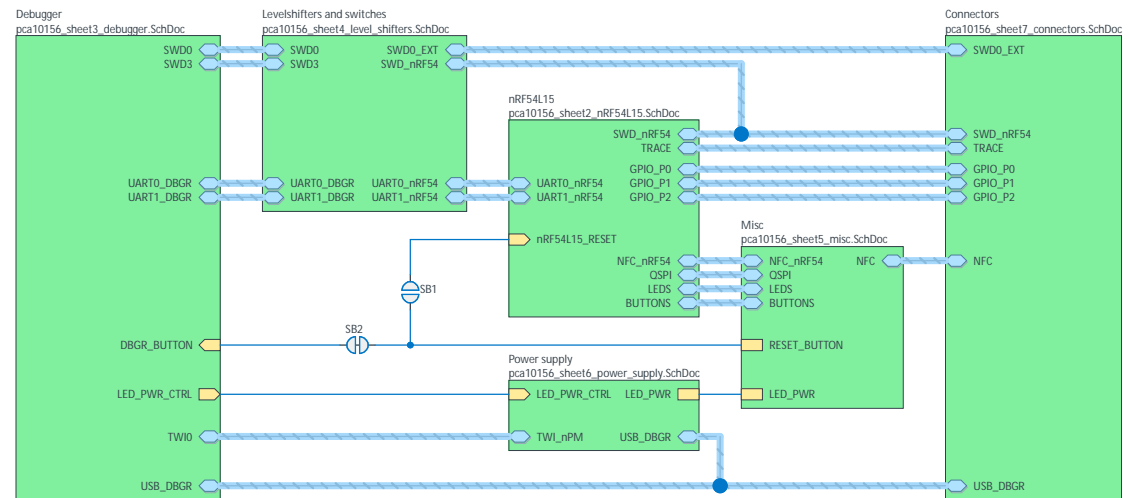


# Nordic Semiconductor ASA

## nRF54L15 Development Kit (PCA10156)

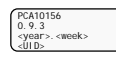
Sheet 1:	Connections
Sheet 2:	nRF54L15
Sheet 3:	Debugger
Sheet 4:	Level Shifters
Sheet 5:	Misc
Sheet 6:	Power Supply
Sheet 7:	Connectors



✗ 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.

Board fiducials

Logo's and markings



Title  
**nRF54L15-DK - Connections**

Size  
**A3**

PCB Assembly Number  
**PCA10156**

Revision  
**0.9.3**

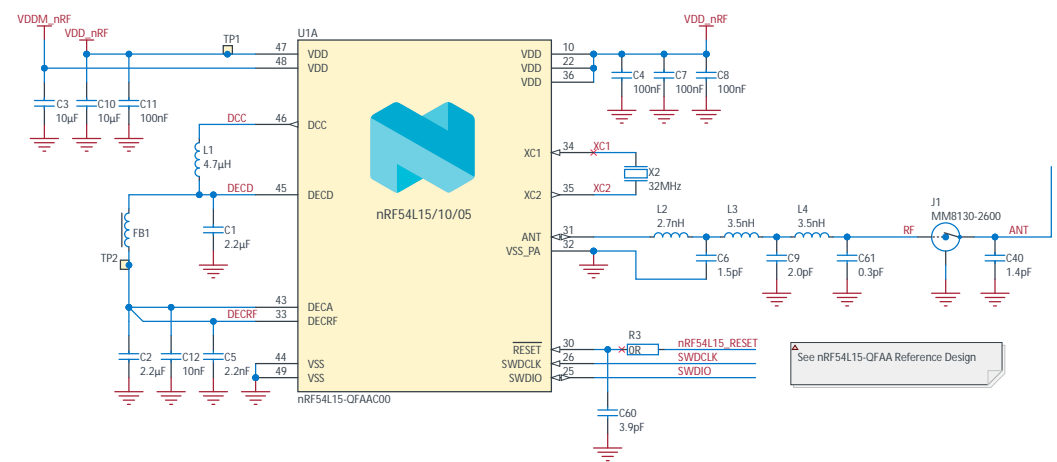
Date: 02.10.2024  
File: pca10156\_sheet1\_connections.SchDoc  
Classification: PUBLIC

