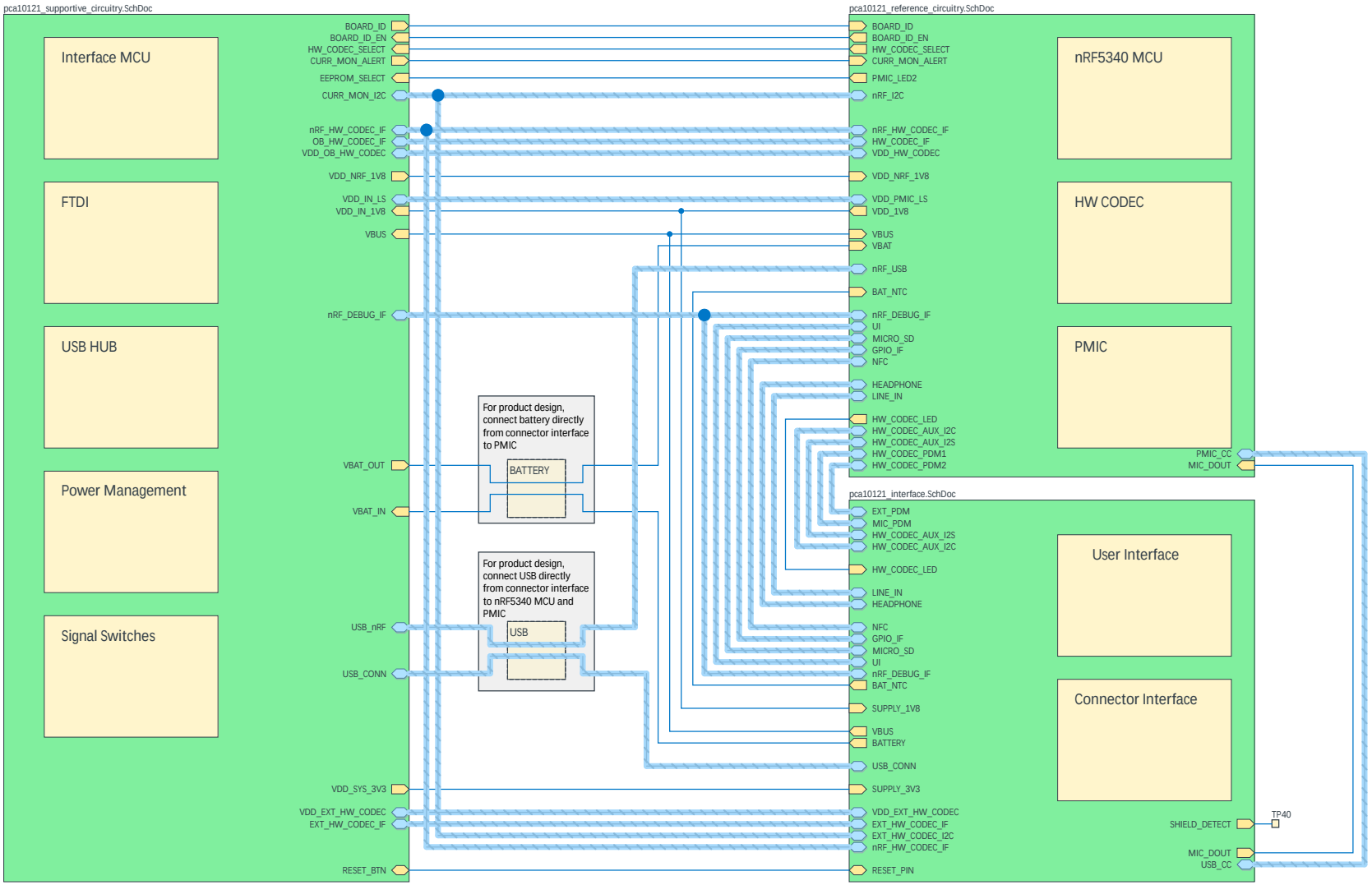
Nordic Semiconductor ASA

nRF5340 Audio Development Board (PCA10121)

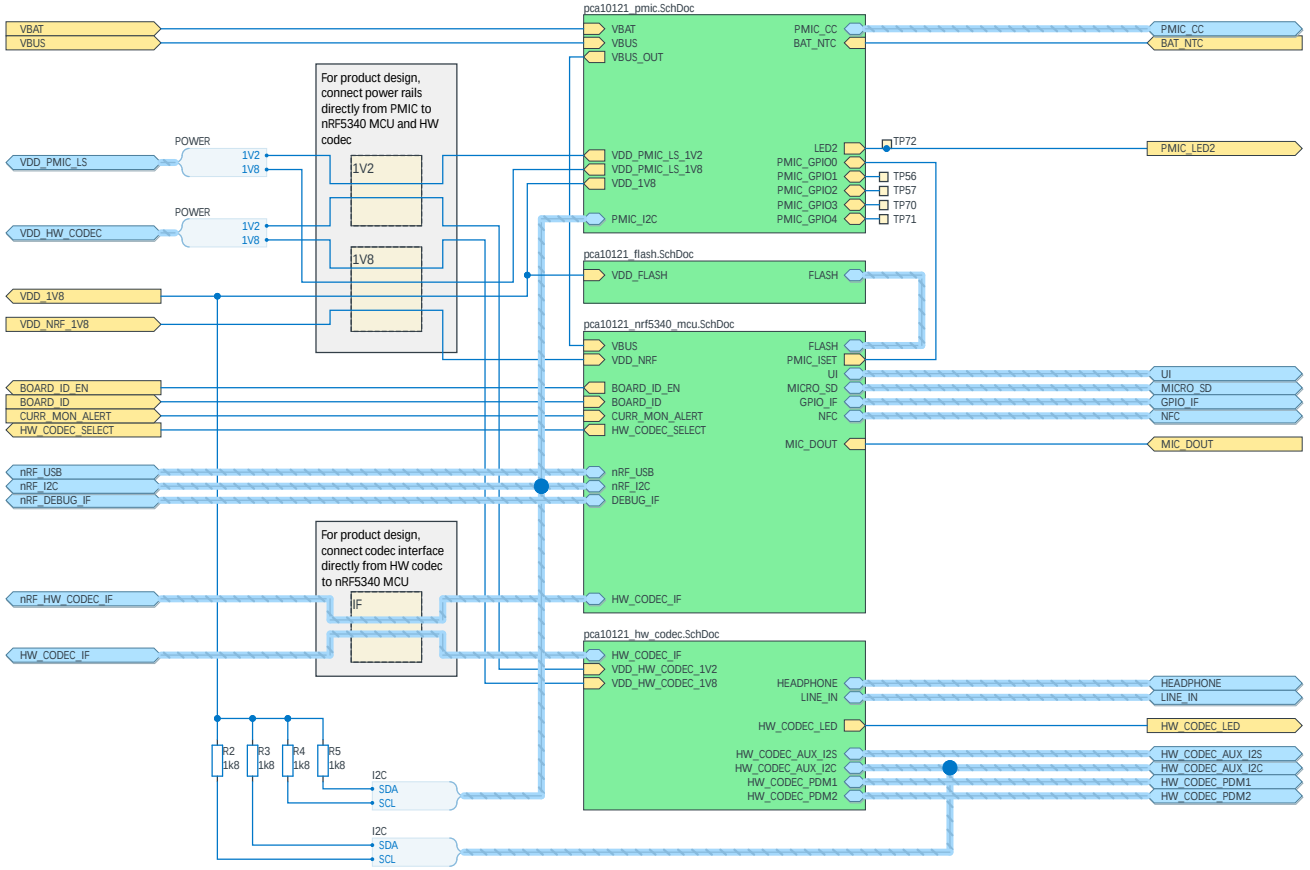


The No ERC object is a design directive.
This directive is placed on a node in the circuit to suppress harmless warnings and/or error violation conditions that are detected when the schematic project is compiled.

