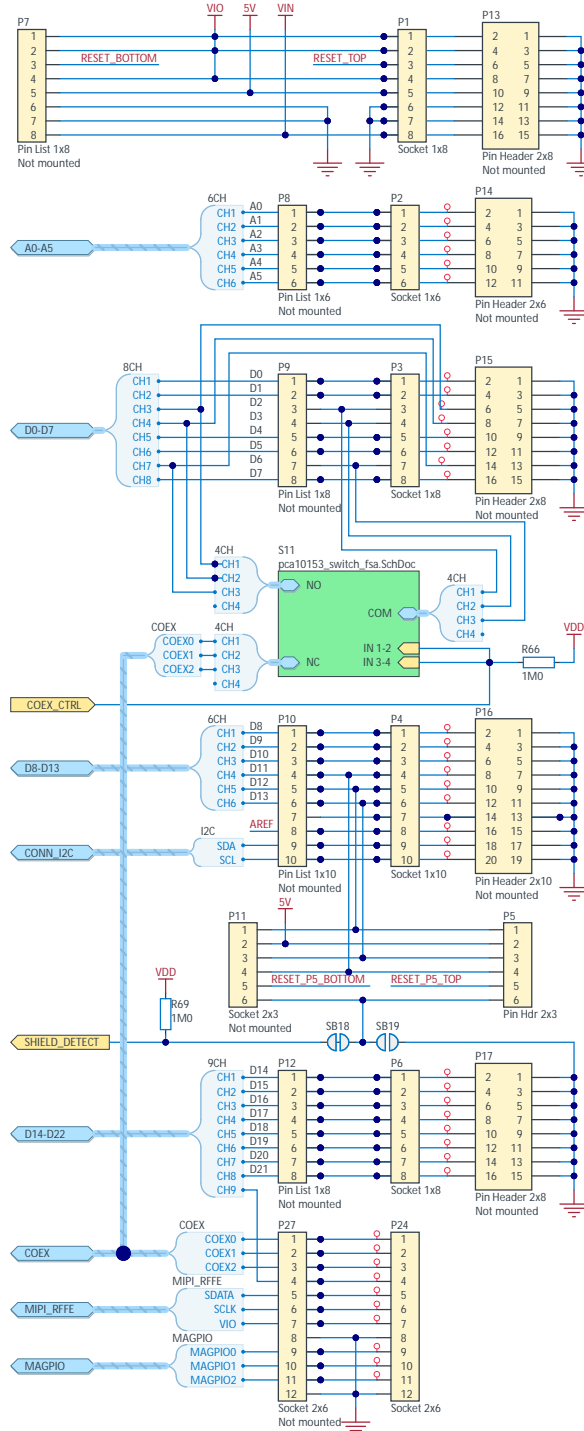




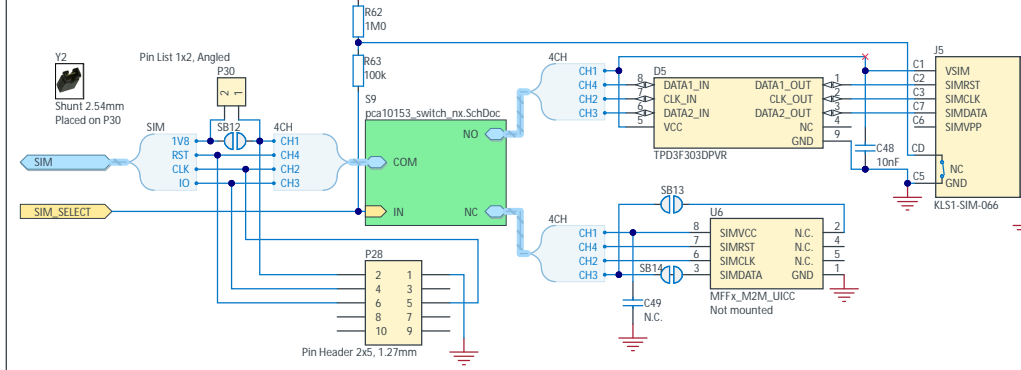




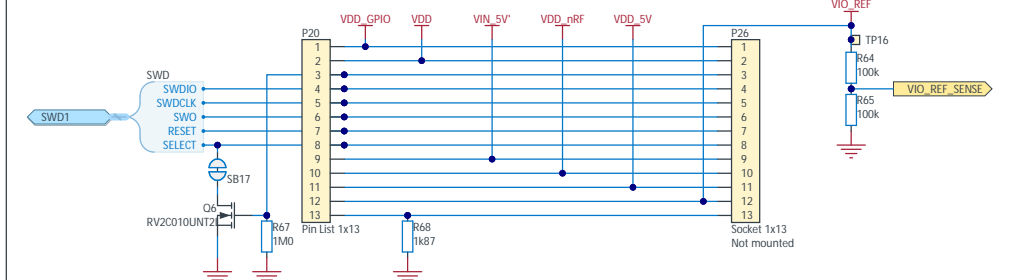
Interface connectors



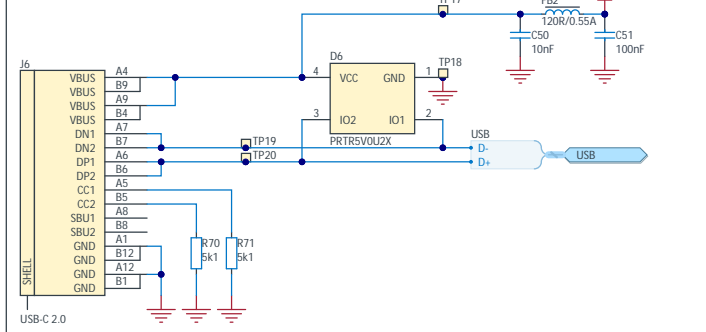
SIM card, eSIM and selection switch



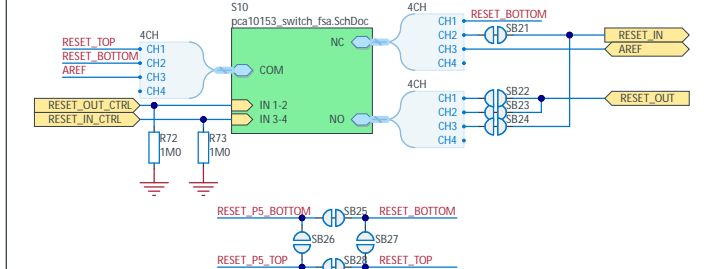
Shield debug and current measurement connector



