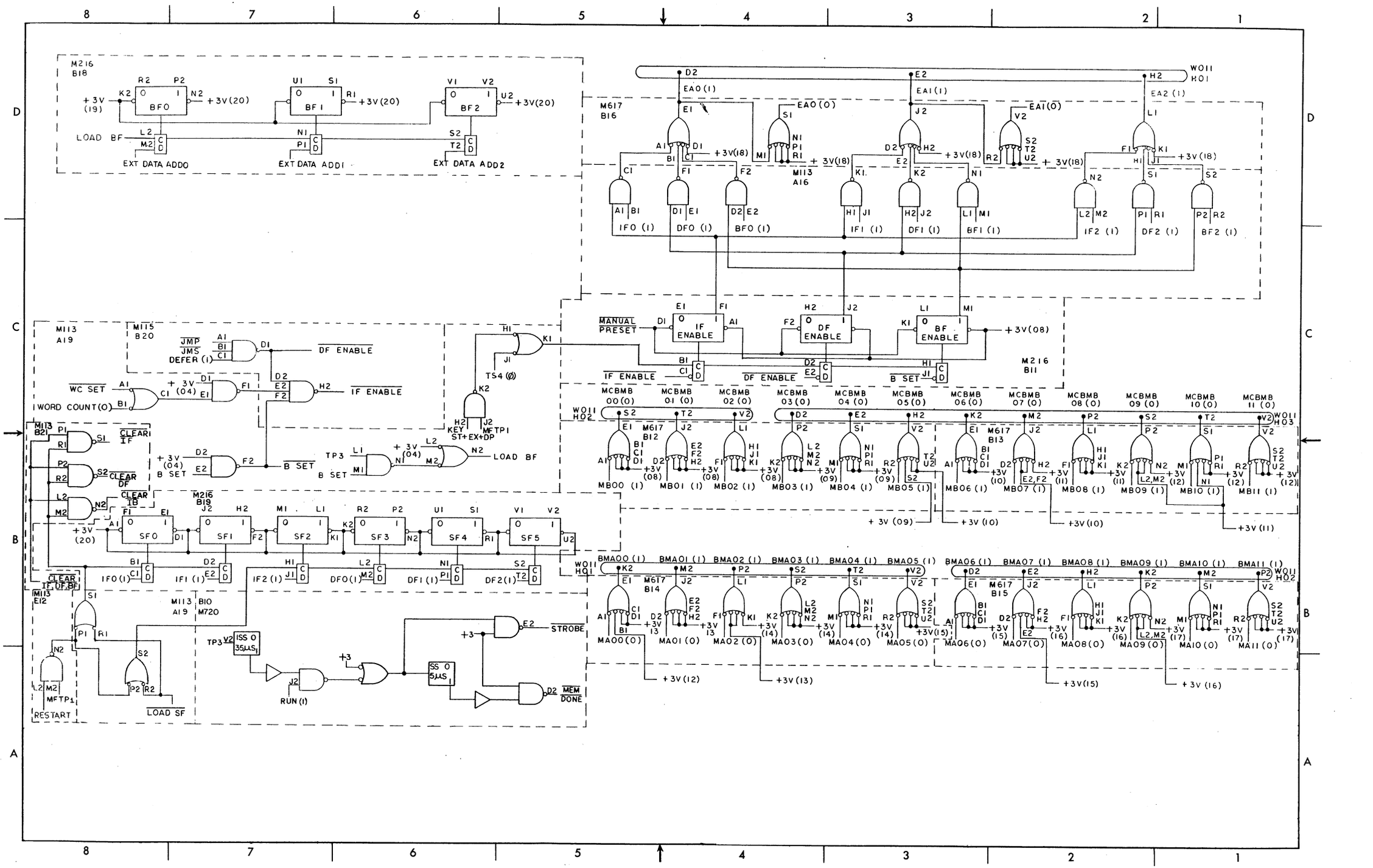
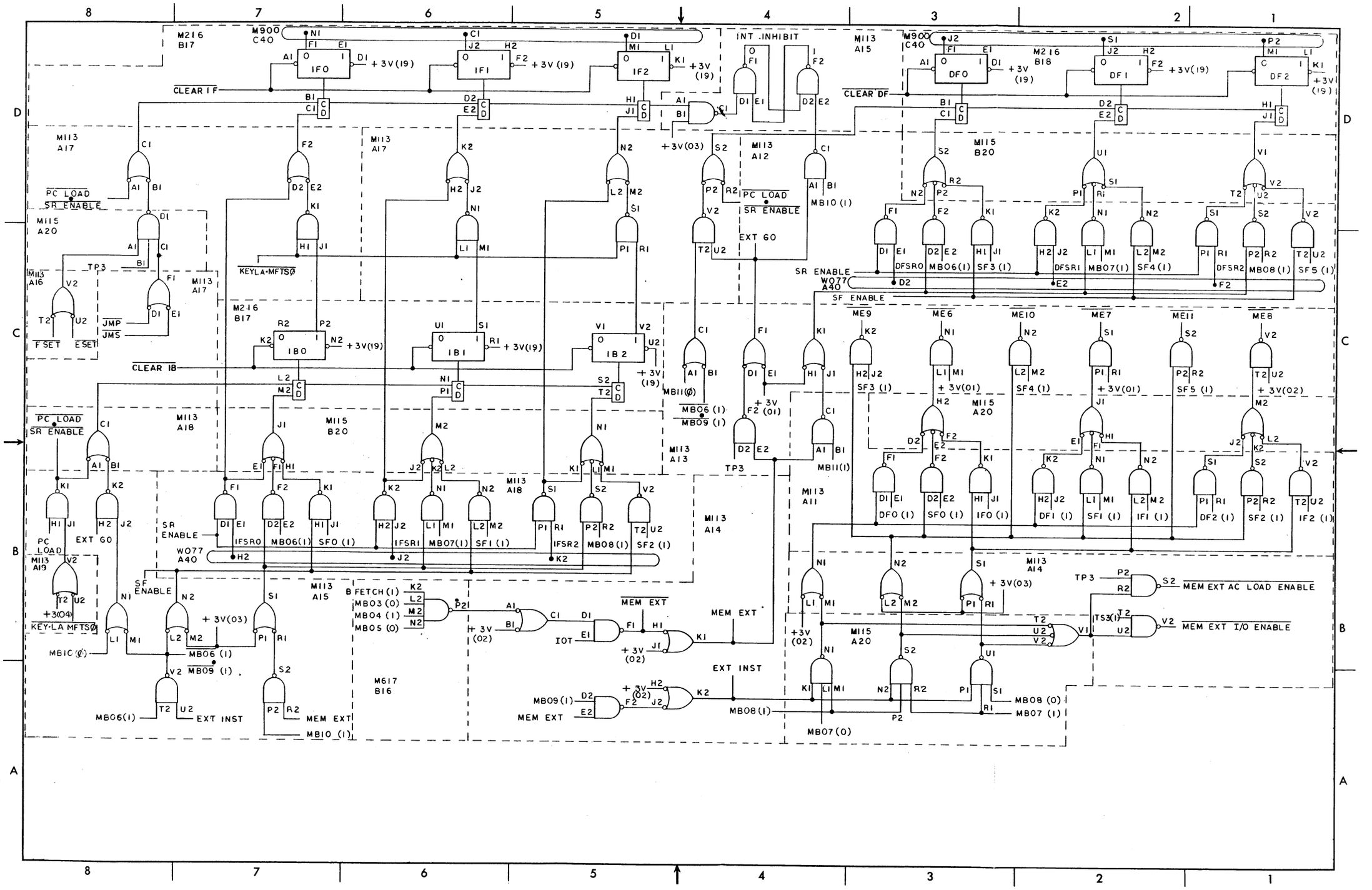
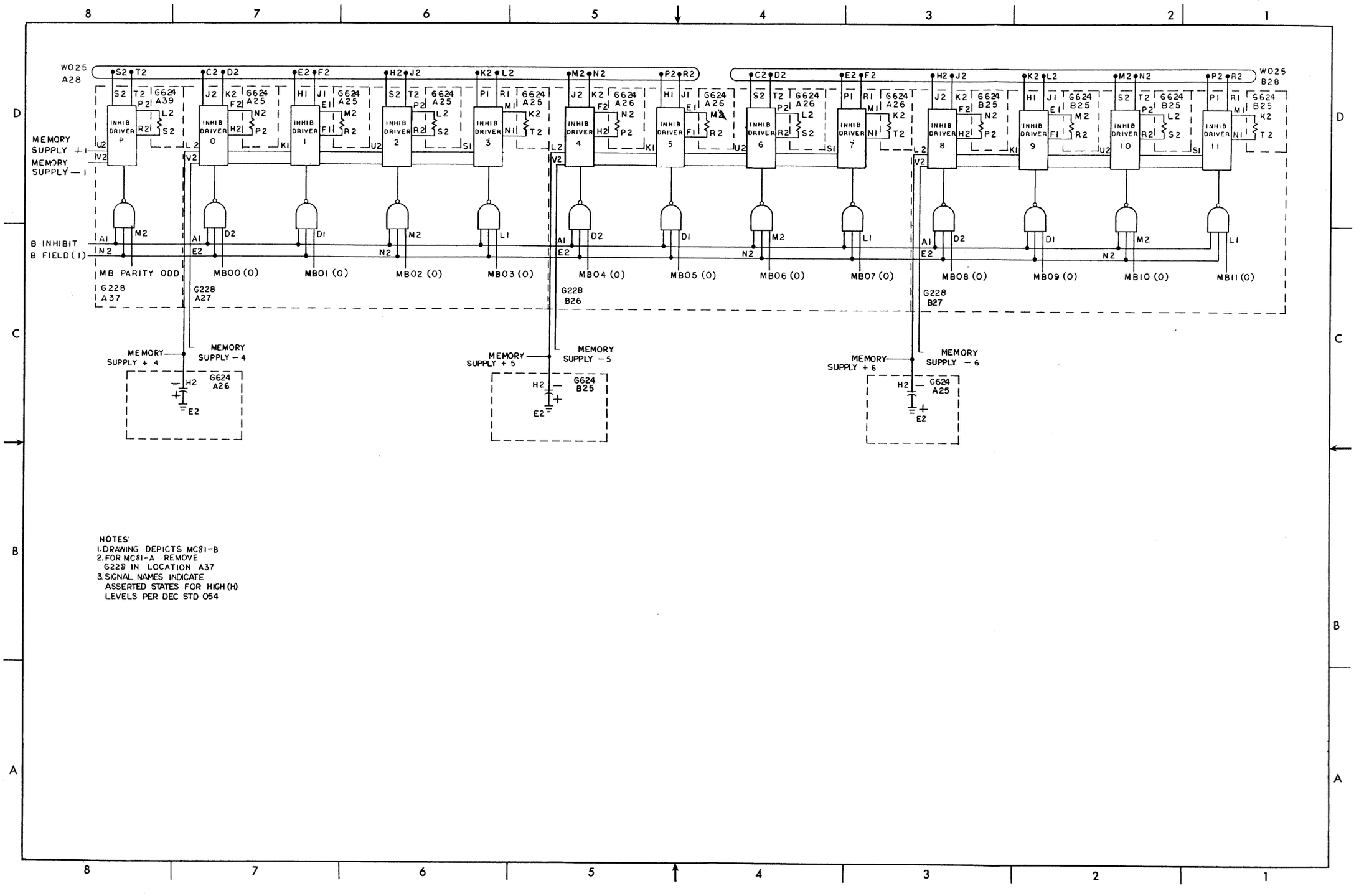


D-BS-MC8I-0-1 Memory Extension Control (Sheet 1)

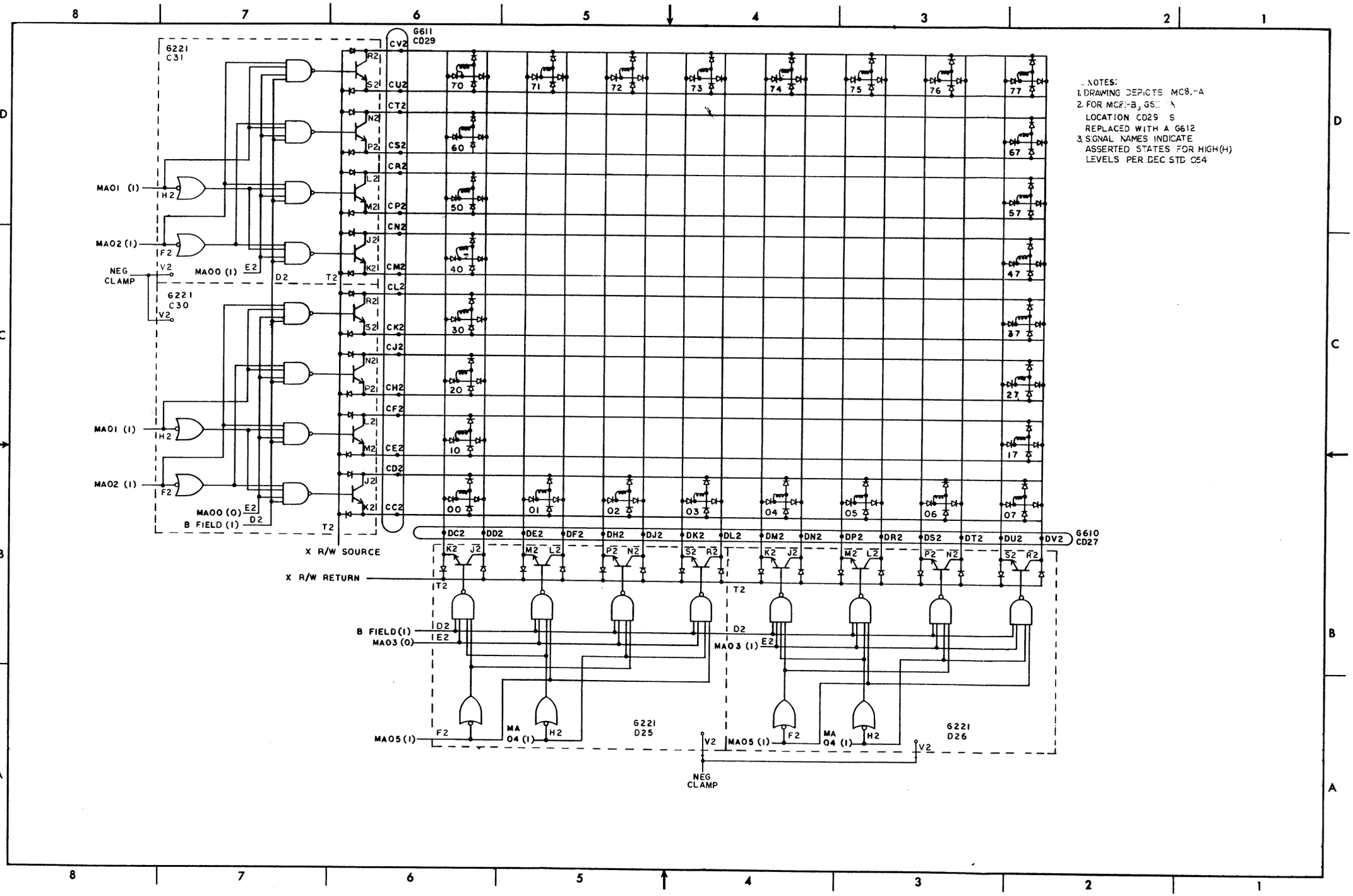


D-BS-MC8I-0-1 Memory Extension Control (Sheet 2)

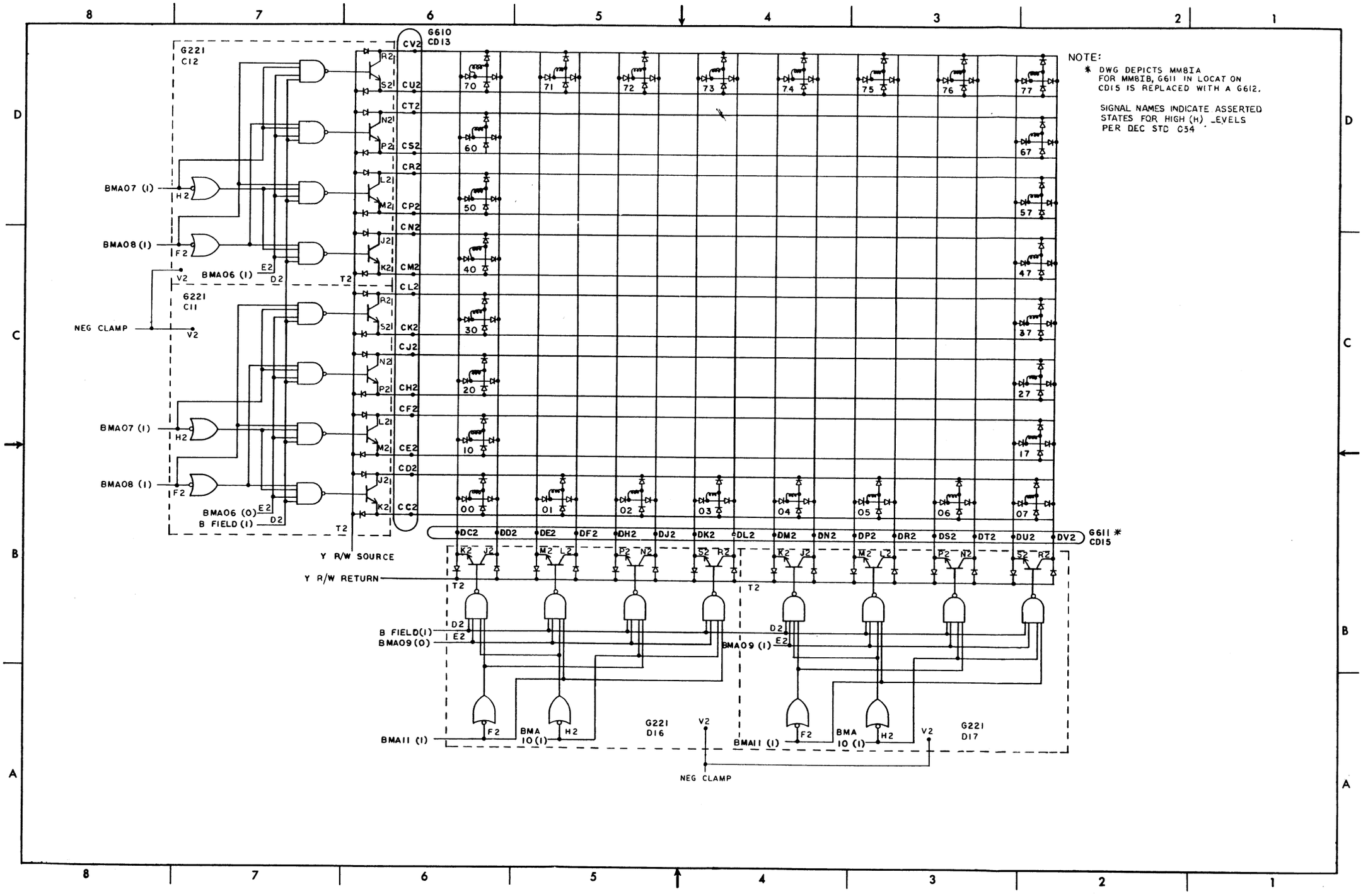


NOTES:
1. DRAWING DEPICTS MC81-B
2. FOR MC81-A REMOVE G228 IN LOCATION A37
3. SIGNAL NAMES INDICATE ASSERTED STATES FOR HIGH (H) LEVELS PER DEC STD 054

