


# Nordic Semiconductor ASA

## nRF5340 Bluetooth Low Energy/ANT/802.15.4/2.4GHz RF Development Board (PCA10095)

Sheet 1:	Cover
Sheet 2:	nRF Radio
Sheet 3:	Interface MCU
Sheet 4:	Miscellaneous
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 harmless warnings and/or error violation conditions that are detected when the schematic project is compiled.

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PCA10095 - Cover			
Size A3	Project Number 4465	Revision 2.0.0	
Date: 15.04.2021		Sheet 1 of 6	
File: pca10095_sheet1_cover.SchDoc		Drawn By: GETR	

A

B

C

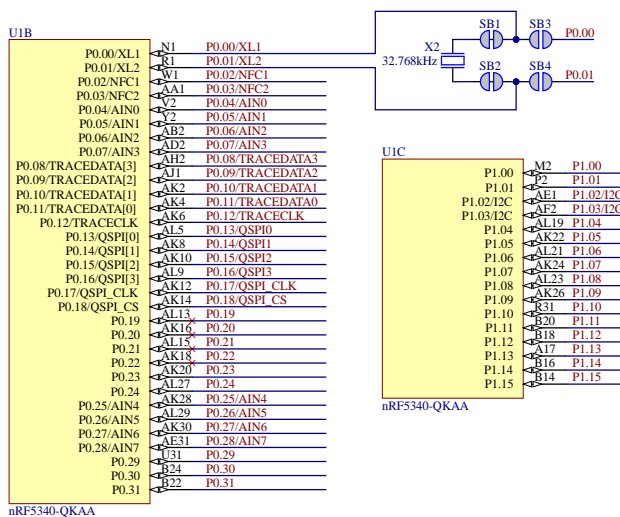
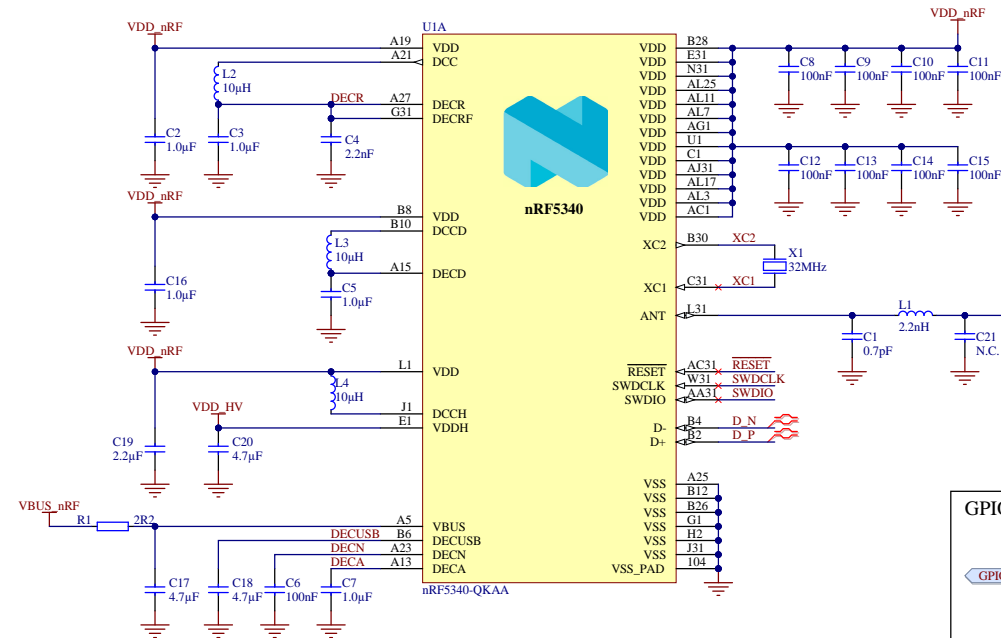
D

