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Revisions				
Rev	Description	Date	Designer	Approver
A	Based on 95131_C	27-May-2025	Alan Yao	L. Achten

FRDM-MCXW23



BL Secure Connected Edge Connectivity
6501 William Cannon Drive West
Austin, TX 78735-8598

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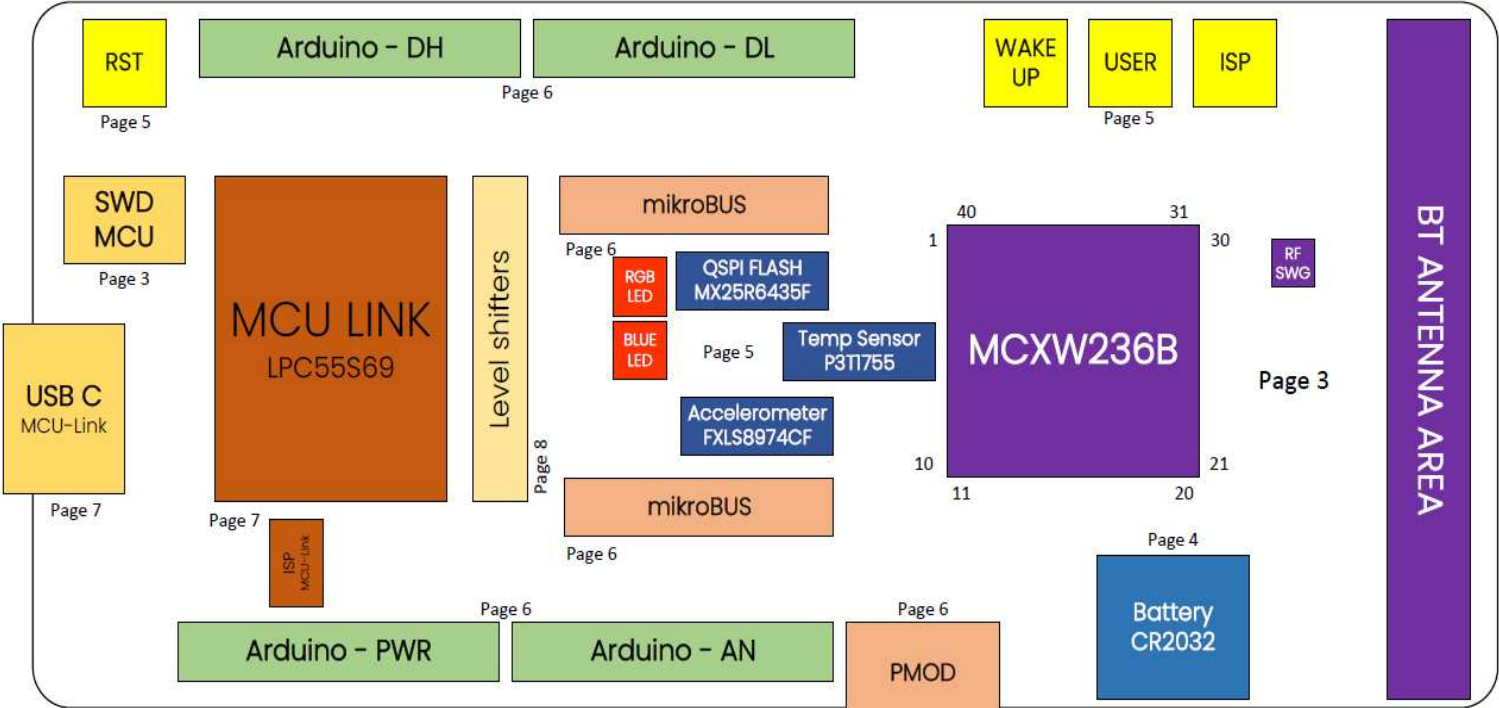
Designer: Alan Yao	Drawing Title: FRDM-MCXW23		
Drawn by: Alan Yao	Page Title: 01. TITLE PAGE		
Approved: L. Achten	Size C	Document Number SCH-95746, PDF: SPF-95746	Rev A
Date: Thursday, May 29, 2025		Sheet 1 of 9	

NOTES

- 1. Unless Otherwise Specified:
 - All resistors are in ohms, 5%, 1/8 Watt
 - All capacitors are in uF, 20%, 50V
 - All voltages are DC
 - All polarized capacitors are aluminum electrolytic
- 2. Interrupted lines coded with the same letter or letter combinations are electrically connected.
- 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.