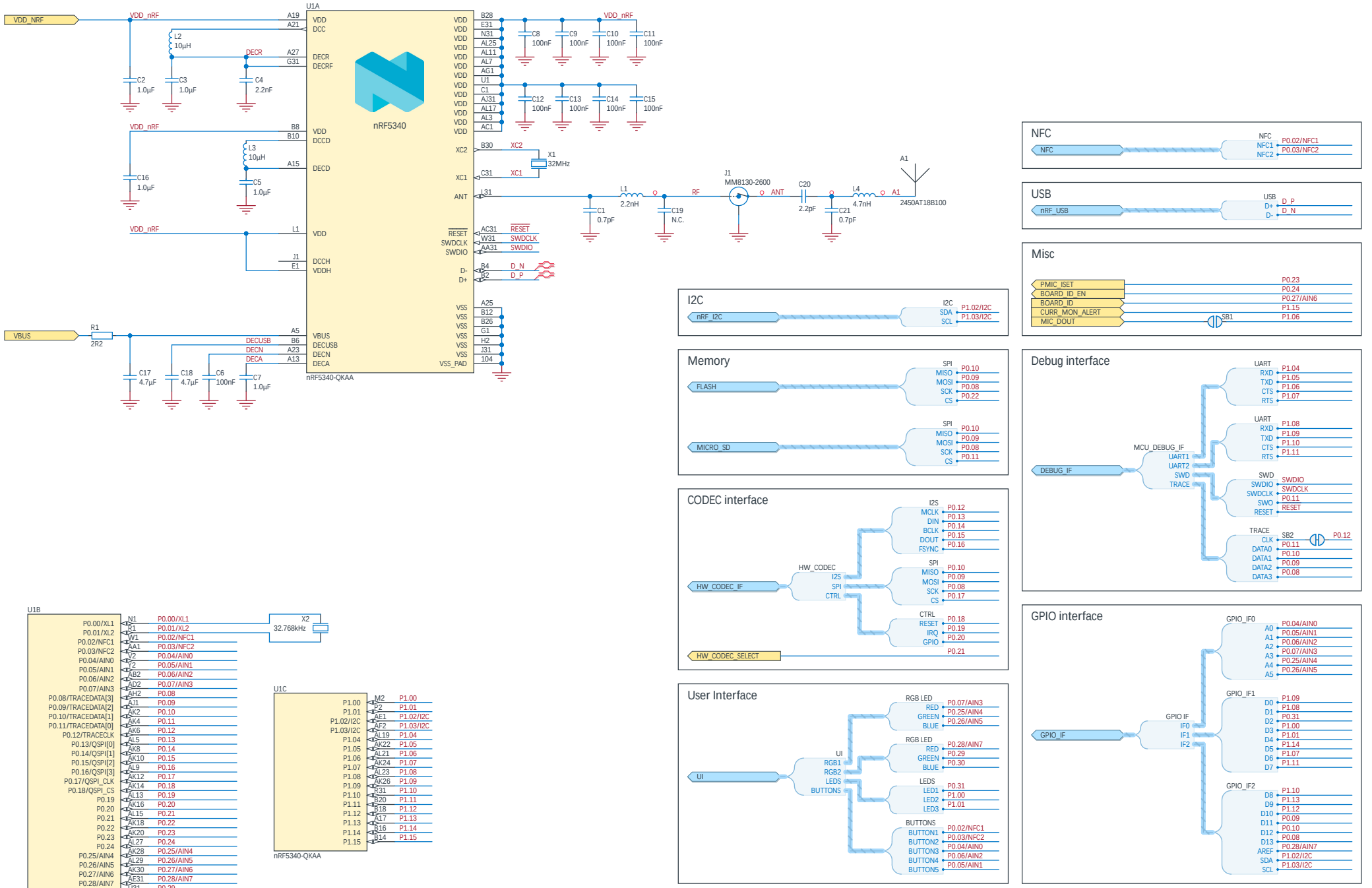
ENCLOSURE1 SCREW1 SCREW2

Nordic Logo

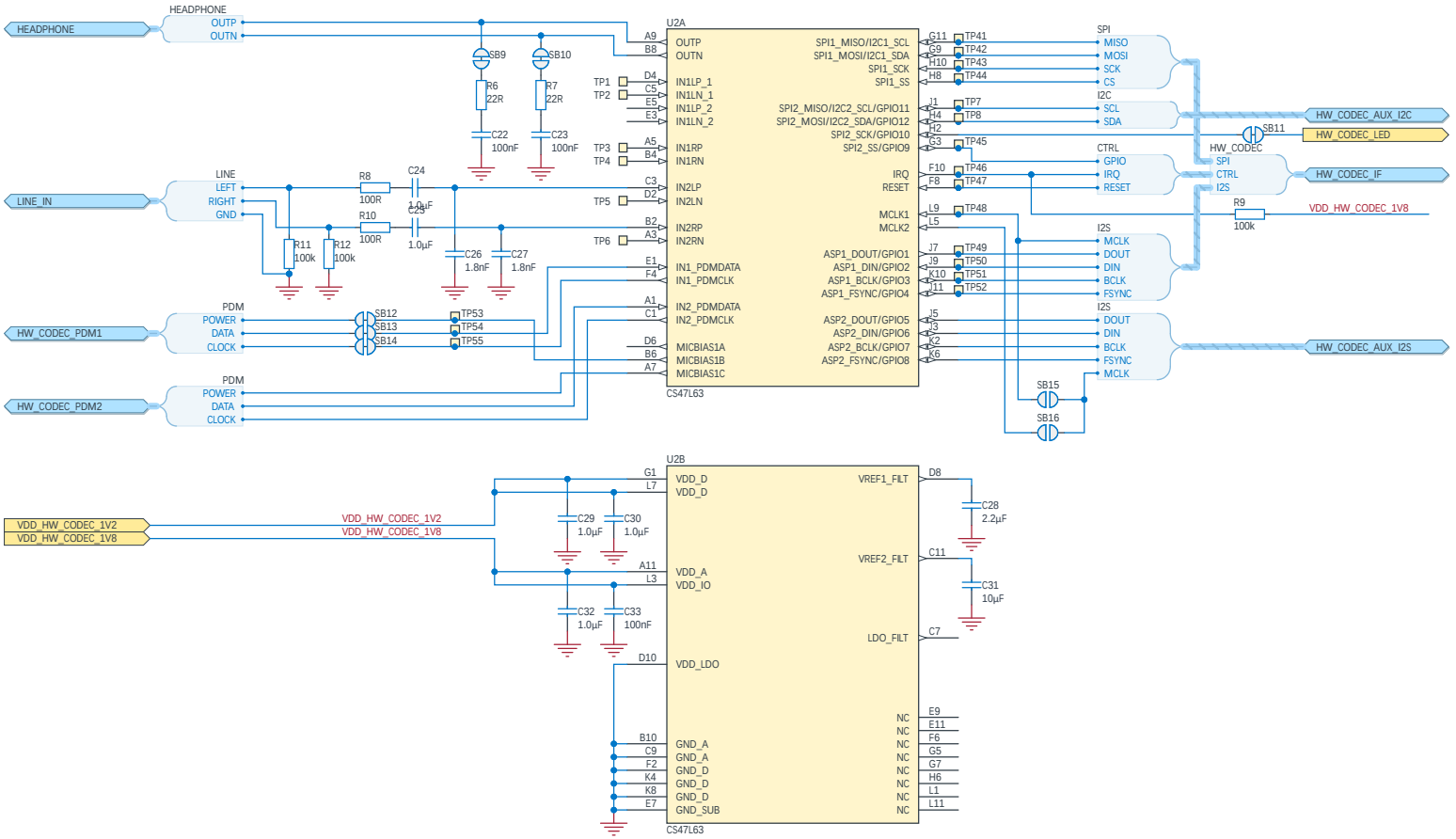
Title: nRF5340 Audio Development Board - Top level		
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.19		Sheet 1 of 17
File: pca10121_top_level.SchDoc		Drawn By: RUBR
Classification: Public		



Title: nRF5340 Audio Development Board - Reference circuitry		
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.19		Sheet 2 of 17
File: pca10121_reference_circuitry.SchDoc		Drawn By: RUBR
Classification: Public		

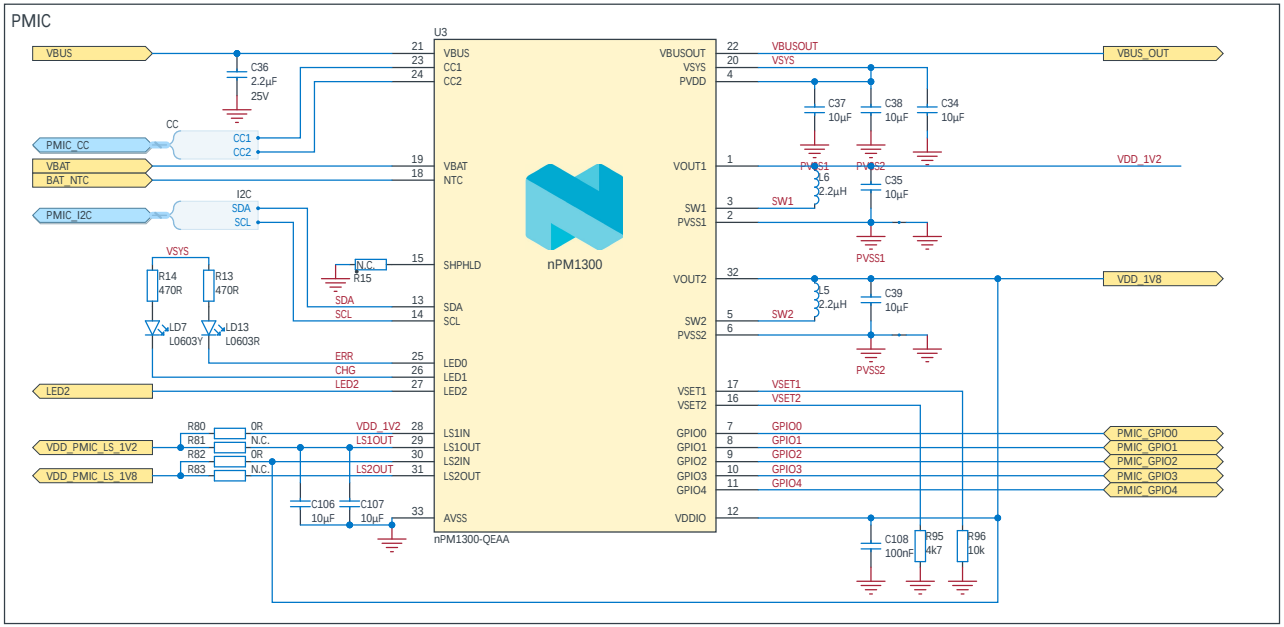


Title	nRF5340 Audio Development Board - nRF5340 MCU	
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.19		Sheet 3 of 17
File: pca10121_nrf5340_mcu.SchDoc		Drawn By: RUBR
Classification: Public		



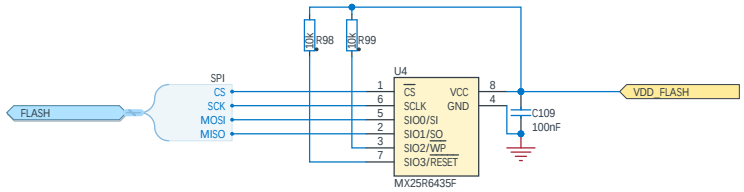
Title	nRF5340 Audio Development Board - HW codec	
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.15		Sheet 4 of 17
File: pca10121_hw_codec.SchDoc		Drawn By: RUBR
Classification: Public		

NORDIC SEMICONDUCTOR

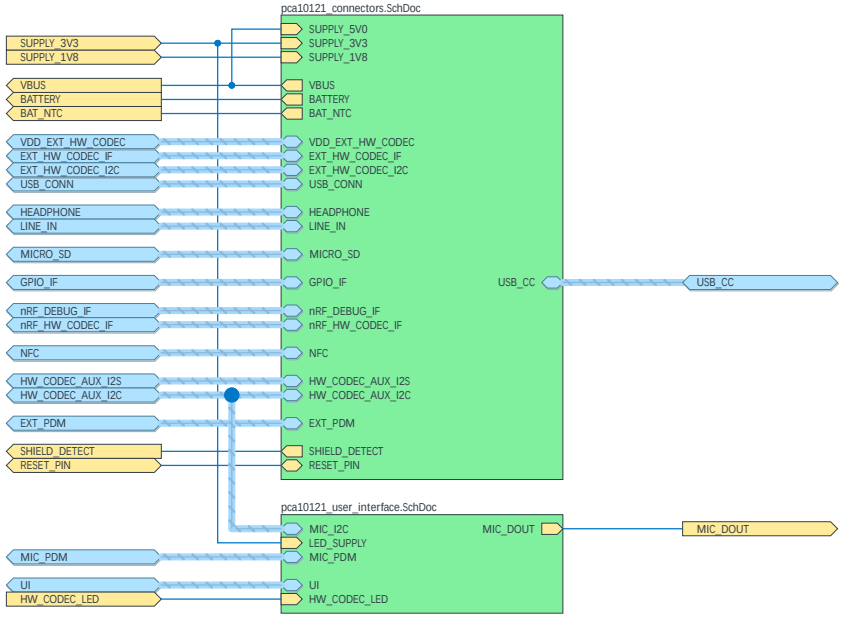


Title: nRF5340 Audio Development Board - PMIC		
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.15		Sheet 5 of 17
File: pca10121_pmic.SchDoc		Drawn By: RUBR
Classification: Public		

