



Renesas Electronics Corporation delivers trusted embedded design innovation with complete semiconductor solutions that enable billions of connected, intelligent devices to enhance the way people work and live. A global leader in microcontrollers, analog, power, and SoC products, Renesas provides comprehensive solutions for a broad range of automotive, industrial, infrastructure, and IoT applications that help shape a limitless future.



Würth Elektronik eiSos is one of the leading manufacturers of electronic and electromechanical components in Europe. The product portfolio includes: EMC Components, EMC Filters, Capacitors, Inductors, RF Inductors and LTCC Components, Resistors, Quartz, Oscillators, Transformers, Components for Circuit Protection, Power Modules, LEDs, Connectors, Switches, High-Power Contacts, Assembly Technique, Wireless Connectivity and Sensors.



SEGGER has over twenty-five years of experience in Embedded Systems, producing cutting-edge RTOS and Software Libraries, and offering a full set of hardware tools (for development and production) and software tools. The J-Link debug probes, with Ozone the accompanying debugger and performance analyzer, and Embedded Studio the powerful cross platform C/C++ IDE, are available to support developers in creating their own embedded systems.



AP Memory is a memory IC design company focusing on Low to Mid density RAM solutions, providing a full range of IoT RAM (low pin count QSPIOP-PSRAM), ADMUX RAM (CellularRAM), low power DRAM (LPDDR2/LPDDR3), as well as innovative solution for AI such as UHS OPI and more... Partnering with an advanced DRAM technology foundry, AP Memory provides world class performance, supply longevity, quality and cost, including high volume and customer oriented innovative and customized solutions, in both KGD and package form.


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PRODUCT

M13-RA6M4-EK (Evaluation Board)

DRAWN BY

PATRICK S.

