68000 Single Board Computer
from
"Microprocessor Systems Design" by Alan Clements
Modified by Jeff Tranter

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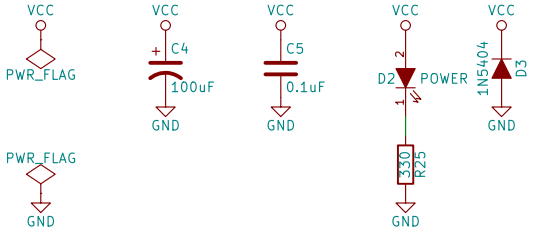
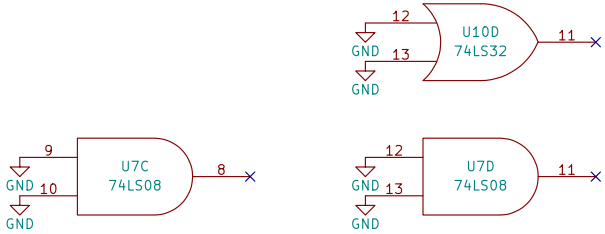
Bypass caps,
one per IC



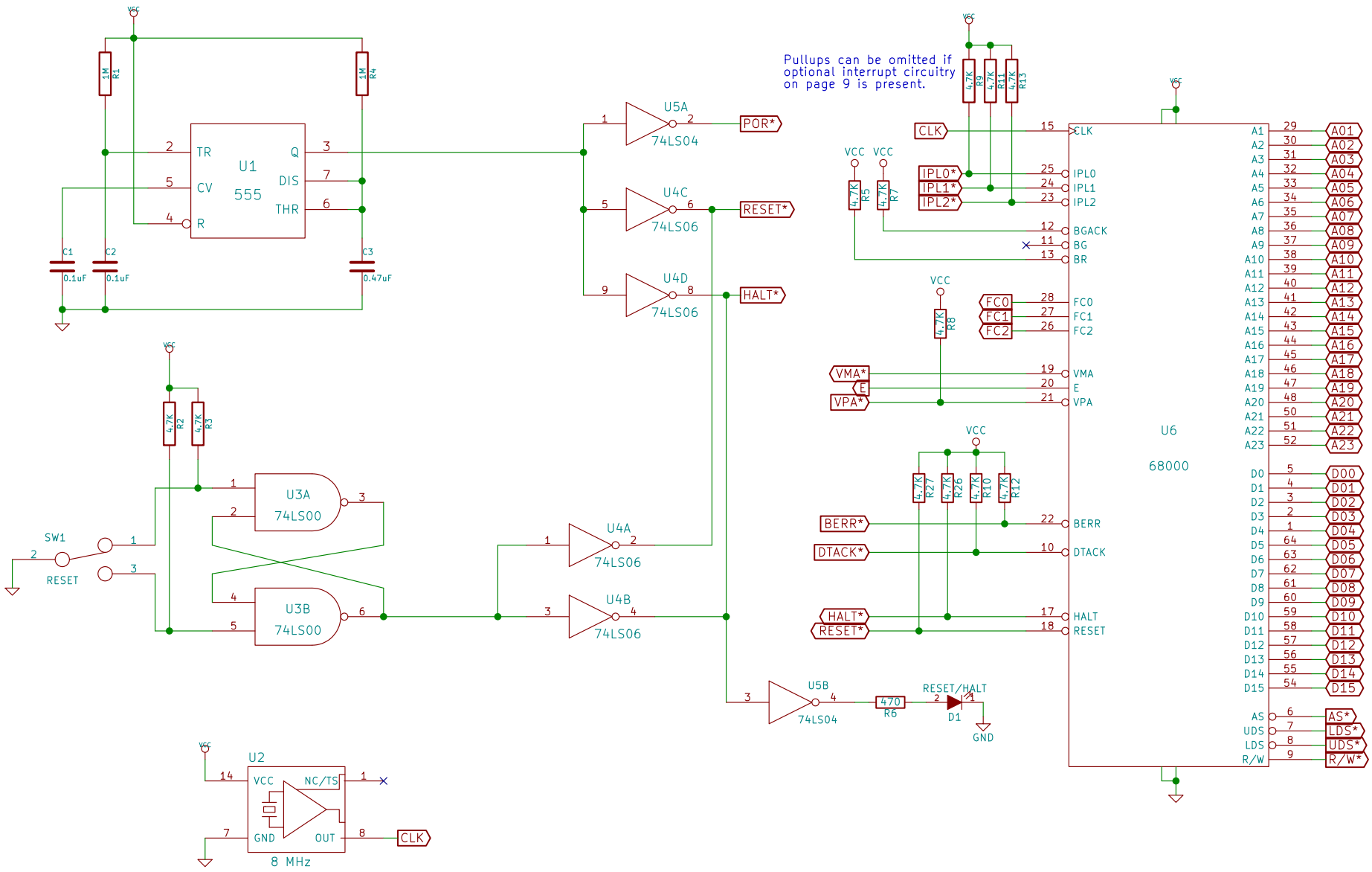
Spare Gates



Top Level Schematic
