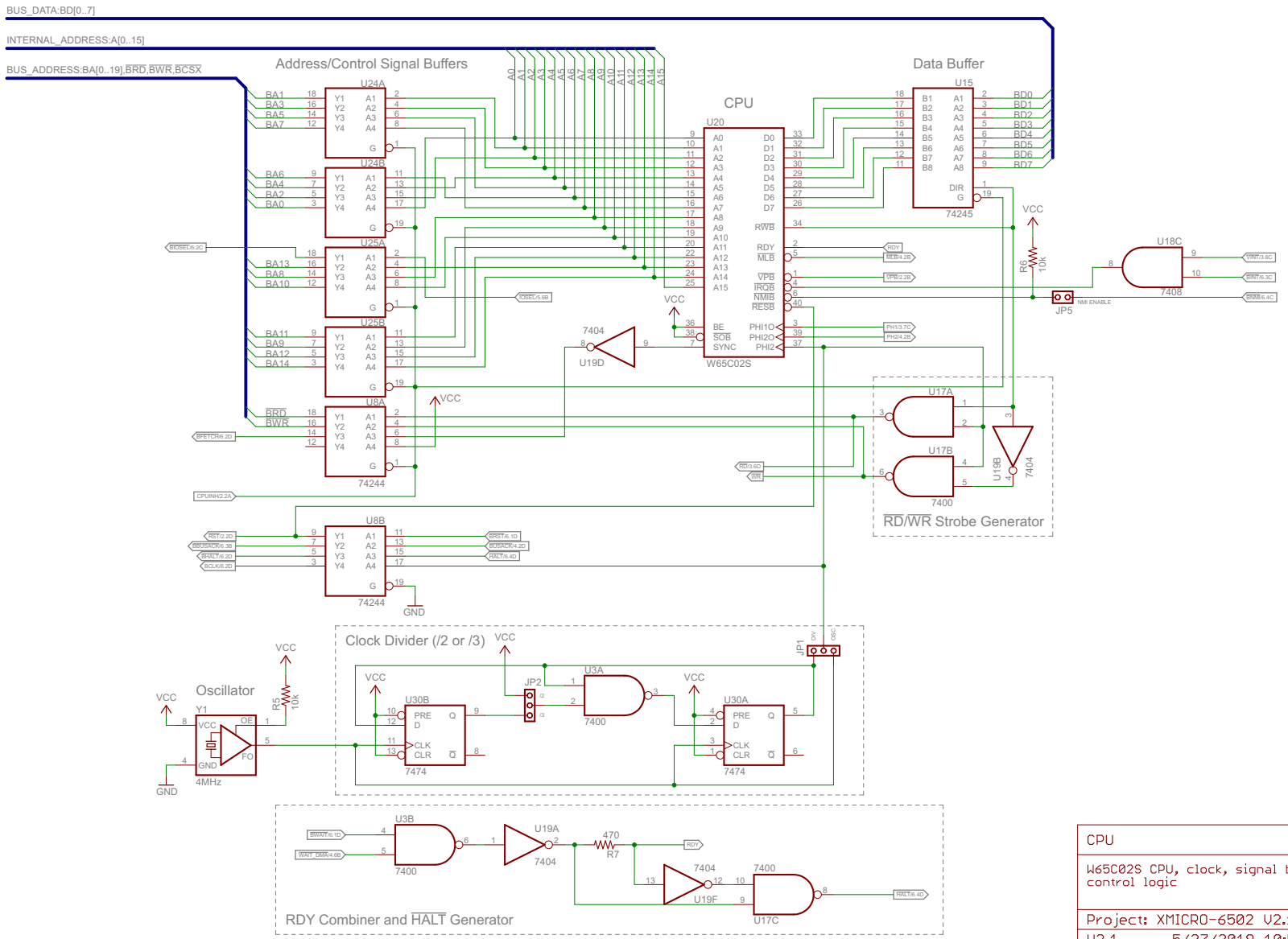
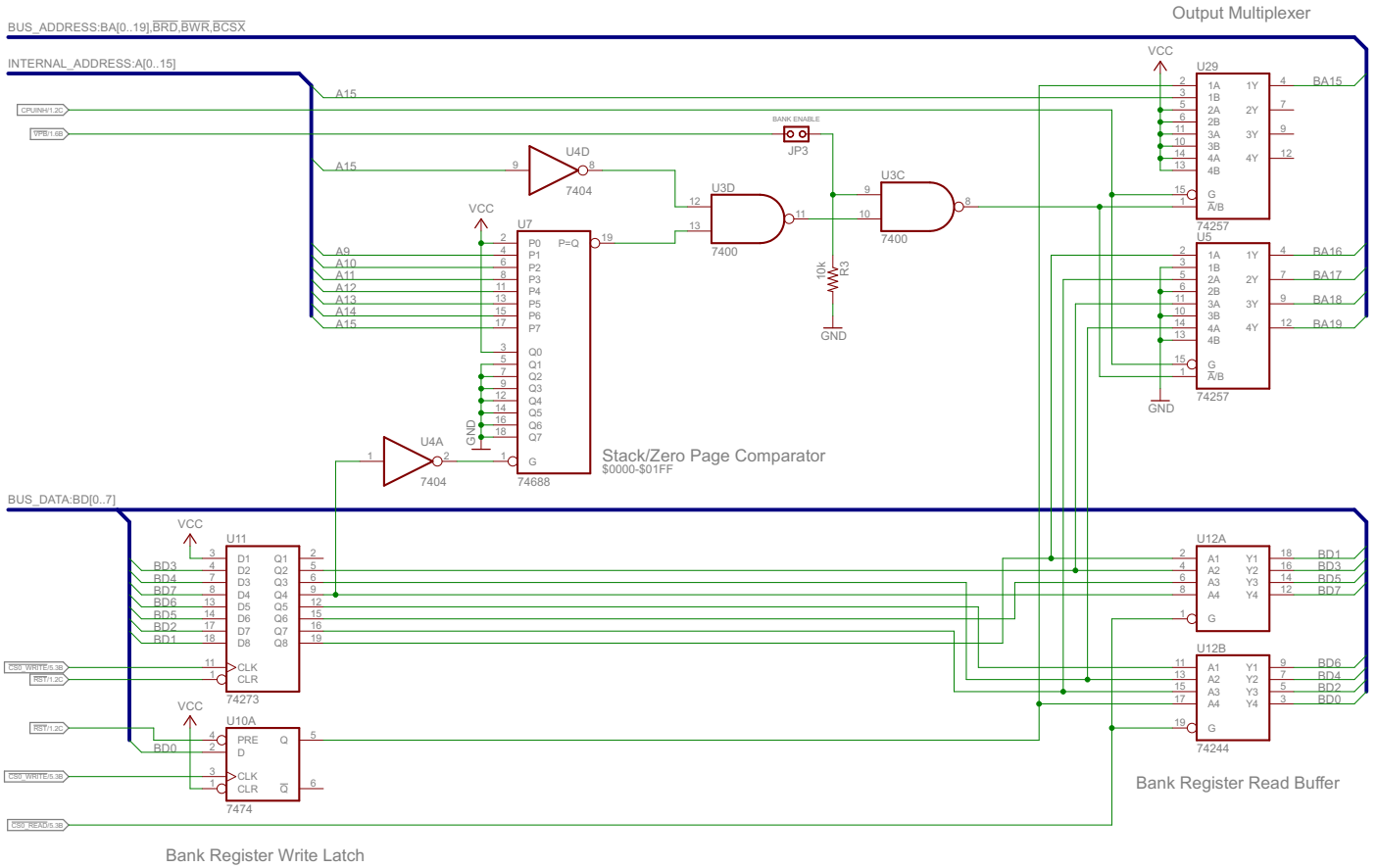

BUS_DATA:BD[0..7]
INTERNAL_ADDRESS:A[0..15]
BUS_ADDRESS:BA[0..19],BRD,BWR,BCSX
Address/Control Signal Buffers
Data Buffer
CPU
U20
W65C02S
U15
74245
U24A
U24B
U25A
U25B
U8A
U8B
74244
U19D
7404
U18C
7408
JP5
NMI ENABLE
R6
10k
VCC
U17A
U17B
7400
U19B
RD/WR Strobe Generator
Clock Divider (/2 or /3)
JP1
JP2
U3A
U30B
U30A
7474
Oscillator
Y1
4MHz
R5
10K
GND
U3B
U19A
470
R7
RDY Combiner and HALT Generator
U19F
U17C
CPU
W65C02S CPU, clock, signal buffers, and control logic
Project: XMICRO-6502 V2.1
Chris Weir
V2.1
5/27/2019 10:52:08 PM
Sheet:1/6



Bank Switcher	
Generates address bits A19-A15 based on current CPU address and the bank register.	