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Content

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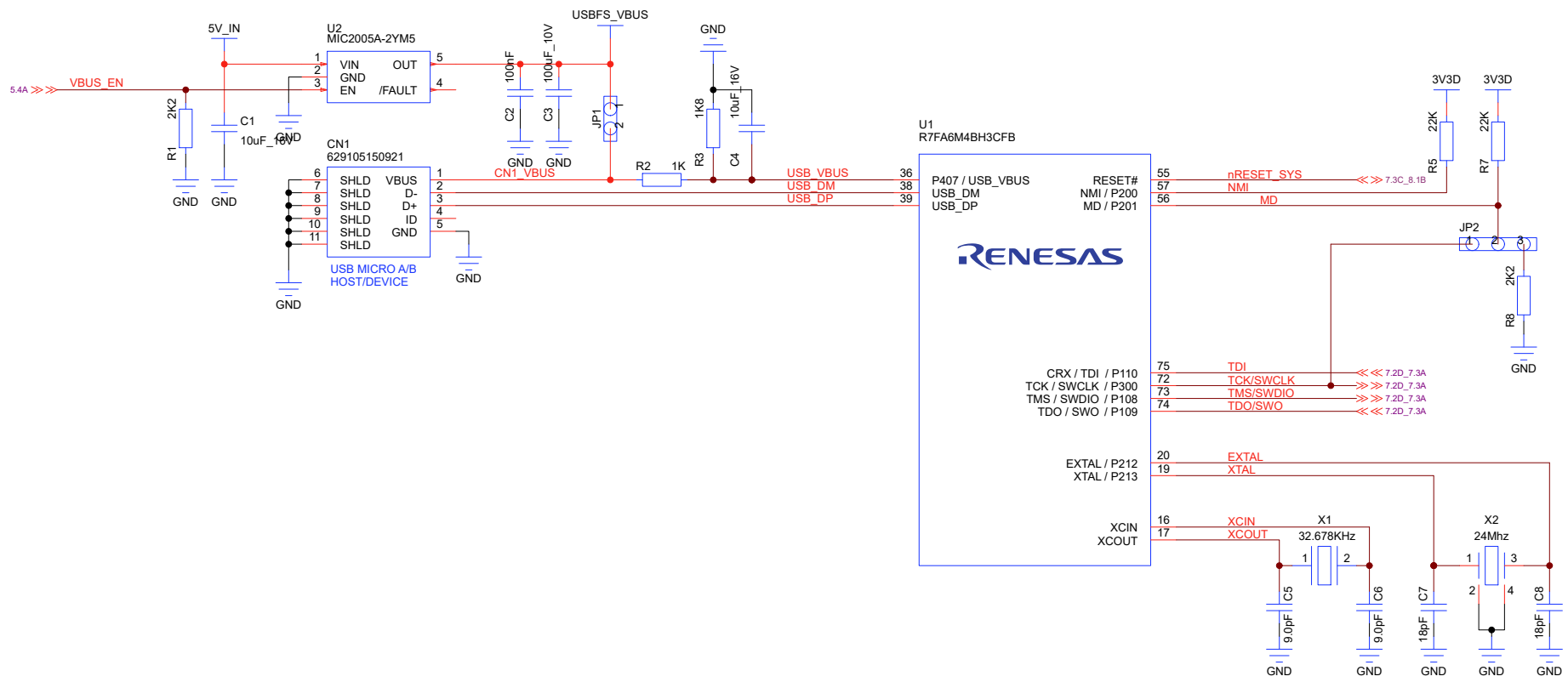
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