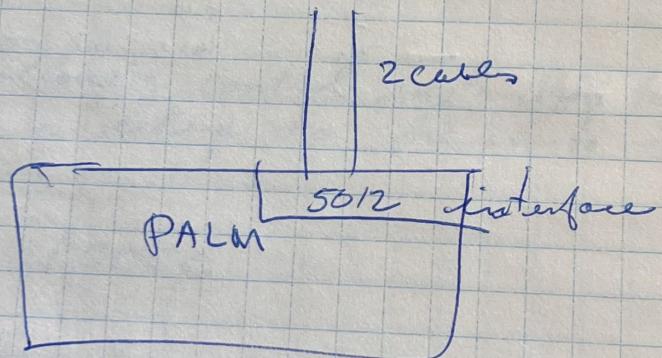
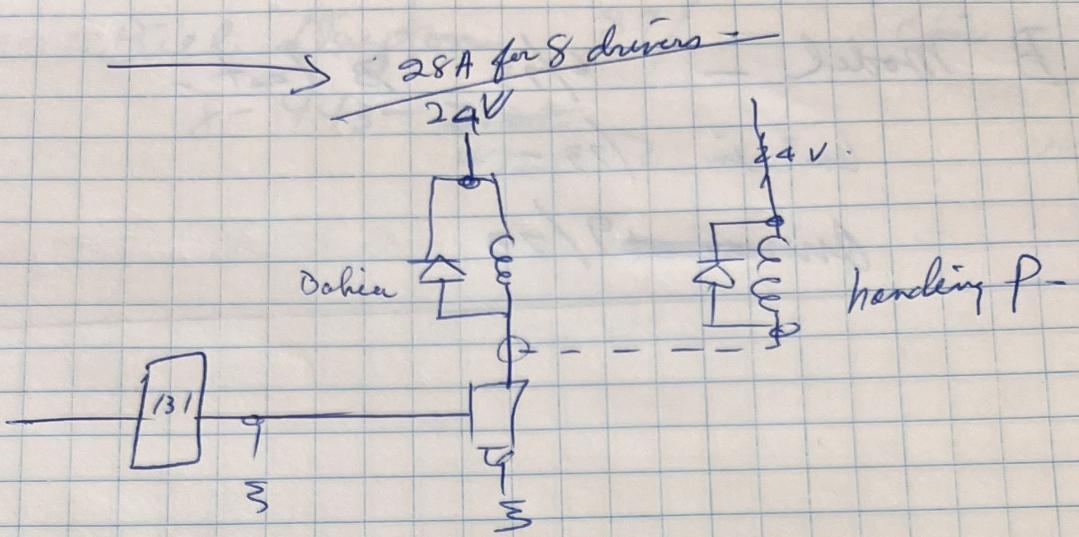


2 banks of DO.
1 .. DT





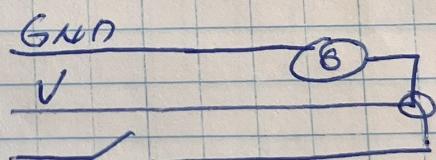
Need method to Switch high I^S

Shut off 24V / select 24V for B of HP.

Consider toggle switch to select Bohne / HP
or relay - program controlled.

Bohney

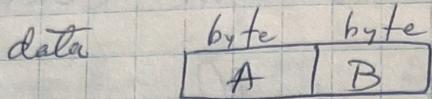
- 8 data Wires-
- 3 switches + lite
- 2 emitter
- need 4 to 1 amplifiers -
- 8 ground



Bohney has only 7 magnets

2/18/13

Shift left 16 bit register



WR1	A	B
WR2	XX	A
WR3	XX	$8\phi_{16}$
(WR4) CTR	XX	ϕ_n

set mask, WR3 = 80_{16}

set shift count (WR4)

Mov Data \rightarrow WR1

LTH WR1 \rightarrow WR2

add WR2 \rightarrow WR2 shift A left 1

Jmp WR1 \rightarrow WR3 MASK

add I + 1 CTR

SET WR2 b,t 7 = 1

Add WR1 \rightarrow WR1 shift B left 1

decr. Counter

Jmp count $\geq \phi$

sub I from I CTR

LTH WR2 \rightarrow WR1

Mov WR1 \rightarrow data -

latch to main line?

hi order bit of byte B = ϕ

2/19/73

Jim Kaeshae, Endicott.

