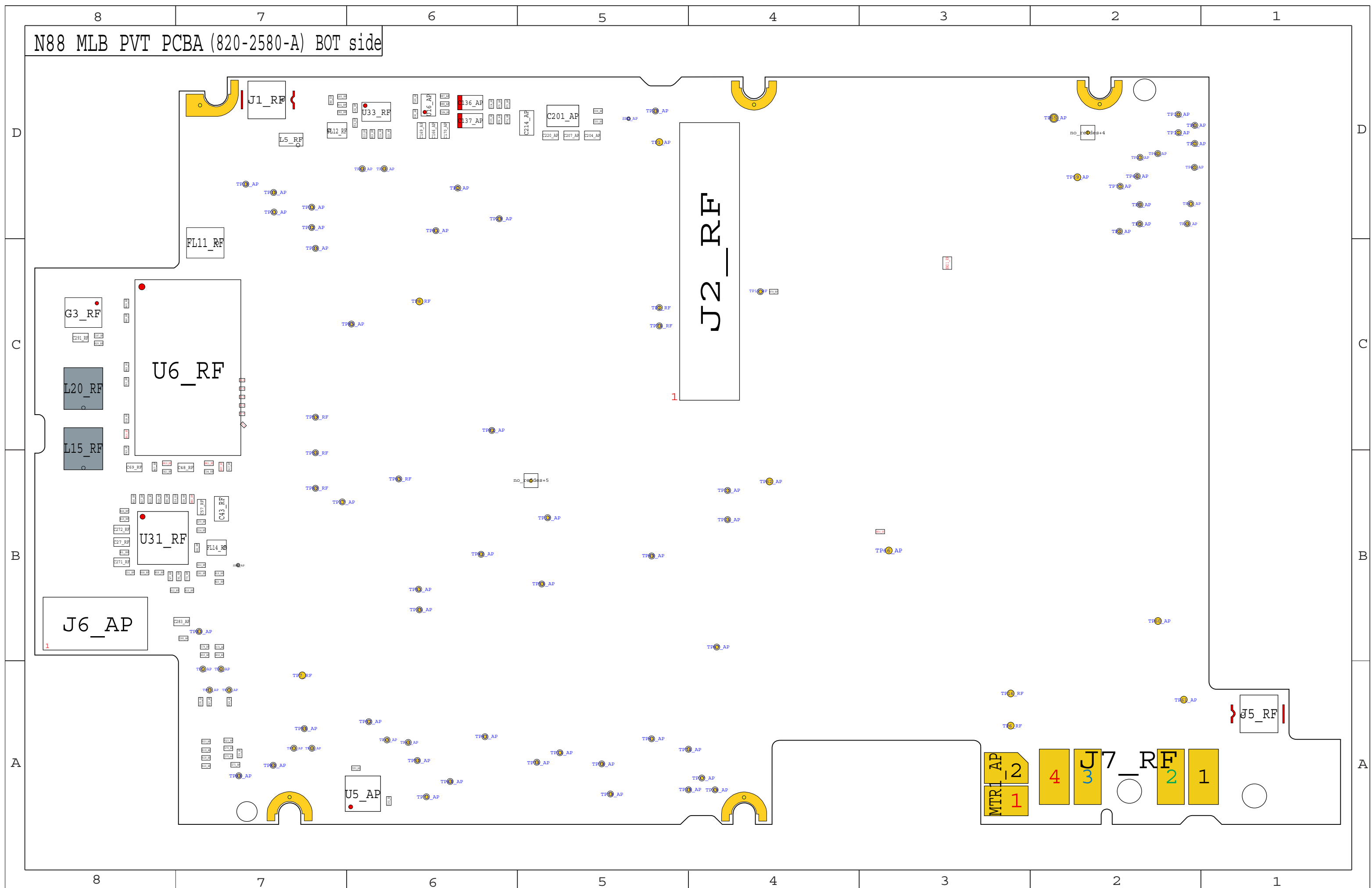


iPhone 3GS Advanced Schematic By OM Tesla





D

C

B

A

NAND BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0643	1	8GB HYNIX 48NM FLASH	U1_AP	Y	FLASH_8GB
335S0642	1	16GB SAMSUNG 42NM FLASH	U1_AP	Y	FLASH_16GB
335S0650	1	32GB SAMSUNG 43NM FLASH	U1_AP	Y	FLASH_32GB

NAND ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S0637	335S0598	FLASH_8GB	U1_AP	8GB SAMSUNG 42NM FLASH
		?		

DEV FUSED BB BOM OPTION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM_OPTION
998-2348	1	DEV FUSED BB	U22_RF	Y	DEV_FUSED_BB

N88 EEE BOM LABELS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
825-2029	1	EEE FOR 639-0066 (16G)	EEE:BDL	Y	EEE_16GB_MURATA
825-2029	1	EEE FOR 639-0067 (16G)	EEE:BDM	Y	EEE_16GB_MITSUMI
825-2029	1	EEE FOR 639-0068 (32G)	EEE:BDN	Y	EEE_32GB_MURATA
825-2029	1	EEE FOR 639-0069 (32G)	EEE:BDP	Y	EEE_32GB_MITSUMI

SIM CONNECTOR ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
512S0069	512S0060	?	J2_AP	SIM CONNECTOR
512S0070	512S0060	?	J2_AP	SIM CONNECTOR

WIFI/BT BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
33950072	1	MURATA WIFI/BT MODULE	U6_RF	Y	MURATA
33950077	1	MITSUMI WIFI/BT MODULE	U6_RF	Y	MITSUMI
11850012	1	MURATA ID RESISTOR	R61_RF	Y	MURATA
11850012	1	MITSUMI ID RESISTOR	R6_RF	Y	MITSUMI

GPS TCX0 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
19750290	1	KDS TCX0	G3_RF	Y	KDS_GPS_TCX0
19750333	1	EPSON TCX0	G3_RF	Y	EPSON_GPS_TCX0

VIDEO AMP ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
353S1625	353S1650	?	U14_AP	VIDEO AMP

DISPLAY	DC-DC	ALTERNATE
---------	-------	-----------

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
353S1989	353S2529	?	U20_AP	LCM DC-DC

ZIF	CONNECTOR	ALTERNATE
-----	-----------	-----------

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
518S0611	518S0600	?	J7_AP	ALS ZIF CONN

26	MHZ	ALTERNATE
----	-----	-----------

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
197S0255	197S0275	?	G2_RF	RF 26 MHZ CLK

BAND 2 PA

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S2363	1	BAND 2 PA, IFX	U37_RF	Y	IFX_BAW
353S2522	1	BAND 2 PA, TRIQUINT	U37_RF	Y	TQNT_BAW

RF DDR MEMORY

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
33550617	1	SPANION DDR	U1_RF	Y	RF_SPANION
33550652	1	NUMONYX DDR	U1_RF	Y	RF_NUMONYX
33550632	1	SAMSUNG DDR	U1_RF	Y	RF_SAMSUNG
341S2474	1	ALL SUPPLIER SUB-BOM DDR	U1_RF	Y	RF_PROGRAMMED_BASEBAND_MEMORY

A



SIZE
D

REV.
11

SCALE	

SHT 1 OF 2

D

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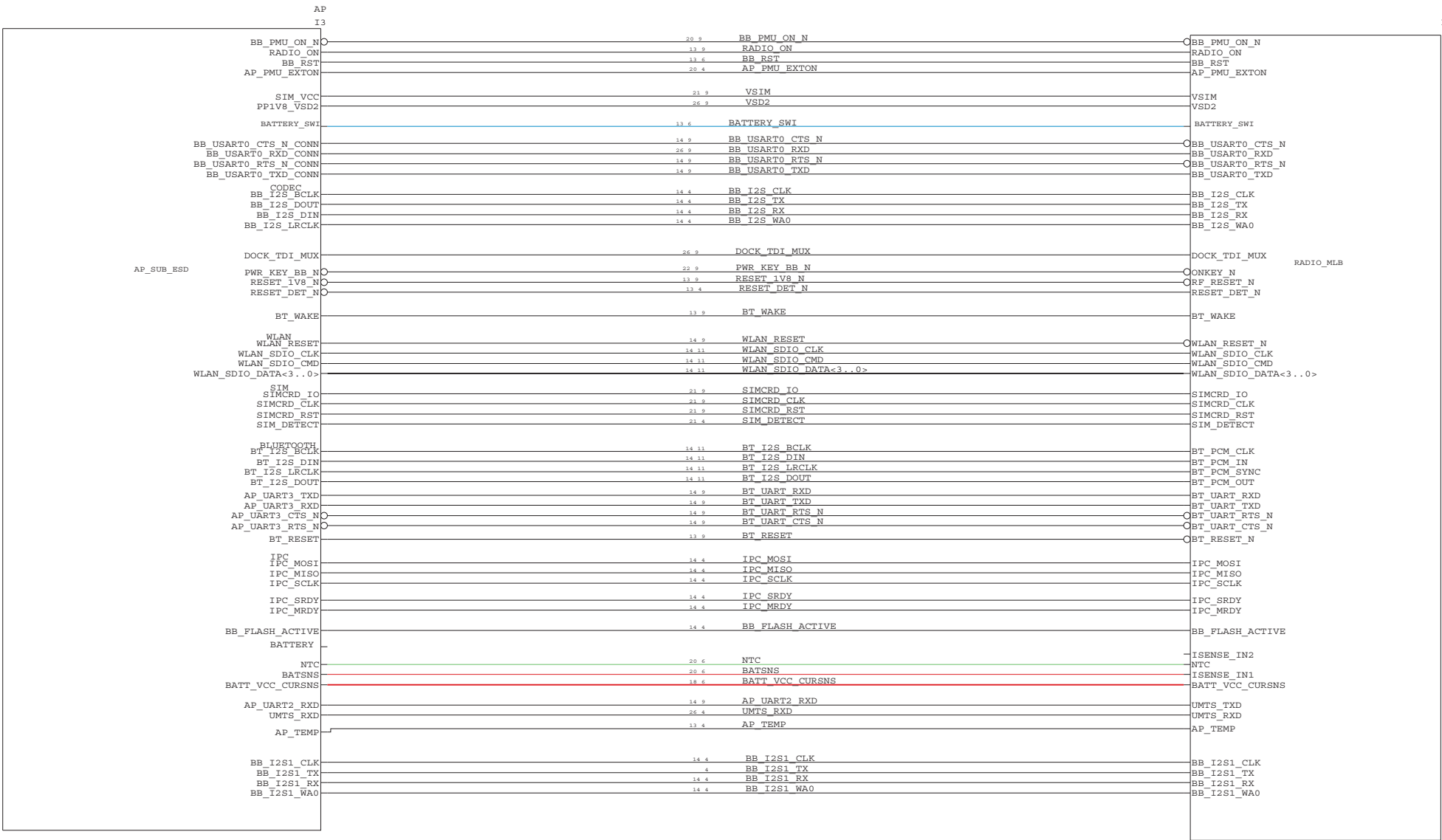
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A



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SIZE	DRAWING NUMBER	REV.
D	051-8004	11
SCALE	SHT	OF
NONE	2	2

iPhone 3GS (ICE2.1) HSDPA RADIO

06/23/09(A) : BRD

PAGE	CONTENTS
02	BASEBAND
03	BASEBAND + MEMORY
04	BASEBAND PMU
05	GSM & UMTS TRANSCEIVER
06	POWER AMPS AND RF FRONT END
07	SYSTEM CONNECTORS
08	A-GPS
09	WLAN AND BLUETOOTH RADIO

BOARD - 920-0593

SCHEMATIC - 951-0716

BOM - 630-9356

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
951-0716	1	NB2_RF_AND_AP_SCHEMATIC	SCH	Y	
920-0593	1	NB2_RF_AND_AP_PCB	PCB	Y	
825-2029	1	EEE: Y5K(8GB), YEU(16GB)	EEE:Y5K	Y	

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APPLE INC.