- NOTES
- This Color is for User Notes
 - This Color is for CAD/LAY Notes
 - This Color is for Silk
 - This Color is for DNP components

Target MCU: MCXW236B p[3]
Debug MCULink: LPC55S69JEV98 p[7]



HMI

PUSH BUTTON

ISP / BOOT CONFIG

USER PB WU

CAD note:
Place cap close to switch

CAD note:
Place cap close to switch

RESET

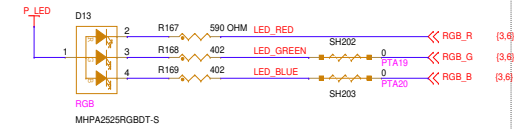
CAD note:
Place 1000pf cap close to switch
Place 0.1uf cap close to Reset pin

PWR WAKE UP

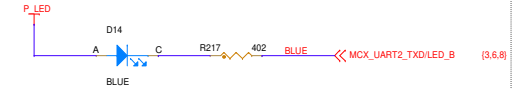
CAD note:
Place cap close to switch

LEDS

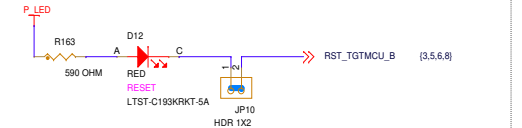
RGB LED



USER LED

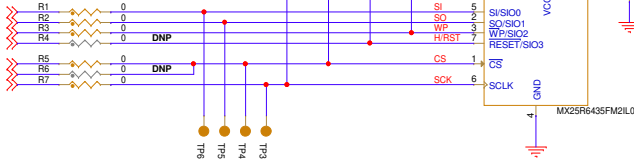


RESET LED

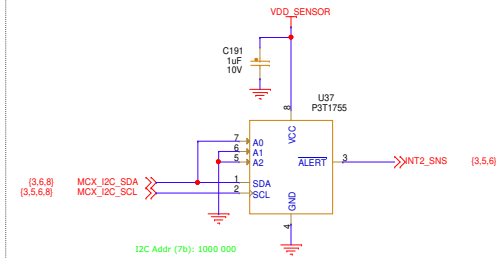


64Mbit (8MB) FLASH

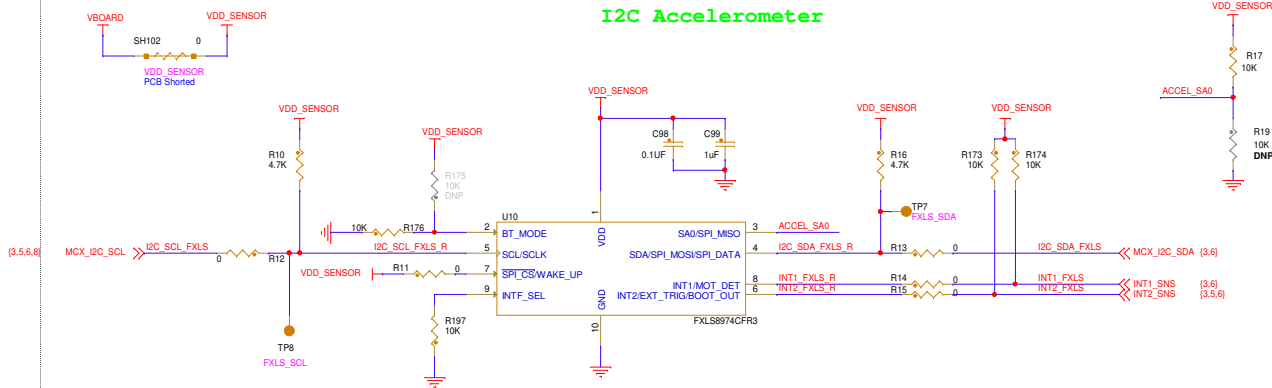
(3.6) MCX_SPI_SOUT
(3.6) MCX_SPI_SIN
(3.6) MCX_SPI_CS1
(3.6) MCX_SPI_RST/DS
(3.6) MCX_SPI_CS0
(3.6) MCX_SPI_CS1
(3.6) MCX_SPI_SCK



