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Commodore  
Super-Pet

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## Technical Manual

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Model SP9000

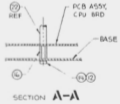
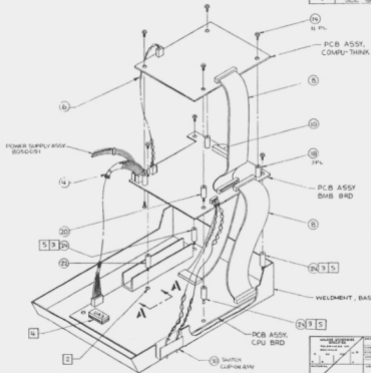
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REVISIONS			
LT#	DATE	DESCRIPTION	AUTH
1		SEE SHEET 1	



		<b>commodore</b>	
HARDWARE ACCESSORY ASSY		Part # <b>C 324052</b>	
REV C		SHEET 3 OF 3	

PART NO.	DESCRIPTION
324038-01	PCB ASSY-BMB 60 HZ

REVISIONS			
LTR	ZONE	DESCRIPTION	DATE
A		PRODUCTION RELEASE	1/16/81
A		PER ECO 2263	1/21/81
A		REV PER ECO 2248	1/21/81
B		REV PER ECO 2310 & 2324	1/23/81
C		REV PER ECO 2377	1/23/81
D		REV PER ECO 2458	1/23/81

- 6 ROMS CAN BE REPLACED WITH A PROGRAMED 2516 EPROM.
- 5 ROMS CAN BE REPLACED WITH PROGRAMED 2532 EPROMS.
- 4 REQUIRED WITH REV A ARTWORK C
- 3 SOLDER JUMPER TO XTAL & PCB

2. IDENTIFY WITH APPLICABLE DASH AND REV LETTER.

1. SHEET 4 OF 4 SIZE C

ASSY DWG

NOTES UNLESS OTHERWISE SPECIFIED

commodore	TITLE PCB ASSY-BMB	DESIGNED BY	DATE	ENGR	DATE	CHKD	DATE	SIZE	DRAWING NUMBER
		CHKD	DATE	APPV	DATE	DATE	DATE	B	3240



DATE: [redacted]  
TIME: [redacted]

6/18/22 5:52 PM

SON/2006 CERAMIC SON/56 CERAMIC

901550-20 RESISTOR CARBON THIN

1559

225106

0101010

10-584106

NOTES

DUCT ONLY

0  
MM

QUANTITY REQD PER  
PART / CABINET NO.

QTY	PART NUMBER	DESCRIPTION	REF DES	QTY	NOTES
	B 901527-02	VOLTAGE REGULATOR +5	VRL2,3		
	B 902727-01	TRANSISTOR, PNP, TIP 30	Q2		
	B 902847-03	TRANSISTOR, NPN, 2N3222	Q1,3		
	B 900753-01	DIODE, 1N5402	CR1,2,3,4		
	B 903316-03	HEADER ASSY, .156 CENTERS	J6		3 PIN
	B 903316-07	HEADER ASSY, .100 CENTERS	J4		7 PIN, REMOVE PIN 2
	B 903316-09	HEADER ASSY, .156 CENTERS	J5A, J5B		9 PIN, REMOVE PIN 7
	B 903345-20	HEADER ASSY, DUAL ROW, .100 CENTERS	J8		40 PIN
	B 903345-25	HEADER ASSY, DUAL ROW, .100 CENTERS	JHE2		50 PIN
	B 903266-01	CONNECTOR, RIGHT ANGLE,	J3		
	B 903335-05	HEADER	J9		R5-2B2
	B 900555-02	CRYSTAL, 1.84320 MHZ	Y1		
	B 902910-01	HEATSINK, TO-220	XVRL,2		
	B 904150-01	IC SOCKET, 14 PIN	XU5,6,8,9,15,16,24,25		
	B 904150-02	16 PIN	XU1,2,7,11,12,14		
	B 904149-04	20 PIN	XU9,10		
	B 904150-04	24 PIN	XU17-22		
	B 904150-05	28 PIN	XU23		
	B 904150-06	IC SOCKET, 40 PIN	XU3,4		
265					
66					
67					
68					
69					
70					
71					
72					
73					
272	906403-19	RIVET, OPEN			

commodore

PCB ASSY-BMB

TRUCK

DATE BY  
CABINET

DATE BY  
CABINET

324038

QUANTITY AND  
PART / ASSEMBLY

PART NUMBER

DESCRIPTION

REF DES

QTY

NOTES

007401-02 WASHER, SHOULDER # 4  
 006610-03 SCREW, PHILIPS 6-32 X .375  
 905970-04 KEP-NUT # 6-32

320086-02 BUSS WIRE  
 903780-11 KYNAR WIRE 30 AWG

904907-01 THERMAL COMPOUND

I.C. ROM 2332

U17  
 U18  
 U19  
 U20  
 U22  
 U21

SEE NOTE  
 SEE NOTE  
 SEE NOTE  
 SEE NOTE

SEE NOTE 4  
 SEE NOTE 4

commodore

PCB ASSY -

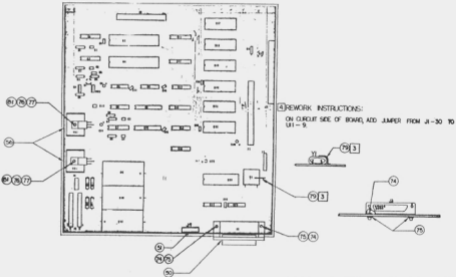
REV  
 03-82

REV  
 03-82

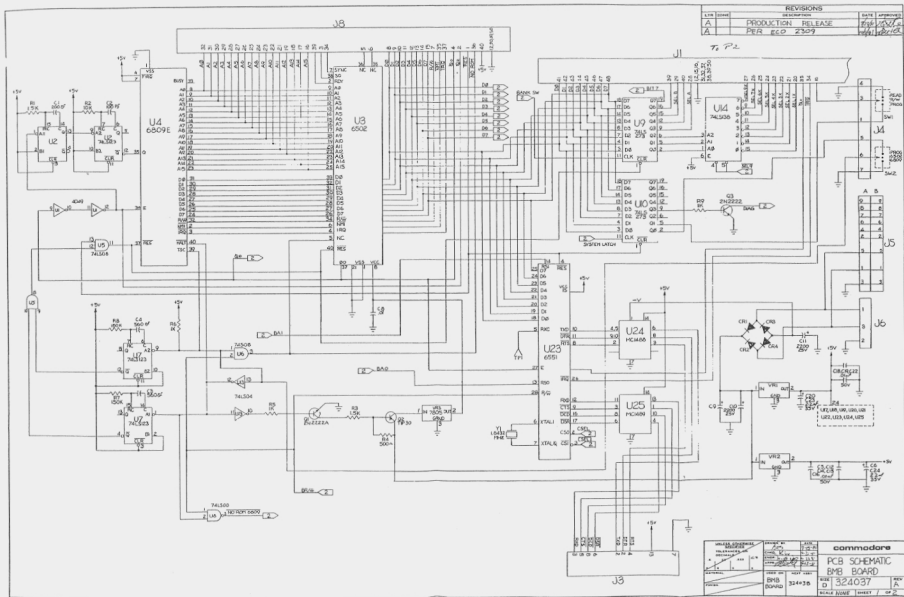
REV  
 03-82

REV  
 03-82

REVISIONS		
DATE	BY	APP'D



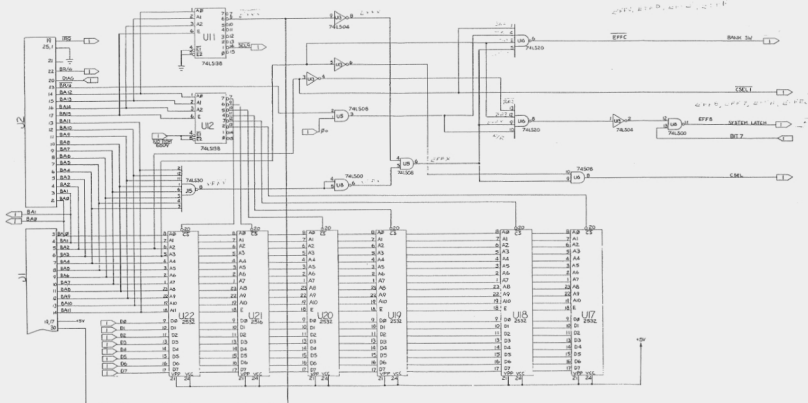
	DATE: 11/11/00 REV: 1 DESIGNED BY: [blank] CHECKED BY: [blank]	<b>ammodore</b> PCB ASSEMBLY BMB3 BOARD QTY: 324038 SCALE: 1:1
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REVISIONS			
Rev	Date	Description	By
A		PRODUCTION RELEASE	WJH/SLC
A		PER EOP 2/1979	WJH/SLC

