iPhone 3G Disassembly

Comparison with previous iPhone

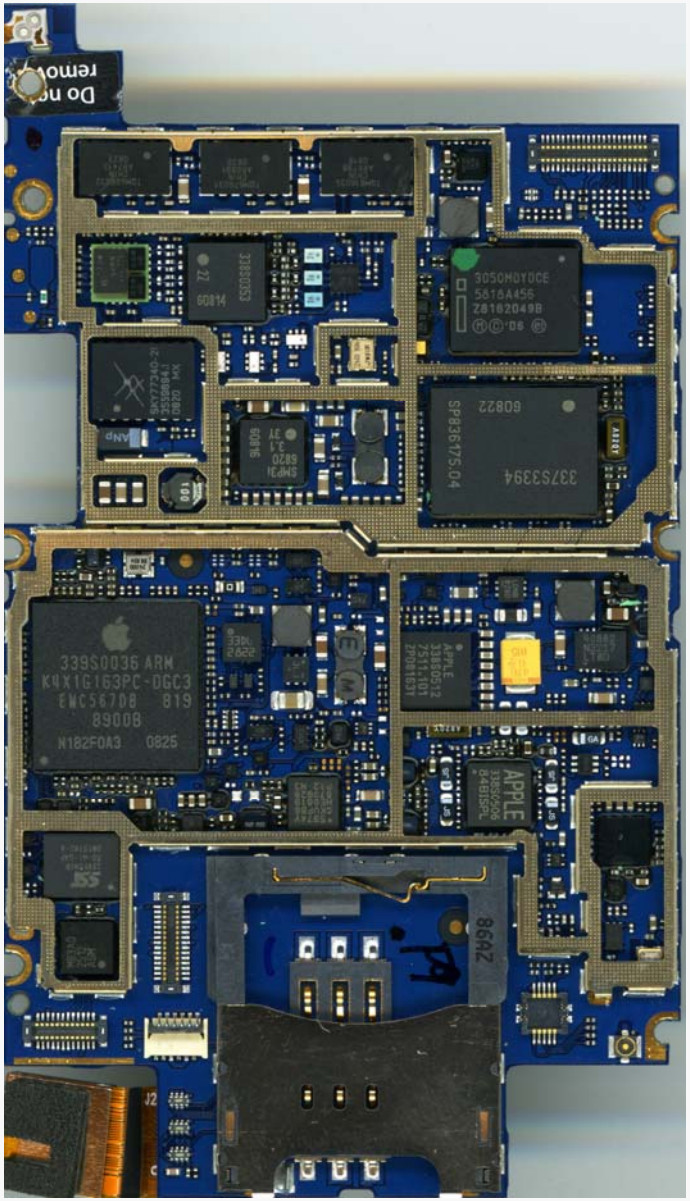
Openmoko
open. mobile. free.

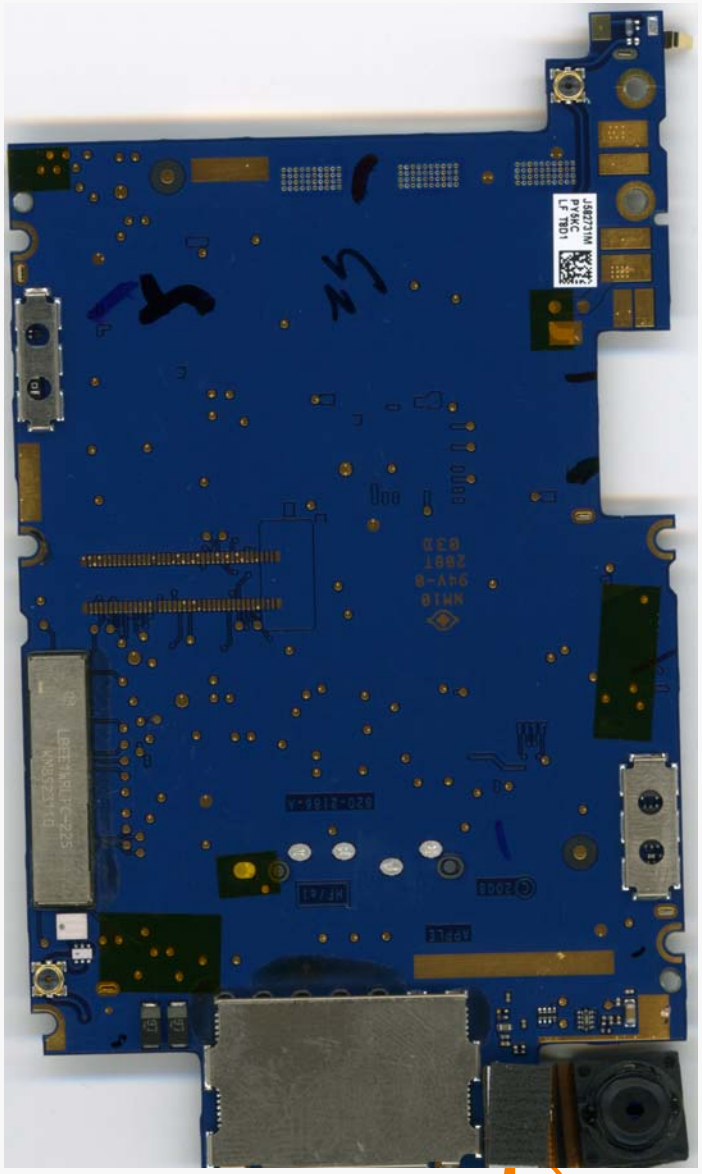
iPhone 3G at a glance

Available:	2008,July
Network:	GSM 850 / 900 / 1800 / 1900 HSDPA 850 / 1900 / 2100
Data:	GPRS + EDGE+WCDMA+HSDPA+WIFI
Screen:	320 x 480 pixels, 3.5 inches
Camera:	2 mega pixels FF
Size:	115.5 x 62.1 x 12.3 mm / 133grams
Bluetooth:	Yes
Color	Black(8/16 GB), White (16 GB)
Infra-red:	No
Polyphonic:	Yes
Memory Card	No
Battery life:	10 hours talktime / 300 hours standby

openmoko

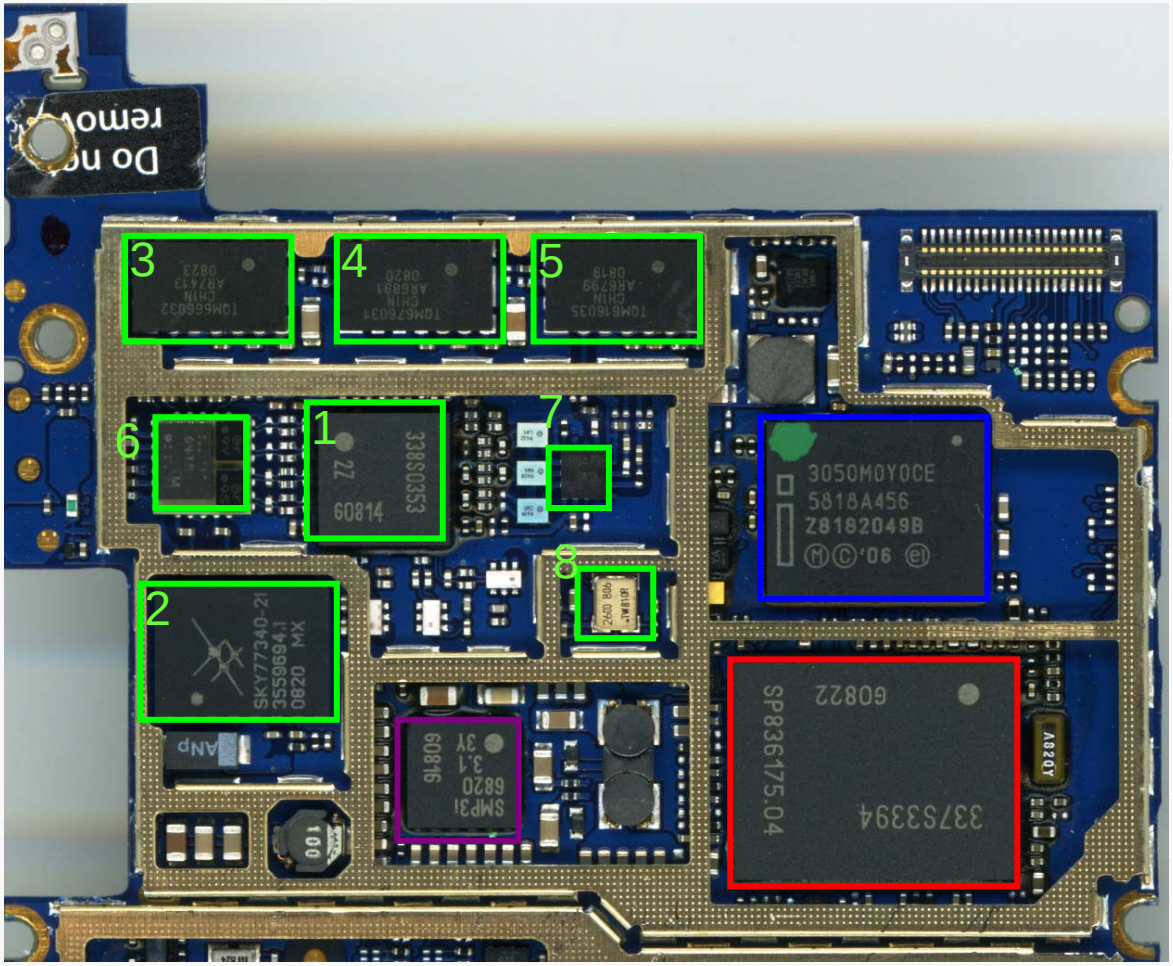
PCBA





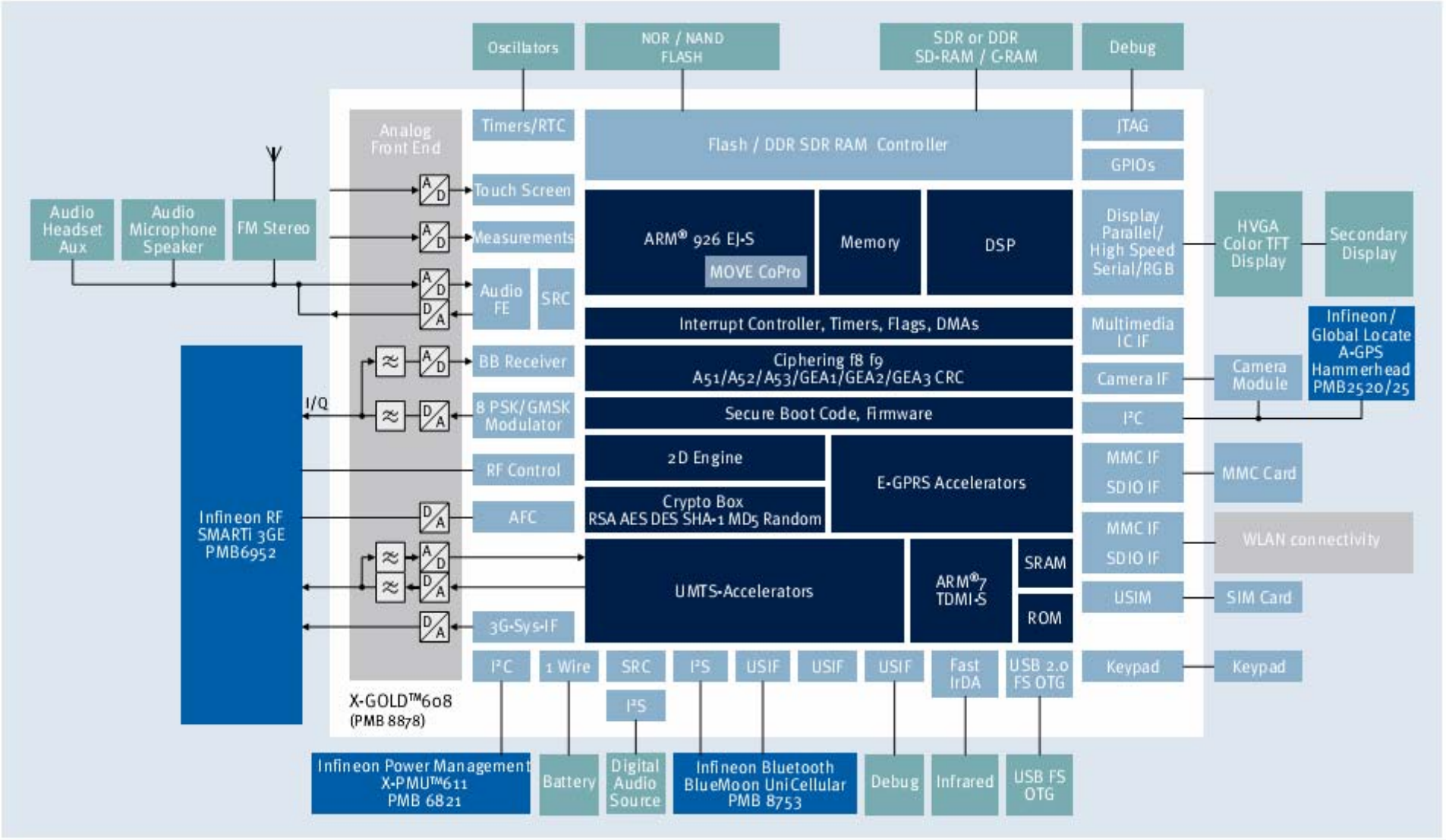
openmoko

Wireless MODEM



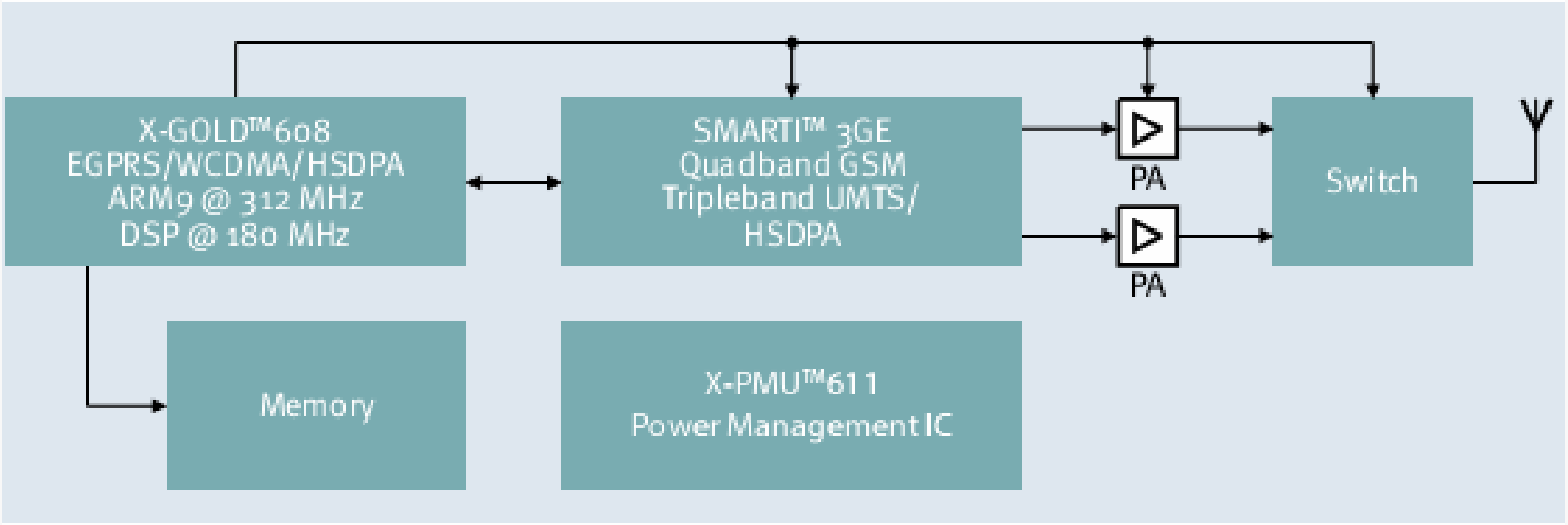
DBB	Infineon XMM 6080 ARM 926 Based (Guess?)
NOR+SRAM	Intel 3050M0Y0CE 5818A456 (16MB NOR+8MB PSRAM)
PMU	Infineon PMB 6820
RF Parts	1. Infineon PMB6952 Dual Mode W-DMA/EDGE
	2. Skyworks SKY77340 EDGE Quad-band PA
	3. TriQuint TQM666032 4. TriQuint TQM676031 5. TriQuint TQM616035 (2100, 1900, 850PA-duplexers respectively)
	6. Murata Quad-band FEM
	7. Infineon BGA736 Tri-band LNA 8. TCXO

XMM 6080 Block I



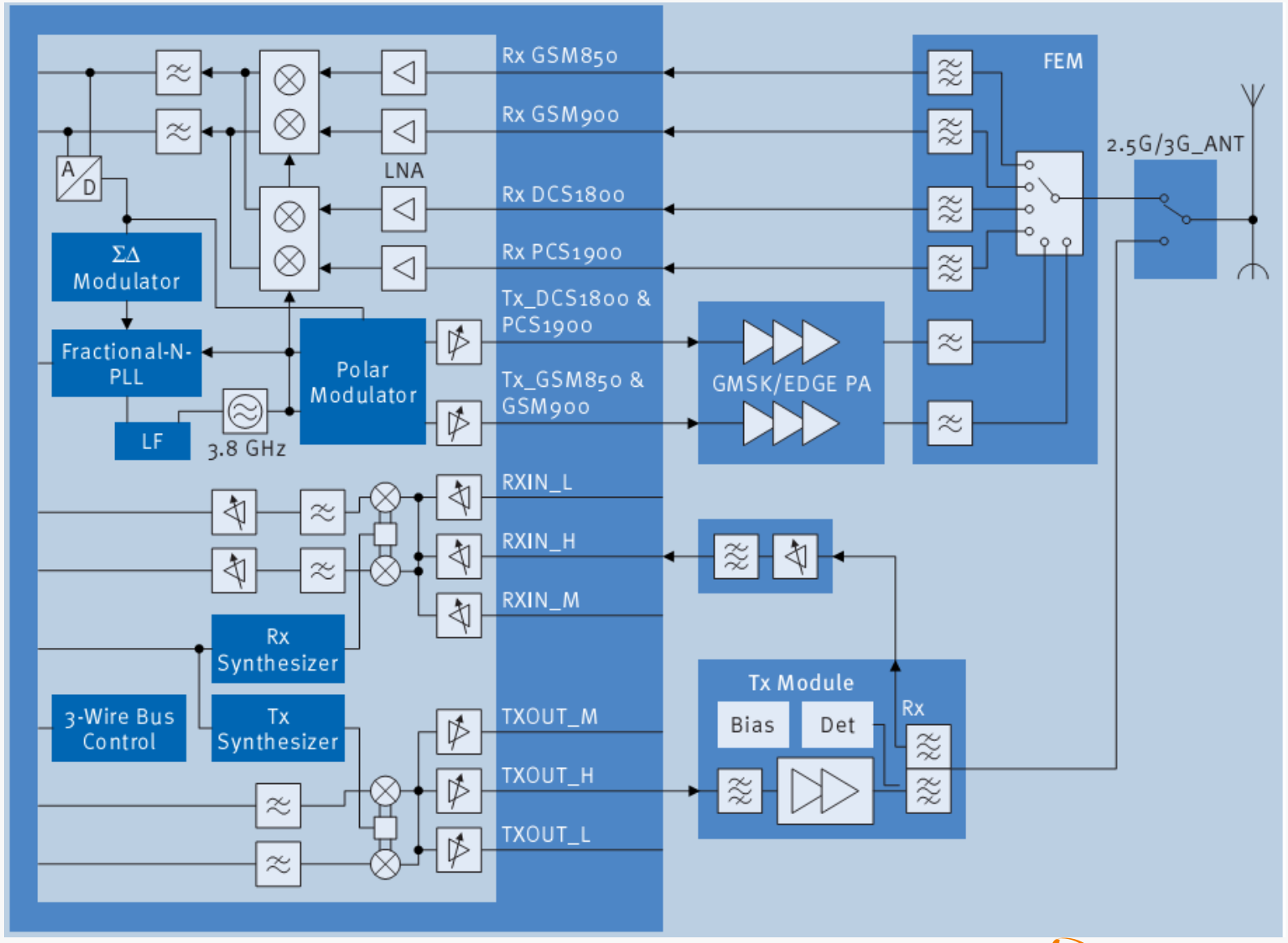
openmoko

XMM 6080 Block II



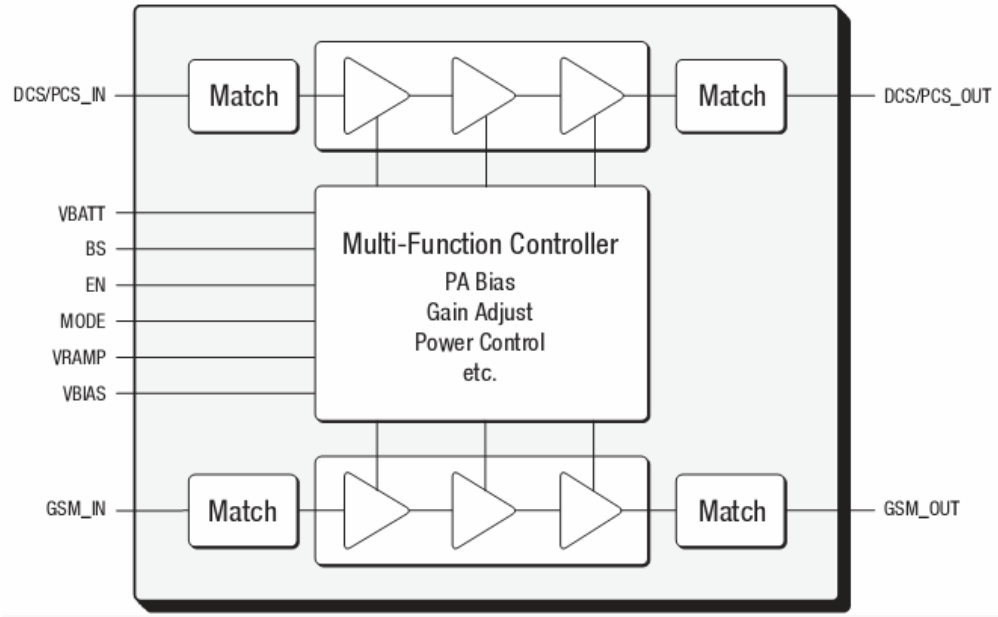
openmoko

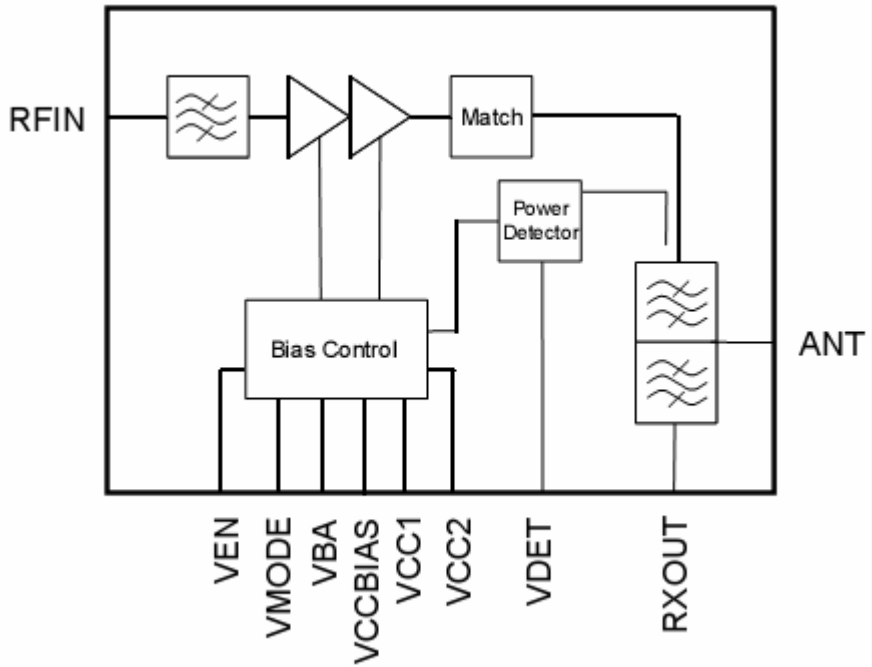
PMB6952 Block



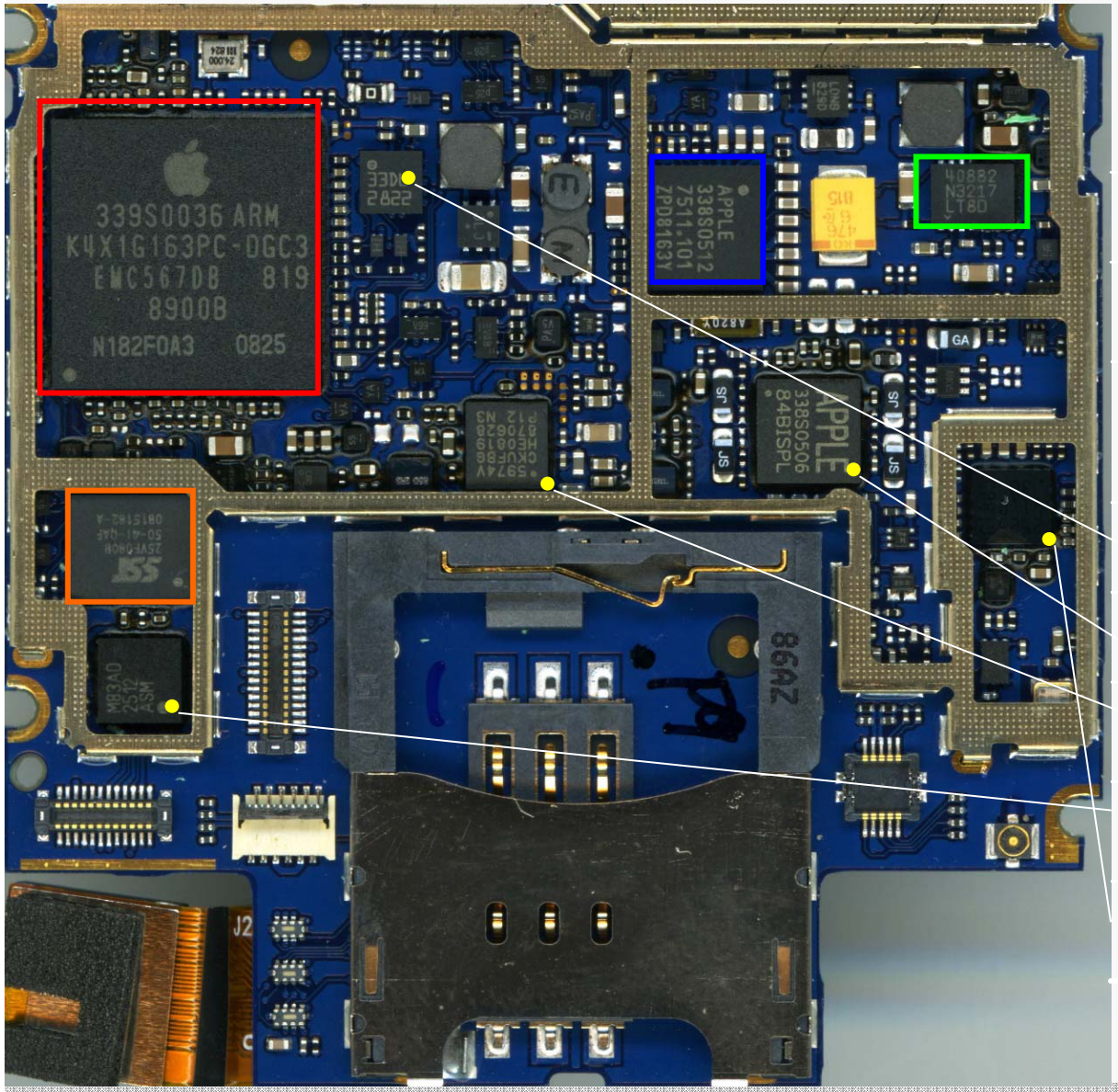
openmoko

PA Parts


DCS/PCS_IN
Match
Match
DCS/PCS_OUT
VBATT
BS
EN
MODE
VRAMP
VBIAS
Multi-Function Controller
PA Bias
Gain Adjust
Power Control
etc.
GSM_IN
Match
Match
GSM_OUT


RFIN
Match
Power Detector
Bias Control
ANT
VEN
VMODE
VBA
VCCBIAS
VCC1
VCC2
VDET
RXOUT

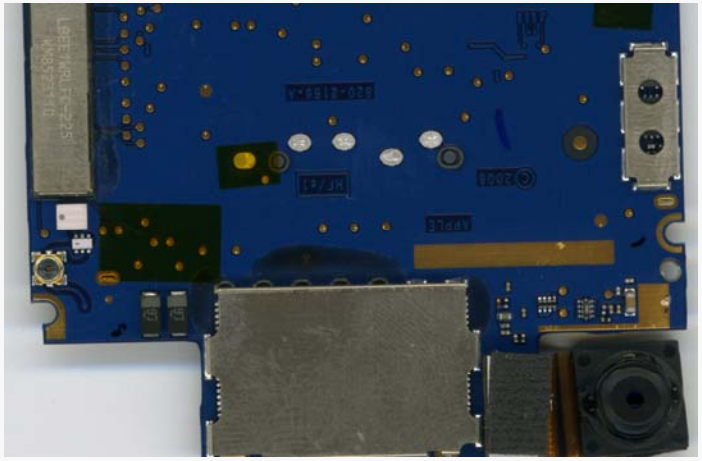
Logic Board



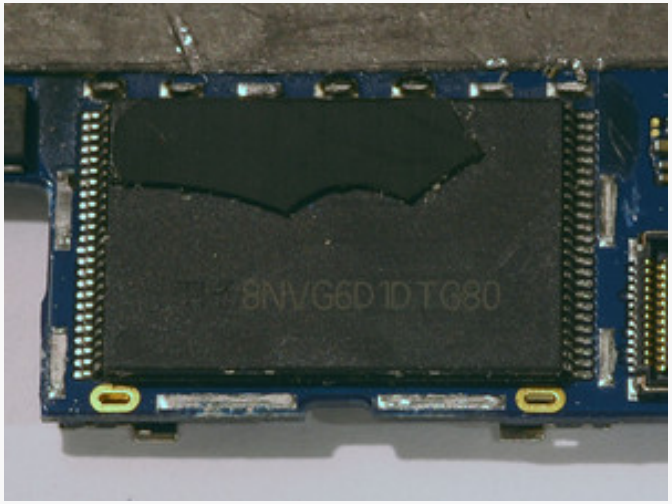
CPU	SAMSUNG 64XX Series with SAMSUNG 128MB M-DDR
PMU	NXP
Flash	SST 4Mb (SST25VF040B)
Battery Charger/USB Controller	Linear LTC4088-2
G Sensor	ST LIS331AL
Audio Codec	Wolfson WM6180C
Touch screen controller	Broadcom BCM5974
Display Interface	NS LM2512AA
GPS	Infineon PMB2525(HH II)

openmoko

NAND Flash?



