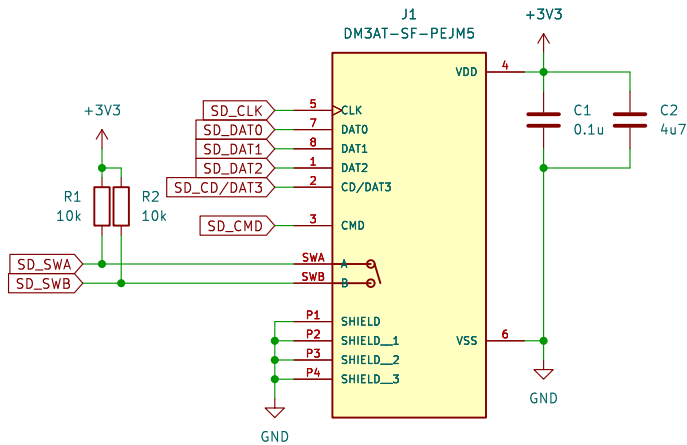
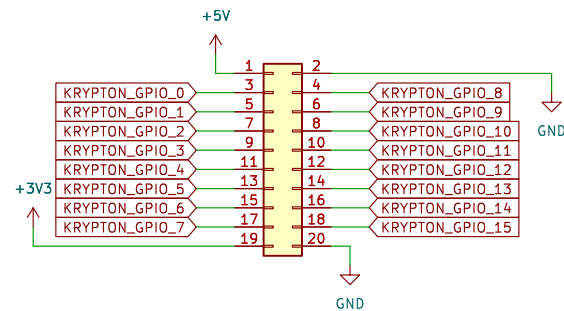
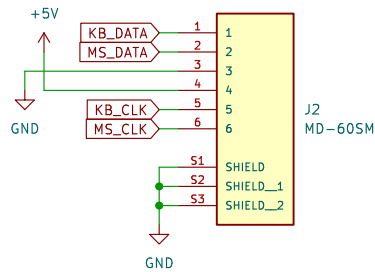


Argon I/O ports

Micro-SD slot

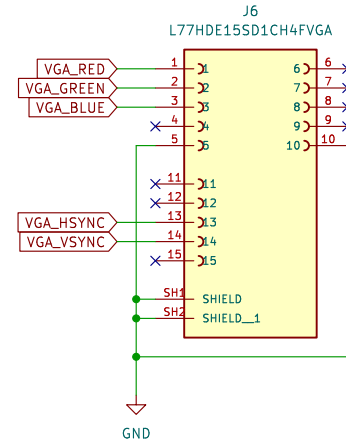


PS/2 port (Mini DIN-6)

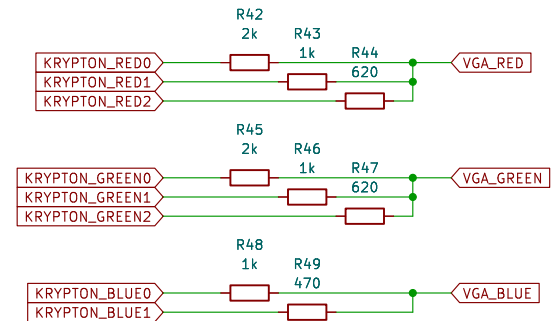


Krypton VGA port

VGA port

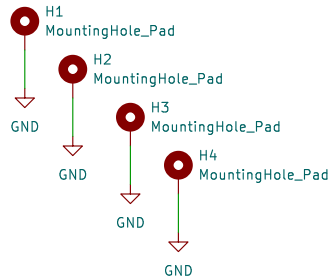


VGA digital -> analog circuit



VGA has 75 ohm resistors at the end of each color line.
These resistors are creating a voltage divider to give
the VGA monitor voltages between 0 and +0.7V

GPIO ports



CherryTree7

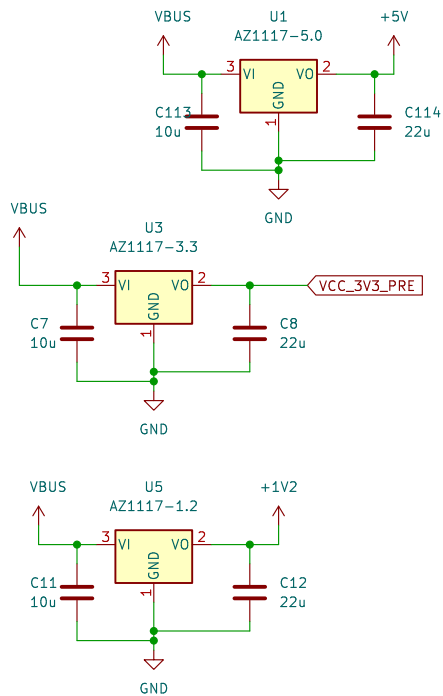
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Title: Oganesson Minicomputer

