



REV	ECN	DESCRIPTION OF REVISION
B	0000854735	PRODUCTION RELEASED

VICE MLB


2/4/2010 PVT

K48-DRI

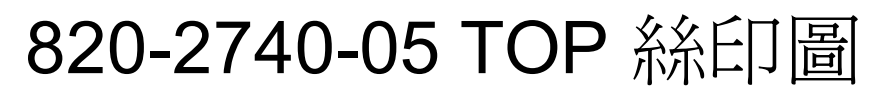
1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.
2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.
3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.

PDF	CSA	CONTENTS	SYNC MASTER	DATE
1	1	TABLE OF CONTENTS		
2	2	SYSTEM BLOCK DIAGRAM	ALEX	05/02/2009
3	3	POWER BLOCK DIAGRAM	MARK	12/04/2009
4	4	CONFIGURATION OPTIONS	MIAMI	08/06/2009
5	5	FUNC/ICT TEST/BRACKETS	MIAMI	09/16/2009
6	6	AP MAIN	JAMES	12/21/2009
7	7	AP PWR,AP BB&WIFI	JAMES	12/21/2009
8	8	AP NAND & GPIO, NOR	JAMES	12/21/2009
9	9	AP RGB/CLCD,CAMERA	JAMES	12/21/2009
10	10	AP TVOUT	JAMES	12/21/2009
11	11	3G AND DEBUG MUXES	JAMES	12/21/2009
12	12	AP MISC & ALIASES	JAMES	12/21/2009
13	14	MLC	MIAMI	09/16/2009
14	15	MLC ALIASES	MIAMI	09/16/2009
15	17	Power Conn / Alias	MARK	12/04/2009
16	18	DCIN POWER PATH	MARK	12/04/2009
17	19	CHARGER	MARK	12/04/2009
18	20	PMU	MARK	12/04/2009
19	21	PMU	MARK	12/04/2009
20	24	3.3V SUPPLY	MARK	12/04/2009
21	26	LED BACKLIGHT CONTROLLER	MARK	12/04/2009
22	29	DEBUG RESET ACCESS	MIAMI	09/16/2009
23	30	GRAPE 1 OF 2	JAMES	12/21/2009
24	31	GRAPE 2 OF 2	JAMES	12/21/2009
25	32	LVDS CONNECTOR	MIAMI	09/16/2009
26	34	MOTION,GYRO,COMPASS/THERM	MIAMI	09/16/2009
27	35	USB MUX/BRK DET	MIAMI	09/16/2009
28	36	L61 AUDIO INTERFACE	AUDIO	12/04/2009
29	37	AUDIO: SPEAKER AMP	AUDIO	12/04/2009
30	38	AUDIO:HEADPHONE OUT	AUDIO	12/04/2009
31	39	AUDIO: LINE OUT DOCK ESD CIRCUIT	AUDIO	12/04/2009

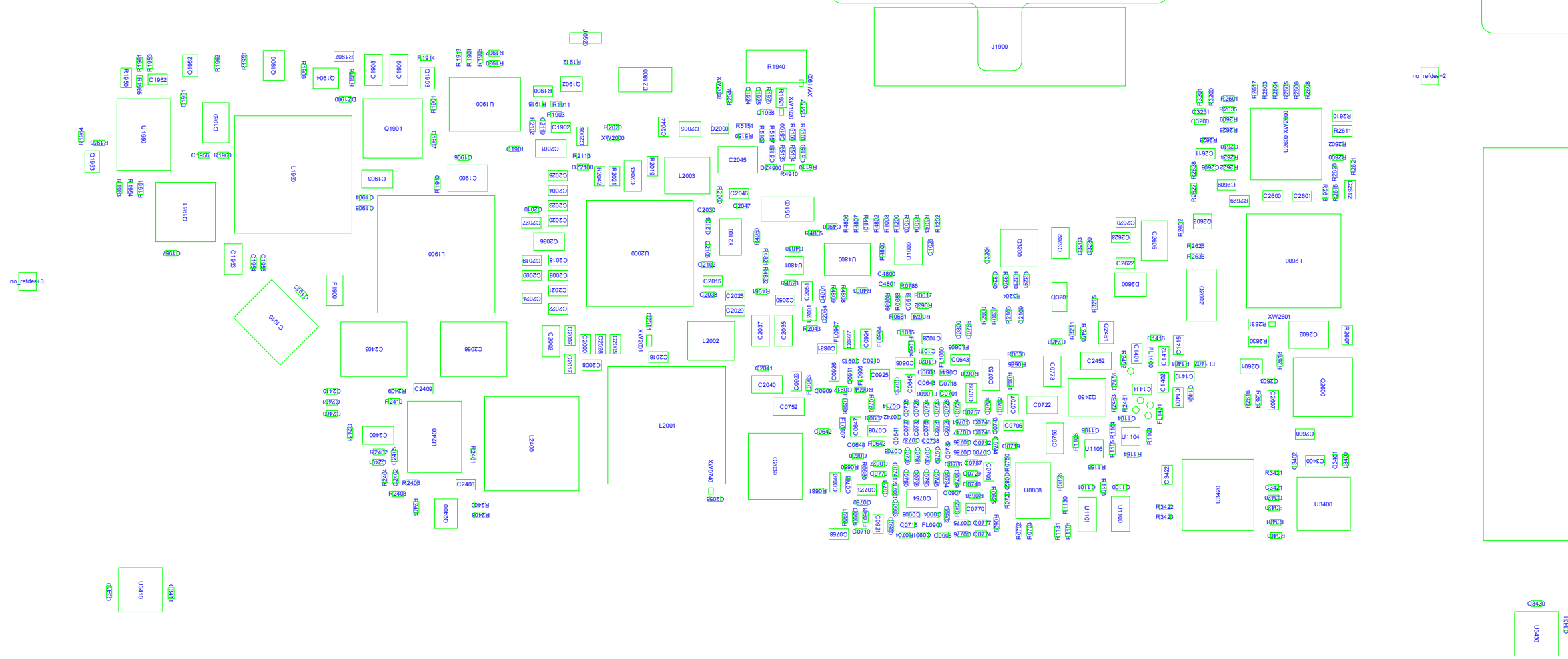
PDF	CSA	CONTENTS	SYNC MASTER	DATE
32	40	AUDIO: AUDIENCE	AUDIO	12/04/2009
33	42	AUDIO: DETECT/MIC BIAS	AUDIO	12/04/2009
34	43	AUDIO: HP CONN	AUDIO	12/04/2009
35	45	ALS CONNECTOR	MIAMI	09/16/2009
36	48	I/O EXPANDER	JAMES	12/21/2009
37	49	DISPLAY PORT SWITCH	JAMES	12/21/2009
38	50	44-PIN LANDSCAPE DOCK CONN	JAMES	12/21/2009
39	51	60-PIN PORTRAIT DOCK CONN	JAMES	12/21/2009
40	54	BUTTONS CONNECTOR	MIAMI	09/16/2009
41	55	3G CONNECTOR	MIAMI	09/16/2009
42	57	PROX SENSOR	MARKSIN	10/14/2009
43	67	FLASH	MIAMI	09/16/2009
44	100	CONSTRAINTS	MIAMI	09/16/2009
45	101	MORE CONSTRAINTS	MIAMI	09/16/2009
46	106	PHYSICAL/SPACING RULES	MIAMI	09/16/2009
47	113	Cross Reference Page		
48	114	Cross Reference Page		
49	115	Cross Reference Page		
50	116	Cross Reference Page		
51	117	Cross Reference Page		
52	118	Cross Reference Page		
53	119	Cross Reference Page		

DRAWING TITLE		DRAWING NUMBER		SIZE	
VICE MLB		051-8245		D	
 Apple Inc.		REVISION			
		B.0.0			
NOTICE OF PROPRIETARY PROPERTY:		BRANCH			
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE I I NOT TO REPRODUCE OR COPY IT I I I NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART I V ALL RIGHTS RESERVED		PAGE			
		1 OF 119			
		SHEET			
		1 OF 53			

DRAWING
TITLE=U230
ABBREV=DRAWING
LAST_MODIFIED=Thu Feb 4 00:41:44 2010



820-2740-05 BOTTOM 絲印圖

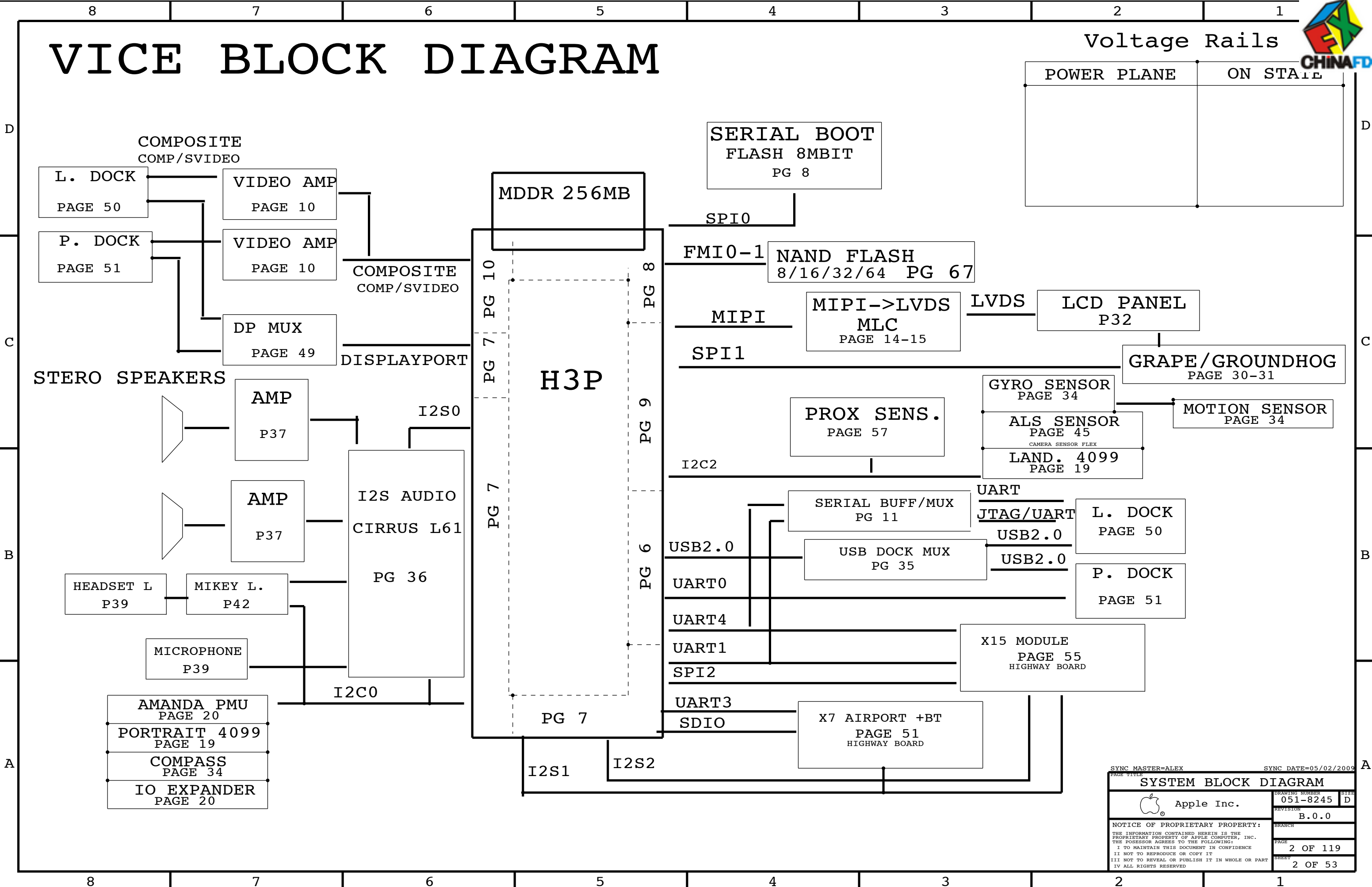
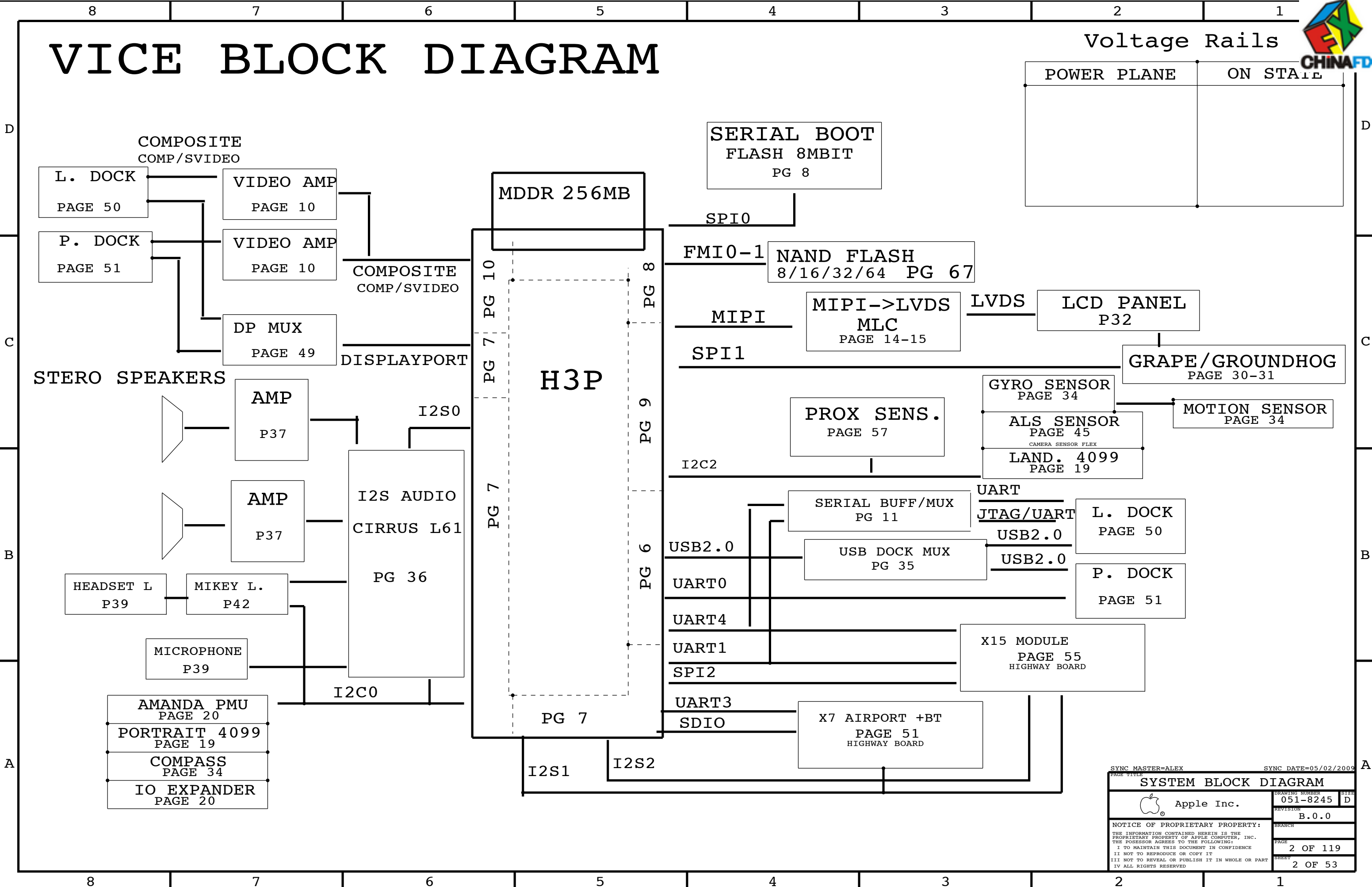
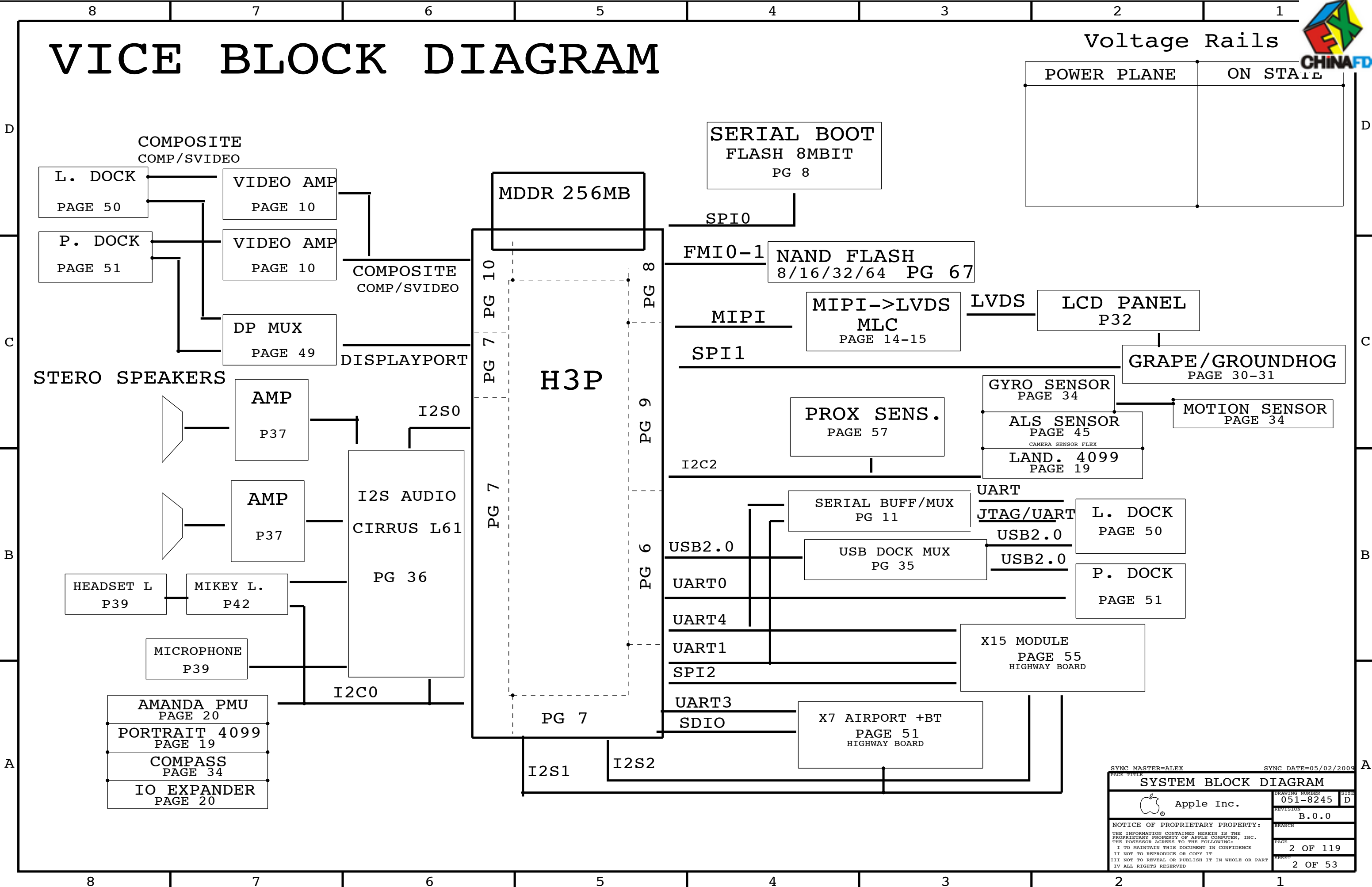
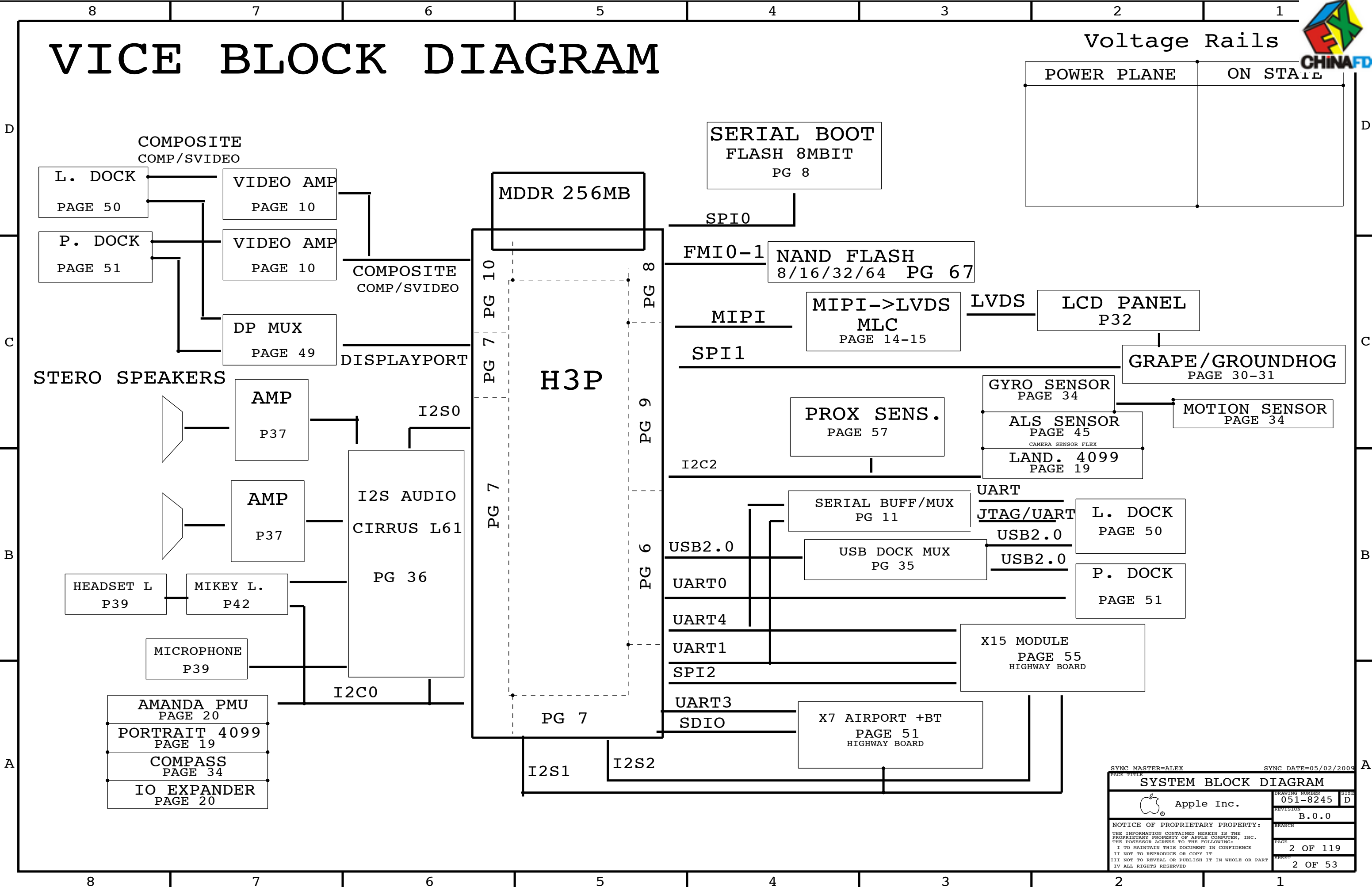


no_refdes+1

no_refdes+2

no_refdes+3

U3400

[illegible]

VICE BLOCK DIAGRAM

This diagram illustrates the system architecture of the VICE platform, centered around the H3P processor. The components are organized into functional blocks connected by various interfaces.

Voltage Rails:

- POWER PLANE
- ON STATE

Central Processor:

- H3P

Storage and Boot:

- SERIAL BOOT FLASH 8MBIT PG 8
- NAND FLASH 8/16/32/64 PG 67
- MDDR 256MB

Display and Video:

- COMPOSITE COMP/SVIDEO
- VIDEO AMP PAGE 10
- L. DOCK PAGE 50
- P. DOCK PAGE 51
- DP MUX PAGE 49
- DISPLAYPORT
- MIPI->LVDS MLC PAGE 14-15
- LCD PANEL P32

Audio and Peripherals:

- STEREO SPEAKERS
- AMP P37
- I2S AUDIO CIRRUS L61 PG 36
- HEADSET L P39
- MIKEY L. P42
- MICROPHONE P39
- AMANDA PMU PAGE 20
- PORTRAIT 4099 PAGE 19
- COMPASS PAGE 34
- IO EXPANDER PAGE 20

Sensors and Miscellaneous:

- PROX SENS. PAGE 57
- GYRO SENSOR PAGE 34
- ALS SENSOR PAGE 45
- CAMERA SENSOR FLEX
- LAND. 4099 PAGE 19
- MOTION SENSOR PAGE 34
- GRAPE/GROUNDHOG PAGE 30-31
- X15 MODULE PAGE 55 HIGHWAY BOARD
- X7 AIRPORT +BT PAGE 51 HIGHWAY BOARD

Connectivity and Control:

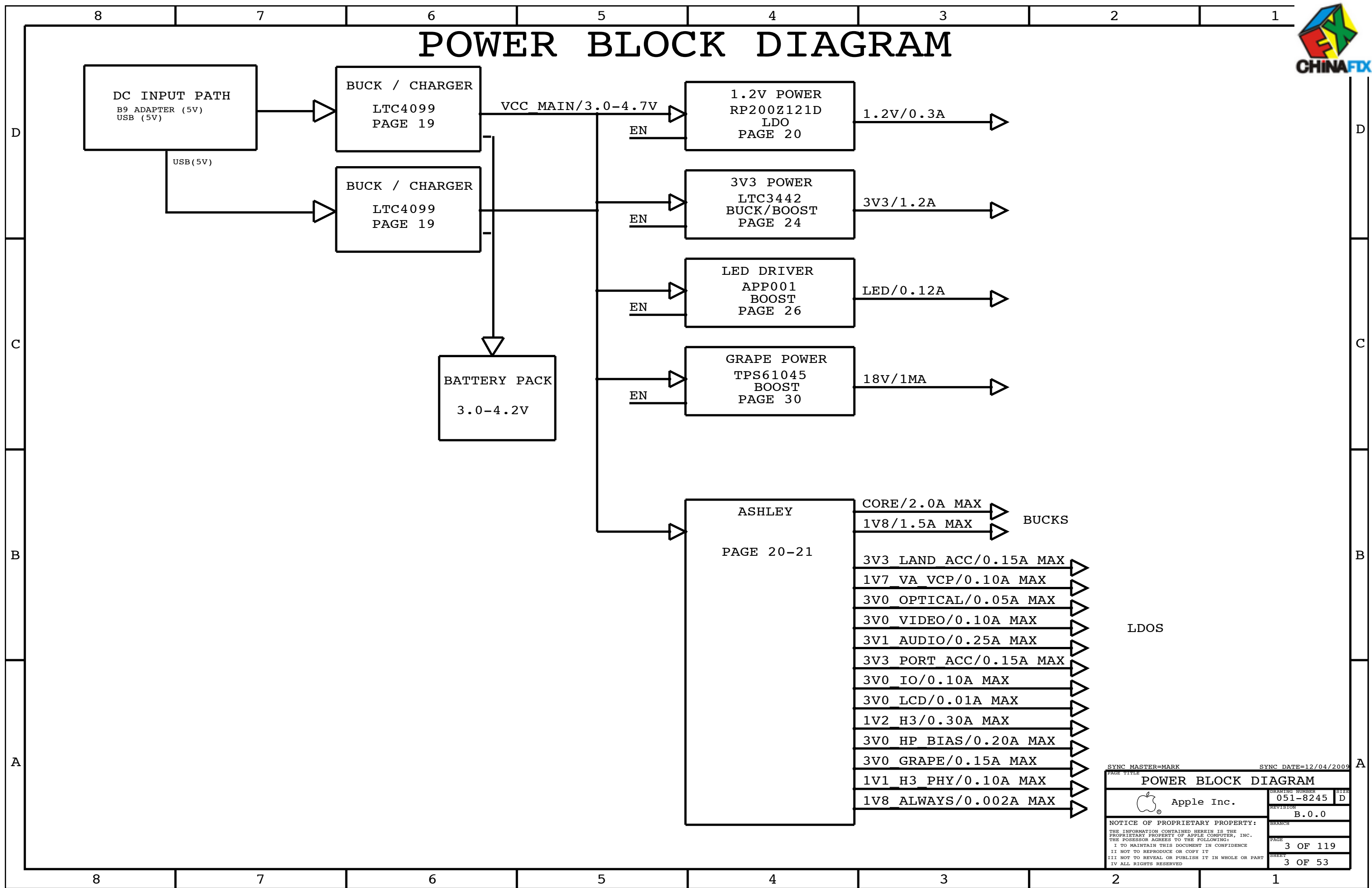
- SPI0
- FMI0-1
- MIPI
- SPI1
- I2C2
- UART
- JTAG/UART
- USB2.0
- USB DOCK MUX PG 35
- UART0
- UART4
- UART1
- SPI2
- UART3
- SDIO
- I2S1
- I2S2
- I2C0
- I2S0


Page Information:

SYNC MASTER=ALEX SYNC DATE=05/02/2009
PAGE TITLE SYSTEM BLOCK DIAGRAM
DRAWING NUMBER 051-8245 D
REVISION B.0.0
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 THIS DOCUMENT IN CONFIDENCE
II NOT TO REPRODUCE OR COPY IT
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART
IV ALL RIGHTS RESERVED
PAGE 2 OF 119
SHEET 2 OF 53



POWER BLOCK DIAGRAM



SYNC MASTER=MARK		SYNC DATE=12/04/2009	
PAGE TITLE			
POWER BLOCK DIAGRAM			
 Apple Inc.		DRAWING NUMBER	SIZE
		051-8245	D
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 THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		REVISION	BRANCH
		B.0.0	
		PAGE	3 OF 119
		SHEET	3 OF 53



