

MIMXRT1060-EVKC

Table of Content

Page 1	COVER
Page 2	BLOCK DIAGRAM
Page 3	MAIN POWER
Page 4	POWER DOMAIN
Page 5	MIMXRT1062DVL6A
Page 6	LCD
Page 7	USB
Page 8	CAN
Page 9	AUDIO
Page 10	ETHERNET
Page 11	M.2 SOCKET
Page 12	SD/FLASH
Page 13	ARDUINO/JTAG
Page 14	SDRAM
Page 15	MCU-Link
Page 16	CSI
Page 17	BOOT
Page 18	MISC
Page 19	
Page 20	
Page 21	
Page 22	
Page 23	
Page 24	
Page 25	
Page 26	
Page 26	
Page 27	
Page 28	

1. Unless Otherwise Specified:

All resistors are in ohms, 1/16 Watt, 0402

All capacitors are in uF, 0402

All voltages are DC

All polarized capacitors are aluminum electrolytic

2. Interrupted lines coded with the same letter or letter combinations are electrically connected.

Revision History

Rev. Code	Date	By	Description
A	2022-08-11	Shawn Shi	Initial Release
B	2023-01-17	Albert Li	1. Change I2C address for FXLS8974CFR3, DNP R1031 and populate R1038 2. Add pull down option for JTAG_nTRST

Jumper Setting

REF DES	JUMPER(DEFAULT)	PAGE NAME
J40	5-6	03 MAIN POWER
J25,J26,J27,J29,J30,J44	1-2	04 POWER DOMAIN
J112	OPEN	04 POWER DOMAIN
J110	1-2	05 MIMXRT1062DVL6A
J109,J111	Open	05 MIMXRT1062DVL6A
J97,J98,J99,J100	1-2	09 AUDIO
J21	Open	09 AUDIO
J54,J55	1-2	11 M.2 SOCKET
J56,J57,J103	Open	11 M.2 SOCKET
J76	1-2	12 SD/FLASH
J107	2-3	12 SD/FLASH
J28	Open	13 ARDUINO/JTAG
JP6,JP7	1-2	15 MCU-Link
JP5	Open	15 MCU-Link
J104,J105,J106	Open	17 BOOT

Switch Setting

REF DES	SWITCH(DEFAULT)	PAGE NAME
SW3,SW2	off,off,off,off	17 BOOT
SW4	off,off,on,off	17 BOOT

3. Device type number is for reference only. The number varies with the manufacturer.

4. Special signal usage:

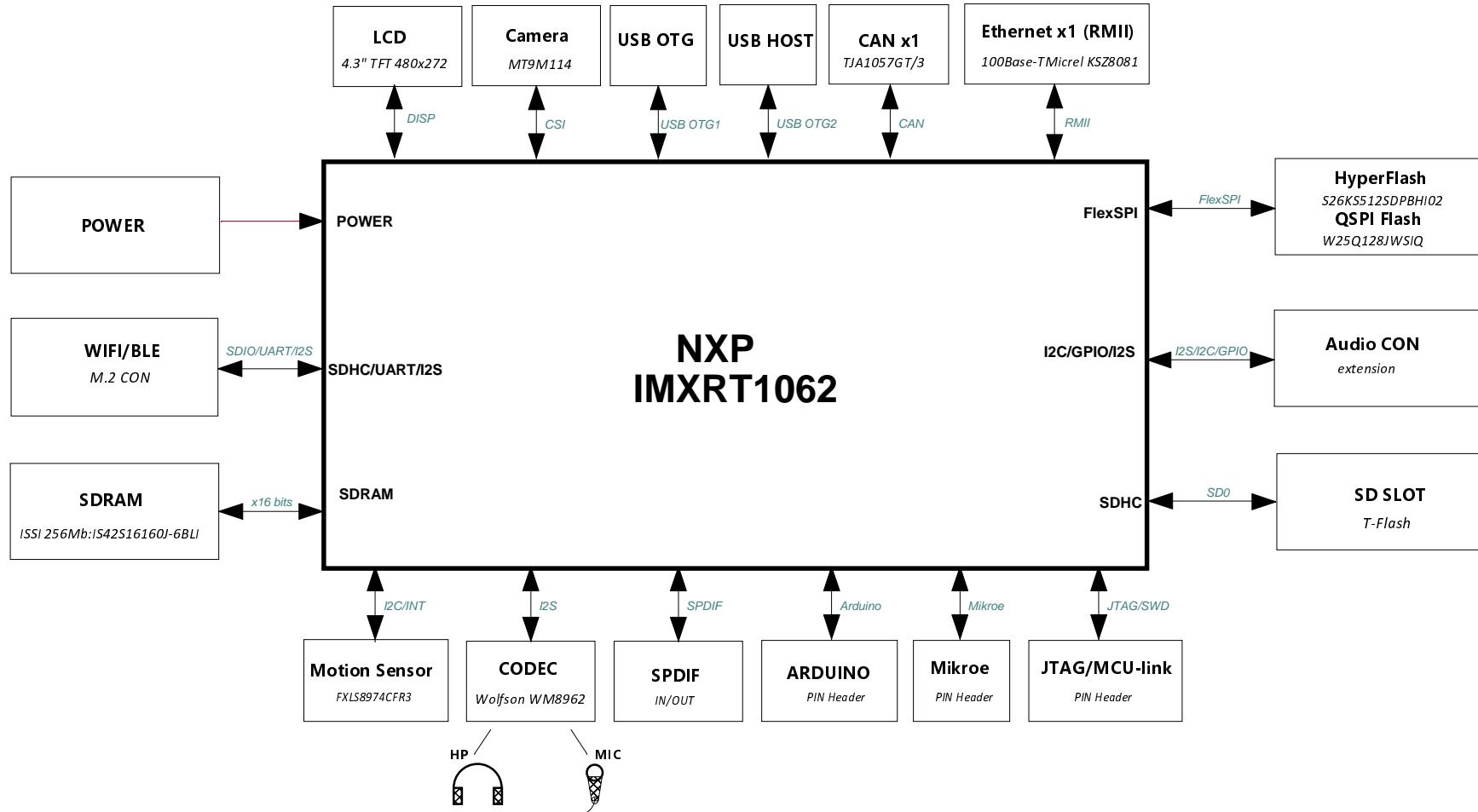
_B Denotes - Active-Low Signal
_> or [] Denotes - Vectored Signals

5. Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.