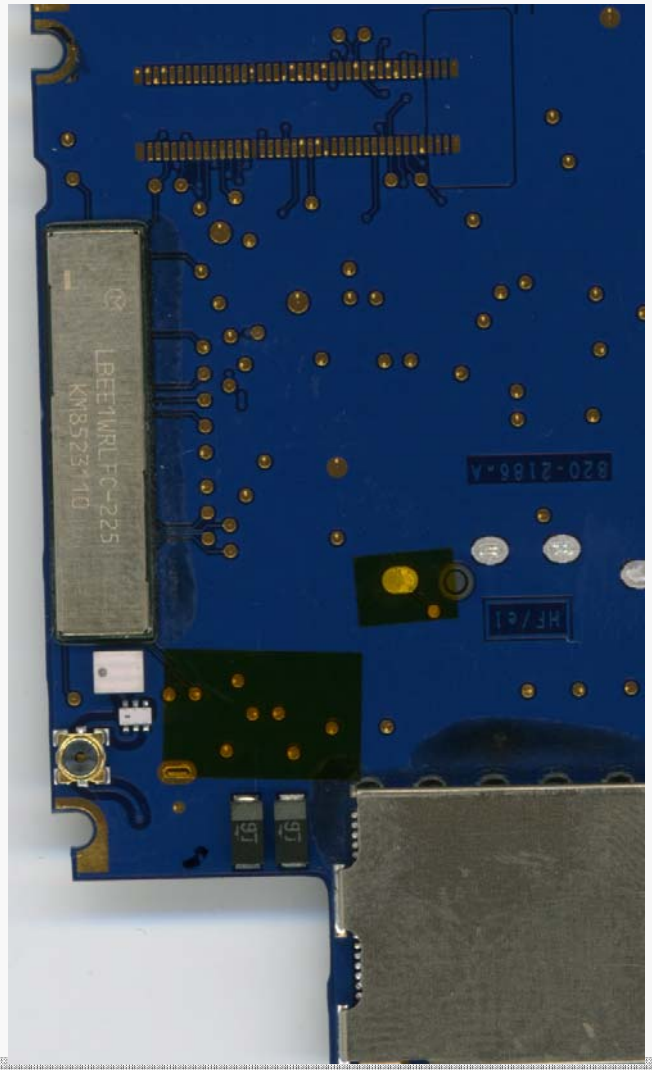
Remove Shielding Can



Toshiba TH58NVG6D1DTG80 (8GB)

openmoko

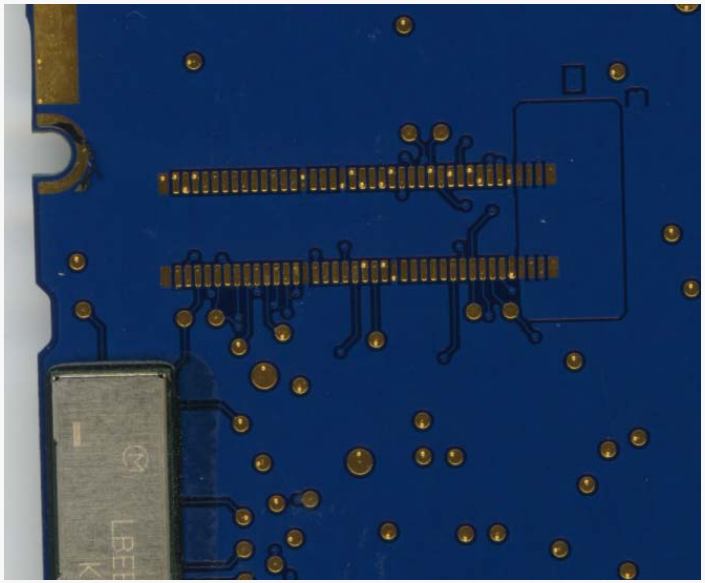
Where are the other wireless chip??



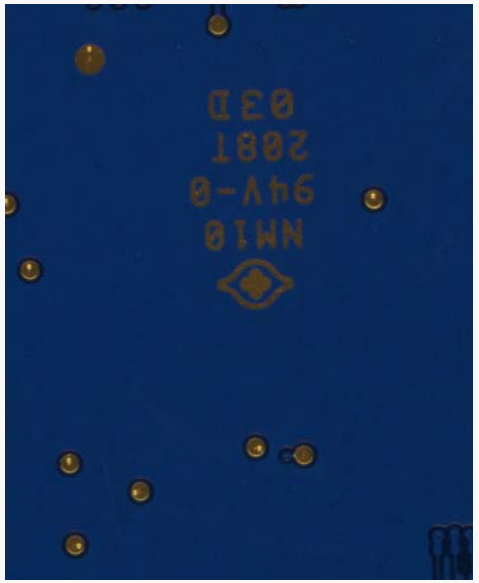
These chips/modules may implement WIFI/BT (Vendor: Murata). But one thing for sure, these components must be the customized parts.

openmoko

Some interesting detections from PCB



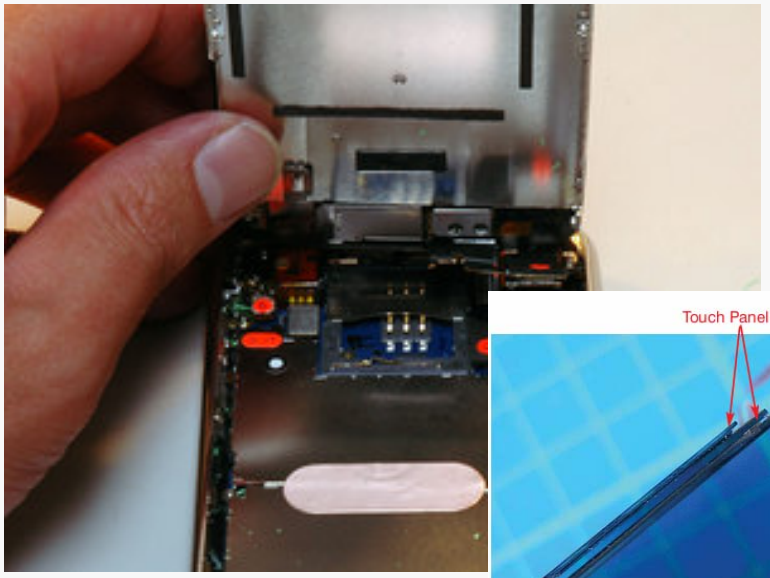
Debug Connector?

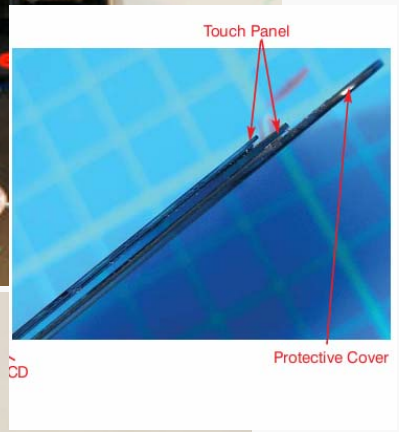


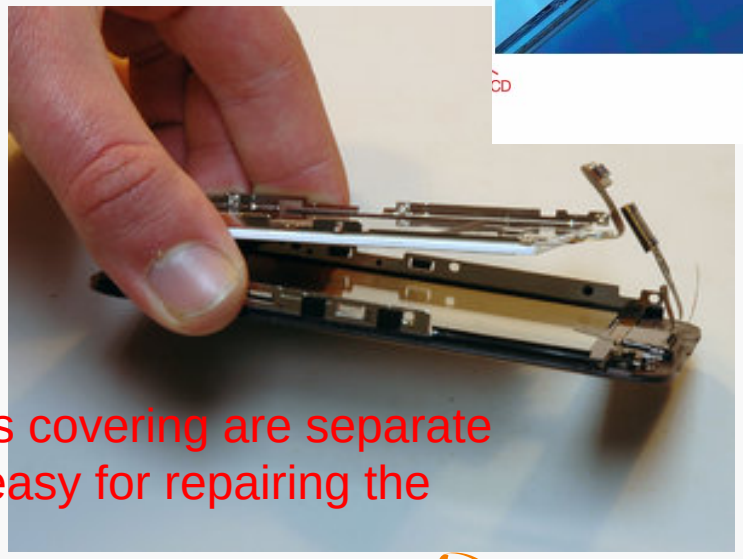
NAN Ya PCB!

openmoko

Disassembly I



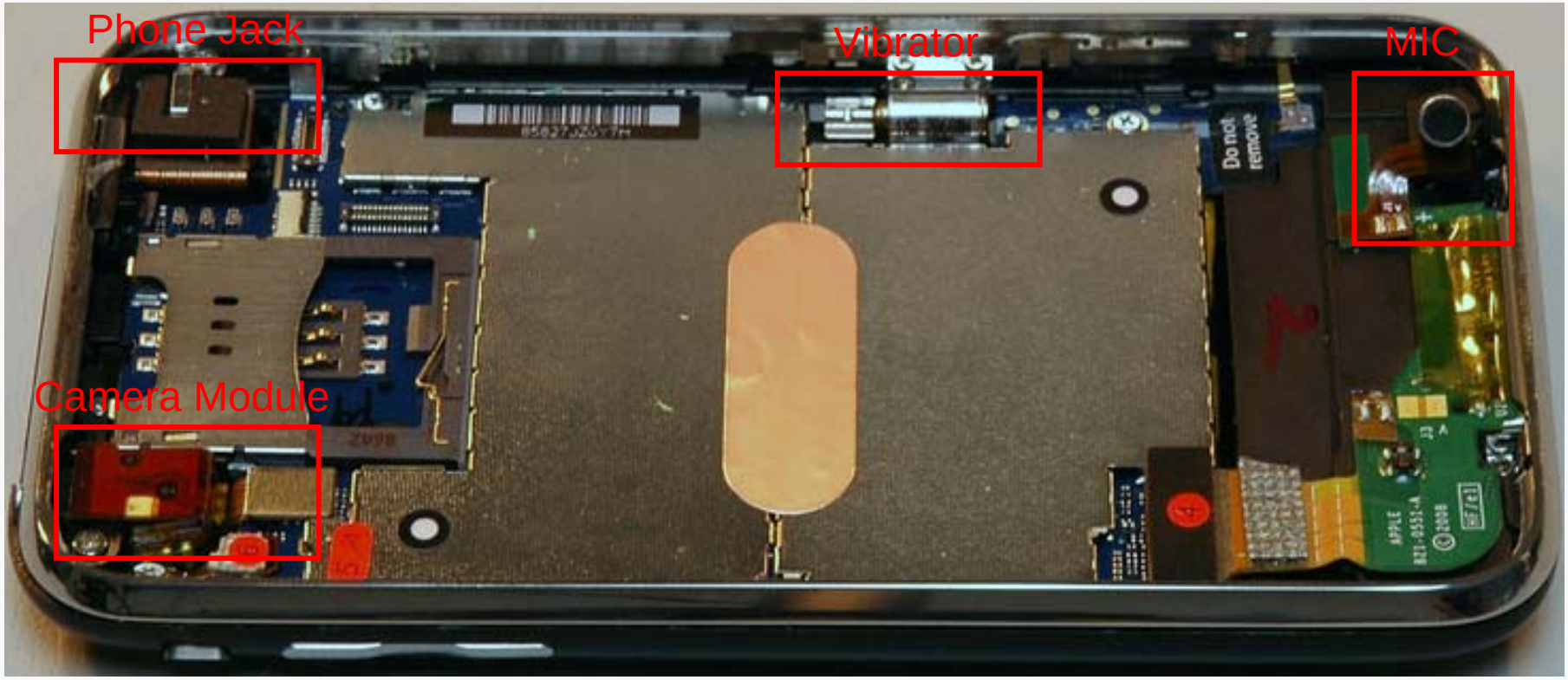




The LCD and glass covering are separate components. It is easy for repairing the iPhone 3G!

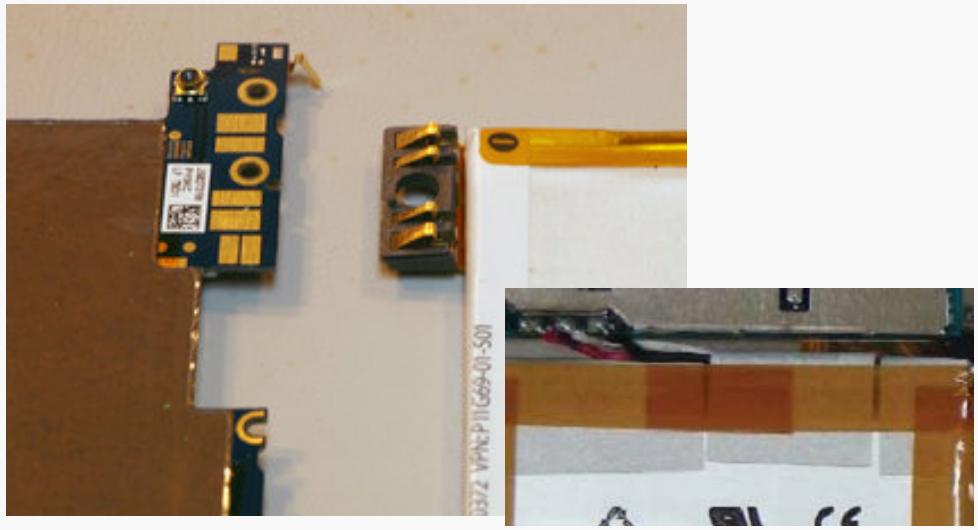
openmoko

Disassembly II

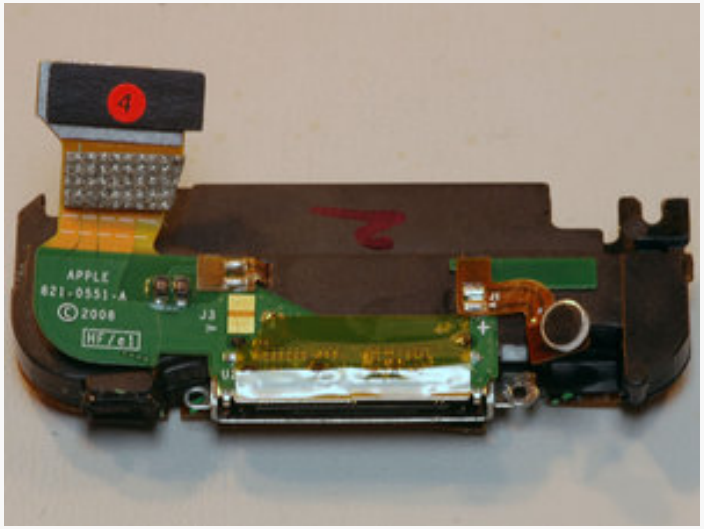


openmoko

Disassembly III



The battery isn't soldered on. It helps to replace the battery. But the spring type connection may cause the supply voltage drop while the phone drops on the ground.

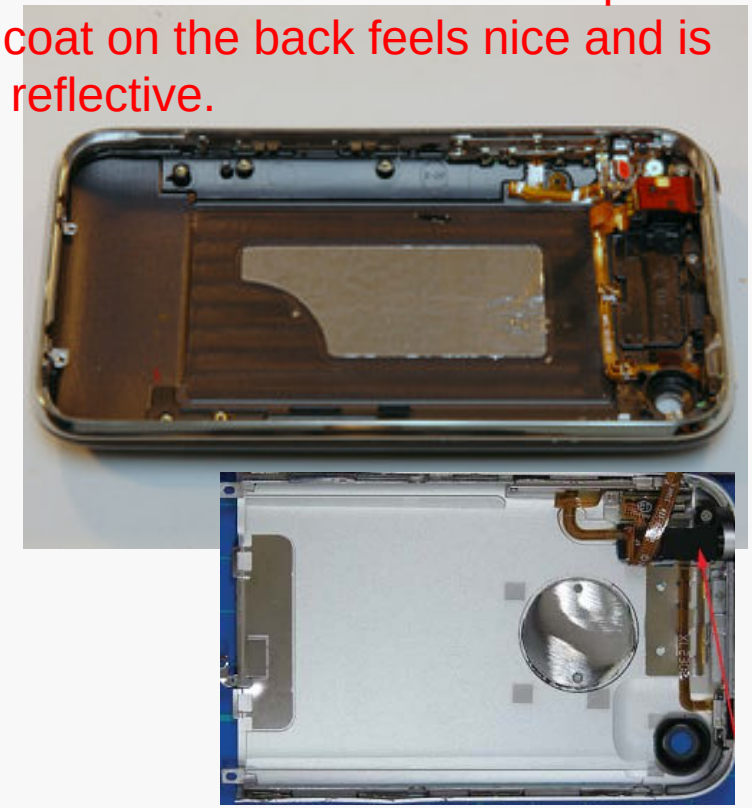


Dock and headphone connector. The primary antenna is on the other side of this part.

openmoko

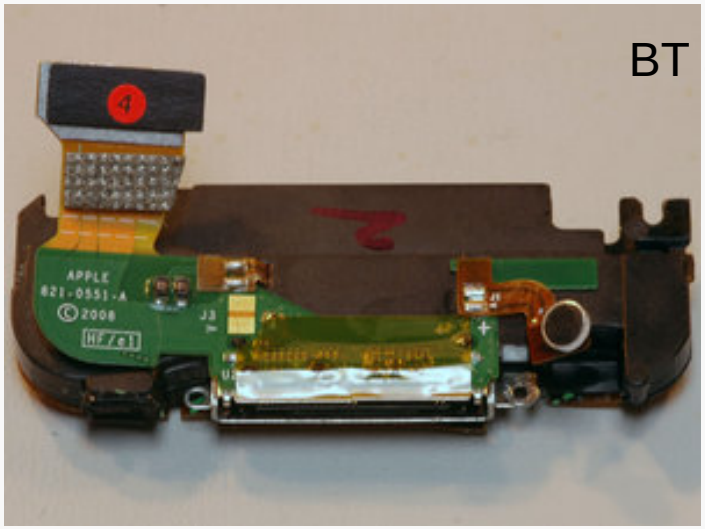
Disassembly IV

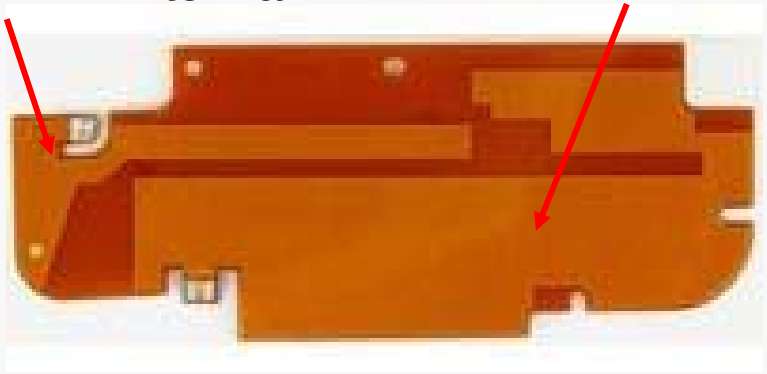
Unlike the metal rear panel on the original iPhone. Made from ABS plastic. The coat on the back feels nice and is very reflective.

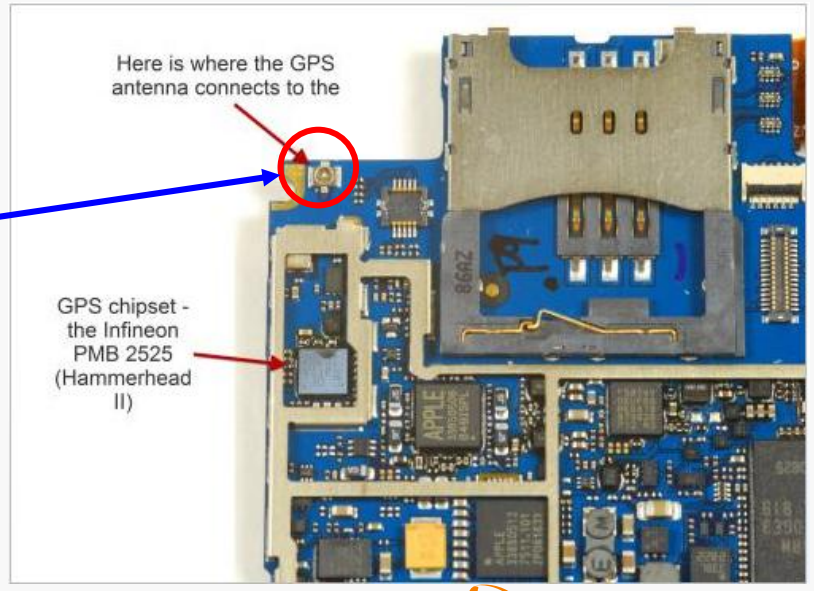


openmoko

Antenna Location



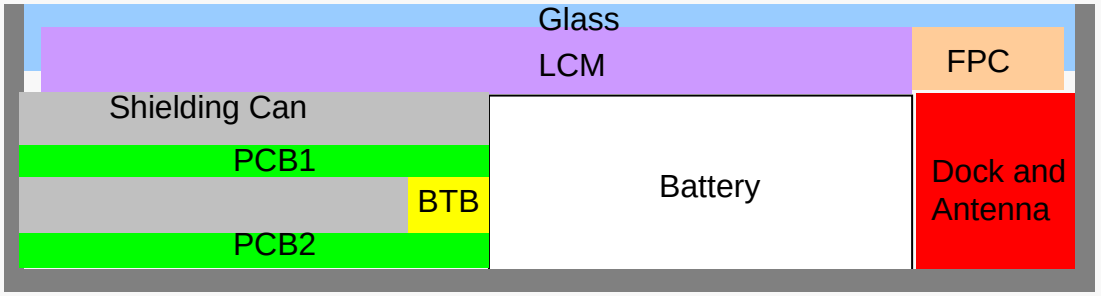




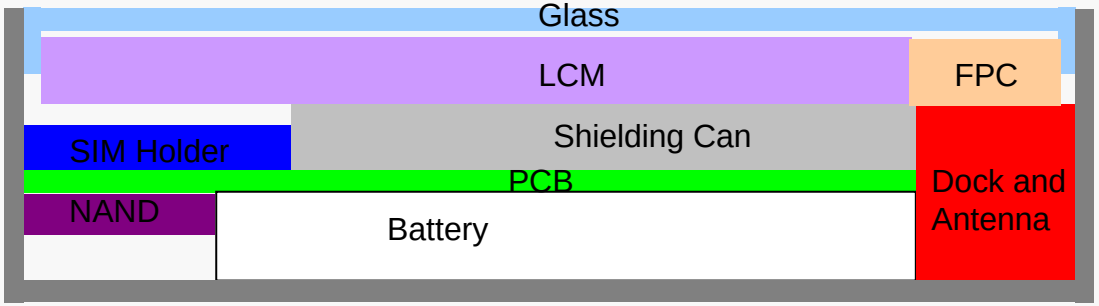
openmoko

Mechanical Staking

iPhone



iPhone 3G



openmoko

Battery Spec

iPhone

Public Information	Release date: 2008-01-08
Issued by:	DK_DEMKO (UL International Demko A/S)
Certificate Number:	DK-10696/A2
Product:	Li-ion Battery Pack
Model/Type reference:	616-0290
Rating and principal characteristic:	3.7 Vdc, 1350 mAh, Class III (supplied by SELV), IPX0.
Trade mark (if any):	Sony
Standard(s) used:	60950-1(ed.1)
National differences:	If any, not covered by this certificate.
Issued date:	2007/04/25

iPhone 3G

Public Information	Release date: 2008-03-04
Issued by:	DE_TUVPS (TÜV SÜD Product Service GmbH)
Certificate Number:	DE 3 - 57479M1
Product:	Battery Packs
Model/Type reference:	616-0372
Rating and principal characteristic:	Rated voltage: 3.7 V d.c. Rated capacity: 1150 mAh Protection class: III
Trade mark (if any):	
Standard(s) used:	60950-1(ed.1)
National differences:	If any, not covered by this certificate.
Issued date:	2008/03/04

openmoko

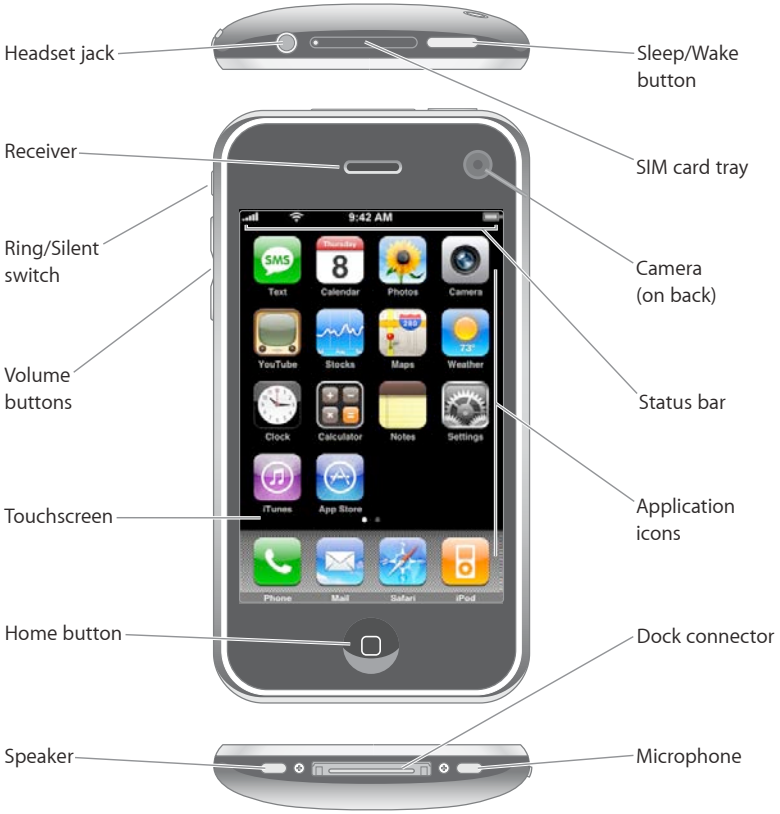
HW Cost Analysis

Baseband Functionality	
Application Processor with DDR	$20.50
Vedio Processor	$5.50
Audio Codec	$2.00
PMU	$2.20
NAND Flash (8GB)	$22.00
ASIC DSP	$6.00
Wireless Functionality	
802.11b/g Wifi/Bluetooth	$15.50
AGPS	$3.60
WWEN Fuctionality	
DBB	$17.50
ABB	$2.80
RF Trensceiver	$4.50
64Mb NOR+32Mb PSRAM MCP	$1.89
PA Parts	$8.60
Other RF compontents	$2.50
Camera Module	
2.0 MP FF Module	$7.00
Display	
3.5 Inch Touch Screen	$30.50
Touch screen controller	$1.15
Other PCB Level Components	
G sensor, Proximity Sensor, Ambient Sensor	$3.00
PCB Substrate	$3.50
Other Passive and Discrete Semi	$17.80
Mechanical Components/Enclosure	
	$12.00
Battery	
	$4.50
Accessory/Packing Etc.	
	$8.30
Final Manufacturing and Margin	
	$15.50
Total	$218.34

The BOM cost is very close to 2G iPhone on sale last year. It is obvious the NAND depreciation compensates for the high price of 3G MODEM. The cost will be reduced quarter by quarter. The cheaper iPhone we can get.

openmoko

iPhone 3G Carrier Troubleshooting Guide



iPhone System Requirements

These are the minimum system requirements for a customer to use iPhone:

- A wireless service plan with the carrier that provides iPhone service in your area.
- A Mac or a PC with a USB 2.0 port and one of the following operating systems:
  - Mac OS X version 10.4.10 or later.
  - Windows XP Home or Professional with Service Pack 2 or later.
  - Windows Vista Home, Premium, Business, Enterprise, or Ultimate edition.
- Display resolution on your computer set to 1024 x 768 or higher
- iTunes 7.7 or later, available at www.apple.com/itunes.
- An Internet connection (broadband recommended).

