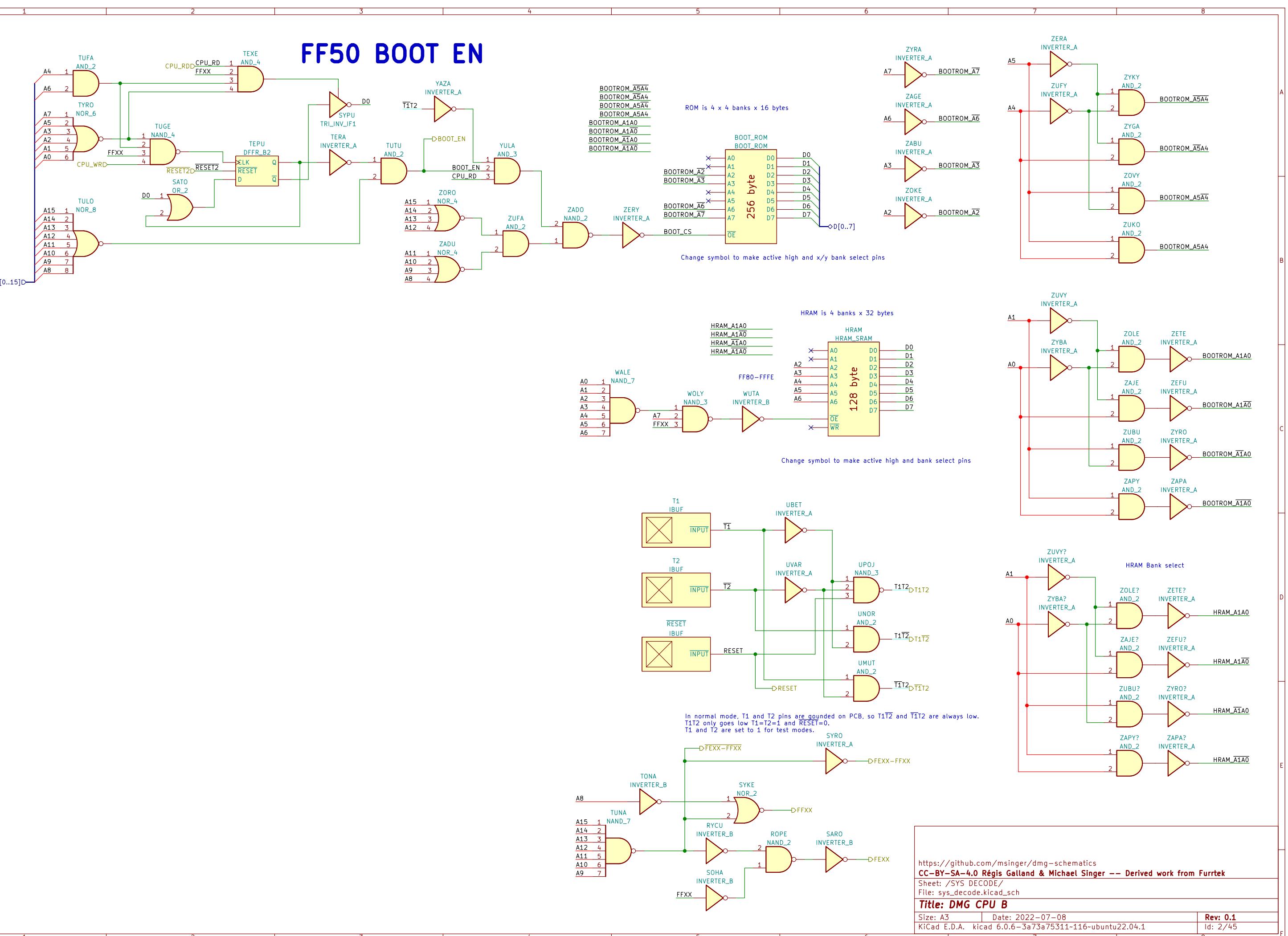
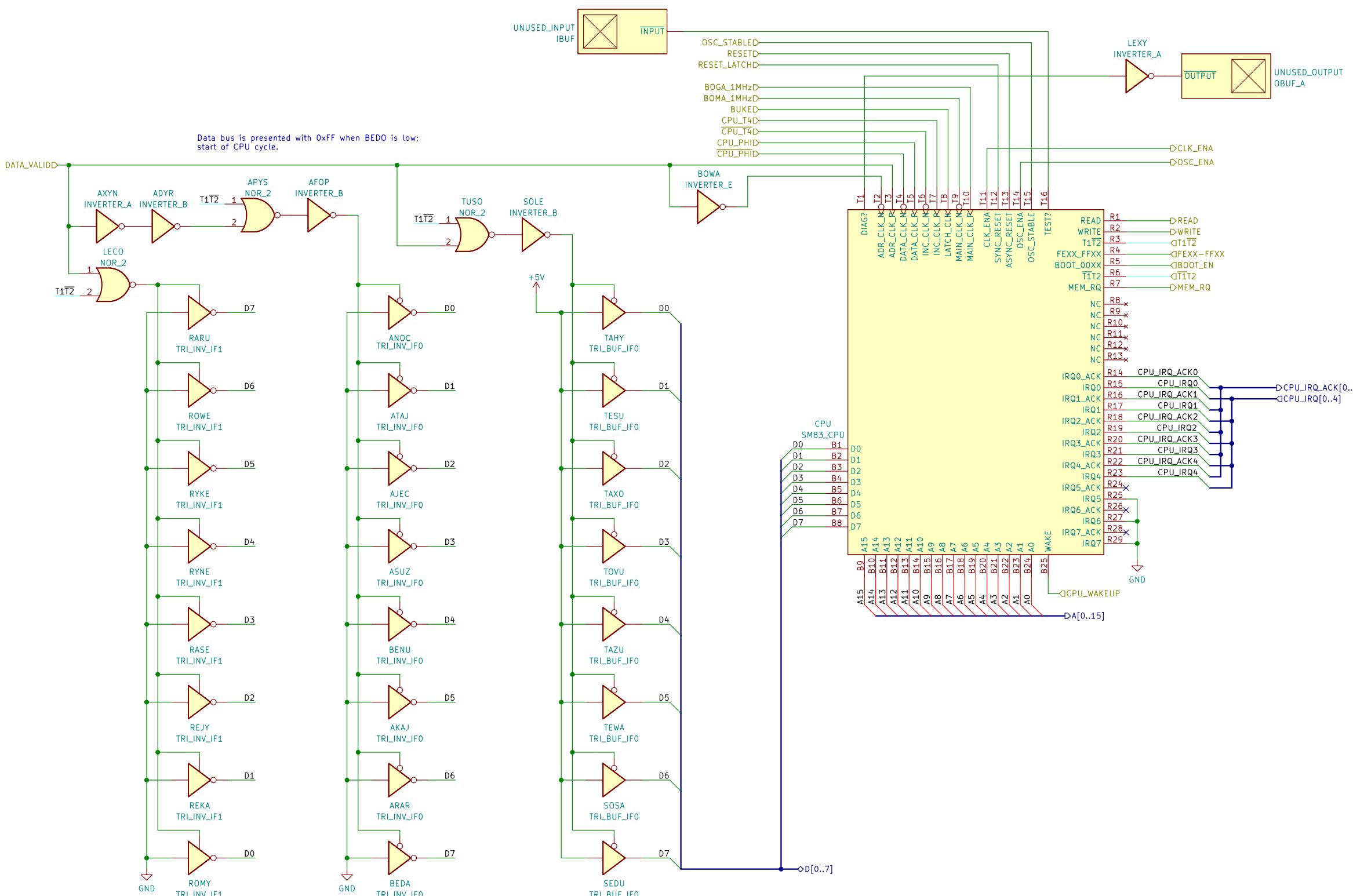


Green boxes contain IO pins
Red boxes contain sub sheets

<https://github.com/msinger/dmg-schematics>
 CC-BY-SA-4.0 Régis Galland & Michael Singer -- Derived work from Furtek
 Sheet: /
 File: dmg_cpu_b.kicad_sch
Title: DMG CPU B
 Size: A3 | Date: 2022-07-08 | Rev: 0.1
 KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1 | Id: 1/45

FF50 BOOT EN





<https://github.com/msinger/dmg-schematics>
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Sheet: /CPU/

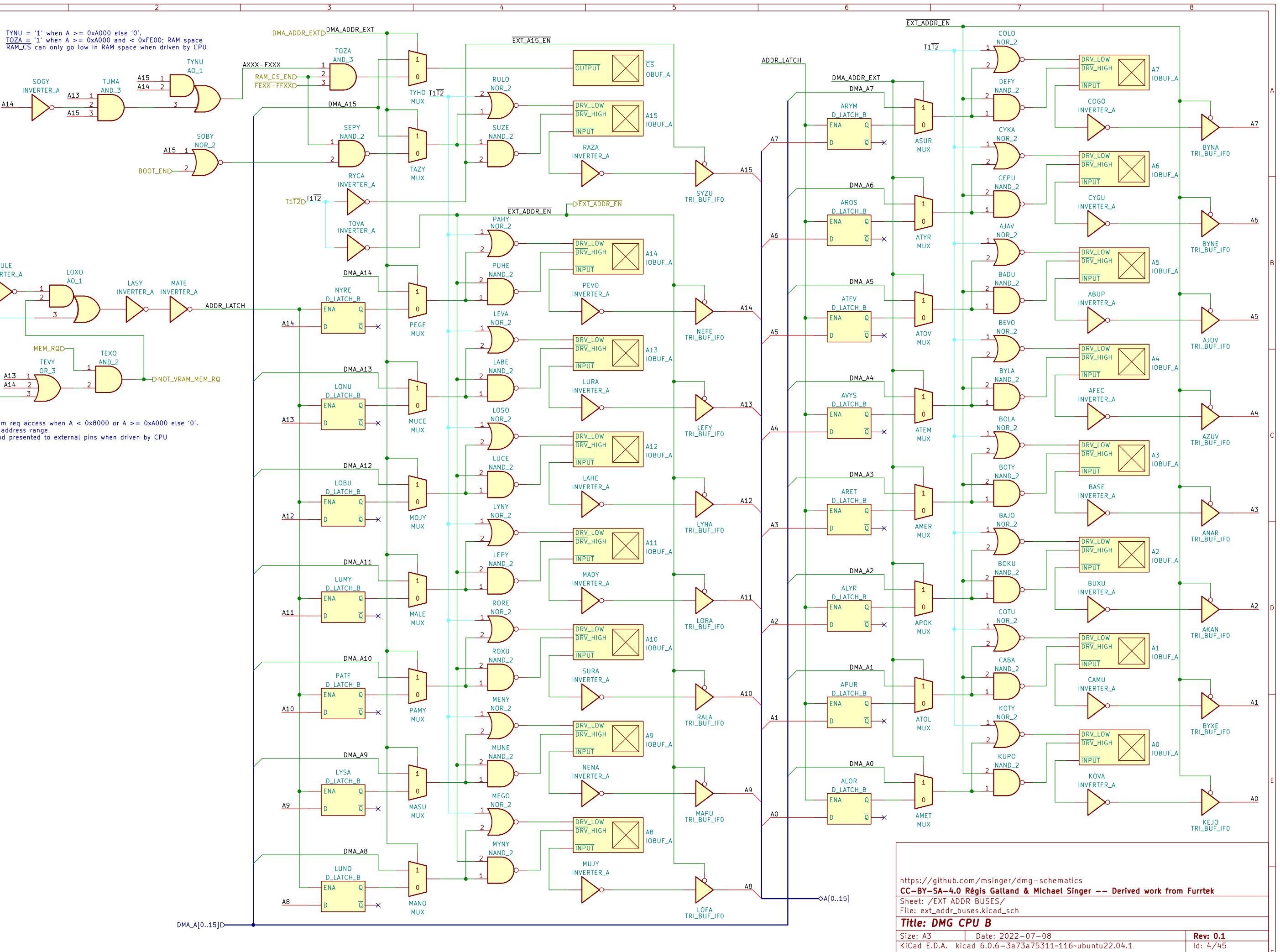
File: cpu.kicad_sch

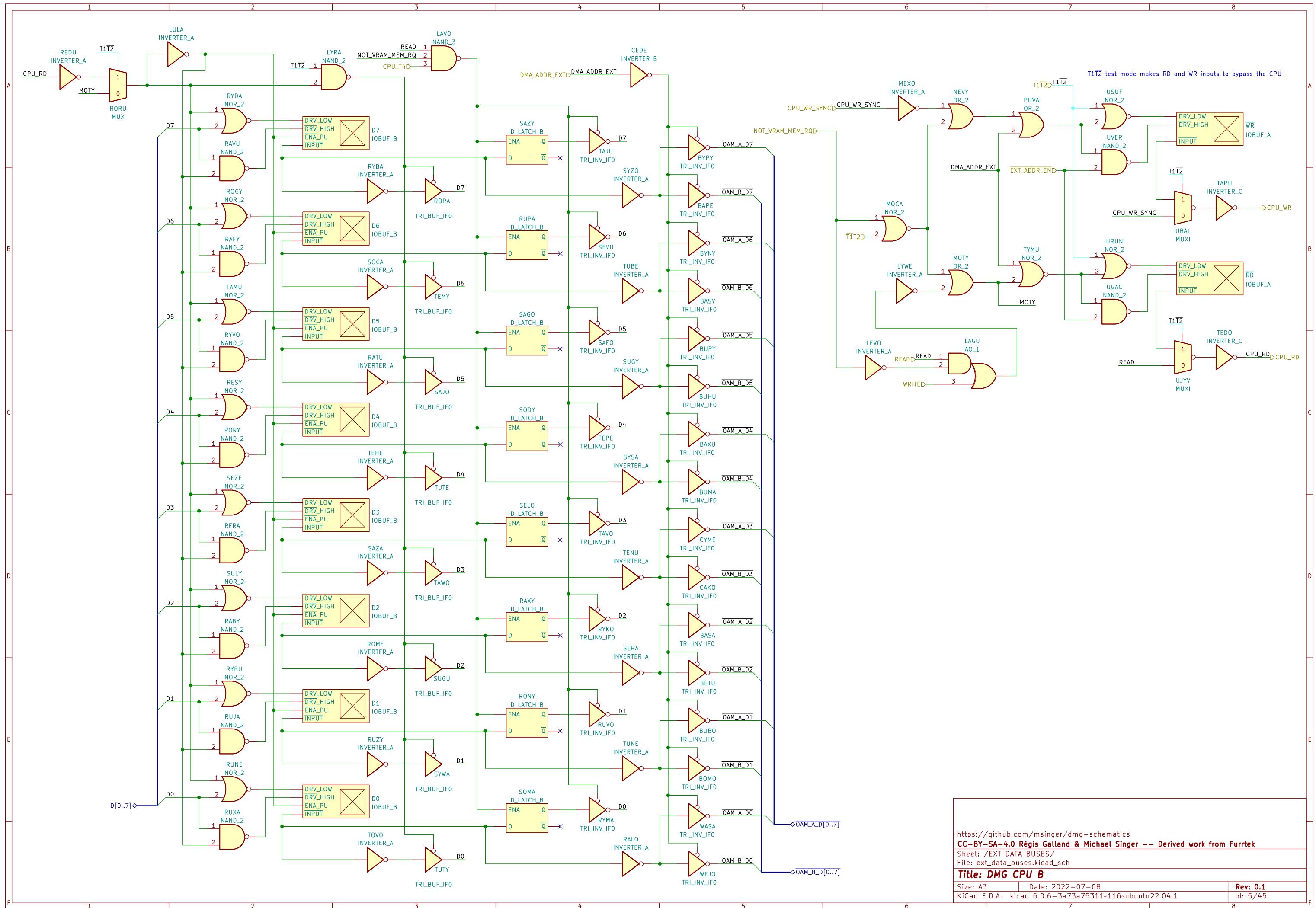
Title: DMG CPU B

Size: A3 Date: 2022-07-08
KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1

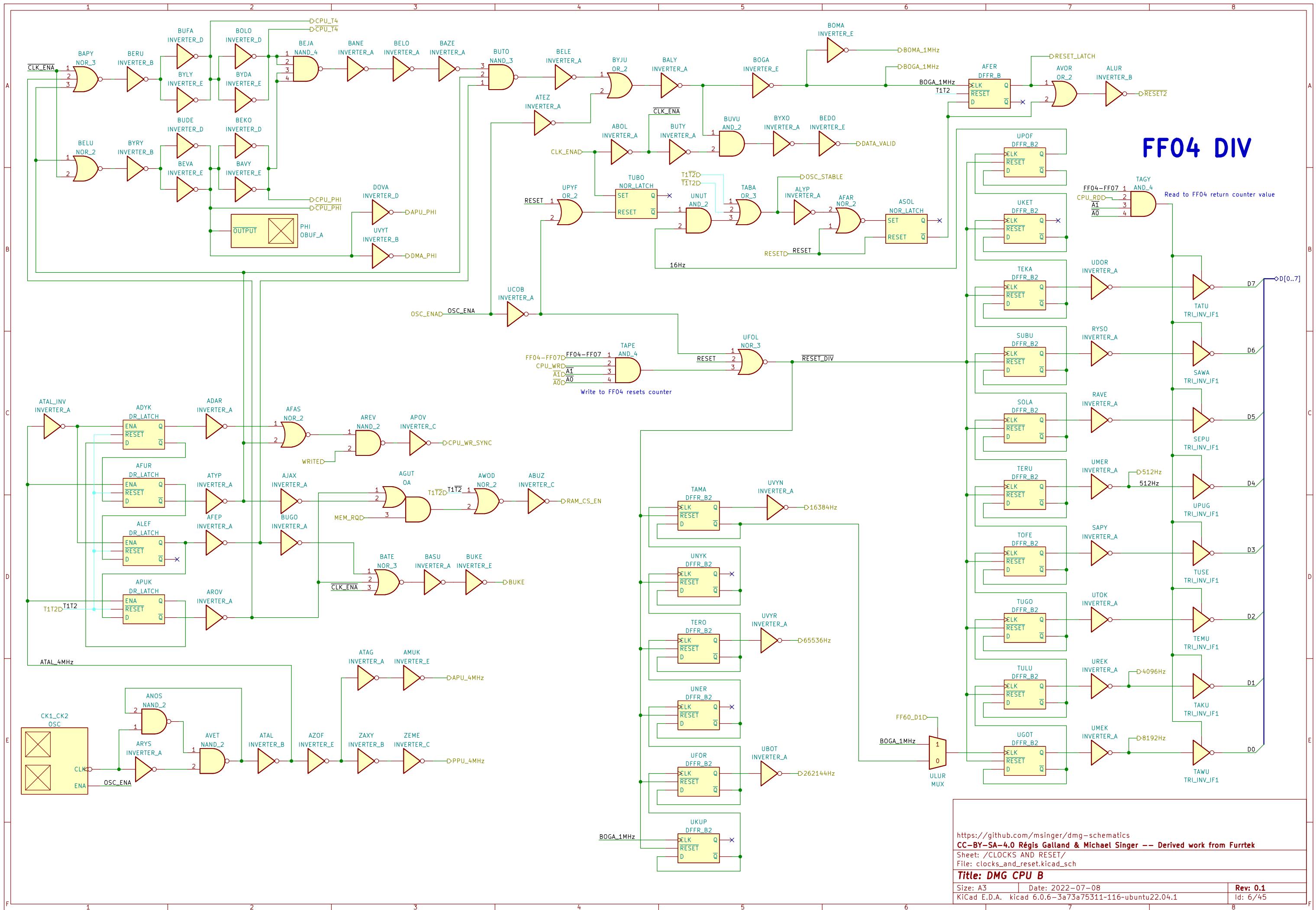
Rev: 0.1
Id: 3/45

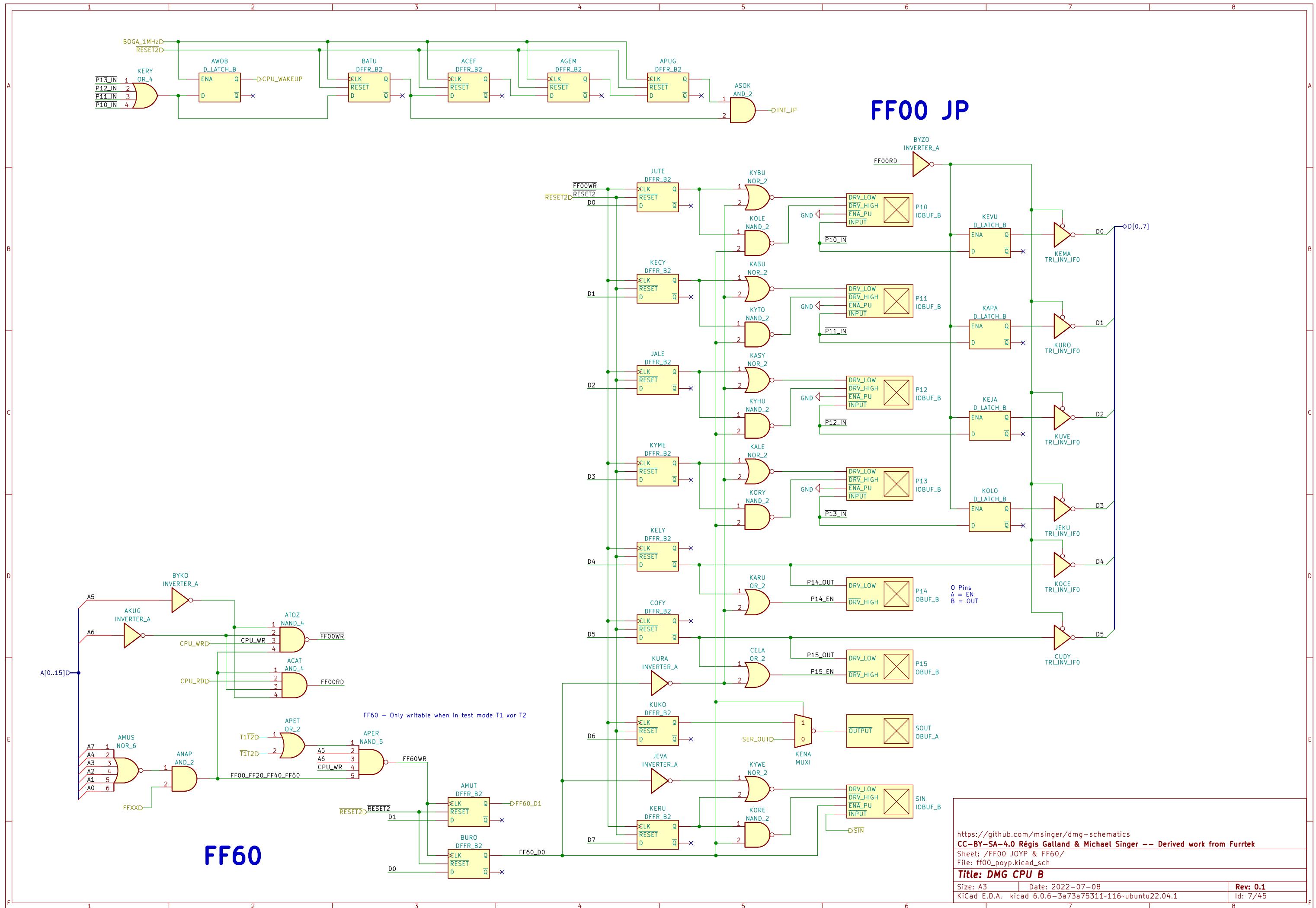
$TNU = '1'$ when $A \geq 0xA000$ else ' 0 '.
 $TOZA = '1'$ when $A \geq 0xA000$ and $< 0xFE00$; RAM space
 RAM_CS can only go low in RAM space when driven by CPU



