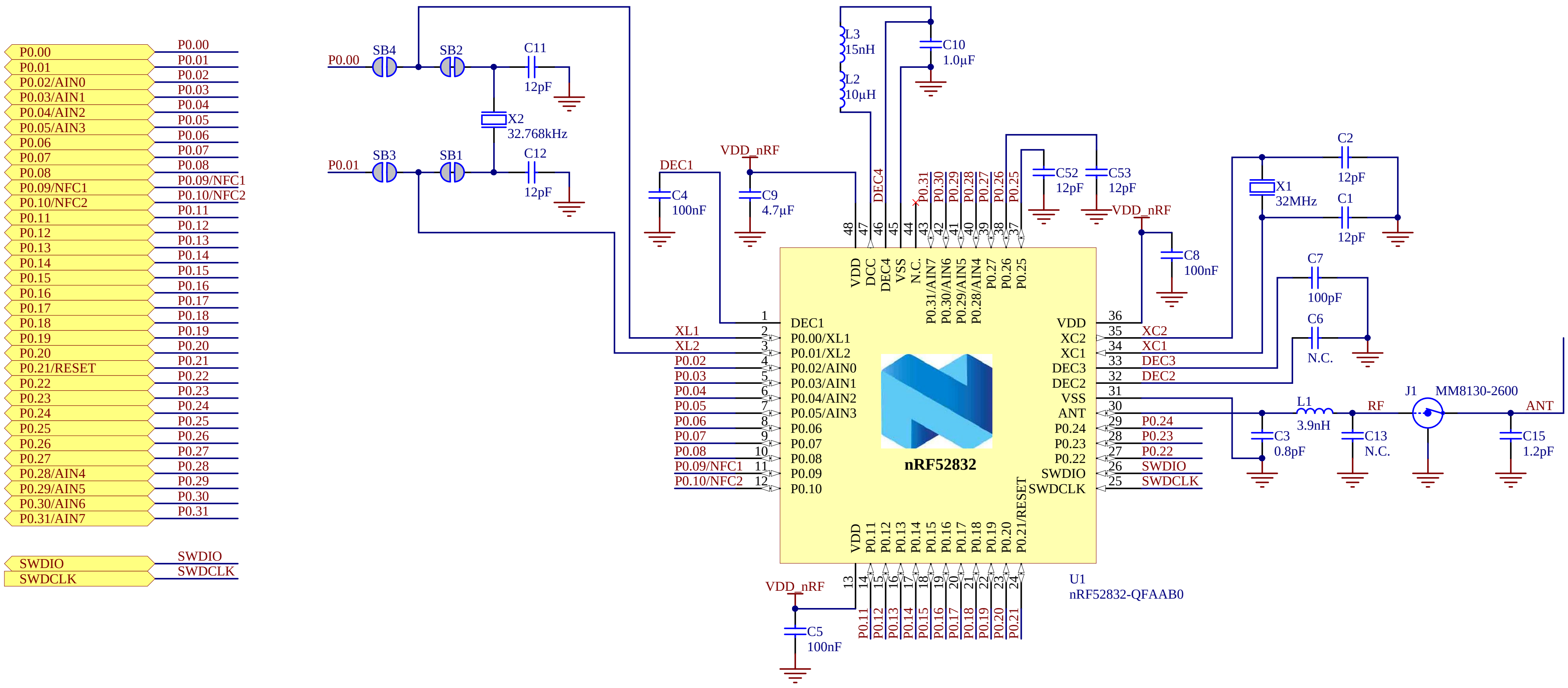
Nordic Semiconductor ASA

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

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.

PCA10040 - Cover		
Size: A3	Project Number: 4397	Revision: 1.2.1
Date: 31.05.2017		Sheet 1 of 7
File: pca10040_sheet1_cover.SchDoc		Drawn By: KJP/RUBR

NORDIC SEMICONDUCTOR



Title		
PCA10040 - nRF Radio		
Size: A4	Project Number: 4397	Revision: 1.2.1
Date: 31.05.2017		Sheet 2 of 7
File: pca10040_sheet2_radio.SchDoc		Drawn By: KJP/RUBR

