

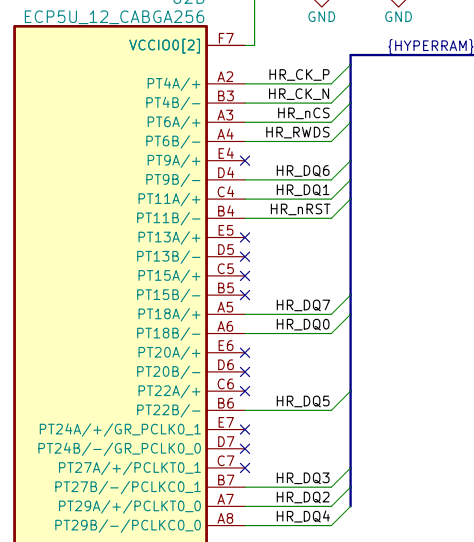
# ECP5 Mini

Following Black Mesa Lab's "S7 Mini" form factor

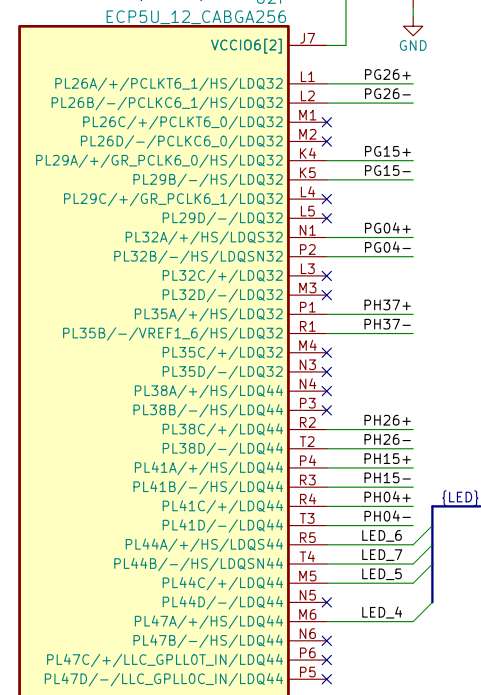
## IO Banks

## Breakout Pins

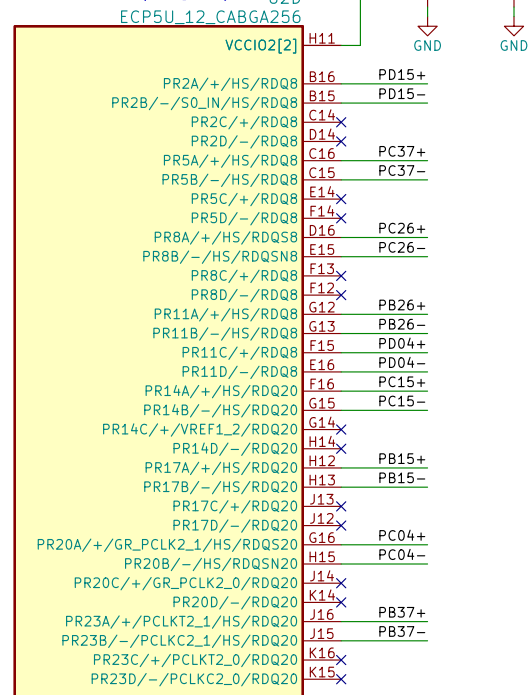
### Bank 0 (Top) 1V8 ONLY!