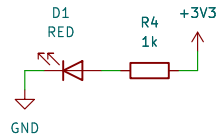
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Id: 1/10

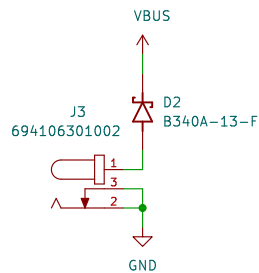
Voltage Regulators



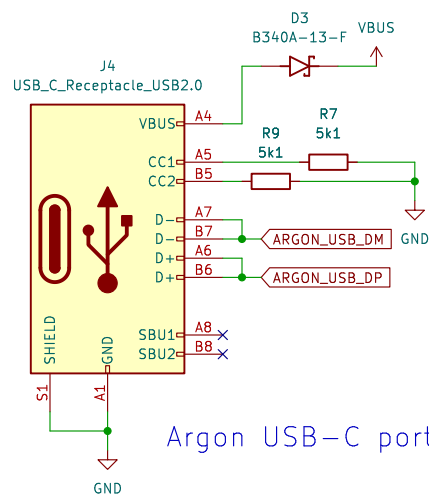
Power Indicator LED



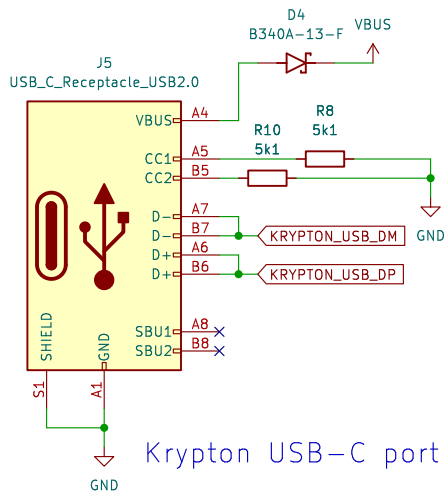
Barrel Jack



Argon USB-C port



Krypton USB-C port

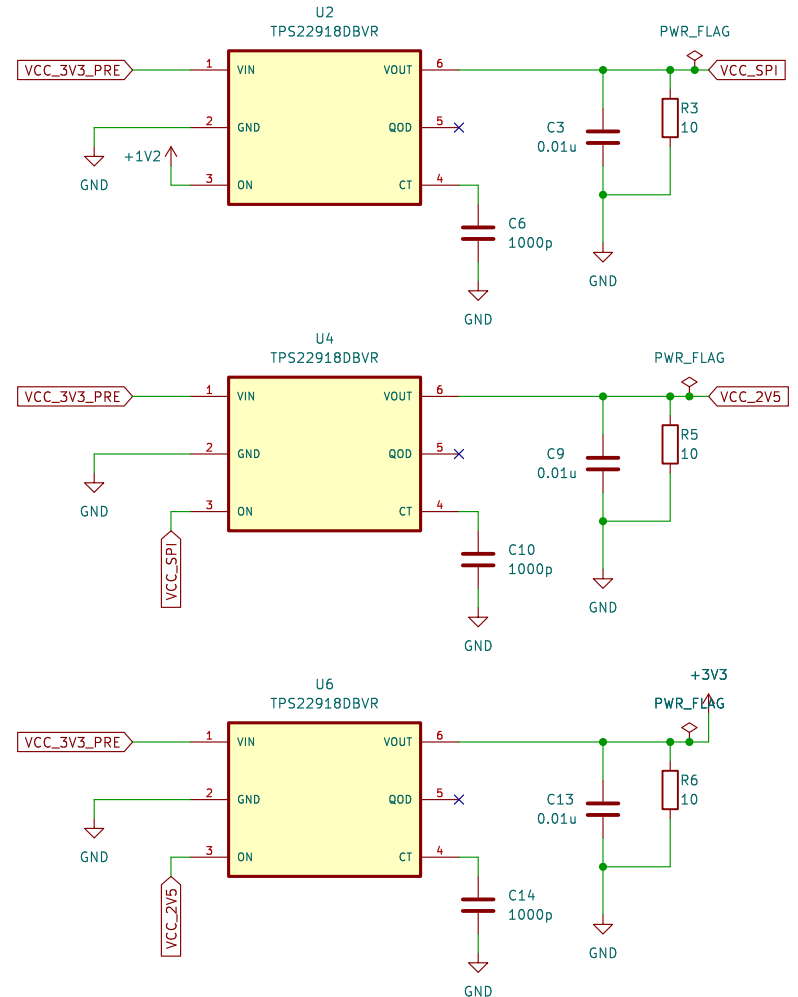


Voltage order:

1. VCC / VCC_PLL (+1V2)
2. VCC_SPI (+3V3)
3. VPP_2V5 (+3V3)
4. VCC_IO (+3V3)

Load switches

+3V3
Rise time: 1680 us
CT: 1000 pF
CL: 0.01 uF
RL: 10 ohm
Rise rate: 1.96V/ms



Power + USB-C ports

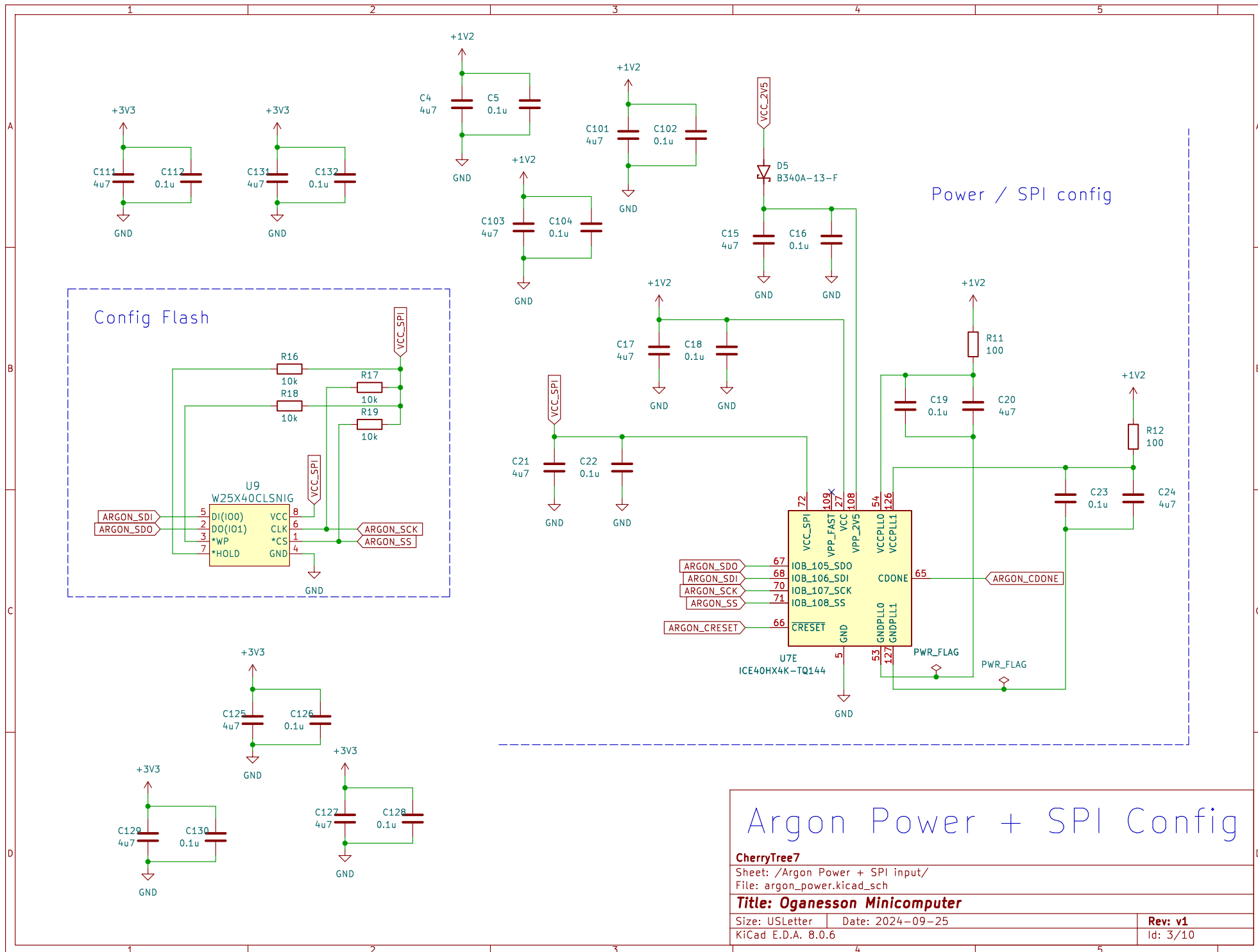
CherryTree7

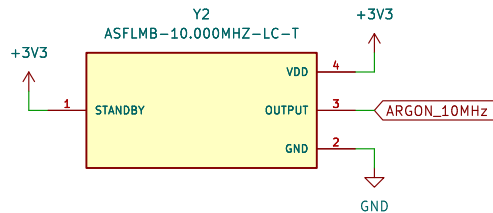
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Title: Oganesson Minicomputer

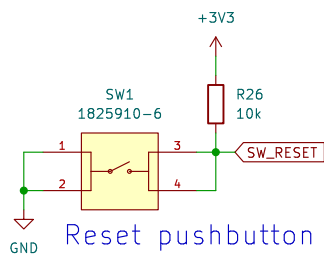
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Rev: v1
Id: 2/10

