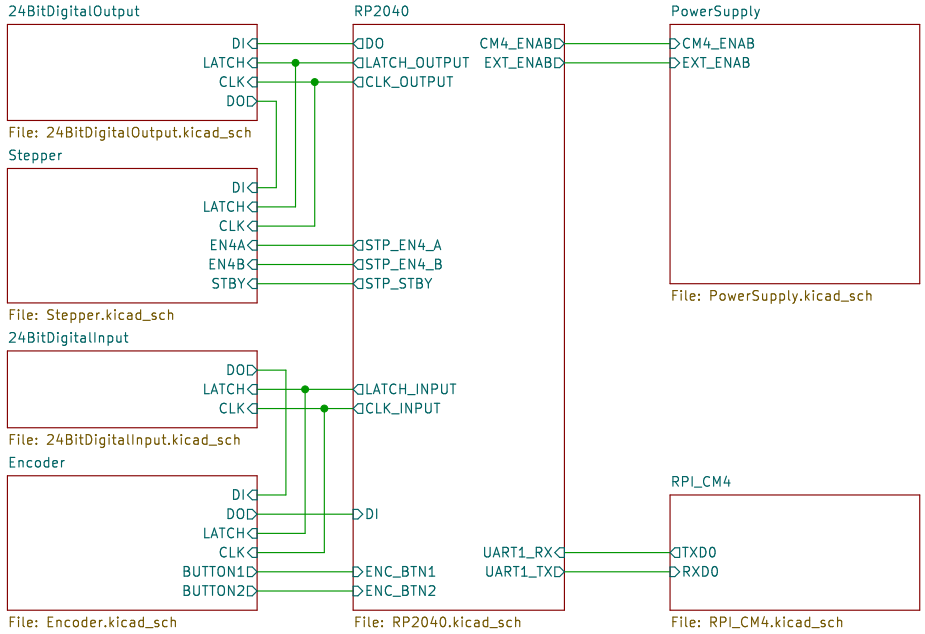

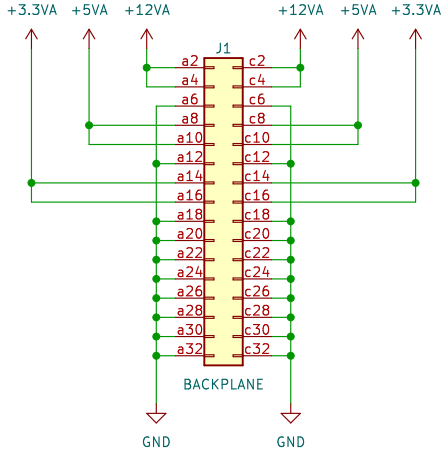