Jeff Tranter
Sheet: /
File: ts2.sch

Title: TS2 68000 Single Board Computer

Size: A	Date: 2017-01-14	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1-stable		Id: 1/9



Reset, Halt, and Clock Control Circuits

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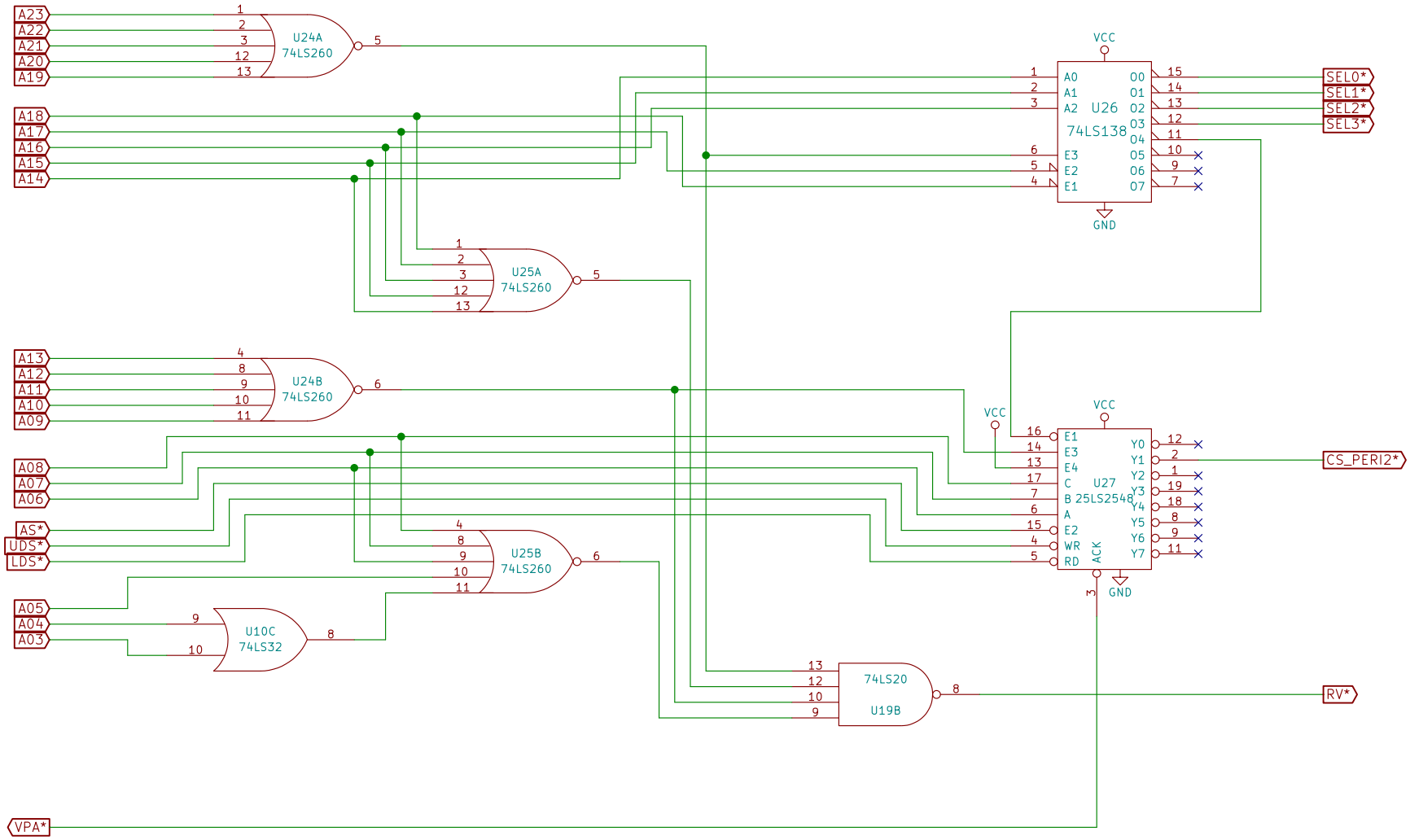
Title: TS2 68000 Single Board Computer

