

LOGIC DIAGRAMS
for
MODELS 7220 and 7230
VIDEO DISPLAY TERMINAL


May 20, 1975

REVISED: August 16, 1976



PROPRIETARY INFORMATION

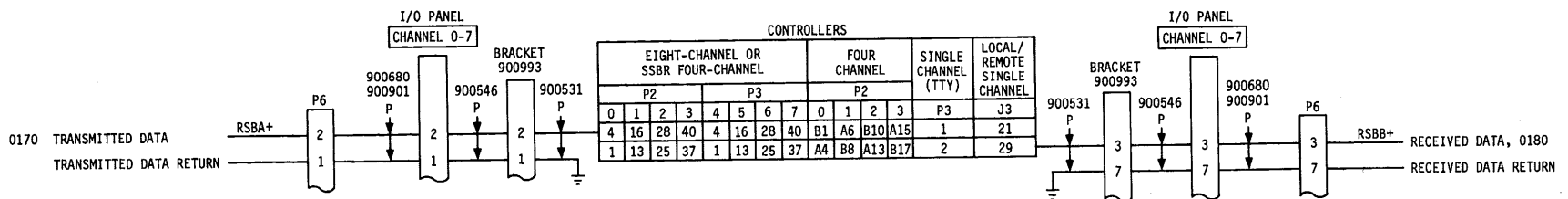
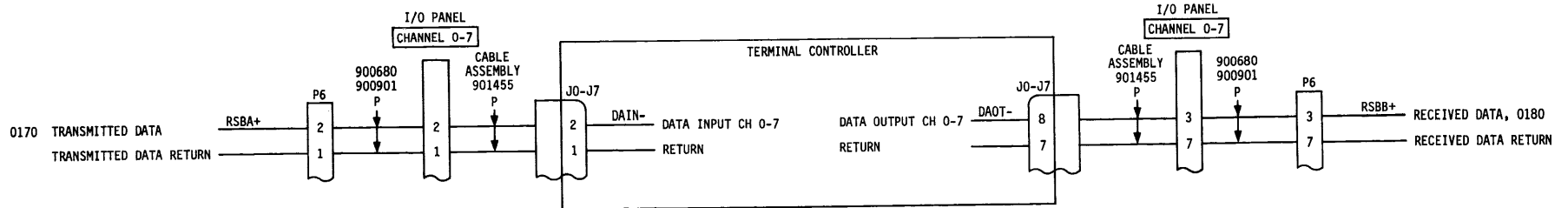
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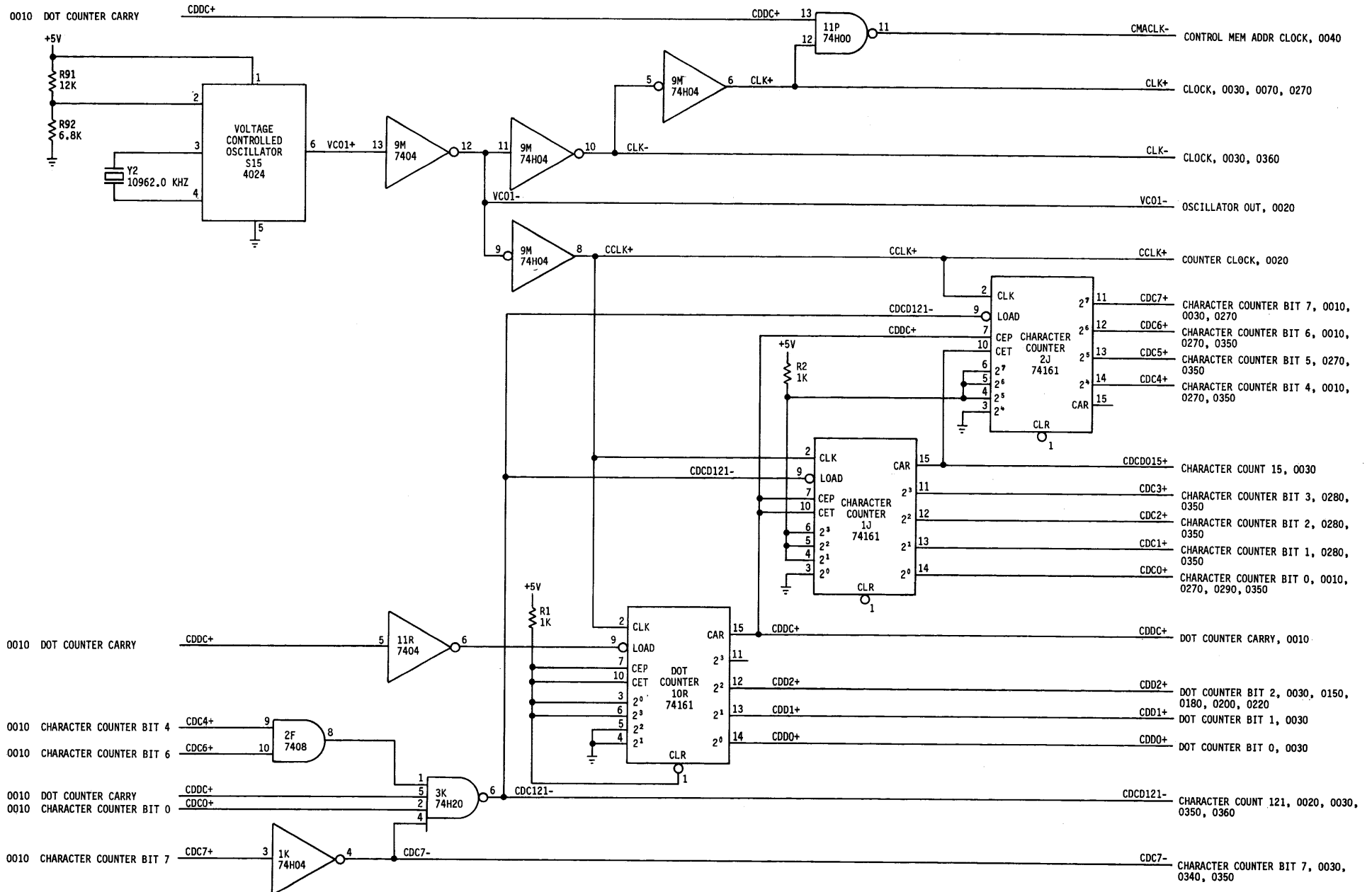
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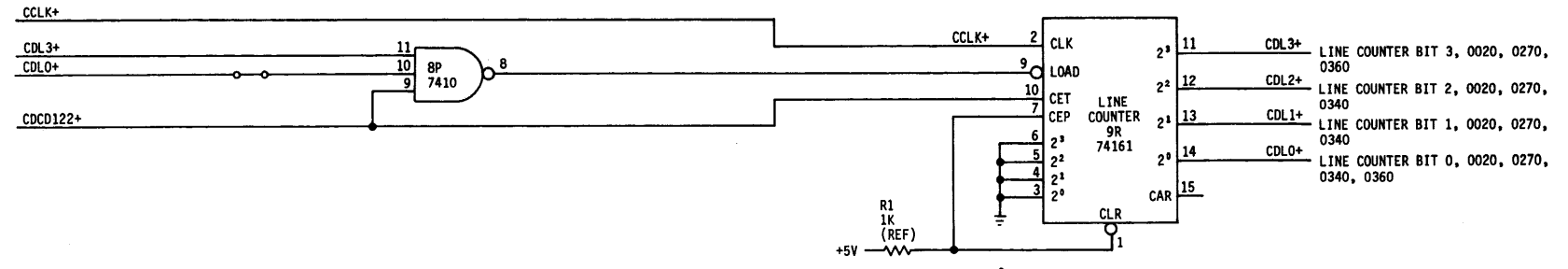
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Video and Logic Board Power Supplies	1350	Original
+5 Volt Power Supply	1360	Original

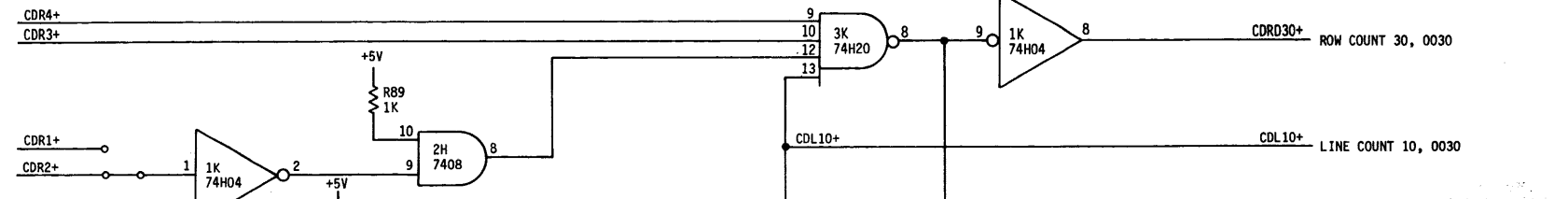




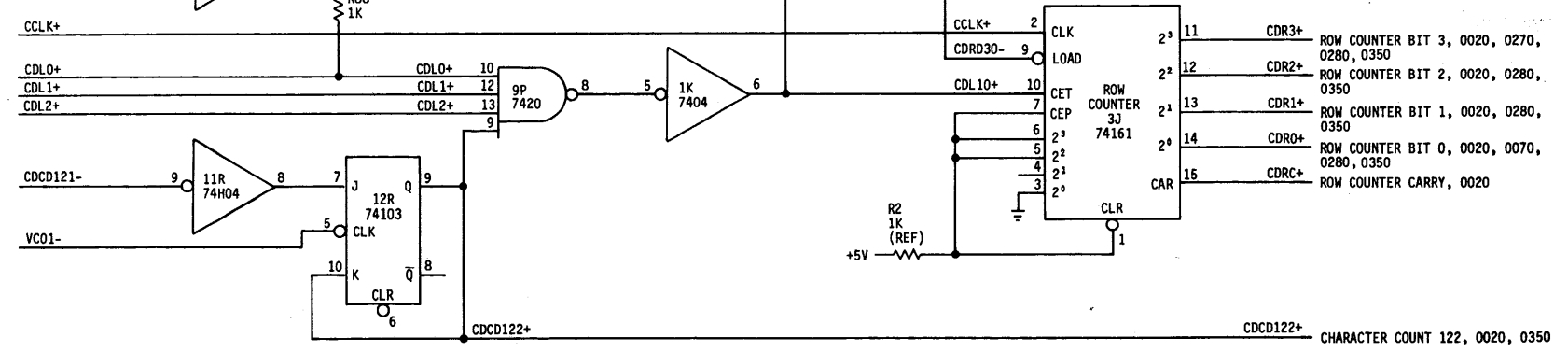
0010 COUNTER CLOCK
 0020 LINE COUNTER BIT 3
 0020 LINE COUNTER BIT 0
 0020 CHARACTER COUNT 122



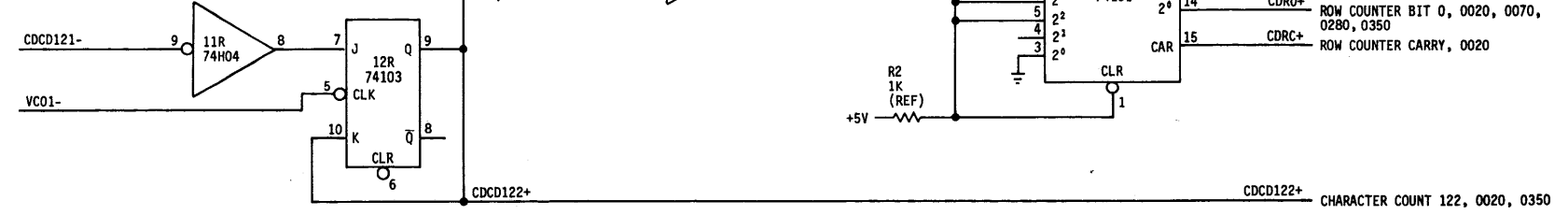
0020 ROW COUNTER BIT 4
 0020 ROW COUNTER BIT 3
 0020 ROW COUNTER BIT 1
 0020 ROW COUNTER BIT 2



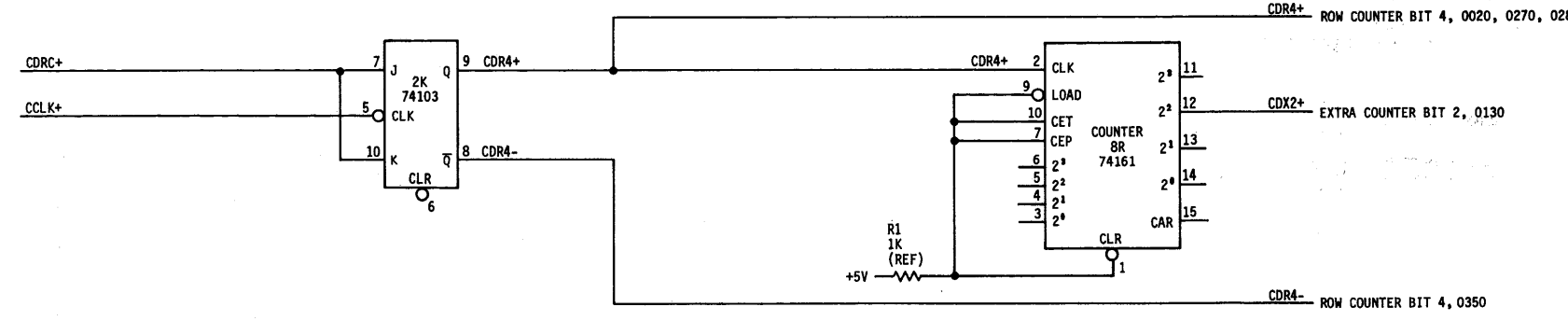
0010 COUNTER CLOCK
 0020 LINE COUNTER BIT 0
 0020 LINE COUNTER BIT 1
 0020 LINE COUNTER BIT 2

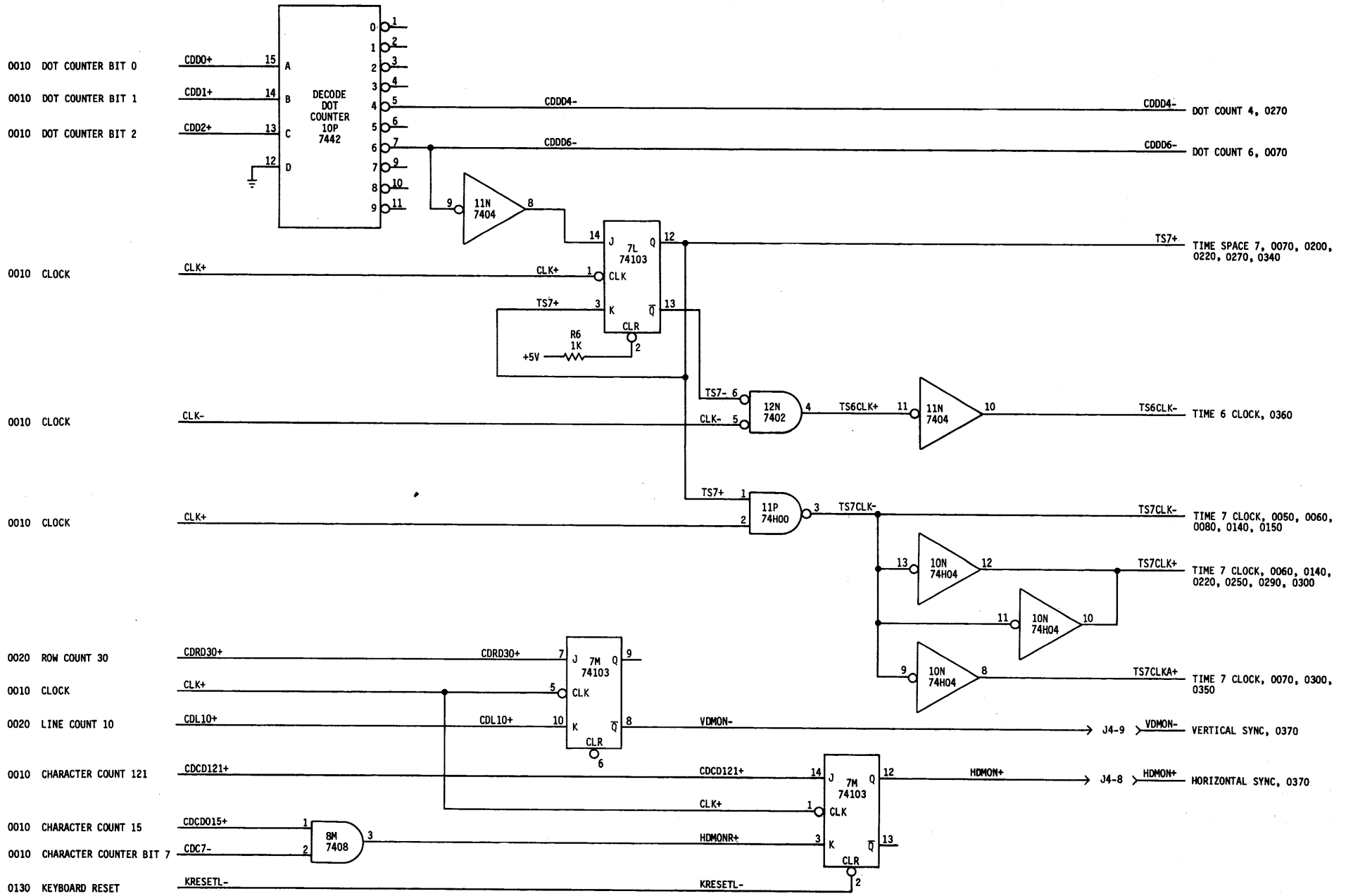


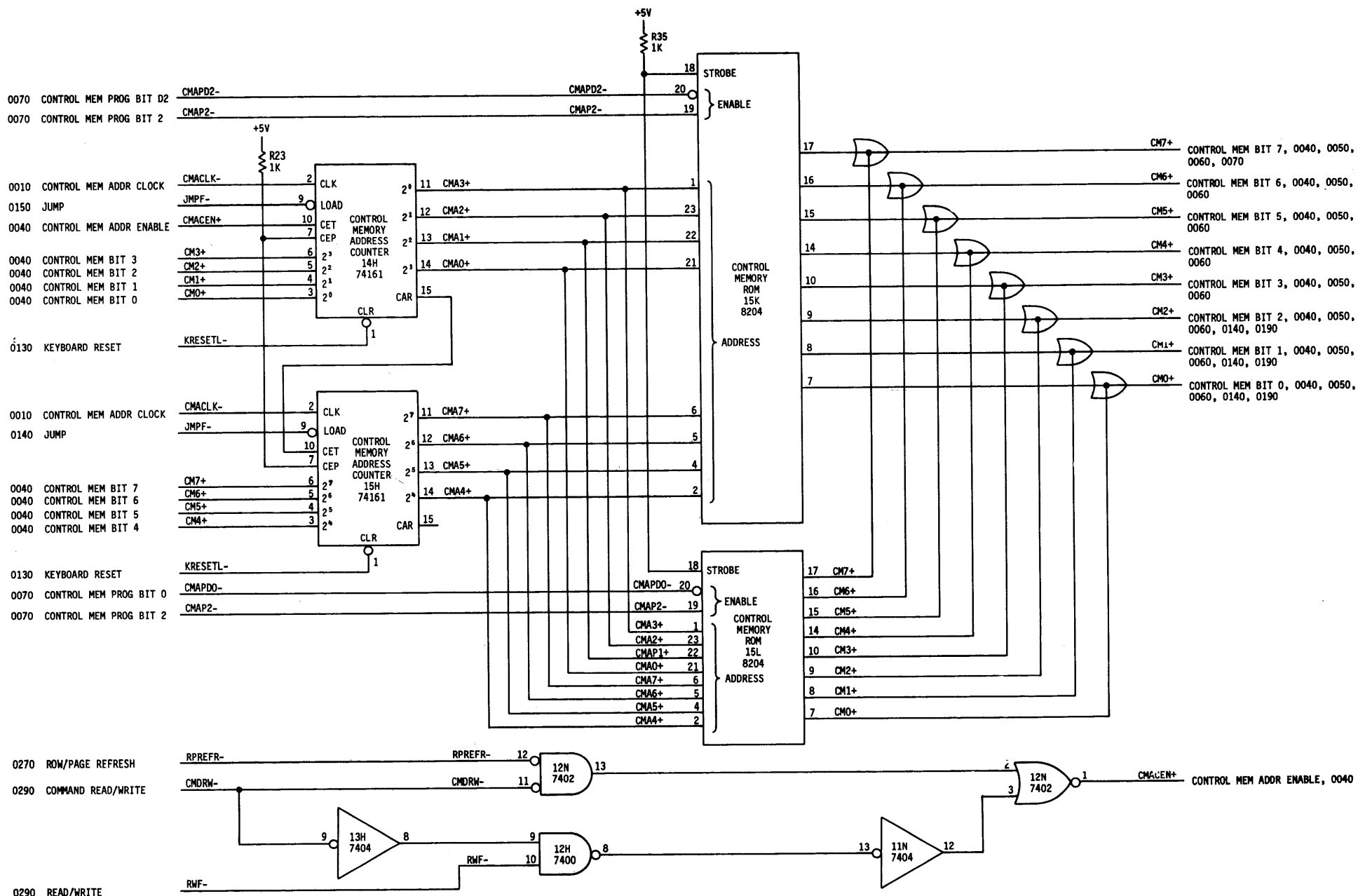
0010 CHARACTER COUNT 121
 0010 OSCILLATOR OUT



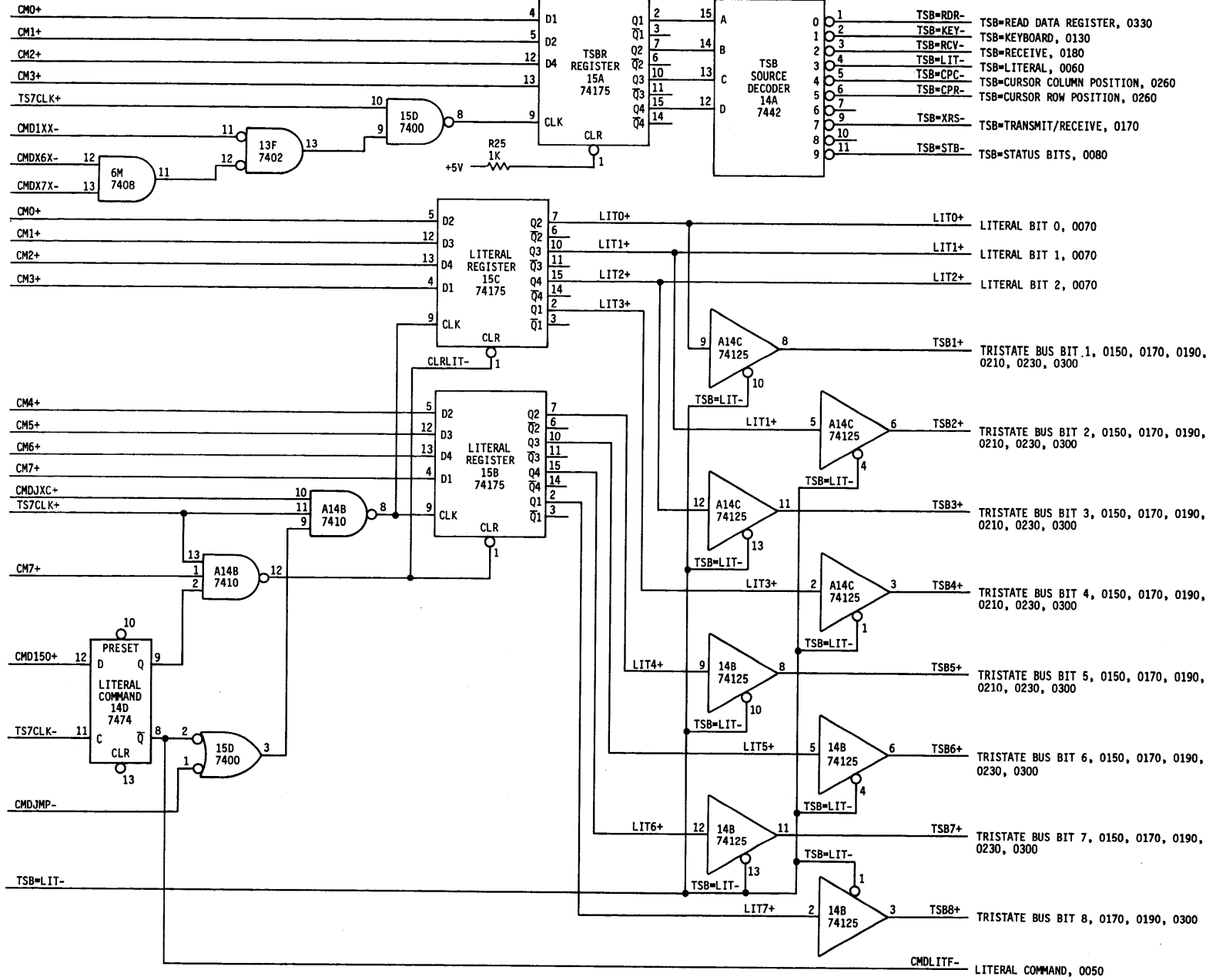
0020 ROW COUNTER CARRY
 0010 COUNTER CLOCK







0040 CONTROL MEM BIT 0
 0040 CONTROL MEM BIT 1
 0040 CONTROL MEM BIT 2
 0040 CONTROL MEM BIT 3
 0030 TIME 7 CLOCK
 0050 COMMAND 1XX
 0050 COMMAND X6X
 0050 COMMAND X7X
 0040 CONTROL MEM BIT 0
 0040 COMMAND MEM BIT 1
 0040 CONTROL MEM BIT 2
 0040 CONTROL MEM BIT 3
 0040 COMMAND MEM BIT 4
 0040 COMMAND MEM BIT 5
 0040 CONTROL MEM BIT 6
 0040 CONTROL MEM BIT 7
 0070 CONDITIONAL COMMAND
 0030 TIME 7 CLOCK
 0040 CONTROL MEM BIT 7
 0050 COMMAND 150
 0030 TIME 7 CLOCK
 0150 JUMP COMMAND
 0060 TSB=LITERAL



