

COL_0

COL_1

COL_2

COL_3

COL_4

COL_5

COL_6

COL_7

COL_8

COL_9

COL_10

COL_11

COL_12

COL_13

COL_14

COL_15

coil_matrix

File: coil_matrix.kicad_sch

ROW_0

ROW_1

ROW_2

ROW_3

ROW_4

ROW_5

ROW_6

ROW_7

ROW_8

ROW_9

ROW_10

ROW_11

ROW_12

ROW_13

ROW_14

ROW_15

ROW_0

up_driver

COIL

IO_ROW0

gpio

VCC

File: up_driver.kicad_sch

ROW_1

up_driver1

COIL

IO_ROW1

gpio

VCC

File: up_driver.kicad_sch

ROW_2

up_driver2

COIL

IO_ROW2

gpio

VCC

File: up_driver.kicad_sch

ROW_3

up_driver3

COIL

IO_ROW3

gpio

VCC

File: up_driver.kicad_sch

ROW_4

up_driver4

COIL

IO_ROW4

gpio

VCC

File: up_driver.kicad_sch

ROW_5

up_driver5

COIL

IO_ROW5

gpio

VCC

File: up_driver.kicad_sch

ROW_6

up_driver6

COIL

IO_ROW6

gpio

VCC

File: up_driver.kicad_sch

ROW_7

up_driver7

COIL

IO_ROW7

gpio

VCC

File: up_driver.kicad_sch

ROW_8

up_driver8

COIL

IO_ROW8

gpio

VCC

File: up_driver.kicad_sch

ROW_9

up_driver9

COIL

IO_ROW9

gpio

VCC

File: up_driver.kicad_sch

ROW_10

up_driver10

COIL

IO_ROW10

gpio

VCC

File: up_driver.kicad_sch

ROW_11

up_driver11

COIL

IO_ROW11

gpio

VCC

File: up_driver.kicad_sch

ROW_12

up_driver12

COIL

IO_ROW12

gpio

VCC

File: up_driver.kicad_sch

ROW_13

up_driver13

COIL

IO_ROW13

gpio

VCC

File: up_driver.kicad_sch

ROW_14

up_driver14

COIL

IO_ROW14

gpio

VCC

File: up_driver.kicad_sch

ROW_15

up_driver15

COIL

IO_ROW15

gpio

VCC

File: up_driver.kicad_sch

IO_COLO

IO_COL1

IO_COL2

IO_COL3

IO_COL4

IO_COL5

IO_COL6

IO_COL7

IO_COL8

IO_COL9

IO_COL10

IO_COL11

IO_COL12

IO_COL13

IO_COL14

IO_COL15

rp2040

File: rp2040.kicad_sch

SR_CLKD

SR_SERD

SR_LATCHD

SR_END

CLK

SER

LATCH

OE

row_shift_registers

File: row_shift_registers.kicad_sch

ROW0

ROW1

ROW2

ROW3

ROW4

ROW5

ROW6

ROW7

ROW8

ROW9

ROW10

ROW11

ROW12

ROW13

ROW14

ROW15

IO_ROW0

IO_ROW1

IO_ROW2

IO_ROW3

IO_ROW4

IO_ROW5

IO_ROW6

IO_ROW7

IO_ROW8

IO_ROW9

IO_ROW10

IO_ROW11

IO_ROW12

IO_ROW13

IO_ROW14

IO_ROW15

BEMF

VCC

VCC

File: bemf.kicad_sch

VCC

1

2

3

J2

3

2

1

J3

GND

Sheet: /

File: magtrix.kicad_sch

Title:

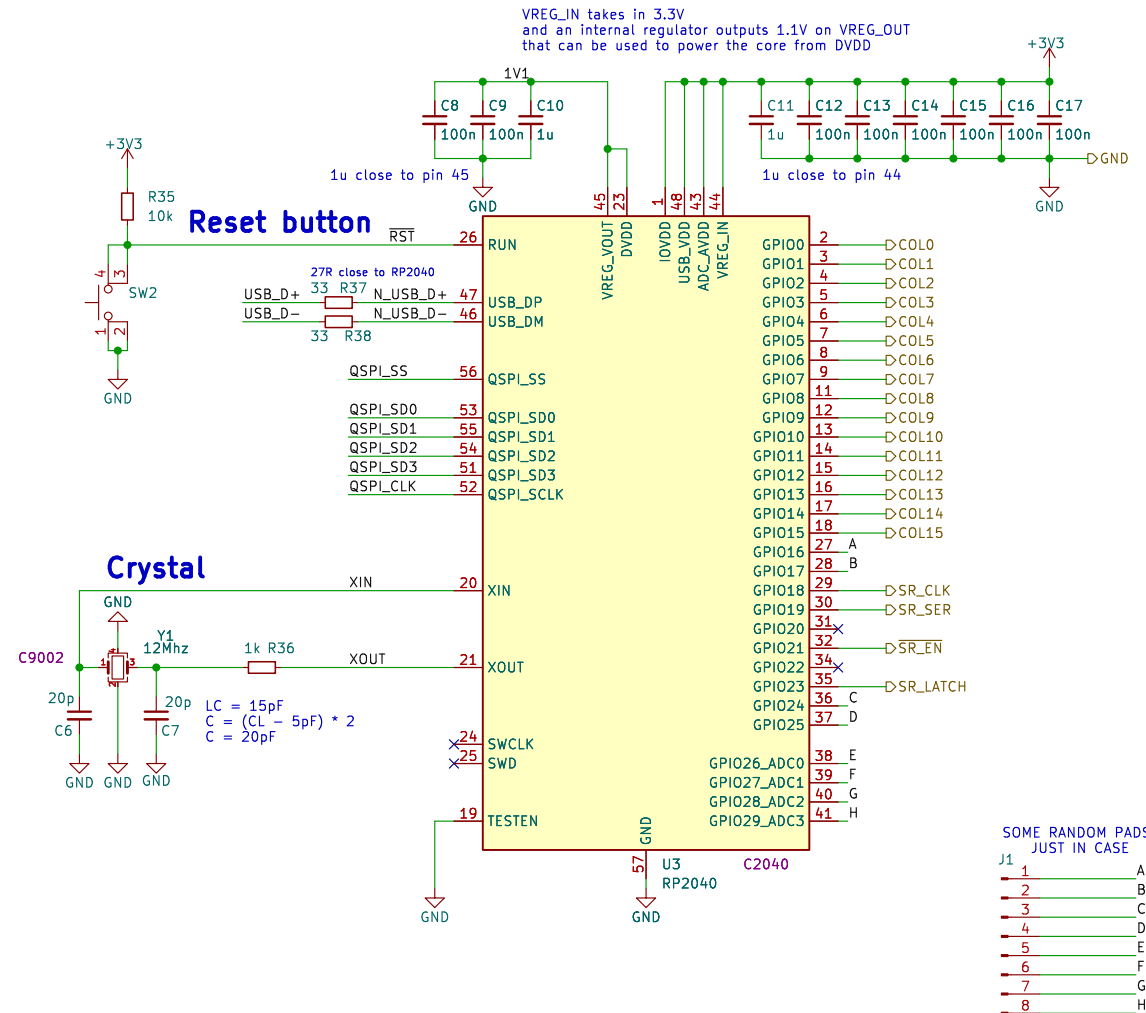
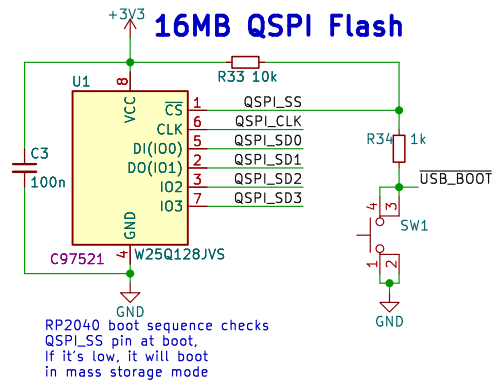
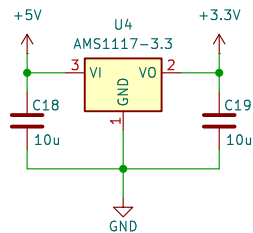
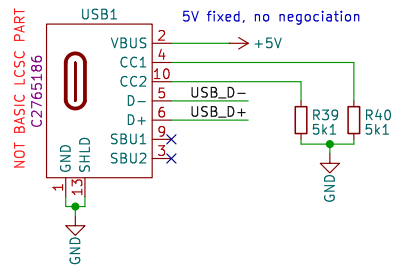
Size: A4

Date: 2024-07-23

KiCad E.D.A. 8.0.3

Rev:

Id: 1/37



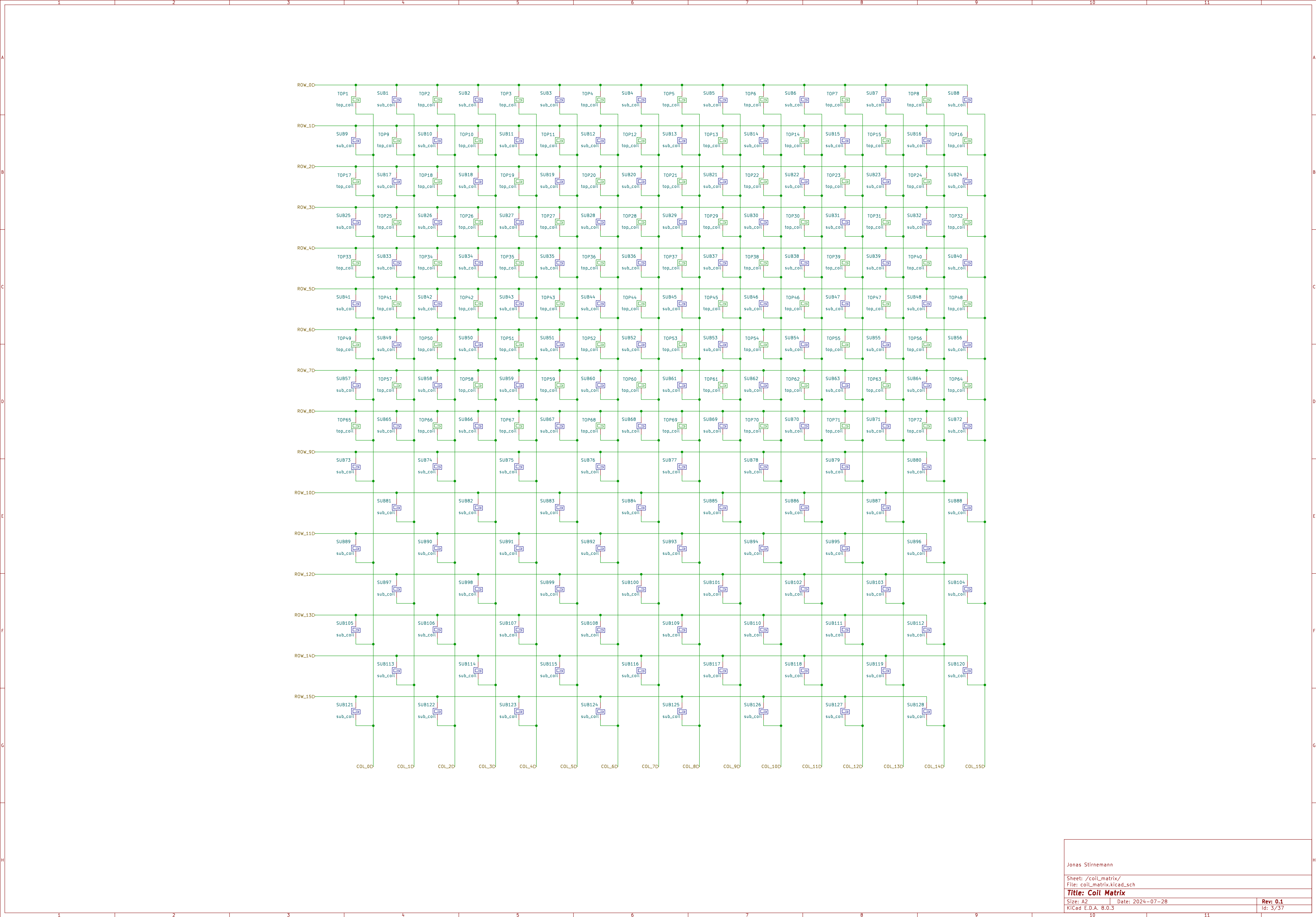
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File: rp2040.kicad_sch

