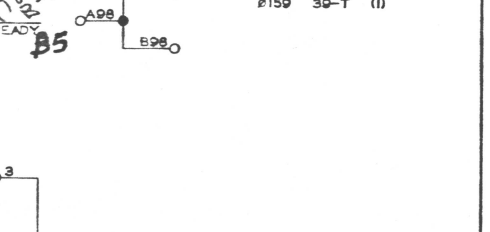
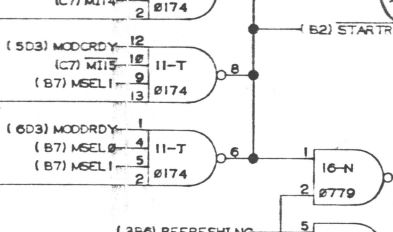
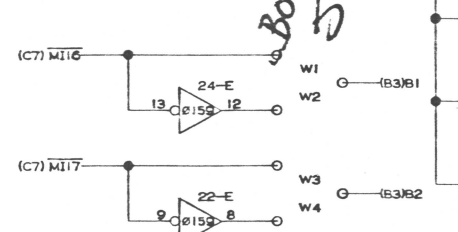
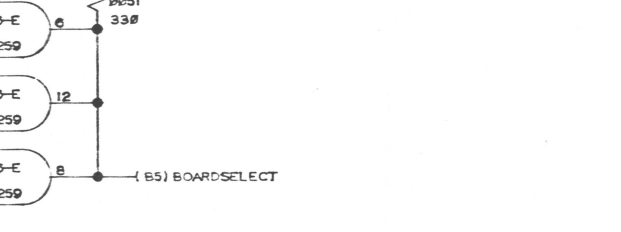
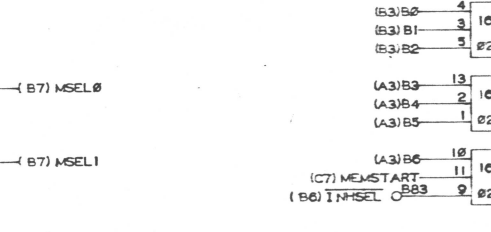
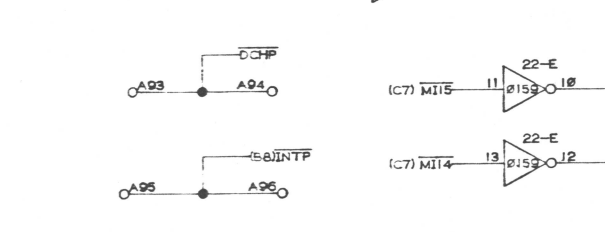
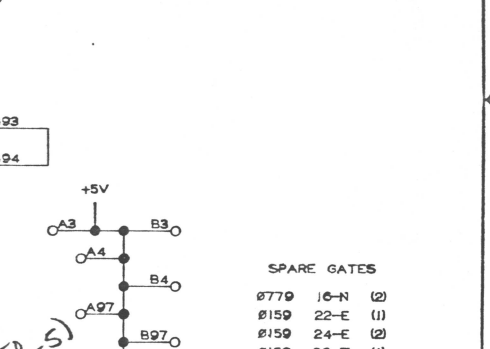
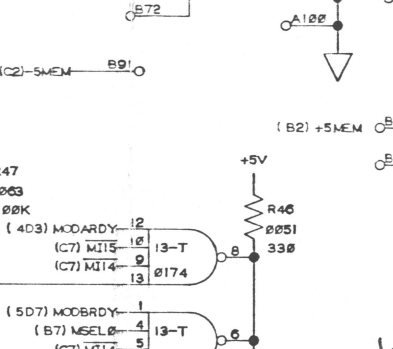
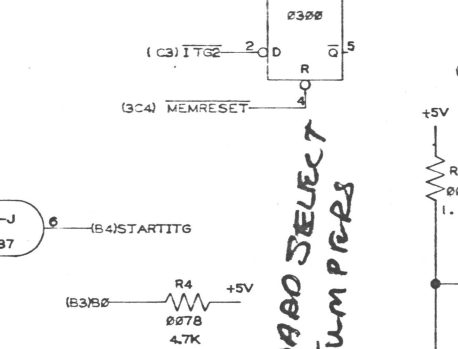
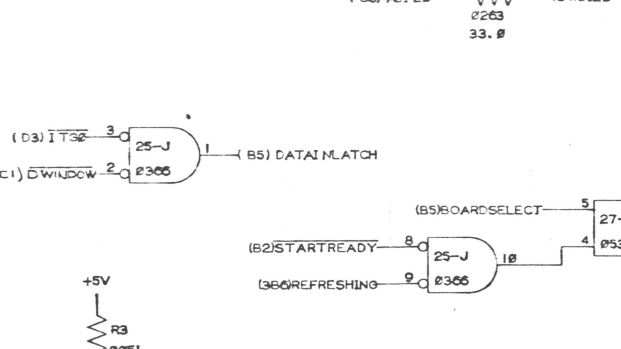
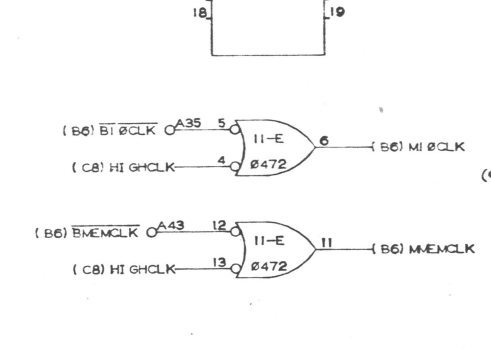
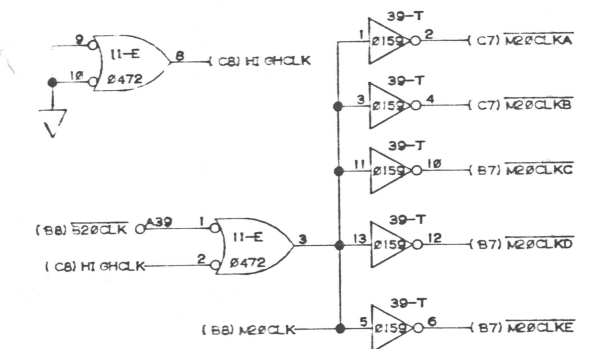
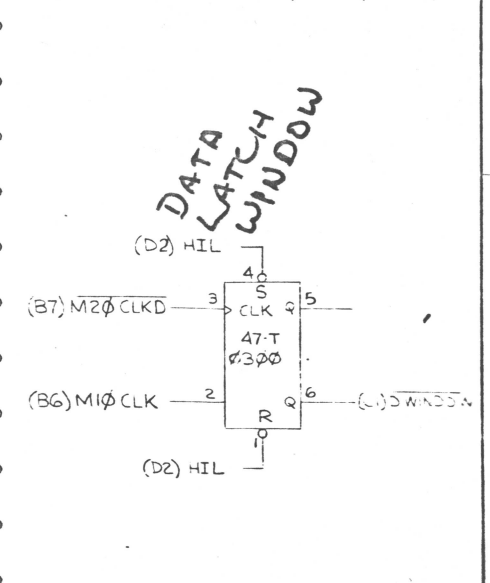
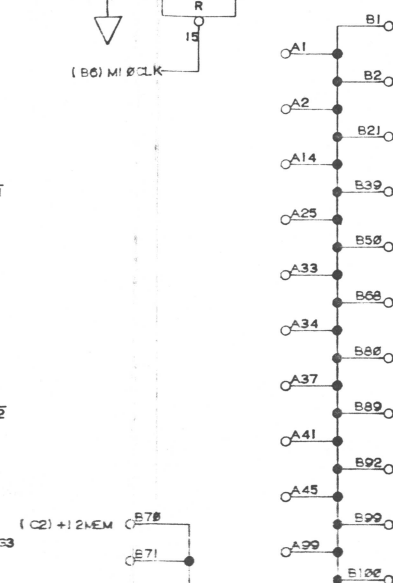
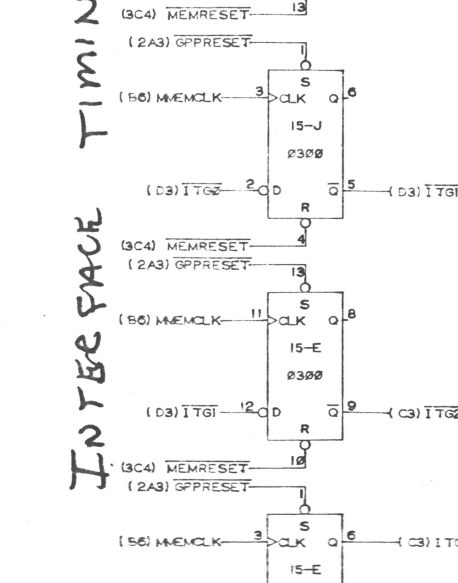
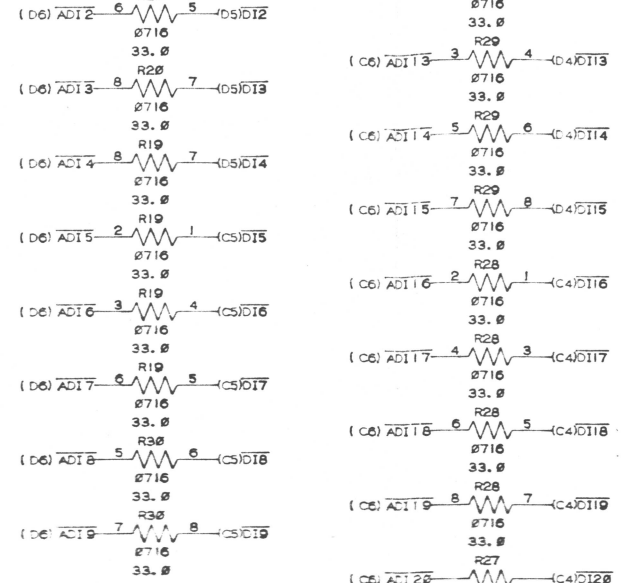
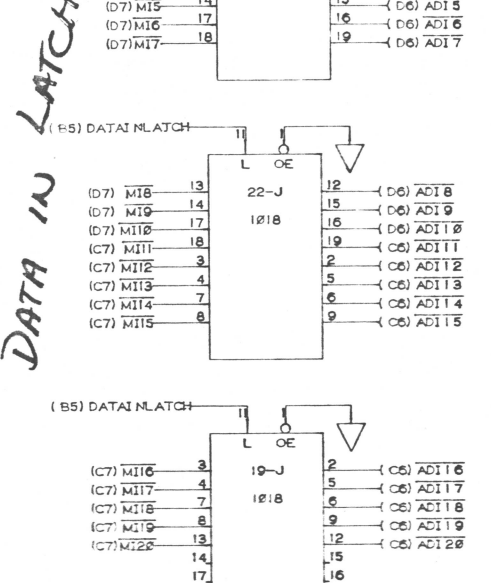
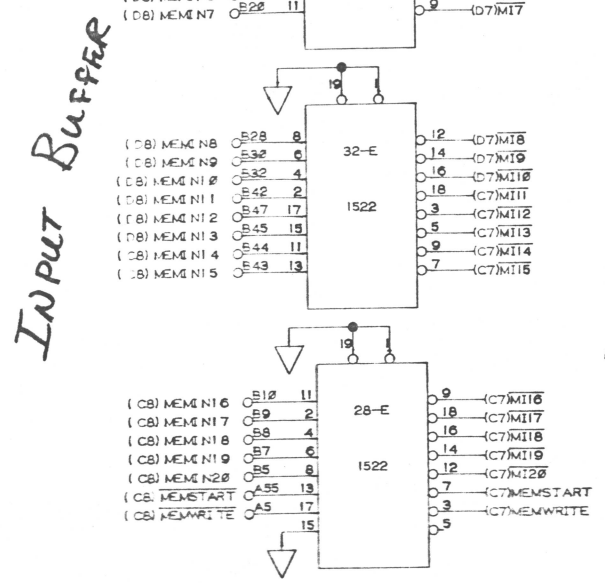


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REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE
00	RLSD PER ECO E547		
01	PER ECO E508A		
2			



ASSEMBLY	TESTED-005012128 UNTESTED-005012129 (10K X 16 BIT)	TESTED-005012130 UNTESTED-005012131 (10K ECC)	TESTED-005012132 UNTESTED-005012133 (32K X 16 BIT)	TESTED-005012134 UNTESTED-005012135 (32K ECC)	TESTED-005012136 UNTESTED-005012137 (64K X 16 BIT)	TESTED-005012138 UNTESTED-005012139 (64K ECC)	TESTED-005012140 UNTESTED-005012141 (128K X 16 BIT)	TESTED-005012142 UNTESTED-005012143 (128K ECC)
INSTALL THESE DUMMY RESISTORS ONLY	R10, R12, R43	R1, R10, R12, R43	R10, R12, R18, R43	R1, R10, R12, R18, R43	R9, R11, R15, R41	R1, R9, R11, R15, R41	R9, R11, R15, R41	R1, R9, R11, R15, R18, R41
DO NOT INSTALL	R28, 8-E, 2-J, 3-J, 19-J, 2-O, 3-O, 5-T, 7-T		R28, 8-E, 2-J, 3-J, 19-J, 2-O, 3-O, 5-T, 7-T		R28, 8-E, 2-J, 3-J, 19-J, 2-O, 3-O, 5-T, 7-T		R28, 8-E, 2-J, 3-J, 19-J, 2-O, 3-O, 5-T, 7-T	
DO NOT INSTALL ALL COMPONENTS ON PAGES	9,11,13,15	9,11,13,15			9,11,13,15	9,11,13,15		
DO NOT INSTALL THE COMPONENTS ENCLOSED IN SOLID LINES ON PAGES	8,10,12,14		8,9,10,11,12,13,14,15		8,10,12,14		8,9,10,11,12,13,14,15	
ALL RAMS HAVE PART NO.	100-1250	100-1250	100-1250	100-1250	100-1100	100-1100	100-1100	100-1100