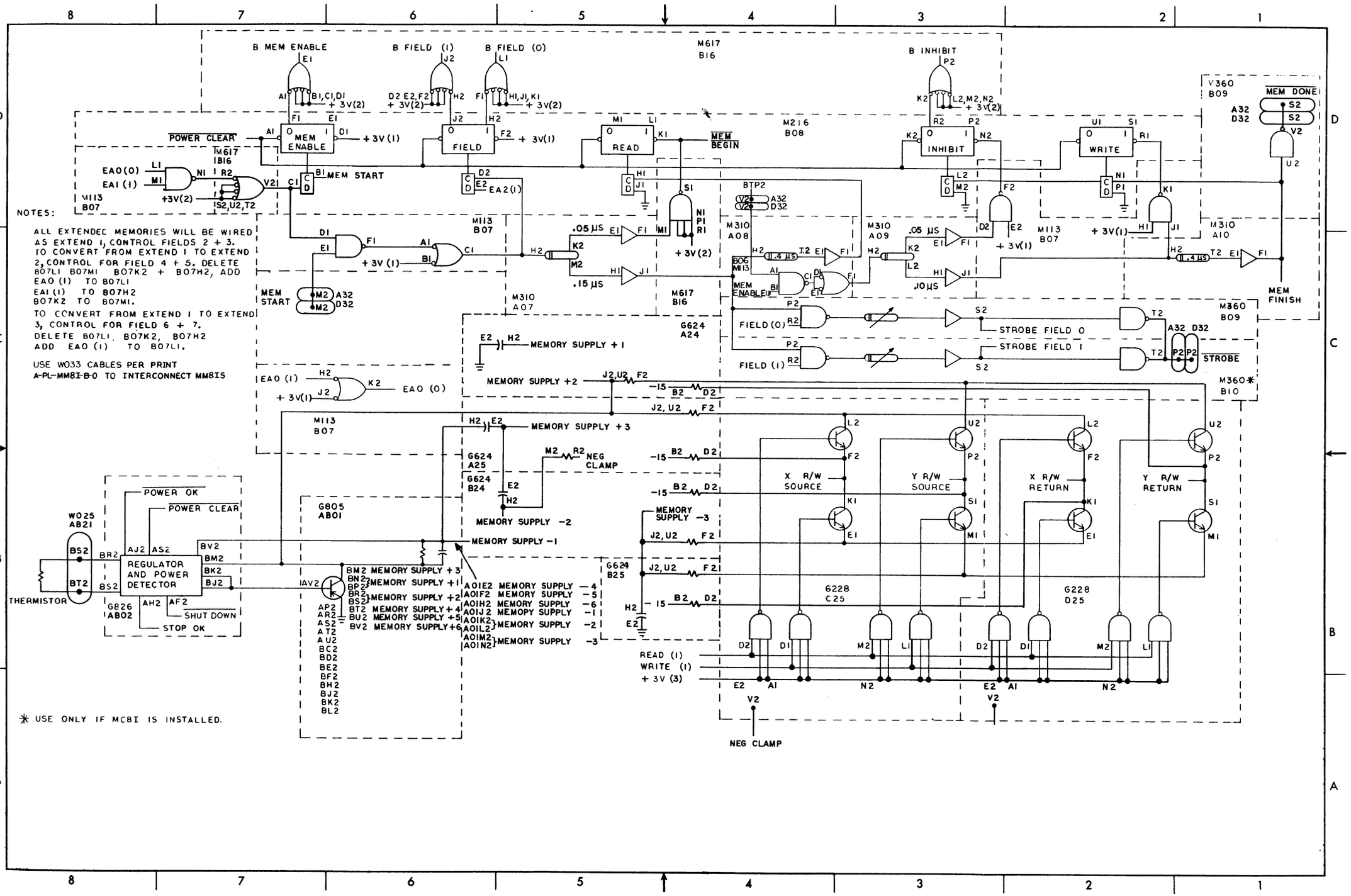
D-BS-MC8I-0-2 Inhibit Drivers



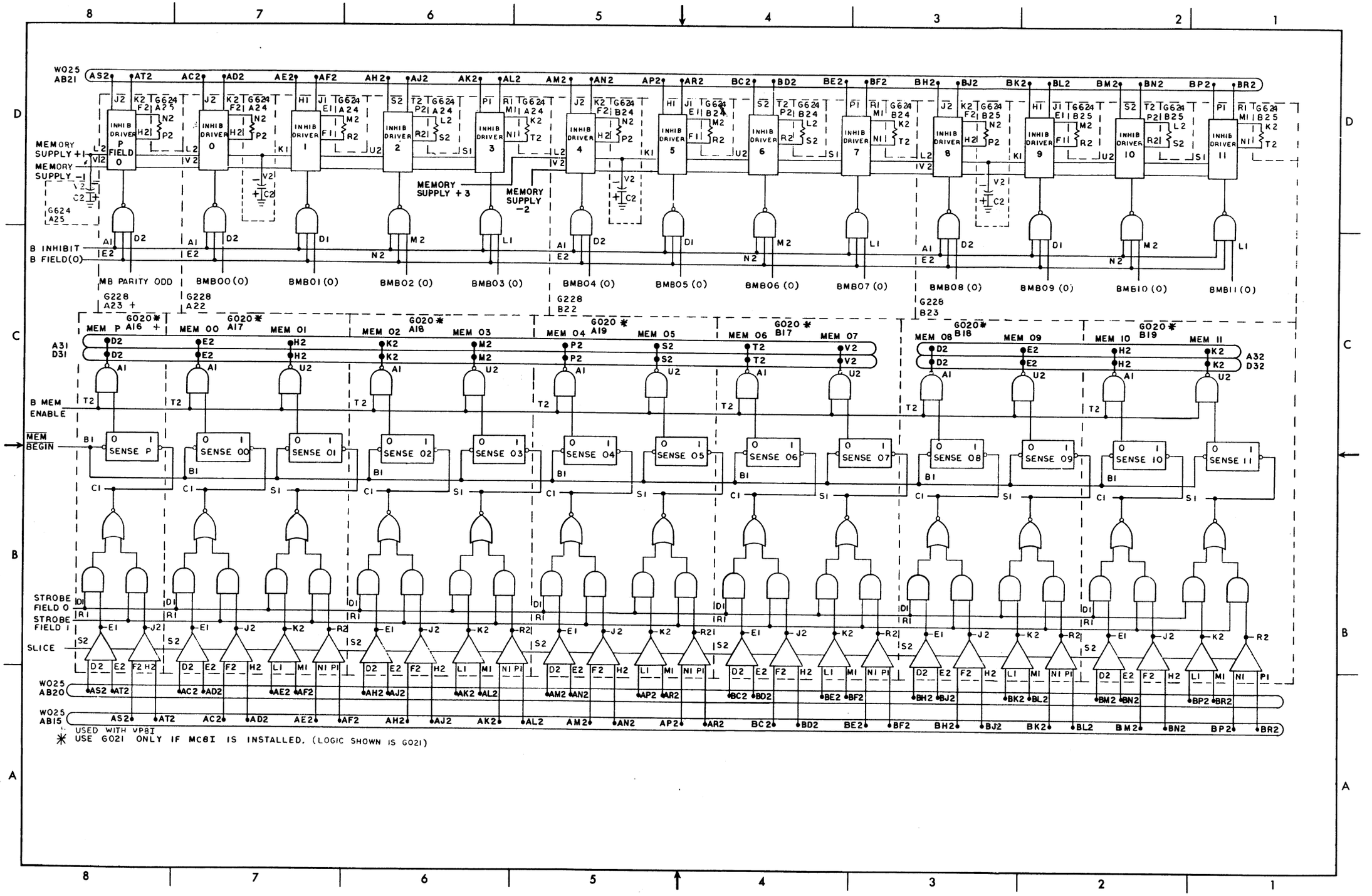
D-BS-MC8I-0-3 X Axis Selection



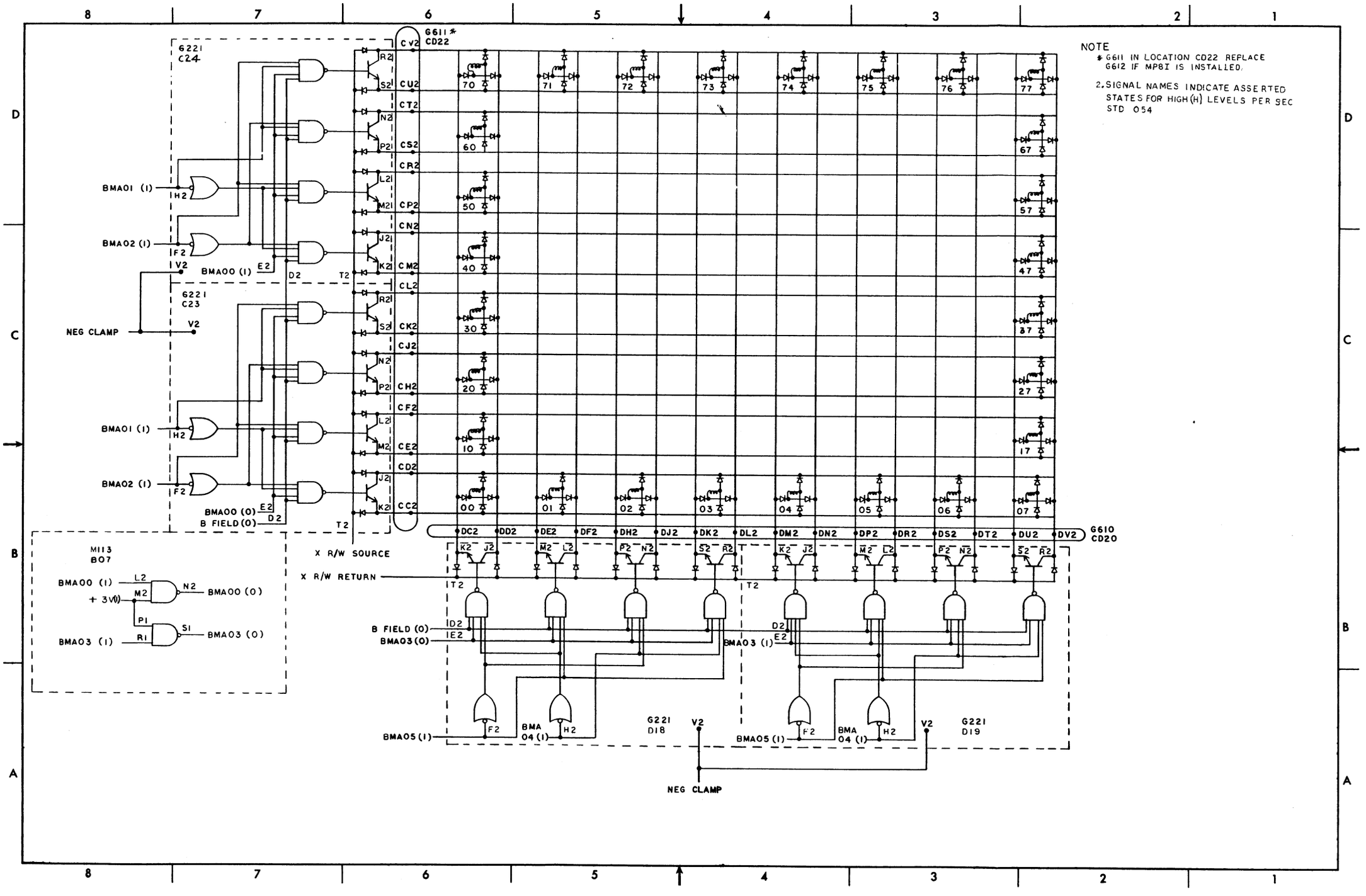
D-BS-MC8I-0-4 Y Axis Selection



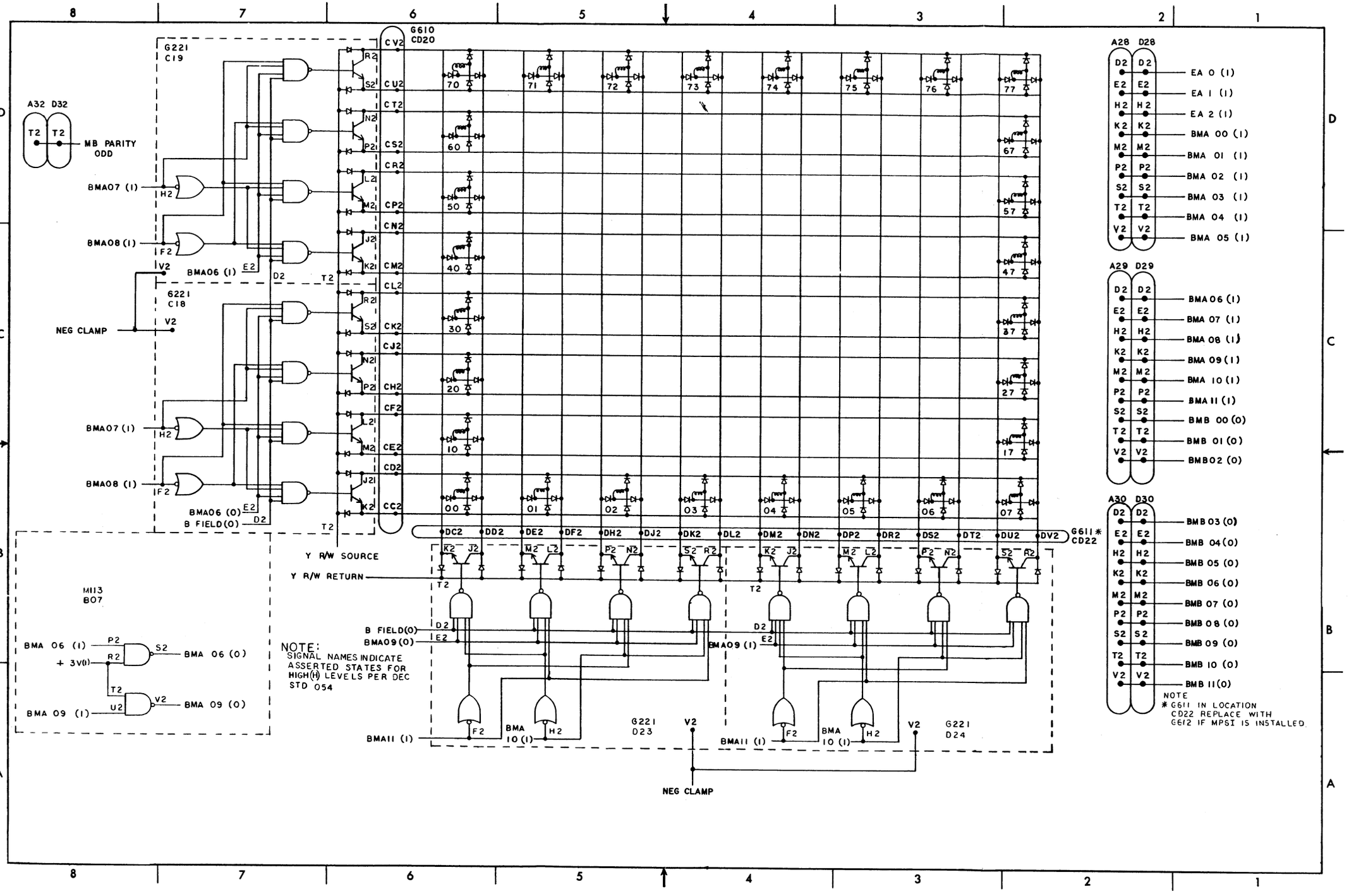
D-BS-MM8I-A-1 Memory Control



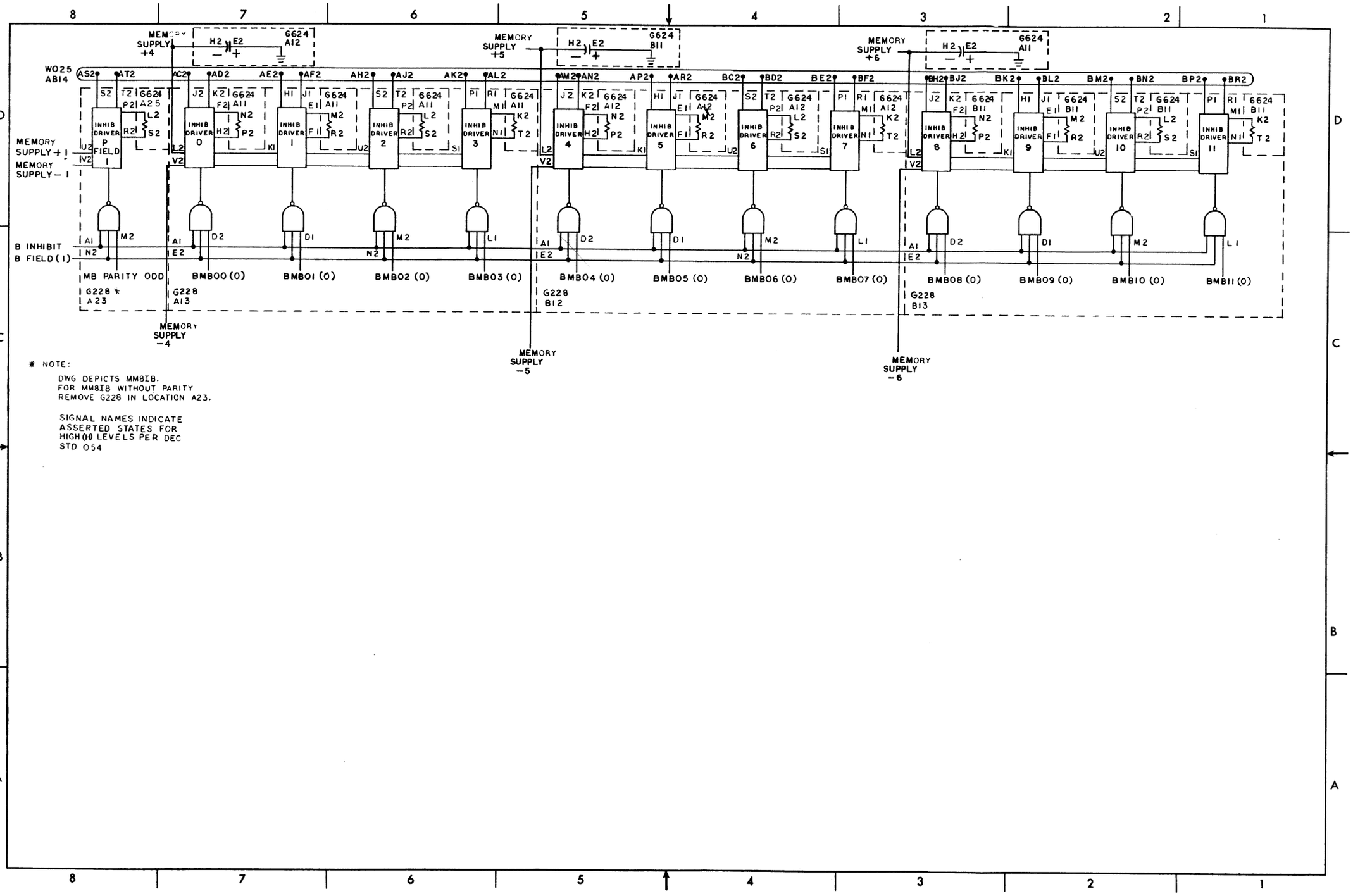
D-BS-MM8I-A-2 Sense Amplifiers and Inhibit Drivers



D-BS-MM8I-A-3 X Axis Selection, Field 0



D-BS-MM8I-A-4 Y Axis Selection, Field 0

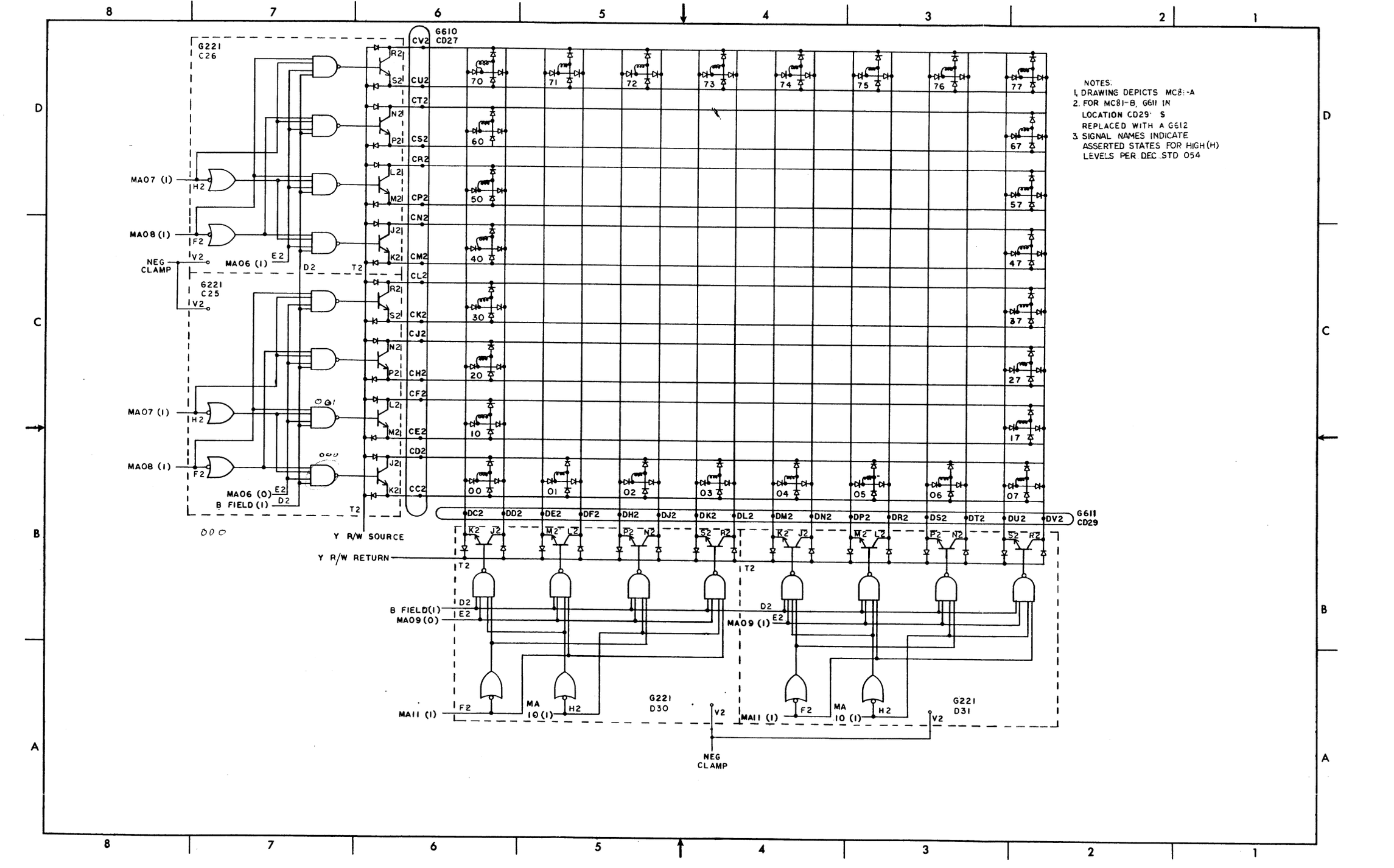


* NOTE:

