

- 1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.
- 2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.
- 3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.

REV	ZONE	ECN	DESCRIPTION OF CHANGE	CK APPD DATE	ENG APPD DATE
?		?	?	?	?

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Q26 MLB  
GEN X  
REV D

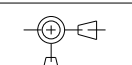

LAST\_MODIFIED=Wed Feb 26 10:29:15 2003

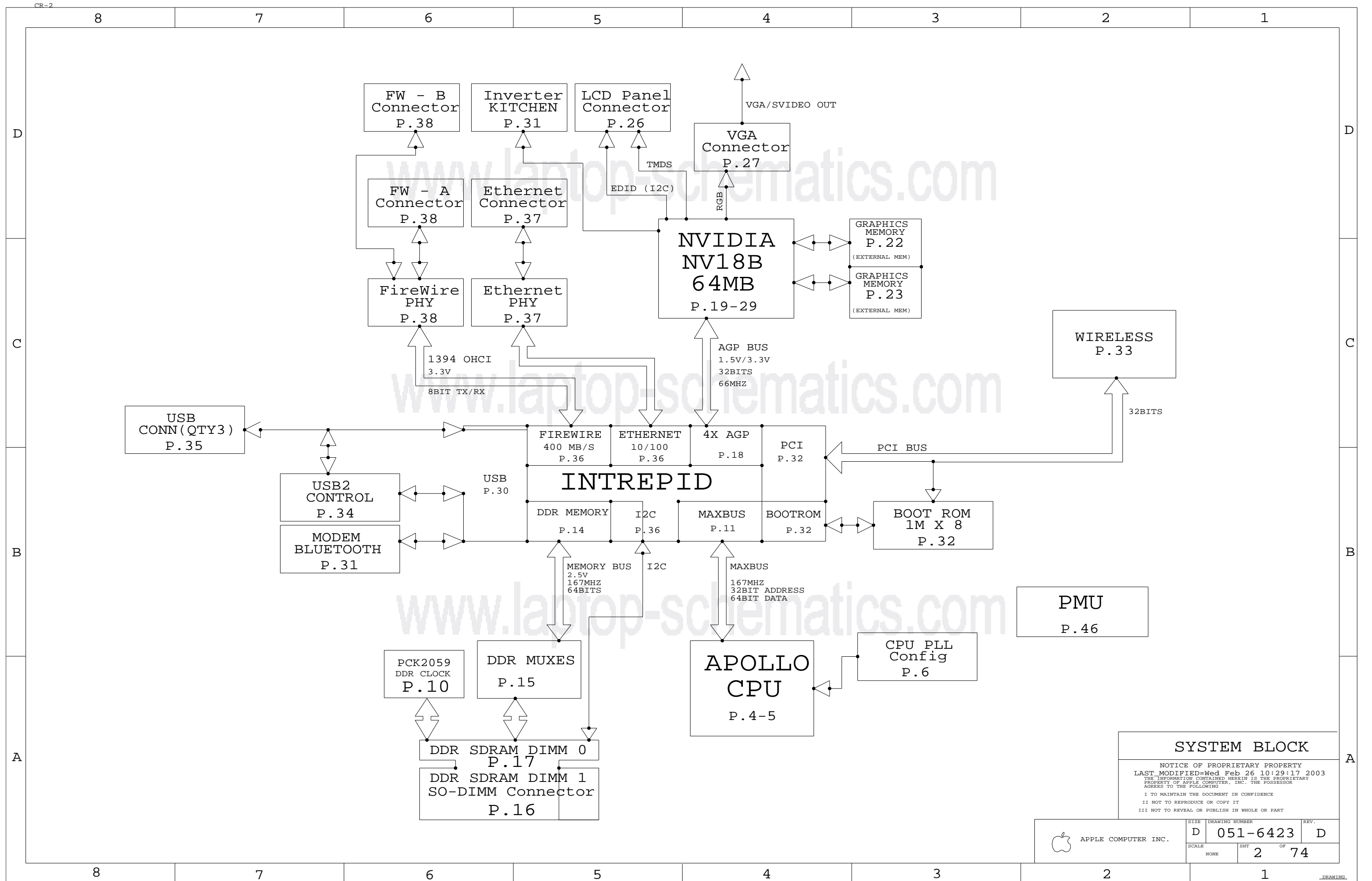
POWER RAIL DEFINITIONS

	RUN	SLEEP	SHUTDOWN
+2_5V_MAIN	ON	ON	OFF
+3V_MAIN	ON	ON	OFF
+5V_MAIN	ON	ON	OFF
+5V_SLEEP	ON	OFF	OFF
+12V_MAIN	ON	ON	ON
+12V_SLEEP	ON	OFF	OFF
FW_PWR	ON	ON	OFF
+1.8V_SLEEP	ON	OFF	OFF
+MAXBUS_SLEEP	ON	OFF	OFF

SCHEMATIC AND PCB SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
051-6423	1	SCHEM,MLB,Q26,GENX	SCH1	CRITICAL	
820-1501	1	PCB,MLB,IMACG4	PCB1	CRITICAL	
825-2029	1	LBL,SER #,BARCODE	PCB1		
056-1158	1	DESIGN GUIDE,MCO,IMACG4	PCB1	CRITICAL	
057-0040	1	DFM,PNLZN DWG,MLB,Q26	PCB1	CRITICAL	
630-4578	1	630-4578,PCBA,H,Q26,EEE P9V	HYNIX		OMIT
630-4579	1	630-4579,PCBA,S,Q26,EEE P9W	SAMSUNG		OMIT

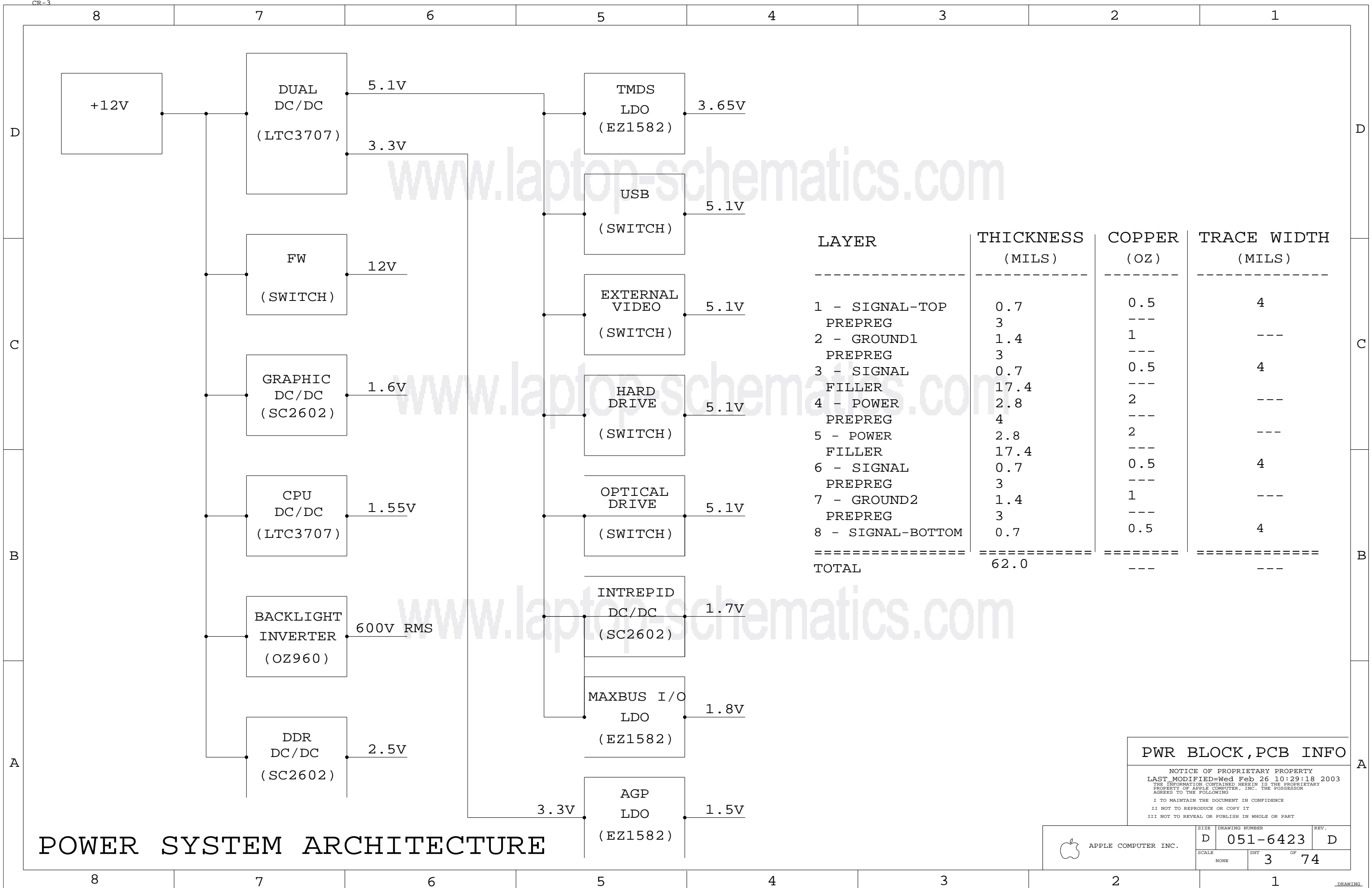
DIMENSIONS ARE IN MILLIMETERS xx : _____ x.xx : _____ x.xxx : _____ ANGLES : _____ DO NOT SCALE DRAWING  THIRD ANGLE PROJECTION	METRIC		 Apple Computer Inc. NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING I TO MAINTAIN THE DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART TITLE <b>SCHEM,MLB,Q26,GEN X</b> DRAWING NUMBER <b>051-6423</b> REV. <b>D</b> SHT 1 OF 74	
	DRAFTER ENG APPD QA APPD RELEASE	DESIGN CK MFG APPD DESIGNER SCALE		NONE SIZE <b>D</b>
	MATERIAL/FINISH NOTED AS APPLICABLE			
	MATERIAL/FINISH NOTED AS APPLICABLE SIZE <b>D</b>			



**SYSTEM BLOCK**

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT		OF
NONE	2		74



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LAYER	THICKNESS (MILS)	COPPER (OZ)	TRACE WIDTH (MILS)
1 - SIGNAL-TOP	0.7	0.5	4
PREPREG	3	---	---
2 - GROUND1	1.4	1	---
PREPREG	3	---	---
3 - SIGNAL	0.7	0.5	4
FILLER	17.4	---	---
4 - POWER	2.8	2	---
PREPREG	4	---	---
5 - POWER	2.8	2	---
FILLER	17.4	---	---
6 - SIGNAL	0.7	0.5	4
PREPREG	3	---	---
7 - GROUND2	1.4	1	---
PREPREG	3	---	---
8 - SIGNAL-BOTTOM	0.7	0.5	4
=====	=====	=====	=====
TOTAL	62.0	---	---

# POWER SYSTEM ARCHITECTURE

## PWR BLOCK, PCB INFO

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	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT	OF	
NONE	3	74	

CPU INTERNAL PLL FILTERING

CPU\_VCORE\_SLEEP 4D7 9B6 9C2 47B3 47C1 54C6 61B4 61D7

61D7 61B4 54C6 47C1 47B3 9C2 9B6 4D3 CPU\_VCORE\_SLEEP

+MAXBUS\_SLEEP 48D4 54C6 61C7 6D8 7A3 7B3 7C3 7C5 7C7 8D3 9B2 9D2 9D4 11B8 11D8 46B7 46D1 46D2 47D2

R891 470 1/16W MF 402

54C6 CPU\_AVDD

1 C1036 0.1UF 204 10V CERM 402  
1 C1035 2.2UF 204 10V CERM 805

R901 10 1/16W MF 603

1 NOSTUFF R895 47 1/16W MF 402 SYSCLK\_CPU 11A4 58C3

RC GLITCH FILTER PLACE CLOSE TO PIN

1 NOSTUFF R850 0 1/16W MF 402 CPU\_DRDY\_L 7B7 9B6 11B1 58C3

1 C954 10PF 204 5V CERM 402

FILTERS A WAKE FROM SLEEP GLITCH IF NECESSARY

58D3 11D3 9C5 7C7 CPU\_BR\_L D2 BR\*  
58D3 11D3 9B5 7B7 CPU\_BG\_L M1 BG\*  
58D3 11D3 9C7 7C7 CPU\_TS\_L L4 TS\*  
7C5 4A3 CPU\_PULLDOWN E11 A0  
H1 A1  
C11 A2  
G3 A3  
F10 A4  
L2 A5  
D11 A6  
D1 A7  
C10 A8  
G2 A9  
D12 A10  
L3 A11  
G4 A12  
T2 A13  
F4 A14  
V1 A15  
J4 A16  
R2 A17  
K5 A18  
W2 A19  
J2 A20  
K4 A21  
N4 A22  
J3 A23  
M5 A24  
P5 A25  
N3 A26  
T1 A27  
V2 A28  
U1 A29  
N5 A30  
W1 A31  
B12 A32  
C4 A33  
G10 A34  
B11 A35

NC\_CPUAP<0> NO\_TEST C1 AP0  
NC\_CPUAP<1> NO\_TEST E3 AP1  
NC\_CPUAP<2> NO\_TEST H6 AP2  
NC\_CPUAP<3> NO\_TEST F5 AP3  
NC\_CPUAP<4> NO\_TEST G7 AP4

58D3 11B3 9C5 7A7 CPU\_TT<0> E5 TT0  
58D3 11B3 9C6 7A7 CPU\_TT<1> E6 TT1  
58D3 11B3 9B5 7A7 CPU\_TT<2> F6 TT2  
58D3 11B3 9B6 7A7 CPU\_TT<3> E9 TT3  
58D3 11B3 9C5 7A7 CPU\_TT<4> C5 TT4

58D3 11B3 9B5 7B7 CPU\_TBST\_L F11 TBST\*  
58D3 11B3 9B6 CPU\_TSIZ<0> G6 TSIZ0  
58D3 11B3 9C6 CPU\_TSIZ<1> F7 TSIZ1  
58D3 11B3 9B7 CPU\_TSIZ<2> E7 TSIZ2

58C3 11B3 9B6 7A7 CPU\_WT\_L D3 WT\*  
58C3 11C3 9C6 7A7 CPU\_CI\_L J1 CI\*  
58C3 11B3 9B6 7B7 CPU\_AACK\_L R1 AACK\*  
58C3 11B3 9B8 7C7 CPU\_ARTRY\_L N2 ARTRY\*  
7B5 CPU\_SHD0\_L E4 SHD0\*  
7B5 CPU\_SHD1\_L H5 SHD1\*  
58C3 11B3 9B8 7C7 CPU\_HIT\_L B2 HIT\*

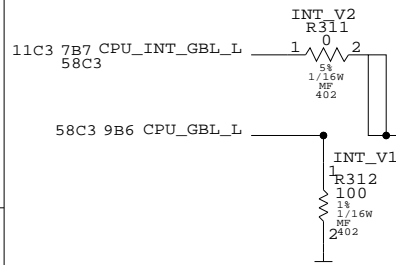
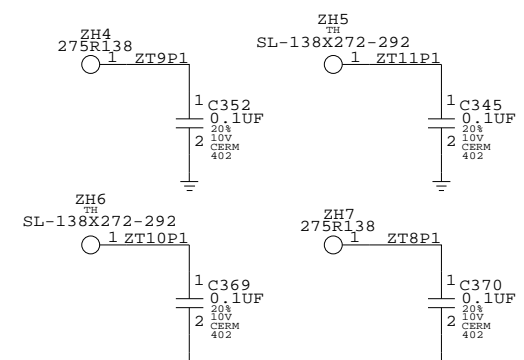
U34 800MHZ APOLLO MPC7445\_360 BGA (1 OF 3) SEE\_TABLE

BVSEL B7 CPU\_BUS\_VSEL 7C4  
SYSCLK A10  
CLKOUT H2 NO\_TEST NC\_CPU\_CLKOUT  
PLLCFG0 B8 CPU\_PLL\_CFG<0> 6C6 9A8  
PLLCFG1 C8 CPU\_PLL\_CFG<1> 6C6 9A8  
PLLCFG2 C7 CPU\_PLL\_CFG<2> 6C6 9A8  
PLLCFG3 D7 CPU\_PLL\_CFG<3> 6C6 9A8  
PLL\_EXT A7 CPU\_PLL\_CFGEXT 6C6 9A8  
DBG\* M2 CPU\_DBG\_L 7B7 9C8 11B1 58C3  
DRDY\* C3 58C3 CPU\_DRDY\_L UF  
DTI0 G1 CPU\_EDTI 7C5  
DTI1 K1 CPU\_DTI<0> 9B7 11A1 58C3  
DTI2 P1 CPU\_DTI<1> 9B5 11A1 58C3  
DTI3 N1 CPU\_DTI<2> 9B5 11A1 58C3  
TDI B9 JTAG\_CPU\_TDI 7A5 8D2 9A2 61C7  
TDO A4 JTAG\_CPU\_TDO 9A2 61C7  
TMS F1 JTAG\_CPU\_TMS 7A5 8D2 9A2 61C7  
TCK C6 JTAG\_CPU\_TCK 7D5 8C2 9A2 61C7  
TRST\* A5 JTAG\_CPU\_TRST\_L 7C5 8D2 9A2 61C7  
LSSDMODE\* E8 CPU\_LSSD\_MODE 7B5  
L1TSTCLK G8 CPU\_L1TSTCLK 7A4  
L2TSTCLK B3 CPU\_L2TSTCLK 7C4  
TA\* K6 CPU\_TA\_L 7C7 9C5 11A1 58C3  
TEA\* L1 CPU\_TEA\_L 7B7 9C6 11A1 58C3  
TBEN E1 CPU\_TBEN 7C5 11A3  
QREQ\* F4 CPU\_QREQ\_L 7D5 9B7 11B3 58C3  
QACK\* G5 CPU\_QACK\_L 9B5 11B3 58C3  
CKSTP\_IN\* A3 CPU\_CHKSTP\_IN\_L 7B5 61C7  
CKSTP\_OUT\* B1 CPU\_CHKSTP\_OUT\_L 7B5 9A2 9D6 61C7

INT\* D4 MPIC\_CPU\_INT\_L 7A5 9D7 30B5  
SMI\* F9 CPU\_SMI\_L 7A5 46C4  
MCP\* C9 CPU\_MCP\_L 7B5  
SRESET\* A2 CPU\_SRESET\_L 7A5 9A2 61C4  
HRESET\* D8 CPU\_HRESET\_L 7A3 7A5 7B3 8D2 9A2 46C2 46D2 61C7

IBORG PULLS THIS UP, SPEC SAYS TO GROUND IT FOR SW CONTROL  
PMON\_IN\* D9 CPU\_PMONIN\_L 7C5  
PMON\_OUT\* A9 NO\_TEST NC\_PMON\_OUT\_L  
BMODE0\* G9 CPU\_EMODE0\_L 7A4  
BMODE1\* F8 CPU\_EMODE1\_L 7A4

EXT\_QUAL A11  
TEST0 A12  
TEST1 B6  
TEST2 B10  
TEST3 E10  
TEST4 D10  
CPU\_PULLUP 7A5  
CPU\_PULLDOWN 4D7 7C5



INTREPID VERSION 1 PULLS GBL ALL THE TIME. NEED TO CUT THE TRACE AND YANK DOWN HARD FOR SNOOPING. FIXED IN INTREPID VERSION 2.

CPU MECHANICAL PARTS SUPPORT

Table with 6 columns: PART NUMBER, QTY, DESCRIPTION, REFERENCE DES, CRITICAL, BOM OPTION. Rows include parts like 875-1475 PAD, THERMAL, CPU, U34 and 870-1113 HEAT SINK, CPU, Q26, U34.

MPC7450 MAXBUS

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Apple logo and drawing information: DRAWING NUMBER 051-6423, SHT 4 OF 74, SCALE NONE.

APOLLO\_MPC7445\_360

NC\_CPUCRUD<0> NO\_TEST F18 NC\_F18  
 NC\_CPUCRUD<1> NO\_TEST F17 NC\_F17  
 NC\_CPUCRUD<2> NO\_TEST F19 NC\_F19  
 NC\_CPUCRUD<3> NO\_TEST H19 NC\_H19  
 NC\_CPUCRUD<4> NO\_TEST H18 NC\_H18  
 NC\_CPUCRUD<5> NO\_TEST H17 NC\_H17  
 NC\_CPUCRUD<6> NO\_TEST H16 NC\_H16  
 NC\_CPUCRUD<7> NO\_TEST E19 NC\_E19  
 NC\_CPUCRUD<8> NO\_TEST D18 NC\_D18  
 NC\_CPUCRUD<9> NO\_TEST F16 NC\_F16  
 NC\_CPUCRUD<10> NO\_TEST G16 NC\_G16  
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NC\_CPUCRUD<17> NO\_TEST P15 NC\_P15  
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 NC\_CPUCRUD<72> NO\_TEST B16 NC\_B16  
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 NC\_CPUCRUD<76> NO\_TEST A13 NC\_A13  
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 NC\_CPUCRUD<87> NO\_TEST B13 NC\_B13  
 NC\_CPUCRUD<88> NO\_TEST B14 NC\_B14  
 NC\_CPUCRUD<89> NO\_TEST A6 NC\_A6

U34  
 800MHZ  
 BGA  
 (3 OF 3)

APOLLO\_MPC7445\_360

58D3 11D1 9C5 CPU\_DATA<0> R15 D0  
 58D3 11D1 9C7 CPU\_DATA<1> W15 D1  
 58D3 11D1 9C8 CPU\_DATA<2> T14 D2  
 58D3 11D1 9C6 CPU\_DATA<3> V16 D3  
 58D3 11D1 9C7 CPU\_DATA<4> W16 D4  
 58D3 11D1 9C8 CPU\_DATA<5> T15 D5  
 58D3 11D1 9C5 CPU\_DATA<6> U15 D6  
 58D3 11D1 9C8 CPU\_DATA<7> P14 D7  
 58D3 11D1 9D6 CPU\_DATA<8> V13 D8  
 58D3 11D1 9D5 CPU\_DATA<9> W13 D9  
 58D3 11D1 9C7 CPU\_DATA<10> T13 D10  
 58D3 11D1 9C6 CPU\_DATA<11> P13 D11  
 58D3 11D1 9C6 CPU\_DATA<12> U14 D12  
 58D3 11D1 9C7 CPU\_DATA<13> W14 D13  
 58D3 11D1 9C8 CPU\_DATA<14> R12 D14  
 58D3 11C1 9D6 CPU\_DATA<15> T12 D15  
 58D3 11C1 9C5 CPU\_DATA<16> W12 D16  
 58D3 11C1 9D7 CPU\_DATA<17> V12 D17  
 58D3 11C1 9C5 CPU\_DATA<18> N11 D18  
 58D3 11C1 9D5 CPU\_DATA<19> N10 D19  
 58D3 11C1 9D5 CPU\_DATA<20> R11 D20  
 58D3 11C1 9D8 CPU\_DATA<21> U11 D21  
 58D3 11C1 9D7 CPU\_DATA<22> W11 D22  
 58D3 11C1 9D8 CPU\_DATA<23> T11 D23  
 58D3 11C1 9D5 CPU\_DATA<24> R10 D24  
 58D3 11C1 9D7 CPU\_DATA<25> N9 D25  
 58D3 11C1 9D6 CPU\_DATA<26> P10 D26  
 58D3 11C1 9D7 CPU\_DATA<27> U10 D27  
 58D3 11C1 9D8 CPU\_DATA<28> R9 D28  
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 58D3 11D5 11C1 9D7 CPU\_DATA<40> P17 D40  
 58D3 11D5 11B1 9D5 CPU\_DATA<41> R19 D41  
 58D3 11D5 11B1 9C6 CPU\_DATA<42> V18 D42  
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 58D3 11B8 11B1 9C5 CPU\_DATA<49> W17 D49  
 58D3 11B8 11B1 9C8 CPU\_DATA<50> W18 D50  
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 58D3 11B8 11B1 9D7 CPU\_DATA<54> W3 D54  
 58D3 11B8 11B1 9C6 CPU\_DATA<55> V17 D55  
 58D3 11B1 9D8 CPU\_DATA<56> U4 D56  
 58D3 11B5 11B1 9D6 CPU\_DATA<57> U8 D57  
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 58D3 11B5 11B1 9D8 CPU\_DATA<59> R7 D59  
 58D3 11B5 11B1 9D8 CPU\_DATA<60> P6 D60  
 58D3 11B5 11B1 9D5 CPU\_DATA<61> R8 D61  
 58D3 11B5 11B1 9D5 CPU\_DATA<62> W8 D62  
 58D3 11B5 11B1 9D6 CPU\_DATA<63> T8 D63

U34  
 800MHZ  
 BGA  
 (2 OF 3)

NC\_CPUUDP<0> NO\_TEST T3 DP0  
 NC\_CPUUDP<1> NO\_TEST W4 DP1  
 NC\_CPUUDP<2> NO\_TEST T4 DP2  
 NC\_CPUUDP<3> NO\_TEST W9 DP3  
 NC\_CPUUDP<4> NO\_TEST M6 DP4  
 NC\_CPUUDP<5> NO\_TEST V3 DP5  
 NC\_CPUUDP<6> NO\_TEST N8 DP6  
 NC\_CPUUDP<7> NO\_TEST W6 DP7

MPC7450 - 2

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SIZE	DRAWING NUMBER	REV.
D	051-6423	D
SCALE	SHT	OF
NONE	5	74

BOMOPTIONS FOR UPPER-SET OF RESISTORS

1200@133&1500@167&1333@133&1667@167&1467@133&1833@167&1600@133&2000@167&1733@133&2167@167&1867@133&2333@167&2000@133&2500@167&2133@133&2667@167  
 667@133&833@167&733@133&917@167&800@133&1000@167&1067@133&1333@167&1333@133&1667@167&1467@133&1833@167&1600@133&2000@167&1867@133&2333@167&2133@133&2667@167  
 800@133&1000@167&867@133&1083@167&1067@133&1333@167&1200@133&1500@167&1733@133&2167@167&1867@133&2333@167&2133@133&2667@167  
 667@133&833@167&933@133&1167@167&1200@133&1500@167&1333@133&1667@167&1600@133&2000@167  
 667@133&833@167&733@133&917@167&800@133&1000@167&867@133&1083@167&1000@133&1250@167&1200@133&1500@167&1467@133&1833@167&1600@133&2000@167&1733@133&2167@167&2000@133&2500@167&2133@133&2667@167

CPU FREQUENCY CONFIGURATION (SUPPORTED CPU & BUS SPEEDS)

MULTIPLIER (BUS-TO-CORE)	CORE FREQUENCY (AT BUS FREQUENCY)		CPU_PLL_CFG E 0123 HEX
	167MHZ	133MHZ	
5.0X	833	667	0 1011 0B
5.5X	917	733	0 1001 09
6.0X	1000	800	0 1101 0D
6.5X	1083	867	0 0101 05
7.0X	1167	933	0 0010 02
7.5X	1250	1000	0 0001 01
8.0X	1333	1067	0 1100 0C
9.0X	1500	1200	1 0111 17
10.0X	1667	1333	1 1010 1A
11.0X	1833	1467	1 1001 19
12.0X	2000	1600	1 1011 1B
13.0X	2167	1733	1 0101 15
14.0X	2333	1867	1 1100 1C
15.0X	2500	2000	1 0001 11
16.0X	2667	2133	1 1101 1D

CPU FREQUENCY CONFIGURATION (OTHER POSSIBLE CPU & BUS SPEEDS)

MULTIPLIER (BUS-TO-CORE)	CORE FREQUENCY (AT BUS FREQUENCY)		CPU_PLL_CFG E 0123 HEX
	167MHZ	133MHZ	
0.0X	PLL OFF		0 1111 0F
1.0X (11.5X)	167 (1917)	133 (1533)	0 0000 00
PLL BYPASS	PLL BYPASS		0 0011 03
2.0X	333	267	0 0100 04
2.5X (8.5X)	417 (1417)	333 (1133)	0 0110 06
3.0X	500	400	0 1000 08
3.5X (13.5X)	583 (2250)	467 (1800)	0 1110 0E
4.0X	667	533	0 1010 0A
4.5X (9.5X)	750 (1583)	600 (1267)	0 0111 07
17.0X	2833	2267	1 0000 10
18.0X	3000	2400	1 0010 12
20.0X	3333	2667	1 0011 13
21.0X	3500	2800	1 0100 14
24.0X	4000	3200	1 0110 16
10.5X	1750	1400	1 1000 18
28.0X	4667	3733	1 1110 1E
12.5X	2083	1667	1 1111 1F

BOMOPTIONS FOR LOWER-SET OF RESISTORS

933@133&1167@167&1067@133&1333@167&1333@133&1667@167&1867@133&2333@167  
 733@133&917@167&800@133&1000@167&867@133&1083@167&1000@133&1250@167&1067@133&1333@167&1467@133&1833@167&1733@133&2167@167&1867@133&2333@167&2000@133&2500@167&2133@133&2667@167  
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 867@133&1083@167&933@133&1167@167&1000@133&1250@167&1200@133&1500@167&1733@133&2167@167&2000@133&2500@167  
 667@133&833@167&733@133&917@167&800@133&1000@167&867@133&1083@167&933@133&1167@167&1000@133&1250@167&1067@133&1333@167


CPU SPEED & BUS RATIO SUPPORT

THE CONFIGURATION RESISTORS BELOW ARE SELF CONFIGURING WHEN THE ENGINEER SELECTS THE APPROPRIATE CPU AND BUS SPEED BOM OPTION, THE APPROPRIATE RESISTORS ARE AUTOMATICALLY SELECTED

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
337S2674	1	IC, APOLLO, N5, V3.3, 1.0GHZ	U34		1000@133

CPU BUS RATIO BITS

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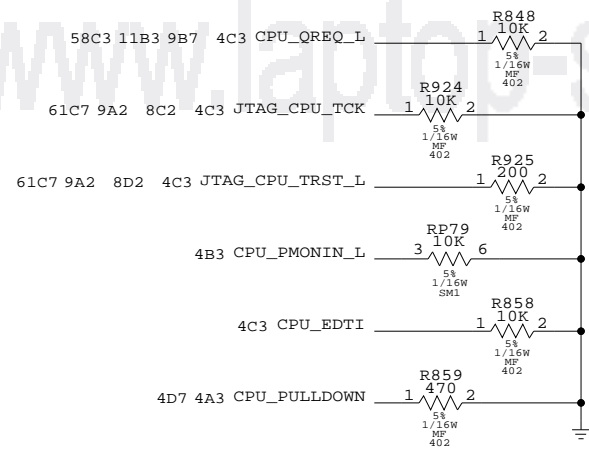
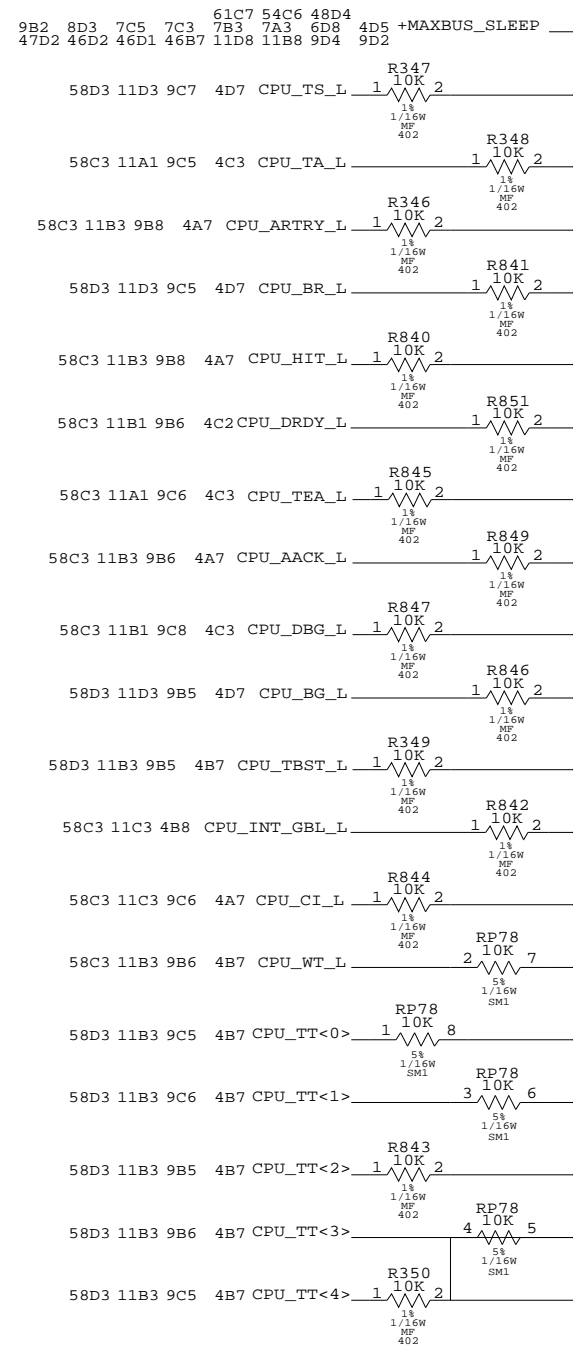
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SCALE	SHT	OF
NONE	6	74

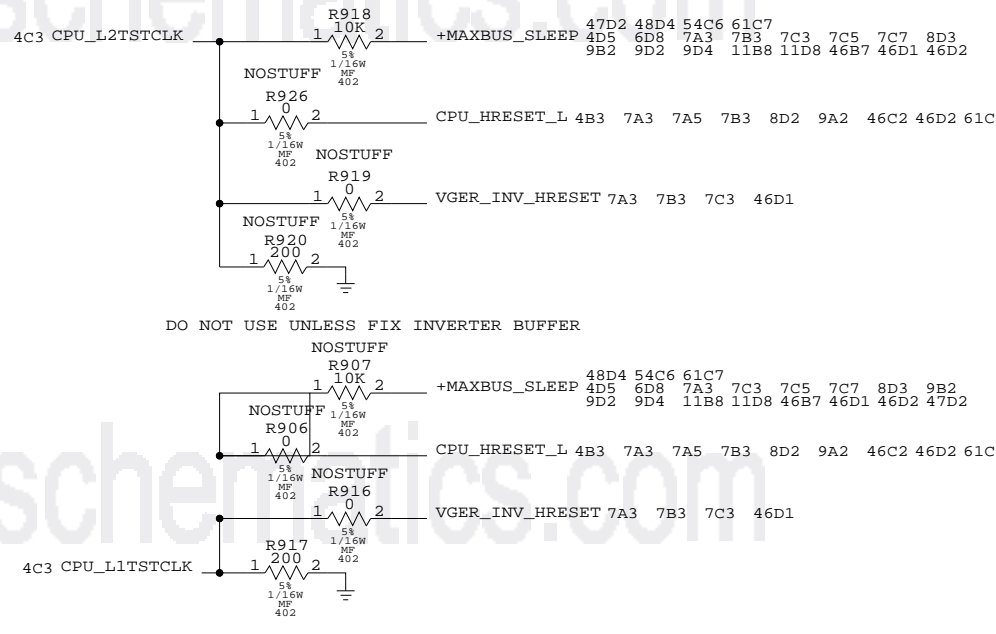
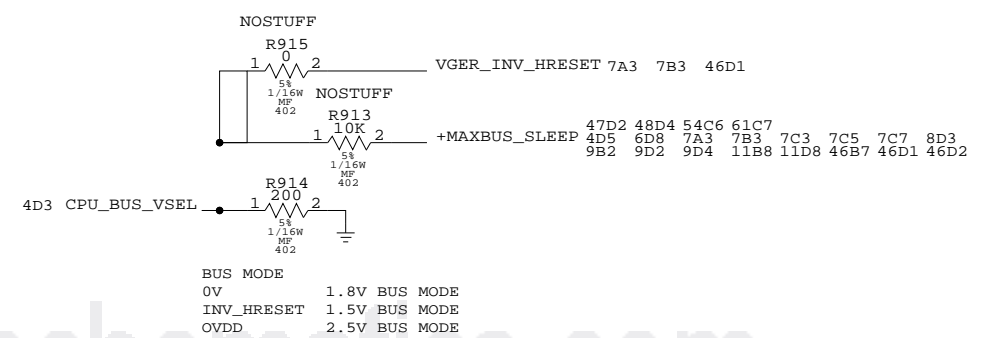
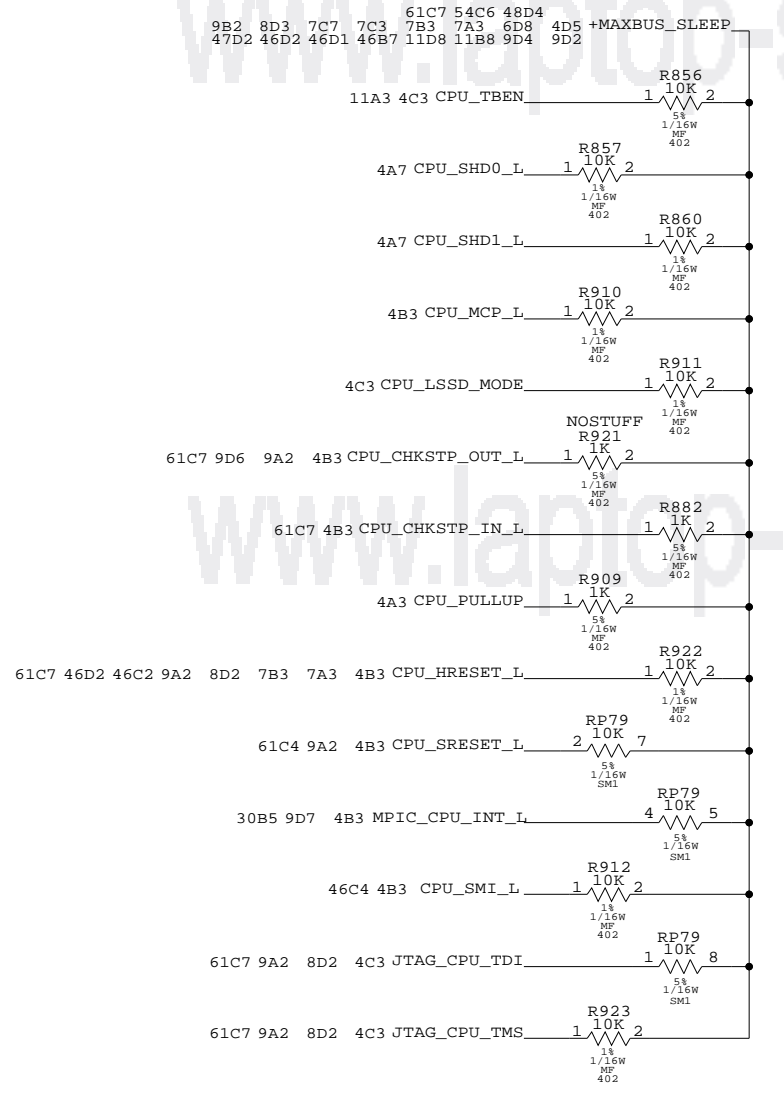
BMODE <0> <1>	MSSCR0 <16:17>	Sys Bus	Vger ID	Addr Drve
L L	1 1	???	01	yes unavail
L !hr	1 0	Max	01	yes unavail
L hr	1 1	???	00	yes unavail
L H	1 0	Max	00	yes unavail
!hr L	0 1	MB+	01	yes unavail
!hr !hr	0 0	60x	01	yes unavail
!hr hr	0 1	MB+	00	yes unavail
!hr H	0 0	60x	00	yes unavail
hr L	1 1	???	01	norm unavail
hr !hr	1 0	Max	01	norm
hr hr	1 1	???	00	norm unavail
HR H	1 0	MAX	00	NORM <- DEFAULT
H L	0 1	MB+	01	norm unavail
H !hr	0 0	60x	01	norm
H hr	0 1	MB+	00	norm unavail
H H	0 0	60x	00	norm

SIGNAL	TIED	APPLICATION
CPU_EMODE0_L	HIGH	60X BUS MODE
CPU_BUS_VSEL	CPU_HRESET_L	MAX BUS MODE
	CPU_HRESET_L	2.5V INTERFACE
	LOW	1.8V INTERFACE
	CPU_HRESET_H	1.5V INTERFACE
CPU_L3_VSEL	CPU_HRESET_L or L3_OVDD	2.5V INTERFACE
	LOW	1.8V INTERFACE
	CPU_HRESET_H	1.5V INTERFACE

MAXBUS PULL-UPS



MPC7450 PULL-UPS

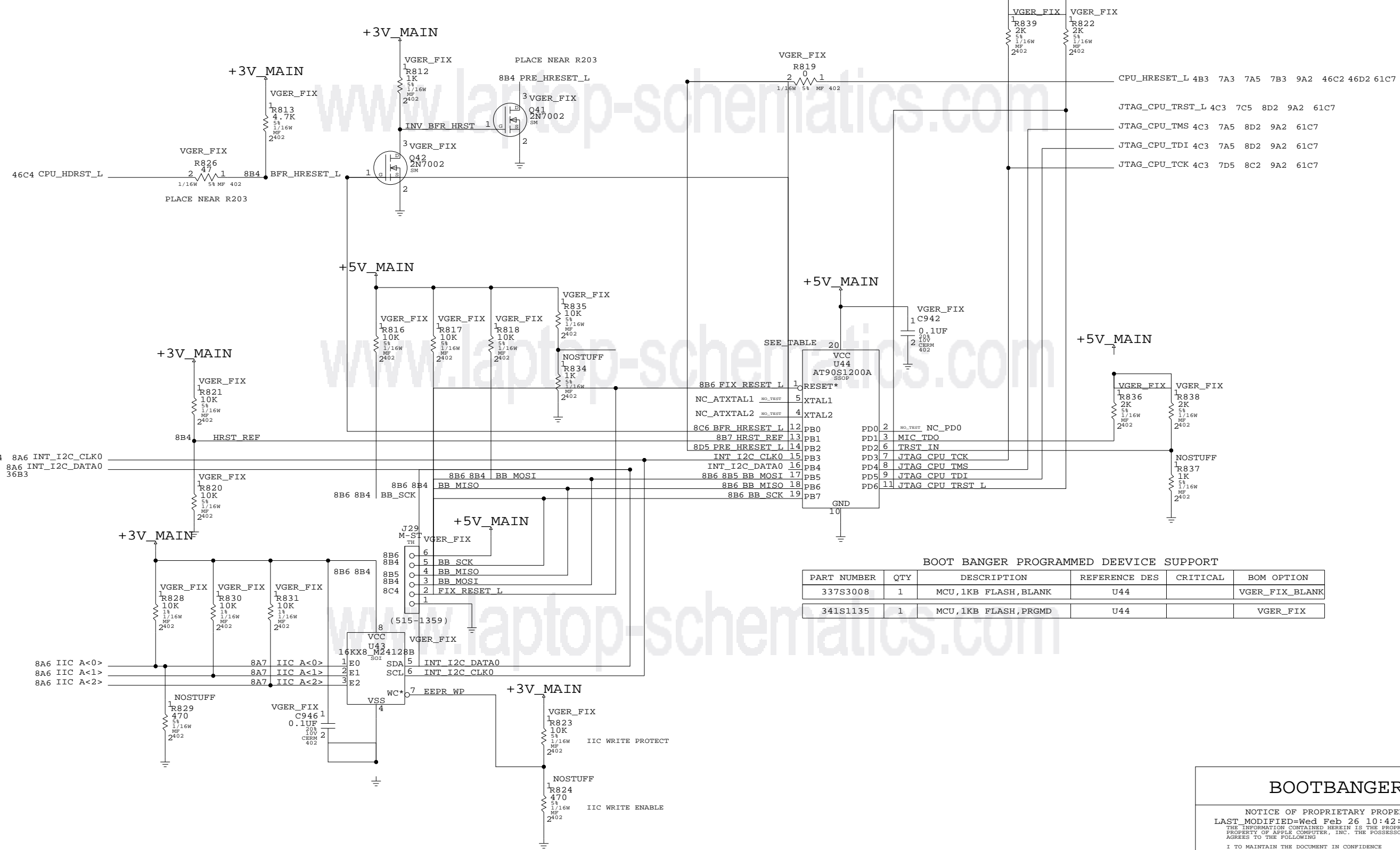


CPU CONFIG OPTIONS

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SCALE	SHT	OF	
NONE	7	74	

61C7 54C6 49D4  
9B2 7C7 7C5 7C3 7B3 7A3 6D8 4D5 +MAXBUS\_SLEEP\_  
47D2 46D2 46D1 46B7 11D8 11B8 9D4 9D2



BOOT BANGER PROGRAMMED DEEVICE SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
337S3008	1	MCU,1KB FLASH,BLANK	U44		VGER_FIX_BLANK
341S1135	1	MCU,1KB FLASH,PRGMD	U44		VGER_FIX

**BOOTBANGER**

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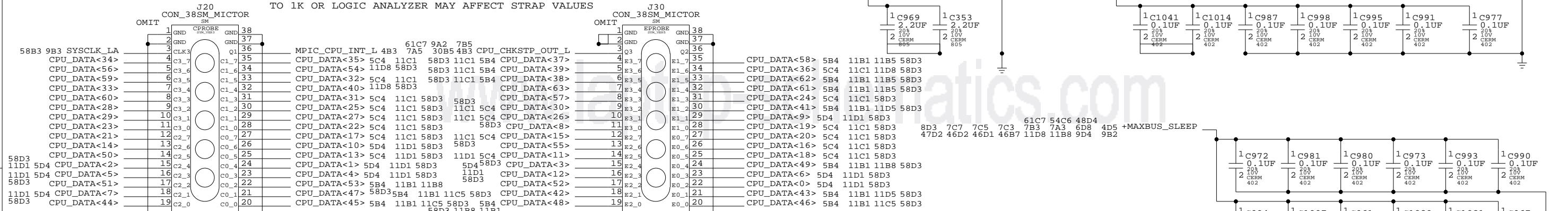
APPLE COMPUTER INC.

SIZE	DRAWING NUMBER	REV.
D	051-6423	D
SCALE	SHT	OF
NONE	8	74

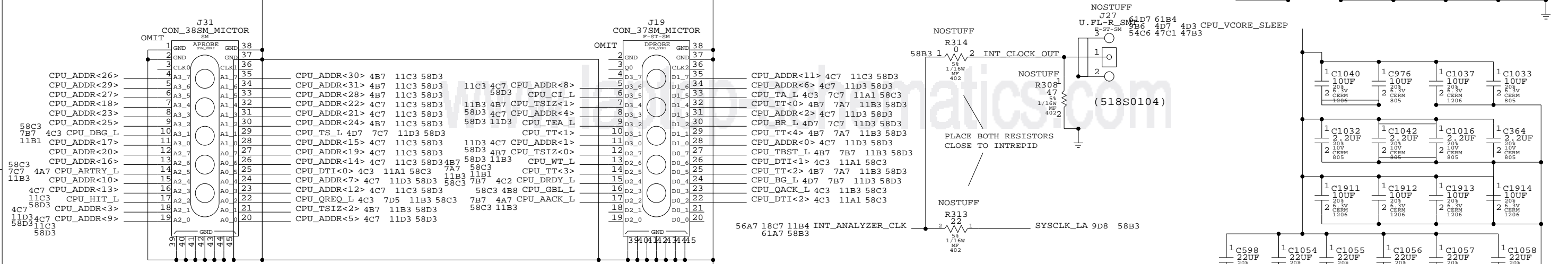


### MAXBUS LOGIC ANALYZER SUPPORT

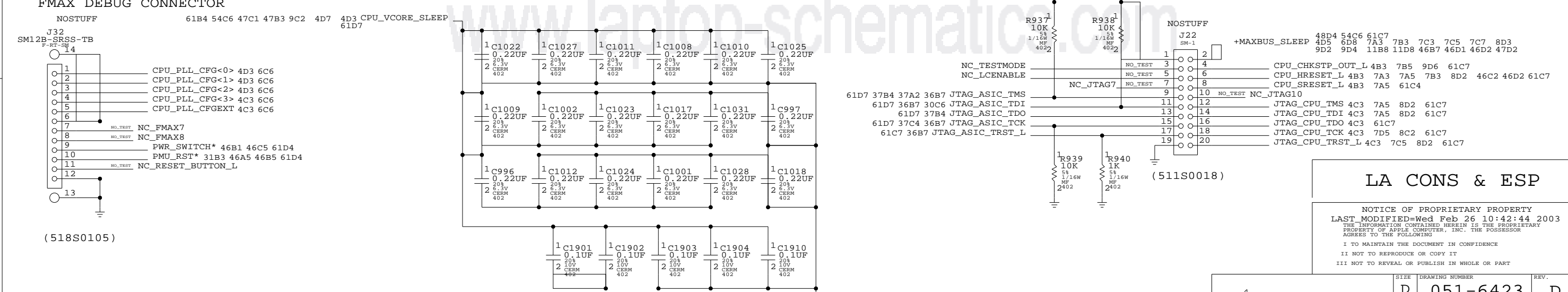
NOTE: INTREPID MAXBUS CONFIG STRAPS MUST DROP TO 1K OR LOGIC ANALYZER MAY AFFECT STRAP VALUES



### INTREPID CLOCK OUTPUT



### CPU CORE DECOUPLING



### LA CONS & ESP

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	D	051-6423	D
SCALE	NONE	SHT	9 OF 74

D

D

C

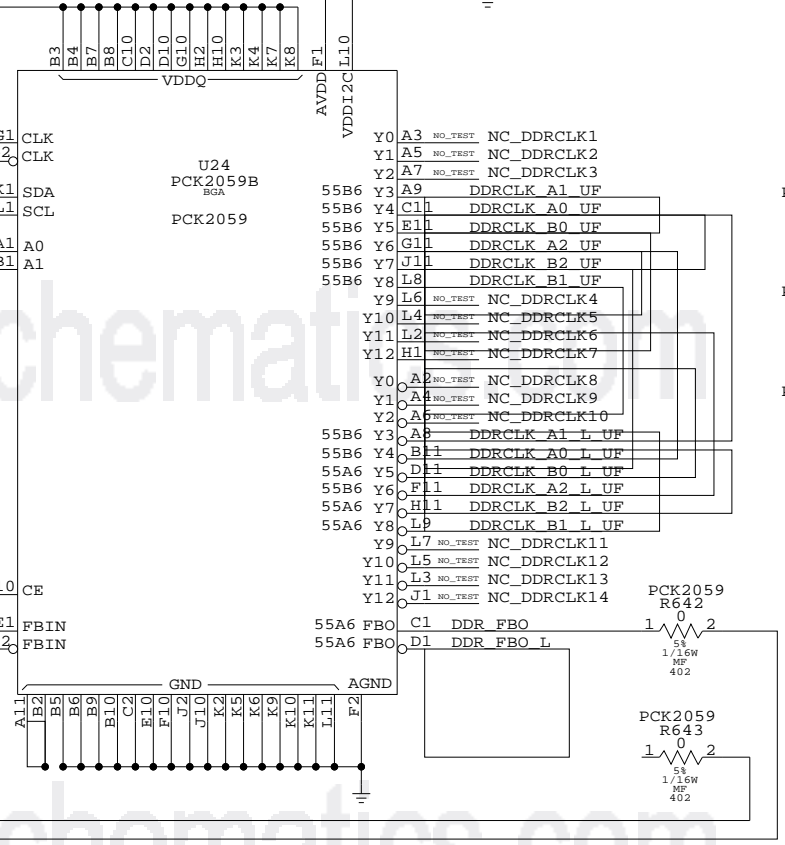
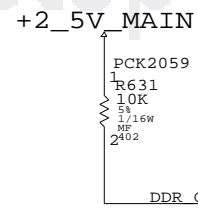
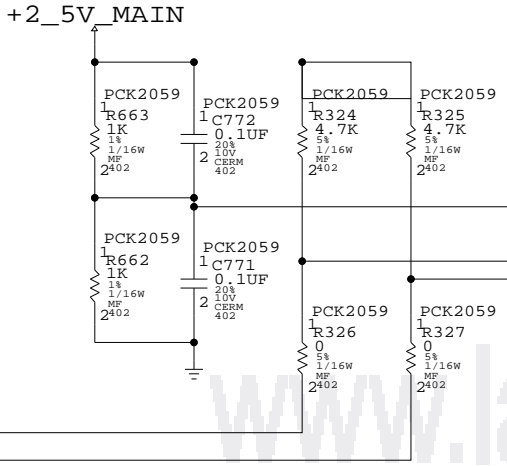
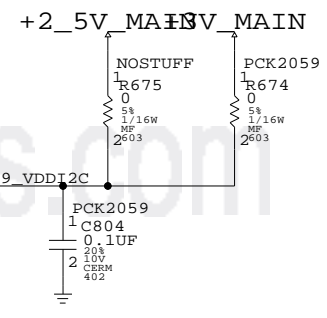
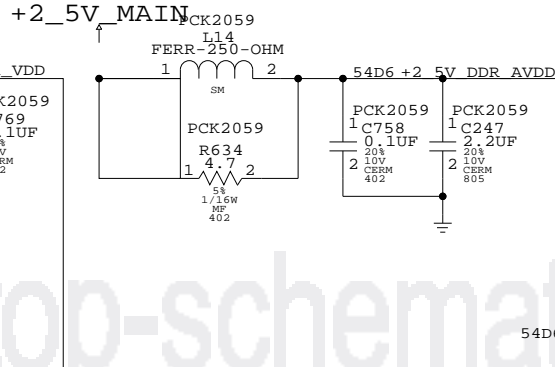
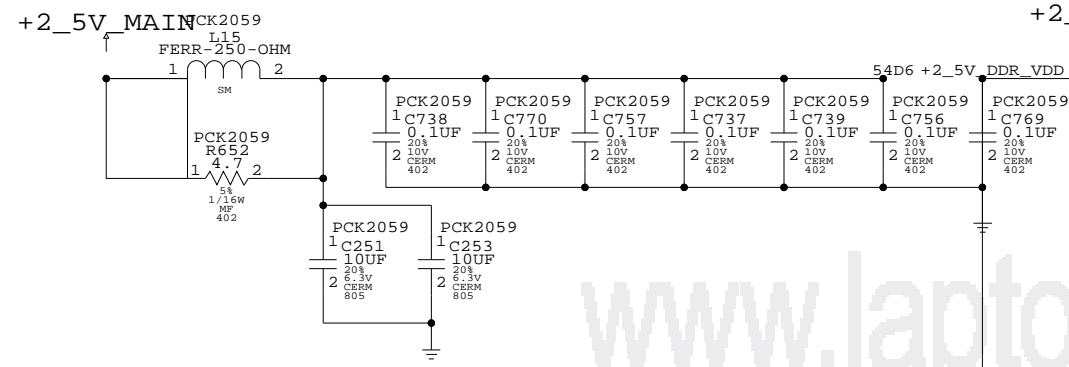
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B

