

REVISIONS				
REV	DESCRIPTION	DRAFTG	APP BY	DATE
00	RLSC PER ECO E547			
01	PER ECO E508A	W/L		12/8/78
2				

ASSEMBLY	TESTED-005012128 UNTESTED-005012129 (10K X 16 BIT)	TESTED-005012130 UNTESTED-005012131 (0K 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, R18, R41	R1, R9, R15, R18, R41
DO NOT INSTALL	R20, 8-E, 2-J, 3-J, 19-J, 2-O, 3-O, 5-T, 7-T		R20, 8-E, 2-J, 3-J, 19-J, 2-O, 3-O, 5-T, 7-T		R20, 8-E, 2-J, 3-J, 19-J, 2-O, 3-O, 5-T, 7-T		R20, 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

4K RAM 16K RAM

ARTWORK: 107 -813
 ARTWORK VS SCHEMATIC
 CHECKED: B. GLATHORN 12-18-78
 REV SCHEMATIC REV(S)
 #2 00,01
 ENGINEER
 APPROVED
 FIRST USED ON
 SEE CHART

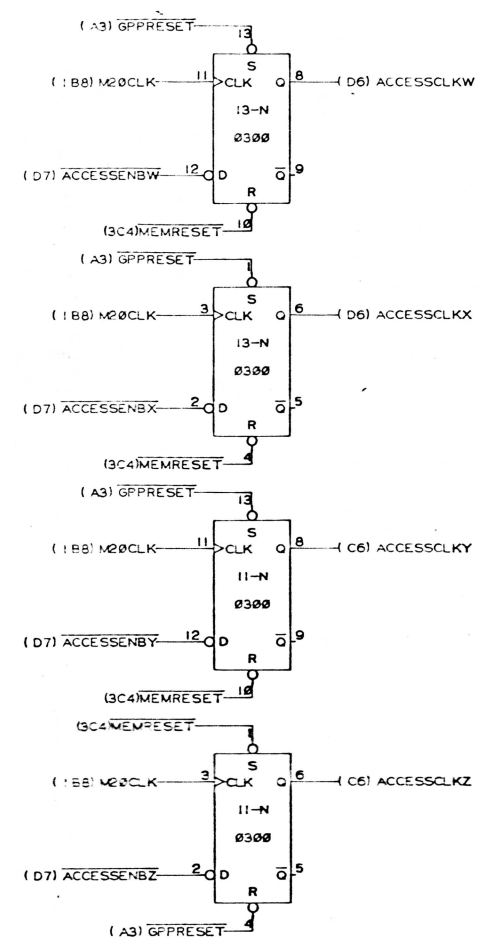
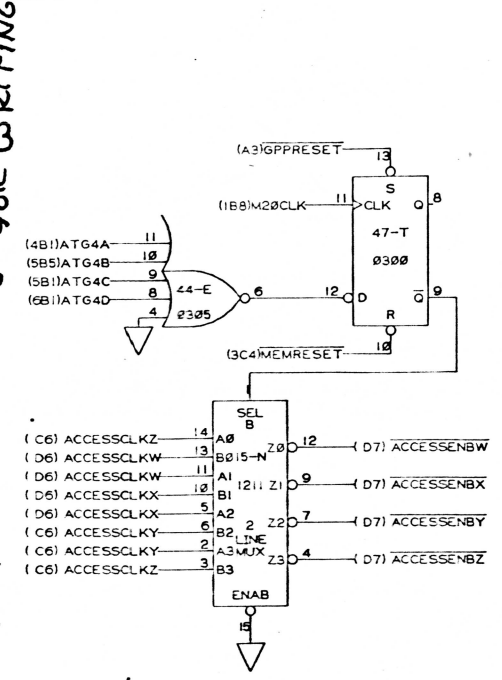
DRAWN: DIGITIZING 12-8-78
 CHECKED: B. GLATHORN 12-18-78
 REV SCHEMATIC REV(S)
 #2 00,01
 ENGINEER
 APPROVED
 FIRST USED ON
 SEE CHART

DATA GENERAL CORPORATION
 SOUTHBORO, MASSACHUSETTS 01772
 TITLE
DGC BBU MEMORY
 SIZE CODE 001001229 13
 REV 13

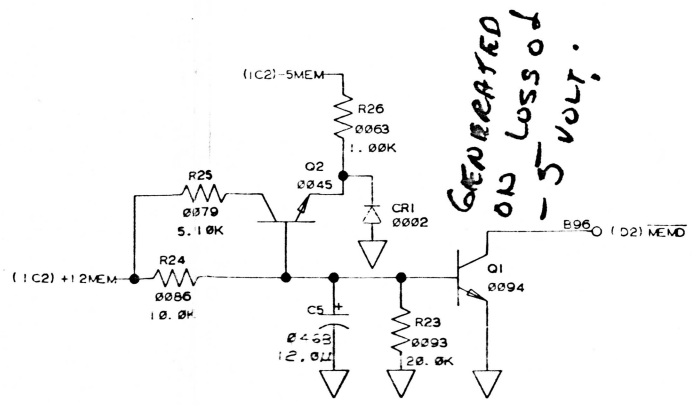
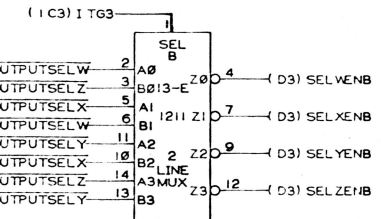
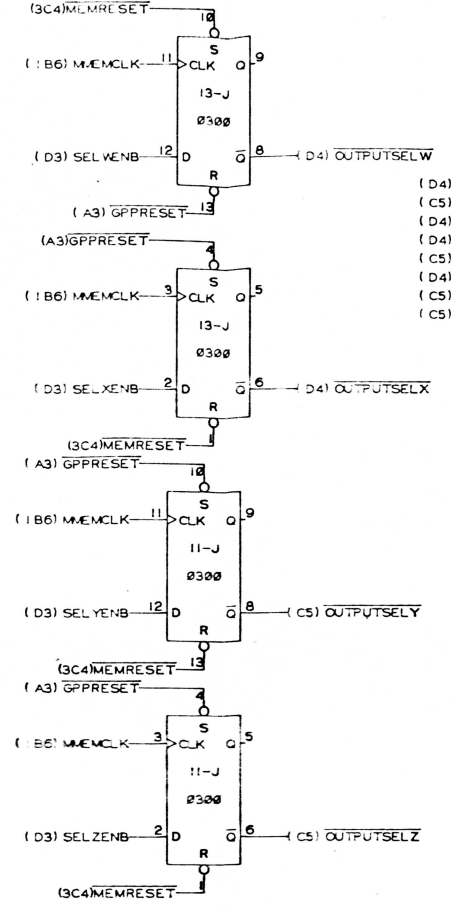
REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

5. DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.

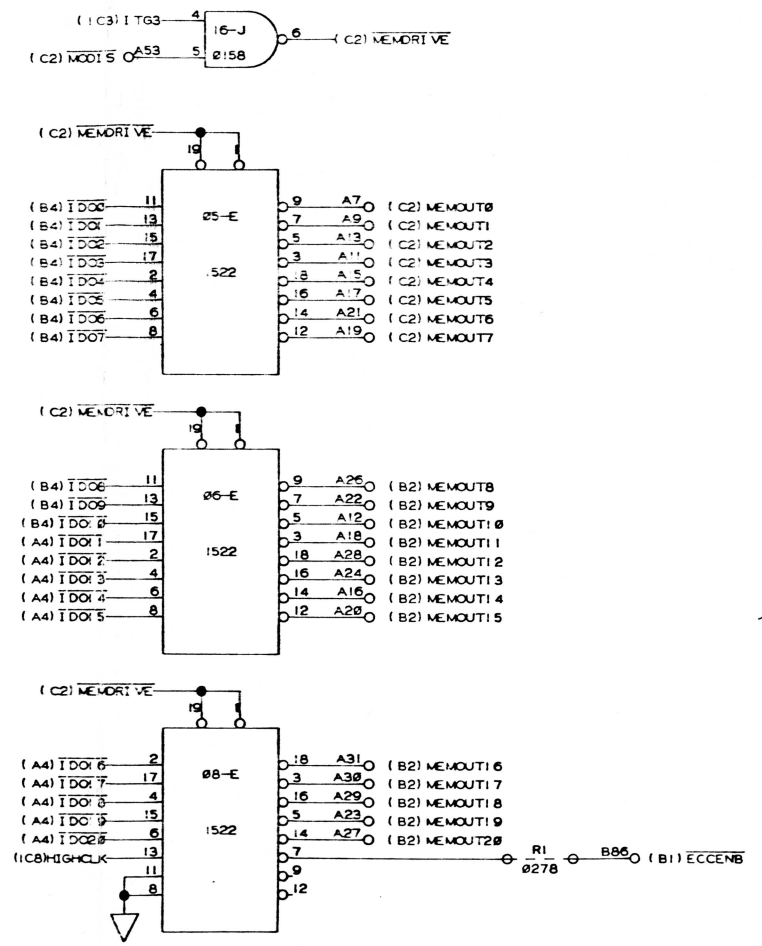
SEQUENTIAL REGISTERS ADDRESS TIMING FOR WRITING



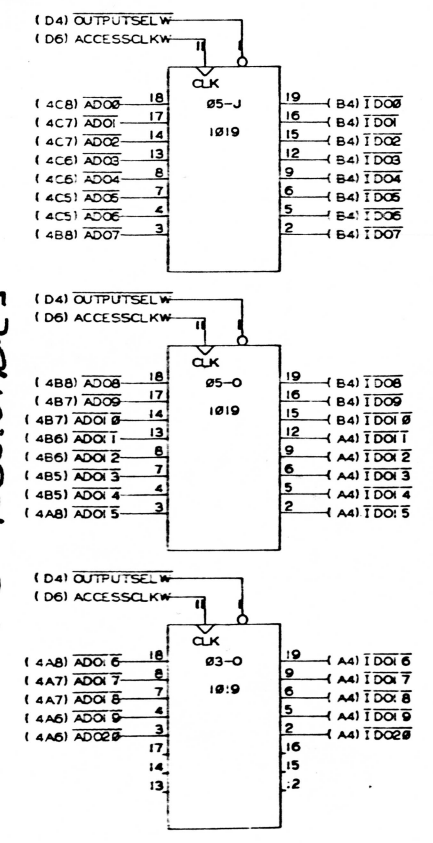
SEQUENTIAL REGISTERS READ out CONTROL



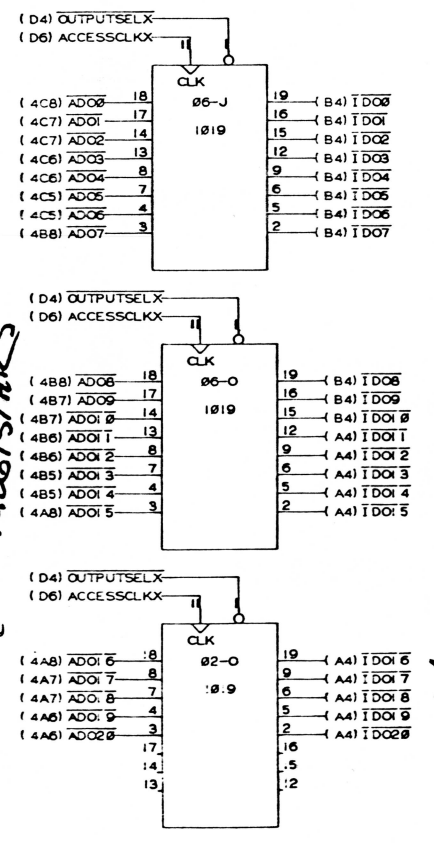
MEMORY OUTPUT BUS DRIVERS



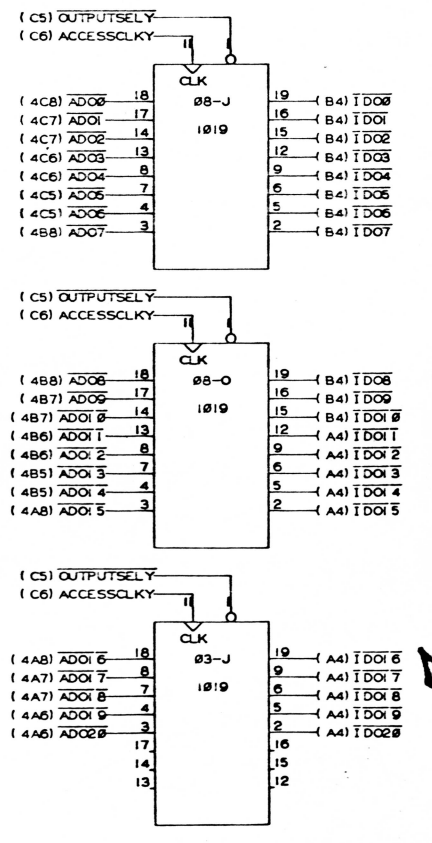
W REGISTERS



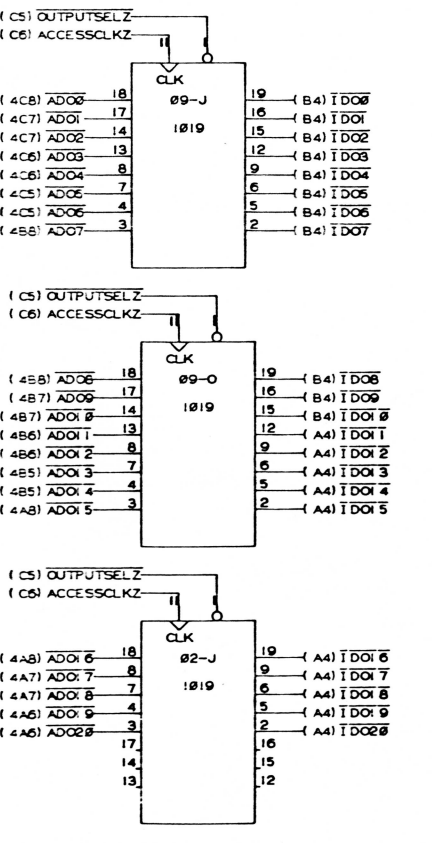
X REGISTERS



Y REGISTERS



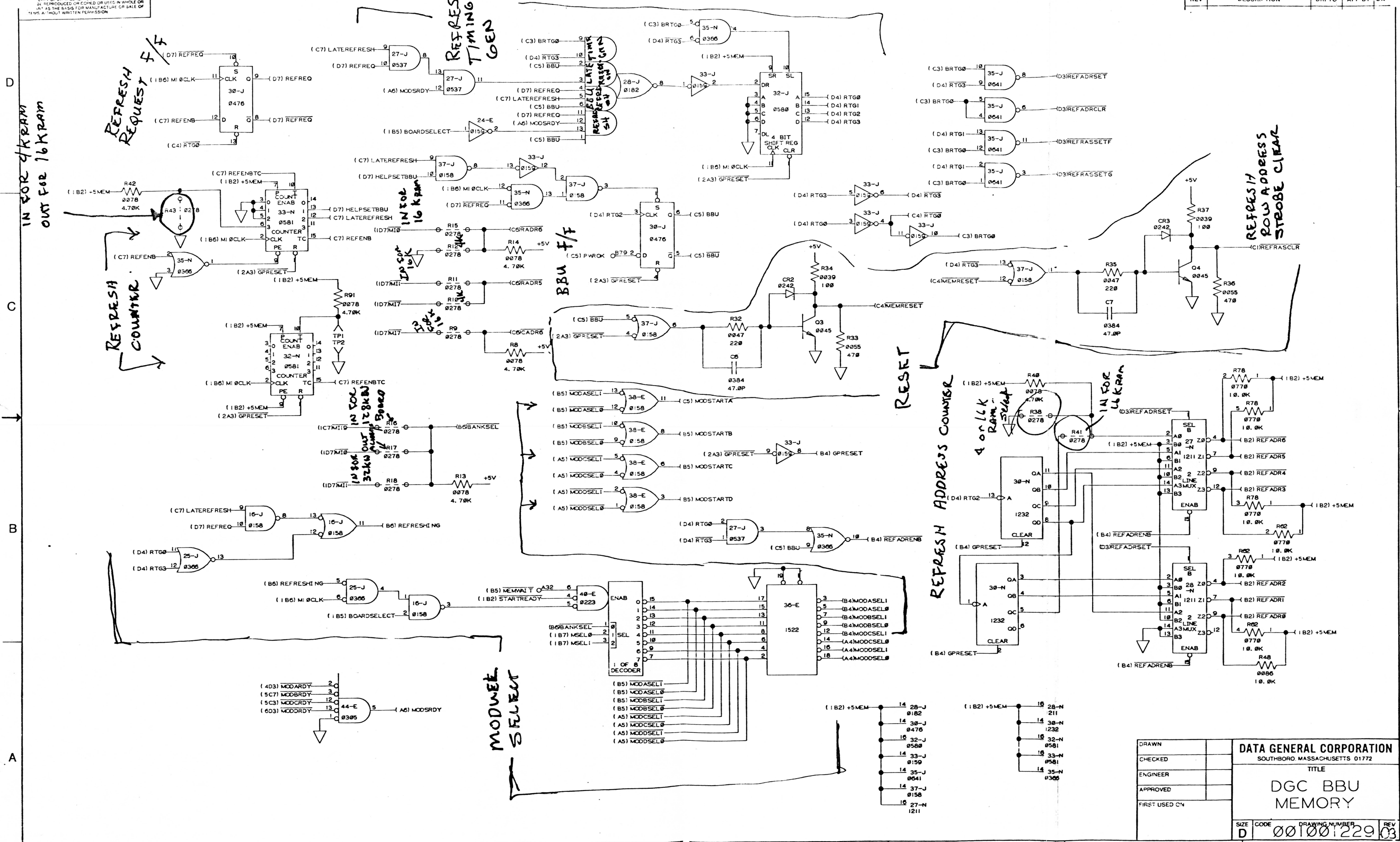
Z REGISTERS



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

ALL DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION

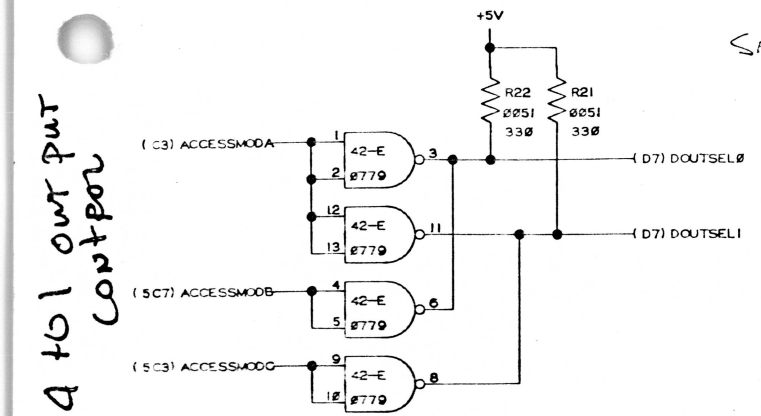
REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DA



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

ALL DIMENSIONS AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF DATA GENERAL CORPORATION.

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE



SELECT 1 0 OUTPUT

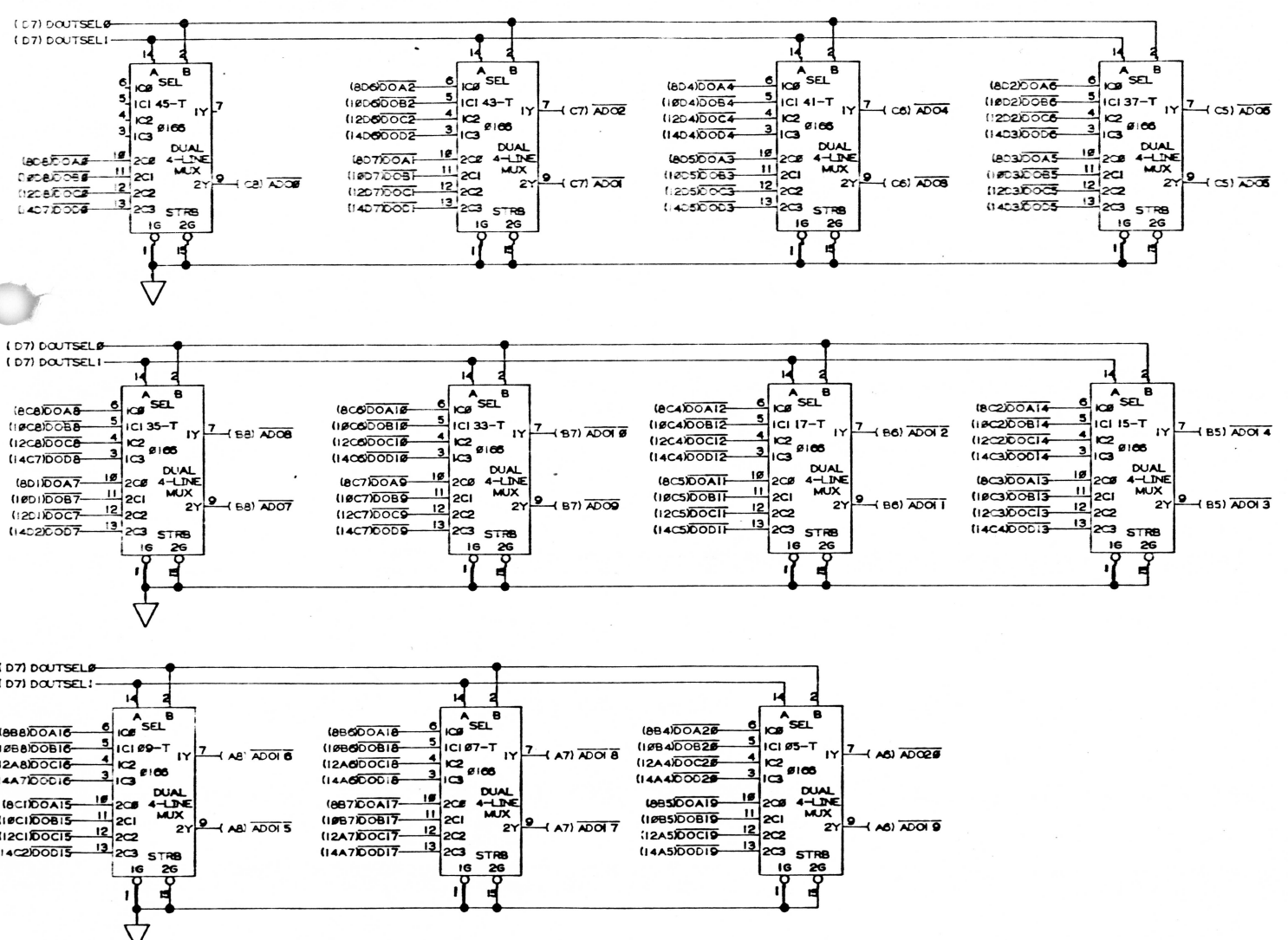
L L	MOD A
L L	MOD B
L H	MOD C
H H	MOD D

MOD A
Row, Column
SELECT

MOD A
READY

MOD A
ADDRESS STRB

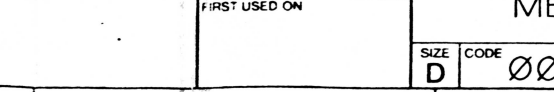
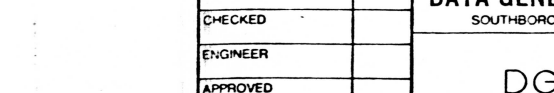
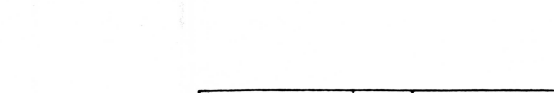
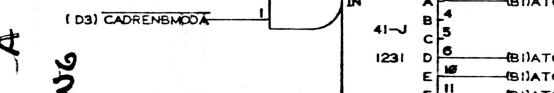
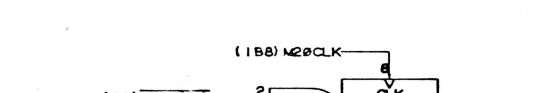
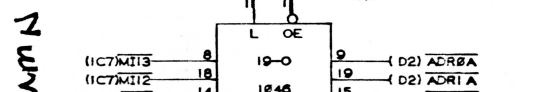
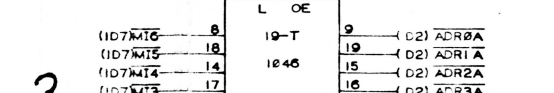
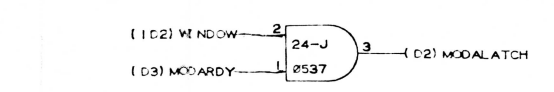
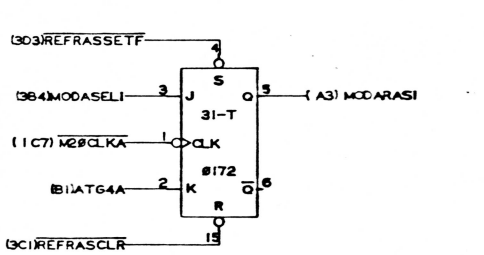
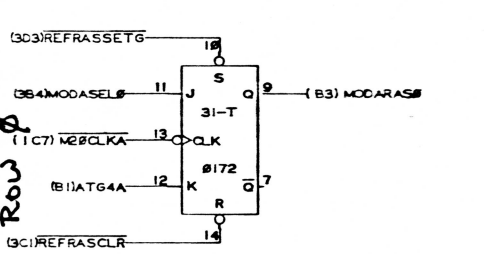
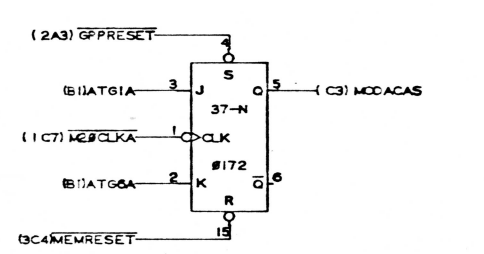
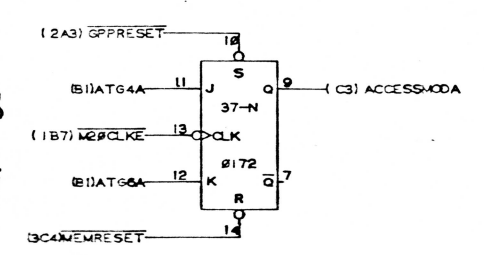
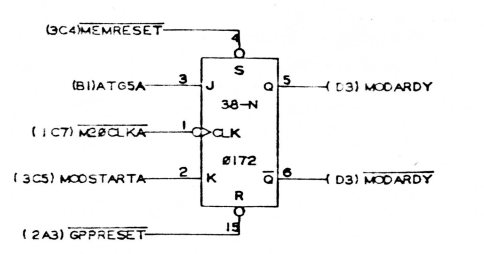
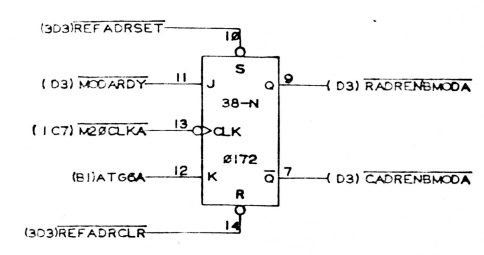
MOD A
ROW ADDRESS
STRB FOR
Row 1



4 to 1 output control

Mux.