Sheet 1 of 7  
Drawn By: STL

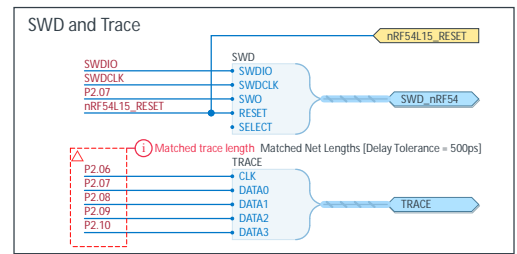
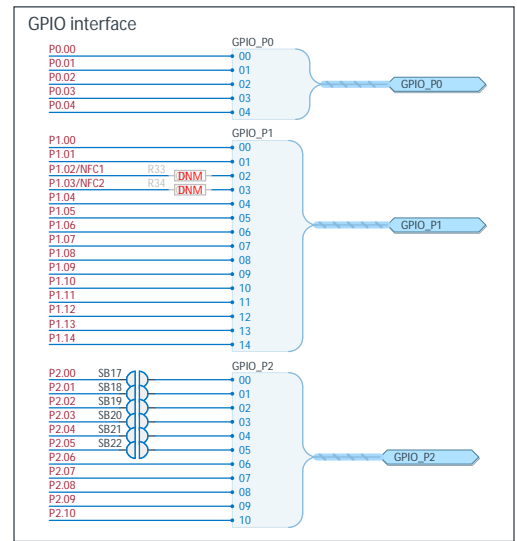
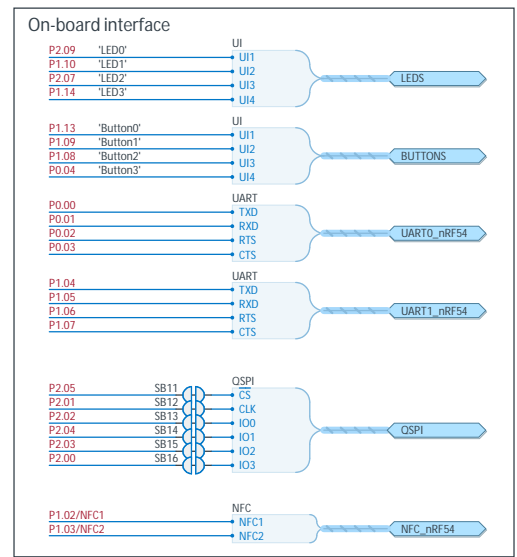
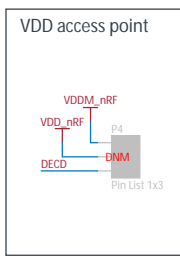
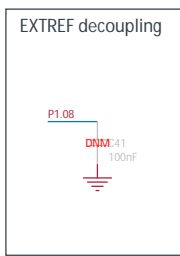
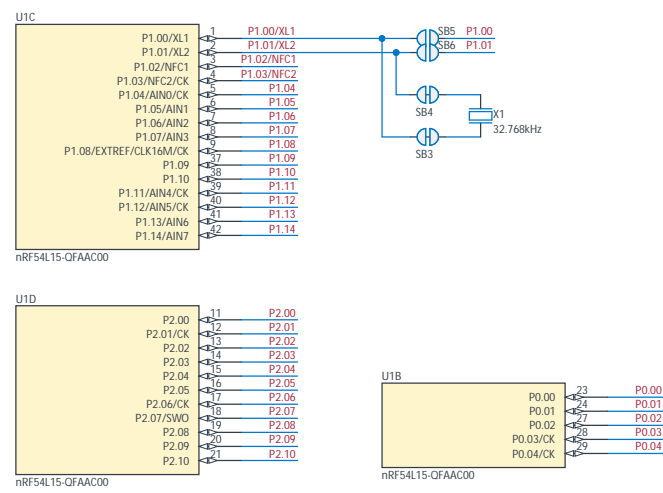


For this version of the DK, the VDDM pin provides the main power source to nRF54L15. This approach will not be used for any future designs.

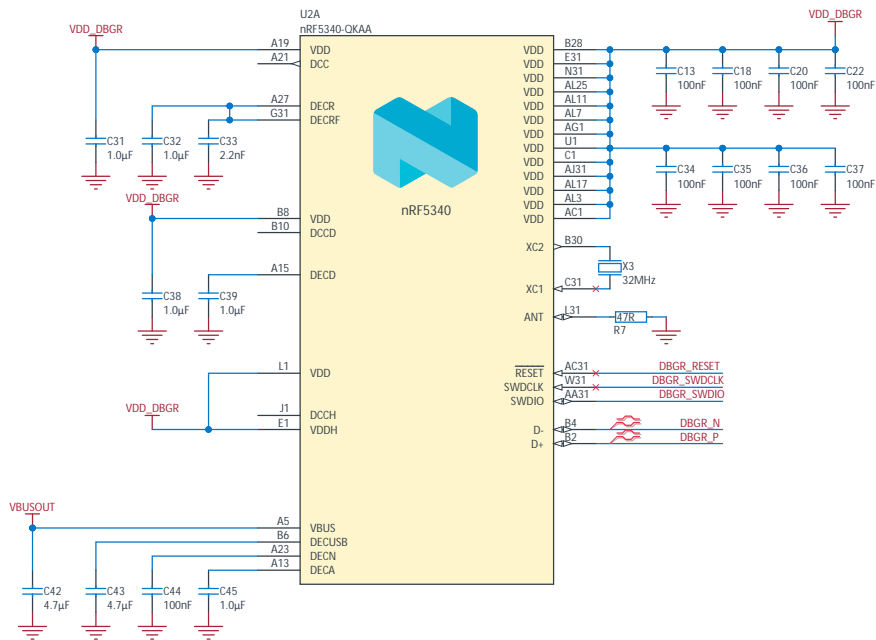
Future DK's and the latest reference design has the VDDM pin 48 renamed to VDD and shorted to VDD pin 47.



