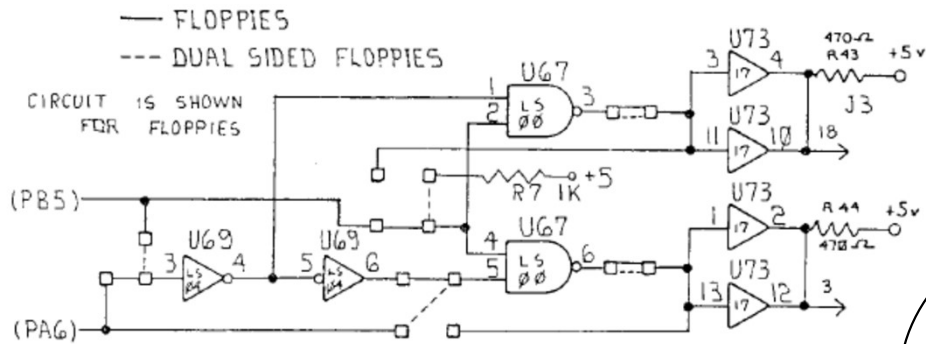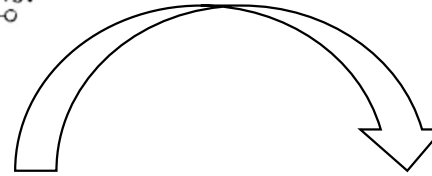# OSI FLOPPY CONTROLLER SETUP FOR YE-DOS

ORIGINAL TWO DRIVES SINGLE SIDED

MODIFIED FOR TWO DRIVES DOUBLE SIDED
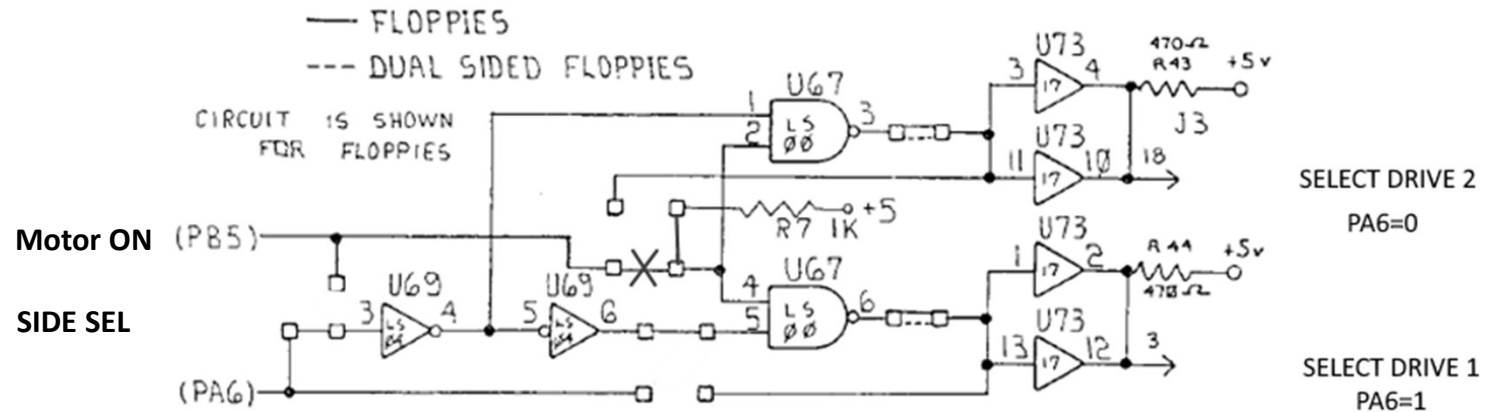
Software control:

PA6=1 -> Drive 1
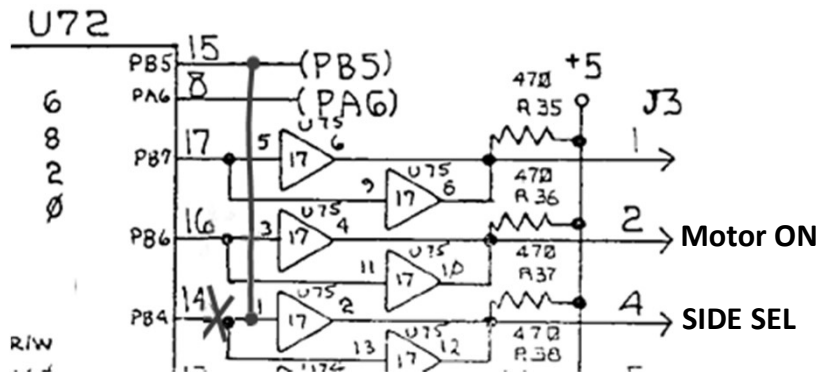PA6=0 -> Drive 2

PB5=1 -> Side 0
PB5=0 -> Side 1

A- Disconnect PB5 bride and connect R7 to U67

OSI FLOPPY CONTROLLER SETUP FOR YE-DOS

B- Add Motor On output on PB4 and
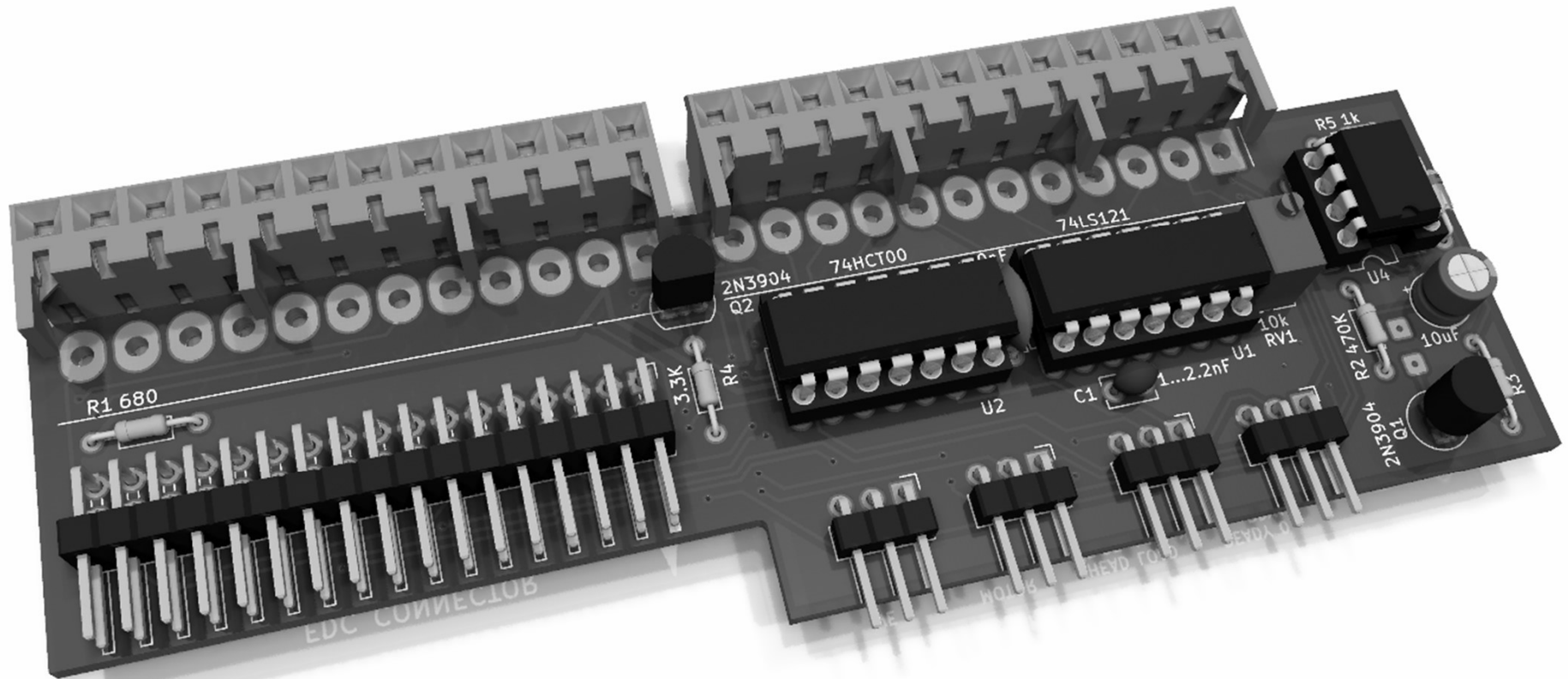modify Side Select output port to PB5

