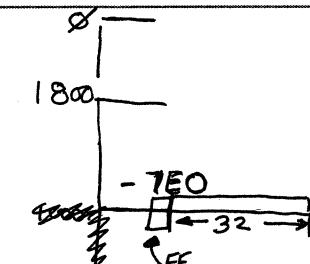


REV	ZONE	ECN	DESCRIPTION OF REVISION		CK APPD DATE	ENG APPD DATE
			PRODUCTION RELEASE	DB 6/95		
B		33392	PRODUCTION RELEASE	DB 6/95		
C		36868	REVISED PER RFA	DB 12/95		

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	26.	Test Points
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	28.	Reference Designator Location

CHANGES SINCE 051-0302-C

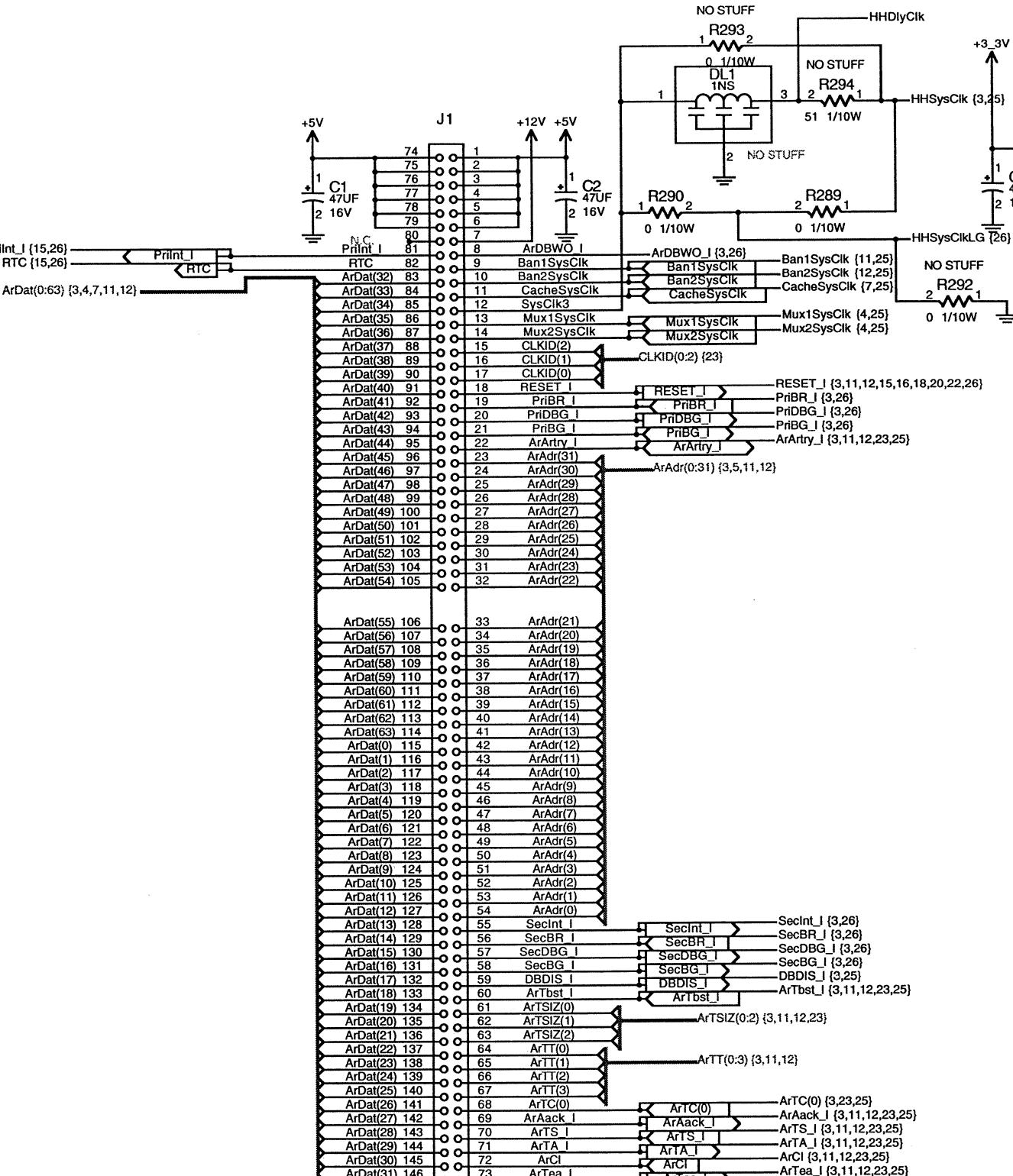
- v1 Initial v1 Montana schematic based on production 9590
Change power supply connectors J39 and J36 for K2
Added C83,91,93, R1,27,45,46
Other RFAs??
- v2 Updated R27,45,46 to 0805 (were incorrectly in as 0809)
FRP to Russ 31-May-96
- v3 Fixed SCSI connectors for RUss, BOM changes for Barb
FRP to Russ, 4-Jun-96
- v4 Removed D3 and replaced with circuit with lower forward drop
Added R47,48,55, Q13,Q14
Also Changed J41 to be 4 pin..
- v5 BOM Changes for Barb
Mirrored J20, J32, J41 per PCB Design
- A Unmirrored J20, J32, J41 per PCB Design
- B Fixed NVRAM CS failure mode - changed R251 from 1kΩ to 100Ω



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				SHT. 1 OF 28	

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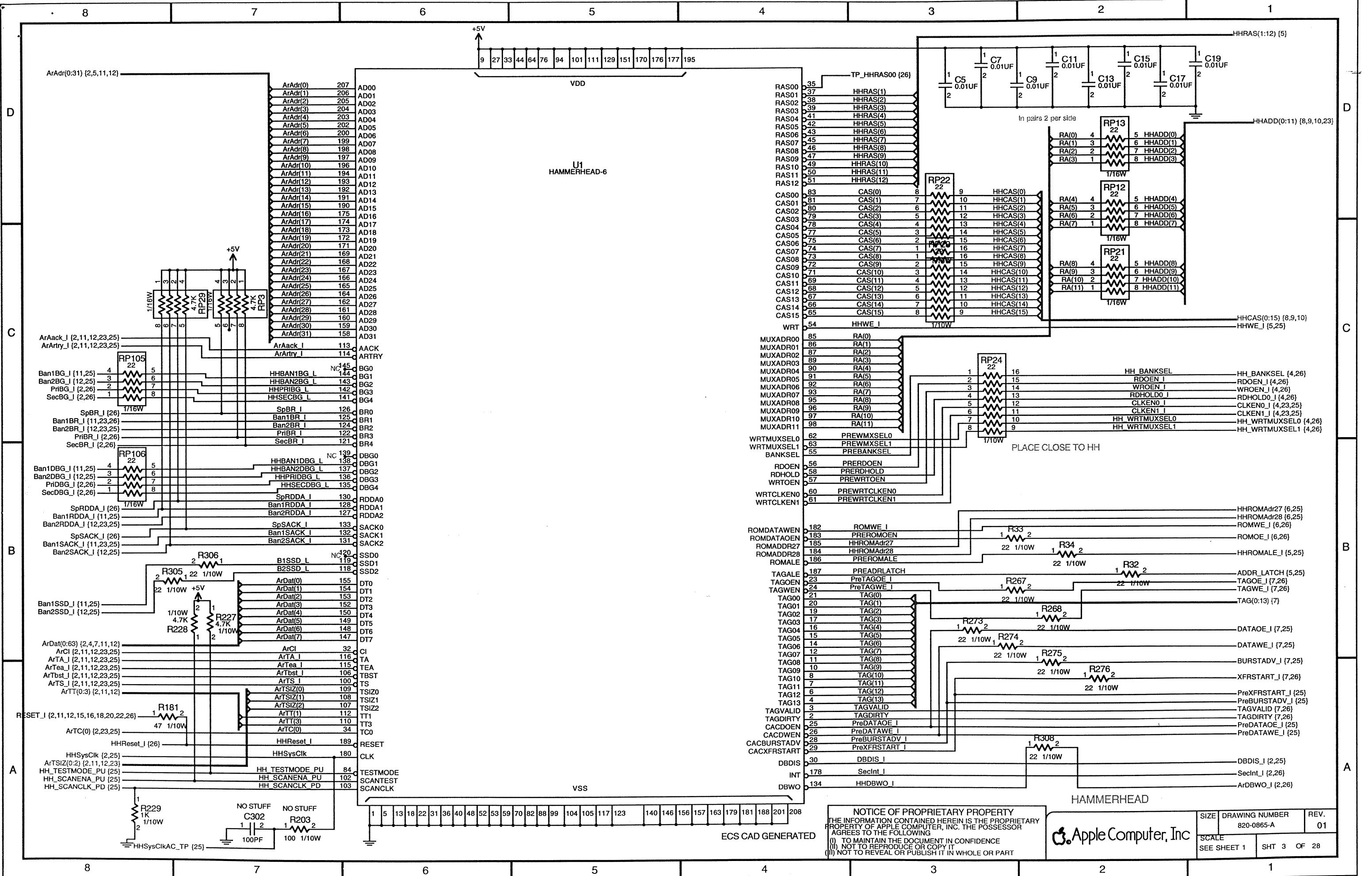
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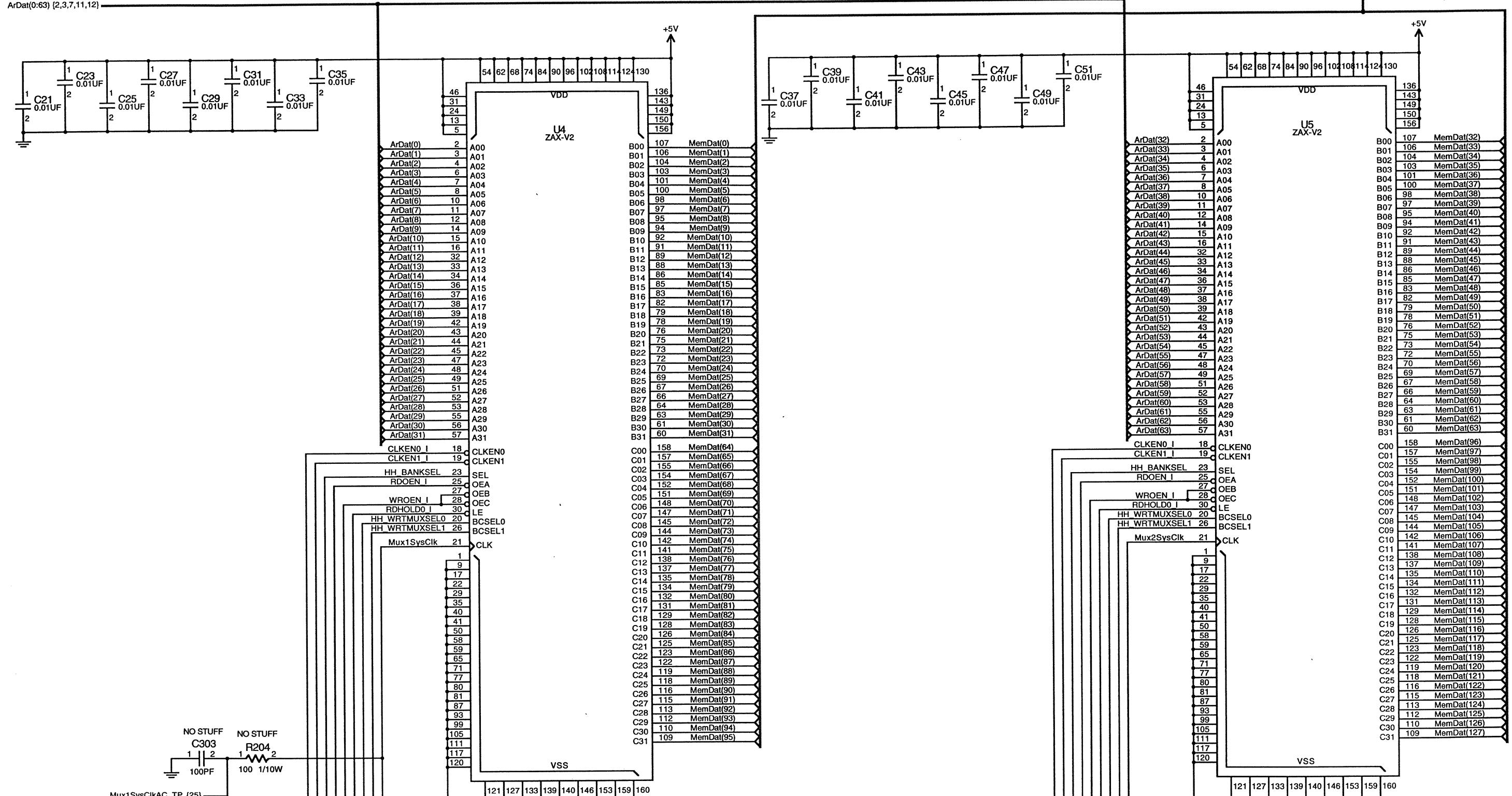
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60x Connector