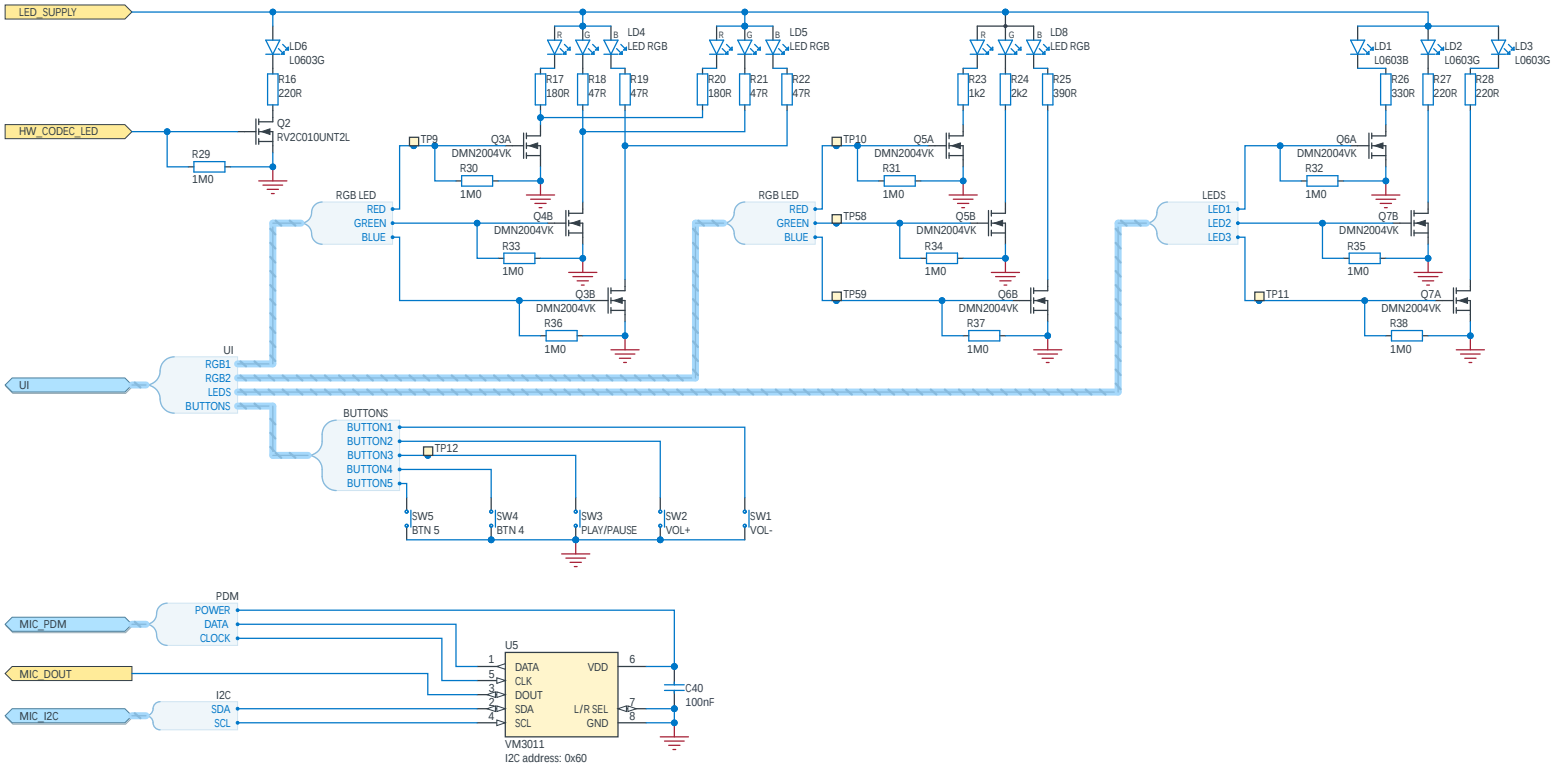
Serial Flash Memory



Title	nRF5340 Audio Development Board - Serial Flash Memory		
Size	PCB Assembly Number	Revision	
A3	PCA10121	1.2.0	
Date: 2022.09.15		Sheet 6 of 17	
File: pca10121_flash.SchDoc		Drawn By: RUBR	
Classification: Public			

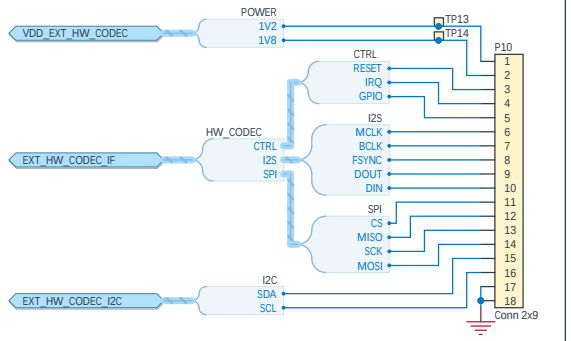


Title	nRF5340 Audio Development Board - Interfaces		
Size	PCB Assembly Number	Revision	
A3	PCA10121	1.2.0	
Date: 2022.09.15		Sheet 7 of 17	
File: pca10121_interface.SchDoc		Drawn By: RUBR	
Classification: Public			

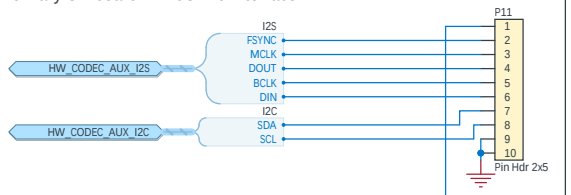


Title: nRF5340 Audio Development Board - User Interface		
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.15		Sheet 8 of 17
File: pca10121_user_interface.SchDoc		Drawn By: RUBR
Classification: Public		