Disconnect PB4 and wire PB5 to U75

C- Add Ground to Pin 12/13 and
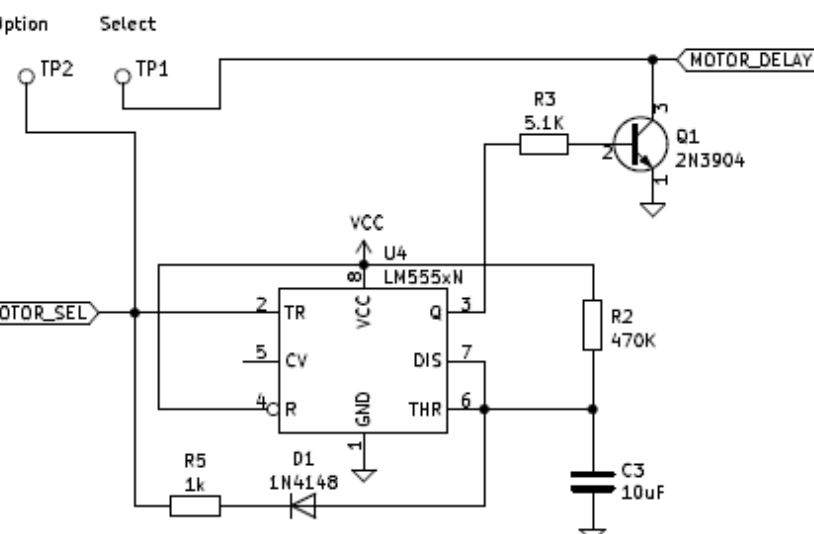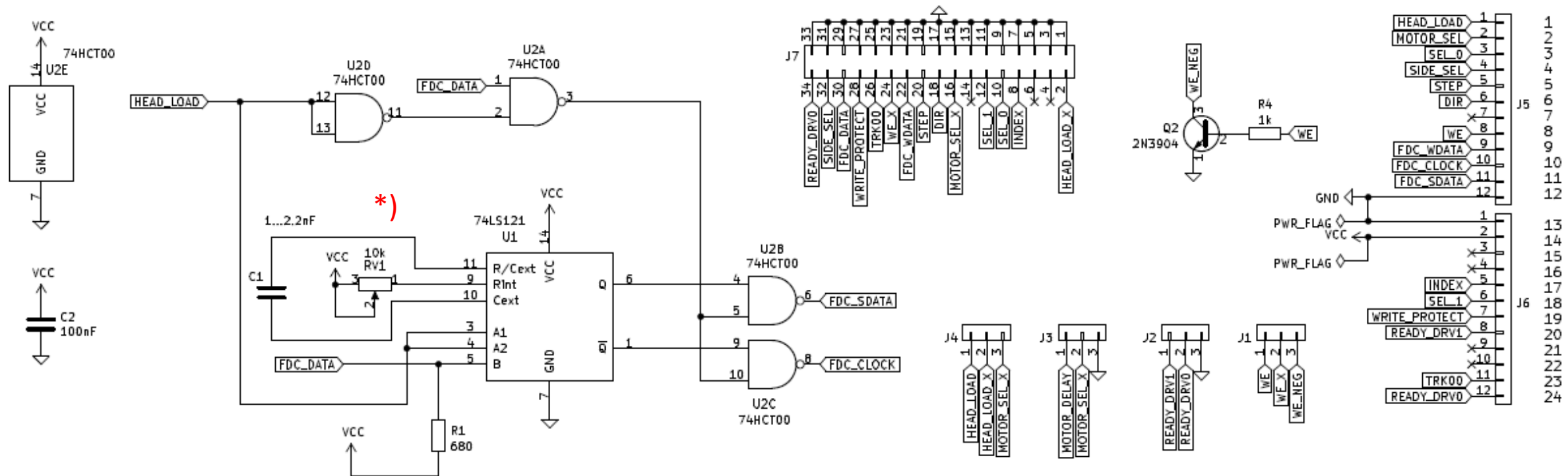 +5V to Pin 14 of the OSI 610 Floppy J3 connector pins

