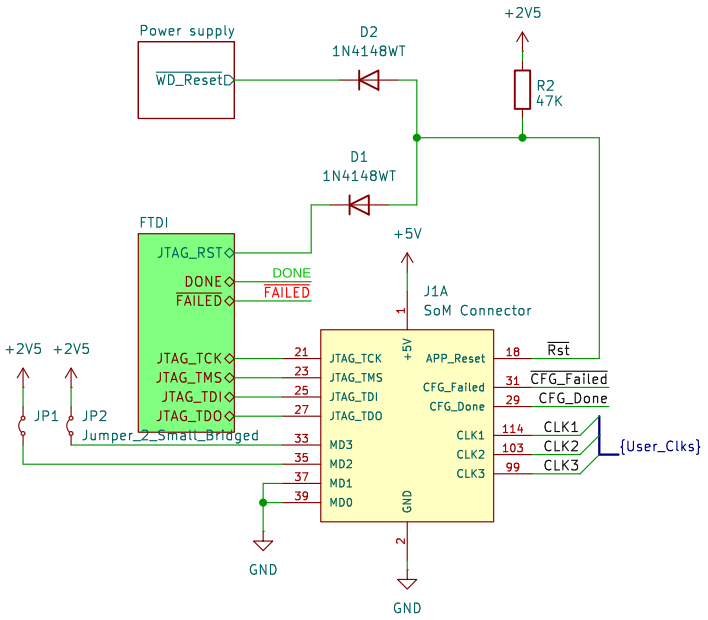
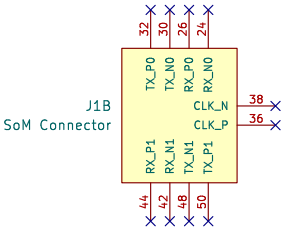
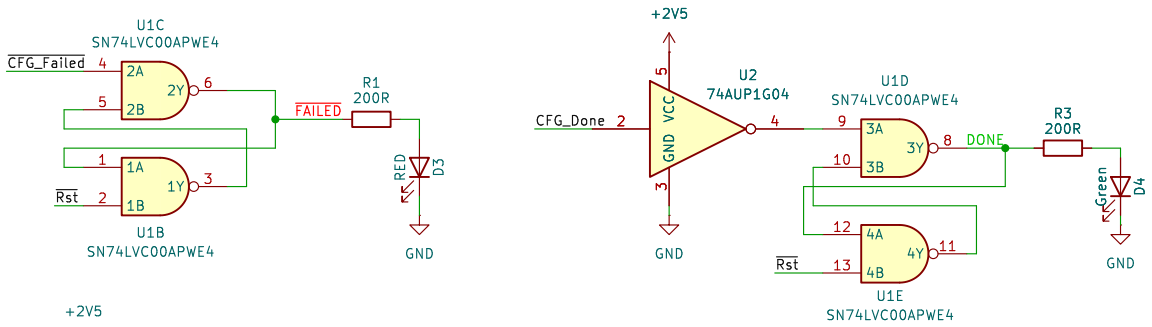
Configuration & Reset

