

github.com/jfleitz/gp-mpu

ePinball

Sheet: /

File: gp-mpu.kicad\_sch

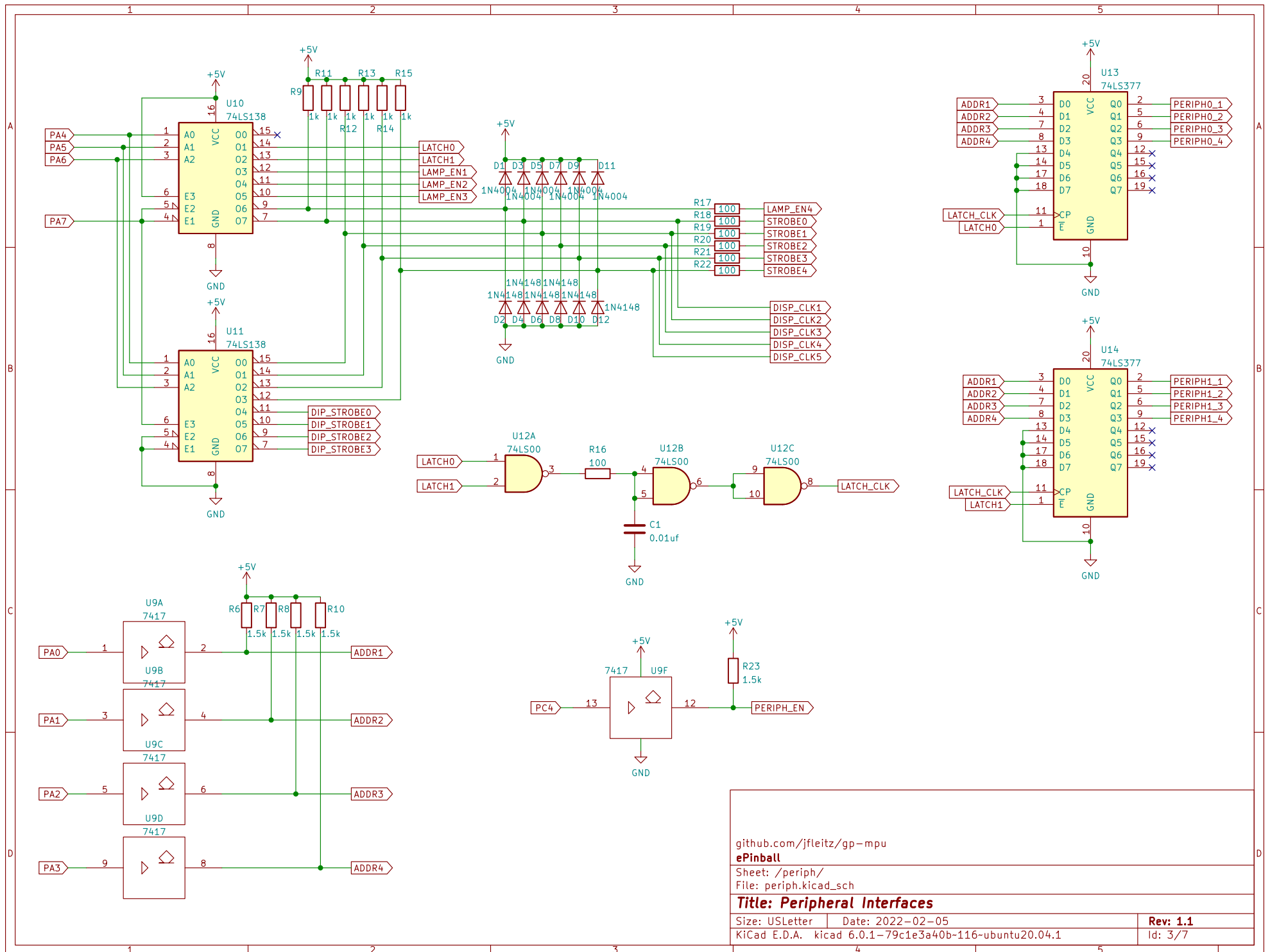
**Title: CPU and Memory**

Size: USLetter Date: 2022-02-05

KiCad E.D.A. kicad 6.0.1-79c1e3a40b-116-ubuntu20.04.1

**Rev: 1.1**

Id: 1/7



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Sheet: /periph/  
File: periph.kicad\_sch