CONTROL MEMORY ADDRESS MODIFY AND ALARM

0060 LITERAL BIT 0
0060 LITERAL BIT 1
0060 LITERAL BIT 2

0150 JUMP COMMAND
0030 TIME SPACE 7

0030 TIME 7 CLOCK
0010 CLOCK

0130 KEYBOARD RESET

0050 COMMAND OXX
0050 COMMAND XOX

0040 CONTROL MEM BIT 7

0050 COMMAND X2X

0240 CPR=MEM ADDR COUNT

0050 COMMAND XX4

0050 COMMAND XX2

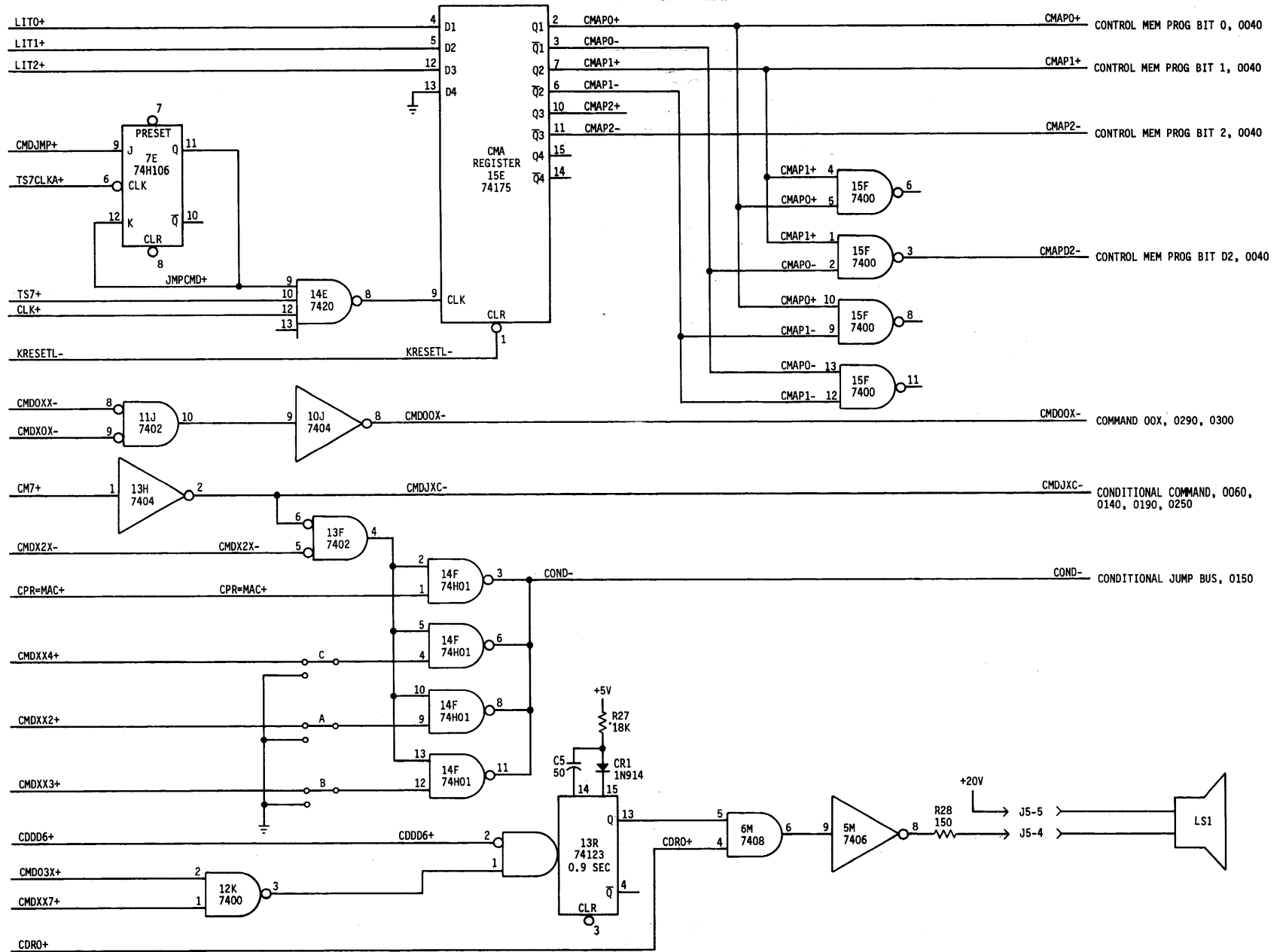
0050 COMMAND XX3

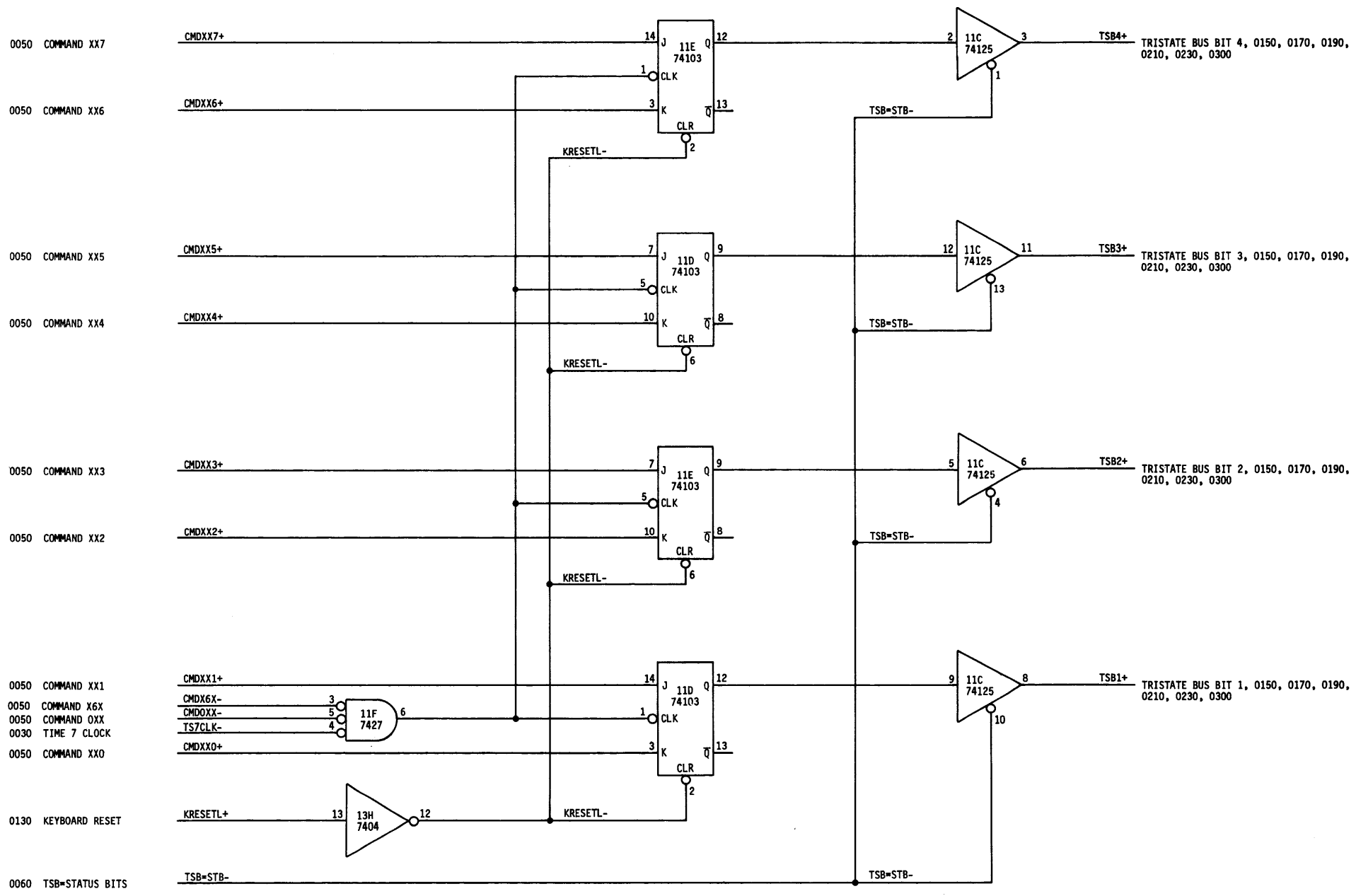
0030 DOT COUNT 6

0200 COMMAND O3X

0050 COMMAND XX7

0020 ROW COUNTER BIT 0





0380 -12 VOLTS

0380 +5 VOLTS

GROUND

GROUND

0100 CLOCK INHIBIT

0100 STROBE

0090 BINARY COUNT 5

0090 BINARY COUNT 6

0090 BINARY COUNT 7

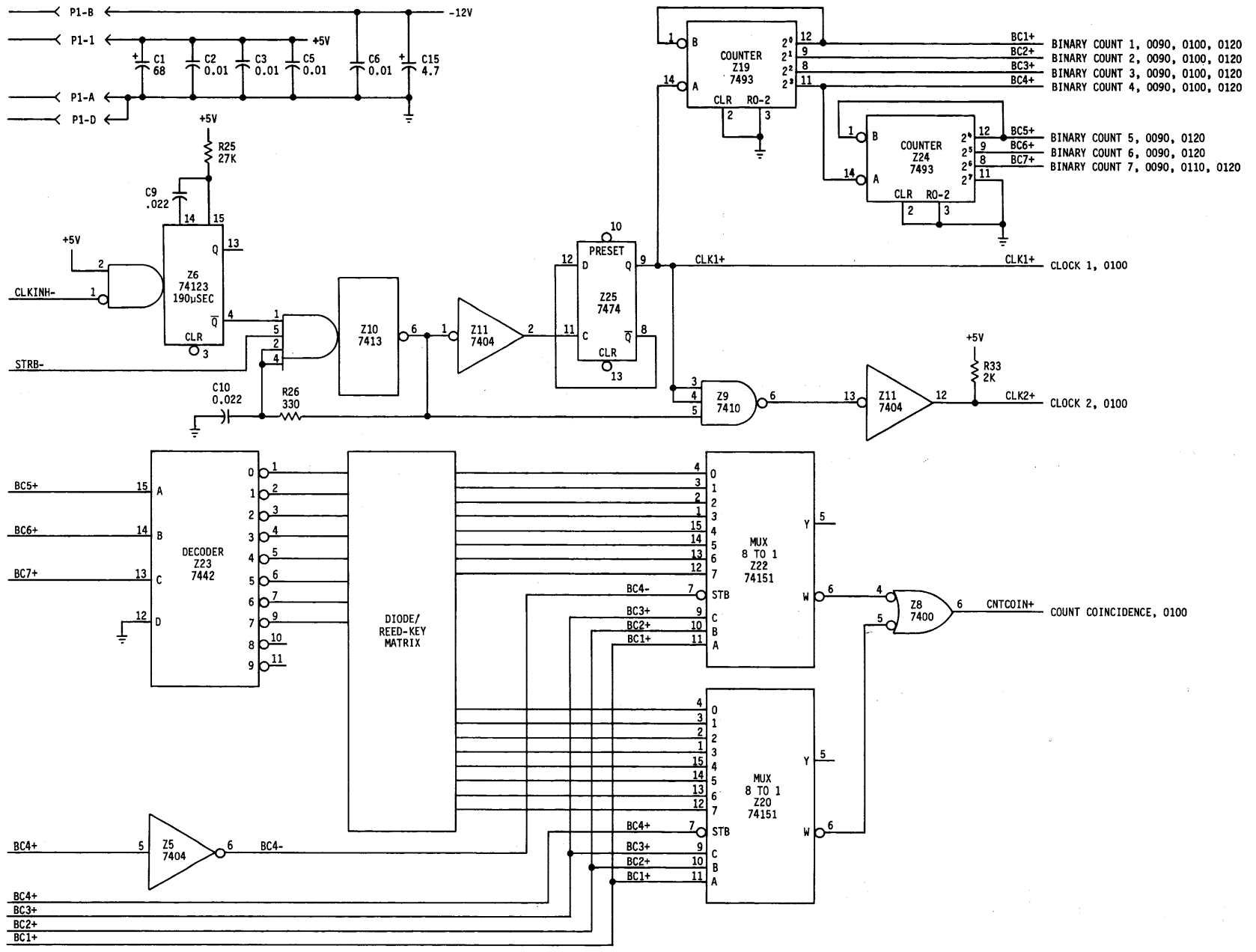
0090 BINARY COUNT 4

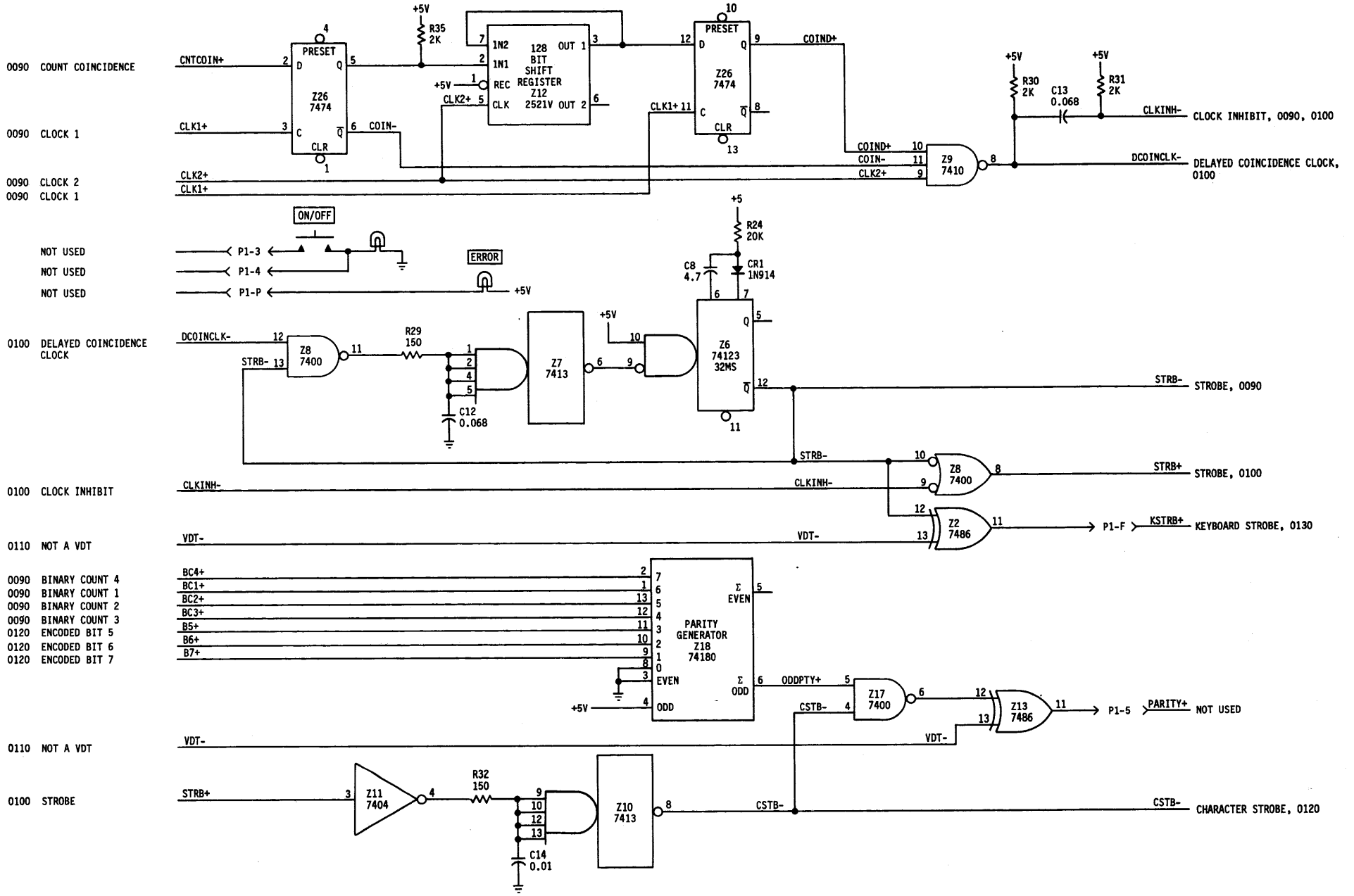
0090 BINARY COUNT 4

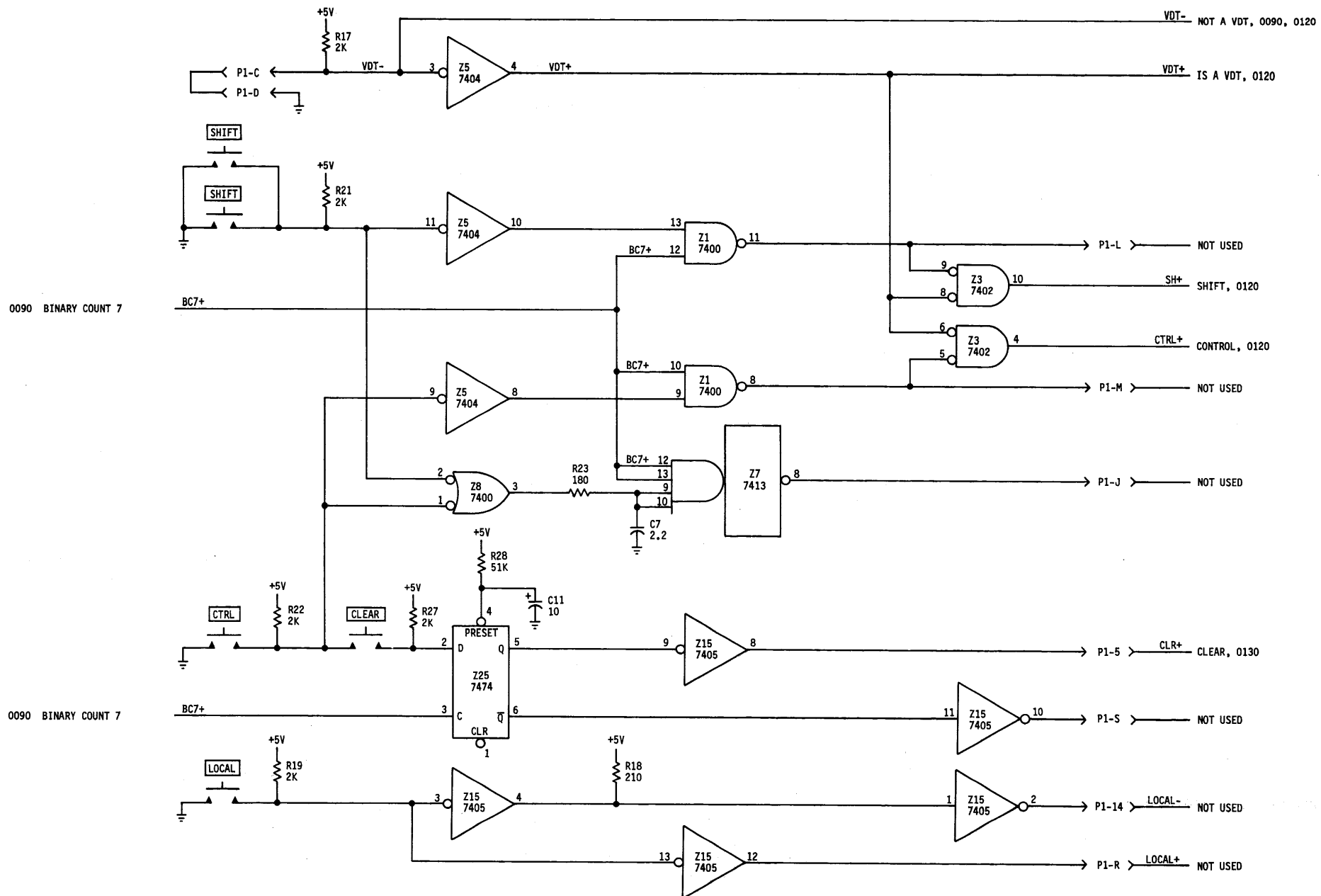
0090 BINARY COUNT 3

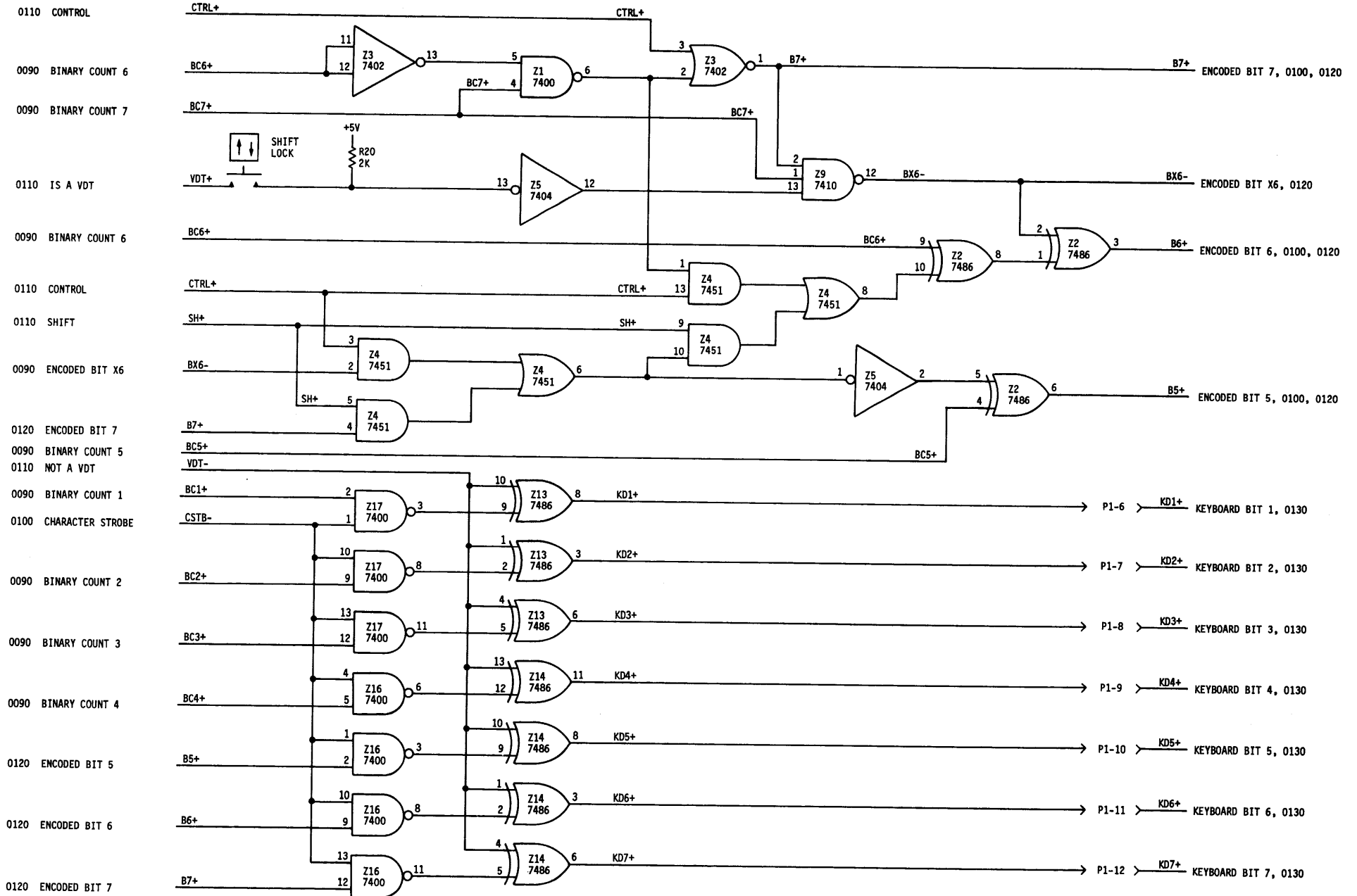
0090 BINARY COUNT 2

0090 BINARY COUNT 1

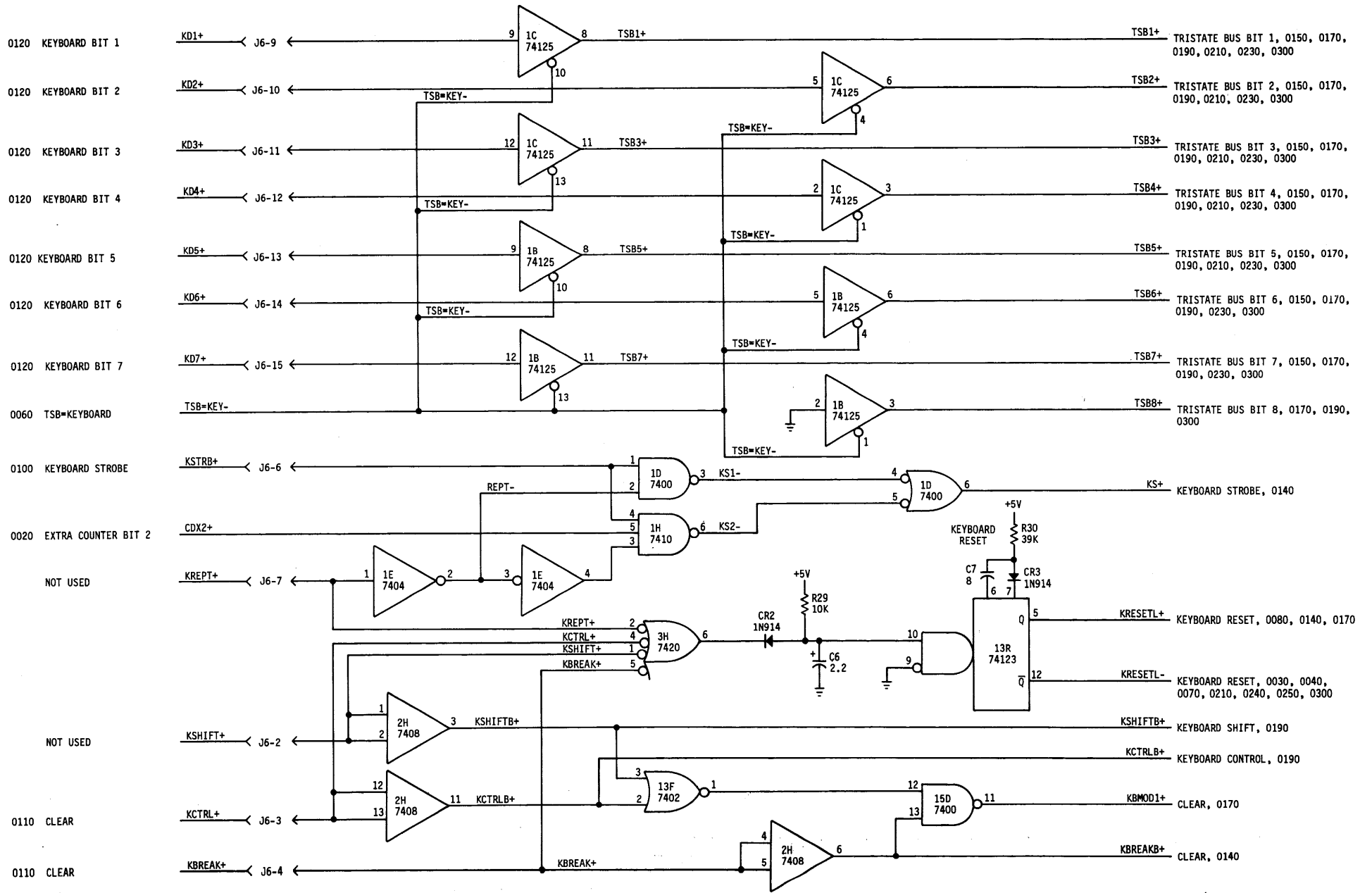








INPUTS FROM KEYBOARD

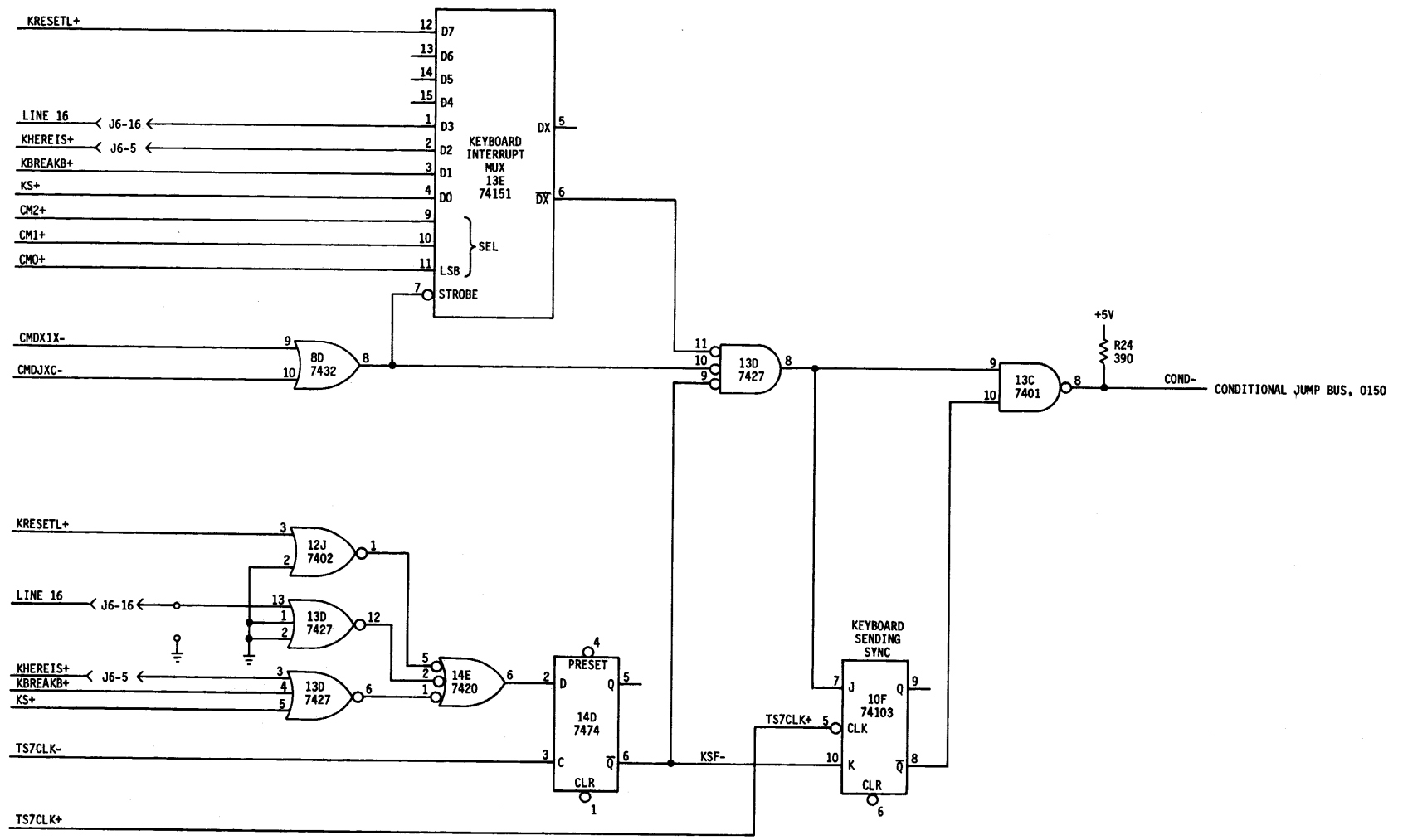


0130 KEYBOARD RESET
 NOT USED
 NOT USED
 0130 CLEAR
 0130 KEYBOARD STROBE
 0040 CONTROL MEM BIT 2
 0040 CONTROL MEM BIT 1
 0040 CONTROL MEM BIT 0

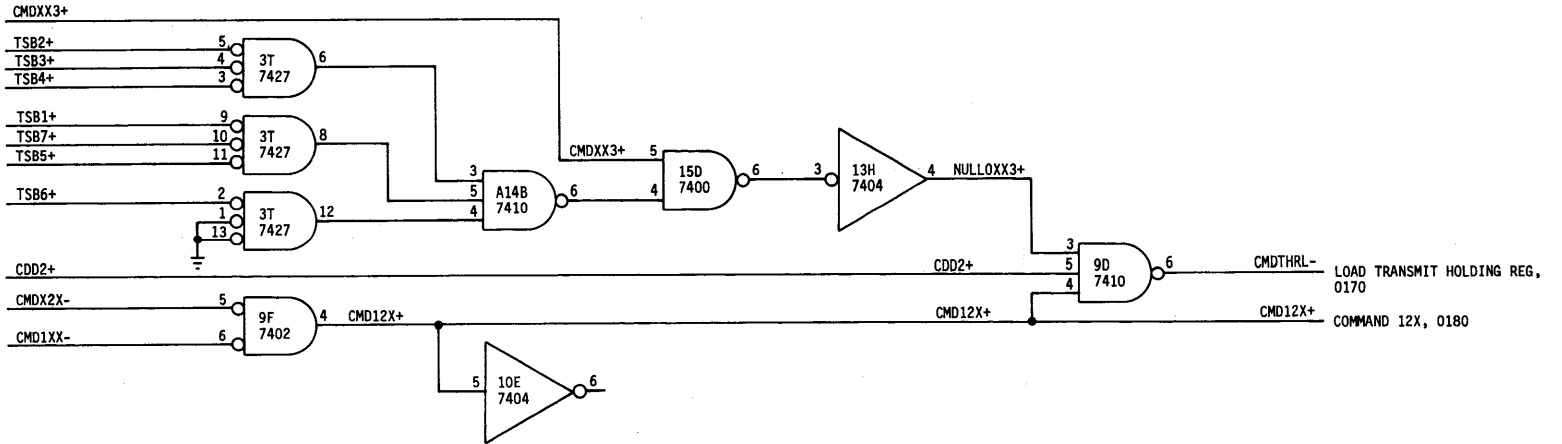
0050 COMMAND X1X
 0070 CONDITIONAL COMMAND

0130 KEYBOARD RESET
 NOT USED
 NOT USED
 0130 CLEAR
 0130 KEYBOARD STROBE

0030 TIME 7 CLOCK
 0030 TIME 7 CLOCK



0050 COMMAND XX3
 { TRISTATE BUS BIT 2
 0060, TRISTATE BUS BIT 3
 0080, TRISTATE BUS BIT 4
 0130, TRISTATE BUS BIT 1
 0170, TRISTATE BUS BIT 7
 0180, TRISTATE BUS BIT 5
 0260, TRISTATE BUS BIT 6
 0330



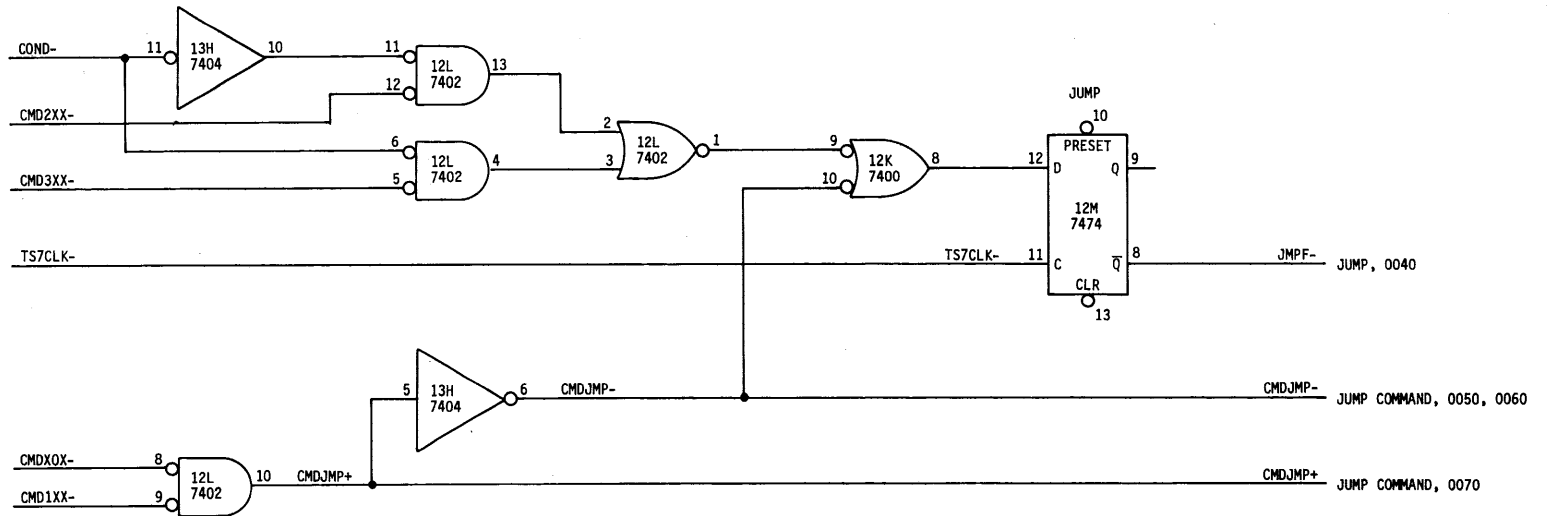
0010 DOT COUNTER BIT 2
 0050 COMMAND X2X
 0050 COMMAND 1XX

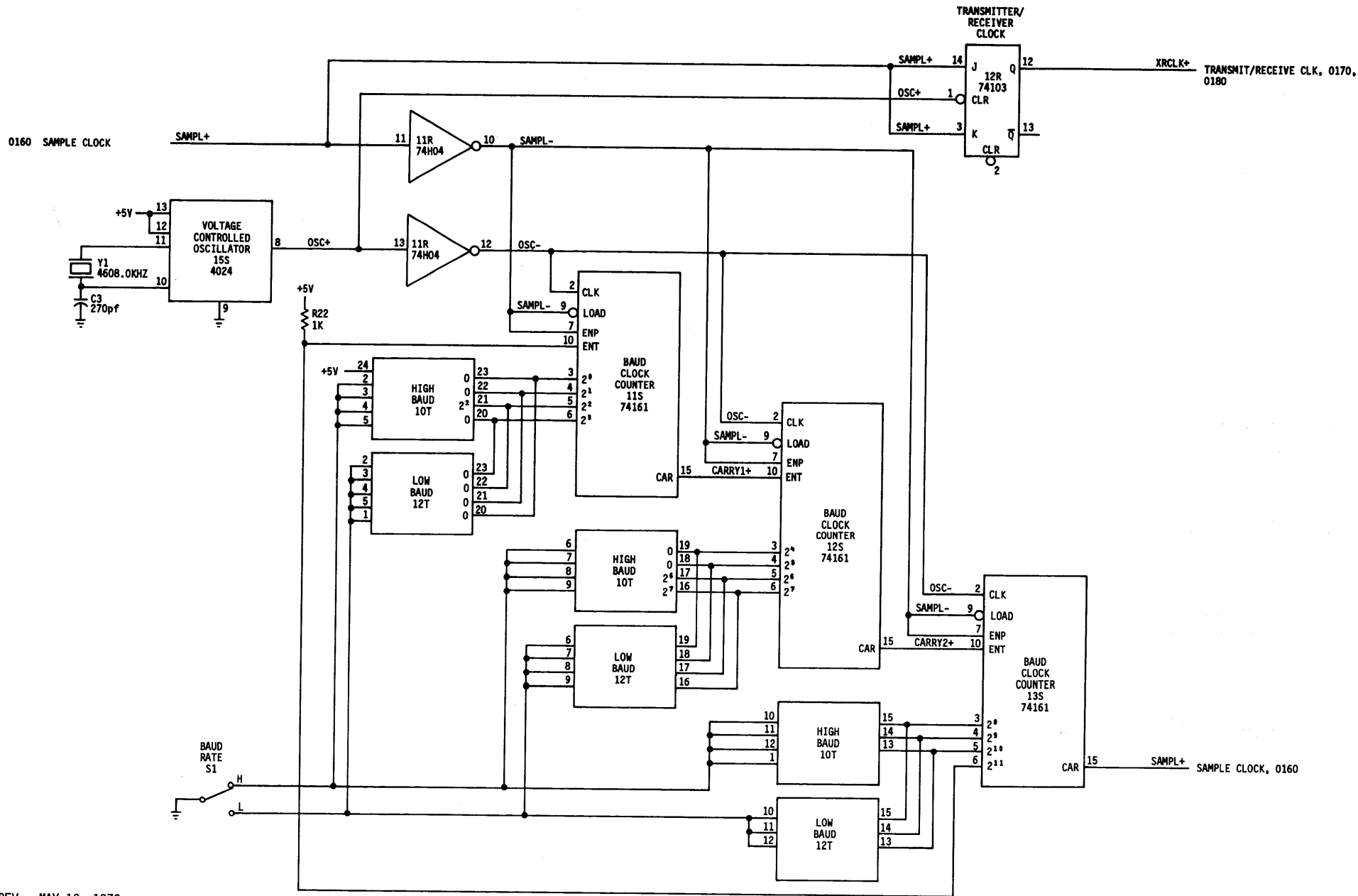
0070, 0140, 0190, 0240
 CONDITIONAL JUMP BUS

0050 COMMAND 2XX
 0050 COMMAND 3XX

0030 TIME 7 CLOCK

0050 COMMAND XOX
 0050 COMMAND 1XX





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BAUD RATE CLOCK GENERATOR

TRANSMITTER

0130 KEYBOARD RESET

TRISTATE BUS BIT 8
TRISTATE BUS BIT 7
TRISTATE BUS BIT 6
TRISTATE BUS BIT 5
TRISTATE BUS BIT 4
TRISTATE BUS BIT 3
TRISTATE BUS BIT 2
TRISTATE BUS BIT 1

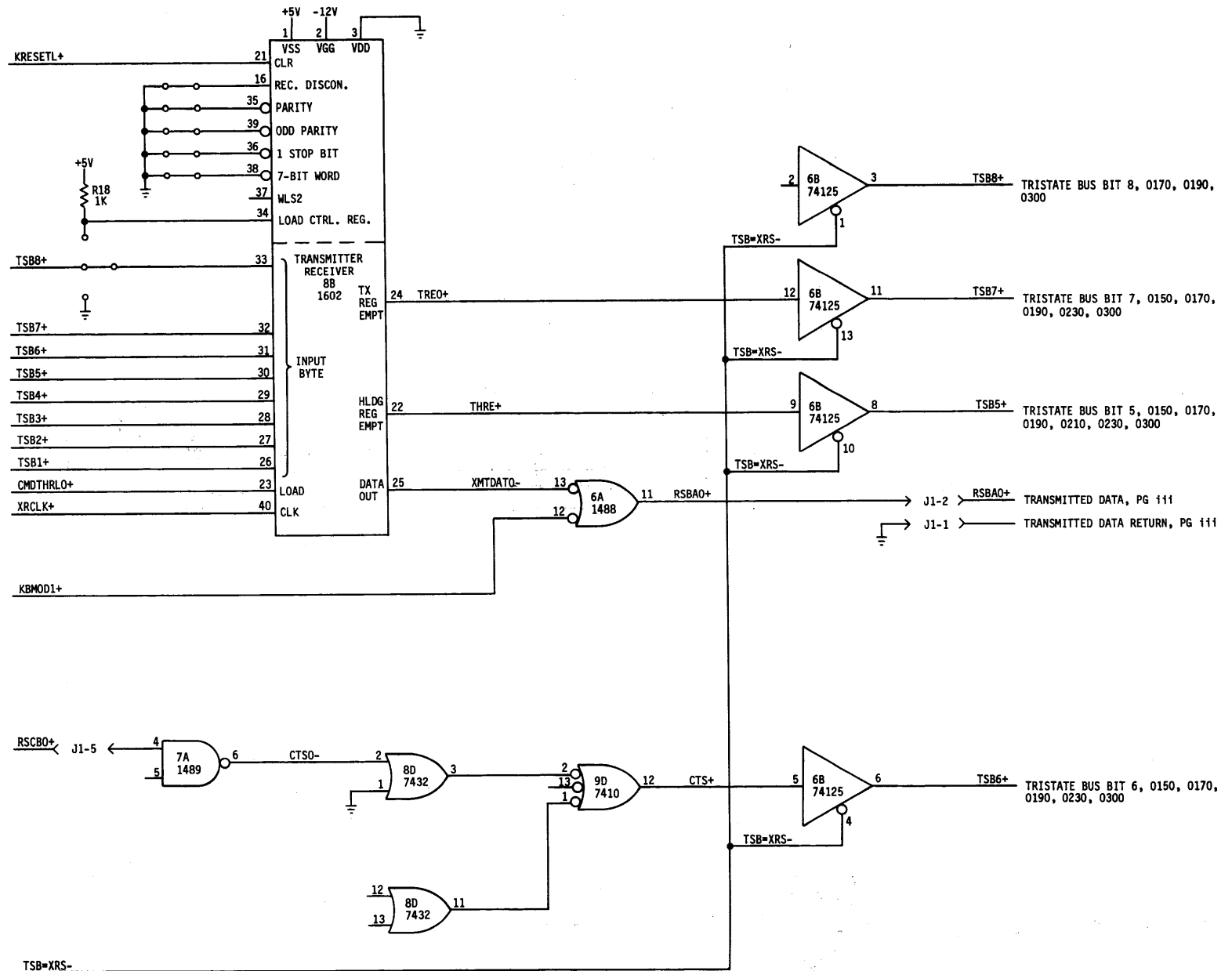
0150 LOAD TRANSMIT HOLDING REG

0160 TRANSMIT/RECEIVE CLK

0130 CLEAR

NOT USED

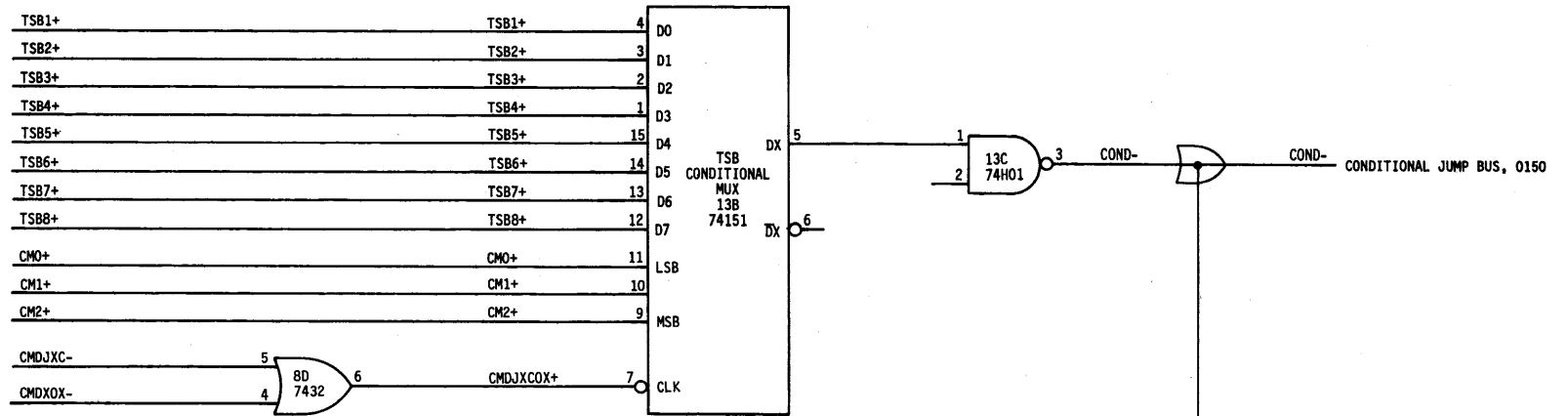
0060 TSB=XRS-



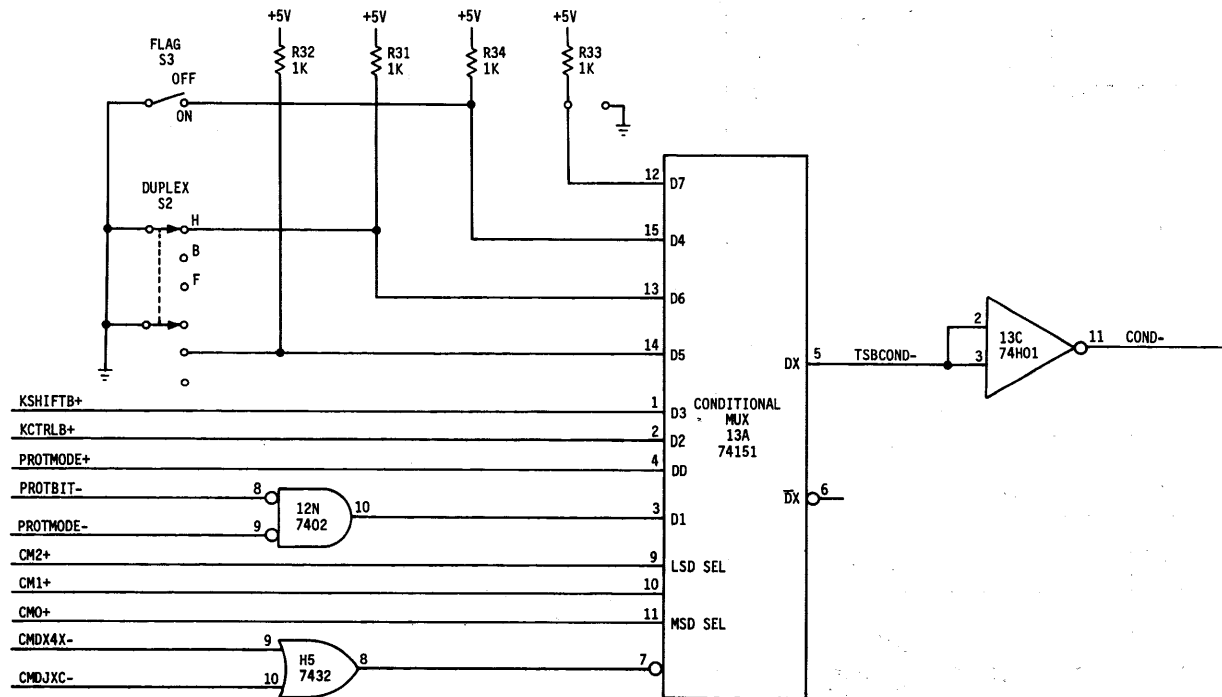
TSB = LRC AND TSB CONDITIONAL JUMP

- TRISTATE BUS BIT 1
- TRISTATE BUS BIT 2
- 0060. TRISTATE BUS BIT 3
- 0080. TRISTATE BUS BIT 4
- 0130. TRISTATE BUS BIT 5
- 0170. TRISTATE BUS BIT 6
- 0180. TRISTATE BUS BIT 7
- 0260. TRISTATE BUS BIT 8
- 0330. TRISTATE BUS BIT 8

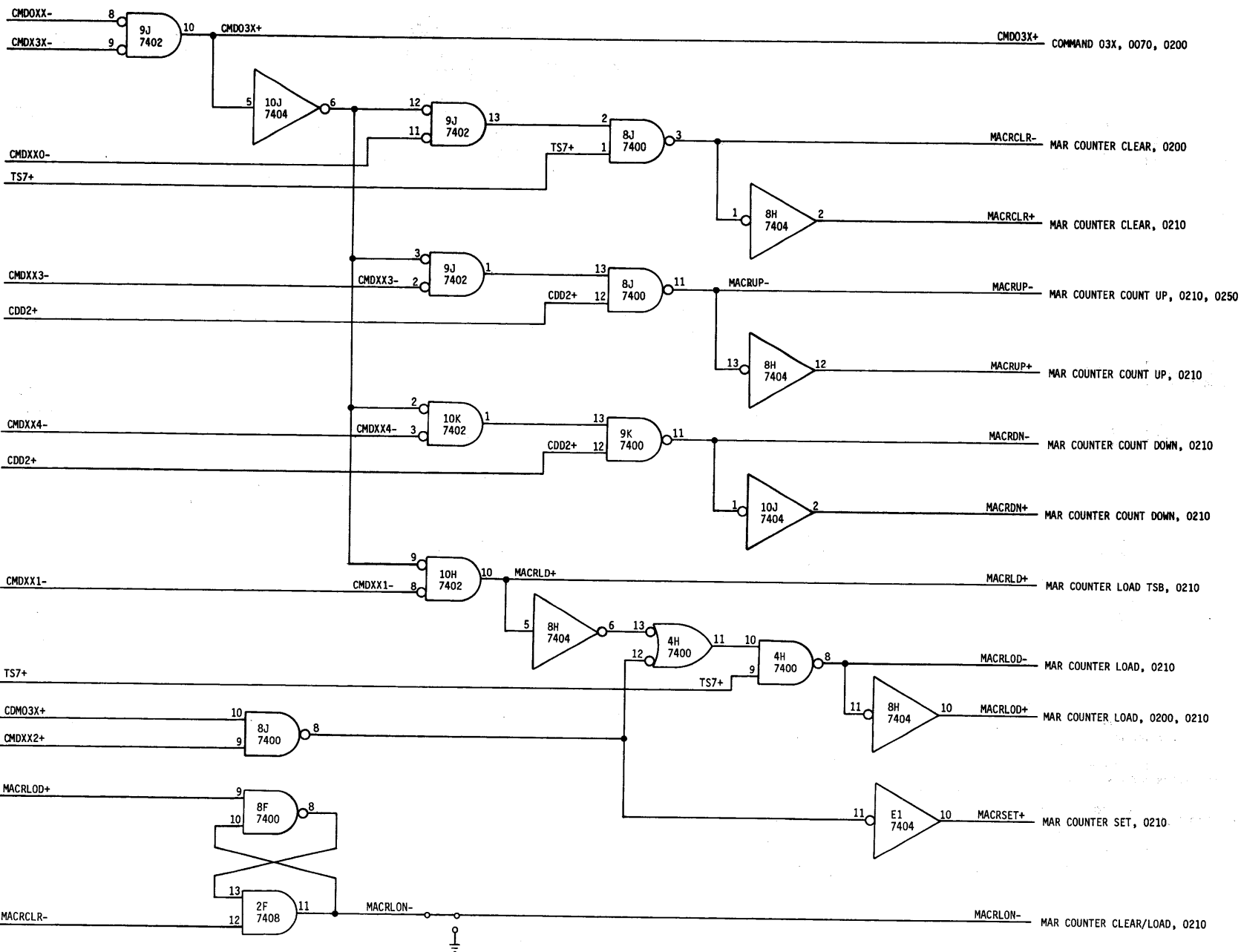
- 0040 CONTROL MEM BIT 0
- 0040 CONTROL MEM BIT 1
- 0040 CONTROL MEM BIT 2
- 0070 CONDITIONAL COMMAND
- 0050 COMMAND XOx