9K RAM 16k RAM

ARTWORK: 107 -B13  
ARTWORK VS SCHEMATIC  
REV SCHEMATIC REVIS  
P2 00,01

DRAWN DIGITIZING 12/83  
CHECKED B. GLATHORN 12/83  
ENGINEER 11/83

APPROVED

FIRST USED ON

SEE CHART

DATA GENERAL CORPORATION  
SOUTHBORO, MASSACHUSETTS 01772

TITLE  
DGC BBU MEMORY

SIZE CODE 001001229  
DRAWING NUMBER 03

A

B

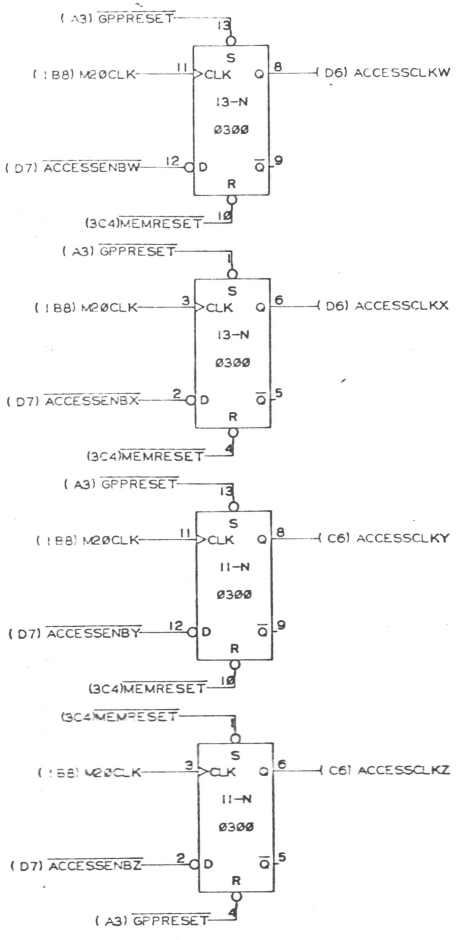
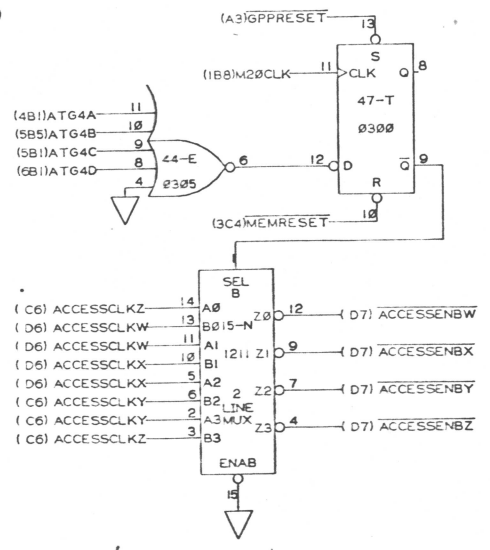
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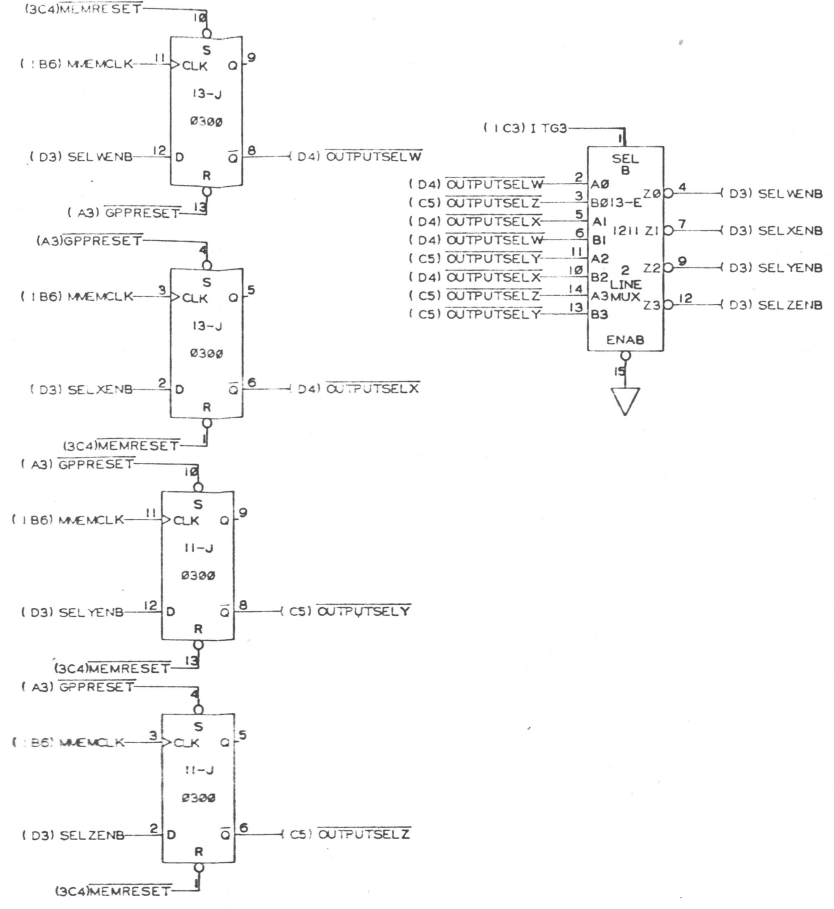
REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE

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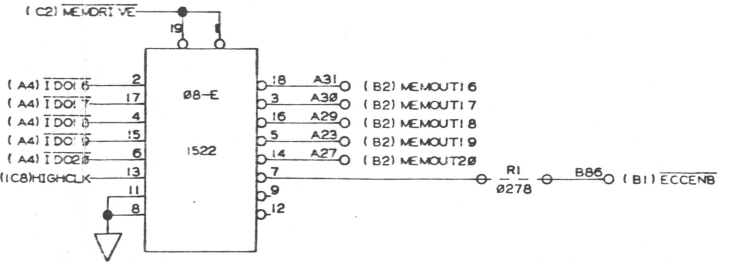
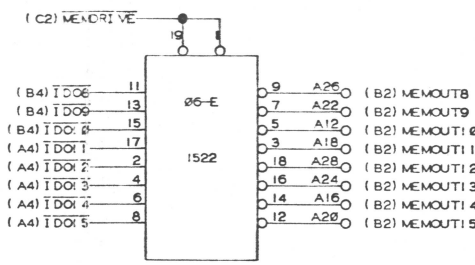
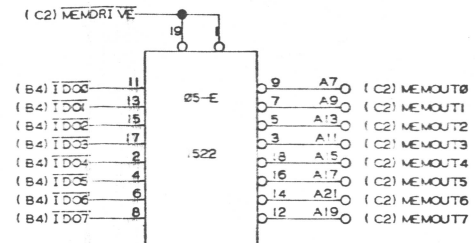
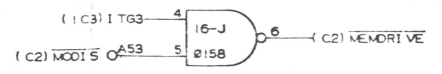
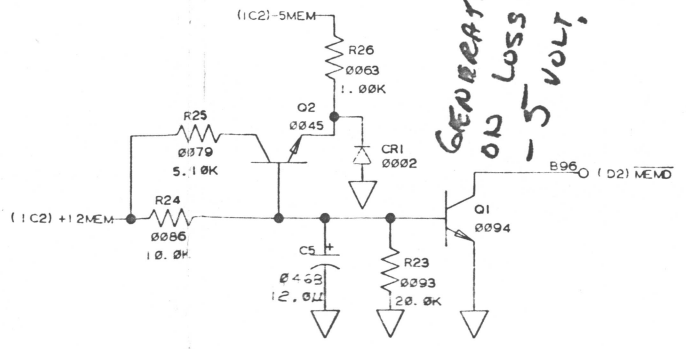
SEQUENTIAL REGISTERS ADDRESS TIMING SIGNAL WRITING



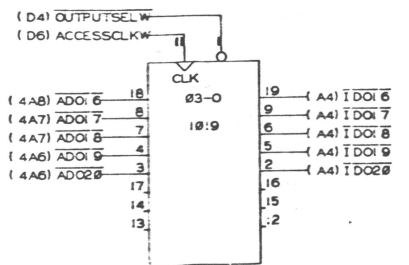
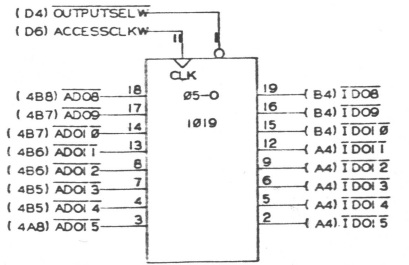
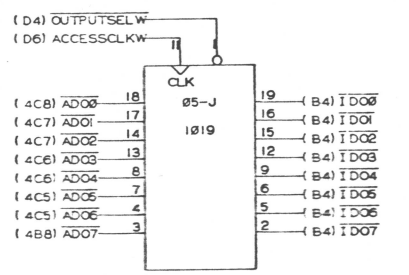
SEQUENTIAL REGISTERS READ OUT CONTROL



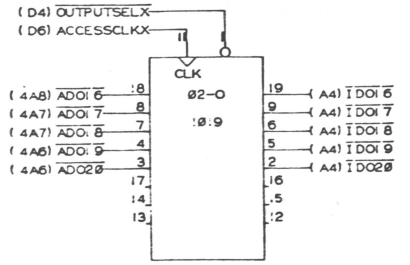
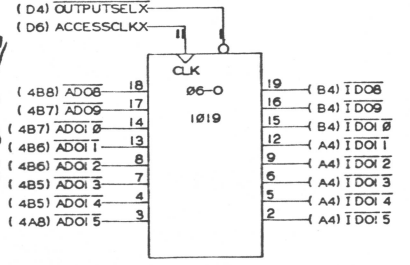
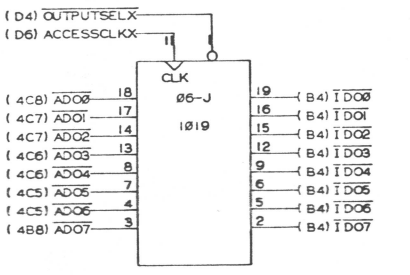
MEMORY OUTPUT BUS DRIVERS



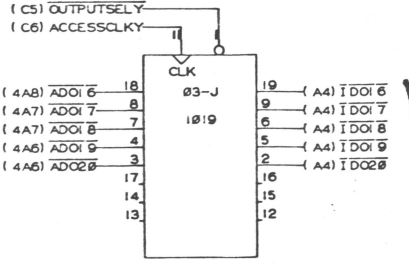
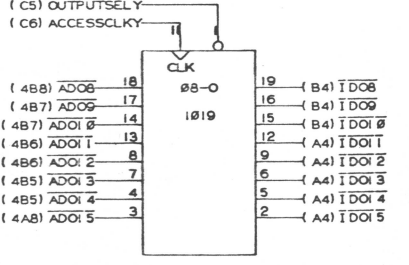
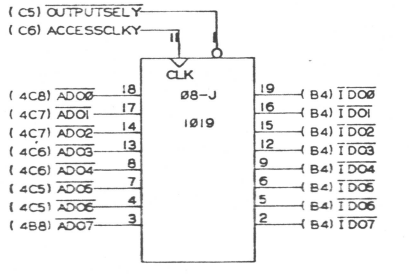
W REGISTERS



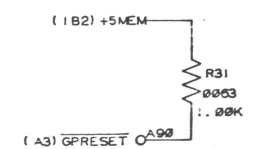
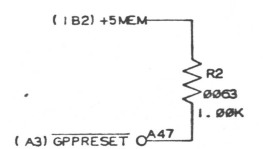
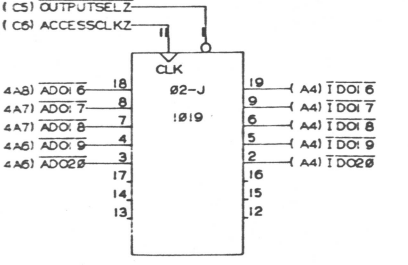
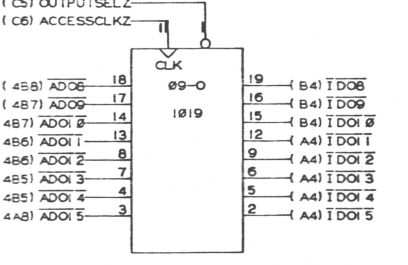
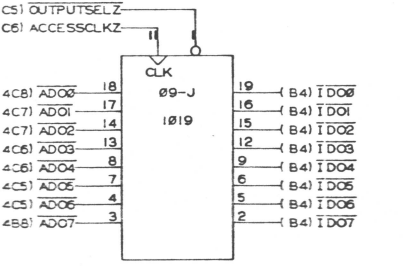
X REGISTERS



Y REGISTERS



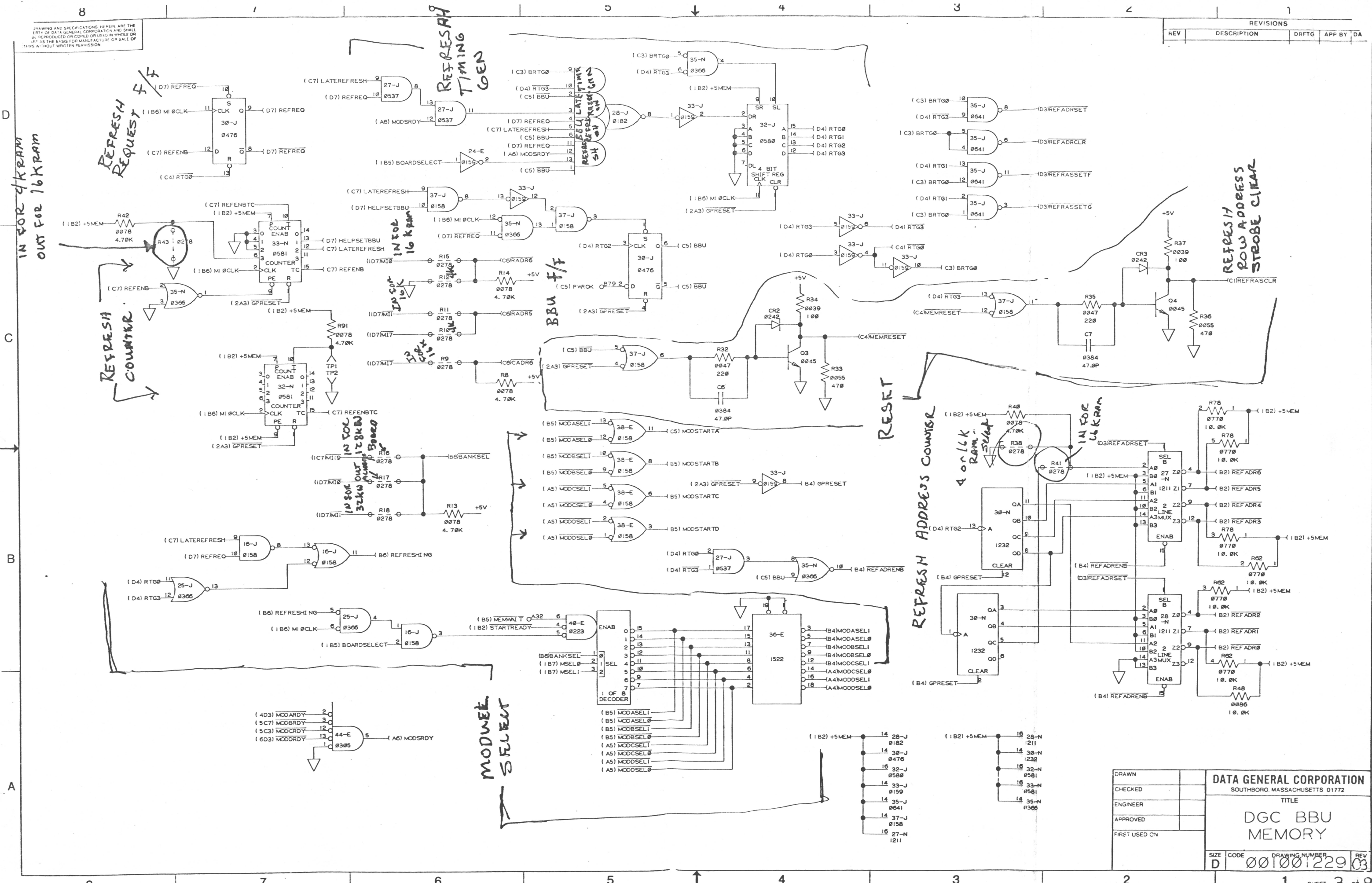
Z REGISTERS



DRAWN		DATA GENERAL CORPORATION	
CHECKED		SOUTHBORO, MASSACHUSETTS 01772	
ENGINEER		TITLE	
APPROVED		DGC BBU	
FIRST USED ON		MEMORY	
SIZE	CODE	DRAWING NUMBER	REV
D		001001229	03