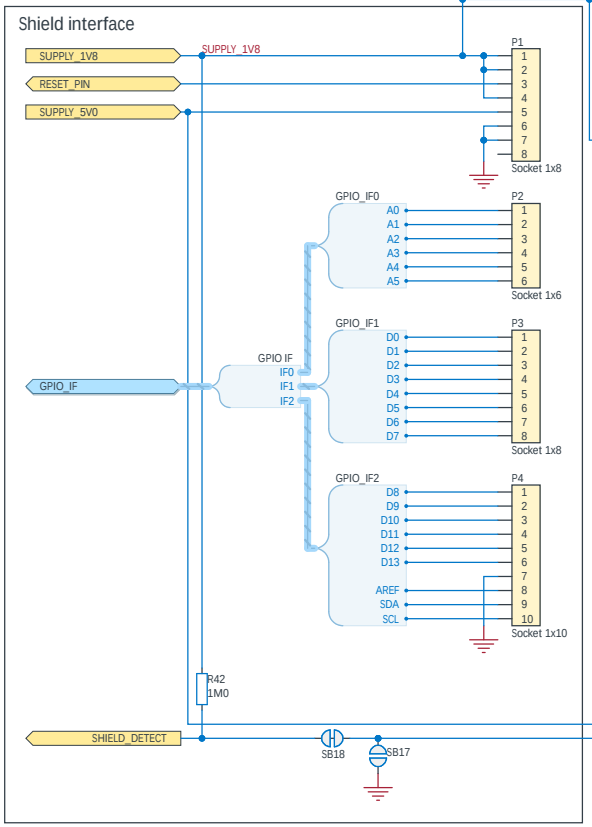
External HW CODEC interface



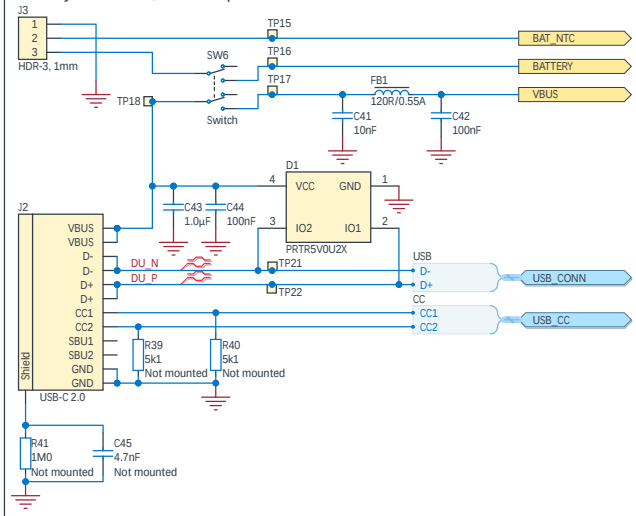
Auxilary On-board HW CODEC interface



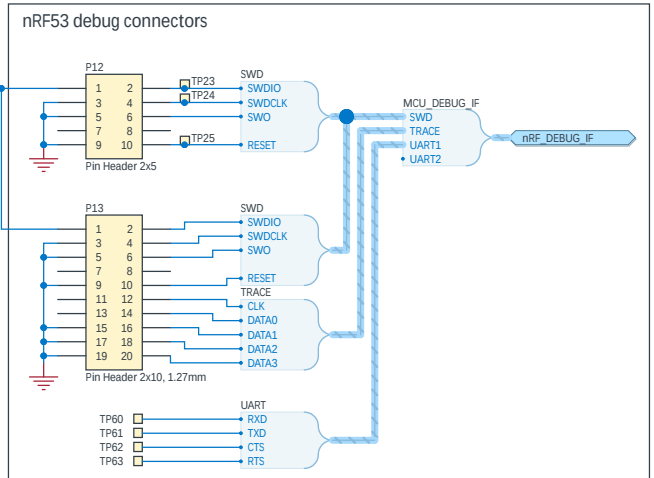
Shield interface



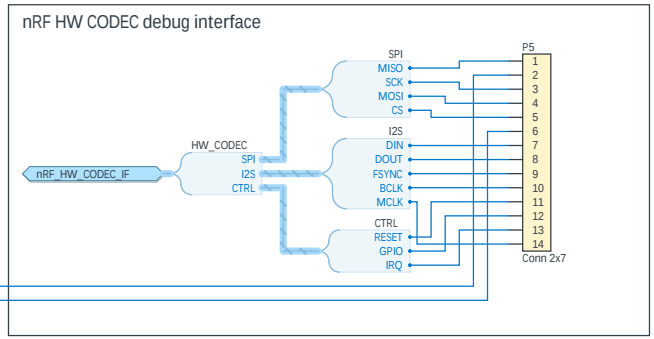
Battery connector, USB and power switch



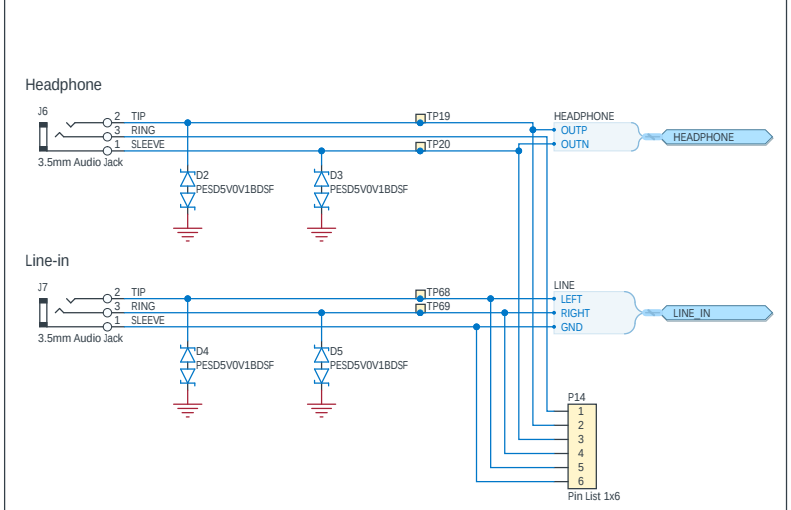
nRF53 debug connectors



nRF HW CODEC debug interface



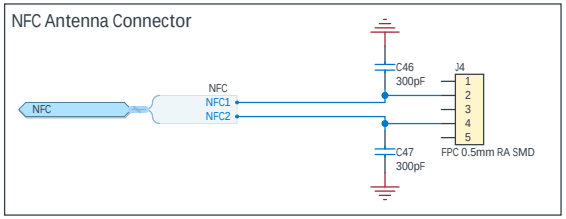
Audio connectors



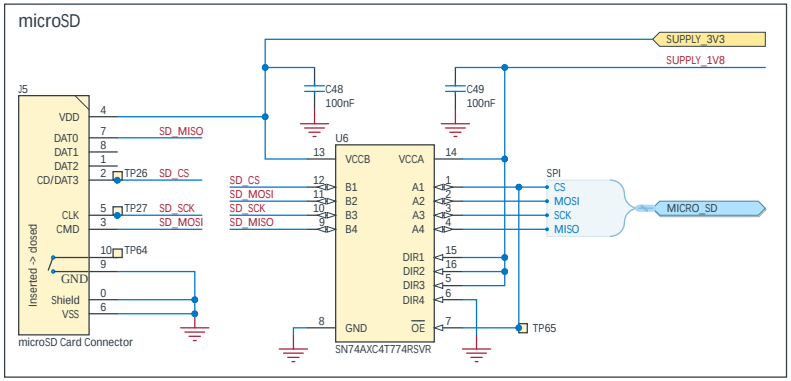
PDM microphone interface



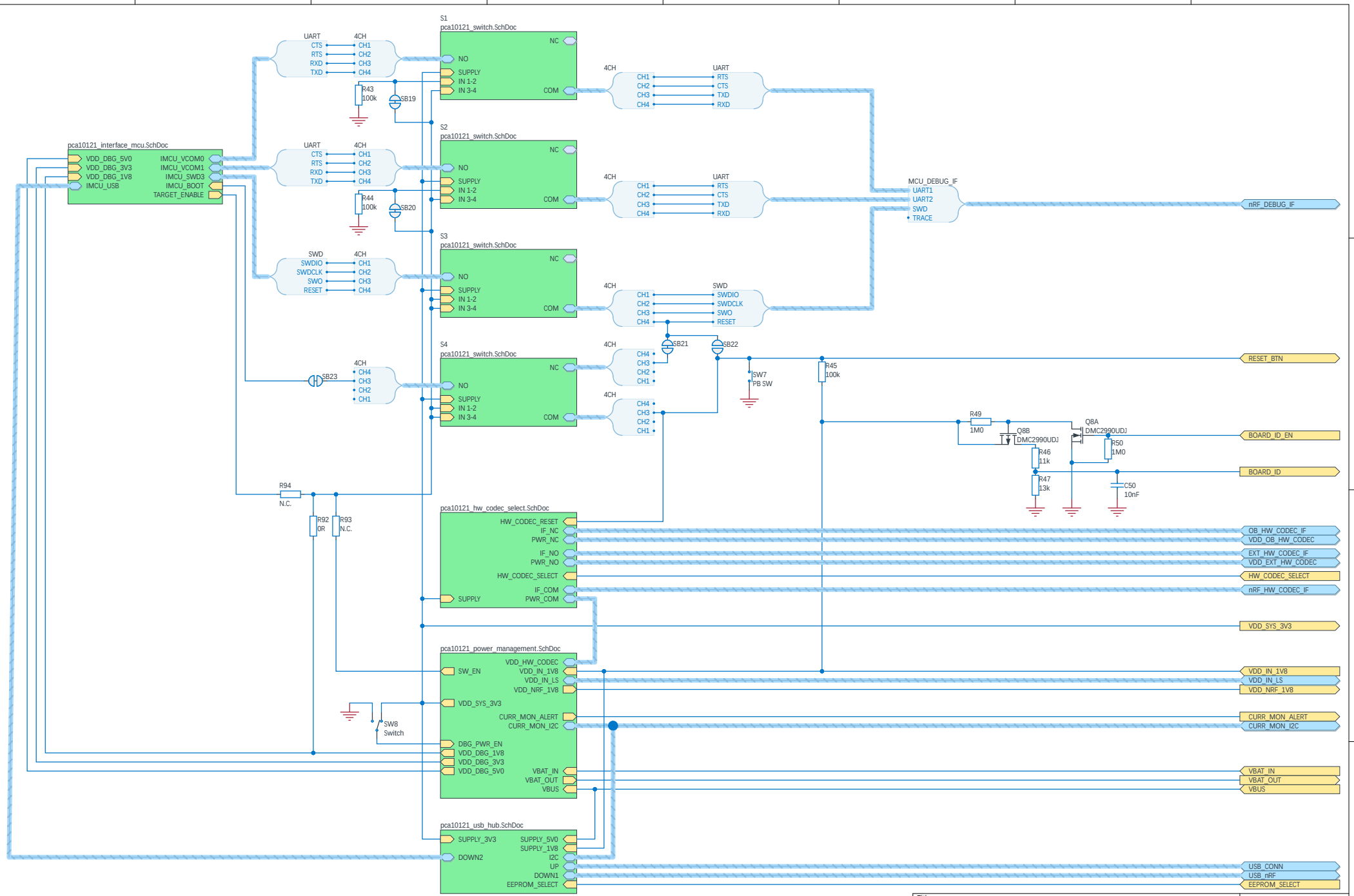
NFC Antenna Connector



microSD

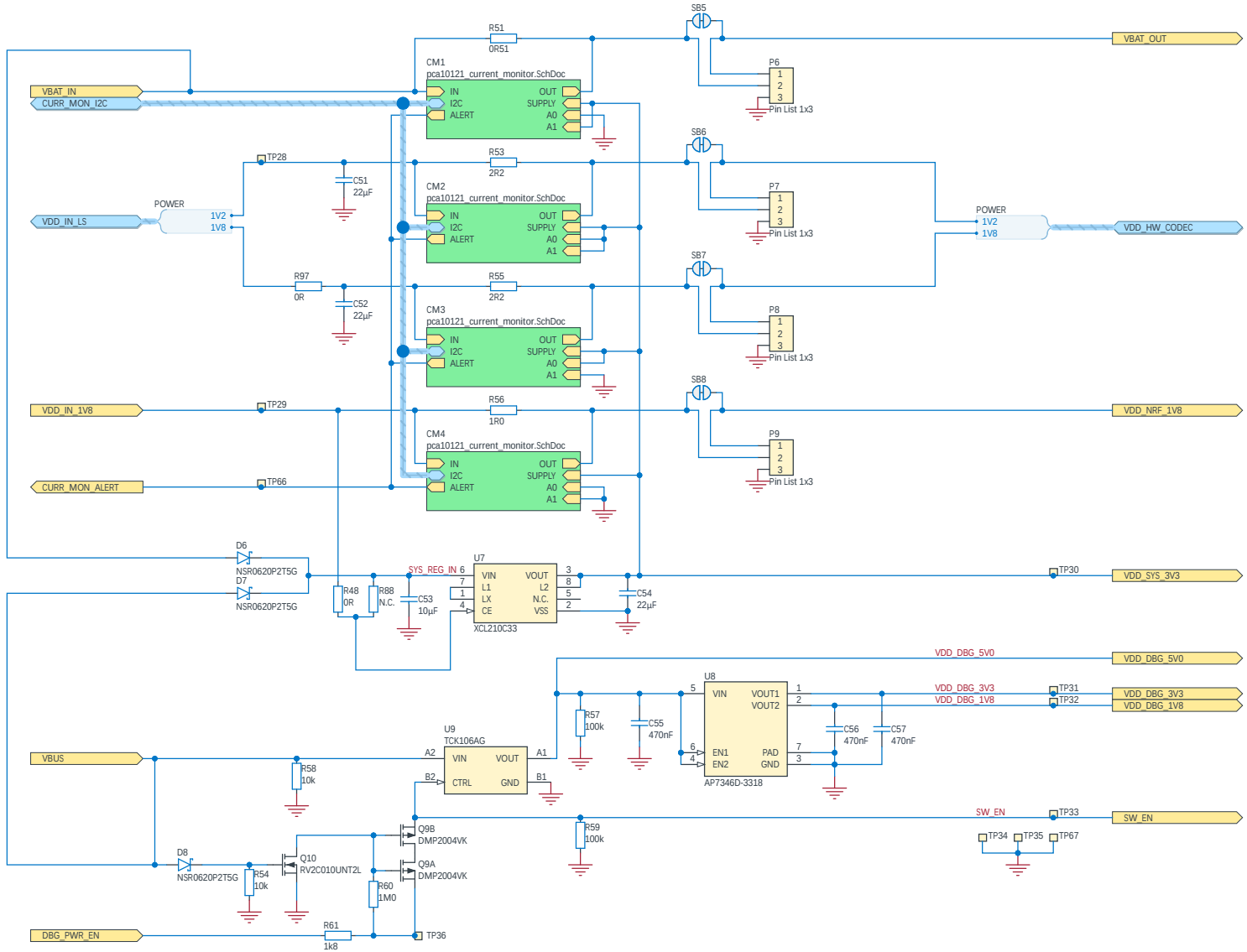


Title	nRF5340 Audio Development Board - Connectors		
Size	PCB Assembly Number	Revision	
A3	PCA10121	1.2.0	
Date: 2022.09.19		Sheet 9 of 17	
File: pca10121_connectors.SchDoc		Drawn By: RUBR	
Classification: Public			

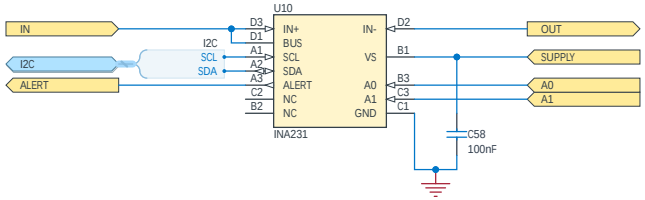


Title	nRF5340 Audio Development Board - Supportive circuitry	
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.19	Sheet 10 of 17	
File: pca10121_supportive_circuitry.SchDoc	Drawn By: RUBR	
Classification: Public		