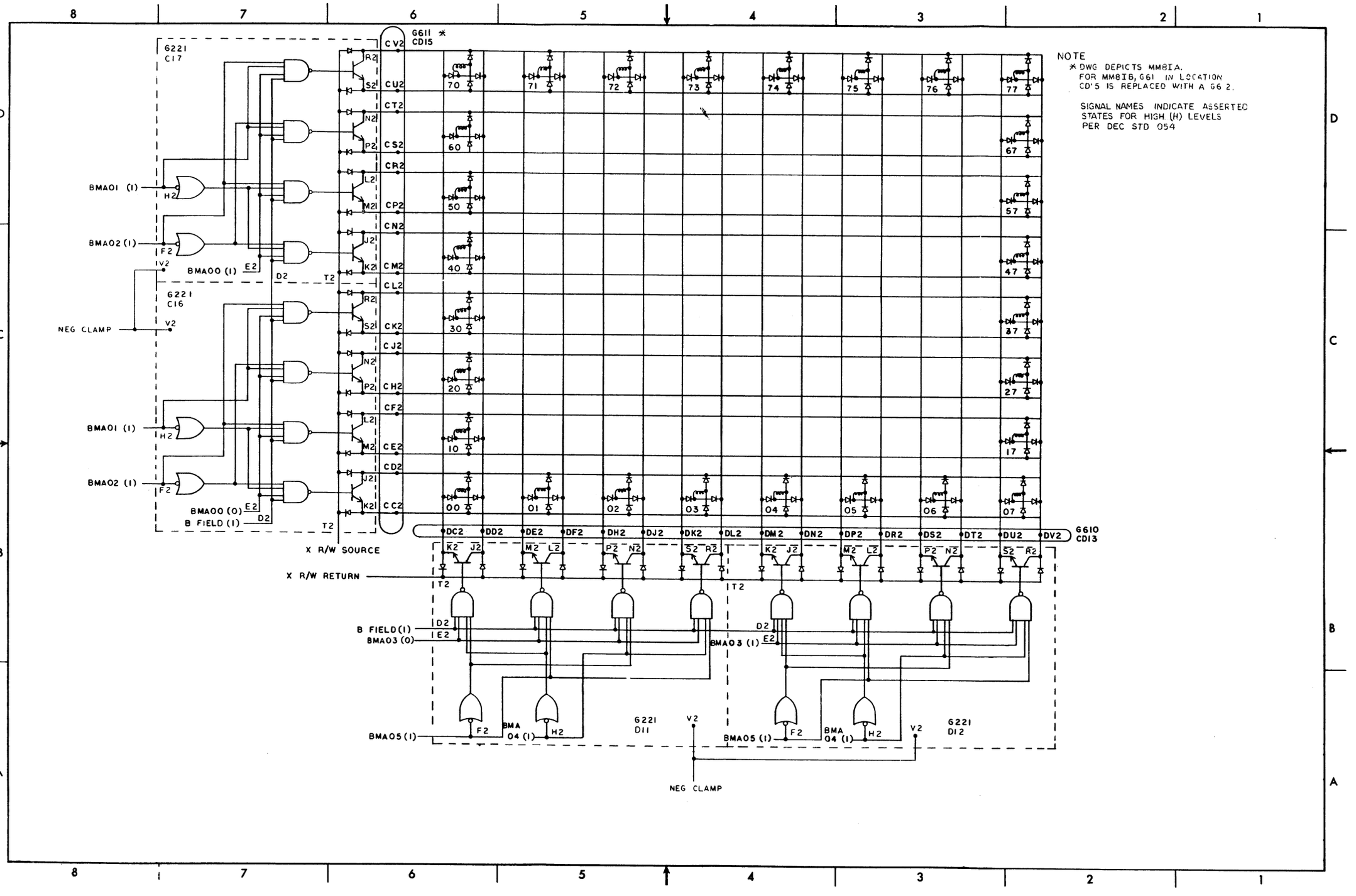
DWG DEPICTS MM8IB.
FOR MM8IB WITHOUT PARITY
REMOVE G228 IN LOCATION A23.

SIGNAL NAMES INDICATE
ASSERTED STATES FOR
HIGH (H) LEVELS PER DEC
STD 054

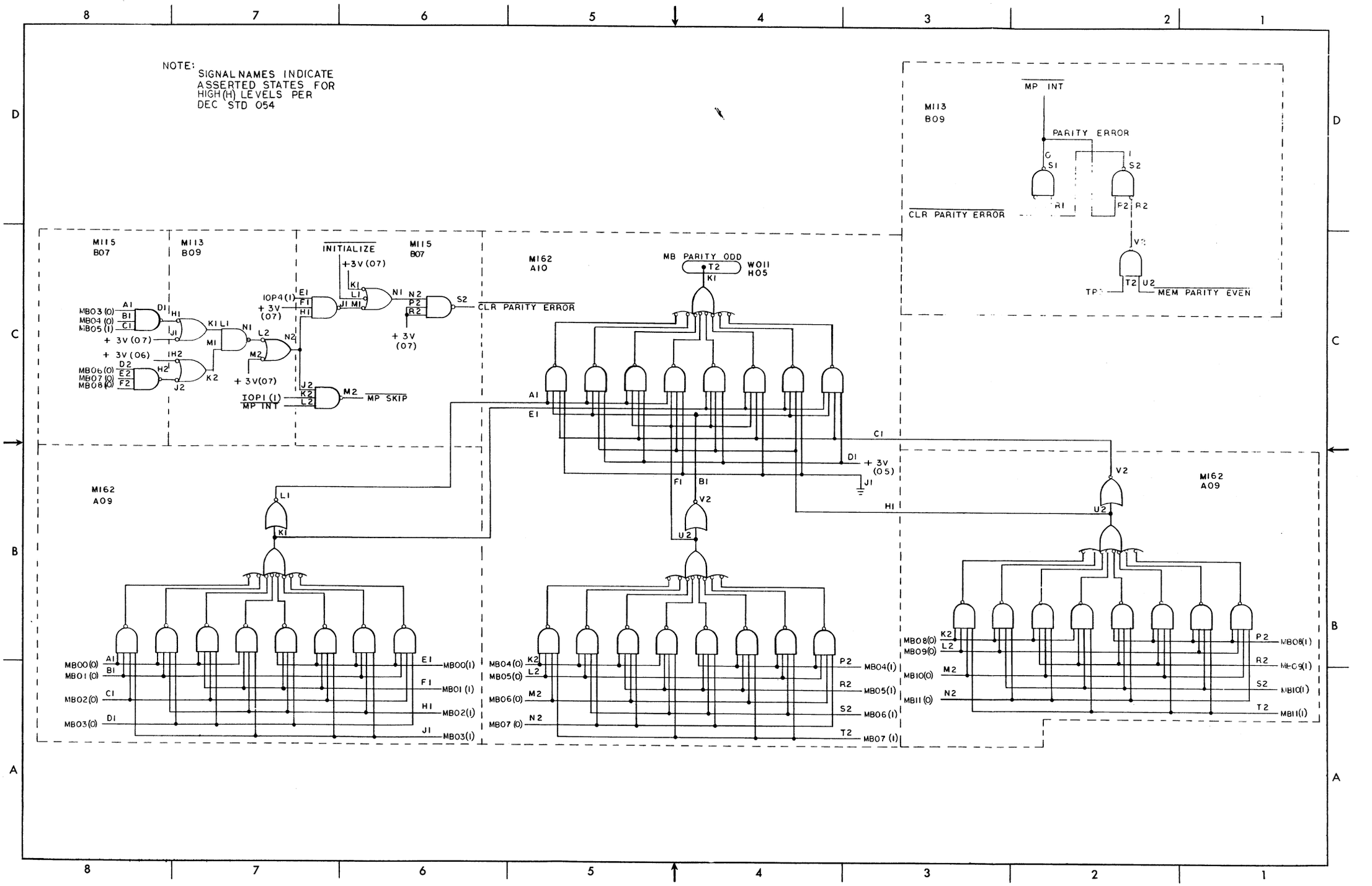
D-BS-MM8I-B-1 Inhibit Drivers, Field 1



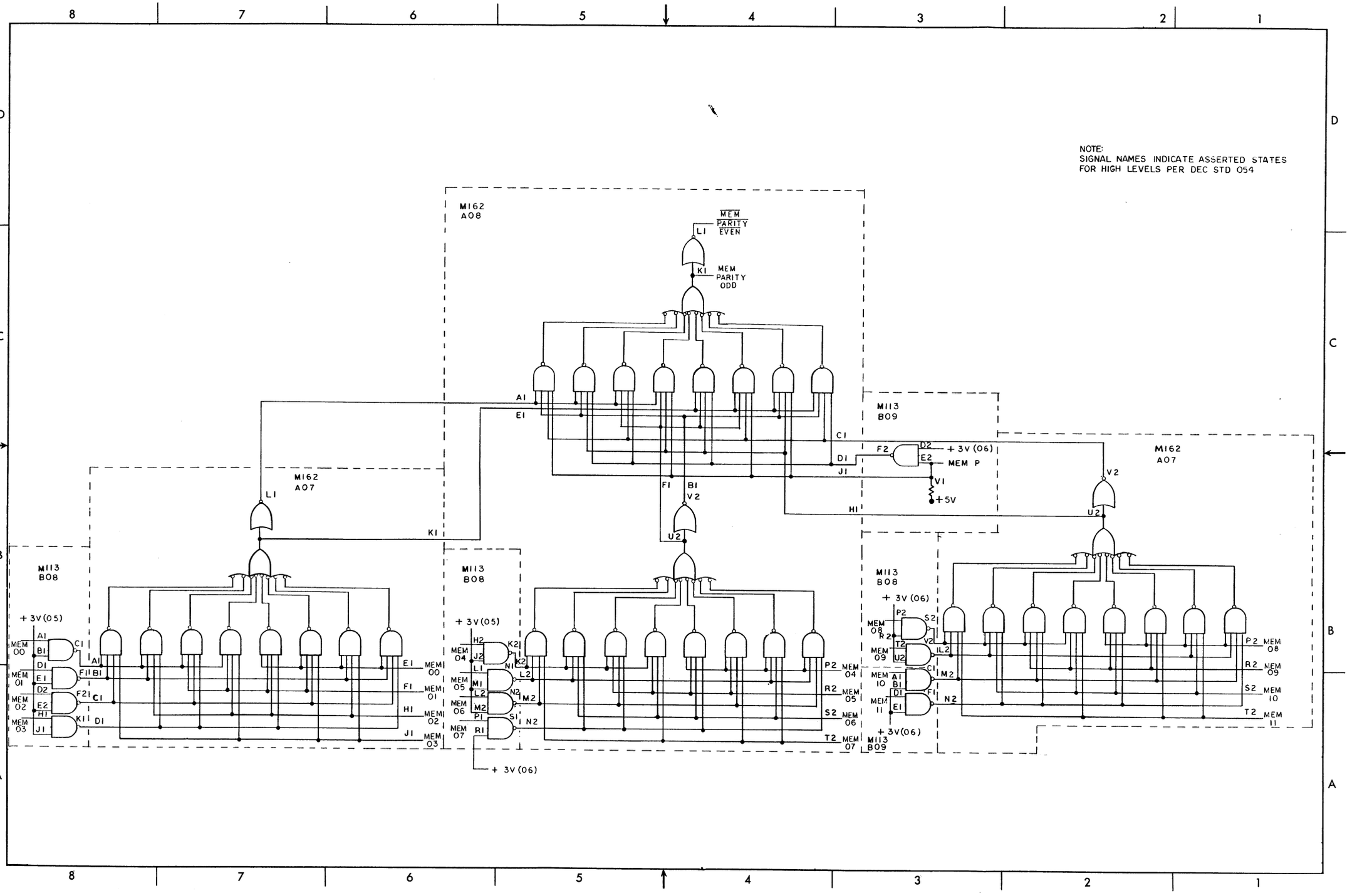
D-BS-MM8I-B-2 X Axis Selection, Field 1



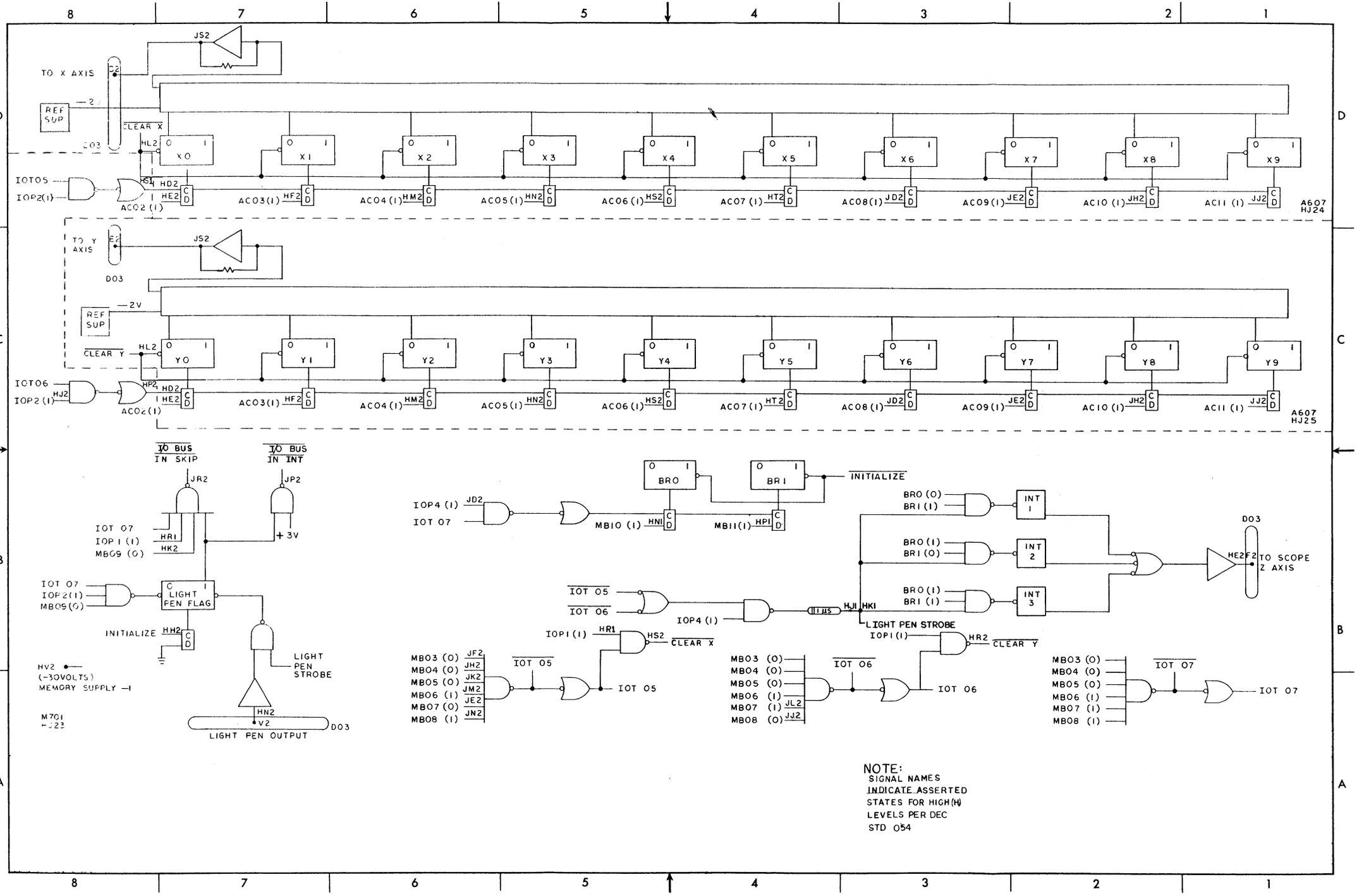
D-BS-MM8I-B-3 Y Axis Selection, Field 1



D-BS-MP8I-0-1 Memory Parity Option (Sheet 1)

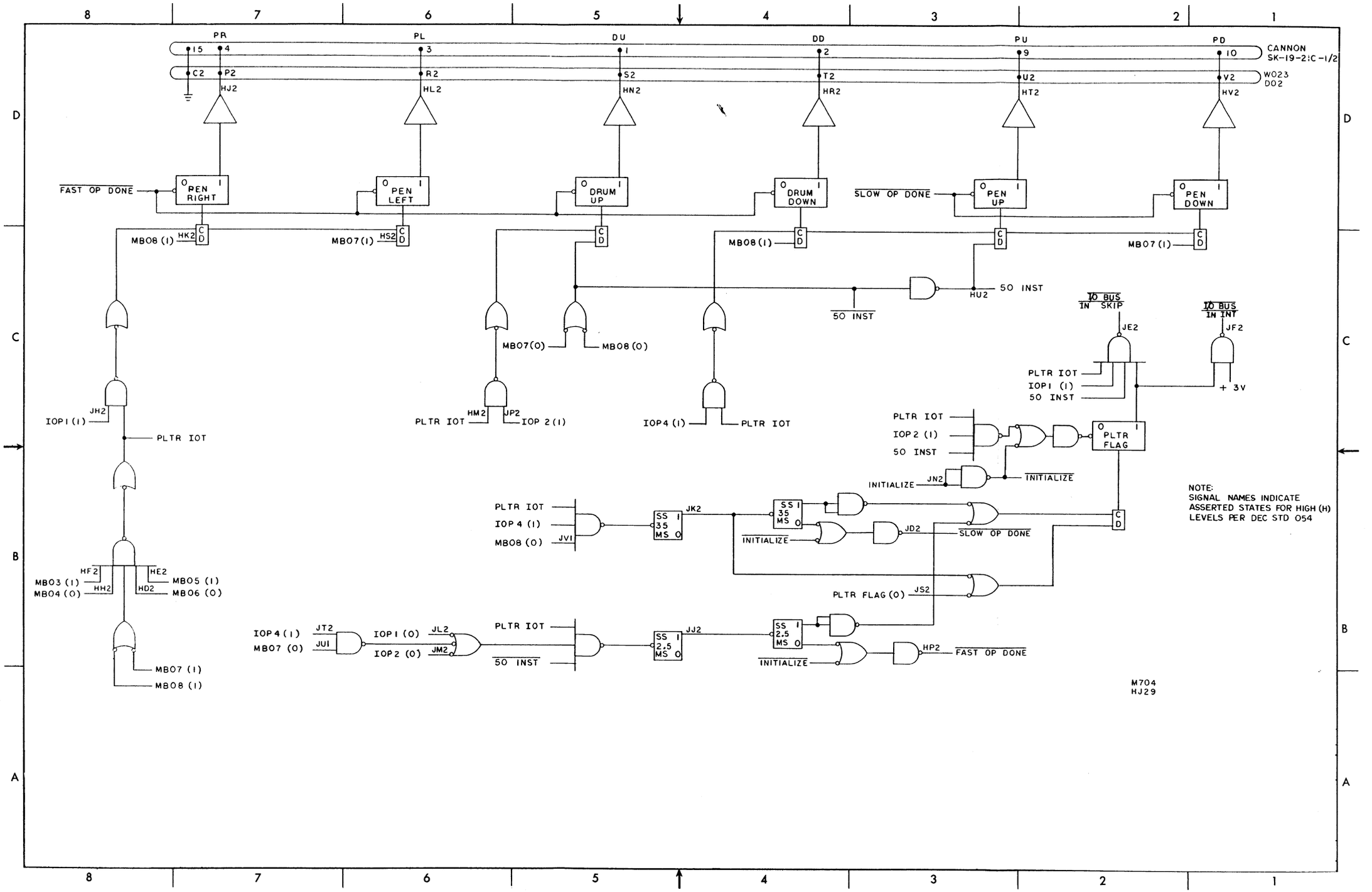


D-BS-MP8I-0-1 Memory Parity Option (Sheet 2)