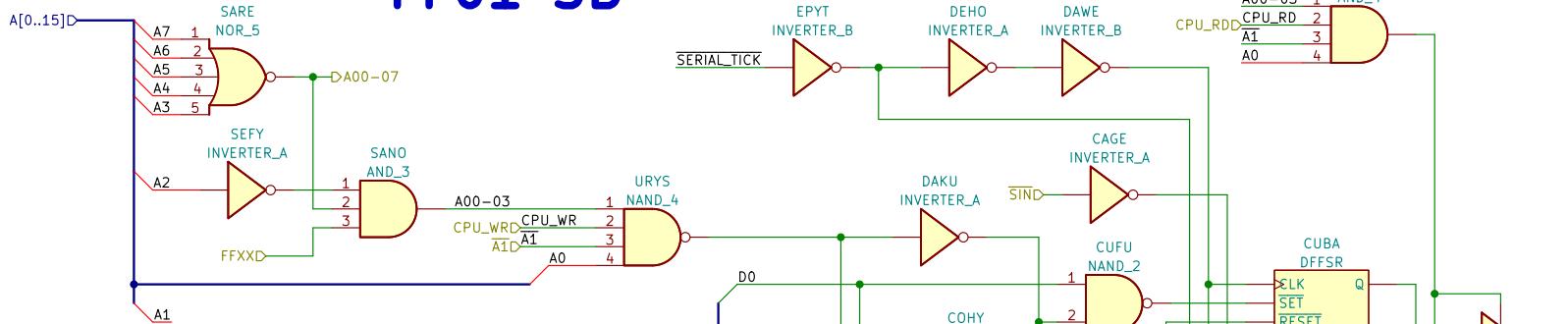


FF04 DIV

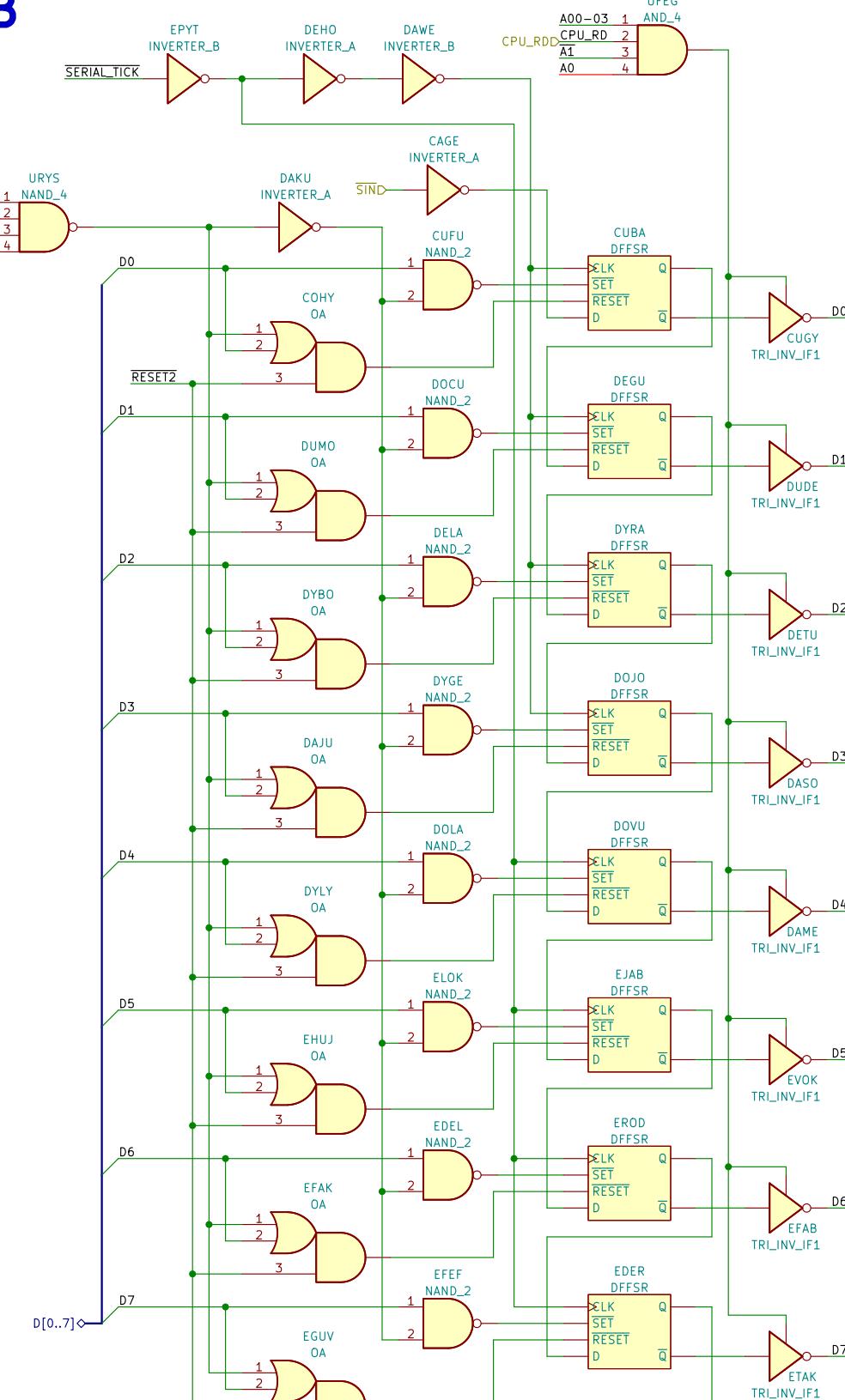
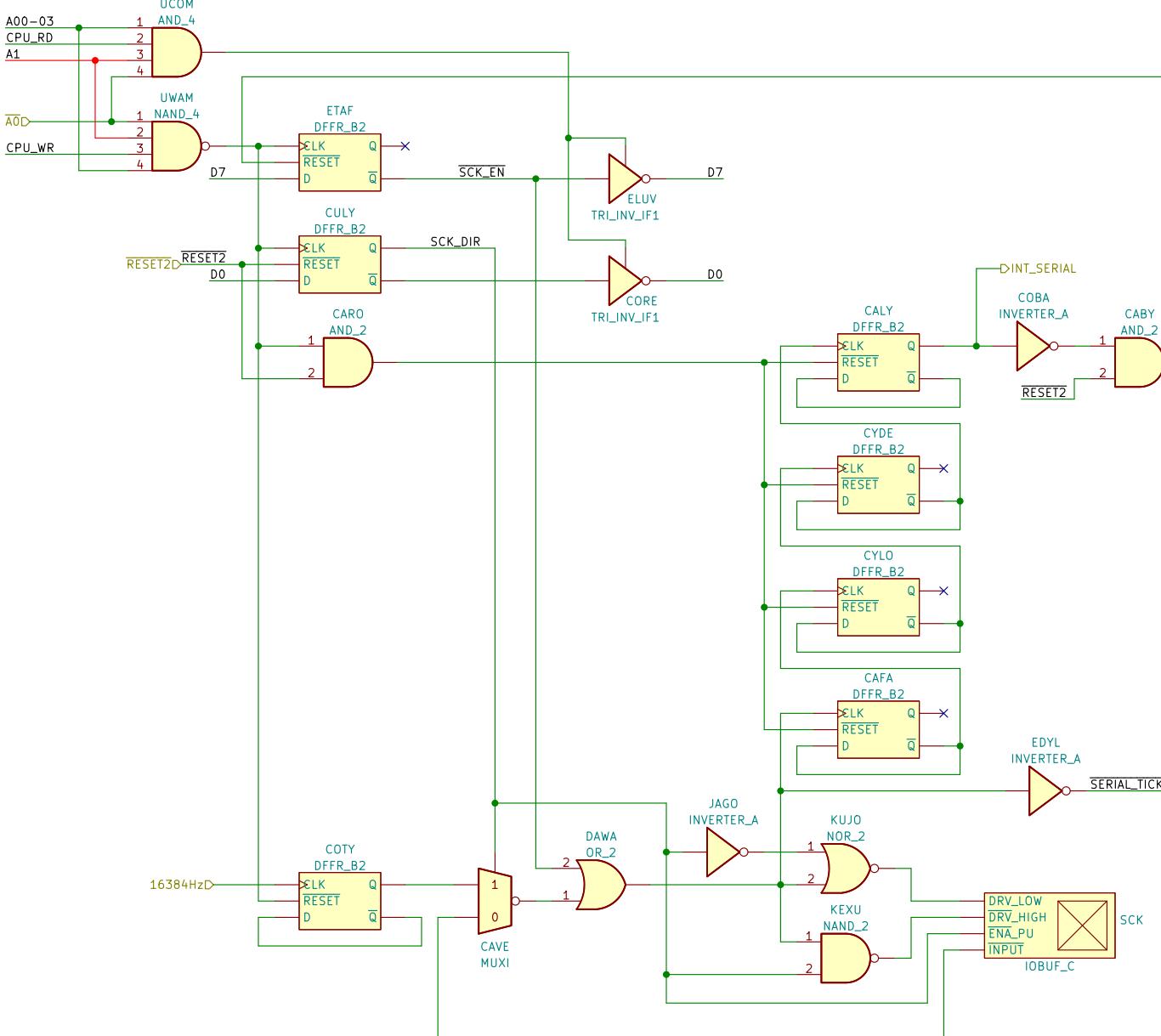




FF01 SB



FF02 SC

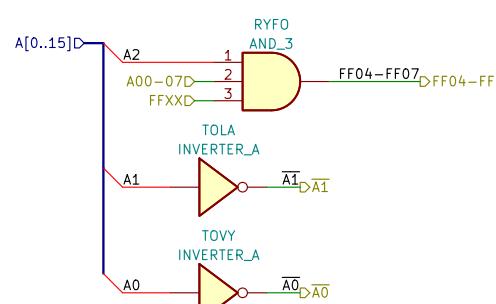


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Sheet: /FF01-02 SERIAL LINK/
File: ff01-02_serial.kicad_sch

Title: DMG CPU B

Size: A3	Date: 2022-07-08	Rev: 0.1
KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1		Id: 8/45