		<b>commodore</b> <b>PCB SCHEMATIC</b> <b>RMB BOARD</b> 324037 REV. A	
PART NO. 324037	QTY. 1000	DATE 11/80	BY WJH
BOARD NO. 324037		REV. NO. 1	
MADE IN THE U.S.A.			

REVISIONS			
DATE	DESCRIPTION	DATE	APPROVED
	SEE SHEET 1		



		<b>commodore</b> PCB SCHEMATIC SIMB BOARD REV D 324037 BOARD 324038	REV A © www.commodore.ca
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PART NO.	DESCRIPTION
324042-01	PCB ASSY, COMPU-THINK

REVISIONS				
LTR	ZONE	DESCRIPTION	DATE	APPROVED
A		PRODUCTION RELEASE	1/10/82	[Signature]
A		[REDACTED]		[Signature]
B		[REDACTED]		
C		[REDACTED] 7B		[Signature]

- 4 REQUIRED WITH REV A ARTWORK ONLY.
- 3 ITEM 69 CONNECTS INTO ITEM 63.

2. IDENTIFY WITH COMMODORE PART NO.  
AND APPLICABLE REV LETTER.

1. SHEET 4 OF 4 SIZE D  
ASSY DWG

NOTES-UNLESS OTHERWISE SPECIFIED:

	TITLE PCB ASSY, COMPU-THINK	DRAWN BY [Signature]	DATE 8-2-82	ENGR [Signature]	CHECKED [Signature]	SIZE B	DRAWING NUMBER 324042
		CORR BY [Signature]	DATE 8-2-82	APPR [Signature]	[Signature]	SHEET 1	OF 4

QUANTITY REQD PER PART / DASH NO.				ITEM NO	QTY	PART NUMBER	DESCRIPTION	REF DES	MFG	NOTES
				1	D	324041-01	SCHEMATIC, COMPU-THINK			
				1	D	324040-01	PCB FAB, COMPU-THINK			
				3						
				1	B	901521-04	IC, 7400, QUAD NAND	U9, 17		
				2	B	901521-21	IC, 74LS02, QUAD NOR	U8, 22		
				1	B	901521-37	IC, 74LS05, HEX INVERTER	U25		
				1	B	901521-03	IC, 74LS08, QUAD AND	U27		
				3	B	901521-24	IC, 74LS10, TRIPLE 3-INPUT NAND	U10, 16, 28		
				1	B	901521-04	IC, 74LS20, DUAL 4-INPUT NAND	U11		
				1	B	901521-08	IC, 74LS107, J-K FLIP-FLOP	U21		
				1	B	901521-49	IC, 74LS123, DUAL ONE-SHOT	U26		
				1	B	901521-50	IC, 74LS132, QUAD NAND W/SCHMITT	U20		
				2	B	901521-11	IC, 74LS157, QUAD 2-1 MULTIPLEXER	U2, 5		
				2	B	901522-23	IC, 74LS157, QUAD 2-1 MULTIPLEXER	U1, 4		
				4	B	901521-51	IC, 74LS241, OCTAL BUFFER	U6, 8, 12, 14		
				1	B	901521-13	IC, 74LS244, OCTAL BUFFER	U13		
				1	B	901521-52	IC, 74LS293, 4 BIT BINARY COUNTER	U7		
				1	B	901521-45	IC, 74LS393, DUAL 4 BIT BINARY COUNTER	U3		
				32	B	901470-07	IC, 4116, DYNAMIC RAM	U29-60		
				20						
				21						
				1		901527-03	VOLTAGE REGULATOR, -5 VOLT	U61		
				1		901527-01	VOLTAGE REGULATOR, +12 VOLT	U19		
				1		901527-02	VOLTAGE REGULATOR, +5 VOLT	U24		
				1		900152-02	DIODE, FAST RECTIFIER	CR3		
				2		900653-01	DIODE, BRIDGE	CR1, 2		
				27						
				1	B	900050-1B	CAP, DIPPED MICA, 22pF, 500V	C79		
				1		-H	50pF	C81		
				1		-20	62pF	C76		
				1		-21	82pF	C78		
				1		-22	100pF	C80		
				1	B	900050-23	CAP, DIPPED MICA, 180pF, 500V	C77		
				63	B	900020-01	CAP, MONO, CERAMIC, .1uF, 50V	C1-63		
				6	B	900402-15	CAP, DIPPED TANT, 10uF, 25V	C65, 67, 73, 74, 75, 82		
				3	B	900100-44	CAPELECT RADIAL, 470uF, 16V	C68, 69, 72		
				1	B	900100-44	CAP, ELECT, RADIAL, 470uF, 25V	C66		

commodore

PCB ASSY, COMPU/THINK

DESIGNED BY  
A. J. ...

DATE

REVISIONS

1-2-82

APPROVED BY

...

DATE

...

SIZE

B

REV

C

324042

3/8



QUANTITY	REQ. NO.	REV.	PART NO.	DESCRIPTION	REF. DES.	QTY	NOTES
2	381	B	90010100-07	CAP. ELECT. RADIAL, 1000UF, 16V C70.71			
2	401	B	9024427-03	RESISTOR NETWORK, 8 PIN SEP. 33.0	R71, 3		
			902442-26	B PIN SEP. 2K	409		
			9074411-29	C PIN SEP. 3.3K	407		
			907442-29	B PIN SEP. 3.3K	405		
			9024420-48	RESISTOR NETWORK 16 PIN DIP 2K	R75		
			901550-105	RESISTOR CARBON 1/4W, 5%, 33R	R5, 6		
			90550-02	RESISTOR CARBON 1/4W, 5%, 3.3K	R4		
			90550-20	RESISTOR CARBON 1/4W, 5%, 10K	R2, 3, 4		
			903316-03	HEADER ASSY, 156 CENTERS, 3 PIN			
			903345-25	HEADER ASSY, DUAL ROW, 100 CENTER, P2, 50 PIN			
			903446-01	CONNECTOR HOUSING, 50 PIN	P3		
			903549-12	FUSE, AXIAL LEAD	3A		
			903905-01	HEATSINK, TO-220	X161		
			902911-01	HEATSINK	X119, 24		
			902912-01	HEATSINK	XU19, 24		
			907401-02	WASHER SHOULDER	4 U		
			904150-01	IC SOCKET	H		
			904150-02	IC SOCKET	16 PIN		
			904149-04	IC SOCKET	20 PIN		
			320086-02	BUS WIRE	M1, 2, 4, 5, 6, 9		
			324056-01	PC B ASSY, MEMORY PROTECT			
			906600-06	SCREW PHILLIPS, 4-40 x .436			
			905970-05	KEP NUT 4-40			

commodore PBC ASSY, COMPU/THINK

commodore

PCB ASSY, CPU/THINK

COMP

ARMED

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324042

SIZE  
REV  
DATE

QUANTITY REQ PER

UNIT / DASH NO.