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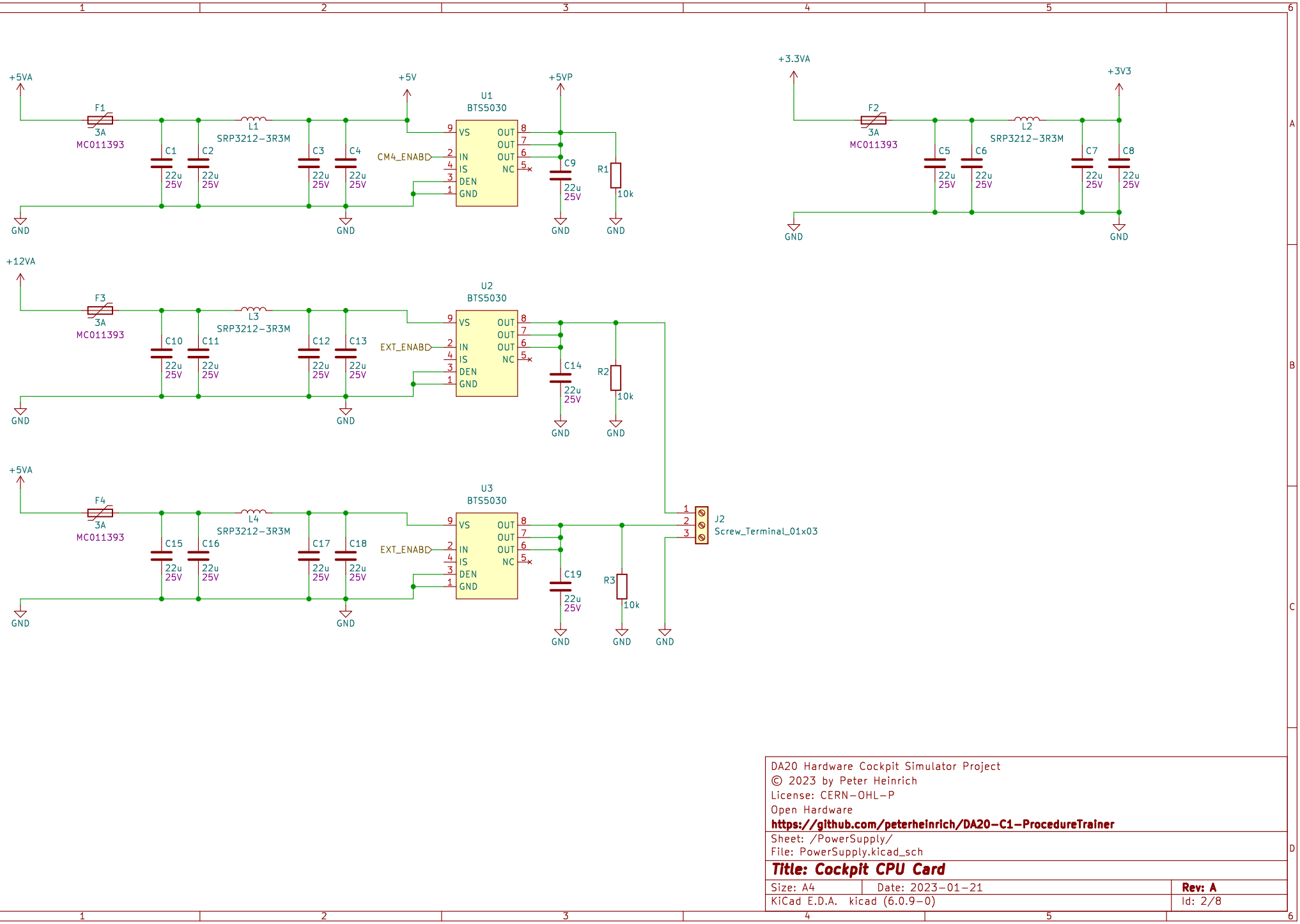
Sheet: /
File: Cockpit-CPU-Card.kicad_sch