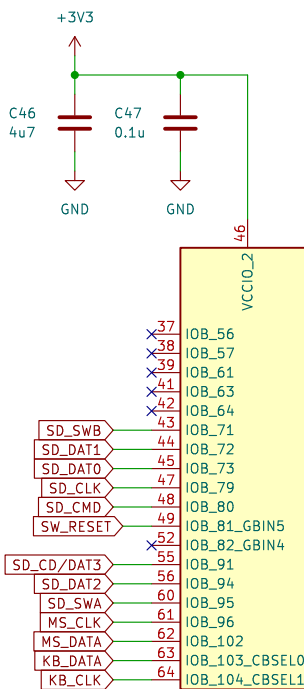




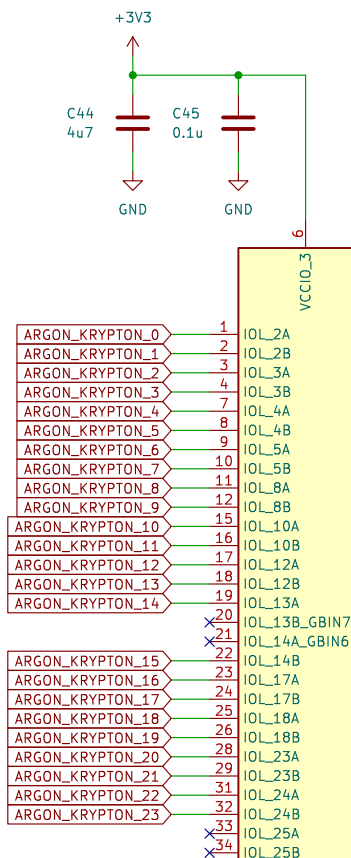
10MHz MEMS oscillator



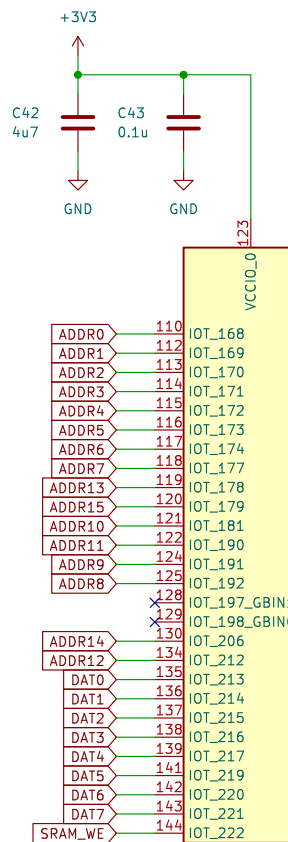
Reset pushbutton



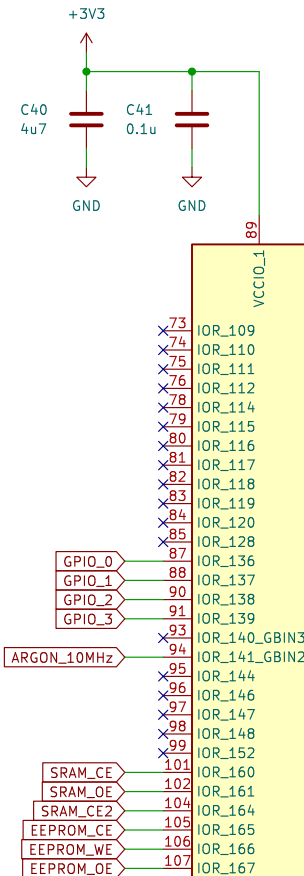
U7C
ICE40HX4K-TQ144