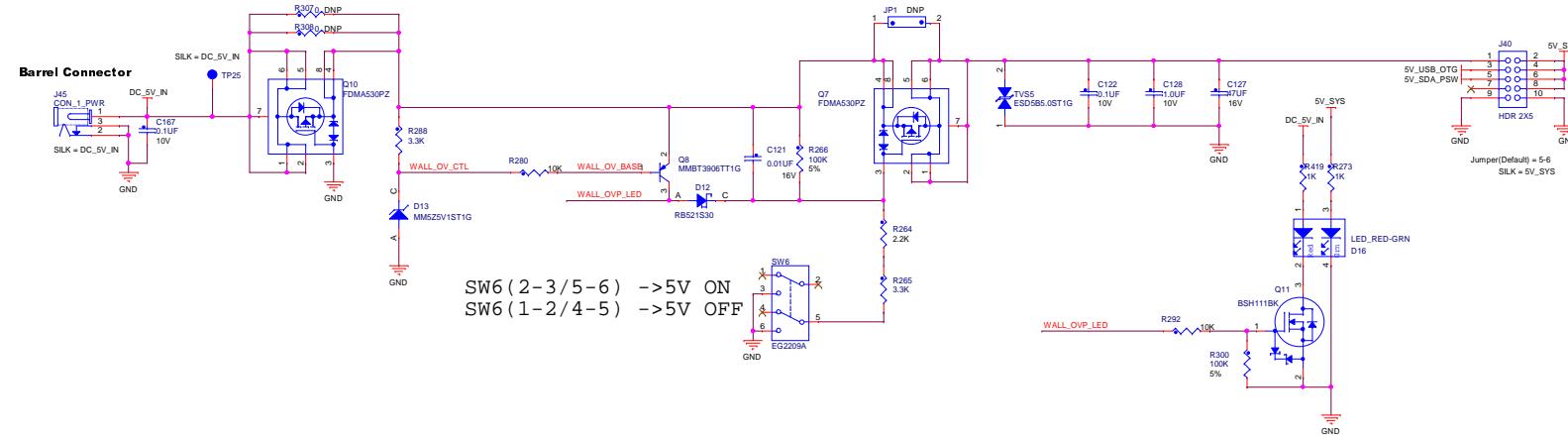
 NXP Microcontroller Product Group 6501 William Cannon Drive West Austin, TX 78735 USA		Microcontroller Product Group 6501 William Cannon Drive West Austin, TX 78735 USA <small>This document contains information proprietary to NXP and shall not be used for engineering design, procurement or manufacture in whole or in part without the express written permission of NXP Semiconductors.</small>		
		<small>ICAP Classification: CP ILO: PUBL</small>		
Designer: Shawn Shi	Drawing Title: MIMXRT1060-EVKC			
Drawn by: Shawn Shi	Page Title: COVER			
Approved: Yes	Size: C	Document Number: SCH-55539, PDF: SPF-55539	Rev: B	
<small>Date: Tuesday, January 17, 2023 Sheet 1 of 18</small>				