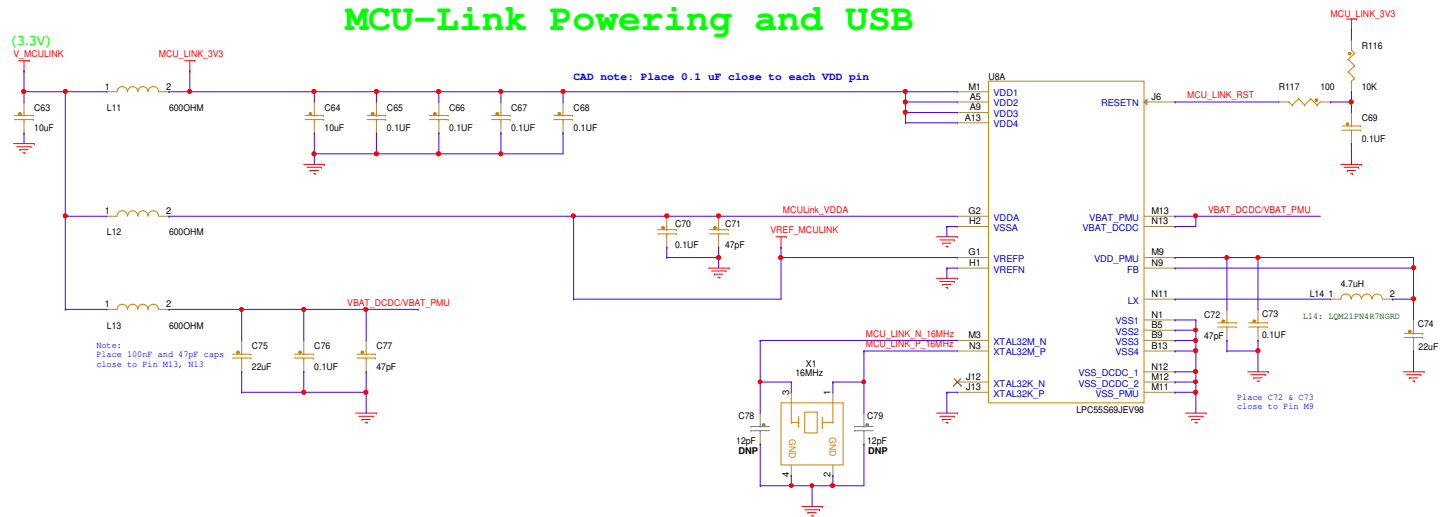
Temperature Sensor



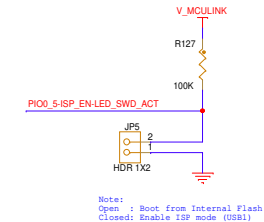
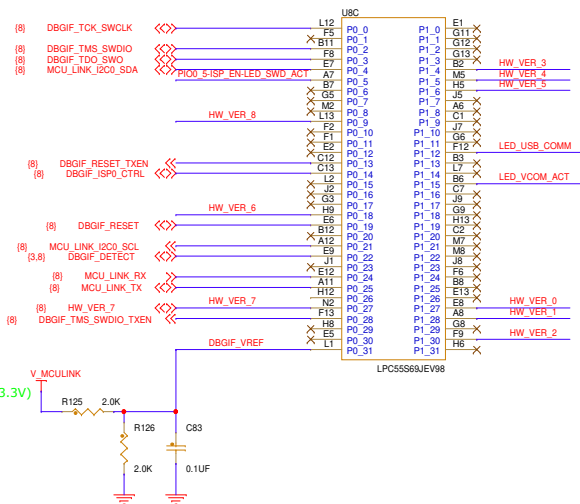
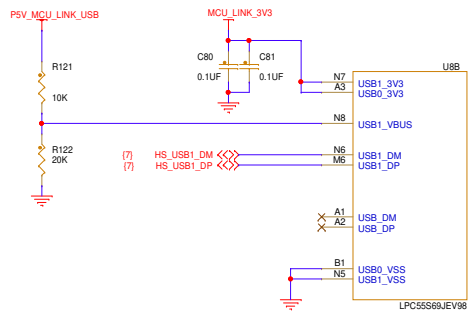
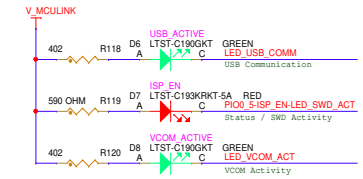
I2C Accelerometer