Size: A	Date: 2017-01-14	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1-stable		Id: 2/9



Address Decoding
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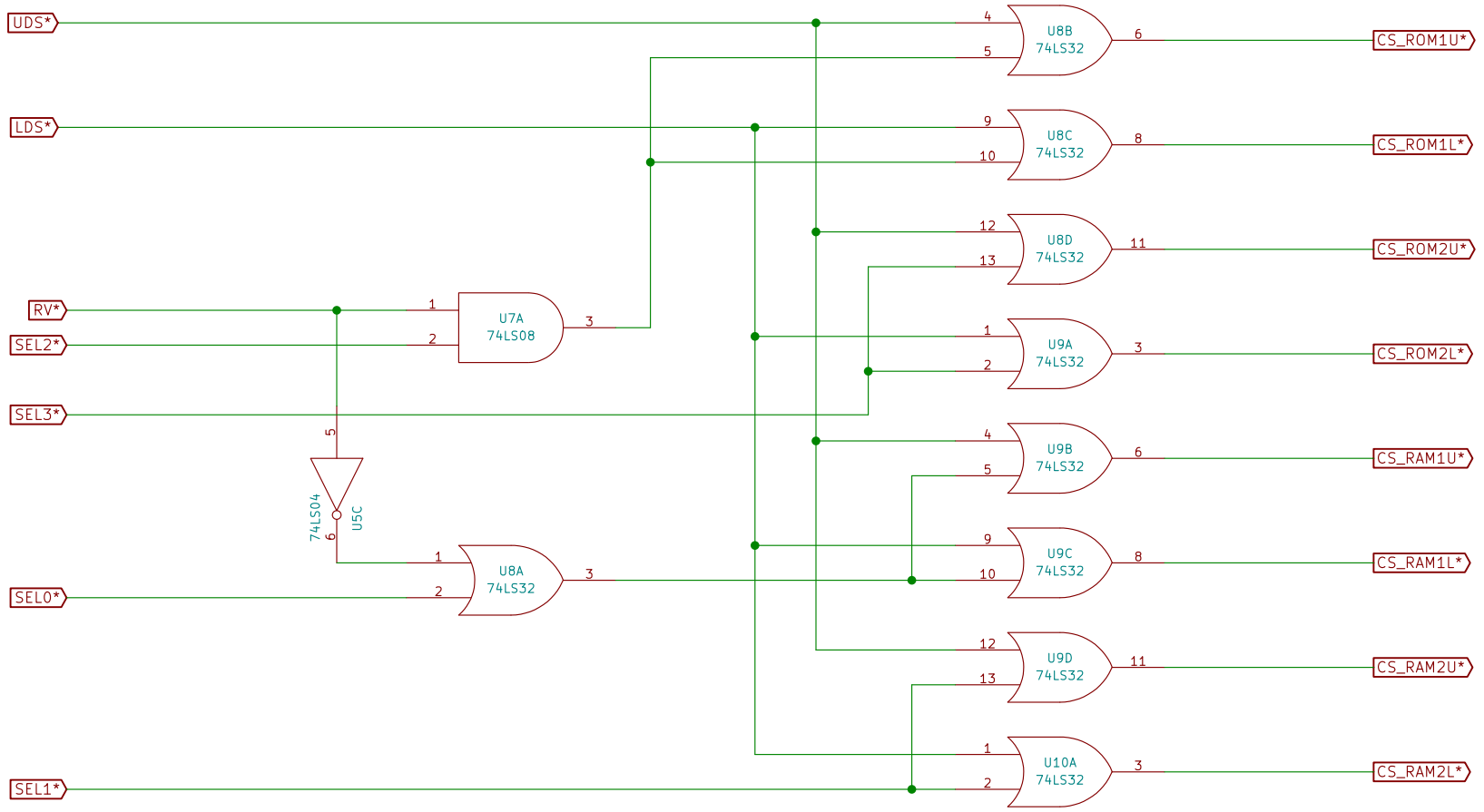
File: page2.sch