FF06 TMA

TUBY
AND_4

CPU_RDD
CPU_RD
A1
A0

TYJU
NAND_4

CPU_WRD
CPU_WR
FF04-FF07

TOPE
NAND_4

A0
A1
CPU_WR
FF04-FF07

MULO
INVERTER_A

RESET2

PAGU
NOR_2

PYMA
NOR_2

RATO
MUXI

REFU
MUXI

RUGY
NOR_2

ROLU
NOR_2

REPA
NOR_2

NADA
NOR_2

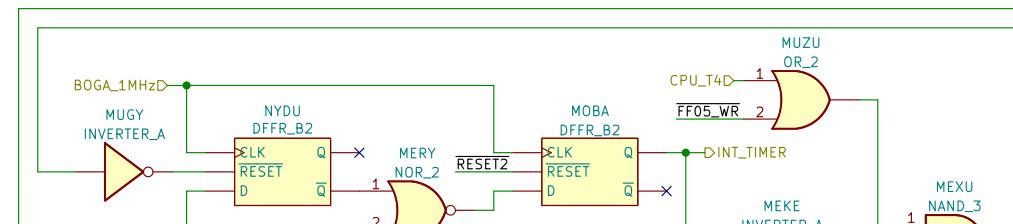
NYKU
MUXI

NERO
NOR_2

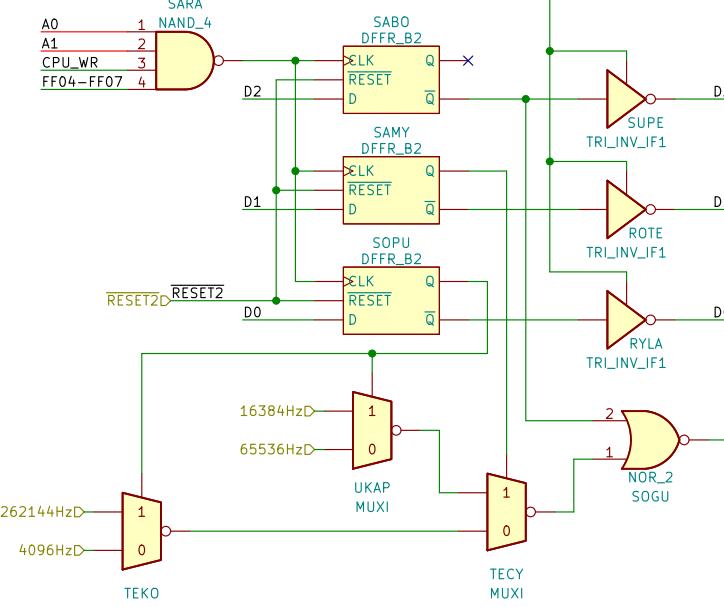
PUTU
MUXI

ROKE
MUXI

FF05 TIMA



FF07 TAC



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Sheet: /FF05-07 TIMER/

File: ff05-07_timer.kicad_sch

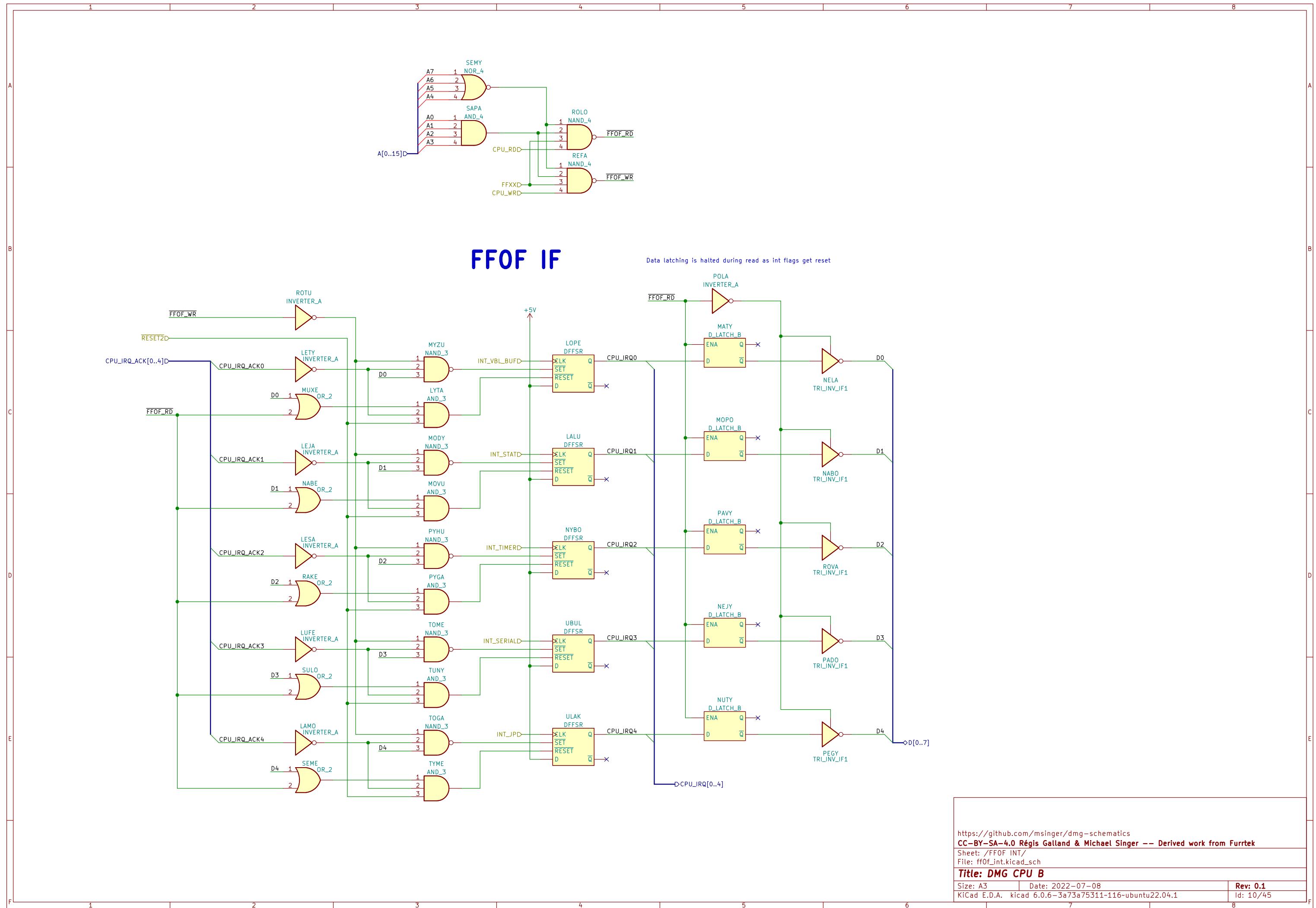
Title: DMG CPU B

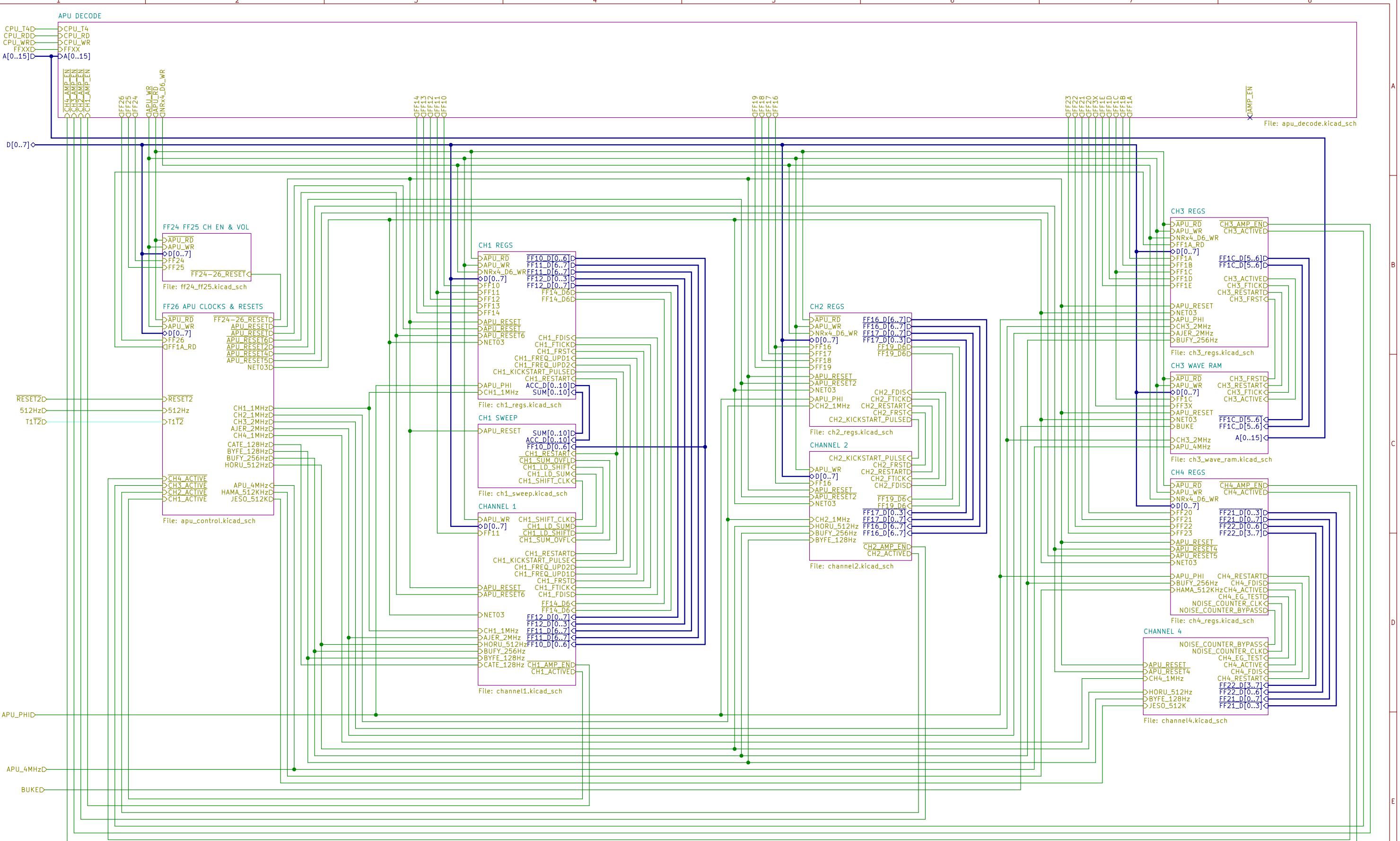
Size: A3 Date: 2022-07-08

KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1

Rev: 0.1

Id: 9/45





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Sheet: /APU/

File: apu.kicad_sch

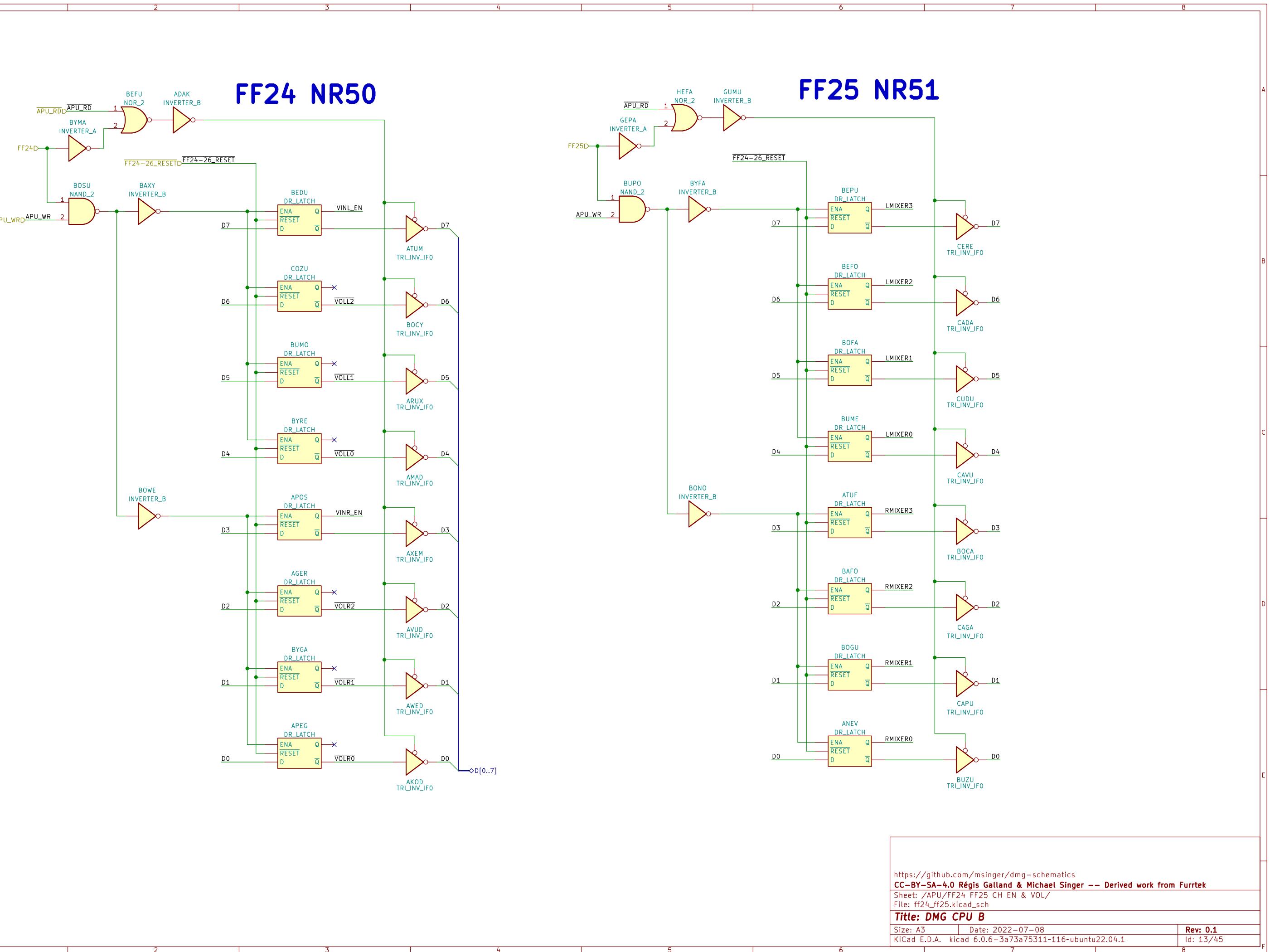
Title: DMG CPU B

Size: A3 | Date: 2022-07-08

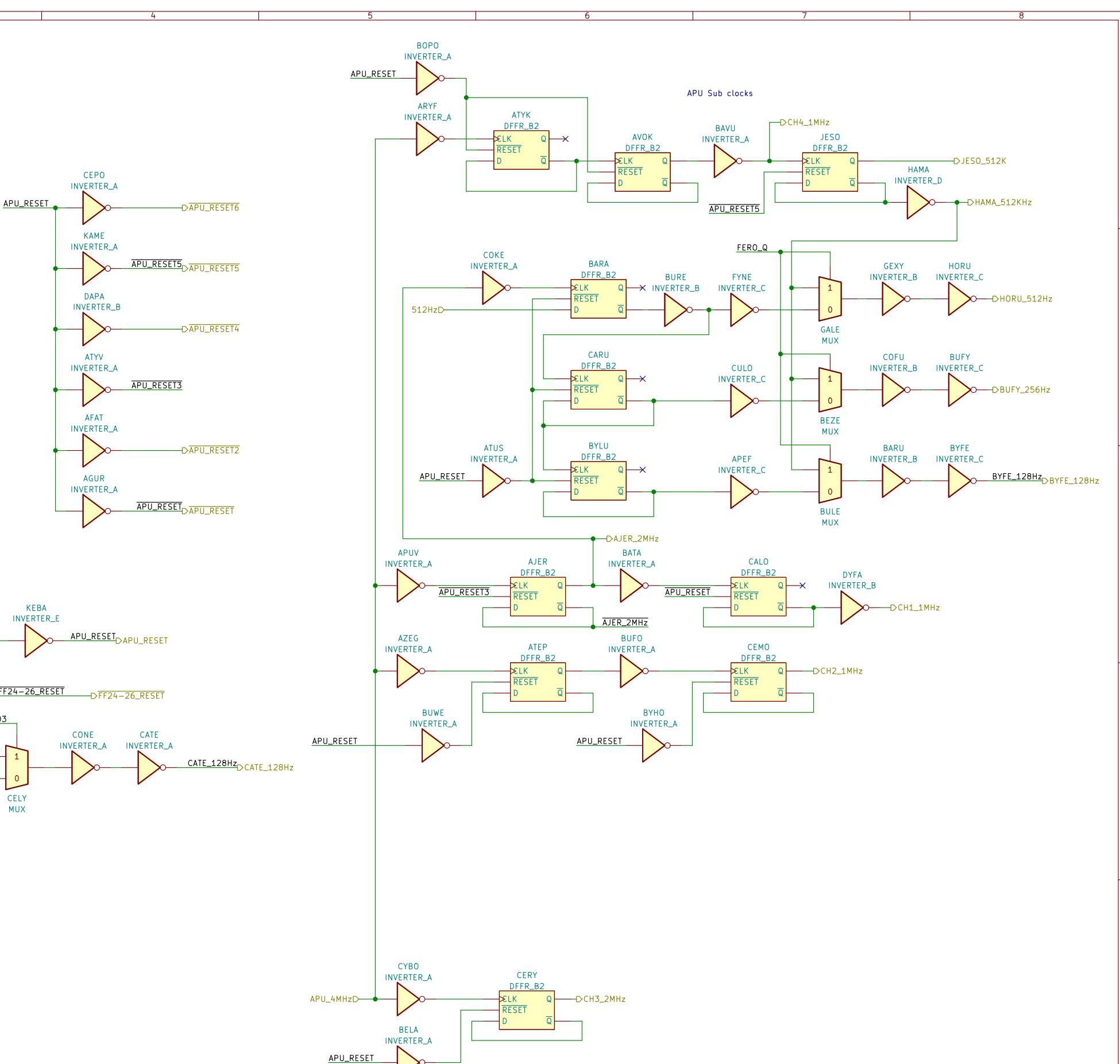
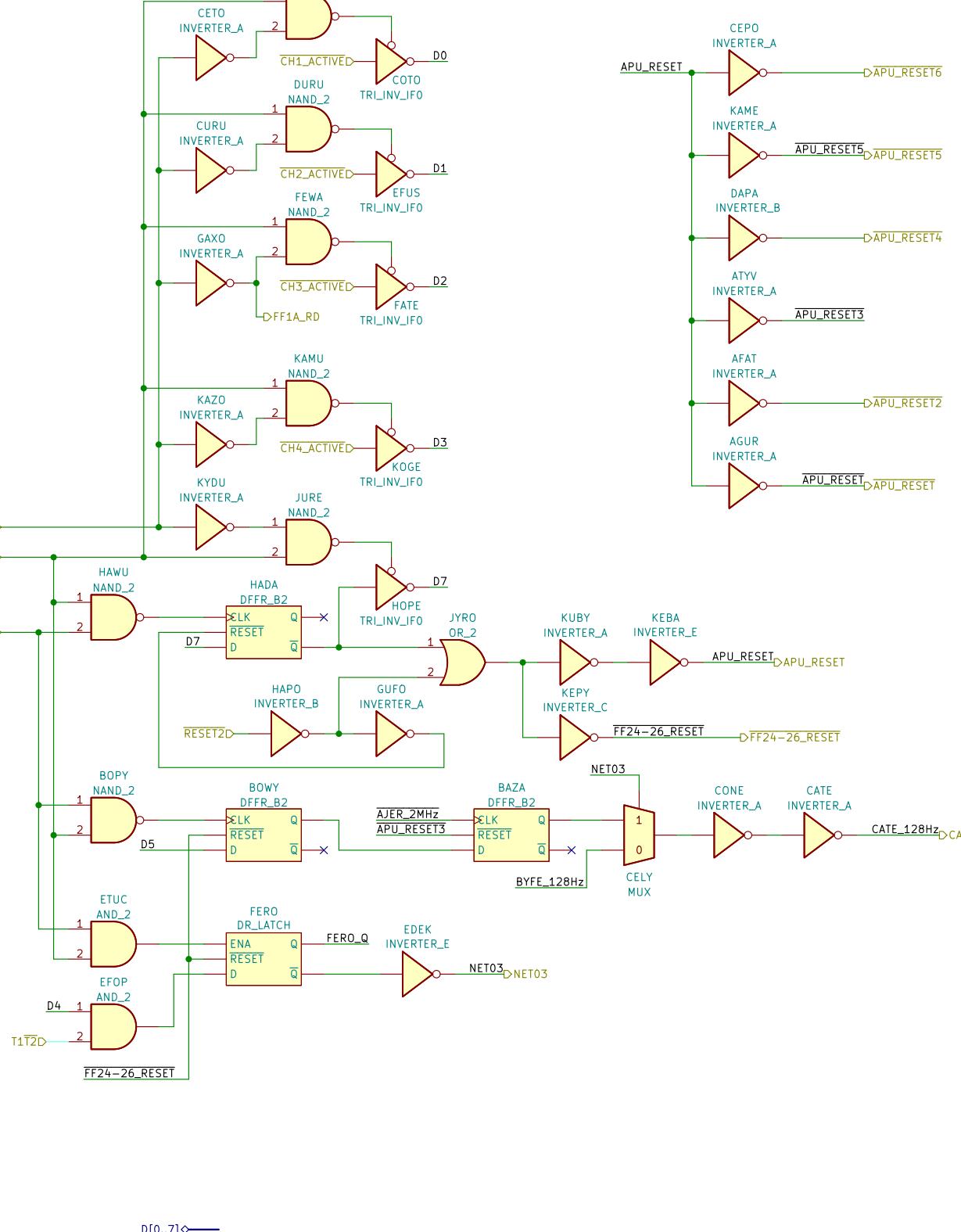
KiCad E.D.A. kicad 6.0-3a73a75311-116-ubuntu22.04.1

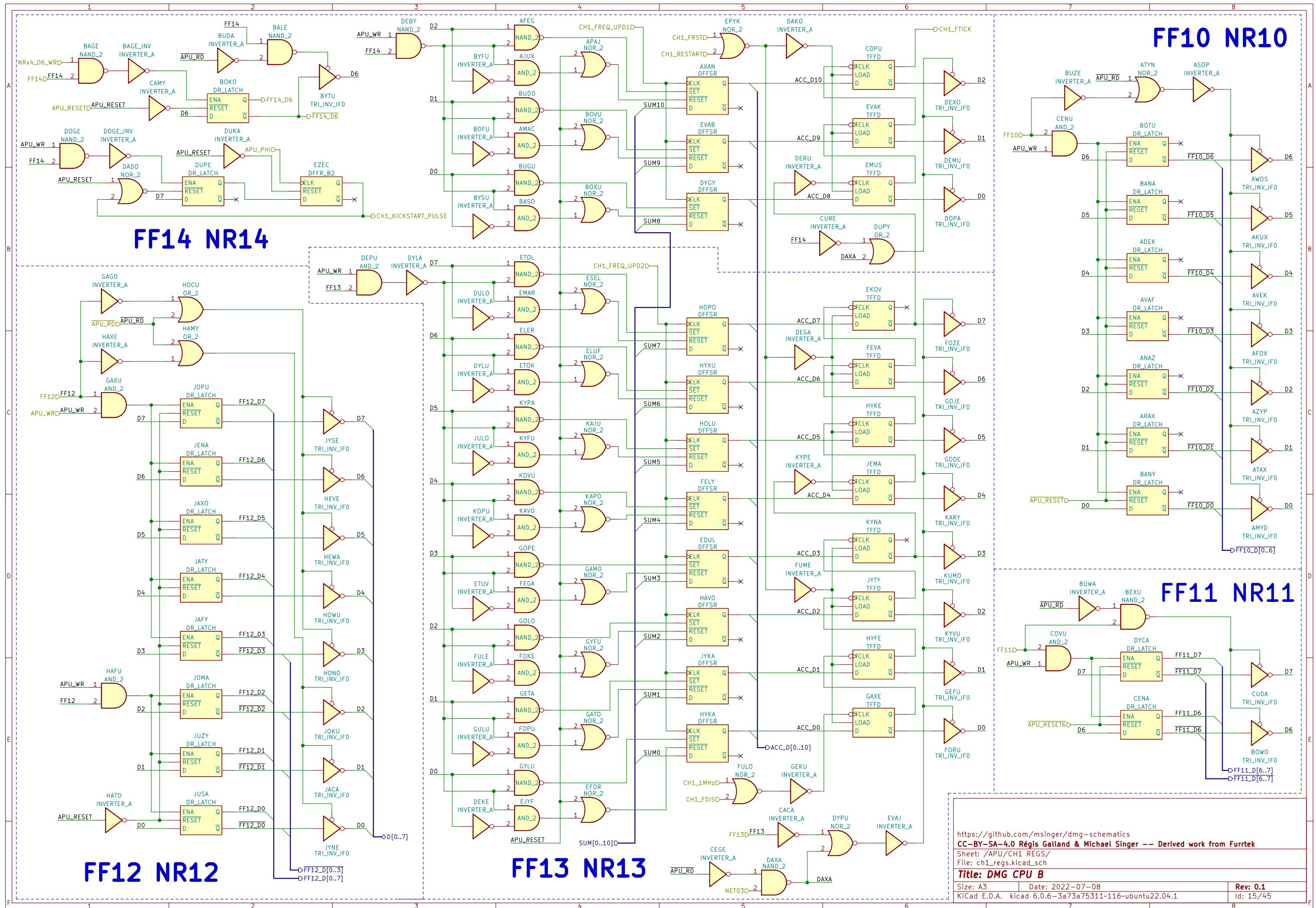
Rev: 0.1

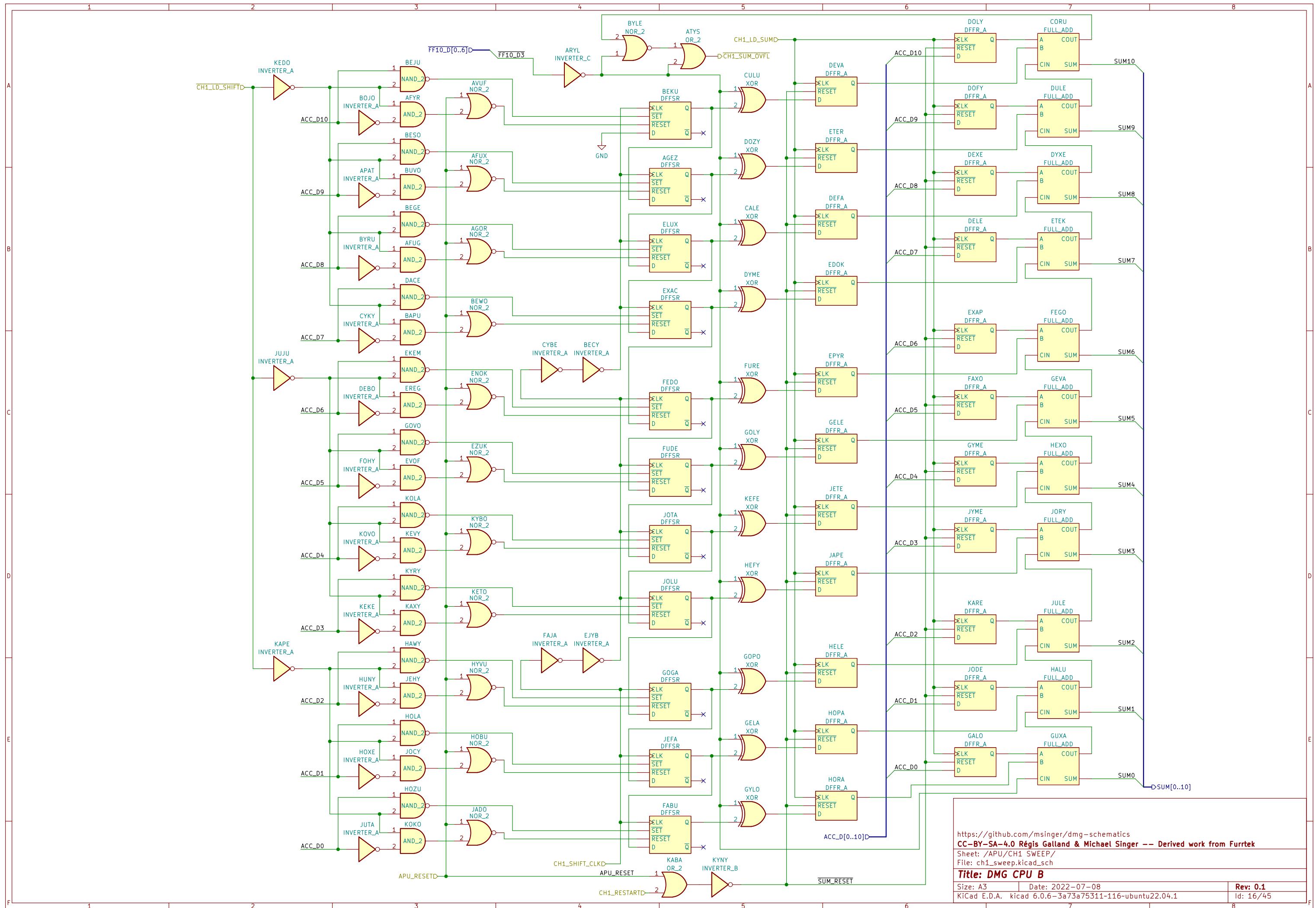
Id: 11/45



FF26 NR52





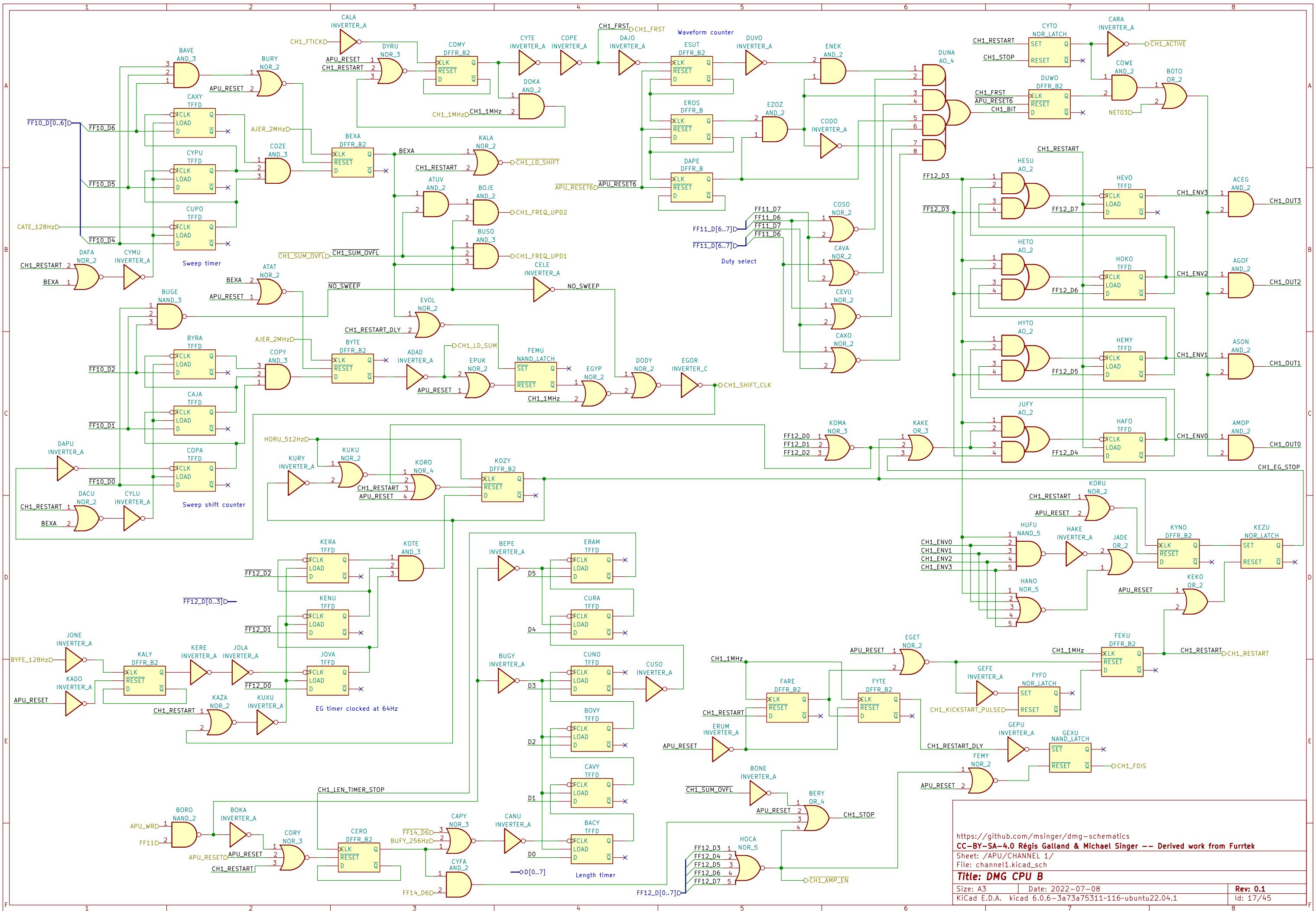


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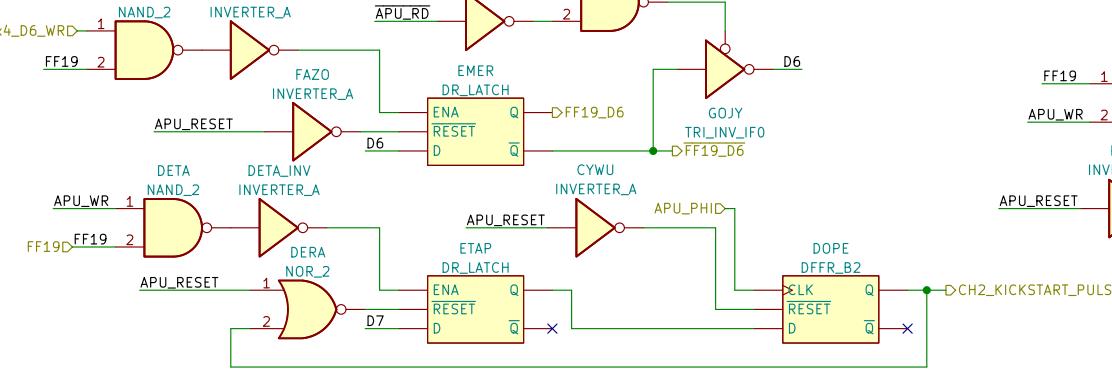
Sheet: /APU/CH1_SWEEP/
 File: ch1_sweep.kicad_sch

Title: DMG CPU B

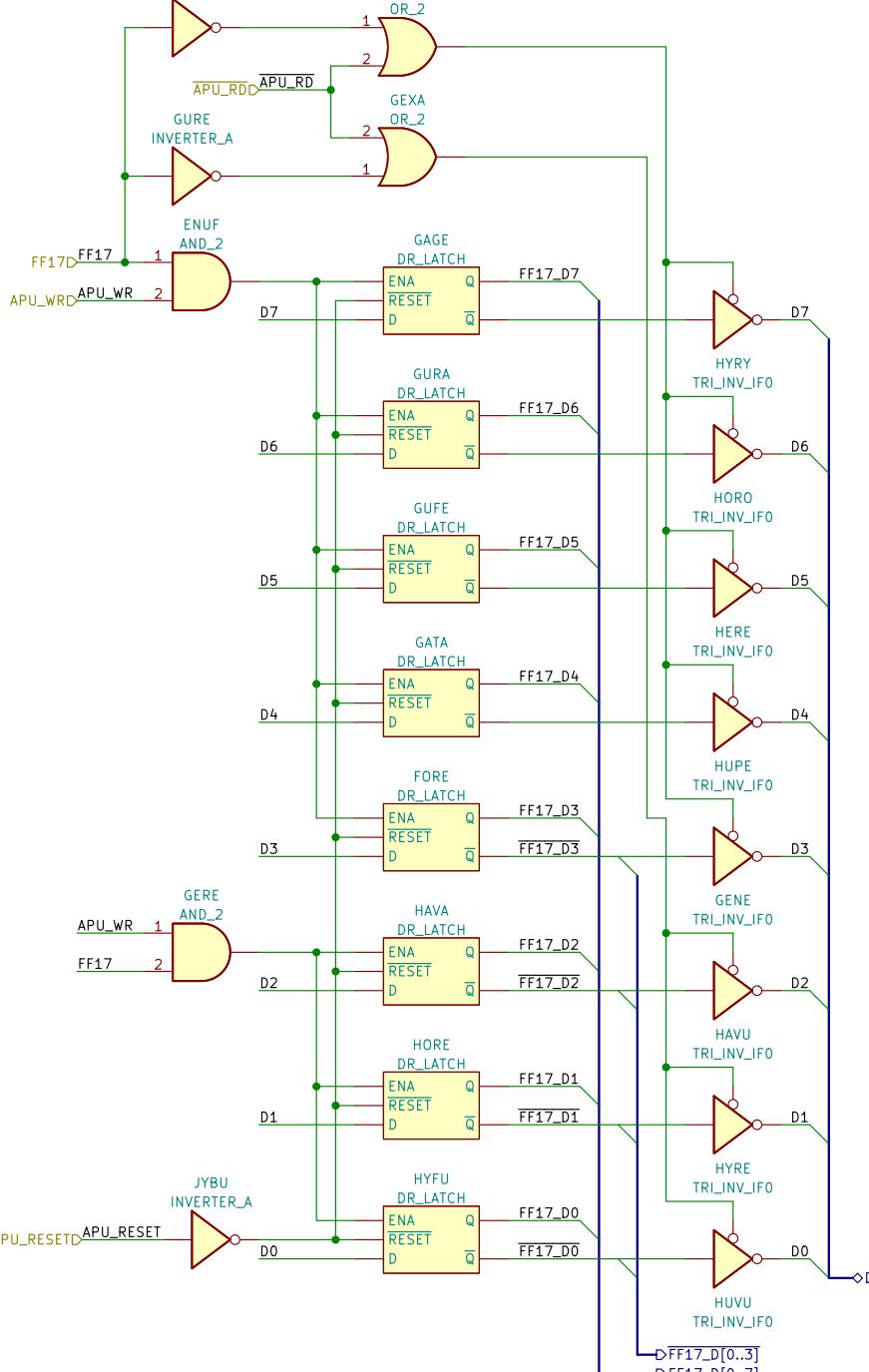
Size: A3	Date: 2022-07-08	Rev: 0.1
KiCad E.D.A.	kicad 6.0.6-3a73a75311-116-ubuntu22.04.1	Id: 16/45