MCU-Link Powering and USB



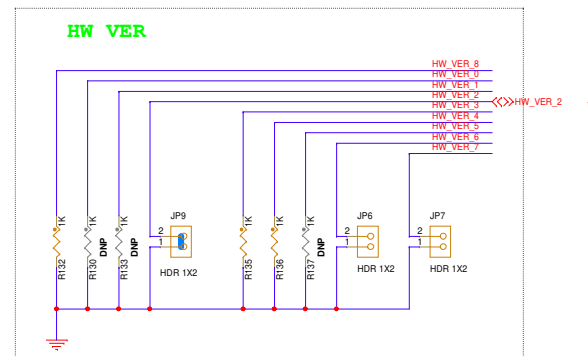
MCULINK LEDs



HW VER

HW VER 0	SW / OFF
HW VER 1	Reserved
HW VER 2	SW / OFF
HW VER 3	Open / Low
HW VER 4	SW / P20
HW VER 5	Board Identity
HW VER 6	SW / B15
HW VER 7	SW / B15
HW VER 8	SW / B15

HW VER



Classification: Public

Drawing Title: **FRDM-MCXW23**

Page Title: **07. MCU Link**

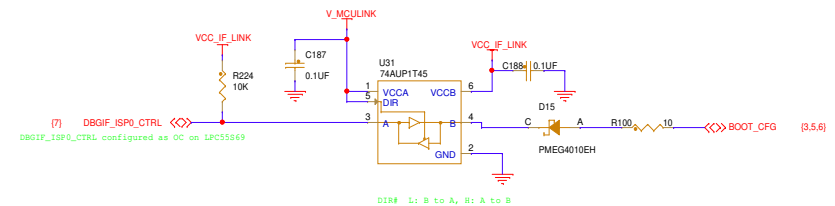
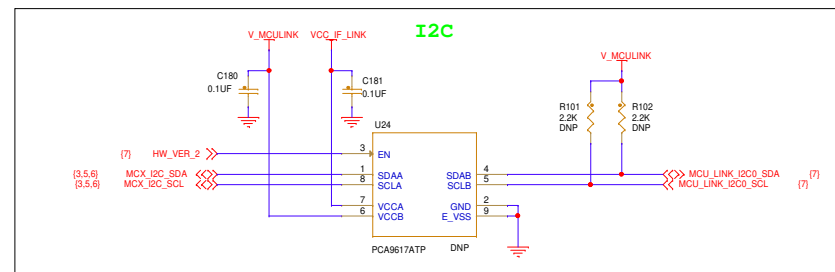
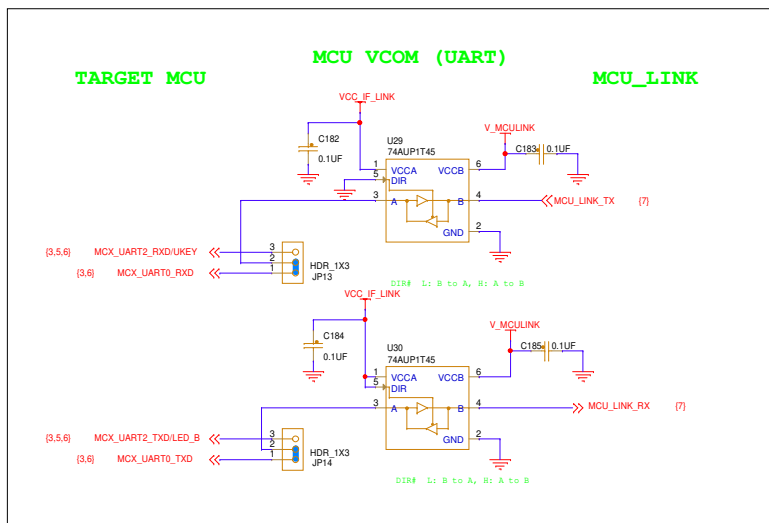
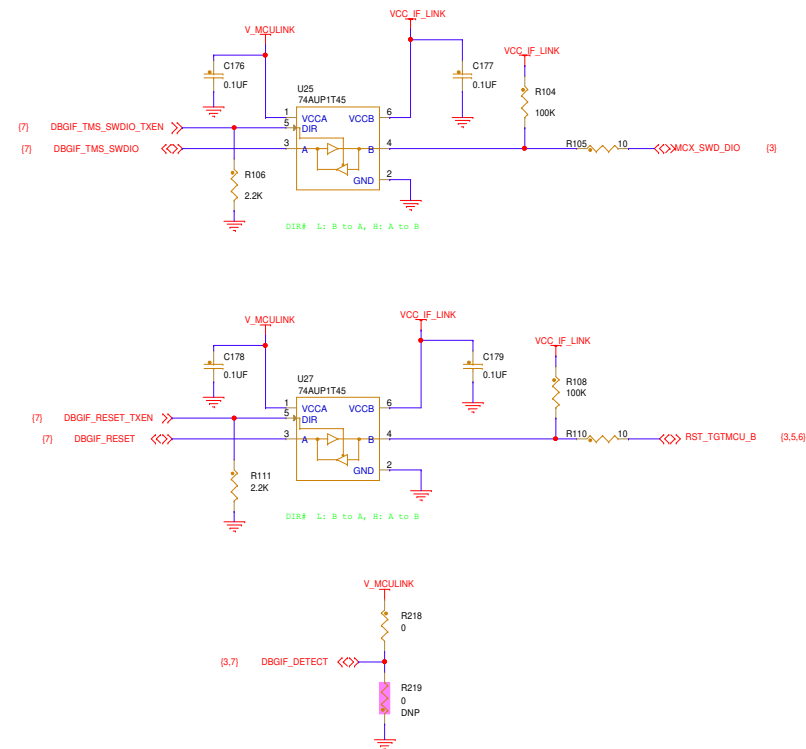
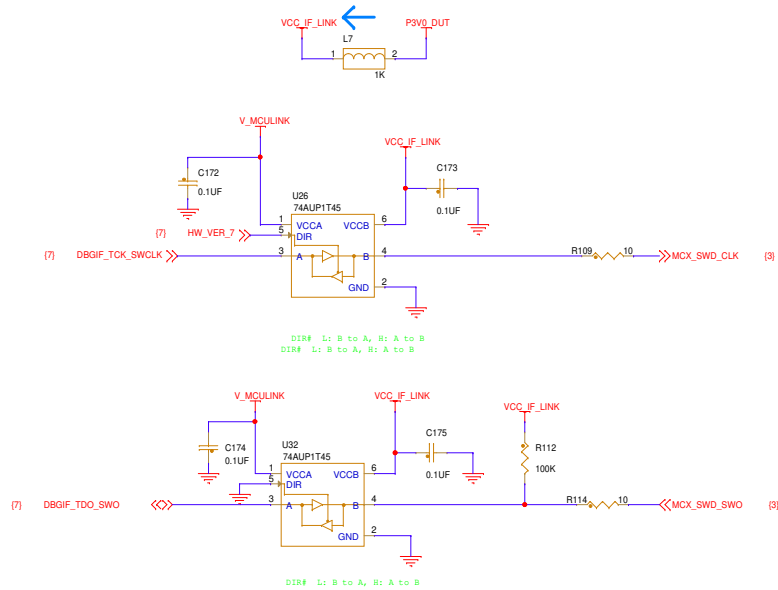
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Rev A