REV

PART NUMBER

DESCRIPTION

REF DES

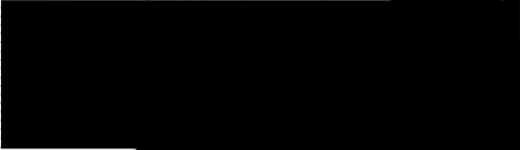
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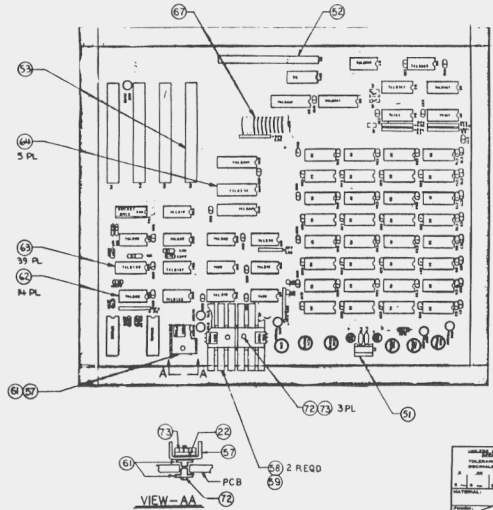
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SEE NOTE 4

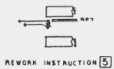
SEE NOTE 4



REVISIONS			
LTN	DATE	DESCRIPTION	DATE APPROVED
		SEE SHEET	



- 4 RERWORK INSTRUCTIONS:
1. ADD JUMPER FROM U15-12 TO GROUND.
  2. ADD JUMPER FROM P2-28 TO COMMON POINT OF J3 AND J5.
  3. ADD JUMPER FROM P2-30 TO P3-14
  4. CUT OFF PINS 4 & 5 OF U27,
  5. CUT TRACE BETWEEN FEEDTHRU NEXT TO U11 AND RP7.
  6. ADD JUMPERS TO J1, J2, J4, J5 & U15 AS SHOWN.



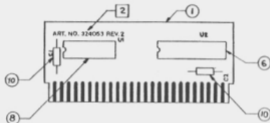
RERWORK INSTRUCTION 5

-01 SHOWN

APPROVED ASSEMBLER <b>PH2222</b> TALKING TO YOU COMMERCIAL DATE: _____ APP: _____	DRAWING NO. <b>324042</b> DATE: _____ APP: _____	DATE <b>11.23.11</b> TIME <b>1:20:18</b>	<b>commodore</b> PCB ASSY COMPU/THINK C 324042 SCALE 1/1 SHEET 8 OF 8
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PART NO.	DESCRIPTION
324056-01	PCB ASSY, MEMORY PROTECT

LTR		ZONE	DESCRIPTION	DATE	APPROVED
A			PRODUCTION RELEASE	7-2-80	<i>[Signature]</i>
B			REV PER ECO 2302	10/6/81	<i>[Signature]</i>



QUANTITY REQD PER PART / DASH NO.		ITEM	B	PART NUMBER	DESCRIPTION	REF DES
		1	B	324054-01	PC B FAB, MEMORY PROTECT	
		2				
		3	C	324055-01	LOGIC DIAGRAM, MEMORY PROTECT	
		4				
		5				
		6				U2
		7				
		8	B	901521-16	I.C. 74LS138	U1
		9				
		10			5M $\Omega$ AXIAL, 50V	C1, 2

DRAWN BY: R. J.  
 CHECKED BY: S. J. B.  
 ENGR: J. L. L. L.  
 APPR: E. J. E.

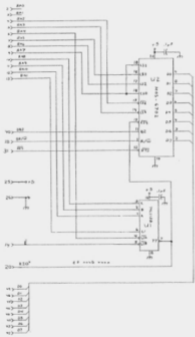
DESIGNED BY: SUPER PET  
 NEXT REV: 324042

**commodore**

PCB ASSY  
MEMORY PROTECT

SIZE B 324056 REV B  
 SCALE 2/1 SHEET OF

REVISIONS			
REV	DATE	DESCRIPTION	BY
A		PRODUCTION RELEASE	



-OI SHOWN

SMALL SIGNAL LOGIC SYMBOLS OR SYMBOLS	DATE: 12/12/82 BY: J. J. J.	REV: 1 DATE: 12/12/82 BY: J. J. J.	PART NO: 324056
	REV: 1 DATE: 12/12/82 BY: J. J. J.	REV: 1 DATE: 12/12/82 BY: J. J. J.	PART NO: 324056
COMMERCIAL: NONE MILITARY: NONE			PART NO: 324056 REV: A SHEET: 1 OF 1

commodore

LOGIC DIAGRAM

PART NO: 324056 REV: A

PART NO.	DESCRIPTION
9000007-01	PCB ASSY S.P. COMBO - 60 HZ

REVIEWS		DATE	APPROVED
A	PRODUCTION RELEASE	1/16/02	[Signature]
B	REV PER ECO 2566	1/16/02	[Signature]
C	REV PER ECO 2586	1/16/02	[Signature]
D	REVISED PER ECO 2621	1/16/02	[Signature]
E	REV PER ECO 2631	1/16/02	[Signature]
F	REV PER ECO 2650	1/16/02	[Signature]
G	REVISED PER ECO 2731	1/16/02	[Signature]
H	REVISED PER ECO 2807	1/16/02	[Signature]

REV 9000007

1 SHEET 4 OF 4 SIZE D  
 ASSY DWG  
 NOTES-UNLESS OTHERWISE SPECIFIED:

<b>commodore</b> <a href="http://www.commodore.ca">www.commodore.ca</a>	DRAWN BY	DATE	ENGR	SIZE	SHEET 1 of 4 B
	CARD	2-9-02	3-10-02	3-10-02	

QTY	RECD PER PART / (UNIT NO.)	QTY	NO	PART NUMBER	DESCRIPTION	REF DES	NOTES
1				9000008	PCB FABRICATION SUPER PET PCB		
2				9000016	SCHEMATIC DIAGRAM SUPER PET		
1				901521-02	IC, WILSON, HEX INVERTER	U1	
1				901525-01	74504, HEX INVERTER	U2	
1				901521-45	74LS393, DUAL 4BIT BINARY COUNTER	U3	
1				901521-07	74LS93, 4BIT BINARY COUNTER	U4	
1				901519-01	74LS11, TRIPLE 3INPUT POS.-AND GATES	U5	
1				901521-2B	74LS164, 8BIT PARALLEL OUT SERIAL SHIFT REG.	U6	
2				901522-23	74LS17, QUAD 2 TO 1 LINE DATE MUX	U10-U11	
1				901521-49	74LS123, DUAL ONE-SHOT	U12	
1				901893-01	6809E, CPU	U13	
2				901521-06	74LS74, DUAL D-TYPE F-F	U14, U37	
1				901518-01	74LS37, QUADRUPLE 2INPUT NAND BUFFERS	U15	
1				901525-05	74S08, QUADRUPLE 2INPUT AND GATES	U16	
1				901434-01	6502, CPU	U17	
3				901521-47	74LS367, HEX BUS DRIVERS	U18-U20	
1				901521-46	74LS245, OCTAL BUS TRANSCEIVER	U21	
1				901505-01	64K x 1 DYNAMIC RAM	U22-U29	
2				901521-16	74LS138, 3 TO 8 DECODER	U30, U42	
1				901521-53	74LS30, 8INPUT POS.-NAND GATE	U31	
1				901521-04	74LS20, DUAL 4INPUT POS.-NAND GATE	U32	
2				901521-31	74LS32, QUADRUPLE 2INPUT POS.-OR GATE	U33, U34	
2				901521-42	74LS273, OCTAL D F-F	U35, U36	
3				901521-11	74LS157, QUAD 2 TO 1 LINE DATE MUX	U7-U9	
1				901524-07	MC1488, RECEIVER	U35	
1				901524-06	MC1488, LINE DRIVER	U35	
1				901895-01	6551, AGTA	U39	
1				901889-01	6702, SECURITY	U40	
1				901521-24	74LS10, TRIPLE 3INPUT NAND GATES	U41	
1				901521-18	74LS139, DUAL 2 TO 4 MUX	U43	
1				970018-12	64K ROM BINARY LISTING A000-BFFF	U47	
1				970019-12	64K ROM BINARY LISTING C000-DFFF	U48	
1				970020-12	64K ROM BINARY LISTING E000-FFFF	U49	
1				901521-03	74LS08, QUADRUPLE 2INPUT AND GATES	U50	
1				970034-12	64K ROM BINARY LISTING E000-FFFF	U49	