SIZE D

DRAWING NUMBER 051-0716

REV. 01

SCALE NONE

SHT 1 OF 9

D

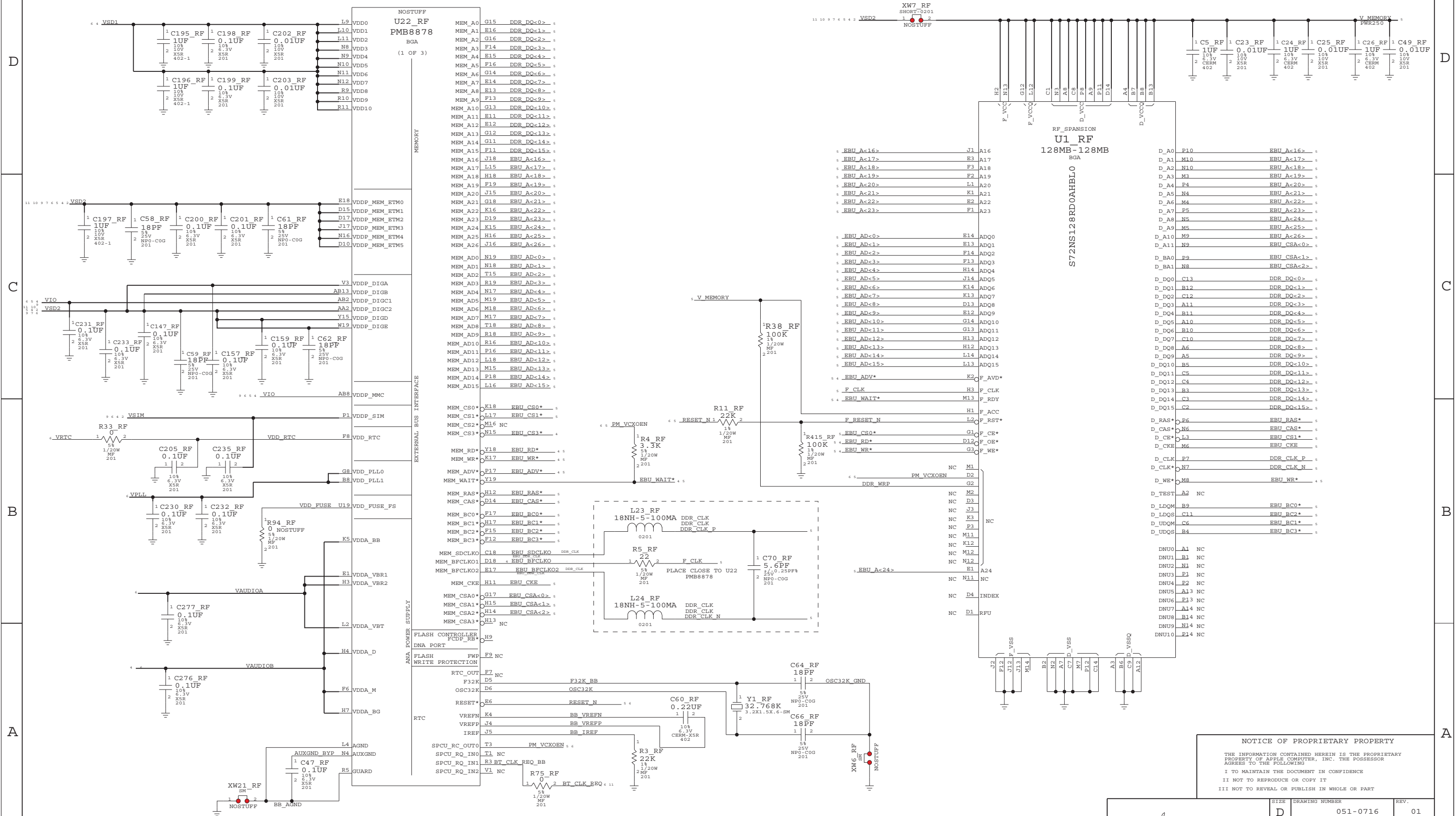


D 051-071



BASEBAND/RADIO MEM

NOR/DDR MCP STACK



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SIZE	DRAWING NUMBER
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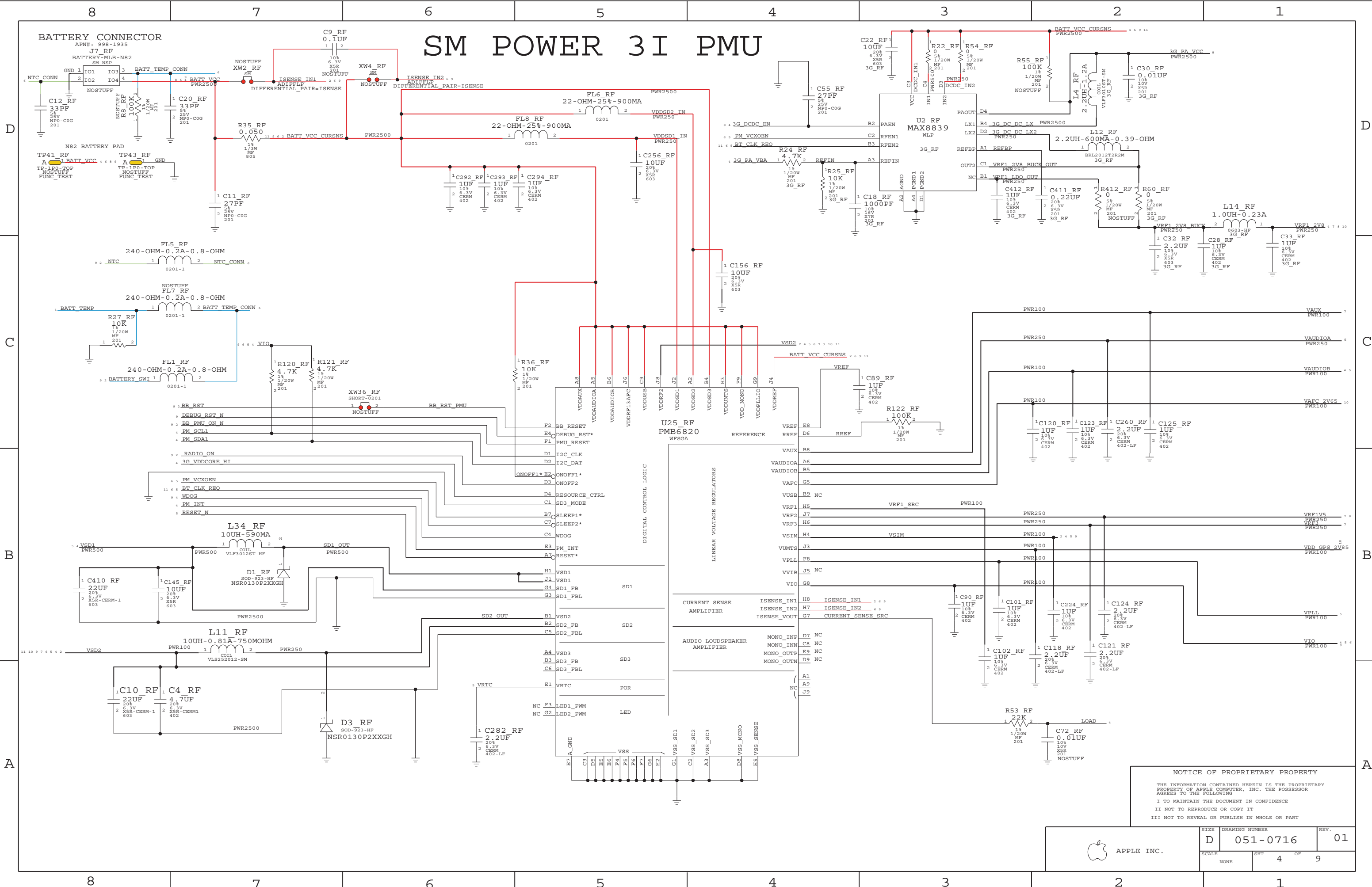
APPLE INC.

SIZE	DRAWING NUMBER	REV.
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D	051-0716	01
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D		
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SCALE	SHT	OF	9
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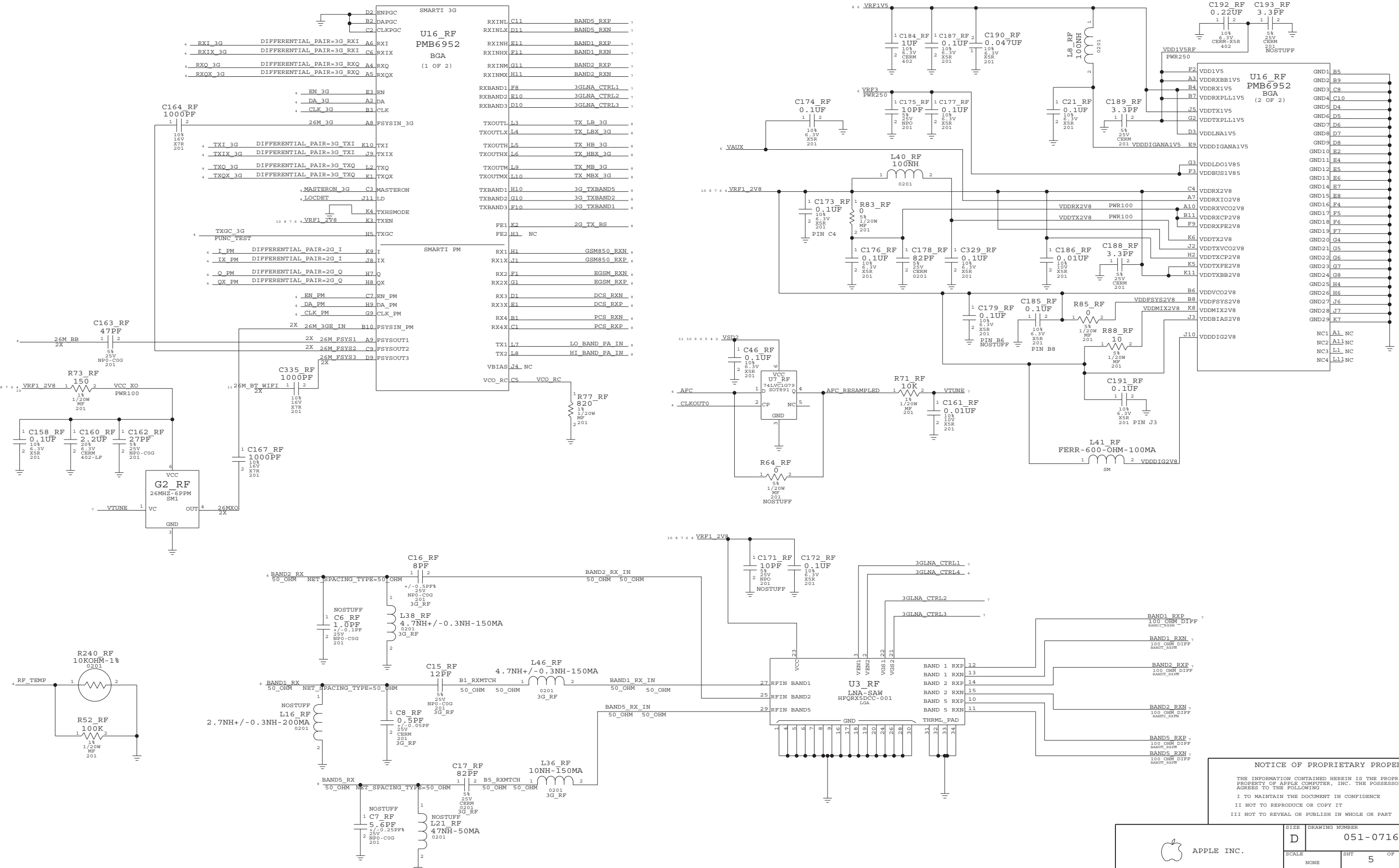
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APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	051-0716	01
	SCALE	SHT	OF
	NONE	4	9