What You Need

To use and test iPhone, you will need the following:

- A wireless service plan with the carrier that provides iPhone service in your area.
- Configure settings as described in the iTunes Settings section, below.
- Wi-Fi Wireless Network.
- Apple Dock Connector (30-pin) to USB Cable
- Apple USB Power Adapter for iPhone
- iPhone Headset with Mic
- Anti-Static Brush
- Compressed-Gas Duster (difluoroethane only) with straw nozzle

  Note: Always follow usage instructions and avoid products with undue safety risks
- SIM Eject Tool
- iPhone Polishing Cloth
- Lighted Otoscope or 4x Lighted Magnifying Glass (to check for Liquid Submersion Indicator activation, and for dirt, debris, or corrosion)

iTunes Settings Prior to Testing

Important: To avoid the possibility of syncing the customers iPhone when connecting to the test computer, verify that the "Disable automatic syncing for all iPhones" under the iPhones tab in iTunes Preferences is selected.

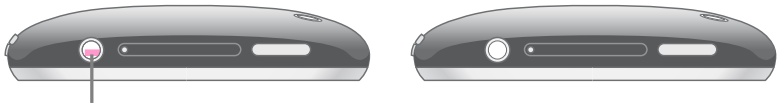
Visual Inspection

A visual inspection is performed before troubleshooting to protect test cables and identify conditions and potential causes that may affect warranty coverage.

Liquid Submersion Indicators

iPhone 3G has two liquid submersion indicators: one in the headset jack and one in the dock connector. If needed, first clean the headset jack and dock connector (see procedures), then use a lighted Otoscope or magnifier to inspect both indicators.

Headset jack: The bottom of the headset jack is normally a white or a silver metallic color. If the iPhone has been submerged in liquid, a red or pinkish color appears across half of the indicator.



Triggered Liquid Submersion Indicator Not Triggered

Dock Connector: To check, hold the iPhone so that you can point the lighted otoscope or magnifier at an angle to view the center of the bottom inside face of the dock connector port opening (not the connector pin rail).

The indicator is white, and oval shaped. If the indicator has been exposed to liquid, the indicator will turn red, as shown at right.

Liquid Damage of Display Module

In the event an iPhone is submerged or encounters an excessive amount of liquid, damage may occur to the display module. In some cases liquid damage can be observed under the display module when the unit is able to power on.

Liquid damage to the display module is NOT covered under warranty.

Inspection for Debris or Corrosion in Ports

Debris or other contamination could prevent proper function, connection, charging, or testing and should be removed if possible.

Use a lighted otoscope or lighted magnifying glass to check the:

- Dock connector
- Headset jack
- Speaker opening
- Microphone opening

Important: Corrosion indicates exposure to liquid and is not covered under warranty. If debris or contamination is from an external cause, any resulting non-operation, malfunction, damage, or cosmetic damage is also not covered under warranty.

Examples :

Clean, no debris, contamination, or corrosion

Corrosion (original iPhone shown)

Lint

Note: Lint or other foreign debris should be removed with a compressed-gas duster, and if needed, an anti-static brush and or anti-static tweezers, before connecting cables.

Dock Connector Cleaning Procedure:

Follow this procedure to remove dirt, debris or other foreign matter trapped in the dock connector.

Tools: (see What You Need heading)

- Anti-Static Brush
- Anti-Static Tweezers
- Compressed-Gas Duster (Important: Follow all product safety precautions)

1. Turn off the iPhone (red slider).
2. Blow out any fine debris with the compressed-gas duster.
   Important: To prevent liquid gas (white spray) from being sprayed into the port:
   - Never shake or agitate the compressed-gas duster canister, or lay it on its side.
   - Hold the can upright, never tilt the can or spray the can upside-down.
   - Before each use, clear the nozzle of any liquid gas: Hold the can upright, point the nozzle away from you, and spray several times until the stream is clear.

3. If needed, delicately brush out debris or lint. Be careful not to damage the contacts along the top of the connector pin rail.

4. If needed, use anti-static tweezers to pull out any large pieces of debris or lint.

Speaker and Microphone Cleaning Procedure:

Audio performance issues can be a result of dirt, debris or other foreign matter trapped in the microphone or speaker covers (holes on the bottom of the iPhone), such as:

- Low or distorted speaker volume while playing music or during a hands-free call.
- Muffled, low volume or distorted microphone.

Tools:

- Compressed-Gas Duster (Important: Follow all product safety precautions)

1. Turn off the iPhone (red slider).
2. To prevent damage to the mesh, hold the compressed-gas duster nozzle at least 1mm from the mesh. Direct 3 short bursts from the compressed-gas duster directly at the mesh to blow out debris. Use in less than 5 second bursts.
   Important—To prevent liquid gas (white spray) from being sprayed into the port:
   - Never shake or agitate the compressed-gas duster canister, or lay it on its side.
   - Hold the can upright when using. Never tilt the can or spray the can upside-down.
   - Before each use, clear the nozzle of any liquid gas: Hold the can upright, point the nozzle away from you, and spray several times until the stream is clear.

3. Apply 1 short burst at both ends at an angle to blow out any remaining debris.

Headset Jack Cleaning Procedure:

Dirt, debris or other foreign matter trapped in the headset connector (jack) can cause audio or functional performance issues, such as:

- iPhone is stuck in headset mode and no call audio is heard from the Receiver.
- Audio from the headset is distorted—has static or crackles.
- No sound is heard from headset or one channel does not operate.
- Microphone on headset is distorted or non-operational

Tools:

- Compressed-Gas Duster **Important**: Follow all product safety precautions

  To prevent liquid gas (white spray) from being sprayed into the jack:

  - Never shake or agitate the compressed-gas duster canister, or lay it on its side.
  - Hold the can upright, never tilt the can or spray the can upside-down.
  - Before each use, clear the nozzle of any liquid gas: Hold the can upright, point the nozzle away from you, and spray several times until the stream is clear.

1. Visually inspect the iPhone headset jack for loose debris.

2. If present, use the compressed-gas duster with the straw attached (following the guidelines, above) to blow out the debris. Dispense gas for no more than 5 seconds.

Guidelines for Damage Classification

The following tables and examples will help you determine warranty coverage for damaged iPhones.

Enclosure Damage Classification

Severe Enclosure Damage	Examples	Warranty Classification
Puncture holes		NOT Covered
Bent or crushed enclosure		NOT Covered

Issue	Example 1	Example 2	Housing Condition	Warranty Coverage
Evidence of Liquid or Corrosion Damage	 Triggered Liquid Submersion Indicator	 Corrosion	Minor or Severe Damage	NOT covered and NOT repairable
External Physical Damage			Minor or Severe Damage	NOT covered
Multiple Display Fractures (Cover glass or LCD)			Minor or Severe Damage	NOT covered
Single Display Fracture (Cover glass or LCD)			Minor damage, no sign of impact or damage near fracture location	COVERED
Hairline Two-Leg Display Fractures (May include two legs only if it passes through the earpiece receiver or Home button location)			Minor damage, no sign of impact or damage near fracture location	COVERED

Issue	Examples	Display Condition	Housing Damage	Warranty Classification
Damage caused by Disassembly of iPhone		Single or Multiple Fractures	Minor or Severe Damage	NOT covered
	Note: A disassembled iPhone is defined as a unit that meets one or more of the following conditions: • The unit is in three (3) or more unassembled pieces. • The unit is open at time of inspection and clearly missing internal parts and/or screws. • Failure of the iPhone consistent with internal damage, and customer admits that the unit has been disassembled, including the removal and reinsertion of external housing screws.			
Functional Defect		Single or No Display Fractures	Minor or No Housing Damage	COVERED
Button Functionality		Single or No Display Fractures	Minor or No Housing Damage	COVERED
Scratches		Single or No Display Fractures	Minor or No Housing Damage	COVERED with Functional Defect Only
Light Abrasions		Single or No Display Fractures	Minor or No Housing Damage	COVERED with Functional Defect Only
Small dents (<0.3mm)		Single or No Display Fractures	Minor or No Housing Damage	COVERED with Functional Defect Only
Note: Cosmetic complaints are not covered under the warranty without a functional defect, unless the issue was present before the customer received the iPhone. An iPhone with a cosmetic complaint should only be replaced or repaired if there is also an unrelated functional complaint.				

Serial Number and IMEI Number Identification

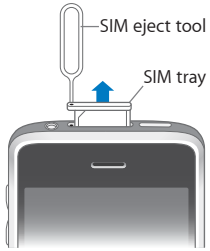
There are several ways to get the serial number and IMEI number of the iPhone 3G.

1. If the iPhone is operational, the serial number and IMEI number can be found in the About screen: Settings > General > About

2. With the iPhone connected to the computer, in iTunes, click the iPhone Summary tab.
   - The iPhone's serial number and phone number will display on screen.

   Note: You can choose Edit > Copy to put the serial number in the Clipboard.
   - If you click the words "Phone Number" in this tab iTunes will also display the IMEI of the iPhone as shown below:

3. If the iPhone is not operational, the serial number and IMEI number are on the SIM tray. Use the SIM eject tool to remove the SIM Tray.



4. On the original packing, the serial number is printed on the barcode label.

Battery Charging

Verify that there is enough battery charge for the iPhone to work. Charge the battery by connecting the iPhone to the USB power adapter.

Note: iPhone 3G cannot be charged from a FireWire power adapter.

Important: If iPhone is very low on power, it may display one of the following images, indicating that iPhone needs to charge for up to ten minutes before you can use it. If iPhone is extremely low on power, the display may be blank for up to two minutes before one of the low-battery images appears.

or

Battery Life Tips

Battery life depends upon the iPhone application settings and use.

To conserve battery power, the customer might try any of the following:

Software: Use iTunes to install the latest iPhone software to ensure that you have the latest battery conservation features.

3G Network Connectivity: 3G connections require more power than 2G connections. If a 2G network is available, turning off 3G (Settings > General > Network) when not needed will extend battery life.

Location Services: Applications that actively use locations services (GPS, cellular tower, Wi-Fi positioning) affect battery life. Disable Locations Services from Settings > General > Location Services and use location services only when needed.

Mail Auto-Check: Set iPhone to automatically check for emails less frequently, or manually, in the Mail settings (Settings > Mail > Auto-Check).

Yahoo! Mail: If the customer has a Yahoo! mail account, turn off push mail when it's not needed. Open Settings, select Mail, select your Yahoo! account, select Advanced, and set "Use push mail" to OFF.

Reduce Mail Accounts: Delete unnecessary mail accounts. The less mail accounts that the iPhone checks, the less battery power it uses.

Wi-Fi: Turn off Wi-Fi (Settings > Wi-Fi > Wi-Fi ON/OFF) when not in use.

Signal Strength: Power usage increases in no coverage areas. Even in standby, cell phones continually try to communicate their location, monitor signal strength and available networks. Turning on Airplane Mode during this time (which disables the phone, Internet access, and Bluetooth) will increase battery life.

Bluetooth: If you do not use Bluetooth, turn it off (Settings > General > Bluetooth > Bluetooth ON/OFF).

Auto-Lock: Set the iPhone to lock itself (and go to sleep) after as short a time as possible (Settings > General > Auto-Lock).

Manual Lock: Lock the phone when finished using it by tapping the Sleep/Wake button.

EQ: If music is listened to frequently turn off equalization (Settings > iPod > EQ Off).

Brightness: Turn on Auto-Brightness to allow the iPhone to adjust the brightness to an appropriate level for the current location (Settings > Brightness > Auto-Brightness ON/OFF). Lowering the brightness slider can also improve battery life.

Charge Cycles: For proper lithium-based battery maintenance, be sure to go through at least one charge cycle per month. A charge cycle is defined as a complete 100% charge and running the battery all the way down.

Reference Tables

Verify an issue, attempt to fix it, then verify whether the issue is resolved.

CompTIA codes used to categorize failures:

CompTIA Code	Issue
B02	Controls no response (button-switch-touch)
B03	Any battery issue
B04	Any display issue
B05	Input output issue (Audio-Video-USB)
B06	Alert message on screen or computer
B07	No Power-will not boot-unusually warm
B08	No Service - dropped calls - SIM issue
B09	Issue with Accessories
B0A	Any Camera issue
B0B	Any audio issue
B0C	Connectivity (Web-GPS-WiFi-BT)

Several iPhone troubleshooting functions:

iPhone Function	Action
Quit Frozen Application	Press and hold the Home button for at least six seconds, until the iPhone returns to the Home screen.
Power Off	Press and hold the Sleep/Wake button until a red slider appears. Slide the slider to power off.
Power On	Press the Sleep/Wake button, or Home button and slide the Unlock slider to power on.
Force Reset	Press and hold both the Sleep/Wake button and the Home button for at least ten seconds, until the Apple logo appears.
Reset All Settings	Settings > General > Reset > Reset All Settings
Restore [1]	Restore with iTunes. (This restores the OS and firmware.)
Erase All Content and Settings [1]	Settings > General > Reset > Erase All Content and Settings **Caution:** Can take up to 2 or more hours to complete, depending upon iPhone model.

[1] **Warning:** This makes all content inaccessible (including un-synced photos and contacts).

Touchscreen Function Testing (failure CompTIA code B02)

The touchscreen "touch" functionality can be tested in this two step process:

1. Launch the basic calculator application to test all but the top row of the screen. Press each button on the calculator to verify activity.
2. To test the number readout area at the top of the screen, rotate the iPhone to launch the scientific calculator and press all the buttons in the left two rows.

Accelerometer Testing (failure CompTIA code B08)

To test, select a photo and open while holding the iPhone vertically. Rotate the iPhone to a horizontal position and the image orientation will change to landscape mode.

When verifying the accelerometer remember that videos display in wide-screen orientation only, and when testing photos, the calculator, or web pages, hold the iPhone in a vertical plane, not horizontal.

Ambient Light Sensor Testing (failure CompTIA code B02)

The ambient light sensor brightens the display when using the iPhone in bright light environments, and dims the display in low light. To test this sensor, do the following:

1. Verify that the Brightness setting (Settings > Brightness) is set to Auto-Brightness ON, and that the Brightness level is set near the middle of the slider.
2. Press the Home button to return to the Home screen, then press the Sleep/Wake button to lock the iPhone.
3. In a bright light environment, cover the top third of the iPhone to block the light, then press the Sleep/Wake button or the Home button to wake the phone. Slide the slider to unlock the phone.
4. Notice the brightness of the screen and application icons; they should be dimmed.
5. Remove the cover from the top of the display and in a few moments the display will brighten.

Symptoms and Solutions

Won't Charge (failure CompTIA code B07)

1. Check charging with a known good USB power adapter. Replace customer's power adapter if suspect.
2. If charge icon does not show charging, check that iPhone software version is up to date.

Frozen, Won't Power Off, Application Not Working Right, or Other Irregular Behavior (failure CompTIA code B02)

Try these methods in the following order, until the iPhone returns to normal operation:

	iPhone Function	Action
1	**Quit Frozen Application**	Press and hold the Home button for at least six seconds, until the iPhone returns to the Home screen.
2	**Force Reset**	Press and hold both the Sleep/Wake button and the Home button (for at least ten seconds) until the Apple logo appears (the red slider screen appears first, then the Apple logo screen).
3	**Restore**	Restore with iTunes. (This restores the OS and firmware.) **Warning:** This makes all content inaccessible (including un-synced photos and contacts).

Will Not Power On (failure CompTIA code B07)

Use the following procedures when the iPhone will not power on.

1. Check the **liquid submersion indicator** for activation.
2. Connect the iPhone to a USB power adapter to charge for at least 10 minutes.
3. Perform a **Force Reset** by pressing and holding the Sleep/Wake button and the Home button at the same time for at least 10 seconds until the Apple logo appears.
4. Try to **Restore** the iPhone:

Restoring the iPhone:

1. Disconnect the USB cable from iPhone.
2. Press and hold the Home button while reconnecting USB cable. The iPhone should power on. **Note:** If you see the message "Charging... Please Wait," let the iPhone charge for at least 10 minutes more to ensure the battery has some charge and then start again.
3. Continue holding the Home button while iPhone starts up. You will see the Apple logo.
4. When you see "Connect to iTunes" on the iPhone screen, you can release the Home button and iTunes will display the recovery mode message.
   Note: If you don't see the "Connect to iTunes" screen, then disconnect the USB cable from iPhone, power off the iPhone (red slider) and repeat steps 2-5.
5. If you are still unable to restore the iPhone, continue to the Device Firmware Update procedure.

Device Firmware Update:

1. Connect the iPhone to a USB port on the test computer.
2. If the iPhone screen is not blank, press and hold both the Home button and Sleep/Wake button until the screen goes blank.
3. Release the Sleep/Wake button, but continue to hold the Home button (about 20 seconds) or until iTunes recognizes the iPhone. You can then release the Home button
4. The iPhone display will remain blank. Click the Restore button in iTunes.
5. If you are still unable to restore, fail the iPhone.

Cannot Make or Receive Calls, Send or Receive Text Messages, Access E-Mail or The Web (failure CompTIA code B08)

1. Make sure Airplane mode is off.
2. If the iPhone is in a carrying case, remove it from the case and power cycle the unit.
3. If there is not at least one bar of signal-strength, try moving to another location and check for a better signal.
4. If not using Wi-Fi make sure there is a cellular network connection (3G or EDGE).
5. Turn Airplane mode on for 15 seconds, then off. This resets all of iPhone's wireless connections.
6. For text messaging, make sure that the area code is included with phone numbers in the contacts list.
7. Power cycle the unit.
8. Reset network settings: Settings > General > Reset > Reset Network Settings.
9. Reset all Settings: Settings > General > Reset > Reset All Settings.

iPhone Does Not Appear in iTunes (failure CompTIA code B05)

If it appears in the test computer iTunes Source list:

1. Verify the customer's system requirements. iPhone will not appear in iTunes earlier than 7.7.
2. The customer should verify all their cable connections from the iPhone to the computer, and that the USB cable is connected directly to the computer.
3. If iPhone does not appear in the iTunes Source list on the test computer:
   - Verify the battery charge.
   - Power cycle the iPhone
   - Try a different USB 2.0 port on the computer.
   - Try different dock to USB cable.

No Audio (failure CompTIA code B0B)

1. Verify that there is nothing plugged into the headset jack.
2. Inspect for lint or other contamination in the headset jack. Blow out if necessary.
3. Increase the volume setting with the volume buttons.

No Ringer Sound (failure CompTIA code B05)

1. Check that the Ring/Silent switch is set for ring and not vibrate.
2. Check volume level with volume button.
3. Check Ringtone volume setting in Settings > Sounds.

No Vibrate (failure CompTIA code B05)

1. Check Vibrate settings for both Silent and Ring in Settings > Sounds.
2. Toggle the Ring/Silent switch to verify vibrate.
3. Power iPhone off (red slider) then on.

"This accessory is not made to work with iPhone" Message (failure CompTIA code B09)

Make sure of the following:

1. The accessory's package says "Works with iPhone" and not "Made for iPod"
2. The iPhone dock connector is free of any debris
3. The "Works with iPhone" accessory's connector is free of debris
4. The iPhone is securely connected to the accessory; not crooked or making partial connection.
5. If available, try another accessory.

"Different SIM detected. Please connect to iTunes." Message (failure CompTIA code B08)

This can be caused by inserting a SIM card that is not the SIM used for the iPhone's current activation.

"Invalid SIM card installed" Message (failure CompTIA code B08)

This can be caused by inserting a non-Apple authorized Carrier SIM card.

GPS Not Functioning (failure CompTIA code B0C)

If GPS is not functioning, please make sure of the following:

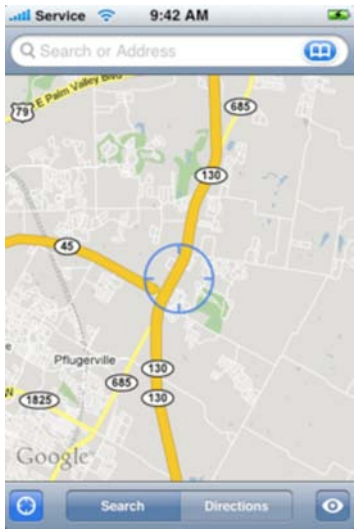
- Airplane Mode is not enabled.
- Positioning Systems is not disabled in Settings > General > Location Services.
- The iPhone 3G has a wide field of view of the sky (this may require being close to a large window or actually being outside in a unobstructed area).

Note: GPS functionality does not have its own settings and is only disabled as mentioned above.

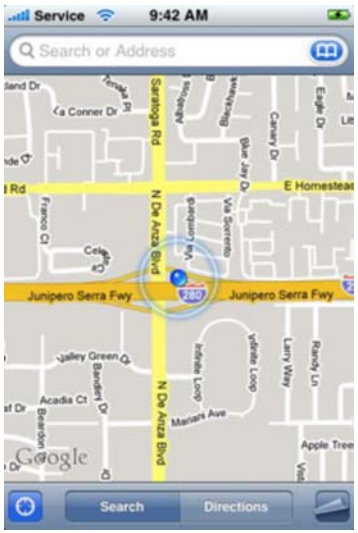
Several factors can affect GPS accuracy:

- **Unobstructed view of the sky:** GPS satellites orbit above the earth. Car roofs, buildings, tinted glass can block GPS signals.
- **Wide field of view**: GPS requires at least four satellites to accurately determine location, and visibility to the horizon is useful. GPS may be unable to determine position in cities, deep valleys or canyons.
- **Accurate time:** GPS compares the GPS satellite time to the iPhone's current time. If the time is off by a few minutes, it takes longer to determine position correctly.

Note: Initial GPS location can take time, depending on the number of visible satellites. When available, the iPhone 3G uses cell towers and Wi-Fi to quickly determine initial position, fine-tuning as the GPS signal increases. After the iPhone 3G receives a strong GPS signal from multiple satellites, it relies more on GPS positioning. If cell towers or Wi-Fi is unavailable, the device may take several minutes to calculate an accurate position.



Location indicator using cellular towers or Wi-Fi



Location indicator using GPS

Temperature Alert (failure CompTIA code B07)

iPhone 3G monitors its internal temperature. If the temperature exceeds Apple specifications, the iPhone begins reducing power consumption (which reduces heat generation) and can automatically power itself off to protect internal components. The iPhone must cool down before resuming use.

The iPhone 3G follows these steps:

1. Battery charging is disabled.
2. Display brightness dims, cellular transmission power is reduced.
3. Applications close, phone calls end, a Temperature aler message (below) appears.

   - If a Temperature alert message appears, only emergency calls may be possible. If not making emergency calls, power off the iPhone (Hold down the Sleep/ Wake button until the red slider appears, then slide it).
   - Move the iPhone to a cooler location and let it cool down for several minutes before resuming use.

     Note: If the iPhone has already powered off due to excessive internal temperature, the alert message will not be seen.
4. iPhone 3G powers off.

Warranty Coverage

Issues Covered Under Hardware Warranty Apple covers defects in materials and workmanship on the iPhone under normal use for a period of ONE (1) YEAR from the date of retail purchase by the original end-user purchaser. Failure that has resulted from malfunctions in the iPhone, not due to any exclusions as noted below, are covered under warranty.

Issues Not Covered Under the Hardware Warranty

This warranty does not apply to:

a) Damage caused by use with non-Apple products;

b) Damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes;

c) Damage caused by operating the product outside the permitted or intended uses described by Apple;

d) Damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP");

e) A product or part that has been modified to alter functionality or capability without the written permission of Apple;

f) Consumable parts, such as batteries, unless damage has occurred due to a defect in materials or workmanship;

g) Cosmetic damage, including but not limited to scratches, dents and broken plastic on ports; or

h) If any Apple serial number has been removed or defaced.

Specific examples of failures or damage not covered under the warranty include:

- Damage caused by intentional separation, opening, or disassembly of enclosure.
- Damage or operational failure caused by the removal and re-insertion of external and internal screws or parts.
- Damage caused by punctures or holes in the outer case.
- Cracked glass or LCD resulting from external cause [Please review "Guidelines for Damage Classifications"]
- Damage or failure caused by external force.
- Damage or failure caused by liquid [Please review " Liquid submersion indicator"]
- Damage or failure caused by wet or dry chemicals, (such as gasoline, acid, corrosives), dust, soil, or foreign matter [Please review "Debris or corrosion in ports"]
- Damage or failure caused by external heat or fire (internal heat damage is covered unless as a result of an external cause).
- Cosmetic damage from external causes, including dents, abrasions, scratches on case, discoloration, cracking, peeling of metal or plastic parts of enclosure.

Not Covered Under Warranty or Eligible for Technical Support

Apple has discovered that some of the unauthorized unlocking programs available on the Internet may cause irreparable damage to the iPhone's software.

As part of the service process, Apple and providers should update the software on the iPhone to the latest version. IF THE IPHONE'S SOFTWARE HAS BEEN MODIFIED, THE IPHONE MAY BE INOPERABLE OR BECOME INOPERABLE WHEN THE SOFTWARE IS UPDATED. Making unauthorized modifications to the software on the iPhone violates the iPhone software license agreement, and the inability to use the iPhone due to unauthorized software modifications is not covered under the iPhone's warranty.