Title: TS2 68000 Single Board Computer

Size: A	Date: 2017-01-14	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1-stable		Id: 3/9



RAM and ROM Address Select

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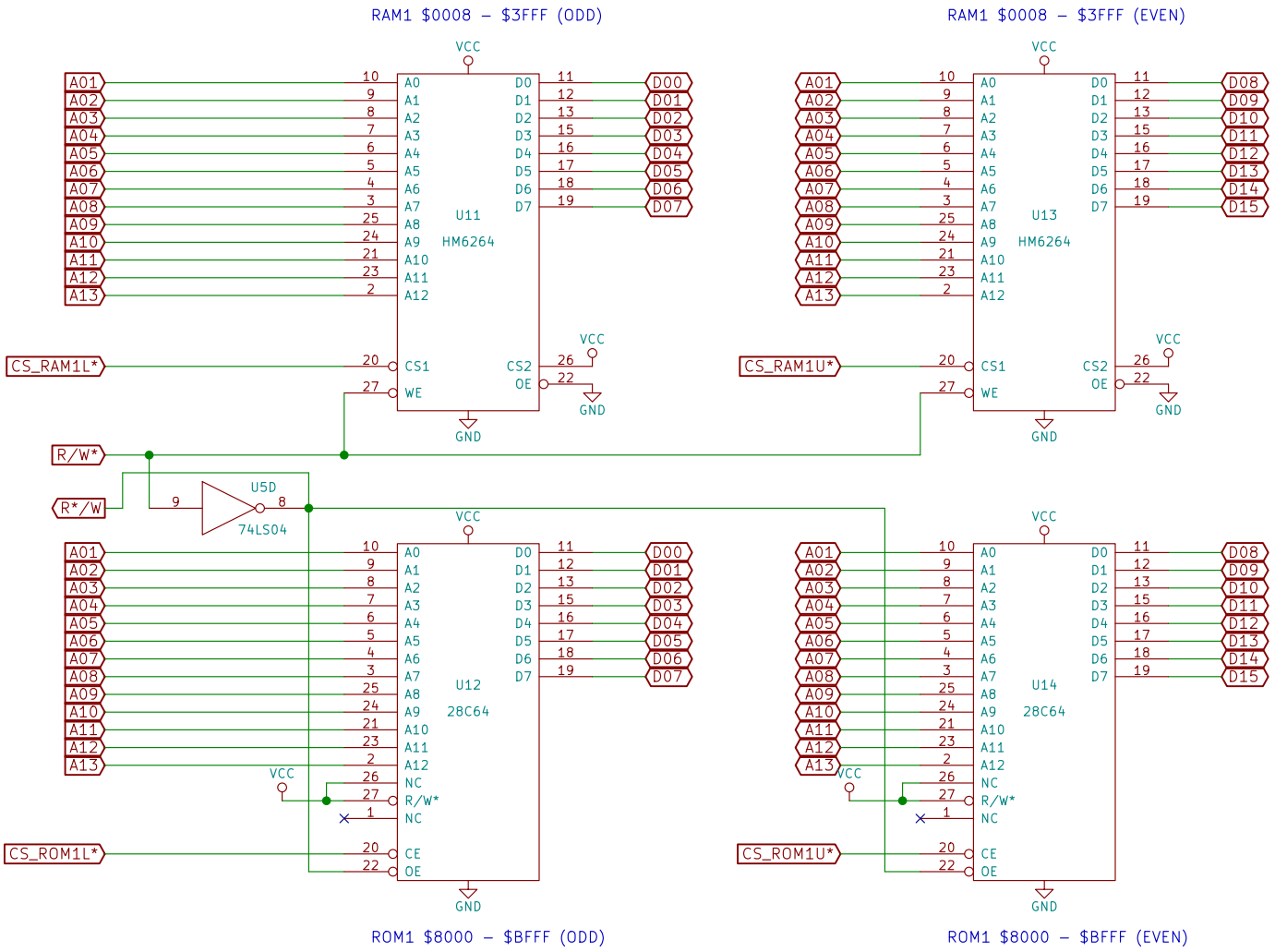
Title: TS2 68000 Single Board Computer

Size: A	Date: 2017-01-14	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1-stable		Id: 4/9



RAM and ROM (1 of 2)

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Title: TS2 68000 Single Board Computer