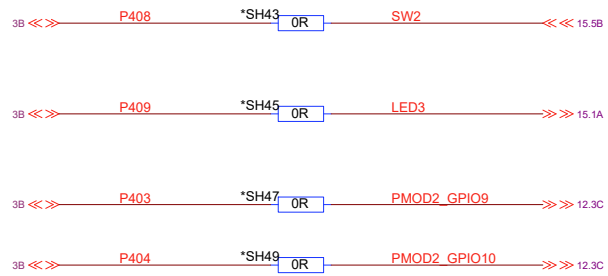
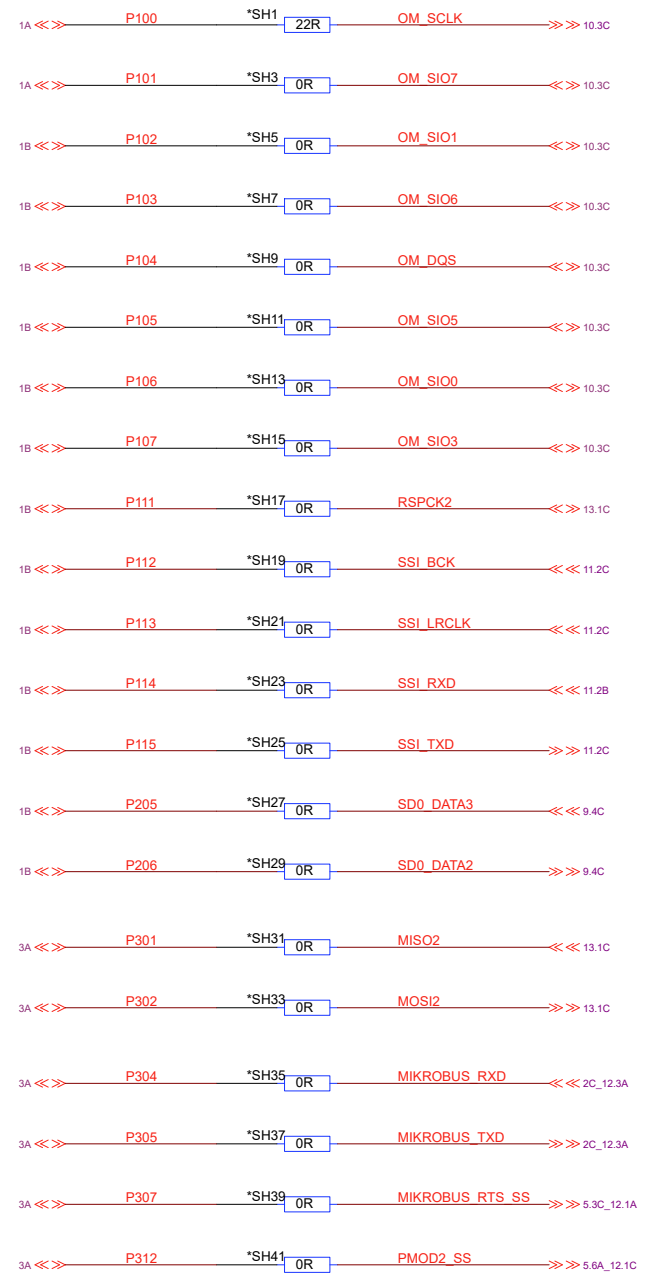
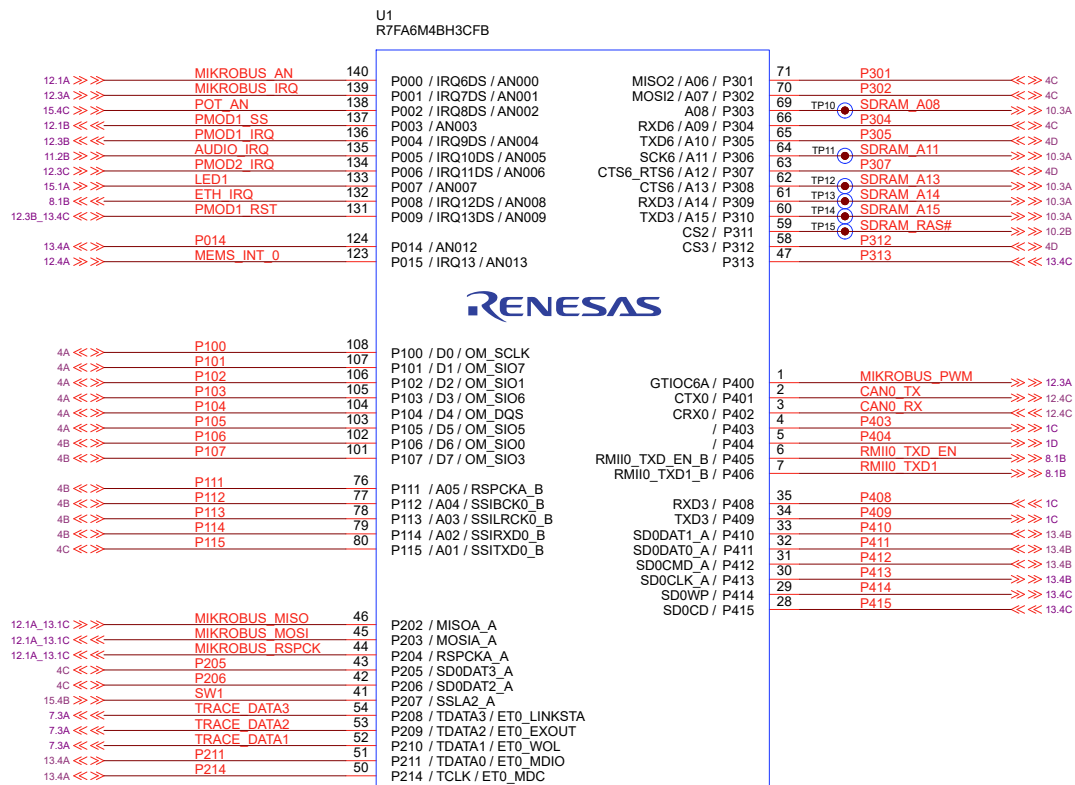
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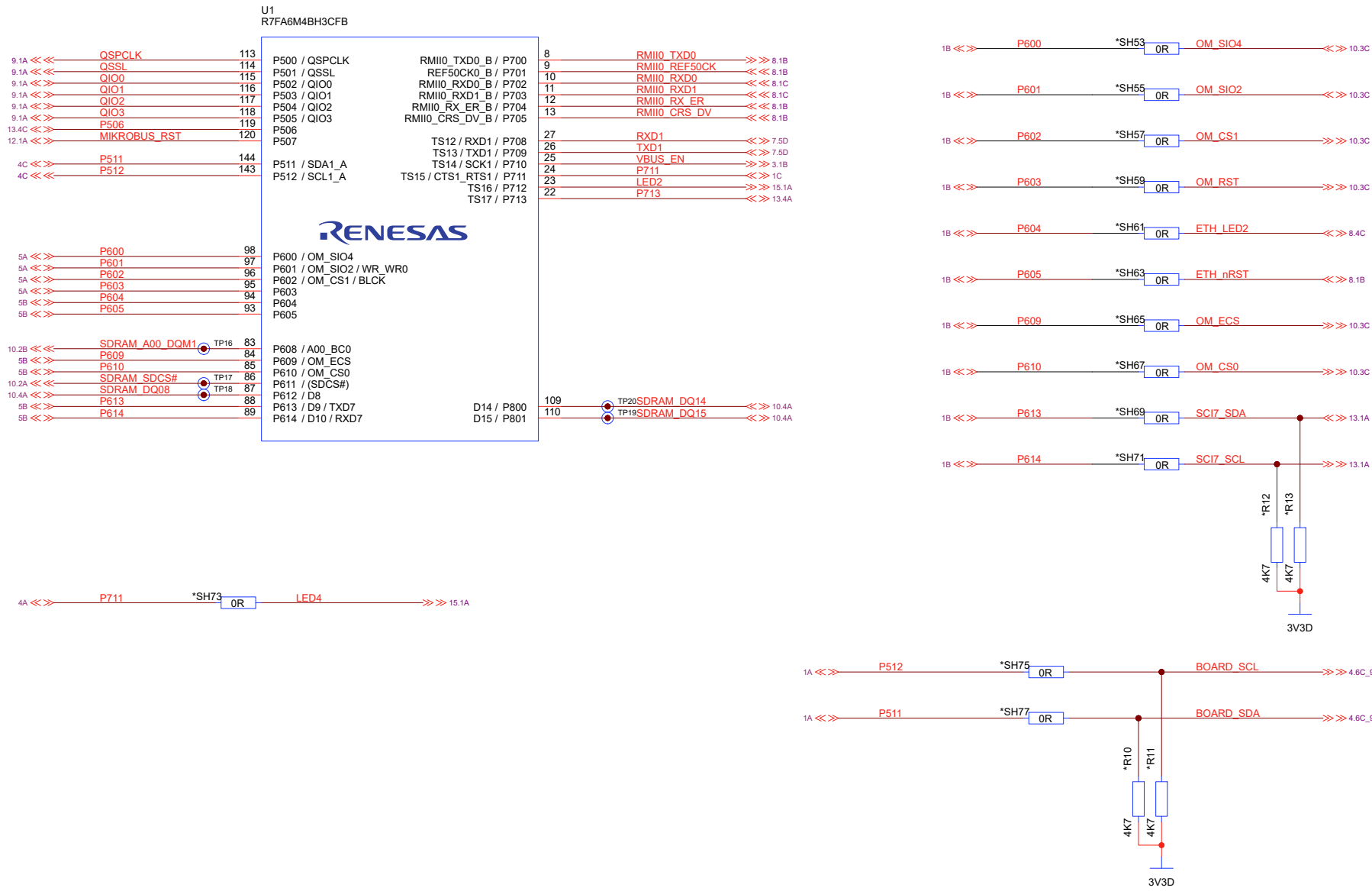