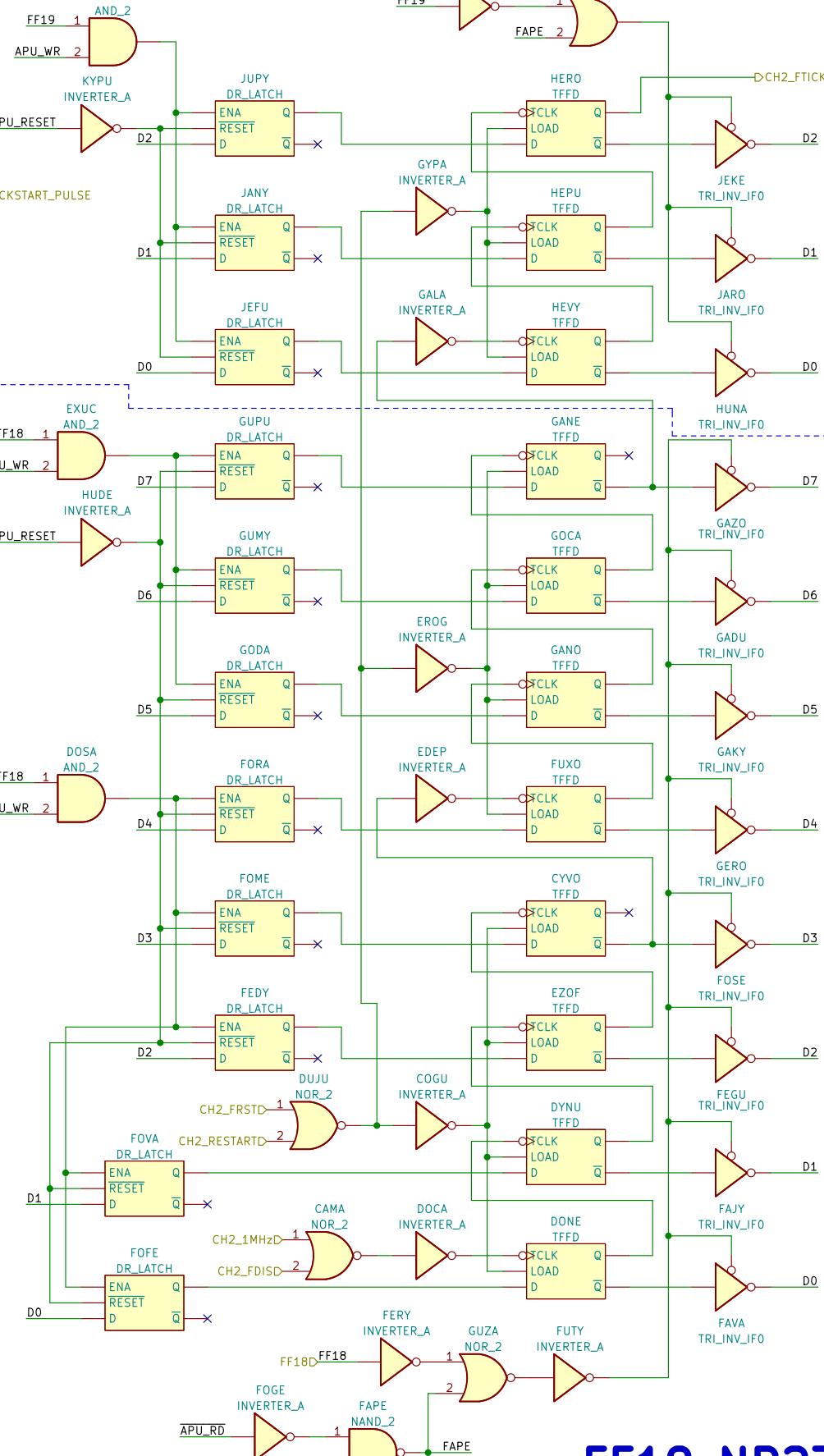
FF19 NR24



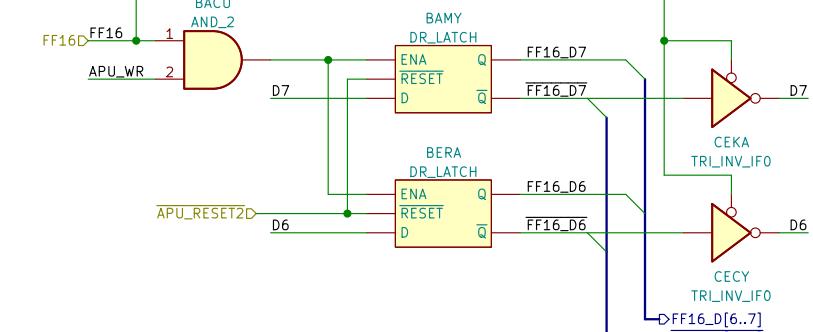
FF17 NR22



FF18 NR23



FF16 NR21

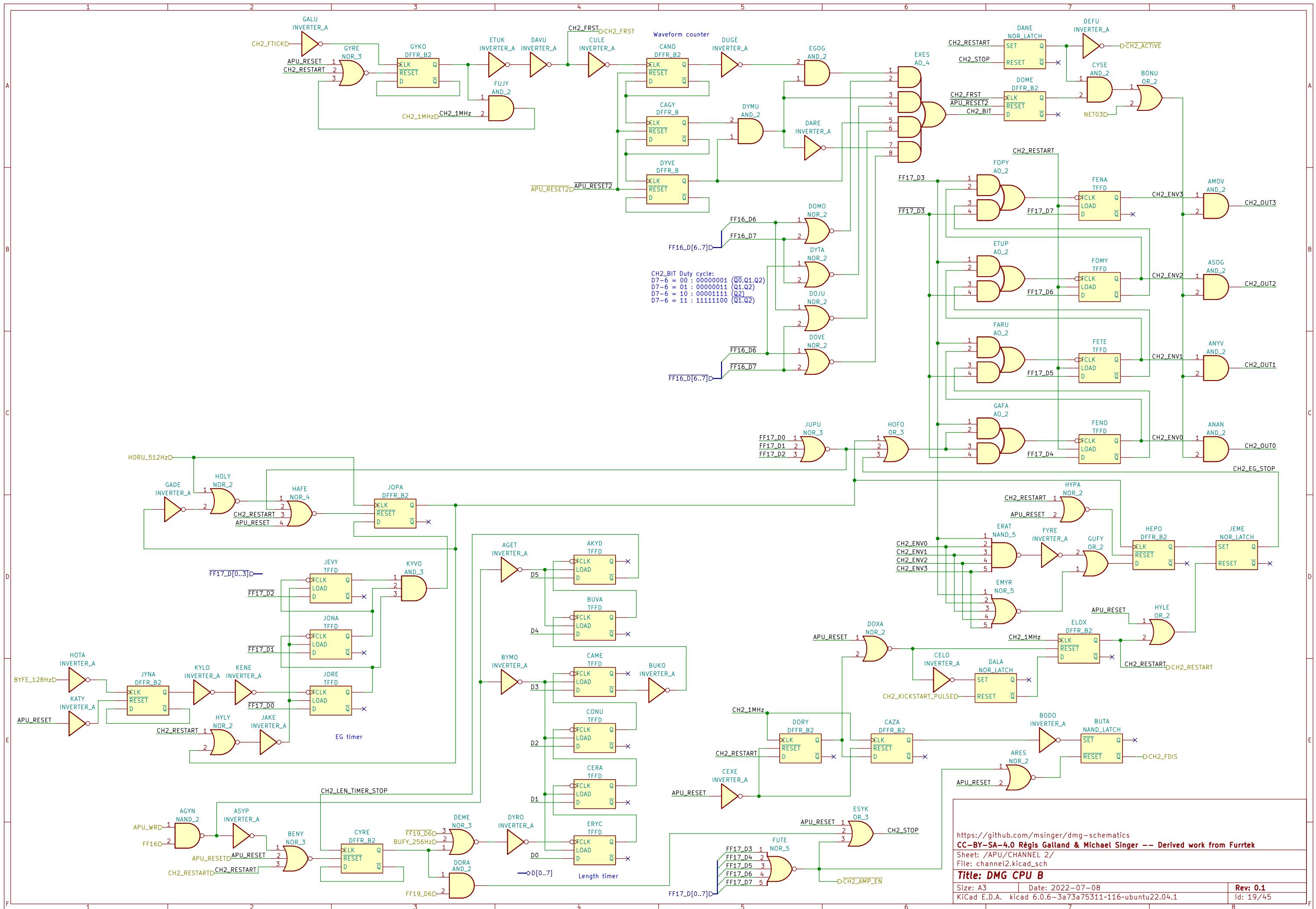


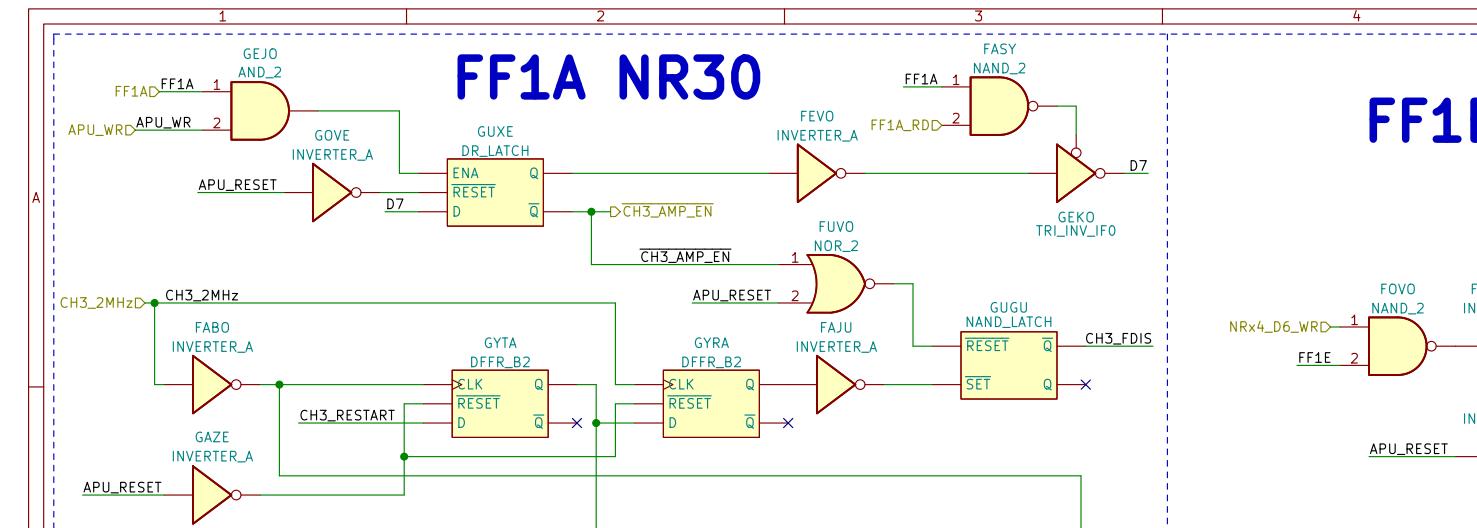
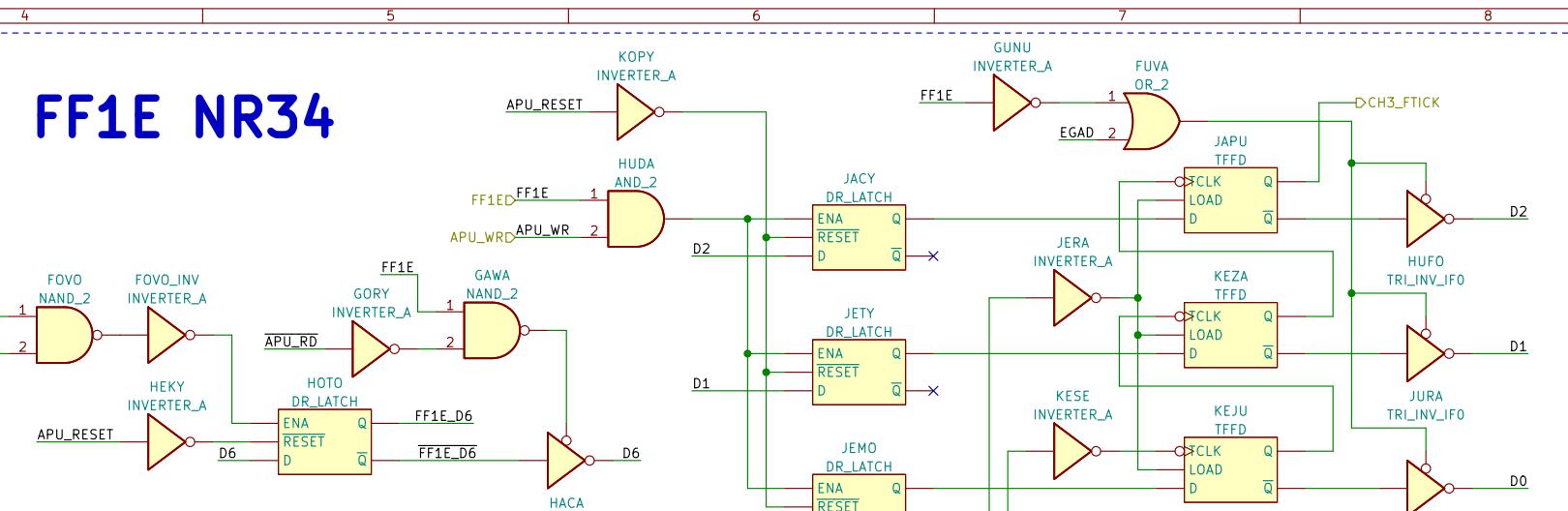
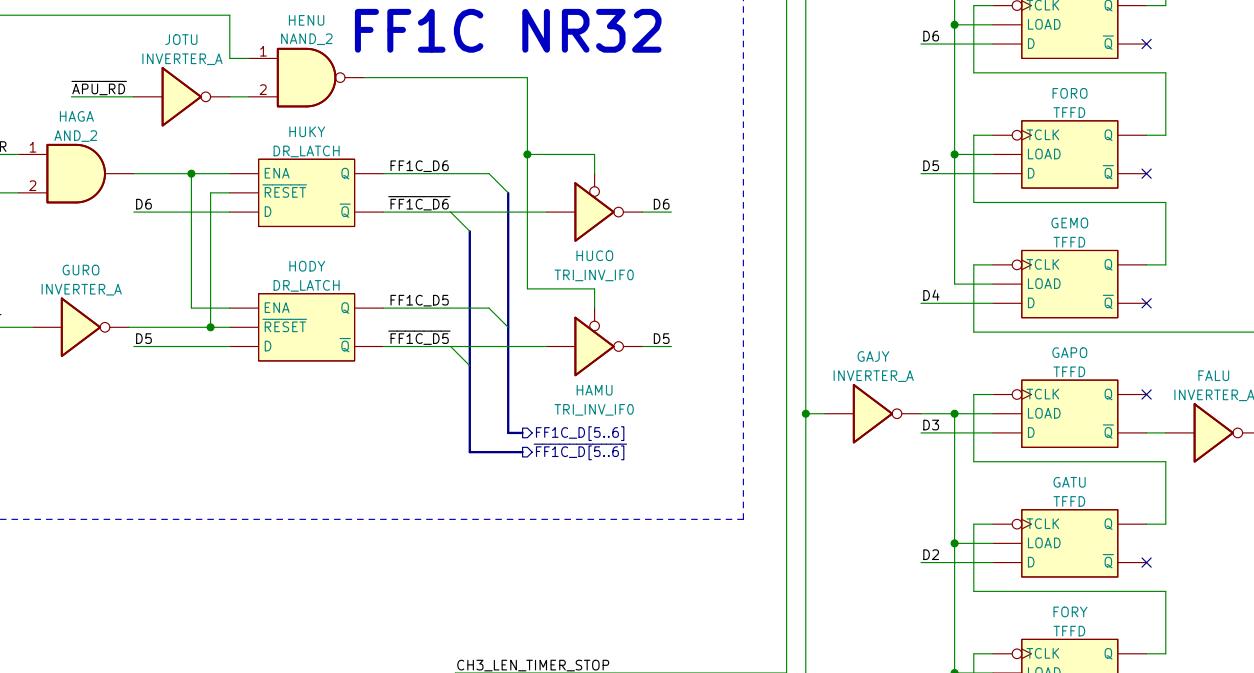
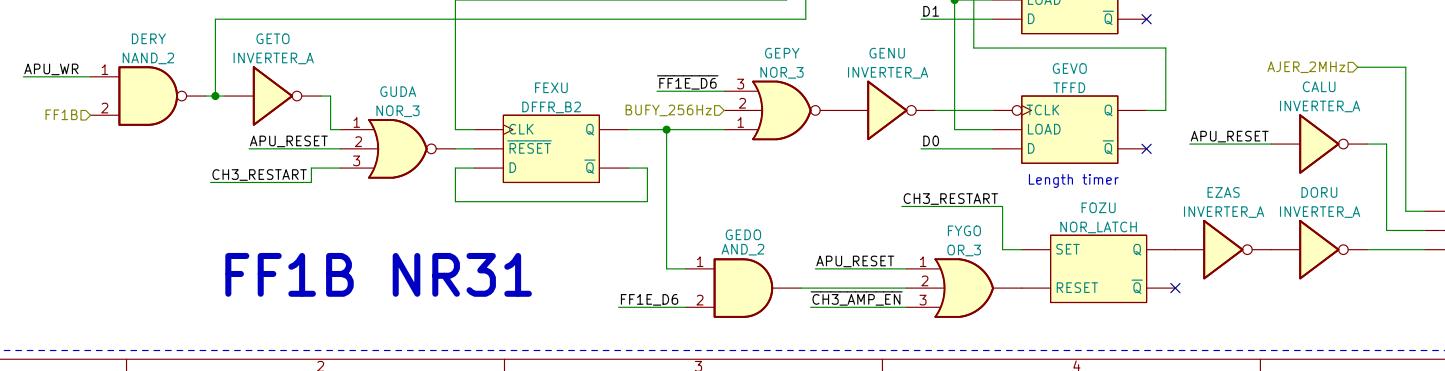
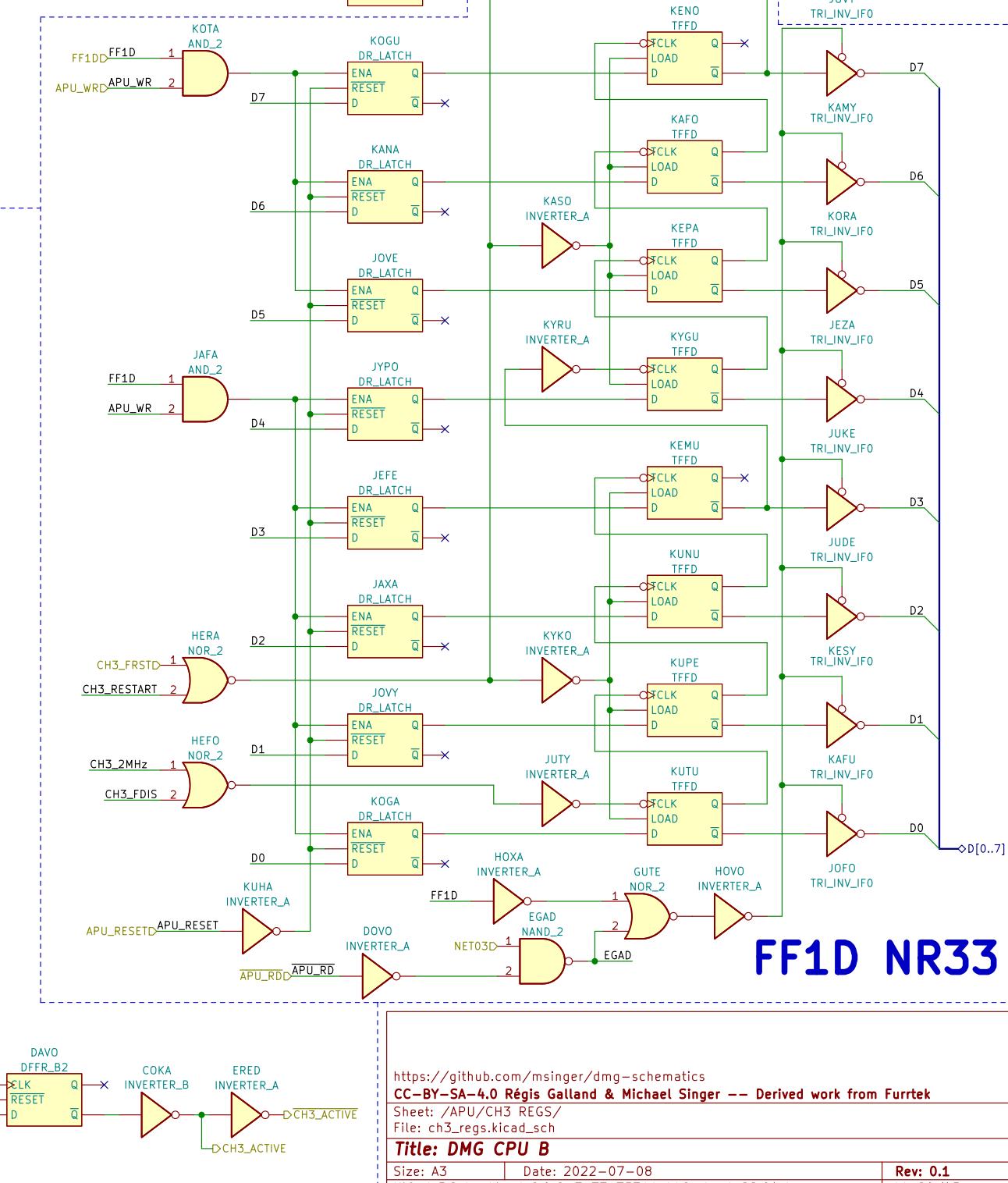
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Sheet: /APU/CH2_REGS/
File: ch2_regs.kicad_sch

Title: DMG CPU B

Size: A3	Date: 2022-07-08	Rev: 0.1
KiCad E.D.A.	kicad 6.0.6-3a73a75311-116-ubuntu22.04.1	Id: 18/45



FF1A NR30**FF1E NR34****FF1C NR32****FF1B NR31****FF1D NR33**

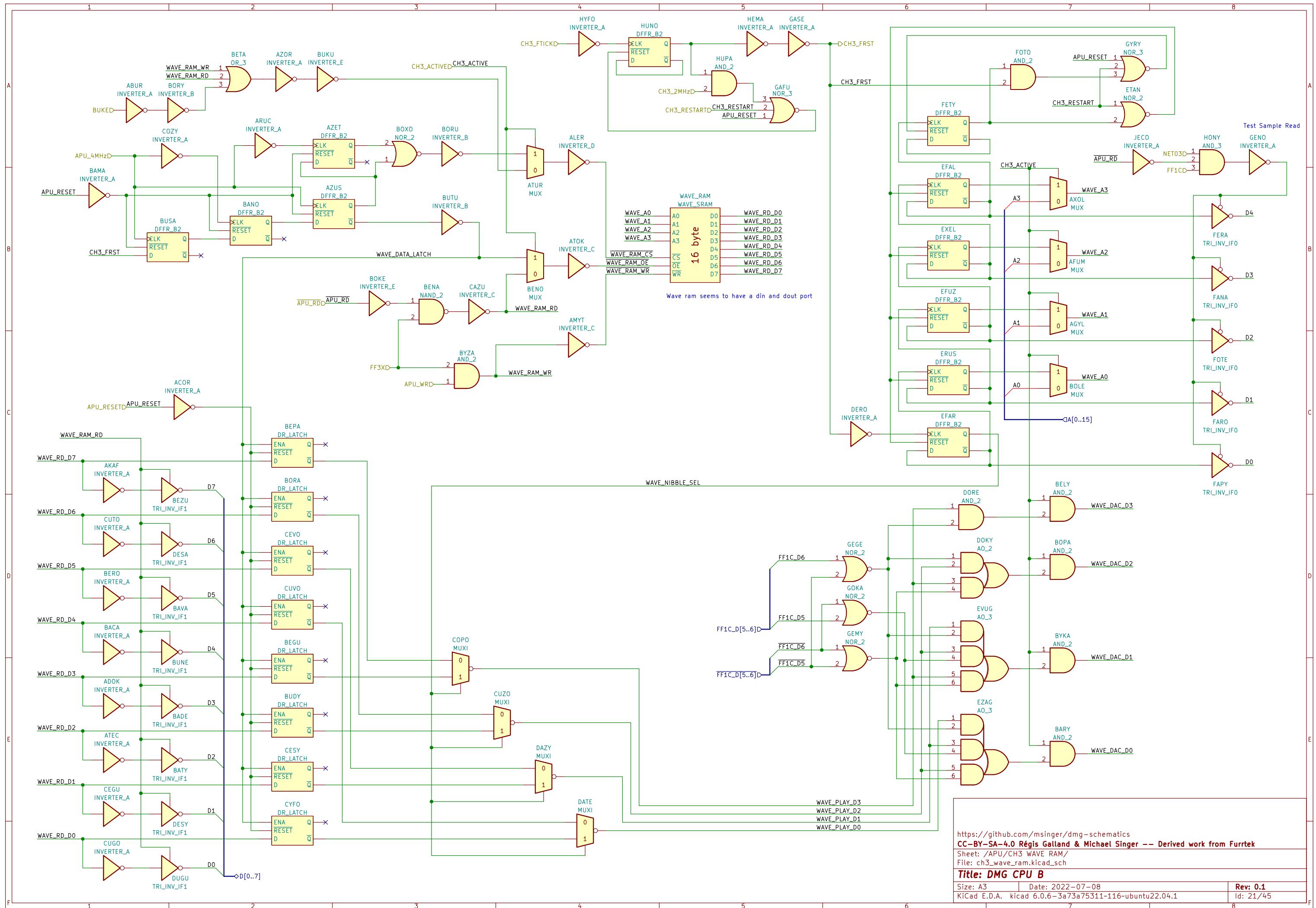
<https://github.com/msinger/dmg-schematics>
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Sheet: /APU/CH3_REGS/
 File: ch3_regs.kicad_sch