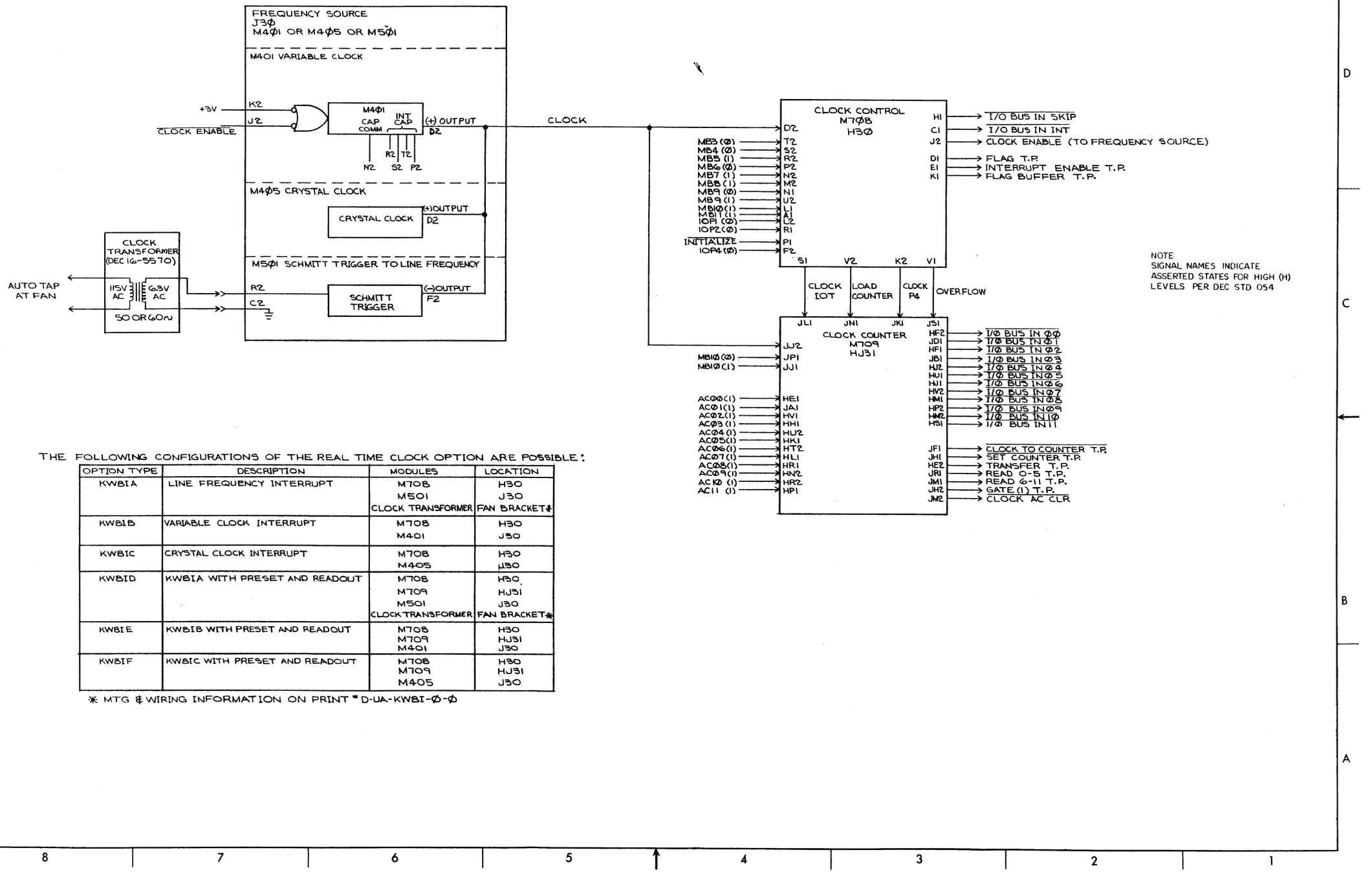
NOTE:
SIGNAL NAMES
INDICATE ASSERTED
STATES FOR HIGH (H)
LEVELS PER DEC
STD 054

D-BS-VC8I-0-1 Display Control



D-BS-VP8I-0-1 Plotter Control

I-VP5

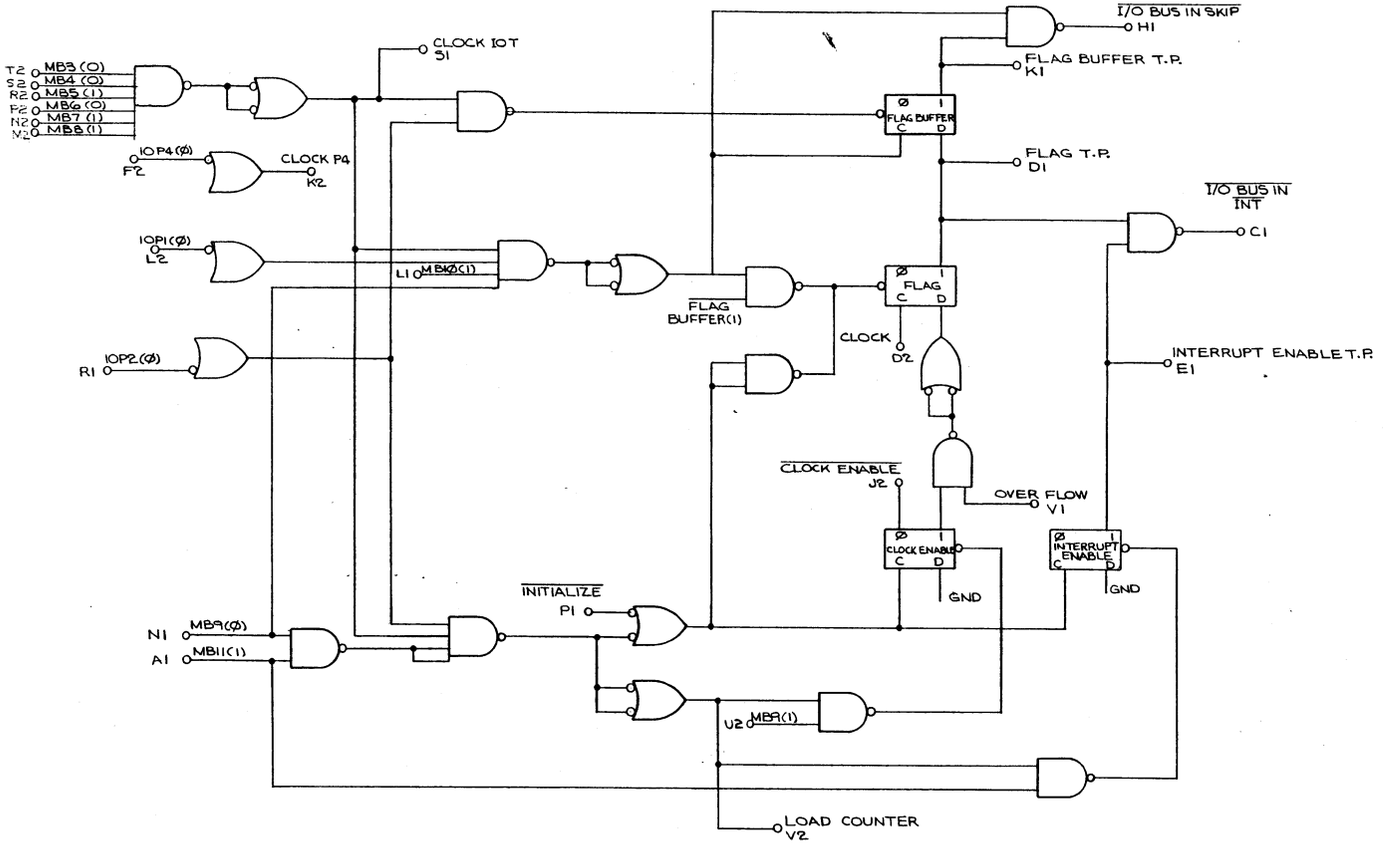


THE FOLLOWING CONFIGURATIONS OF THE REAL TIME CLOCK OPTION ARE POSSIBLE:

OPTION TYPE	DESCRIPTION	MODULES	LOCATION
KW8IA	LINE FREQUENCY INTERRUPT	M708 M501 CLOCK TRANSFORMER	H30 J30 FAN BRACKET*
KW8IB	VARIABLE CLOCK INTERRUPT	M708 M401	H30 J30
KW8IC	CRYSTAL CLOCK INTERRUPT	M708 M405	H30 J30
KW8ID	KW8IA WITH PRESET AND READOUT	M708 M709 M501 CLOCK TRANSFORMER	H30 HJ31 J30 FAN BRACKET*
KW8IE	KW8IB WITH PRESET AND READOUT	M708 M709 M401	H30 HJ31 J30
KW8IF	KW8IC WITH PRESET AND READOUT	M708 M709 M405	H30 HJ31 J30

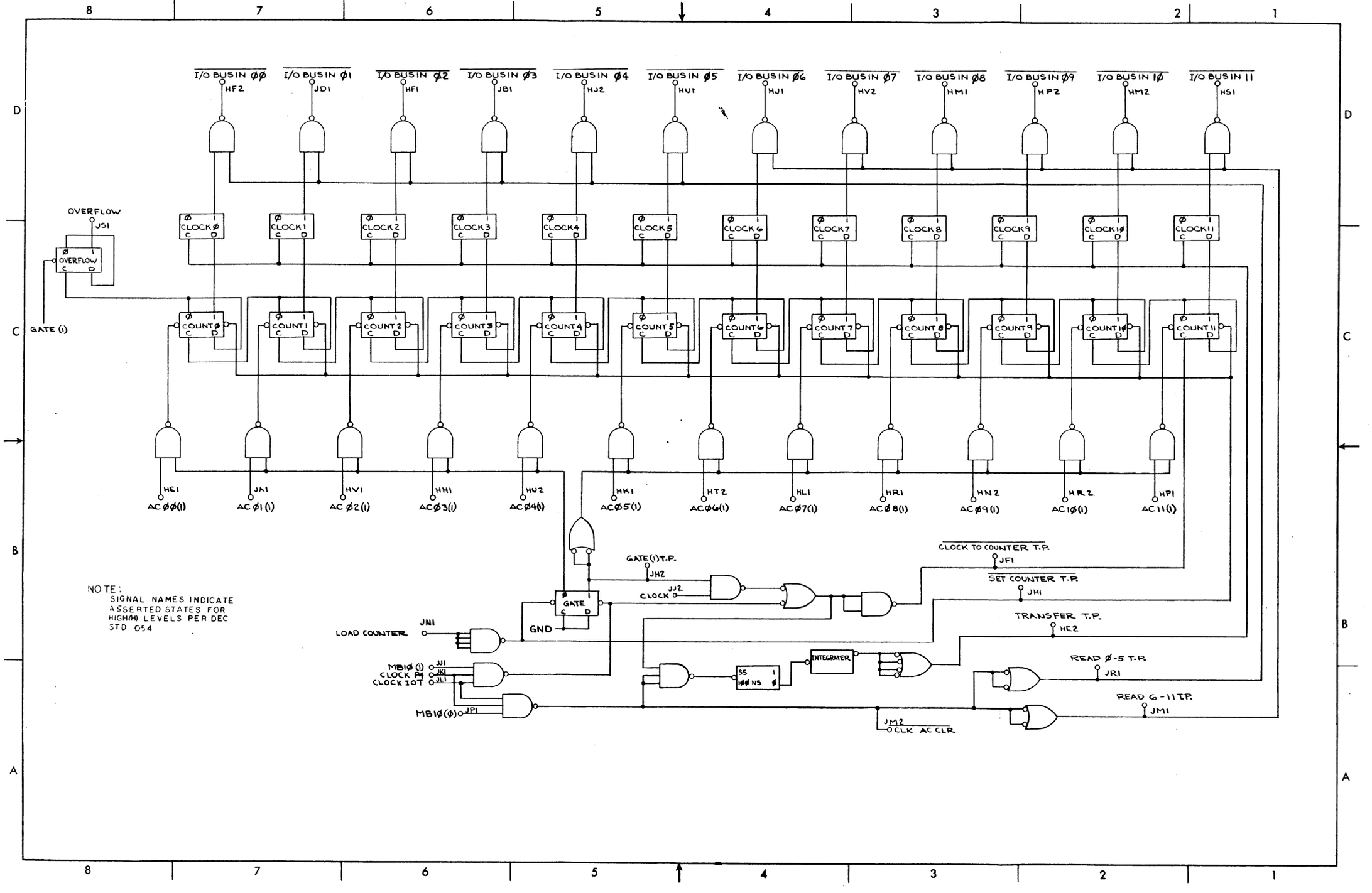
* MTG & WIRING INFORMATION ON PRINT *D-UA-KW8I-Ø-Ø

D-BS-KW8I-0-1 Real Time Clock Option

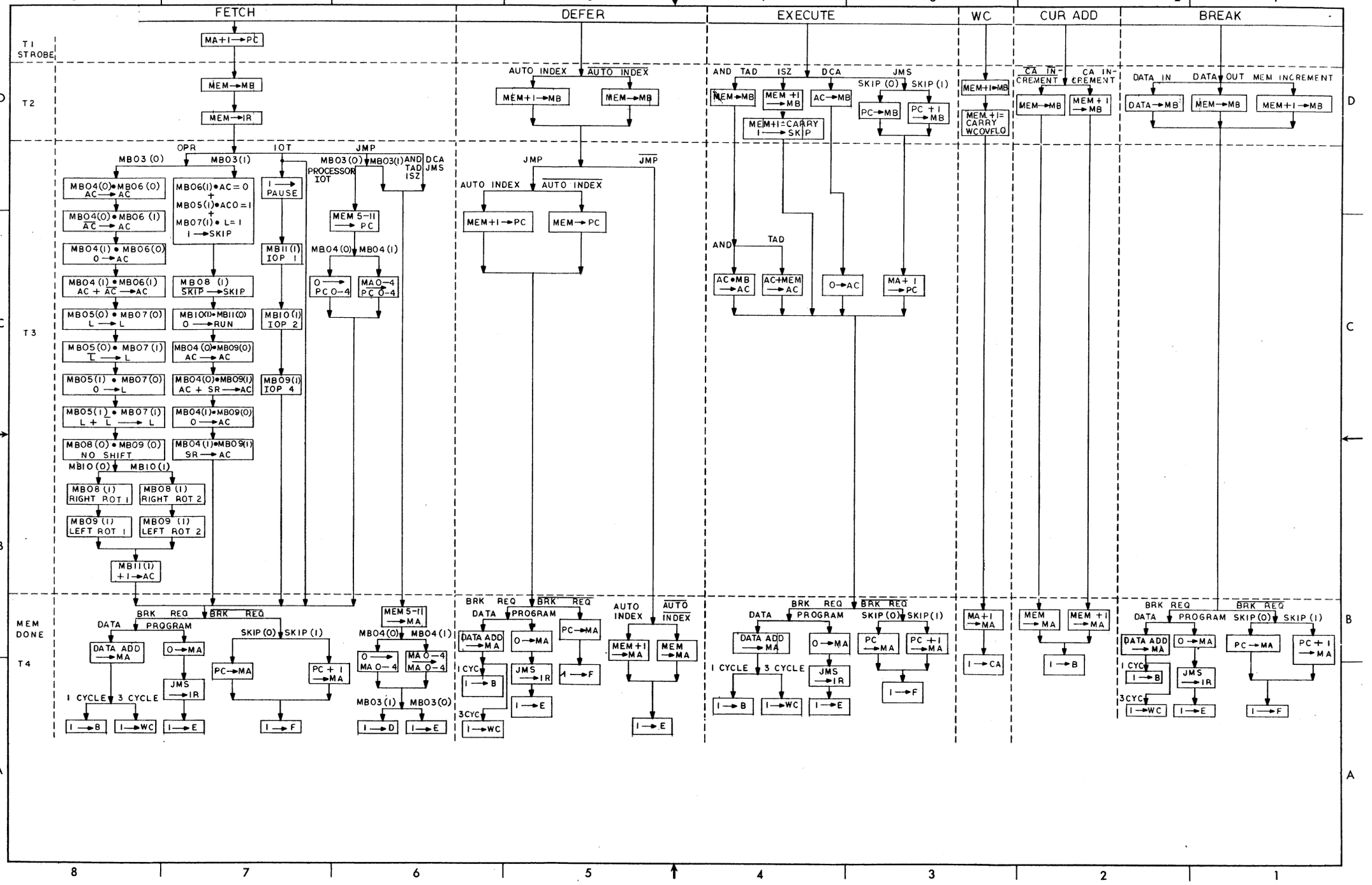


NOTE:
SIGNAL NAMES INDICATE ASSERTED STATES
FOR HIGH (H) LEVELS PER DEC STD 054

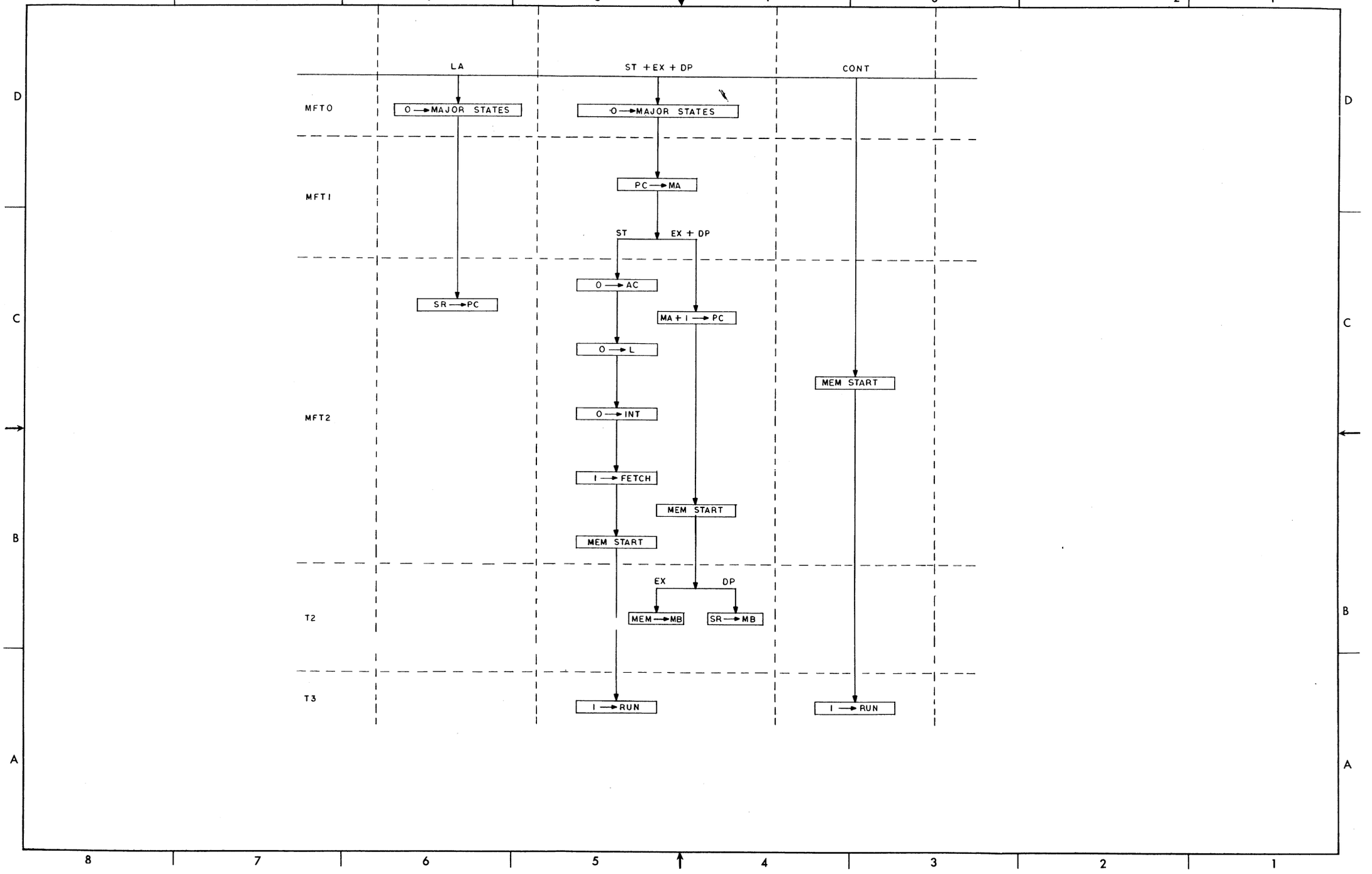
D-BS-KW8I-0-2 Clock Control M708



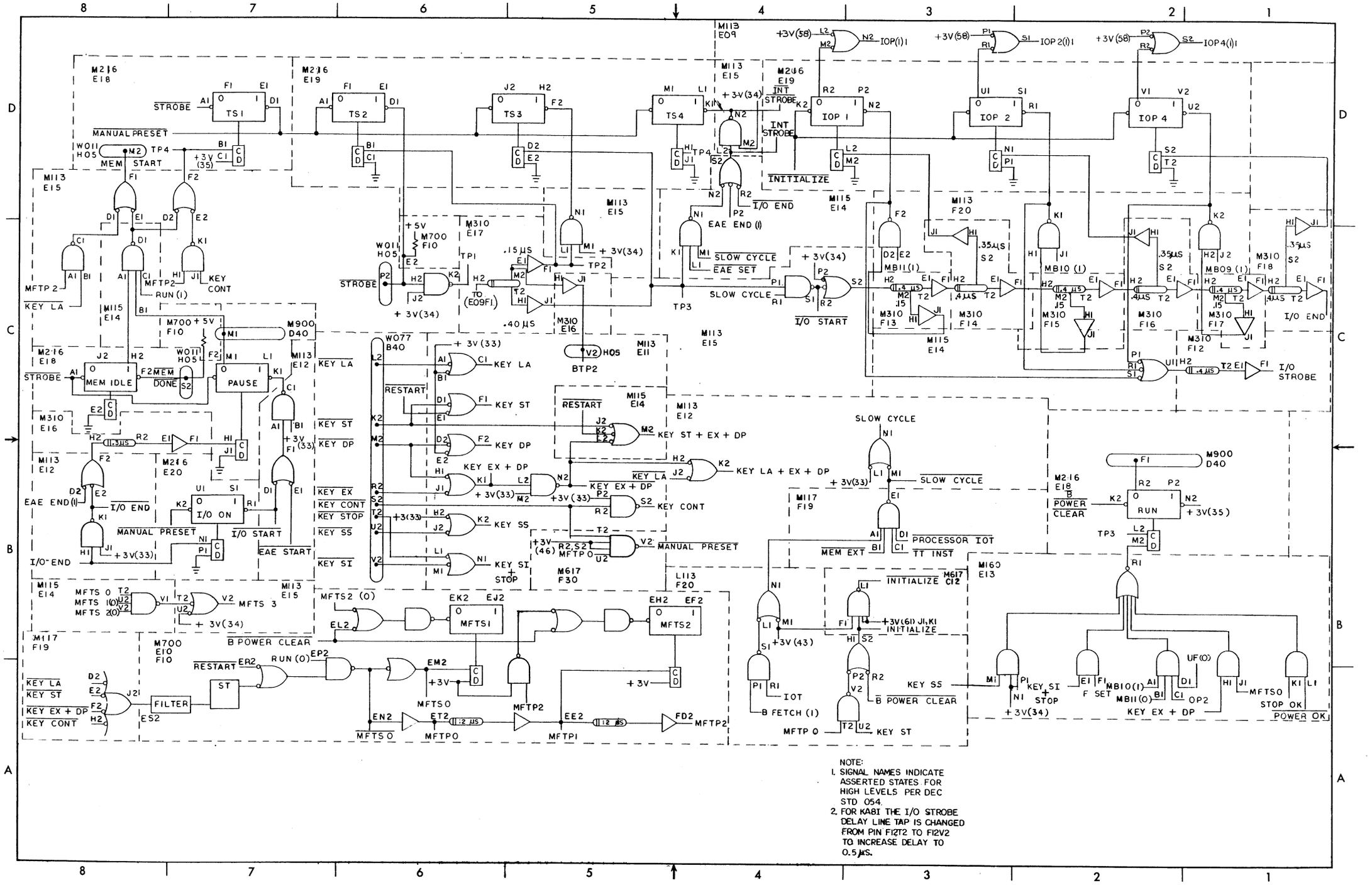
D-BS-KW8I-0-3 Clock Counter M709



D-FD-8I-0-1 Flow Diagram (Sheet 1)