Blcok Diagram Rev B#####

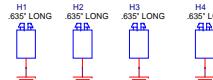
MIMXRT1060-EVKC



Main Power



Board Mounting Holes

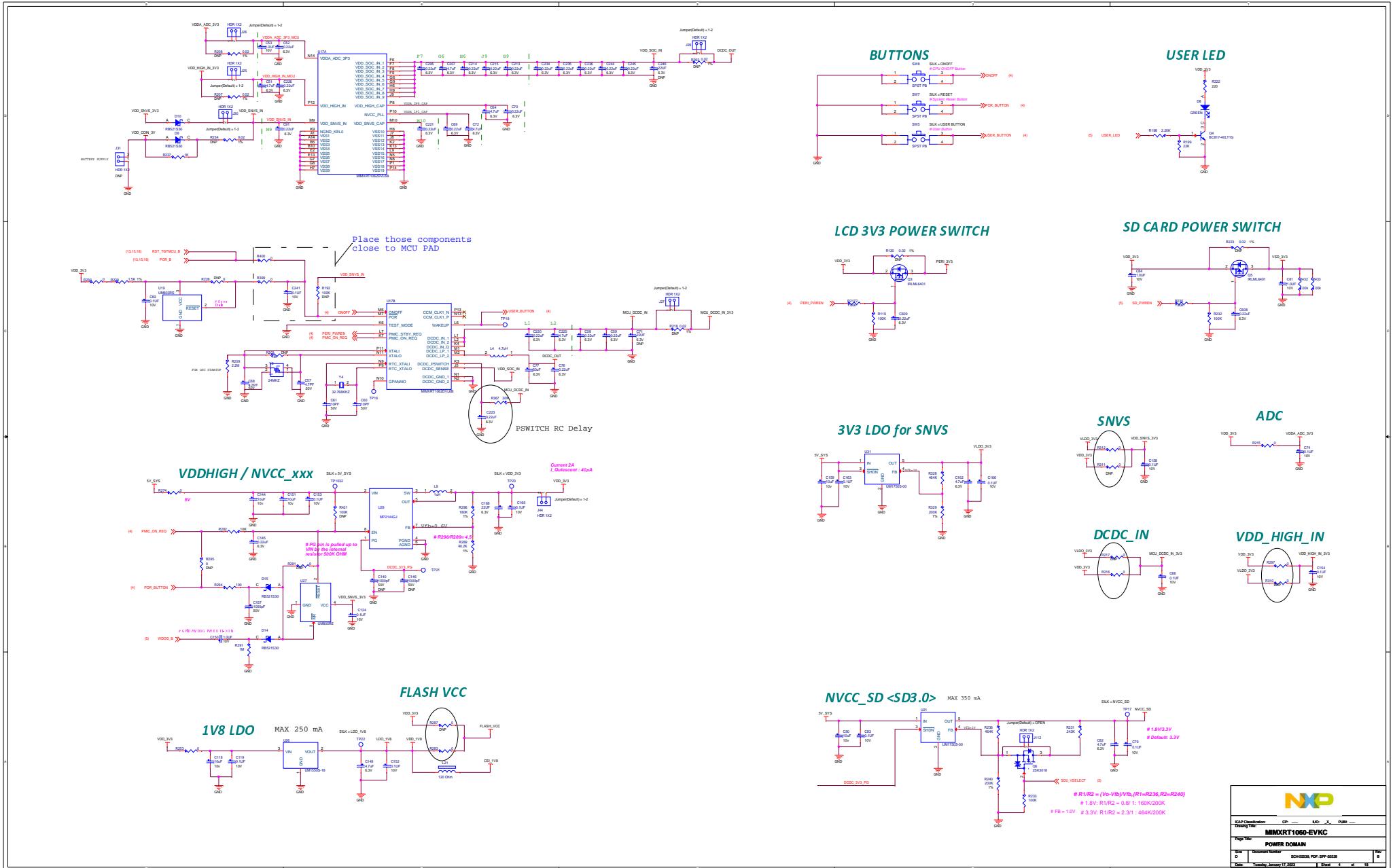


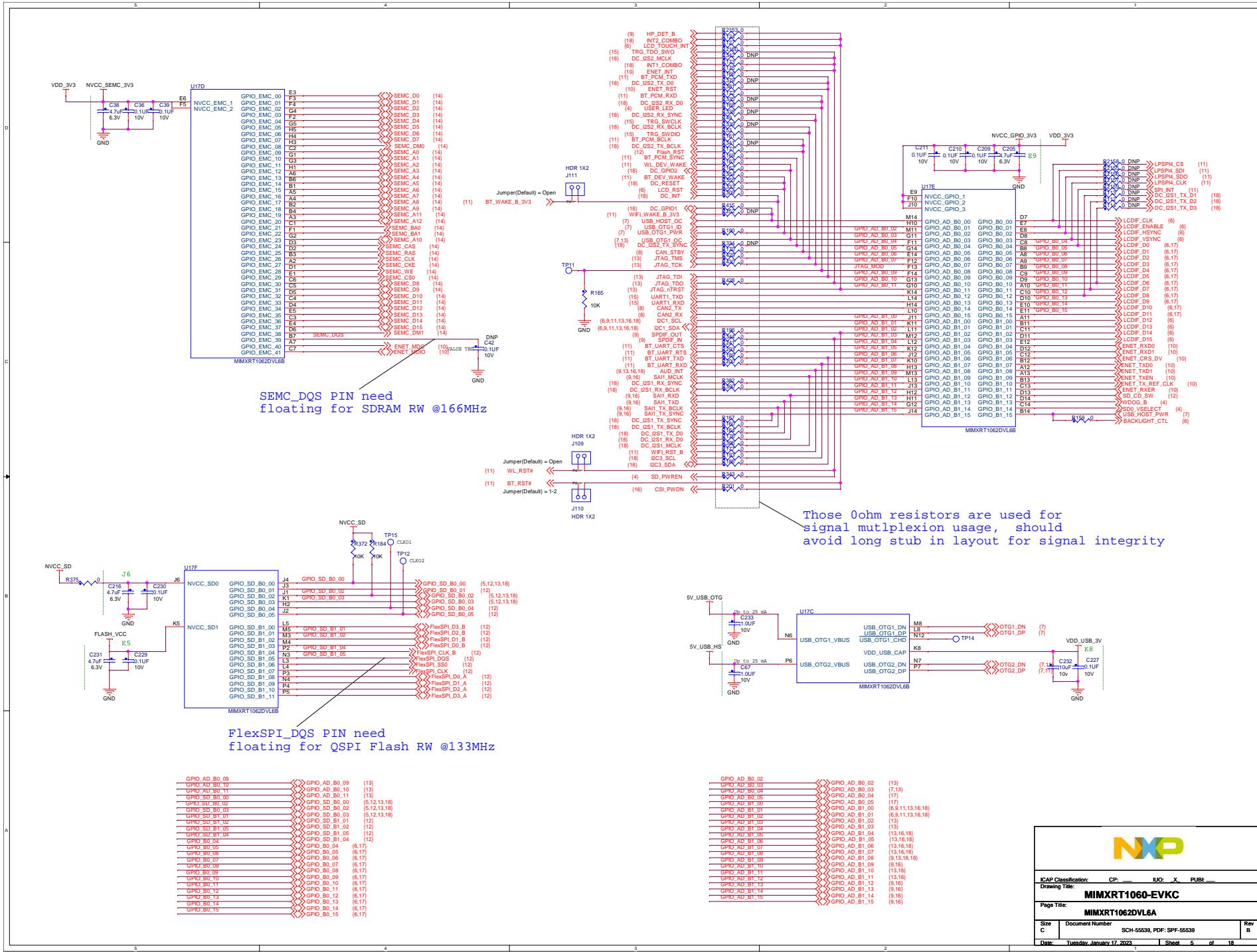
Ground TPs

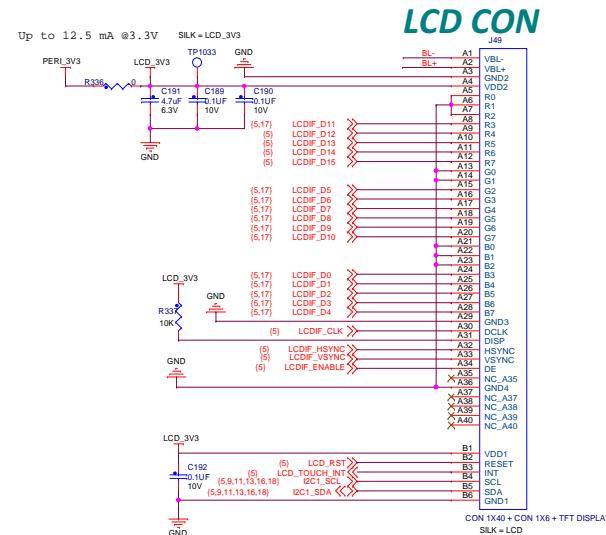
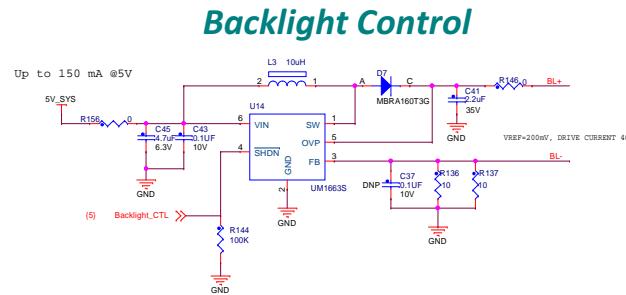


Layout Note: Place Ground TPs to assist signal measurement.

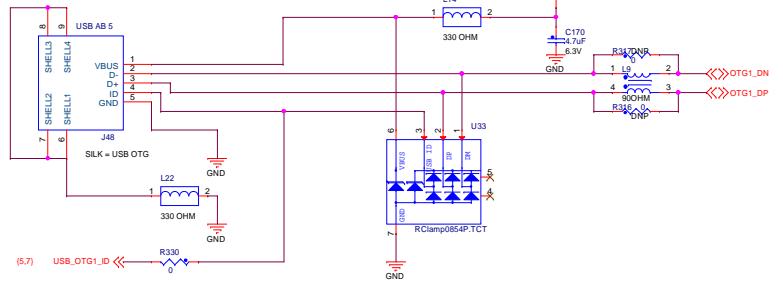
NXP		
ICAP Classification:	CP: <input type="checkbox"/>	IIO: <input checked="" type="checkbox"/> PUB: <input type="checkbox"/>
Drawing Title:	MIMXRT1060-EVKC	
Page Title:	MAIN POWER	
Size C	Document Number SCH-5539, PDF: SPI-5539	Rev B
Date Tuesday, January 17, 2023	Sheet 3 of 18	



