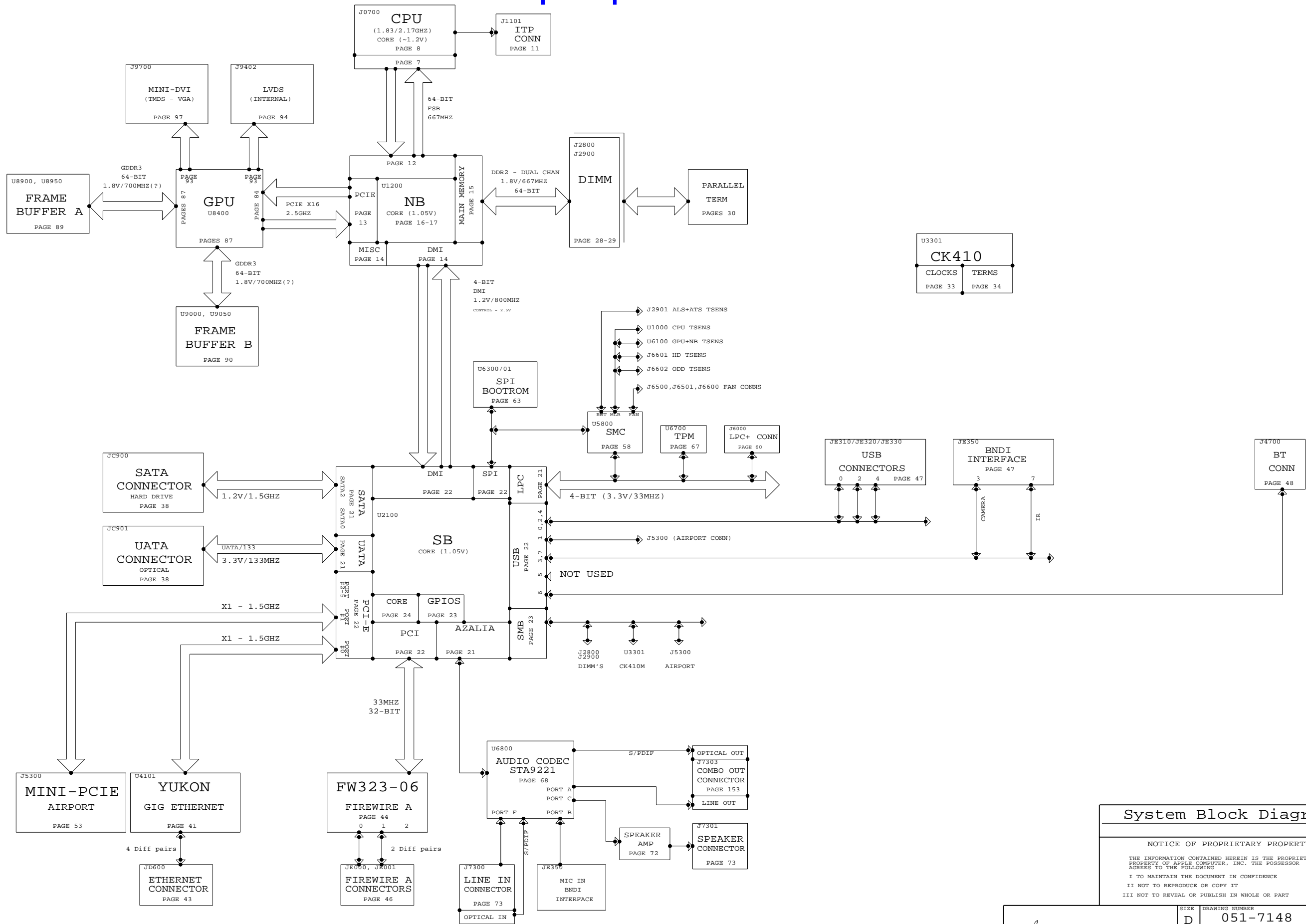
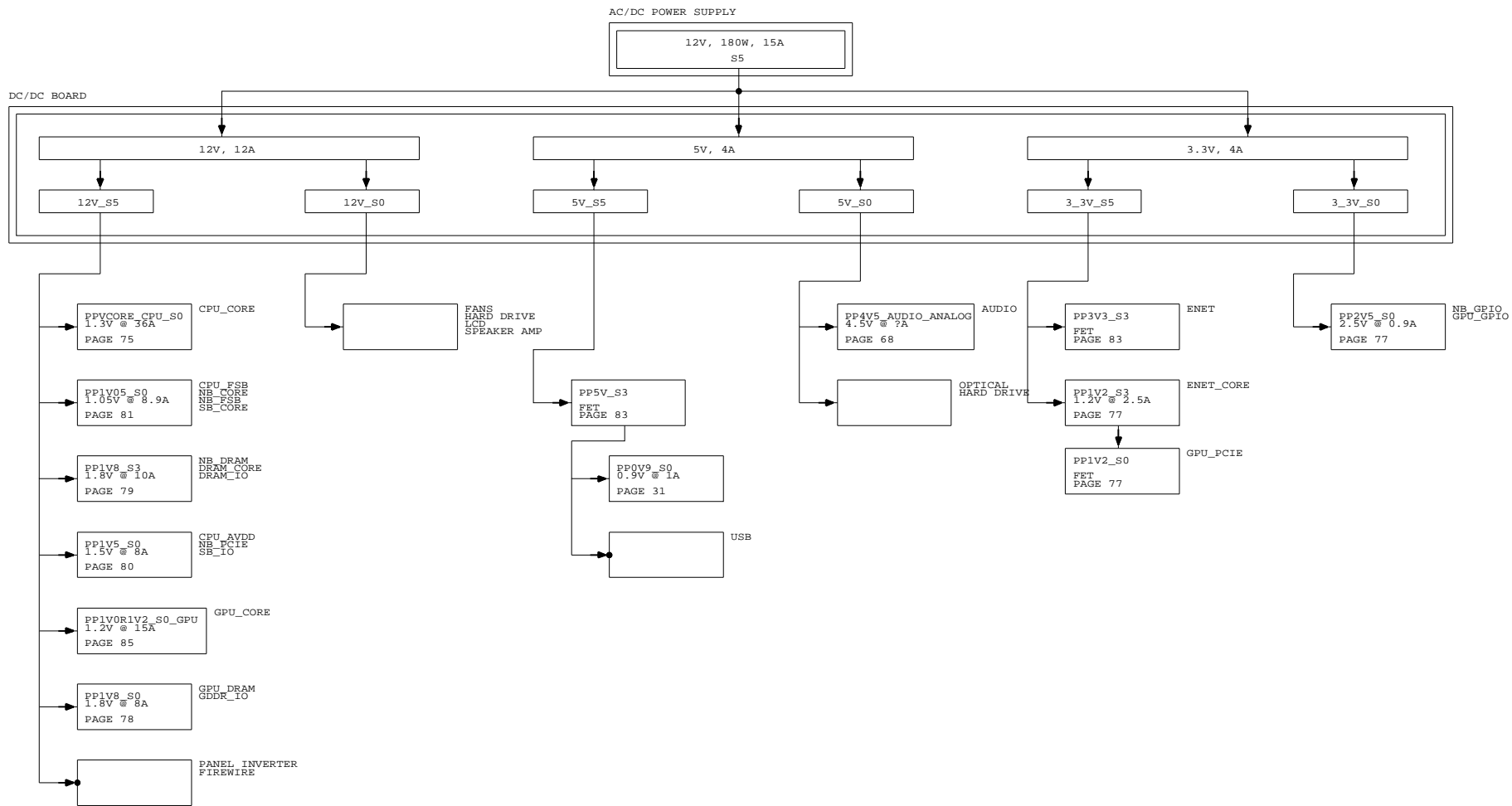


8		7		6		5		4		3		2		1													
1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.														REV		ZONE		ECN		DESCRIPTION OF CHANGE		CK APPD DATE		ENG APPD DATE			
2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.														13				445818		ENGINEERING RELEASED		06/22/06		06/22/04			
3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.																											
M38A – DVT																											
06/22/06																											
PAGE DRI PDF CIRCUIT														PAGE DRI PDF CIRCUIT													
1 JD JD 1 TABLE OF CONTENTS														53 JD JD 43 PCI-E - AIRPORT MINI-PCIE CONN													
2 JD JD 2 SYSTEM BLOCK DIAGRAM														54 JD JD 44 PCI-E - UNUSED PORTS													
3 RT RT 3 POWER BLOCK DIAGRAM														58 MS MS 45 SMC - H8S2116													
4 JD JD 4 TABLE ITEMS & REVISION HISTORY														59 MS MS 46 SMC - SMB BUSSES, MISC													
5 JD JD 5 FUNC TEST														60 MS MS 47 SMC - LPC+ CONN													
6 RT RT 6 POWER CONNECTOR / POWER ALIAS														61 JH JH 48 SMC - GPU/NB THERMAL SENSOR													
(M42) 7 MS JD 7 CPU - BUS INTERFACE														RX 63 MS JD 49 SMC - SPI BOOTROM													
(M42) 8 MS JD 8 CPU - PWR & GND														65 MS MS 50 SMC - FANS													
9 MS JD 9 CPU - DECAPS														66 MS MS 51 SMC - FANS													
(M42) 10 MS JD 10 CPU - THERMAL SENSOR														67 JD JD 52 SMC - TPM													
M42 11 MS JD 11 CPU - ITP CONN														SO 68 PT JD 53 AUDIO - CODEC,VREG,MIC BIAS													
M1 12 PS JH 12 NB - CPU INTERFACE														SO 72 PT JD 54 AUDIO - INTERNAL SPEAKER AMP													
M1 13 PS JH 13 NB - VIDEO INTERFACE														SO 73 PT JD 55 AUDIO - I/O CONN'S,EMC													
14 PS JH 14 NB - MISC INTERFACES														SO 74 PT JD 56 AUDIO - DETECT TRANSLATORS													
M1 15 PS JH 15 NB - DDR2 INTERFACE														RP 75 RT RT 57 VR - CPU CORE													
M1 16 PS JH 16 NB - POWER 1														RP 76 RT RT 58 VR - CPU I-V SENSE CKT													
M1 17 PS JH 17 NB - POWER 2														RP 77 RT RT 59 VR - "S0" 1.2V & 2.5V (GRAFIX)													
M1 18 PS JH 18 NB - GROUNDS														RP 78 RT RT 60 VR - "S0" 1.8V													
19 PS JH 19 NB - DECAPS														RP 79 RT RT 61 VR - "S3" 1.8V													
M1 20 PS JH 20 NB - CONFIG STRAPS														RP 80 RT RT 62 VR - "S0" 1.5V													
21 JD JD 21 SB - RTC,LAN,AUDIO,ATA,CPU,LPC														RP 81 RT RT 63 VR - "S0" 1.05V													
22 JD JD 22 SB - PCIE,SPI,USB,DMI,PCI														RP 83 RT RT 64 VR - "S3" 3.3V AND 5V													
23 JD JD 23 SB - SMB,GPIO,PM,CLKS														JH 84 JH JH 65 GPU - M56 PCI-E													
24 JD JD 24 SB - POWERS AND GROUNDS														M1 85 JH JH 66 GPU - VCORE SUPPLY													
25 JD JD 25 SB - DECAPS														M1 86 JH JH 67 GPU - M56 CORE PWR													
26 JD JD 26 SB - MISC														M1 87 JH JH 68 GPU - M56 FRAME BUFFER													
27 JD JD 27 SB - SMB BUS CONNECTIONS														M1 88 JH JH 69 GPU - MISC													
28 PS JD 28 DDR2 - SO-DIMM CONN A														M1 89 JH JH 70 GPU - GDDR SDRAM A													
29 PS JD 29 DDR2 - SO-DIMM CONN B (REVERSED)														M1 90 JH JH 71 GPU - GDDR SDRAM B													
30 PS JD 30 DDR2 - TERMINATION														M1 91 JH JH 72 GPU - M56 GPIO,DVO,MISC													
M1 31 RT RT 31 DDR2 - VTT SUPPLY														M1 92 JH JH 73 GPU - M56 CLOCKS													
M42 33 JD JD 32 CLOCKS - GENERATOR														M1 93 JH JH 74 GPU - M56 VIDEO INTERFACES													
34 JD JD 33 CLOCKS - TERMINATIONS														JH 94 JH JH 75 GPU - INTERNAL DISPLAY CONN'S													
38 JD JD 34 ATA (SATA AND IDE) CONN'S														JH 95 JH JH 76 GPU - TP'S													
(M42) 41 JD JD 35 LAN - YUKON'S PCIE INTERFACE														JH 96 JH JH 77 GPU - TMDS,INVERTER,EXT VGA													
42 JD JD 36 LAN - YUKON'S PWR, MISC														JH 97 JH JH 78 GPU - EXTERNAL DISPLAY CONN'S													
43 JD JD 37 LAN - CONN																											
44 JD JD 38 FIREWIRE - FW323-06																											
45 JD JD 39 FIREWIRE - DECAPS																											
46 JD JD 40 FIREWIRE - CONN'S																											
47 JD JD 41 USB - CONN'S																											
</																											





Power Block Diagram

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SIZE	DRAWING NUMBER	REV.
D	051-7148	13
SCALE NONE	SHT 3	OF 110

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COMMON

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
511S0025	1	IC,CPU-SKT,479BGA	J0700	CRITICAL	
338S0328	1	IC,945PM,NORTHBRIDGE	U1200	CRITICAL	
343S0385	1	IC,SB,652BGA	U2100	CRITICAL	
338S0344	1	IC,ATI,M56P,GRAPHIXCTLR,880BGA,LF	U8400	CRITICAL	
359S0101	1	IC,CY28445-5,CLK GEN,68PIN QFN	U3301	CRITICAL	
338S0270	1	IC,88E8053,GIGABIT ENET XCVR,64P QFN,MD	U4101	CRITICAL	
341S1797	1	IC,ENET LAN ROM	U4102	CRITICAL	
338S0279	1	IC,FW32306,1394A LINK,TQFP	U4400	CRITICAL	

(335S0382)

UNSCREENED P/N  
353S1235

341S1789	1	IC,TPM,TSSOP,28P	U6700	CRITICAL	LEMENU
353S1465	1	IC,CPU VREG,IMVP,TWO PHASE	U7500	CRITICAL	

128S0078	3	CAP,EL,AL,330UF,20%,16V,10X12.7MM,SMD,LF	C7517,C7518,C7910	CRITICAL	
825-6447	1	MLB LABEL,48.0X4.8	X14	CRITICAL	

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
126S0096	126S0076		C7801	SANYO W16CE680EX 680UF 16V LF
126S0086	126S0078		C699,C940,C1900,C1901,C1968	SANYO W6CE330FS 330UF 6.3V LF
128S0080	128S0078		C7517,C7518,C7910	SANYO 168VP330W 330UF 16V SMD LF
124-0338	124-0333		C7501,C8014	CAP,AL,EL,680UF,16V,RAD,10X12.5MM
138S0580	138S0552			22UF 0805
353S1321	353S1105		U7910	LM339
378S0141	378S0140		LED#01,LED#02,LED#03	LED

353S1461	353S1465		U7500	CPU REGULATOR - ISL9504
----------	----------	--	-------	-------------------------

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-7148	1	PCB,SCHRM,MLB,M38A	SCH1		17_INCH_LCD
820-2052	1	PCB,FAB,MLB,M38A	MLB1		17_INCH_LCD
341T0040	1	EFI ROM,M38A	U6301	CRITICAL	17_INCH_LCD
114S0264	1	3.01K,1%,1/16W,402,MF-LF	R8522		GPU_VCORE_1P2V
341T0039	1	IC,SMC,M38A	U5800	CRITICAL	17_INCH_LCD
338S0315	1	IC,ATI,M56LP,GRAPHIX CTLR,880BGA,LF	U8400	CRITICAL	GPU_B26_LP
114S0287	1	5.11K,1%,1/16W,402,MF-LF	R8522		GPU_VCORE_OP953V
114S0281	1	4.53K,1%,1/16W,402,MF-LF	R8522		GPU_VCORE_1P0V
337S3299	1	2.00GHZ MEROM	CPU	CRITICAL	2P00_CPU
337S3293	1	2.16GHZ MEROM	CPU	CRITICAL	2P16_CPU

(341S1908 - DEVEL)  
(341S1909 - FINAL)  
(335S0384 - BLNK)

(341S1907 - PROG)  
(338S0274 - BLNK)

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
333S0354	4	IC,SGRAM,GDDR3,8MX32,700MHZ,136FBGA	U8900,U8950,U9000,U9050	CRITICAL	ATI_FB_128M_SAMSUNG
333S0358	4	IC,SGRAM,GDDR3,8MX32,700MHZ,136FBGA	U8900,U8950,U9000,U9050	CRITICAL	ATI_FB_128M_HYNIX
333S0376	4	IC,SGRAM,GDDR3,8MX32,700MHZ,136FBGA	U8900,U8950,U9000,U9050	CRITICAL	ATI_FB_128M_INFINEON

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
333S0350	4	IC,SGRAM,GDDR3,16MX32,700MHZ,136FBGA	U8900,U8950,U9000,U9050	CRITICAL	ATI_FB_256M_SAMSUNG
333S0351	4	IC,SGRAM,GDDR3,16MX32,700MHZ,136FBGA	U8900,U8950,U9000,U9050	CRITICAL	ATI_FB_256M_HYNIX
333S0377	4	IC,SGRAM,GDDR3,16MX32,700MHZ,136FBGA	U8900,U8950,U9000,U9050	CRITICAL	ATI_FB_256M_INFINEON

Table Items

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APPLE COMPUTER INC.

SIZE

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DRAWING NUMBER

051-7148

REV.

13

SCALE

NONE

SHT

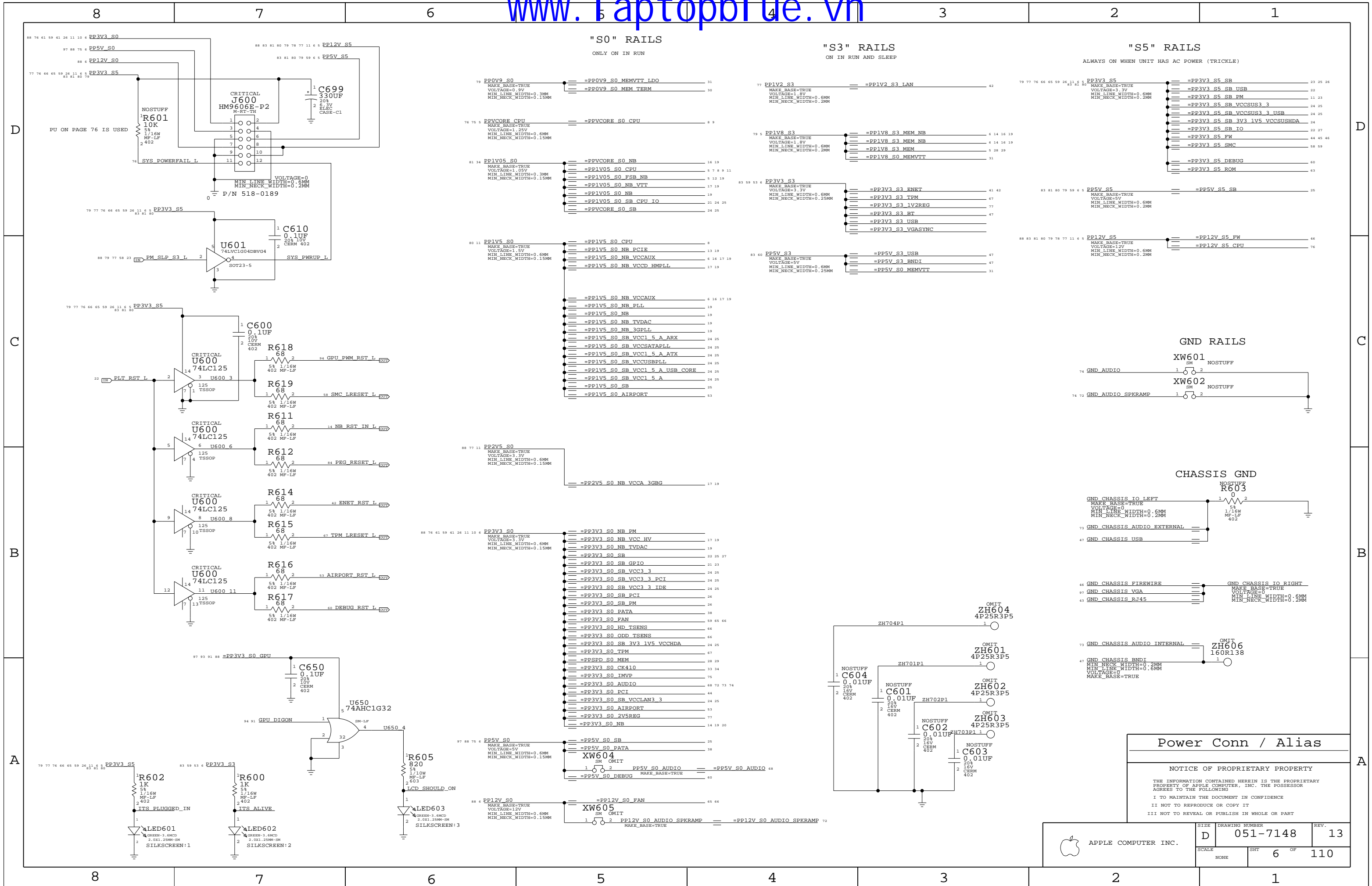
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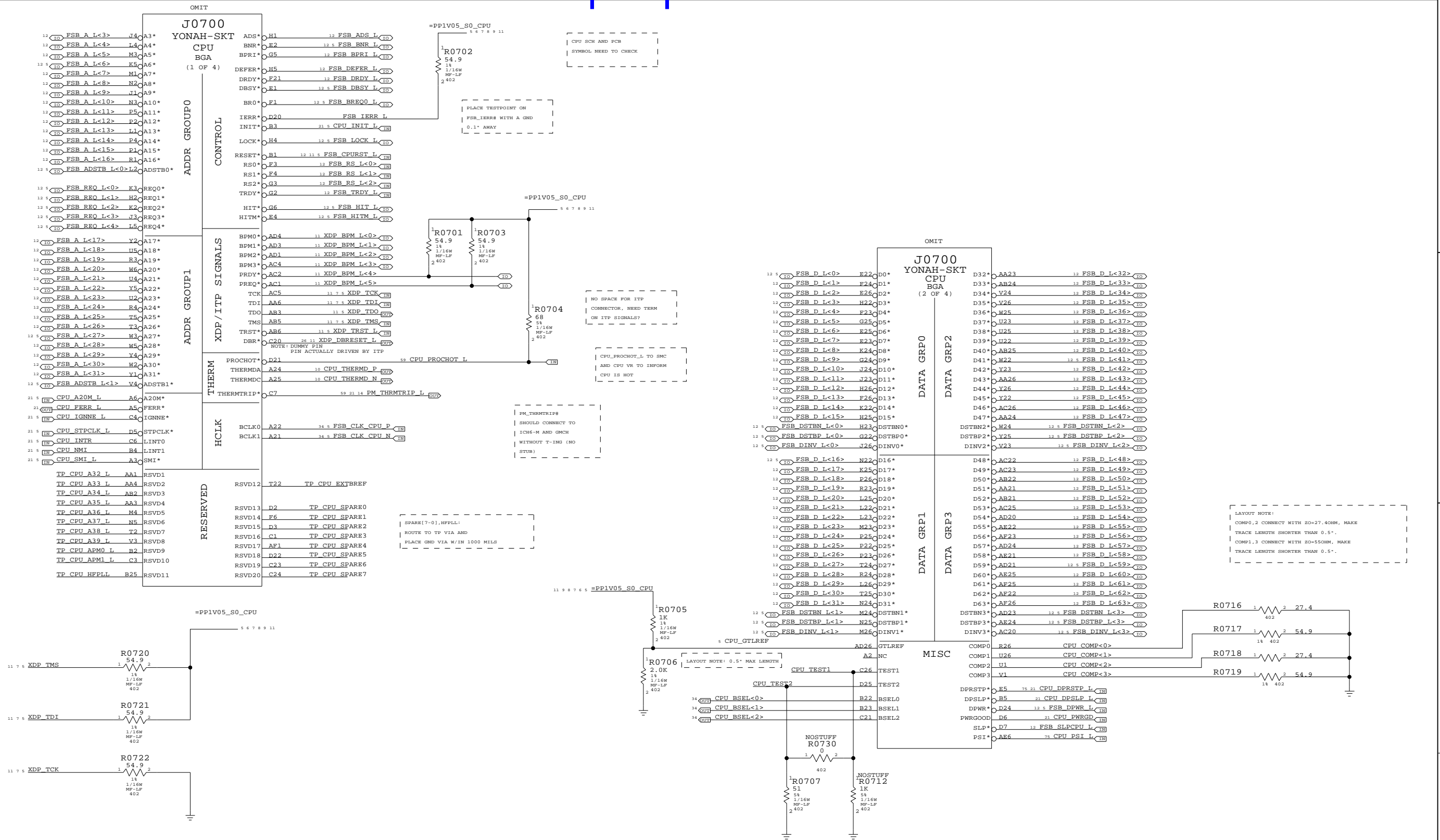
OF

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[illegible]







CPU 1 OF 2-FSB

SYNC\_MASTER=MASTER SYNC\_DATE=05/03/2005

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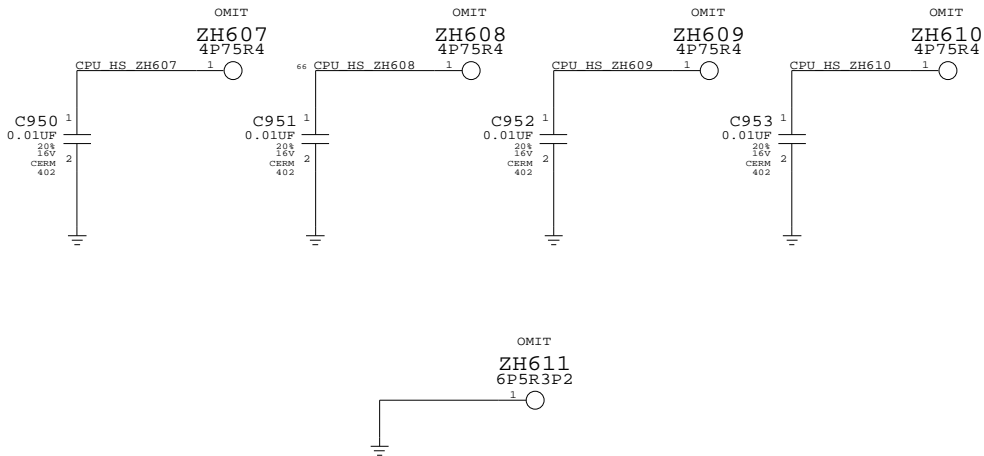
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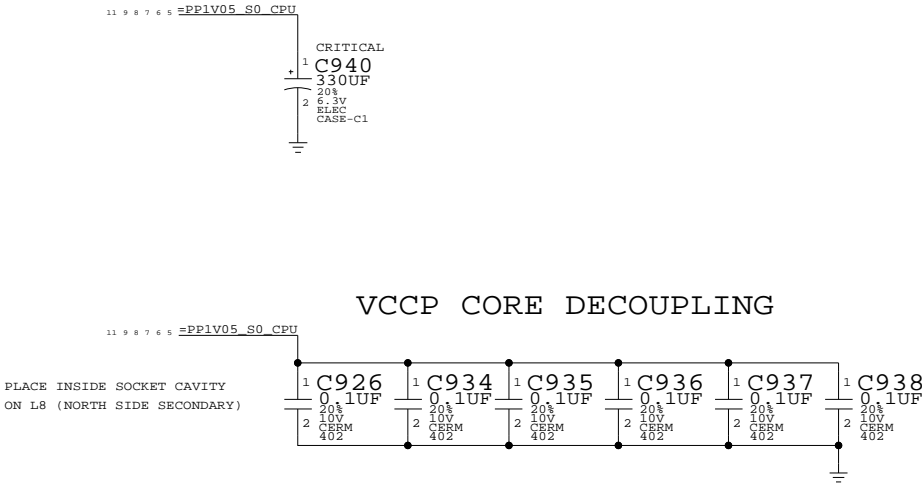




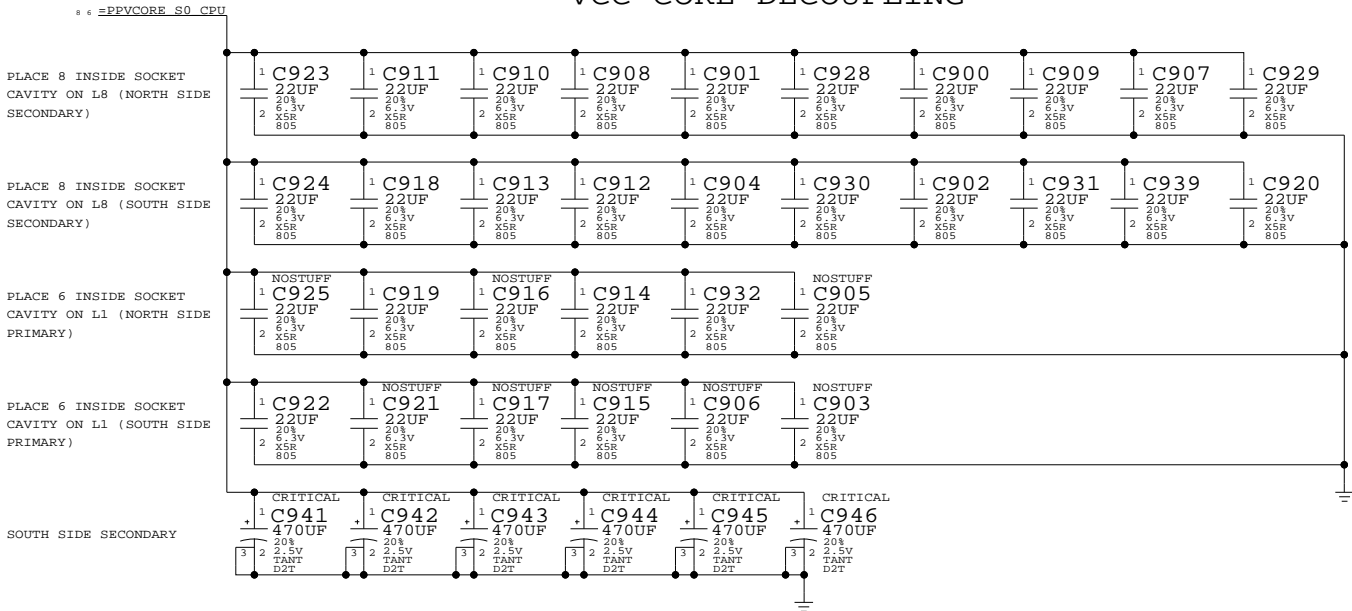
CPU HEATSINK MOUNTING HOLES



VCCP CORE DECOUPLING



VCC CORE DECOUPLING



CPU DECAPS & VID<>

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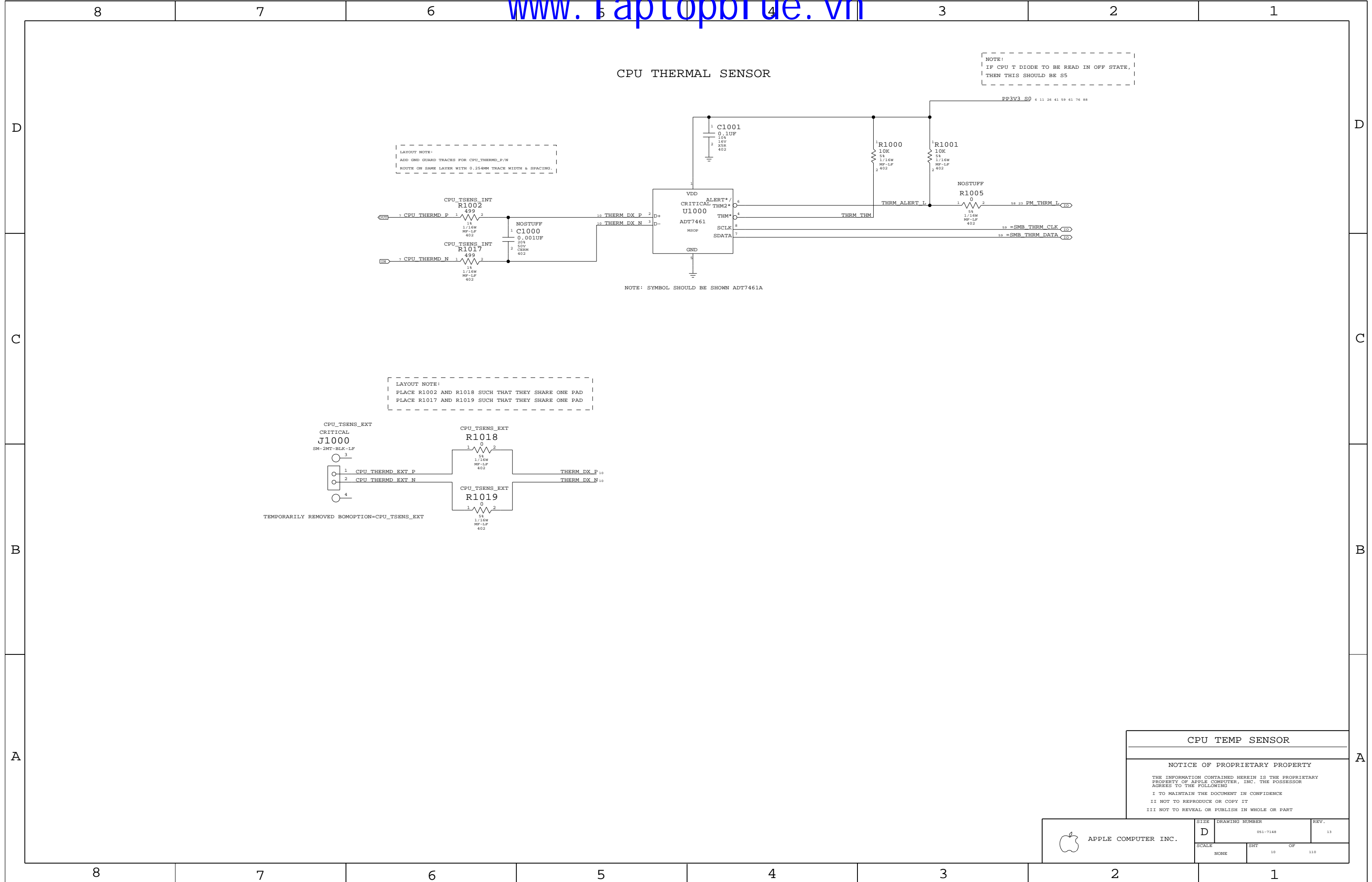
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SIZE	DRAWING NUMBER	REV.
D	051-7148	13
SCALE	SHT	OF
NONE	9	110



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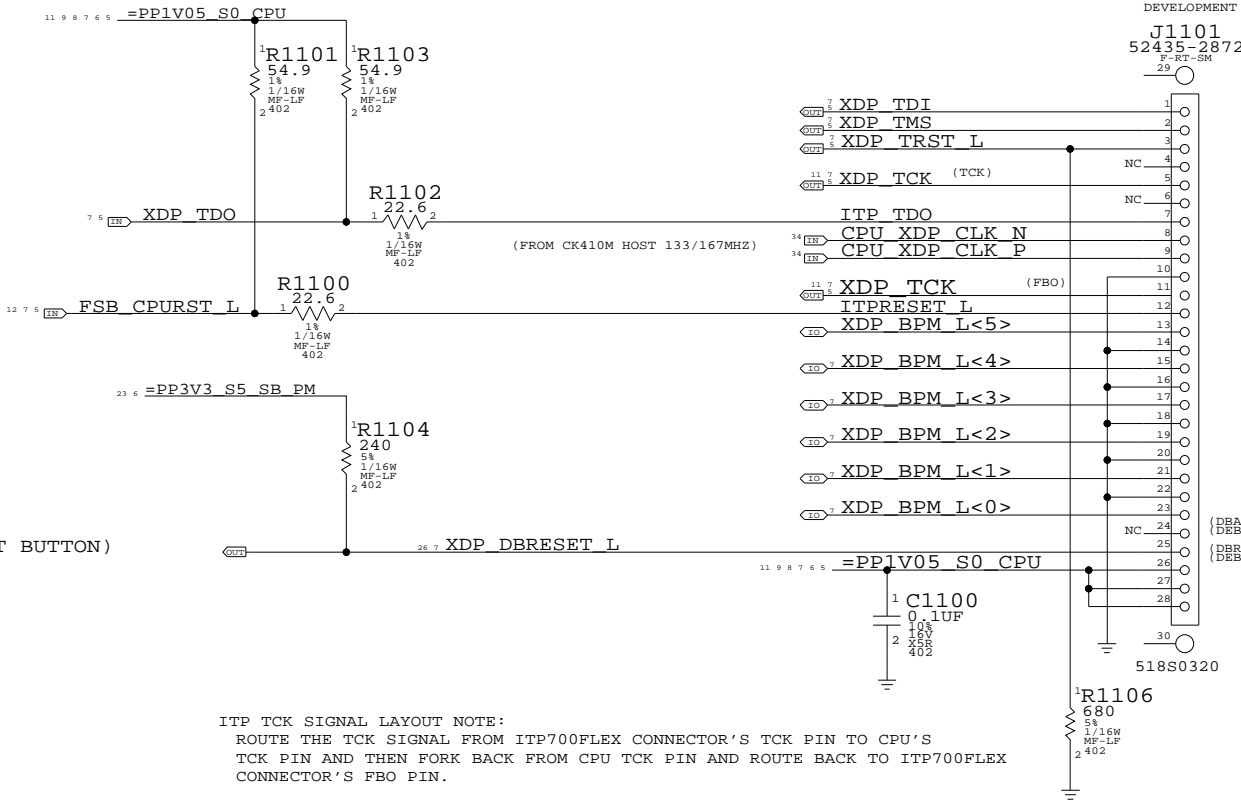
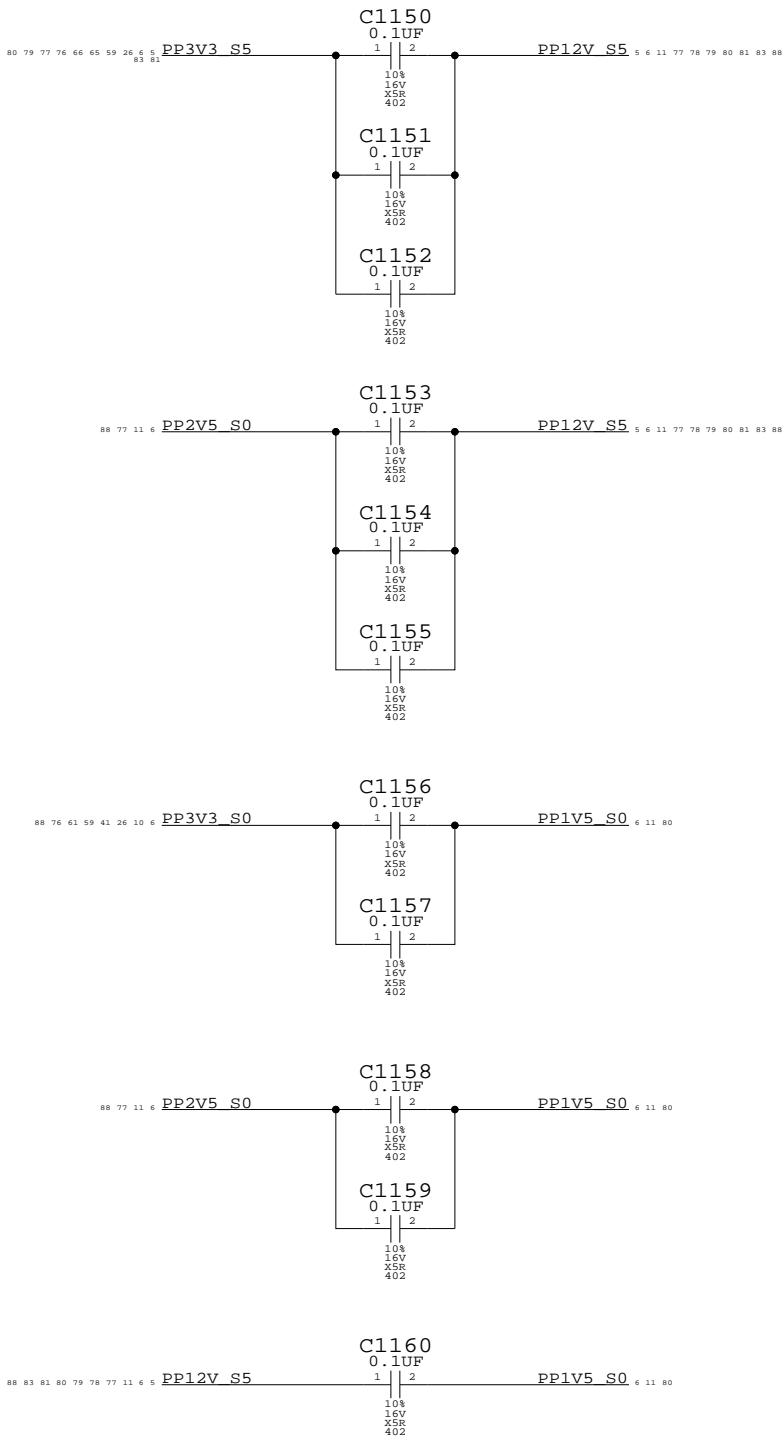
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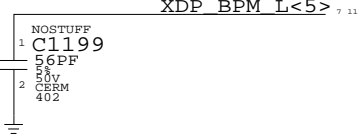
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CPU ITP700FLEX DEBUG SUPPORT