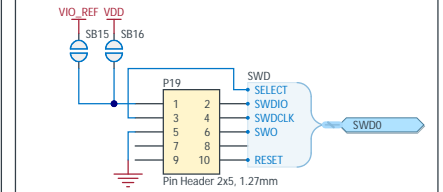
USB connector



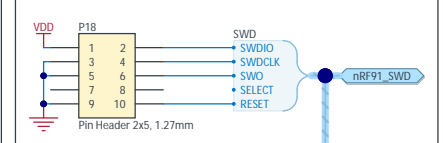
RESET config



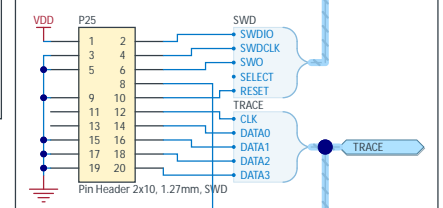
Debug OUT connector



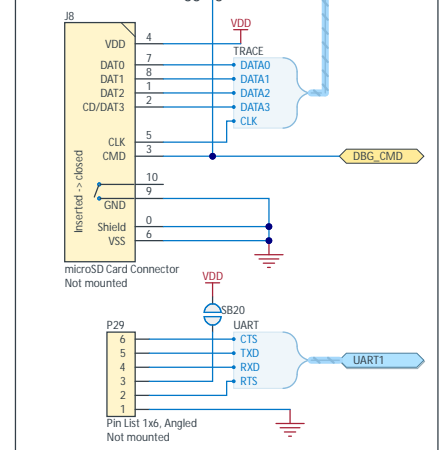
Debug IN connector



Trace connector



Nordic internal debugging interface