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*DNF: Do Not Fit

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PAGE RA6M4 GPIO2

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DATE 2023.03.21



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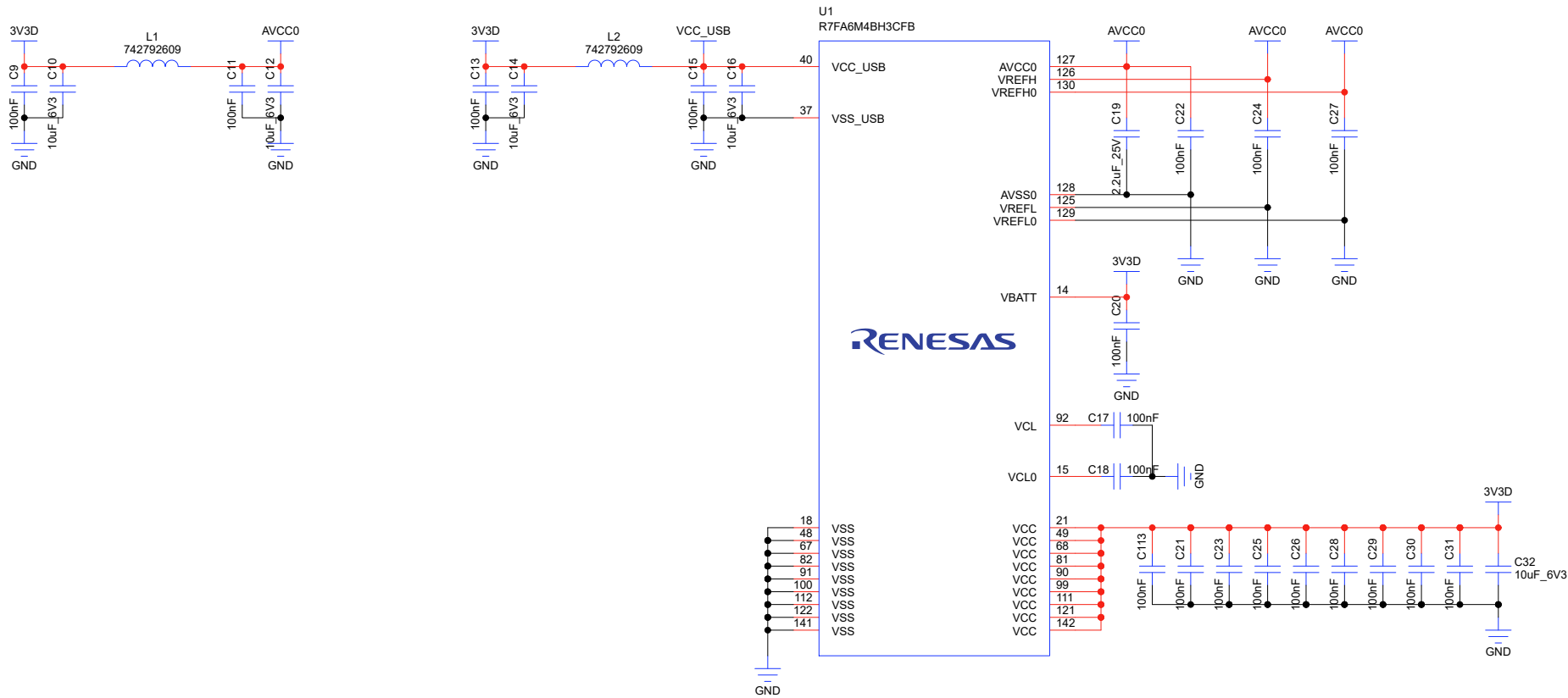
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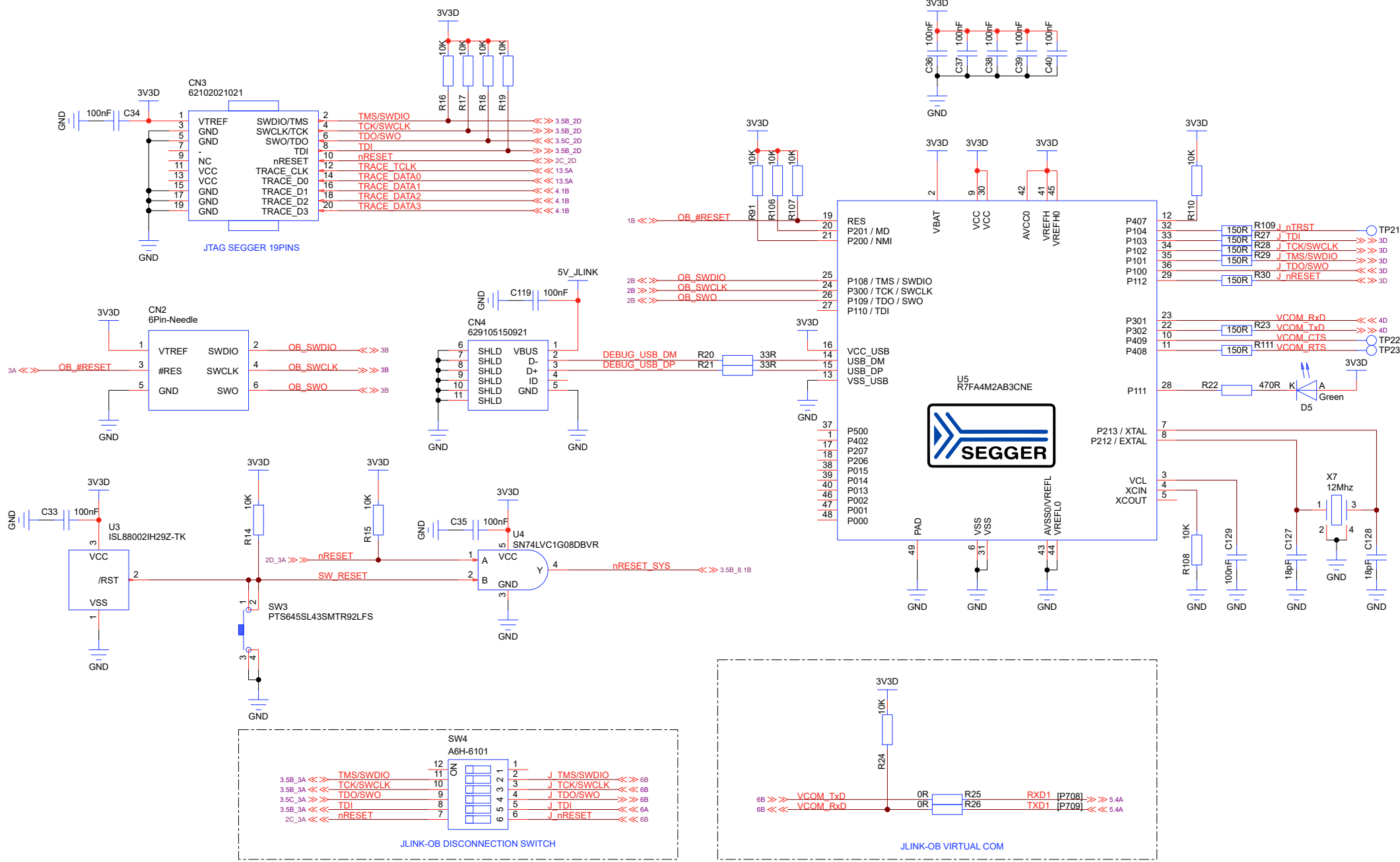
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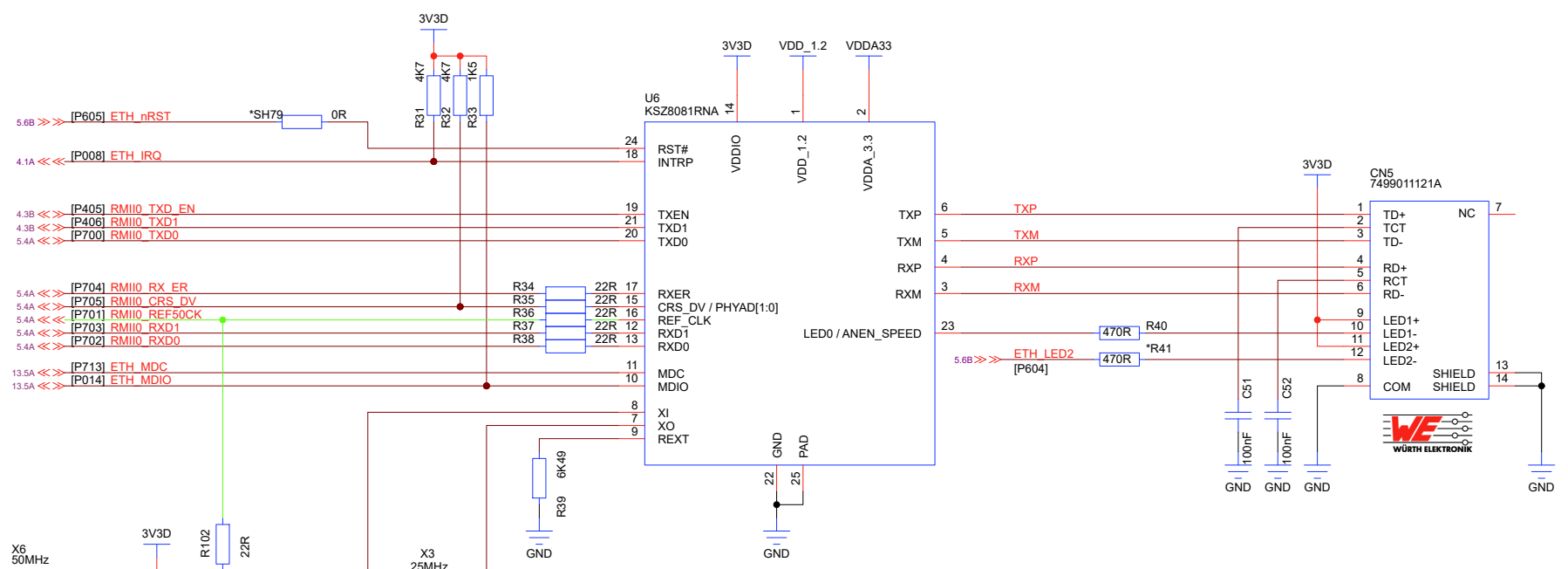
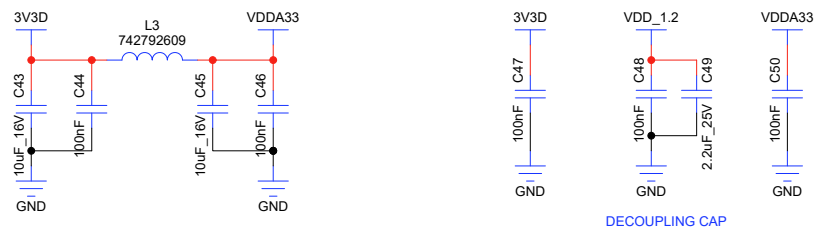