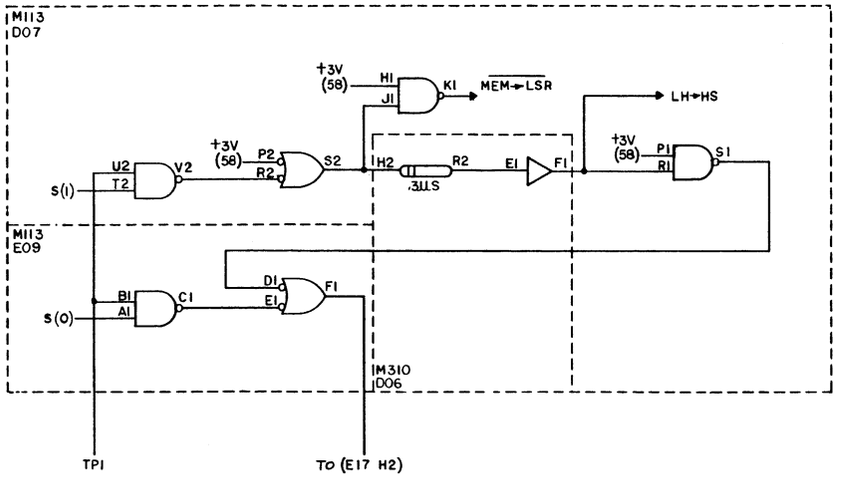


D-FD-8I-0-1 Flow Diagram (Sheet 2)

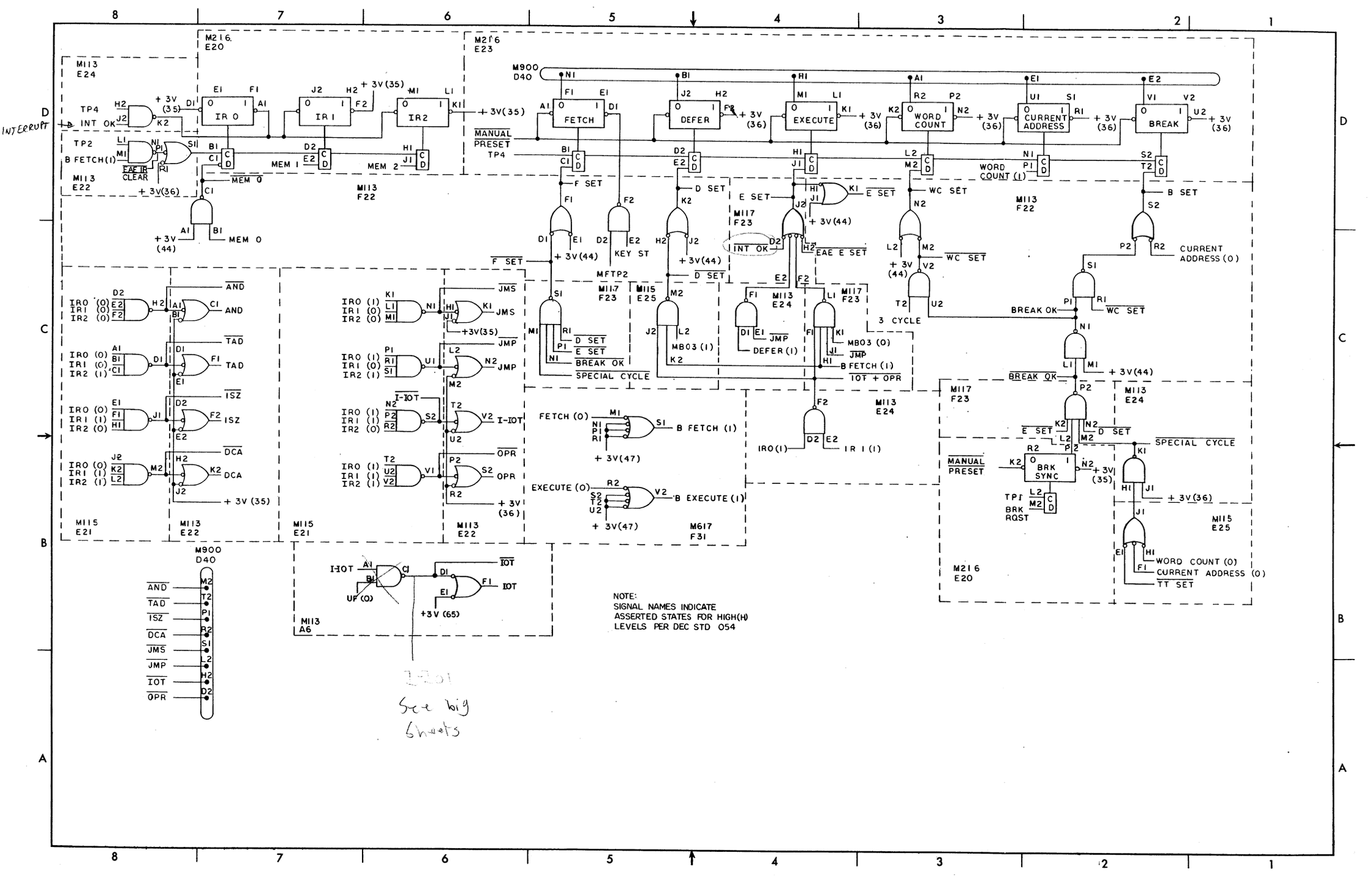


NOTE:
1. SIGNAL NAMES INDICATE ASSERTED STATES FOR HIGH LEVELS PER DEC STD 054.
2. FOR KA8I THE I/O STROBE DELAY LINE TAP IS CHANGED FROM PIN F12T2 TO F12V2 TO INCREASE DELAY TO 0.5 µS.

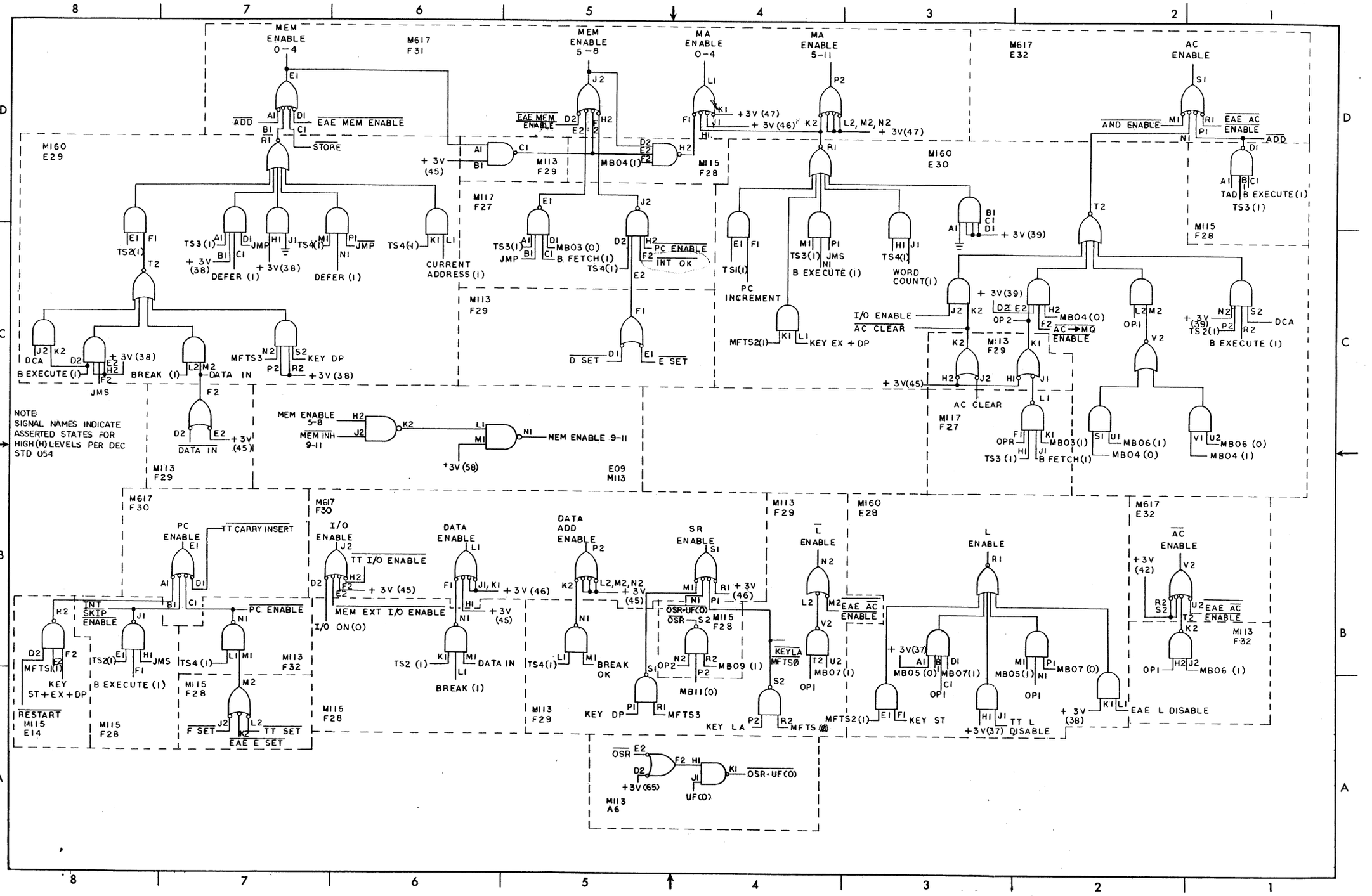
D-BS-8I-0-2 Timing Manual Functions and Run (Sheet 1)



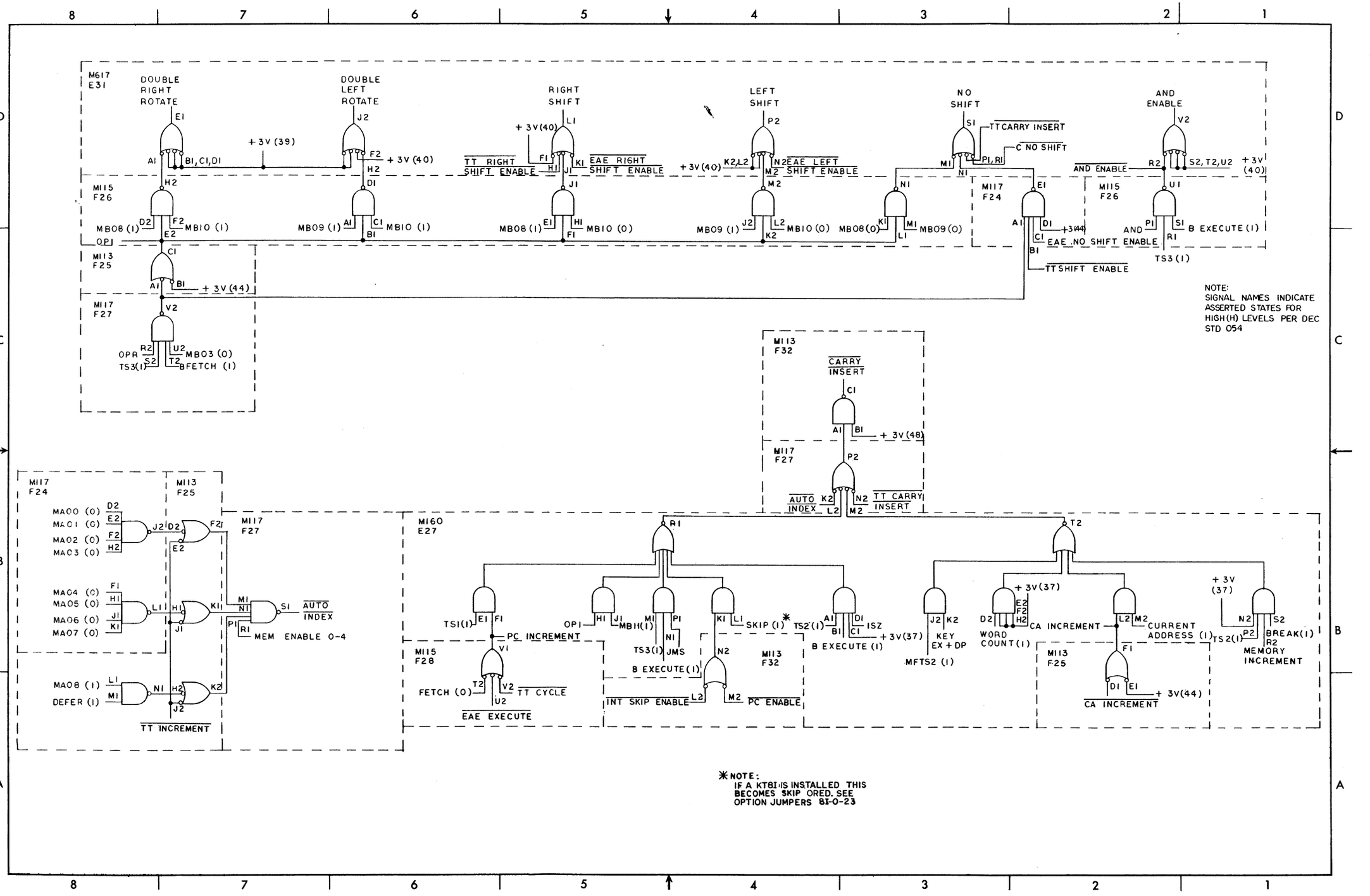
D-BS-81-0-2 Timing Manual Functions and Run
(Sheet 2)



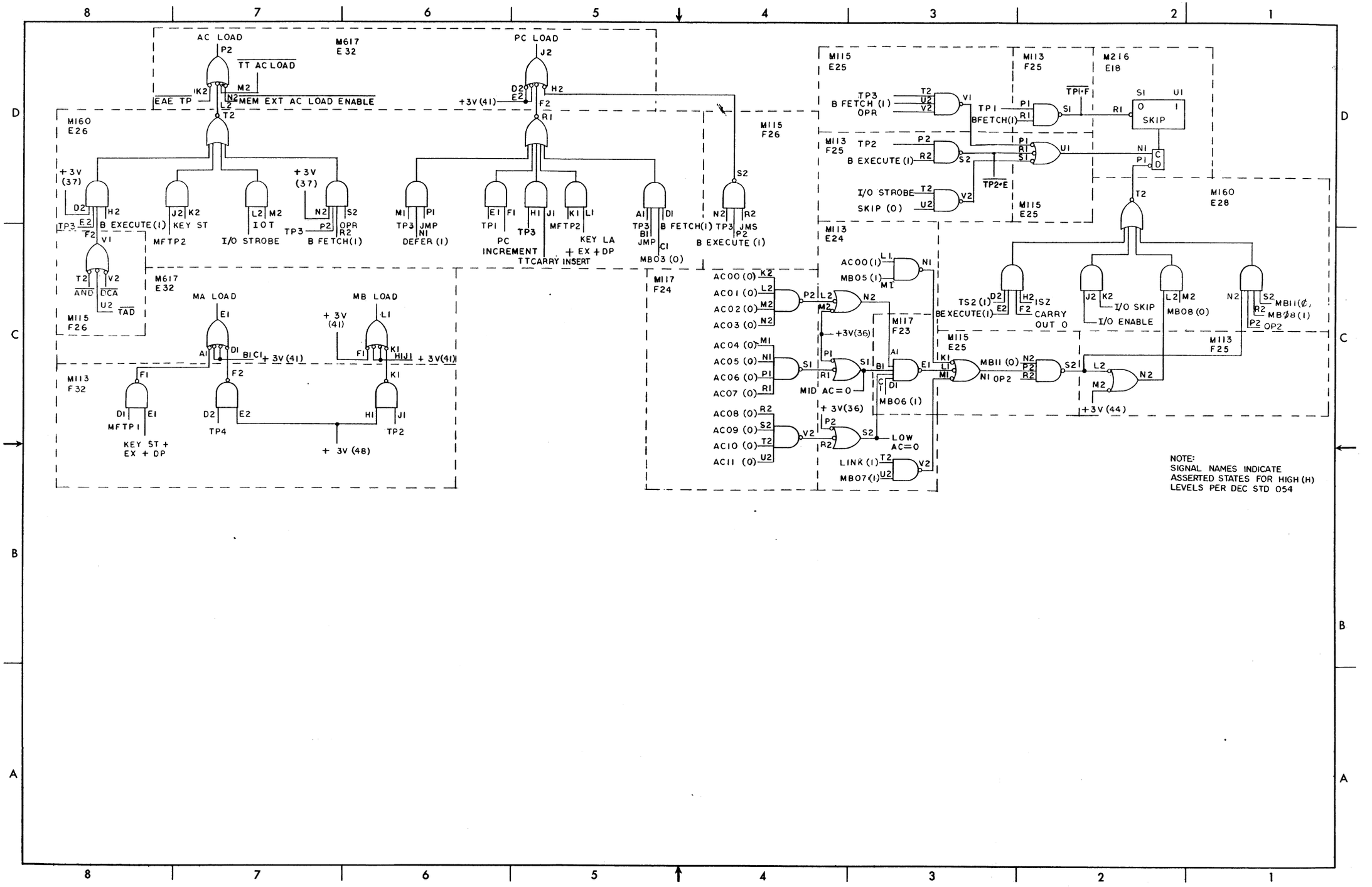
D-BS-8I-0-3 Instruction Register and Major States