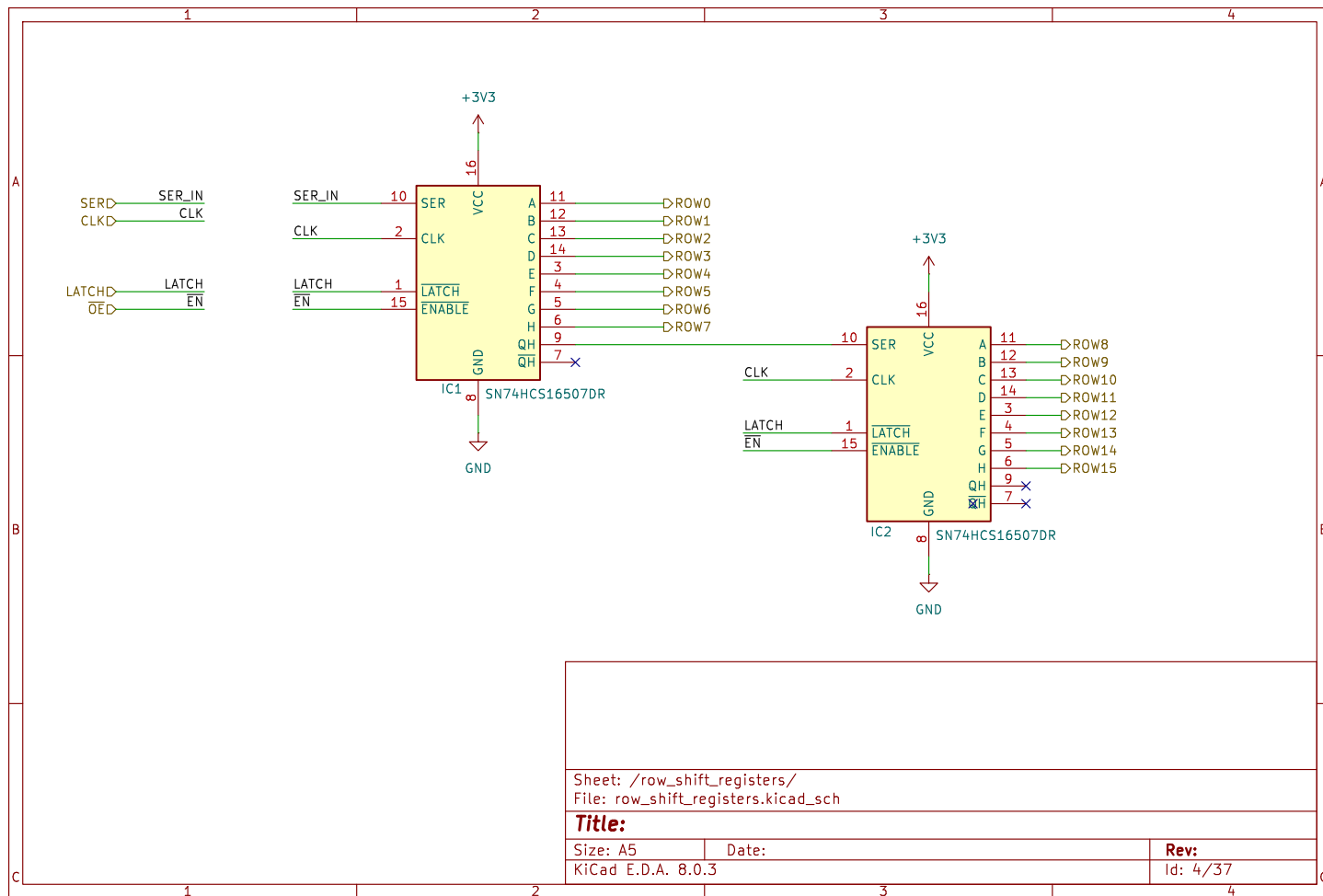
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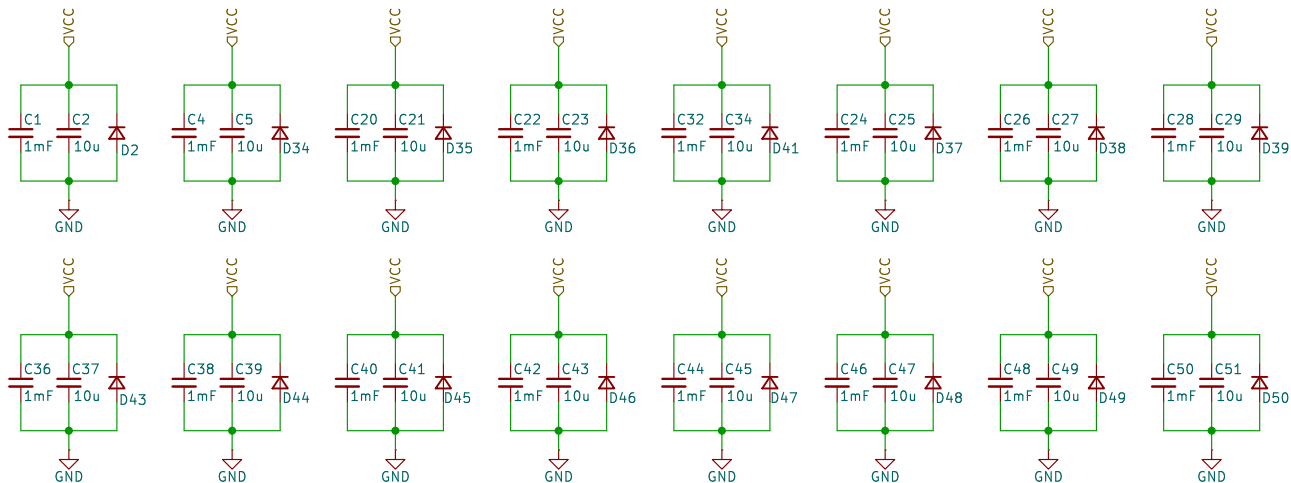
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KiCad E.D.A. 8.0.3