B

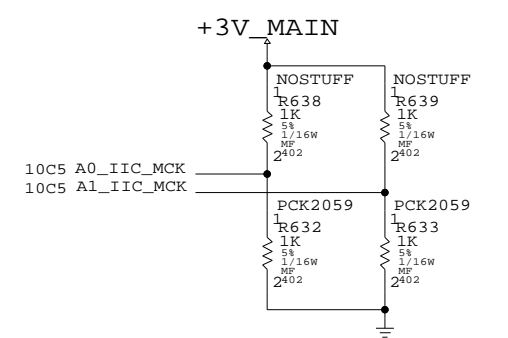
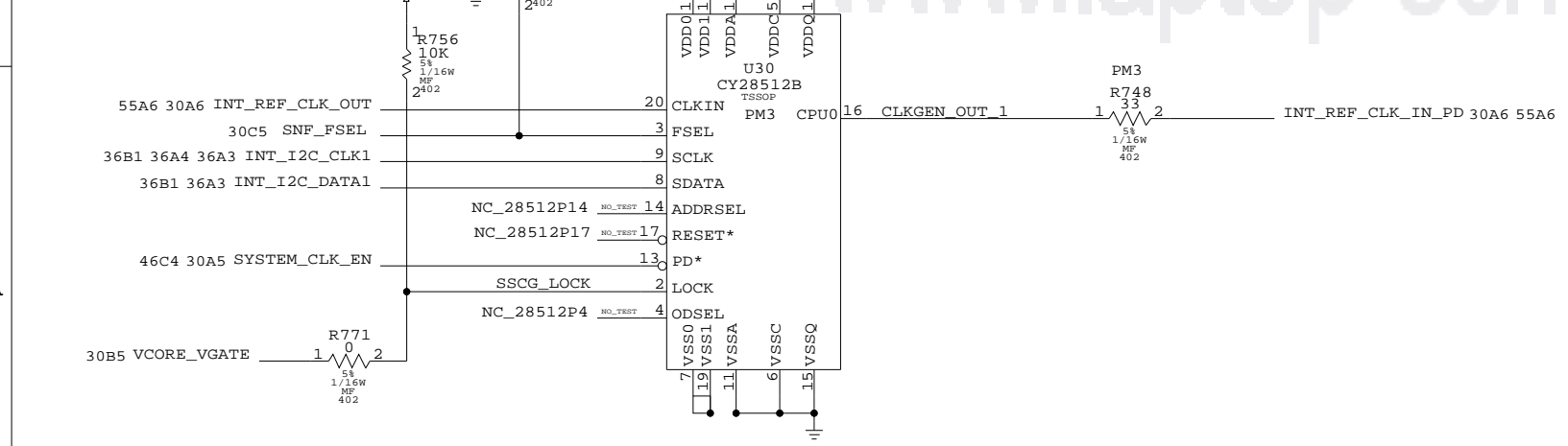
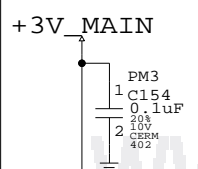
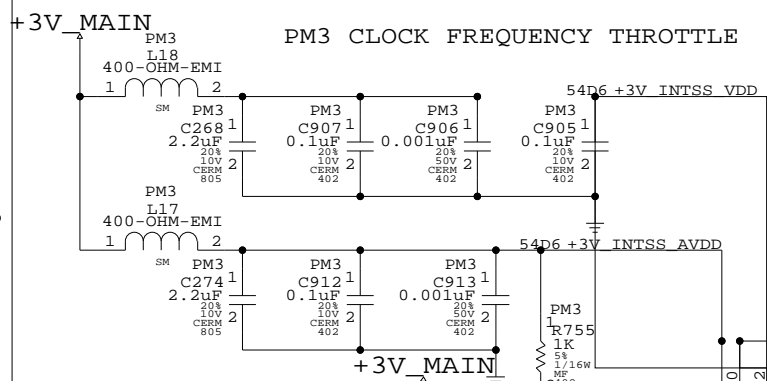
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CLOCK CHIP ALTERNATE SUPPORT

PART NUMBER	ALTERNATE FOR PART NUMBER	REFERENCE DESIGNATOR(S)	DESCRIPTION	BOM OPTION
359S0065	359S0059	U24	IC, CLK DVR, ZDB	PCK2059



### CLOCKS

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SCALE	SHT	OF	
NONE	10	74	

INTREPID BOOT STRAPS  
BITS 32 - 47

54D3 32D5 30D6 18D6 +1\_5V\_INTREPID\_PLL 11A2 INT\_PLL6\_GND 54D3+1\_5V\_INTREPID\_PLL7 INTREPID V1.1 IS 133MHZ ONLY

D

D

C

C

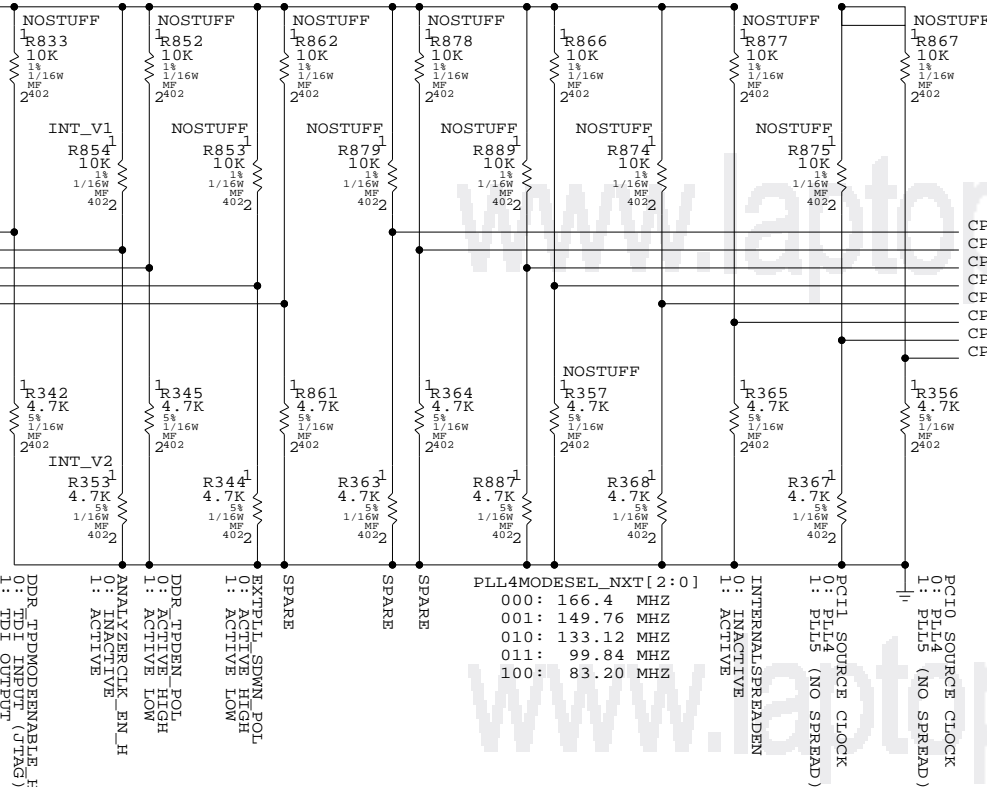
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B

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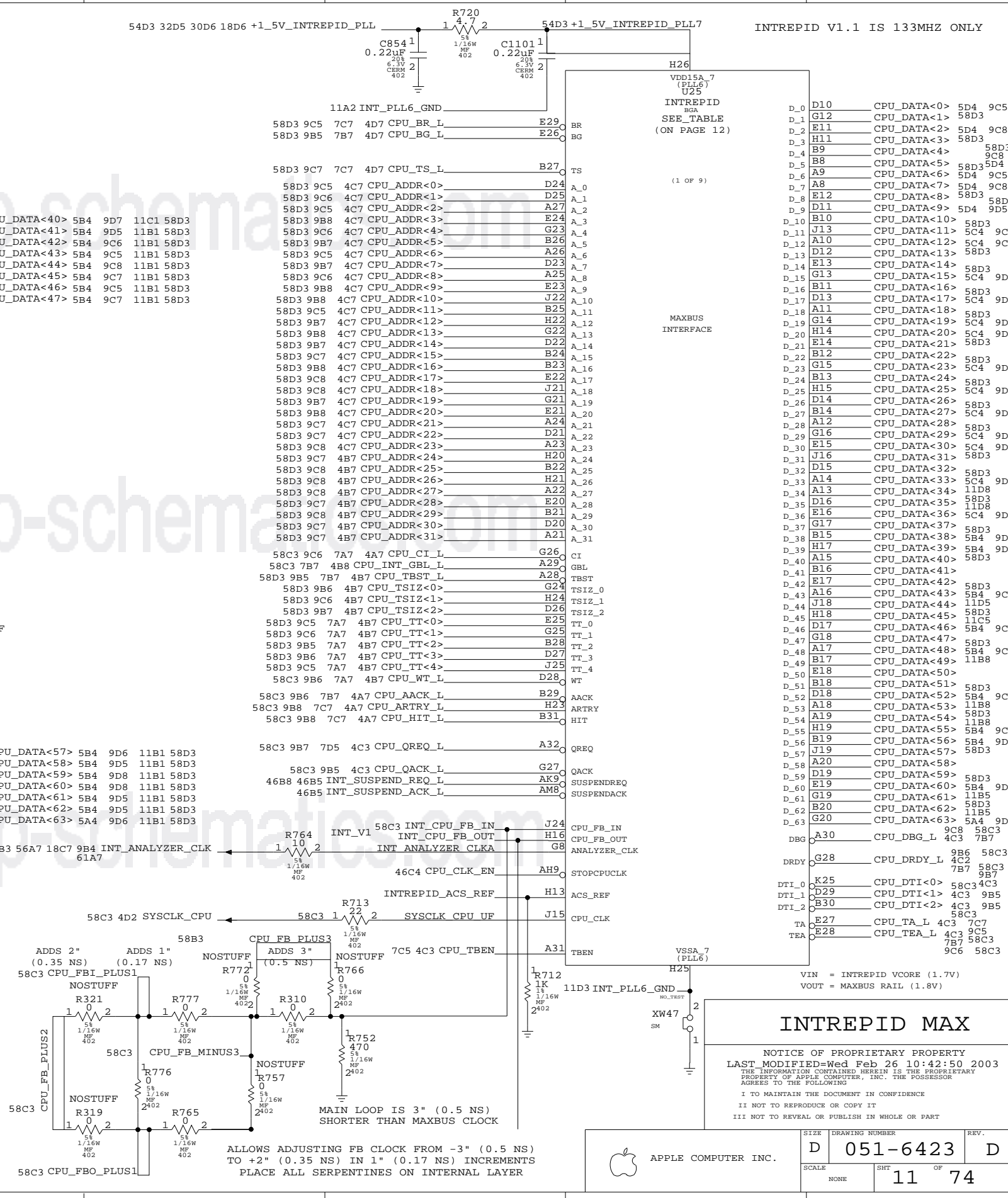
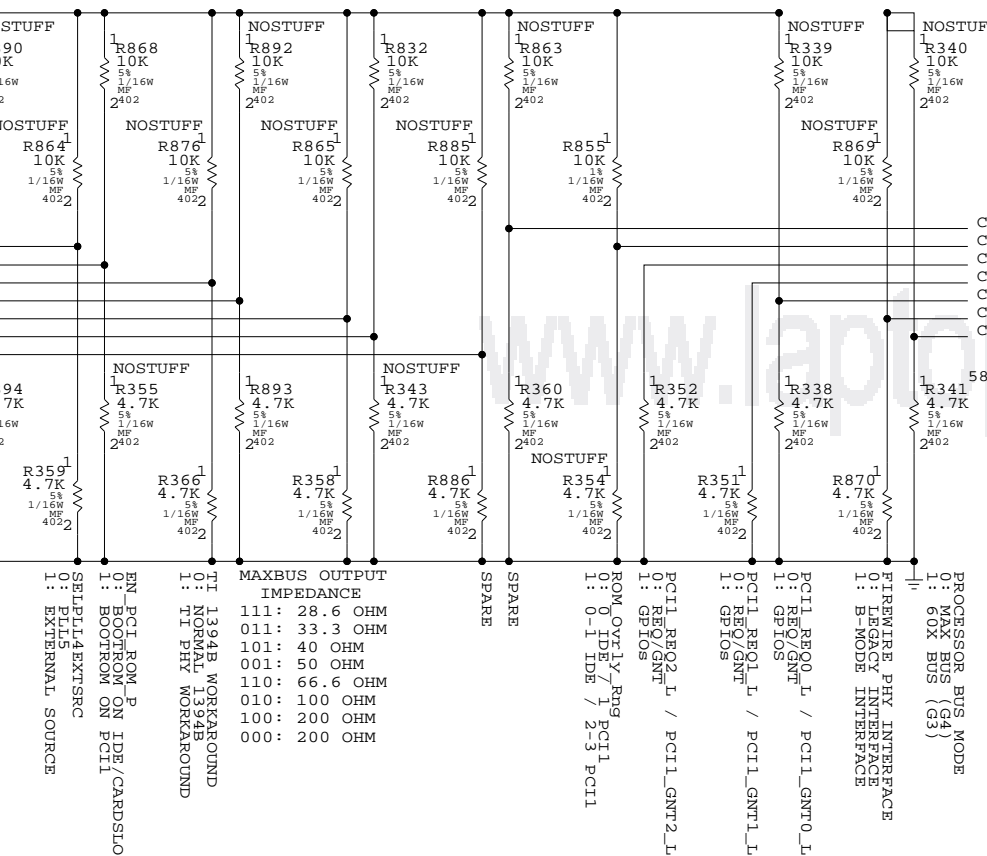
A

46D2 46D1 61C7  
9B2 8D3 46B7  
7A3 6D8 4D5 +MAXBUS\_SLEEP  
7C5 7C3 7B3  
11B8 9D4 9D2  
54C6 48D4 47D2



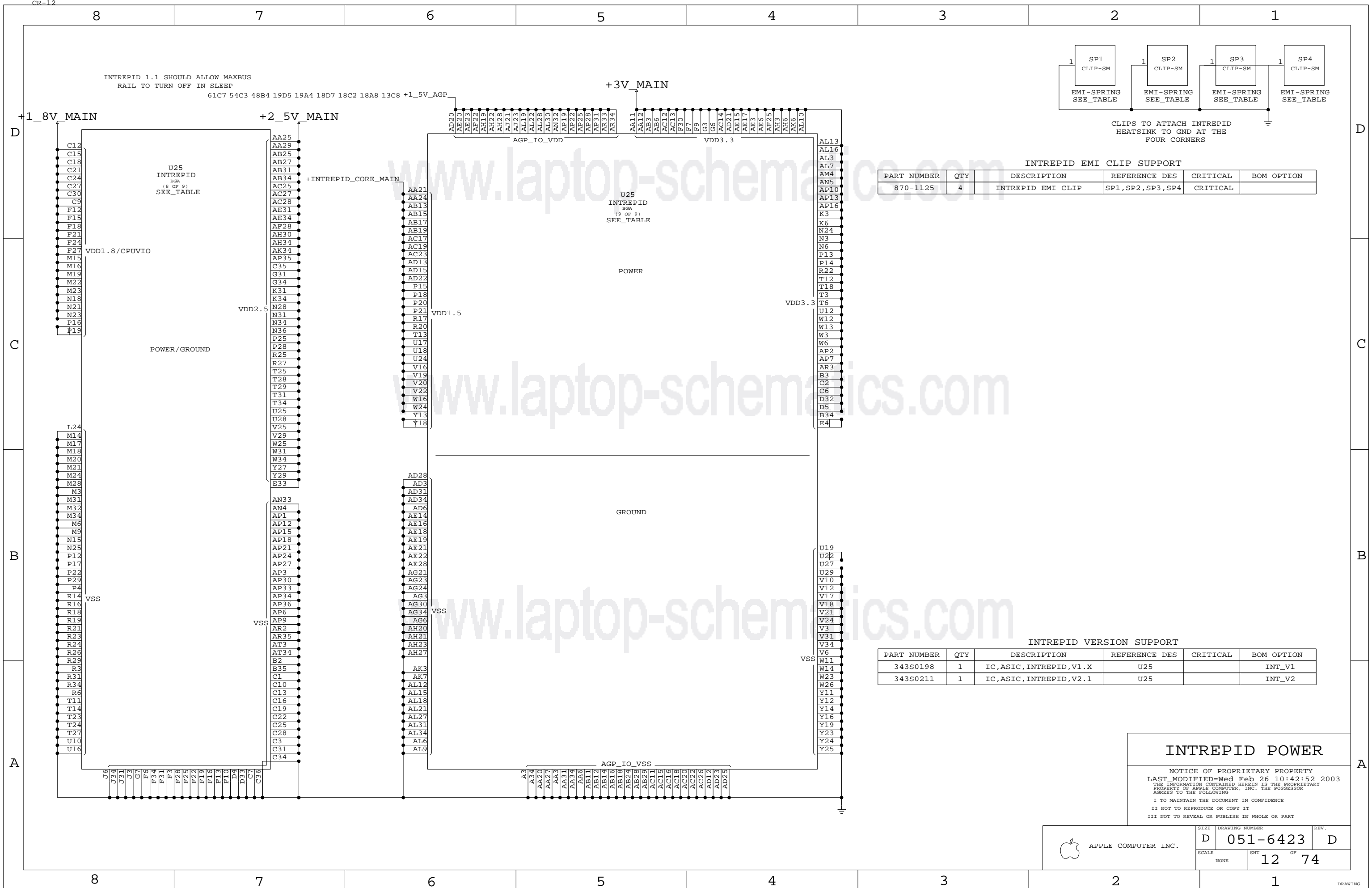
46D2 46D1 61C7  
9B2 8D3 46B7  
7A3 6D8 4D5 +MAXBUS\_SLEEP  
7C5 7C3 7B3  
11D8 9D4 9D2  
54C6 48D4 47D2

BITS 48 - 63



INTREPID MAX  
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APPLE COMPUTER INC. DRAWING NUMBER 051-6423 REV. D SCALE NONE SHT 11 OF 74



INTREPID EMI CLIP SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
870-1125	4	INTREPID EMI CLIP	SP1,SP2,SP3,SP4	CRITICAL	

INTREPID VERSION SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
343S0198	1	IC,ASIC,INTREPID,V1.X	U25		INT_V1
343S0211	1	IC,ASIC,INTREPID,V2.1	U25		INT_V2

**INTREPID POWER**

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	D	051-6423	D
SCALE	SHT	OF	
NONE	12	74	

+1\_8V\_MAIN

INTREPID MAXBUS DECOUPLING

24 Balls  
4 X 10UF (0805)  
32 X 0.22UF (0402)

49B2 48B3 12D6 +INTREPID\_CORE\_MAIN  
61C7

INTREPID CORE DECOUPLING

30 Balls  
4 X 10UF (0805)  
29 X 0.22UF (0402)

D

D

61C7  
48B4  
19A4  
18C2  
12D6  
18A8  
18D7  
19D5  
54C3

+1\_5V\_AGP

INTREPID AGP I/O DECOUPLING

21 Balls  
4 X 10UF (0805)  
24 X 0.22UF (0402)

+3V\_MAIN

INTREPID 3.3V DECOUPLING

57 Balls  
4 X 10UF (0805)  
68 X 0.22UF (0402)

C

C

+2\_5V\_MAIN

INTREPID DDR DECOUPLING

44 Balls  
4 X 10UF (0805)  
51 X 0.22UF (0402)

A

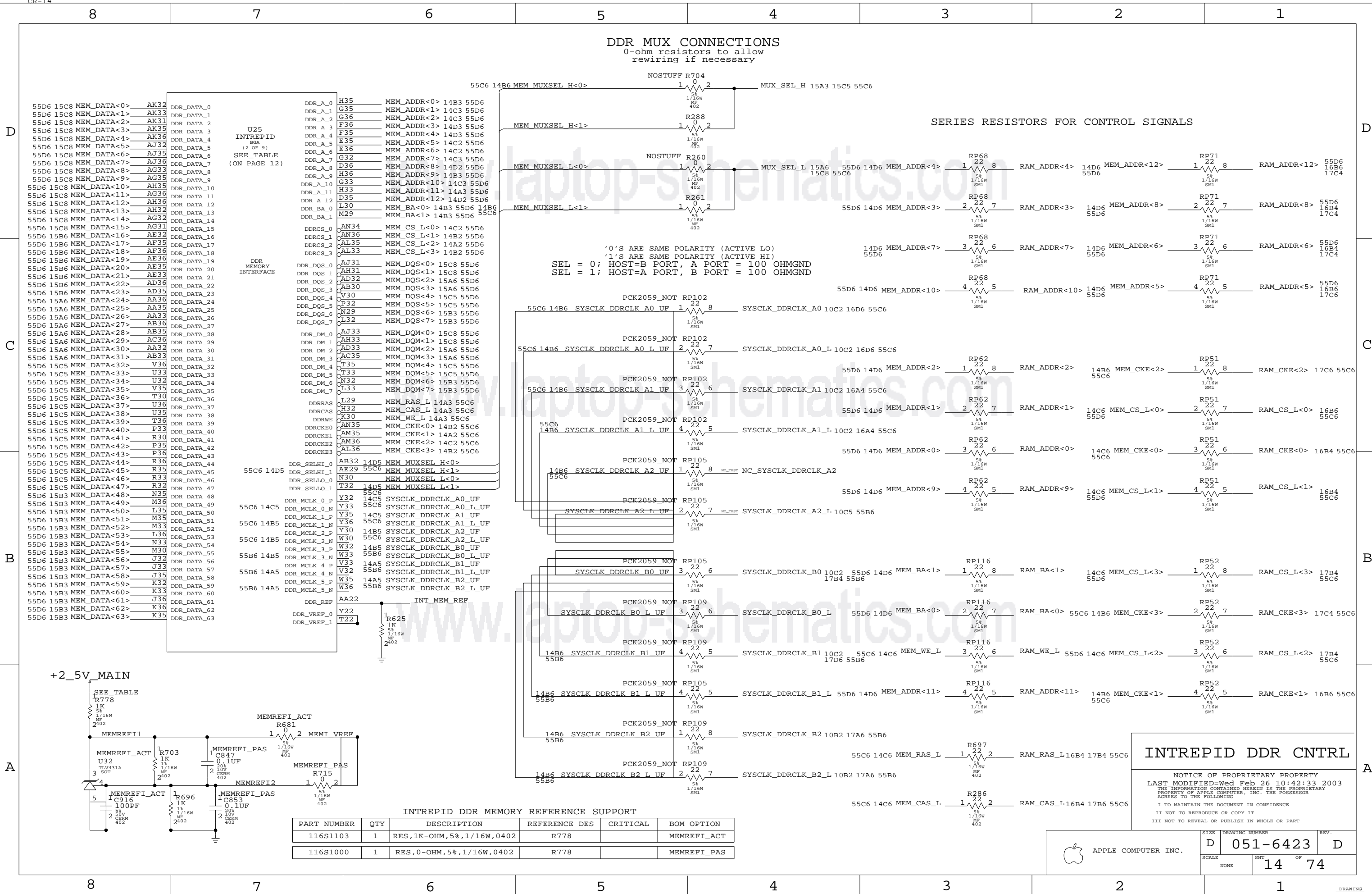
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INTREPID BYPASS

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	D	051-6423	D
SCALE	SHT	OF	
NONE	13	74	

DDR MUX CONNECTIONS  
0-ohm resistors to allow  
rewiring if necessary



INTREPID DDR MEMORY REFERENCE SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
116S1103	1	RES, 1K-OHM, 5%, 1/16W, 0402	R778		MEMREFI_ACT
116S1000	1	RES, 0-OHM, 5%, 1/16W, 0402	R778		MEMREFI_PAS

INTREPID DDR CNTRL

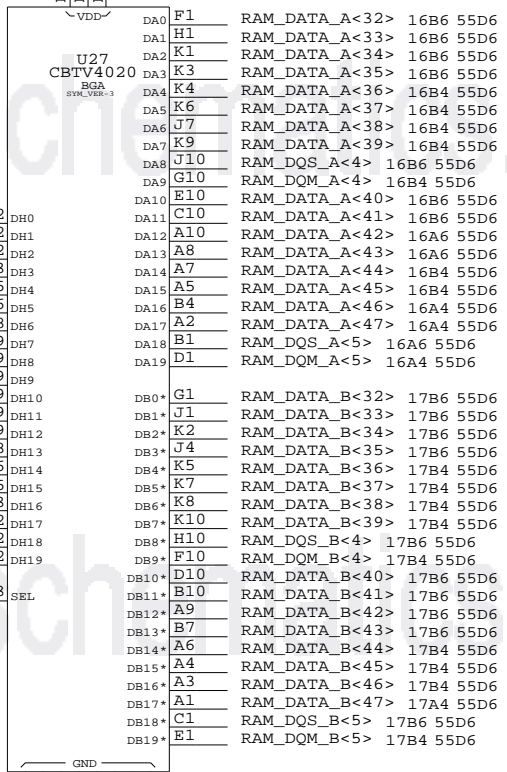
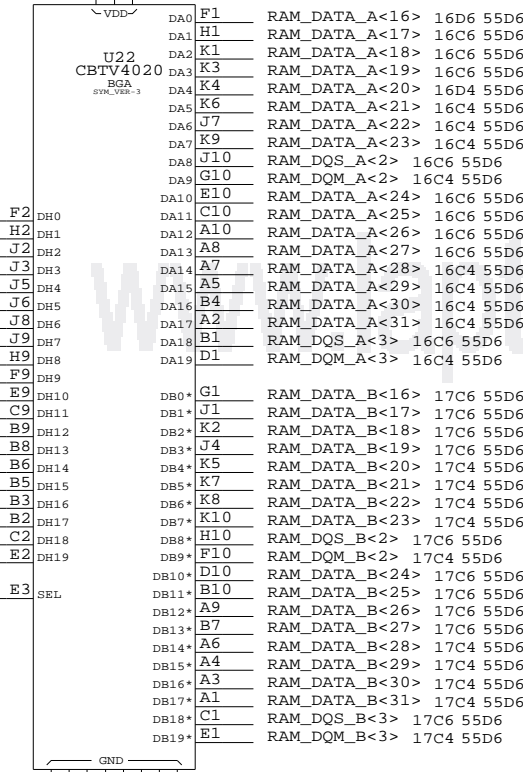
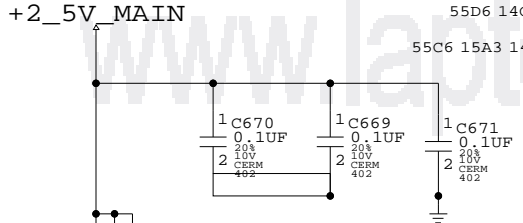
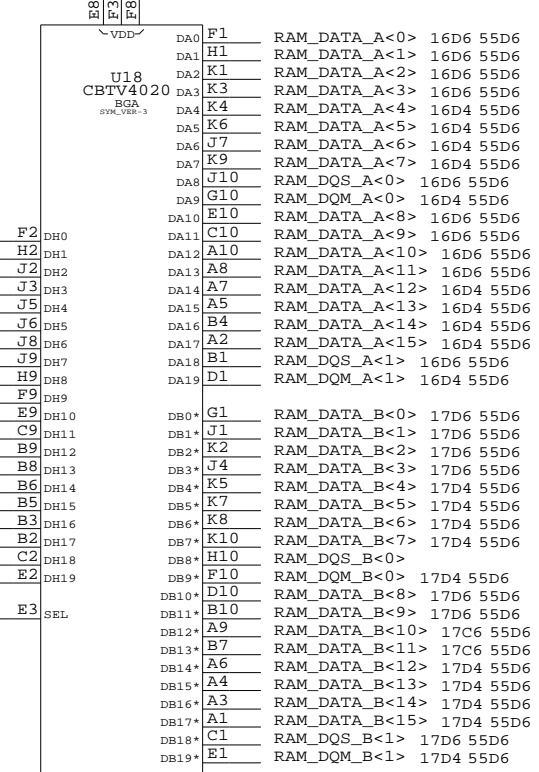
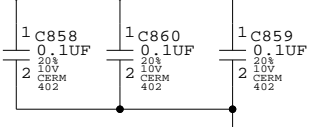
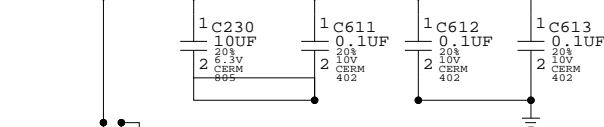
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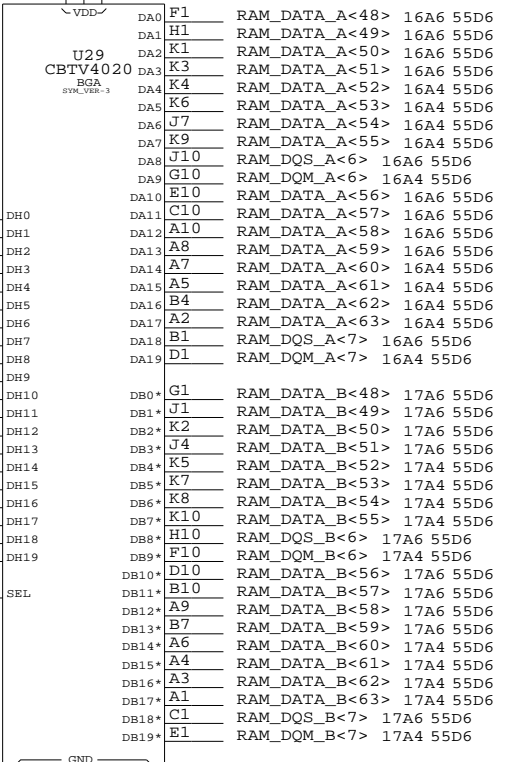
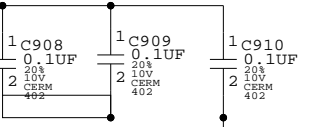
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SCALE	NONE	SHT	14	OF	74

+2\_5V\_MAIN

+2\_5V\_MAIN



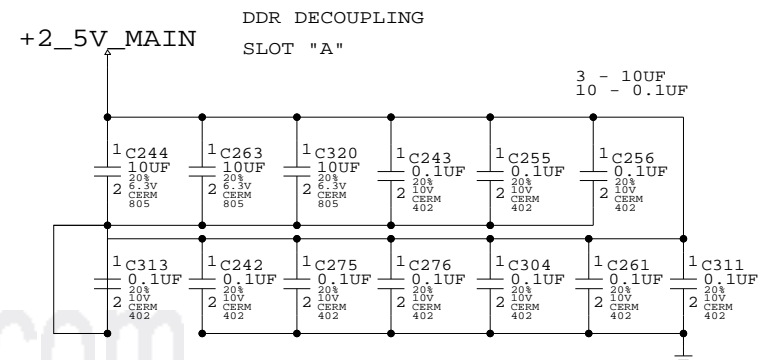
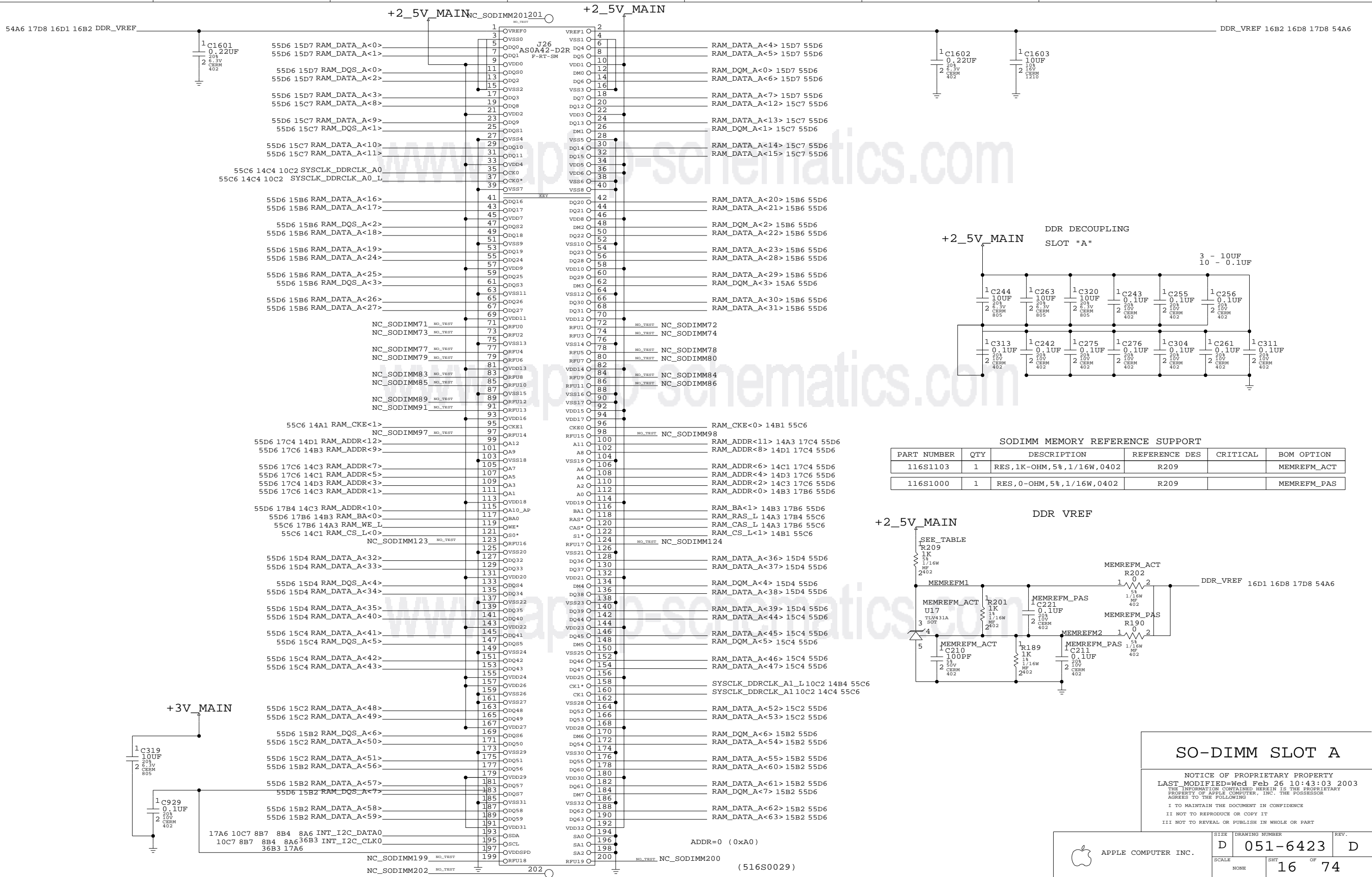
+2\_5V\_MAIN



### DDR MUXES

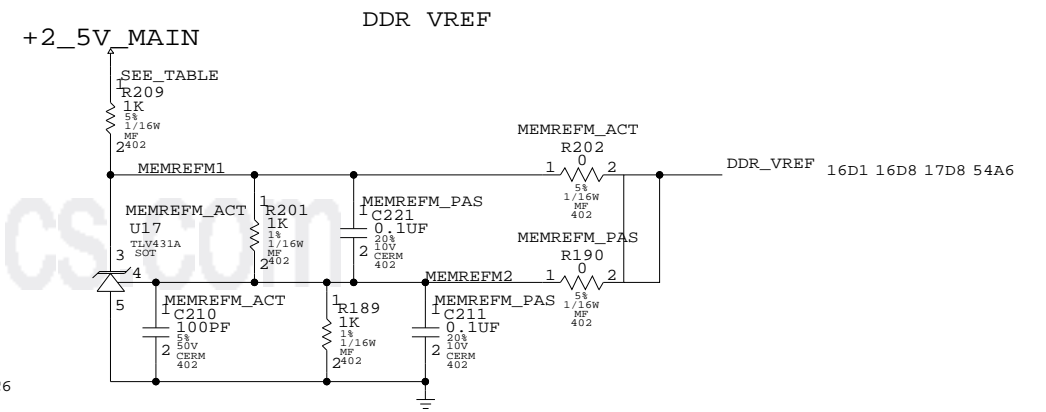
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT		OF
NONE	15		74



SODIMM MEMORY REFERENCE SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
116S1103	1	RES, 1K-OHM, 5%, 1/16W, 0402	R209		MEMREFM_ACT
116S1000	1	RES, 0-OHM, 5%, 1/16W, 0402	R209		MEMREFM_PAS



**SO-DIMM SLOT A**

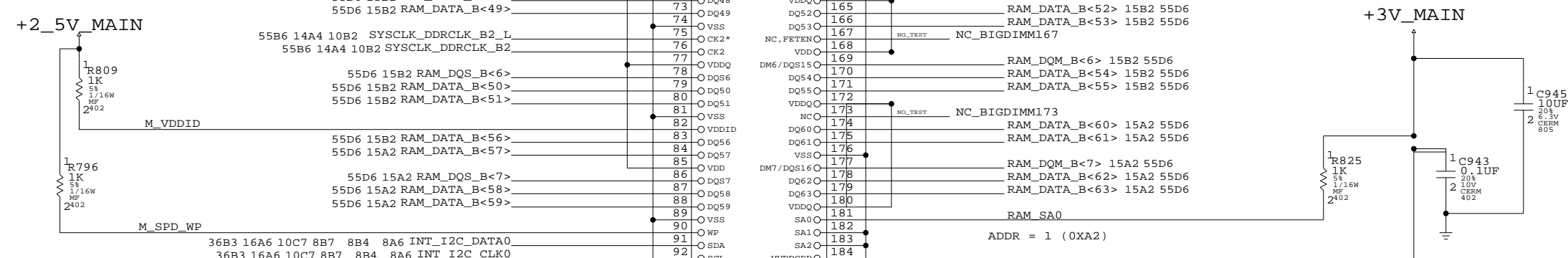
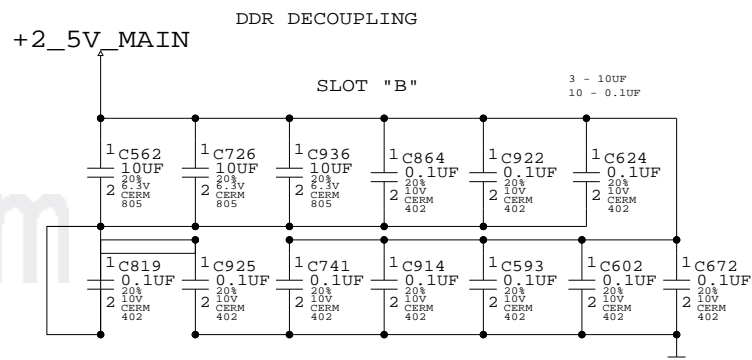
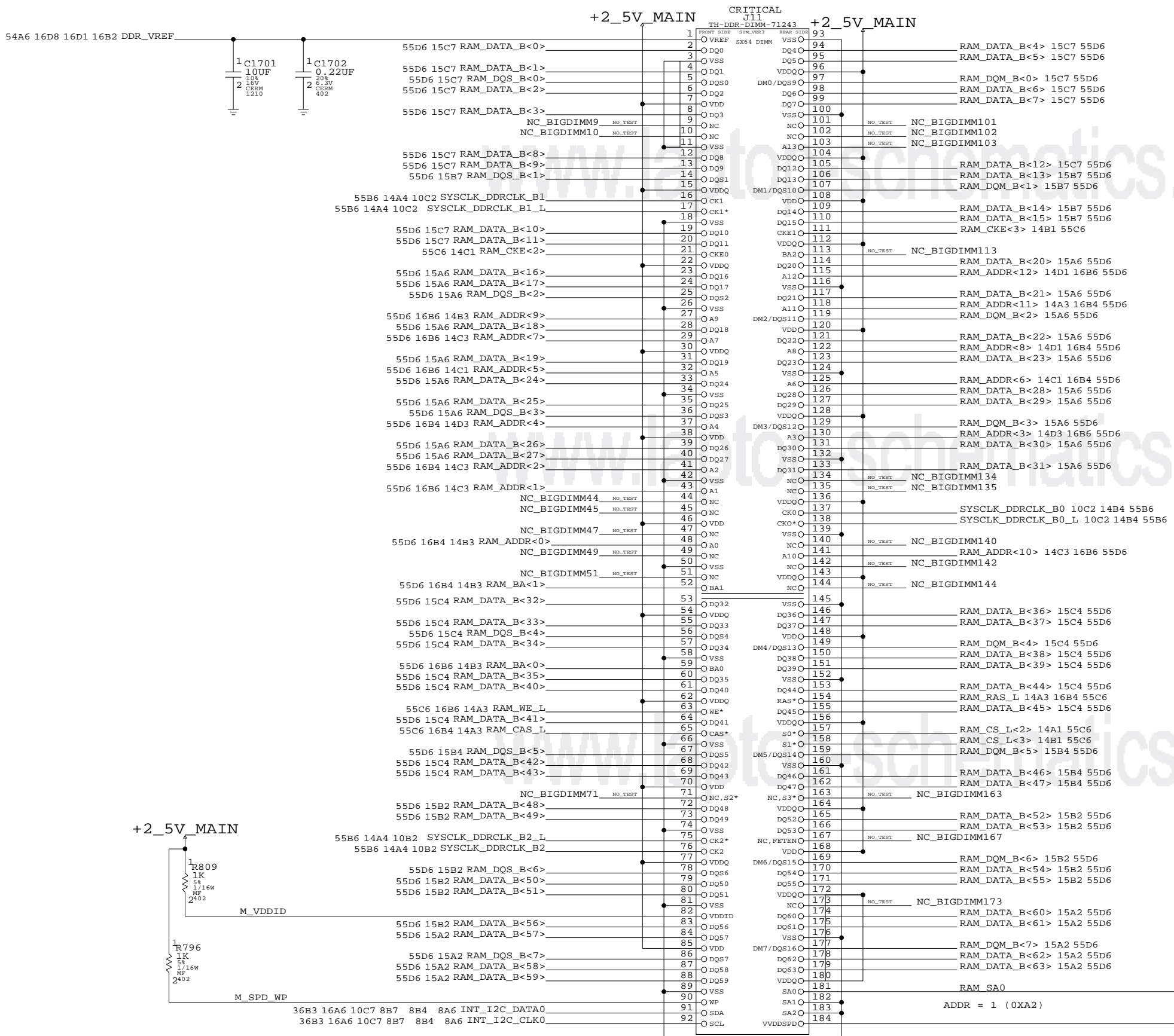
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NONE	16	74





(516-1001) DDR SDRAM SLOT B

**BIG DIMM SLOT B**

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	NONE	D 051-6423	D
SCALE		SHT	OF
		17	74

D

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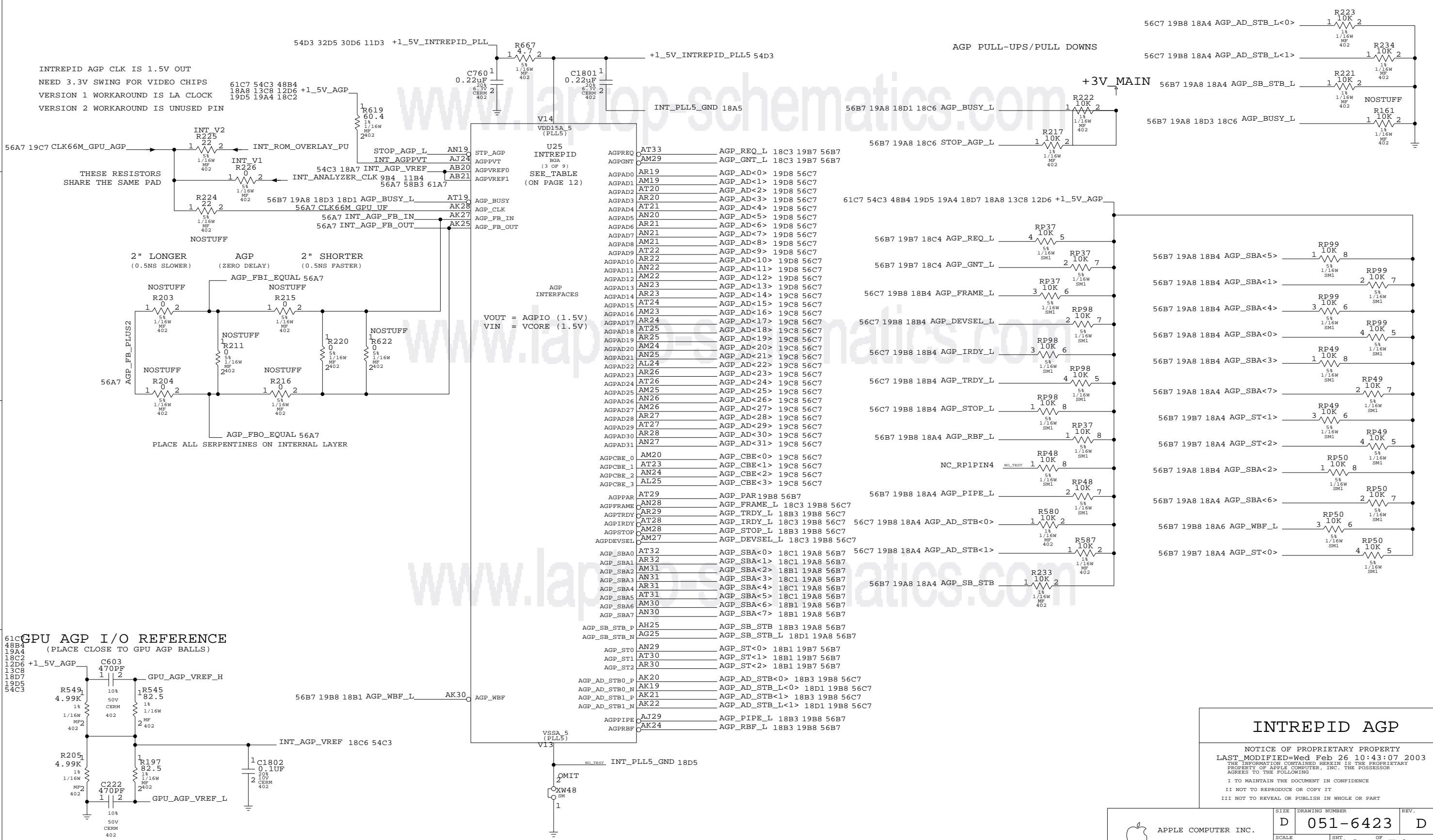
A

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A



**INTREPID AGP**

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D 051-6423 D

SCALE NONE SHT 18 OF 74

61C7 54C3 48B4 19A4 18D7 18C2 18A8 13C8 12D6 +1\_5V\_AGP

D

D

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B

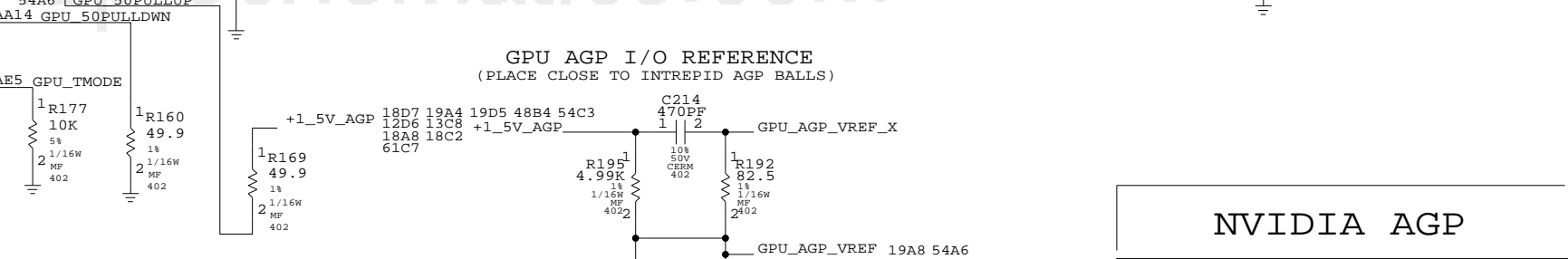
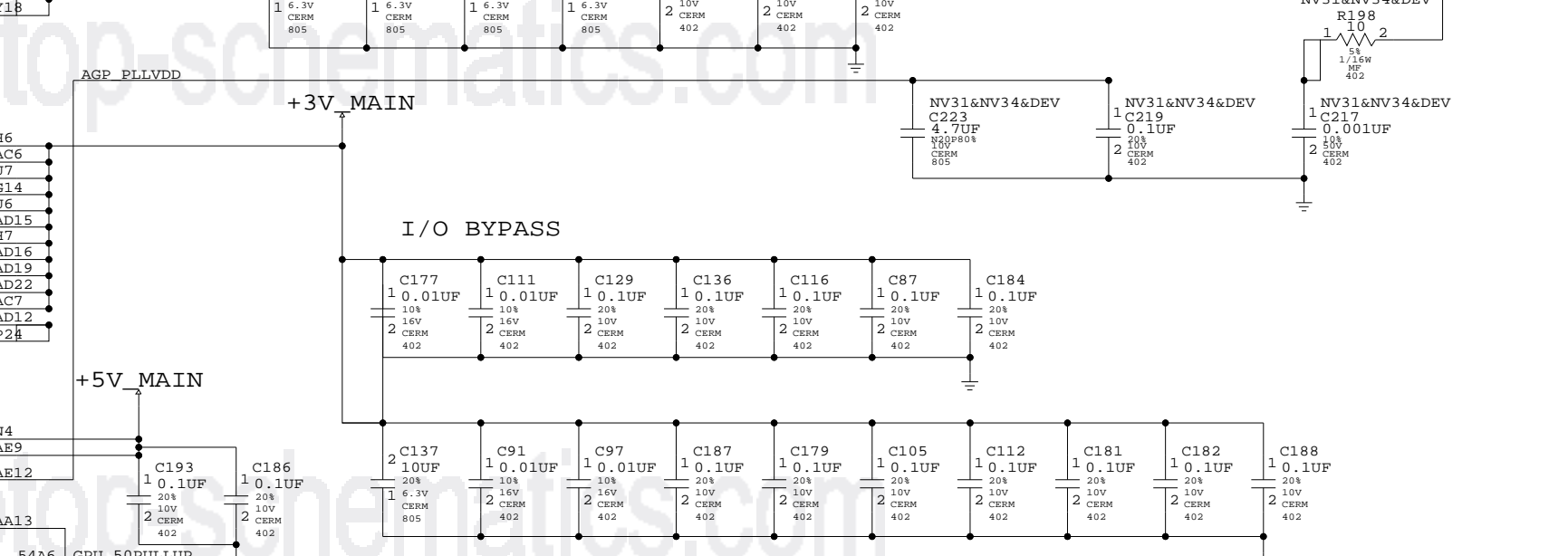
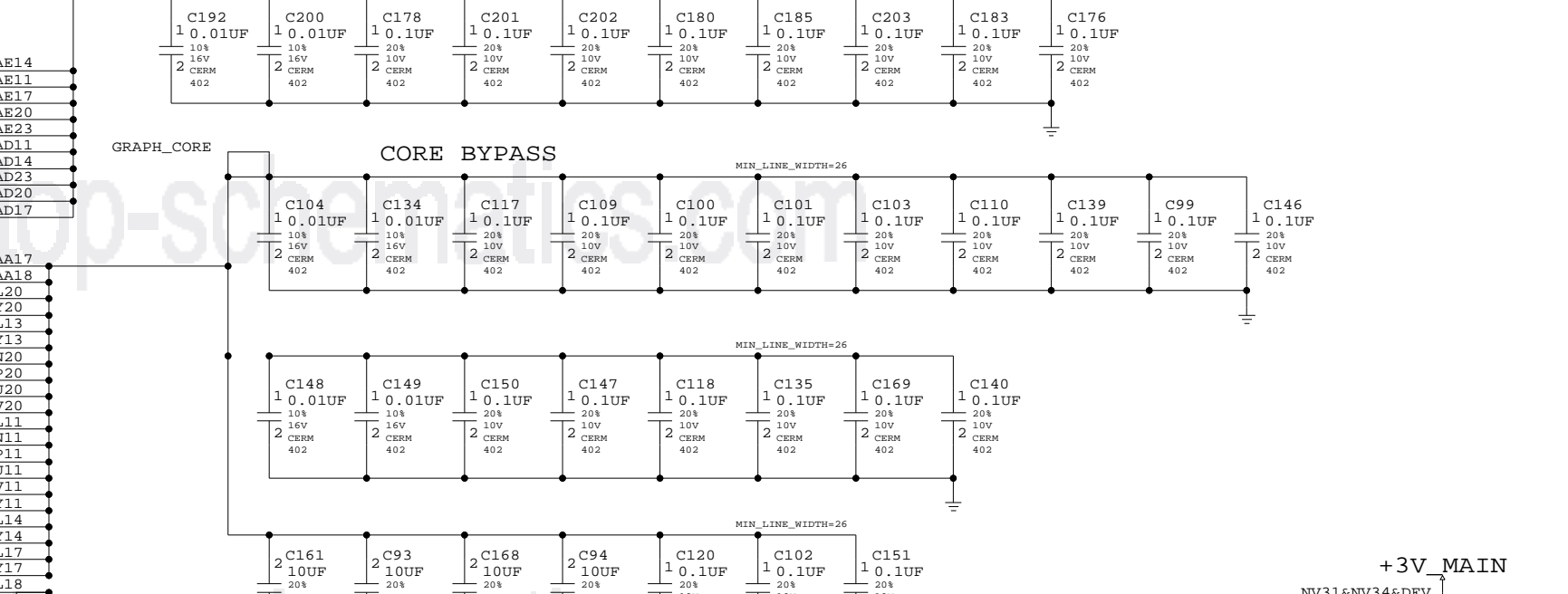
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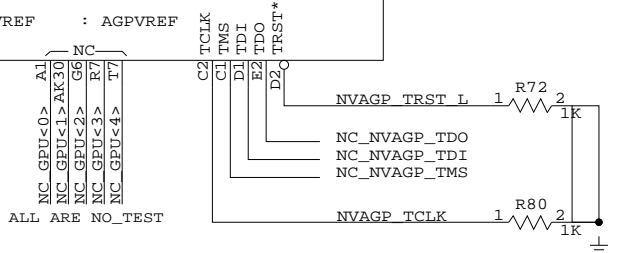
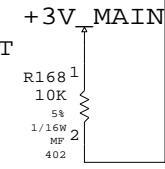
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56C7 18C4 AGP_AD<2>	3	5	6	NO_TEST 56B7 GPU AGP AD<2>	AH27	PCIAD2
56C7 18C4 AGP_AD<3>	4	1/16W SM1	5	NO_TEST 56B7 GPU AGP AD<3>	AK27	PCIAD3
56C7 18C4 AGP_AD<4>	1	8	8	NO_TEST 56B7 GPU AGP AD<4>	AJ27	PCIAD4
56C7 18C4 AGP_AD<5>	56B7 2	RP30	7	NO_TEST GPU AGP AD<5>	AH26	PCIAD5
56C7 18C4 AGP_AD<6>	56B7 3	22	6	NO_TEST GPU AGP AD<6>	AJ26	PCIAD6
56C7 18C4 AGP_AD<7>	56B7 4	1/16W SM1	5	56B7 GPU AGP AD<7>	AH25	PCIAD7
56C7 18C4 AGP_AD<8>	1	8	8	NO_TEST 56B7 GPU AGP AD<8>	AH23	PCIAD8
56C7 18C4 AGP_AD<9>	2	RP32	7	NO_TEST 56B7 GPU AGP AD<9>	AJ23	PCIAD9
56C7 18C4 AGP_AD<10>	3	22	6	NO_TEST 56B7 GPU AGP AD<10>	AH22	PCIAD10
56C7 18C4 AGP_AD<11>	4	1/16W SM1	5	NO_TEST 56B7 GPU AGP AD<11>	AJ22	PCIAD11
56C7 18C4 AGP_AD<12>	1	8	8	NO_TEST 56B7 GPU AGP AD<12>	AJ21	PCIAD12
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- AGP 2X, 4X : AGP 8X
- PCIC0/BE0\* : C0\*/BE0
- PCIC1/BE1\* : C1\*/BE1
- PCIC2/BE2\* : C2\*/BE2
- PCIC3/BE3\* : C3\*/BE3
- PCICLK\* : CLK
- PCIRST\* : RST\*
- PCIGNT\* : GNT
- PCIREQ\* : REQ
- PCIFRAME\* : FRAME
- PCIIRDY\* : IRDY
- PCITRDY\* : TRDY
- PCIDEVSEL\* : DEVSEL
- PCISTOP\* : STOP
- PCIPAR\* : PAR
- PCIINTA\* : INTA
- NC\_PCIINTB\* : INTB
- AGPRBF\* : RBF
- AGPWBF\* : WBF
- AGPPPIPE\* : DBI\_HI
- <RESRVD> : DBI\_LO
- AGPST0 : ST0
- AGPST1 : ST1
- AGPST2 : ST2
- AGPADSTBF0 : ADSTBF0
- AGPADSTBS0\* : ADSTBS0
- AGPADSTBF1 : ADSTBF1
- AGPADSTBS1\* : ADSTBS1
- AGPSBSTBF : SBSTBF
- AGPSBSTBS\* : SBSTBS
- AGPSBA0 : SBA0\*
- AGPSBA1 : SBA1\*
- AGPSBA2 : SBA2\*
- AGPSBA3 : SBA3\*
- AGPSBA4 : SBA4\*
- AGPSBA5 : SBA5\*
- AGPSBA6 : SBA6\*
- AGPSBA7 : SBA7\*
- <RESRVD> : MBDET\*
- AGPBUSY\* : BUSY\*
- AGPSTOP\* : STOP\*
- AGPVREF : AGPVREF

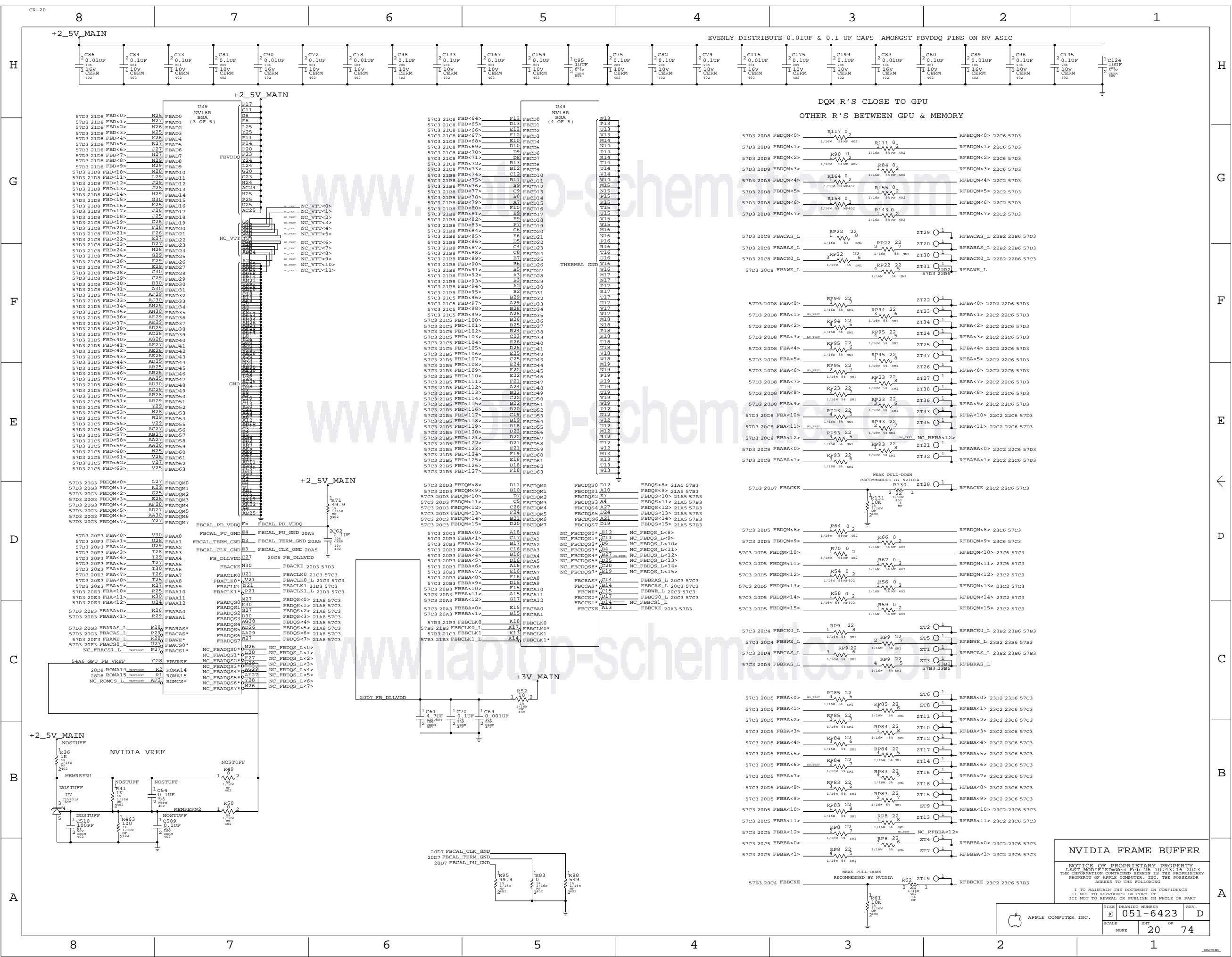


**AGP VERSION SELECT**  
 (LOW = AGP V3.X)  
 (HIGH = AGP V2.X)



**NVIDIA AGP**

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**NVIDIA FRAME BUFFER**  
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SCALE	REV	DATE	BY
SCALE	051-6423	REV	D
SCALE	20	OF	74



8 7 6 5 4 3 2 1

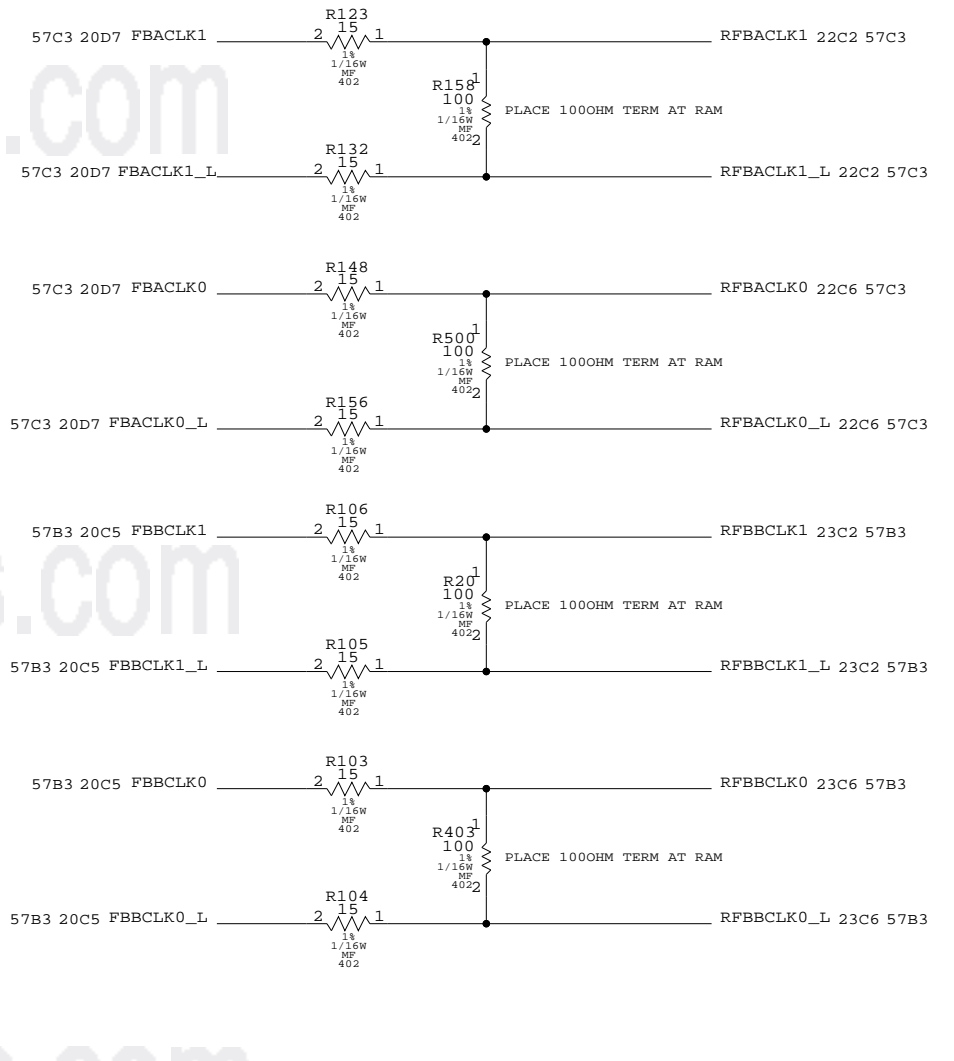
PLACE R'S BETWEEN GPU & MEMORY

Table of component values for GPU & MEMORY connections, including part numbers like 57D3 20G8 FBD<0> and resistor values like 15 1, 15 2, etc.