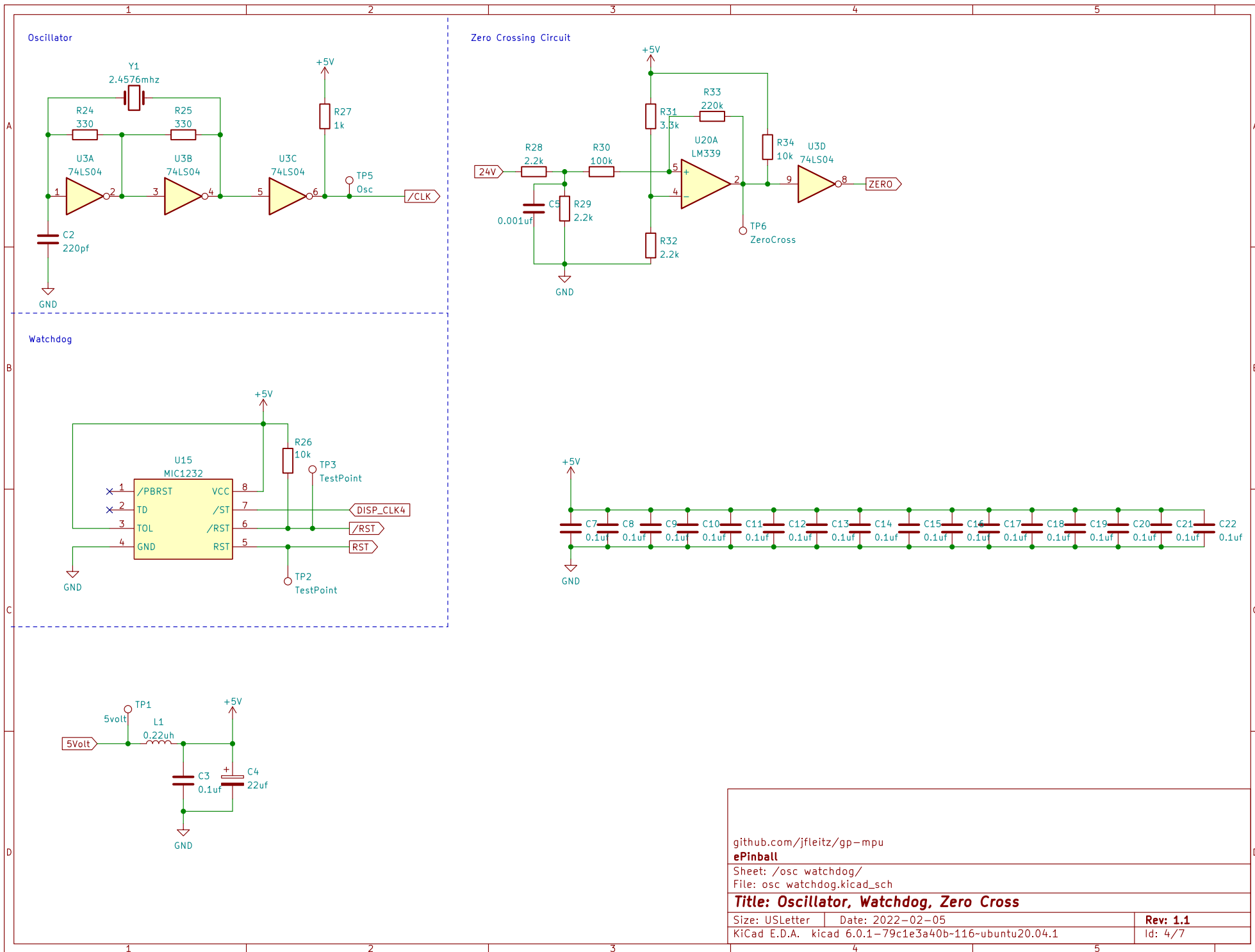
# **Title: Peripheral Interfaces**

Size: USLetter Date: 2022-02-05

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Rev: 1.1

Id: 3/7