- 0130 KEYBOARD SHIFT
- 0130 KEYBOARD CONTROL
- 0300 PROTECT MODE
- 0330 PROTECTED BIT
- 0300 PROTECT MODE
- 0040 CONTROL MEM BIT 2
- 0040 CONTROL MEM BIT 1
- 0040 CONTROL MEM BIT 0
- 0050 COMMAND X4x
- 0070 CONDITIONAL COMMAND

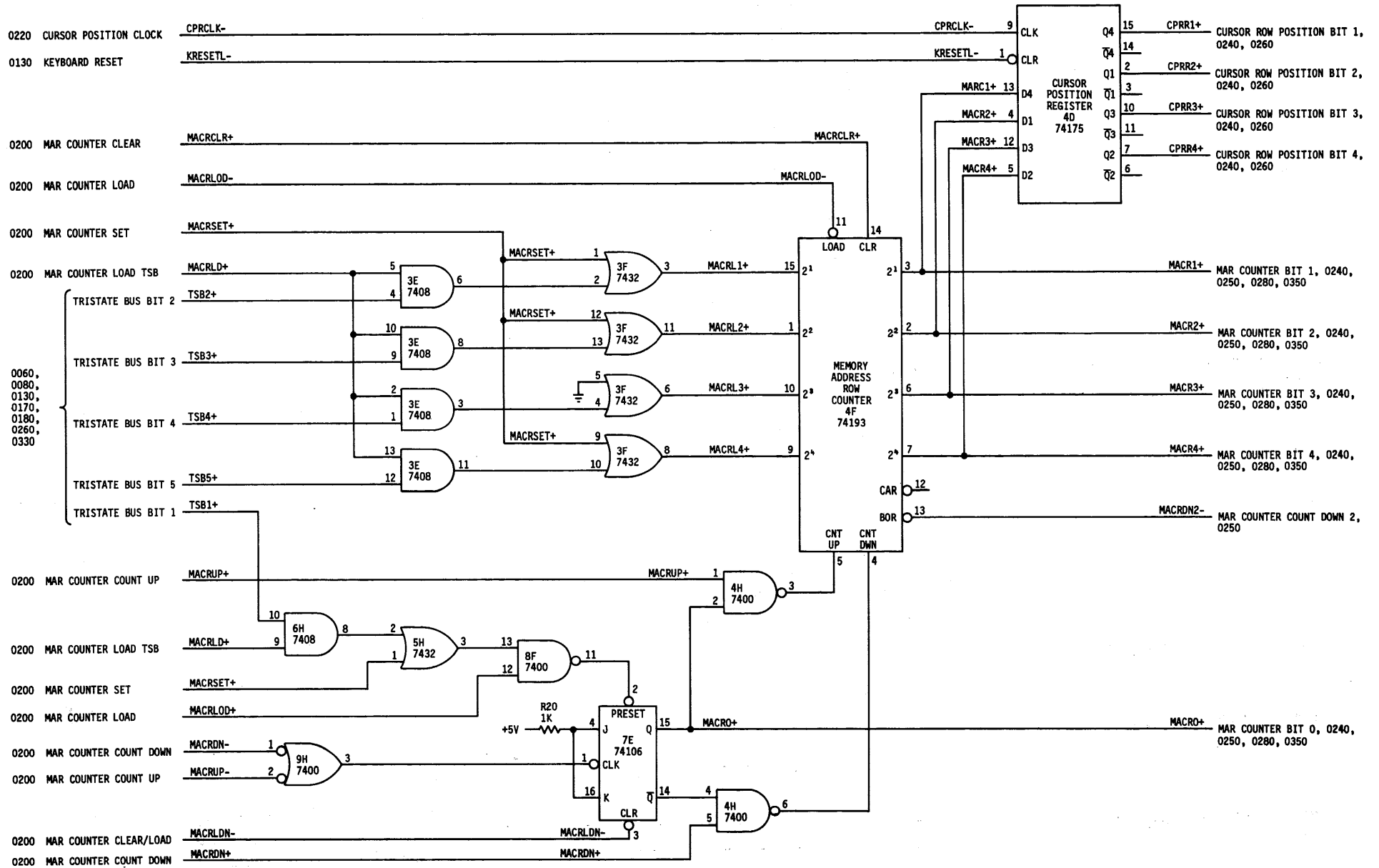


0050 COMMAND OXX
0050 COMMAND X3X



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MEMORY ADDRESS ROW COUNTER CONTROL



0030 TIME SPACE 7

0050 COMMAND XX0

0050 COMMAND X2X

0050 COMMAND OXX

0050 COMMAND XX2

0050 COMMAND XX1

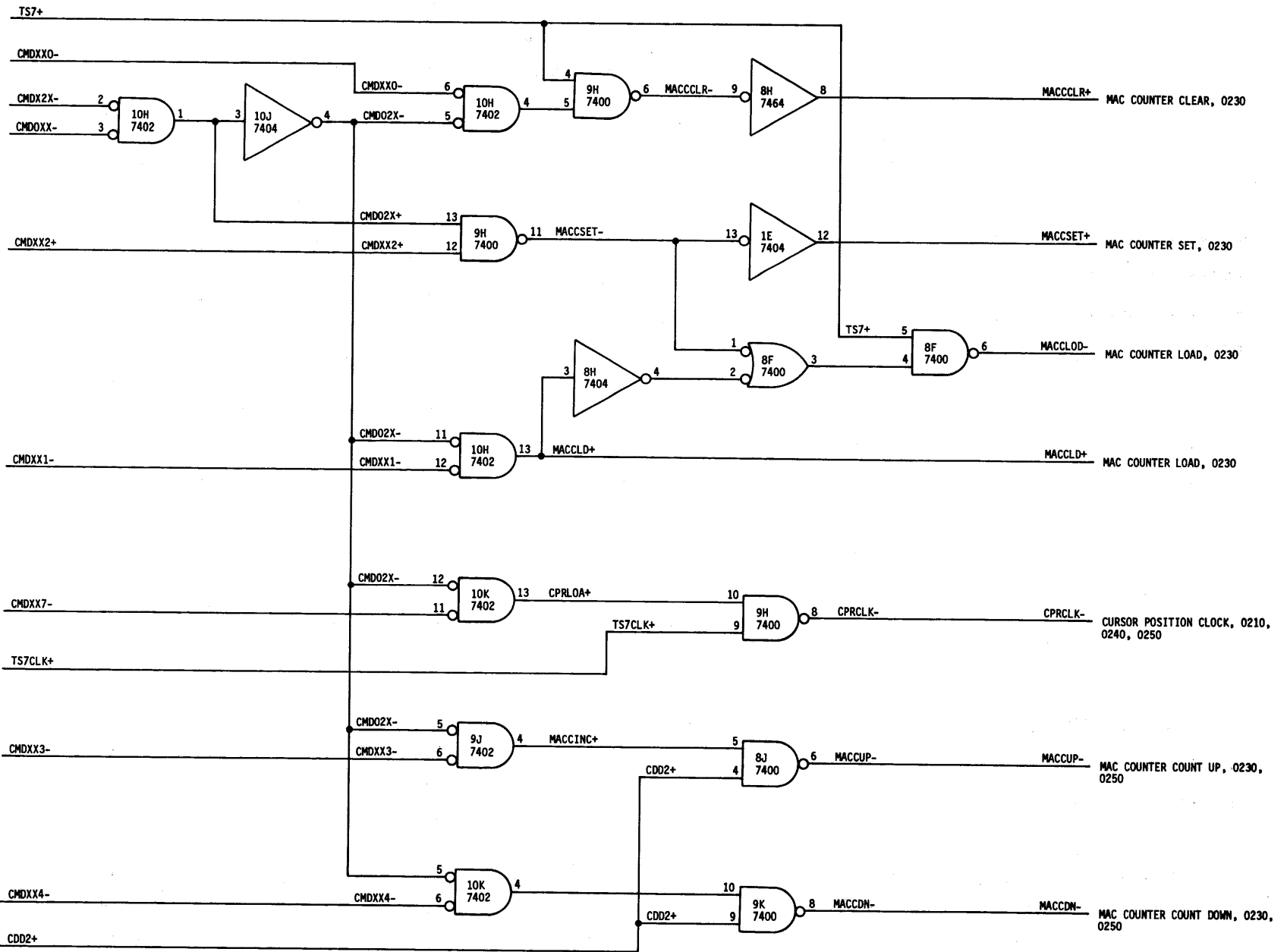
0050 COMMAND XX7

0030 TIME 7 CLOCK

0050 COMMAND XX3

0050 COMMAND XX4

0010 DOT COUNTER BIT 2



MEMORY ADDRESS COLUMN COUNTER

0220 MAC COUNTER LOAD

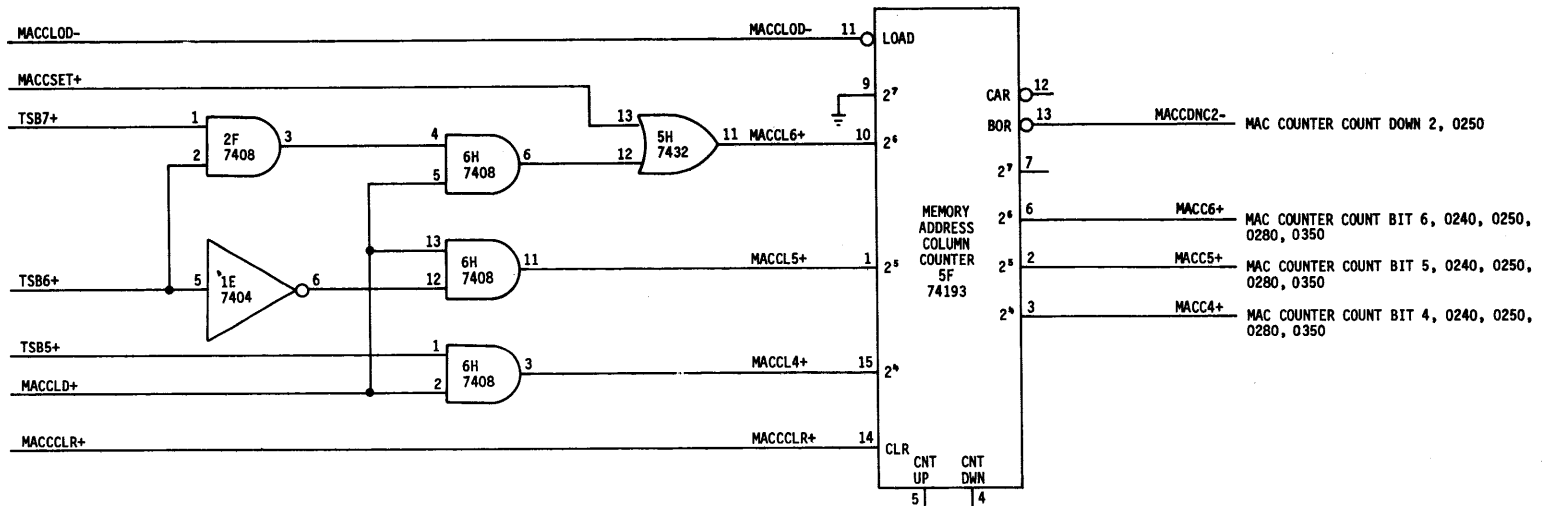
0220 MAC COUNTER SET

TRISTATE BUS BIT 7
0060,
0080,
0130,
0170,
0180,
0260,
0330
TRISTATE BUS BIT 6

TRISTATE BUS BIT 5

0220 MAC COUNTER LOAD

0220 MAC COUNTER CLEAR



0220 MAC COUNTER LOAD

TRISTATE BUS BIT 4
0060,
0080,
0130,
0170,
0180,
0260,
0330
TRISTATE BUS BIT 3
TRISTATE BUS BIT 2

TRISTATE BUS BIT 1

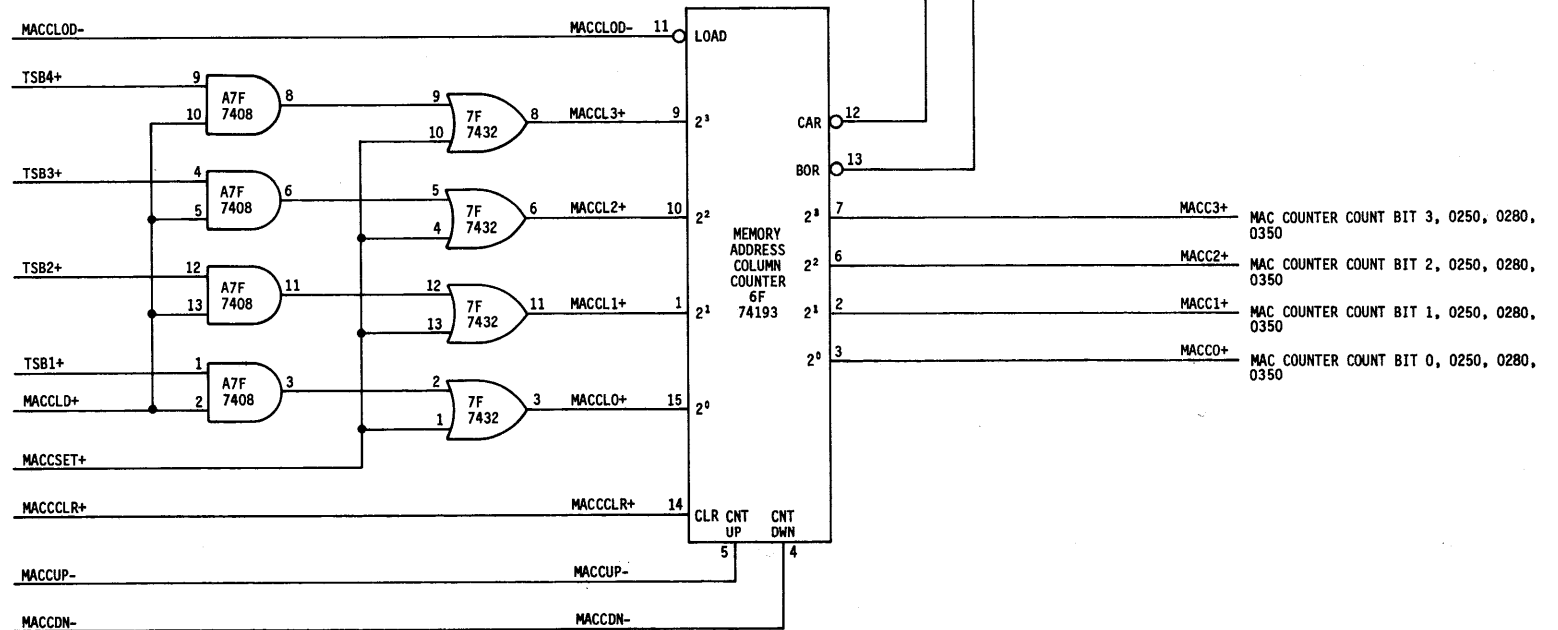
0220 MAC COUNTER LOAD

0220 MAC COUNTER SET

0220 MAC COUNTER CLEAR

0220 MAC COUNTER COUNT UP

0220 MAC COUNTER COUNT DOWN



0050 COMMAND XX1

0210 CURSOR ROW POSITION BIT 4
0210 CURSOR ROW POSITION BIT 3
0210 CURSOR ROW POSITION BIT 2
0210 CURSOR ROW POSITION BIT 1

0210 MAR COUNTER BIT 4
0210 MAR COUNTER BIT 3
0210 MAR COUNTER BIT 2
0210 MAR COUNTER BIT 1

0250 CURSOR ROW POSITION BIT 0
0250 CURSOR COLUMN POSITION BIT 6
0250 CURSOR COLUMN POSITION BIT 5
0250 CURSOR COLUMN POSITION BIT 4

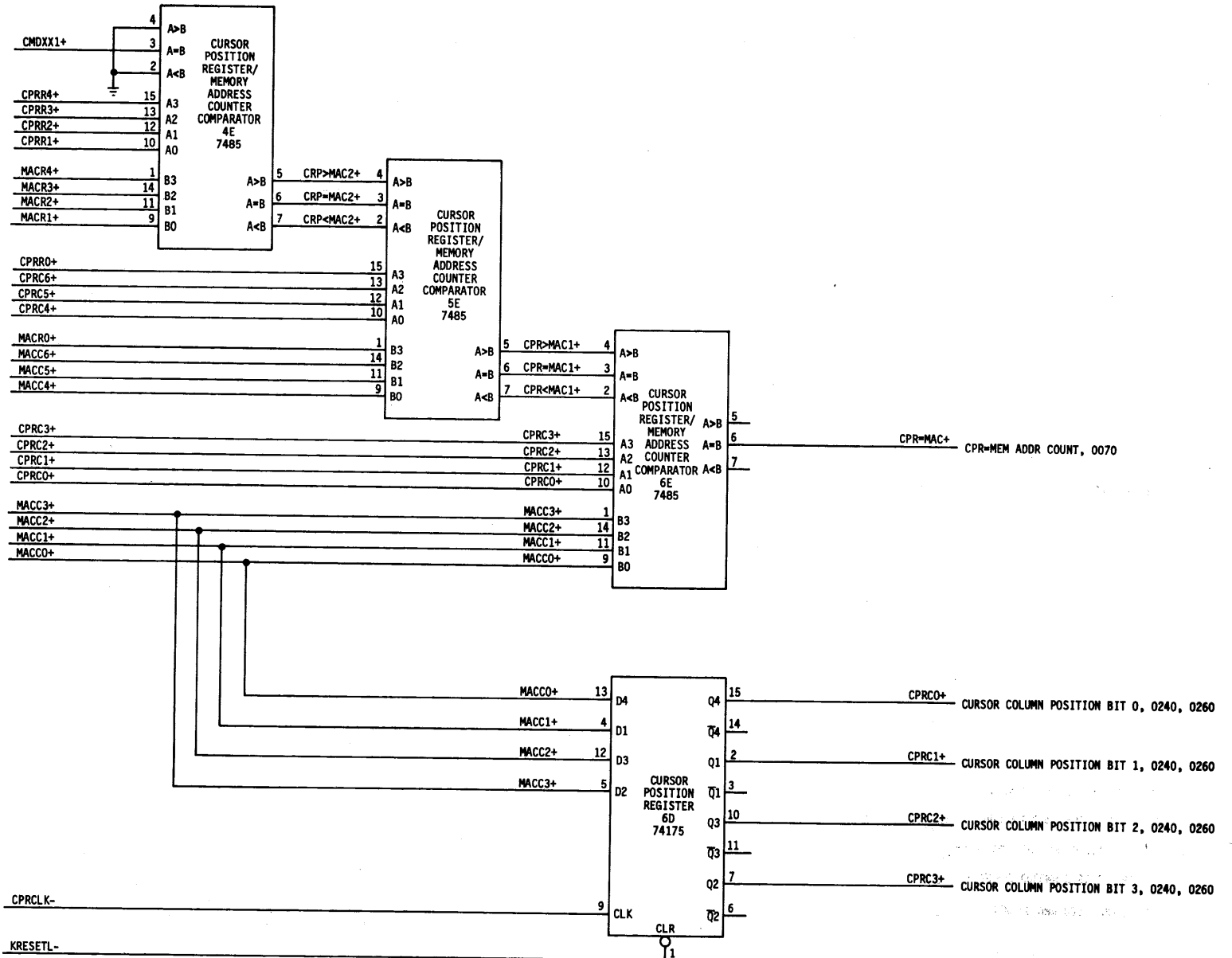
0210 MAR COUNT BIT 0
0230 MEM ADDR CURSOR COUNT BIT 6
0230 MEM ADDR CURSOR COUNT BIT 5
0230 MEM ADDR CURSOR COUNT BIT 4

0240 CURSOR COLUMN POSITION BIT 3
0240 CURSOR COLUMN POSITION BIT 2
0240 CURSOR COLUMN POSITION BIT 1
0240 CURSOR COLUMN POSITION BIT 0

0230 MAC COUNTER COUNT BIT 3
0230 MAC COUNTER COUNT BIT 2
0230 MAC COUNTER COUNT BIT 1
0230 MAC COUNTER COUNT BIT 0

0220 CURSOR POSITION CLOCK

0130 KEYBOARD RESET



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CURSOR POSITION - MEMORY ADDRESS

0230 MAC COUNTER COUNT BIT 4

0230 MAC COUNTER COUNT BIT 5

0220 CURSOR POSITION CLOCK

0130 KEYBOARD RESET

0230 MAC COUNTER COUNT BIT 6
0230 MAC COUNTER COUNT BIT 3
0230 MAC COUNTER COUNT BIT 2
0230 MAC COUNTER COUNT BIT 1
0230 MAC COUNTER COUNT BIT 0

0220 MAC COUNTER COUNT UP
0030 TIME 7 CLOCK

0210 MAC COUNTER BIT 0
0210 MAR COUNTER BIT 1
0210 MAR COUNTER BIT 2
0210 MAR COUNTER BIT 4

0200 MAR COUNTER COUNT UP

0210 MAR COUNTER COUNT DOWN 2

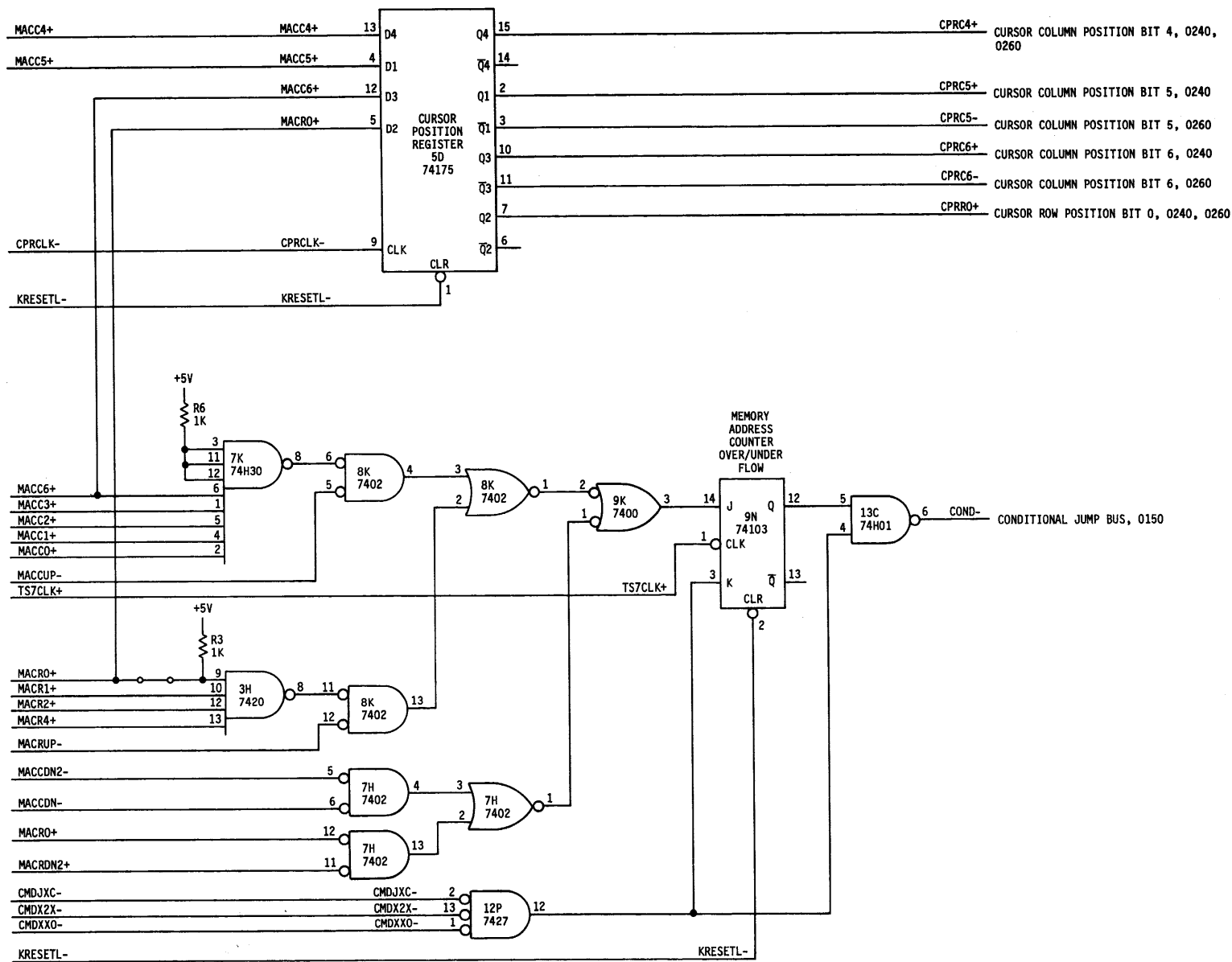
0220 MAC COUNTER COUNT DOWN

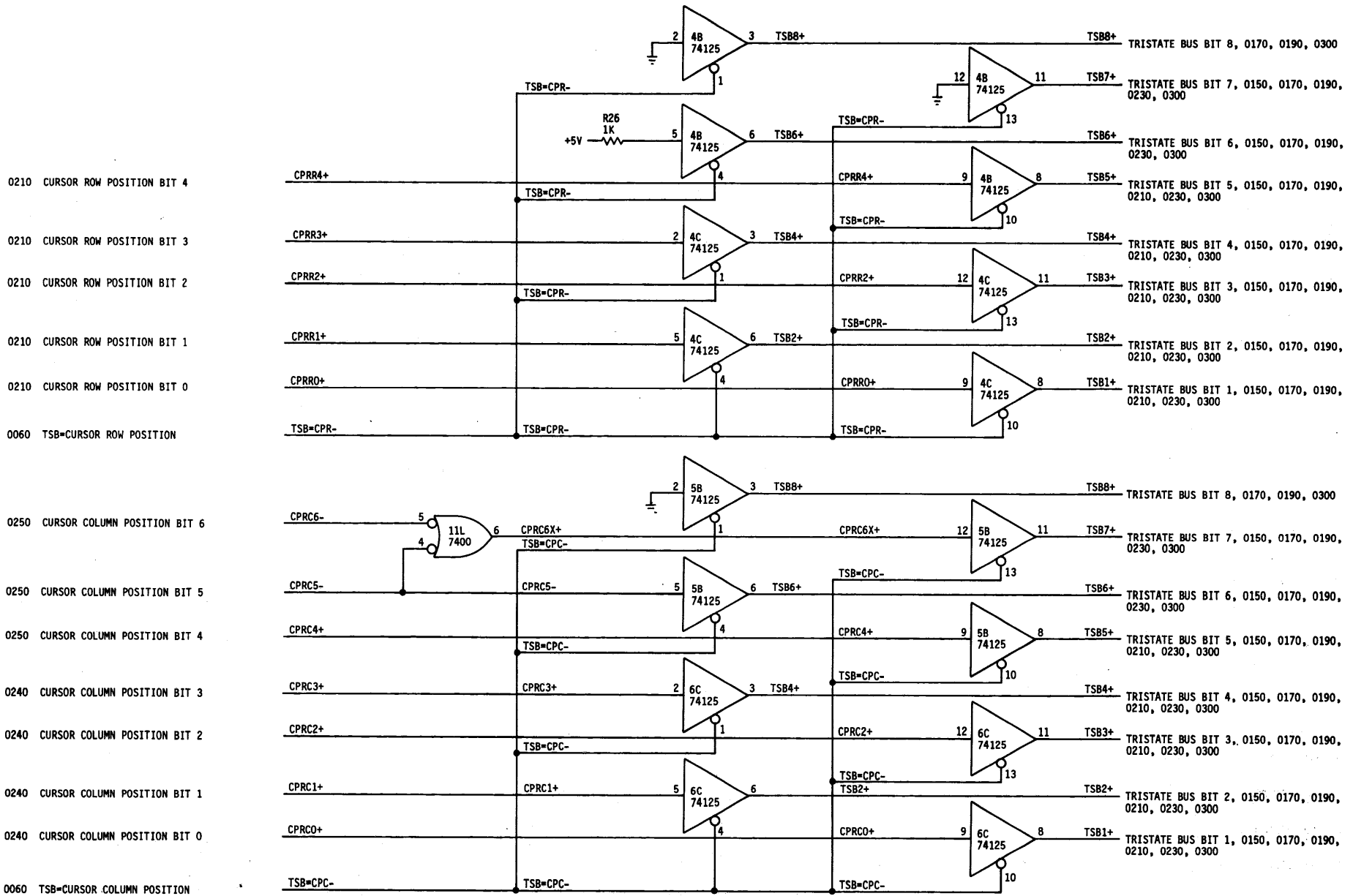
0210 MAR COUNTER BIT 0

0210 MAR COUNTER COUNT DOWN 2

0070 CONDITIONAL COMMAND
0050 COMMAND X2X
0050 COMMAND XX0

0130 KEYBOARD RESET

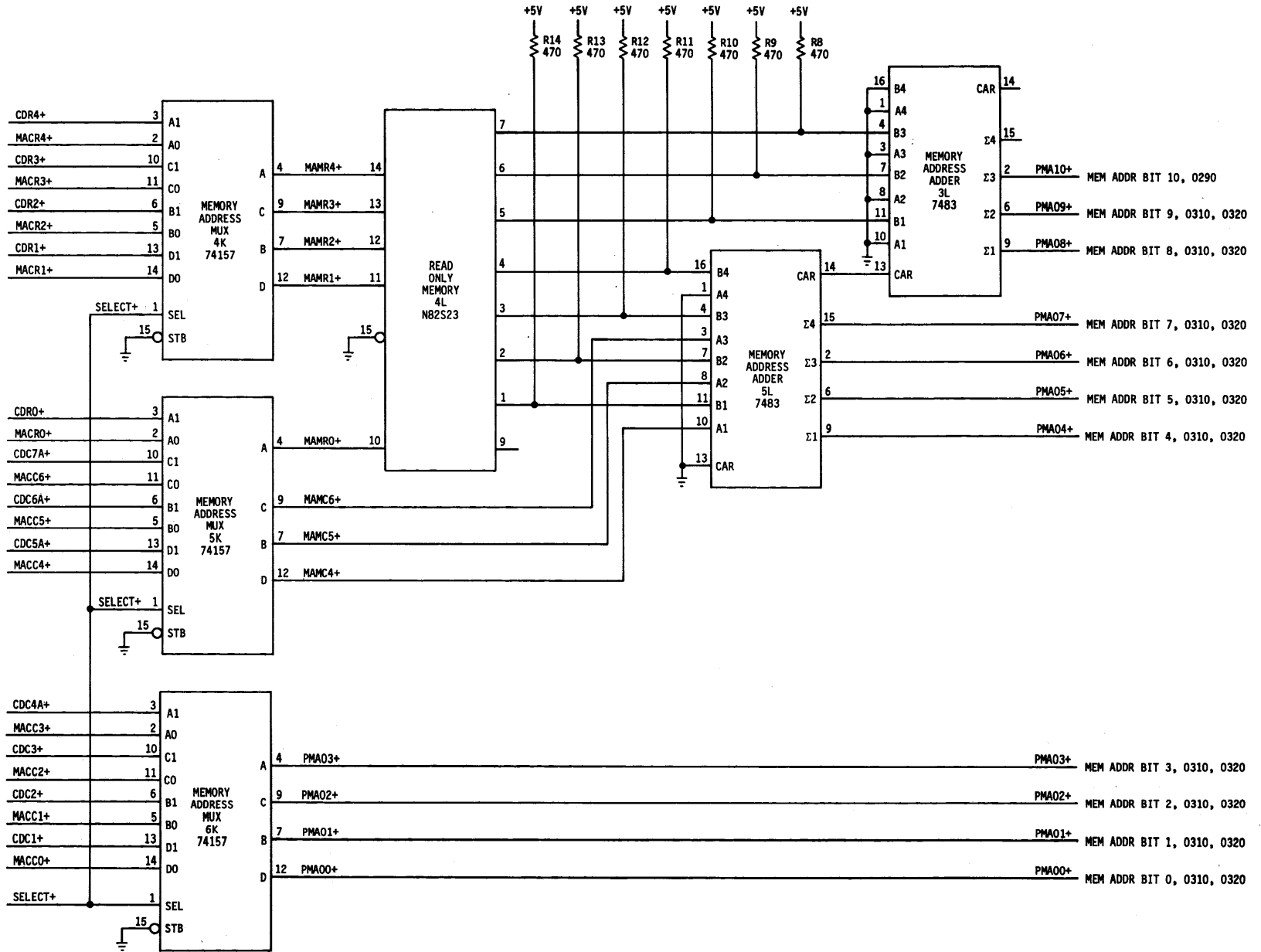




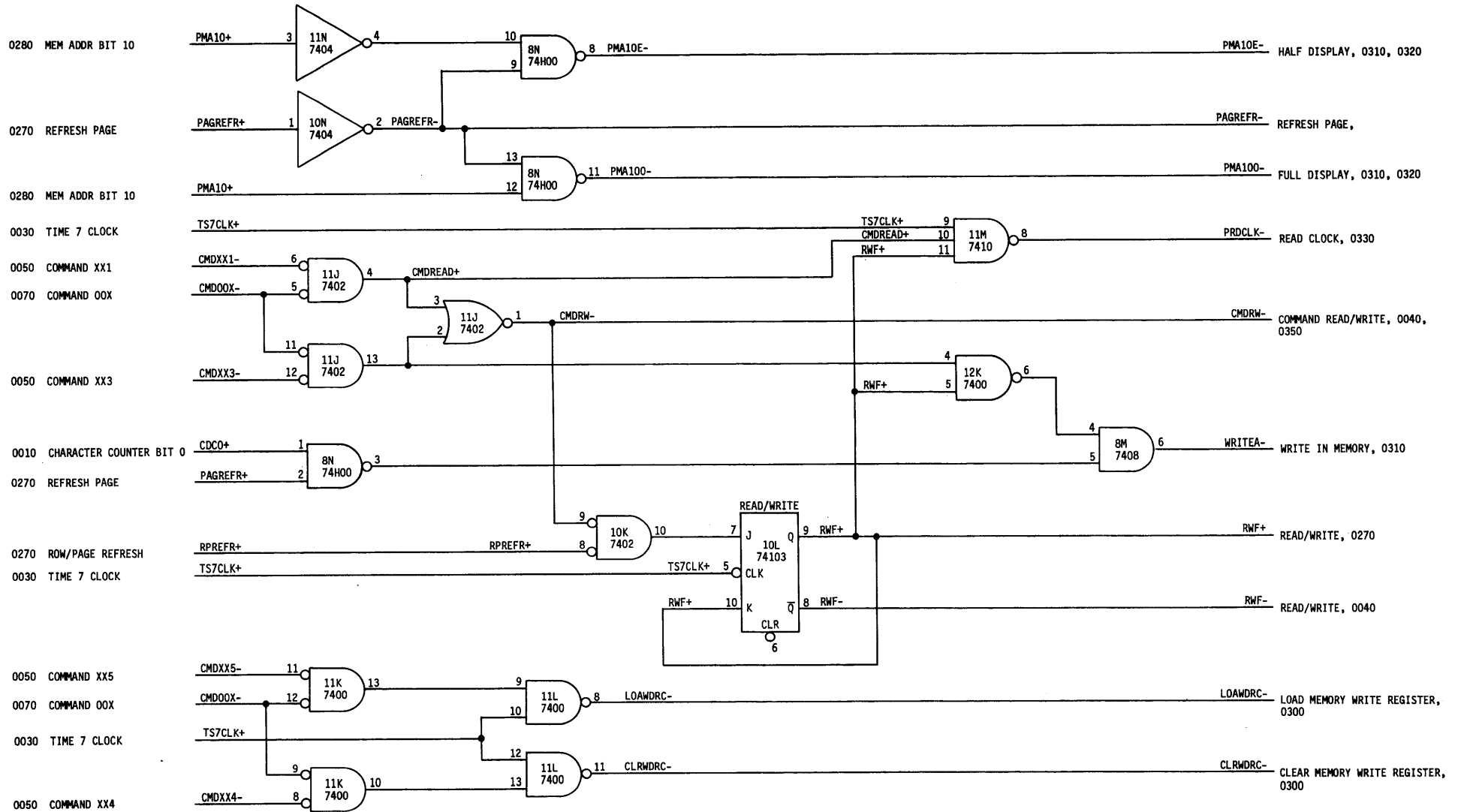
0020 ROW COUNTER BIT 4
 0210 MAR COUNTER BIT 4
 0020 ROW COUNTER BIT 3
 0210 MAR COUNTER BIT 3
 0020 ROW COUNTER BIT 2
 0210 MAR COUNTER BIT 2
 0020 ROW COUNTER BIT 1
 0210 MAR COUNTER BIT 1