A

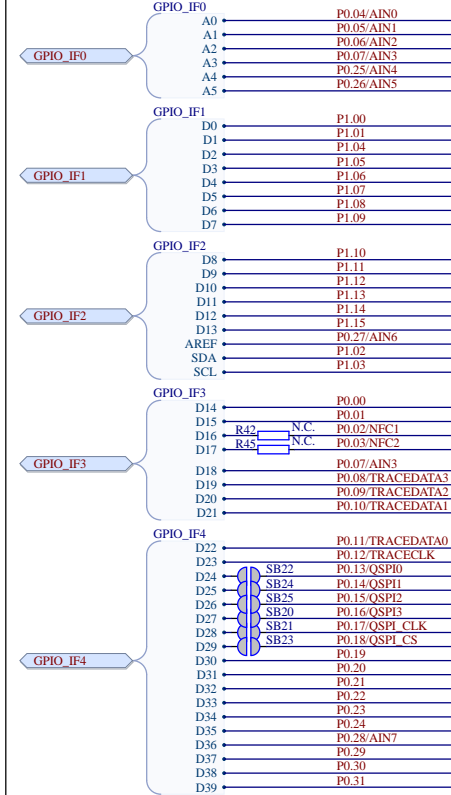
B

C

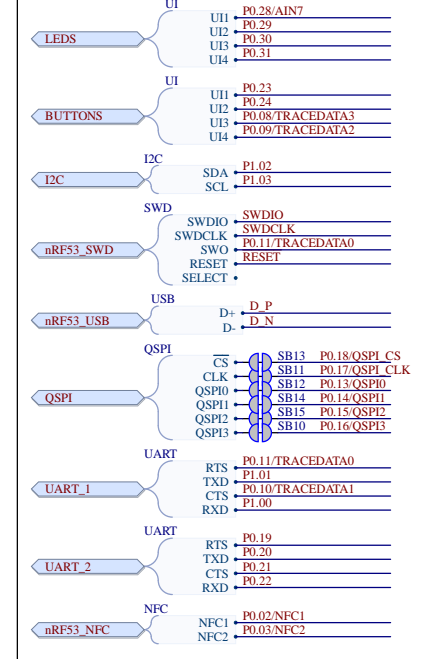
D



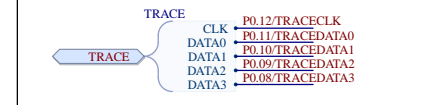
### GPIO interface



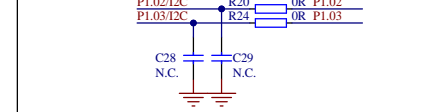
### On-board interface



### Trace



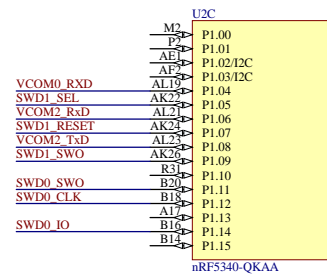
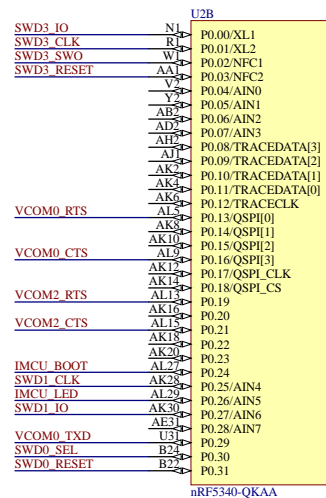
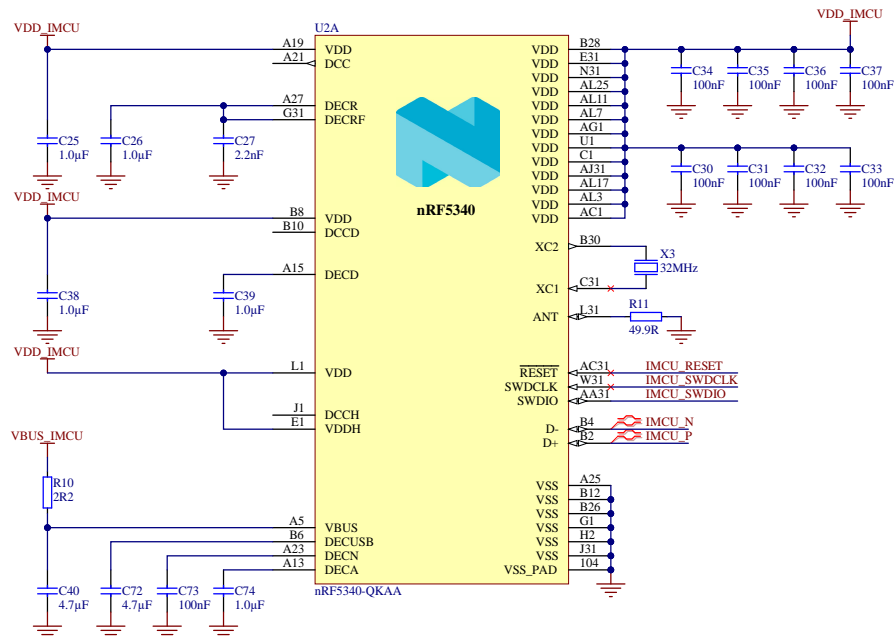
### I2C



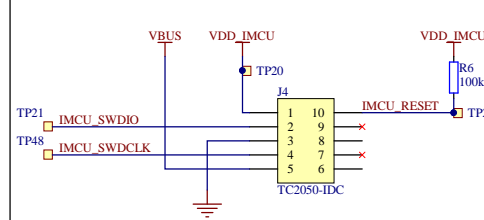
### PCA10095 - nRF5340 MCU

Size	Project Number	Revision	
A3	4465	2.0.0	
Date: 16.04.2021	Sheet 2 of 6	Drawn By: GETR	
File: pca10095_sheet2_nrf5340_mcu.SchDoc			