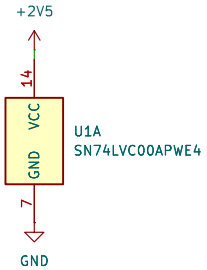


SERDES unused

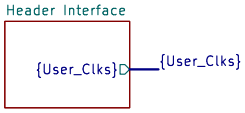


CFG-LED Latches





IO Configuration



adc
Datei: adc.kicad_sch

analog_front_end
Datei: analog_front_end.kicad_sch

usb2
Datei: usb2.kicad_sch

H1 MountingHole_M3
H2 MountingHole_M3
H3 MountingHole_M3
H4 MountingHole_M3

log2

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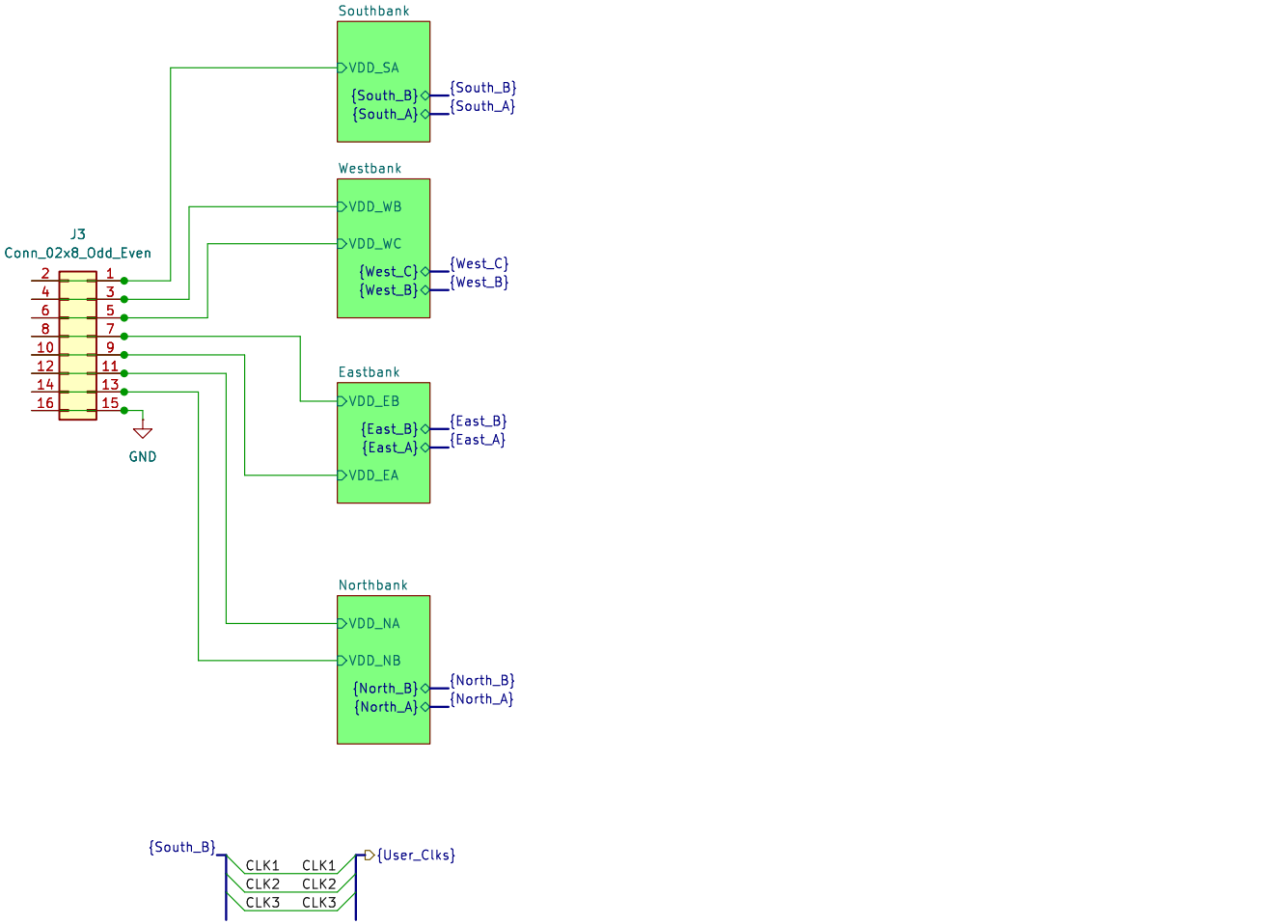
Sheet: /
File: CcSoM_ADC_Board.kicad_sch

Title: SoM Programmer & ADC Board

Size: A4	Date: 2026-02-09	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 1/12



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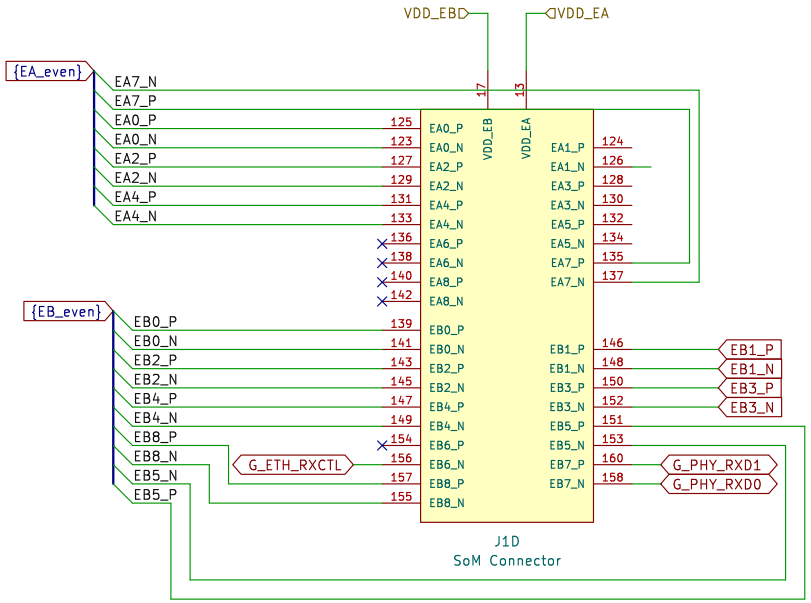
Sheet: /Header Interface/
File: HeaderInterface.kicad_sch