MemDat(0:127) {8,9,10}



Memory Address Buffers & Zax Data Mux

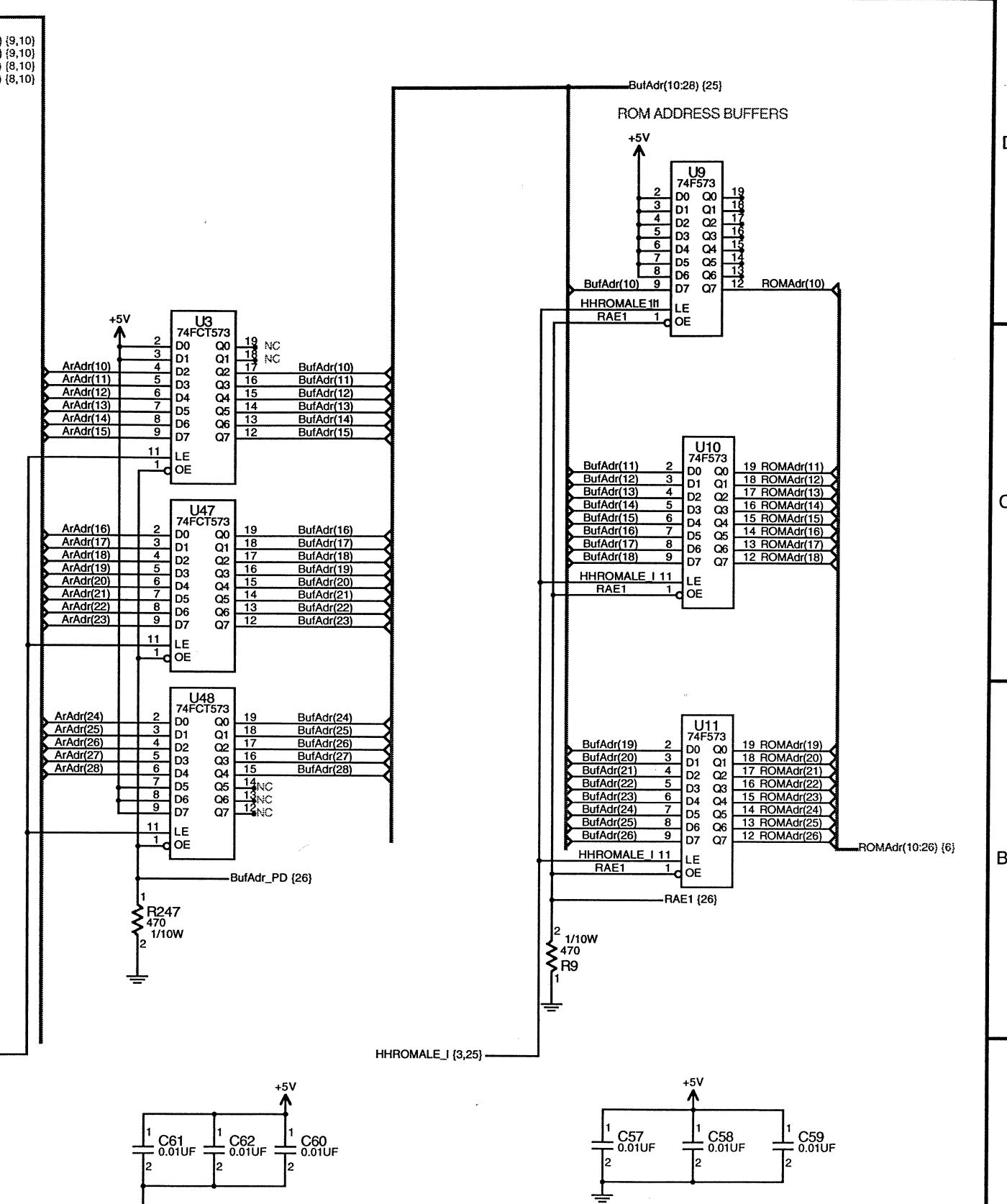
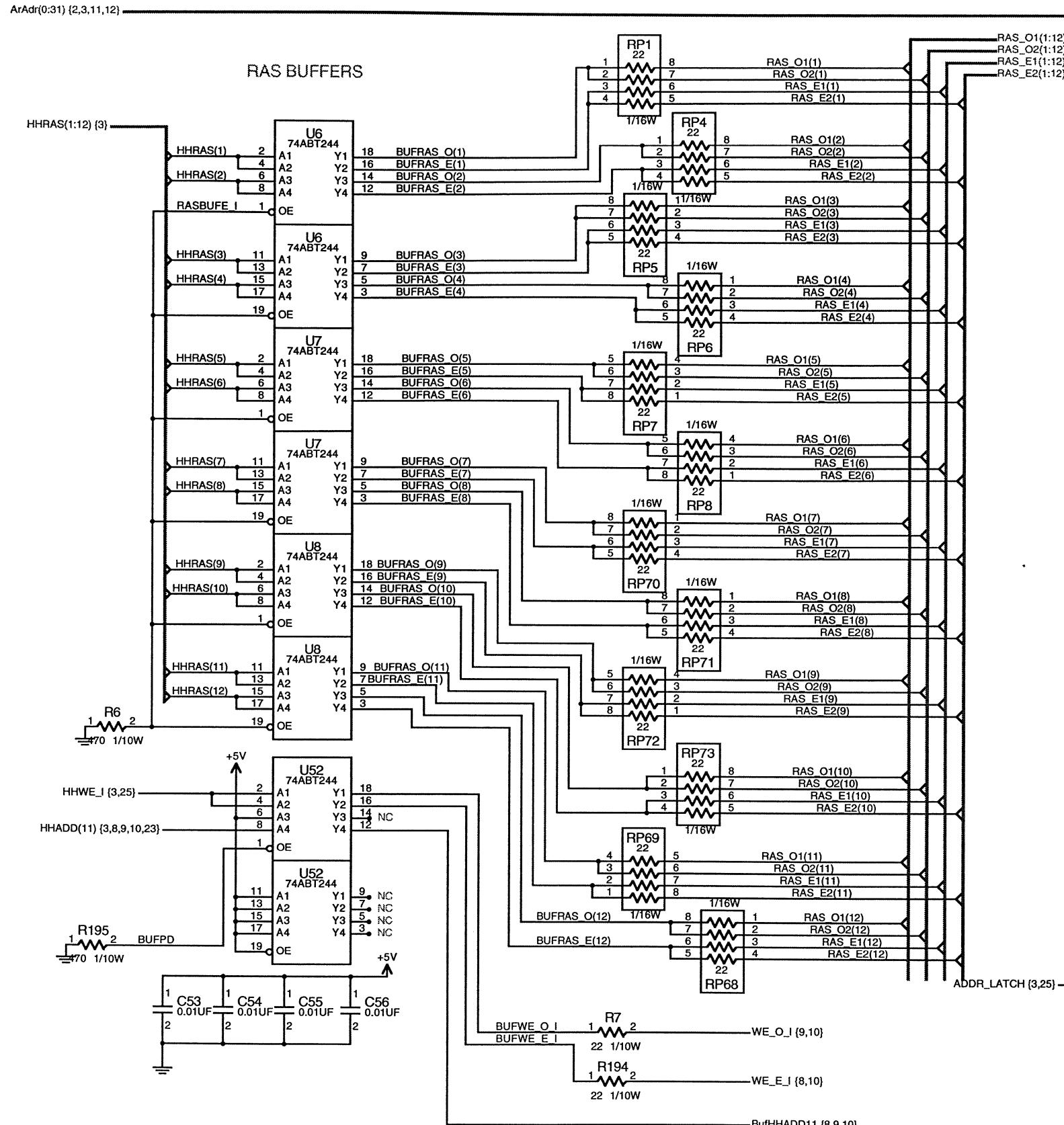
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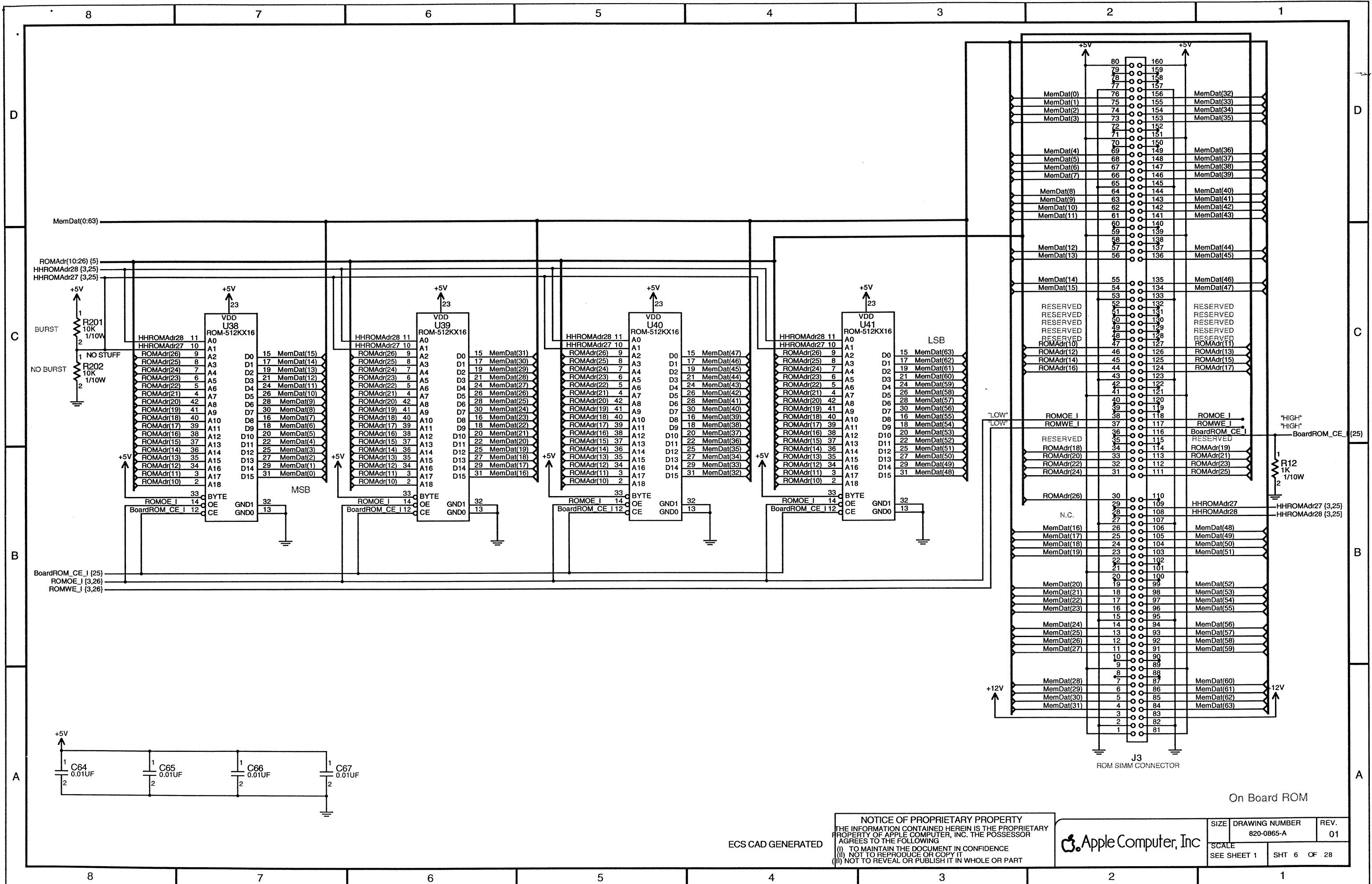
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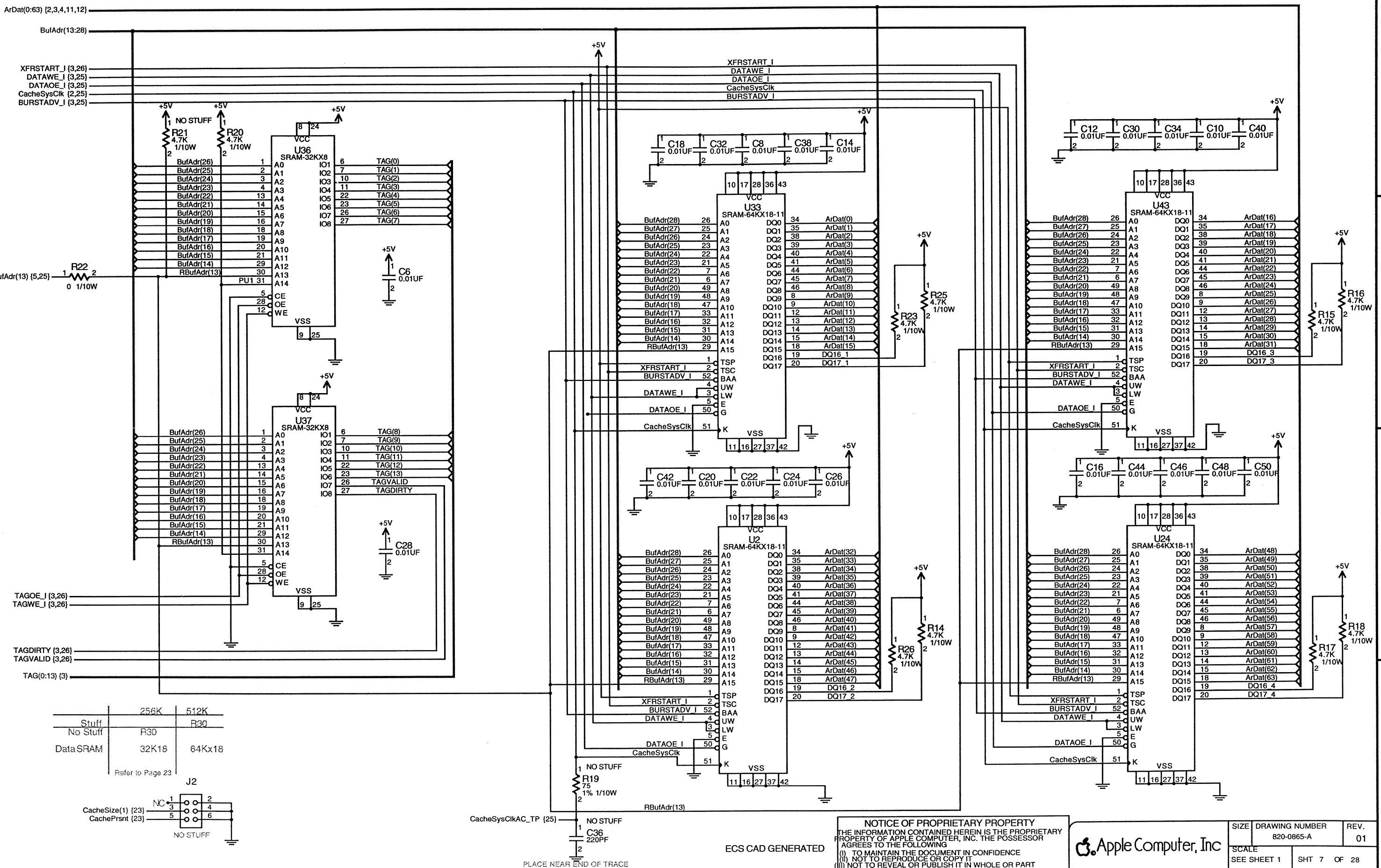
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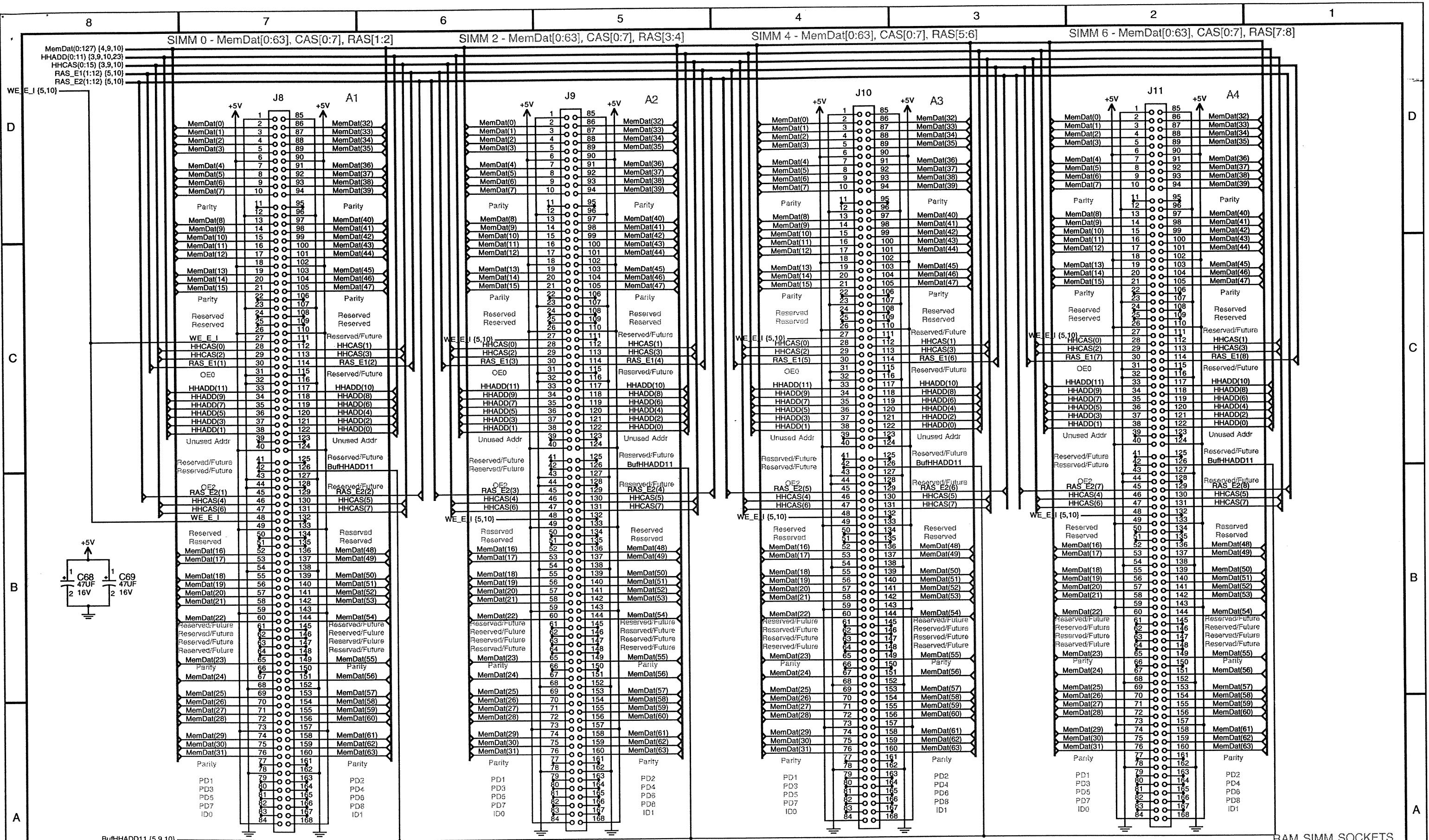
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8 7 6 5 4 3 2 1