Date:

Rev:
Id: 2/37







- LOCAL BULK CAPACITORS
- BASIC DECOUPLING
- FLYBACK DIODES

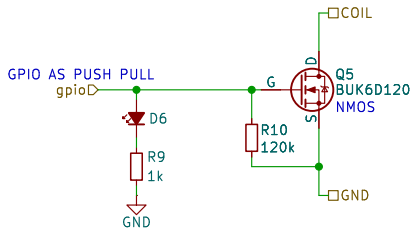
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File: bemf.kicad_sch

Title:

Size: A5
KiCad E.D.A. 8.0.3

Date:

Rev:
Id: 5/37



Jonas Stirnemann

Sheet: /driver5/
File: driver.kicad_sch

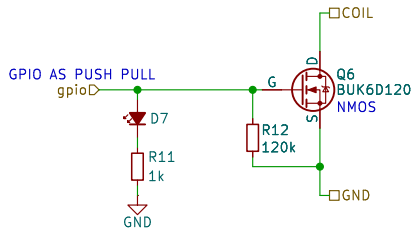
Title: Coil driver FET

Size: User Date: 2024-07-28

KiCad E.D.A. 8.0.3

Rev: 0.1

Id: 6/37



Jonas Stirnemann

Sheet: /driver6/
File: driver.kicad_sch

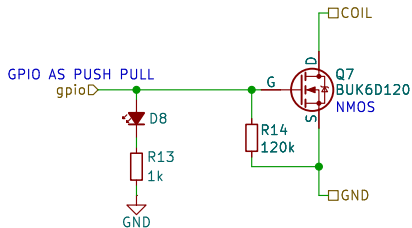
Title: Coil driver FET

Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 7/37



Jonas Stirnemann

Sheet: /driver7/
File: driver.kicad_sch

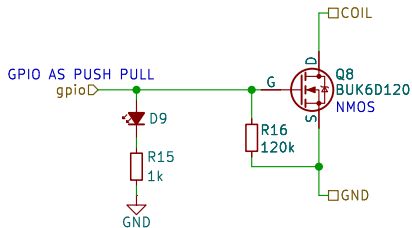
Title: Coil driver FET

Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 8/37



Jonas Stirnemann

Sheet: /driver8/
File: driver.kicad_sch

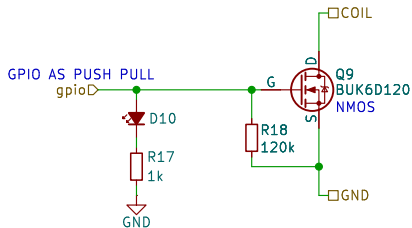
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 9/37



Jonas Stirnemann

Sheet: /driver9/
File: driver.kicad_sch

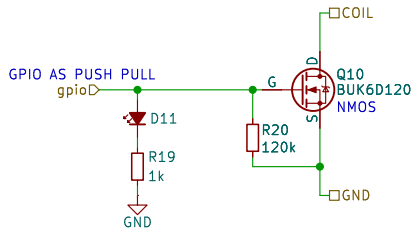
Title: Coil driver FET

Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 10/37



Jonas Stirnemann

Sheet: /driver10/
File: driver.kicad_sch

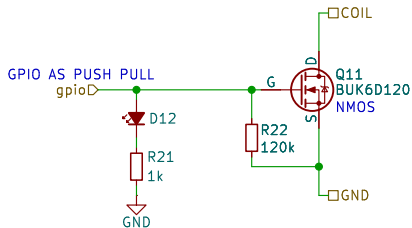
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 11/37