Title
nRF9161 Development Kit - Connectors

Size
A3

PCB Assembly Number
PCA10153

Date: 14/04/2023

File: pca10153_connectors.SchDoc

Classification: CONFIDENTIAL

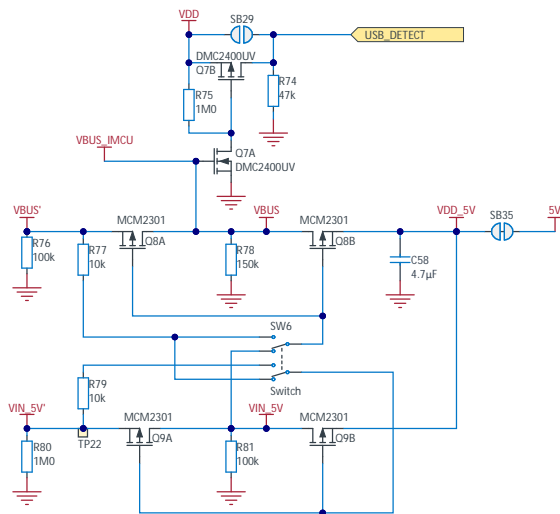
Revision
0.9.0

Sheet 7 of 10

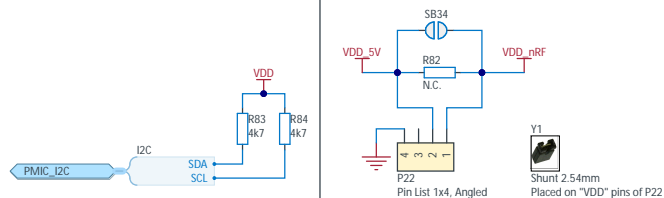
Drawn By: RUBRK001