See nRF54L15-QFAA Reference Design

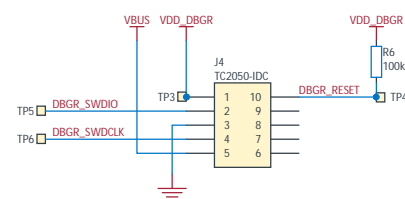


# Debugger

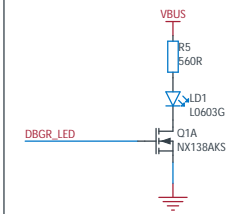


VDD\_DBG = VDDIO = 1.8 - 2.6V

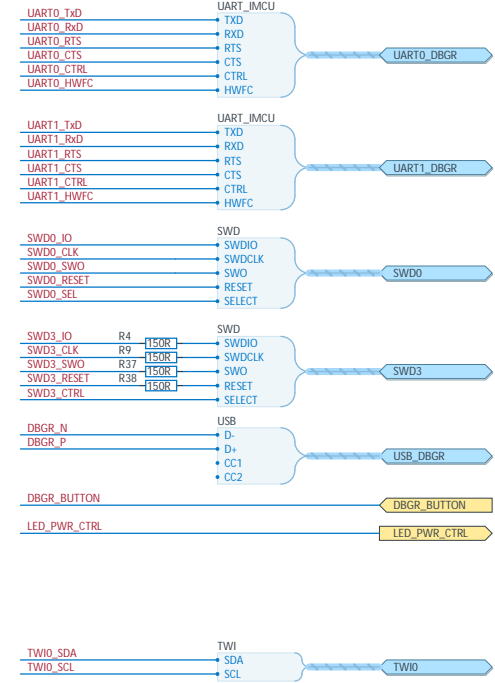
## Debugger Programming Connector




## LED



## Ports



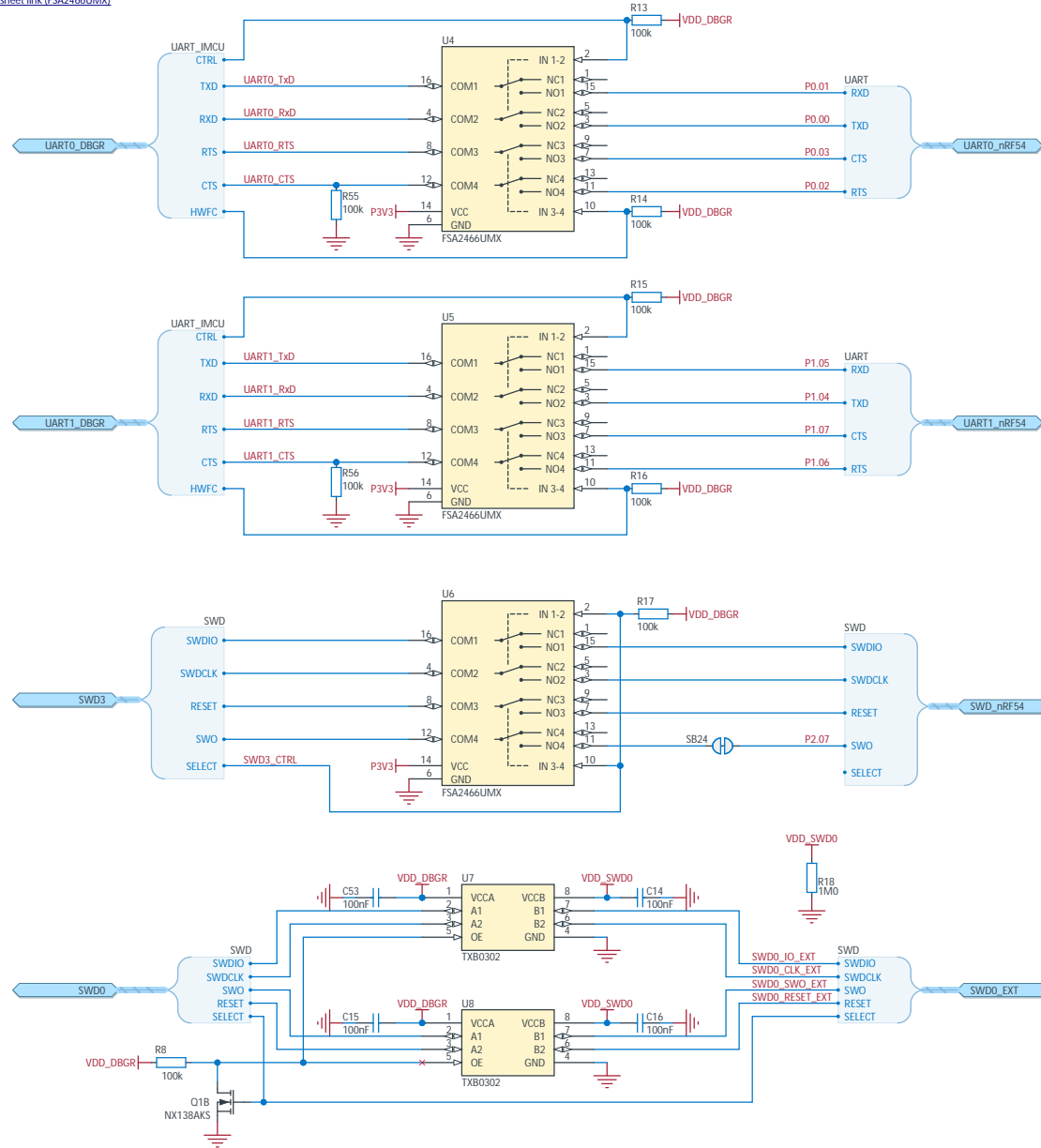
Title nRF54L15-DK - Debugger			
Size A3	PCB Assembly Number PCA10156	Revision 0.9.3	
Date: 02.10.2024		Sheet 3 of 7	
File: pca10156_sheet3_debugger.SchDoc		Drawn By: STL1	
Classification: PUBLIC			