EVEN SIMMS - MemDat[0:63], CAS[0:7], RAS_E(1:8), WE_E]

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8 7 6 5 4 3 2 1

SIMM 1 - MemDat[64:127], CAS[8:15], RAS[1:2]

SIMM 3 - MemDat[64:127], CAS[8:15], RAS[3:4]

SIMM 5 - MemDat[64:127], CAS[8:15], RAS[5:6]

SIMM 7 - MemDat[64:127], CAS[8:15], RAS[7:8]

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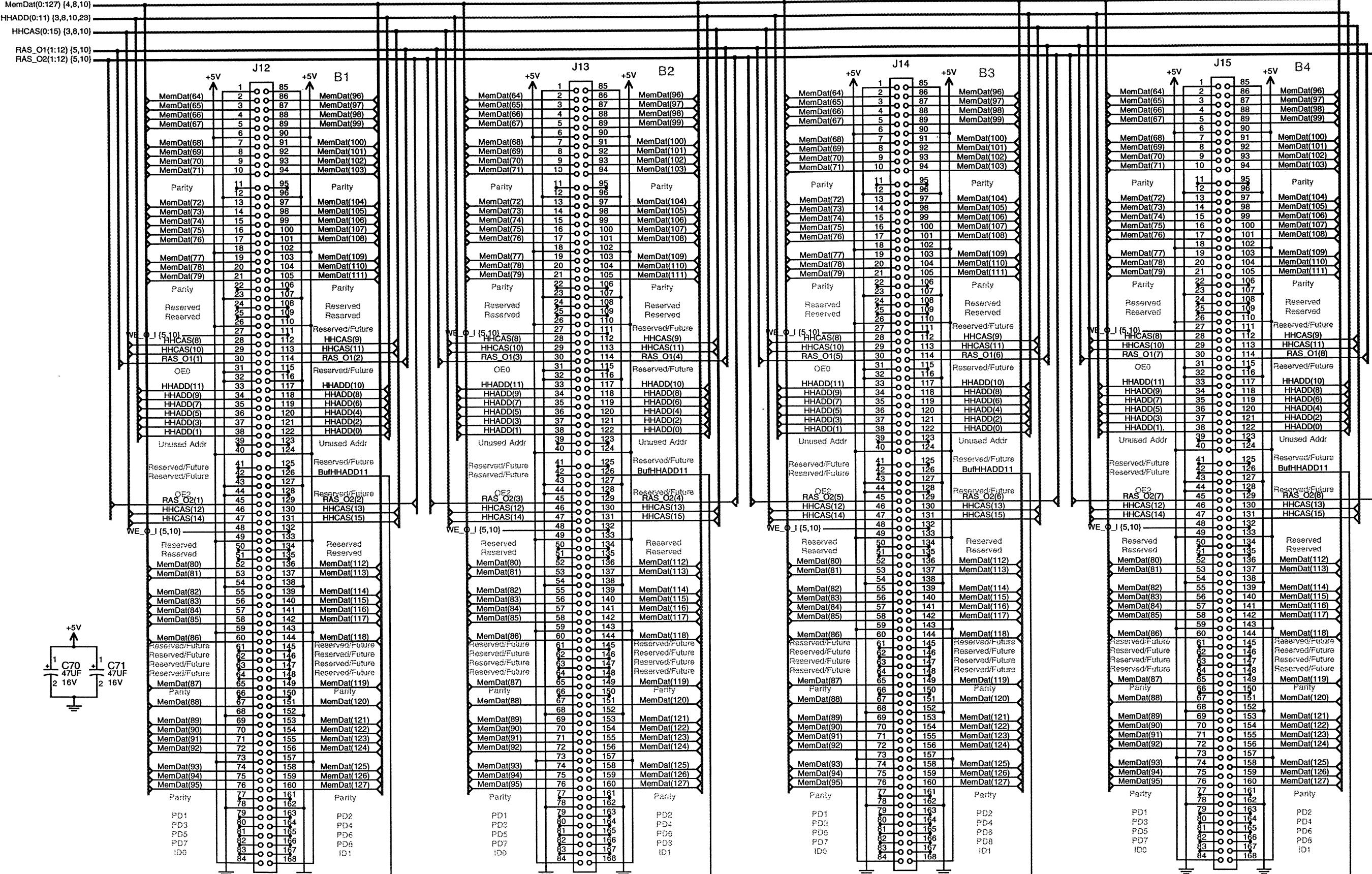
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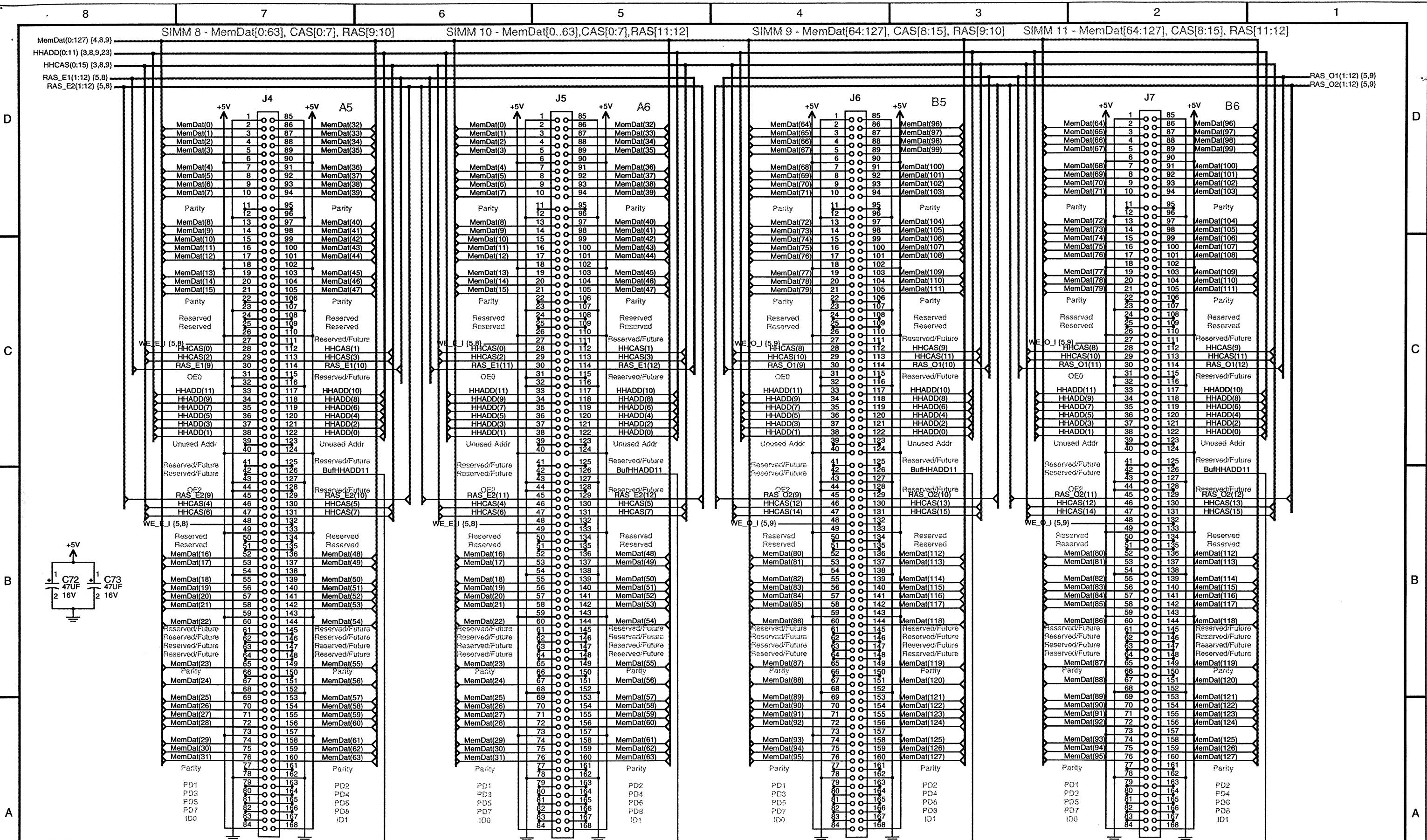
ODD SIMMS - MemDat[64:127], CAS[8:15], RAS_O(1:8)

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ADDITIONAL RAM SIMMS FOR TSUNAMI