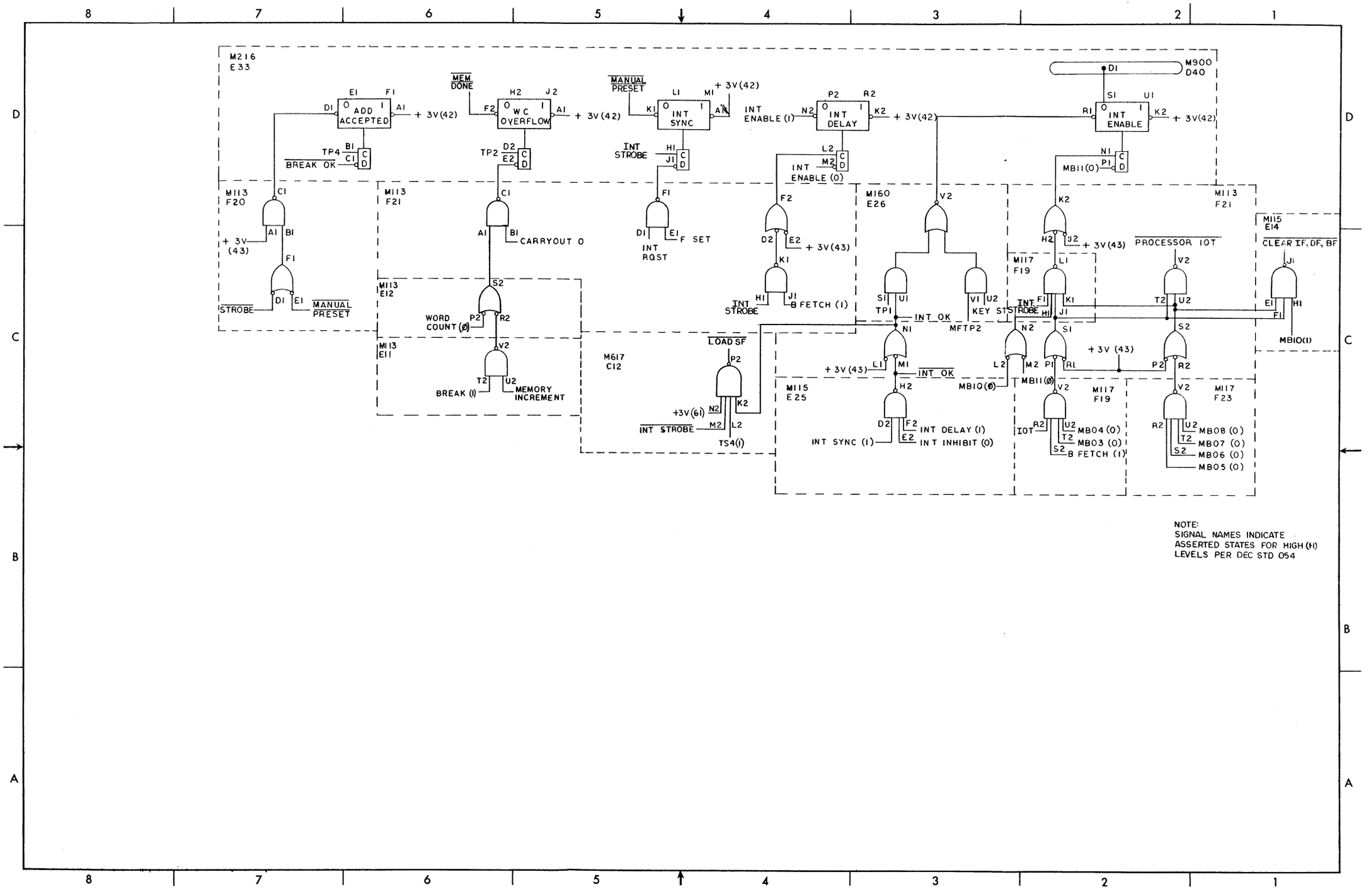
D-BS-8I-0-4 Register Output Gate Control



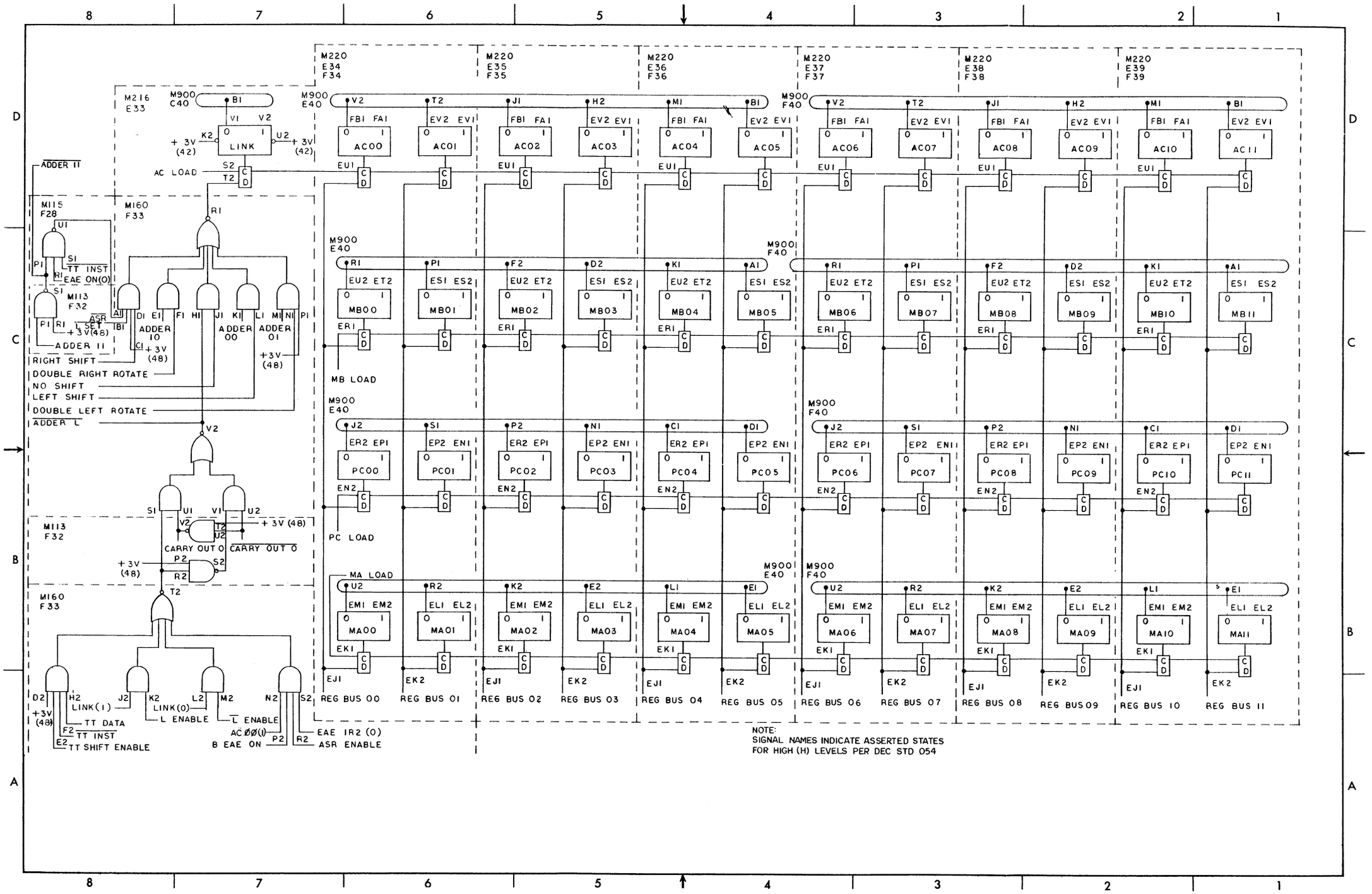
D-BS-8I-0-5 Shift and Carry Gate Control



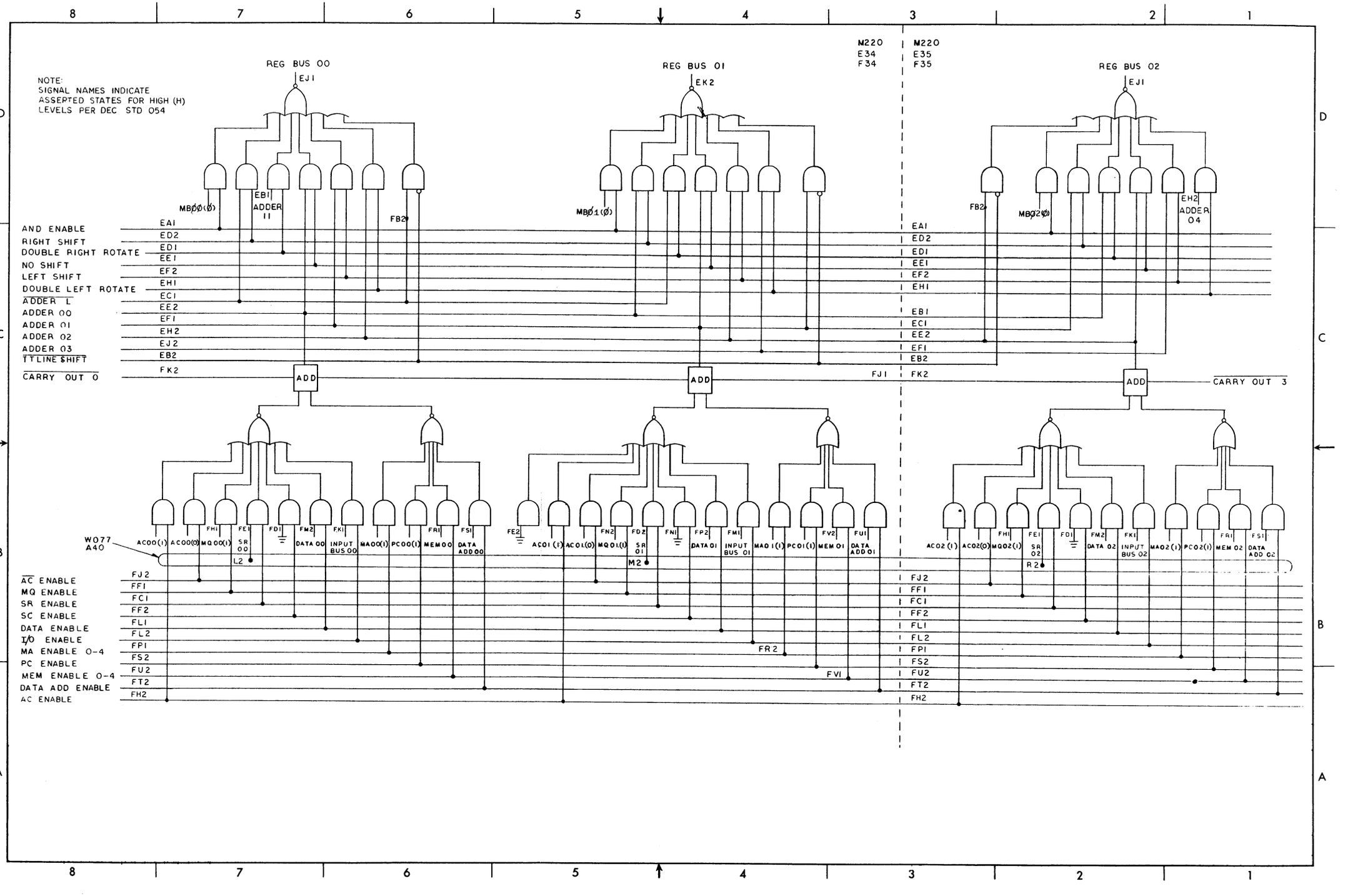
D-BS-8I-0-6 Register Input Control and Skip



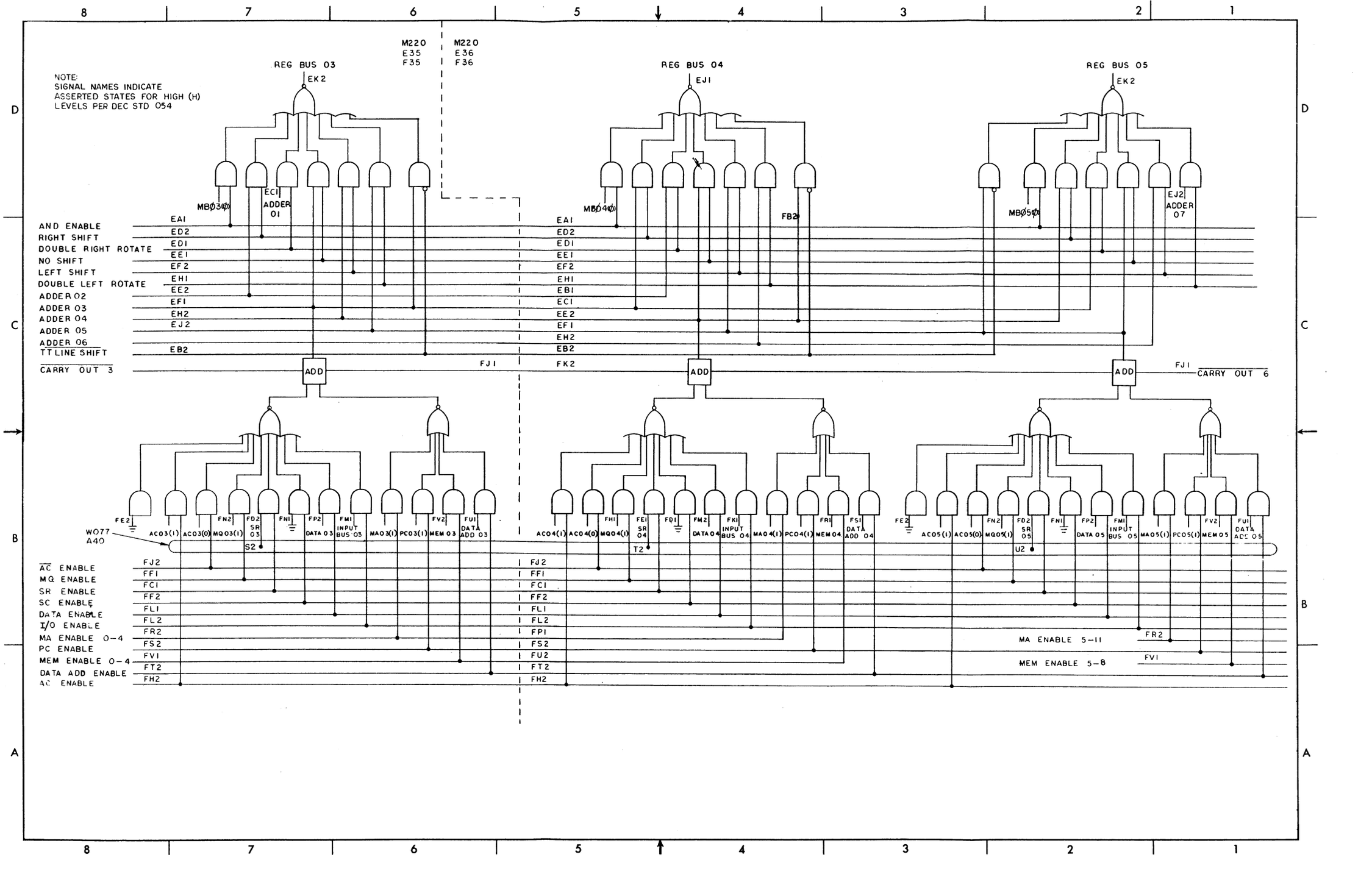
D-BS-8I-0-7 Interrupt and Break Control



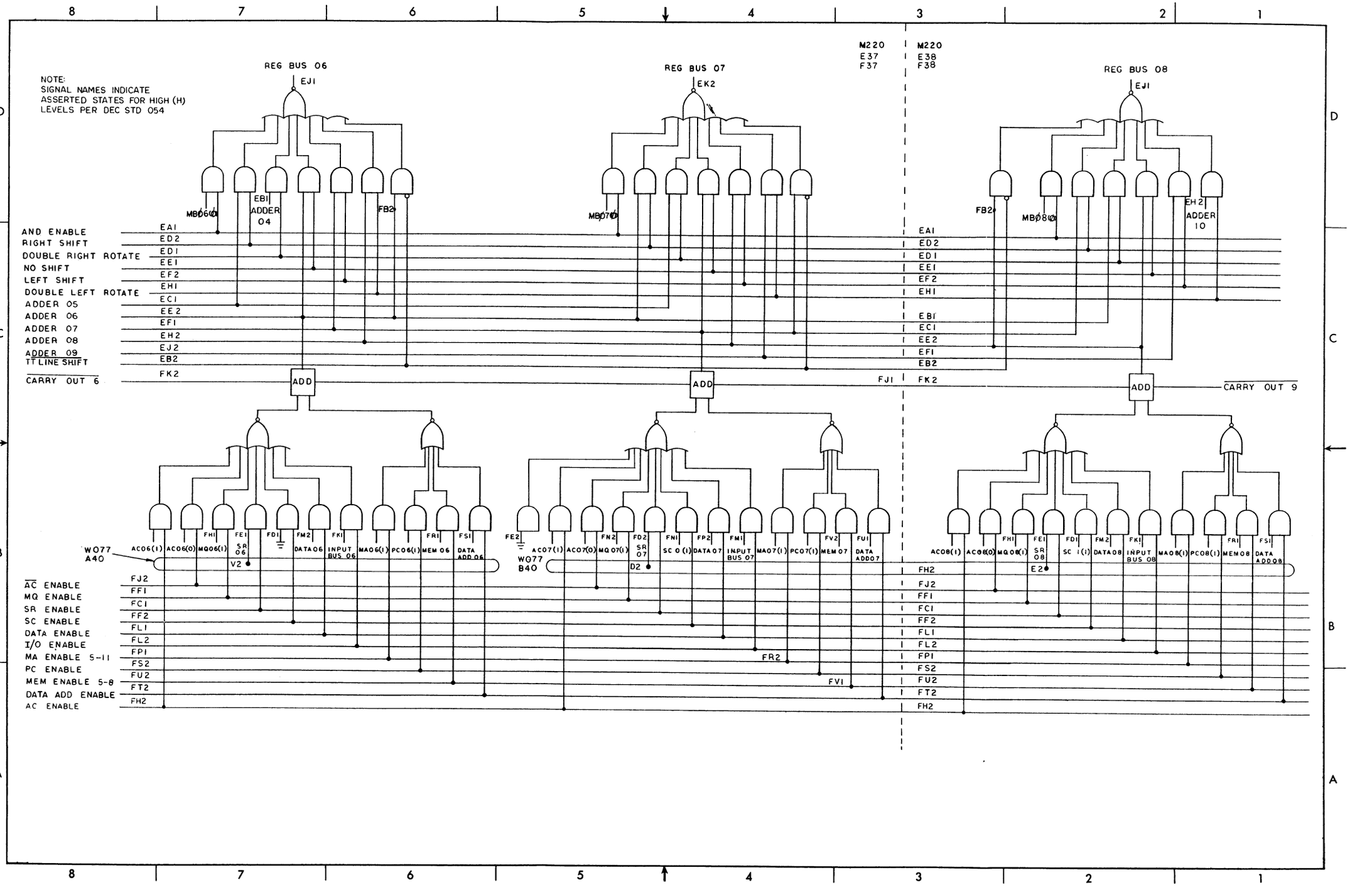
D-BS-8I-0-8 Major Registers



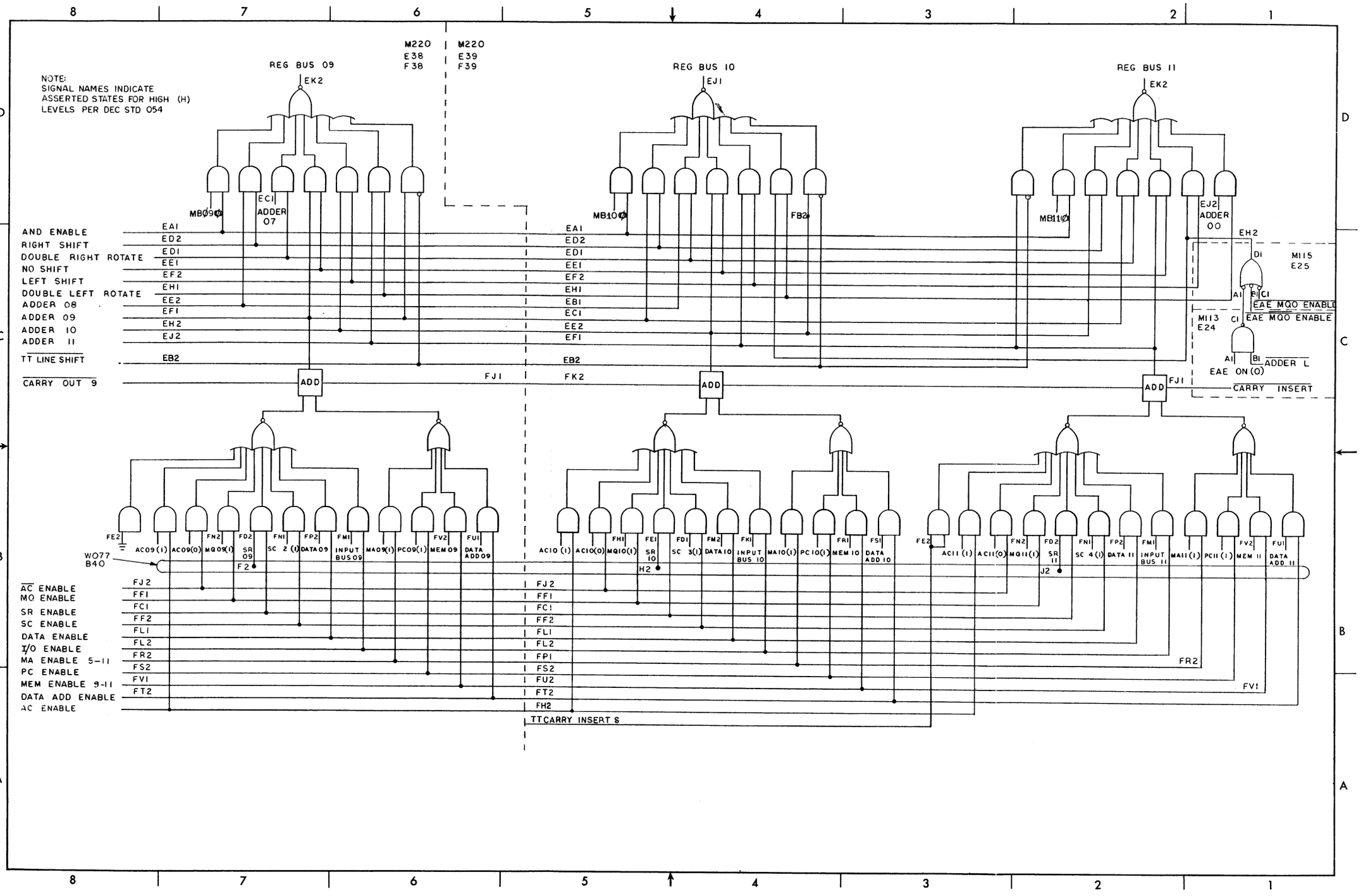
D-BS-8I-0-9 Major Registers Gating (Sheet 1)



