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REVISION HISTORY

REVISION	DESCRIPTION OF CHANGE	DATE	Author	Reviewer
A	Prototype Release	03-June-22	CBC	Vincent FILLATRE
A1	Production X- Release BOM Update: L60 -> 7442335900 U205, U207, U208, U212, U213 -> 74AUP1T34GW,125 J60 -> Default 1:2	16-June-22	CBC	Vincent FILLATRE
A2	Production Pilot Release BOM Update: R322 --> 180K (APN# 470-78122) R323 --> Populated J63 --> Jumper Default Pos: 2-3	10-October-22	CBC	Vincent FILLATRE
A3	Production Pilot Release BOM Update: Default configuration = 3 x I²S MICs U209, U210 and U211 ACTIVE R228, R368, R222 --> DNP R243, R367, R365 --> 0 Ohm APN# 470-80866	04-Nov-22	CBC	Vincent FILLATRE
A4	U5 --> W25Q256JWEIQ	14-Nov-22	CBC	Vincent FILLATRE
A5	U4 --> 330-77237 / MFG_PN# MIMXRT106VDVL6B	19-Dec-22	CBC	Vincent FILLATRE

Do Not Populate

REF DES	*ASSY_OPT*	*PAGE NAME*
C22,C221,R13,R317,Y3	DNP	03 Power Section
R215,R216	DNP	04 i.MXRT Section
C277,R14,R30,R264,R273,R274, R275,R276,R277,R286,R382,R383	DNP	05 Memory Section
C61,C62,C63,C66,C67,C68,D1, R72,R74,R75,R218,R302,R330, R331,R332,R333,R334,R335, R346,R347,R348,R349,R357, R361,R376,R378,R380	DNP	06 Wi-Fi & BT/BLE/M2 Section
R22,R23,R32,R40,R41	DNP	07 BOOT & Debug Interfaces
R45,R46	DNP	09 Audio Amplifier EXT
R49,R222,R226,R228,R238,R240, R242,R244,R368	DNP	10 PDM & I2S MIC MAIN-EXT

Default Jumpers

REF DES	*JUMPER*	*PAGE NAME*
J60	Default 1:2	03 Power Section
J61	Default 1:2	07 BOOT & Debug Interfaces
J63	Default 2:3	07 BOOT & Debug Interfaces

SLN-SVUI-IOT

ICAP Classification: CP: IUO: PUBL

Drawing Title: SLN-SVUI-IOT

Page Title: Cover Page

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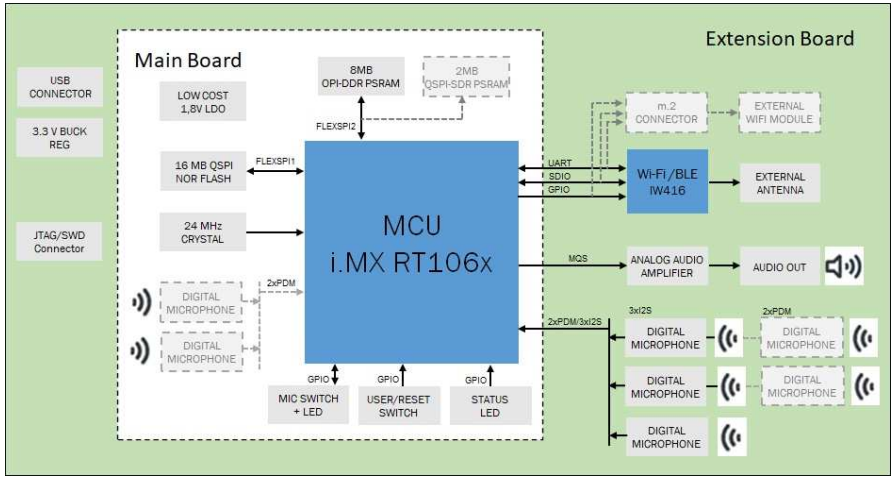
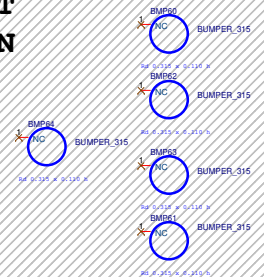
Block Diagram