QUANTITY RECD PER PART / (UNIT NO.)  
 QUANTITY IN STOCK  
 QUANTITY ON ORDER  
 QUANTITY IN TRANSIT  
 QUANTITY IN PROCESS  
 QUANTITY IN RECEIVING  
 QUANTITY IN WAREHOUSE  
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 QUANTITY IN OFFICE  
 QUANTITY IN TRUCK  
 QUANTITY IN RAIL  
 QUANTITY IN AIR  
 QUANTITY IN SEA

PCB ASSY S. P. COMBO  
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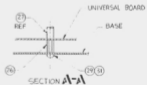
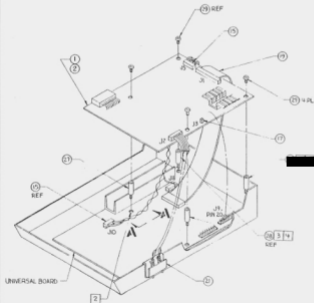
FCB ASSY S.P. COMBO

9000007

QTY	ITEM	PART NUMBER	DESCRIPTION	NOTES
1	78			
1	72	903025-01	FERRITE FEED	
	71			
1	70	903327-07	HEADER ASSY, 100 CENTER 7 PIN	
1	69	903266-01	CONNECTOR RIGHT ANGLE RS-232	
1	68	903326-01	HEADER ASSY, 1 PIN	
1	67	903326-07	HEADER ASSY, 100 CENTERS 7 PIN	
1	66	903345-20	HEADER ASSY, DUAL ROW 100 CENTERS 40 PIN	
	65			
1	64	800555-02	CRYSTAL, 1.8432 MHZ	
1	63	904150-08	IC SOCKET, 20 PIN	
2	62	904150-06	IC SOCKET, 40 PIN	
3	61	904150-09	IC SOCKET, 24 PIN	
	60			
	59			
2	58	900109-01	CAP, ELECT 25V/47UF	
	57			
	56			
19	55	900461-16	CAP, CERAMIC 50V/01UF	
	54			
2	53	901550-94	RESISTOR, CARBON 1/4W 5% 60K	
3	51	901550-12		
4	50	901550-02		
1	49	901550-69		
2	48	901550-32		
2	47	901550-01		
1	46	901550-31		
1	45	901550-38		
10	44	901550-105	RESISTOR, CARBON 1/4W 5% 33K	
	43			
1	42	902704-01	2N403, TRANSISTOR PNP	
4	41	902647-03	2N2222, TRANSISTOR NPN	
	40			
	39			
2	38	901527-02	7805 VOLTAGE REGULATOR +5V	
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REVISIONS			
LINE	DATE	DESCRIPTION	APPROVED
1		SEE SHEET 1	



COMMODORE MANUFACTURED BY COMMODORE	MODEL NO. 9000035	DATE OF DESIGN 11-1985	<b>commodore</b> 8057, AIRPORT ROAD CORVALLIS, OREGON, U.S.A.
MATERIAL PLAS COLOR 0000	PART NO. 9000035	DATE OF MANUFACTURE 11-1985	DRAWING NO. 9000035
SCALE: NONE			SHEET NO. 3 OF 7



QUANTITY REQD PER PART / (ASST NO)										QTY	B	PART NUMBER	DESCRIPTION	REF DES	QTY	NOTES	
11	10	9	8	7	6	5	4	3	2								
3	3	3	3	3	3	3	3	3	3	30	B	900461-16	CAP, CERAMIC AXIAL .01uF 50V	C52, 60, 61			
2	2	2	2	2	2	2	2	2	2	39	B	900461-20	CERAMIC AXIAL .022uF 50V	C3, 4			
1	1	1	1	1	1	1	1	1	1	40	B	900100-					
1	1	1	1	1	1	1	1	1	1	41	B	900100-					
5	5	5	5	5	5	5	5	5	5	42	B	900109-03	LOW LEAK ELECT. 10uF 25V	C1, 16, 17, 23, 24	SEE NOTE 4		
1	1	1	1	1	1	1	1	1	1	43	B	900250-21	DIPPED ANCA, RADIAL, 82pF, 50V	C72	SEE NOTE 4		
2	2	2	2	2	2	2	2	2	2	44	B	900402-13	TANTALUM 1uF 35V	C6, 51			
2	2	2	2	2	2	2	2	2	2	45	B	900101-37	ELECTROLYTIC 47uF 16V	C7, 11			
1	1	1	1	1	1	1	1	1	1	46	B	900465-08	CERAMIC AXIAL 220pF	C92			
4	4	4	4	4	4	4	4	4	4	47	B	900462-29	CAP, CERAMIC AXIAL 47pF	C74-C86, C88			
2	2	2	2	2	2	2	2	2	2	49	B	901550-84	RES, CARBON VAW 5%	1M R24, 25			
2	2	2	2	2	2	2	2	2	2	50	B	901550-58		470u R13, 16, 17			
4	4	4	4	4	4	4	4	4	4	51	B	901550-94		68u R10, 11, 46, 49			
2	2	2	2	2	2	2	2	2	2	52	B	901550-03		5.1M R19, 21			
2	2	2	2	2	2	2	2	2	2	53	B	901550-85		2.4k R18, 20			
1	1	1	1	1	1	1	1	1	1	54	B	901550-64		10u R8			
2	2	2	2	2	2	2	2	2	2	55	B	901550-20		10M R23, 27			
2	2	2	2	2	2	2	2	2	2	56	B	901550-69		1.5M R47, 48			
8	8	8	8	8	8	8	8	8	8	57	B	901550-49		100u R3, 8, 10			
1	1	1	1	1	1	1	1	1	1	58	B	901550-19		4.7k R51			
1	1	1	1	1	1	1	1	1	1	59	B	901550-18		2.2k R53			
2	2	2	2	2	2	2	2	2	2	60	B	901550-56		47u R50, 52			
										61	B						
										62	B						
										63	B						
1	1	1	1	1	1	1	1	1	1	64	B	901550-73		39u R7			
16	16	16	16	16	16	16	16	16	16	65	B	901550-01		1M R1, 6, 12, 15, 22, 26, 28, 79, 12, 46			
1	1	1	1	1	1	1	1	1	1	66	B	901550-02	CARBON 1/4W 5%	3.3k R14			
1	1	1	1	1	1	1	1	1	1	67	B	902419-66	FLS, NETWORK, DIP 14PIN	12M U811			
2	2	2	2	2	2	2	2	2	2	69	B	702653-01	TRANSISTOR, TIP 29	U1, U2			
1	1	1	1	1	1	1	1	1	1	70	B	902550-01	TRANSISTOR, PACK Q2T222	U1, 16			
										71	B						
										72	B						
1	1	1	1	1	1	1	1	1	1	73	B	901300-02	TRANSDUCER PIEZO ACOUSTIC	MT1			

commodore

PCB ASSY-UNIV. DYNAMIC PET

REV: 1.0

DATE: 8/10

CHK: 1.0

APP: 1.0

QTY: 1

QTY: 1

8052090

REV: 11

3/7

	ITEM			BEND	
			DIODE 1N4005		SEE [REDACTED]
			SY		[REDACTED]
2			VOLTAGE REGULATOR 7905-5V/1.5A		[REDACTED]
1			W 1A		[REDACTED]
			CR		[REDACTED]
			HEADER ASSY	J10	[REDACTED]
			ER ASSY, PO	NTLR ER	[REDACTED]
			DELY	7 20	[REDACTED]
		90418	PRIPLE		[REDACTED]
			BUS W		[REDACTED]
3			LATED, 22 AWG (25US)		[REDACTED]