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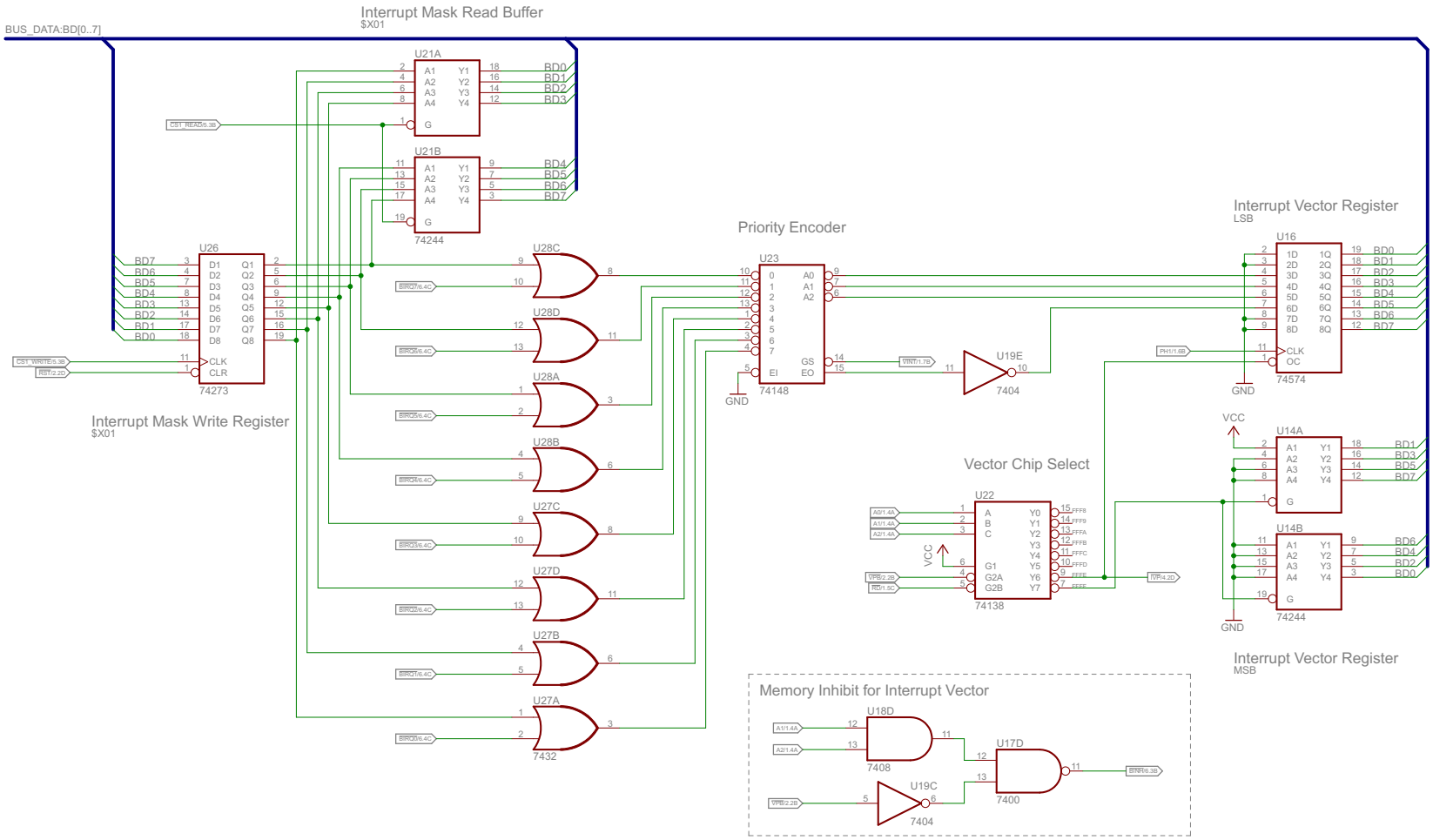
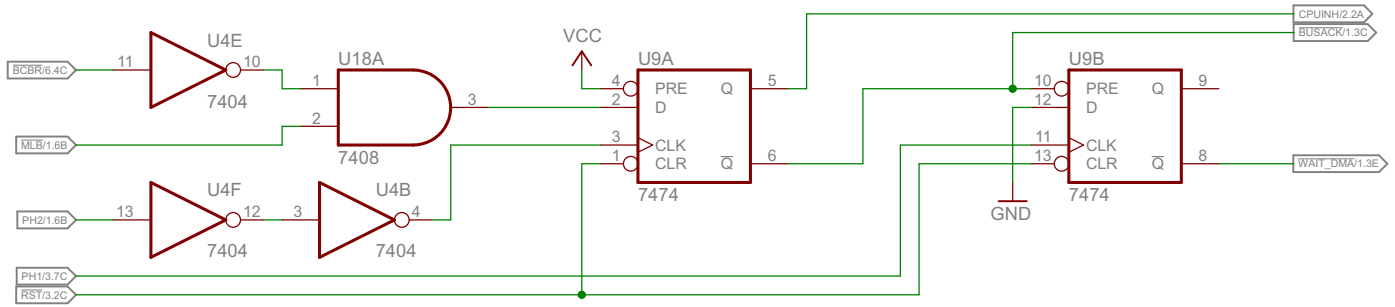
V2.1 5/27/2019 10:52:08 PM	Sheet:2/6

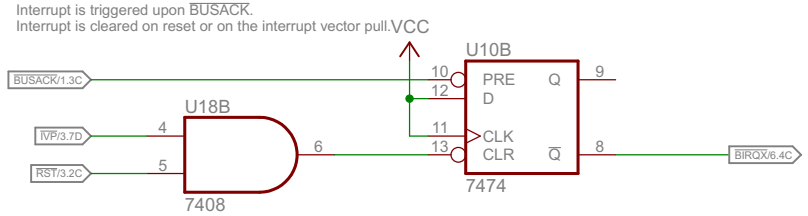


Interrupt Vector Generator	
Takes individual card-specific interrupt requests and generates a prioritized interrupt vector. Individual IRQ lines can be masked with $X01	
Project: XMICRO-6502 V2.1	Chris Weir
V2.1 5/27/2019 10:52:08 PM	Sheet:3/6

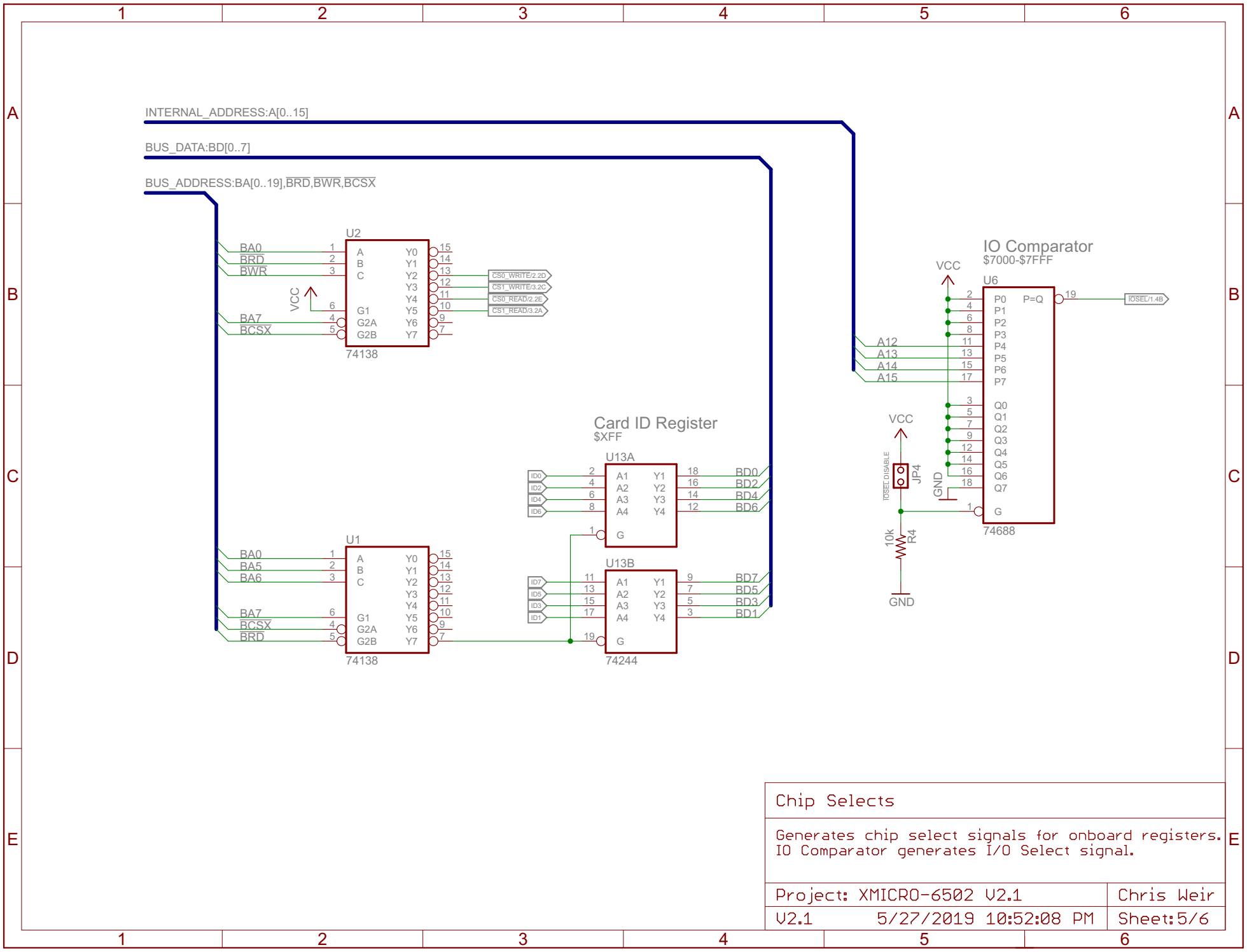


DMA Interrupt

Interrupt is triggered upon BUSACK.