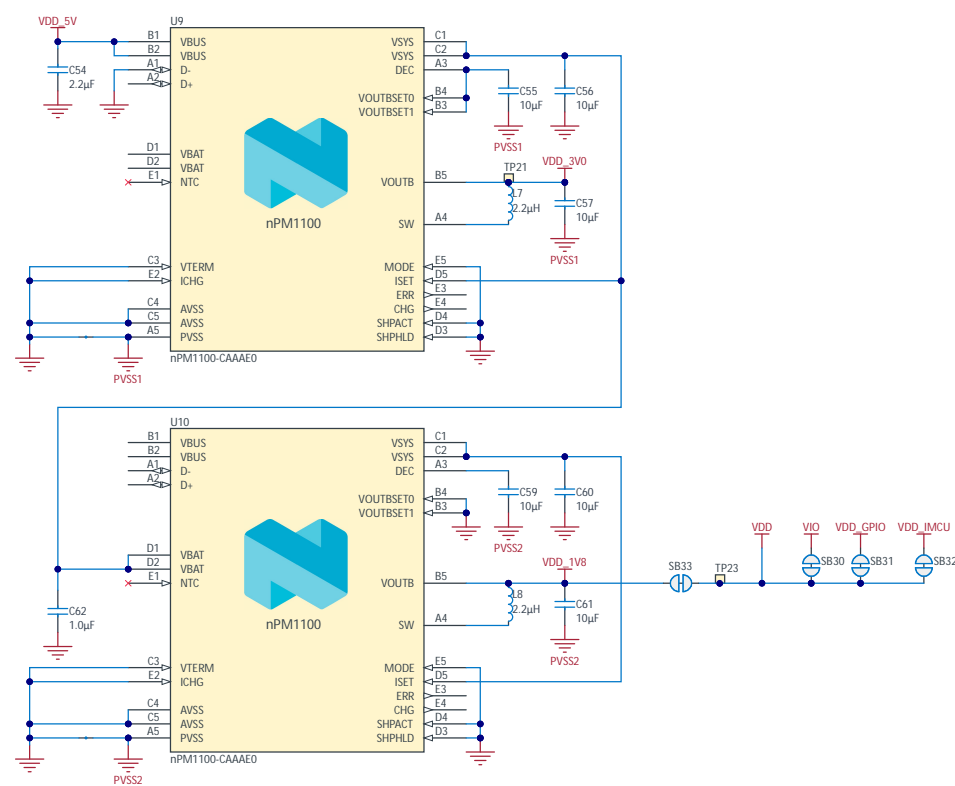
Power input selection and power switch



nRF91 VDD current measurement




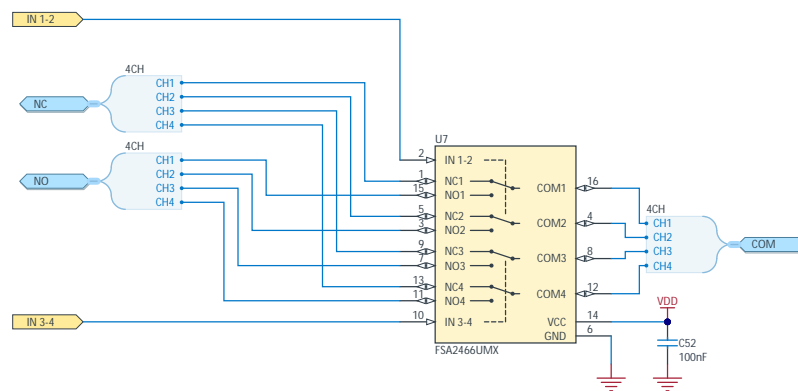
VDD voltage regulators

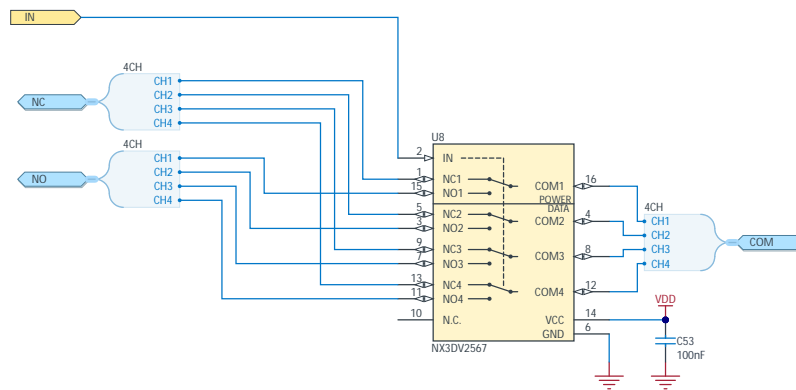


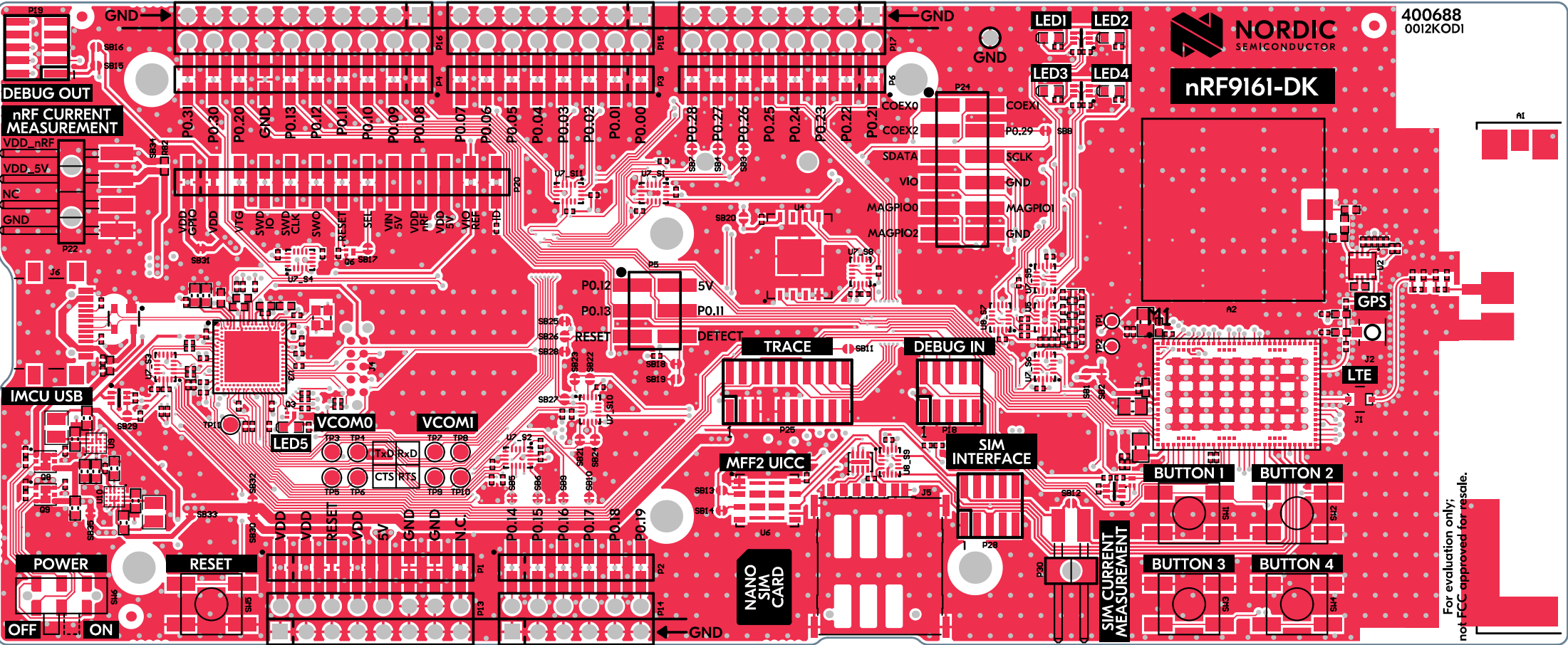
Instrument ground