Title: Cockpit CPU Card

Size: A4	Date: 2023-01-21	**Rev: A**
KiCad E.D.A. kicad (6.0.9-0)		Id: 1/8



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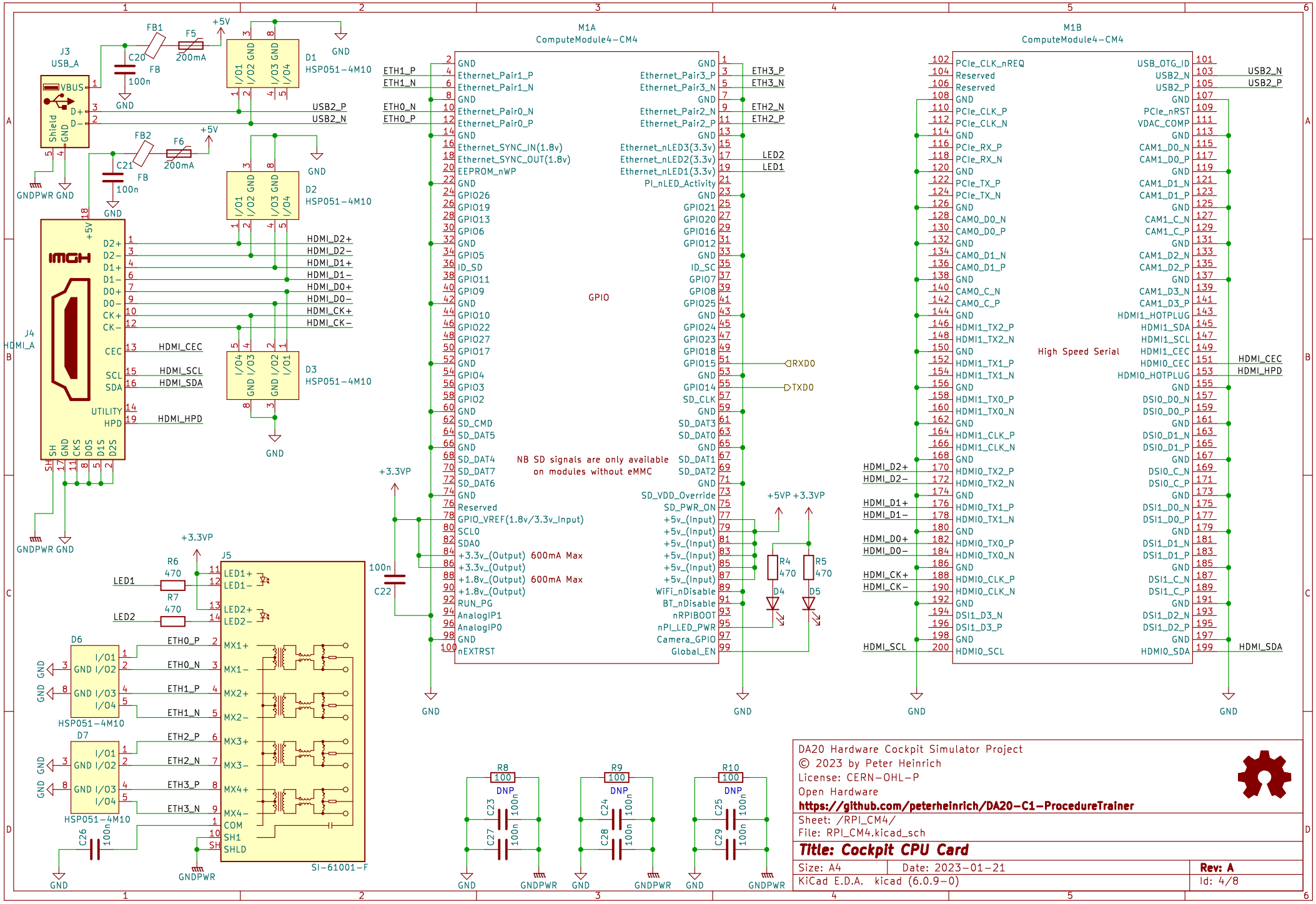
Sheet: /PowerSupply/
File: PowerSupply.kicad_sch