Table of component values for GPU & MEMORY connections, including part numbers like 57D3 20F8 FBD<32> and resistor values like 15 1, 15 2, etc.

Table of component values for GPU & MEMORY connections, including part numbers like 57D3 20E8 FBD<96> and resistor values like 15 1, 15 2, etc.

PLACE R'S CLOSE TO GPU

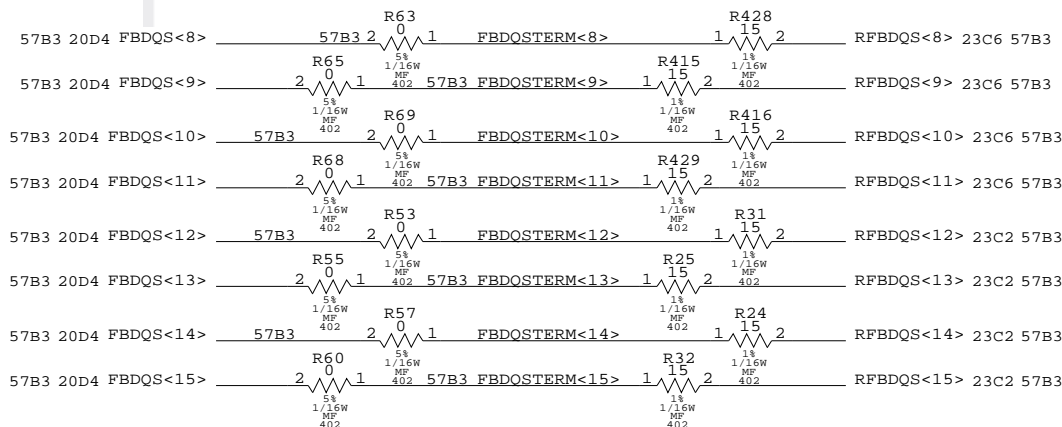
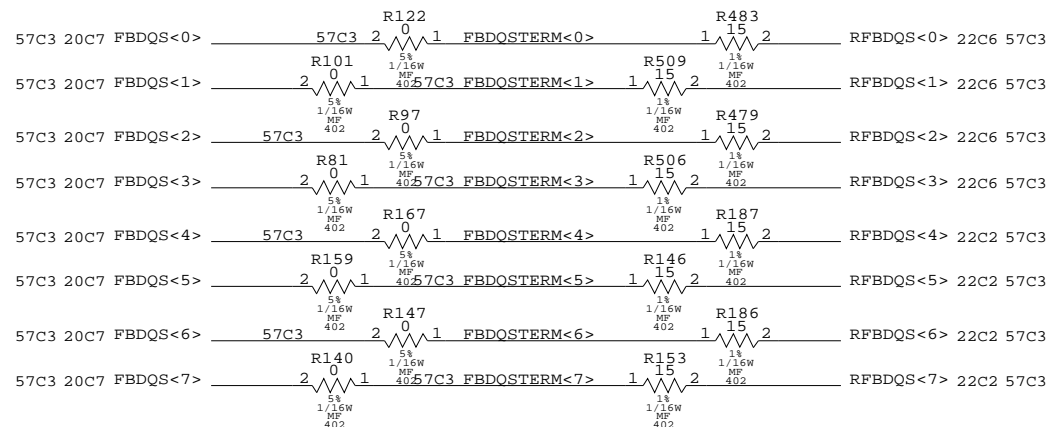


PLACE THESE R CLOSE TO GPU

PLACE THESE R CLOSE TO SGRAM

PLACE THESE R CLOSE TO GPU

PLACE THESE R CLOSE TO SGRAM

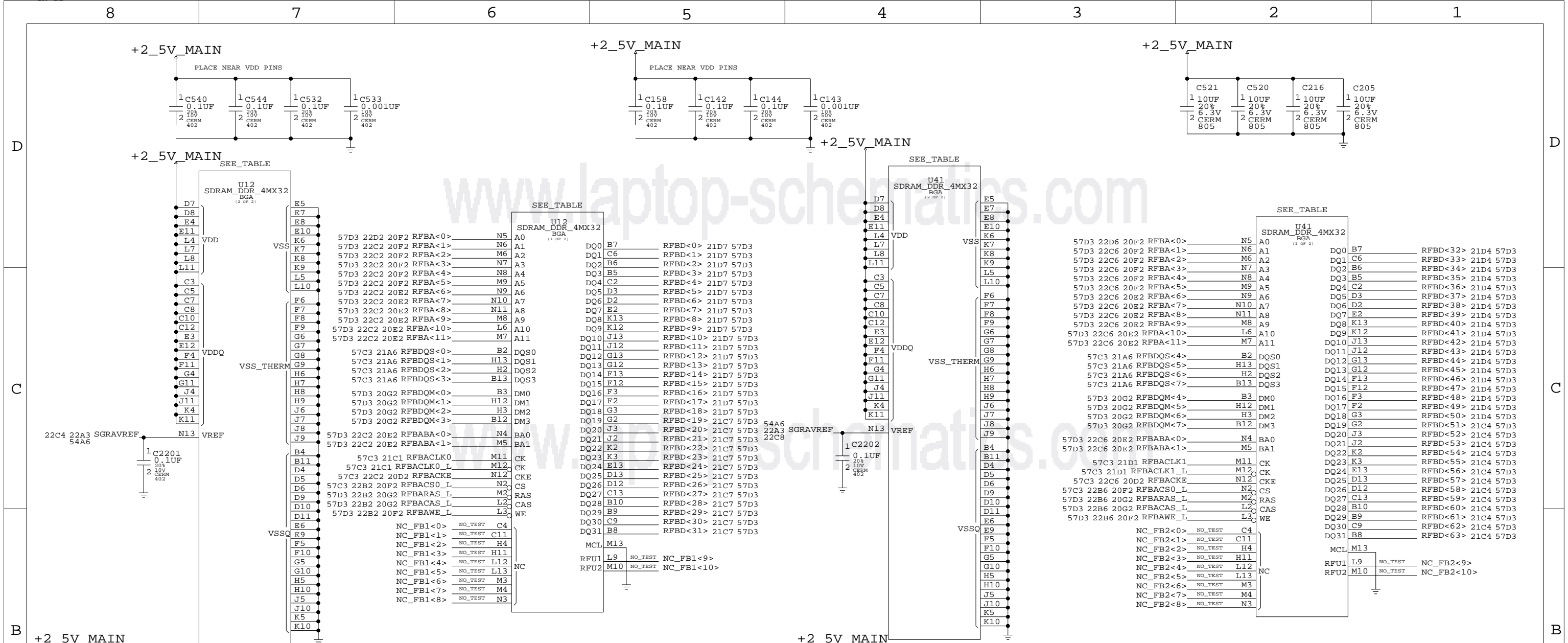


FB TERMINATION

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Drawing information: D 051-6423 D
Scale: NONE
Sheet: 21 OF 74

8 7 6 5 4 3 2 1

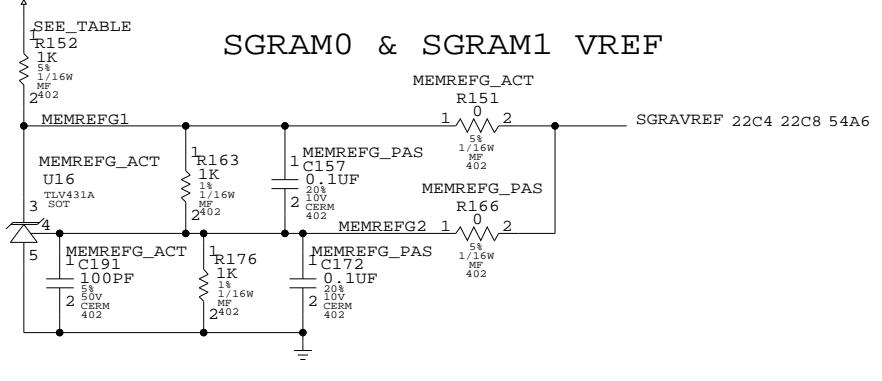


**SGRAM0 & SGRAM1 MEMORY SUPPORT**

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
333S0249	2	SDRAM, 4MX32, DDR, 275MHZ	U12, U41	CRITICAL	275_SAMSUNG
333S0250	2	SDRAM, 4MX32, DDR, 275MHZ	U12, U41	CRITICAL	275_HYNIX

**SGRAM0 & SGRAM1 DDR MEMORY REFERENCE SUPPORT**

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
116S1103	1	RES, 1K-OHM, 5%, 1/16W, 0402	R152		MEMREFG_ACT
116S1000	1	RES, 0-OHM, 5%, 1/16W, 0402	R152		MEMREFG_PAS



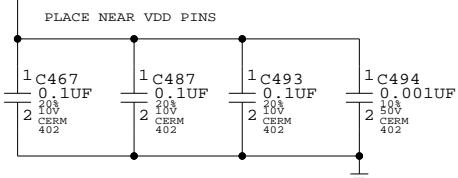
### SGRAM0 & SGRAM1

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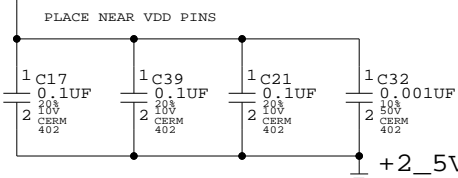
APPLE COMPUTER INC.

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SCALE	SHT	OF
NONE	22	74

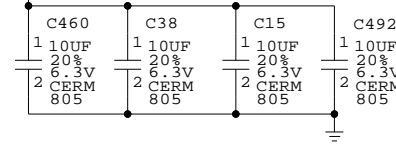
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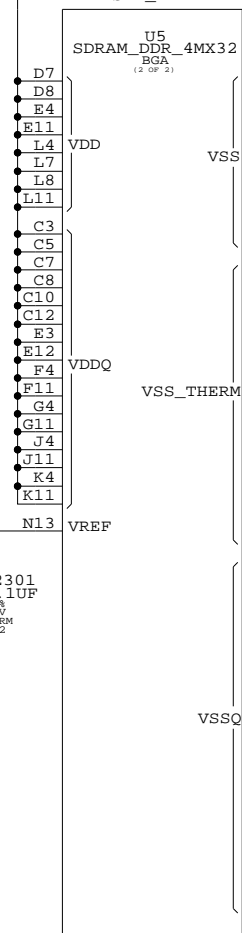
+2\_5V\_MAIN



+2\_5V\_MAIN



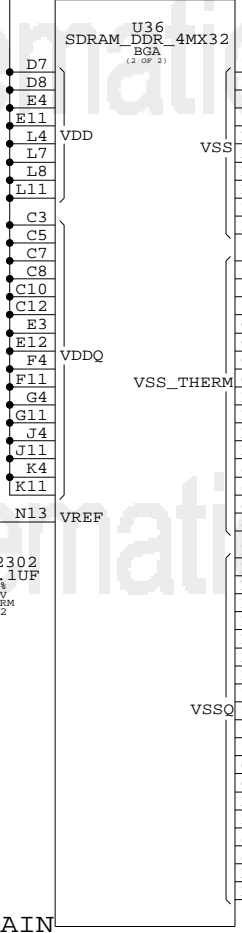
+2\_5V\_MAIN



SEE\_TABLE

Table mapping SDRAM pins to memory banks and addresses for U5 and U36.

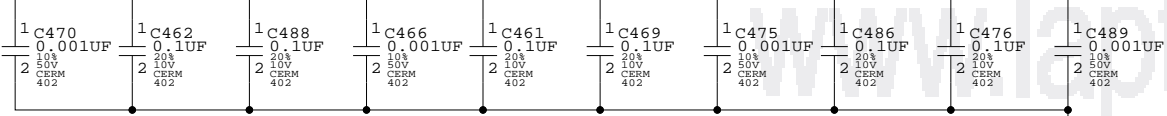
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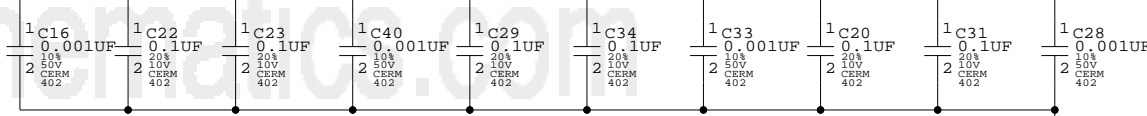
SEE\_TABLE

Table mapping SDRAM pins to memory banks and addresses for U5 and U36.

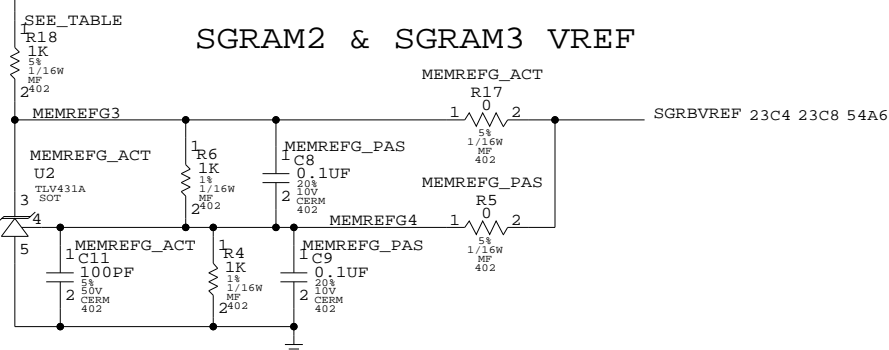
+2\_5V\_MAIN



+2\_5V\_MAIN



+2\_5V\_MAIN



SGRAM0 & SGRAM1 MEMORY SUPPORT

Table with 6 columns: PART NUMBER, QTY, DESCRIPTION, REFERENCE DES, CRITICAL, BOM OPTION. Lists SDRAM parts 333S0249 and 333S0250.

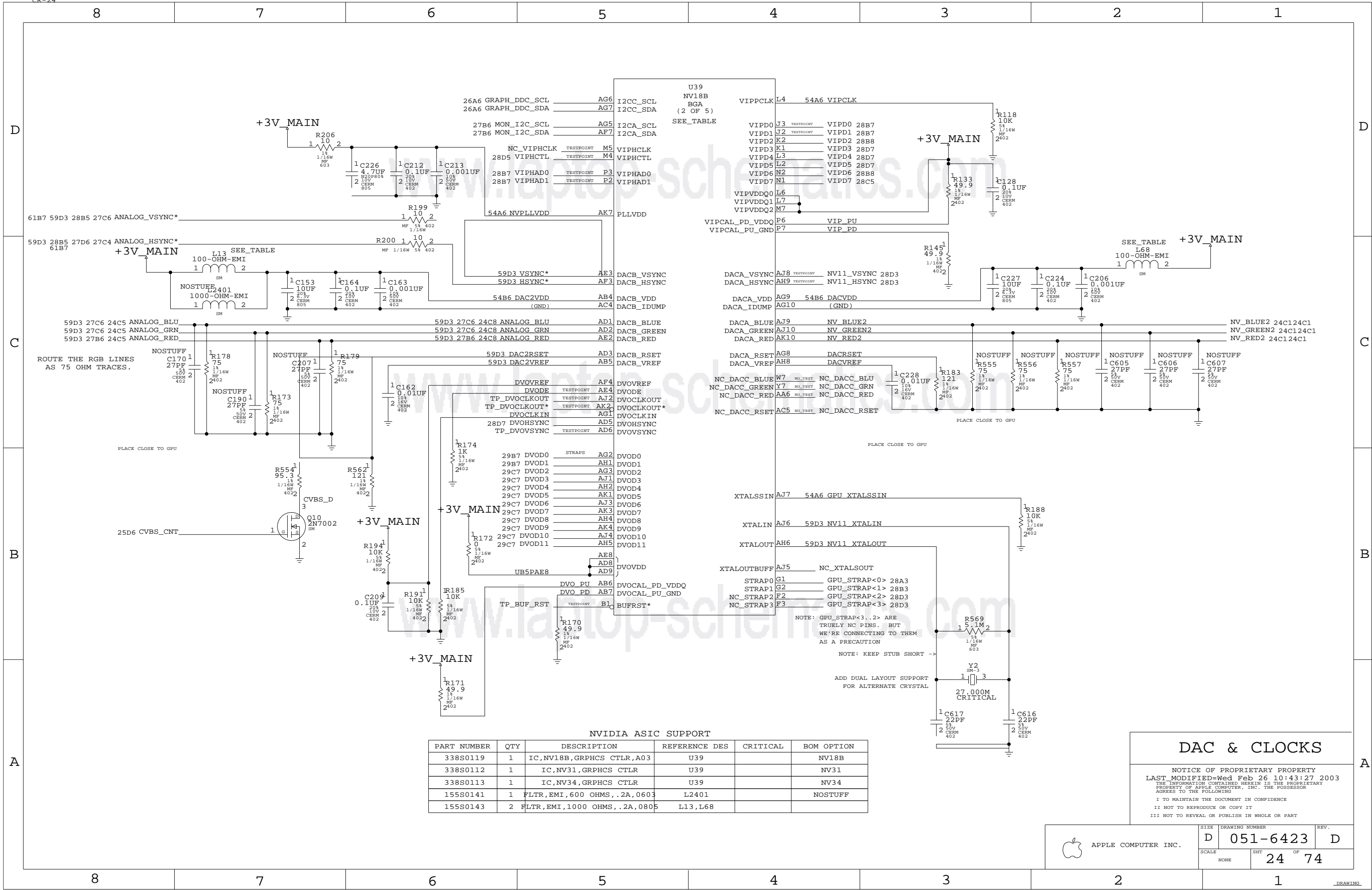
SGRAM2 & SGRAM3 DDR MEMORY REFERENCE SUPPORT

Table with 6 columns: PART NUMBER, QTY, DESCRIPTION, REFERENCE DES, CRITICAL, BOM OPTION. Lists resistor parts 116S1103 and 116S1000.

SGRAM2 & SGRAM3

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**NVIDIA ASIC SUPPORT**

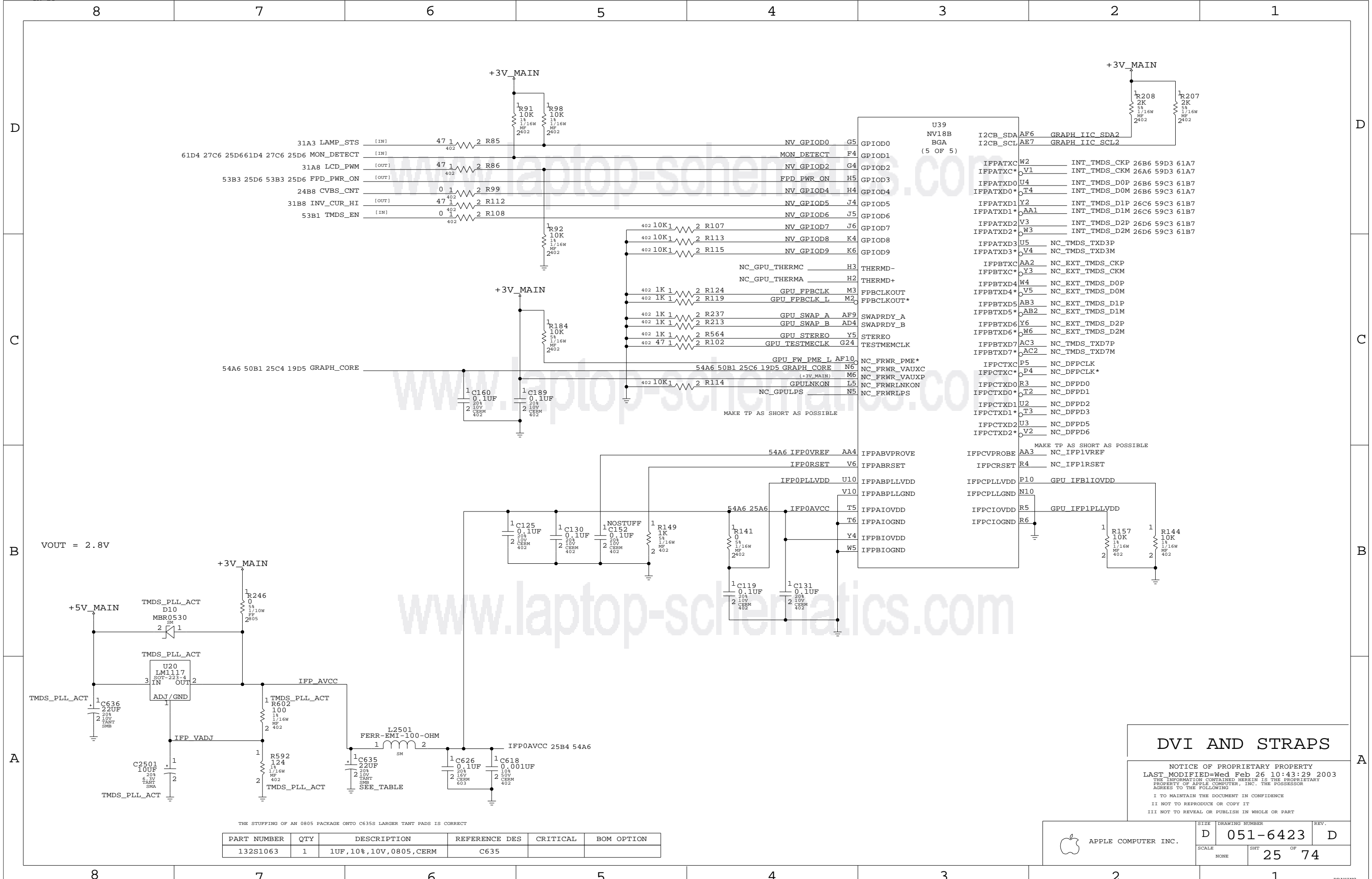
PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
338S0119	1	IC,NV18B,GRPHCS CTLR,A03	U39		NV18B
338S0112	1	IC,NV31,GRPHCS CTLR	U39		NV31
338S0113	1	IC,NV34,GRPHCS CTLR	U39		NV34
155S0141	1	FLTR,EMI,600 OHMS,.2A,0603	L2401		NOSTUFF
155S0143	2	FLTR,EMI,1000 OHMS,.2A,0805	L13,L68		NOSTUFF

**DAC & CLOCKS**

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NONE	24	74	





**DVI AND STRAPS**

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PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
132S1063	1	1UF, 10%, 10V, 0805, CERM	C635		

APPLE COMPUTER INC.

SCALE: NONE SHT: 25 OF 74

THE STUFFING OF AN 0805 PACKAGE ONTO C635S LARGER TANT PADS IS CORRECT

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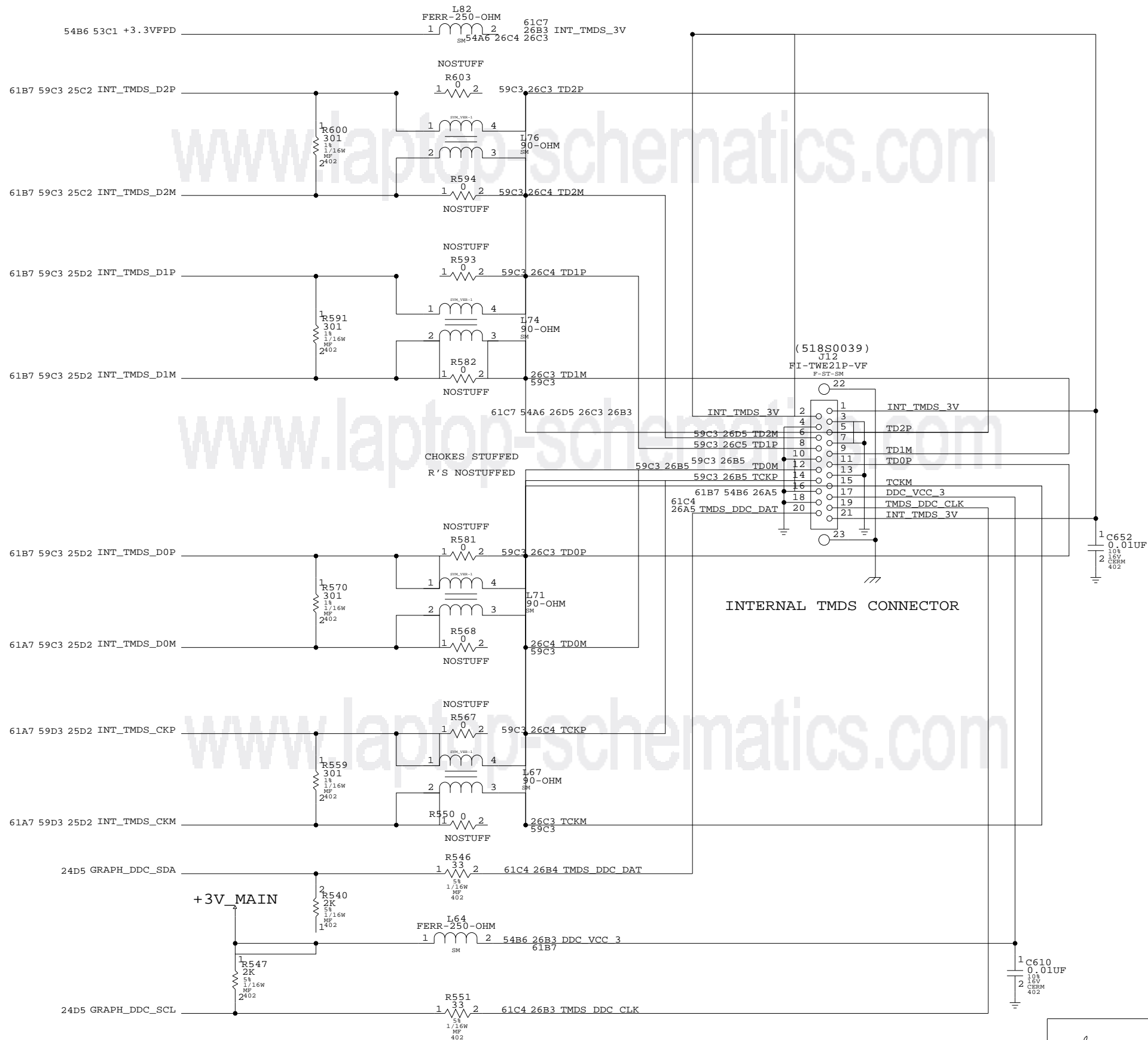
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**TMDS**

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	SCALE	NONE	SHT 26 OF 74

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D

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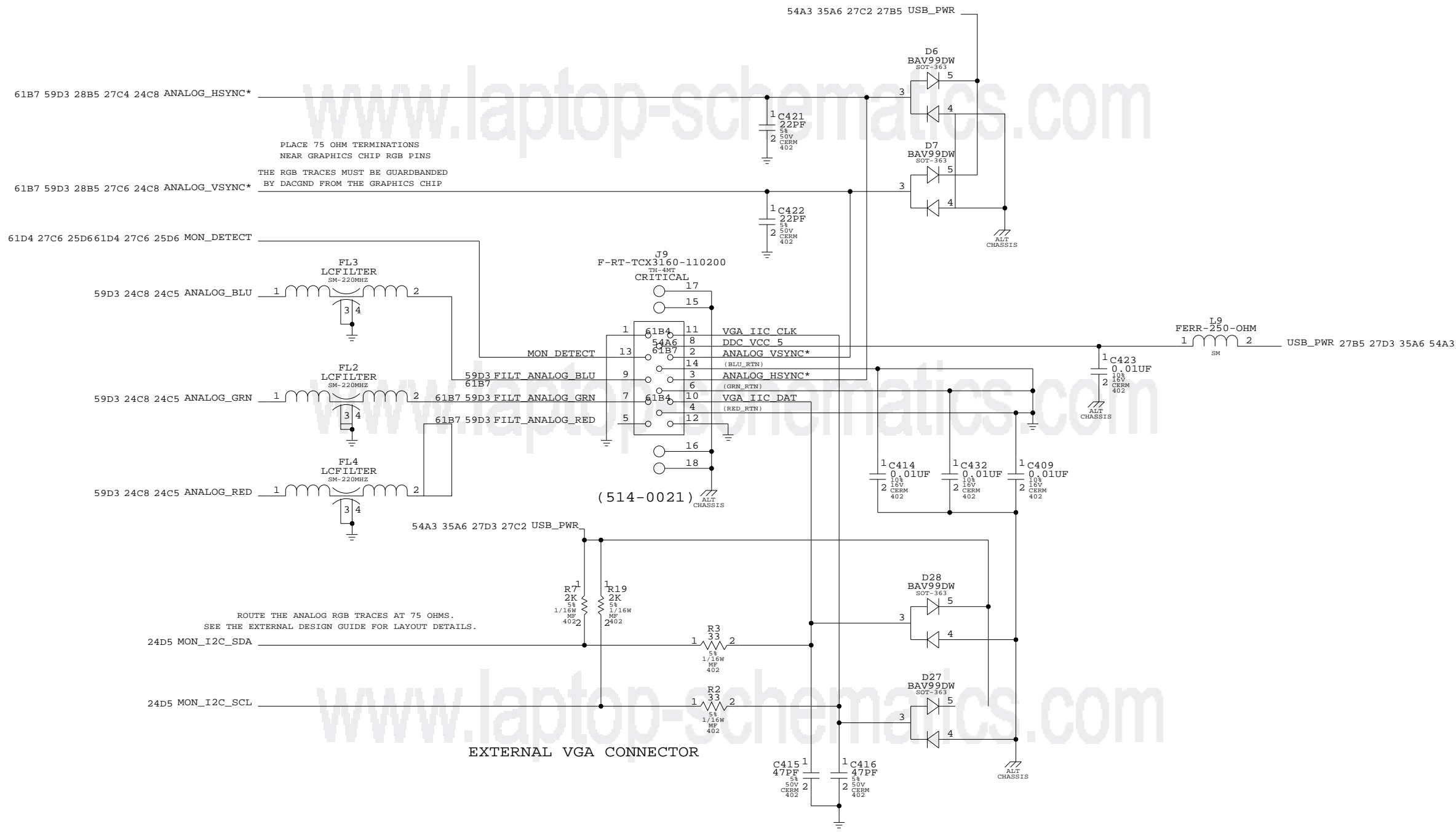
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PLACE 75 OHM TERMINATIONS  
NEAR GRAPHICS CHIP RGB PINS  
THE RGB TRACES MUST BE GUARDBANDED  
BY DACGND FROM THE GRAPHICS CHIP

ROUTE THE ANALOG RGB TRACES AT 75 OHMS.  
SEE THE EXTERNAL DESIGN GUIDE FOR LAYOUT DETAILS.

EXTERNAL VGA CONNECTOR

### EXTERNAL VGA

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	D	051-6423	D
SCALE	NONE	SHT	27 OF 74

D

D

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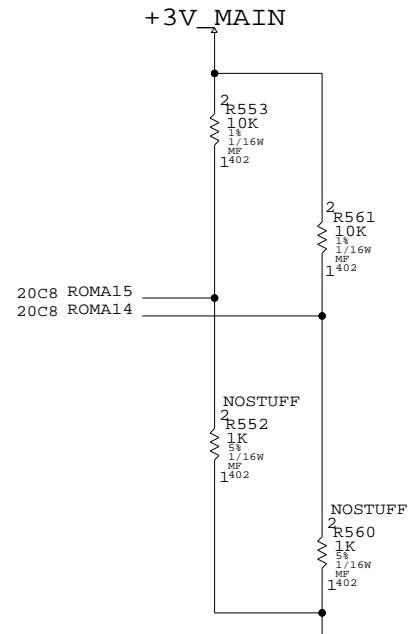
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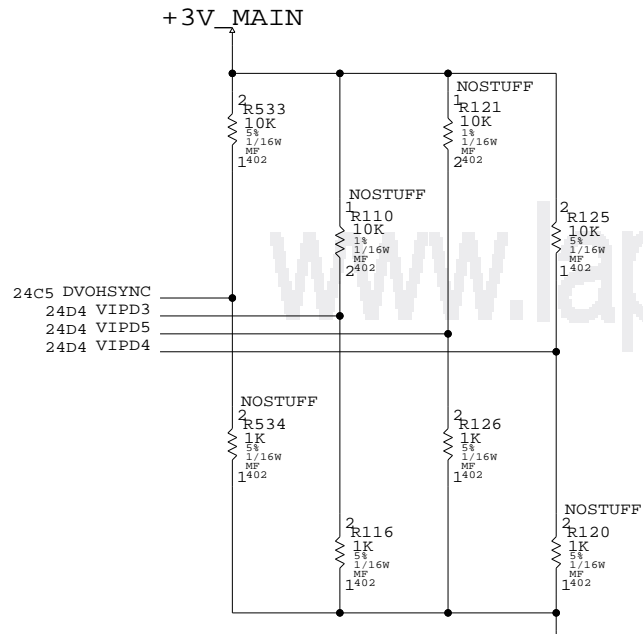
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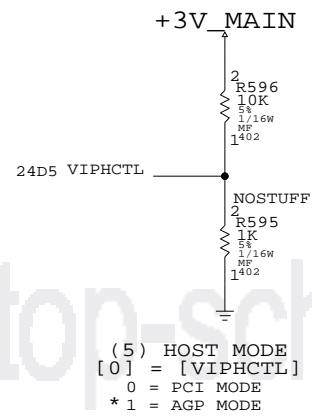
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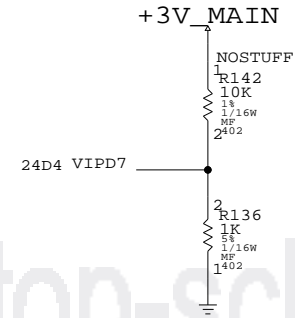
(1) ROM TYPE (OVERRIDDEN IF STRAP1 = 0)  
 [1..0] = [ROMA15,ROMA14]  
 00 = PARALLEL  
 01 = SERIAL AT25F  
 10 = SERIAL SST45VF  
 \* 11 = SERIAL FUTURE



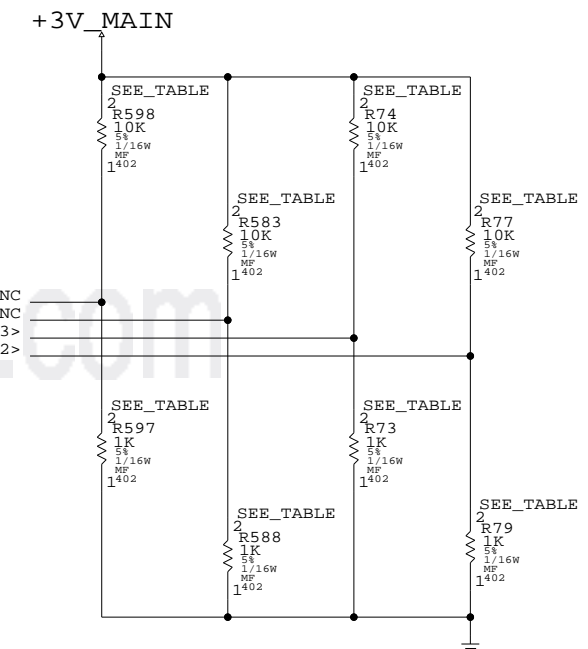
(3) PCI DEVICE ID  
 [3..0] = [DVOHSYNC, VIPD3, VIPD5, VIPD4]  
 0010 = 0X112 GEFORCE2 GO  
 0011 = 0X113 QUADRO2 GO  
 0100 = 0X114 NV17M  
 0000 = 0X110 GEFORCE2GO MX (NV11B)  
 \* 1001 = NV18B, NV31, NV34



(5) HOST MODE  
 [0] = [VIPHCTL]  
 0 = PCI MODE  
 \* 1 = AGP MODE

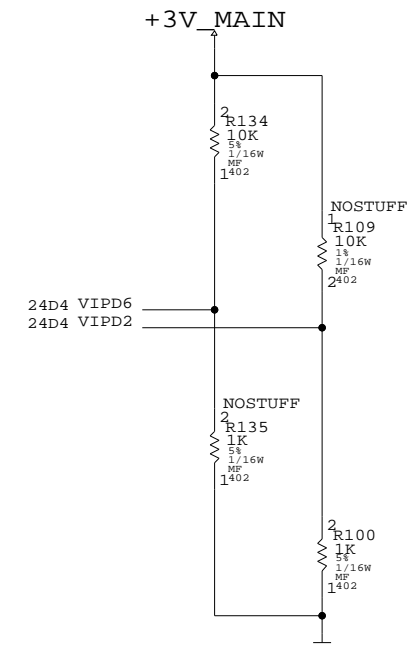


(6) AGP SIDE BAND  
 [0] = [VIPD7]  
 \* 0 = ENABLE AGP SIDE BAND  
 1 = DISABLE AGP SIDE BAND

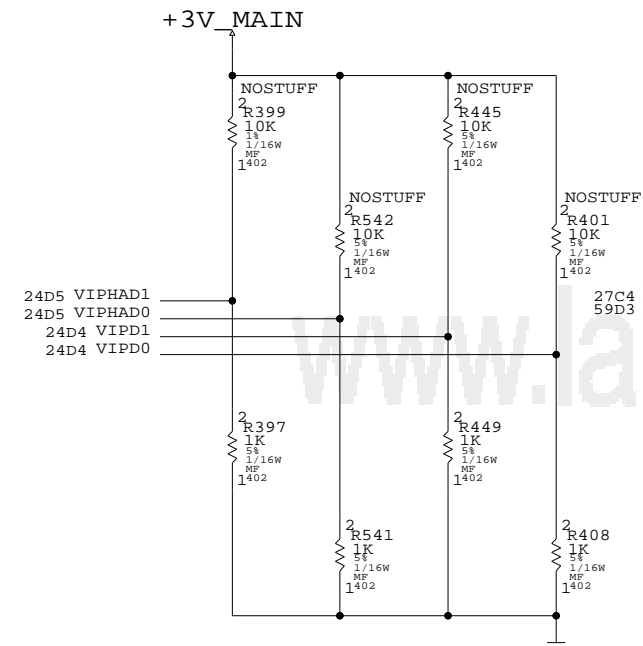


(8) FRAME BUFFER MEMORY TYPE  
 [3..0] = [NV11\_HSYNC, NV11\_VSYNC, GPU\_STRAP<3>, GPU\_STRAP<2>]  
 1111 = 222MHZ  
 1101 = 275MHZ SAMSUNG  
 1100 = 275MHZ HYNIX

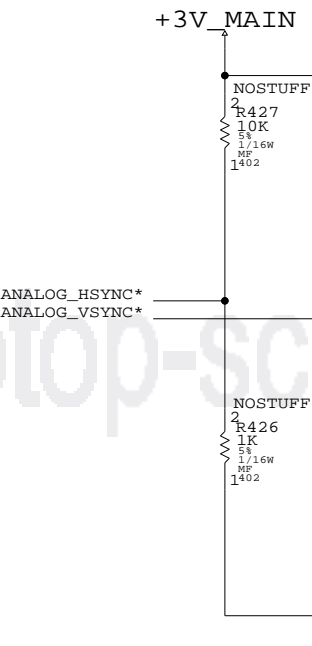
PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
116S1104	3	RES, 10KOHM, 5%, 0402	R598, R583, R77		275_SAMSUNG
116S1103	1	RES, 1KOHM, 5%, 0402	R73		275_SAMSUNG
116S1104	2	RES, 10KOHM, 5%, 0402	R598, R583		275_HYNIX
116S1103	2	RES, 1KOHM, 5%, 0402	R73, R79		275_HYNIX



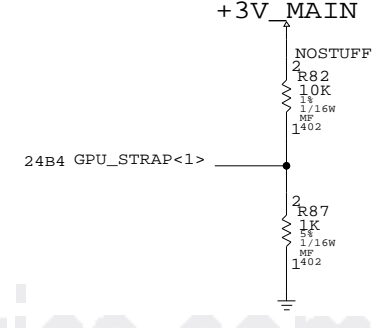
(2) CRYSTAL FREQUENCY SELECT  
 [1..0] = [VIPD6, VIPD2]  
 00 = 13.5MHZ  
 01 = 14.38MHZ  
 \* 10 = 27MHZ  
 11 = {UNDEFINED}



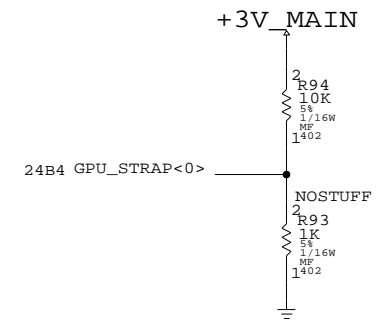
(4) USER DEFINED STRAPS  
 [3..0] = [VIPHAD1, VIPHAD0, VIPD1, VIPD0]  
 THESE BITS ARE UNDEFINED BUT THEY  
 MUST BE KEPT LOW DURING RESET



(7) TV MODE  
 [1..0] = [ANALOG\_HSYNC\*, ANALOG\_VSYNC\*]  
 00 = SECAM  
 01 = NTSC  
 10 = PAL  
 \* 11 = DISABLED  
 (THESE RESISTORS ARE ALL NOSTUFF)



(9) SUB-VENDOR  
 [0] = [GPU\_STRAP<1>]  
 0 = SYSTEM BIOS (VENDOR & SUBSYSTEM ID=0X0000)  
 \* 1 = ADAPTER CARD VGA BIOS (VENDOR & SUBSYSTEM ID=0X54-0X57)



(10) PCI ADDRESS BUS  
 [0] = [GPU\_STRAP<0>]  
 0 = REVERSED  
 \* 1 = NORMAL

### NVIDIA STRAPS 1

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	D	051-6423	D
SCALE	NONE	SHT	28 OF 74

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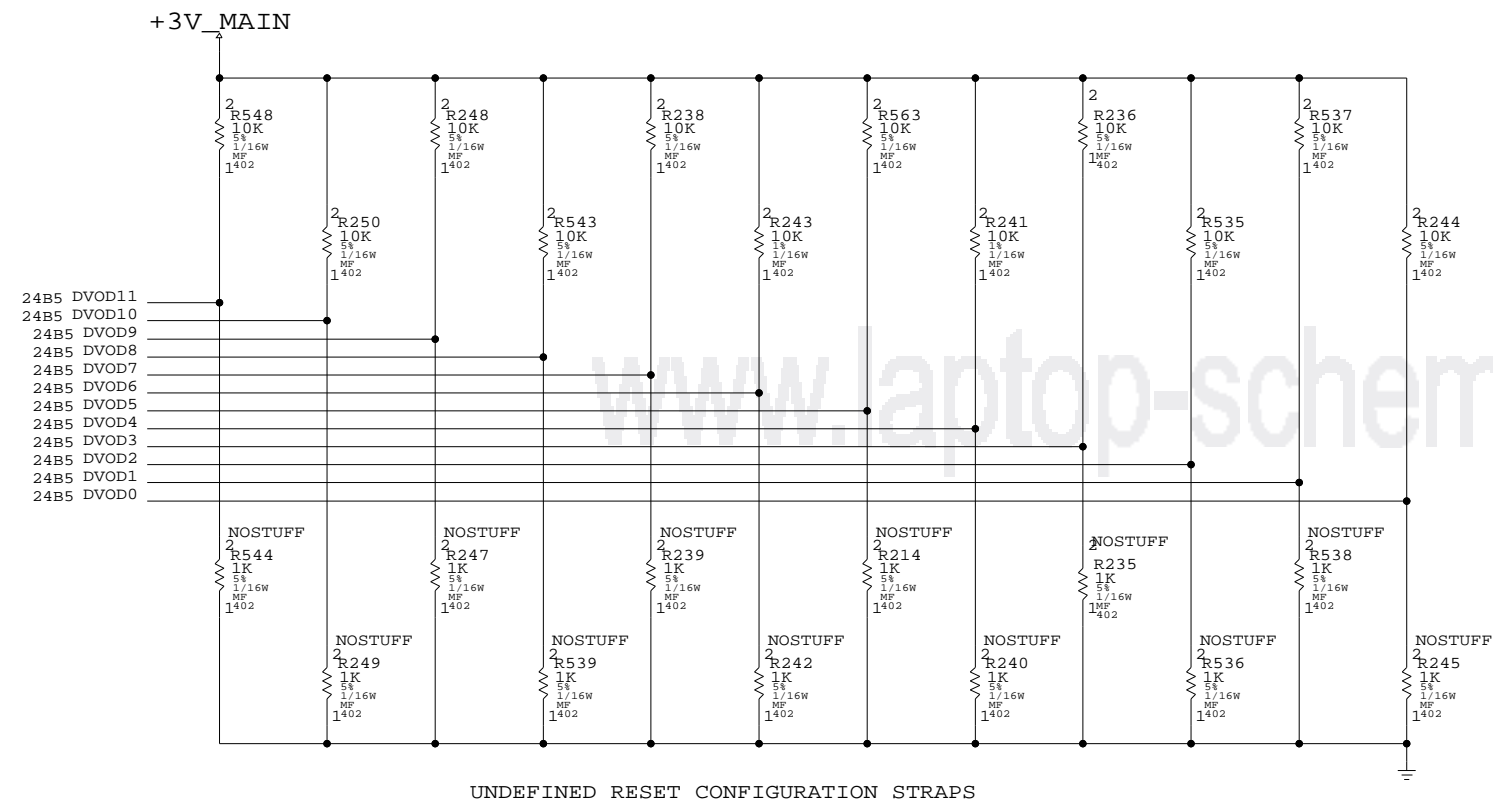
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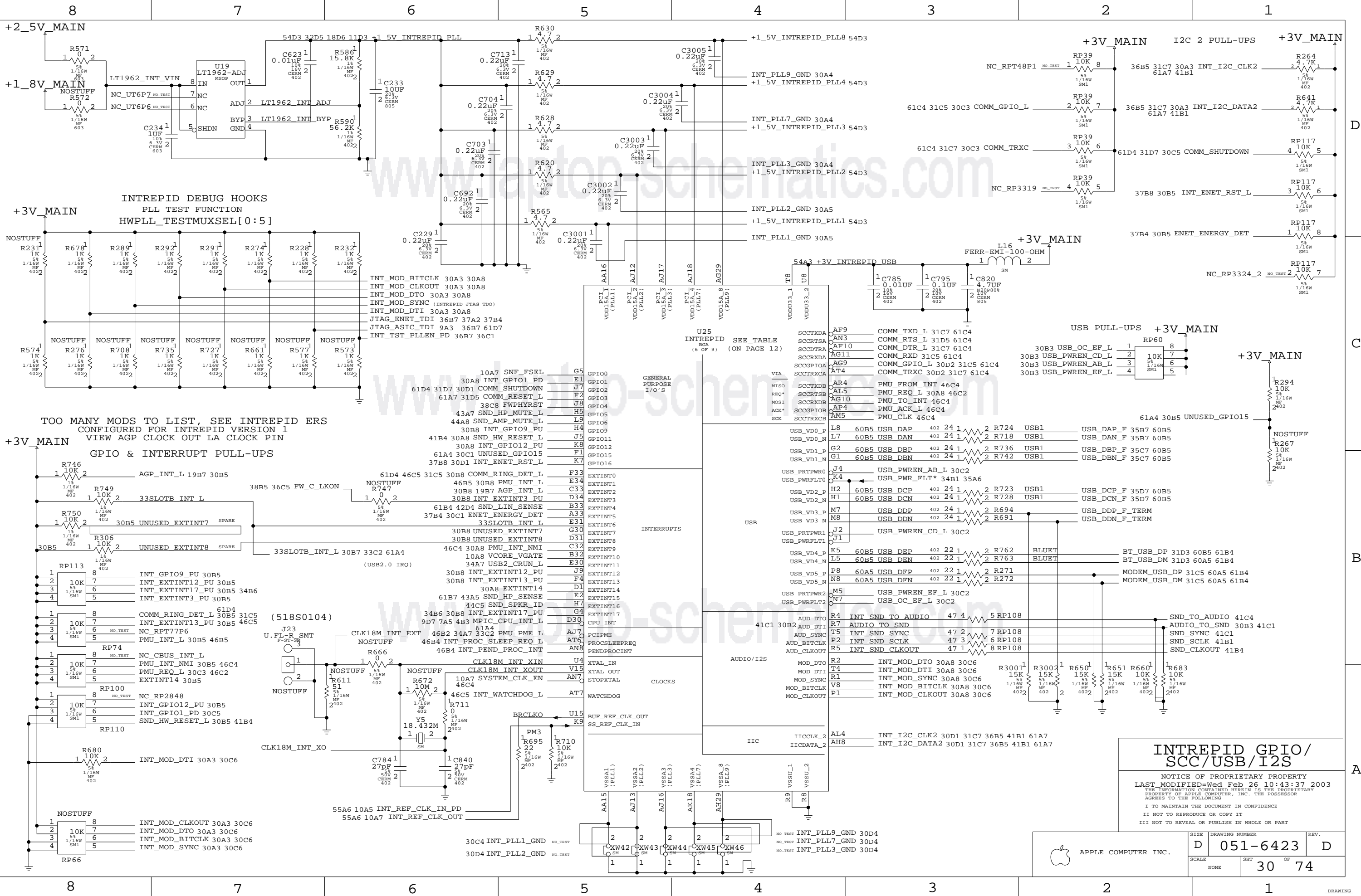


