

Commodore 64 Computer

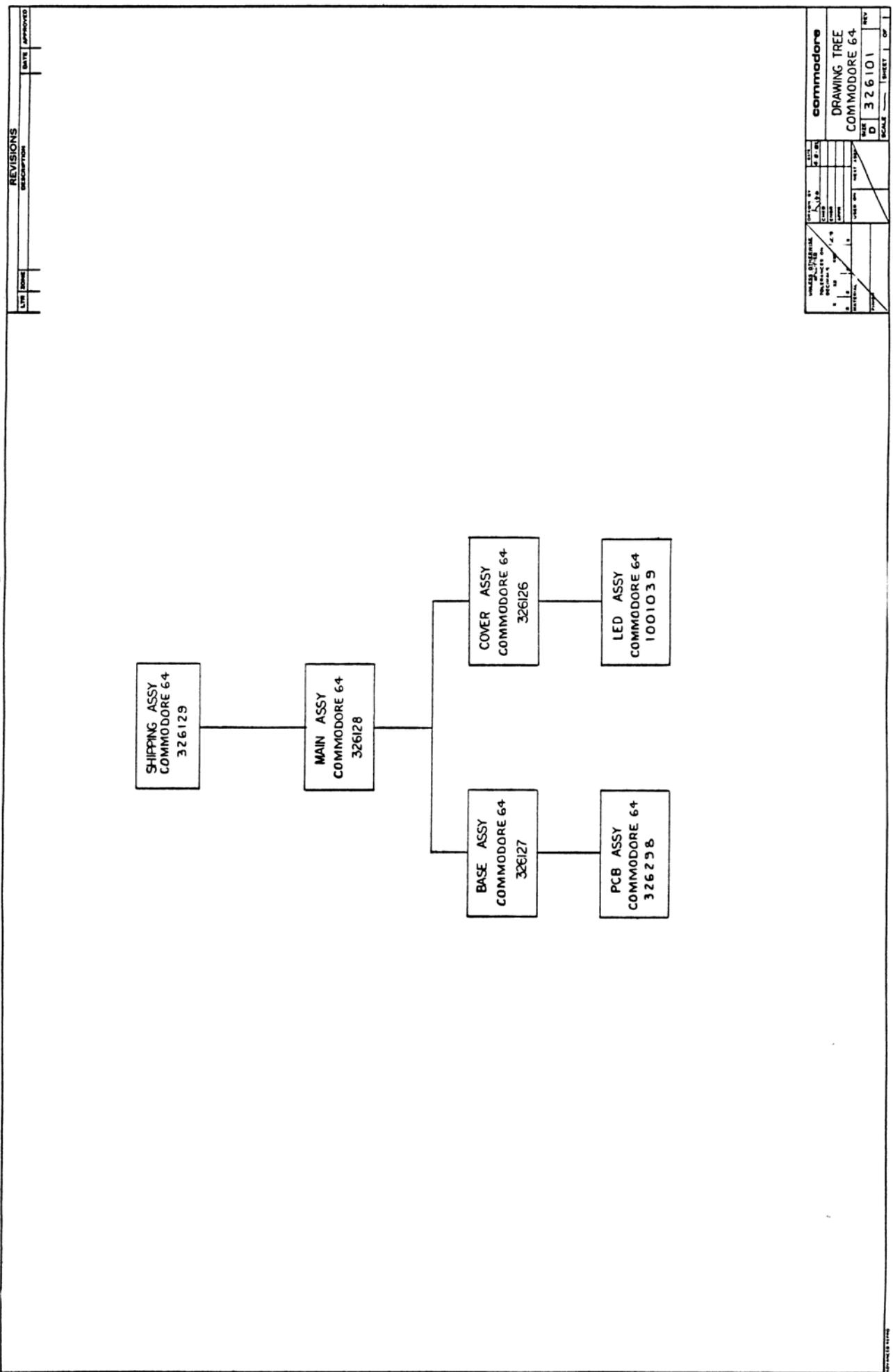
Technical Manual

Model C-64



C commodore
COMPUTER

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PART NO.	DESCRIPTION
250407-04	U.S. VERSION WITH TYPE B MODULATOR
250407	

REVISED PER ECO 830140

REVISIONS	
LTR	ZONE
A	PRODUCTION RELEASE
B	REVISED PER ECO 830140

DATE APPROVED
3/28/83 J. A. G.

1. SHEET 7 OF 7 SIZE C
 ASSY DWG
 NOTES-UNLESS OTHERWISE SPECIFIED:

DRAWN BY: CHIKO <i>Kitajima</i>	K. T. M. N. <i>K. T. M. N.</i>	DATE 2-15-83 Mar. 1st '83	ENGR. <i>J. A. G.</i>	APPR. <i>J. A. G.</i>	SIZE 3-8-83 B	SHEET 1 or 7
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QUANTITY REC'D PER PART / DASH NO.	REF	PART NO.	PART NUMBER	DESCRIPTION	REF DES	Q238	NOTES		
							REV	DATE	SIZE
04	01	1 C	2511 38	SCHEMATIC DIAGRAM					
	01	2 C	2504 06	P.C BOARD			REV A,		
1	3								
	4	C	251137	C-64 ARTWORK					
	5								
	6								
	- 7 B	906/07-01	I.C. 6510A		U7		2MH _E TYP		
	- 8 B	906/08-01	6526		U1, U2				
	- 9 B	906/09-01	6567		U19		JIS, NTSC		
	- 10	906/11-01	6569		U19		PAL		
	- 11 B	906/12-01	6581		U18				
	- 12 B	90/453-01	2114 L-30		U6				
	- 13 B	90/505-01	4/64-2 (200NSEC)		U9,10,11,12		21,22,23,24		
	- 14	90/226-01	2,364 A BASIC		U3		(2364 - 161)		
	- 15	90/227-02	2364 A KERNAL U.S. PAL		U4		(2364 - 182)		
	- 16	90/225-01	2332 B CHAR. U.S. PAL		U5				
	- 17	906/45-02	2364 A KERNAL J/S		U4				
	- 18	906/43-02	2332 B CHAR J/S		U5				
	- 19 B	90/523-03	NE 556		U20				
	2	- 20 B	90/502-01	4066			U16, U28		
	2	- 21 B	90/521-57	74LS 257N			U13, U25		
	1	- 22 B	90/521-29	74LS 373N			U26		
	1	- 23 B	90/521-18	74LS 139N			U15		
	1	- 24 B	90/521-68	74LS 629N			U31		
	1	- 25 B	90/521-03	74LS 08N			U27		
	1	- 26 B	90/521-58	74LS 258N			U14		
	1	- 27 B	90/521-06	74LS 74AN			U29		
	1	- 28 B	90/521-26	74LS 193N			U30		
	1	- 29 B	90/522-06	7406			U8		
	1	- 30 B	906/28-01	MC4044CP			U32		
	1	- 31 B	906/14-01	I.C. 825100N/ 7700			U17		
	1	- 32 B	906/14-06	I.C. 93459			U17		
	33								
	34								
	35								
	36								
	37								
TITLE: COMMODORE 64 PCB ASSY				DRAWN BY: H. T. H. N. CHKD BY: T. P. APR 1983	DATE: 2/14/83 3/1/83	ENGR: D. S. APR 1983	DATE: 3-8-83 3-8-83	SIZE: B B	REV SHEET B 27