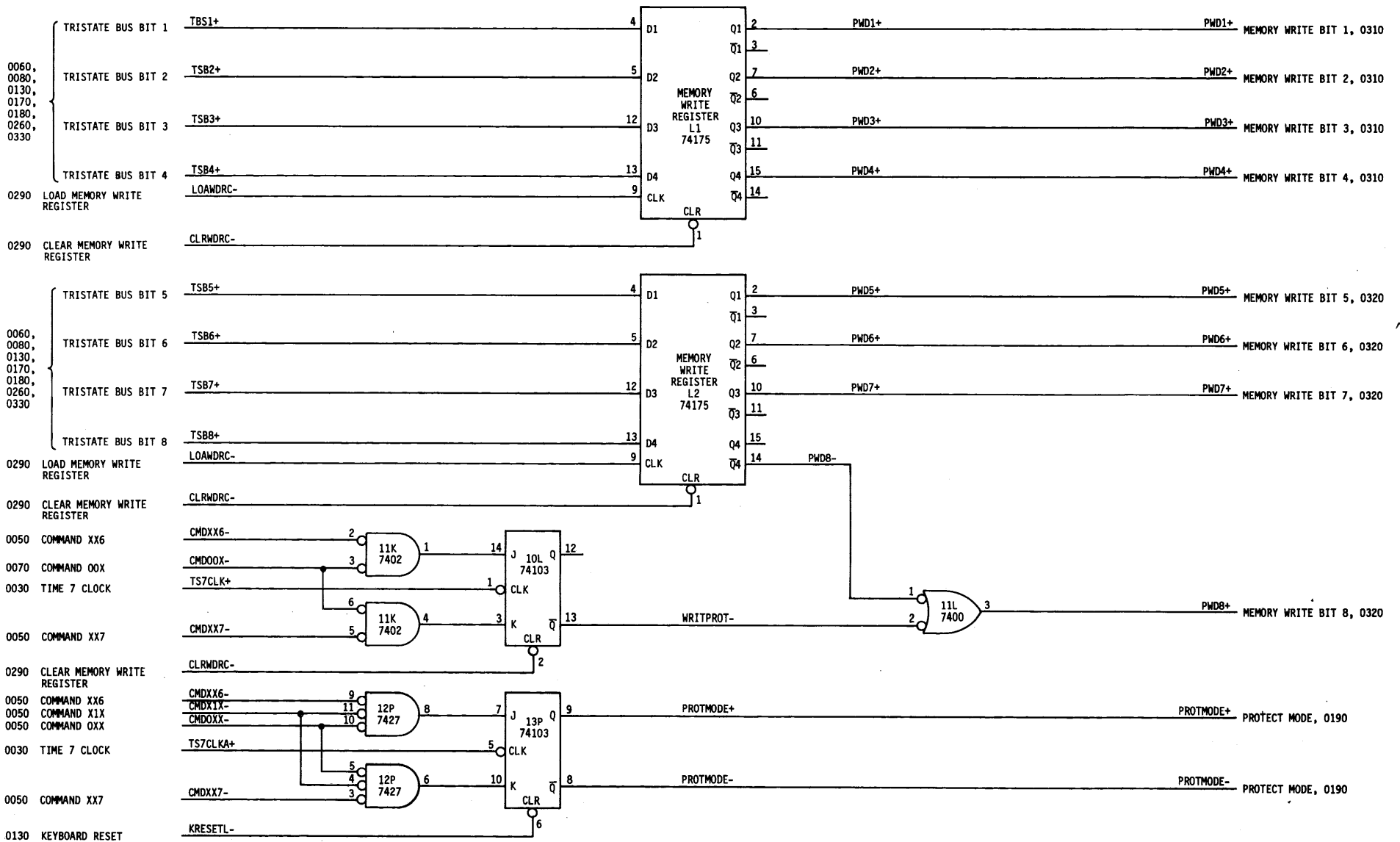
0020 ROW COUNTER BIT 0
 0210 MAR COUNTER BIT 0
 0270 CHARACTER COUNT ALT
 0230 MAC COUNTER COUNT BIT 6
 0270 CHARACTER COUNT ALT
 0230 MAC COUNTER COUNT BIT 5
 0270 CHARACTER COUNT ALT
 0230 MAC COUNTER COUNT BIT 4

0270 CHARACTER COUNT ALT
 0230 MAC COUNTER COUNT BIT 3
 0010 CHARACTER COUNTER BIT 3
 0230 MAC COUNTER COUNT BIT 2
 0010 CHARACTER COUNTER BIT 2
 0230 MAC COUNTER COUNT BIT 1
 0010 CHARACTER COUNTER BIT 1
 0230 MAC COUNTER COUNT BIT 0
 0270 SELECT

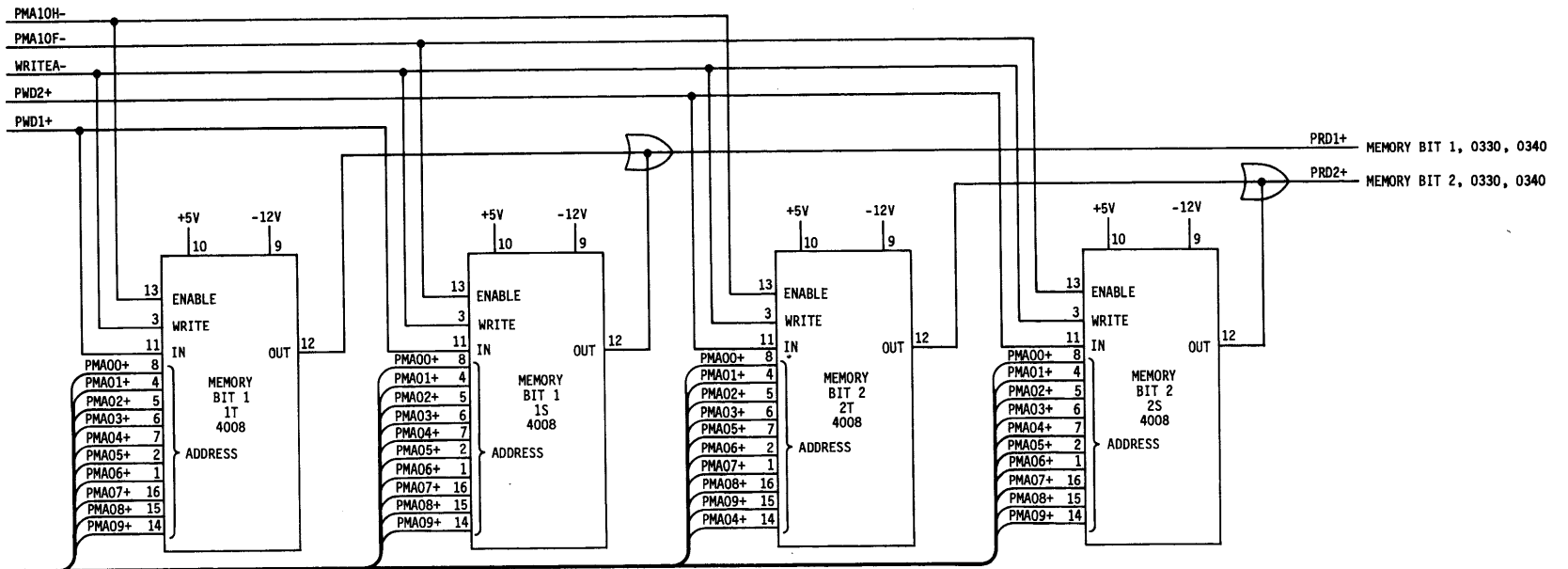


MEMORY WRITE CONTROL

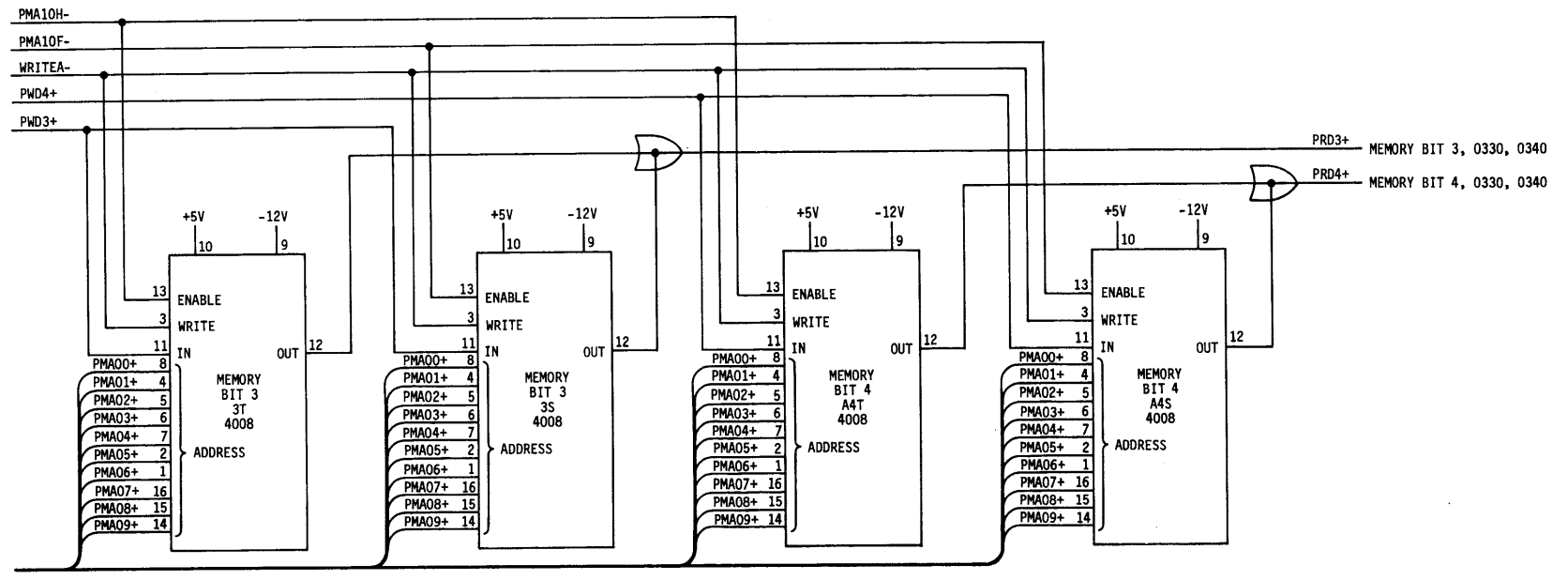




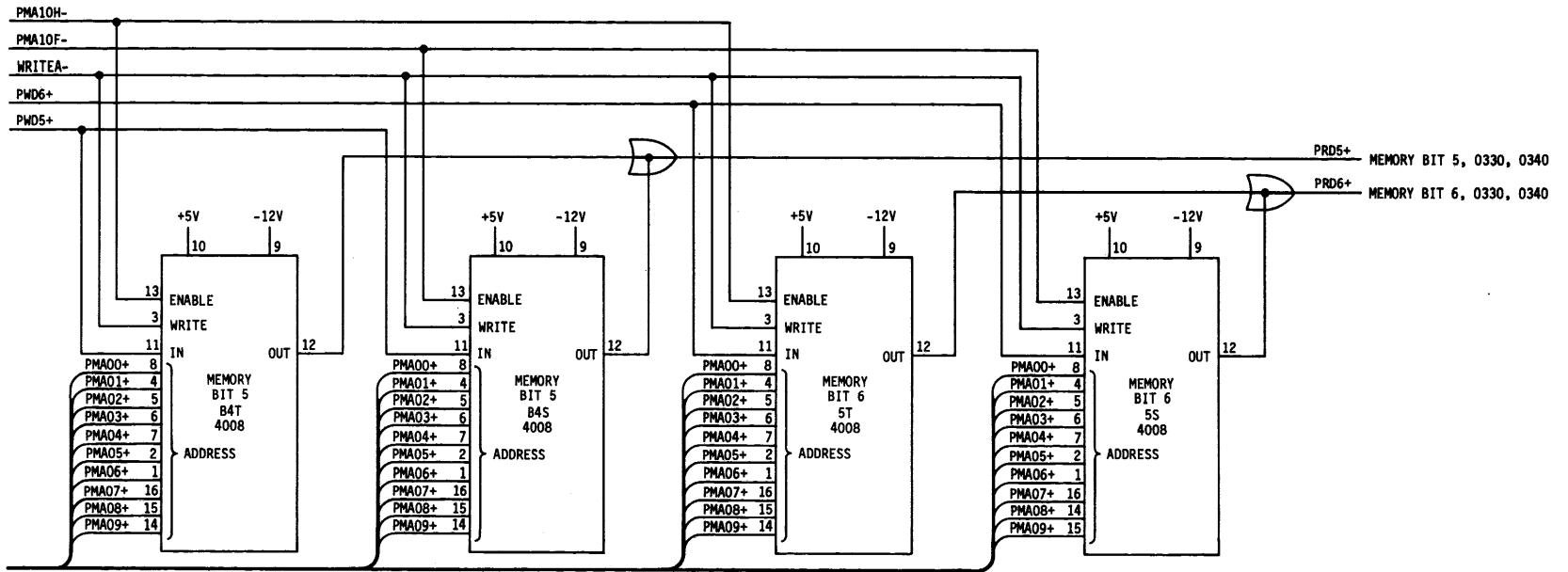
- 0290 HALF DISPLAY
- 0290 FULL DISPLAY
- 0290 WRITE IN MEMORY
- 0300 MEMORY WRITE BIT 2
- 0300 MEMORY WRITE BIT 1



- 0280 HALF DISPLAY
- 0290 FULL DISPLAY
- 0290 WRITE IN MEMORY
- 0300 MEMORY WRITE BIT 4
- 0300 MEMORY WRITE BIT 3

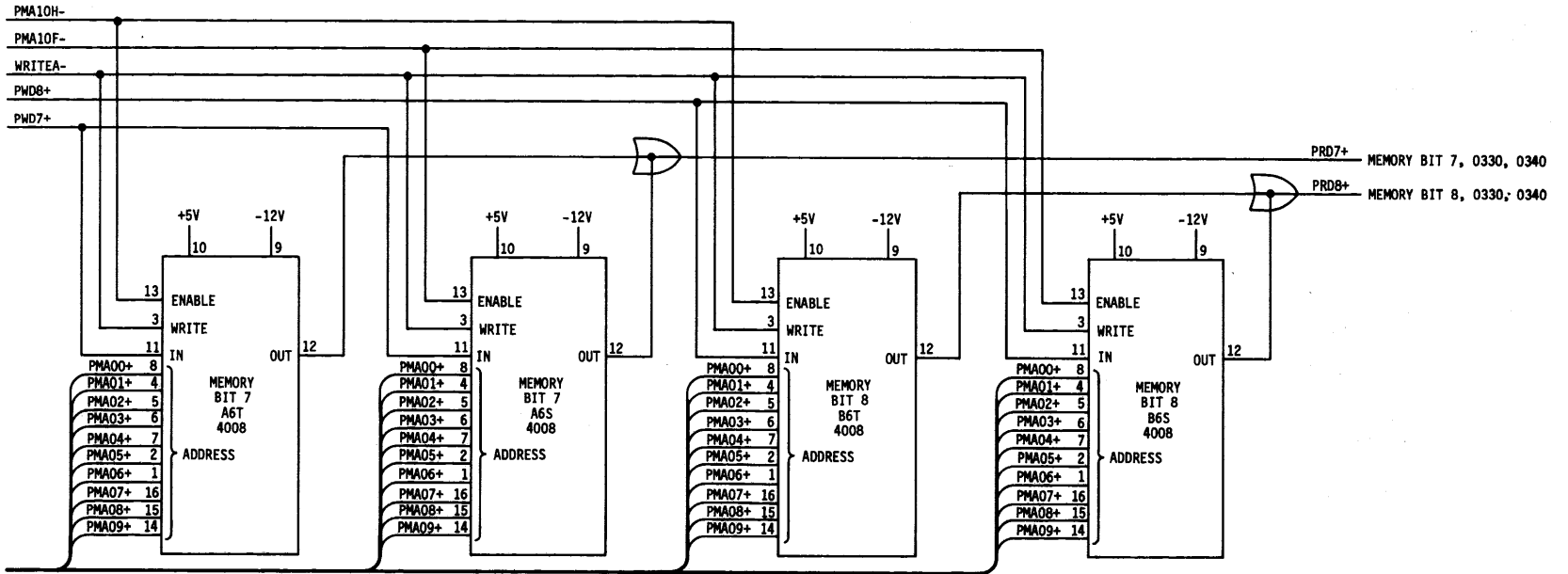


0290 HALF DISPLAY
 0290 FULL DISPLAY
 0290 WRITE IN MEMORY
 0300 MEMORY WRITE BIT 6



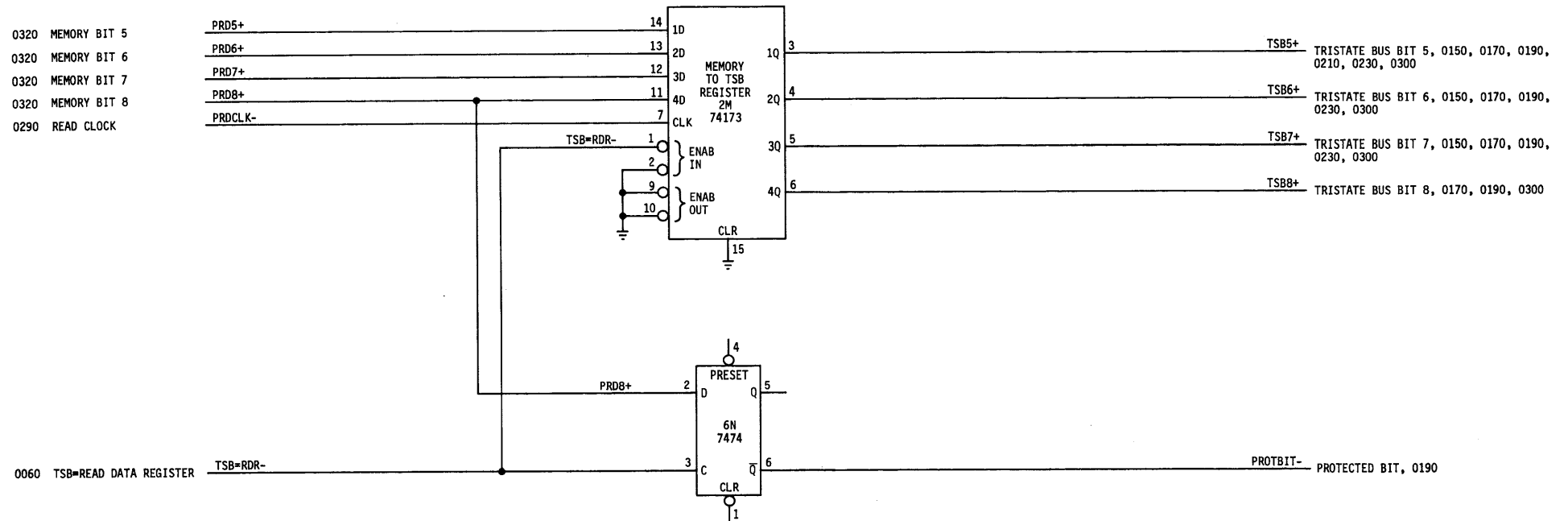
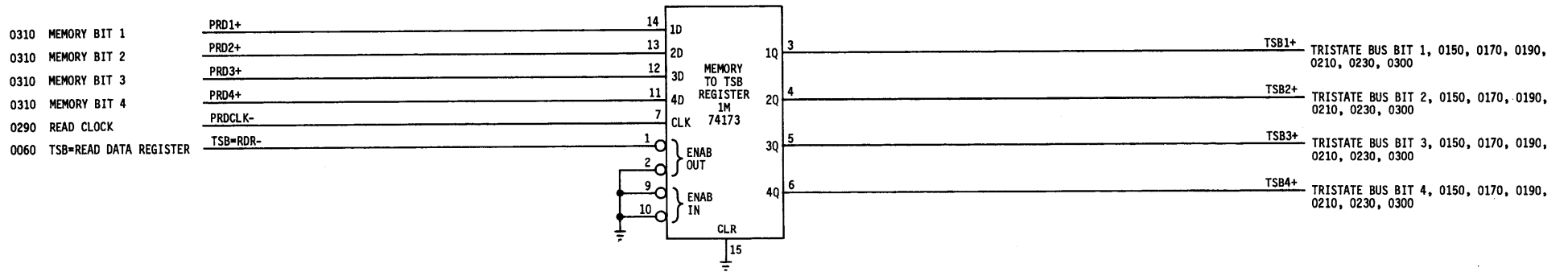
0280 MEM ADDR BITS 0 - 9

0290 HALF DISPLAY
 0290 FULL DISPLAY
 0290 WRITE IN MEMORY
 0300 MEMORY WRITE BIT 8
 0300 MEMORY WRITE BIT 7



0280 MEM ADDR BITS 0 - 9

TSB = MEMORY CHARACTER



0020 LINE COUNTER BIT 0
 0020 LINE COUNTER BIT 1
 0020 LINE COUNTER BIT 2

0310 MEMORY BIT 1
 0270 REFRESH ROW
 0310 MEMORY BIT 2
 0310 MEMORY BIT 3
 0310 MEMORY BIT 4

0270 ROW CLOCK

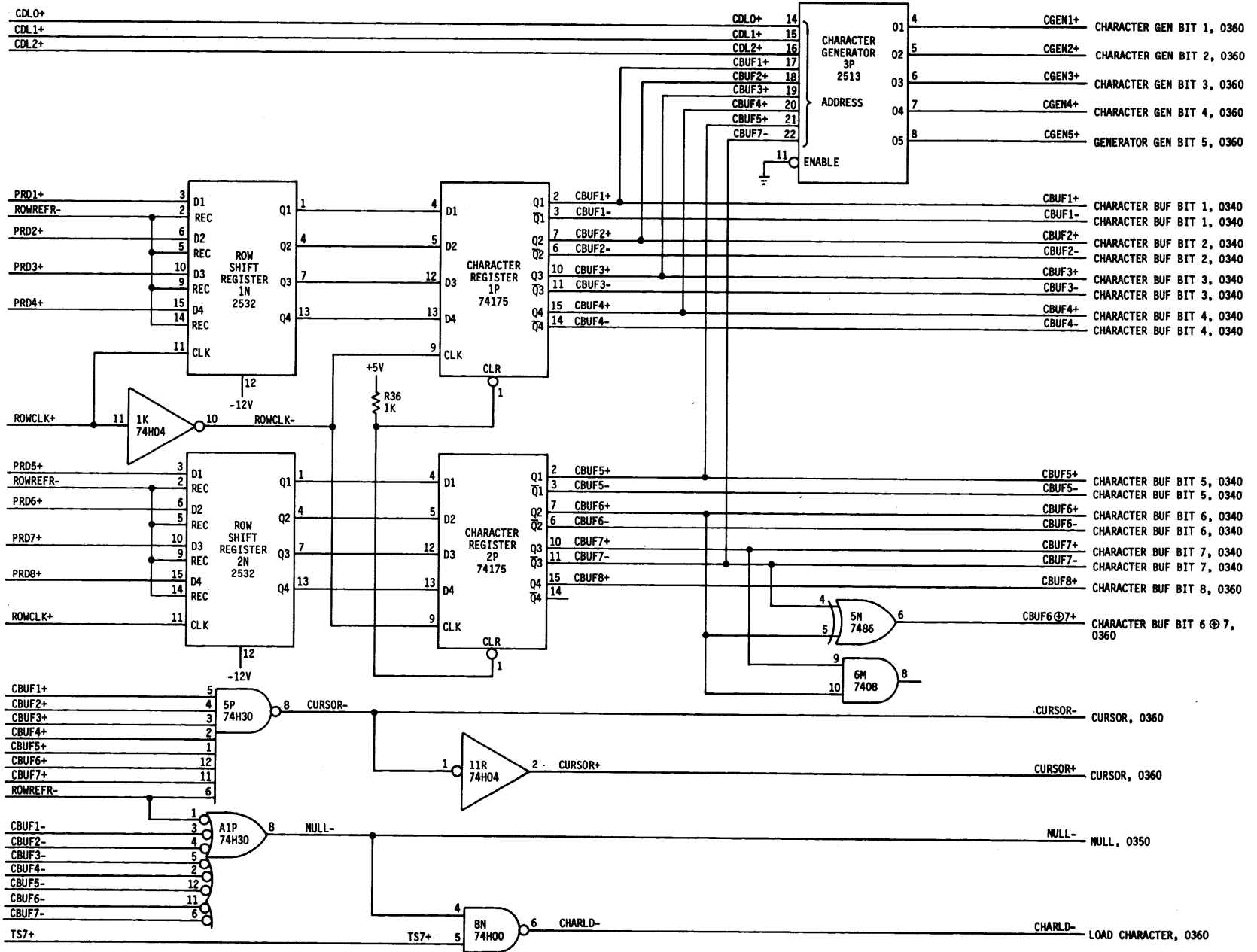
0320 MEMORY BIT 5
 0270 REFRESH ROW
 0320 MEMORY BIT 6
 0320 MEMORY BIT 7
 0320 MEMORY BIT 8

0270 ROW CLOCK

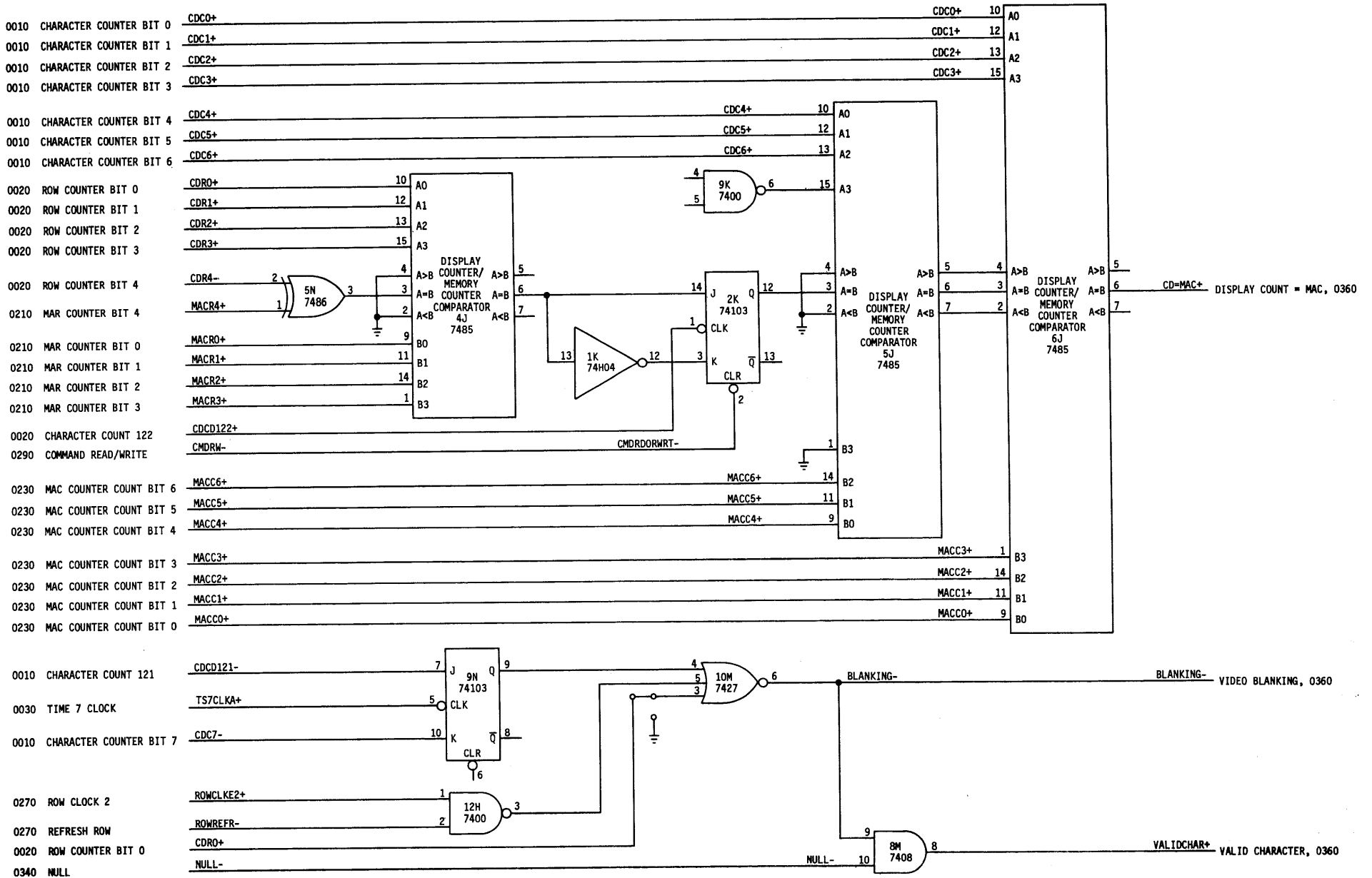
0340 CHARACTER BUF BIT 1
 0340 CHARACTER BUF BIT 2
 0340 CHARACTER BUF BIT 3
 0340 CHARACTER BUF BIT 4
 0340 CHARACTER BUF BIT 5
 0340 CHARACTER BUF BIT 6
 0340 CHARACTER BUF BIT 7
 0270 REFRESH ROW

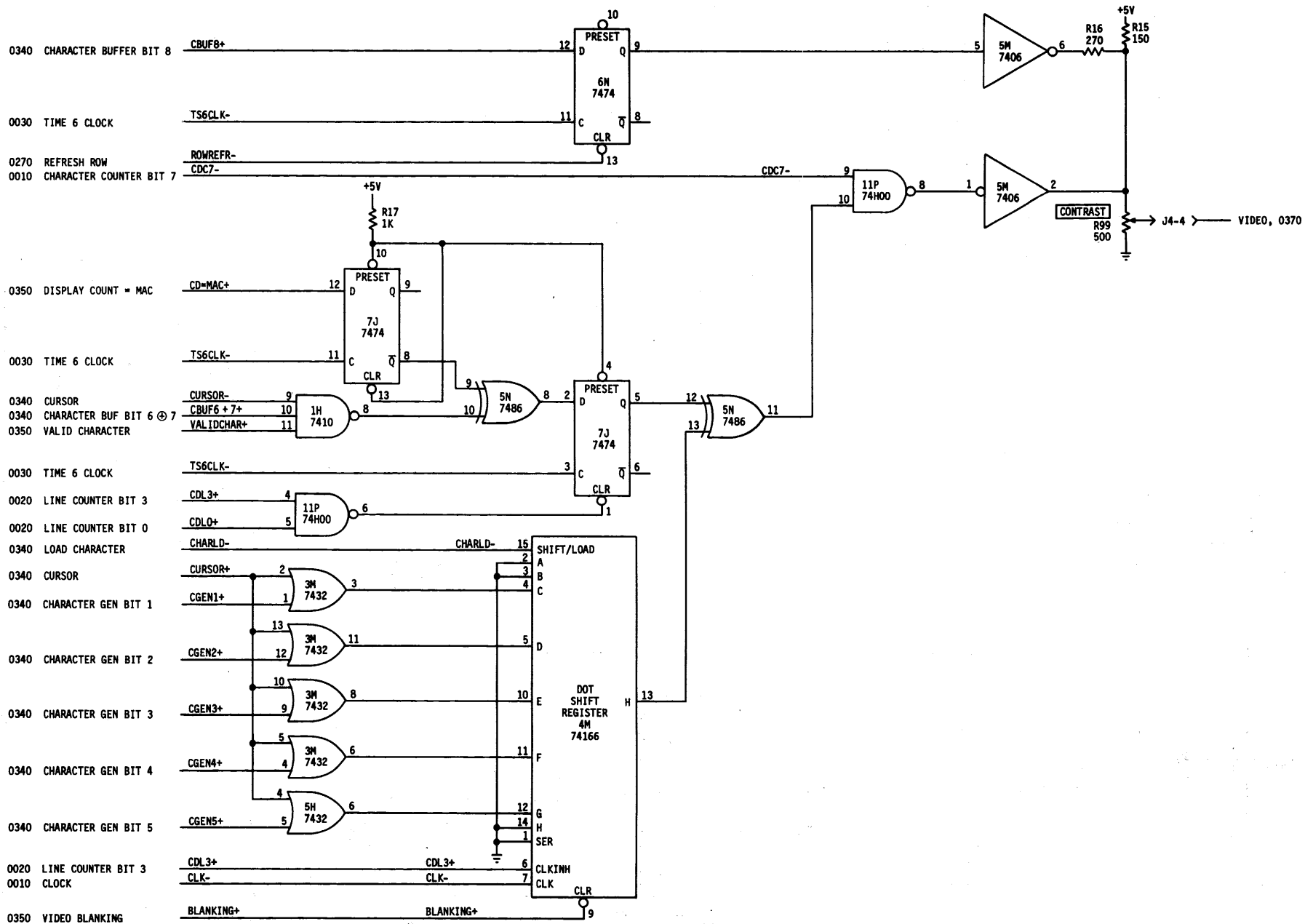
0340 CHARACTER BUF BIT 1
 0340 CHARACTER BUF BIT 2
 0340 CHARACTER BUF BIT 3
 0340 CHARACTER BUF BIT 4
 0340 CHARACTER BUF BIT 5
 0340 CHARACTER BUF BIT 6
 0340 CHARACTER BUF BIT 7

0030 TIME SPACE 7



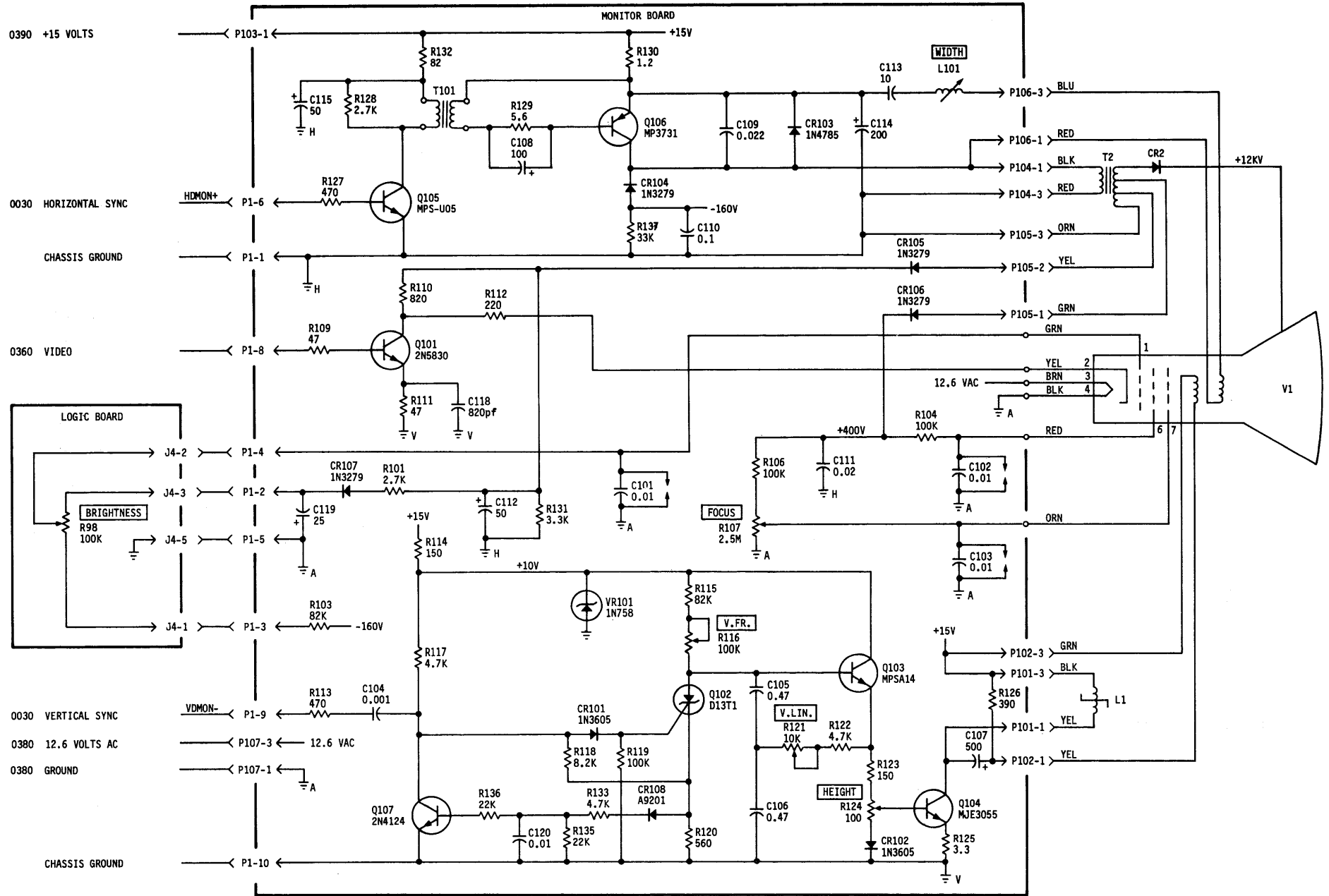
CHARACTER DECODING

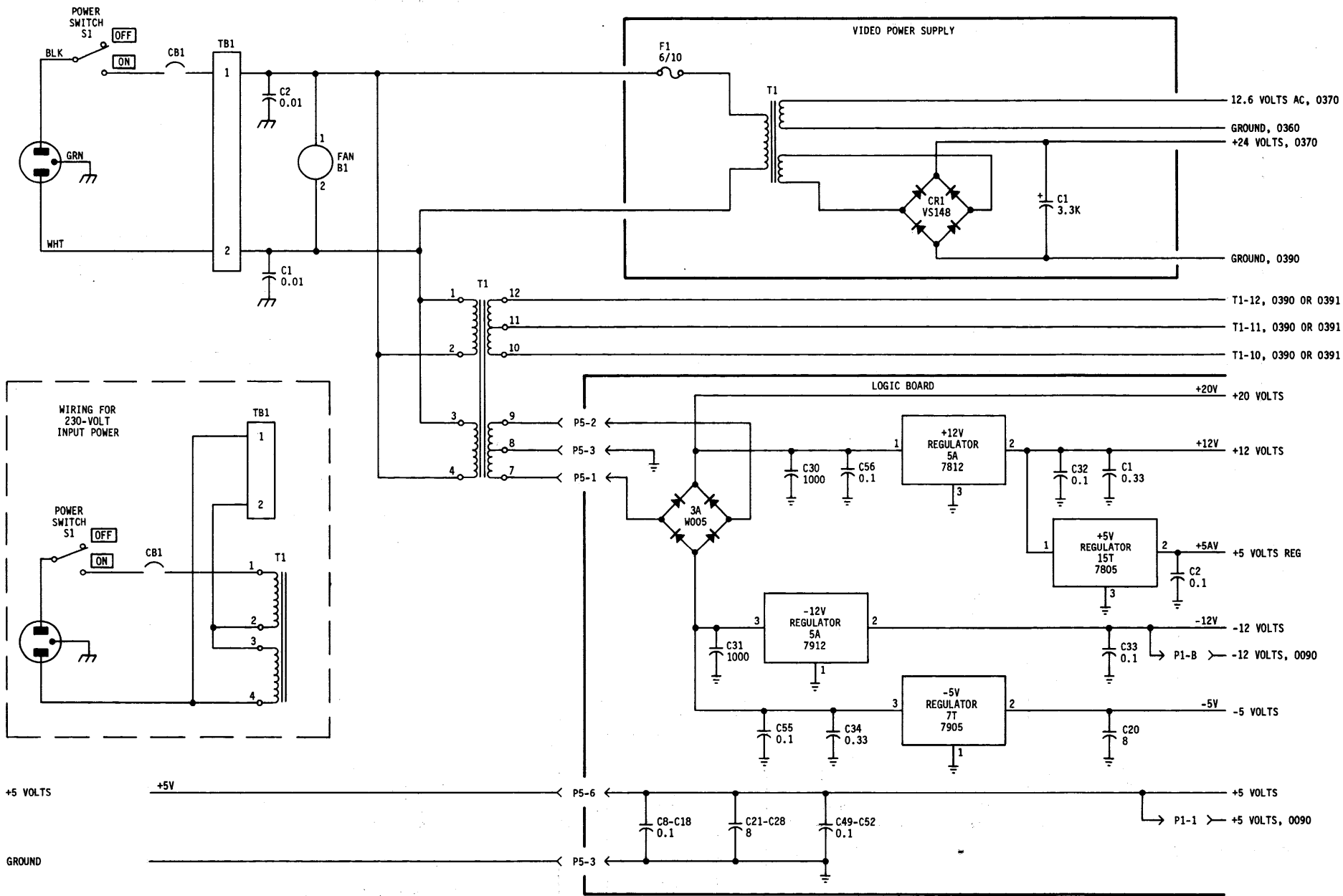




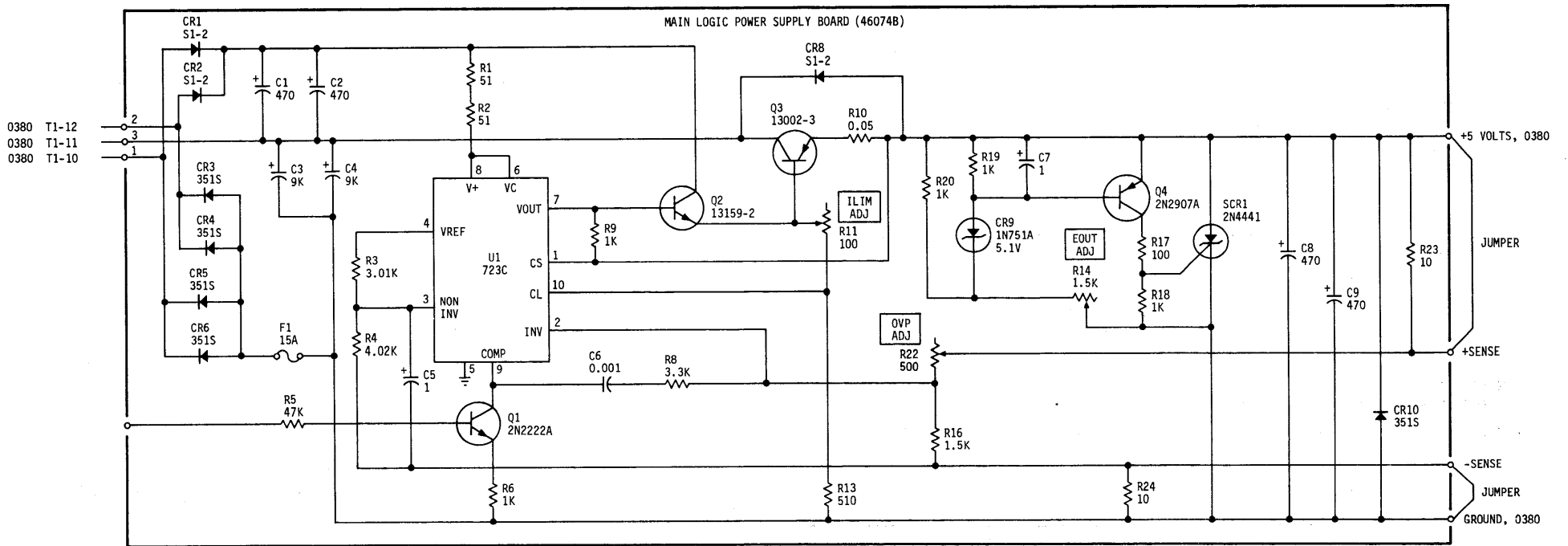
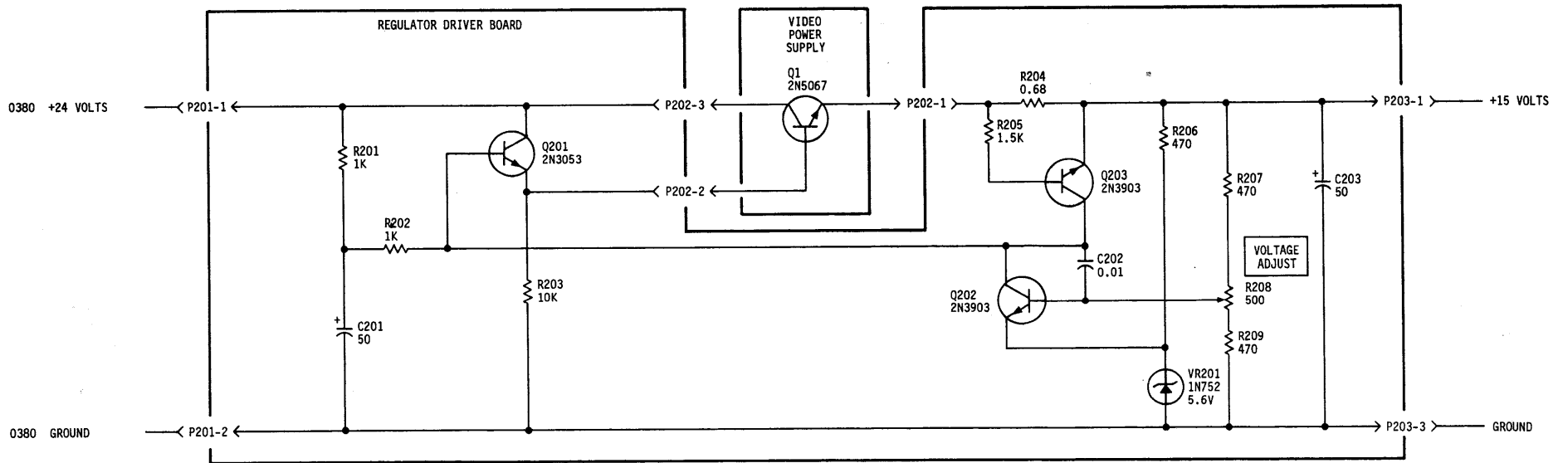
LD 7210
VIDEO DISPLAY TERMINAL