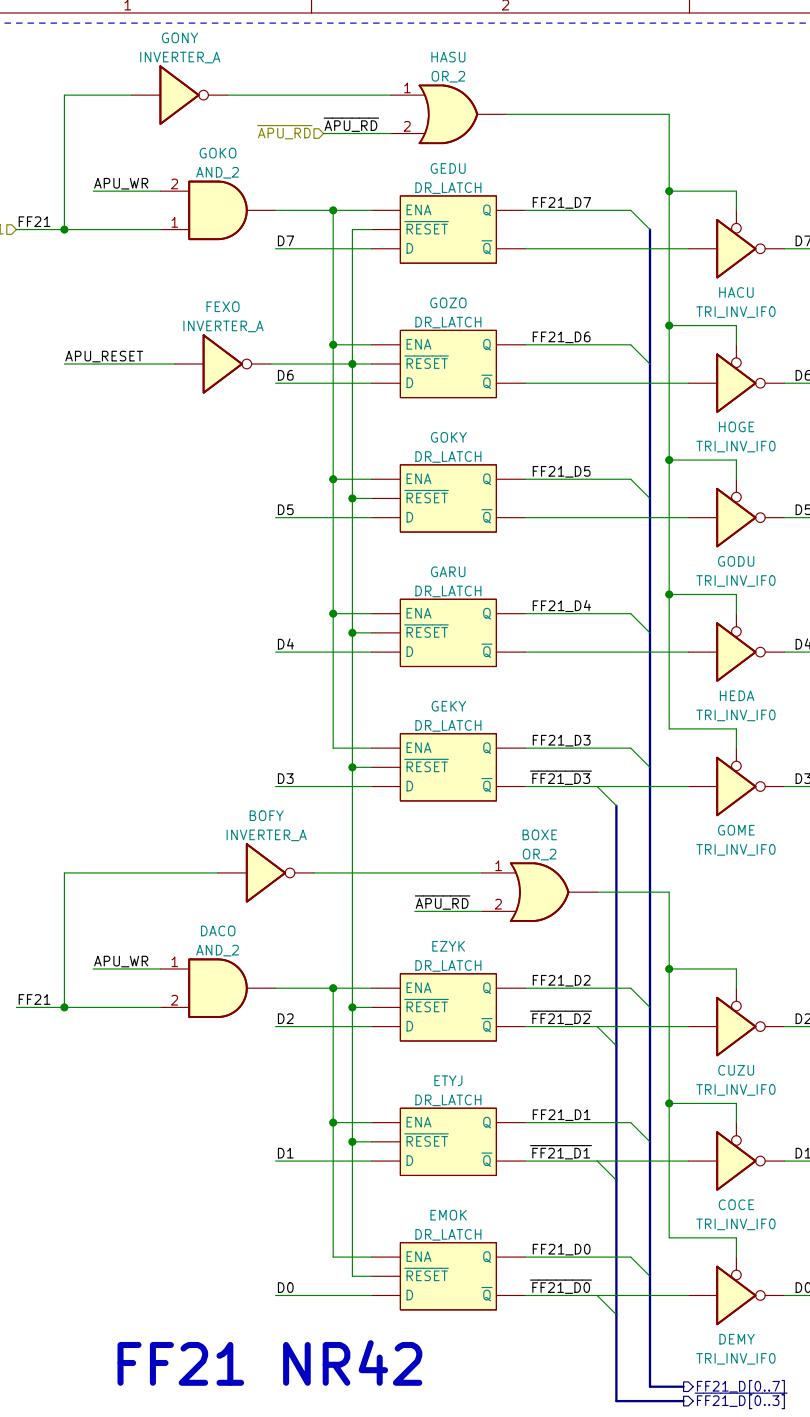
Title: DMG CPU B

Size: A3 Date: 2022-07-08 Rev: 0.1

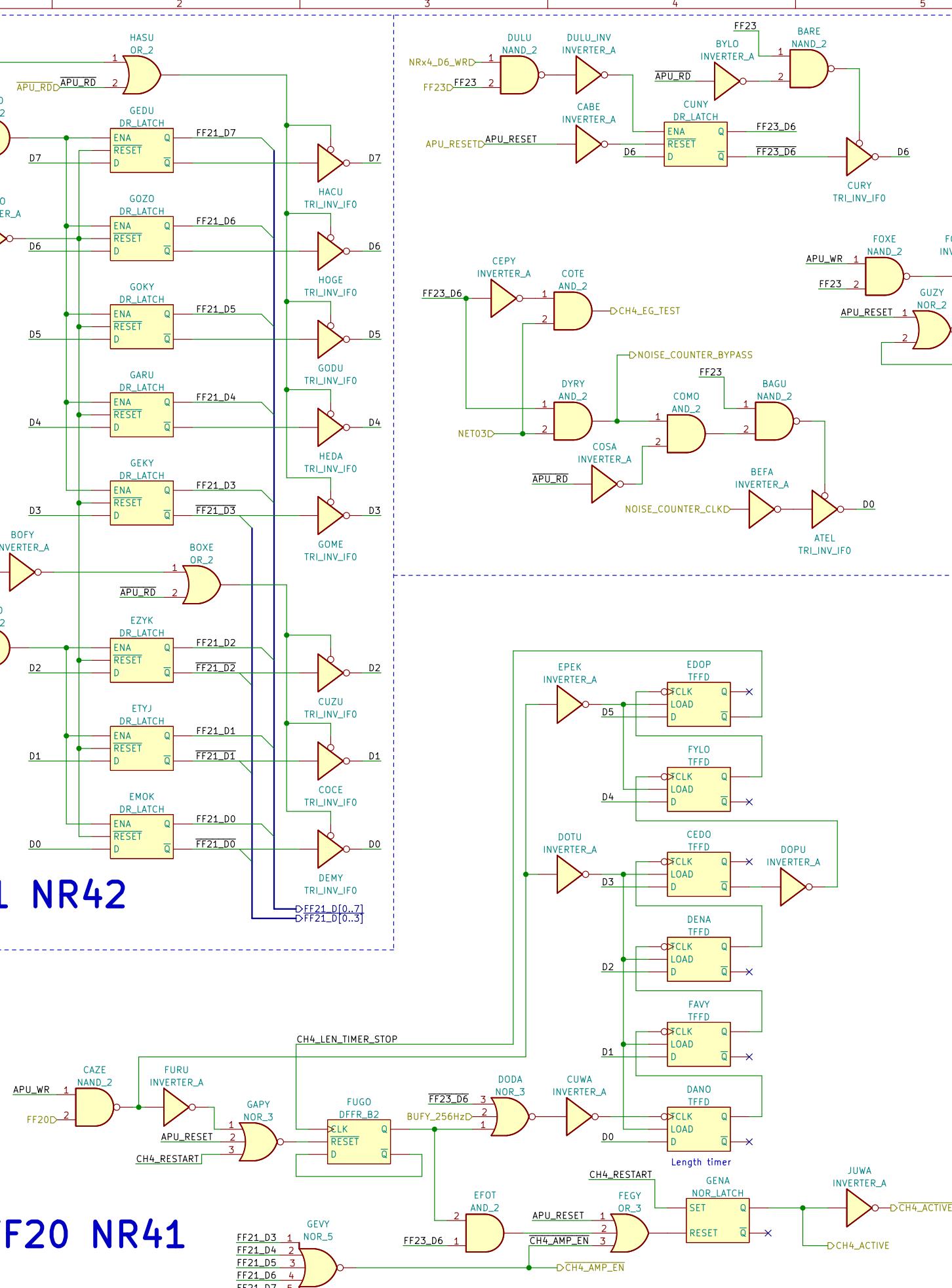
KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1 Id: 20/45



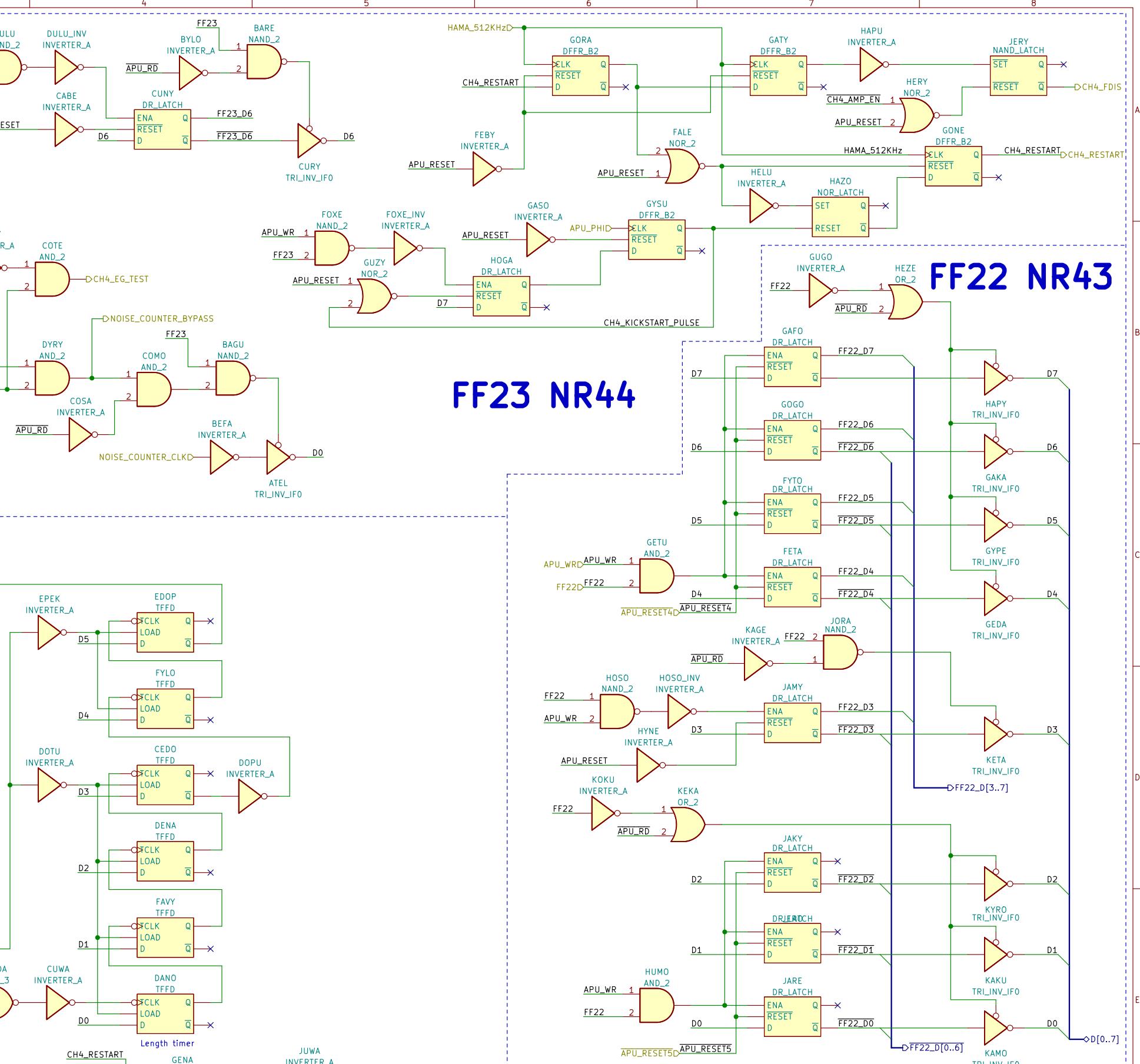
FF21 NR42



FF20 NR41



FF23 NR44



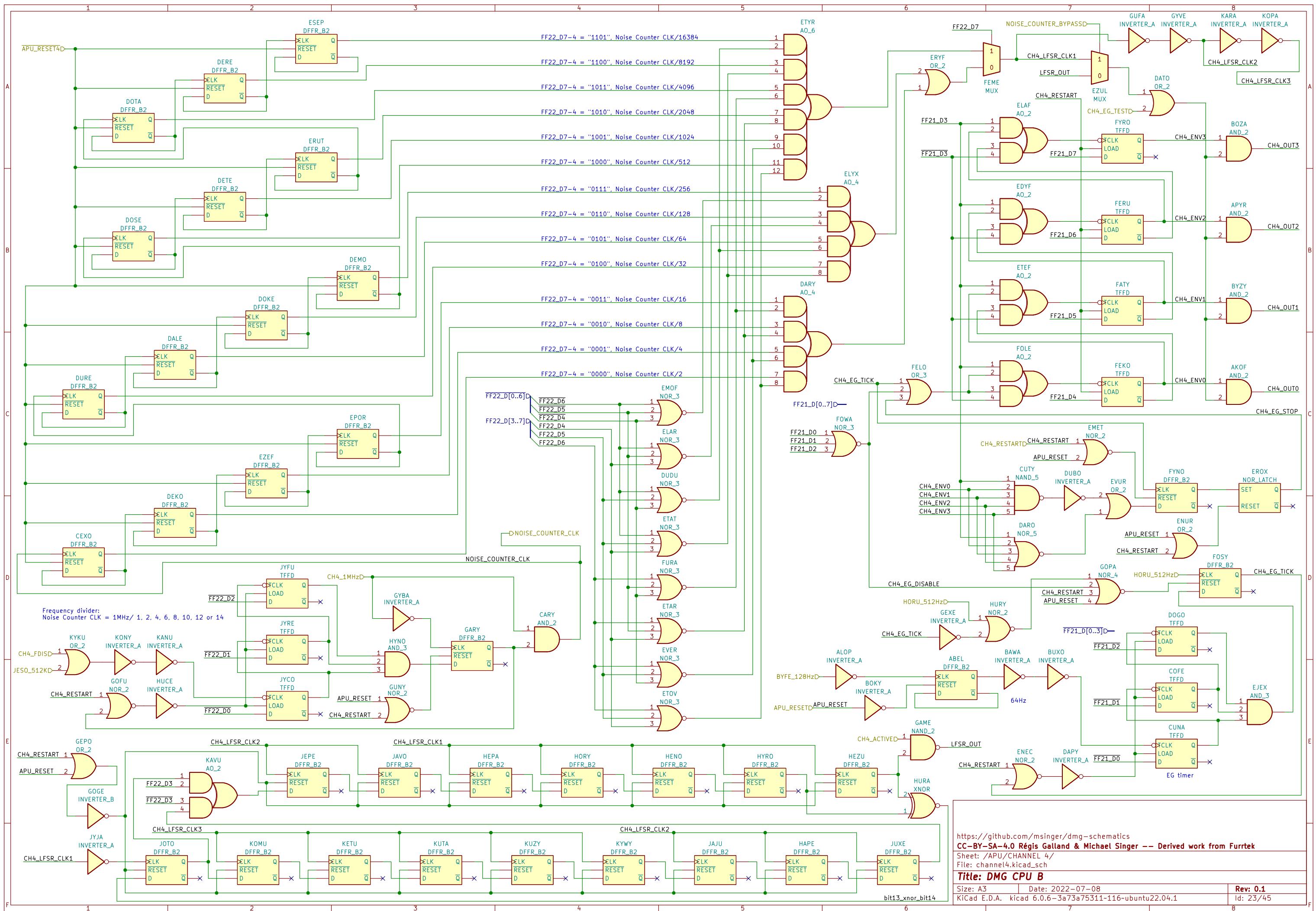
<https://github.com/msinger/dmg-schematics>
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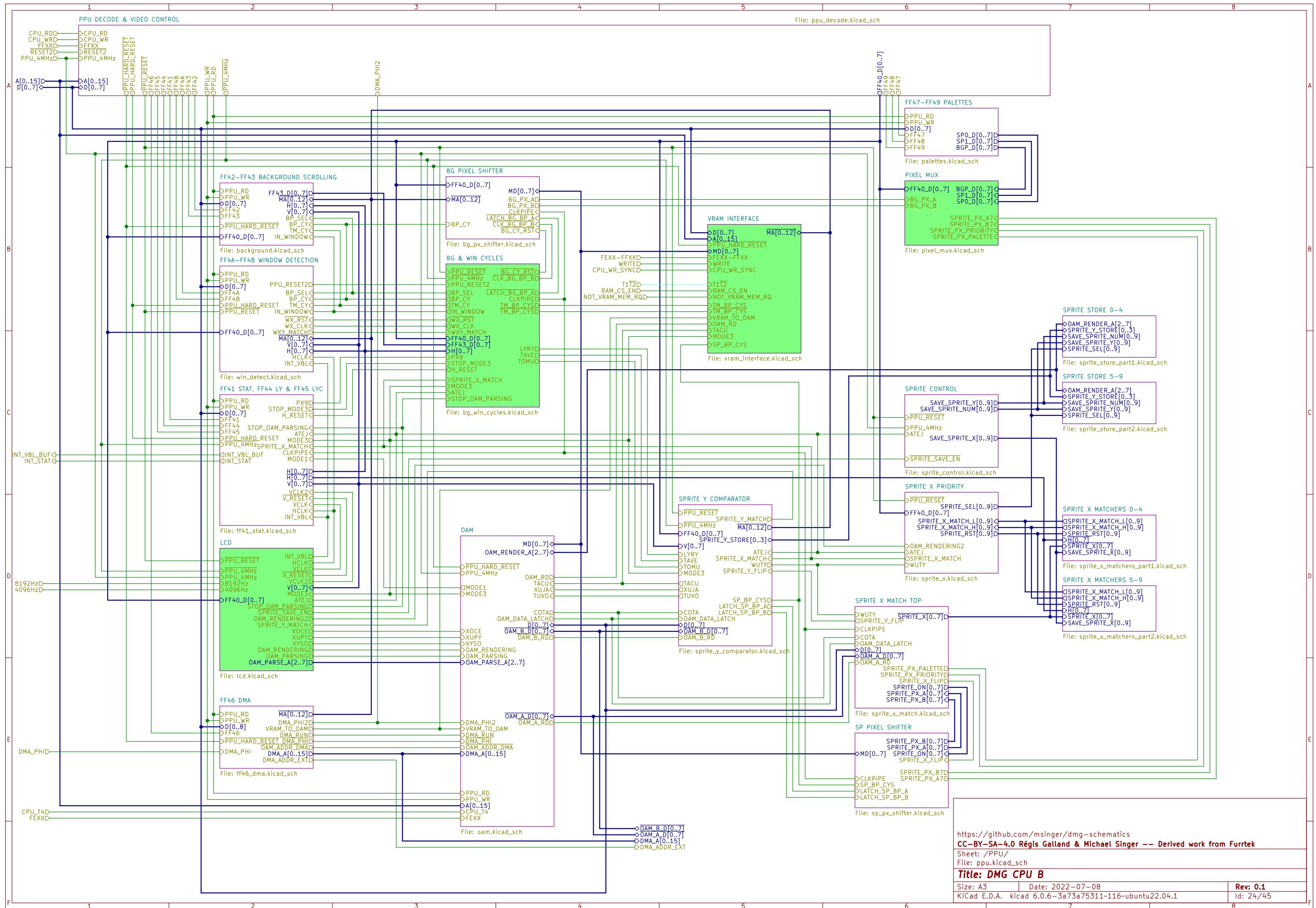
Sheet: /APU/CH4_REGS/
 File: ch4_regs.kicad_sch