commodore ADVANCED REPRO

QUANTITY	REF ID	PART NUMBER	DESCRIPTION	REF DES	QTY	NOTES
04	01					
-	38 B	251030-01	CAPACITOR $\text{R}15\text{PF} \pm 5\%$ N3300	(C70)		PAL
1	- 39 B	251078-14	④ 20pfSL $\pm 5\%$	C36		
1	- 40 B	251078-24	④ 5pfSL $\pm 5\%$	C38		Ⓐ : AXIAL
1	- 41 B	251078-51	④ 360pf B $\pm 10\%$	C23		Ⓑ : RADIAL
2	- 42 B	251078-29	④ 82pf SL $\pm 5\%$	C83, 86		① : TUBULAR
2	- 43 B	251069-4	④ 470pf B $\pm 10\%$	C10, 11		
1	- 44 B	251069-8	④ 1000pf B $\pm 10\%$	C37		
2	- 45 B	251069-11	④ 1800pf B $\pm 10\%$	C48, 93		
1	- 46 B	900016-01	④ 0.47μF 50V $\pm 20\%$	C85		
3	- 47 B	900100-01	④ 10μf 25V ELECT $\pm 10\%$	C8C12/15/17		24.34, 57.62, 65, 94, 102 SEE ITEM 54
1	- 48 B	900100-40	④ 100μf 16V	C91		
2	- 49 B	900101-34	④ 470μf 50V	C88, 90		
1	- 50 B	900101-33	④ 2200μf 16V	C19		
2	- 51 B	900150-11	④ 0.22μf 100V $\pm 20\%$	C20, C21		
1	- 52 B	251030-02	④ 16pf $\pm 5\%$ N2200	(C70)		JIS, NTSC
1	- 53 B	251078-35	④ 220pf B $\pm 10\%$	C203		SUITABLE FOR 6569 REV1 (U19)
5	- 54 B	251074-16	CAPACITOR ④ 10μF 25V ELECT SHALL 120%			
55	55					
56	56					
57	57					
1	- 58 B	901151-17	COIL 2.2μh	L2		
1	- 59 B	325570-01	COIL/INDUCTOR 1.2μh	L5		
1	- 60 B	325559-02	ASSY LINE FILTER	L4		
01						
62	62					
63	63					
1	- 64 B	251081	CRYSTAL 14.31818 MHz	Y1		NTSC, JIS
1	- 65 B	251082	CRYSTAL 17.73447 MHz	Y1		PAL
66	66					
67	67					
68	68					
2	- 69 B	900750-01	DIODE POWER IN4001	CR5, CR6		
1	- 70 B	906103-02	ZENER 1N4371	CR1	2.7 V	
1	- 71 B	900941-01	ZENER IN755	CR2	7.5 V	
1	- 72 C	251026	DIODE BRIDGE RECTIFIER	CR4		
73	73					
74	74					

commodore COMMODORE 64 PCB ASSY

DRAWN BY: K. O. M. N. DATE: 2/16/83
CHRODIS/Felicemra 3/1/83 APPRO: 70215 S-82

REV B 250407 SHT 3/7

QUANTITY REQD. PER PART / DASH NO.	ITEM	REF	PART NUMBER	DESCRIPTION	REF DES	ON	NOTES
04	01	-75	B	902265-05	POTENTIOMETER	500Ω	R27
1	76						
1	77						
1	78	-79	B	901550-31	RESISTOR 1/4 W 5% 680Ω	(R52)	NTSC, JIS
1	80	-80	B	901550-13	"	910n	(R53)
2	81	-81	B	901550-84	"	1M	R41, 50
1	82	-82	B	901550-105	"	33Ω	R42
1	83	-83	B	901550-26	"	15K	R19
1	84	-84	B	901550-57	"	390n	R39
7	85	-85	B	901550-49	"	100n	R26
10	86	-86	B	901550-01	"	1K	R4, 6, 16
2	87	-87	B	901550-69	"	1.5K	R2, 51
4	88	-88	B	901550-02	"	3.3K	R1, 43-45
2	89	-90	B	901550-20	"	10K	R3, 7
2	91	-91	B	901550-22	"	47K	R33, 34
1	92	-92	B	901550-82	"	470K	R35
2	93	-93	B	901550-23	"	2.7K	R17, 37
1	94	-94	B	901550-30	"	560Ω	R5
1	95	-95	B	902410-06	PACK 3.3K, 10 PIN	RP4	
1	96	-96	B	902442-29	"	8PIN	RP3
2	97	-97	B	902422-03	PACK 33Ω 8PIN	RP 1, RP2	
-	98	-98	B	901550-14	RESISTOR 1/4 W 5% 330Ω	(R52)	PAL
-	99	-99	B	901550-49	"	100Ω	(R53)
100							
101							
4	102	-102	B	902693-01	TRANSISTOR	2SC/815	Q 1, 2, 7, 8
5	103	-103	B	902694-01	TRANSISTOR	2SD 880	Q 3
1	104	-104	B	902653-01	TRANSISTOR	TIP29B	Q 3
105							
106							
107							
1	108	-108	B	901527-01	VOLTAGE REGULATOR	MC 7812CT	VR 1
1	109	-109	B	901527-02	VOLTAGE REGULATOR	MC 7805CT	VR 2
110							
111							

