

12345678

bus

power

buffers

fpanel

File: bus.kicad\_sch  
65816CPU

File: power.kicad\_sch  
GALS

File: buffers.kicad\_sch  
bus sharing

File: fpanel.kicad\_sch  
mapper

A

B

C

D

E

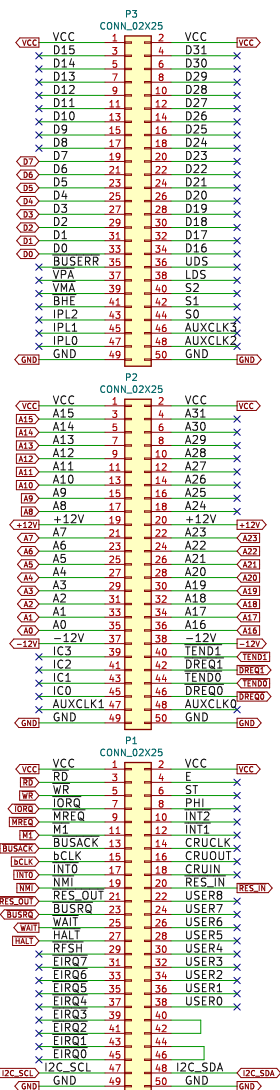
12345678

Sheet: /  
File: processor.65816.kicad\_sch

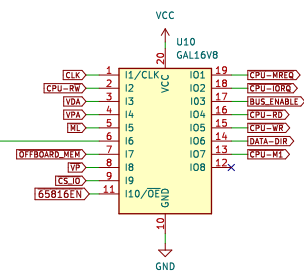
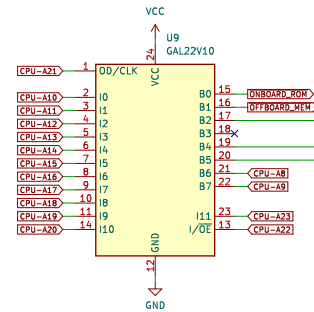
Title: Duodyne 65816 CPU board