57 mm X 127 mm PCB EXT
57 mm X 38 mm PCB MAIN



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Drawing Title:	SLN-SVUI-IOT		
Page Title:	Block Diagram		
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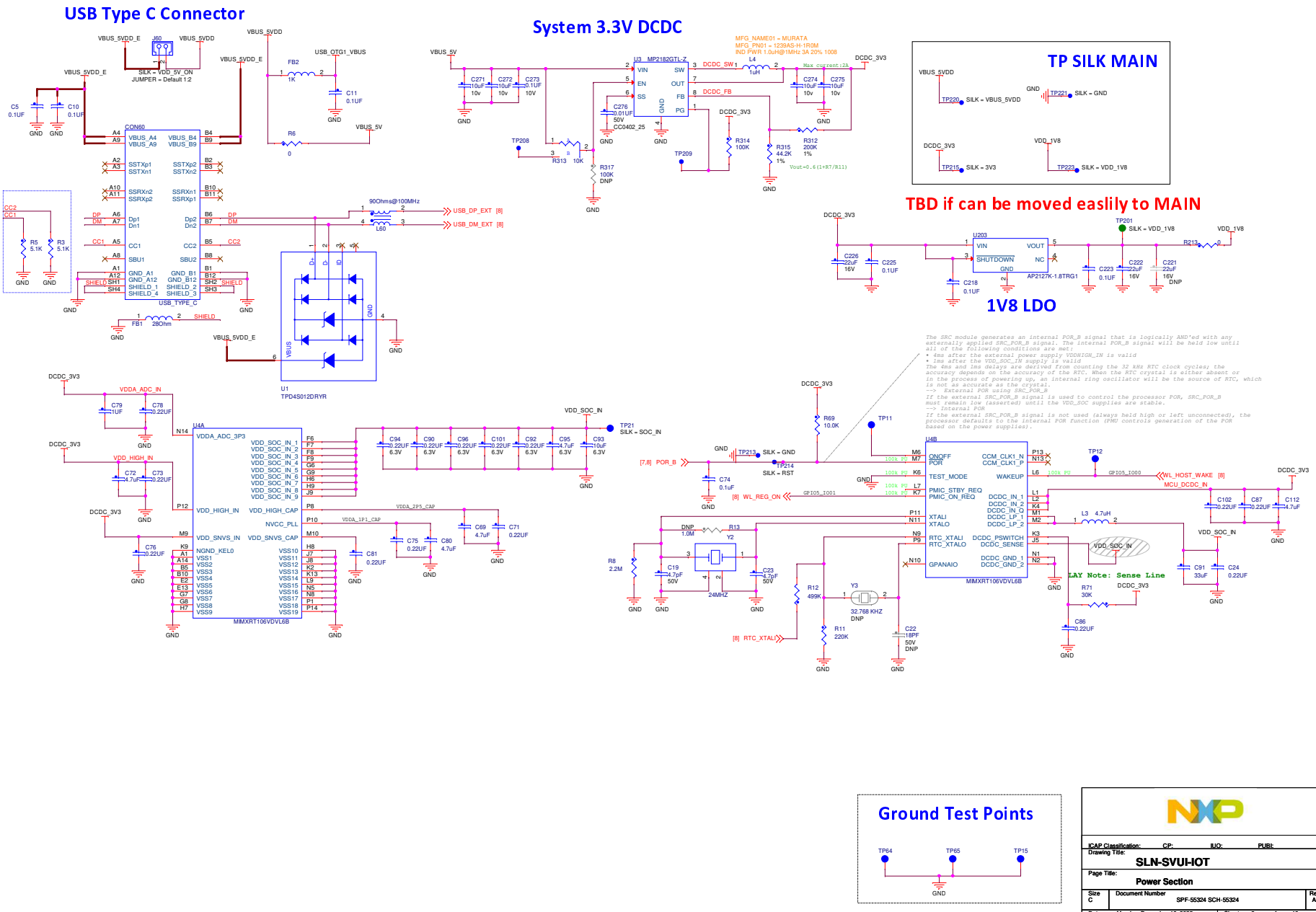
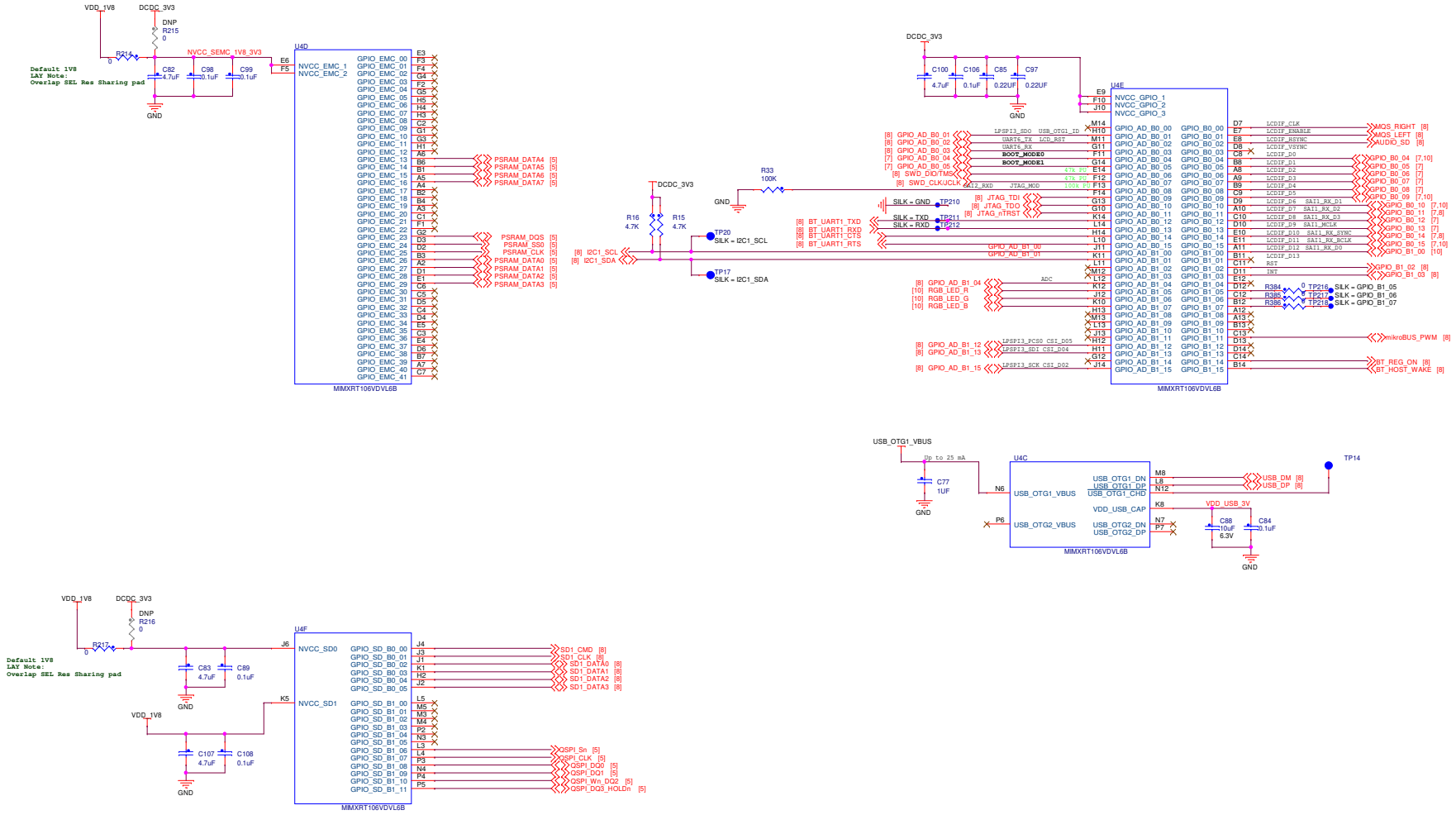
iMXRT Connected Module Power Section