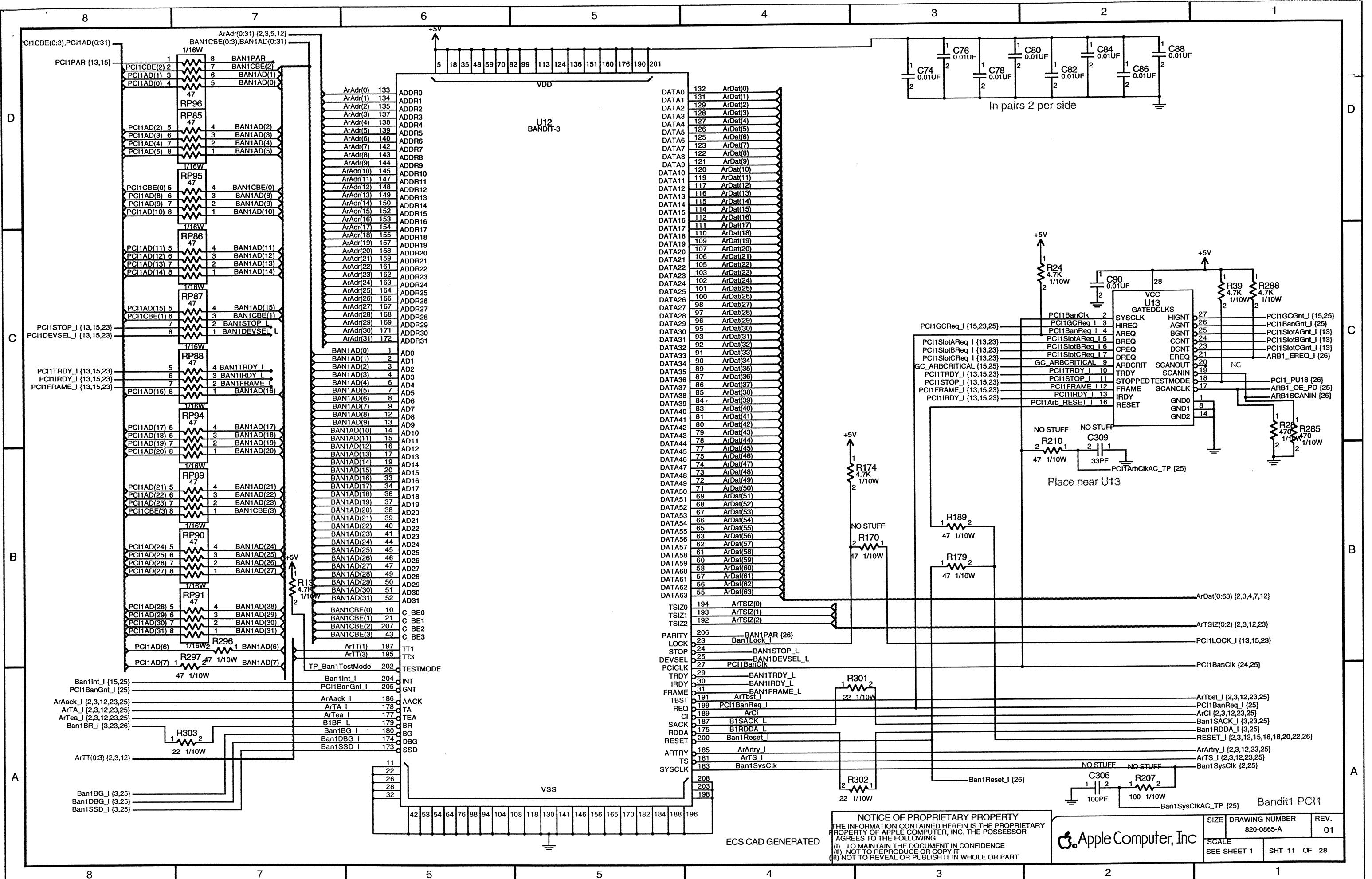
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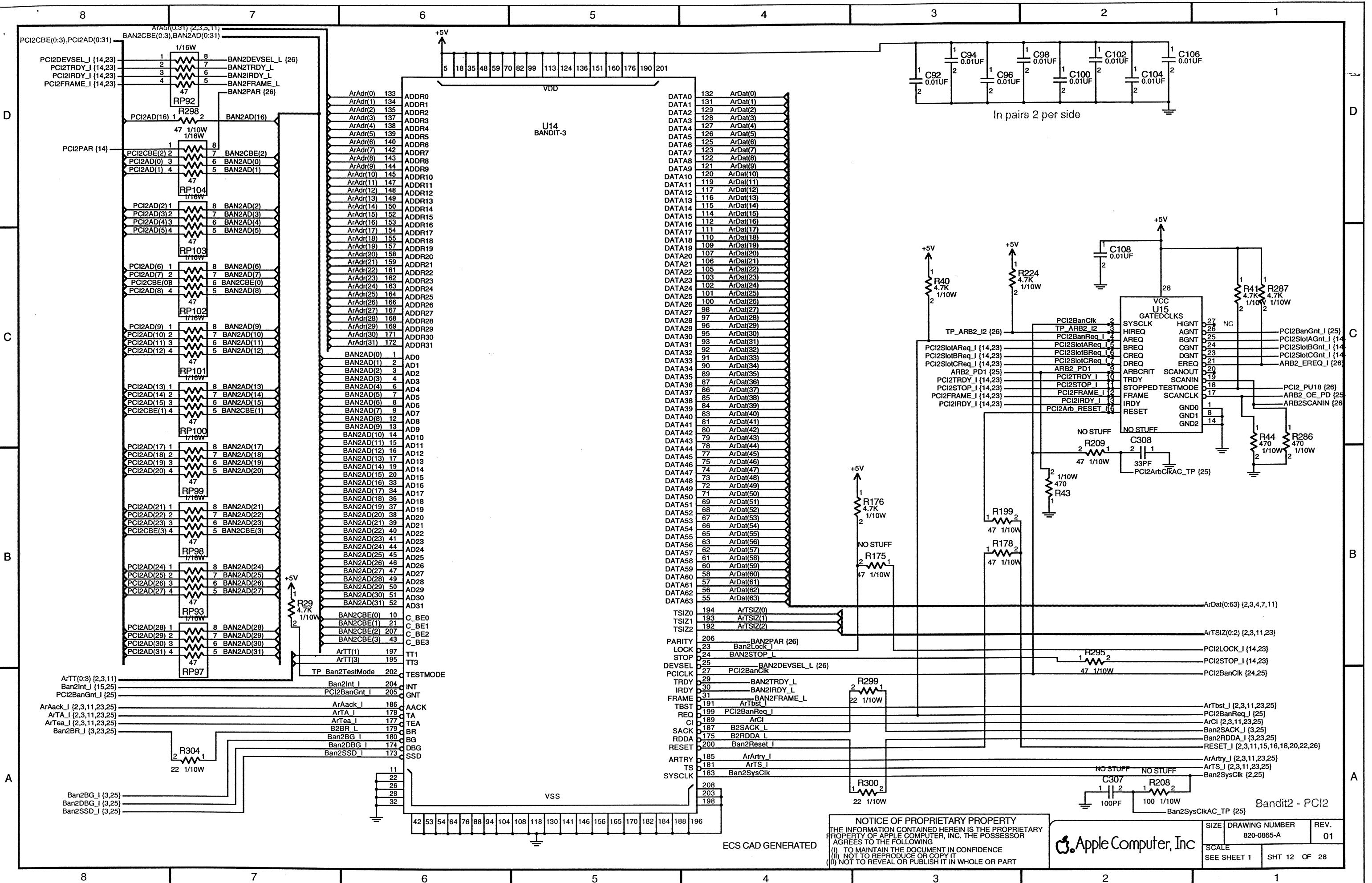
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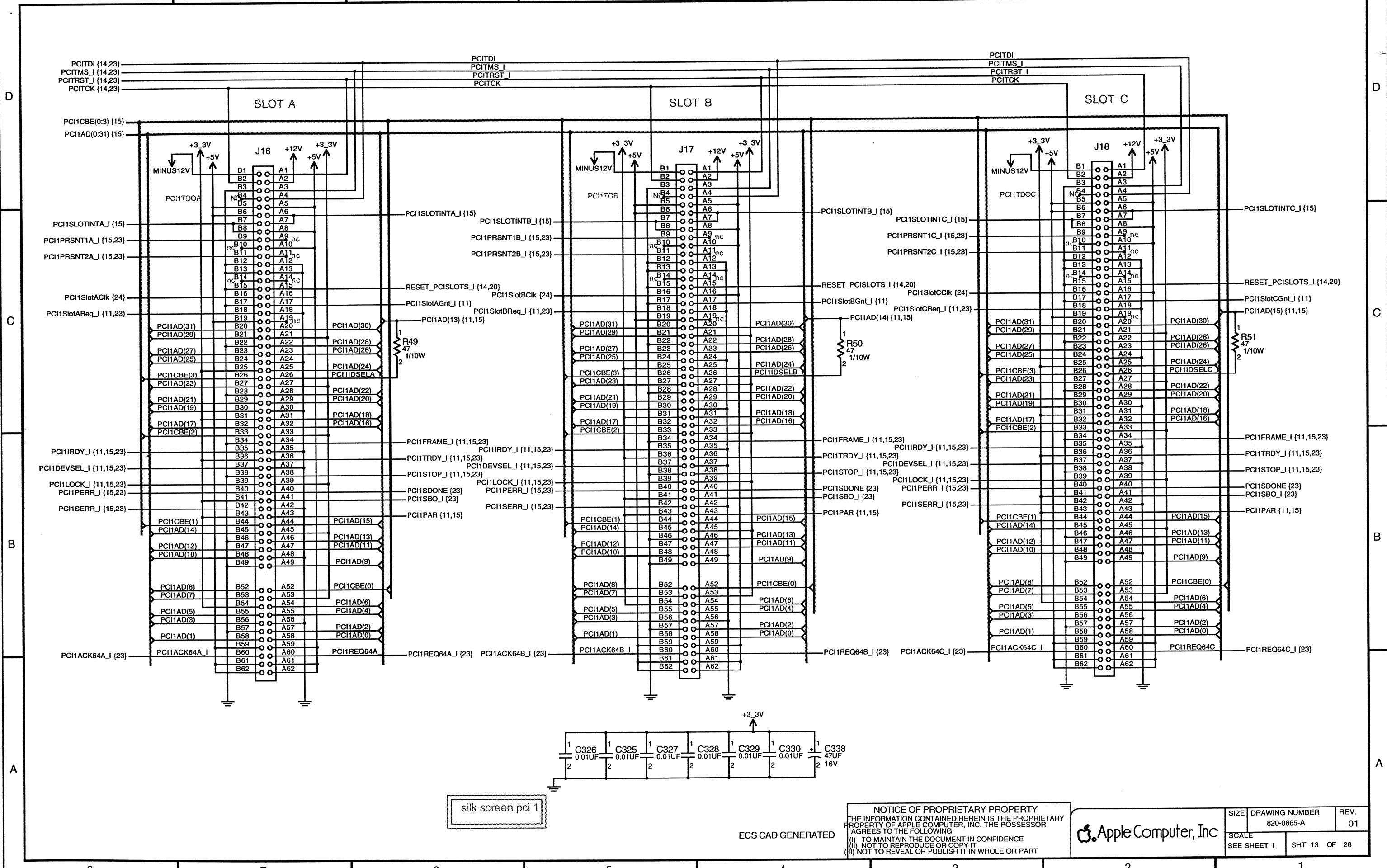
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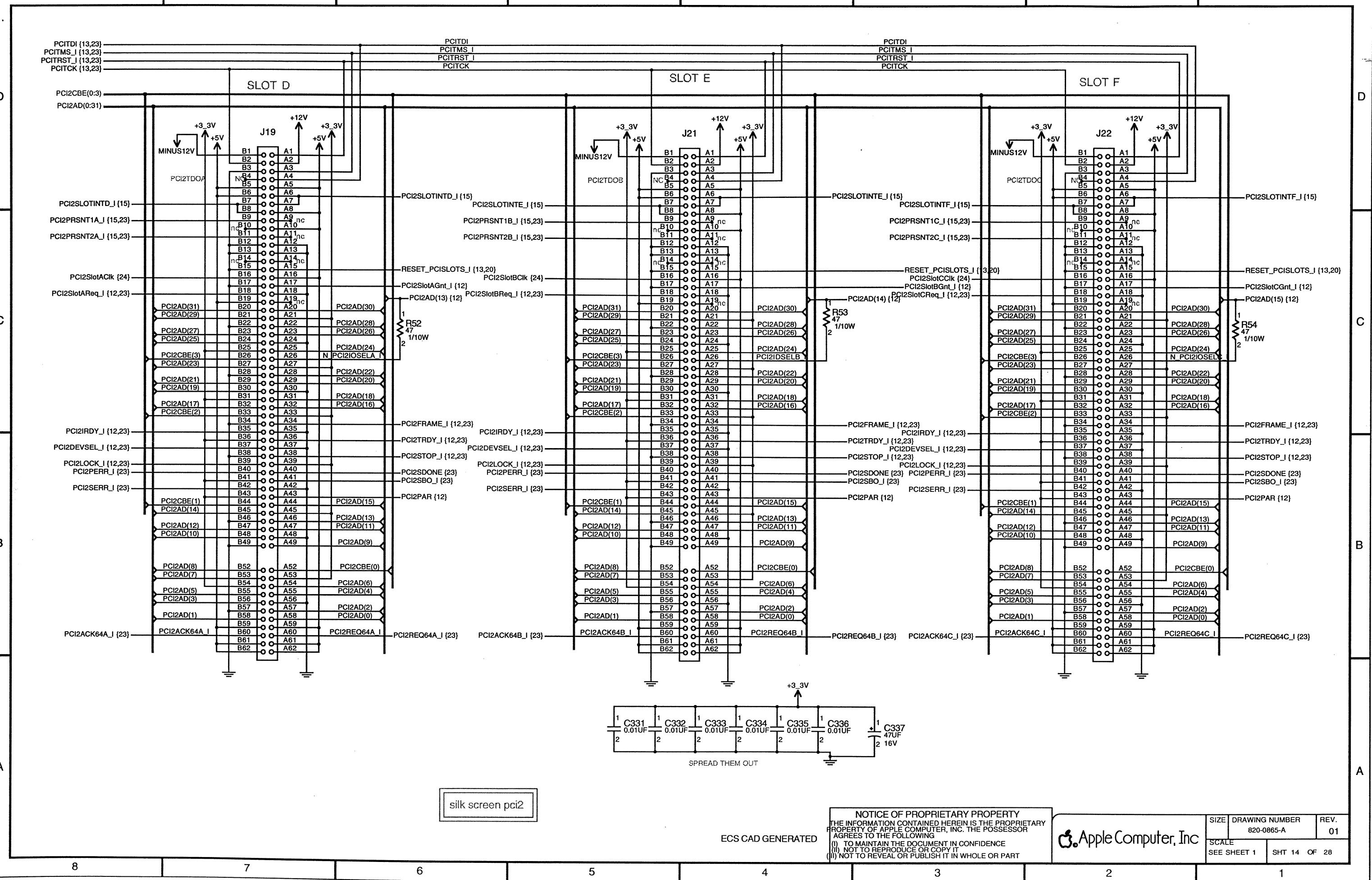