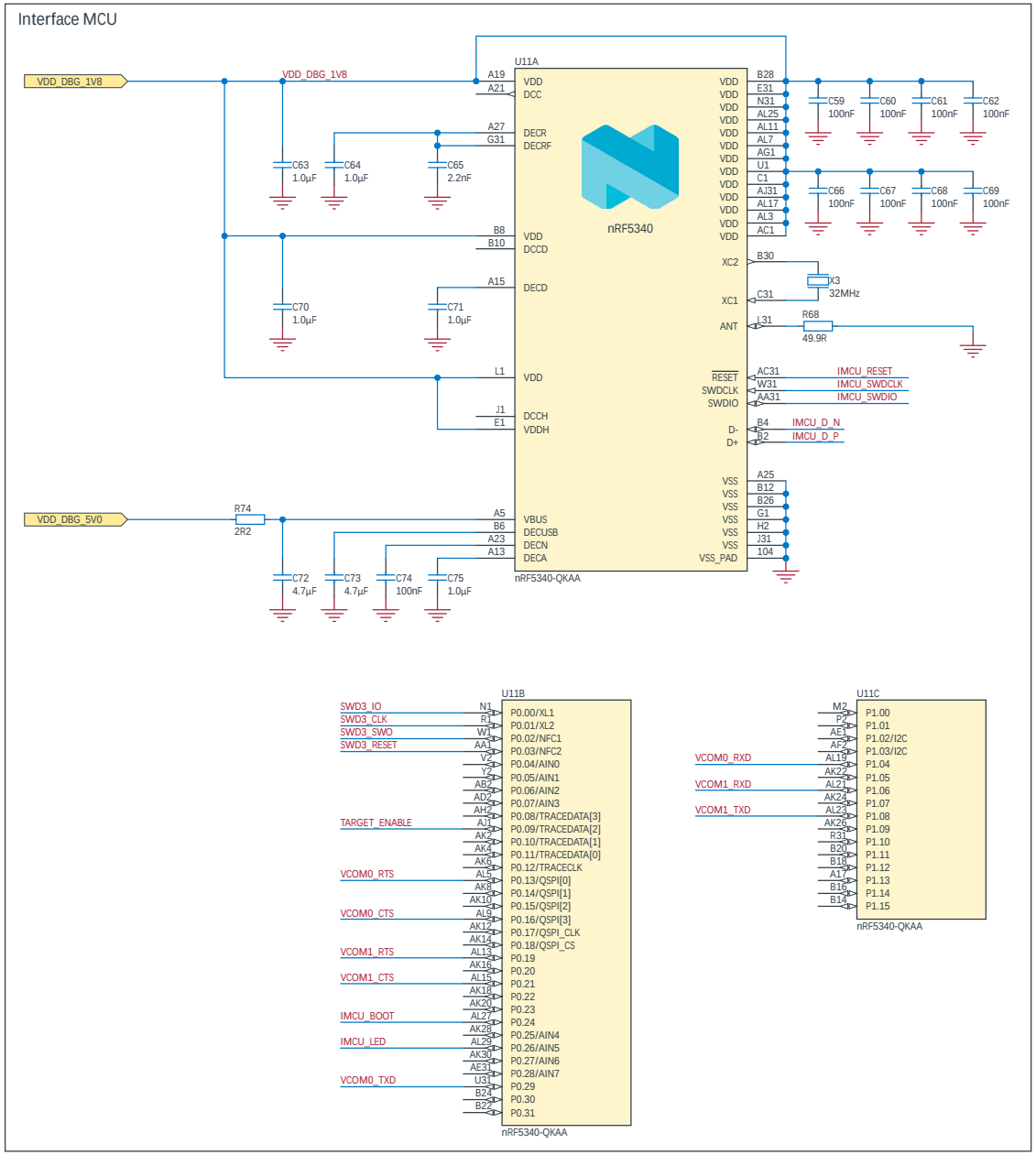
NORDIC SEMICONDUCTOR



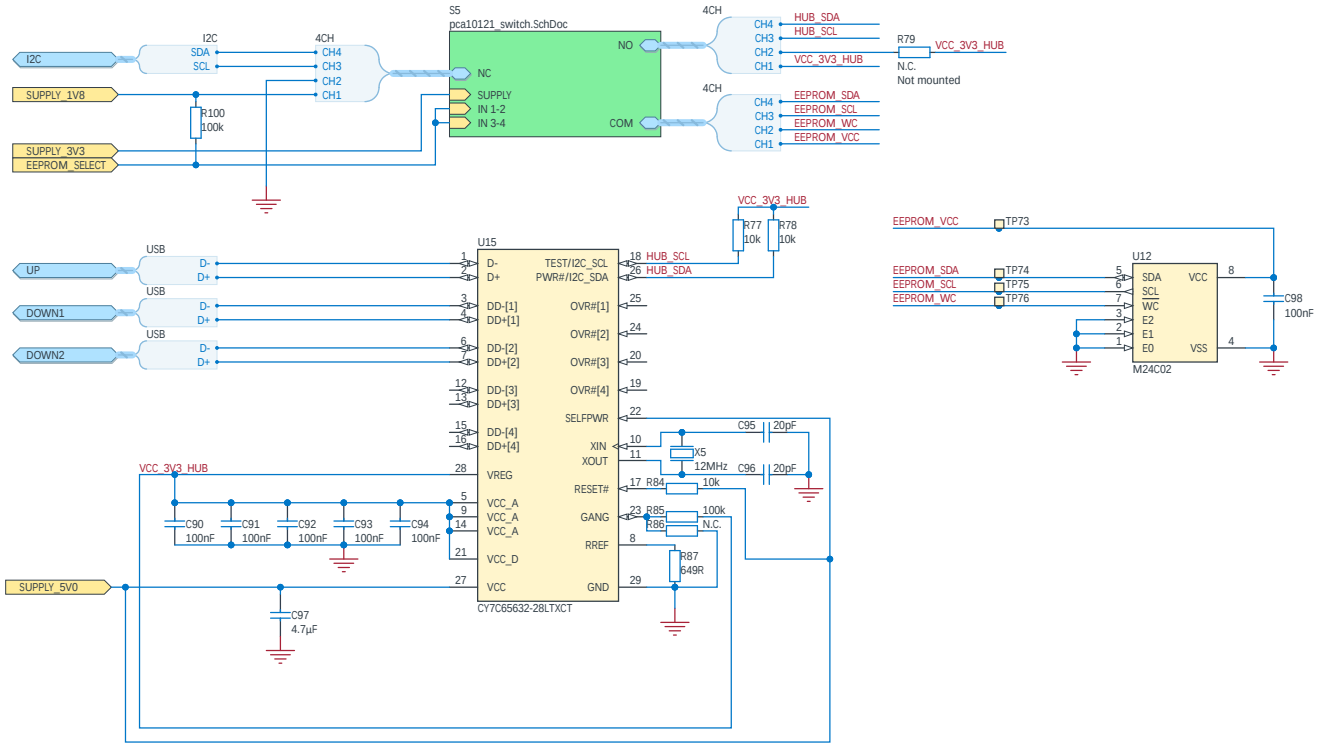
Title	nRF5340 Audio Development Board - Power management	
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.15		Sheet 11 of 17
File: pca10121_power_management.SchDoc		Drawn By: RUBR
Classification: Public		



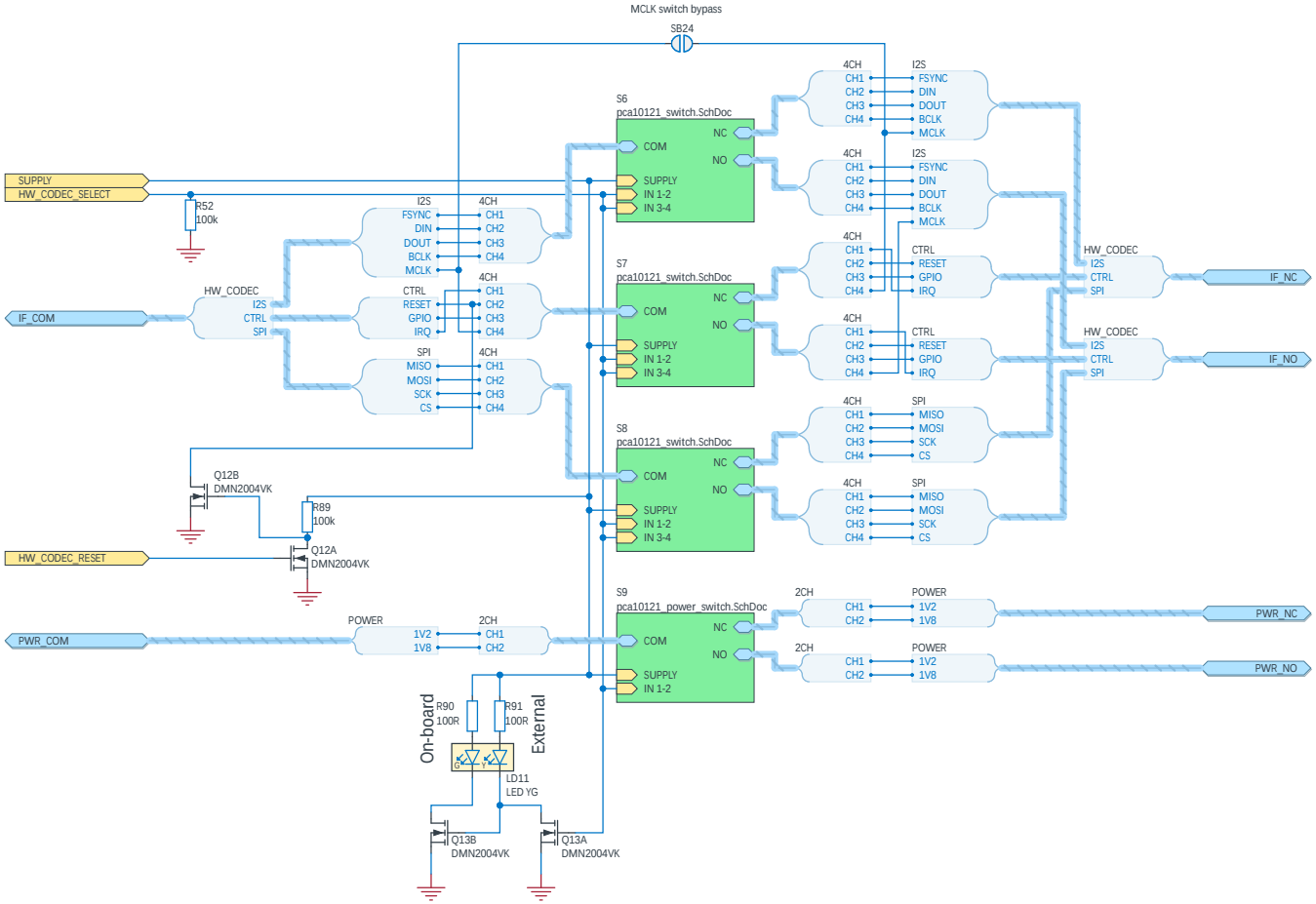
Title	nRF5340 Audio Development Board - Current monitor		
Size	PCB Assembly Number	Revision	
A3	PCA10121	1.2.0	
Date: 2022.09.15		Sheet 12 of 17	
File: pca10121_current_monitor.SchDoc		Drawn By: RUBR	
Classification: Public			