MCU LINK



JUMPER SETTINGS

REF DES	JUMPER(DEFAULT)	PAGE NAME
JP11,JP12	1-2	03. MCXW238 RADIO
JP4	1-2	04. PWR MANAGEMENT
JP10	1-2	05. HMI, SENSOR & MEMORY
JS7,JS8	1-2	06. I/O Headers
JP9	1-2	07. MCU Link
JP13,JP14	1-2	08. MCU Link SWD

POPULATION OPTIONS

REF DES	ASSY OPT	PAGE NAME
D11	DNP	03. MCXW238 RADIO
D4,J15,J16,J17,J20,J23	DNP	04. PWR MANAGEMENT
C87,C114,R4,R6,R8,R19,R175,R187	DNP	05. HMI, SENSOR & MEMORY
J22,JS1,JS2,JS3,JS4,R20,R28,R29,R223,R229	DNP	06. I/O Headers
C78,C79,R130,R133,R137,U9	DNP	07. MCU Link
R101,R102,R219,U24	DNP	08. MCU Link SWD

SHORT TABLE

REF DES	SHORT	PAGE NAME
SH100,SH200,SH201	SHORTED	04. PWR MANAGEMENT
SH101,SH102,SH202,SH203	SHORTED	05. HMI, SENSOR & MEMORY
SH1,SH2,SH5,SH6,SH7,SH8,SH9,SH11,SH12,SH13,SH14,SH15,SH16,SH19,SH20,SH21,SH22,SH23,SH24,SH25,SH26,SH32,SH33,SH34,SH37,SH38,SH39,SH40,SH43,SH204,SH205,SH206,SH207,SH208,SH209,SH210,SH211,SH212,SH213,SH214,SH215	SHORTED	06. I/O Headers