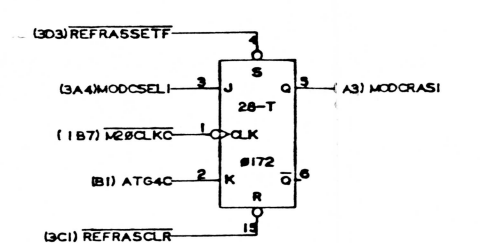
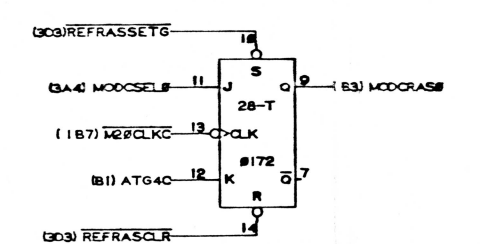
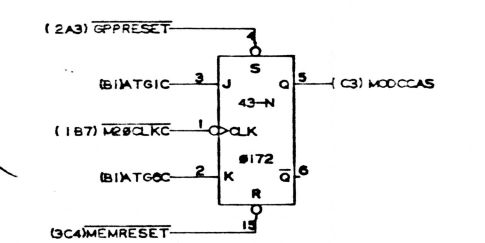
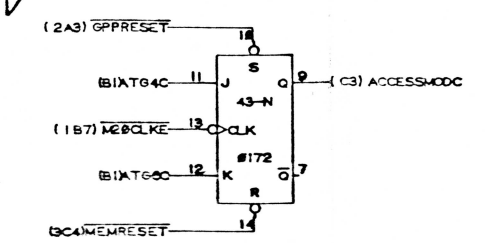
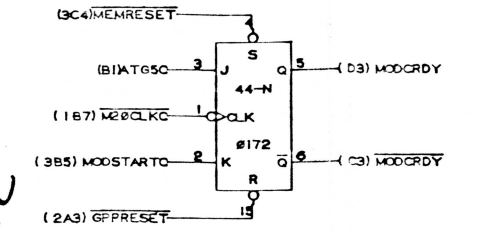
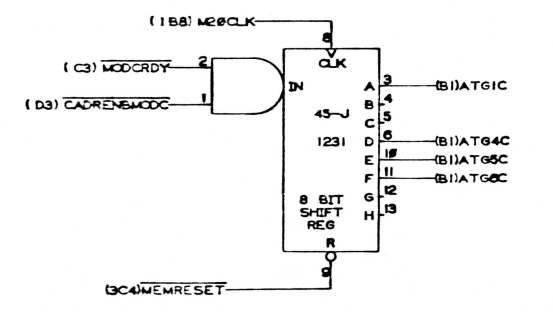
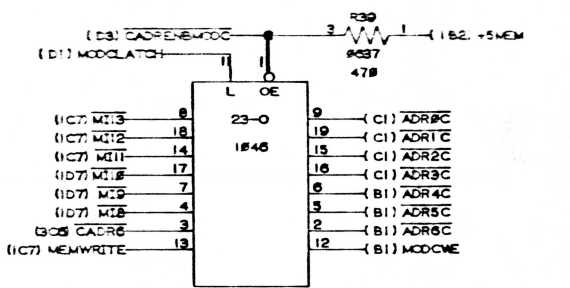
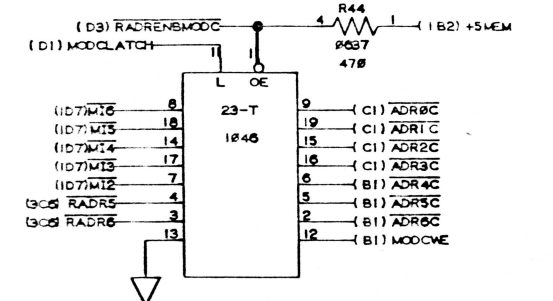
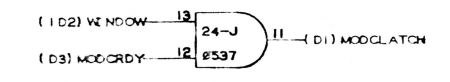
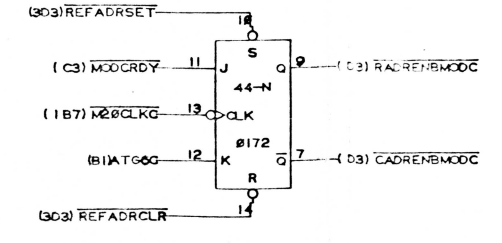
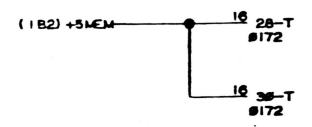
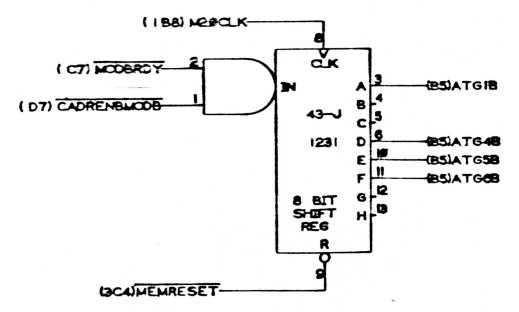
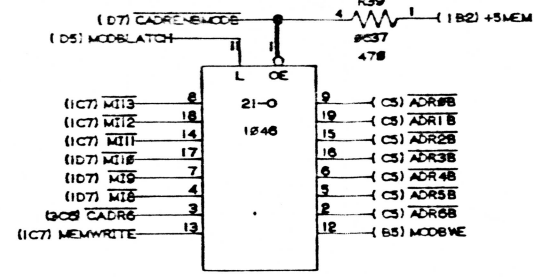
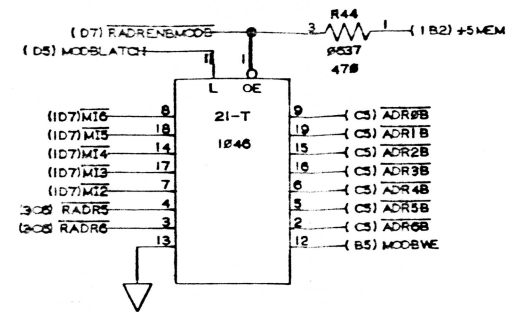
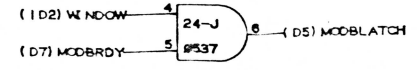
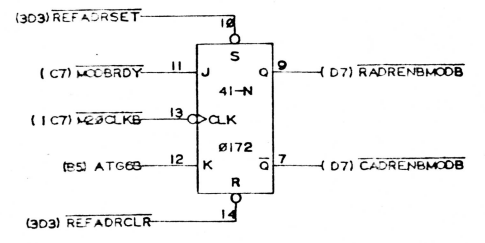
4 to 1 output Mux.



DRAWN		DATA GENERAL CORPORATION SOUTHBORO, MASSACHUSETTS 01772 TITLE DGC BBU MEMORY	
CHECKED			
ENGINEER			
APPROVED			
FIRST USED ON			
SIZE	CODE	DRAWING NUMBER	REV
D		001001229	031

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF PRODUCTS WITHOUT WRITTEN PERMISSION



CONTROL MOD B TIMING LOGIC

CONTROL MOD C TIMING LOGIC

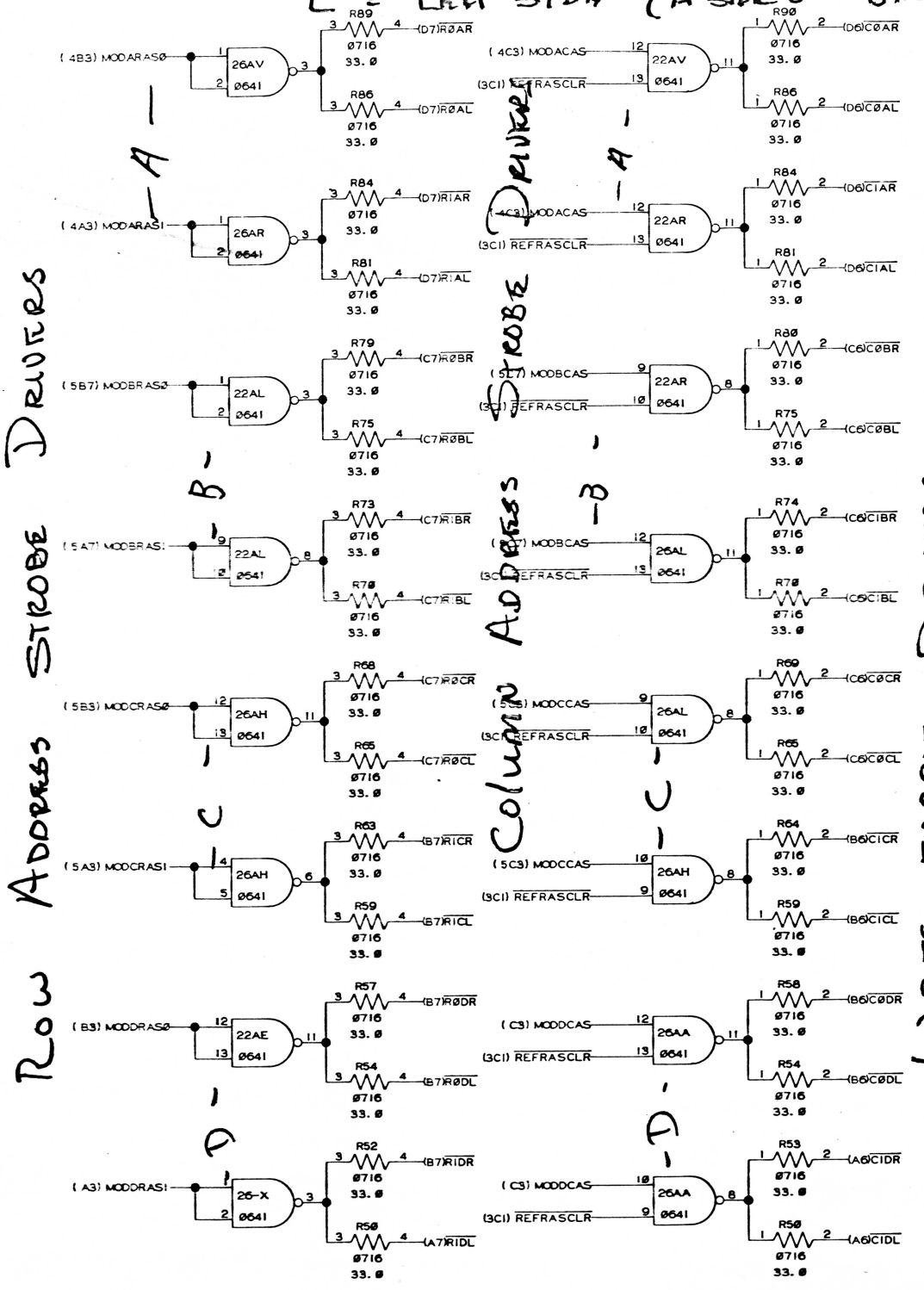
DRAWN		DATA GENERAL CORPORATION SOUTH BORO, MASSACHUSETTS 01772 TITLE DGC BBU MEMORY SIZE CODE DRAWING NUMBER RE D 001001229 03
CHECKED		
ENGINEER		
APPROVED		
FIRST USED ON		

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION

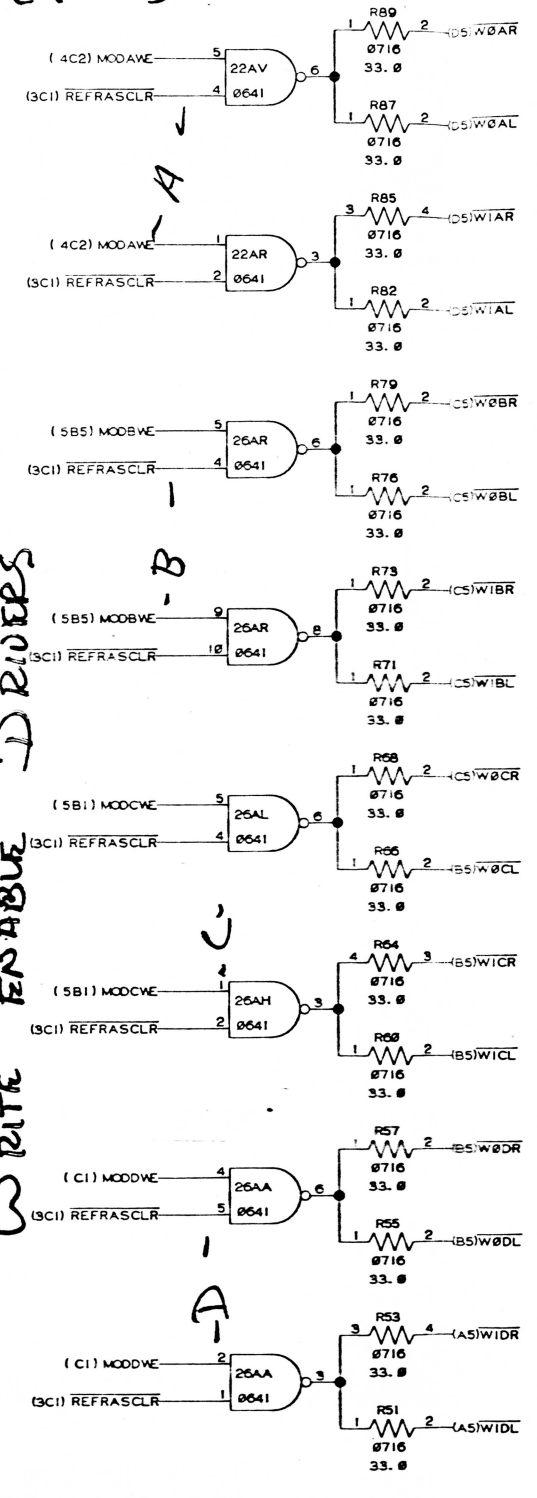
ANY SIGNAL ENDING WITH **R** GOES TO THE RIGHT SIDE OF BOARD (B SIDE ON BACK PLANS)
 L = LEFT SIDE (A SIDE OF BACK PLANS)