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DA

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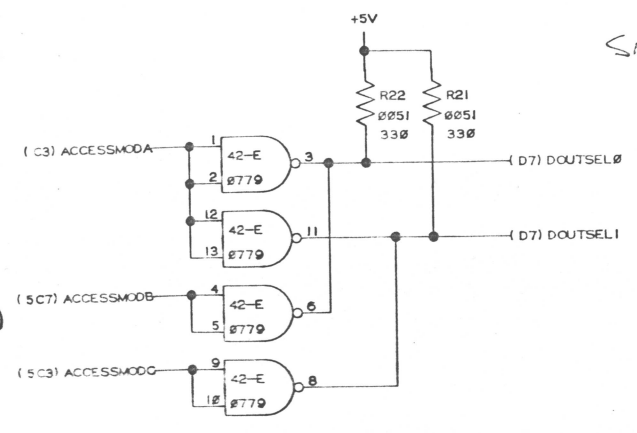


DRAWN		DATA GENERAL CORPORATION	
CHECKED		SOUTHBORO, MASSACHUSETTS 01772	
ENGINEER		TITLE	
APPROVED		DGC BBU MEMORY	
FIRST USED ON		SIZE	CODE
		D	001001229 03
		DRAWING NUMBER	REV
			03

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE

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4 to 1 output control



SELECT 1 0 OUTPUT  
 L L MOD A  
 H L MOD B  
 L H MOD C  
 H H MOD D

MOD A  
 Row, Column  
 SELECT

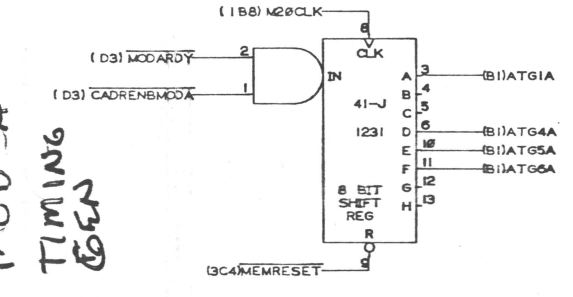
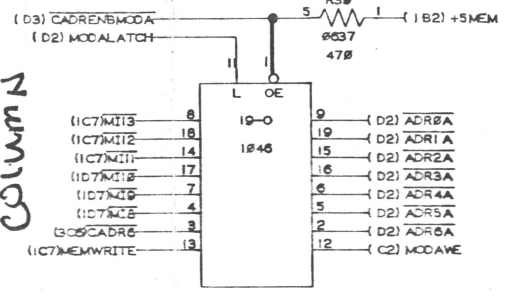
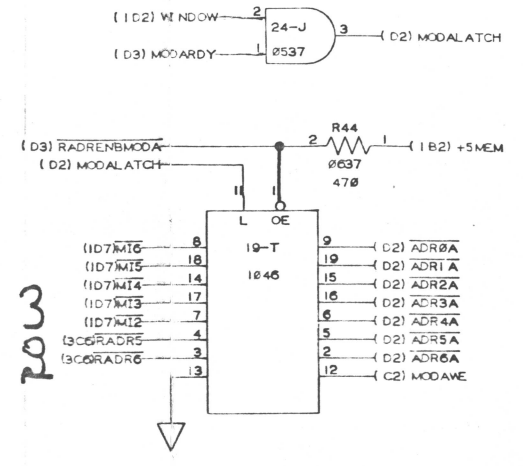
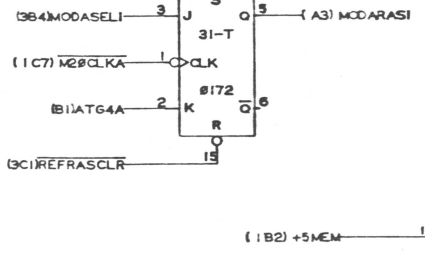
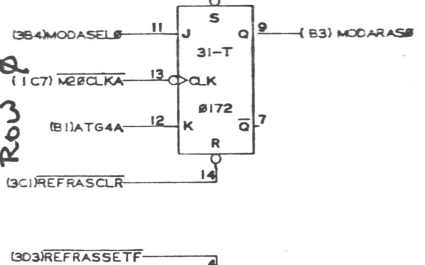
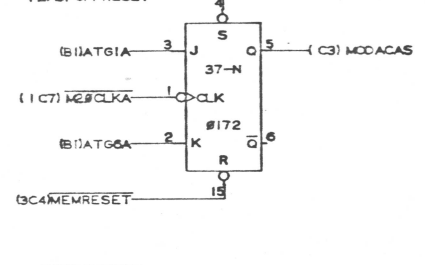
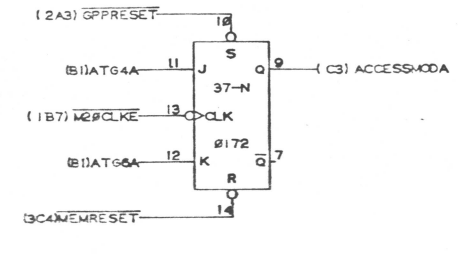
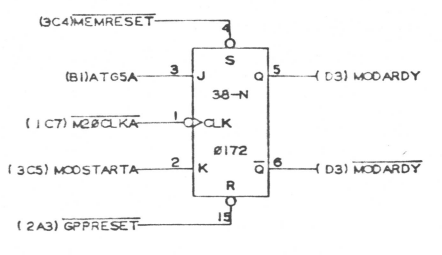
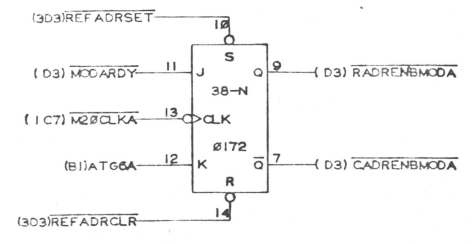
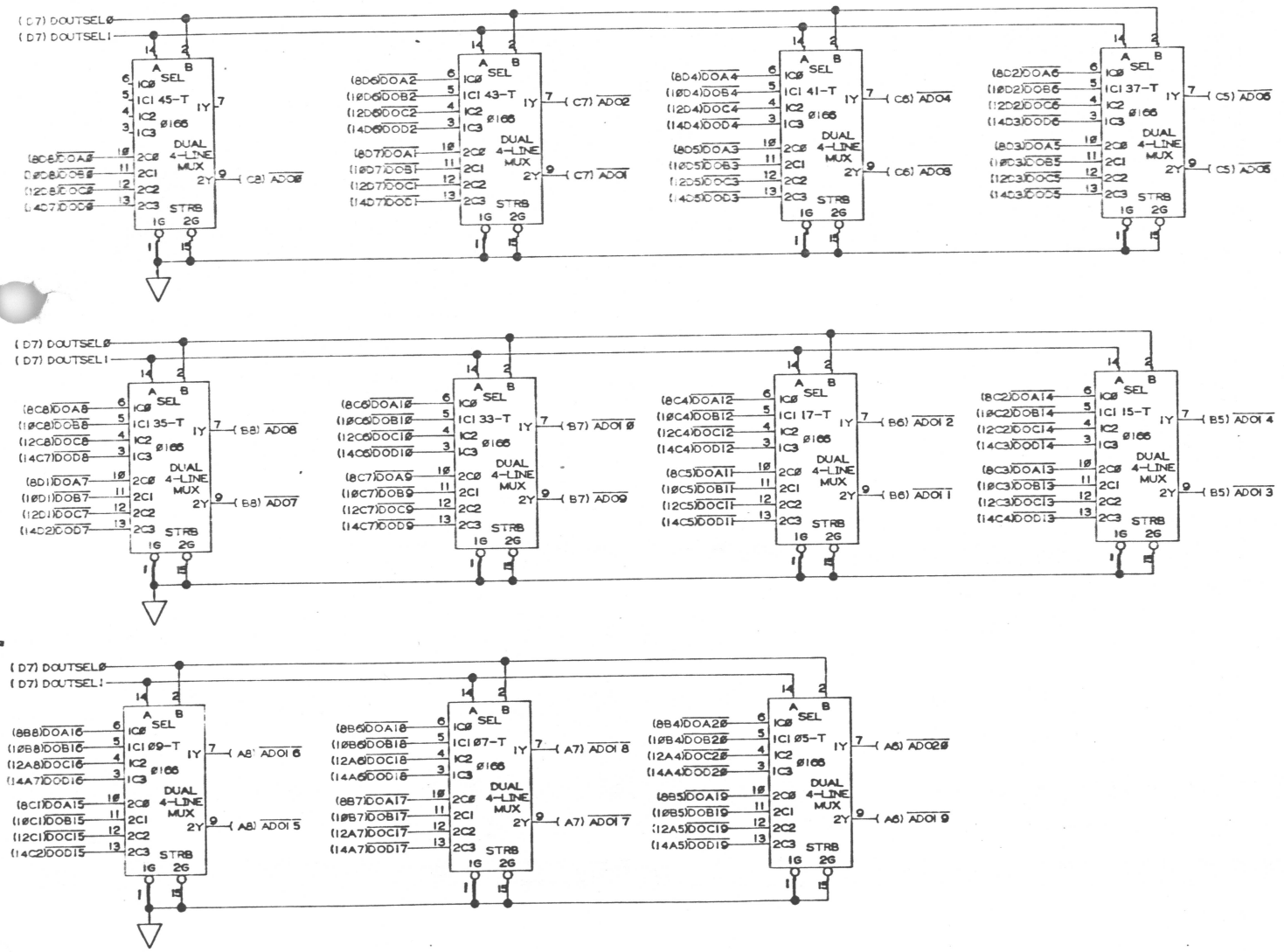
MOD A  
 READY

MOD A  
 ADDRESS STRAP

MOD A  
 ADDRESS STRAP FOR Row 1

MOD A  
 ADDRESS STRAP FOR Row 1

4 to 1 output Mux.