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Sheet: /osc watchdog/

File: osc\_watchdog.kicad\_sch

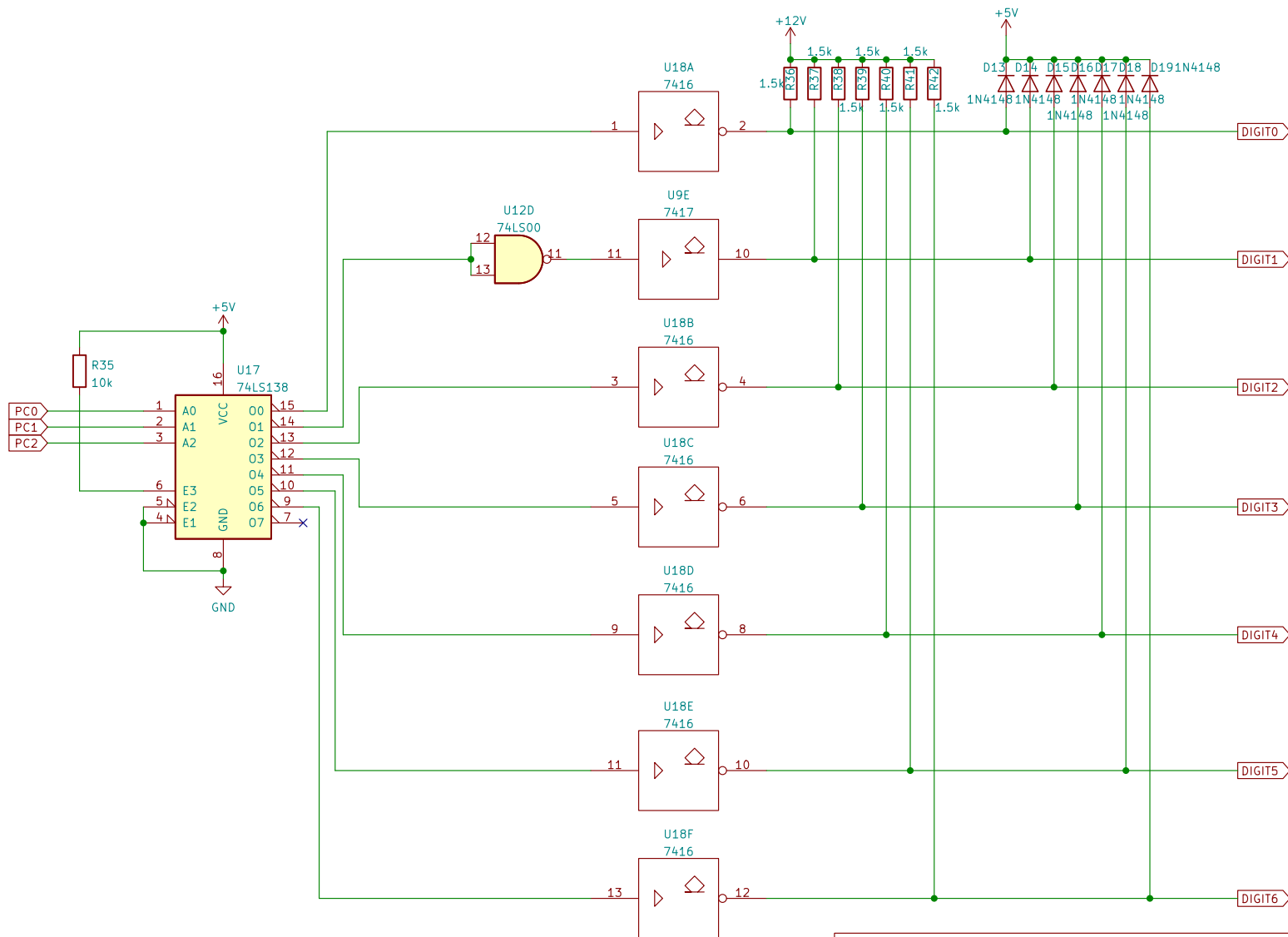
**Title: Oscillator, Watchdog, Zero Cross**