VIDEO SIGNAL GENERATION

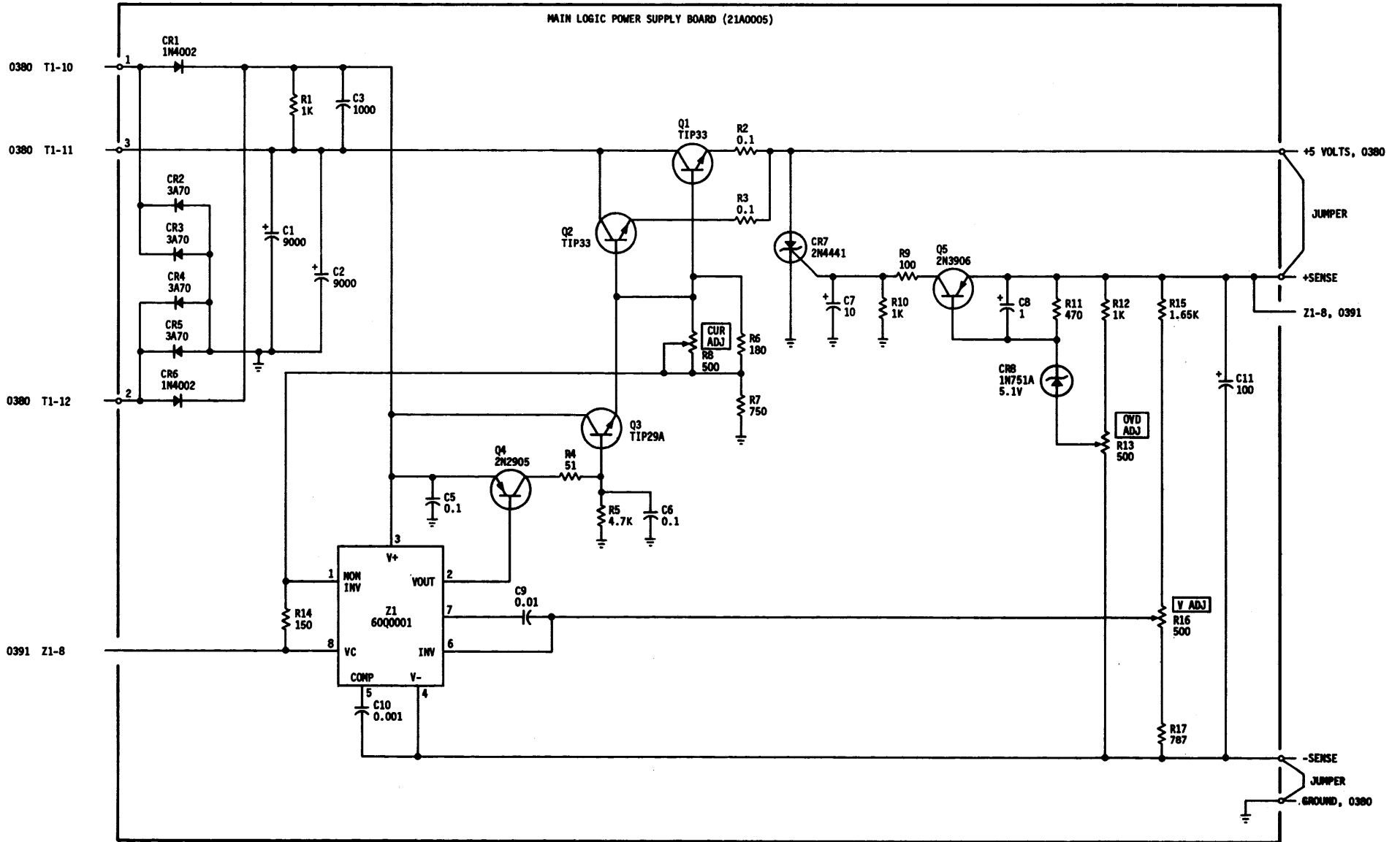


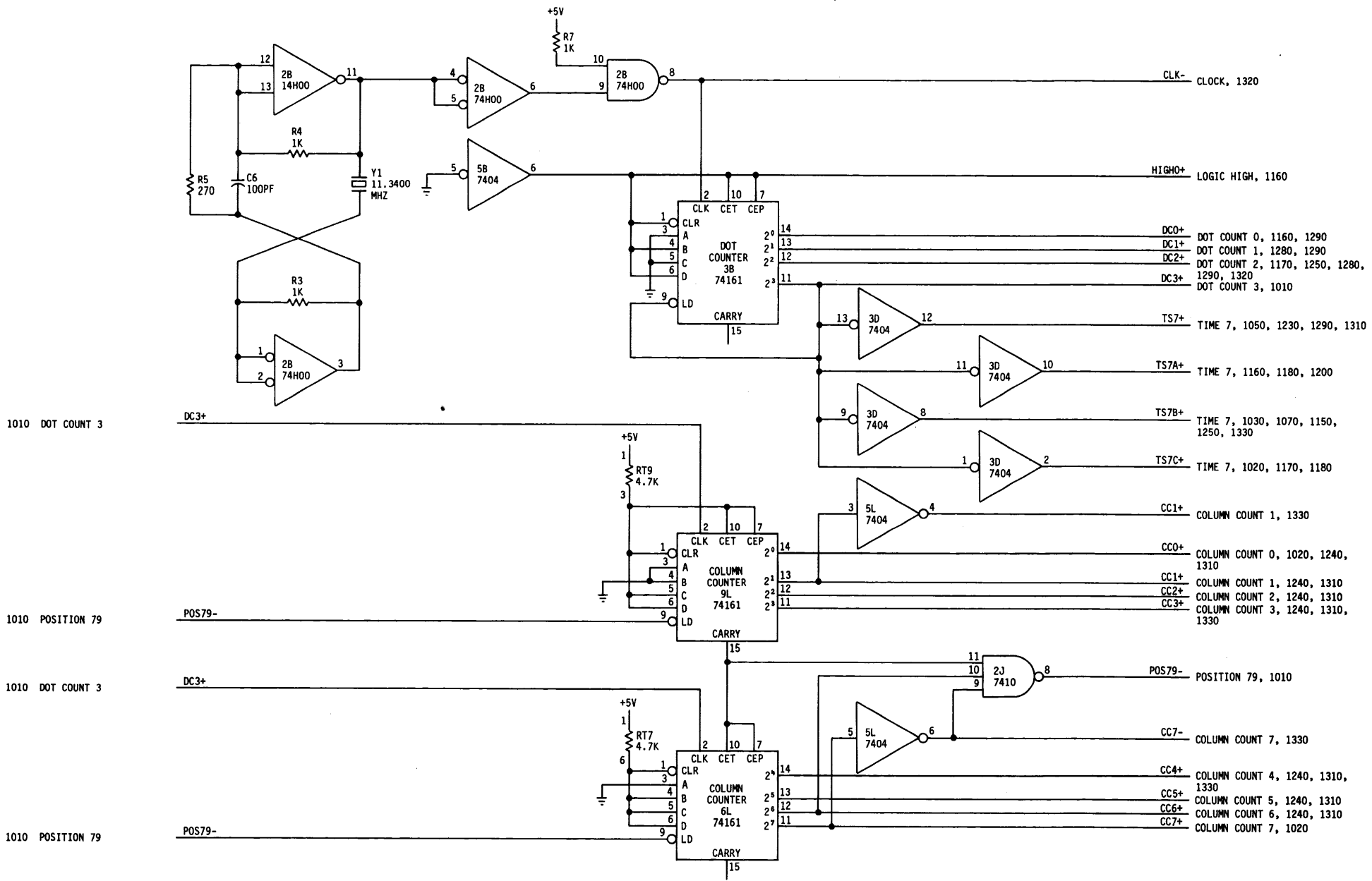


+15 AND +5 VOLT POWER SUPPLIES

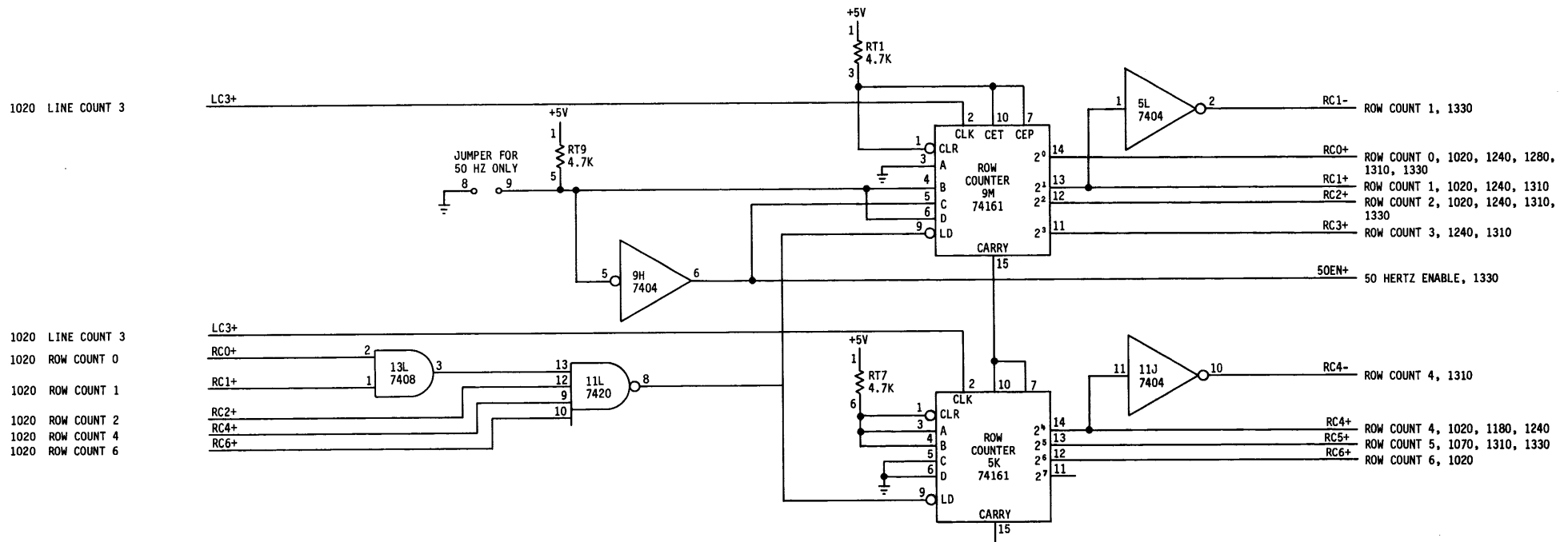
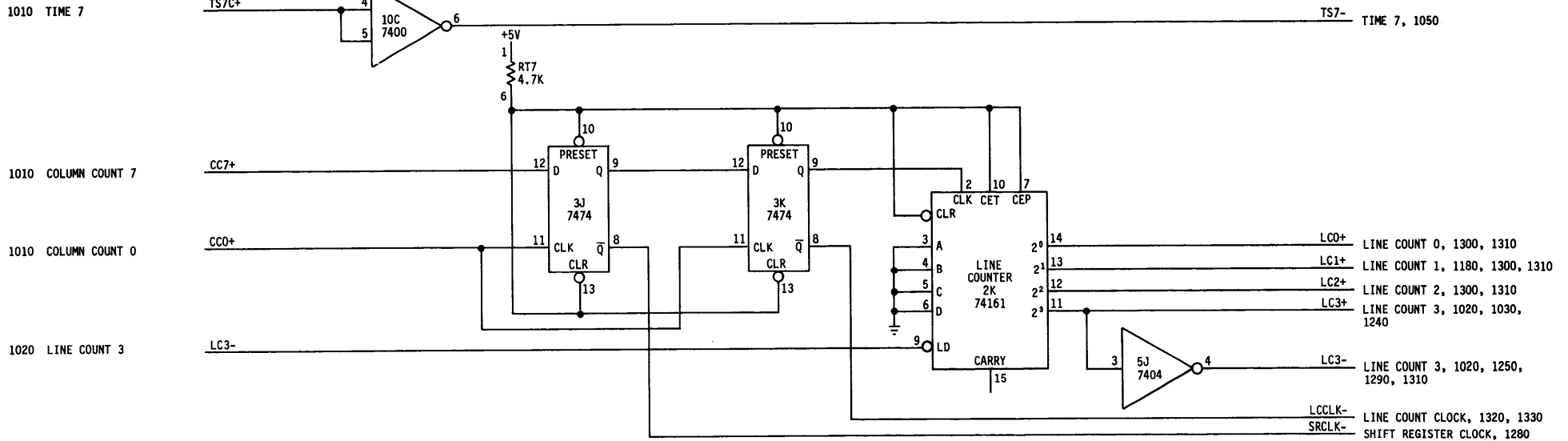


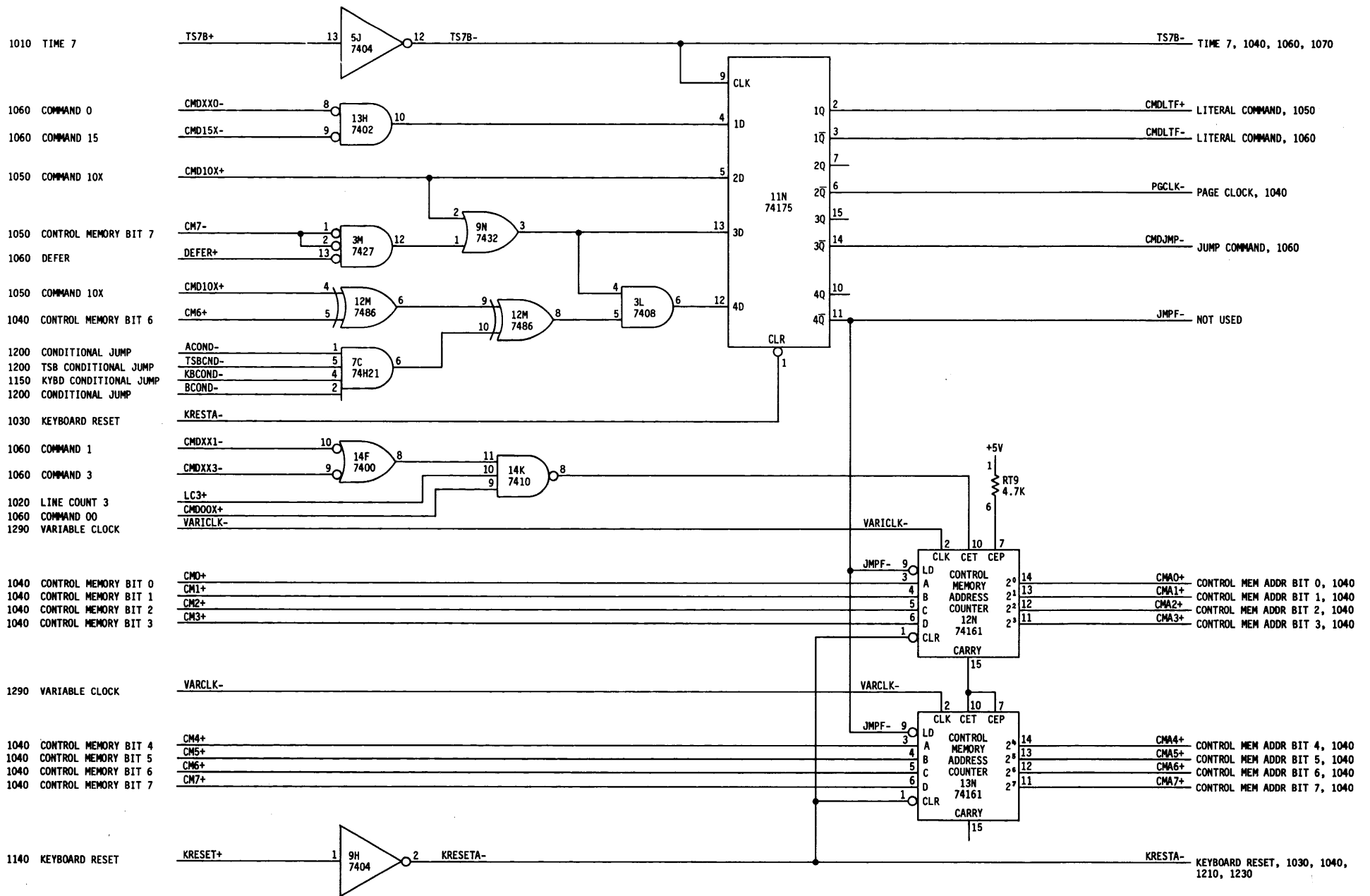
MAIN LOGIC POWER SUPPLY BOARD (21A0005)



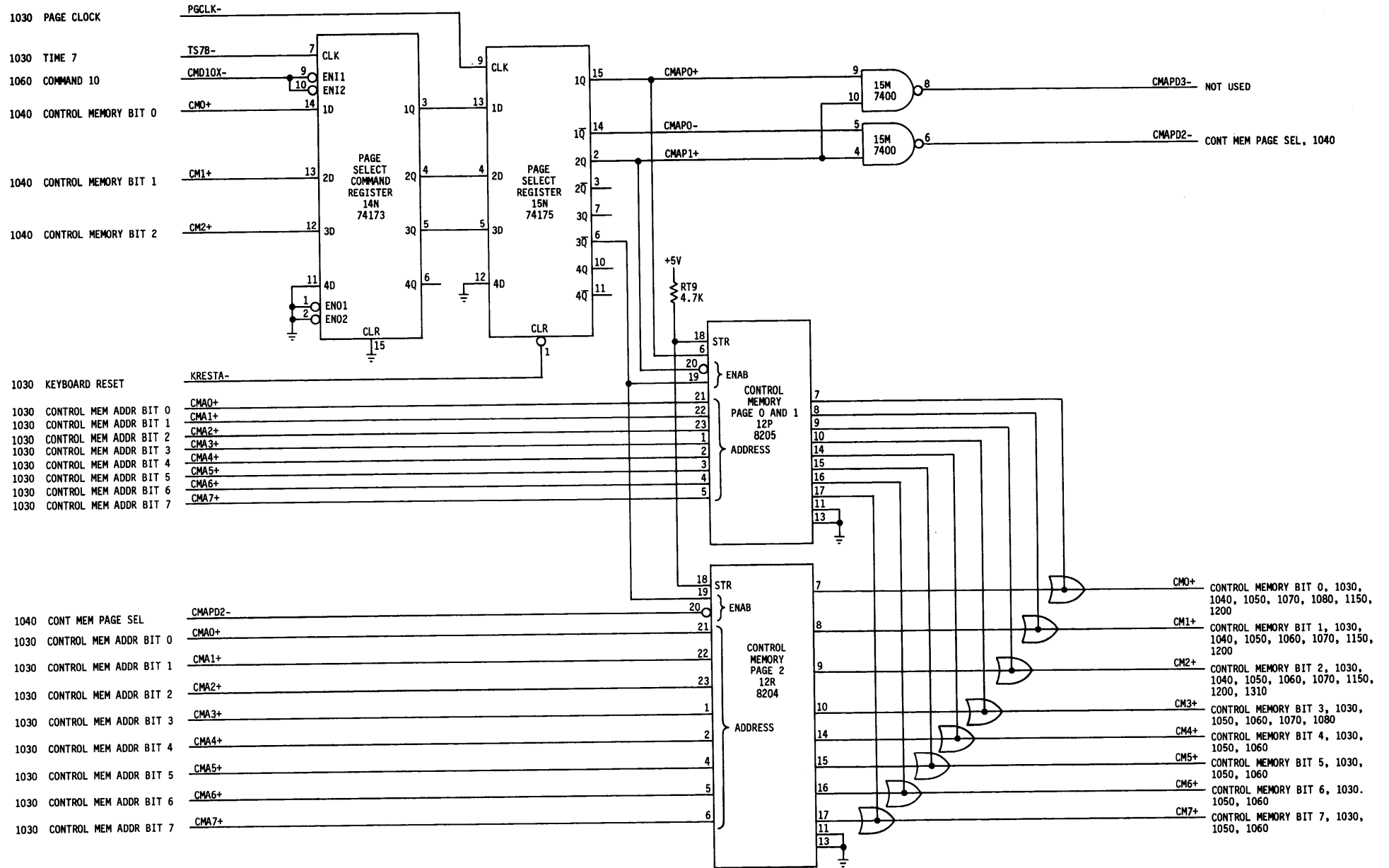


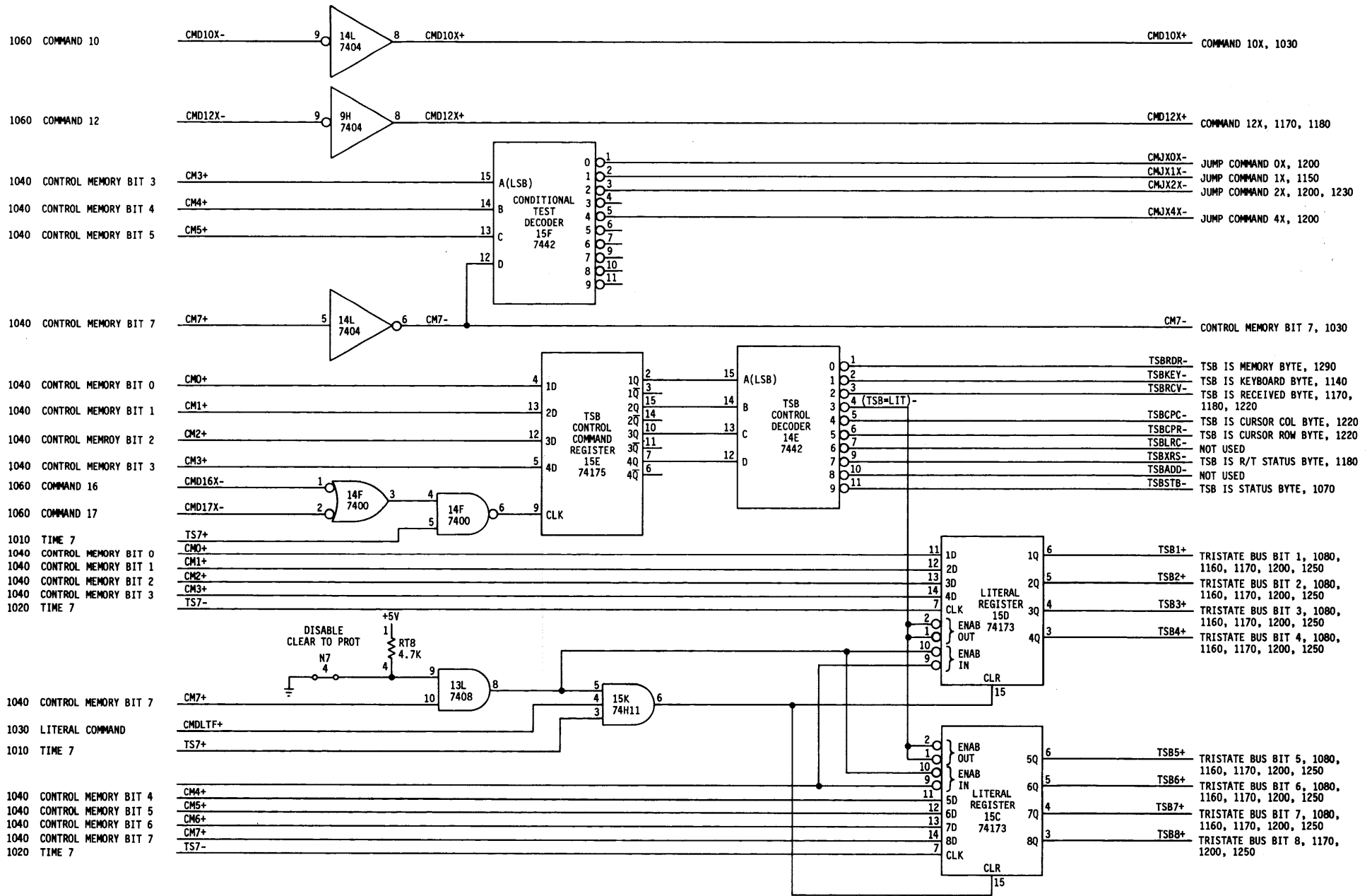
LINE AND ROW COUNTERS



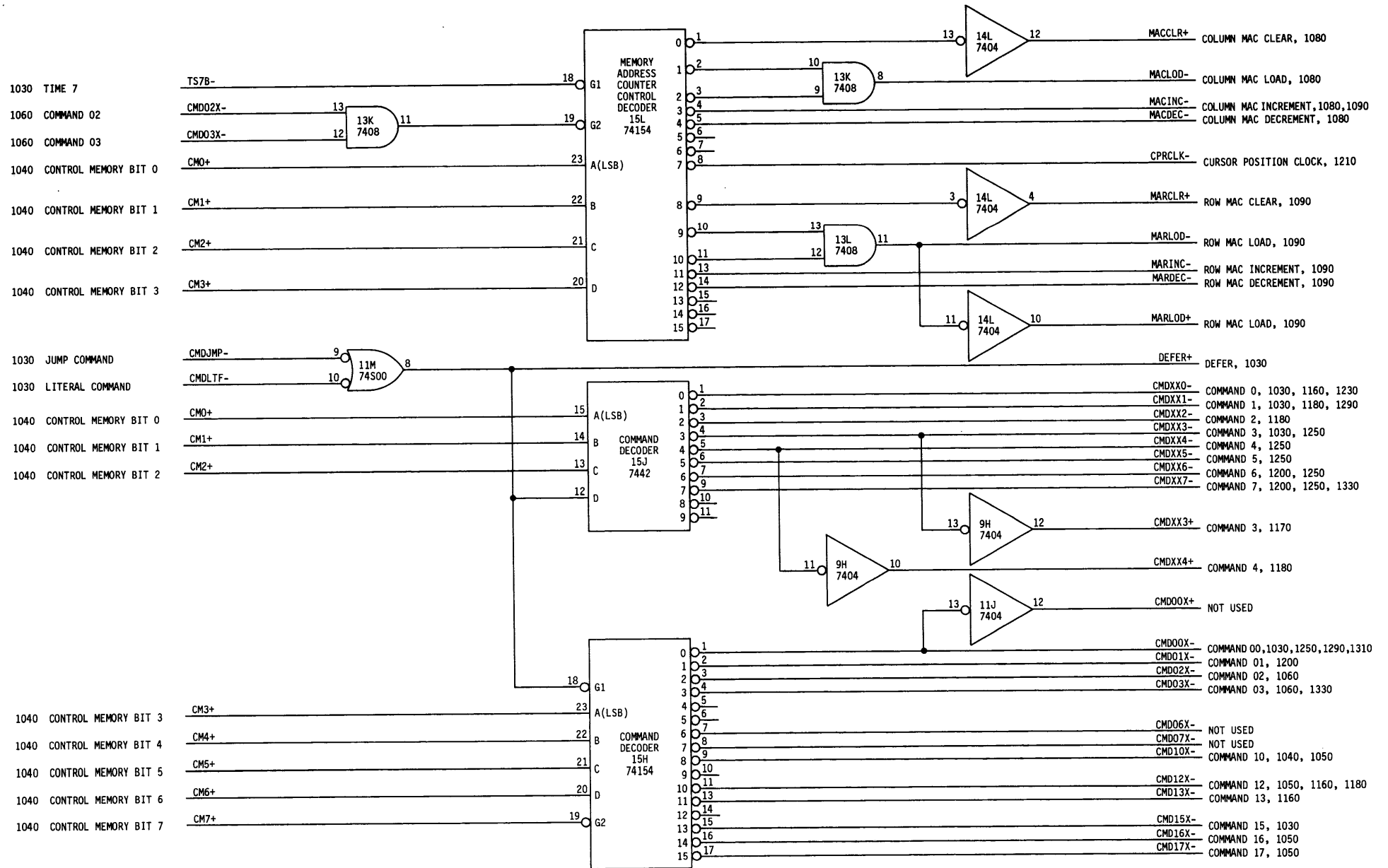


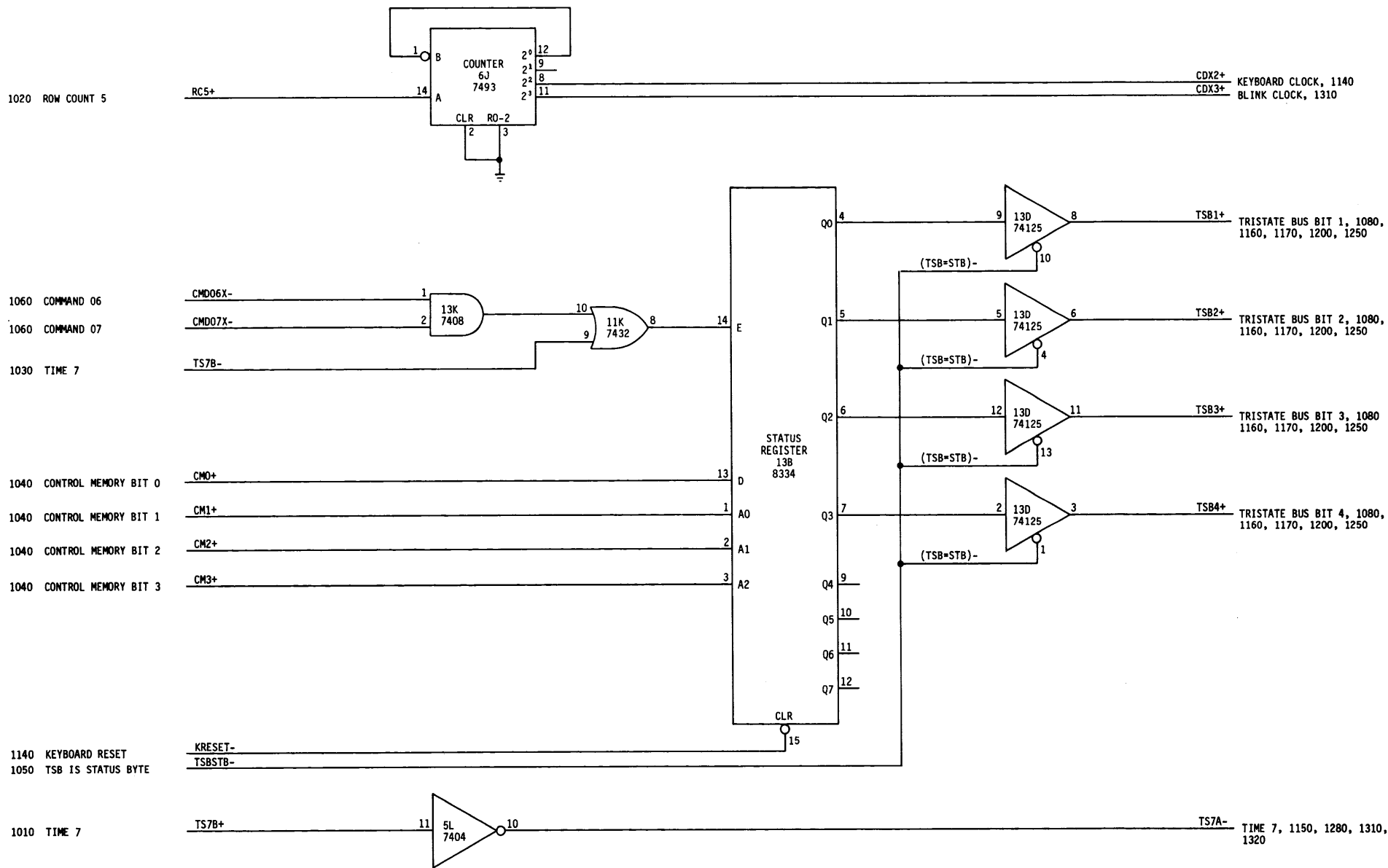
CONTROL MEMORY



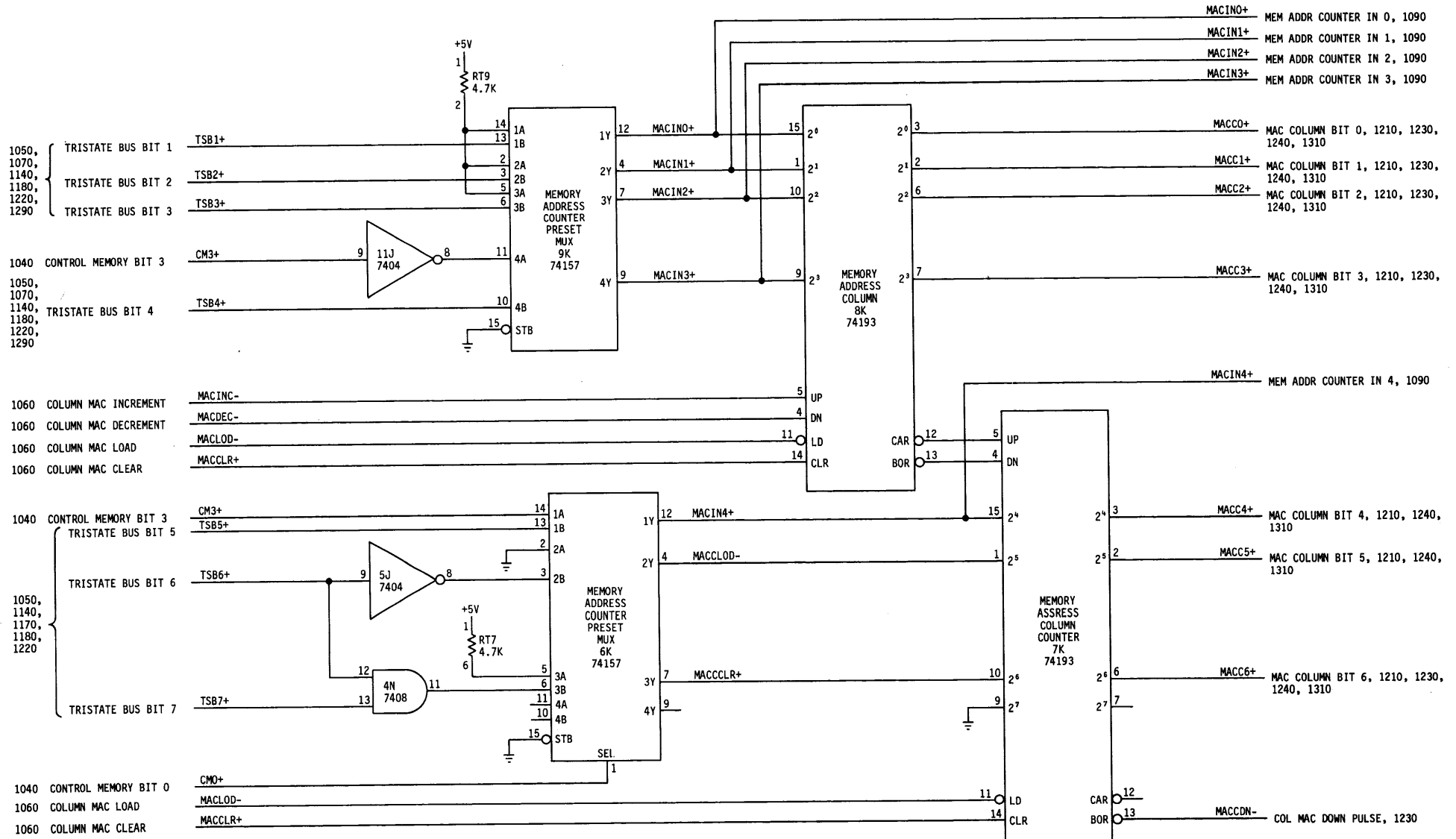


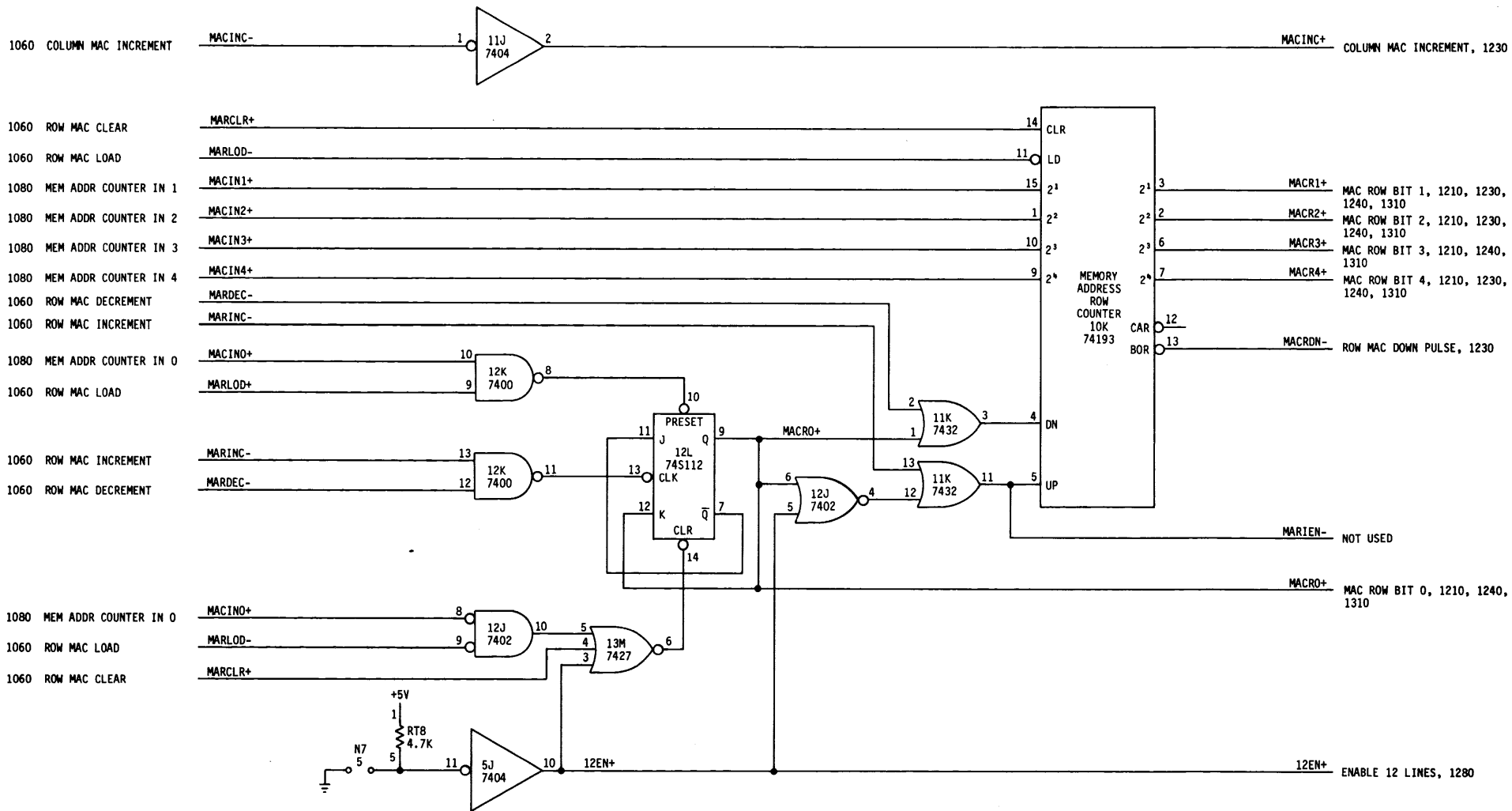
CONTROL MEMORY DECODING (SHEET 2 OF 2)





