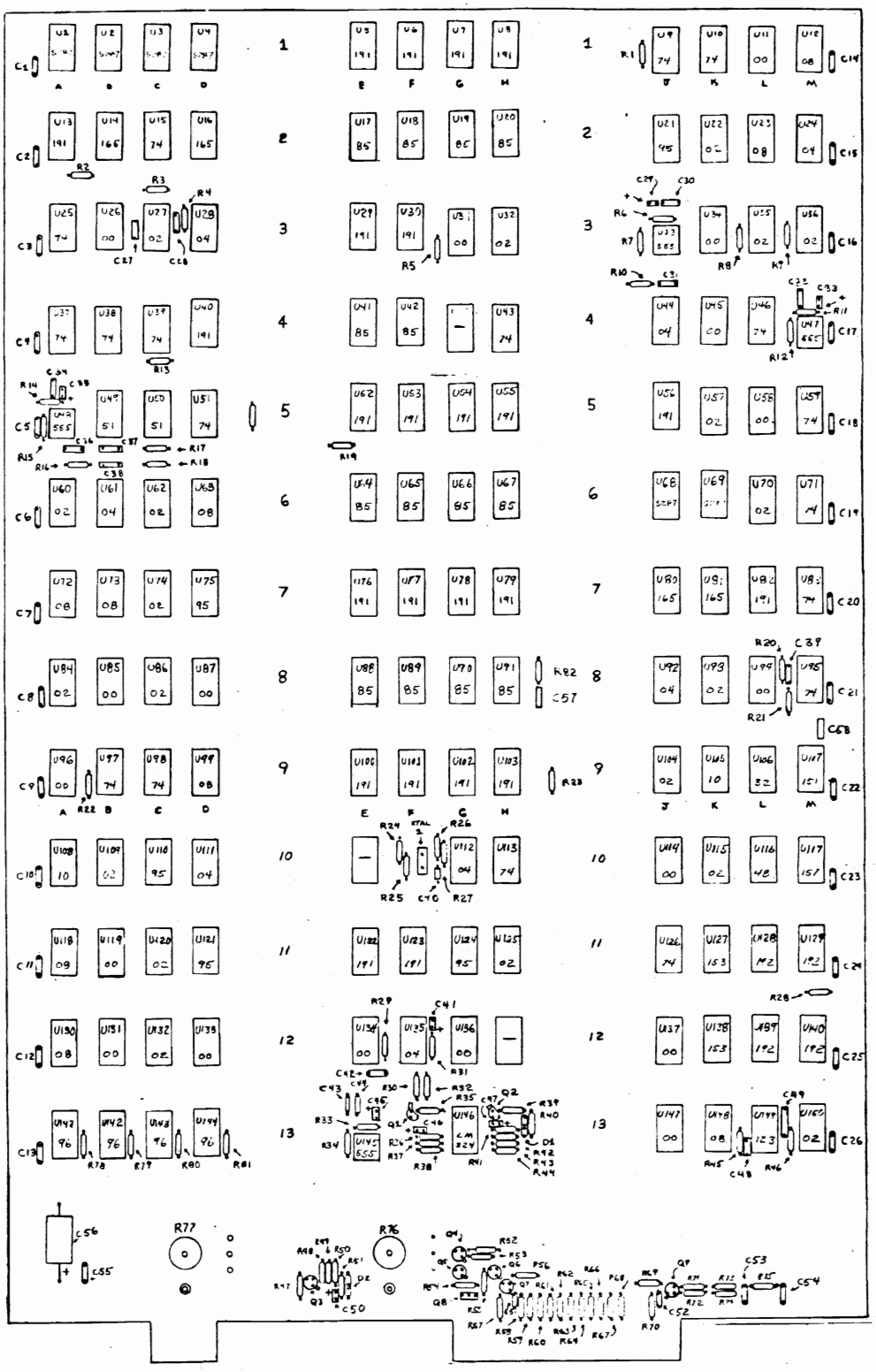
ATTACK

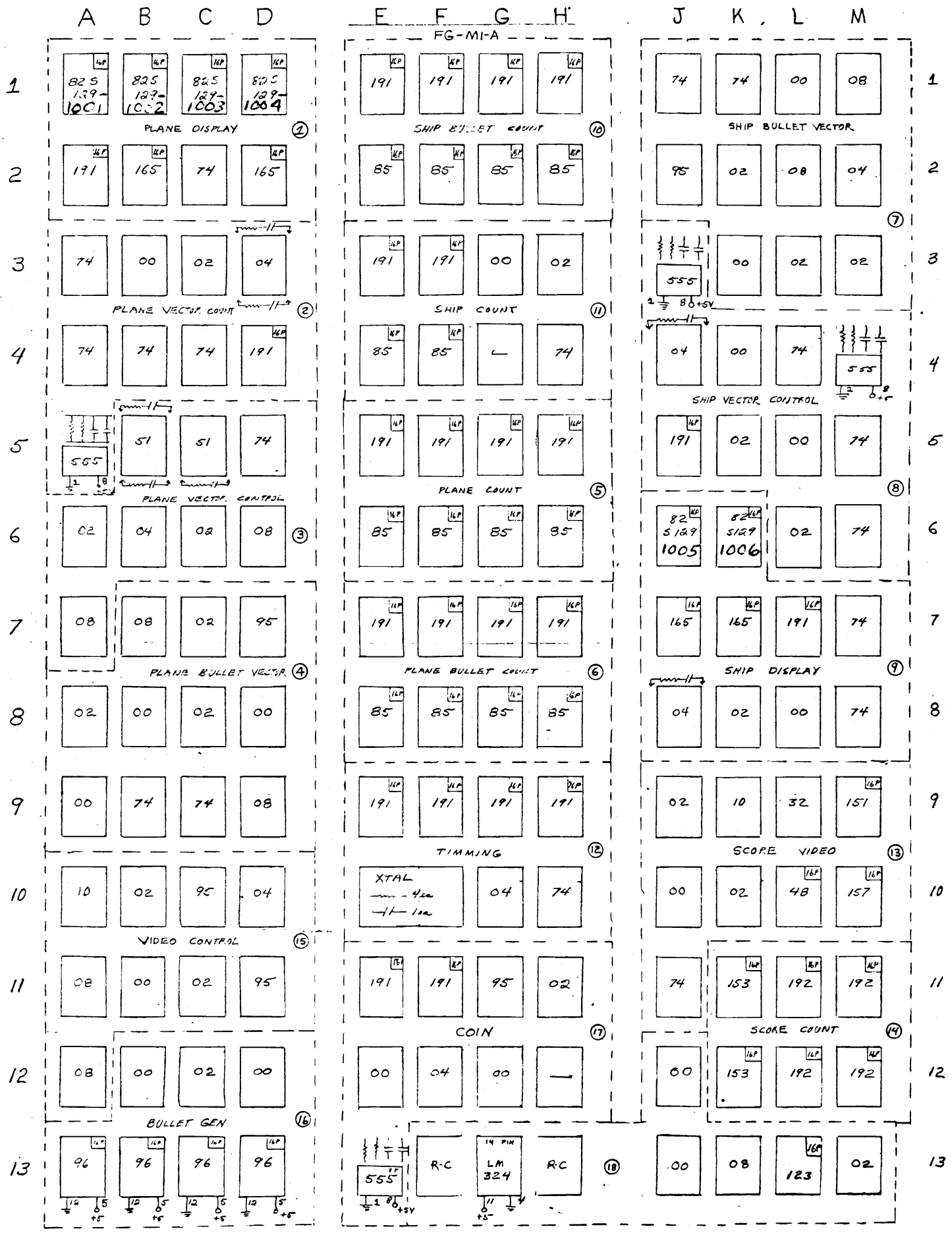
BY *Exidy*

LOGIC DIAGRAM 1A



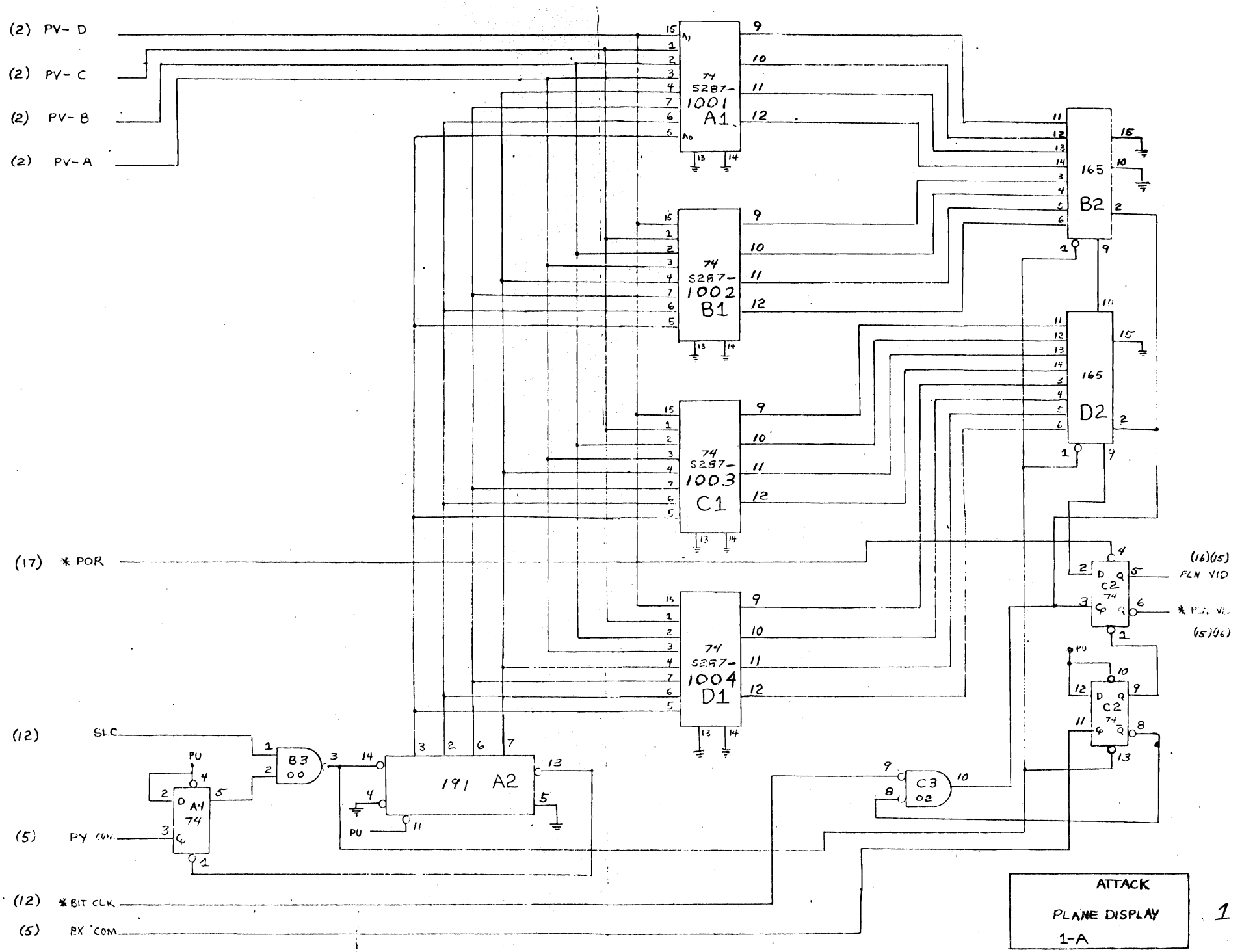
COMPONENT LOCATION

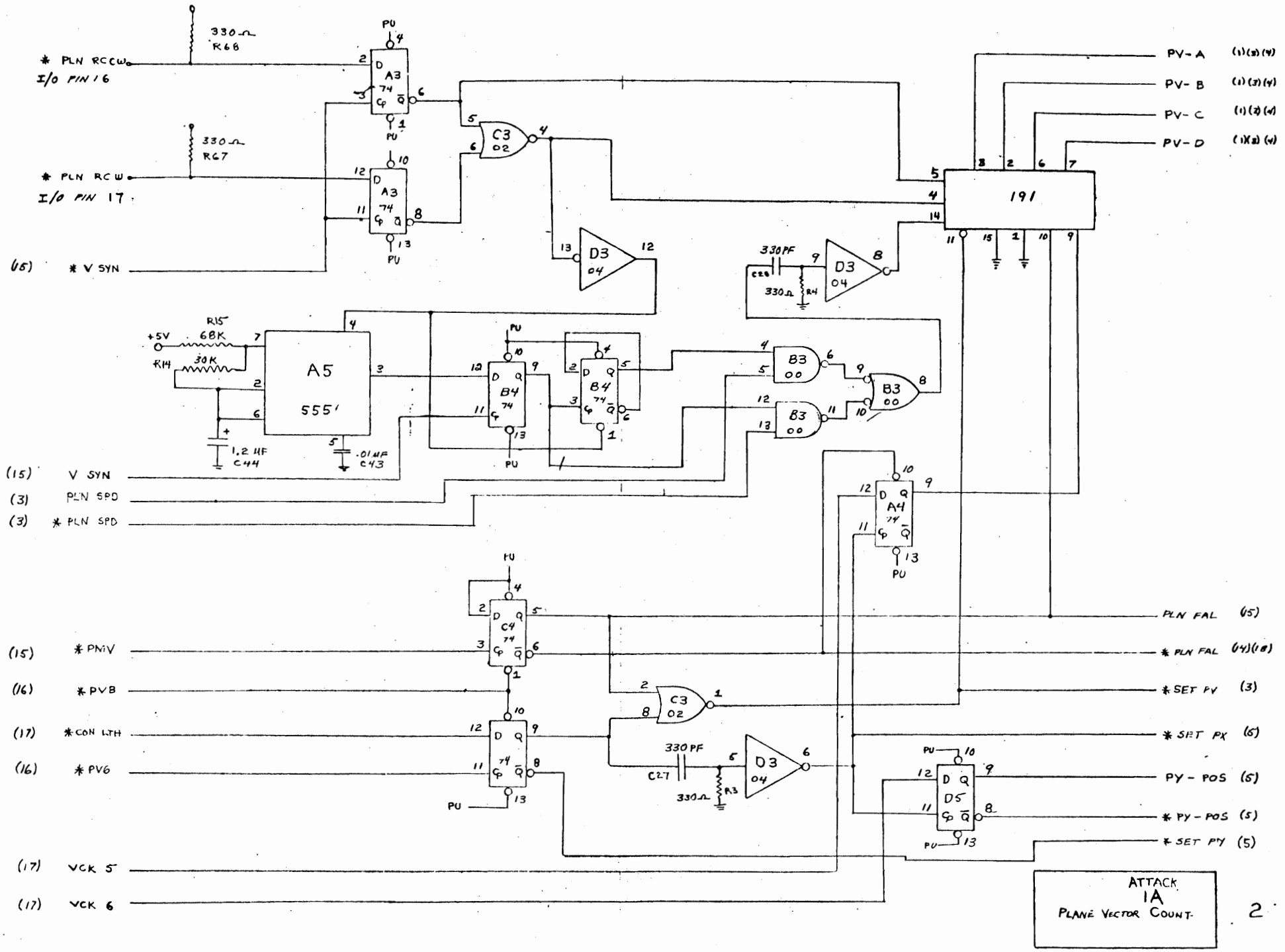
1-A ATTACK