FSA2466UMX:  
NC/NO terminal: 6pF, OFF  
21pF, ON

Flow control and interface control  
signal controlled by IMCU

## Level Shifters and switches

[Datasheet link \(FSA2466UMX\)](#)



Title  
nRF54L15-DK - Level Shifters

Size  
A3

PCB Assembly Number  
PCA10156

Revision  
0.9.3

Date: 02.10.2024  
File: pca10156-sheet4\_level\_shifters.SchDoc  
Classification: PUBLIC

Sheet 4 of 7  
Drawn By: STL1



A

B

C

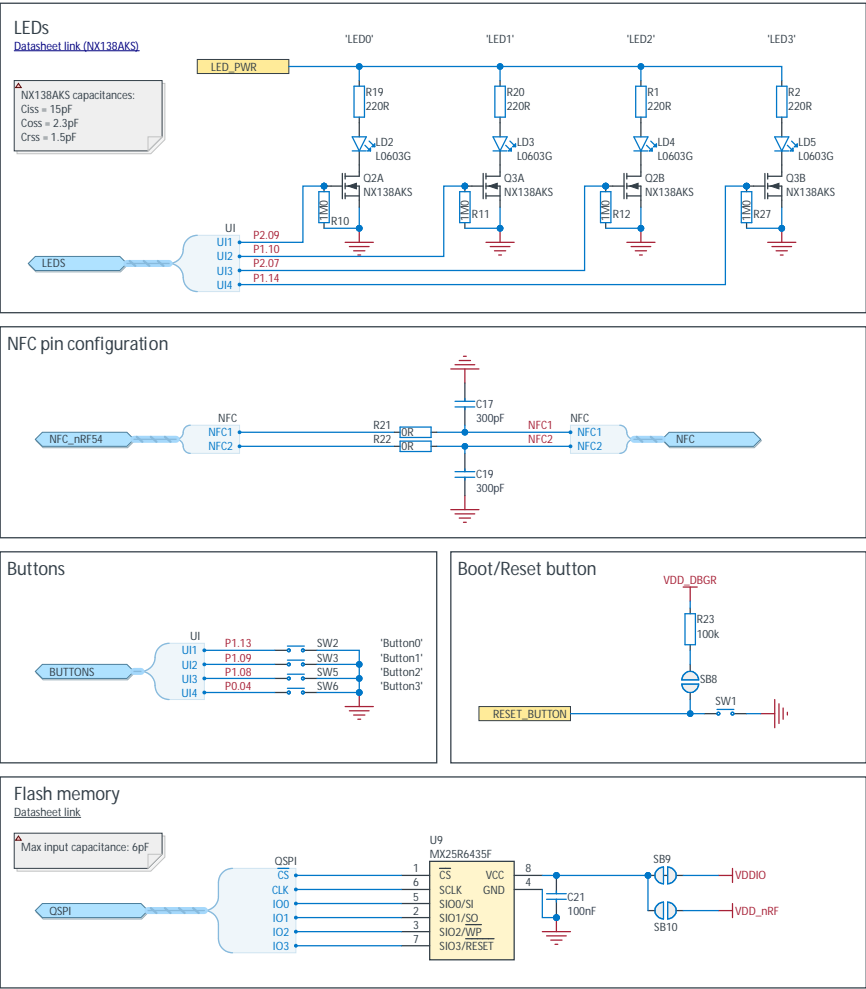