D

C

B

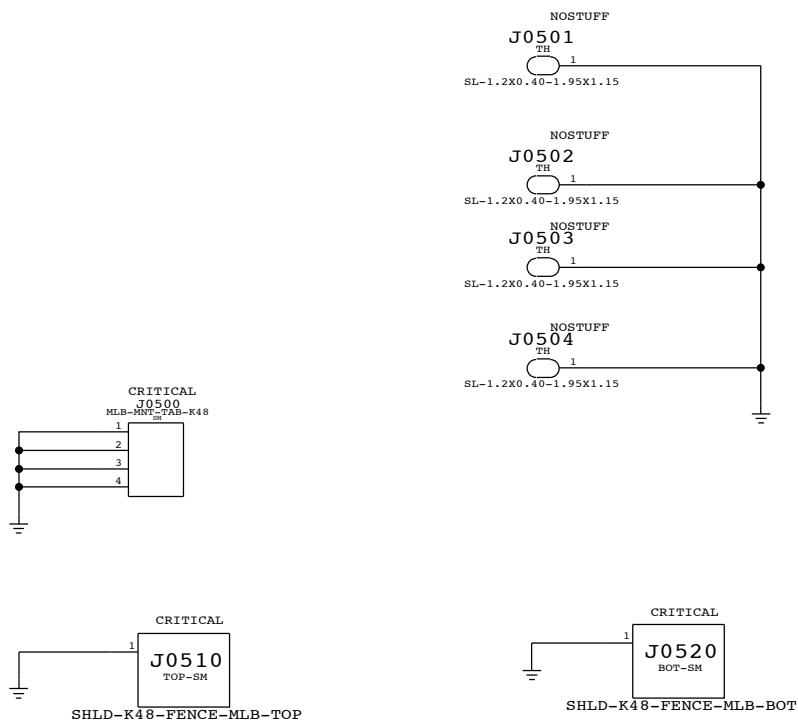
A

D

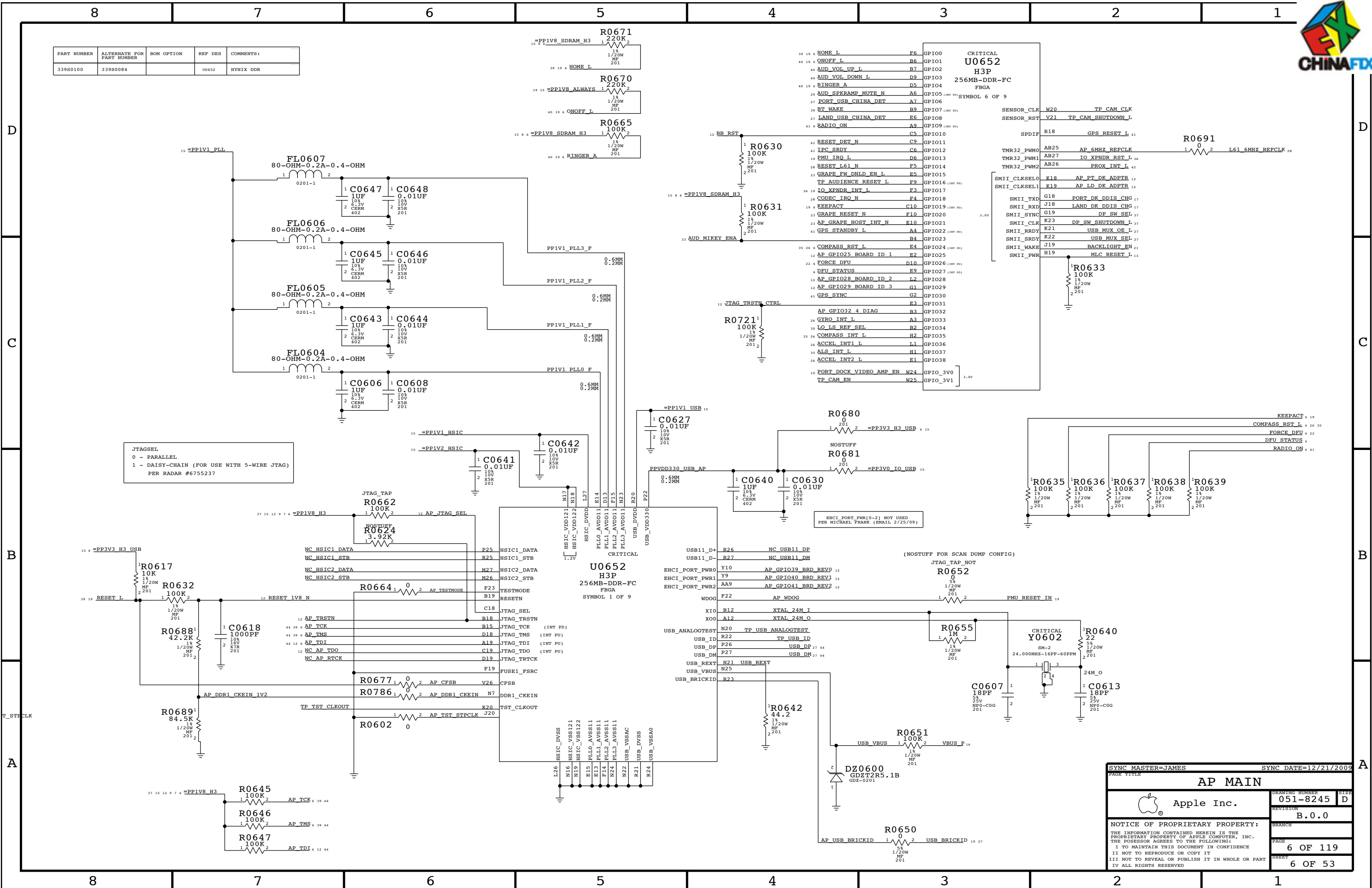
C


B

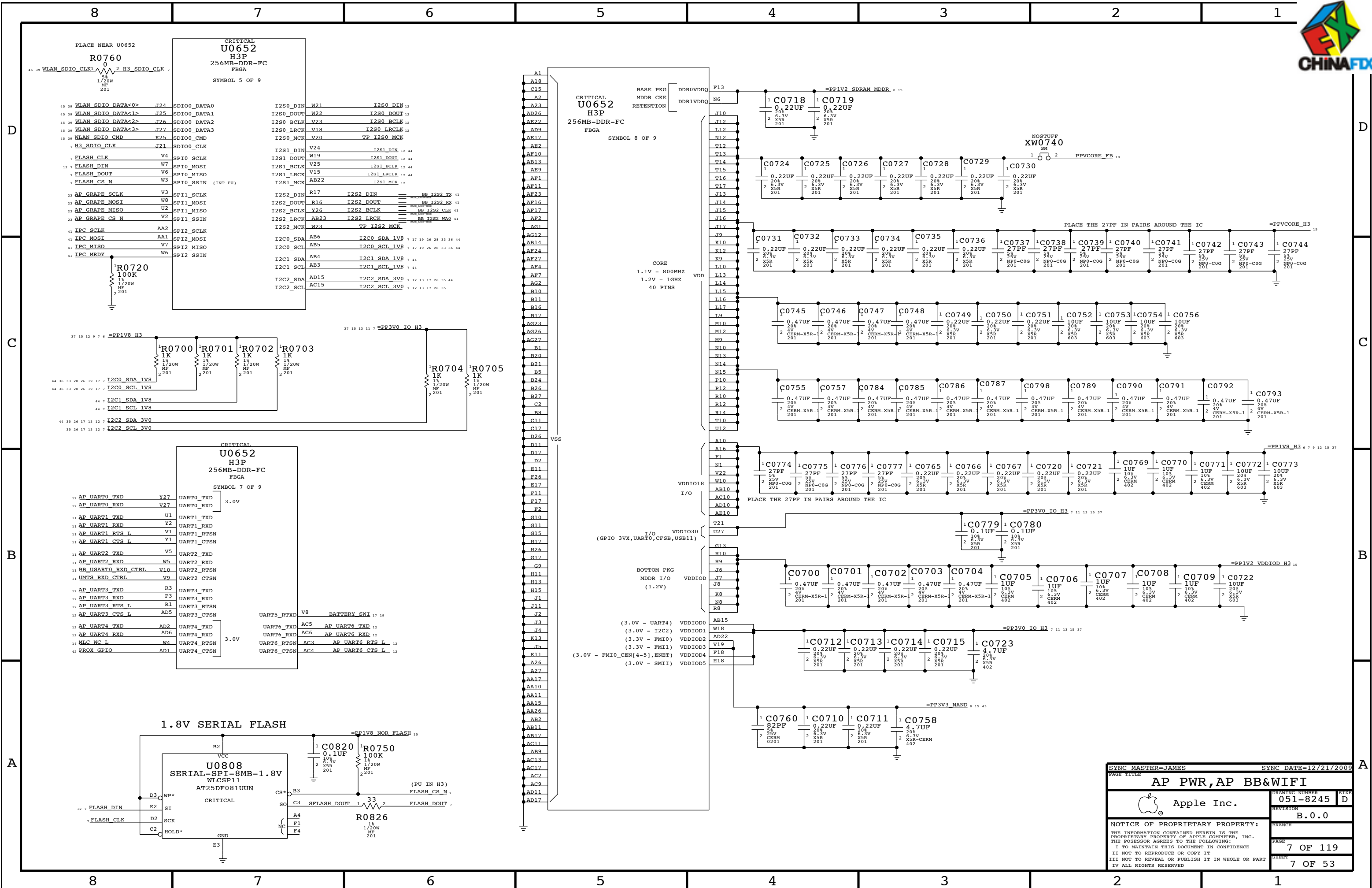
A

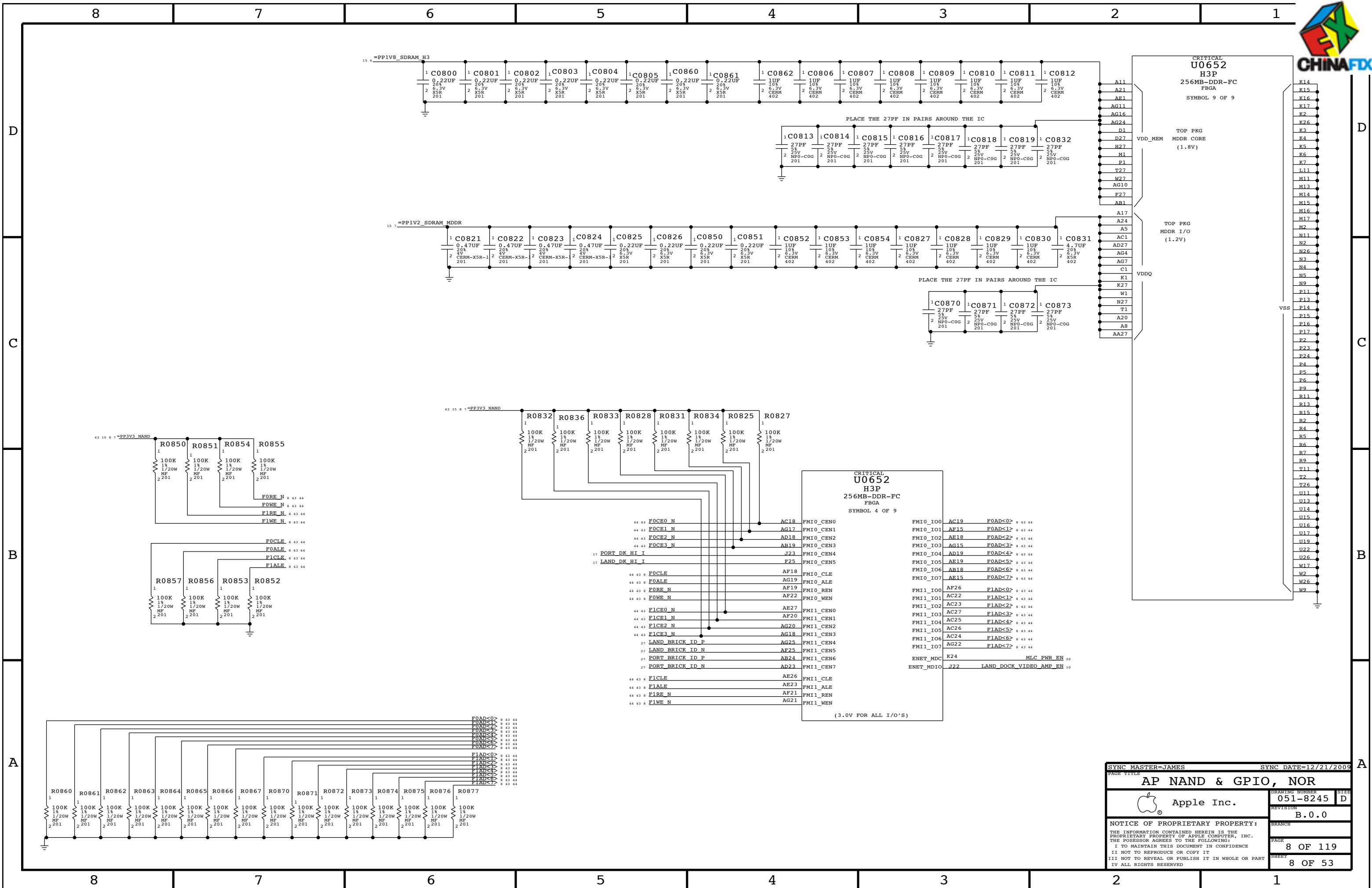


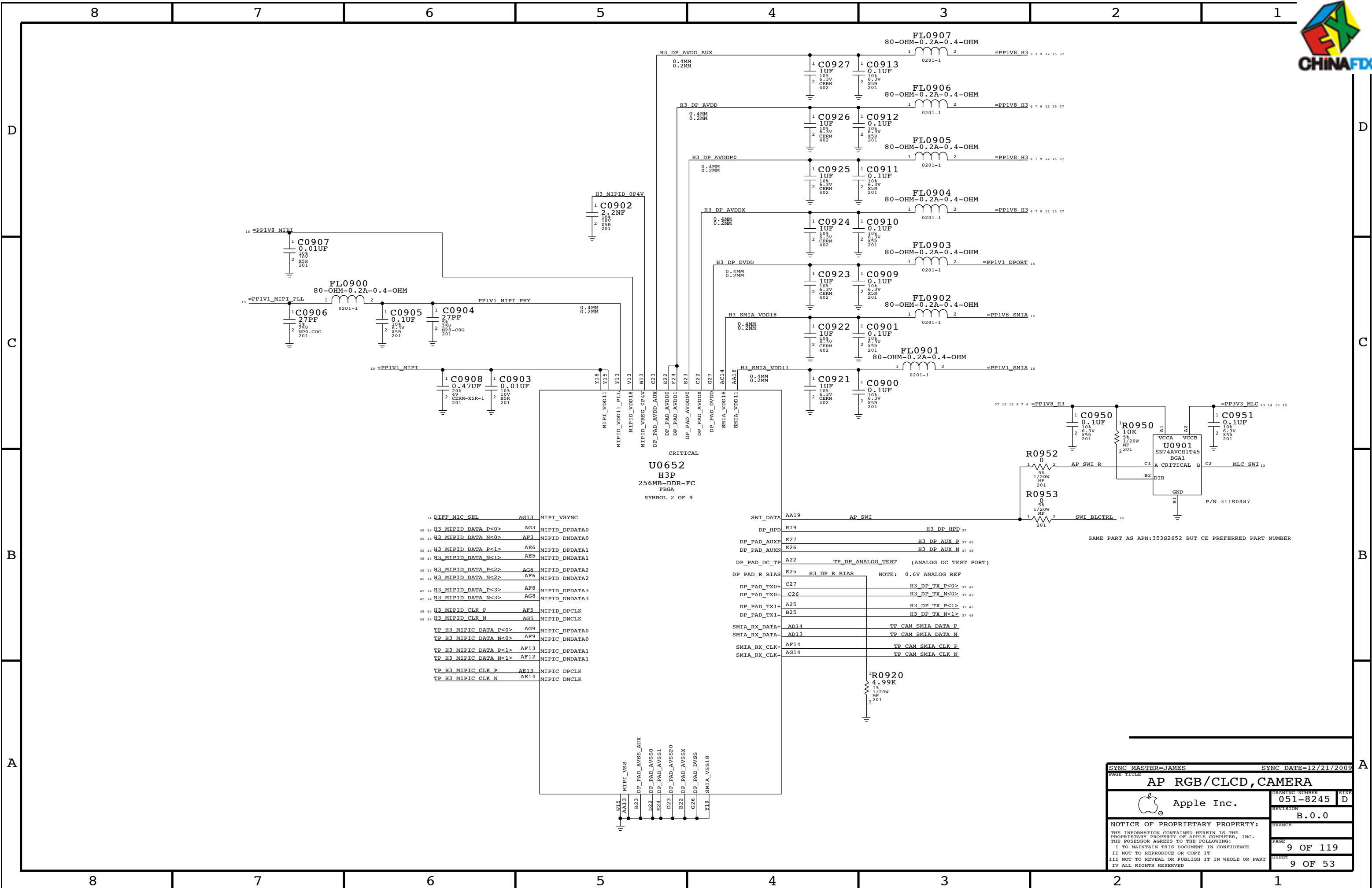
PAGE TITLE		PAGE TITLE	
FUNC/ICT TEST/BRACKETS		051-8245	
Apple Inc.		B.0.0	
NOTICE OF PROPRIETARY PROPERTY:		5 OF 119	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		5 OF 53	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE			
II NOT TO REPRODUCE OR COPY IT			
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART			
IV ALL RIGHTS RESERVED			

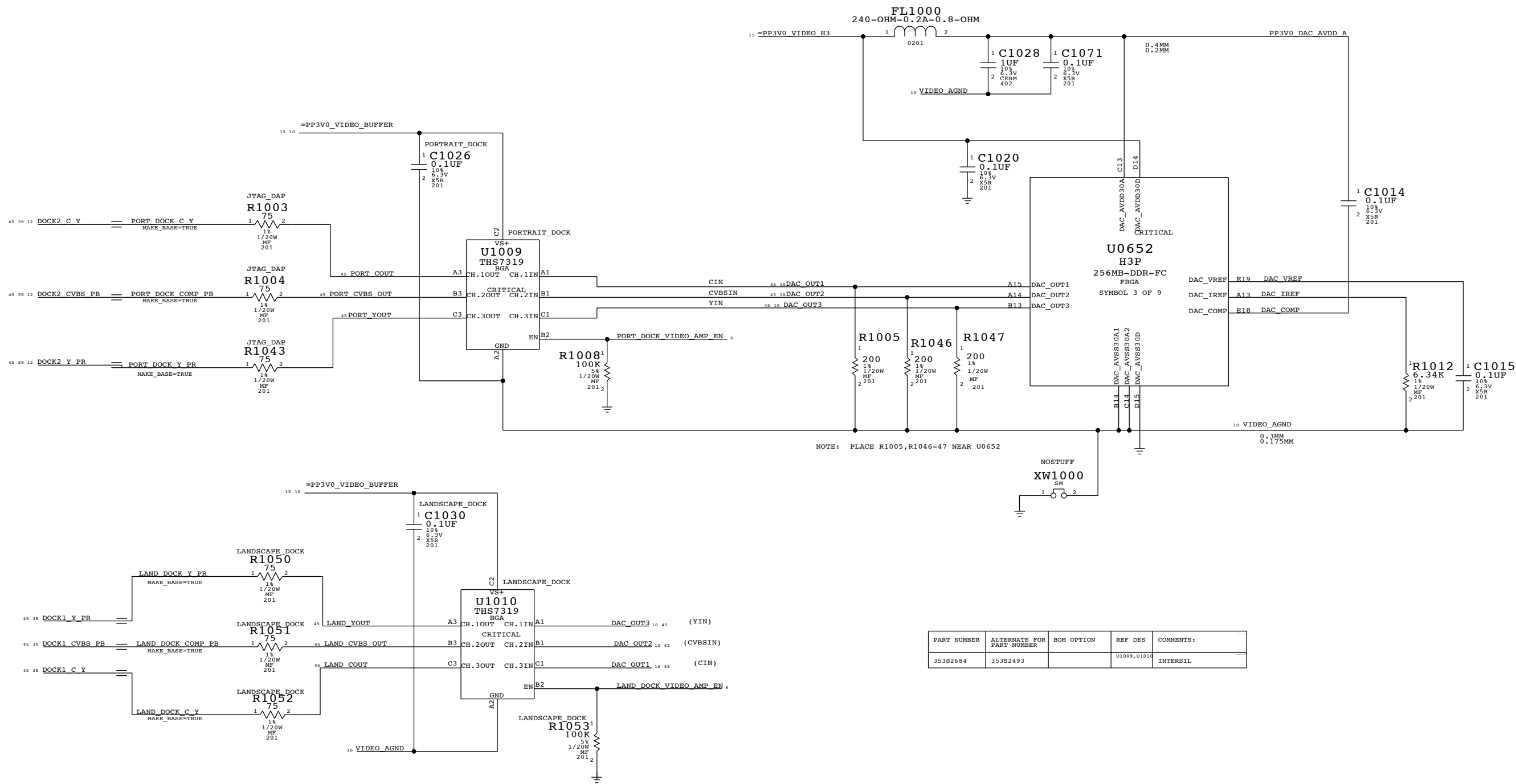


SYNC MASTER=JAMES		SYNC DATE=12/21/2009	
PAGE TITLE			
AP MAIN			
 Apple Inc.		DRAWING NUMBER 051-8245	
		SIZE D	
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE I I NOT TO REPRODUCE OR COPY IT I I I NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		REVISION B.0.0	
		BRANCH	
		PAGE 6 OF 119	
		SHEET 6 OF 53	




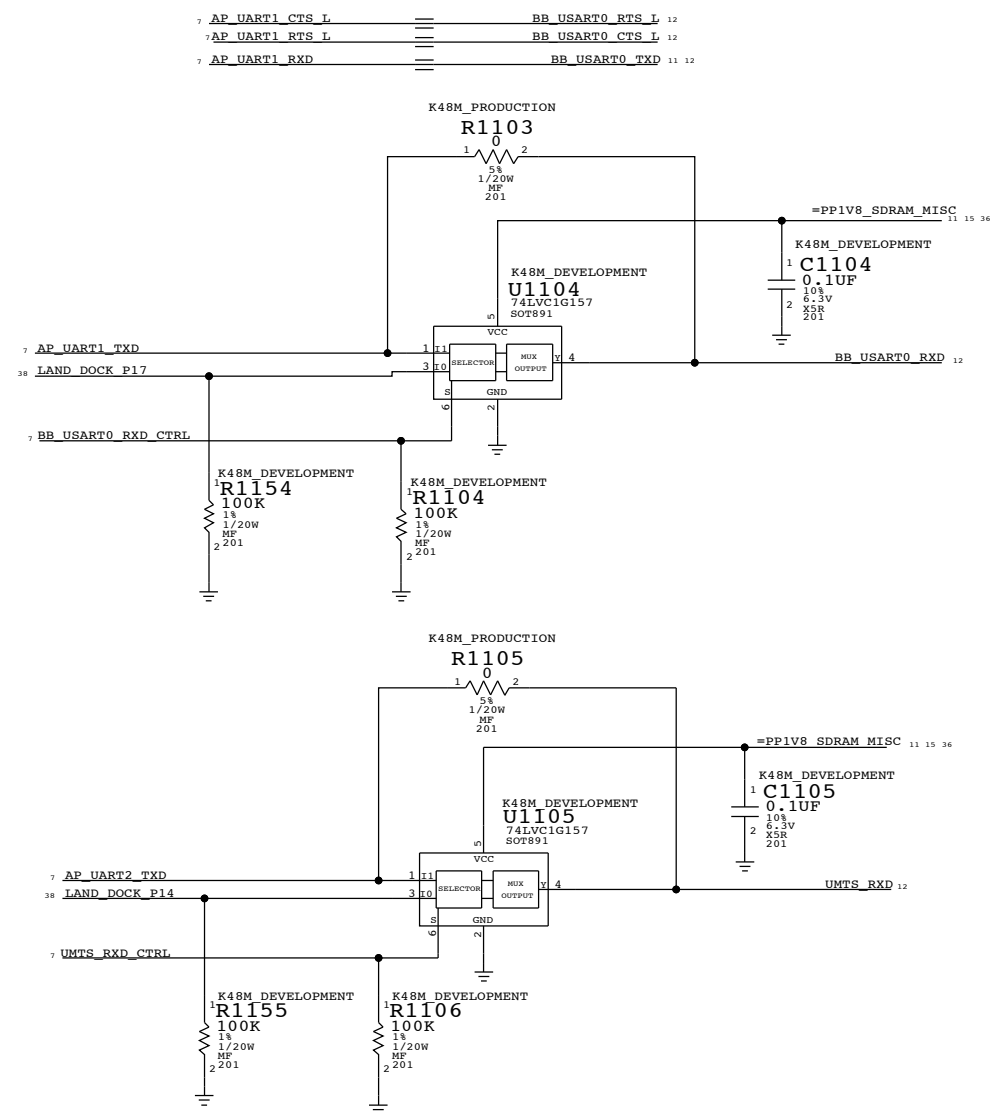
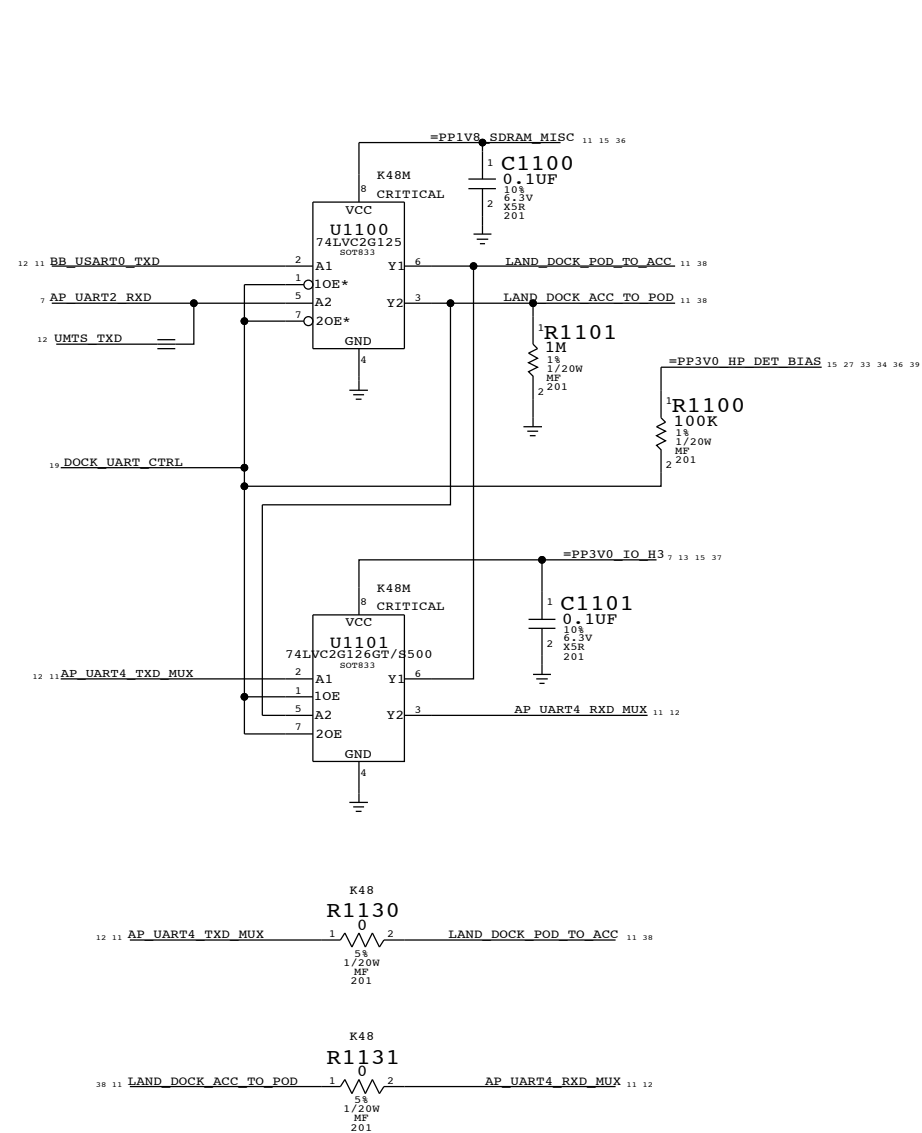






PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
353S2684	353S2493		U1009, U1010	INTERSIL

SYNC MASTER=JAMES		SYNC DATE=12/21/2009	
PAGE TITLE			
AP TVOUT			
 Apple Inc.		DRAWING NUMBER	051-8245
		REVISION	B.0.0
		BRANCH	
		PAGE	10 OF 119
		SHEET	10 OF 53
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 THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED			





D

C

B

A

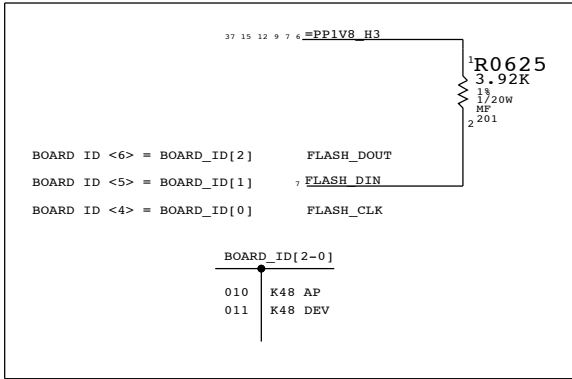
D

C

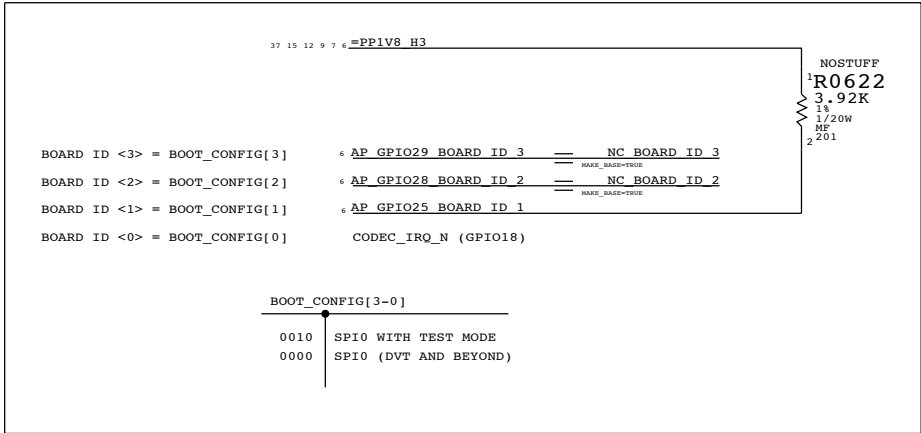
B

A

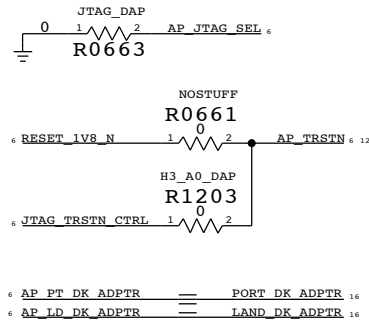
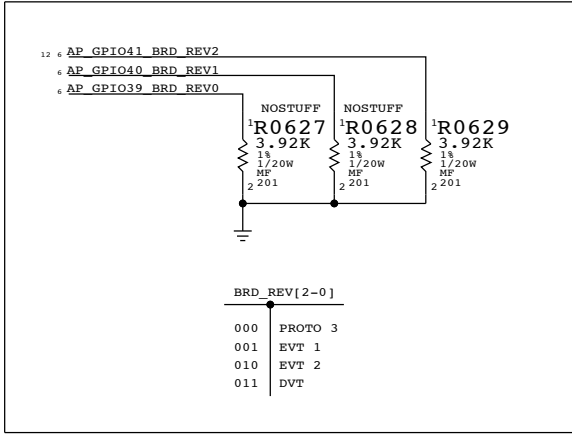
BOARD ID



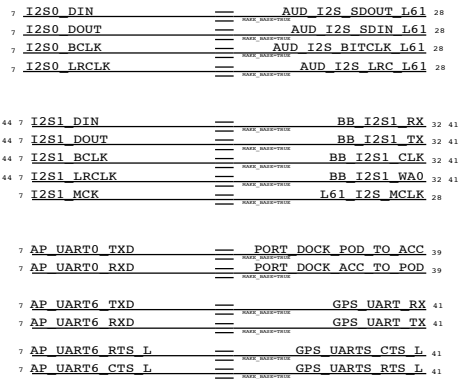
BOOT CONFIG ID



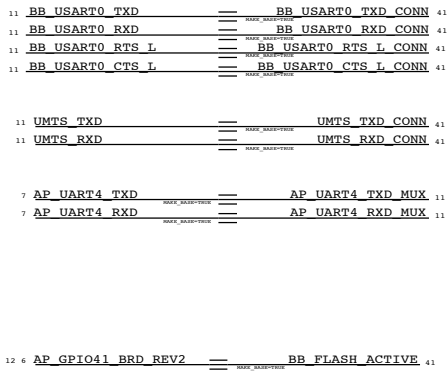
BOARD REVISION



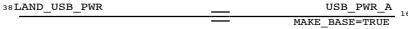
ALIASES FROM PAGE 7



ALIASES FROM PAGE 11



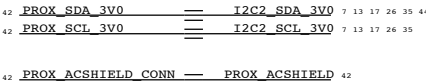
ALIASES FROM PAGE 50



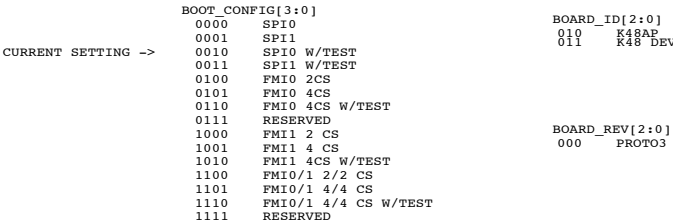
ALIASES FROM PAGE 51




ALIASES FOR PAGE 57



FOR REFERENCE



SYNC MASTER=JAMES		SYNC DATE=12/21/2009	
PAGE TITLE			
AP MISC & ALIASES			
 Apple Inc.		DRAWING NUMBER	051-8245
		SIZE	D
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		REVISION	B.0.0
		BRANCH	
		PAGE	12 OF 119
		SHEET	12 OF 53



D





D

C

B

A

D


C

B

A

MLC ALIASES

45	9	H3 MIPID CLK P	==	MLC MIPID CLK P	13
45	9	H3 MIPID CLK N	HAKE_BASE=TRUE	MLC MIPID CLK N	13
			HAKE_BASE=TRUE		
45	9	H3 MIPID DATA P<0>	==	MLC MIPID DATA P<0>	13
45	9	H3 MIPID DATA N<0>	HAKE_BASE=TRUE	MLC MIPID DATA N<0>	13
			HAKE_BASE=TRUE		
45	9	H3 MIPID DATA P<1>	==	MLC MIPID DATA P<1>	13
45	9	H3 MIPID DATA N<1>	HAKE_BASE=TRUE	MLC MIPID DATA N<1>	13
			HAKE_BASE=TRUE		
45	9	H3 MIPID DATA P<2>	==	MLC MIPID DATA P<2>	13
45	9	H3 MIPID DATA N<2>	HAKE_BASE=TRUE	MLC MIPID DATA N<2>	13
			HAKE_BASE=TRUE		
45	9	H3 MIPID DATA P<3>	==	MLC MIPID DATA P<3>	13
45	9	H3 MIPID DATA N<3>	HAKE_BASE=TRUE	MLC MIPID DATA N<3>	13
			HAKE_BASE=TRUE		
13		MLC_MUX_SDA_3V3	==	MLC_2MUX_SDA_3V3	13
13		MLC_MUX_SCL_3V3	HAKE_BASE=TRUE	MLC_2MUX_SCL_3V3	13
			HAKE_BASE=TRUE		
13		MLC_2WC_L	==	MLC_WC_L	7
			HAKE_BASE=TRUE		
13		=PP3V3_MLC_EEPROM	==	=PP3V3_MLC	0 13 15 25

SYNC_MASTER=MIAMI		SYNC_DATE=09/16/2009	
PAGE TITLE			
MLC ALIASES			
 Apple Inc.		DRAWING NUMBER	051-8245
		REVISION	B.0.0
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 THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		BRANCH	
		PAGE	15 OF 119
		SHEET	14 OF 53



POWER CONN / ALIAS

LDO RAILS

PROGRAMMABLE ON/OFF

18 PP3V1 AUDIO == PP3V1 AUDIO 28 30
MAKE BASE=TRUE
VOLTAGE=3.1V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP3V0 GRAPE == PP3V0 GRAPE 23 24
MAKE BASE=TRUE
VOLTAGE=3.0V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== PP3V0 GRAPE_Z1 24
== PP3V0 GRAPE_Z2 24
== PP3V0 GRAPE_MARIO1 23
== PP3V0 GRAPE_MARIO2
== PP3V0 GRAPE_MARIO3

18 PP3V0 VIDEO == PP3V0 VIDEO_BUFFER 10
MAKE BASE=TRUE
VOLTAGE=3.0V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== PP3V0 VIDEO_H3 10
== PP3V0 DPMUX 37

18 PP3V0 OPTICAL == PP3V0 OPTICAL 35
MAKE BASE=TRUE
VOLTAGE=3.0V
MIN LINE WIDTH=0.3 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP3V3 LAND ACC == PP3V3 LAND ACC 38
MAKE BASE=TRUE
VOLTAGE=3.3V
MIN LINE WIDTH=0.2MM
MIN NECK WIDTH=0.1MM
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP3V3 PORT ACC == PP3V3 PORT ACC 38
MAKE BASE=TRUE
VOLTAGE=3.3V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP3V0 IO == PP3V0 IO_SMS 26 42
MAKE BASE=TRUE
VOLTAGE=3.0V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== PP3V0 IO_H3 7 11 13 37
== PP3V0 IO_3V3 20
== PP3V0 IO_CHGR 17
== PP3V0 IO_USB 6

18 PP3V0 LCD == PP3V0 LCD 21
MAKE BASE=TRUE
VOLTAGE=3.0V
MIN LINE WIDTH=0.3 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP1V2 AUDIENCE == PP1V2 AUDIO
MAKE BASE=TRUE
VOLTAGE=1.2V
MIN LINE WIDTH=0.5 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP3V0 HP DET BIAS == PP3V0 HP DET BIAS 11 27 33 34 36 39
MAKE BASE=TRUE
VOLTAGE=3.0V
MIN LINE WIDTH=0.4MM
MIN NECK WIDTH=0.2MM
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP1V7 VA VCP == PP1V7 VA VCP 28
MAKE BASE=TRUE
VOLTAGE=1.7V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP1V2 H3 == PP1V2 HSIC 6
MAKE BASE=TRUE
VOLTAGE=1.2V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== PP1V2 VDDIOD H3 7

18 PP1V1 H3 PHY == PP1V1 SMIA 9
MAKE BASE=TRUE
VOLTAGE=1.1V
MIN LINE WIDTH=0.5 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== PP1V1 PLL 6
== PP1V1 MIPI 9
== PP1V1 MIPI PLL 9
== PP1V1 DPORT 9
== PP1V1 HSIC 6
== PP1V1 USB 6

18 PP1V8 ALWAYS == PP1V8 ALWAYS 6 19
MAKE BASE=TRUE
VOLTAGE=1.8V
MIN LINE WIDTH=0.2 mm
MIN NECK WIDTH=0.1 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP1V2 SDRAM == PP1V2 SDRAM_MDDR 7 8
MAKE BASE=TRUE
VOLTAGE=1.2V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

BUCK RAILS

18 PPVCORE_H3 == PPVCORE_H3 7
MAKE BASE=TRUE
VOLTAGE=1.2V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.25 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP1V8 SDRAM == PP1V8 SDRAM_H3 6 8
MAKE BASE=TRUE
VOLTAGE=1.8V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== PP1V8 SDRAM_WL 39
== PP1V8 SDRAM_MISC 11 36
== PP1V8 SDRAM_1V2 18
== PP1V8 SDRAM_GPS 41

18 PP1V8 GRAPE == PP1V8 GRAPE 23
MAKE BASE=TRUE
VOLTAGE=1.8V
MIN LINE WIDTH=0.3 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP1V8 == PP1V8_CAM 26 42
MAKE BASE=TRUE
VOLTAGE=1.8V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== PP1V8 SMS 26 42
== PP1V8 CHGR 28
== PP1V8_AUDIO 28
== PP1V8_H3 6 7 9 12 37
== PP1V8 NOR_FLASH 7
== PP1V8_SMIA 9
== PP1V8_MIPI 9

21 PPLED_OUT == PPLED_REG 25
MAKE BASE=TRUE
VOLTAGE=20.4V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

18 PP5V1_OUT == PP5V1_LED 21
MAKE BASE=TRUE
VOLTAGE=5.1V
MIN LINE WIDTH=0.4 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

20 PP3V3_OUT == PP3V3_LCD 25
MAKE BASE=TRUE
VOLTAGE=3.3V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== PP3V3 NAND 7 8 43
== PP3V3_H3_USB 6
== PP3V3_AUDIO 28

20 PP3V3_MLC_OUT == PP3V3_MLC 9 13 14 25
MAKE BASE=TRUE
VOLTAGE=3.3V
MIN LINE WIDTH=0.4 mm
MIN NECK WIDTH=0.2 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

GND
MAKE BASE=TRUE
VOLTAGE=0V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.20MM
NET SPACING TYPE=GND
MAX_NECK_LENGTH=5 MM

CHARGER MAIN

17 PPVCC_MAIN == VCC_MAIN_3V3 20
MAKE BASE=TRUE
VOLTAGE=4.7V
MIN LINE WIDTH=0.6MM
MIN NECK WIDTH=0.2MM
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM
== VCC_MAIN_LED 21
== VCC_MAIN_AUDIO 22 29
== VCC_MAIN_WL 39
== VCC_MAIN_DOCK 38 39
== VCC_MAIN_ASH 18

BATTERY

17 15 BATT_POS_F == BATT_POS_F_3G 41
MAKE BASE=TRUE
VOLTAGE=4.2V
MIN LINE WIDTH=0.6 mm
MIN NECK WIDTH=0.25 mm
NET SPACING TYPE=PWR
MAX_NECK_LENGTH=3 MM

(REPLACE WITH 155S0243 IF NEED FILTER)

R1940

17 BATT_POS 1 0 2 BATT_POS_F 15 17
58
174W
FF-LF
1206

SYNC MASTER=MARK SYNC DATE=12/04/2009

PAGE TITLE

Power Conn / Alias



Apple Inc.