Title: Cockpit CPU Card

Size: A4	Date: 2023-01-21	**Rev: A**
KiCad E.D.A. kicad (6.0.9-0)		Id: 2/8


M1A
ComputeModule4-CM4
GPIO
NB SD signals are only available on modules without eMMC
M1B
ComputeModule4-CM4
High Speed Serial
J3
USB_A
J4
HDMI_A
J5
SI-61001-F
D1
HSP051-4M10
D2
HSP051-4M10
D3
HSP051-4M10
D6
HSP051-4M10
D7
HSP051-4M10
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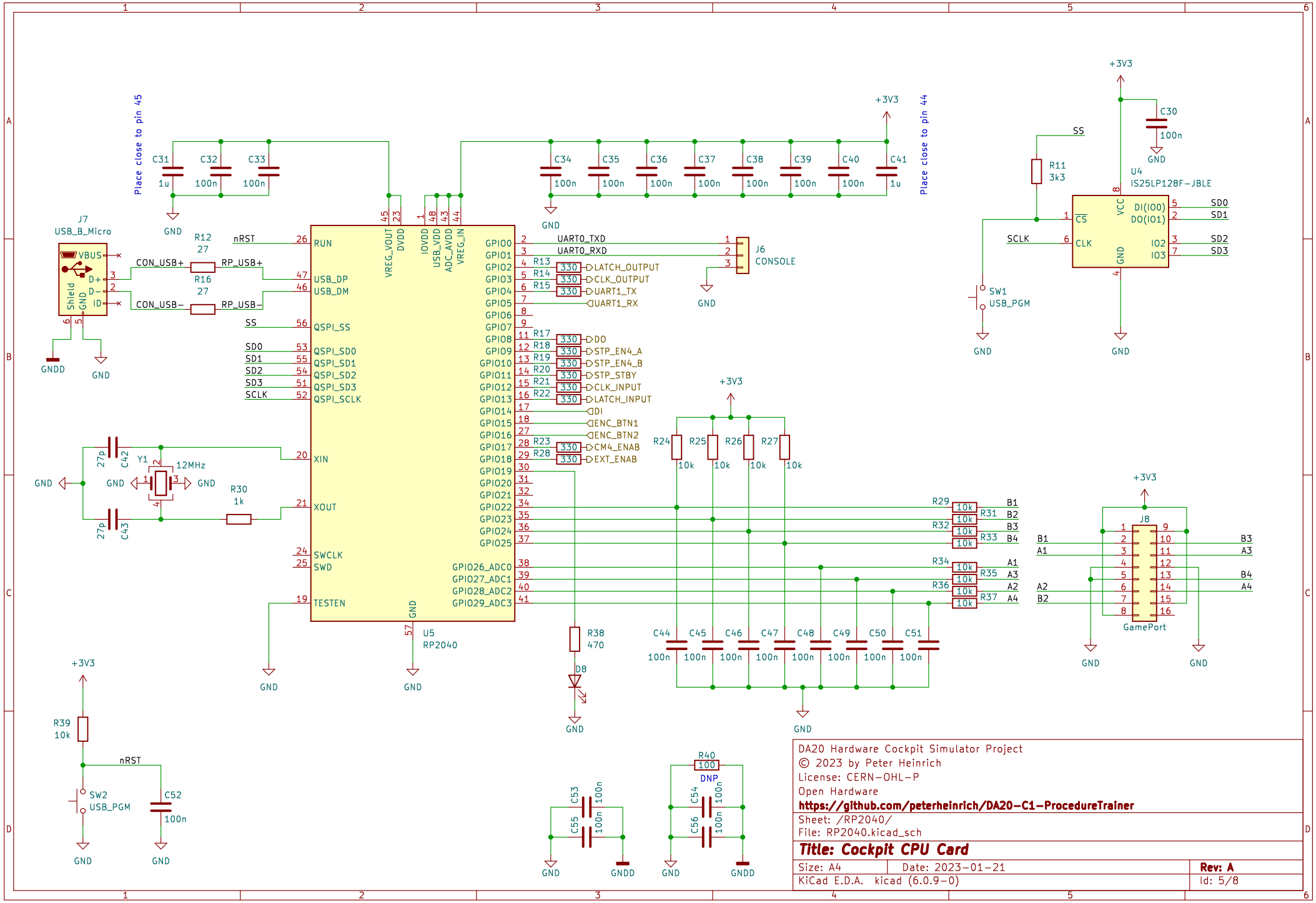
Sheet: /RPI_CM4/
File: RPI_CM4.kicad_sch
Title: Cockpit CPU Card
Size: A4
Date: 2023-01-21
Rev: A
KiCad E.D.A. kicad (6.0.9-0)
Id: 4/8