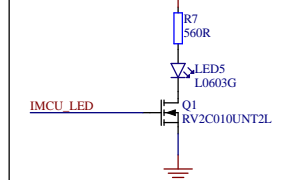
# Interface MCU



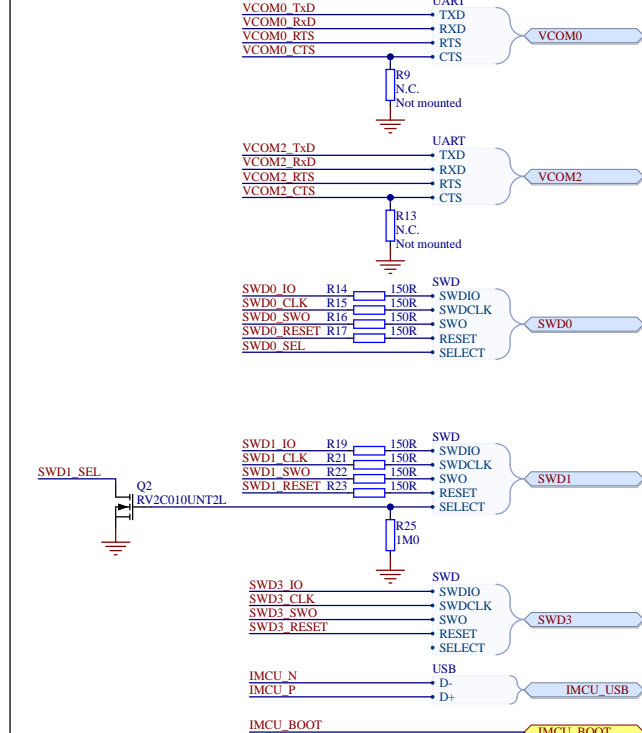
# Interface MCU Programming Connector



# LED



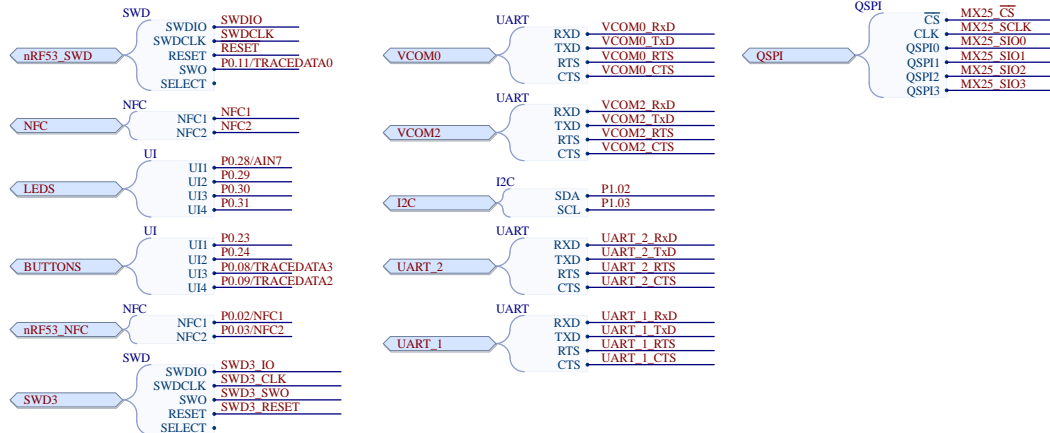
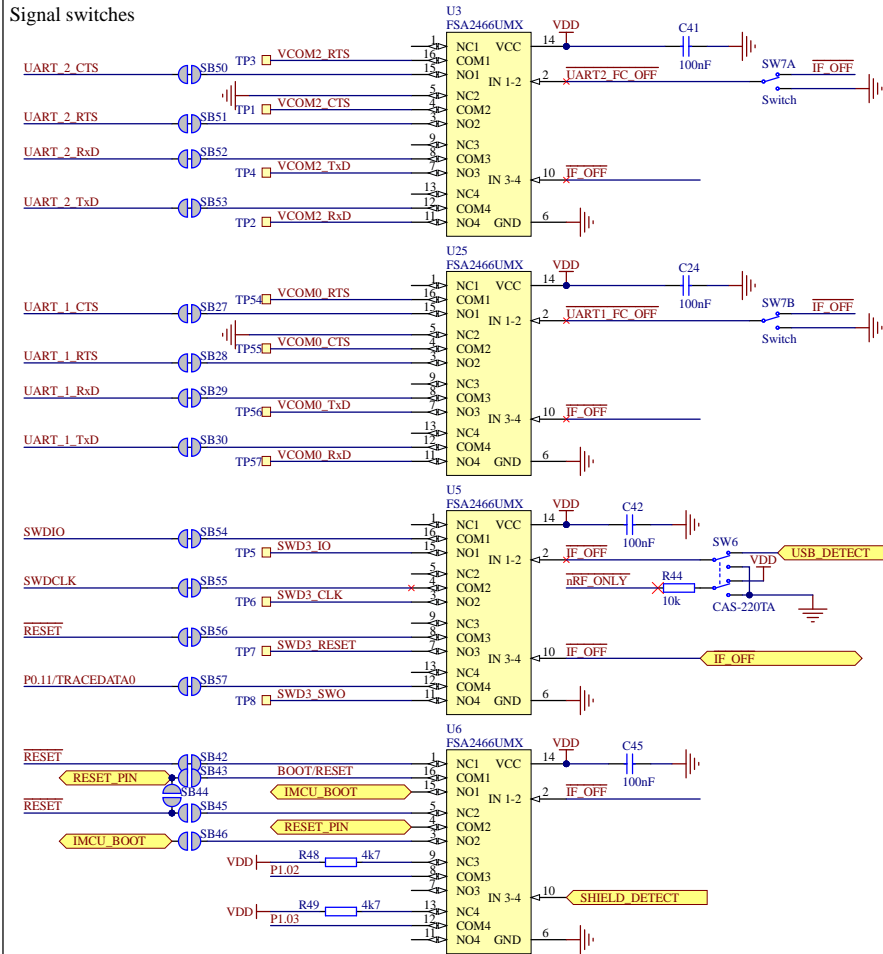
# Ports



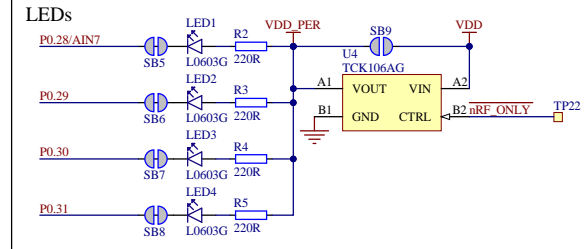
# PCA10095 - Interface MCU

Size	Project Number	Revision	
A3	4465	2.0.0	
Date: 03.05.2021	Sheet 3 of 6	Drawn By: GETR	