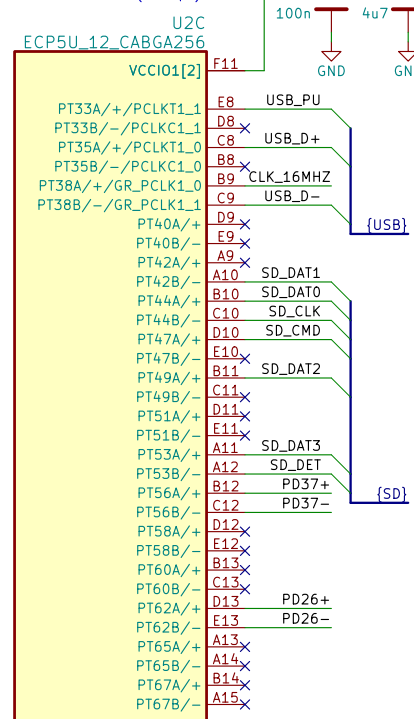
### Bank 6 (Left)



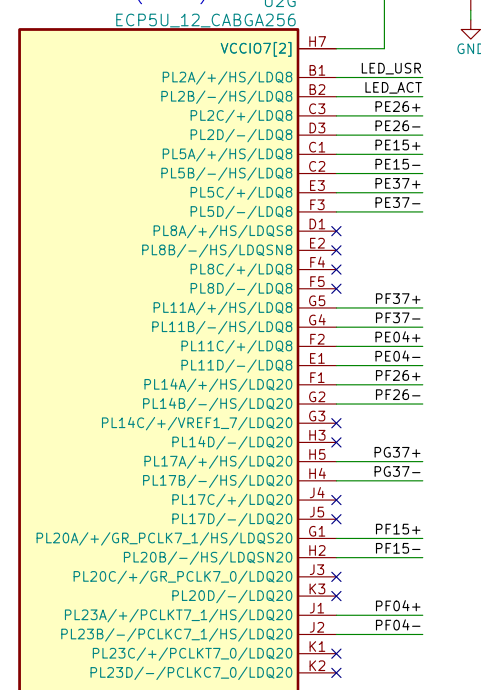
### Bank 2 (Right)



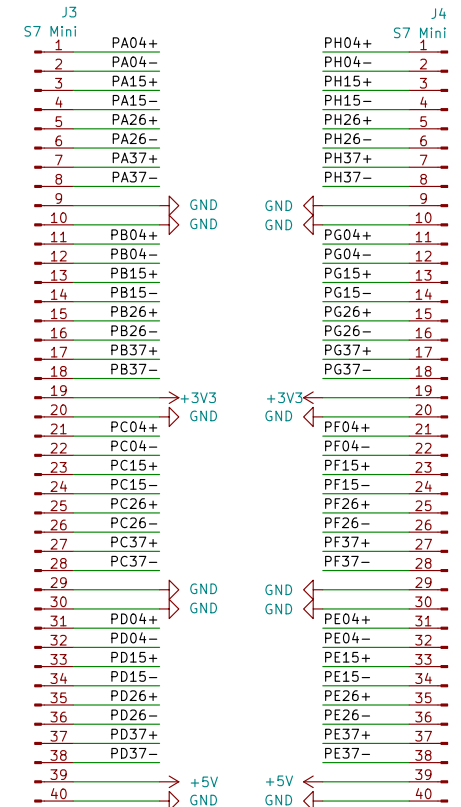
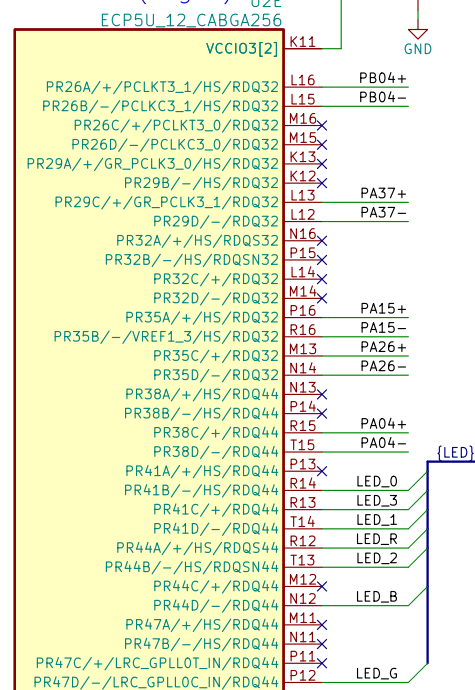
### Bank 1 (Top)