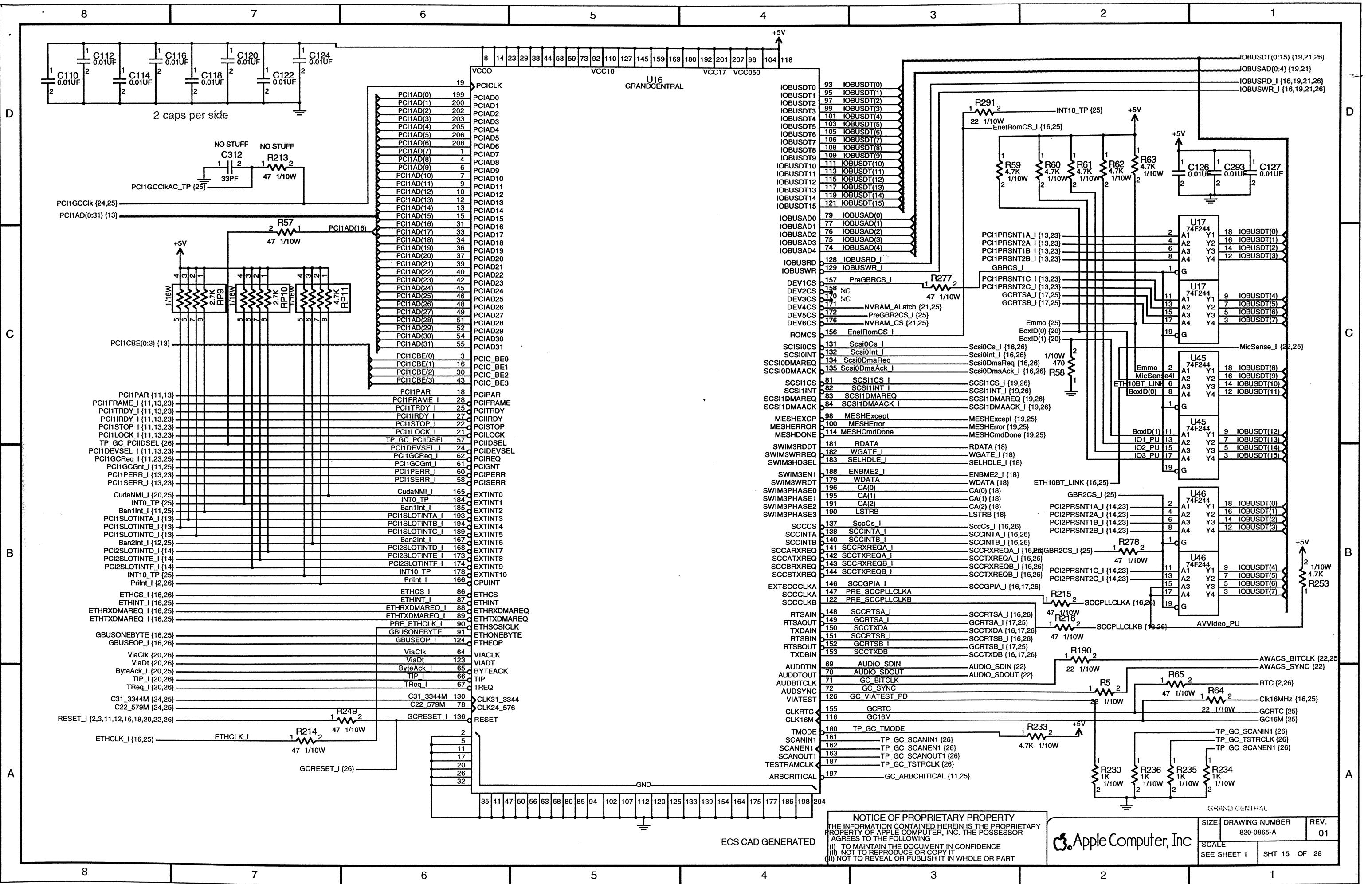
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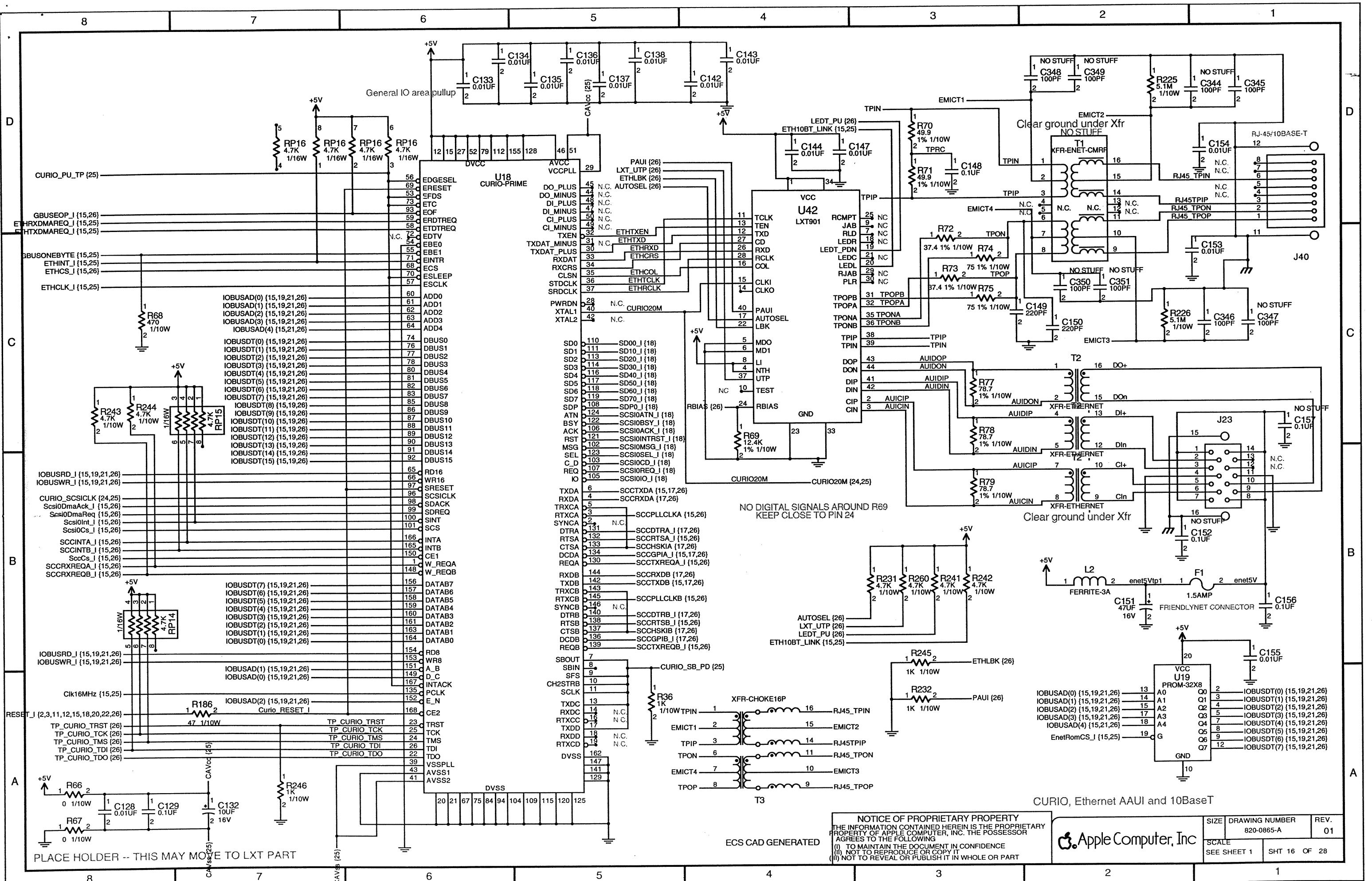