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE

Row Address Strobe Drivers



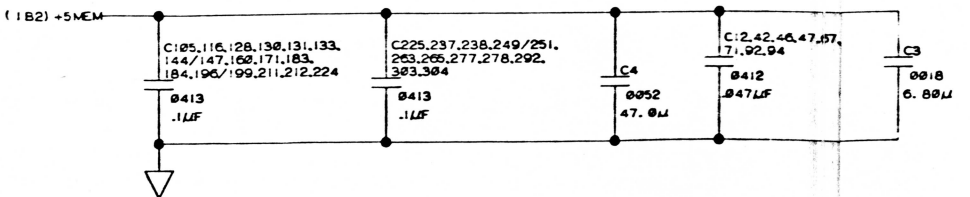
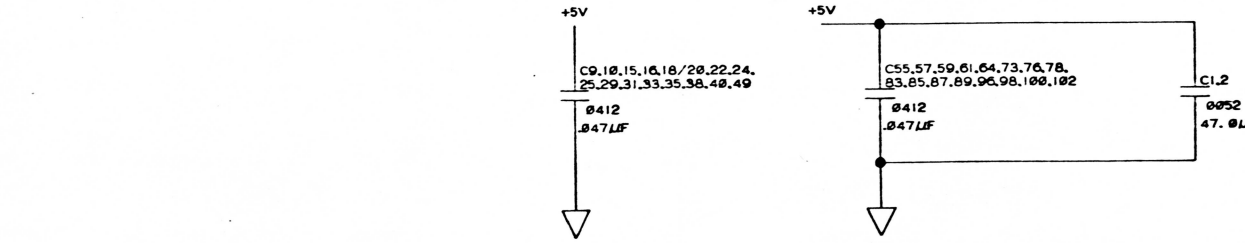
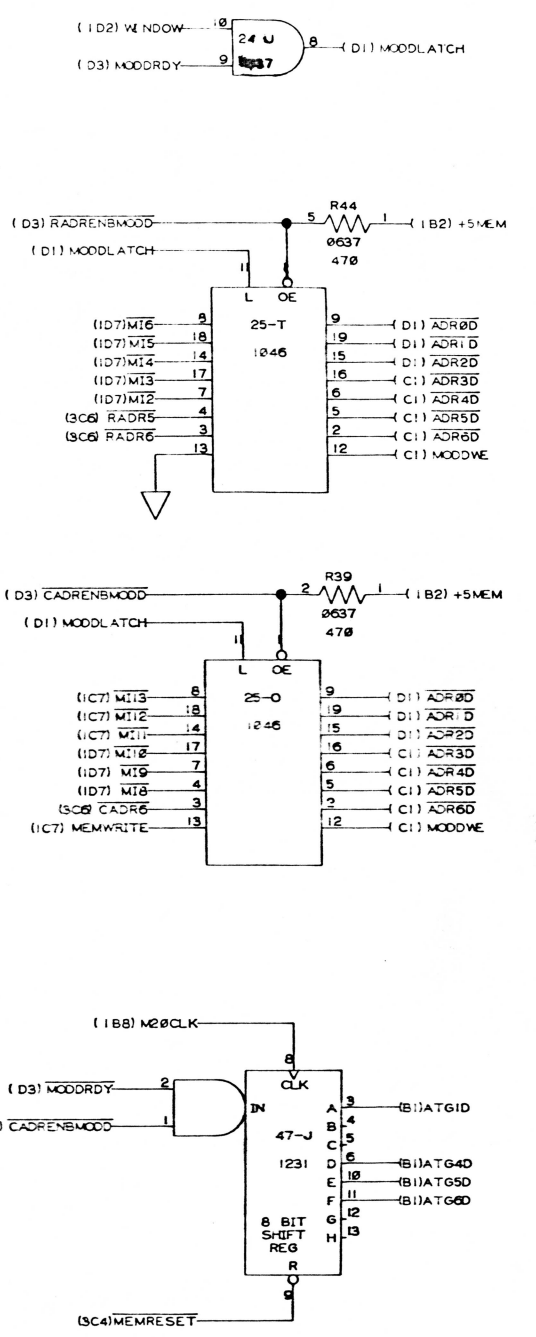
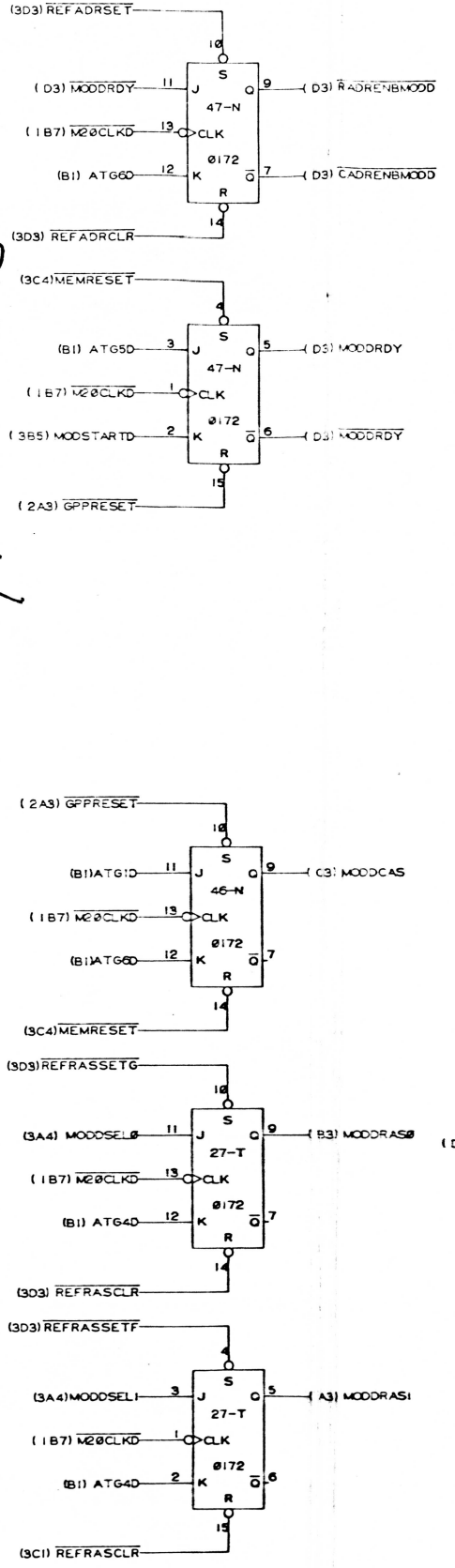
Column Address Drivers



Write Enable Drivers



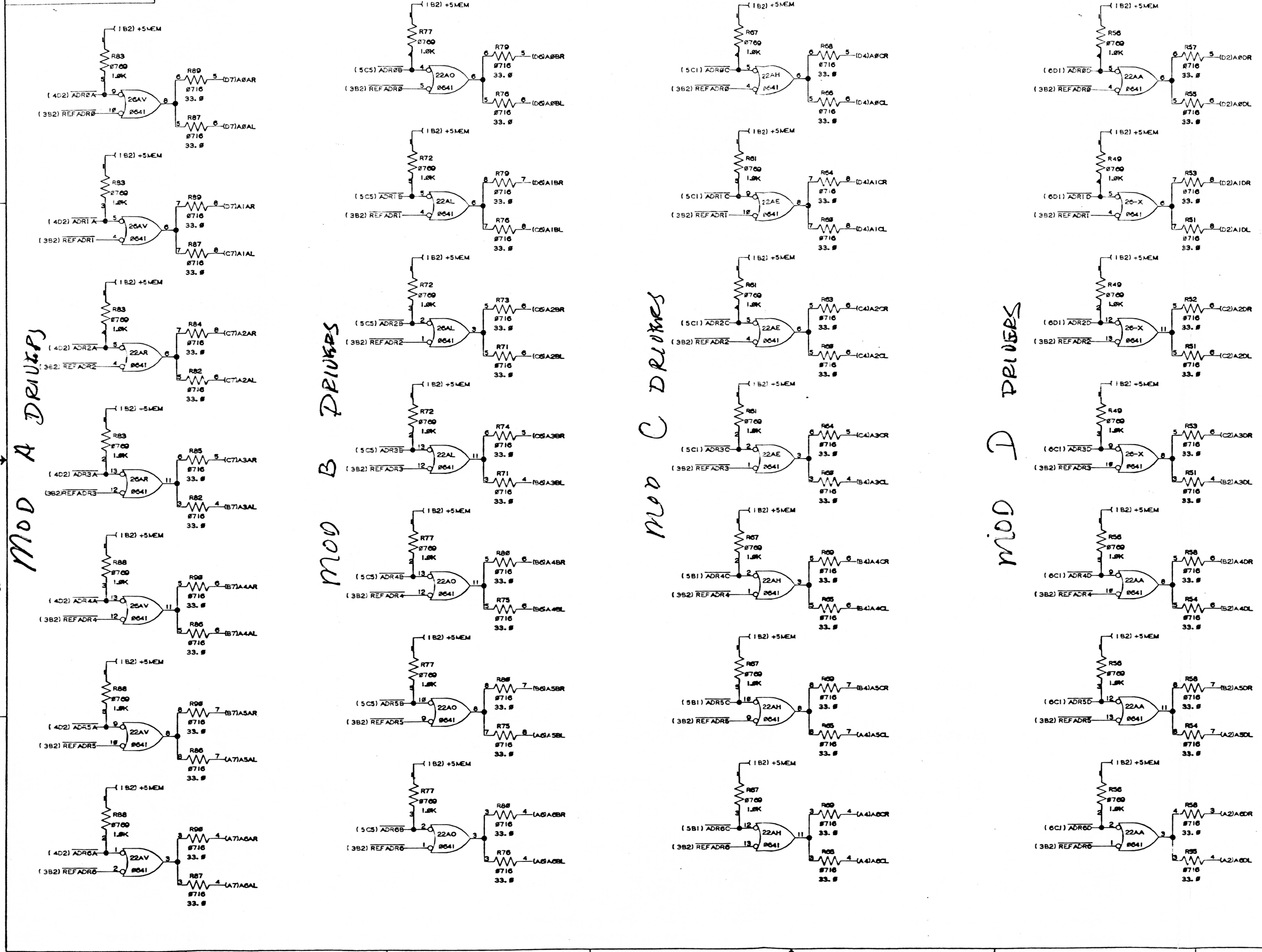
MOD D CONTROL/TIMING LOGIC



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

THE DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF THIS WITHOUT WRITTEN PERMISSION

REVISIONS				
REV	DESCRIPTION	DRFTG	A/P BY	DATE



MOD A DRIVERS

MOD B DRIVERS

MOD C DRIVERS

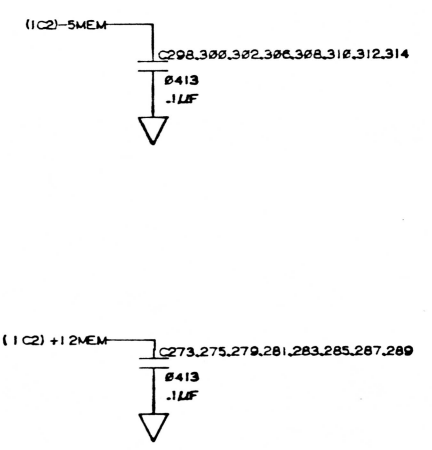
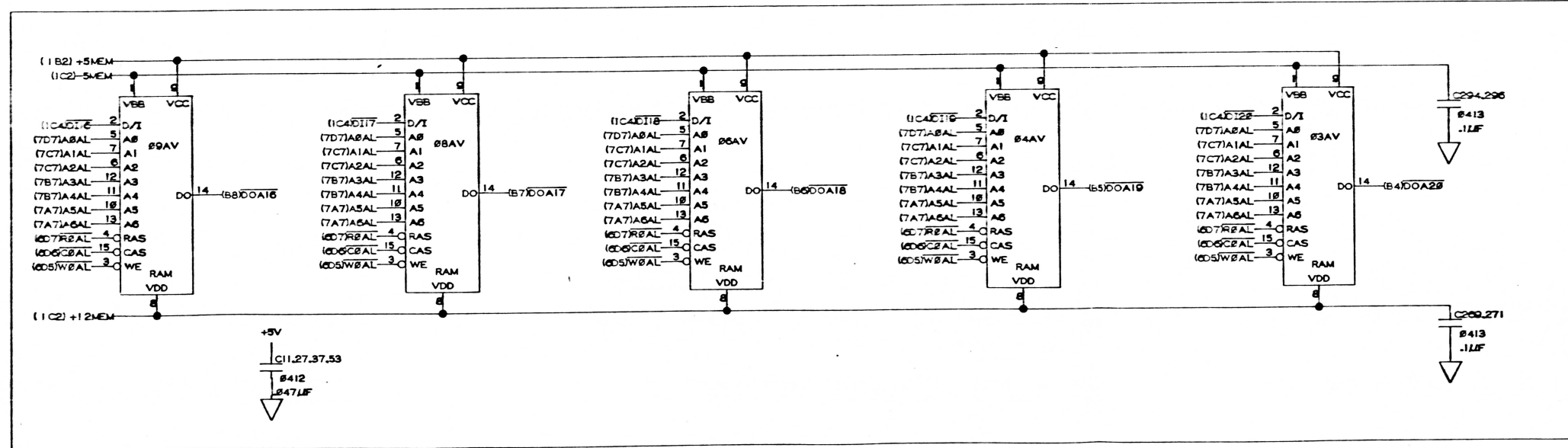
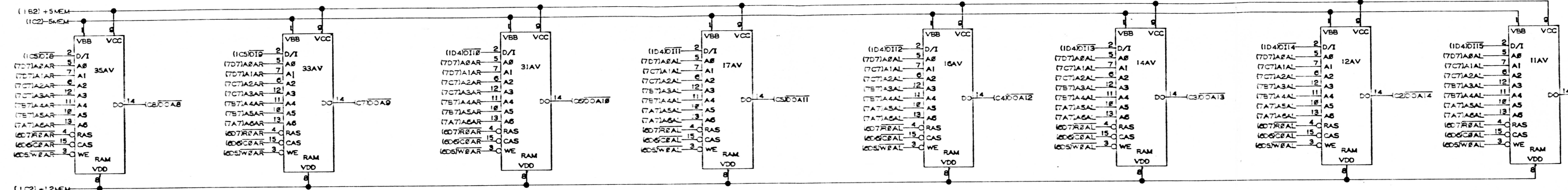
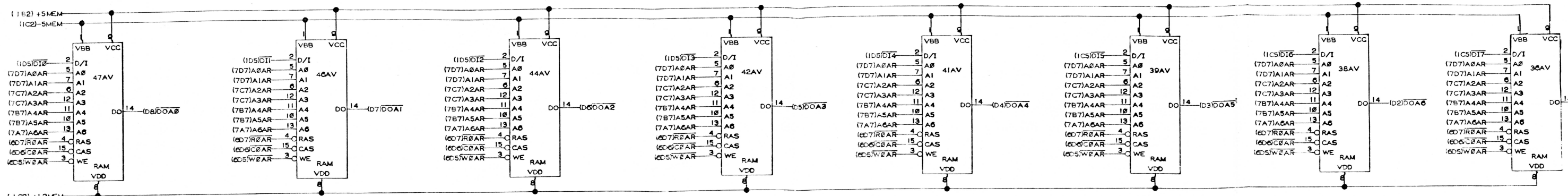
MOD D DRIVERS