Note: Independent of unauthorized unlocking software, an iPhone may still be eligible for warranty service if the failure is due to a defect in materials and workmanship

EVT3B BRD REV10

N82 SINGLE_BRD(MLB) 2/15/2008(I) REV10

PAGE	CONTENTS
02	RADIO AND AP SCHEMATIC INSTANTIATION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-7340	1	N82_SCHEMATIC_TOP	SCH	Y	?
820-2186	1	N82_SINGLE_BOARD	PCB	Y	?
AP_V1	7	DOCK JTAG STUFF OPTIONS FOR DEVELOPMENT		Y	DEVELOPMENT
AP_V1	2	DOCK JTAG STUFF OPTIONS FOR PRODUCTION		Y	PRODUCTION
AP_V1	1	HP MIC RETURN TO SNS		Y	HP_RET_SNS
AP_V1	1	HP MIC RETURN TO GND		Y	HP_RET_GND
AP_V1	1	MIKEY AVDD=VCC_MAIN		Y	MIKEY_VCCMAIN
AP_V1	1	MIKEY AVDD=CODEC_A3V		Y	MIKEY_A3V
RADIO_PROTO	1	3G PA DC/DC = MAX8836		Y	MAX_8836
RADIO_PROTO	1	3G PA DC/DC = MAX8805		Y	MAX_8805
AP_V1	5	3V SERIAL FLASH		Y	SFLASH_3V
AP_V1	4	1V8 SERIAL FLASH		Y	SFLASH_1V8
RADIO_PROTO	2	BT/WIFI MODULE (MURATA)		Y	MURATA
RADIO_PROTO	2	BT/WIFI MODULE ALPS		Y	ALPS

N82 EEE BOM LABELS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
825-2029	1	EEE FOR 630-8772 (8G)	EEE:Y5K	Y	FLASH_8GB
825-2029	1	EEE FOR 630-8943 (16G)	EEE:YEU	Y	FLASH_16GB

BOARD - 820-2186
SCHEMATIC - 051-7340
BOM - 630-8772(8GB)
BOM - 630-8943(16GB)

NAND BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0517	1	8GB TOSHIBA 56NM FLASH TSOP48	U29_AP	Y	FLASH_8GB
335S0514	1	16GB SAMSUNG 51NM FLASH DSP/WBLP	U29_AP	Y	FLASH_16GB

NAND ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S0575	335S0517	FLASH_8GB	U29_AP	8GB SAMSUNG 63NM FLASH TSOP48
335S0548	335S0517	FLASH_8GB	U29_AP	8GB MICRON 50NM FLASH TSOP48
335S0545	335S0517	FLASH_8GB	U29_AP	8GB INTEL 50NM FLASH TSOP48
335S0573	335S0514	FLASH_16GB	U29_AP	16GB TOSHIBA 56NM FLASH BGA

SUB BOM FOR BT/WIFI MODULE

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
607-2683	1	FOR MURATA BT/WIFI MODULE	SB1	Y	BT_WIFI

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
607-2682	607-2683	BT_WIFI	SB1	FOR ALPS BT/WIFI MODULE

EEE BOM LABELS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
825-2029	1	EEE FOR 607-2683 (MURATA)	EEE:0XL	Y	MURATA
825-2029	1	EEE FOR 607-2682 (ALPS)	EEE:0XM	Y	ALPS

SERIAL FLASH BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0552	1	SST 8MBIT 3V SERIAL FLASH	U11_AP	Y	SFLASH_3V
335S0555	1	ATMEL 8MBIT 1V8 SERIAL FLASH	U11_AP	Y	SFLASH_1V8

VIDEO AMP ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
353S1625	353S1650	?	U30_AP	VIDEO AMP

ACC SWITCH ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
353S1769	353S1751	?	S1_AP	ACC SWITCH

BB MEMORY BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0486	1	BLANK BASEBAND MEMORY	U13_RF	Y	BB_MEM_BLANK
341S2247	1	PROGRAMMED BASEBAND MEMORY	U13_RF	Y	BB_MEM_PROGRAMMED

3G PA DC/DC BOM OPTION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S1988	1	3GPA DC/DC CUSTOM MAX8836	U1_RF	Y	MAX_8836
353S1981	1	3GPA DC/DC STAND MAX8805	U1_RF	Y	MAX_8805

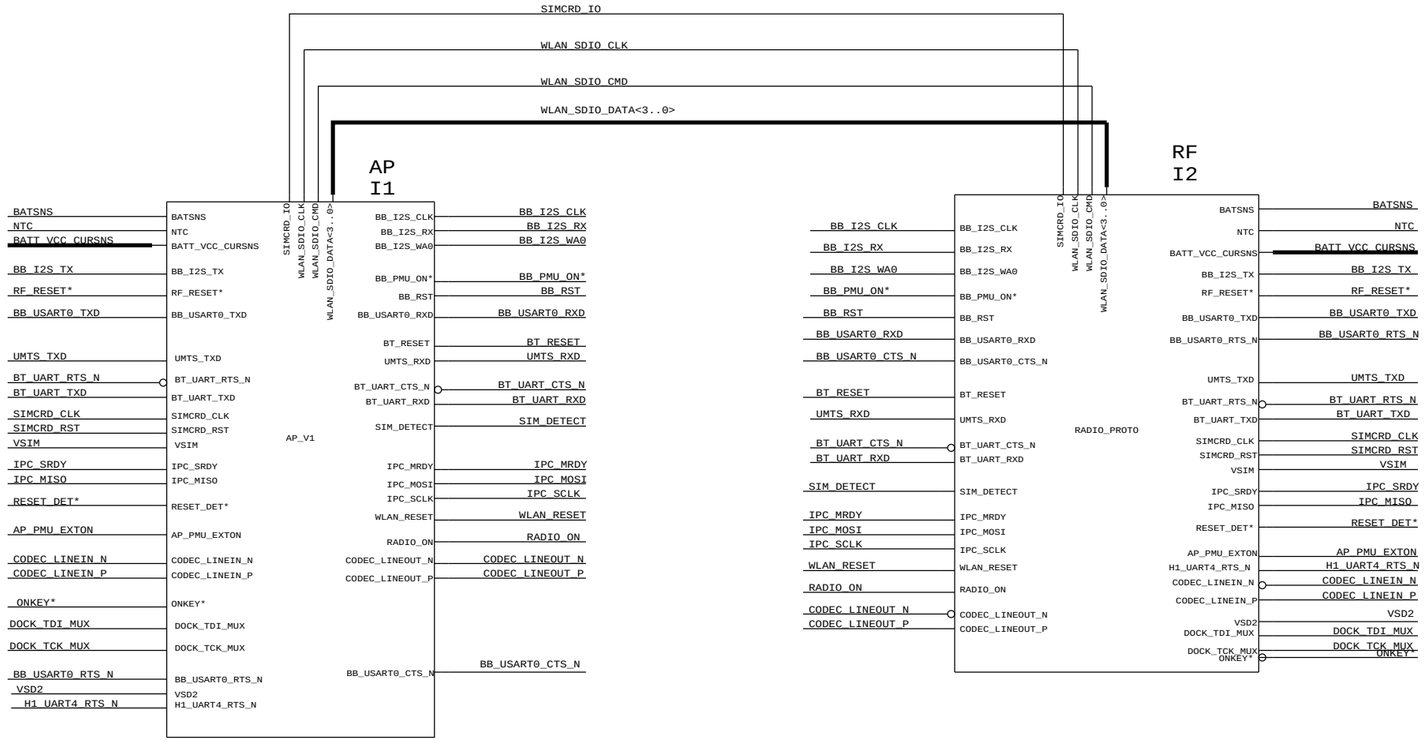
BT/WIFI BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S0040	1	MURATA BT/WIFI MODULE	U10_RF	Y	MURATA
339S0039	1	ALPS BT/WIFI MODULE	U10_RF	Y	ALPS
118S0012	1	RESISTER ID FOR MURATA	R61_RF	Y	MURATA
118S0012	1	RESISTER ID FOR ALPS	R6_RF	Y	ALPS

APPLE INC.

SIZE D | DRAWING NUMBER 051-7340 | REV: 02

SCALE NONE | SHT 1 OF 9



APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 2 OF 9	

Title: Basenet Report
Design: mlb
Date: Apr 3 18:21:53 2007

Base nets and synonyms for single_brd_lib.MLB(@single_brd_lib.mlb(sch_1))

Base Signal	Synonyms	Location([Zone][dir])

Base nets and synonyms for single_brd_lib.AP_V1(@single_brd_lib.mlb(sch_1):page2_i1@ap_v1_design_lib.ap_v1(sch_1))

Base Signal	Synonyms	Location([Zone][dir])
+1.0V	+1.0V - @single_brd_lib.AP_V1	4D6 4D7 6B1 6C1 6C1 6D1 11C1 11C1 18C3
+1.8V	+1.8V - @single_brd_lib.AP_V1	4A1 4A7 4A8 4D1 5B2 5D2 5D3 7B2 7C5 7C6 7C7 8C2 8D2 9D7 9D7 11D1 13D7 14D4 15B5 16B5 18C3
+1.8V_CTRL	+1.8V_CTRL - @single_brd_lib.AP_V1	11D2
+1.8V_CTRL2	+1.8V_CTRL2 - @single_brd_lib.AP_V1	11C1 11D1
+1.8_FB	+1.8_FB - @single_brd_lib.AP_V1	11C4 11C4
+18V	+18V - @single_brd_lib.AP_V1	15A5 15D3 15D4 18D3
1.0_FB	1.0_FB - @single_brd_lib.AP_V1	11C4
1.0_LX	1.0_LX - @single_brd_lib.AP_V1	11C4
1.8_LX	1.8_LX - @single_brd_lib.AP_V1	11C4
18V_FB	18V_FB - @single_brd_lib.AP_V1	15A7
18V_L	18V_L - @single_brd_lib.AP_V1	15A7
18V_SW	18V_SW - @single_brd_lib.AP_V1	15A7
24M_O	24M_O - @single_brd_lib.AP_V1	4B6
27M_O	27M_O - @single_brd_lib.AP_V1	8A4
ACCEL_INT	ACCEL_INT - @single_brd_lib.AP_V1	4B3 14D5
ACCEL_INT2	ACCEL_INT2 - @single_brd_lib.AP_V1	4B3 14D5
ACCSW	ACCSW - @single_brd_lib.AP_V1	11B5
ACC_3.3	ACC_3.3 - @single_brd_lib.AP_V1	11B3 13C8 18B3
ACC_DETECT*	ACC_DETECT* - @single_brd_lib.AP_V1	11C7 13C2 13C8 13C8 18B5
ACC_IDENTIFY	ACC_IDENTIFY - @single_brd_lib.AP_V1	11A3 13C2 13C4 13C8 18B5
ACC_TO_POD_DOCK	ACC_TO_POD_DOCK - @single_brd_lib.AP_V1	4C1 13C8 18C5
ACC_TO_POD_DOCK_CONN	ACC_TO_POD_DOCK_CONN - @single_brd_lib.AP_V1	13B4 13C2 13C5
ACC_TO_POD_DOCK_FILTERED	ACC_TO_POD_DOCK_FILTERED - @single_brd_lib.AP_V1	13C7
ADCIN1	ADCIN1 - @single_brd_lib.AP_V1	11B5
ADCIN_DN	ADCIN_DN - @single_brd_lib.AP_V1	14B5
ADCIN_DP	ADCIN_DP - @single_brd_lib.AP_V1	14A5
ADPTSNS	ADPTSNS - @single_brd_lib.AP_V1	10B4 11B6
	VCC_REG_PWR - @single_brd_lib.CHARGER(i664_page8)	20A5 20C2
ALS_INT	ALS_INT - @single_brd_lib.AP_V1	6D8 16B1
AP_PMU_EXTON	AP_PMU_EXTON - @single_brd_lib.AP_V1	7B8 11C7 17C4
AUD_I2S_BITCLK	AUD_I2S_BITCLK - @single_brd_lib.AP_V1	4C3 9B5
AUD_I2S_LRC	AUD_I2S_LRC - @single_brd_lib.AP_V1	4C3 9C5
AUD_I2S_SDIN	AUD_I2S_SDIN - @single_brd_lib.AP_V1	4C3 9C5
AUD_I2S_SDOUT	AUD_I2S_SDOUT - @single_brd_lib.AP_V1	4C3 9C7
AUD_MCLK	AUD_MCLK - @single_brd_lib.AP_V1	4C2 9C7
AUD_MCLK_H1	AUD_MCLK_H1 - @single_brd_lib.AP_V1	4C3
AV_RET_SENSE	AV_RET_SENSE - @single_brd_lib.AP_V1	9B2 13A5
BATSNS	BATSNS - @single_brd_lib.AP_V1	11B6 17C5
BATT_635	BATT_635 - @single_brd_lib.AP_V1	11B7
BATT_VCC_CURSNS	BATT_VCC_CURSNS - @single_brd_lib.AP_V1	10C4 17D5 18C3
	VBAT - @single_brd_lib.CHARGER(i664_page8)	20A3
BB_I2S2_CLK	BB_I2S2_CLK - @single_brd_lib.AP_V1	4C1 17C4
BB_I2S2_RX	BB_I2S2_RX - @single_brd_lib.AP_V1	4C2 17C4
BB_I2S2_TX	BB_I2S2_TX - @single_brd_lib.AP_V1	4C1 17C4
BB_I2S2_WA0	BB_I2S2_WA0 - @single_brd_lib.AP_V1	4C3 17C4
BB_I2S_CLK	BB_I2S_CLK - @single_brd_lib.AP_V1	4C4
BB_I2S_SDI	BB_I2S_SDI - @single_brd_lib.AP_V1	4C4
BB_I2S_SDO	BB_I2S_SDO - @single_brd_lib.AP_V1	4C4
BB_I2S_WS	BB_I2S_WS - @single_brd_lib.AP_V1	4C4
BB_ON*	BB_ON* - @single_brd_lib.AP_V1	7A7 17C8
BB_PMU_GATE	BB_PMU_GATE - @single_brd_lib.AP_V1	17C8
BB_PMU_ON*	BB_PMU_ON* - @single_brd_lib.AP_V1	17C5 17D6
BB_RST	BB_RST - @single_brd_lib.AP_V1	4C6 17C4
BB_USART0_RXD	BB_USART0_RXD - @single_brd_lib.AP_V1	13D8 17C4
BB_USART0_TXD	BB_USART0_TXD - @single_brd_lib.AP_V1	13D8 17C4
BOARD_ID0	BOARD_ID0 - @single_brd_lib.AP_V1	4C4
BOOST_EN	BOOST_EN - @single_brd_lib.AP_V1	15A6 18A5
BOOST_GATE	BOOST_GATE - @single_brd_lib.AP_V1	11A4 11C6
BRICK_DETECT	BRICK_DETECT - @single_brd_lib.AP_V1	11B4 14A3
BRICK_IDENTIFY_DN	BRICK_IDENTIFY_DN - @single_brd_lib.AP_V1	6C8 14A6
BRICK_IDENTIFY_DP	BRICK_IDENTIFY_DP - @single_brd_lib.AP_V1	6C8 14A6
BT_RESET	BT_RESET - @single_brd_lib.AP_V1	4C6 17C5
BT_UART_CTS_N	BT_UART_CTS_N - @single_brd_lib.AP_V1	4B3 17C5
BT_UART_RTS_N	BT_UART_RTS_N - @single_brd_lib.AP_V1	4A2 17C5
BT_UART_RXD	BT_UART_RXD - @single_brd_lib.AP_V1	4B3 17C5
BT_UART_TXD	BT_UART_TXD - @single_brd_lib.AP_V1	4A2 17C5
BUBAT	BUBAT - @single_brd_lib.AP_V1	11B6
CAMERA_LDO_EN	CAMERA_LDO_EN - @single_brd_lib.AP_V1	4C6 10A8
CAM_HSYNC	CAM_HSYNC - @single_brd_lib.AP_V1	8C3 16A8
CAM_I2C_SCL	CAM_I2C_SCL - @single_brd_lib.AP_V1	8B3 16A6
CAM_I2C_SDA	CAM_I2C_SDA - @single_brd_lib.AP_V1	8B3 16A5
CAM_MCLK	CAM_MCLK - @single_brd_lib.AP_V1	8C1 16A8
CAM_MCLK_H1	CAM_MCLK_H1 - @single_brd_lib.AP_V1	8C2
CAM_RESET	CAM_RESET - @single_brd_lib.AP_V1	8C3 16A5
CAM_SD	CAM_SD - @single_brd_lib.AP_V1	8C3 16A6
CAM_VCLK	CAM_VCLK - @single_brd_lib.AP_V1	8C3 16A8
CAM_VDD_AP_CONN	CAM_VDD_AP_CONN - @single_brd_lib.AP_V1	16A6
CAM_VSYNC	CAM_VSYNC - @single_brd_lib.AP_V1	8C3 16A8
CHGCUR	CHGCUR - @single_brd_lib.AP_V1	11B6
CHGR_SHUTDOWN	CHGR_SHUTDOWN - @single_brd_lib.AP_V1	4B3 10B6
	D1 - @single_brd_lib.CHARGER(i664_page8)	20A4
CHGR_STATUS_IN	CHGR_STATUS_IN - @single_brd_lib.AP_V1	6D8
CHGR_SUSPEND	CHGR_SUSPEND - @single_brd_lib.AP_V1	4B3 10C3
	CHRG* - @single_brd_lib.CHARGER(i664_page8)	20B4
CIF<0>	CIF<0> - @single_brd_lib.AP_V1	8C3 16B8
CIF<7..0>	CIF<7..0> - @single_brd_lib.AP_V1	8C2
CIF<1>	CIF<1> - @single_brd_lib.AP_V1	8C3 16B8
CIF<2>	CIF<2> - @single_brd_lib.AP_V1	8C3 16B8
CIF<3>	CIF<3> - @single_brd_lib.AP_V1	8C3 16B8
CIF<4>	CIF<4> - @single_brd_lib.AP_V1	8B3 16B8
CIF<5>	CIF<5> - @single_brd_lib.AP_V1	8B3 16B8
CIF<6>	CIF<6> - @single_brd_lib.AP_V1	8B3 16B8
CIF<7>	CIF<7> - @single_brd_lib.AP_V1	8B3 16B8
CIN	CIN - @single_brd_lib.AP_V1	8C6
CKE0	CKE0 - @single_brd_lib.AP_V1	5B2 5C6
CKE1	CKE1 - @single_brd_lib.AP_V1	5A2 5C6
CKE_EN	CKE_EN - @single_brd_lib.AP_V1	5B2 11C6
CLCD_HSYNC	CLCD_HSYNC - @single_brd_lib.AP_V1	7A4 7A5
CLCD_VCLK	CLCD_VCLK - @single_brd_lib.AP_V1	7A5
CLK_24M_O	CLK_24M_O - @single_brd_lib.AP_V1	4D7 18D6
CLK_32K	CLK_32K - @single_brd_lib.AP_V1	4A2 4C6 11C7 16C4 18C6
CLK_SYS_OUT	CLK_SYS_OUT - @single_brd_lib.AP_V1	4D7 18C6
CODEC_3.0	CODEC_3.0 - @single_brd_lib.AP_V1	9D7 11B3 11D2 18B3
CODEC_RIN	CODEC_RIN - @single_brd_lib.AP_V1	9C7
CODEC_RIP	CODEC_RIP - @single_brd_lib.AP_V1	9C7
CODEC_TO_BB_N	CODEC_TO_BB_N - @single_brd_lib.AP_V1	9C4 17C5
CODEC_TO_BB_P	CODEC_TO_BB_P - @single_brd_lib.AP_V1	9C4 17C5
CON_CAM_HSYNC	CON_CAM_HSYNC - @single_brd_lib.AP_V1	16A5 16A7
CON_CAM_MCLK	CON_CAM_MCLK - @single_brd_lib.AP_V1	16A6 16A7
CON_CAM_VCLK	CON_CAM_VCLK - @single_brd_lib.AP_V1	16A4 16A7
CON_CAM_VSYNC	CON_CAM_VSYNC - @single_brd_lib.AP_V1	16A6 16A7
CON_CIF<0>	CON_CIF<0> - @single_brd_lib.AP_V1	16A6 16B7
CON_CIF<1>	CON_CIF<1> - @single_brd_lib.AP_V1	16A5 16B7
CON_CIF<2>	CON_CIF<2> - @single_brd_lib.AP_V1	16A6 16B7
CON_CIF<3>	CON_CIF<3> - @single_brd_lib.AP_V1	16A5 16B7
CON_CIF<4>	CON_CIF<4> - @single_brd_lib.AP_V1	16A6 16B7
CON_CIF<5>	CON_CIF<5> - @single_brd_lib.AP_V1	16A5 16B7
CON_CIF<6>	CON_CIF<6> - @single_brd_lib.AP_V1	16A6 16B7
CON_CIF<7>	CON_CIF<7> - @single_brd_lib.AP_V1	16A5 16B7
COUT	COUT - @single_brd_lib.AP_V1	8C7
CVBSIN	CVBSIN - @single_brd_lib.AP_V1	8C6
CVBS_OUT	CVBS_OUT - @single_brd_lib.AP_V1	8C7
DAC_COMP	DAC_COMP - @single_brd_lib.AP_V1	8C4
DAC_IREF	DAC_IREF - @single_brd_lib.AP_V1	8C4
DAC_OUT1	DAC_OUT1 - @single_brd_lib.AP_V1	8C4
DAC_OUT2	DAC_OUT2 - @single_brd_lib.AP_V1	8C4
DAC_OUT3	DAC_OUT3 - @single_brd_lib.AP_V1	8C4
DAC_VREF	DAC_VREF - @single_brd_lib.AP_V1	8C4
DOCK_3_3V	DOCK_3_3V - @single_brd_lib.AP_V1	13C2 13C5
DOCK_C	DOCK_C - @single_brd_lib.AP_V1	13A3 13D2
DOCK_COMP	DOCK_COMP - @single_brd_lib.AP_V1	13B3 13D2
DOCK_RTCK	DOCK_RTCK - @single_brd_lib.AP_V1	4C7
DOCK_TCK	DOCK_TCK - @single_brd_lib.AP_V1	4C7 13D2
DOCK_TDI	DOCK_TDI - @single_brd_lib.AP_V1	4C7 13C2
DOCK_TDO	DOCK_TDO - @single_brd_lib.AP_V1	4C7 13C2
DOCK_TMS	DOCK_TMS - @single_brd_lib.AP_V1	4C7 13D2
DOCK_TRST*	DOCK_TRST* - @single_brd_lib.AP_V1	4C7
DOCK_Y	DOCK_Y - @single_brd_lib.AP_V1	13B3 13D2
DUAL_LDO_SRC	DUAL_LDO_SRC - @single_brd_lib.AP_V1	10A7
EXT_MIC+	EXT_MIC+ - @single_brd_lib.AP_V1	12C2 17A5
EXT_MIC_GATE	EXT_MIC_GATE - @single_brd_lib.AP_V1	9C3
EXT_MIC_NEG	EXT_MIC_NEG - @single_brd_lib.AP_V1	9C8 12B8
EXT_MIC_NEG2	EXT_MIC_NEG2 - @single_brd_lib.AP_V1	12B7
EXT_MIC_P1	EXT_MIC_P1 - @single_brd_lib.AP_V1	9B2 12C7 18C8
EXT_MIC_POS	EXT_MIC_POS - @single_brd_lib.AP_V1	9C8 12C6
FAD<0>	FAD<0> - @single_brd_lib.AP_V1	6B8 6D6
FAD<7..0>	FAD<7..0> - @single_brd_lib.AP_V1	6B8 6D5
FAD<1>	FAD<1> - @single_brd_lib.AP_V1	6B8 6D6
FAD<2>	FAD<2> - @single_brd_lib.AP_V1	6B8 6D6
FAD<3>	FAD<3> - @single_brd_lib.AP_V1	6B8 6D6
FAD<4>	FAD<4> - @single_brd_lib.AP_V1	6B8 6D6
FAD<5>	FAD<5> - @single_brd_lib.AP_V1	6B8 6D6
FAD<6>	FAD<6> - @single_brd_lib.AP_V1	6B8 6C6
FAD<7>	FAD<7> - @single_brd_lib.AP_V1	6B8 6C6
FALE	FALE - @single_brd_lib.AP_V1	6A8 6C5
FCE0*	FCE0* - @single_brd_lib.AP_V1	6A8 6C7
FCE1*	FCE1* - @single_brd_lib.AP_V1	6A8 6C7
FCE2*	FCE2* - @single_brd_lib.AP_V1	6B6 6C7
FCE3*	FCE3* - @single_brd_lib.AP_V1	6B6 6C7
FCLE	FCLE - @single_brd_lib.AP_V1	6A8 6C5
FLM	FLM - @single_brd_lib.AP_V1	16C6 17C4
FRDYBSY1*	FRDYBSY1* - @single_brd_lib.AP_V1	6A6 6A8 6C7
FRDYBSY2*	FRDYBSY2* - @single_brd_lib.AP_V1	4C6 6A6 6A8
FRDYBSY3*	FRDYBSY3* - @single_brd_lib.AP_V1	4C6 6A6 6B6
FRDYBSY4*	FRDYBSY4* - @single_brd_lib.AP_V1	4C6 6A6 6B6
FRE*	FRE* - @single_brd_lib.AP_V1	6A8 6C5
FWE*	FWE* - @single_brd_lib.AP_V1	6A8 6C5
FWP*	FWP* - @single_brd_lib.AP_V1	6A8 6C5 6C5
FW_HOST_DET*	FW_HOST_DET* - @single_brd_lib.AP_V1	6C8 13D4
FW_HOST_DET_DOCK	FW_HOST_DET_DOCK - @single_brd_lib.AP_V1	13C2 13D3
FW_PWR	FW_PWR - @single_brd_lib.AP_V1	10B6 13C2 13D5 18C3
	FW_VIN_NOPROTECT - @single_brd_lib.CHARGER(i664_page8)	20C8
FW_REG_PWR	FW_REG_PWR - @single_brd_lib.AP_V1	18C3
GATED_CKE0	GATED_CKE0 - @single_brd_lib.AP_V1	5B1 5B4
GATED_CKE1	GATED_CKE1 - @single_brd_lib.AP_V1	5A1 5A4
GPIO19	GPIO19 - @single_brd_lib.AP_V1	4B6 18C8
GP_SW_G1	GP_SW_G1 - @single_brd_lib.AP_V1	15B4
GP_SW_GATE	GP_SW_GATE - @single_brd_lib.AP_V1	15B4
GRAPE_BOOST_EN	GRAPE_BOOST_EN - @single_brd_lib.AP_V1	15A3 15C5 16C6
GRAPE_BURST_L	GRAPE_BURST_L - @single_brd_lib.AP_V1	15C5
GRAPE_HOST_INT_L	GRAPE_HOST_INT_L - @single_brd_lib.AP_V1	15C5
GRAPE_LDO_EN	GRAPE_LDO_EN - @single_brd_lib.AP_V1	8B4 10A8 15B5
GRAPE_RESET_L	GRAPE_RESET_L - @single_brd_lib.AP_V1	15B5
GRAPE_VDD_1V8	GRAPE_VDD_1V8 - @single_brd_lib.AP_V1	15A3 15B2 15B3 15C5 15D3 15D5 16C2
GSM_TXBURST_IND_N	GSM_TXBURST_IND_N - @single_brd_lib.AP_V1	16C4 17C4 18D8
H1_TEST	H1_TEST - @single_brd_lib.AP_V1	4D6
HCLDOIN	HCLDOIN - @single_brd_lib.AP_V1	11B4 11D5
	LDO12IN - @single_brd_lib.AP_V1	11B4 11D6
	LDO34IN - @single_brd_lib.AP_V1	11B4 11D7
	LDO_SRC - @single_brd_lib.AP_V1	11D4 11D6 11D7 11D8
	LDO34IN - @single_brd_lib.AP_V1	11B4 11D7
	LDO12IN - @single_brd_lib.AP_V1	11B4 11D6
HOLD_KEY	HOLD_KEY - @single_brd_lib.AP_V1	4C4 4C7
HOST_CS_L	HOST_CS_L - @single_brd_lib.AP_V1	16C1
HOST_INT_N	HOST_INT_N - @single_brd_lib.AP_V1	7B7
HOST_MISO	HOST_MISO - @single_brd_lib.AP_V1	16C3
HOST_MOSI	HOST_MOSI - @single_brd_lib.AP_V1	16C1
HOST_REFCLK	HOST_REFCLK - @single_brd_lib.AP_V1	15B5 16D3
	Z2_CLKIN - @single_brd_lib.AP_V1	15B6
HOST_SCLK	HOST_SCLK - @single_brd_lib.AP_V1	16C1
HOST_WAKE*	HOST_WAKE* - @single_brd_lib.AP_V1	7B7
HP_AUD_L	HP_AUD_L - @single_brd_lib.AP_V1	12C5
HP_AUD_L_CONN	HP_AUD_L_CONN - @single_brd_lib.AP_V1	12C2 12C2 17A5 18B8
HP_AUD_R	HP_AUD_R - @single_brd_lib.AP_V1	12C5
HP_AUD_R_CONN	HP_AUD_R_CONN - @single_brd_lib.AP_V1	12C2 12C2 17A5 18B8
HP_COM	HP_COM - @single_brd_lib.AP_V1	9B3 9C7
HP_DETECT	HP_DETECT - @single_brd_lib.AP_V1	6C8 12D6
HP_DETECT_SWITCH	HP_DETECT_SWITCH - @single_brd_lib.AP_V1	12C2 12C2 17A4
HP_RET_SENSE	HP_RET_SENSE - @single_brd_lib.AP_V1	9B2 12B6
I2C_SCL_1V8	I2C_SCL_1V8 - @single_brd_lib.AP_V1	4A8 4D2 11C6 14D4
I2C_SCL_3V	I2C_SCL_3V - @single_brd_lib.AP_V1	4A7 9C7 16B1 18A5
I2C_SDA_1V8	I2C_SDA_1V8 - @single_brd_lib.AP_V1	4A7 4D2 11C6 14D4
I2C_SDA_3V	I2C_SDA_3V - @single_brd_lib.AP_V1	4A6 9C5 16B1 18A5
INT_MIC_N	INT_MIC_N - @single_brd_lib.AP_V1	13B8 17C5
INT_MIC_N_DOCK	INT_MIC_N_DOCK - @single_brd_lib.AP_V1	13B2 13B6 18B8
INT_MIC_P	INT_MIC_P - @single_brd_lib.AP_V1	13C8 17C5
INT_MIC_P_DOCK	INT_MIC_P_DOCK - @single_brd_lib.AP_V1	13B2 13C6 18B8
KEEPACT	KEEPACT - @single_brd_lib.AP_V1	11C6
LCD_BL_CA	LCD_BL_CA - @single_brd_lib.AP_V1	11A3 11B1 16C6 18B3
LCD_BL_CC	LCD_BL_CC - @single_brd_lib.AP_V1	11A1 16C6 18B3
LCD_CLKOE	LCD_CLKOE - @single_brd_lib.AP_V1	15C5
	Z2_BOOST_EN - @single_brd_lib.AP_V1	15C6
LCD_CLKOUT	LCD_CLKOUT - @single_brd_lib.AP_V1	15C6 16C6
LCD_D<0>	LCD_D<0> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<23..0>	LCD_D<23..0> - @single_brd_lib.AP_V1	7B2 7B4
LCD_D<1>	LCD_D<1> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<2>	LCD_D<2> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<3>	LCD_D<3> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<4>	LCD_D<4> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<5>	LCD_D<5> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<6>	LCD_D<6> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<7>	LCD_D<7> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<8>	LCD_D<8> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<9>	LCD_D<9> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<10>	LCD_D<10> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<11>	LCD_D<11> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<12>	LCD_D<12> - @single_brd_lib.AP_V1	7B4 7B5
LCD_D<13>	LCD_D<13> - @single_brd_lib.AP_V1	7A4 7B5
LCD_D<14>	LCD_D<14> - @single_brd_lib.AP_V1	7A4 7B5
LCD_D<15>	LCD_D<15> - @single_brd_lib.AP_V1	7A4 7B5
LCD_D<16>	LCD_D<16> - @single_brd_lib.AP_V1	7A5 7B2
LCD_D<17>	LCD_D<17> - @single_brd_lib.AP_V1	7A5 7B2
LCD_D<18>	LCD_D<18> - @single_brd_lib.AP_V1	7A5 7B2
LCD_D<19>	LCD_D<19> - @single_brd_lib.AP_V1	7A5 7B2
LCD_D<20>	LCD_D<20> - @single_brd_lib.AP_V1	7A5 7B2
LCD_D<21>	LCD_D<21> - @single_brd_lib.AP_V1	7A5 7B2
LCD_D<22>	LCD_D<22> - @single_brd_lib.AP_V1	7A5 7B2
LCD_D<23>	LCD_D<23> - @single_brd_lib.AP_V1	7A5 7B2
LCD_DE	LCD_DE - @single_brd_lib.AP_V1	7A4
LCD_PCLK	LCD_PCLK - @single_brd_lib.AP_V1	7A3
LCD_RST	LCD_RST - @single_brd_lib.AP_V1	7A5 16C5
LCD_RST*	LCD_RST* - @single_brd_lib.AP_V1	16C4 16C6
LCD_SPI_CLK_AP	LCD_SPI_CLK_AP - @single_brd_lib.AP_V1	7A7 16B6 16B6
LCD_SPI_CLK_BB	LCD_SPI_CLK_BB - @single_brd_lib.AP_V1	17C4
LCD_SPI_CS_AP*	LCD_SPI_CS_AP* - @single_brd_lib.AP_V1	7A7 16B6 16B6
LCD_SPI_CS_BB*	LCD_SPI_CS_BB* - @single_brd_lib.AP_V1	17C4
LCD_SPI_DI_AP	LCD_SPI_DI_AP - @single_brd_lib.AP_V1	7A7 16C6 16C6
LCD_SPI_DI_BB	LCD_SPI_DI_BB - @single_brd_lib.AP_V1	17C4
LCD_SPI_DO	LCD_SPI_DO - @single_brd_lib.AP_V1	16B4
LCD_SPI_DO_AP	LCD_SPI_DO_AP - @single_brd_lib.AP_V1	7A7 16B5
LCD_VDD_DC	LCD_VDD_DC - @single_brd_lib.AP_V1	16C6 16D4
LCD_VS	LCD_VS - @single_brd_lib.AP_V1	7A4
LEDOUT	LEDOUT - @single_brd_lib.AP_V1	11B4
LED_LX	LED_LX - @single_brd_lib.AP_V1	11A3 11B2
LEFT_HP	LEFT_HP - @single_brd_lib.AP_V1	9C1 12C8
LEFT_HP_FILTERED	LEFT_HP_FILTERED - @single_brd_lib.AP_V1	12C6
LINE_IN_L	LINE_IN_L - @single_brd_lib.AP_V1	9B5 13A7
LINE_IN_R	LINE_IN_R - @single_brd_lib.AP_V1	9A5 13A7
LINE_OUT_L	LINE_OUT_L - @single_brd_lib.AP_V1	9A4 13A8
LINE_OUT_L_CONN	LINE_OUT_L_CONN - @single_brd_lib.AP_V1	13A5 13D2
LINE_OUT_R	LINE_OUT_R - @single_brd_lib.AP_V1	9A4 13B8
LINE_OUT_R_CONN	LINE_OUT_R_CONN - @single_brd_lib.AP_V1	13B5 13D2
LINE_RET_SENSE_CONN	LINE_RET_SENSE_CONN - @single_brd_lib.AP_V1	13A3 13D2
LLINEIN_01	LLINEIN_01 - @single_brd_lib.AP_V1	9B7
LLINE_IN	LLINE_IN - @single_brd_lib.AP_V1	9B7 9C7
LLINE_OUT	LLINE_OUT - @single_brd_lib.AP_V1	9A7 9C4
LOUT_COM	LOUT_COM - @single_brd_lib.AP_V1	9B3 9C7
L_LINE_IN_CONN	L_LINE_IN_CONN - @single_brd_lib.AP_V1	13A6 13D2
MARIO_VCCDIG	MARIO_VCCDIG - @single_brd_lib.AP_V1	15D3
MENU_KEY	MENU_KEY - @single_brd_lib.AP_V1	4C1 4C6 4C7
MENU_KEY*	MENU_KEY* - @single_brd_lib.AP_V1	4C8 11A8 11B8 11D8 13B4 18D8
MENU_KEY_DFU	MENU_KEY_DFU - @single_brd_lib.AP_V1	4C3
MPL_CLK	MPL_CLK - @single_brd_lib.AP_V1	7B2 16C8
MPL_D<1>	MPL_D<1> - @single_brd_lib.AP_V1	7B2 16C8
MPL_D<2>	MPL_D<2> - @single_brd_lib.AP_V1	7B2 16C8
MPL_PWRDWN*	MPL_PWRDWN* - @single_brd_lib.AP_V1	7A7 16C6
MPL_SPI_CLK	MPL_SPI_CLK - @single_brd_lib.AP_V1	7A2 7B7
MPL_SPI_CS*	MPL_SPI_CS* - @single_brd_lib.AP_V1	7A2 7B7
MPL_S_D_L	MPL_S_D_L - @single_brd_lib.AP_V1	7A2
MPL_VDD	MPL_VDD - @single_brd_lib.AP_V1	7C4
MPL_VDDIO	MPL_VDDIO - @single_brd_lib.AP_V1	7A1 7B3 7B5
NAND_PRE	NAND_PRE - @single_brd_lib.AP_V1	6A8 6C5
NAND_SUPPLY	NAND_SUPPLY - @single_brd_lib.AP_V1	6A6 6B6 6B7 18B3
NAND_SUPPLY_LDO	NAND_SUPPLY_LDO - @single_brd_lib.AP_V1	6B6 11B3
NTC	NTC - @single_brd_lib.AP_V1	10B3 17D5 18B3
	NTC - @single_brd_lib.CHARGER(i664_page8)	20A3 20A5
ONKEY*	ONKEY* - @single_brd_lib.AP_V1	11C7 11D7
OSC32I	OSC32I - @single_brd_lib.AP_V1	11A5 11B6
OSC32O	OSC32O - @single_brd_lib.AP_V1	11A5 11B6
OV_FLAG*	OV_FLAG* - @single_brd_lib.AP_V1	6D8 18B3
PLL_AVSS	PLL_AVSS - @single_brd_lib.AP_V1	4A5 4D3
PM_IRQ*	PM_IRQ* - @single_brd_lib.AP_V1	6D8 11C6
POD_TO_ACC_DOCK	POD_TO_ACC_DOCK - @single_brd_lib.AP_V1	4C3 13D8 18D5
POD_TO_ACC_DOCK_CONN	POD_TO_ACC_DOCK_CONN - @single_brd_lib.AP_V1	13B4 13C2 13D6
POWER_ON	POWER_ON - @single_brd_lib.AP_V1	11B7 11C7
PROC_BT_UCTS	PROC_BT_UCTS - @single_brd_lib.AP_V1	4A4 4B3
PROC_BT_URXD	PROC_BT_URXD - @single_brd_lib.AP_V1	4A4 4B3
PROC_SYS_CLK	PROC_SYS_CLK - @single_brd_lib.AP_V1	4C6
PROC_USB_CLK	PROC_USB_CLK - @single_brd_lib.AP_V1	4C6
PROX_DET_OUT	PROX_DET_OUT - @single_brd_lib.AP_V1	16B1
PROX_EN	PROX_EN - @single_brd_lib.AP_V1	16B2
PROX_LED_DRV	PROX_LED_DRV - @single_brd_lib.AP_V1	16B2
PROX_LED_DRV_CONN	PROX_LED_DRV_CONN - @single_brd_lib.AP_V1	16A2 16B3
PTT	PTT - @single_brd_lib.AP_V1	4C4 9C2
PWM0	PWM0 - @single_brd_lib.AP_V1	4B6
PWM2	PWM2 - @single_brd_lib.AP_V1	4B6
PWM3	PWM3 - @single_brd_lib.AP_V1	4B6
PWRDWN_2512*	PWRDWN_2512* - @single_brd_lib.AP_V1	7A2 7A4
PWR_KEY*	PWR_KEY* - @single_brd_lib.AP_V1	4C8 11A8 11B8 11C8 11D7 17A5 18D8
RADIO_ON	RADIO_ON - @single_brd_lib.AP_V1	4C6 17D4
RCVR_N	RCVR_N - @single_brd_lib.AP_V1	16B3 17C5 18B8
RCVR_P	RCVR_P - @single_brd_lib.AP_V1	16B3 17C5 18C8
REFC	REFC - @single_brd_lib.AP_V1	11B6
REF_GND	REF_GND - @single_brd_lib.AP_V1	11A6
RESET*	RESET* - @single_brd_lib.AP_V1	4D8 11C7 13C2 18B5
RESET_DET*	RESET_DET* - @single_brd_lib.AP_V1	4B8 4C6 17C4
RESET_H1*	RESET_H1* - @single_brd_lib.AP_V1	4D6 4D7
RIGHT_HP	RIGHT_HP - @single_brd_lib.AP_V1	9C1 12C8
RIGHT_HP_FILTERED	RIGHT_HP_FILTERED - @single_brd_lib.AP_V1	12C6
RINGER_A	RINGER_A - @single_brd_lib.AP_V1	4A5 11A8 17A4 17B6
RINGER_AB	RINGER_AB - @single_brd_lib.AP_V1	4A6 4C3
RINGER_AB_CHG	RINGER_AB_CHG - @single_brd_lib.AP_V1	11A7 11A8
RINGER_A_DLY	RINGER_A_DLY - @single_brd_lib.AP_V1	11A8 17A7
RLINEIN_01	RLINEIN_01 - @single_brd_lib.AP_V1	9A7
RLINE_IN	RLINE_IN - @single_brd_lib.AP_V1	9A7 9C7
RLINE_OUT	RLINE_OUT - @single_brd_lib.AP_V1	9A7 9C4
R_LINE_IN_CONN	R_LINE_IN_CONN - @single_brd_lib.AP_V1	13A6 13D2
SDRAM+1.8V	SDRAM+1.8V - @single_brd_lib.AP_V1	5B2 5B2 6B1 11A8 11B1 11B8 11B8 11C2 11D2 16D3 17B6 18C3
SERIAL_FLASH_SCK_1V8	SERIAL_FLASH_SCK_1V8 - @single_brd_lib.AP_V1	7D6
SERIAL_FLASH_SCK_3V	SERIAL_FLASH_SCK_3V - @single_brd_lib.AP_V1	7D4 7D6
SERIAL_FLASH_SI_1V8	SERIAL_FLASH_SI_1V8 - @single_brd_lib.AP_V1	7D6
SERIAL_FLASH_SI_3V	SERIAL_FLASH_SI_3V - @single_brd_lib.AP_V1	7D4 7D6
SERIAL_FLASH_SO_3V	SERIAL_FLASH_SO_3V - @single_brd_lib.AP_V1	7C7 7D6
SHDWN	SHDWN - @single_brd_lib.AP_V1	11C7
SIGNAL_FLASH_CE_1V8_N	SIGNAL_FLASH_CE_1V8_N - @single_brd_lib.AP_V1	7C6
SIGNAL_FLASH_CE_3V_N	SIGNAL_FLASH_CE_3V_N - @single_brd_lib.AP_V1	7C4 7D8
SIMCRD_CLK	SIMCRD_CLK - @single_brd_lib.AP_V1	14C4 14C8 17C4
SIMCRD_IO	SIMCRD_IO - @single_brd_lib.AP_V1	14B5 14B5 14C4 17C4
SIMCRD_RST	SIMCRD_RST - @single_brd_lib.AP_V1	14C3 14C8 17C4
SIM_DETECT	SIM_DETECT - @single_brd_lib.AP_V1	14C8 14C8 17C4 18B5
SIM_VCC	SIM_VCC - @single_brd_lib.AP_V1	14C3 14C5 14C8 17C4
SMPOWER_SPKR+	SMPOWER_SPKR+ - @single_brd_lib.AP_V1	13B4 17C5 18C8
SMPOWER_SPKR-	SMPOWER_SPKR- - @single_brd_lib.AP_V1	13B4 17C5 18C8
SPI2_CLK	SPI2_CLK - @single_brd_lib.AP_V1	15B3
SPI2_CLK_GRAPE	SPI2_CLK_GRAPE - @single_brd_lib.AP_V1	15B1 15C6
SPI2_CS_GRAPE_L	SPI2_CS_GRAPE_L - @single_brd_lib.AP_V1	15C3
SPI2_CS_L_GRAPE	SPI2_CS_L_GRAPE - @single_brd_lib.AP_V1	15C1 15C6
SPI2_MISO	SPI2_MISO - @single_brd_lib.AP_V1	15C3
SPI2_MISO_GRAPE	SPI2_MISO_GRAPE - @single_brd_lib.AP_V1	15C1 15C6
SPI2_MOSI	SPI2_MOSI - @single_brd_lib.AP_V1	15C3
SPI2_MOSI_GRAPE	SPI2_MOSI_GRAPE - @single_brd_lib.AP_V1	15C1 15C6
SPI_CLK_CONN	SPI_CLK_CONN - @single_brd_lib.AP_V1	16B3 16C8
SPI_CS_CONN*	SPI_CS_CONN* - @single_brd_lib.AP_V1	16B3 16C8
SPI_DI_CONN	SPI_DI_CONN - @single_brd_lib.AP_V1	16B3 16C8
SPI_DO_CONN	SPI_DO_CONN - @single_brd_lib.AP_V1	16B3 16C8
SP_AMP_IN_N	SP_AMP_IN_N - @single_brd_lib.AP_V1	9C8 17C5
SP_AMP_IN_P	SP_AMP_IN_P - @single_brd_lib.AP_V1	9D8 17C5
TIMER	TIMER - @single_brd_lib.AP_V1	18B3
TOUCH_POWER	TOUCH_POWER - @single_brd_lib.AP_V1	16B2 16B3
TP_CLK	TP_CLK - @single_brd_lib.AP_V1	7B7 16C3
TP_CS*	TP_CS* - @single_brd_lib.AP_V1	7B7 16C3
TP_MISO	TP_MISO - @single_brd_lib.AP_V1	7B7 16C1
TP_MOSI	TP_MOSI - @single_brd_lib.AP_V1	7B7 16C3
T_CAP	T_CAP - @single_brd_lib.AP_V1	4B6
UART4_RXD	UART4_RXD - @single_brd_lib.AP_V1	4B3 13D7
UART4_TXD	UART4_TXD - @single_brd_lib.AP_V1	4B3 13D6
USB_1A	USB_1A - @single_brd_lib.AP_V1	7B7 10B6

