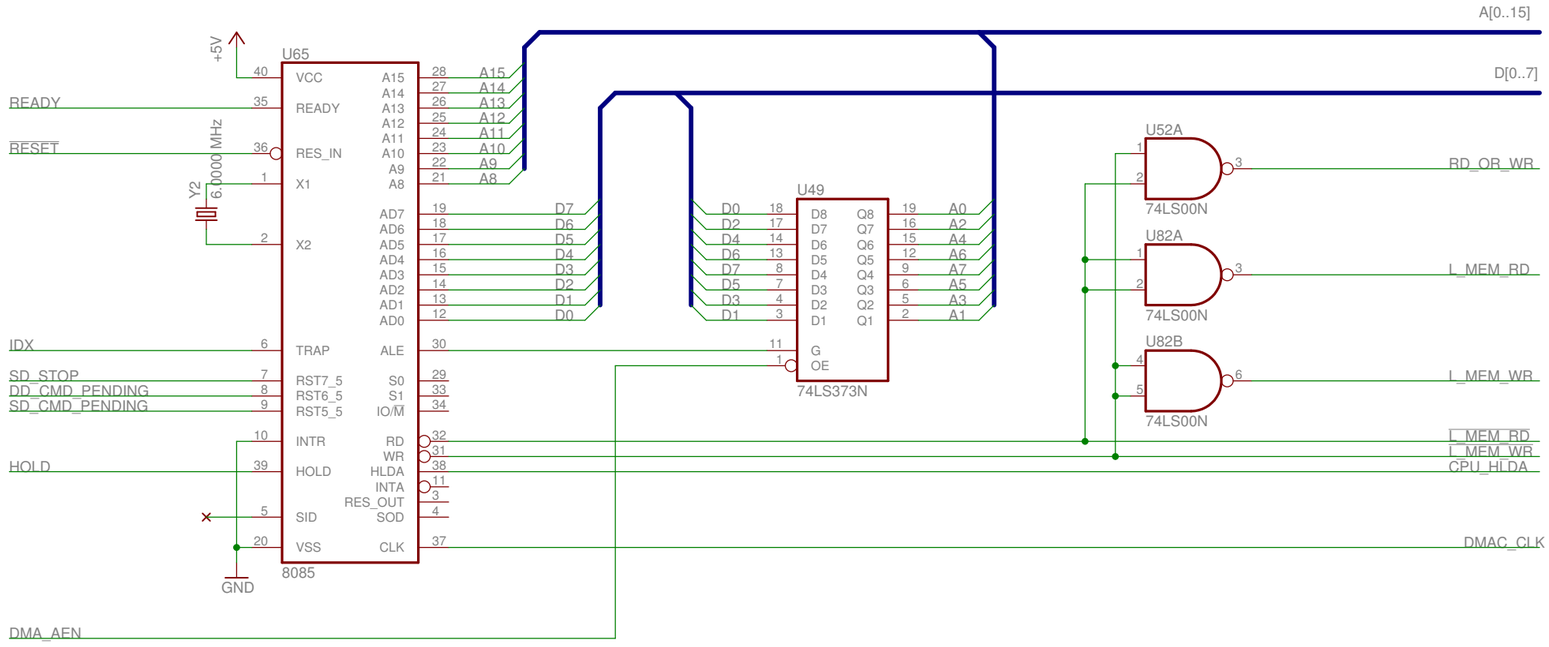
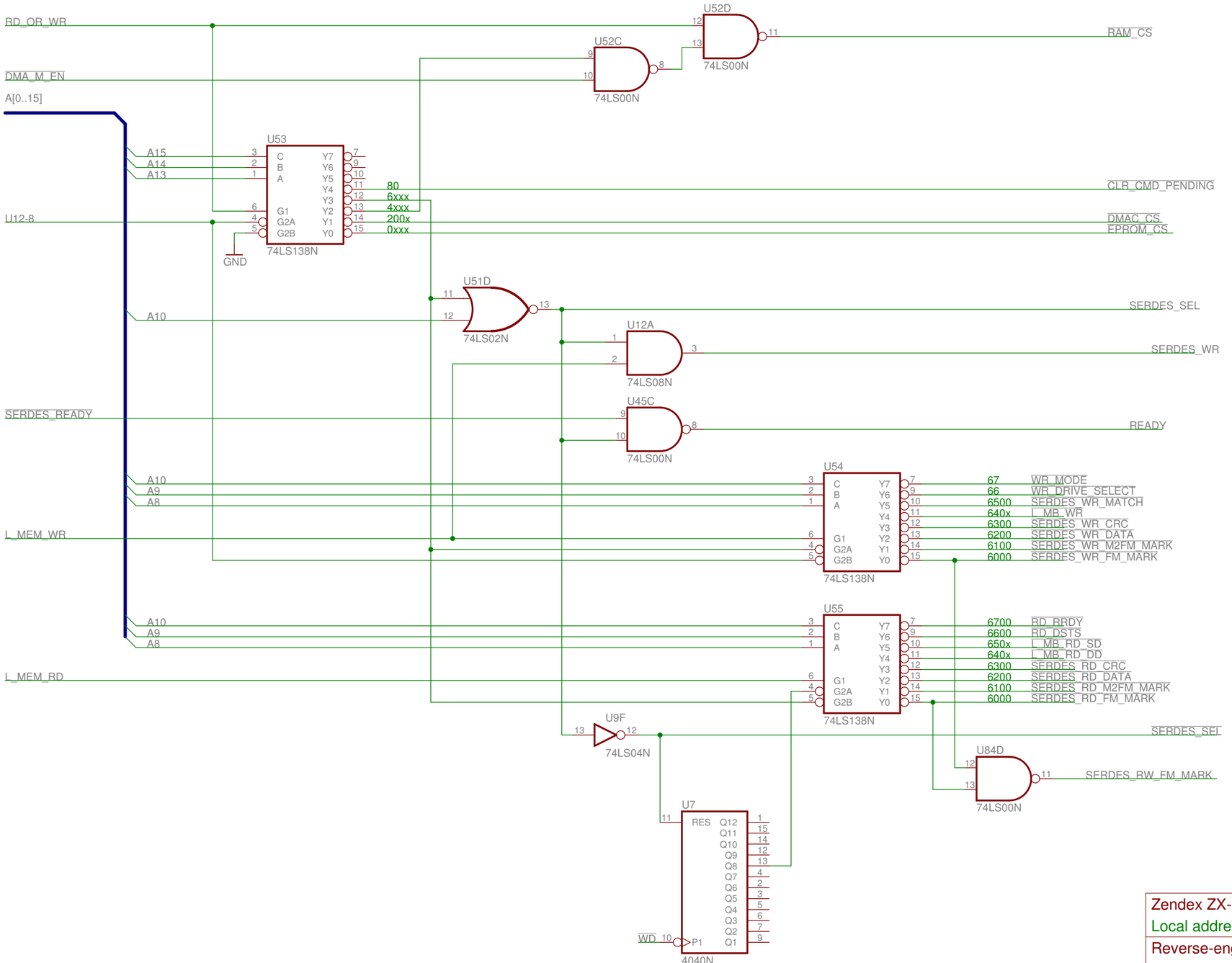


U65 SID input should not be left floating

Zendex ZX-200A Single Board DIsk Controller	
Microprocessor	
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 1/17