### Bank 7 (Left)



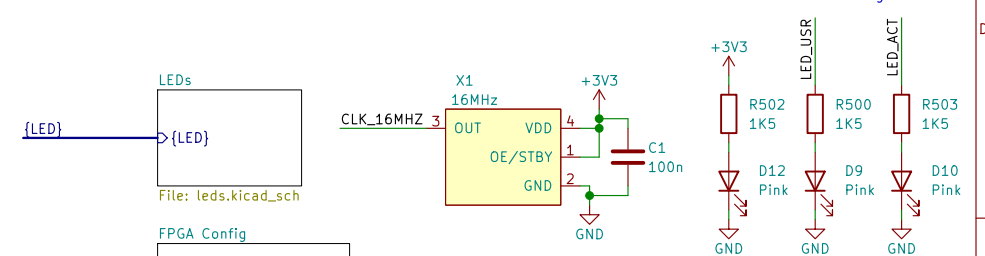
### Bank 3 (Right)



## Sub Sections

### Status LEDs

CDONE LED on config sheet



LENGTH MATCHING:  
id: hr\_ck\_skew  
netnames: "/HR\_CK\_[PN]"  
tolerance: 0.254 mm  
viallength: 1.6 mm

LENGTH MATCHING:  
id: hr  
netnames: "/HR\_[DQ][RWDS][CK]"  
tolerance: 1.27 mm  
viallength: 1.6 mm

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Sheet: /  
File: ecp5-mini.kicad\_sch

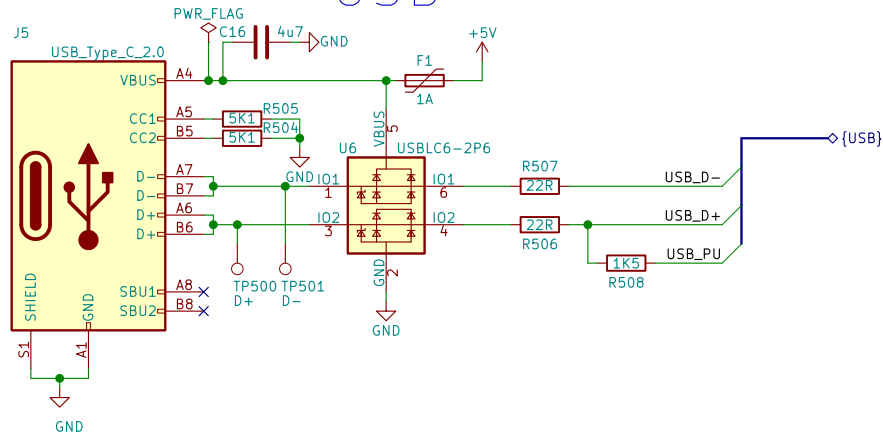
Title: ECP5 Mini

Size: A3 Date: 2020-12-31  
KiCad E.D.A. kicad 5.99.0-unknown-af2219ba7f106ubuntu20.04.1