### NVIDIA STRAPS 2

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SCALE	SHT		OF
NONE	29		74

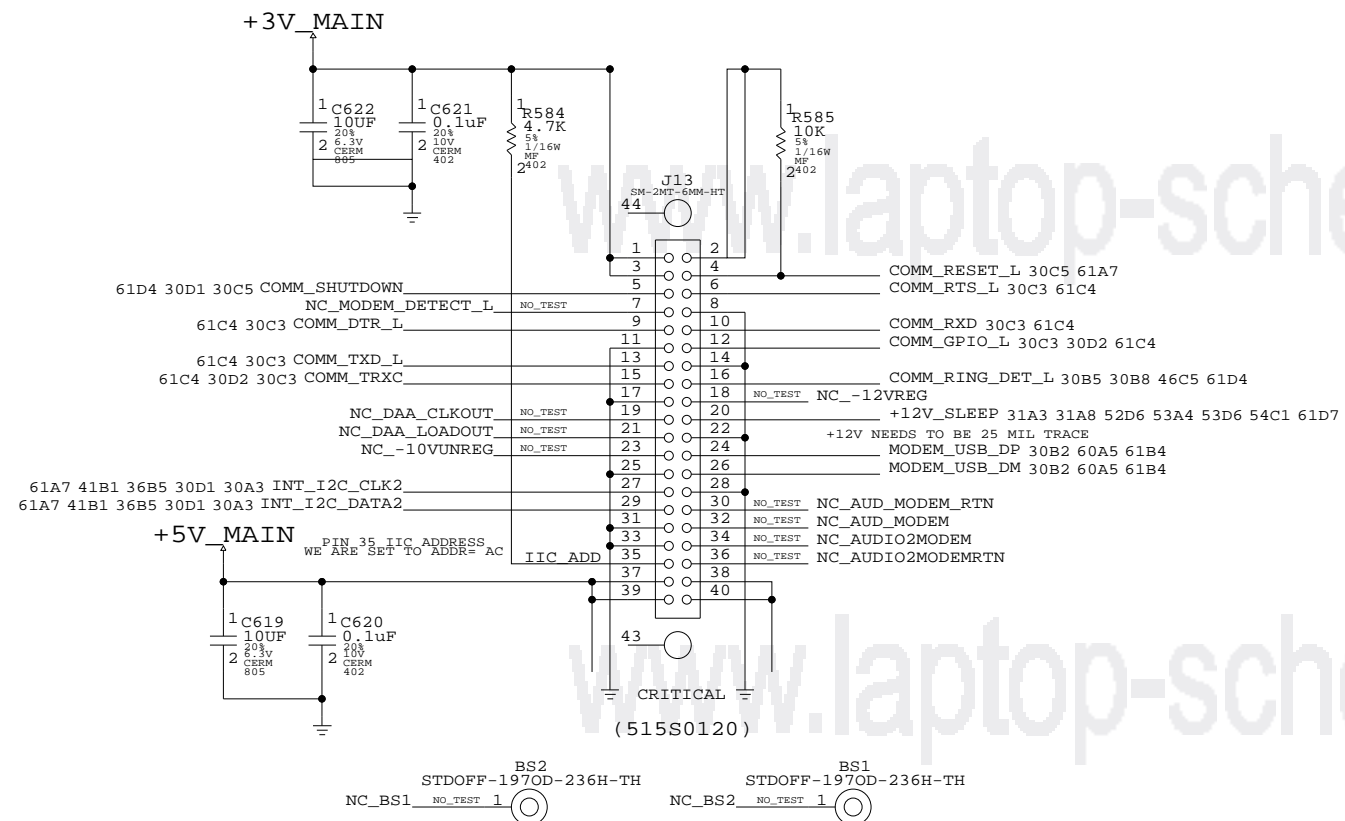


**INTREPID GPIO/SCC/USB/I2S**

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	D	051-6423	D
SCALE	SHT		OF
NONE	30		74

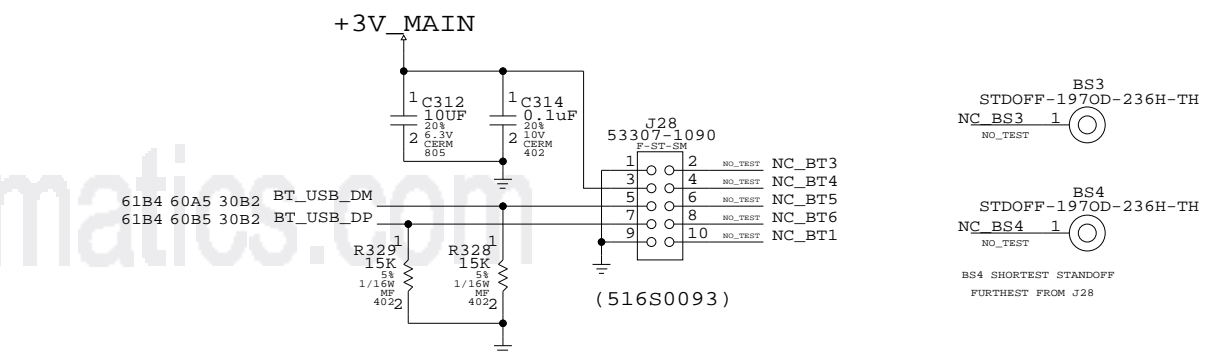
### MODEM BOARD CONNECTOR (DASH II)



MODEM STANDOFF SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
860-1034	2	STDOFF-19709-236H-TH	BS1, BS2		

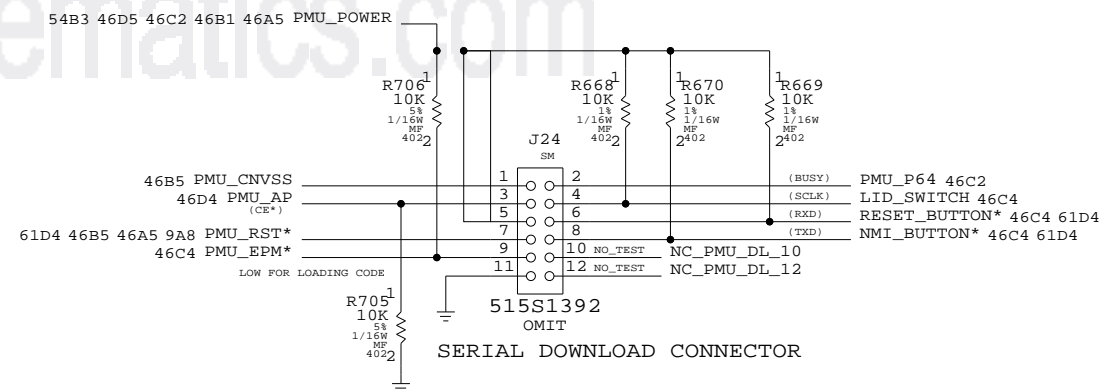
### BLUETOOTH CONNECTOR



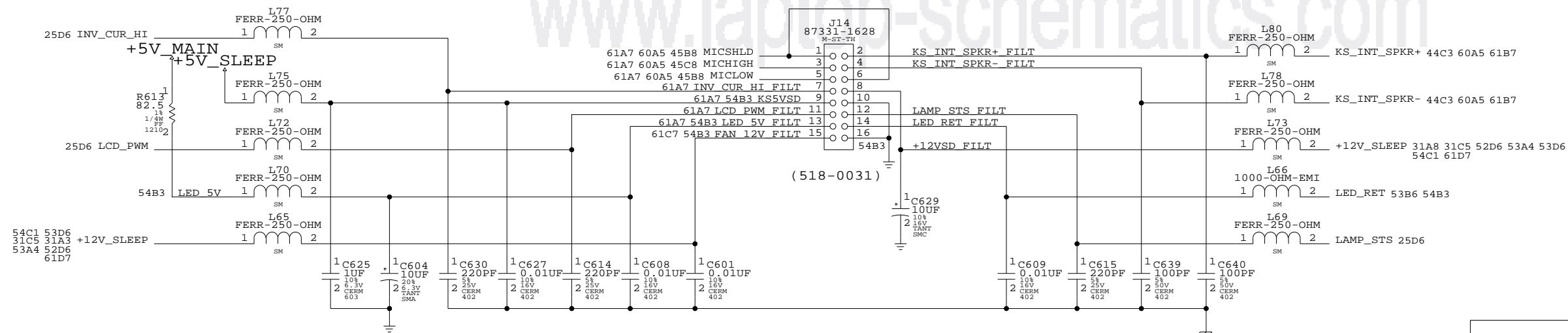
BLUETOOTH CARD MOUNTING HARDWARE SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
860-0170	1	STDOFF, BLUETOOTH, SHORT	BS4		
860-0171	1	STDOFF, BLUETOOTH, LONG	BS3		

### SERIAL DOWNLOAD INTERFACE



### 'KITCHEN SINK' CONNECTOR (MICROPHONE, INTERNAL SPEAKER CONNECTIONS INVERTER, LCD, LED & FAN POWER)



### MODEM, BLUETOOTH, & SERIAL DOWNLOAD

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SCALE	SHT	OF
NONE	31	74

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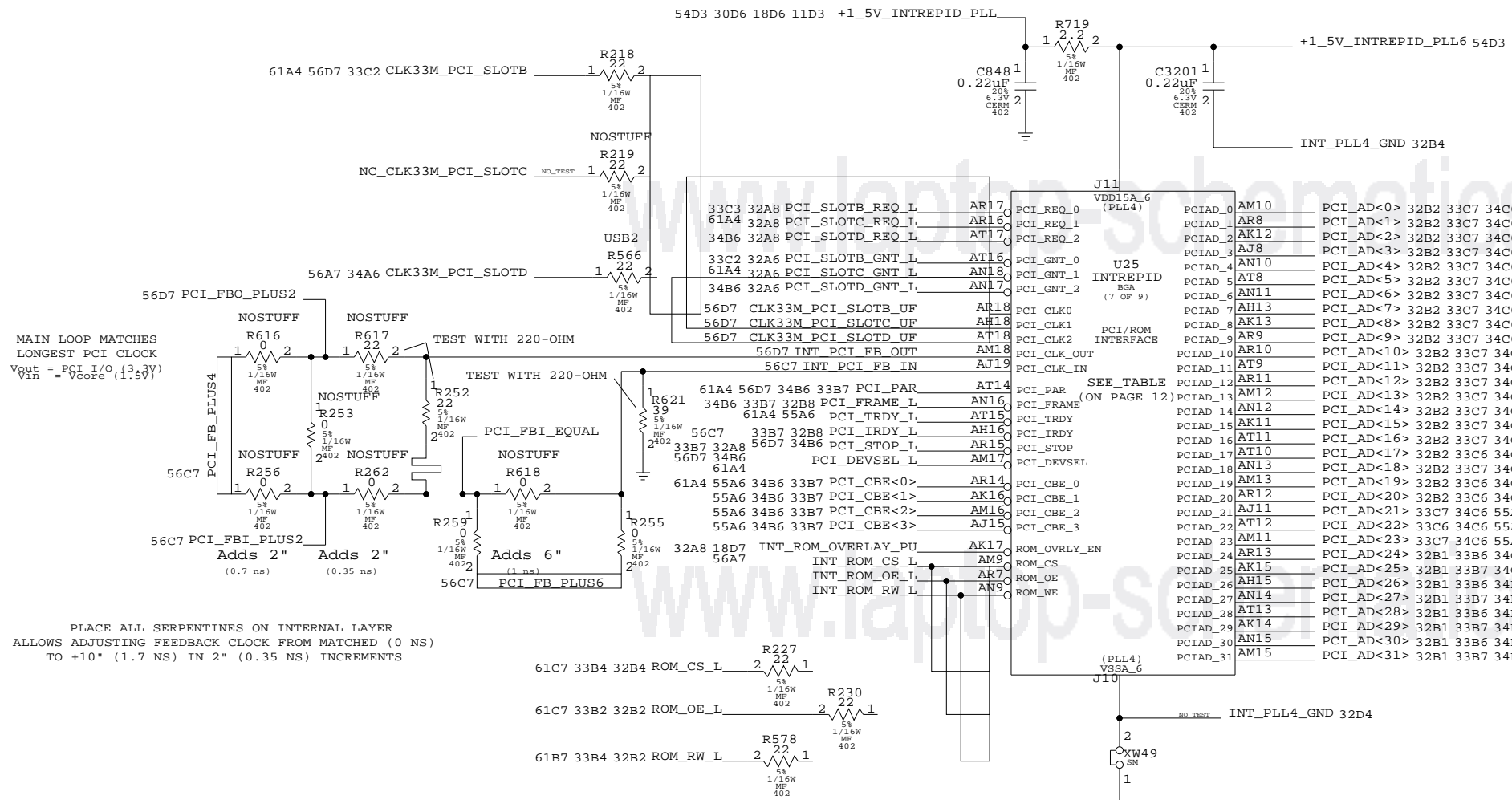
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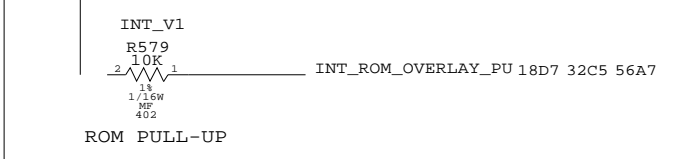
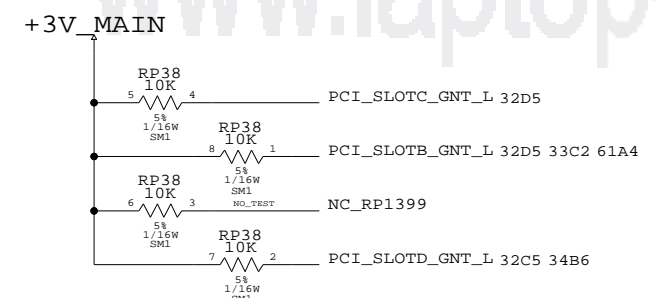
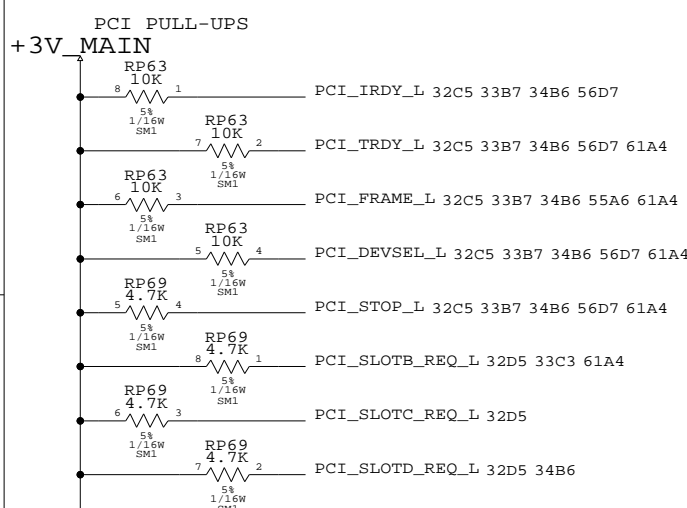


MAIN LOOP MATCHES  
LONGEST PCI CLOCK  
V<sub>OUT</sub> = PCI I/O (3.3V)  
V<sub>IN</sub> = V<sub>core</sub> (1.5V)

PLACE ALL SERPENTINES ON INTERNAL LAYER  
ALLOWS ADJUSTING FEEDBACK CLOCK FROM MATCHED (0 NS)  
TO +10" (1.7 NS) IN 2" (0.35 NS) INCREMENTS

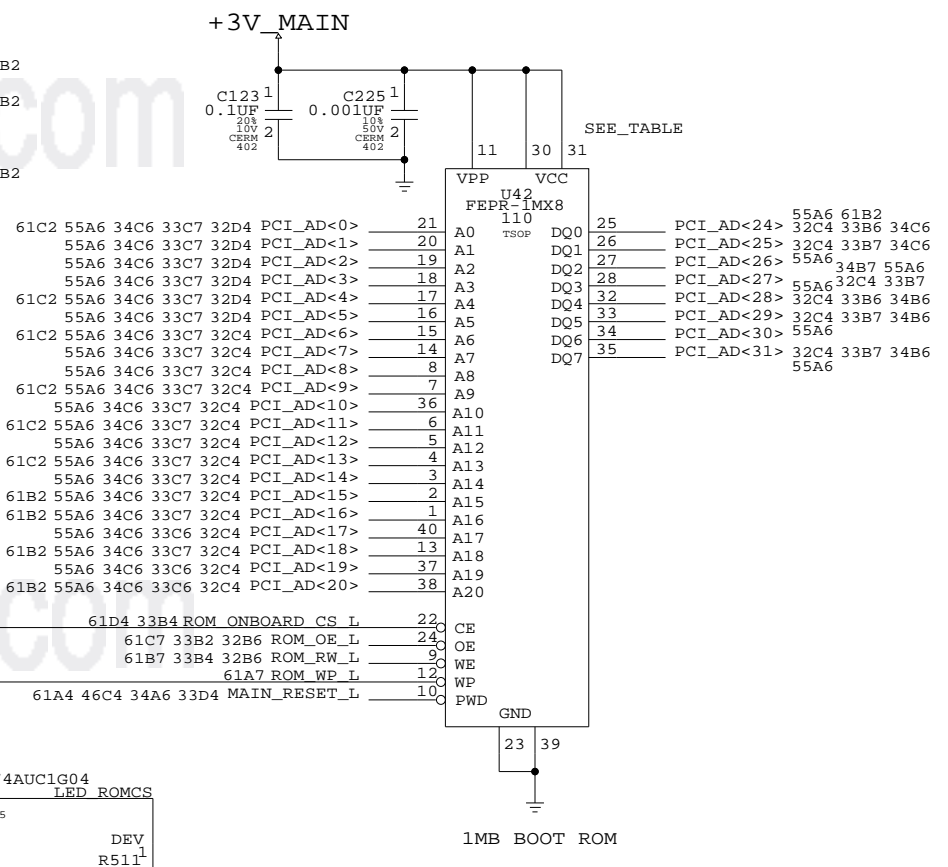
INTREPID PCI INTERFACE

33C3	32A8	PCI_SLOTB_REQ_L	AR17	PCI_REQ_0	PCIAD_0	AM10	PCI_AD<0>	32B2	33C7	34C6	55A6	61C2
61A4	32A8	PCI_SLOTC_REQ_L	AR16	PCI_REQ_1	PCIAD_1	AR8	PCI_AD<1>	32B2	33C7	34C6	55A6	
34B6	32A8	PCI_SLOTD_REQ_L	AT17	PCI_REQ_2	PCIAD_2	AK12	PCI_AD<2>	32B2	33C7	34C6	55A6	
33C2	32A6	PCI_SLOTB_GNT_L	AT16	PCI_GNT_0	PCIAD_3	AJ8	PCI_AD<3>	32B2	33C7	34C6	55A6	
61A4	32A6	PCI_SLOTC_GNT_L	AN18	PCI_GNT_1	PCIAD_4	AN10	PCI_AD<4>	32B2	33C7	34C6	55A6	61C2
34B6	32A6	PCI_SLOTD_GNT_L	AN17	PCI_GNT_2	PCIAD_5	AT8	PCI_AD<5>	32B2	33C7	34C6	55A6	
56D7	CLK33M_PCI_SLOTB_UP		AP18	PCI_CLK0	PCIAD_6	AN11	PCI_AD<6>	32B2	33C7	34C6	55A6	61C2
56D7	CLK33M_PCI_SLOTC_UP		AH18	PCI_CLK1	PCIAD_7	AH13	PCI_AD<7>	32B2	33C7	34C6	55A6	
56D7	CLK33M_PCI_SLOTD_UP		AT18	PCI_CLK2	PCIAD_8	AK13	PCI_AD<8>	32B2	33C7	34C6	55A6	
56D7	INT_PCI_FB_OUT		AM18	PCI_CLK2_OUT	PCIAD_9	AR9	PCI_AD<9>	32B2	33C7	34C6	55A6	61C2
56C7	INT_PCI_FB_IN		AJ19	PCI_CLK_IN	PCIAD_10	AR10	PCI_AD<10>	32B2	33C7	34C6	55A6	
61A4	56D7	34B6	33B7	PCI_PAR	PCIAD_11	AT9	PCI_AD<11>	32B2	33C7	34C6	55A6	61C2
34B6	33B7	32B8	PCI_FRAME_L	AN16	PCIAD_12	AR11	PCI_AD<12>	32B2	33C7	34C6	55A6	
61A4	55A6	PCI_TRDY_L	AT15	PCI_FRAME	PCIAD_13	AM12	PCI_AD<13>	32B2	33C7	34C6	55A6	61C2
56C7	33B7	32B8	PCI_IRDY_L	AH16	PCIAD_14	AN12	PCI_AD<14>	32B2	33C7	34C6	55A6	
56D7	34B6	PCI_STOP_L	AR15	PCI_IRDY	PCIAD_15	AK11	PCI_AD<15>	32B2	33C7	34C6	55A6	61B2
61A4	PCI_DEVSEL_L		AM17	PCI_STOP	PCIAD_16	AT11	PCI_AD<16>	32B2	33C7	34C6	55A6	61B2
61A4	55A6	34B6	33B7	PCI_CBE<0>	PCIAD_17	AT10	PCI_AD<17>	32B2	33C6	34C6	55A6	
55A6	34B6	33B7	PCI_CBE<1>	AR14	PCIAD_18	AN13	PCI_AD<18>	32B2	33C7	34C6	55A6	61B2
55A6	34B6	33B7	PCI_CBE<2>	AK16	PCIAD_19	AM13	PCI_AD<19>	32B2	33C6	34C6	55A6	
55A6	34B6	33B7	PCI_CBE<3>	AM16	PCIAD_20	AR12	PCI_AD<20>	32B2	33C6	34C6	55A6	61B2
55A6	34B6	33B7	PCI_CBE<3>	AJ15	PCIAD_21	AT12	PCI_AD<21>	33C7	34C6	55A6		
32A8	18D7	INT_ROM_OVERLAY_PU	AK17	ROM_OVRLY_EN	PCIAD_22	AM11	PCI_AD<22>	33C6	34C6	55A6	61B2	
56A7	INT_ROM_CS_L		AR9	ROM_CS	PCIAD_23	AR13	PCI_AD<23>	33C7	34C6	55A6		
	INT_ROM_OE_L		AR9	ROM_OE	PCIAD_24	AK15	PCI_AD<24>	32B1	33B6	34C6	55A6	61B2
	INT_ROM_RW_L		AR9	ROM_WE	PCIAD_25	AK15	PCI_AD<25>	32B1	33B7	34C6	55A6	
			AR9	ROM_WE	PCIAD_26	AH15	PCI_AD<26>	32B1	33B6	34B6	55A6	61B2
			AR9	ROM_WE	PCIAD_27	AN14	PCI_AD<27>	32B1	33B7	34B7	55A6	
			AR9	ROM_WE	PCIAD_28	AT13	PCI_AD<28>	32B1	33B6	34B6	55A6	
			AR9	ROM_WE	PCIAD_29	AK14	PCI_AD<29>	32B1	33B7	34B6	55A6	
			AR9	ROM_WE	PCIAD_30	AN15	PCI_AD<30>	32B1	33B6	34B6	55A6	61B2
			AR9	ROM_WE	PCIAD_31	AM15	PCI_AD<31>	32B1	33B7	34B6	55A6	



FLASH BOOT ROM SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
341T1107	1	IC, FLASH, PROD, ROM, PRGMD	U42		
341S1169	1	IC, FEPR, FLASH ROM, PROD	U42		ROM_PRGMD PROD
009-6420	1	IC, FEPR, FLASH ROM, PROD	U42		ROM_IMG PROD
341S1225	1	IC, FLASH, BOOT ROM, Q26, 4.5.8B2	U42		ROM_PRGMD PROD
009-6076	1	CODE, BOOTROM, Q26, PVT, 4.5.8B2	U42		ROM_IMG PROD
335S0350	1	IC, FLASH ROM, 1MB, BLANK	U42		OMIT



**INTREPID PCI & BOOT ROM**

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SIZE: D DRAWING NUMBER: 051-6423 REV.: D

SCALE: NONE SHEET: 32 OF 74



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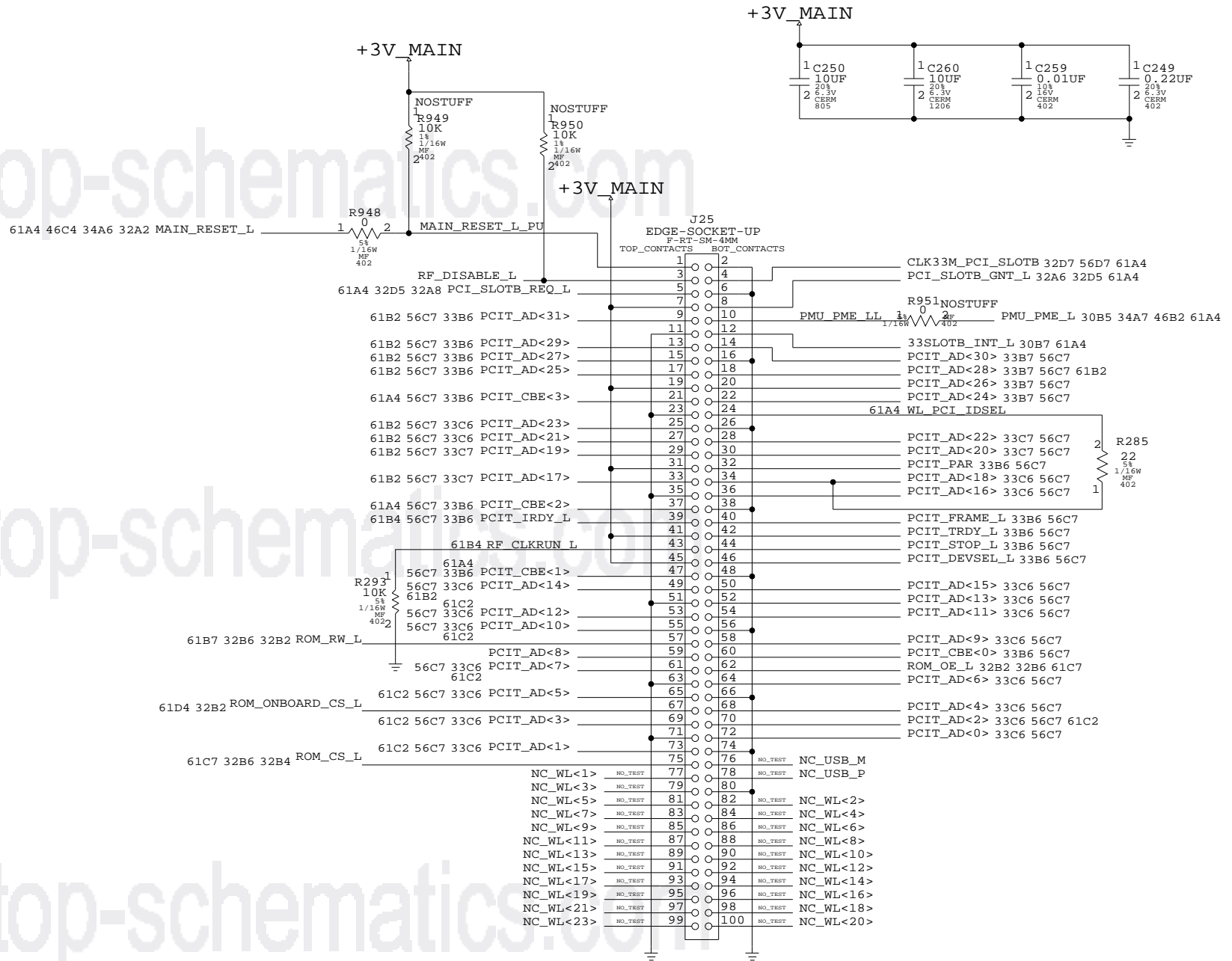
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PLACE RP'S NEAR WIRELESS CONNECTOR

61C2 55A6 34C6 32D4 32B2 PCI_AD<0>	1	RP77	8	PCIT_AD<0>	33B2 56C7
55A6 34C6 32D4 32B2 PCI_AD<1>	2	33	7	PCIT_AD<1>	33B3 56C7 61C2
55A6 34C6 32D4 32B2 PCI_AD<2>	3	1/16W	6 NO_TEST	PCIT_AD<2>	33B2 56C7 61C2
55A6 34C6 32D4 32B2 PCI_AD<3>	4	SM1	5	PCIT_AD<3>	33B3 56C7 61C2
61C2 55A6 34C6 32D4 32B2 PCI_AD<4>	1	RP75	8	PCIT_AD<4>	33B2 56C7
55A6 34C6 32D4 32B2 PCI_AD<5>	2	33	7	PCIT_AD<5>	33B3 56C7 61C2
61C2 55A6 34C6 32C4 32B2 PCI_AD<6>	3	1/16W	6 NO_TEST	PCIT_AD<6>	33B2 56C7
55A6 34C6 32C4 32B2 PCI_AD<7>	4	SM1	5	PCIT_AD<7>	33B3 56C7 61C2
55A6 34C6 32C4 32B2 PCI_AD<8>	1	8	8	PCIT_AD<8>	33B3 56C7 61C2
61C2 55A6 34C6 32C4 32B2 PCI_AD<9>	2	RP73	7 NO_TEST	PCIT_AD<9>	33B2 56C7
55A6 34C6 32C4 32B2 PCI_AD<10>	3	33	6	PCIT_AD<10>	33B3 56C7 61C2
61C2 55A6 34C6 32C4 32B2 PCI_AD<11>	4	1/16W	5 NO_TEST	PCIT_AD<11>	33B2 56C7
55A6 34C6 32C4 32B2 PCI_AD<12>	1	SM1	8	PCIT_AD<12>	33B3 56C7 61C2
61C2 55A6 34C6 32C4 32B2 PCI_AD<13>	2	RP72	7 NO_TEST	PCIT_AD<13>	33B2 56C7
55A6 34C6 32C4 32B2 PCI_AD<14>	3	33	6	PCIT_AD<14>	33C3 56C7 61B2
61B2 55A6 34C6 32C4 32B2 PCI_AD<15>	4	1/16W	5 NO_TEST	PCIT_AD<15>	33C2 56C7
61B2 55A6 34C6 32C4 32B2 PCI_AD<16>	1	SM1	8	PCIT_AD<16>	33C2 56C7
61B2 56C7 33C3 PCIT_AD<17>	2	RP59	7	PCIT_AD<17>	32B2 32C4 34C6 55A6
61B2 55A6 34C6 32C4 32B2 PCI_AD<18>	3	33	6	PCIT_AD<18>	33C2 56C7
61B2 56C7 33C3 PCIT_AD<19>	4	1/16W	5	PCI_AD<19>	32B2 32C4 34C6 55A6
55A6 34C6 32C4 PCI_AD<23>	1	SM1	8	PCIT_AD<23>	33C3 56C7 61B2
55A6 34C6 32C4 PCI_AD<21>	2	RP58	7	PCIT_AD<21>	33C3 56C7 61B2
56C7 33C2 PCIT_AD<22>	3	33	6	PCI_AD<22>	32C4 34C6 55A6 61B2
56C7 33C2 PCIT_AD<20>	4	1/16W	5	PCI_AD<20>	32B2 32C4 34C6 55A6 61B2
55A6 34B7 32C4 32B1 PCI_AD<27>	1	SM1	8	PCIT_AD<27>	33C3 56C7 61B2
55A6 34C6 32C4 32B1 PCI_AD<25>	2	RP56	7	PCIT_AD<25>	33C3 56C7 61B2
56C7 33C2 PCIT_AD<26>	3	33	6	PCI_AD<26>	32B1 32C4 34B6 55A6 61B2
56C7 33C2 PCIT_AD<24>	4	1/16W	5	PCI_AD<24>	32B1 32C4 34C6 55A6 61B2
61B2 56C7 33C2 PCIT_AD<28>	1	SM1	8	PCI_AD<28>	32B1 32C4 34B6 55A6
56C7 33C2 PCIT_AD<30>	2	RP54	7	PCI_AD<30>	32B1 32C4 34B6 55A6 61B2
55A6 34B6 32C4 32B1 PCI_AD<31>	3	33	6	PCIT_AD<31>	33C3 56C7 61B2
55A6 34B6 32C4 32B1 PCI_AD<29>	4	1/16W	5	PCIT_AD<29>	33C3 56C7 61B2
61A4 56D7 34B6 32C5 PCI_PAR	1	SM1	8	PCIT_PAR 39>	33C2 56C7
61A4 55A6 34B6 32C5 32B8 PCI_FRAME_L	2	RP61	7 NO_TEST	PCIT_FRAME_L	33C2 56C7
61A4 56D7 34B6 32C5 32B8 PCI_TRDY_L	3	33	6 NO_TEST	PCIT_TRDY_L	33C2 56C7
56D7 34B6 32C5 32B8 PCI_IRDY_L	4	1/16W	5 NO_TEST	PCIT_IRDY_L	33C3 56C7 61B4
61A4 56D7 34B6 32C5 32A8 PCI_STOP_L	1	SM1	8	PCIT_STOP_L	33C2 56C7
61A4 56D7 34B6 32C5 32A8 PCI_DEVSEL_L	2	RP67	7 NO_TEST	PCIT_DEVSEL_L	33C2 56C7
55A6 34B6 32C5 PCI_CBE<1>	3	33	6	PCIT_CBE<1>	33C3 56C7 61A4
61A4 55A6 34B6 32C5 PCI_CBE<0>	4	1/16W	5 NO_TEST	PCIT_CBE<0>	33B2 56C7
55A6 34B6 32C5 PCI_CBE<2>	1	SM1	8	PCIT_CBE<2>	33C3 56C7 61A4
55A6 34B6 32C5 PCI_CBE<3>	2	RP64	7	PCIT_CBE<3>	33C3 56C7 61A4
NC_PCIR0	NO_TEST	3	6 NO_TEST	NC_PCITR0	
NC_PCIR1	NO_TEST	4	5 NO_TEST	NC_PCITR1	



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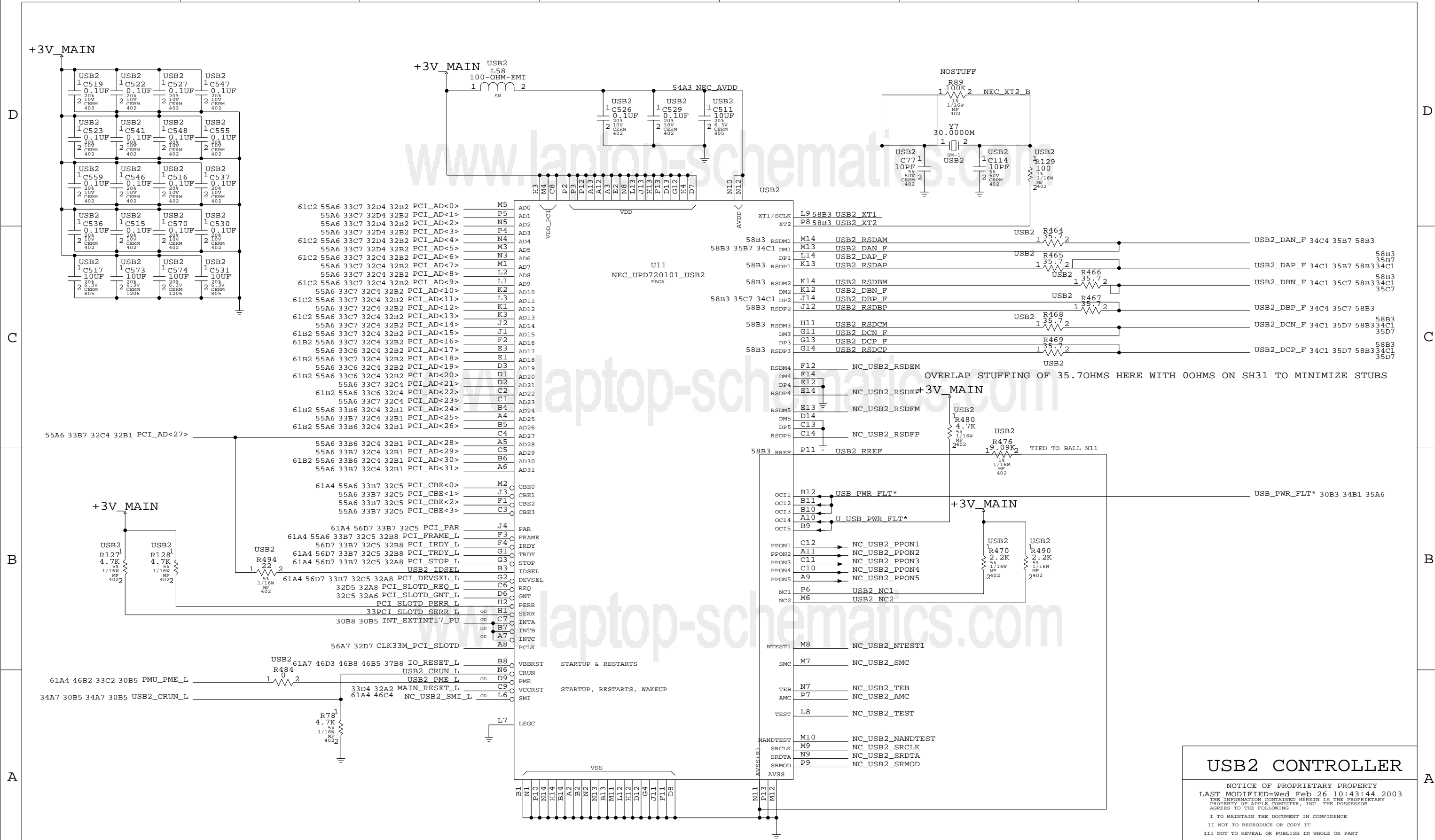
WIRELESS CARD MOUNTING HARDWARE SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
815-7245	1	WIRELESS CARD GUIDE, J25	J251		
452-0411	2	NUT, HEX, M2 X 1.5H, J25	J252, J253		
452-0412	2	SCREW, M2 X 0.4 X 6.0 L, J25	J254, J255		

WIRELESS PCI

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	D	051-6423	D
SCALE	NONE	SHT	33 OF 74



**USB2 CONTROLLER**

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D

C

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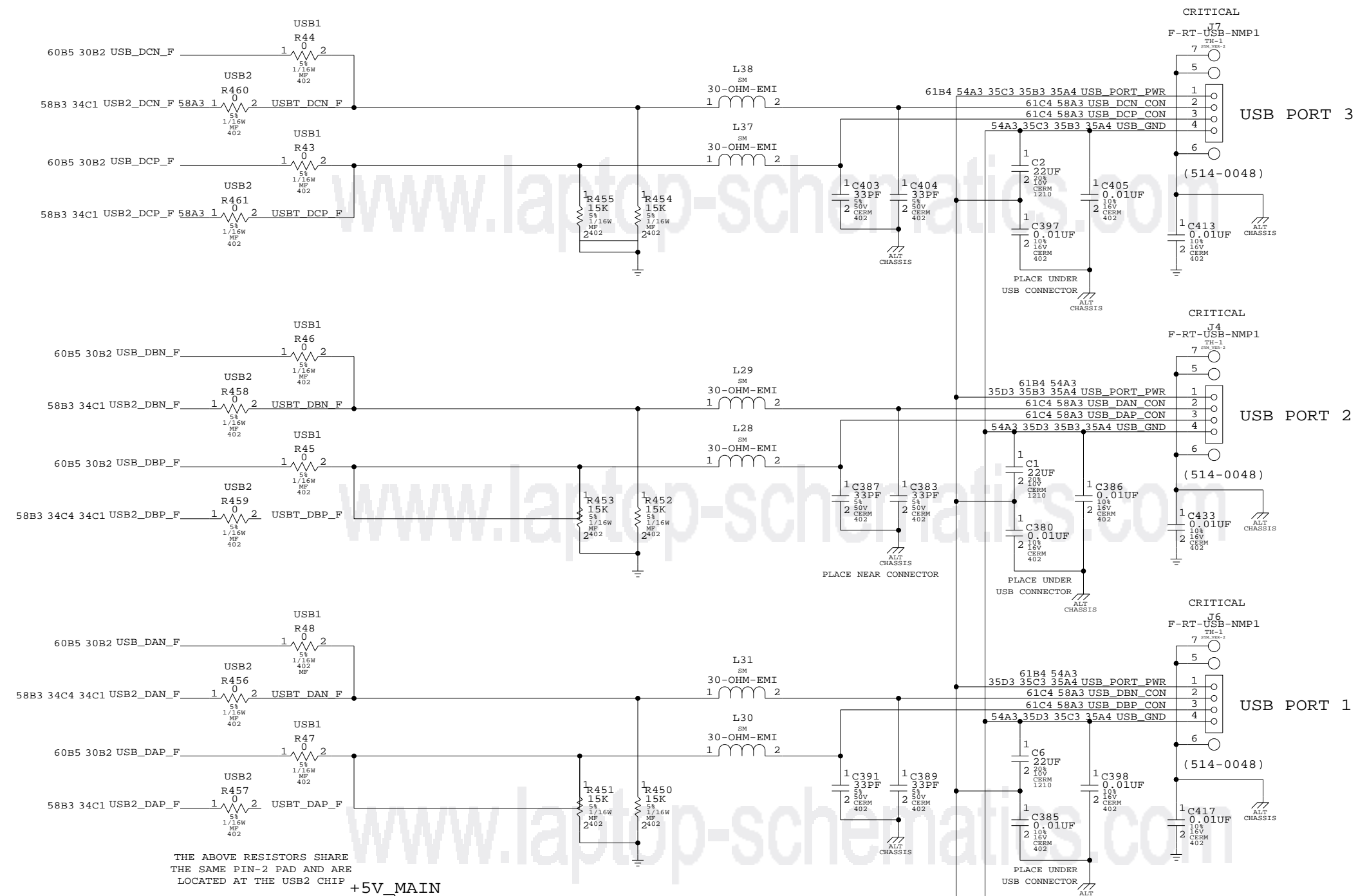
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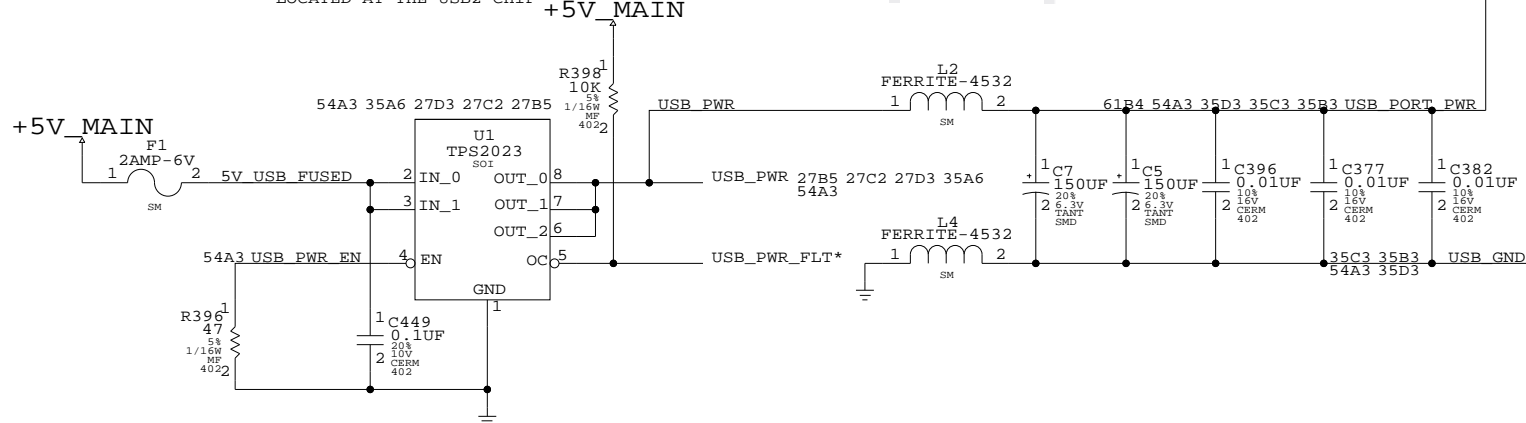
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THE ABOVE RESISTORS SHARE THE SAME PIN-2 PAD AND ARE LOCATED AT THE USB2 CHIP



### USB CONNS & PWR

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT	OF	
NONE	35	74	

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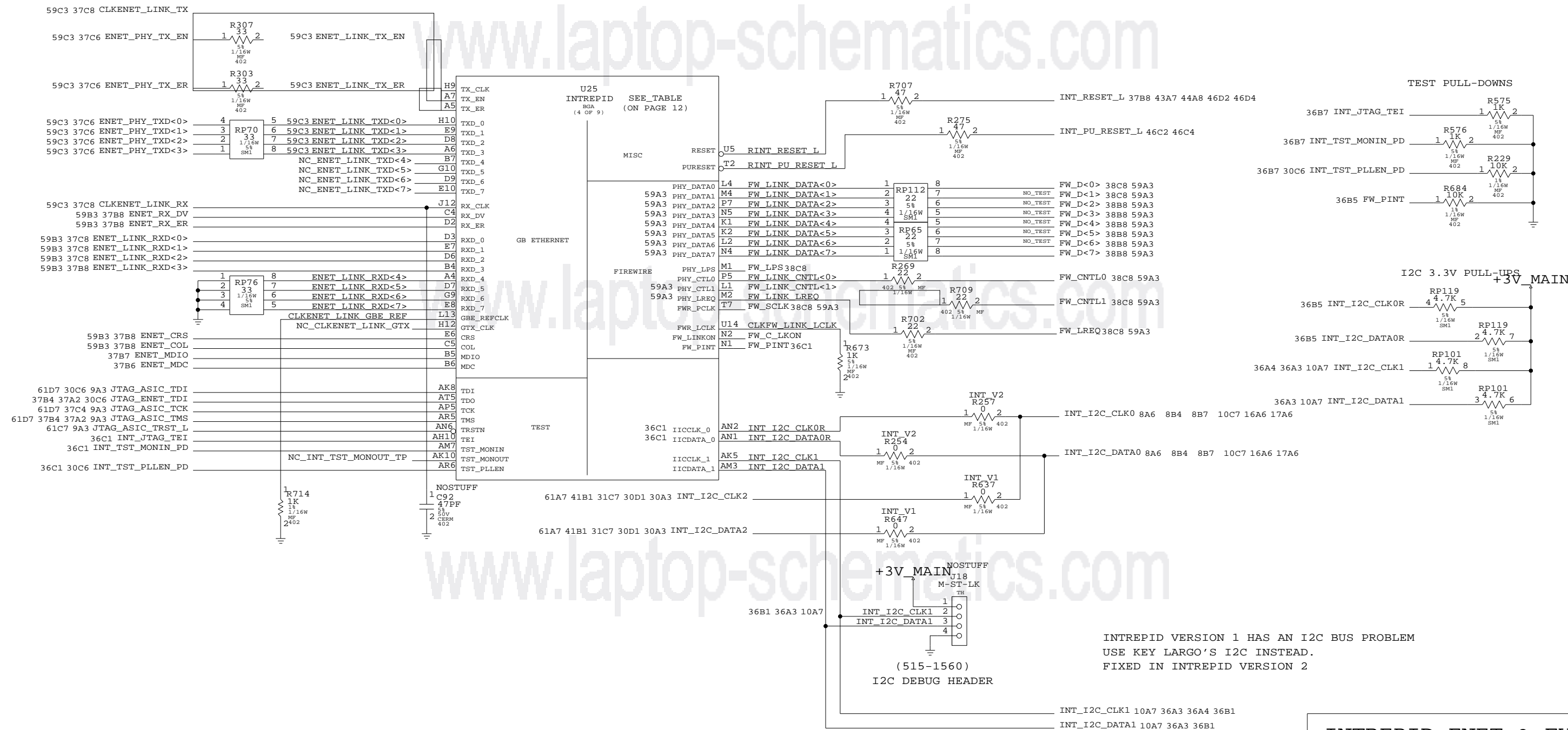
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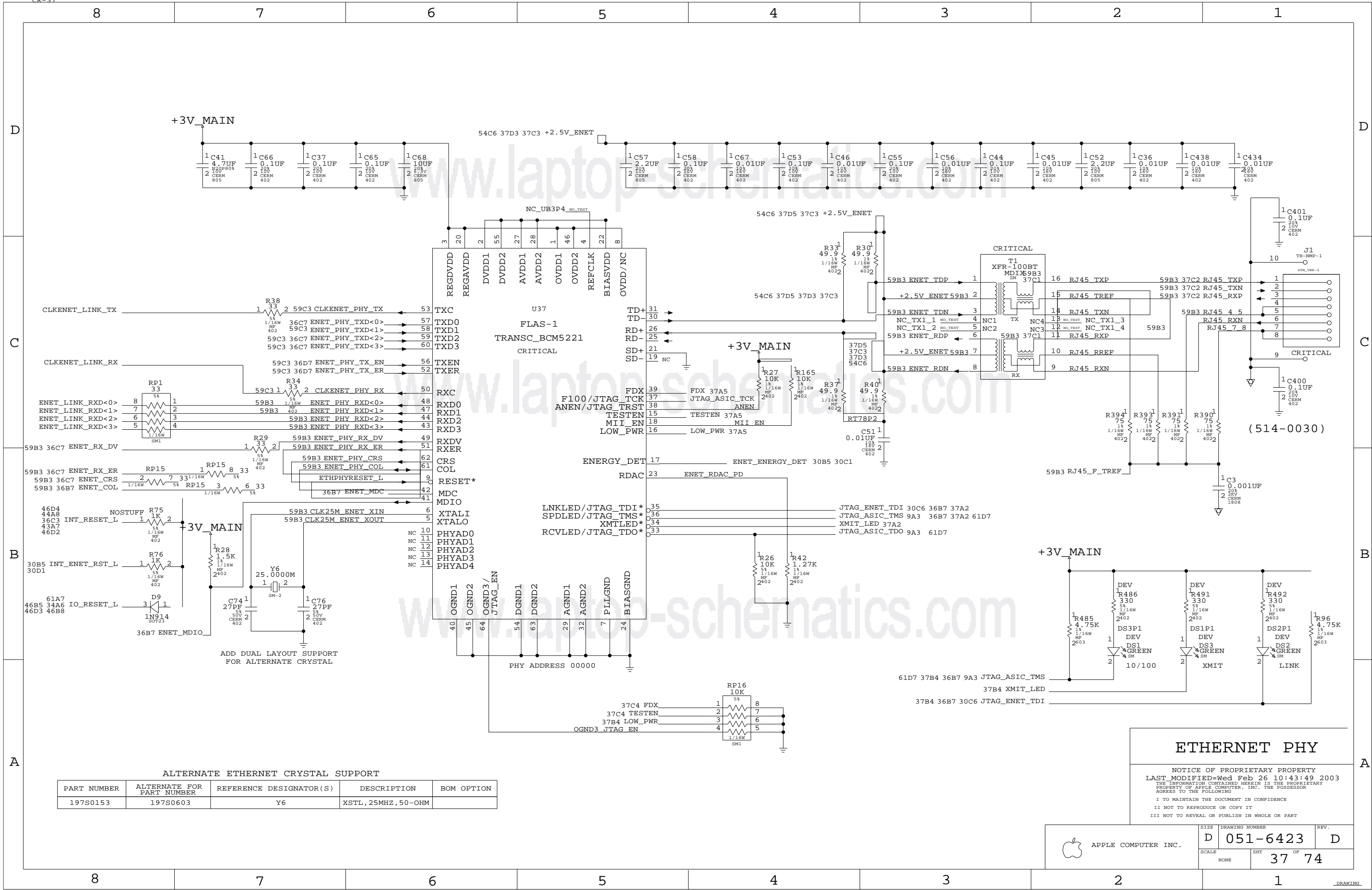
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### INTREPID ENET & FW

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	NONE	SHT	36 OF 74



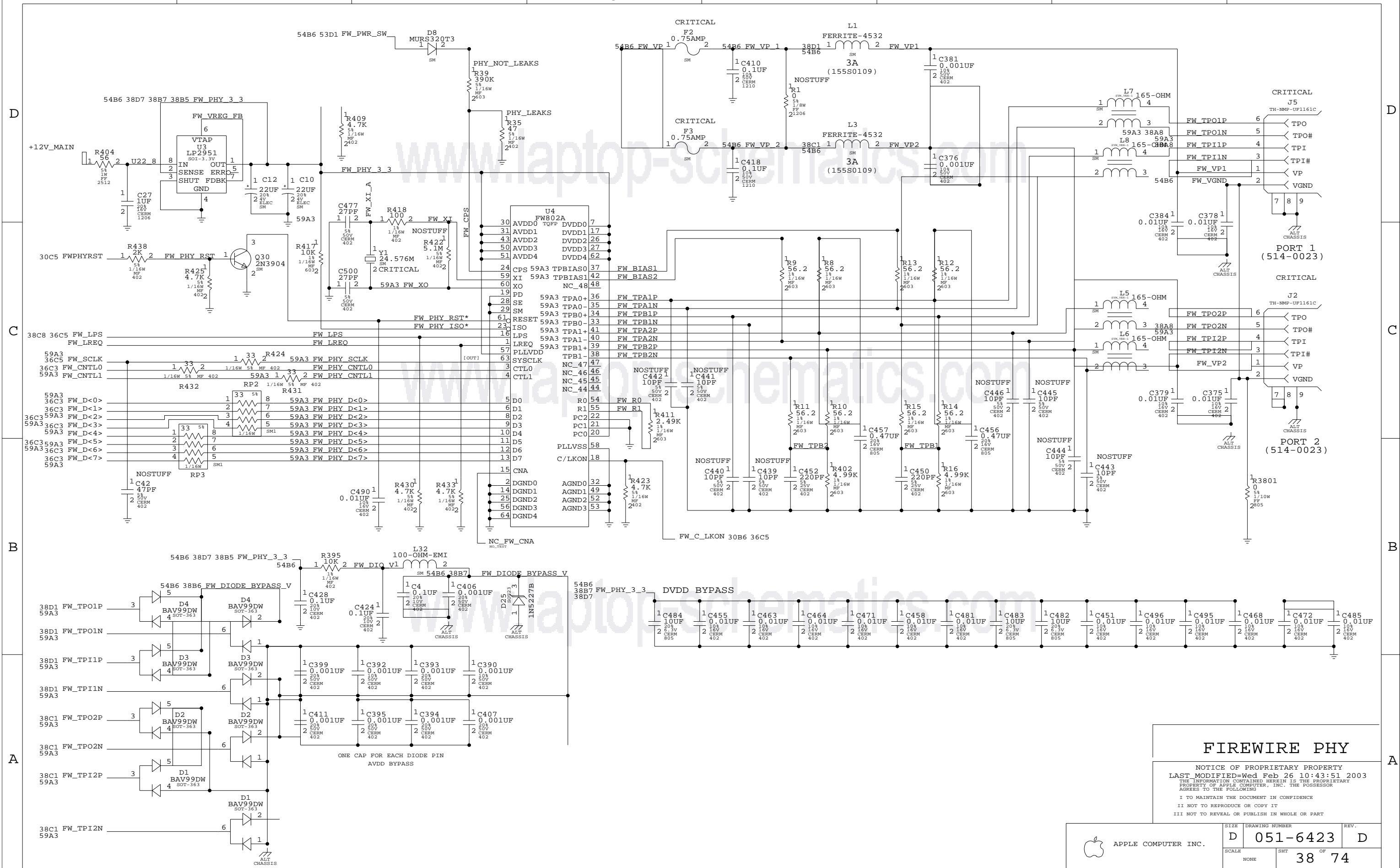
ALTERNATE ETHERNET CRYSTAL SUPPORT

PART NUMBER	ALTERNATE FOR PART NUMBER	REFERENCE DESIGNATOR(S)	DESCRIPTION	BOM OPTION
197S0153	197S0603	Y6	XSTL, 25MHZ, 50-OHM	

ETHERNET PHY

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	NONE	SHT	37 OF 74



### FIREWIRE PHY

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	SCALE	DRAWING NUMBER	REV.
	NONE	D 051-6423	D
		SHT	OF
		38	74