Zendex ZX-200A Single Board DIsk Controller

Local address decode

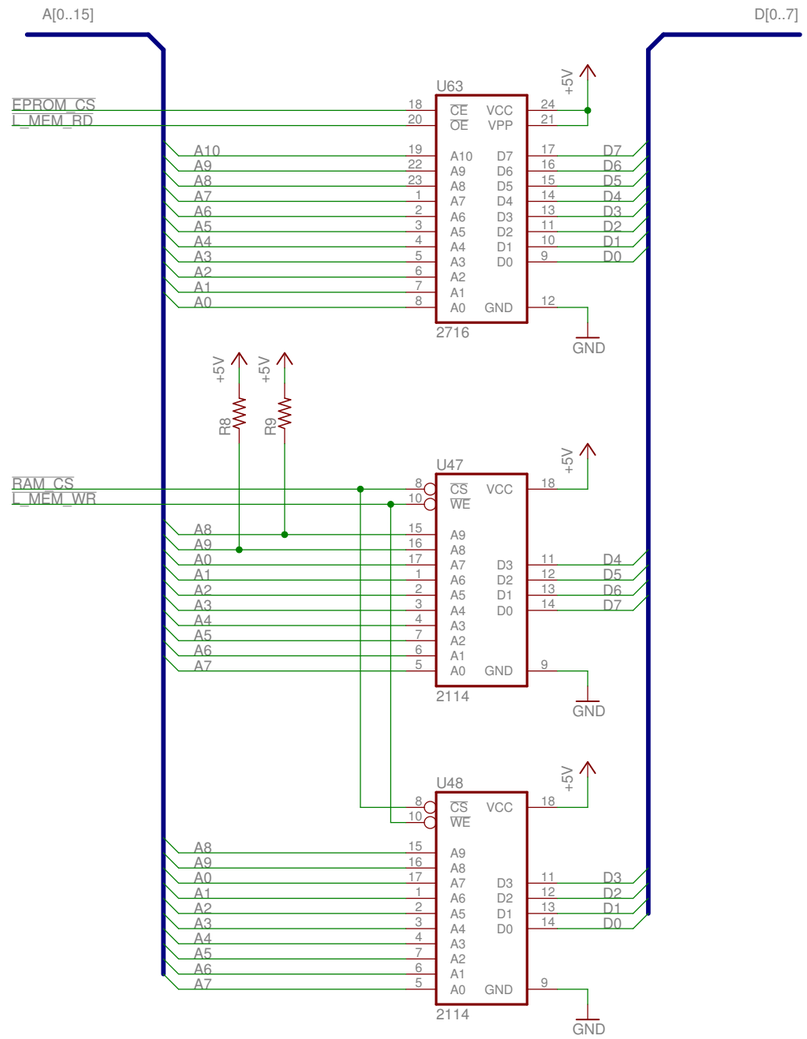
Reverse-engineered by Eric Smith

email: <spacewar@gmail.com>

Drawing Number:

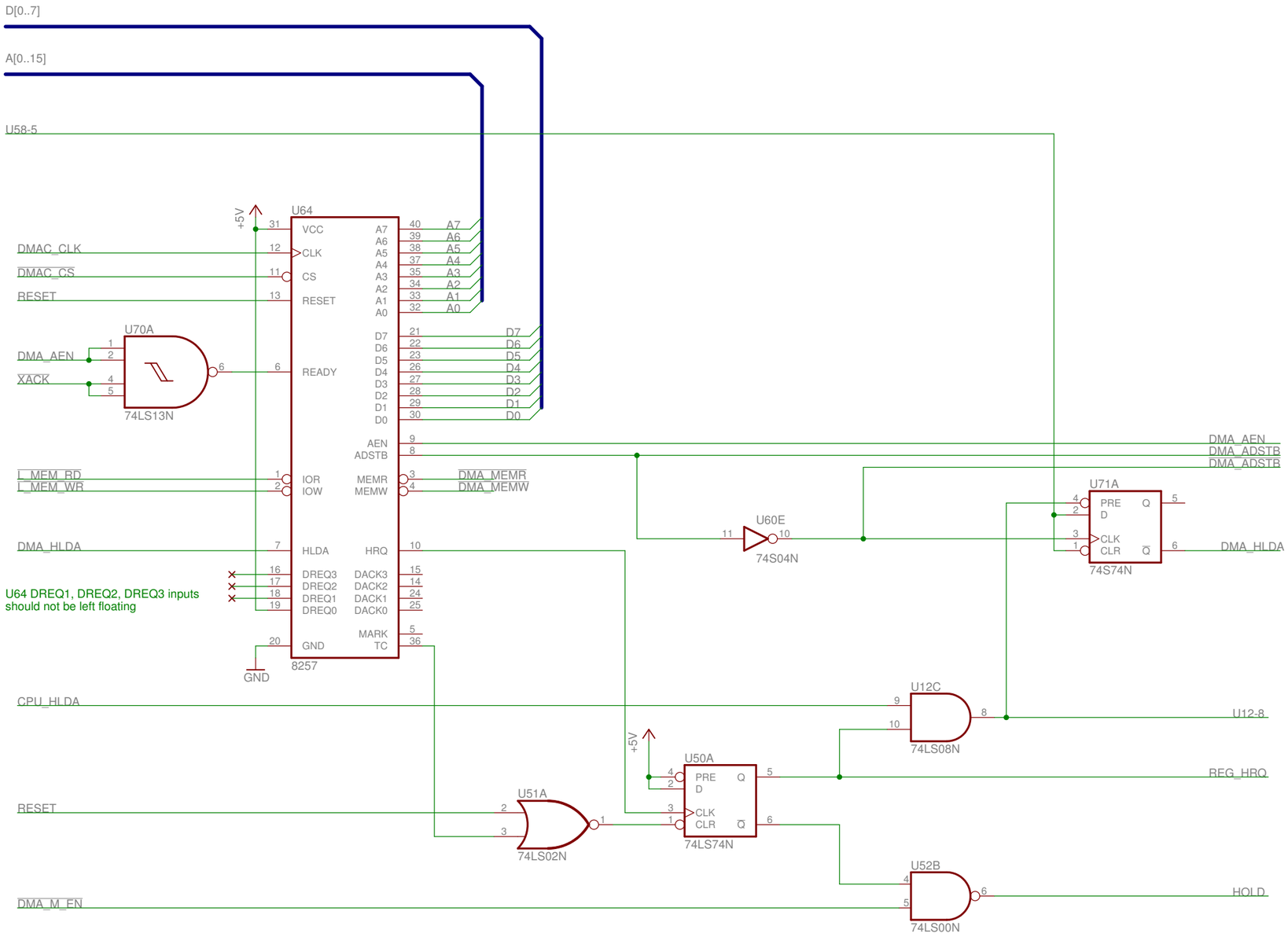
File: zx-200a | REV:

Date: 10/12/15 8:42 PM | Sheet: 2/17

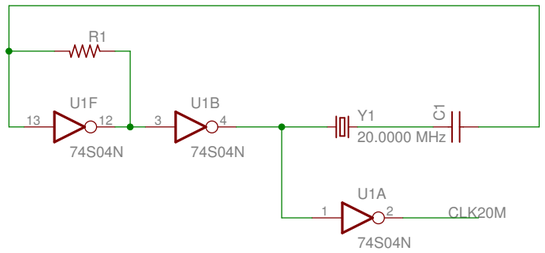


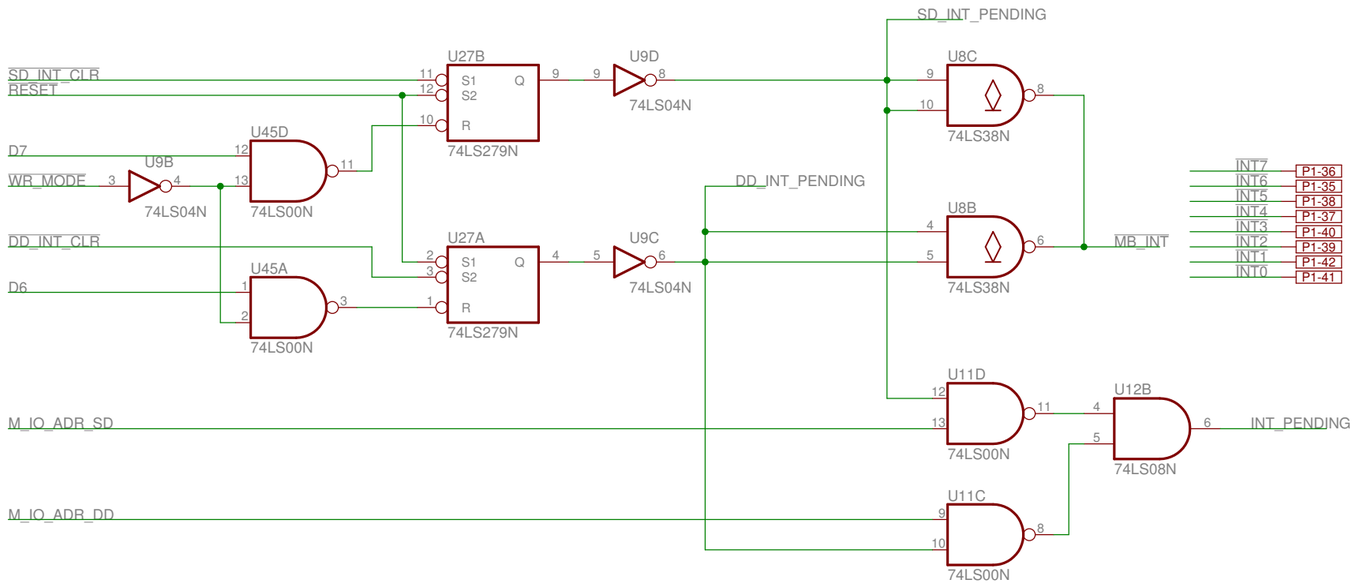
Pullup resistors R8 and R9 on address lines A9 and A8, respectively, ensure that DMAC accesses use local memory in the highest 256-byte page of local SRAM, 4300h..43ffh.