Jonas Stirnemann

Sheet: /driver11/
File: driver.kicad_sch

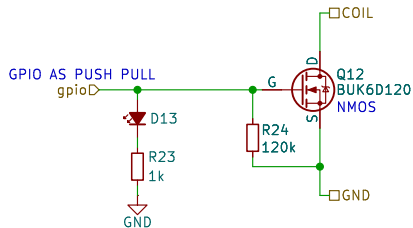
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 12/37



Jonas Stirnemann

Sheet: /driver12/
File: driver.kicad_sch

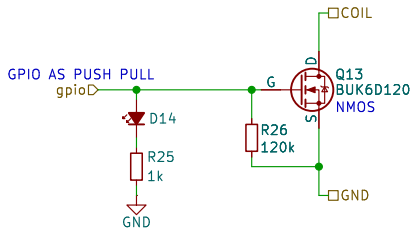
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 13/37



Jonas Stirnemann

Sheet: /driver13/
File: driver.kicad_sch

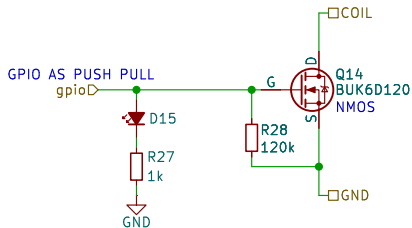
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Size: User Date: 2024-07-28

KiCad E.D.A. 8.0.3

Rev: 0.1

Id: 14/37



Jonas Stirnemann

Sheet: /driver14/
File: driver.kicad_sch

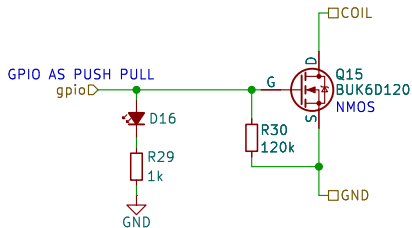
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 15/37



Jonas Stirnemann

Sheet: /driver15/
File: driver.kicad_sch

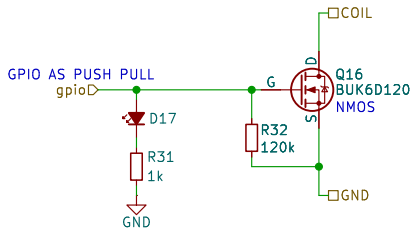
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 16/37



Jonas Stirnemann

Sheet: /driver16/
File: driver.kicad_sch

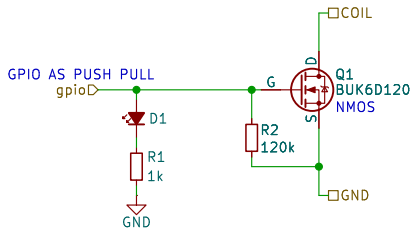
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 17/37



Jonas Stirnemann

Sheet: /driver2/
File: driver.kicad_sch

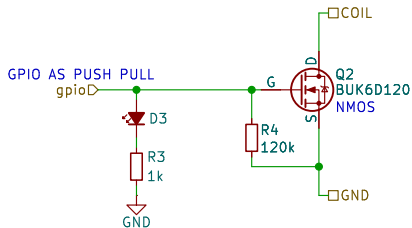
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 18/37