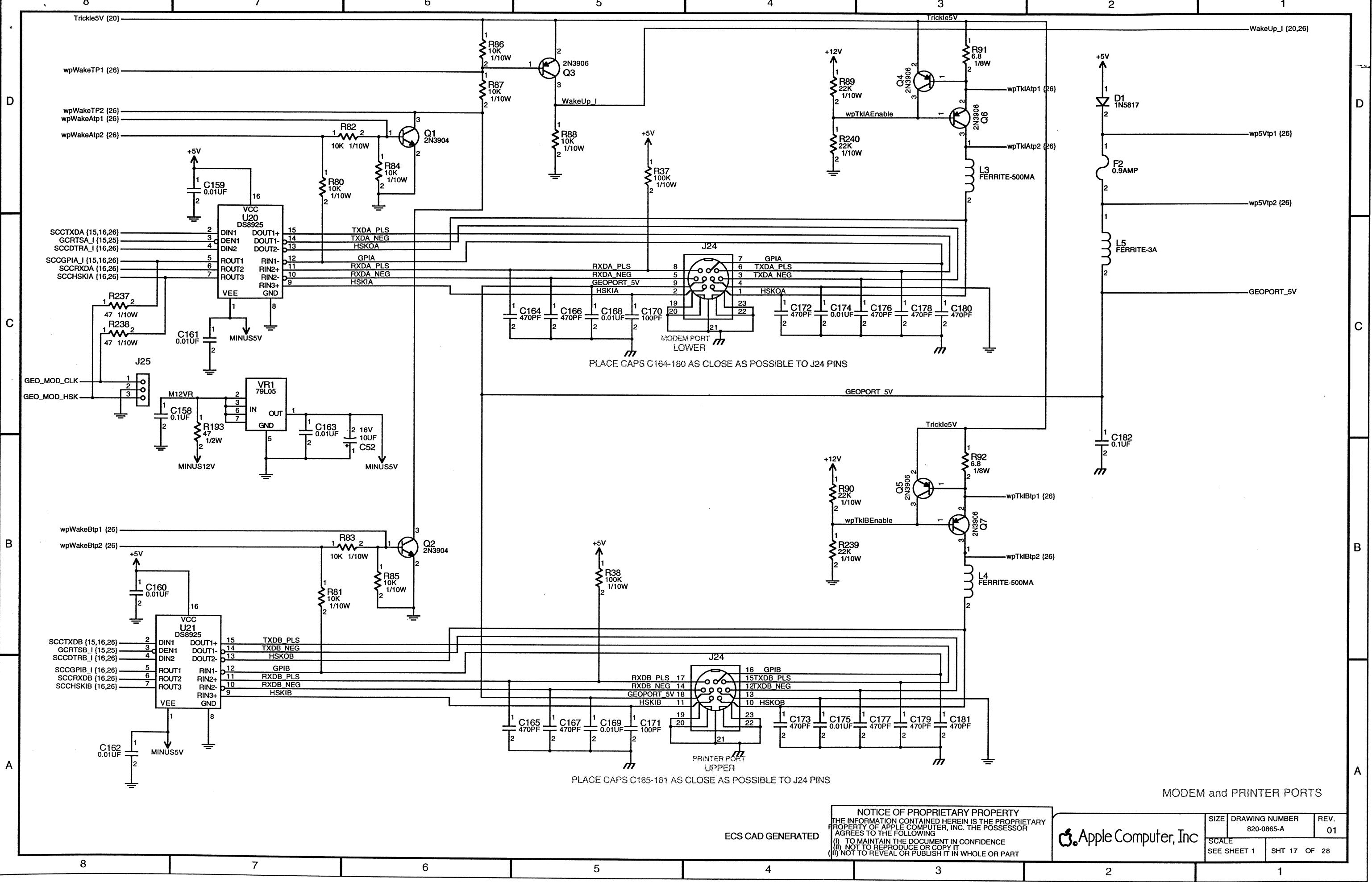


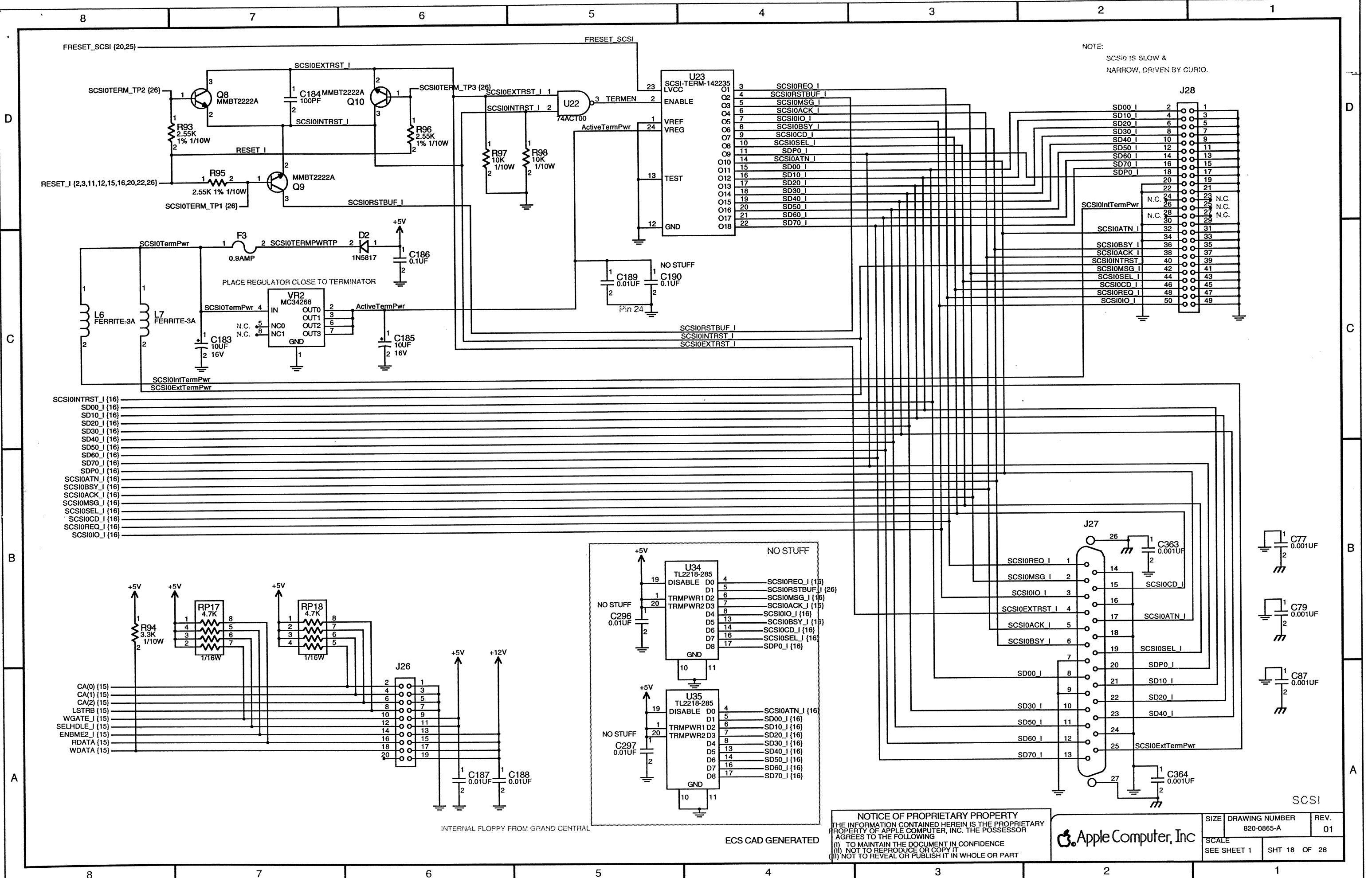


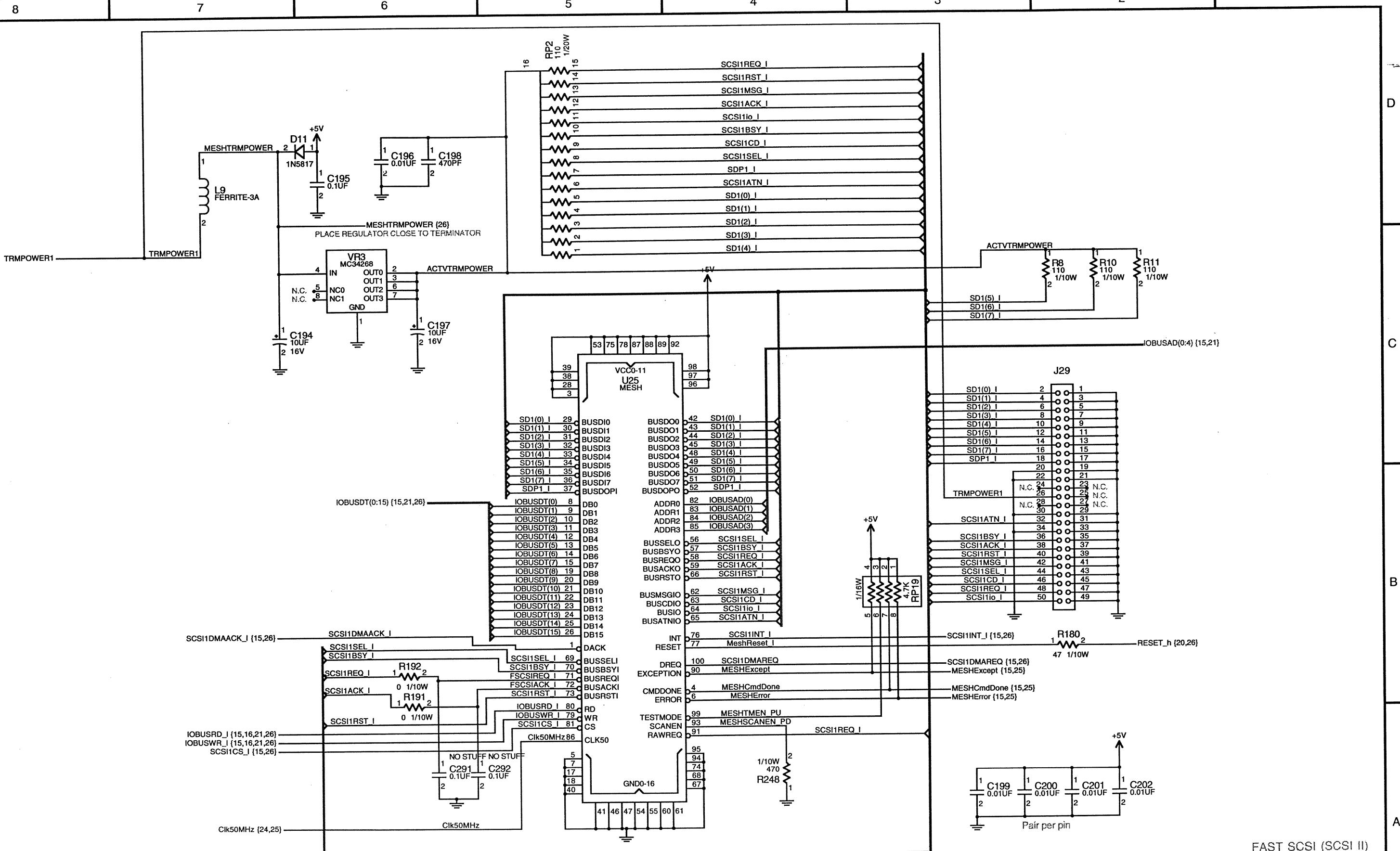




8 7 6 5 4 3 2 1







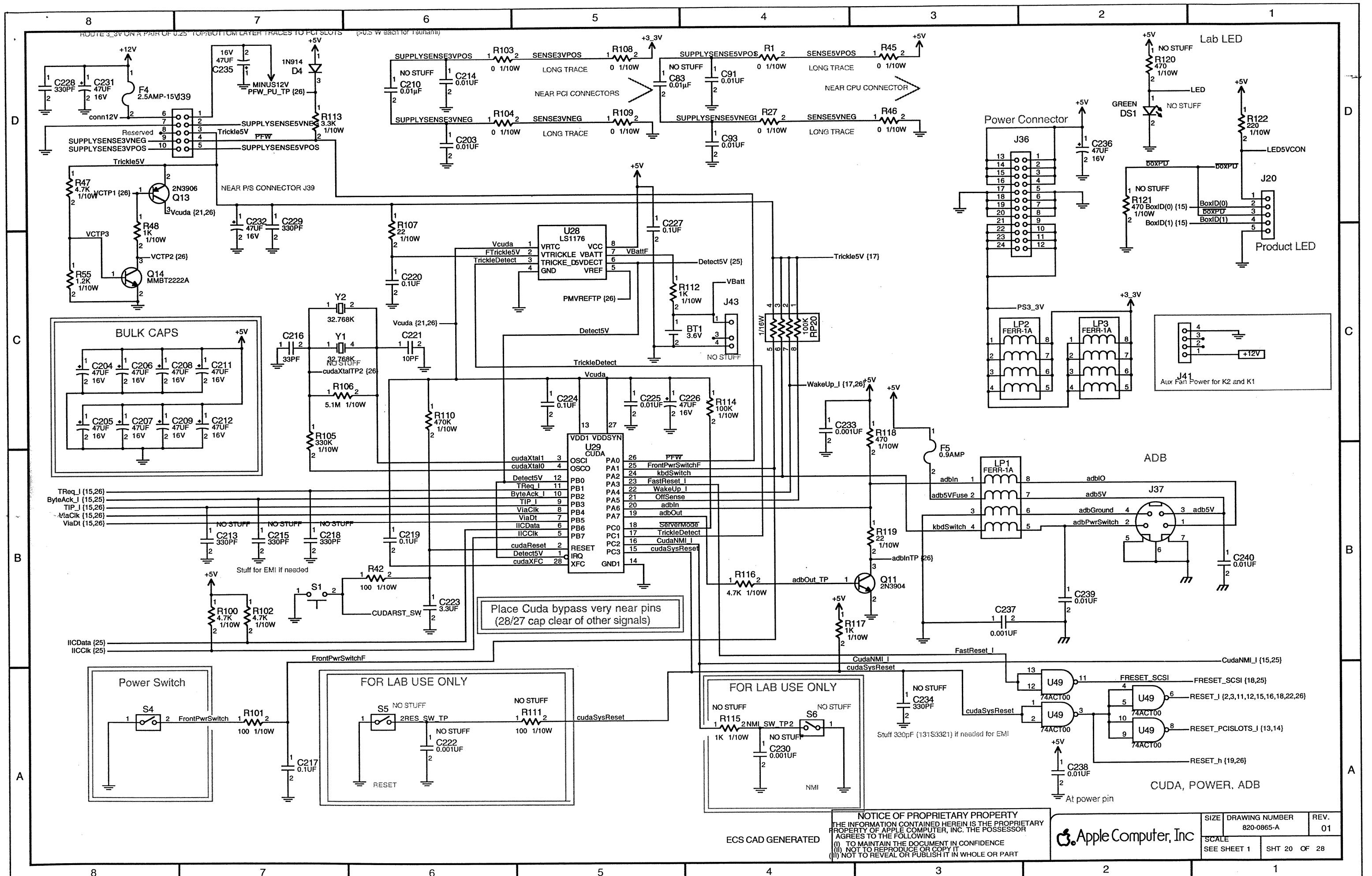
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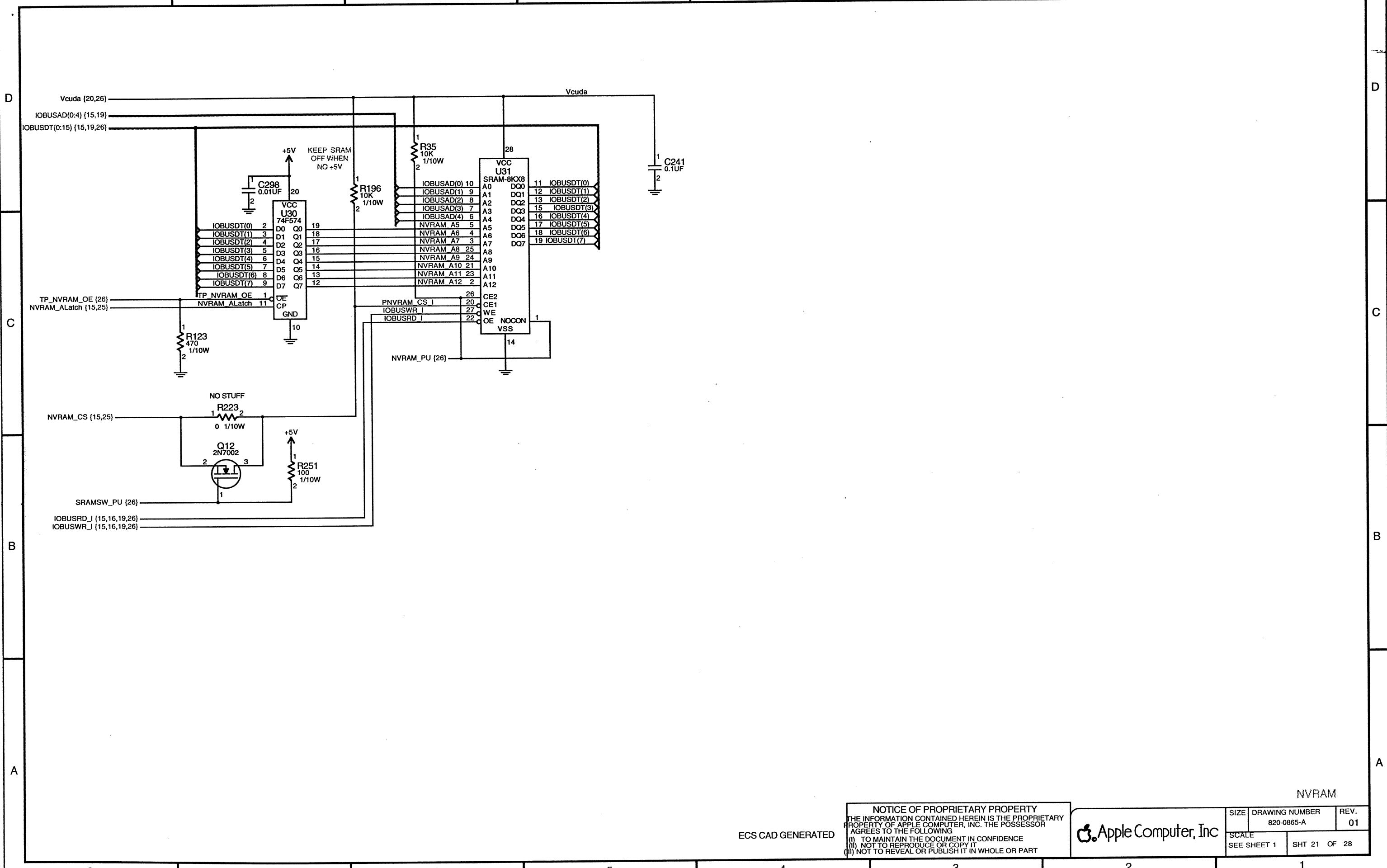
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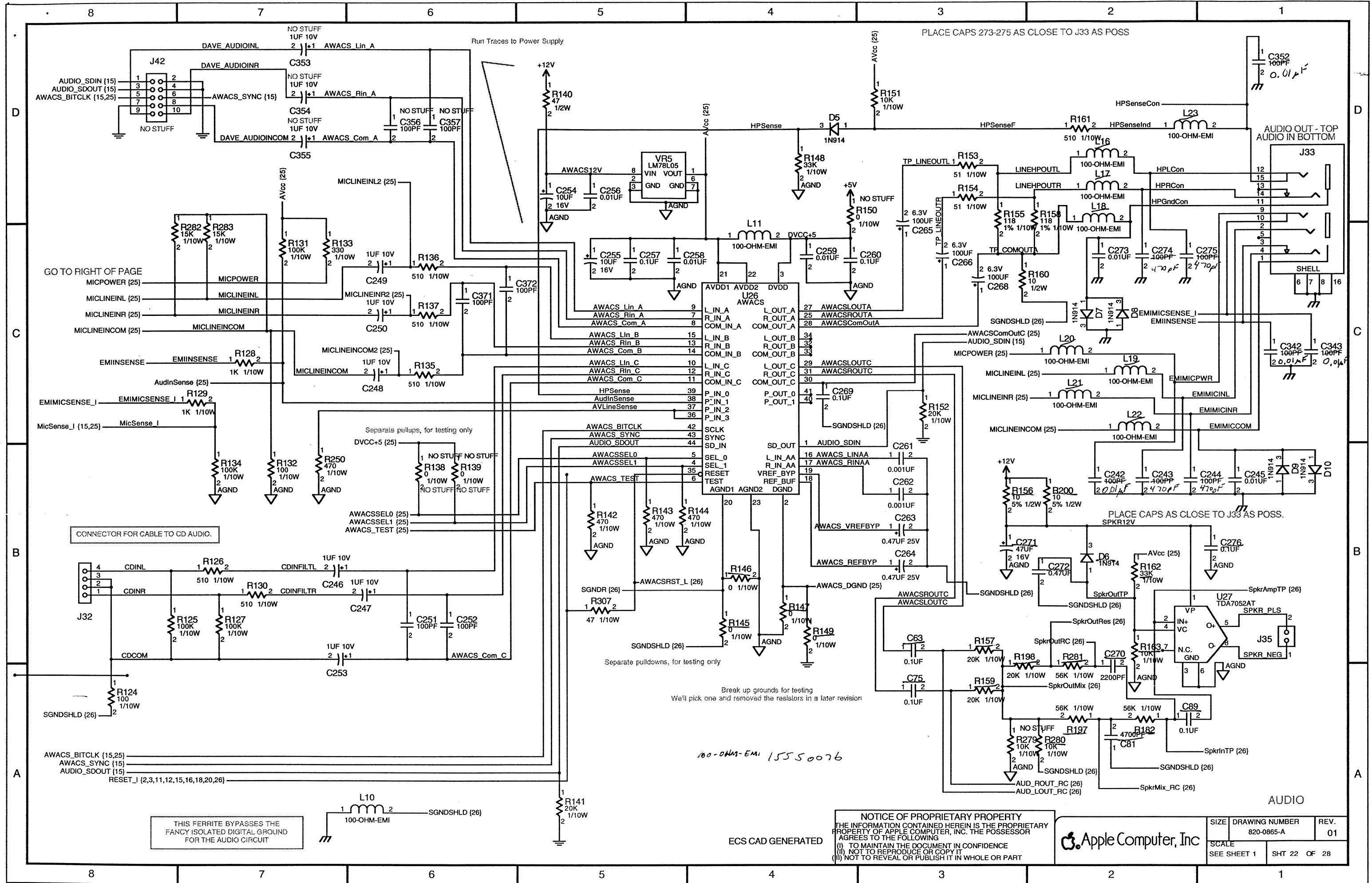
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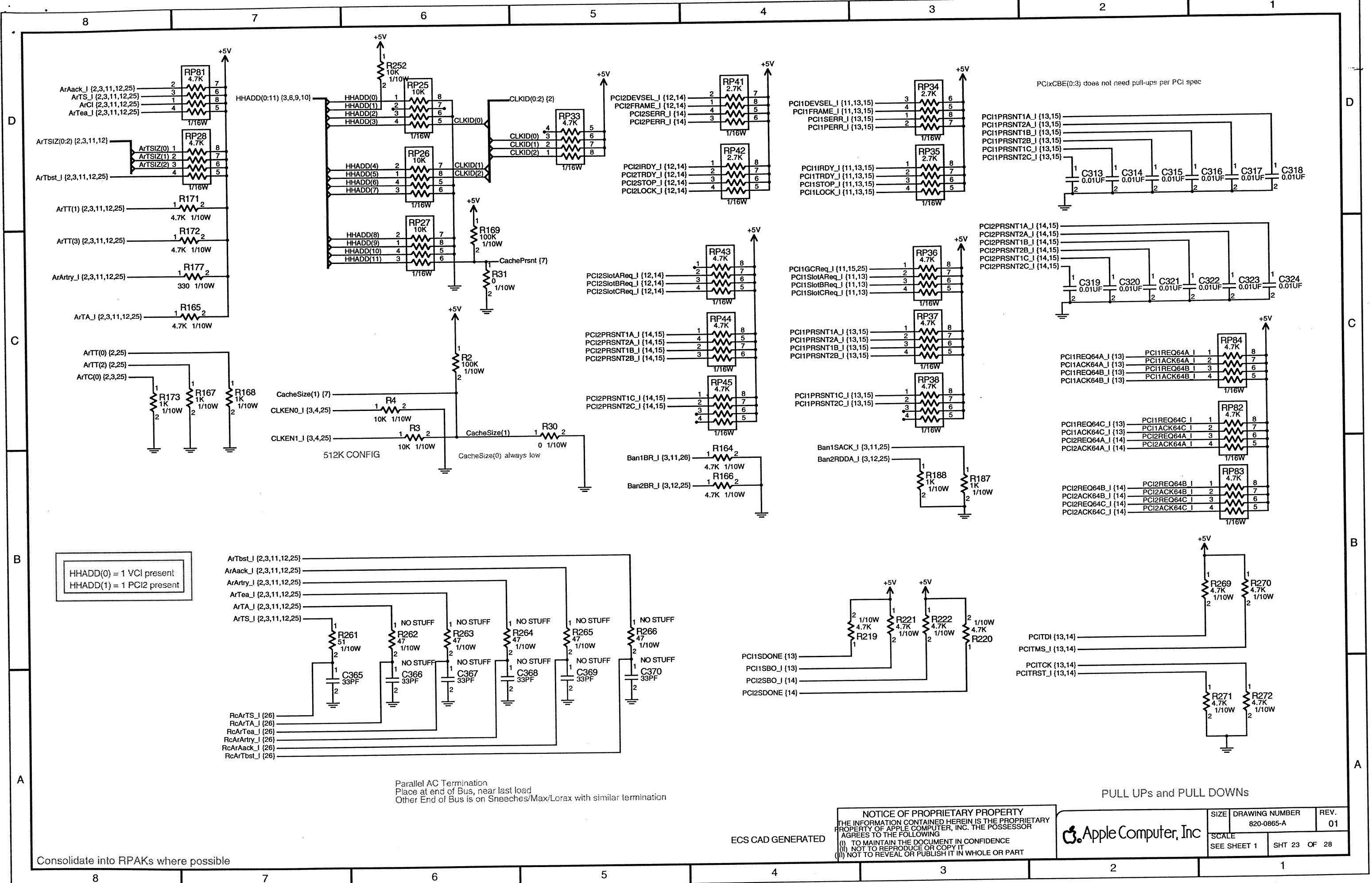