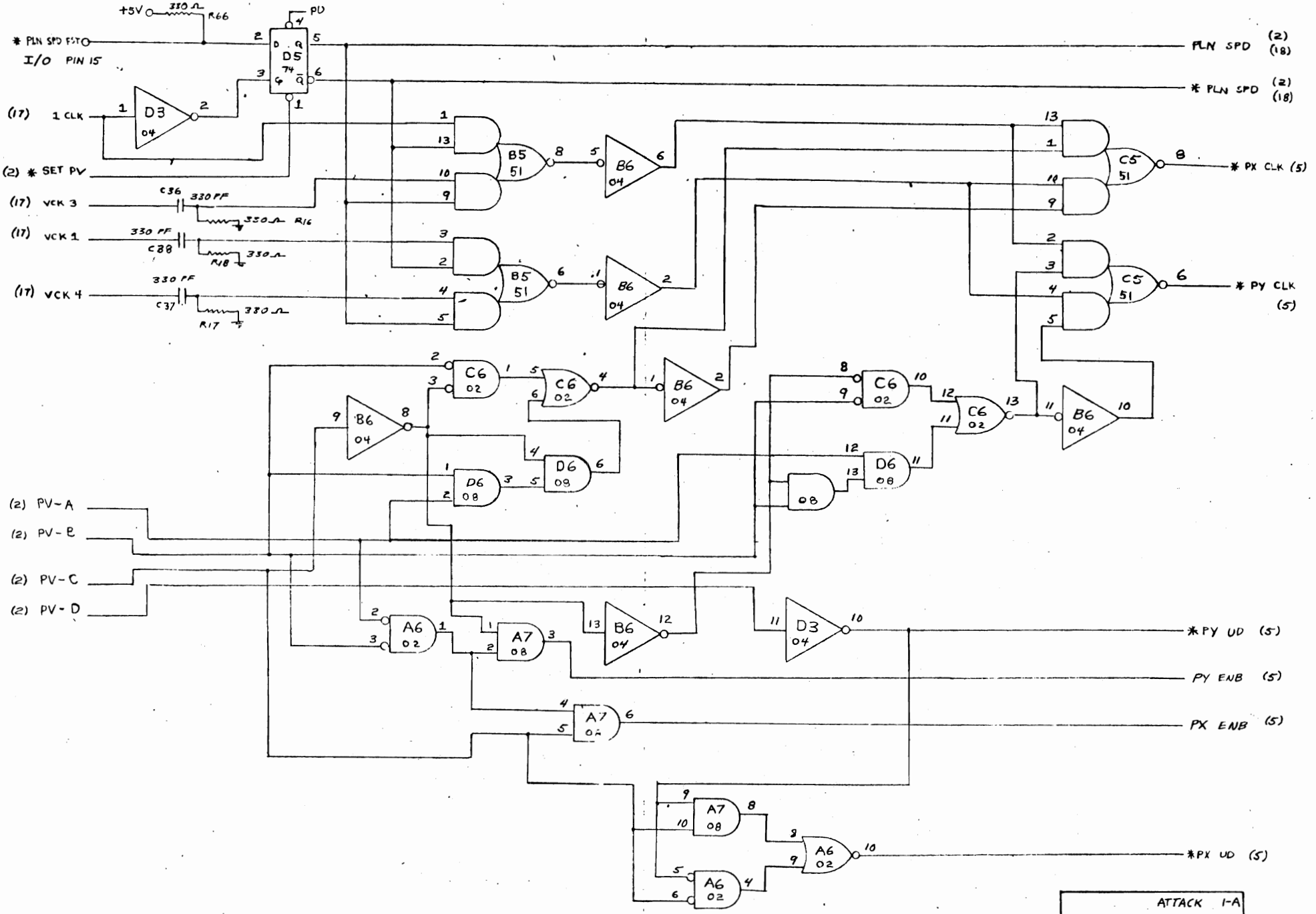
1-A IC LOCATION

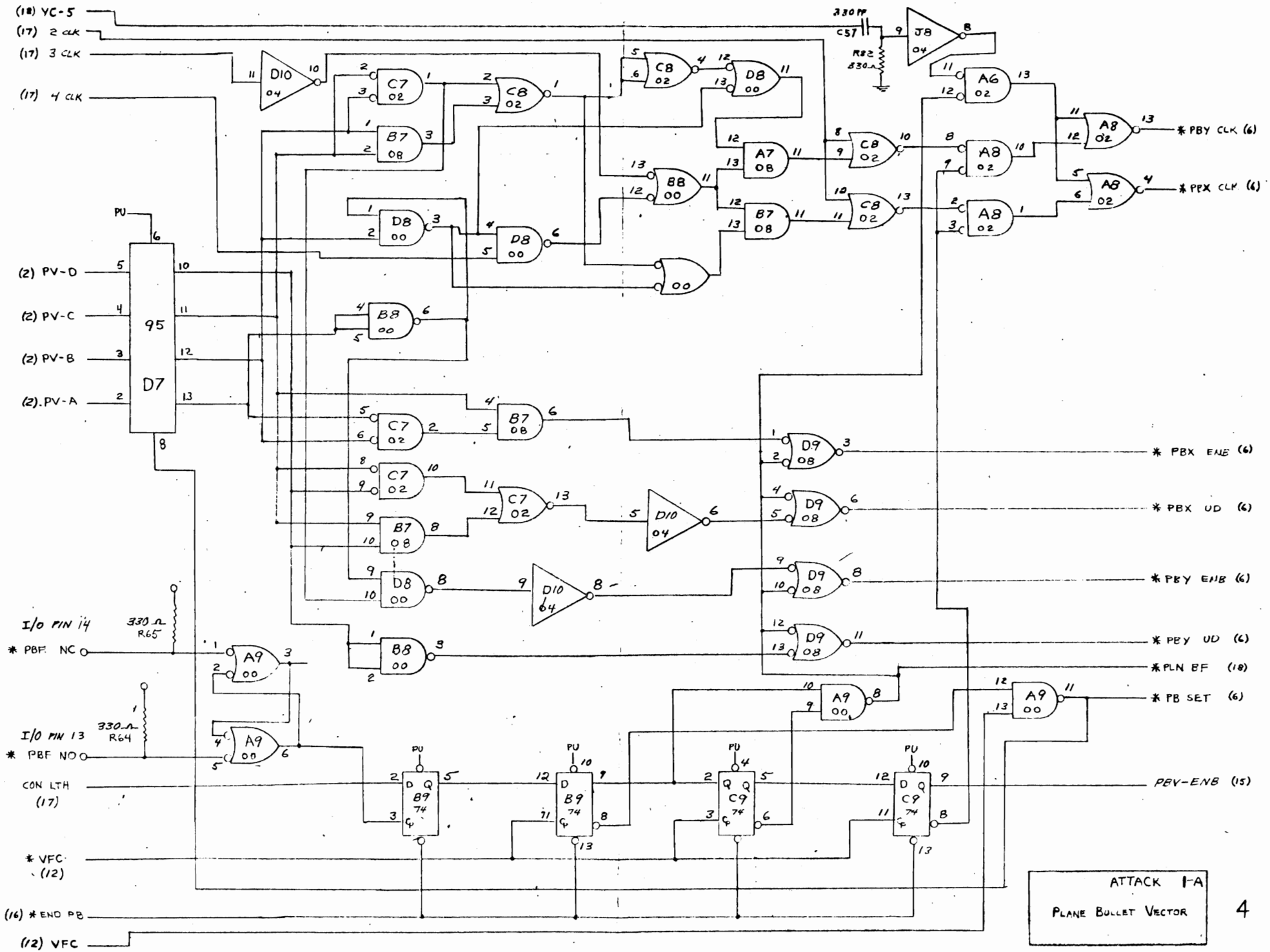
ATTACK

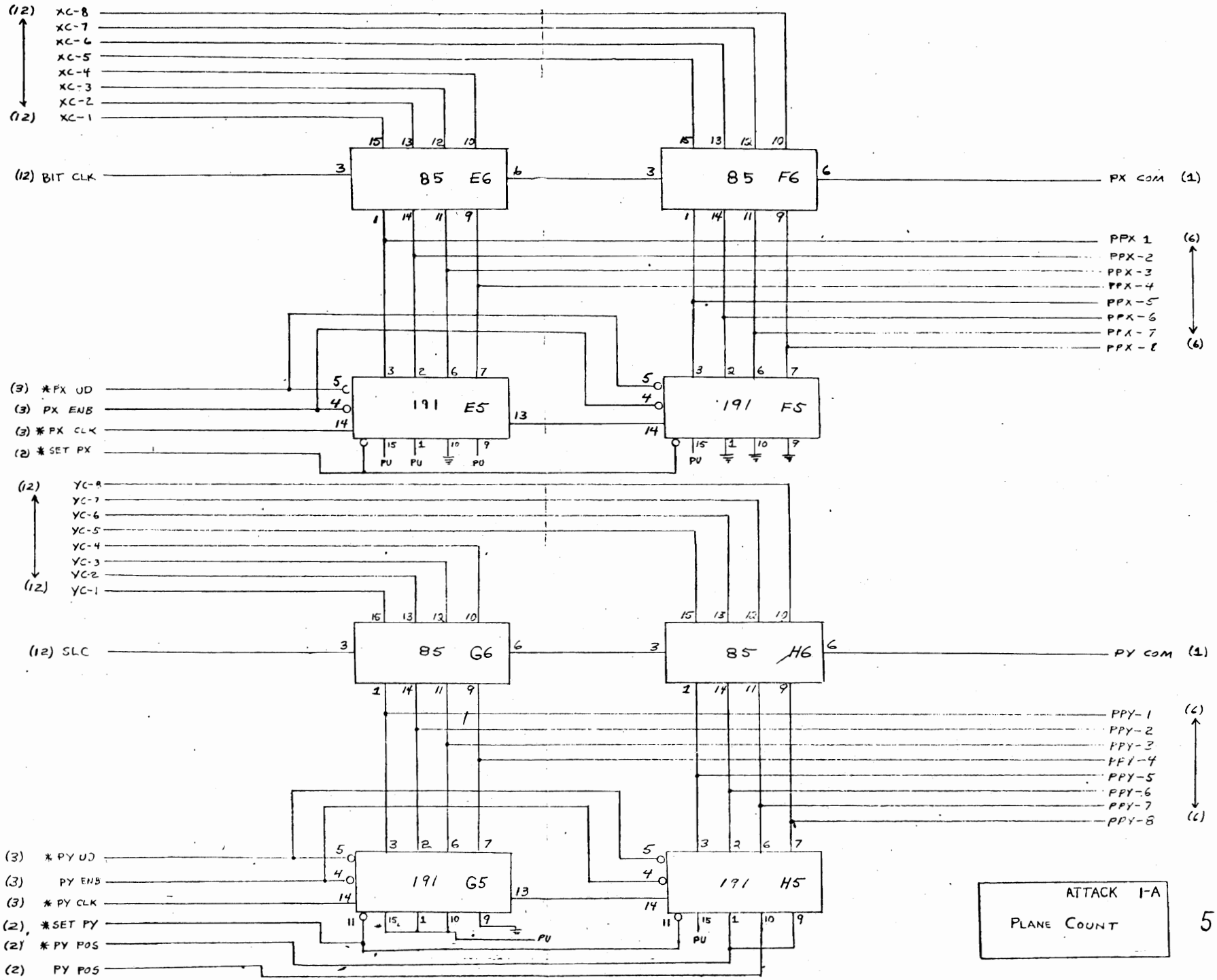

(2) PV- D
(2) PV- C
(2) PV- B
(2) PV- A
74 S287- 1001 A1
74 S287- 1002 B1
74 S287- 1003 C1