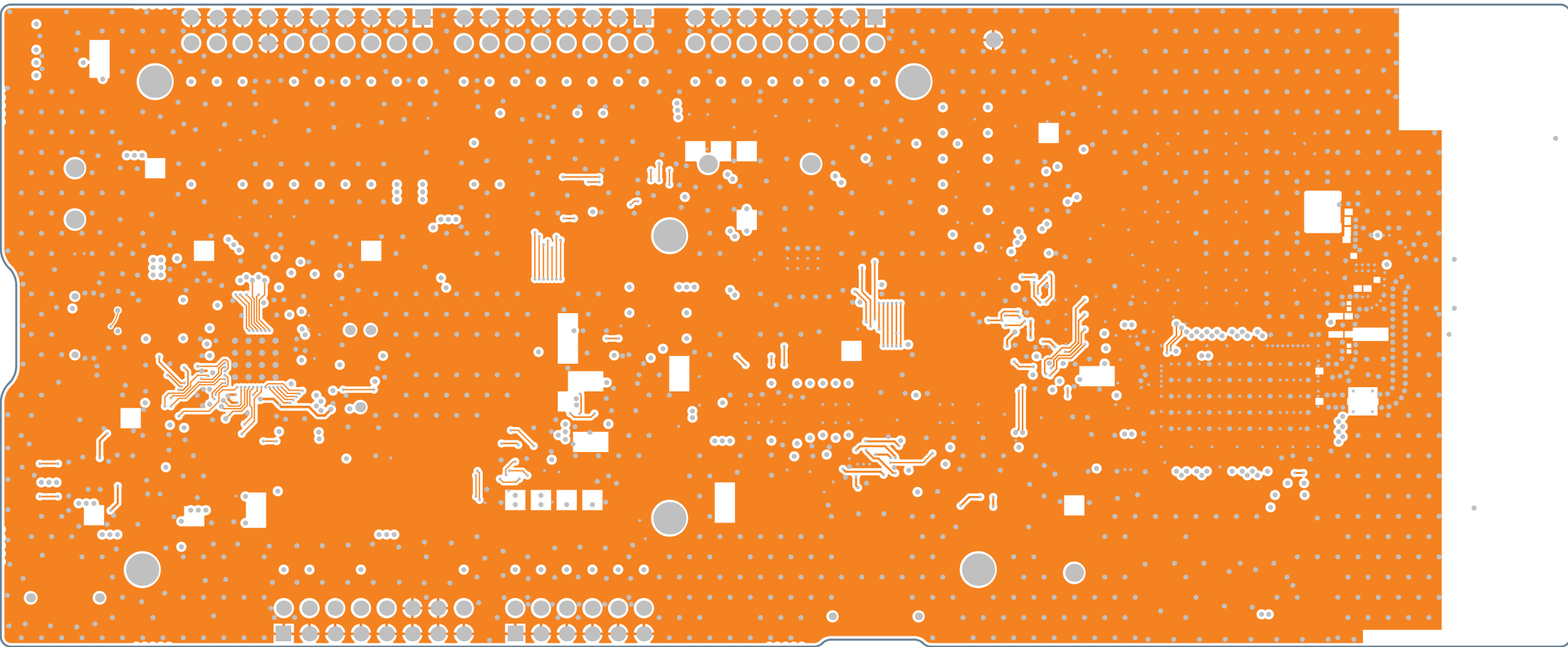


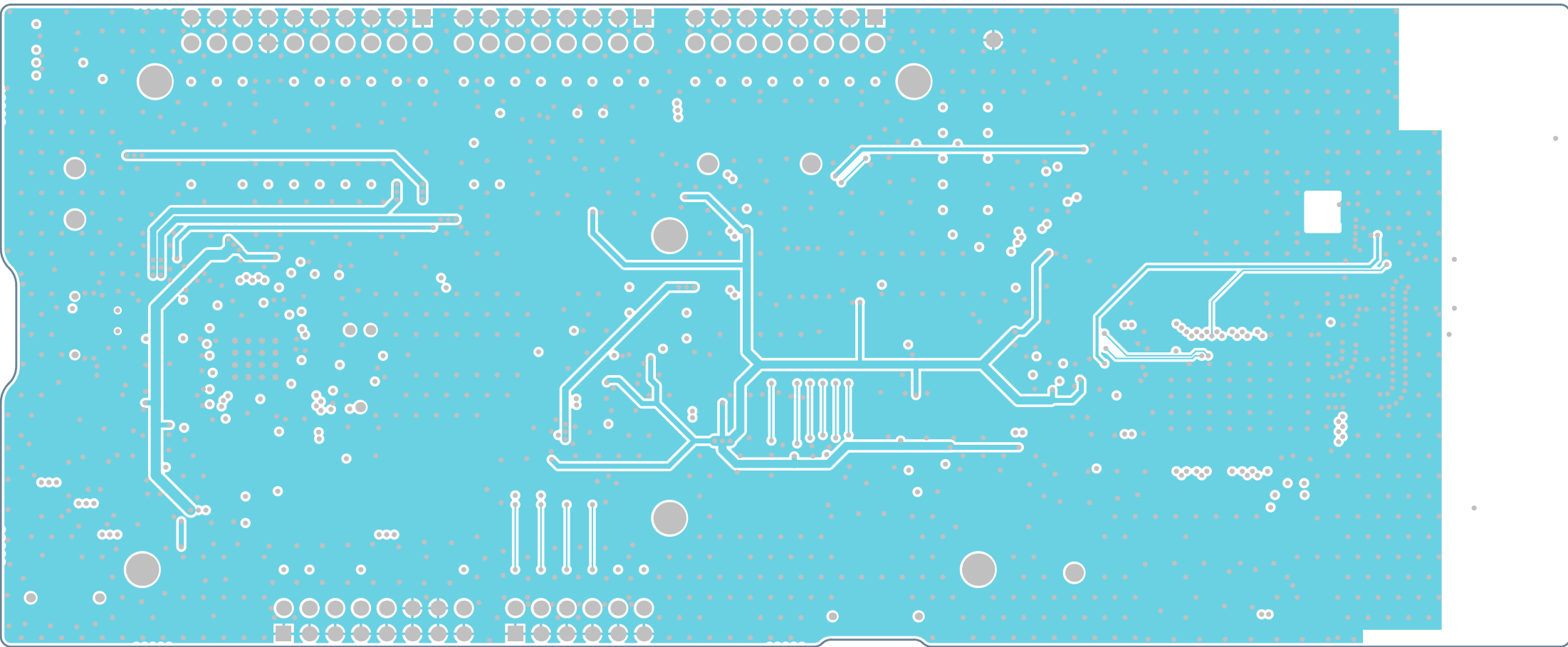
Title nRF9161 Development Kit - Power Supply		
Size A3	PCB Assembly Number PCA10153 Revision 0.9.0	
Date: 14/04/2023		Sheet 8 of 10
File: pca10153_power_supply_SchDoc		Drawn By: RUBRK/D01
Classification: CONFIDENTIAL		