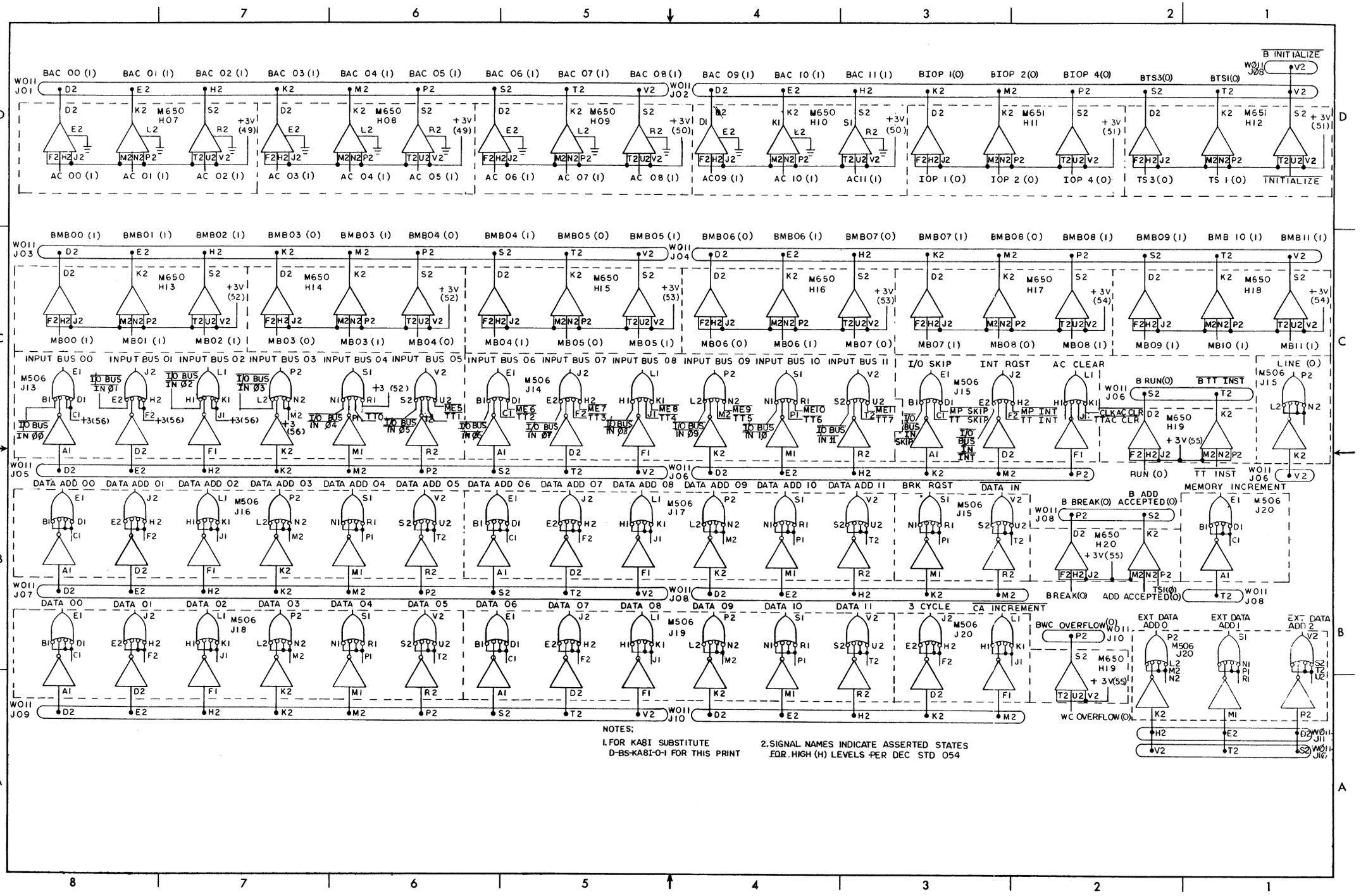
D-BS-8I-0-9 Major Registers Gating (Sheet 2)



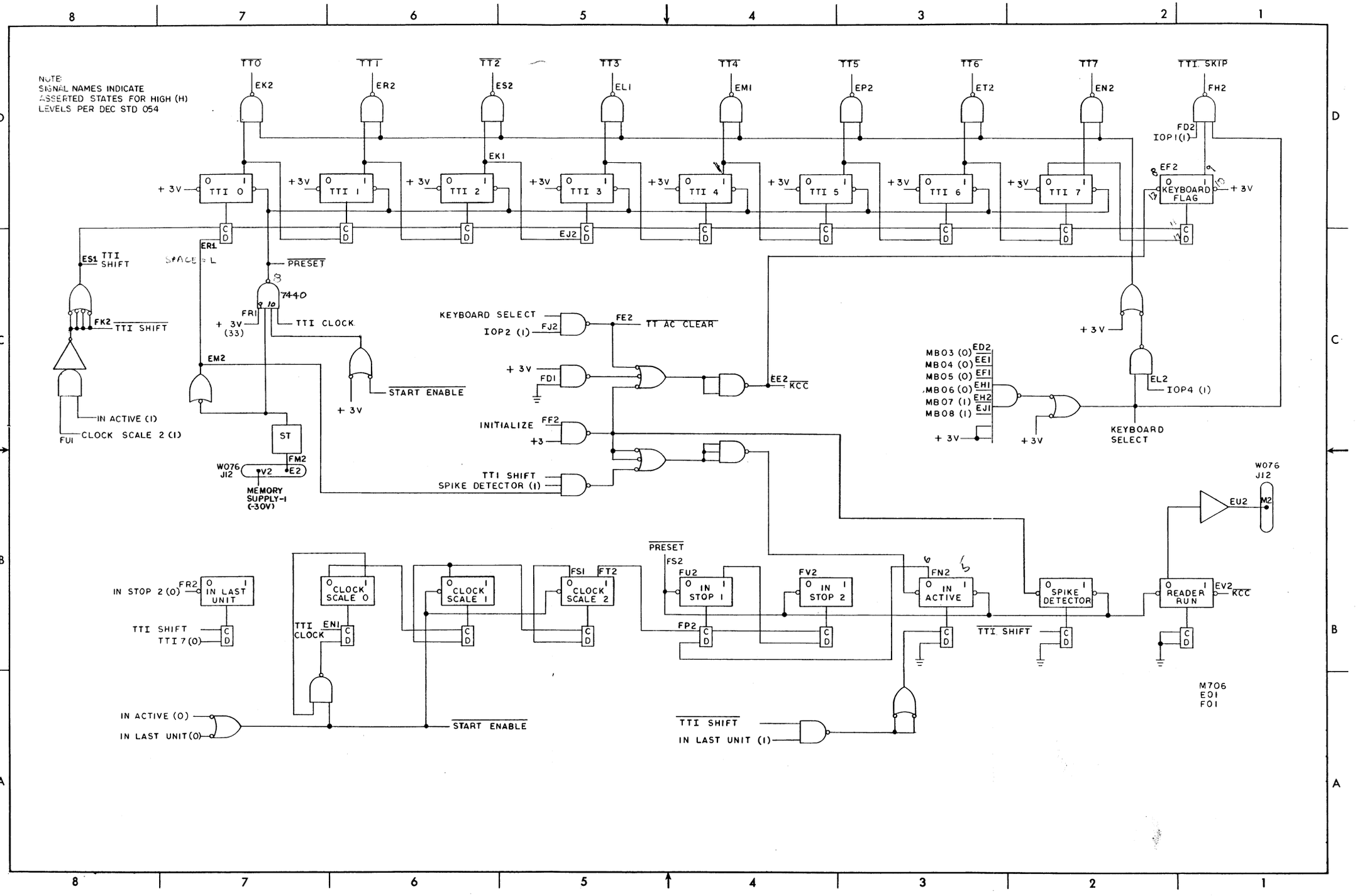
D-BS-8I-0-9 Major Registers Gating (Sheet 3)

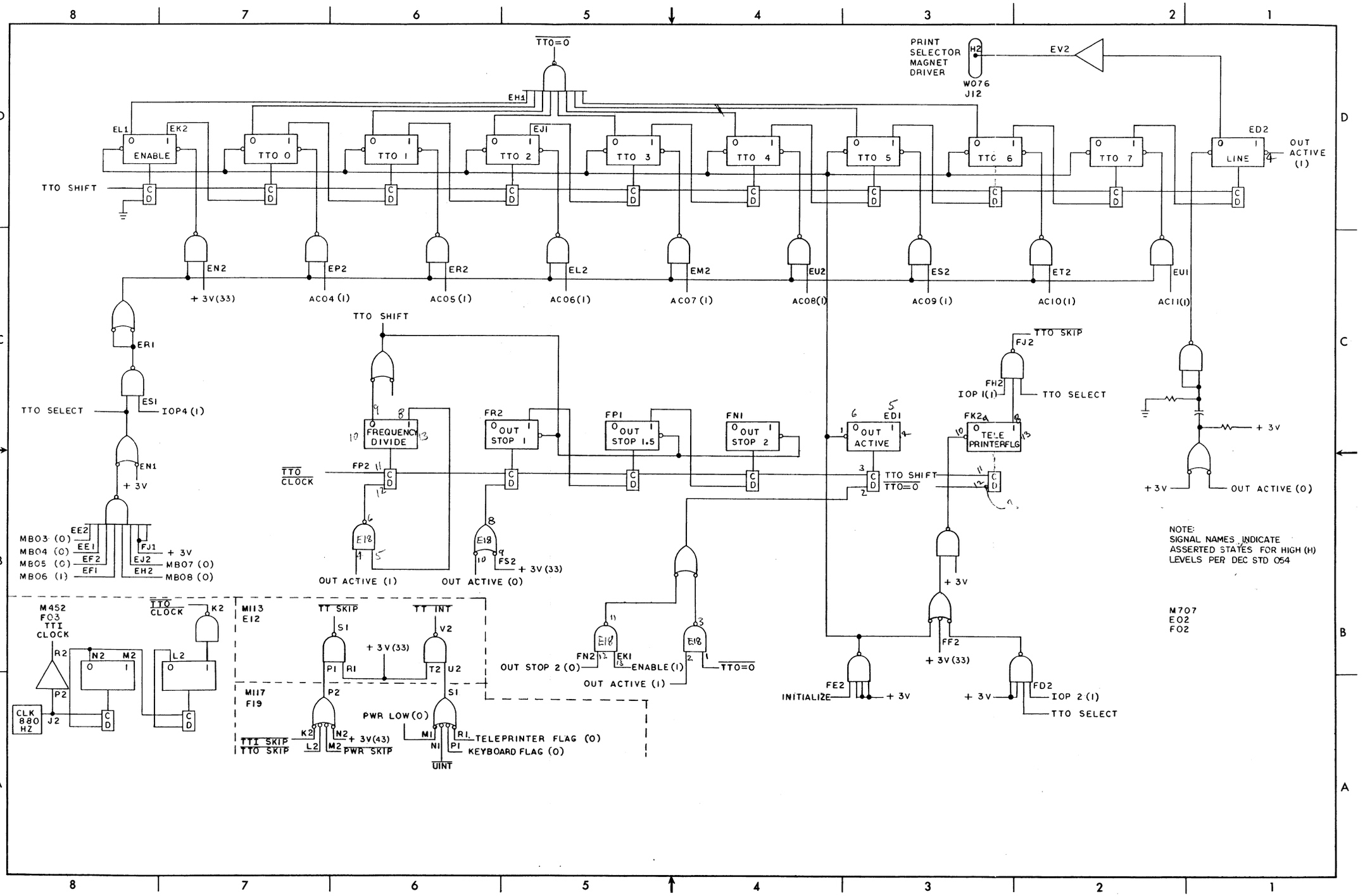


D-BS-8I-0-9 Major Registers Gating (Sheet 4)

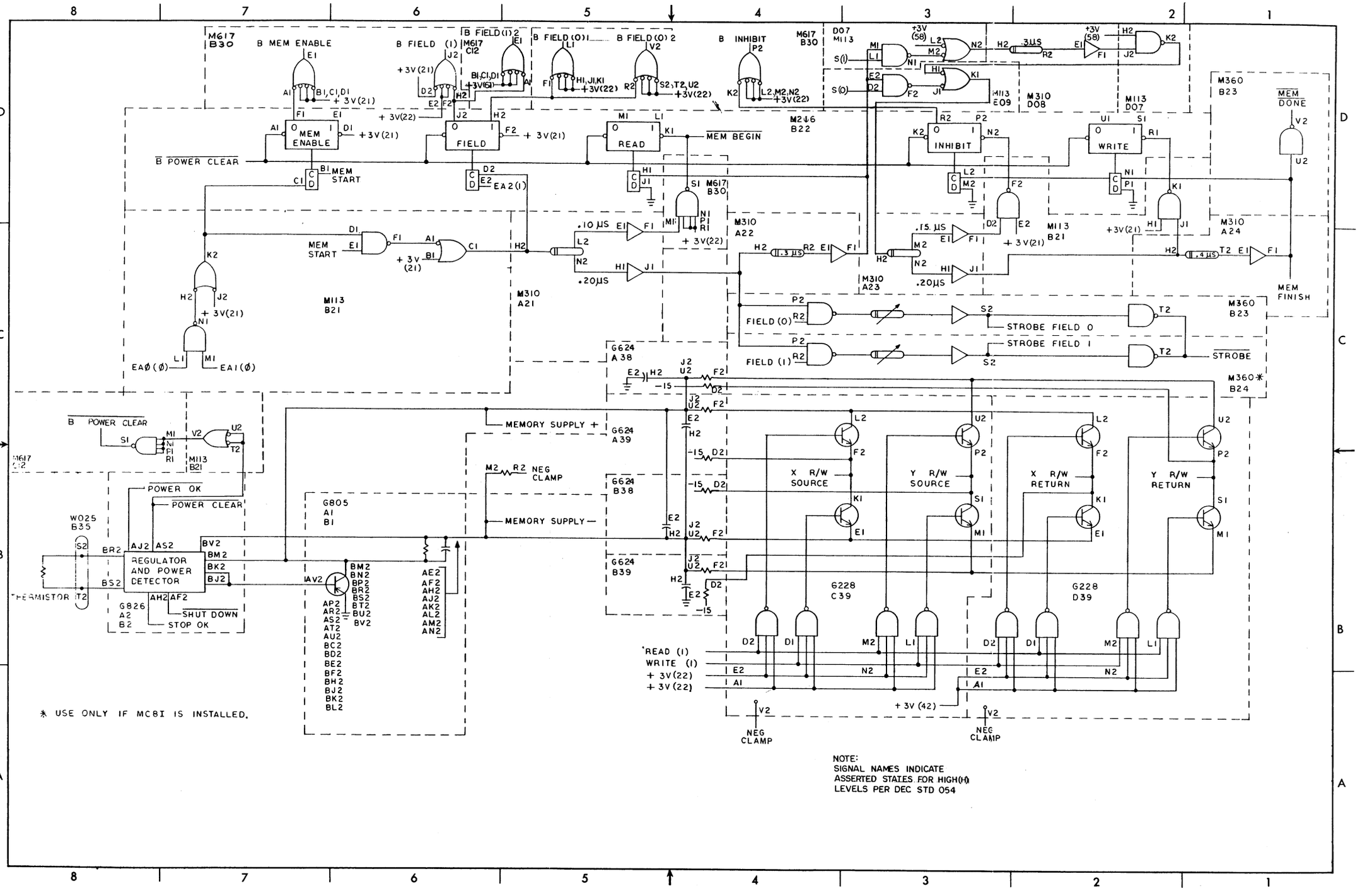


D-BS-8I-0-10 I/O Level Converter

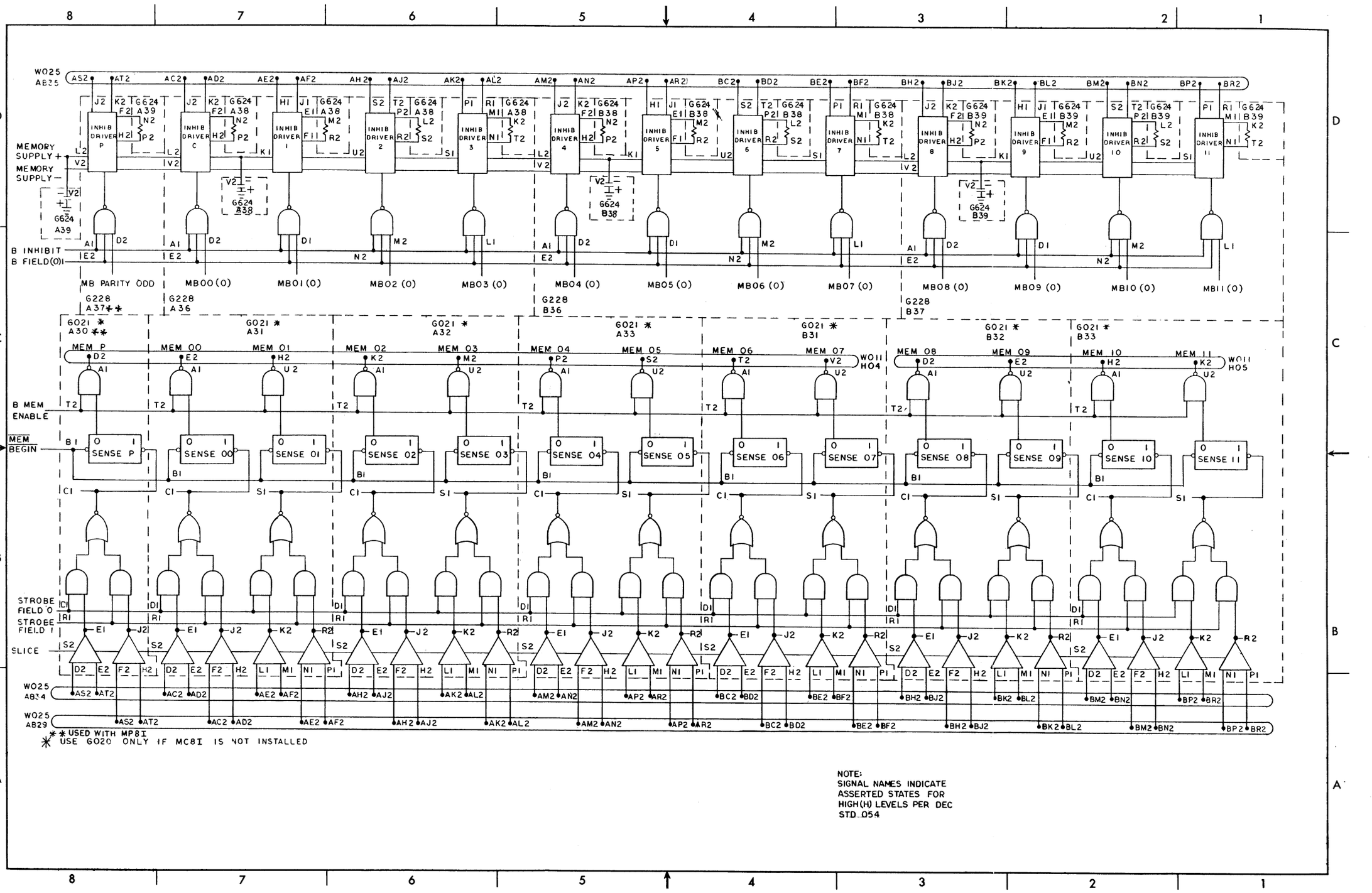

NOTE:
SIGNAL NAMES INDICATE
ASSERTED STATES FOR HIGH (H)
LEVELS PER DEC STD 054
TT0
TT1
TT2
TT3
TT4
TT5
TT6
TT7
TTI SKIP
EK2
ER2
ES2
EL1
EM1
EP2
ET2
EN2
FH2
FD2
IOP1(1)
EK1
EF2
KEYBOARD FLAG
+3V
TTI 0
TTI 1
TTI 2
TTI 3
TTI 4
TTI 5
TTI 6
TTI 7
C D
EJ2
ER1
ES1 TTI SHIFT
SPACE = L
PRESET
7440
FR1
FK2 TTI SHIFT
TTI CLOCK
EM2
START ENABLE
IN ACTIVE (1)
FU1
CLOCK SCALE 2 (1)
ST
FM2
W076 J12
FV2
E2
MEMORY SUPPLY-1 (-30V)
KEYBOARD SELECT
IOP2 (1)
FJ2
FE2
TT AC CLEAR
FD1
EE2 KCC
INITIALIZE
FF2
+3
TTI SHIFT
SPIKE DETECTOR (1)
MB03 (0) ED2
MB04 (0) EE1
MB05 (0) EF1
MB06 (0) EH1
MB07 (1) EH2
MB08 (1) EJ1
EL2
IOP4 (1)
KEYBOARD SELECT
W076 J12
EU2
M2
PRESET
FS2
FU2
IN STOP 1
FV2
IN STOP 2
FN2
IN ACTIVE
SPIKE DETECTOR
READER RUN
EV2 KCC
IN STOP 2 (0)
FR2
IN LAST UNIT
TTI SHIFT
TTI 7 (0)
CLOCK SCALE 0
CLOCK SCALE 1
CLOCK SCALE 2
FS1
FT2
TTI CLOCK
EN1
FP2
TTI SHIFT
IN ACTIVE (0)
IN LAST UNIT (0)
START ENABLE
TTI SHIFT
IN LAST UNIT (1)
M706
E01
F01