(B2) +5MEM 16 31-T #172

MOD A  
 TIMING GEN

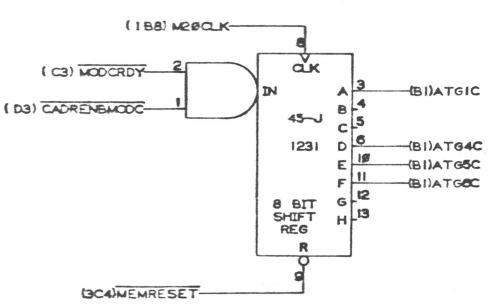
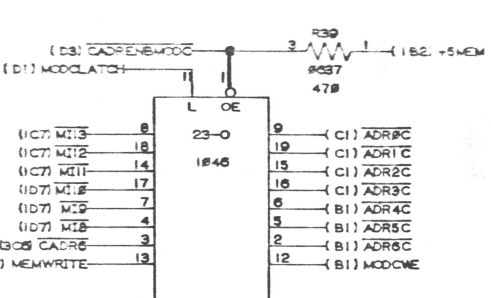
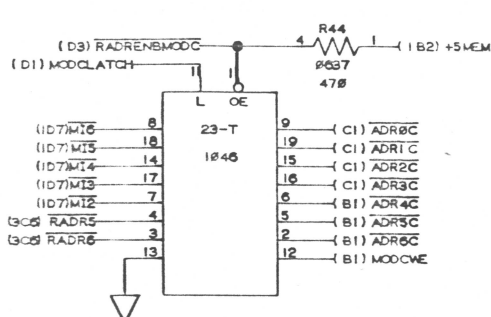
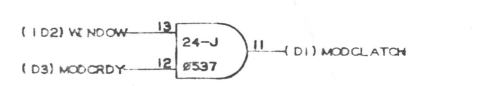
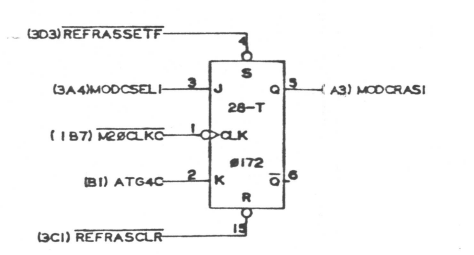
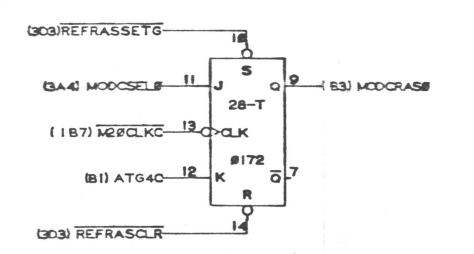
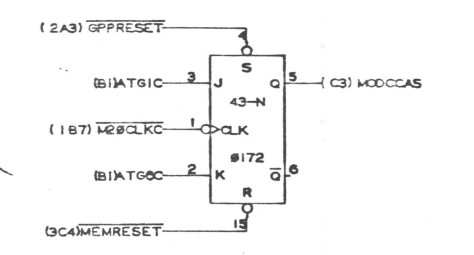
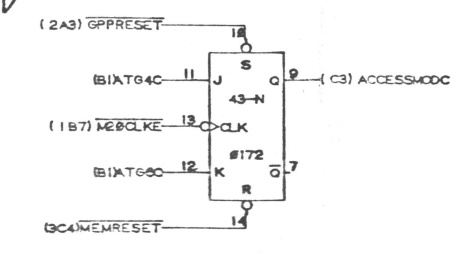
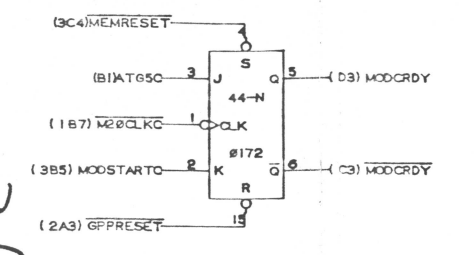
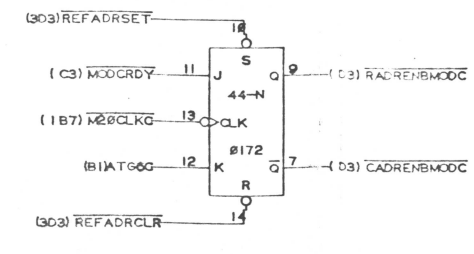
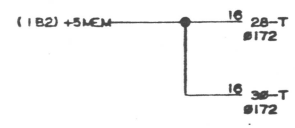
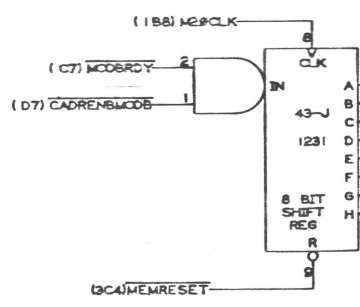
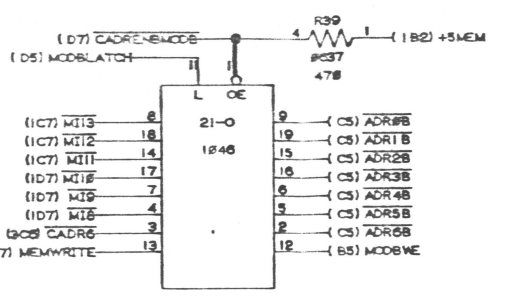
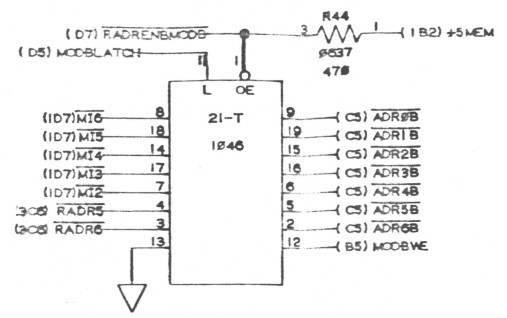
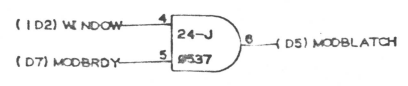
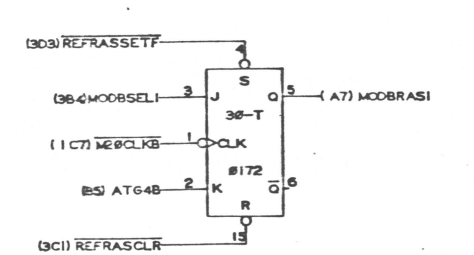
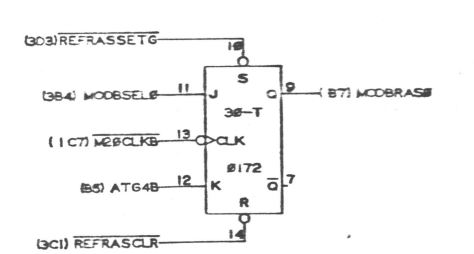
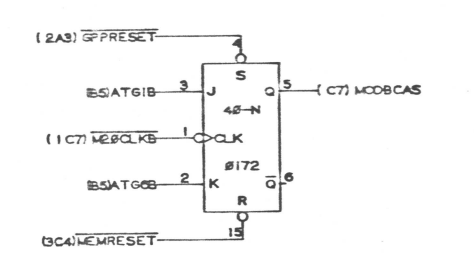
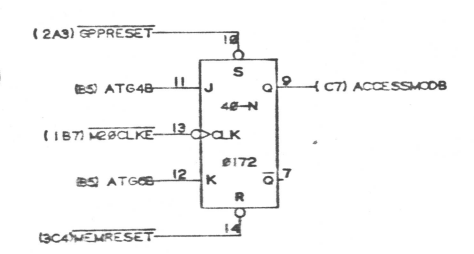
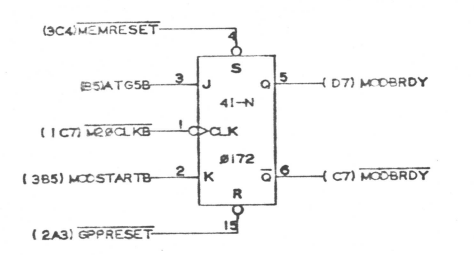
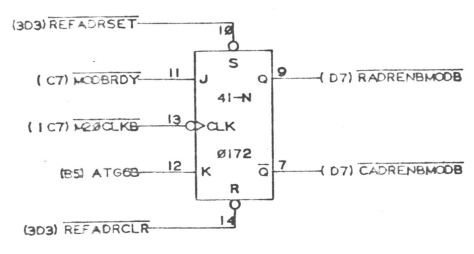
DRAWN	DATA GENERAL CORPORATION		
CHECKED	SOUTHBORO, MASSACHUSETTS 01772		
ENGINEER	TITLE		
APPROVED	DGC BBU MEMORY		
FIRST USED ON	SIZE	CODE	DRAWING NUMBER
	D	001001	229031

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE

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CONTROL TIMING LOGIC  
MOD B

CONTROL TIMING LOGIC  
MOD C



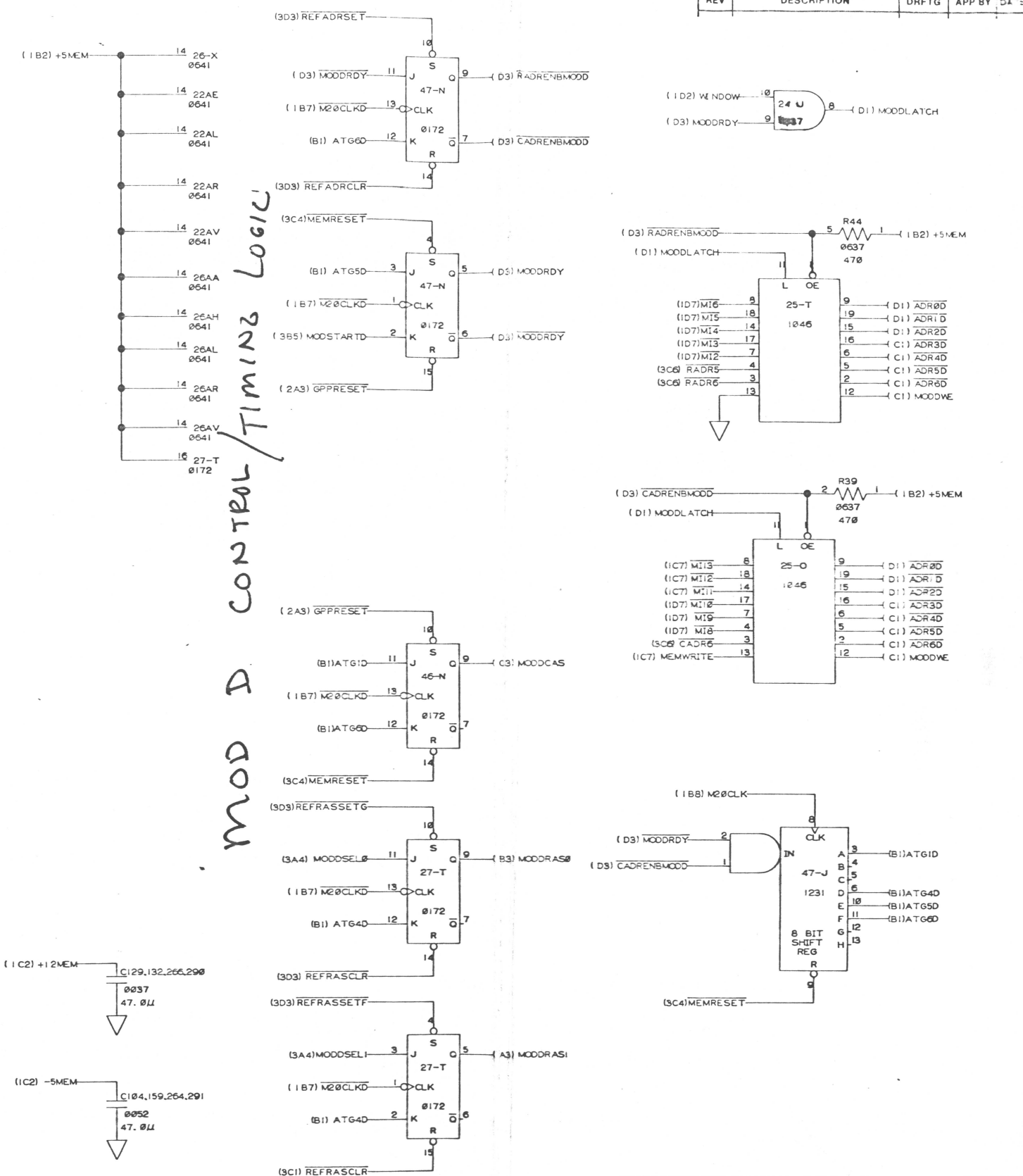
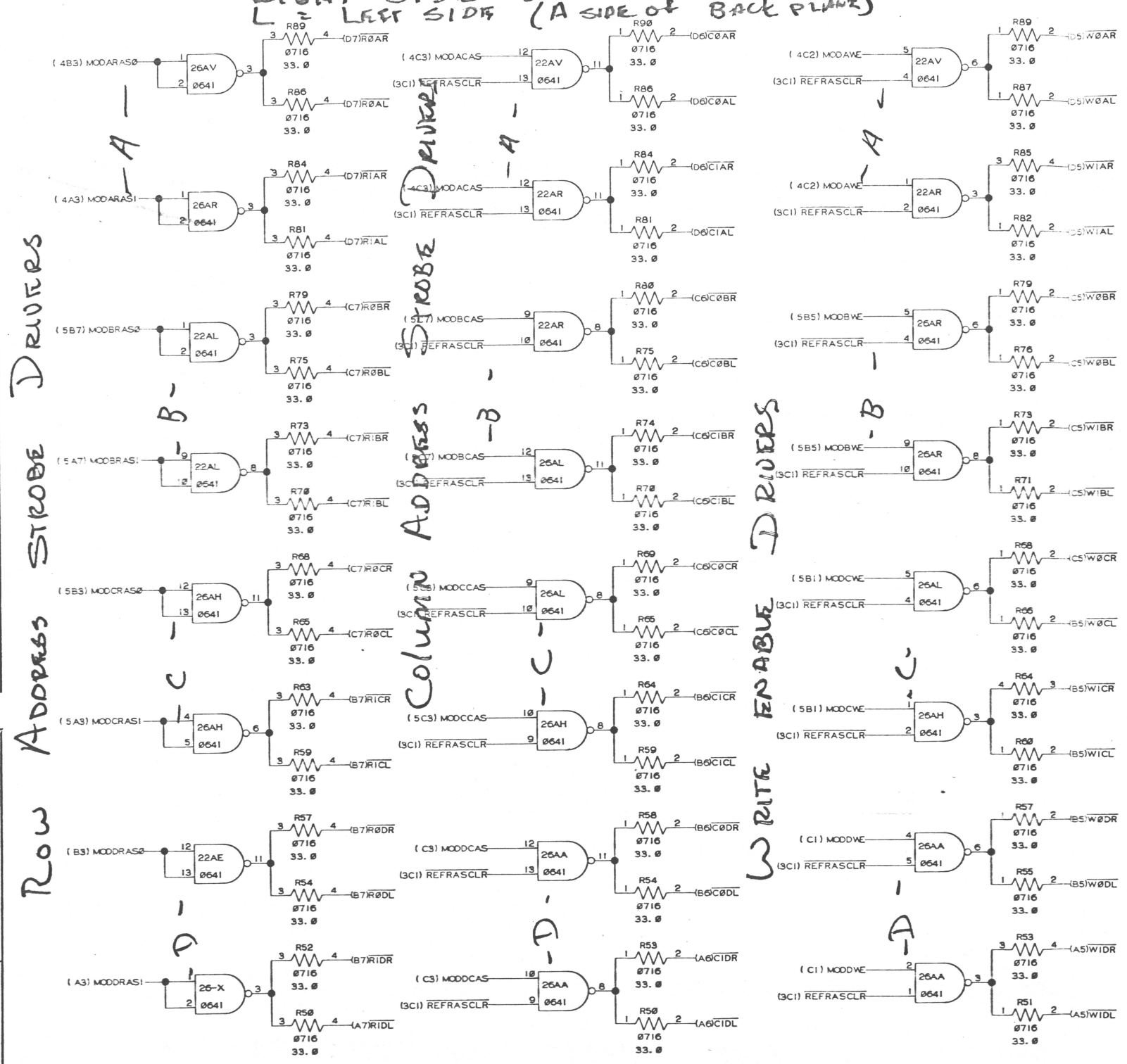
DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTHBORO, MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>	
CHECKED			
ENGINEER			
APPROVED			
FIRST USED ON			
SIZE	D	DRAWING NUMBER	00100122903
		RE	03

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ANY SIGNAL ENDING WITH R GOES TO THE RIGHT SIDE OF BOARD (B SIDE ON BACK PLANE)  
 L = LEFT SIDE (A SIDE OF BACK PLANE)

REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

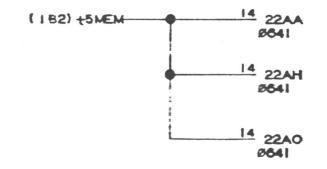
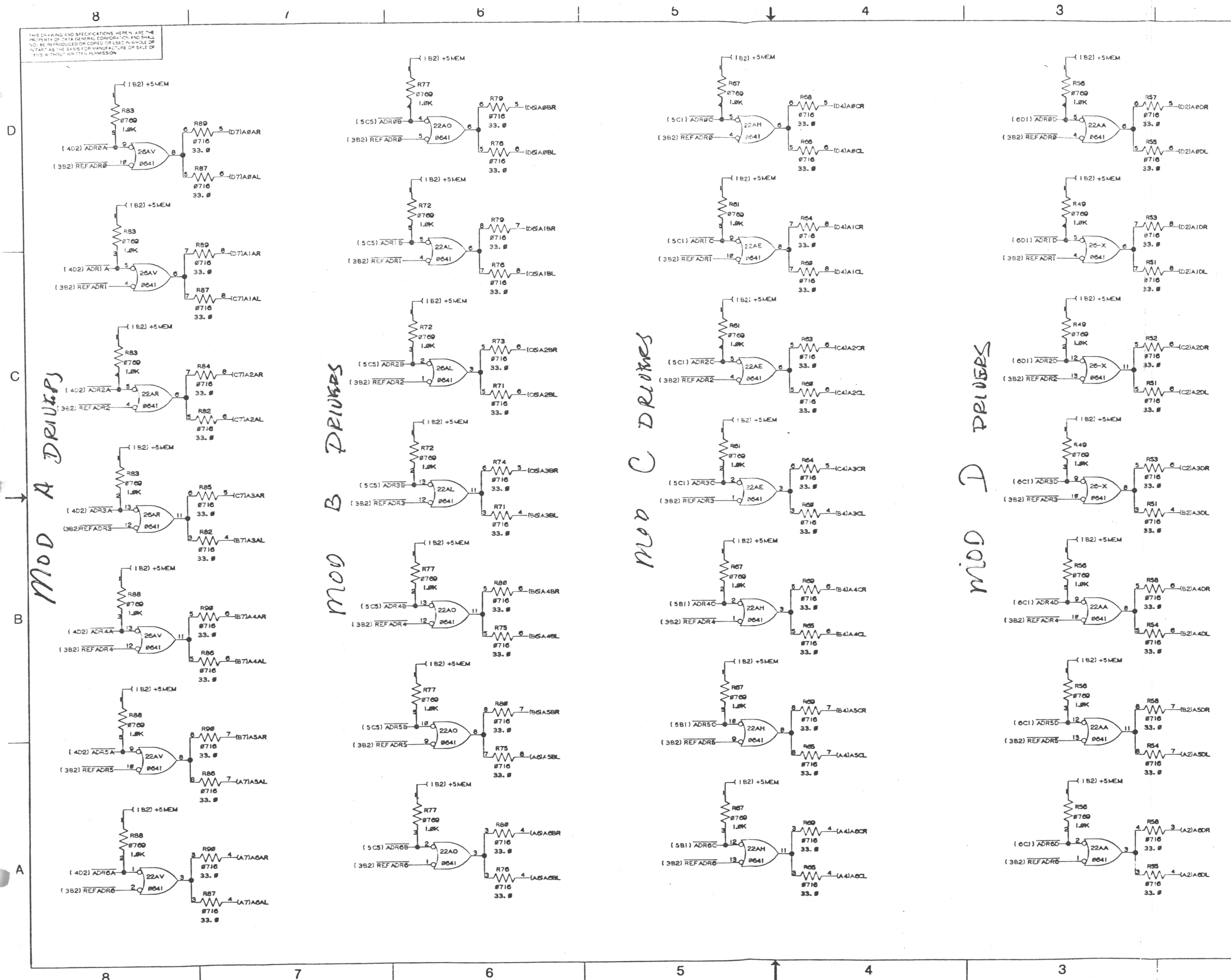
Row Address Strobe Drivers  
 Column Address Drivers  
 Write Enable Drivers  
 MOD D CONTROL/TIMING LOGIC



DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTH BORO, MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>
CHECKED		
ENGINEER		
APPROVED		
FIRST USED ON		
SIZE	CODE	DRAWING NUMBER
D		00100122903

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REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

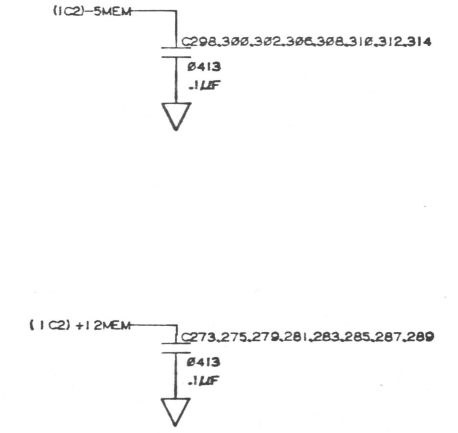
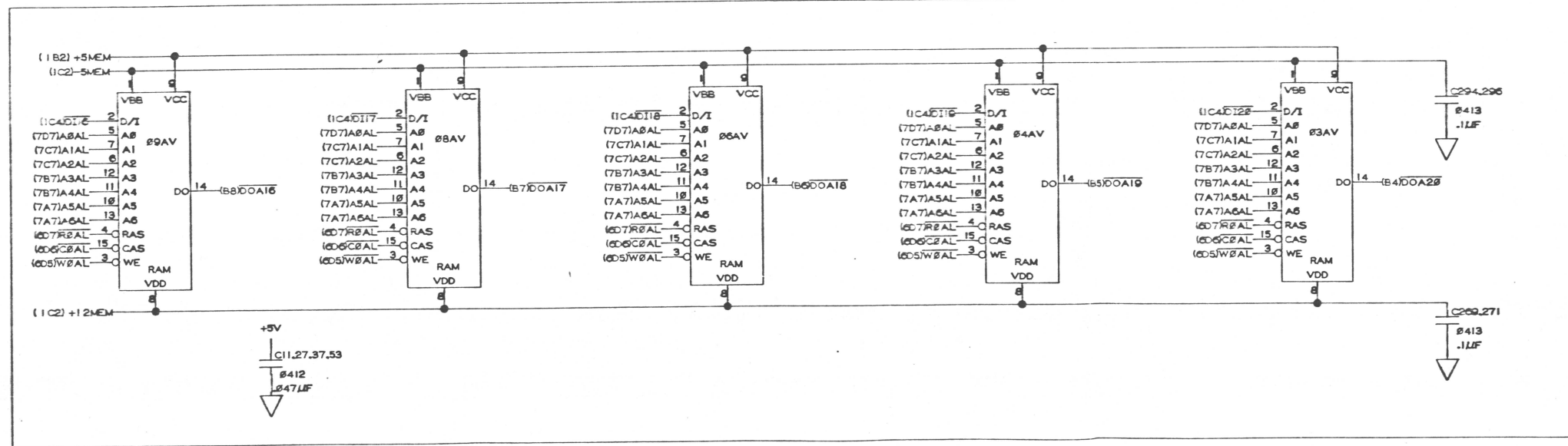
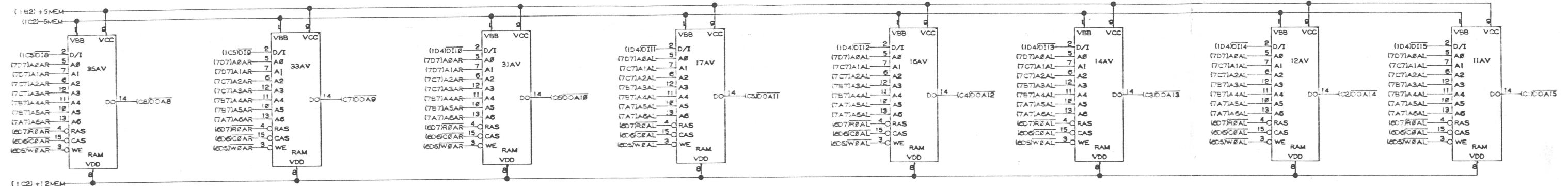
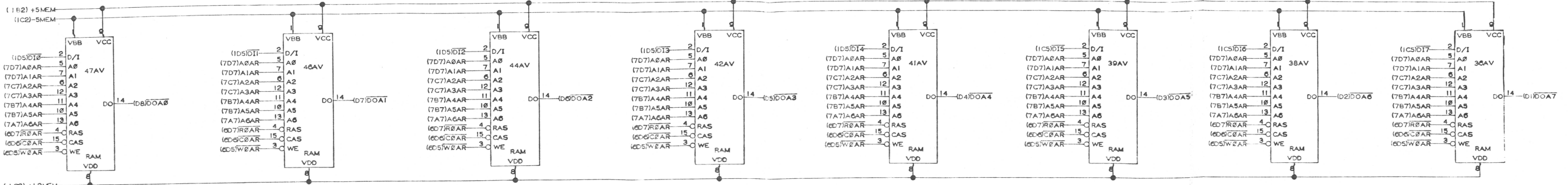


DRAWN		DATA GENERAL CORPORATION		
CHECKED		SOUTH-BORO, MASSACHUSETTS 01772		
ENGINEER		TITLE		
APPROVED		DGC BBU		
FIRST USED ON		MEMORY		
SIZE	CODE	DRAWING NUMBER	REV	
D		001001229	03	

# MOD A BANK 0

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE

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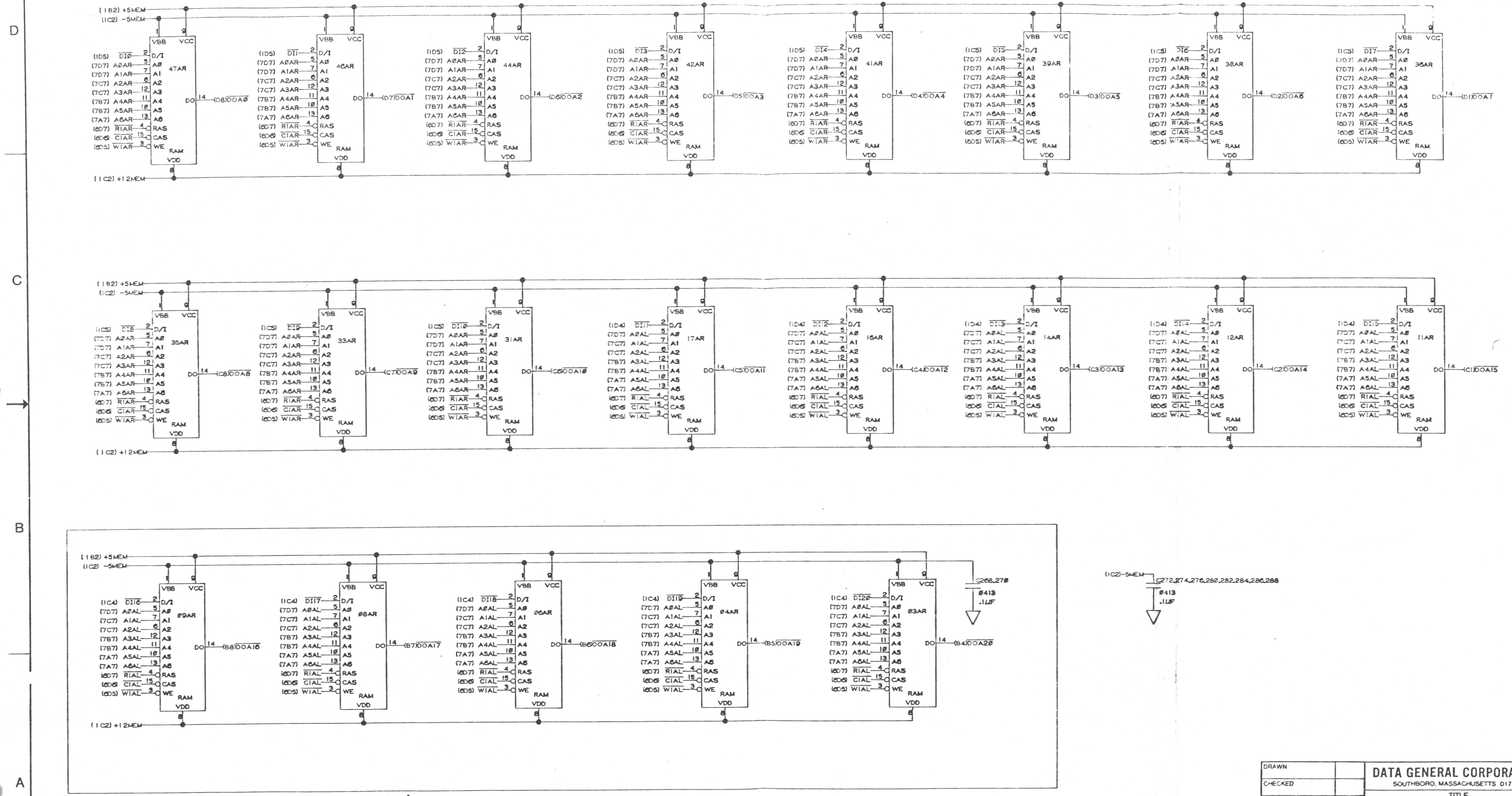


DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTH BORO, MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>	
CHECKED			
ENGINEER			
APPROVED			
FIRST USED ON			
SIZE	CODE	DRAWING NUMBER	REV
D		001001229	03



# Mod A BANK

REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

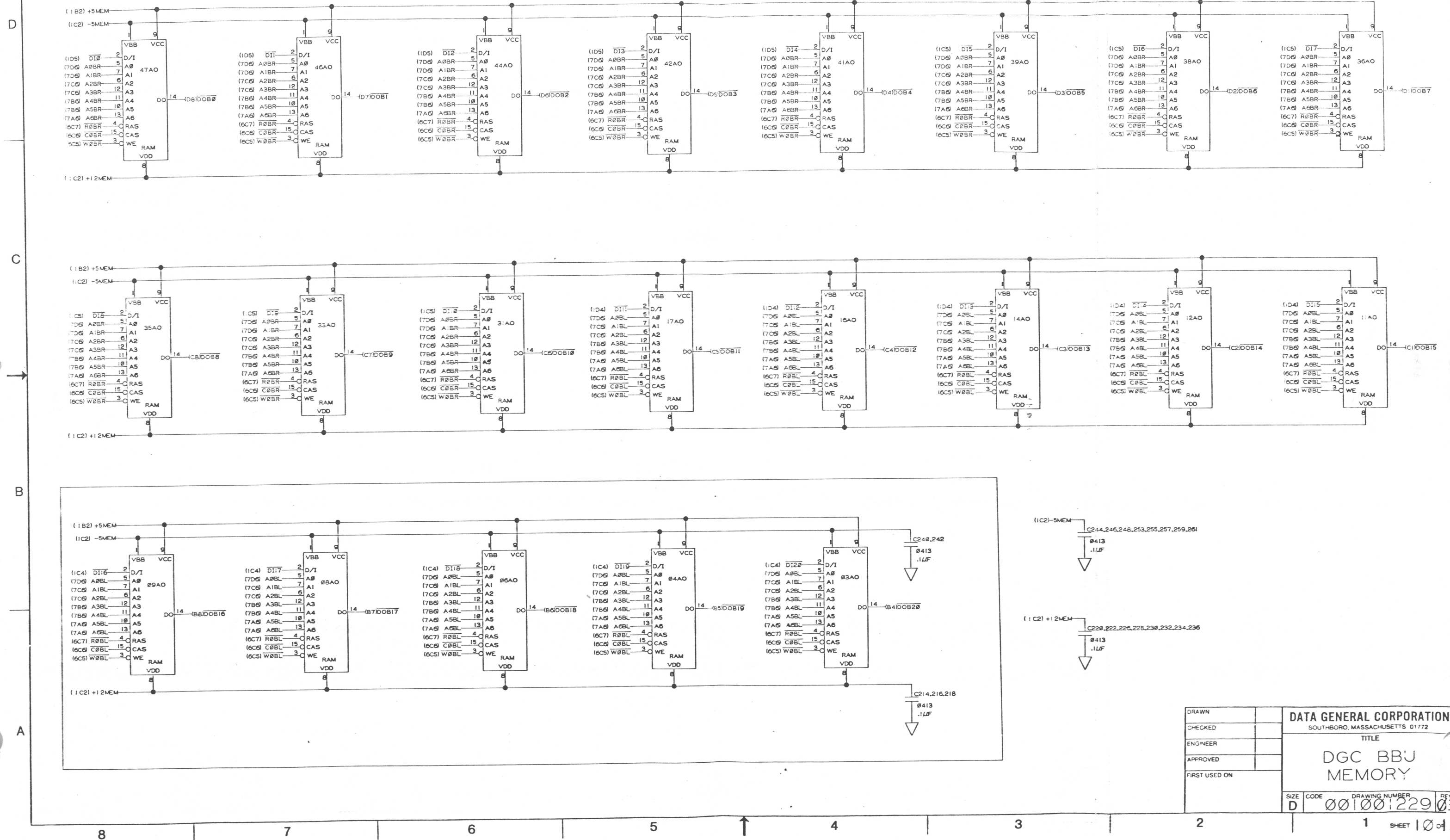


DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTHBORO, MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>
CHECKED		
ENGINEER		
APPROVED		
FIRST USED ON		SIZE CODE <b>001001229</b> REV <b>02</b>