Title: SoM Programmer & ADC Board

Size: A4	Date: 2024-12-20	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 2/12



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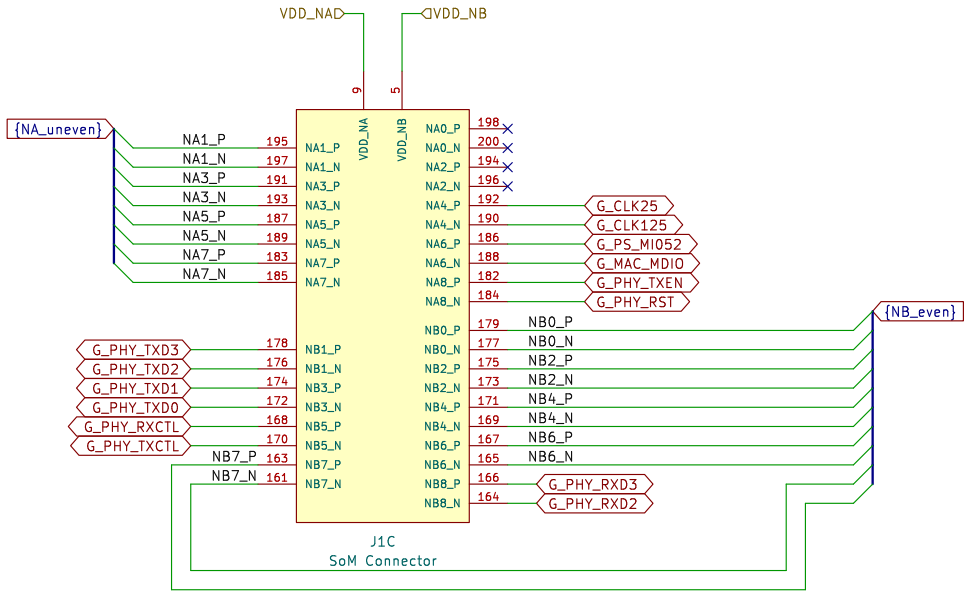
Sheet: /Header Interface/Eastbank/
File: Eastbank.kicad_sch

Title: SoM Programmer & ADC Board

Size: A4	Date: 2026-02-09	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 3/12



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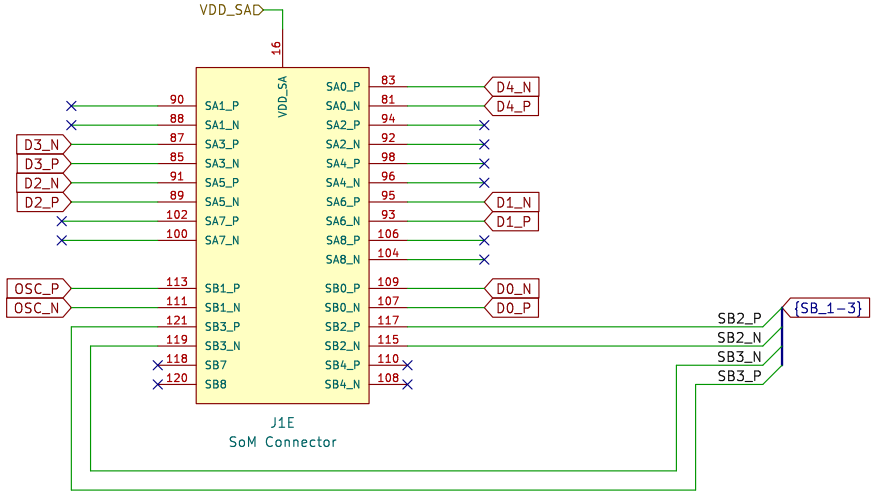
Sheet: /Header Interface/Northbank/
File: Northbank.kicad_sch