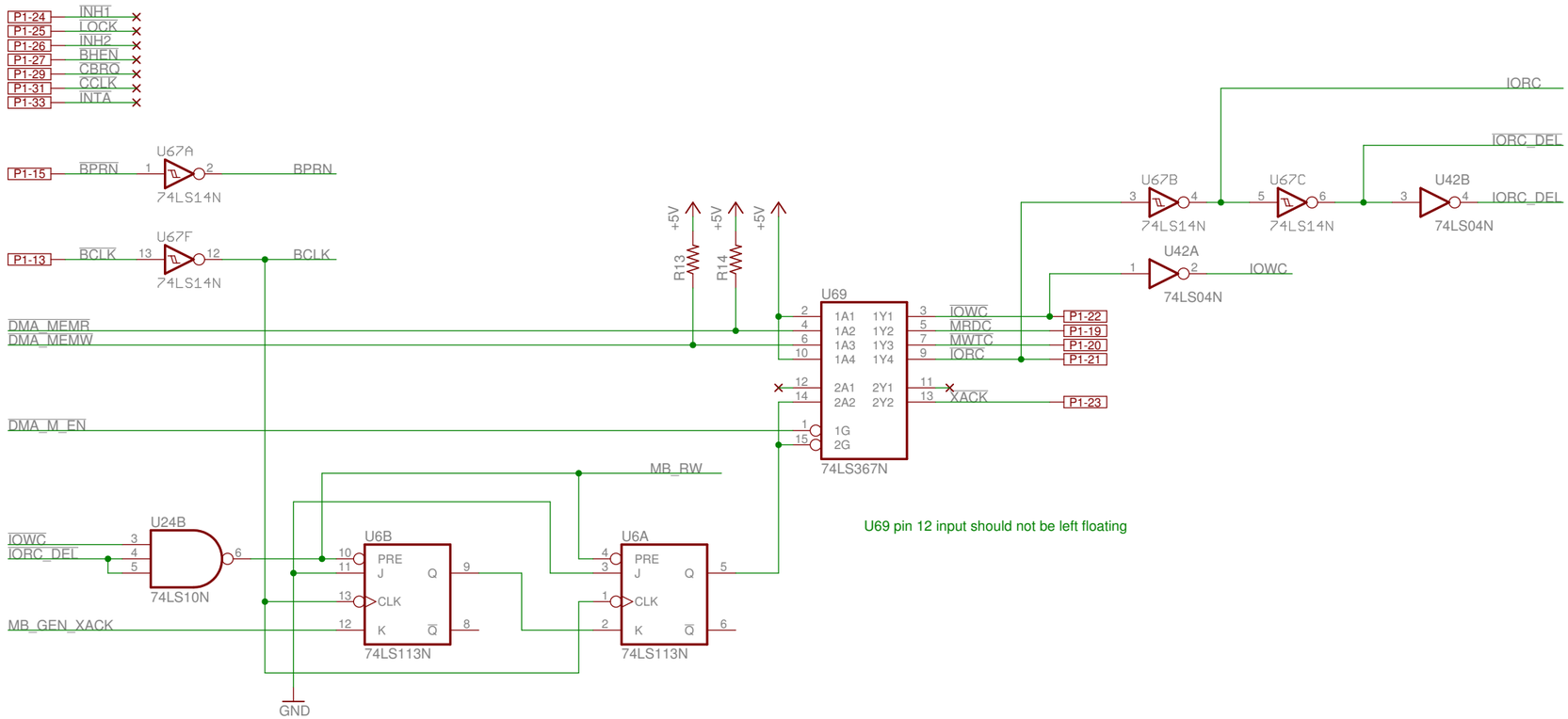
Zendex ZX-200A Single Board DIsk Controller Local memory	
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 3/17



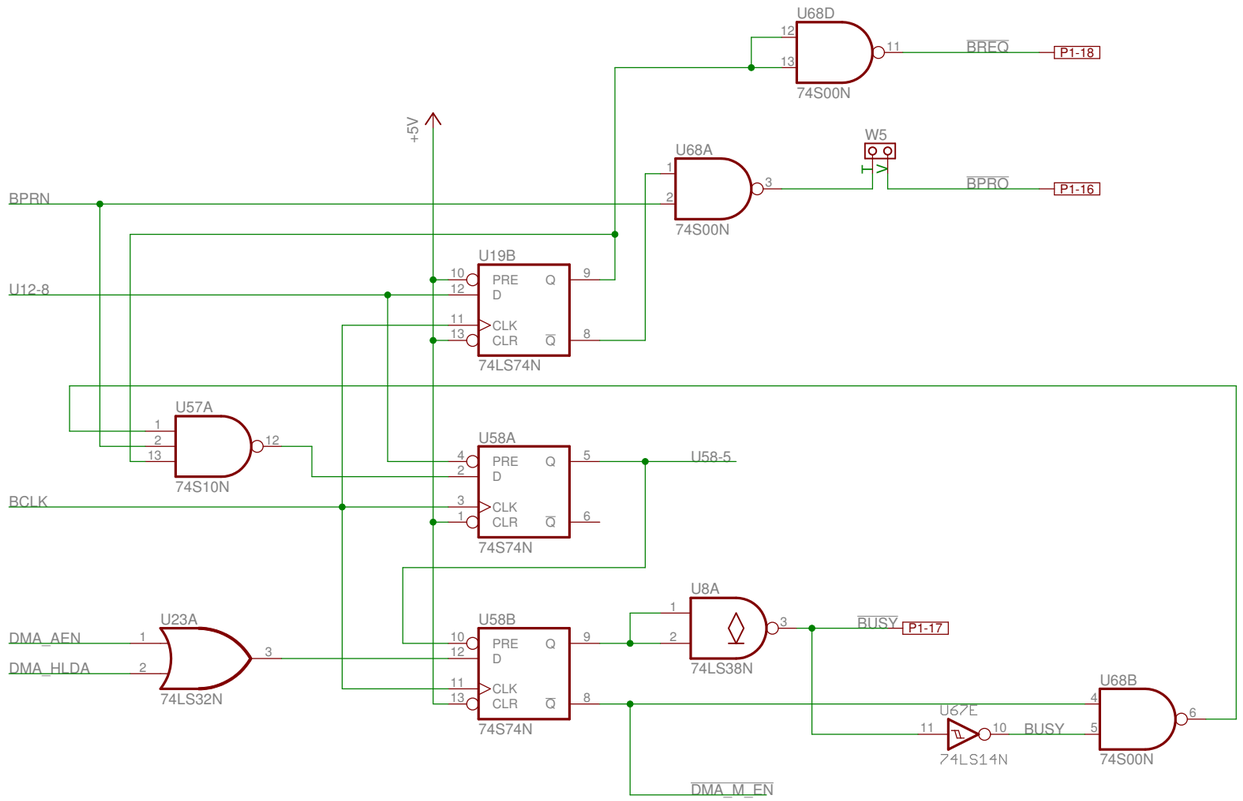
Zendex ZX-200A Single Board DIsk Controller	
DMA Controller	
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 4/17