8-252-7078, Dept. P26 - Packaging Engng

~~812 457~~ ~~3/4 plane~~
~~full plane~~

Fred Pericchio - ~~7040~~

Jim Barry - 7078

Dave Zevon - Endicott

Les Holmes
Owen Mc Elligott. } Dutchers VTL cards

2/24 Dick Ciccone - 4593

We're it yourself Dutchers ~~VTL~~

- John Hill - 4119

Order stock from Endicott -

PN Internal plane 273 165# — ~~PALM~~
4W 6H~~I~~ etch yourself, ^{VTL} card.

~~with it~~

Terry Howe itch lab - Boca
3444

2/26

Hep Keyboard

VTL Conn.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (8)
- 11 (9)
- 12 (10)
- 13 (11)
- 14 (12)
- 15 (13)
- 16 (14)

SLT adaptor

- B05
- B06
- B07
- B09
- ~~B10~~
- B11
- B12
- B13
- D13
- D12
- D21
- D10
- D09
- D07
- D06
- D05

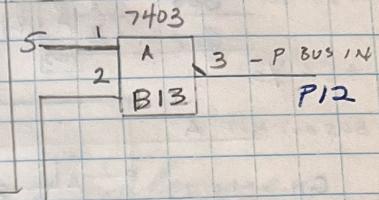
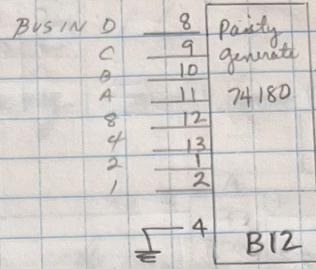
NOT USED
NOT USED

Signal

- get strobe
- + DA X 1
- + DA Y 3
- + BUS IN BIT 1
- + BUS IN BIT 2
- + BUS IN BIT 4
- GND
- + BUS IN BIT 8
- + BUS IN BIT D
- ext 1 reg.
- BUS OUT BIT A
- CTRL STROBE
- + DA F
- ~~+5V~~

7/21/13

Shift instruction.



BUS OUT BIT D (0) S06
BUS OUT BIT C (1) S07
BUS OUT BIT B (2) S08
BUS OUT BIT A (3) S09

+ SHIFT RIGHT
+ ROTATE

SQ CTRL

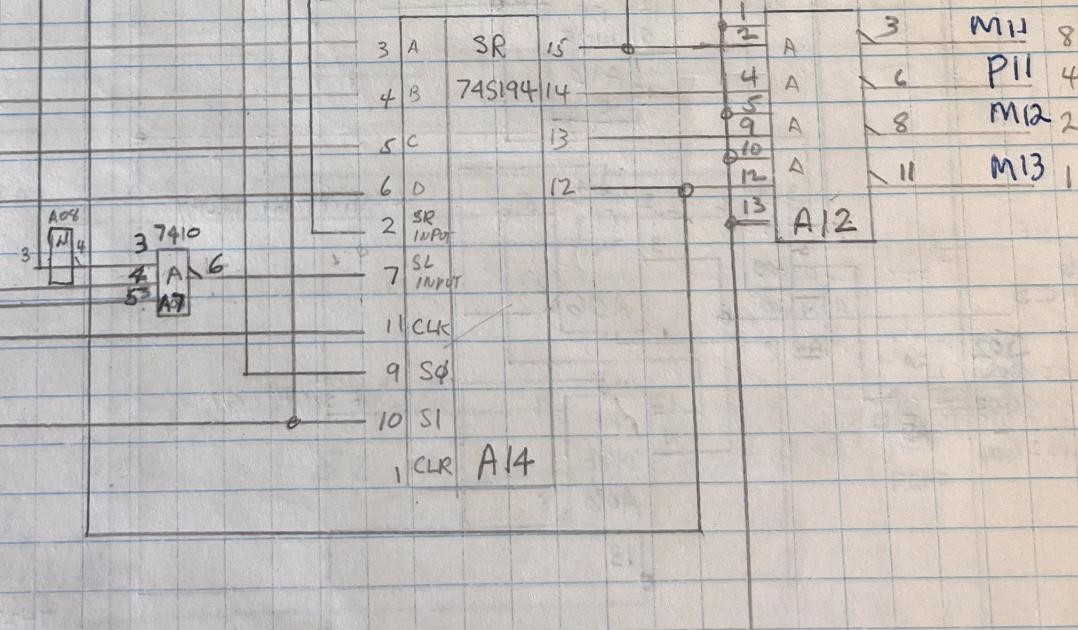
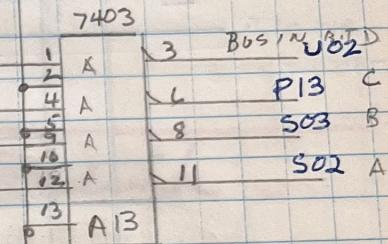
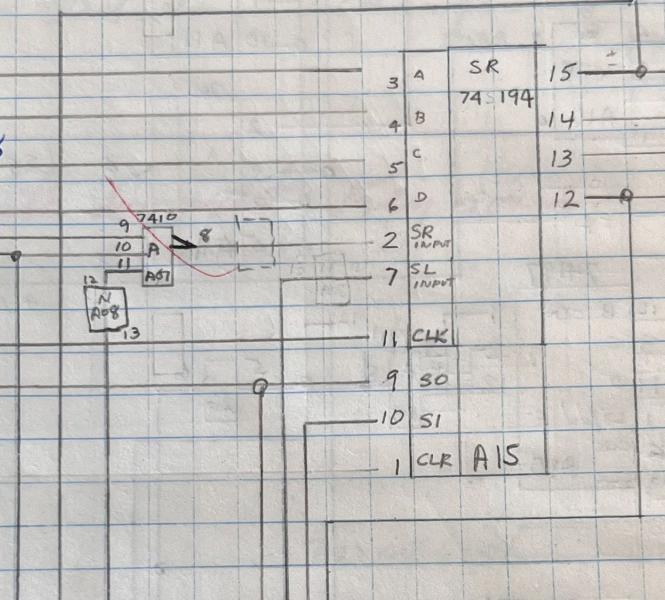
CLOCK
+ OSC PWR