	D2 - @single_brd_lib.CHARGER(i664_page8)	20B4
USB_500/100*	USB_500/100* - @single_brd_lib.AP_V1	4B3 10C6
	D0 - @single_brd_lib.CHARGER(i664_page8)	20A4
USB_DM	USB_DM - @single_brd_lib.AP_V1	4B3 13C4 14B6
USB_DM_CONN	USB_DM_CONN - @single_brd_lib.AP_V1	13C2 13C3 18C5
USB_DP	USB_DP - @single_brd_lib.AP_V1	4B3 13D4 14A6
USB_DP_CONN	USB_DP_CONN - @single_brd_lib.AP_V1	13C2 13D3 18C5
USB_PWR	USB_PWR - @single_brd_lib.AP_V1	4B3 11B7 18C3
USB_PWR_NO_PROTECT	USB_PWR_NO_PROTECT - @single_brd_lib.AP_V1	10B6 13C2 13D5 18C3
	USB_VIN - @single_brd_lib.CHARGER(i664_page8)	20D7
USB_REXT	USB_REXT - @single_brd_lib.AP_V1	4B4
USB_SUSPEND	USB_SUSPEND - @single_brd_lib.AP_V1	4B3
USB_VBUS	USB_VBUS - @single_brd_lib.AP_V1	4B4
USIF_CTS_N	USIF_CTS_N - @single_brd_lib.AP_V1	4C3 17C4
USIF_RTS_N	USIF_RTS_N - @single_brd_lib.AP_V1	4C3 17C4
USIF_RXD_MRST	USIF_RXD_MRST - @single_brd_lib.AP_V1	4C3 17C4
USIF_TXD_MTSR	USIF_TXD_MTSR - @single_brd_lib.AP_V1	4C3 17C4
VBUSDIG	VBUSDIG - @single_brd_lib.AP_V1	4B4
VCC_MAIN	VCC_MAIN - @single_brd_lib.AP_V1	10A8 10B3 11A8 11B1 11B4 11B6 11C4 11C4 11C6 11C6 11D5 11D5 15A8 18C3 20B2
	VCC_MAIN - @single_brd_lib.CHARGER(i664_page8)	20B2
VDD_ACCEL	VDD_ACCEL - @single_brd_lib.AP_V1	14D5
VDD_CAM_ANALOG	VDD_CAM_ANALOG - @single_brd_lib.AP_V1	10A6 16A3 18B3
VDD_CAM_ANALOG_CONN	VDD_CAM_ANALOG_CONN - @single_brd_lib.AP_V1	16A4
VDD_CAM_AP	VDD_CAM_AP - @single_brd_lib.AP_V1	8D3 16A3
VDD_CORE_1V0	VDD_CORE_1V0 - @single_brd_lib.AP_V1	6C2
VDD_EDRAM_3V0	VDD_EDRAM_3V0 - @single_brd_lib.AP_V1	6D3
VDD_IO_3V	VDD_IO_3V - @single_brd_lib.AP_V1	4B1 4D7 6C1 6D5 7B7 7C4 7C4 7D4 7D4 7D4 7D5 7D7 11B3 11C6 11D8 12D5 13D4 13D6 13D6 13D7 13D8 14A4 14B6 14D6 18B3
VDD_IO_A	VDD_IO_A - @single_brd_lib.AP_V1	4A5 4B7 4C3 4C8 4C8 4D4 4D7 6A7 7B8 9C2
VDD_IO_A2	VDD_IO_A2 - @single_brd_lib.AP_V1	4B2 4D4
VDD_IO_E	VDD_IO_E - @single_brd_lib.AP_V1	7B6
VDD_IO_PLL	VDD_IO_PLL - @single_brd_lib.AP_V1	4D5
VDD_LCD	VDD_LCD - @single_brd_lib.AP_V1	11B3 16C6 16D7 17C8 18B3
VDD_LOGIC	VDD_LOGIC - @single_brd_lib.AP_V1	4A3 4A3 4A3 4C8 4D4
VDD_LOGIC_1V0	VDD_LOGIC_1V0 - @single_brd_lib.AP_V1	6C2
VDD_NOR_AP	VDD_NOR_AP - @single_brd_lib.AP_V1	5D4
VDD_SDRAM_DDR	VDD_SDRAM_DDR - @single_brd_lib.AP_V1	5D5
VDD_TOUCH	VDD_TOUCH - @single_brd_lib.AP_V1	10A6 18B3
VDD_USB_ANLG_3V	VDD_USB_ANLG_3V - @single_brd_lib.AP_V1	4D5
VDD_USB_LOGIC	VDD_USB_LOGIC - @single_brd_lib.AP_V1	4D6
VDD_VDRAM_1V0	VDD_VDRAM_1V0 - @single_brd_lib.AP_V1	6D2
VDD_VIDEO_3V	VDD_VIDEO_3V - @single_brd_lib.AP_V1	8D8 11B3 18B3
VDD_VIDEO_AP	VDD_VIDEO_AP - @single_brd_lib.AP_V1	8D5
VDD_VIDEO_DAC	VDD_VIDEO_DAC - @single_brd_lib.AP_V1	8D5
VDD_VRAM_1V0	VDD_VRAM_1V0 - @single_brd_lib.AP_V1	6B3
VIBRATOR+	VIBRATOR+ - @single_brd_lib.AP_V1	17A4 17C5 18C6
VIDEO_AMP_EN	VIDEO_AMP_EN - @single_brd_lib.AP_V1	6D8 8C6
VIDEO_GND	VIDEO_GND - @single_brd_lib.AP_V1	8A3 8A7 9A4
VID_C	VID_C - @single_brd_lib.AP_V1	8C8 13A5
VID_COMP	VID_COMP - @single_brd_lib.AP_V1	8C8 13B5
VID_Y	VID_Y - @single_brd_lib.AP_V1	8C8 13B5
VISA	VISA - @single_brd_lib.AP_V1	11B6 11D8
VISC	VISC - @single_brd_lib.AP_V1	11B6
VOL_DWN*	VOL_DWN* - @single_brd_lib.AP_V1	4B8 4C6 17A4
VOL_UP*	VOL_UP* - @single_brd_lib.AP_V1	4B8 4C6 17A4
VR1_BYP	VR1_BYP - @single_brd_lib.AP_V1	10A6
WLAN_RESET	WLAN_RESET - @single_brd_lib.AP_V1	4C6 17C5
WLAN_SDIO_CLK	WLAN_SDIO_CLK - @single_brd_lib.AP_V1	4B7 17D4
WLAN_SDIO_CMD	WLAN_SDIO_CMD - @single_brd_lib.AP_V1	4B7 17C4
WLAN_SDIO_DATA<0>	WLAN_SDIO_DATA<0> - @single_brd_lib.AP_V1	4B7 17D4
WLAN_SDIO_DATA<1>	WLAN_SDIO_DATA<1> - @single_brd_lib.AP_V1	4B7 17D4
WLAN_SDIO_DATA<2>	WLAN_SDIO_DATA<2> - @single_brd_lib.AP_V1	4B7 17D4
WLAN_SDIO_DATA<3>	WLAN_SDIO_DATA<3> - @single_brd_lib.AP_V1	4B7 17D4
WM_AVDD	WM_AVDD - @single_brd_lib.AP_V1	9D6
WM_DBVDD	WM_DBVDD - @single_brd_lib.AP_V1	9D6
WM_DCVDD	WM_DCVDD - @single_brd_lib.AP_V1	9D6
WM_VMID	WM_VMID - @single_brd_lib.AP_V1	9C5
WOLFSON_MICBIAS	WOLFSON_MICBIAS - @single_brd_lib.AP_V1	9C4
XM_MA0	XM_MA0 - @single_brd_lib.AP_V1	5C4 18C8
XM_MA1	XM_MA1 - @single_brd_lib.AP_V1	5C4
XM_MA2	XM_MA2 - @single_brd_lib.AP_V1	5C4
XTAL_24M_I	XTAL_24M_I - @single_brd_lib.AP_V1	4B6
XTAL_24M_O	XTAL_24M_O - @single_brd_lib.AP_V1	4B6
XTAL_27M_I	XTAL_27M_I - @single_brd_lib.AP_V1	8B4
XTAL_27M_O	XTAL_27M_O - @single_brd_lib.AP_V1	8B4
YIN	YIN - @single_brd_lib.AP_V1	8C6
YOUT	YOUT - @single_brd_lib.AP_V1	8C7
Z2_ARMTAPMD_L	Z2_ARMTAPMD_L - @single_brd_lib.AP_V1	15B8
Z2_A_CS_L	Z2_A_CS_L - @single_brd_lib.AP_V1	15B6
Z2_A_SCLK	Z2_A_SCLK - @single_brd_lib.AP_V1	15B6
Z2_A_SDI	Z2_A_SDI - @single_brd_lib.AP_V1	15B6
Z2_A_SDO	Z2_A_SDO - @single_brd_lib.AP_V1	15B6
Z2_BON_L<0>	Z2_BON_L<0> - @single_brd_lib.AP_V1	15C6 15D4
Z2_BON_L<1>	Z2_BON_L<1> - @single_brd_lib.AP_V1	15C6 15D4
Z2_BON_L<2>	Z2_BON_L<2> - @single_brd_lib.AP_V1	15C6 15D4
Z2_BON_L<3>	Z2_BON_L<3> - @single_brd_lib.AP_V1	15C6
Z2_BON_L<4>	Z2_BON_L<4> - @single_brd_lib.AP_V1	15C6
Z2_BON_L<5>	Z2_BON_L<5> - @single_brd_lib.AP_V1	15A2 15C6