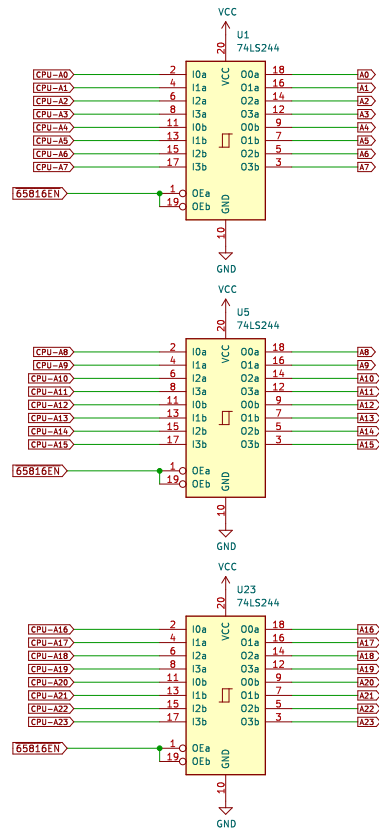
Size: B | Date: 2023-10-01 | Rev: V0.80

KiCad E.D.A. | kicad (6.0.11) | Id: 1/9

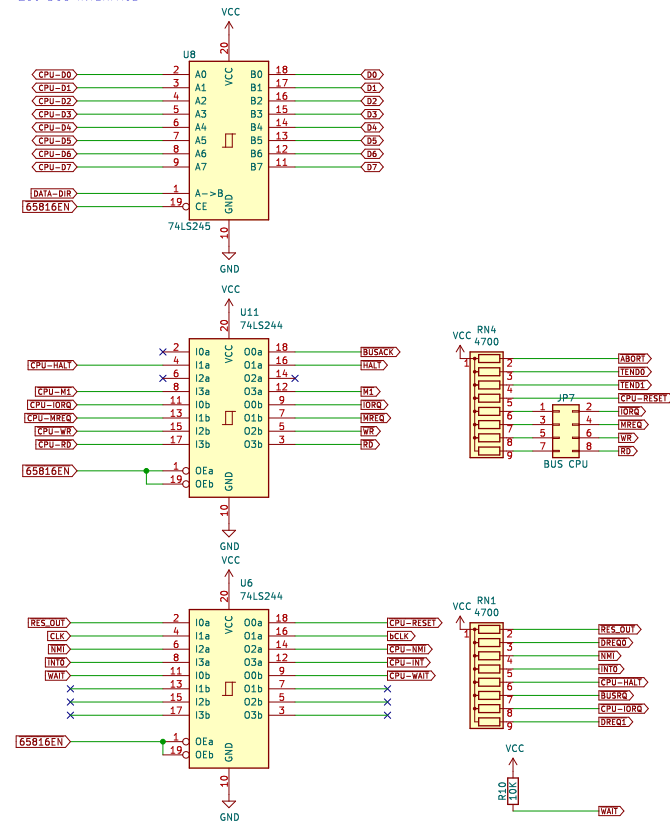


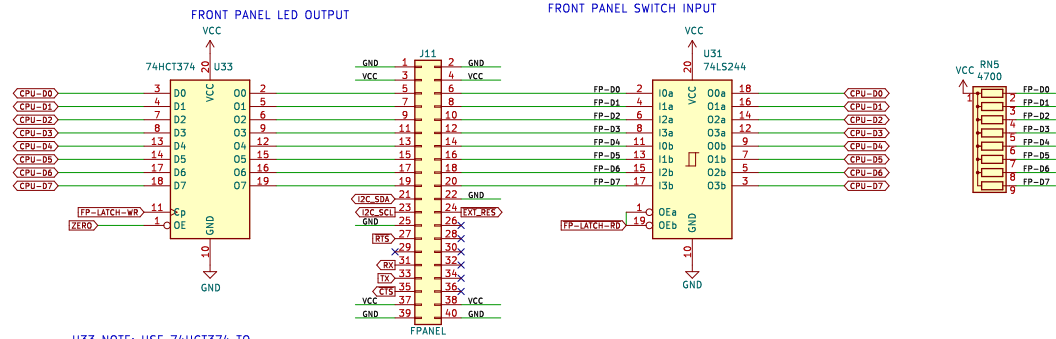






# Z80 BUS INTERFACE

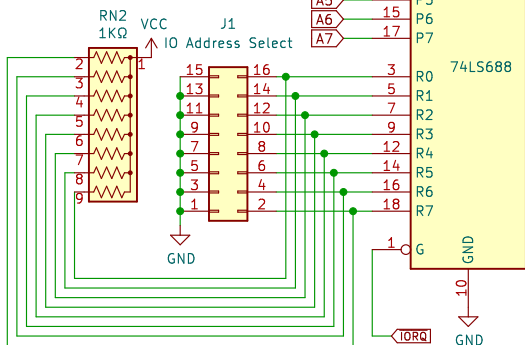






Note: IO Address Port \$95

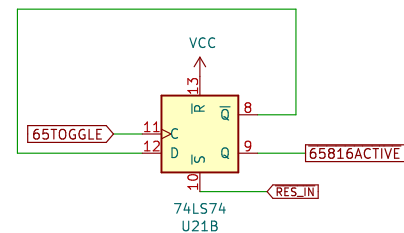
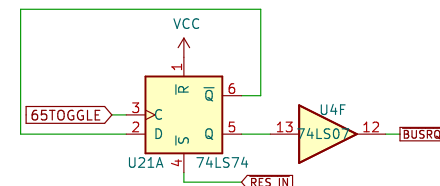
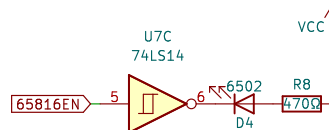
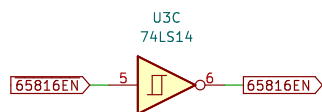
1-2 = off - A7 (high)  
 3-4 = on - A6 (low)  
 5-6 = on - A5 (low)  
 7-8 = off - A4 (high)  
 9-10 = on - A3 (low)  
 11-12 = off - A2 (high)  
 13-14 = on - A1 (low)  
 15-16 = off - A0 (high)