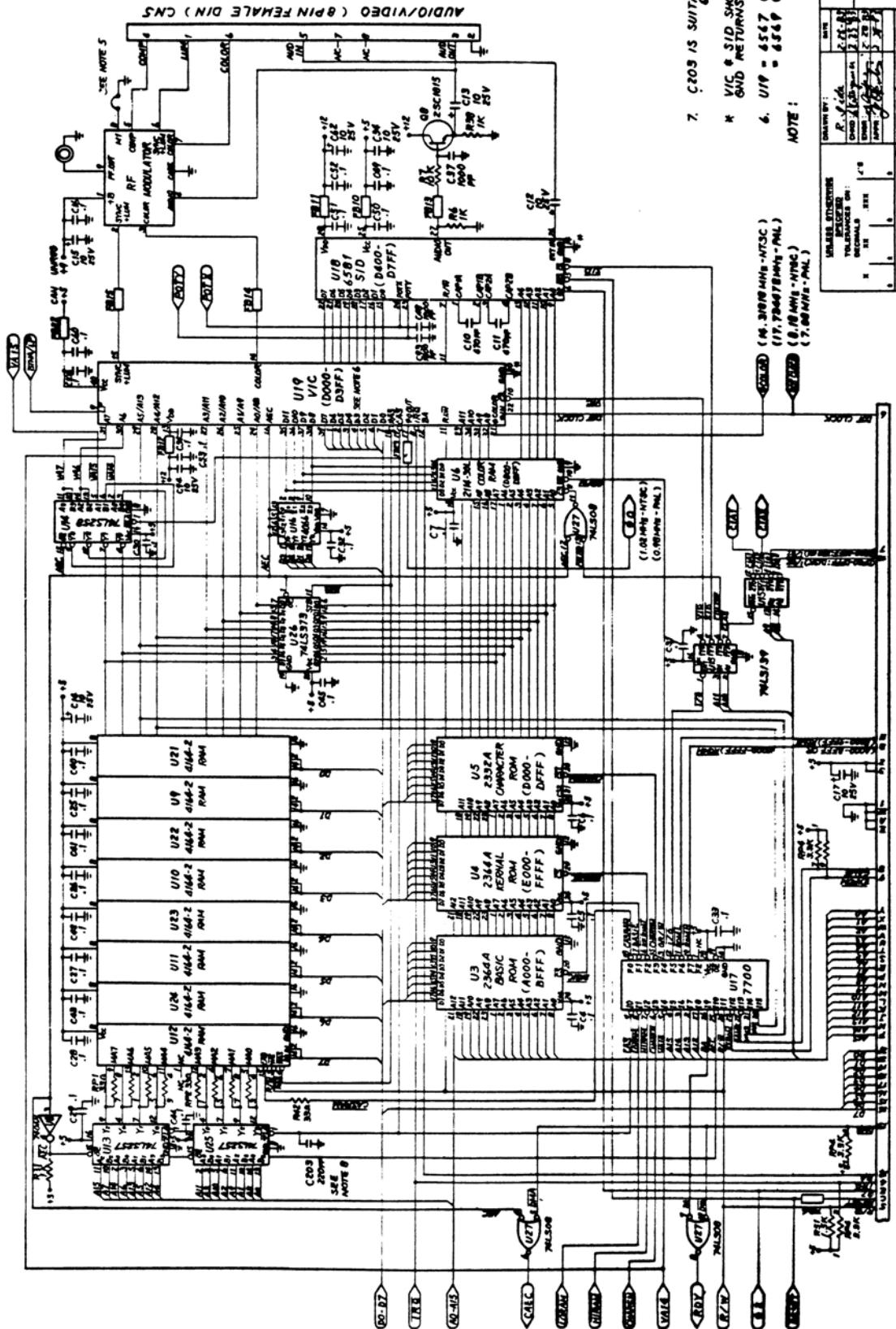
commodore TITLE: COMMODORE 64 PCB ASSY

DRAWN BY: K. T. H. N. DATE: 2-6-83
CHKD: G. L. APPROVED: 3-7-83 SIZE: 3-3/8" REV: B SHT: 4/7

QUANTITY RECD PER PART / DASH NO.	PART #	PART NUMBER	DESCRIPTION	REF DES	C N E S		NOTES
					QTY	UNIT	
04	0/						
-	112						
-	113	251019	MODULATOR J15	(M1)			
-	114 C	251025	MODULATOR PAL	(M1)			
-	115 C	251080	MODULATOR USA	(M1)			
1	116						
117							
118							
3	-119 B	904150-04	SOCKET IC 24 PIN				USE ON: U3, U4, U5
2	-120 B	904150-05	SOCKET IC 28 PIN				USE ON: U17, U18
4	-121 B	904150-06	SOCKET IC 40 PIN				USE ON: U1, U2, U7, U19
122							
123							
1	124		JUMPER WIRE	NO			
1	-125 B	251116	CONNECTOR 7PIN DIN	CN7			
1	-126 B	906100-02	44PIN CARD EDGE	CN6			
1	-127 B	90336/-01					
5	-128 B	90333/-20	6PIN DIN	CN4			
			20PIN POST HDR Q1CTR	CN1			SUBSTITUTE FOR ITEM 131
1	129						
1	-130 B	3235573-01	8PIN DIN	CN5			
1	-131 B	903364-01	20PIN POST HDR Q1CTR	CN1			
1	-132 B	903365-01	3PIN	CN10			
2	-133 B	251057	CONNECTOR 9PIN	CN8,9			
1	134						
135							
136							
1	-137 B	903556-18	FUSE NORMAL BLOW	1.5A			
5	138 B	251184-02	FUSE MEDIUM TIME LAG	1.25A			
1	-139 B	200018-12	JUMPER WIRE				USE ON CHANGING FOR NTSC OR PAL
140							
2	-141 B	906102-01	CLIP, FUSE				
142							
143							
22	-144 B	903025-01	FERRITE BEAD	F8 1-5			7-23
145							
146							
147							
148							
commodore	TITLE: COMMODORE 64 PCB ASSY			DRAWN BY: A. J. H. N. CHKD: J. L. T. P.	DATE: 2-16-85 APR 1985	SIZE: 3-8-83 3-8-83	REV: S/N B 57

QUANTITY REQD PER PART / DASH NO.	ITEM	PART NUMBER	DESCRIPTION	REF DES	QTY	NOTES
	04					
1	-149 B	904500-01	SWITCH ROCKER DPDT	SW1		
	150					
1	151					
1	152					
1	-153 C	326116-01	CARTRIDGE GUIDE			
	154					
	155					
1	156					
1	-157 C	251023	SHIELD BOX			
1	-158 C	251024	SHIELD CAP ASSY (WITH HEAT SINK)			
	159					
	160					
1	161					
1	-162 B	251095	CONNECTOR PANEL			
	163					
	164					
1	165	B	906800-02	SCREW METRIC M3 x 10L		USE ON VR2
1	166	B	906800-02	SCREW METRIC M3 x 10L		USE ON VR2
1	167	B	906888J-03	SELF TAPPING M3 x 6L		USE ON QPin D SUB
4	-168 B	906888J-03	SELF TAPPING M3 x 6L			USE ON QPin D SUB
2	-169 B	906800-01	SCREW METRIC M3 x 4L			USE ON CONNECTOR PANEL
	170					
	171					
1	172	B	251112	HEAT SINK		USE ON VR2
4R	-173 B	904907-01	HEAT SINK COMP'D THER CONDUCTIVE			USE ON VR2 AND U19
1	174	B				
1	175					
1	176	B	905960-03	NUT METRIC M3		USE ON VR2
1	177	B				
1	178					
1	179					(R) : RADIAL
1	180					
51	-181 B	251075-06	CAPACITOR ® 0.1μF 15V FORMING	C15	32.36 ⁸ / ₁₀	22, 23, 33, 39-47, 49, 50-54, 56, 59-60, 66-68, 72, 82, 84
3	-182 B	251073-04	® 0.1μF 15V FORMING	C98	90, 101	
2	-183 B	251075-07	® 0.22μF 15V FORMING	C97	100	
2	-184 B	251079-16	CAPACITOR ® 10μF 25V ELECT SHALL (+20%) C107, 108			
	185					
TITLE: COMMODORE 64 PCB ASSY				DRAWN BY: H. To M. No. 246-83 CHKD/ DATE: 3-1-83	DATE: 3-8-83 APPR: 3-8-83 3-8-83	SIZE: B REV: B SHT: 7
commodore						