NOTE: PLACE C1199 AT J1101 PINS 13 AND 14



(DBAH). INDICATE THAT ITP IS USING TAP I/F, NC IN 945GM CHIPSET SYSTEM.  
(DEBUG PORT ACTIVE)  
(DBAH) TO ICH7M SYS\_RST\*, AND WITH SYSTEM RESET LOGIC  
(DEBUG PORT RESET)

CPU ITP700FLEX DEBUG

SYNC\_MASTER=MASTER      SYNC\_DATE=5/23/05

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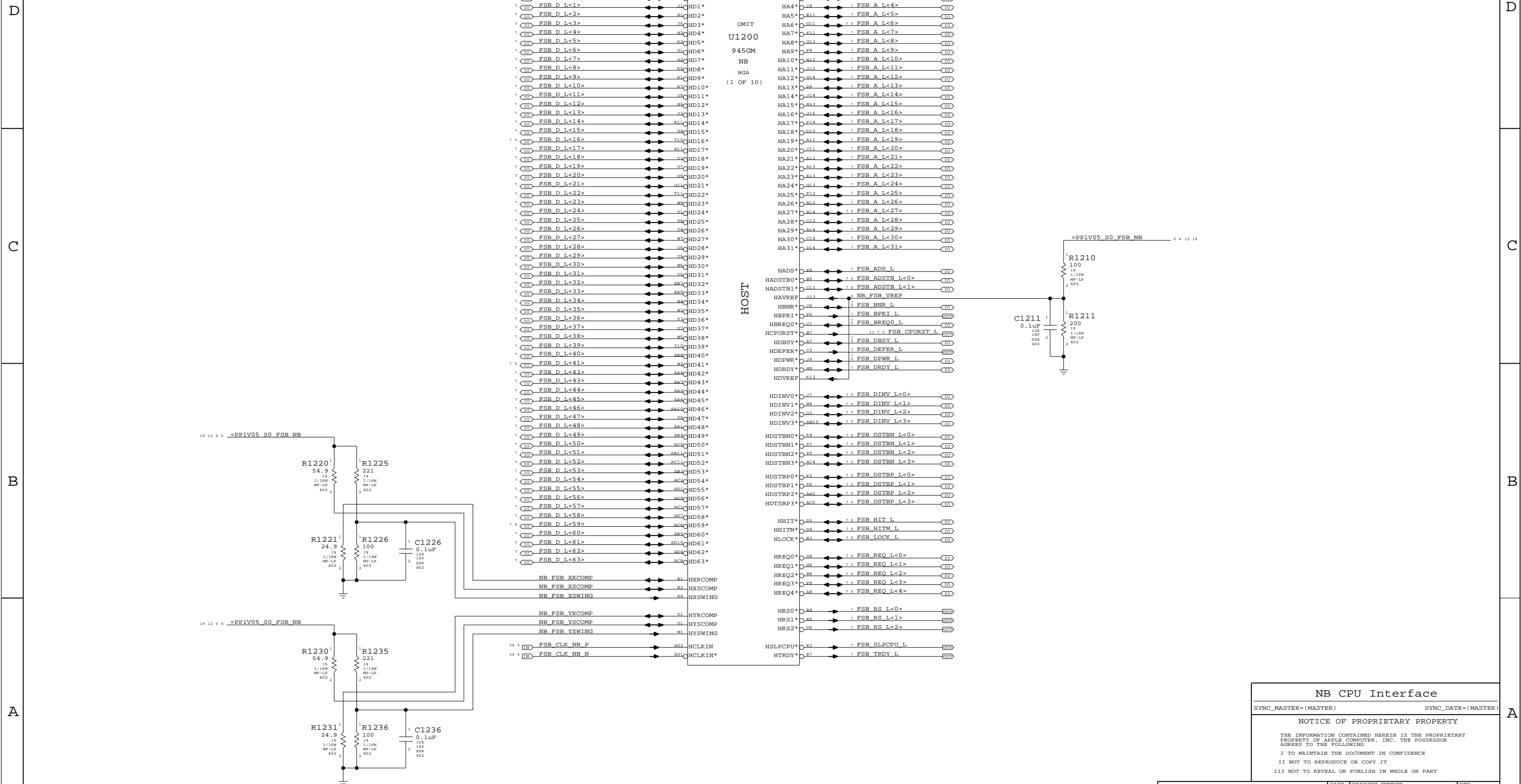
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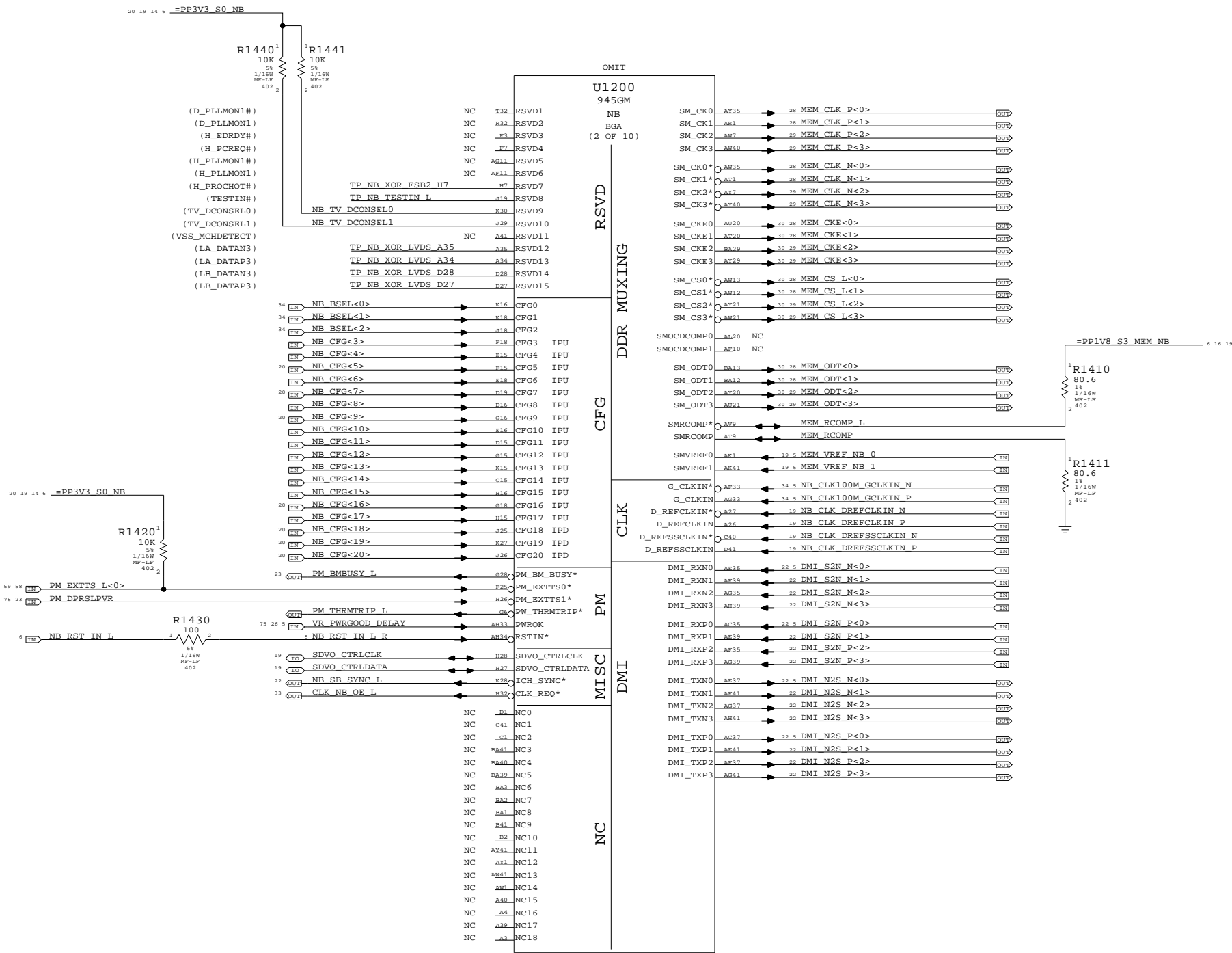
APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
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SCALE		SHT	OF
NONE		11	110



 APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
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	SCALE	SHT	OF
	NONE	12	110







### NB Misc Interfaces

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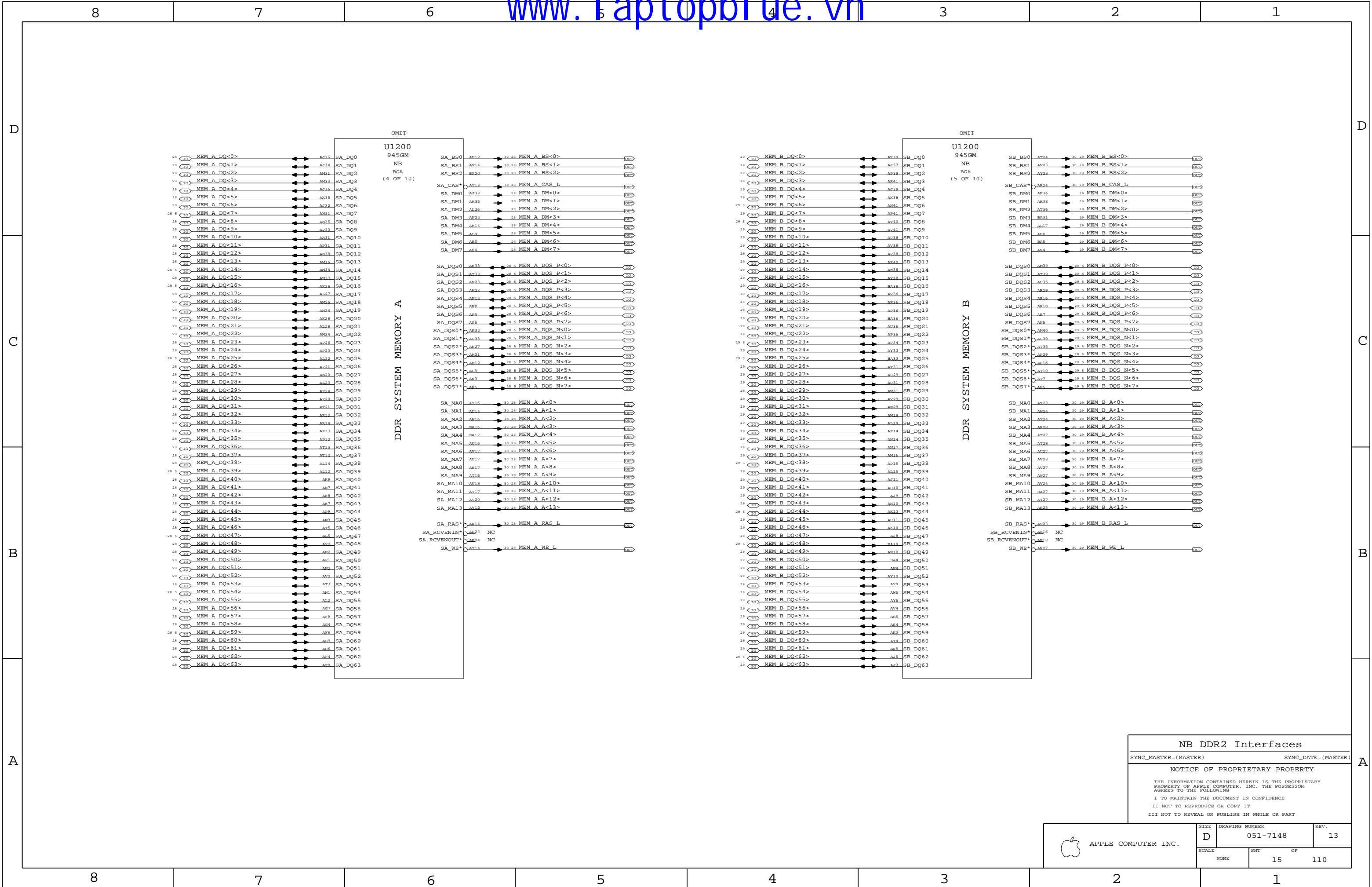
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SCALE	SHT	OF
NONE	14	110



NB DDR2 Interfaces

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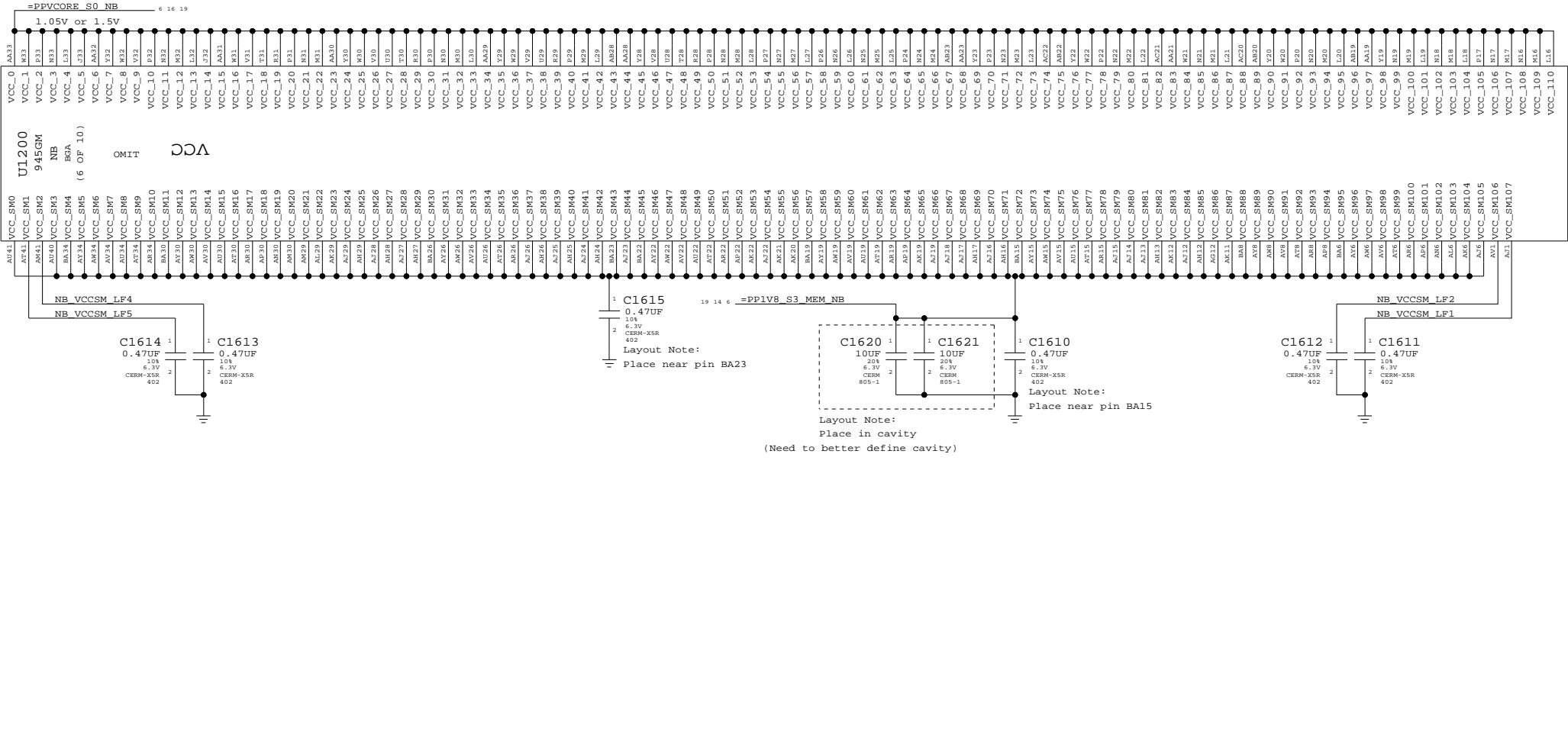
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NCTF balls are Not Critical To Function

These connections can break without impacting part performance.

OMIT



NB Power 1

SYNC\_MASTER=(MASTER)

SYNC\_DATE=(MASTER)

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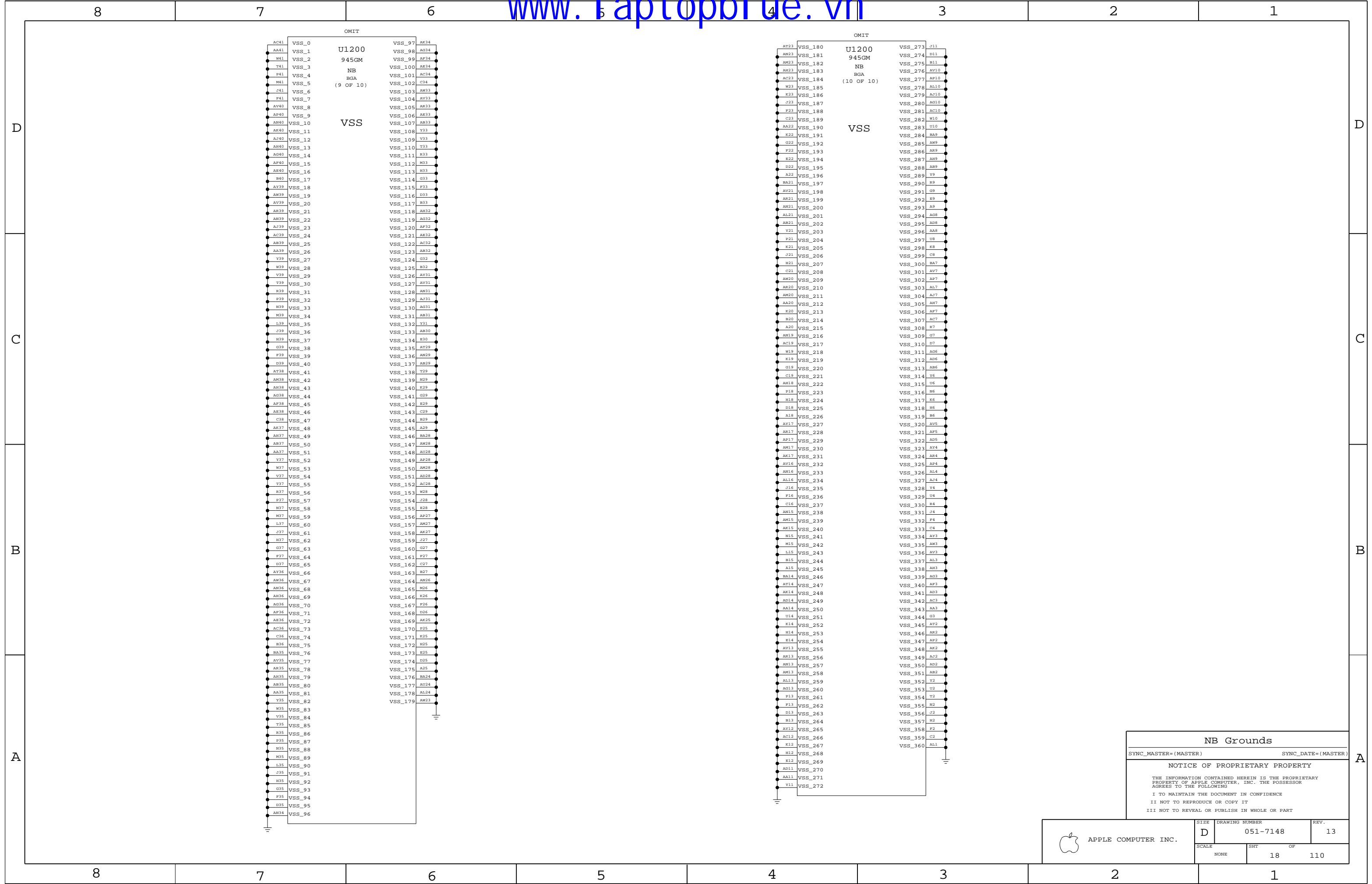
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	D	051-7148	13
SCALE	SHT		OF
	NONE		16110





NB Grounds

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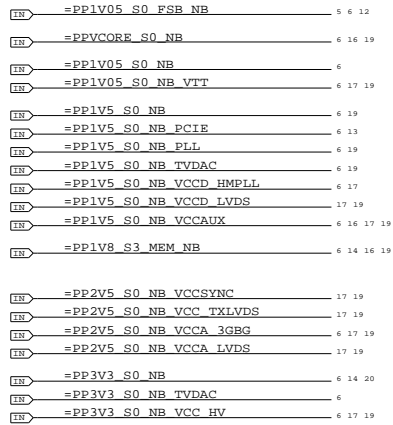
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	NONE	18	110

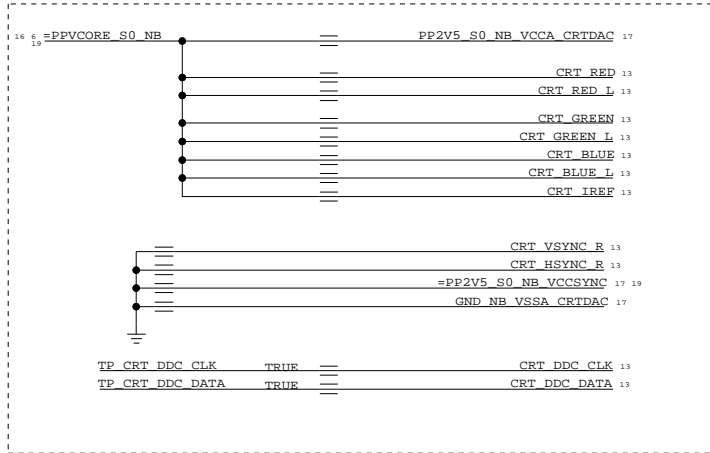


### Power Interface

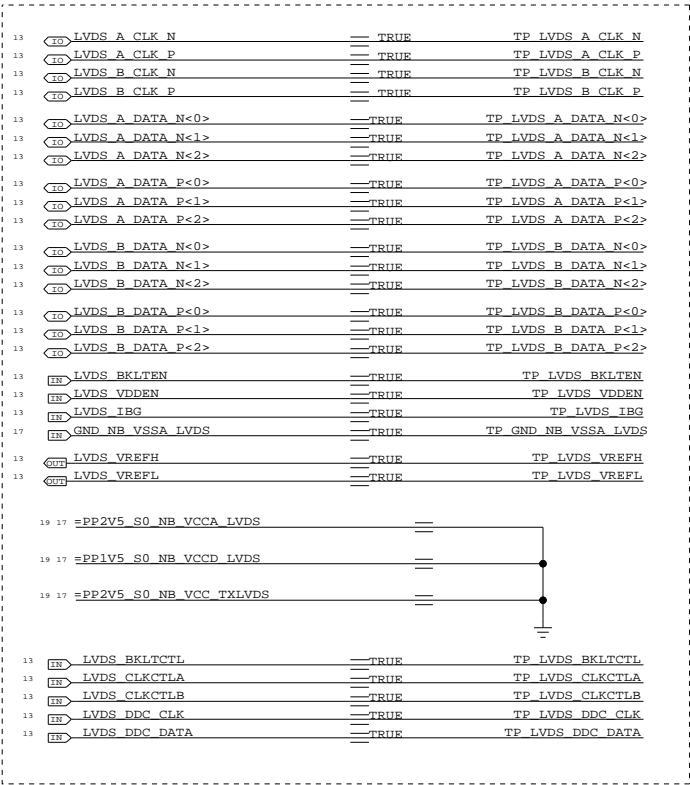
These are the power signals that leave the NB "block"



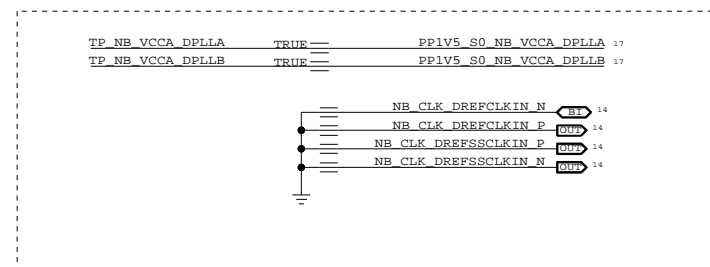
### TVOUT DISABLE



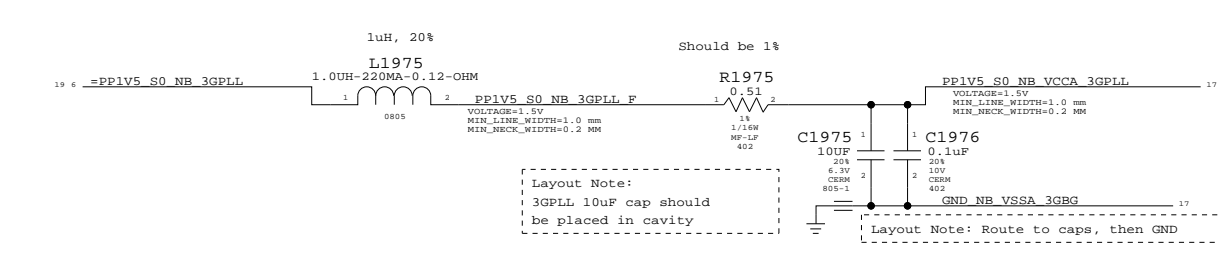
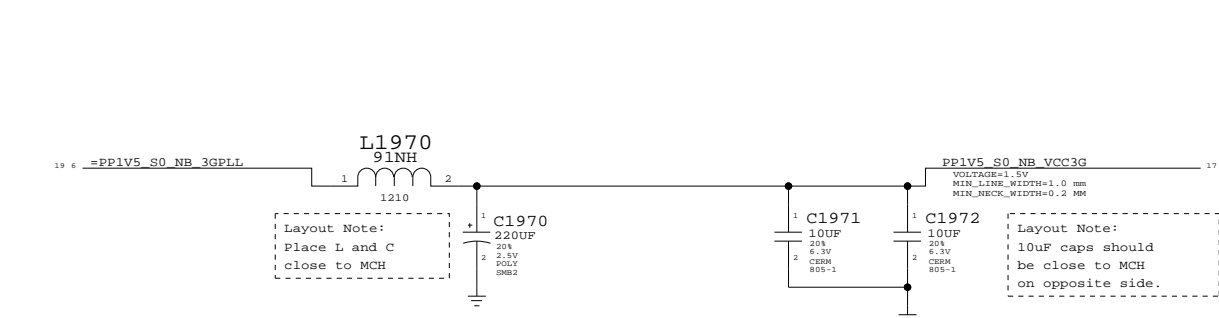
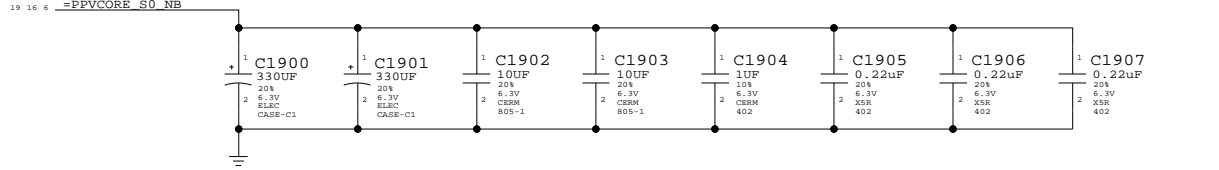
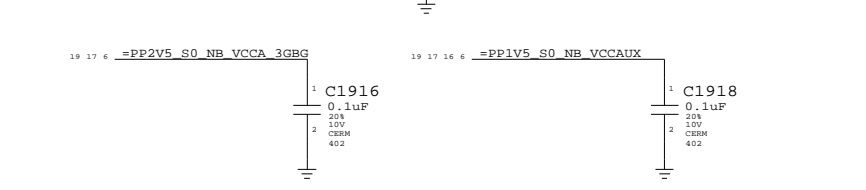
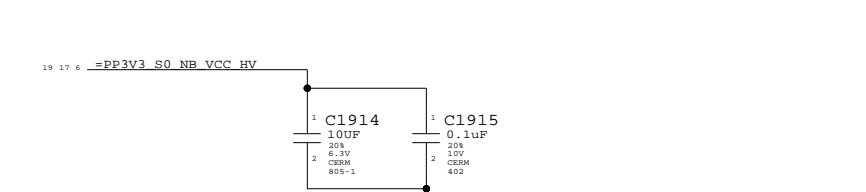
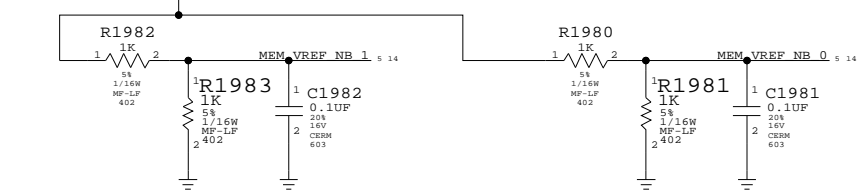
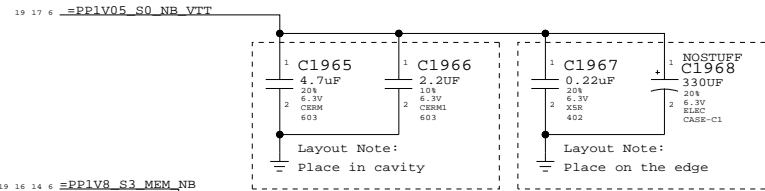
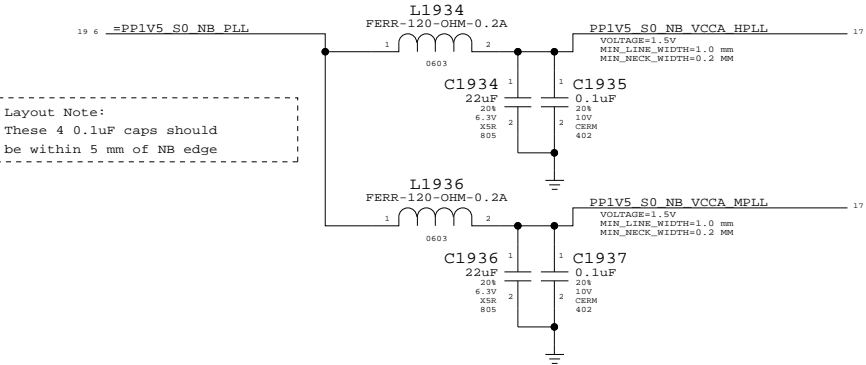
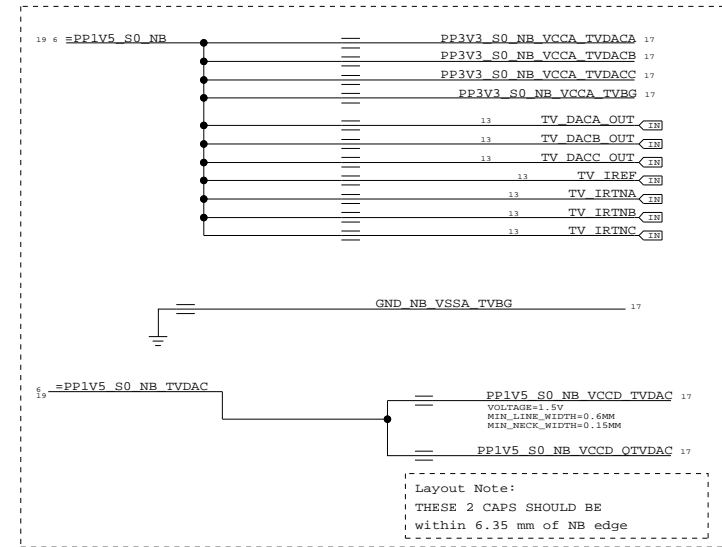
### LVDS DISABLE



### DISPLAY DISABLE



### TVOUT DISABLE



**NB (GM) Decoupling**

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NB_CFG<3>	RESERVED
-----------	----------

NB_CFG<4>	RESERVED
-----------	----------

14_NB_CFG<5> Internal pull-up	
NB_CFG<5> DMI x2 Select	High = DMIx4 Low = DMIx2
NBCFG_DMI_X2 1R2075 2.2K 5% 1/16W MF-LP 2402	

PROBABLY NOT NEEDED

NB_CFG<6>	RESERVED
-----------	----------

14_NB_CFG<7> Internal pull-up	
NB_CFG<7> CPU Strap	High = Mobile CPU Low = RESERVED
NO STUFF 1R2077 2.2K 5% 1/16W MF-LP 2402	

NB_CFG<8>	RESERVED
-----------	----------

14_NB_CFG<9> Internal pull-up	
NB_CFG<9> PCIe Graphics Lane Reversal	High = Normal Low = Reversed
NBCFG_PEG_REVERSE 1R2079 2.2K 5% 1/16W MF-LP 2402	

NB_CFG<10>	RESERVED
------------	----------

NB_CFG<11>	RESERVED
------------	----------

Internal pull-ups	
NB_CFG<13:12>	00 = Partial Clock Gating Disable 01 = XOR Mode Enabled 10 = All-Z Mode Enabled 11 = Normal Operation

NB_CFG<14>	RESERVED
------------	----------

NB_CFG<15>	RESERVED
------------	----------

14_NB_CFG<16> Internal pull-up	
NB_CFG<16> FSB Dynamic ODT	High = Enabled Low = Disabled
NBCFG_DYN_ODT_DISABLE 1R2085 2.2K 5% 1/16W MF-LP 2402	

NB_CFG<17>	RESERVED
------------	----------


=PP3V3_S0_NB NBCFG_VCC_1V5	
NB_CFG<18> VCC Select	High = 1.5V Low = 1.05V
1R2058 2.2K 5% 1/16W MF-LP 2402	
14_NB_CFG<18> Internal pull-down	

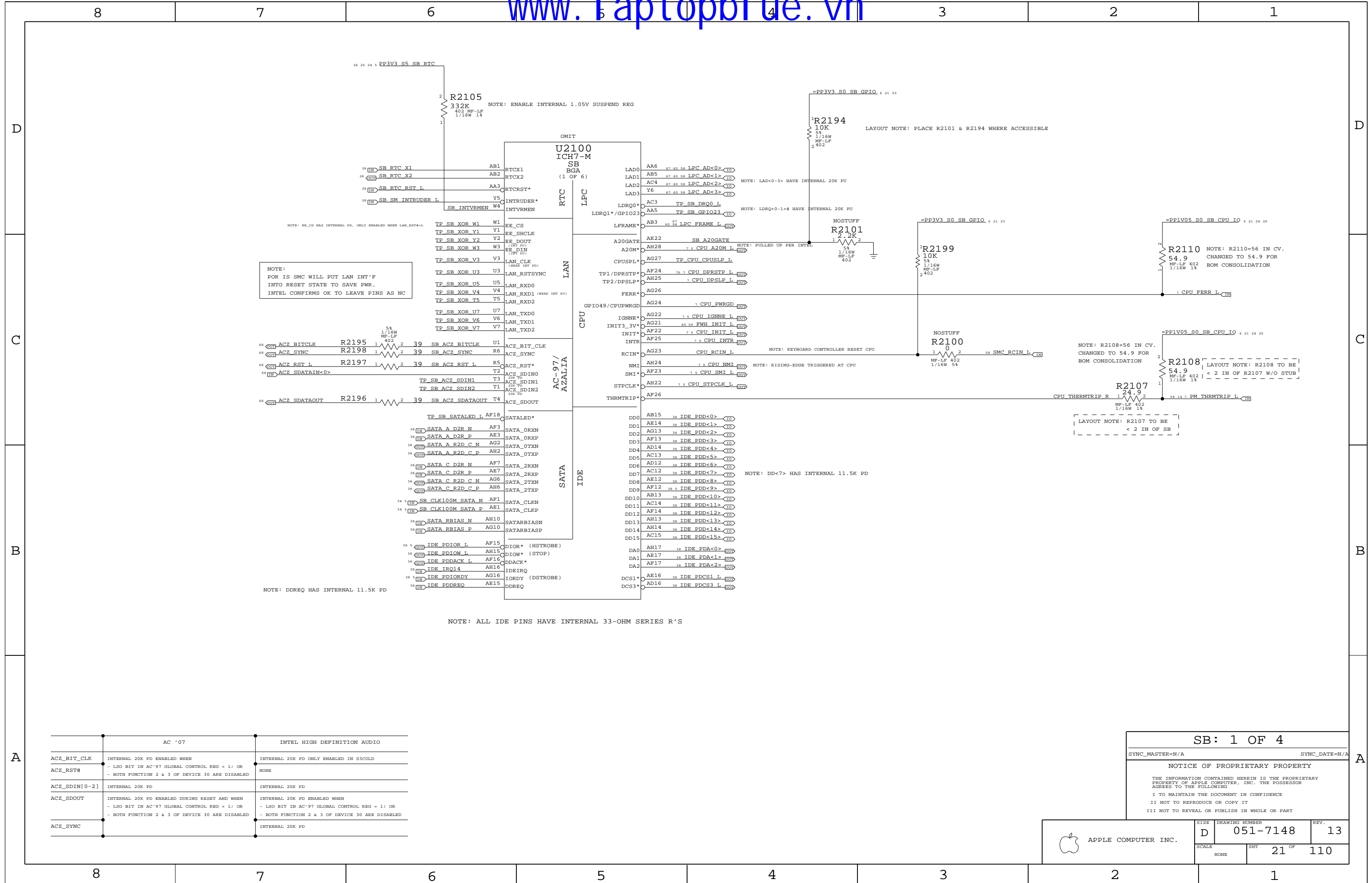
=PP3V3_S0_NB NBCFG_DMI_REVERSE	
NB_CFG<19> DMI Lane Reversal	High = Reversed Low = Normal
1R2059 2.2K 5% 1/16W MF-LP 2402	
14_NB_CFG<19> Internal pull-down	