NORDIC SEMICONDUCTOR

GPIO pin mapping

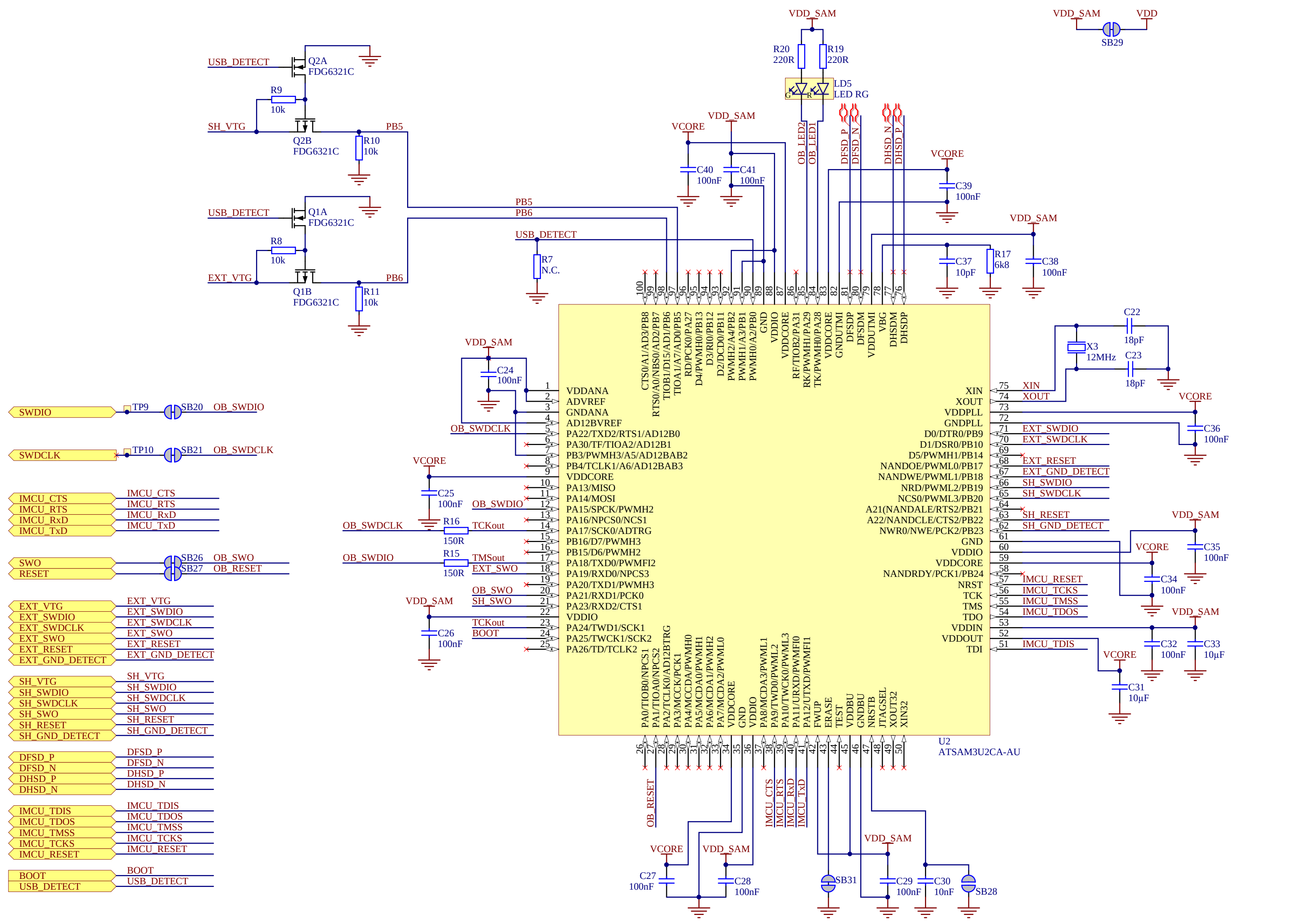
Signal	Solder bridge	Pin	Test point
SWO		P0.18	
RESET		P0.21/RESET	TP11
TRACECLK		P0.07	
TRACEDATA0		P1.00	
TRACEDATA1		P0.12	
TRACEDATA2		P0.11	
TRACEDATA3		P1.09	
XL1		P0.00	
XL2		P0.01	
IMCU_CTS	SB22	P0.05/AIN3	TP5
IMCU_RxD	SB23	P0.06	TP6
IMCU_RTS	SB24	P0.07	TP7
IMCU_TxD	SB25	P0.08	TP8
LED1		P0.17	
LED2		P0.18	
LED3		P0.19	
LED4		P0.20	
BUTTON1		P0.13	
BUTTON2		P0.14	
BUTTON3		P0.15	
BUTTON4		P0.16	
IOEXP_IRQ	SB30	P0.17	
RESET_PIN	SB17	P0.21/RESET	

Signal	Solder bridge	Pin
D0		P0.11
D1		P0.12
D2		P0.13
D3		P0.14
D4		P0.15
D5		P0.16
D6		P0.17
D7		P0.18
D8		P0.19
D9		P0.20
D10		P0.22
D11		P0.23
D12		P0.24
D13		P0.25
D14		P0.00
D15		P0.01
D16		P0.21/RESET
D17	SB13	P0.05/AIN3
D18	SB14	P0.06
D19	SB15	P0.07
D20	SB16	P0.08
D21		P0.09
D22		P0.10
AREF		P0.02/AIN0
A0		P0.03/AIN1
A1		P0.04/AIN2
A2		P0.28/AIN4
A3		P0.29/AIN5
A4		P0.30/AIN6
A5		P0.31/AIN7
SDA		P0.26
SCL		P0.27

Title: PCA10056 - Pin Map		NORDIC SEMICONDUCTOR
Size: A4	Project Number: 4397	Revision: 1.2.1
Date: 31.05.2017		Sheet 3 of 7
File: pca10040_sheet3_pin_map.SchDoc		Drawn By: RUBR