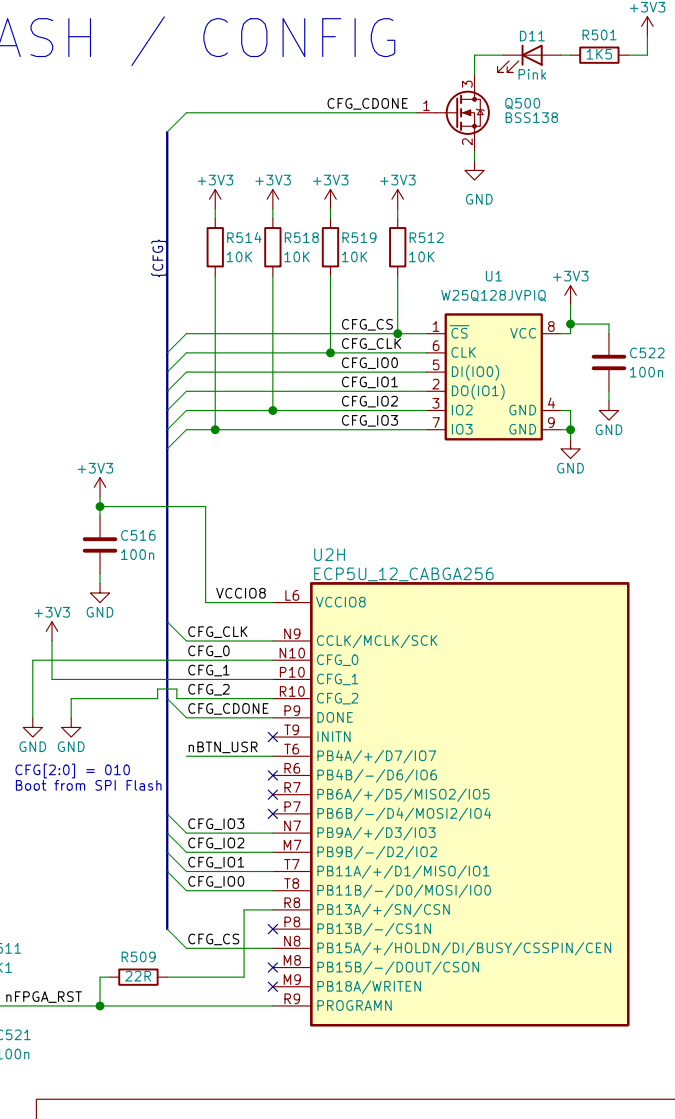
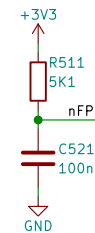
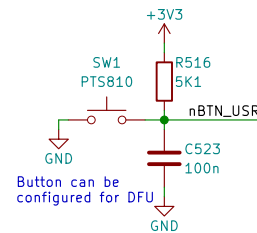
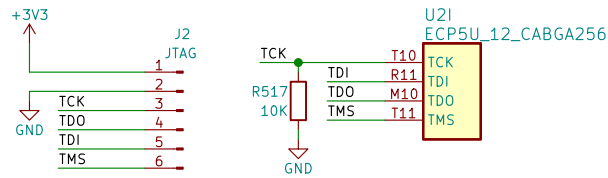
Rev: 0.2  
Id: 1/5