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D

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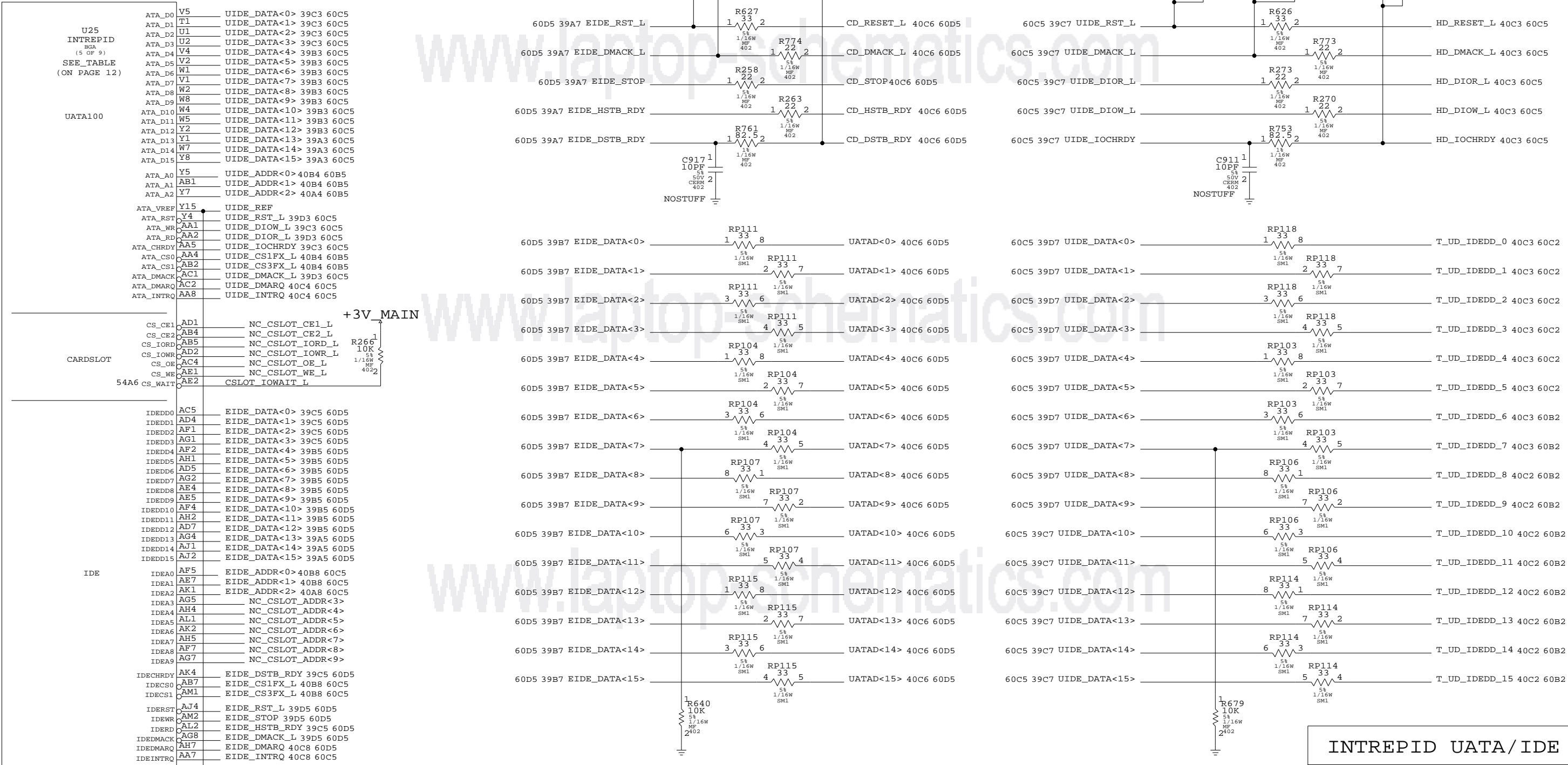
C

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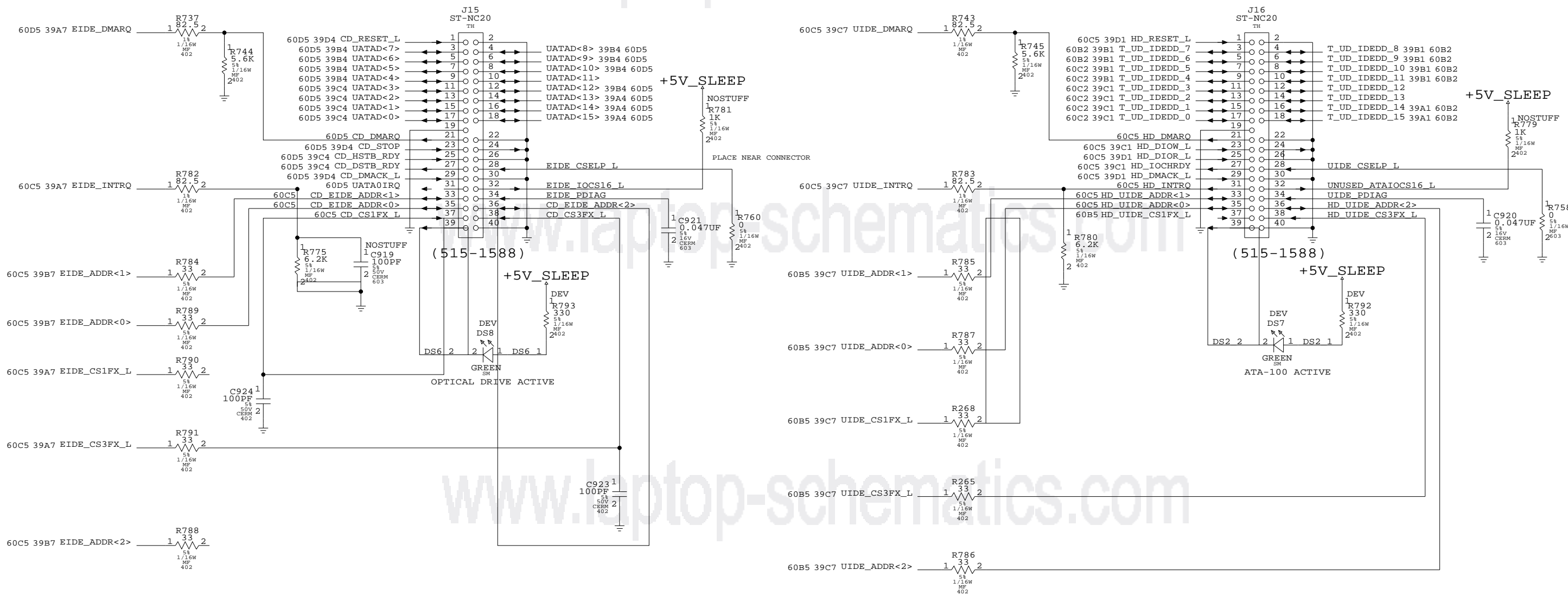
INTREPID UATA/IDE

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	SCALE	39 OF 74	D

# OPTICAL DRIVE INTERFACE

# ATA-100 INTERFACE



## CD/HD CONS

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	SCALE	SHT	OF
	NONE	40	74



D

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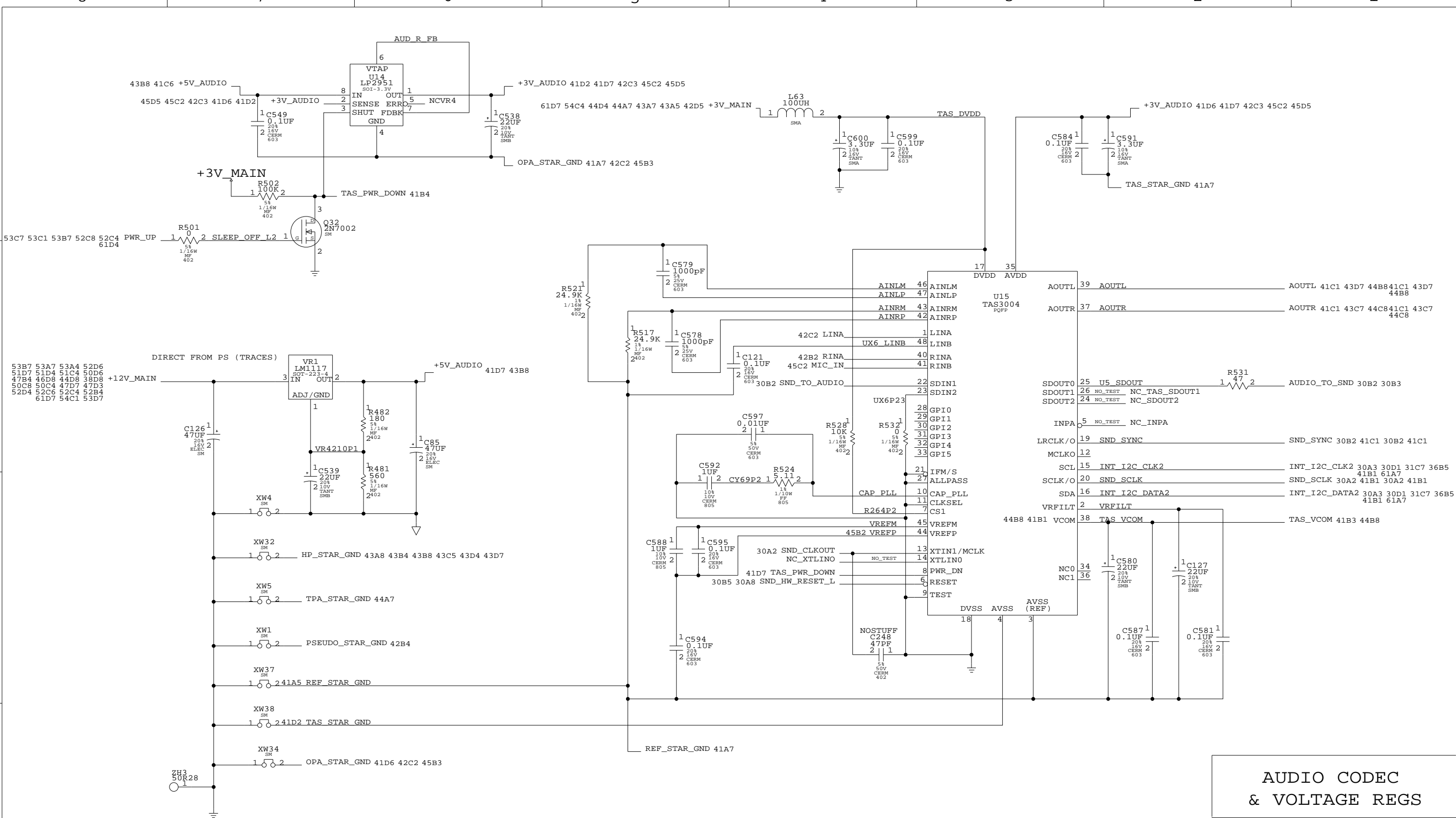
C

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## AUDIO CODEC & VOLTAGE REGS

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	DRAWING NUMBER	REV.
	D 051-6423	D
SCALE	SHT	OF
NONE	41	74

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D

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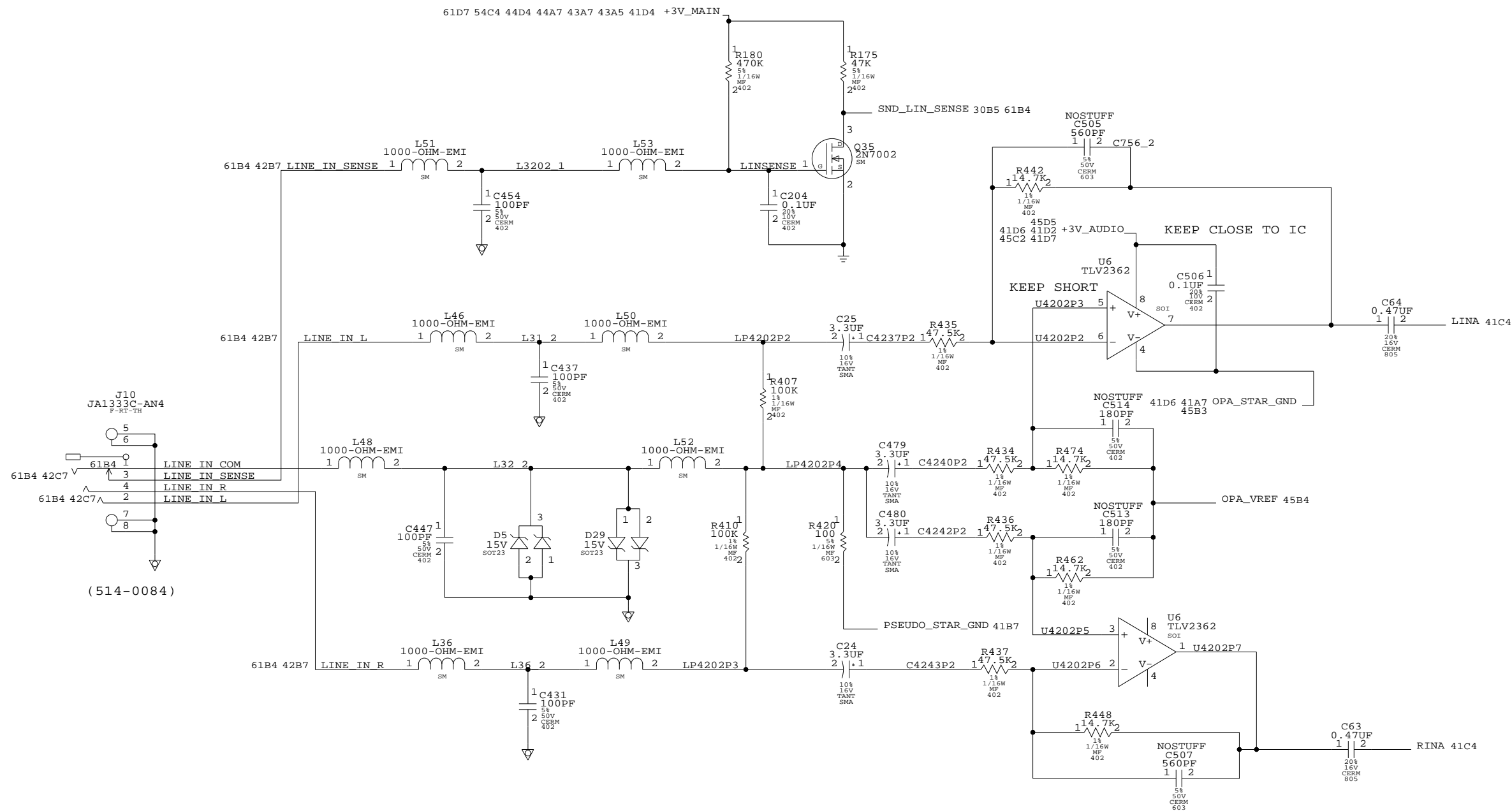
C

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J10  
JA1333C-AN4  
F-RT-TH

61B4 42C7

5	6
1	LINE IN COM
3	LINE IN SENSE
4	LINE IN R
2	LINE IN L
7	
8	

(514-0084)

### LINE IN BUFFER

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	NONE	051-6423	D
SCALE		SHT	OF
		42	74

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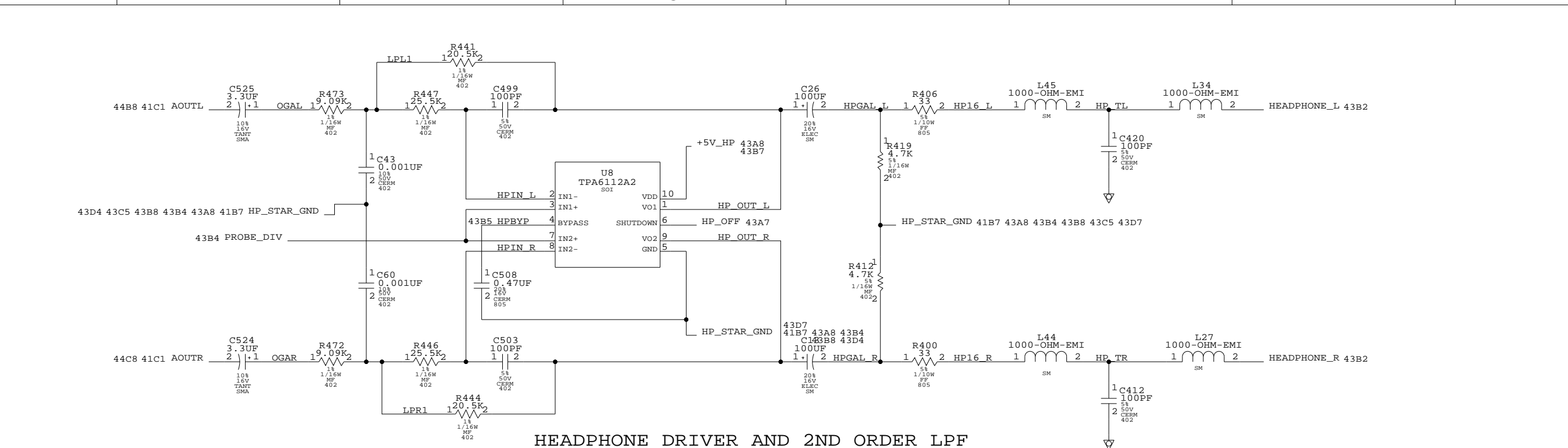
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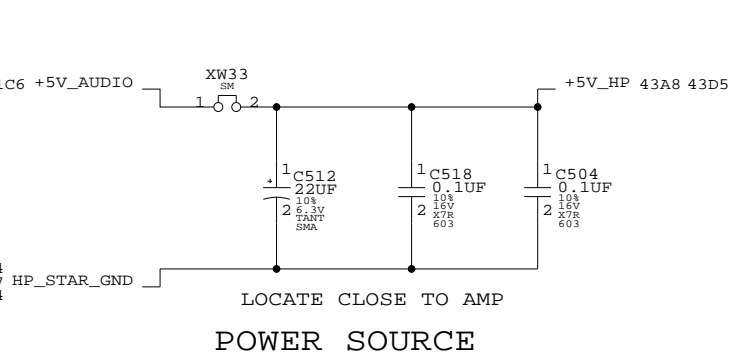
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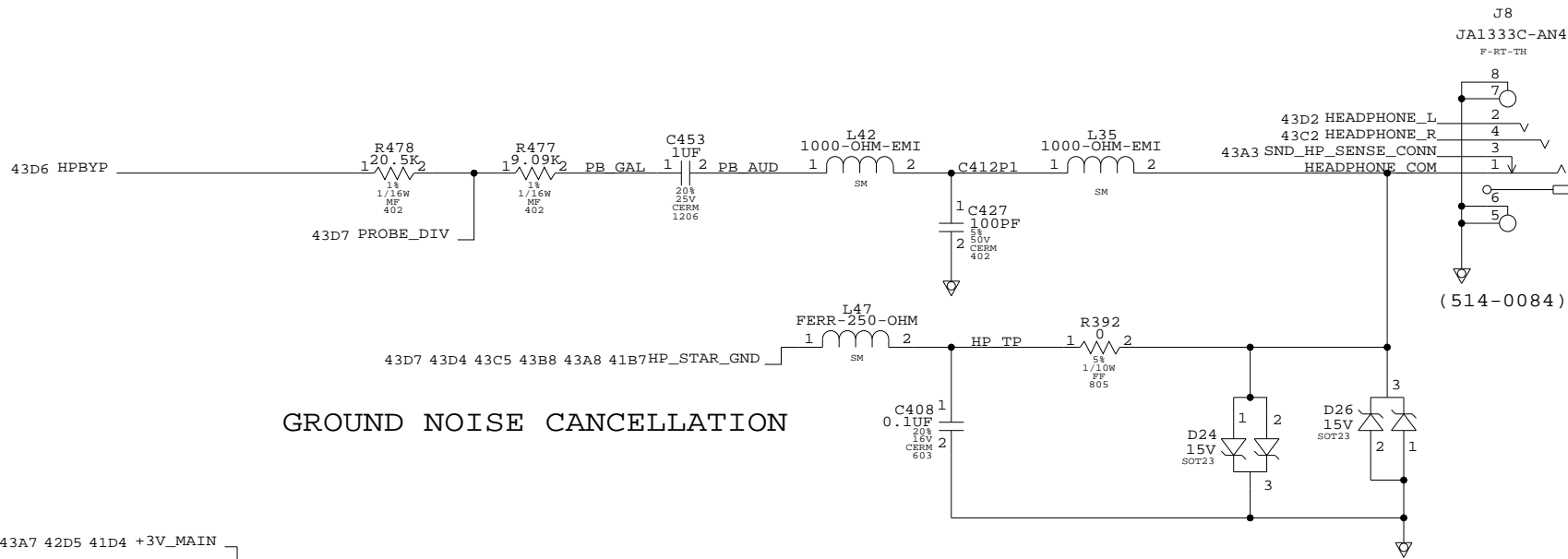
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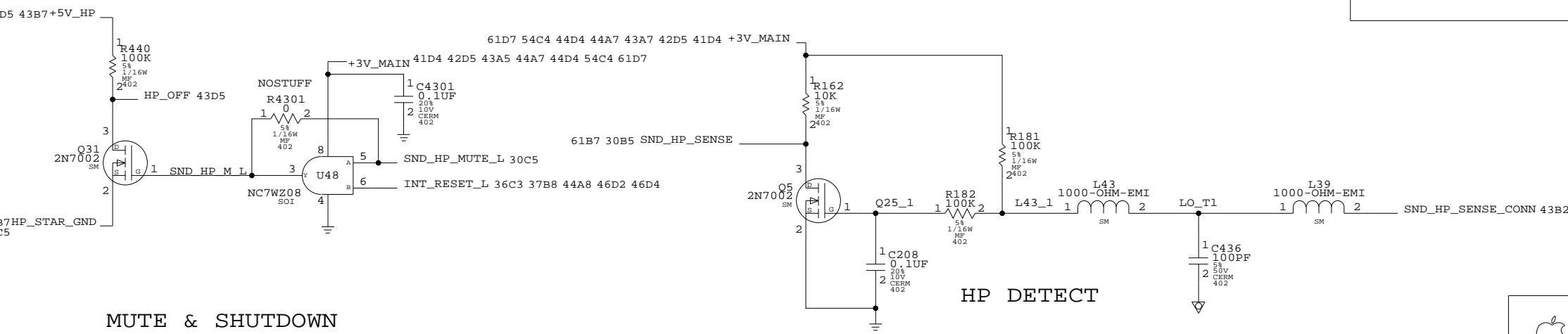
HEADPHONE DRIVER AND 2ND ORDER LPF



POWER SOURCE



GROUND NOISE CANCELLATION



MUTE & SHUTDOWN

HP DETECT

**HEADPHONE OUT AMP**

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT		OF
NONE	43		74

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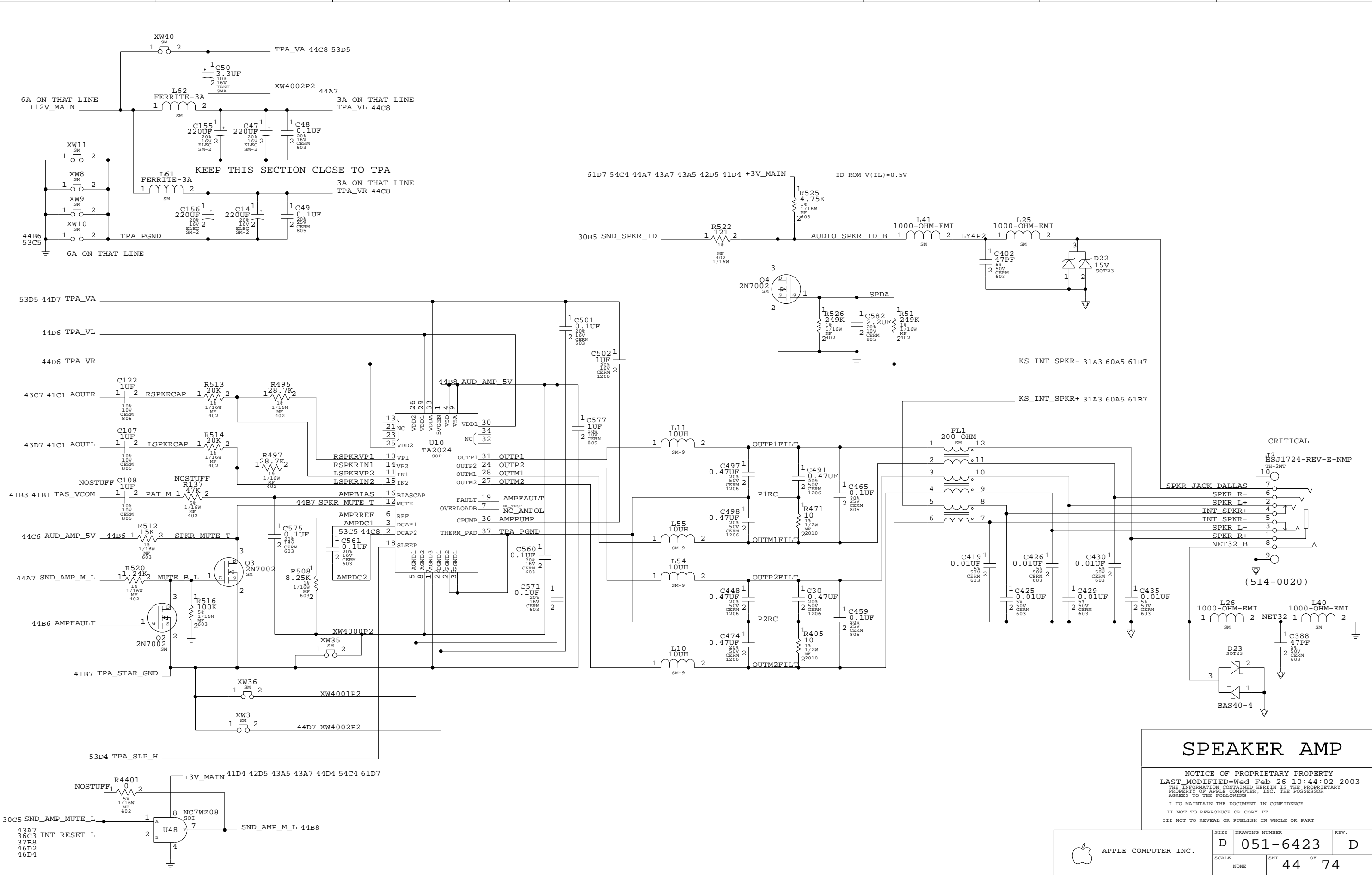
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# SPEAKER AMP

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APPLE COMPUTER INC.	SIZE	D	DRAWING NUMBER	051-6423	REV.	D
	SCALE	NONE	SHT	44	OF	74

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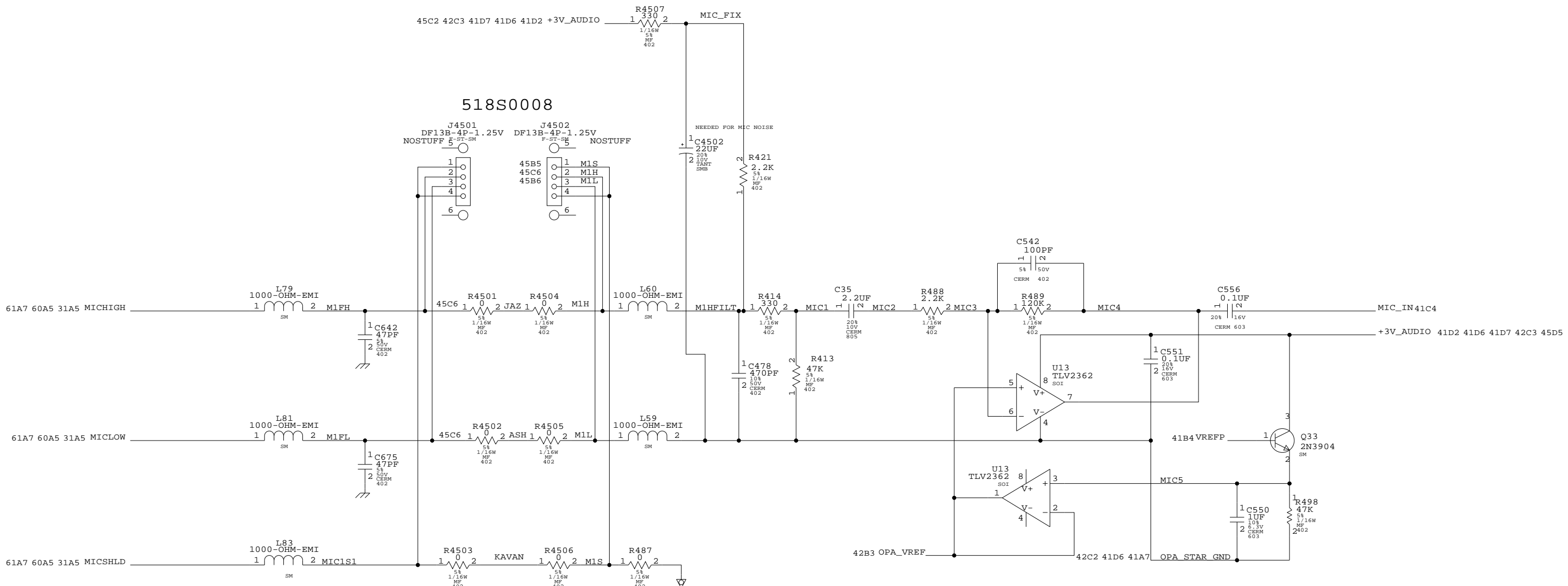
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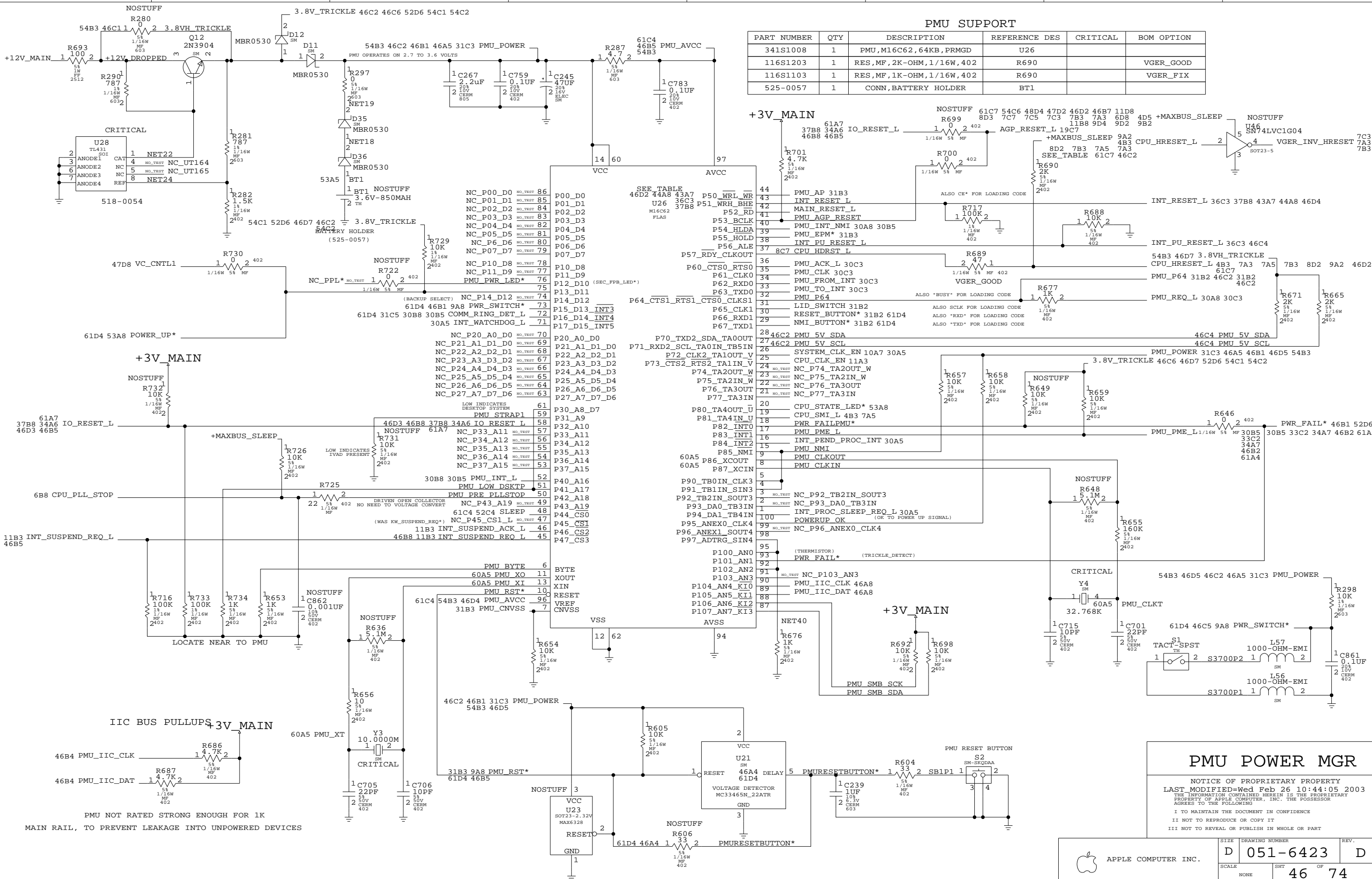
PLACE R4501, R4502 AND R4503 NEAR AUDIO

PLACE R4504, R4505 AND R4506 NEAR KITCHENSINK

# MIC PREAMP

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT	OF	
NONE	45	74	



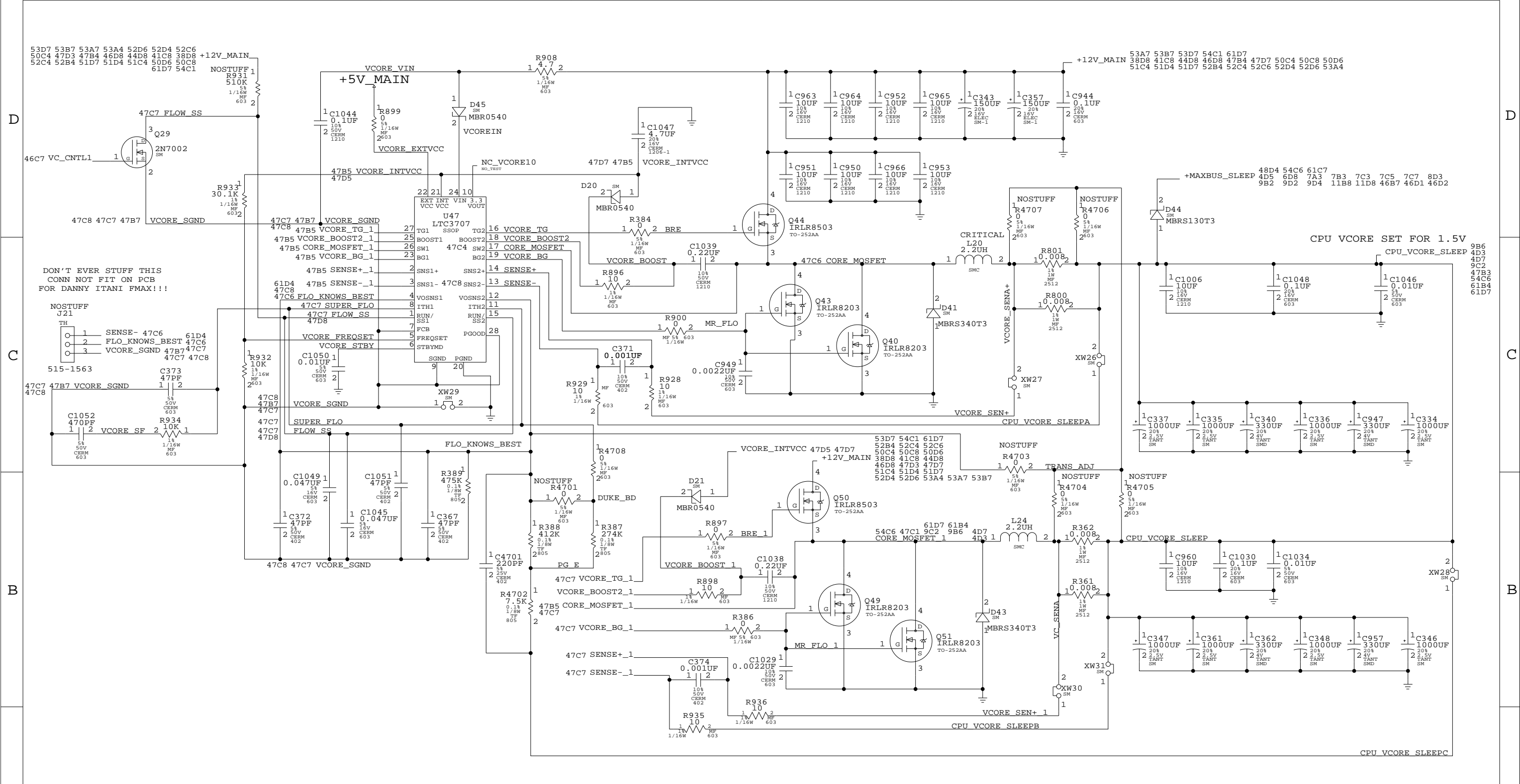
**PMU SUPPORT**

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
341S1008	1	PMU, M16C62, 64KB, PRMGD	U26		
116S1203	1	RES, MF, 2K-OHM, 1/16W, 402	R690		VGER_GOOD
116S1103	1	RES, MF, 1K-OHM, 1/16W, 402	R690		VGER_FIX
525-0057	1	CONN, BATTERY HOLDER	BT1		

**PMU POWER MGR**

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A KUMA SERVER(1):HARDWARE:KUMA DESIGNS:KUMA POWER SUPPLIES:VCORE WITH AVP TABLES

CPU & AGP VREGS

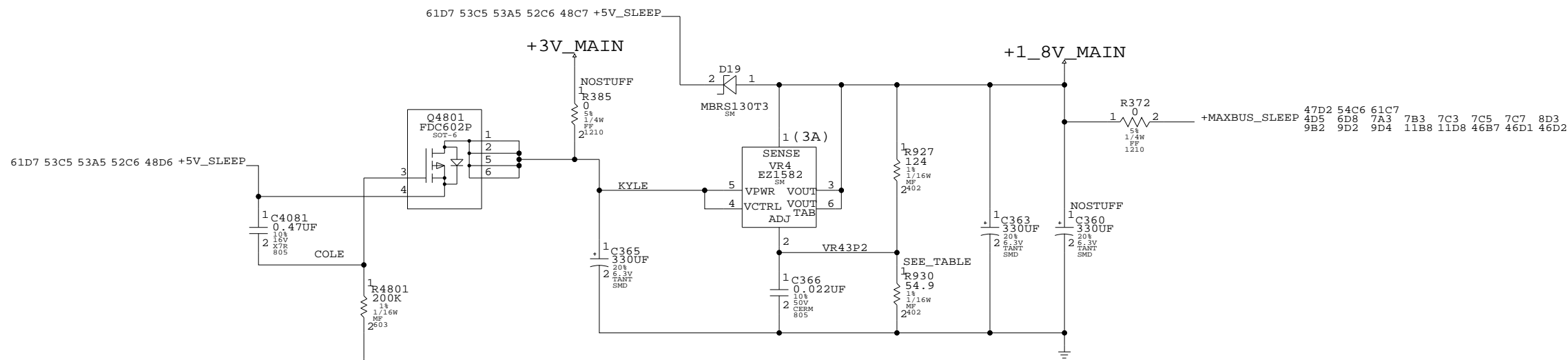
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PART NUMBER	ALTERNATE FOR PART NUMBER	REFERENCE DESIGNATOR(S)	DESCRIPTION	BOM OPTION
128S0018	128S0012	C340,C362,C947,C957	330UF, 2.5V, TANT	

APPLE COMPUTER INC.

SIZE	DRAWING NUMBER	REV.
D	051-6423	D
SCALE	SHT	REV.
NONE	47	74

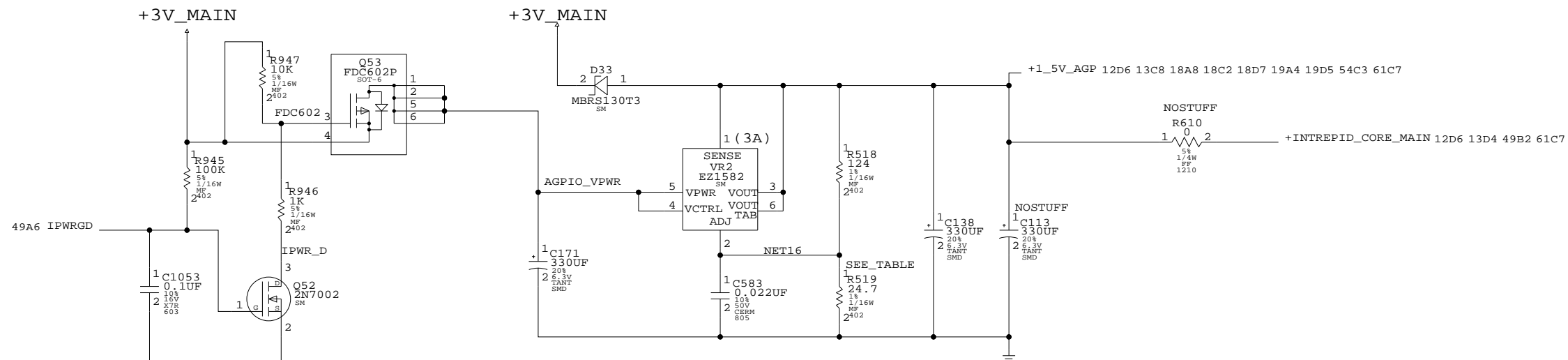
### INTREPID MAXBUS & CPU OVDD POWER CONVERTER (OFF DURING SLEEP)



MAXBUS I/O SUPPLY SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
114S2491	1	RES, FF, 24.9-OHM, 1%	R930		MAXIO_1'50V
114S3481	1	RES, FF, 34.8-OHM, 1%	R930		MAXIO_1'65V
114S4421	1	RES, FF, 44.2-OHM, 1%	R930		MAXIO_1'70V
114S5491	1	RES, FF, 54.9-OHM, 1%	R930		MAXIO_1'80V

### AGP I/O POWER CONVERTER



AGP I/O SUPPLY SUPPORT

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
114S2491	1	RES, FF, 24.9-OHM, 1%	R519		AGPIO_1'50V
114S3481	1	RES, FF, 34.8-OHM, 1%	R519		AGPIO_1'65V
114S4421	1	RES, FF, 44.2-OHM, 1%	R519		AGPIO_1'70V
114S5491	1	RES, FF, 54.9-OHM, 1%	R519		AGPIO_1'80V

### CPU & AGP VREGS

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	NONE	051-6423	D
SCALE		SHT	OF
		48	74

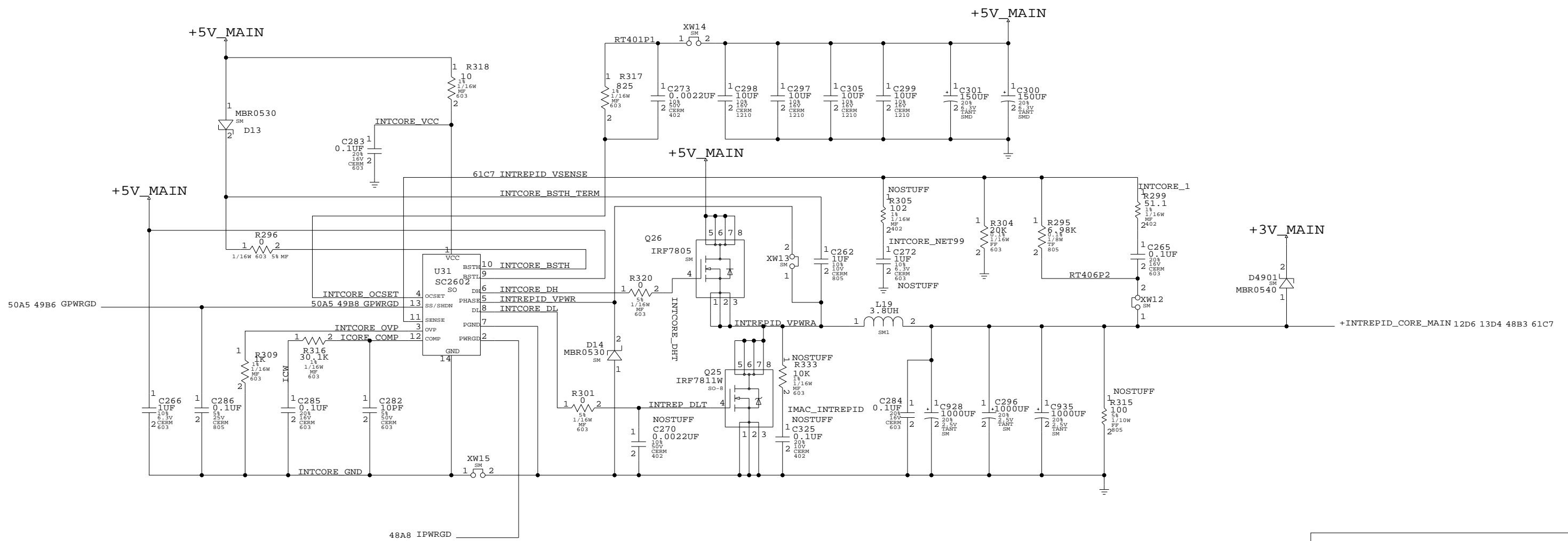


TABLES FOR INTREPID CORE RESISTOR VALUES TO VOLTAGES ARE LOCATED AT  
 KUMA SERVER(1):HARDWARE:KUMA DESIGNS;KUMA POWER SUPPLIES;ICORE R TOLERANCE

# INTREPID CORE

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT		OF
NONE	49		74



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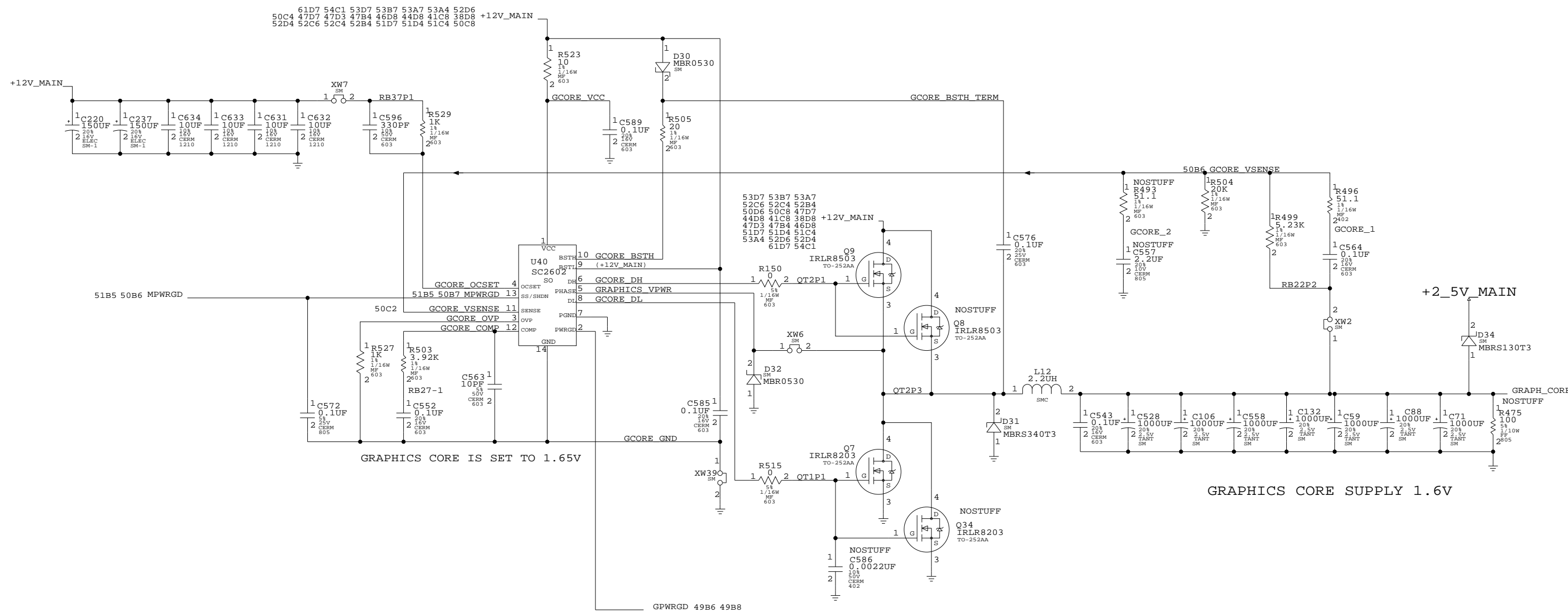
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# GRAPHICS CORE

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	D	051-6423	D
SCALE	SHT	OF	
NONE	50	74	

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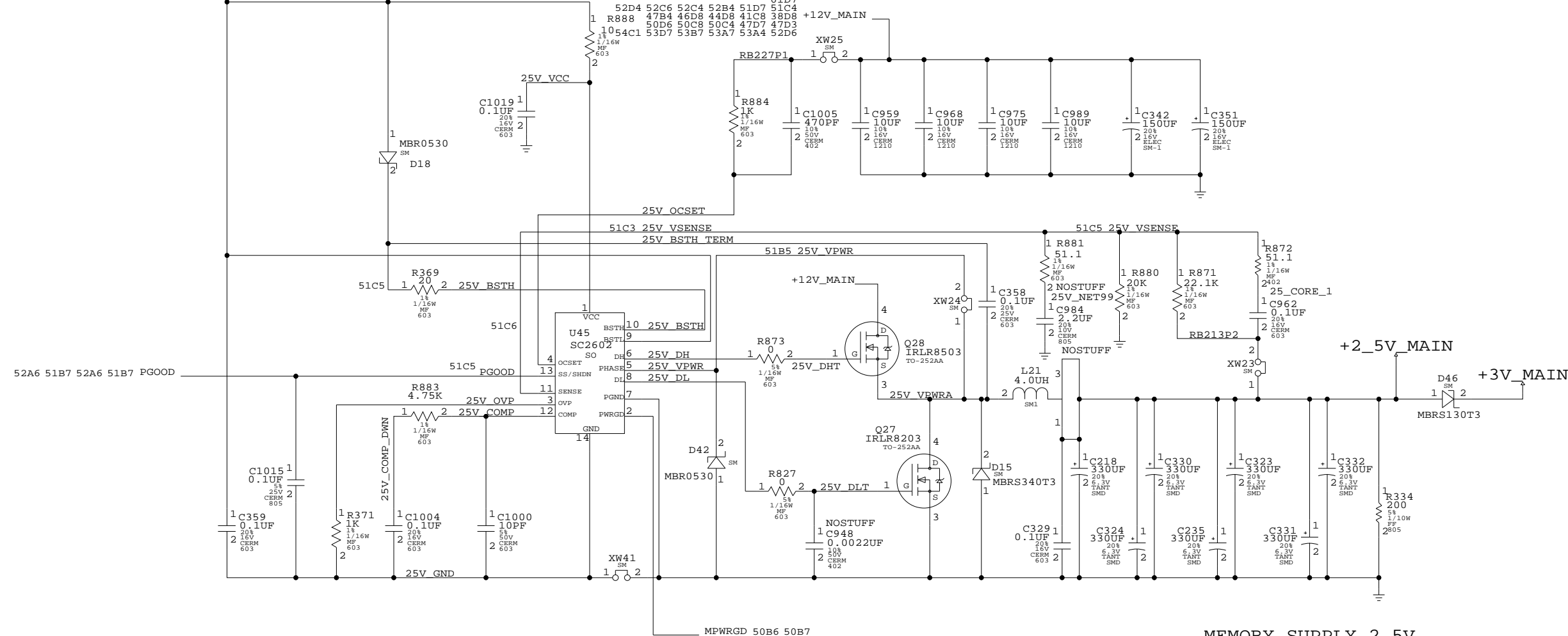
B

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61D7 54C1 53D7 53B7 53A7 53A4 52D6  
50C4 47D7 47D3 47B4 46D8 44D8 41C8 38D8  
52D4 52C6 52C4 52B4 51D4 51C4 50D6 50C8 +12V\_MAIN

MAIN MEMORY DDR AND FRAME BUFFER POWER CONVERTER (2.50VDC)

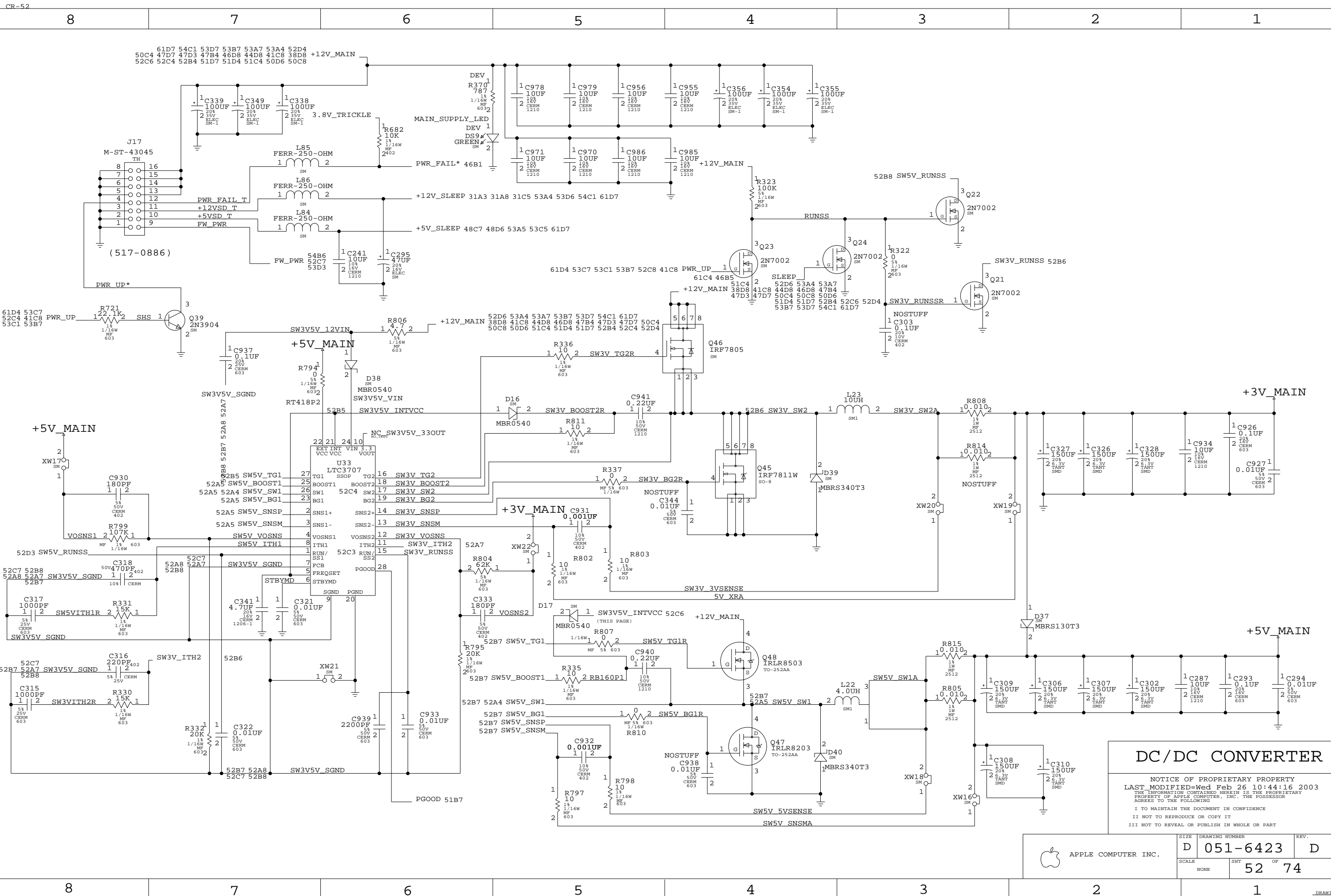


MEMORY SUPPLY 2.5V

# MEMORY PS

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	NONE	051-6423	D
		SHT	OF
		51	74



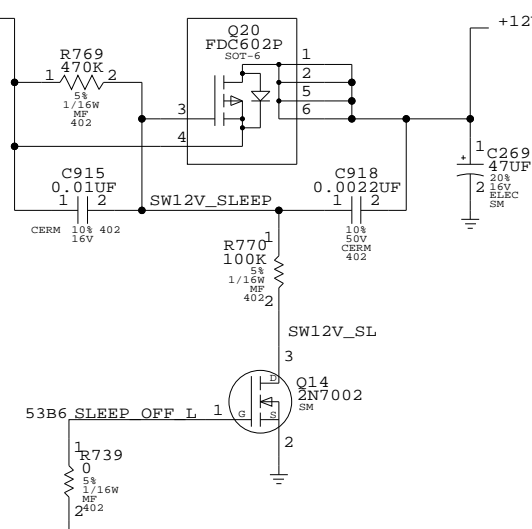
# DC/DC CONVERTER

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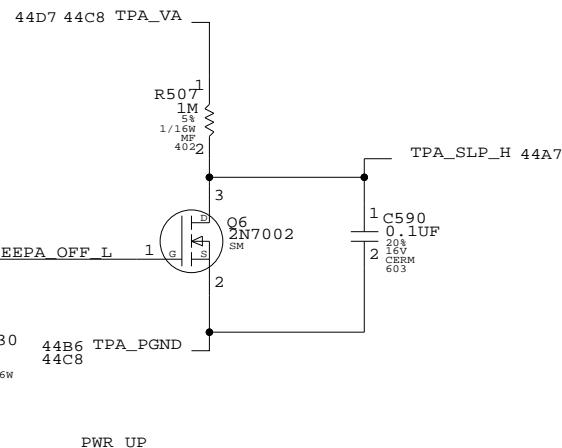
APPLE COMPUTER INC.	D	051-6423	D
	SCALE	SHT	REV.
NONE	52	74	