GSM & UMTS TRANSCEIVER - SMARTI 3GE

SMARTI3GE SUPPLIES



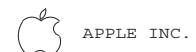
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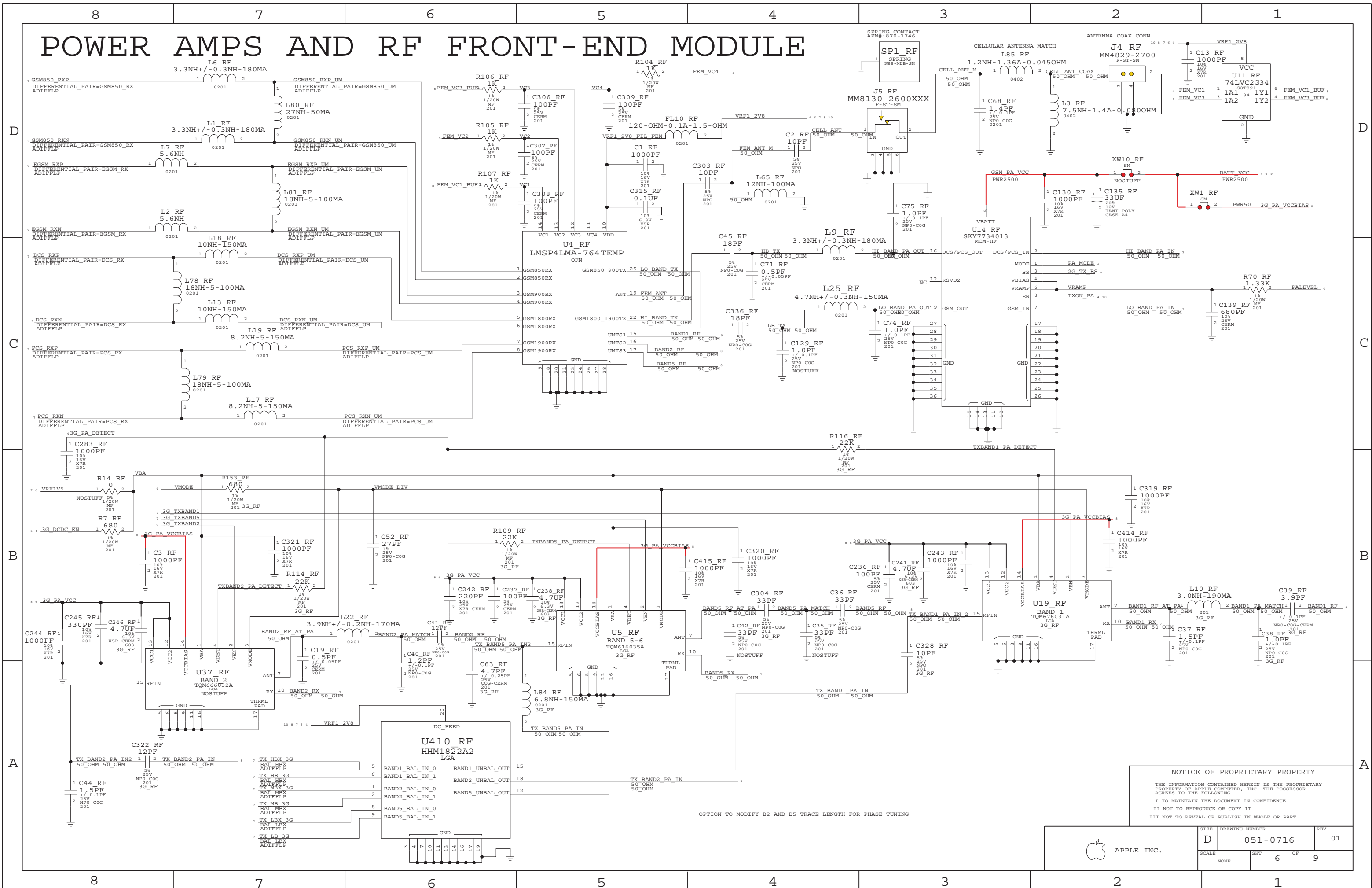
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SIZE	DRAWING NUMBER	REV.
D	051-0716	01
SCALE	SHT	OF
NONE	5	9

POWER AMPS AND RF FRONT-END MODULE



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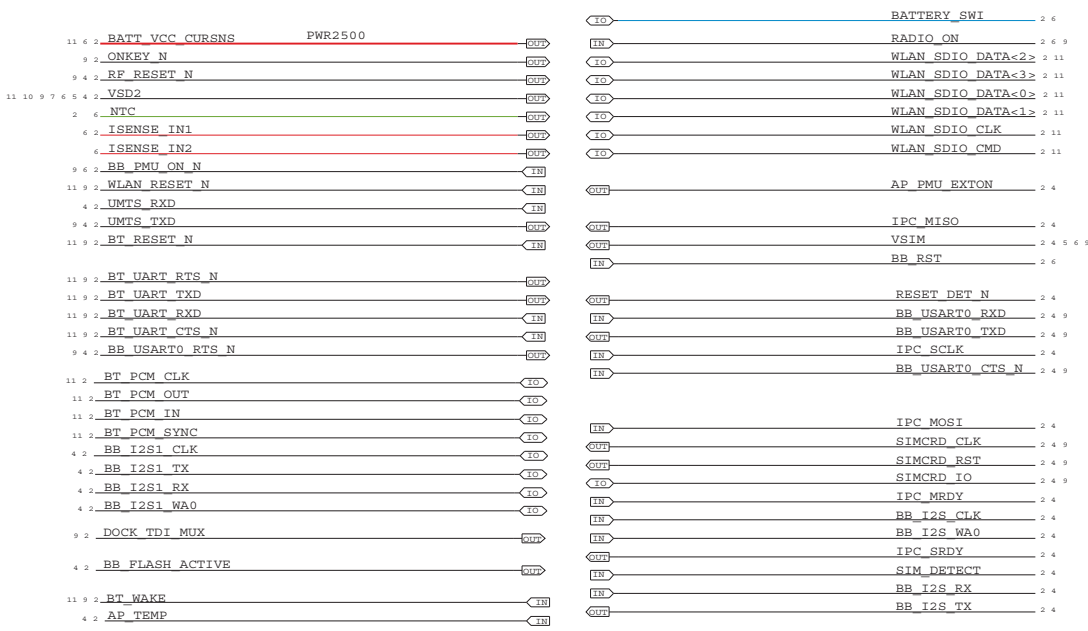
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APPLE INC.

SYSTEM CONNECTORS

AP CONNECTIONS



TP15 RF
A TP-P6
NOSTUFF
DOCK_TDI_MUX 2 9 NOTE: BB_USART0_RXD MUX INPUT
FUNC_TEST

TP33 RF
A TP-P6
NOSTUFF
WDG 4 6 PLACE TEST POINT ON TOP SIDE
FUNC_TEST

TP60 RF
A TP-P6
NOSTUFF
VSIM 2 4 5 6 9

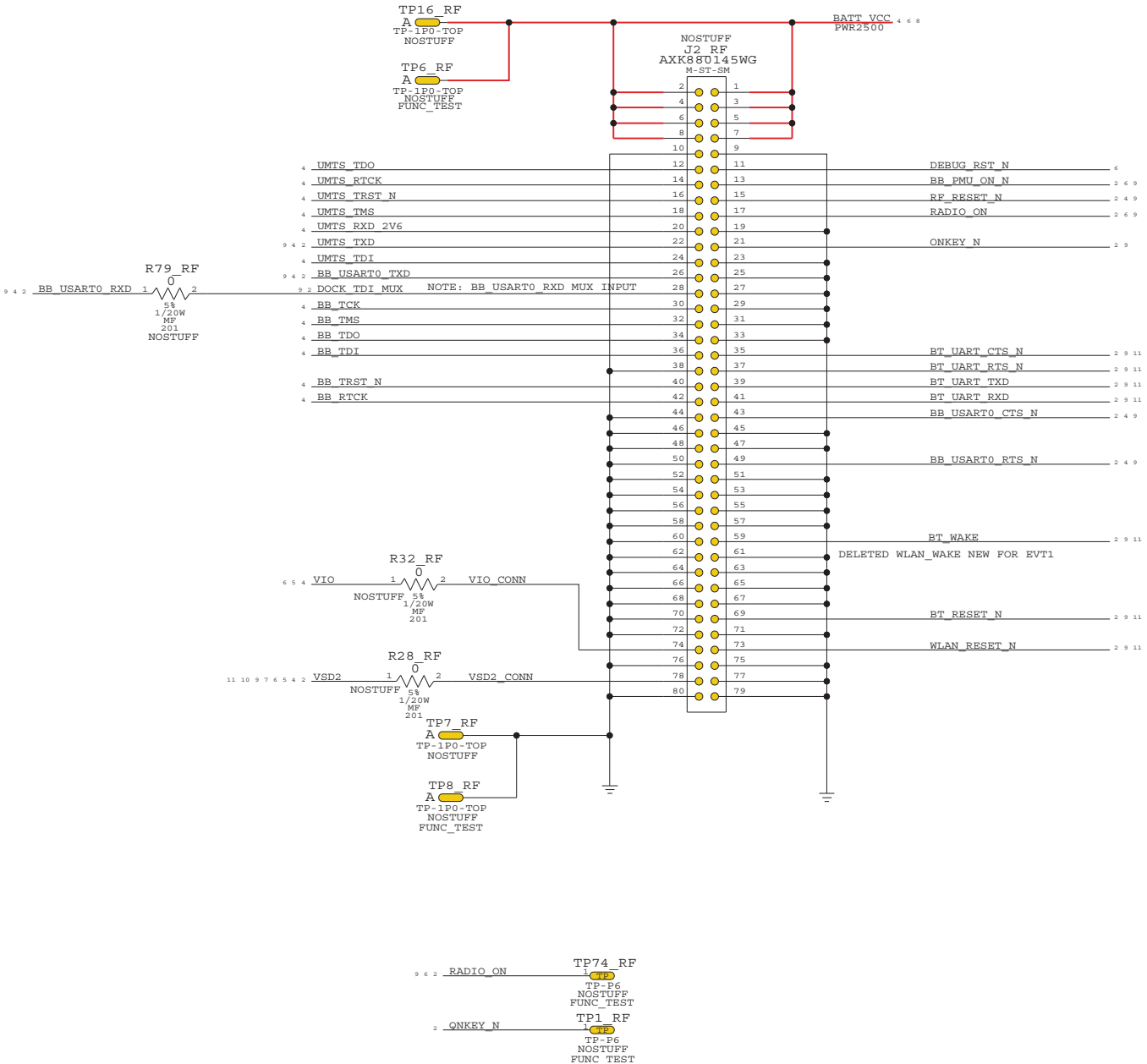
TP56 RF
A TP-P6
NOSTUFF
SIMCRD_RST 2 4 9

TP59 RF
A TP-P6
NOSTUFF
SIMCRD_CLK 2 4 9

TP65 RF
A TP-P6
NOSTUFF
SIMCRD_IO 2 4 9

NOTE: FOR DEBUG FIXTURES WHEN UART MUXES ARE NOSTUFF

DEBUG CONNECTOR
516S0612



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APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-0716	01
SCALE	SHT	OF
NONE	7	9