i.MXRT Section



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Page Title:	i.MXRT Section		
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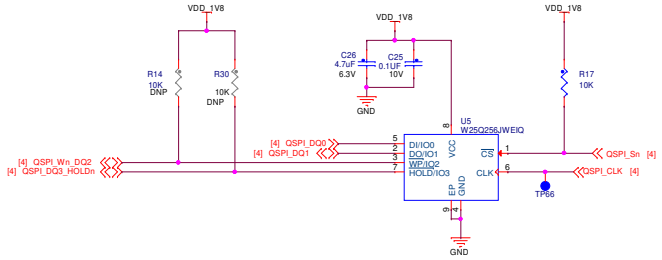
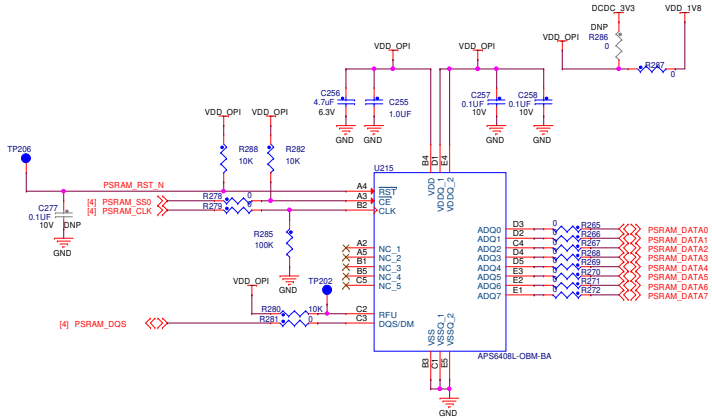
Memory Section