# FLASH / CONFIG

## USB



## JTAG



Josh Johnson

Sheet: /FPGA Config/  
File: fpga-config.kicad\_sch

Title: ECP5 Mini

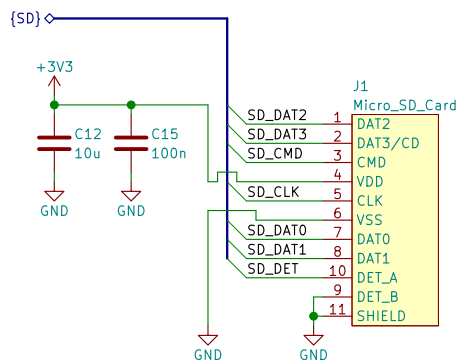
Size: A4 Date: 2020-12-31

KiCad E.D.A. kicad 5.99.0-unknown-af2219ba7f106ubuntu20.04.1

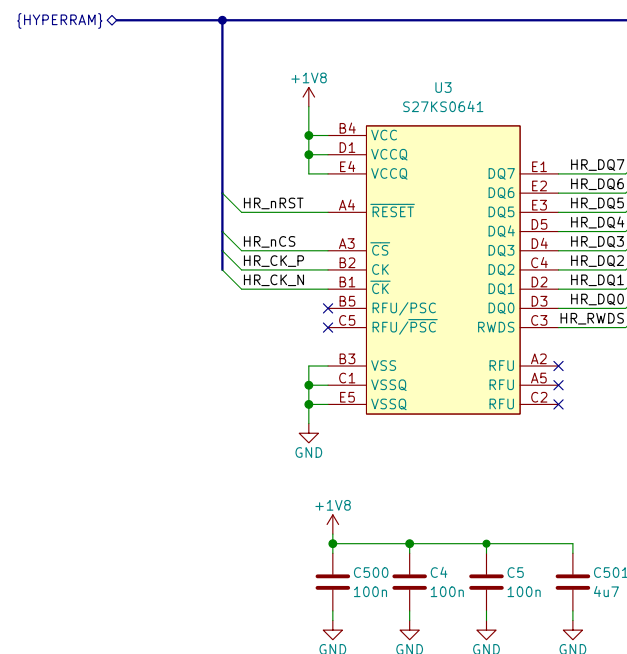
Rev: 0.2

Id: 2/5

## Micro SD Card



## Hyperram



Josh Johnson

Sheet: /SD / Hyperram/

File: storage.kicad\_sch

**Title: ECP5 Mini**

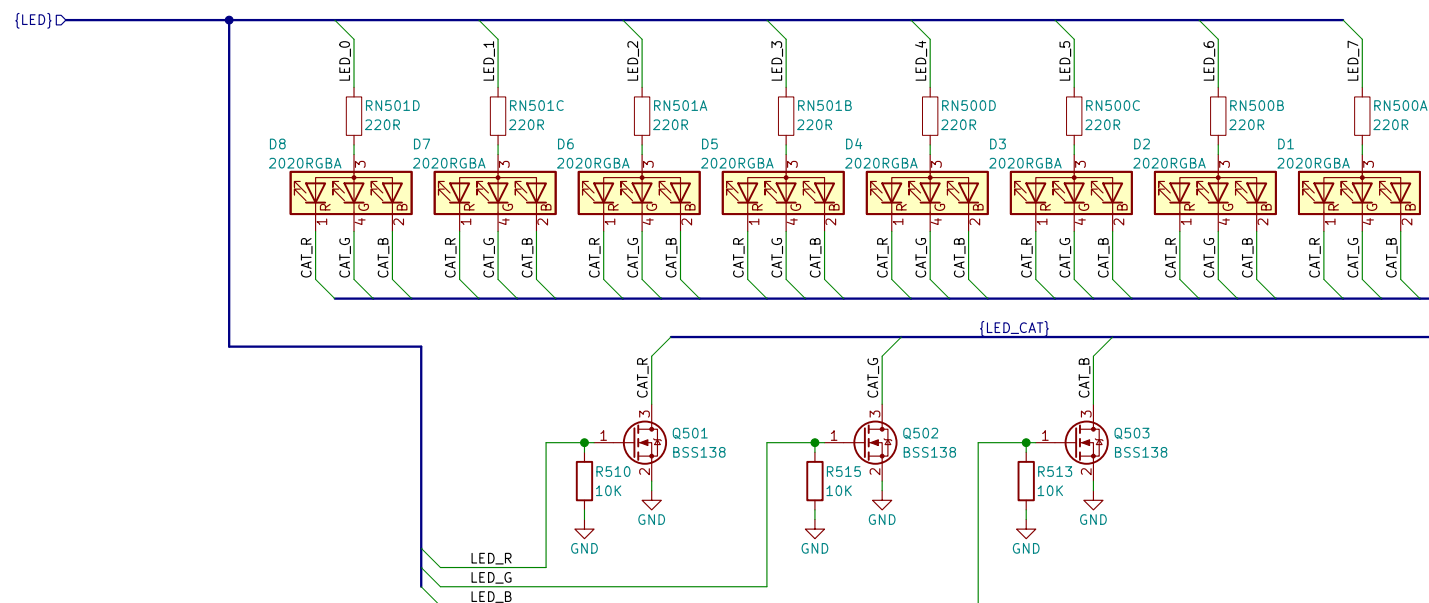
Size: A4 Date: 2020-12-31

KiCad E.D.A. kicad 5.99.0-unknown-af2219ba7f106ubuntu20.04.1

Rev: 0.2

Id: 3/5

LEDs



**Josh Johnson**

Sheet: /LEDs/  
File: leds.kicad\_sch

**Title:** *ECP5 Mini*

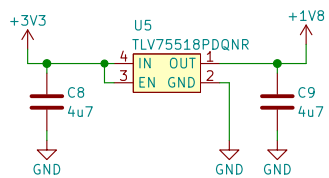
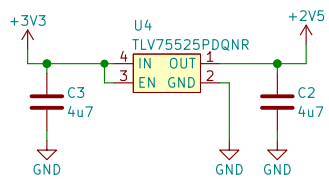