Title: SoM Programmer & ADC Board

Size: A4	Date: 2026-02-09	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 4/12



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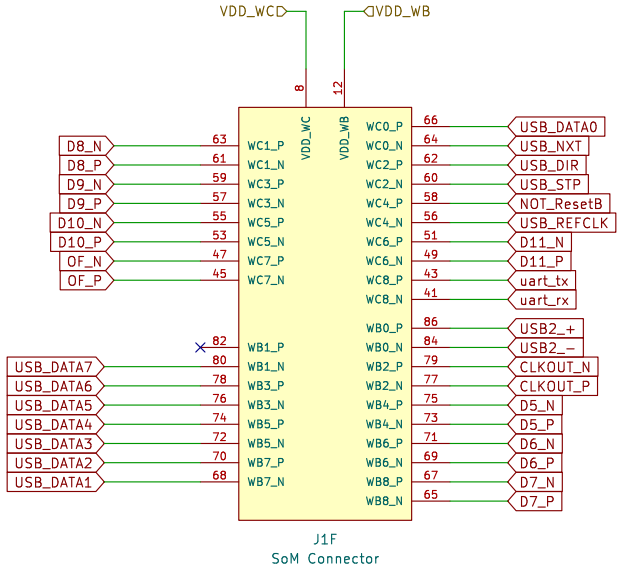
Sheet: /Header Interface/Southbank/
File: Southbank.kicad_sch

Title: SoM Programmer & ADC Board

Size: A4	Date: 2026-02-09	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 5/12



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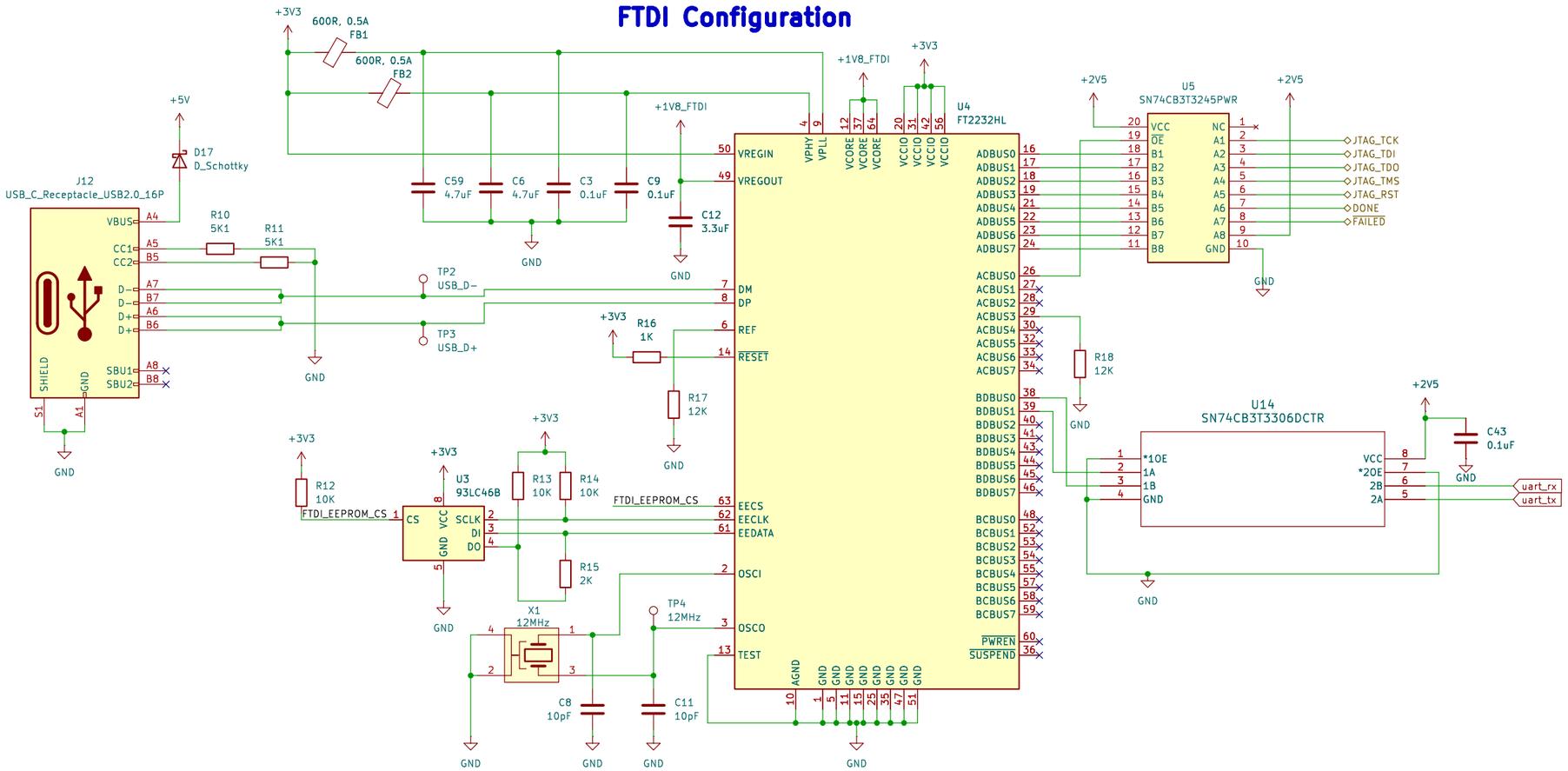
Sheet: /Header Interface/Westbank/
File: Westbank.kicad_sch