OSI--610 J3 PIN FUNCTION				
J3	NAME	5.25 inch drive	3.5 inch drive	Port
1	Head Load	2 or Open	Open	PB7
2	Low Current	Motor ON (PB6) 16	Motor ON (PB6) 16	PB6
18	Select Drive H(1) (opt Side Select)	12	12	(PB5)
4	(Fault reset) Side Select	SIDE SEL (PB5) 32	SIDE SEL (PB5) 32	PB4
5	Step	20	20	PB3
6	Step Direction	18	18	PB2
7	Erase Enable			PB1
8	Write Enable	24	24	PB0
9	Write Data	22	22	ACIA
10	Receive Clock From Data Separator			ACIA
11	Receive Data From Data Separator	Data Separator (30)	Data Separator (30)	ACIA
12	Ground	All ODD Pins	All ODD Pins	
13	Ground	All ODD Pins	All ODD Pins	
14	OPT.GND or +5V		37/38	n/a
15	NC			n/a
16	NC			n/a
17	Index	8	8	PA7
3	Select Drive L(0)	10	10	(PA6)
19	Write Protect	28	28	PA5
20	** Grounded	NC	NC	PA4
21	Sector (470)	Pull high	Pull high	PA3
22	Fault	Pull high	Pull high	PA2
23	Track 00	26	26	PA1
24	** Grounded	34 (not always)	34	PA0

IN

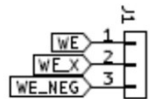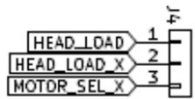| OUT |
|---|

OSI DATA SEPARATOR FOR 610 FLOPPY CONTROLLER BOARD

First adjust the 610 board signal Monoflop's according to the Service Manual

Setup Data Separator:
Connect 5V to VCC Pin 14(VCC, J6) and
Ground to Pin12 & Pin1 (Heal Load, J5)
Apply 10kHz or up to 50kHz TTL signal to Pin 30 J7 (Floppy pin header)
Adjust 74LS121 Monoflop (pin 1, U1) to 5.5usec delay (compared to TTL input)

OSI DATA SEPARATOR
FOR 610 CONTROLLER
BOARD VERSION 2.1

	Headload HL Pin 2 to disk drive	1-2 HL driven by PB7	2-3 HL driven by Motor	Open HL off
J4 HEAD_LOAD (1) HEAD_LOAD_X (2) MOTOR_SEL_X (3)	Motor signal Pin 16 to disk drive	1-2 Motor driven by PB6	2-3 Motor always on	Open \<no option\>
J3 MOTOR_DELAY (1) MOTOR_SEL_X (2) (3)	Ready 0 from disk drive going to PA0	1-2 Ready 1&0 connected	2-3 Ready 0 always true	Open Ready 0 goes to PA0
J2 READY_DRV1 (1) READY_DRV0 (2) (3)	Write Enable Pin 24 to disk drive	1-2 Linked to PB0	2-3 Inverted WE (YE-DOS)	Open \<no option\>
J1 WE (1) WE_X (2) WE_NEG (3)				