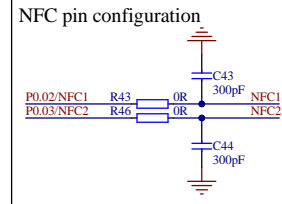
# Signal switches



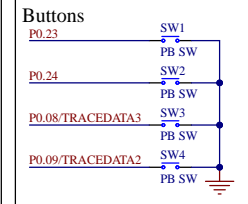
# LEDs



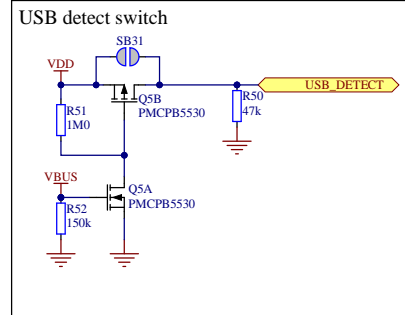
# NFC pin configuration



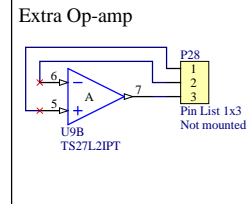
# Buttons



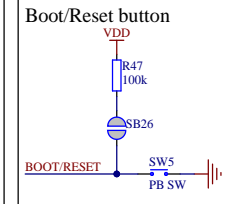
# USB detect switch



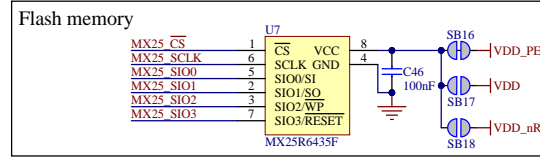
# Extra Op-amp



# Boot/Reset button



# Flash memory



# PCA10095 - Miscellaneous

Size	Project Number	Revision
A3	4465	2.0.0
Date: 03.05.2021	Sheet 4 of 6	Drawn By: GETR
File: pca10095_sheet4_misc_SchDoc		