945 External Design Spec says reserved =PP3V3_S0_NB NBCFG_SDVO_AND_PCIE	
NB_CFG<20> PCIe Backward Interop. Mode	High = Both active Low = Only SDVO or PCIe x1
1R2060 2.2K 5% 1/16W MF-LP 2402	
14_NB_CFG<20> Internal pull-down	

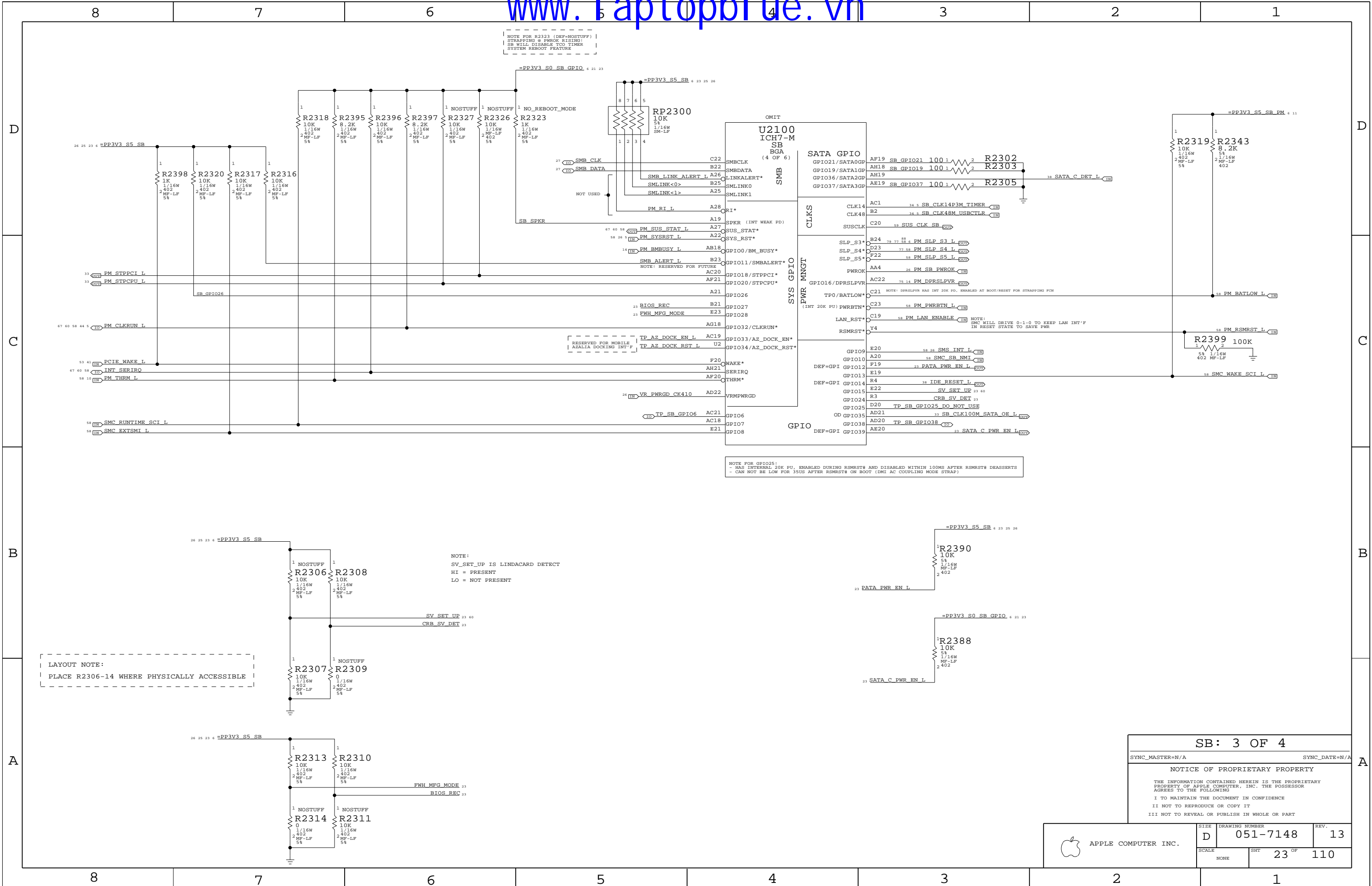
PROBABLY NOT NEEDED

NB Config Straps		
SYNC_MASTER=(MASTER)		SYNC_DATE=(MASTER)
NOTICE OF PROPRIETARY PROPERTY		
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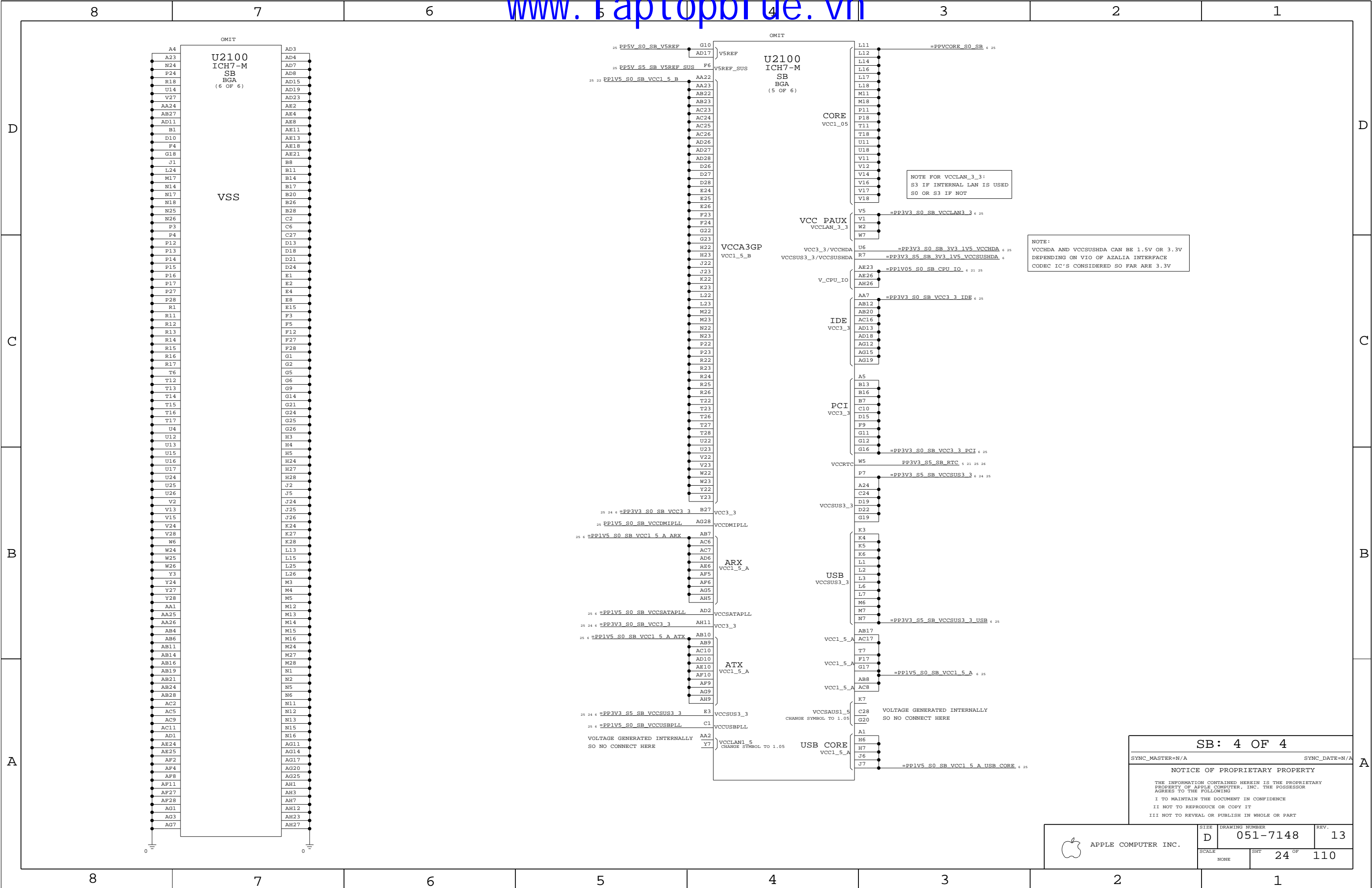
 APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-7148	REV. 13
	SCALE NONE	SHT 20	OF 110

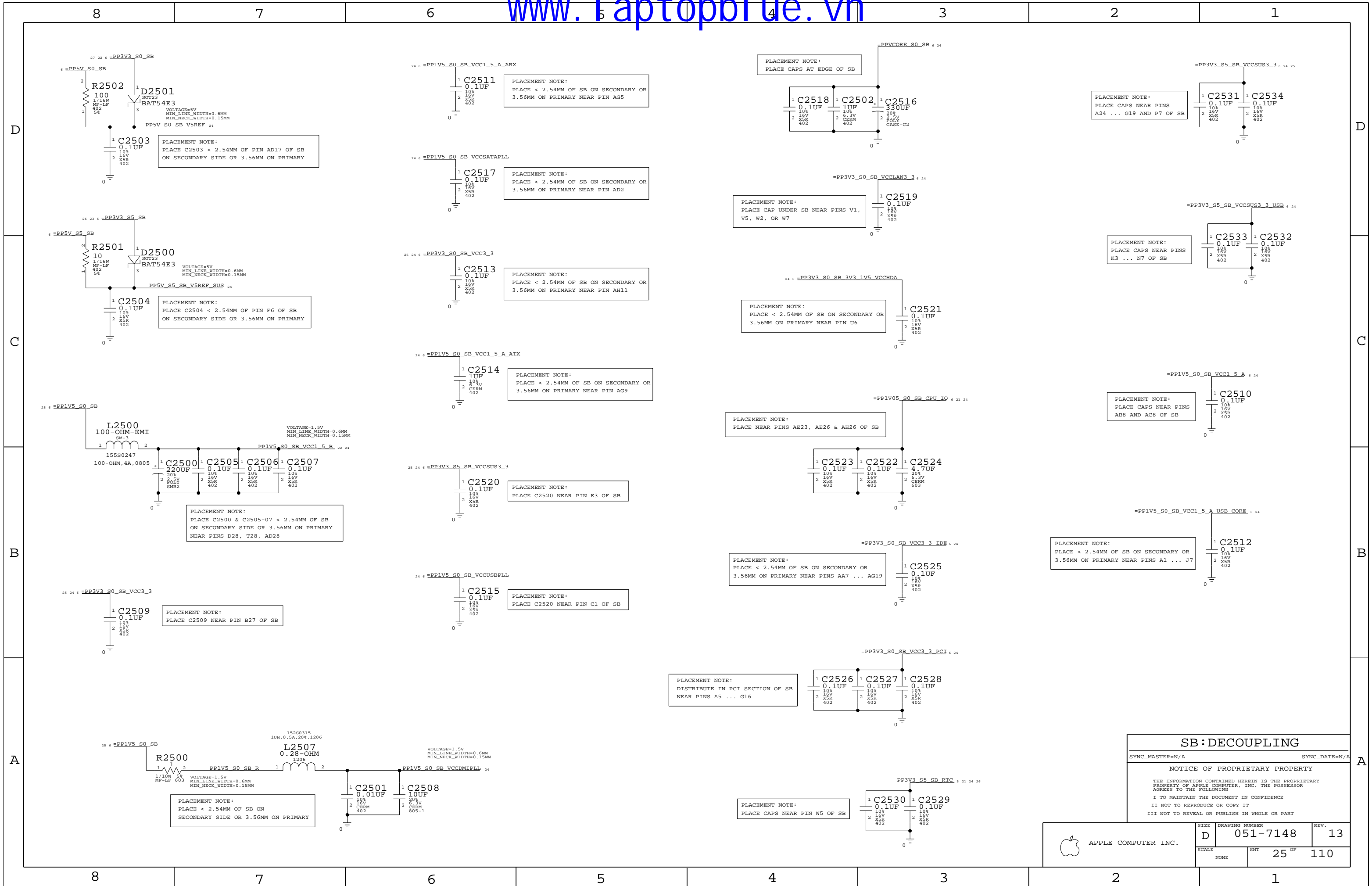












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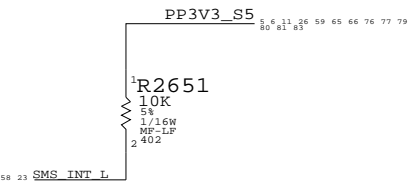
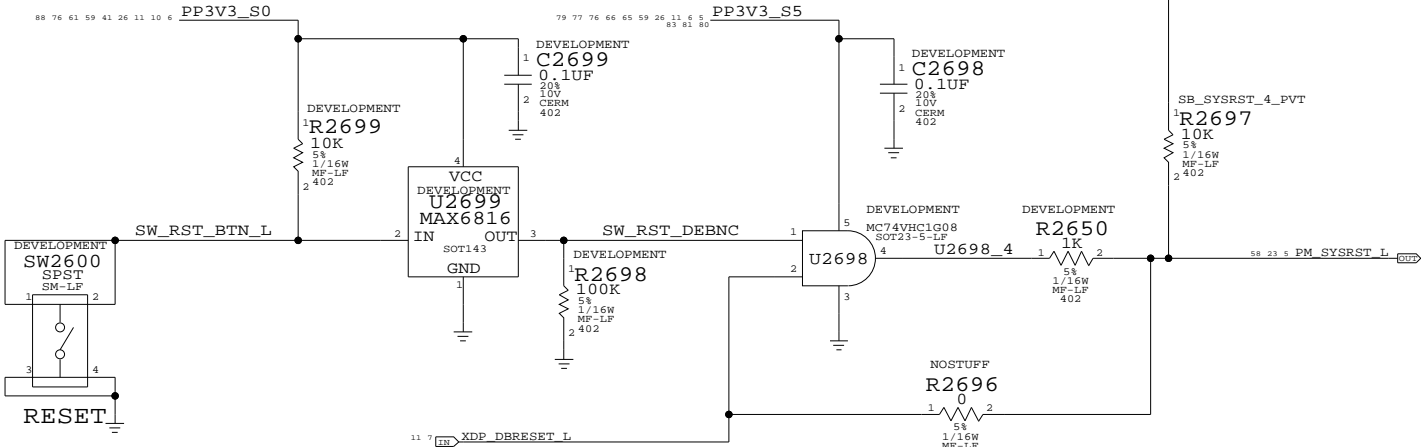
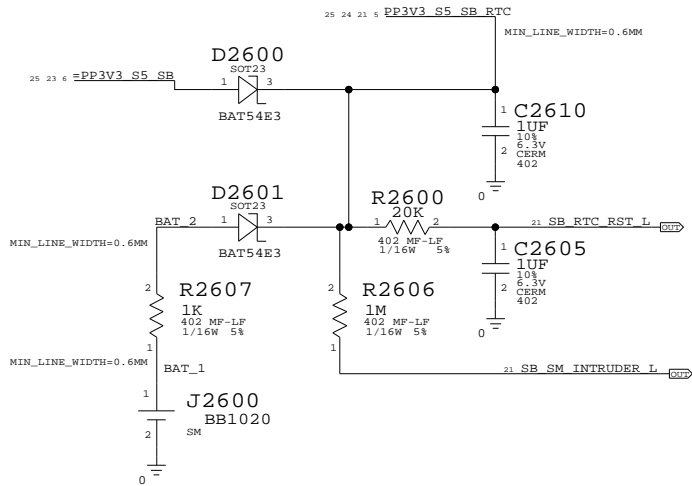
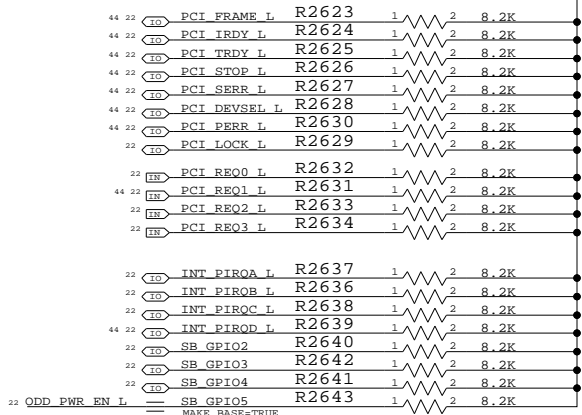
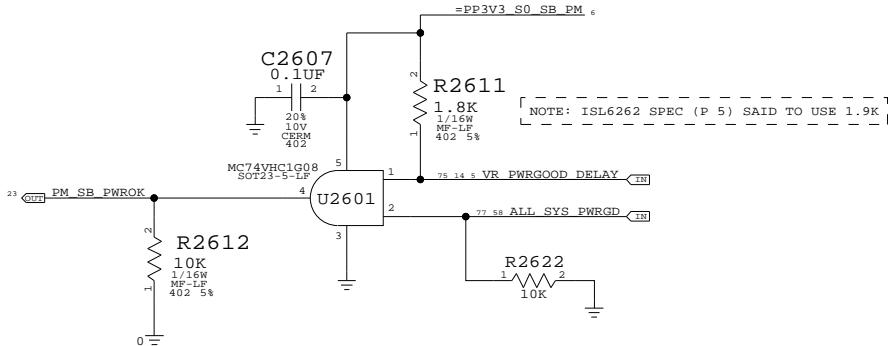
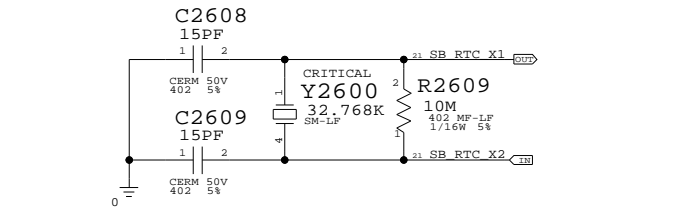
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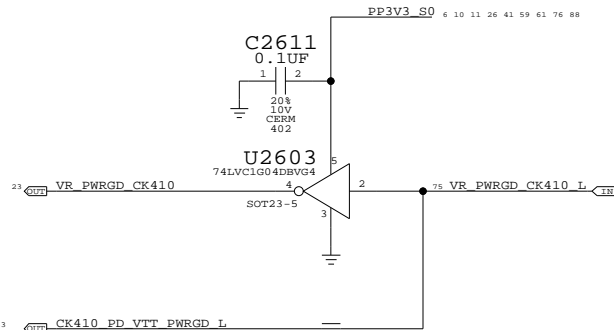
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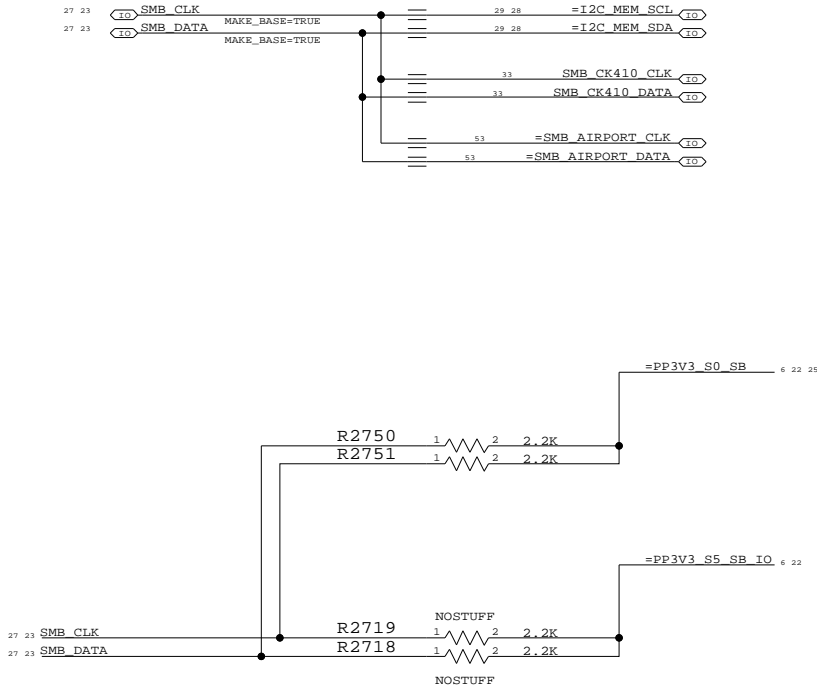
NOTE: R2696 CAN'T EXIST WITH BOTH ITP & DEVELOPMENT  
SHOULD BE STUFFED WITH ITP & NO DEVELOPMENT



SB: MISC	
SYNC_MASTER=N/A	SYNC_DATE=N/A
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7148	13
SCALE		SHT	26 OF 110
NONE			

SB I2C BUSSES



SB: SMB HUB

SYNC\_MASTER=N/A SYNC\_DATE=N/A

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APPLE COMPUTER INC.

SIZE

D

DRAWING NUMBER

051-7148

REV.

13

SCALE

NONE

SHT

27

OF

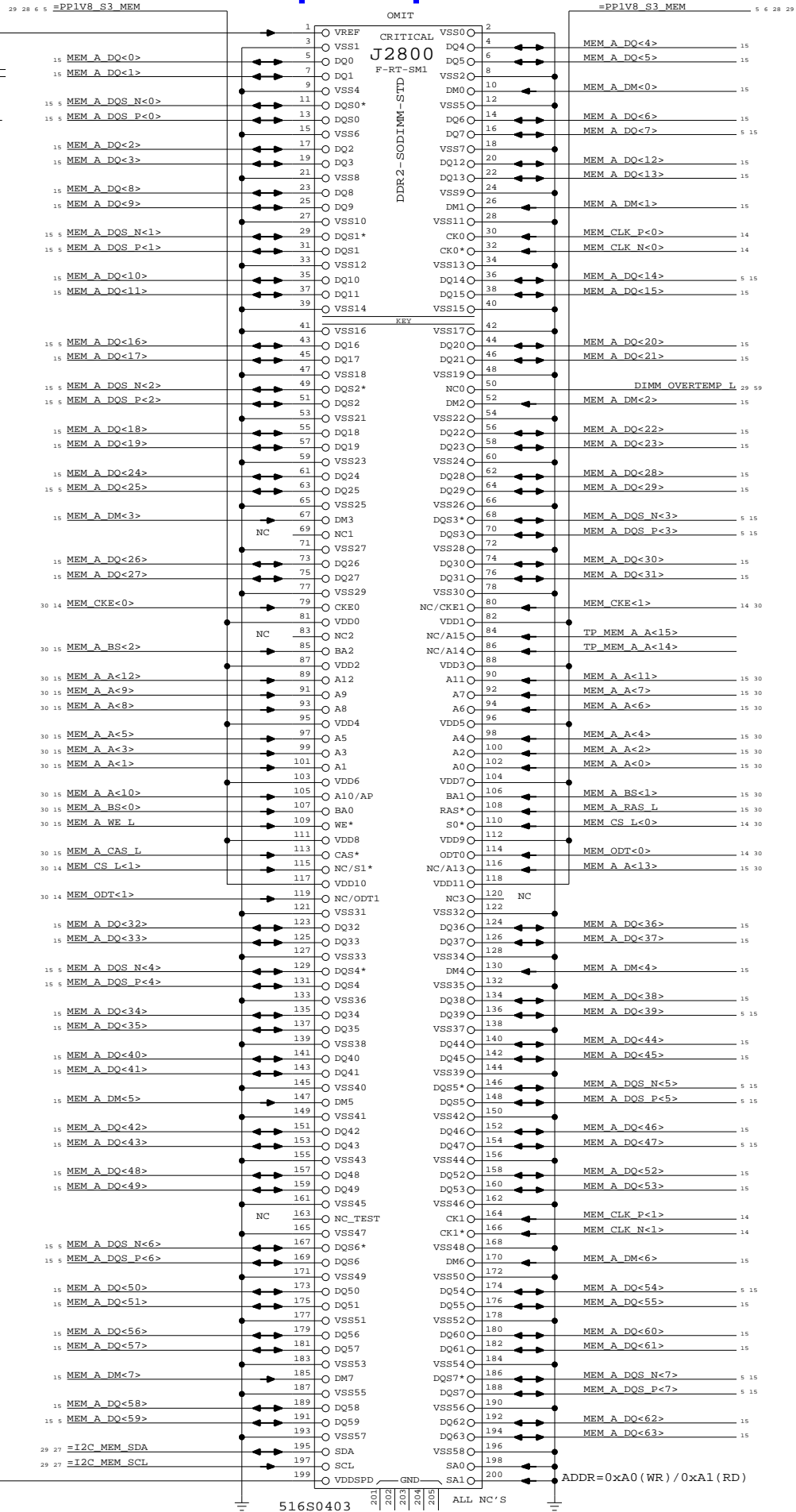
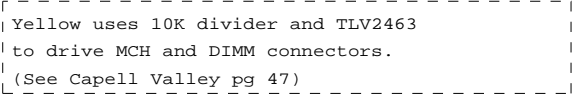
110


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 APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7148	13
	SCALE	SHT	OF
	NONE	28	110

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SIZE D	DRAWING NUMBER 051-7148	REV. 13
SCALE NONE	SHT 28	OF 110



Page Notes

Power aliases required by this page:  
- =PPIV8\_S3\_MEM  
- =PPSPD\_S0\_MEM (2.5V - 3.3V)

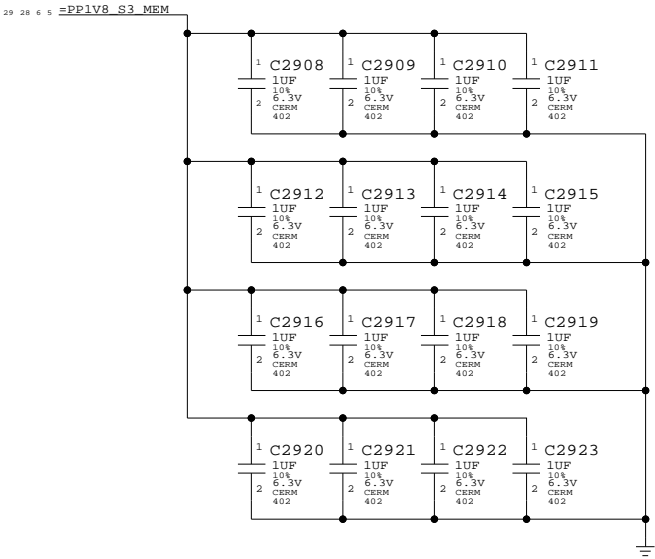
Signal aliases required by this page:  
- =I2C\_MEM\_SCL  
- =I2C\_MEM\_SDA

BOM options provided by this page:  
(NONE)


NOTE: This page does not supply VREF.  
The reference voltage must be provided  
by another page.

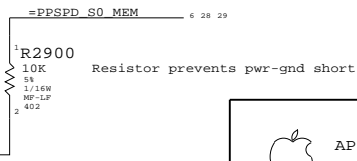
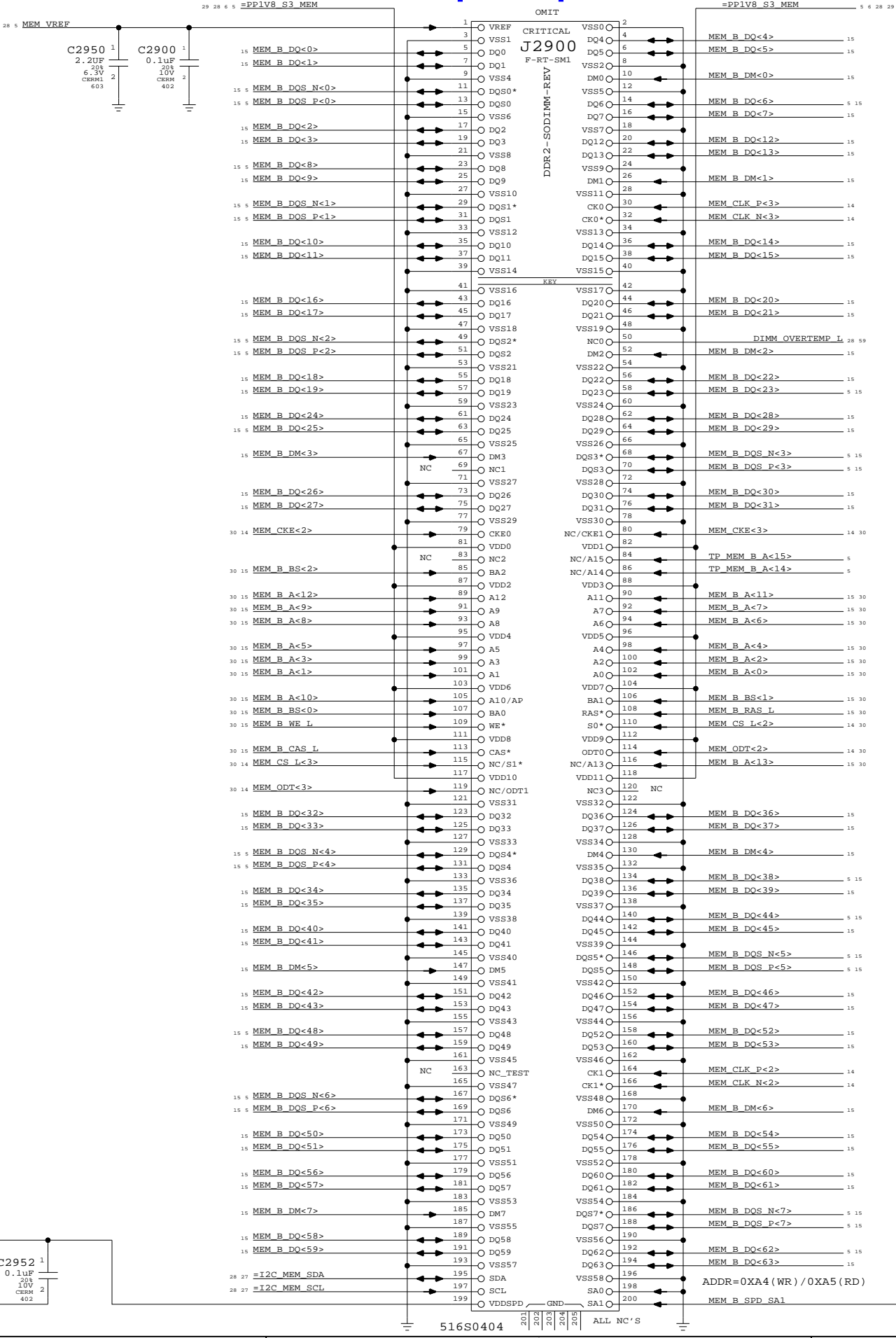
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
516S0504	1	DDR2 SODIMM REV CONN	J2900	CRITICAL	

DDR2 Bypass Caps  
(For return current)

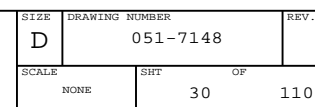


DDR2 SO-DIMM Connector B		
SYNC_MASTER=(MASTER)		SYNC_DATE=(MASTER)
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 APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-7148	REV. 13
	SCALE NONE	SHT 29	OF 110



A



```
Power aliases required by this page:
- =PP5V_S0_MEMVTT
- =PP1V8_S0_MEMVTT
- =PP0V9_S0_MEMVTT_LDO
```