Size: A	Date: 2017-01-14	**Rev: 2.0**
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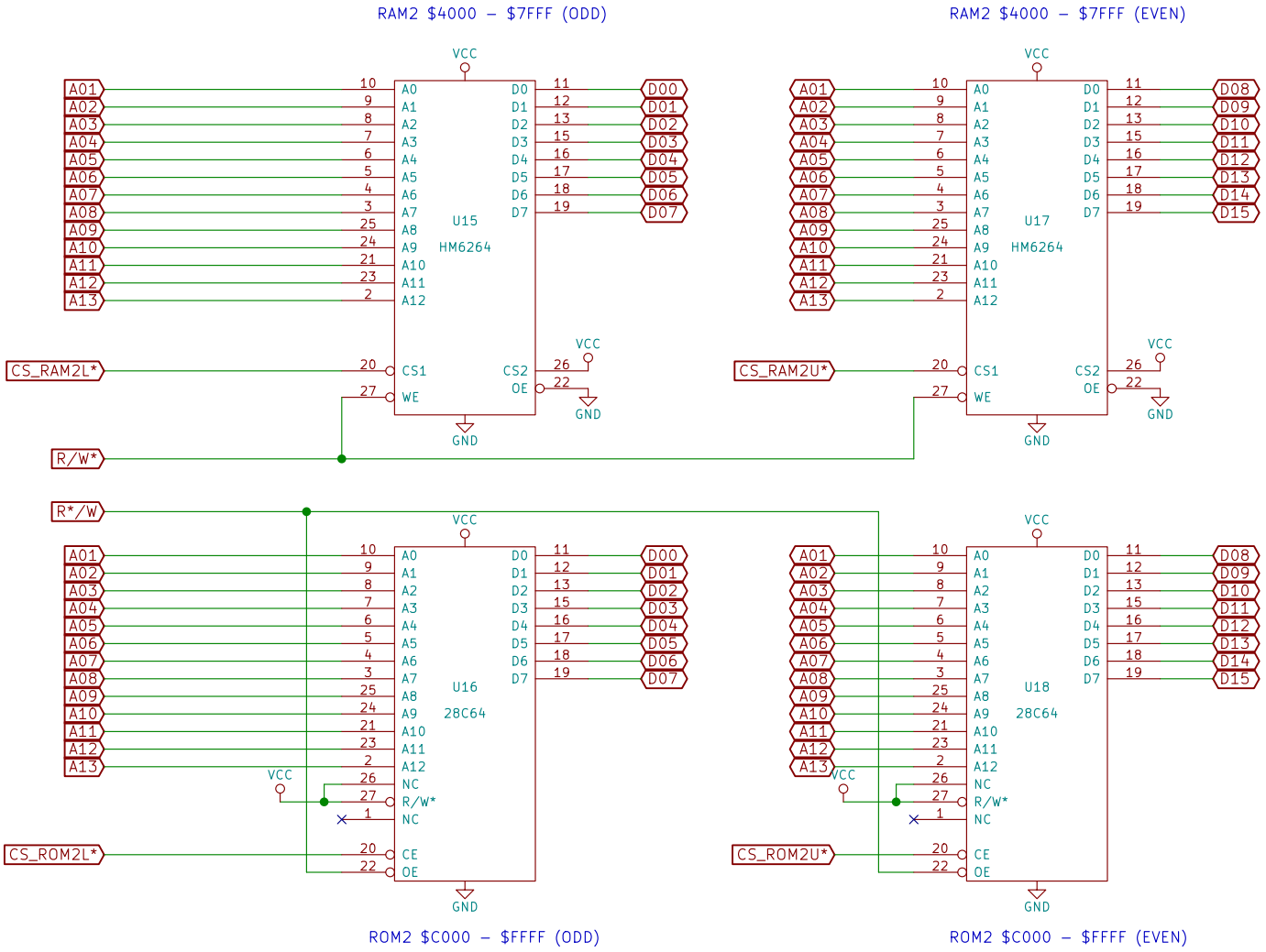

RAM and ROM (2 of 2)

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Title: TS2 68000 Single Board Computer