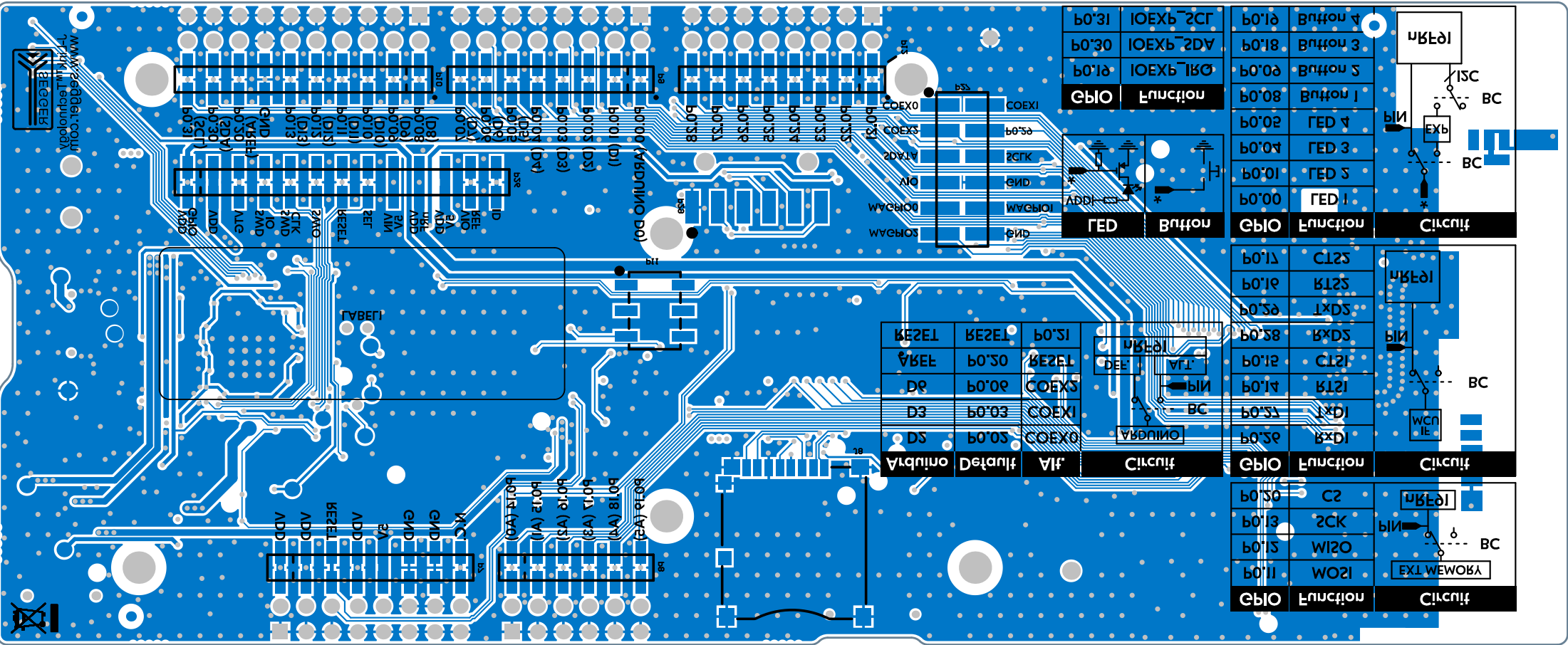








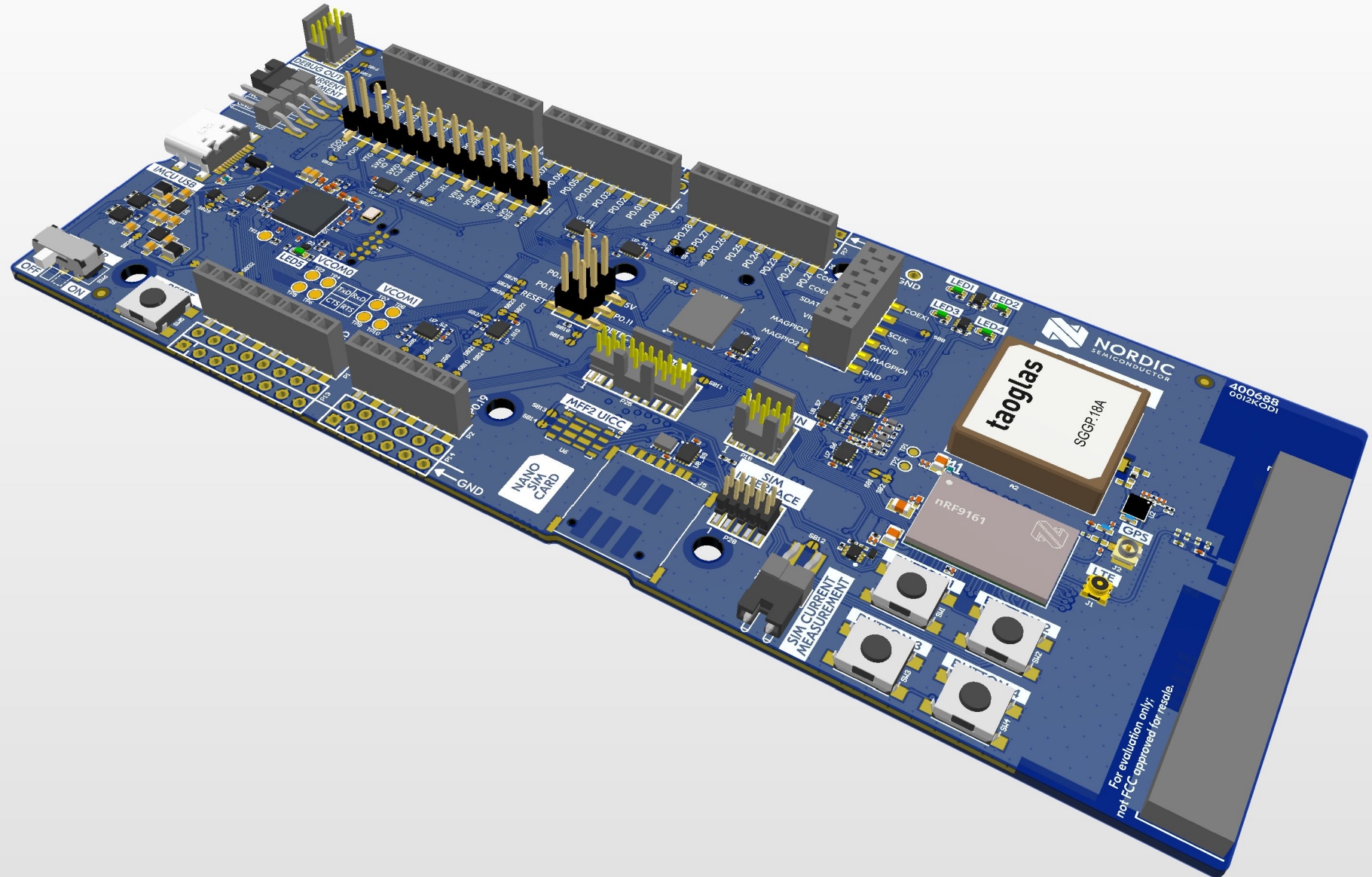


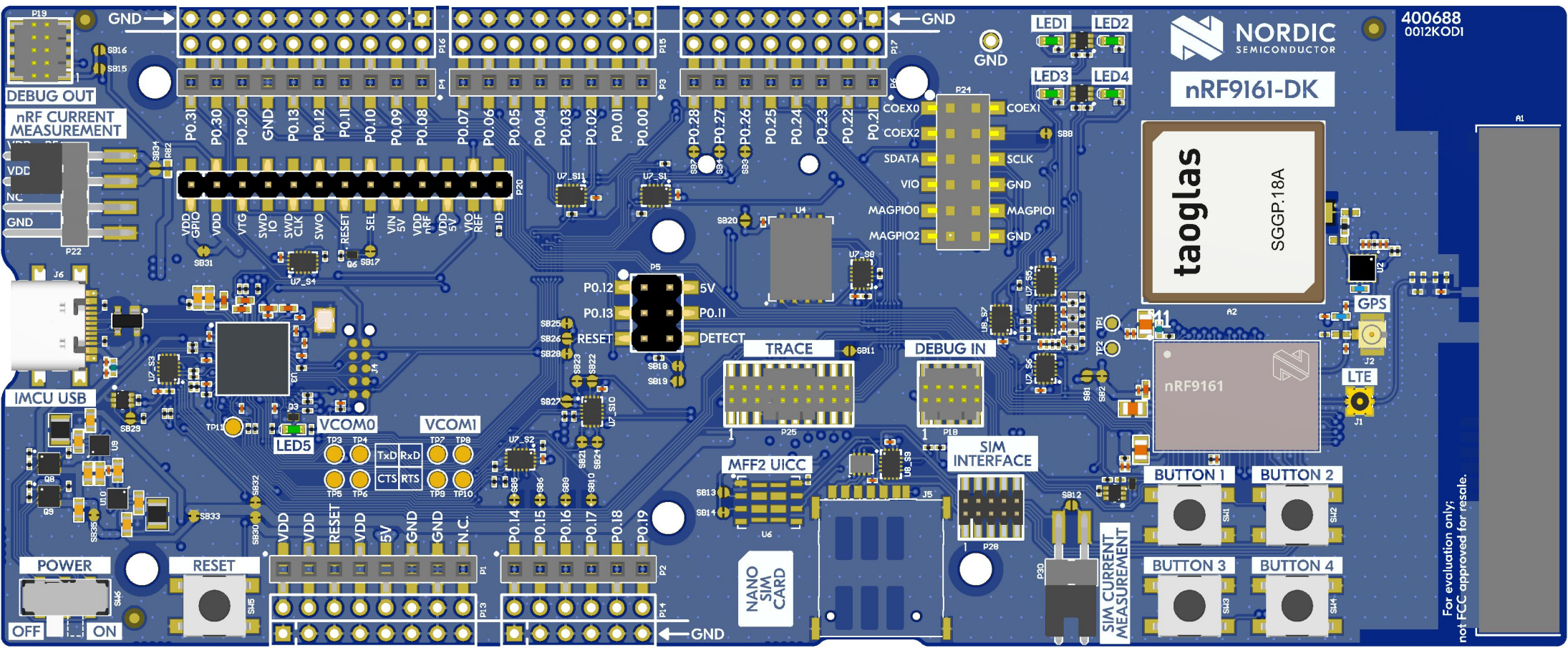


WWW.2EEDER.COM
T2EEDER Technology



b0'31	IOEXB_2CG	b0'1a	Button 4	
b0'30	IOEXB_2DA	b0'18	Button 3	
b0'1a	IOEXB_1B0	b0'0a	Button 2	
GPIO	Function	b0'08	Button 1	
b0'02	GED 4	b0'02	GED 4	
b0'04	GED 3	b0'04	GED 3	
b0'01	GED 2	b0'01	GED 2	
b0'00	GED 1	b0'00	GED 1	
b0'12	C12S	b0'1e	K12S	
b0'3a	1XD3	b0'38	BXD3	
b0'1e	C12I	b0'1e	K12I	