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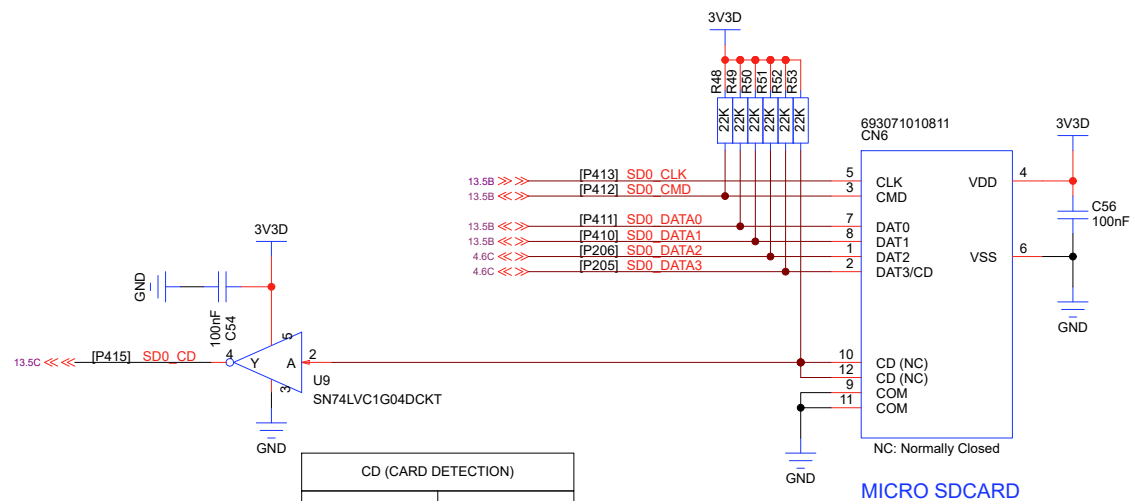
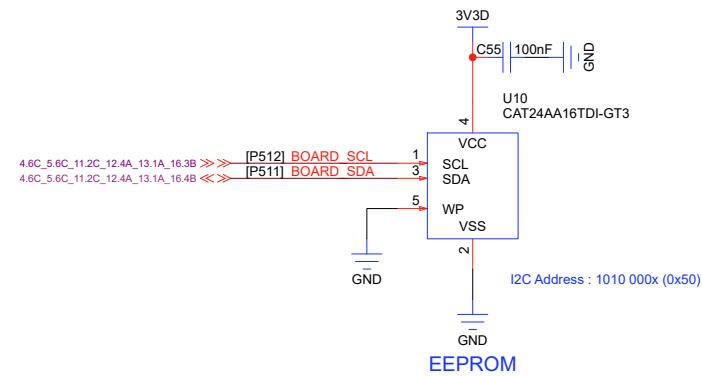
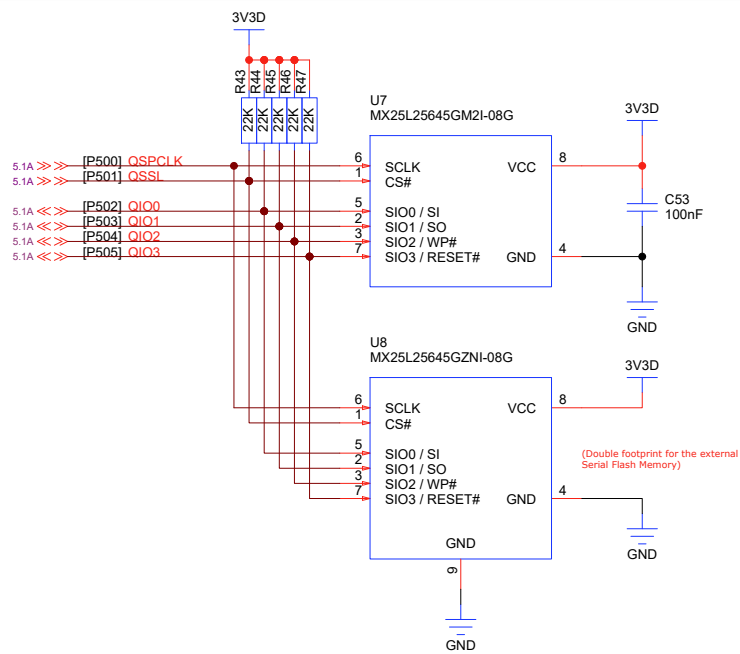


	X3	C41	C42	X6	R36	R100	R101	R102	C115
KSZ8081RNA	F	F	F	NF	F	NF	NF	NF	NF
KSZ8081RND	NF	NF	NF	F	NF	F	F	F	F

NF: Not Fitted
F: Fitted

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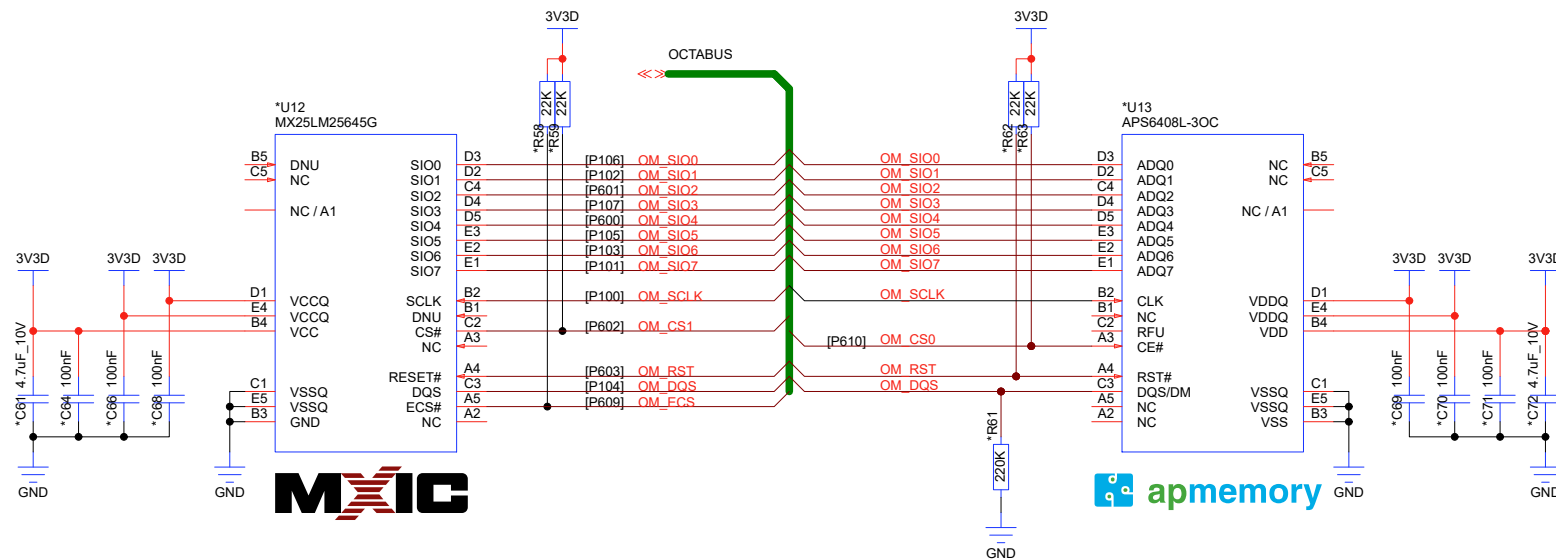