A-GPS

D

C

B

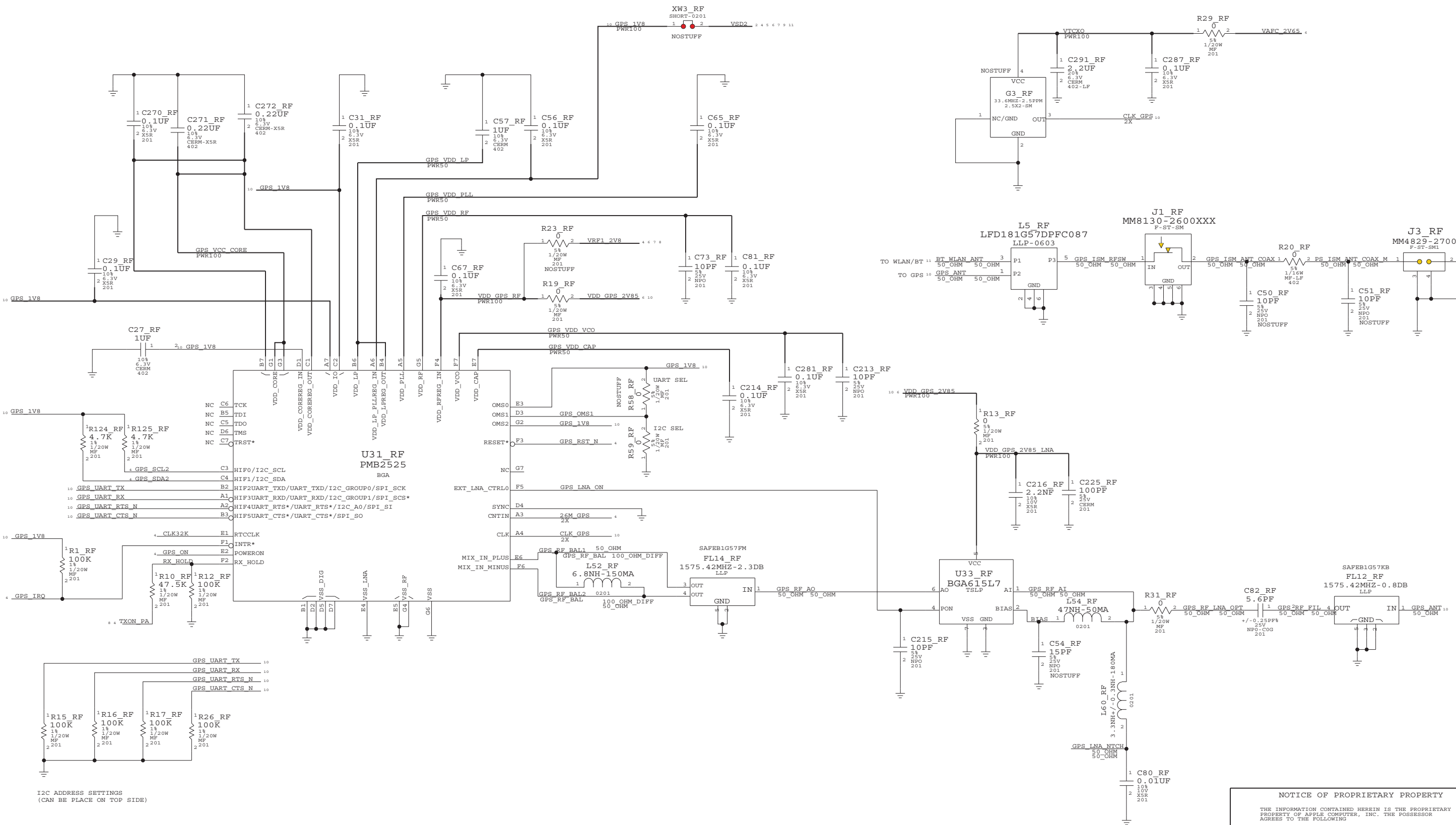
A

D

C

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A

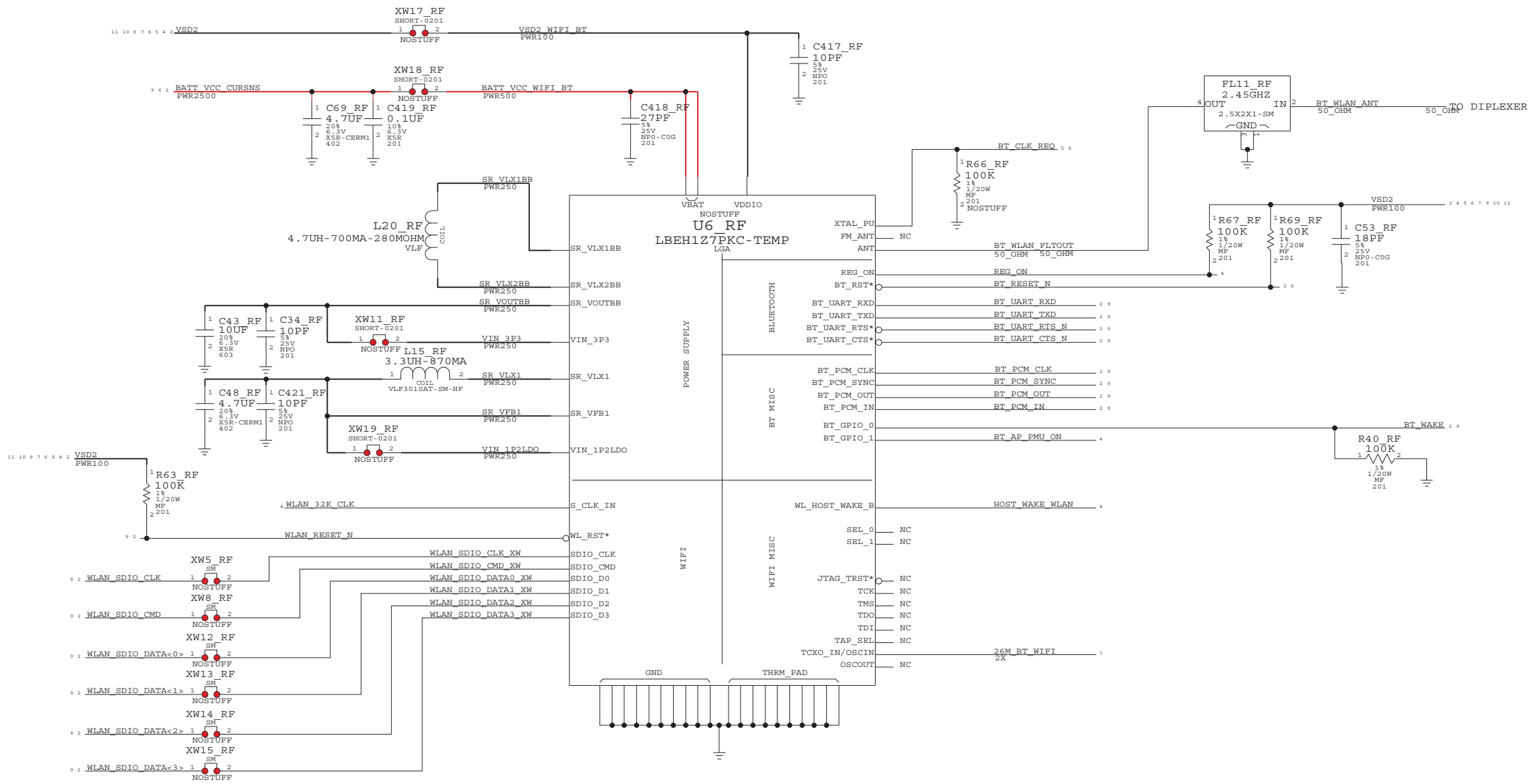


I2C ADDRESS SETTINGS
(CAN BE PLACE ON TOP SIDE)

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APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	051-0716	01
SCALE	SHT		
	NONE	8	OF 9

WLAN RADIO



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	D	951-0716	01
SCALE		SHT	OF
NONE		9	9