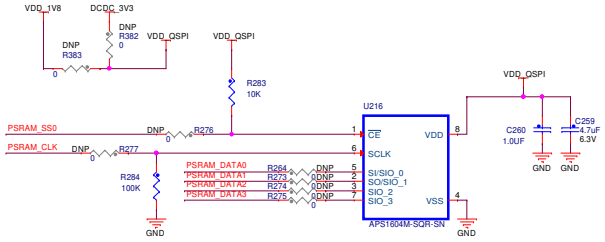
128Mbit QSPI Flash Memory



OPI PSRAM



QSPI PSRAM



ICAP Classification:	CP:	IUO:	PUBL	
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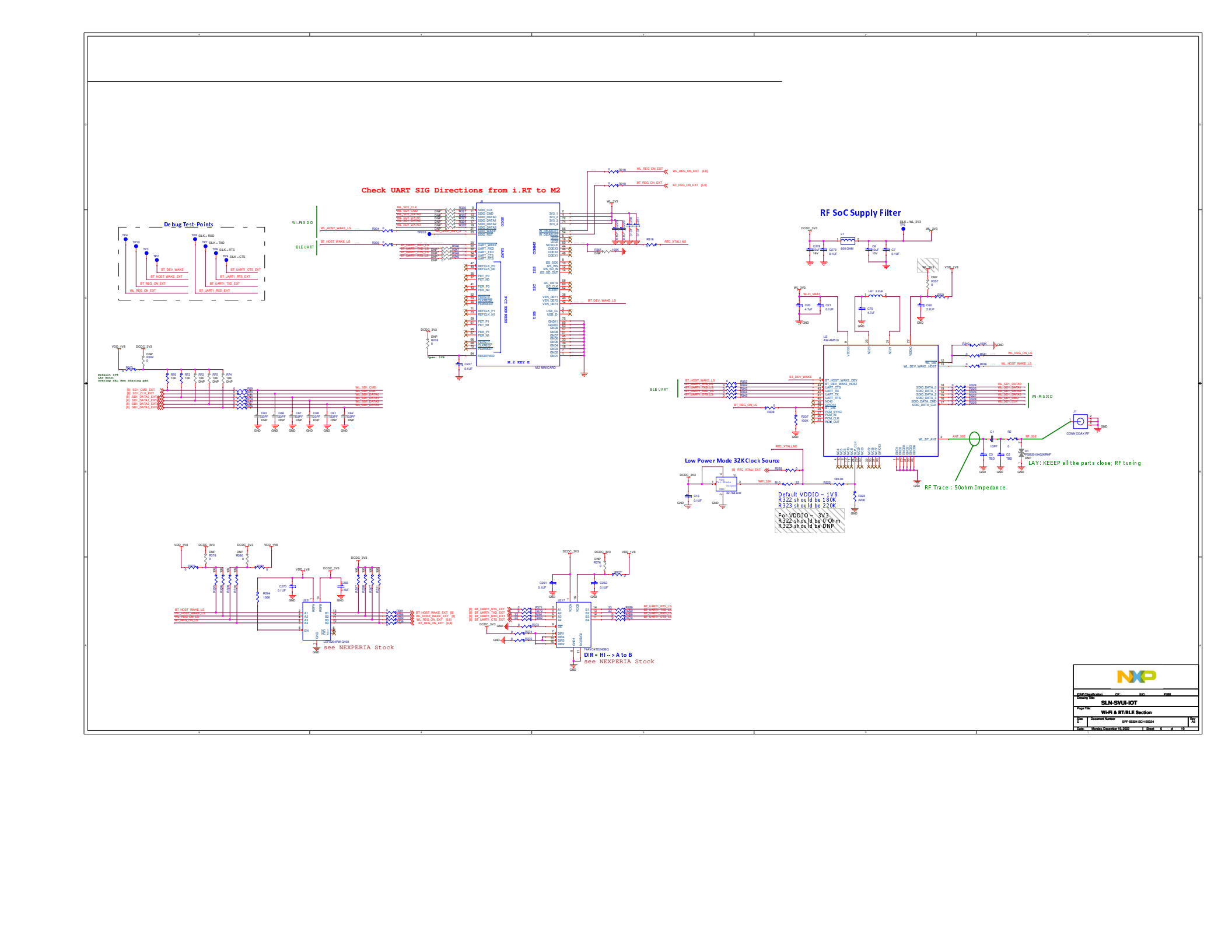
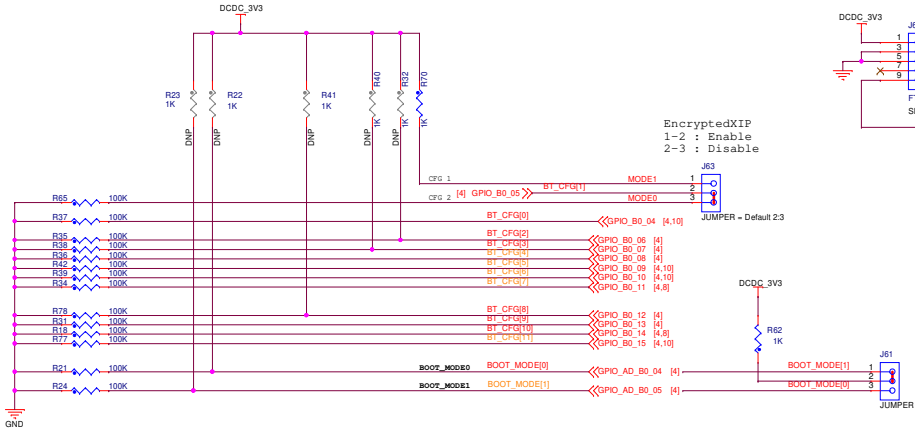