CD (CARD DETECTION)	
CARD REMOVED	CARD INSERTED
CLOSE	OPEN
SD0_CD = 1	SD0_CD = 0



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PRODUCT M13-RA6M4-EK (Evaluation Board)

PAGE OctaFlash, OctaRAM

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DATE 2023.03.21



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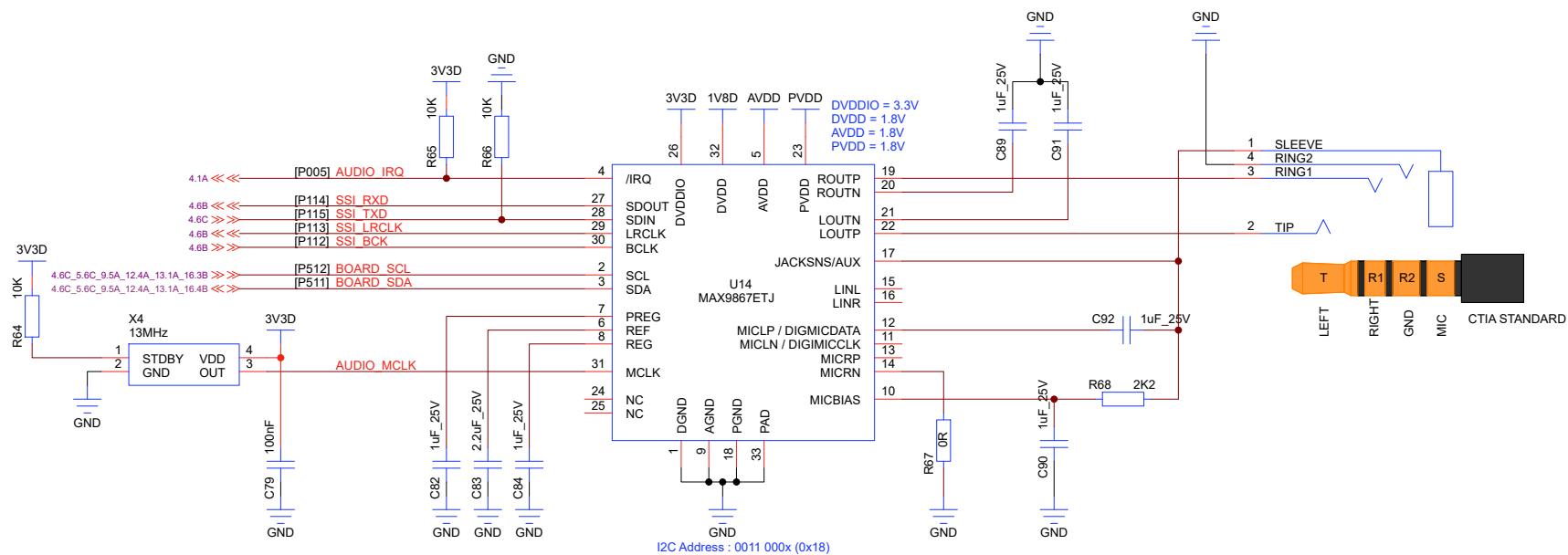
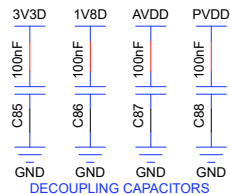
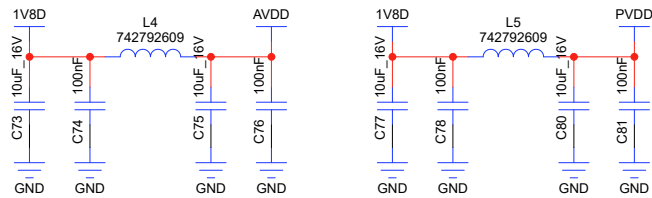
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PRODUCT M13-RA6M4-EK (Evaluation Board)