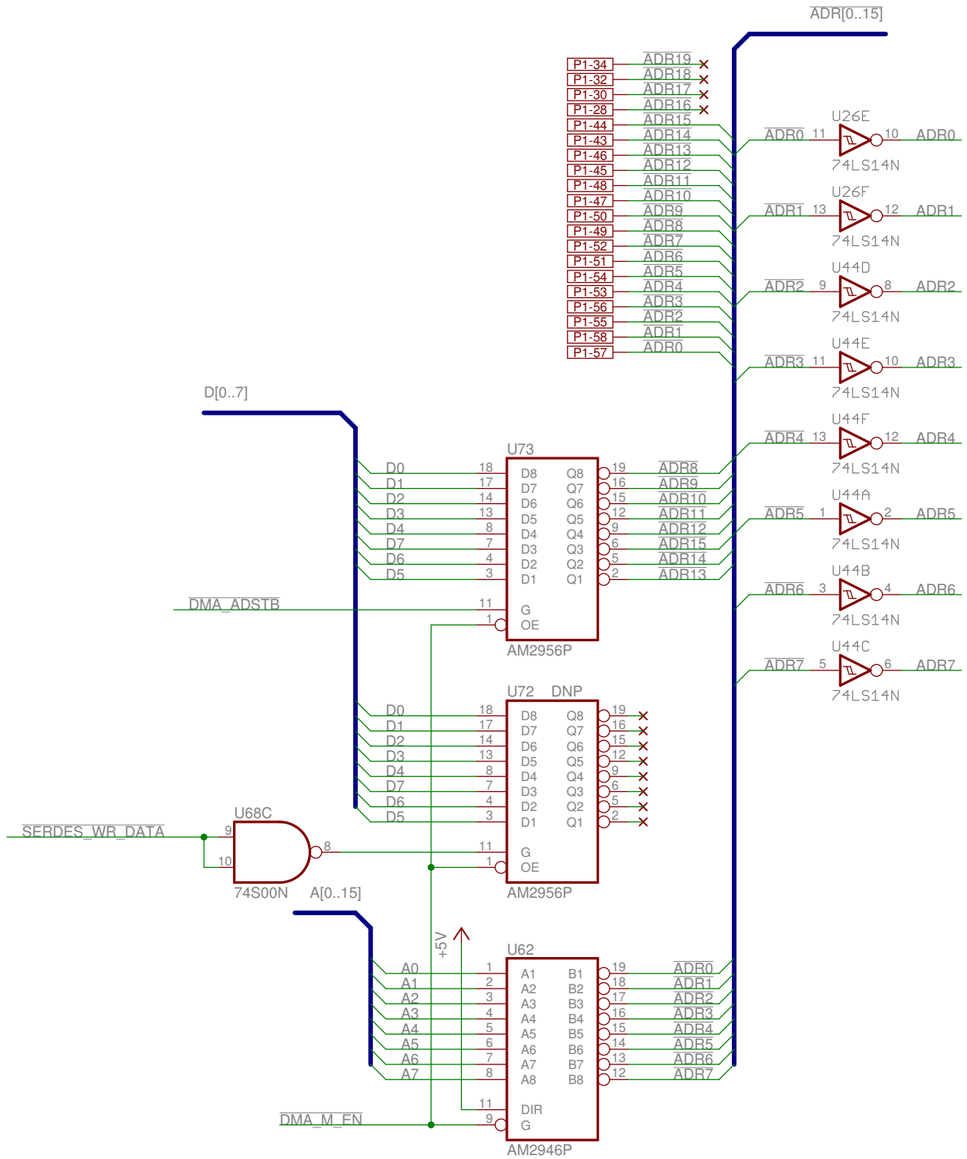


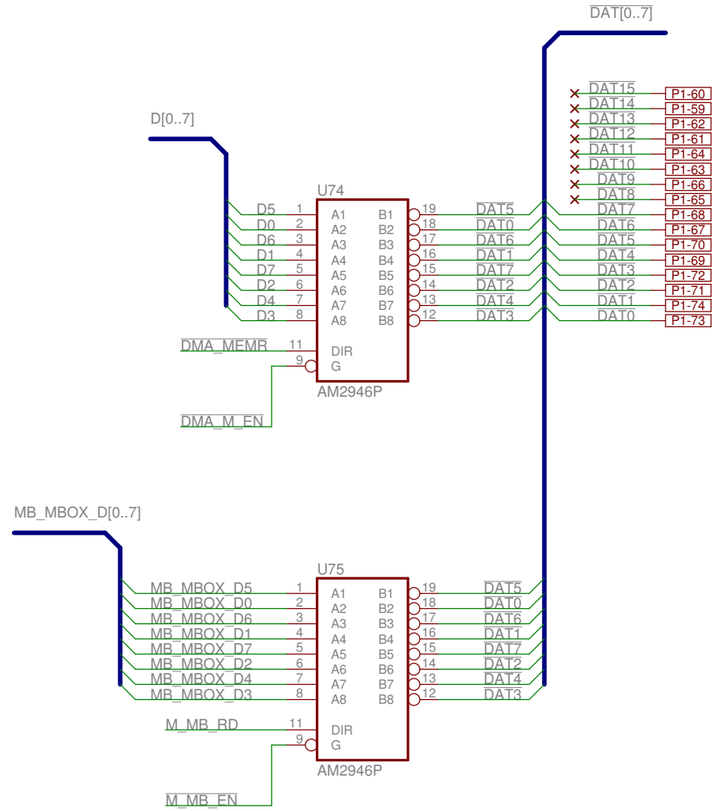


Zendex ZX-200A Single Board DIsk Controller 20 MHz clock, Multibus commands and interrupt	
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 5/17



Zendex ZX-200A Single Board DIsk Controller Multibus arbitration	
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 6/17





U72 may have been intended to provide a means of addressing more than the first 64KB of Multibus memory, driving the higher address lines. However, its outputs appear to be unconnected.