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```
Signal aliases required by this page:
(NONE)
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```
BOM options provided by this page:
(NONE)
```

Power aliases required by this page:

- =PP5V\_S0\_MEMVTT
- =PP1V8\_S0\_MEMVTT
- =PP0V9\_S0\_MEMVTT\_LDO

Signal aliases required by this page:  
(NONE)

BOM options provided by this page:  
( NONE )

[illegible]

If power inputs are not S0, MEMVTT\_EN can be used to disable MEMVTT in sleep.

?Can 5V be S0 if 1V8 is S3?

SYNC_MASTER=(MASTER)	SYNC_DATE=(MASTER)
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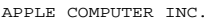
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SIZE

SIZE	DRAWING NUMBER
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D | 051-7148

SCALE

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SHT

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110



\* FOR EXT. GRAPHIC SYSTEM

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SHT
33

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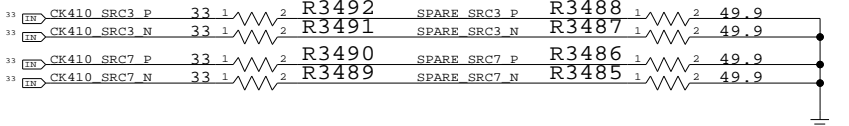
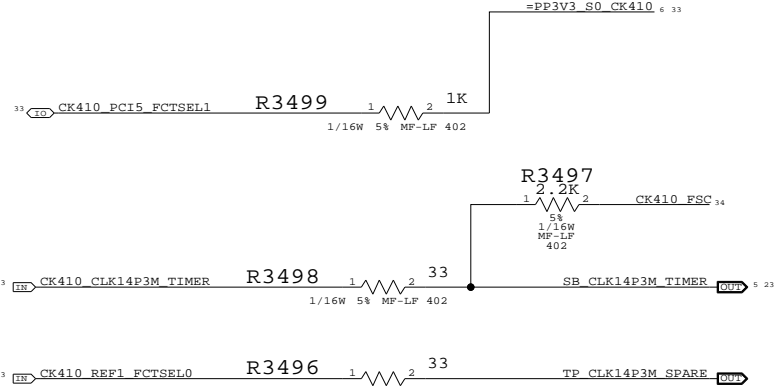
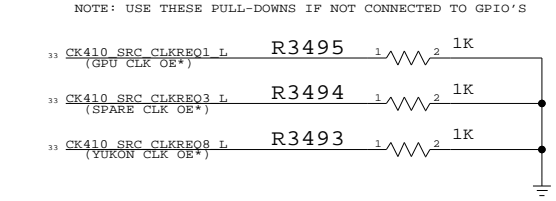
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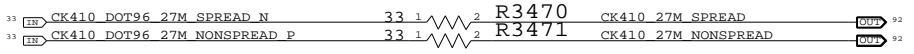
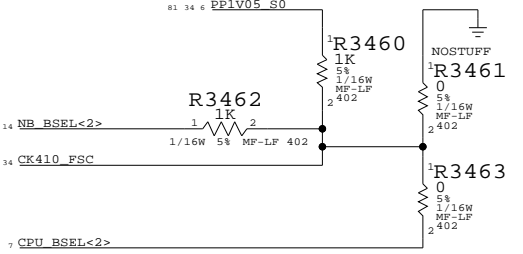
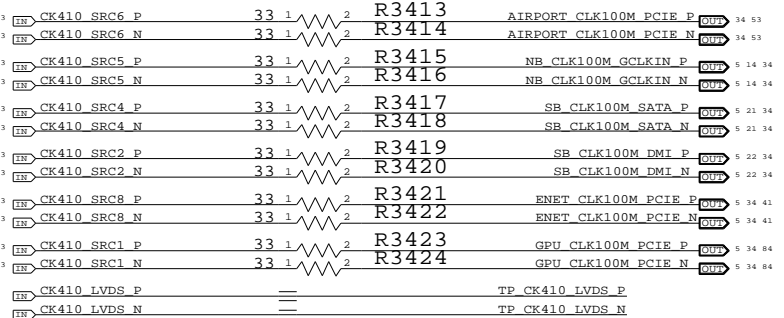
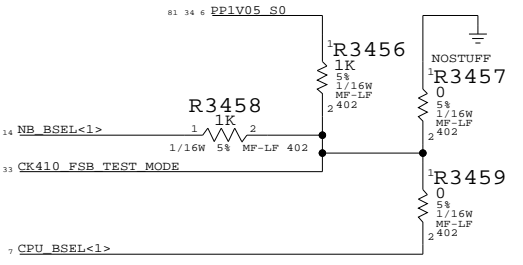
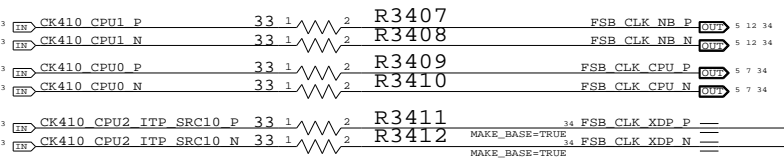
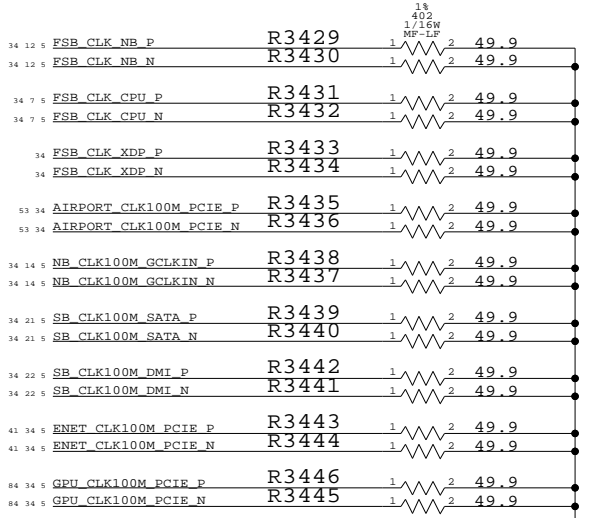
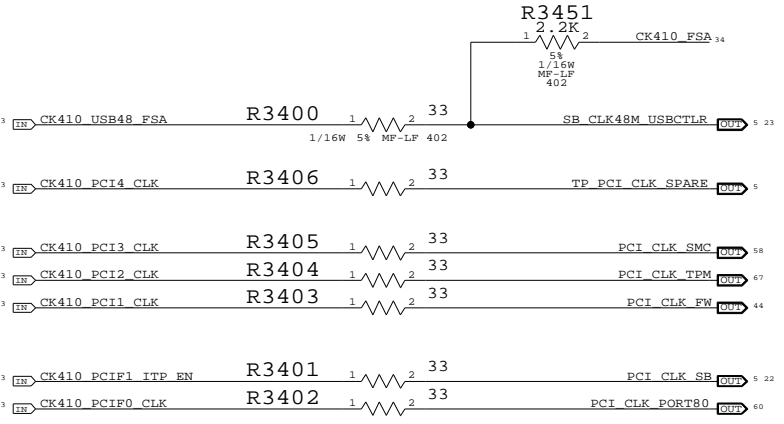
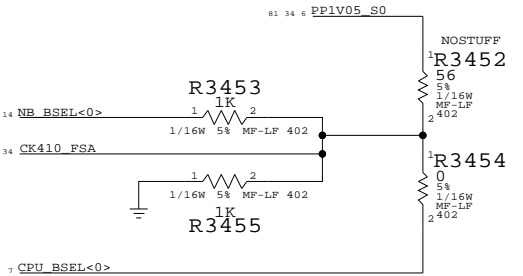
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FSB FREQUENCY SELECT:

	STUFF	NO STUFF
CPU DRIVEN	R3454 R3455 R3456	R3457 R3458 R3459
533MHZ (133MHZ CPU CLK)	R3452 R3453 R3454	R3455 R3456 R3457
667MHZ (166MHZ CPU CLK)	R3452 R3453 R3454	R3455 R3456 R3457



## CLOCKS: TERMINATIONS

SYNC\_MASTER=N/A SYNC\_DATE=N/A

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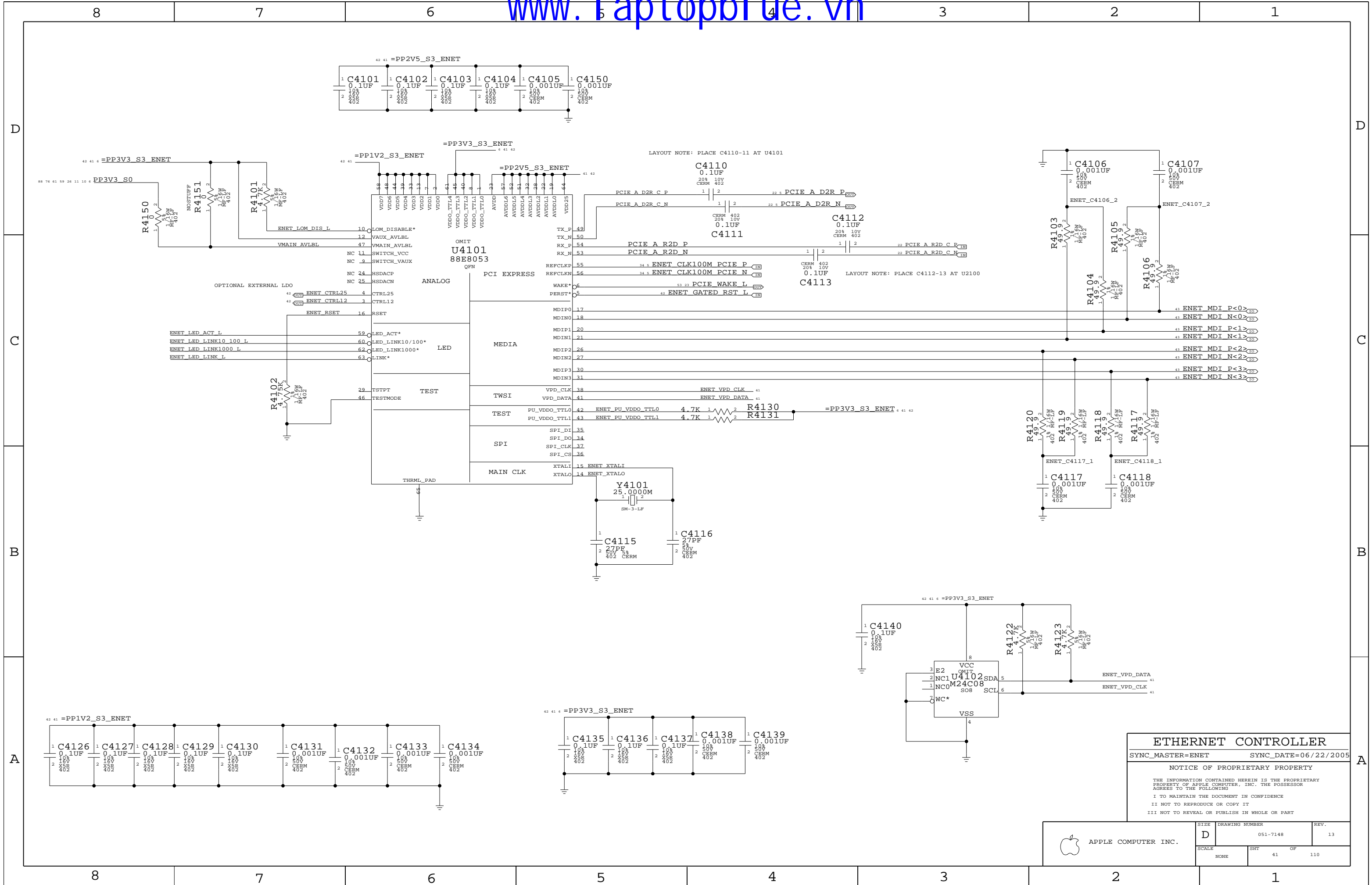


APPLE COMPUTER INC.

SIZE	DRAWING NUMBER	REV.
D	051-7148	13
SCALE	SHT	OF
NONE	34	110







**ETHERNET CONTROLLER**

SYNC\_MASTER=ENET SYNC\_DATE=06/22/2005

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7148	13
SCALE	NONE		
	SHT	41	OF 110

8 7 6 5 4 3 2 1

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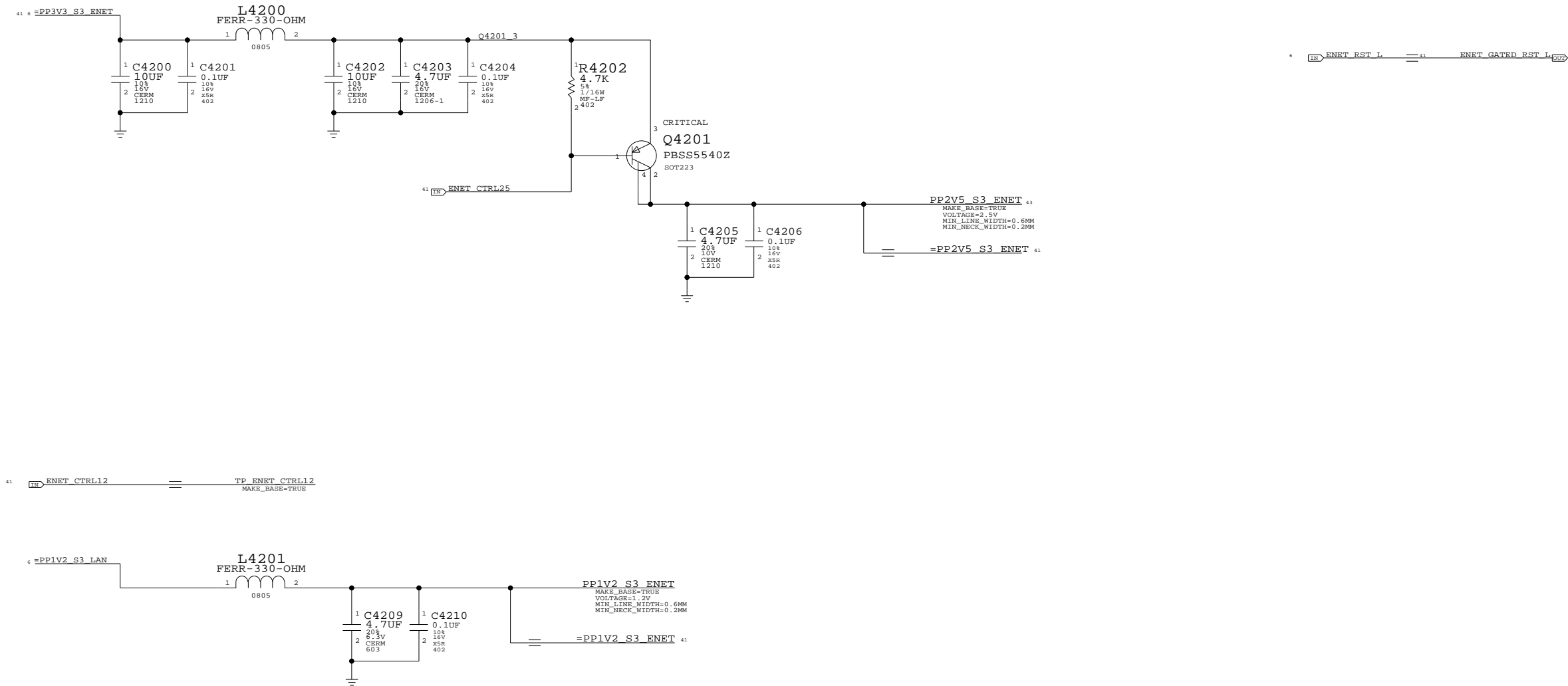
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ETHERNET MISC

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SIZE  
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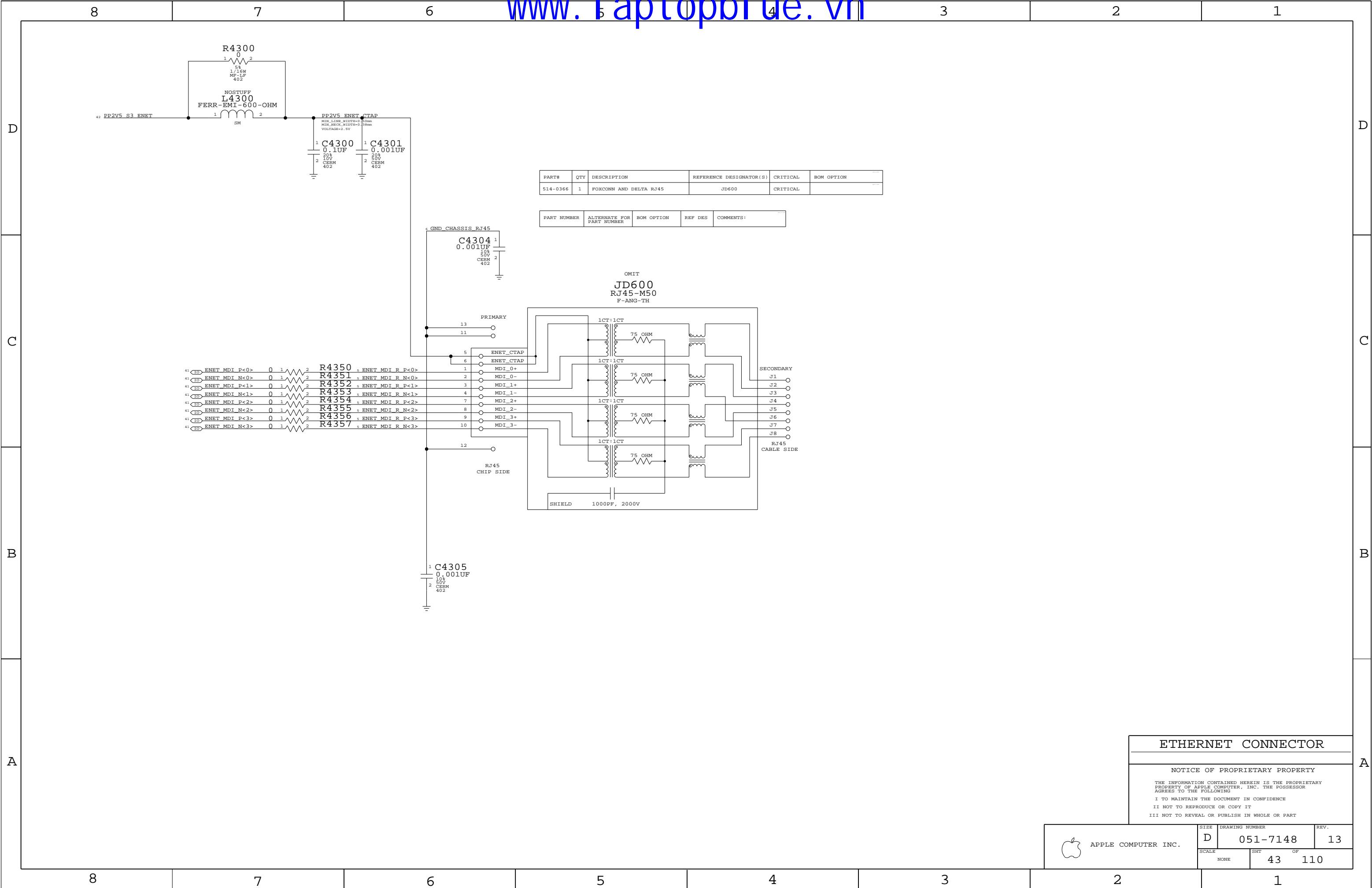
DRAWING NUMBER  
051-7148

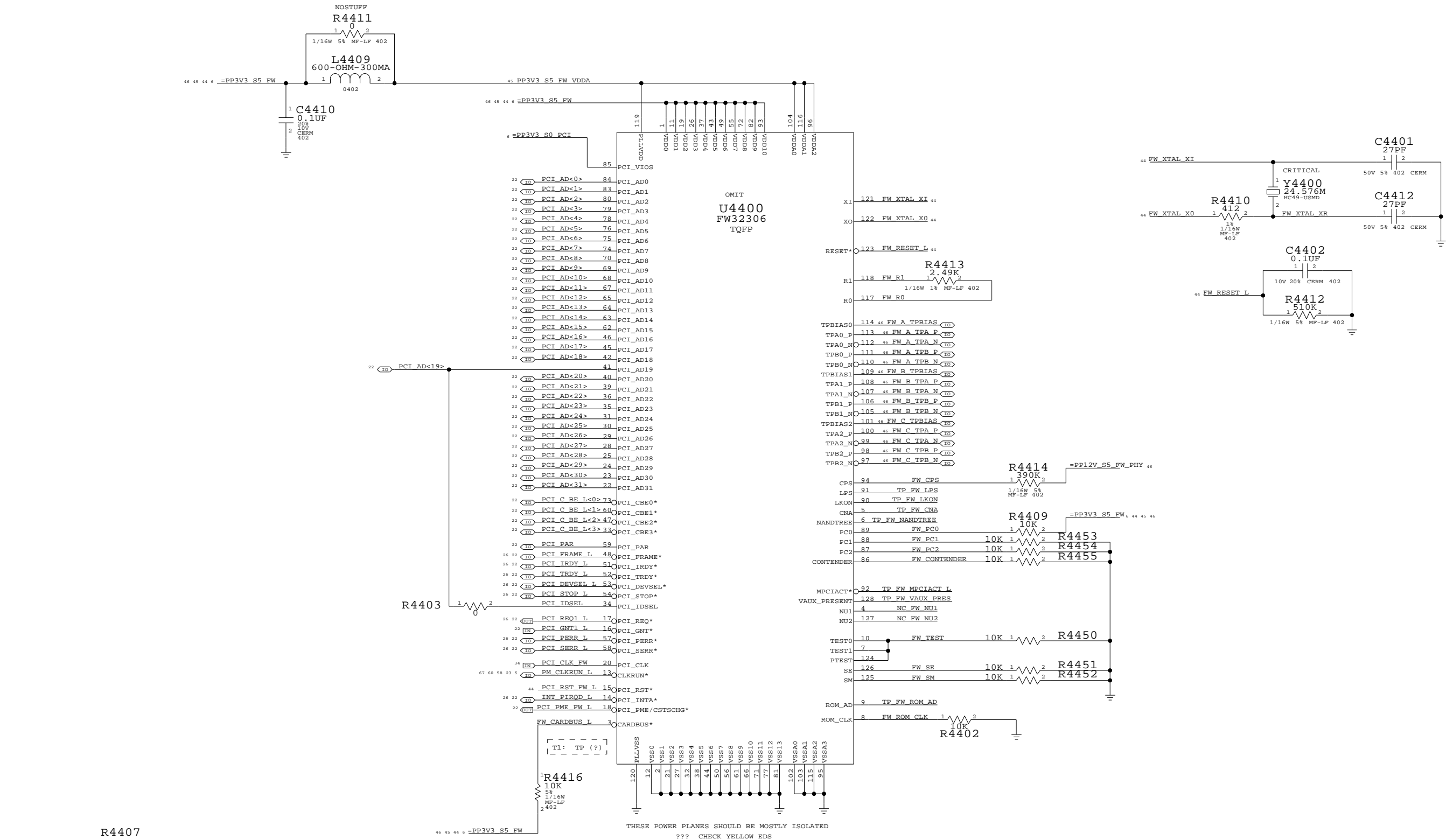
REV.  
13

SCALE  
NONE

SHT  
42

OF  
110





FW: FW323-06

SYNC\_MASTER=N/A SYNC\_DATE=N/A

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APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-7148	REV. 13
	SCALE NONE	SHT 44 OF 110	

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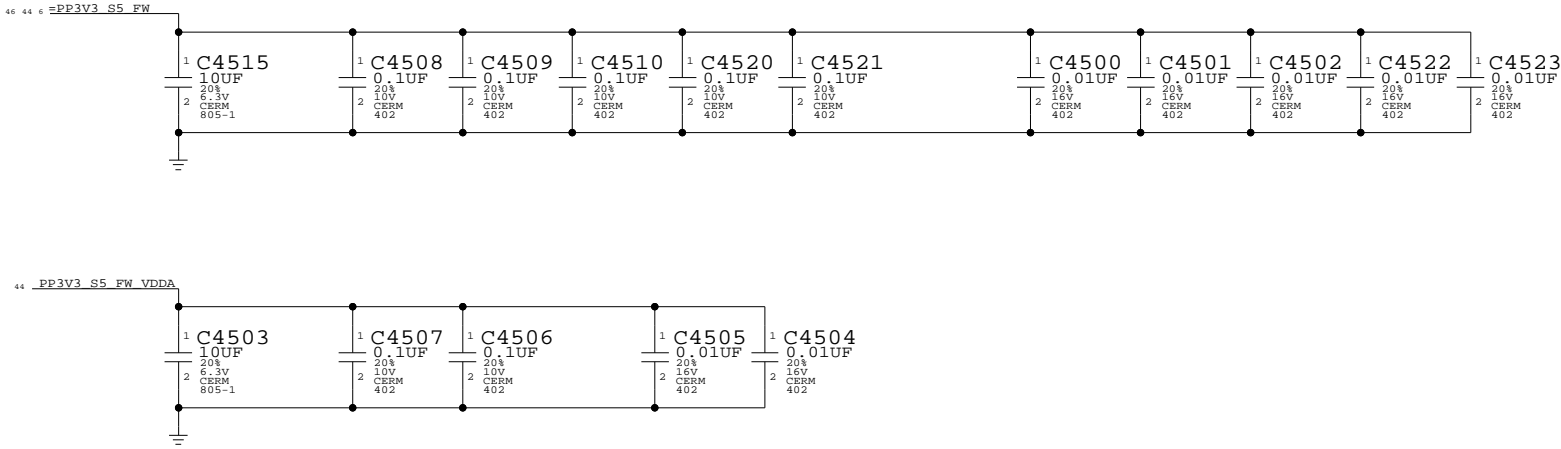
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FW: DECAPS

SYNC\_MASTER=N/A SYNC\_DATE=N/A

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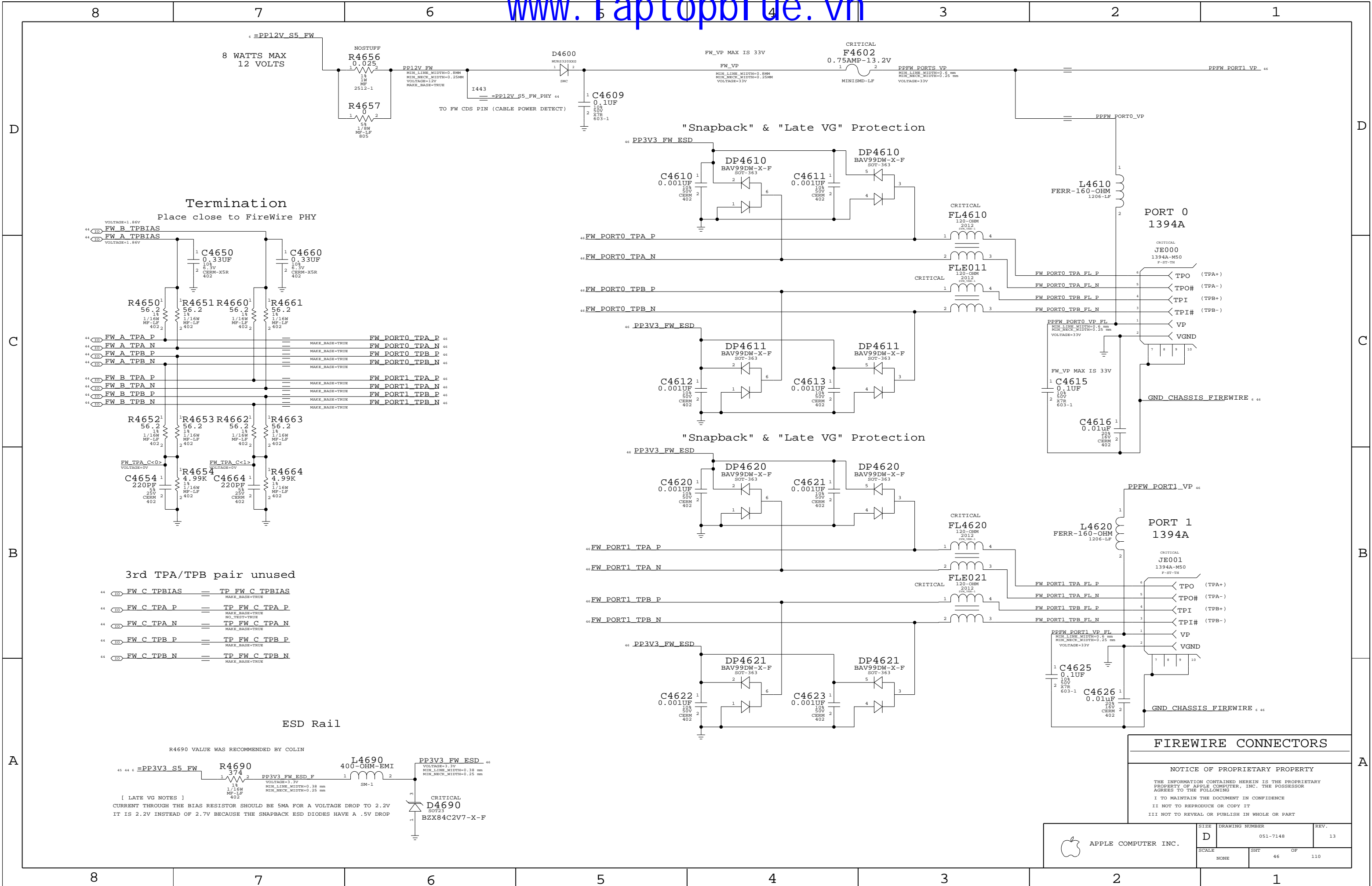
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SIZE	DRAWING NUMBER	REV.
D	051-7148	13
SCALE	SHT	OF
NONE	45	110



FIREWIRE CONNECTORS

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D	051-7148	13
SCALE	SHT	OF
NONE	46	110



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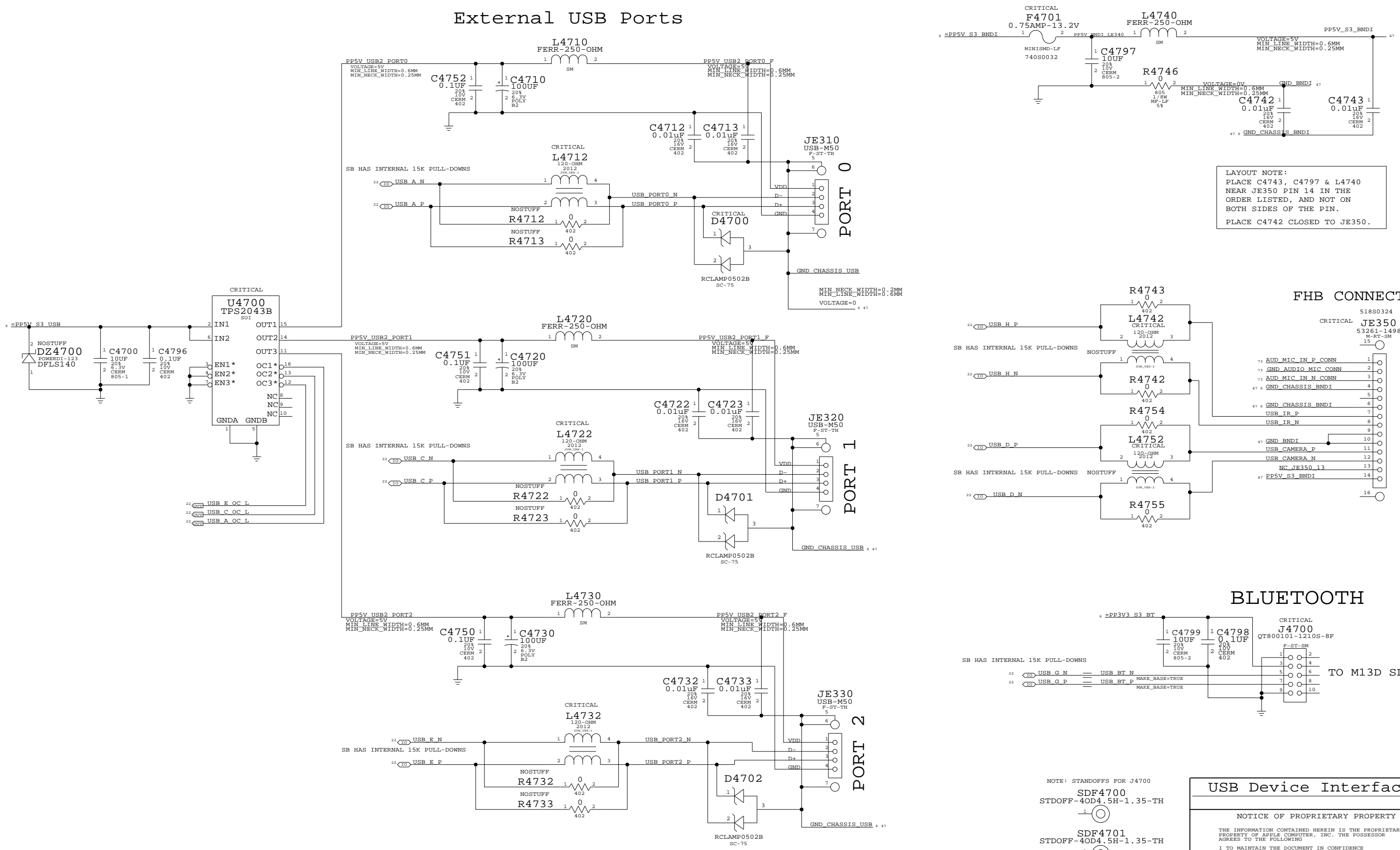
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External USB Ports



8

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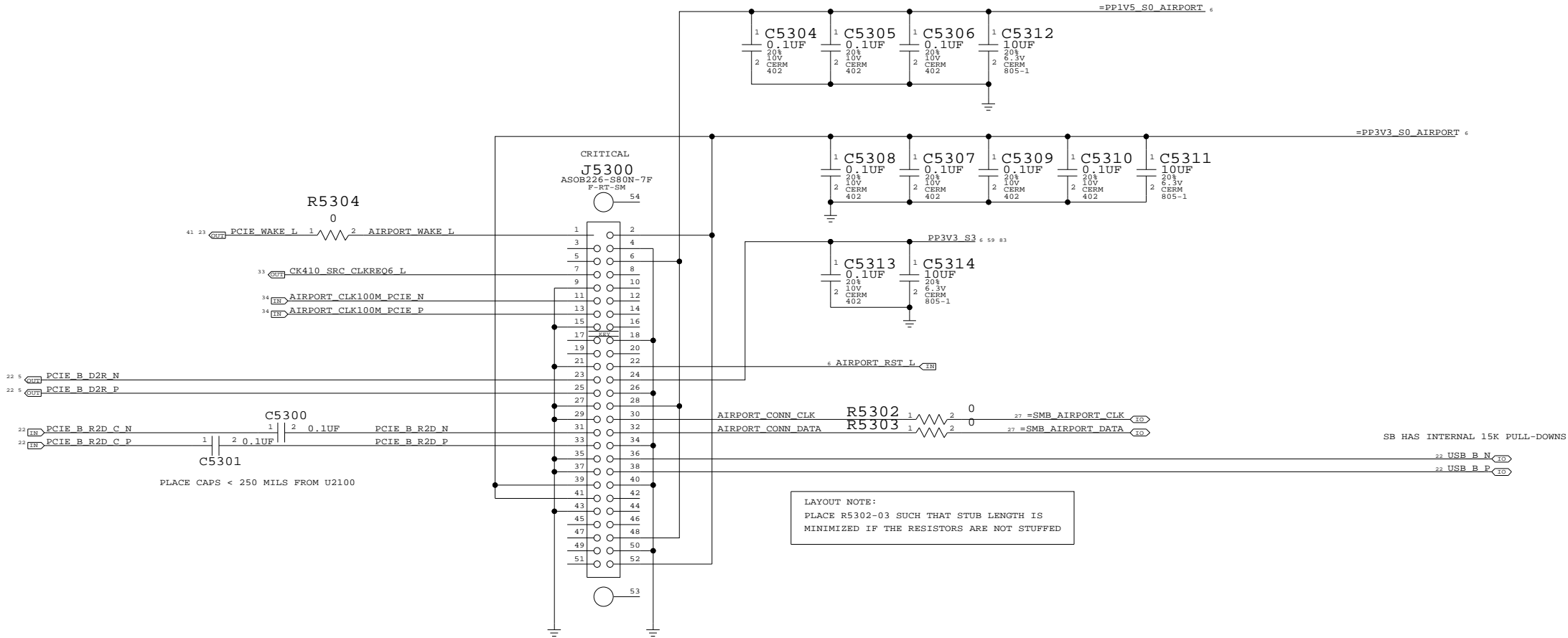
4

3

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1





NOTE: STANDOFFS FOR J5300

SDF5300  
STDOFF-40D5.6H-1.35-TH

SDF5301  
STDOFF-40D5.6H-1.35-TH

AIRPORT CONN

SYNC\_MASTER=N/A

SYNC\_DATE=N/A

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	D	051-7148	13
SCALE		SHT	OF
NONE		53	110

D

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22	<div>IN</div> PCIE C R2D C N	==	TP PCIE C R2D C N
			MAKE_BASE=TRUE
22	<div>IN</div> PCIE C R2D C P	==	TP PCIE C R2D C P
			MAKE_BASE=TRUE
22	<div>OUT</div> PCIE C D2R N	==	TP PCIE C D2R N
			MAKE_BASE=TRUE
22	<div>OUT</div> PCIE C D2R P	==	TP PCIE C D2R P
			MAKE_BASE=TRUE
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			MAKE_BASE=TRUE
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			MAKE_BASE=TRUE
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			MAKE_BASE=TRUE
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			MAKE_BASE=TRUE
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			MAKE_BASE=TRUE

PCIE UNUSED PORTS

SYNC\_MASTER=N/A SYNC\_DATE=N/A

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SIZE

D

DRAWING NUMBER

051-7148

REV.

13

SCALE

NONE

SHT

54

OF

110

D



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[ LAYOUT NOTE:
[ PLACE R5899 AND C5820 NEAR SMC PIN N14,N15 ]

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A

80 79 77 76 66 65 26 11 5 5  
 B3 S1  
 PP3V3 S5

66 65 59 6 =PP3V3\_S0\_FAN

1  
 2  
 C5903  
 0.1uF  
 20% 10V  
 CERM 402

59 POV48\_SMC\_LSREF

LM393A  
 SOI-1-LF

U5999

8  
 7  
 6  
 5  
 4  
 3  
 2  
 1

LM393A  
 SOI-1-LF

U5999

8  
 7  
 6  
 5  
 4  
 3  
 2  
 1

1  
 2  
 R5932  
 1K  
 5%  
 1/16W  
 MF-LF  
 2402

SMC\_PROCHOT\_3\_3\_L 58

1  
 2  
 R5933  
 1K  
 5%  
 1/16W  
 MF-LF  
 2402

SMC\_CPU\_RESET\_3\_3\_L 58

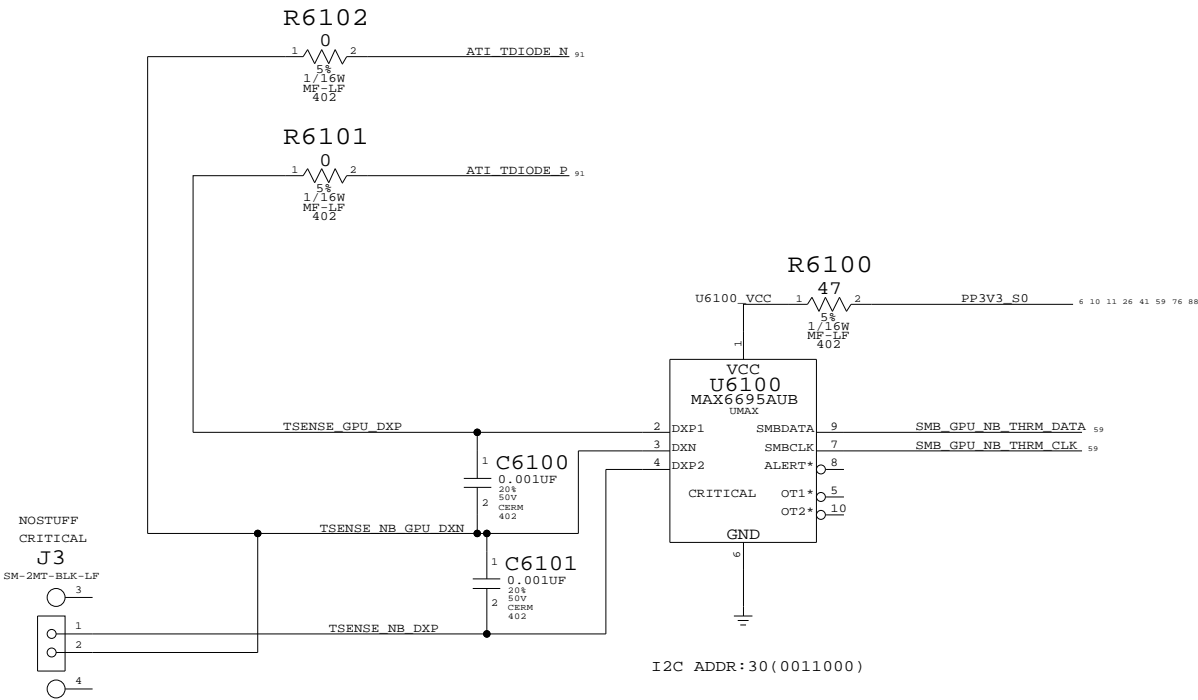
PCB: ENSURE FSB\_CPURST\_L FANS OUT FROM U1200  
 AND MINIMIZE ROUTE LENGTH TO U5999.

SMC & TPM SUPPORT			
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D		051-7148	13
MPUTER INC.			
SCALE		SHT	OF
NONE		59	110





SIZE D	DRAWING NUMBER 051-7148	REV. 13
SCALE NONE	SHT 60	OF 110



GPU+NB THERMAL

SYNC\_MASTER=N/A

SYNC\_DATE=N/A


NOTICE OF PROPRIETARY PROPERTY

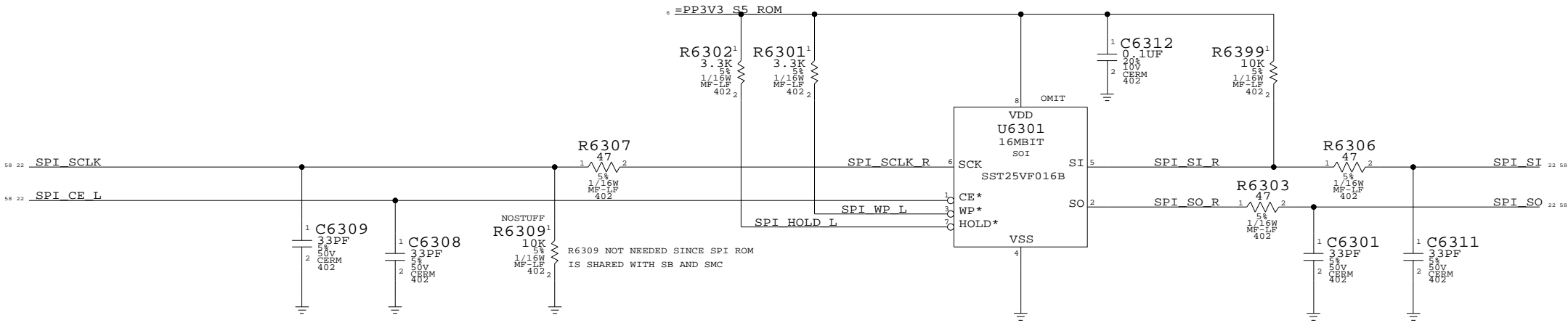
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	D	051-7148	13
SCALE		SHT	OF
NONE		61	110



R6306-07 SHOULD BE PLACED LESS THAN 2.54MM FROM U2100  
R6303 SHOULD BE PLACED LESS THAN 2.54MM FROM U6301

SPI BOOTROM

SYNC\_MASTER=MASTER

SYNC\_DATE=5/23/05

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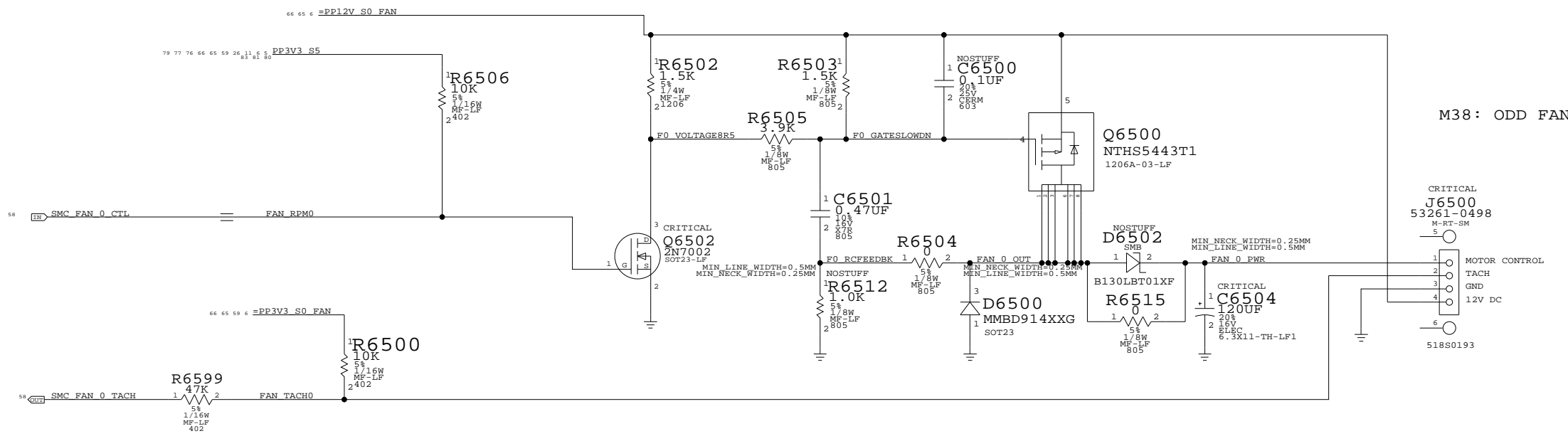
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II NOT TO REPRODUCE OR COPY IT

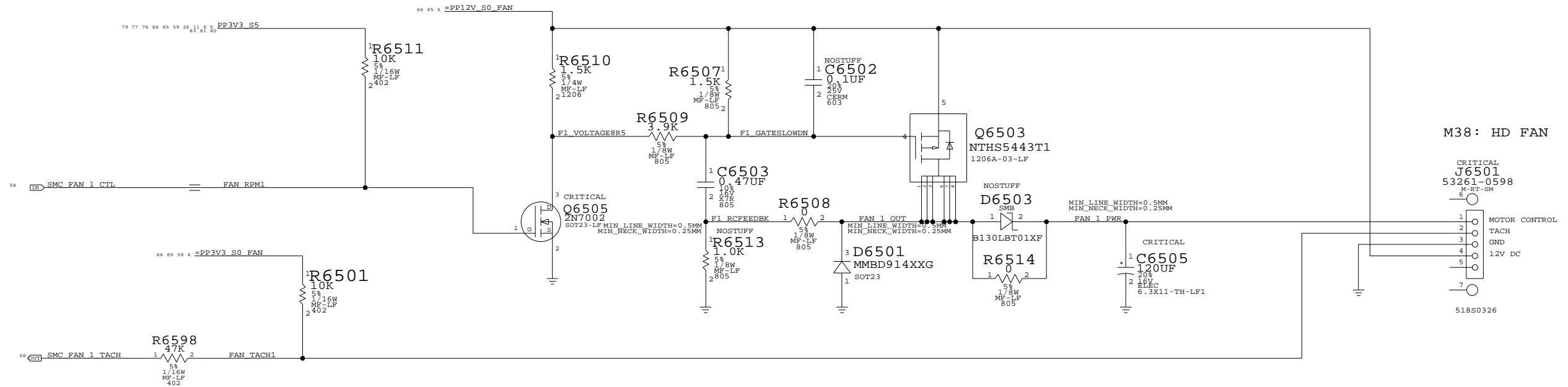
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE COMPUTER INC.	SIZE	DRAWING NUMBER		REV.
	D	051-7148		13
SCALE		SHT	OF	
NONE		63	110	

FAN 0



FAN 1



Fan 0, 1 & System Temp

NOTICE OF PROPRIETARY PROPERTY

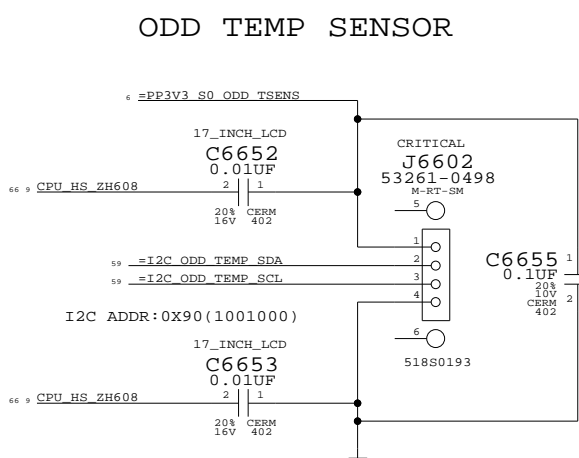
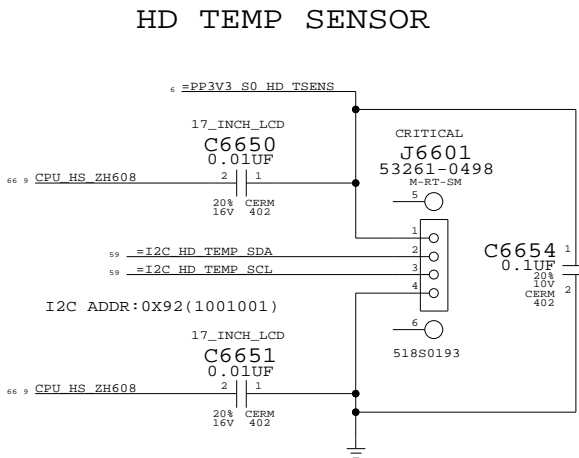
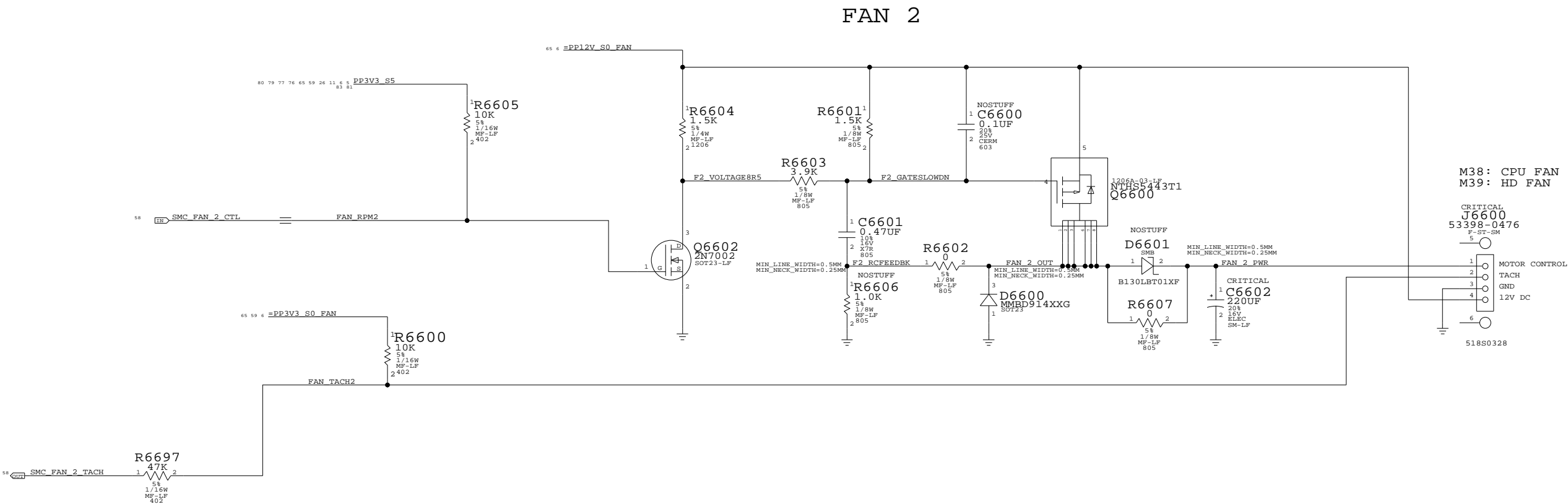
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
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	SCALE	SHT	
	NONE	65	110



Fan 2 & HD Temp

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APPLE COMPUTER INC.

SIZE

D

DRAWING NUMBER

051-7148

REV.

13

SCALE

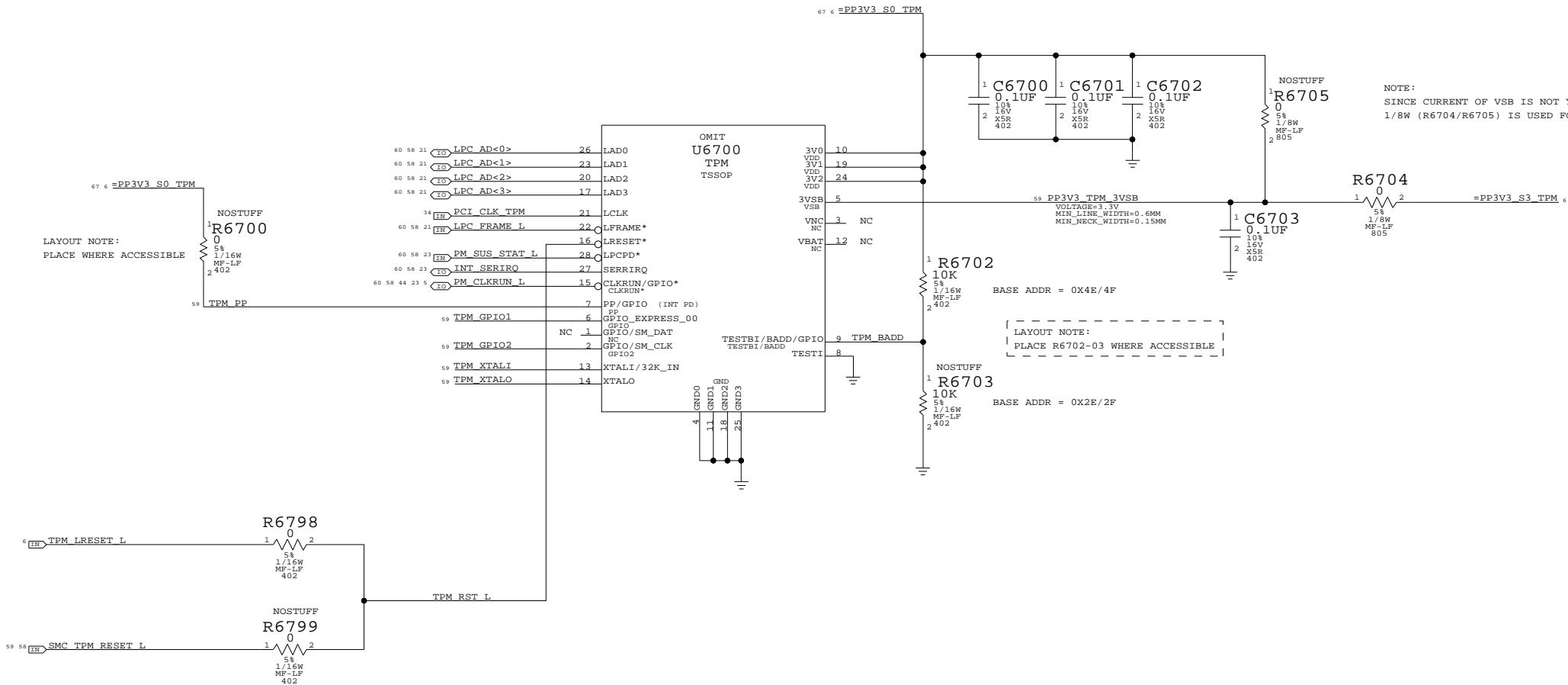
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SHT

66

OF

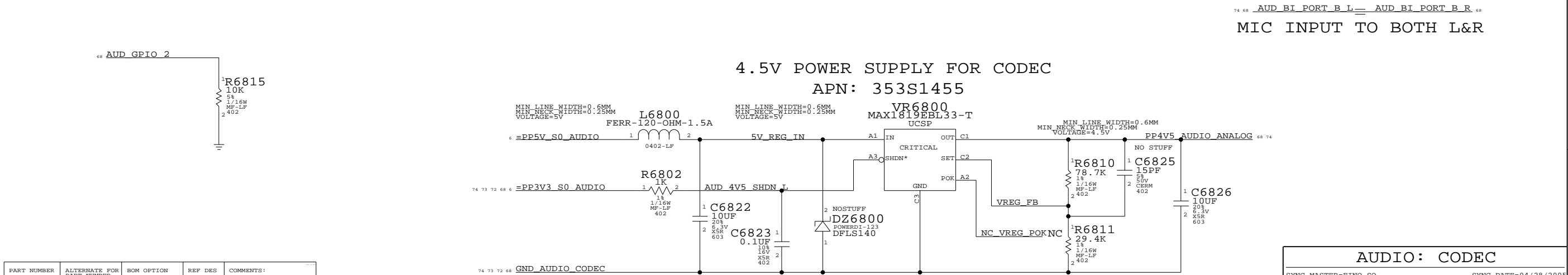
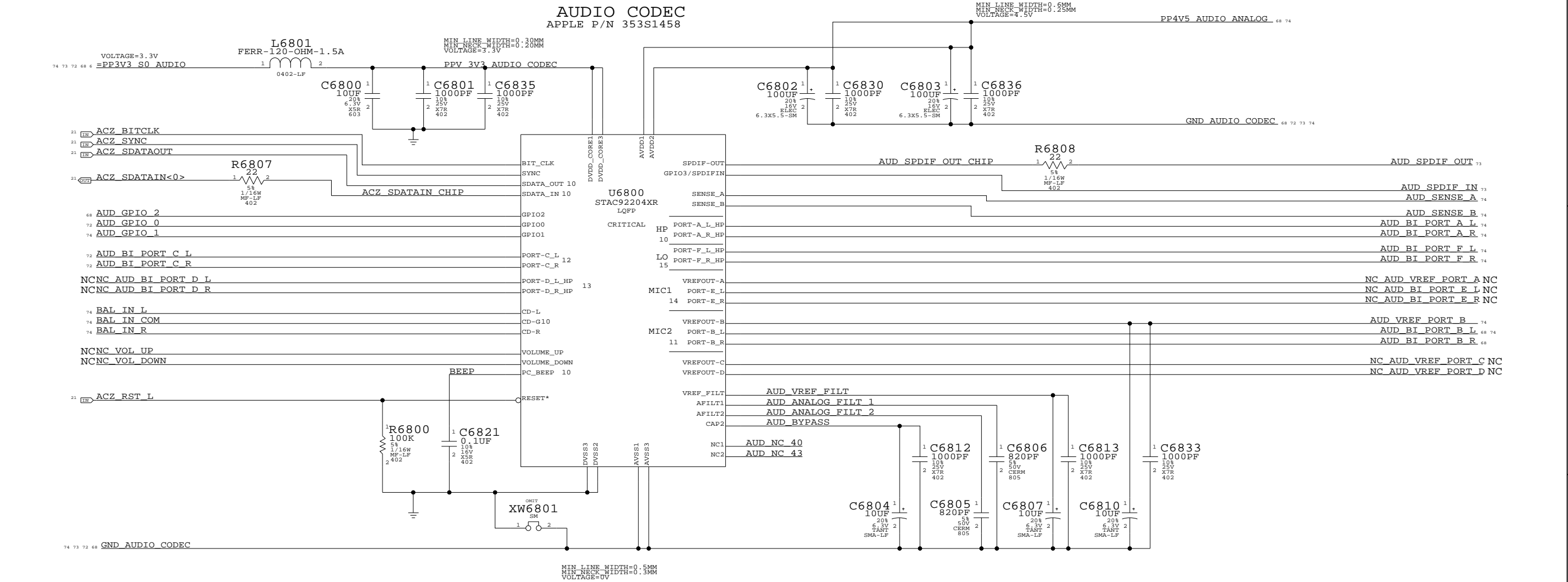
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TPM		
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NOTICE OF PROPRIETARY PROPERTY		
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APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-7148	REV. 13
	SCALE NONE	SHT 67 OF 110	





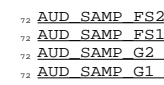
PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
126S0091	126S0092		C6802,C6803	FACTORY SHORTAGE
126S0091	126S0092		C7403,C7404	FACTORY SHORTAGE


AUDIO: CODEC	
SYNC_MASTER=FINO-SO	SYNC_DATE=04/28/2005
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	D	051-7148	13
SCALE		SHT	OF
NONE		68	110



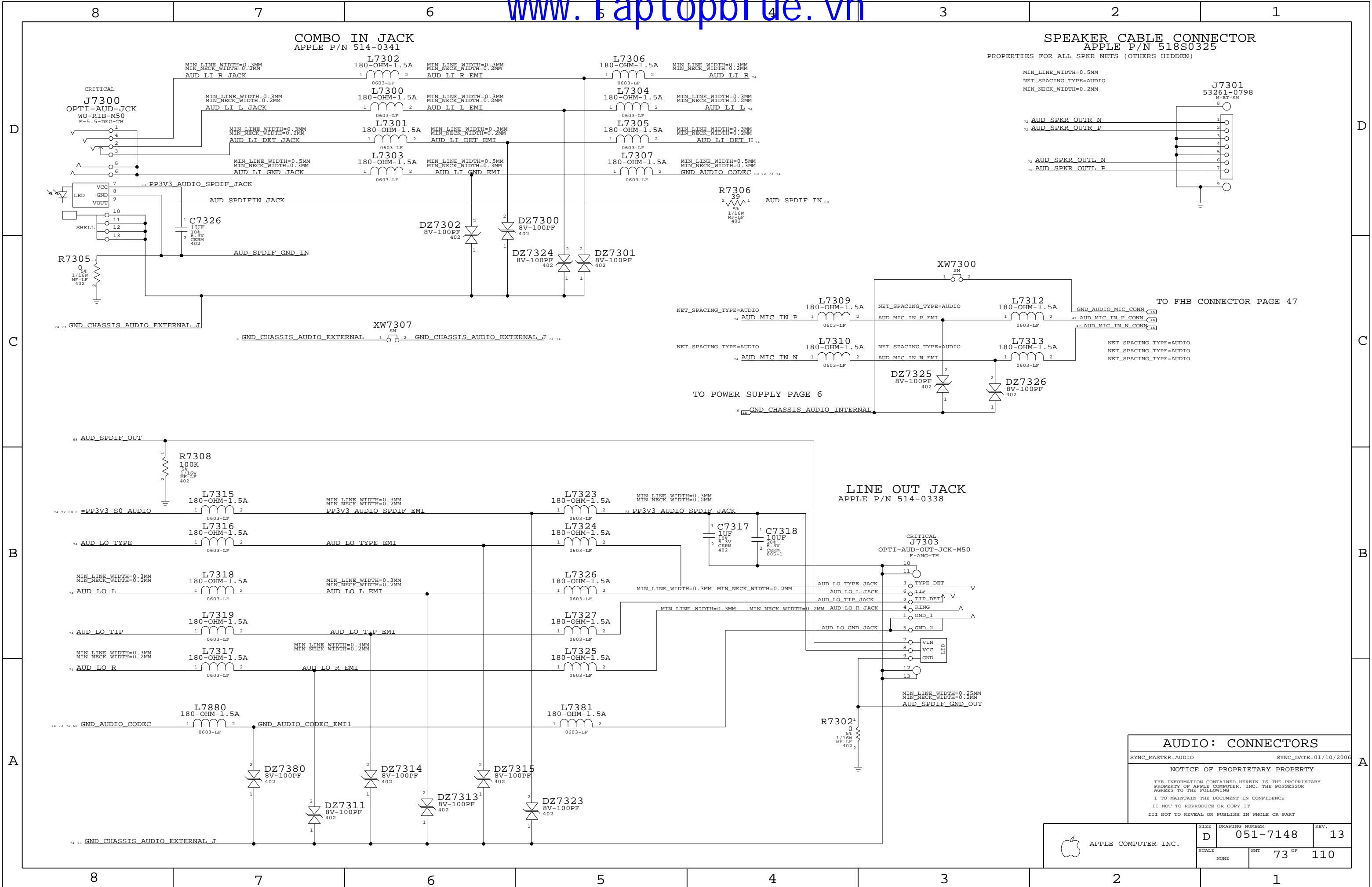
74 73 72 68 6 =PP3V3\_S0\_AUDIO

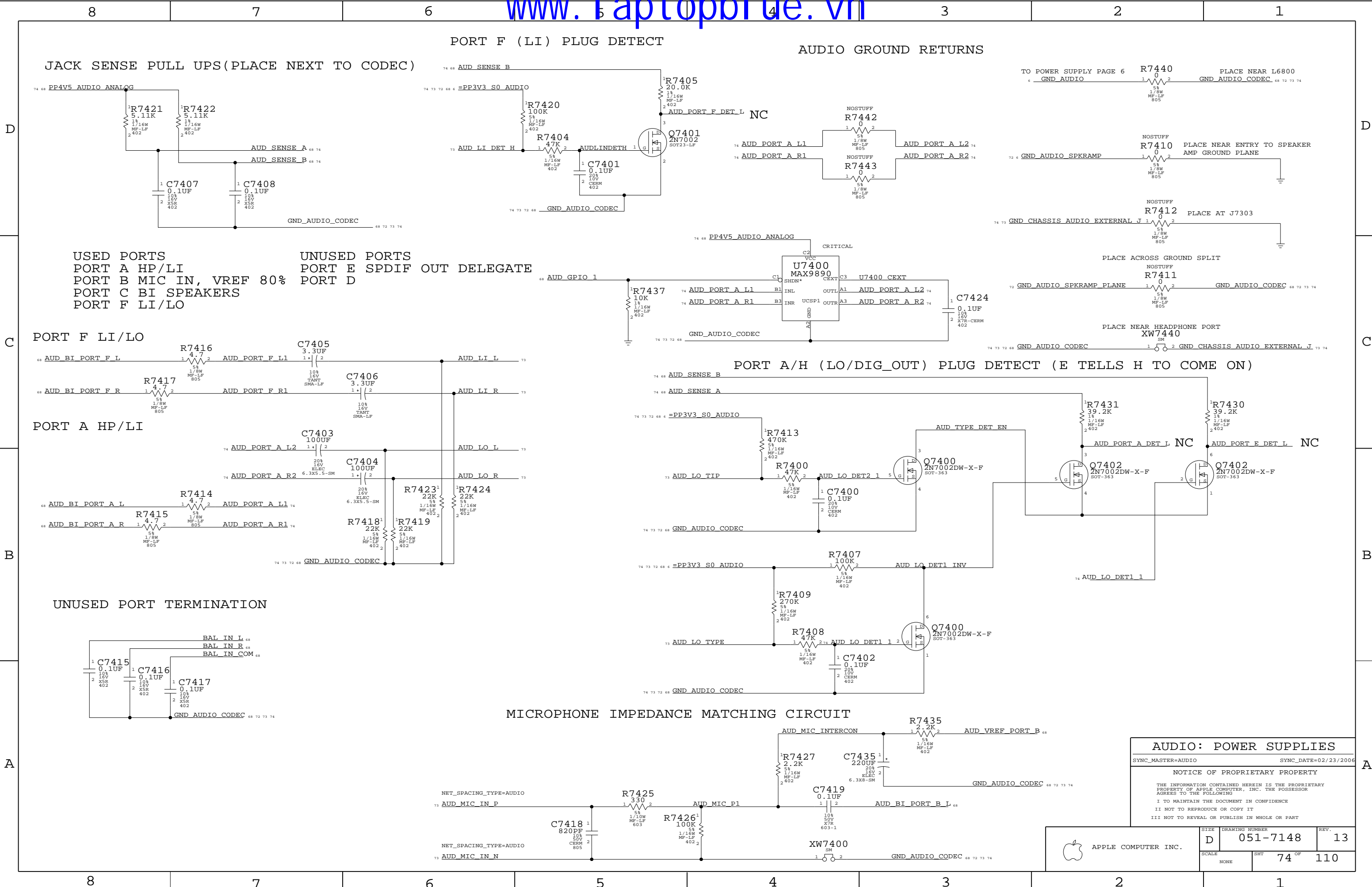


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	D	051-7148	13
	SCALE	SHT OF	
	NONE	72	110



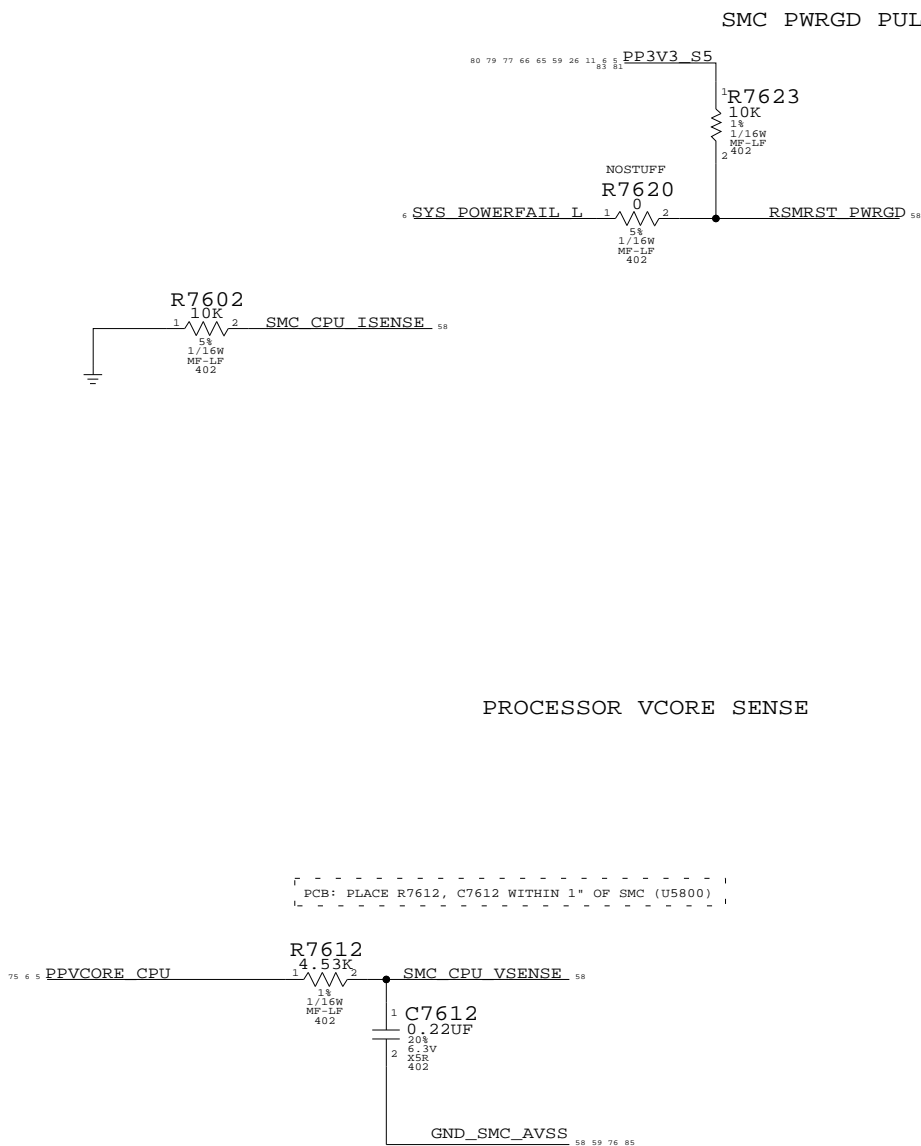
APPLE COMPUTER INC.



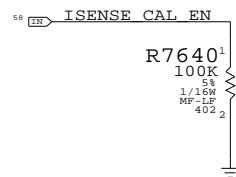







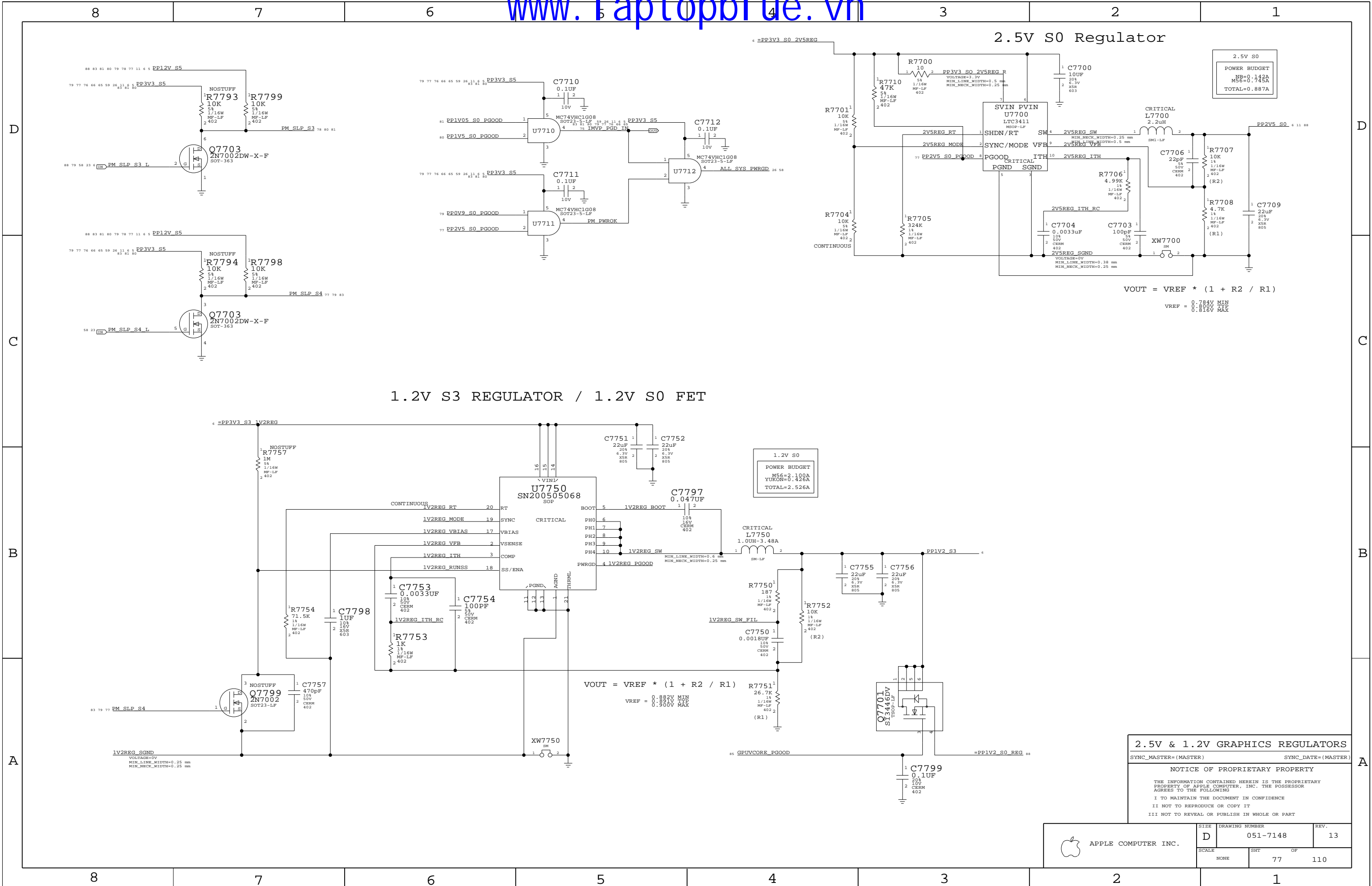


Switches in fixed load on power supplies to calibrate current sense circuits



CPU SENSE CIRCUITRIES	
SYNC_MASTER=(MASTER)	SYNC_DATE=(MASTER)
NOTICE OF PROPRIETARY PROPERTY	
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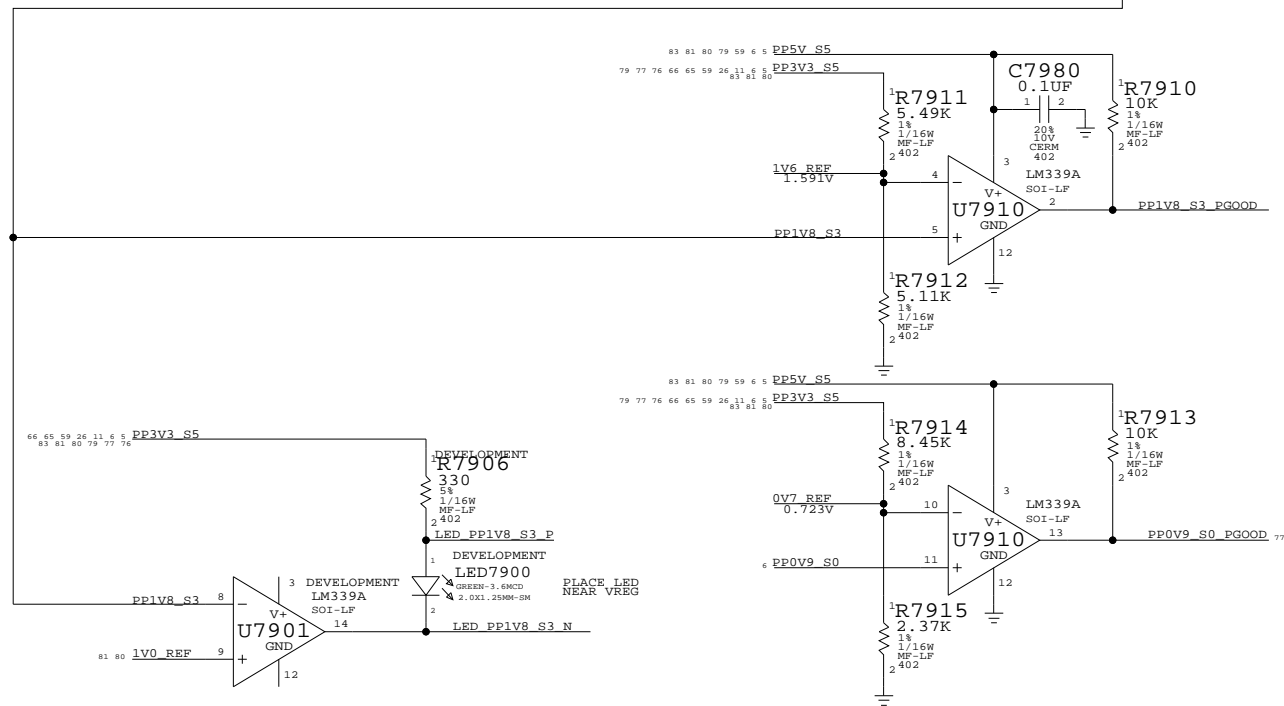
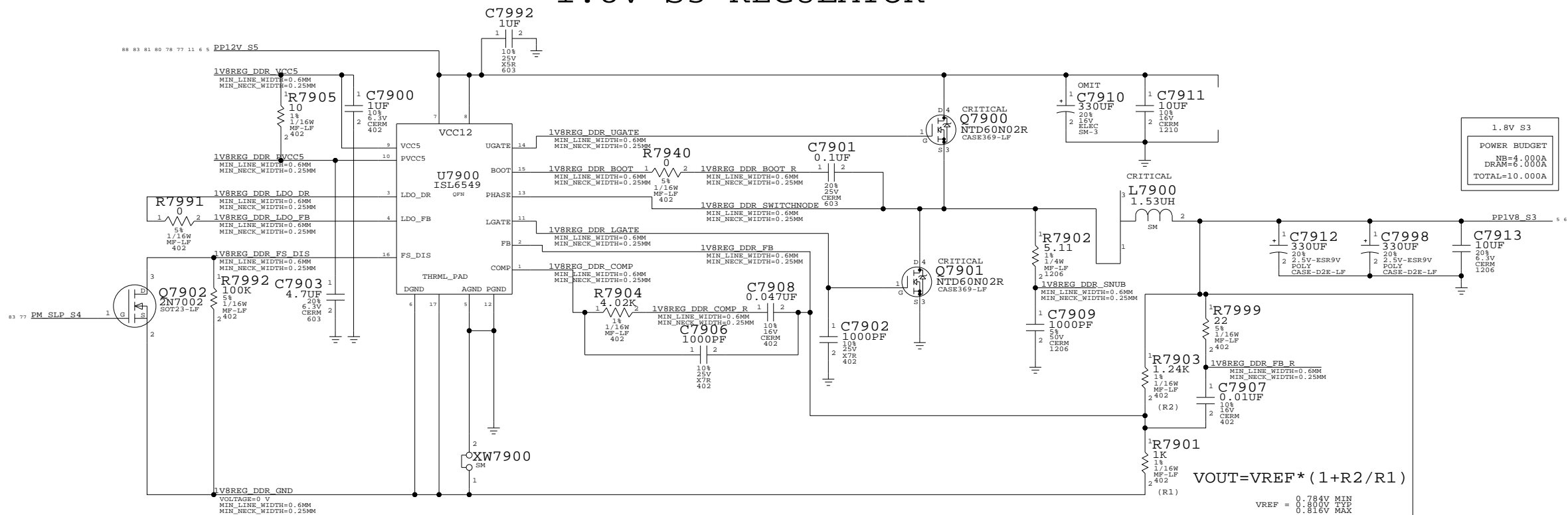
 APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-7148	REV. 13
	SCALE NONE	SHT 76 OF 110	







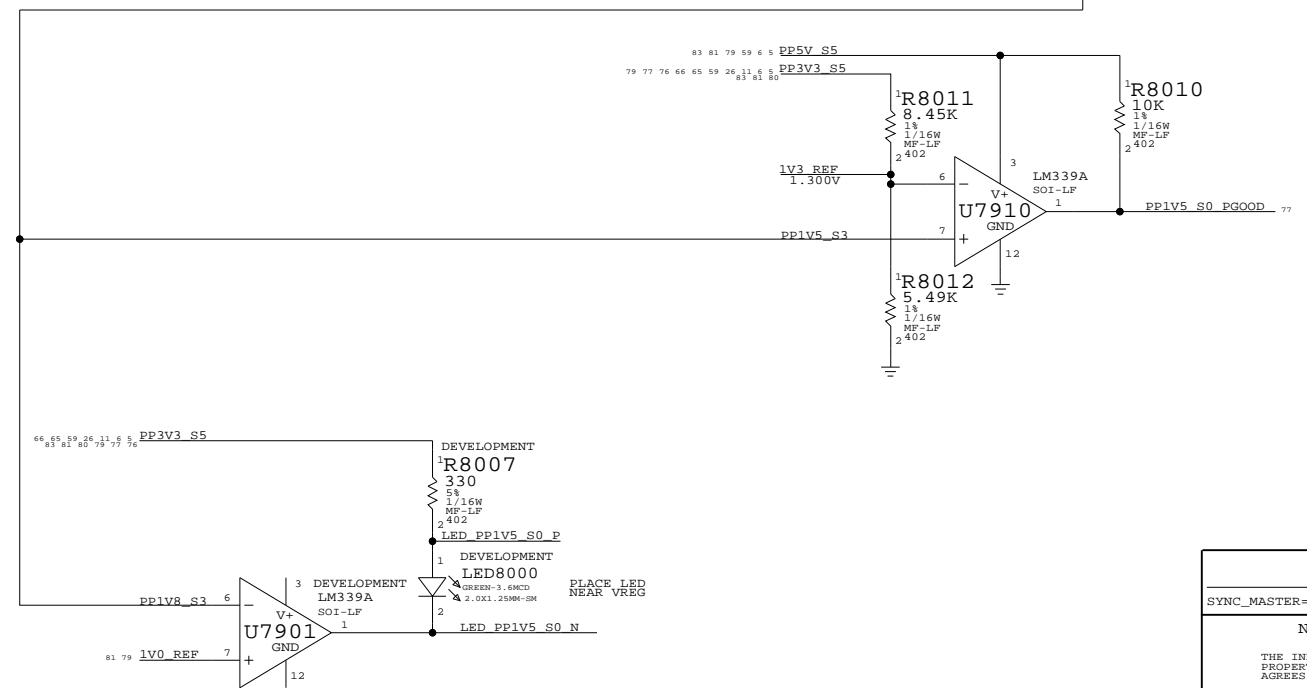
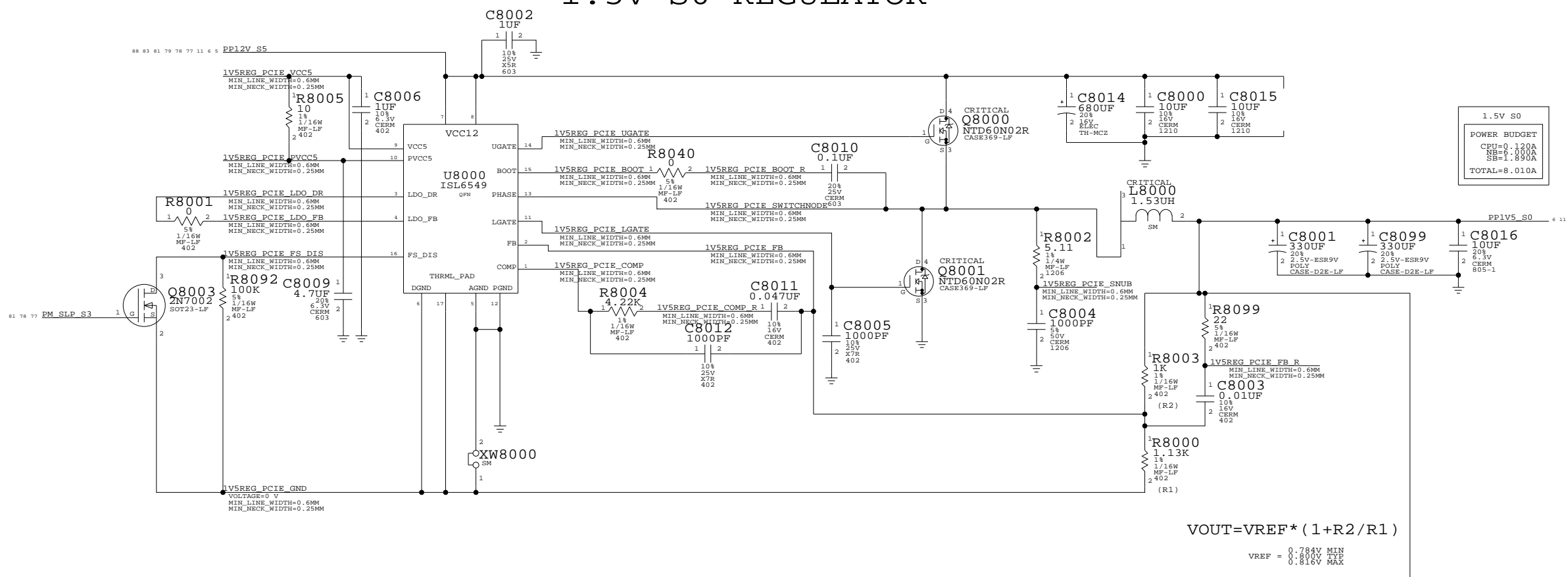
1.8V S3 REGULATOR



1.8V Vreg	