74 S287- 1004 D1
165 B2
165 D2
(17) * POR
(16)(15) FLN VID
(65)(66)
(12) SLC
B3 00
191 A2
A4 74
C2 74
C3 02
(5) PY COM
(12) * BIT CLK
(5) BX COM
ATTACK PLANE DISPLAY 1-A
1

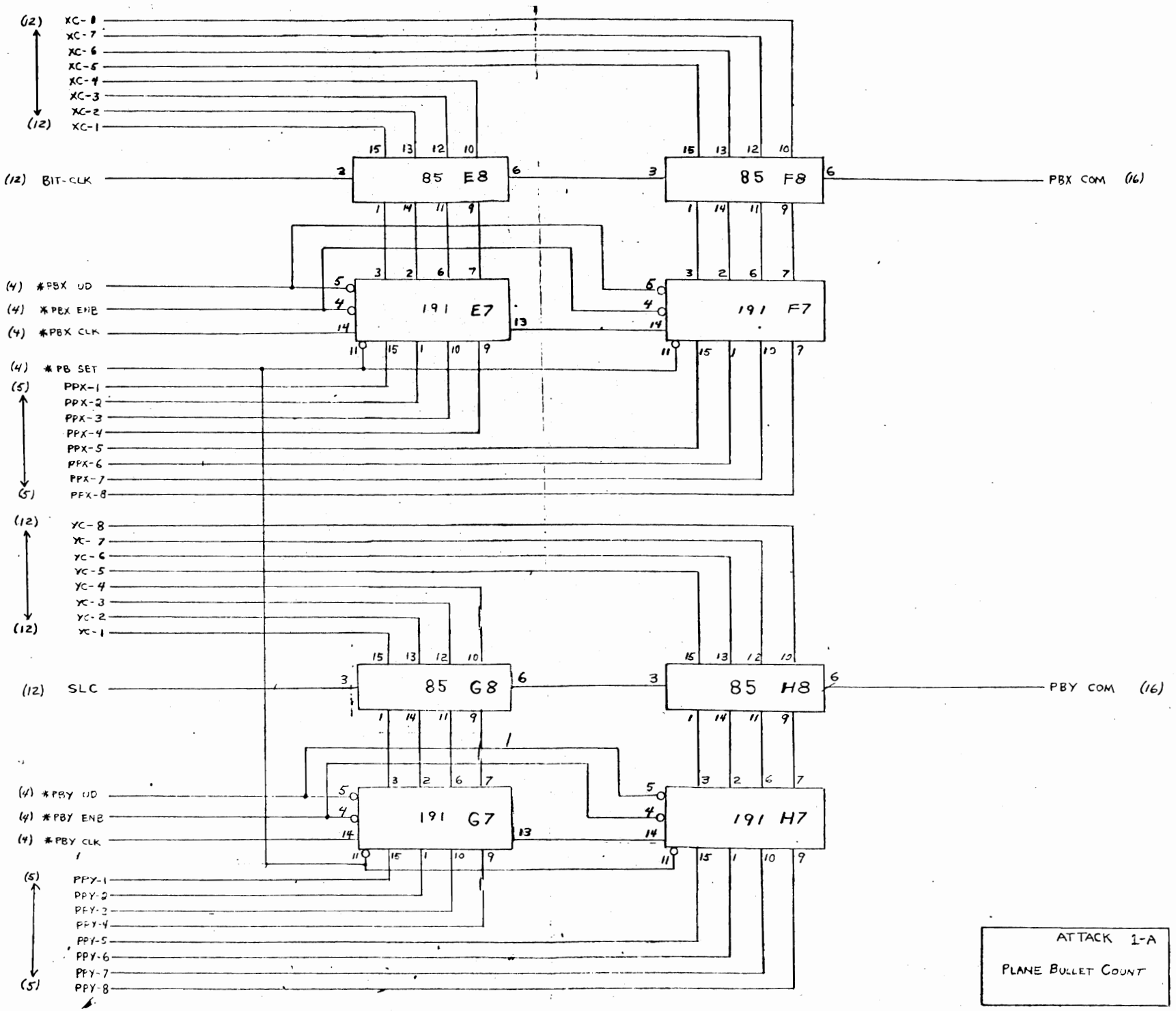


ATTACK
1A
PLANE VECTOR COUNT.