# MCD B BANK

REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

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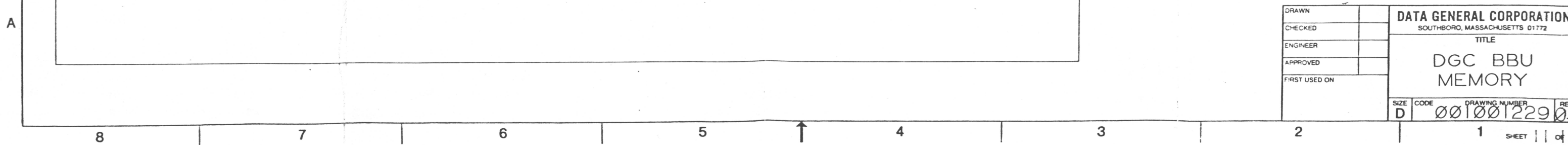
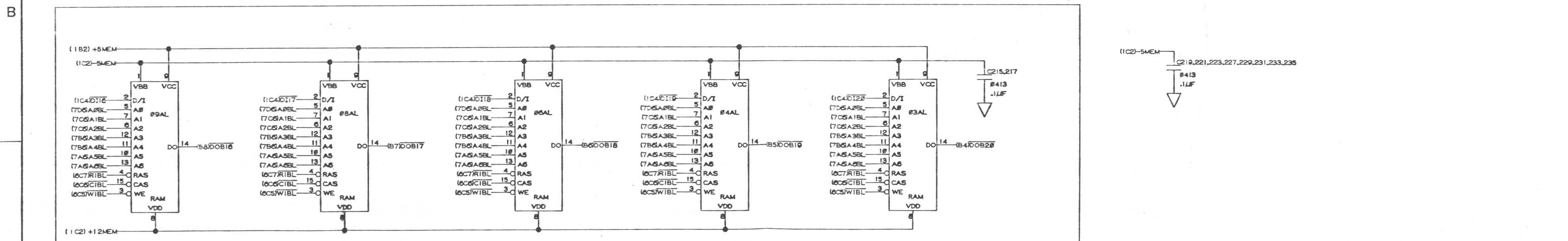
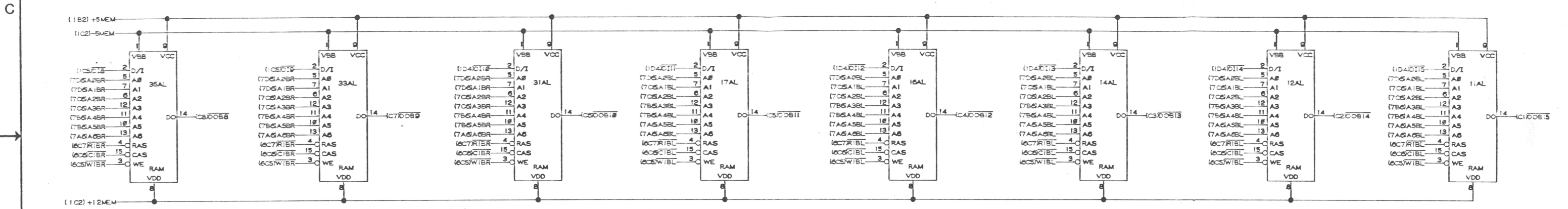
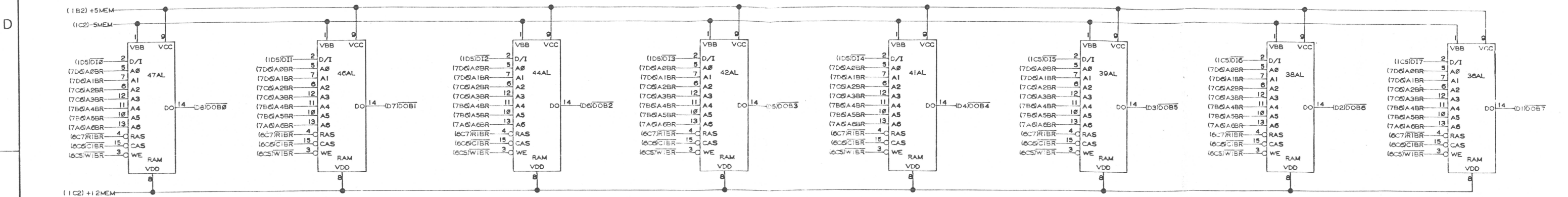


DRAWN		<b>DATA GENERAL CORPORATION</b>	
CHECKED		SOUTHBORO, MASSACHUSETTS 01772	
ENGINEER		TITLE	
APPROVED		<b>DGC BBU MEMORY</b>	
FIRST USED ON		SIZE	CODE
		D	00100122903
		DRAWING NUMBER	REV
			10 of 15

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# MOD B BANK 1

REVISIONS			
REV	DESCRIPTION	DRFTG	APPEY DATE

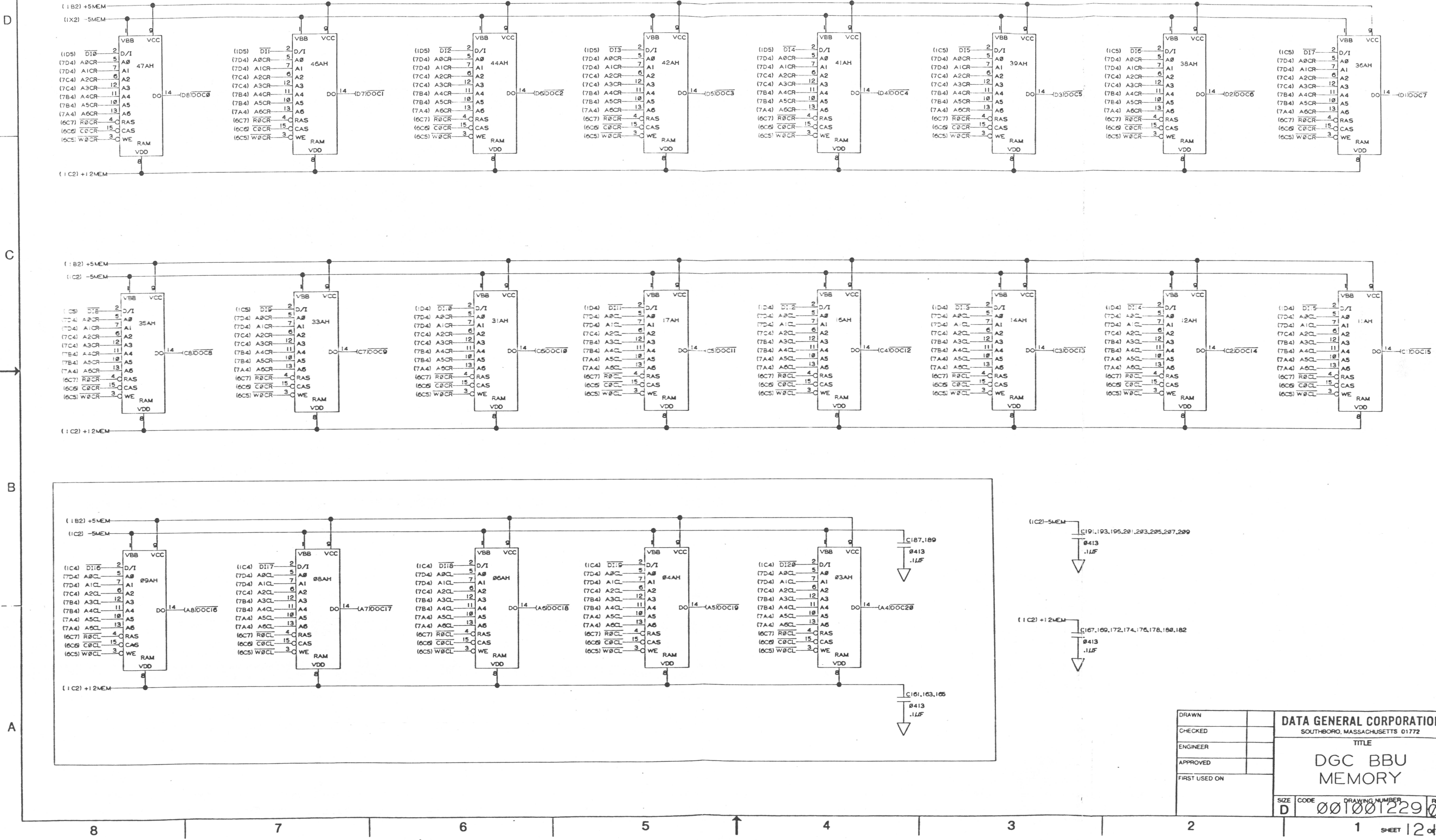


DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTHBORO, MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>	
CHECKED			
ENGINEER			
APPROVED			
FIRST USED ON			
SIZE	CODE	DRAWING NUMBER	REV
D		0010012290	0

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REV	DESCRIPTION	DRFTG	APP BY	DATE

# MOD C BANK 0

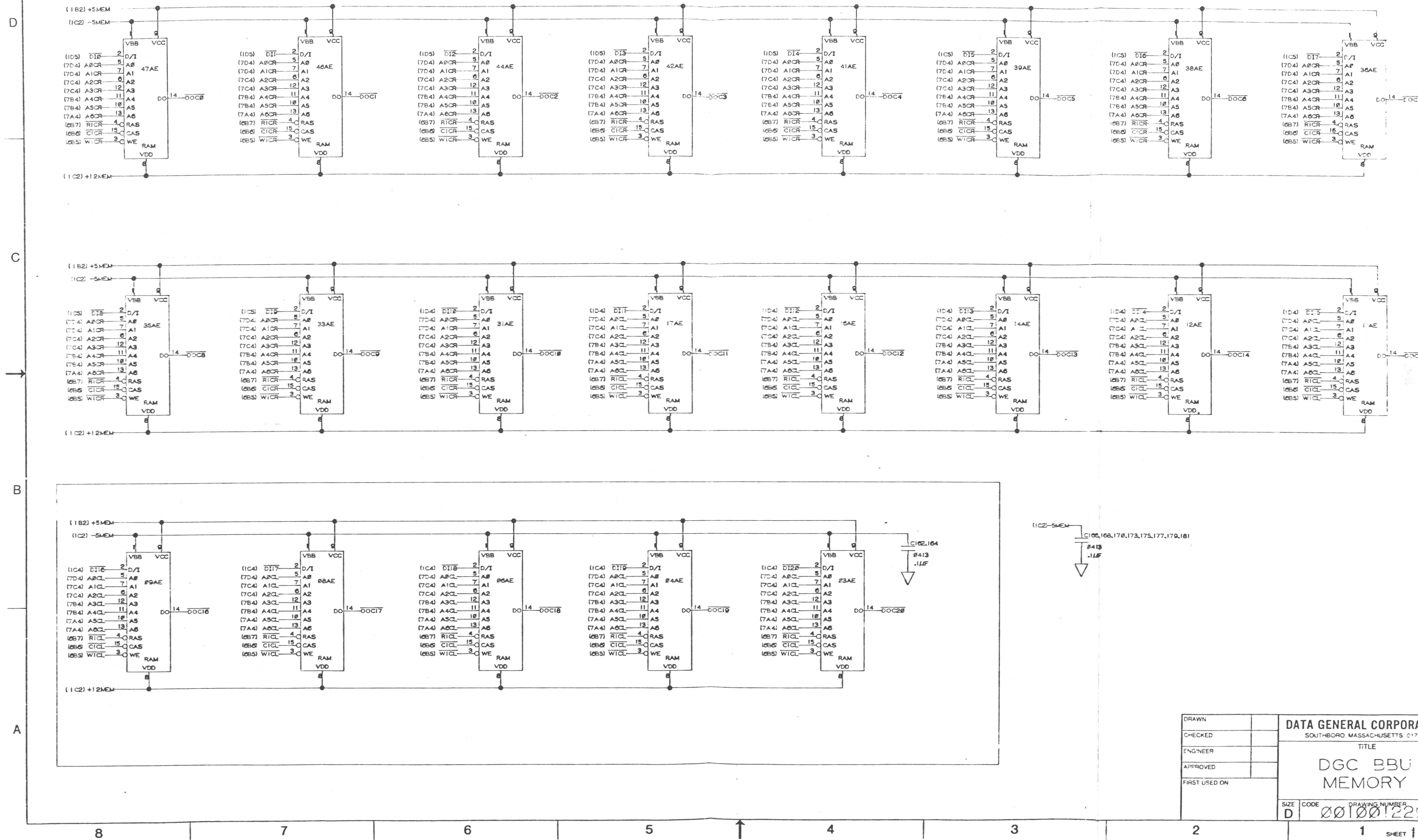


DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTHBORO, MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>
CHECKED		
ENGINEER		
APPROVED		
FIRST USED ON		SIZE CODE <b>D</b> DRAWING NUMBER <b>001001229</b>

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# MOD C BANK 1

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY



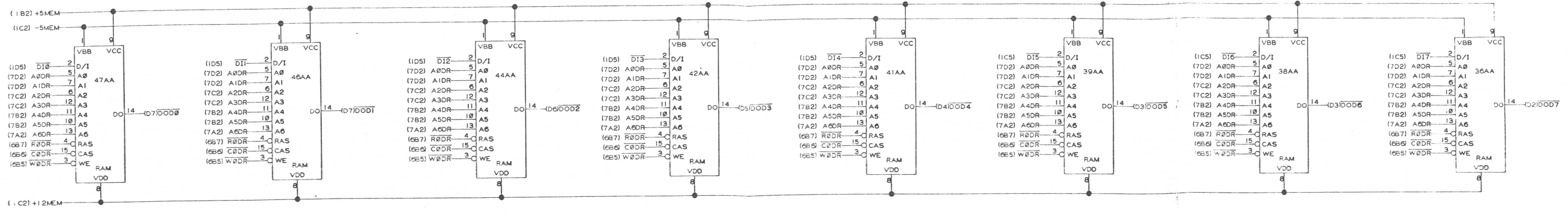
DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTH-BORO MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>
CHECKED		
ENGINEER		
APPROVED		
FIRST USED ON		SIZE D CODE 001001229 DRAWING NUMBER 001001229 SHEET 13 of 13