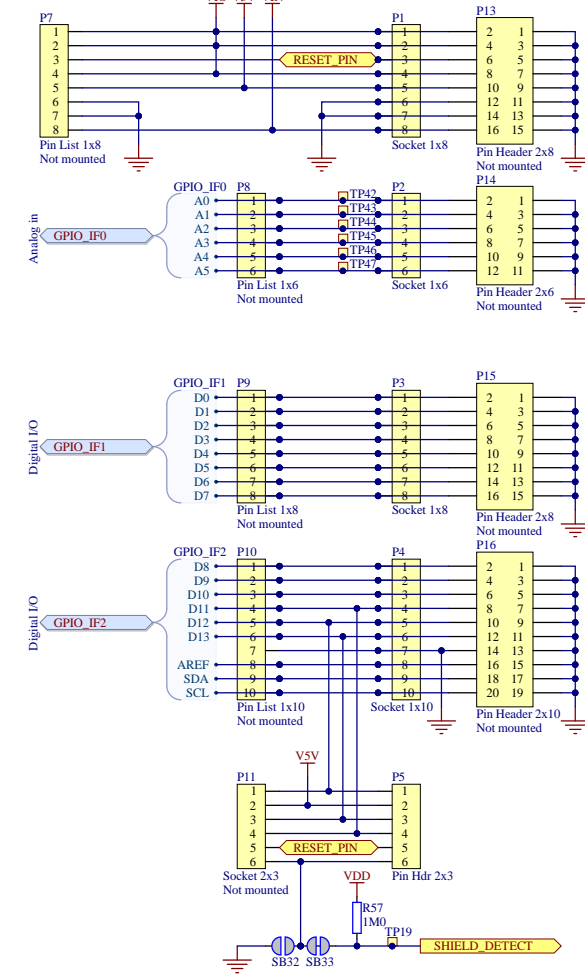




## Arduino Interface Connectors

Bottom Connectors

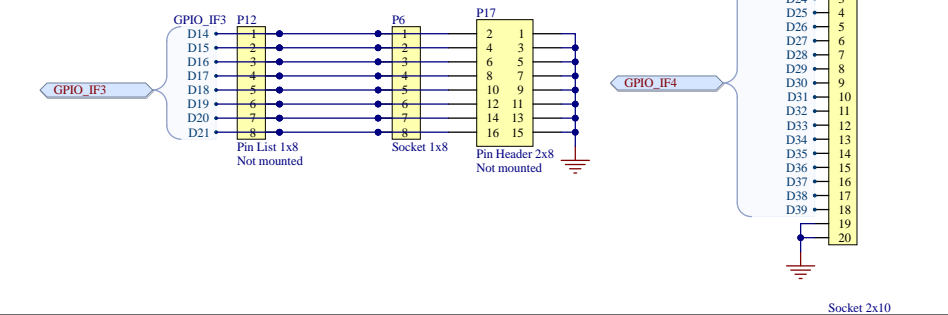
Top connectors



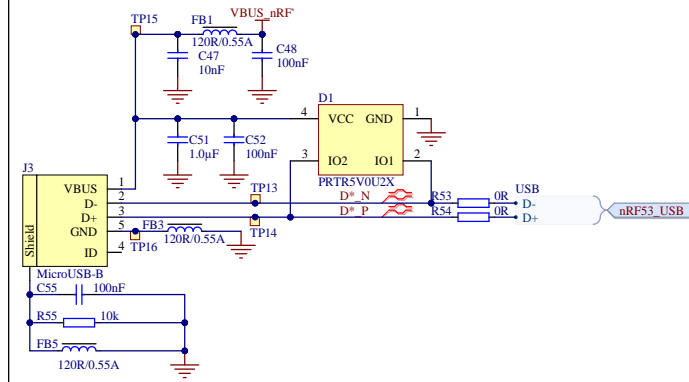
## Auxiliary Connectors

Bottom Connectors

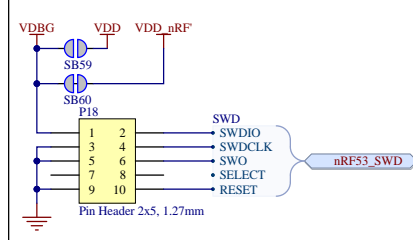
Top connectors



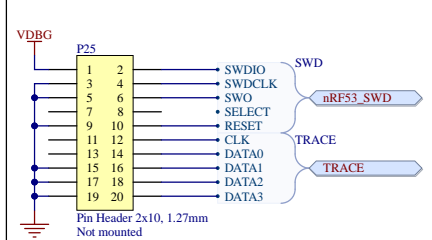
## nRF USB Connector



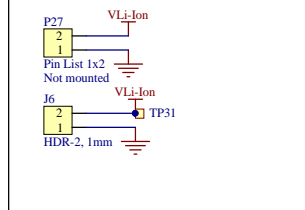
## Debug IN Connector



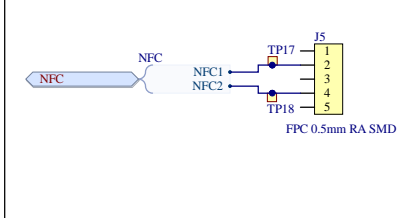
## Trace connector



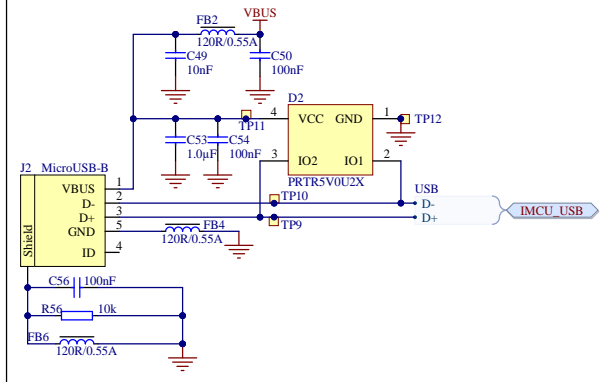
## Li-ion connector



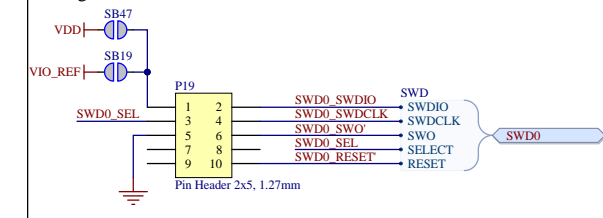
## NFC Antenna Connector



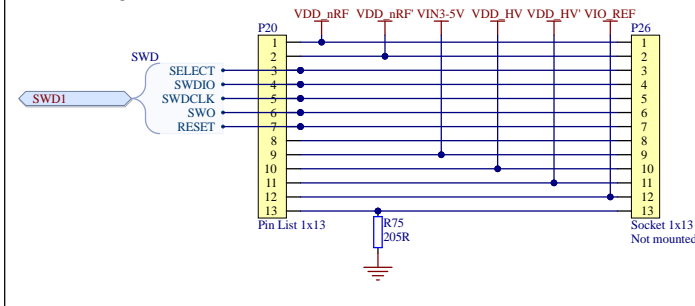
## Interface MCU USB Connector



## Debug OUT Connector



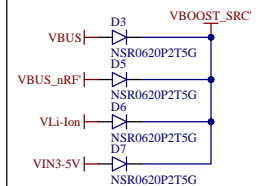
## Shield Debug and Current measurement Connector



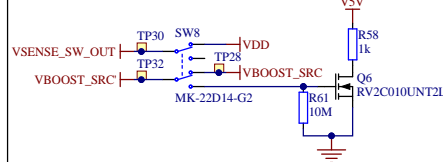
## PCA10095 - Connectors

Size	Project Number	Revision	
A3	4465	2.0.0	
Date: 15.04.2021	Sheet 5 of 6	Drawn By: GETR	
File: pca10095_sheet5_connectors.SchDoc			