REVISIONS		DATE APPROVED	DATE RELEASED
LTR	ZONE		
A	PRODUCTION		7/26/75



PART NO.		DESCRIPTION		TITLE: COMMODORE 64 PCB ASSY DWG NO 326298	
326298-01		US VERSION		REVISIONS	
LTR	ZONE	DESCRIPTION		DATE	APPROVED
A		PRODUCTION RELEASE		7-14-82	<i>[Signature]</i>
B		REVISED PER ECO 4256-2 326-1B 9-28-82		7-14-82	<i>[Signature]</i>
C		REVISED PER ECO 10030 4256-20 9-28-82		7-14-82	<i>[Signature]</i>
D		REVISED PER ECO 2883		26/1/83	<i>[Signature]</i>
E		REV. PER ECO 2893		26/1/83	<i>[Signature]</i>
F		REV. PER ECO 2898		26/1/83	<i>[Signature]</i>
G		REV. PER ECO 2910		26/1/83	<i>[Signature]</i>
H		REV. PER ECO 2911		26/1/83	<i>[Signature]</i>
J		REV. PER ECO 2964		26/1/83	<i>[Signature]</i>
K		REV. PER ECO 2976		26/1/83	<i>[Signature]</i>
L		REV. PER ECO 2996		26/1/83	<i>[Signature]</i>
326298					

- TROUBLE SHOOTING GUIDE.**

[2] **901505-02, 150NS DYNAMIC RAMS ARE TO BE USED IN CONJUNCTION WITH R4, 6567 VIC CHIPS. DO NOT MIX -01 WITH -02 RAMS ON SAME BOARD.**

1. SHEET 7 OF 7 SIZE D
ASSY DWG
NOTES-UNLESS OTHERWISE SPECIFIED:

DRAWN BY S. C. LANGE		8/11/82	ENGR. RALPH J. YANKEE	APPR.	B	SHEET	1 OF 7
CHKD							

QUANTITY	REF ID	PART NUMBER	DESCRIPTION	REF DES	QTY	NOTES
RECD PER						
PART / DASH NO.						
	01					
	1	326106	SCHEMATIC DIAGRAM	REV F		
	2	326294	P.C.B. ART WORK	REV D		
	3	326295	P.C.B. SOLDER MASK	REV D		
	4	326296	P.C.B. SILKSCREEN	REV D		
	5	326295-01	P.C.B. FABRICATION	REV D		
	6					
	7					
-	8	901521-68	I.C. 74LS629N	U31		
-	9	906128-01	MC4044 CP	U32		
-	10	906107-01	6510A	U7		
-	11	906108-01	6526A	U1,U2		
-	12	906109-01	6567	U19		
-	13	906112-01	6581	U18		
-	14	901226-01	2364A BASIC U.S.	U3		
-	15	901227-02	2364A KERNAL	U4		
-	16	901225-01	2332A CHAR U.S.	U5		
-	17	906114-02	82S100N	U17		
-	18	901523-03	NE556	U20		
-	19	901502-01	4066	U16,U28		
-	20	901453-01	2114L-30	U6		
-	21	901521-57	74LS257N	U13,U25		
-	22	901521-29	74LS373N	U26		
-	23	901521-18	74LS139N	U15		
8	24	901505-01	4164-2 (200NS)	U9,10,11,12	2	
	25	901522-06	7406	U21,22,23,24		
-	26	901521-03	74LS08N	U8		
-	27	901521-58	74LS258N	U27		
-	28	906144-01	2364A BASIC JPN	U14		
-	29	906145-01	2364A KERNAL JPN	U3		
-	30	906143-01	2332A CHAR JPN	U4		
-	31	906141-01	2364A BASIC PAL	U5		
-	32	901337-01	FPLA 93459 PG	U17		
-	33	906140-01	2332A CHAR PAL	U5		
-	34	906111-01	6569 PAL	U19		
-	35	901521-06	74LS74 AN	U29		
-	36	901521-26	I.C. 74LS193N	U30		
TITLE: COMMODORE 64 PCB ASSY				DRAWN BY: C. Callegari -	DATE: 6/16/82	REV: A
				CHKD:	APPR:	SHT 27