DRAWING NUMBER
051-8245

SIZE
D

REVISION
B.0.0

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 THIS DOCUMENT IN CONFIDENCE

II NOT TO REPRODUCE OR COPY IT

III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART

IV ALL RIGHTS RESERVED

BRANCH

PAGE
17 OF 119

SHEET
15 OF 53

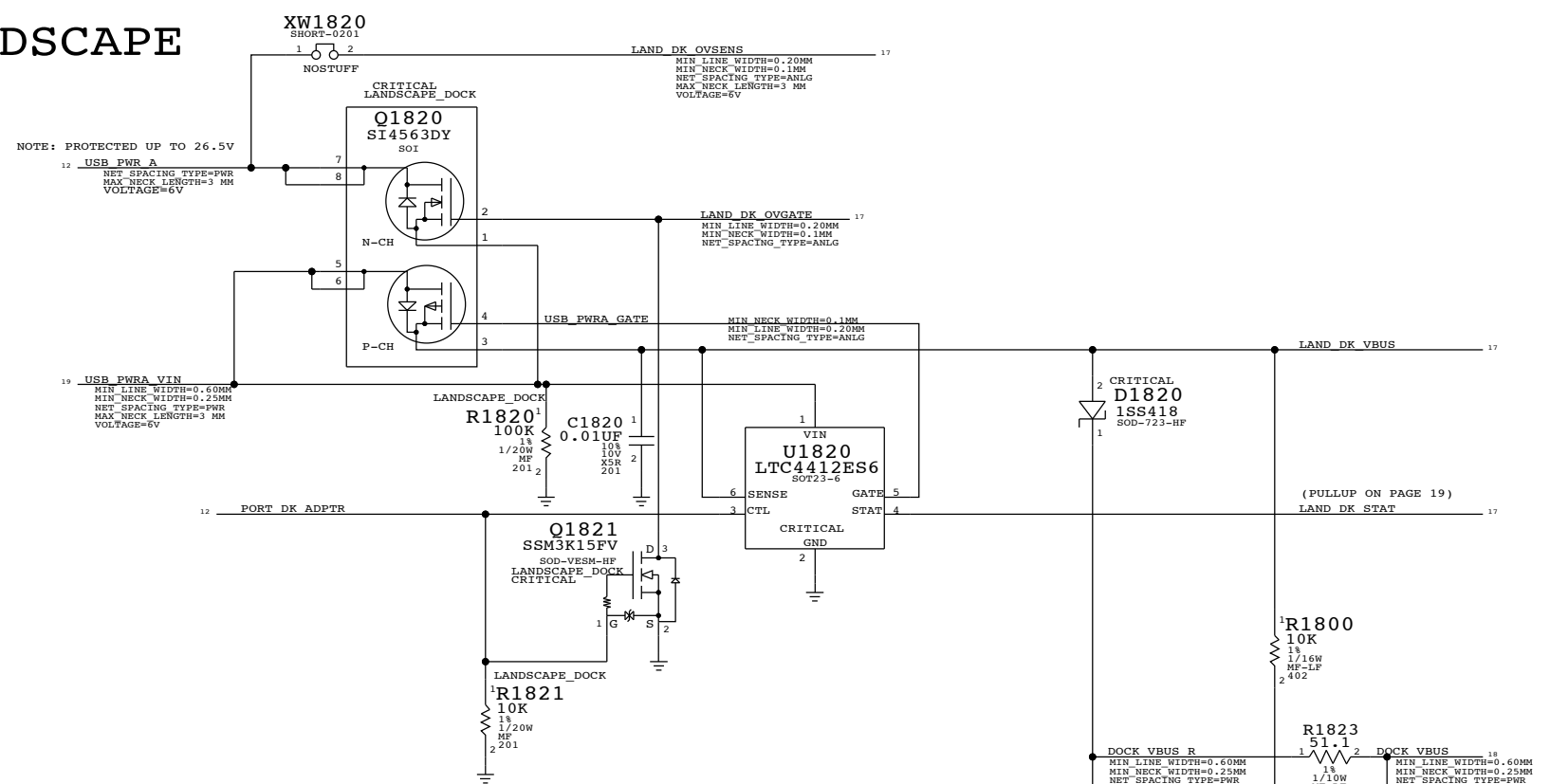
DCIN POWER PATH

SO-8 DUAL P/N F

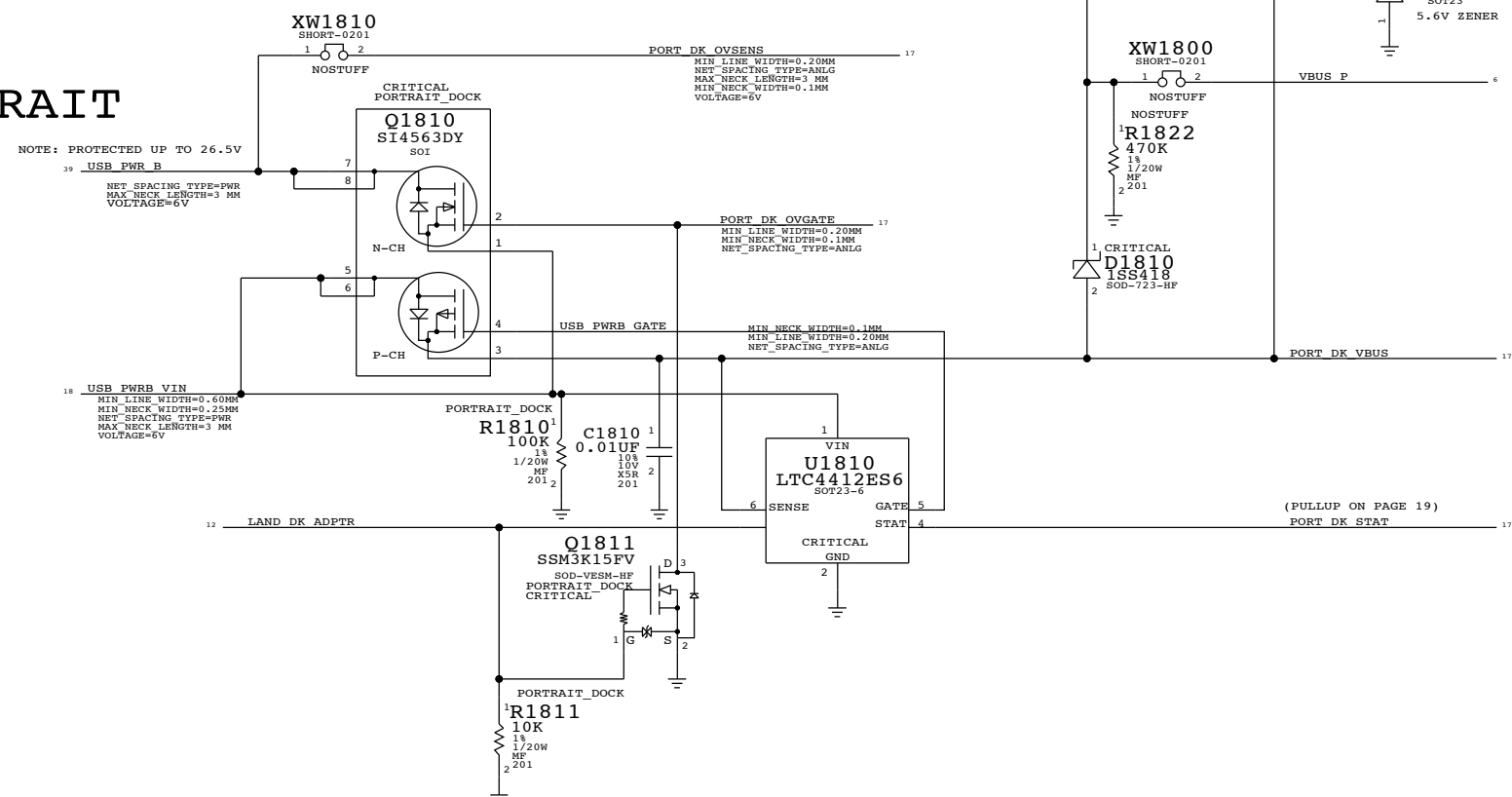
MOSFET	SI4563DY
CHANNEL	N-TYPE
RDS (ON)	15 MOHM @4.5V
IMAX	8 A
VGS MAX	+/- 16V

SO-8 DUAL P/N FETS

MOSFET	SI4563DY
CHANNEL	P-TYPE
RDS (ON)	25 MOHM @-4.5
IMAX	8 A
VGS MAX	+/- 16V



PORTRAIT





MAIN SUPPLY/BATTERY CHARGER

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
110S0550	1	REG, PP, 5 OHM, 1/10W, 0603, 5%TOL, LF, 0.020	F1900	CRITICAL	

CHANGE TO A SMALLER FUSE FOR H3
OMIT

SYSTEM CURRENT 3.0A MAX

(ONLY NEEDED WHEN BATTERY ISN'T PRESENT)
(CAN REMOVE FOR PRODUCTION)

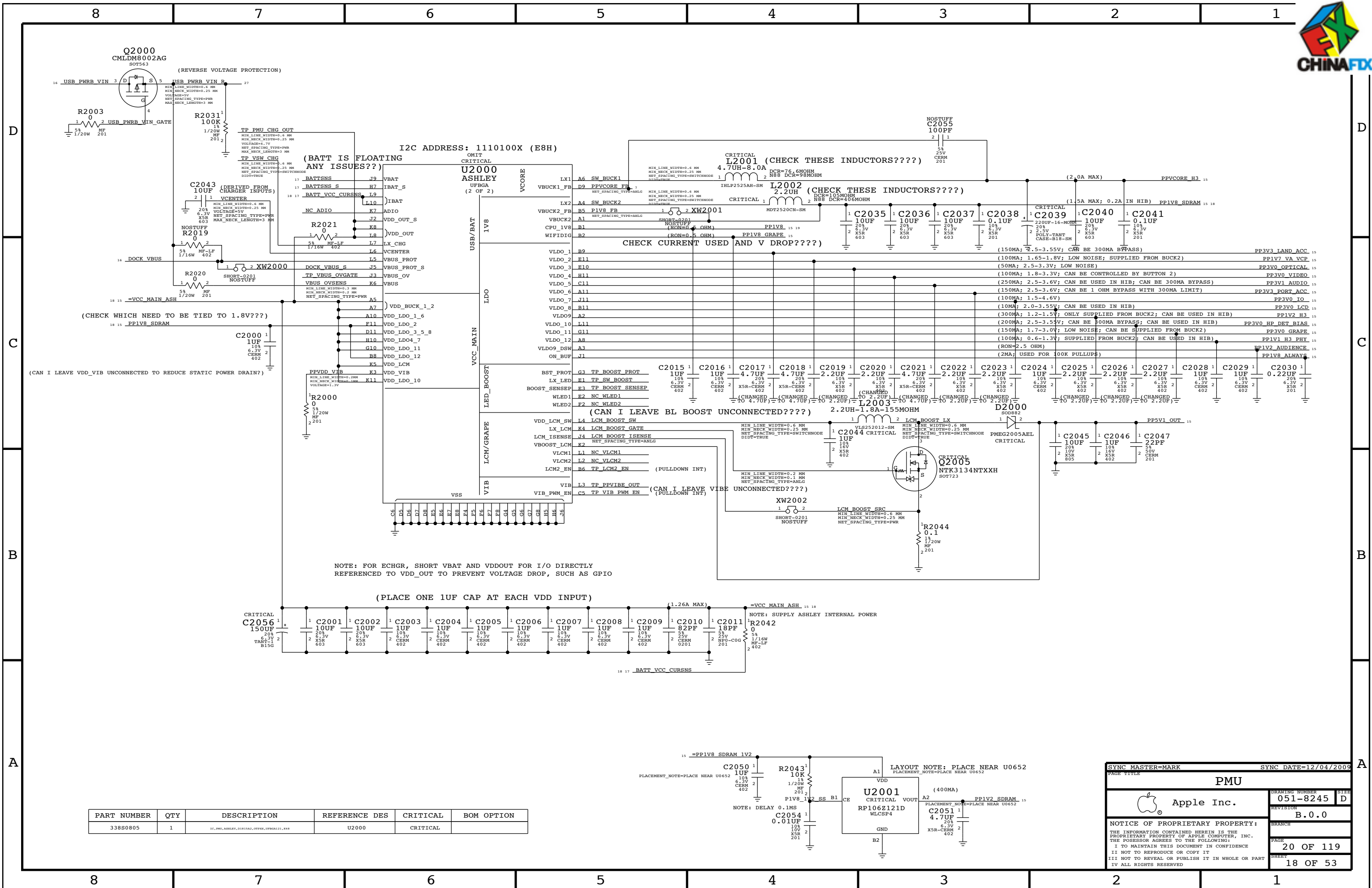
(REPLACE SENSE SHORTS WITH 0 OHM RESISTORS TO REMOVE AMANDA???)

NOTE:
VERIFY PINOUT OF
BATTERY CONNECTOR

APN:998-2616

SYNC MASTER=MARK SYNC DATE=12/04/2009

PAGE TITLE		DRAWING NUMBER		SIZE
CHARGER		051-8245		D
Apple Inc.		REVISION	B.0.0	
NOTICE OF PROPRIETARY PROPERTY:		BRANCH		
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		PAGE	19 OF 119	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		SHEET	17 OF 53	
II NOT TO REPRODUCE OR COPY IT				
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART				
IV ALL RIGHTS RESERVED				



15 =PPIV8 SDRAM LV2

1 2

C2050
1UF
10K
1/20W
6.3V
XSR-CERM
402

NOTE: DELAY 0.1MS

1 2

C2054
0.01UF
10K
1/20W
6.3V
XSR
201

1 2

R2043
10K
1/20W
6.3V
XSR
201

P1V8 LV2 SS B1

A1

VDD

U2001
CRITICAL VOUT
RP106Z121D
WLCSP4

GND

B2

LAYOUT NOTE: PLACE NEAR U0652

1 2

C2051
1UF
10K
1/20W
6.3V
XSR-CERM
402

NOTE: DELAY 0.1MS

15 =PPIV2 SDRAM LV2

A2


VDD

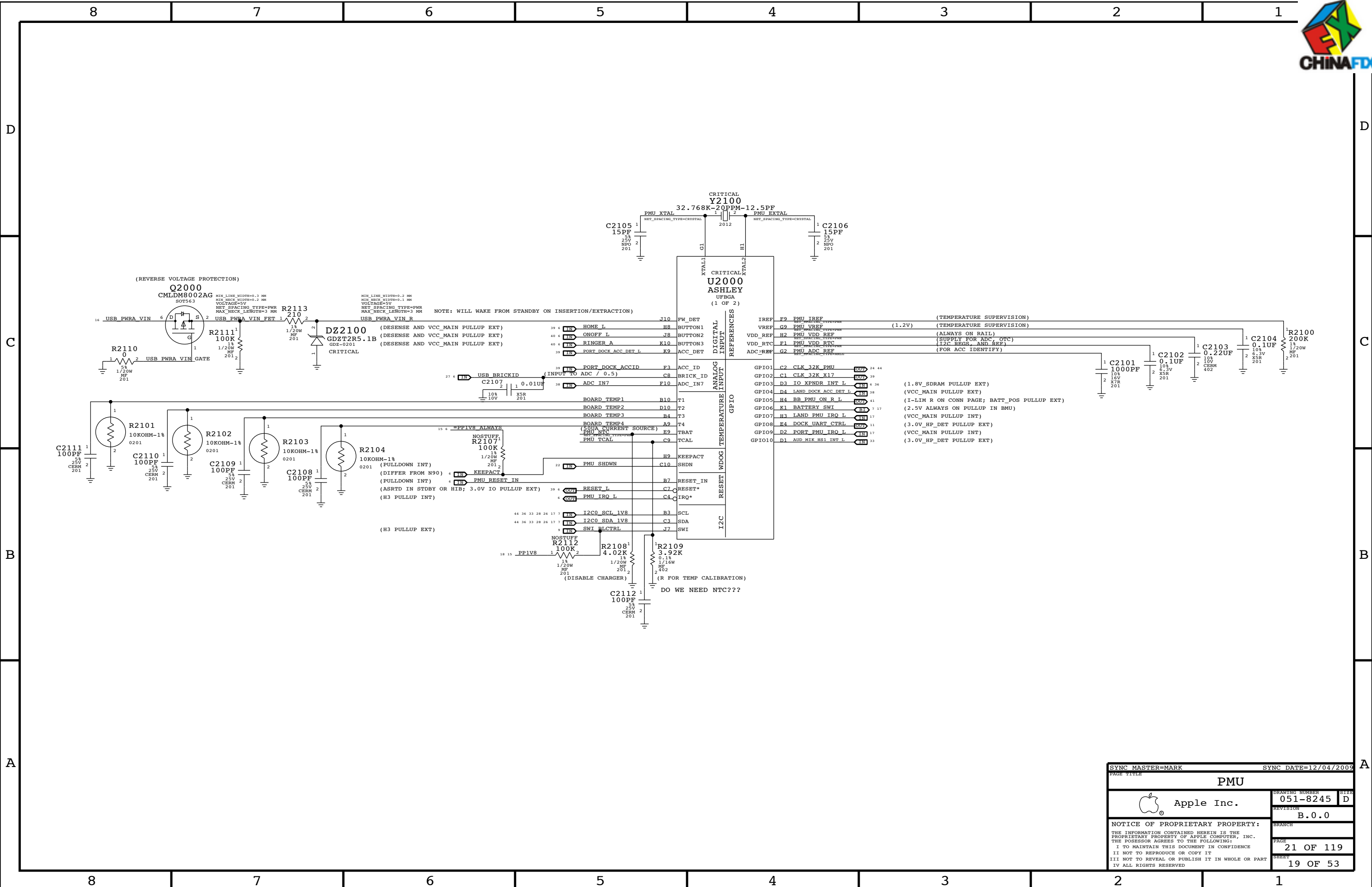
U2001
CRITICAL VOUT
RP106Z121D
WLCSP4

GND

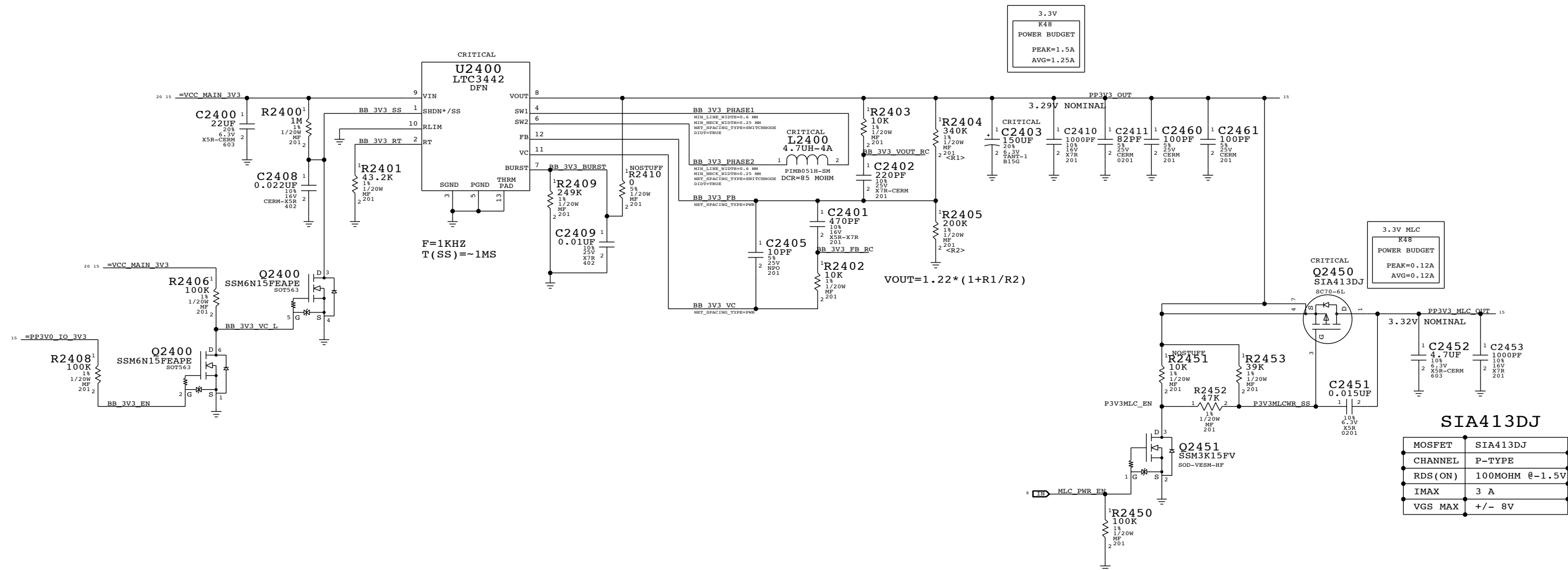
B2

LAYOUT NOTE: PLACE NEAR U0652

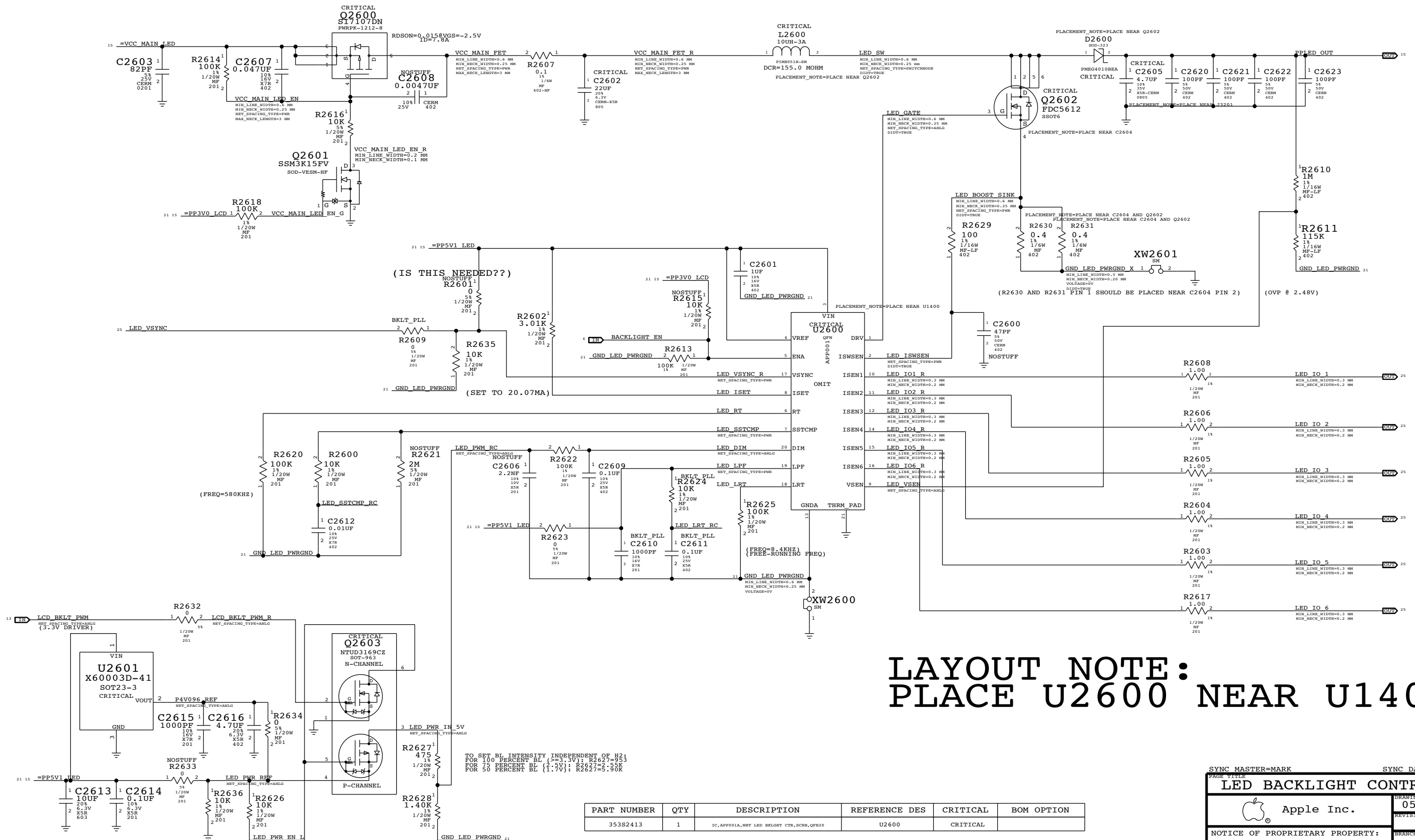
SYNC MASTER=MARK		SYNC DATE=12/04/2009	
PAGE TITLE			
PMU			
 Apple Inc.		DRAWING NUMBER 051-8245	
		SIZE D	
		REVISION B.0.0	
NOTICE OF PROPRIETARY PROPERTY:			
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED			
		BRANCH	
		PAGE 20 OF 119	
		SHEET 18 OF 53	



3.3V SUPPLY



LED BOOST/BACKLIGHT CONTROLLER



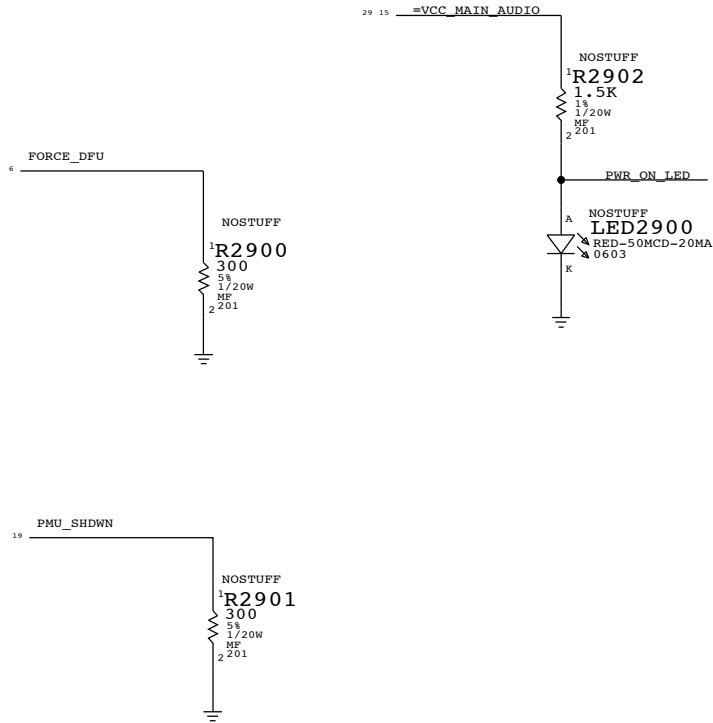
LAYOUT NOTE:
PLACE U2600 NEAR U1400

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
35382413	1	IC, APP001A, NHT LED BRIGHT CTR, SCRN, QFN20	U2600	CRITICAL	

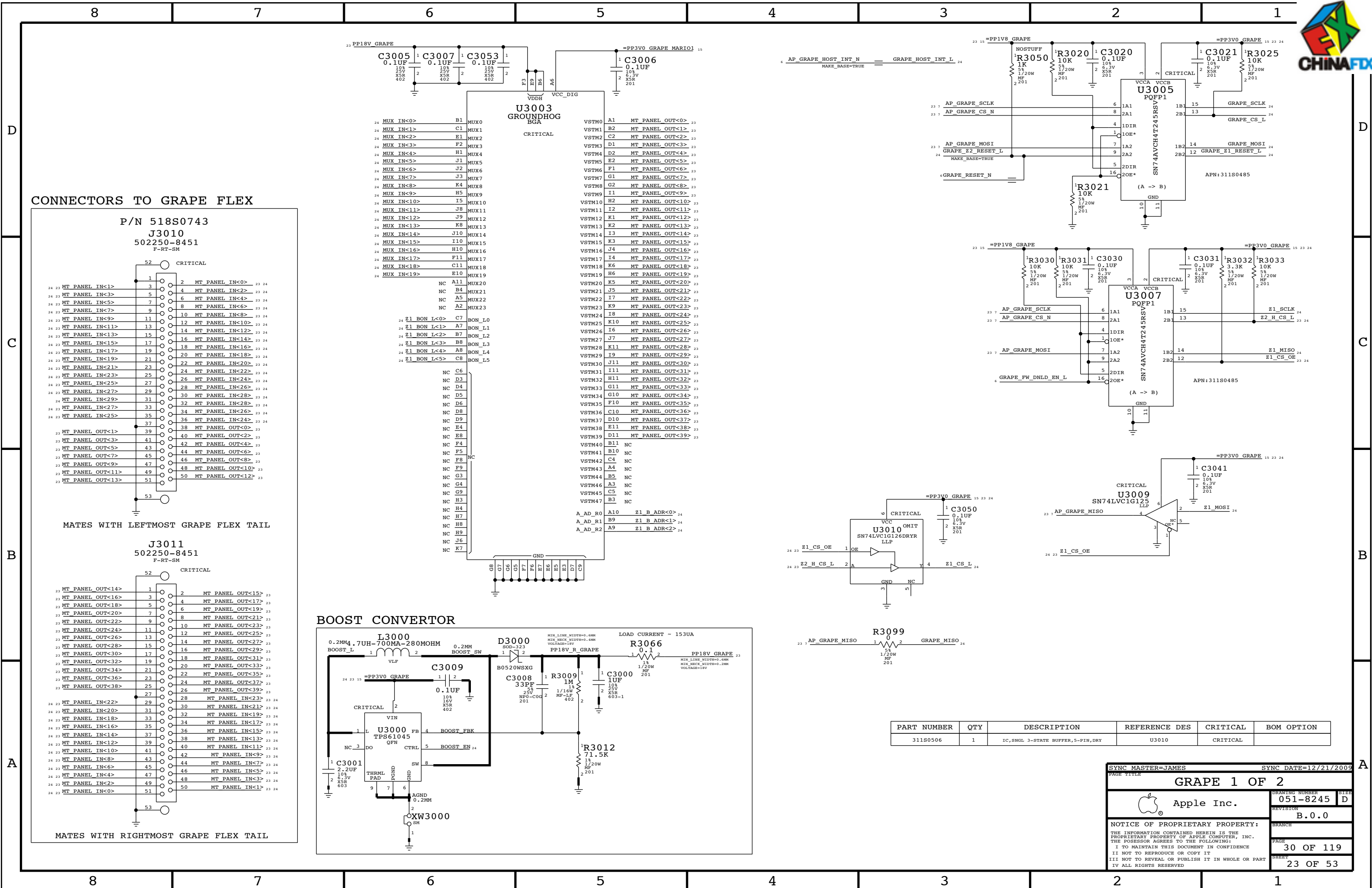
PAGE TITLE		SYNC DATE=12/04/2009	
LED BACKLIGHT CONTROLLER		DRAWING NUMBER	
Apple Inc.		051-8245	
NOTICE OF PROPRIETARY PROPERTY:		REVISION	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		B.0.0	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		BRANCH	
II NOT TO REPRODUCE OR COPY IT		PAGE	
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART		26 OF 119	
IV ALL RIGHTS RESERVED		SHEET	
		21 OF 53	



DEBUG RESET ACCESS



PAGE TITLE		PAGE TITLE	
DEBUG RESET ACCESS		051-8245	
Apple Inc.		B.0.0	
NOTICE OF PROPRIETARY PROPERTY:		29 OF 119	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		22 OF 53	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE			
II NOT TO REPRODUCE OR COPY IT			
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART			
IV ALL RIGHTS RESERVED			