BUS OUT BIT 8 (4) S04
BUS OUT BIT 4 (5) U04
BUS OUT BIT 2 (6) S05
BUS OUT BIT 1 (7) U05

+ SHIFT LEFT

SI CTRL

+ DEVICE ADDRESS



2/27/73

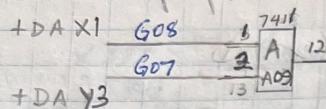
BA

SHIFT LEFT (ZERO insert)

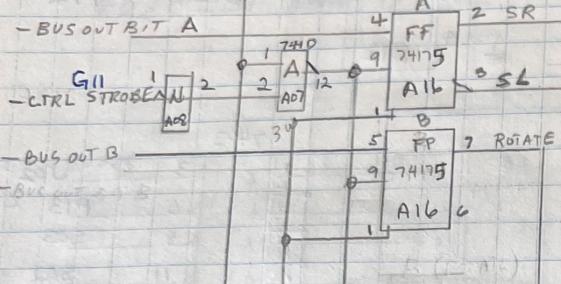
0 0
1 0
0 1
1 1

SL AND ROTATE

SHIFT RIGHT (Zero insert)

SR LOGICAL 1's insert.
+ rotate

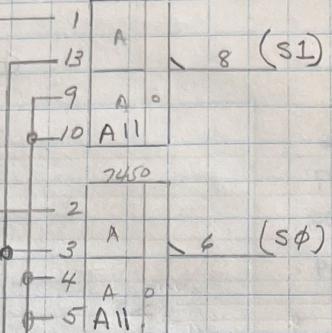
+ DA Y3



74197

1D B CTR
3 C
11 D
1 LD/COUNT
6 CLK
13 CLR A10

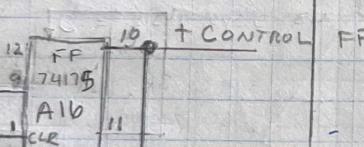
7450



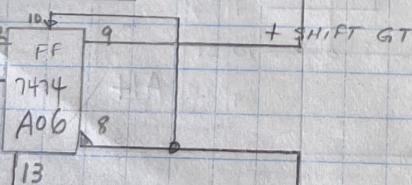
S1 SO

+	+	LOAD
-	+	SR
+	-	SL
-	-	No SHIFT

+ ROTATE OR SRL



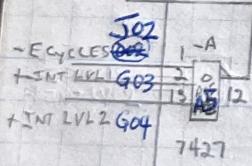
+ SHIFT GT DELAY



+ SHIFT GT

E CYCLE

G06 + CS



J02

INT LVL G03

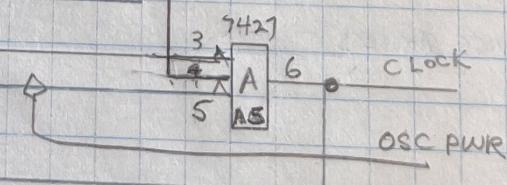
INT LVL 2 G04

7427

G13

OSC

9 N 8



CLOCK

OSC PWR

Consider adding additional control for optional 1's fill on Right Shift.