SYNC_MASTER=M23-PC	SYNC_DATE=04/12/2005
NOTICE OF PROPRIETARY PROPERTY	
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7148	13
SCALE		SHT	79 OF 110
NONE			

1.5V S0 REGULATOR



1.5V Vreg

SYNC\_MASTER=FINO-PC SYNC\_DATE=05/18/2005

NOTICE OF PROPRIETARY PROPERTY

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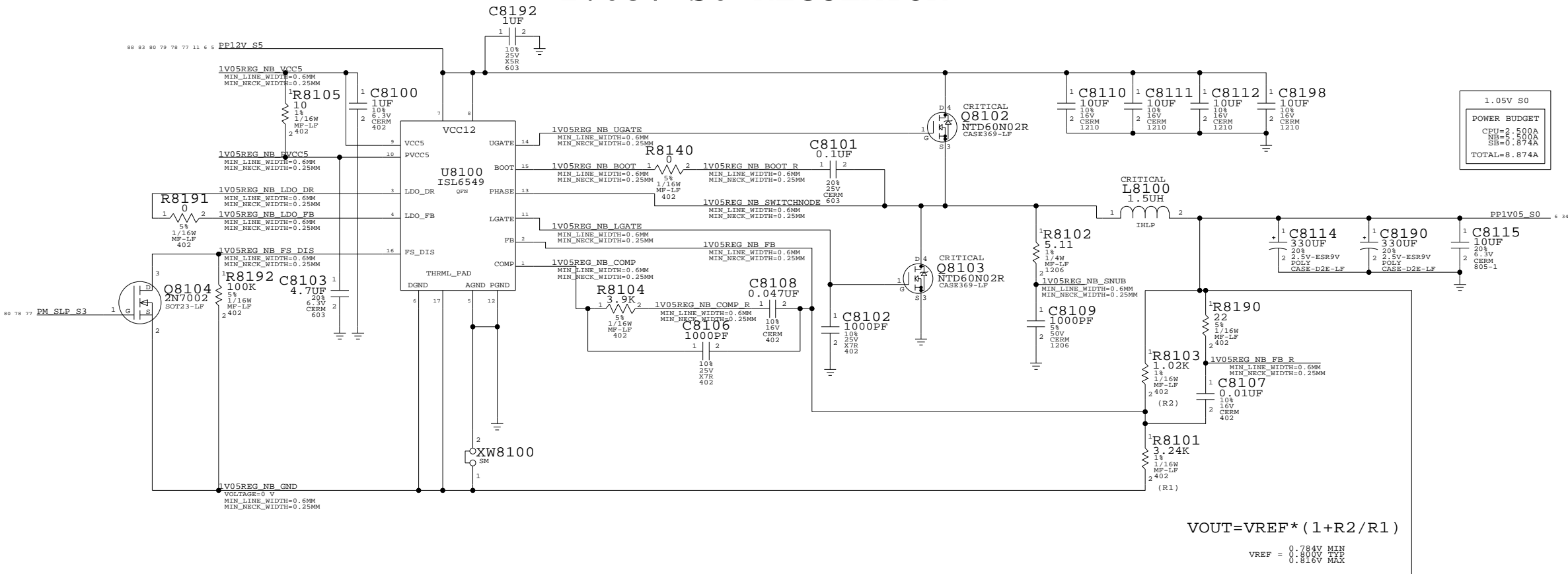
I TO MAINTAIN THE DOCUMENT IN CONFIDENCE

II NOT TO REPRODUCE OR COPY IT

III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

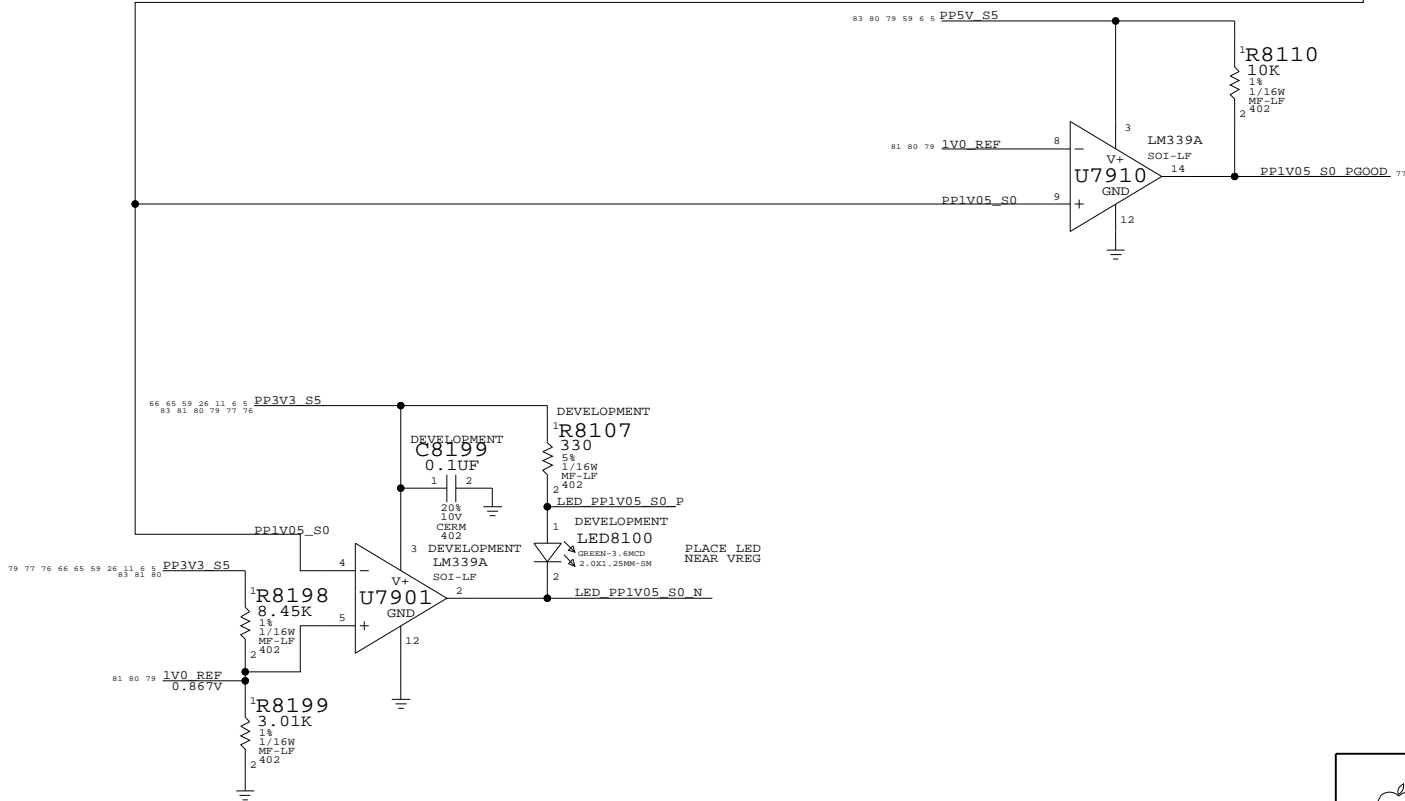
APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7148	13
	SCALE	SHT	80 OF 110
	NONE		

1.05V S0 REGULATOR



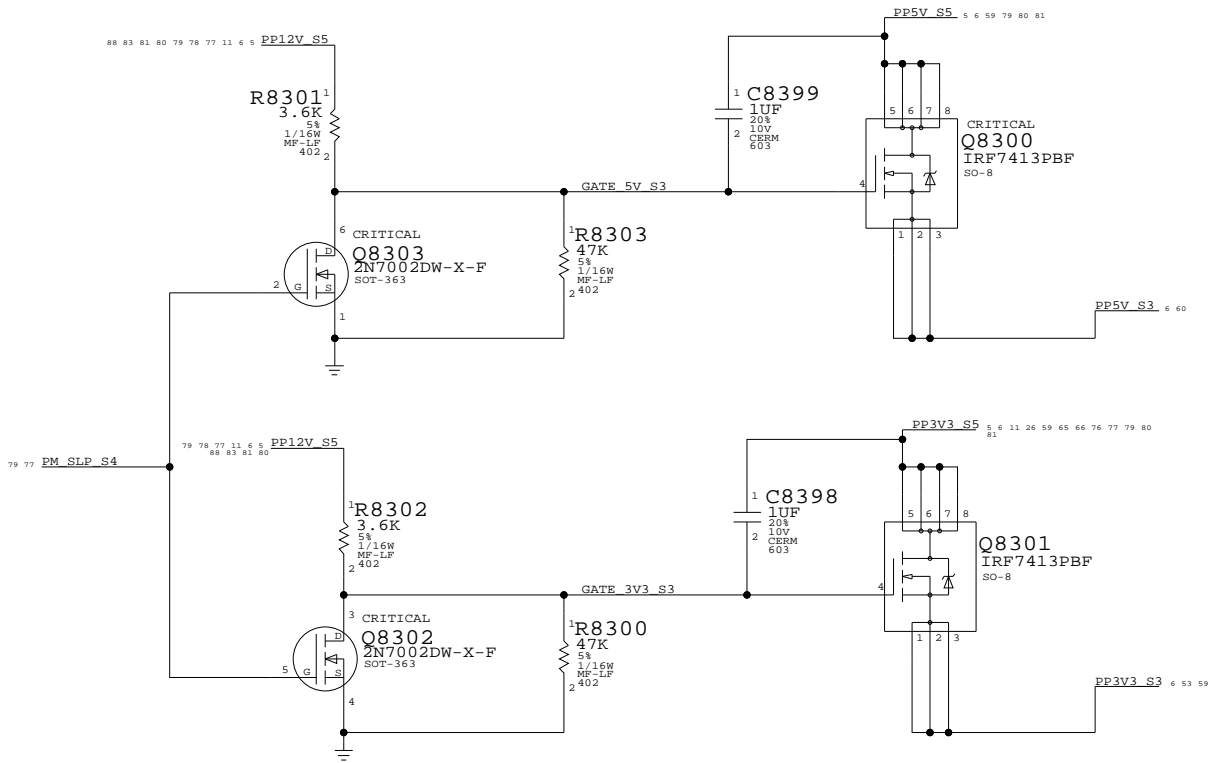
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VREF = 0.784V MIN  
0.800V TYP  
0.816V MAX



1.05V VREG	
SYNC_MASTER=M38-RT	SYNC_DATE=05/18/2005
NOTICE OF PROPRIETARY PROPERTY	
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7148	13
SCALE		SHT	81 OF 110
NONE			



5V & 3.3V Fets

SYNC\_MASTER=FINO-PC SYNC\_DATE=04/12/2005

NOTICE OF PROPRIETARY PROPERTY

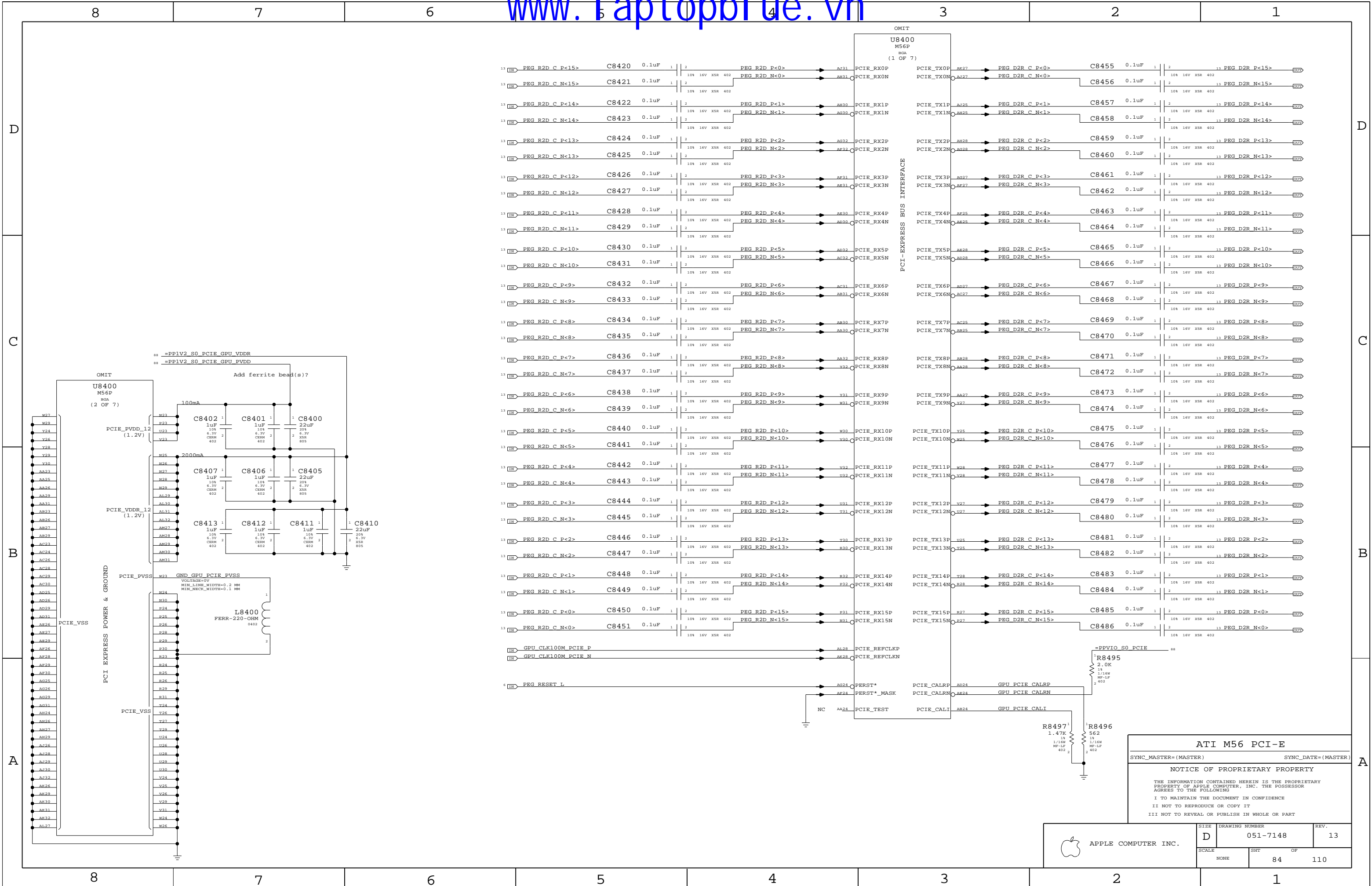
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
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SCALE		SHT	83 OF 110
NONE			



ATI M56 PCI-E

SYNC\_MASTER=(MASTER) SYNC\_DATE=(MASTER)

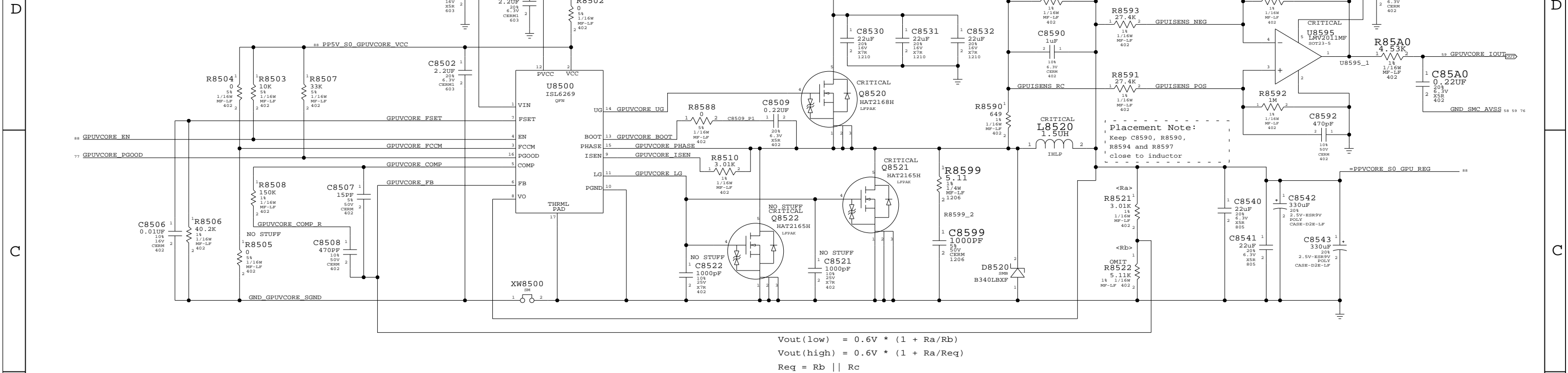
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	SCALE	SHT OF	
	NONE	85	110

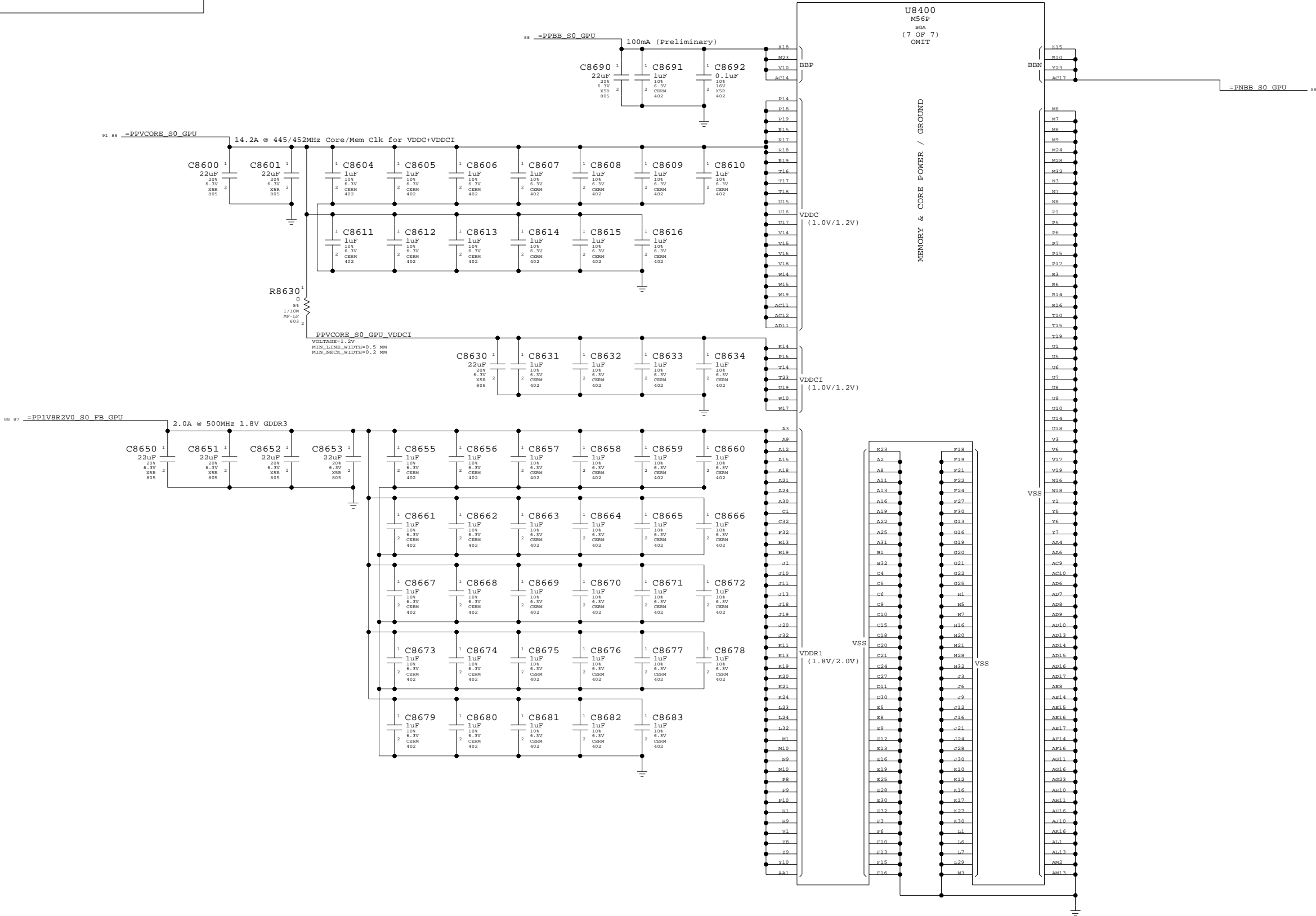


Page Notes

Power aliases required by this page:  
- =PP1V5\_GPU\_VDD15  
- =PP1VR1V3\_GPU\_VCORE

Signal aliases required by this page:  
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BOM options provided by this page:  
(NONE)



ATI M56 Core Power

SYNC\_MASTER=(MASTER)SYNC\_DATE=(MASTER)

NOTICE OF PROPRIETARY PROPERTY

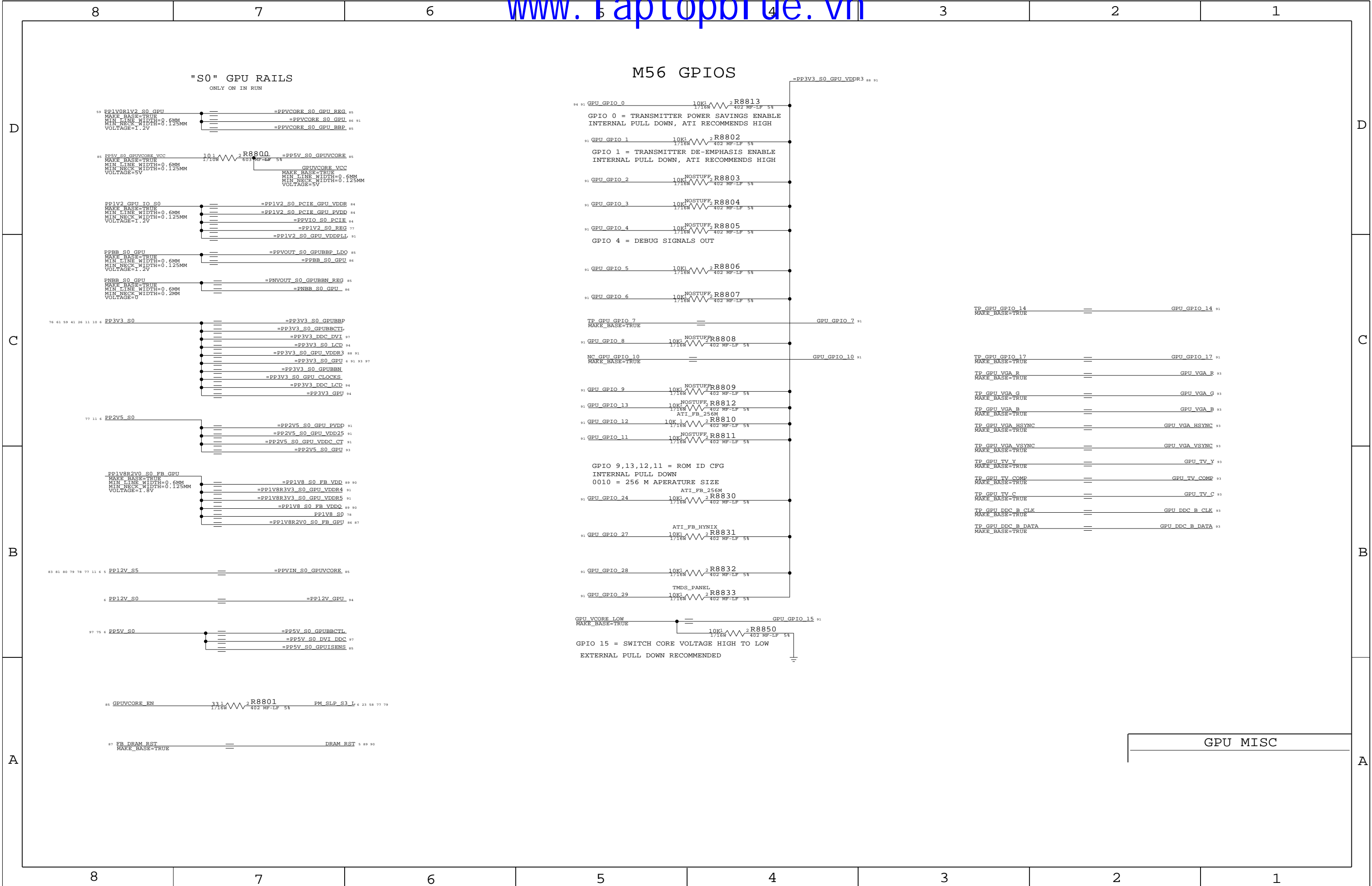
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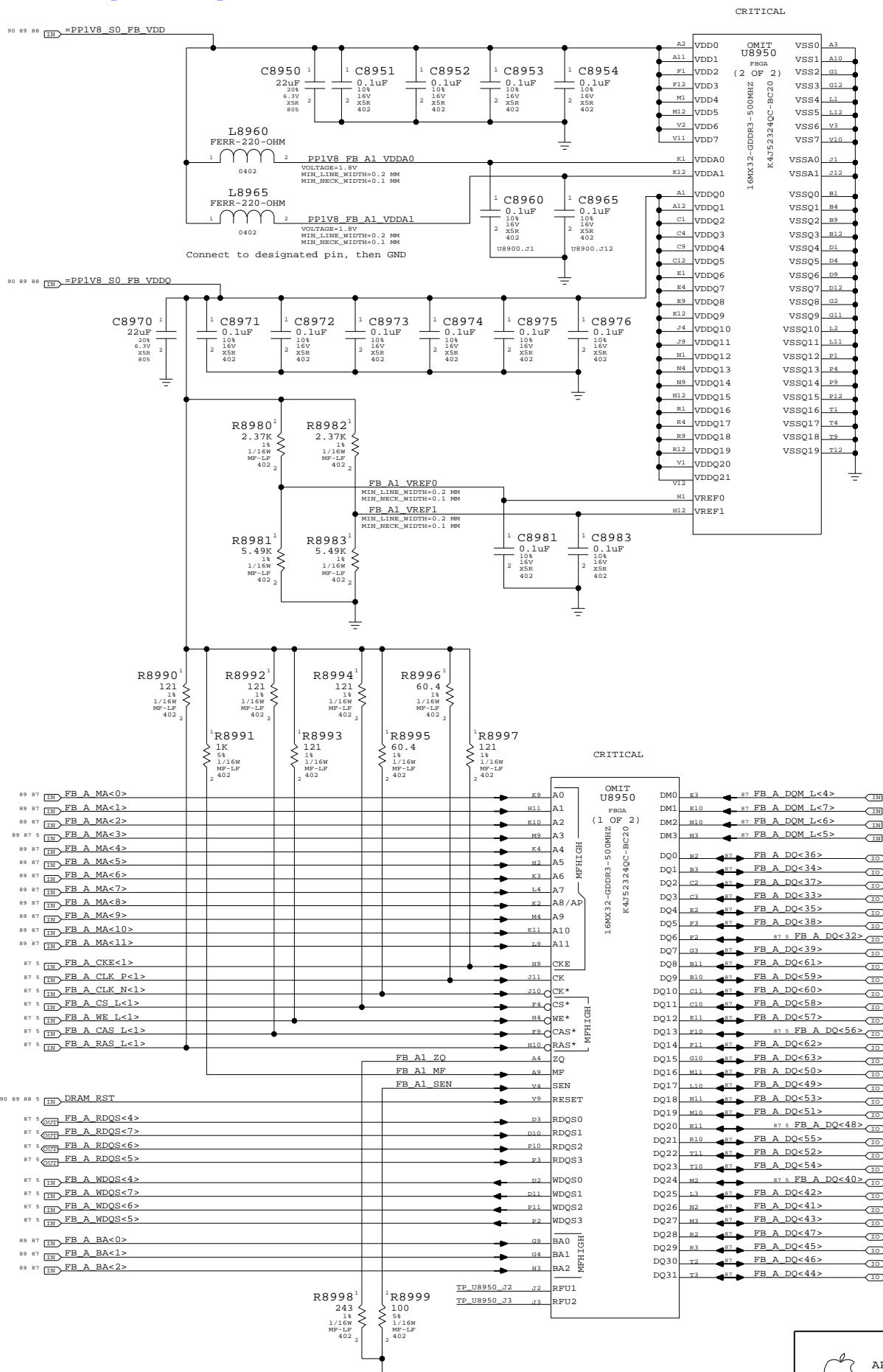
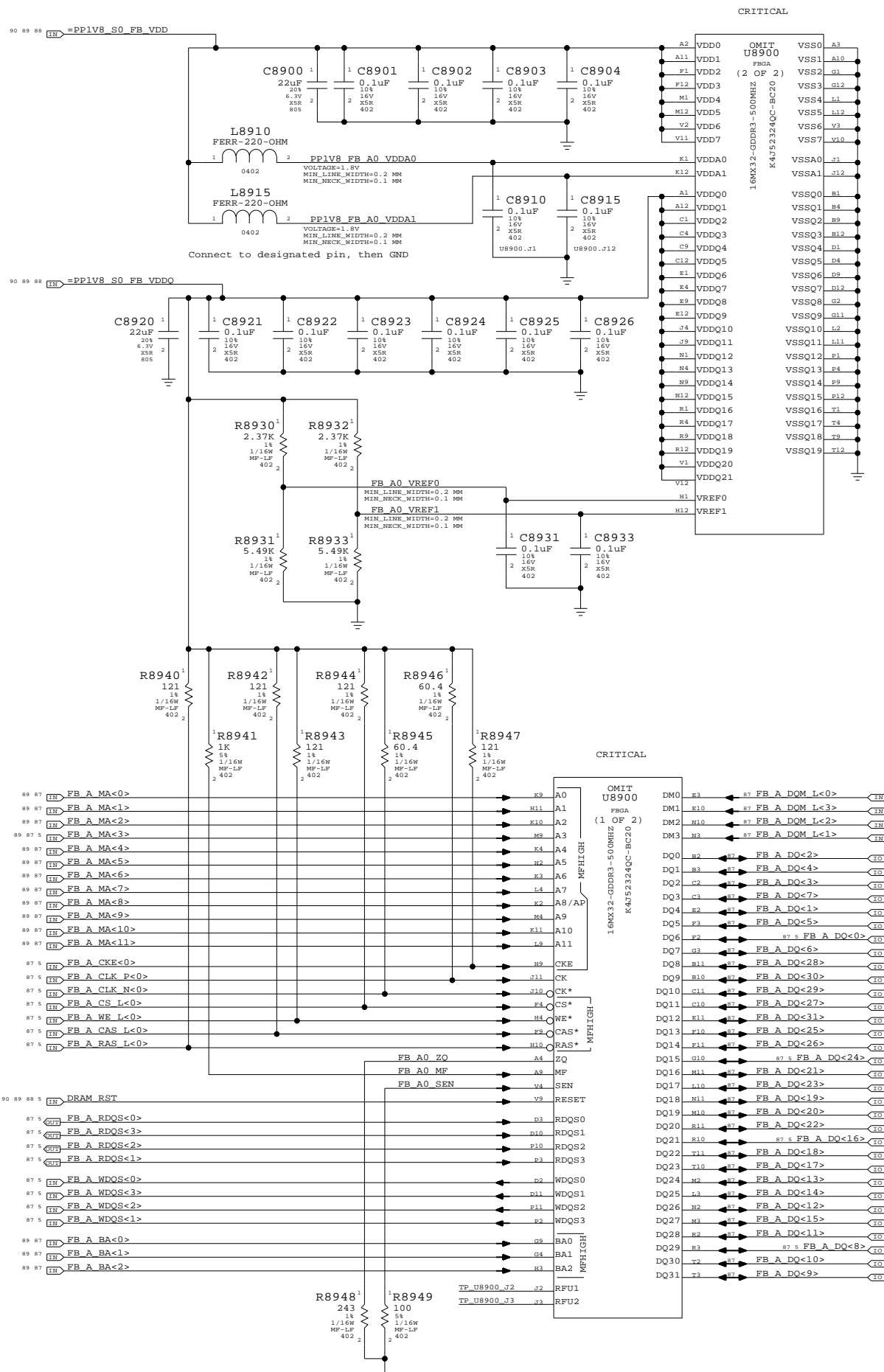
II NOT TO REPRODUCE OR COPY IT

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Power aliases required by this page:

- =PP1V8\_S0\_FB\_VDD  
- =PP1V8\_S0\_FB\_VDDQSignal aliases required by this page:  
(NONE)BOM options provided by this page:  
(NONE)

## GDDR3 Frame Buffer A

SYNC\_MASTER=(MASTER)

SYNC\_DATE=(MASTER)

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APPLE COMPUTER INC.

SIZE

D

DRAWING NUMBER

051-7148

REV.

13

SCALE

NONE

SHT

89

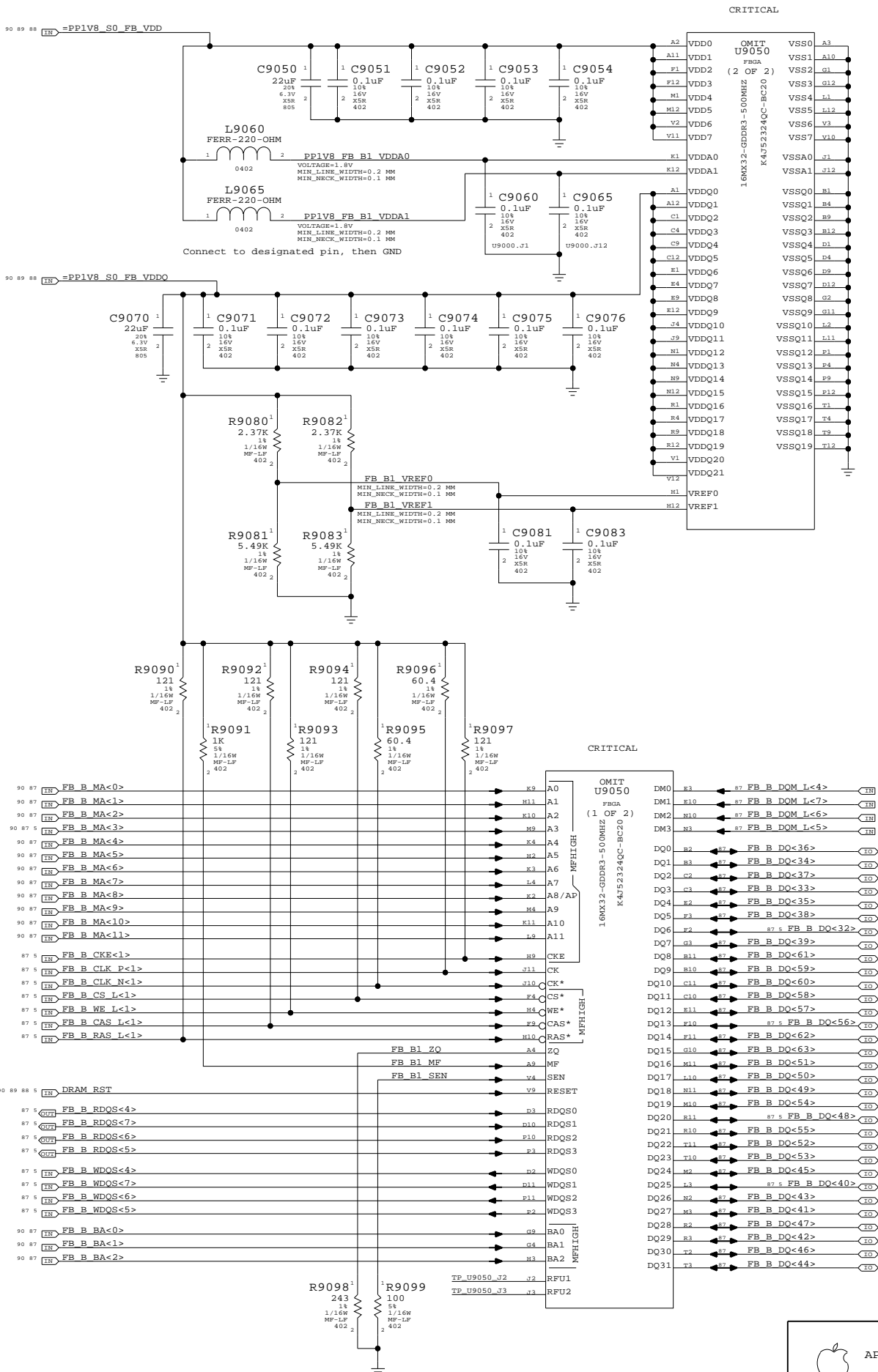
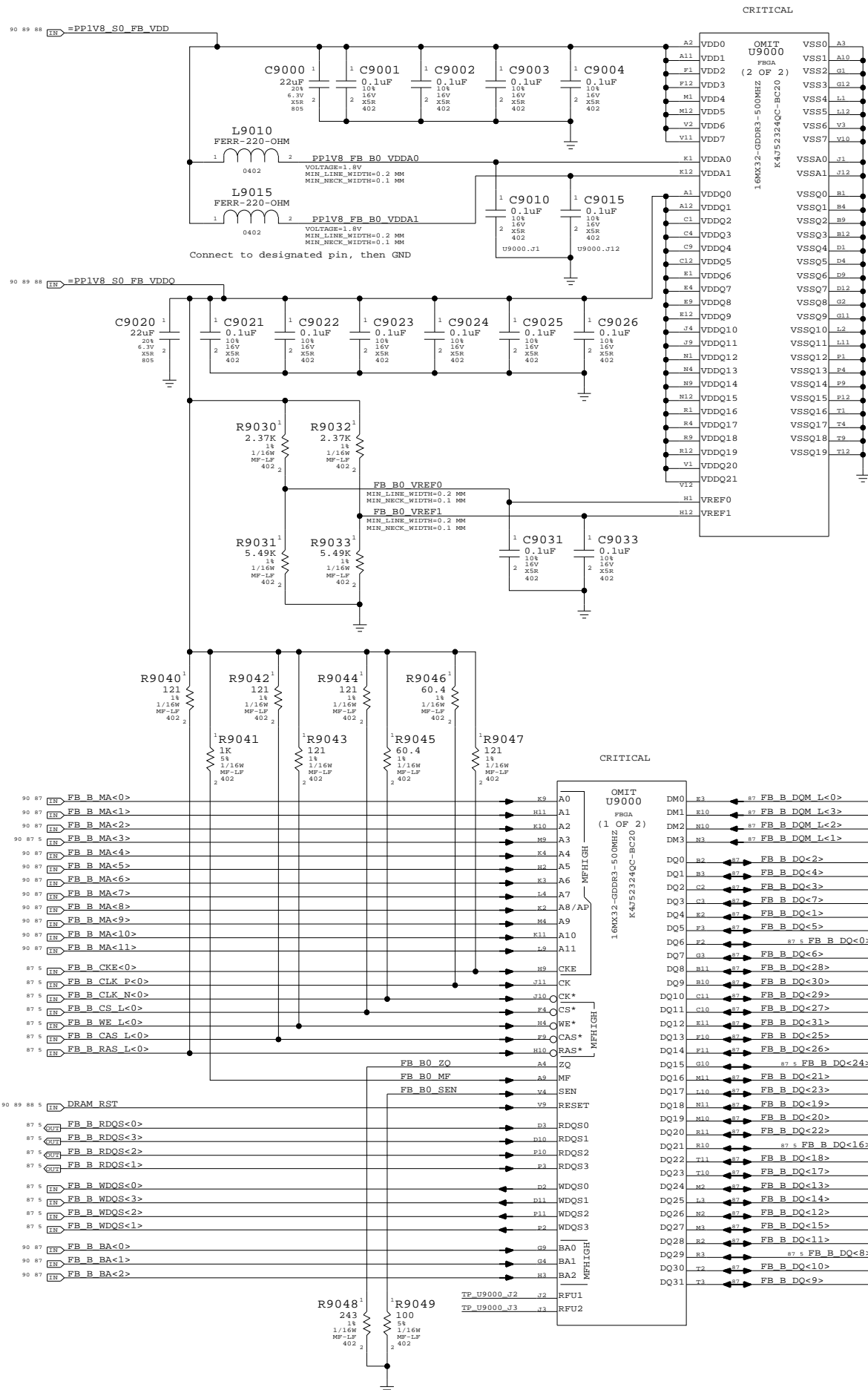
OF

110

Power aliases required by this page:  
- =PP1V8\_S0\_FB\_VDD  
- =PP1V8\_S0\_FB\_VDDQ

Signal aliases required by this page:  
(NONE)

BOM options provided by this page:  
(NONE)



GDDR3 Frame Buffer B

SYNC\_MASTER=(MASTER) SYNC\_DATE=(MASTER)

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SIZE	DRAWING NUMBER	REV.
D	051-7148	13
SCALE	SHT	OF
NONE	90	110



Page Notes

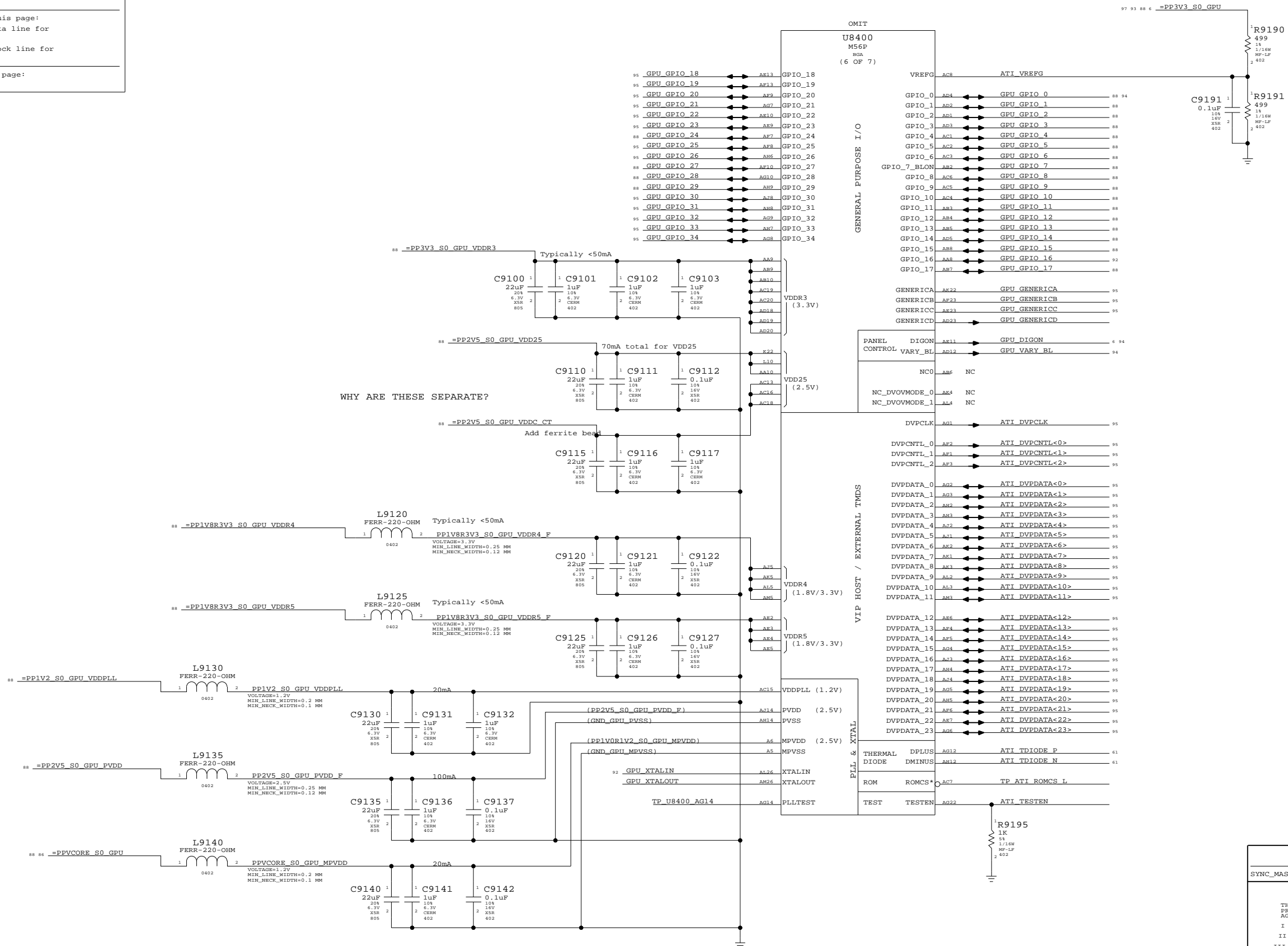
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- =PP3V3\_GPU\_GPIOS
- =PP2V5\_PVDD
- =PP1V8\_GPU\_LVDS\_PLL

Signal aliases required by this page:

- =I2C\_GPU\_TMDS\_SDA - I2C data line for external TMDS transmitters
- =I2C\_GPU\_TMDS\_SCL - I2C clock line for external TMDS transmitters

BOM options provided by this page:  
(NONE)



ATI M56 GPIO/DVO/Misc		
SYNC_MASTER=(MASTER)		SYNC_DATE=(MASTER)
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7148	13
SCALE		SHT	OF
NONE		91	110

87654321

Page Notes

Power aliases required by this page:  
- =PP3V3\_GPU\_CLOCKS - =PP3V3\_GPU\_PWRSEQ  
- =PPVIN\_GPU\_LVDDR\_LDO - =PP2V5\_GPU\_PWRSEQ  
- =PP2V5\_GPU\_LVDDR\_LDO - =PP1V8\_GPU\_PWRSEQ  
- =PP1V5\_GPU\_PWRSEQ

Signal aliases required by this page:  
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BOM options provided by this page:  
- GPU\_SS - GPU\_LVDDR\_2V8

D

D

C

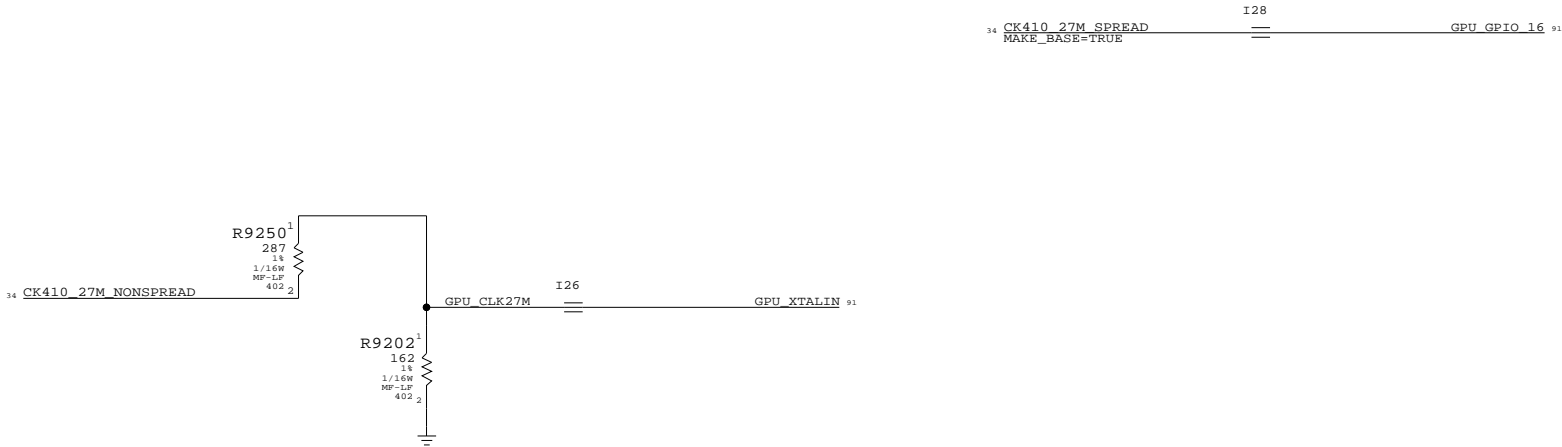
C

B

B

A

A



GPU CLOCKS

SYNC\_MASTER=BOZEMAN SYNC\_DATE=05/21/2005

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SIZE	DRAWING NUMBER	REV.
D	051-7148	13
SCALE	SHT	OF
NONE	92	110



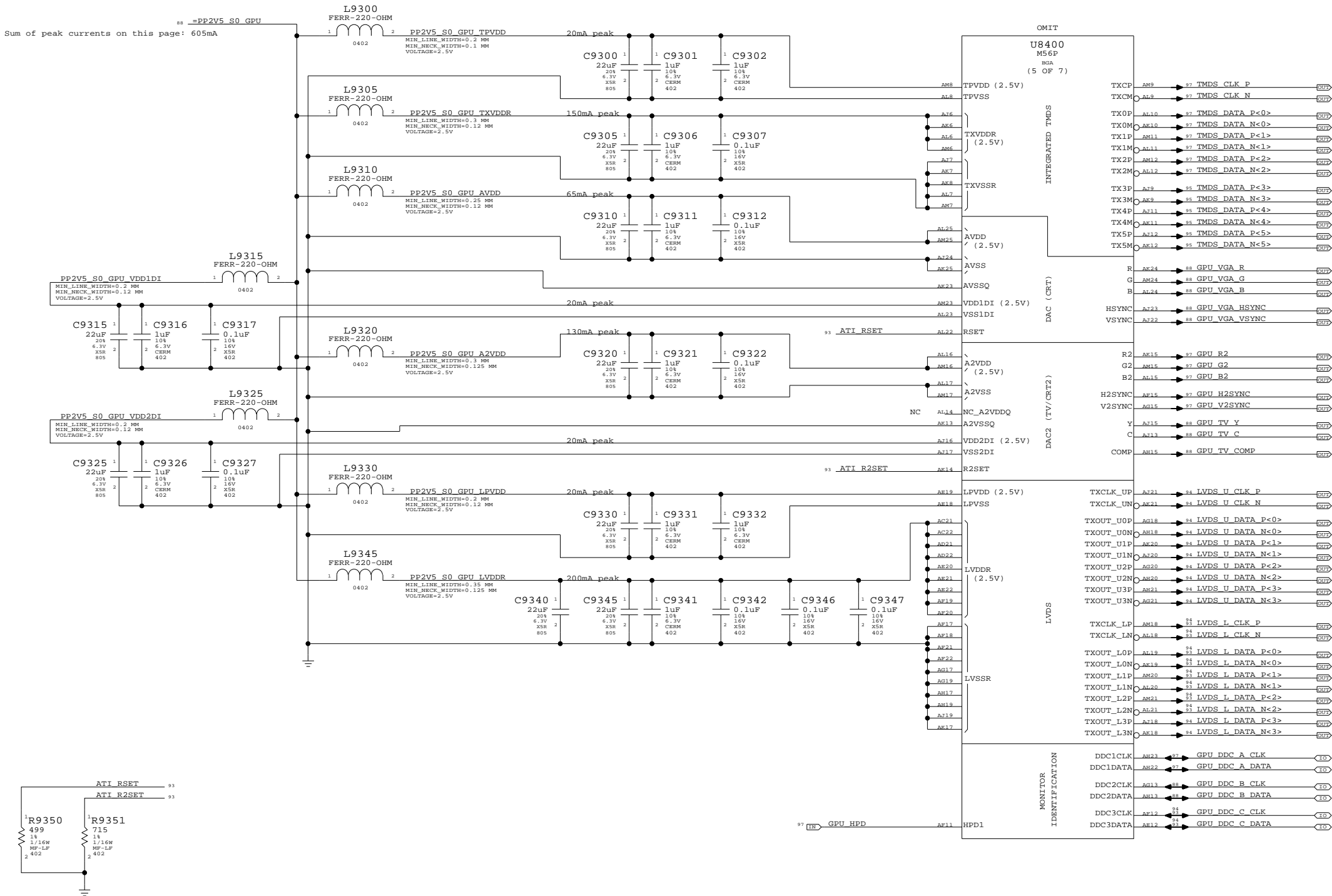
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- =PP1V8R2V5\_S0\_GPU\_LVDDR

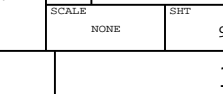
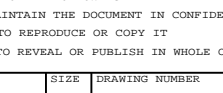
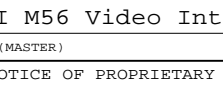
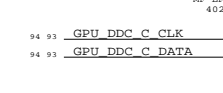
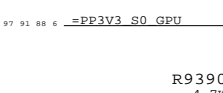
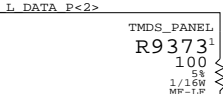
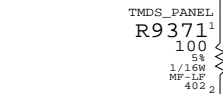
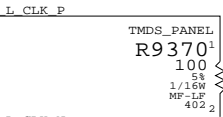
Signal aliases required by this page:  
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BOM options provided by this page:  
(NONE)

TERMINATION FOR TMDS USAGE OF LVDS PINS  
PLACE CLOSE TO GPU (U8400)



Composite/S-Video	VGA	Component
Y	G	Y
C	R	Pr
Comp	B	Pb



ATI M56 Video Interfaces

SYNC\_MASTER=(MASTER) SYNC\_DATE=(MASTER)

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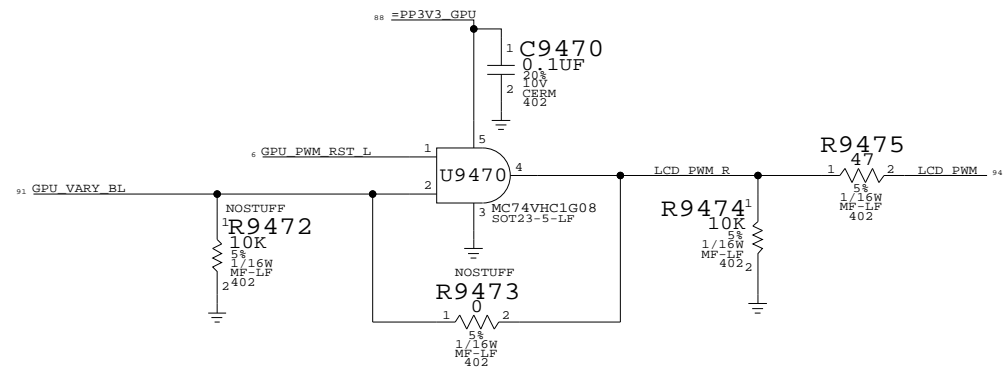
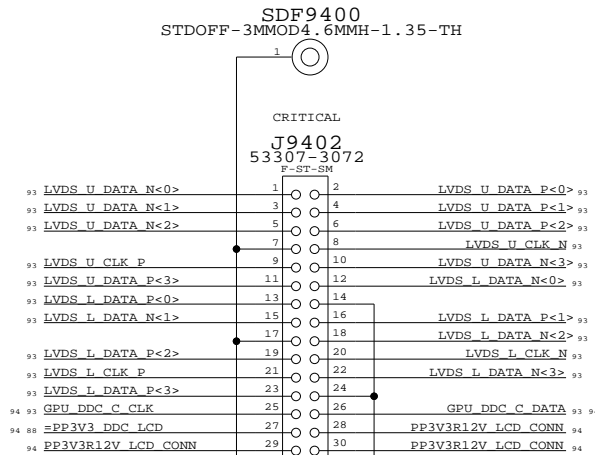
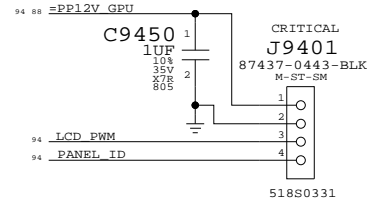
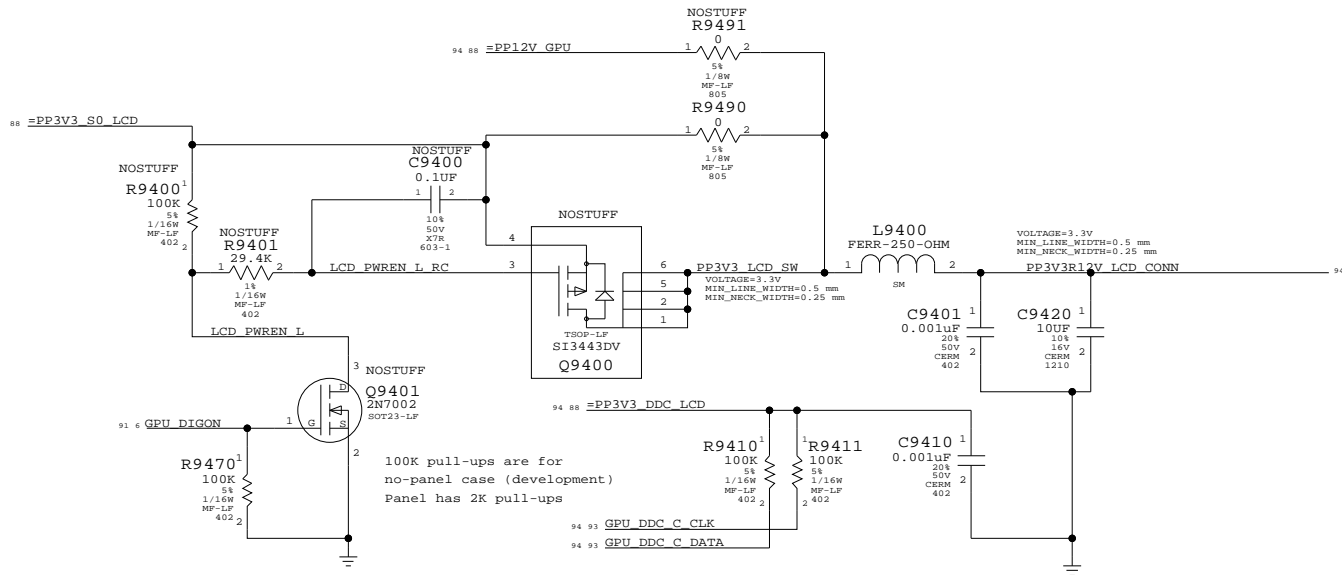


APPLE COMPUTER INC.

SIZE	DRAWING NUMBER	REV.
D	051-7148	13
SCALE	SHT	OF
NONE	93	110

LCD (LVDS) INTERFACE

INVERTER INTERFACE



GATE TO PREVENT LEAKAGE ONTO PWM  
MIGHT BE ABLE TO BYPASS IF SMC DRIVES SIGNAL

Internal Display Conns		
SYNC_MASTER=BOZEMAN		SYNC_DATE=04/27/2005
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APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-7148	REV. 13
	SCALE NONE	SHT 94	OF 110

D

C

B

A

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A

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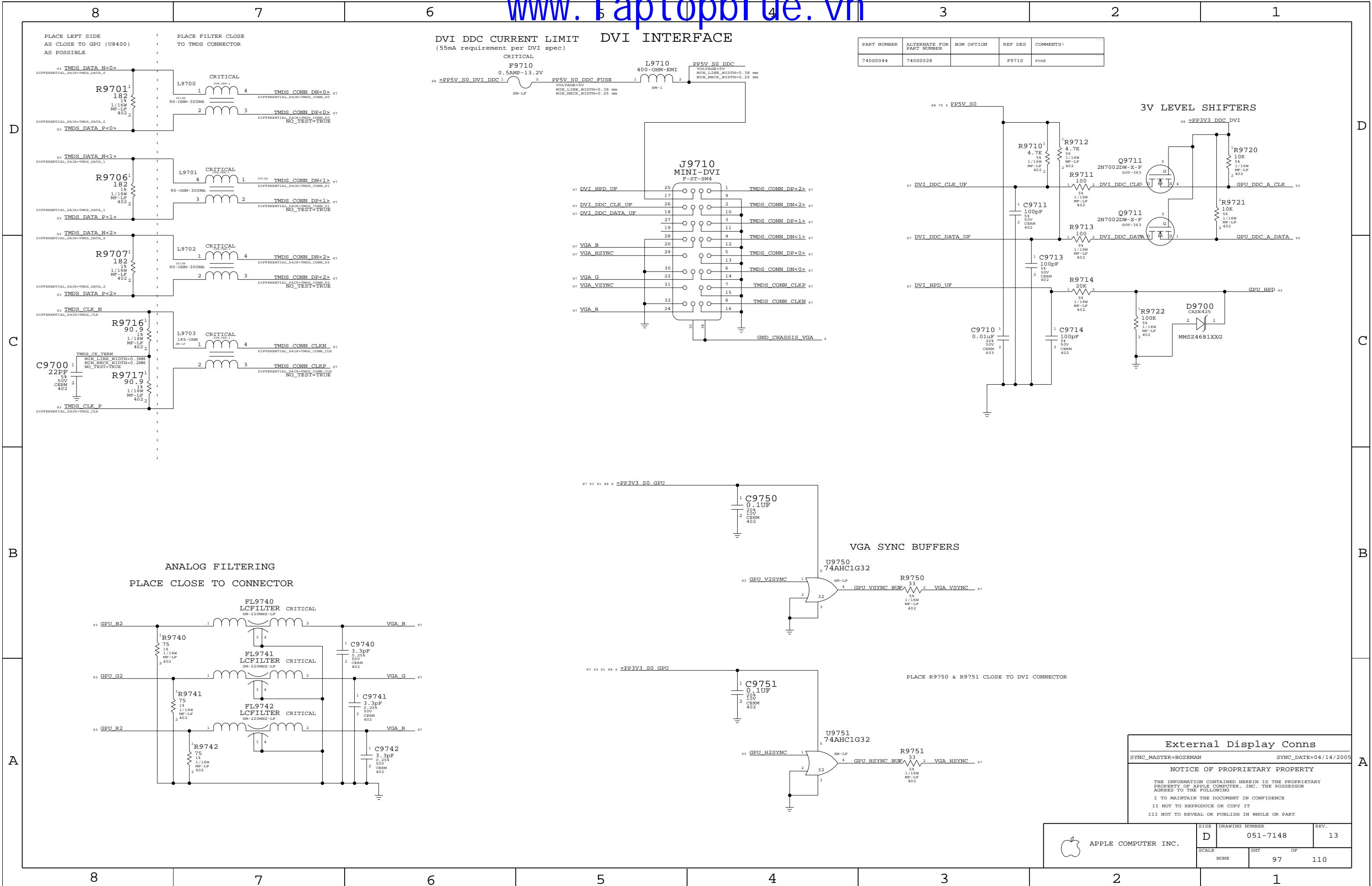
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SIZE	DRAWING NUMBER	REV.
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SCALE	SHT	95 OF 110
NONE		



[illegible]





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	FB_B_DQM_L<3>	FB_B_DQM_L<3> - ~om38a_1ib.M38A	87C1 90B6	FSB_D_L<27>	FSB_D_L<27> - ~om38a_1ib.M38A	7B4 12C6				GPU_VGA_HSYNC	GPU_VGA_HSYNC - ~om38a_1ib.M38A	88B1 93B3
A	FB_B_DQM_L<4>	FB_B_DQM_L<4> - ~om38a_1ib.M38A	87C1 90B3	FSB_D_L<28>	FSB_D_L<28> - ~om38a_1ib.M38A	7B4 12C6				TP_GPU_VGA_HSYNC	TP_GPU_VGA_HSYNC - ~om38a_1ib.M38A	88B3
	FB_B_DQM_L<5>	FB_B_DQM_L<5> - ~om38a_1ib.M38A	87C1 90B3	FSB_D_L<29>	FSB_D_L<29> - ~om38a_1ib.M38A	7B4 12C6				GPU_VGA_R	GPU_VGA_R - ~om38a_1ib.M38A	88C1 93C3
	FB_B_DQM_L<6>	FB_B_DQM_L<6> - ~om38a_1ib.M38A	87C1 90B3	FSB_D_L<30>	FSB_D_L<30> - ~om38a_1ib.M38A	7B4 12C6				TP_GPU_VGA_R	TP_GPU_VGA_R - ~om38a_1ib.M38A	88C1 93C3
	FB_B_DQM_L<7>	FB_B_DQM_L<7> - ~om38a_1ib.M38A	87C1 90B3	FSB_D_L<31>	FSB_D_L<31> - ~om38a_1ib.M38A	7B4 12C6				GPU_VGA_VSYNC	GPU_VGA_VSYNC - ~om38a_1ib.M38A	88B1 93B3
	FB_B_MA<0>	FB_B_MA<0> - ~om38a_1ib.M38A	87D1 90B5 90B8	FSB_D_L<32>	FSB_D_L<32> - ~om38a_1ib.M38A	7C2 12C6				GPU_VGA_VSCL	GPU_VGA_VSCL - ~om38a_1ib.M38A	59C1 59C8
	FB_B_MA<1>	FB_B_MA<1> - ~om38a_1ib.M38A	87D1 90B5 90B8	FSB_D_L<33>	FSB_D_L<33> - ~om38a_1ib.M38A	7C2 12C6				SMB_A_S3_CLK	SMB_A_S3_CLK - ~om38a_1ib.M38A	58B5 59C2 59D1
	FB_B_MA<2>	FB_B_MA<2> - ~om38a_1ib.M38A	87D1 90B5 90B8	FSB_D_L<34>	FSB_D_L<34> - ~om38a_1ib.M38A	7C2 12C6				I2C_ALS_SDA	I2C_ALS_SDA - ~om38a_1ib.M38A	59C1 59C8
	FB_B_MA<3>	FB_B_MA<3> - ~om38a_1ib.M38A	5A5 5B5 5C6 87D1 90B5 90B8	FSB_D_L<35>	FSB_D_L<35> - ~om38a_1ib.M38A	7C2 12C6				SMB_A_S3_DATA	SMB_A_S3_DATA - ~om38a_1ib.M38A	58B5 59C2 59D1
	FB_B_MA<4>	FB_B_MA<4> - ~om38a_1ib.M38A	87D1 90B5 90B8	FSB_D_L<36>	FSB_D_L<36> - ~om38a_1ib.M38A	7C2 12C6				IDR_CSEL_PD	IDR_CSEL_PD - ~om38a_1ib.M38A	38C3
	FB_B_MA<5>	FB_B_MA<5> - ~om38a_1ib.M38A	87D1 90B5 90B8	FSB_D_L<37>	FSB_D_L<37> - ~om38a_1ib.M38A	7C2 12C6				IDR_DASIS_L	IDR_DASIS_L - ~om38a_1ib.M38A	38C3
A	FB_B_MA<6>	FB_B_MA<6> - ~om38a_1ib.M38A	87D1 90B5 90B8	FSB_D_L<38>	FSB_D_L<38> - ~om38a_1ib.M38A	7C2 12C6				IDR_RESET_L_DS	IDR_RESET_L_DS - ~om38a_1ib.M38A	38C3
	FB_B_MA<7>	FB_B_MA<7> - ~om38a_1ib.M38A	87D1 90B5 90B8	FSB_D_L<39>	FSB_D_L<39> - ~om38a_1ib.M38A	7C2 12B6				IDR_OCIS16_PU	IDR_OCIS16_PU - ~om38a_1ib.M38A	38C1
	FB_B_MA<8>	FB_B_MA<8> - ~om38a_1ib.M38A	87D1 90B5 90B8	FSB_D_L<40>	FSB_D_L<40> - ~om38a_1ib.M38A	7C2 12B6				IDR_IRQ14	IDR	



	8	7	6	5	4	3	2	1	