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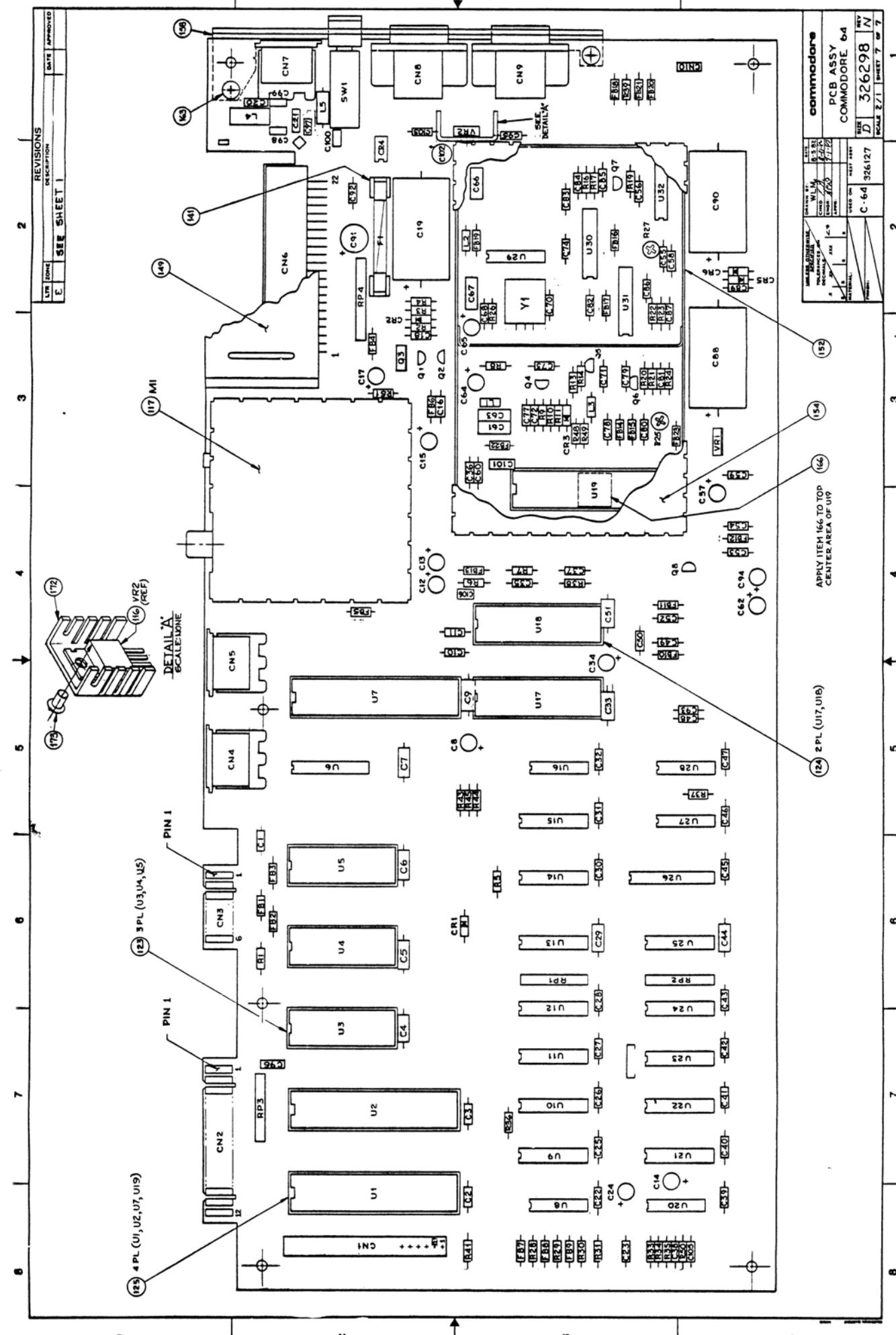
QUANTITY REQD PER PART / DASH NO.	#	PART NUMBER	DESCRIPTION	REF DES	QTY		NOTES
					1	2	
	01						
	2	37	900462-20 CAPACITOR, 20pf 50V	C36,C81			
	1	38	900050-11 "MICA±5% C83				
	1	39	900050-17 "MICA±5% C86				
	2	40	900462-30 "MICA±5% C86				
	1	41	900462-54 510pf "	C80,38, C79			
	1	42	900462-41 150pf "	C73			
	2	43	45 220pf "	C72,78			
	1	44	-50 360pf "	C23			
	5	45	-53 470pf "	C49,52,53,10,11			
	1	46	900462-61 1000pf "	C37..			
	1	47		C			
	37	48	900461-28 0.1μf	Q1-9,16	18,22,30-32,35,39,45-47,56,58,68,71,74,77		
	12	49	900461-32 0.72μf	C82,84,87, C25-28	89,95,96,55,103,105,NO/N 40-43,50,54,59,92		
	2	50	900010-59 0.22μf 250V CERAMIC	C93,C100			
	15	51	900464-36 0.47μf 50V ±20%	C61,63,66,	67,85,45,67,29,33,9,51,60,44		
	14	52	900100-01 10μf 25V ELECT. ±10%	C8,C12-15	17,24,34,57,62,64,65,94,102		
	1	53	900100-40 100μf 16V	C91			
	2	54	900101-34 470μf 50V	C88,90			
	1	55	900101-33 2200μf 16V	C19			
	1	56	900050-14 10pf 50V MICA±5% C70				
	2	57	900462-67 1800pf 50V C48,93				
	2	58	900150-11 CAPACITOR 0.22μf 100V ±20% C20,C21				
	.59						
	3	60	900020-01 CAPACITOR 1μf 50V ±20% C98,99,101				
	-61	251071-26 CAPACITOR ⑧ 220pf SL ±10% C107	USE FOR ONLY 6569 REV.1				
	5	62	251078-39 CAPACITOR ④ 470pf ±10% C108	SUB FOR ITEM 45			
	5	63	251078-45 CAPACITOR ④ 1800pf ±10% C109	SUB FOR ITEM 57			
	1	64	901152-01 COIL 1.2μh @ 2.2K L5				
	2	65	901151-17 COIL 2.2μh L1,2				
	1	66	901151-21 COIL 3.0μh L3				
	67						
	1	68	906127-01 ASSY LINE FILTER L4				
	69						
	1	70	90055B-01 CRYSTAL 14.31818 MHZ Y1	NTSC CRYSTAL NEED. IN CRYSTAL			
	-71	906106-01 CRYSTAL 17.73447 Y1	PAL				
	72						
TITLE: COMMODORE 64 PCB ASSY				DRAWN BY: S. Orlanger CHD:	DATE: 6/9/82	SIZE: B	REV: B 3/7