1 2 3 4 5 6 7 8

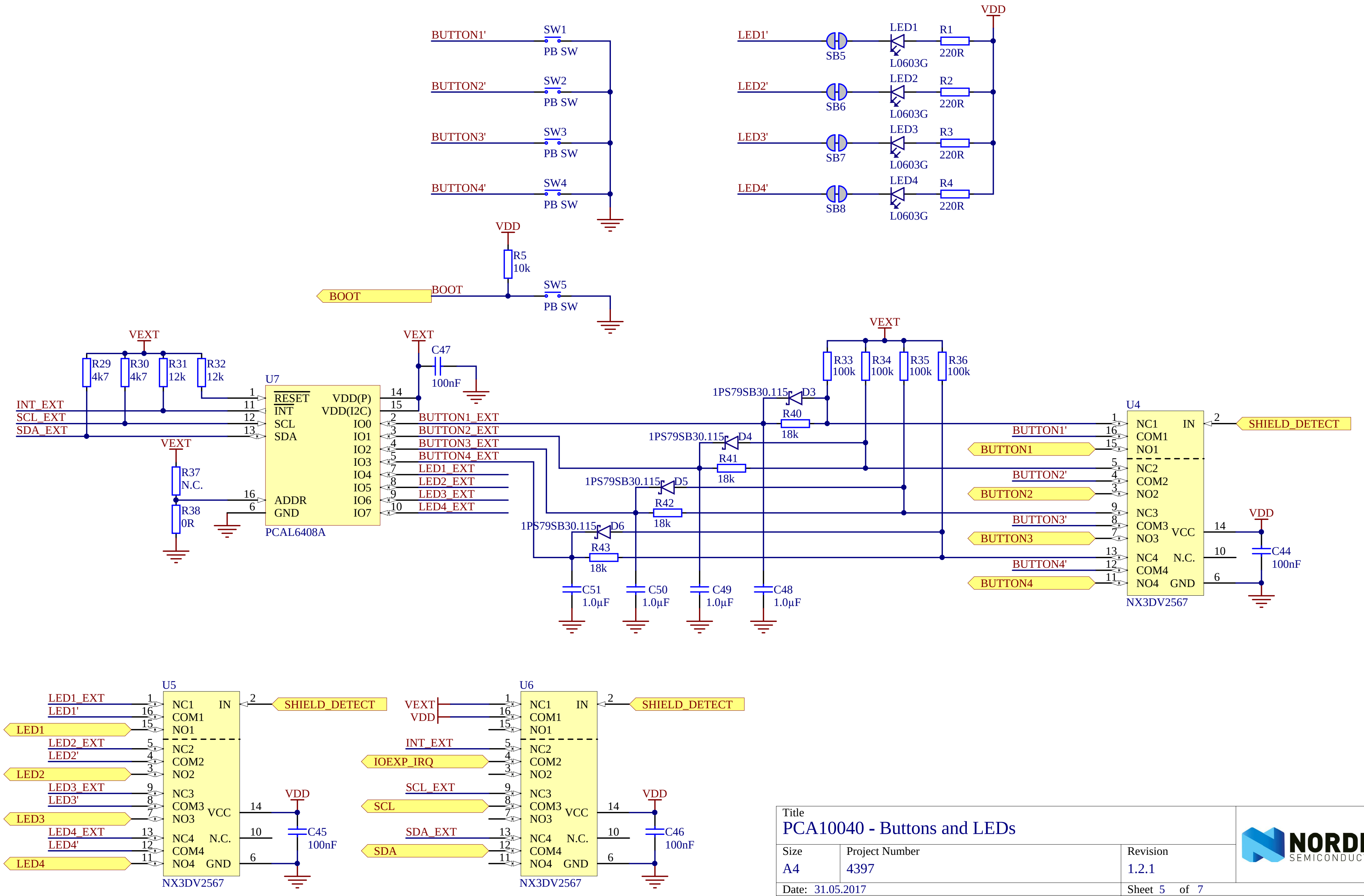
A B C D



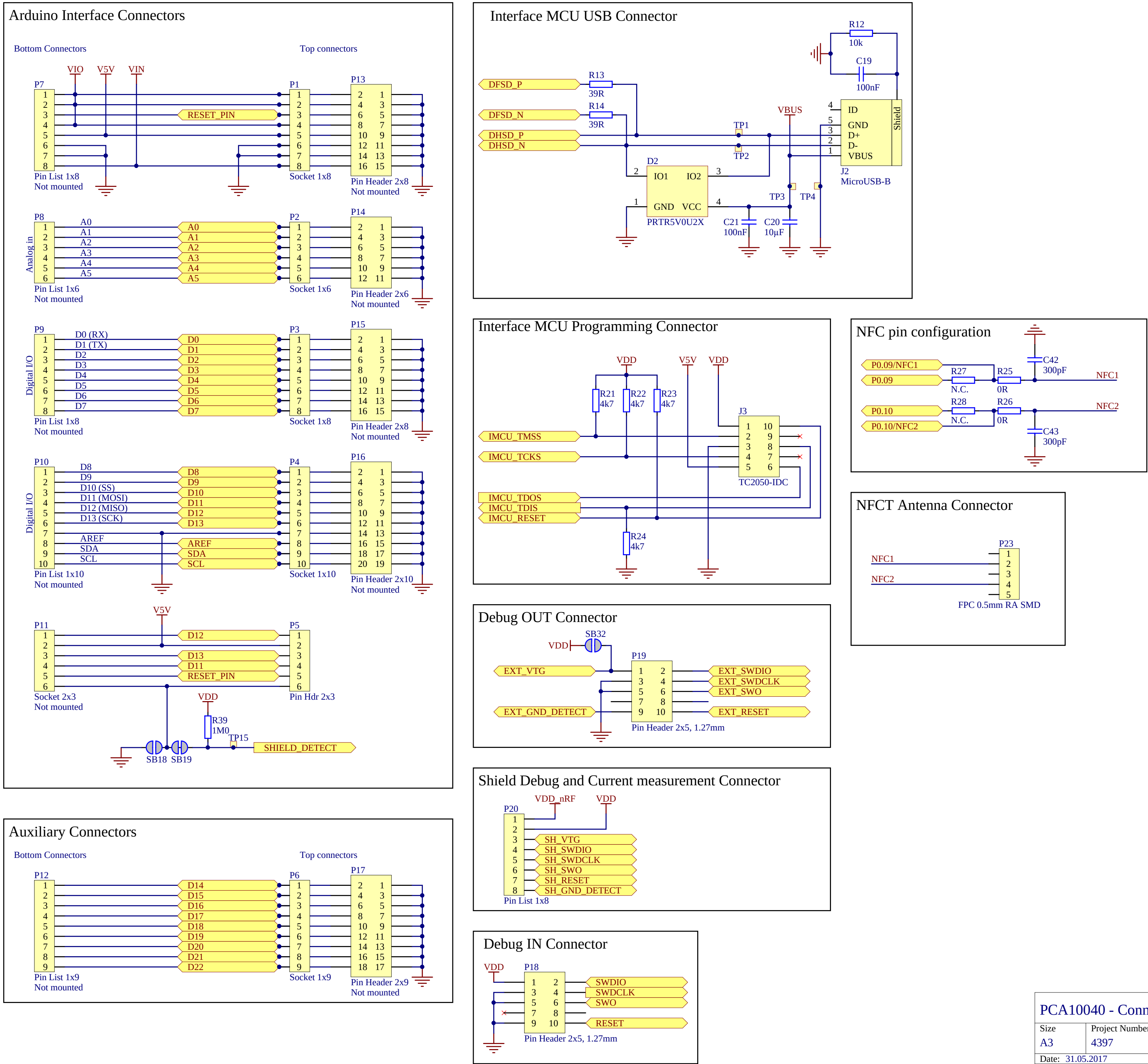
PCA10040 - Interface MCU		
Size: A3	Project Number: 4397	Revision: 1.2.1
Date: 31.05.2017		Sheet 4 of 7
File: pca10040_sheet4_interface_mcu.SchDoc		Drawn By: KJP/RUBR

NORDIC SEMICONDUCTOR

1 2 3 4 5 6 7 8



Title: PCA10040 - Buttons and LEDs		