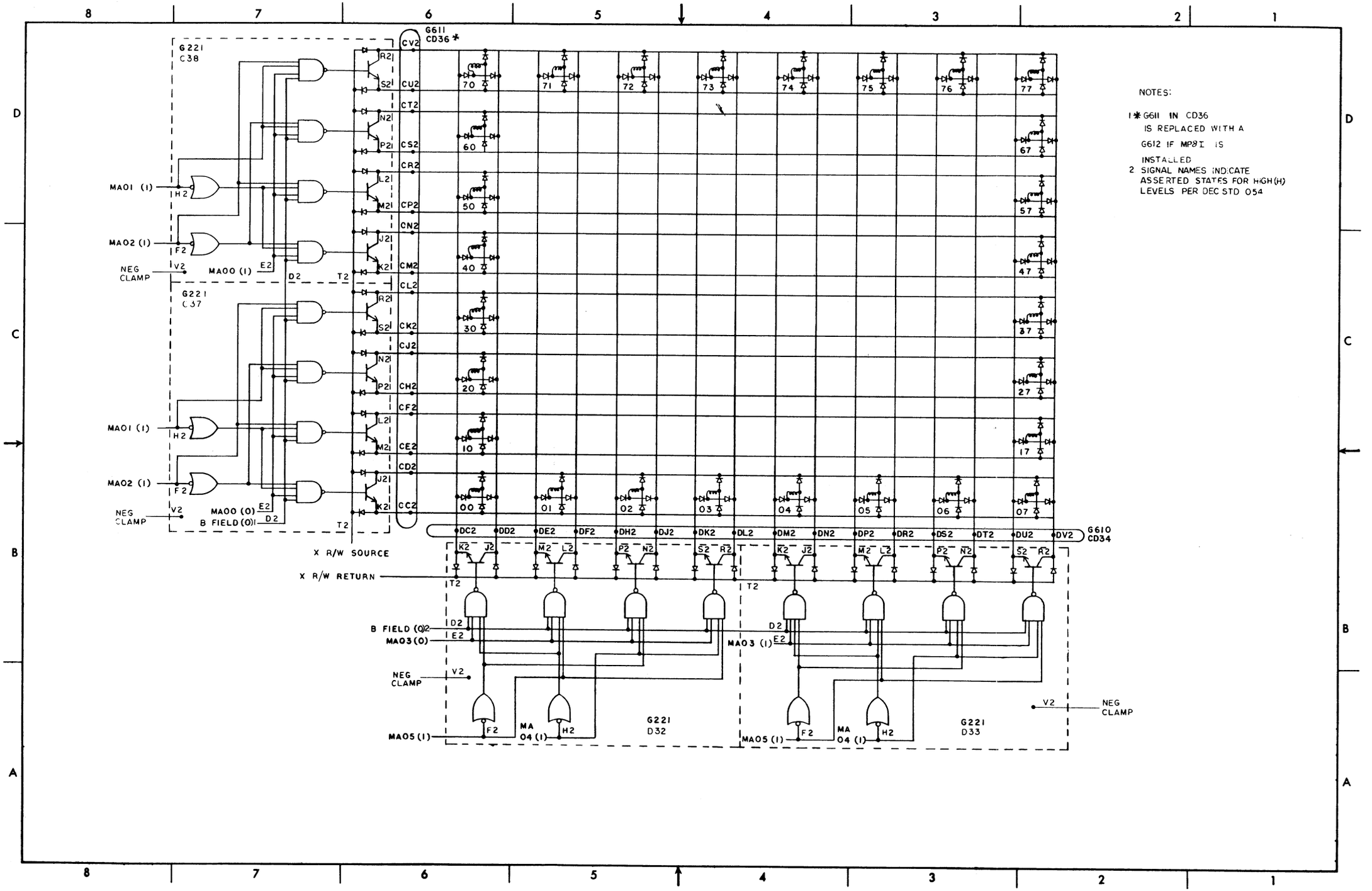
D-BS-8I-0-12 Teletype Transmitter



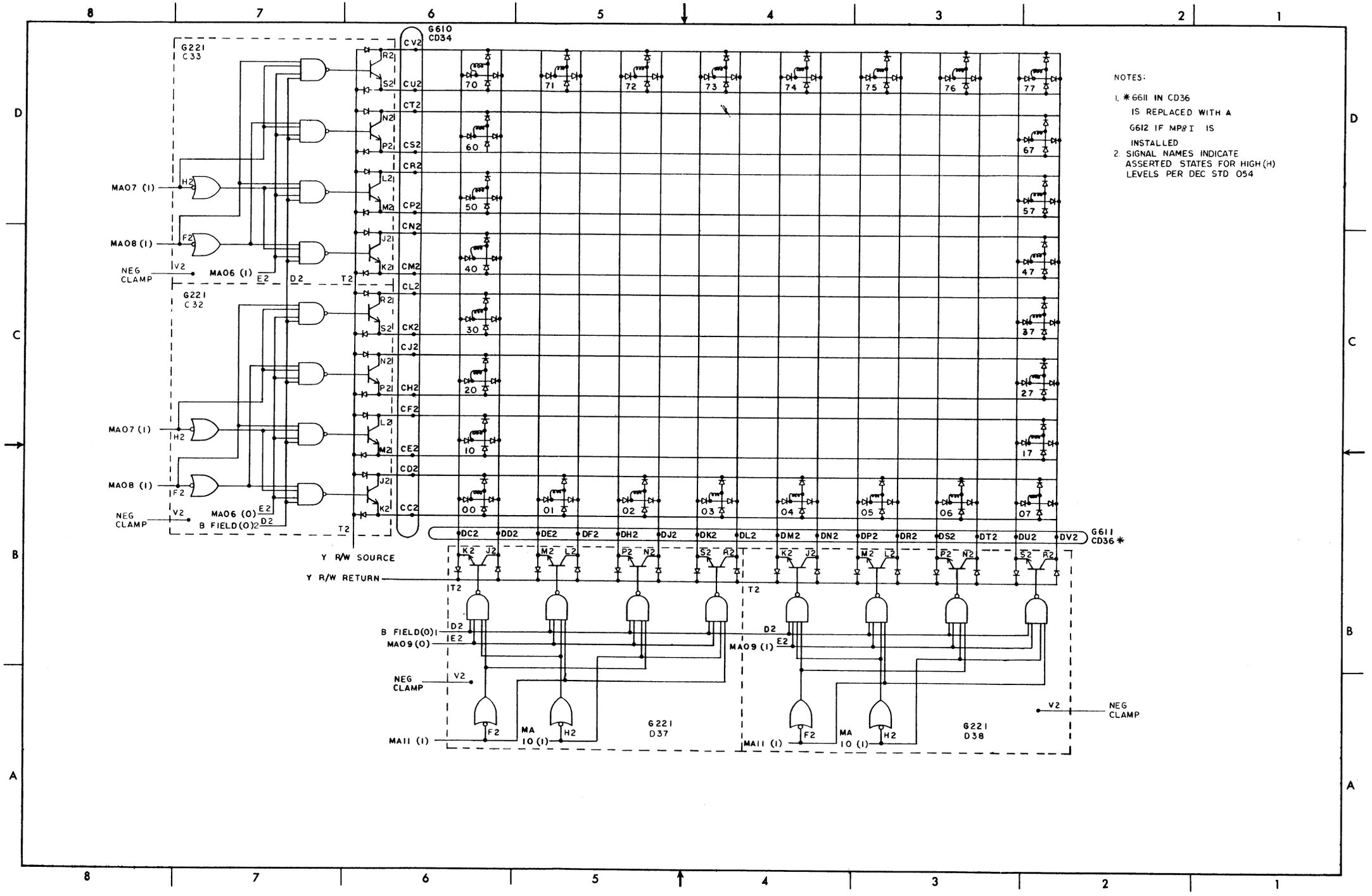
D-BS-8I-0-13 Memory Control



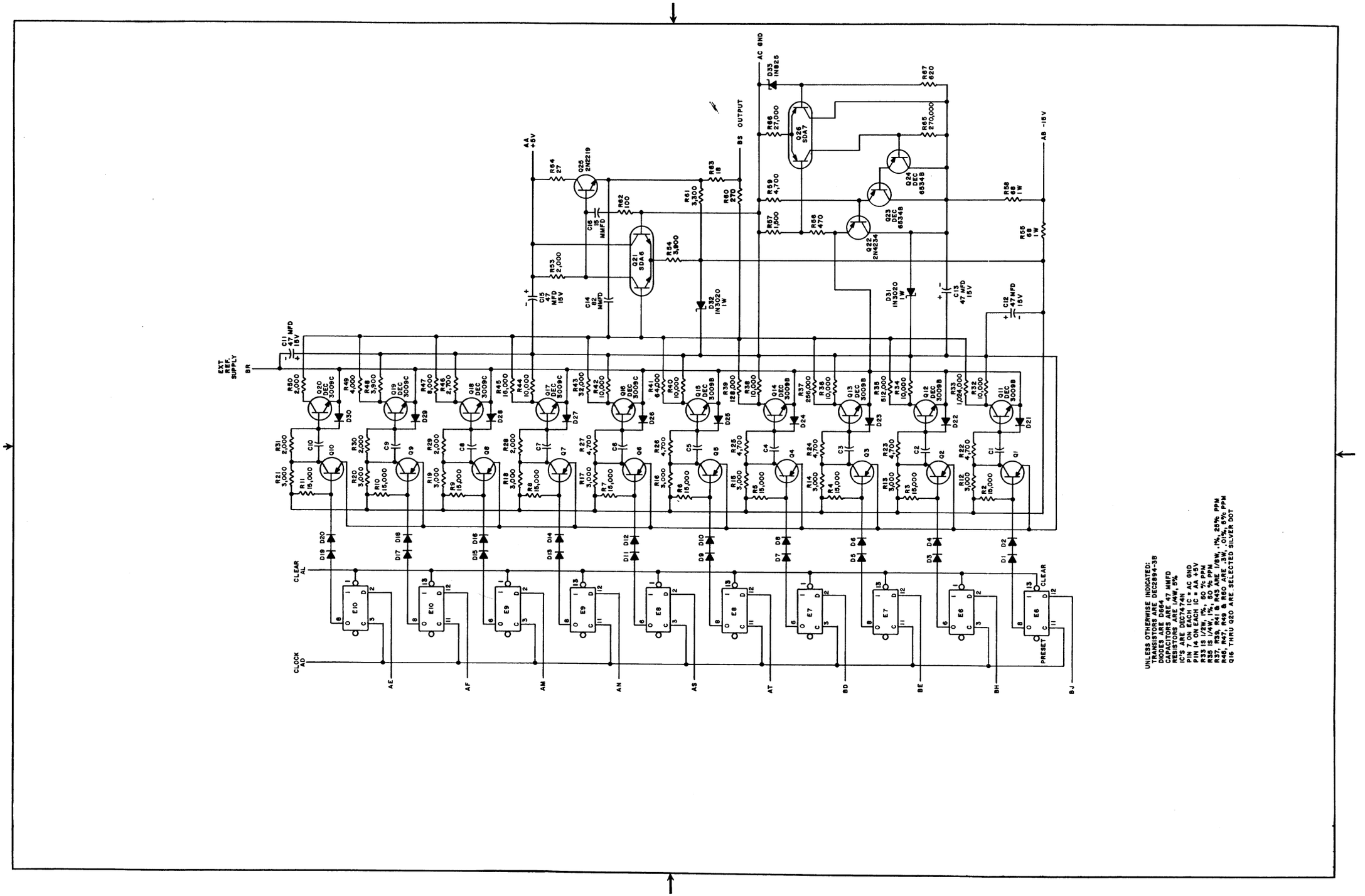
D-BS-8I-0-14 Sense Amps and Inhibit Drivers



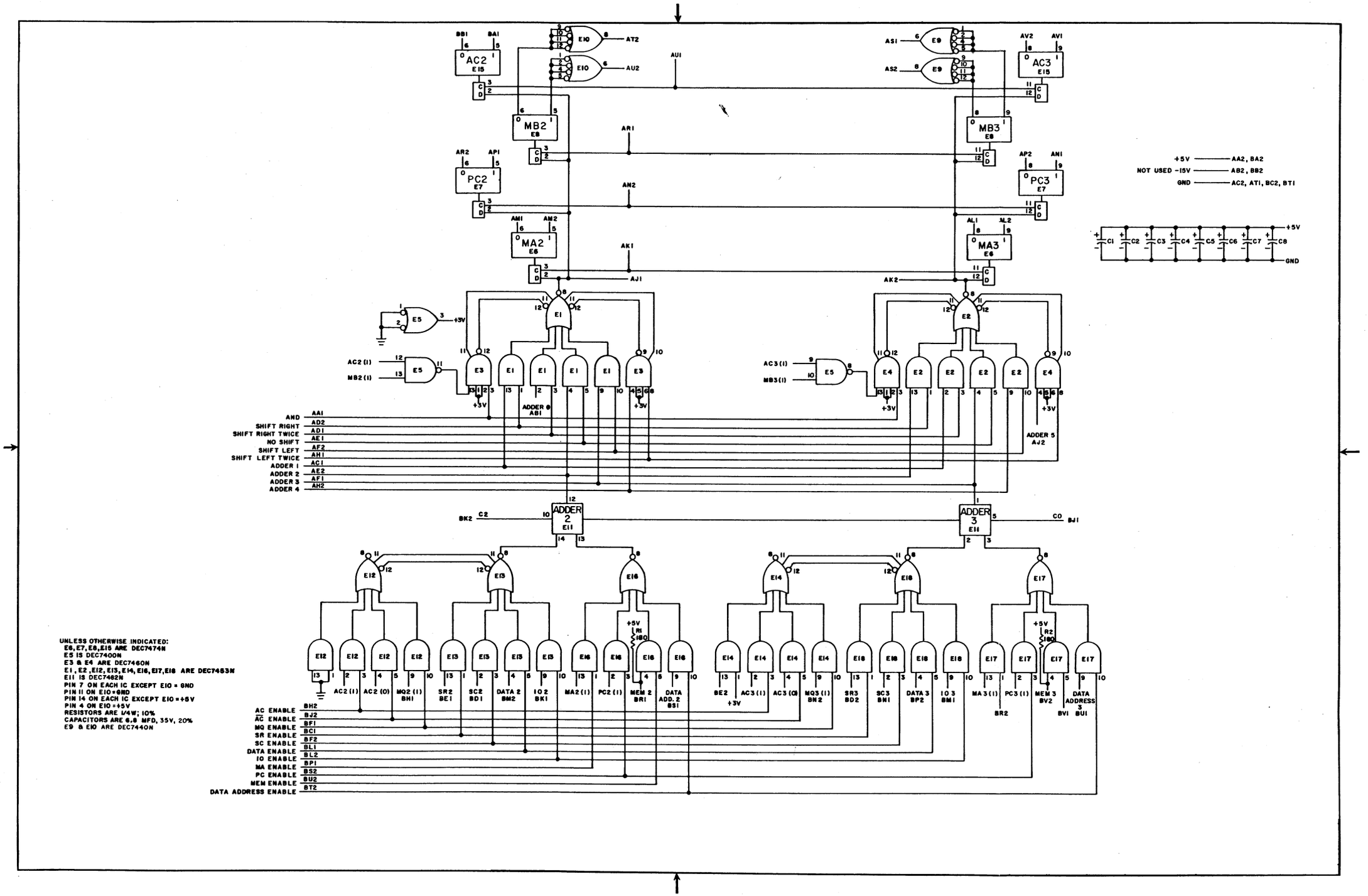
D-BS-8I-0-15 X Axis Selection

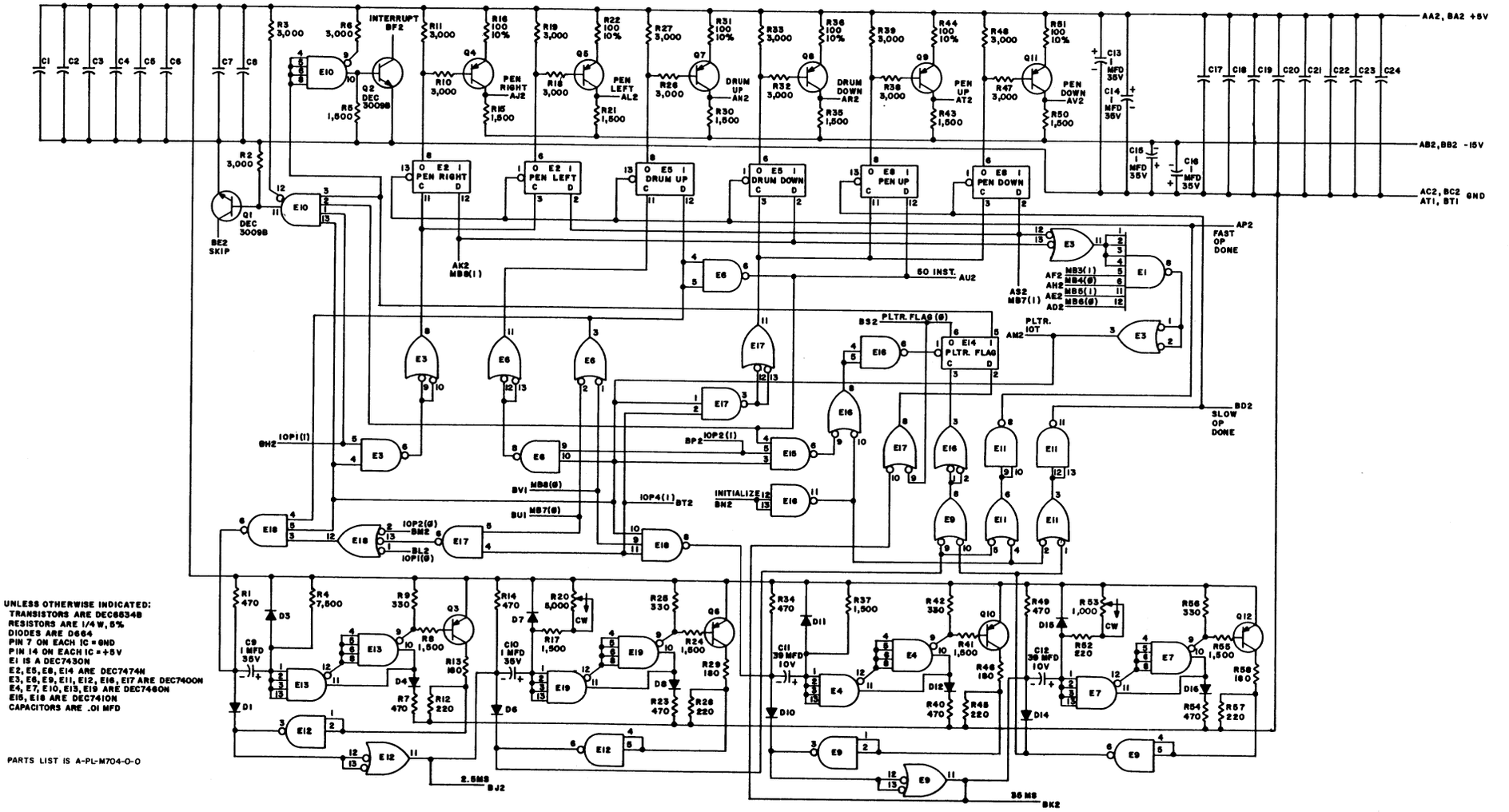


D-BS-8I-0-16 Y Axis Selection



D-CS-A607-0-1 10 Bit D-A Converter


AC2 E15
MB2 E8
PC2 E7
MA2 E6
AC3 E15
MB3 E8
PC3 E7
MA3 E6
E1
E2
E3
E4
E5
E9
E10
ADDER 2 E11
ADDER 3 E11
+5V
NOT USED -15V
GND
AA2, BA2
AB2, BB2
AC2, AT1, BC2, BT1
C1 C2 C3 C4 C5 C6 C7 C8
AND
SHIFT RIGHT
SHIFT RIGHT TWICE
NO SHIFT
SHIFT LEFT
SHIFT LEFT TWICE
ADDER 1
ADDER 2
ADDER 3
ADDER 4
AC ENABLE
AC ENABLE
MQ ENABLE
SR ENABLE
SC ENABLE
DATA ENABLE
IO ENABLE
MA ENABLE
PC ENABLE
MEM ENABLE
DATA ADDRESS ENABLE
UNLESS OTHERWISE INDICATED:
E6, E7, E8, E15 ARE DEC7474N
E5 IS DEC7400N
E3 & E4 ARE DEC7460N
E1, E2, E12, E13, E14, E16, E17, E18 ARE DEC7453N
E11 IS DEC7482N
PIN 7 ON EACH IC EXCEPT E10 = GND
PIN 11 ON E10=GND
PIN 14 ON EACH IC EXCEPT E10 =+5V
PIN 4 ON E10 =+5V
RESISTORS ARE 1/4W; 10%
CAPACITORS ARE 6.8 MFD, 35V, 20%
E9 & E10 ARE DEC7440N



D-CS-M704-0-1 Plotter Control