Place close to pin 45
Place close to pin 44
+3V3
GND
GNDD
C31 1u
C32 100n
C33 100n
C34 100n
C35 100n
C36 100n
C37 100n
C38 100n
C39 100n
C40 100n
C41 1u
J7
USB_B_Micro
VBUS
D+
D-
ID
Shield
GND
R12 27
R16 27
CON_USB+
CON_USB-
RP_USB+
RP_USB-
nRST
SS
SD0
SD1
SD2
SD3
SCLK
RUN
USB_DP
USB_DM
QSPI_SS
QSPI_SD0
QSPI_SD1
QSPI_SD2
QSPI_SD3
QSPI_SCLK
XIN
XOUT
SWCLK
SWD
TESTEN
VREG_VOUT
DVDD
IOVDD
USB_VDD
ADC_AVDD
VREG_IN
U5
RP2040
GPIO0 UART0_TXD
GPIO1 UART0_RXD
GPIO2 R13 330 LATCH_OUTPUT
GPIO3 R14 330 CLK_OUTPUT
GPIO4 R15 330 UART1_TX
GPIO5 UART1_RX
GPIO8 R17 330 DO
GPIO9 R18 330 STP_EN4_A
GPIO10 R19 330 STP_EN4_B
GPIO11 R20 330 STP_STBY
GPIO12 R21 330 CLK_INPUT
GPIO13 R22 330 LATCH_INPUT
GPIO14 DI
GPIO15 ENC_BTN1
GPIO16 ENC_BTN2
GPIO17 R23 330 CM4_ENAB
GPIO18 R28 330 EXT_ENAB
GPIO26_ADC0
GPIO27_ADC1
GPIO28_ADC2
GPIO29_ADC3
J6 CONSOLE
27p C42
27p C43
Y1 12MHz
R30 1k
R38 470
D8
R24 10k
R25 10k
R26 10k
R27 10k
R29 10k B1
R31 10k B2
R32 10k B3
R33 10k B4
R34 10k A1
R35 10k A3
R36 10k A2
R37 10k A4
C44 100n
C45 100n
C46 100n
C47 100n
C48 100n
C49 100n
C50 100n
C51 100n
J8
GamePort
B1 B3 A1 A3 B4 A4 A2 B2
R39 10k
SW2
USB_PGM
C52 100n
C53 100n
C55 100n
R40 100 DNP
C54 100n
C56 100n
R11 3k3
U4
IS25LP128F-JBLE
C30 100n
SW1
USB_PGM
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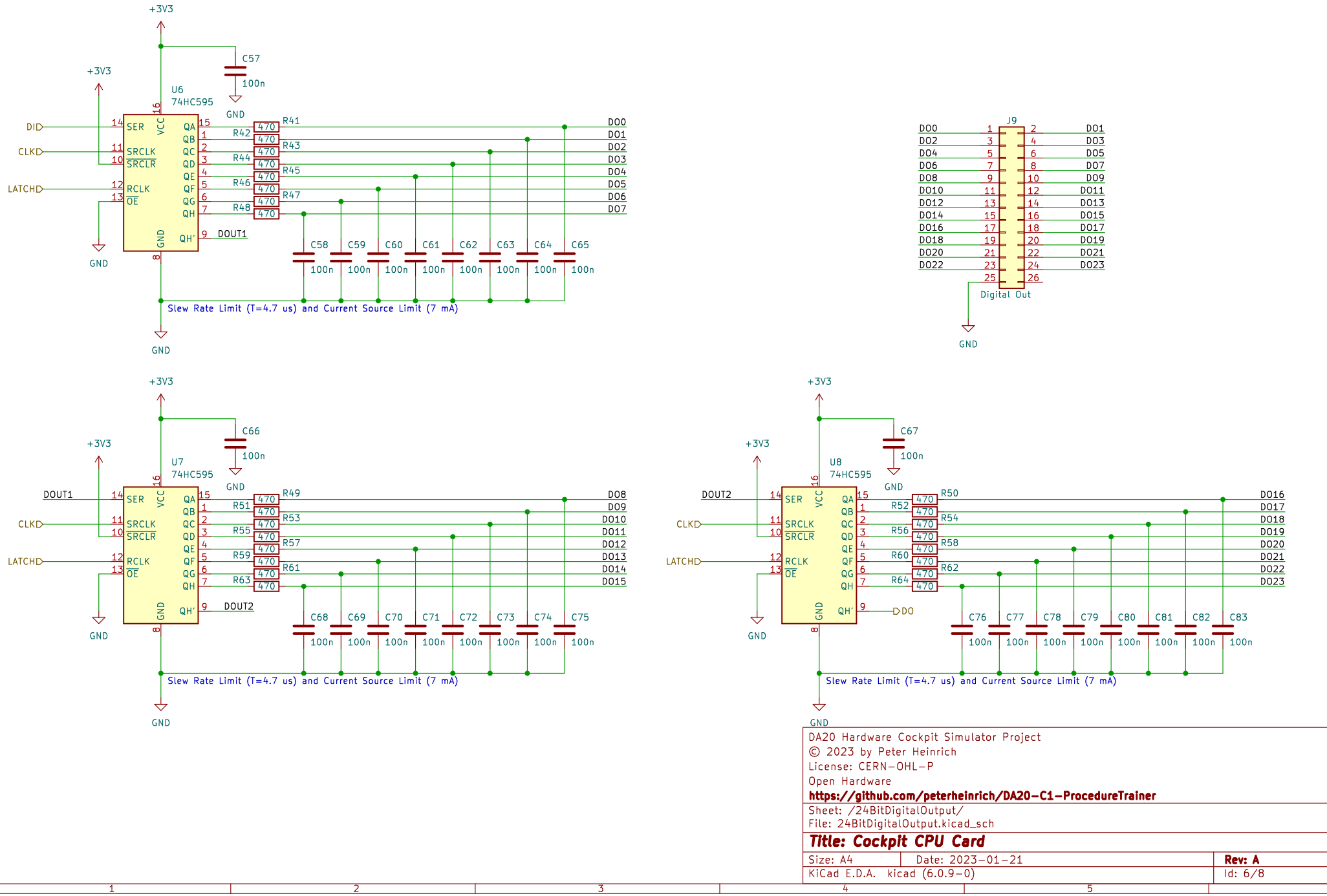
Sheet: /RP2040/
File: RP2040.kicad_sch
Title: Cockpit CPU Card
Size: A4
Date: 2023-01-21
Rev: A
KiCad E.D.A. kicad (6.0.9-0)
Id: 5/8