D

A

B

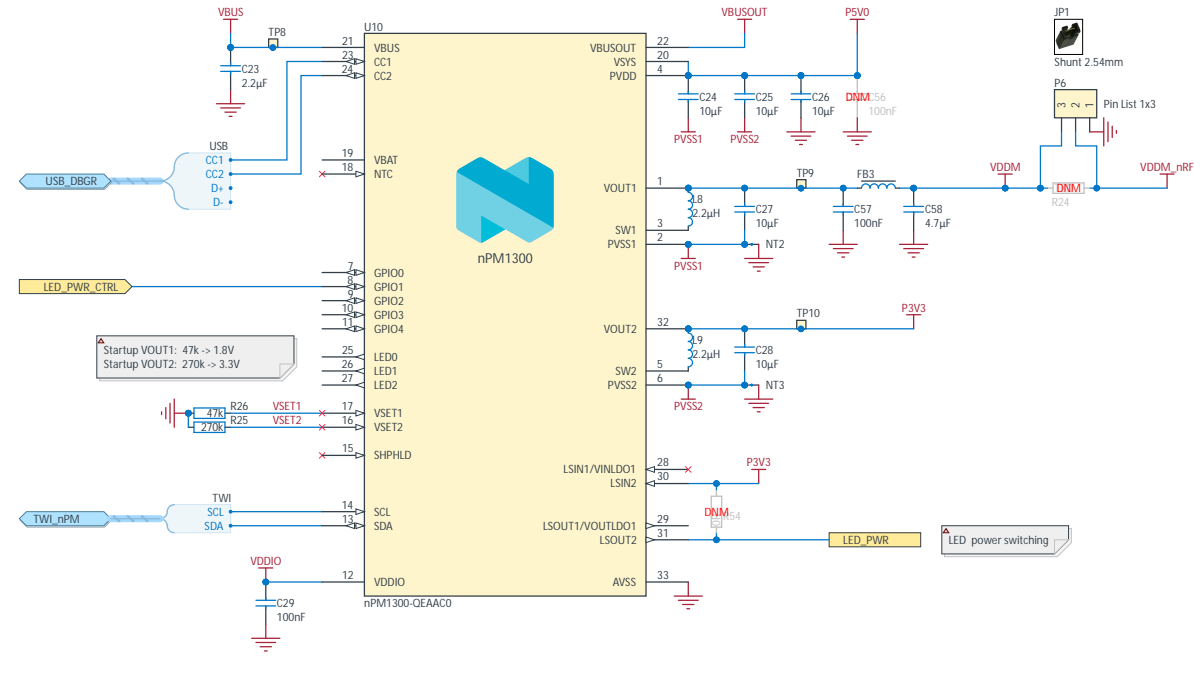
C

D

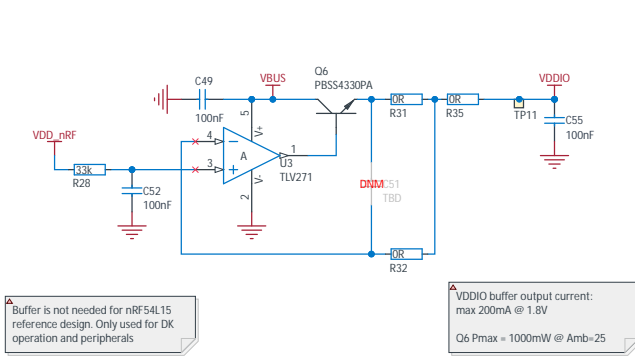


## Power managment

[Datasheet link](#)



## VDD\_nRF supply buffer -> VDDIO



## Title

nRF54L15-DK - Power Supply

Size PCB Assembly Number

A3 PCA10156

Date: 02.10.2024

File: pca10156\_sheet6\_power\_supply.SchDoc

Classification: PUBLIC

Revision

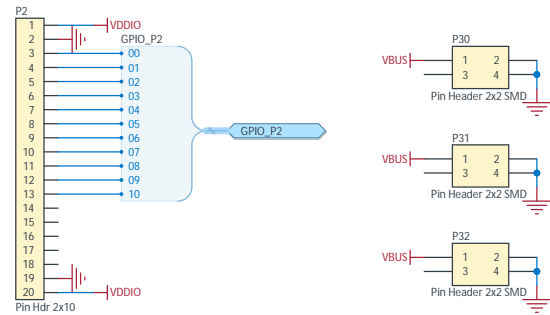
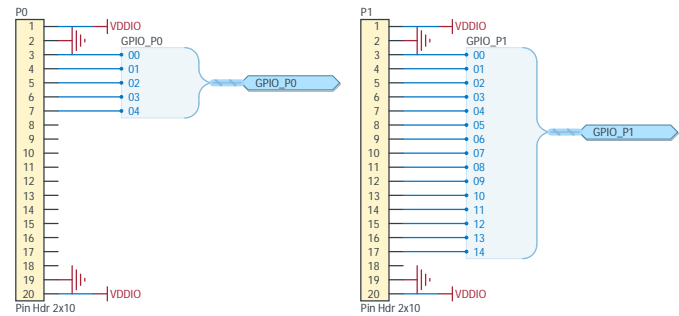
0.9.3