Size: USLetter Date: 2022-02-05

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Id: 4/7



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Sheet: /Displays/

File: display.kicad\_sch

**Title: Display Digit Drivers**

Size: USLetter Date: 2022-02-05

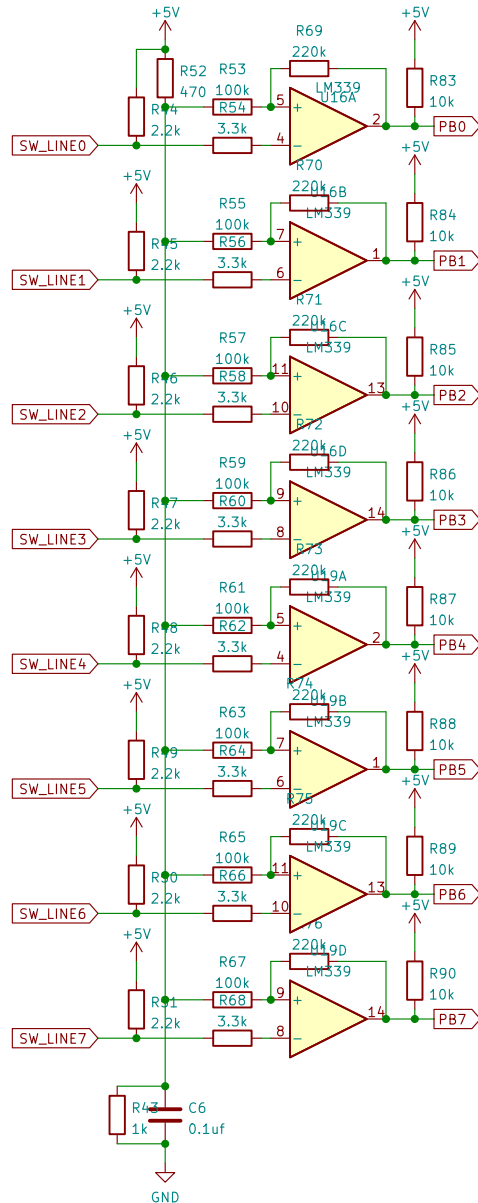
KiCad E.D.A. kicad 6.0.1-79c1e3a40b-116-ubuntu20.04.1