QTY	QUANTITY BEOCD PER PART / DASH NO.		PART NUMBER	DESCRIPTION	REV DES	DASH	NOTES
	M	A					
1		41	901521-13	IC, 741,5244			UB4-UB7,UA9,UB10,UD3,UC4,UEB-UEO
1	9		901521-13	IC, 741,5244			UB4,UB5,UB9,UB10,UD3,UC4,UEB-UEO
1			B 901521-29	IC, 741,5373			UB3,UB8
1			B 901521-29	IC, 741,5373			UB3
2			901453-02	IC, 2114			UC4-UC7
2			901453-02	IC, 2114			UC4,UC5
2			901470-01	IC, 4116			UA4,UA19
1			C 1474-03	IC, 2316			UA5,UA7, UA9,UA11,UA13,UA15,UA17,UA19
1			B 901499-01	IC, 2316			UD7
1							UD7
							UD7
			970150-07	IC, 2516 EPR04			
26			903025-01	FERRITE BEAD			FBI-26,28,29
1			4022049-01	SHIELD BOX			
1			4032047-01	SHIELD CAP			
1			900461-22	CAP,CERAMIC ANAL,1033,4 F,50V			C94
1			900461-24	CAP,CERAMIC ANAL,1037,2 F,50V			C93
1			900463-04	CAP,CERAMIC ANAL,100 PF,50V			C91

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PCB ASSY-UNIV. DYNAMIC PET

REV H 8032090

REV B

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PART NO.	DESCRIPTION
8032051-01	POWER SUPPLY ASSY, 8032 117V UL

REVISIONS				
REV	DATE	DESCRIPTION	DATE	APPROVED
A		PRODUCTION RELEASE		
B		REV PER ECO 1935		
C		REV PER ECO 2028		
D		REV PER ECO 2284		
E		REV PER ECO 2777		

- ⑥ REFER TO PART SUBSTITUTE INDEX  
 IN 321233.  
 ⑤ SWITCH SHOWN IN "OFF" POSITION.  
 4. ALL LEADS WILL HAVE A MINIMUM OF  
 ONE WRAP AROUND TERMINALS PRIOR  
 TO SOLDERING.  
 ③ IDENTIFY WITH COMMODORE PART  
 NO. 8032051 AND APPLICABLE DASH  
 NO. LOCATE APPROX AS SHOWN.  
 ② DASH 04 CONFIGURATION SHALL BE  
 USED FOR VDE, SEV 4 SEMKO.

1 SHEET 3 OF 3 SIZE D  
 ASSY DWG

NOTES - UNLESS OTHERWISE SPECIFIED:

	TITLE POWER SUPPLY ASSY, 8032	DESIGNED BY L. CHRISTENSEN	DATE 8/22/88	ENGR J. J. J.	SHEET 1 OF 3
		CHECKED BY R. P. J.	DATE 8/22/88	APPROVED [Signature]	DRAWING NUMBER 8032051

COMMODORE REPAIR KIT PART / DRAWING NO.		QTY	PART NUMBER	DESCRIPTION	PRT DES	QTY REQ	NOTES
1	1	1	D 8052043-02	CHASSIS, POWER, UNIVERSAL			
1	2	1	C 320502-01	TRANSFORMER	TI		SEE NOTE (G) FOR SUBSTITUTE
1	6	1	B 900102-01	CAPACITOR 25,000 MFD	CI		
1	8	1	B 903467-03	FILTER POWER CONNECTOR			
1	11						
1	13						
1	14	1	B 320285-01	DYNAMIC PET POWER HARNESS			
1	15						
1	16	1	B 903557-04	FUSE, 125V SLO-BLO 1.6A	FI		
1	18						
1	20	1	B 903611-03	FUSE HOLDER	XFI		FOR SUBSTITUTE SEE NOTE (G)
1	21	1	B 904507-01	SWITCH, ROCKER	SWI		
	22						
	23						
5	25	5	B 320475-02	TUBE, SHRINKABLE			
3	26	3	B 320478-01	TUBE, SHRINKABLE			
2	27	2	B 320058-01	LEAD WIRE (BLACK)			
	28						
							FOR SUBSTITUTE SEE NOTE (G)
1	30	1	B 903612-07	FUSE CARRIER			
1	31	1	B 906630-03	SCREW PAN HEAD #10-32 x .250 LG			
2	32	2	B 905650-03	WASHER, LOCK, INT TOOTH #10			
	33						
1	34	1	C 320925-05	GROUND CABLE ASSY			
2	35	2	B 906600-06	SCREW PAN HEAD #4-40 x .438 LG			
2	36	2	B 905970-05	NUT KEPS #4-40			
	37						

commodore

POWER SUPPLY ASSY, 8032

DESIGN BY:  
S. CHRISTENSEN  
DRAWN BY:  
J. B.

DATE:  
12/75

SCALE:  
AS SHOWN

QTY:  
1

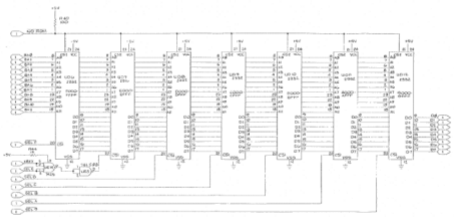
SIZE:  
B

8032051

REV:  
E

3

REVISIONS		DATE
1	1000	10/10/81

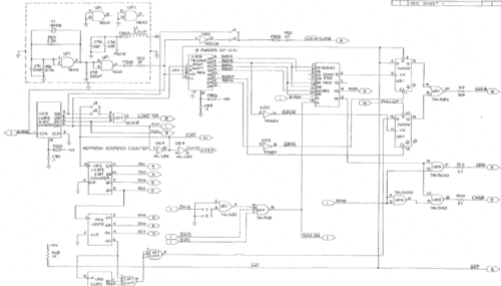


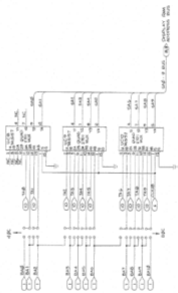
ROMS

	Commodore International, Inc. 5350 Central Expressway Fremont, CA 94538	Commodore Logic Division 15000 15000 15000 15000
--	---	---

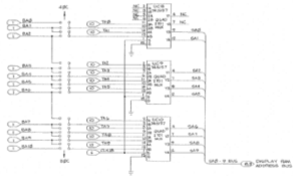








REVISIONS		DATE	BY
1	REV 1		

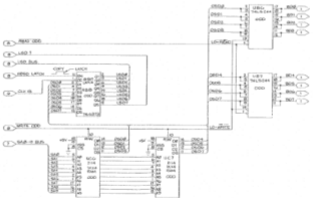


DISPLAY ADDRESS MUX

74138	74138	74138
74138	74138	74138
74138	74138	74138
74138	74138	74138

www.commodore.com  
 LCD MUX  
 INVERTED  
 20 PINS  
 © 1982 ORT  
 100% CMOS

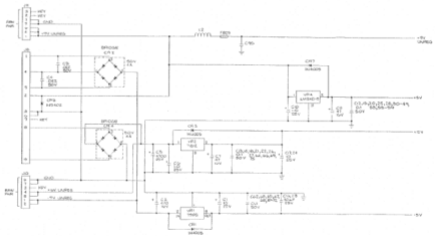
REV	DESCRIPTION	DATE	DESIGNED BY
1	INITIAL		
2	ADD RAM		



ODD DISPLAY RAMS

REV	DESCRIPTION	DATE	DESIGNED BY
1	INITIAL		
2	ADD RAM		

REVISED		
DATE	BY	APP'D
04/19/87	W. J. BLOTT	



**VOLTAGE REGULATOR**

DATE	BY	APP'D
04/19/87	W. J. BLOTT	

Commodore  
15000 PAKING  
SUNSHINE  
PHOTOCOPY  
15000 PAKING  
SUNSHINE  
PHOTOCOPY

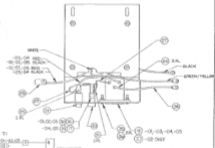
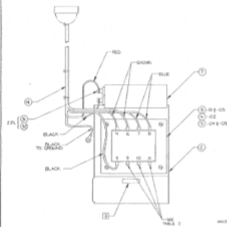
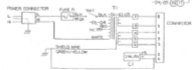