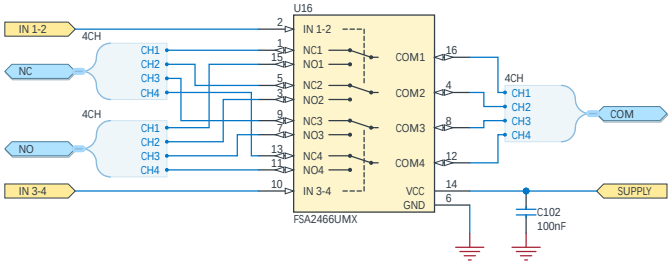
Title	nRF5340 Audio Development Board - Interface MCU	
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.19		Sheet 13 of 17
File: pca10121_interface_mcu.SchDoc		Drawn By: RUBR
Classification: Public		



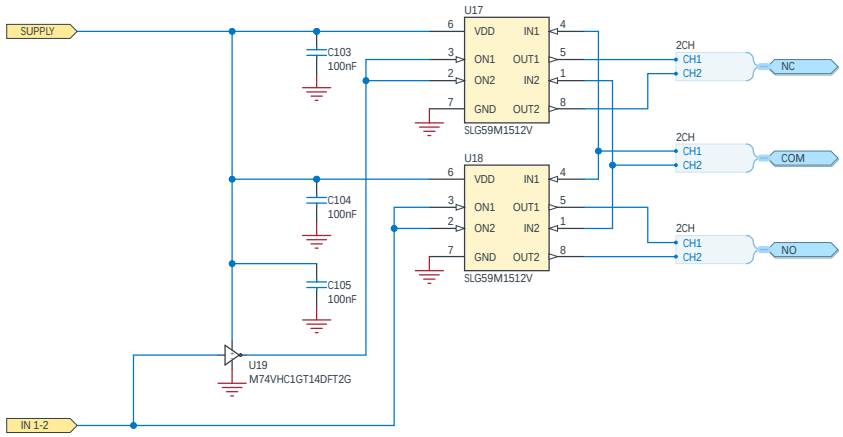
Title: nRF5340 Audio Development Board - USB HUB		
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.19		Sheet 14 of 17
File: pca10121_usb_hub.SchDoc		Drawn By: RUBR
Classification: Public		



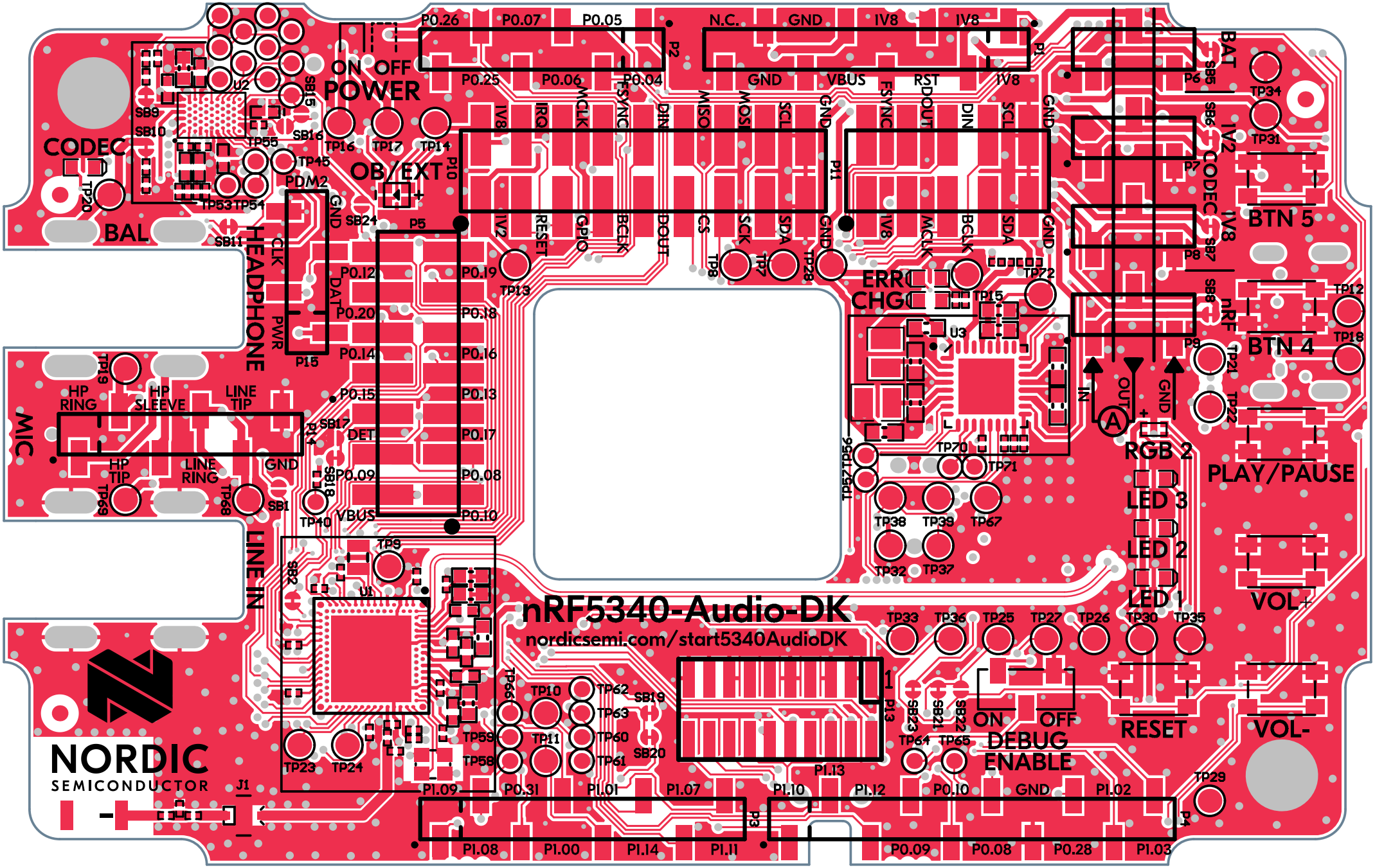
Title	nRF5340 Audio Development Board - HW codec select	
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.15		Sheet 15 of 17
File: pca10121_hw_codec_select.SchDoc		Drawn By: RUBR
Classification: Public		