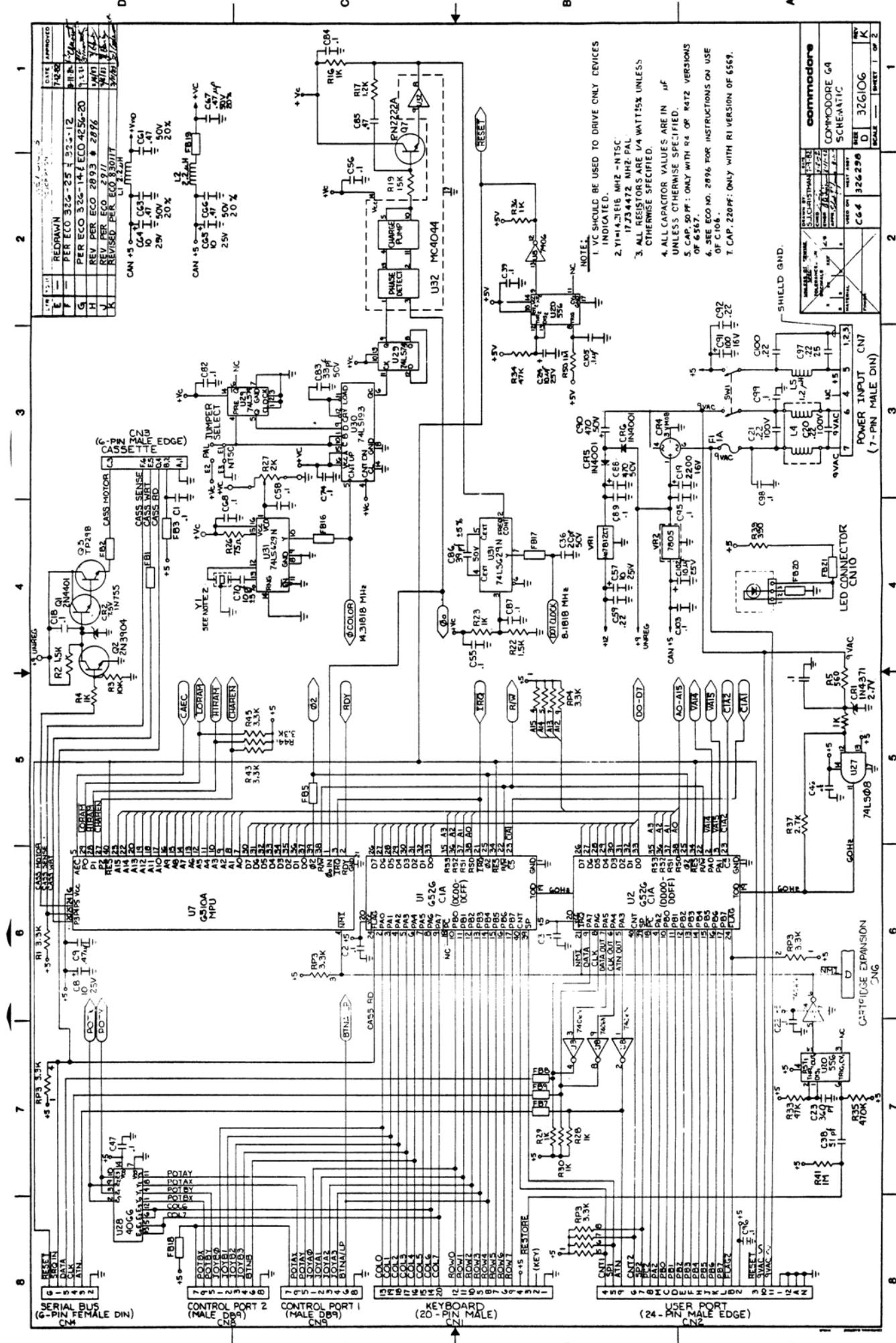
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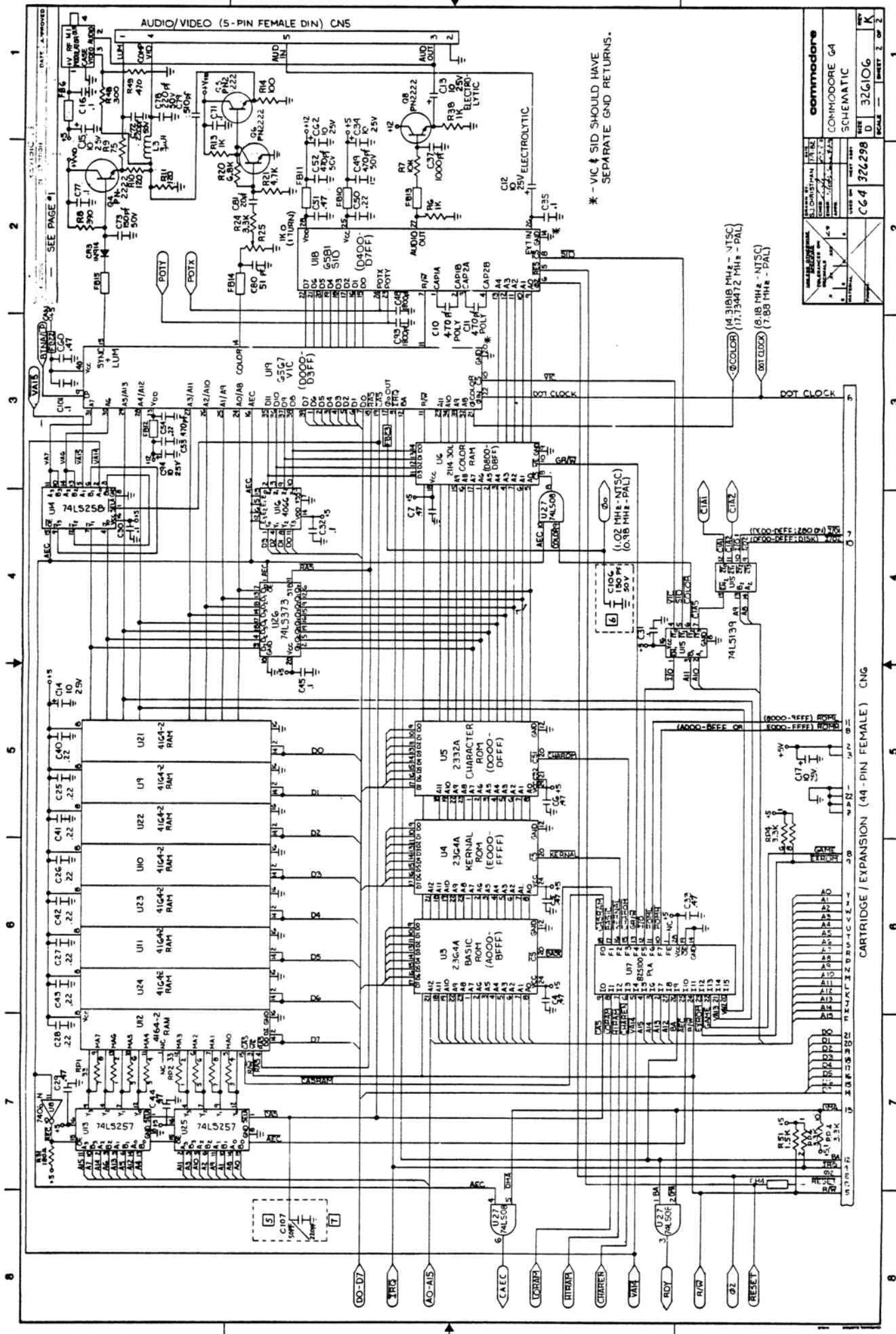
QUANTITY	REF. NO.	DESCRIPTION	REF. DES.	QTY	NOTES
1	01	DIODE, POWER IN4001	CR5, CR6		
2	73	900750-01	CR1	2.7 V	
1	74	906103-02	CR2	7.5 V	
1	75	ZENER IN4371	CR3		
1	76	ZENER IN755	CR4		
1	77	SIGNAL IN914			
1	78	DIODE, BRIDGE RECTIFIER			
1	79	POTENTIOMETER	IK	R25	
1	80	POTENTIOMETER	2K	R27	
2	81	RESISTOR, 1/4W, 5%	1M	R41, 50	
	82				
	83	-30	560Ω	R5	
	84	-17	1.2K	R17	
	85	-26	15K	R19	
	86	-4.5	75Ω	R26, R9	
	87	-5.7	390Ω	R39, RB	
	88	-4.9	100Ω	R14	
10	89	-01	1K	R4.6, 13, 16, 23	
				R28, 30, R38, NON	
3	90	-69	1.5K	R2, 22, 51	
5	91	-02	3.3K	R43:45, 24	
1	92	-19	4.7K	R21	
1	93	-04	6.8K	R20	
2	94	-20	10K	R3, R7	
2	95	-22	47K	R33, R34	
1	96	-82	470K	R35	
1	97	-100	180Ω	R31	
	98	-70	2K	R43	(BELOW U16, 6381 CHIP)
	99	-58	180Ω	R31	
1	100	-23	2.7K	R37	
2	101	RESISTOR 1/4W, 5%	120Ω	R11, 10	
2	102	RESISTOR 1/4W, 5%	75Ω	R9, R24	
	103				
	104	RESISTOR 1/4W, 5%	470Ω	NONE	INPUT VIDEO LINE TO GND (SEE SILICON)
	105	RESISTOR PACK 3.3K, 10 PIN	RP4		
	106	RESISTOR PACK 3.3K, 8 PIN	RP3		
2	107	RESISTOR PACK 33Ω, 8 PIN	RP1, RP2		
	108				
commodore				DRAWN BY: S. C. L. / 1982 CHRD:	DATE: 6/4/82 APPR: <i>[Signature]</i>
TITLE: COMMODORE 64 PCB ASSY				SIZE: B	REV. N 4/7