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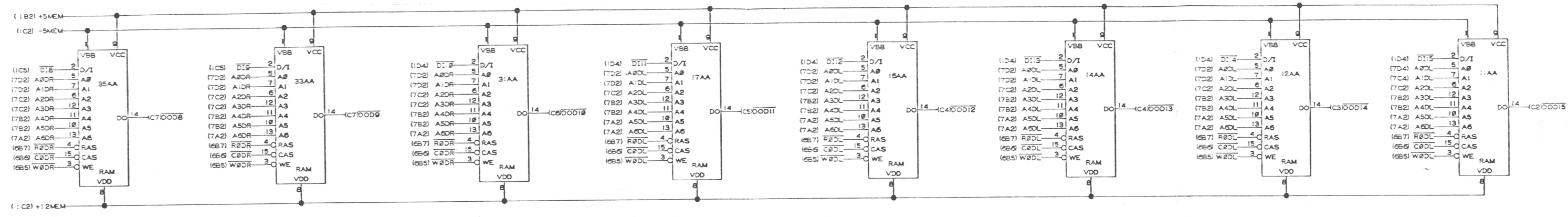
REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

# MOD D BANK 0

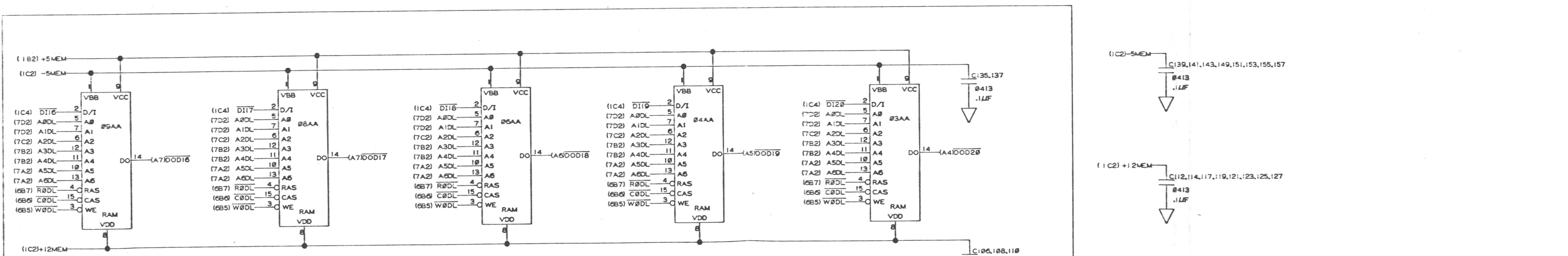
D



C



B



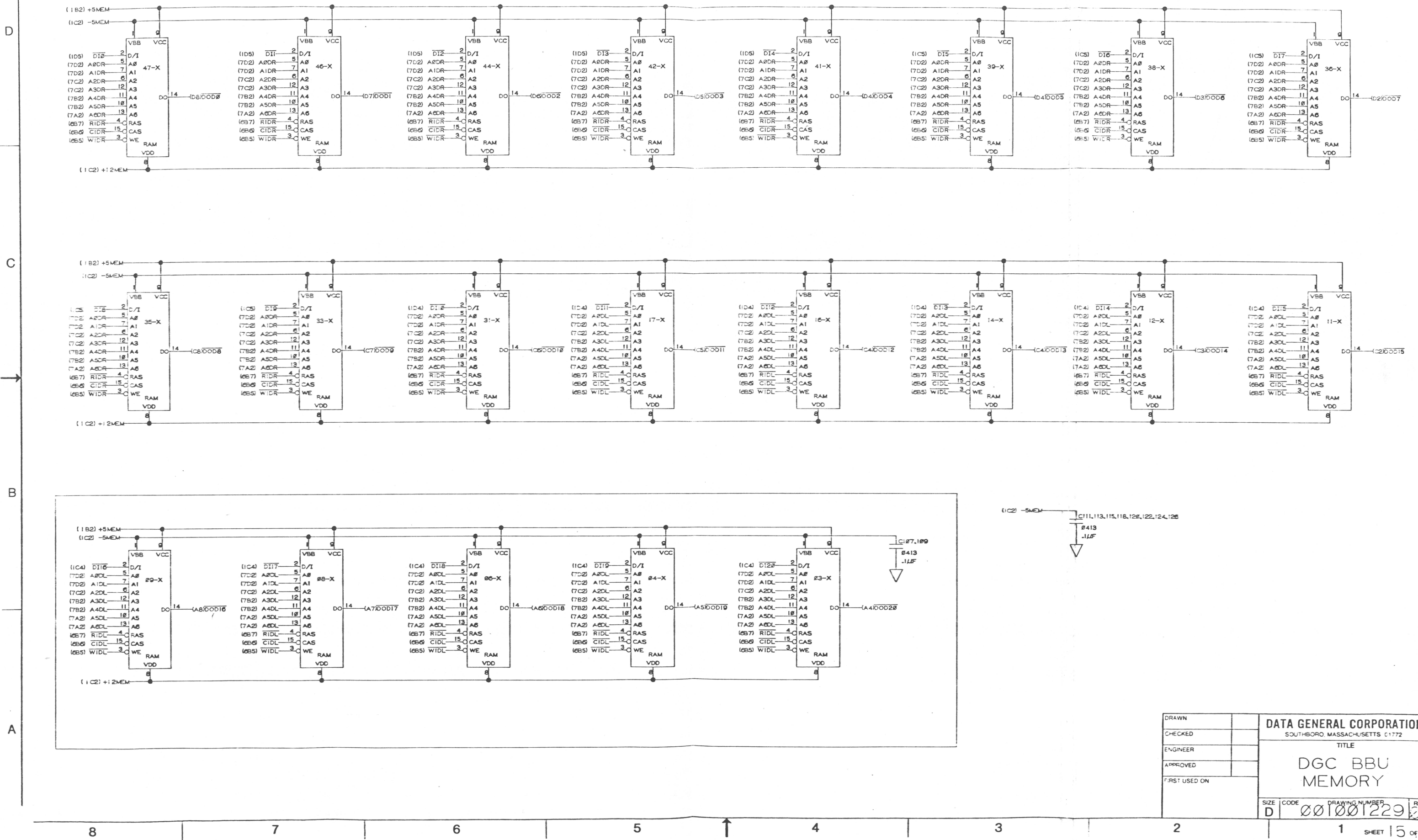
A

DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTHBORO, MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>	
CHECKED			
ENGINEER			
APPROVED			
FIRST USED ON			
SIZE	D	DRAWING NUMBER	001001229

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# MOD B BANK 1

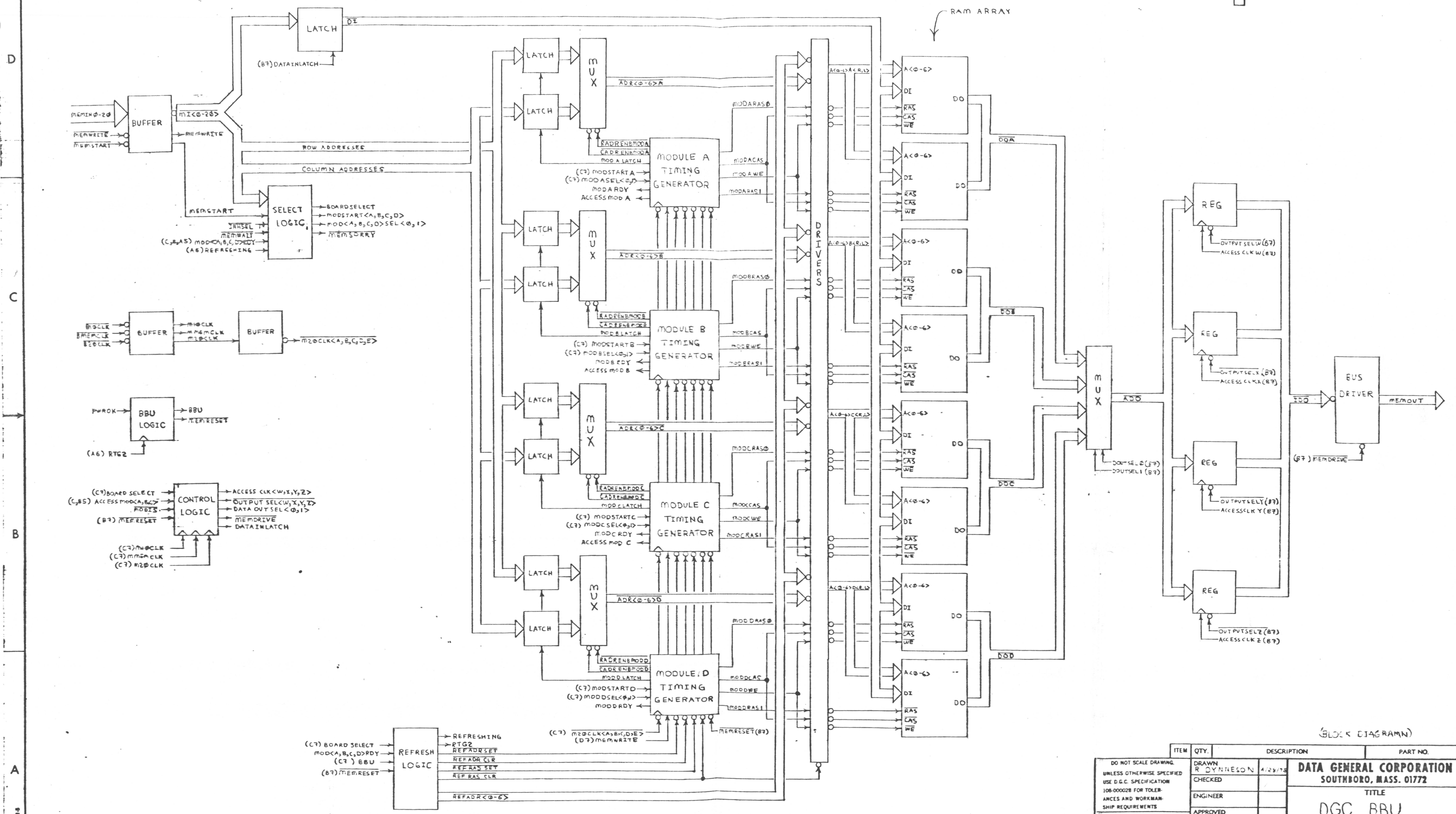
REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY



DRAWN		<b>DATA GENERAL CORPORATION</b> SOUTHBORO, MASSACHUSETTS 01772 TITLE <b>DGC BBU MEMORY</b>
CHECKED		
ENGINEER		
APPROVED		
FIRST USED ON		SIZE CODE <b>D</b> DRAWING NUMBER <b>001001229</b>

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REV.	DESCRIPTION	DRFTG.	APP BY	DATE



(BLOCK DIAGRAM)

ITEM	QTY.	DESCRIPTION	PART NO.

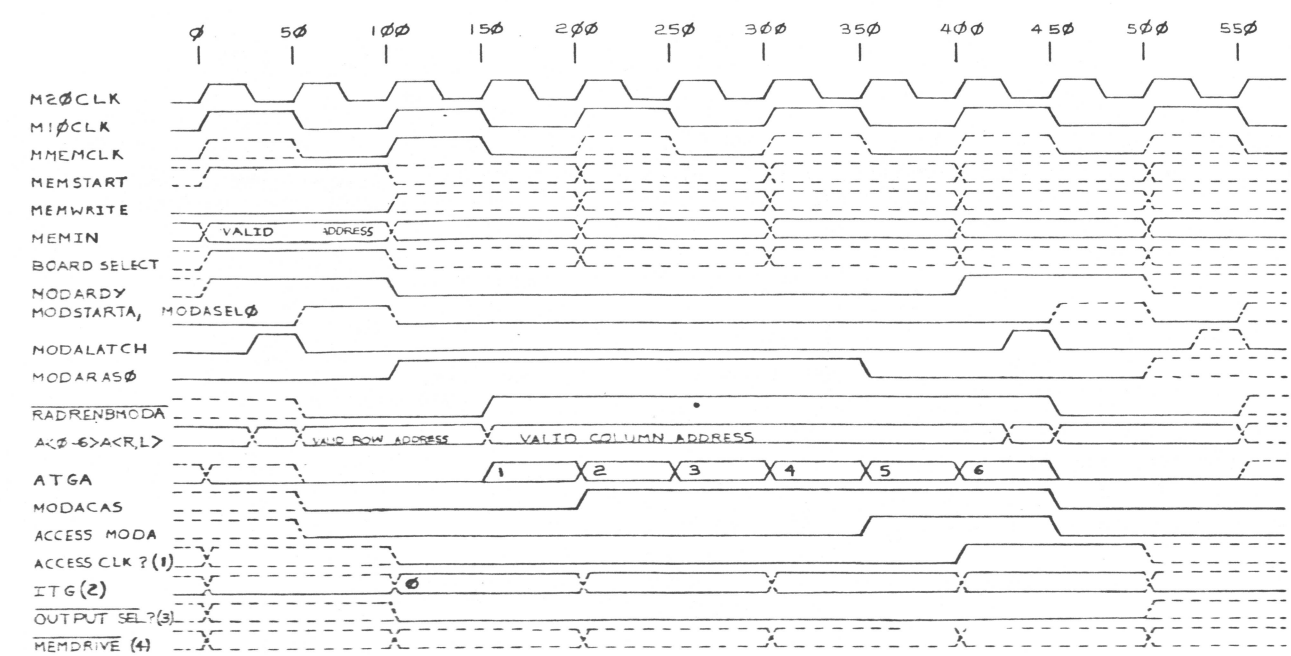
DO NOT SCALE DRAWING UNLESS OTHERWISE SPECIFIED USE D.G.C. SPECIFICATION 108-000028 FOR TOLER- ANCES AND WORKMAN- SHIP REQUIREMENTS	DRAWN R DYNRESON 4/25/78	<b>DATA GENERAL CORPORATION</b> SOUTHBORO, MASS. 01772	
MATERIAL	CHECKED	TITLE DGC BBU MEMORY	
FINISH	ENGINEER	FIRST USED ON	
	APPROVED	SCALE	CODE IDENT. SIZE CODE DRAWING NUMBER REV.
			34984 D 00101229 03



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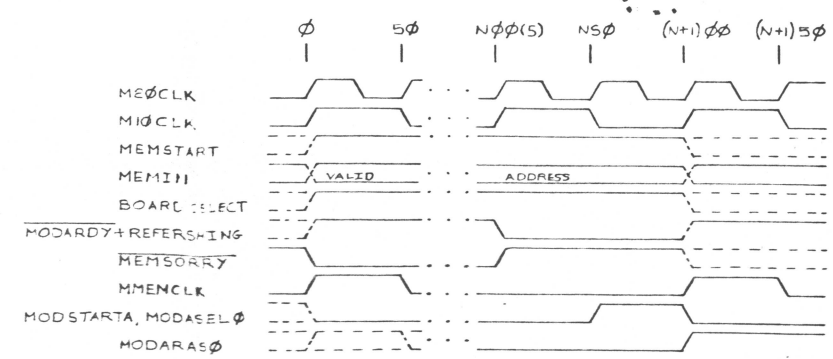
REVISIONS			
REV.	DESCRIPTION	DRFTG.	APP. BY DATE