**Rev: 1.1**

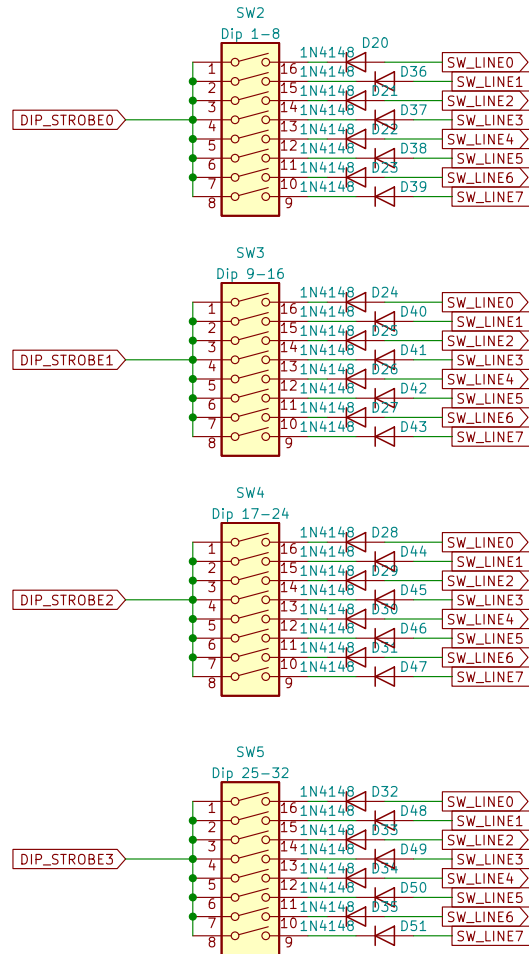
Id: 4/7

## Switch Matrix Input

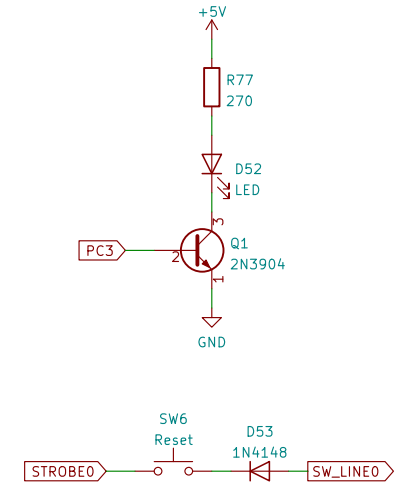
Need 10k pullup on each LM339 output  
Check 6.8k pullup for proper value on Cyclopes MPU  
Check 10k pulldown (looks like 1k pulldown??) on Cyclopes MPU



## Dip Switch Settings



## Diagnostic LED and Reset Switch



1.1: Update R52 = 470, R43 = 1k; Add R83-R90  
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Sheet: /switches/  
File: switches.kicad\_sch

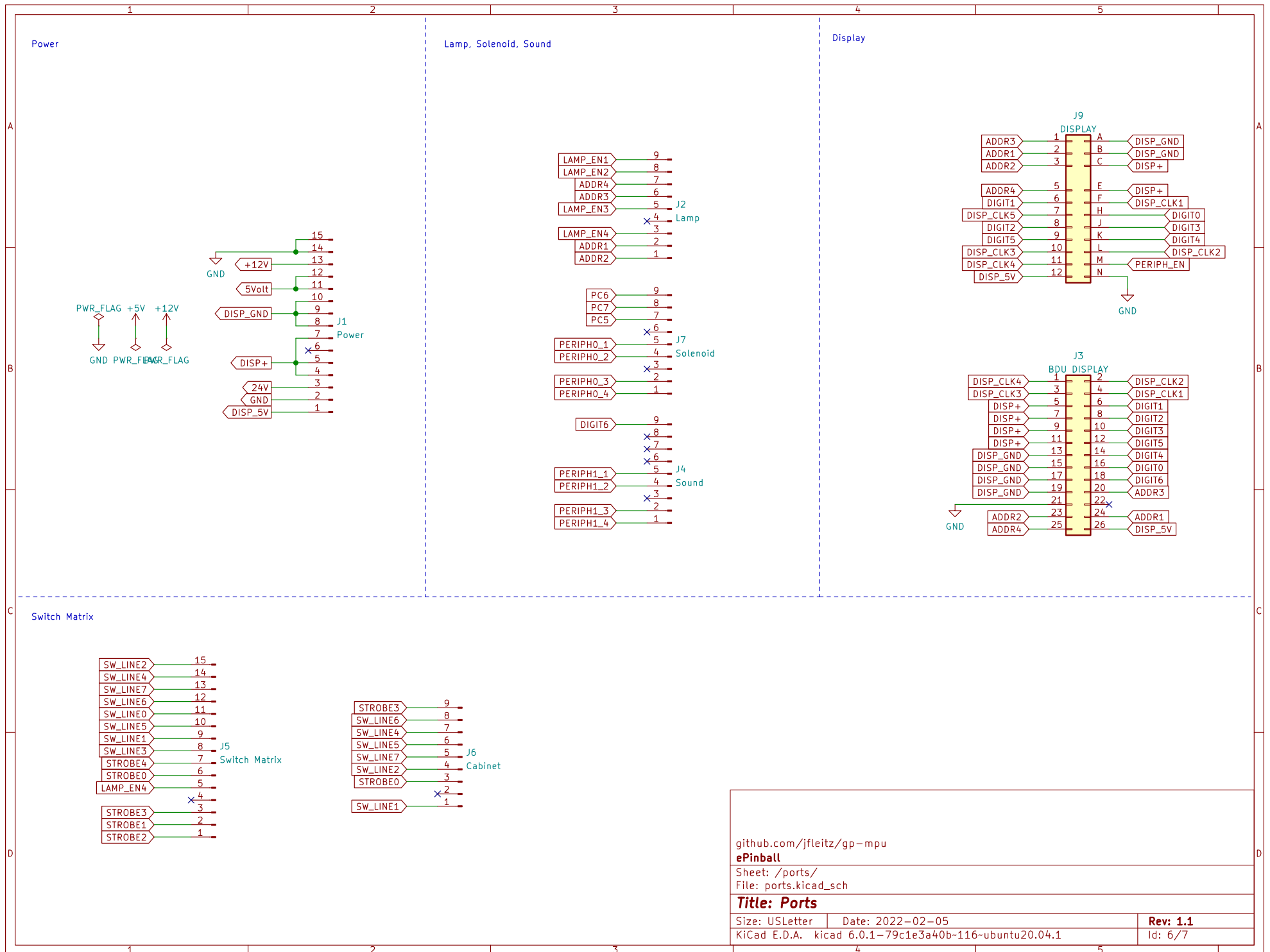
**Title: Switch Matrix, Dip Switches and Diag/Reset Sw**