D

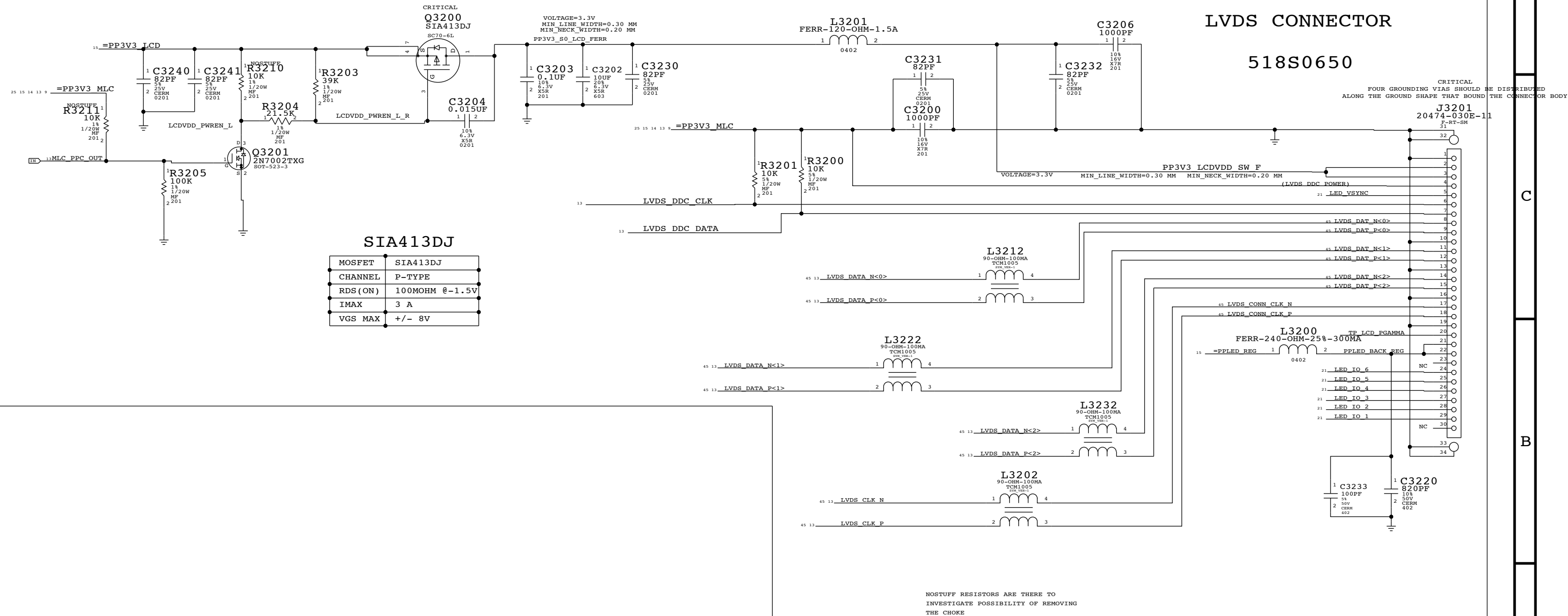
B0.1
109D

LVDS CONNECTOR

SIMILAR TO M97

LVDS CONNECTOR


518S0650



SIA413DJ

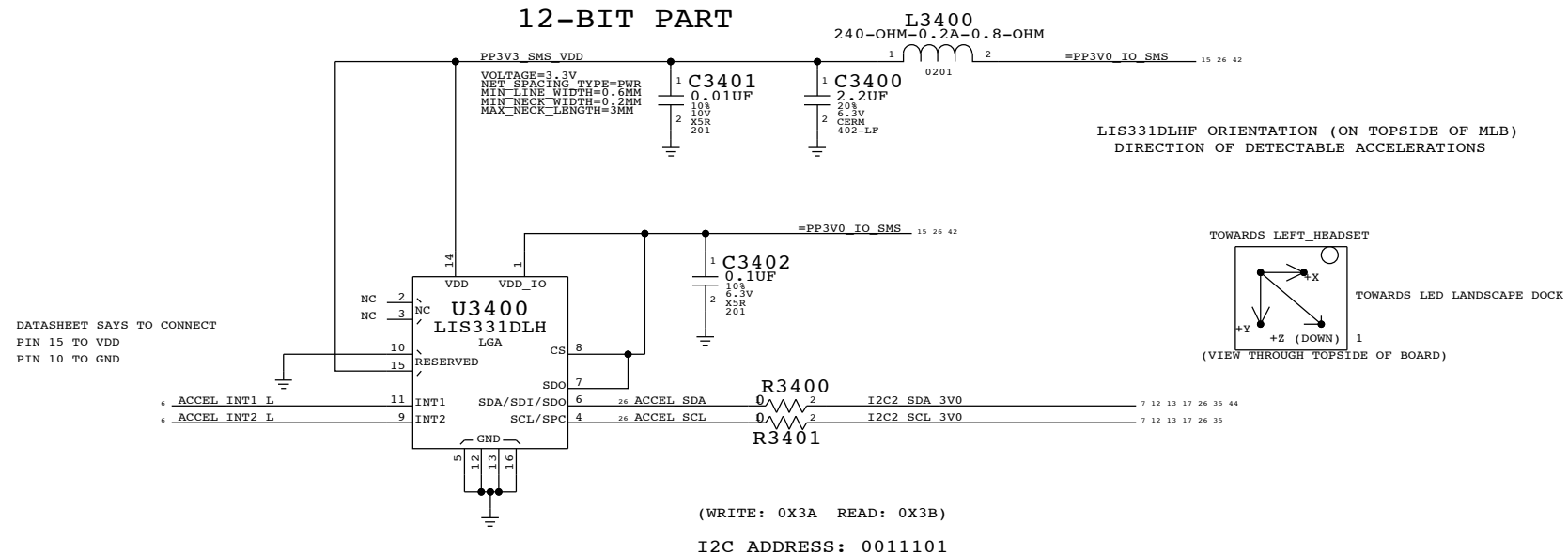
MOSFET	SIA413DJ
CHANNEL	P-TYPE
RDS(ON)	100MOHM @-1.5V
IMAX	3 A
VGS MAX	+/- 8V

SYNC MASTER=MIAMI SYNC DATE=09/16/2009

PAGE TITLE						
LVDS CONNECTOR						
	Apple Inc.		DRAWING NUMBER	051-8245	SIZE	D
			REVISION		B.0.0	
	NOTICE OF PROPRIETARY PROPERTY:		BRANCH			
	THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		PAGE		32 OF 119	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		SHEET		25 OF 53		
II NOT TO REPRODUCE OR COPY IT						
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART						
IV ALL RIGHTS RESERVED						

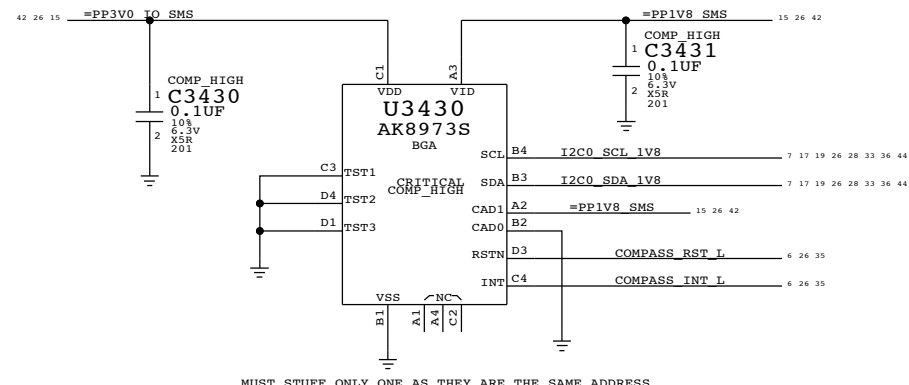
MOTION/GYRO/COMPASS SENSORS

ST MICRO LIS331DLHF MOTION SENSOR 12-BIT PART



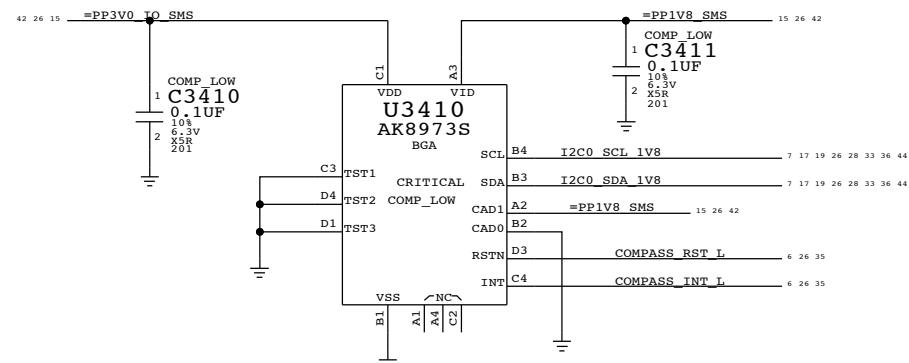
COMPASS HIGH

(HAS THERMAL SENSOR IN IT)
I2C ADDR: 0011110
WRITE: 0X3C READ: 0X3D



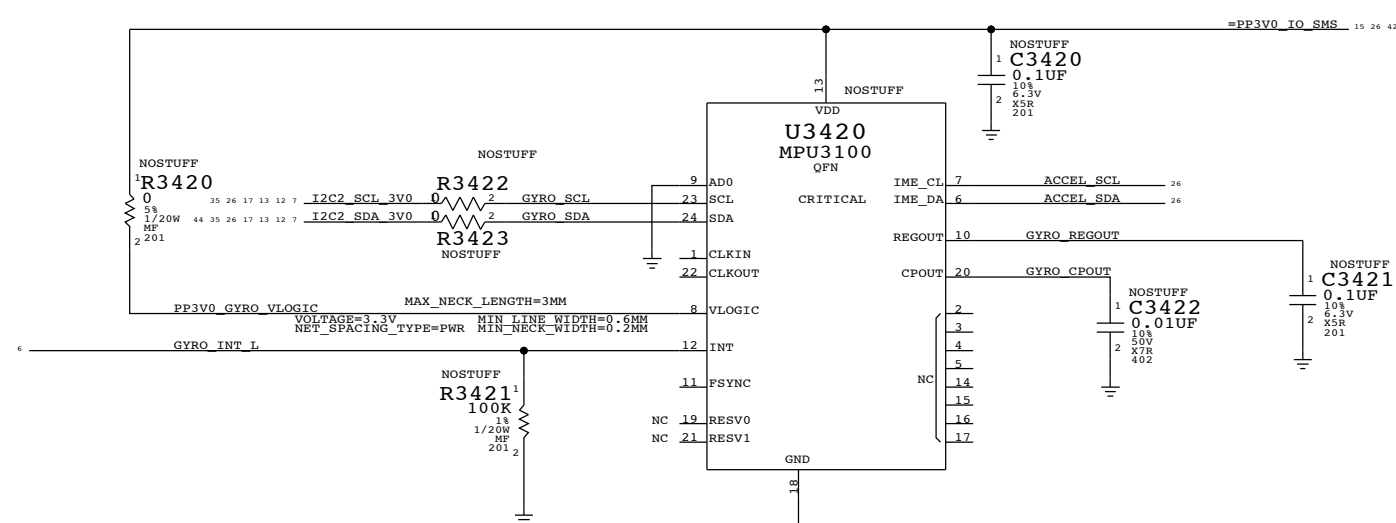
COMPASS LOW

(HAS THERMAL SENSOR IN IT)
I2C ADDR: 0011110
WRITE: 0X3C READ: 0X3D



GYRO

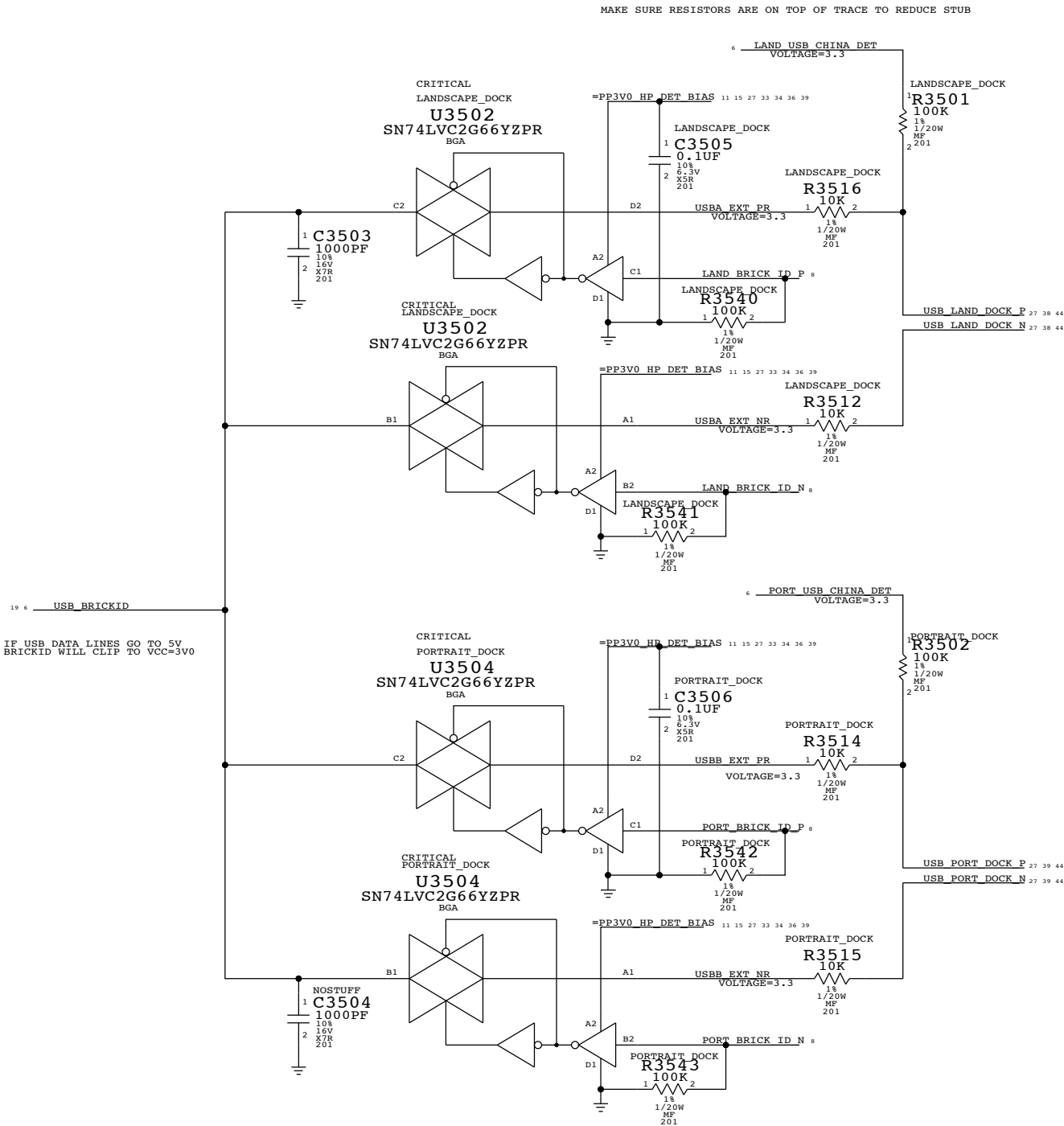
(WRITE: 0XD0 READ: 0XD1)
I2C ADDRESS: 1101000



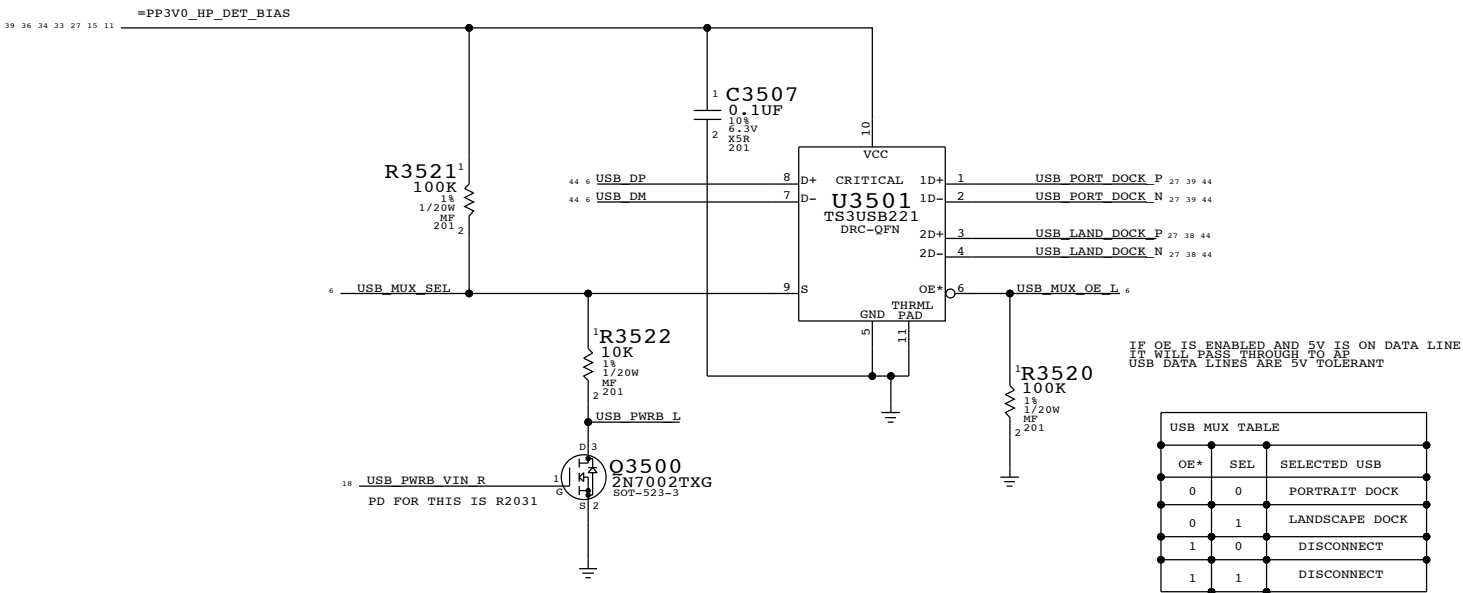


USB MUX/BRICK DETECTION

MAKE SURE RESISTORS ARE ON TOP OF TRACE TO REDUCE STUB



USB MUX FOR DOCK USB



USB MUX TABLE			
OE*	SEL	SELECTED USB	
0	0	PORTRAIT DOCK	
0	1	LANDSCAPE DOCK	
1	0	DISCONNECT	
1	1	DISCONNECT	

SYNC MASTER=MIAMI

SYNC DATE=09/16/2009

USB MUX/BRK DET

Apple Inc.

051-8245

B.0.0

35 OF 119

27 OF 53

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 THIS DOCUMENT IN CONFIDENCE

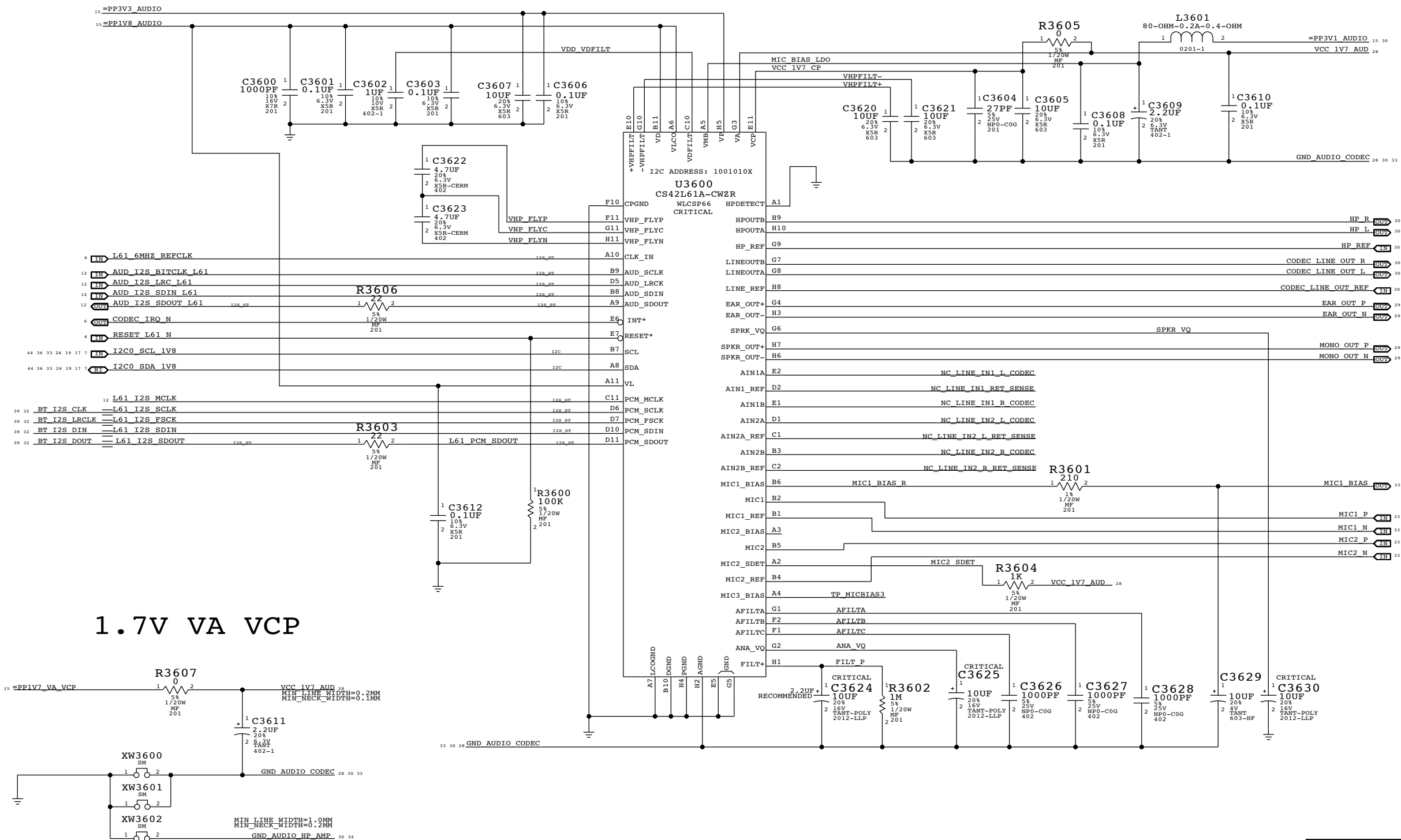
II NOT TO REPRODUCE OR COPY IT


III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART

IV ALL RIGHTS RESERVED

L61 AUDIO CODEC

APN:338S0589



SYNC MASTER=AUDIO		SYNC DATE=12/04/2009	
PAGE TITLE			
L61 AUDIO INTERFACE			
 Apple Inc.		DRAWING NUMBER	051-8245
		D	
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 THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		REVISION	B.0.0
		BRANCH	
		PAGE	36 OF 119
		SHEET	28 OF 53

SPEAKER AMPLIFIER

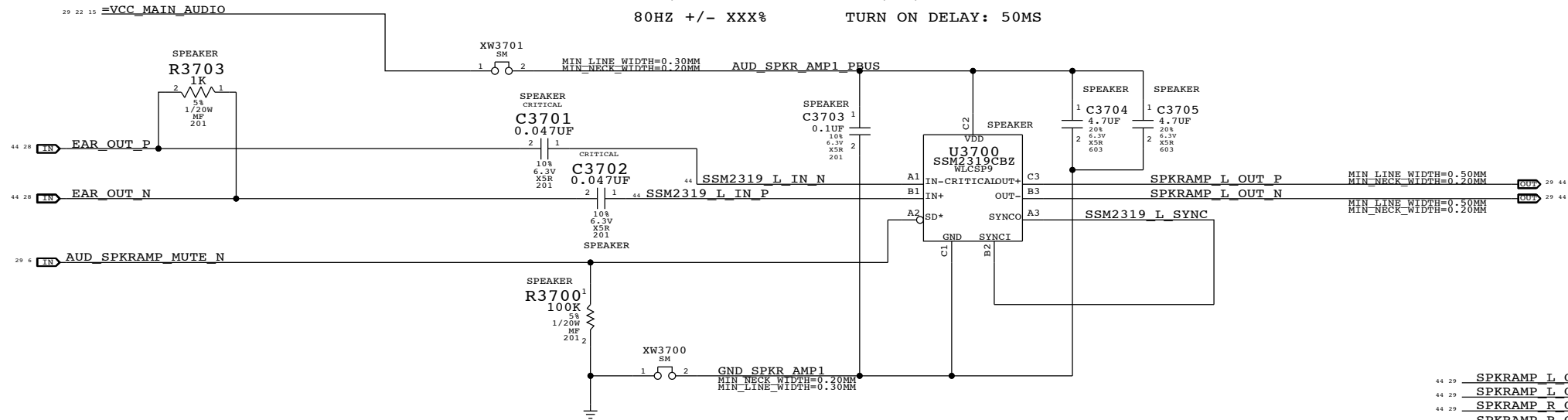
SSM2319 APN:353S2136

GAIN = 12DB

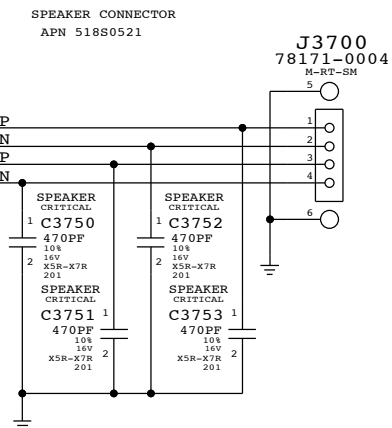
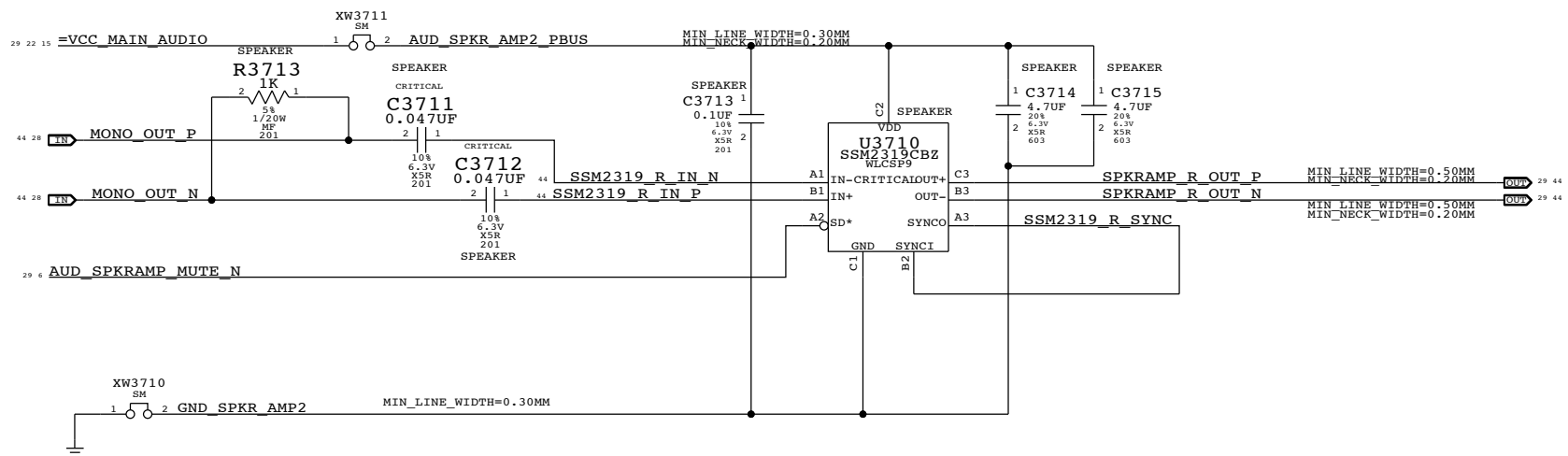
TURN ON TIME: 28MS

80HZ +/- XXX%

TURN ON DELAY: 50MS

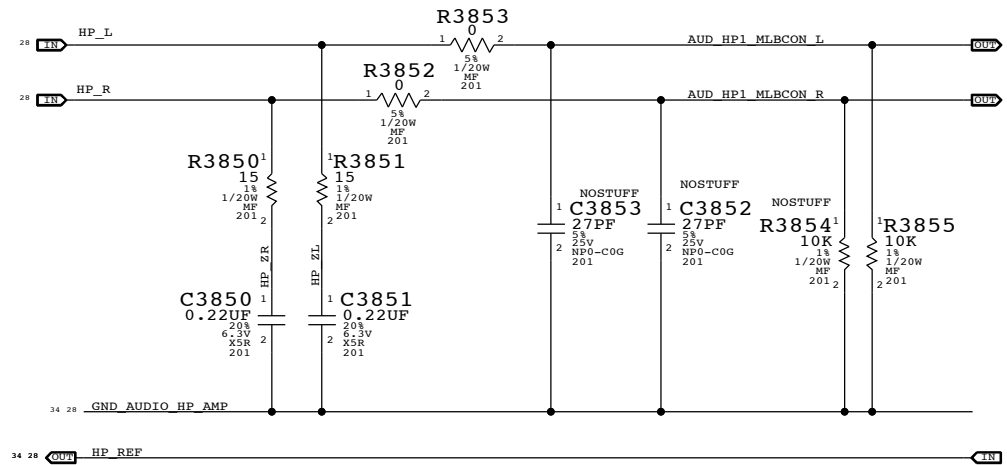


L61 RECEIVER OUTPUT IS CONNECTED TO U3700
L61 SPEAKER OUTPUT IS CONNECTED TO U3710

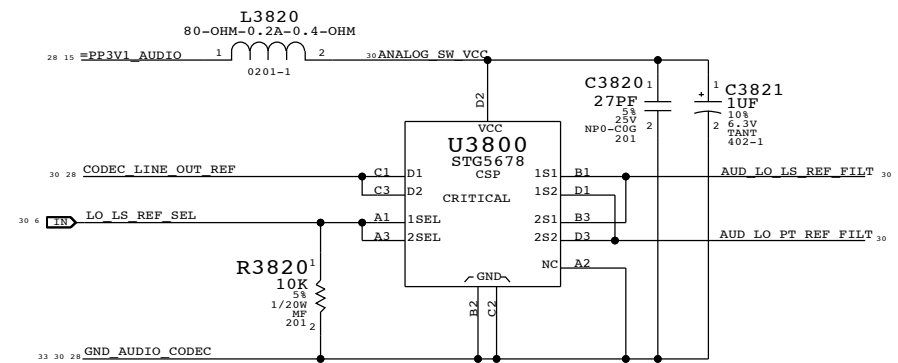


PAGE TITLE		SYNC DATE=12/04/2009	
AUDIO: SPEAKER AMP		DRAWING NUMBER	051-8245
Apple Inc.		REVISION	B.0.0
NOTICE OF PROPRIETARY PROPERTY:		BRANCH	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		PAGE	37 OF 119
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		SHEET	29 OF 53
II NOT TO REPRODUCE OR COPY IT			
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART			
IV ALL RIGHTS RESERVED			

HEADPHONE OUTPUT ZOBEL NETWORK



LINE OUTPUT REF SENSE DOCK SELECTOR

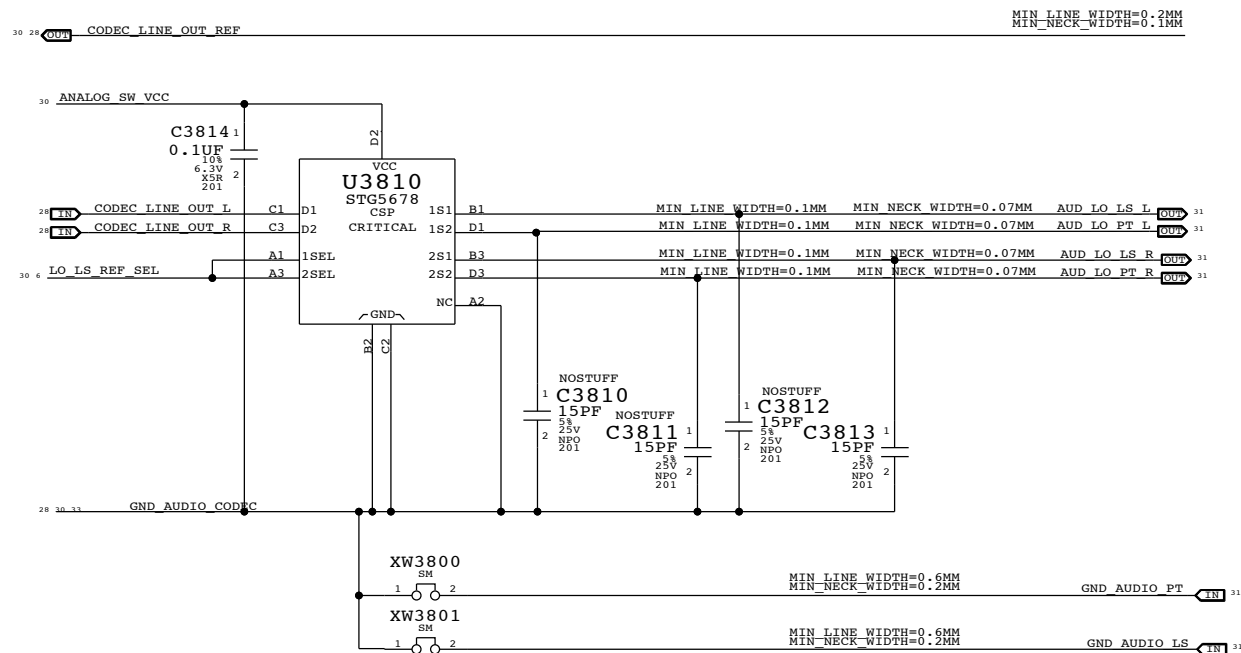


OUTPUT REF SENSE LINE SHOULD BE SWITCHED TO ACTIVE PORT

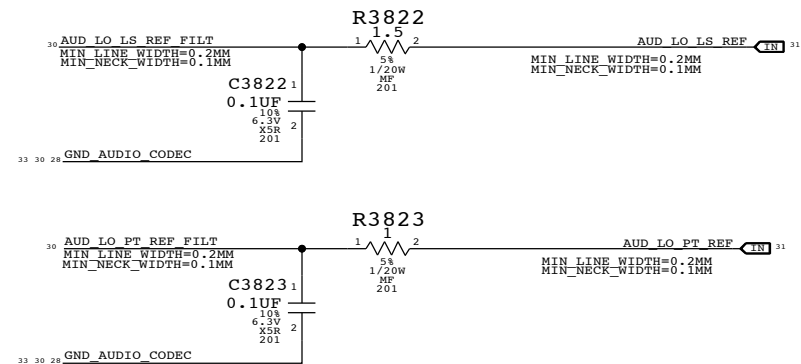
LO_LS_REF_SEL = 0: PORTRAIT DOCK SELECTED
LO_LS_REF_SEL = 1: LANDSCAPE DOCK SELECTED


LINE OUTPUT DOCK SELECTOR

LO_LS_REF_SEL = 0: DAC OUTPUT CONNECTED TO PORTRAIT DOCK
LO_LS_REF_SEL = 1: DAC OUTPUT CONNECTED TO LANDSCAPE DOCK



LINE OUTPUT REF SENSE FILTER



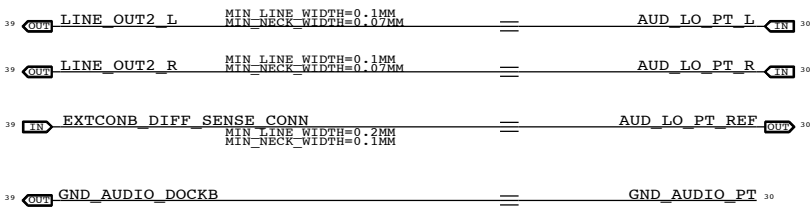
SYNC MASTER=AUDIO		SYNC DATE=12/04/2009	
PAGE TITLE			
AUDIO:HEADPHONE OUT			
 Apple Inc.		DRAWING NUMBER	SIZE
		051-8245	D
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		REVISION	
		B.0.0	
		BRANCH	
		PAGE	
		38	OF 119
		SHEET	
		30	OF 53