+3V3
C57
100n
GND
U6
74HC595
DI
CLK
LATCH
SER
SRCLK
SRCLR
RCLK
OE
VCC
GND
QA
QB
QC
QD
QE
QF
QG
QH
QH'
R41
R42
R43
R44
R45
R46
R47
R48
470
DO0
DO1
DO2
DO3
DO4
DO5
DO6
DO7
DOUT1
C58
C59
C60
C61
C62
C63
C64
C65
Slew Rate Limit (T=4.7 us) and Current Source Limit (7 mA)
J9
DO0
DO1
DO2
DO3
DO4
DO5
DO6
DO7
DO8
DO9
DO10
DO11
DO12
DO13
DO14
DO15
DO16
DO17
DO18
DO19
DO20
DO21
DO22
DO23
Digital Out
C66
U7
74HC595
DOUT1
DOUT2
R49
R51
R53
R55
R57
R59
R61
R63
C68
C69
C70
C71
C72
C73
C74
C75
C67
U8
74HC595
R50
R52
R54
R56
R58
R60
R62
R64
DO
C76
C77
C78
C79
C80
C81
C82
C83
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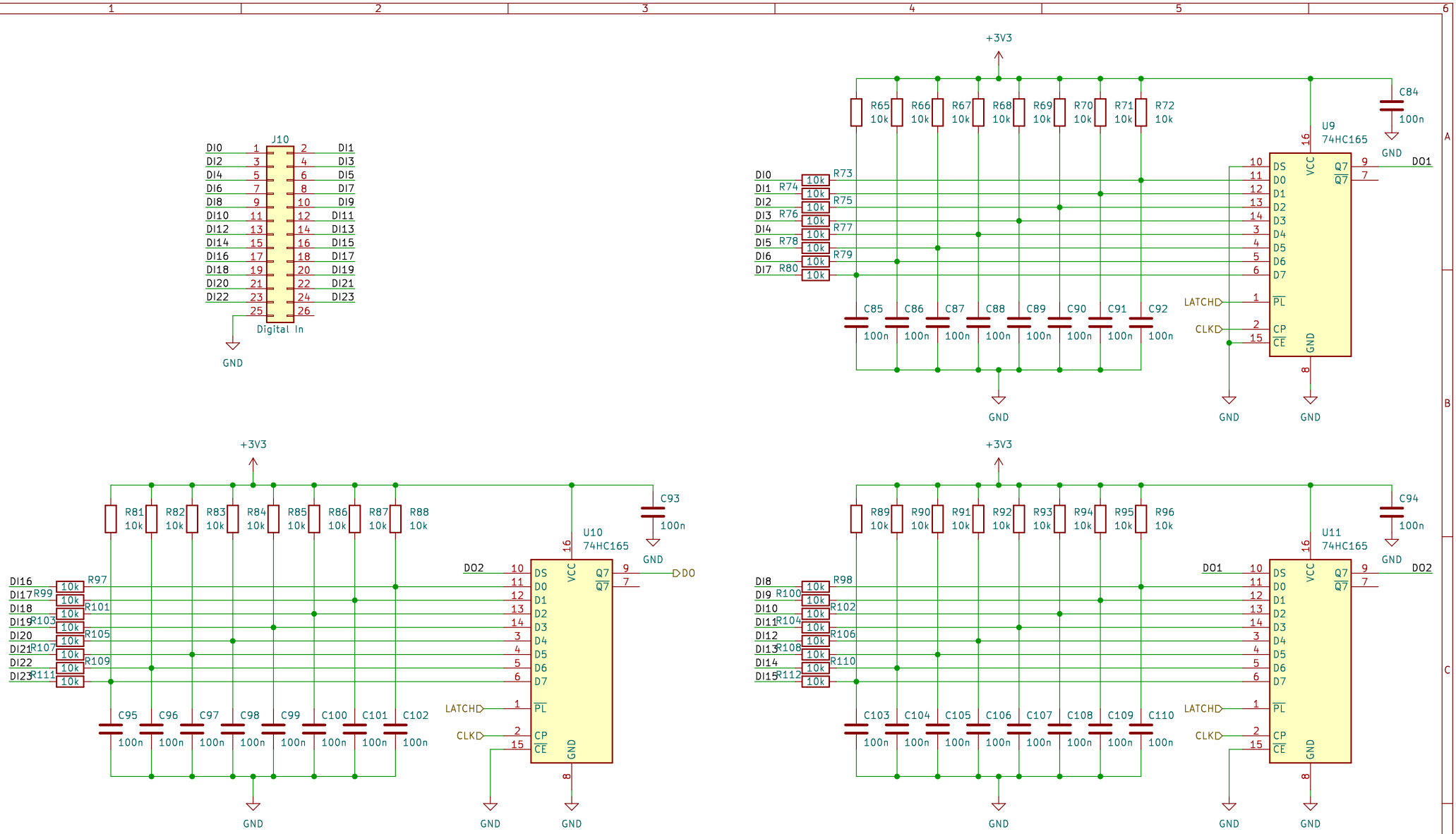
https://github.com/peterheinrich/DA20-C1-ProcedureTrainer
Sheet: /24BitDigitalOutput/
File: 24BitDigitalOutput.kicad_sch
Title: Cockpit CPU Card
Size: A4
Date: 2023-01-21
Rev: A
KiCad E.D.A. kicad (6.0.9-0)
Id: 6/8