Size: A4	Project Number: 4397	Revision: 1.2.1
Date: 31.05.2017		Sheet 5 of 7
File: pca10040_sheet5_buttons_and_leds.SchDoc		Drawn By: KJP/RUBR

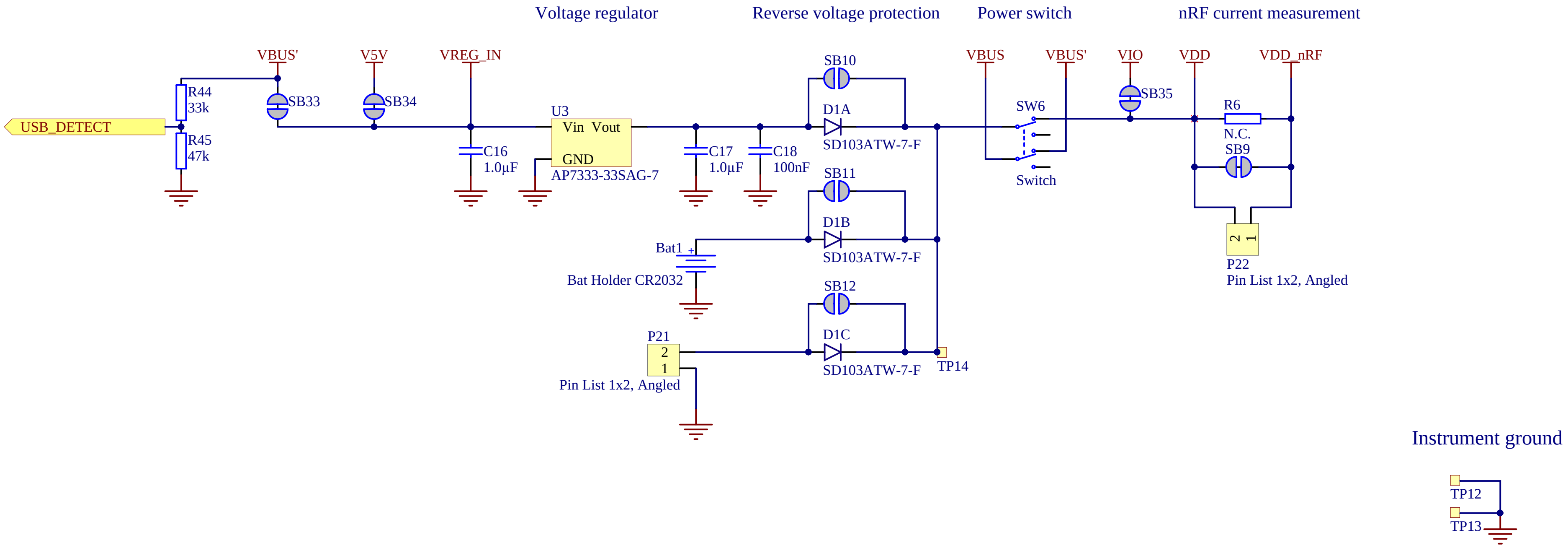


PCA10040 - Connectors

Size	Project Number	Revision
A3	4397	1.2.1

Date: 31.05.2017 | Sheet 6 of 7
File: pca10040_sheet6_connectors.SchDoc | Drawn By: KJP/RUBR