8

7

6

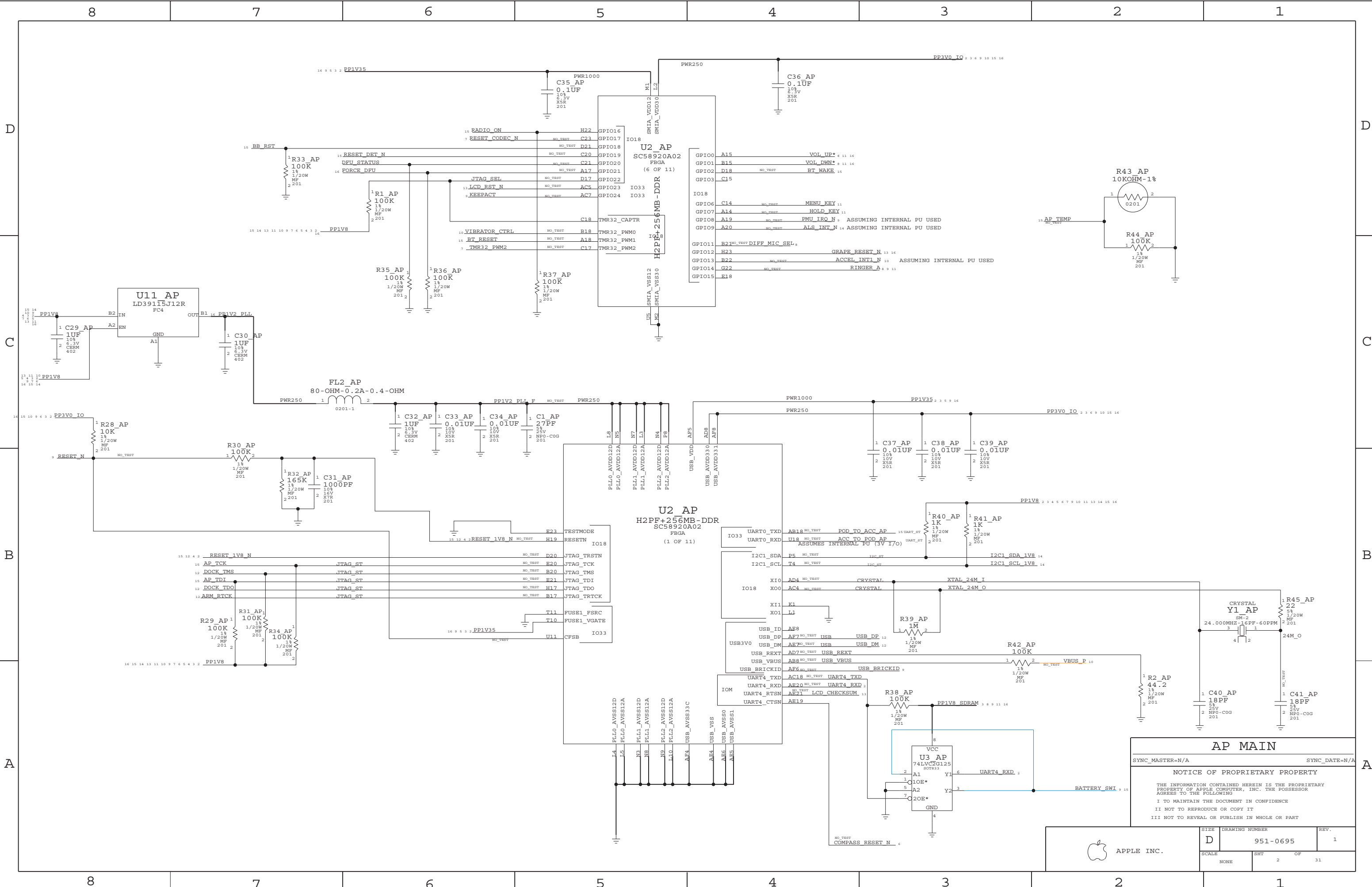
5

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3

2

1



AP MAIN

SYNC_MASTER=N/A SYNC_DATE=N/A

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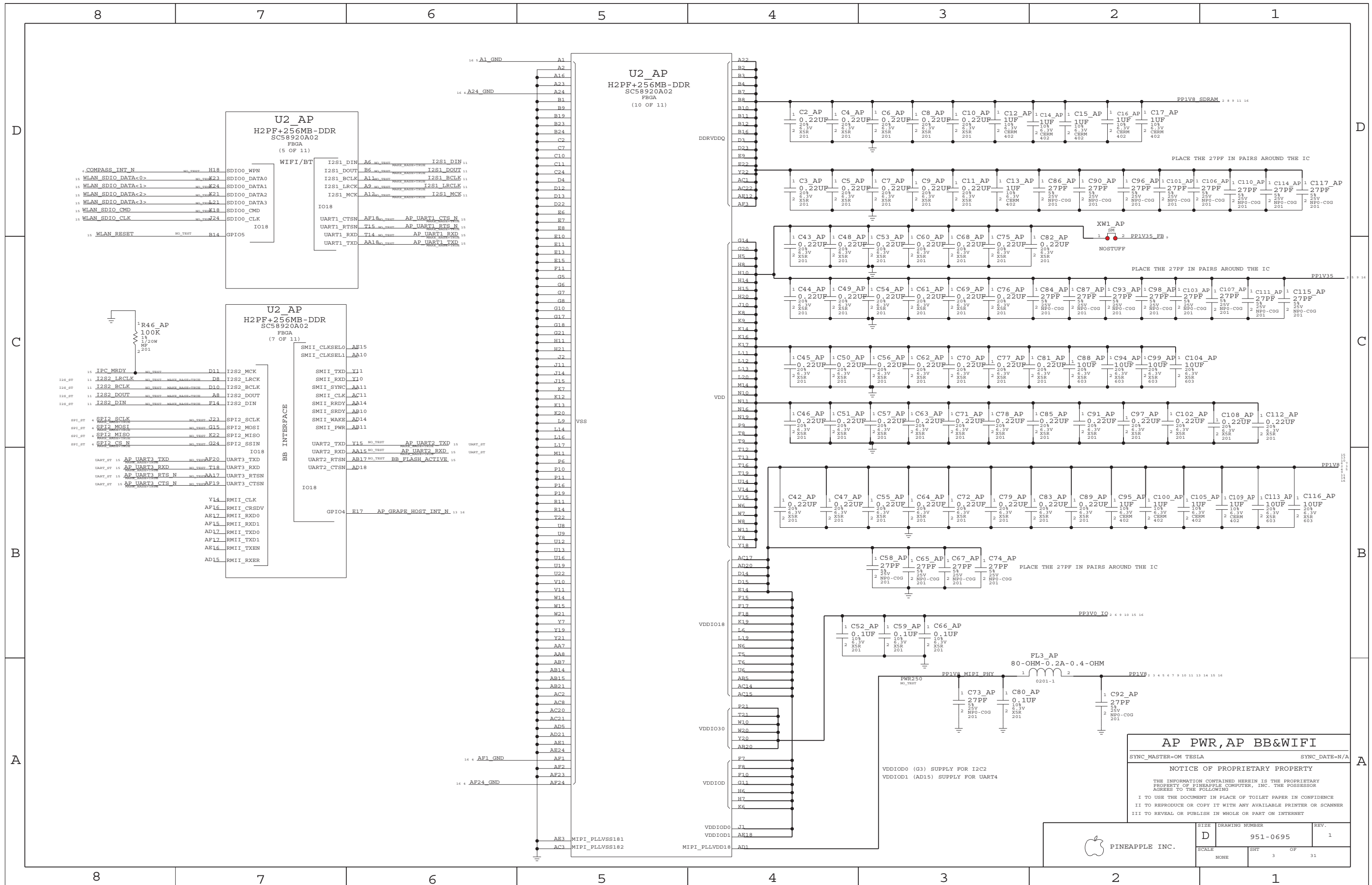
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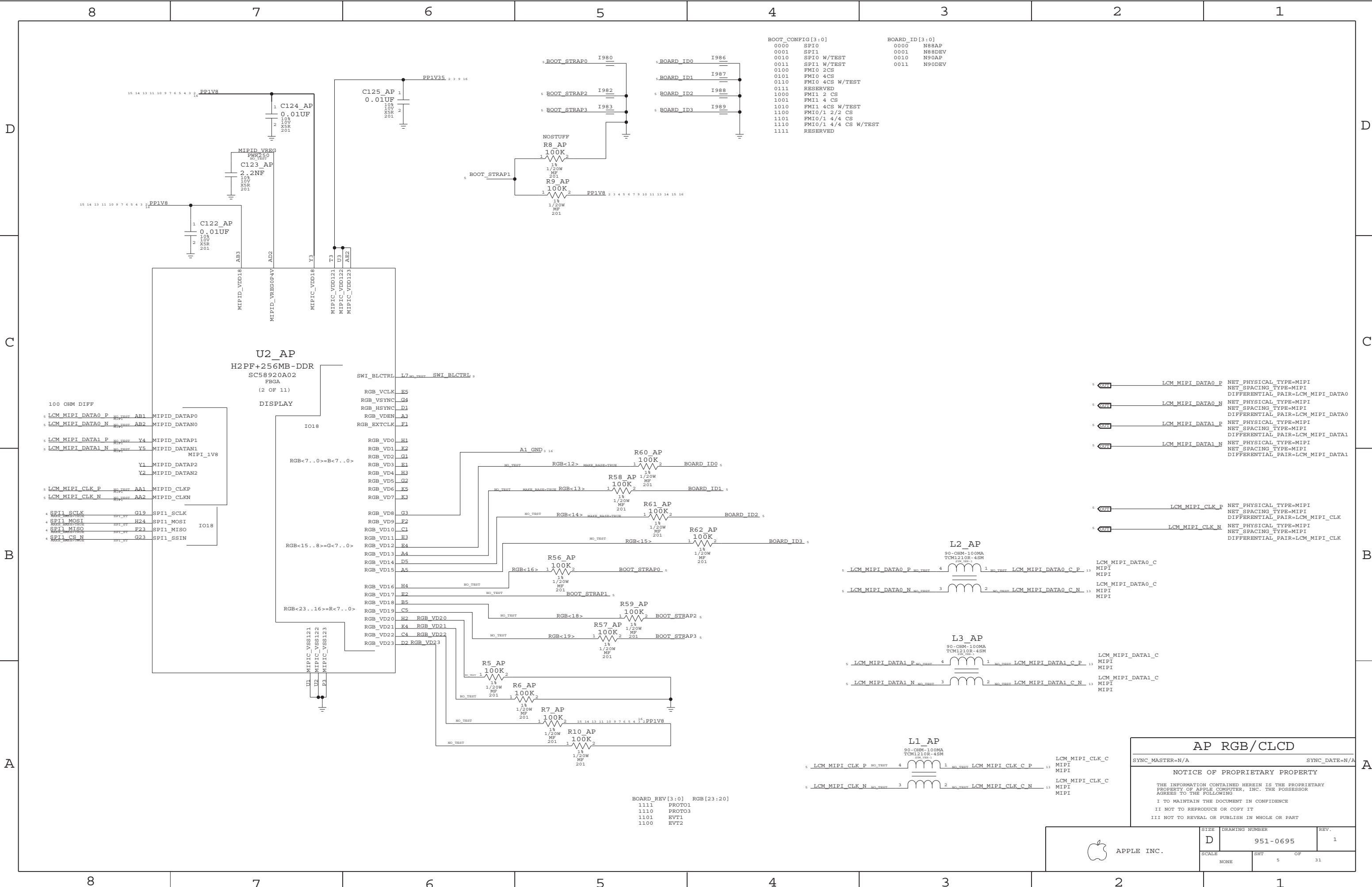
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

SIZE D	DRAWING NUMBER 951-0695		REV. 1
	SCALE NONE	SHT 2	OF 31



APPLE INC.

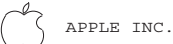




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0000 SPI0	0000 N88AP
0001 SPI1	0001 N88DEV
0010 SPI0 W/TEST	0010 N90AP
0011 SPI1 W/TEST	0011 N90DEV
0100 FMIO 2CS	
0101 FMIO 4CS	
0110 FMIO 4CS W/TEST	
0111 RESERVED	
1000 FMIO 2 CS	
1001 FMIO 4 CS	
1010 FMIO 4CS W/TEST	
1100 FMIO/1 2/2 CS	
1101 FMIO/1 4/4 CS	
1110 FMIO/1 4/4 CS W/TEST	
1111 RESERVED	

BOARD_REV[3:0]	RGB[23:20]
1111	PROTO1
1110	PROTO3
1101	EVT1
1100	EVT2

AP RGB/CLCD		
SYNC_MASTER=N/A		SYNC_DATE=N/A
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APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	951-0695	1
SCALE	SHT	OF
NONE	5	31

L61 AUDIO INTERFACE

D

D

C

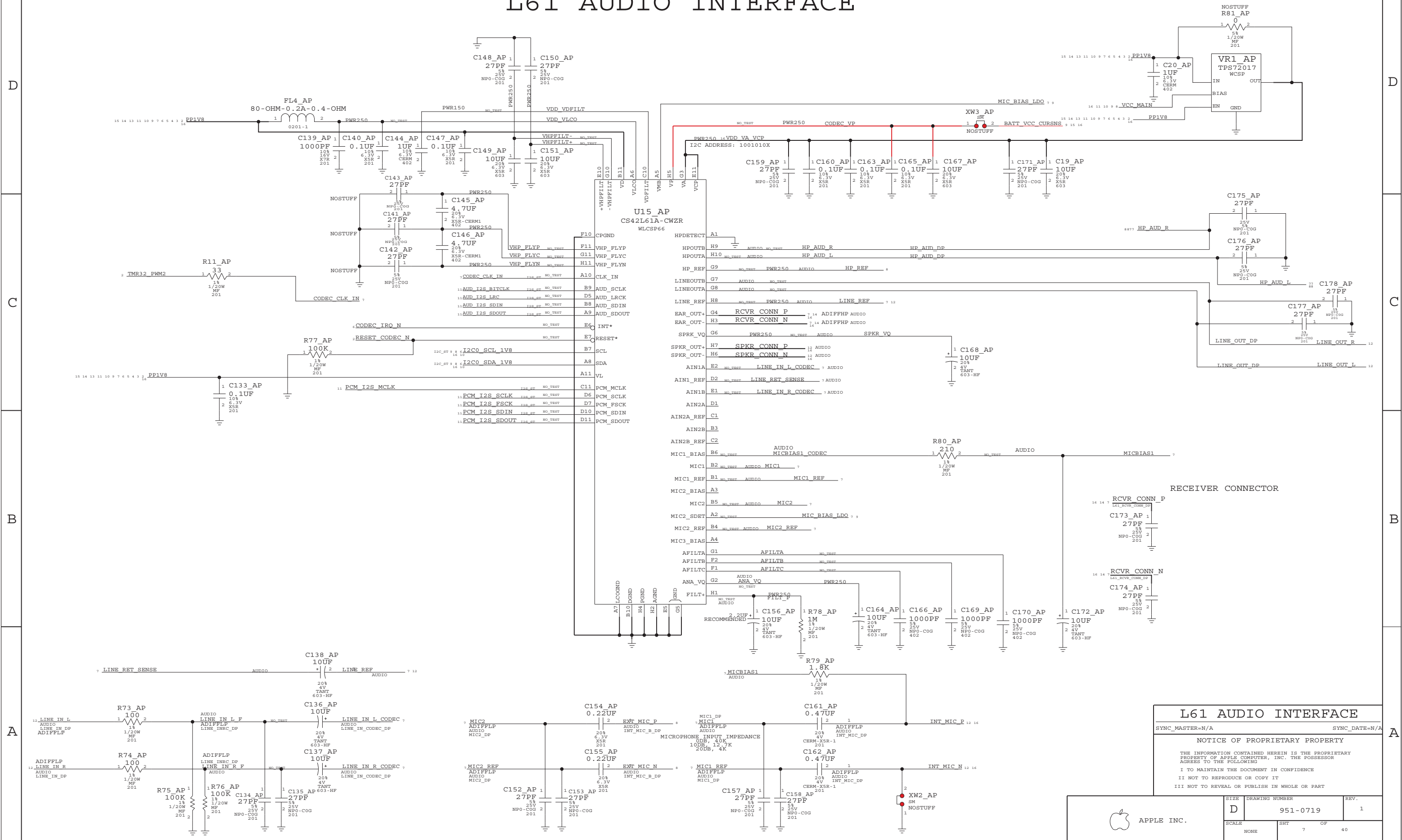
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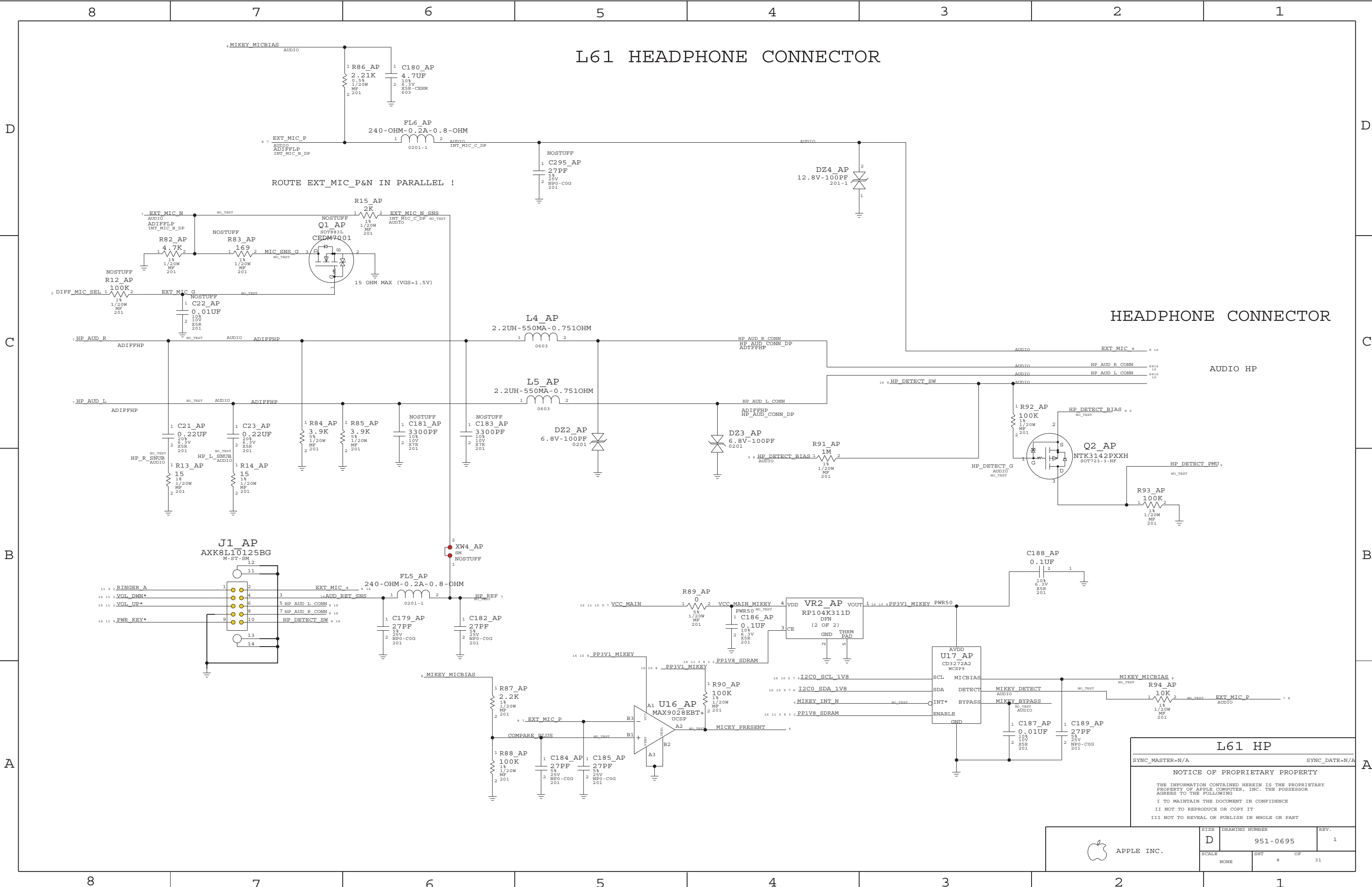
B