Size: A	Date: 2017-01-14	**Rev: 2.0**
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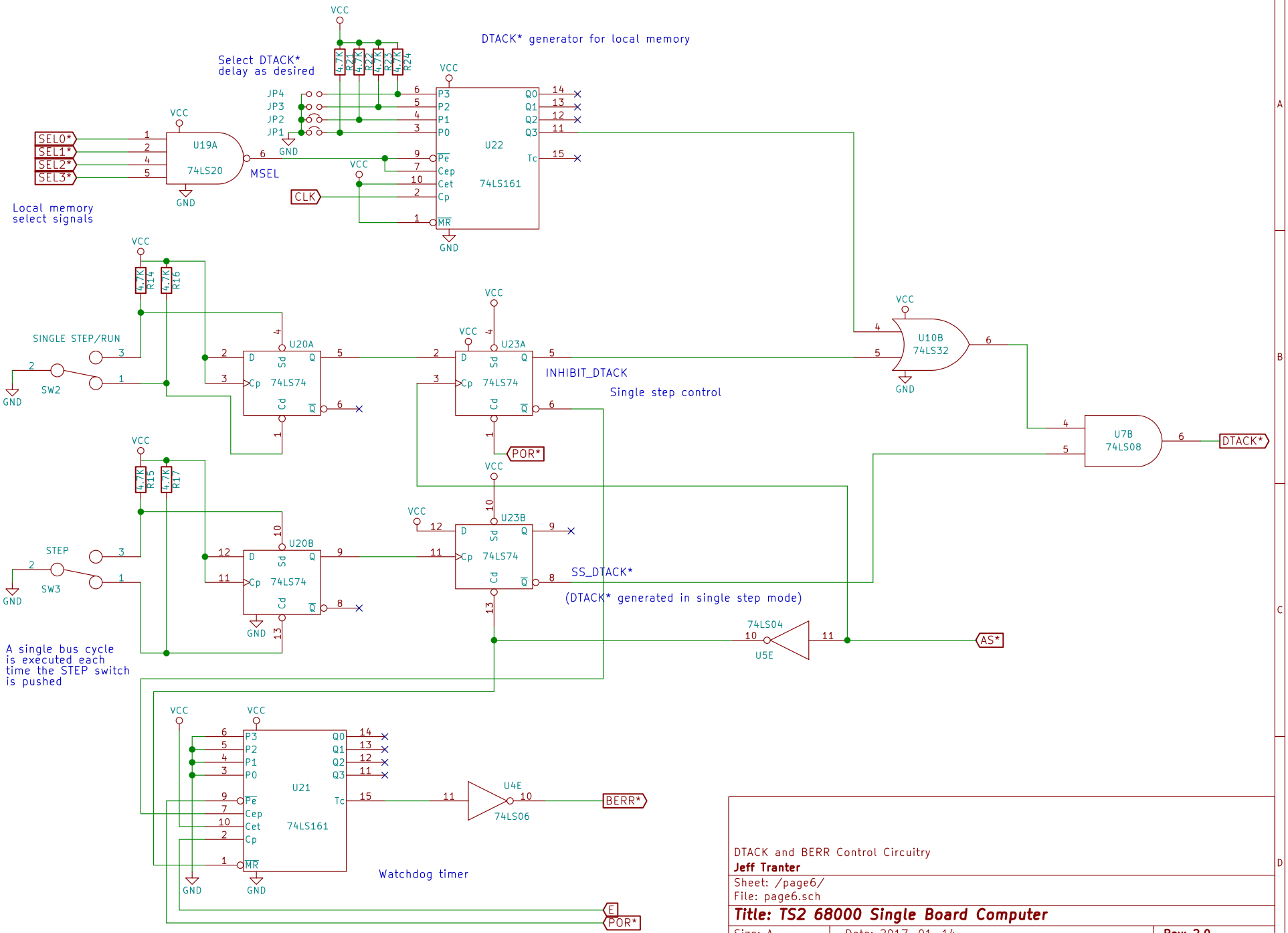

DTACK and BERR Control Circuitry

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Title: TS2 68000 Single Board Computer