NORDIC SEMICONDUCTOR



Title PCA10040 - Power Supply		
Size A4	Project Number 4397	Revision 1.2.1
Date: 31.05.2017		Sheet 7 of 7
File: pca10040_sheet7_power_supply.SchDoc		Drawn By: KJP/RUBR

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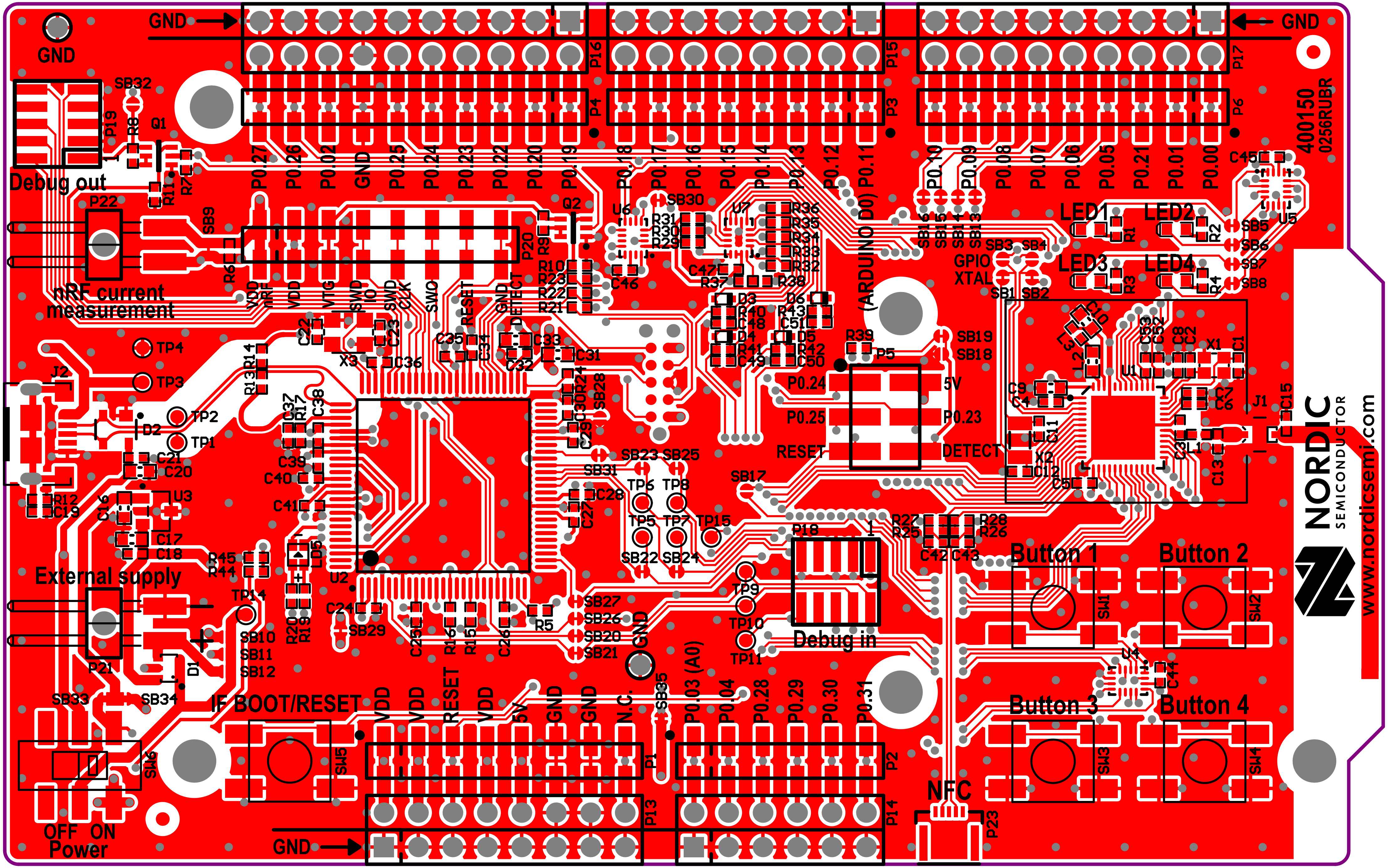