U7D
ICE40HX4K-TQ144



U7A
ICE40HX4K-TQ144



U7B
ICE40HX4K-TQ144

Argon I/O banks

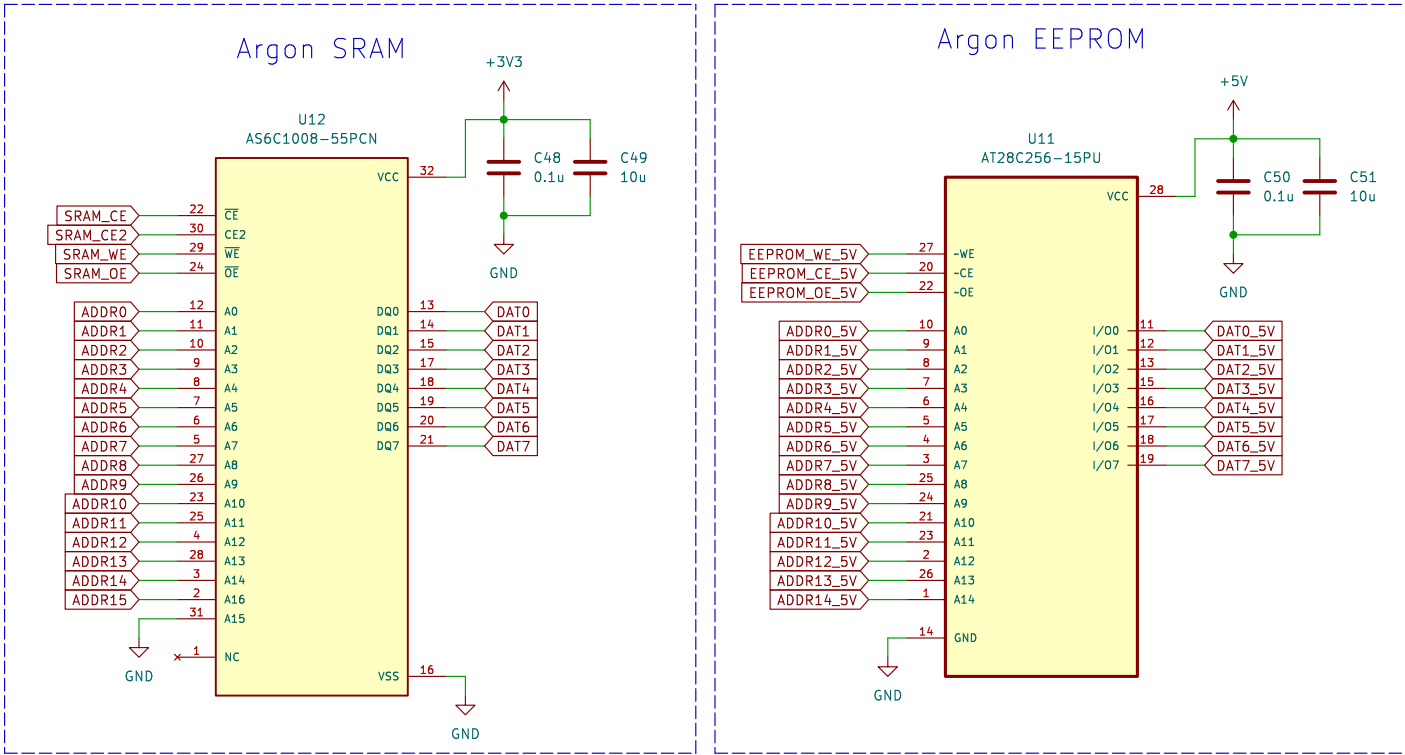
CherryTree7

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Title: Oganesson Minicomputer