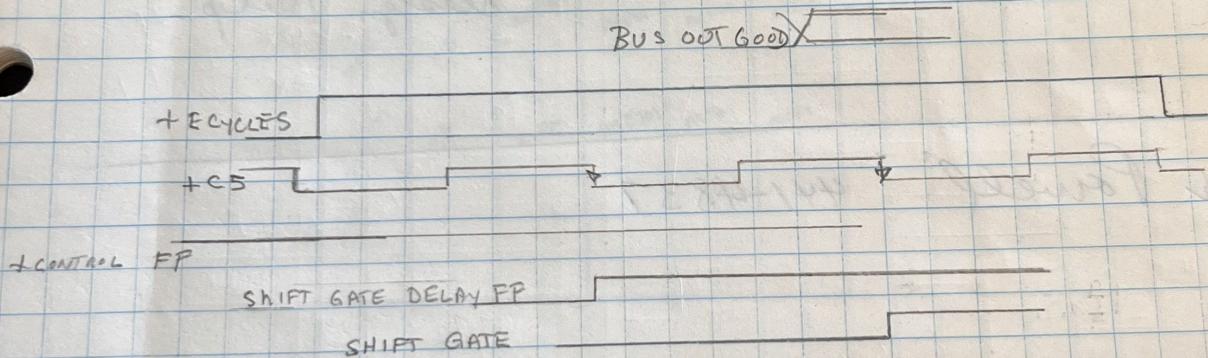
Call from BILL DILLON.
8-443-3245
self clocking code -

~~Spadice~~

Sending cassette design + disclosure
he did in 1967 for FSD -

look into compact keyboard - Raleigh -
COMPAC

2/27/73



Test Routine -

0080 Emit $\rightarrow R3$ FF — data - } shift left.
 CTR L 3, (3B) = SL 7 CMD }
 GET $\rightarrow R$ 3, 3
 MOV 3, 3, #
 8080

8380 data = 80₁₆ } shift left &
1311 SL & Rotate 1 Setup cmd- }
033E shift data of R3 }
8080

R.C. Johnson 441-6287

2/28/73

COMPAC — sending specs

2/28/73

Mike Striker 252-7845

1/2 standard vertical Board (6x6 32D)
812457

Ted Brown - 243 - Design Help -

2/

Low Powell 441-4837

Shift right.

83 Ø3
~~83 Ø4~~
1321
033E
8080

data
shift right 10mD
shift data
return

Device Addresses

Interrupt Priority

small Keyboard	7	(x1 y3)	1
printer	5		2
large Keyboard	4		1
Cassette	3, 7		1
C. A.	8, 9		1
CRT, error reset			CRT = CYCLE ST
Interrupt Mask			
Processor	φ		

Shift Instruction F3

Device address F = general reset

BUS out bit 1	1	
	2	
	4	
	8	
A		PRINTER
B		KEYBOARD
C		C.A
D		CASSETTE

Shift Instruction.