+5V
330 Ω
R66
PD
* PLN SPD FST
I/O PIN 15
D5
74
PLN SPD (2) (18)
* PLN SPD (2) (18)
(17) 1 CLK
D3
04
(2) * SET PV
(17) VCK 3
C36
330 PF
330 Ω R16
(17) VCK 1
330 PF
C38
330 Ω R18
(17) VCK 4
330 PF
C37
330 Ω R17
B5 51
B6 04
C5 51
* PX CLK (5)
* PY CLK (5)
C6 02
D6 08
08
(2) PV-A
(2) PV-B
(2) PV-C
(2) PV-D
A6 02
A7 08
* PY UD (5)
PY ENB (5)
PX ENB (5)
* PX UD (5)
ATTACK I-A
PLANE VECTOR CONTROL
3

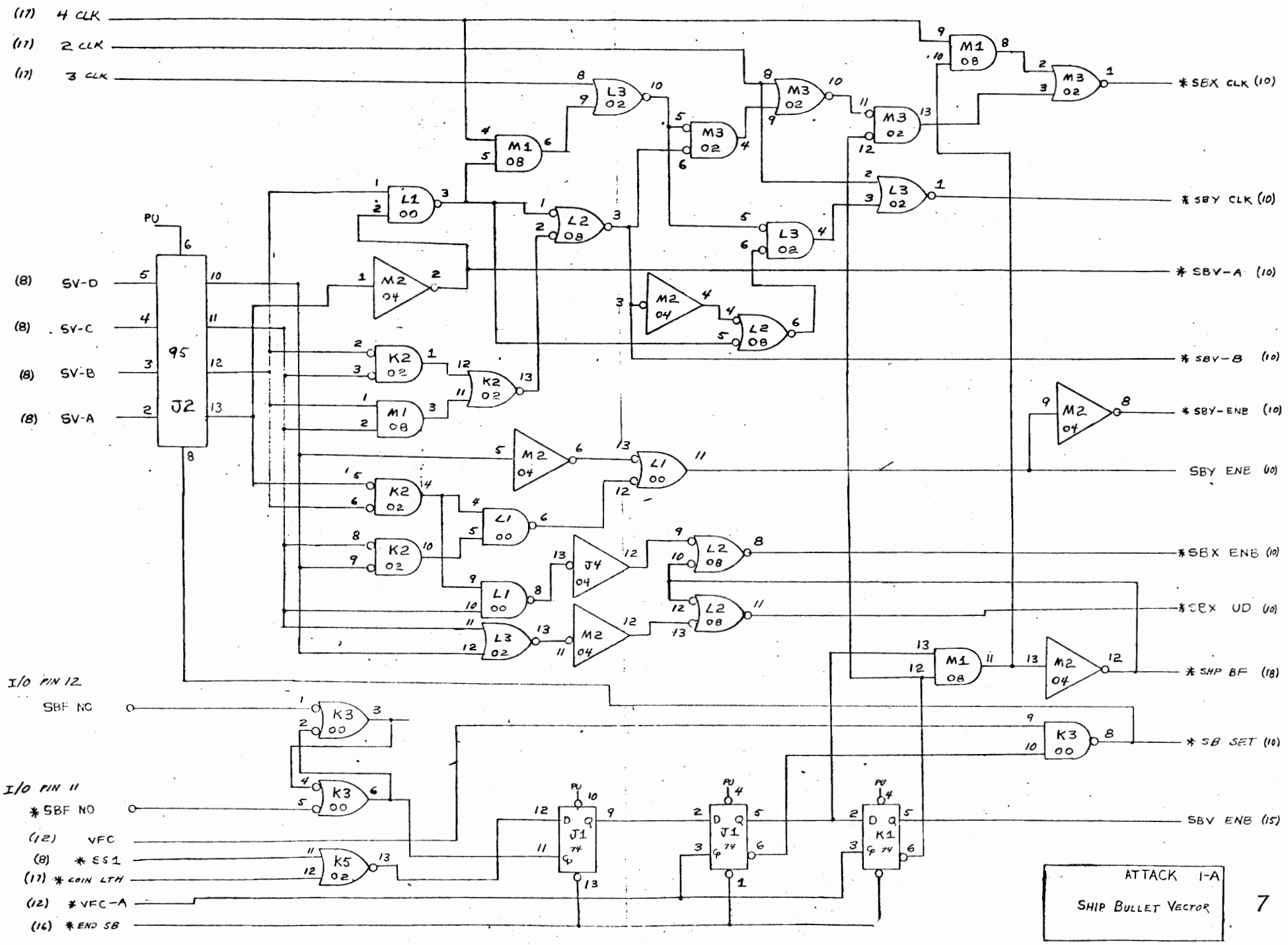

(18) VC-5
(17) 2 CLK
(17) 3 CLK
(17) 4 CLK
330 PF
C57
R82
330Ω
J8
04
D10
04
C7
02
B7
08
C8
02
D8
00
B8
00
A7
08
A6
02
A8
02
PU
95
D7
(2) PV-D
(2) PV-C
(2) PV-B
(2). PV-A
* PBY CLK (6)
* PBX CLK (6)
* PBX ENB (6)
* PBX UD (6)
* PBY ENB (6)
* PBY UD (6)
* PLN BF (18)
* PB SET (6)
D9
08
A9
00
I/O PIN 14
330Ω R65
* PBF NC
I/O PIN 13
330Ω R64
* PBF NO
CON LTH (17)
B9 74
C9 74
PBV-ENB (15)
* VFC (12)
(16) * END PB
(12) VFC
ATTACK I-A
PLANE BULLET VECTOR
4

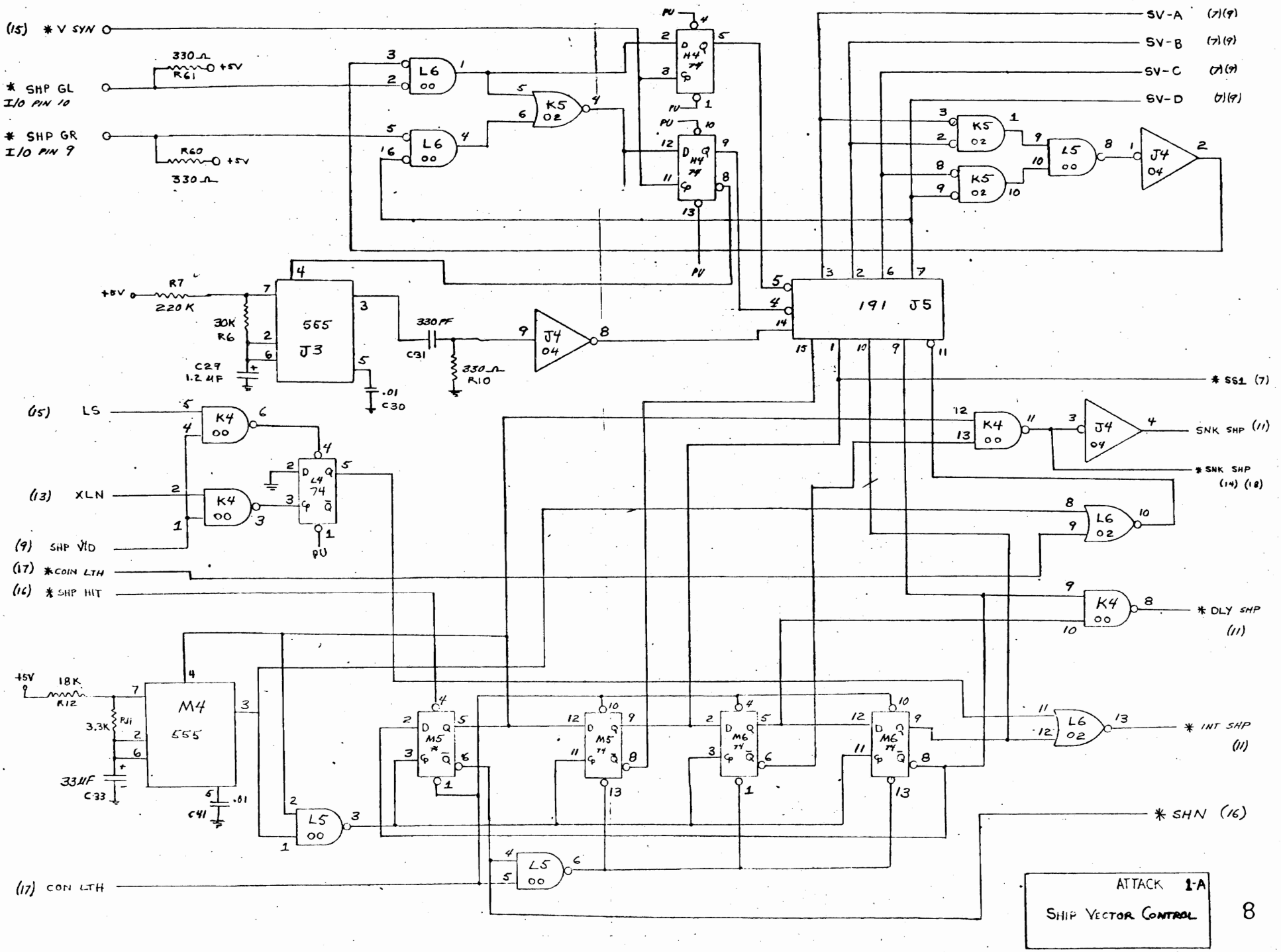

(12) XC-8
XC-7
XC-6
XC-5
XC-4
XC-3
XC-2
(12) XC-1
(12) BIT CLK
85 E6
85 F6
PX COM (1)
PPX 1
PPX-2
PPX-3
PPX-4
PPX-5
PPX-6
PPX-7
PPX-8
(6)
(3) *PX UD
(3) PX ENB
(3) *PX CLK
(2) *SET PX
191 E5
191 F5
PU
(12) YC-8
YC-7
YC-6
YC-5
YC-4
YC-3
YC-2
(12) YC-1
(12) SLC
85 G6
85 H6
PY COM (1)
PPY-1
PPY-2
PPY-3
PPY-4
PPY-5
PPY-6
PPY-7
PPY-8
(8)
(3) *PY UD
(3) PY ENB
(3) *PY CLK
(2) *SET PY
(2) *PY POS
(2) PY POS
191 G5
191 H5
ATTACK 1-A
PLANE COUNT
5