### READ FROM MODULE A



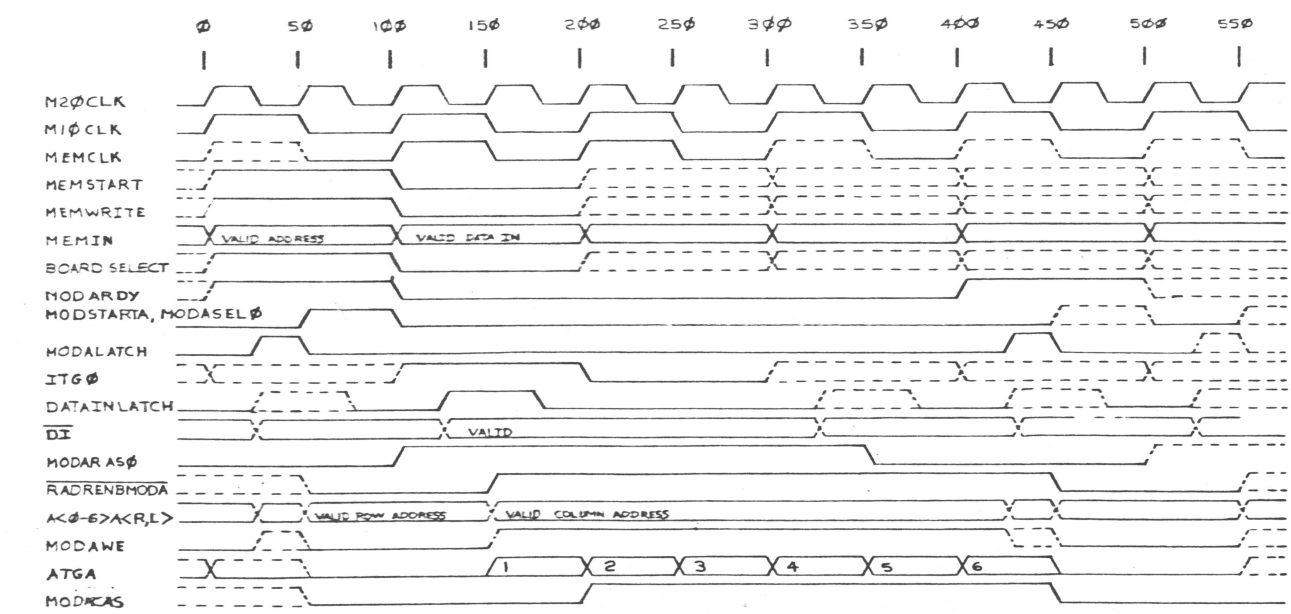
- NOTES:  
 (1) ? MAY BE W, X, Y, OR Z.  
 (2) THE ITG REGISTER IS CLOCKED BY MMEMCLK.  
 (3) ? IS THE SAME (W, X, Y OR Z) AS IN (1), OUTPUT SEL ? OCCURS DURING ITG3.  
 (4) THE MEMDRIVE OF INTEREST OCCURS DURING ITG3 WHEN MODIS IS NOT ASSERTED.

### READ FROM OR WRITE TO MODULE A DEFERRED

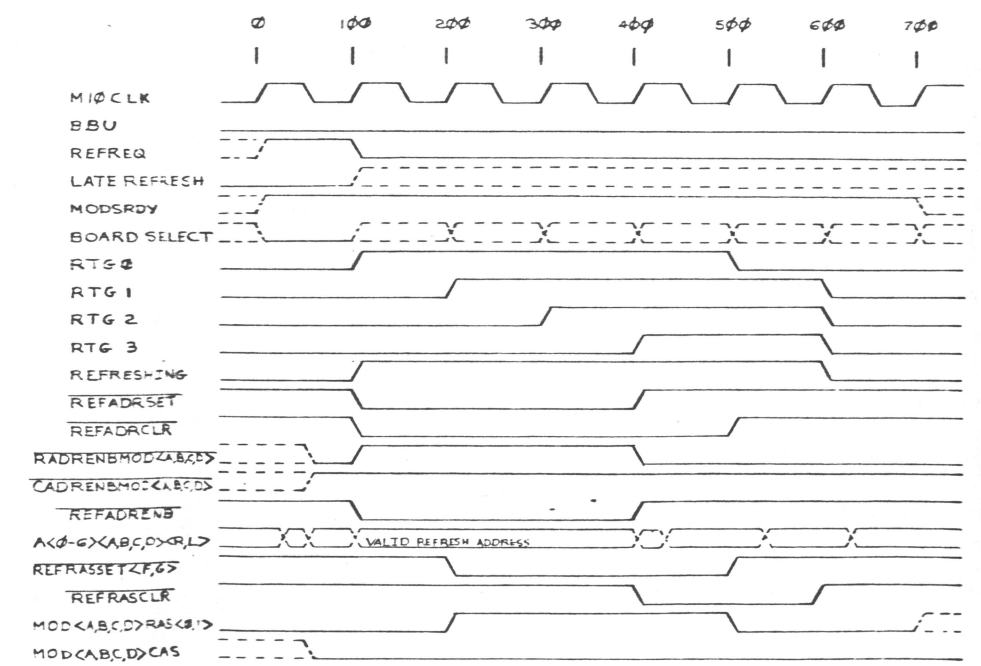


NOTE:  
 (5) N IS THE NO. OF 100 NS CYCLES THAT START IS DEFERRED.

### WRITE TO MODULE A



### NORMAL REFRESH



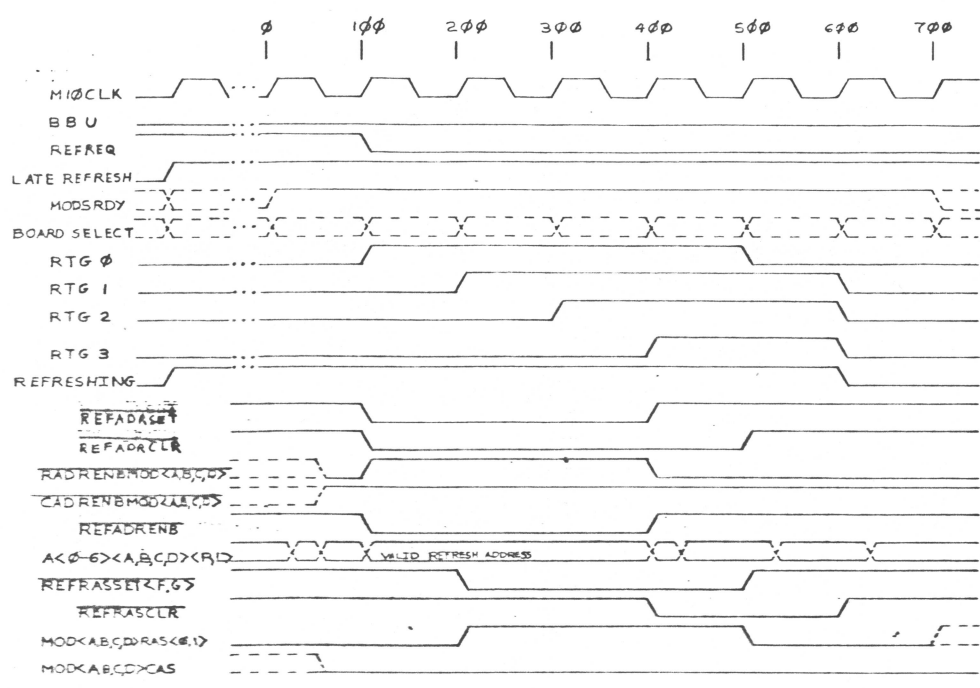
(TIMING)

DO NOT SCALE DRAWING UNLESS OTHERWISE SPECIFIED USE D.G.C. SPECIFICATION 108-000025 FOR TOLERANCES AND WORKMANSHIP REQUIREMENTS MATERIAL FINISH	ITEM	QTY.	DESCRIPTION	PART NO.
	DRAWN	7	5-17-78	DATA GENERAL CORPORATION SOUTHBORO, MASS. 01772
	CHECKED			
	ENGINEER			TITLE
APPROVED			DGC BBU MEMORY	
FIRST USED ON				
SCALE	CODE IDENT	SIZE	CODE	DRAWING NUMBER
	34984	D	001	001229
				REV
				03

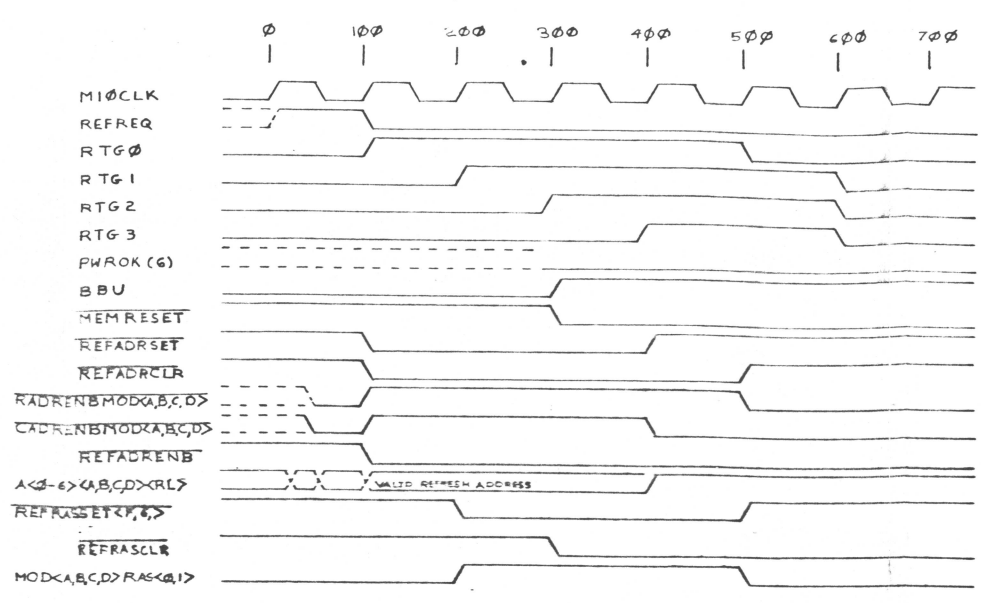
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REVISIONS				
REV.	DESCRIPTION	DRFTG	APP BY	DATE

LATE REFRESH

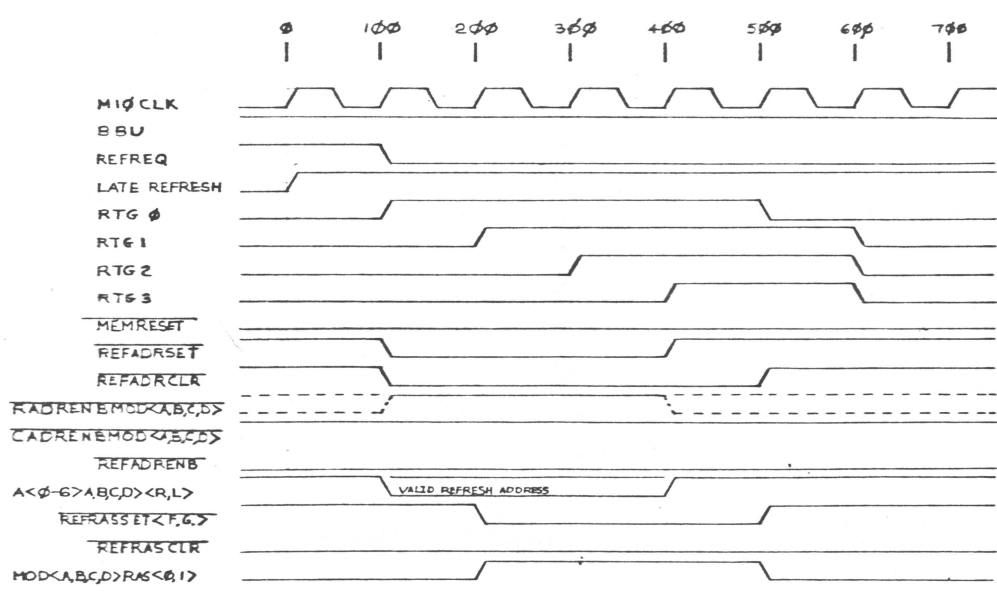


SWITCHING INTO BBU

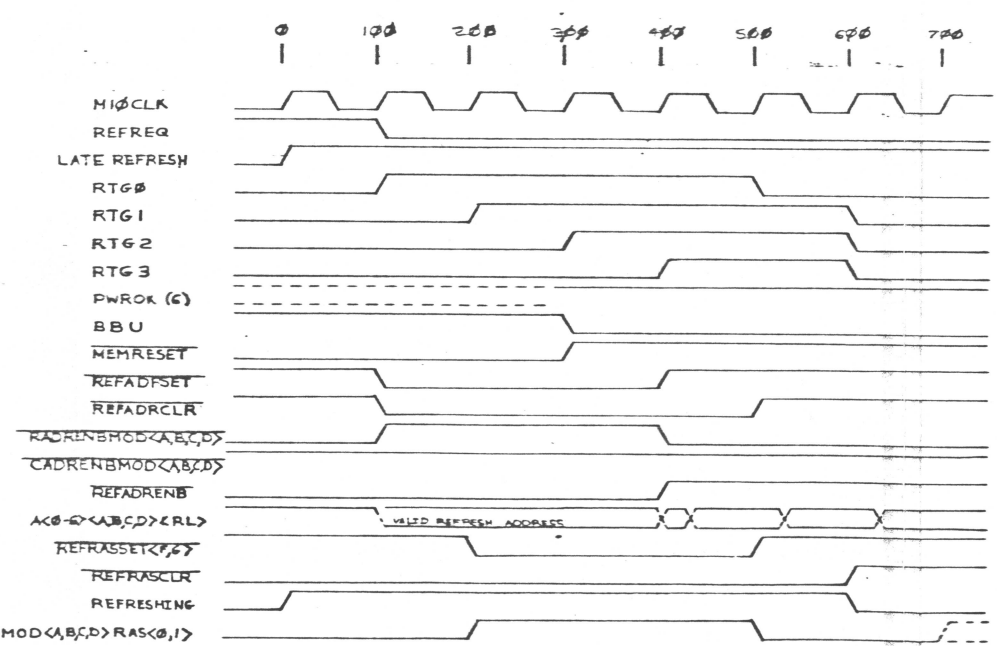


NOTE: (6) PWROK IS AN ASYNCHRONOUS SIGNAL

REFRESH DURING BBU



SWITCHING OUT OF BBU



(TIMING)

ITEM	QTY	DESCRIPTION	PART NO.

DO NOT SCALE DRAWING UNLESS OTHERWISE SPECIFIED USE D.G.C. SPECIFICATION 108-00028 FOR TOLERANCES AND WORKMANSHIP REQUIREMENTS	DRAWN 5-18-78 CHECKED	DATA GENERAL CORPORATION SOUTHBORO, MASS. 01772	
MATERIAL	ENGINEER	TITLE DGC BBU MEMORY	
FINISH	APPROVED	FIRST USED ON	
		SCALE	CODE IDENT. SIZE CODE DRAWING NUMBER REV
			34984 D 001 CC1229 03