Z2_BOOT_CFG<0>	Z2_BOOT_CFG<0> - @single_brd_lib.AP_V1	15A4 15B8
Z2_BOOT_CFG<1>	Z2_BOOT_CFG<1> - @single_brd_lib.AP_V1	15A4 15B8
Z2_B_ADR<0>	Z2_B_ADR<0> - @single_brd_lib.AP_V1	15D4 15D6
Z2_B_ADR<1>	Z2_B_ADR<1> - @single_brd_lib.AP_V1	15C6 15D4
Z2_B_ADR<2>	Z2_B_ADR<2> - @single_brd_lib.AP_V1	15C6 15D4
Z2_CLKOUT	Z2_CLKOUT - @single_brd_lib.AP_V1	15B6
Z2_EXTFLLIN	Z2_EXTFLLIN - @single_brd_lib.AP_V1	15B8
Z2_FLOO	Z2_FLOO - @single_brd_lib.AP_V1	15B8
Z2_GPIO<2>	Z2_GPIO<2> - @single_brd_lib.AP_V1	15C6
Z2_GPIO<4>	Z2_GPIO<4> - @single_brd_lib.AP_V1	15C6
Z2_GPIO<5>	Z2_GPIO<5> - @single_brd_lib.AP_V1	15C6
Z2_GPIO<6>	Z2_GPIO<6> - @single_brd_lib.AP_V1	15C6
Z2_JTAG_TCK	Z2_JTAG_TCK - @single_brd_lib.AP_V1	15C6
Z2_JTAG_TDI	Z2_JTAG_TDI - @single_brd_lib.AP_V1	15C6
Z2_JTAG_TDO	Z2_JTAG_TDO - @single_brd_lib.AP_V1	15C6
Z2_JTAG_TMS	Z2_JTAG_TMS - @single_brd_lib.AP_V1	15C6
Z2_LFOO	Z2_LFOO - @single_brd_lib.AP_V1	15B8
Z2_PANEL_IN<0>	Z2_PANEL_IN<0> - @single_brd_lib.AP_V1	15D1 15D8
Z2_PANEL_IN<1>	Z2_PANEL_IN<1> - @single_brd_lib.AP_V1	15C8 15D1
Z2_PANEL_IN<2>	Z2_PANEL_IN<2> - @single_brd_lib.AP_V1	15C8 15D1
Z2_PANEL_IN<3>	Z2_PANEL_IN<3> - @single_brd_lib.AP_V1	15C8 15D1
Z2_PANEL_IN<4>	Z2_PANEL_IN<4> - @single_brd_lib.AP_V1	15C8 15D1
Z2_PANEL_IN<5>	Z2_PANEL_IN<5> - @single_brd_lib.AP_V1	15C8 15D1
Z2_PANEL_IN<6>	Z2_PANEL_IN<6> - @single_brd_lib.AP_V1	15C8 15D1
Z2_PANEL_IN<7>	Z2_PANEL_IN<7> - @single_brd_lib.AP_V1	15C8 15D1
Z2_PANEL_IN<8>	Z2_PANEL_IN<8> - @single_brd_lib.AP_V1	15C8 15D1
Z2_PANEL_IN<9>	Z2_PANEL_IN<9> - @single_brd_lib.AP_V1	15C8 15D1
Z2_TM<0>	Z2_TM<0> - @single_brd_lib.AP_V1	15B6
Z2_VDDANA	Z2_VDDANA - @single_brd_lib.AP_V1	15D7
Z2_VDDCORE	Z2_VDDCORE - @single_brd_lib.AP_V1	15D8
Z2_VDDIO	Z2_VDDIO - @single_brd_lib.AP_V1	15D7
Z2_VSTM_OUT<0>	Z2_VSTM_OUT<0> - @single_brd_lib.AP_V1	15D1 15D3
Z2_VSTM_OUT<1>	Z2_VSTM_OUT<1> - @single_brd_lib.AP_V1	15D1 15D3
Z2_VSTM_OUT<2>	Z2_VSTM_OUT<2> - @single_brd_lib.AP_V1	15C1 15D3
Z2_VSTM_OUT<3>	Z2_VSTM_OUT<3> - @single_brd_lib.AP_V1	15C2 15D3
Z2_VSTM_OUT<4>	Z2_VSTM_OUT<4> - @single_brd_lib.AP_V1	15D2 15D3
Z2_VSTM_OUT<5>	Z2_VSTM_OUT<5> - @single_brd_lib.AP_V1	15D2 15D3
Z2_VSTM_OUT<6>	Z2_VSTM_OUT<6> - @single_brd_lib.AP_V1	15C3 15D2
Z2_VSTM_OUT<7>	Z2_VSTM_OUT<7> - @single_brd_lib.AP_V1	15C3 15D2
Z2_VSTM_OUT<8>	Z2_VSTM_OUT<8> - @single_brd_lib.AP_V1	15C3 15D2
Z2_VSTM_OUT<9>	Z2_VSTM_OUT<9> - @single_brd_lib.AP_V1	15C3 15D2
Z2_VSTM_OUT<10>	Z2_VSTM_OUT<10> - @single_brd_lib.AP_V1	15C3 15D2
Z2_VSTM_OUT<11>	Z2_VSTM_OUT<11> - @single_brd_lib.AP_V1	15C3 15D2
Z2_VSTM_OUT<12>	Z2_VSTM_OUT<12> - @single_brd_lib.AP_V1	15C3 15D2
Z2_VSTM_OUT<13>	Z2_VSTM_OUT<13> - @single_brd_lib.AP_V1	15C3 15D2
Z2_VSTM_OUT<14>	Z2_VSTM_OUT<14> - @single_brd_lib.AP_V1	15C3 15D2

Base nets and synonyms for
single_brd_lib.CHARGER(@single_brd_lib.mlb(sch_1):page2_i1@ap_v1_design_lib.ap_v1(sch_1):page8_i664@charger_design_lib.charger(sch_1))

Base Signal	Synonyms	Location([Zone][dir])
C/X	C/X - @single_brd_lib.CHARGER	20A3
CHRG*	CHGR_SUSPEND - @single_brd_lib.AP_V1	4B3 10C3
	CHRG* - @single_brd_lib.CHARGER	20B4
CHRG_GATE	CHRG_GATE - @single_brd_lib.CHARGER	20B3
CHRG_SW	CHRG_SW - @single_brd_lib.CHARGER	20B3
CLPROG	CLPROG - @single_brd_lib.CHARGER	20A4
D0	USB_500/100* - @single_brd_lib.AP_V1	4B3 10C6
	D0 - @single_brd_lib.CHARGER	20A4
D1	CHGR_SHUTDOWN - @single_brd_lib.AP_V1	4B3 10B6
	D1 - @single_brd_lib.CHARGER	20A4
D2	USB_1A - @single_brd_lib.AP_V1	7B7 10B6
	D2 - @single_brd_lib.CHARGER	20B4
FW_5V_ILIM	FW_5V_ILIM - @single_brd_lib.CHARGER	20C7
FW_BOOST	FW_BOOST - @single_brd_lib.CHARGER	20C6 20C6
FW_FB	FW_FB - @single_brd_lib.CHARGER	20B5
FW_OUT_5V	FW_OUT_5V - @single_brd_lib.CHARGER	20C4 20C7 20C7
FW_POK	FW_POK - @single_brd_lib.CHARGER	20C4
FW_POK_CLAMP	FW_POK_CLAMP - @single_brd_lib.CHARGER	20C4
FW_SW	FW_SW - @single_brd_lib.CHARGER	20C5
FW_VIN	FW_VIN - @single_brd_lib.CHARGER	20C7
FW_VIN_NOPROTECT	FW_PWR - @single_brd_lib.AP_V1	10B6 13C2 13D5 18C3
	FW_VIN_NOPROTECT - @single_brd_lib.CHARGER	20C8
NTC	NTC - @single_brd_lib.AP_V1	10B3 17D5 18B3
	NTC - @single_brd_lib.CHARGER	20A3 20A5
OVP_FLAG*	OVP_FLAG* - @single_brd_lib.CHARGER	20D5
OVP_GATE	OVP_GATE - @single_brd_lib.CHARGER	20D5
PROG	PROG - @single_brd_lib.CHARGER	20A3
REG_PWR_N	REG_PWR_N - @single_brd_lib.CHARGER	20D2
REG_PWR_P	REG_PWR_P - @single_brd_lib.CHARGER	20D2
USB_PWR_SW	USB_PWR_SW - @single_brd_lib.CHARGER	20D6
USB_SW_GATE	USB_SW_GATE - @single_brd_lib.CHARGER	20C6
USB_VIN	USB_PWR_NO_PROTECT - @single_brd_lib.AP_V1	10B6 13C2 13D5 18C3
	USB_VIN - @single_brd_lib.CHARGER	20D7
VBAT	BATT_VCC_CURSNS - @single_brd_lib.AP_V1	10C4 17D5 18C3
	VBAT - @single_brd_lib.CHARGER	20A3

VCC_MAIN	VCC_MAIN - @single_brd_lib.AP_V1	10A8 10B3 11A8 11B1 11B4 11B6 11C4 11C4 11C6 11C6 11D5 11D5 15A8 18C3
	VCC_MAIN - @single_brd_lib.CHARGER	20B2
VCC_REG	VCC_REG - @single_brd_lib.CHARGER	20C3
VCC_REG_PWR	ADPTSNS - @single_brd_lib.AP_V1	10B4 11B6
	VCC_REG_PWR - @single_brd_lib.CHARGER	20A5 20C2
VDD_PULLUP	VDD_PULLUP - @single_brd_lib.CHARGER	20D5

Base nets and synonyms for
single_brd_lib.RADIO_PROTO(@single_brd_lib.mlb(sch_1):page2_i2@radio_design_lib.radio_proto(sch_1))

Base Signal	Synonyms	Location([Zone][dir])
2G_TX_BS	2G_TX_BS - @single_brd_lib.RADIO_PROTO	25C5 26C2
3GLNA_CTRL1	3GLNA_CTRL1 - @single_brd_lib.RADIO_PROTO	25A5 25D5
3GLNA_CTRL2	3GLNA_CTRL2 - @single_brd_lib.RADIO_PROTO	25A5 25D5
3GLNA_GAIN_EN	3GLNA_GAIN_EN - @single_brd_lib.RADIO_PROTO	25A5 25C5
3G_PA_DETECT	3G_PA_DETECT - @single_brd_lib.RADIO_PROTO	22C3 26B7
3G_PA_VBA	3G_PA_VBA - @single_brd_lib.RADIO_PROTO	22C3 26B8
3G_PA_VCC	3G_PA_VCC - @single_brd_lib.RADIO_PROTO	26B4 26B6 26B8 26D3
3G_TXBAND1	3G_TXBAND1 - @single_brd_lib.RADIO_PROTO	25C5 26B8
3G_TXBAND2	3G_TXBAND2 - @single_brd_lib.RADIO_PROTO	25C5 26B8
3G_TXBAND5	3G_TXBAND5 - @single_brd_lib.RADIO_PROTO	25C5 26B8
3G_VDDCORE_HI	3G_VDDCORE_HI - @single_brd_lib.RADIO_PROTO	22B3 24A4 24C7
26MXO	26MXO - @single_brd_lib.RADIO_PROTO	25B7
26M_3G	26M_3G - @single_brd_lib.RADIO_PROTO	25C7
26M_3GE_IN	26M_3GE_IN - @single_brd_lib.RADIO_PROTO	25C7
26M_BB	26M_BB - @single_brd_lib.RADIO_PROTO	22C8 25B8
26M_BT	26M_BT - @single_brd_lib.RADIO_PROTO	25B7 29B5
26M_FSYS1	26M_FSYS1 - @single_brd_lib.RADIO_PROTO	25B7
26M_FSYS2	26M_FSYS2 - @single_brd_lib.RADIO_PROTO	25B7
26M_FSYS3	26M_FSYS3 - @single_brd_lib.RADIO_PROTO	25B7
26M_GPS	26M_GPS - @single_brd_lib.RADIO_PROTO	22A7 28B5
AFC	AFC - @single_brd_lib.RADIO_PROTO	22C7 25B8
AIREF_BB	AIREF_BB - @single_brd_lib.RADIO_PROTO	22D3
AP_PMU_EXTON	AP_PMU_EXTON - @single_brd_lib.RADIO_PROTO	22A3 27C5
B1_BAL_P1	B1_BAL_P1 - @single_brd_lib.RADIO_PROTO	26A3
B1_BAL_P2	B1_BAL_P2 - @single_brd_lib.RADIO_PROTO	26A3
B1_RXMTCH	B1_RXMTCH - @single_brd_lib.RADIO_PROTO	25B6
B2_BAL_P1	B2_BAL_P1 - @single_brd_lib.RADIO_PROTO	26A7
B2_BAL_P2	B2_BAL_P2 - @single_brd_lib.RADIO_PROTO	26A7
B2_RXMTCH	B2_RXMTCH - @single_brd_lib.RADIO_PROTO	25A6
B5_BAL_P1	B5_BAL_P1 - @single_brd_lib.RADIO_PROTO	26A5
B5_BAL_P2	B5_BAL_P2 - @single_brd_lib.RADIO_PROTO	26A5
B5_RXMTCH	B5_RXMTCH - @single_brd_lib.RADIO_PROTO	25A6
BAND1_RF	BAND1_RF - @single_brd_lib.RADIO_PROTO	26B1 26C4
BAND1_RF_AT_PA	BAND1_RF_AT_PA - @single_brd_lib.RADIO_PROTO	26B2
BAND1_RX	BAND1_RX - @single_brd_lib.RADIO_PROTO	25B7 26B2
BAND1_RXN	BAND1_RXN - @single_brd_lib.RADIO_PROTO	25B2 25D5
BAND1_RXN_UM	BAND1_RXN_UM - @single_brd_lib.RADIO_PROTO	25B4
BAND1_RXP	BAND1_RXP - @single_brd_lib.RADIO_PROTO	25B2 25D5
BAND1_RXP_UM	BAND1_RXP_UM - @single_brd_lib.RADIO_PROTO	25B4
BAND1_RX_IN	BAND1_RX_IN - @single_brd_lib.RADIO_PROTO	25B5
BAND2_RF	BAND2_RF - @single_brd_lib.RADIO_PROTO	26A6 26C4
BAND2_RF_AT_PA	BAND2_RF_AT_PA - @single_brd_lib.RADIO_PROTO	26A7
BAND2_RX	BAND2_RX - @single_brd_lib.RADIO_PROTO	25A7 26A7
BAND2_RXN	BAND2_RXN - @single_brd_lib.RADIO_PROTO	25A2 25D5
BAND2_RXN_UM	BAND2_RXN_UM - @single_brd_lib.RADIO_PROTO	25A4
BAND2_RXP	BAND2_RXP - @single_brd_lib.RADIO_PROTO	25A2 25D5
BAND2_RXP_UM	BAND2_RXP_UM - @single_brd_lib.RADIO_PROTO	25B4
BAND2_RX_IN	BAND2_RX_IN - @single_brd_lib.RADIO_PROTO	25A5
BAND5_RF	BAND5_RF - @single_brd_lib.RADIO_PROTO	26B4 26C4
BAND5_RF_AT_PA	BAND5_RF_AT_PA - @single_brd_lib.RADIO_PROTO	26B4
BAND5_RX	BAND5_RX - @single_brd_lib.RADIO_PROTO	25A7 26A4
BAND5_RXN	BAND5_RXN - @single_brd_lib.RADIO_PROTO	25A2 25D5
BAND5_RXN_UM	BAND5_RXN_UM - @single_brd_lib.RADIO_PROTO	25A4
BAND5_RXP	BAND5_RXP - @single_brd_lib.RADIO_PROTO	25A2 25D5
BAND5_RXP_UM	BAND5_RXP_UM - @single_brd_lib.RADIO_PROTO	25A4

BAND5_RX_IN	BAND5_RX_IN - @single_brd_lib.RADIO_PROTO	25A5
BATSNS	BATSNS - @single_brd_lib.RADIO_PROTO	24D7 27C8
BATT_VCC	BATT_VCC - @single_brd_lib.RADIO_PROTO	22D8 24B3 24D8 26D2 27C1
BATT_VCC_CURSNS	BATT_VCC_CURSNS - @single_brd_lib.RADIO_PROTO	24B3 24C4 24D7 26D1 27C8 30C5 30D6 30D8
BB1	BB1 - @single_brd_lib.RADIO_PROTO	22A7
BB2	BB2 - @single_brd_lib.RADIO_PROTO	22A7
BB3	BB3 - @single_brd_lib.RADIO_PROTO	22A7
BB_ADC_M_7	BB_ADC_M_7 - @single_brd_lib.RADIO_PROTO	22D7
BB_ADC_M_8	BB_ADC_M_8 - @single_brd_lib.RADIO_PROTO	22D7
BB_AGND	BB_AGND - @single_brd_lib.RADIO_PROTO	23A7
BB_AP_PMU_ON	BB_AP_PMU_ON - @single_brd_lib.RADIO_PROTO	22A4 22D5
BB_BT_PIO0	BB_BT_PIO0 - @single_brd_lib.RADIO_PROTO	22D5
BB_BT_PIO1	BB_BT_PIO1 - @single_brd_lib.RADIO_PROTO	22D5
BB_BT_PIO4	BB_BT_PIO4 - @single_brd_lib.RADIO_PROTO	22D5
BB_BT_RST_N	BB_BT_RST_N - @single_brd_lib.RADIO_PROTO	22D5
BB_EPN	BB_EPN - @single_brd_lib.RADIO_PROTO	22C5
BB_EPP	BB_EPP - @single_brd_lib.RADIO_PROTO	22C5
BB_I2S_CLK	BB_I2S_CLK - @single_brd_lib.RADIO_PROTO	22B5 27B5
BB_I2S_RX	BB_I2S_RX - @single_brd_lib.RADIO_PROTO	22B5 27B5
BB_I2S_TX	BB_I2S_TX - @single_brd_lib.RADIO_PROTO	22B5 27B5
BB_I2S_WA0	BB_I2S_WA0 - @single_brd_lib.RADIO_PROTO	22B5 27B5
BB_IREF	BB_IREF - @single_brd_lib.RADIO_PROTO	23A5
BB_MISO	BB_MISO - @single_brd_lib.RADIO_PROTO	22A5
BB_PMU_ON*	BB_PMU_ON* - @single_brd_lib.RADIO_PROTO	24C7 27C8 31C8
BB_RST	BB_RST - @single_brd_lib.RADIO_PROTO	24C7 27C5
BB_RST_DET	BB_RST_DET - @single_brd_lib.RADIO_PROTO	22B8 22D5
BB_RTCK	BB_RTCK - @single_brd_lib.RADIO_PROTO	22B3 27C4
BB_TCK	BB_TCK - @single_brd_lib.RADIO_PROTO	22B3 27C1
BB_TDI	BB_TDI - @single_brd_lib.RADIO_PROTO	22B3 27C4
BB_TDO	BB_TDO - @single_brd_lib.RADIO_PROTO	22B3 27C4
BB_TMS	BB_TMS - @single_brd_lib.RADIO_PROTO	22B3 27C4
BB_TRST_N	BB_TRST_N - @single_brd_lib.RADIO_PROTO	22B3 27C4
BB_USART0_CTS_N	BB_USART0_CTS_N - @single_brd_lib.RADIO_PROTO	31D5
BB_USART0_RTS_N	BB_USART0_RTS_N - @single_brd_lib.RADIO_PROTO	31C5
BB_USART0_RXD	BB_USART0_RXD - @single_brd_lib.RADIO_PROTO	22A5 27C5 31D5
BB_USART0_TXD	BB_USART0_TXD - @single_brd_lib.RADIO_PROTO	22A5 27C5 31D5
BB_VC2	BB_VC2 - @single_brd_lib.RADIO_PROTO	22C7
BB_VREFN	BB_VREFN - @single_brd_lib.RADIO_PROTO	23A5
BB_VREFP	BB_VREFP - @single_brd_lib.RADIO_PROTO	23A5
BB_WLAN_RST_N	BB_WLAN_RST_N - @single_brd_lib.RADIO_PROTO	22D5
BIAS	BIAS - @single_brd_lib.RADIO_PROTO	28B3
BTON_AND_WLANOFF	BTON_AND_WLANOFF - @single_brd_lib.RADIO_PROTO	22C7 30D3
BTON_WLANOFF_GATE_IN	BTON_WLANOFF_GATE_IN - @single_brd_lib.RADIO_PROTO	30D2
BTWLAN_LNA_IN	BTWLAN_LNA_IN - @single_brd_lib.RADIO_PROTO	30A4 30B1
BTWLAN_LNA_OUT	BTWLAN_LNA_OUT - @single_brd_lib.RADIO_PROTO	30A3
BTWLAN_RX_SHARED	BTWLAN_RX_SHARED - @single_brd_lib.RADIO_PROTO	30B2
BTWLAN_SPLITTER_IN	BTWLAN_SPLITTER_IN - @single_brd_lib.RADIO_PROTO	30A2
BT_AIO2	BT_AIO2 - @single_brd_lib.RADIO_PROTO	29B4
BT_AP_PMU_ON	BT_AP_PMU_ON - @single_brd_lib.RADIO_PROTO	22A4 22D5 29B4
BT_CLK_REQ	BT_CLK_REQ - @single_brd_lib.RADIO_PROTO	24A4 24C7 29B4
BT_PCM_CLK	BT_PCM_CLK - @single_brd_lib.RADIO_PROTO	22B5 29C4
BT_PCM_IN	BT_PCM_IN - @single_brd_lib.RADIO_PROTO	22B5 29C6
BT_PCM_OUT	BT_PCM_OUT - @single_brd_lib.RADIO_PROTO	22B5 29C4
BT_PCM_SYNC	BT_PCM_SYNC - @single_brd_lib.RADIO_PROTO	22B5 29C4
BT_PIO0	BT_PIO0 - @single_brd_lib.RADIO_PROTO	22D4 29A5 29C4
BT_PIO1	BT_PIO1 - @single_brd_lib.RADIO_PROTO	22D4 29A4 29B4 30D1 30D2
BT_PIO4	BT_PIO4 - @single_brd_lib.RADIO_PROTO	22C4 29A4 29B4
BT_PRIORITY	BT_PRIORITY - @single_brd_lib.RADIO_PROTO	29B4 30B8
BT_RESET	BT_RESET - @single_brd_lib.RADIO_PROTO	22A7 27C8 29B7 31C5
BT_RESET*	BT_RESET* - @single_brd_lib.RADIO_PROTO	22D4 29B6
BT_RF	BT_RF - @single_brd_lib.RADIO_PROTO	29C7 30C1
BT_RF_A	BT_RF_A - @single_brd_lib.RADIO_PROTO	29C5
BT_RF_B	BT_RF_B - @single_brd_lib.RADIO_PROTO	29C5
BT_RF_BAL1	BT_RF_BAL1 - @single_brd_lib.RADIO_PROTO	29C6
BT_RF_BAL2	BT_RF_BAL2 -	29C6

	@single_brd_lib.RADIO_PROTO	
BT_RF_SW	BT_RF_SW -	30C1
	@single_brd_lib.RADIO_PROTO	
BT_RX	BT_RX - @single_brd_lib.RADIO_PROTO	30A1
BT_RX_SW	BT_RX_SW -	30C1
	@single_brd_lib.RADIO_PROTO	
BT_STATE	BT_STATE -	29B4 30B8
	@single_brd_lib.RADIO_PROTO	
BT_TX	BT_TX - @single_brd_lib.RADIO_PROTO	30B3
BT_TXRX_EN	BT_TXRX_EN -	30D1
	@single_brd_lib.RADIO_PROTO	
BT_TX_SW	BT_TX_SW -	30B4 30C1
	@single_brd_lib.RADIO_PROTO	
BT_UART_CTS_N	BT_UART_CTS_N -	27C8 29C6 31C5
	@single_brd_lib.RADIO_PROTO	
BT_UART_RTS_N	BT_UART_RTS_N -	27C8 29C4 31C5
	@single_brd_lib.RADIO_PROTO	
BT_UART_RXD	BT_UART_RXD -	27C8 29C6 31C5
	@single_brd_lib.RADIO_PROTO	
BT_UART_TXD	BT_UART_TXD -	27C8 29C4 31C5
	@single_brd_lib.RADIO_PROTO	
BT_WAKE	BT_WAKE -	31B5
	@single_brd_lib.RADIO_PROTO	
BT_WLAN_ANT	BT_WLAN_ANT -	30D4
	@single_brd_lib.RADIO_PROTO	
BT_WLAN_FLTOUT	BT_WLAN_FLTOUT -	30D3
	@single_brd_lib.RADIO_PROTO	
BT_WLAN_RF_INOUT	BT_WLAN_RF_INOUT -	30D3
	@single_brd_lib.RADIO_PROTO	
CELL_ANT	CELL_ANT -	26D4
	@single_brd_lib.RADIO_PROTO	
CFG0	CFG0 - @single_brd_lib.RADIO_PROTO	22C2
CFG1	CFG1 - @single_brd_lib.RADIO_PROTO	22C2
CLK32K	CLK32K -	22C3 22C7 28B7
	@single_brd_lib.RADIO_PROTO	
CLKOUT0	CLKOUT0 -	22C3 22C8
	@single_brd_lib.RADIO_PROTO	
CLK_3G	CLK_3G -	22B3 25C7
	@single_brd_lib.RADIO_PROTO	
CLK_GPS	CLK_GPS -	28B5 28D2
	@single_brd_lib.RADIO_PROTO	
CLK_PM	CLK_PM -	22C7 25C7
	@single_brd_lib.RADIO_PROTO	
CODEC_LINEIN_N	CODEC_LINEIN_N -	22C5 24B3 27C8
	@single_brd_lib.RADIO_PROTO	
CODEC_LINEIN_P	CODEC_LINEIN_P -	22C5 24B3 27C8
	@single_brd_lib.RADIO_PROTO	
CODEC_LINEOUT_N	CODEC_LINEOUT_N -	22C3 27B8
	@single_brd_lib.RADIO_PROTO	
CODEC_LINEOUT_P	CODEC_LINEOUT_P -	22B3 27B8
	@single_brd_lib.RADIO_PROTO	
CURRENT_SENSE_SRC	CURRENT_SENSE_SRC -	24B4
	@single_brd_lib.RADIO_PROTO	
DA_3G	DA_3G - @single_brd_lib.RADIO_PROTO	22C3 25D7
DA_PM	DA_PM - @single_brd_lib.RADIO_PROTO	22C7 25C7
DCS_RXN	DCS_RXN -	25C5 26C8
	@single_brd_lib.RADIO_PROTO	
DCS_RXN_UM	DCS_RXN_UM -	26C7
	@single_brd_lib.RADIO_PROTO	
DCS_RXP	DCS_RXP -	25C5 26C8
	@single_brd_lib.RADIO_PROTO	
DCS_RXP_UM	DCS_RXP_UM -	26C7
	@single_brd_lib.RADIO_PROTO	
DEBUG_RST_N	DEBUG_RST_N -	24C7 27C4
	@single_brd_lib.RADIO_PROTO	
EBU_A<0>	EBU_A<0> -	23A2 23D3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<24..0>	EBU_A<24..0> -	23D4 23D5
	@single_brd_lib.RADIO_PROTO	
EBU_A<1>	EBU_A<1> -	23D3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<2>	EBU_A<2> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<3>	EBU_A<3> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<4>	EBU_A<4> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<5>	EBU_A<5> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<6>	EBU_A<6> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<7>	EBU_A<7> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<8>	EBU_A<8> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<9>	EBU_A<9> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<10>	EBU_A<10> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<11>	EBU_A<11> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<12>	EBU_A<12> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<13>	EBU_A<13> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<14>	EBU_A<14> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<15>	EBU_A<15> -	23C3 23D6
	@single_brd_lib.RADIO_PROTO	
EBU_A<16>	EBU_A<16> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_A<17>	EBU_A<17> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_A<18>	EBU_A<18> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_A<19>	EBU_A<19> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_A<20>	EBU_A<20> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_A<21>	EBU_A<21> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_A<22>	EBU_A<22> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_A<23>	EBU_A<23> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_A<24>	EBU_A<24> -	23C3 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<0>	EBU_AD<0> -	23A2 23C6 23D2
	@single_brd_lib.RADIO_PROTO	
EBU_AD<15..0>	EBU_AD<15..0> -	23C5 23D1
	@single_brd_lib.RADIO_PROTO	
EBU_AD<1>	EBU_AD<1> -	23C6 23D2
	@single_brd_lib.RADIO_PROTO	
EBU_AD<2>	EBU_AD<2> -	23C2 23C6