### +12V MAIN POWER SWITCH (OFF DURING SLEEP)

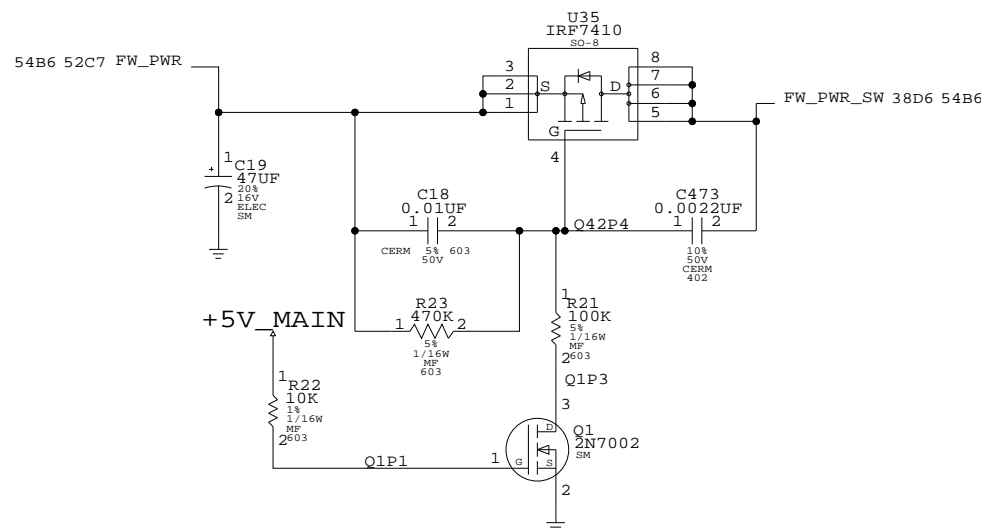
61D7 54C1 53B7  
52C4 52B4 51D7 51D4 51C4  
47B4 46D8 44D8 41C8 38D8  
50D6 50C8 50C4 47D7 47D3  
53A7 53A4 52D6 52D4 52C6



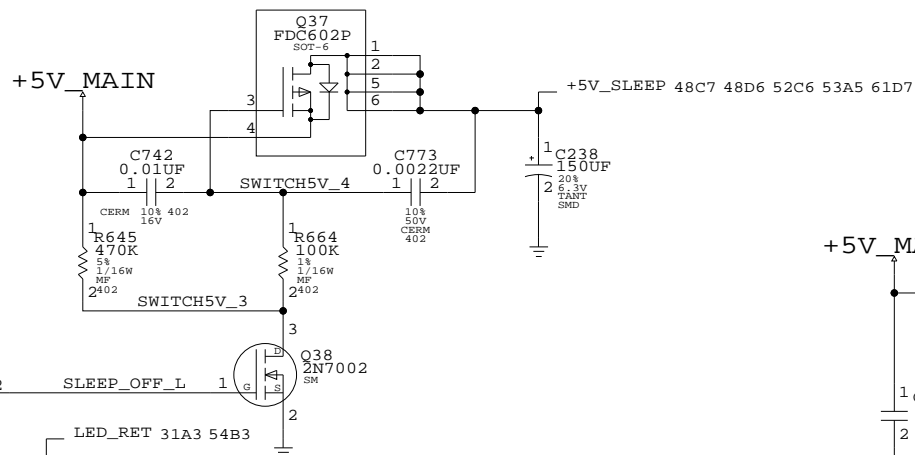
### AUDIO SLEEP SWITCH (OFF DURING SLEEP)



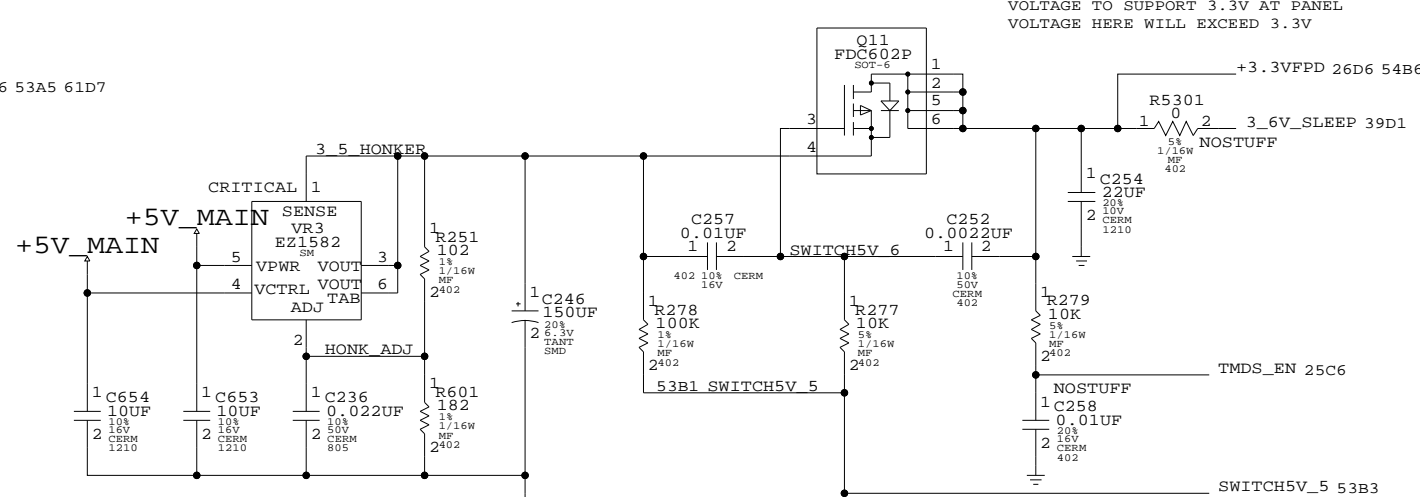
### FIREWIRE POWER SWITCH



### +5V POWER SWITCH (OFF DURING SLEEP)

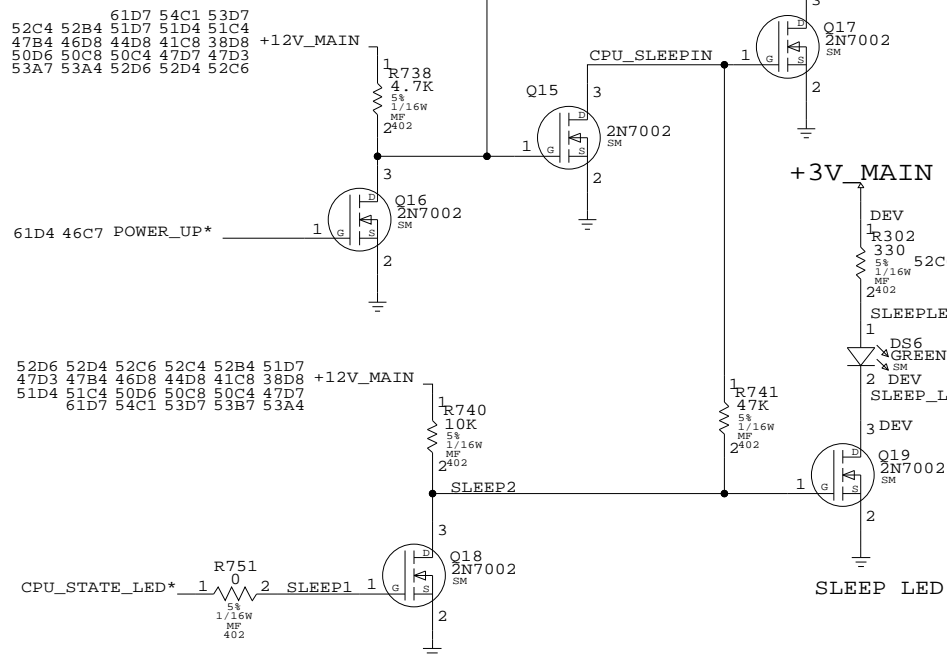


### TMDS POWER CONVERTER & SWITCH (OFF DURING SLEEP)

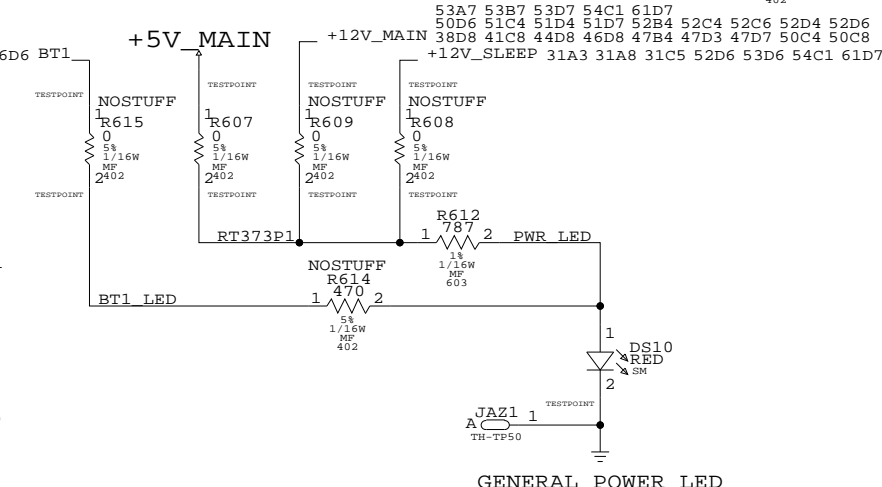


### +5V POWER, SLEEP & TESTPOINT LEDES (TESTPOINT LED IS USED TO FOR SERVICE AND IF NOT ILLUMINATED, TELLS USER ITS OK TO ADD MEMORY)

61D7 54C1 53D7  
52C4 52B4 51D7 51D4 51C4  
47B4 46D8 44D8 41C8 38D8  
50D6 50C8 50C4 47D7 47D3  
53A7 53A4 52D6 52D4 52C6



53A7 53B7 53D7 54C1 61D7  
50D6 51C4 51D4 51D7 52B4 52C4 52C6 52D4 52D6  
38D8 41C8 44D8 46D8 47B4 47D3 47D7 50C4 50C8  
+12V\_SLEEP 31A3 31A8 31C5 52D6 53D6 54C1 61D7



## +5V/+12V, AUDIO FW & TMDS PWR

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SIZE	DRAWING NUMBER	REV.
D	051-6423	D
SCALE	SHT	OF
NONE	53	74

CLOCK POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
+2_5V_DDR_AVDD	10	2.5	20
+2_5V_DDR_VDD	10	2.5	20
+3V_INTSS_AVDD	10	3.3	20
+3V_INTSS_VDD	10	3.3	20
PCK2059_VDDI2C	10	2.5	20

10D4  
10D5  
10B7  
10B6  
10D4

CPU POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
+MAXBUS_SLEEP	10	1.8	20
CPU_AVDD	10	1.85	20
CPU_VCORE_SLEEP	10	1.85	20

4D5 6D8 7A3 7B3 7C3 7C5 7C7 8D3 9B2 9D2 9D4  
4D3 11B8 11D8 46B7 46D1 46D2 47D2 48D4 61C7  
4D3 4D7 9B6 9C2 47B3 47C1 61B4 61D7

ETHERNET POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
+2.5V_ENET	10	2.5	20

37C3 37D3 37D5

FIREWIRE POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
FW_DIO_V	10	3.3	20
FW_DIODE_BYPASS_V	10	3.3	20
FW_PWR	10	24	20
FW_PWR_SW	10	24	20
FW_PHY_3_3	10	3.3	20
FW_VGND	10	0	20
FW_VP	10	12	20
FW_VP1	10	12	20
FW_VP2	10	12	20
FW_VP_1	10	12	20
FW_VP_2	10	12	20

38B6  
38B6 38B7  
52C7 53D3  
38D6 53D1  
38B5 38B7 38D7  
38D1  
38D5  
38D1 38D3  
38C1 38D3  
38D4  
38D4

GRAPHICS POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
+3.3VFPD	10	3.6	20
DAC2VDD	10	3.3	20
DACVDD	10	3.3	20
DDC_VCC_3	10	3.3	20
DDC_VCC_5	10	5	20
DDR_VREF	10	1.25	20
IFP0AVCC	10	3.8	20
IFP0VREF	10	3.8	20
INT_TMDS_3V	10	3.6	20
GPU_AGP_VREF	10	0.75	20
GPU_FB_VREF	10	1.25	20
GRAPH_CORE	10	1.6	20
NVPLLVD	10	3.3	20
SGRAVREF	10	1.25	20
SGRBVREF	10	1.25	20

26D6 53C1  
24C5  
24C4  
26A5 26B3 61B7  
27C4 61B7  
16B2 16D1 16D8 17D8  
25A6 25B4  
25B4  
26B3 26C3 26C4 26D5 61C7  
19A3 19A8  
20C8  
19D5 25C4 25C6 50B1  
24D5  
22A3 22C4 22C8  
23A3 23C4 23C8

GPU_50PULLUP	1.5	OFFP	9A5
GPU_50PULLDWN	0	OFFP	9A5
GPU_TMODE	0	OFFP	9A5

GPU_XTALSSIN	0	OFFP	24B4
VIPCLK	0	OFFP	24D4

CSLOT_IOWAIT_L	3.3	OFFP	9B7
EIDE_CSELP_L	0	OFFP	40C6
EIDE_IOCS16_L	5	OFFP	40C6
UIDE_CSELP_L	0	OFFP	40C2
UNUSED_ATAIOCS16_L	5	OFFP	40C2

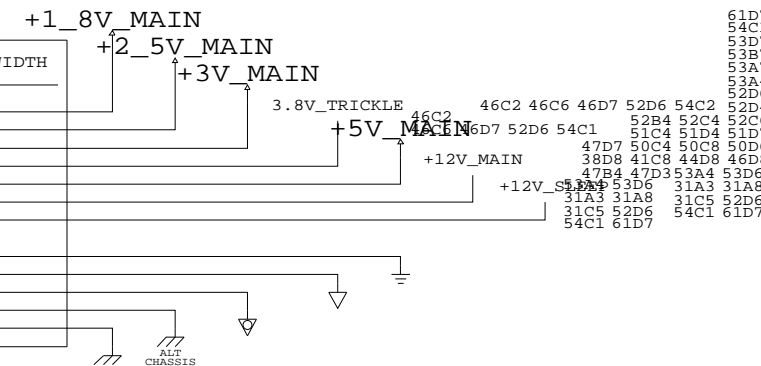
INTREPID POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
+1_5V_INTREPID_PLL	10	1.5	20
+1_5V_INTREPID_PLL1	10	1.5	20
+1_5V_INTREPID_PLL2	10	1.5	20
+1_5V_INTREPID_PLL3	10	1.5	20
+1_5V_INTREPID_PLL4	10	1.5	20
+1_5V_INTREPID_PLL5	10	1.5	20
+1_5V_INTREPID_PLL6	10	1.5	20
+1_5V_INTREPID_PLL7	10	1.5	20
+1_5V_INTREPID_PLL8	10	1.5	20
+1_5V_AGP	10	1.5	20
INT_AGP_VREF	10	0.75	20

11D3 18D6 30D6 32D5  
30C4  
30D4  
30D4  
30D4  
18D5  
32D4  
11D2  
30D4  
12D6 13C8 18A8 18C2 18D7 19A4 19D5 48B4 61C7  
18A7 18C6

MAIN POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
+1_8V_MAIN	10	1.8	20
+2_5V_MAIN	10	2.5	20
+3V_MAIN	10	3.3	20
3.8V_TRICKLE	10	3.8	20
+5V_MAIN	10	5	20
+12V_MAIN	10	12	20
+12V_SLEEP	10	12	20
GND	10	0	20
AGND	10	0	20
ANALOGGND	10	0	20
ALTCGND	10	0	20
CHGND	10	0	20



PMU POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
3.8VH_TRICKLE	10	3.8	20
PMU_AVCC	10	3.5	20
PMU_POWER	10	3.5	20

46C1 46D7  
46B5 46D4 61C4  
31C3 46A5 46B1 46C2 46D5

SYSTEM POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
+12VSD_FILT	10	12	20
FAN_12V_FILT	10	12	20
KSSVSD	10	5	20
LED_5V	10	5	20
LED_5V_FILT	10	5	20
LED_RET	10	0	20
LED_RET_FILT	10	0	20

31A5  
31A5 61C7  
31A5 61A7  
31A8  
31A5 61A7  
31A3 53B6  
31A5 61A7

USB POWER CONSTRAINT TABLE

SIG_NAME	MIN_NECK_WIDTH	VOLTAGE	MIN_LINE_WIDTH
+3V_INTREPID_USB	10	3.3	20
NEC_AVDD	10	3.3	20
USB_GND	10	0	20
USB_PORT_PWR	10	5	20
USB_PWR	10	5	20
USB_PWR_EN	10	0	20

30C4  
34D5  
35A4 35B3 35C3 35D3  
35A4 35B3 35C3 35D3  
61B4 27B5 27C2 27D3  
35A6

POWER CONSTRAINTS

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SIG_NAME	RATSNEST_SCHEDULE				NET_SPACING_TYPE	DIFFERENTIAL_PAIR		PULSE_PARAM	FLAG	LINE
	MATCHED_DELAY	MAX_VIAS	DELAY_RULE	STUB_LENGTH		MAX_EXPOSED_LENGTH	FUNC_TEST			
34B6 33B7 32C5 32B8 PCI_IRDY_L	MIN_DAI	6	:6000:800	500			33 MHZ	FLAG	111	
61A4 34B6 33B7 32C5 32B8 PCI_TRDY_L	MIN_DAI	6	:6000:800	500			33 MHZ	FLAG	112	
61A4 34B6 33B7 32C5 32A8 PCI_DEVSEL_L	MIN_DAI	6	:6000:800	500			33 MHZ	FLAG	113	
61A4 34B6 33B7 32C5 32A8 PCI_STOP_L	MIN_DAI	6	:6000:800	500			33 MHZ	FLAG	114	
61A4 34B6 33B7 32C5 PCI_PAR	MIN_DAI	6	:6000:800	500			33 MHZ	FLAG	115	
32C5 CLK33M_PCI_SLOTB_UP		3	:600:1000	200		450	33 MHZ	FLAG	116	
32C5 CLK33M_PCI_SLOTC_UP		3	:600:1200	200		450	33 MHZ	FLAG	117	
32C5 CLK33M_PCI_SLOTD_UP		3	:600:1000	200		450	33 MHZ	FLAG	118	
61A4 33C2 32D7 CLK33M_PCI_SLOTB		5	:3000:400	200	10 MIL SPACING	450	33 MHZ	FLAG	119	
32C5 INT_PCI_FB_OUT		4	:::1000	200		450	33 MHZ	FLAG	120	
32C7 PCI_FBO_PLUS2		4	:::200	200		450	33 MHZ	FLAG	121	
32C8 PCI_FB_PLUS4		4	:1900:2000	200		450	33 MHZ	FLAG	122	
32C7 PCI_FBI_PLUS2		4	:1900:2000	200		450	33 MHZ	FLAG	123	
32C7 PCI_FBI_EQUAL		4	:2000:3000	200		450	33 MHZ	FLAG	124	
32C7 PCI_FB_PLUS6		4	:5900:6000	200		450	33 MHZ	FLAG	125	
32C5 INT_PCI_FB_IN		4	:::1080	200		450	33 MHZ	FLAG	126	
33C7 33C6 33C3 33C2 33B7 33B6 33B3 33B2 PCIT_AD<31..0>		3	:::1000				33 MHZ	FLAG	127	
61C2 61B2 61A4 33C3 33B6 33B2 PCIT_CBE<31..0>		3	:::1000				33 MHZ	FLAG	128	
33C2 33B6 PCIT_FRAME_L		3	:::1000				33 MHZ	FLAG	129	
61B4 33C3 33B6 PCIT_IRDY_L		3	:::1000				33 MHZ	FLAG	130	
33C2 33B6 PCIT_TRDY_L		3	:::1000				33 MHZ	FLAG	131	
33C2 33B6 PCIT_DEVSEL_L		3	:::1000				33 MHZ	FLAG	132	
33C2 33B6 PCIT_STOP_L		3	:::1000				33 MHZ	FLAG	133	
33C2 33B6 PCIT_PAR		3	:::1000				33 MHZ	FLAG	134	
19D8 19C8 18C4 AGP_AD<0..15>	AGP_GROUP0:::280	5	:::4500				266 MHZ	FLAG	135	
19C8 18B4 AGP_CBE<0..1>	AGP_GROUP0:::330	5	:::4500				266 MHZ	FLAG	136	
19B8 18B3 18A4 AGP_AD_STB<0>	AGP_GROUP0:::330	4	:::4400	200	8 MIL SPACING	500	AGP_ADSTBDP0	133 MHZ	FLAG	137
19B8 18D1 18A4 AGP_AD_STB_L<0>	AGP_GROUP0:::330	4	:::4400	200	8 MIL SPACING	500	AGP_ADSTBDP0	133 MHZ	FLAG	138
19C8 18C4 18B4 AGP_AD<16..31>	AGP_GROUP0:::280	5	:::4500				266 MHZ	FLAG	139	
19C8 18B4 AGP_CBE<2..3>	AGP_GROUP0:::280	5	:::4500				266 MHZ	FLAG	140	
19B8 18B3 18A4 AGP_AD_STB<1>	AGP_GROUP0:::280	4	:::4400	200	8 MIL SPACING	500	AGP_ADSTBDP1	133 MHZ	FLAG	141
19B8 18D1 18A4 AGP_AD_STB_L<1>	AGP_GROUP0:::330	4	:::4400	200	8 MIL SPACING	500	AGP_ADSTBDP1	133 MHZ	FLAG	142
19B8 18C3 18B4 AGP_FRAME_L		5	:4000:4500				66 MHZ	FLAG	143	
19B8 18C3 18B4 AGP_IRDY_L		5	:4000:4500				66 MHZ	FLAG	144	
19B8 18B4 18B3 AGP_TRDY_L		5	:4000:4500				66 MHZ	FLAG	145	
19B8 18C3 18B4 AGP_DEVSEL_L		5	:4000:4500				66 MHZ	FLAG	146	
19B8 18B4 18B3 AGP_STOP_L		5	:4000:4500				66 MHZ	FLAG	147	
19B8 18B4 AGP_PAR		5	:4000:4500				66 MHZ	FLAG	148	
19A8 18C1 18B4 18B1 18A4 AGP_SBA<0..7>	AGP_GROUP99:::200	5	:::4500				AGP_SBSTBB	FLAG	149	
19A8 18D1 18A4 AGP_SB_STB_L	AGP_GROUP99:::200	5	:::4500				AGP_SBSTBB	FLAG	150	
19B7 18B1 18A4 AGP_ST<0..2>		5	:4500:5000					FLAG	151	
19B8 18B3 18A4 AGP_PIPE_L		5	:4000:4500					FLAG	152	
19B8 18B3 18A4 AGP_RBF_L		5	:4000:4500					FLAG	153	
19B7 18C4 18C3 AGP_REQ_L		5	:4500:5000					FLAG	154	
19B7 18C4 18C3 AGP_GNT_L		5	:4500:5000					FLAG	155	
19B8 18B1 18A6 AGP_WBF_L		5	:4000:4500					FLAG	156	
19A8 18D3 18D1 18C6 AGP_BUSY_L		5	:4500:5000					FLAG	157	
19A8 18D3 18C6 STOP_AGP_L		5	:4500:5000					FLAG	158	
19D7 19C7 GPU_AGP_AD<0..15>	GPU_AGP_GROUP0:::100	3	:::600				266 MHZ	FLAG	159	
19C7 GPU_AGP_CBE<0..1>	GPU_AGP_GROUP0:::100	3	:::600				266 MHZ	FLAG	160	
19B7 AGP_AD_STB_GPUUF<0>	GPU_AGP_STB0:::50	3	:::450	200	8 MIL SPACING	500	GPU_ADSTBDP0	133 MHZ	FLAG	161
19B7 AGP_AD_STB_L_GPUUF<0>	GPU_AGP_STB0:::50	3	:::800	200	8 MIL SPACING	500	GPU_ADSTBDP0	133 MHZ	FLAG	162
19C7 GPU_AGP_AD<16..31>	GPU_AGP_GROUP1:::100	3	:::600				266 MHZ	FLAG	163	
19C7 GPU_AGP_CBE<2..3>	GPU_AGP_GROUP1:::100	3	:::600				266 MHZ	FLAG	164	
19B7 AGP_AD_STB_GPUUF<1>	GPU_AGP_STB1:::50	3	:::800	200	8 MIL SPACING	500	GPU_ADSTBDP1	133 MHZ	FLAG	165
19B7 AGP_AD_STB_L_GPUUF<1>	GPU_AGP_STB1:::50	3	:::800	200	8 MIL SPACING	500	GPU_ADSTBDP1	133 MHZ	FLAG	166
19B7 GPU_AGP_FRAME_L		3	:300:600				66 MHZ	FLAG	167	
19B7 GPU_AGP_IRDY_L		3	:300:600				66 MHZ	FLAG	168	
19B7 GPU_AGP_TRDY_L		3	:300:600				66 MHZ	FLAG	169	
19B7 GPU_AGP_DEVSEL_L		3	:300:600				66 MHZ	FLAG	170	
19B7 GPU_AGP_STOP_L		3	:300:600				66 MHZ	FLAG	171	
19B7 GPU_AGP_PAR		3	:300:600				66 MHZ	FLAG	172	
19A7 GPU_AGP_SBA<0..7>	GPU_AGP_SBSTB:::50	3	:300:600				GPU_SBSTBB	FLAG	173	
19A7 GPU_AGP_SB_STB_L	GPU_AGP_SBSTB:::50	3	:300:600				GPU_SBSTBB	FLAG	174	
19B7 GPU_AGP_PIPE_L		3	:300:600					FLAG	175	
19B7 GPU_AGP_RBF_L		3	:300:600					FLAG	176	
18C6 CLK66M_GPU_UP		3	:1000:1100	200	10 MIL SPACING	250	66 MHZ	FLAG	177	
19C7 18D8 CLK66M_GPU_AGP		4	:3700:3900	200	10 MIL SPACING	250	66 MHZ	FLAG	178	
18C6 INT_AGP_FB_OUT		4	:1400:1500	200			66 MHZ	FLAG	179	
18B7 AGP_FBO_EQUAL		4	:1900:2000	200			66 MHZ	FLAG	180	
18B8 AGP_FB_PLUS2		4	:1900:2000	200			66 MHZ	FLAG	181	
18C7 AGP_FBI_EQUAL		4	:::200	200			66 MHZ	FLAG	182	
18C6 INT_AGP_FB_IN		4	:::1200	200			66 MHZ	FLAG	183	
32C5 32A8 18D7 INT_ROM_OVERLAY_PU		3	:600:800		10 MIL SPACING	250	66 MHZ	FLAG	184	
61A7 58B3 18C7 11B4 9B4 INT_ANALYZER_CLK		2	:::2800		8 MIL SPACING	250	66 MHZ	FLAG	185	
34A6 32D7 CLK33M_PCI_SLOTD		4	:3000:3500	200	8 MIL SPACING	250	33 MHZ	FLAG	186	

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NONE	56	74

8 7 6 5 4 3 2 1



DIGITAL SIGNALS

GROUP	SIG_NAME	MATCHED_DELAY	MAX VIAS	DELAY_RULE	STUB_LENGTH	NET_SPACING_TYPE	MAX EXPOSED LENGTH	PULSE PARAM	
	FBD<0..63>	GPU_FBDATA_A:::225	4	:::800				300 MHZ	20E8 20F8 20G8 21C5 21C8 21D5 21D8
	FEBD<0..63>	RAM_FBDATA_A:::300	4	:::1000				300 MHZ	21C4 21C7 21D4 21D7 22B1 22B5 22C1 22C5
	FBDQM<0..7>	GPU_FBDM_A:::200	4	:::800				300 MHZ	20D8 20G3
	FEBDQM<0..7>	RAM_FBDM_A:::200	4	:::1000				300 MHZ	20G2 22C2 22C6
	FBA<0..12>	GPU_FBADDR_A:::200	4	:::700				300 MHZ	20C8 20D8 20E3 20F3
	FEBA<0..11>	RAM_FBADDR_A:::530	5	:::2400	2350			300 MHZ	20E2 20F2 22C2 22C6 22D2 22D6
	FEBBA<0..1>	GPU_FBADDR_A:::200	4	:::600				300 MHZ	20C8 20E3
	FEBBBA<0..1>	RAM_FBADDR_A:::530	5	:::2400	50			300 MHZ	20E2 22C2 22C6
	FBRAS L	GPU_FBCNTL_A:::200	4	:::400				300 MHZ	20C8 20G3
	FBRAS L	GPU_FBCNTL_A:::200	4	:::400				300 MHZ	20C8 20G3
	FBAWE L	GPU_FBCNTL_A:::200	4	:::400				300 MHZ	20C8 20F3
	FBRAS0 L	GPU_FBCNTL_A:::200	4	:::400				300 MHZ	20C8 20F3
	FBRACKE	GPU_FBCNTL_A:::200	5	:::400	100			300 MHZ	20D3 20D7
	FBRBRAS L	RAM_FBCNTL_A:::350	5	:::2700	50			300 MHZ	20G2 22B2 22B6
	FEBRACAS L	RAM_FBCNTL_A:::500	5	:::2700	50			300 MHZ	20G2 22B2 22B6
	FEBBAWE L	RAM_FBCNTL_A:::500	5	:::2700	50			300 MHZ	20F2 22B2 22B6
	FEBRACS0 L	RAM_FBCNTL_A:::350	5	:::2700	50			300 MHZ	20F2 22B2 22B6
	FEBRACKE	RAM_FBCNTL_A:::500	5	:::2700	50			300 MHZ	20D2 22C2 22C6
	FBDQS<0..7>	GPU_FBDQS_A:::100	3	:::350				300 MHZ	20C7 21A8
	FEBDQSTERM<0..7>	FB_DQSTERM_A:::50	3	:::1500		10 MIL SPACING		300 MHZ	21A7
	FBDQS<0..7>	RAM_FBDQS_A:::55	3	:::150		10 MIL SPACING		300 MHZ	21A6 22C2 22C6
	FEBCLK0	GPU_FBCLK_A:::50	3	:::150			200	300 MHZ	20D7 21C3
	FEBCLK0_L	GPU_FBCLK_A:::50	3	:::150			200	300 MHZ	20D7 21C3
	FEBCLK1	GPU_FBCLK_A:::50	3	:::150			200	300 MHZ	20D7 21D3
	FEBCLK1_L	GPU_FBCLK_A:::50	3	:::150			200	300 MHZ	20D7 21D3
	FEBBCLK1	RAM_FBCLK_A:::80	3	:::2500			200	300 MHZ	21D1 22C2
	FEBBCLK1_L	RAM_FBCLK_A:::80	3	:::2500			200	300 MHZ	21D1 22C2
	FEBBCLK0	RAM_FBCLK_A:::70	3	:::2500			200	300 MHZ	21C1 22C6
	FEBBCLK0_L	RAM_FBCLK_A:::70	3	:::2500			200	300 MHZ	21C1 22C6
	FBD<64..127>	GPU_FBDATA_B:::225	4	:::800				300 MHZ	20E5 20F5 20G5 21B5 21B8 21C5 21C8
	FEBD<64..127>	RAM_FBDATA_B:::325	4	:::1000				300 MHZ	21B4 21B7 21C4 21C7 23B1 23B5 23C1 23C5
	FBDQM<8..15>	GPU_FBDM_B:::120	4	:::800				300 MHZ	20C3 20D3 20D5
	FEBDQM<8..15>	RAM_FBDM_B:::120	4	:::1000				300 MHZ	20C2 20D2 23C2 23C6
	FBA<0..12>	GPU_FBADDR_B:::120	4	:::600				300 MHZ	20A3 20B3 20C3 20C5 20D5
	FEBBA<0..11>	RAM_FBADDR_B:::370	5	:::2400	50			300 MHZ	20B2 20C2 23C2 23C6 23D2 23D6
	FEBBBA<0..1>	GPU_FBADDR_B:::120	4	:::600				300 MHZ	20A3 20C5
	FEBBBA<0..1>	RAM_FBADDR_B:::370	5	:::2400	50			300 MHZ	20A2 23C2 23C6
	FBRAS L	GPU_FBCNTL_B:::120	4	:::400				300 MHZ	20C3 20D4
	FBRAS L	GPU_FBCNTL_B:::120	4	:::400				300 MHZ	20C3 20D4
	FBAWE L	GPU_FBCNTL_B:::120	4	:::400				300 MHZ	20C3 20D4
	FBRAS0 L	GPU_FBCNTL_B:::120	4	:::400				300 MHZ	20C3 20C4
	FBRACKE	GPU_FBCNTL_B:::120	5	:::400	100			300 MHZ	20A3 20C4
	FBRBRAS L	RAM_FBCNTL_B:::2000	5	:::3500	3550			300 MHZ	20C2 23B2 23B6
	FEBRACAS L	RAM_FBCNTL_B:::2000	5	:::3500	3550			300 MHZ	20C2 23B2 23B6
	FEBBAWE L	RAM_FBCNTL_B:::2000	5	:::3500	3550			300 MHZ	20C2 23B2 23B6
	FEBRACS0 L	RAM_FBCNTL_B:::2000	5	:::3500	3550			300 MHZ	20C2 23B2 23B6
	FEBRACKE	RAM_FBCNTL_B:::2000	5	:::3500	3550			300 MHZ	20A2 23C2 23C6
	FBDQS<8..15>	GPU_FBDQS_B:::100	3	:::350		10 MIL SPACING		300 MHZ	20D4 21A5
	FEBDQSTERM<8..15>	FB_FBDQSTERM_B:::60	3	:::1500		10 MIL SPACING		300 MHZ	21A4
	FBDQS<8..15>	RAM_FBDQS_B:::50	3	:::150		10 MIL SPACING		300 MHZ	21A3 23C2 23C6
	FEBCLK0	GPU_FBCLK_B:::50	3	:::150			200	300 MHZ	20C5 21B3
	FEBCLK0_L	GPU_FBCLK_B:::50	3	:::150			200	300 MHZ	20C5 21B3
	FEBCLK1	GPU_FBCLK_B:::50	3	:::150			200	300 MHZ	20C5 21C3
	FEBCLK1_L	GPU_FBCLK_B:::50	3	:::150			200	300 MHZ	20C5 21B3
	FEBBCLK1	RAM_FBCLK_B:::90	4	:::2500			200	300 MHZ	21C1 23C2
	FEBBCLK1_L	RAM_FBCLK_B:::90	3	:::2500			200	300 MHZ	21B1 23C2
	FEBBCLK0	RAM_FBCLK_B:::90	3	:::2500			200	300 MHZ	21B1 23C6
	FEBBCLK0_L	RAM_FBCLK_B:::90	3	:::2500			200	300 MHZ	21B1 23C6

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT		OF
NONE	57		74

DIGITAL SIGNALS

GROUP	SIG_NAME	MATCHED_DELAY	MAX_VIAS	DELAY_RULE	STUB_LENGTH	NET_SPACING_TYPE	NO_TEST	PULSE_PARAM	MAX_EXPOSED_LENGTH
MAXBUS	#GPU_ADDR<0..31>	CPU_ADDR_GROUP:::71250	:::5000		250			166 MHZ	4B7 4C7 9B7 9B8 9C5 9C6 9C7 9C8 11C3 11D3 11D8
	#GPU_DATA<0..63>	CPU_DATA_GROUP:::7400	:::5000		1550			166 MHZ	5A4 5B4 5C4 5D4 9C5 9C6 9C7 9C8 9D5 9D6 9D7 9D8
	#GPU_BR L	CPU_CNTL_GROUP:::7100	:::5000		250	10 MIL SPACING		166 MHZ	4D7 7C7 9C5 11D3 11B1 11B5 11B8 11C1 11C5 11D1 11D5
	#GPU_BG L	CPU_CNTL_GROUP:::7100	:::5000		250	10 MIL SPACING		166 MHZ	4D7 7B7 9B5 11D3
	#GPU_TS L	CPU_CNTL_GROUP:::7000	:::5000		250	10 MIL SPACING		166 MHZ	4D7 7C7 9C7 11D3
	#GPU_TT<0..4>	CPU_CNTL_GROUP:::7300	:::5000		250	10 MIL SPACING		166 MHZ	4B7 7A7 9B5 9B6 9C5 9C6 11B3
	#GPU_TBST L	CPU_CNTL_GROUP:::7100	:::5000		250	10 MIL SPACING		166 MHZ	4B7 7B7 9B5 11B3
	#GPU_TSIZ<0..2>	CPU_CNTL_GROUP:::7260	:::5000		250	10 MIL SPACING		166 MHZ	4B7 9B6 9B7 9C6 11B3
	#GPU_ARTRY L	CPU_CNTL_GROUP:::7000	:::5000		250	10 MIL SPACING		166 MHZ	4A7 7C7 9B8 11B3
	#GPU_AACK L	CPU_CNTL_GROUP:::7000	:::5000		250	10 MIL SPACING		166 MHZ	4A7 7B7 9B6 11B3
	#GPU_GBL L	CPU_CNTL_GROUP:::7000	:::1000		250	10 MIL SPACING		166 MHZ	4B8 9B6
	#GPU_INT_GBL L	CPU_CNTL_GROUP:::5100	:::3500		250	10 MIL SPACING		166 MHZ	4B8 7B7 11C3
	#GPU_CI L	CPU_CNTL_GROUP:::7000	:::5000		250	10 MIL SPACING		166 MHZ	4A7 7A7 9C6 11C3
	#GPU_HIT L	CPU_CNTL_GROUP:::7000	:::5000		250	10 MIL SPACING		166 MHZ	4A7 7C7 9B8 11B3
	#GPU_DBG L	CPU_CNTL_GROUP:::7000	:::3500		250	10 MIL SPACING		166 MHZ	4C3 7B7 9C8 11B1
	#GPU_DRDY L	CPU_CNTL_GROUP:::5100	:::500		250	10 MIL SPACING		166 MHZ	4C2 7B7 9B6 11B1
	#GPU_WT L	CPU_CNTL_GROUP:::7000	:::5000		250	10 MIL SPACING		166 MHZ	4B7 7A7 9B6 11B3
	#GPU_DRDY L UF		2	:::5000		250	10 MIL SPACING	166 MHZ	4C3
	#GPU_DTI<0..2>	CPU_CNTL_GROUP:::7150	:::5000		250	10 MIL SPACING		166 MHZ	4C3 9B5 9B7 11A1
	#GPU_TA L	CPU_CNTL_GROUP:::7100	:::5000		250	10 MIL SPACING		166 MHZ	4C3 7C7 9C5 11A1
	#GPU_TEA L	CPU_CNTL_GROUP:::7100	:::5000		250	10 MIL SPACING		166 MHZ	4C3 7B7 9C6 11A1
	#GPU_OREO L	CPU_CNTL_GROUP:::7000	:::5000		250	10 MIL SPACING		166 MHZ	4C3 7D5 9B7 11B3
#GPU_OACK L	CPU_CNTL_GROUP:::1000	:::4000		250	10 MIL SPACING		166 MHZ	4C3 9B5 11B3	
#SYSCLK CPU UF		2	:::150				166 MHZ	11A3	
#SYSCLK CPU		4	:::2200:2400	200	10 MIL SPACING		166 MHZ	315 4D2 11A4	
#INT CPU FB OUT		3	:::1000	200			166 MHZ	315 11B3	
#GPU_FBO PLUS1		3	:::200	200			166 MHZ	315 11A4	
#GPU_FBI PLUS1		3	:::1400:1500	200			166 MHZ	315 11A4	
#GPU_FB MINUS3		4	:::900:1000	200			166 MHZ	315 11A4	
#INT CPU FB IN		4	:::1000	200			166 MHZ	315 11B3	
#GPU_FB PLUS2		3	:::900:1000				166 MHZ	315 11A5	
#GPU_FB PLUS3		3	:::2900:3000				166 MHZ	315 11A4	
#INT_ANALYZER_CLK		3	:::300				166 MHZ	9B4 11B4 18C7 56A7 61A7	
#SYSCLK LA		2	:::2000				166 MHZ	9B3 9D8	
#INT_CLOCK_OUT		3	:::3000				166 MHZ	9C4	
MIN_LINE_WIDTH DIFFERENTIAL_PAIR									
#USB2_XT1		3	:::1000	100	10 MIL SPACING		30 MHZ		34C4
#USB2_XT2 B		3	:::1000	100	10 MIL SPACING		30 MHZ		
#USB2_XT2		3	:::100	100	10 MIL SPACING		30 MHZ		34C4
#USB2_RREF		2	:::100						34B4
#USB2_RSDAM	USB2_RSDA:::20	2	:::500		8 MIL SPACING	3.5	480 MHZ		34C4
#USB2_RSDAP	USB2_RSDA:::20	2	:::500		8 MIL SPACING	3.5	480 MHZ		34C4
#USB2_RSDBM	USB2_RSDB:::20	2	:::500		8 MIL SPACING	3.5	480 MHZ		34C4
#USB2_RSDBP	USB2_RSDB:::20	2	:::500		8 MIL SPACING	3.5	480 MHZ		34C4
#USB2_RSDCM	USB2_RSDC:::20	2	:::500		8 MIL SPACING	3.5	480 MHZ		34C4
#USB2_RSDCP	USB2_RSDC:::20	2	:::500		8 MIL SPACING	3.5	480 MHZ		34C4
#USB2_DAN F	USB2_DMA:::30	3	:::500	50	8 MIL SPACING	3.5	480 MHZ	USB2_DMA_DP	RATSNST_SCHEDULE MIN_DAI5Y_CHAIN 34C1 34C4 35B7
#USB2_DAP F	USB2_DMA:::30	3	:::500	50	8 MIL SPACING	3.5	480 MHZ	USB2_DMA_DP	MIN_DAI5Y_CHAIN 34C1 35B7
#USB2_DBN F	USB2_DMB:::20	3	:::500	50	8 MIL SPACING	3.5	480 MHZ	USB2_DMB_DP	MIN_DAI5Y_CHAIN 34C1 35C7
#USB2_DBP F	USB2_DMB:::20	3	:::500	50	8 MIL SPACING	3.5	480 MHZ	USB2_DMB_DP	MIN_DAI5Y_CHAIN 34C1 34C4 35C7
#USB2_DCN F	USB2_DMC:::20	3	:::500	50	8 MIL SPACING	3.5	480 MHZ	USB2_DMC_DP	MIN_DAI5Y_CHAIN 34C1 35D7
#USB2_DCP F	USB2_DMC:::20	3	:::500	50	8 MIL SPACING	3.5	480 MHZ	USB2_DMC_DP	MIN_DAI5Y_CHAIN 34C1 35D7
#USBT_DAN F	USB2_DMAT:::60	4	:::3000	2000	8 MIL SPACING	3.5	480 MHZ	USB2_DMAT_DP	MIN_DAI5Y_CHAIN 35B6
#USBT_DAP F	USB2_DMAT:::60	4	:::3000	2000	8 MIL SPACING	3.5	480 MHZ	USB2_DMAT_DP	MIN_DAI5Y_CHAIN 35B6
#USBT_DBN F	USB2_DMBT:::60	4	:::3000	2000	8 MIL SPACING	3.5	480 MHZ	USB2_DMBT_DP	MIN_DAI5Y_CHAIN 35C6
#USBT_DBP F	USB2_DMBT:::60	4	:::3000	2000	8 MIL SPACING	3.5	480 MHZ	USB2_DMBT_DP	MIN_DAI5Y_CHAIN 35C6
#USBT_DCN F	USB2_DMCT:::60	4	:::3000	2000	8 MIL SPACING	3.5	480 MHZ	USB2_DMCT_DP	MIN_DAI5Y_CHAIN 35D6
#USBT_DCP F	USB2_DMCT:::60	4	:::3000	2000	8 MIL SPACING	3.5	480 MHZ	USB2_DMCT_DP	MIN_DAI5Y_CHAIN 35D6
#USB_DAN CON	USB2_CONA:::30	2	:::750	50	8 MIL SPACING	3.5	480 MHZ	USB2_CONA_DP	MIN_DAI5Y_CHAIN 35C3 61C4
#USB_DAP CON	USB2_CONA:::30	2	:::750	50	8 MIL SPACING	3.5	480 MHZ	USB2_CONA_DP	MIN_DAI5Y_CHAIN 35C3 61C4
#USB_DBN CON	USB2_CONB:::30	2	:::750	50	8 MIL SPACING	3.5	480 MHZ	USB2_CONB_DP	MIN_DAI5Y_CHAIN 35B3 61C4
#USB_DBP CON	USB2_CONB:::30	2	:::750	50	8 MIL SPACING	3.5	480 MHZ	USB2_CONB_DP	MIN_DAI5Y_CHAIN 35B3 61C4
#USB_DCN CON	USB2_CONC:::30	2	:::750	50	8 MIL SPACING	3.5	480 MHZ	USB2_CONC_DP	MIN_DAI5Y_CHAIN 35D3 61C4
#USB_DCP CON	USB2_CONC:::30	2	:::750	50	8 MIL SPACING	3.5	480 MHZ	USB2_CONC_DP	MIN_DAI5Y_CHAIN 35D3 61C4

SIGNAL CONSTRAINTS

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	NONE	SHT	58 OF 74



DIGITAL SIGNALS (CONT'D)

GROUP	SIG_NAME	MATCHED_DELAY	MAX_VIAS	DELAY_RULE	STUB_LENGTH	NET_SPACING_TYPE	MAX_EXPOSED_LENGTH	PULSE_PARAM
CD DRIVE BUS	EIDE_RST_L			:::3500:5500				33 MHZ 39A7 39D5
	EIDE_DMACK_L			:::3500:5500				33 MHZ 39A7 39D5
	EIDE_STOP			:::5500				33 MHZ 39A7 39D5
	EIDE_HSTB_RDY			:::5500				33 MHZ 39A7 39C5
	EIDE_DSTB_RDY			:::3500:5500				33 MHZ 39A7 39C5
	EIDE_DATA<0..15>			:::3500:5500				33 MHZ 39A5 39B5 39B7 39C5
	GD_RESET_L			:::1000				33 MHZ 39D4 40C6
	GD_DMACK_L			:::4000				33 MHZ 39D4 40C6
	GD_STOP			:::5000				33 MHZ 39D4 40C6
	GD_HSTB_RDY			:::5000				33 MHZ 39C4 40C6
	GD_DSTB_RDY			:::1000				33 MHZ 39C4 40C6
	UATAD<0..15>			:::1000				33 MHZ 39A4 39B4 39C4 40C6
	GD_DMARO			:::1000				33 MHZ 40C6
	EIDE_DMARO			:::3500:5500				33 MHZ 39A7 40C8
	UATA0IRO			:::1000				33 MHZ 40C6
	EIDE_INTRO			:::3500:5500				33 MHZ 39A7 40C8
	CD_EIDE_ADDR<0..2>			:::1000				33 MHZ 40C6
	EIDE_ADDR<0..2>			:::3500:5500				33 MHZ 39B7 40A8 40B8
	CD_CS1FX_L			:::1000				33 MHZ 40C6
	EIDE_CS1FX_L			:::3500:5500				33 MHZ 39A7 40B8
	CD_CS3FX_L			:::1000				33 MHZ 40C6
	EIDE_CS3FX_L			:::3500:5500				33 MHZ 39A7 40B8
HD DRIVE BUS	UIDE_RST_L	HD_DATA:::5500		:::100:6000	500			100 MHZ 39C7 39D3
	UIDE_DMACK_L	HD_DATA:::5500		:::100:6000	500			100 MHZ 39C7 39D3
	UIDE_DIOR_L	HD_DATA:::5500		:::100:6000				100 MHZ 39C7 39D3
	UIDE_DIOW_L	HD_DATA:::5500		:::6000				100 MHZ 39C3 39C7
	UIDE_IOCHRDY	HD_DATA:::5500		:::100:6000	500			100 MHZ 39C3 39C7
	UIDE_DATA<0..15>	HD_DATA:::5500		:::100:6000				100 MHZ 39A3 39B3 39C3 39C7 39D7
	HD_RESET_L			:::1000				100 MHZ 39D1 40C3
	HD_DMACK_L			:::1000				100 MHZ 39D1 40C3
	HD_DIOR_L			:::5500				100 MHZ 39D1 40C3
	HD_DIOW_L			:::5500				100 MHZ 39C1 40C3
	HD_IOCHRDY			:::1000				100 MHZ 39C1 40C3
	HD_DMARO			:::1000				100 MHZ 40C3
	UIDE_DMARO	HD_DATA:::5500		:::100:6000				100 MHZ 39C7 40C4
	HD_INTRO			:::1000	500			100 MHZ 40C3
	UIDE_INTRO	HD_DATA:::5500		:::100:6000				100 MHZ 39C7 40C4
	HD_UIDE_ADDR<0..2>			:::1000				100 MHZ 40C2 40C3
	UIDE_ADDR<0..2>	HD_DATA:::5500		:::100:6000				100 MHZ 39C7 40A4 40B4
	HD_UIDE_CS1FX_L			:::6000				100 MHZ 40C3
	UIDE_CS1FX_L	HD_DATA:::5500		:::6000				100 MHZ 39C7 40B4
	HD_UIDE_CS3FX_L			:::6000				100 MHZ 40C2
	UIDE_CS3FX_L	HD_DATA:::5500		:::6000				100 MHZ 39C7 40B4
	CLK_18M_INT_XOUT		3	:::1000	100	8 MIL SPACING		18.432 MHZ 60B5
	CLK_18M_INT_XOUT		3	:::1000	100	8 MIL SPACING		18.432 MHZ 60B5
	CLK_18M_INT_XOUT		3	:::200	50	8 MIL SPACING		18.432 MHZ 60B5
	USB_DAP	USBA:::500						30B3
	USB_DAN	USBA:::500						30B3
	USB_DAP_F	USBA_F:::500			100			30B2 35B7
	USB_DAN_F	USBA_F:::500			100			30B2 35B7
	USB_DBP	USBB:::500						30B3
	USB_DBN	USBB:::500						30B3
	USB_DBP_F	USBB_F:::500			100			30B2 35C7
	USB_DBN_F	USBB_F:::500			100			30B2 35C7
	USB_DCP	USBC:::500						30B3
	USB_DCN	USBC:::500						30B3
	USB_DCP_F	USBC_F:::500			100			30B2 35D7
	USB_DCN_F	USBC_F:::500			100			30B2 35D7
	USB_DEP	USBE:::500						30B3
	USB_DEN	USBE:::500						30B3
	RT_USB_DP	USBE_F:::500			100			30B2 31D3 61B4
	RT_USB_DM	USBE_F:::500			100			30B2 31D3 61B4
	USB_DFP	USBF:::500						30B3
	USB_DFN	USBF:::500						30B3
	MODEM_USB_DP	USBF_F:::500			100			30B2 31C5 61B4
	MODEM_USB_DM	USBF_F:::500			100			30B2 31C5 61B4
	EMU_XO		3	:::1000	100	8 MIL SPACING		10 MHZ 46B5
	EMU_XI		3	:::1000	100	8 MIL SPACING		10 MHZ 46B5
	EMU_XT		3	:::300	50	8 MIL SPACING		10 MHZ 46A6
	EMU_CLKOUT		3	:::1000	100	8 MIL SPACING		32.768 MHZ 46B4
	EMU_CLKIN		3	:::1000	100	8 MIL SPACING		32.768 MHZ 46B4
	EMU_CLKT		3	:::300	50	8 MIL SPACING		32.768 MHZ 46B2
	MICSHLD					10 MIL SPACING		31A5 45B8 61A7
	MICHIGH					10 MIL SPACING		31A5 45C8 61A7
	MICLOW					10 MIL SPACING		31A5 45B8 61A7
	KS_INT_SPKR+					10 MIL SPACING		31A3 44C3 61B7
	KS_INT_SPKR-					10 MIL SPACING		31A3 44C3 61B7

SIG_NAME	DELAY_RULE	PULSE_PARAM
T_UD_IDEDD_0	:::1000	100 MHZ 39C1 40C3
T_UD_IDEDD_1	:::1000	100 MHZ 39C1 40C3
T_UD_IDEDD_2	:::1000	100 MHZ 39C1 40C3
T_UD_IDEDD_3	:::1000	100 MHZ 39C1 40C3
T_UD_IDEDD_4	:::1000	100 MHZ 39B1 40C3
T_UD_IDEDD_5	:::1000	100 MHZ 39B1 40C3
T_UD_IDEDD_6	:::1000	100 MHZ 39B1 40C3
T_UD_IDEDD_7	:::1000	100 MHZ 39B1 40C3
T_UD_IDEDD_8	:::1000	100 MHZ 39B1 40C2
T_UD_IDEDD_9	:::1000	100 MHZ 39B1 40C2
T_UD_IDEDD_10	:::1000	100 MHZ 39B1 40C2
T_UD_IDEDD_11	:::1000	100 MHZ 39B1 40C2
T_UD_IDEDD_12	:::1000	100 MHZ 39B1 40C2
T_UD_IDEDD_13	:::1000	100 MHZ 39A1 40C2
T_UD_IDEDD_14	:::1000	100 MHZ 39A1 40C2
T_UD_IDEDD_15	:::1000	100 MHZ 39A1 40C2

SIGNAL CONSTRAINTS

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SCALE	SHT		OF
NONE	60		74

FUNC\_TEST

+1_8V_MAIN	FUNC_TEST	OFFF54C4
+12V_MAIN	FUNC_TEST	53B7 53D7 54C1
+12V_SLEEP	FUNC_TEST	OFFF38D8 41C8 44D8 46D8 47B4 47D3 47D7 50C4 50C8 50D6
+12V_SLEEPS	FUNC_TEST	OFFF31A3 31A8 31C5 52D6 53A4 53D6 54C1
+5V_MAIN	FUNC_TEST	OFFPAGE
+5V_SLEEP	FUNC_TEST	OFFF54C4
+2_5V_MAIN	FUNC_TEST	OFFF48C7 48D6 52C6 53A5 53C5
+3V_MAIN	FUNC_TEST	OFFF32A3 54C4
CPU_VCORE_SLEEP	FUNC_TEST	OFFF41D4 42D5 43A5 43A7 44A7 44D4 54C4
JTAG_ASIC_TCK	FUNC_TEST	OFFF44D3 4D7 9B6 9C2 47B3 47C1 54C6 61B4
JTAG_ASIC_TDI	FUNC_TEST	OFFF42A3 36B7 37C4
JTAG_ASIC_TDO	FUNC_TEST	OFFF42A3 30C6 36B7
JTAG_ASIC_TMS	FUNC_TEST	OFFF42A3 37B4
JTAG_ASIC_TRST_L	FUNC_TEST	OFFF42A3 36B7 37A2 37B4
INT_TMDS_3V	FUNC_TEST	OFFF42B3 26C3 26C4 26D5 54A6
+1_5V_AGP	FUNC_TEST	OFFF42D6 13C8 18A8 18C2 18D7 19A4 19D5 48B4 54C3
FAN_12V_FILT	FUNC_TEST	OFFF31A5 54B3
+INTREPID_CORE_MAIN	FUNC_TEST	OFFF42D6 13D4 48B3 49B2
INTREPID_VSENSE	FUNC_TEST	OFFF49C6
OVDG_ADJ	FUNC_TEST	OFFPAGE
CPU_CHKSTP_OUT_L	FUNC_TEST	OFFF4B3 7B5 9A2 9D6
CPU_CHKSTP_IN_L	FUNC_TEST	OFFF4B3 7B5
CPU_HRESET_L	FUNC_TEST	OFFF4B3 7A3 7A5 7B3 8D2 9A2 46C2 46D2
JTAG_CPU_TCK	FUNC_TEST	OFFF46C3 7D5 8C2 9A2
JTAG_CPU_TDI	FUNC_TEST	OFFF46C3 7A5 8D2 9A2
JTAG_CPU_TDO	FUNC_TEST	OFFF46C3 9A2
JTAG_CPU_TMS	FUNC_TEST	OFFF46C3 7A5 8D2 9A2
JTAG_CPU_TRST_L	FUNC_TEST	OFFF46C3 7C5 8D2 9A2
+MAXBUS_SLEEP	FUNC_TEST	OFFF4D5 6D8 7A3 7B3 7C3 7C5 7C7 8D3 9B2 9D2
ROM_CS_L	FUNC_TEST	OFFF4D4 11B8 11D8 46B7 46D1 46D2 47D2 48D4 54C6
ROM_OE_L	FUNC_TEST	OFFF42B4 32B6 33B4
ROM_RW_L	FUNC_TEST	OFFF42B2 32B6 33B4
DDC_VCC_3	FUNC_TEST	OFFF46A5 26B3 54B6
DDC_VCC_5	FUNC_TEST	OFFF47C4 54A6
SND_HP_SENSE	FUNC_TEST	OFFF46B5 43A5
ANALOG_HSYNC*	FUNC_TEST	OFFF44C8 27C4 27D6 28B5 59D3
ANALOG_VSYNC*	FUNC_TEST	OFFF44C8 27C6 28B5 59D3
FILT_ANALOG_BLU	FUNC_TEST	OFFF47C5 59D3
FILT_ANALOG_RED	FUNC_TEST	OFFF47C5 59D3
FILT_ANALOG_GRN	FUNC_TEST	OFFF47C5 59D3
GND	FUNC_TEST	OFFPAGE
KS_INT_SPKR+	FUNC_TEST	OFFF41A3 44C3 60A5
KS_INT_SPKR-	FUNC_TEST	OFFF41A3 44C3 60A5
INT_TMDS_D2P	FUNC_TEST	OFFF45C2 26D6 59C3
INT_TMDS_D2M	FUNC_TEST	OFFF45C2 26D6 59C3
INT_TMDS_D1P	FUNC_TEST	OFFF45D2 26C6 59C3
INT_TMDS_D1M	FUNC_TEST	OFFF45D2 26C6 59C3
INT_TMDS_D0P	FUNC_TEST	OFFF45D2 26B6 59C3
INT_TMDS_D0M	FUNC_TEST	OFFF45D2 26B6 59C3
INT_TMDS_CKM	FUNC_TEST	OFFF45D2 26B6 59D3
INV_CUR_HI_FILT	FUNC_TEST	OFFF45D2 26A6 59D3
IO_RESET_L	FUNC_TEST	OFFF41A5
KS5VSD	FUNC_TEST	OFFF44A6 37B8 46B5 46B8 46D3
INT_I2C_CLK2	FUNC_TEST	OFFF41A5 54B3
INT_I2C_DATA2	FUNC_TEST	OFFF40A3 30D1 31C7 36B5 41B1
INT_ANALYZER_CLK	FUNC_TEST	OFFF40A3 30D1 31C7 36B5 41B1
LAMP_STS_FILT	FUNC_TEST	OFFF42B4 11B4 18C7 56A7 58B3
LCD_PWM_FILT	FUNC_TEST	OFFF41A5
LED_5V_FILT	FUNC_TEST	OFFF41A5 54B3
LED_RET_FILT	FUNC_TEST	OFFF41A5 54A3
MICSHLD	FUNC_TEST	OFFF41A5 45B8 60A5
MICHIGH	FUNC_TEST	OFFF41A5 45C8 60A5
MICLOW	FUNC_TEST	OFFF41A5 45B8 60A5
COMM_RESET_L	FUNC_TEST	OFFF40C5 31D5
IIC_ADD	FUNC_TEST	OFFF41C6
ROM_WP_L	FUNC_TEST	OFFF42A2