TABLE I

TERMINAL	VOLTAGE	WIRE
1 & 2	0	0" GAUGE
3 & 4	0	0" GAUGE



WIRING DIAGRAM

-01 THRU -05 SHOWN

REV.	DATE	DESCRIPTION
1		COMMODORE
2		POWER SUPPLY
3		455V, 50HZ
4		80/300VA
5		100/300VA
6		100/300VA

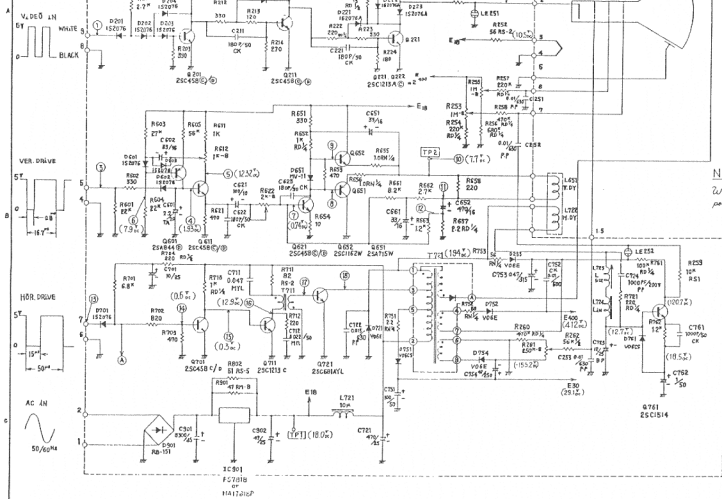
# BASIC CIRCUIT DIAGRAM (CDU-BBO-CMD 12)

**commodore**

PCB SCHEMATIC  
12" CRT DISPLAY

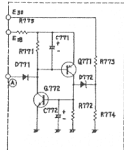
SIZE B 321448 REV 7

SCALE 100% SHEET 1 OF 1



## NOTES

Waveforms are measured at the points indicated with ⓐ



HIGH VOLTAGE HOLD DOWN CIRCUIT




321450

## REVISIONS

LTR/ZONE	DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE	12/29/80	<i>[Signature]</i>

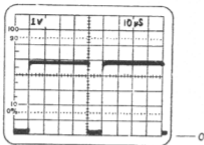
THE INFORMATION AND DATA CONTAINED HEREIN IS PROPRIETARY AND SHALL NOT BE USED OR DUPLICATED WITHOUT PERMISSION OF COMMODORE BUSINESS MACHINES, INC.

DRAWN BY: <i>Muster</i>	DATE: 12-5-80	
CHKD: <i>[Signature]</i>	12/4/80	
ENGR: <i>[Signature]</i>	12/10/80	TITLE: PCB WAVEFORMS 12" CRT DISPLAY
PROB:		
APPD:		SIZE: A
ISSD:		DWG NO. 321450
	RELEASE DATE	REV: A
		SHEET 1 OF 10

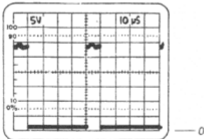
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VIDEO (1/1)

1



2

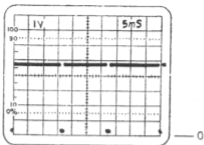


<b>commodore</b>		
PCB WAVEFORMS 12" CRT DISPLAY		
SIZE <b>A</b>	321450	REV <b>A</b>
SCALE NONE	SHEET 2	OF 10

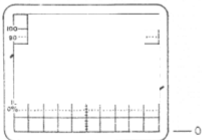
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VERTICAL (1/3)

3



4

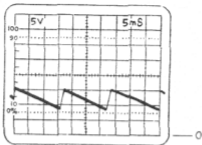


<b>commodore</b>		
PCB WAVEFORMS 12" CRT DISPLAY		
SIZE <b>A</b>	<b>321450</b>	REV <b>A</b>
SCALE NONE	SHEET 3	OF 10

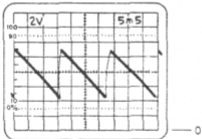
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VERTICAL (1/3)

5



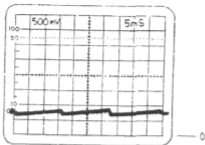
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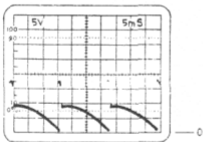
<b>commodore</b>		
PCB WAVEFORMS 12" CRT DISPLAY		
SIZE <b>A</b>	<b>321450</b>	REV <b>A</b>
SCALE NONE	SHEET 4	OF 10

VERTICAL (2/3)

7



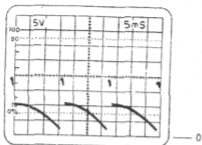
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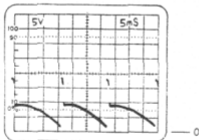
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PCB WAVEFORMS 12" CRT DISPLAY		
SIZE <b>A</b>	<b>32:450</b>	REV <b>A</b>
SCALE NONE	SHEET 5	OF 10

VERTICAL (2/3)

9



10

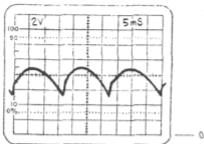


<b>commodore</b>		
PCB WAVEFORMS 12" CRT DISPLAY		
SIZE <b>A</b>	<b>321450</b>	REV <b>A</b>
SCALE NONE	SHEET 6	OF 10

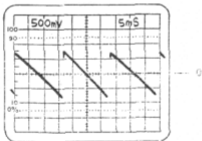
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VERTICAL (B/3)

11



12

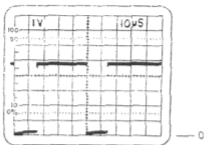


<b>commodore</b>		
PCB WAVEFORMS 12" CRT DISPLAY		
SIZE <b>A</b>	<b>321450</b>	REV <b>A</b>
SCALE NONE	SHEET 7	OF 10

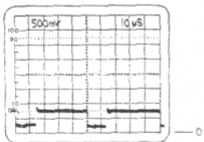
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HORIZONTAL (1/2)

3



14



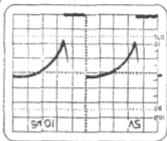
<b>commodore</b>		
PCB WAVEFORMS 12" CRT DISPLAY		
SIZE <b>A</b>	<b>321450</b>	REV <b>A</b>
SCALE NONE	SHEET 8	OF 10

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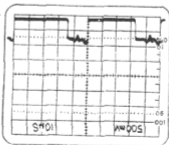
SCALE NONE SHEET 9 OF 10	
SIZE	321450
REV	A
PCB WAVEFORMS 12" CRT DISPLAY	
commodore	

0



16

0

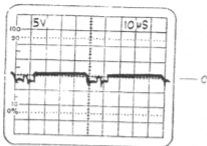


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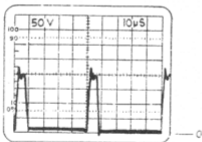
HORIZONTAL (1/2)

HORIZONTAL (2/2)