Check UART SIG Directions from i.RT to M2
Debug Test-Points
RF SoC Supply Filter
Low Power Mode 32K Clock Source
Default VDDIO = 1V8
R322 should be 180K
R323 should be 220K
For VDDIO = 3V3,
R322 should be 0 Ohm
R323 should be DNP
RF Trace : 50ohm impedance
LAY: KEEEP all the parts close; RF tuning
see NEXPERIA Stock
see NEXPERIA Stock
DIR = HI --> A to B
SLN-SVUI-IOT
Wi-Fi & BT/BLE Section

Boot Configuration & Debug Interface

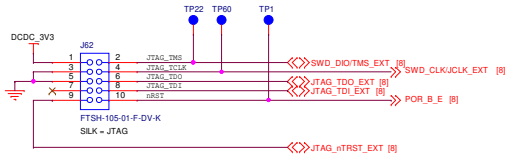
Boot Configuration.



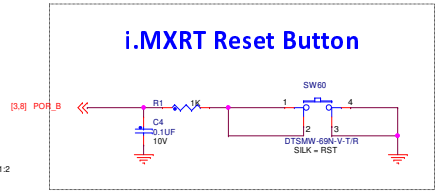
Use only during Development phase

Boot Mode selection Header

i.MXRT Debug & Programming



i.MXRT Reset Button



CHECK RST Timing! Lo --> HI, ~Min 1V for LS to be ON

FUSE MAP

	0	0	0	1	0	0	0	0	0	0	0	0
TYPE	BOOT_CFG[11]	BOOT_CFG[10]	BOOT_CFG[9]	BOOT_CFG[8]	BOOT_CFG[7]	BOOT_CFG[6]	BOOT_CFG[5]	BOOT_CFG[4]	BOOT_CFG[3]	BOOT_CFG[2]	BOOT_CFG[1]	BOOT_CFG[0]
FlexSPI1 - Serial NOR	Infinit-Loop: (Debug USE only) 0 - Disable 1- Enable	FLASH_TYPE 000-Device supports 3B read by default 001-Device supports 4B read by default 010-HyperFlash 1V8 011-HyperFlash 3V3 100-MXIC Octal DDR			0	0	0	0	HOLD TIME: 00 - 500us 01 - 1ms 10 - 3ms 11 - 10ms		EncryptedXIP 0 - Disabled 1- Enabled	Reserved
SD	Infinit-Loop: (Debug USE only) 0 - Disable 1- Enable	Reserved	Bus Width: 0 - 1-bit 1 - 4-bit	SD1 VOLTAGE SELECTION: 0 - 3.3V 1 - 1.8V	0	1	SD/SDXC Speed: 00 - Normal/SDR12 01 - High/SDR25 10 - SDR50 11 - SDR104		SD Power Cycle Enable: '0' - No power cycle '1' - Enabled via USDHC_RST pad	SD Loopback Clock Source Sel: (for SDR50 and SDR104 only) '0' - through SD '1' - direct	Port Select: 0 - eSDHC1 1 - eSDHC2	Fast Boot: 0 - Regular 1 - Fast Boot