Zendex ZX-200A Single Board DIsk Controller

Multibus address and data buffers

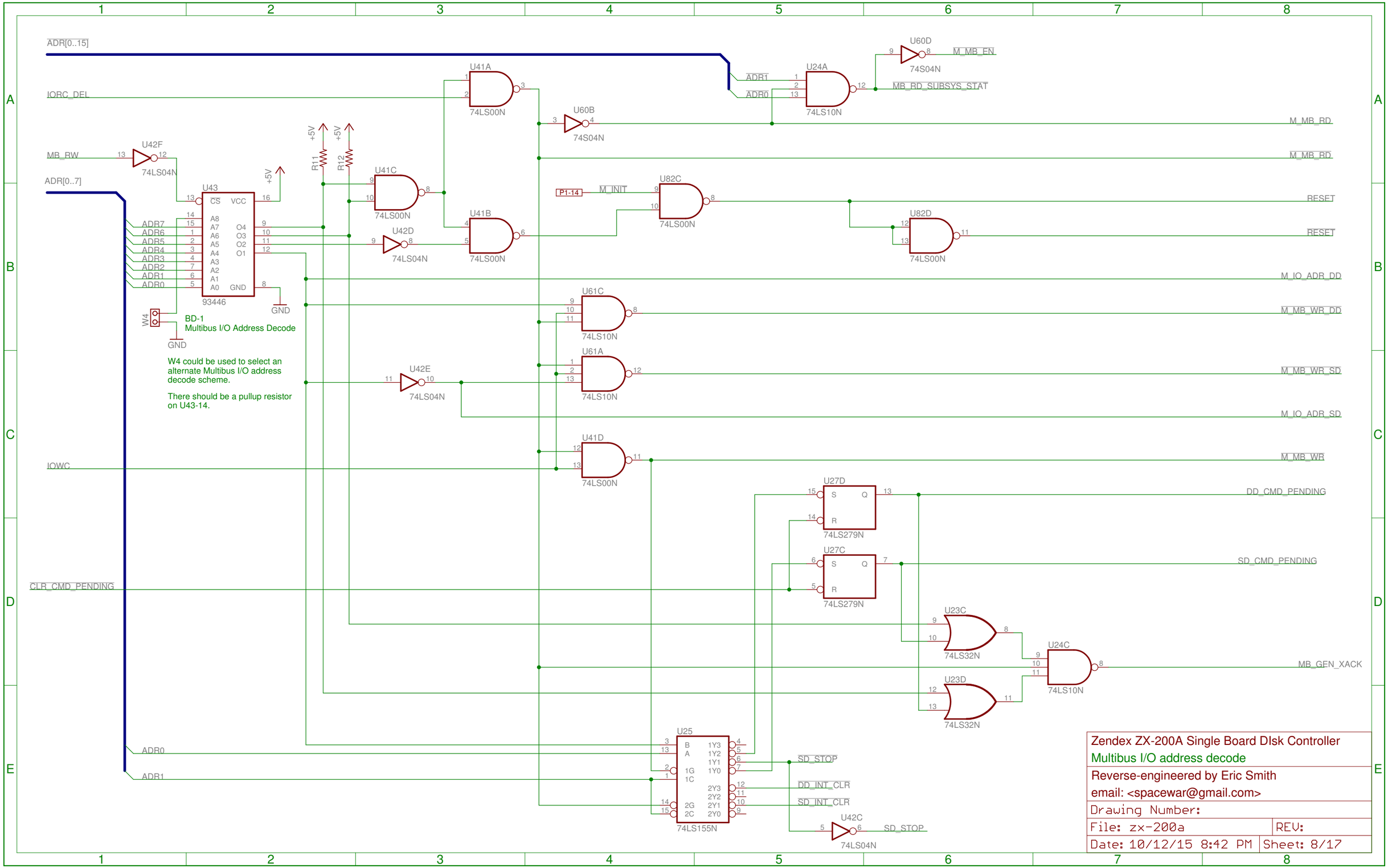
Reverse-engineered by Eric Smith

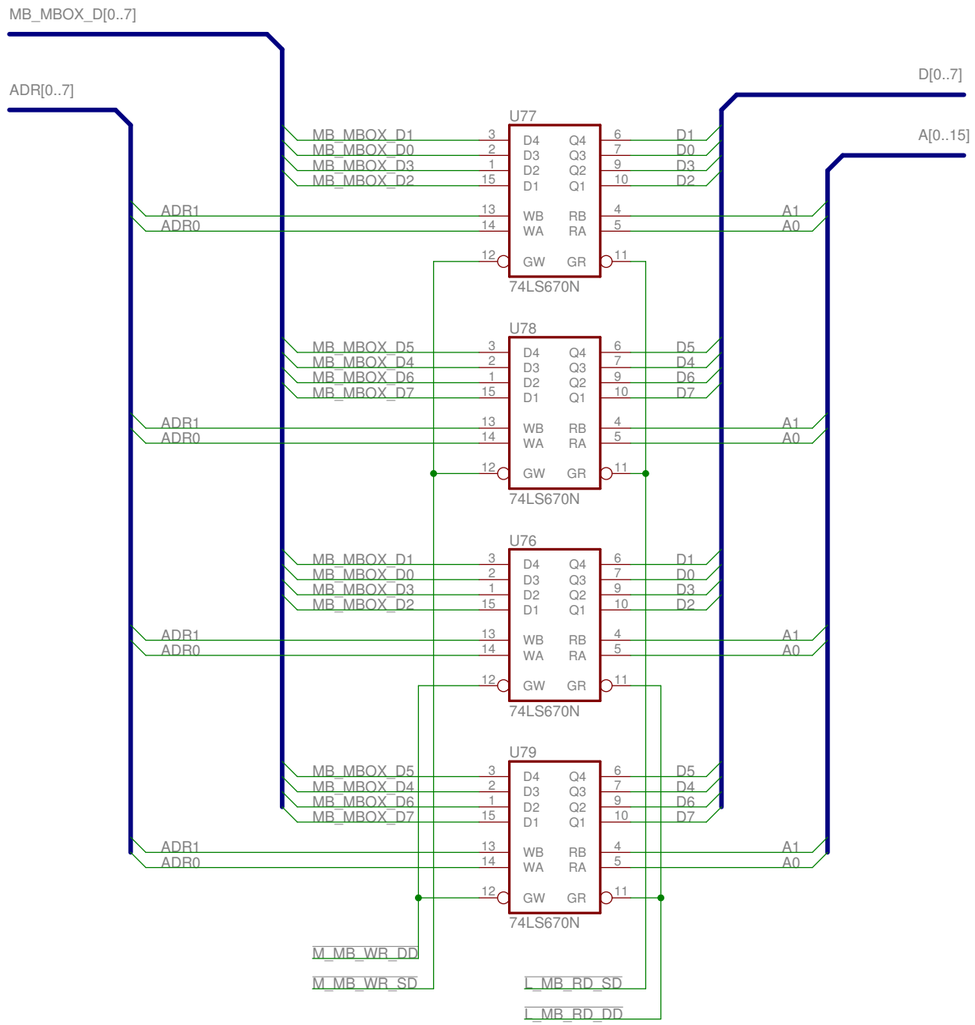
email: <spacewar@gmail.com>

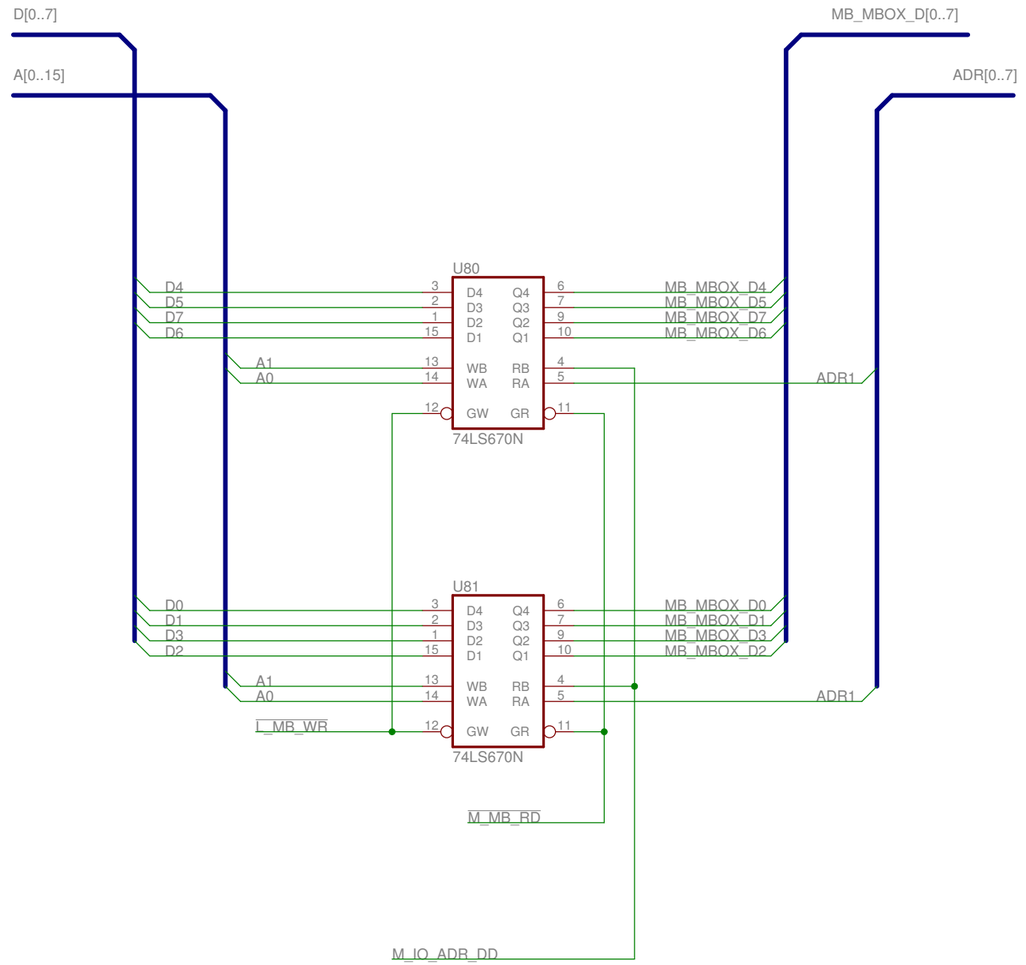
Drawing Number:

File: zx-200a | REV:

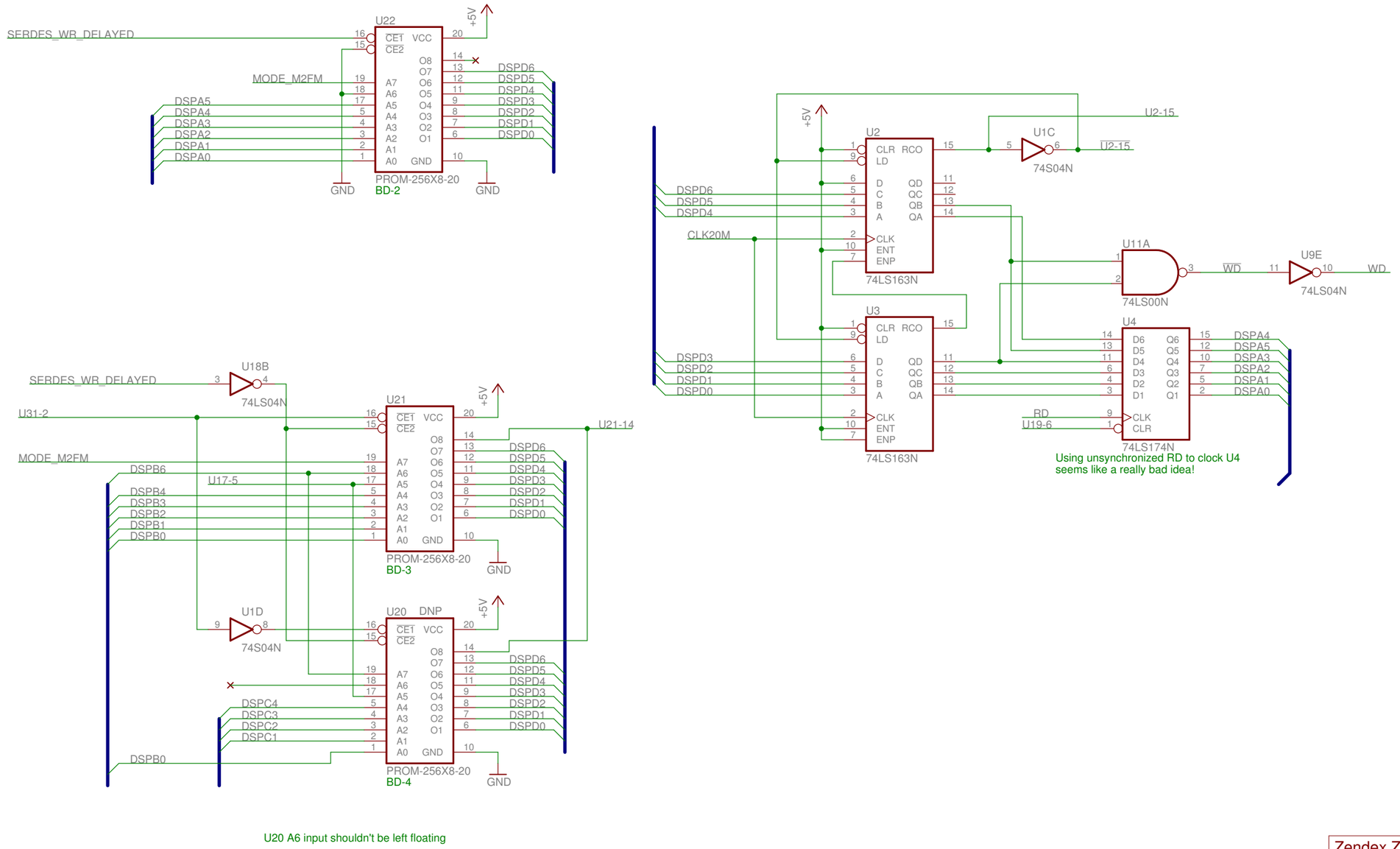
Date: 10/12/15 8:42 PM | Sheet: 7/17


ADR[0..15]
IORC_DEL
MB_RW
ADR[0..7]
IOWC
CLR_CMD_PENDING
ADR0
ADR1
U42F
74LS04N
U43
CS
VCC
A8
A7
A6
A5
A4
A3
A2
A1
A0
O4
O3
O2
O1
GND
93446
+5V
R11
R12
W4
GND
BD-1
Multibus I/O Address Decode
W4 could be used to select an alternate Multibus I/O address decode scheme.
There should be a pullup resistor on U43-14.
U41A
74LS00N
U41B
74LS00N
U41C
74LS00N
U41D
74LS00N
U42D
74LS04N
U42E
74LS04N
U60B
74S04N
U60D
74S04N
M_MB_EN
U24A
74LS10N
MB_RD_SUBSYS_STAT
U82C
74LS00N
P1-14
M_INIT
U82D
74LS00N
U61C
74LS10N
U61A
74LS10N
U27D
74LS279N
U27C
74LS279N
U23C
74LS32N
U23D
74LS32N
U24C
74LS10N
U25
74LS155N
U42C
74LS04N
SD_STOP
DD_INT_CLR
SD_INT_CLR
M_MB_RD
M_MB_RD
RESET
RESET
M_IO_ADR_DD
M_MB_WR_DD
M_MB_WR_SD
M_IO_ADR_SD
M_MB_WR
DD_CMD_PENDING
SD_CMD_PENDING
MB_GEN_XACK
Zendex ZX-200A Single Board DIsk Controller
Multibus I/O address decode
Reverse-engineered by Eric Smith
email: <spacewar@gmail.com>
Drawing Number:
File: zx-200a
REV:
Date: 10/12/15 8:42 PM
Sheet: 8/17

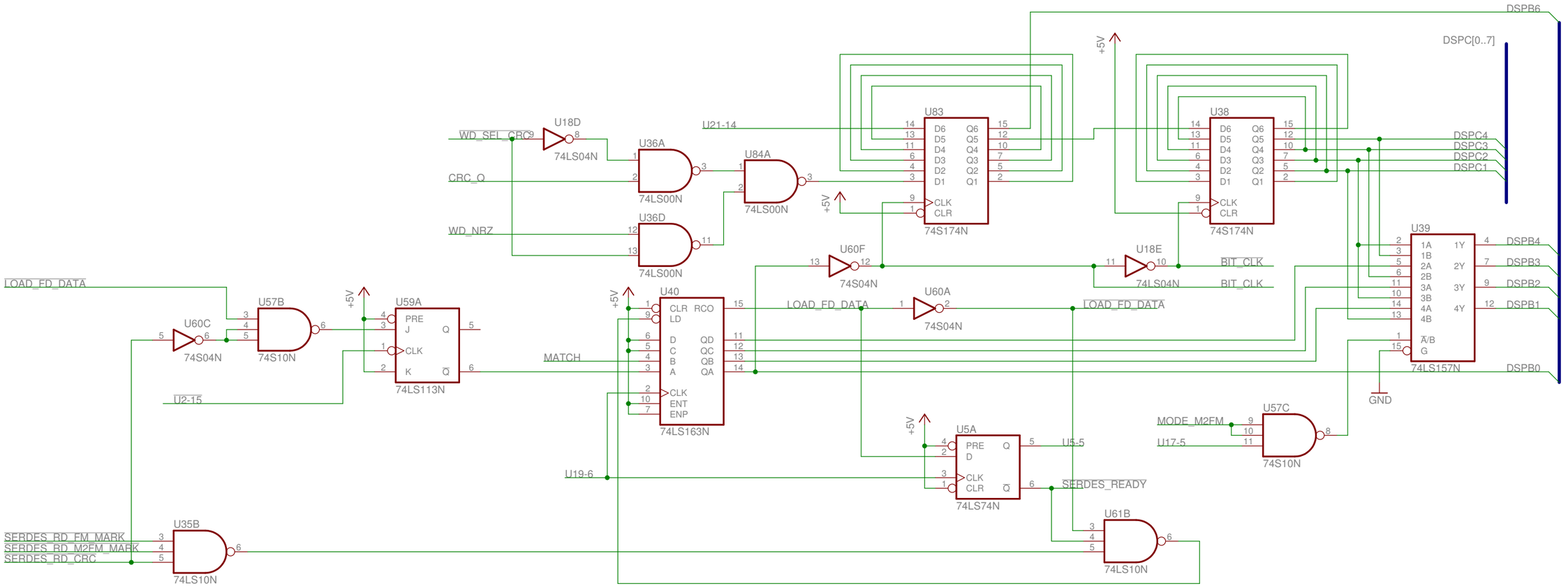




Zendex ZX-200A Single Board DIsk Controller Multibus mailbox	
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 9/17



Zendex ZX-200A Single Board DIsk Controller	
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 10/17