Size: A	Date: 2017-01-14	**Rev: 2.0**
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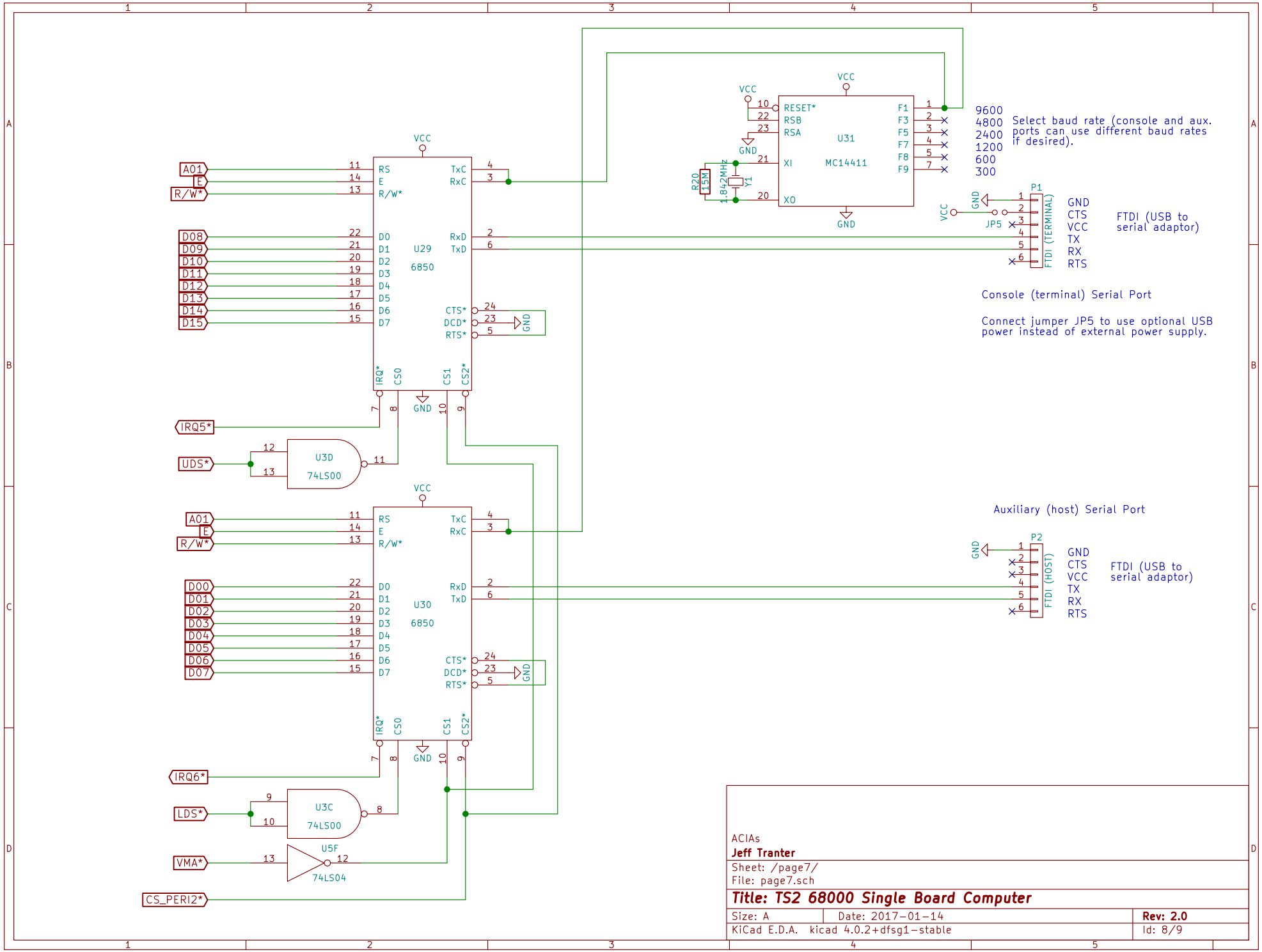
VCC
A01
E
R/W*
D08
D09
D10
D11
D12
D13
D14
D15
RS
E
R/W*
D0
D1
D2
D3
D4
D5
D6
D7
U29
6850
TxC
RxC
RxD
TxD
CTS*
DCD*
RTS*
GND
IRQ*
CS0
CS1
CS2*
IRQ5*
UDS*
U3D
74LS00
D00
D01
D02
D03
D04
D05
D06
D07
U30
IRQ6*
LDS*
U3C
74LS00
VMA*
U5F
74LS04
CS_PERI2*
RESET*
RSB
RSA
XI
XO
U31
MC14411
F1
F3
F5
F7
F8
F9
R20
15M
1.842MHz
Y1
9600
4800
2400
1200
600
300
Select baud rate (console and aux. ports can use different baud rates if desired).
P1
JP5
FTDI (TERMINAL)
GND
CTS
VCC
TX
RX
RTS