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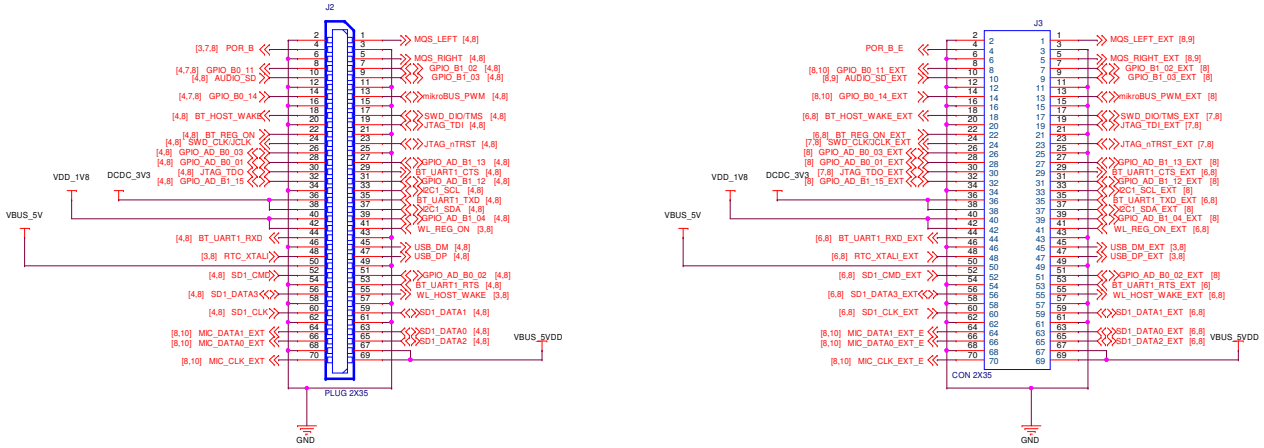
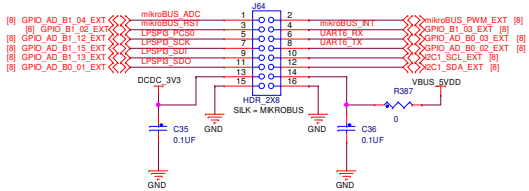
Headers

CK Aligment with PE



Serial Port Header

Serial Port Header



ICAP Classification:	CP:	IUO:	PUBL
Drawing Title:	SLN-SVUI-IOT		
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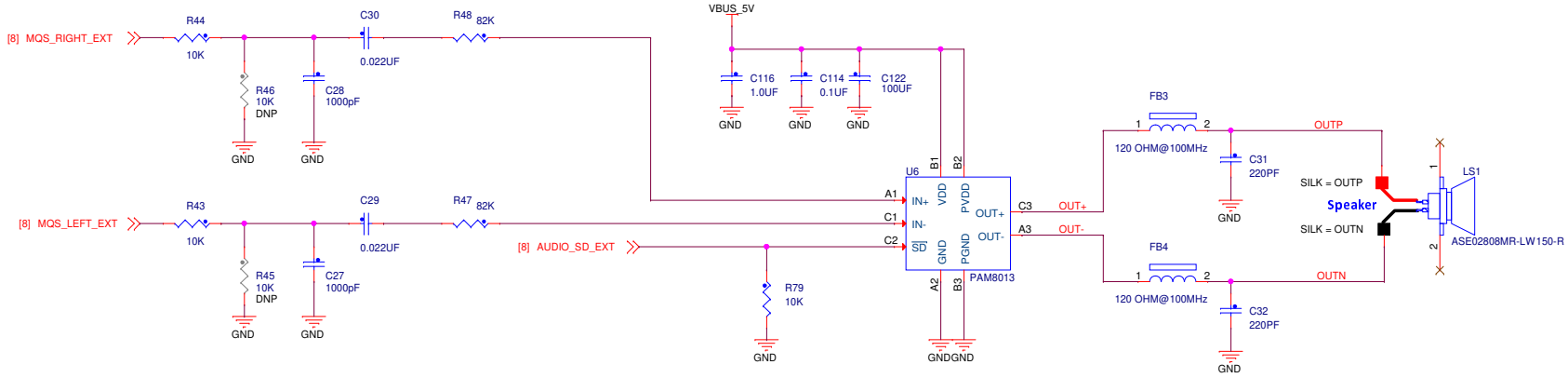
Audio Amplifier Extention Board