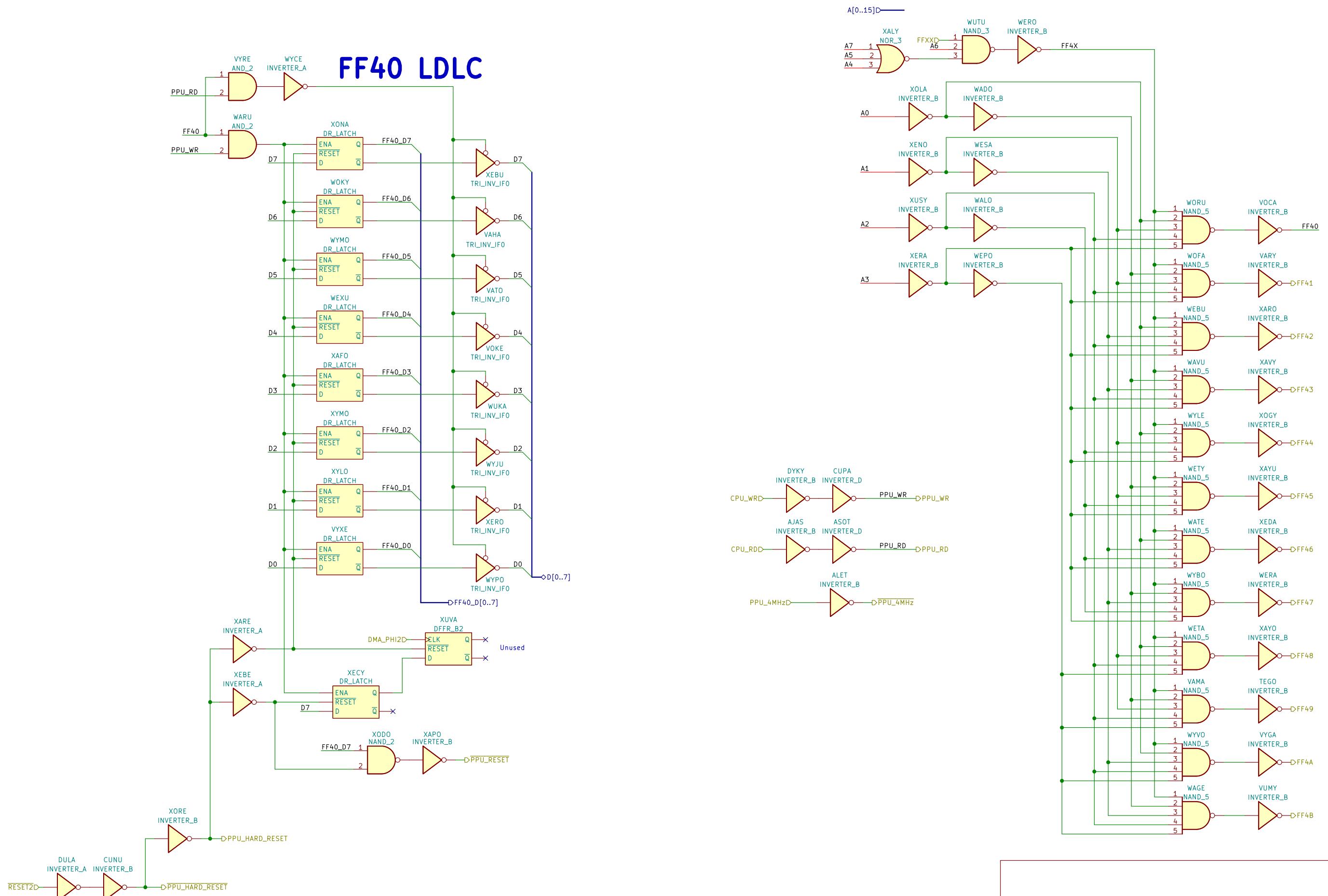
Title: DMG CPU B

Size: A3 Date: 2022-07-08 Rev: 0.1

KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1 Id: 22/45





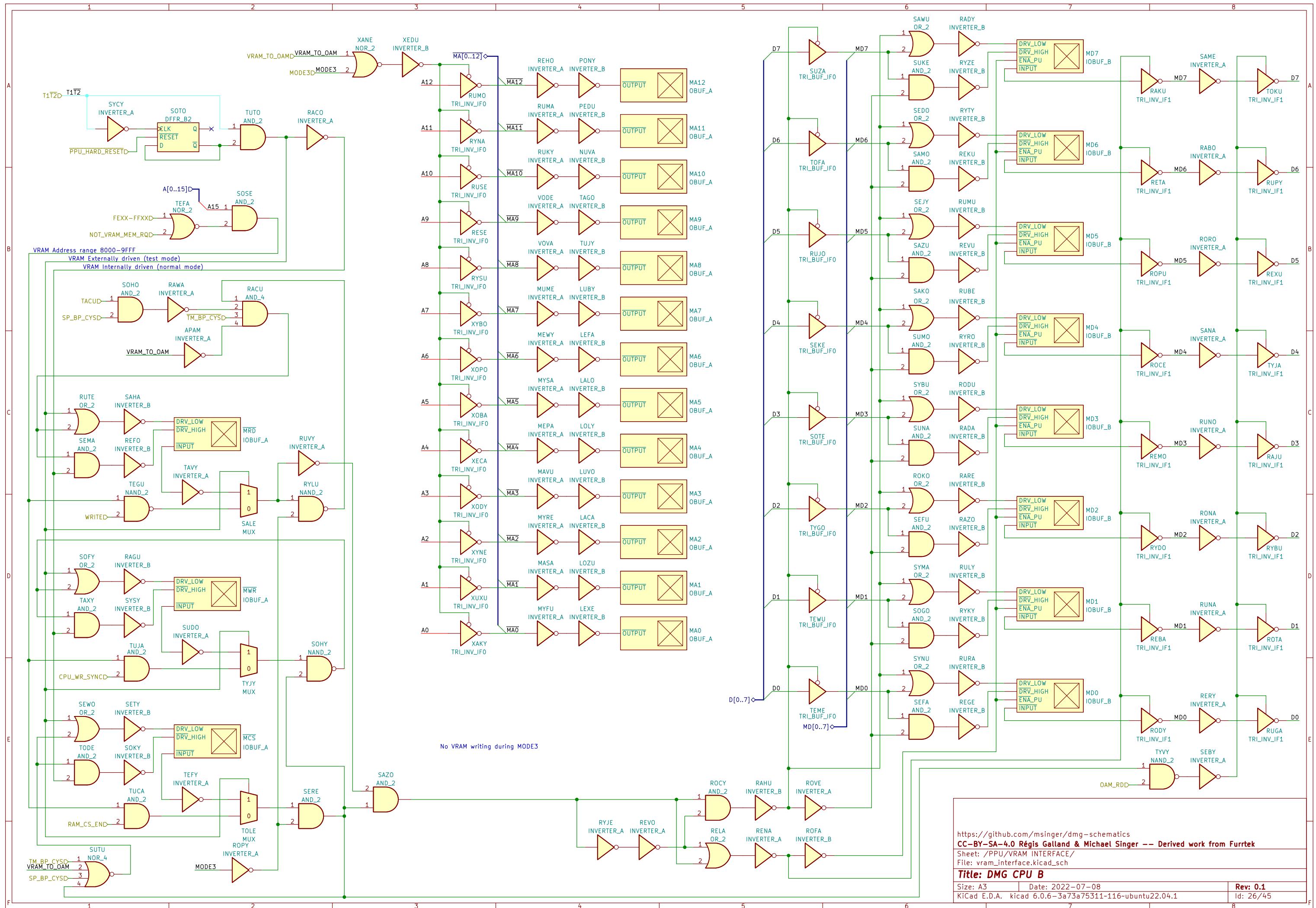


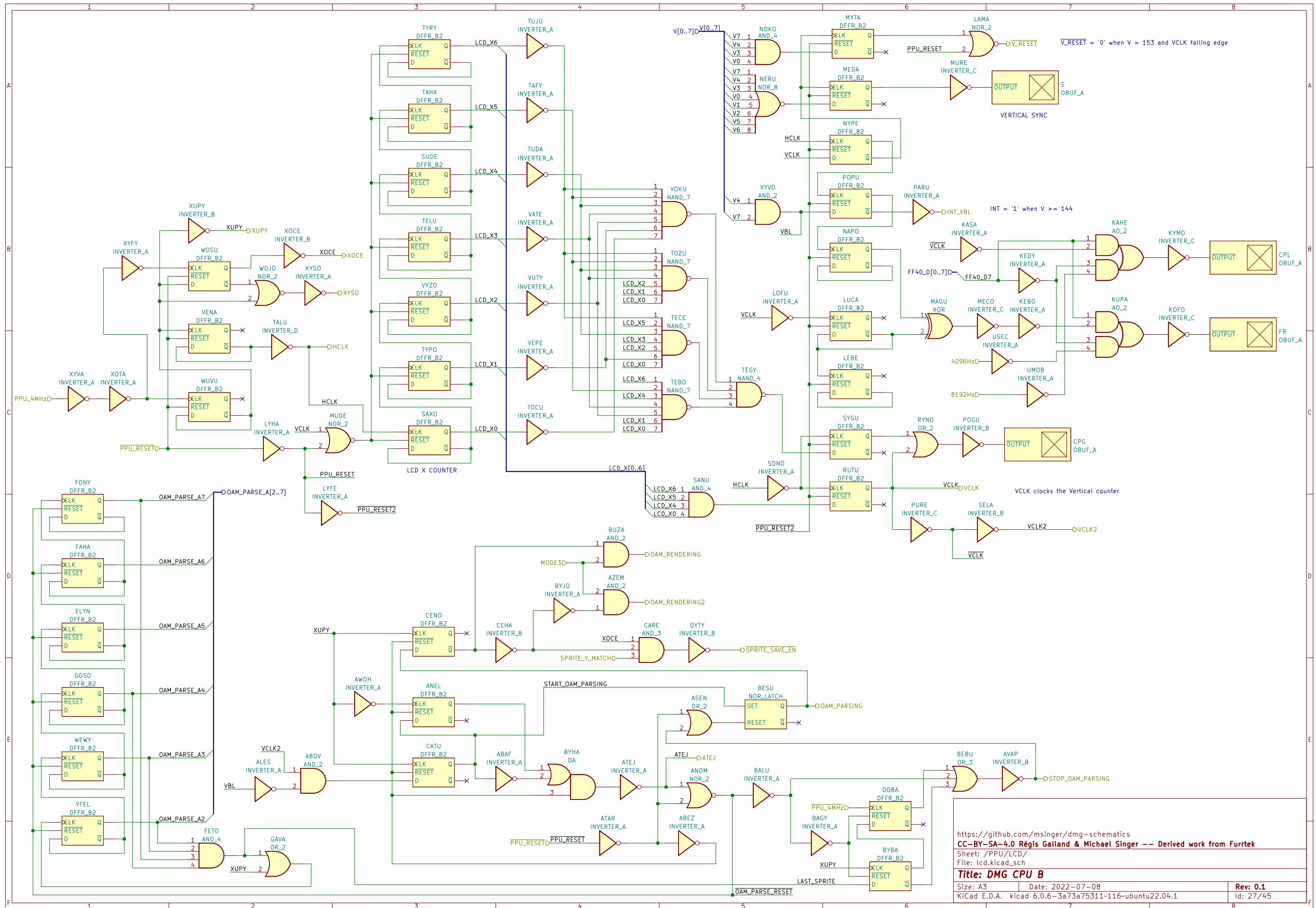
<https://github.com/msinger/dmg-schematics>
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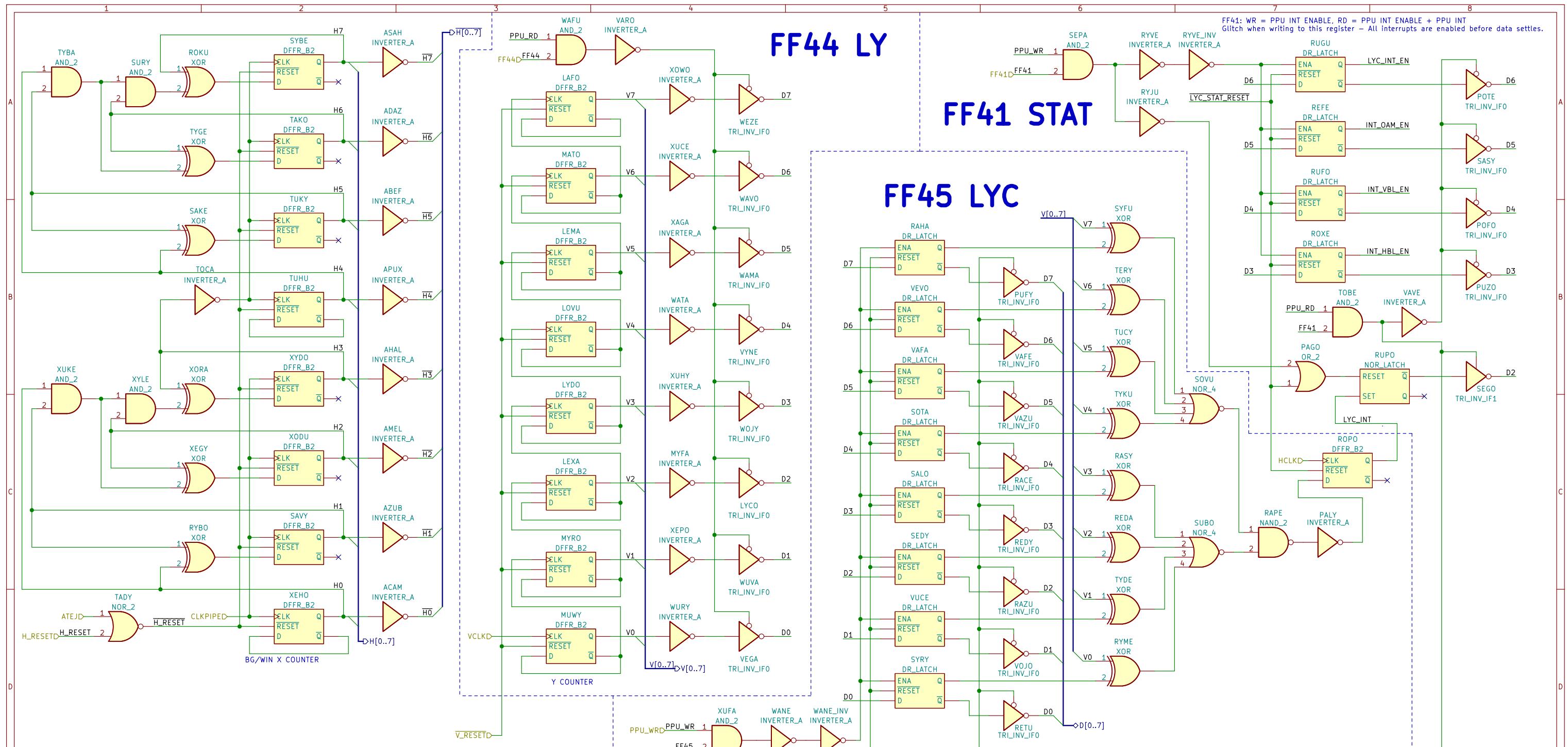
Sheet: /PPU/PPU DECODE & VIDEO CONTROL/
File: ppu_decode.kicad_sch

Title: DMG CPU B

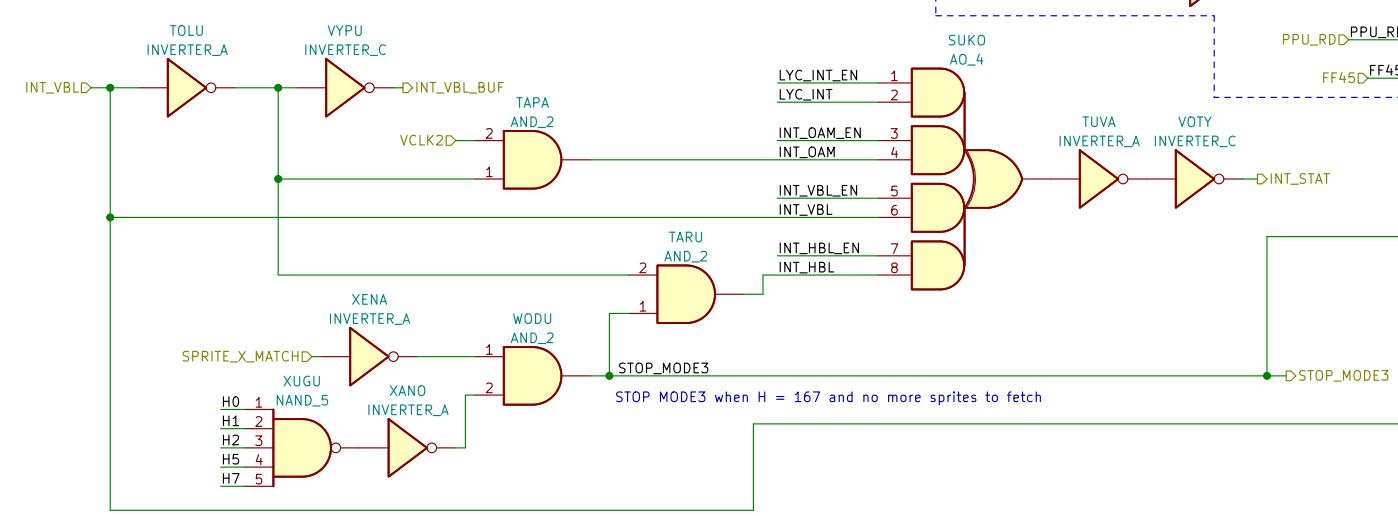
Size: A3	Date: 2022-07-08	Rev: 0.1
KiCad E.D.A.	kicad 6.0.6-3a73a75311-116-ubuntu22.04.1	Id: 25/45







When all interrupts are enabled, INT_STAT = '1' when LY = LYC (whole line), VBLANK (MODE1), HBLANK (MODE0) and Only for a few cycles at the start of OAM parsing when VCLK is high.



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Sheet: /PPU/FF41 SAI, FF44 LY & FF45 LYC/
File: ff41_stat.kicad_sch

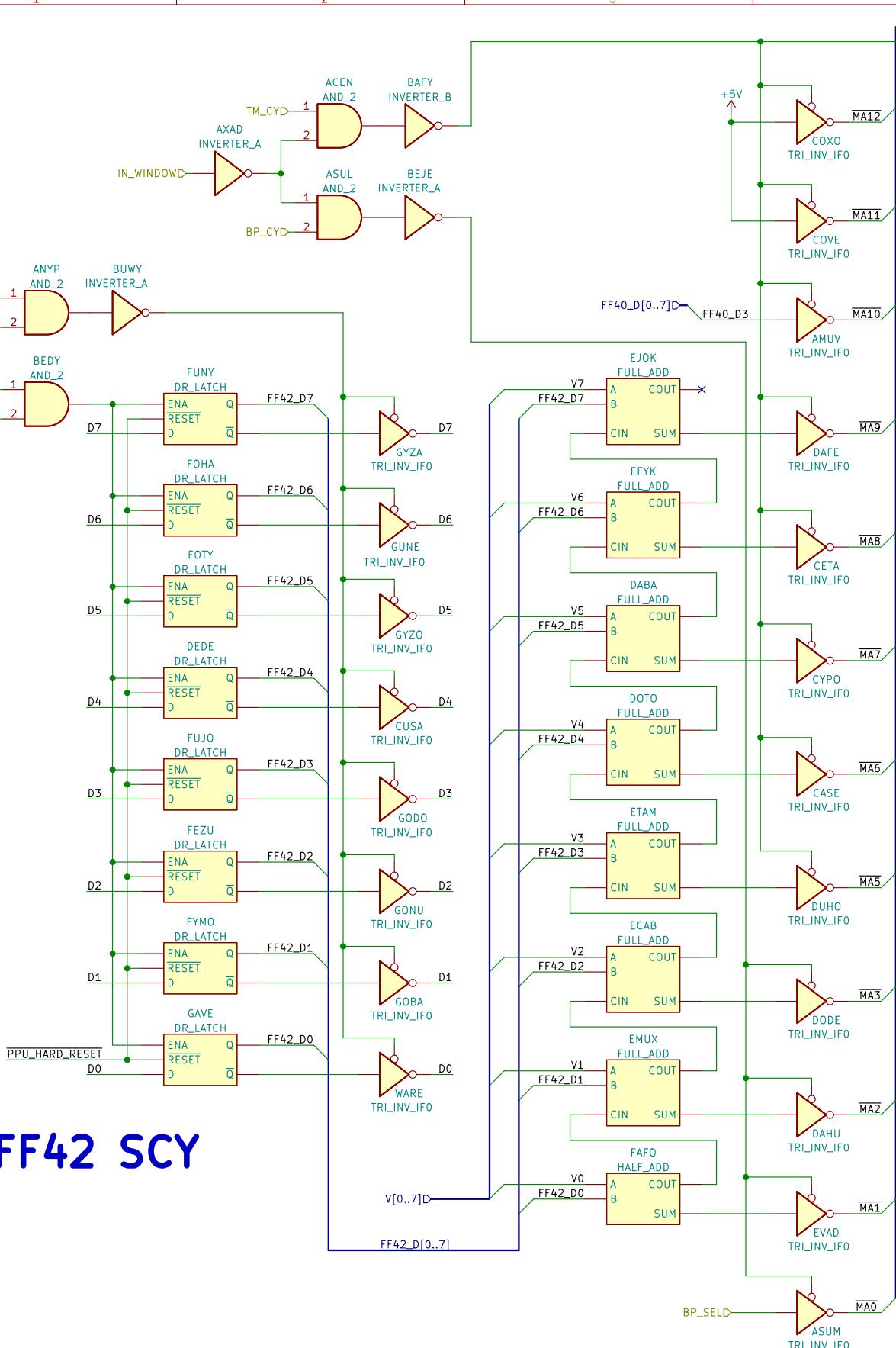
Title: DMG CPU B

Size: A3 Date: 2022-07-08 Rev: 0.1
KIC-158-A-1-1-6-0-6-7-77-75744-115-1-1-1-22-0-1

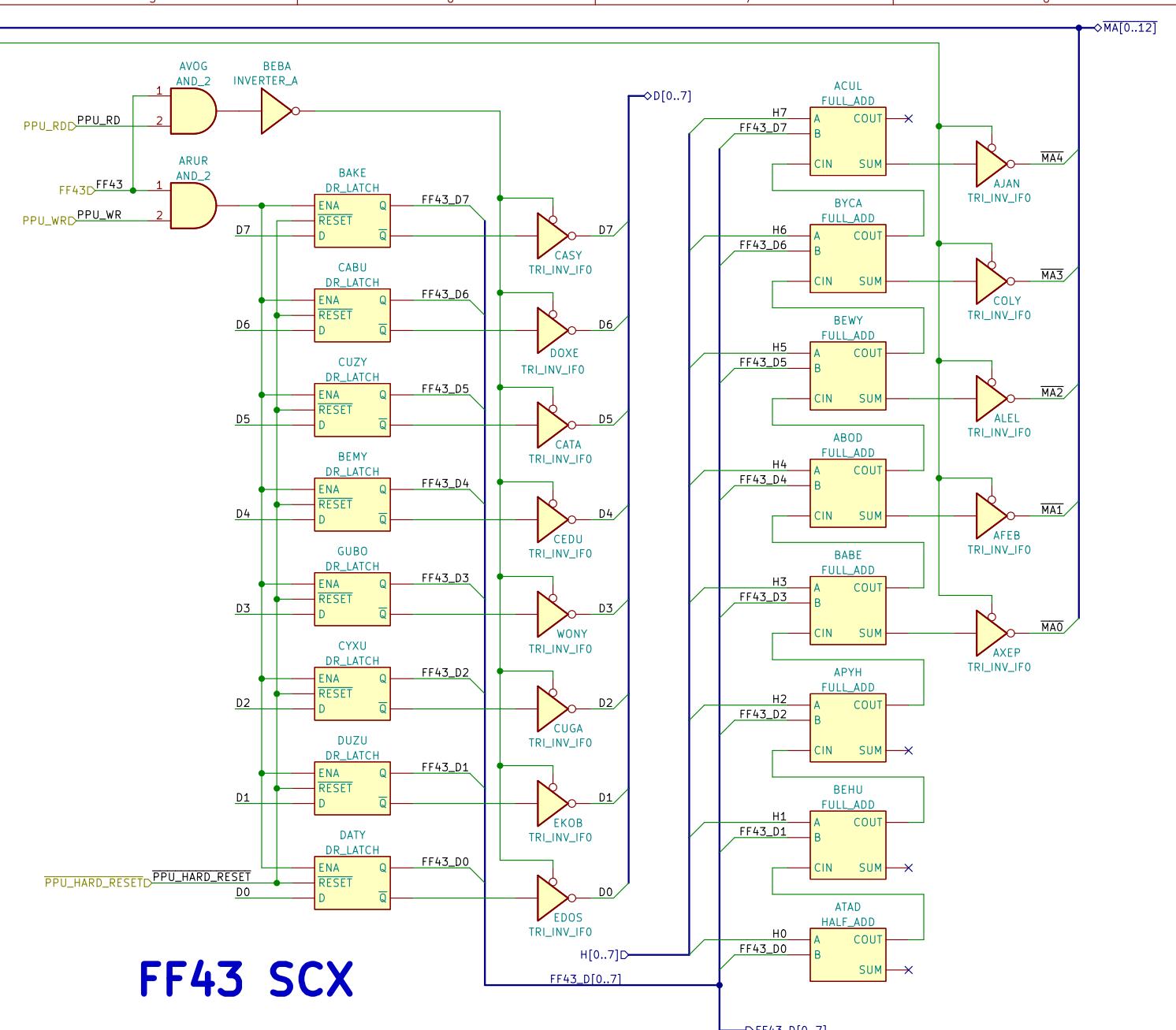
KiCad E.D.A. kicad 6.0.6-3a73a75311~116~ubuntu22.04.1 | Id: 28/45