	@single_brd_lib.RADIO_PROTO	
EBU_AD<3>	EBU_AD<3> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<4>	EBU_AD<4> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<5>	EBU_AD<5> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<6>	EBU_AD<6> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<7>	EBU_AD<7> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<8>	EBU_AD<8> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<9>	EBU_AD<9> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<10>	EBU_AD<10> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<11>	EBU_AD<11> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<12>	EBU_AD<12> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<13>	EBU_AD<13> -	23C2 23C6
	@single_brd_lib.RADIO_PROTO	
EBU_AD<14>	EBU_AD<14> -	23B6 23C2
	@single_brd_lib.RADIO_PROTO	
EBU_AD<15>	EBU_AD<15> -	23B6 23C2
	@single_brd_lib.RADIO_PROTO	
EBU_ADV*	EBU_ADV* -	22C2 23A3 23B4 23B5
	@single_brd_lib.RADIO_PROTO	
EBU_BC0*	EBU_BC0* -	23A2 23B1 23B5
	@single_brd_lib.RADIO_PROTO	
EBU_BC1*	EBU_BC1* -	23A2 23B1 23B5
	@single_brd_lib.RADIO_PROTO	
EBU_BFCLKI	EBU_BFCLKI -	23B5
	@single_brd_lib.RADIO_PROTO	
EBU_BFCLKO	EBU_BFCLKO -	22C3 23B5
	@single_brd_lib.RADIO_PROTO	
EBU_CS0*	EBU_CS0* -	23A3 23B4 23B5
	@single_brd_lib.RADIO_PROTO	
EBU_CS1*	EBU_CS1* -	23A3 23B1 23B5
	@single_brd_lib.RADIO_PROTO	
EBU_CS3*	EBU_CS3* -	22C3 23A3 23B5
	@single_brd_lib.RADIO_PROTO	
EBU_RD*	EBU_RD* -	22C3 23A3 23B1 23B4 23B5
	@single_brd_lib.RADIO_PROTO	
EBU_WAIT*	EBU_WAIT* -	22C3 23B5 23C2
	@single_brd_lib.RADIO_PROTO	
EBU_WR*	EBU_WR* -	22C3 23A3 23B1 23B4 23B5
	@single_brd_lib.RADIO_PROTO	
EGSM_RXN	EGSM_RXN -	25C5 26C8
	@single_brd_lib.RADIO_PROTO	
EGSM_RXN_UM	EGSM_RXN_UM -	26C7
	@single_brd_lib.RADIO_PROTO	
EGSM_RXP	EGSM_RXP -	25C5 26D8
	@single_brd_lib.RADIO_PROTO	
EGSM_RXP_UM	EGSM_RXP_UM -	26D7
	@single_brd_lib.RADIO_PROTO	
EN_3G	EN_3G - @single_brd_lib.RADIO_PROTO	22B3 25D7
EN_PM	EN_PM - @single_brd_lib.RADIO_PROTO	22C7 25C7
EXT_SDIO_VCC	EXT_SDIO_VCC -	27B2 30D7 31C3
	@single_brd_lib.RADIO_PROTO	
F2_OE*	F2_OE* -	23B3
	@single_brd_lib.RADIO_PROTO	
F32K_BB	F32K_BB -	23A5
	@single_brd_lib.RADIO_PROTO	
FEM_ANT	FEM_ANT -	26C5
	@single_brd_lib.RADIO_PROTO	
FEM_VC1	FEM_VC1 -	22C7 26D6
	@single_brd_lib.RADIO_PROTO	
FEM_VC2	FEM_VC2 -	22D8 26D6
	@single_brd_lib.RADIO_PROTO	
FEM_VC3	FEM_VC3 -	22C7 26D6
	@single_brd_lib.RADIO_PROTO	
FEM_VC4	FEM_VC4 -	22C1 26D4
	@single_brd_lib.RADIO_PROTO	
FLASH_WP	FLASH_WP -	23A5 23B5
	@single_brd_lib.RADIO_PROTO	
F_CLK	F_CLK - @single_brd_lib.RADIO_PROTO	23B4 23B4
F_RESET_N	F_RESET_N -	23B4
	@single_brd_lib.RADIO_PROTO	
GPS_1V8	GPS_1V8 -	28B5 28B8 28B8 28C5 28C7
	@single_brd_lib.RADIO_PROTO	28C7 28C8 28D5
GPS_ANT	GPS_ANT -	28B1
	@single_brd_lib.RADIO_PROTO	
GPS_IRQ	GPS_IRQ -	22D5 28B8
	@single_brd_lib.RADIO_PROTO	
GPS_LNA_NTCH	GPS_LNA_NTCH -	28A2
	@single_brd_lib.RADIO_PROTO	
GPS_LNA_ON	GPS_LNA_ON -	28B4
	@single_brd_lib.RADIO_PROTO	
GPS_OMS1	GPS_OMS1 -	28B5
	@single_brd_lib.RADIO_PROTO	
GPS_ON	GPS_ON -	22D5 28B7
	@single_brd_lib.RADIO_PROTO	
GPS_RF_AI	GPS_RF_AI -	28B3
	@single_brd_lib.RADIO_PROTO	
GPS_RF_AO	GPS_RF_AO -	28B4
	@single_brd_lib.RADIO_PROTO	
GPS_RF_BAL1	GPS_RF_BAL1 -	28B5
	@single_brd_lib.RADIO_PROTO	
GPS_RF_BAL2	GPS_RF_BAL2 -	28B5
	@single_brd_lib.RADIO_PROTO	
GPS_RF_FIL	GPS_RF_FIL -	28B2
	@single_brd_lib.RADIO_PROTO	
GPS_RST_N	GPS_RST_N -	22D5 28B5
	@single_brd_lib.RADIO_PROTO	
GPS_SCL2	GPS_SCL2 -	22A5 28B8
	@single_brd_lib.RADIO_PROTO	
GPS_SDA2	GPS_SDA2 -	22A5 28B8
	@single_brd_lib.RADIO_PROTO	
GPS_UART_CTS_N	GPS_UART_CTS_N -	27B4 28A7 28B8
	@single_brd_lib.RADIO_PROTO	
GPS_UART_RTS_N	GPS_UART_RTS_N -	27B4 28A7 28B8
	@single_brd_lib.RADIO_PROTO	
GPS_UART_RX	GPS_UART_RX -	27B4 28A7 28B8
	@single_brd_lib.RADIO_PROTO	
GPS_UART_TX	GPS_UART_TX -	27B4 28B7 28B8
	@single_brd_lib.RADIO_PROTO	
GPS_VCC_CORE	GPS_VCC_CORE -	28C7
	@single_brd_lib.RADIO_PROTO	
GPS_VDD_CAP	GPS_VDD_CAP -	28C5
	@single_brd_lib.RADIO_PROTO	
GPS_VDD_LP	GPS_VDD_LP -	28D6
	@single_brd_lib.RADIO_PROTO	

GPS_VDD_PLL	GPS_VDD_PLL -	28C6
	@single_brd_lib.RADIO_PROTO	
GPS_VDD_RF	GPS_VDD_RF -	28C6
	@single_brd_lib.RADIO_PROTO	
GPS_VDD_VCO	GPS_VDD_VCO -	28C5
	@single_brd_lib.RADIO_PROTO	
GSM850_RXN	GSM850_RXN -	25C5 26D8
	@single_brd_lib.RADIO_PROTO	
GSM850_RXN_UM	GSM850_RXN_UM -	26D7
	@single_brd_lib.RADIO_PROTO	
GSM850_RXP	GSM850_RXP -	25C5 26D8
	@single_brd_lib.RADIO_PROTO	
GSM850_RXP_UM	GSM850_RXP_UM -	26D7
	@single_brd_lib.RADIO_PROTO	
GSM_PA_VCC	GSM_PA_VCC -	26D3
	@single_brd_lib.RADIO_PROTO	
GSM_TXBURST_IND	GSM_TXBURST_IND -	22B8 22C7
	@single_brd_lib.RADIO_PROTO	
GSM_TXBURST_IND_N	GSM_TXBURST_IND_N -	22B7 27C5
	@single_brd_lib.RADIO_PROTO	
HB_TX	HB_TX - @single_brd_lib.RADIO_PROTO	26C4
HI_BAND_PA_IN	HI_BAND_PA_IN -	25B5 26C2
	@single_brd_lib.RADIO_PROTO	
HI_BAND_PA_OUT	HI_BAND_PA_OUT -	26C3
	@single_brd_lib.RADIO_PROTO	
HI_BAND_TX	HI_BAND_TX -	26C5
	@single_brd_lib.RADIO_PROTO	
HOST_WAKE_WLAN	HOST_WAKE_WLAN -	22A4 22D5 30A5
	@single_brd_lib.RADIO_PROTO	
INT_MIC_N	INT_MIC_N -	22D1 27B8
	@single_brd_lib.RADIO_PROTO	
INT_MIC_P	INT_MIC_P -	22D1 27B8
	@single_brd_lib.RADIO_PROTO	
IPC_MISO	IPC_MISO -	22A4 27C5
	@single_brd_lib.RADIO_PROTO	
IPC_MOSI	IPC_MOSI -	22A5 27C5
	@single_brd_lib.RADIO_PROTO	
IPC_MRDY	IPC_MRDY -	22A5 27B5
	@single_brd_lib.RADIO_PROTO	
IPC_SCLK	IPC_SCLK -	22A5 27C5
	@single_brd_lib.RADIO_PROTO	
IPC_SRDY	IPC_SRDY -	22B5 27B5
	@single_brd_lib.RADIO_PROTO	
IX_PM	IX_PM - @single_brd_lib.RADIO_PROTO	22D7 25C7
I_PM	I_PM - @single_brd_lib.RADIO_PROTO	22D7 25C7
LB_TX	LB_TX - @single_brd_lib.RADIO_PROTO	26C4
LOAD	LOAD - @single_brd_lib.RADIO_PROTO	22D7 24A2
LOCDET	LOCDET -	22C1 25C7
	@single_brd_lib.RADIO_PROTO	
LO_BAND_PA_IN	LO_BAND_PA_IN -	25B5 26C2
	@single_brd_lib.RADIO_PROTO	
LO_BAND_PA_OUT	LO_BAND_PA_OUT -	26C3
	@single_brd_lib.RADIO_PROTO	
LO_BAND_TX	LO_BAND_TX -	26C5
	@single_brd_lib.RADIO_PROTO	
MASTERON_3G	MASTERON_3G -	22C1 25C7
	@single_brd_lib.RADIO_PROTO	
MIC1_N	MIC1_N -	22C5 22D4
	@single_brd_lib.RADIO_PROTO	
MIC1_P	MIC1_P -	22B5 22D4
	@single_brd_lib.RADIO_PROTO	
MIC2_N	MIC2_N -	22C4
	@single_brd_lib.RADIO_PROTO	
MIC2_P	MIC2_P -	22B4
	@single_brd_lib.RADIO_PROTO	
MIC_N	MIC_N - @single_brd_lib.RADIO_PROTO	22D3
MIC_P	MIC_P - @single_brd_lib.RADIO_PROTO	22D3
MON1	MON1 - @single_brd_lib.RADIO_PROTO	22B7 31D8
MON2	MON2 - @single_brd_lib.RADIO_PROTO	22B7 31D8
MON3	MON3 - @single_brd_lib.RADIO_PROTO	22C5
MON4	MON4 - @single_brd_lib.RADIO_PROTO	22C5
NTC	NTC - @single_brd_lib.RADIO_PROTO	24D8 27C8
ONOFF1*	ONOFF1* -	24C5
	@single_brd_lib.RADIO_PROTO	
OSC32K	OSC32K -	23A5
	@single_brd_lib.RADIO_PROTO	
P1_CRE	P1_CRE -	23A2 23A5 23B1
	@single_brd_lib.RADIO_PROTO	
PALEVEL	PALEVEL -	22D7 26C1
	@single_brd_lib.RADIO_PROTO	
PA_MODE	PA_MODE -	22C7 26C2
	@single_brd_lib.RADIO_PROTO	
PA_PE_G	PA_PE_G -	30B6
	@single_brd_lib.RADIO_PROTO	
PCS_RXN	PCS_RXN -	25C5 26C8
	@single_brd_lib.RADIO_PROTO	
PCS_RXN_UM	PCS_RXN_UM -	26C6
	@single_brd_lib.RADIO_PROTO	
PCS_RXP	PCS_RXP -	25C5 26C8
	@single_brd_lib.RADIO_PROTO	
PCS_RXP_UM	PCS_RXP_UM -	26C6
	@single_brd_lib.RADIO_PROTO	
PDETECT_IN	PDETECT_IN -	30B6
	@single_brd_lib.RADIO_PROTO	
PDETECT_OUT	PDETECT_OUT -	30B3
	@single_brd_lib.RADIO_PROTO	
PIPESTAT0	PIPESTAT0 -	22B7 27C4
	@single_brd_lib.RADIO_PROTO	
PIPESTAT1	PIPESTAT1 -	22B7 27C4
	@single_brd_lib.RADIO_PROTO	
PIPESTAT2	PIPESTAT2 -	22B7 27C1
	@single_brd_lib.RADIO_PROTO	
PM_INT	PM_INT -	22A5 24A4 24C7
	@single_brd_lib.RADIO_PROTO	
PM_SCL1	PM_SCL1 -	22B5 24C7
	@single_brd_lib.RADIO_PROTO	
PM_SDA1	PM_SDA1 -	22A5 24C7
	@single_brd_lib.RADIO_PROTO	
PM_VCXOEN	PM_VCXOEN -	23A5 23B4 23B5 24A4 24C7
	@single_brd_lib.RADIO_PROTO	
QX_PM	QX_PM - @single_brd_lib.RADIO_PROTO	22D7 25C7
Q_PM	Q_PM - @single_brd_lib.RADIO_PROTO	22D7 25C7
RADIO_ON	RADIO_ON -	24C7 27C5 31C8
	@single_brd_lib.RADIO_PROTO	
RCVR_N	RCVR_N -	22C3 27B8
	@single_brd_lib.RADIO_PROTO	
RCVR_P	RCVR_P -	22C3 27B8
	@single_brd_lib.RADIO_PROTO	
RESET_DET*	RESET_DET* -	22B7 27C5
	@single_brd_lib.RADIO_PROTO	
RESET_N	RESET_N -	23A5 23B5 24C7
	@single_brd_lib.RADIO_PROTO	
RF_TEMP	RF_TEMP -	22D7 25A8
	@single_brd_lib.RADIO_PROTO	

RREF	RREF - @single_brd_lib.RADIO_PROTO	24C4
RXIX_3G	RXIX_3G -	22C3 25D7
	@single_brd_lib.RADIO_PROTO	
RXI_3G	RXI_3G -	22C3 25D7
	@single_brd_lib.RADIO_PROTO	
RXQX_3G	RXQX_3G -	22C3 25D7
	@single_brd_lib.RADIO_PROTO	
RXQ_3G	RXQ_3G -	22C3 25D7
	@single_brd_lib.RADIO_PROTO	
RX_HOLD	RX_HOLD -	28B7
	@single_brd_lib.RADIO_PROTO	
SD1_FB	SD1_FB -	24B7
	@single_brd_lib.RADIO_PROTO	
SD1_OUT	SD1_OUT -	24B7
	@single_brd_lib.RADIO_PROTO	
SD2_FB	SD2_FB -	24B6
	@single_brd_lib.RADIO_PROTO	
SD2_FBL	SD2_FBL -	24B6
	@single_brd_lib.RADIO_PROTO	
SD2_OUT	SD2_OUT -	24B6
	@single_brd_lib.RADIO_PROTO	
SD3_FB	SD3_FB -	24B6
	@single_brd_lib.RADIO_PROTO	
SD3_FBL	SD3_FBL -	24B6
	@single_brd_lib.RADIO_PROTO	
SD3_OUT	SD3_OUT -	24B6
	@single_brd_lib.RADIO_PROTO	
SIMCRD_CLK	SIMCRD_CLK -	22B7 27C5 31D3
	@single_brd_lib.RADIO_PROTO	
SIMCRD_IO	SIMCRD_IO -	22B7 27B5 31D3
	@single_brd_lib.RADIO_PROTO	
SIMCRD_RST	SIMCRD_RST -	22B7 27B5 31D3
	@single_brd_lib.RADIO_PROTO	
SIM_DETECT	SIM_DETECT -	22C6 27B5 31D3
	@single_brd_lib.RADIO_PROTO	
SMPOWER_SPKR+	SMPOWER_SPKR+ -	24B3 27C8
	@single_brd_lib.RADIO_PROTO	
SMPOWER_SPKR-	SMPOWER_SPKR- -	24B3 27C8
	@single_brd_lib.RADIO_PROTO	
TRACECLK	TRACECLK -	22B7 27C4
	@single_brd_lib.RADIO_PROTO	
TRACEPKT<0>	TRACEPKT<0> -	22A7 27C1
	@single_brd_lib.RADIO_PROTO	
TRACEPKT<1>	TRACEPKT<1> -	22A7 27C1
	@single_brd_lib.RADIO_PROTO	
TRACEPKT<2>	TRACEPKT<2> -	22A7 27C1
	@single_brd_lib.RADIO_PROTO	
TRACEPKT<3>	TRACEPKT<3> -	22A7 27C1
	@single_brd_lib.RADIO_PROTO	
TRACEPKT<4>	TRACEPKT<4> -	22A7 27C1
	@single_brd_lib.RADIO_PROTO	
TRACEPKT<5>	TRACEPKT<5> -	22A7 27C1
	@single_brd_lib.RADIO_PROTO	
TRACEPKT<6>	TRACEPKT<6> -	22A7 27C1
	@single_brd_lib.RADIO_PROTO	
TRACEPKT<7>	TRACEPKT<7> -	22A7 27C4
	@single_brd_lib.RADIO_PROTO	
TRACESYNC	TRACESYNC -	22B7 27C1
	@single_brd_lib.RADIO_PROTO	
TRIG_IN	TRIG_IN -	22B7 27C1
	@single_brd_lib.RADIO_PROTO	
TXBAND1_PA_DETECT	TXBAND1_PA_DETECT -	26B3
	@single_brd_lib.RADIO_PROTO	
TXBAND2_PA_DETECT	TXBAND2_PA_DETECT -	26B7
	@single_brd_lib.RADIO_PROTO	
TXBAND5_PA_DETECT	TXBAND5_PA_DETECT -	26B5
	@single_brd_lib.RADIO_PROTO	
TXGC_3G	TXGC_3G -	22C3 25C7
	@single_brd_lib.RADIO_PROTO	
TXIX_3G	TXIX_3G -	22C3 25C7
	@single_brd_lib.RADIO_PROTO	
TXI_3G	TXI_3G -	22C3 25C7
	@single_brd_lib.RADIO_PROTO	
TXON_PA	TXON_PA -	22C7 26C2 28B8
	@single_brd_lib.RADIO_PROTO	
TXQX_3G	TXQX_3G -	22C3 25C7
	@single_brd_lib.RADIO_PROTO	
TXQ_3G	TXQ_3G -	22C3 25C7
	@single_brd_lib.RADIO_PROTO	
TX_BAND1_PA_IN	TX_BAND1_PA_IN -	26A3
	@single_brd_lib.RADIO_PROTO	
TX_BAND1_PA_IN_2	TX_BAND1_PA_IN_2 -	26B3
	@single_brd_lib.RADIO_PROTO	
TX_BAND2_PA_IN	TX_BAND2_PA_IN -	26A7
	@single_brd_lib.RADIO_PROTO	
TX_BAND2_PA_IN2	TX_BAND2_PA_IN2 -	26A8
	@single_brd_lib.RADIO_PROTO	
TX_BAND5_PA_IN	TX_BAND5_PA_IN -	26A5
	@single_brd_lib.RADIO_PROTO	
TX_BAND5_PA_IN2	TX_BAND5_PA_IN2 -	26A6
	@single_brd_lib.RADIO_PROTO	
TX_BIAS_BAND1	TX_BIAS_BAND1 -	26A3
	@single_brd_lib.RADIO_PROTO	
TX_BIAS_BAND2	TX_BIAS_BAND2 -	26A6
	@single_brd_lib.RADIO_PROTO	
TX_BIAS_BAND5	TX_BIAS_BAND5 -	26A4
	@single_brd_lib.RADIO_PROTO	
TX_HBX_3G	TX_HBX_3G -	25C5 26A4
	@single_brd_lib.RADIO_PROTO	
TX_HB_3G	TX_HB_3G -	25C5 26A4
	@single_brd_lib.RADIO_PROTO	
TX_LBX_3G	TX_LBX_3G -	25C5 26A6
	@single_brd_lib.RADIO_PROTO	
TX_LB_3G	TX_LB_3G -	25C5 26A6
	@single_brd_lib.RADIO_PROTO	
TX_MBX_3G	TX_MBX_3G -	25C5 26A8
	@single_brd_lib.RADIO_PROTO	
TX_MB_3G	TX_MB_3G -	25C5 26A8
	@single_brd_lib.RADIO_PROTO	
UMTS_RSTN	UMTS_RSTN -	22D3 22D5
	@single_brd_lib.RADIO_PROTO	
UMTS_RTCK	UMTS_RTCK -	22B3 27C1
	@single_brd_lib.RADIO_PROTO	
UMTS_RXD	UMTS_RXD -	22A5 27C8
	@single_brd_lib.RADIO_PROTO	
UMTS_TDI	UMTS_TDI -	22B3 27C4
	@single_brd_lib.RADIO_PROTO	
UMTS_TDO	UMTS_TDO -	22B3 27C1
	@single_brd_lib.RADIO_PROTO	
UMTS_TMS	UMTS_TMS -	22B3 27C1
	@single_brd_lib.RADIO_PROTO	
UMTS_TRST_N	UMTS_TRST_N -	22B3 27C1
	@single_brd_lib.RADIO_PROTO	
UMTS_TXD	UMTS_TXD -	22A5 27C8

	@single_brd_lib.RADIO_PROTO	
VAFC_2V65	VAFC_2V65 - @single_brd_lib.RADIO_PROTO	24C1 28D2
VAFC_SRC	VAFC_SRC - @single_brd_lib.RADIO_PROTO	24C3
VAUDIOA	VAUDIOA - @single_brd_lib.RADIO_PROTO	23B8 24C1
VAUDIOA_SRC	VAUDIOA_SRC - @single_brd_lib.RADIO_PROTO	24C3
VAUDIOB	VAUDIOB - @single_brd_lib.RADIO_PROTO	22B3 23A8 24C1
VAUDIOB_SRC	VAUDIOB_SRC - @single_brd_lib.RADIO_PROTO	24C3
VAUX	VAUX - @single_brd_lib.RADIO_PROTO	24C1 25D4
VAUX_SRC	VAUX_SRC - @single_brd_lib.RADIO_PROTO	24C3
VC1	VC1 - @single_brd_lib.RADIO_PROTO	26D5
VC2	VC2 - @single_brd_lib.RADIO_PROTO	26D5
VC3	VC3 - @single_brd_lib.RADIO_PROTO	26D5
VC4	VC4 - @single_brd_lib.RADIO_PROTO	26D5
VCA	VCA - @single_brd_lib.RADIO_PROTO	22C1 22D7
VCC_WLANPA	VCC_WLANPA - @single_brd_lib.RADIO_PROTO	30C4
VCC_XO	VCC_XO - @single_brd_lib.RADIO_PROTO	25B8
VCO_RC	VCO_RC - @single_brd_lib.RADIO_PROTO	25B5
VDD1V5RF	VDD1V5RF - @single_brd_lib.RADIO_PROTO	25D2
VDDDIG2V8	VDDDIG2V8 - @single_brd_lib.RADIO_PROTO	25B2
VDDDIGANA1V5	VDDDIGANA1V5 - @single_brd_lib.RADIO_PROTO	25D2
VDDFSYS2V8	VDDFSYS2V8 - @single_brd_lib.RADIO_PROTO	25C2
VDDMIX2V8	VDDMIX2V8 - @single_brd_lib.RADIO_PROTO	25C2
VDDRX2V8	VDDRX2V8 - @single_brd_lib.RADIO_PROTO	25C3
VDDSD1_IN	VDDSD1_IN - @single_brd_lib.RADIO_PROTO	24D5
VDDSD2_IN	VDDSD2_IN - @single_brd_lib.RADIO_PROTO	24D5
VDDSD3_IN	VDDSD3_IN - @single_brd_lib.RADIO_PROTO	24D5
VDDTX2V8	VDDTX2V8 - @single_brd_lib.RADIO_PROTO	25C3
VDD_3GLNA	VDD_3GLNA - @single_brd_lib.RADIO_PROTO	25B5
VDD_BTDIG	VDD_BTDIG - @single_brd_lib.RADIO_PROTO	29A4 29A4 29A5 29B7 29D4
VDD_BTRF_1V8	VDD_BTRF_1V8 - @single_brd_lib.RADIO_PROTO	29D6
VDD_BT_1V80UT	VDD_BT_1V80UT - @single_brd_lib.RADIO_PROTO	29C4 29D6
VDD_BT_2V85	VDD_BT_2V85 - @single_brd_lib.RADIO_PROTO	24B1 29B6 30D1
VDD_E_FUSE	VDD_E_FUSE - @single_brd_lib.RADIO_PROTO	22B3
VDD_FUSE	VDD_FUSE - @single_brd_lib.RADIO_PROTO	23B7
VDD_LNA_3V1	VDD_LNA_3V1 - @single_brd_lib.RADIO_PROTO	30A3
VDD_WLAN_1V2	VDD_WLAN_1V2 - @single_brd_lib.RADIO_PROTO	30C6
VDD_WLAN_1V8A	VDD_WLAN_1V8A - @single_brd_lib.RADIO_PROTO	30D7
VDD_WLAN_3V1	VDD_WLAN_3V1 - @single_brd_lib.RADIO_PROTO	24C1 30A2 30C6 30D2
VDD_WLAN_IO	VDD_WLAN_IO - @single_brd_lib.RADIO_PROTO	30A8 30C5 30D5
VIO	VIO - @single_brd_lib.RADIO_PROTO	22B3 23B7 23C8 24B1 24C7 27C4
VIO_SRC	VIO_SRC - @single_brd_lib.RADIO_PROTO	24B3
VMICN	VMICN - @single_brd_lib.RADIO_PROTO	22B5 22D2
VMICP	VMICP - @single_brd_lib.RADIO_PROTO	22B5 22D1
VMODE	VMODE - @single_brd_lib.RADIO_PROTO	22C1 26B8
VMODE_DIV	VMODE_DIV - @single_brd_lib.RADIO_PROTO	26B6
VPLL	VPLL - @single_brd_lib.RADIO_PROTO	23B8 24B1
VPLL_SIG	VPLL_SIG - @single_brd_lib.RADIO_PROTO	24B3
VRAMP	VRAMP - @single_brd_lib.RADIO_PROTO	26C2
VREF	VREF - @single_brd_lib.RADIO_PROTO	24C4
VREG_IN	VREG_IN - @single_brd_lib.RADIO_PROTO	30B3
VRF1V5	VRF1V5 - @single_brd_lib.RADIO_PROTO	24B1 25D3
VRF1_2V8	VRF1_2V8 - @single_brd_lib.RADIO_PROTO	22D8 24C1 25B5 25B8 25C4 25C7 26A4 26A7 26D4
VRF1_2V8_FIL	VRF1_2V8_FIL - @single_brd_lib.RADIO_PROTO	26D5
VRF1_SRC	VRF1_SRC - @single_brd_lib.RADIO_PROTO	24B3
VRF2_SRC	VRF2_SRC - @single_brd_lib.RADIO_PROTO	24B3
VRF3	VRF3 - @single_brd_lib.RADIO_PROTO	24B1 28C3 28C5
VRF3_GPS_LNA	VRF3_GPS_LNA - @single_brd_lib.RADIO_PROTO	28B3
VRF3_SRC	VRF3_SRC - @single_brd_lib.RADIO_PROTO	24B3
VRTC	VRTC - @single_brd_lib.RADIO_PROTO	23B8 24B6
VSD1	VSD1 - @single_brd_lib.RADIO_PROTO	22B2 23D8 24B8
VSD1_GND	VSD1_GND - @single_brd_lib.RADIO_PROTO	24B7
VSD2	VSD2 - @single_brd_lib.RADIO_PROTO	22A3 22A4 22A8 23C8 23C8 23D4 24B8 24C4 25D4 27C4 28D4
VSD3	VSD3 - @single_brd_lib.RADIO_PROTO	24A8 30D5
VSIM	VSIM - @single_brd_lib.RADIO_PROTO	22C8 23B8 24B3 27C5 31D3
VTCXO	VTCXO - @single_brd_lib.RADIO_PROTO	28D3
VTUNE	VTUNE - @single_brd_lib.RADIO_PROTO	25B8
VUMTS_SIG	VUMTS_SIG - @single_brd_lib.RADIO_PROTO	24B3
VUSB_SRC	VUSB_SRC - @single_brd_lib.RADIO_PROTO	24B3
VVIB	VVIB - @single_brd_lib.RADIO_PROTO	24B1 27C8
VVIB_SRC	VVIB_SRC - @single_brd_lib.RADIO_PROTO	24B3
V_FLASH	V_FLASH - @single_brd_lib.RADIO_PROTO	23C4 23D3 23D4
V_PSRAM	V_PSRAM - @single_brd_lib.RADIO_PROTO	23D3