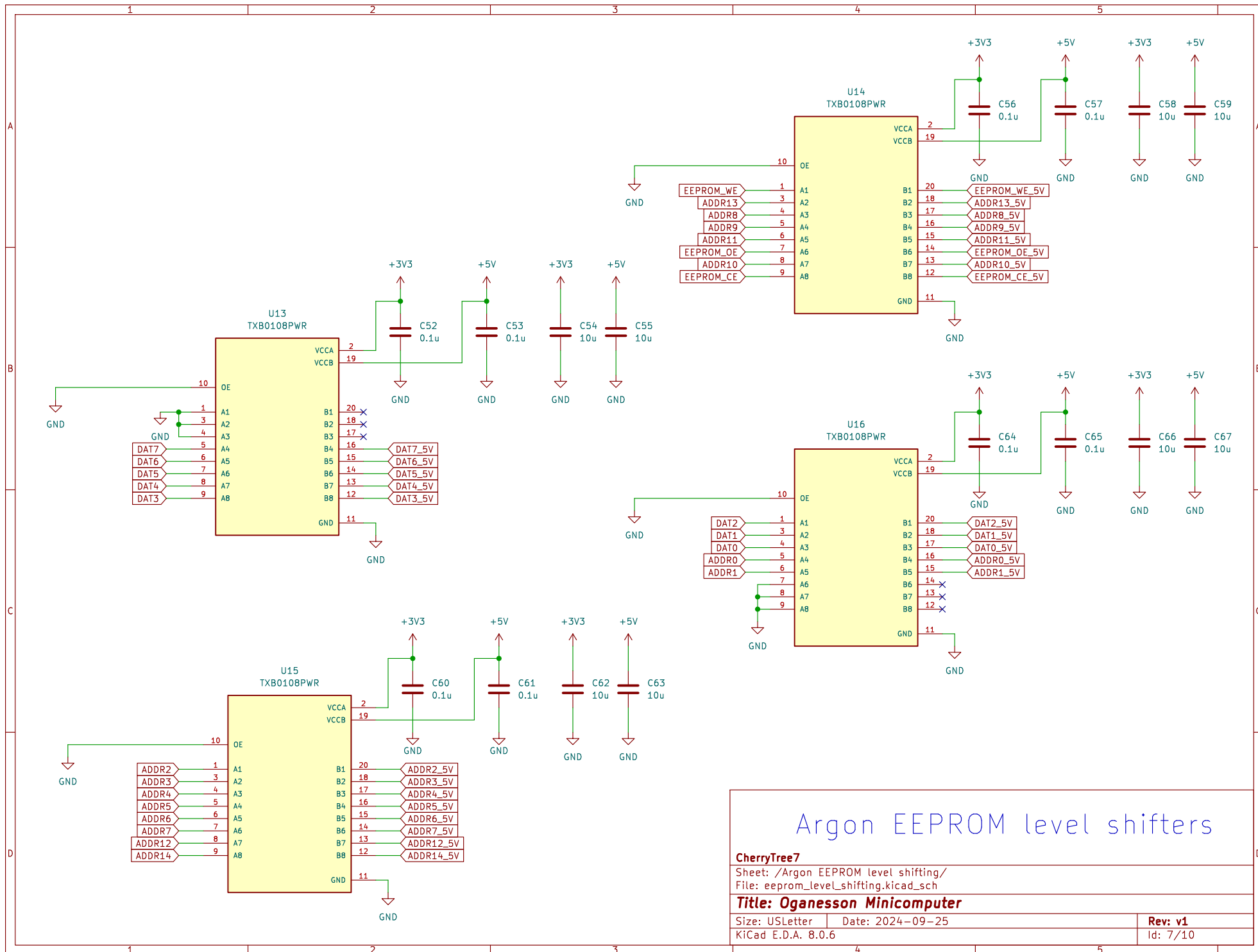
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KiCad E.D.A. 8.0.6

Rev: v1
Id: 5/10



Argon Memory

CherryTree7	
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File: argon_memory.kicad_sch	
Title: Oganesson Minicomputer	
Size: USLetter	Date: 2024-09-25
KiCad E.D.A. 8.0.6	Rev: v1
	Id: 6/10