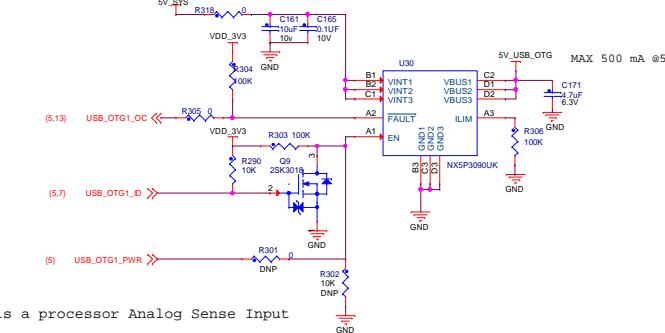




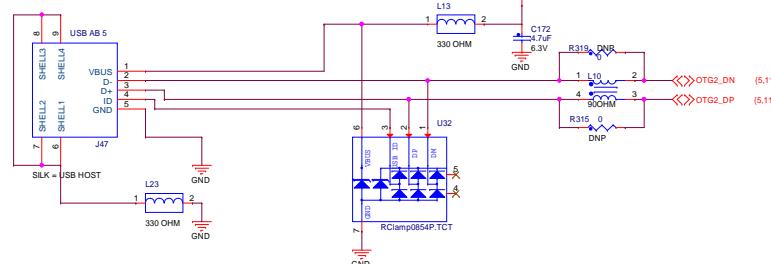
USB OTG



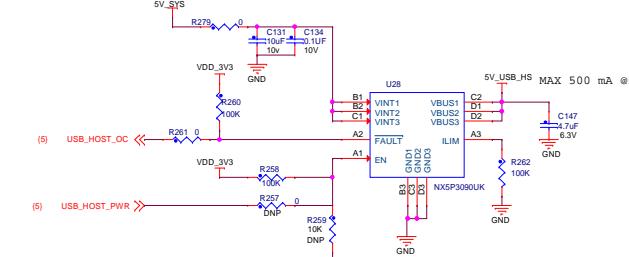
USB POWER



USB HOST



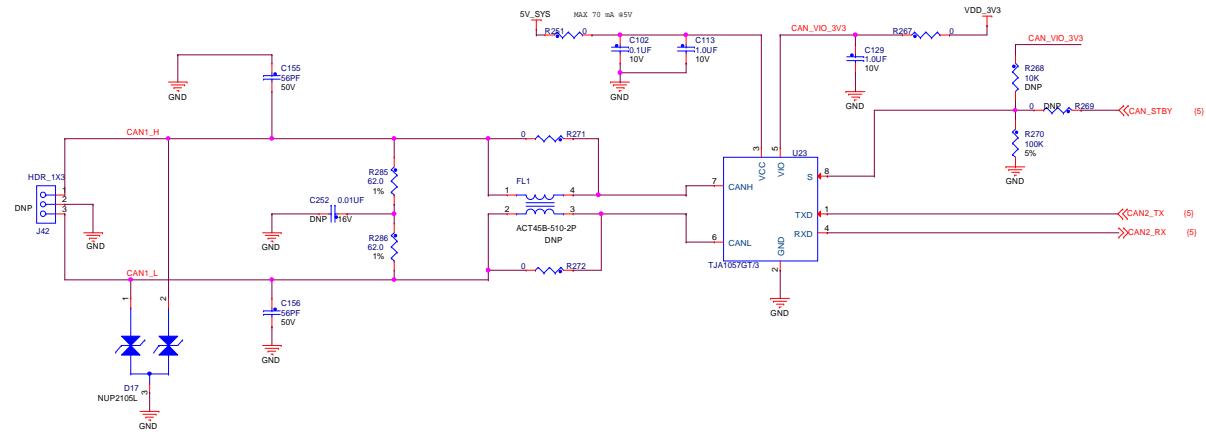
USB POWER



NXP

ICAP Classification:	CP: _____	IIO: <input checked="" type="checkbox"/> X	PUB: _____
Drawing Title: MIMXRT1060-EVKC			
Page Title: USB			
Size C Document Number: SCH-5539, PDF: SPIF-55539 Rev B			
Date: Tuesday, January 17, 2023	1	Sheet 7	of 18

CAN BUS



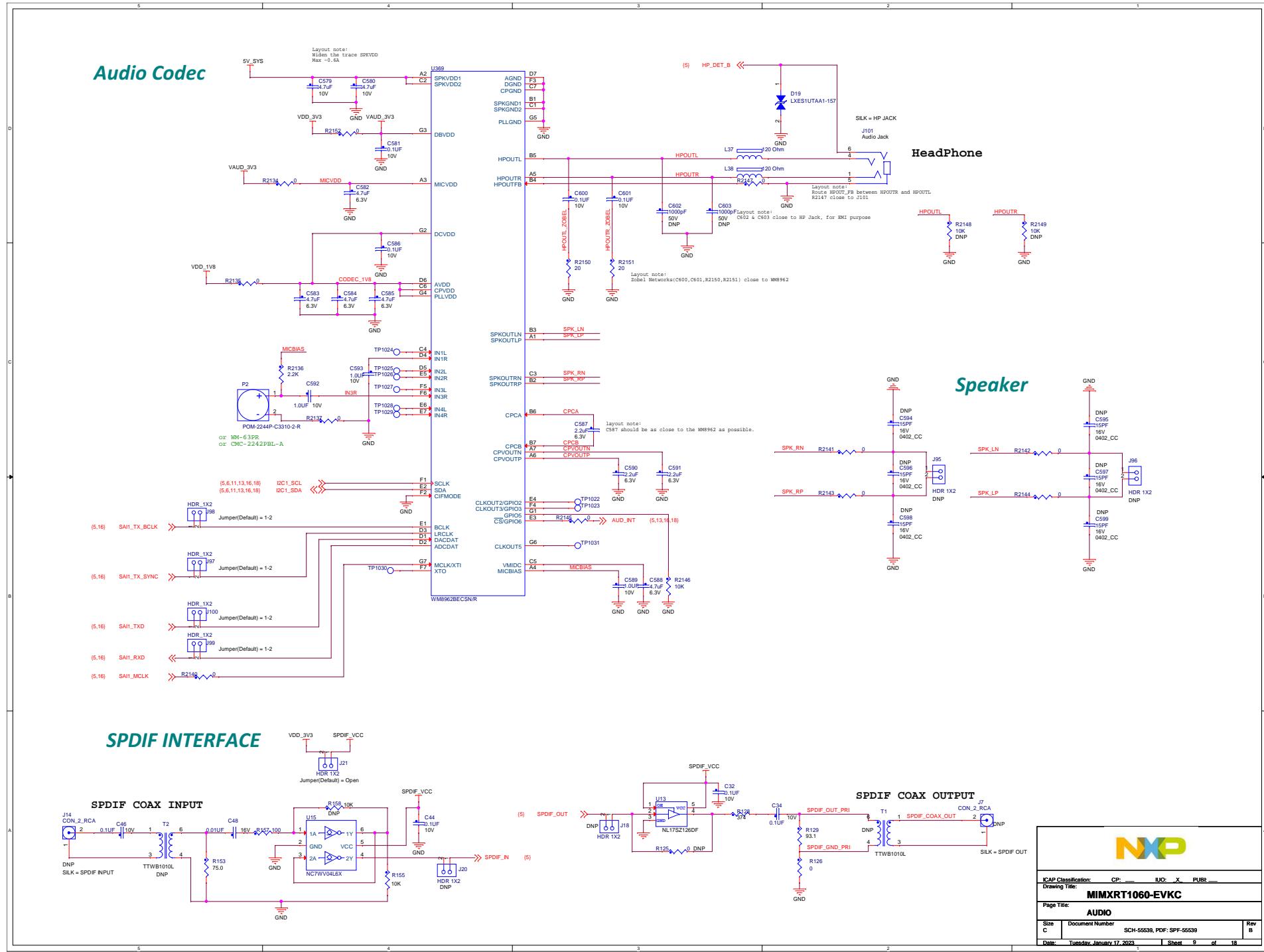
ICAP Classification: CP: _____ IUO: X PUBt _____