MEMORY ADDRESS COLUMN COUNTER



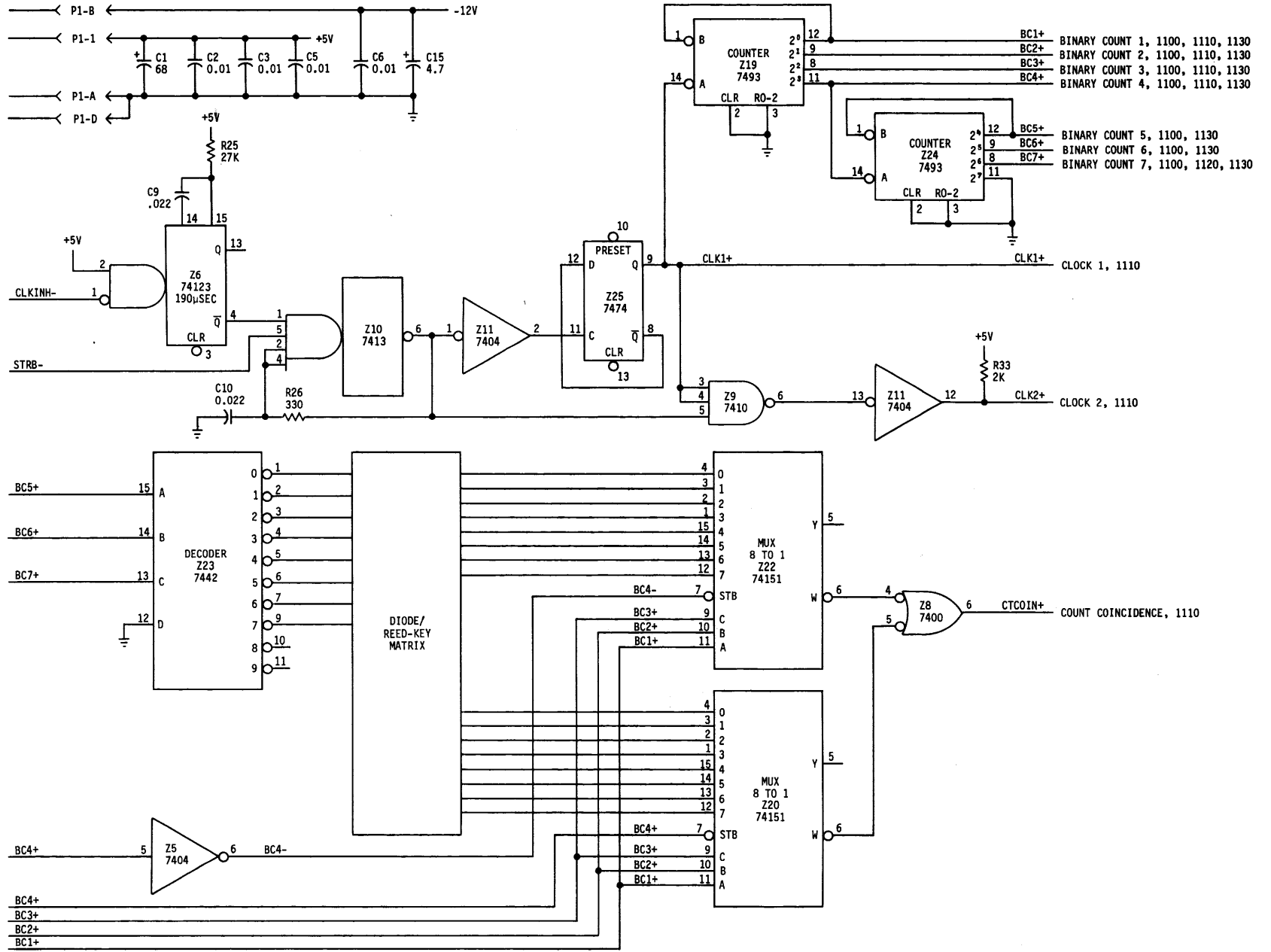


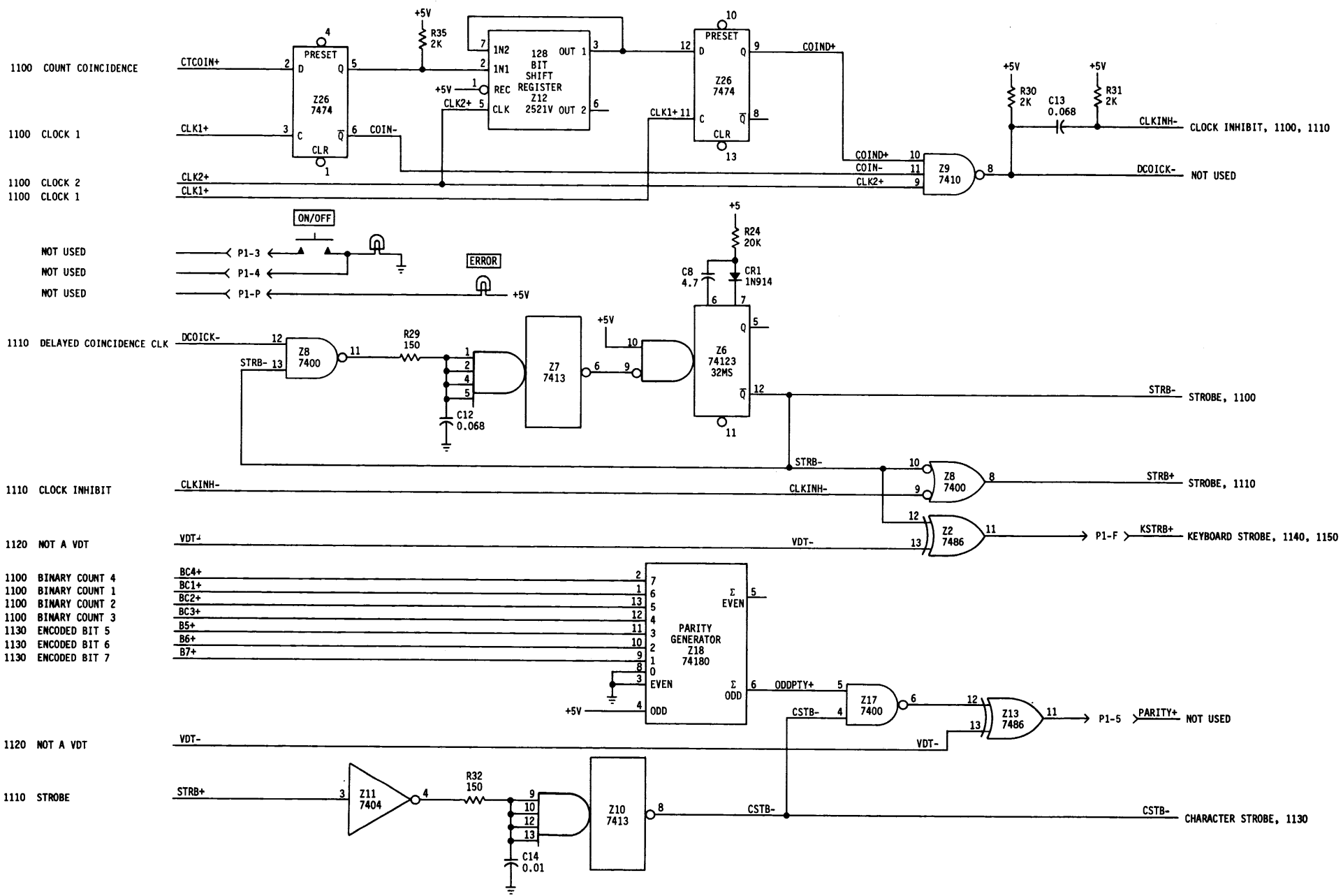
1350 -12 VOLTS
1350 +5 VOLTS
1350 GROUND
1350 GROUND

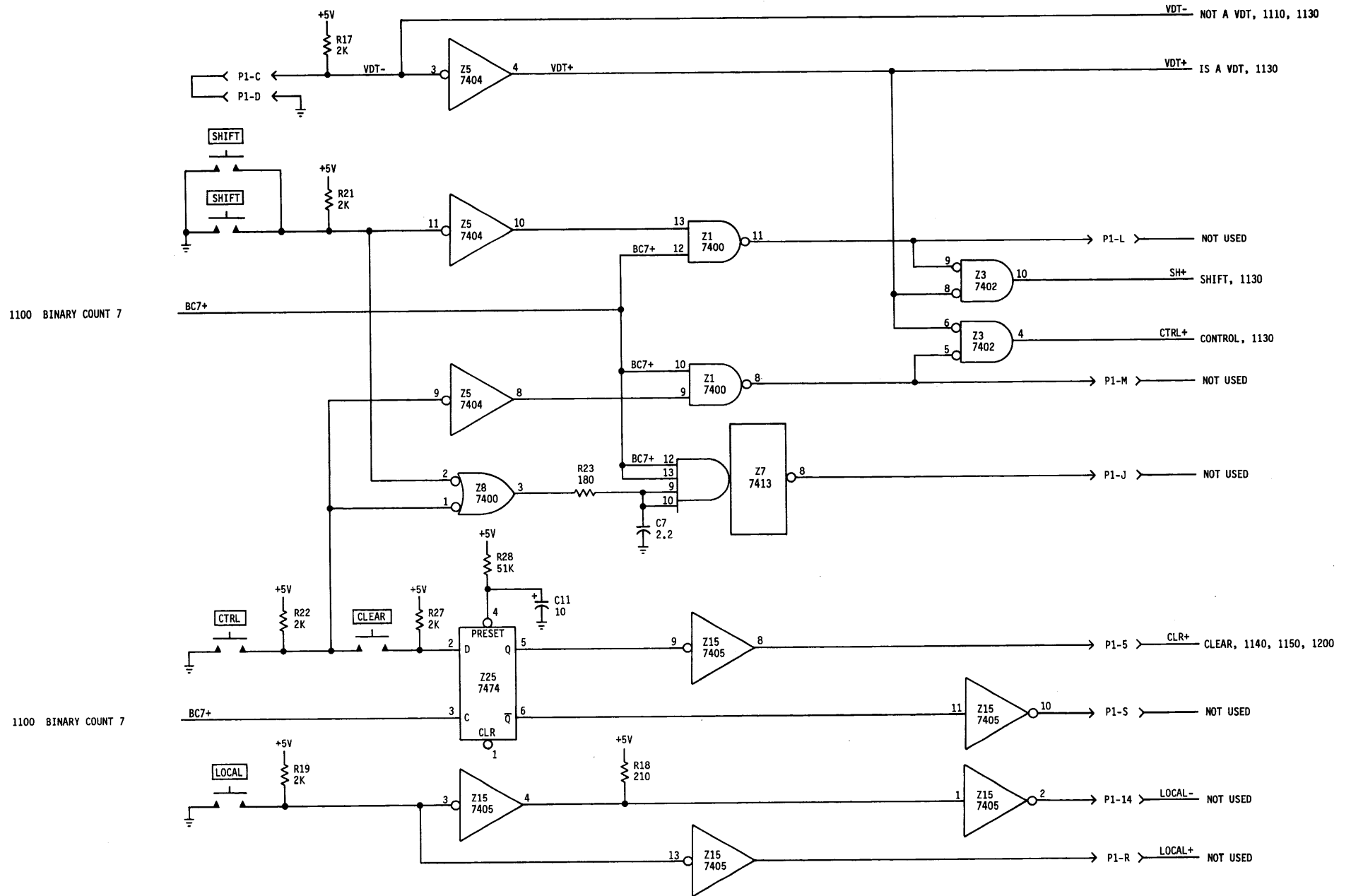
1110 CLOCK INHIBIT
1110 STROBE

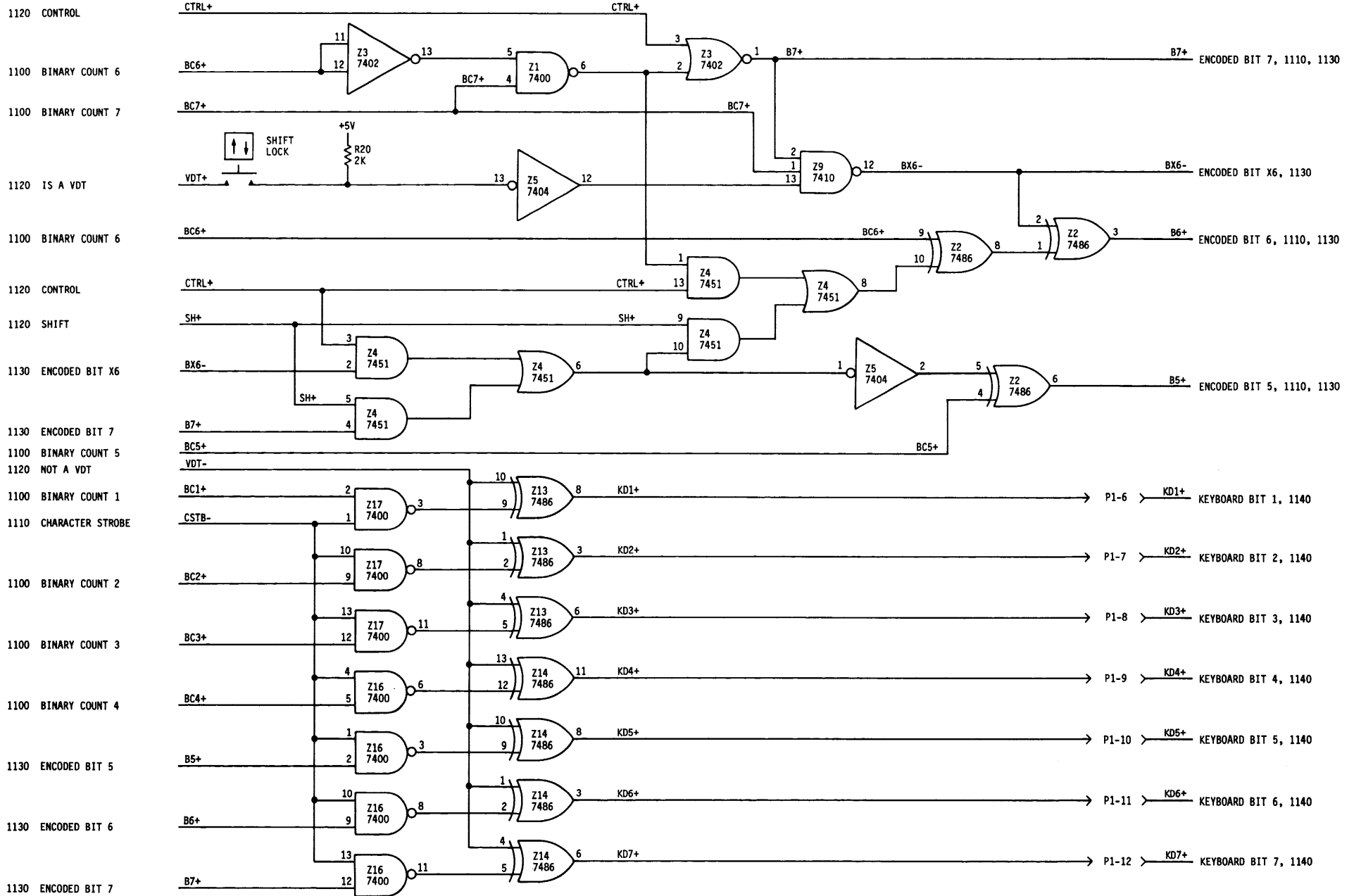
1100 BINARY COUNT 5
1100 BINARY COUNT 6
1100 BINARY COUNT 7

1100 BINARY COUNT 4
1100 BINARY COUNT 3
1100 BINARY COUNT 2
1100 BINARY COUNT 1

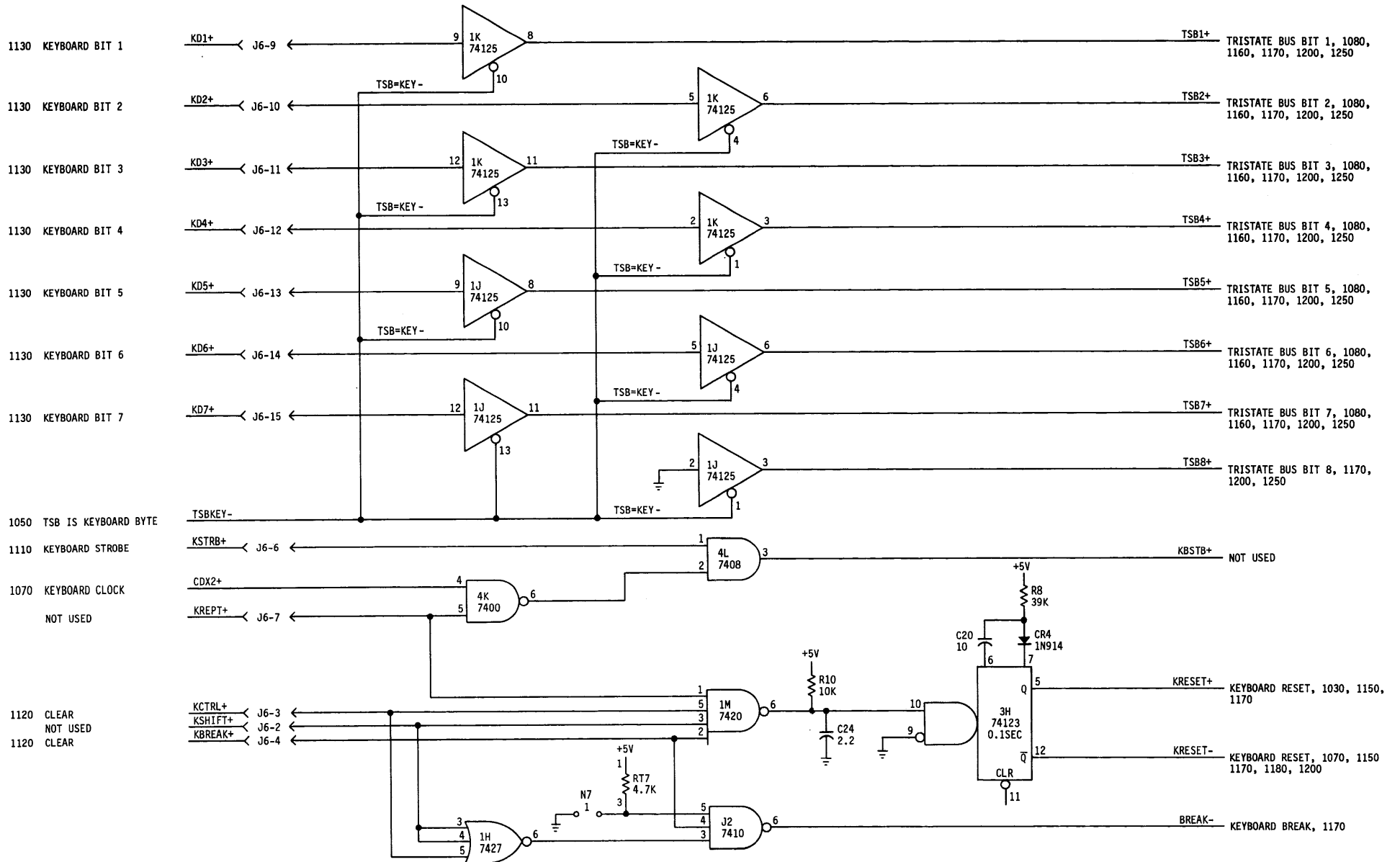


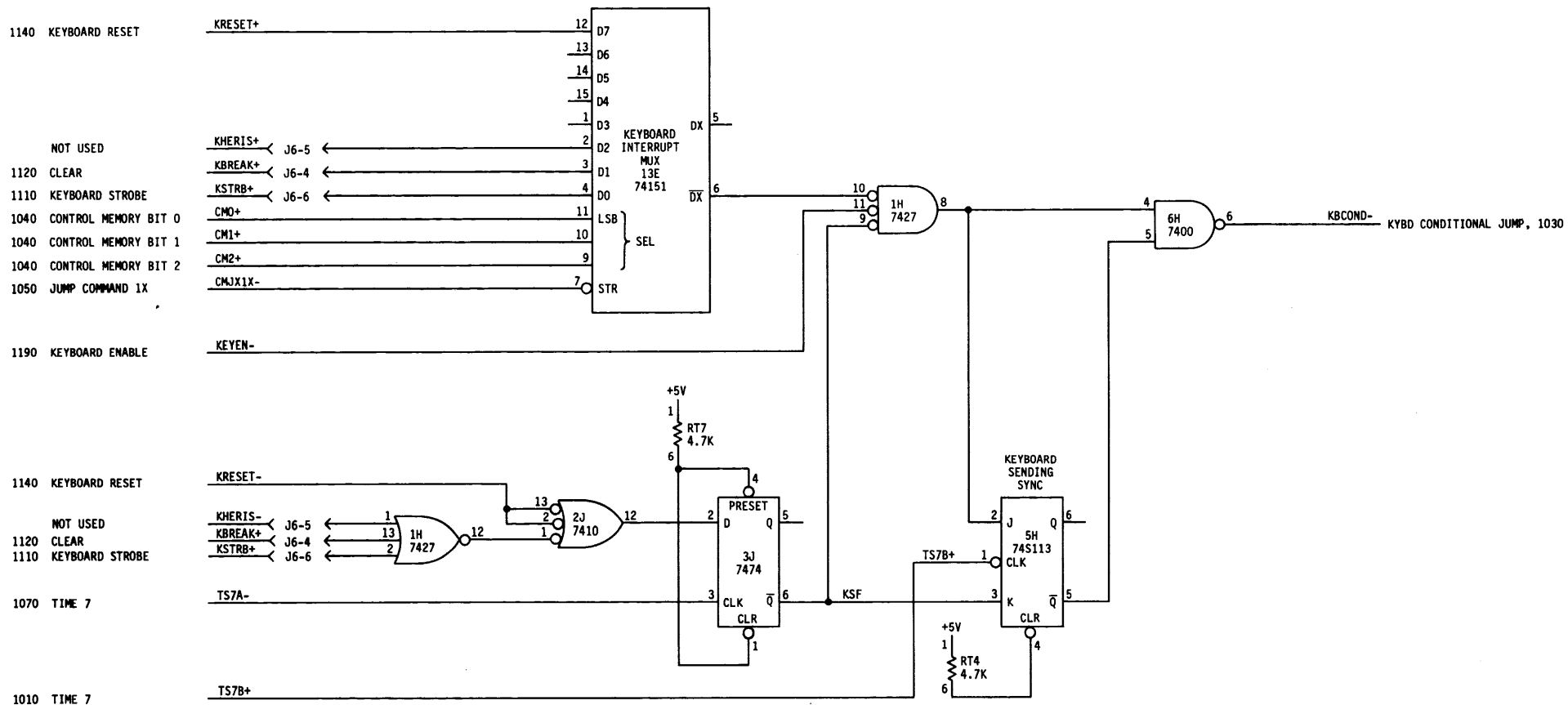




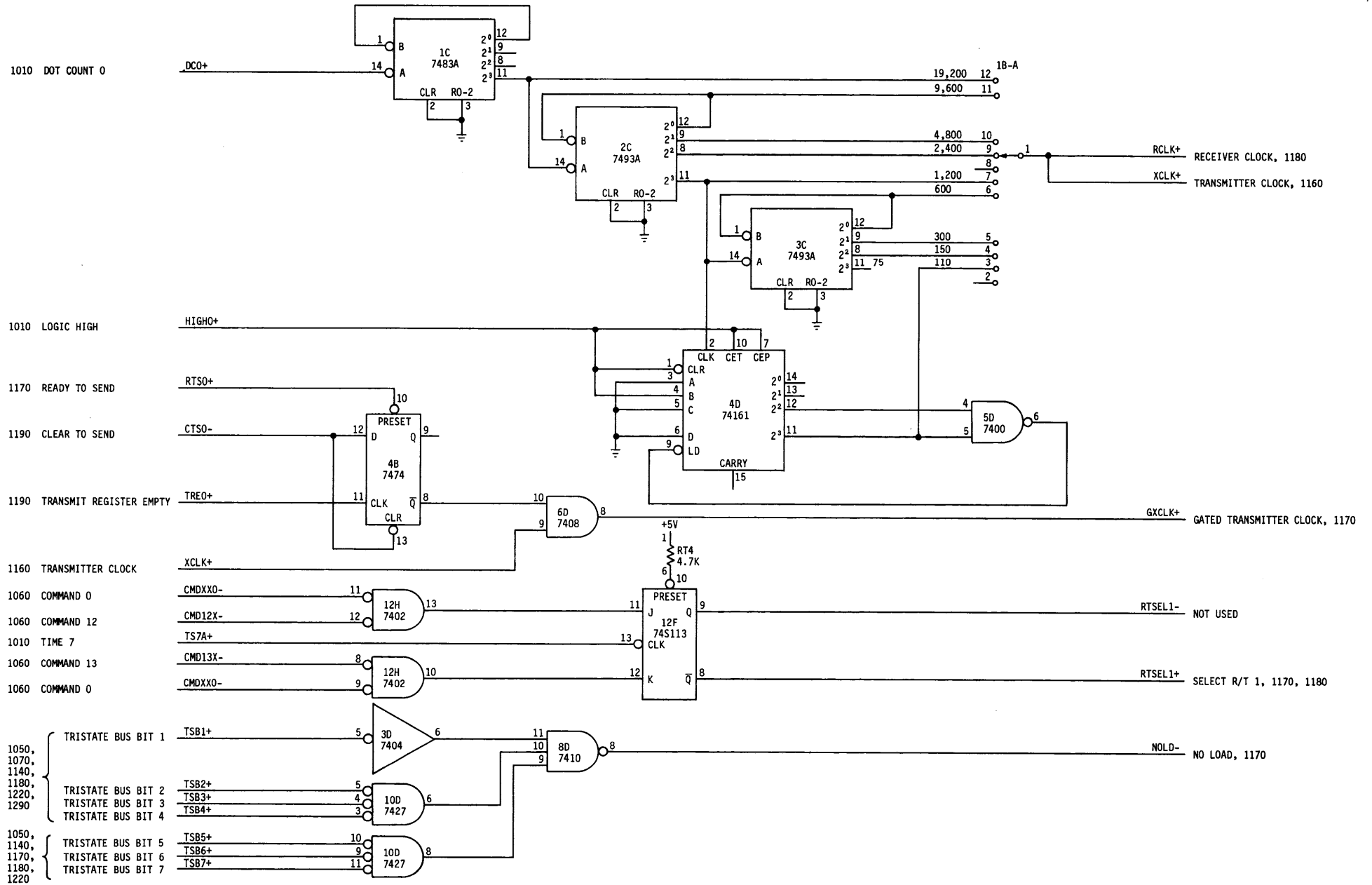


INPUTS FROM KEYBOARD





BAUD RATE GENERATOR



1140 KEYBOARD BREAK

1140 KEYBOARD RESET

1050, 1140, 1170, 1180, 1220, 1050, 1070, 1140, 1180, 1220, 1290

- TRISTATE BUS BIT 8
- TRISTATE BUS BIT 7
- TRISTATE BUS BIT 6
- TRISTATE BUS BIT 5
- TRISTATE BUS BIT 4
- TRISTATE BUS BIT 3
- TRISTATE BUS BIT 2
- TRISTATE BUS BIT 1