Title: SoM Programmer & ADC Board

Size: A4	Date: 2024-12-20	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 6/12

FTDI Configuration



Fitering

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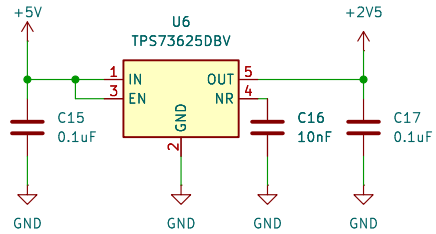
Sheet: /FTDI/
File: FTDI.kicad_sch

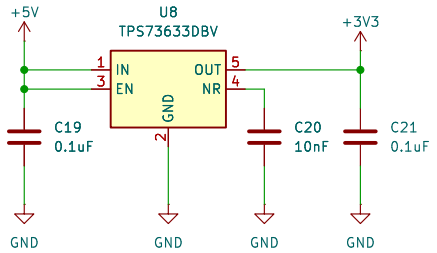
Title: SoM Programmer & Tester

Size: A3	Date: 2026-02-09	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 7/12

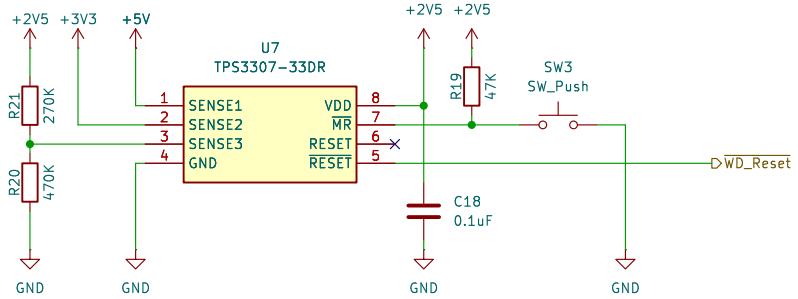
2.5V Regulator



3.3V Regulator



Supervisory Circuit with manual reset



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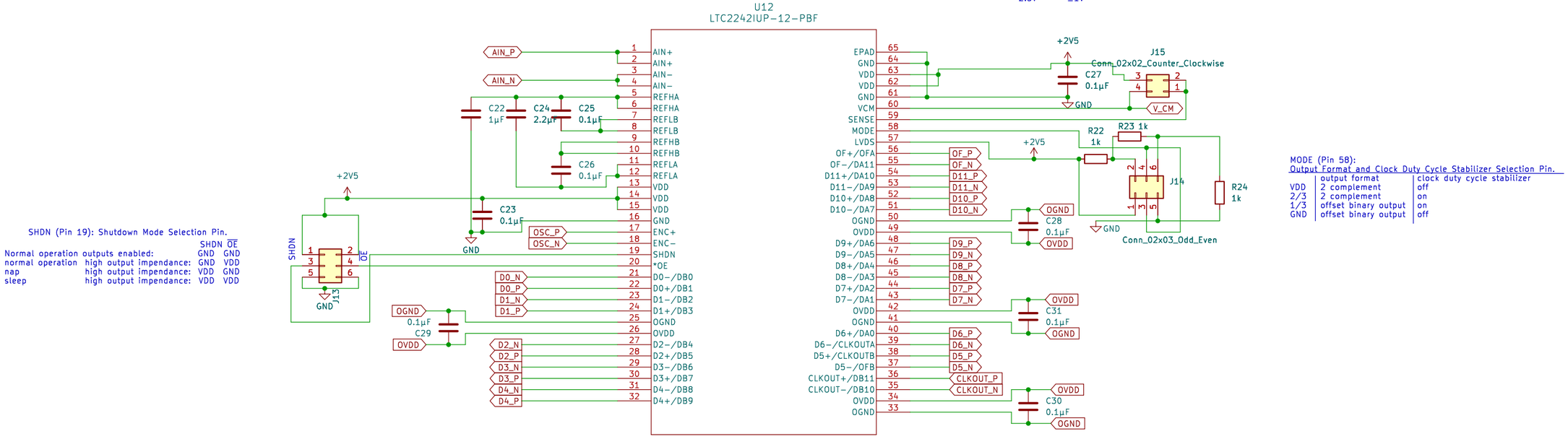
Sheet: /Power supply/	
File: PowerSupply.kicad_sch	
Title: SoM Programmer & ADC	
Size: A4	Date: 2024-12-20
KiCad E.D.A. 9.0.7	Id: 8/12
	Rev: 0.1

ADC

Differential adc output gets inverted into the fpga
D0 – OF