QUANTITY	RECD. PER PART / DASH NO.	ITEM #	PART NUMBER	DESCRIPTION	REF DES	Q38	NOTES
61		1109	902652-01	TRANSISTOR 2N4401	Q1		
		1110	902658-01	2N3904	Q2		[2]
5	902686	1111	902653-01	TRANSISTOR PN2222	Q4,5,6,7,8		
		1112	902653-01	TIP29B	Q3		
114		1115	901527-01	VOLTAGE REGULATOR MC7812CT	VRI		
115		1116	901527-02	VOLTAGE REGULATOR MC7805CT	VR2		
117		326130-01	MODULATOR		M1		
118		326163-01	MODULATOR		M1		
119		326162-01	MODULATOR		M1		
120		121					
1	122	1123	904150-04	SOCKET IC 24PIN			USE ON: U3, U4, U5
2	124	2125	904150-05	SOCKET IC 28PIN			USE ON: U17, U18
2	125	2126	904150-06	SOCKET IC 40PIN			USE ON: U1, U2, U7, U9
127		2128	906126-01	CONNECTOR, 9PIN	CNB,9		
129		1130	906100-02	CONNECTOR, 44 PIN CARD EDGE	CNG		532623-1 AMP (.200" ROW CTR)
131		1131	903362-01	5PIN DIN	CNS		
132		1132	903361-01	6PIN DIN	CN4		
133		1133	903331-20	20PIN POST HDR 0.1" CTR.	CNI		
134		1134	903332-03	3PIN "	CN10		
135		1135	906130-01	CONNECTOR, 7 PIN DIN	CN7		
136		137					
138		1138	903556-18	FUSE 3AG 1.5AMP	F1		
5	T. B. A.	139	FUSE TIME LAG	1.25A	F1		SUB. ITEM 138
2	141	140	906102-01	CLIP, FUSE			
142		143					
23	144	145	903025-01	FERRITE BEAD	F.B1-23		
commodore				COMMODORE 64 PCB ASSY	DRIVEN BY: S. Callahan	DATE: 1/18/82	REV. N S/N 57
					CHKD:		APPR:

QUANTITY READ PER PART / DASH NO.	REF	PART NUMBER	DESCRIPTION	REF DES	ON SHE	NOTES	
					DATE	ENGR:	REV
01	146	904500-01	SWITCH ROCKER DPDT	SW1			
1	147	326116-01	CARTRIDGE GUIDE				
1	148	326116-01	CARTRIDGE GUIDE				
1	149	326116-01	CARTRIDGE GUIDE				
1	150						
1	151	326265-01	SHIELD BOX				
1	152	326267-01	SHIELD CAP ASSY (WITH HEATSINK)				
1	153						
1	154	326267-01	SHIELD CAP ASSY (WITH HEATSINK)				
1	155						
1	156						
1	157						
1	158	326299-01	CONNECTOR PANEL				
1	159	903755-03	WIRE, INSULATED 22 AWG		3		
1	160						
1	161						
1	162						
2	163	906610-01	SCREW, #6-32 x .25 LG				
1	164						
1	165						
1	166	904907-01	HEAT SINK COMP'D THER. CONDUCTIVE				
1	167	902920-01	HEATSINK, FLAT				
1	168	906404-04	RIVET				
1	169						
1	170						
1	171						
1	172	902920	HEATSINK, FLAT				
1	173	906404-04	RIVET				
1	174						
1	175						
1	176						
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1	178						
1	179						
1	180						
1	181						
1	182						