DOCKS OUTPUTS

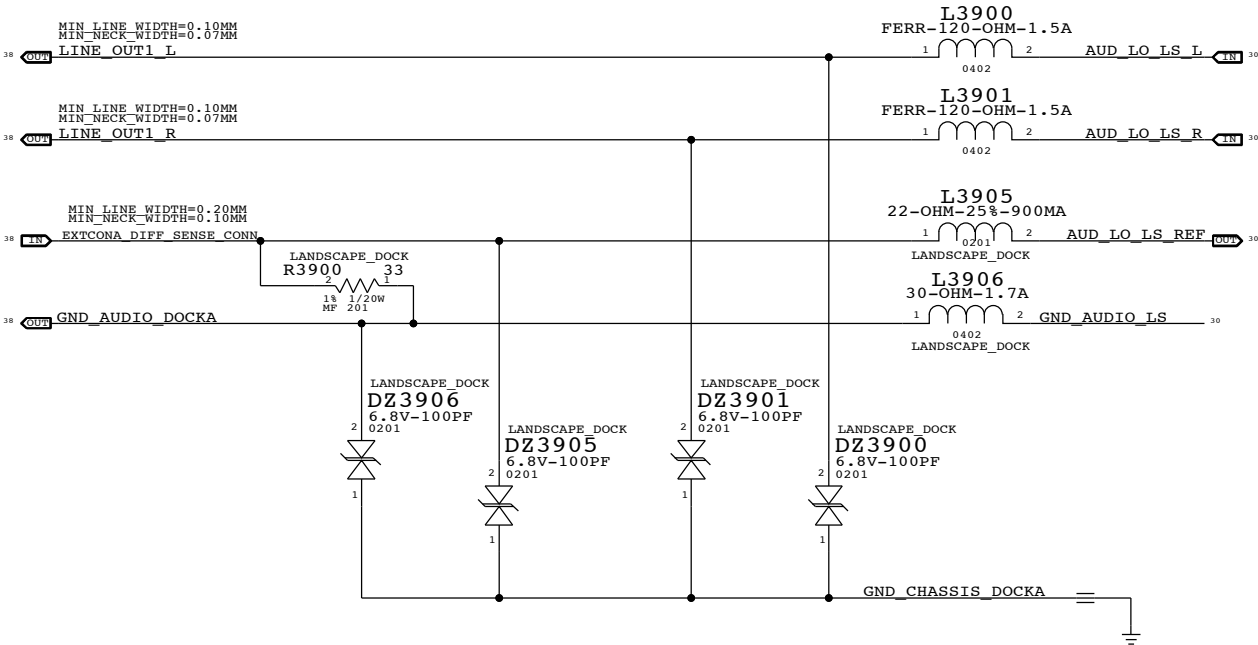
NOTE: PORTRAIT DOCK IS PRIMARY DOCK

PORTRAIT DOCK LINE OUTPUT




TO PORTRAIT DOCK MLB CONNECTOR

LANDSCAPE DOCK LINE OUTPUT ESD CIRCUIT



TO LANDSCAPE DOCK MLB CONNECTOR

SYNC MASTER=AUDIO		SYNC DATE=12/04/2009	
PAGE TITLE			
AUDIO: LINE OUT DOCK ESD CIRCUIT			
 Apple Inc.		DRAWING NUMBER	SIZE
		051-8245	D
NOTICE OF PROPRIETARY PROPERTY:		REVISION	B.0.0
		BRANCH	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:			
I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE			
II NOT TO REPRODUCE OR COPY IT			
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART			
IV ALL RIGHTS RESERVED			
PAGE		39 OF 119	
SHEET		31 OF 53	



D

C

B

A

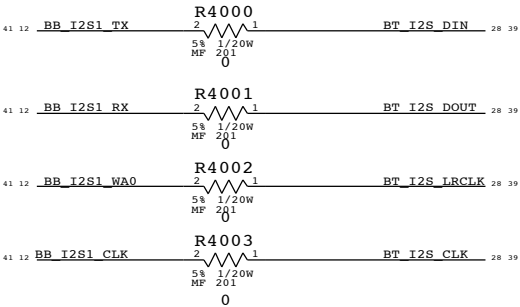
D


C

B

A

AUDIENCE BYPASS SHUNTS



SYNC MASTER=AUDIO		SYNC DATE=12/04/2009	
PAGE TITLE			
AUDIO: AUDIENCE			
 Apple Inc.		DRAWING NUMBER	SIZE
		051-8245	D
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		REVISION	B.0.0
		BRANCH	
		PAGE	40 OF 119
		SHEET	32 OF 53

8

7

6

5

4

3

2

1

8

7

6

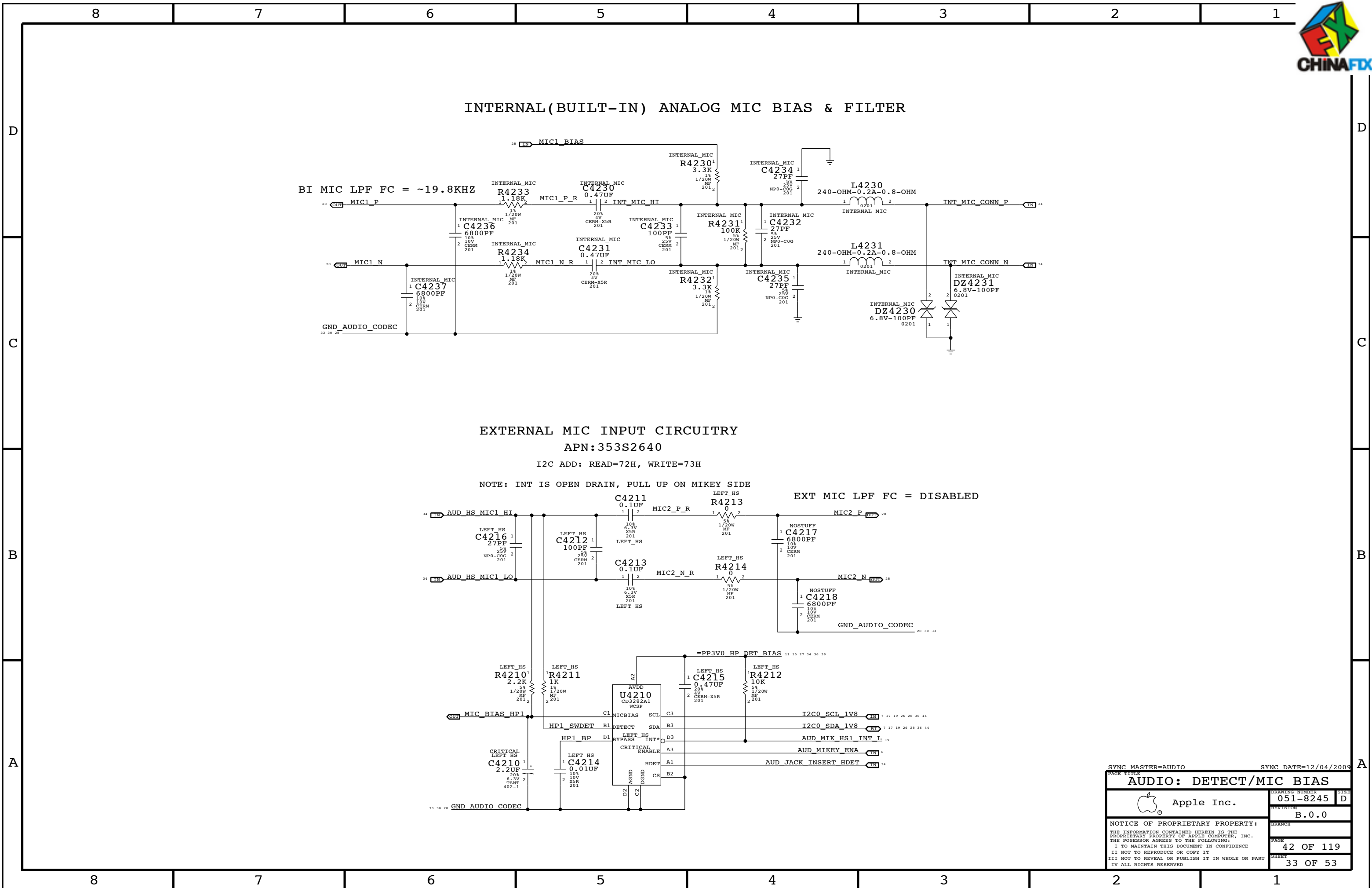
5


4

3

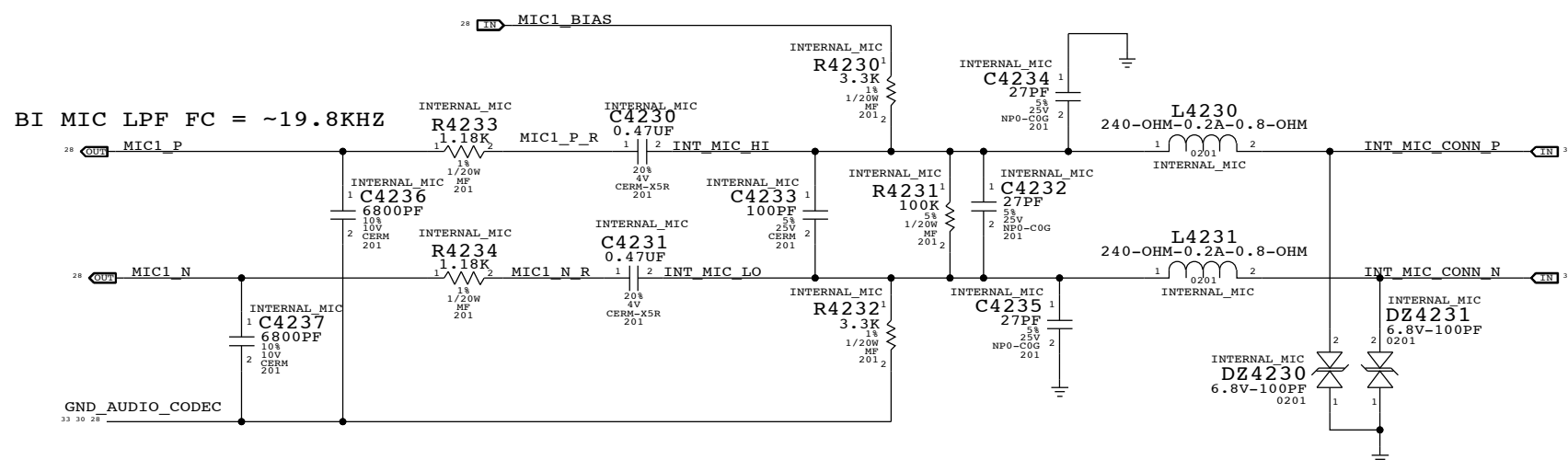
2

1





INTERNAL (BUILT-IN) ANALOG MIC BIAS & FILTER



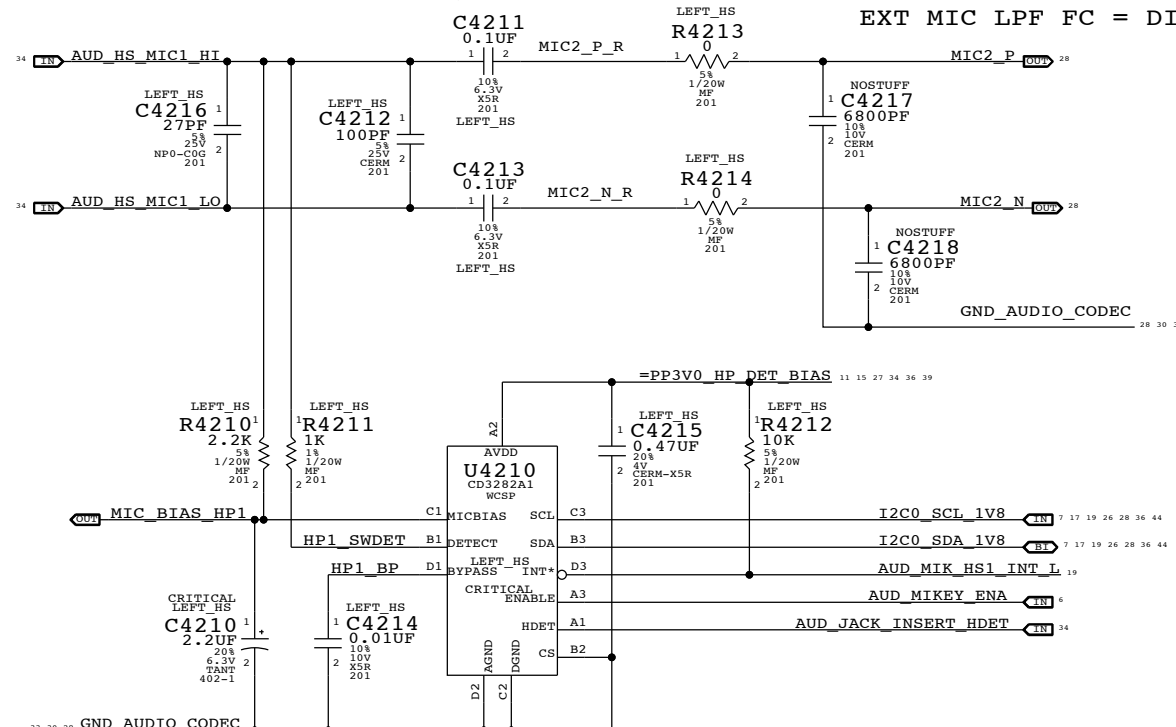
EXTERNAL MIC INPUT CIRCUITRY

APN:353S2640

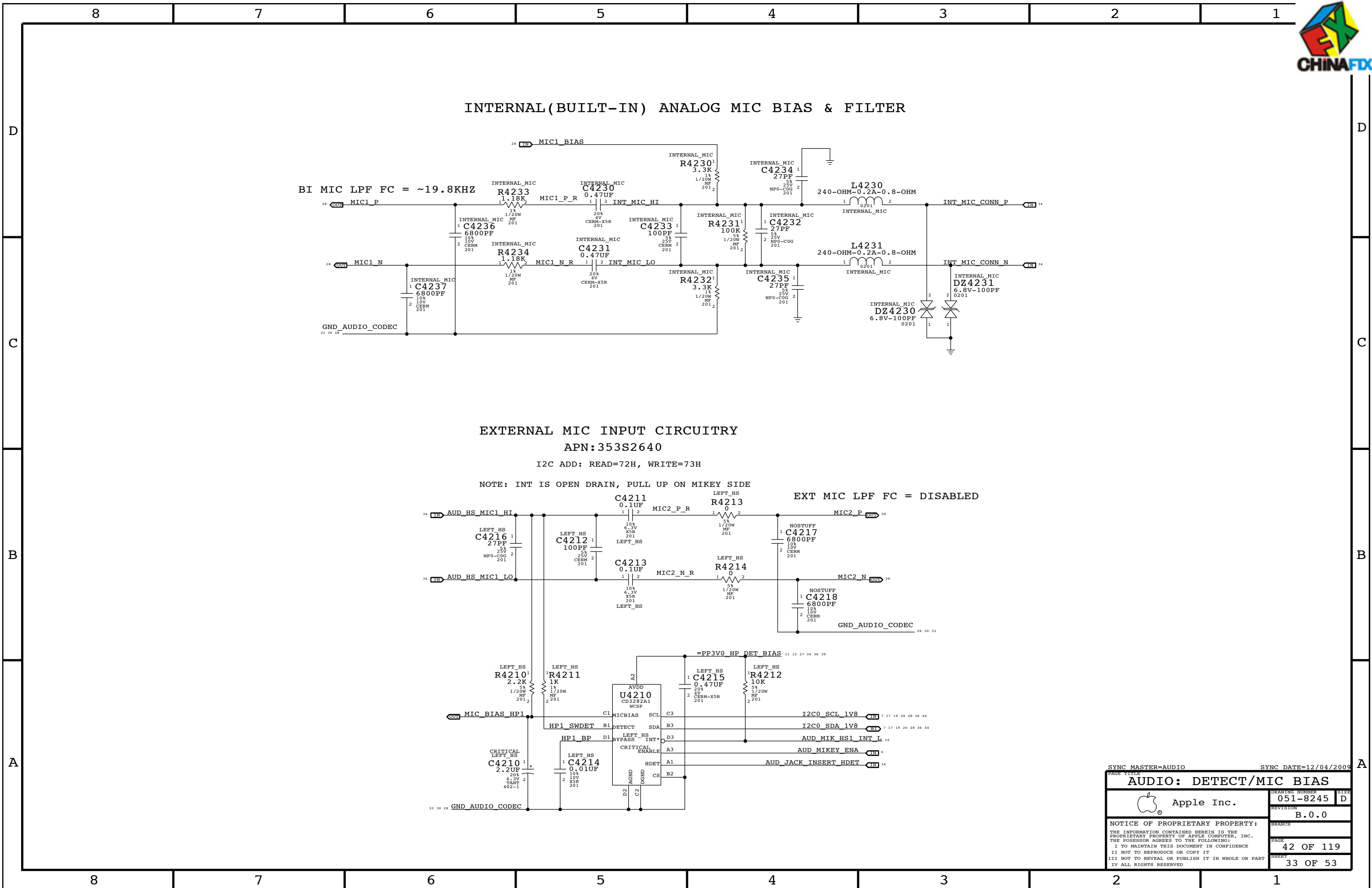
I2C ADD: READ=72H, WRITE=73H


NOTE: INT IS OPEN DRAIN, PULL UP ON MIKEY SIDE

EXT MIC LPF FC = DISABLED

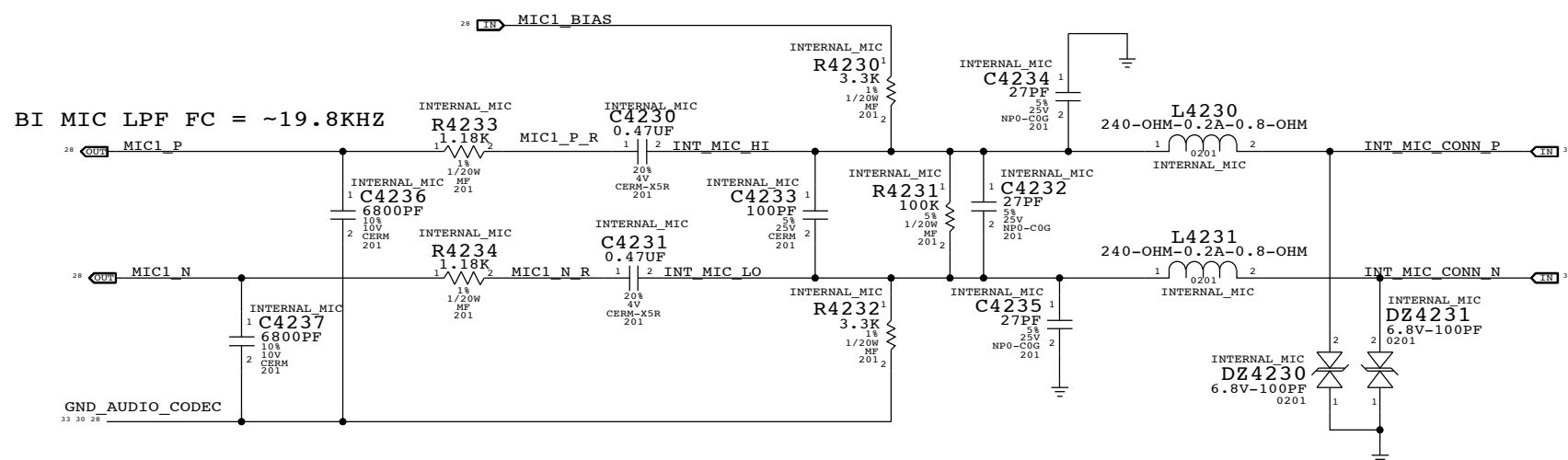


PAGE TITLE		SYNC MASTER=AUDIO		SYNC DATE=12/04/2009	
AUDIO: DETECT/MIC BIAS		DRAWING NUMBER		051-8245	
Apple Inc.		REVISION		B.0.0	
NOTICE OF PROPRIETARY PROPERTY:		PAGE		42 OF 119	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		SHEET		33 OF 53	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE					
II NOT TO REPRODUCE OR COPY IT					
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART					
IV ALL RIGHTS RESERVED					

[illegible]



INTERNAL (BUILT-IN) ANALOG MIC BIAS & FILTER



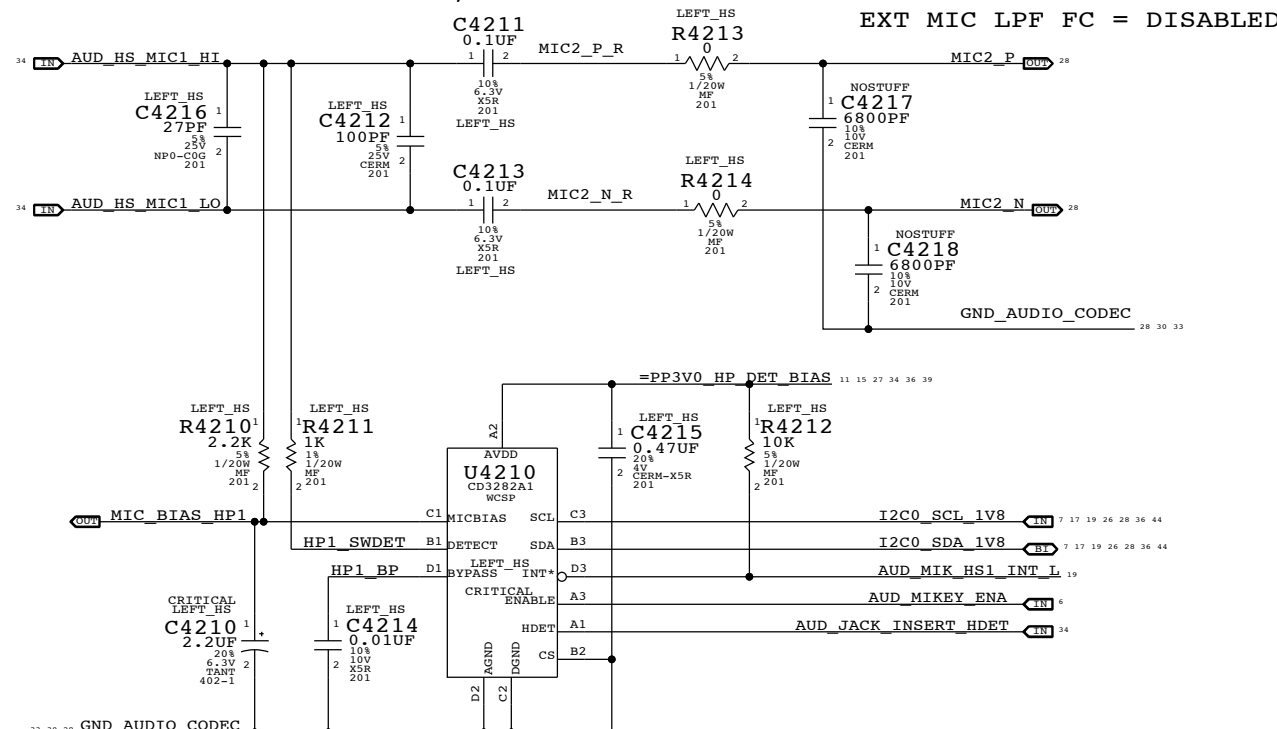
BI MIC LPF FC = ~19.8KHZ

EXTERNAL MIC INPUT CIRCUITRY

APN:353S2640

I2C ADD: READ=72H, WRITE=73H


NOTE: INT IS OPEN DRAIN, PULL UP ON MIKEY SIDE



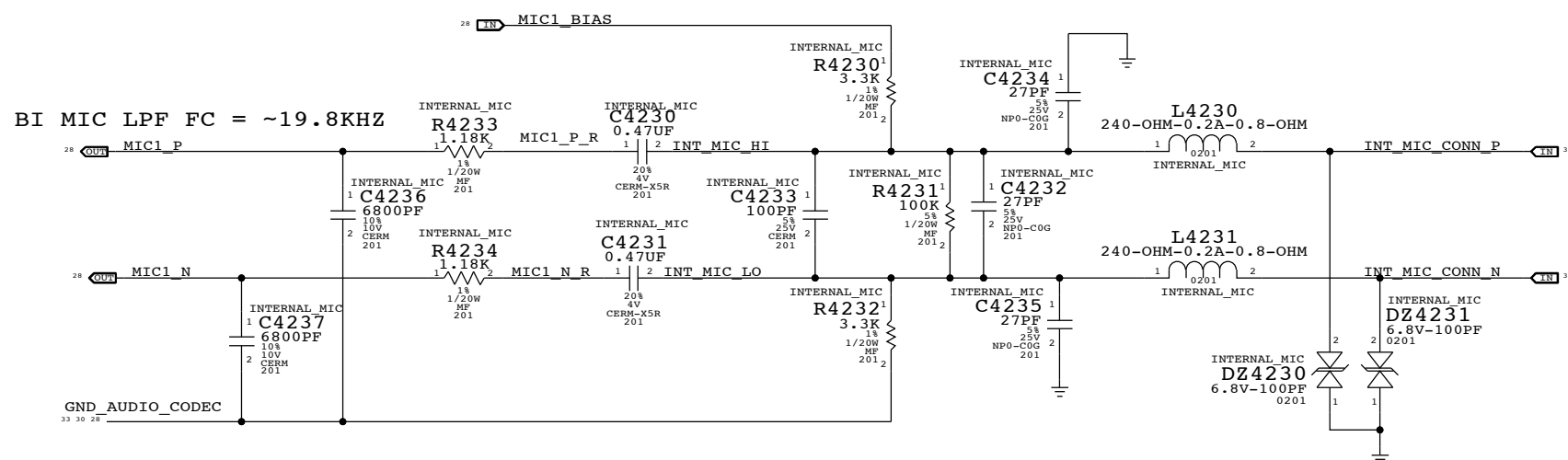
EXT MIC LPF FC = DISABLED

PAGE TITLE		SYNC MASTER=AUDIO		SYNC DATE=12/04/2009	
AUDIO: DETECT/MIC BIAS		DRAWING NUMBER		SIZE	
Apple Inc.		051-8245		D	
NOTICE OF PROPRIETARY PROPERTY:		REVISION		B.0.0	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		PAGE		42 OF 119	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		SHEET		33 OF 53	
II NOT TO REPRODUCE OR COPY IT					
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART					
IV ALL RIGHTS RESERVED					

[illegible]



INTERNAL (BUILT-IN) ANALOG MIC BIAS & FILTER



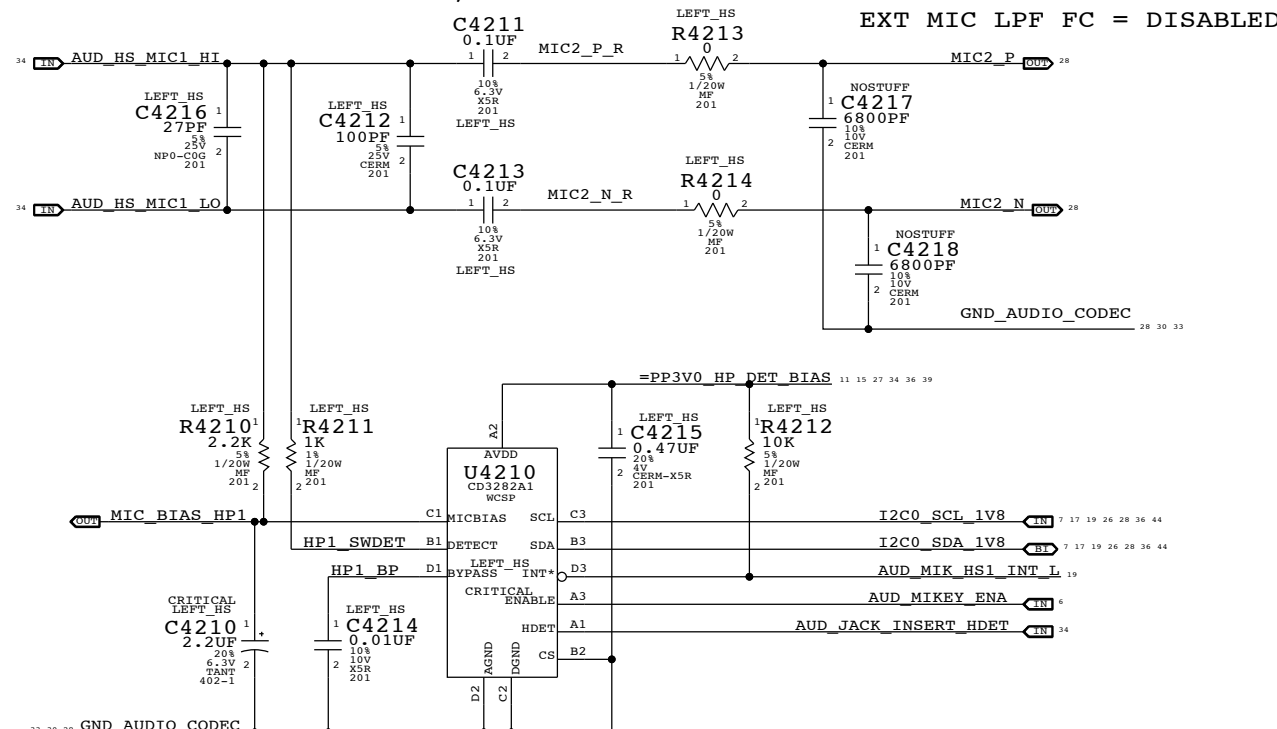
BI MIC LPF FC = ~19.8KHZ

EXTERNAL MIC INPUT CIRCUITRY

APN:353S2640

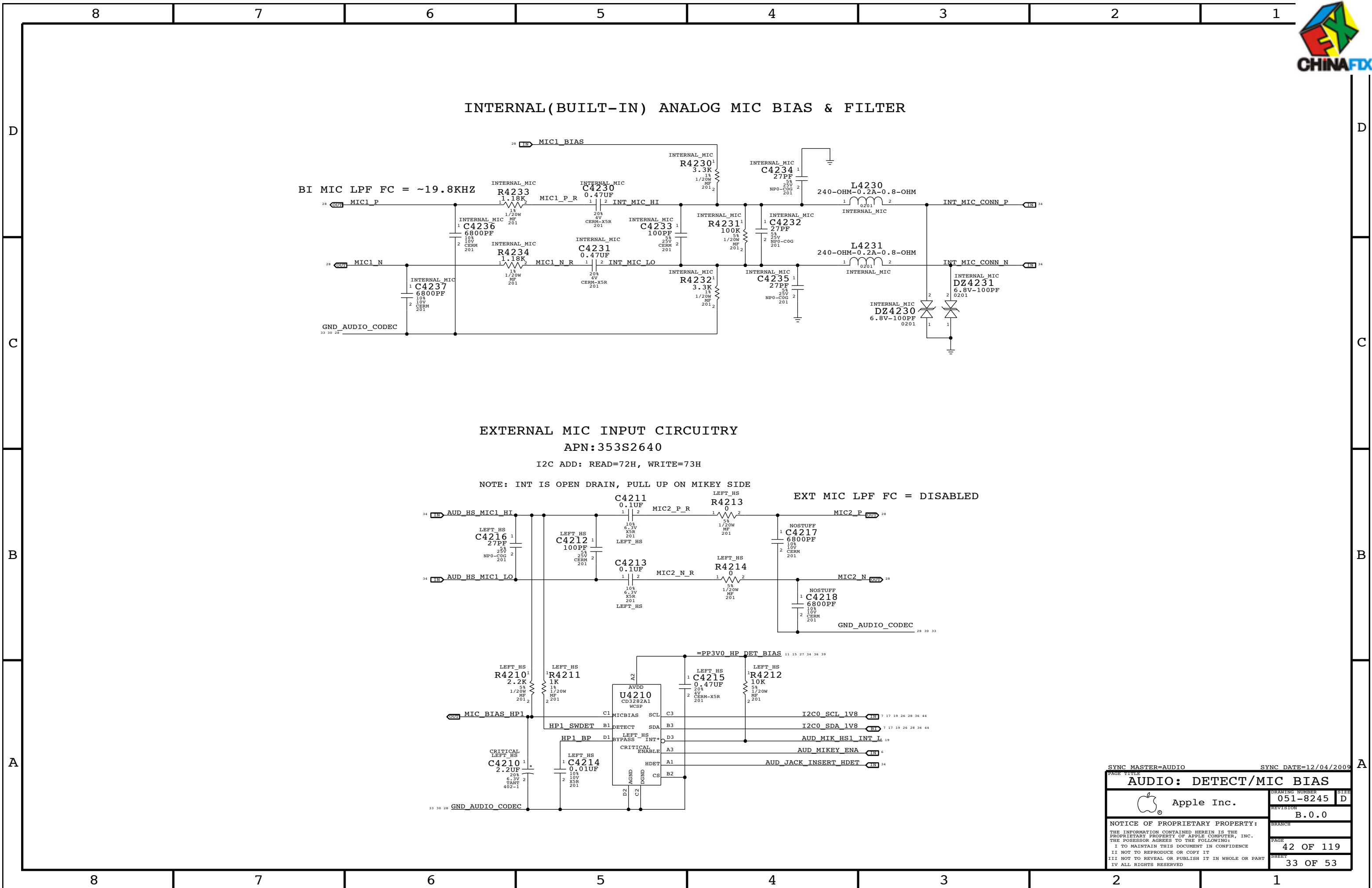
I2C ADD: READ=72H, WRITE=73H


NOTE: INT IS OPEN DRAIN, PULL UP ON MIKEY SIDE



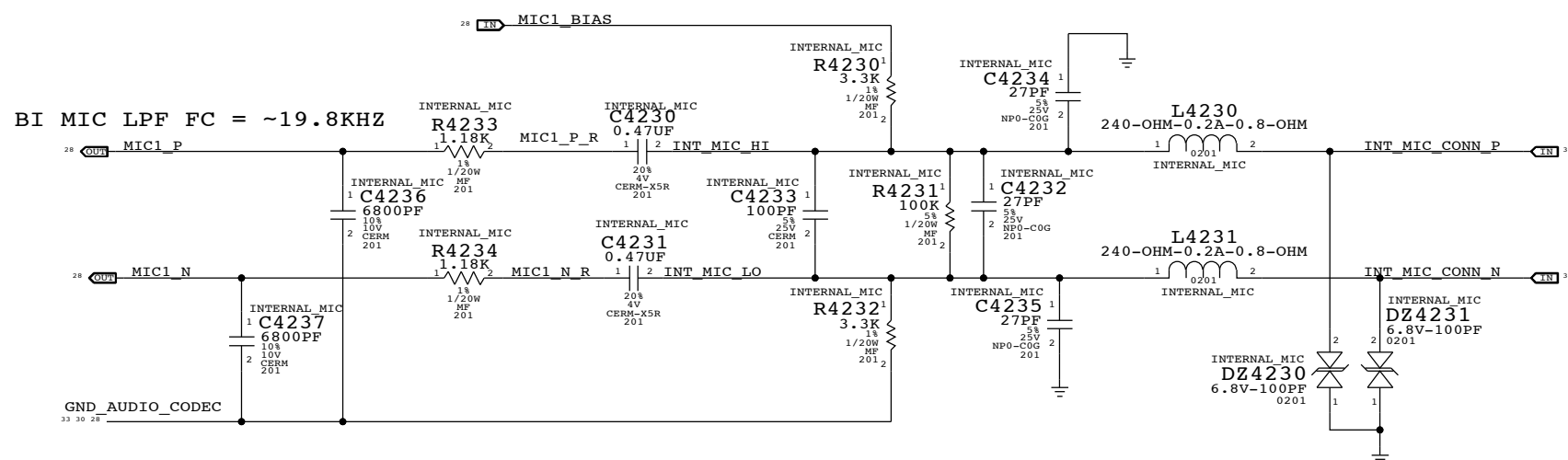
EXT MIC LPF FC = DISABLED

PAGE TITLE		SYNC MASTER=AUDIO		SYNC DATE=12/04/2009	
AUDIO: DETECT/MIC BIAS		DRAWING NUMBER		SIZE	
Apple Inc.		051-8245		D	
NOTICE OF PROPRIETARY PROPERTY:		REVISION		B.0.0	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		PAGE		42 OF 119	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		SHEET		33 OF 53	
II NOT TO REPRODUCE OR COPY IT					
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART					
IV ALL RIGHTS RESERVED					