1160 NO LOAD
1010 DOT COUNT 2
1060 COMMAND 3
1050 COMMAND 12X
1160 GATED TRANSMITTER CLOCK

NOT USED
1170 READY TO SEND
NOT USED
1180 RECEIVER READY

NOT USED

1160 SELECT R/T 1
NOT USED

1050 TSB IS R/T STATUS BYTE

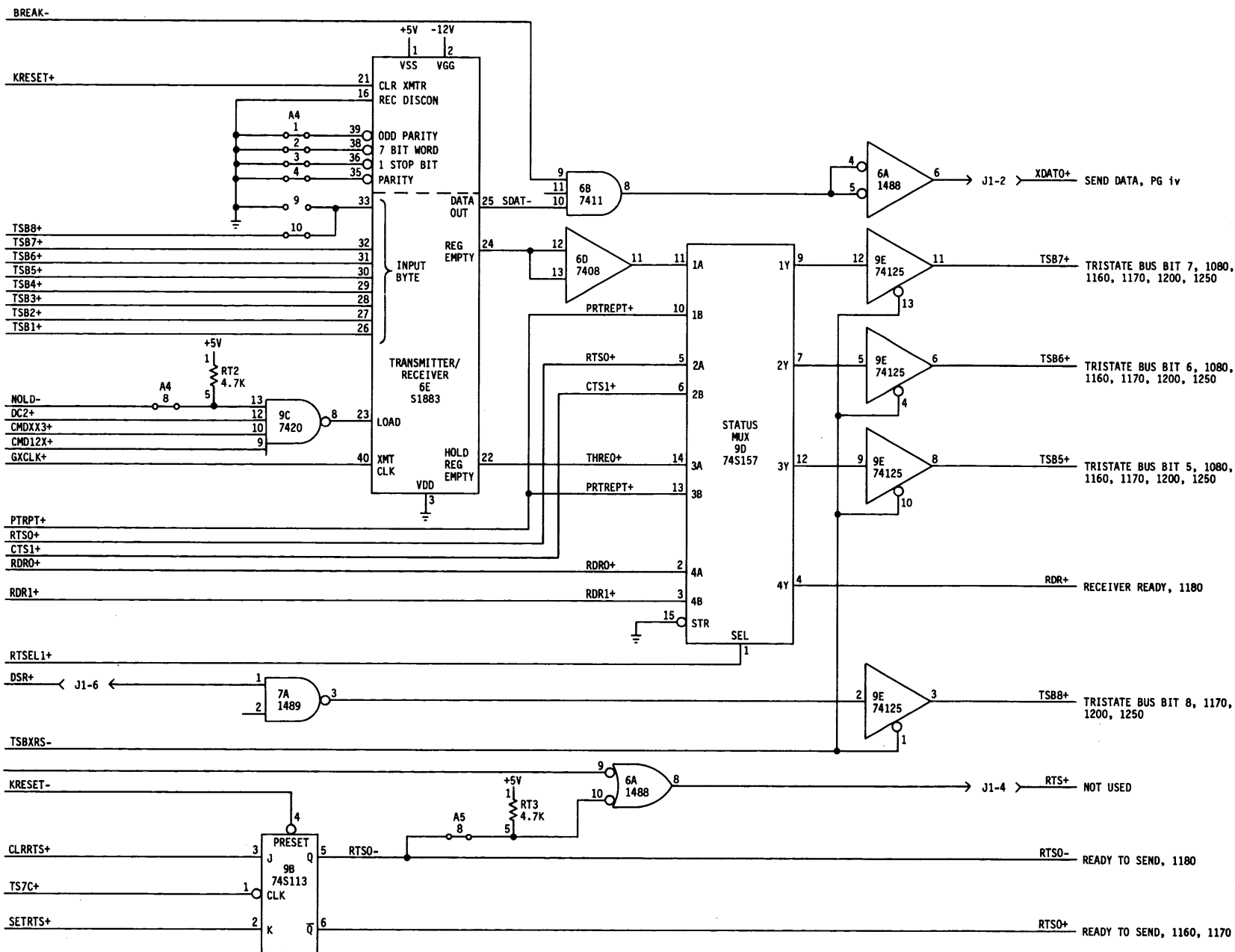
NOT USED

1140 KEYBOARD RESET

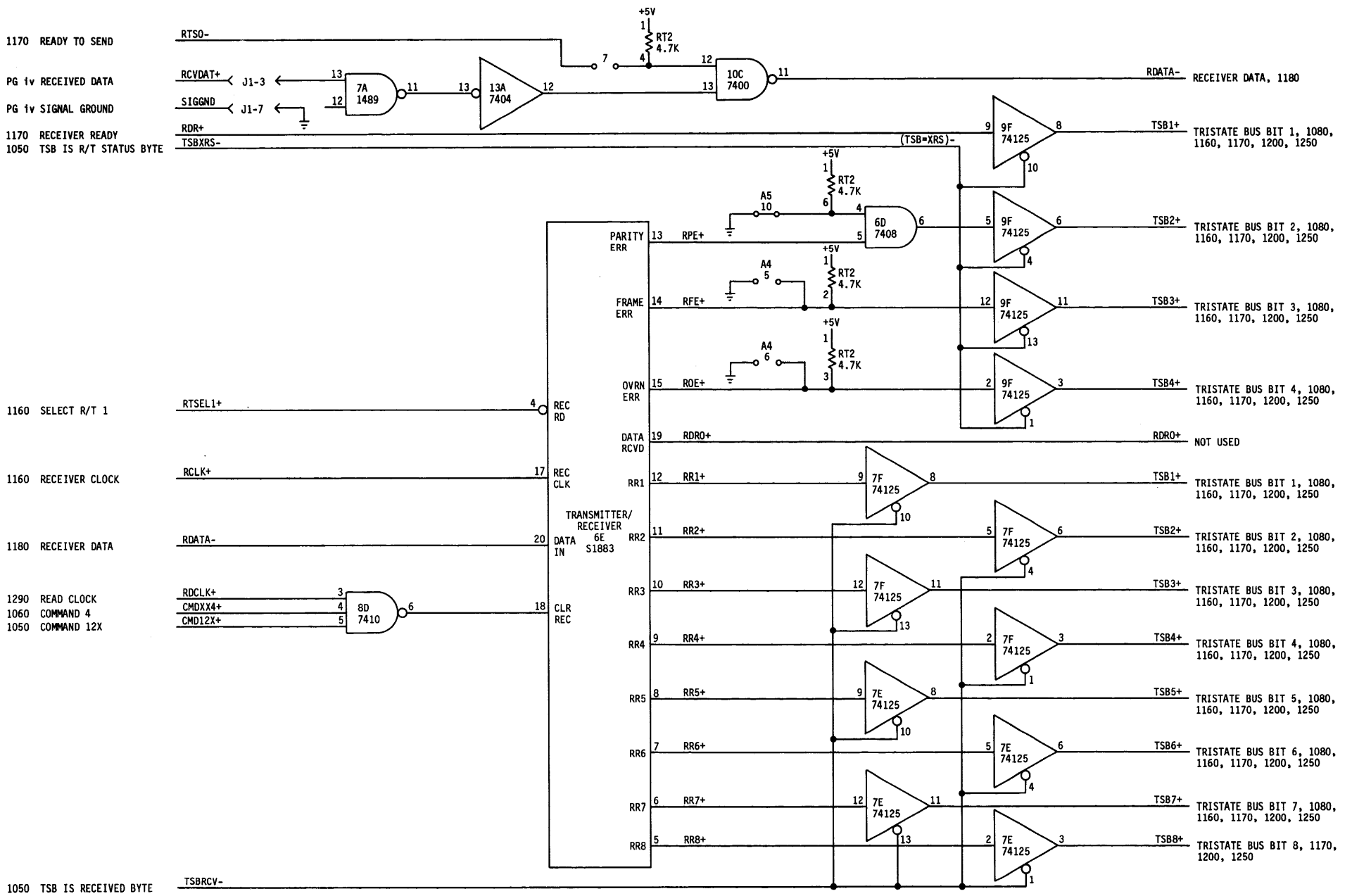
1190 CLEAR READY TO SEND

1010 TIME 7

1190 SET READY TO SEND



RECEIVER



1050 TSB IS RECEIVED BYTE

1140 KEYBOARD RESET
 1060 COMMAND 2
 1060 COMMAND 12
 1010 TIME 7
 1060 COMMAND 12
 1060 COMMAND 1

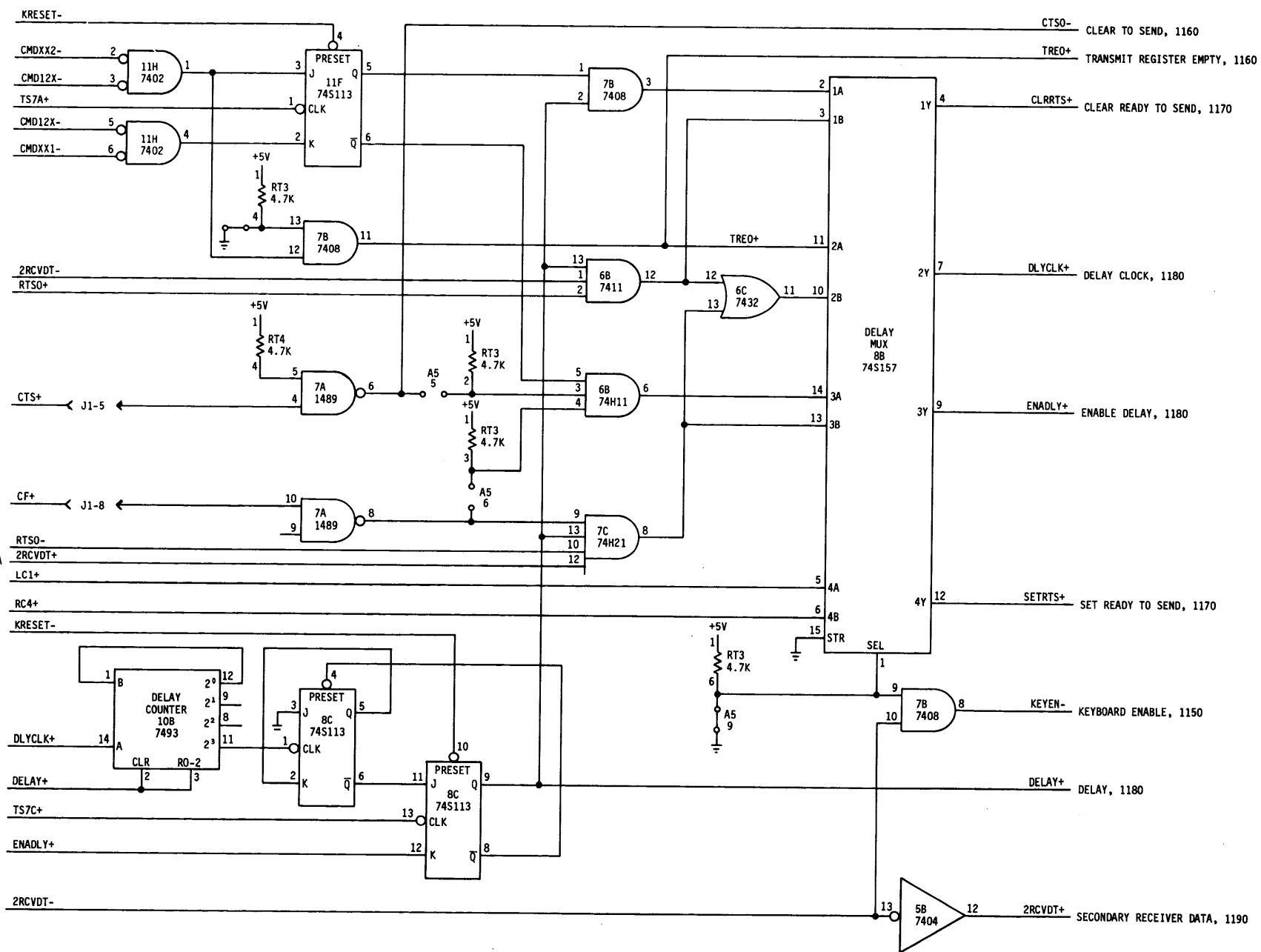
 NOT USED
 1170 READY TO SEND

 NOT USED

 NOT USED
 1170 READY TO SEND
 1190 SECONDARY RECEIVER DATA
 1020 LINE COUNT 1
 1020 ROW COUNT 4
 1140 KEYBOARD RESET

 1190 DELAY CLOCK
 1190 DELAY
 1010 TIME 7
 1190 ENABLE DELAY

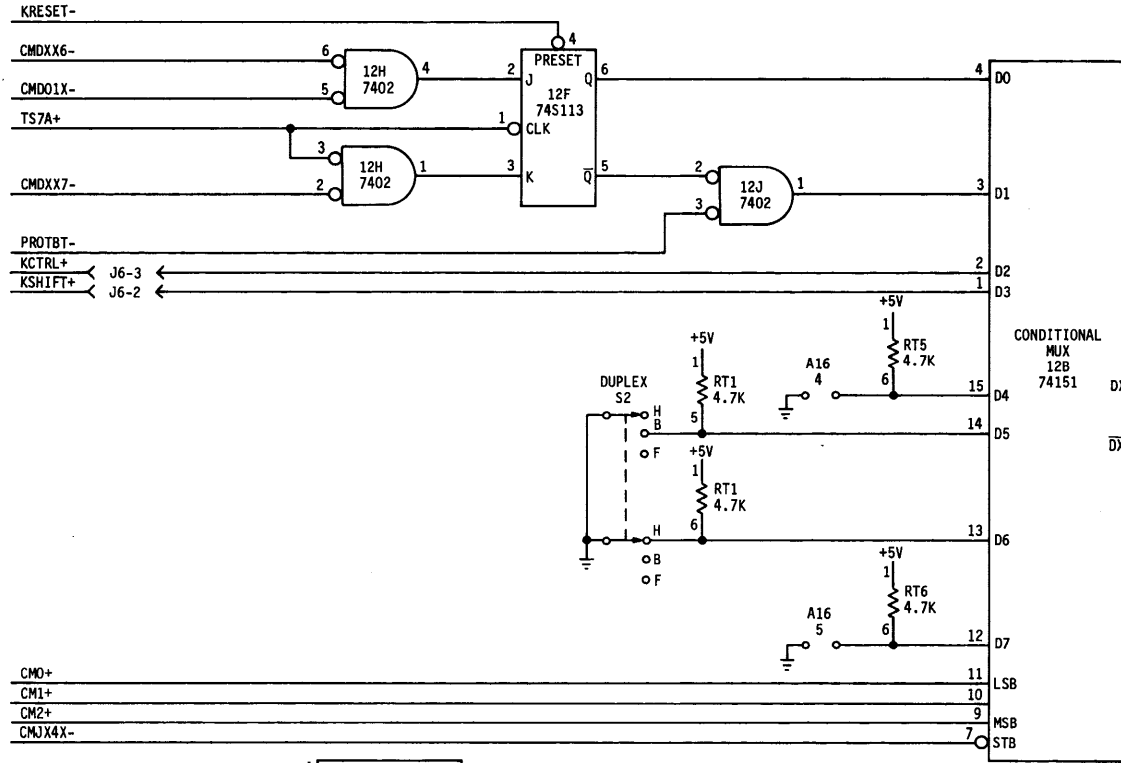
 NOT USED



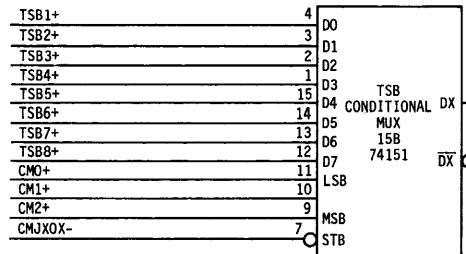
CLOCK DELAY SELECTOR

CONDITIONAL JUMP MULTIPLEXERS

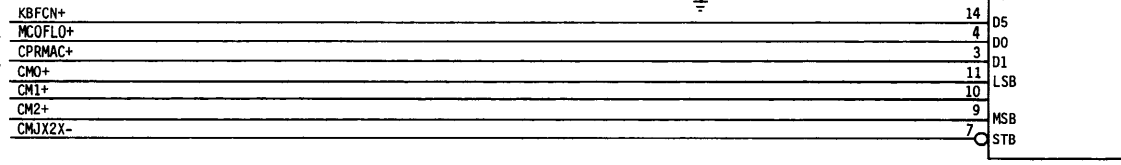
- 1140 KEYBOARD RESET
- 1060 COMMAND 6
- 1060 COMMAND 01
- 1010 TIME 7
- 1060 COMMAND 7
- 1290 PROTECT BIT
- 1120 CLEAR
- NOT USED



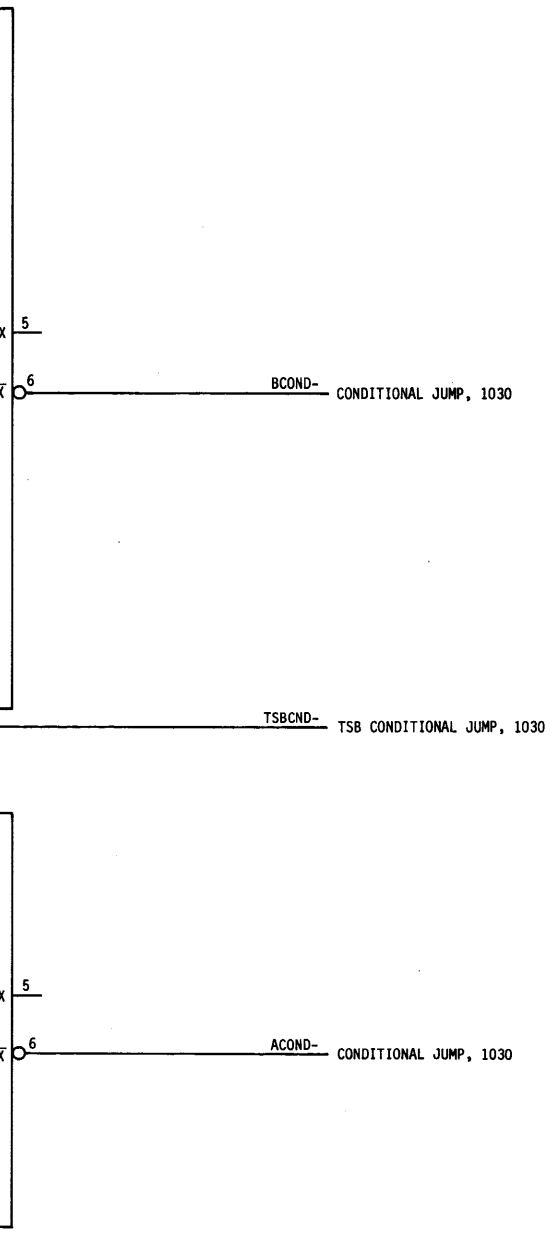
- 1040 CONTROL MEMORY BIT 0
- 1040 CONTROL MEMORY BIT 1
- 1040 CONTROL MEMORY BIT 2
- 1050 JUMP COMMAND 4X
- 1050, 1070, 1140, 1180, 1220, 1290 TRISTATE BUS BIT 1-8
- 1040 CONTROL MEMORY BIT 0
- 1040 CONTROL MEMORY BIT 1
- 1040 CONTROL MEMORY BIT 2
- 1050 JUMP COMMAND 0X

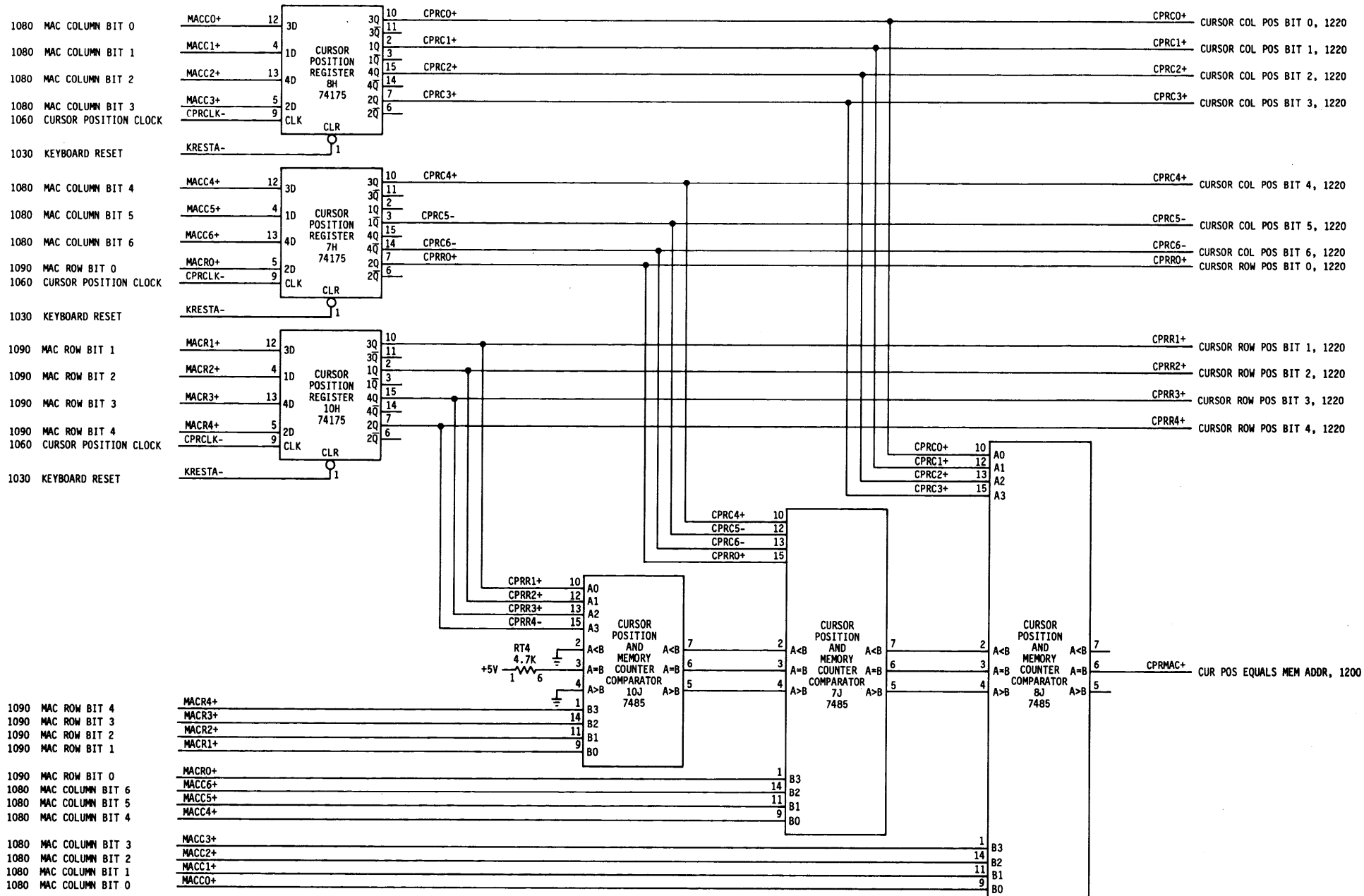


- NOT USED
- 1230 MEM ADDR COUNT OVERFLOW
- 1210 CUR POS EQUALS MEM ADDR
- 1040 CONTROL MEMORY BIT 0
- 1040 CONTROL MEMORY BIT 1
- 1040 CONTROL MEMORY BIT 2
- 1050 JUMP COMMAND 2X

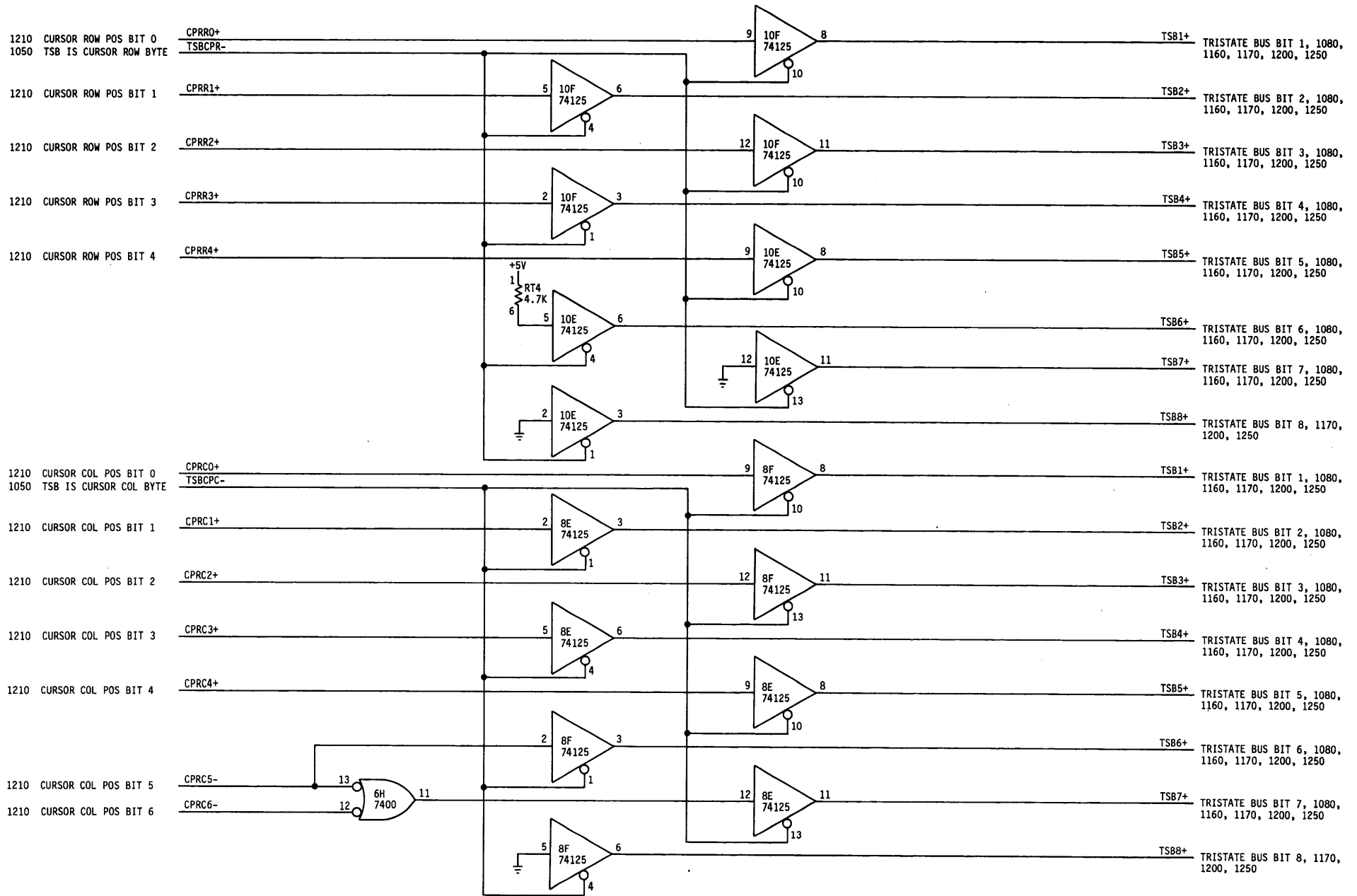


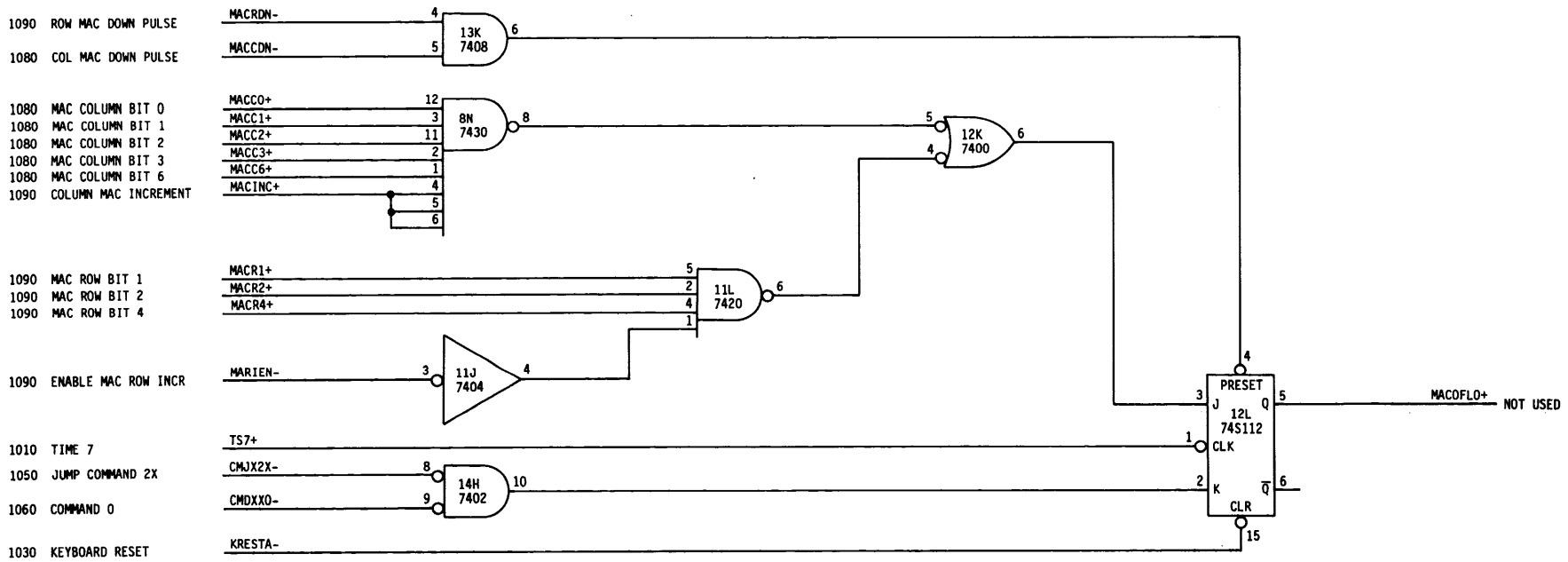
- KBFEN+
- MCOFLO+
- CPRMAC+
- CMO+
- CM1+
- CM2+
- CMJX2-

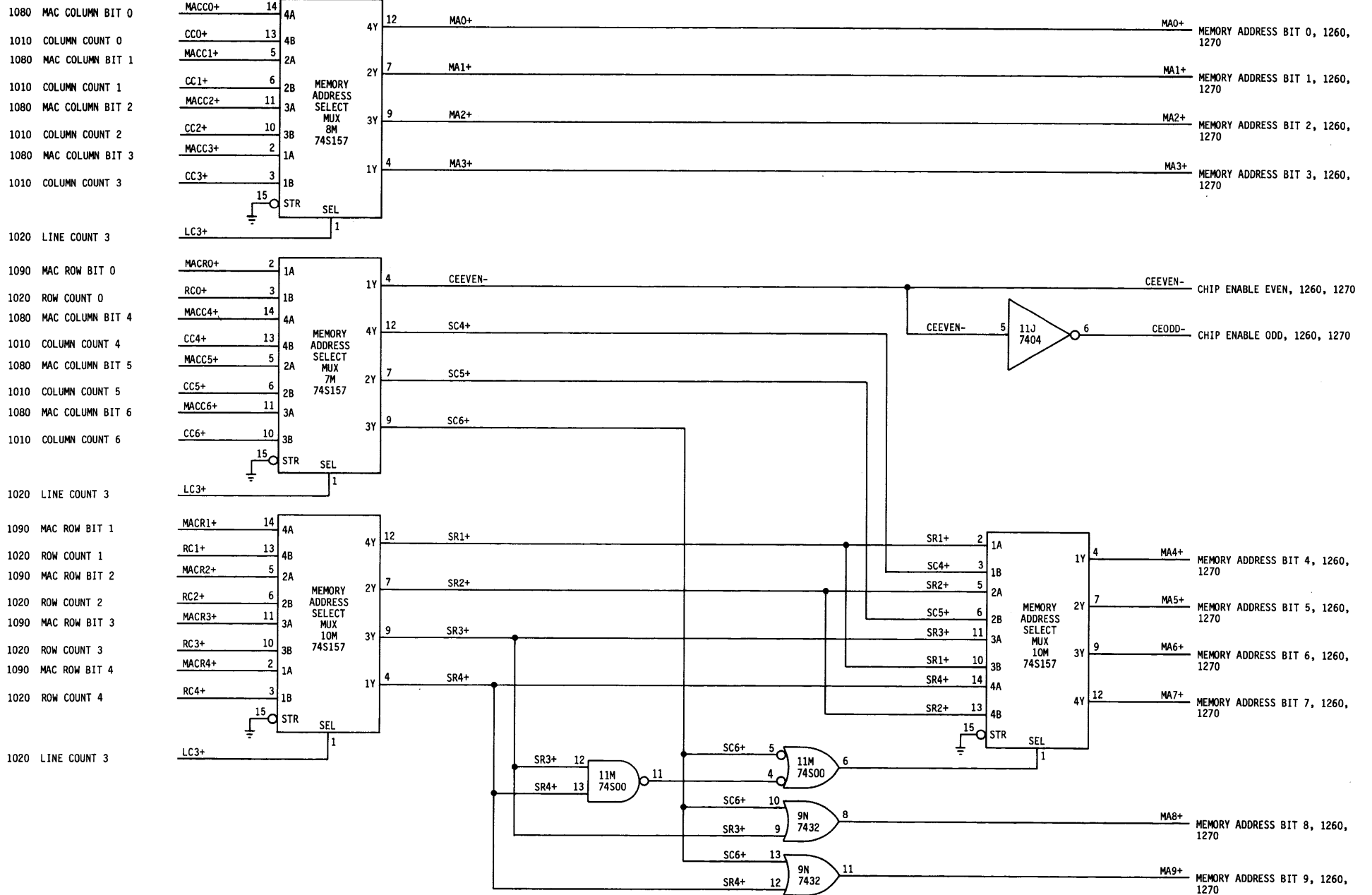


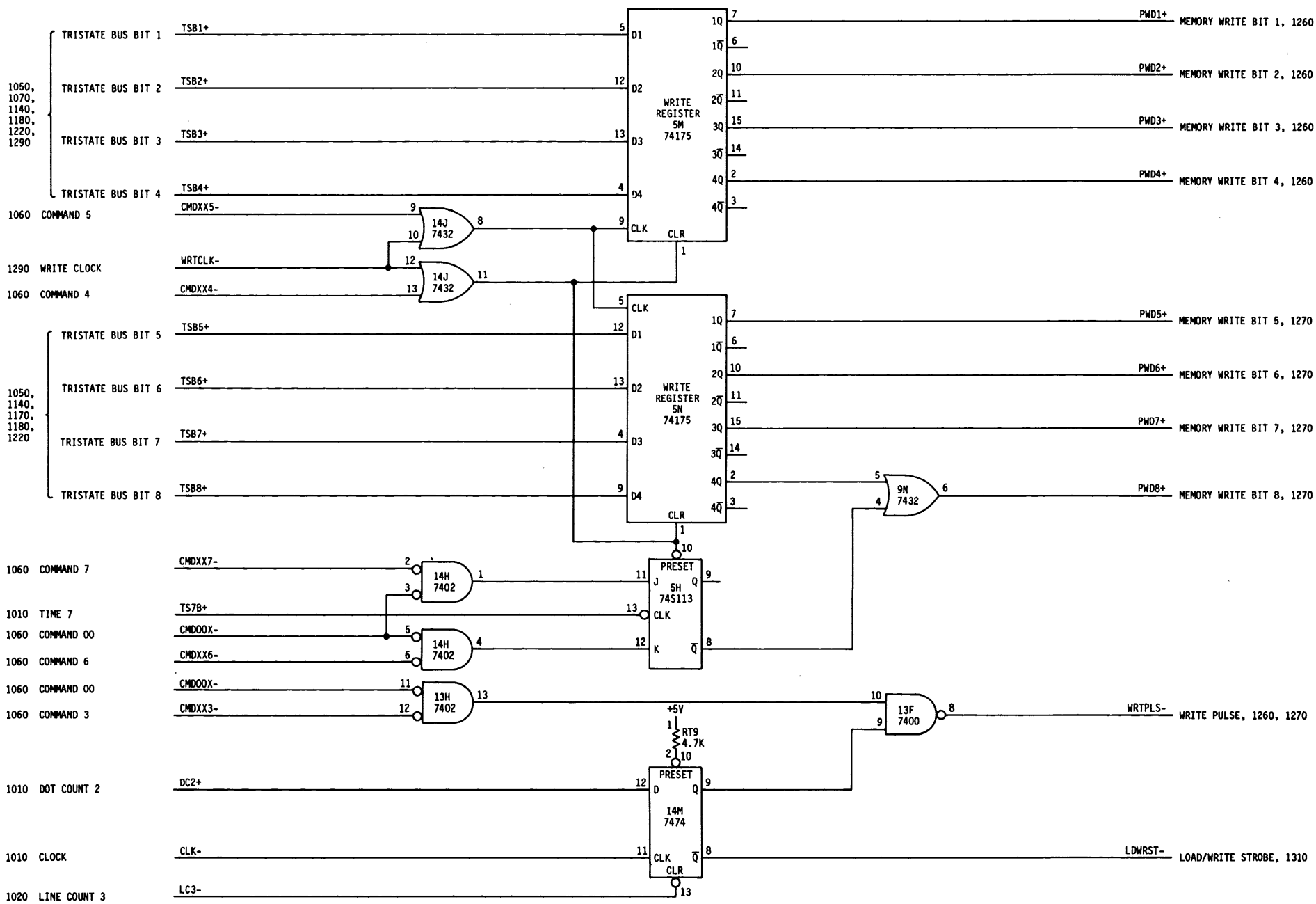


TSB=CURSORS POSITION



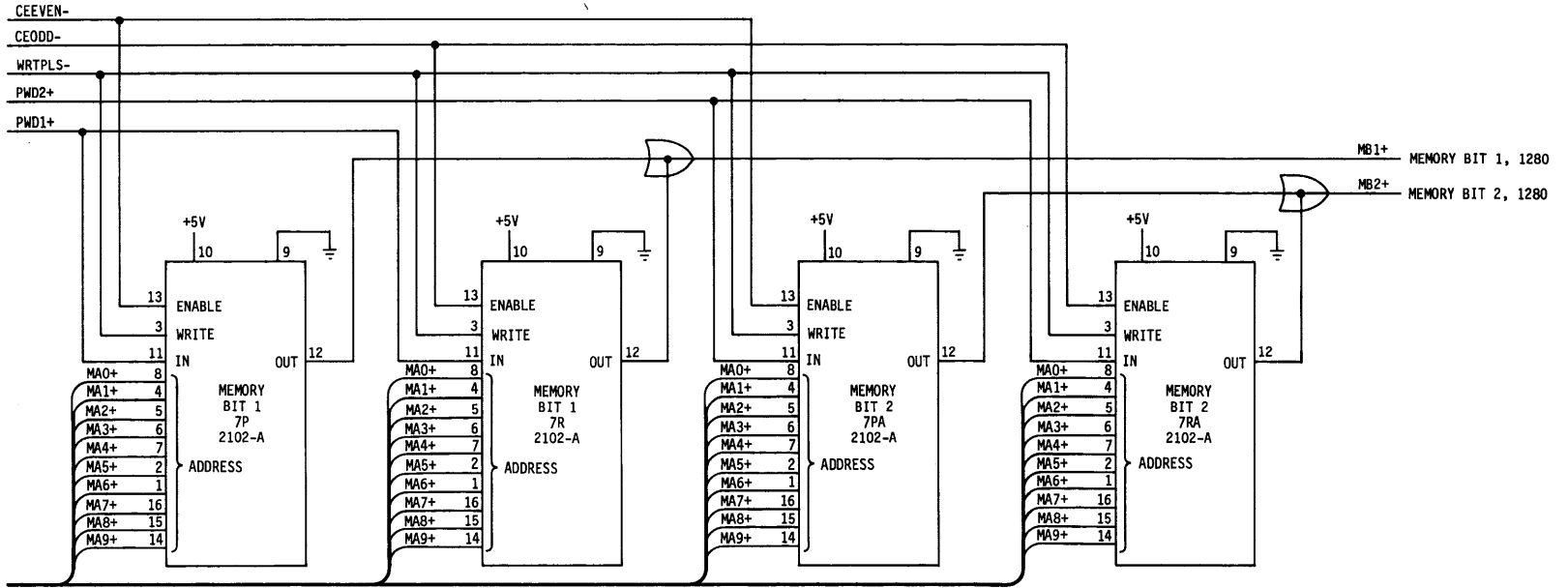




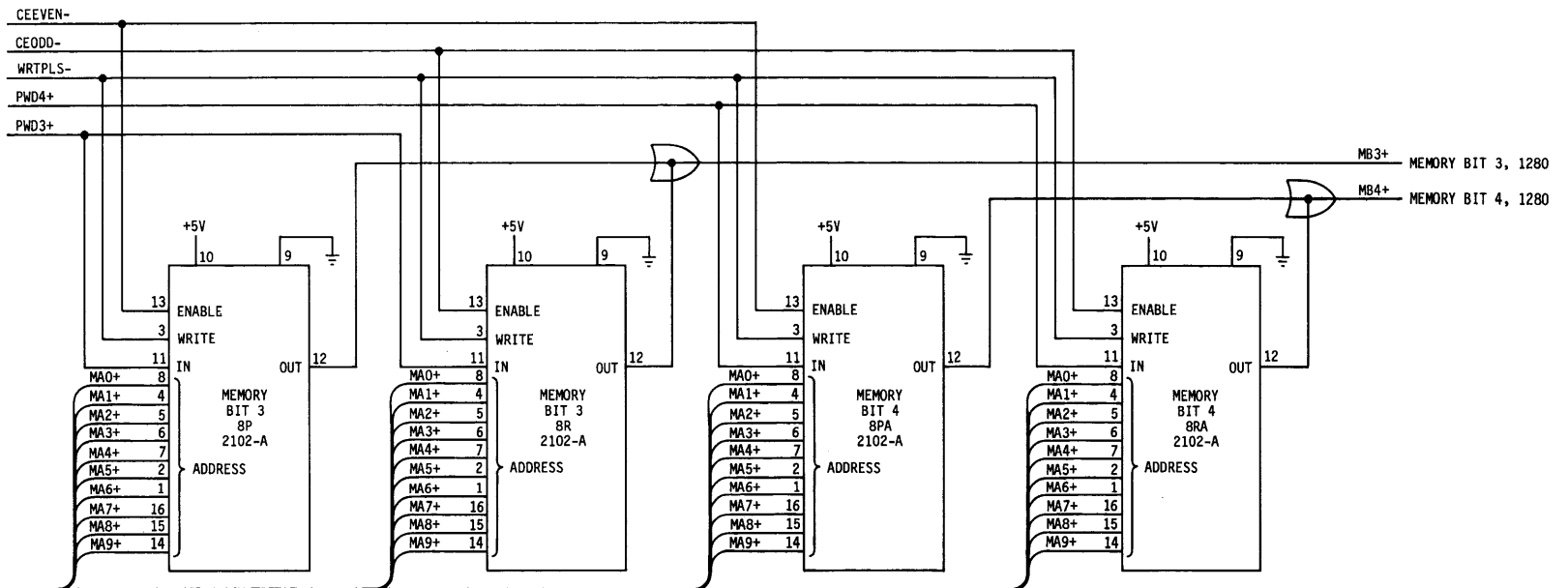


MEMORY BITS 1 - 4

- 1240 CHIP ENABLE EVEN
- 1240 CHIP ENABLE ODD
- 1250 WRITE PULSE
- 1250 MEMORY WRITE BIT 2
- 1250 MEMORY WRITE BIT 1

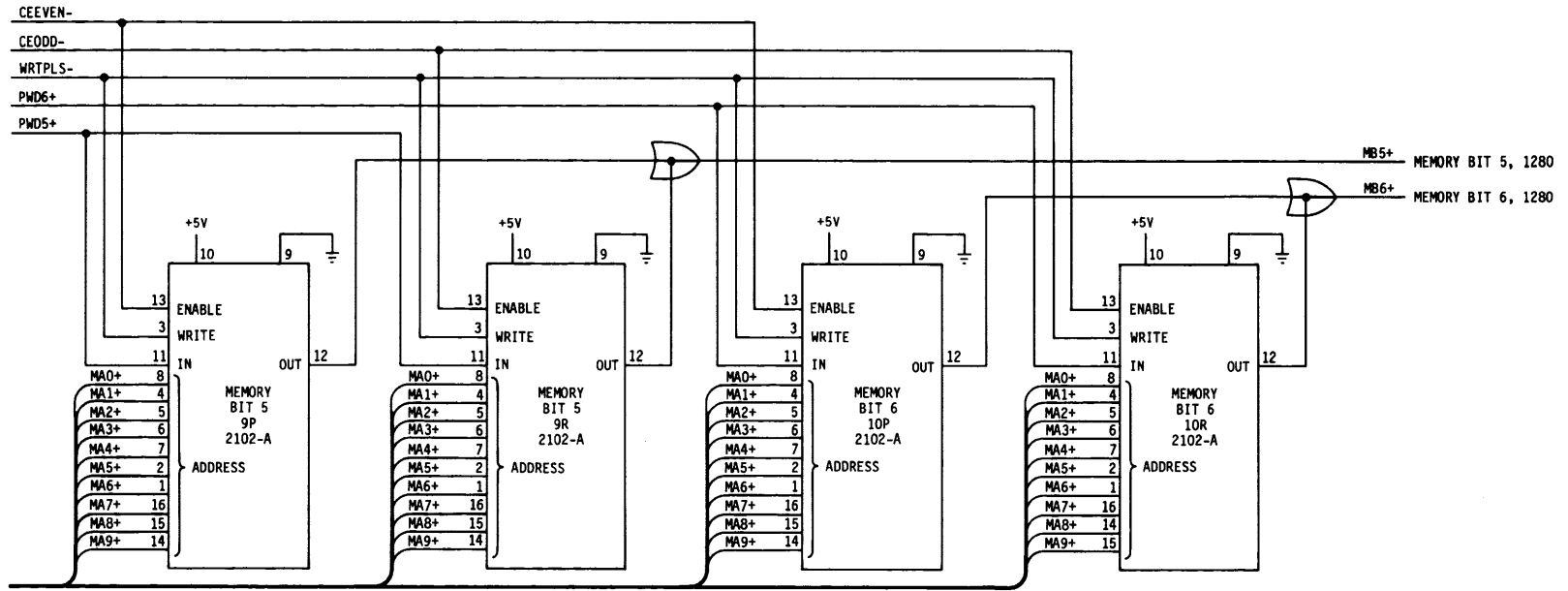


- 1240 MEMORY ADDRESS BITS 0 - 9
- 1240 CHIP ENABLE EVEN
- 1240 CHIP ENABLE ODD
- 1250 WRITE PULSE
- 1250 MEMORY WRITE BIT 4
- 1250 MEMORY WRITE BIT 3