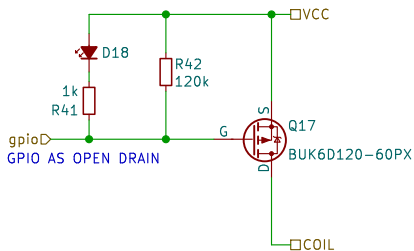
Jonas Stirnemann

Sheet: /driver1/
File: driver.kicad_sch

Title: Coil driver FET

Size: User Date: 2024-07-28
KiCad E.D.A. 8.0.3

Rev: 0.1
Id: 19/37



Jonas Stirnemann

Sheet: /up_driver/
File: up_driver.kicad_sch

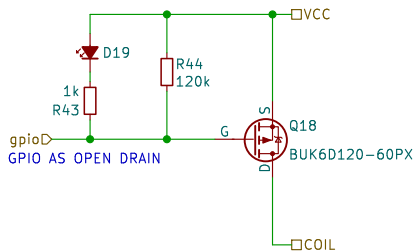
Title: Row driver

Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 20/37



Jonas Stirnemann

Sheet: /up_driver1/
File: up_driver.kicad_sch

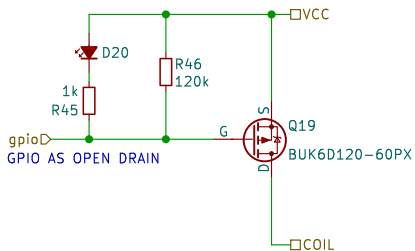
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 22/37



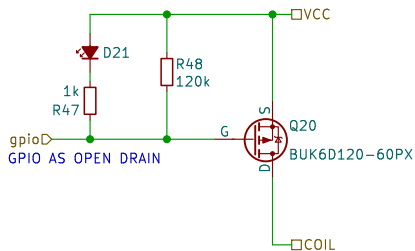
Jonas Stirnemann

Sheet: /up_driver2/
File: up_driver.kicad_sch

Title: Row driver

Size: User Date: 2024-07-28
KiCad E.D.A. 8.0.3

Rev: 0.1
Id: 23/37



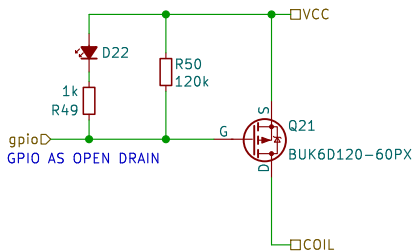
Jonas Stirnemann

Sheet: /up_driver3/
File: up_driver.kicad_sch

Title: Row driver

Size: User Date: 2024-07-28
KiCad E.D.A. 8.0.3

Rev: 0.1
Id: 24/37



Jonas Stirnemann

Sheet: /up_driver4/
File: up_driver.kicad_sch

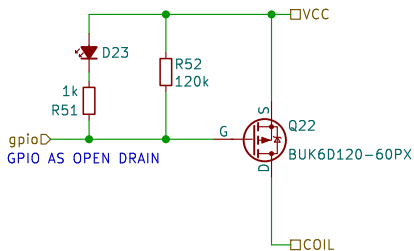
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 25/37



Jonas Stirnemann

Sheet: /up_driver5/
File: up_driver.kicad_sch

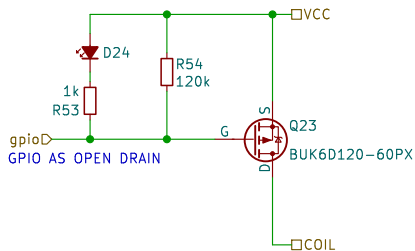
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 26/37



Jonas Stirnemann

Sheet: /up_driver6/
File: up_driver.kicad_sch

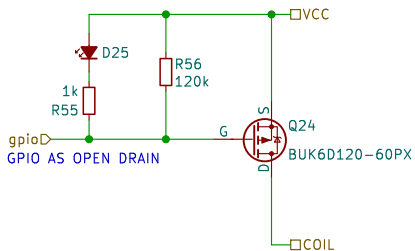
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 27/37



Jonas Stirnemann

Sheet: /up_driver7/

File: up_driver.kicad_sch

Title: Row driver

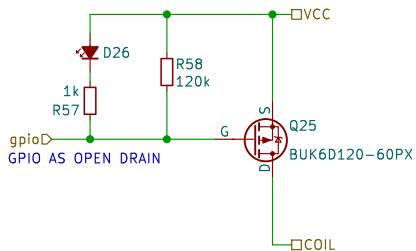
Size: User

Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 28/37



Jonas Stirnemann

Sheet: /up_driver8/
File: up_driver.kicad_sch

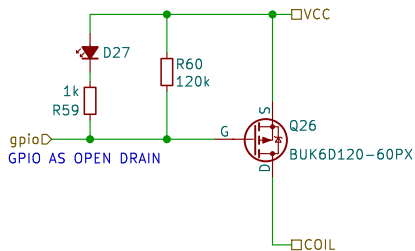
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 29/37