FUNC\_TEST

COMM_SHUTDOWN	FUNC_TEST	OFFF40C5 30D1 31D7
MON_DETECT	FUNC_TEST	OFFF45D6 27C6
FLO_KNOWS_BEST	FUNC_TEST	OFFF47C6 47C7 47C8
NMI_BUTTON*	FUNC_TEST	OFFF41B2 46C4
PWR_SWITCH*	FUNC_TEST	OFFF42A8 46B1 46C5 61D4
PMU_RST*	FUNC_TEST	OFFF42A8 31B3 46A5 46B5
PMURESETBUTTON*	FUNC_TEST	OFFF46A4
PWR_SWITCH*	FUNC_TEST	OFFF42A8 46B1 46C5 61D4
PWR_UP	FUNC_TEST	OFFF41C8 52C4 52C8 53B7 53C1 53C7
POWER_UP*	FUNC_TEST	OFFF46C7 53A8
RESET_BUTTON*	FUNC_TEST	OFFF41B2 46C4
COMM_RING_DET_L	FUNC_TEST	OFFF40B5 30B8 31C5 46C5
ROM_ONBOARD_CS_L	FUNC_TEST	OFFF42B2 33B4
COMM_DTR_L	FUNC_TEST	OFFF40C3 31C7
COMM_TXD_L	FUNC_TEST	OFFF40C3 31C7
COMM_TRXC	FUNC_TEST	OFFF40C3 30D2 31C7
COMM_RTS_L	FUNC_TEST	OFFF40C3 31D5
COMM_RXD	FUNC_TEST	OFFF40C3 31C5
COMM_GPIO_L	FUNC_TEST	OFFF40C3 30D2 31C5
SLEEP	FUNC_TEST	OFFF46B5 52C4
CPU_SRESET_L	FUNC_TEST	OFFF4B3 7A5 9A2
PMU_AVCC	FUNC_TEST	OFFF46B5 46D4 54B3
TMDS_DDC_CLK	FUNC_TEST	OFFF46A5 26B3
TMDS_DDC_DAT	FUNC_TEST	OFFF46A5 26B4
USB_DCN_CON	FUNC_TEST	OFFF45D3 58A3
USB_DCP_CON	FUNC_TEST	OFFF45D3 58A3
USB_DBN_CON	FUNC_TEST	OFFF45B3 58A3
USB_DBP_CON	FUNC_TEST	OFFF45B3 58A3
USB_DAN_CON	FUNC_TEST	OFFF45C3 58A3
USB_DAP_CON	FUNC_TEST	OFFF45C3 58A3
BT_USB_DP	FUNC_TEST	OFFF40B2 31D3 60B5
BT_USB_DM	FUNC_TEST	OFFF40B2 31D3 60A5
MODEM_USB_DP	FUNC_TEST	OFFF40B2 31C5 60A5
MODEM_USB_DM	FUNC_TEST	OFFF40B2 31C5 60A5
USB_PORT_PWR	FUNC_TEST	OFFF45A4 35B3 35C3 35D3 54A3
VGA_IIC_CLK	FUNC_TEST	OFFF47C4
VGA_IIC_DAT	FUNC_TEST	OFFF47C4
CPU_VCORE_SLEEP	FUNC_TEST	OFFF4B3 4D7 9B6 9C2 47B3 47C1 54C6 61D7
LINE_IN_COM	FUNC_TEST	OFFF42B7
LINE_IN_R	FUNC_TEST	OFFF42B6 42B7
LINE_IN_SENSE	FUNC_TEST	OFFF42B7 42C7
LINE_IN_L	FUNC_TEST	OFFF42B7 42C7
SND_LIN_SENSE	FUNC_TEST	OFFF40B5 42D4
OUT_R	FUNC_TEST	OFFPAGE
LINEOUT_COMM2	FUNC_TEST	OFFPAGE
LINE_OUT_L	FUNC_TEST	OFFPAGE
PCIT_IRDY_L	FUNC_TEST	OFFF43B6 33C3 56C7
RF_CLKRUN_L	FUNC_TEST	OFFF40C3
NC_RF_DISABLE_L	FUNC_TEST	OFFPAGE
PCI_DEVSEL_L	FUNC_TEST	OFFF42A8 32C5 33B7 34B6 56D7
PCI_STOP_L	FUNC_TEST	OFFF42A8 32C5 33B7 34B6 56D7
PCI_TRDY_L	FUNC_TEST	OFFF42B8 32C5 33B7 34B6 56D7
PCI_FRAME_L	FUNC_TEST	OFFF42B8 32C5 33B7 34B6 55A6
PCI_PAR	FUNC_TEST	OFFF42C5 33B7 34B6 56D7
WL_PCI_IDSEL	FUNC_TEST	OFFF40C2
33SLOTB_INT_L	FUNC_TEST	OFFF40B7 33C2
PMU_PME_L	FUNC_TEST	OFFF40B5 33C2 34A7 46B2
PCI_SLOTB_GNT_L	FUNC_TEST	OFFF42A6 32D5 33C2
CLK33M_PCI_SLOTB	FUNC_TEST	OFFF42D7 33C2 56D7
PCI_SLOTB_REQ_L	FUNC_TEST	OFFF42A8 32D5 33C3
MAIN_RESET_L	FUNC_TEST	OFFF42A2 33D4 34A6 46C4
PCI_CBE<0>	FUNC_TEST	OFFF42C5 33B7 34B6 55A6
PCIT_CBE<1>	FUNC_TEST	OFFF43B6 33C3 56C7
PCIT_CBE<2>	FUNC_TEST	OFFF43B6 33C3 56C7
PCIT_CBE<3>	FUNC_TEST	OFFF43B6 33C3 56C7
UNUSED_GPIO15	FUNC_TEST	OFFF40B5 30C1

FUNC\_TEST

PCI_AD<0>	FUNC_TEST	OFFF43B2 32D4 33C7 34C6 55A6
PCIT_AD<1>	FUNC_TEST	OFFF43B3 33C6 56C7
PCIT_AD<2>	FUNC_TEST	OFFF43B2 33C6 56C7
PCIT_AD<3>	FUNC_TEST	OFFF43B3 33C6 56C7
PCI_AD<4>	FUNC_TEST	OFFF43B2 32D4 33C7 34C6 55A6
PCI_AD<5>	FUNC_TEST	OFFF43B3 33C6 56C7
PCI_AD<6>	FUNC_TEST	OFFF43B2 32C4 33C7 34C6 55A6
PCIT_AD<7>	FUNC_TEST	OFFF43B3 33C6 56C7
PCIT_AD<8>	FUNC_TEST	OFFF43B3 33C6 56C7
PCI_AD<9>	FUNC_TEST	OFFF43B2 32C4 33C7 34C6 55A6
PCIT_AD<10>	FUNC_TEST	OFFF43B3 33C6 56C7
PCI_AD<11>	FUNC_TEST	OFFF43B2 32C4 33C7 34C6 55A6
PCIT_AD<12>	FUNC_TEST	OFFF43B3 33C6 56C7
PCI_AD<13>	FUNC_TEST	OFFF43B2 32C4 33C7 34C6 55A6
PCIT_AD<14>	FUNC_TEST	OFFF43C3 33C6 56C7
PCI_AD<15>	FUNC_TEST	OFFF43B2 32C4 33C7 34C6 55A6
PCI_AD<16>	FUNC_TEST	OFFF43B2 32C4 33C7 34C6 55A6
PCIT_AD<17>	FUNC_TEST	OFFF43C3 33C7 56C7
PCI_AD<18>	FUNC_TEST	OFFF43B2 32C4 33C7 34C6 55A6
PCIT_AD<19>	FUNC_TEST	OFFF43C3 33C7 56C7
PCI_AD<20>	FUNC_TEST	OFFF43B2 32C4 33C6 34C6 55A6
PCIT_AD<21>	FUNC_TEST	OFFF43C3 33C6 56C7
PCI_AD<22>	FUNC_TEST	OFFF43C4 33C6 34C6 55A6
PCIT_AD<23>	FUNC_TEST	OFFF43C3 33C6 56C7
PCI_AD<24>	FUNC_TEST	OFFF43B1 32C4 33B6 34C6 55A6
PCIT_AD<25>	FUNC_TEST	OFFF43B6 33C3 56C7
PCI_AD<26>	FUNC_TEST	OFFF43B1 32C4 33B6 34B6 55A6
PCIT_AD<27>	FUNC_TEST	OFFF43B6 33C3 56C7
PCIT_AD<28>	FUNC_TEST	OFFF43B7 33C2 56C7
PCIT_AD<29>	FUNC_TEST	OFFF43B6 33C3 56C7
PCI_AD<30>	FUNC_TEST	OFFF43B1 32C4 33B6 34B6 55A6
PCIT_AD<31>	FUNC_TEST	OFFF43B6 33C3 56C7

CONSTRAINT TABLES

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	NONE	SHT	61 OF 74

\*\*\* Signal Cross-Reference \*\*\*  
--- for the entire design ---

+1\_5V\_AGP 12D6 13C8 18A8 18C2 18D7 19A4 19D5  
48B4 54C3 61C7  
+1\_5V\_INTREPID\_PLL 11D3 18D6 30D6 32D5 54D3  
+1\_5V\_INTREPID\_PLL1 30C4 54D3  
+1\_5V\_INTREPID\_PLL2 30D4 54D3  
+1\_5V\_INTREPID\_PLL3 30D4 54D3  
+1\_5V\_INTREPID\_PLL4 30D4 54D3  
+1\_5V\_INTREPID\_PLL5 18D5 54D3  
+1\_5V\_INTREPID\_PLL6 32D4 54D3  
+1\_5V\_INTREPID\_PLL7 11D2 54D3  
+1\_5V\_INTREPID\_PLL8 30D4 54D3  
+1\_8V\_MAIN 54C4 61D7  
+2\_5V\_ENET 37C3 37D3 37D5 54C6  
+2\_5V\_DDR\_AVDD 10D4 54D6  
+2\_5V\_DDR\_VDD 10D5 54D6  
+2\_5V\_MAIN 32A3 54C4 61D7  
+3.3VFPD 26D6 53C1 54B6  
+3V\_AUDIO 41D2 41D6 41D7 42C3 45C2 45D5  
+3V\_INTREPID\_USB 30C4 54A3  
+3V\_INTSS\_AVDD 10B7 54D6  
+3V\_INTSS\_VDD 10B6 54D6  
+3V\_MAIN 41D4 42D5 43A5 43A7 44A7 44D4 54C4  
61D7  
+5VSD\_T 52D7  
+5V\_AUDIO 41C6 41D7 43B8  
+5V\_HP 43A8 43B7 43D5  
+5V\_MAIN 54C4 61D7  
+5V\_SLEEP 48C7 48D6 52C6 53A5 53C5 61D7  
+12VSD\_FILT 31A5 54B3  
+12VSD\_T 52D7  
+12V\_DROPPED 46D8  
+12V\_MAIN 38D8 41C8 44D8 46D8 47B4 47D3 47D7  
50C4 50C8 50D6 51C4 51D4 51D7 52B4  
52C4 52C6 52D4 52D6 53A4 53A7 53B7  
53D7 54C1 61D7  
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61D7  
+12V\_SLEEPA 61D7  
+INTREPID\_CORE\_MAIN 12D6 13D4 48B3 49B2 61C7  
+MAXBUS\_SLEEP 4D5 6D8 7A3 7B3 7C3 7C5 7C7 8D3 9B2  
9D2 9D4 11B8 11D8 46B7 46D1 46D2  
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25V\_DLT 51B4  
25V\_GND 51B6  
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25V\_OCSET 51C5  
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25V\_VSENSE 51C3 51C5  
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A1\_IIC\_MCK 10A4 10C5  
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AGP\_AD<31..0> 18B4 18C4 19C8 19D8 56C7  
AGP\_AD\_STB<1..0> 18A4 18B3 19B8 56C7  
AGP\_AD\_STB\_GPUUF<1..0> 19B7 56B7  
AGP\_AD\_STB\_L<1..0> 18A4 18D1 19B8 56C7  
AGP\_AD\_STB\_L\_GPUUF<1..0> 19B7 56B7

AGP\_BUSY\_L 18C6 18D1 18D3 19A8 56B7  
AGP\_CBE<3..0> 18B4 19C8 56C7  
AGP\_DEVSEL\_L 18B4 18C3 19B8 56C7  
AGP\_FBI\_EQUAL 18C7 56A7  
AGP\_FBO\_EQUAL 18B7 56A7  
AGP\_FB\_PLUS2 18B8 56A7  
AGP\_FRAME\_L 18B4 18C3 19B8 56C7  
AGP\_GNT\_L 18C3 18C4 19B7 56B7  
AGP\_INT\_L 19B7 30B5 30B8  
AGP\_IRDY\_L 18B4 18C3 19B8 56C7  
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AGP\_PIPE\_L 18A4 18B3 19B8 56B7  
AGP\_PLLVDD 19C5  
AGP\_RBF\_L 18A4 18B3 19B8 56B7  
AGP\_REQ\_L 18C3 18C4 19B7 56B7  
AGP\_RESET\_L 19C7 46D3  
AGP\_SBA<7..0> 18A4 18B1 18B4 18C1 19A8 56B7  
AGP\_SB\_STB 18A4 18B3 19A8 56B7  
AGP\_SB\_STB\_L 18A4 18D1 19A8 56B7  
AGP\_ST<2..0> 18A4 18B1 19B7 56B7  
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AGP\_TRDY\_L 18B3 18B4 19B8 56C7  
AGP\_WBF\_L 18A6 18B1 19B8 56B7  
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AMPDC2 44B6  
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ANALOG\_GRN 24C5 24C8 27C6 59D3  
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ANALOG\_RED 24C5 24C8 27B6 59D3  
ANALOG\_VSNC\* 24C8 27C6 28B5 59D3 61B7  
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ASH 45B6  
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AUD\_AMP\_5V 44B8 44C6  
AUD\_R\_FB 41D6  
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BB\_SCK 8B4 8B6  
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CAP\_PLL 41B4  
CD\_CS1FX\_L 40C6 60C5  
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CD\_DMACK\_L 39D4 40C6 60D5  
CD\_DMARQ 40C6 60D5  
CD\_DSTB\_RDY 39C4 40C6 60D5  
CD\_EIDE\_ADDR<2..0> 40C6 60C5  
CD\_HSTB\_RDY 39C4 40C6 60D5  
CD\_RESET\_L 39D4 40C6 60D5  
CD\_STOP 39D4 40C6 60D5  
CHGND 54C4  
CLK18M\_INT\_EXT 30B6  
CLK18M\_INT\_XIN 30A5  
CLK18M\_INT\_XO 30A6  
CLK18M\_INT\_XOUT 30A5  
CLK25M\_ENET\_XIN 37B6 59B3

CLK25M\_ENET\_XOUT 37B6 59B3  
CLK33M\_PCI\_SLOTB 32D7 33C2 56D7 61A4  
CLK33M\_PCI\_SLOTB\_UF 32C5 56D7  
CLK33M\_PCI\_SLOTC\_UF 32C5 56D7  
CLK33M\_PCI\_SLOTD 32D7 34A6 56A7  
CLK33M\_PCI\_SLOTD\_UF 32C5 56D7  
CLK66M\_GPU\_AGP 18D8 19C7 56A7  
CLK66M\_GPU\_UF 18C6 56A7  
CLKENET\_LINK\_GBE\_REF 36C6  
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CLKENET\_LINK\_TX 36D7 37C8 59C3  
CLKENET\_PHY\_RX 37C6 59C3  
CLKENET\_PHY\_TX 37C6 59C3  
CLKFW\_LINK\_LCLK 36C5  
CLKGEN\_OUT\_1 10A6 55A6  
CLK\_18M\_INT\_XOUT 60B5  
COLE 48C7  
COMM\_DTR\_L 30C3 31C7 61C4  
COMM\_GPIO\_L 30C3 30D2 31C5 61C4  
COMM\_RESET\_L 30C5 31D5 61A7  
COMM\_RING\_DET\_L 30B5 30B8 31C5 46C5 61D4  
COMM\_RTS\_L 30C3 31D5 61C4  
COMM\_RXD 30C3 31C5 61C4  
COMM\_SHUTDOWN 30C5 30D1 31D7 61D4  
COMM\_TRXC 30C3 30D2 31C7 61C4  
COMM\_TXD\_L 30C3 31C7 61C4  
CORE\_MOSFET 47C4 47C6  
CORE\_MOSFET\_1 47B5 47C7  
CPU\_AACK\_L 4A7 7B7 9B6 11B3 58C3  
CPU\_ADDR<31..0> 4B7 4C7 9B7 9B8 9C5 9C6 9C7 9C8  
11C3 11D3 58D3  
CPU\_ARTRY\_L 4A7 7C7 9B8 11B3 58C3  
CPU\_AVDD 4D3 54C6  
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CPU\_BR\_L 4D7 7C7 9C5 11D3 58D3  
CPU\_BUS\_VSEL 4D3 7C4  
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CPU\_CHKSTP\_OUT\_L 4B3 7B5 9A2 9D6 61C7  
CPU\_CI\_L 4A7 7A7 9C6 11C3 58C3  
CPU\_CLK\_EN 11A3 46C4  
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CPU\_DBG\_L 4C3 7B7 9C8 11B1 58C3  
CPU\_DRDY\_L 4C2 7B7 9B6 11B1 58C3  
CPU\_DRDY\_L\_UF 4C3 58C3  
CPU\_DTI<2..0> 4C3 9B5 9B7 11A1 58C3  
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CPU\_FBI\_PLUS1 11A4 58C3  
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CPU\_FB\_MINUS3 11A4 58C3  
CPU\_FB\_PLUS2 11A5 58C3  
CPU\_FB\_PLUS3 11A4 58B3  
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CPU\_HDRST\_L 8C7 46C4  
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CPU\_HRESET\_L 4B3 7A3 7A5 7B3 8D2 9A2 46C2 46D2  
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CPU\_INT\_GBL\_L 4B8 7B7 11C3 58C3  
CPU\_L1TSTCLK 4C3 7A4  
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CPU\_MCP\_L 4B3 7B5  
CPU\_PLL\_CFG<3..0> 4C3 4D3 6C6 9A8  
CPU\_PLL\_CFGEXT 4C3 6C6 9A8  
CPU\_PLL\_STOP 6B8 46B8  
CPU\_PMONIN\_L 4B3 7C5  
CPU\_PULLDOWN 4A3 4D7 7C5  
CPU\_PULLUP 4A3 7A5  
CPU\_QACK\_L 4C3 9B5 11B3 58C3  
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CPU\_STATE\_LED\* 46C4 53A8  
CPU\_TA\_L 4C3 7C7 9C5 11A1 58C3  
CPU\_TBEN 4C3 7C5 11A3

CPU\_TBST\_L 4B7 7B7 9B5 11B3 58D3  
CPU\_TEA\_L 4C3 7B7 9C6 11A1 58C3  
CPU\_TSIZ<2..0> 4B7 9B6 9B7 9C6 11B3 58D3  
CPU\_TS\_L 4D7 7C7 9C7 11D3 58D3  
CPU\_TT<4..0> 4B7 7A7 9B5 9B6 9C5 9C6 11B3 58D3  
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61D7  
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CPU\_VCORE\_SLEEPA 47C3  
CPU\_VCORE\_SLEEPC 47A1  
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CVBS\_D 24B7  
CY69P2 41B5  
DAC2RSET 24C6 59D3  
DAC2VDD 24C5 54B6  
DAC2VREF 24C5 59D3  
DACRSET 24C4  
DACVDD 24C4 54B6  
DACVREF 24C4  
DDC\_VCC\_3 26A5 26B3 54B6 61B7  
DDC\_VCC\_5 27C4 54A6 61B7  
DDRCLK\_A0\_L\_UF 10B3 55B6  
DDRCLK\_A0\_UF 10C3 55B6  
DDRCLK\_A1\_L\_UF 10B3 55B6  
DDRCLK\_A1\_UF 10C3 55B6  
DDRCLK\_A2\_L\_UF 10B3 55B6  
DDRCLK\_A2\_UF 10C3 55B6  
DDRCLK\_B0\_L\_UF 10B3 55A6  
DDRCLK\_B0\_UF 10C3 55B6  
DDRCLK\_B1\_L\_UF 10B3 55A6  
DDRCLK\_B1\_UF 10C3 55B6  
DDRCLK\_B2\_L\_UF 10B3 55A6  
DDRCLK\_B2\_UF 10C3 55B6  
DDR\_CK\_CE 10B5  
DDR\_CLK\_VDD\_2 10C5 55B6  
DDR\_FBIN 10B5 55A6  
DDR\_FBIN\_L 10B5 55A6  
DDR\_FBO 10B3 55A6  
DDR\_FBO\_L 10B3 55A6  
DDR\_VREF 16B2 16D1 16D8 17D8 54A6  
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DS2P1 37B1  
DS2\_1 40B2  
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DVOD7 24B5 29C7  
DVOD8 24B5 29C7  
DVOD9 24B5 29C7  
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DVODE 24C5  
DVOHSYNC 24C5 28D7  
DVOREF 24C5  
DVO\_PD 24B5  
DVO\_PU 24B5  
EEPWR 8A6  
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EIDE\_CS1FX\_L 39A7 40B8 60C5  
EIDE\_CS3FX\_L 39A7 40B8 60C5  
EIDE\_CSELP\_L 40C6 54A6  
EIDE\_DATA<15..0> 39A5 39B5 39B7 39C5 60D5  
EIDE\_DMACK\_L 39A7 39D5 60D5  
EIDE\_DMARQ 39A7 40C8 60D5  
EIDE\_DSTB\_RDY 39A7 39C5 60D5  
EIDE\_HSTB\_RDY 39A7 39C5 60D5  
EIDE\_INTRQ 39A7 40C8 60C5  
EIDE\_IOCS16\_L 40C6 54A6  
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D	EIDE_RST_L 39A7 39D5 60D5 EIDE_STOP 39A7 39D5 60D5 ENET_COL 36B7 37B8 59B3 ENET_CRIS 36C7 37B8 59B3 ENET_ENERGY_DET 30B5 30C1 37B4 ENET_LINK_RXD<7..0> 36C6 36C7 37B8 37C8 59B3 ENET_LINK_TXD<3..0> 36C6 59C3 ENET_LINK_TX_EN 36D6 59C3 ENET_LINK_TX_ER 36D6 59C3 ENET_MDC 36B7 37B6 ENET_MDIO 36B7 37B7 ENET_PHY_COL 37B6 59B3 ENET_PHY_CRIS 37B6 59B3 ENET_PHY_RXD<3..0> 37B6 37C6 59B3 ENET_PHY_RX_DV 37B6 59B3 ENET_PHY_RX_ER 37B6 59B3 ENET_PHY_TXD<3..0> 36C7 37C6 59C3 ENET_PHY_TX_EN 36D7 37C6 59C3 ENET_PHY_TX_ER 36D7 37C6 59C3 ENET_RDAC_PD 37B5 ENET_RDN 37C3 59B3 ENET_RDP 37C3 59B3 ENET_RX_DV 36C7 37B8 59B3 ENET_RX_ER 36C7 37B8 59B3 ENET_TDN 37C3 59B3 ENET_TDP 37C3 59B3 ETHPHYRESET_L 37B6 EXTINT14 30A8 30B5 FAN_12V_FILT 31A5 54B3 61C7 FBA<12..0> 20C8 20D8 20E3 20F3 57D3 FBABA<1..0> 20C8 20E3 57D3 FBACAS_L 20C8 20G3 57D3 FBACKE 20D3 20D7 57D3 FBACLK0 20D7 21C3 57C3 FBACLK0_L 20D7 21C3 57C3 FBACLK1 20D7 21D3 57C3 FBACLK1_L 20D7 21D3 57C3 FBACSO_L 20C8 20F3 57D3 FBARAS_L 20C8 20G3 57D3 FBAWE_L 20C8 20F3 57D3 FBBA<12..0> 20A3 20B3 20C3 20C5 20D5 57C3 FBBBA<1..0> 20A3 20C5 57C3 FBBCAS_L 20C3 20D4 57C3 FBBCKE 20A3 20C4 57B3 FBBCLK0 20C5 21B3 57B3 FBBCLK0_L 20C5 21B3 57B3 FBBCLK1 20C5 21C3 57B3 FBBCLK1_L 20C5 21B3 57B3 FBBCSO_L 20C3 20C4 57C3 FBBRAS_L 20C3 20D4 57C3 FBBWE_L 20C3 20D4 57C3 FBCAL_CLK_GND 20A5 20D7 FBCAL_PD_VDDQ 20D7 FBCAL_PU_GND 20A5 20D7 FBCAL_TERM_GND 20A5 20D7 FBD<127..0> 20E5 20E8 20F5 20F8 20G5 20G8 21B5 FBDQ 21B8 21C5 21C8 21D5 21D8 57C3 57D3 FBDQM<15..0> 20C3 20D3 20D5 20D8 20G3 57C3 57D3 FBDQS<15..0> 20C7 20D4 21A5 21A8 57B3 57C3 FBDQSTERM<15..0> 21A4 21A7 57B3 57C3 FB_DLLVDD 20C6 20D7 FDC602 48B7 FDX 37A5 37C4 FILT_ANALOG_BLU 27C5 59D3 61B7 FILT_ANALOG_GRN 27C5 59D3 61B7 FILT_ANALOG_RED 27C5 59D3 61B7 FIX_RESET_L 8B6 8C4 FLOW_SS 47C7 47D8 FLO_KNOWS_BEST 47C6 47C7 47C8 61D4 FPD_PWR_ON 25D6 53B3 FPD_PWR_ON_T 53B3 FWPHYRST 30C5 38C8 FW_BIAS1 38C5 59A3 FW_BIAS2 38C5 59A3 FW_CNTRL0 36C3 38C8 59A3 FW_CNTRL1 36C3 38C8 59A3 FW_CPS 38C6 FW_C_LKON 30B6 36C5 38B5 FW_D<7..0> 36C3 38B8 38C8 59A3 FW_DIODE_BYPASS_V 38B6 38B7 54B6 FW_DIO_V 38B6 54B6	FW_LINK_CNTRL<1..0> 36C5 59A3 FW_LINK_DATA<7..0> 36C5 59A3 FW_LINK_LREQ 36C5 59A3 FW_LPS 36C5 38C8 FW_LREQ 36C3 38C8 59A3 FW_PHY_3_3 38B5 38B7 38D7 54B6 FW_PHY_CNTRL0 38C7 59A3 FW_PHY_CNTRL1 38C7 59A3 FW_PHY_D<7..0> 38B7 38C7 59A3 FW_PHY_ISO* 38C6 FW_PHY_RST 38C8 FW_PHY_RST* 38C6 FW_PHY_SCLK 38C7 59A3 FW_PINT 36B5 36C1 FW_PWR 52C7 53D3 54B6 FW_PWR_SW 38D6 53D1 54B6 FW_R0 38C5 FW_R1 38C5 FW_SCLK 36C5 38C8 59A3 FW_TPA1N 38C5 59A3 FW_TPA1P 38C5 59A3 FW_TPA2N 38C5 59A3 FW_TPA2P 38C5 59A3 FW_TPB1 38B3 FW_TPB1N 38C5 59A3 FW_TPB1P 38C5 59A3 FW_TPB2 38B4 FW_TPB2N 38C5 59A3 FW_TPB2P 38C5 59A3 FW_TPI1N 38A8 38D1 59A3 FW_TPI1P 38A8 38D1 59A3 FW_TPI2N 38A8 38C1 59A3 FW_TPI2P 38A8 38C1 59A3 FW_TPOLN 38A8 38D1 59A3 FW_TPOLP 38B8 38D1 59A3 FW_TPO2N 38A8 38C1 59A3 FW_TPO2P 38A8 38C1 59A3 FW_VGND 38D1 54B6 FW_VP 38D5 54B6 FW_VP1 38D1 38D3 54B6 FW_VP2 38C1 38D3 54B6 FW_VP_1 38D4 54B6 FW_VP_2 38D4 54B6 FW_VREG_FB 38D7 FW_XI 38C6 59A3 FW_XI_A 38C6 FW_XO 38C6 59A3 GCORE_1 50C2 GCORE_2 50C3 GCORE_BSTH 50C5 GCORE_BSTH_TERM 50C3 GCORE_COMP 50B6 GCORE_DH 50B5 GCORE_DL 50B5 GCORE_GND 50B5 GCORE_OCSET 50B6 GCORE_OVP 50B6 GCORE_VCC 50C6 GCORE_VSENSE 50B6 50C2 GPULLNCON 25C4 GPU_50PULLDWN 19A5 54A6 GPU_50PULLUP 19A5 54A6 GPU_AGP_AD<31..0> 19C7 19D7 56B7 GPU_AGP_CBE<3..0> 19C7 56B7 GPU_AGP_DEVSEL_L 19B7 56B7 GPU_AGP_FRAME_L 19B7 56B7 GPU_AGP_IRDY_L 19B7 56B7 GPU_AGP_PAR 19B7 56B7 GPU_AGP_PIPE_L 19B7 56A7 GPU_AGP_RBF_L 19B7 56A7 GPU_AGP_SBA<7..0> 19A7 56A7 GPU_AGP_SB_STB 19A7 56A7 GPU_AGP_SB_STB_L 19A7 56A7 GPU_AGP_STOP_L 19B7 56B7 GPU_AGP_TRDY_L 19B7 56B7 GPU_AGP_VREF 19A3 19A8 54A6 GPU_AGP_VREF_H 18A8 GPU_AGP_VREF_L 18A8 GPU_AGP_VREF_X 19A3 GPU_AGP_VREF_Y 19A3 GPU_AGP_WBF_L 19B7	GPU_FB_VREF 20C8 54A6 GPU_FPBCLK 25C4 GPU_FPBCLK_L 25C4 GPU_FW_PME_L 25C4 GPU_IFB1IOVDD 25B2 GPU_IFP1PLLVD 25B2 GPU_MBDL 19A7 GPU_STEREO 25C4 GPU_STRAP<3..0> 24B4 28A3 28B3 28D3 GPU_SWAP_A 25C4 GPU_SWAP_B 25C4 GPU_TESTMECLK 25C4 GPU_TMODE 19A5 54A6 GPU_XTALSSIN 24B4 54A6 GPWRGD 49B6 49B8 50A5 GRAPHICS_VPWR 50B5 GRAPH_CORE 19D5 25C4 25C6 50B1 54A6 GRAPH_DDC_SCL 24D5 26A6 GRAPH_DDC_SDA 24D5 26A6 GRAPH_IIC_SCL2 25D2 GRAPH_IIC_SDA2 25D2 HD_DIOR_L 39D1 40C3 60C5 HD_DIOW_L 39C1 40C3 60C5 HD_DMACK_L 39D1 40C3 60C5 HD_DMARQ 40C3 60C5 HD_INTRQ 40C3 60C5 HD_IOCHRQ 39C1 40C3 60C5 HD_RESET_L 39D1 40C3 60C5 HD_UIDE_ADDR<2..0> 40C2 40C3 60C5 HD_UIDE_CS1FX_L 40C3 60B5 HD_UIDE_CS3FX_L 40C2 60B5 HEADPHONE_COM 43B2 HEADPHONE_L 43B2 43D2 HEADPHONE_R 43B2 43C2 HONK_ADJ 53B4 HP16_L 43D4 HP16_R 43C4 HPBYP 43B5 43D6 HPGAL_L 43D4 HPGAL_R 43C4 HPIN_L 43D6 HPIN_R 43D6 HP_OFF 43A7 43D5 HP_OUT_L 43D5 HP_OUT_R 43D5 HP_STAR_GND 41B7 43A8 43B4 43B8 43C5 43D4 43D7 HP_TL 43D3 HP_TP 43B3 HP_TR 43C3 HRST_REF 8B4 8B7 HSYNC* 24C5 59D3 ICORE_COMP 49B6 ICW 49B7 IFP0AVCC 25A6 25B4 54A6 IFP0PLLVD 25B4 IFPORSET 25B4 IFP0VREF 25B4 54A6 IFP_AVCC 25A7 IFP_VADJ 25A8 IIC_A<2..0> 8A6 8A7 IIC_ADD 31C6 61A7 IMAC_INTREPID 49B4 INTCORE_1 49B3 INTCORE_BSTH 49B6 INTCORE_BSTH_TERM 49B6 INTCORE_DH 49B6 INTCORE_DHT 49B5 INTCORE_DL 49B6 INTCORE_GND 49A7 INTCORE_NET99 49B4 INTCORE_OCSET 49B6 INTCORE_OVP 49B6 INTCORE_VCC 49C7 INTREPID_ACS_REF 11A3 INTREPID_VPWR 49B6 INTREPID_VPWR_A 49B4 INTREPID_VSENSE 49C6 61C7 INTREP_DLT 49B5 INT_AGPPVT 18C6 INT_AGP_FB_IN 18C6 56A7 INT_AGP_FB_OUT 18C6 56A7	INT_AGP_VREF 18A7 18C6 54C3 INT_ANALYZER_CLK 9B4 11B4 18C7 56A7 58B3 61A7 INT_ANALYZER_CLKA 11B3 INT_CLOCK_OUT 9C4 58B3 INT_CPU_FB_IN 11B3 58C3 INT_CPU_FB_OUT 11B3 58C3 INT_ENET_RST_L 30B5 30D1 37B8 INT_EXTINT3_PU 30B5 30B8 INT_EXTINT12_PU 30B5 30B8 INT_EXTINT13_PU 30B5 30B8 INT_EXTINT17_PU 30B5 30B8 34B6 INT_GPI01_PD 30A8 30C5 INT_GPI09_PU 30B5 30B8 INT_GPI012_PU 30A8 30B5 INT_I2C_CLK0 8A6 8B4 8B7 10C7 16A6 17A6 36B3 INT_I2C_CLK0R 36B5 36C1 INT_I2C_CLK1 10A7 36A3 36A4 36B1 INT_I2C_CLK2 30A3 30D1 31C7 36B5 41B1 61A7 INT_I2C_DATA0 8A6 8B4 8B7 10C7 16A6 17A6 36B3 INT_I2C_DATA0R 36B5 36C1 INT_I2C_DATA1 10A7 36A3 36B1 INT_I2C_DATA2 30A3 30D1 31C7 36B5 41B1 61A7 INT_JTAG_TEI 36B7 36C1 INT_MEM_REF 14B6 INT_MOD_BITCLK 30A3 30A8 30C6 INT_MOD_CLKOUT 30A3 30A8 30C6 INT_MOD_DTI 30A3 30A8 30C6 INT_MOD.DTO 30A3 30A8 30C6 INT_MOD_SYNC 30A3 30A8 30C6 INT_PCI_FB_IN 32C5 56C7 INT_PCI_FB_OUT 32C5 56D7 INT_PEND_PROC_INT 30A5 46B4 INT_PLL1_GND 30A5 30C4 INT_PLL2_GND 30A5 30D4 INT_PLL3_GND 30A4 30D4 INT_PLL4_GND 32B4 32D4 INT_PLL5_GND 18A5 18D5 INT_PLL6_GND 11A2 11D3 INT_PLL7_GND 30A4 30D4 INT_PLL9_GND 30A4 30D4 INT_PROC_SLEEP_REQ_L 30A5 46B4 INT_PU_RESET_L 36C3 46C2 46C4 INT_REF_CLK_IN_PD 10A5 30A6 55A6 INT_REF_CLK_OUT 10A7 30A6 55A6 INT_REF_CLK_OUT_UF 55A6 INT_RESET_L 36C3 37B8 43A7 44A8 46D2 46D4 INT_ROM_CS_L 32C5 INT_ROM_OE_L 32C5 INT_ROM_OVERLAY_PU 18D7 32A8 32C5 56A7 INT_ROM_RW_L 32C5 INT_SND_CLKOUT 30A3 INT_SND_SCLK 30A3 INT_SND_SYNC 30B3 INT_SND_TO_AUDIO 30B3 INT_SPKR+ 44B1 INT_SPKR- 44B1 INT_SUSPEND_ACK_L 11B3 46B5 INT_SUSPEND_REQ_L 11B3 46B5 46B8 INT_TMDS_3V 26B3 26C3 26C4 26D5 54A6 61C7 INT_TMDS_CKM 25D2 26A6 59D3 61A7 INT_TMDS_CKP 25D2 26B6 59D3 61A7 INT_TMDS_DOM 25D2 26B6 59C3 61A7 INT_TMDS_D0P 25D2 26B6 59C3 61B7 INT_TMDS_DIM 25D2 26C6 59C3 61B7 INT_TMDS_D1P 25D2 26C6 59C3 61B7 INT_TMDS_D2M 25C2 26D6 59C3 61B7 INT_TMDS_D2P 25C2 26D6 59C3 61B7 INT_TST_MONIN_PD 36B7 36C1 INT_TST_PLEN_PD 30C6 36B7 36C1 INT_WATCHDOG_L 30A5 46C5 INV_BFR_HRST 8D6 INV_CUR_HI 25D6 31B8 INV_CUR_HI_FILT 31A5 61A7 IO_RESET_L 34A6 37B8 46B5 46B8 46D3 61A7 IPWRGD 48A8 49A6 IPWR_D 48A7 JAZ 45C6 JTAG_ASIC_TCK 9A3 36B7 37C4 61D7 JTAG_ASIC_TDI 9A3 30C6 36B7 61D7 JTAG_ASIC_TDO 9A3 37B4 61D7 JTAG_ASIC_TMS 9A3 36B7 37A2 37B4 61D7	NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING I TO MAINTAIN THE DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART															
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							APPLE COMPUTER INC.	<table border="1"> <tr> <td>SIZE</td> <td>DRAWING NUMBER</td> <td>REV.</td> </tr> <tr> <td></td> <td>D 051-6423</td> <td>D</td> </tr> <tr> <td>SCALE</td> <td>NONE</td> <td>SHT OF</td> </tr> <tr> <td></td> <td></td> <td>63 OF 74</td> </tr> </table>	SIZE	DRAWING NUMBER	REV.		D 051-6423	D	SCALE	NONE	SHT OF			63 OF 74
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D	JTAG_ASIC_TRST_L 9A3 36B7 61C7 JTAG_CPU_TCK 4C3 7D5 8C2 9A2 61C7 JTAG_CPU_TDI 4C3 7A5 8D2 9A2 61C7 JTAG_CPU_TDO 4C3 9A2 61C7 JTAG_CPU_TMS 4C3 7A5 8D2 9A2 61C7 JTAG_CPU_TRST_L 4C3 7C5 8D2 9A2 61C7 JTAG_ENET_TDI 30C6 36B7 37A2 37B4 KAVAN 45B6 KSSVSD 31A5 54B3 61A7 KS_INT_SPKR+ 31A3 44C3 60A5 61B7 KS_INT_SPKR+_FILT 31A5 KS_INT_SPKR- 31A3 44C3 60A5 61B7 KS_INT_SPKR-_FILT 31A5 KYLE 48C6 L31_2 42C6 L32_2 42B6 L36_2 42B6 L43_1 43A4 L3202_1 42C6 LAMP_STS 25D6 31A3 LAMP_STS_FILT 31A5 61A7 LCD_PWM 25D6 31A8 LCD_PWM_FILT 31A5 61A7 LED_5V 31A8 54B3 LED_5V_FILT 31A5 54B3 61A7 LED_RET 31A3 53B6 54B3 LED_RET_FILT 31A5 54A3 61A7 LED_ROMCS 32A3 LED_ROMCS_L 32A4 LED_ROMCS_LIGHT 32A3 LID_SWITCH 31B2 46C4 LINA 41C4 42C2 LINEOUT_COMM2 61B4 LINE_IN_COM 42B7 61B4 LINE_IN_L 42B7 42C7 61B4 LINE_IN_R 42B6 42B7 61B4 LINE_IN_SENSE 42B7 42C7 61B4 LINE_OUT_L 61B4 LINSENSE 42C5 LOW_PWR 37A5 37B4 LO_T1 43A4 LP4202P2 42C5 LP4202P3 42B5 LP4202P4 42B5 LPL1 43D6 LPR1 43C6 LSPKRCAP 44B8 LSPKRIN2 44B6 LSPKRVP2 44B6 LT1962_INT_ADJ 30D7 LT1962_INT_BYP 30D7 LT1962_INT_VIN 30D7 LY4P2 44C3 M1FH 45C7 M1FL 45B7 M1H 45C6 M1HFILT 45C5 M1L 45B6 45C6 M1S 45B5 45C6 MAIN_RESET_L 32A2 33D4 34A6 46C4 61A4 MAIN_RESET_L_PU 33D3 MAIN_SUPPLY_LED 52D6 MEMI_VREF 14A6 MEMREFG1 22A5 MEMREFG2 22A4 MEMREFG3 23A5 MEMREFG4 23A4 MEMREFI1 14A8 MEMREFI2 14A7 MEMREFM1 16B3 MEMREFM2 16B2 MEMREFN1 20B8 MEMREFN2 20B7 MEM_ADDR<12..0> 14A3 14B3 14C2 14C3 14D2 14D3 14D6 55D6 MEM_BA<1..0> 14B3 14D6 55D6 MEM_CAS_L 14A3 14C6 55C6 MEM_CKE<3..0> 14A2 14B2 14B6 14C2 14C6 55C6 MEM_CS_L<3..0> 14A2 14B2 14C2 14C6 55D6 MEM_DATA<63..0> 14B8 14C8 14D8 15A6 15B3 15B6 15C5 15C8 55D6	MEM_DQM<7..0> 14C6 15A6 15B3 15C5 15C8 55D6 MEM_DQS<7..0> 14C6 15A6 15B3 15C5 15C8 55D6 MEM_MUXSEL_H<1..0> 14B6 14D5 55C6 MEM_MUXSEL_L<1..0> 14B6 14D5 55C6 MEM_RAS_L 14A3 14C6 55C6 MEM_WE_L 14A3 14C6 55C6 MIC1 45C4 MIC1S1 45B7 MIC2 45C4 MIC3 45C4 MIC4 45C3 MIC5 45B3 MICHIGH 31A5 45C8 60A5 61A7 MICLOW 31A5 45B8 60A5 61A7 MICSHLD 31A5 45B8 60A5 61A7 MIC_FIX 45D5 MIC_IN 41C4 45C2 MIC_TDO 8B3 MII_EN 37C4 MODEM_USB_DM 30B2 31C5 60A5 61B4 MODEM_USB_DP 30B2 31C5 60A5 61B4 MON_DETECT 25D6 27C6 61D4 MON_I2C_SCL 24D5 27B6 MON_I2C_SDA 24D5 27B6 MPIC_CPU_INT_L 4B3 7A5 9D7 30B5 MPWRGD 50B6 50B7 51B5 MR_FLO 47C5 MR_FLO_1 47B4 MUTE_B_L 44B8 MUX_SEL_H 14D4 15A3 15C5 55C6 MUX_SEL_L 14D4 15A6 15C8 55C6 M_SPD_WP 17A7 M_VDDID 17A7 NCVVR4 41D6 NC_-10VUNREG 31C6 NC_-12VREG 31C6 NC_28512P4 10A7 NC_28512P14 10A7 NC_28512P17 10A7 NC_AMPOL 44B6 NC_ATXTAL1 8C4 NC_ATXTAL2 8B4 NC_AUDIO2MODEM 31C6 NC_AUDIO2MODEMRTN 31C6 NC_AUD_MODEM 31C6 NC_AUD_MODEM_RTN 31C6 NC_BIGDIMM9 17D6 NC_BIGDIMM10 17D6 NC_BIGDIMM44 17C6 NC_BIGDIMM45 17B6 NC_BIGDIMM47 17B6 NC_BIGDIMM49 17B6 NC_BIGDIMM51 17B6 NC_BIGDIMM71 17A6 NC_BIGDIMM101 17D4 NC_BIGDIMM102 17D4 NC_BIGDIMM103 17D4 NC_BIGDIMM113 17C4 NC_BIGDIMM134 17C4 NC_BIGDIMM135 17C4 NC_BIGDIMM140 17B4 NC_BIGDIMM142 17B4 NC_BIGDIMM144 17B4 NC_BIGDIMM163 17A4 NC_BIGDIMM167 17A4 NC_BIGDIMM173 17A4 NC_BS1 31B7 NC_BS2 31B6 NC_BS3 31D1 NC_BS4 31D1 NC_BT1 31D2 NC_BT3 31D2 NC_BT4 31D2 NC_BT5 31D2 NC_BT6 31D2 NC_CBUS_INT_L 30A8 NC_CLK33M_PCI_SLOT 32D7 NC_CLKENET_LINK_GTX 36C6 NC_CPUAP<4..0> 4B7 NC_CPUCRUD<89..0> 5A7 5B7 5C7 5D7 NC_CPUUD<7..0> 5A4	NC_CPU_CLKOUT 4D3 NC_CSLOT_ADDR<9..3> 39A7 39B7 NC_CSLOT_CE1_L 39C7 NC_CSLOT_CE2_L 39C7 NC_CSLOT_TORD_L 39C7 NC_CSLOT_TOWR_L 39C7 NC_CSLOT_OE_L 39B7 NC_CSLOT_WE_L 39B7 NC_DAA_CLKOUT 31C6 NC_DAA_LOADOUT 31C6 NC_DACC_BLU 24C4 NC_DACC_GRN 24C4 NC_DACC_RED 24C4 NC_DACC_RSET 24C4 NC_DDRCLK1 10C3 NC_DDRCLK2 10C3 NC_DDRCLK3 10C3 NC_DDRCLK4 10C3 NC_DDRCLK5 10C3 NC_DDRCLK6 10C3 NC_DDRCLK7 10C3 NC_DDRCLK8 10C3 NC_DDRCLK9 10C3 NC_DDRCLK10 10C3 NC_DDRCLK11 10B3 NC_DDRCLK12 10B3 NC_DDRCLK13 10B3 NC_DDRCLK14 10B3 NC_DDRCLK_A2 10C2 NC_DDRCLK_A2_L 10C2 NC_DFPCLK 25C2 NC_DFPCLK* 25C2 NC_DFPD0 25C2 NC_DFPD1 25C2 NC_DFPD2 25C2 NC_DFPD3 25C2 NC_DFPD5 25B2 NC_DFPD6 25B2 NC_ENET_LINK_TXD<7..4> 36C6 NC_EXT_TMDS_CKM 25C2 NC_EXT_TMDS_CKP 25C2 NC_EXT_TMDS_DOM 25C2 NC_EXT_TMDS_D0P 25C2 NC_EXT_TMDS_D1M 25C2 NC_EXT_TMDS_D1P 25C2 NC_EXT_TMDS_D2M 25C2 NC_EXT_TMDS_D2P 25C2 NC_FB1<10..0> 22B5 22B6 NC_FB2<10..0> 22B1 22B2 NC_FB3<10..0> 23B5 23B6 NC_FB4<10..0> 23B1 23B2 NC_FBACS1_L 20C8 NC_FBBCS1_L 20C4 NC_FBDQS_L<15..0> 20C7 20D4 NC_FMAX7 9A8 NC_FMAX8 9A8 NC_FW_CNA 38B6 NC_GPU<4..0> 19A6 NC_GPULFS 25C4 NC_GPU_DBI_LO 19B7 NC_GPU_INTB_L 19B7 NC_GPU_THERMA 25C4 NC_GPU_THERMC 25C4 NC_IFP1RSET 25B2 NC_IFP1VREF 25B2 NC_INPA 41C2 NC_INT_TST_MONOUT_TP 36B6 NC_JTAG7 9A3 NC_JTAG10 9A2 NC_LCENABLE 9A3 NC_MODEM_DETECT_L 31C6 NC_NVAGP_TDI 19A5 NC_NVAGP_TDO 19A5 NC_NVAGP_TMS 19A5 NC_P00_D0 46D5 NC_P01_D1 46D5 NC_P02_D2 46C5 NC_P03_D3 46C5 NC_P04_D4 46C5 NC_P05_D5 46C5 NC_P6_D6 46C5	NC_P07_D7 46C5 NC_P10_D8 46C5 NC_P11_D9 46C5 NC_P14_D12 46C5 NC_P20_A0_D0 46C5 NC_P21_A1_D1_D0 46C5 NC_P22_A2_D2_D1 46C5 NC_P23_A3_D3_D2 46C5 NC_P24_A4_D4_D3 46C5 NC_P25_A5_D5_D4 46C5 NC_P26_A6_D6_D5 46C5 NC_P27_A7_D7_D6 46C5 NC_P33_A11 46B5 NC_P34_A12 46B5 NC_P35_A13 46B5 NC_P36_A14 46B5 NC_P37_A15 46B5 NC_P43_A19 46B5 NC_P45_CS1_L 46B5 NC_P74_TA2OUT_W 46C4 NC_P75_TA2IN_W 46C4 NC_P76_TA3OUT 46C4 NC_P77_TA3IN 46C4 NC_P92_TB2IN_SOUT3 46B4 NC_P93_DA0_TB3IN 46B4 NC_P96_ANEX0_CLK4 46B4 NC_P103_AN3 46B4 NC_PCIR0 33B7 NC_PCIR1 33B7 NC_PCITR0 33B6 NC_PCITR1 33B6 NC_PD0 8B3 NC_PMON_OUT_L 4B3 NC_PMU_DL_10 31B2 NC_PMU_DL_12 31B2 NC_PPL* 46C6 NC_RESET_BUTTON_L 9A8 NC_RFBA<12..12> 20E2 NC_RFBBA<12..12> 20A2 NC_RF_DISABLE_L 61A4 NC_ROMCS_L 20C8 NC_RP1PIN4 18B3 NC_RP1399 32A6 NC_RP2848 30A8 NC_RP3319 30D2 NC_RP3324_2 30C1 NC_RPT48P1 30D2 NC_RPT77P6 30B8 NC_SDOUT2 41C2 NC_SODIMM71 16C6 NC_SODIMM72 16C5 NC_SODIMM73 16C6 NC_SODIMM74 16C5 NC_SODIMM77 16C6 NC_SODIMM78 16C5 NC_SODIMM79 16C6 NC_SODIMM80 16C5 NC_SODIMM83 16C6 NC_SODIMM84 16C5 NC_SODIMM85 16C6 NC_SODIMM86 16C5 NC_SODIMM89 16C6 NC_SODIMM91 16C6 NC_SODIMM97 16B6 NC_SODIMM98 16B5 NC_SODIMM123 16B6 NC_SODIMM124 16B5 NC_SODIMM199 16A6 NC_SODIMM200 16A5 NC_SODIMM201 16D5 NC_SODIMM202 16A6 NC_SW3V5V_33OUT 52C6 NC_SYSCLK_DDRCLK_A2 14B4 NC_TAS_SDOUT1 41C2 NC_TESTMODE 9A3 NC_TMDS_TXD3M 25C2 NC_TMDS_TXD3P 25C2 NC_TMDS_TXD7M 25C2 NC_TMDS_TXD7P 25C2 NC_TX1_1 37C3 NC_TX1_2 37C3					
C									
B									
A									
	8	7	6	5	4	3	2	1	