INTERNAL (BUILT-IN) ANALOG MIC BIAS & FILTER



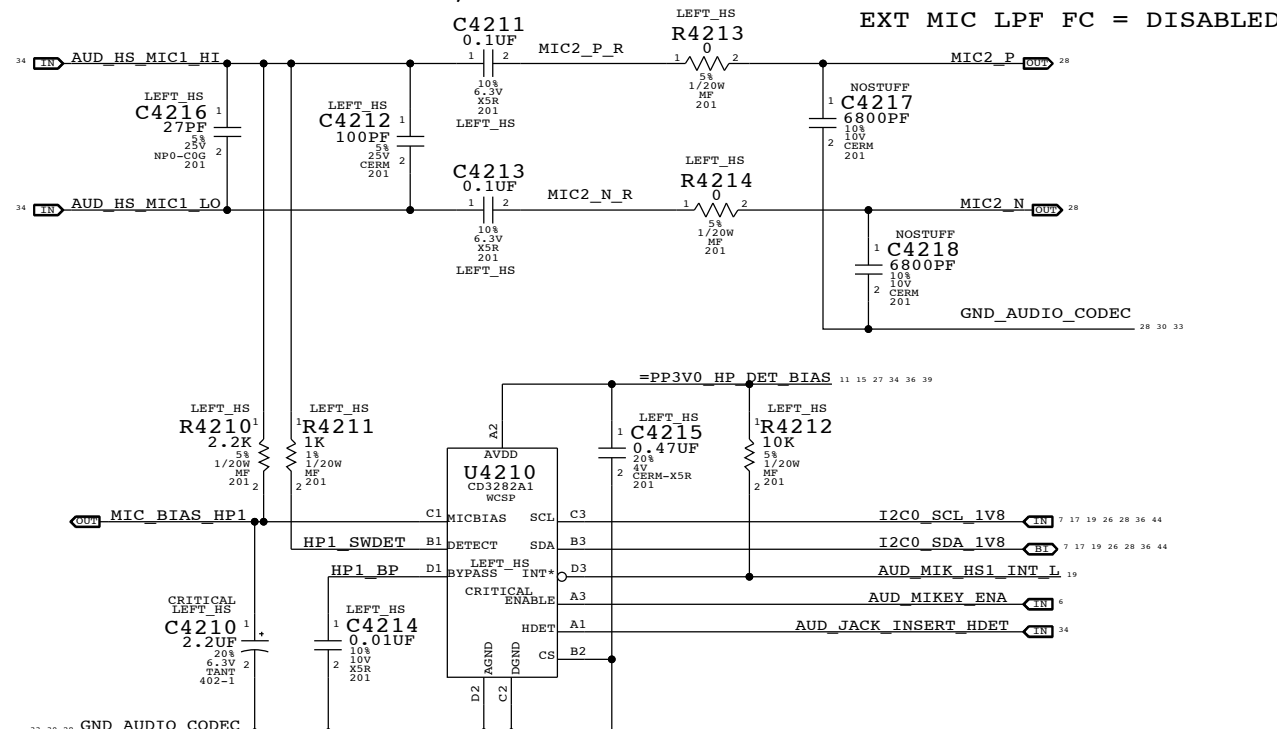
BI MIC LPF FC = ~19.8KHZ

EXTERNAL MIC INPUT CIRCUITRY

APN:353S2640

I2C ADD: READ=72H, WRITE=73H

NOTE: INT IS OPEN DRAIN, PULL UP ON MIKEY SIDE

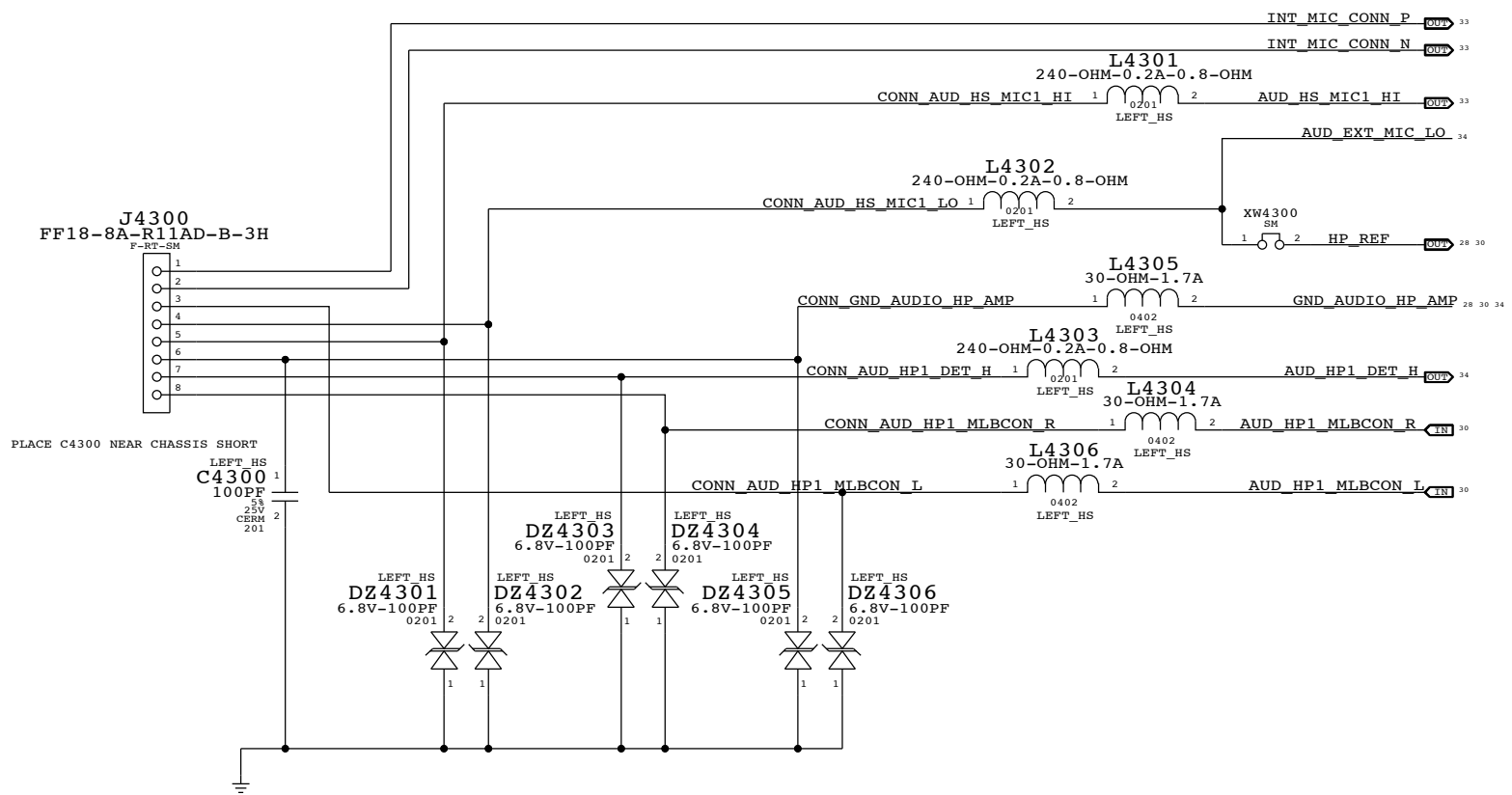


EXT MIC LPF FC = DISABLED

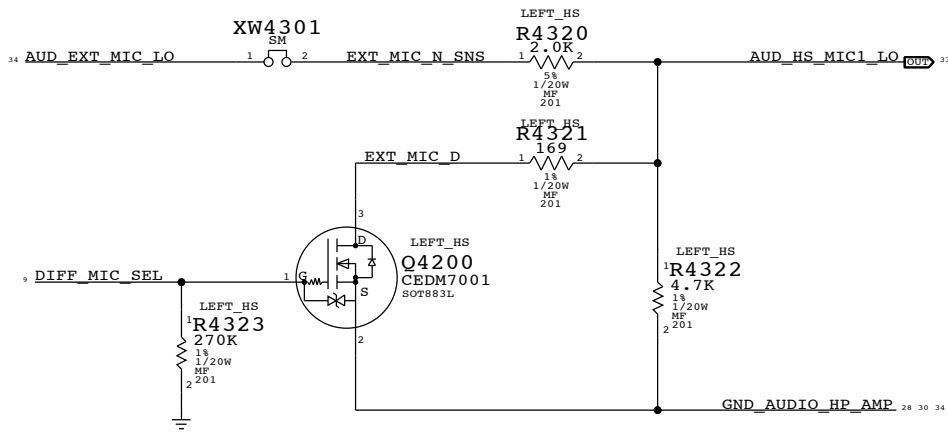
PAGE TITLE		SYNC MASTER=AUDIO		SYNC DATE=12/04/2009	
AUDIO: DETECT/MIC BIAS		DRAWING NUMBER		SIZE	
Apple Inc.		051-8245		D	
NOTICE OF PROPRIETARY PROPERTY:		REVISION		B.0.0	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		PAGE		42 OF 119	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		SHEET		33 OF 53	
II NOT TO REPRODUCE OR COPY IT					
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART					
IV ALL RIGHTS RESERVED					



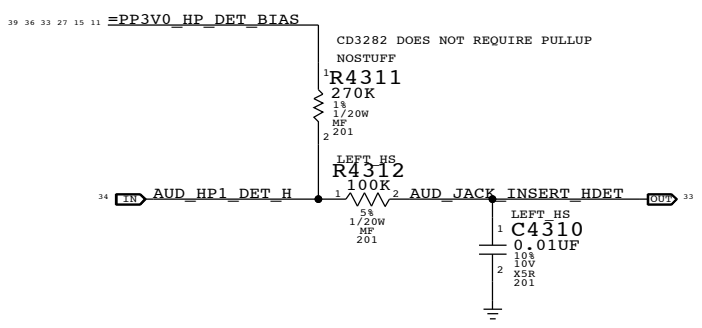
JACK 1 MLB CONNECTOR: HEADPHONE/HS_MIC/INT_MIC
APN: 518S0693




HEADSET HP/MIC CROSSTALK MITIGATION (NOT USED)



HEADSET JACK INSERTION DETECT



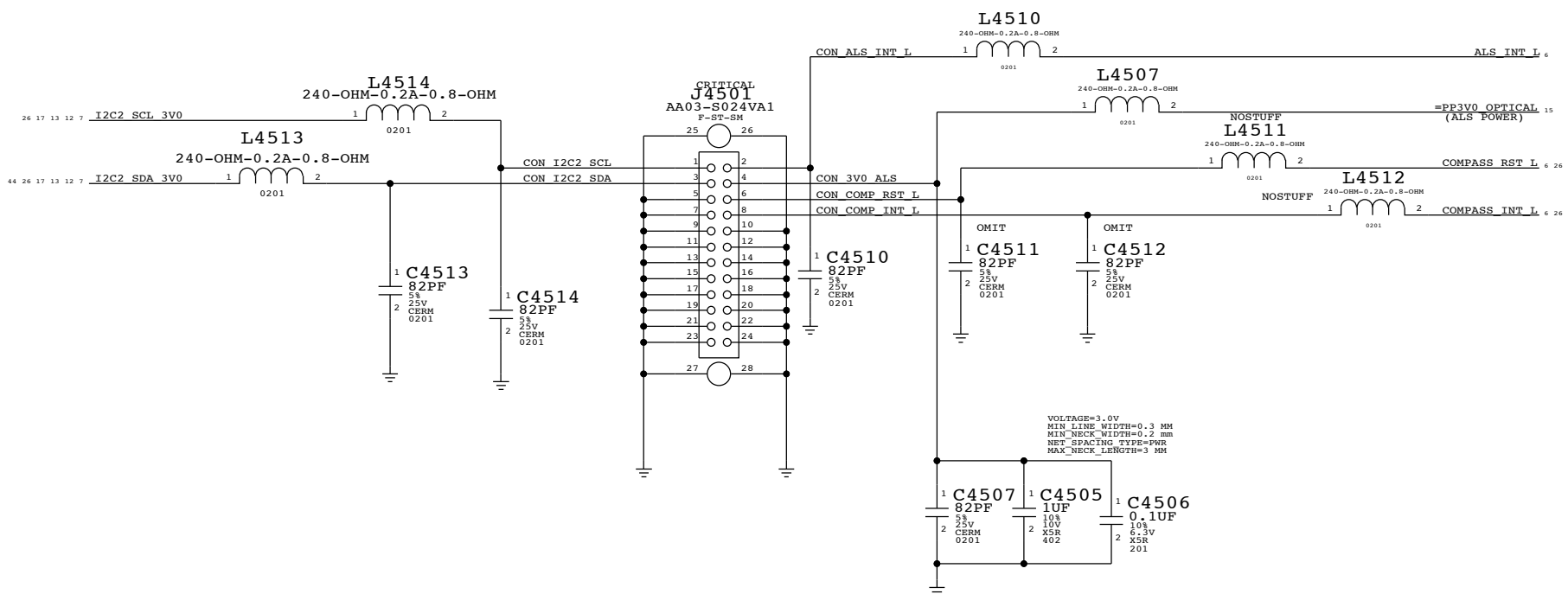
PAGE TITLE		DRAWING NUMBER		SIZE	
AUDIO: HP CONN		051-8245		D	
 Apple Inc.		REVISION		B.0.0	
NOTICE OF PROPRIETARY PROPERTY:		BRANCH			
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:		PAGE		43 OF 119	
I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE		SHEET		34 OF 53	
II NOT TO REPRODUCE OR COPY IT					
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART					
IV ALL RIGHTS RESERVED					



ALS CONN.

FPC CONNECTOR

APN: 516S0498



PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
117S0002	2	0-OHM, 5%, 1/20W, MF, 0201	C4511, C4512	

SYNC MASTER=MIAMI

SYNC DATE=09/16/2009

ALS CONNECTOR

Apple Inc.

DRAWING NUMBER

051-8245

SIZE

D

REVISION

B.0.0

BRANCH

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 THIS DOCUMENT IN CONFIDENCE
II NOT TO REPRODUCE OR COPY IT
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART
IV ALL RIGHTS RESERVED

PAGE

45 OF 119

SHEET

35 OF 53



D

D

C

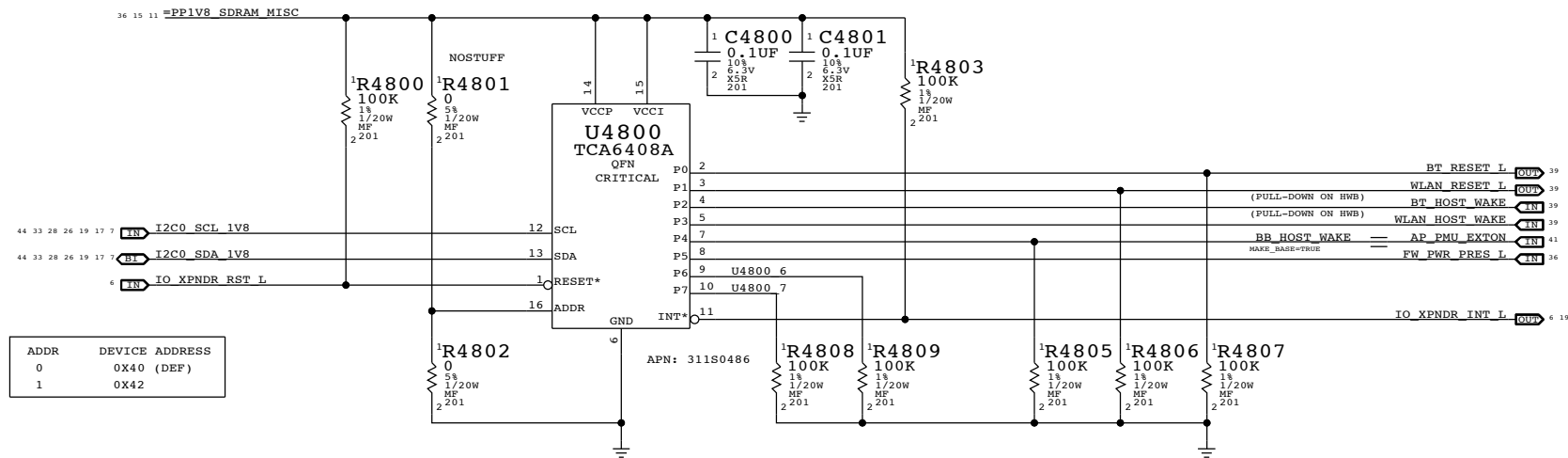
C

B

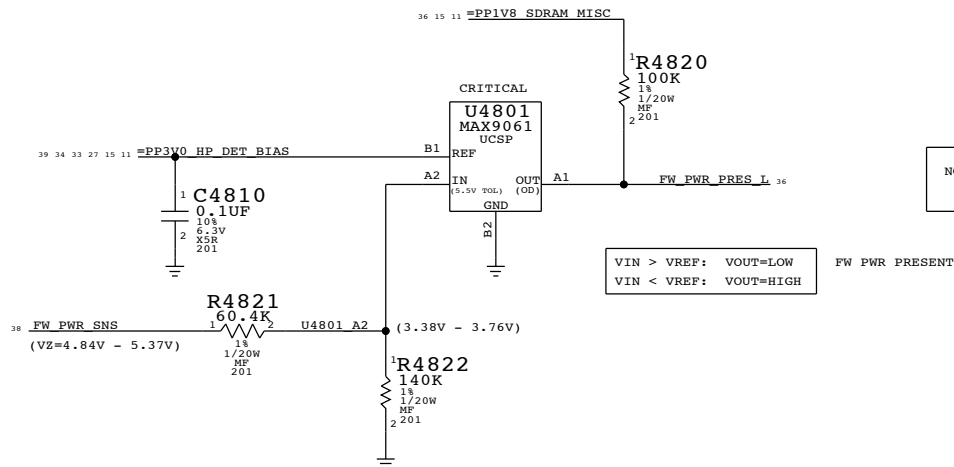
B


A

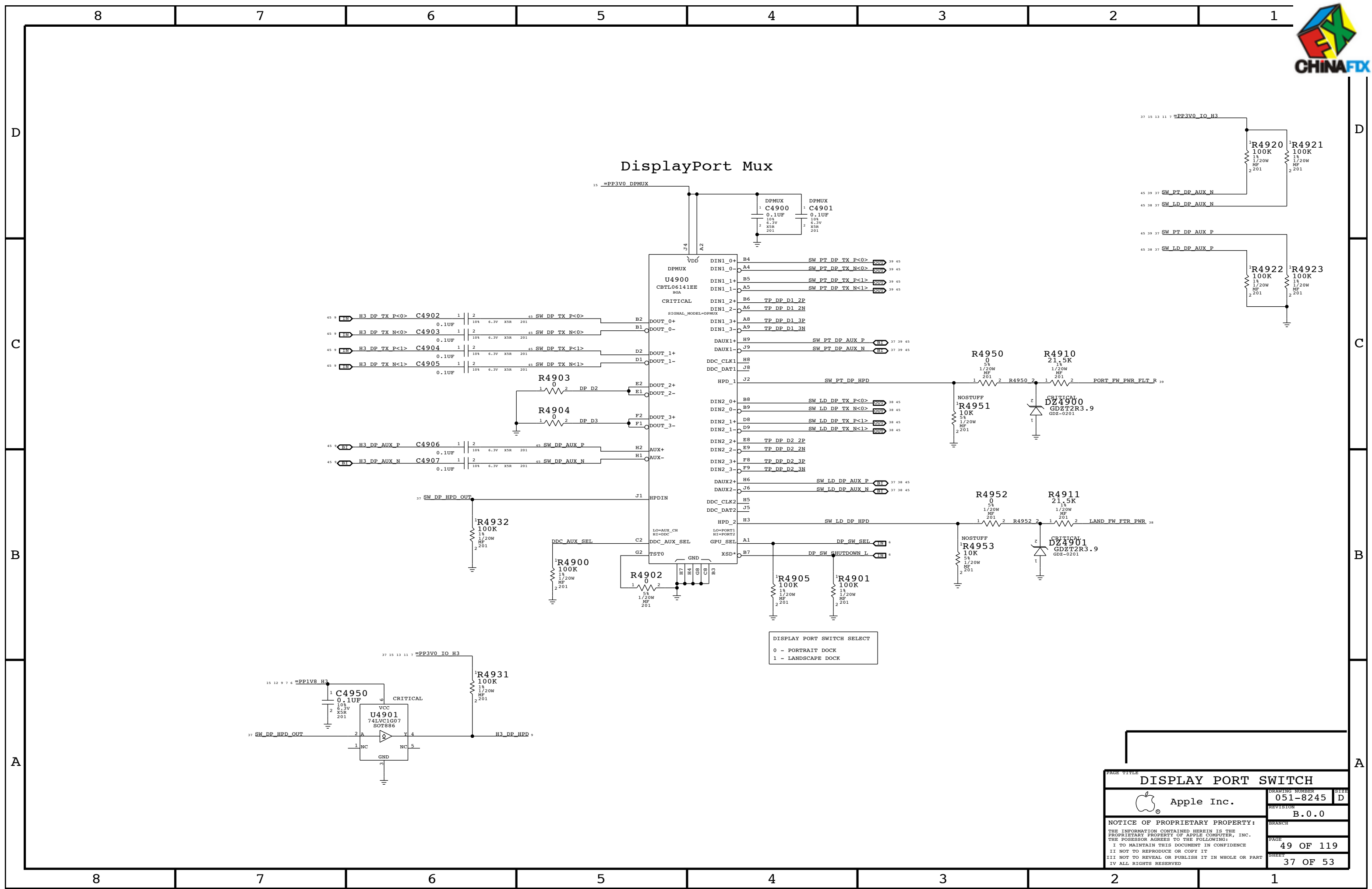
A




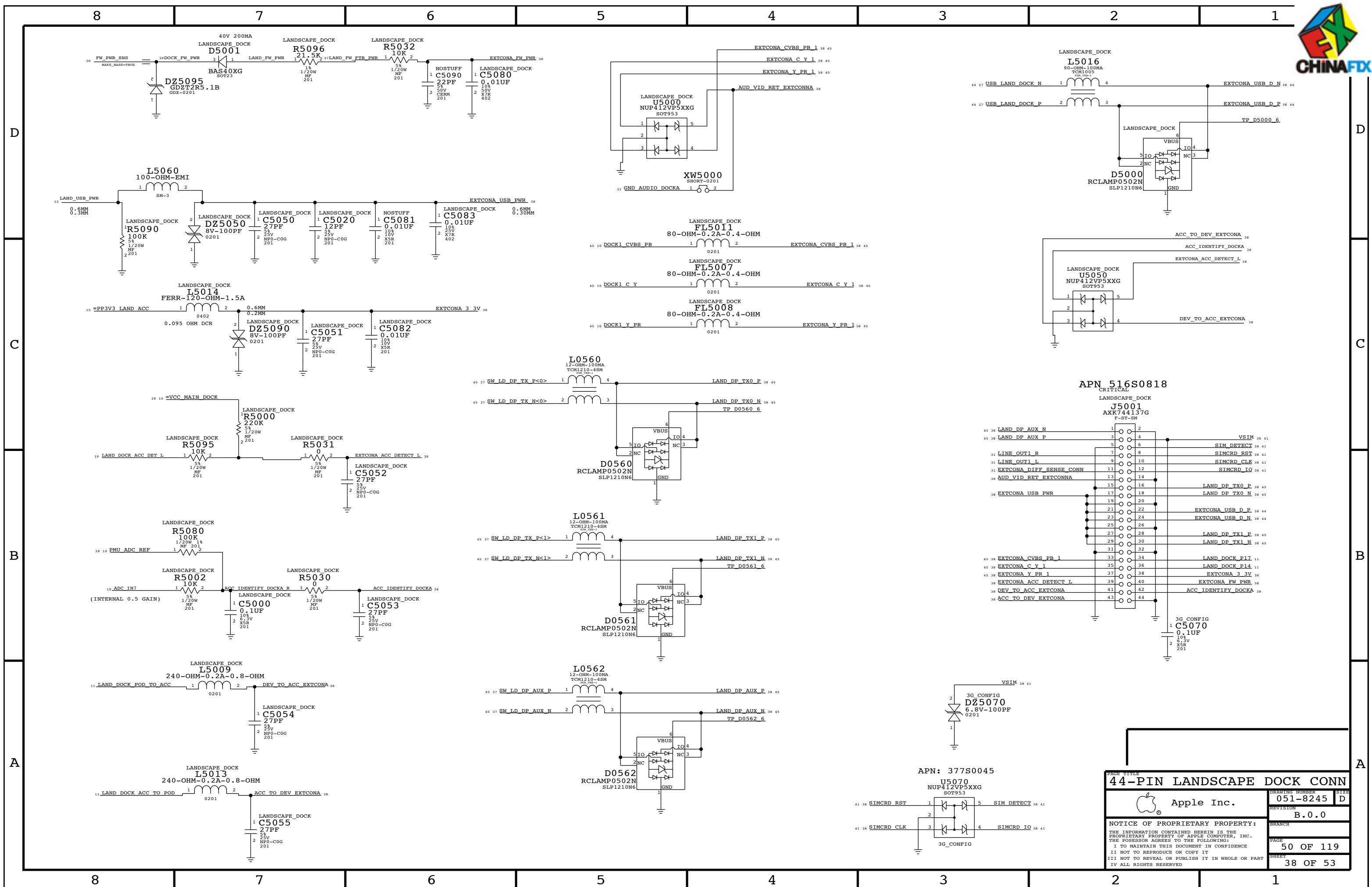
THIS IS SAME AS PREVIOUS, BUT CE APPROVED APN NUMBER (SAME PART)

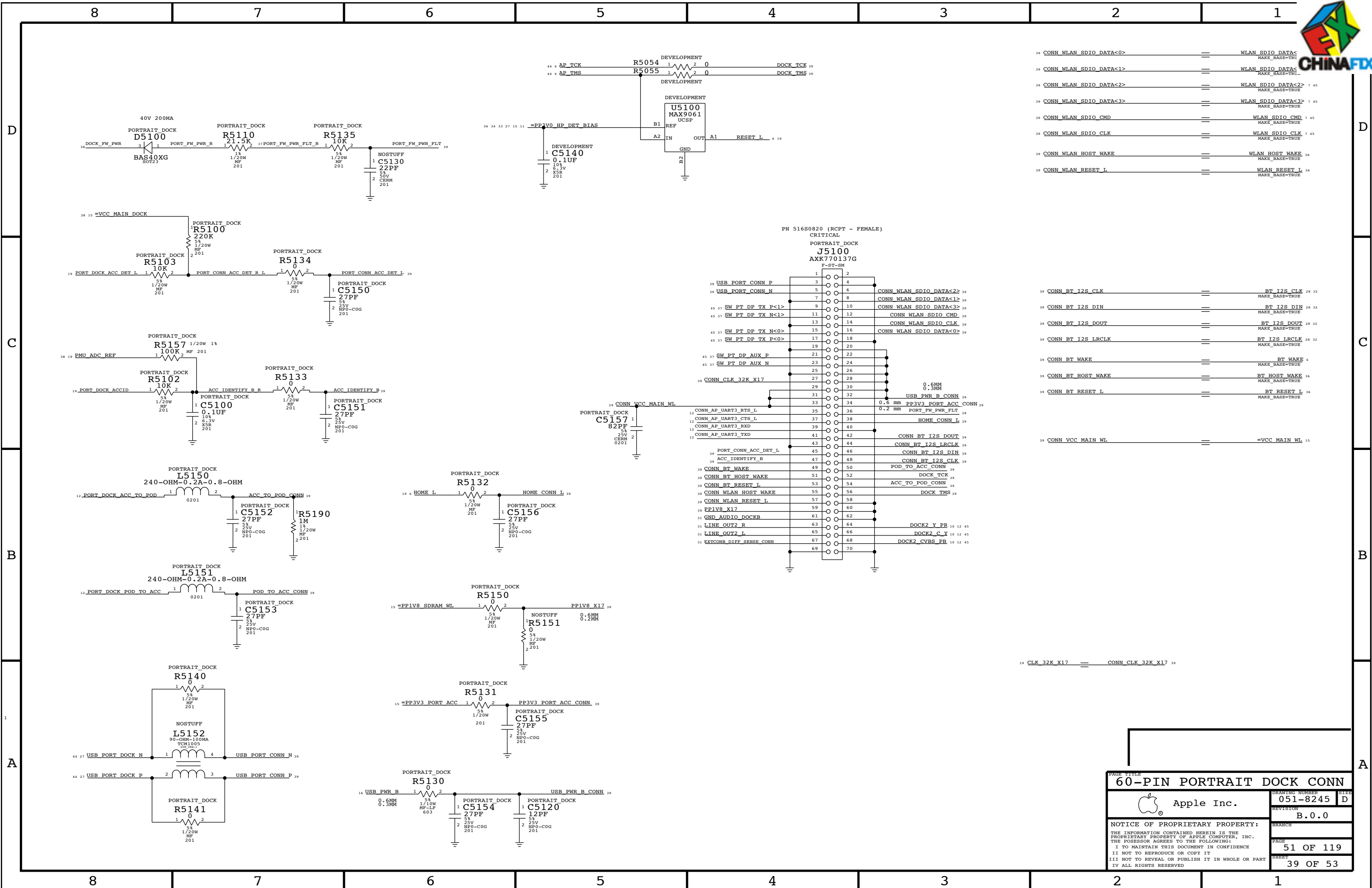
NOTE: FW PWR DETECTION IF FW VOLTAGE > 4.5V
ALSO IN THIS CASE, IGNORE H3_DP_HPD

I/O EXPANDER			
 Apple Inc.	DRAWING NUMBER	051-8245	SIZE
	REVISION	B.0.0	
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 THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		BRANCH	
		PAGE	48 OF 119
		SHEET	36 OF 53



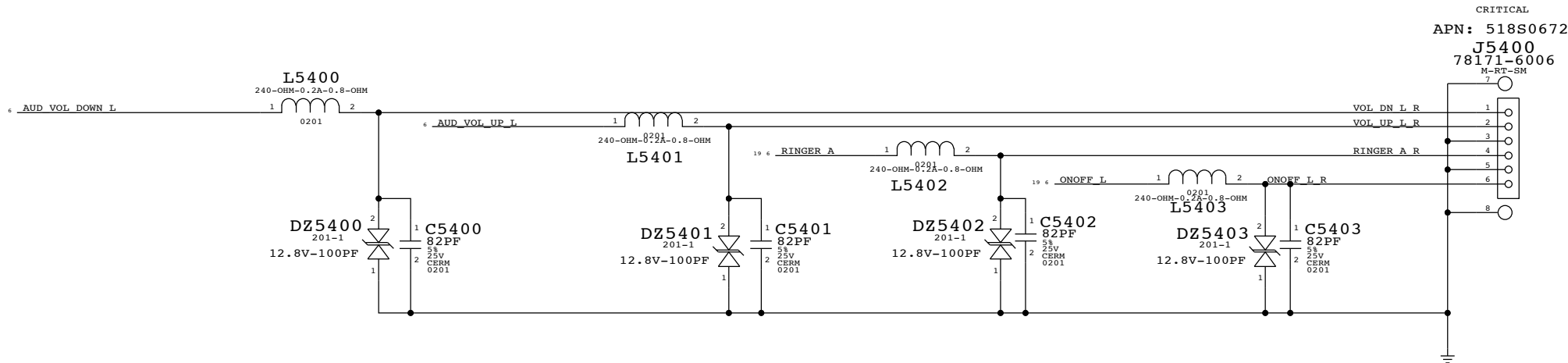
PAGE TITLE			
DISPLAY PORT SWITCH			
 Apple Inc.	DRAWING NUMBER	051-8245	SIZE D
	REVISION	B.0.0	
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED	BRANCH		
	PAGE	49 OF 119	
	SHEET	37 OF 53	