Jonas Stirnemann

Sheet: /up_driver9/

File: up_driver.kicad_sch

Title: Row driver

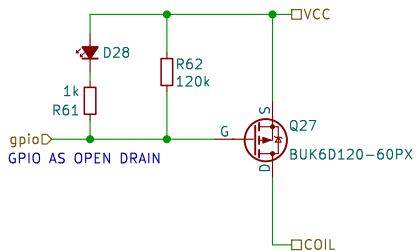
Size: User

Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 30/37



Jonas Stirnemann

Sheet: /up_driver10/
File: up_driver.kicad_sch

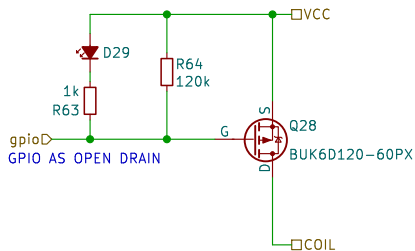
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 31/37



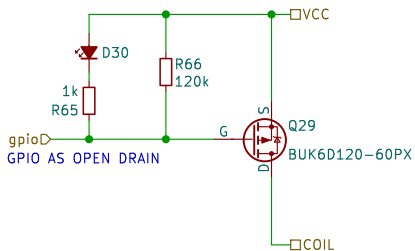
Jonas Stirnemann

Sheet: /up_driver11/
File: up_driver.kicad_sch

Title: Row driver

Size: User Date: 2024-07-28
KiCad E.D.A. 8.0.3

Rev: 0.1
Id: 32/37



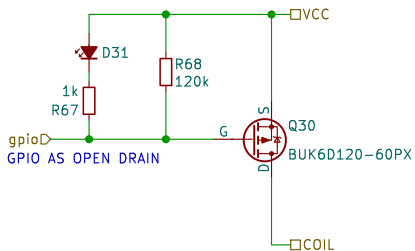
Jonas Stirnemann

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File: up_driver.kicad_sch

Title: Row driver

Size: User Date: 2024-07-28
KiCad E.D.A. 8.0.3

Rev: 0.1
Id: 33/37



Jonas Stirnemann

Sheet: /up_driver13/
File: up_driver.kicad_sch

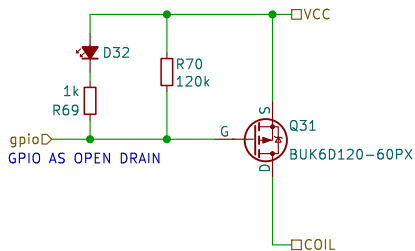
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 34/37



Jonas Stirnemann

Sheet: /up_driver14/
File: up_driver.kicad_sch

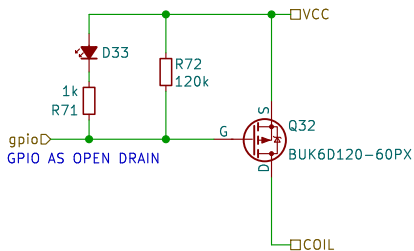
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Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 35/37



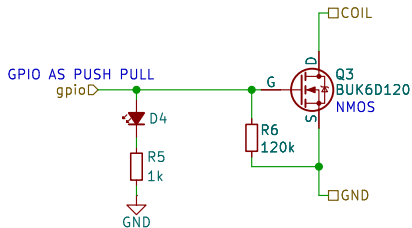
Jonas Stirnemann

Sheet: /up_driver15/
File: up_driver.kicad_sch

Title: Row driver

Size: User Date: 2024-07-28
KiCad E.D.A. 8.0.3

Rev: 0.1
Id: 36/37



Jonas Stirnemann

Sheet: /driver3/
File: driver.kicad_sch

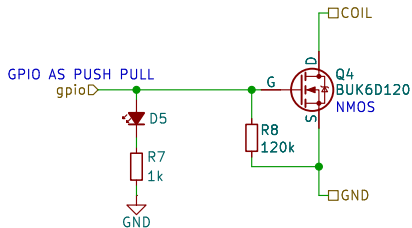
Title: Coil driver FET

Size: User Date: 2024-07-28

KiCad E.D.A. 8.0.3

Rev: 0.1

Id: 37/37



Jonas Stirnemann

Sheet: /driver4/
File: driver.kicad_sch

Title: Coil driver FET

Size: User Date: 2024-07-28

Rev: 0.1

KiCad E.D.A. 8.0.3

Id: 38/37