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

MOD A BANK Ø

REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION

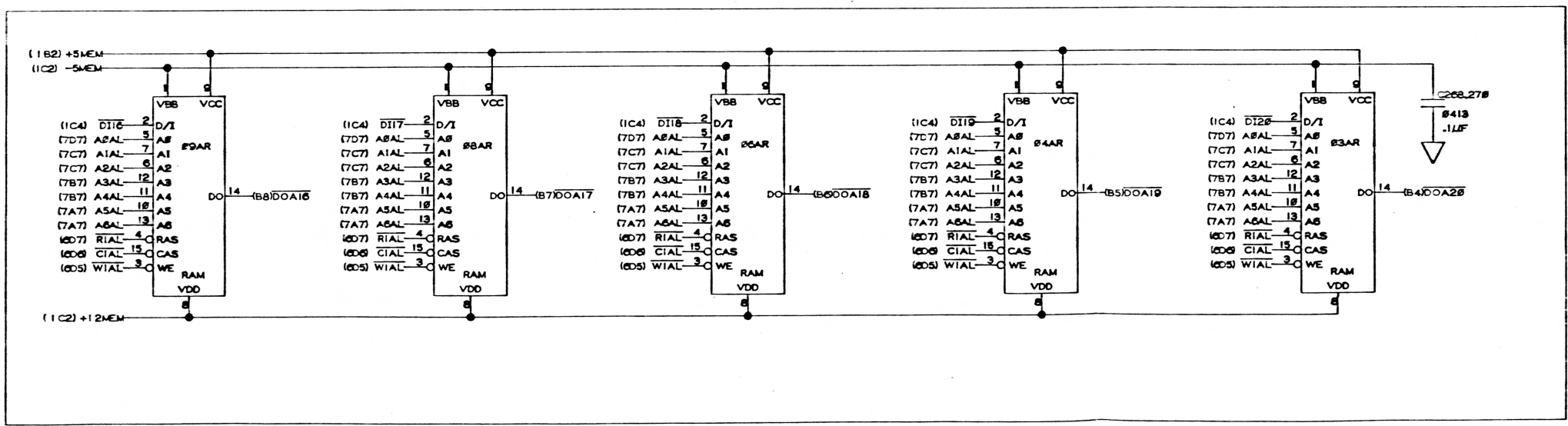
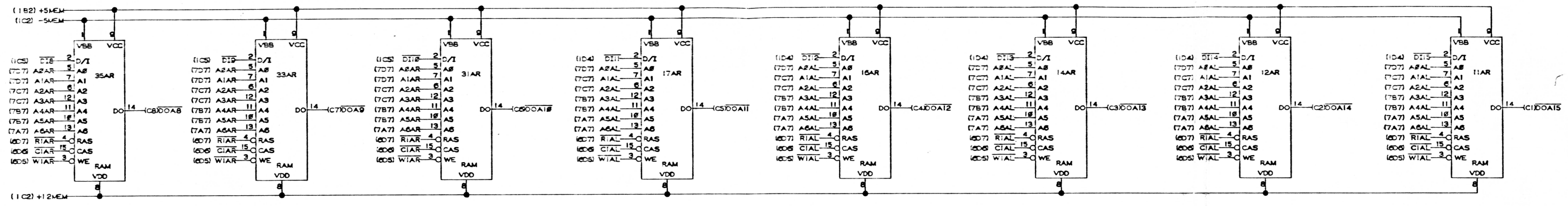
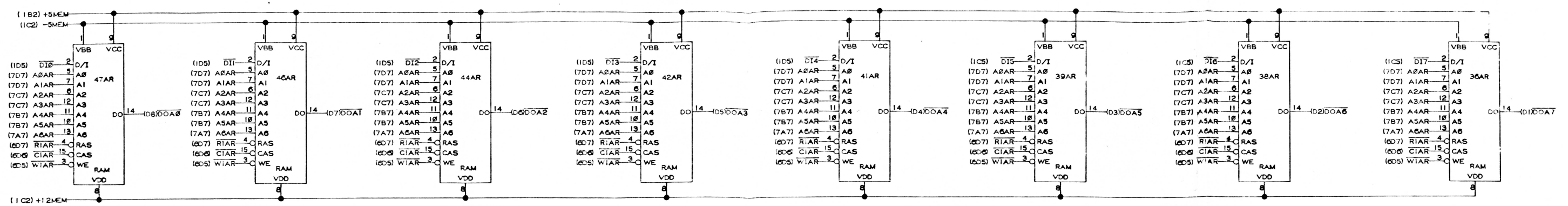


DRAWN		DATA GENERAL CORPORATION SOUTH BORO, MASSACHUSETTS 01772 TITLE DGC BBU MEMORY	
CHECKED			
ENGINEER			
APPROVED			
FIRST USED ON			
SIZE	CODE	DRAWING NUMBER	REV
D		001001229	03

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION

Mod A BANK 1

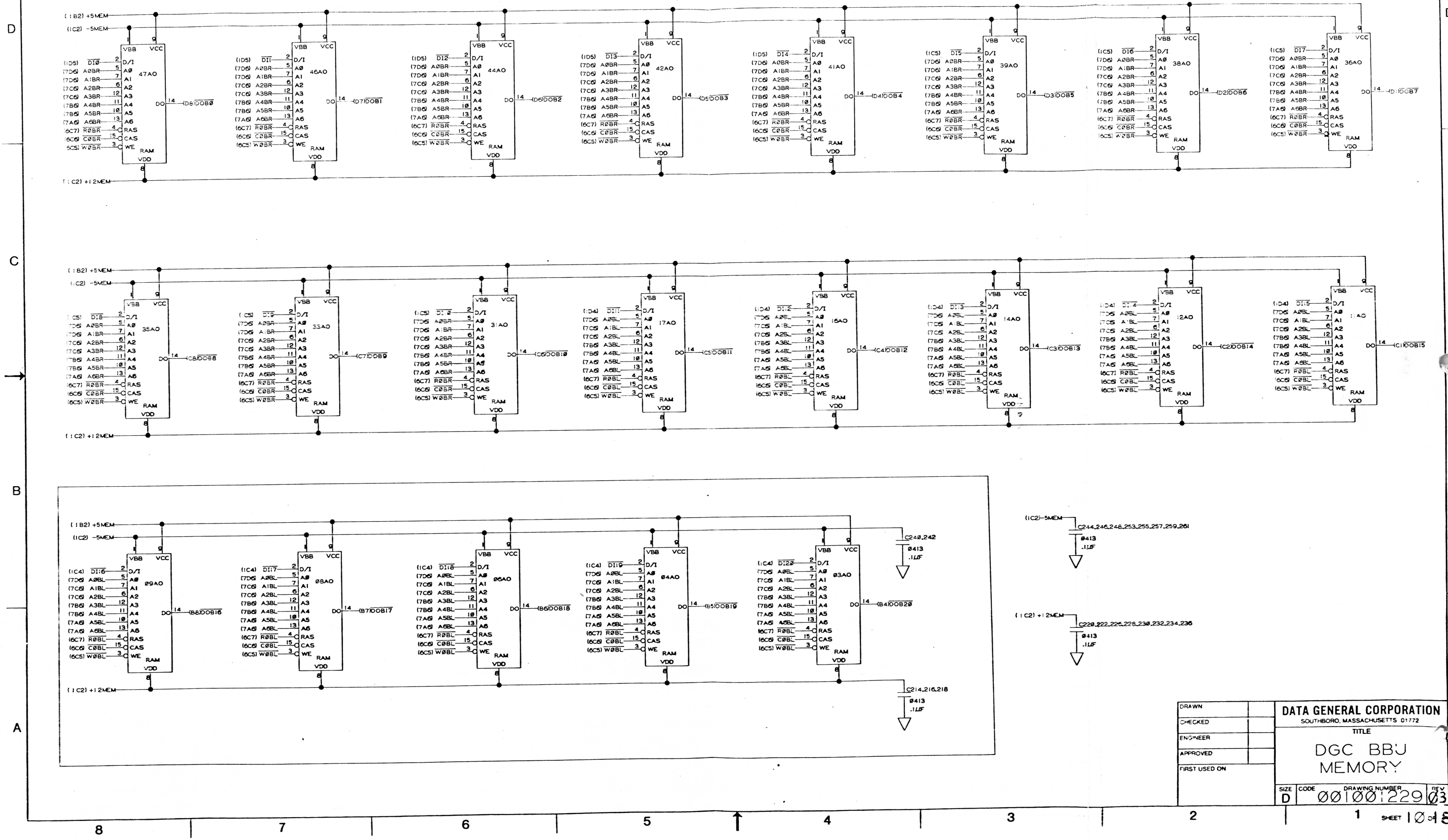
REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE



MCD B BANK

REVISIONS			
REV	DESCRIPTION	DRFTG	APP BY DATE

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.

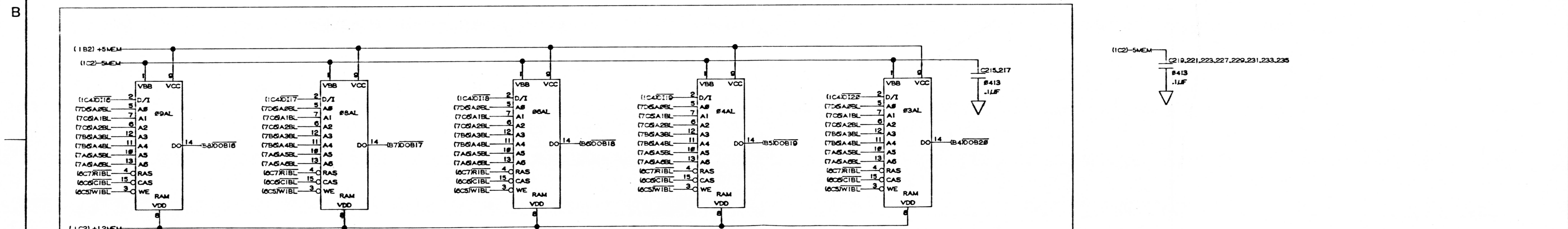
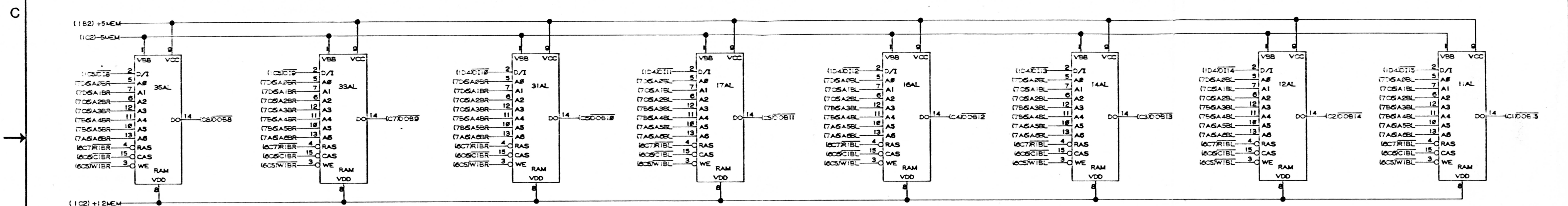
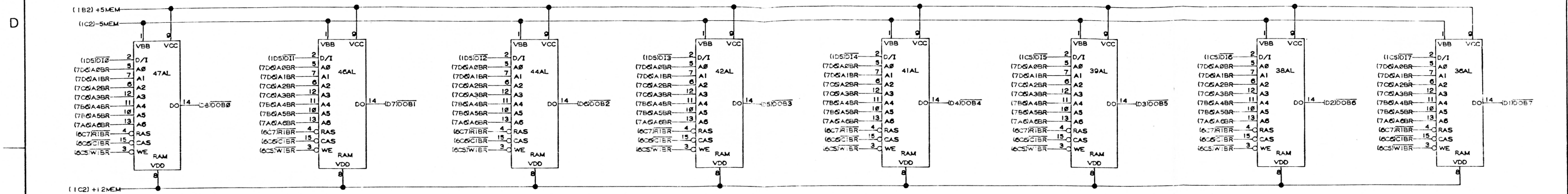