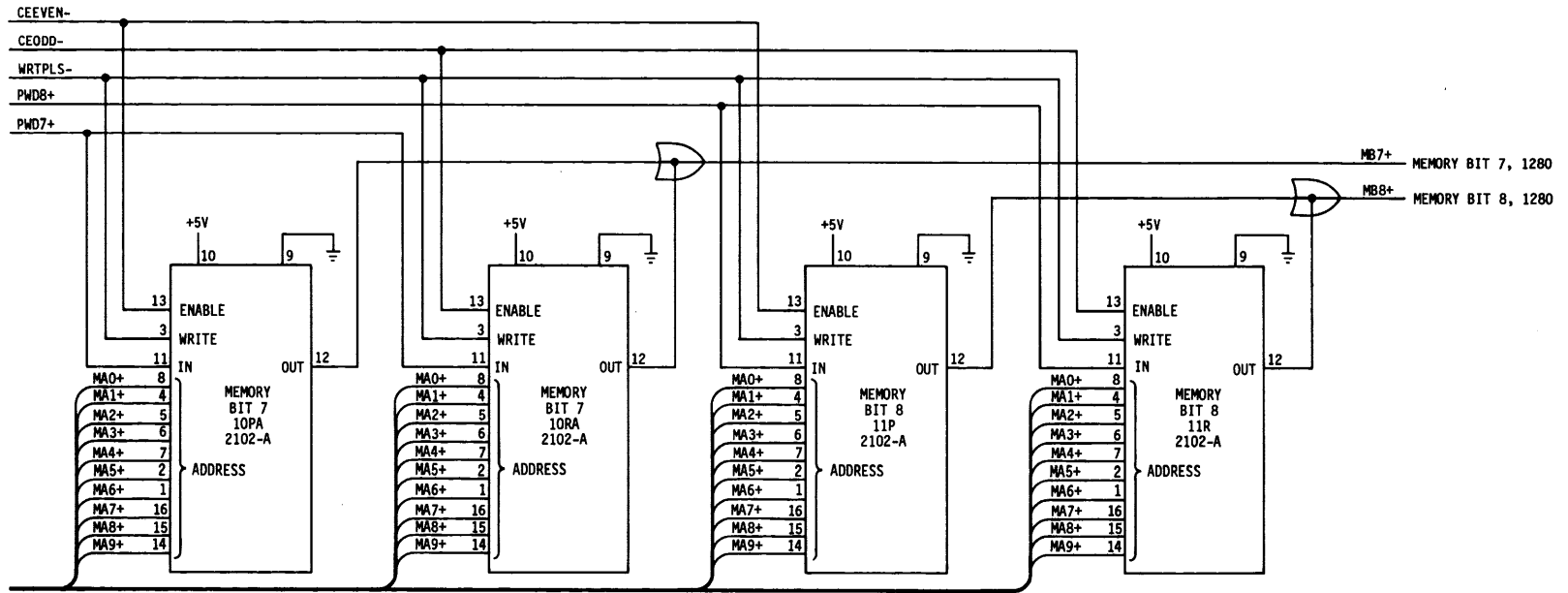


- 1240 MEMORY ADDRESS BITS 0 - 9

- 1240 CHIP ENABLE EVEN
- 1240 CHIP ENABLE ODD
- 1250 WRITE PULSE
- 1250 MEMORY WRITE BIT 6
- 1250 MEMORY WRITE BIT 5



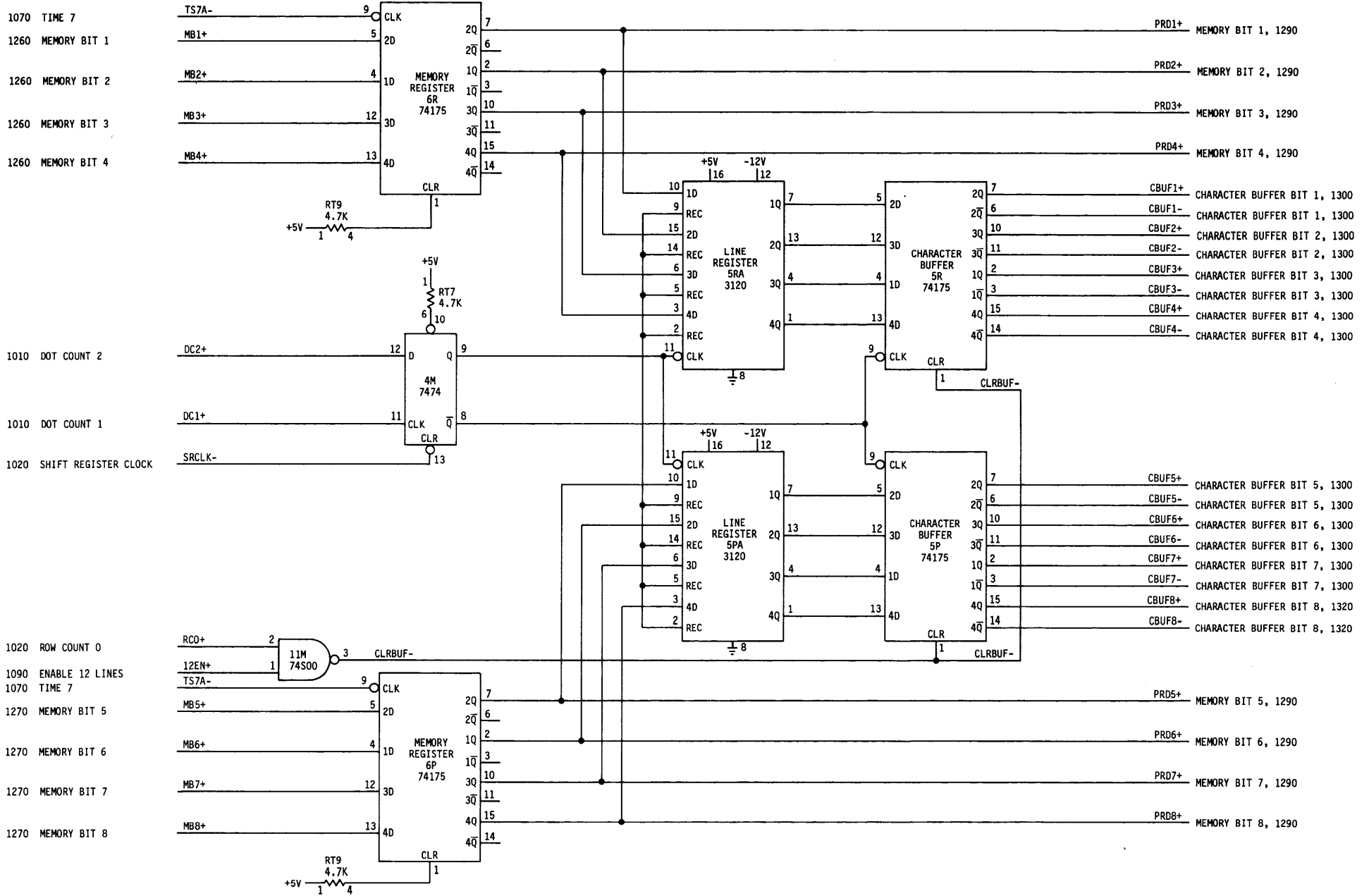
- 1240 MEMORY ADDRESS BITS 0 - 9
- 1240 CHIP ENABLE EVEN
- 1240 CHIP ENABLE ODD
- 1250 WRITE PULSE
- 1250 MEMORY WRITE BIT 8
- 1250 MEMORY WRITE BIT 7



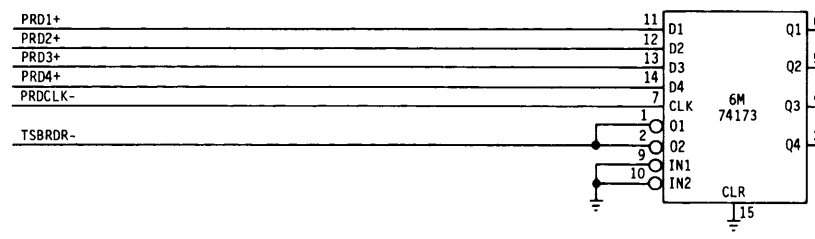
LD 7210
VIDEO DISPLAY TERMINAL

MEMORY BITS 5 - 8

FROM MEMORY TO CHARACTER BUFFER

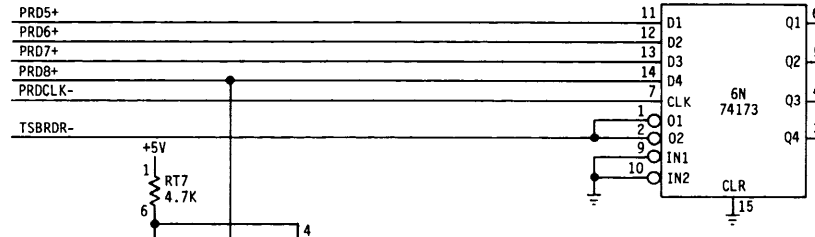


1280 MEMORY BIT 1
 1280 MEMORY BIT 2
 1280 MEMORY BIT 3
 1280 MEMORY BIT 4
 1290 MEMORY REGISTER CLOCK
 1050 TSB IS MEMORY BYTE



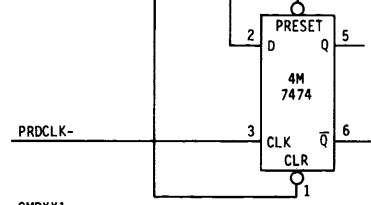
TSB1+ TRISTATE BUS BIT 1, 1080, 1160, 1170, 1200, 1250
 TSB2+ TRISTATE BUS BIT 2, 1080, 1160, 1170, 1200, 1250
 TSB3+ TRISTATE BUS BIT 3, 1080, 1160, 1170, 1200, 1250
 TSB4+ TRISTATE BUS BIT 4, 1080, 1160, 1170, 1200, 1250

1280 MEMORY BIT 5
 1280 MEMORY BIT 6
 1280 MEMORY BIT 7
 1280 MEMORY BIT 8
 1290 MEMORY REGISTER CLOCK
 1050 TSB IS MEMORY BYTE



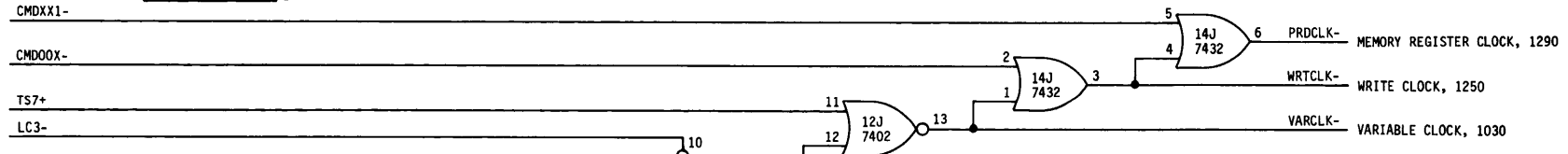
TSB5+ TRISTATE BUS BIT 5, 1080, 1160, 1170, 1200, 1250
 TSB6+ TRISTATE BUS BIT 6, 1080, 1160, 1170, 1200, 1250
 TSB7+ TRISTATE BUS BIT 7, 1080, 1160, 1170, 1200, 1250
 TSB8+ TRISTATE BUS BIT 8, 1170, 1200, 1250

1290 MEMORY REGISTER CLOCK



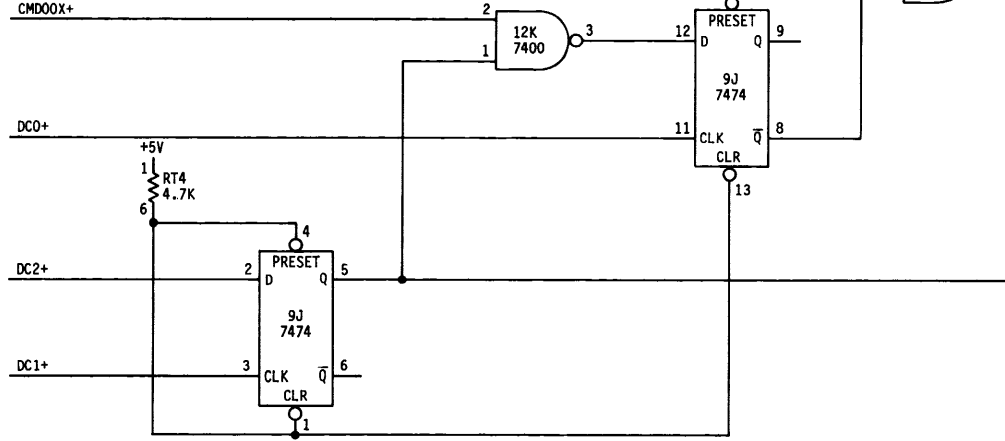
PROTBT- PROTECT BIT, 1200

1060 COMMAND 1
 1060 COMMAND 00
 1010 TIME 7
 1020 LINE COUNT 3
 1060 COMMAND 00

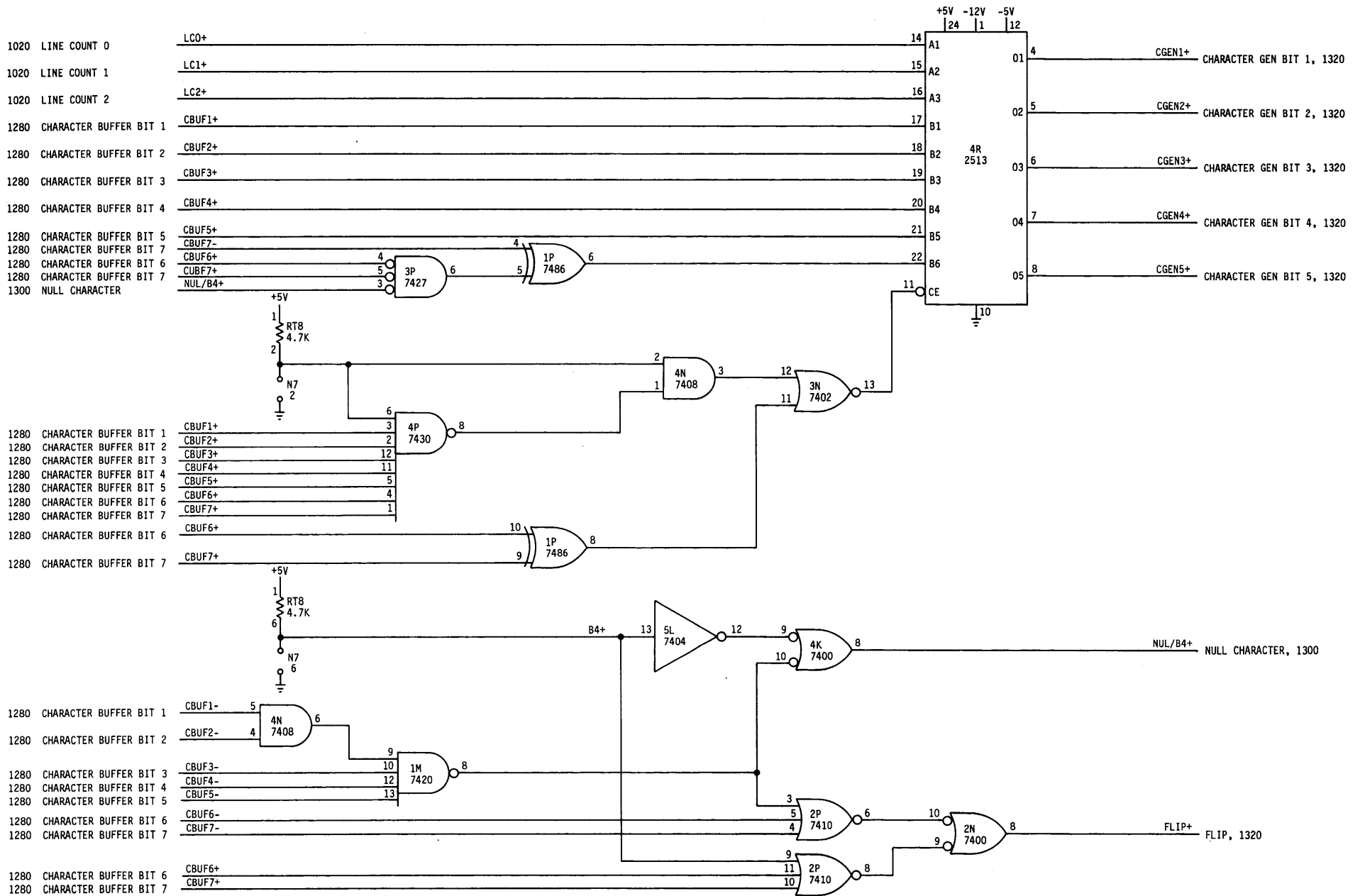


PRDCLK- MEMORY REGISTER CLOCK, 1290
 WRTCLK- WRITE CLOCK, 1250
 VARCLK- VARIABLE CLOCK, 1030

1010 DOT COUNT 0
 1010 DOT COUNT 2
 1010 DOT COUNT 1



RDCLK+ READ CLOCK, 1180



1010 COLUMN COUNT 0
 1010 COLUMN COUNT 1
 1010 COLUMN COUNT 2
 1010 COLUMN COUNT 3

 1010 COLUMN COUNT 4
 1010 COLUMN COUNT 5
 1010 COLUMN COUNT 6
 1070 BLINK CLOCK

 1020 ROW COUNT 0
 1020 ROW COUNT 1
 1020 ROW COUNT 2
 1020 ROW COUNT 3

 1020 ROW COUNT 4
 1090 MAC ROW BIT 4

 1090 MAC ROW BIT 3
 1090 MAC ROW BIT 2
 1090 MAC ROW BIT 1
 1090 MAC ROW BIT 0

 1020 LINE COUNT 3
 1250 LOAD/WRITE STROBE
 1060 COMMAND 00
 1040 CONTROL MEMORY BIT 2

 1010 TIME 7
 1080 MAC COLUMN BIT 6
 1080 MAC COLUMN BIT 5
 1080 MAC COLUMN BIT 4

 1080 MAC COLUMN BIT 3
 1080 MAC COLUMN BIT 2
 1080 MAC COLUMN BIT 1
 1080 MAC COLUMN BIT 0

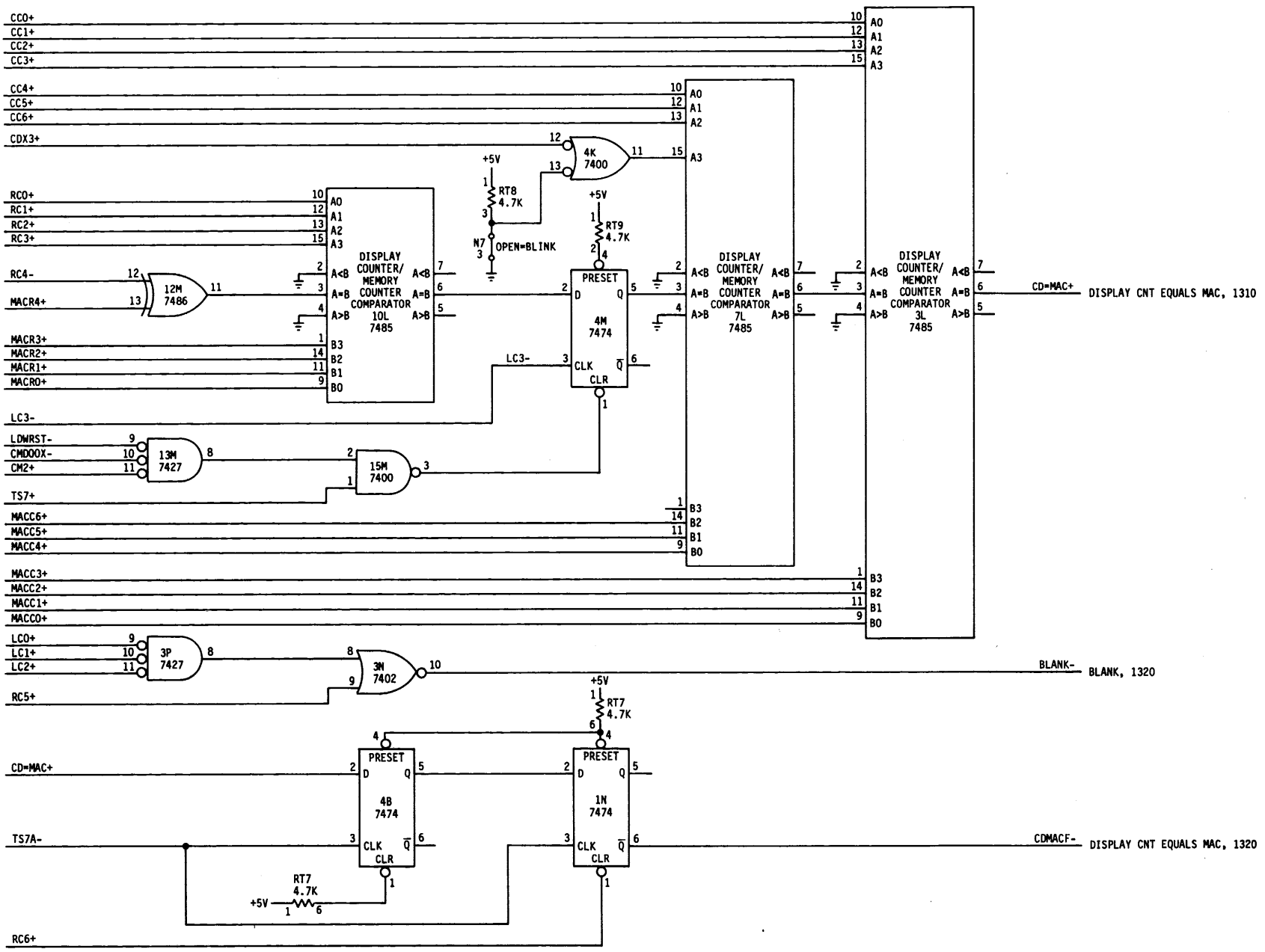
 1020 LINE COUNT 0
 1020 LINE COUNT 1
 1020 LINE COUNT 2

 1020 ROW COUNT 5

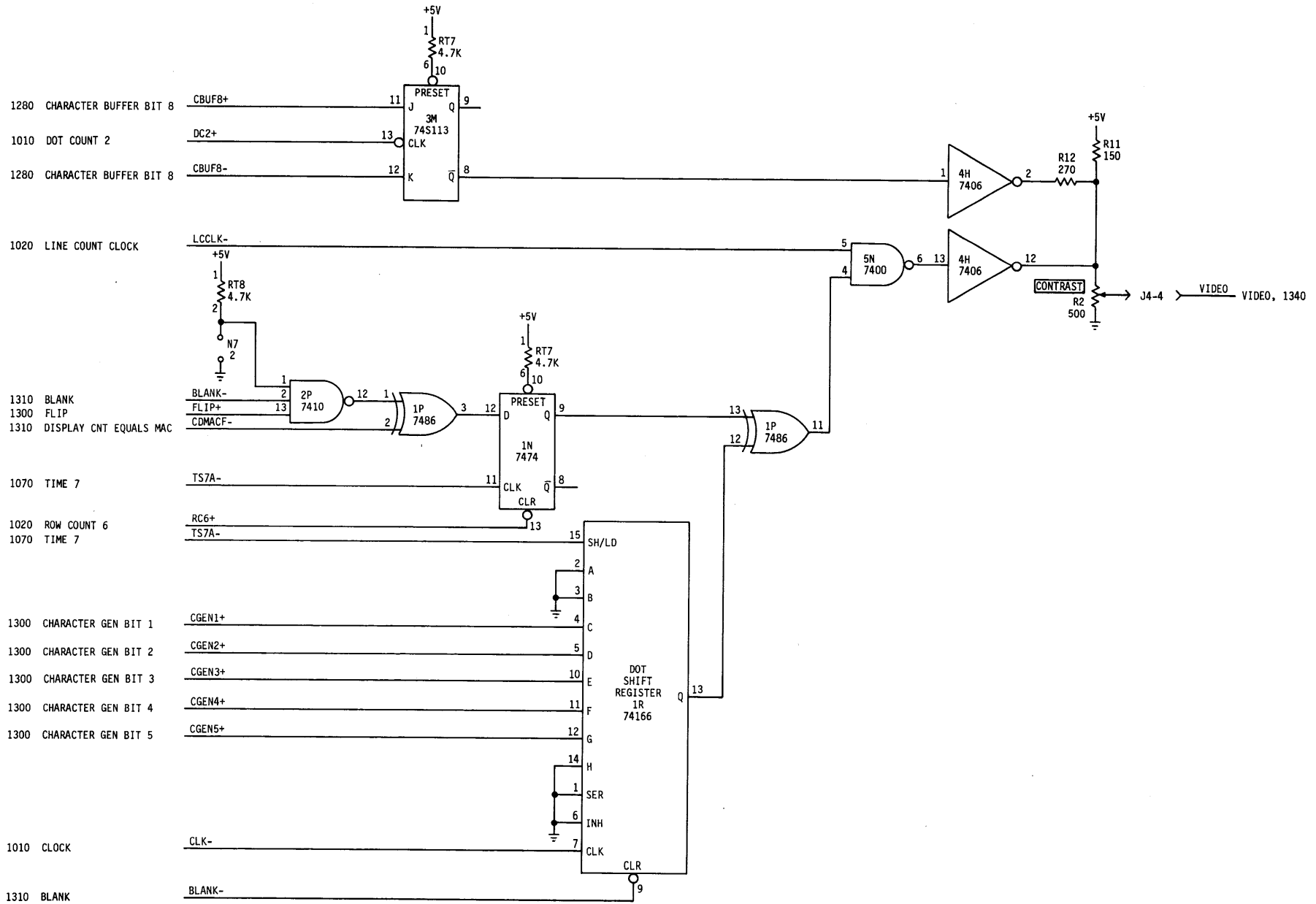
 1310 DISPLAY CNT EQUALS MAC

 1070 TIME 7

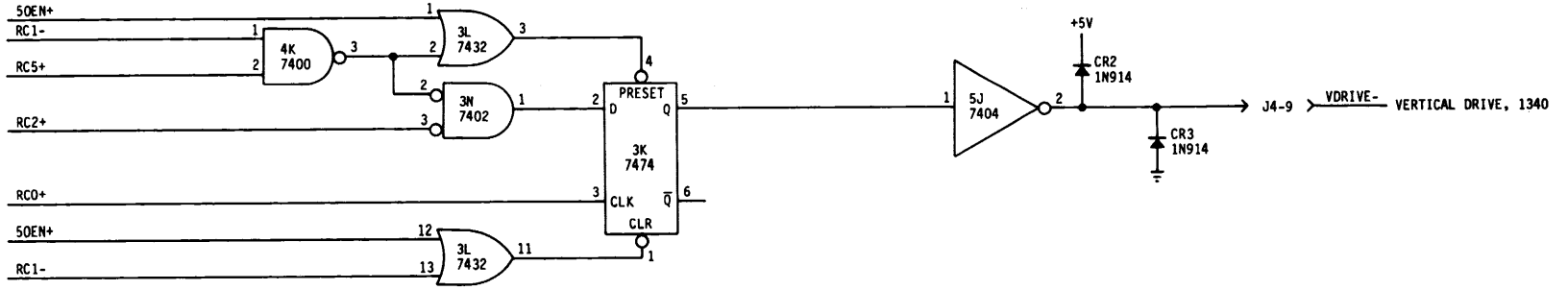
 1020 ROW COUNT 6



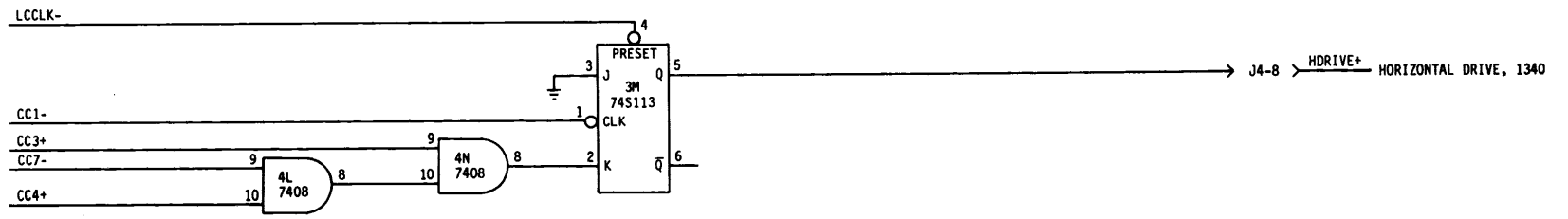
DISPLAY COUNTER/MEMORY COUNTER COINCIDENCE



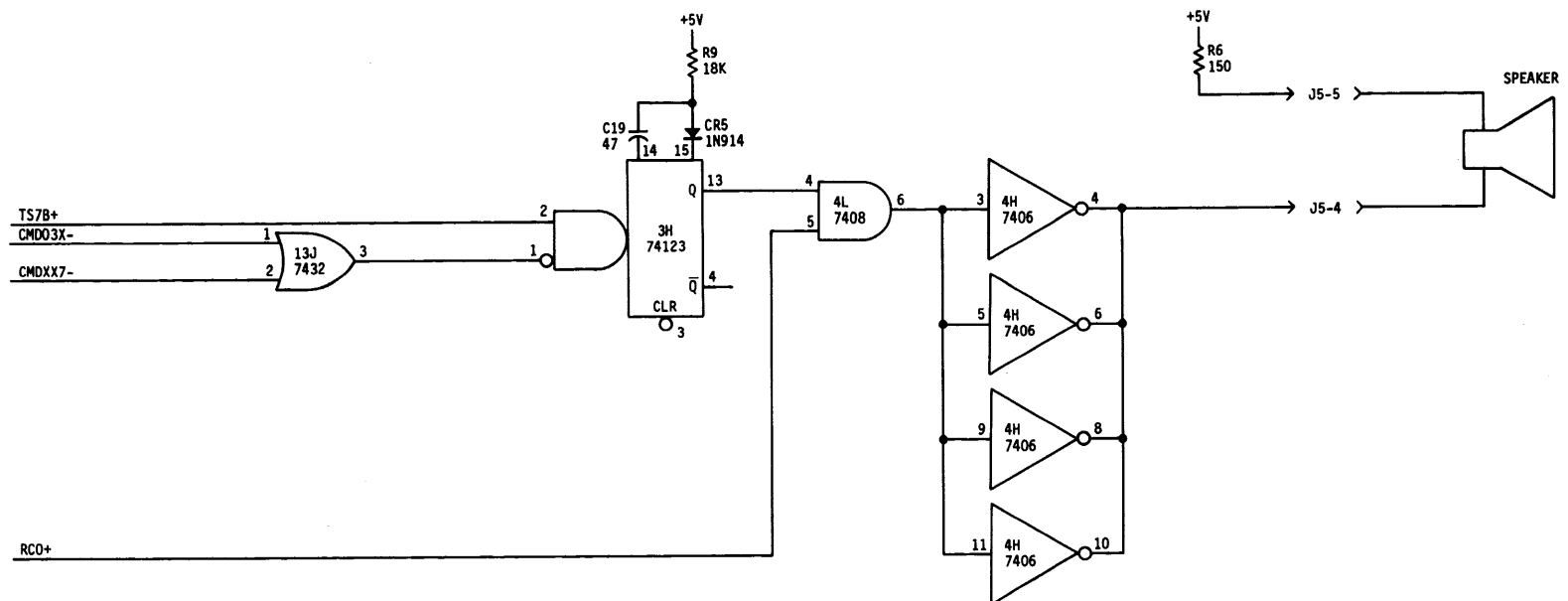
1020 50 HERTZ ENABLE
 1020 ROW COUNT 1
 1020 ROW COUNT 5
 1020 ROW COUNT 2
 1020 ROW COUNT 0
 1020 50 HERTZ ENABLE
 1020 ROW COUNT 1



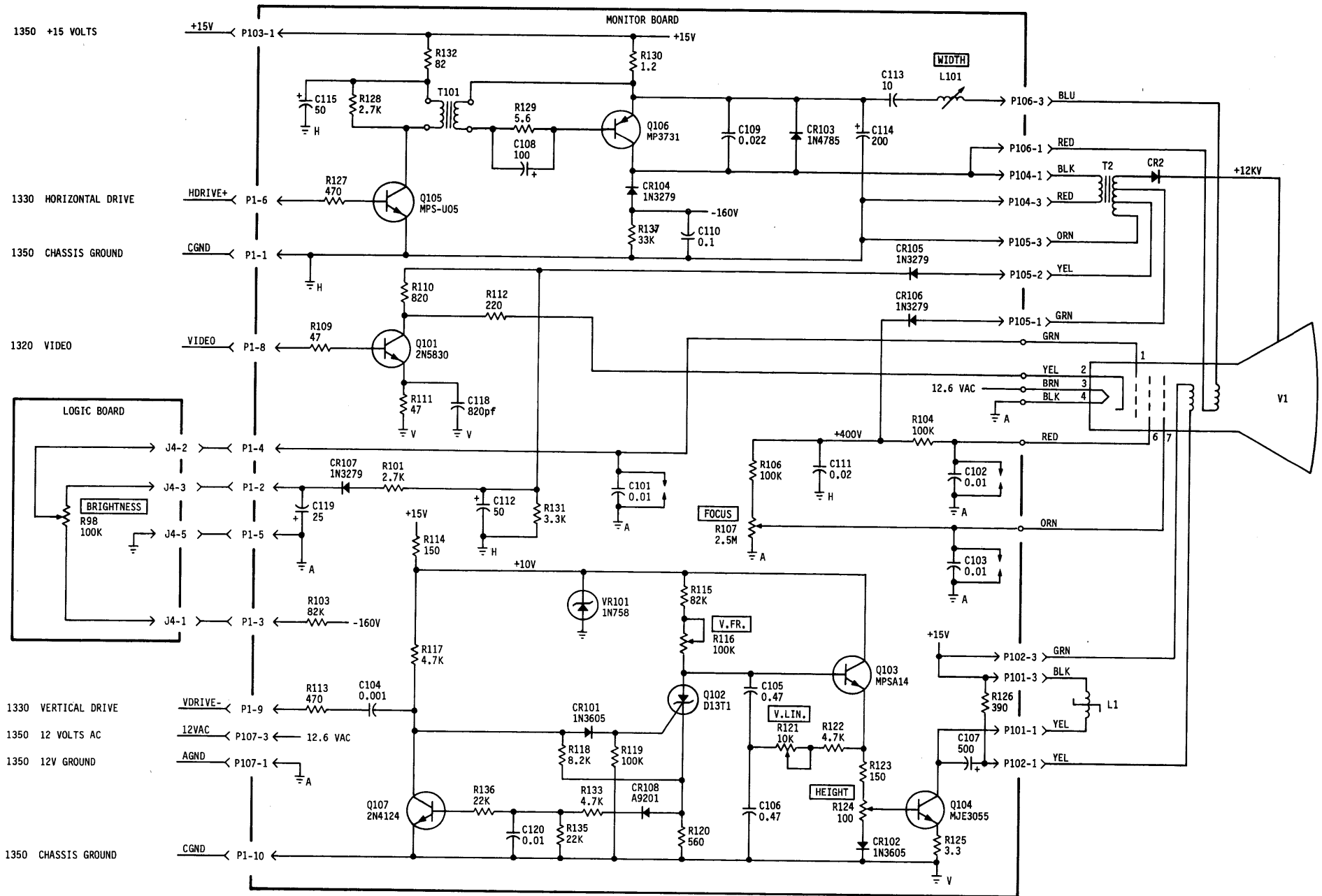
1020 LINE COUNT CLOCK
 1010 COLUMN COUNT 1
 1010 COLUMN COUNT 3
 1010 COLUMN COUNT 7
 1010 COLUMN COUNT 4

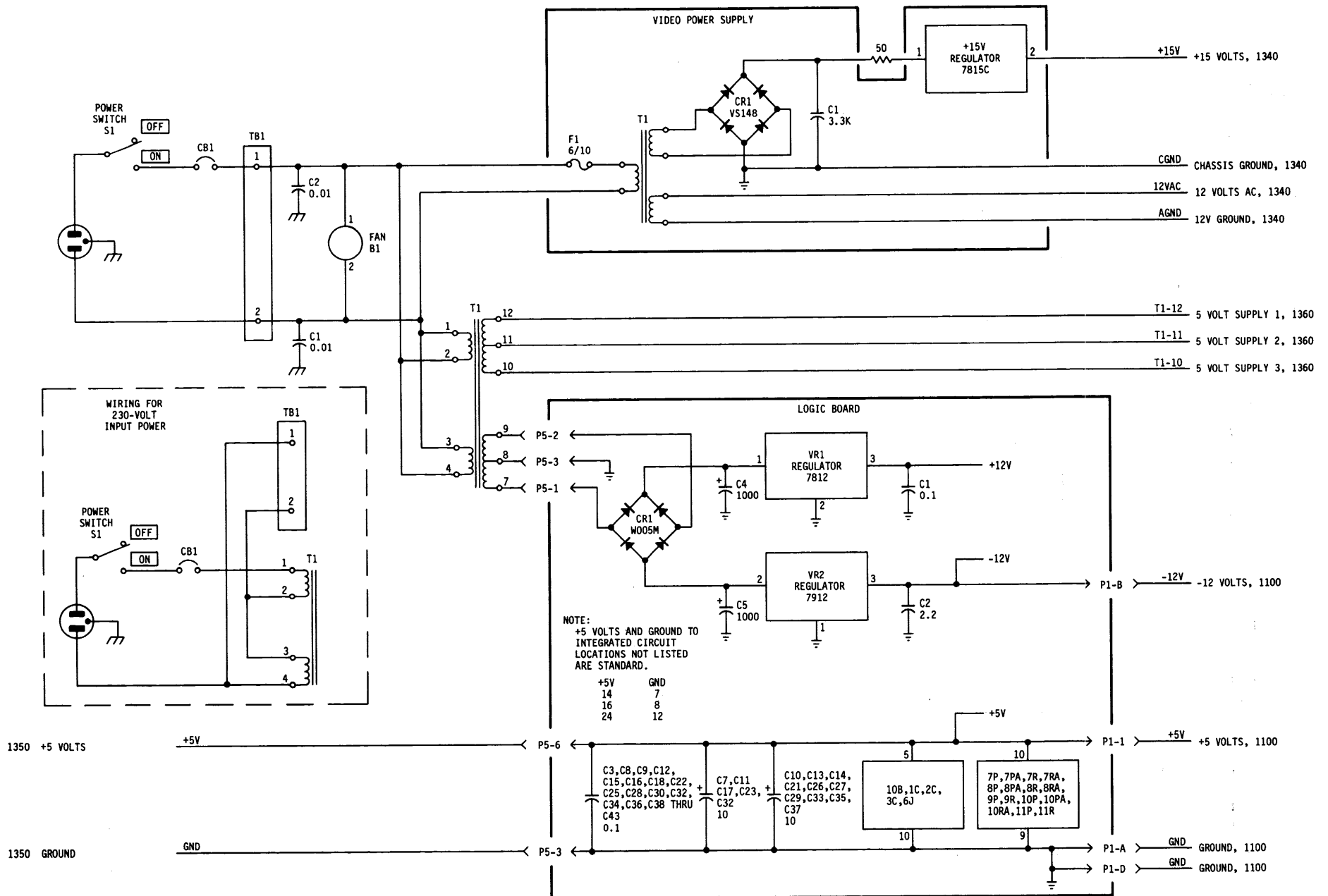


1010 TIME 7
 1060 COMMAND 03
 1060 COMMAND 7



1020 ROW COUNT 0





MAIN LOGIC POWER SUPPLY BOARD (21A0005)