PAGE Audio CODEC

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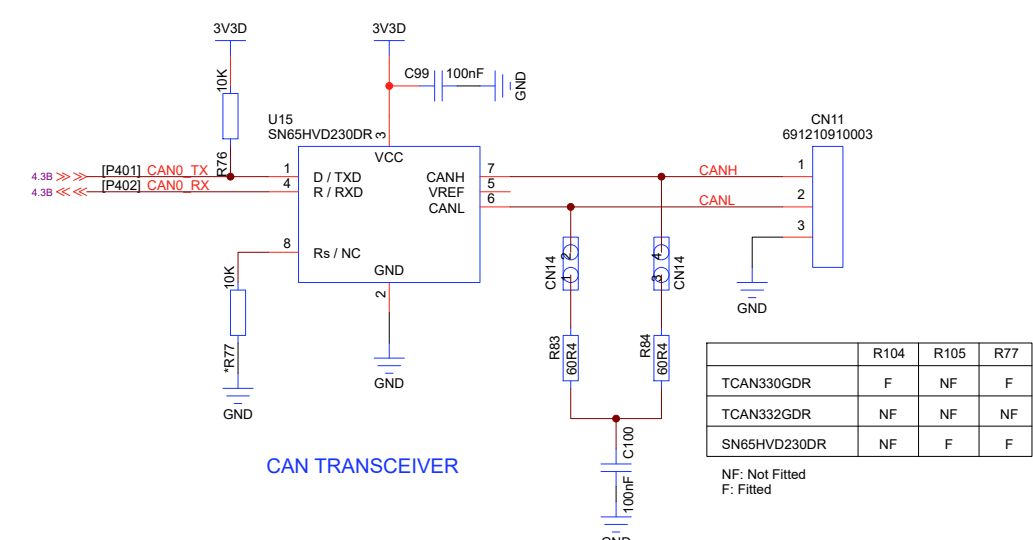
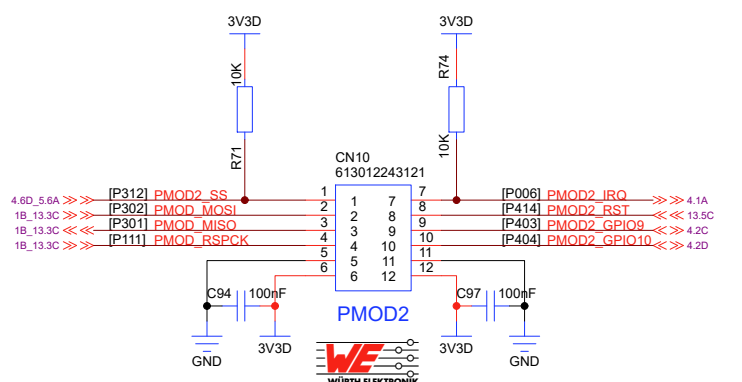
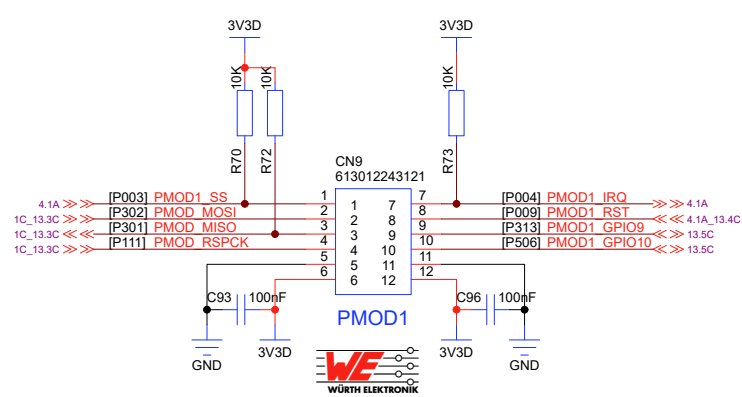
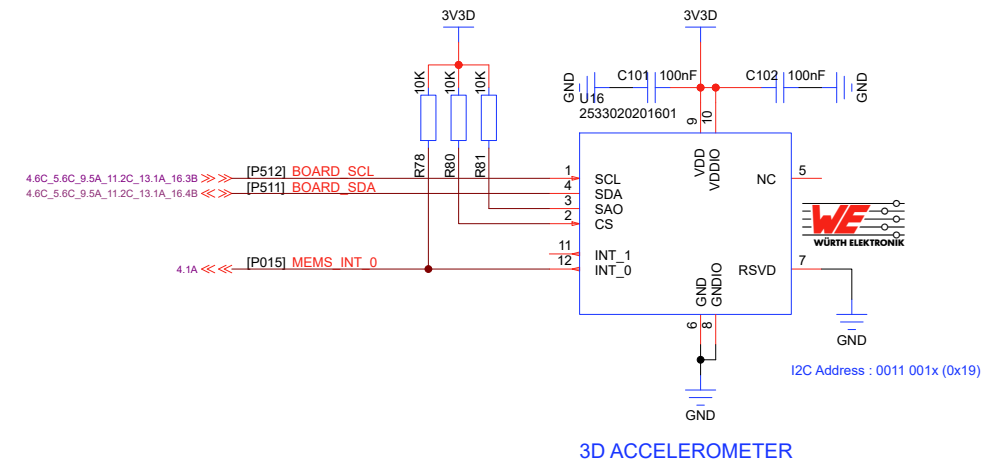
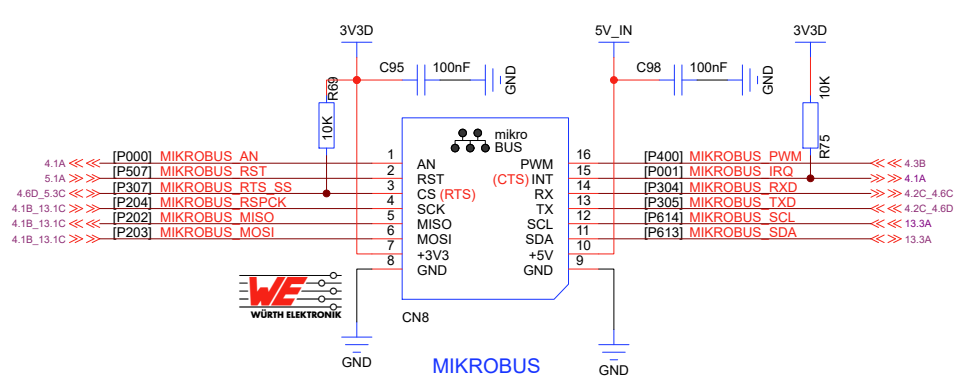
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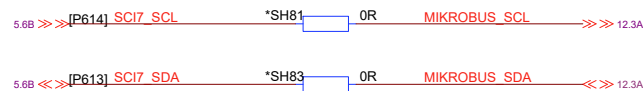
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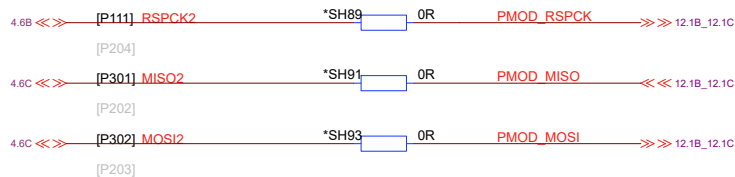
	R104	R105	R77
TCAN330GDR	F	NF	F
TCAN332GDR	NF	NF	NF
SN65HVD230DR	NF	F	F

NF: Not Fitted
F: Fitted

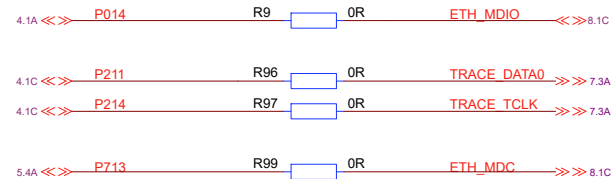
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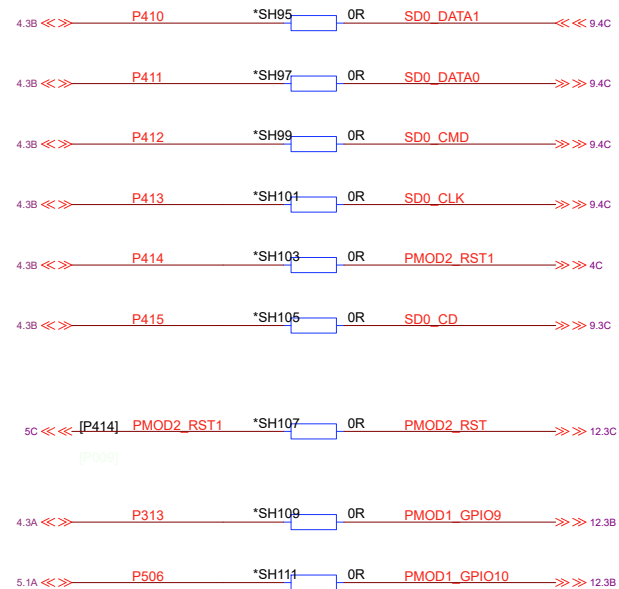
I2C BUS SELECTION FOR MIKROBUS



SPI BUS SELECTION FOR PMOD



MDC/MDIO & TRACE SIGNALS SELECTION



SDCARD / CAMERA MULTIPLEXING



PRODUCT M13-RA6M4-EK (Evaluation Board)