Zendex ZX-200A Single Board DIsk Controller

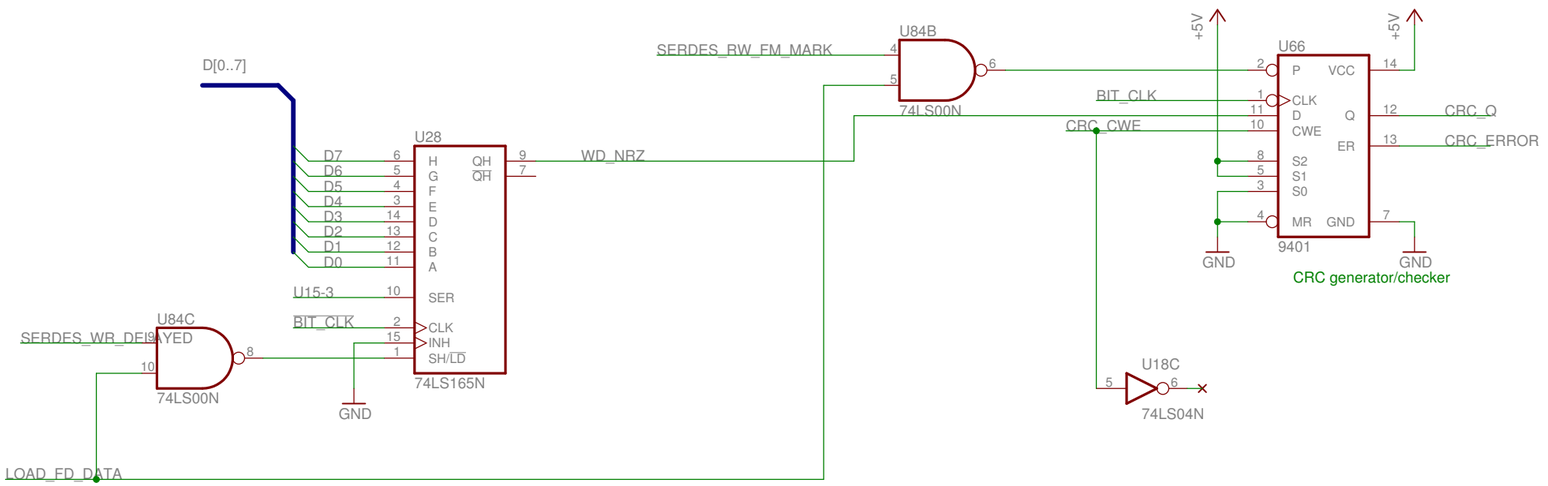
Floppy disk state machines

Reverse-engineered by Eric Smith
email: <spacewar@gmail.com>

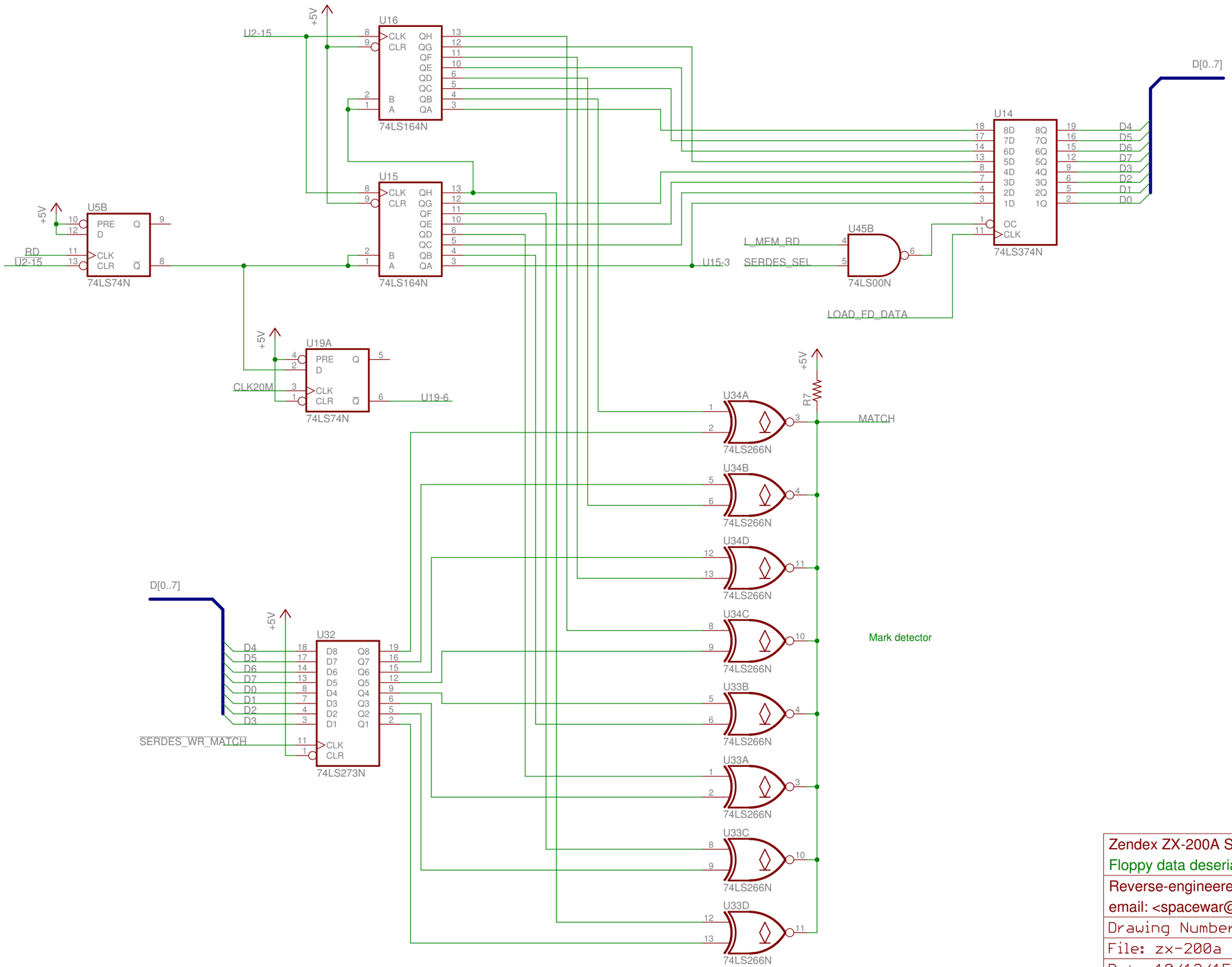
Drawing Number:

File: zx-200a | REV:

Date: 10/12/15 8:42 PM | Sheet: 11/17



Zendex ZX-200A Single Board DIsk Controller	
Floppy data serializer, CRC generator/checker	
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 12/17



Zendex ZX-200A Single Board DIsk Controller

Floppy data deserializer

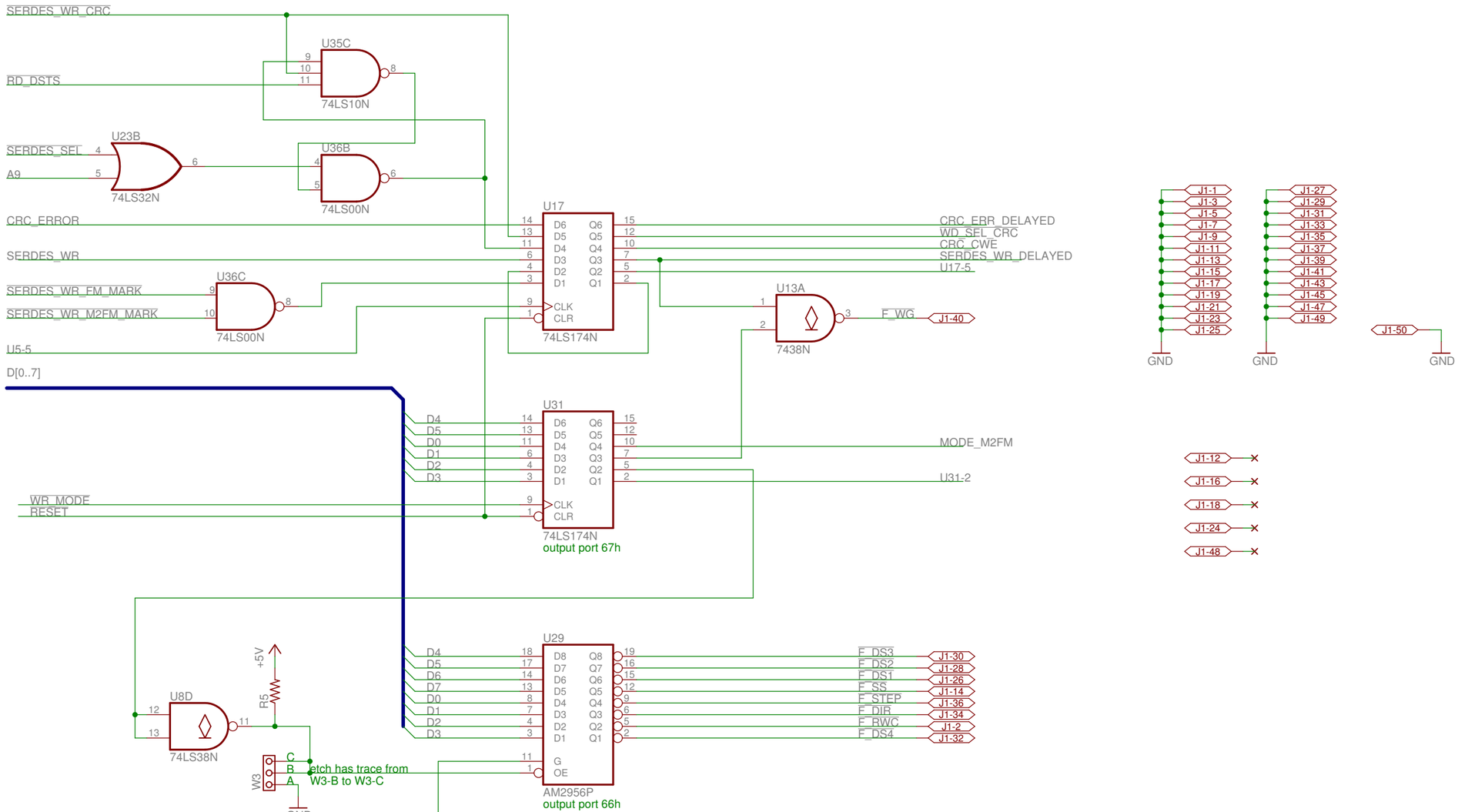
Reverse-engineered by Eric Smith

email: <spacewar@gmail.com>

Drawing Number:

File: zx-200a | REV:

Date: 10/12/15 8:42 PM | Sheet: 13/17



Zendex ZX-200A Single Board DIsk Controller

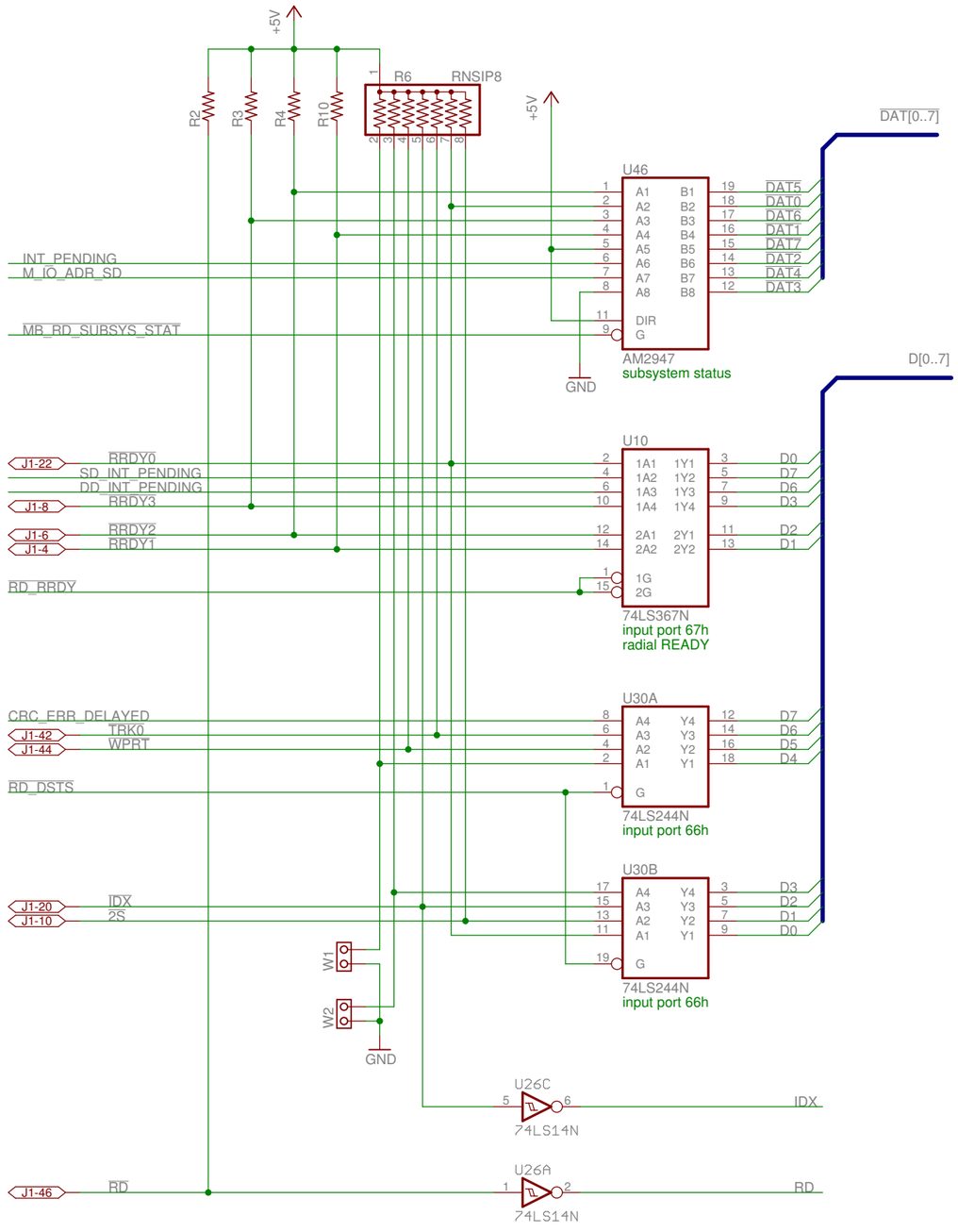
Floppy interface drivers, grounds, no connects

Reverse-engineered by Eric Smith
email: <spacewar@gmail.com>

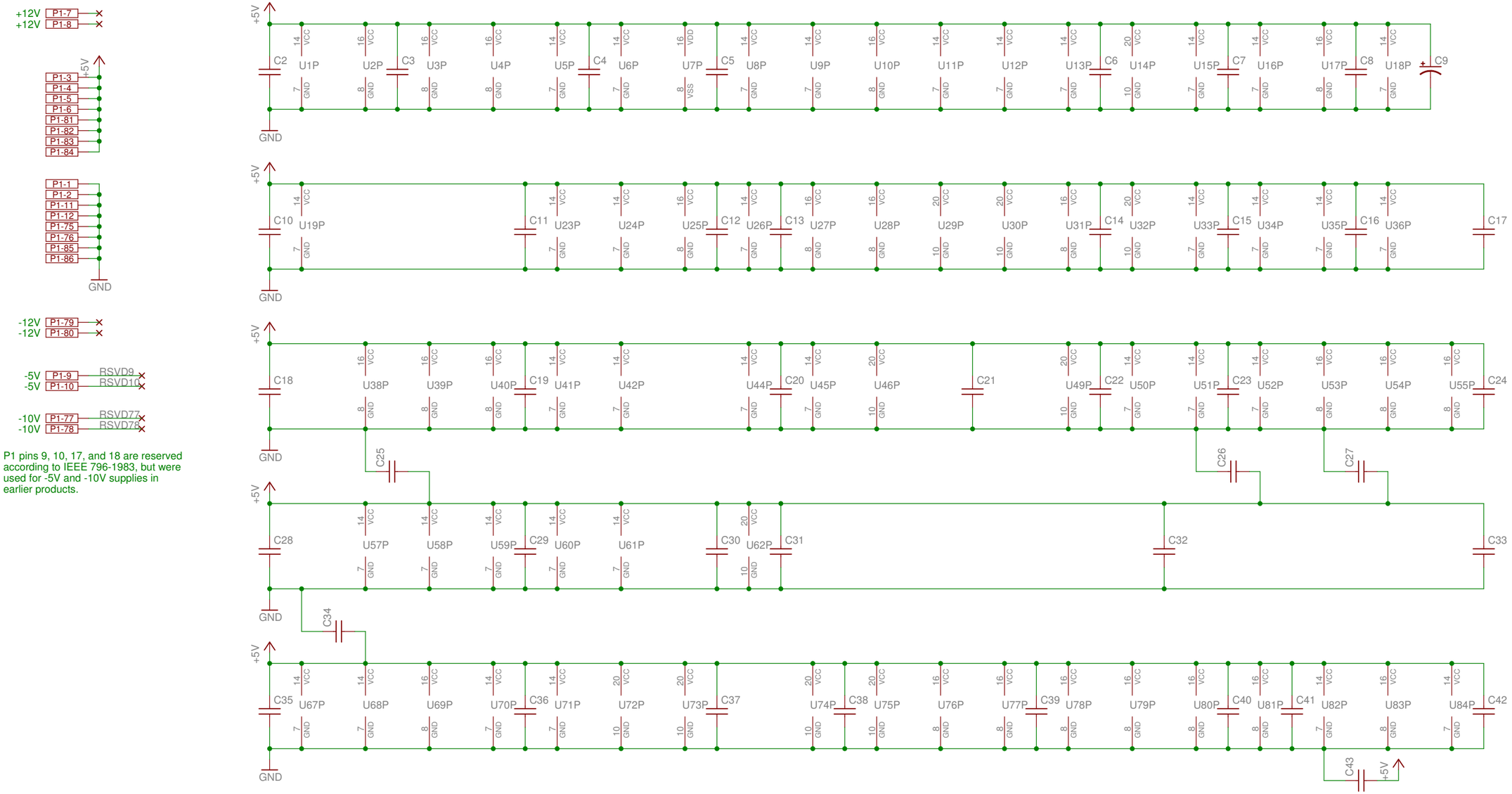
Drawing Number:

File: zx-200a | REV:

Date: 10/12/15 8:42 PM | Sheet: 14/17



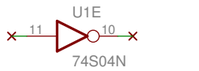
Zendex ZX-200A Single Board DIsk Controller	
Floppy interface receivers	
Reverse-engineered by Eric Smith	
email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 15/17

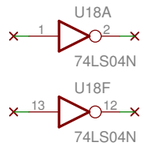


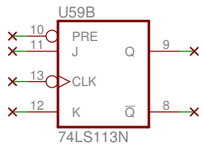
P1 pins 9, 10, 17, and 18 are reserved according to IEEE 796-1983, but were used for -5V and -10V supplies in earlier products.

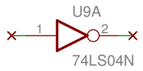
C2..C8, C10..C43 are axial lead bypass capacitors
C9 is an axial lead aluminum electrolytic capacitor for bulk capacitance

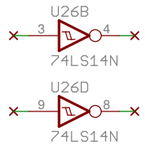
Zendex ZX-200A Single Board DIsk Controller	
Power	
Reverse-engineered by Eric Smith	
email: <spacewar@gmail.com>	
Drawing Number:	
File: zx-200a	REV:
Date: 10/12/15 8:42 PM	Sheet: 16/17

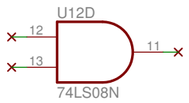


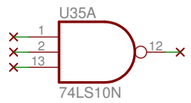


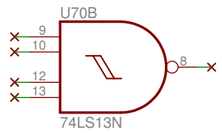


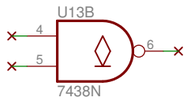


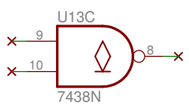


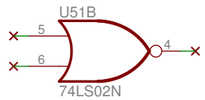


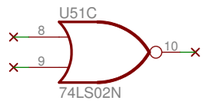


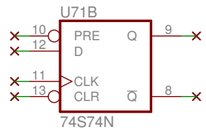












Need to double-check whether these are really unused.

Unused inputs should not be left floating.

Zendex ZX-200A Single Board DIsk Controller Unused gates		
Reverse-engineered by Eric Smith email: <spacewar@gmail.com>		
Drawing Number:		
File: zx-200a	REV:	
Date: 10/12/15 8:42 PM	Sheet: 17/17	