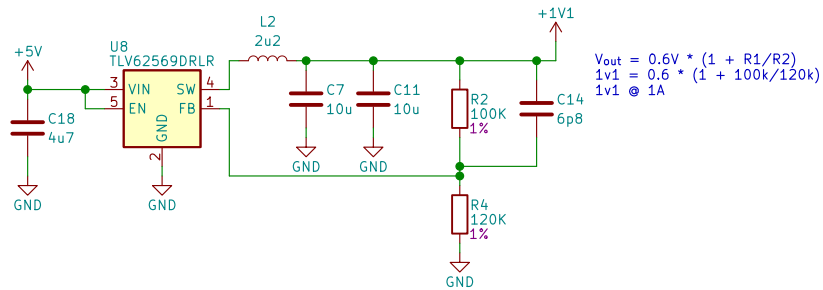
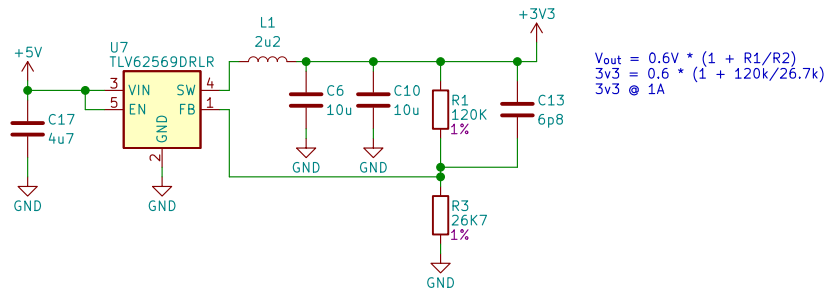
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|----------|------------------|
| Size: A4 | Date: 2020-12-31 |
|----------|------------------|

|              |   |
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| KiCad E.D.A. | kiCad 5.99.0-unknown-af2219ba7f106ubuntu20.04.1 |
|--------------|---|

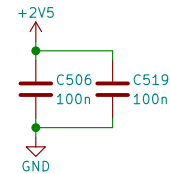
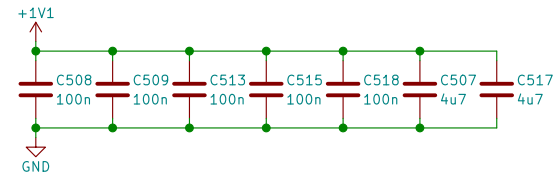
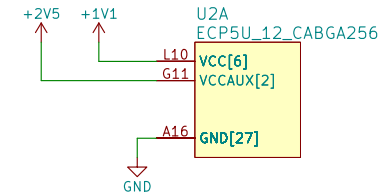
Rev: 0.2

Id: 4/5

# Power Supply



# VCore



Josh Johnson

Sheet: /Power/  
File: power.kicad\_sch

Title: ECP5 Mini

Size: A4 Date: 2020-12-31  
KiCad E.D.A. kicad 5.99.0-unknown-af2219ba7f106ubuntu20.04.1

Rev: 0.2  
Id: 5/5