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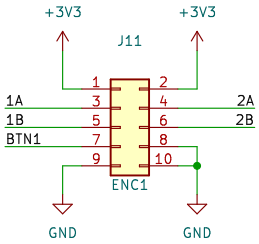
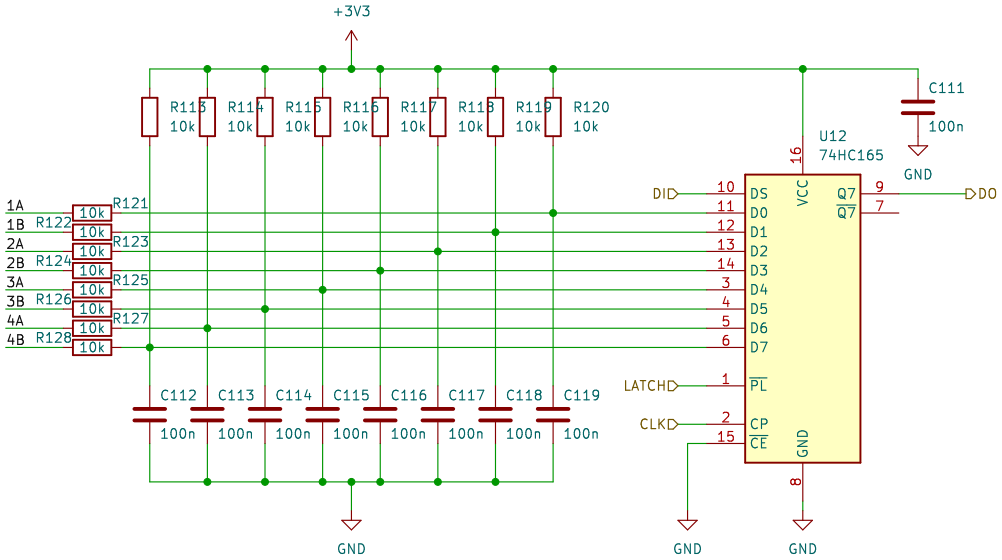
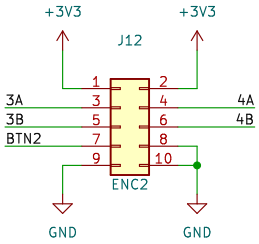
Sheet: /24BitDigitalInput/
File: 24BitDigitalInput.kicad_sch