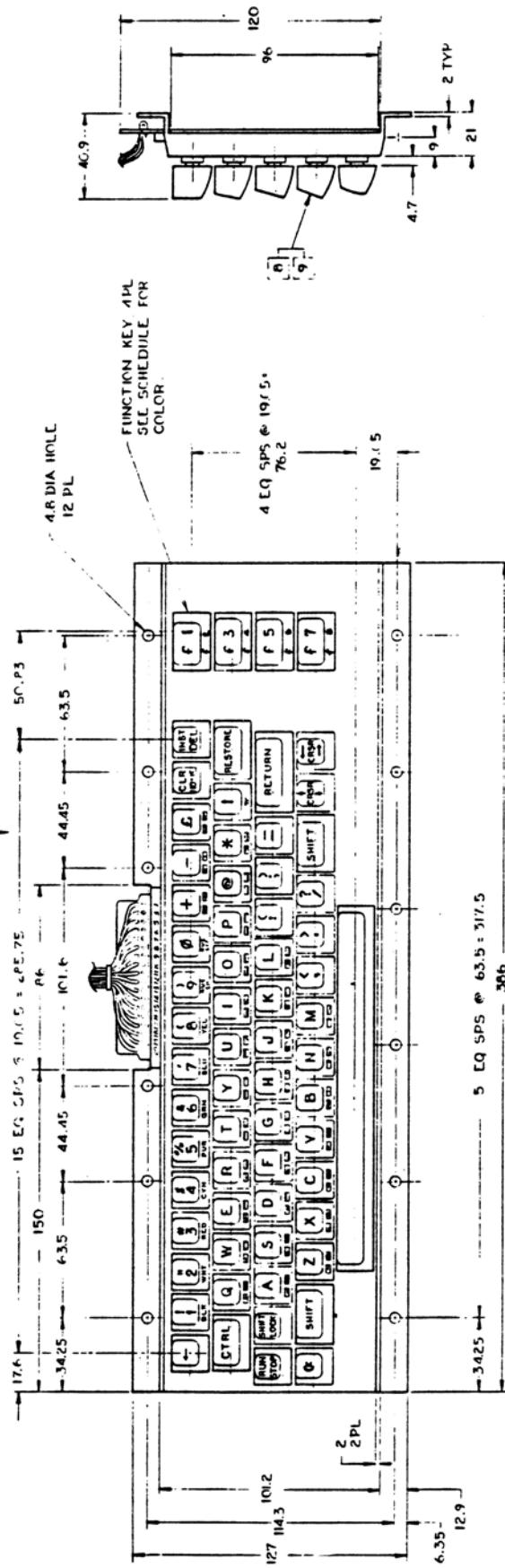






FUNCTION KEY COLOR SCHEDULE			
PART NO.	USED IN	KLT. CAT. C/LIR	
1001-026-01	VIC 20	BROWN (4972)	
1001-026-02	C-64	BROWN (SR-7655R1)	

WIRE COLOR SCHEDULE									
No.	Color	No.	Color	No.	Color	No.	Color	No.	Color
1	WHITE	6	VIOLET	11	CARM.	16	WHITE/GREEN		
2	KEY	7	BLUE	12	BROWN	17	WHITE/TELL. "W"		
3	BLACK	8	GREEN	13	WHITE/RED	18	WHITE/SHANGE		
4	INC.	9	YELLOW	14	WHITE/VIOLET	19	WHITE/RED		
5	GHEY	10	ORANGE	15	WHITE/BLUE	20	WHITE/BROWN		



ALL DIMENSIONS ARE REFERENCE ONLY.

ALL KEYCAPS TO BE DARK BROWN (3A-786460), EXCEPT FUNCTION KEYS.
ALL CHARACTERS & GRAPHICS TO BE IVORY (3A-135550).

8 KEYCAPS ARE TWO SHORT MOLDED TRUNCATED PYRAMID WITH CONCAVE TOP FOR CHARACTER. ALL GRAPHICS ARE ON THE FRONT SIDE OF KEYCAPS BY SILKSCREEN.

6. CONTACT TO BE PROTECTED FROM CONTAMINATION OVER LIFE OF CONTACT !
(10 MILLION OPERATIONS).

5. IDENTIFY WITH COMMERCIAL PART NO 226166, & APPLICABLE DATA NO (BAG TAG).

4. THIS PART IS PURCHASED & MANUFACTURED FROM MITSUMI IN
3. PCF MITSUMI INC., COTTER CLIP PATH (FRA CLIPS ALT)

2. CERTAIN ATTACHMENTS ARE APPROVED BY
 1. ALL DIMENSIONS ARE IN MILLIMETERS.
 NOTES—UNLESS OTHERWISE SPECIFIED.

卷之三

PT FUNCTION KCYS.

WITH CONCAVE TRP FOR

AIR LIFT, OF CONTACT.
OF MECHANICS BY SILKSCREEN.

OVER LIFE OR CONTACT.

LICABLE IN TOKYO JAPAN

55 ALT)

COMMODORE	
MONITOR	VIC-20
KEYBOARD	VIC-1001
DISK DRIVE	VIC-1540
VIDEO	VIC-1541
POWER	VIC-1542
WIRELESS	VIC-1543
MONITOR	VIC-1544
KEYBOARD	VIC-1545
DISK DRIVE	VIC-1546
VIDEO	VIC-1547
POWER	VIC-1548
WIRELESS	VIC-1549
MONITOR	VIC-1550
KEYBOARD	VIC-1551
DISK DRIVE	VIC-1552
VIDEO	VIC-1553
POWER	VIC-1554
WIRELESS	VIC-1555
MONITOR	VIC-1556
KEYBOARD	VIC-1557
DISK DRIVE	VIC-1558
VIDEO	VIC-1559
POWER	VIC-1560
WIRELESS	VIC-1561
MONITOR	VIC-1562
KEYBOARD	VIC-1563
DISK DRIVE	VIC-1564
VIDEO	VIC-1565
POWER	VIC-1566
WIRELESS	VIC-1567
MONITOR	VIC-1568
KEYBOARD	VIC-1569
DISK DRIVE	VIC-1570
VIDEO	VIC-1571
POWER	VIC-1572
WIRELESS	VIC-1573
MONITOR	VIC-1574
KEYBOARD	VIC-1575
DISK DRIVE	VIC-1576
VIDEO	VIC-1577
POWER	VIC-1578
WIRELESS	VIC-1579
MONITOR	VIC-1580
KEYBOARD	VIC-1581
DISK DRIVE	VIC-1582
VIDEO	VIC-1583
POWER	VIC-1584
WIRELESS	VIC-1585
MONITOR	VIC-1586
KEYBOARD	VIC-1587
DISK DRIVE	VIC-1588
VIDEO	VIC-1589
POWER	VIC-1590
WIRELESS	VIC-1591
MONITOR	VIC-1592
KEYBOARD	VIC-1593
DISK DRIVE	VIC-1594
VIDEO	VIC-1595
POWER	VIC-1596
WIRELESS	VIC-1597
MONITOR	VIC-1598
KEYBOARD	VIC-1599
DISK DRIVE	VIC-1600
VIDEO	VIC-1601
POWER	VIC-1602
WIRELESS	VIC-1603
MONITOR	VIC-1604
KEYBOARD	VIC-1605
DISK DRIVE	VIC-1606
VIDEO	VIC-1607
POWER	VIC-1608
WIRELESS	VIC-1609
MONITOR	VIC-1610
KEYBOARD	VIC-1611
DISK DRIVE	VIC-1612
VIDEO	VIC-1613
POWER	VIC-1614
WIRELESS	VIC-1615
MONITOR	VIC-1616
KEYBOARD	VIC-1617
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DISK DRIVE	VIC-1696
VIDEO	VIC-1697
POWER	VIC-1698
WIRELESS	VIC-1699
MONITOR	VIC-1700
KEYBOARD	VIC-1701
DISK DRIVE	VIC-1702
VIDEO	VIC-1703
POWER	VIC-1704
WIRELESS	VIC-1705
MONITOR	VIC-1706
KEYBOARD	VIC-1707
DISK DRIVE	VIC-1708
VIDEO	VIC-1709
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VIDEO	VIC-1793
POWER	VIC-1794
WIRELESS	VIC-1795
MONITOR	VIC-1796
KEYBOARD	VIC-1797
DISK DRIVE	VIC-1798
VIDEO	VIC-1799
POWER	VIC-1800
WIRELESS	VIC-1801