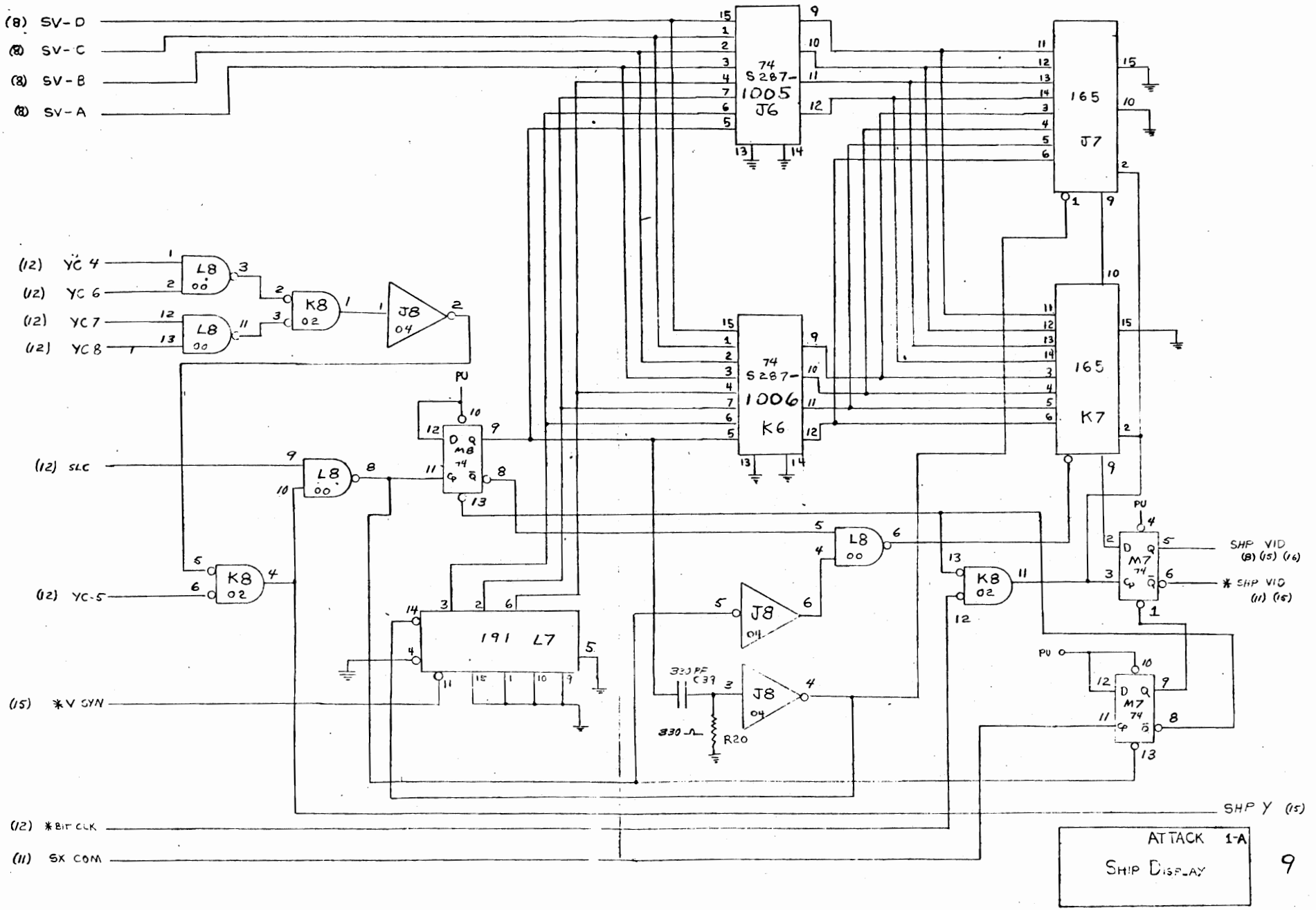


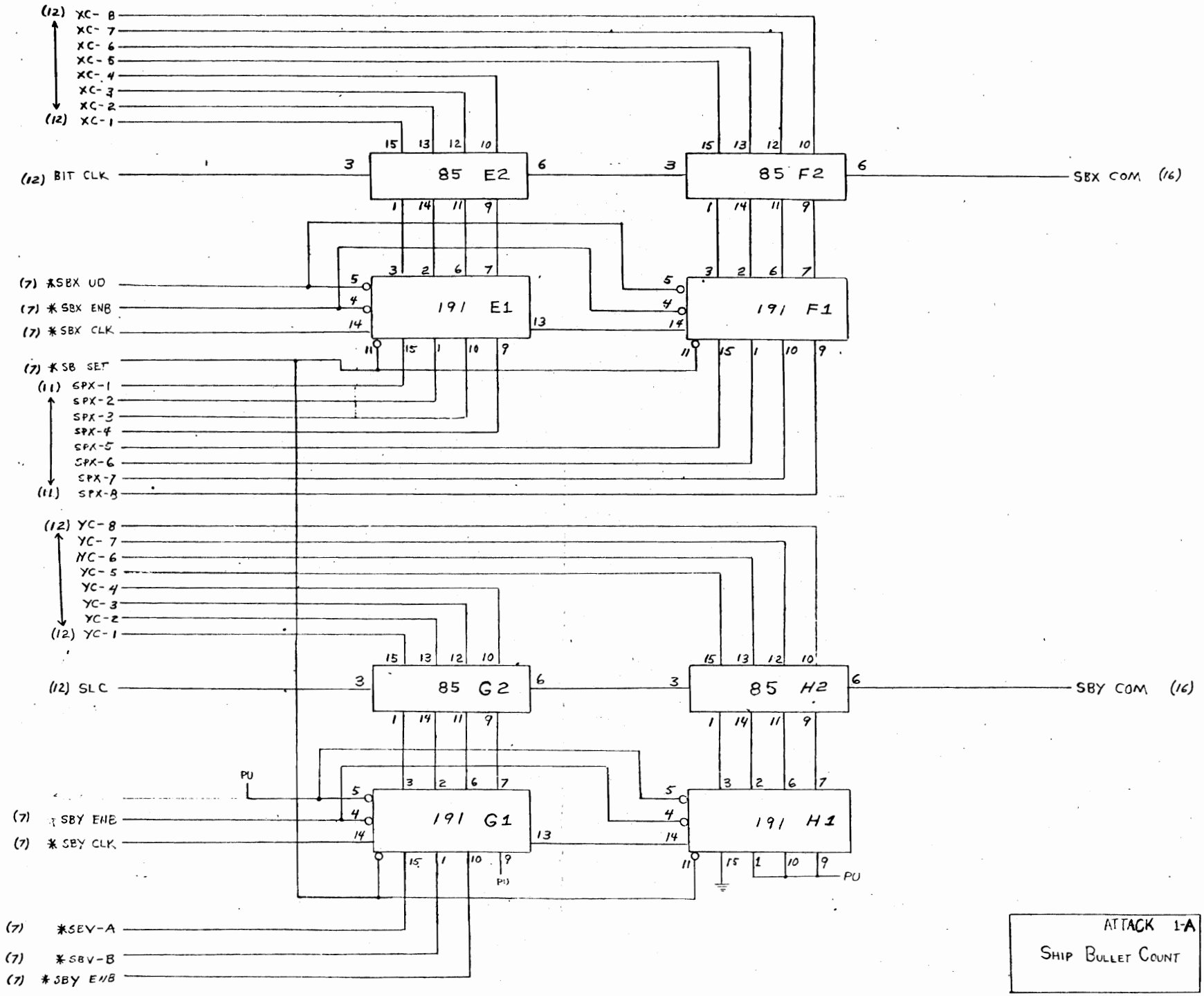
ATTACK 1-A

PLANE BULLET COUNT


(17) 4 CLK
(17) 2 CLK
(17) 3 CLK
PU
(8) SV-D
(8) SV-C
(8) SV-B
(8) SV-A
95 J2
M1 08
L3 02
M3 02
L1 00
L2 08
M2 04
K2 02
J4 04
* SBX CLK (10)
* SBY CLK (10)
* SBV-A (10)
* SBV-B (10)
* SBY-ENB (10)
SBY ENB (10)
* SBX ENB (10)
* SBX UD (10)
* SHP BF (18)
* SB SET (10)
SBY ENB (15)
I/O PIN 12
SBF NC
I/O PIN 11
* SBF NO
(12) VFC
(8) * ES1
(17) * COIN LTH
(12) * VFC-A
(16) * END SB
K3 00
K5 02
J1 74
K1 74
ATTACK 1-A
SHIP BULLET VECTOR

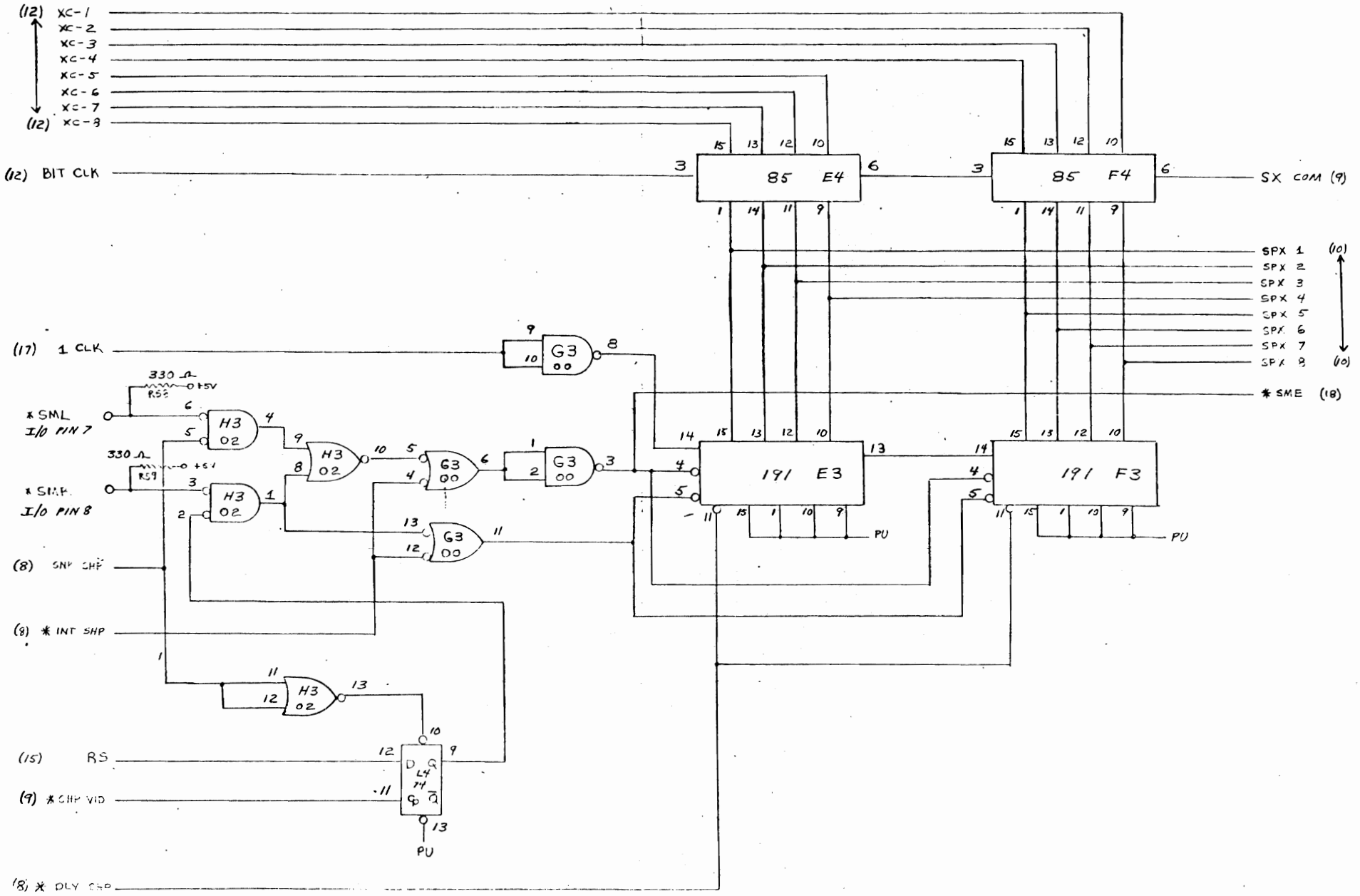

(15) * V SYN
* SHP GL
I/O PIN 10
* SHP GR
I/O PIN 9
330Ω R61 +5V
R60 +5V 330Ω
L6 00
K5 02
H4 74
PU
SV-A (7)(9)
SV-B (7)(9)
SV-C (7)(9)
SV-D (7)(9)
K5 02
L5 00
J4 04
191 J5
+5V R7 220K
30K R6
C29 1.2 μF
565 J3
.01 C30
330 pF C31
330Ω R10
J4 04
* SS1 (7)
(05) LS
(13) XLN
(9) SHP VID
(17) *COIN LTH
(16) * SHP HIT
K4 00
L4 74
SNK SHP (11)
* SNK SHP (14) (18)
L6 02
* DLY SHP (11)
+5V 18K R12
3.3K PJ1
33 μF C33
.01 C41
M4 555
M5 74
M6 74
L5 02
* INT SHP (11)
* SHN (16)
(17) CON LTH
ATTACK 1-A
SHIP VECTOR CONTROL
8