B

A

A





L61 HEADPHONE CONNECTOR

HEADPHONE CONNECTOR

AUDIO HP

L61 HP

SYNC_MASTER=N/A SYNC_DATE=N/A

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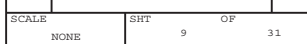
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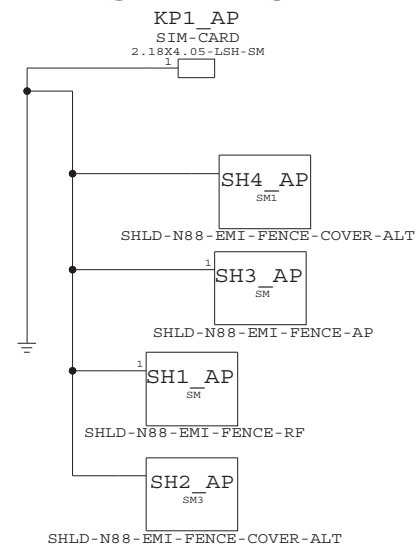
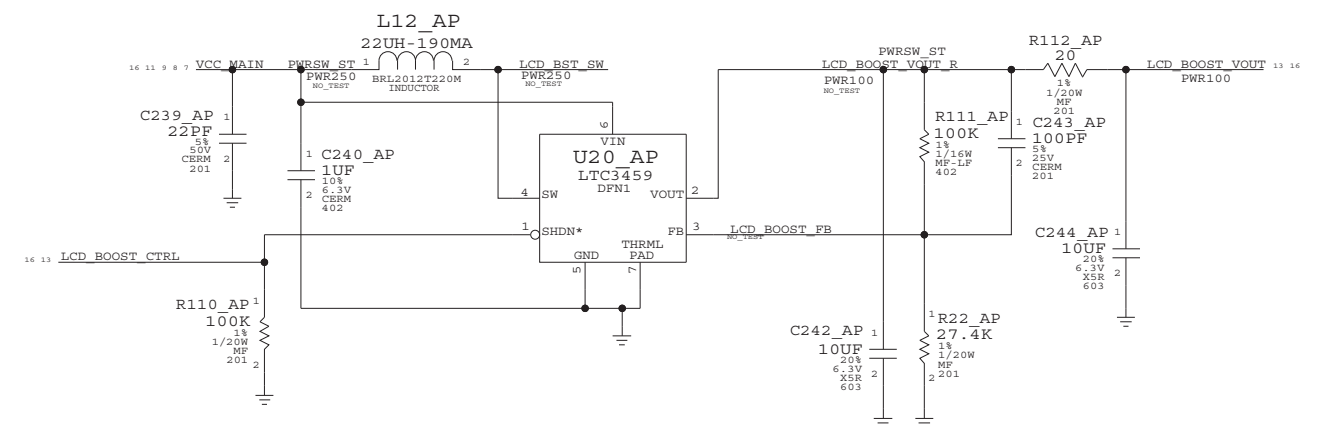
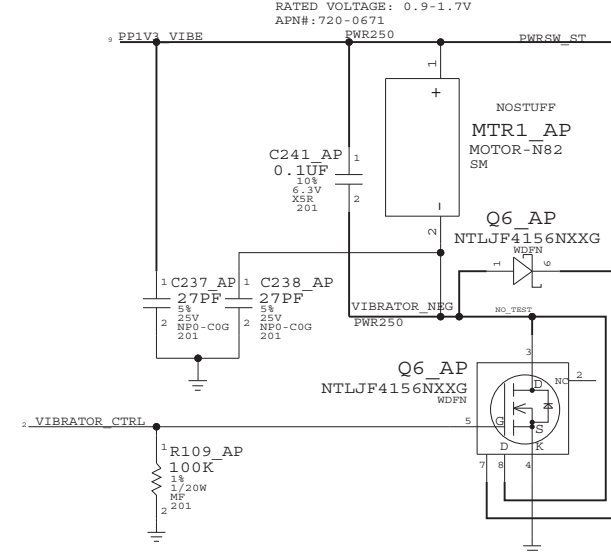
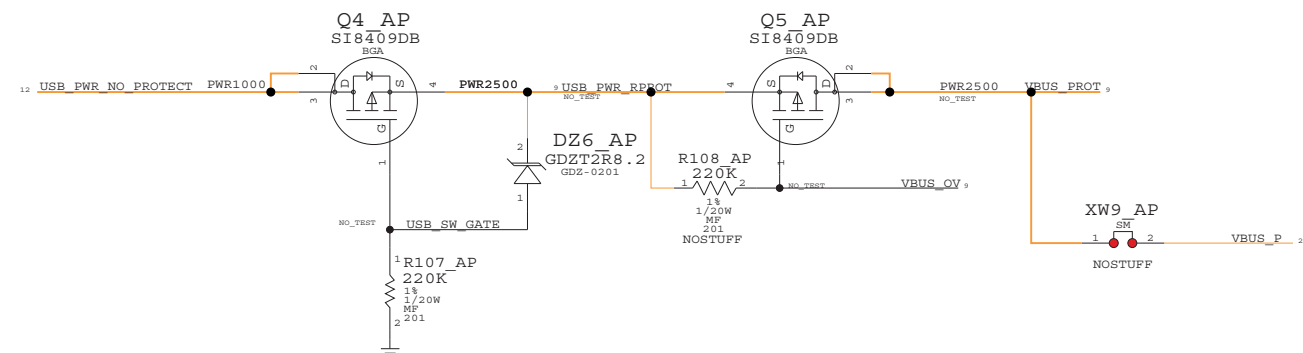
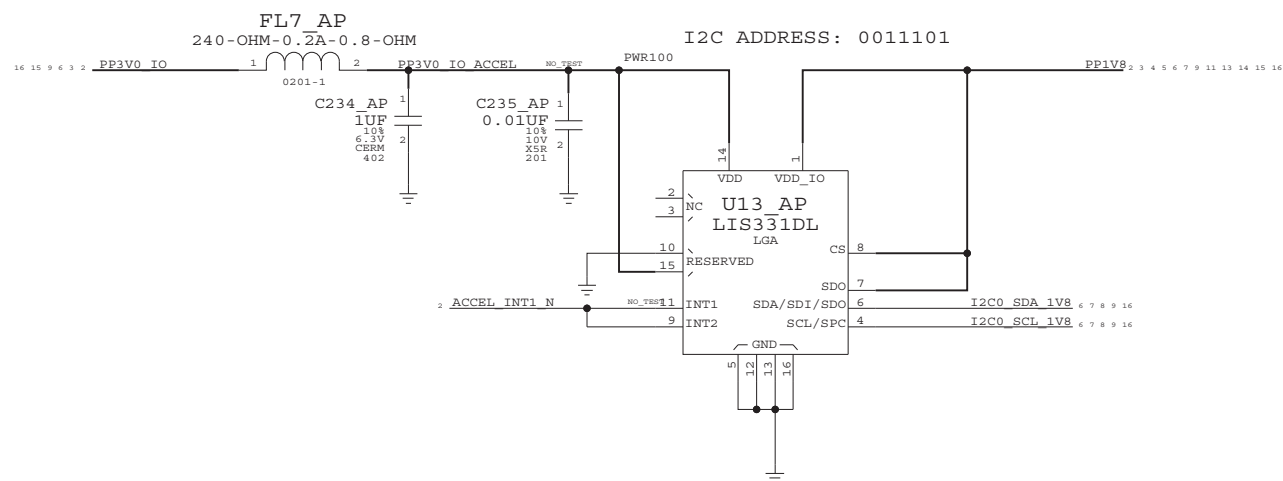
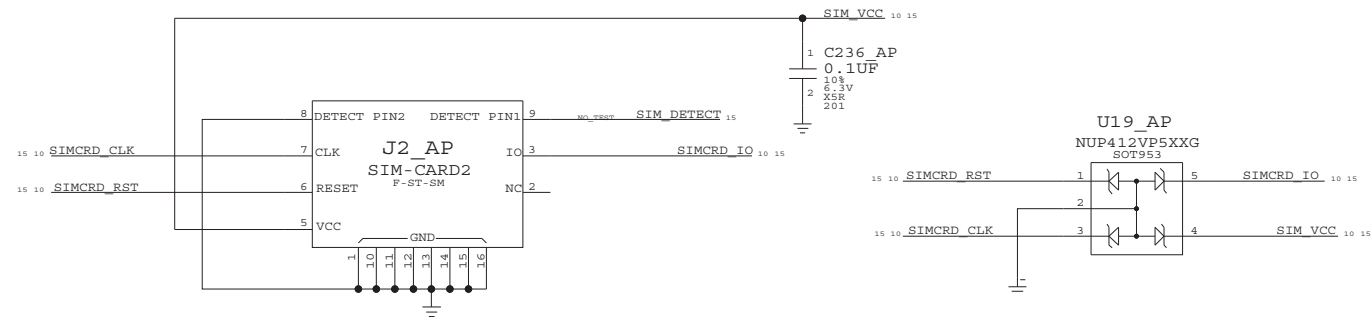
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APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	951-0695	1
SCALE	SHT	OF
NONE	8	31





 APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	951-0719	1
	SCALE	SHT OF	
	NONE	10	25

D

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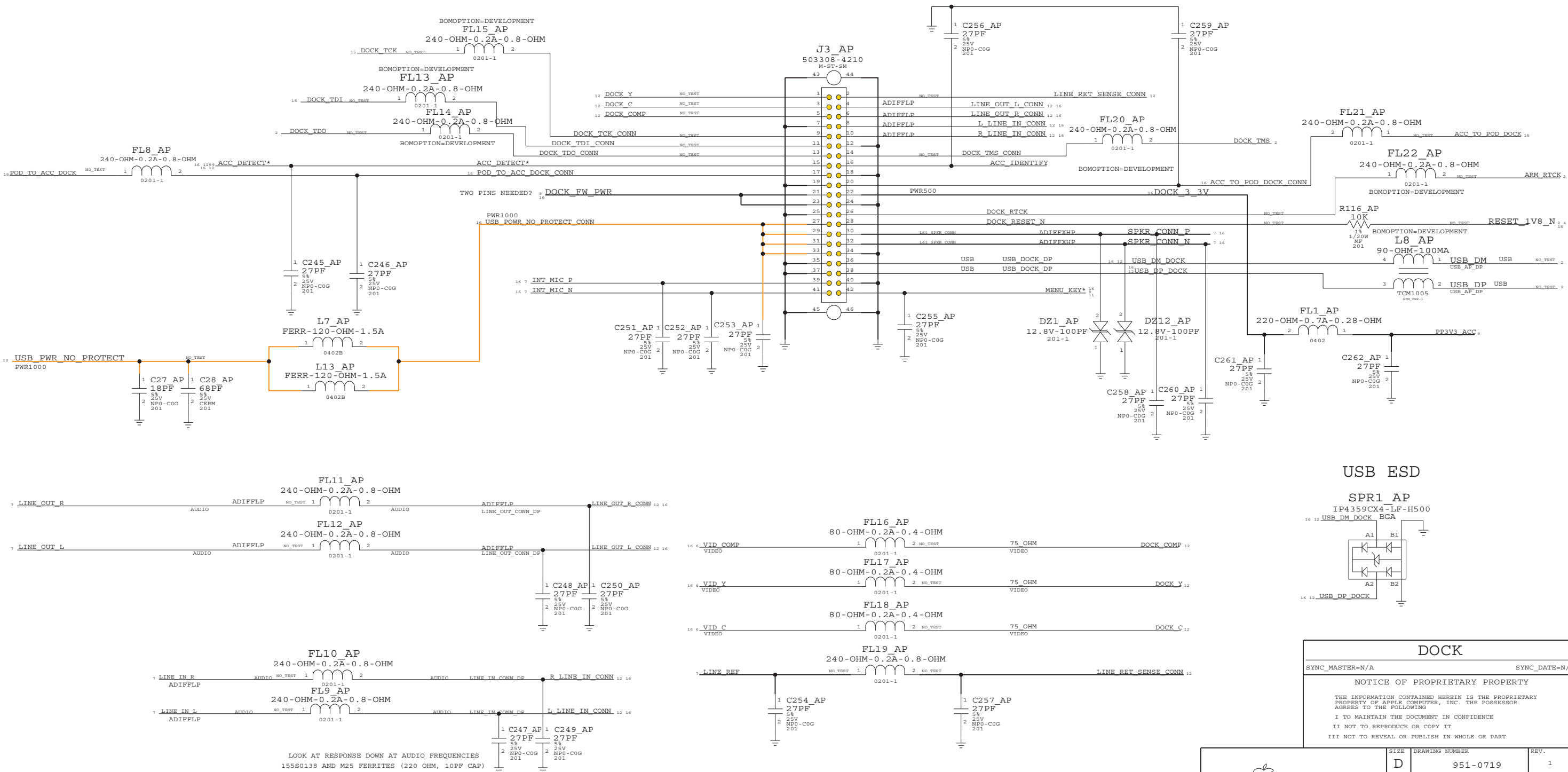
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DOCK CONNECTOR