/ 8

FF42 SCY



FF43 SCX

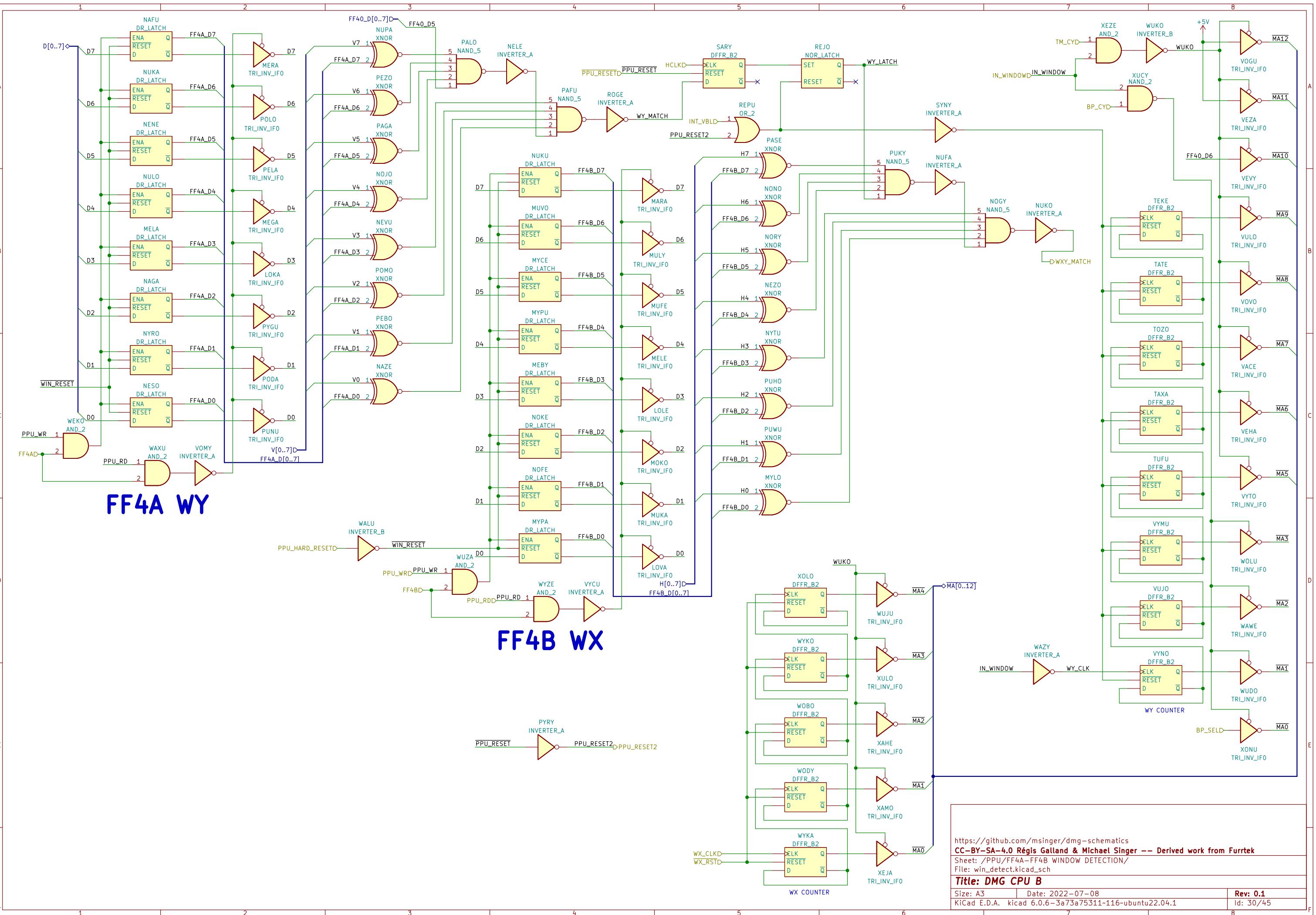


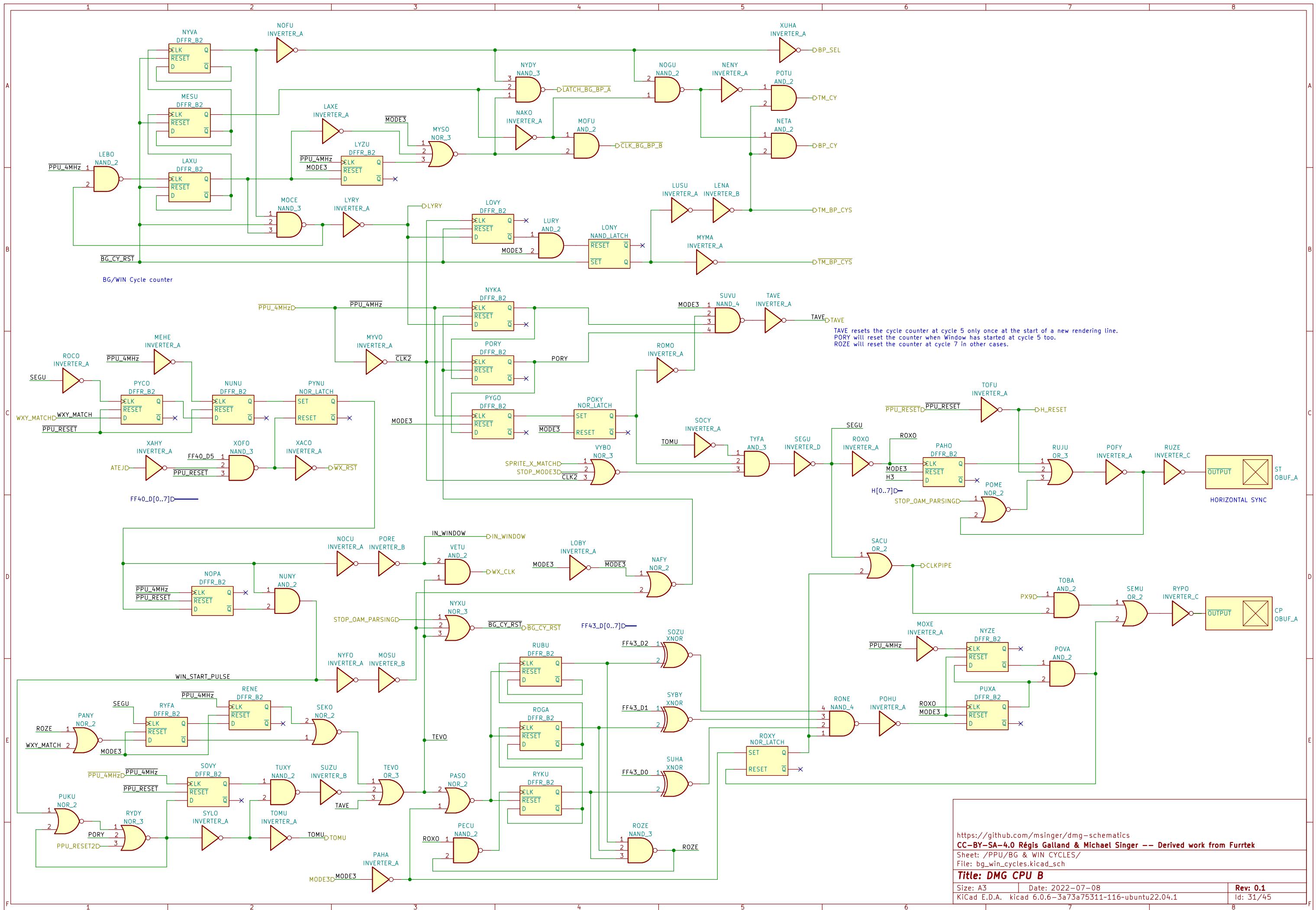
<https://github.com/msinger/dmg-schematics>
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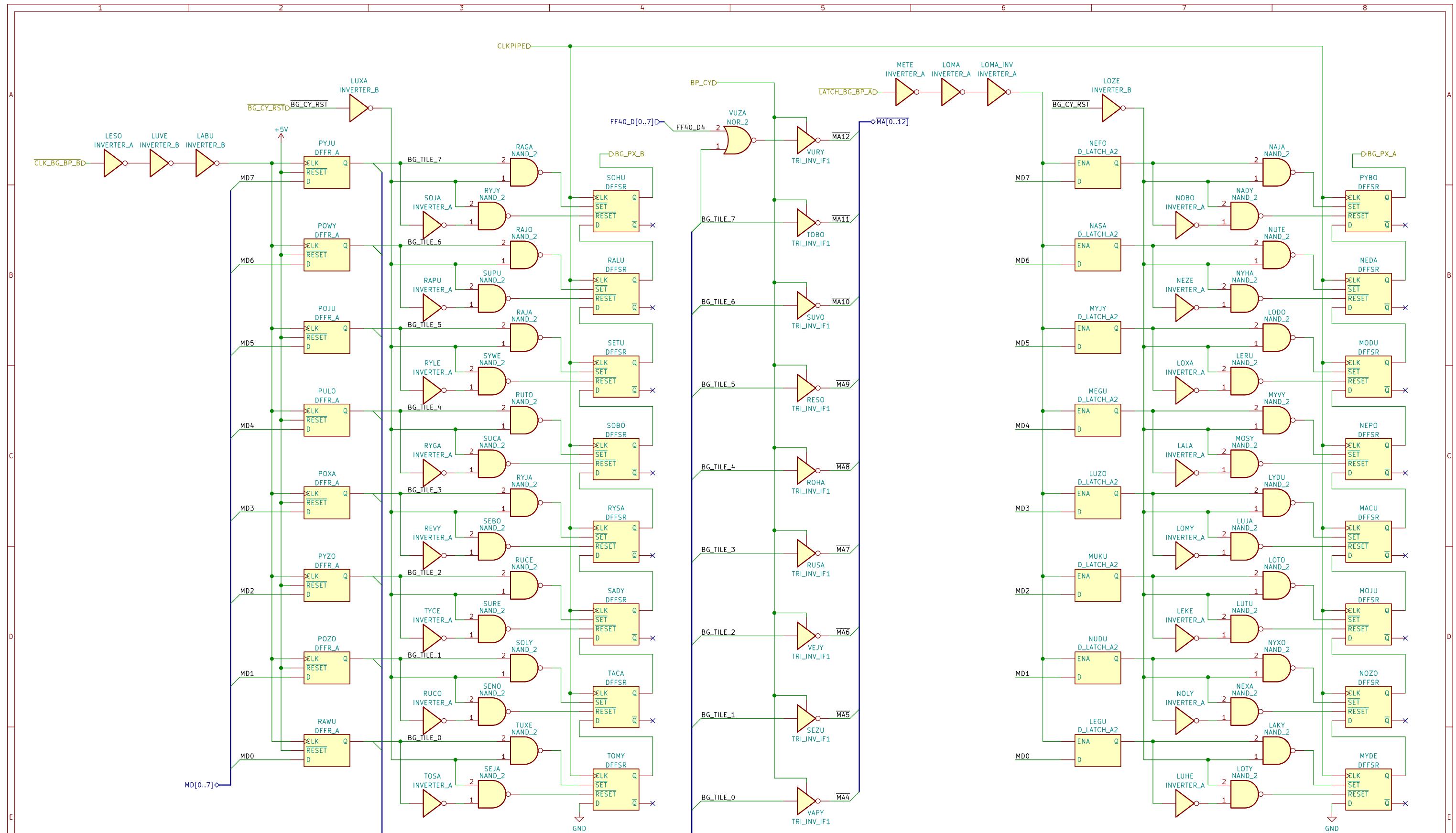
Sheet: /PPU/FF42-FF43 BACKGROUND SCROLLING/
 File: background.kicad_sch

Title: DMG CPU B

Size: A3 Date: 2022-07-08 Rev: 0.1
 KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1 Id: 29/45







MA bit 3–0 comes from BG or WIN sheets which gives the y offset in the tile

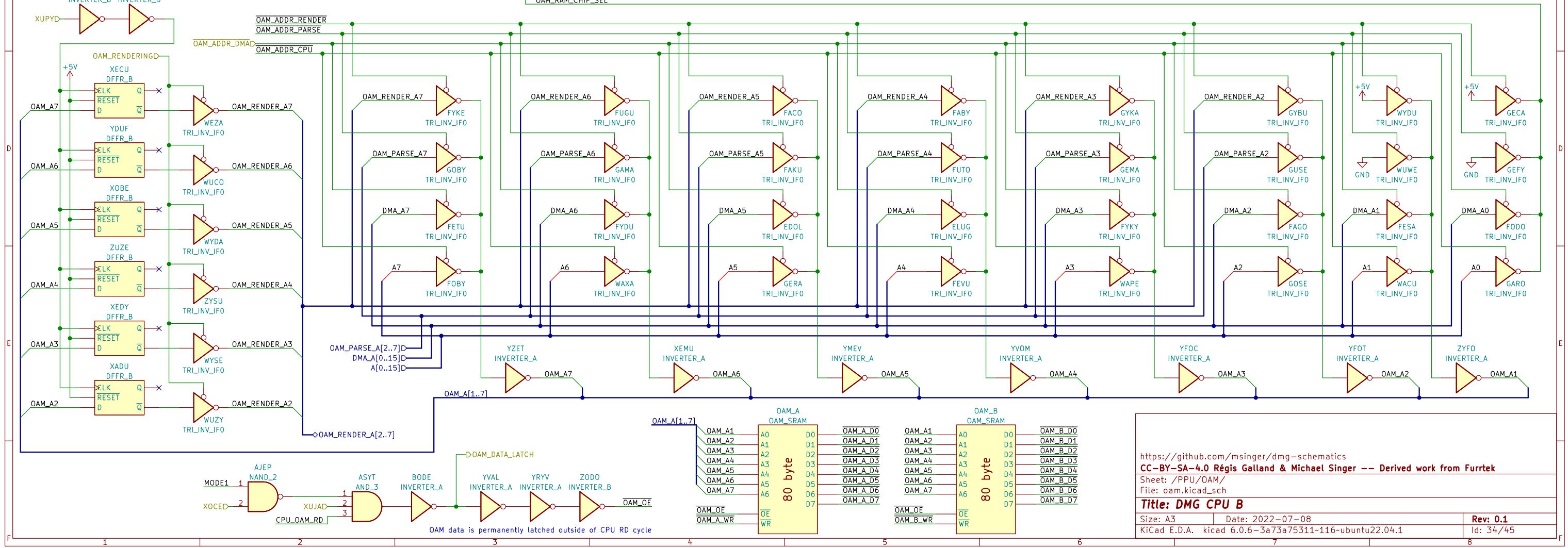
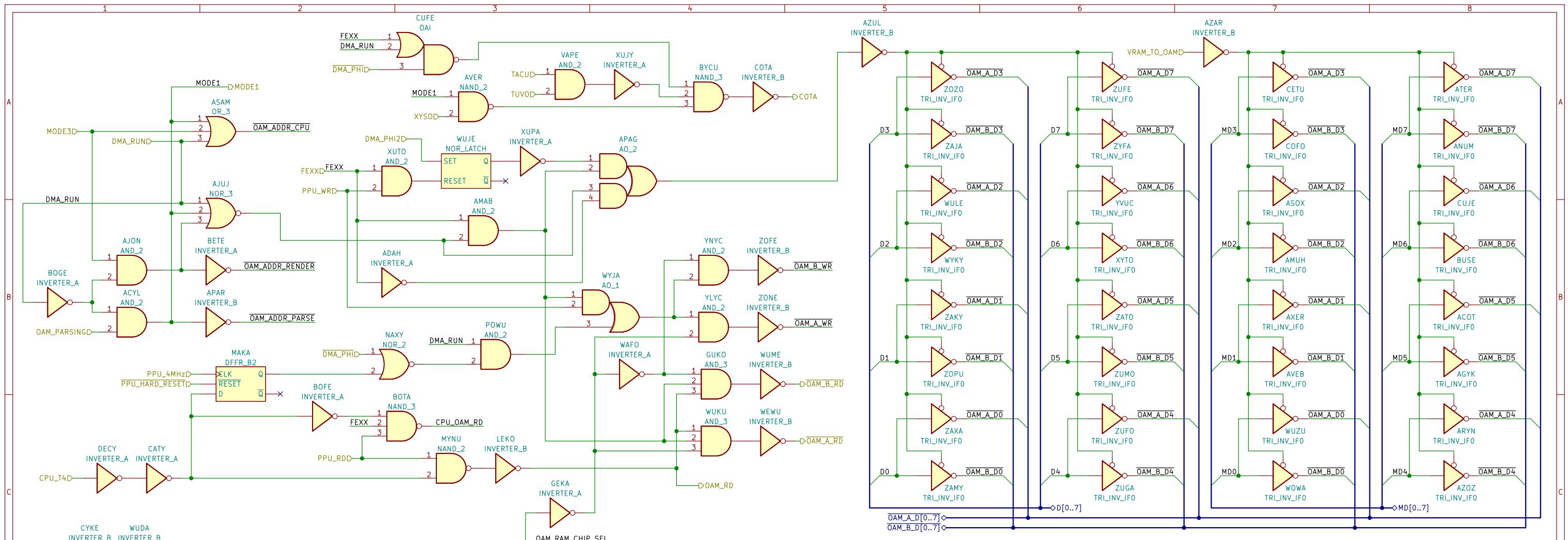
<https://github.com/msinger/dmg-schematics>
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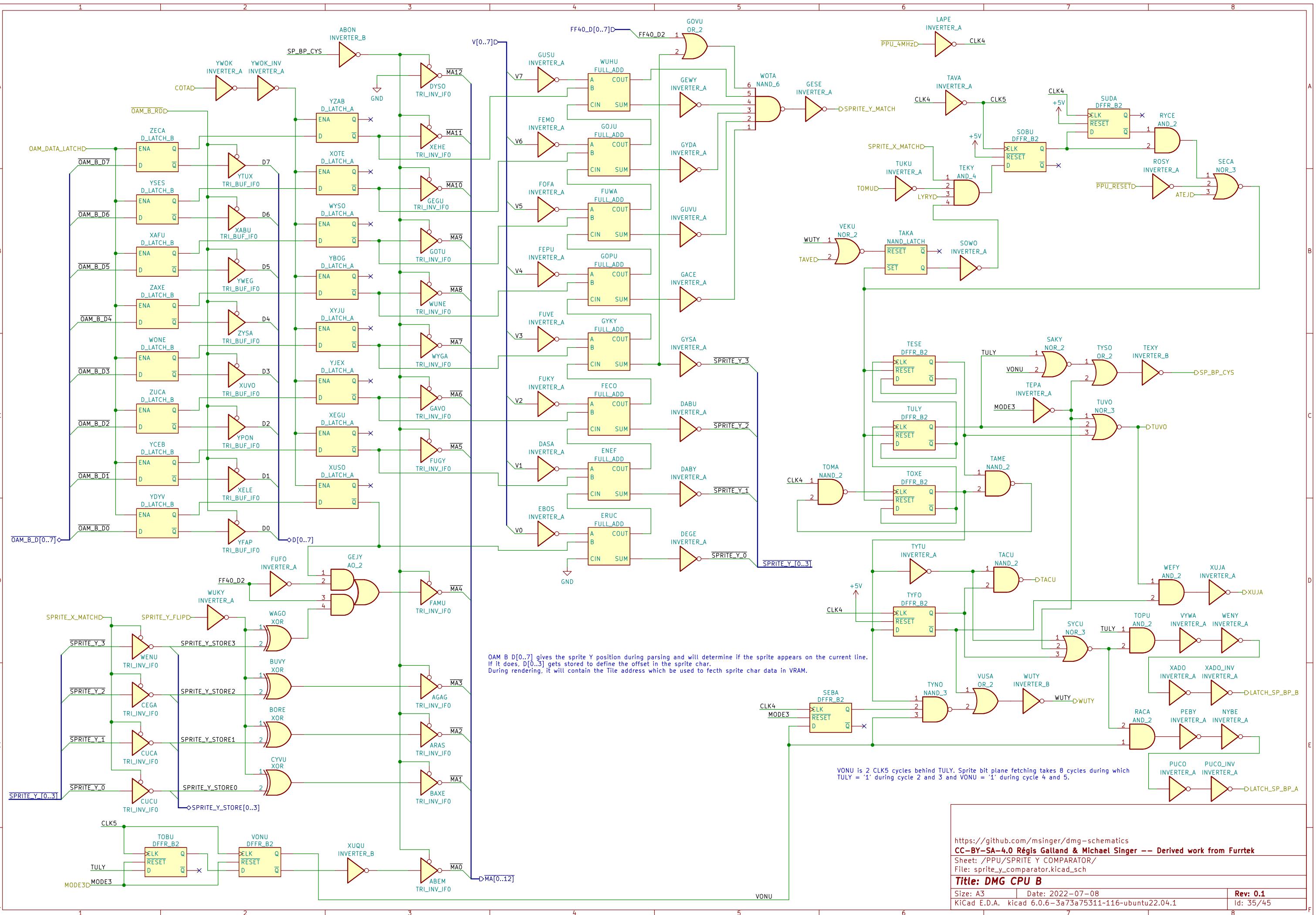
Sheet: /PPU/BC PIXEL SHIFTER/
 File: bg_px_shifter.kicad_sch

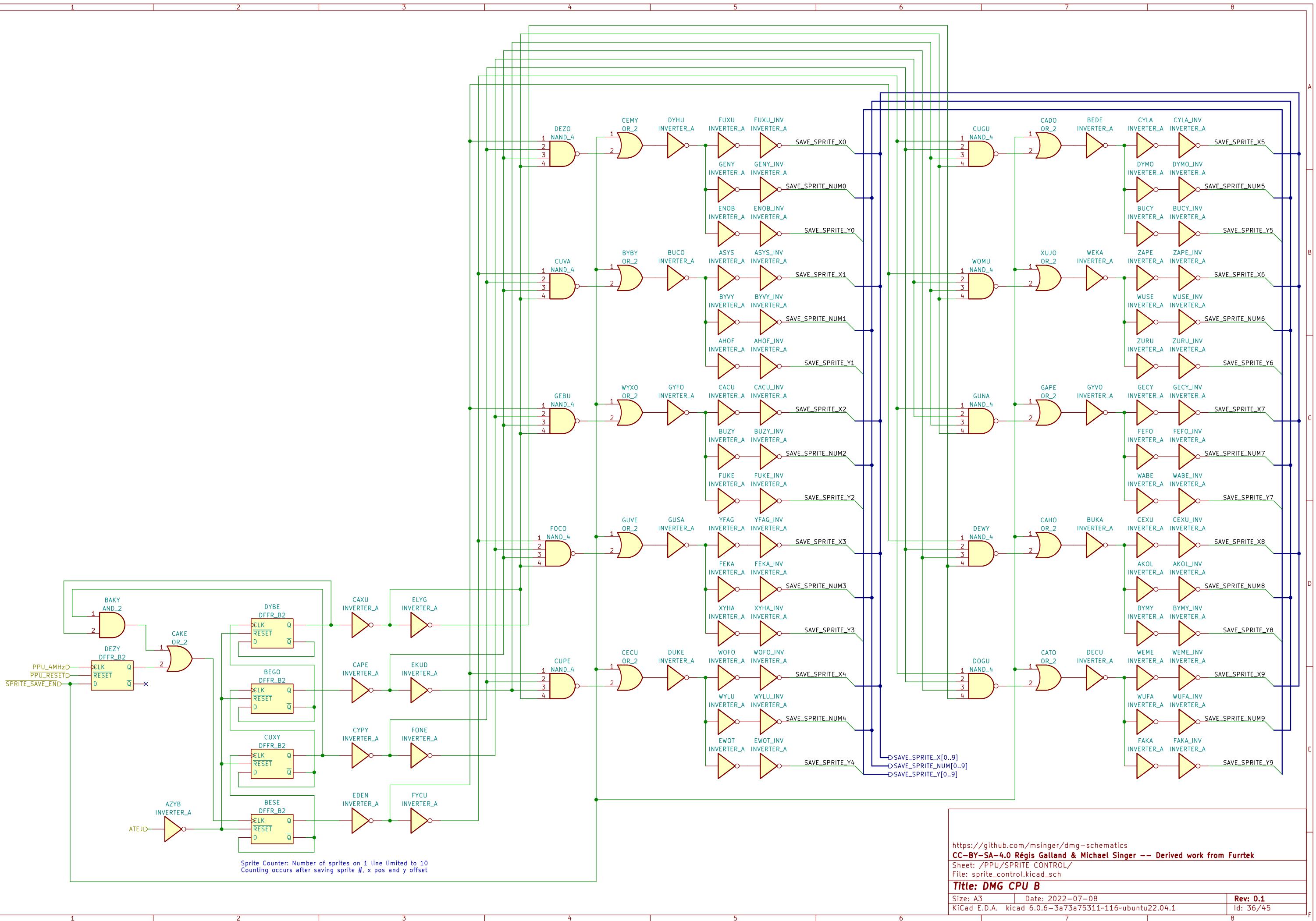
Title: DMG CPU B

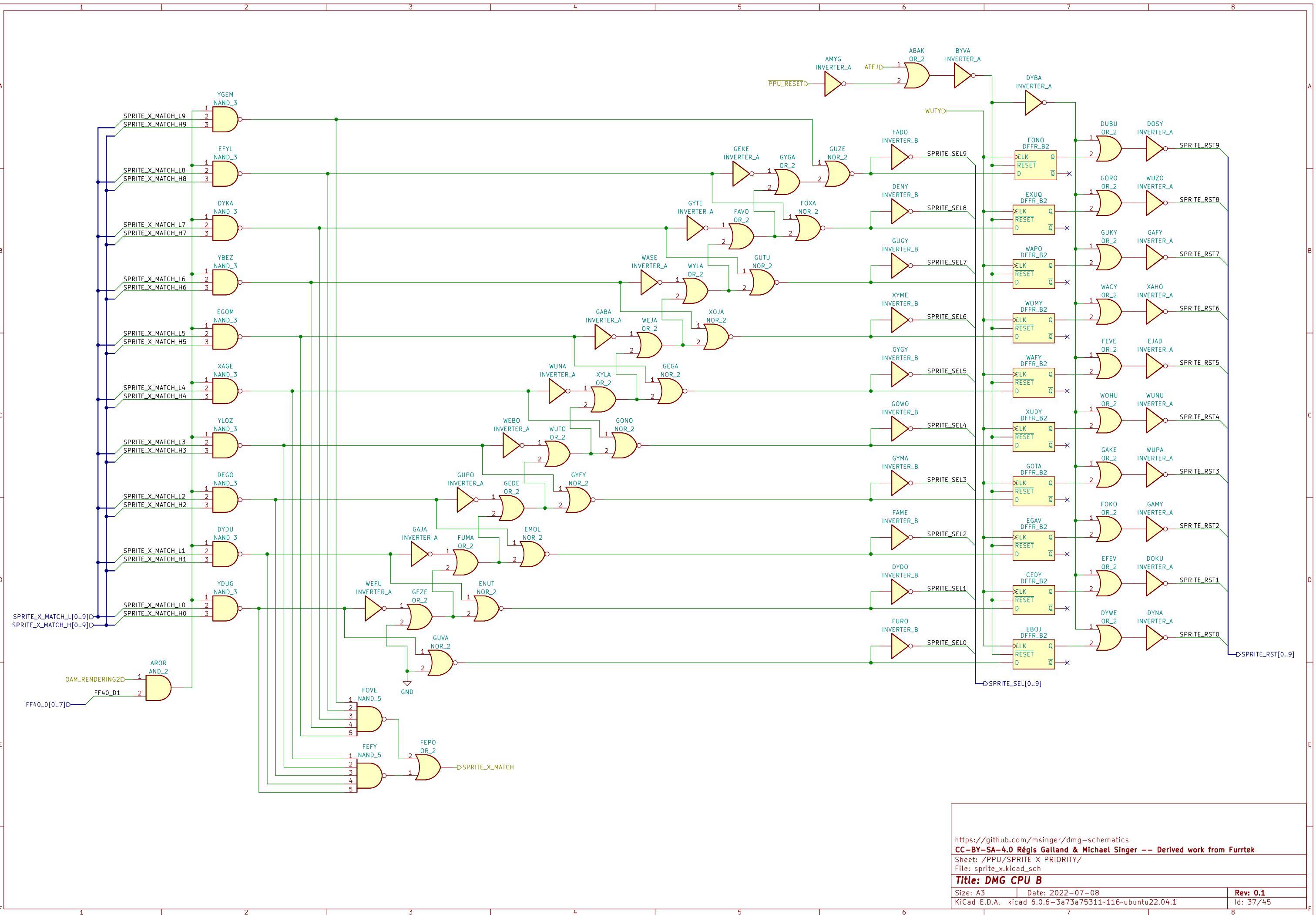
Size: A3 | Date: 2022-07-08
 KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1