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT OF		
NONE	64		74



D	<p>NC_TX1_3 37C2 NC_TX1_4 37C2 NC_UB3P4 37D5 NC_USB2_AMC 34A4 NC_USB2_NANDTEST 34A4 NC_USB2_NTST1 34A4 NC_USB2_PPON1 34B4 NC_USB2_PPON2 34B4 NC_USB2_PPON3 34B4 NC_USB2_PPON4 34B4 NC_USB2_PPON5 34B4 NC_USB2_RSDEM 34C4 NC_USB2_RSDEP 34C4 NC_USB2_RSDFM 34C4 NC_USB2_RSDFP 34B4 NC_USB2_SMC 34A4 NC_USB2_SMI_L 34A6 NC_USB2_SRCLK 34A4 NC_USB2_SRDTA 34A4 NC_USB2_SRMOD 34A4 NC_USB2_TEB 34A4 NC_USB2_TEST 34A4 NC_USB_M 33B2 NC_USB_P 33B2 NC_UT6P6 30D8 NC_UT6P7 30D8 NC_UT164 46D7 NC_UT165 46D7 NC_VCORE10 47D6 NC_VIPHCLK 24D5 NC_VTT&lt;11..0&gt; 20F7 20G7 NC_WL&lt;23..1&gt; 33B2 33B3 NC_XTALSOUT 24B4 NC_XTLINO 41B4 NEC_AVDD 34D5 54A3 NEC_XT2_B 34D3 NET16 48A5 NET18 46D6 NET19 46D6 NET22 46D8 NET24 46D8 NET32 44B1 NET32_B 44B1 NET40 46B4 NMI_BUTTON* 31B2 46C4 61D4 NV11_HSYNC 24C4 28D3 NV11_VSYNC 24C4 28D3 NV11_XTALIN 24B4 59D3 NV11_XTALOUT 24B4 59D3 NVAGP_TCLK 19A5 NVAGP_TRST_L 19A5 NVPLLVDV 24D5 54A6 NV_BLUE2 24C1 NV_GPIOD0 25D4 NV_GPIOD2 25D4 NV_GPIOD4 25D4 NV_GPIOD5 25D4 NV_GPIOD6 25C4 NV_GPIOD7 25C4 NV_GPIOD8 25C4 NV_GPIOD9 25C4 NV_GREEN2 24C1 NV_RED2 24C1 OGAL 43D7 OGAR 43C7 OGND3_JTAG_EN 37A5 OPA_STAR_GND 41A7 41D6 42C2 45B3 OPA_VREF 42B3 45B4 OUTM1 44B6 OUTM1FILT 44B4 OUTM2 44B6 OUTM2FILT 44A4 OUTP1 44B6 OUTP1FILT 44B4 OUTP2 44B6 OUTP2FILT 44B4 OUT_R 61B4 OVDD_ADJ 61C7 P1RC 44B4 P2RC 44B4 PAT_M 44B8</p>	C					
C	<p>PB_AUD 43B4 PB_GAL 43B4 PCIT_AD&lt;31..0&gt; 33B2 33B3 33B6 33B7 33C2 33C3 33C6 33C7 56C7 61B2 61C2 PCIT_CBE&lt;31..0&gt; 33B2 33B6 33C3 56C7 61A4 PCIT_DEVSEL_L 33B6 33C2 56C7 PCIT_FRAME_L 33B6 33C2 56C7 PCIT_IRDY_L 33B6 33C3 56C7 61B4 PCIT_PAR 33B6 33C2 56C7 PCIT_STOP_L 33B6 33C2 56C7 PCIT_TRDY_L 33B6 33C2 56C7 PCI_AD&lt;31..0&gt; 32B1 32B2 32C4 32D4 33B6 33B7 33C6 33C7 34B6 34B7 34C6 55A6 61B2 61C2 PCI_CBE&lt;3..0&gt; 32C5 33B7 34B6 55A6 61A4 PCI_DEVSEL_L 32A8 32C5 33B7 34B6 56D7 61A4 PCI_FBI_EQUAL 32C7 56C7 PCI_FBI_PLUS2 32C7 56C7 PCI_FBO_PLUS2 32C7 56D7 PCI_FB_PLUS4 32C8 56C7 PCI_FB_PLUS6 32C7 56C7 PCI_FRAME_L 32B8 32C5 33B7 34B6 55A6 61A4 PCI_IRDY_L 32B8 32C5 33B7 34B6 56D7 PCI_PAR 32C5 33B7 34B6 56D7 61A4 PCI_SLOTB_GNT_L 32A6 32D5 33C2 61A4 PCI_SLOTB_REQ_L 32A8 32D5 33C3 61A4 PCI_SLOTC_GNT_L 32A6 32D5 PCI_SLOTC_REQ_L 32A8 32D5 PCI_SLOTD_GNT_L 32A6 32C5 34B6 PCI_SLOTD_PERR_L 34B6 PCI_SLOTD_REQ_L 32A8 32D5 34B6 PCI_STOP_L 32A8 32C5 33B7 34B6 56D7 61A4 PCI_TRDY_L 32B8 32C5 33B7 34B6 56D7 61A4 PCK2059_VDDI2C 10D4 54D6 PGOOD 51B7 52A6 PG_E 47B6 PMURESETBUTTON* 46A4 61D4 PMU_5V_SCL 46C2 46C4 PMU_5V_SDA 46C2 46C4 PMU_ACK_L 30C3 46C4 PMU_AGP_RESET 46C4 PMU_AP 31B3 46D4 PMU_AVCC 46B5 46D4 54B3 61C4 PMU_BYTE 46B5 PMU_CLK 30C3 46C4 PMU_CLKIN 46B4 60A5 PMU_CLKOUT 46B4 60A5 PMU_CLKT 46B2 60A5 PMU_CNVSS 31B3 46B5 PMU_EPM* 31B3 46C4 PMU_FROM_INT 30C3 46C4 PMU_IIC_CLK 46A8 46B4 PMU_IIC_DAT 46A8 46B4 PMU_INT_L 30B5 30B8 46B5 PMU_INT_NMI 30A8 30B5 46C4 PMU_LOW_DSKTP 46B5 PMU_NMI 46B4 PMU_P64 31B2 46C2 PMU_PME_L 30B5 33C2 34A7 46B2 61A4 PMU_PME_LL 33C2 PMU_POWER 31C3 46A5 46B1 46C2 46D5 54B3 PMU_PRE_PLLSTOP 46B5 PMU_PWR_LED* 46C5 PMU_REQ_L 30A8 30C3 46C2 PMU_RST* 9A8 31B3 46A5 46B5 61D4 PMU_SMB_SCK 46A3 PMU_SMB_SDA 46A3 PMU_STRAP1 46C5 PMU_TO_INT 30C3 46C4 PMU_XI 46B5 60A5 PMU_XO 46B5 60A5 PMU_XT 46A6 60A5 POWERUP_OK 46B4 POWER_UP* 46C7 53A8 61D4 PRE_HRESET_L 8B4 8D5 PROBE_DIV 43B4 43D7 PSEUDO_STAR_GND 41B7 42B4 PWR_FAIL* 46B1 52D6 PWR_FAILPMU* 46B4 PWR_FAIL_T 52D7 PWR_LED 53A4 PWR_SWITCH* 9A8 46B1 46C5 61D4</p>	B					
B	<p>PWR_UP 41C8 52C4 52C8 53B7 53C1 53C7 61D4 PWR_UP* 52C8 Q1P1 53C3 Q1P3 53C2 Q25_1 43A5 Q42P4 53D2 QT1P1 50B4 QT2P1 50B4 QT2P3 50B4 R264P2 41B4 RAM_ADDR&lt;12..0&gt; 14A3 14B3 14C1 14C3 14D1 14D3 16B4 16B6 17B4 17B6 17C4 17C6 55D6 RAM_BA&lt;1..0&gt; 14B3 16B4 16B6 17B6 55D6 RAM_CAS_L 14A3 16B4 17B6 55C6 RAM_CKE&lt;3..0&gt; 14A1 14B1 14C1 16B4 16B6 17C4 17C6 55C6 RAM_CS_L&lt;3..0&gt; 14A1 14B1 14C1 16B4 16B6 17B4 55C6 RAM_DATA_A&lt;63..0&gt; 15B2 15B6 15C2 15C4 15C7 15D4 15D7 16A4 16A6 16B4 16B6 16C4 16C6 16D4 16D6 55D6 RAM_DATA_B&lt;63..0&gt; 15A2 15A6 15B2 15B4 15B7 15C4 15C7 17A4 17A6 17B4 17B6 17C4 17C6 17D4 17D6 55D6 RAM_DQM_A&lt;7..0&gt; 15A6 15B2 15B6 15C4 15C7 15D4 15D7 16A4 16B4 16C4 16D4 55D6 RAM_DQM_B&lt;7..0&gt; 15A2 15A6 15B2 15B4 15B7 15C4 15C7 17A4 17B4 17C4 17D4 55D6 RAM_DQS_A&lt;7..0&gt; 15B2 15B6 15C4 15C7 15D4 15D7 16A6 16B6 16C6 16D6 55D6 RAM_DQS_B&lt;7..0&gt; 15A2 15A6 15B2 15B4 15B7 15C4 15C7 17A6 17B6 17C6 17D6 55D6 RAM_RAS_L 14A3 16B4 17B4 55C6 RAM_SA0 17A4 RAM_WE_L 14A3 16B6 17B6 55C6 RB22P2 50B2 RB27-1 50B6 RB37P1 50C6 RB160P1 52A5 RB213P2 51C3 RB227P1 51C5 REF_STAR_GND 41A5 41A7 RESET_BUTTON* 31B2 46C4 61D4 RFBA&lt;11..0&gt; 20E2 20F2 22C2 22C6 22D2 22D6 57D3 RFBABA&lt;1..0&gt; 20E2 22C2 22C6 57D3 RFBACAS_L 20G2 22B2 22B6 57D3 RFBACKE 20D2 22C2 22C6 57C3 RFBACLK0 21C1 22C6 57C3 RFBACLK0_L 21C1 22C6 57C3 RFBACLK1 21D1 22C2 57C3 RFBACLK1_L 21D1 22C2 57C3 RFBACS0_L 20F2 22B2 22B6 57C3 RFBARAS_L 20G2 22B2 22B6 57D3 RFBABE_L 20F2 22B2 22B6 57D3 RFBBA&lt;11..0&gt; 20B2 20C2 23C2 23C6 23D2 23D6 57C3 RFBABA&lt;1..0&gt; 20A2 23C2 23C6 57C3 RFBBCAS_L 20C2 23B2 23B6 57B3 RFBBCKE 20A2 23C2 23C6 57B3 RFBCLK0 21B1 23C6 57B3 RFBCLK0_L 21B1 23C6 57B3 RFBCLK1 21C1 23C2 57B3 RFBCLK1_L 21B1 23C2 57B3 RFBCCS0_L 20C2 23B2 23B6 57B3 RFBBRAS_L 20C2 23B2 23B6 57B3 RFBWE_L 20C2 23B2 23B6 57B3 RFBBD&lt;127..0&gt; 21B4 21B7 21C4 21C7 21D4 21D7 22B1 22B5 22C1 22C5 23B1 23B5 23C1 23C5 57C3 57D3 RFBBDQM&lt;15..0&gt; 20C2 20D2 20G2 22C2 22C6 23C2 23C6 57C3 57D3 RFBBDQS&lt;15..0&gt; 21A3 21A6 22C2 22C6 23C2 23C6 57B3 57C3 RF_CLKRUN_L 33C3 61B4 RF_DISABLE_L 33C3 RINA 41C4 42B2 RINT_PU_RESET_L 36C5 RINT_RESET_L 36C5 RJ45_4_5 37C1 59B3 RJ45_7_8 37C1 59B3 RJ45_F_TREF 37B2 59B3 RJ45_RREF 37C2 59B3 RJ45_RXN 37C1 37C2 59B3</p>	A					
A	<p>RJ45_RXP 37C1 37C2 59B3 RJ45_TREF 37C2 59B3 RJ45_TXN 37C1 37C2 59B3 RJ45_TXP 37C1 37C2 59B3 ROMA14 20C8 28D8 ROMA15 20C8 28D8 ROM_CS_L 32B4 32B6 33B4 61C7 ROM_OE_L 32B2 32B6 33B2 61C7 ROM_ONBOARD_CS_L 32B2 33B4 61D4 ROM_RW_L 32B2 32B6 33B4 61B7 ROM_WP_L 32A2 61A7 RSPKRCAP 44C8 RSPKRIN1 44B6 RSPKRVP1 44B6 RT78P2 37C4 RT373P1 53A5 RT401P1 49C5 RT406P2 49B3 RT418P2 52C7 RUNLED1 53A5 RUNSS 52D4 S3700P1 46A1 S3700P2 46A1 SB1P1 46A3 SENSE+ 47C6 SENSE+_1 47B5 47C7 SENSE- 47C6 47C8 SENSE-_1 47B5 47C7 SGRAVREF 22A3 22C4 22C8 54A6 SGRBVREF 23A3 23C4 23C8 54A6 SHS 52C8 SLEEP 46B5 52C4 61C4 SLEEP1 53A8 SLEEP2 53A7 SLEEPA_OFF_L 53C5 SLEEPLD_TERM 53A6 SLEEP_LED_BD 53A6 SLEEP_OFF_L 53B6 53C7 SLEEP_OFF_L2 41C7 SND_AMP_MUTE_L 30C5 44A8 SND_AMP_M_L 44A7 44B8 SND_CLKOUT 30A2 41B4 SND_HP_MUTE_L 30C5 43A7 SND_HP_M_L 43A7 SND_HP_SENSE 30B5 43A5 61B7 SND_HP_SENSE_CONN 43A3 43B2 SND_HW_RESET_L 30A8 30B5 41B4 SND_LIN_SENSE 30B5 42D4 61B4 SND_SCLK 30A2 41B1 SND_SPKR_ID 30B5 44C5 SND_SYNC 30B2 41C1 SND_TO_AUDIO 30B2 41C4 SNF_FSEL 10A7 30C5 SPDA 44C3 SPKR_JACK_DALLAS 44B1 SPKR_L+ 44B1 SPKR_L- 44B1 SPKR_MUTE_T 44B6 44B7 SPKR_R+ 44B1 SPKR_R- 44B1 SSCG_LOCK 10A7 STBYMD 52B7 STOP_AGP_L 18C6 18D3 19A8 56B7 SUPER_FLO 47C7 SW3V5V_12VIN 52C7 SW3V5V_INTVCC 52B5 52C6 SW3V5V_SGND 52A7 52A8 52B7 52B8 52C7 SW3V5V_VIN 52C6 SW3VITH2R 52A8 SW3V_3VSENSE 52B4 SW3V_BG2 52B6 SW3V_BG2R 52B5 SW3V_BOOST2 52B6 SW3V_BOOST2R 52C5 SW3V_ITH2 52A7 52B6 SW3V_RUNSS 52B6 52C3 SW3V_RUNSSR 52C3 SW3V_SNSM 52B6 SW3V_SNSP 52B6 SW3V_SW2 52B6 52C4 SW3V_SW2A 52C3</p>	<p>NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING I TO MAINTAIN THE DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART</p> <p>SIZE DRAWING NUMBER REV. D 051-6423 D SCALE NONE SHEET 65 OF 74</p> <p>APPLE COMPUTER INC.</p>					
8	7	6	5	4	3	2	1



SW3V_TG2	52B6
SW3V_TG2R	52C5
SW3V_VOSNS	52B6
SW5VITH1R	52B8
SW5V_SVSENSE	52A4
SW5V_BG1	52A5 52B7
SW5V_BG1R	52A5
SW5V_BOOST1	52A5 52B7
SW5V_ITH1	52B7
SW5V_RUNSS	52B8 52D3
SW5V_SNSM	52A5 52B7
SW5V_SNSMA	52A4
SW5V_SNSP	52A5 52B7
SW5V_SW1	52A4 52A5 52B7
SW5V_SW1A	52A3
SW5V_TG1	52B5 52B7
SW5V_TG1R	52B4
SW5V_VOSNS	52B7
SW12V_SL	53C7
SW12V_SLEEP	53D7
SWITCH5V_3	53B6
SWITCH5V_4	53B6
SWITCH5V_5	53B1 53B3
SWITCH5V_6	53B2
SYSCLK_CPU	4D2 11A4 58C3
SYSCLK_CPU_UF	11A3 58C3
SYSCLK_DDRCLK_A0	10C2 14C4 16D6 55C6
SYSCLK_DDRCLK_A0_L	10C2 14C4 16D6 55C6
SYSCLK_DDRCLK_A0_L_UF	14B6 14C5 55C6
SYSCLK_DDRCLK_A1	10C2 14C4 16A4 55C6
SYSCLK_DDRCLK_A1_L	10C2 14B4 16A4 55C6
SYSCLK_DDRCLK_A1_L_UF	14B5 14B6 55C6
SYSCLK_DDRCLK_A1_UF	14B6 14C5 55C6
SYSCLK_DDRCLK_A2_L	10C5 14B4 55B6
SYSCLK_DDRCLK_A2_L_UF	14B5 14B6 55C6
SYSCLK_DDRCLK_A2_UF	14B5 14B6 55C6
SYSCLK_DDRCLK_B0	10C2 14B4 17B4 55B6
SYSCLK_DDRCLK_B0_L	10C2 14B4 17B4 55B6
SYSCLK_DDRCLK_B0_L_UF	14B5 14B6 55B6
SYSCLK_DDRCLK_B0_UF	14B5 14B6 55B6
SYSCLK_DDRCLK_B1	10C2 14A4 17D6 55B6
SYSCLK_DDRCLK_B1_L	10C2 14A4 17D6 55B6
SYSCLK_DDRCLK_B1_L_UF	14A5 14B6 55B6
SYSCLK_DDRCLK_B1_UF	14A5 14B6 55B6
SYSCLK_DDRCLK_B2	10B2 14A4 17A6 55B6
SYSCLK_DDRCLK_B2_L	10B2 14A4 17A6 55B6
SYSCLK_DDRCLK_B2_L_UF	14A5 14B6 55B6
SYSCLK_DDRCLK_B2_UF	14A5 14B6 55B6
SYSCLK_LA	9B3 9D8 58B3
SYSTEM_CLK_EN	10A7 30A5 46C4
TAS_DVDD	41D3
TAS_PWR_DOWN	41B4 41D7
TAS_STAR_GND	41A7 41D2
TAS_VCOM	41B1 41B3 44B8
TCKM	26A5 26C3 59C3
TCKP	26B5 26C4 59C3
TD0M	26B5 26C4 59C3
TD0P	26B5 26C3 59C3
TD1M	26C3 26C5 59C3
TD1P	26C4 26C5 59C3
TD2M	26C4 26D5 59C3
TD2P	26C3 26D5 59C3
TESTEN	37A5 37C4
TMDS_DDC_CLK	26A5 26B3 61C4
TMDS_DDC_DAT	26A5 26B4 61C4
TMDS_EN	25C6 53B1
TPA_PGND	44B6 44C8 53C5
TPA_SLP_H	44A7 53D4
TPA_STAR_GND	41B7 44A7
TPA_VA	44C8 44D7 53D5
TPA_VL	44C8 44D6
TPA_VR	44C8 44D6
TP_BUF_RST	24B5
TP_DVOCLKOUT	24C5
TP_DVOCLKOUT*	24C5
TP_DVOVSYNC	24B5
TRANS_ADJ	47B3
TRST_IN	8B3
T_UD_IDEDD_0	39C1 40C3 60C2
T_UD_IDEDD_1	39C1 40C3 60C2

T_UD_IDEDD_2	39C1 40C3 60C2
T_UD_IDEDD_3	39C1 40C3 60C2
T_UD_IDEDD_4	39B1 40C3 60C2
T_UD_IDEDD_5	39B1 40C3 60C2
T_UD_IDEDD_6	39B1 40C3 60B2
T_UD_IDEDD_7	39B1 40C3 60B2
T_UD_IDEDD_8	39B1 40C2 60B2
T_UD_IDEDD_9	39B1 40C2 60B2
T_UD_IDEDD_10	39B1 40C2 60B2
T_UD_IDEDD_11	39B1 40C2 60B2
T_UD_IDEDD_12	39B1 40C2 60B2
T_UD_IDEDD_13	39A1 40C2 60B2
T_UD_IDEDD_14	39A1 40C2 60B2
T_UD_IDEDD_15	39A1 40C2 60B2
U5_SDOUT	41C3
U22_8	38D8
U4202P2	42C3
U4202P3	42C3
U4202P5	42B3
U4202P6	42B3
U4202P7	42B3
UATA0IRQ	40C6 60D5
UATAD<15..0>	39A4 39B4 39C4 40C6 60D5
UB5PAE8	24B5
UIDE_ADDR<2..0>	39C7 40A4 40B4 60B5
UIDE_CS1FX_L	39C7 40B4 60B5
UIDE_CS3FX_L	39C7 40B4 60B5
UIDE_CSELP_L	40C2 54A6
UIDE_DATA<15..0>	39A3 39B3 39C3 39C7 39D7 60C5
UIDE_DIOR_L	39C7 39D3 60C5
UIDE_DIOW_L	39C3 39C7 60C5
UIDE_DMACK_L	39C7 39D3 60C5
UIDE_DMARQ	39C7 40C4 60C5
UIDE_INTRQ	39C7 40C4 60C5
UIDE_IOCHRDY	39C3 39C7 60C5
UIDE_PDIAG	40C2
UIDE_REF	39C7
UIDE_RST_L	39C7 39D3 60C5
UNUSED_ATAIOCS16_L	40C2 54A6
UNUSED_EXTINT7	30B5 30B8
UNUSED_EXTINT8	30B5 30B8
UNUSED_GPIO15	30B5 30C1 61A4
USB2_CRUN_L	30B5 34A7
USB2_DAN_F	34C1 34C4 35B7 58B3
USB2_DAP_F	34C1 35B7 58B3
USB2_DBN_F	34C1 35C7 58B3
USB2_DBP_F	34C1 34C4 35C7 58B3
USB2_DCN_F	34C1 35D7 58B3
USB2_DCP_F	34C1 35D7 58B3
USB2_IDSEL	34B6
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USB2_RSADAP	34C4 58B3
USB2_RSDBM	34C4 58B3
USB2_RSDBP	34C4 58B3
USB2_RSDCM	34C4 58B3
USB2_RSDCP	34C4 58B3
USB2_XT1	34C4 58B3
USB2_XT2	34C4 58B3
USB2_XT2_B	58B3
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USBT_DAP_F	35B6 58B3
USBT_DBN_F	35C6 58A3
USBT_DBP_F	35C6 58A3
USBT_DCN_F	35D6 58A3
USBT_DCP_F	35D6 58A3
USB_DAN	30B3 60B5
USB_DAN_CON	35C3 58A3 61C4
USB_DAN_F	30B2 35B7 60B5
USB_DAP	30B3 60B5
USB_DAP_CON	35C3 58A3 61C4
USB_DAP_F	30B2 35B7 60B5
USB_DBN	30B3 60B5
USB_DBN_CON	35B3 58A3 61C4
USB_DBN_F	30B2 35C7 60B5
USB_DBP	30B3 60B5
USB_DBP_CON	35B3 58A3 61C4
USB_DBP_F	30B2 35C7 60B5

USB_DCN	30B3 60B5
USB_DCN_CON	35D3 58A3 61C4
USB_DCN_F	30B2 35D7 60B5
USB_DCP	30B3 60B5
USB_DCP_CON	35D3 58A3 61C4
USB_DCP_F	30B2 35D7 60B5
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USB_DDN_F_TERM	30B2
USB_DDP	30B3
USB_DDP_F_TERM	30B2
USB_DEN	30B3 60B5
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USB_DFN	30B3 60A5
USB_DFP	30B3 60A5
USB_GND	35A4 35B3 35C3 35D3 54A3
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USB_PWR	27B5 27C2 27D3 35A6 54A3
USB_PWREN_AB_L	30B3 30C2
USB_PWREN_CD_L	30B3 30C2
USB_PWREN_EF_L	30B3 30C2
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UX6_LINB	41C4
U_USB_PWR_FLT*	34B4
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VCORE_BG	47C6
VCORE_BG_1	47B5 47C7
VCORE_BOOST	47C5
VCORE_BOOST2	47C6
VCORE_BOOST2_1	47B5 47C7
VCORE_BOOST_1	47B5
VCORE_EXTVCC	47D7
VCORE_FREQSET	47C7
VCORE_INTVCC	47B5 47D5 47D7
VCORE_SEN+	47C3
VCORE_SEN+_1	47A3
VCORE_SENA+	47C3
VCORE_SF	47C8
VCORE_SGND	47B7 47C7 47C8
VCORE_STBY	47C7
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VCORE_TG_1	47B5 47C7
VCORE_VGATE	10A8 30B5
VCORE_VIN	47D7
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VGA_IIC_DAT	27C4 61B4
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VIPCLK	24D4 54A6
VIPD0	24D4 28B7
VIPD1	24D4 28B7
VIPD2	24D4 28B8
VIPD3	24D4 28D7
VIPD4	24D4 28D7
VIPD5	24D4 28D7
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VIPHAD0	24D5 28B7
VIPHAD1	24D5 28B7
VIPHCTL	24D5 28D5
VIP_PD	24C4
VIP_PU	24C4
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VOSNS2	52B5
VR43P2	48C5
VR4210P1	41B7
VREFM	41B4
VREFP	41B4 45B2
VRFILT	41B3
VSYNC*	24C5 59D3
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XMIT_LED	37A2 37B4
XW4000P2	44B7
XW4001P2	44A7
XW4002P2	44A7 44D7
ZT8P1	4A1
ZT9P1	4B2
ZT10P1	4A2

ZT11P1	4B1
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	NONE	SHT OF	66 OF 74

	8	7	6	5	4	3	2	1																	
	<p>*** Unit Cross-Reference ***  --- for the entire design --</p> <p>BS1 PCB_STANDOFF 31B5  BS2 PCB_STANDOFF 31B6  BS3 PCB_STANDOFF 31D1  BS4 PCB_STANDOFF 31D1  BT1 BATTERY 46D6  C1 CAP 35C3  C2 CAP 35D3  C3 CAP 37B1  C4 CAP 38B6  C5 CAP_P 35A5  C6 CAP 35B3  C7 CAP_P 35A5  C8 CAP 23A4  C9 CAP 23A4  C10 CAP_P 38D7  C11 CAP 23A5  C12 CAP_P 38D7  C13 CAP_P 43C4  C14 CAP_P 44C7  C15 CAP 23D2  C16 CAP 23B4  C17 CAP 23D5  C18 CAP 53D2  C19 CAP_P 53D3  C20 CAP 23B2  C21 CAP 23D5  C22 CAP 23B4  C23 CAP 23B4  C24 CAP_P 42B4  C25 CAP_P 42C4  C26 CAP_P 43D4  C27 CAP 38D8  C28 CAP 23B1  C29 CAP 23B3  C30 CAP 44B4  C31 CAP 23B2  C32 CAP 23D4  C33 CAP 23B2  C34 CAP 23B3  C35 CAP 45C4  C36 CAP 37D2  C37 CAP 37D7  C38 CAP 23D2  C39 CAP 23D5  C40 CAP 23B3  C41 CAP 37D7  C42 CAP 38B8  C43 CAP 43D6  C44 CAP 37D3  C45 CAP 37D2  C46 CAP 37D4  C47 CAP_P 44D7  C48 CAP 44D7  C49 CAP 44C7  C50 CAP_P 44D7  C51 CAP 37B3  C52 CAP 37D2  C53 CAP 37D4  C54 CAP 20B8  C55 CAP 37D3  C56 CAP 37D3  C57 CAP 37D5  C58 CAP 37D5  C59 CAP_P 50B2  C60 CAP 43C6  C61 CAP 20B6  C62 CAP 20D6  C63 CAP 42B2  C64 CAP 42C2  C65 CAP 37D6  C66 CAP 37D7  C67 CAP 37D4  C68 CAP 37D6  C69 CAP 20B5  C70 CAP 20B6  C71 CAP_P 50B1  C72 CAP 20H7  C73 CAP 20H7</p>		<p>C74 CAP 37B7  C75 CAP 20H5  C76 CAP 37B7  C77 CAP 34D3  C78 CAP 20H6  C79 CAP 20H4  C80 CAP 20H2  C81 CAP 20H7  C82 CAP 20H4  C83 CAP 20H3  C84 CAP 20H8  C85 CAP_P 41C6  C86 CAP 20H8  C87 CAP 19B3  C88 CAP_P 50B1  C89 CAP 20H2  C90 CAP 20H7  C91 CAP 19B4  C92 CAP 36B6  C93 CAP 19C4  C94 CAP 19C3  C95 CAP 20H5  C96 CAP 20H2  C97 CAP 19B3  C98 CAP 20H6  C99 CAP 19D2  C100 CAP 19D3  C101 CAP 19D3  C102 CAP 19C3  C103 CAP 19D3  C104 CAP 19D4  C105 CAP 19B3  C106 CAP_P 50B2  C107 CAP 44B8  C108 CAP 44B8  C109 CAP 19D3  C110 CAP 19D2  C111 CAP 19B4  C112 CAP 19B2  C113 CAP_P 48A4  C114 CAP 34D3  C115 CAP 20H3  C116 CAP 19B3  C117 CAP 19D4  C118 CAP 19C3  C119 CAP 25B4  C120 CAP 19C3  C121 CAP 41C4  C122 CAP 44C8  C123 CAP 32C2  C124 CAP 20H1  C125 CAP 25B5  C126 CAP_P 41C7  C127 CAP_P 41B2  C128 CAP 24D3  C129 CAP 19B3  C130 CAP 25B5  C131 CAP 25B4  C132 CAP_P 50B2  C133 CAP 20H6  C134 CAP 19D4  C135 CAP 19C3  C136 CAP 19B3  C137 CAP 19B4  C138 CAP_P 48A5  C139 CAP 19D2  C140 CAP 19C2  C141 CAP 22B3  C142 CAP 22D5  C143 CAP 22D4  C144 CAP 22D5  C145 CAP 20H2  C146 CAP 19D1  C147 CAP 19C3  C148 CAP 19C4  C149 CAP 19C4  C150 CAP 19C4  C151 CAP 19C3  C152 CAP 25B5  C153 CAP 24C7  C154 CAP 10B6</p>		<p>C155 CAP_P 44D7  C156 CAP_P 44C7  C157 CAP 22A4  C158 CAP 22D5  C159 CAP 20H5  C160 CAP 25C6  C161 CAP 19C4  C162 CAP 24C6  C163 CAP 24C6  C164 CAP 24C7  C165 CAP 22B3  C166 CAP 22B3  C167 CAP 20H5  C168 CAP 19C4  C169 CAP 19C3  C170 CAP 24C7  C171 CAP_P 48A6  C172 CAP 22A4  C173 CAP 22B2  C174 CAP 22B4  C175 CAP 20H3  C176 CAP 19D2  C177 CAP 19B4  C178 CAP 19D4  C179 CAP 19B3  C180 CAP 19D3  C181 CAP 19B2  C182 CAP 19B2  C183 CAP 19D2  C184 CAP 19B2  C185 CAP 19D3  C186 CAP 19B4  C187 CAP 19B3  C188 CAP 19B1  C189 CAP 25C5  C190 CAP 24C7  C191 CAP 22A5  C192 CAP 19D5  C193 CAP 19B5  C194 CAP 22B4  C195 CAP 22B1  C196 CAP 22B2  C197 CAP 22B2  C198 CAP 22B4  C199 CAP 20H3  C200 CAP 19D4  C201 CAP 19D4  C202 CAP 19D3  C203 CAP 19D3  C204 CAP 42C5  C205 CAP 22D2  C206 CAP 24C2  C207 CAP 24C7  C208 CAP 43A5  C209 CAP 24B6  C210 CAP 16A3  C211 CAP 16A2  C212 CAP 24D6  C213 CAP 24D6  C214 CAP 19A3  C215 CAP 19A3  C216 CAP 22D2  C217 CAP 19C1  C218 CAP_P 51B3  C219 CAP 19C2  C220 CAP_P 50C8  C221 CAP 16B3  C222 CAP 18A8  C223 CAP 19C2  C224 CAP 24C2  C225 CAP 32C2  C226 CAP 24D6  C227 CAP 24C3  C228 CAP 24C3  C229 CAP 30C6  C230 CAP 15D7  C231 CAP 13C8  C232 CAP 13C8  C233 CAP 30D6  C234 CAP 30D7  C235 CAP_P 51B3</p>		<p>C236 CAP 53B3  C237 CAP_P 50C8  C238 CAP_P 53C5  C239 CAP 46A4  C240 CAP 13B8  C241 CAP 52C6  C242 CAP 16C3  C243 CAP 16C2  C244 CAP 16C3  C245 CAP_P 46D5  C246 CAP_P 53B3  C247 CAP 10D4  C248 CAP 41B4  C249 CAP 33D1  C250 CAP 33D2  C251 CAP 10D7  C252 CAP 53B2  C253 CAP 10D7  C254 CAP 53B1  C255 CAP 16C2  C256 CAP 16C1  C257 CAP 53B2  C258 CAP 53B2  C259 CAP 33D1  C260 CAP 33D2  C261 CAP 16C1  C262 CAP 49B4  C263 CAP 16C3  C264 CAP 13C4  C265 CAP 49B3  C266 CAP 49B8  C267 CAP 46D6  C268 CAP 10B8  C269 CAP_P 53D6  C270 CAP 49A5  C271 CAP 13B8  C272 CAP 49B4  C273 CAP 49C5  C274 CAP 10B8  C275 CAP 16C2  C276 CAP 16C2  C277 CAP 13B8  C278 CAP 13C6  C279 CAP 13C5  C280 CAP 13C6  C281 CAP 13C6  C282 CAP 49B6  C283 CAP 49C7  C284 CAP 49B4  C285 CAP 49B7  C286 CAP 49B7  C287 CAP 52A1  C288 CAP 13D8  C289 CAP 13D8  C290 CAP 13D8  C291 CAP 13D8  C292 CAP 13D4  C293 CAP 52A1  C294 CAP 52A1  C295 CAP_P 52C6  C296 CAP_P 49B3  C297 CAP 49C4  C298 CAP 49C5  C299 CAP 49C4  C300 CAP_P 49C3  C301 CAP_P 49C4  C302 CAP_P 52A2  C303 CAP 52C3  C304 CAP 16C2  C305 CAP 49C4  C306 CAP_P 52A2  C307 CAP_P 52A2  C308 CAP_P 52A3  C309 CAP_P 52A3  C310 CAP_P 52A2  C311 CAP 16C1  C312 CAP 31D3  C313 CAP 16C3  C314 CAP 31D3  C315 CAP 52A8  C316 CAP 52A8</p>		<p>NOTICE OF PROPRIETARY PROPERTY  THE INFORMATION CONTAINED HEREIN IS THE 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SIZE	DRAWING NUMBER	REV.																							
D	051-6423	D																							
SCALE	SHT	OF																							
NONE	67	74																							
	8	7	6	5	4	3	2	1																	

	8	7	6	5	4	3	2	1
D	C317 CAP 52B8		C399 CAP 38A7		C480 CAP_P 42B4		C561 CAP 44B6	
	C318 CAP 52B8		C400 CAP 37C1		C481 CAP 38B3		C562 CAP 17C2	
	C319 CAP 16A8		C401 CAP 37D1		C482 CAP 38B3		C563 CAP 50B6	
	C320 CAP 16C2		C402 CAP 44C3		C483 CAP 38B3		C564 CAP 50C2	
	C321 CAP 52B7		C403 CAP 35D4		C484 CAP 38B5		C565 CAP 22B5	
	C322 CAP 52A7		C404 CAP 35D4		C485 CAP 38B1		C566 CAP 22B7	
	C323 CAP_P 51B3		C405 CAP 35D3		C486 CAP 23B6		C567 CAP 22B7	
	C324 CAP_P 51B3		C406 CAP 38B6		C487 CAP 23D7		C568 CAP 22B8	
	C325 CAP 49A4		C407 CAP 38A6		C488 CAP 23B7		C569 CAP 22B8	
	C326 CAP_P 52B2		C408 CAP 43B3		C489 CAP 23B5		C570 CAP 34C8	
	C327 CAP_P 52B2		C409 CAP 27B3		C490 CAP 38B6		C571 CAP 44B5	
	C328 CAP_P 52B2		C410 CAP 38D4		C491 CAP 44B4		C572 CAP 50B7	
	C329 CAP 51B3		C411 CAP 38A7		C492 CAP 23D2		C573 CAP 34C8	
	C330 CAP_P 51B3		C412 CAP 43C3		C493 CAP 23D7		C574 CAP 34C8	
	C331 CAP_P 51B2		C413 CAP 35D3		C494 CAP 23D7		C575 CAP 44B7	
	C332 CAP_P 51B2		C414 CAP 27B4		C495 CAP 38B2		C576 CAP 50C3	
	C333 CAP 52B6		C415 CAP 27A4		C496 CAP 38B2		C577 CAP 44B5	
	C334 CAP_P 47C1		C416 CAP 27A4		C497 CAP 44B4		C578 CAP 41C5	
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	C338 CAP_P 52D7		C420 CAP 43D3		C501 CAP 44C5		C582 CAP 44C3	
	C339 CAP_P 52D7		C421 CAP 27D4		C502 CAP 44C5		C583 CAP 48A5	
	C340 CAP_P 47C2		C422 CAP 27C4		C503 CAP 43C6		C584 CAP 41D3	
	C341 CAP 52B7		C423 CAP 27C3		C504 CAP 43B7		C585 CAP 50B5	
	C342 CAP_P 51C3		C424 CAP 38B6		C505 CAP 42D3		C586 CAP 50A4	
	C343 CAP_P 47D3		C425 CAP 44B3		C506 CAP 42C3		C587 CAP 41B2	
	C344 CAP 52B4		C426 CAP 44B2		C507 CAP 42B3		C588 CAP 41B5	
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	C348 CAP_P 47B2		C430 CAP 44B2		C511 CAP 34D5		C592 CAP 41B5	
	C349 CAP_P 52D7		C431 CAP 42B6		C512 CAP_P 43B7		C593 CAP 17C1	
	C350 CAP 9D4		C432 CAP 27B3		C513 CAP 42B3		C594 CAP 41B5	
	C351 CAP_P 51C3		C433 CAP 35C3		C514 CAP 42C3		C595 CAP 41B5	
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	C383 CAP 35C4		C464 CAP 38B4		C545 CAP 22B7		C626 CAP 25A6	
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	C396 CAP 35A4		C477 CAP 38C7		C558 CAP_P 50B2		C639 CAP 31A4	
	C397 CAP 35D3		C478 CAP 45B5		C559 CAP 34D8		C640 CAP 31A3	
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NONE	68		74

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SCALE	SHT OF		
NONE	69 OF		74

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C1040 CAP 9C2 C1041 CAP 9D3 C1042 CAP 9C2 C1043 CAP 9D2 C1044 CAP 47D7 C1045 CAP 47B7 C1046 CAP 47C1 C1047 CAP 47D5 C1048 CAP 47C2	C1049 CAP 47B7 C1050 CAP 47C7 C1051 CAP 47B6 C1052 CAP 47C8 C1053 CAP 48A8 C1054 CAP 9B2 C1055 CAP 9B2 C1056 CAP 9B1 C1057 CAP 9B1 C1058 CAP 9B1 C1101 CAP 11D3 C1601 CAP 16D7 C1602 CAP 16D3 C1603 CAP 16D3 C1701 CAP 17D7 C1702 CAP 17D7 C1801 CAP 18D5 C1802 CAP 18A7 C1901 CAP 9A6 C1902 CAP 9A5 C1903 CAP 9A5 C1904 CAP 9A5 C1910 CAP 9A5 C1911 CAP 9B2 C1912 CAP 9B2 C1913 CAP 9B1 C1914 CAP 9B1 C2201 CAP 22C8 C2202 CAP 22C4 C2301 CAP 23C8 C2302 CAP 23C4 C2501 CAP_P 25A8 C3001 CAP 30C5 C3002 CAP 30D5 C3003 CAP 30D5 C3004 CAP 30D4 C3005 CAP 30D4 C3201 CAP 32D4 C3901 CAP 39D1 C4081 CAP 48C7 C4301 CAP 43A6 C4502 CAP_P 45C5 C4701 CAP 47B6 D1 DIODE_DUAL_6P 38A7 D2 DIODE_DUAL_6P 38A7 D3 DIODE_DUAL_6P 38A7 D4 DIODE_DUAL_6P 38B7 D5 ZENER_MMBZ15VDLT1 42B6 D6 DIODE_DUAL_6P 27D4 D7 DIODE_DUAL_6P 27D4 D8 DIODE 38D6 D9 DIODE 37B8 D10 DIODE_SCHOT 25B8 D11 DIODE_SCHOT 46D7 D12 DIODE_SCHOT 46D7 D13 DIODE_SCHOT 49C7 D14 DIODE_SCHOT 49B5 D15 DIODE_SCHOT 51B4 D16 DIODE_SCHOT 52C5 D17 DIODE_SCHOT 52B5 D18 DIODE_SCHOT 51C6 D19 DIODE_SCHOT 48D6 D20 DIODE_SCHOT 47D5 D21 DIODE_SCHOT 47B5 D22 ZENER_MMBZ15VDLT1 44C2 D23 DIODE_SCHOT_3P 44A1 D24 ZENER_MMBZ15VDLT1 43B2 D25 ZENER 38B6 D26 ZENER_MMBZ15VDLT1 43B2 D27 DIODE_DUAL_6P 27B4 D28 DIODE_DUAL_6P 27B4 D29 ZENER_MMBZ15VDLT1 42B5 D30 DIODE_SCHOT 50C5 D31 DIODE_SCHOT 50B3 D32 DIODE_SCHOT 50B5 D33 DIODE_SCHOT 48B6 D34 DIODE_SCHOT 50B1 D35 DIODE_SCHOT 46D6 D36 DIODE_SCHOT 46D6 D37 DIODE_SCHOT 52B2 D38 DIODE_SCHOT 52C6	D39 DIODE_SCHOT 52B4 D40 DIODE_SCHOT 52A4 D41 DIODE_SCHOT 47C4 D42 DIODE_SCHOT 51B5 D43 DIODE_SCHOT 47B3 D44 DIODE_SCHOT 47D2 D45 DIODE_SCHOT 47D6 D46 DIODE_SCHOT 51B2 D4901 DIODE_SCHOT 49B2 DS1 LED 37A2 DS2 LED 37A1 DS3 LED 37A1 DS4 LED 32A3 DS5 LED 53A5 DS6 LED 53A6 DS7 LED 40B2 DS8 LED 40B6 DS9 LED 52D6 DS10 LED 53A3 F1 FUSE 35A7 F2 FUSE 38D5 F3 FUSE 38D5 FL1 FILTER_12P 44B3 FL2 FILTER_LC 27C6 FL3 FILTER_LC 27C6 FL4 FILTER_LC 27B6 J1 CON_RJ45 37C1 J2 CON_FWVERT_SKT 38C1 J3 CON_F8RT_S_TH1 44B1 J4 CON_F4RT_USB_UPRIGHT 35C3 J5 CON_FWVERT_SKT 38D1 J6 CON_F4RT_USB_UPRIGHT 35B3 J7 CON_F4RT_USB_UPRIGHT 35D3 J8 CON_F4RT_S4MT_TH1 43C1 J9 CON_F14RT_D4MT_TH1 27C5 J10 CON_F4RT_S4MT_TH1 42C7 J11 CON_F184ST_DDRDIMM 17D5 J12 CON_F21ST_D2MT_SM 26C3 J13 CON_M40SM_635 31D6 J14 CON_M16ST_D_TH 31B5 J15 CON_M40ST_NC20 40D6 J16 CON_M40ST_NC20 40D2 J17 CON_M16ST_MICROFIT 52D8 J18 CON_M4ST_LCK 36B4 J19 CON_37SM_MTOR 9C5 J20 CON_38SM_MTOR 9D7 J21 CON_M3ST_LCK 47C8 J22 CON_F20SM_KX 9B3 J23 CON_F1ST_S2MT_SM 30B7 J24 CON_M12ST_SM 31B3 J25 CON_F100RT_LP_SM 33D3 J26 CON_F200RT_DDRDIMM_SM2 16D5 J27 CON_F1ST_S2MT_SM 9C3 J28 CON_F10ST_D_SMA 31D2 J29 CON_M6ST_BTRY 8B6 J30 CON_38SM_MTOR 9D5 J31 CON_38SM_MTOR 9C7 J32 CON_F12RT_S2MT_SM 9B8 J4501 CON_F4ST_S2MT_SM 45C6 J4502 CON_F4ST_S2MT_SM 45C6 JAZ1 TP 53A4 L1 IND 38D4 L2 IND 35A5 L3 IND 38D4 L4 IND 35A5 L5 FILTER_4P 38C2 L6 FILTER_4P 38C2 L7 FILTER_4P 38D2 L8 FILTER_4P 38D2 L9 IND 27C2 L10 IND 44A5 L11 IND 44B5 L12 IND 50B3 L13 IND 24C7 L14 IND 10D5 L15 IND 10D7 L16 IND 30C3 L17 IND 10B8 L18 IND 10B8 L19 IND 49B4 L20 IND 47C3	L21 IND_3P 51B4 L22 IND_3P 52A3 L23 IND 52C3 L24 IND 47B3 L25 IND 44C3 L26 IND 44B1 L27 IND 43C3 L28 IND 35C5 L29 IND 35C5 L30 IND 35B5 L31 IND 35B5 L32 IND 38B6 L34 IND 43D3 L35 IND 43B3 L36 IND 42B6 L37 IND 35D5 L38 IND 35D5 L39 IND 43A3 L40 IND 44B1 L41 IND 44C3 L42 IND 43B3 L43 IND 43A4 L44 IND 43C3 L45 IND 43D3 L46 IND 42C6 L47 IND 43B3 L48 IND 42C6 L49 IND 42B5 L50 IND 42C5 L51 IND 42D6 L52 IND 42C5 L53 IND 42D5 L54 IND 44B5 L55 IND 44B5 L56 IND 46A1 L57 IND 46A1 L58 IND 34D6 L59 IND 45B5 L60 IND 45C5 L61 IND 44D7 L62 IND 44D7 L63 IND 41D4 L64 IND 26A5 L65 IND 31A7 L66 IND 31A3 L67 FILTER_4P 26A5 L68 IND 24C2 L69 IND 31A3 L70 IND 31A7 L71 FILTER_4P 26B5 L72 IND 31A7 L73 IND 31A3 L74 FILTER_4P 26C5 L75 IND 31A7 L76 FILTER_4P 26D5 L77 IND 31B7 L78 IND 31A3 L79 IND 45C7 L80 IND 31B3 L81 IND 45B7 L82 IND 26D5 L83 IND 45B7 L84 IND 52D7 L85 IND 52D7 L86 IND 52D7 L2401 IND 24C7 L2501 IND 25A6 Q1 TRA_2N7002 53C2 Q2 TRA_2N7002 44A7 Q3 TRA_2N7002 44B7 Q4 TRA_2N7002 44C4 Q5 TRA_2N7002 43A5 Q6 TRA_2N7002 53C4 Q7 TRA_IRLR8203 50B4 Q8 TRA_IRLR8503 50B4 Q9 TRA_IRLR8503 50C4 Q10 TRA_2N7002 24B7 Q11 TRA_FDC602P 53C2 Q12 TRA_2N3904 46D7 Q13 TRA_2N7002 53B2 Q14 TRA_2N7002 53C7					
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	D	051-6423	D
SCALE	NONE	SHT OF	70 74



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	R288 RES 14D4		R369 RES 51C6		R451 RES 35B5		R532 RES 41C4	
	R289 RES 30C8		R370 RES 52D6		R452 RES 35C5		R533 RES 28D6	
	R290 RES 46D8		R371 RES 51B6		R453 RES 35C5		R534 RES 28C6	
	R291 RES 30C7		R372 RES 48D4		R454 RES 35D5		R535 RES 29C5	
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	R303 RES 36D7		R385 RES 48D6		R466 RES 34C2		R547 RES 26A6	
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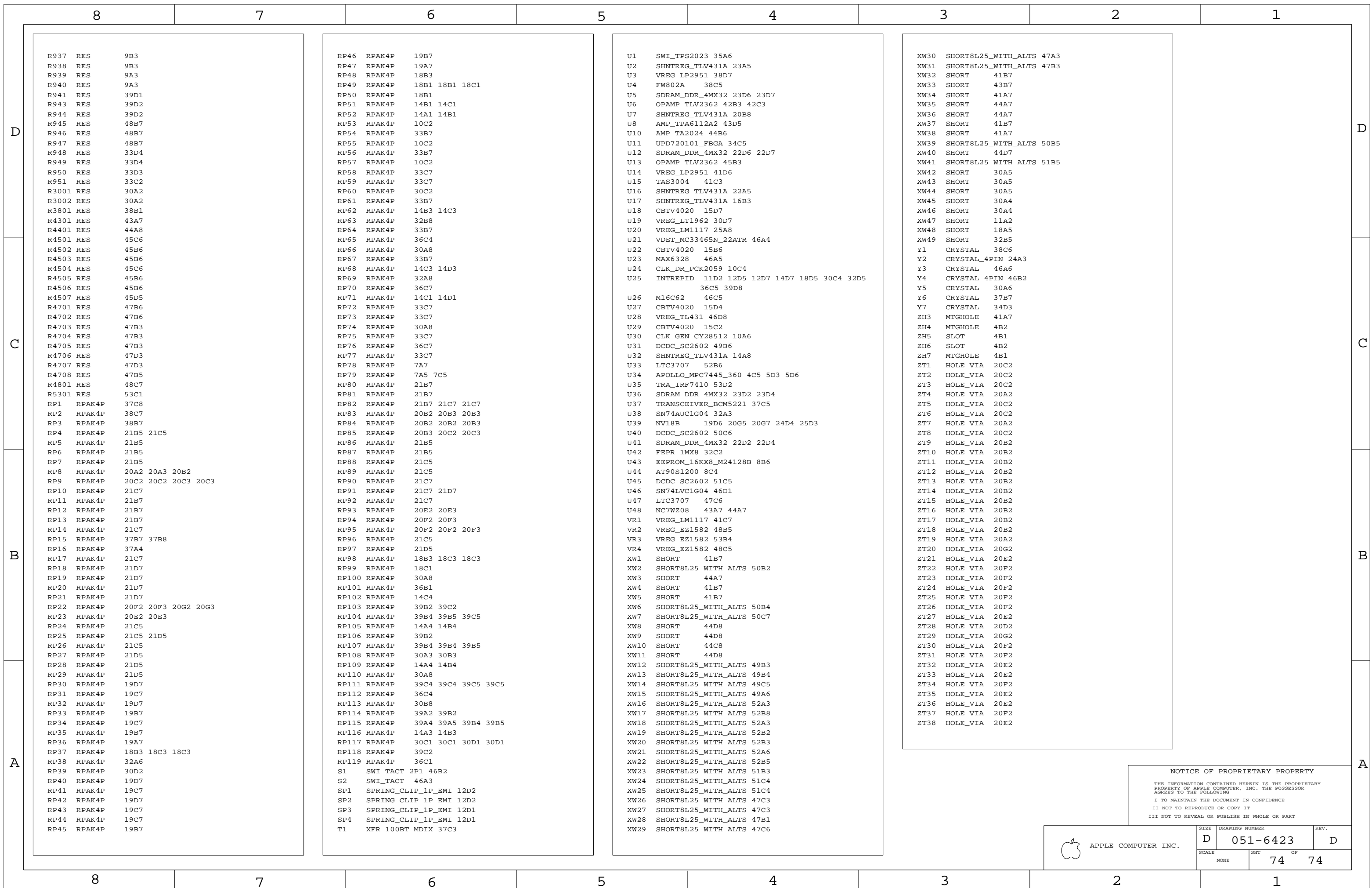
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SCALE	NONE	SHT	OF
		72	74



	8	7	6	5	4	3	2	1
D	R613 RES 31A8 R614 RES 53A4 R615 RES 53A5 R616 RES 32C7 R617 RES 32C7 R618 RES 32C7 R619 RES 18D6 R620 RES 30D5 R621 RES 32C6 R622 RES 18C6 R623 RES 39D5 R624 RES 39A7 R625 RES 14B6 R626 RES 39D2 R627 RES 39D5 R628 RES 30D5 R629 RES 30D5 R630 RES 30D5 R631 RES 10B5 R632 RES 10A3 R633 RES 10A3 R634 RES 10D5 R635 RES 39D3 R636 RES 46B6 R637 RES 36B3 R638 RES 10A3 R639 RES 10A3 R640 RES 39A5 R641 RES 30D1 R642 RES 10B3 R643 RES 10B3 R644 RES 10B5 R645 RES 53B6 R646 RES 46C1 R647 RES 36B4 R648 RES 46B2 R649 RES 46C3 R650 RES 30A2 R651 RES 30A2 R652 RES 10D7 R653 RES 46B7 R654 RES 46A5 R655 RES 46B2 R656 RES 46A6 R657 RES 46C3 R658 RES 46C3 R659 RES 46C2 R660 RES 30A2 R661 RES 30C7 R662 RES 10C6 R663 RES 10C6 R664 RES 53B6 R665 RES 46C1 R666 RES 30A6 R667 RES 18D6 R668 RES 31C3 R669 RES 31C2 R670 RES 31C2 R671 RES 46C1 R672 RES 30A6 R673 RES 36B4 R674 RES 10D3 R675 RES 10D3 R676 RES 46B4 R677 RES 46C2 R678 RES 30C8 R679 RES 39A2 R680 RES 30A8 R681 RES 14A7 R682 RES 52D6 R683 RES 30A2 R684 RES 36C1 R685 RES 53B6 R686 RES 46A7 R687 RES 46A7 R688 RES 46C2 R689 RES 46C3 R690 RES 46D3 R691 RES 30B3 R692 RES 46A3 R693 RES 46D8	R694 RES 30B3 R695 RES 30A5 R696 RES 14A7 R697 RES 14A3 R698 RES 46A3 R699 RES 46D3 R700 RES 46D3 R701 RES 46D4 R702 RES 36C4 R703 RES 14A8 R704 RES 14D4 R705 RES 31B3 R706 RES 31C3 R707 RES 36D4 R708 RES 30C8 R709 RES 36C4 R710 RES 30A5 R711 RES 30A6 R712 RES 11A3 R713 RES 11A3 R714 RES 36B7 R715 RES 14A7 R716 RES 46B8 R717 RES 46C3 R718 RES 30B3 R719 RES 32D5 R720 RES 11D3 R721 RES 52C8 R722 RES 46C6 R723 RES 30B3 R724 RES 30C3 R725 RES 46B6 R726 RES 46B7 R727 RES 30C7 R728 RES 30B3 R729 RES 46C6 R730 RES 46C7 R731 RES 46B6 R732 RES 46C7 R733 RES 46B7 R734 RES 46B7 R735 RES 30C7 R736 RES 30B3 R737 RES 40C7 R738 RES 53B7 R739 RES 53C7 R740 RES 53A7 R741 RES 53A6 R742 RES 30B3 R743 RES 40C4 R744 RES 40C7 R745 RES 40C3 R746 RES 30B8 R747 RES 30B6 R748 RES 10A5 R749 RES 30B8 R750 RES 30B8 R751 RES 53A8 R752 RES 11A3 R753 RES 39C2 R754 RES 39D4 R755 RES 10B7 R756 RES 10A7 R757 RES 11A4 R758 RES 40C1 R759 RES 39D2 R760 RES 40C5 R761 RES 39C5 R762 RES 30B3 R763 RES 30B3 R764 RES 11B4 R765 RES 11A4 R766 RES 11A3 R767 RES 39D2 R768 RES 39D5 R769 RES 53D7 R770 RES 53D7 R771 RES 10A7 R772 RES 11A4 R773 RES 39D2 R774 RES 39D4	R775 RES 40C7 R776 RES 11A4 R777 RES 11A4 R778 RES 14A8 R779 RES 40C1 R780 RES 40C3 R781 RES 40C5 R782 RES 40C7 R783 RES 40C4 R784 RES 40C7 R785 RES 40C4 R786 RES 40A4 R787 RES 40B4 R788 RES 40A7 R789 RES 40B7 R790 RES 40B7 R791 RES 40B7 R792 RES 40B2 R793 RES 40B6 R794 RES 52C7 R795 RES 52A6 R796 RES 17A8 R797 RES 52A5 R798 RES 52A5 R799 RES 52B8 R800 RES 47C3 R801 RES 47C3 R802 RES 52B5 R803 RES 52B5 R804 RES 52B6 R805 RES 52A3 R806 RES 52C6 R807 RES 52B5 R808 RES 52C3 R809 RES 17A8 R810 RES 52A5 R811 RES 52C5 R812 RES 8D6 R813 RES 8D6 R814 RES 52B3 R815 RES 52B3 R816 RES 8C6 R817 RES 8C6 R818 RES 8C5 R819 RES 8D4 R820 RES 8B7 R821 RES 8C7 R822 RES 8D3 R823 RES 8A5 R824 RES 8A5 R825 RES 17A3 R826 RES 8C7 R827 RES 51B5 R828 RES 8B7 R829 RES 8A7 R830 RES 8B7 R831 RES 8B6 R832 RES 11B6 R833 RES 11D7 R834 RES 8C5 R835 RES 8C5 R836 RES 8C2 R837 RES 8B2 R838 RES 8C2 R839 RES 8D3 R840 RES 7C7 R841 RES 7C7 R842 RES 7B7 R843 RES 7A7 R844 RES 7A7 R845 RES 7B7 R846 RES 7B7 R847 RES 7B7 R848 RES 7D5 R849 RES 7B7 R850 RES 4C2 R851 RES 7B7 R852 RES 11D7 R853 RES 11D7 R854 RES 11D7 R855 RES 11B6	R856 RES 7C5 R857 RES 7B5 R858 RES 7C5 R859 RES 7C5 R860 RES 7B5 R861 RES 11C7 R862 RES 11D7 R863 RES 11B6 R864 RES 11B7 R865 RES 11B7 R866 RES 11D6 R867 RES 11D5 R868 RES 11B7 R869 RES 11B5 R870 RES 11A5 R871 RES 51C3 R872 RES 51C3 R873 RES 51C5 R874 RES 11D6 R875 RES 11D5 R876 RES 11B7 R877 RES 11D5 R878 RES 11D6 R879 RES 11D6 R880 RES 51C3 R881 RES 51C3 R882 RES 7B5 R883 RES 51B6 R884 RES 51C5 R885 RES 11B6 R886 RES 11A6 R887 RES 11C6 R888 RES 51D5 R889 RES 11D6 R890 RES 11B8 R891 RES 4D6 R892 RES 11B7 R893 RES 11B7 R894 RES 11B8 R895 RES 4D2 R896 RES 47C5 R897 RES 47B5 R898 RES 47B5 R899 RES 47D6 R900 RES 47C5 R901 RES 4D3 R902 RES 7A4 R903 RES 7A4 R904 RES 7A4 R905 RES 7A4 R906 RES 7B4 R907 RES 7B4 R908 RES 47D6 R909 RES 7B5 R910 RES 7B5 R911 RES 7B5 R912 RES 7A5 R913 RES 7C4 R914 RES 7C4 R915 RES 7C4 R916 RES 7B4 R917 RES 7A4 R918 RES 7C4 R919 RES 7B4 R920 RES 7B4 R921 RES 7B5 R922 RES 7A5 R923 RES 7A5 R924 RES 7D5 R925 RES 7C5 R926 RES 7B4 R927 RES 48C5 R928 RES 47C5 R929 RES 47C5 R930 RES 48C5 R931 RES 47D7 R932 RES 47C7 R933 RES 47D7 R934 RES 47C8 R935 RES 47A5 R936 RES 47A5	D			
C								
B								
A								
	8	7	6	5	4	3	2	1

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-6423	D
SCALE	SHT	OF	
NONE	73	74	



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	SCALE NONE	SHIT <b>74</b>	OF <b>74</b>