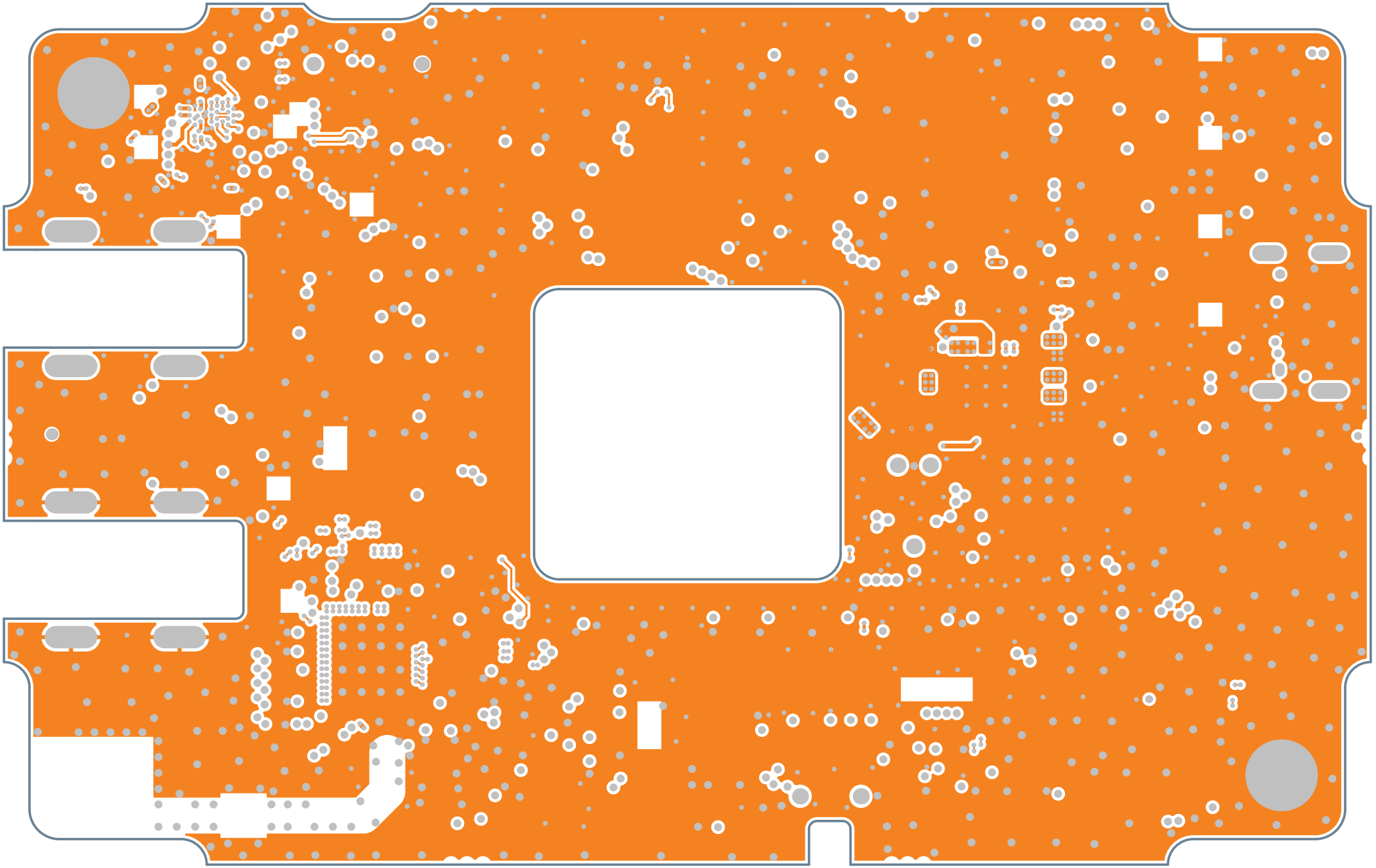


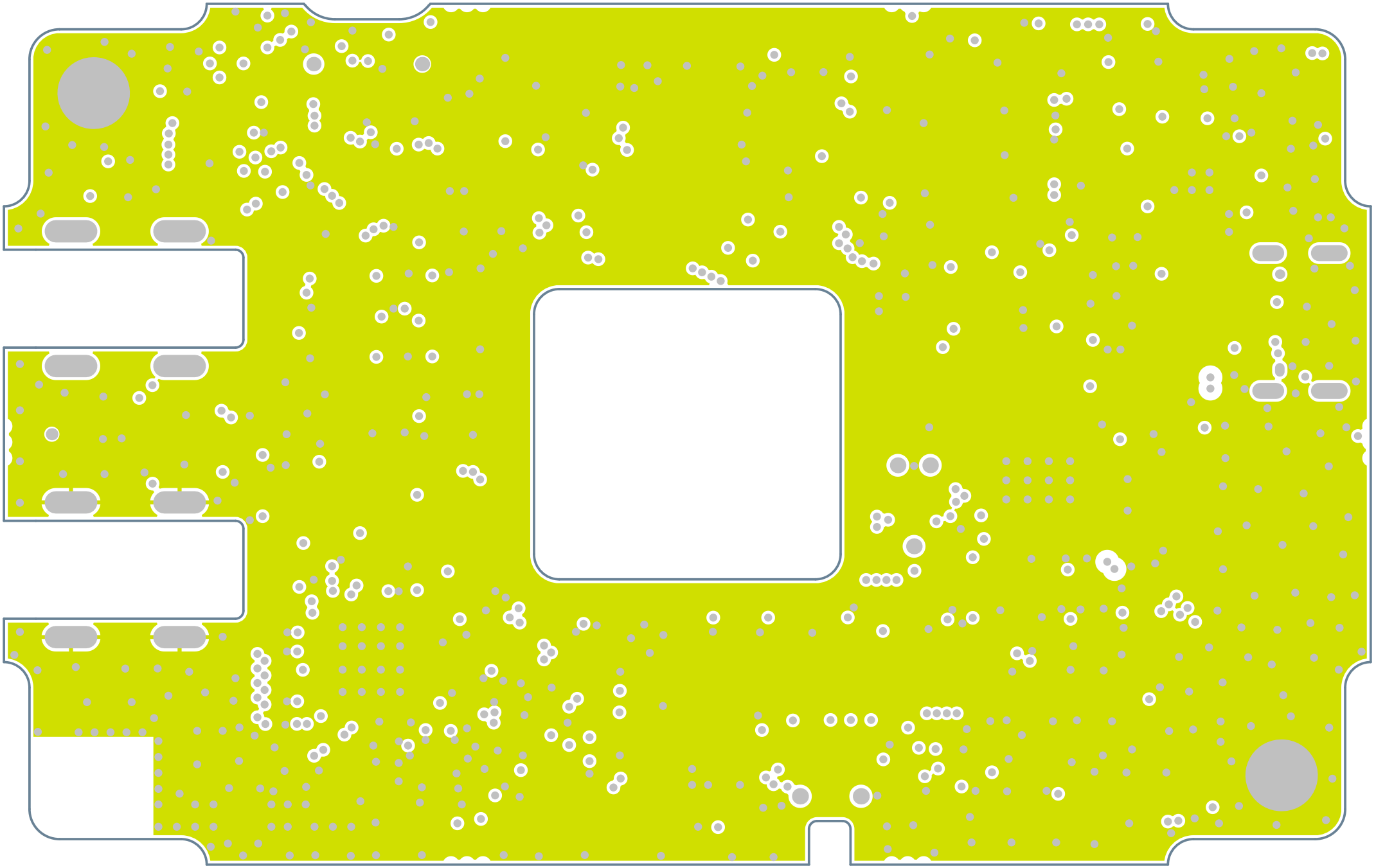
Title	nRF5340 Audio Development Board - Switch		
Size	PCB Assembly Number	Revision	
A3	PCA10121	1.2.0	
Date: 2022.09.15		Sheet 16 of 17	
File: pca10121_switch.SchDoc		Drawn By: RUBR	
Classification: Public			

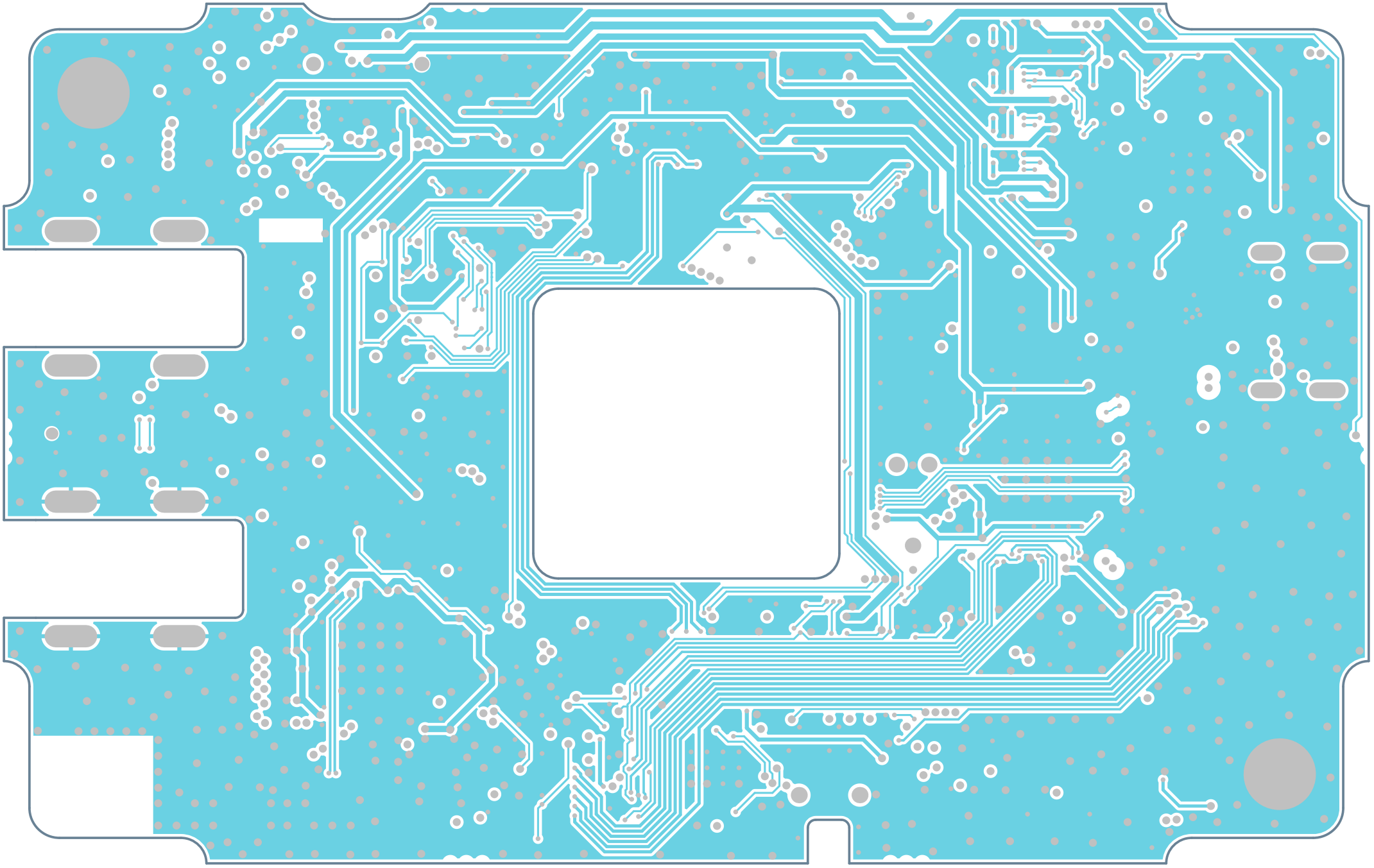


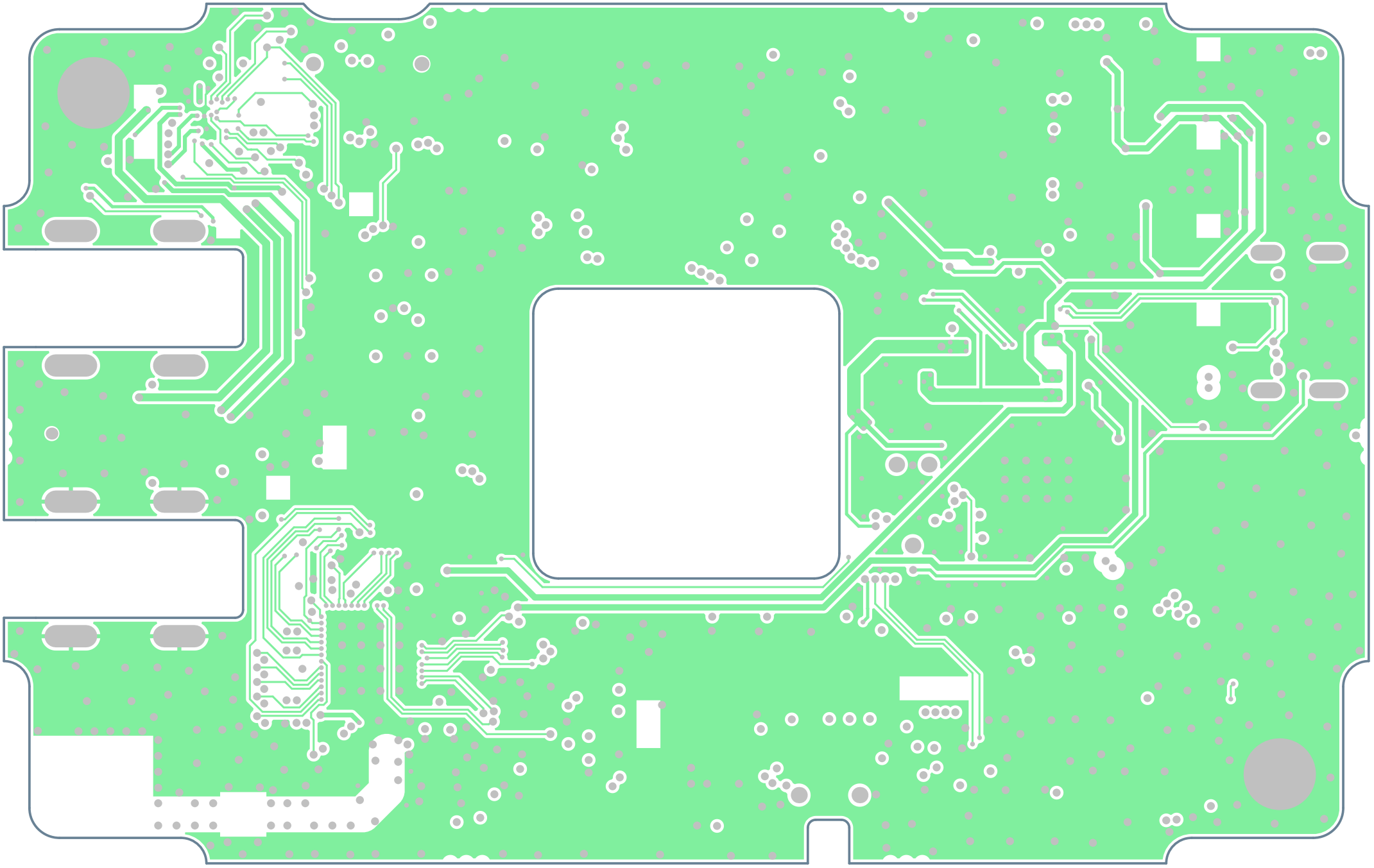
Title: nRF5340 Audio Development Board - Power switch		
Size: A3	PCB Assembly Number: PCA10121	Revision: 1.2.0
Date: 2022.09.15		Sheet 17 of 17
File: pca10121_power_switch.SchDoc		Drawn By: RUBR
Classification: Public		