Sheet 6 of 7

Drawn By: STL1



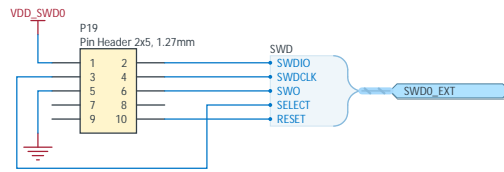
GPIO Connectors



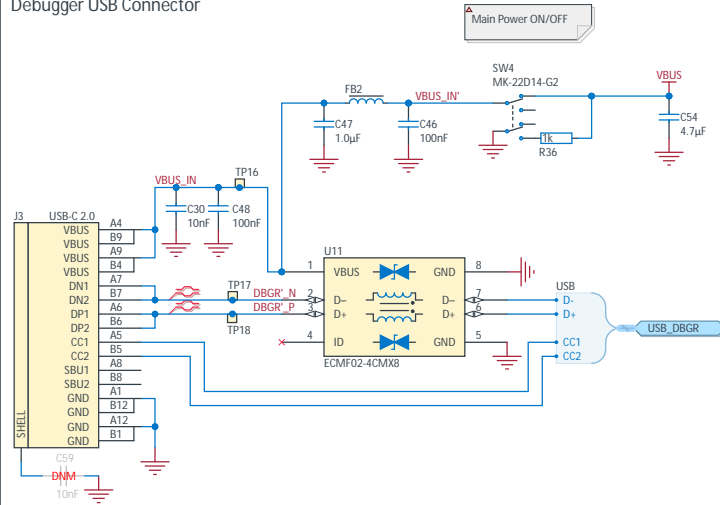
GND probe point



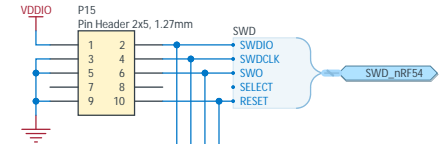
Debug OUT Connector



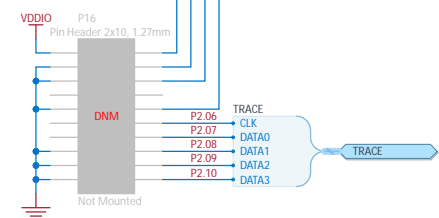
Debugger USB Connector



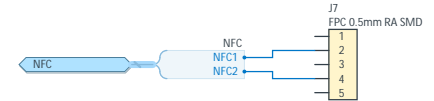
Debug IN Connector

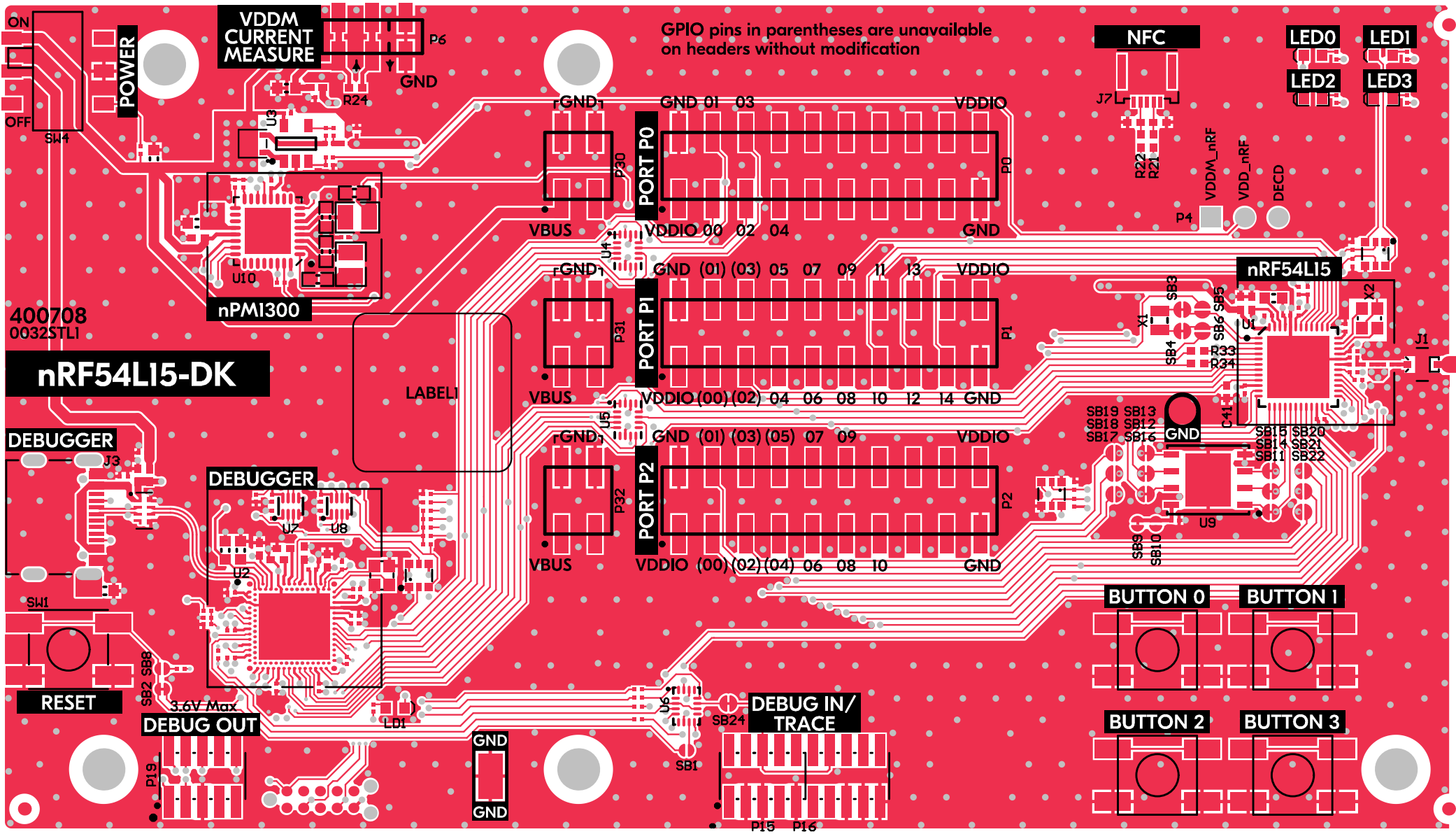