17



18

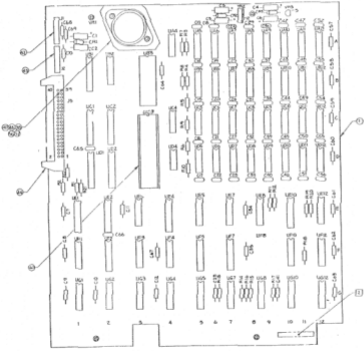


**commodore**

PCB WAVEFORMS  
12" CRT DISPLAY

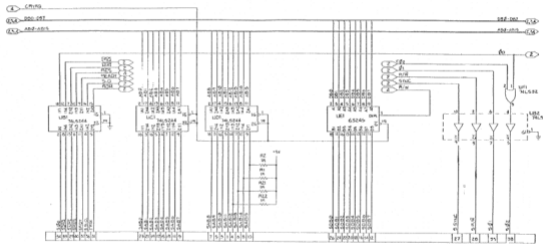
SIZE A	321450	REV A
SCALE NONE	SHEET 10	OF 10

REVISED		DATE	BY
1	SEE SEE 1		



DESIGNED BY	DATE	COMMODORE
DRAWN BY	DATE	PCB ASSY
CHECKED BY	DATE	PET 549 MEMOR
DATE		REV 1
DATE		BOZORS
DATE		REV 1

REVISIONS	
DATE	DESCRIPTION
A	PRODUCTION RELEASE
B	REV PER ECO 2046
C	REV PER ECO 2045
D	REV PER ECO 2117

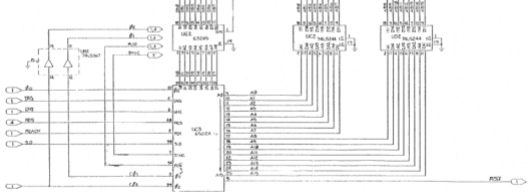
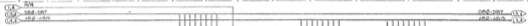
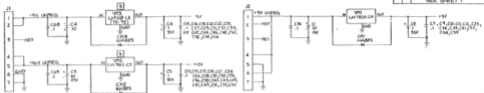


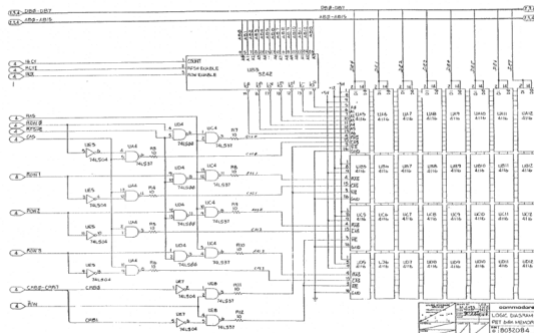
35

3 DO NOT MOUNT FLUSH TO THE BOARD. MOUNT STANDOFF.  
 2 CAPACITANCE VALUES ARE IN MICROFARADS. 50V.  
 1 RESISTANCE VALUES ARE IN OHMS, 1% 15%.  
 NOTES—UNLESS OTHERWISE SPECIFIED:

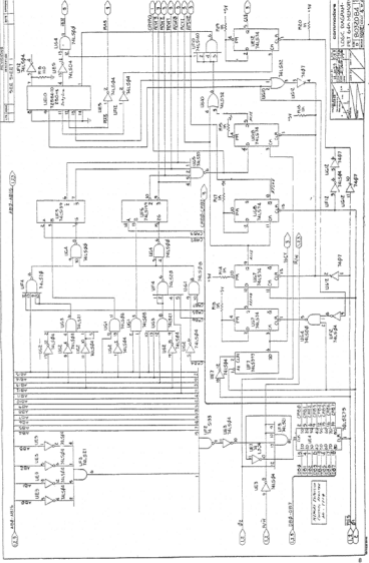
NOT SHOWN

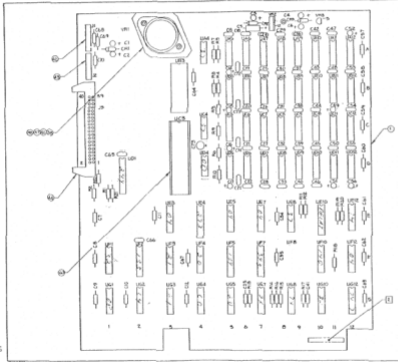
WAVEFORM	LOGIC DIAGRAM	COMMODORE
NET 54R HEAD	LOGIC DIAGRAM	NET 54R HEAD
NET 54R HEAD	LOGIC DIAGRAM	NET 54R HEAD
NET 54R HEAD	LOGIC DIAGRAM	NET 54R HEAD





commodore  
 LOGIC DIAGRAM  
 PART 64A MEMORY  
 KIT # 60520B4  
 REVISED DATE 5/84





REV 0006	DATE
SEE S&P	

CHANGE SILK SCREEN TO SHOW  
ACTUAL CONDITION.

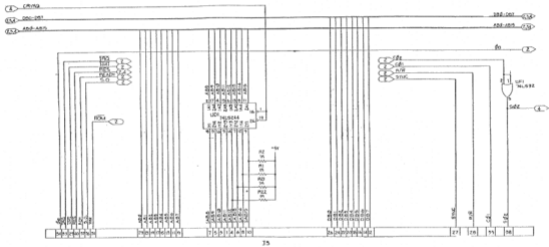
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11/11/84	02	WJ	WJ
11/11/84	03	WJ	WJ
11/11/84	04	WJ	WJ
11/11/84	05	WJ	WJ
11/11/84	06	WJ	WJ
11/11/84	07	WJ	WJ
11/11/84	08	WJ	WJ
11/11/84	09	WJ	WJ
11/11/84	10	WJ	WJ
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11/11/84	12	WJ	WJ

commodore  
PCB Assy.  
PET 64K V800  
ORIGIN  
DESIGN



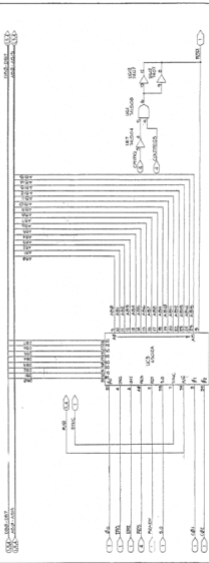
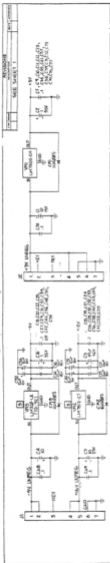
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A	PRODUCTION RELEASE	NA/81
B	REV PER ECO 2102	8/2/81
C	REV PER ECO 2241	2/2/82
D	REV PER ECO 2318	10/2/82
E	REV PER ECO 2768	11/2/82

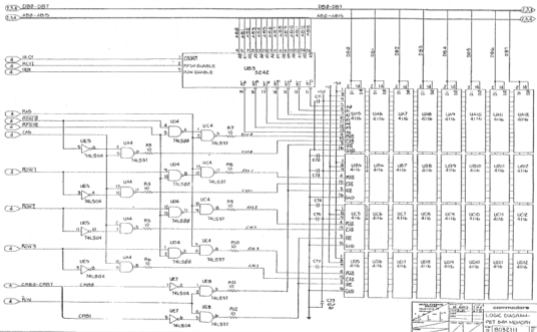


1. DO NOT HOIST FLUSH TO THE BOARD. MOUNT STANDING UP.
  2. CAPACITANCE VALUES ARE IN MICROFARADS, 50%.
  3. RESISTANCE VALUES ARE IN OHMS, TOLER 1%.
- NOTES—WALKS OTHERWISE SPECIFIED!