nRF5340-Audio-DK
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NORDIC
SEMICONDUCTOR
ON OFF
POWER
CODEC
BAL
HEADPHONE
MIC
LINE IN
OB/EXT
PDM2
ERR
CHG
BAT
CODEC
nRF
BTN 5
BTN 4
PLAY/PAUSE
VOL+
VOL-
RESET
RGB 2
LED 3
LED 2
LED 1
ON OFF
DEBUG
ENABLE
HP RING
HP SLEEVE
LINE TIP
HP TIP
LINE RING
GND
VBUS
P0.26
P0.07
P0.05
N.C.
GND
IV8
P0.25
P0.06
P0.04
GND
VBUS
RST
IV8
P1.13
P1.09
P0.31
P1.01
P1.07
P1.10
P1.12
P0.10
GND
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P0.08
P0.28
P1.03

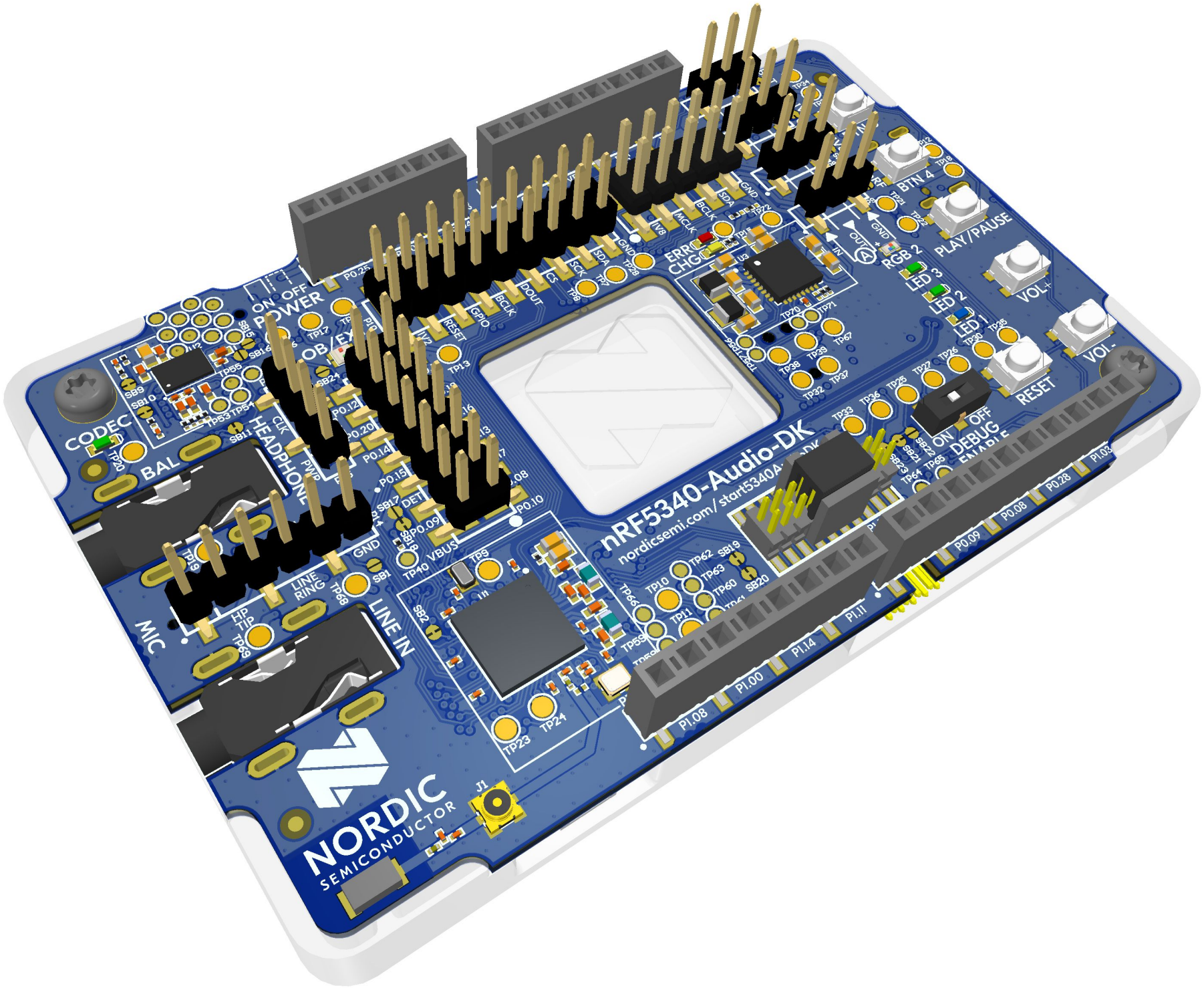


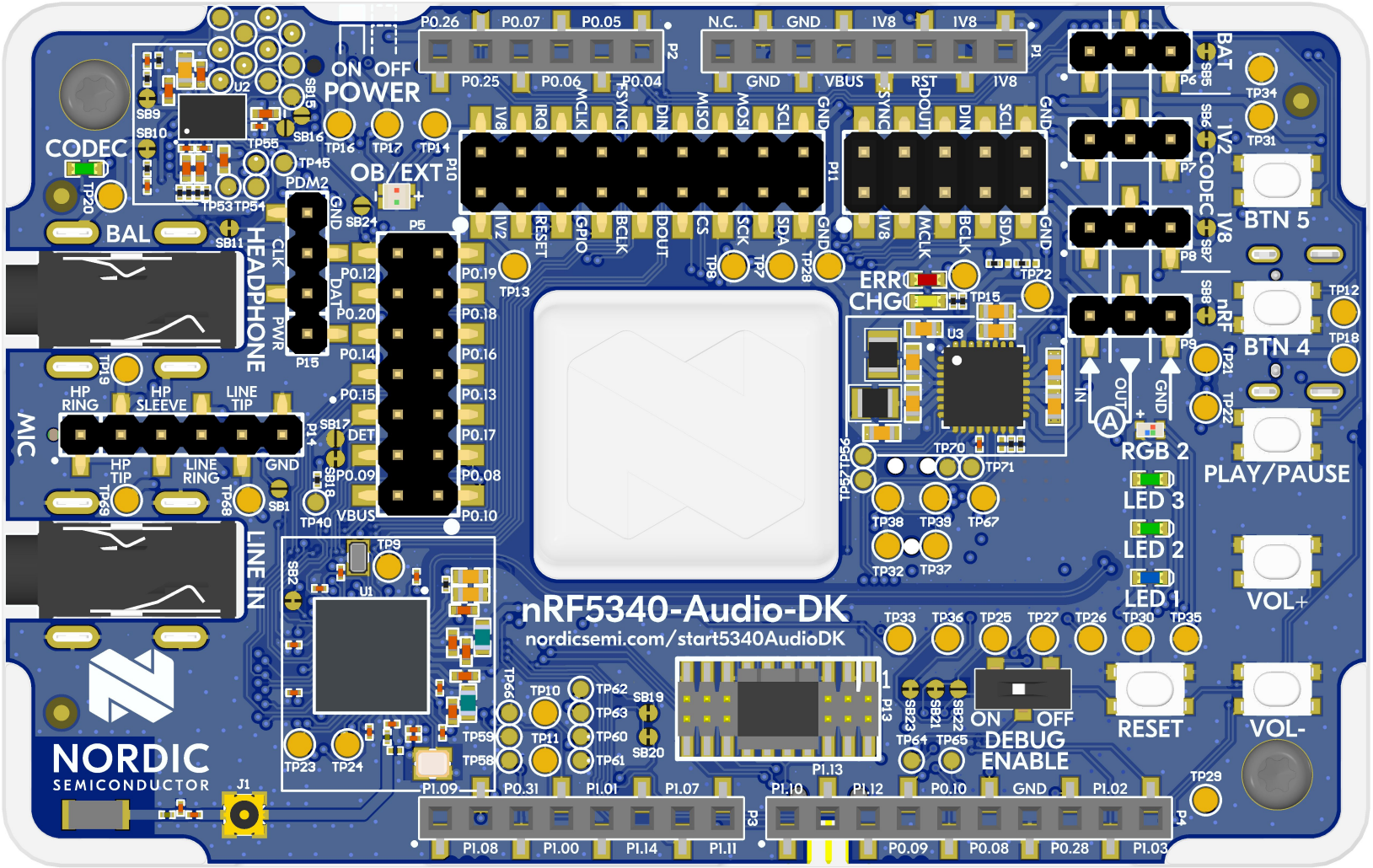






ON
OFF
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TP6
TP4
TP2
TP5
TP3
TP1
for evaluation only;
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SEMICONDUCTOR
IEWCN


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NORDIC
SEMICONDUCTOR
CODEC
POWER
ON OFF
BAL
HEADPHONE
MIC
LINE IN
LINE
RING
HP
TIP
GND
VBUS
DET
BTN 4
PLAY/PAUSE
VOL+
VOL-
RESET
RGB 2
LED 3
LED 2
LED 1
DEBUG
ON OFF
J1


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nordicsemi.com/start5340AudioDK
NORDIC
SEMICONDUCTOR
POWER
ON OFF
CODEC
BAL
HEADPHONE
MIC
LINE IN
OB/EXT
PDM2
ERR
CHG
RGB 2
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LED 1
BTN 5
BTN 4
PLAY/PAUSE
VOL+
VOL-
RESET
DEBUG
ENABLE
BAT
IN
OUT
GND
VBUS
P0.26
P0.07
P0.05
N.C.
IV8
P0.25
P0.06
P0.04
RST
IRQ
MCLK
FSYNC
DIN
MISO
MOSI
SCL
SYNC
DOUT
RESET
GPIO
BCLK
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CS
SCK
SDA
IV2
HP RING
HP SLEEVE
LINE TIP
HP TIP
LINE RING
DET
CLK
DAT
PWR
P0.12
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