Argon EEPROM level shifters

CherryTree7

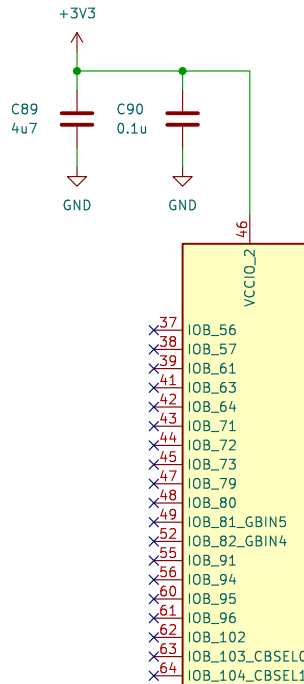
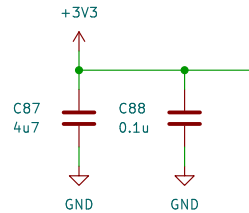
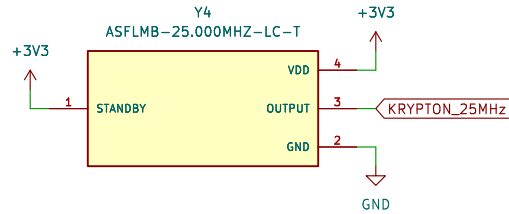
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Title: Oganesson Minicomputer

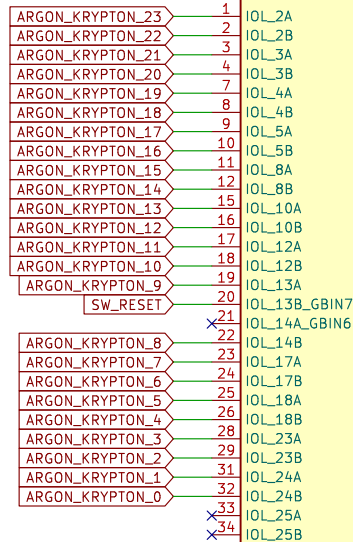
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KiCad E.D.A. 8.0.6

Rev: v1
Id: 7/10

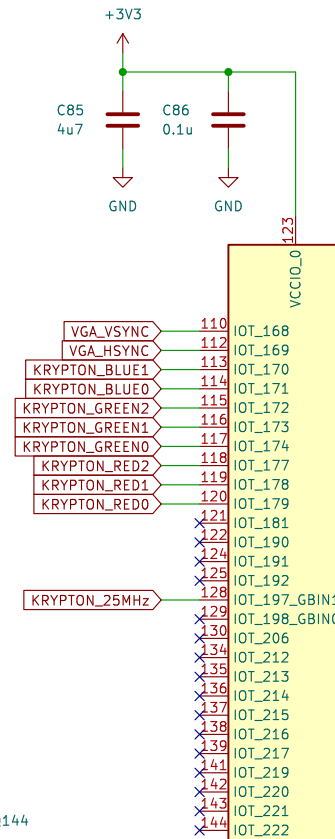
25MHz MEMS oscillator



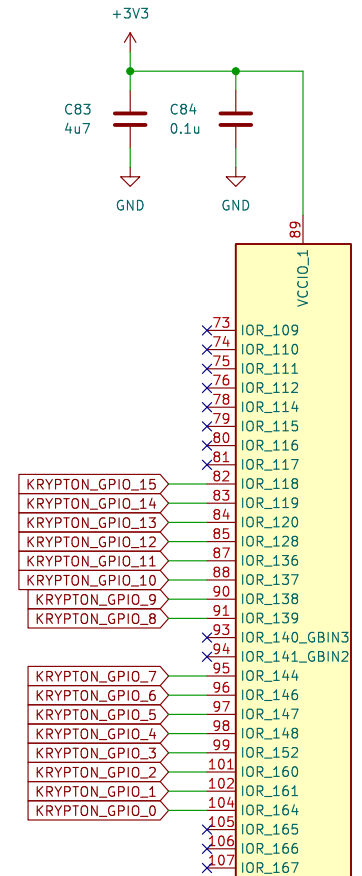
U20C
ICE40HX4K-TQ144



U20D
ICE40HX4K-TQ144



U20A
ICE40HX4K-TQ144



U20B
ICE40HX4K-TQ144

Krypton I/O Banks

CherryTree7

Sheet: /Krypton IO Banks/
File: krypton_io.kicad_sch

Title: Oganesson Minicomputer

Size: USLetter Date: 2024-09-25
KiCad E.D.A. 8.0.6

Rev: v1
Id: 9/10