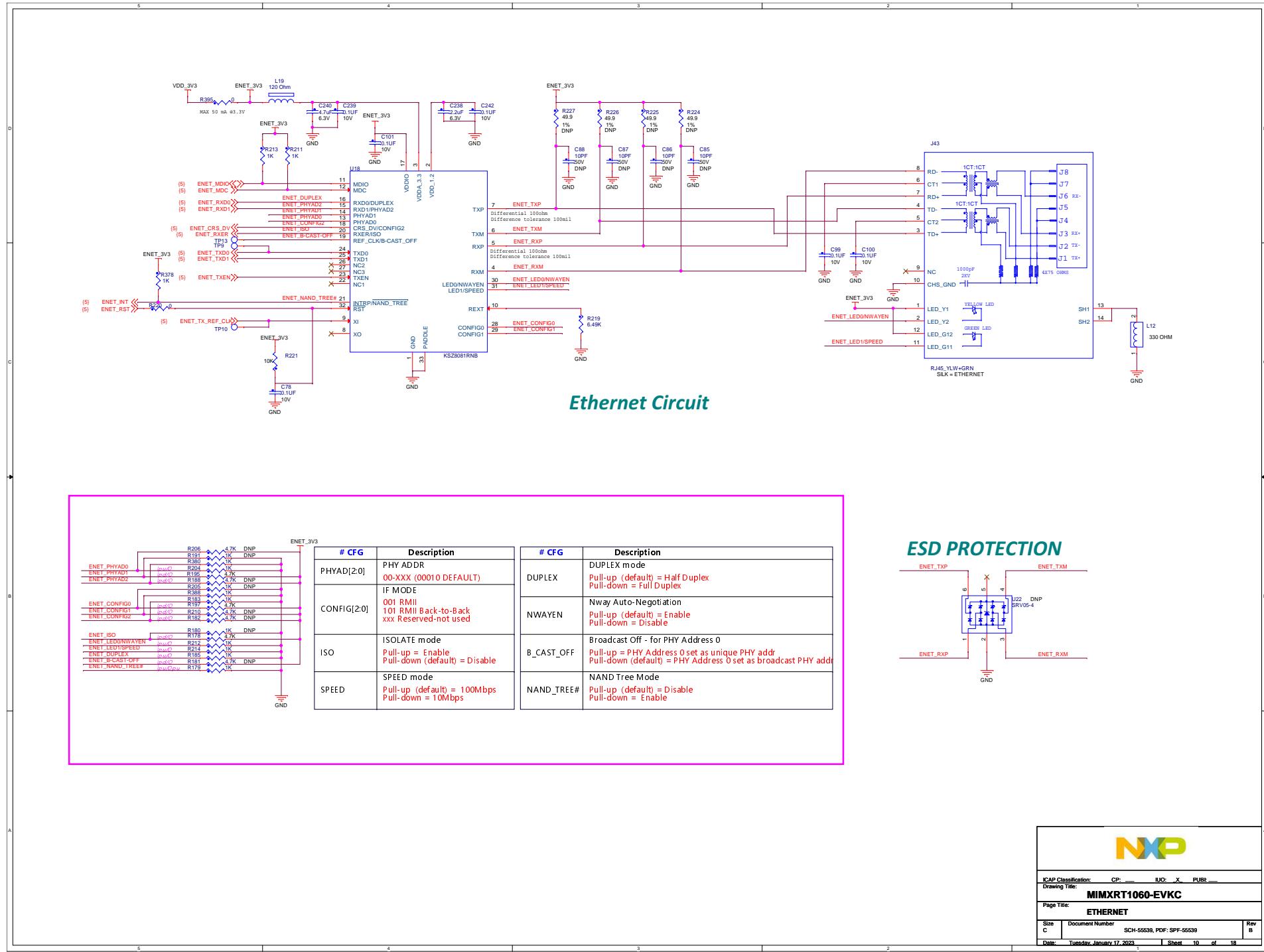
Drawing Title: MIMXRT1060-EVKC

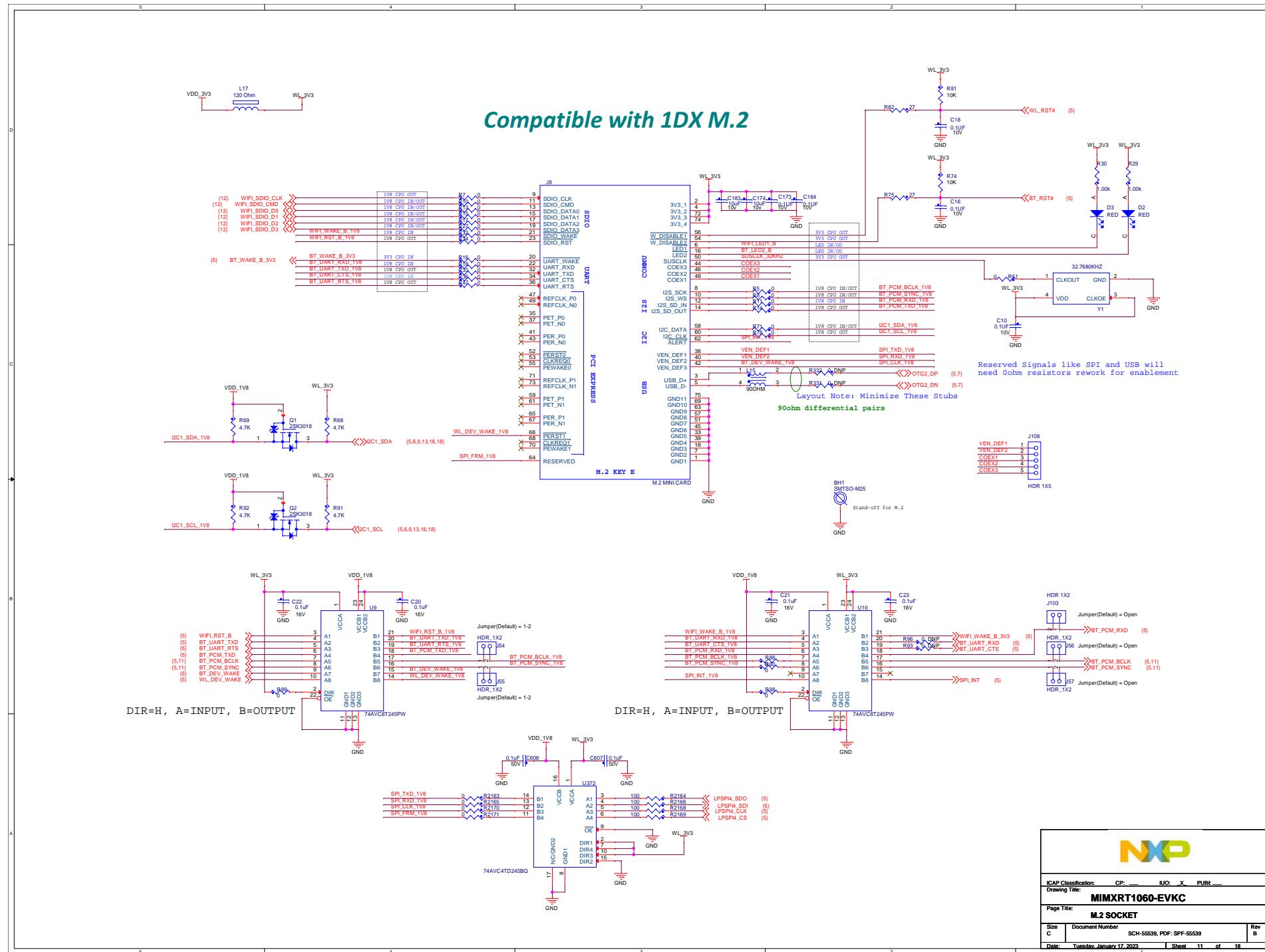
Page Title:

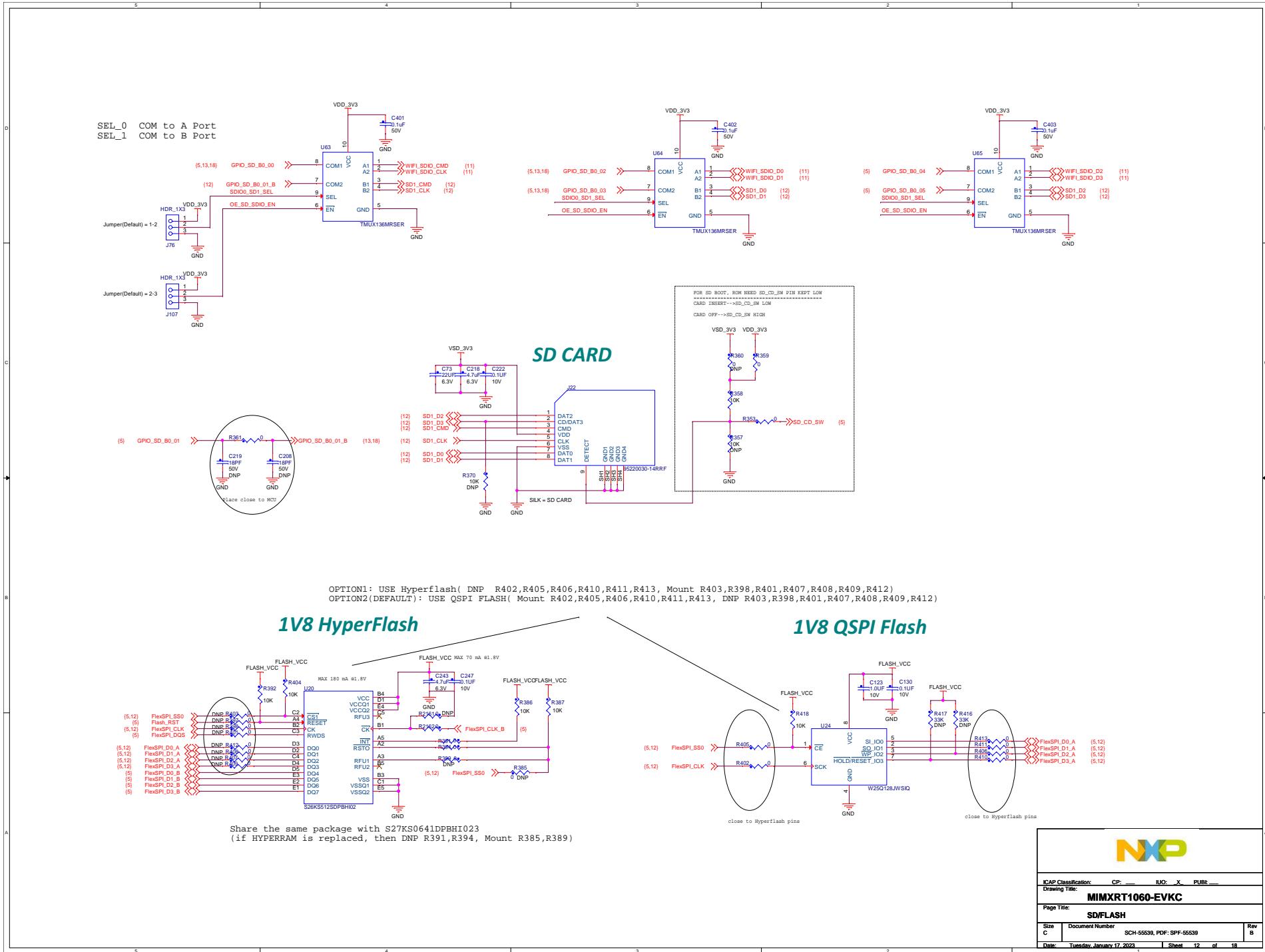
CAN

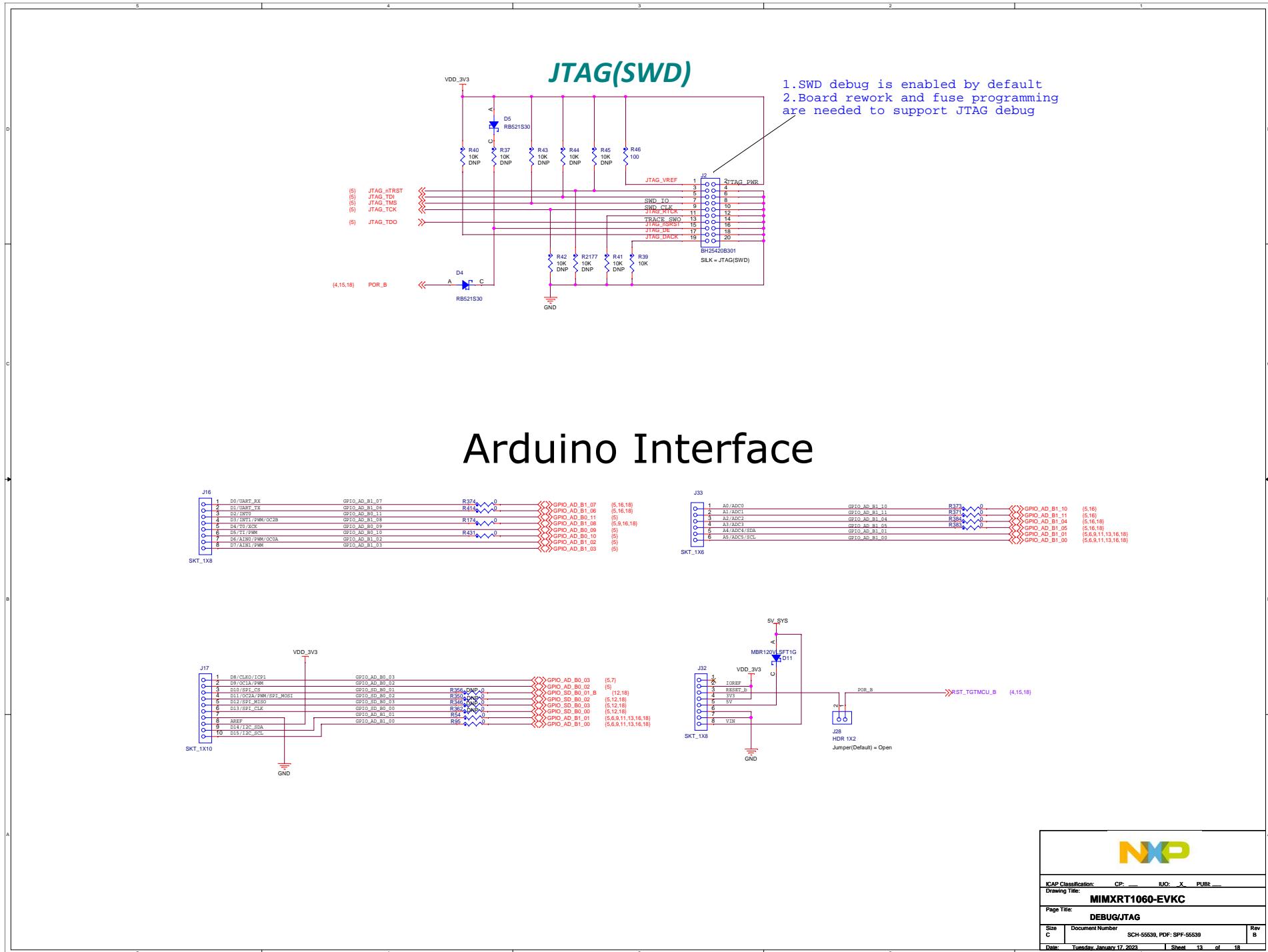
Size C	Document Number SCH-55539, PDF: SPF-55539	Rev B
Date:	Tuesday, January 17, 2023	Sheet 8 of 18