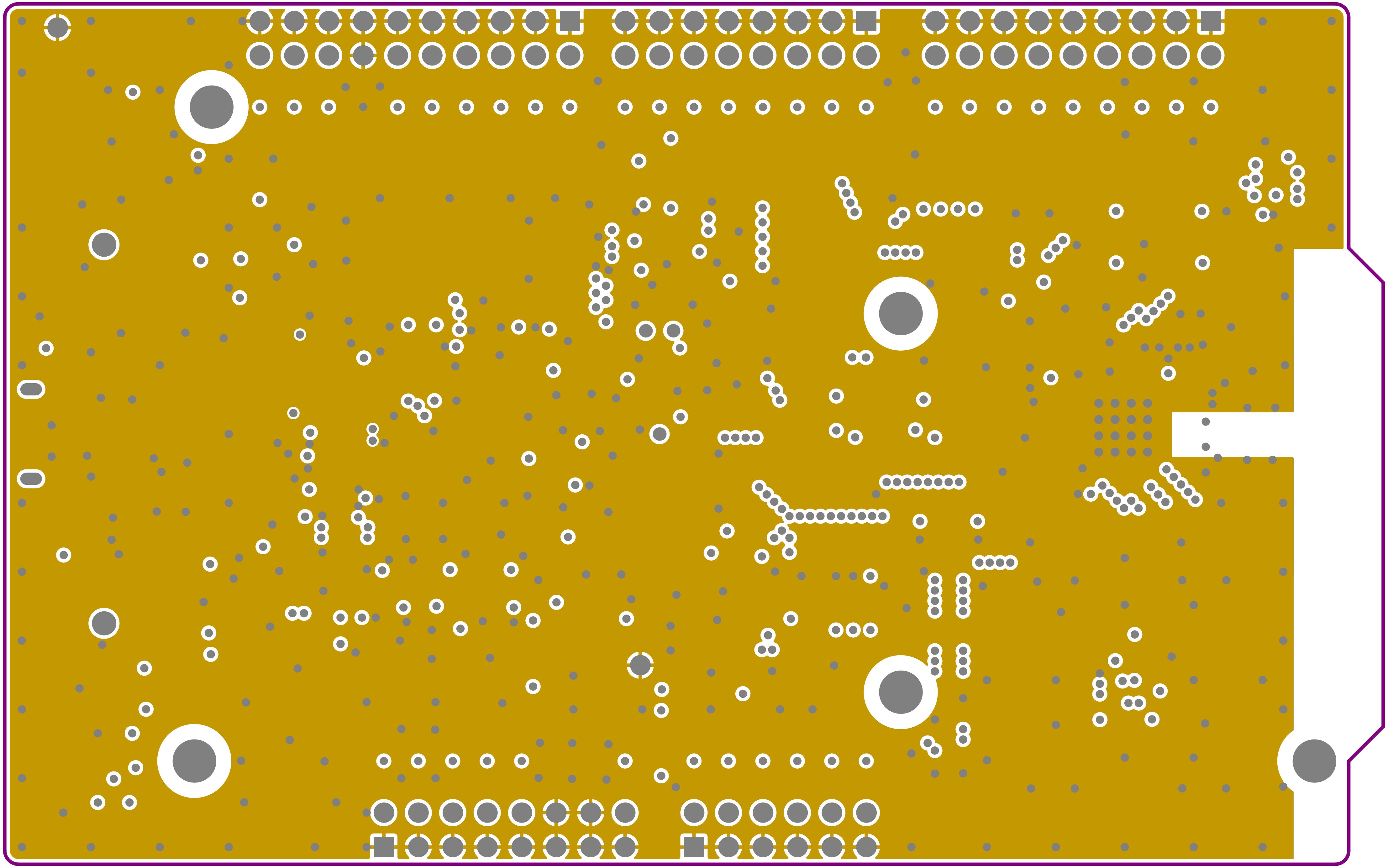
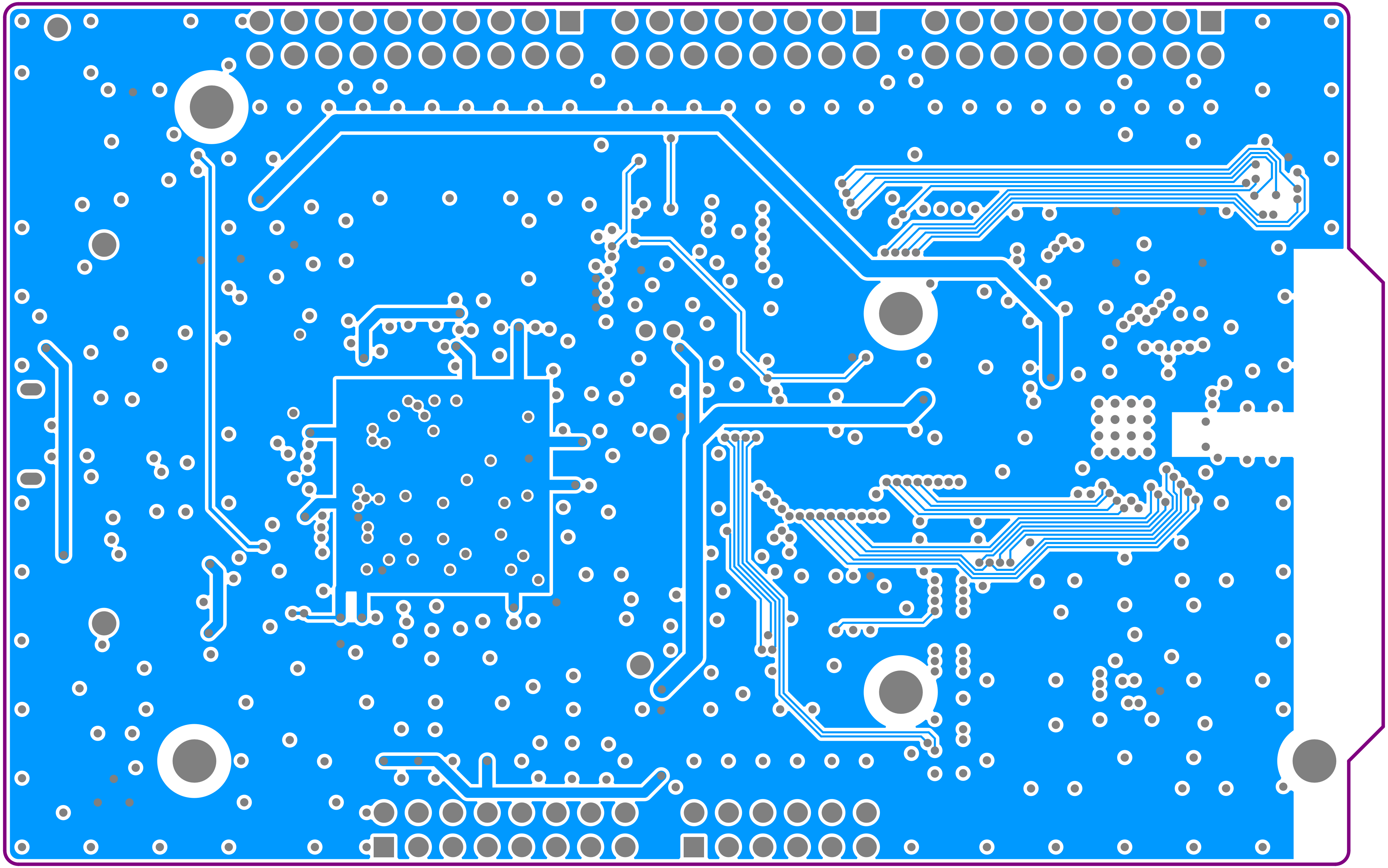
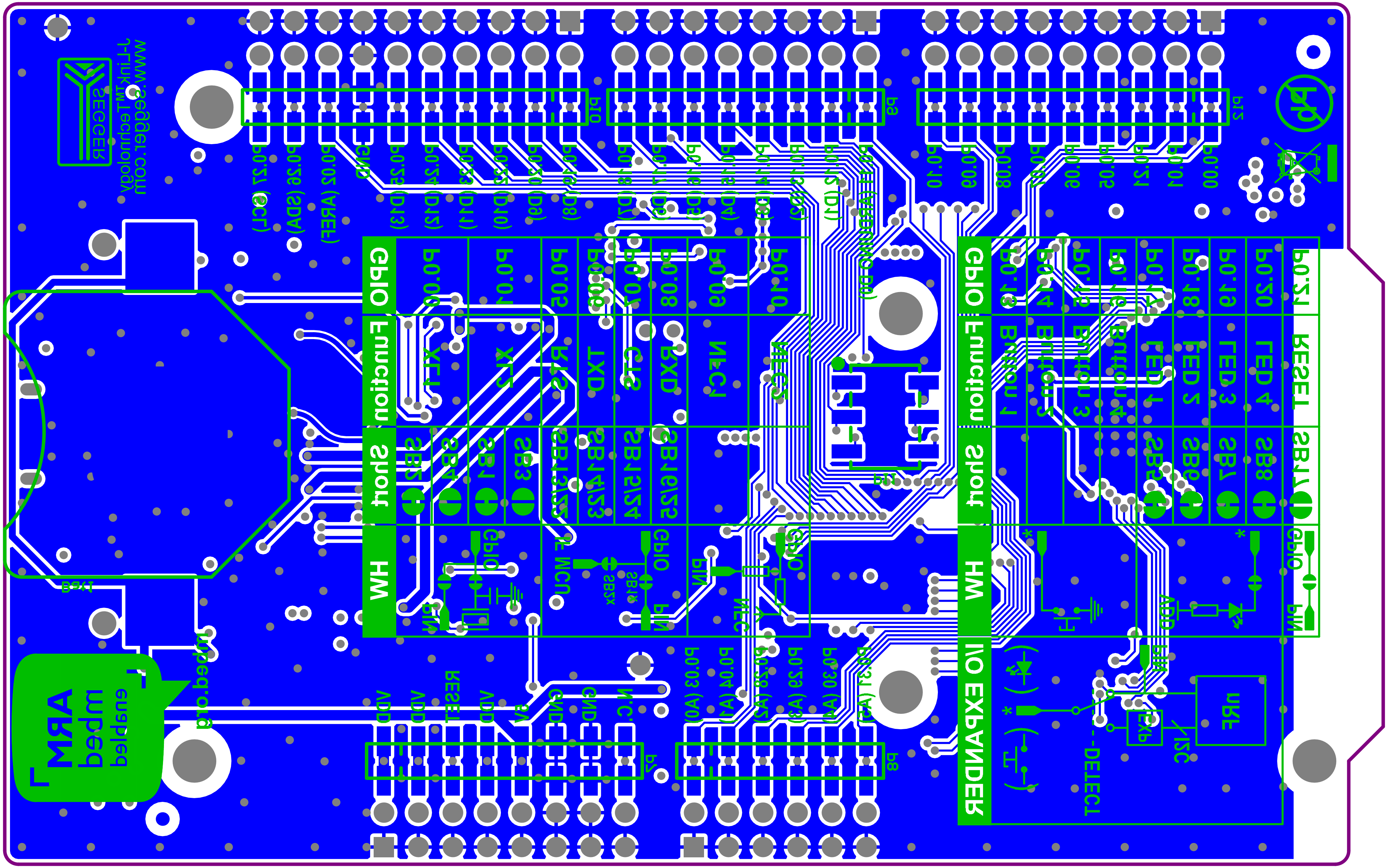
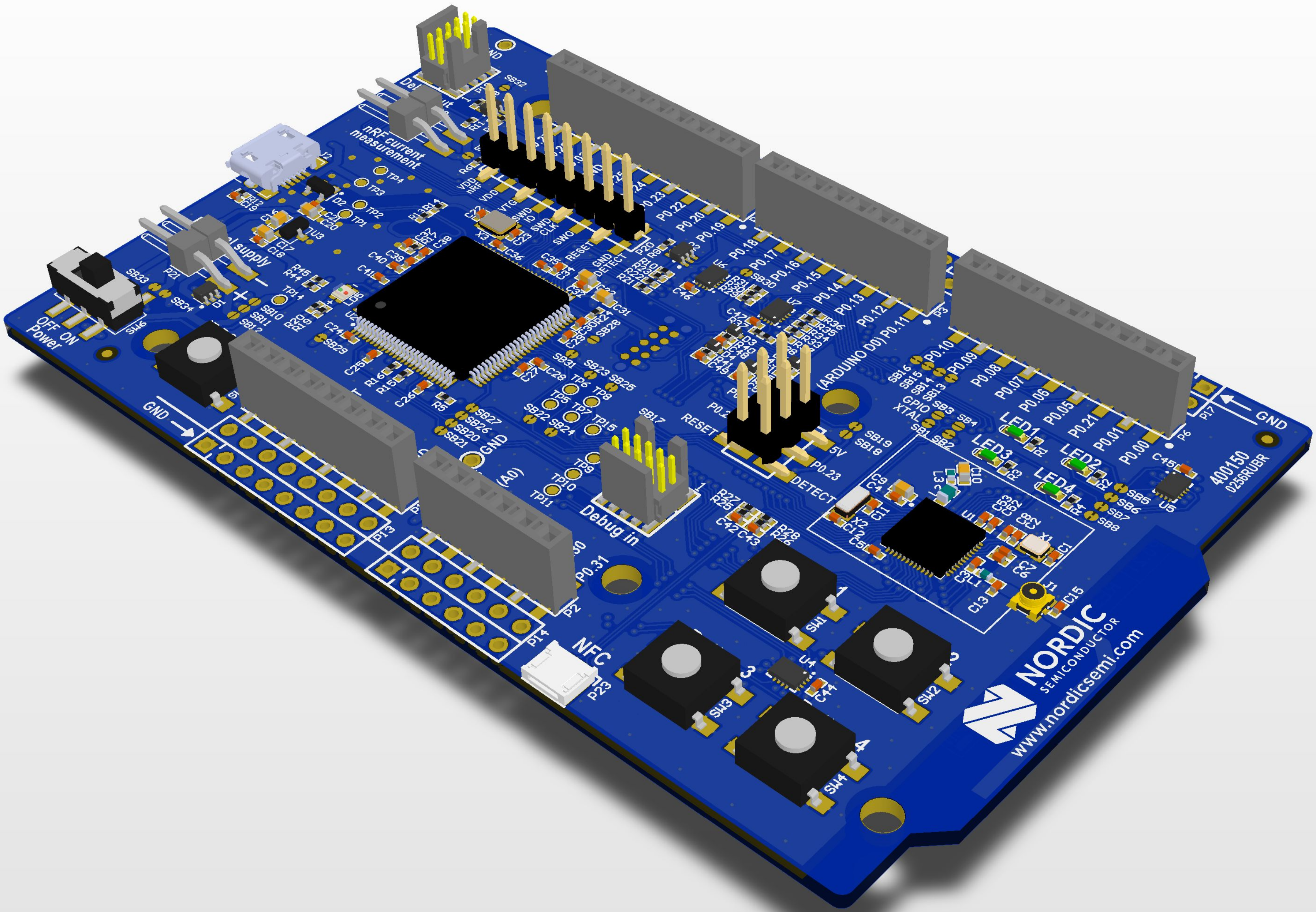