(8) SV-D
(8) SV-C
(8) SV-B
(8) SV-A
74 S287-1005 J6
74 S287-1006 K6
165 J7
165 K7
(12) YC 4
(12) YC 6
(12) YC 7
(12) YC 8
L8 00
K8 02
J8 04
PU
(12) SLC
M8 74
(12) YC-5
191 L7
(15) *V SYN
330 PF C39
330 Ω R20
M7 74
SHP VID (8) (15) (16)
* SHP VID (11) (15)
SHP Y (15)
(12) *BIT CLK
(11) SX COM
ATTACK 1-A
SHIP DISPLAY
9



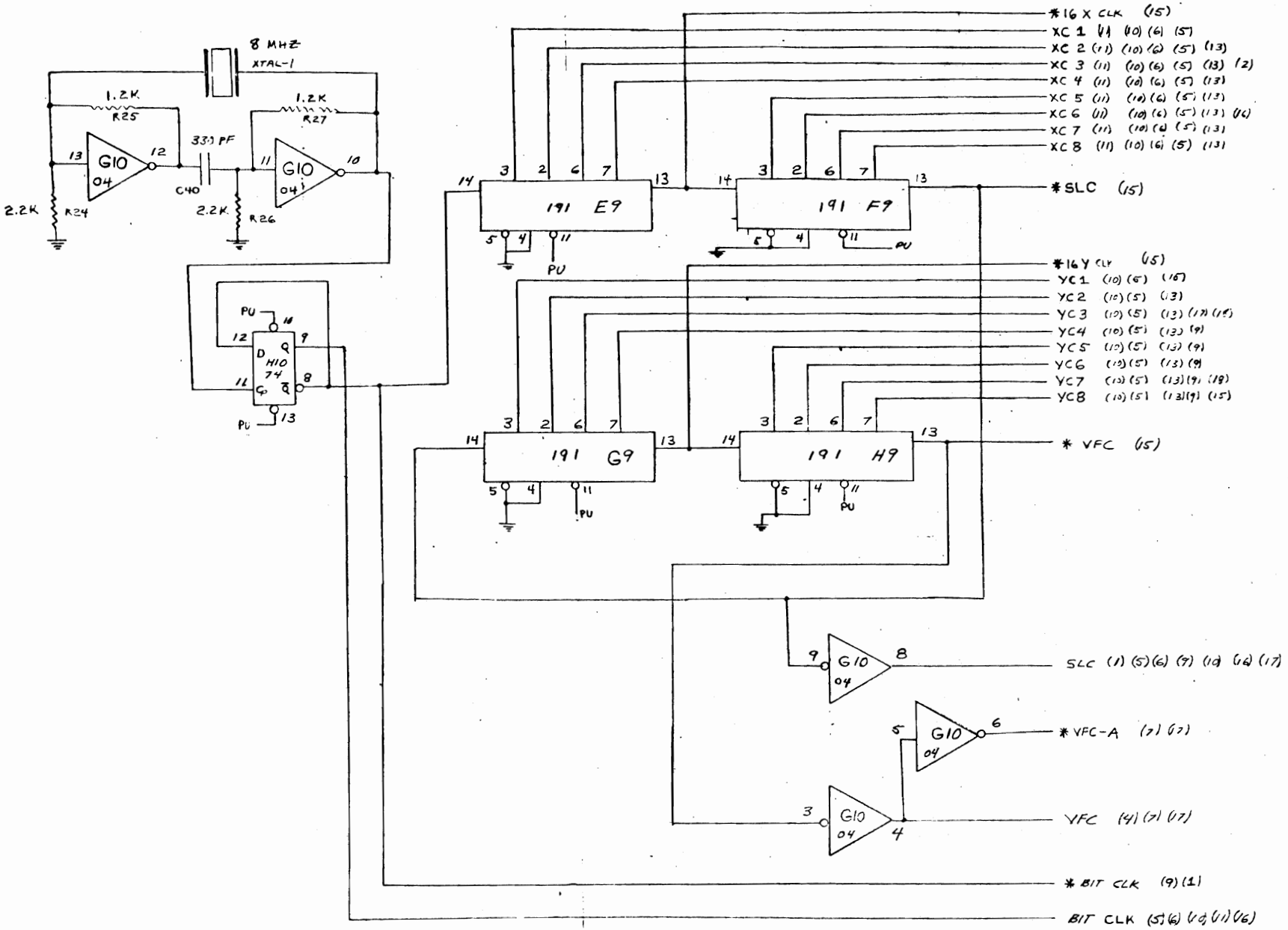
ATTACK 1-A

SHIP BULLET COUNT



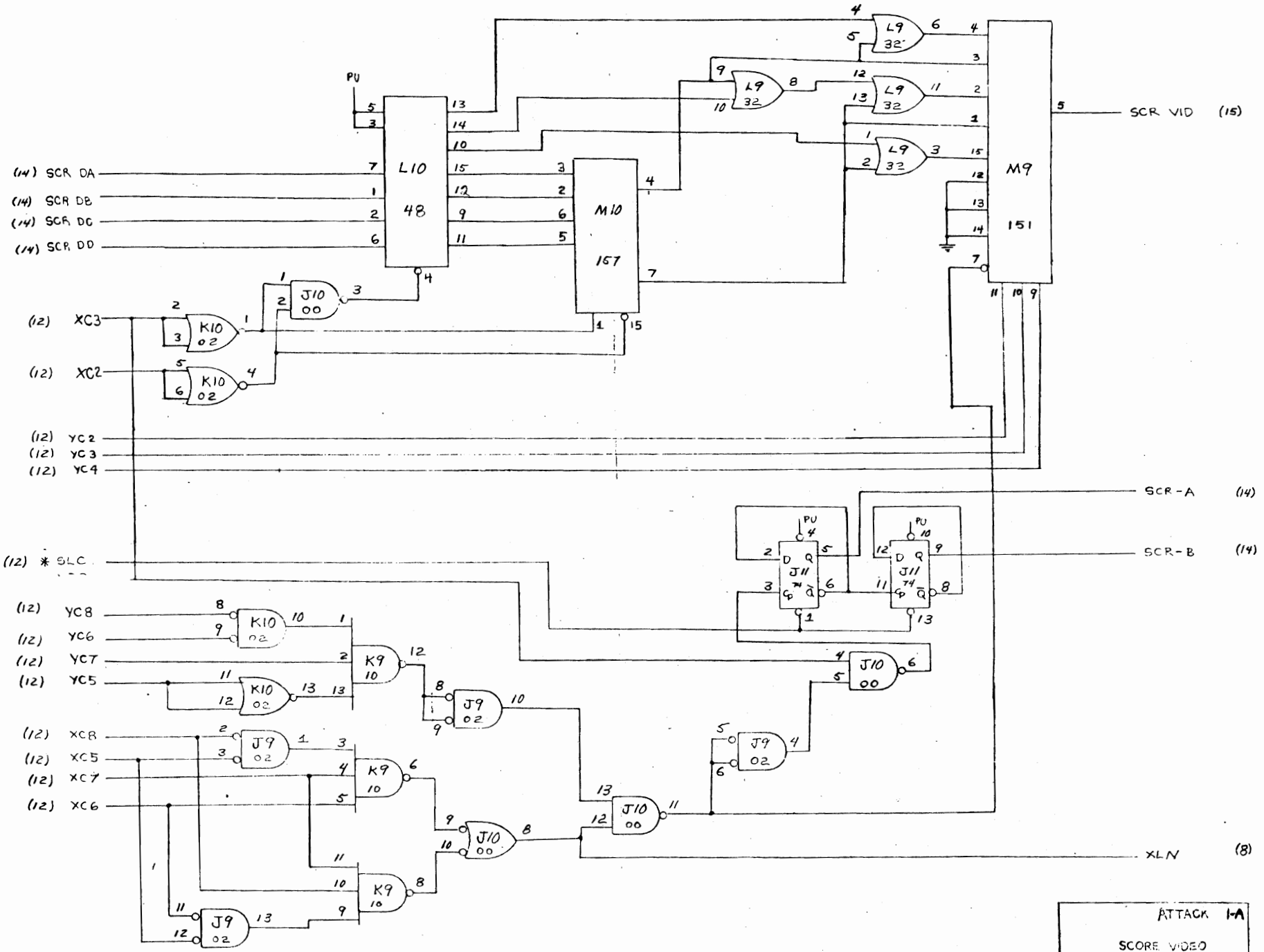