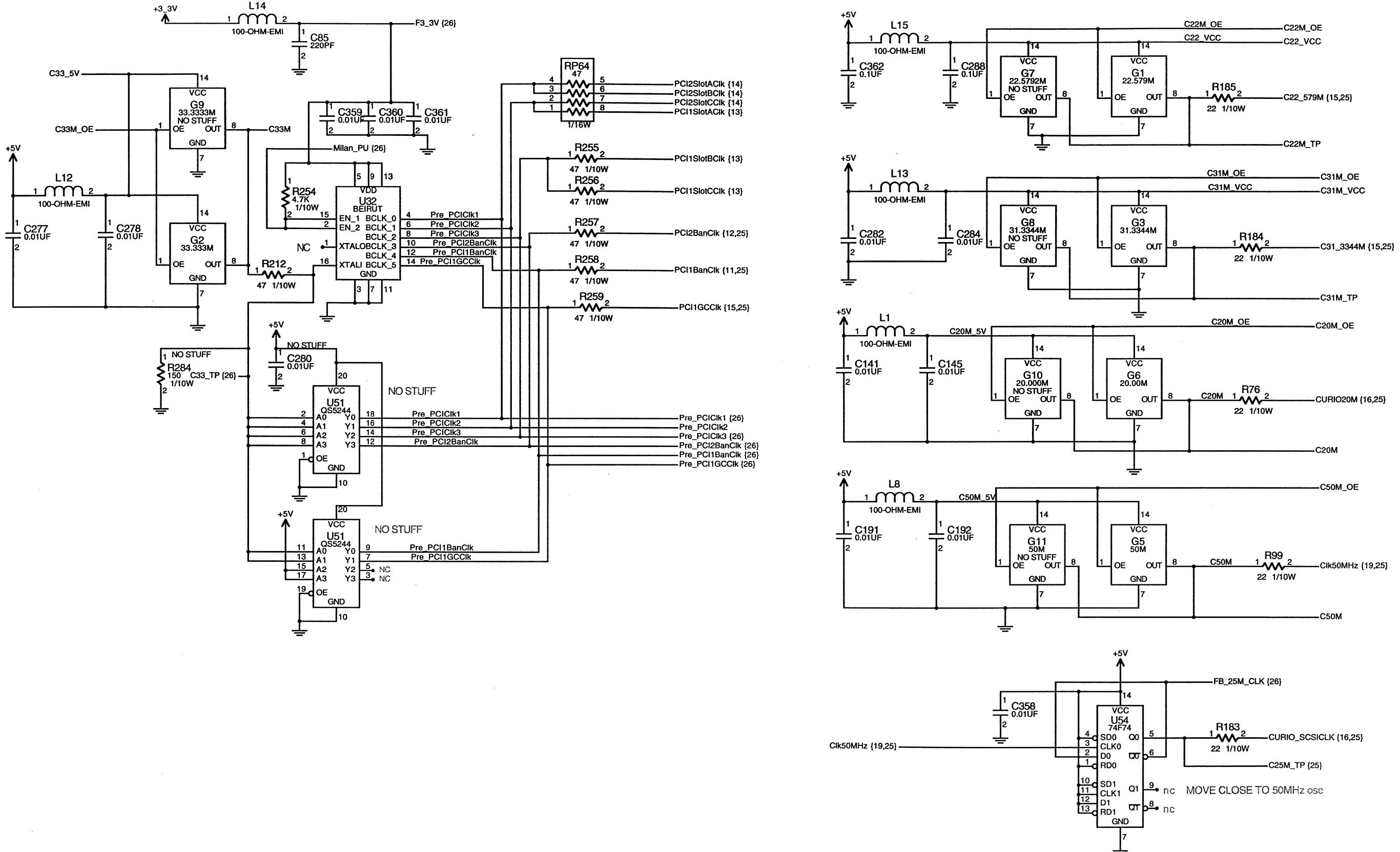
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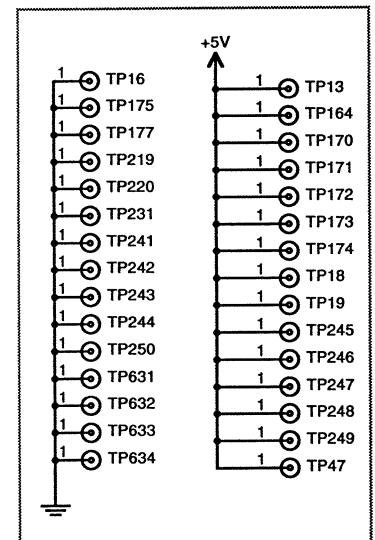
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SIZE	DRAWING NUMBER	REV.
	820-0865-A	01
SCALE	SEE SHEET 1	SHT 25 OF 28

TEST POINTS

D

C

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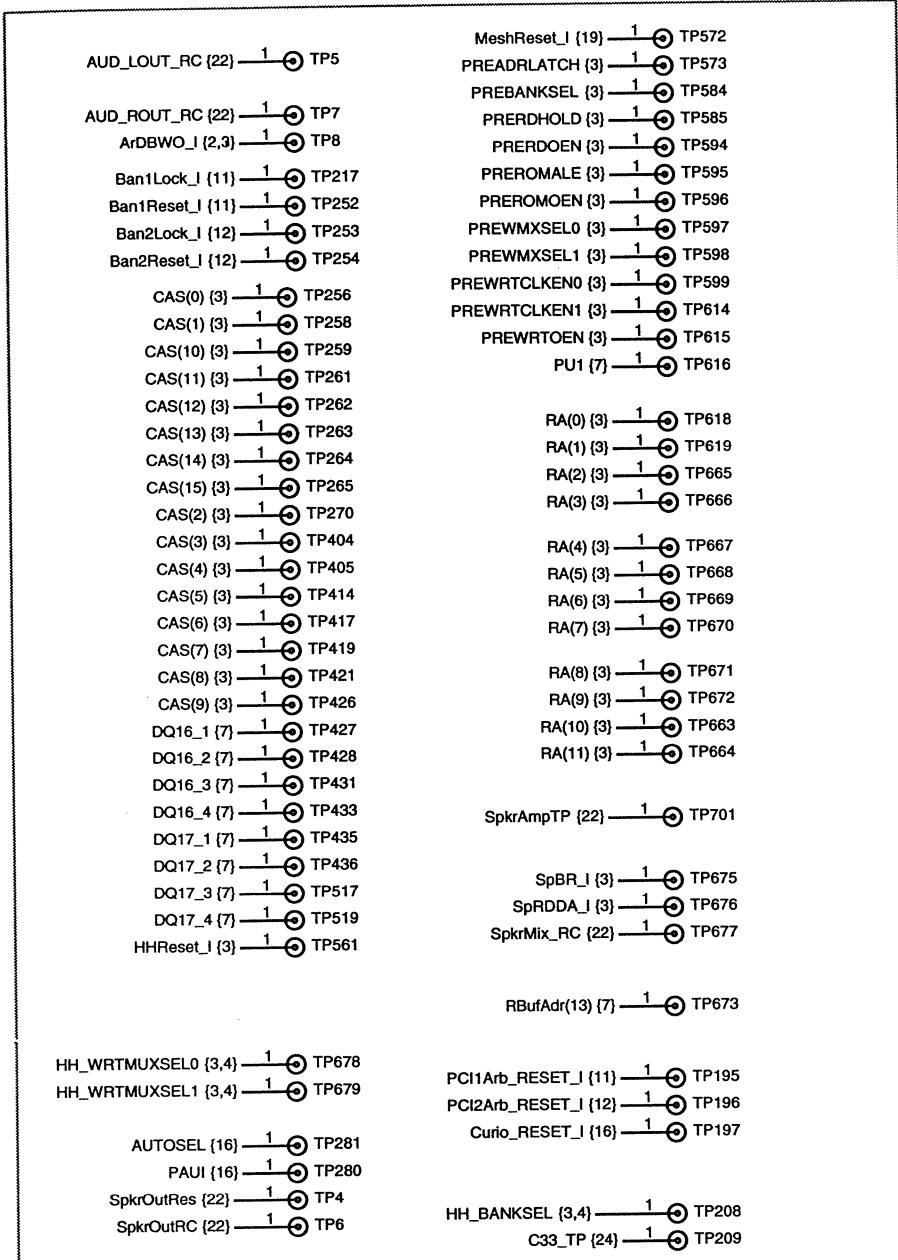
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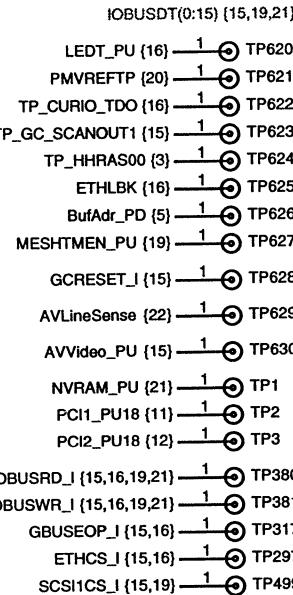
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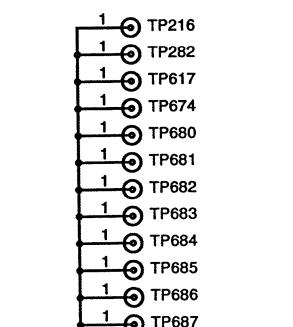
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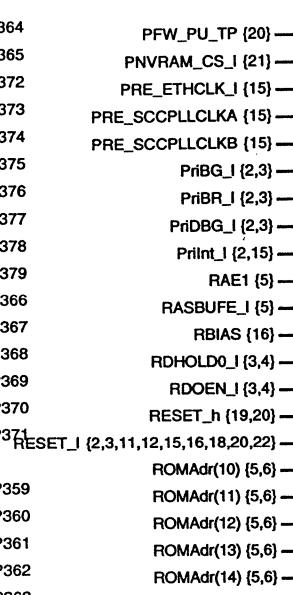
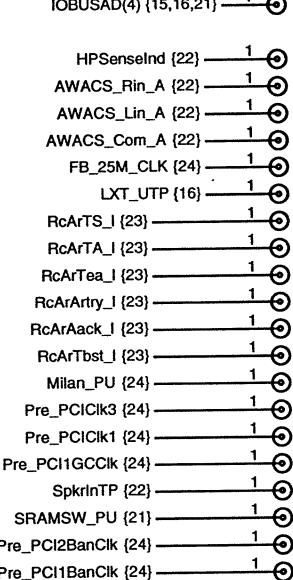
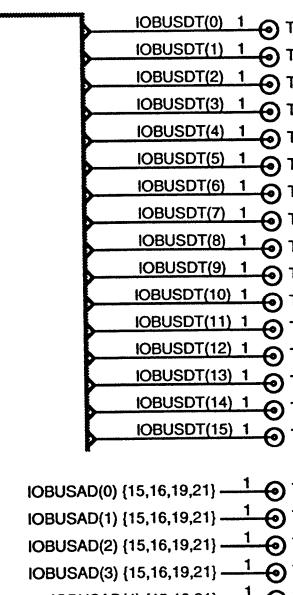
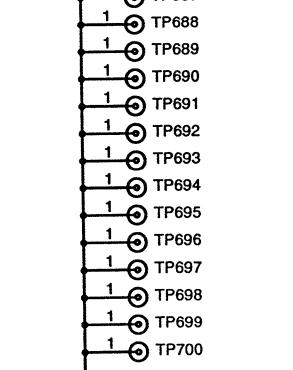
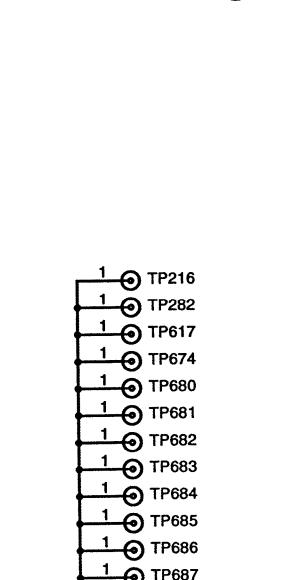
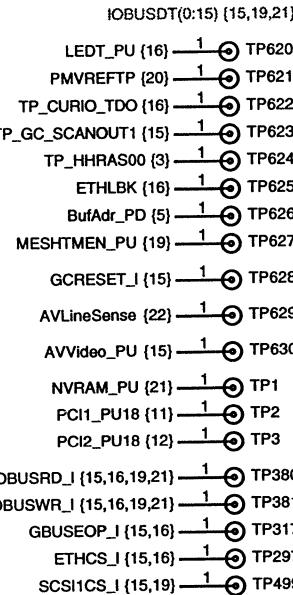
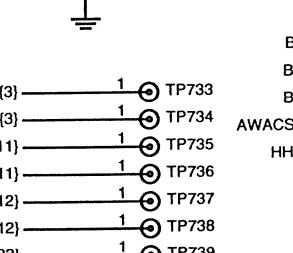
C