PAGE GPIO Distribution

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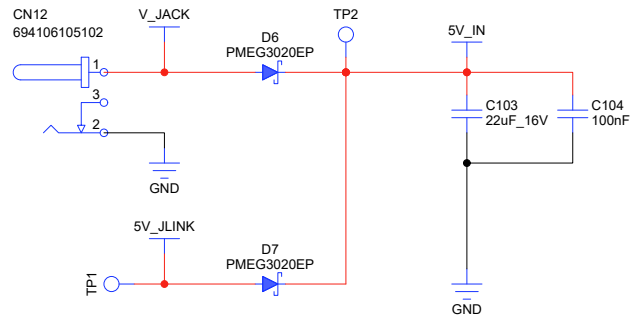
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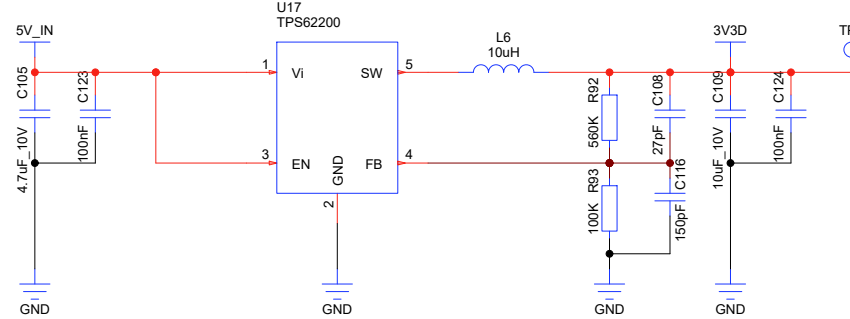
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JACK POWER SUPPLY MUST BE STRICTLY 5V

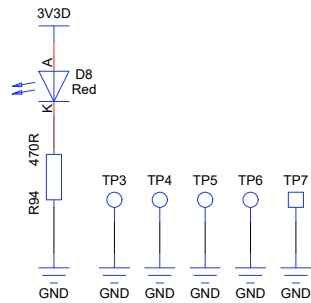
5V POWER SOURCE



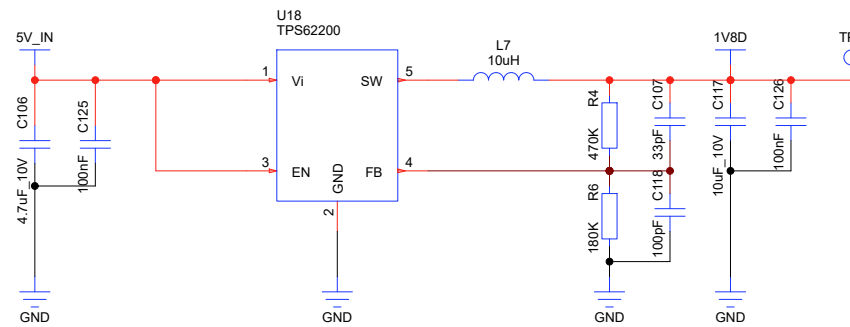
5V TO 3V3 Digital



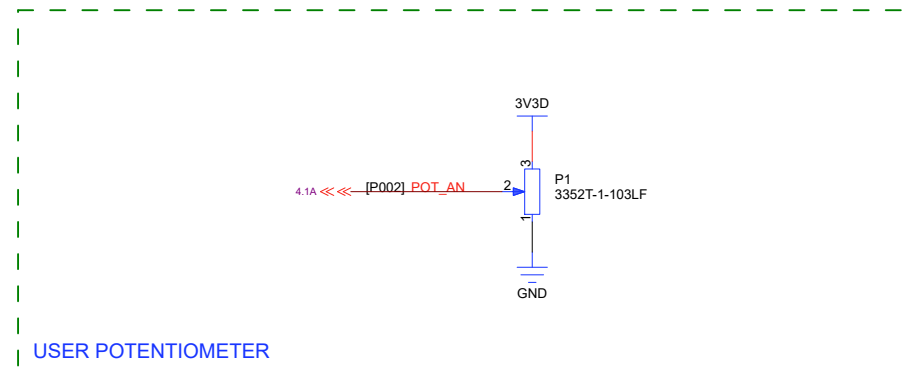
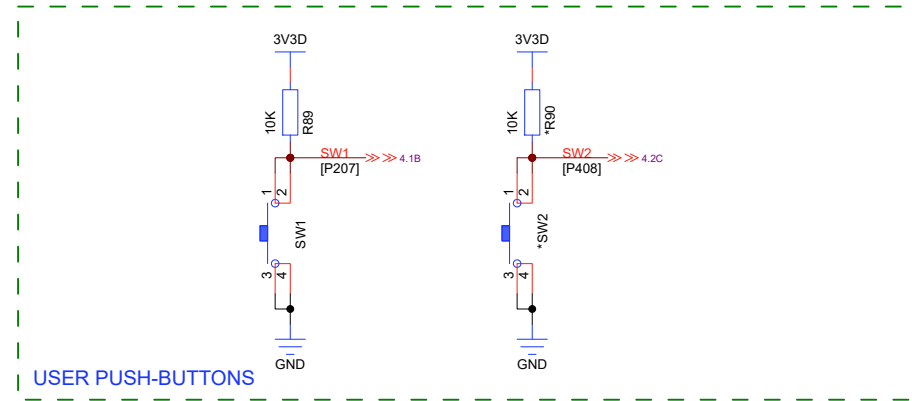
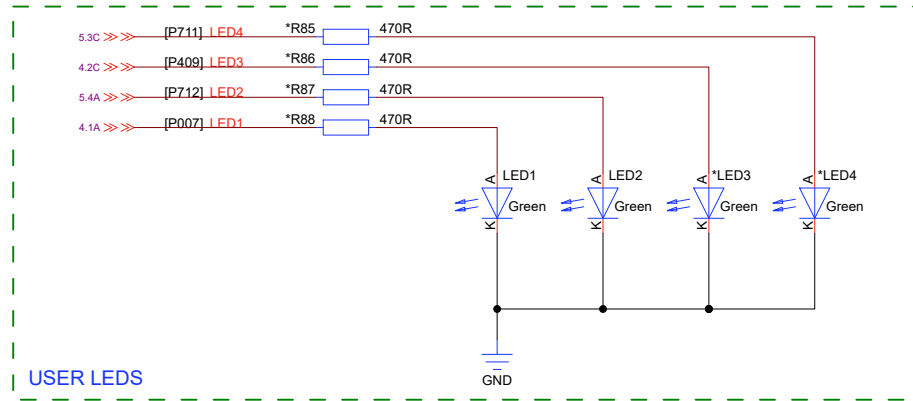
POWER ON LED



5V TO 1V8 Digital



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C

C

D

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REVISION HISTORY		
DATE	VERSION	CHANGES
2023.03.21	V1.0	First draft

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