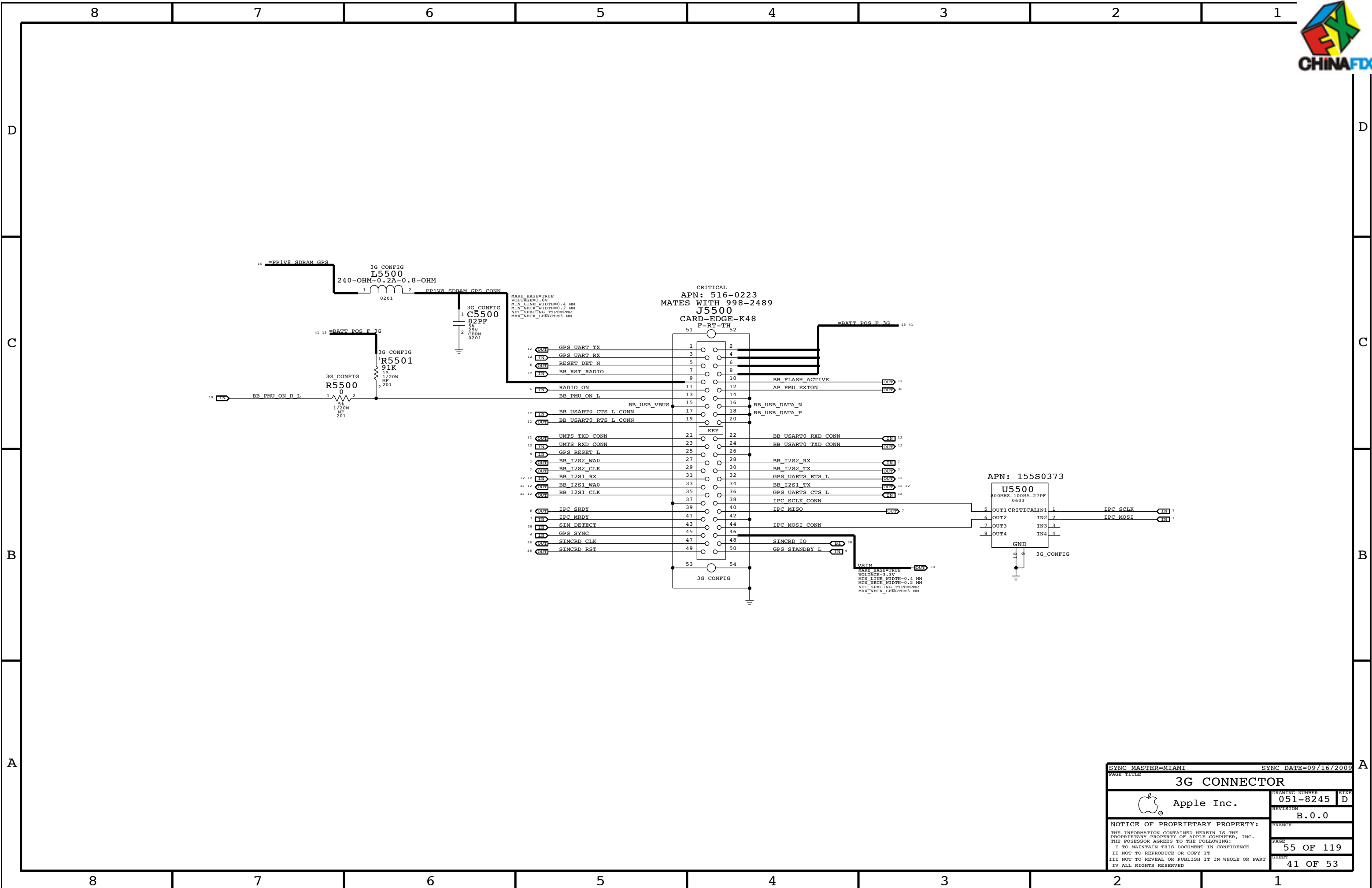


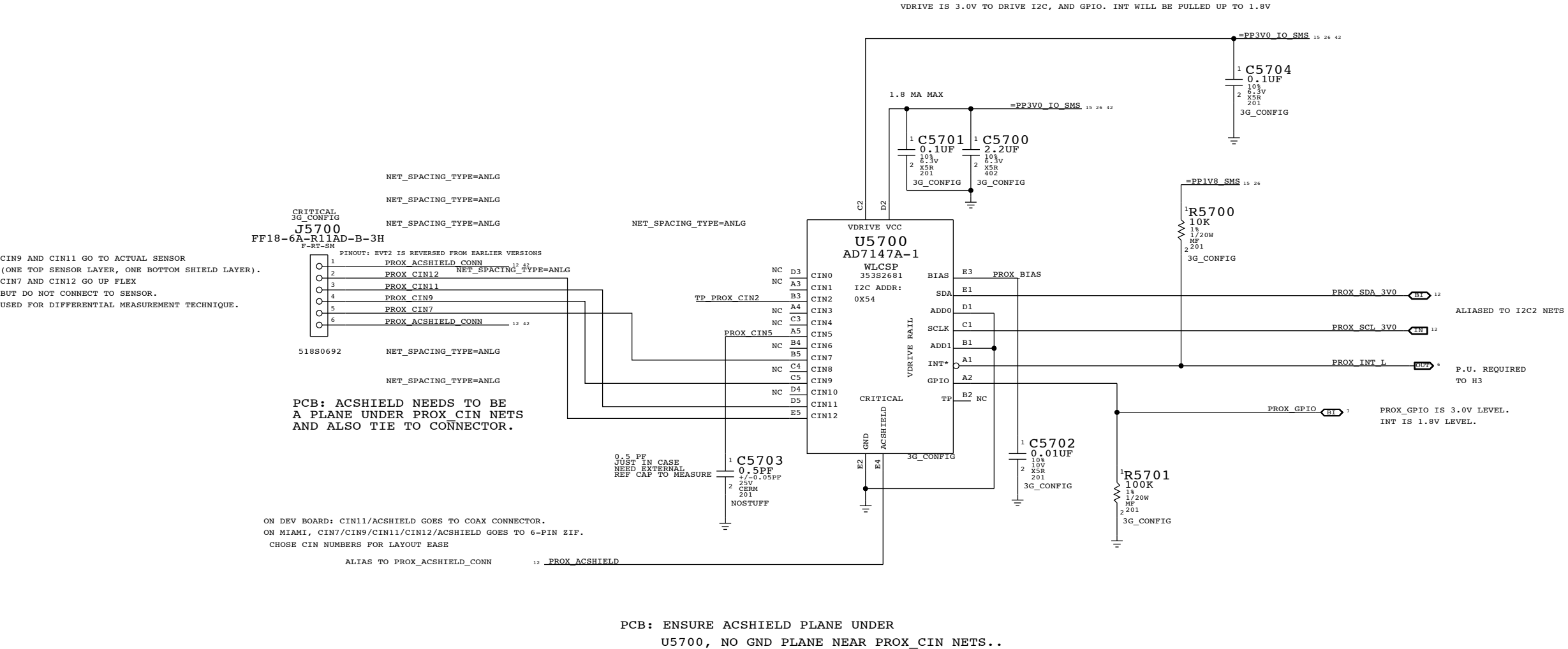



BUTTON CONNECTOR



SYNC MASTER=MIAMI		SYNC DATE=09/16/2009	
PAGE TITLE			
BUTTONS CONNECTOR			
 Apple Inc.		DRAWING NUMBER	051-8245
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED		REVISION	B.0.0
		BRANCH	
		PAGE	54 OF 119
		SHEET	40 OF 53





SYNC MASTER=MARKSIN		SYNC DATE=10/14/2009	
PAGE TITLE			
PROX SENSOR			
	DRAWING NUMBER		SHEET
	051-8245		D
Apple Inc.		REVISION	
		B.0.0	
NOTICE OF PROPRIETARY PROPERTY:			
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:			
I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE			
II NOT TO REPRODUCE OR COPY IT			
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART			
IV ALL RIGHTS RESERVED			
		PAGE	57 OF 119
		SHEET	42 OF 53



C

B


A

D

C

R

A

SYMC MASTER-MIAMI		SYMC DATE=09/16/2009	
PAGE TITLE			
FLASH			
	Apple Inc.		DRAWING NUMBER
			051-8245
		SIZE	D
		REVISION	
		B.0.0	
NOTICE OF PROPRIETARY PROPERTY:		BRANCH	
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTERS, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED			
		PAGE	67 OF 119
		SHEET	43 OF 53



Clock Signal Constraints

NET_PHYSICAL_TYPE	AREA_TYPE	PHYSICAL_RULE_SET
CLK_50S	*	50_OHM_SE

NET_SPACING_TYPE1	NET_SPACING_TYPE2	AREA_TYPE	SPACING_RULE_SET
CLK	*	*	0P5MM_SPACING

USB 2.0 Interface Constraints

NET_PHYSICAL_TYPE	AREA_TYPE	PHYSICAL_RULE_SET
USB_90D	*	90_OHM_DIFF

NET_SPACING_TYPE1	NET_SPACING_TYPE2	AREA_TYPE	SPACING_RULE_SET
USB	*	*	0P5MM_SPACING

OTHER CONSTRAINTS


NET_PHYSICAL_TYPE	AREA_TYPE	PHYSICAL_RULE_SET
I2C_50S	*	50_OHM_SE
NAND_50S	*	50_OHM_SE
AUDIO	*	1:1_DIFFPAIR
SPEAKER	*	SPEAKER

NET_SPACING_TYPE1	NET_SPACING_TYPE2	AREA_TYPE	SPACING_RULE_SET
NAND	*	*	1.5:1_SPACING
I2C	*	*	1.5:1_SPACING
AUDIO	*	*	3:1_SPACING

ELECTRICAL_CONSTRAINT_SET		NET_TYPE			
		PHYSICAL	SPACING		
U15		JTAG	AP_TCK	6 39	
U15		JTAG	AP_TMS	6 39	
U14		JTAG	AP_TDI	6 12	
U18		JTAG	AP_TDO	12	
U20		JTAG	AP_RTCK		
U5	USB	USB_90D	USB	USB_LAND_DOCK_P	27 38
U6	USB	USB_90D	USB	USB_LAND_DOCK_N	27 38
U7	USB	USB_90D	USB	USB_PORT_DOCK_P	27 39
U8	USB	USB_90D	USB	USB_PORT_DOCK_N	27 39
U9		USB_90D	USB	EXTCONA_USB_D_P	38
U10		USB_90D	USB	EXTCONA_USB_D_N	38
U24	USB	USB_90D	USB	USB_DP	6 27
U23	USB	USB_90D	USB	USB_DM	6 27

I2C BUS NET PROPERTIES

ELECTRICAL_CONSTRAINT_SET		NET_TYPE			
		PHYSICAL	SPACING		
U11	I2C1_ECS	I2C_50S	I2C	I2C1_SDA_1V8	7
U10	I2C1_ECS	I2C_50S	I2C	I2C1_SCL_1V8	7
U10	I2C0_ECS	I2C_50S	I2C	I2C0_SDA_1V8	7 17 19 26 28 33 36
U10	I2C0_ECS	I2C_50S	I2C	I2C0_SCL_1V8	7 17 19 26 28 33 36
U14	I2C2_ECS	I2C_50S	I2C	I2C2_SDA_3V0	7 12 13 17 26 35 44
U12	I2C2_ECS	I2C_50S	I2C	I2C2_SCL_3V0	7 12 13 17 26 35 44

SYNC MASTER=MIAMI		SYNC DATE=09/16/2009	
PAGE TITLE			
CONSTRAINTS			
 Apple Inc.		DRAWING NUMBER	051-8245
		REVISION	D
		B.0.0	
		BRANCH	
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 THIS DOCUMENT IN CONFIDENCE			
II NOT TO REPRODUCE OR COPY IT			
III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART			
IV ALL RIGHTS RESERVED			
		PAGE	100 OF 119
		SHEET	44 OF 53



Video Signal Constraints

PHYSICAL_RULE_SET	LAYER	ALLOW_ROUTE_ON_LAYER?	MINIMUM_LINE_WIDTH	MINIMUM_NECK_WIDTH	MAXIMUM_NECK_LENGTH	DIFFPAIR_PRIMARY_GAP	DIFFPAIR_NECK_GAP
VID_50S	*	Y	=50_OHM_SE	=50_OHM_SE	=50_OHM_SE	=STANDARD	=STANDARD

NET_PHYSICAL_TYPE	AREA_TYPE	PHYSICAL_RULE_SET
LVDS_100D	*	90_OHM_DIFF
MIPI_100D	*	90_OHM_DIFF
SMIA_100D	*	90_OHM_DIFF
DP_100D	*	90_OHM_DIFF

NET_SPACING_TYPE1	NET_SPACING_TYPE2	AREA_TYPE	SPACING_RULE_SET
ANALOG_VIDEO	*	*	2.5:1_SPACING
LVDS	*	*	4:1_SPACING
MIPI	*	*	4:1_SPACING
SMIA	*	*	4:1_SPACING
DP	*	*	4:1_SPACING

SDIO SIGNAL CONSTRAINTS

NET_PHYSICAL_TYPE	AREA_TYPE	PHYSICAL_RULE_SET
SDIO_50S	*	50_OHM_SE

NET_SPACING_TYPE1	NET_SPACING_TYPE2	AREA_TYPE	SPACING_RULE_SET
SDIO	*	*	1.5:1_SPACING

ANALOG VIDEO CONSTRAINTS

ELECTRICAL_CONSTRAINT_SET	NET_TYPE			
	PHYSICAL	SPACING		
H210	VID_50S	ANALOG_VIDEO	DAC_OUT1	10
H211	VID_50S	ANALOG_VIDEO	DAC_OUT2	10
H212	VID_50S	ANALOG_VIDEO	DAC_OUT3	10
H213	VID_50S	ANALOG_VIDEO	LAND_YOUT	10
H214	VID_50S	ANALOG_VIDEO	LAND_CVBS_OUT	10
H215	VID_50S	ANALOG_VIDEO	LAND_COUT	10
H216	VID_50S	ANALOG_VIDEO	PORT_YOUT	10
H217	VID_50S	ANALOG_VIDEO	PORT_CVBS_OUT	10
H218	VID_50S	ANALOG_VIDEO	PORT_COUT	10
H220	VID_50S	ANALOG_VIDEO	DOCK1_CVBS_PB	10 38
H221	VID_50S	ANALOG_VIDEO	DOCK1_C_Y	10 38
H222	VID_50S	ANALOG_VIDEO	DOCK1_Y_PR	10 38
H223	VID_50S	ANALOG_VIDEO	EXTCONA_CVBS_PB_1	38
H224	VID_50S	ANALOG_VIDEO	EXTCONA_C_Y_1	38
H225	VID_50S	ANALOG_VIDEO	EXTCONA_Y_PR_1	38
H226	VID_50S	ANALOG_VIDEO	DOCK2_CVBS_PB	10 12 39
H227	VID_50S	ANALOG_VIDEO	DOCK2_C_Y	10 12 39
H228	VID_50S	ANALOG_VIDEO	DOCK2_Y_PR	10 12 39

MIPI, SMIA AND DISPLAYPORT BUS CONSTRAINTS

ELECTRICAL_CONSTRAINT_SET	NET_TYPE					
	PHYSICAL	SPACING				
H301	MIPI_ECS	MIPI_100D	MIPI	H3 MIPID DATA P<0>	9	14
H302		MIPI_100D	MIPI	H3 MIPID DATA N<0>	9	14
H303	MIPI_ECS	MIPI_100D	MIPI	H3 MIPID DATA P<1>	9	14
H304		MIPI_100D	MIPI	H3 MIPID DATA N<1>	9	14
H305	MIPI_ECS	MIPI_100D	MIPI	H3 MIPID DATA P<2>	9	14
H306		MIPI_100D	MIPI	H3 MIPID DATA N<2>	9	14
H307	MIPI_ECS	MIPI_100D	MIPI	H3 MIPID DATA P<3>	9	14
H308		MIPI_100D	MIPI	H3 MIPID DATA N<3>	9	14
H309	MIPI_ECS	MIPI_100D	MIPI	H3 MIPID CLK P	9	14
H310		MIPI_100D	MIPI	H3 MIPID CLK N	9	14
H311	SMIA_ECS	SMIA_100D	SMIA	CAM SMIA DATA P		
H312		SMIA_100D	SMIA	CAM SMIA DATA N		
H313	SMIA_ECS	SMIA_100D	SMIA	CAM SMIA CLK P		
H314		SMIA_100D	SMIA	CAM SMIA CLK N		
H315		SMIA_100D	SMIA	CONN SMIA CLK P		
H316		SMIA_100D	SMIA	CONN SMIA CLK N		
H317						
H318						
H319						
H320						
H321	DP_H3_ECS	DP_100D	DP	H3 DP TX P<0>	9	37
H322		DP_100D	DP	H3 DP TX N<0>	9	37
H323	DP_H3_ECS	DP_100D	DP	H3 DP TX P<1>	9	37
H324		DP_100D	DP	H3 DP TX N<1>	9	37
H325	DP_H3_ECS	DP_100D	DP	H3 DP_AUX_P	9	37
H326		DP_100D	DP	H3 DP_AUX_N	9	37
H327		DP_100D	DP	SW DP TX P<0>	37	
H328		DP_100D	DP	SW DP TX N<0>	37	
H329		DP_100D	DP	SW DP TX P<1>	37	
H330		DP_100D	DP	SW DP TX N<1>	37	
H331		DP_100D	DP	SW DP_AUX_P	37	
H332		DP_100D	DP	SW DP_AUX_N	37	
H333	DP_PORT_ECS	DP_100D	DP	SW_PT_DP_TX P<0>	37	38
H334		DP_100D	DP	SW_PT_DP_TX N<0>	37	38
H335	DP_PORT_ECS	DP_100D	DP	SW_PT_DP_TX P<1>	37	38
H336		DP_100D	DP	SW_PT_DP_TX N<1>	37	38
H337	DP_PORT_ECS	DP_100D	DP	SW_PT_DP_AUX_P	37	38
H338		DP_100D	DP	SW_PT_DP_AUX_N	37	38
H339	DP_LAND_ECS	DP_100D	DP	SW_LD_DP_TX P<0>	37	38
H340		DP_100D	DP	SW_LD_DP_TX N<0>	37	38
H341	DP_LAND_ECS	DP_100D	DP	SW_LD_DP_TX P<1>	37	38
H342		DP_100D	DP	SW_LD_DP_TX N<1>	37	38
H343	DP_LAND_ECS	DP_100D	DP	SW_LD_DP_AUX_P	37	38
H344		DP_100D	DP	SW_LD_DP_AUX_N	37	38
H345		DP_100D	DP	LAND_DP_TX0_P	38	
H346		DP_100D	DP	LAND_DP_TX0_N	38	
H347		DP_100D	DP	LAND_DP_TX1_P	38	
H348		DP_100D	DP	LAND_DP_TX1_N	38	
H349		DP_100D	DP	LAND_DP_AUX_P	38	
H350		DP_100D	DP	LAND_DP_AUX_N	38	
H351		DP_100D	DP			



D

C

B

A

D

C

B

A

MIAMI BOARD-SPECIFIC SPACING & PHYSICAL CONSTRAINTS (10-LAYER)

BOARD LAYERS				BOARD AREAS		BOARD UNITS (MIL OR MM)	ALLEGRO VERSION
TOP, ISL2, ISL3, ISL4, ISL5, ISL6, ISL7, ISL8, ISL9, BOTTOM				NO_TYPE, BGA		MM	15.2

PHYSICAL_RULE_SET	LAYER	ALLOW ROUTE ON LAYER?	MINIMUM LINE WIDTH	MINIMUM NECK WIDTH	MAXIMUM NECK LENGTH	DIFFPAIR PRIMARY GAP	DIFFPAIR NECK GAP
DEFAULT	*	Y	=50_OHM_SE	=50_OHM_SE	30 MM	0 MM	0 MM
STANDARD	*	Y	=DEFAULT	=DEFAULT	12.7 MM	=DEFAULT	=DEFAULT

PHYSICAL_RULE_SET	LAYER	ALLOW ROUTE ON LAYER?	MINIMUM LINE WIDTH	MINIMUM NECK WIDTH	MAXIMUM NECK LENGTH	DIFFPAIR PRIMARY GAP	DIFFPAIR NECK GAP
50_OHM_SE	TOP, BOTTOM	Y	0.230 MM	0.070 MM	3.0 MM		
50_OHM_SE	ISL2, ISL9	Y	0.076 MM	0.070 MM	3.0 MM		
50_OHM_SE	ISL4, ISL7	Y	0.076 MM	0.070 MM	3.0 MM		
50_OHM_SE	*	N	0.070 MM	0.070 MM	3.0 MM		

PHYSICAL_RULE_SET	LAYER	ALLOW ROUTE ON LAYER?	MINIMUM LINE WIDTH	MINIMUM NECK WIDTH	MAXIMUM NECK LENGTH	DIFFPAIR PRIMARY GAP	DIFFPAIR NECK GAP
BGA	*	Y	0.075 MM	0.075 MM	=STANDARD	0.076 MM	0.075 MM

PHYSICAL_RULE_SET	LAYER	ALLOW ROUTE ON LAYER?	MINIMUM LINE WIDTH	MINIMUM NECK WIDTH	MAXIMUM NECK LENGTH	DIFFPAIR PRIMARY GAP	DIFFPAIR NECK GAP
90_OHM_DIFF	*	Y	=STANDARD	=STANDARD	=STANDARD	=STANDARD	=STANDARD
90_OHM_DIFF	ISL4, ISL7	Y	0.070 MM	0.070 MM		0.200 MM	0.100 MM
90_OHM_DIFF	TOP, BOTTOM	Y	0.070 MM	0.070 MM		0.200 MM	0.200 MM

PHYSICAL_RULE_SET	LAYER	ALLOW ROUTE ON LAYER?	MINIMUM LINE WIDTH	MINIMUM NECK WIDTH	MAXIMUM NECK LENGTH	DIFFPAIR PRIMARY GAP	DIFFPAIR NECK GAP
1:1_DIFFPAIR	*	Y	=STANDARD	=STANDARD	=STANDARD	0.075 MM	0.075 MM
SPEAKER	*	Y	0.3 MM	0.19MM	10 MM	0.075 MM	0.075 MM

SPACING_RULE_SET	LAYER	LINE-TO-LINE SPACING	WEIGHT
DEFAULT	*	0.08 MM	?
STANDARD	*	=DEFAULT	?
BGA	*	=DEFAULT	?


NET_SPACING_TYPE1	NET_SPACING_TYPE2	AREA_TYPE	SPACING_RULE_SET
*	*	BGA	BGA
CLK	*	BGA	BGA
PWR	*	*	PWR_P1SPACING
GND	*	*	GND_P1SPACING
SWITCHNODE	*	*	SWITCHNODE
PWR	*	*	PWR_P1SPACING
ANLG	*	*	3:1_SPACING
CRYSTAL	*	*	3:1_SPACING
JTAG	*	*	2:1_SPACING
I2S_ST	*	*	2:1_SPACING
I2S_ST	I2S_ST	*	1.5:1_SPACING

NET_PHYSICAL_TYPE	AREA_TYPE	PHYSICAL_RULE_SET
*	BGA	BGA

NOTES:

SPACING_RULE_SET	LAYER	LINE-TO-LINE SPACING	WEIGHT
1:1_SPACING	*	0.075 MM	?
1.5:1_SPACING	*	0.114 MM	?
1.8:1_SPACING	*	0.136 MM	?
2:1_SPACING	*	0.152 MM	?
2.5:1_SPACING	*	0.190 MM	?
3:1_SPACING	*	0.228 MM	?
4:1_SPACING	*	0.304 MM	?
0P64MM_SPACING	*	0.64 MM	?
0P5MM_SPACING	*	0.5 MM	?
PWR_P1SPACING	*	0.1 MM	900
GND_P1SPACING	*	0.1 MM	950
SWITCHNODE	*	0.5 MM	1000
SWITCHNODE	TOP, BOTTOM	0.2 MM	1000

0.075 MM ~ 3 MIL
0.089 MM ~ 3.5 MIL
0.102 MM ~ 4 MIL
0.114 MM ~ 4.5 MIL
0.125 MM ~ 5 MIL
0.140 MM ~ 5.5 MIL
0.15 MM ~ 6 MIL
0.18 MM ~ 7 MIL
0.2 MM ~ 8 MIL
0.25 MM ~ 10 MIL
0.3 MM ~ 12 MIL
0.33 MM ~ 13 MIL
0.4 MM ~ 16 MIL
1.0 MM = 39.37 MIL

SYNC MASTER=MIAMI		SYNC DATE=09/16/2009	
PAGE TITLE			
PHYSICAL/SPACING RULES			
 Apple Inc.	DRAWING NUMBER		SIZE
	051-8245		D
	REVISION		BRANCH
	B.0.0		
NOTICE OF PROPRIETARY PROPERTY: THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING: I I TO MAINTAIN THIS DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IT IN WHOLE OR PART IV ALL RIGHTS RESERVED			
		PAGE	106 OF 119
		SHEET	46 OF 53

A

	8	7	6	5	4	3	2	1	
	FFLAG_R FILT_CVBS_PB FILT_C_Y FILT_Y_PR FIL_CVBS_PB FIL_C_Y FIL_Y_PR FLASH_AD<0> FLASH_AD<1> FLASH_AD<2> FLASH_AD<3> FLASH_AD<4> FLASH_AD<5> FLASH_AD<6> FLASH_AD<7> FLASH_AD<8> FLASH_AD<9> FLASH_AD<10> FLASH_AD<11> FLASH_AD<12> FLASH_AD<13> FLASH_AD<14> FLASH_AD<15> FLASH_ALE FLASH_CE_L<0> FLASH_CE_L<1> FLASH_CE_L<2> FLASH_CE_L<3> FLASH_CE_L<4> FLASH_CE_L<5> FLASH_CE_L<6> FLASH_CE_L<7> FLASH_CLE FLASH_FRDY<0> FLASH_FRDY<1> FLASH_LED FLASH_RESET_L FLASH_RE_L FLASH_RREF FLASH_TEST FLASH_WE_L FLASH_WP_L FSB_ADSTB_L<0> FSB_ADSTB_L<1..0> FSB_ADSTB_L<1> FSB_ADS_L FSB_A_L<3> FSB_A_L<16..3> FSB_A_L<31..3> FSB_A_L<4> FSB_A_L<5> FSB_A_L<6> FSB_A_L<7> FSB_A_L<8> FSB_A_L<9> FSB_A_L<10> FSB_A_L<11> FSB_A_L<12> FSB_A_L<13> FSB_A_L<14> FSB_A_L<15> FSB_A_L<16> FSB_A_L<17> FSB_A_L<35..17> FSB_A_L<18> FSB_A_L<19> FSB_A_L<20> FSB_A_L<21> FSB_A_L<22> FSB_A_L<23> FSB_A_L<24> FSB_A_L<25> FSB_A_L<26> FSB_A_L<27> FSB_A_L<28> FSB_A_L<29> FSB_A_L<30> FSB_A_L<31> FSB_BNR_L FSB_BPRI_L FSB_BREQ0_L FSB_CVREF FSB_CVREF_L FSB								

8			7			6			5			4			3			2			1		
MT_PANEL_IN<11> MT_PANEL_IN<12> MT_PANEL_IN<13> MT_PANEL_IN<14> MT_PANEL_IN<15> MT_PANEL_IN<16> MT_PANEL_IN<17> MT_PANEL_IN<18> MT_PANEL_IN<19> MT_PANEL_IN<20> MT_PANEL_IN<21> MT_PANEL_IN<22> MT_PANEL_IN<23> MT_PANEL_IN<24> MT_PANEL_IN<25> MT_PANEL_IN<26> MT_PANEL_IN<27> MT_PANEL_IN<28> MT_PANEL_IN<29> MT_PANEL_OUT<0> MT_PANEL_OUT<29..0> MT_PANEL_OUT<1> MT_PANEL_OUT<2> MT_PANEL_OUT<3> MT_PANEL_OUT<4> MT_PANEL_OUT<5> MT_PANEL_OUT<6> MT_PANEL_OUT<7> MT_PANEL_OUT<8> MT_PANEL_OUT<9> MT_PANEL_OUT<10> MT_PANEL_OUT<11> MT_PANEL_OUT<12> MT_PANEL_OUT<13> MT_PANEL_OUT<14> MT_PANEL_OUT<15> MT_PANEL_OUT<16> MT_PANEL_OUT<17> MT_PANEL_OUT<18> MT_PANEL_OUT<19> MT_PANEL_OUT<20> MT_PANEL_OUT<21> MT_PANEL_OUT<22> MT_PANEL_OUT<23> MT_PANEL_OUT<24> MT_PANEL_OUT<25> MT_PANEL_OUT<26> MT_PANEL_OUT<27> MT_PANEL_OUT<28> MT_PANEL_OUT<29> MT_PANEL_OUT<30> MT_PANEL_OUT<31> MT_PANEL_OUT<32> MT_PANEL_OUT<33> MT_PANEL_OUT<34> MT_PANEL_OUT<35> MT_PANEL_OUT<36> MT_PANEL_OUT<37> MT_PANEL_OUT<38> MT_PANEL_OUT<39> NC_ALS_GAIN NC_CK505_PCI3 NC_ISENSE_CAL_EN NC_ISENSE_CAL_EN_L NC_I																							



	8	7	6	5	4	3	2	1
D	TP_LVDS_DATAP3 TP_LVDS_VSYNC_OUT TP_PCIE_PER1_N TP_PCIE_PER1_P TP_PCIE_PER2_N TP_PCIE_PER2_P TP_PCIE_PET1_N TP_PCIE_PET1_P TP_PCIE_PET2_N TP_PCIE_PET2_P TP_SCART_CVBS TP_SCART_VGA_B TP_SCART_VGA_G TP_SCART_VGA_R TP_SCH_CLK_LPC_1 TP_SCH_CLK_LPC_2 TP_SCH_GPIOSU0 TP_SCH_GPIO_9 TP_SCH_PLLMON1 TP_SCH_PLLMON1_L TP_SCH_RESVRD0 TP_SCH_RESVRD8 TP_SCH_SD0_DATA6 TP_SCH_SD1_CLK TP_SCH_SD2_CLK TP_U0600_G28 TP_U0600_K27 TP_U0600_U30 TP_U0600_V27 TP_U3101_TCK TP_U3101_TDI TP_U3101_TDO TP_U3101_TMS TP_USB_D_N TP_USB_D_P TP_USB_G_N TP_USB_G_P TP_USB_H_N TP_USB_H_P TP_WL_TCK TP_WL_TDI TP_WL_TDO TP_WL_TMS TP_WL_TRST_L TVCLK_N TVCLK_P TVOUT_DOCKS_EN U6700_R1 U6700_R2 U6700_R3 U6700_R4 U6710_R1 U6710_R2 U6710_R3 U6710_R4 USBA_EXT_N USBA_EXT_PR USBA_GATE USBA_GATE_D USBA_PWR_DETECT_L USBA_PWR_SLCT USBB_EXT_N USBB_EXT_PR USBB_GATE USBB_GATE_D USBB_PWR_DETECT_L USBB_PWR_SLCT USBCC USB_BT_N USB_BT_P USB_CAMERA_CONN_N USB_CAMERA_CONN_P USB_CAMERA_N USB_CAMERA_P USB_C_N USB_C_P USB_FLASH_CON_N USB_FLASH_CON_P USB_FLASH_N USB_FLASH_P USB_GRAPE_N USB_GRAPE_P USB_LAND_DOCK_N USB_LAND_DOCK_P USB_PORT_DOCK_N USB_PORT_DOCK_P USB_PSOC_N USB_PSOC_P USB_PWR_A USB_PWR_B USB_RBIAS_PN VCORE_BG VCORE_BOOST VCORE_BOOST_RCD VCORE_CLSET VCORE_CS VCORE_CSN VCORE_CSP VCORE_CSP_R VCORE_DAC VCORE_DRN VCORE_ERRROUT VCORE_FBN VCORE_FBP VCORE_GND VCORE_HYS VCORE_RAMP VCORE_SS VCORE_TG VCORE_TTRIP VCORE_VCCA VCORE_VREF VR_PWRGD_CLKEN_L VSSAPCIEBG WL_HOST_WAKE WL_RESET_L WL_WAKE_L XDP_BPM_L<0> XDP_BPM_L<4..0> XDP_BPM_L<1> XDP_BPM_L<2> XDP_BPM_L<3>	TP_LVDS_DATAP3 - @lost_lib.LOST TP_LVDS_VSYNC_OUT - @lost_lib.LOST TP_PCIE_PER1_N - @lost_lib.LOST TP_PCIE_PER1_P - @lost_lib.LOST TP_PCIE_PER2_N - @lost_lib.LOST TP_PCIE_PER2_P - @lost_lib.LOST TP_PCIE_PET1_N - @lost_lib.LOST TP_PCIE_PET1_P - @lost_lib.LOST TP_PCIE_PET2_N - @lost_lib.LOST TP_PCIE_PET2_P - @lost_lib.LOST TP_SCART_CVBS - @lost_lib.LOST TP_SCART_VGA_B - @lost_lib.LOST TP_SCART_VGA_G - @lost_lib.LOST TP_SCART_VGA_R - @lost_lib.LOST TP_SCH_CLK_LPC_1 - @lost_lib.LOST TP_SCH_CLK_LPC_2 - @lost_lib.LOST TP_SCH_GPIOSU0 - @lost_lib.LOST TP_SCH_GPIO_9 - @lost_lib.LOST TP_SCH_PLLMON1 - @lost_lib.LOST TP_SCH_PLLMON1_L - @lost_lib.LOST TP_SCH_RESVRD0 - @lost_lib.LOST TP_SCH_RESVRD8 - @lost_lib.LOST TP_SCH_SD0_DATA6 - @lost_lib.LOST TP_SCH_SD1_CLK - @lost_lib.LOST TP_SCH_SD2_CLK - @lost_lib.LOST TP_U0600_G28 - @lost_lib.LOST TP_U0600_K27 - @lost_lib.LOST TP_U0600_U30 - @lost_lib.LOST TP_U0600_V27 - @lost_lib.LOST TP_U3101_TCK - @lost_lib.LOST TP_U3101_TDI - @lost_lib.LOST TP_U3101_TDO - @lost_lib.LOST TP_U3101_TMS - @lost_lib.LOST TP_USB_D_N - @lost_lib.LOST TP_USB_D_P - @lost_lib.LOST TP_USB_G_N - @lost_lib.LOST TP_USB_G_P - @lost_lib.LOST TP_USB_H_N - @lost_lib.LOST TP_USB_H_P - @lost_lib.LOST TP_WL_TCK - @lost_lib.LOST TP_WL_TDI - @lost_lib.LOST TP_WL_TDO - @lost_lib.LOST TP_WL_TMS - @lost_lib.LOST TP_WL_TRST_L - @lost_lib.LOST TVCLK_N - @lost_lib.LOST TVCLK_P - @lost_lib.LOST TVOUT_DOCKS_EN - @lost_lib.LOST U6700_R1 - @lost_lib.LOST U6700_R2 - @lost_lib.LOST U6700_R3 - @lost_lib.LOST U6700_R4 - @lost_lib.LOST U6710_R1 - @lost_lib.LOST U6710_R2 - @lost_lib.LOST U6710_R3 - @lost_lib.LOST U6710_R4 - @lost_lib.LOST USBA_EXT_N - @lost_lib.LOST USBA_EXT_PR - @lost_lib.LOST USBA_GATE - @lost_lib.LOST USBA_GATE_D - @lost_lib.LOST USBA_PWR_DETECT_L - @lost_lib.LOST USBA_PWR_SLCT - @lost_lib.LOST USBB_EXT_N - @lost_lib.LOST USBB_EXT_PR - @lost_lib.LOST USBB_GATE - @lost_lib.LOST USBB_GATE_D - @lost_lib.LOST USBB_PWR_DETECT_L - @lost_lib.LOST USBB_PWR_SLCT - @lost_lib.LOST USBCC - @lost_lib.LOST USB_BT_N - @lost_lib.LOST USB_BT_P - @lost_lib.LOST USB_CAMERA_CONN_N - @lost_lib.LOST USB_CAMERA_CONN_P - @lost_lib.LOST USB_CAMERA_N - @lost_lib.LOST USB_CAMERA_P - @lost_lib.LOST USB_C_N - @lost_lib.LOST USB_C_P - @lost_lib.LOST USB_FLASH_CON_N - @lost_lib.LOST USB_FLASH_CON_P - @lost_lib.LOST USB_FLASH_N - @lost_lib.LOST USB_FLASH_P - @lost_lib.LOST USB_GRAPE_N - @lost_lib.LOST USB_GRAPE_P - @lost_lib.LOST USB_LAND_DOCK_N - @lost_lib.LOST USB_LAND_DOCK_P - @lost_lib.LOST USB_PORT_DOCK_N - @lost_lib.LOST USB_PORT_DOCK_P - @lost_lib.LOST USB_PSOC_N - @lost_lib.LOST USB_PSOC_P - @lost_lib.LOST USB_PWR_A - @lost_lib.LOST USB_PWR_B - @lost_lib.LOST USB_RBIAS_PN - @lost_lib.LOST VCORE_BG - @lost_lib.LOST VCORE_BOOST - @lost_lib.LOST VCORE_BOOST_RCD - @lost_lib.LOST VCORE_CLSET - @lost_lib.LOST VCORE_CS - @lost_lib.LOST VCORE_CSN - @lost_lib.LOST VCORE_CSP - @lost_lib.LOST VCORE_CSP_R - @lost_lib.LOST VCORE_DAC - @lost_lib.LOST VCORE_DRN - @lost_lib.LOST VCORE_ERRROUT - @lost_lib.LOST VCORE_FBN - @lost_lib.LOST VCORE_FBP - @lost_lib.LOST VCORE_GND - @lost_lib.LOST VCORE_HYS - @lost_lib.LOST VCORE_RAMP - @lost_lib.LOST VCORE_SS - @lost_lib.LOST VCORE_TG - @lost_lib.LOST VCORE_TTRIP - @lost_lib.LOST VCORE_VCCA - @lost_lib.LOST VCORE_VREF - @lost_lib.LOST VR_PWRGD_CLKEN_L - @lost_lib.LOST VSSAPCIEBG - @lost_lib.LOST WL_HOST_WAKE - @lost_lib.LOST WL_RESET_L - @lost_lib.LOST WL_WAKE_L - @lost_lib.LOST XDP_BPM_L<0> - @lost_lib.LOST XDP_BPM_L<4..0> - @lost_lib.LOST XDP_BPM_L<1> - @lost_lib.LOST XDP_BPM_L<2> - @lost_lib.LOST XDP_BPM_L<3> - @lost_lib.LOST	9C6 5D6 32C2 984 984 984 984 984 984 984 984 94C5 94C5 94C5 94C5 9D6 9D6 10C5 10B5 8A6 8A6 9D4 9D4 986 986 986 6B5 6B5 31C6 31C6 31C6 31C6 10D7 103B4 10D7 103B4 10D7 103B4 10D7 103B4 10D7 103B4 96B3 96B3 96B3 96B3 96B3 94B7 101B4 94B7 101B4 10B4 10C2 75B8 67B6 67B6 67B6 67B6 67B3 67B3 67B3 67B3 67B3 35D6 35D6 18D3 18C3 18D2 28B8 18C2 28C8 35B6 35C6 18C5 18C4 18C3 28B8 18C4 28C8 10B5 28B5 10D7 97C5 103C4 10D7 97C5 103C4 5B6 46C6 103D4 5B6 46C6 103D4 10D7 46C6 103D4 10D7 46C6 103D4 10D7 35A4 103D4 10D7 10D7 65B5 103D4 65C5 103D4 10D7 65B6 103D4 10D7 65C6 103D4 10D7 30D4 103C4 10D7 30D4 103C4 35A3 35D5 50D3 103D4 35A3 35D5 50D3 103D4 35A3 35C5 51D3 103D4 35A3 35C5 51D3 103D4 30D3 30D3 18D2 50D7 18C3 51D7 10C7 20C5 20C5 20D4 20C6 20B2 20C6 20C6 20B3 20C6 20C5 20C5 20C6 20C6 20A4 20B6 20C8 20C6 20B5 20C6 20C5 20C6 20B6 20C4 20C8 20A7 20C4 12B2 28A8 96B3 28D5 96B3 29B4 6C5 90C6 100A3 6C5 90C6 6C5 90C6 6C5 90C6	XDP_BPM_L<4> XDP_BPM_L<5> XDP_CPURST_L XDP_DBRESET_L XDP_FWRGD XDP_SCH_TCK<1> XDP_SCH_TDI XDP_SCH_TDO XDP_SCH_TMS XDP_SCL XDP_SDA XDP_TCK XDP_TDI XDP_TDO XDP_TRST_L XTAL_FLASH_IN XTAL_FLASH_OUT Y9400_2 Y_PR Z1_IV8_OUT Z1_BON_L<0> Z1_BON_L<1> Z1_BON_L<2> Z1_BON_L<3> Z1_BON_L<4> Z1_BON_L<5> Z1_B_ADDR<0> Z1_B_ADDR<1> Z1_B_ADDR<2> Z1_CS_L Z1_DONE Z1_GO Z1_MISO Z1_MOSI Z1_PCLK Z1_SCLK Z1_STWIN Z2_3V3_IV8_IN Z2_VDDANA Z2_VDDCORE	XDP_BPM_L<4> - @lost_lib.LOST XDP_BPM_L<5> - @lost_lib.LOST XDP_CPURST_L - @lost_lib.LOST XDP_DBRESET_L - @lost_lib.LOST XDP_FWRGD - @lost_lib.LOST XDP_SCH_TCK<1> - @lost_lib.LOST XDP_SCH_TDI - @lost_lib.LOST XDP_SCH_TDO - @lost_lib.LOST XDP_SCH_TMS - @lost_lib.LOST XDP_SCL - @lost_lib.LOST XDP_SDA - @lost_lib.LOST XDP_TCK - @lost_lib.LOST XDP_TDI - @lost_lib.LOST XDP_TDO - @lost_lib.LOST XDP_TRST_L - @lost_lib.LOST XTAL_FLASH_IN - @lost_lib.LOST XTAL_FLASH_OUT - @lost_lib.LOST Y9400_2 - @lost_lib.LOST Y_PR - @lost_lib.LOST Z1_IV8_OUT - @lost_lib.LOST Z1_BON_L<0> - @lost_lib.LOST Z1_BON_L<1> - @lost_lib.LOST Z1_BON_L<2> - @lost_lib.LOST Z1_BON_L<3> - @lost_lib.LOST Z1_BON_L<4> - @lost_lib.LOST Z1_BON_L<5> - @lost_lib.LOST Z1_B_ADDR<0> - @lost_lib.LOST Z1_B_ADDR<1> - @lost_lib.LOST Z1_B_ADDR<2> - @lost_lib.LOST Z1_CS_L - @lost_lib.LOST Z1_DONE - @lost_lib.LOST Z1_GO - @lost_lib.LOST Z1_MISO - @lost_lib.LOST Z1_MOSI - @lost_lib.LOST Z1_PCLK - @lost_lib.LOST Z1_SCLK - @lost_lib.LOST Z1_STWIN - @lost_lib.LOST Z2_3V3_IV8_IN - @lost_lib.LOST Z2_VDDANA - @lost_lib.LOST Z2_VDDCORE - @lost_lib.LOST	6C5 90C6 6C5 6C5 90C6 100A3 90B3 6C5 28A5 90B3 100A3 90C6 10C5 90B6 100C1 10C5 90A5 100C1 10C5 90A4 90B3 100C1 10C5 90A4 100C1 6A8 6C5 90A5 90B3 100B3 90B5 90B5 6A8 6C5 90B6 100A3 6A8 6C5 90A4 90B3 100B3 6A8 6C5 90A5 100B3 6C5 10C5 90B3 100A3 66C6 66C6 94A7 75B8 94B3 101B7 31D4 31D5 30C8 31C3 30C8 31C3 30C7 31C3 30C7 31C3 30D6 31C3 30D6 31C3 30C8 30D6 30D7 31C3 30C8 30D6 30D7 31C3 30C8 30D6 30D7 31C3 31C6 31D3 31C3 31C6 31C3 31C6 31B6 31C3 31B6 31C3 31C3 31C6 31C6 31D3 31C3 31D6 31D8 31A6 31D8		
C								
B								
A								