B



A



LAYER	THICKNESS (MILS)	TRACE WIDTH
TOP ELECTRICAL	2.1	6.0
PREPREG	8.0	
INNER PLANE	1.4	
CORE	8.0	
INNER ELECTRICAL	1.4	6.0
PREPREG	20.2	
INNER ELECTRICAL	1.4	6.0
CORE	8.0	
INNER PLANE	1.4	
PREPREG	8.0	
BOTTOM ELECTRICAL	2.1	6.0
MATERIAL		
ELECTRICAL =	COPPER	BOARD THICKNESS
PREPREG =	EPOXY	62
CORE =	FR4	

NOTE: These are the default values for board thicknesses

SIGNAL	NET NAME	NET WIDTH (MILS)	VOLTAGE LEVEL OPTIONAL
GND	+5V	25	5
SIGNAL	+12V	50	12
SIGNAL	MINUS5V	25	-5
SIGNAL	MINUS12V	50	12
VCC	Trickle5V	25	5
SIGNAL	+3_3V	250	3.3
SIGNAL	AWACS12V	50	12
SIGNAL	GND	25	0
SIGNAL	GEOPORT_5V	25	5

REFERENCE DESIGNATIONS	
LAST USED	NOT USED
BT1	
C372	C95 C97 C99 C101 C103 C105 C107 C109 C111 C113 C115 C117 C119 C121 C123 C125 C130-131 C139-140 C146 C193 C267 C279 C281 C283 C285-287 C289-290 C294-295 C299-301 C305 C310-311 C339-341
D11	D3
DL1	
DS1	
F5	
G11	G4
J43	J30-31 J34 J38
L23	
LP3	
Q14	
R308	R56 R206 R211 R217-218
RC4	
RP106	RP30-32 RP39-40 RP46-63 RP65-67 RP74-80
S6	S2-3
ST1	
T3	
TP744	TP349 TP562-564 TP709
U54	U44 U50 U53
VR5	VR4
Y2	

NET CLASS	NET WIDTH	MAX STUB LENGTH	DELAYS				CROSS TALK PARAMETERS					
			SOURCE PIN	PIN	LAYER CHANGE	MIN	MAX	NET MAX	RISE/FALL TIME	LENGTH FACTOR	SPACING FACTOR	MAX
(MILS)												
SIGA_IMPEDANCE	6.0	500.0	0.1	0.1	0.0	10.0	1000.0	10000.0	1000.0	0.5	0.5	400.0
CNTRL_IMPEDANCE	6.0	500.0	0.1	0.1	0.0	10.0	1000.0	10000.0	1000.0	0.5	0.5	400.0
SIGD_IMPEDANCE	6.0	500.0	0.1	0.1	0.0	10.0	1000.0	10000.0	1000.0	0.5	0.5	400.0
SIGC_IMPEDANCE	6.0	500.0	0.1	0.1	0.0	10.0	1000.0	10000.0	1000.0	0.5	0.5	400.0
MD_IMPEDANCE	6.0	500.0	0.1	0.1	0.0	10.0	1000.0	10000.0	1000.0	0.5	0.5	400.0
BUFFD_IMPEDANCE	6.0	500.0	0.1	0.1	0.0	10.0	1000.0	10000.0	1000.0	0.5	0.5	400.0
PCI	6.0	500.0	0.1	0.1	0.0	10.0	1000.0	10000.0	1000.0	0.5	0.5	400.0

REFERENCE DESIGNATOR LOCATIONS																			
BT1	20-C5	C90	11-C2	C203	20-D6	C309	11-B2	J1	2-A6	R8	19-C2	R100	20-B7	R191	19-B6	R286	12-B1	RP96	11-D8
C1	2-D7	C91	20-D4	C204	20-C8	C312	15-D7	J2	7-A7	R9	5-B2	R101	20-A7	R192	19-B6	R287	12-C1	RP97	12-B8
C2	2-D6	C93	20-D4	C205	20-C8	C313	23-D2	J3	6-D2	R10	19-C2	R102	20-B7	R193	17-B7	R288	11-C1	RP98	12-B8
C3	2-D4	C94	12-D3	C207	20-C8	C315	23-D2	J4	10-A7	R12	6-B1	R104	20-D6	R194	5-A6	R289	2-D5	RP99	12-C8
C4	2-D4	C96	12-D3	C208	20-C8	C316	23-D1	J5	10-A5	R13	11-B7	R105	20-B7	R196	21-C6	R291	15-D3	RP100	12-C8
C5	3-D3	C98	12-D2	C209	20-C8	C317	23-D1	J6	10-A4	R14	7-B3	R106	20-C7	R197	22-A2	R292	2-D5	RP101	12-C8
C6	7-C6	C100	12-D2	C210	20-D6	C318	23-D1	J7	10-A2	R15	7-C1	R107	20-C6	R198	22-A3	R293	2-D5	RP102	12-C8
C7	3-D3	C102	12-D2	C211	20-C7	C319	23-C2	J8	8-A7	R16	7-C1	R108	20-D5	R199	12-B3	R294	2-D5	RP103	12-D8
C8	7-D4	C104	12-D2	C212	20-C7	C320	23-C2	J9	8-A5	R17	7-A1	R109	20-D5	R200	22-B2	R295	12-B2	RP104	12-D8
C9	3-D3	C106	12-D2	C213	20-B7	C321	23-C2	J10	8-A4	R18	7-B1	R110	20-C6	R201	6-C8	R296	11-B7	RP105	3-C8
C10	7-D2	C108	12-C2	C214	20-D6	C322	23-C2	J11	8-A2	R19	7-A5	R111	20-A6	R202	6-C8	R297	11-B8	RP106	3-B8
C11	3-D2	C110	15-D8	C215	20-B7	C323	23-C1	J12	9-A7	R20	7-D7	R112	20-C5	R203	3-A7	R298	12-D7		
C12	7-D2	C112	15-D8	C216	20-C7	C324	23-C1	J13	9-A5	R21	7-D7	R113	20-D7	R204	4-A7	R299	12-A3		
C13	3-D2	C114	15-D8	C217	20-A7	C325	13-A5	J14	9-A4	R22	7-C8	R114	20-C4	R205	4-A7	R300	12-A4		
C14	7-D4	C116	15-D8	C218	20-B7	C326	13-A5	J15	9-A2	R23	7-C3	R115	20-A4	R207	11-A2	R301	11-A4		
C15	3-D2	C118	15-D7	C219	20-B6	C327	13-A5	J16	13-A7	R24	11-C2	R116	20-B4	R208	12-A2	R302	11-A3		
C16	7-B2	C120	15-D7	C220	20-C6	C328	13-A5	J17	13-A5	R25	7-C3	R117	20-B4	R209	12-B2	R303	11-A8		
C17	3-D2	C122	15-D7	C221	20-C6	C329	13-A4	J18	13-A2	R26	7-A3	R118	20-B3	R210	11-B2	R304	12-A7		
C18	7-D5	C124	15-D7	C222	20-A6	C330	13-A4	J19	14-A7	R27	20-D4	R119	20-B3	R212	24-C7	R305	3-B7		
C19	3-D1	C126	15-D2	C223	20-B6	C331	14-A5	J20	20-C1	R28	11-B1	R120	20-D2	R213	15-D7	R306	3-B7		
C20	7-B4	C127	15-D1	C224	20-C5	C332	14-A5	J21	14-A5	R29	12-B7	R121	20-D2	R214	15-A7	R307	22-B5		
C21	4-D8	C128	16-A8	C225	20-C5	C333	14-A4	J22	14-A2	R30	23-C5	R122	20-D1	R215	15-B2	R308	3-A2		
C22	7-B4	C129	16-A8	C226	20-C5	C334	14-A4	J23	16-B1	R31	23-C6	R123	21-C7	R216	15-B2				
C23	4-D8	C132	16-A7	C227	20-C5	C335	14-A4	J24	17-A5	R32	3-B2	R124	22-A8	R219	23-B4	RC1	2-B3	U1	3-A6
C24	7-B4	C133	16-D6	C228	20-D8	C336	14-A4	J25	17-C8	R33	3-B3	R125	22-B8	R220	23-B3	RC2	2-C3	U2	7-A4
C25	4-D8	C134	16-D6	C229	20-C7	C337	14-A3	J26	18-A6	R34	3-B2	R126	22-B7	R221	23-B3	RC3	2-B3	U3	5-C4
C26	7-B4	C135	16-D5	C230	20-A4	C338	13-A4	J27	18-A2	R35	21-D6	R127	22-B7	R222	23-B3	RC4	2-A3	U4	4-A6
C27	4-D8	C136	16-D5	C231	20-D8	C342	22-C1	J28	18-C1	R36	16-A5	R128	22-C7	R223	21-C7	U5	4-A2	U6	5-C7
C28	7-B6	C137	16-D5	C232	20-C7	C343	22-C1	J29	19-B2	R37	17-D5	R129	22-C7	R224	12-C3	RP1	5-D6	U7	5-C7
C29	4-D7	C138	16-D5	C233	20-C4	C344	16-D1	J32	22-B8	R38	17-B5	R130	22-B7	R225	16-D2	RP2	19-D5	U8	5-B7
C30	7-D2	C141	24-C4	C234	20-A3	C345	16-D1	J33	22-C1	R39	11-C1	R131	22-C7	R226	16-C2	RP3	3-C7	U9	5-C2
C31	4-D7	C142	16-D4	C235	20-D7	C346	16-C1	J35	22-B1	R40	12-C3	R132	22-B7	R227	3-B7	RP4	5-D6	U10	5-C2
C32	7-D4	C143	16-D4	C236	20-D2	C347	16-C1	J36	20-C3	R41	12-C1	R133	22-C7	R228	3-B7	RP5	5-D6	U11	5-B2
C33	4-D7	C144	16-D4	C237	20-B3	C348	16-D2	J37	20-B2	R42	20-B6	R134	22-B7	R229	3-A8	RP6	5-D5	U12	11-A6
C34	7-D2	C145	24-C3	C238	20-A2	C349	16-D2	J39	20-D8	R43	12-B2	R135	22-C6	R230	15-A2	RP7	5-C6	U13	11-C2
C35	4-D7	C147	16-D4	C239	20-B2	C350	16-C2	J40	16-D1	R44	12-B1	R136	22-C6	R231	16-B3	RP8	5-C5	U14	12-A6
C36	7-A5	C148	16-D3	C240	20-B1	C351	16-C2	J41	20-C1	R45	20-D3	R137	22-C6	R232	16-A3	RP9	15-C7	U15	12-C2
C37	4-D4	C149	16-C3	C241	21-D5	C352	22-D1	J42	22-B8	R46	20-D3	R138	22-B6	R233	15-A3	RP10	15-C7	U16	15-A6
C38	7-D4	C150	16-C2	C242	22-B2	C353	22-D7	J43	20-C4	R47	20-D8	R139	22-B6	R234	15-A1	RP11	15-C7	U17	15-C2
C39	4-D4	C151	16-B2	C243	22-B2	C354	22-D7			R48	20-C8	R140	22-D5	R235	15-A2	RP12	3-C2	U18	16-A6
C40	7-D1	C152	16-B2	C244	22-B2	C355	22-D7			R49	13-C6	R141	22-A5	R236	15-A2	RP13	3-D2	U19	16-A2
C41	4-D4	C153	16-C1	C245	22-B1	C356	22-D6			R50	13-C4	R142	22-B5	R237	17-C8	RP14	16-B8	U20	17-C7
C42	7-B5	C154	16-D1	C246	22-B6	C357	22-D6			R51	13-C1	R143	22-B5	R238	17-C8	RP15	16-C8	U21	17-A8
C43	4-D4	C155	16-A1	C247	22-B6	C358	24-B3			R52	1								