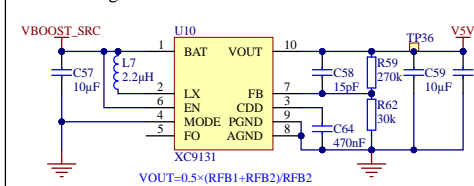
# Power input, reverse protection



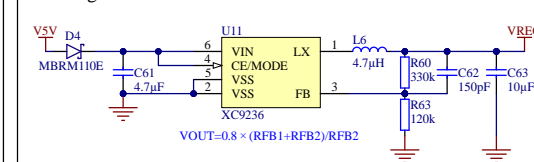
# Power switch



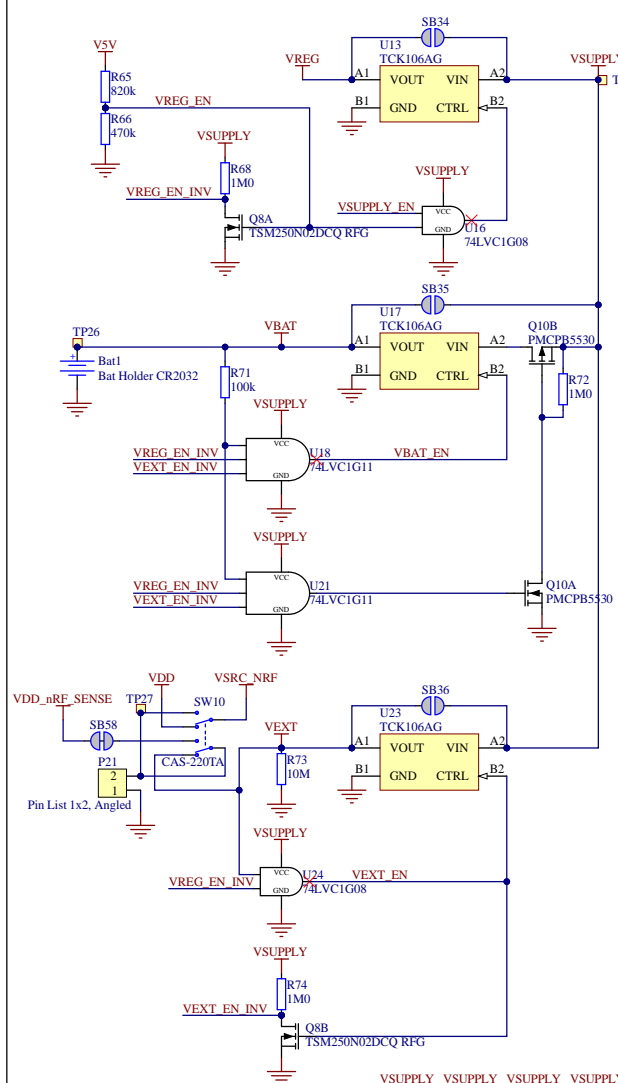
# 5V Boost regulator



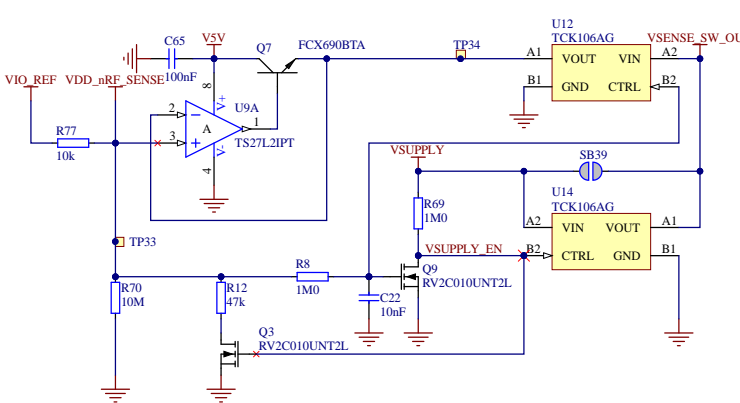
# Buck regulator for VDD



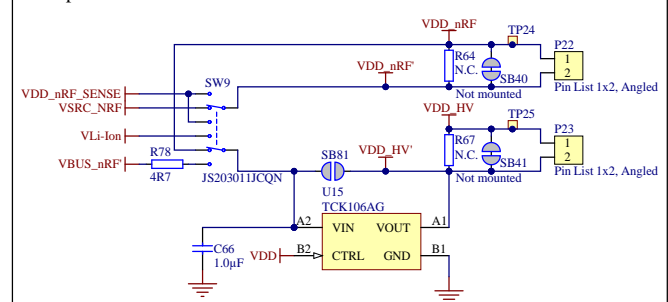
# Power sources and switches



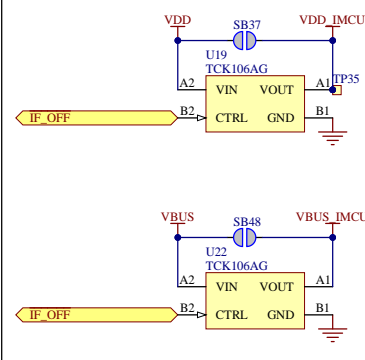
# VDD\_nRF sense buffer and switch



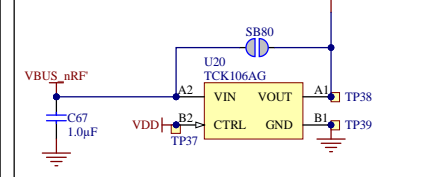
# nRF power source select and current measurement



# Interface MCU power switch



# VBUS\_nRF switch



Instrument ground



# PCA10095 - Power Supply

Size A3	Project Number 4465	Revision 2.0.0
Date: 16.04.2021	Sheet 6 of 6	Drawn By: GETR
File: pca10095_sheet6_power_supply_SchDoc		