	IMVP6_UGATE1 IMVP6_UGATE2 IMVP6_VDIFF IMVP6_VDIFF_RC IMVP6_VO IMVP6_VO_R IMVP6_VR_TT IMVP6_VSEN IMVP6_VSUM IMVP6_VSUM_R1 IMVP6_VSUM_R2 IMVP6_VW IMVP_DPRS_LVPR IMVP_PGD_IN IMVP_VID<0> IMVP_VID<1> IMVP_VID<2> IMVP_VID<3> IMVP_VID<4> IMVP_VID<5> IMVP_VID<6> IMVP_VR_ON INT_PIRQA_L INT_PIRQB_L INT_PIRQC_L INT_PIRQD_L INT_SERIRQ ISENSE_CAL_EN ITPRESST_L ITP_TDO ITS_ALIVE ITS_PLUGGED_IN KBC_MDE LCD_PWM LCD_PWM_R LCD_PWREN_L LCD_PWREN_L_RC LCD_SHOULD_ON LED_PP1V05_S0_N LED_PP1V05_S0_P LED_PP1V5_S0_N LED_PP1V5_S0_P LED_PP1V8_S3_N LED_PP1V8_S3_P LPC_AD<0> LPC_AD<1> LPC_AD<2> LPC_AD<3> LPC_FRAME_L LVDS_A_CLK_N LVDS_A_CLK_P LVDS_A_DATA_N<0> LVDS_A_DATA_N<1> LVDS_A_DATA_N<2> LVDS_A_DATA_P<0> LVDS_A_DATA_P<1> LVDS_A_DATA_P<2> LVDS_A_DATA_P<2> LVDS_BKLTCTL LVDS_BKLTEN LVDS_B_CLK_N LVDS_B_CLK_P LVDS_B_DATA_N<0> LVDS_B_DATA_N<1> LVDS_B_DATA_N<2> LVDS_B_DATA_P<0> LVDS_B_DATA_P<1> LVDS_B_DATA_P<2> LVDS_BKLTCTL LVDS_CLKCTLA LVDS_CLKCTLB LVDS_DDC_CLK LVDS_DDC_CLICK LVDS_DDC_DATA LVDS_DDC_DATA LVDS_DBG LVDS_I_CLK_N LVDS_I_CLK_P LVDS_I_DATA_N<0> LVDS_I_DATA_N<1> LVDS_I_DATA_N<2> LVDS_I_DATA_N<3> LVDS_I_DATA_P<0> LVDS_I_DATA_P<1> LVDS_I_DATA_P<2> LVDS_I_DATA_P<3> LVDS_I_DATA_P<3> LVDS_VDDEN LVDS_VREFH LVDS_VREFL MEMVTT_VREF MEM_A<0> MEM_A<1> MEM_A<1> MEM_A<1> MEM_A<2> MEM_A<3> MEM_A<4> MEM_A<5> MEM_A<6> MEM_A<7> MEM_A<8> MEM_A<9> MEM_A<10> MEM_A<11> MEM_A<12>	IMVP6_UGATE1 - @m38a_1ib.M38A IMVP6_UGATE2 - @m38a_1ib.M38A IMVP6_VDIFF - @m38a_1ib.M38A IMVP6_VDIFF_RC - @m38a_1ib.M38A IMVP6_VO - @m38a_1ib.M38A IMVP6_VO_R - @m38a_1ib.M38A IMVP6_VR_TT - @m38a_1ib.M38A IMVP6_VSEN - @m38a_1ib.M38A IMVP6_VSUM - @m38a_1ib.M38A IMVP6_VSUM_R1 - @m38a_1ib.M38A IMVP6_VSUM_R2 - @m38a_1ib.M38A IMVP6_VW - @m38a_1ib.M38A IMVP_DPRS_LVPR - @m38a_1ib.M38A IMVP_PGD_IN - @m38a_1ib.M38A IMVP_VID<0> - @m38a_1ib.M38A IMVP_VID<1> - @m38a_1ib.M38A IMVP_VID<2> - @m38a_1ib.M38A IMVP_VID<3> - @m38a_1ib.M38A IMVP_VID<4> - @m38a_1ib.M38A IMVP_VID<5> - @m38a_1ib.M38A IMVP_VID<6> - @m38a_1ib.M38A IMVP_VR_ON - @m38a_1ib.M38A INT_PIRQA_L - @m38a_1ib.M38A INT_PIRQB_L - @m38a_1ib.M38A INT_PIRQC_L - @m38a_1ib.M38A INT_PIRQD_L - @m38a_1ib.M38A INT_SERIRQ - @m38a_1ib.M38A ISENSE_CAL_EN - @m38a_1ib.M38A ITPRESST_L - @m38a_1ib.M38A ITP_TDO - @m38a_1ib.M38A ITS_ALIVE - @m38a_1ib.M38A ITS_PLUGGED_IN - @m38a_1ib.M38A KBC_MDE - @m38a_1ib.M38A LCD_PWM - @m38a_1ib.M38A LCD_PWM_R - @m38a_1ib.M38A LCD_PWREN_L - @m38a_1ib.M38A LCD_PWREN_L_RC - @m38a_1ib.M38A LCD_SHOULD_ON - @m38a_1ib.M38A LED_PP1V05_S0_N - @m38a_1ib.M38A LED_PP1V05_S0_P - @m38a_1ib.M38A LED_PP1V5_S0_N - @m38a_1ib.M38A LED_PP1V5_S0_P - @m38a_1ib.M38A LED_PP1V8_S3_N - @m38a_1ib.M38A LED_PP1V8_S3_P - @m38a_1ib.M38A LPC_AD<0> - @m38a_1ib.M38A LPC_AD<1> - @m38a_1ib.M38A LPC_AD<2> - @m38a_1ib.M38A LPC_AD<3> - @m38a_1ib.M38A LPC_FRAME_L - @m38a_1ib.M38A LVDS_A_CLK_N - @m38a_1ib.M38A LVDS_A_CLK_P - @m38a_1ib.M38A LVDS_A_DATA_N<0> - @m38a_1ib.M38A LVDS_A_DATA_N<1> - @m38a_1ib.M38A LVDS_A_DATA_N<2> - @m38a_1ib.M38A LVDS_A_DATA_P<0> - @m38a_1ib.M38A LVDS_A_DATA_P<1> - @m38a_1ib.M38A LVDS_A_DATA_P<2> - @m38a_1ib.M38A LVDS_A_DATA_P<2> - @m38a_1ib.M38A LVDS_BKLTCTL - @m38a_1ib.M38A LVDS_BKLTEN - @m38a_1ib.M38A LVDS_B_CLK_N - @m38a_1ib.M38A LVDS_B_CLK_P - @m38a_1ib.M38A LVDS_B_DATA_N<0> - @m38a_1ib.M38A LVDS_B_DATA_N<1> - @m38a_1ib.M38A LVDS_B_DATA_N<2> - @m38a_1ib.M38A LVDS_B_DATA_P<0> - @m38a_1ib.M38A LVDS_B_DATA_P<1> - @m38a_1ib.M38A LVDS_B_DATA_P<2> - @m38a_1ib.M38A LVDS_BKLTCTL - @m38a_1ib.M38A LVDS_CLKCTLA - @m38a_1ib.M38A LVDS_CLKCTLB - @m38a_1ib.M38A LVDS_DDC_CLK - @m38a_1ib.M38A LVDS_DDC_CLICK - @m38a_1ib.M38A LVDS_DDC_DATA - @m38a_1ib.M38A LVDS_DDC_DATA - @m38a_1ib.M38A LVDS_DBG - @m38a_1ib.M38A LVDS_I_CLK_N - @m38a_1ib.M38A LVDS_I_CLK_P - @m38a_1ib.M38A LVDS_I_DATA_N<0> - @m38a_1ib.M38A LVDS_I_DATA_N<1> - @m38a_1ib.M38A LVDS_I_DATA_N<2> - @m38a_1ib.M38A LVDS_I_DATA_N<3> - @m38a_1ib.M38A LVDS_I_DATA_P<0> - @m38a_1ib.M38A LVDS_I_DATA_P<1> - @m38a_1ib.M38A LVDS_I_DATA_P<2> - @m38a_1ib.M38A LVDS_I_DATA_P<3> - @m38a_1ib.M38A LVDS_I_DATA_P<3> - @m38a_1ib.M38A LVDS_VDDEN - @m38a_1ib.M38A LVDS_VREFH - @m38a_1ib.M38A LVDS_VREFL - @m38a_1ib.M38A MEMVTT_VREF - @m38a_1ib.M38A MEM_A<0> - @m38a_1ib.M38A MEM_A<1> - @m38a_1ib.M38A MEM_A<1> - @m38a_1ib.M38A MEM_A<1> - @m38a_1ib.M38A MEM_A<2> - @m38a_1ib.M38A MEM_A<3> - @m38a_1ib.M38A MEM_A<4> - @m38a_1ib.M38A MEM_A<5> - @m38a_1ib.M38A MEM_A<6> - @m38a_1ib.M38A MEM_A<7> - @m38a_1ib.M38A MEM_A<8> - @m38a_1ib.M38A MEM_A<9> - @m38a_1ib.M38A MEM_A<10> - @m38a_1ib.M38A MEM_A<11> - @m38a_1ib.M38A MEM_A<12> - @m38a_1ib.M38A	75A8 75C5 75A6 75C5 75A4 75B6 75B7 75A4 75B4 75B4 75C7 75A4 75B5 75A4 75C5 75A8 75C2 75A6 75B2 75A4 75B6 75C6 75C6 77D5 75C6 75C7 7						

A
$$N \leq 0$$
A



D

C

C

B

A

SMC_WAKE_SCI_L - @m38a_11b.M38A	23C1 58D5	TP_NB_TESTIN_L - @m38a_11b.M38A	14D6	@m38a_11b.M38A
SMC_XDP_TCK	58C7	TP_NB_XOR_FSB2_H7 - @m38a_11b.M38A	58C7	=PPIV5_S0_SB_VCC1_5_A -
SMC_XDP_TCK_3_3 - @m38a_11b.M38A	58B5 58A5	TP_NB_XOR_LVDS_A34 - @m38a_11b.M38A	22C6	6C4 24A3 25C1
SMC_XDP_TDO_3_3_L - @m38a_11b.M38A	58B7 58A5	TP_NB_XOR_LVDS_A35 - @m38a_11b.M38A	14C6	=PPIV5_S0_SB - @m38a_11b.M38A
SMC_XDP_TMS_L - @m38a_11b.M38A	58C7	TP_NB_XOR_LVDS_D27 - @m38a_11b.M38A	14C6	=PPIV5_S0_NB_VCCD_HMPLL -
SMC_XDP_TRST_L - @m38a_11b.M38A	58C7	TP_NB_XOR_LVDS_D28 - @m38a_11b.M38A	14C6	@m38a_11b.M38A
SMC_XTAL	58C3 5988	TP_PCI_CLK_SPARE - @m38a_11b.M38A	584 34C4	=PPIV5_S0_NB_VCCAUX -
SMLINK<0>	23D5	TP_PCI_GNT0_L - @m38a_11b.M38A	22B6	@m38a_11b.M38A
SMLINK<1>	23D5	TP_PCI_GNT2_L - @m38a_11b.M38A	22B6	=PPIV5_S0_NB_VTDAC - @m38a_11b.M38A
SMS_INT_L	23C3 26C2 58B5	TP_PCI_GNT3_L - @m38a_11b.M38A	22B6	=PPIV5_S0_NB_PLL - @m38a_11b.M38A
SMS_ONOFF_L	58A5 5984	TP_PCI_GNT4_L - @m38a_11b.M38A	22B6	=PPIV5_S0_NB_PCIE - @m38a_11b.M38A
SMS_X_AXIS	58B7 5986	TP_PCI_PME_L - @m38a_11b.M38A	22A6	=PPIV5_S0_NB_3GPLL - @m38a_11b.M38A
SMS_Y_AXIS	58B7 5986	TP_SB_ACZ_SDI1 - @m38a_11b.M38A	21C5	=PPIV5_S0_CPU - @m38a_11b.M38A
SMS_Z_AXIS	58B5	TP_SB_ACZ_SDI2 - @m38a_11b.M38A	21C6	=PPIV5_S0_CPU - @m38a_11b.M38A
SPARE_SRC3_N	58A7 5986	TP_SB_DRQ0_L - @m38a_11b.M38A	21D4	=PPIV5_S0_AIRPORT - @m38a_11b.M38A
SPARE_SRC3_P	58B5	TP_SB_GPI06 - @m38a_11b.M38A	23C5	U600_3 - @m38a_11b.M38A
SPARE_SRC7_N	58B5	TP_SB_GPI023 - @m38a_11b.M38A	21D5	U600_6 - @m38a_11b.M38A
SPARE_SRC7_P	44D2	TP_SB_GPI025_DO_NOT_USE	23C3	U600_8 - @m38a_11b.M38A
SPI_ARB	44D2	TP_SB_GPI038	23C3	U600_11 - @m38a_11b.M38A
SPI_CLK_L	22C6 58D5	TP_SB_GPI038 - @m38a_11b.M38A	22A6	U650_4 - @m38a_11b.M38A
SPI_HOLD_L	22C6 58B5 63C7	TP_SB_RSVD9	22A6	U2698_4 - @m38a_11b.M38A
SPI_SCLK	22C6 58D5 63C7	TP_SB_SATALED_L - @m38a_11b.M38A	21C6	U3100_VDDQ - @m38a_11b.M38A
SPI_SCLK_R	63C4	TP_SB_XOR_AD5 - @m38a_11b.M38A	22A7	U6100_VCC - @m38a_11b.M38A
SPI_SI	22C6 58D5 63C1	TP_SB_XOR_AD9 - @m38a_11b.M38A	22A7	U7400_CEXT - @m38a_11b.M38A
SPI_SI_R	63C3	TP_SB_XOR_AE5 - @m38a_11b.M38A	22A7	U8595_1 - @m38a_11b.M38A
SPI_SO	22C6 58D5 63C1	TP_SB_XOR_AE9 - @m38a_11b.M38A	22A6	USB_A_N - @m38a_11b.M38A
SPI_SO_R	63C3	TP_SB_XOR_AG4 - @m38a_11b.M38A	22A7	USB_A_OC_L - @m38a_11b.M38A
SPI_WP_L	63C4	TP_SB_XOR_AG8 - @m38a_11b.M38A	22A6	USB_A_P - @m38a_11b.M38A
SPKRAMP	72B5	TP_SB_XOR_AH4 - @m38a_11b.M38A	22A7	USB_B_N - @m38a_11b.M38A
SPKRAMP_SS	72B4	TP_SB_XOR_AH8 - @m38a_11b.M38A	22A6	USB_B_OC_L - @m38a_11b.M38A
SUS_CLK_SB	58C3 59B5	TP_SB_XOR_T5 - @m38a_11b.M38A	21C6	USB_B_P - @m38a_11b.M38A
SUS_CLK_SB	58C5 59B6	TP_SB_XOR_U3 - @m38a_11b.M38A	21C6	USB_CAMERA_N
SV_SET_UP	23B6 23C3 60C1	TP_SB_XOR_U5 - @m38a_11b.M38A	21C6	USB_CAMERA_P - @m38a_11b.M38A
SW_RST_BTN_L	5D1 26C6	TP_SB_XOR_U7 - @m38a_11b.M38A	21C6	USB_C_N - @m38a_11b.M38A
SW_RST_DEBNC	26C4	TP_SB_XOR_V3 - @m38a_11b.M38A	21C6	USB_C_OC_L - @m38a_11b.M38A
SYS_LED_BRT_D	60B8	TP_SB_XOR_V4 - @m38a_11b.M38A	21C6	USB_C_P - @m38a_11b.M38A
SYS_LED_C	60A6	TP_SB_XOR_V6 - @m38a_11b.M38A	21C6	USB_D_N - @m38a_11b.M38A
SYS_LED_CTL_B	60B7	TP_SB_XOR_V7 - @m38a_11b.M38A	21C6	USB_D_OC_L - @m38a_11b.M38A
SYS_LED_CTL_C	60B6	TP_SB_XOR_W1 - @m38a_11b.M38A	21C6	USB_D_P - @m38a_11b.M38A
SYS_LED_CTL_D	60A6	TP_SB_XOR_W3 - @m38a_11b.M38A	21C6	USB_E_N - @m38a_11b.M38A
SYS_ONWIRE	58B7 59B4	TP_SB_XOR_Y1 - @m38a_11b.M38A	21C6	USB_E_OC_L - @m38a_11b.M38A
SYS_POWERFAIL_L	5D8 76D2	TP_SB_XOR_Y2 - @m38a_11b.M38A	21C6	USB_E_P - @m38a_11b.M38A
SYS_PWRUP_L	6C7	TP_U8400_AG14 - @m38a_11b.M38A	91A5	USB_F_N - @m38a_11b.M38A
THERM_DX_N	10B5 10C5	TP_U8900_J2 - @m38a_11b.M38A	89A7	USB_F_P - @m38a_11b.M38A
THERM_DX_P	10B5 10C5	TP_U8900_J3 - @m38a_11b.M38A	89A7	USB_G_N - @m38a_11b.M38A
THRM_ALERT_L	10D3	TP_U8950_J2 - @m38a_11b.M38A	89A4	USB_BT_N - @m38a_11b.M38A
THRM_THM	10C4	TP_U8950_J3 - @m38a_11b.M38A	89A4	USB_G_P - @m38a_11b.M38A
TMDS_CK_TERM	97C8	TP_U9000_J2 - @m38a_11b.M38A	90A7	USB_BT_P - @m38a_11b.M38A
TMDS_CLK_N	93C3 97C8	TP_U9000_J3 - @m38a_11b.M38A	90A7	USB_H_N - @m38a_11b.M38A
TMDS_CLK_P	93C3 97C8	TP_U9050_J2 - @m38a_11b.M38A	90A4	USB_H_P - @m38a_11b.M38A
TMDS_CONN_CLKN	97C4 97C7	TP_U9050_J3 - @m38a_11b.M38A	90A4	USB_IR_N - @m38a_11b.M38A
TMDS_CONN_CLKP	97C4 97C7	TSSENSE_GPU_DXP	61C5	USB_IR_P - @m38a_11b.M38A
TMDS_CONN_DN<0>	97C4 97D7	TSSENSE_NB_DXP - @m38a_11b.M38A	61B5	USB_PORT0_N - @m38a_11b.M38A
TMDS_CONN_DN<1>	97C4 97D7	TSSENSE_NB_GPU_DXN - @m38a_11b.M38A	61B5	USB_PORT0_P - @m38a_11b.M38A
TMDS_CONN_DN<2>	97C4 97D7	TV_DACC_OUT - @m38a_11b.M38A	13C5 19B1	USB_PORT1_N - @m38a_11b.M38A
TMDS_CONN_DP<0>	97C4 97D7	TV_DACC_OUT - @m38a_11b.M38A	13C5 19B1	USB_PORT1_P - @m38a_11b.M38A