SENSE (Pin 59): Reference Programming Pin.
connecting input range
VCM ±0.5V
2.5V ±1V

U12
LTC2242IUP-12-PBF



SHDN (Pin 19): Shutdown Mode Selection Pin.

SHDN	$\overline{OE}$
Normal operation outputs enabled:	GND	GND
normal operation high output impendance:	GND	VDD
nap high output impendance:	VDD	GND
sleep high output impendance:	VDD	VDD

MODE (Pin 58):
Output Format and Clock Duty Cycle Stabilizer Selection Pin.

	output format	clock duty cycle stabilizer
VDD	2 complement	off
2/3	2 complement	on
1/3	offset binary output	on
GND	offset binary output	off

OVDD

OGND

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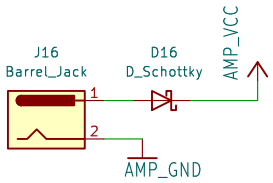
Sheet: /adc/
File: adc.kicad_sch

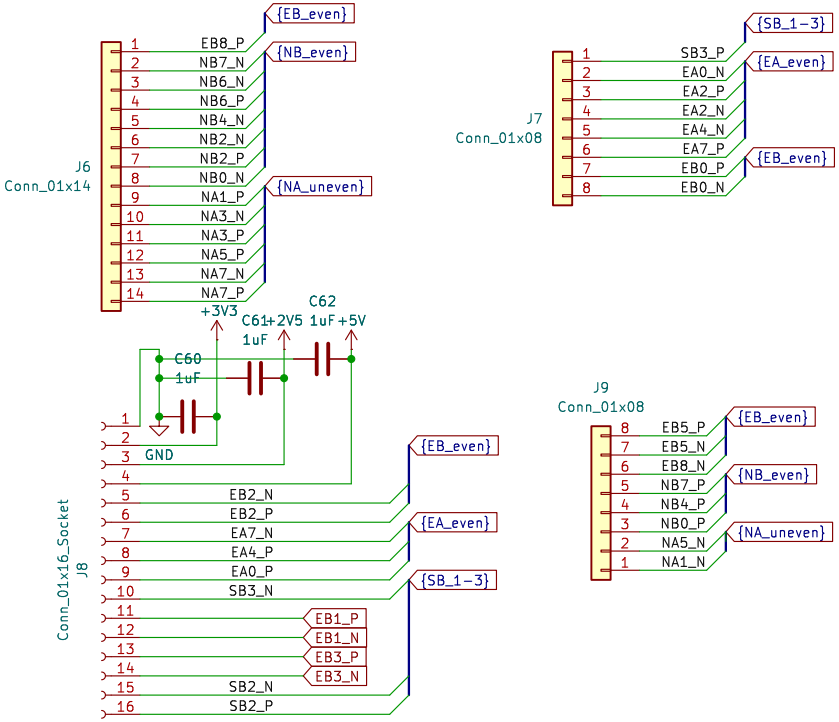
Title: SoM Programmer & ADC Board

Size: A3	Date: 2026-02-09	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 9/12