ATTACK 1-A

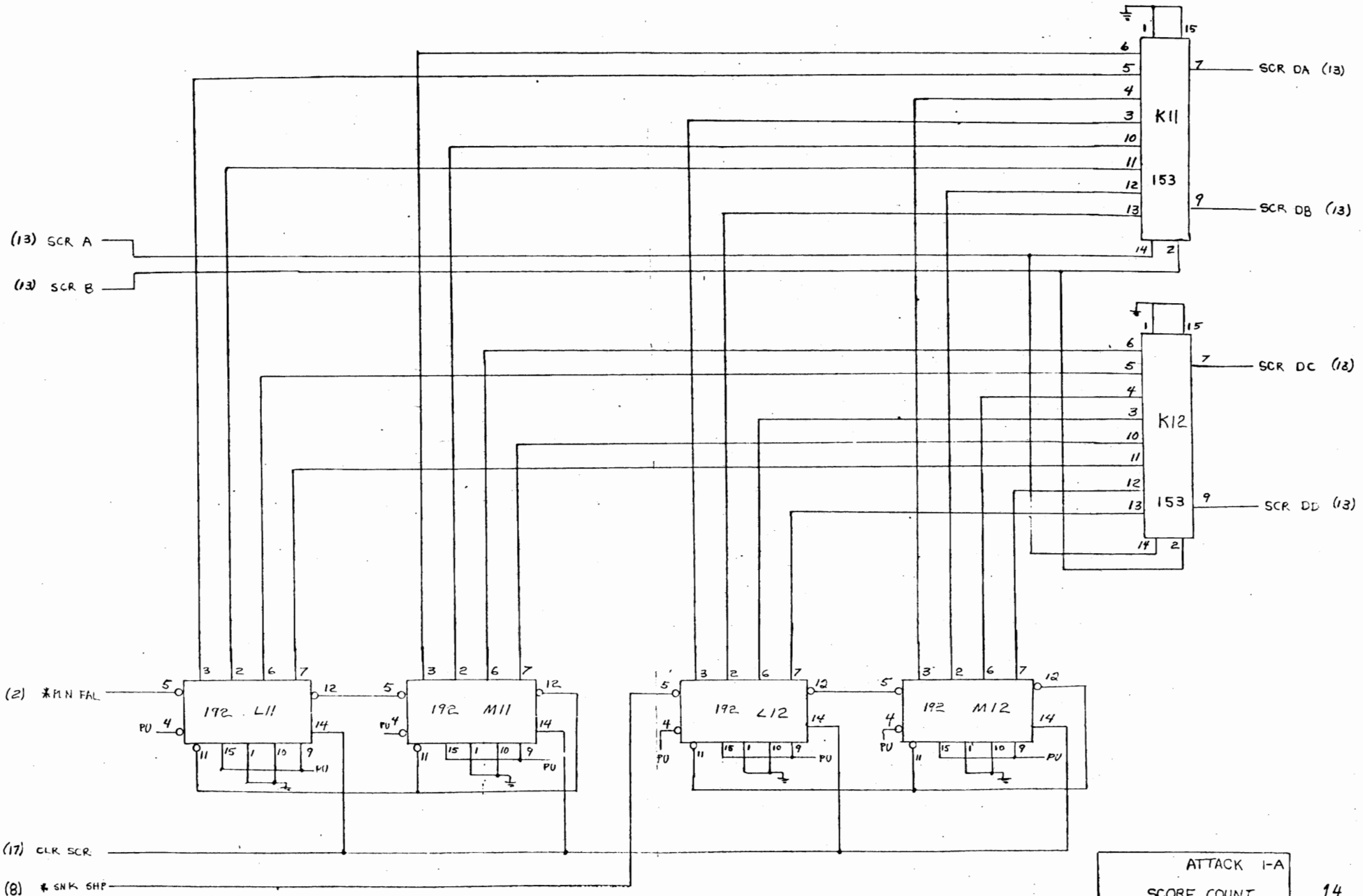
SHIP X COUNT



ATTACK 1-A

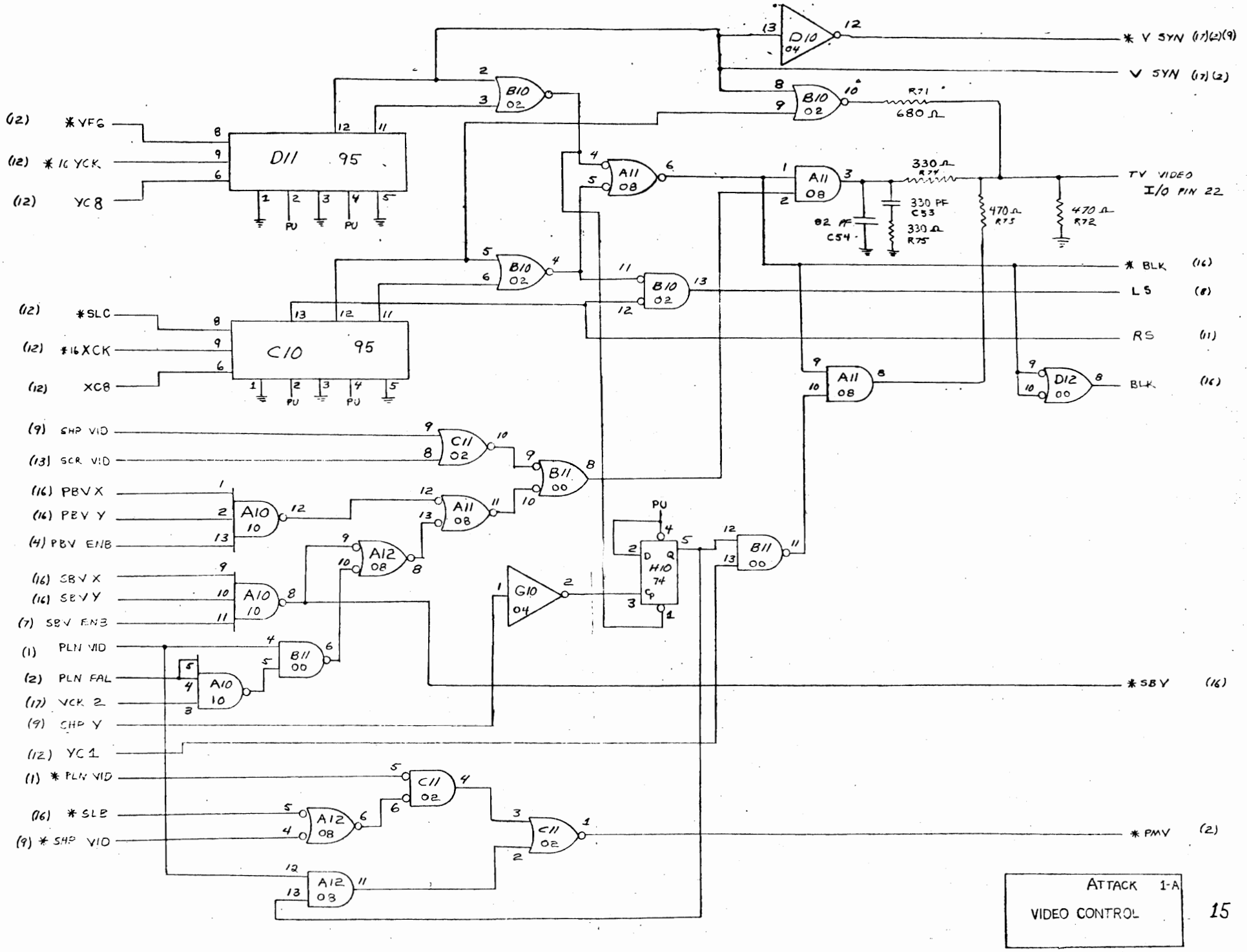
TIMING


PU
L10
48
M10
157
M9
151
L9
32
J10
00
K10
02
J9
02
K9
10
J11
(14) SCR DA
(14) SCR DB
(14) SCR DC
(14) SCR DD
(12) XC3
(12) XC2
(12) YC2
(12) YC3
(12) YC4
(12) * SLC
(12) YC8
(12) YC6
(12) YC7
(12) YC5
(12) XC8
(12) XC5
(12) XC7
(12) XC6
SCR VID (15)
SCR-A (14)
SCR-B (14)
XLN (8)
ATTACK I-A
SCORE VIDEO