FX
CHINAFOX

116



8			7			6			5			4			3			2			1		
D	Title: Cref Part Report			C1800 CAP_0805 lost[18C7]			C2704 CAP_402 lost[27B6]			C4224 CAP_201 lost[42A7]													
	Design: lost			C1801 CAP_402 lost[18B5]			C2705 CAP_402 lost[27B6]			C4225 CAP_201 lost[42B6]													
	Date: Feb 19 11:01:06 2008			C1802 CAP_402 lost[18C5]			C2706 CAP_402 lost[27C2]			C4300 CAP_402 lost[43C5]													
	C0500 CAP_1210 lost[5D1]				C1803 CAP_402 lost[18D4]				C2707 CAP_201 lost[27B5]				C4301 CAP_402 lost[43D4]										
	C0501 CAP_1210 lost[5D1]				C1910 CAP_805 lost[19D7]				C2750 CAP_402 lost[27B7]				C5000 CAP_201 lost[50C7]										
	C0502 CAP_1210 lost[5D1]				C1929 CAP_0805 lost[19D8]				C2757 CAP_201 lost[27A6]				C5084 CAP_402 lost[50D7]										
	C0503 CAP_1210 lost[5D1]				C1930 CAP_201 lost[19B7]				C2758 CAP_201 lost[27A6]				C5086 CAP_402 lost[50D8]										
	C0504 CAP_1210 lost[5D1]				C1931 CAP_201 lost[19B8]				C2759 CAP_201 lost[27A5]				C5090 CAP_201 lost[50E5]										
	C0505 CAP_1210 lost[5D1]				C1932 CAP_201 lost[19B8]				C2760 CAP_201 lost[27A5]				C5100 CAP_201 lost[51C7]										
	C0506 CAP_1210 lost[5C1]				C1933 CAP_201 lost[19B8]				C2803 CAP_201 lost[28D3]				C5184 CAP_402 lost[51D7]										
	C0507 CAP_1210 lost[5C1]				C1934 CAP_402 lost[19D5]				C2804 CAP_201 lost[28D3]				C5186 CAP_402 lost[51D7]										
	C0508 CAP_1210 lost[5C1]				C1935 CAP_0805 lost[19D4]				C2805 CAP_201 lost[28D3]				C5190 CAP_201 lost[51D6]										
	C0509 CAP_1210 lost[5C1]				C1936 CAP_805 lost[19D5]				C2806 CAP_201 lost[28D3]				C5200 CAP_201 lost[52C6]										
C0600 CAP_201 lost[6B6]				C1937 CAP_P_SH lost[19C3]				C2807 CAP_805 lost[28D4]				C5201 CAP_201 lost[52C6]											
C0601 CAP_201 lost[6B4]				C1938 CAP_201 lost[19C2]				C2808 CAP_402 lost[28D2]				C5202 CAP_201 lost[52C6]											
C0700 CAP_402 lost[7D4]				C1941 CAP_0805 lost[19D6]				C2900 CAP_201 lost[29B1]				C5203 CAP_201 lost[52B6]											
C0701 CAP_402 lost[7D3]				C1942 CAP_201 lost[19C6]				C2901 CAP_201 lost[29C6]				C5208 CAP_201 lost[52C3]											
C0702 CAP_201 lost[7B3]				C1943 CAP_402 lost[19C7]				C2902 CAP_201 lost[29C6]				C6600 CAP_201 lost[66A7]											
C0703 CAP_402 lost[7D3]				C1944 CAP_201 lost[19C7]				C2903 CAP_201 lost[29D7]				C6601 CAP_201 lost[66A6]											
C0704 CAP_402 lost[7D3]				C1945 CAP_201 lost[19C6]				C2906 CAP_201 lost[29C7]				C6602 CAP_201 lost[66A6]											
C0705 CAP_402 lost[7D4]				C1946 CAP_201 lost[19B3]				C2907 CAP_603 lost[29B7]				C6603 CAP_402 lost[66A6]											
C0706 CAP_402 lost[7D3]				C1947 CAP_201 lost[19A4]				C2908 CAP_402 lost[29B8]				C6604 CAP_201 lost[66D7]											
C0708 CAP_201 lost[7C6]				C1948 CAP_201 lost[19B4]				C2909 CAP_402 lost[29D7]				C6605 CAP_201 lost[66D7]											
C0709 CAP_201 lost[7C6]				C1949 CAP_603 lost[19C2]				C2910 CAP_201 lost[29D8]				C6606 CAP_201 lost[66D6]											
C0710 CAP_402 lost[7C6]				C1950 CAP_201 lost[19B2]				C3000 CAP_603 lost[30A3]				C6607 CAP_201 lost[66D6]											
C0711 CAP_402 lost[7D1]				C1951 CAP_201 lost[19C6]				C3001 CAP_603 lost[30A5]				C6608 CAP_402 lost[66D6]											
C0712 CAP_402 lost[7D2]				C1952 CAP_201 lost[19C3]				C3002 CAP_402 lost[30D1]				C6610 CAP_201 lost[66C2]											
C0713 CAP_402 lost[7D2]				C1953 CAP_201 lost[19D2]				C3003 CAP_201 lost[30D2]				C6620 CAP_201 lost[66C7]											
C0714 CAP_402 lost[7D2]				C1954 CAP_201 lost[19C6]				C3004 CAP_201 lost[30D6]				C6621 CAP_201 lost[66C6]											
C0715 CAP_402 lost[7D2]				C1955 CAP_201 lost[19C3]				C3005 CAP_603 lost[30D6]				C6700 CAP_201 lost[67C5]											
C0716 CAP_402 lost[7D3]				C1956 CAP_201 lost[19B2]				C3006 CAP_201 lost[30D7]				C6701 CAP_201 lost[67C5]											
C0717 CAP_201 lost[7D6]				C1957 CAP_201 lost[19A3]				C3007 CAP_603 lost[30D8]				C6702 CAP_402 lost[67C5]											
C0718 CAP_201 lost[7D5]				C1958 CAP_402 lost[19D4]				C3008 CAP_0201 lost[30A3]				C6710 CAP_201 lost[67C2]											
C0719 CAP_402 lost[7C6]				C1971 CAP_201 lost[19C2]				C3009 CAP_402 lost[30A4]				C6711 CAP_201 lost[67C2]											
C0750 CAP_402 lost[7D3]				C1990 CAP_201 lost[19A6]				C3052 CAP_201 lost[30D5]				C6712 CAP_402 lost[67C2]											
C0751 CAP_402 lost[7D2]				C1991 CAP_201 lost[19A6]				C3053 CAP_603 lost[30D5]				C7502 CAP_201 lost[75C7]											
C0752 CAP_402 lost[7D2]				C1992 CAP_201 lost[19A6]				C3100 CAP_201 lost[31D2]				C7510 CAP_201 lost[75C5]											
C0753 CAP_402 lost[7D2]				C1993 CAP_201 lost[19A5]				C3101 CAP_402 lost[31D3]				C7511 CAP_201 lost[75C5]											
C0754 CAP_402 lost[7D2]				C1994 CAP_201 lost[19C2]				C3102 CAP_201 lost[31D4]				C7512 CAP_201 lost[75C5]											
C0800 CAP_201 lost[8B7]				C2000 CAP_805 lost[20C3]				C3103 CAP_201 lost[31D4]				C7513 CAP_201 lost[75C5]											
C0801 CAP_201 lost[8B2]				C2001 CAP_402 lost[20D6]				C3104 CAP_402 lost[31D4]				C7514 CAP_201 lost[75B5]											
C0802 CAP_201 lost[8C3]				C2002 CAP_402 lost[20D6]				C3105 CAP_201 lost[31D6]				C7515 CAP_201 lost[75B5]											
C0900 CAP_201 lost[9D2]				C2003 CAP_402 lost[20C2]				C3106 CAP_201 lost[31D6]				C7516 CAP_201 lost[75B5]											
C0901 CAP_402 lost[9C2]				C2004 CAP_805 lost[20C3]				C3107 CAP_201 lost[31D6]				C7517 CAP_201 lost[75B5]											
C0902 CAP_201 lost[9C2]				C2005 CAP_402 lost[20C4]				C3108 CAP_201 lost[31D6]				C7518 CAP_201 lost[75B5]											
C0905 CAP_402 lost[9C2]				C2006 CAP_201 lost[20C2]				C3109 CAP_201 lost[31D7]				C7600 CAP_402-LF lost[76C7]											
C1000 CAP_402 lost[10D4]				C2007 CAP_201 lost[20B3]				C3110 CAP_201 lost[31D7]				C7601 CAP_201 lost[76C5]											
C1001 CAP_402 lost[10D5]				C2008 CAP_201 lost[20B2]				C3111 CAP_603 lost[31D7]				C7602 CAP_P_402 lost[76C5]											
C1002 CAP_402 lost[10D5]				C2009 CAP_P_SH lost[20B2]				C3112 CAP_402 lost[31D7]				C7603 CAP_201 lost[76C5]											
C1003 CAP_402 lost[10D4]				C2010 CAP_201 lost[20B1]				C3150 CAP_201 lost[31B2]				C7604 CAP_201 lost[76C7]											
C1050 CAP_402 lost[10D4]				C2011 CAP_201 lost[20C7]				C3200 CAP_201 lost[32B3]				C7610 CAP_201 lost[76D4]											
C1100 CAP_201 lost[11B2]				C2012 CAP_201 lost[20C7]				C3202 CAP_603 lost[32D5]				C7611 CAP_402 lost[76D4]											
C1200 CAP_402 lost[12A5]				C2013 CAP_201 lost[20C7]				C3203 CAP_201 lost[32D6]				C7612 CAP_201 lost[76D3]											
C1201 CAP_402 lost[12A6]				C2014 CAP_201 lost[20B4]				C3204 CAP_201 lost[32D6]				C7613 CAP_402 lost[76D3]											
C1202 CAP_402 lost[12A6]				C2015 CAP_201 lost[20A4]				C3206 CAP_201 lost[32D3]				C7614 CAP_201 lost[76D2]											
C1203 CAP_402 lost[12B7]				C2016 CAP_201 lost[20B5]				C3303 CAP_201 lost[33C4]				C7615 CAP_402 lost[76D2]											
C1204 CAP_402 lost[12B7]				C2017 CAP_201 lost[20B5]				C3400 CAP_402-LF lost[34B4]				C7616 CAP_201 lost[76C3]											
C1205 CAP_402 lost[12B7]				C2018 CAP_201 lost[20C4]				C3401 CAP_201 lost[34B4]				C7617 CAP_201 lost[76C3]											
C1206 CAP_402-LF lost[12D2]				C2019 CAP_201 lost[20C4]				C3500 CAP_201 lost[35D3]				C7618 CAP_402 lost[76C3]											
C1207 CAP_201 lost[12D3]				C2020 CAP_201 lost[20B7]				C3502 CAP_402 lost[35B1]				C7620 CAP_201 lost[76B7]											
C1208 CAP_201 lost[12D3]				C2021 CAP_201 lost[20B8]				C3503 CAP_201 lost[35D8]				C7621 CAP_201 lost[76B7]											
C1209 CAP_201 lost[12D2]				C2022 CAP_201 lost[20B7]				C3504 CAP_201 lost[35B8]				C7622 CAP_201 lost[76B6]											
C1210 CAP_201 lost[12A2]				C2023 CAP_201 lost[20C6]				C3505 CAP_201 lost[35D6]				C7623 CAP_201 lost[76B6]											
C1211 CAP_201 lost[12A3]				C2024 CAP_201 lost[20C2]				C3506 CAP_201 lost[35C6]				C7630 CAP_201 lost[76C6]											
C1212 CAP_201 lost[12A3]				C2100 CAP_P_SH lost[21C3]				C3507 CAP_201 lost[35B4]				C7631 CAP_201 lost[76B5]											
C1213 CAP_201 lost[12A3]				C2101 CAP_201 lost[21D3]				C3600 CAP_P_0603-SM lost[36A5]				C7650 CAP_201 lost[76A5]											
C1215 CAP_201 lost[12B5]				C2102 CAP_201 lost[21C7]				C3601 CAP_201 lost[36A5]				C9000 CAP_201 lost[90B5]											
C1216 CAP_201 lost[12B5]				C2103 CAP_402 lost[21D5]				C3602 CAP_201 lost[36A3]				C9001 CAP_201 lost[90B4]											
C1217 CAP_201 lost[12B1]				C2104 CAP_603 lost[21D3]				C3603 CAP_201 lost[36A5]				C9401 CAP_603 lost[94D7]											
C1219 CAP_402 lost[12C8]				C2105 CAP_402 lost[21D5]				C3604 CAP_201 lost[36A4]				C9402 CAP_201 lost[94D7]											
C1221 CAP_402 lost[12C8]				C2107 CAP_402 lost[21B6]				C3610 CAP_402 lost[36D6]				C9403 CAP_201 lost[94D6]											
C1222 CAP_201 lost[12A2]				C2108 CAP_603 lost[21B7]				C3611 CAP_201 lost[36D6]				C9404 CAP_201 lost[94D6]											
C1223 CAP_402 lost[12D8]				C2111 CAP_201 lost[21A2]				C3612 CAP_201 lost[36D6]				C9405 CAP_603 lost[94D7]											
C1224 CAP_402 lost[12B7]				C2112 CAP_P_B2-SM lost[21A3]				C3613 CAP_P_603-SM lost[36D5]				C9406 CAP_201 lost[94D7]											
C1225 CAP_402-LF lost[12D2]				C2113 CAP_402 lost[21D7]				C3614 CAP_201 lost[36D4]				C9407 CAP_603 lost[94C7]											
C1226 CAP_402 lost[12D2]				C2114 CAP_402 lost[21C3]				C3615 CAP_P_2012-LLF lost[36D4]				C9408 CAP_201 lost[94C7]											
C1227 CAP_402 lost[12D1]				C2115 CAP_201 lost[21A3]				C3616 CAP_201 lost[36D3]				C9409 CAP_603 lost[94C7]											
C1230 CAP_402 lost[12A4]				C2116 CAP_201 lost[21B4]				C3617 CAP_201 lost[36D3]				C9410 CAP_201 lost[94C7]											
C1250 CAP_201 lost[12A3]				C2117 CAP_201 lost[21C3]				C3618 CAP_603 lost[36D3]				C9411 CAP_201 lost[94C6]											
C1251 CAP_201 lost[12A2]				C2118 CAP_201 lost[21B3]				C3619 CAP_402-1 lost[36D6]				C9412 CAP_201 lost[94C6]											
C1260 CAP_402 lost[12B6]				C2120 CAP_201 lost[21C6]				C3620 CAP_402-1 lost[36D6]				C9413 CAP_201 lost[94D5]											
C1400 CAP_201 lost[14A4]				C2121 CAP_201 lost[21C7]				C3621 CAP_402-LF lost[36C6]				C9414 CAP_201 lost[94D5]											
C1402 CAP_201 lost[14D6]				C2122 CAP_201 lost[21D4]				C3622 CAP_402-LF lost[36C6]				C9415 CAP_201 lost[94D5]											
C1403 CAP_201 lost[14D4]				C2123 CAP_201 lost[21C2]				C3623 CAP_P_2012-LLF lost[36B4]				C9416 CAP_603 lost[94D4]											
C1404 CAP_201 lost[14D3]				C2205 CAP_603 lost[22A5]				C3624 CAP_P_402 lost[36B4]				C9417 CAP_201 lost[94C5]											
C1405 CAP_201 lost[14D3]				C2209 CAP_603 lost[22A6]				C3701 CAP_P_2012-LLF lost[37B4]				C9418 CAP_603 lost[94C4]											
C1406 CAP_201 lost[14D4]				C2250 CAP_603 lost[22D7]				C3702 CAP_201 lost[37B5]				C9419 CAP_201 lost[94B7]											

8				7				6				5				4				3				2				1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
D	D2600	DIODE_SCHOT_SOD-323	lost[26D4]	C	D3000	DIODE_SCHOT_SOD-323	lost[30B3]	B	D5000	RCLAMP0502N_SLP1210N	lost[50D2] 6	A	D5023	DIODE_SCHOT_6P_4C_2A	lost[50D7] _SOT666-6	D	D5100	RCLAMP0502N_SLP1210N	lost[51D2] 6	C	D5120	DIODE_SCHOT_6P_4C_2A	lost[51D7] _SOT666-6	B	DZ3900	SUPPR_TRANSIENT1_402	lost[39C6]	A	DZ3901	SUPPR_TRANSIENT1_402	lost[39C6]	D	DZ3902	SUPPR_TRANSIENT1_402	lost[39C7]	C	DZ3903	SUPPR_TRANSIENT1_402	lost[39B7]	B	DZ3904	SUPPR_TRANSIENT1_402	lost[39B6]	A	DZ3905	SUPPR_TRANSIENT1_402	lost[39B6]	D	DZ3910	SUPPR_TRANSIENT1_402	lost[39C3]	C	DZ3911	SUPPR_TRANSIENT1_402	lost[39C3]	B	DZ3912	SUPPR_TRANSIENT1_402	lost[39C4]	A	DZ3913	SUPPR_TRANSIENT1_402	lost[39B3]	D	DZ3914	SUPPR_TRANSIENT1_402	lost[39B3]	C	DZ3915	SUPPR_TRANSIENT1_402	lost[39B3]	B	DZ5089	SUPPR_TRANSIENT1_402	lost[50B7]	A	DZ5090	SUPPR_TRANSIENT1_402	lost[50C4]	D	DZ5091	SUPPR_TRANSIENT1_402	lost[50C6]	C	DZ5092	SUPPR_TRANSIENT1_402	lost[50D4]	B	DZ5093	SUPPR_TRANSIENT1_402	lost[50A7]	A	DZ5189	SUPPR_TRANSIENT1_402	lost[51B7]	D	DZ5190	SUPPR_TRANSIENT1_402	lost[51D4]	C	DZ5191	SUPPR_TRANSIENT1_402	lost[51C6]	B	DZ5192	SUPPR_TRANSIENT1_402	lost[51C4]	A	DZ5193	SUPPR_TRANSIENT1_402	lost[51A7]	D	F1800	FUSE_603-HF	lost[18D7]	C	F1900	FUSE_1206	lost[19C2]	B	FL5007	FILTER_2P_0201	lost[50B5]	A	FL5008	FILTER_2P_0201	lost[50A5]	D	FL5011	FILTER_2P_0201	lost[50B5]	C	FL5020	FILTER_2P_0201	lost[50B3]	B	FL5107	FILTER_2P_0201	lost[51B5]	A	FL5108	FILTER_2P_0201	lost[51A5]	D	FL5111	FILTER_2P_0201	lost[51B5]	C	FL5120	FILTER_2P_0201	lost[51B3]	B	FL7500	FILTER_2P_0201	lost[75C7]	A	J1900	CON_M6RT_S2MT_SM1_M-	lost[19A5] RT-SM	D	J3010	CON_F50ST_D4MT_SM_F-	lost[30B7] ST-SM	C	J3011	CON_F60ST_D4MT_SM_F-	lost[30B6] ST-SM	B	J3020	CON_F4RT_S2MT_SMA_F-	lost[30B1] RT-SM1	A	J3201	CON_F30ST_S5MT_SM_F-	lost[32D1] ST-SM	D	J3700	CON_M4RT_S2MT_SM_M-R	lost[37B2] T-SM	C	J3800	CON_M4RT_S2MT_SM_M-R	lost[38C2] T-SM	B	J4111	CON_M10RT_S2MT_SM1_N	lost[41D5] -RT-SM	A	J4161	CON_M10RT_S2MT_SM1_M	lost[41B5] -RT-SM	D	J4600	CON_F6RT_S2MT_SM_F-R	lost[46C5] T-SM	C	J5001	CON_F36ST_D4MT_SM_F-	lost[50C2] ST-SM	B	J5105	CON_F36ST_D4MT_SM_F-	lost[51C2] ST-SM	A	J5400	CON_M4RT_S2MT_SM_M-R	lost[54C2] T-SM	D	J5400	CON_F6RT_S2MT_SM_F-R	lost[54B4] T-SM	C	J9000	CON_F60ST_D_SM1_F-ST	lost[90C4] -SM	B	L1500	IND_0402-LF	lost[15D7]	A	L1501	IND_0402-LF	lost[15D7]	D	L1900	IND_IHLP2525BD-SM	lost[19C4]	C	L1901	IND_SM-LF	lost[19A6]	B	L2000	IND_PCMC042T-SM	lost[20C2]	A	L2102	IND_PCMC042T-SM	lost[21C4]	D	L2103	IND_PCMC042T-SM	lost[21A3]	C	L2200	IND_MDT2520CN-SM	lost[22B5]	B	L2250	IND_SM	lost[22C4]	A	L2320	IND_MMD05C2-SM	lost[23B3]	D	L2401	IND_S1024AS-SM	lost[24C4]	C	L2450	IND_S1024AS-SM	lost[24B4]	B	L2600	IND_IHLP2020B211-SM	lost[26D5]	A	L3000	IND_VLF	lost[30B4]	D	L3201	IND_0402	lost[32D5]	C	L3202	FILTER_4P_TCM1005	lost[32C3]	B	L3400	FILTER_2P_0201	lost[34B4]	A	L3601	FILTER_2P_0201	lost[36A5]	D	L3602	FILTER_2P_0201	lost[36A5]	C	L3900	FILTER_2P_0201	lost[39D6]	B	L3901	FILTER_2P_0201	lost[39D6]	A	L3902	FILTER_2P_0201	lost[39C6]	D	L3903	FILTER_2P_0201	lost[39C6]	C	L3904	FILTER_2P_0201	lost[39B6]	B	L3905	FILTER_2P_0201	lost[39B6]	A	L3910	FILTER_2P_0201	lost[39D2]	D	L3911	FILTER_2P_0201	lost[39D2]	C	L3912	FILTER_2P_0201	lost[39C2]	B	L3913	FILTER_2P_0201	lost[39C2]	A	L3914	FILTER_2P_0201	lost[39C2]	D	L3915	FILTER_2P_0201	lost[39B2]	C	L3916	FILTER_2P_0201	lost[39C2]	B	L4600	FILTER_4P_TCM1005	lost[46C6]	A	L5006	IND_0402	lost[50A7]	D	L5009	IND_0402	lost[50D5]	C	L5013	IND_0402	lost[50B7]	B	L5014	IND_0402	lost[50C5]	A	L5015	IND_0402	lost[50C7]	D	L5016	FILTER_4P_TCM1005	lost[50D2]	C	L5017	IND_0603	lost[50D7]	B	L5039	IND_0603	lost[50C7]	A	L5106	IND_0402	lost[51A7]	D	L5109	IND_0402	lost[51C5]	C	L5113	IND_0402	lost[51B7]	B	L5114	IND_0402	lost[51D5]	A	L5115	IND_0402	lost[51C7]	D	L5116	FILTER_4P_TCM1005	lost[51D2]	C	L5117	IND_0603	lost[51D7]	B	L5139	IND_0603	lost[51C7]	A	L6500	FILTER_4P_TCM1005	lost[65B5]	D	L7500	IND_0603	lost[75C5]	C	L7501	IND_0603	lost[75C5]	B	L7502	IND_0603	lost[75B5]	A	L7600	FILTER_2P_0201	lost[76D7]	D	L9400	IND_0402-LF	lost[94D7]	C	L9401	IND_0402-LF	lost[94D7]	B	L9402	IND_0402-LF	lost[94D7]	A	L9403	IND_0402-LF	lost[94C7]	D	L9405	IND_0402-LF	lost[94D4]	C	L9406	IND_0402-LF	lost[94C4]	B	Q1801	TRA_DUAL_PWRPK_PCHN_6P_PWRPK-1212-8	lost[18B4 18C5]	A	Q1803	TRA_DUAL_PWRPK_PCHN_6P_PWRPK-1212-8	lost[18B3 18D3]	D	Q1807	TRA_DUAL_2N7002A_SOT	lost[18C4 18C4] 563	C	Q1808	TRA_DUAL_2N7002A_SOT	lost[18A3 18A4] 563	B	Q1809	TRA_PWRPK_PCHN_5P_PWR	lost[18B6] PK-1212-8	A	Q1810	TRA_DUAL_2N7002A_SOT	lost[18A5 18A6] 563	D	Q1816	TRA_DUAL_2N7002A_SOT	lost[18C3 18D2] 563	C	Q1817	TRA_DUAL_2N7002A_SOT	lost[18B1 18B2] 563	B	Q1910	TRA_SI7904DN_PWRPK-1	lost[19C5] 212-8	A	Q1915	TRA_DUAL_2N7002A_SOT	lost[19B2 19A2] 563	D	Q1916	TRA_DUAL_2N7002A_SOT	lost[19A3 19A1] 563	C	Q1917	TRA_PWRPK_PCHN_5P_PWR	lost[19C2] PK-1212-8	B	Q2000	TRA_FDZ294N_BGA	lost[20C3]	A	Q2001	TRA_FDZ294N_BGA	lost[20B4]	D	Q2002	TRA_2N7002T_SOT-523-	lost[20A7] 3	C	Q2100	TRA_SI7904DN_PWRPK-1	lost[21C4] 212-8	B	Q2101	TRA_SI7904DN_PWRPK-1	lost[21C4] 212-8	A	Q2102	TRA_DUAL_SSM6N15FE_S	lost[21C7 21C8] OT563	D	Q2103	TRA_DUAL_2N7002A_SOT	lost[21A7 21A6] 563	C	Q2320	TRA_SI7904DN_PWRPK-1	lost[23B3] 212-8	B	Q2400	TRA_SSM3K15FV_SOD-VE	lost[24B3] SM-HF	A	Q2401	TRA_PCH_CEDM8001_SOT	lost[24B3] 883L	D	Q2701	TRA_FDZ294N_BGA	lost[27C5]	C	Q2702	TRA_FDZ294N_BGA	lost[27C5]	B	Q2703	TRA_FDZ294N_BGA	lost[27B5]	A	Q2709	TRA_SI5486DU_POWERPA	lost[27C2] K	D	Q2900	TRA_DUAL_SSM6N15FE_S	lost[29A4 29A4] OT563	C	Q2902	TRA_DUAL_BC847BV_SOT	lost[29D2 29D1] 563-HF	B	Q3100	TRA_DUAL_2N7002A_SOT	lost[31B1 31B1] 563	A	Q3101	TRA_2N7002T_SOT-523-	lost[31A6] 3	D	Q3102	TRA_2N7002T_SOT-523-	lost[31B1] 3	C	Q3200	TRA_FDZ293P_BGA	lost[32D6]	B	Q3201	TRA_2N7002T_SOT-523-	lost[32D7] 3	A	Q3500	TRA_NTK3142P_PCHN_3P	lost[35C2] _SOT723-3-HF	D	Q3501	TRA_2N7002T_SOT-523-	lost[35B3] 3	C	Q4200	TRA_NCH_SSM3K16CT_CS	lost[42C2] T3	B	Q4201	TRA_NCH_SSM3K16CT_CS	lost[42C6] T3	A	R1	THERMISTOR_0402	lost[20B2]	D	R0600	RES_201	lost[6C8]	C	R0601	RES_201	lost[6C8]	B	R0602	RES_201	lost[6C8]	A	R0603	RES_201	lost[6B5]	D	R0604	RES_201	lost[6B5]	C	R0605	RES_201	lost[6B5]	B	R0606	RES_201	lost[6B5]	A	R0607	RES_201	lost[6D5]	D	R0608	RES_201	lost[6B1]	C	R0609	RES_201	lost[6B1]	B	R0610	RES_201	lost[6B1]	A	R0611	RES_201	lost[6B1]	D	R0612	RES_201	lost[6D4]	C	R0613	RES_201	lost[6C5]	B	R0614	RES_201	lost[6C5]	A	R0620	RES_201	lost[6A7]	D	R0621	RES_201	lost[6A7]	C	R0622	RES_201	lost[6A7]	B	R0623	RES_201	lost[6A7]	A	R0650	RES_201	lost[6B7]	D	R0690	RES_201	lost[6C5]	C	R0700	RES_201	lost[7B3]	B	R0701	RES_201	lost[7B3]	A	R0702	RES_201	lost[7B3]	D	R0703	RES_201	lost[7B3]	C	R0704	RES_201	lost[7B3]	B	R0705	RES_201	lost[7B3]	A	R0706	RES_201	lost[7B3]	D	R0800	RES_201	lost[8B7]	C	R0801	RES_201	lost[8B7]	B	R0802	RES_201	lost[8A8]	A	R0804	RES_201	lost[8C2]	D	R0805	RES_201	lost[8C2]	C	R0806	RES_201	lost[8C2]	B	R0807	RES_201	lost[8B7]	A	R0808	RES_201	lost[8B2]	D	R0900	RES_201	lost[9C2]	C	R0903	RES_201	lost[9D2]	B	R0904	RES_201	lost[9B1]	A	R0909	RES_201	lost[9D4]	D	R0910	RES_201	lost[9D3]	C	R0911	RES_201	lost[9B3]	B	R0912	RES_201	lost[9D6]	A	R0913	RES_201	lost[9D5]	D	R0920	RES_201	lost[9D6]	C	R0923	RES_201	lost[9C7]	B	R0926	RES_201	lost[9B7]	A	R0934	RES_201	lost[9C3]	D	R0936	RES_201	lost[9A2]	C	R0937	RES_201	lost[9D3]	B	R0938	RES_201	lost[9D3]	A	R0940	RES_201	lost[9C6]	D	R0941	RES_201	lost[9C6]	C	R0942	RES_201	lost[9B6]	B	R0943	RES_201	lost[9B6]	A	R0944	RES_201	lost[9B6]	D	R0945	RES_201	lost[9B6]	C	R0966	RES_201	lost[9C3]	B	R0967	RES_201	lost[9A1]	A	R097

119