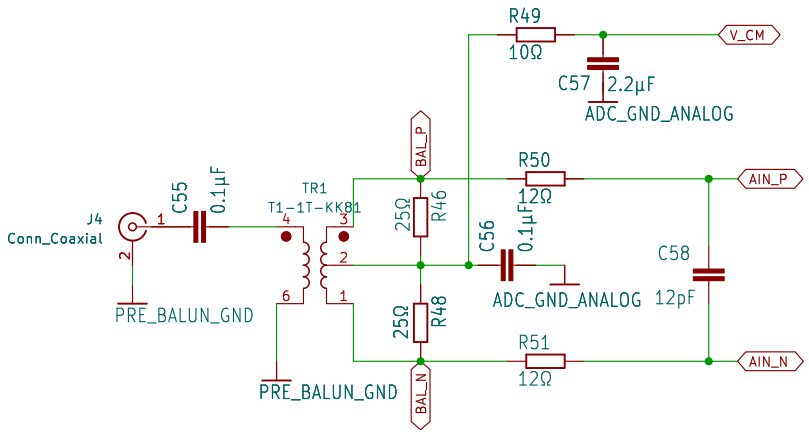
5V Barreljack for external power supply



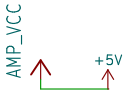
GPIO from FPGA not differencial routed



analog Input max 2Vpp



Supply Voltage



Grounds

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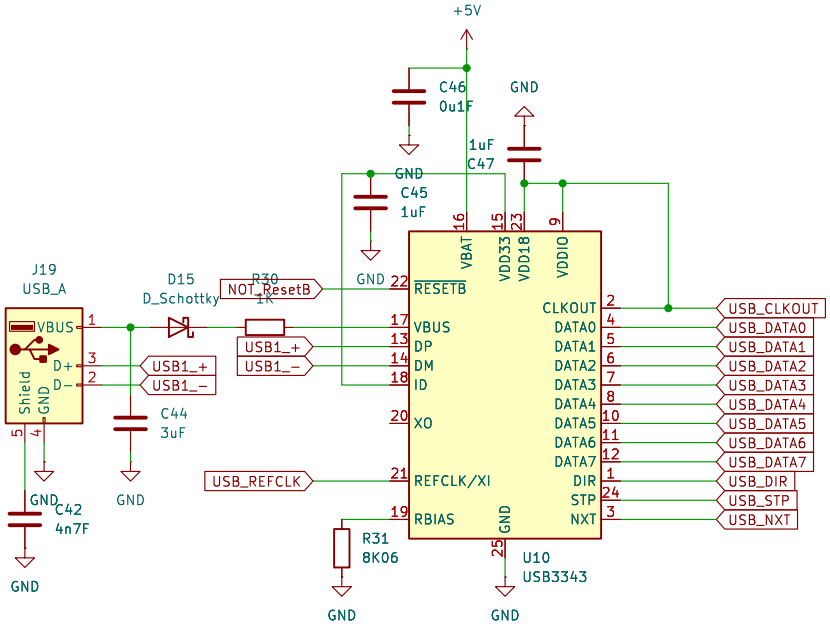
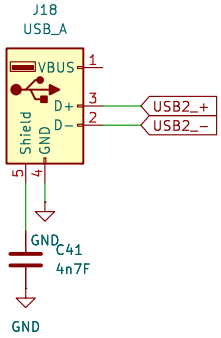
Sheet: /analog_front_end/
File: analog_front_end.kicad_sch

Title: SoM Programmer & ADC Board

Size: A4	Date: 2026-02-09	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 10/12





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Sheet: /usb2/
File: usb2.kicad_sch