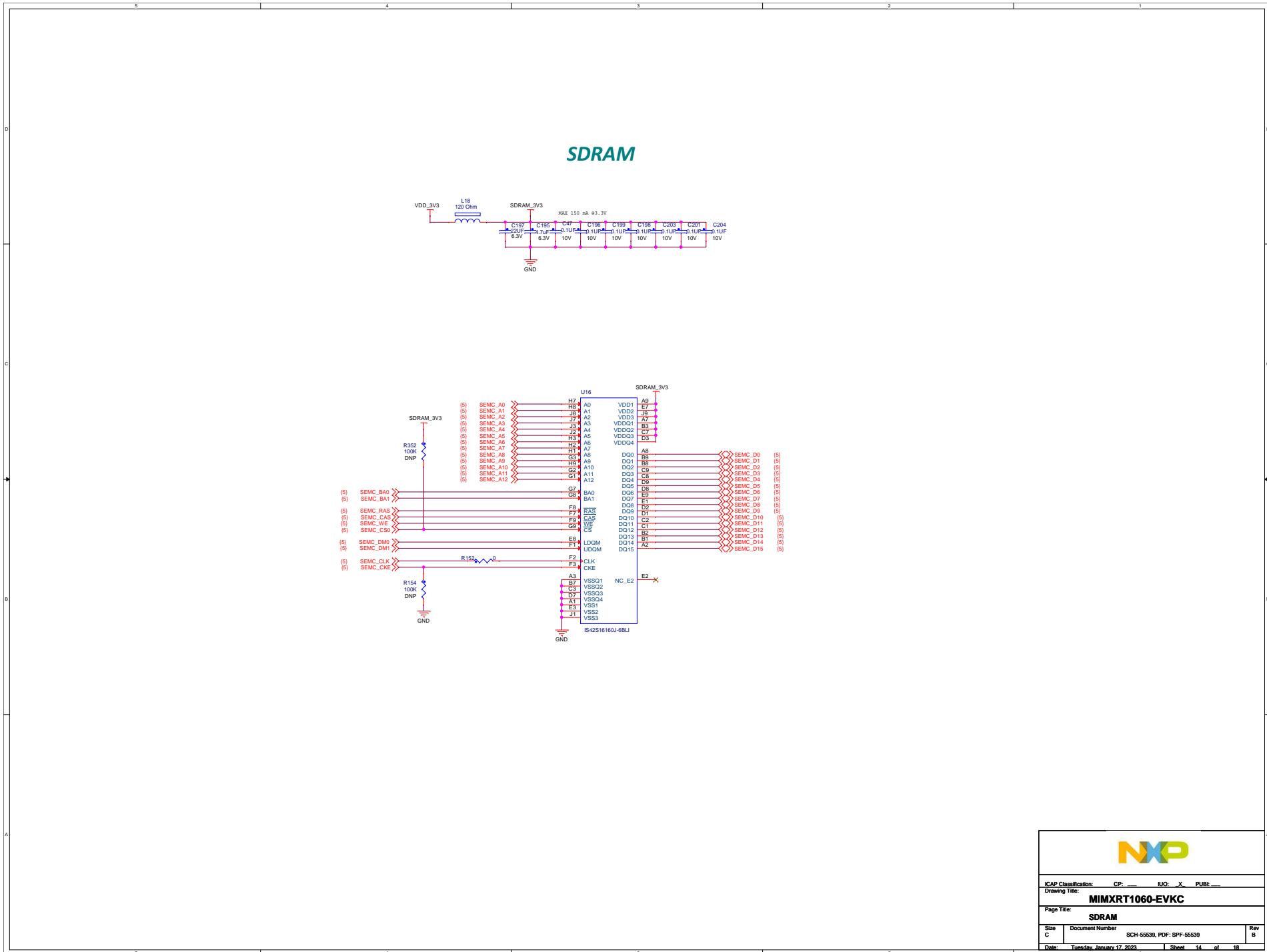


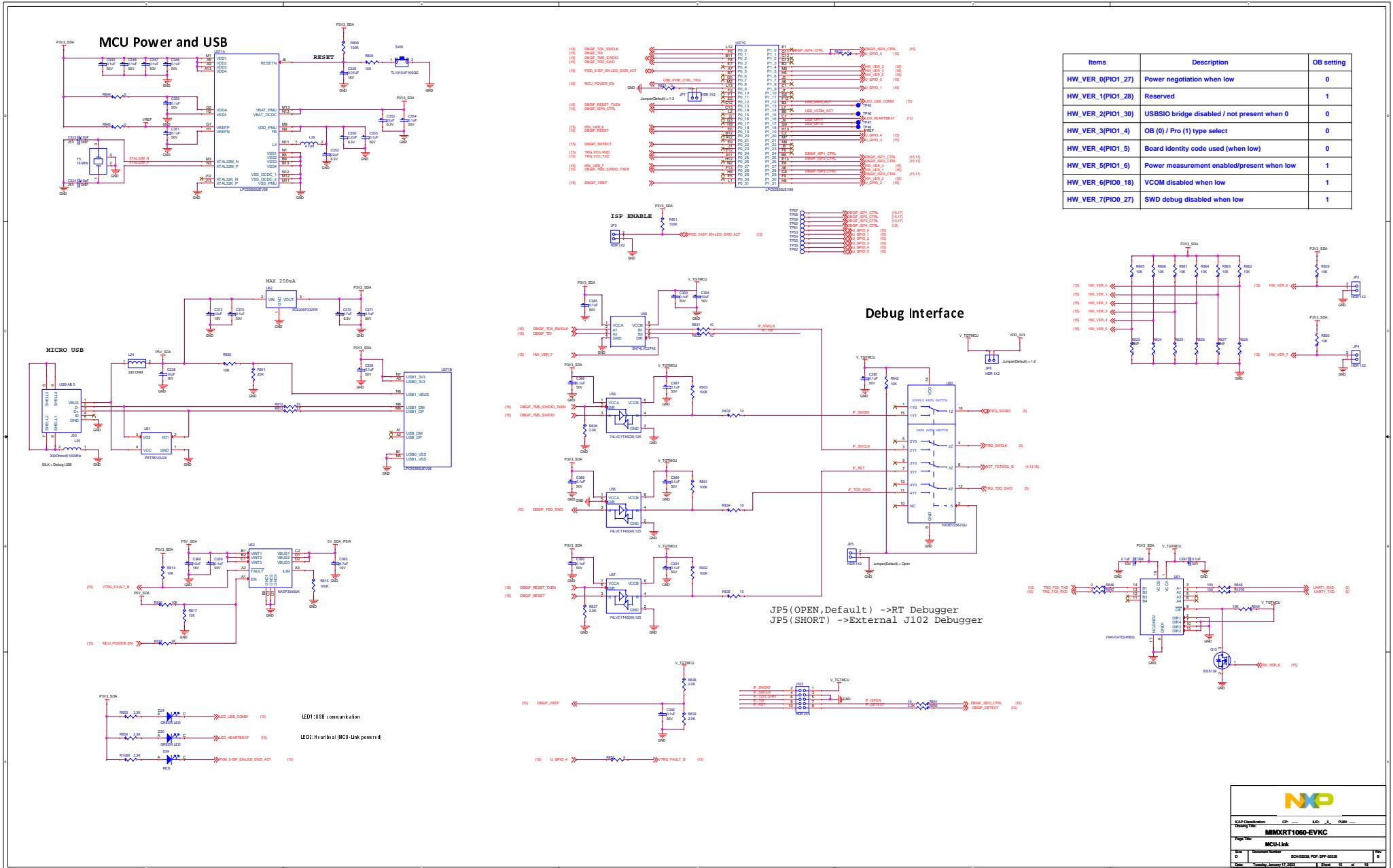




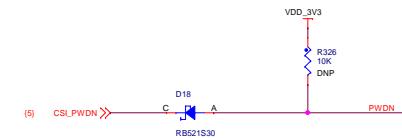
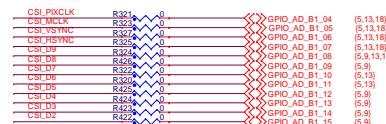




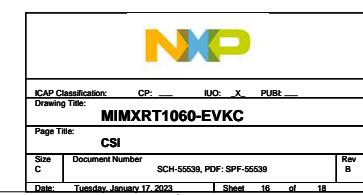
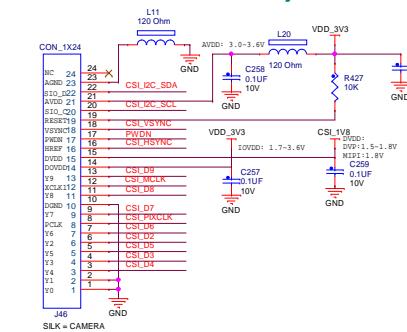
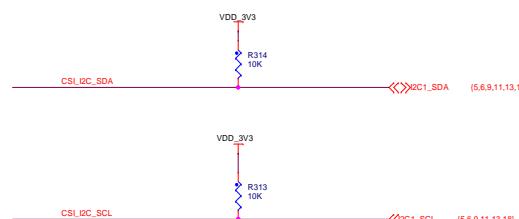