ICAP Classification:	CP:	IUO:	PUBI:
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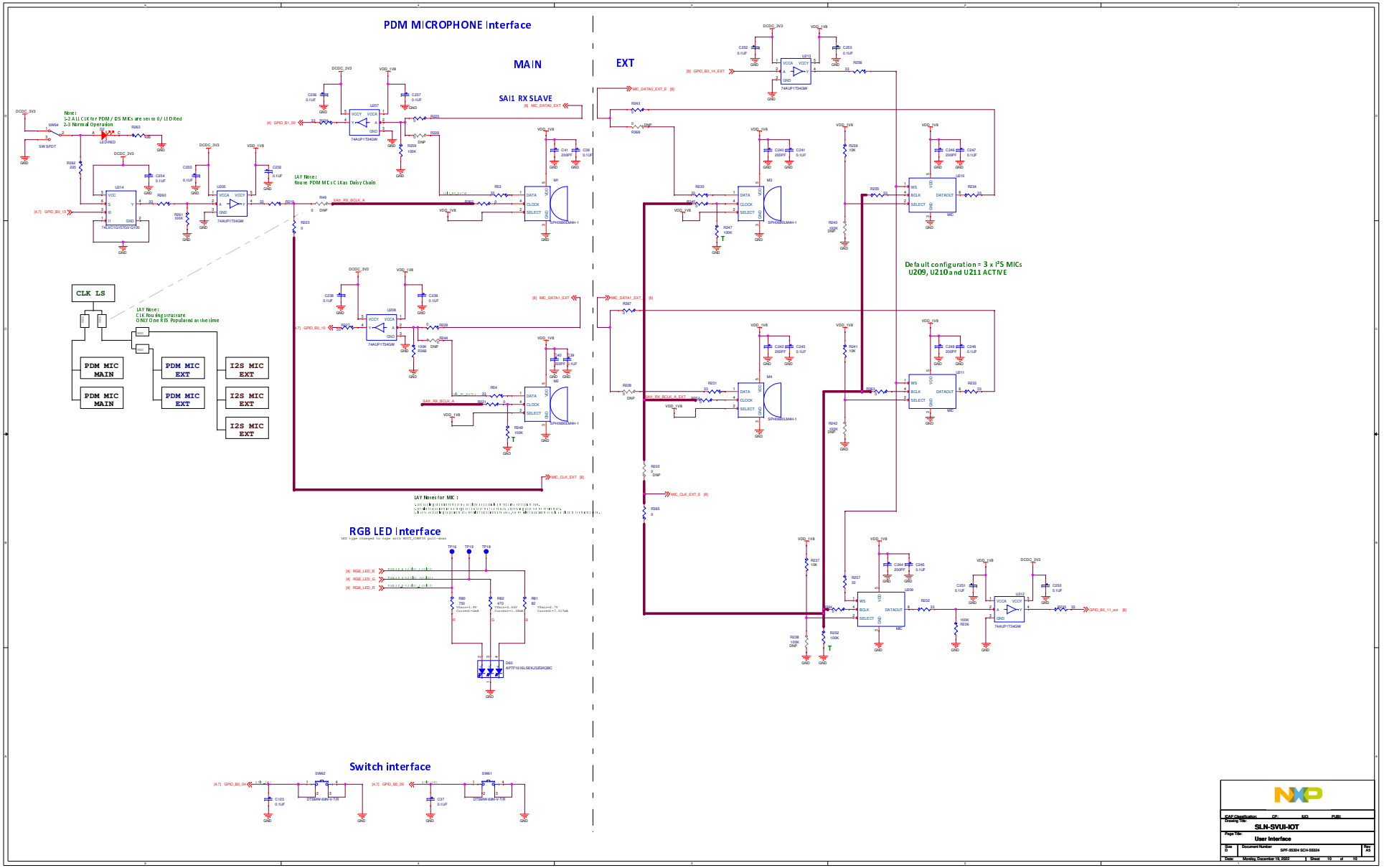
PDM MICROPHONE Interface
MAIN
EXT
SAI1 RX SLAVE
Default configuration = 3 x I²S MICs
U209, U210 and U211 ACTIVE
CLK LS
PDM MIC MAIN
PDM MIC MAIN
PDM MIC EXT
PDM MIC EXT
I2S MIC EXT
I2S MIC EXT
I2S MIC EXT
RGB LED Interface
Switch interface
SLN-SVUI-IOT
User Interface