© SHOWN

DESIGNED BY	DATE	REV	COMMODORE
DRN	12-82	1	
CHECKED BY	DATE	REV	LOGIC DIAGRAM
REP	12-82	1	
DATE	REV	DESCRIPTION	
1-81	1	PRET 64-A MEMORY	
			18032111
			OF 4

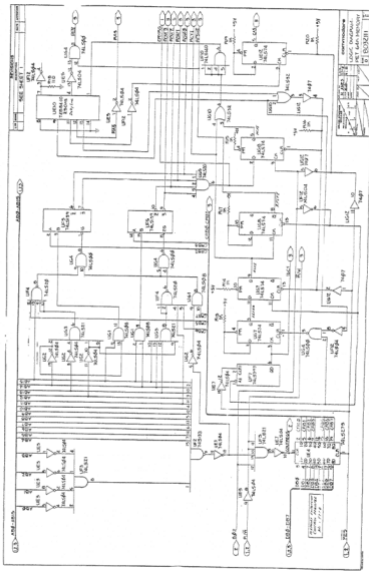




Commodore  
 LOGIC DIAGRAM  
 PET 64 MEMORY

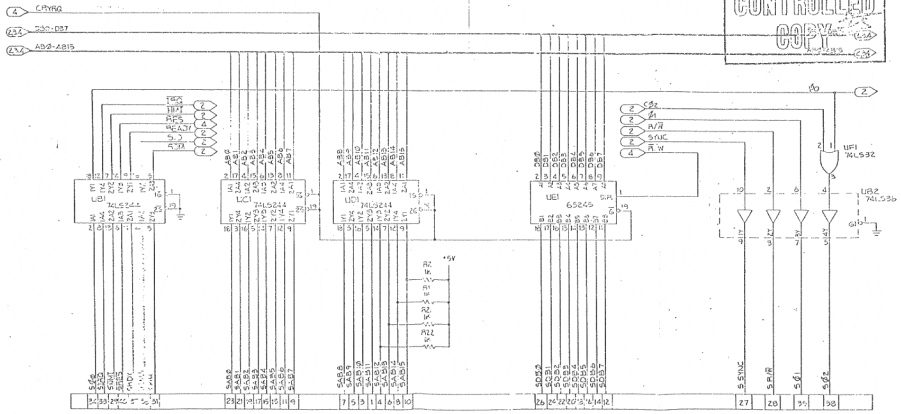
DATE: 11/11/81  
 BY: [Signature]

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74LS00 NAND  
 74LS04 INVERTER  
 74LS08 AND  
 74LS10 OR  
 74LS13 NOT  
 74LS14 MONOSTABLE MULTIVIBRATOR  
 74LS15 TRI-STATE BUFFER  
 74LS16 INVERTER WITH TRI-STATE BUFFER  
 74LS20 NAND  
 74LS21 NAND  
 74LS22 NAND  
 74LS23 NAND  
 74LS24 NAND  
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 74LS99 NAND

REV	DATE	BY	CHKD
A			
B			
C			
D			



13

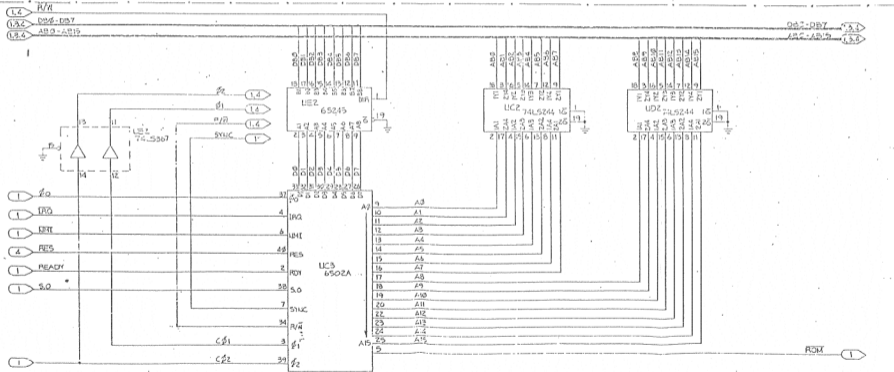
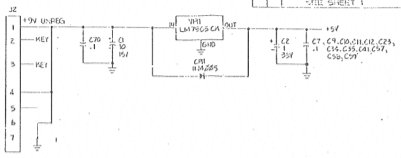
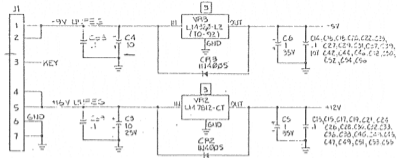
DO NOT MOUNT FLUSH TO THE BOARD. MOUNT STANDINGS UP.  
 1. CAPACITANCE VALUES ARE IN MICROFARADS, 50V.  
 2. RESISTANCE VALUES ARE IN OHMS, 5% TOL.  
 NOTES: UNLESS OTHERWISE SPECIFIED:

-OR SHOWN

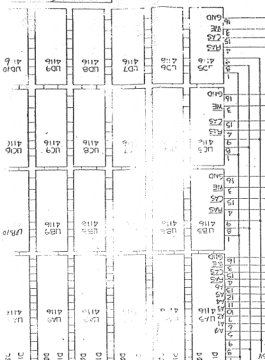
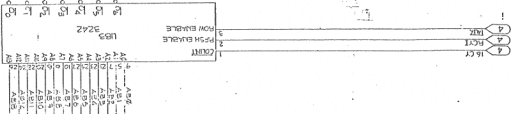
DATE	2/21/81	DESIGNED BY	...
DRAWN BY	...	CHECKED BY	...
APP'D BY	...	DATE	2/21/81

commodore  
 LOGIC DIAGRAM  
 PET 64A MEMOP  
 PET 64K 9921085  
 8080284  
 8080120

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 PET 86A PLUS  
 803024  
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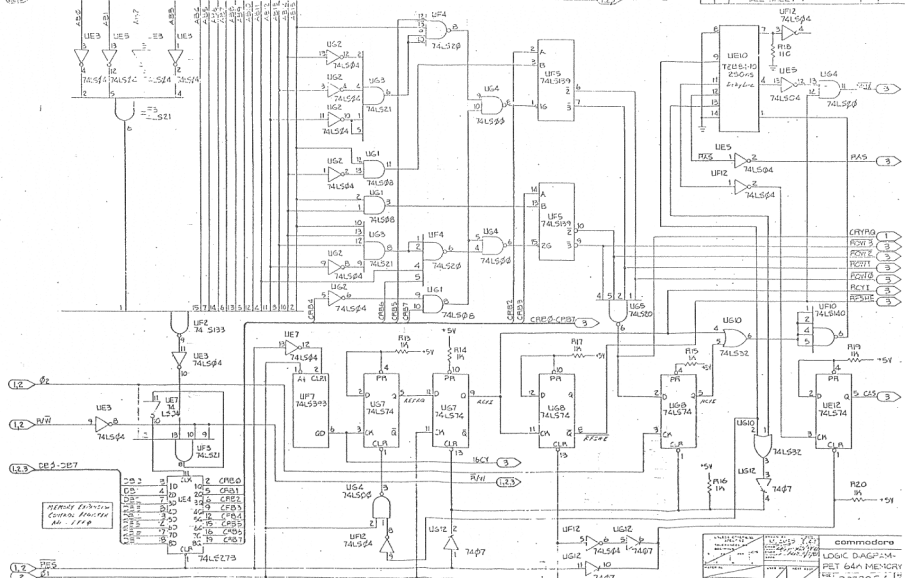


67K  
 EXP  
 3 of 4

IC10 4116  
 IC9 4116  
 IC8 4116  
 IC7 4116  
 IC6 4116  
 IC5 4116  
 IC4 4116  
 IC3 4116  
 IC2 4116  
 IC1 4116

PR2-CB7  
 PR3-AB5

REV	DATE	REVISIONS	BY	APPROVED
1		SEE SHEET 1		



- (1,2) 02
- (1,2) R/W
- (1,2) CS0-CST7
- (1,2) MEM

- CSYMO 1
- CSY3 3
- CSY2 3
- CSY1 3
- CSY0 3
- CSY4 3
- CSY5 3

MEMORY ADDRESS CONTROL PROCESSOR NO. 1118

<p>DATE: 11/15/77</p> <p>DESIGNED BY: [Signature]</p> <p>CHECKED BY: [Signature]</p> <p>APPROVED BY: [Signature]</p>	<p>commodore</p> <p>LOGIC DIAGRAM</p> <p>PET 64A MEMORY</p> <p>0 3032064</p> <p>© 1977 Commodore International, Inc.</p> <p>www.commodore.com</p>
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