GND
GND
GND
Debug out
nRF current measurement
External supply
IF BOOT/RESET
OFF ON
Power
GND
P0.27 P0.26 P0.02 GND P0.25 P0.24 P0.23 P0.22 P0.20 P0.19
P0.18 P0.17 P0.16 P0.15 P0.14 P0.13 P0.12 P0.11
(ARDUINO D0)
P0.10 P0.09 P0.08 P0.07 P0.06 P0.05 P0.21 P0.01 P0.00
VDD nRF VDD VTG SWD IO SWD CLK SWO RESET GND DETECT
LED1 LED2 LED3 LED4
GPIO
XTAL
P0.24 5V
P0.25 P0.23
RESET DETECT
Debug in
Button 1 Button 2
Button 3 Button 4
VDD VDD RESET VDD 5V GND GND N.C.
P0.03 (A0) P0.04 P0.28 P0.29 P0.30 P0.31
NFC
400150
0256RUBR
NORDIC
SEMICONDUCTOR
www.nordicsemi.com








NORDIC
SEMICONDUCTOR
www.nordicsemi.com
nRF current measurement
Debug in
NFC
Power
OFF ON
GND
LED1
LED2
LED3
LED4
SW1
SW2
SW3
SW4
RESET
DETECT
5V
(ARDUINO D0) P0.11
P0.31
400150