TMDS_CONN_DP<1>	97C4 97D7	TV_IRTNA - @m38a_11b.M38A	13C5 19B1	USB_PORT2_N - @m38a_11b.M38A
TMDS_CONN_DP<2>	97C4 97D7	TV_IRTNA - @m38a_11b.M38A	13C5 19B1	USB_PORT2_P - @m38a_11b.M38A
TMDS_CONN_DP<3>	97C4 97D7	TV_IRTNB - @m38a_11b.M38A	13C5 19B1	USB_RBIAS_PN
TMDS_CONN_DP<4>	97C4 97D7	TV_IRTNC - @m38a_11b.M38A	13C5 19B1	VGA_B - @m38a_11b.M38A
TMDS_CONN_DP<5>	97C4 97D7	TV_IREF - @m38a_11b.M38A	13C5 19B1	VGA_G - @m38a_11b.M38A
TMDS_DATA_N<0>	93C3 97D8	PP3V3_S0_NB_VCCA_TVBO - @m38a_11b.M38A	17C6 19B1	VGA_HSYNC - @m38a_11b.M38A
TMDS_DATA_N<1>	93C3 97D8	PP3V3_S0_NB_VCCA_TVBO - @m38a_11b.M38A	17C6 19B1	VGA_R - @m38a_11b.M38A
TMDS_DATA_N<2>	93C3 97C8	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	VGA_VSYNC
TMDS_DATA_N<3>	93C3 95D6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	VGA_VSYNC - @m38a_11b.M38A
TMDS_DATA_N<4>	93C3 95D6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	VMAIN_AVLBLE
TMDS_DATA_N<5>	93C3 95D6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	VREG_FB - @m38a_11b.M38A
TMDS_DATA_P<0>	93C3 97D8	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	VR_PWRGCD_CK410
TMDS_DATA_P<1>	93C3 97C8	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	VR_PWRGCD_DELAY
TMDS_DATA_P<2>	93C3 97C8	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	VR_PWRGCD_DELAY - @m38a_11b.M38A
TMDS_DATA_P<3>	93C3 95D6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	XDP_BPM_L<0>
TMDS_DATA_P<4>	93C3 95D6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	XDP_BPM_L<1>
TMDS_DATA_P<5>	93C3 95D6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	XDP_BPM_L<2>
TPM_BADD	67C4	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17B6 19A1	XDP_BPM_L<3>
TPM_GP101	58B5 67C6	=PPIV5_S0_AIRPORT - @m38a_11b.M38A	6C4 53D3	XDP_BPM_L<4>
TPM_GP102	58B5 67C6	=PPIV5_S0 - @m38a_11b.M38A	6C4 53D3	XDP_BPM_L<5>
TPM_LRESET_L	6B7 67B7	=PPIV5_S0_SB - @m38a_11b.M38A	6C4 11A7 11B7 11B7 80C2	XDP_DBRESET_L
TPM_PP	59A5 67C6	=PPIV5_S0_SB_VCC1_5_A - @m38a_11b.M38A	6C4 24A3 25C1	XDP_TCK
TPM_RST_L	67B6	@m38a_11b.M38A		XDP_TDI
TPM_XTALI	59B7 67C6	=PPIV5_S0_SB_VCC1_5_A_USB_CORE - @m38a_11b.M38A	6C4 24A3 25B1	XDP_TDO
TPM_XTALO	59B7 67C6	@m38a_11b.M38A		XDP_TMS
TP_ATI_ROMCS_L	91A3	=PPIV5_S0_SB_VCCUSBPILL - @m38a_11b.M38A	6C4 24A5 25B6	XDP_TRST_L
TP_AZ_DOCK_EN_L	23C5	@m38a_11b.M38A		ZH701P1
TP_AZ_DOCK_RST_L	23C5	=PPIV5_S0_SB_VCC1_5_A_ATX - @m38a_11b.M38A	6C4 24A5 25C6	ZH702P1
TP_CLK14P3M_SPARE	34C4	@m38a_11b.M38A		ZH703P1
TP_CPU_A32_L	7B7	=PPIV5_S0_SB_VCCSATAPLL - @m38a_11b.M38A	6C4 24B5 25D6	ZH704P1
TP_CPU_A33_L	7B7	@m38a_11b.M38A		
TP_CPU_A34_L	7B7	=PPIV5_S0_SB_VCC1_5_A_ARB - @m38a_11b.M38A	6C4 24B5 25D6	
TP_CPU_A35_L	7B7	@m38a_11b.M38A		
TP_CPU_A36_L	7B7	=PPIV5_S0_NB_3GPLL - @m38a_11b.M38A	6C4 19A6 19A6	
TP_CPU_A37_L	7B7	=PPIV5_S0_NB_PLL - @m38a_11b.M38A	6C4 19C8 19D7	
TP_CPU_A38_L	7B7	=PPIV5_S0_NB_VCCAUX - @m38a_11b.M38A	6C4 6C4 16D1 17B6 19A7	
TP_CPU_A39_L	7B7	@m38a_11b.M38A		
TP_CPU_APM0_L	7B7	=PPIV5_S0_NB_VCCD_HMPLL - @m38a_11b.M38A	6C4 17C6 19D7	
TP_CPU_APM1_L	7B7	@m38a_11b.M38A		
TP_CPU_CPUSUP_L	7B6	=PPIV5_S0_NB_PCIE - @m38a_11b.M38A	6C4 13D2 19D7	
TP_CPU_EXTBREF	7B6	=PPIV5_S0_CPU - @m38a_11b.M38A	6C4 8B6 8C5	
TP_CPU_HFPILL	7B7	TV_IRTNC - @m38a_11b.M38A	13C5 19B1	
TP_CPU_SPARE0	7B6	TV_IRTNB - @m38a_11b.M38A	13C5 19B1	
TP_CPU_SPARE1	7B6	TV_IRTNA - @m38a_11b.M38A	13C5 19B1	
TP_CPU_SPARE2	7B6	TV_IREF - @m38a_11b.M38A	13C5 19B1	
TP_CPU_SPARE3	7B6	TV_DACC_OUT - @m38a_11b.M38A	13C5 19B1	
TP_CPU_SPARE4	7B6	TV_DACC_OUT - @m38a_11b.M38A	13C5 19B1	
TP_CPU_SPARE5	7B6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	
TP_CPU_SPARE6	7B6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	
TP_CPU_SPARE7	7B6	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	
TP_FB_A_MA12	87B5	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	
TP_FB_A_ODT<0>	87B5	PP3V3_S0_NB_VCCA_TVBO - @m38a_11b.M38A	17C6 19B1	
TP_FB_A_ODT<1>	87D1	PP3V3_S0_NB_VCCA_TVBO - @m38a_11b.M38A	17C6 19B1	
TP_FB_B_MA12	87B1	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17C6 19B1	
TP_FB_B_ODT<0>	87B1	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17B6 19A1	
TP_FB_B_ODT<1>	44B3	PP3V3_S0_NB_VCCA_TVDDACC - @m38a_11b.M38A	17B6 19A1	
TP_FW_CNA	44B3	PP3V3_S0 - @m38a_11b.M38A	6C6 11A7 11B7 11B7 80C2	
TP_FW_LKON	44B3	=PPIV5_S0_SB_VCCUSBPILL - @m38a_11b.M38A	6C4 24A5 25B6	
TP_FW_LPS	44B3	=PPIV5_S0_SB_VCC1_5_A_ATX - @m38a_11b.M38A	6C4 24A5 25C6	
TP_FW_MPCIACT_L	44B3	=PPIV5_S0_SB_VCCSATAPLL - @m38a_11b.M38A	6C4 24B5 25D6	
TP_FW_NANDTREE	44B3	=PPIV5_S0_SB_VCC1_5_A_USB_CORE - @m38a_11b.M38A	6C4 24A3 25B1	
TP_FW_ROM_AD	44B3	=PPIV5_S0_SB_VCC1_5_A_ATX - @m38a_11b.M38A	6C4 24A5 25C6	
TP_FW_VAUX_PRES	44B3	=PPIV5_S0_SB_VCC1_5_A_ARB - @m38a_11b.M38A	6C4 24B5 25D6	
TP_LVDS_VBG	13D5			
TP_MEM_A_A<14>	28C3			
TP_MEM_A_A<15>	28C3			
TP_MEM_B_A<14>	5B4 29C3			
TP_MEM_B_A<15>	5B4 29C3			

U600_3	U600_6	U600_8	U600_11	U650_4	U2698_4	U3100_VDDQ	U6100_VCC	U7400_CEXT	U8595_1	USB_A_N	USB_A_OC_L	USB_A_P	USB_B_N	USB_B_OC_L	USB_B_P	USB_CAMERA_N	USB_CAMERA_P	USB_C_N	USB_C_OC_L	USB_C_P	USB_D_N	USB_D_OC_L	USB_D_P	USB_E_N	USB_E_OC_L	USB_E_P	USB_F_N	USB_F_P	USB_G_N	USB_G_P	USB_H_N	USB_H_P	USB_IR_N	USB_IR_P	USB_PORT0_N	USB_PORT0_P	TV_DACC_OUT	TV_DACC_OUT	TV_IRTNA	TV_IRTNB	TV_IRTNC	TV_IREF	PP3V3_S0_NB_VCCA_TVBO	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC	PP3V3_S0_NB_VCCA_TVDDACC
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D	C7528	CAP_402	m38a[75B5]	C8434	CAP_402	m38a[84C5]	C8690	CAP_805	m38a[86D5]	C9342	CAP_402	m38a[93A5]	C	C9345	CAP_805	m38a[93A6]	B							
	C7529	CAP_402	m38a[75B5]	C8435	CAP_402	m38a[84C5]	C8691	CAP_402	m38a[86D5]	C9346	CAP_402	m38a[93A5]												
	C7530	CAP_402	m38a[75D6]	C8436	CAP_402	m38a[84C5]	C8692	CAP_402	m38a[86D5]	C9347	CAP_402	m38a[93A5]												
	C7531	CAP_402	m38a[75B5]	C8437	CAP_402	m38a[84C5]	C8711	CAP_402	m38a[87B7]	C9400	CAP_603-1	m38a[94C7]												
	C7532	CAP_402	m38a[75B6]	C8438	CAP_402	m38a[84C5]	C8713	CAP_402	m38a[87B7]	C9401	CAP_402	m38a[94C6]												
	C7533	CAP_402	m38a[75B6]	C8439	CAP_402	m38a[84C5]	C8715	CAP_402	m38a[87A7]	C9410	CAP_402	m38a[94C5]												
	C7534	CAP_402	m38a[75B5]	C8440	CAP_402	m38a[84B5]	C8716	CAP_402	m38a[87A6]	C9420	CAP_1210	m38a[94C5]												
	C7535	CAP_603	m38a[75D5]	C8441	CAP_402	m38a[84B5]	C8721	CAP_402	m38a[87B4]	C9450	CAP_805	m38a[94C2]												
	C7550	CAP_603	m38a[75D1]	C8442	CAP_402	m38a[84B5]	C8723	CAP_402	m38a[87B4]	C9470	CAP_402	m38a[94B2]												
	C7551	CAP_603	m38a[75D1]	C8443	CAP_402	m38a[84B5]	C8725	CAP_402	m38a[87A4]	C9700	CAP_402	m38a[97C8]												
C	C7590	CAP_402	m38a[75C3]	C8444	CAP_402	m38a[84B5]	C8726	CAP_402	m38a[87A3]	C9710	CAP_603	m38a[97C3]	A	C9711	CAP_402	m38a[97D3]								
	C7592	CAP_402	m38a[75B3]	C8445	CAP_402	m38a[84B5]	C8900	CAP_805	m38a[89D7]	C9713	CAP_402	m38a[97C2]												
	C7596	CAP_402	m38a[75D6]	C8446	CAP_402	m38a[84B5]	C8901	CAP_402	m38a[89D7]	C9714	CAP_402	m38a[97C2]												
	C7597	CAP_1210	m38a[75D1]	C8447	CAP_402	m38a[84B5]	C8902	CAP_402	m38a[89D7]	C9740	CAP_402	m38a[97A7]												
	C7598	CAP_1210	m38a[75D1]	C8448	CAP_402	m38a[84B5]	C8903	CAP_402	m38a[89D7]	C9741	CAP_402	m38a[97A6]												
	C7599	CAP_402	m38a[76D6]	C8449	CAP_402	m38a[84B5]	C8904	CAP_402	m38a[89D6]	C9742	CAP_402	m38a[97A6]												
	C7612	CAP_402	m38a[76B2]	C8450	CAP_402	m38a[84B5]	C8910	CAP_402	m38a[89D7]	C9750	CAP_402	m38a[97B4]												
	C7633	CAP_402	m38a[76C7]	C8451	CAP_402	m38a[84B5]	C8915	CAP_402	m38a[89D6]	C9751	CAP_402	m38a[97A4]												
	C7700	CAP_603	m38a[77D2]	C8455	CAP_402	m38a[84D2]	C8920	CAP_805	m38a[89C8]	D2500	DIODE_SCHOT_SOT23	m38a[25C8]												
	C7703	CAP_402	m38a[77C2]	C8456	CAP_402	m38a[84D2]	C8921	CAP_402	m38a[89C8]	D2501	DIODE_SCHOT_SOT23	m38a[25D8]												
B	C7704	CAP_402	m38a[77C2]	C8457	CAP_402	m38a[84D2]	C8922	CAP_402	m38a[89C7]	D2600	DIODE_SCHOT_SOT23	m38a[26D8]		D2601	DIODE_SCHOT_SOT23	m38a[26C8]								
	C7706	CAP_402	m38a[77D2]	C8458	CAP_402	m38a[84D2]	C8923	CAP_402	m38a[89C7]	D4600	DIODE_SMC	m38a[46D5]												
	C7709	CAP_805	m38a[77D1]	C8459	CAP_402	m38a[84D2]	C8924	CAP_402	m38a[89C7]	D4601	DIODE_SCHOT_SOT23	m38a[46A6]												
	C7710	CAP_402	m38a[77D5]	C8460	CAP_402	m38a[84D2]	C8925	CAP_402	m38a[89C7]	D4700	DIODE_SCHOT_3P_A_SC-	m38a[47C4]												
	C7711	CAP_402	m38a[77D5]	C8461	CAP_402	m38a[84D2]	C8926	CAP_402	m38a[89C6]	D4701	DIODE_SCHOT_3P_A_SC-	m38a[47B4]												
	C7712	CAP_402	m38a[77D4]	C8462	CAP_402	m38a[84D2]	C8931	CAP_402	m38a[89C7]	D4702	DIODE_SCHOT_3P_A_SC-	m38a[47A4]												
	C7750	CAP_402	m38a[77A4]	C8463	CAP_402	m38a[84D2]	C8933	CAP_402	m38a[89C6]	D6500	DIODE_SOT23	m38a[65C4]												
	C7751	CAP_805	m38a[77B5]	C8464	CAP_402	m38a[84C2]	C8950	CAP_805	m38a[89D4]	D6501	DIODE_SOT23	m38a[65B4]												
	C7752	CAP_805	m38a[77B5]	C8465	CAP_402	m38a[84C2]	C8951	CAP_402	m38a[89D4]	D6502	DIODE_SCHOT_SMB	m38a[65C4]												