Control instruction

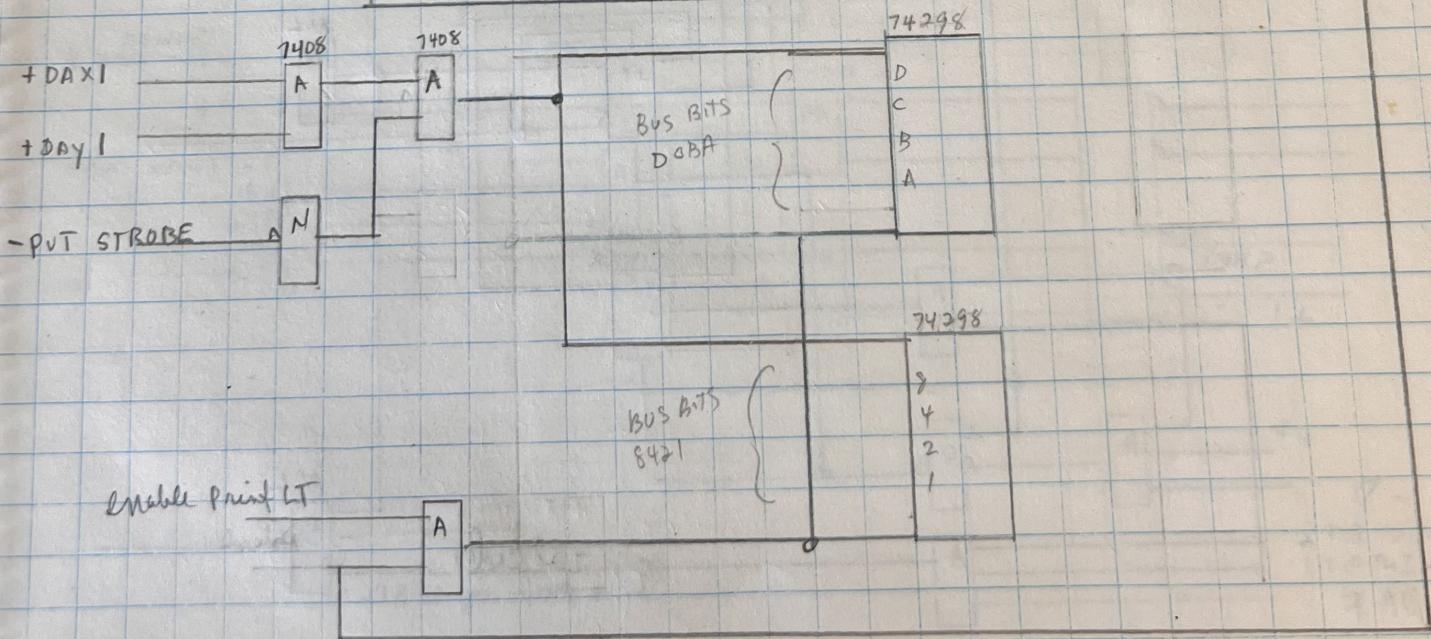
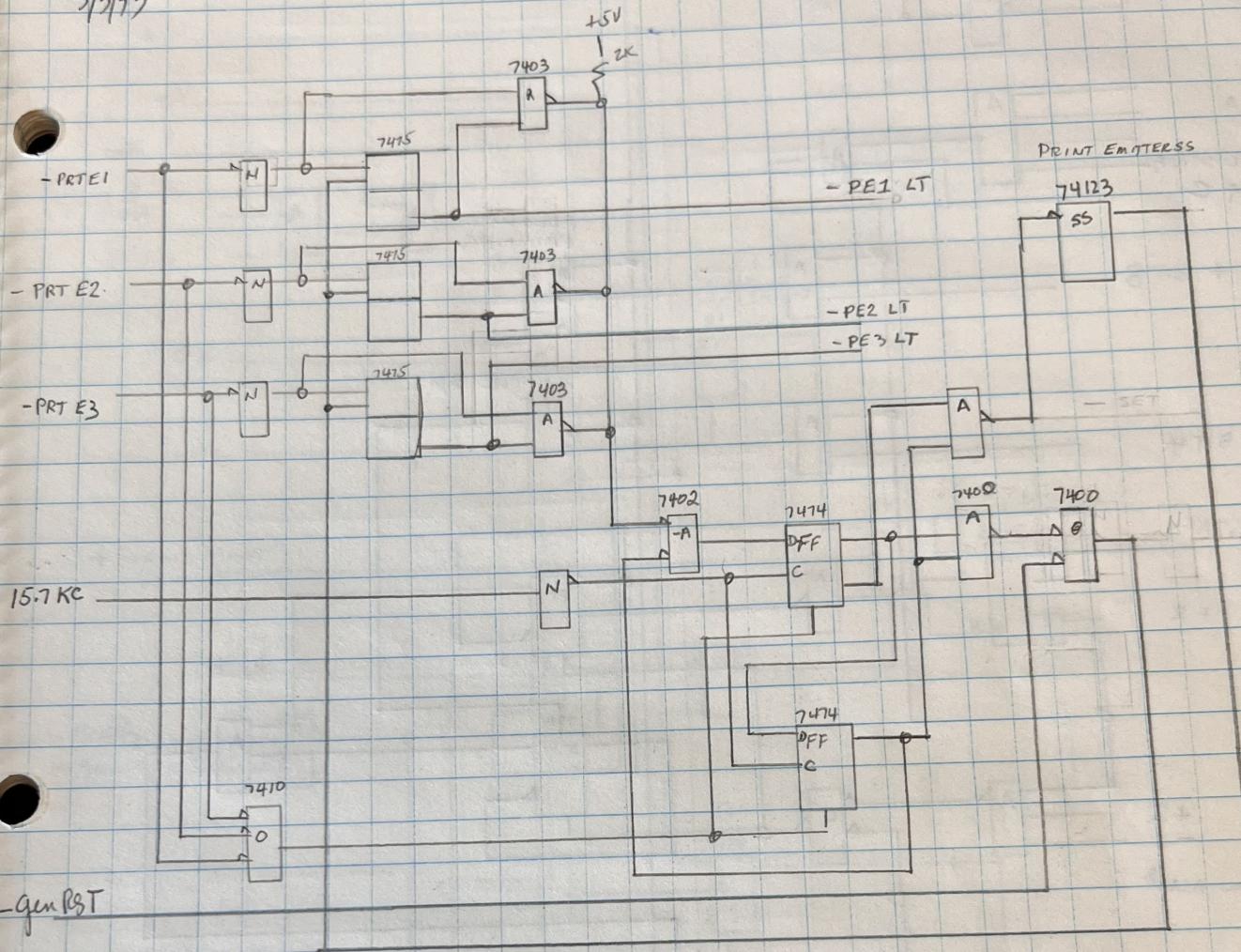
φ = no op