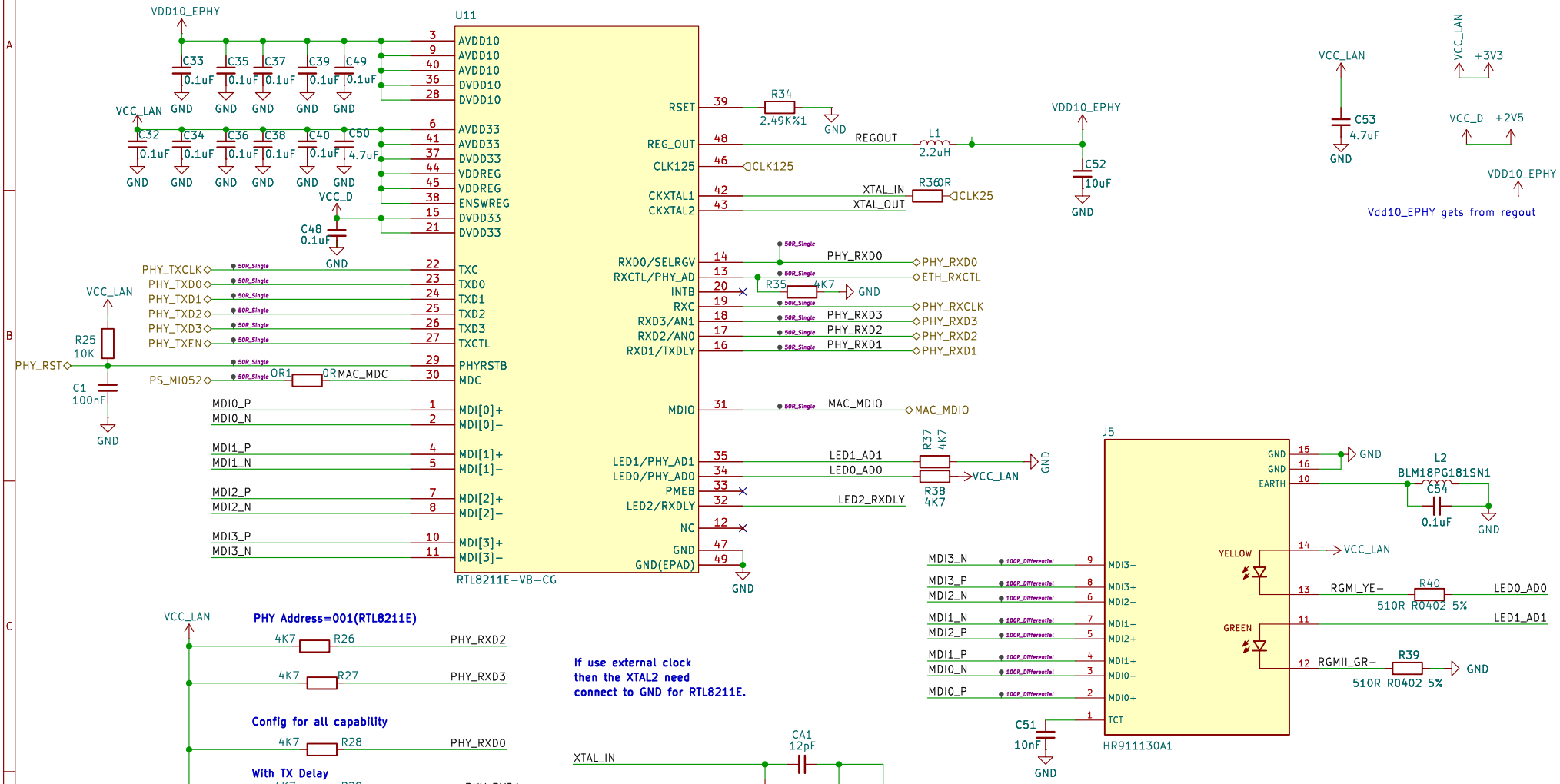
Title: SoM Programmer & ADC Board

Size: A4	Date: 2026-02-09	**Rev: 0.1**
KiCad E.D.A. 9.0.7		Id: 11/12

Original – project that is using this schematic is here:

https://github.com/rishivg/IO-SDR

copied from
https://github.com/intergalaktik/Extension_Boards_for_Olimex_GateMate/tree/main/ethIO



GPL-3.0

Intergalaktik d.o.o.

Sheet: /gigabit_ethernet/
File: gigabit_ethernet.kicad_sch

Title: Olimex Extension ethIO v0.1

Size: A4	Date: 2024-12-02	**Rev: v0.1**
KiCad E.D.A. 9.0.7		Id: 12/12