65816ACTIVE 3 J3  
 65816EN 2  
 1 6502 ONLY

GND  
 1&2 - stand alone  
 2&3 - secondary CPU

65816 RESET 1 RES\_OUT  
 2  
 3 65816EN 65816RST  
 1&2 - stand alone  
 2&3 - secondary CPU



Sheet: /bus sharing/

File: bussharing.kicad\_sch

**Title: Duodyne 65816 CPU board**

Size: A4 Date: 2023-10-01

KiCad E.D.A. kicad (6.0.11)

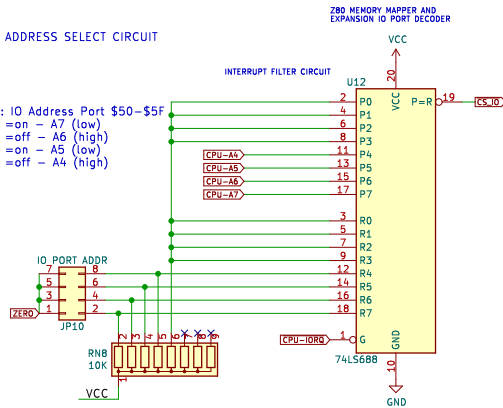
**Rev: V0.80**

Id: 9/9



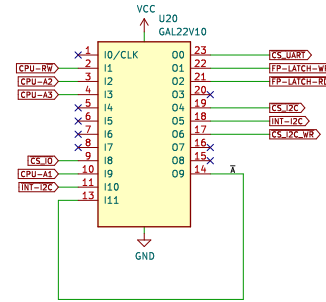
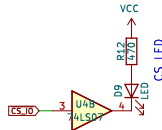
# IO ADDRESS SELECT CIRCUIT

Note: IO Address Port \$50-\$5F  
1-2 = on - A7 (low)  
3-4 = off - A6 (high)  
5-6 = on - A5 (low)  
7-8 = off - A4 (high)

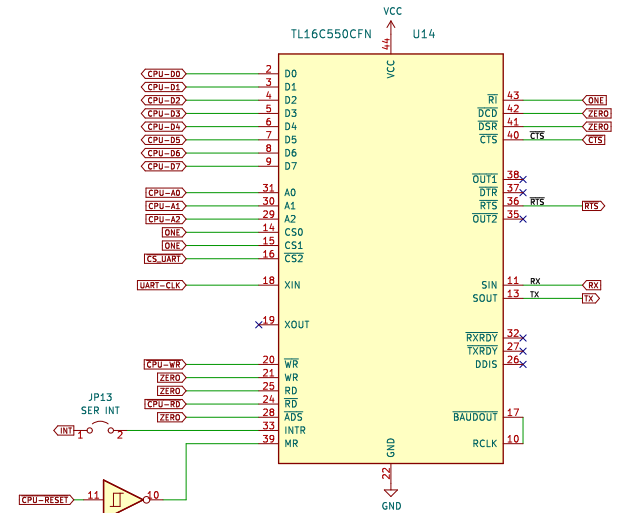
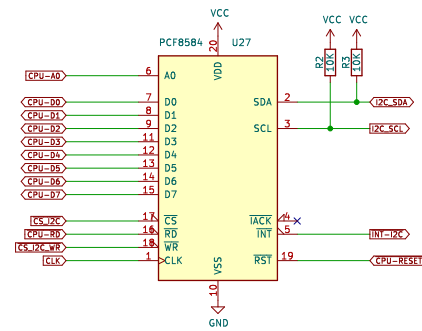
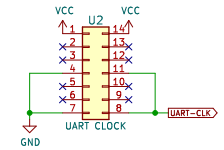


## Z80 MEMORY MAPPER AND EXPANSION IO PORT DECODER

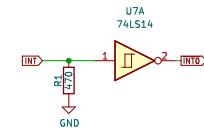
### INTERRUPT FILTER CIRCUIT



## 1.8432 OR 7.3728 MHz TTL OSCILLATOR



NOTE: INTERRUPTS RELY ON 4700 OHM PULL UP RESISTOR ON PROCESSOR



Sheet: /mapper/	File: mapper.kicad_sch	
<b>Title: Duodyne 65816 CPU board</b>		
Size: B	Date: 2023-10-01	Rev: V0.80
KiCad E.D.A. kicad (6.0.11)		Id: 11/9