FTDI (USB to serial adaptor)
Console (terminal) Serial Port
Connect jumper JP5 to use optional USB power instead of external power supply.
Auxiliary (host) Serial Port
P2
FTDI (HOST)
ACIAs
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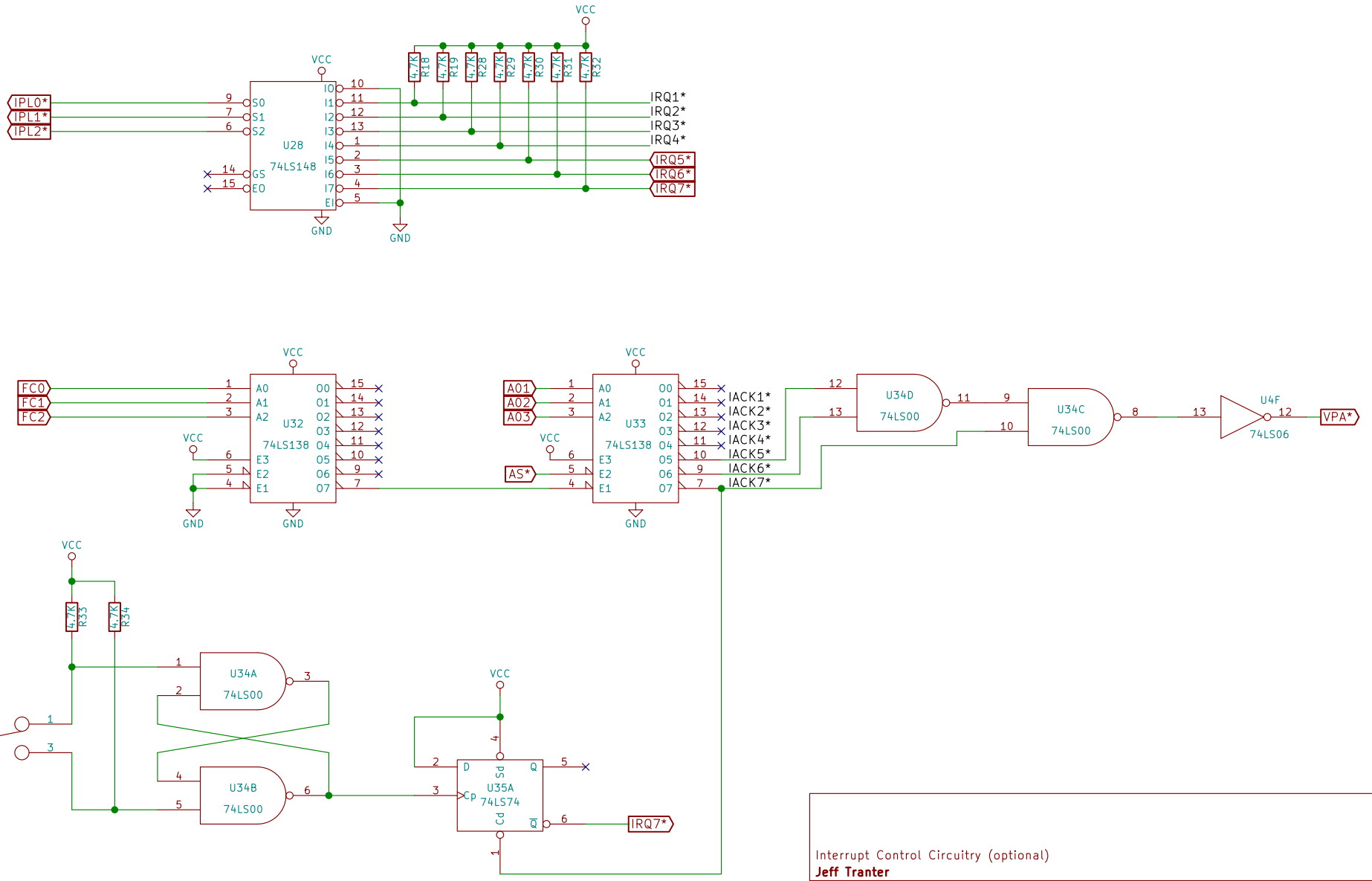
Title: TS2 68000 Single Board Computer
Size: A
Date: 2017-01-14
Rev: 2.0
KiCad E.D.A. kicad 4.0.2+dfsg1-stable
Id: 8/9



Interrupt Control Circuitry (optional)

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Title: TS2 68000 Single Board Computer

Size: A4	Date: 2017-01-14	**Rev: 2.0**
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