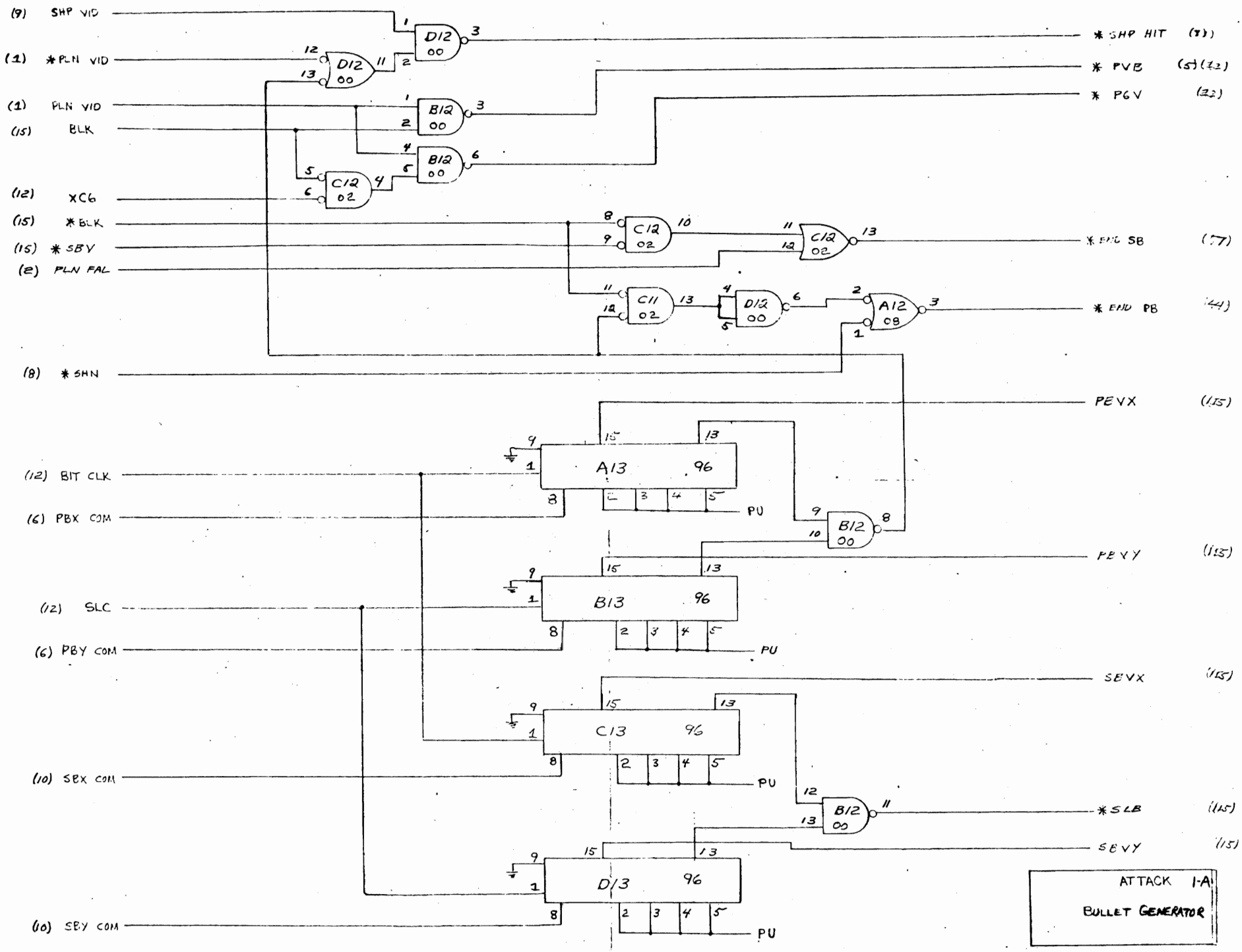


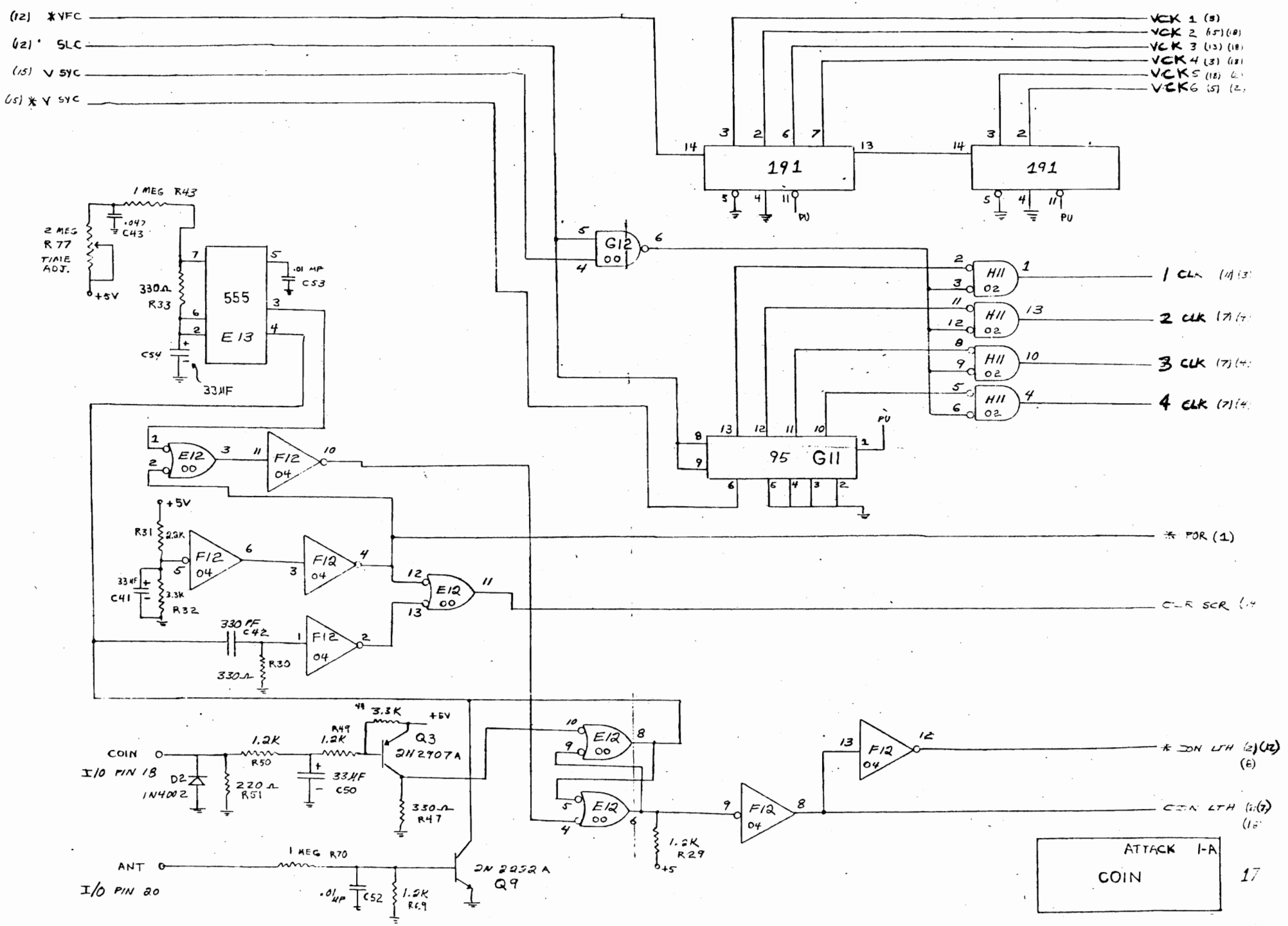
ATTACK I-A

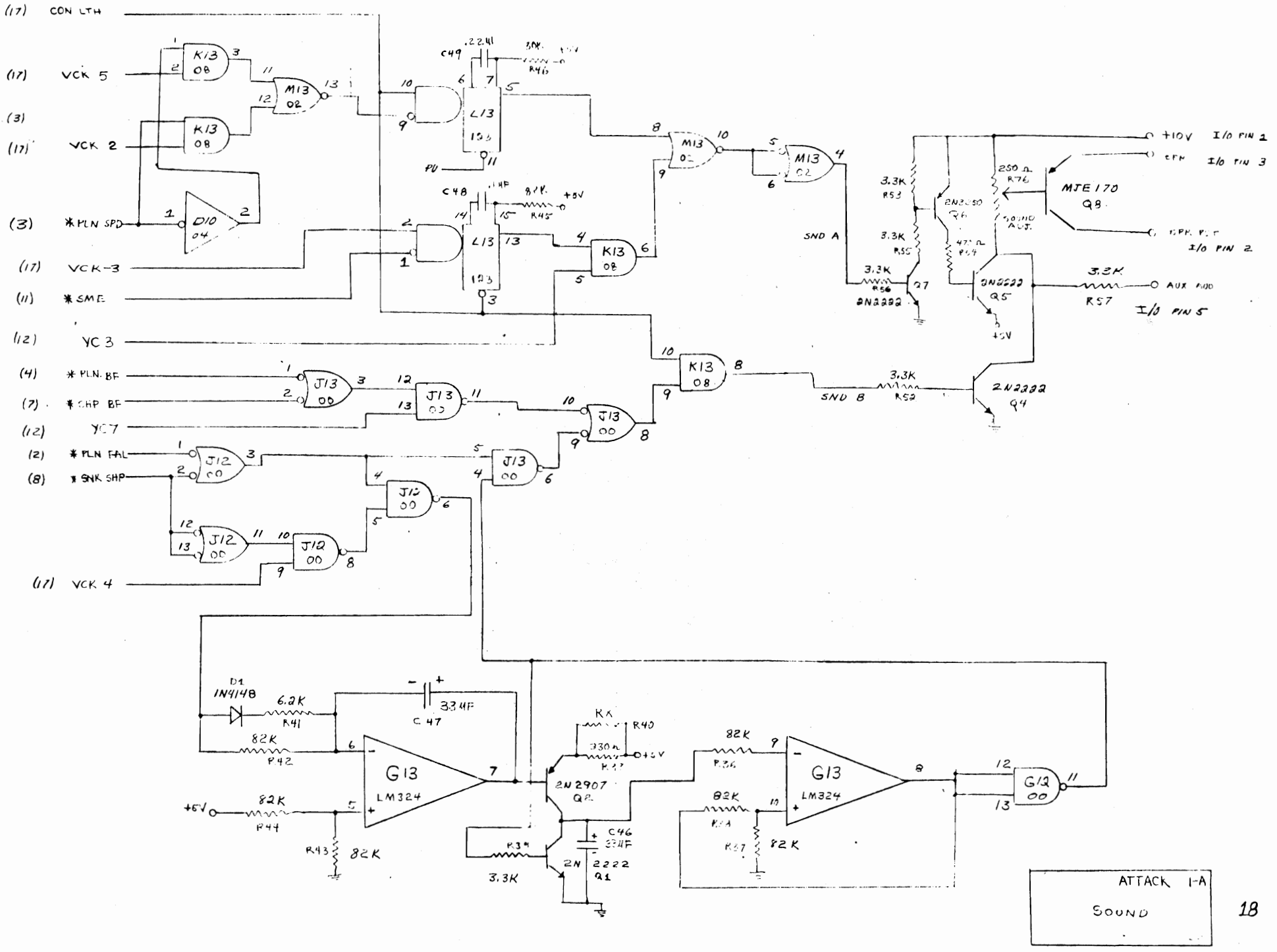
SCORE COUNT



ATTACK 1-A
VIDEO CONTROL


(9) SHP VID
(1) *PLN VID
(1) PLN VID
(15) BLK
(12) XC6
(15) *BLK
(15) *SBV
(2) PLN FAL
(8) *SHN
(12) BIT CLK
(6) PBX COM
(12) SLC
(6) PBY COM
(10) SBX COM
(10) SBY COM
D12 00
B12 00
C12 02
C11 02
A12 08
A13 96
B13 96
C13 96
D13 96
PU
*SHP HIT (11)
* PVB (5)(13)
* PGV (23)
* END SB (17)
* END PB (44)
PEVX (115)
PEVY (115)
SBVX (115)
*SLB (115)
SBVY (115)
ATTACK I-A
BULLET GENERATOR


(12) *VFC
(21) SLC
(15) V SYC
(5) * V SYC
VCK 1 (9)
VCK 2 (5) (10)
VCK 3 (13) (10)
VCK 4 (3) (10)
VCK 5 (10) (2)
VCK 6 (5) (2)
191
191
PU
PU
1 MEG R43
.047 C43
2 MEG R77 TIME ADJ.
+5V
330Ω R33
555 E13
.01 MF C53
C54
33 MF
G12 00
H11 02
H11 02
H11 02
H11 02
1 CLK (11) (3)
2 CLK (7) (4)
3 CLK (7) (4)
4 CLK (7) (4)
95 G11
PU
E12 00
F12 04
* POR (1)
CLR SCR (14)
+5V
R31 2.2K
F12 04
F12 04
33 MF C41
3.3K R32
E12 00
330 PF C42
330Ω R30
F12 04
3.3K +5V
R49 1.2K
Q3 2N2907A
COIN
I/O PIN 18
1.2K R50
D2 IN4002
220Ω R51
33 MF C50
330Ω R47
E12 00
E12 00
F12 04
F12 04
* COIN CTR (2) (12) (6)
COIN CTR (1) (7) (16)
1.2K R29
+5
ANT
I/O PIN 20
1 MEG R70
.01 MF C52
1.2K R69
2N2222A Q9
ATTACK 1-A
COIN
17


(17) CON LTH
(17) VCK 5
(3)
(17) VCK 2
(3) *PLN SPD
(17) VCK-3
(11) *SME
(12) YC 3
(4) *PLN. BF
(7) *SHP BF
(12) YC7
(2) *PLN FAL
(8) *SNK SHP
(17) VCK 4
K13 08
M13 02
D10 04
L13 193
J13 00
J12 00
C49 .22μF
C48 .1μF
R46
R45
+5V
PD
SND A
SND B
3.3K R53
3.3K R55
3.3K R56
2N3250 Q6
47Ω R54
250Ω R76
MTE170 Q8
SOUND ADJ.
2N3222 Q7
2N3222 Q5
2N3222 Q4
3.3K R57
3.3K R52
+10V I/O PIN 1
EFH I/O PIN 3
I/O PIN 2
I/O PIN 5
D1 IN4148
6.2K R41
82K R42
33μF C47
82K R44
82K R43
G13 LM324
2N2907 Q2
330Ω R40
3.3K R39
C46 33μF
2N 2222 Q1
82K R36
82K R37
82K R38
G12 00
ATTACK 1-A
SOUND
18