Size: USLetter Date: 2022-02-05

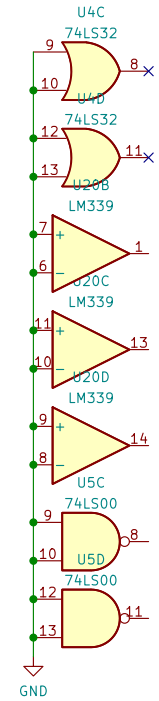
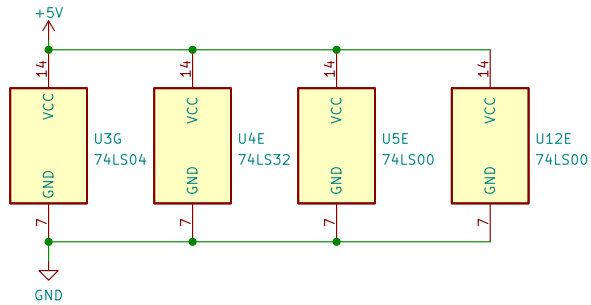
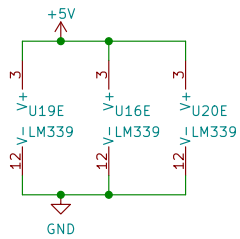
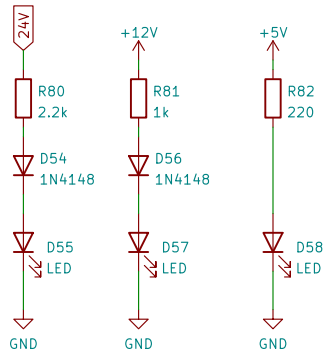
Rev: 1.1

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Id: 5/7



# Power Pins and NC pins



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Sheet: /PowerPins/  
File: powerpins.kicad\_sch

**Title: Power and Non-Connected pins**

Size: USLetter Date: 2022-02-05  
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Rev: 1.1  
Id: 7/7