USB ESD

SPR1 AP
IP4359CX4-LF-H500

DOCK

SYNC_MASTER=N/A SYNC_DATE=N/A

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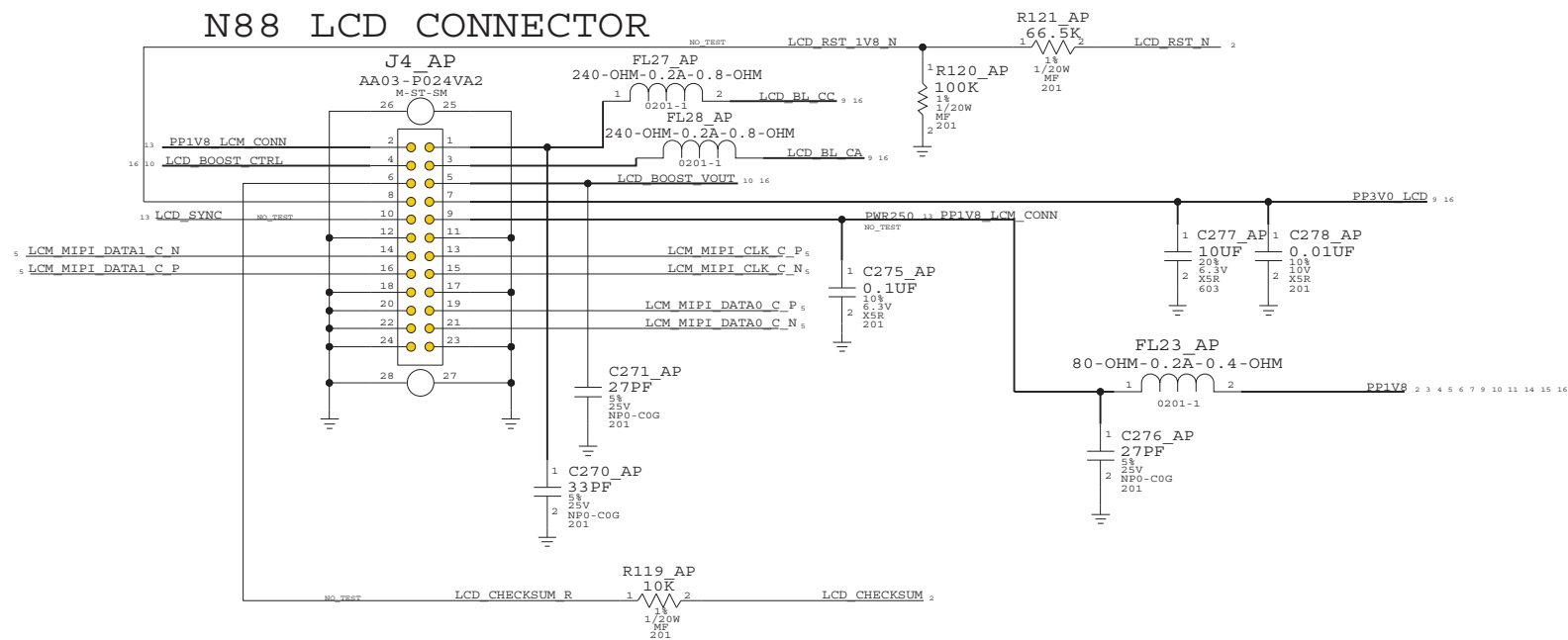
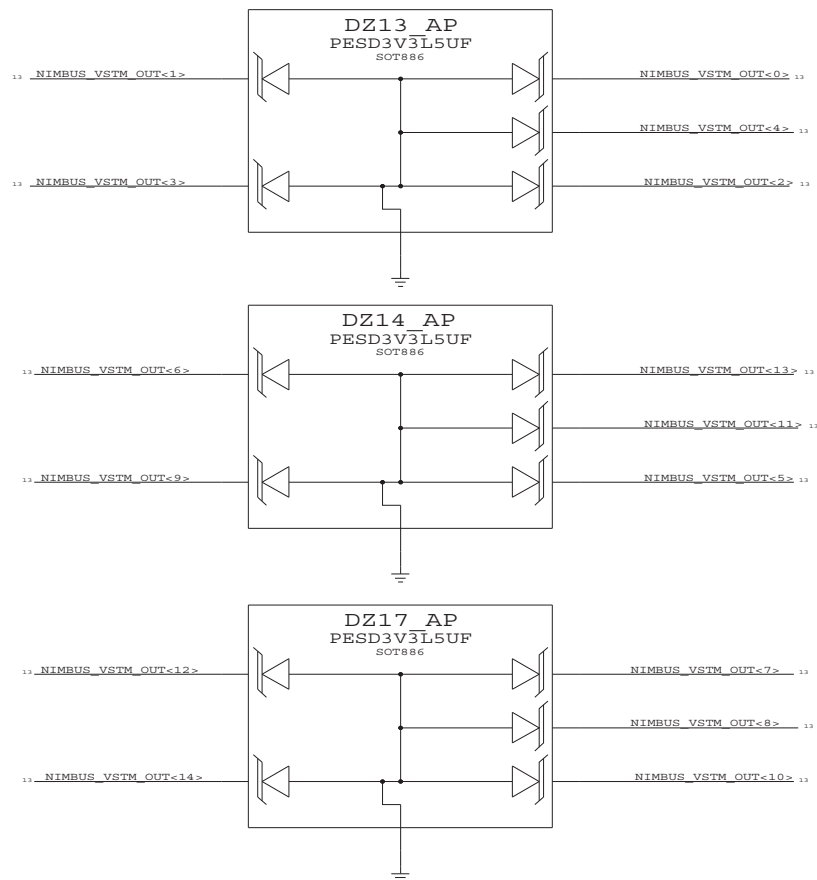
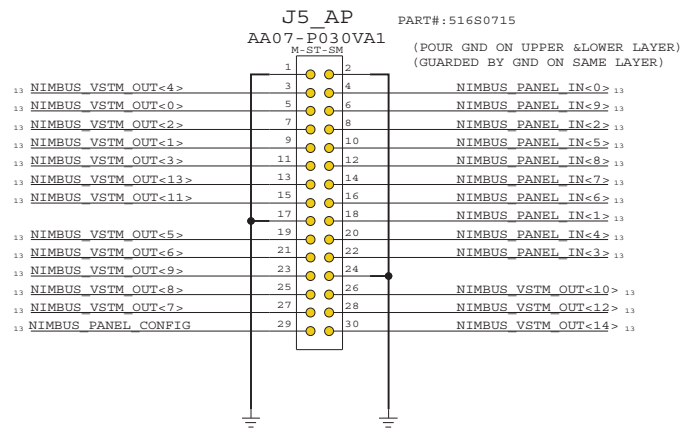
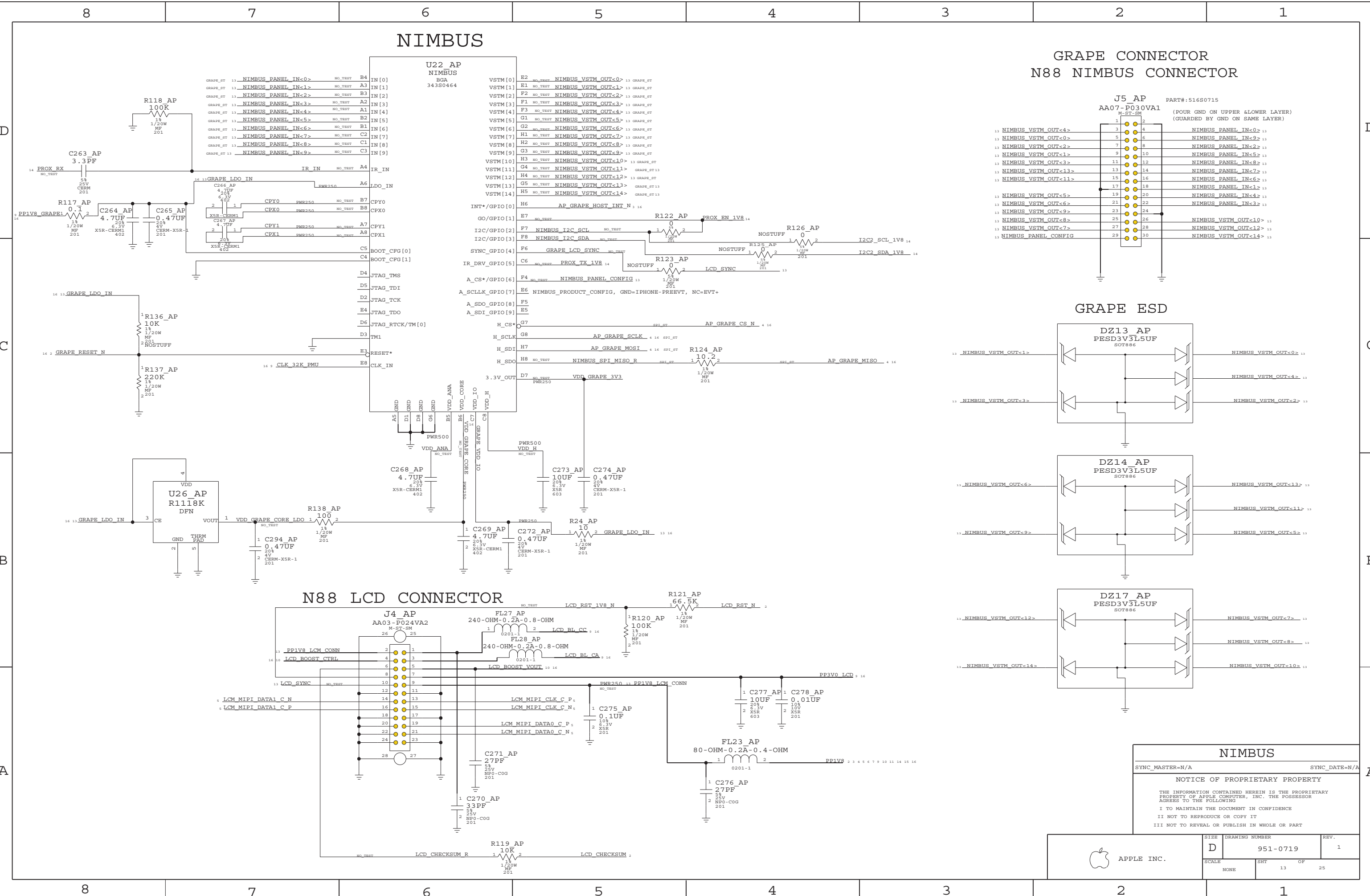
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SIZE	DRAWING NUMBER	REV.
D	951-0719	1
SCALE	SHT	OF
NONE	12	25



APPLE INC.



NIMBUS	
SYNC_MASTER=N/A	SYNC_DATE=N/A
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APPLE INC.