b0'32	1XD1	b0'3e	BXD1	
b0'30	C2	b0'13	2CK	
b0'13	W120	b0'13	W120	
b0'11	W021	b0'11	W021	
GPIO	Function	GPIO	Function	





NORDIC
SEMICONDUCTOR

nRF9161-DK

taoglas
SGGP.18A

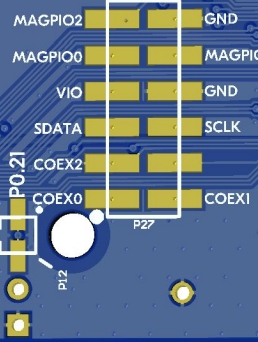
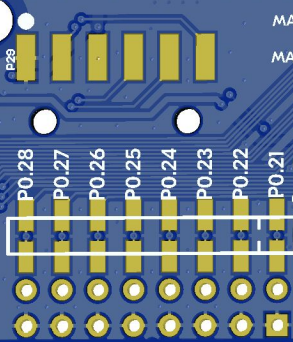
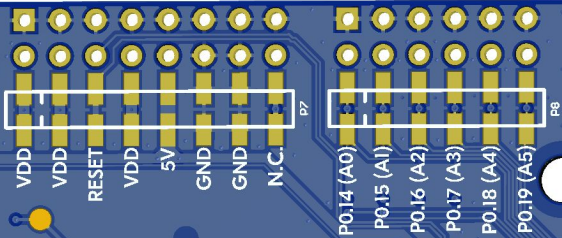
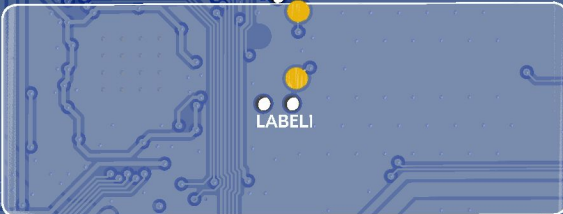
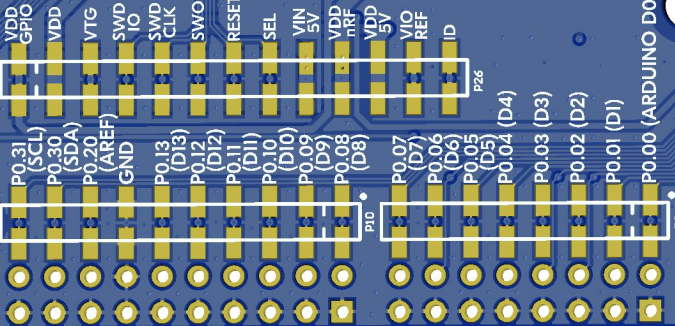
nRF9161

400688
0012KODI

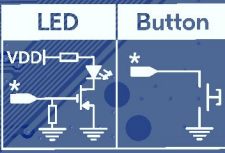
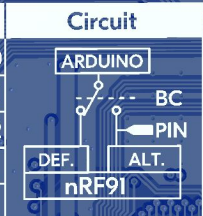
For evaluation only;
not FCC approved for resale.



J-Link™ Technology



Arduino	Default	
D2		COEX0
D3		COEX1
D6	P0.06	COEX2
AREF	P0.20	RESET
RESET	RESET	



GPIO	Function
	IOEXP_IRQ
	IOEXP_SDA
	IOEXP_SCL

GPIO	Function	Circuit
P0.11	MOSI	
P0.12	MISO	
	SCK	
	CS	

GPIO	Function	Circuit
	RxD1	
	TxD1	
	RTS1	
	CTS1	
	RxD2	
	TxD2	
	RTS2	
P0.17	CTS2	

GPIO	Function	Circuit
P0.00	LED 1	
P0.01	LED 2	
	LED 3	
	LED 4	
P0.05	Button 1	
P0.08	Button 2	
P0.09	Button 3	
P0.18	Button 4	