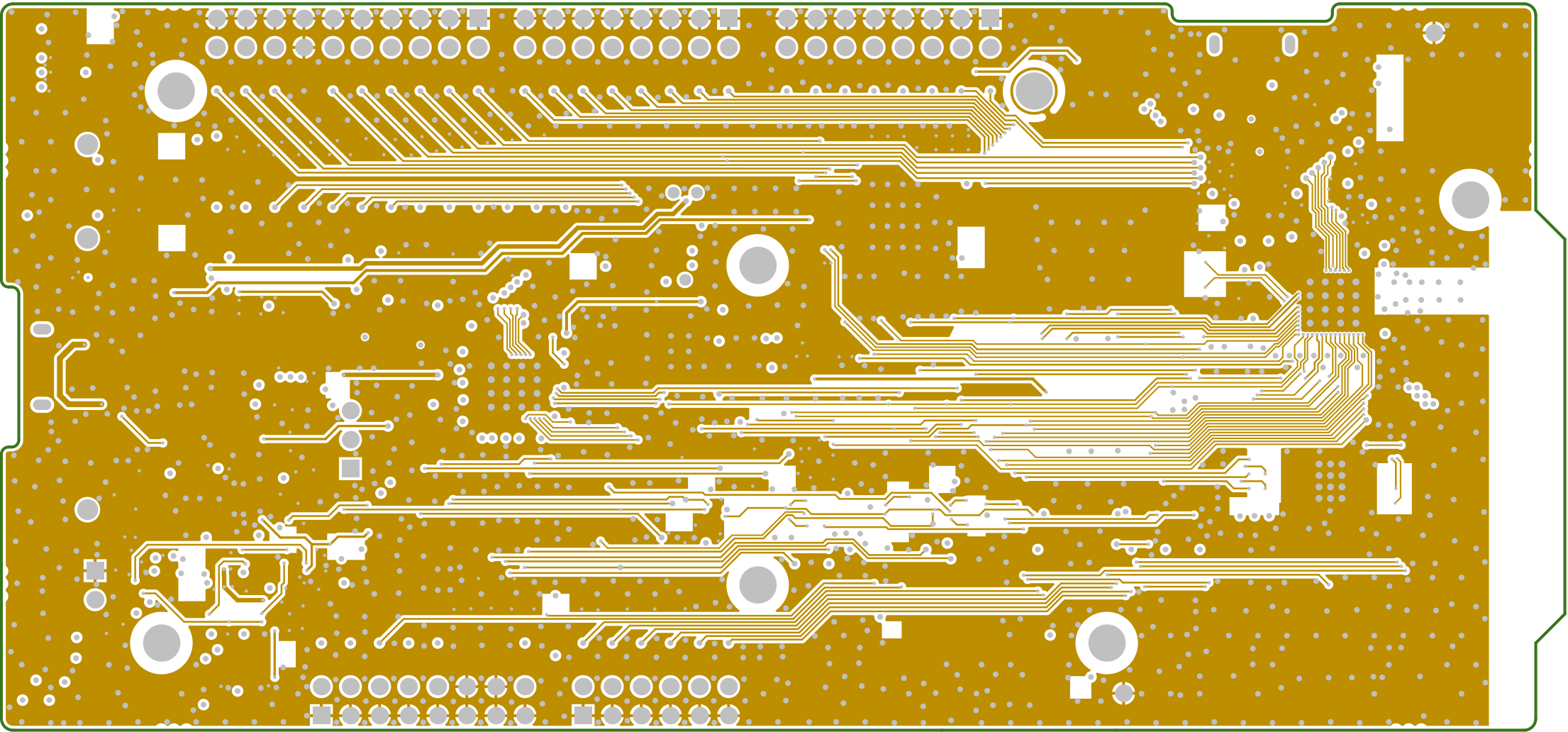


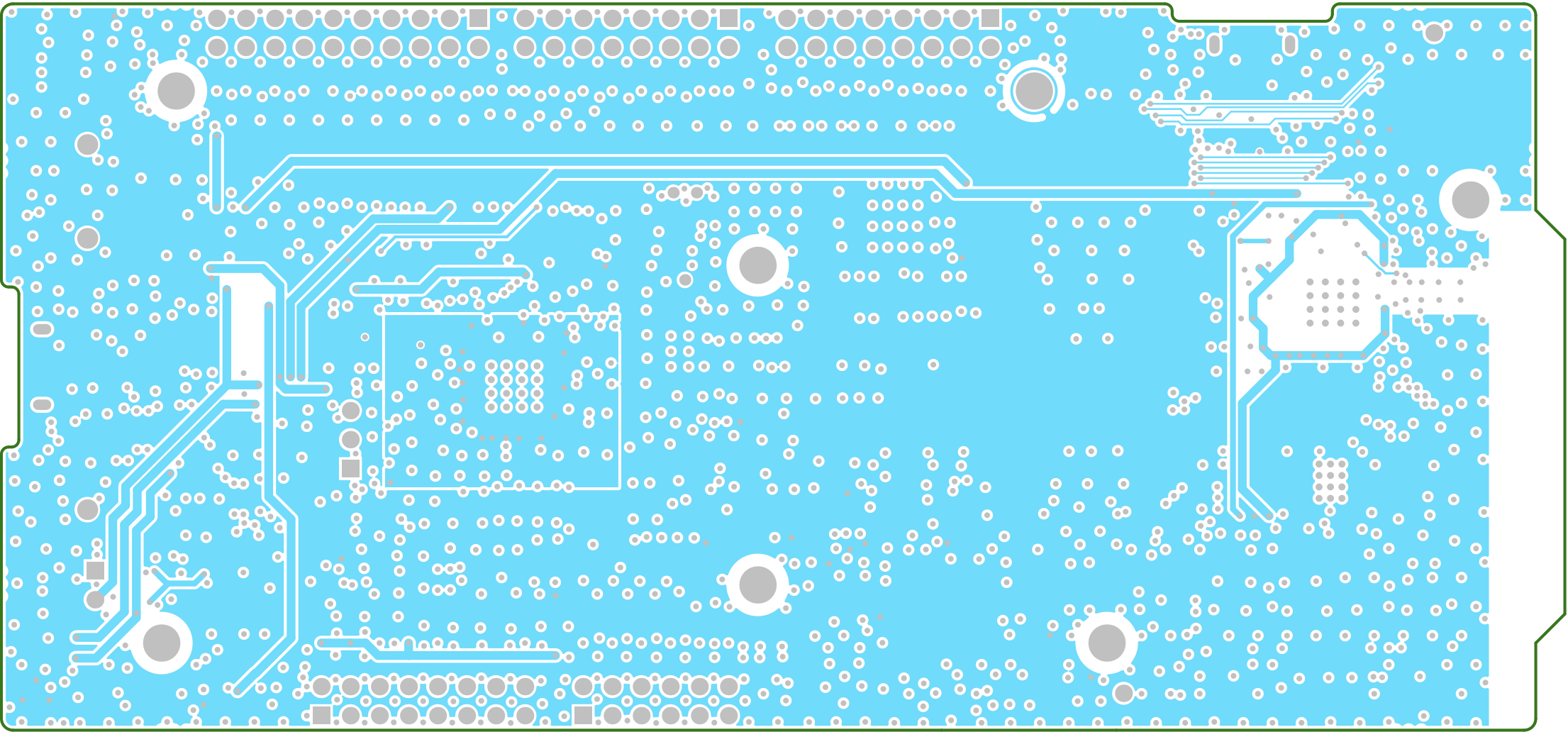
nRF5340-DK

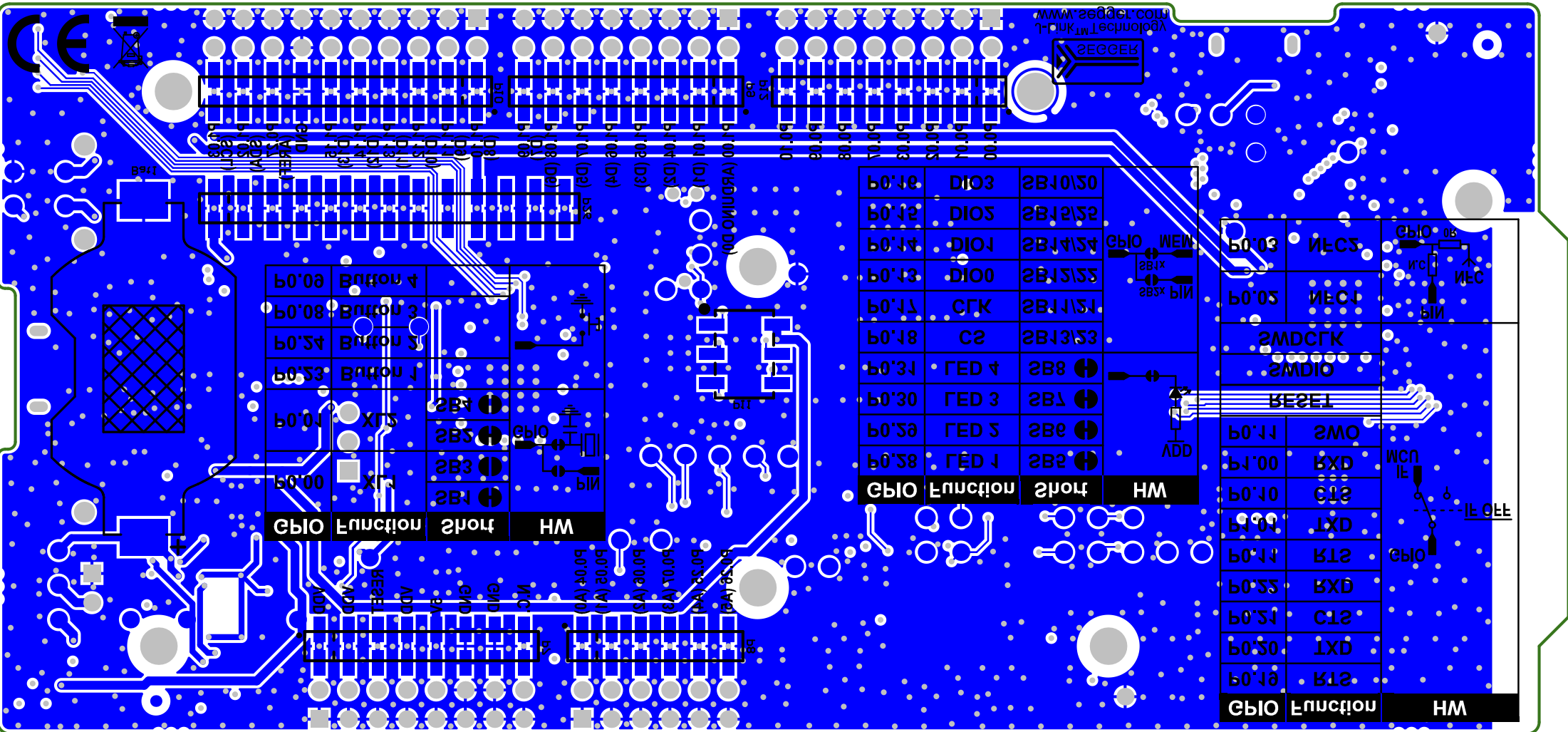


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SEMICONDUCTOR

[www.nordicsemi.com](http://www.nordicsemi.com)







www.2edget.com  
7-010K1M1ecpno100d1



P0'00	Button 4		
P0'08	Button 3		
P0'24	Button 2		
P0'32	Button 1		
P0'01	XLS	2B4	
P0'00	XLS	2B5	
P0'00		2B3	
P0'00		2B1	
GPIO	Function	Short	HW

P0'10	DIO3	2B10\30
P0'12	DIO5	2B12\32
P0'14	DIO4	2B14\34
P0'13	DIO0	2B13\33
P0'11	CLK	2B11\31
P0'18	C2	2B13\33
P0'34	LED 4	2B8
P0'30	LED 3	2B7
P0'30	LED 2	2B6
P0'38	LED 1	2B2
GPIO	Function	Short
		HW

P0'03	IFC3	
P0'05	IFC4	
	2MDCGK	
	2MDIO	
	BE2E1	
P0'11	2MO	
P1'00	FXD	
P0'10	C12	
P1'01	TXD	
P0'11	B12	
P0'33	FXD	
P0'34	C12	
P0'30	TXD	
P0'10	B12	
GPIO	Function	
		HW