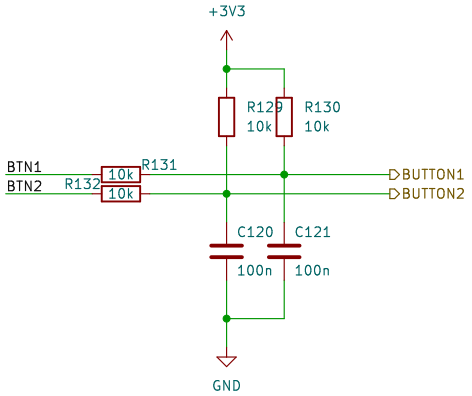
Title: Cockpit CPU Card

Size: A4	Date: 2023-01-21	**Rev: A**
KiCad E.D.A. kicad (6.0.9-0)		Id: 7/8









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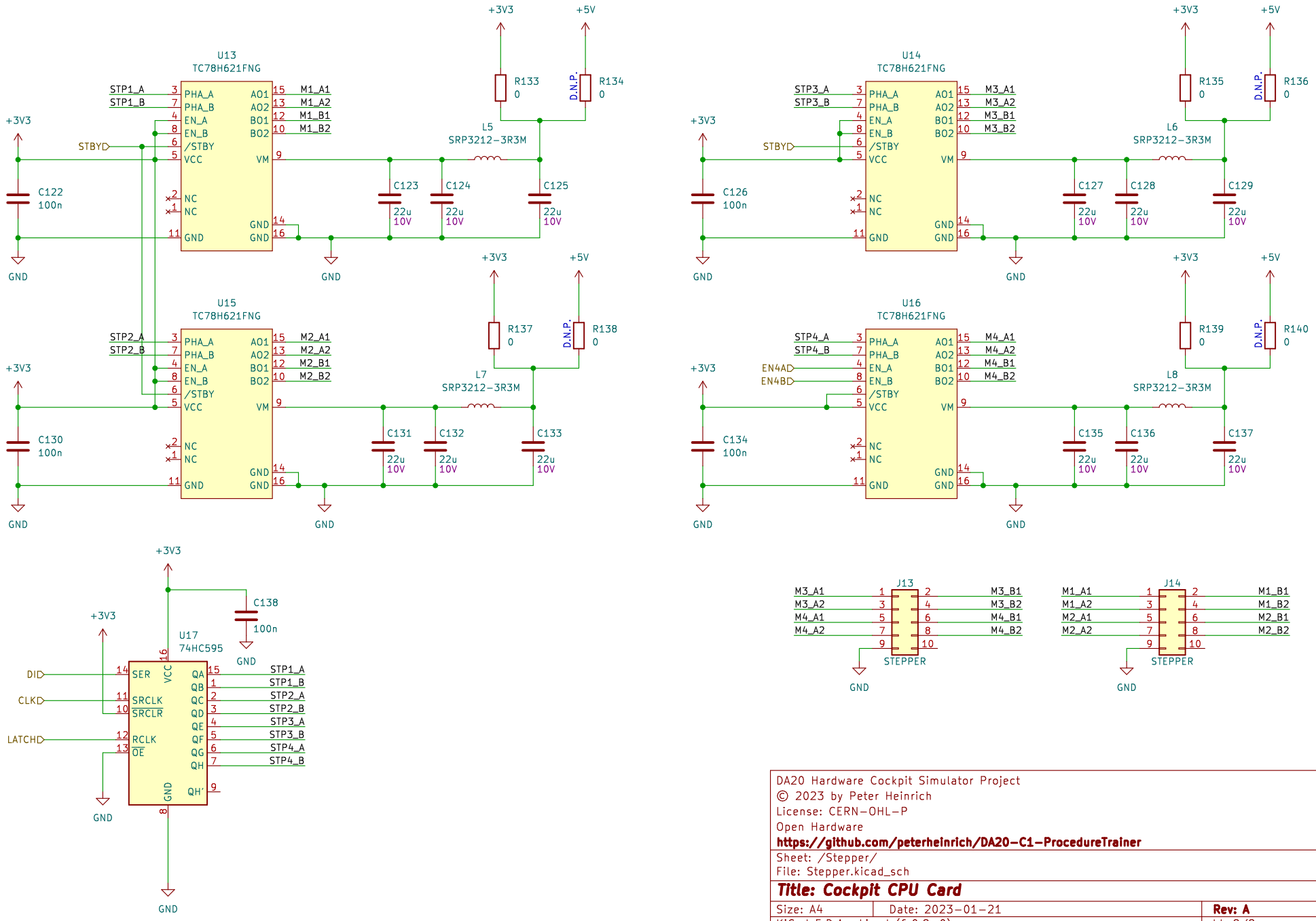
Sheet: /Encoder/
File: Encoder.kicad_sch

Title: Cockpit CPU Card

Size: A4	Date: 2023-01-21	**Rev: A**
KiCad E.D.A. kicad (6.0.9-0)		Id: 8/8



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Sheet: /Stepper/
File: Stepper.kicad_sch

Title: Cockpit CPU Card

Size: A4	Date: 2023-01-21	**Rev: A**
KiCad E.D.A. kicad (6.0.9-0)		Id: 9/8