DRAWN		DATA GENERAL CORPORATION SOUTHBORO, MASSACHUSETTS 01772 TITLE DGC BBU MEMORY	
CHECKED			
ENGINEER			
APPROVED			
FIRST USED ON			
SIZE	D	DRAWING NUMBER	00100122903
		REV	03

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ANY MANNER OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION

MOD B BANK 1

REVISIONS			
REV	DESCRIPTION	DRFTG	APP'Y DATE

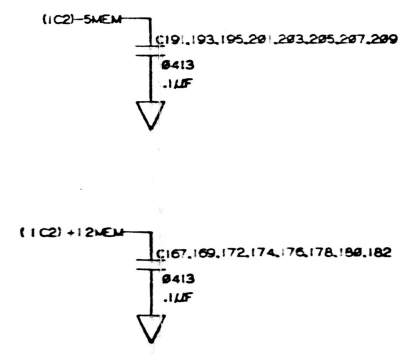
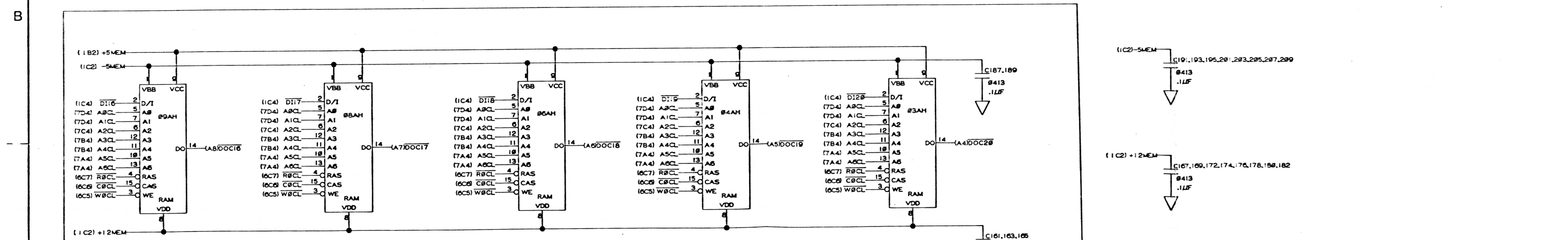
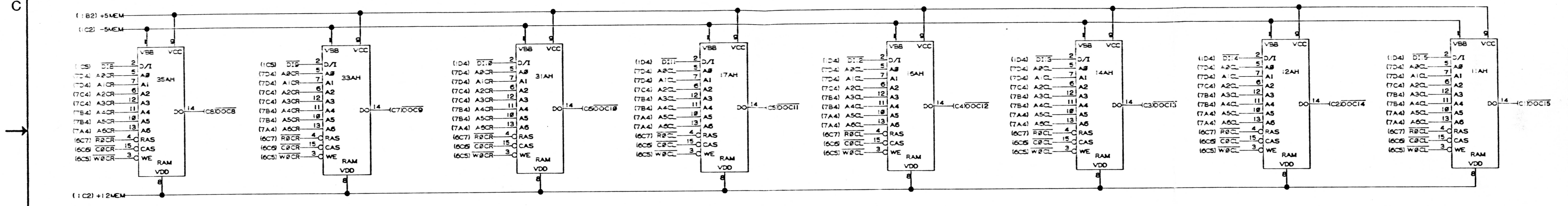
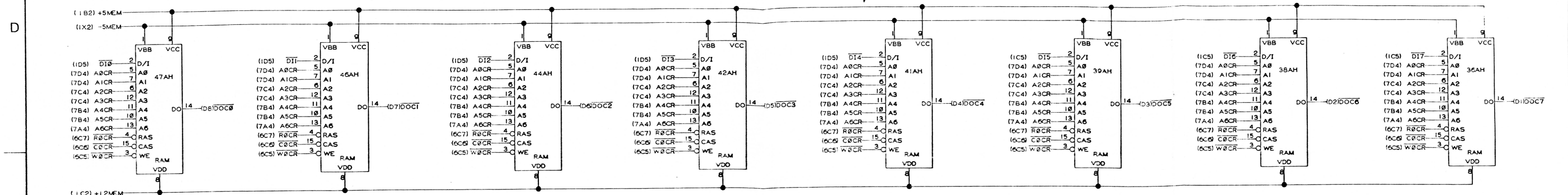


DRAWN		DATA GENERAL CORPORATION	
CHECKED		SOUTHBORO, MASSACHUSETTS 01772	
ENGINEER		TITLE	
APPROVED		DGC BBU MEMORY	
FIRST USED ON		SIZE	CODE
		D	001000122903
		DRAWING NUMBER	REV
			03

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR FORMED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ANY DEVICE WITHOUT WRITTEN PERMISSION

REV	DESCRIPTION	DRFTG	APP BY	DATE

mod C BANK 0

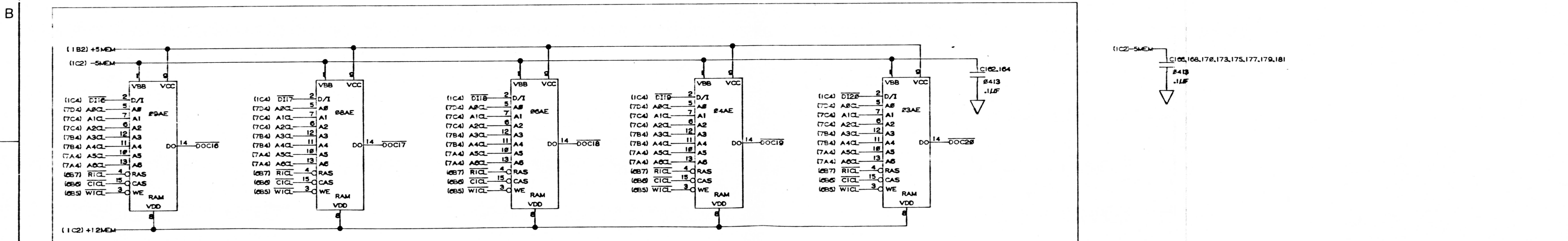
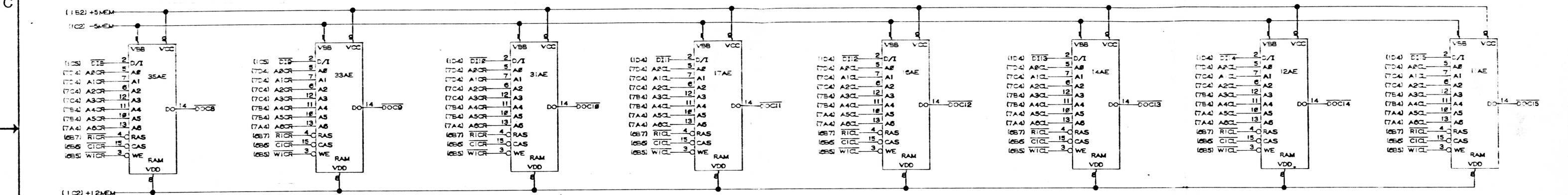
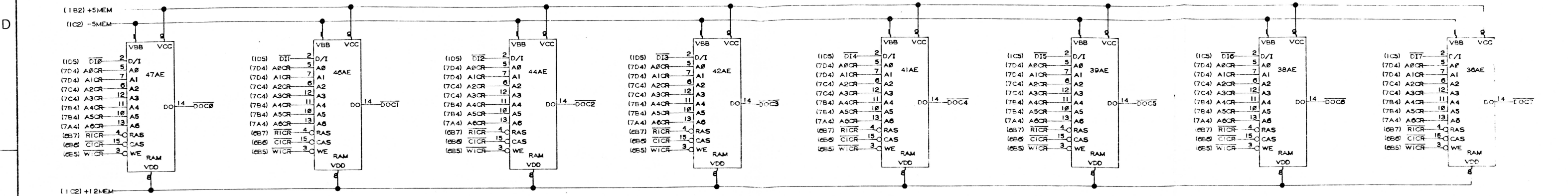


DRAWN		DATA GENERAL CORPORATION SOUTHBORO, MASSACHUSETTS 01172 TITLE DGC BBU MEMORY
CHECKED		
ENGINEER		
APPROVED		
FIRST USED ON		
SIZE	D	CODE 001001229 REV 03

ALL DIMENSIONS AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN WHOLE OR IN PART FOR ANY MANUFACTURE OR SALE OF PRODUCTS WITHOUT WRITTEN PERMISSION

MOD C BANK

REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

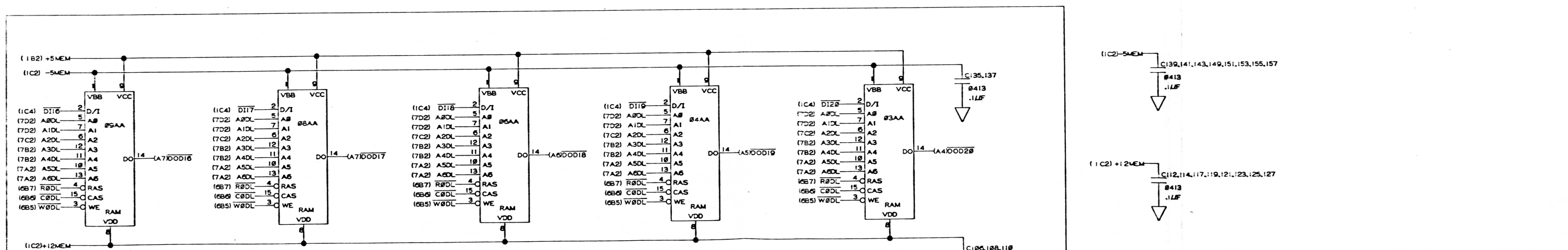
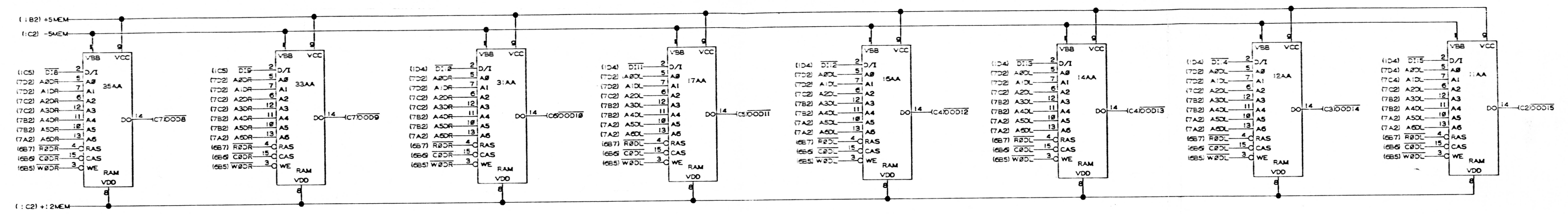
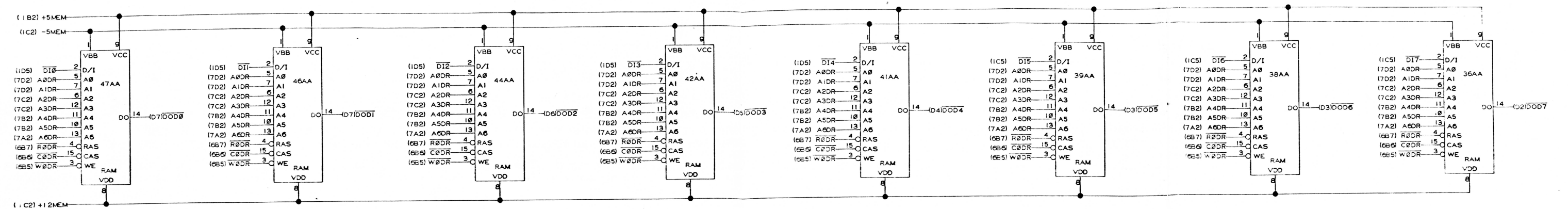


DRAWN		DATA GENERAL CORPORATION SOUTH-BORO MASSACHUSETTS 01772 TITLE DGC BBU MEMORY			
CHECKED					
ENGINEER					
APPROVED					
FIRST USED ON					
SIZE	D	CODE	001001229	RE	13

NO SPECIFICATIONS HEREIN ARE THE PROPERTY OF GENERAL CORPORATION AND SHALL BE USED OR COPIED OR USED IN WHOLE OR IN PART FOR MANUFACTURE OR SALE OF ANY WRITTEN PERMISSION

REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE

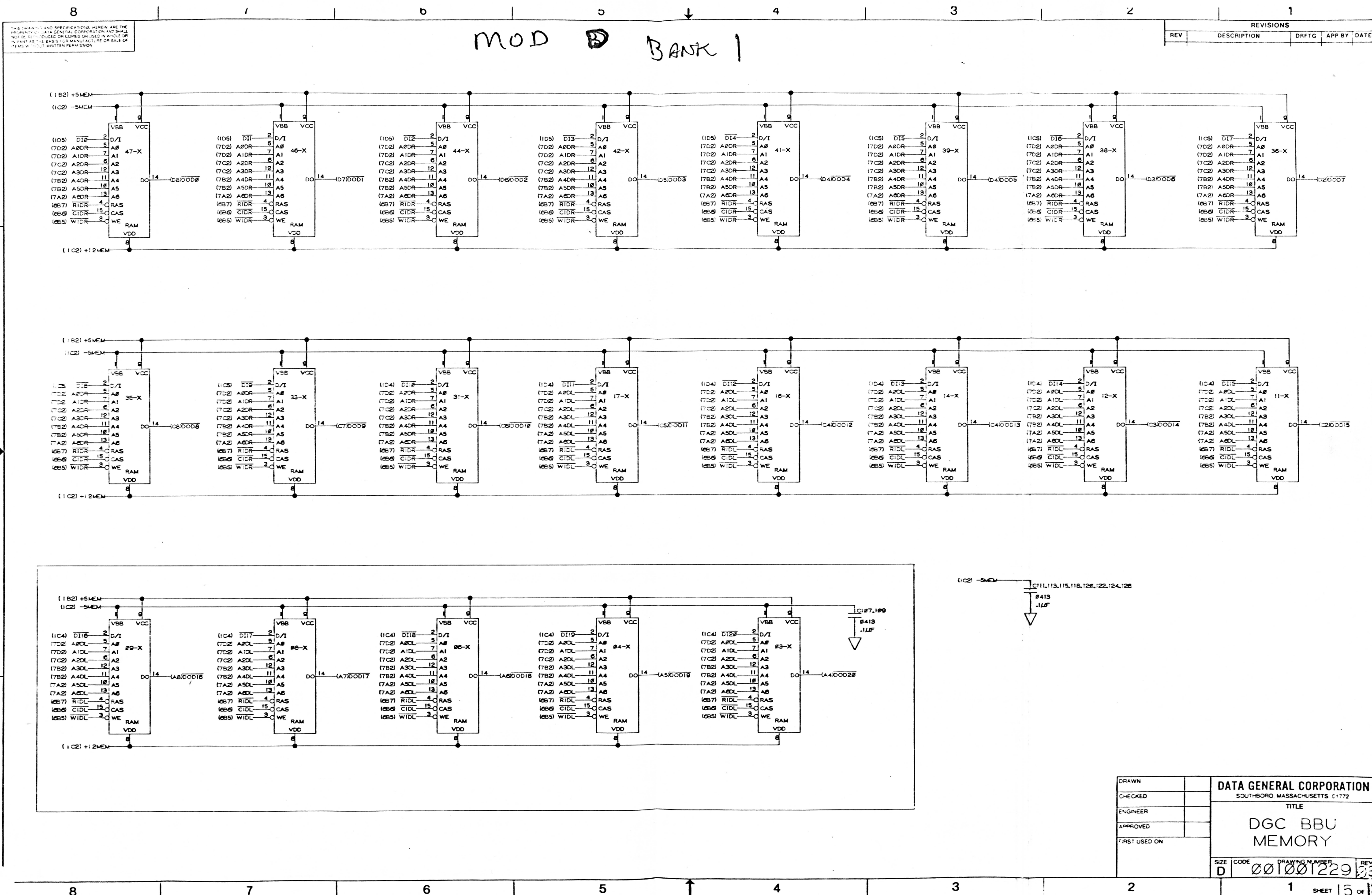
MOD D BANK 0



DRAWN		DATA GENERAL CORPORATION SOUTH BORO, MASSACHUSETTS 01772 TITLE DGC BBU MEMORY SIZE CODE 00100122903 DRAWING NUMBER SHEET 14 of 18
CHECKED		
ENGINEER		
APPROVED		
FIRST USED ON		

MOD B BANK 1

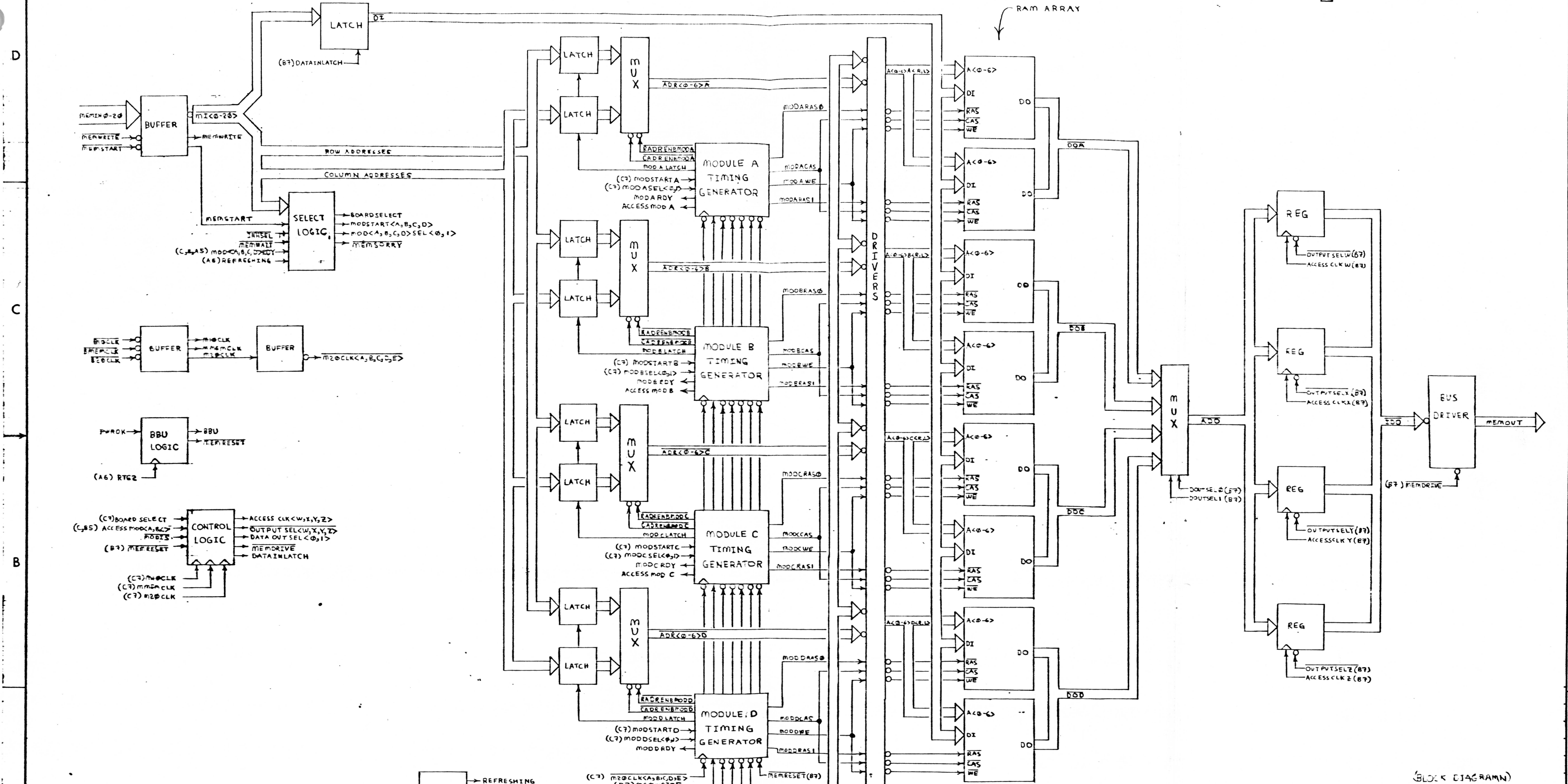
REVISIONS				
REV	DESCRIPTION	DRFTG	APP BY	DATE



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

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.

REVISIONS				
REV.	DESCRIPTION	DRFTG	APP BY	DATE
REV. ECO				



(BLOCK DIAGRAM)

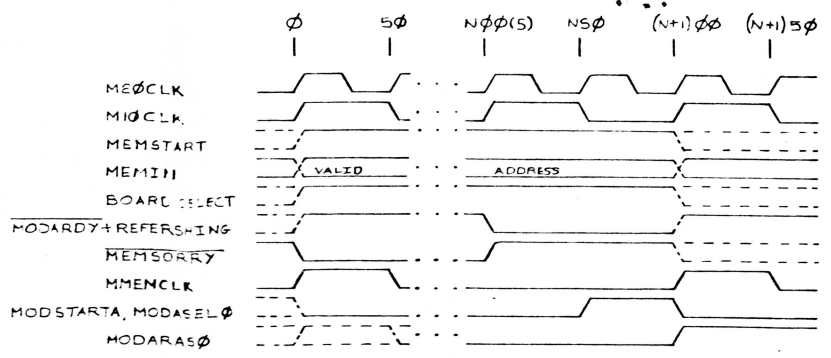
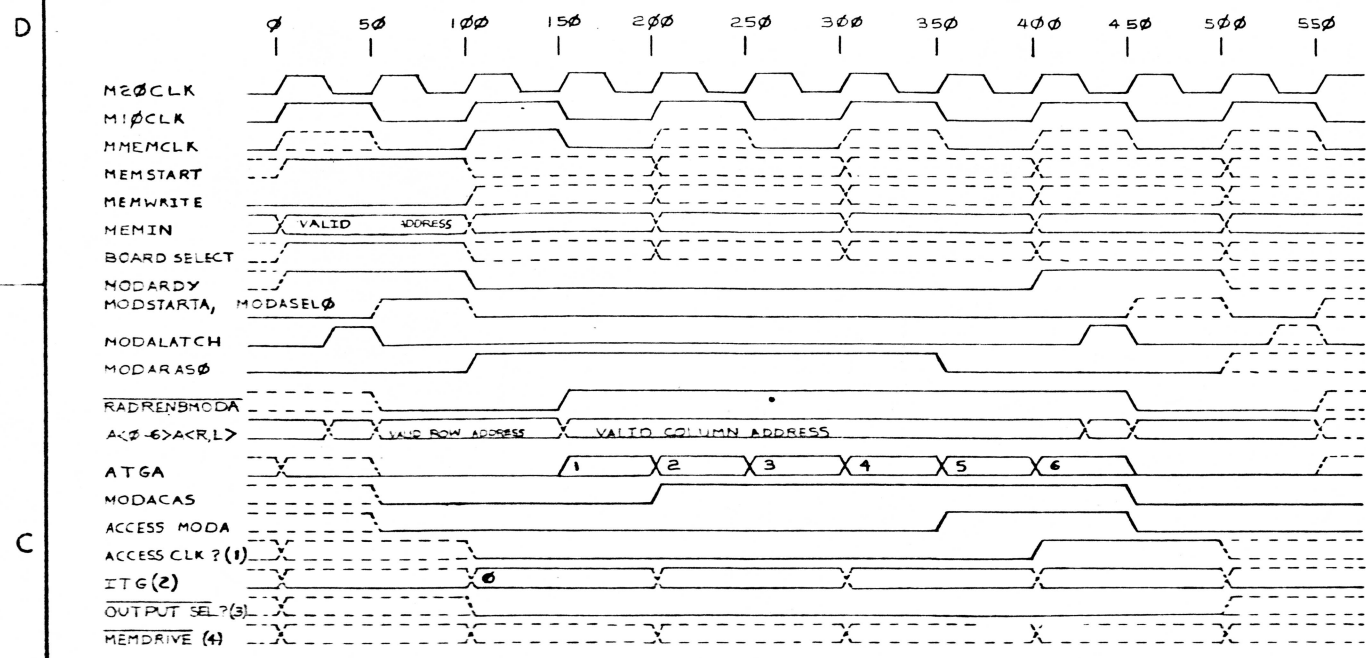
ITEM	QTY.	DESCRIPTION	PART NO.
DO NOT SCALE DRAWING UNLESS OTHERWISE SPECIFIED USE D.G.C. SPECIFICATION 108-000028 FOR TOLERANCES AND WORKMANSHIP REQUIREMENTS			
DRAWN R. DYNESON 4-28-78		DATA GENERAL CORPORATION SOUTHBORO, MASS. 01772	
CHECKED		TITLE DGC BBU MEMORY	
ENGINEER		REV 03	
APPROVED		DRAWING NUMBER 00101229	
FIRST USED ON		REV	
SCALE	CODE IDENT	SIZE	CODE
	34984	D	

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AT THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION

REVISIONS				
REV.	DESCRIPTION	DRFTG.	APP. BY	DATE

READ FROM MODULE A

READ FROM OR WRITE TO MODULE A DEFERRED

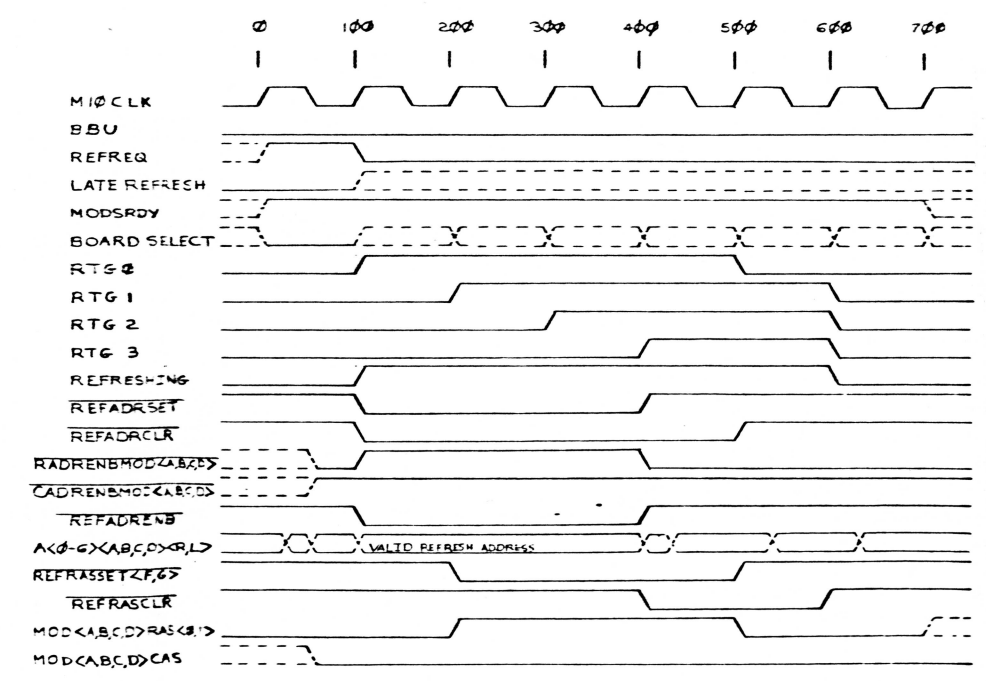
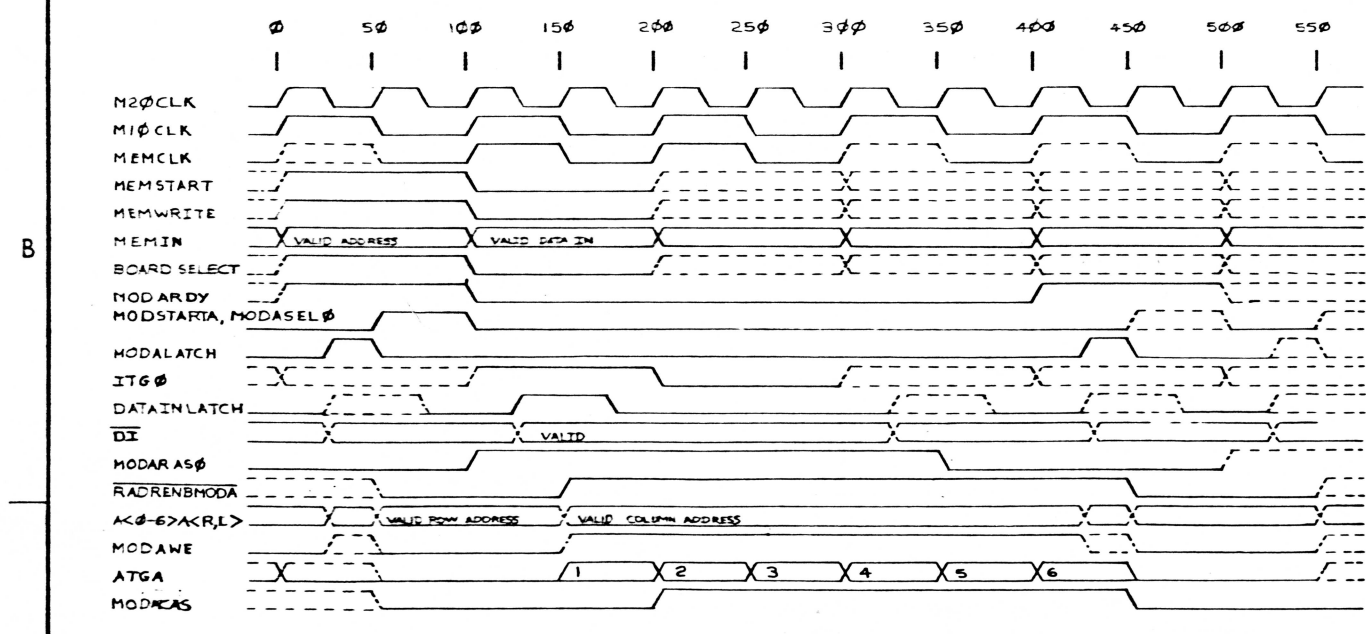


NOTE: (5) N IS THE NO. OF 190 NS CYCLES THAT START IS DEFERRED.

- 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 MODSS IS NOT ASSERTED.

WRITE TO MODULE A

NORMAL REFRESH



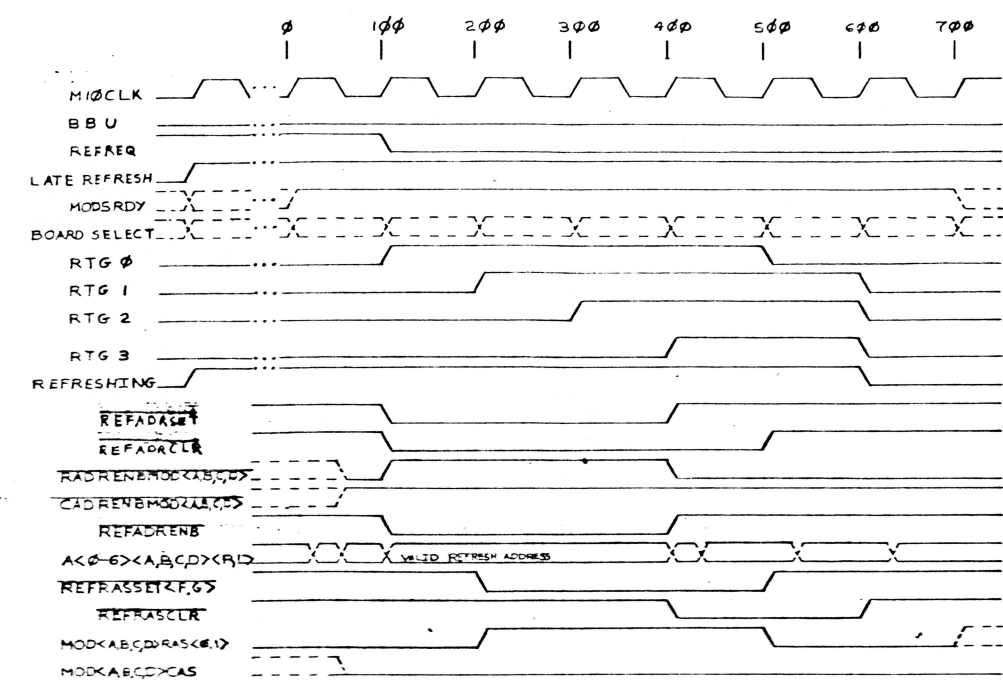
(TIMING)

ITEM	QTY.	DESCRIPTION	PART NO.
DO NOT SCALE DRAWING	DRAWN	5-17-78	DATA GENERAL CORPORATION SOUTHBORO, MASS. 01772
UNLESS OTHERWISE SPECIFIED USE D.G.C. SPECIFICATION 108-00002S FOR TOLERANCES AND WORKMANSHIP REQUIREMENTS	CHECKED		
MATERIAL	ENGINEER		
FINISH	APPROVED		
	FIRST USED ON		
SCALE	CODE IDENT	SIZE	CODE
	34984	D	001
	DRAWING NUMBER	REV	
	001229	02	

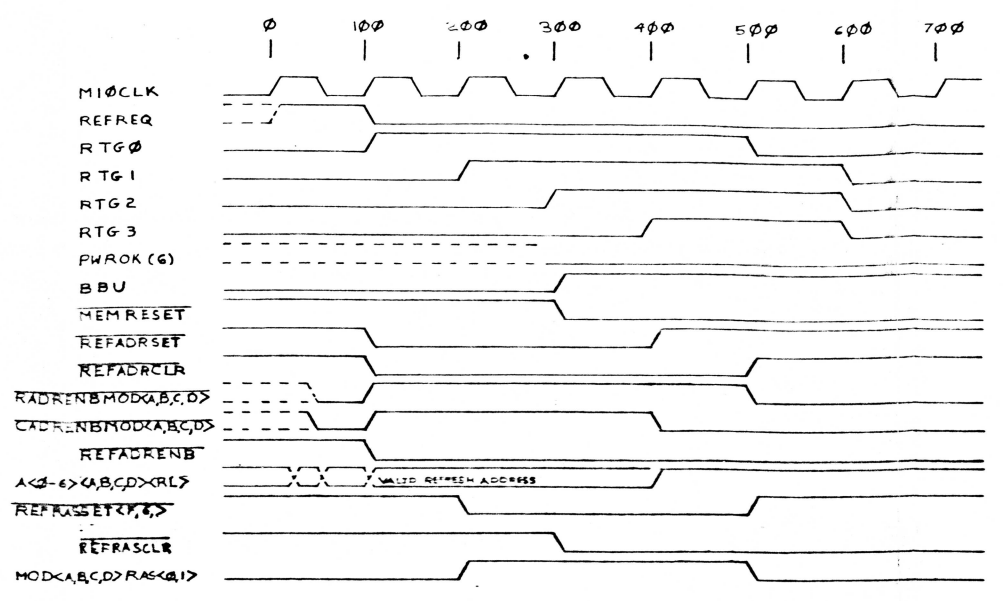
THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DATA GENERAL CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION

REVISIONS				
REV.	DESCRIPTION	DRFTG	APP. BY	DATE
REV				
ECO				

LATE REFRESH

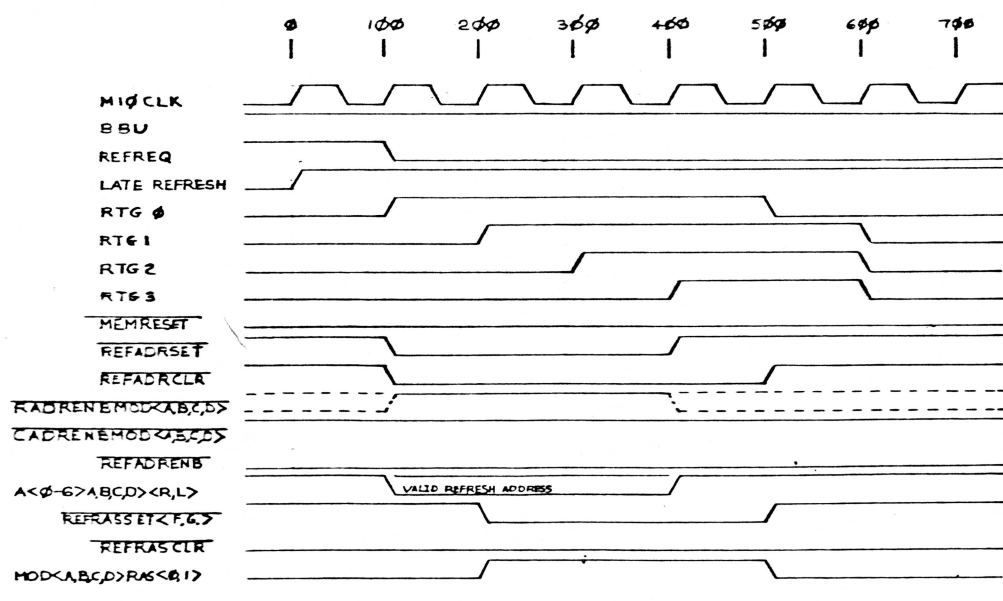


SWITCHING INTO BBU

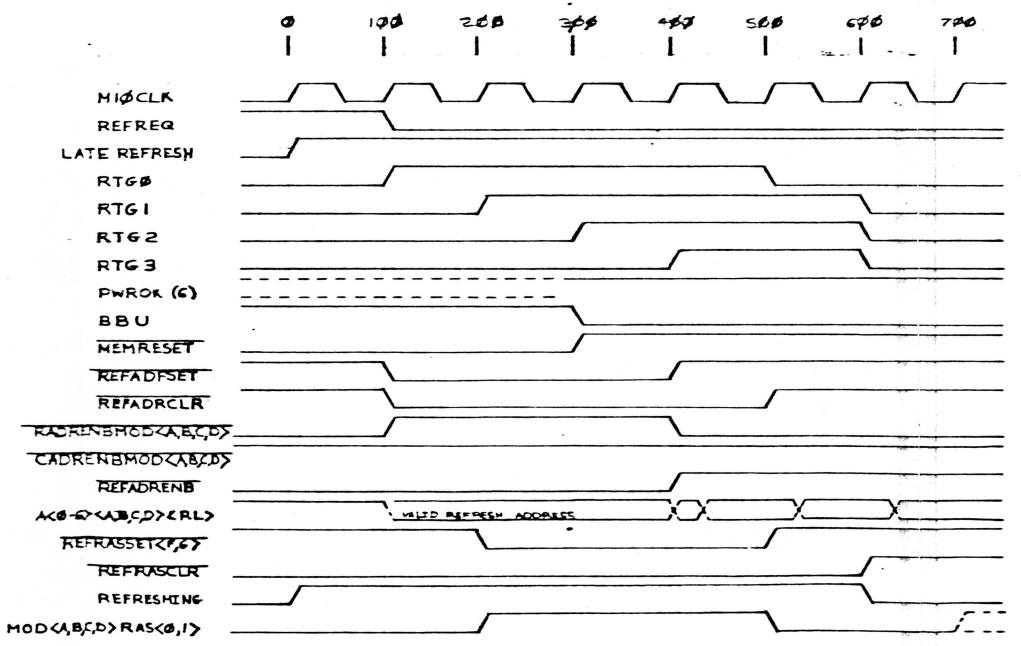


NOTE: (G) PWROK IS AN ASYNCHRONOUS SIGNAL

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 JOB 00028 FOR TOLERANCES AND WORKMANSHIP REQUIREMENTS			
DRAWN 5-18-83		DATA GENERAL CORPORATION SOUTHBORO, MASS. 01772	
CHECKED		TITLE DGC BBU MEMORY	
ENGINEER		APPROVED	
MATERIAL		FIRST USED ON	
FINISH		SCALE	CODE IDENT 34984
		SIZE D	CODE DCI
		DRAWING NUMBER 001229	REV 03