	C7753	CAP_402	m38a[77B6]	C8466	CAP_402	m38a[84C2]	C8952	CAP_402	m38a[89D4]	D6503	DIODE_SCHOT_SMB	m38a[65B4]												
A	C7754	CAP_402	m38a[77B6]	C8467	CAP_402	m38a[84C2]	C8953	CAP_402	m38a[89D3]	D6600	DIODE_SOT23	m38a[66C4]		D6601	DIODE_SCHOT_SMB	m38a[66C3]								
	C7755	CAP_805	m38a[77B4]	C8468	CAP_402	m38a[84C2]	C8954	CAP_402	m38a[89D3]	D7500	DIODE_SCHOT_SMB	m38a[75C3]												
	C7756	CAP_805	m38a[77B3]	C8469	CAP_402	m38a[84C2]	C8960	CAP_402	m38a[89D3]	D7501	DIODE_SCHOT_SMB	m38a[75B2]												
	C7757	CAP_402	m38a[77A7]	C8470	CAP_402	m38a[84C2]	C8965	CAP_402	m38a[89D3]	D7599	DIODE_SOT23	m38a[76D6]												
	C7797	CAP_402	m38a[77B4]	C8471	CAP_402	m38a[84C2]	C8970	CAP_805	m38a[89C5]	D8520	DIODE_SCHOT_SMB	m38a[85C3]												
	C7798	CAP_603	m38a[77B7]	C8472	CAP_402	m38a[84C2]	C8971	CAP_402	m38a[89C4]	D9700	ZENER_CASE425	m38a[97C1]												
	C7799	CAP_402	m38a[77A3]	C8473	CAP_402	m38a[84C2]	C8972	CAP_402	m38a[89C4]	DP4610	DIODE_DUAL_6P_SOT-36	m38a[46D3]												
	C7800	CAP_1210	m38a[78C3]	C8474	CAP_402	m38a[84C2]	C8973	CAP_402	m38a[89C4]	DP4611	DIODE_DUAL_6P_SOT-36	m38a[46C4]												
	C7801	CAP_P_SM-LF	m38a[78C4]	C8475	CAP_402	m38a[84B2]	C8974	CAP_402	m38a[89C4]	DP4620	DIODE_DUAL_6P_SOT-36	m38a[46B4]												
	C7802	CAP_603	m38a[78C6]	C8476	CAP_402	m38a[84B2]	C8975	CAP_402	m38a[89C3]	DP4621	DIODE_DUAL_6P_SOT-36	m38a[46A4]												



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D	R1104	RES_402	m38a[11B5]	R2719	RES_402	m38a[27B7]	R4356	RES_402	m38a[43C7]	R6504	RES_805	m38a[65C5]	C	R1106	RES_402	m38a[11A3]	R2750	RES_402	m38a[27C7]	R4357	RES_402	m38a[43B7]	R6505	RES_805	m38a[65D5]	B	R1210	RES_402	m38a[12C3]	R2751	RES_402	m38a[27C7]	R4402	RES_402	m38a[44B3]	R6506	RES_402	m38a[65D6]	A	R1211	RES_402	m38a[12C3]	R2800	RES_402	m38a[28C7]	R4403	RES_402	m38a[44B5]	R6507	RES_805	m38a[65B5]	R1220	RES_402	m38a[12B7]	R2801	RES_402	m38a[28C7]	R4407	RES_402	m38a[44A7]	R6508	RES_805	m38a[65B5]	R1221	RES_402	m38a[12B7]	R2900	RES_402	m38a[29A3]	R4409	RES_402	m38a[44B3]	R6509	RES_805	m38a[65B5]	R1225	RES_402	m38a[12B7]	R3001	RES_402	m38a[30D4]	R4410	RES_402	m38a[44D2]	R6510	RES_1206	m38a[65B6]	R1226	RES_402	m38a[12B7]	R3009	RES_402	m38a[30D4]	R4411	RES_402	m38a[44D6]	R6511	RES_402	m38a[65B6]	R1230	RES_402	m38a[12A7]	R3011	RES_402	m38a[30C4]	R4412	RES_402	m38a[44C1]	R6512	RES_805	m38a[65C5]	R1231	RES_402	m38a[12A7]	R3025	RES_402	m38a[30C4]	R4413	RES_402	m38a[44C3]	R6513	RES_805	m38a[65B5]	R1235	RES_402	m38a[12A7]	R3035	RES_402	m38a[30B4]	R4414	RES_402	m38a[44C3]	R6514	RES_805	m38a[65B4]	R1236	RES_402	m38a[12A7]	R3100	RES_402	m38a[31C5]	R4416	RES_402	m38a[44A5]	R6515	RES_805	m38a[65C4]	R1310	RES_402	m38a[13D3]	R3101	RES_402	m38a[31C5]	R4450	RES_402	m38a[44B3]	R6598	RES_402	m38a[65A7]	R1410	RES_402	m38a[14C3]	R3300	RES_402	m38a[33B6]	R4451	RES_402	m38a[44B3]	R6599	RES_402	m38a[65C7]	R1411	RES_402	m38a[14C3]	R3301	RES_402	m38a[33B7]	R4452	RES_402	m38a[44B3]	R6600	RES_402	m38a[66C7]	R1420	RES_402	m38a[14B6]	R3302	RES_402	m38a[33D4]	R4453	RES_402	m38a[44B3]	R6601	RES_805	m38a[66D5]	R1430	RES_402	m38a[14B6]	R3303	RES_402	m38a[33C4]	R4454	RES_402	m38a[44B3]	R6602	RES_805	m38a[66C4]	R1440	RES_402	m38a[14D6]	R3304	RES_402	m38a[33C7]	R4455	RES_402	m38a[44B3]	R6603	RES_805	m38a[66D5]	R1441	RES_402	m38a[14D6]	R3400	RES_402	m38a[34C5]	R4456	RES_402	m38a[46C8]	R6604	RES_1206	m38a[66D5]	R1975	RES_402	m38a[19A4]	R3401	RES_402	m38a[34B5]	R4651	RES_402	m38a[46C7]	R6605	RES_402	m38a[66D6]	R1980	RES_402	m38a[19B7]	R3402	RES_402	m38a[34B5]	R4652	RES_402	m38a[46B8]	R6606	RES_805	m38a[66C5]	R1981	RES_402	m38a[19B7]	R3403	RES_402	m38a[34C5]	R4653	RES_402	m38a[46B7]	R6607	RES_805	m38a[66C3]	R1982	RES_402	m38a[19B8]	R3404	RES_402	m38a[34C5]	R4654	RES_402	m38a[46B7]	R6697	RES_402	m38a[66C8]	R1983	RES_402	m38a[19B8]	R3405	RES_402	m38a[34C5]	R4656	RES_2512-1	m38a[46D6]	R6700	RES_402	m38a[67C6]	R2058	RES_402	m38a[20B4]	R3406	RES_402	m38a[34C5]	R4657	RES_805	m38a[46D6]	R6702	RES_402	m38a[67C4]	R2059	RES_402	m38a[20B4]	R3407	RES_402	m38a[34B5]	R4660	RES_402	m38a[46C7]	R6703	RES_402	m38a[67C4]	R2060	RES_402	m38a[20A4]	R3408	RES_402	m38a[34B5]	R4661	RES_402	m38a[46C7]	R6704	RES_805	m38a[67C2]	R2075	RES_402	m38a[20C7]	R3409	RES_402	m38a[34B5]	R4662	RES_402	m38a[46B7]	R6705	RES_805	m38a[67C3]	R2077	RES_402	m38a[20B7]	R3410	RES_402	m38a[34B5]	R4663	RES_402	m38a[46B7]	R6798	RES_402	m38a[67B6]	R2079	RES_402	m38a[20B7]	R3411	RES_402	m38a[34B5]	R4664	RES_402	m38a[46B7]	R6799	RES_402	m38a[67B6]	R2085	RES_402	m38a[20C4]	R3412	RES_402	m38a[34B5]	R4690	RES_402	m38a[46A7]	R6800	RES_402	m38a[68C6]	R2100	RES_402	m38a[21C3]	R3413	RES_402	m38a[34B5]	R4712	RES_402	m38a[47C5]	R6802	RES_402	m38a[68A5]	R2101	RES_402	m38a[21C4]	R3414	RES_402	m38a[34B5]	R4713	RES_402	m38a[47C5]	R6807	RES_402	m38a[68D7]	R2105	RES_402	m38a[21D6]	R3415	RES_402	m38a[34B5]	R4722	RES_402	m38a[47B5]	R6808	RES_402	m38a[68D3]	R2107	RES_402	m38a[21C2]	R3416	RES_402	m38a[34B5]	R4723	RES_402	m38a[47B5]	R6810	RES_402	m38a[68A3]	R2108	RES_402	m38a[21C2]	R3417	RES_402	m38a[34B5]	R4732	RES_402	m38a[47A5]	R6811	RES_402	m38a[68A3]	R2110	RES_402	m38a[21C2]	R3418	RES_402	m38a[34B5]	R4733	RES_402	m38a[47A5]	R6812	RES_402	m38a[68B7]	R2194	RES_402	m38a[21D4]	R3419	RES_402	m38a[34A5]	R4742	RES_402	m38a[47C2]	R7208	RES_402	m38a[72A4]	R2195	RES_402	m38a[21C6]	R3420	RES_402	m38a[34A5]	R4743	RES_402	m38a[47C2]	R7212	RES_402	m38a[72B8]	R2196	RES_402	m38a[21C6]	R3421	RES_402	m38a[34A5]	R4746	RES_805	m38a[47D2]	R7213	RES_402	m38a[72B7]	R2197	RES_402	m38a[21C6]	R3422	RES_402	m38a[34A5]	R4754	RES_402	m38a[47C2]	R7214	RES_402	m38a[72C5]	R2198	RES_402	m38a[21C6]	R3423	RES_402	m38a[34A5]	R4755	RES_402	m38a[47B2]	R7215	RES_402	m38a[72C7]	R2199	RES_402	m38a[21C3]	R3424	RES_402	m38a[34A5]	R5302	RES_402	m38a[53B4]	R7216	RES_402	m38a[72C5]	R2200	RES_402	m38a[22D7]	R3429	RES_402	m38a[34C1]	R5303	RES_402	m38a[53B4]	R7217	RES_402	m38a[72B5]	R2203	RES_402	m38a[22C2]	R3430	RES_402	m38a[34C1]	R5304	RES_402	m38a[53C6]	R7218	RES_402	m38a[72A5]	R2204	RES_402	m38a[22C2]	R3431	RES_402	m38a[34C1]	R5801	RES_402	m38a[58C2]	R7219	RES_402	m38a[72B6]	R2205	RES_402	m38a[22C6]	R3432	RES_402	m38a[34C1]	R5802	RES_402	m38a[58C2]	R7302	RES_402	m38a[73A3]	R2206	RES_402	m38a[22C5]	R3433	RES_402	m38a[34C1]	R5803	RES_402	m38a[58C2]	R7305	RES_402	m38a[73C8]	R2207	RES_402	m38a[22C5]	R3434	RES_402	m38a[34C1]	R5808	RES_402	m38a[58C3]	R7306	RES_402	m38a[73D4]	R2211	RES_402	m38a[22B3]	R3435	RES_402	m38a[34C1]	R5809	RES_402	m38a[58C2]	R7308	RES_402	m38a[73B8]	R2222	RES_402	m38a[22D6]	R3436	RES_402	m38a[34C1]	R5815	RES_402	m38a[58B3]	R7400	RES_402	m38a[74B4]	R2223	RES_402	m38a[22D6]	R3437	RES_402	m38a[34C1]	R5817	RES_402	m38a[58B3]	R7404	RES_402	m38a[74D5]	R2225	RES_402	m38a[22D7]	R3438	RES_402	m38a[34C1]	R5818	RES_402	m38a[58B3]	R7405	RES_402	m38a[74D5]	R2226	RES_402	m38a[22D5]	R3439	RES_402	m38a[34C1]	R5819	RES_402	m38a[58B3]	R7407	RES_402	m38a[74B4]	R2250	RES_402	m38a[22D7]	R3440	RES_402	m38a[34C1]	R5821	RES_402	m38a[58B3]	R7408	RES_402	m38a[74A4]	R2251	RES_402	m38a[22D6]	R3441	RES_402	m38a[34C1]	R5822	RES_402	m38a[58B3]	R7409	RES_402	m38a[74B4]	R2255	RES_402	m38a[22D7]	R3442	RES_402	m38a[34C1]	R5823	RES_402	m38a[58B3]	R7410	RES_805	m38a[74D2]	R2298	RES_402	m38a[22B5]	R3443	RES_402	m38a[34B1]	R5824	RES_402	m38a[58B3]	R7411	RES_805	m38a[74C2]	R2299	RES_402	m38a[22B5]	R3444	RES_402	m38a[34B1]	R5825	RES_402	m38a[58B3]	R7412	RES_805	m38a[74C2]	R2302	RES_402	m38a[23D3]	R3445	RES_402	m38a[34B1]	R5826	RES_402	m38a[58B3]	R7413	RES_402	m38a[74B4]	R2303	RES_402	m38a[23D3]	R3446	RES_402	m38a[34B1]	R5827	RES_402	m38a[58C5]	R7414	RES_805	m38a[74B7]	R2305	RES_402	m38a[23D3]	R3451	RES_402	m38a[34C4]	R5828	RES_402	m38a[58B3]	R7415	RES_805	m38a[74B8]	R2306	RES_402	m38a[23B7]	R3452	RES_402	m38a[34B7]	R5829	RES_402	m38a[58C3]	R7416	RES_805	m38a[74C7]	R2307	RES_402	m38a[23A7]	R3453	RES_402	m38a[34B8]	R5830	RES_402	m38a[58C3]	R7417	RES_805	m38a[74C8]	R2308	RES_402	m38a[23B7]	R3454	RES_402	m38a[34B7]	R5831	RES_402	m38a[58C3]	R7418	RES_402	m38a[74B6]	R2309	RES_402	m38a[23A7]	R3455	RES_402	m38a[34B8]	R5832	RES_402	m38a[58C3]	R7419	RES_402	m38a[74B6]	R2310	RES_402	m38a[23A7]	R3456	RES_402	m38a[34B7]	R5833	RES_402	m38a[58B3]	R7420	RES_402	m38a[74D5]	R2311	RES_402	m38a[23A7]	R3457	RES_402	m38a[34B7]	R5838	RES_402	m38a[58C2]	R7421	RES_402	m38a[74D8]	R2313	RES_402	m38a[23A7]	R3458	RES_402	m38a[34B8]	R5899	RES_402	m38a[58D3]	R7422	RES_402	m38a[74D7]	R2314	RES_402	m38a[23A7]	R3459	RES_402	m38a[34A7]	R5900	RES_402	m38a[59D7]	R7423	RES_402	m38a[74B6]	R2316	RES_402	m38a[23D7]	R3460	RES_402	m38a[34A7]	R5903	RES_402	m38a[59D2]	R7424	RES_402	m38a[74B6]	R2317	RES_402	m38a[23D7]	R3461	RES_402	m38a[34A7]	R5904	RES_402	m38a[59D2]	R7425	RES_603	m38a[74A5]	R2318	RES_402	m38a[23D7]	R3462	RES_402	m38a[34A8]	R5905	RES_402	m38a[59D2]	R7426	RES_402	m38a[74A4]	R2319	RES_4023