Interrupt is cleared on reset or on the interrupt vector pull.



DMA System	
Stops CPU operation on request and releases the bus when safe, then acknowledges the request. An interrupt is triggered for each request.	
Project: XMICRO-6502 V2.1	Chris Weir
V2.1 5/27/2019 10:52:08 PM	Sheet: 4/6


INTERNAL_ADDRESS:A[0..15]
BUS_DATA:BD[0..7]
BUS_ADDRESS:BA[0..19],BRD,BWR,BCSX
U2
74138
CS0_WRITE/2.2D
CS1_WRITE/3.2C
CS0_READ/2.2E
CS1_READ/3.2A
U1
74138
Card ID Register
$XFF
U13A
U13B
74244
IO Comparator
$7000-$7FFF
U6
74688
IOSEL/1.4B
JP4
IOSEL DISABLE
10k
R4
VCC
GND
Chip Selects
Generates chip select signals for onboard registers.
IO Comparator generates I/O Select signal.
Project: XMICRO-6502 V2.1
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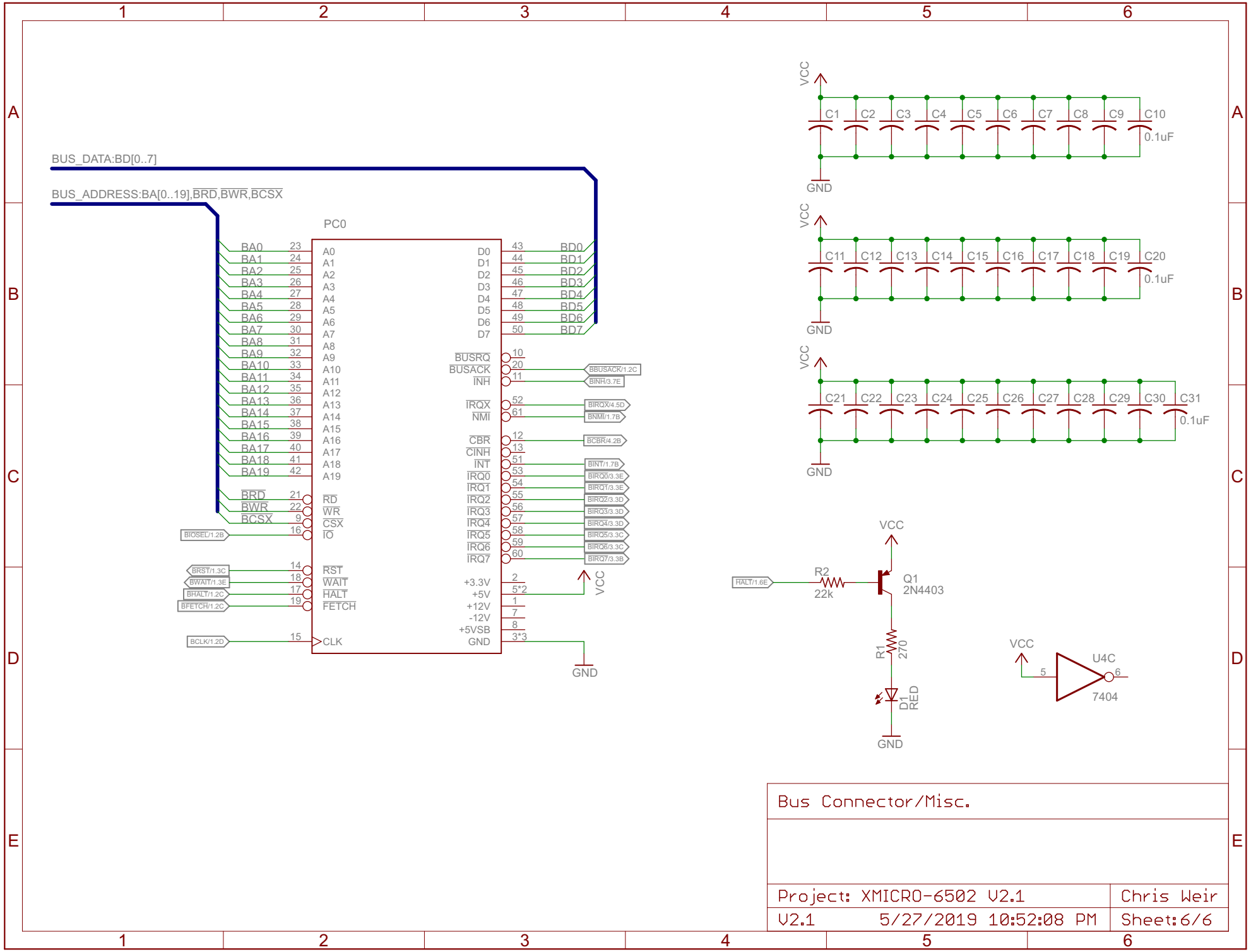
V2.1
5/27/2019 10:52:08 PM
Sheet:5/6


BUS_DATA:BD[0..7]
BUS_ADDRESS:BA[0..19],BRD,BWR,BCSX
PC0
BA0 BA1 BA2 BA3 BA4 BA5 BA6 BA7 BA8 BA9 BA10 BA11 BA12 BA13 BA14 BA15 BA16 BA17 BA18 BA19
BRD BWR BCSX
BIOSEL/1.2B
BRST/1.3C
BWAIT/1.3E
BHALT/1.2C
BFETCH/1.2C
BCLK/1.2D
RD WR CSX IO RST WAIT HALT FETCH CLK
D0 D1 D2 D3 D4 D5 D6 D7
BD0 BD1 BD2 BD3 BD4 BD5 BD6 BD7
BUSRQ BUSACK INH
BBUSACK/1.2C
BINH/3.7E
IRQX NMI
BIRQX/4.5D
BNMI/1.7B
CBR CINH
BCBR/4.2B
INT
BINT/1.7B
IRQ0 IRQ1 IRQ2 IRQ3 IRQ4 IRQ5 IRQ6 IRQ7
BIRQ0/3.3E
BIRQ1/3.3E
BIRQ2/3.3D
BIRQ3/3.3D
BIRQ4/3.3D
BIRQ5/3.3C
BIRQ6/3.3C
BIRQ7/3.3B
+3.3V +5V +12V -12V +5VSB GND
VCC
GND
C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 0.1uF
C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 0.1uF
C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 0.1uF
HALT/1.6E
R2 22k
Q1 2N4403
R1 270
D1 RED
U4C 7404
Bus Connector/Misc.
Project: XMICRO-6502 V2.1
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V2.1 5/27/2019 10:52:08 PM
Sheet:6/6