Rev: 0.1 | Id: 32/45







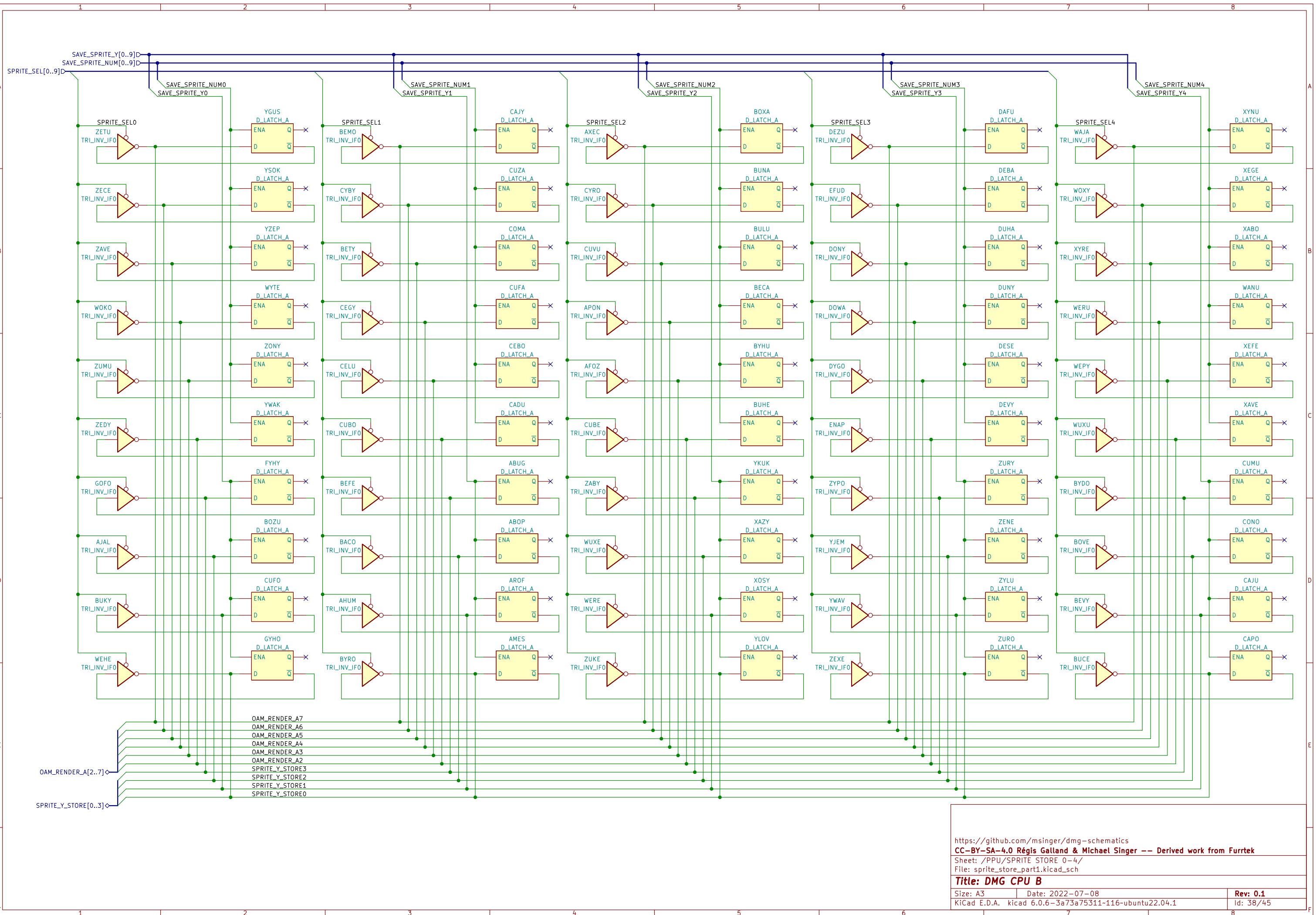


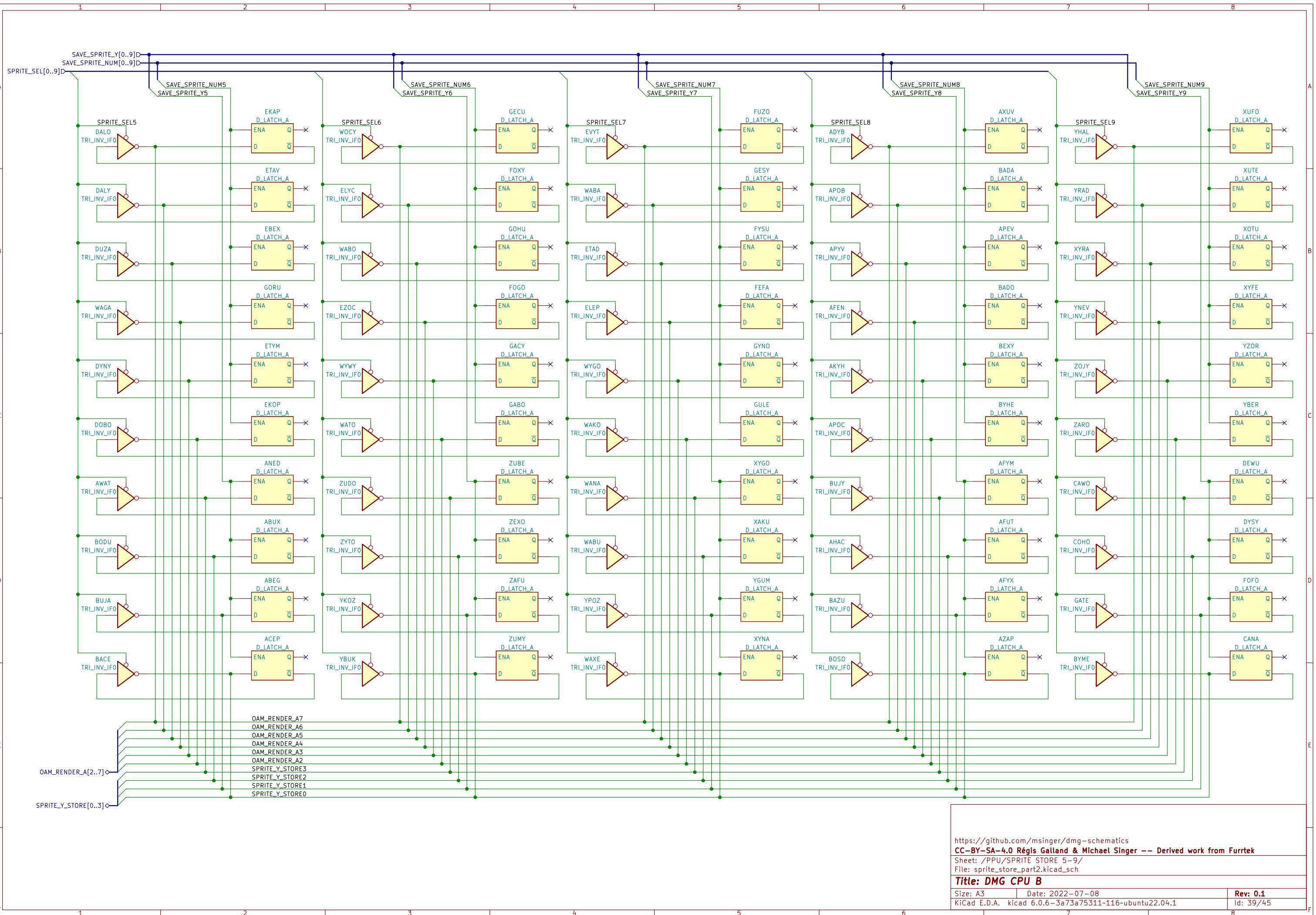
<https://github.com/msinger/dmg-schematics>
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Sheet: /PPU/SPRITE_X_PRIORITY/
 File: sprite_x_kicad_sch

Title: DMG CPU B

Size: A3	Date: 2022-07-08	Rev: 0.1
KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1		Id: 37/45





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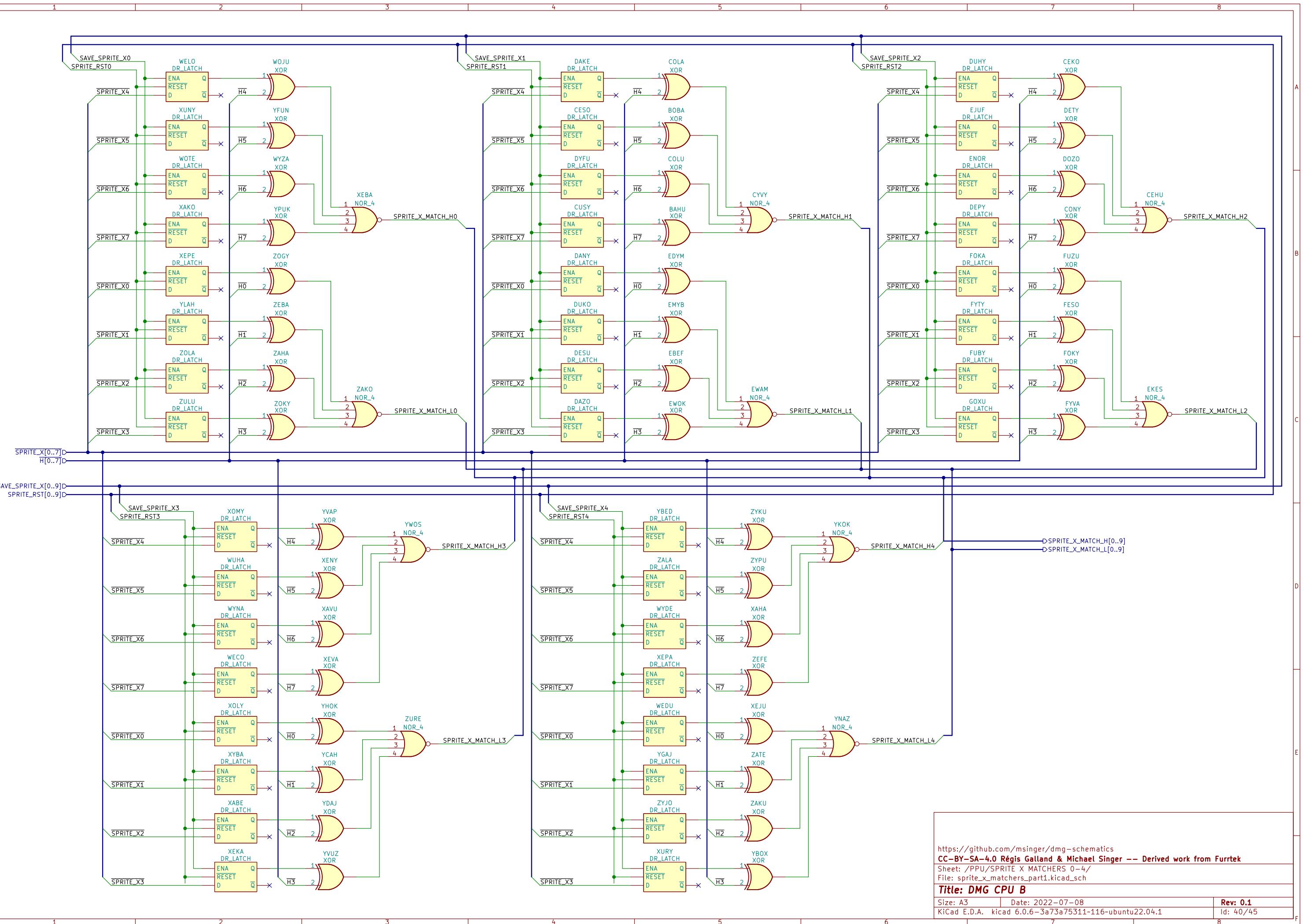
Sheet: /PPU/SPRITE STORE 5-9/
 File: sprite_store_part2.kicad_sch

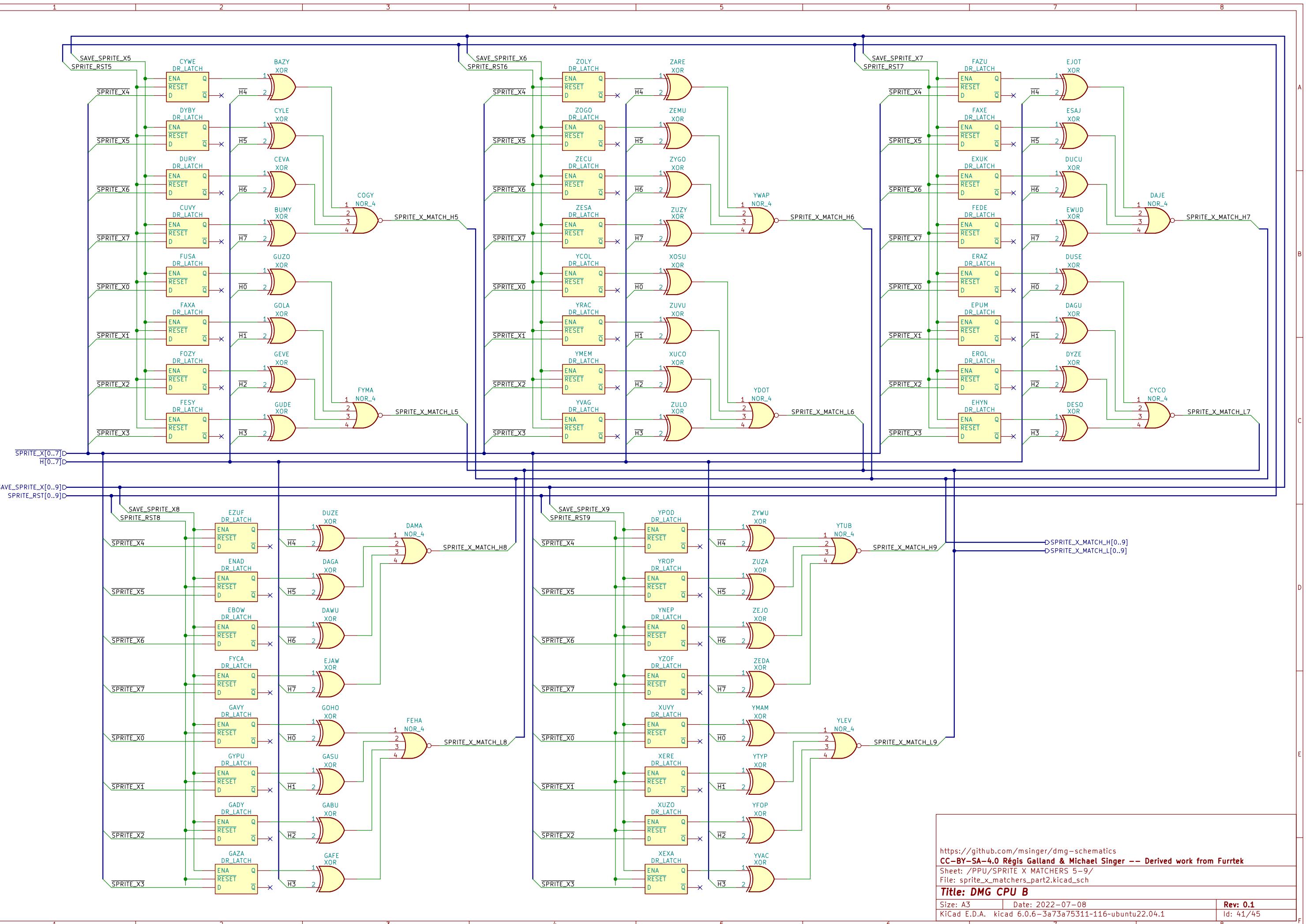
Title: DMG CPU B

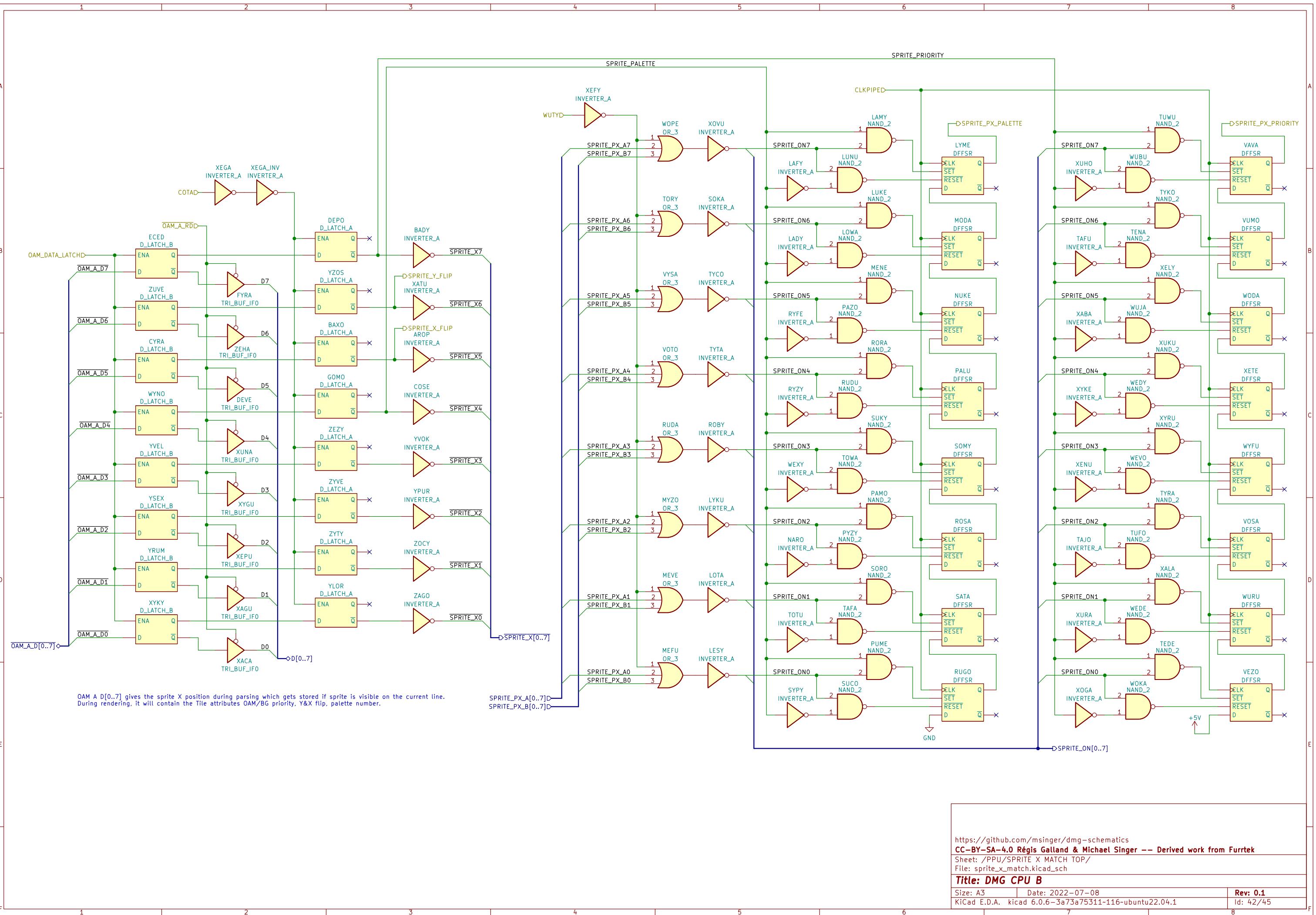
Size: A3 | Date: 2022-07-08
 KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1

Rev: 0.1

Id: 39/45



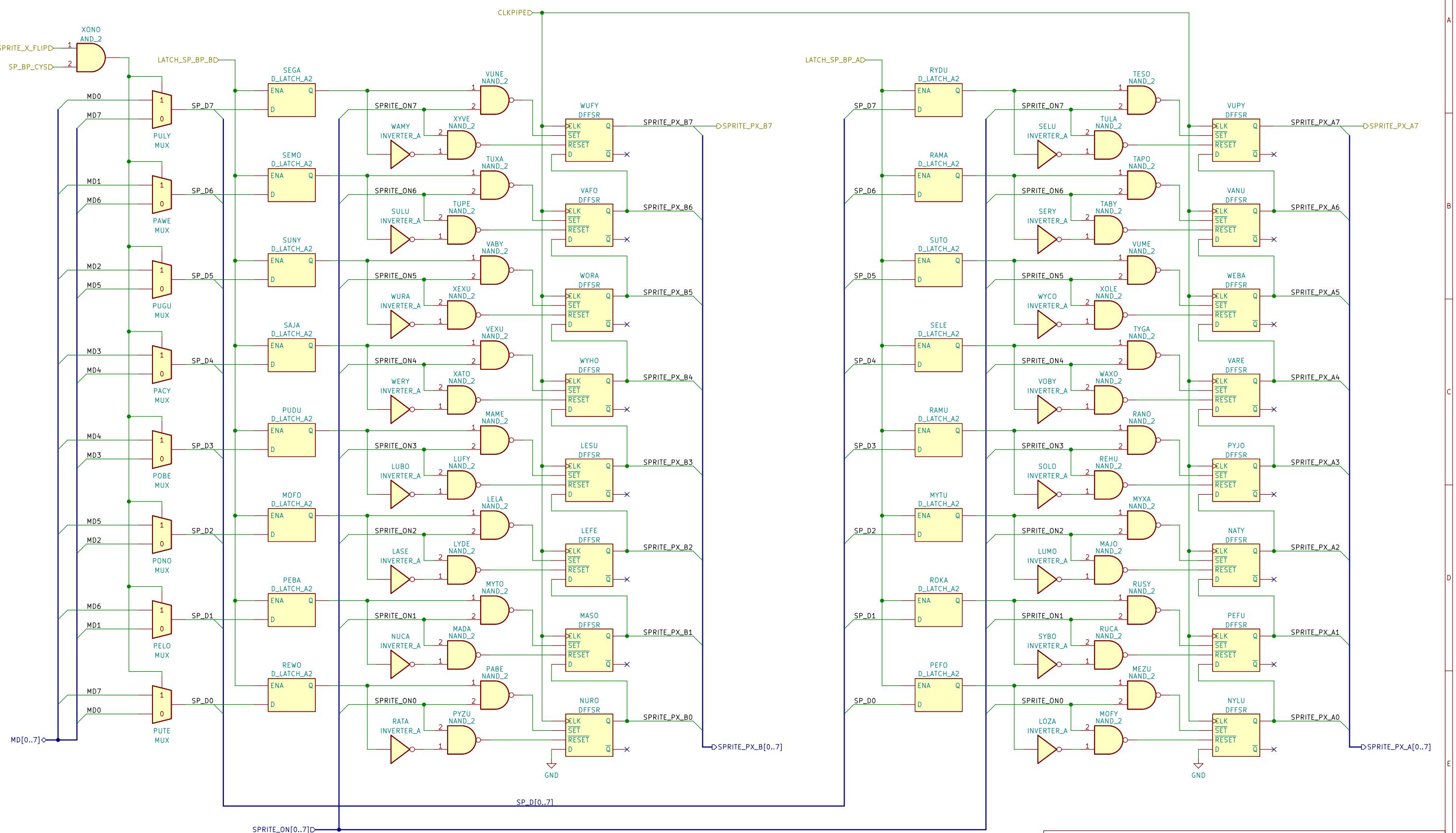




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 Sheet: /PPU/SPRITE X MATCH TOP/
 File: sprite_x_match.kicad_sch

Title: DMG CPU B

Size: A3	Date: 2022-07-08	Rev: 0.1
KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu22.04.1		Id: 42/45



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 Sheet: /PPU/SP PIXEL SHIFTER/
 File: sp_px_shifter.kicad_sch

Title: DMG CPU B

Size: A3	Date: 2022-07-08	Rev: 0.1
KiCad E.D.A.	kicad 6.0.6-3a73a75311-116-ubuntu22.04.1	Id: 43/45