8200 Begin - 0080 BMIT R2, & ϕ

~~add~~ R2, \$4 add 1

0322 82 MOV R3 < R2, Q add 1 to R2
1333 84 CTRL 3, 33 shift left 3 cmd
033E 86 get R3, 3 shift R3 per previous cmd.
1335 88 CTRL 3, 35 shift left 5
033E 8A get R3, 3
C32A C NOJmp R3 = R2
8082 E BMIT ϕ , 82
8090 90 EMIT ϕ , 90 stop on error -

3/3/73



3/13/23

Printer attachment delay - Cont.

Print motor lts

15A4	set print go-
65A3	00
15A7	01
15AF	11
15AB	10
8080	

1101

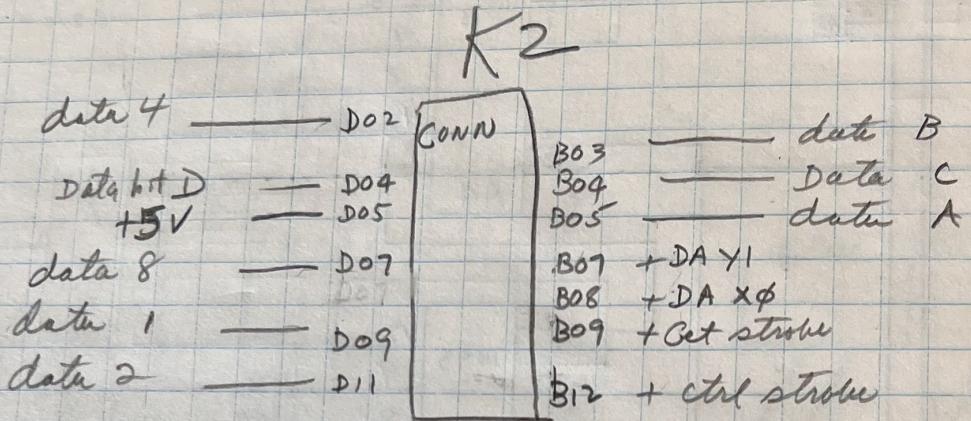
Enable timer interrupt -
use loop to drive timer counter -

6224
8094
3220
15D2
8204
F200
C223
F205
4528
F0FB
830L
053E
8400
054E
1552
8094

0080 BFI 2,2,4 clear R2 hi
82 EMIT 2,94
84 SHD 2,20
86 CTRL
88 EMIT R2,04 } LVL 2 IAR
8A SubI R2,49 enable timer interrupt.
8E Jum R2 = add zeros
90 SubI, R0, 05
92 put 15,49 - step ctr.
94 SubI, 0B
4 Emitt 3,01
8 GetR 5,3
A Emitt 4,00
C GetR 5,3
E CTRL 5, timer count. } level 2
8094

3/14/73

Connector for SMS ROS
Simulator.



7845

K2 D04 , C13-13

K2 B04 C13-12

K2 B03 C13-4

K2 B05 C13-3

K2 D07 C12-13

K2 D02 C12-12

K2 D11 C12-4

K2 D09 C12-3

K2 B07 D11-2

K2 B08 , A09-1

K2 B09 , B14-12

K2 B12 , E16-1a4

-get stroke

B14-13