SIZE

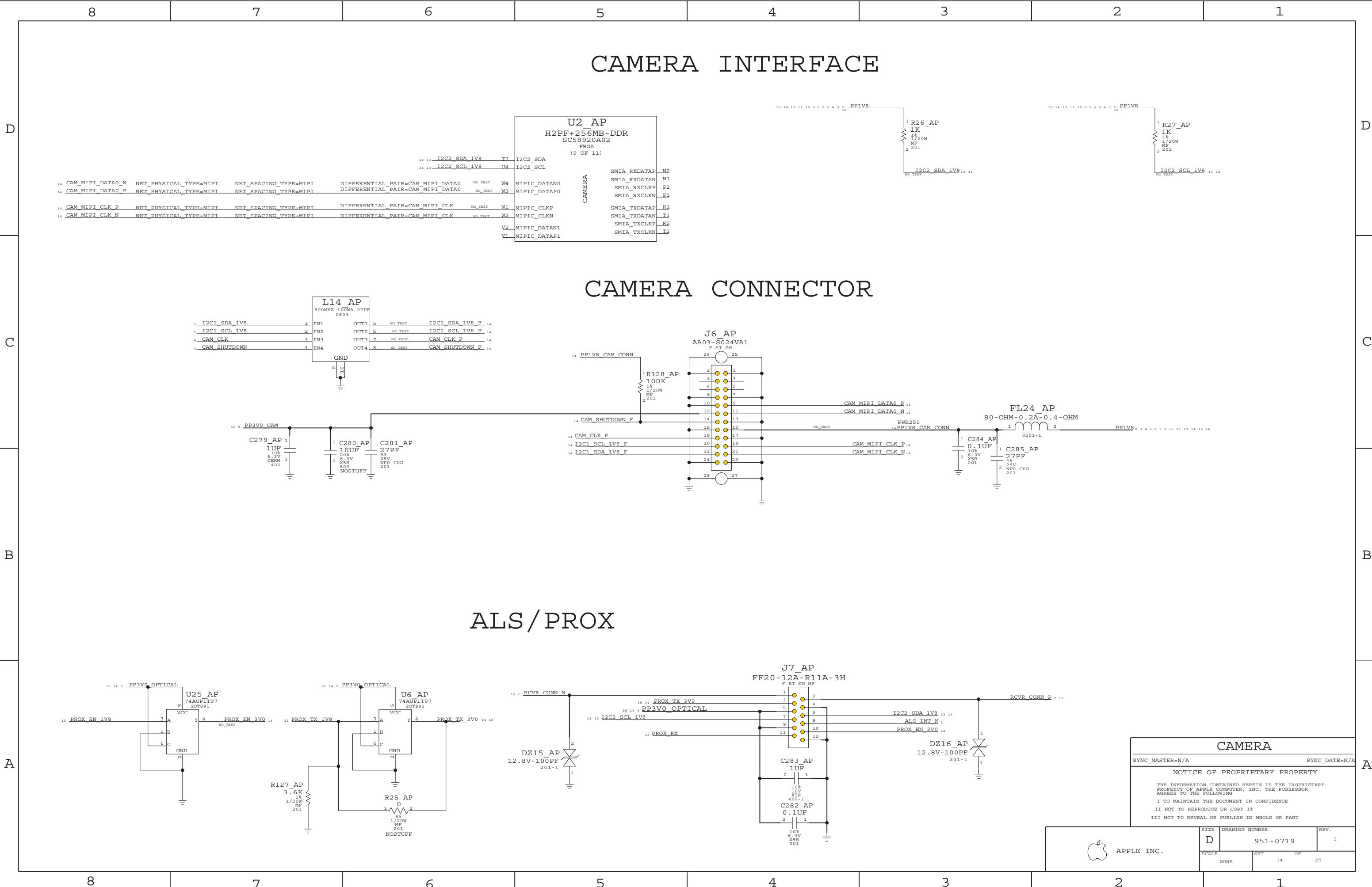
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REV.

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951

071



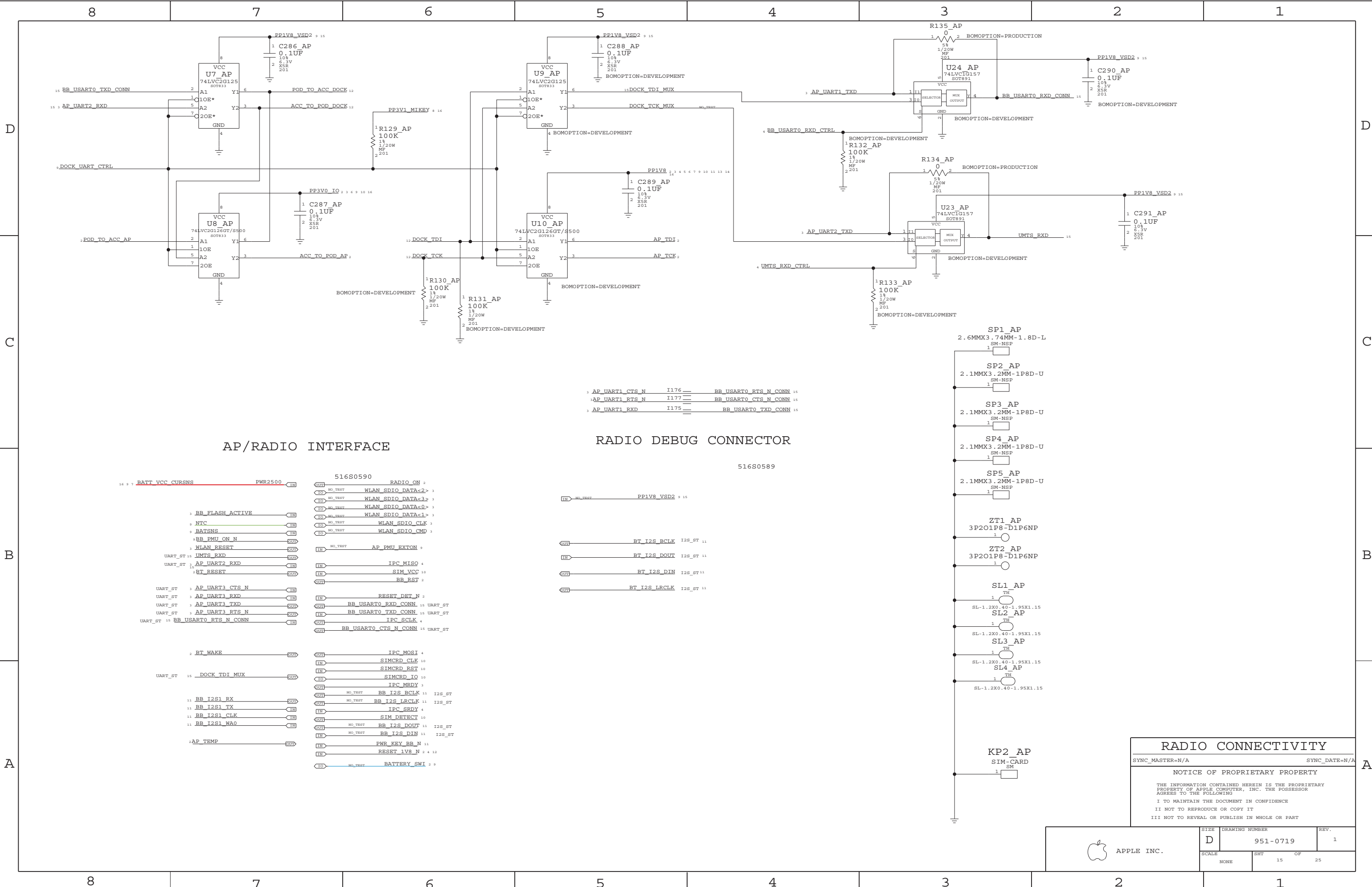
CAMERA INTERFACE

CAMERA CONNECTOR

ALS/PROX

CAMERA	
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APPLE INC.	SIZE D	DRAWING NUMBER 951-0719	REV. 1
	SCALE NONE	SHT 14	OF 25



AP/RADIO INTERFACE

RADIO DEBUG CONNECTOR

RADIO CONNECTIVITY

SYNC_MASTER=N/A SYNC_DATE=N/A

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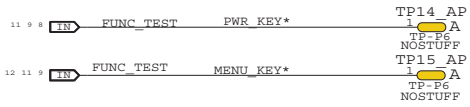
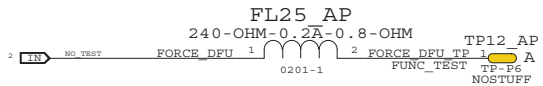


APPLE INC.

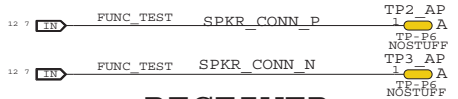
SIZE	DRAWING NUMBER	REV.
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SCALE	SHT	OF
NONE	15	25

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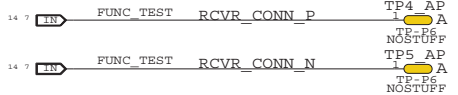
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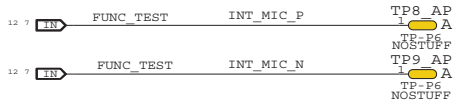
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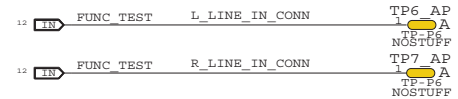
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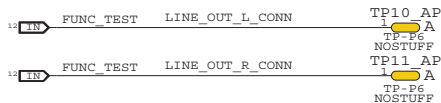
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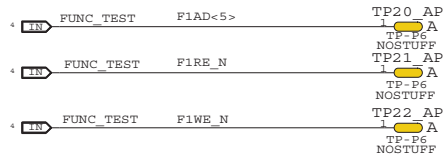
LINE IN



LINE OUT



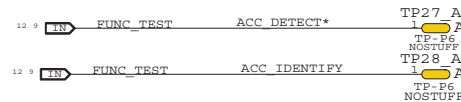
NAND



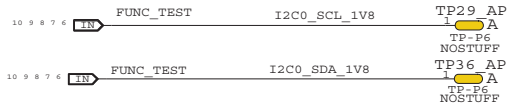
CLOCKS



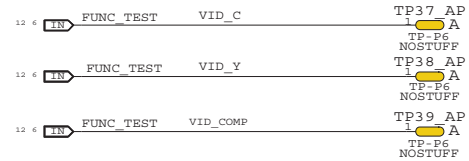
ACCESSORY DETECT



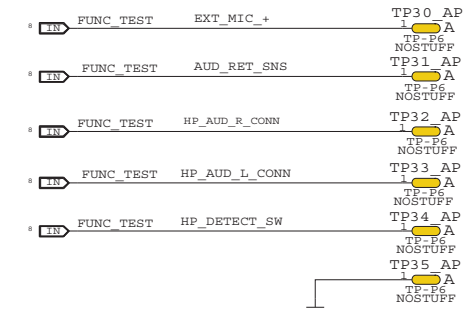
I2C PINS



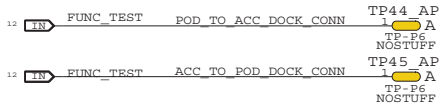
VIDEO



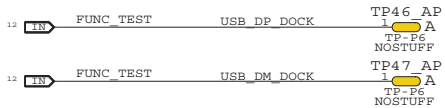
HEADPHONE



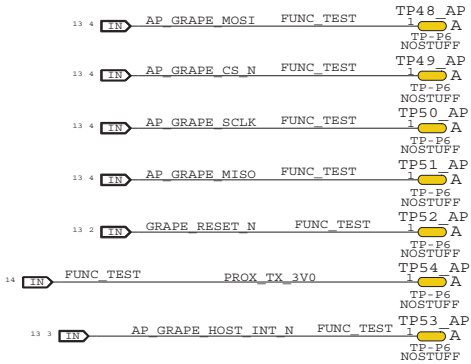
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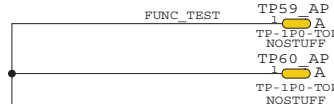
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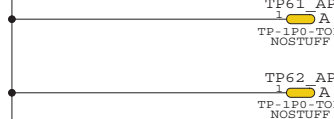
NIMBUS



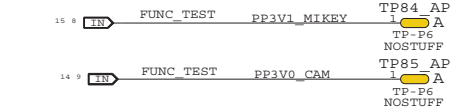
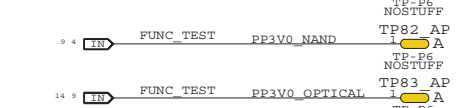
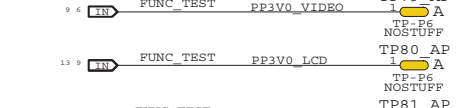
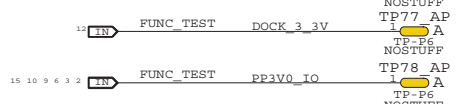
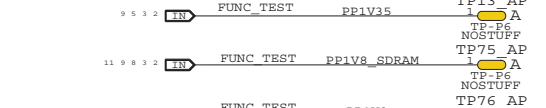
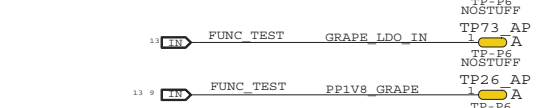
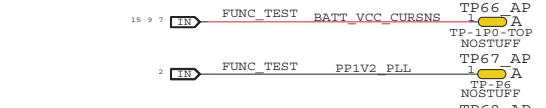
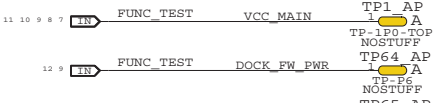
POWER GND



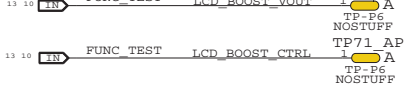
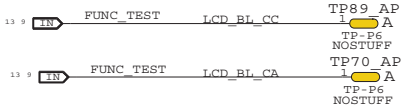
SIGNAL GND



POWER



LCD



RESERVED FOR OUTPUT OF LDO

PROX, ALS

SYNC_MASTER=N/A SYNC_DATE=N/A

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