Camera Signals

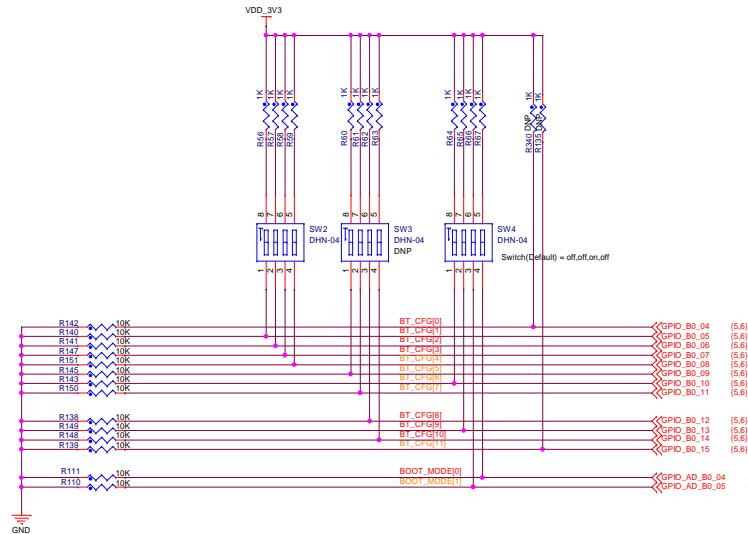


FPC FOR MT9M114/OV7725 MODULE

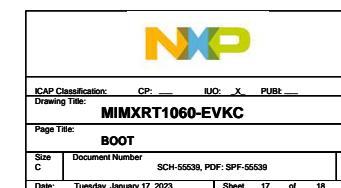
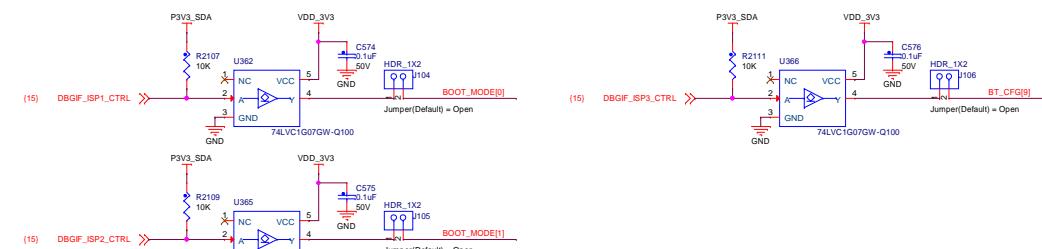


BOOT CONFIG TABLE

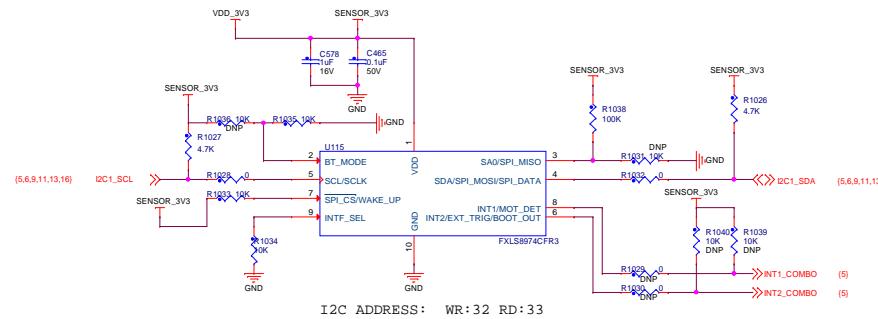
TYPE	BOOT_CFG[11]	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1		
FlexSPI1 - Serial NOR	<i>Infini-Loop: (Debug USE only) 0 - Disable 1 - Enable</i>		<i>FLASH_TYPE 000-Device supports 3B read by default 001-Device supports 4B read by default 010-HyperFlash 1V8 011-HyperFlash 3V3 100-MXIC Octal DDR</i>		0		0		0		<i>FLASH PROBE TYPE (Spi mode after PoR) 00 - QuadSPI NOR 01 - Macronix Octal FLASH 10 - Micron Octal FLASH 11 - Adesto Octal FLASH</i>		<i>EncryptedIP 0 - Disabled 1 - Enabled</i>	<i>FLASH_AUTO_PROBE_EN 0 - Disabled 1 - Enabled</i>	
SD	<i>Infini-Loop: (Debug USE only) 0 - Disable 1 - Enable</i>	Reserved	<i>Bus Width: 0 - 1-bit 1 - 4-bit</i>	<i>SD1 VOLTAGE SELECTION: 0 - 3.3V 1 - 1.8V</i>	0		1		<i>SD/SDXC Speed: 00 - Normal/SDR12 01 - High/SDR25 10 - SDR50 11 - SDR104</i>		<i>SD Power Cycle Enable: '0' - No power cycle '1' - Enabled via USDHC_RST pad</i>	<i>SD Loopback Clock Source Sel: (for SDR50 and SDR104 only) '0' - through SD '1' - direct</i>		<i>Port Select: 0 - eSDHC1 1 - eSDHC2</i>	<i>Fast Boot: 0 - Regular 1 - Fast Boot</i>



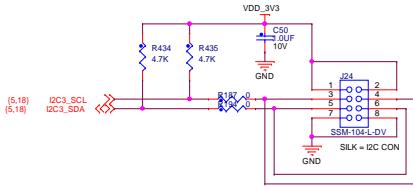
ISP Control for Factory Automation



Accelerometer

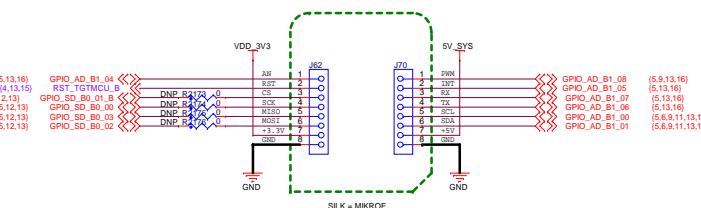


I2C CONN

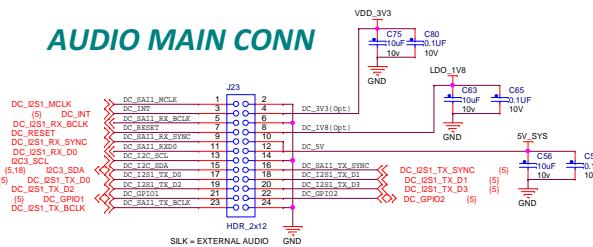


Mikroe Click Connectors

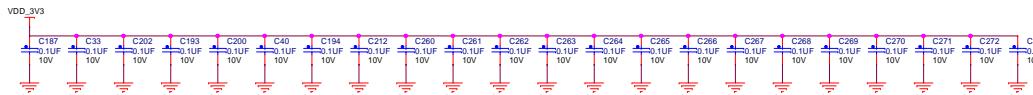
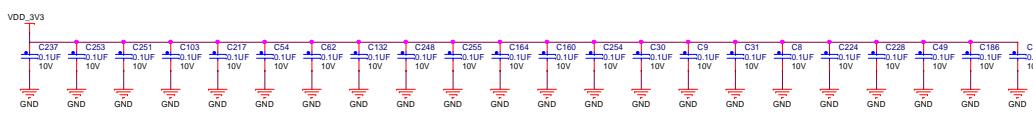
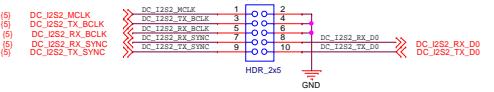
(Signals are shared with Arduino.)



AUDIO MAIN CONN



AUDIO AUX CONN



ICAP Classification:	CP: _____	IIO: X	PUB: _____
Drawing Title: MIMXRT1060-EVKC			
Page Title: MISC			
Size C	Document Number: SCH-5539, PDF: SPIF-5539	Rev B	
Date: Tuesday, January 17, 2023			
Sheet 18 of 18			