Trace connector

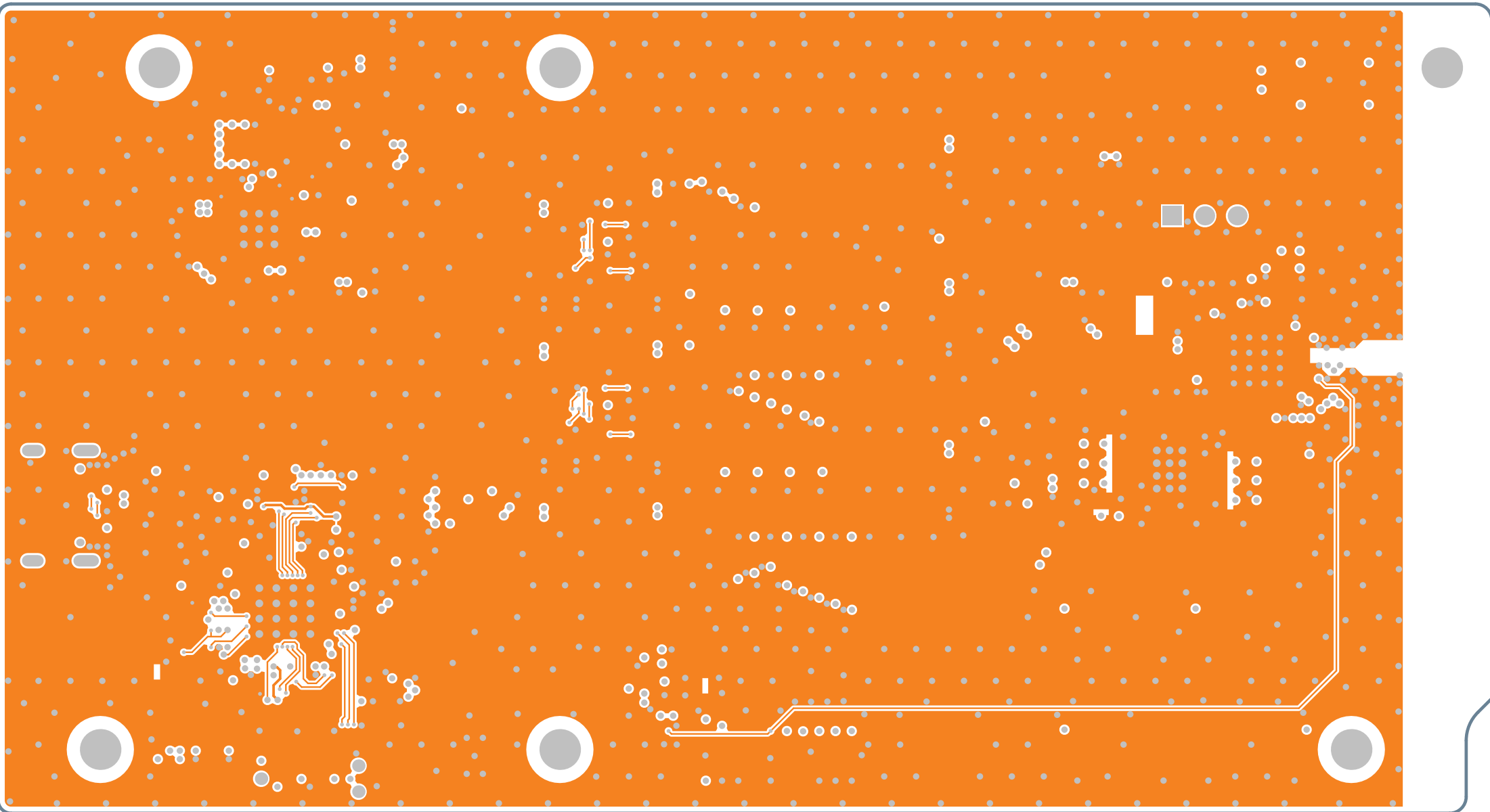


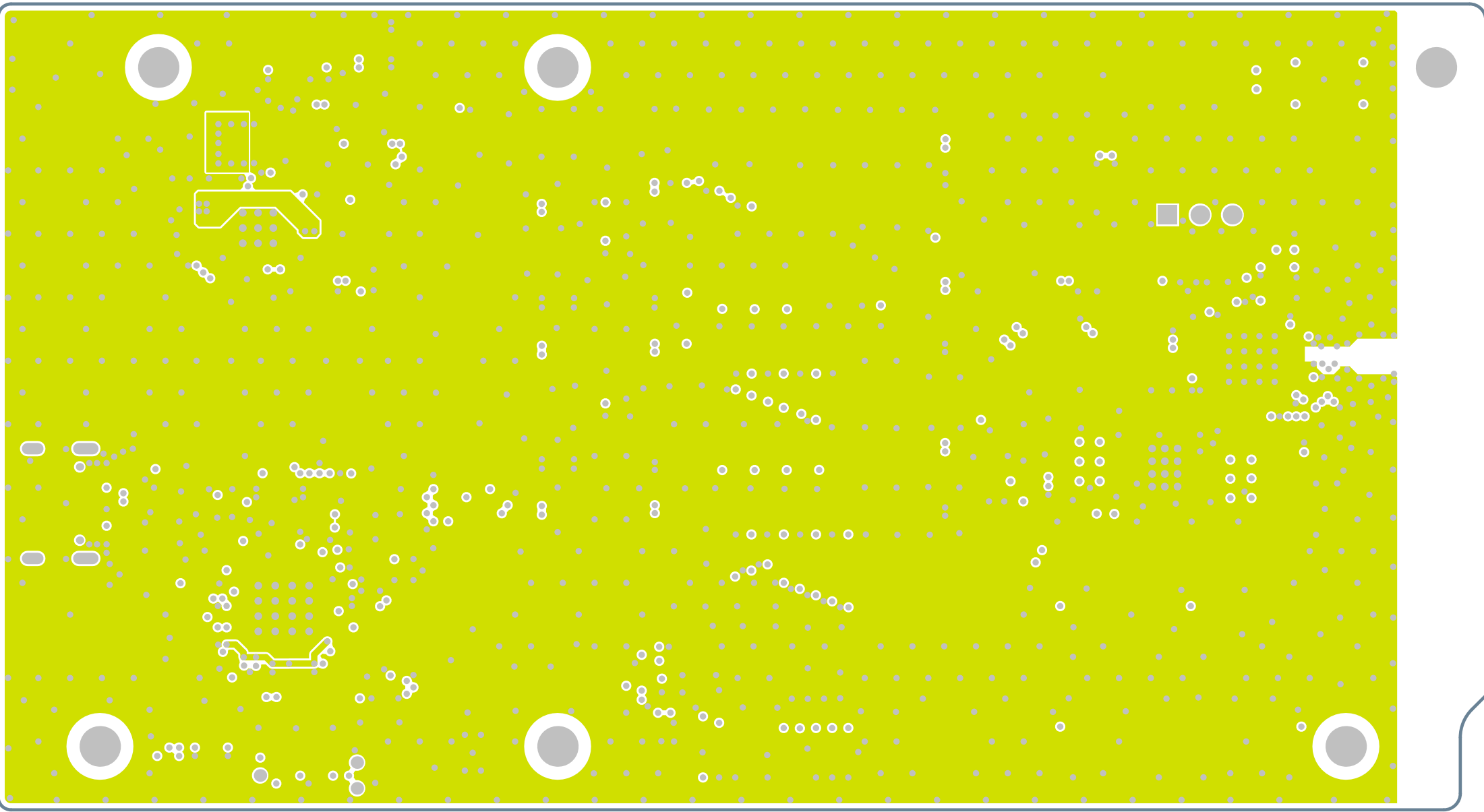
NFCT Antenna Connector













www.segger.com  
Link Technology



P5'03	ZMO	uP5E24
	ZMDCFK	
	ZMDIO	
	BE2EL	DEBUGGER
P1'01	CT21	
P1'09	KT21	uP5E24
P1'04	TXD1	
P1'02	KXD1	BI1
P0'03	CT20	
P0'05	KT20	
P0'00	TXD0	DEBUGGER
P0'01	KXD0	
GPIO	Function	Circuit

P1'03	IECS		GPIO
P1'05	IECI		IEC
P1'01	XG3	2B0	
P1'00	XG1	2B4	GPIO
		2B2	BI1
		2B3	
GPIO	Function	Port	HW
P5'00	DIO3	2B10\13	
P5'03	DIO5	2B12\10	
P5'04	DIO1	2B14\11	GPIO
P5'05	DIO0	2B13\16	WEW
P5'01	CFK	2B15\18	2Bx\BI1
P5'02	C2	2B11\15	
GPIO	Function	Port	HW

P0'04	BUTTON3	
P1'08	BUTTON2	
P1'06	BUTTON1	GPIO
P1'13	BUTTON0	
P1'14	LED3	
P5'01	LED5	IW
P1'10	LED1	GPIO
P5'06	LED0	3.3V
GPIO	Function	HW