WDOG	WDOG - @single_brd_lib.RADIO_PROTO	22C7 24A4 24C7
WLANBT_LNA_VCTL	WLANBT_LNA_VCTL - @single_brd_lib.RADIO_PROTO	30A4
WLANPAVCC1	WLANPAVCC1 - @single_brd_lib.RADIO_PROTO	30C3
WLANPAVCC3	WLANPAVCC3 - @single_brd_lib.RADIO_PROTO	30C3
WLANRX_BAL_IN	WLANRX_BAL_IN - @single_brd_lib.RADIO_PROTO	30B4
WLANRX_BAL_N	WLANRX_BAL_N - @single_brd_lib.RADIO_PROTO	30B4
WLANRX_BAL_P	WLANRX_BAL_P - @single_brd_lib.RADIO_PROTO	30A4
WLANRX_N	WLANRX_N - @single_brd_lib.RADIO_PROTO	30B5
WLANRX_OR_BTTXRX	WLANRX_OR_BTTXRX - @single_brd_lib.RADIO_PROTO	30A5 30D2 30D2
WLANRX_P	WLANRX_P - @single_brd_lib.RADIO_PROTO	30A5
WLAN_1V8_EN	WLAN_1V8_EN - @single_brd_lib.RADIO_PROTO	22D5 30D8
WLAN_32K_CLK	WLAN_32K_CLK - @single_brd_lib.RADIO_PROTO	22C8 30A8
WLAN_ACTIVE	WLAN_ACTIVE - @single_brd_lib.RADIO_PROTO	29B4 30B8
WLAN_BOOTCFG0	WLAN_BOOTCFG0 - @single_brd_lib.RADIO_PROTO	27B1 30B8 31C3
WLAN_BOOTCFG1	WLAN_BOOTCFG1 - @single_brd_lib.RADIO_PROTO	27B1 30B8 31C3
WLAN_BT_RX_EN	WLAN_BT_RX_EN - @single_brd_lib.RADIO_PROTO	30A4 30D1
WLAN_CLK_REQ	WLAN_CLK_REQ - @single_brd_lib.RADIO_PROTO	24C7 30A6
WLAN_GPIO5	WLAN_GPIO5 - @single_brd_lib.RADIO_PROTO	30A6
WLAN_JTAG_EN_N	WLAN_JTAG_EN_N - @single_brd_lib.RADIO_PROTO	30A6
WLAN_PA_RFIN	WLAN_PA_RFIN - @single_brd_lib.RADIO_PROTO	30C4
WLAN_RESET	WLAN_RESET - @single_brd_lib.RADIO_PROTO	22A7 27C8 30A8
WLAN_RESET*	WLAN_RESET* - @single_brd_lib.RADIO_PROTO	22D4 30A5 30A8
WLAN_REXT	WLAN_REXT - @single_brd_lib.RADIO_PROTO	30B6
WLAN_RX	WLAN_RX - @single_brd_lib.RADIO_PROTO	30B1
WLAN_SDIO_CLK	WLAN_SDIO_CLK - @single_brd_lib.RADIO_PROTO	27C5 30B8
WLAN_SDIO_CMD	WLAN_SDIO_CMD - @single_brd_lib.RADIO_PROTO	27C5 30B8
WLAN_SDIO_DATA<0>	WLAN_SDIO_DATA<0> - @single_brd_lib.RADIO_PROTO	27C5 30B8
WLAN_SDIO_DATA<1>	WLAN_SDIO_DATA<1> - @single_brd_lib.RADIO_PROTO	27C5 30B8
WLAN_SDIO_DATA<2>	WLAN_SDIO_DATA<2> - @single_brd_lib.RADIO_PROTO	27C5 30B8
WLAN_SDIO_DATA<3>	WLAN_SDIO_DATA<3> - @single_brd_lib.RADIO_PROTO	27C5 30B8
WLAN_TCK	WLAN_TCK - @single_brd_lib.RADIO_PROTO	27B2 30B8
WLAN_TDI_UART_SIN	WLAN_TDI_UART_SIN - @single_brd_lib.RADIO_PROTO	27B2 30B8 31C3
WLAN_TDO	WLAN_TDO - @single_brd_lib.RADIO_PROTO	27B1 30B8
WLAN_TMS	WLAN_TMS - @single_brd_lib.RADIO_PROTO	27B1 30B8
WLAN_TMS2	WLAN_TMS2 - @single_brd_lib.RADIO_PROTO	30B8
WLAN_TRST_N	WLAN_TRST_N - @single_brd_lib.RADIO_PROTO	27B1 30B8
WLAN_TX_EN	WLAN_TX_EN - @single_brd_lib.RADIO_PROTO	30B1 30B5
WLAN_TX_OUT	WLAN_TX_OUT - @single_brd_lib.RADIO_PROTO	30B6
WLAN_UART_SOUT	WLAN_UART_SOUT - @single_brd_lib.RADIO_PROTO	27B1 30A5 31C3
WLAN_XTAL_IN	WLAN_XTAL_IN - @single_brd_lib.RADIO_PROTO	30A5 30B5
WLAN_XTAL_OUT	WLAN_XTAL_OUT - @single_brd_lib.RADIO_PROTO	30A4 30B5

Title: Cref Part Report
Design: mlb
Date: Apr 3 18:21:53 2007

C1	CAP_603	charger[20C7]ap_v1[10]mlb[2]
C2	CAP_603	charger[20C7]ap_v1[10]mlb[2]
C3	CAP_603	charger[20C7]ap_v1[10]mlb[2]
C4	CAP_402	charger[20C5]ap_v1[10]mlb[2]
C5	CAP_201	charger[20B4]ap_v1[10]mlb[2]
C6	CAP_603	charger[20B4]ap_v1[10]mlb[2]
C7	CAP_201	radio_proto[25B6]mlb[2]
C8	CAP_603	charger[20A5]ap_v1[10]mlb[2]
C9	CAP_201	radio_proto[29C6]mlb[2]
C10	CAP_402	ap_v1[15D4]mlb[2]
C11	CAP_201	radio_proto[29C6]mlb[2]
C12	CAP_201	radio_proto[29C6]mlb[2]
C13	CAP_201	ap_v1[4D6]mlb[2]
C14	CAP_201	ap_v1[4A6]mlb[2]
C15	CAP_201	ap_v1[4D6]mlb[2]
C16	CAP_201	ap_v1[4D5]mlb[2]
C17	CAP_402	ap_v1[4D5]mlb[2]
C18	CAP_402	ap_v1[4D4]mlb[2]
C19	CAP_201	radio_proto[30C4]mlb[2]
C20	CAP_201	radio_proto[30C4]mlb[2]
C21	CAP_201	radio_proto[30B4]mlb[2]
C22	CAP_201	ap_v1[4D4]mlb[2]
C23	CAP_201	ap_v1[4D4]mlb[2]
C24	CAP_201	ap_v1[4D3]mlb[2]
C25	CAP_201	ap_v1[4D3]mlb[2]
C26	CAP_201	ap_v1[4D3]mlb[2]
C27	CAP_402	radio_proto[28C7]mlb[2]
C28	CAP_201	ap_v1[4D3]mlb[2]
C29	CAP_201	radio_proto[28C8]mlb[2]
C30	CAP_201	ap_v1[4A1]mlb[2]
C31	CAP_201	radio_proto[28D6]mlb[2]
C32	CAP_201	radio_proto[29D5]mlb[2]
C33	CAP_201	radio_proto[29C5]mlb[2]
C34	CAP_201	radio_proto[29C5]mlb[2]
C35	CAP_201	radio_proto[29D5]mlb[2]
C36	CAP_201	radio_proto[29C4]mlb[2]
C37	CAP_201	radio_proto[29D4]mlb[2]
C38	CAP_402	radio_proto[29C4]mlb[2]
C39	CAP_201	radio_proto[29B4]mlb[2]
C40	CAP_402	radio_proto[29D4]mlb[2]
C43	CAP_201	radio_proto[30C1]mlb[2]
C44	CAP_201	ap_v1[6B2]mlb[2]
C45	CAP_201	ap_v1[6C2]mlb[2]
C46	CAP_201	ap_v1[6C2]mlb[2]
C47	CAP_201	ap_v1[6B2]mlb[2]
C48	CAP_201	ap_v1[6B2]mlb[2]
C50	CAP_201	ap_v1[6C2]mlb[2]
C51	CAP_201	radio_proto[30C2]mlb[2]
C52	CAP_201	radio_proto[30C2]mlb[2]
C53	CAP_201	ap_v1[6B2]mlb[2]
C54	CAP_201	ap_v1[6C2]mlb[2]
C55	CAP_402	ap_v1[6C2]mlb[2]
C56	CAP_201	radio_proto[28D5]mlb[2]
C57	CAP_402	radio_proto[28D6]mlb[2]
C58	CAP_201	ap_v1[6B2]mlb[2]
C59	CAP_201	ap_v1[6C2]mlb[2]
C60	CAP_402	radio_proto[23A5]mlb[2]
C62	CAP_201	radio_proto[30B4]mlb[2]
C63	CAP_201	radio_proto[30B3]mlb[2]
C64	CAP_201	radio_proto[23A4]mlb[2]
C65	CAP_201	radio_proto[28D5]mlb[2]
C66	CAP_201	radio_proto[23A4]mlb[2]
C67	CAP_201	radio_proto[28C6]mlb[2]
C68	CAP_201	ap_v1[681]mlb[2]
C69	CAP_201	ap_v1[7B6]mlb[2]
C70	CAP_201	ap_v1[7B5]mlb[2]
C71	CAP_402	ap_v1[7C4]mlb[2]
C72	CAP_201	radio_proto[24A2]mlb[2]
C73	CAP_201	radio_proto[28C5]mlb[2]
C74	CAP_201	ap_v1[783]mlb[2]
C75	CAP_201	ap_v1[782]mlb[2]
C76	CAP_201	ap_v1[8B7]mlb[2]
C77	CAP_201	ap_v1[8D6]mlb[2]
C78	CAP_201	ap_v1[8C5]mlb[2]
C79	CAP_201	ap_v1[8B5]mlb[2]
C80	CAP_201	radio_proto[28A2]mlb[2]
C81	CAP_201	radio_proto[28C4]mlb[2]
C82	CAP_201	radio_proto[28B2]mlb[2]
C83	CAP_201	radio_proto[23D3]mlb[2]
C84	CAP_402	radio_proto[23D3]mlb[2]
C85	CAP_201	radio_proto[23D3]mlb[2]
C86	CAP_P_402	ap_v1[9C8]mlb[2]
C87	CAP_P_402	ap_v1[9C7]mlb[2]
C88	CAP_201	ap_v1[9D7]mlb[2]
C89	CAP_402	radio_proto[24C3]mlb[2]
C90	CAP_402	radio_proto[24B3]mlb[2]
C91	CAP_402	radio_proto[30C8]mlb[2]
C92	CAP_P_402	ap_v1[9B7]mlb[2]
C93	CAP_402	radio_proto[30C8]mlb[2]
C94	CAP_201	radio_proto[30C8]mlb[2]
C95	CAP_201	radio_proto[30C8]mlb[2]
C96	CAP_201	ap_v1[9C6]mlb[2]
C97	CAP_201	ap_v1[9D6]mlb[2]
C98	CAP_201	radio_proto[30C8]mlb[2]
C99	CAP_P_603-2	ap_v1[9A6]mlb[2]
C100	CAP_201	radio_proto[30C8]mlb[2]
C101	CAP_402	radio_proto[24B3]mlb[2]
C102	CAP_402	radio_proto[30C5]mlb[2]
C103	CAP_P_402	ap_v1[9B5]mlb[2]
C104	CAP_402	radio_proto[23D2]mlb[2]
C105	CAP_201	radio_proto[23D2]mlb[2]
C106	CAP_201	radio_proto[30C6]mlb[2]
C107	CAP_201	ap_v1[983]mlb[2]
C108	CAP_P_402	ap_v1[9B2]mlb[2]
C109	CAP_402	radio_proto[30C6]mlb[2]
C111	CAP_402	ap_v1[10A7]mlb[2]
C113	CAP_201	radio_proto[30C6]mlb[2]
C114	CAP_201	radio_proto[30C6]mlb[2]
C115	CAP_201	radio_proto[30C5]mlb[2]
C116	CAP_201	radio_proto[30A2]mlb[2]
C117	CAP_402	radio_proto[24C3]mlb[2]
C118	CAP_402	radio_proto[24B2]mlb[2]
C119	CAP_201	radio_proto[30C1]mlb[2]
C120	CAP_402	radio_proto[24C2]mlb[2]
C121	CAP_402	radio_proto[24B2]mlb[2]
C122	CAP_201	radio_proto[30B3]mlb[2]
C123	CAP_402	radio_proto[24C2]mlb[2]
C124	CAP_402	radio_proto[24B2]mlb[2]
C125	CAP_402	radio_proto[24C2]mlb[2]
C126	CAP_201	radio_proto[26A7]mlb[2]
C127	CAP_201	radio_proto[22C4]mlb[2]
C128	CAP_201	radio_proto[26C4]mlb[2]
C129	CAP_201	radio_proto[26C4]mlb[2]
C130	CAP_201	radio_proto[26D2]mlb[2]
C131	CAP_201	radio_proto[30D6]mlb[2]
C132	CAP_201	ap_v1[11D4]mlb[2]
C133	CAP_201	radio_proto[22C4]mlb[2]
C134	CAP_201	radio_proto[22B4]mlb[2]
C135	CAP_P_CASE-A3	radio_proto[26D2]mlb[2]
C136	CAP_201	radio_proto[30A5]mlb[2]
C137	CAP_402	ap_v1[11B3]mlb[2]
C138	CAP_201	radio_proto[22B4]mlb[2]
C139	CAP_201	radio_proto[26C1]mlb[2]
C140	CAP_603	radio_proto[24B8]mlb[2]
C141	CAP_603	radio_proto[24B8]mlb[2]
C142	CAP_201	radio_proto[22C4]mlb[2]
C143	CAP_201	radio_proto[22B4]mlb[2]
C144	CAP_402	radio_proto[22B3]mlb[2]
C145	CAP_603	radio_proto[24B8]mlb[2]
C146	CAP_201	radio_proto[22B3]mlb[2]
C147	CAP_201	radio_proto[23C8]mlb[2]
C148	CAP_201	ap_v1[13D4]mlb[2]
C149	CAP_603	ap_v1[13D4]mlb[2]
C150	CAP_402	radio_proto[24B3]mlb[2]
C151	CAP_201	ap_v1[14B5]mlb[2]
C152	CAP_201	ap_v1[14D5]mlb[2]
C153	CAP_402	ap_v1[14B3]mlb[2]
C154	CAP_201	ap_v1[16D8]mlb[2]
C155	CAP_603	radio_proto[24D4]mlb[2]
C156	CAP_603	radio_proto[24D4]mlb[2]
C157	CAP_201	radio_proto[23C7]mlb[2]
C158	CAP_201	radio_proto[25B8]mlb[2]
C159	CAP_201	radio_proto[23C7]mlb[2]
C160	CAP_402	radio_proto[25B8]mlb[2]
C161	CAP_201	radio_proto[25B8]mlb[2]
C162	CAP_201	radio_proto[25B8]mlb[2]
C163	CAP_201	radio_proto[25B8]mlb[2]
C164	CAP_201	radio_proto[25C7]mlb[2]
C165	CAP_201	ap_v1[15A8]mlb[2]
C166	CAP_402	ap_v1[15D7]mlb[2]
C167	CAP_201	radio_proto[25B7]mlb[2]
C168	CAP_201	radio_proto[25B6]mlb[2]
C169	CAP_201	radio_proto[25A6]mlb[2]
C170	CAP_0201	radio_proto[25A6]mlb[2]
C171	CAP_201	radio_proto[25B4]mlb[2]
C172	CAP_201	radio_proto[25B4]mlb[2]
C173	CAP_201	radio_proto[25C4]mlb[2]
C174	CAP_201	radio_proto[25D4]mlb[2]
C175	CAP_201	radio_proto[25D4]mlb[2]
C176	CAP_201	radio_proto[25C4]mlb[2]
C177	CAP_201	radio_proto[25D3]mlb[2]
C178	CAP_0201	radio_proto[25C4]mlb[2]
C179	CAP_201	radio_proto[25C3]mlb[2]
C180	CAP_201	radio_proto[25D3]mlb[2]
C181	CAP_402	ap_v1[11B3]mlb[2]
C182	CAP_603	charger[20B2]ap_v1[10]mlb[2]
C183	CAP_201	radio_proto[25C3]mlb[2]
C184	CAP_402	radio_proto[25D3]mlb[2]
C185	CAP_201	radio_proto[25C3]mlb[2]
C186	CAP_201	radio_proto[25C3]mlb[2]
C187	CAP_201	radio_proto[25D3]mlb[2]
C188	CAP_201	radio_proto[25C2]mlb[2]
C189	CAP_201	radio_proto[25D2]mlb[2]
C190	CAP_201	radio_proto[25D2]mlb[2]
C191	CAP_201	radio_proto[25B2]mlb[2]
C192	CAP_402	radio_proto[25D2]mlb[2]
C193	CAP_201	radio_proto[25D2]mlb[2]
C195	CAP_402	radio_proto[23D8]mlb[2]
C196	CAP_402	radio_proto[23D8]mlb[2]
C197	CAP_402	radio_proto[23C8]mlb[2]
C198	CAP_201	radio_proto[23D7]mlb[2]
C199	CAP_201	radio_proto[23D7]mlb[2]
C200	CAP_201	radio_proto[23C7]mlb[2]
C201	CAP_201	radio_proto[23C7]mlb[2]
C202	CAP_201	radio_proto[23D7]mlb[2]
C203	CAP_201	radio_proto[23D7]mlb[2]
C204	CAP_201	radio_proto[23C7]mlb[2]
C205	CAP_201	radio_proto[23B8]mlb[2]
C213	CAP_201	radio_proto[28C4]mlb[2]
C214	CAP_201	radio_proto[28C4]mlb[2]
C215	CAP_201	radio_proto[28A3]mlb[2]
C216	CAP_201	radio_proto[28B3]mlb[2]
C224	CAP_402	radio_proto[24B2]mlb[2]
C225	CAP_201	radio_proto[28B3]mlb[2]
C227	CAP_402	radio_proto[22A3]mlb[2]
C228	CAP_201	radio_proto[22A3]mlb[2]
C229	CAP_201	radio_proto[22A3]mlb[2]
C230	CAP_201	radio_proto[23B8]mlb[2]
C231	CAP_201	radio_proto[23C8]mlb[2]
C232	CAP_201	radio_proto[23B7]mlb[2]
C233	CAP_201	radio_proto[23C8]mlb[2]
C235	CAP_201	radio_proto[23B7]mlb[2]
C236	CAP_201	radio_proto[26B6]mlb[2]
C237	CAP_201	radio_proto[26B8]mlb[2]
C238	CAP_603	radio_proto[26B8]mlb[2]
C241	CAP_603	radio_proto[26B6]mlb[2]
C242	CAP_201	radio_proto[26B8]mlb[2]
C243	CAP_201	radio_proto[26B5]mlb[2]
C244	CAP_201	radio_proto[26B3]mlb[2]
C245	CAP_201	radio_proto[26B3]mlb[2]
C246	CAP_603	radio_proto[26B3]mlb[2]
C247	CAP_402	radio_proto[29B5]mlb[2]
C250	CAP_603	radio_proto[24B8]mlb[2]
C251	CAP_603	radio_proto[24A8]mlb[2]
C252	CAP_603	radio_proto[24B8]mlb[2]
C253	CAP_603	radio_proto[24A8]mlb[2]
C256	CAP_603	radio_proto[24D5]mlb[2]
C260	CAP_402	radio_proto[24C2]mlb[2]
C262	CAP_402	radio_proto[22B4]mlb[2]
C263	CAP_201	radio_proto[22B4]mlb[2]
C264	CAP_201	radio_proto[22D3]mlb[2]
C265	CAP_201	radio_proto[22D3]mlb[2]
C266	CAP_201	radio_proto[22D2]mlb[2]
C268	CAP_201	radio_proto[22D2]mlb[2]
C269	CAP_201	radio_proto[22A4]mlb[2]
C270	CAP_201	radio_proto[28D8]mlb[2]
C271	CAP_402	radio_proto[28D7]mlb[2]
C272	CAP_402	radio_proto[28D7]mlb[2]
C273	CAP_402	radio_proto[22A3]mlb[2]
C274	CAP_201	radio_proto[22B4]mlb[2]
C275	CAP_201	radio_proto[22A3]mlb[2]
C276	CAP_201	radio_proto[23A8]mlb[2]
C277	CAP_201	radio_proto[23A8]mlb[2]
C278	CAP_201	radio_proto[26A6]mlb[2]
C279	CAP_201	radio_proto[26A4]mlb[2]
C280	CAP_201	radio_proto[26A3]mlb[2]
C281	CAP_201	radio_proto[28C4]mlb[2]
C282	CAP_402	radio_proto[24A6]mlb[2]
C283	CAP_201	radio_proto[26B8]mlb[2]
C284	CAP_201	radio_proto[30B5]mlb[2]
C285	CAP_201	radio_proto[30C4]mlb[2]
C287	CAP_201	radio_proto[28D2]mlb[2]
C288	CAP_603	radio_proto[24B2]mlb[2]
C289	CAP_201	radio_proto[22D3]mlb[2]
C290	CAP_201	radio_proto[22D1]mlb[2]
C291	CAP_402-LF	radio_proto[28D3]mlb[2]
C292	CAP_402	radio_proto[24D6]mlb[2]
C293	CAP_402	radio_proto[24D6]mlb[2]
C294	CAP_402	radio_proto[24D6]mlb[2]
C295	CAP_201	radio_proto[30A3]mlb[2]
C296	CAP_201	radio_proto[30A3]mlb[2]
C297	CAP_201	radio_proto[30B2]mlb[2]
C300	CAP_201	radio_proto[30D3]mlb[2]
C301	CAP_201	radio_proto[26A6]mlb[2]
C303	CAP_201	radio_proto[26D4]mlb[2]
C304	CAP_201	radio_proto[26B4]mlb[2]
C305	CAP_201	radio_proto[26B1]mlb[2]
C306	CAP_201	radio_proto[26D5]mlb[2]
C307	CAP_201	radio_proto[26D5]mlb[2]
C308	CAP_201	radio_proto[26D5]mlb[2]
C309	CAP_201	radio_proto[26D5]mlb[2]
C313	CAP_201	radio_proto[26C4]mlb[2]
C314	CAP_201	radio_proto[26C4]mlb[2]
C315	CAP_201	radio_proto[26D5]mlb[2]
C319	CAP_201	radio_proto[26B8]mlb[2]
C320	CAP_201	radio_proto[26B4]mlb[2]
C321	CAP_201	radio_proto[26B2]mlb[2]
C322	CAP_201	radio_proto[26A7]mlb[2]
C326	CAP_201	radio_proto[26A6]mlb[2]
C328	CAP_201	radio_proto[26A3]mlb[2]
C329	CAP_201	radio_proto[25C3]mlb[2]
C330	CAP_201	radio_proto[30C3]mlb[2]
C331	CAP_201	radio_proto[30C3]mlb[2]
C332	CAP_201	radio_proto[30B2]mlb[2]
C333	CAP_201	radio_proto[30B2]mlb[2]
C334	CAP_201	radio_proto[30B2]mlb[2]
C335	CAP_201	radio_proto[25B7]mlb[2]
C421	CAP_201	ap_v1[15D8]mlb[2]
C422	CAP_402	ap_v1[11B7]mlb[2]
C423	CAP_603	ap_v1[11B2]mlb[2]
C424	CAP_201	ap_v1[11B2]mlb[2]
C425	CAP_201	ap_v1[12D5]mlb[2]
C426	CAP_402	ap_v1[14D6]mlb[2]
C427	CAP_603	ap_v1[16D7]mlb[2]
C428	CAP_603	ap_v1[16D7]mlb[2]
C429	CAP_201	ap_v1[16D4]mlb[2]
C430	CAP_201	ap_v1[16A2]mlb[2]
C431	CAP_201	ap_v1[15D3]mlb[2]
C432	CAP_201	ap_v1[5D4]mlb[2]
C433	CAP_201	ap_v1[5D4]mlb[2]
C434	CAP_201	ap_v1[5D4]mlb[2]
C436	CAP_201	ap_v1[6A6]mlb[2]
C437	CAP_201	ap_v1[6D5]mlb[2]
C438	CAP_402	ap_v1[6A5]mlb[2]
C439	CAP_201	ap_v1[6B1]mlb[2]
C440	CAP_201	ap_v1[6B1]mlb[2]
C441	CAP_201	ap_v1[8B5]mlb[2]
C442	CAP_201	ap_v1[8C3]mlb[2]
C443	CAP_201	ap_v1[4D8]mlb[2]
C444	CAP_201	ap_v1[4A6]mlb[2]
C445	CAP_201	ap_v1[4D4]mlb[2]
C446	CAP_201	ap_v1[4D4]mlb[2]
C447	CAP_201	ap_v1[4D4]mlb[2]
C448	CAP_201	ap_v1[4D3]mlb[2]
C449	CAP_201	ap_v1[4A2]mlb[2]
C450	CAP_201	ap_v1[5D5]mlb[2]
C451	CAP_201	ap_v1[5D3]mlb[2]
C452	CAP_201	ap_v1[6A5]mlb[2]
C453	CAP_201	ap_v1[6C3]mlb[2]
C454	CAP_201	ap_v1[6C3]mlb[2]
C455	CAP_201	ap_v1[6C3]mlb[2]
C456	CAP_201	ap_v1[6C2]mlb[2]
C457	CAP_201	ap_v1[6D2]mlb[2]
C458	CAP_201	ap_v1[6B2]mlb[2]
C459	CAP_201	ap_v1[6D2]mlb[2]
C460	CAP_201	ap_v1[6B2]mlb[2]
C461	CAP_201	ap_v1[6C2]mlb[2]
C462	CAP_201	ap_v1[6D2]mlb[2]
C463	CAP_201	ap_v1[6B2]mlb[2]
C464	CAP_201	ap_v1[6C1]mlb[2]
C465	CAP_201	ap_v1[6C1]mlb[2]
C466	CAP_201	ap_v1[6C1]mlb[2]
C467	CAP_201	ap_v1[7C3]mlb[2]
C468	CAP_201	ap_v1[7C3]mlb[2]
C469	CAP_603	ap_v1[8D5]mlb[2]
C470	CAP_201	ap_v1[8D5]mlb[2]
C471	CAP_201	ap_v1[8A4]mlb[2]
C472	CAP_201	ap_v1[8A4]mlb[2]
C473	CAP_201	ap_v1[9C7]mlb[2]
C474	CAP_201	ap_v1[9C7]mlb[2]
C475	CAP_201	ap_v1[9C7]mlb[2]
C476	CAP_P_402	ap_v1[9A7]mlb[2]
C477	CAP_201	ap_v1[9C7]mlb[2]
C478	CAP_201	ap_v1[9C7]mlb[2]
C479	CAP_P_603-2	ap_v1[9A6]mlb[2]
C480	CAP_201	ap_v1[9D6]mlb[2]
C481	CAP_P_402	ap_v1[9B5]mlb[2]
C482	CAP_201	ap_v1[9A5]mlb[2]
C483	CAP_201	ap_v1[9A5]mlb[2]
C484	CAP_201	ap_v1[9C3]mlb[2]
C485	CAP_201	ap_v1[9C3]mlb[2]
C486	CAP_P_402	ap_v1[9B2]mlb[2]
C487	CAP_201	ap_v1[10A6]mlb[2]
C489	CAP_402	ap_v1[10A6]mlb[2]
C490	CAP_402	ap_v1[10A6]mlb[2]
C497	CAP_201	ap_v1[11D7]mlb[2]
C498	CAP_201	ap_v1[11B7]mlb[2]
C499	CAP_201	ap_v1[11B7]mlb[2]
C500	CAP_201	ap_v1[11D7]mlb[2]
C501	CAP_201	ap_v1[11A6]mlb[2]
C502	CAP_201	ap_v1[11A5]mlb[2]
C503	CAP_201	ap_v1[11D5]mlb[2]
C504	CAP_201	ap_v1[11A5]mlb[2]
C505	CAP_603	ap_v1[11D4]mlb[2]
C506	CAP_201	ap_v1[11A4]mlb[2]
C507	CAP_201	ap_v1[11D4]mlb[2]
C508	CAP_201	ap_v1[11D4]mlb[2]
C509	CAP_805	ap_v1[11A2]mlb[2]
C510	CAP_603	ap_v1[11C2]mlb[2]
C511	CAP_201	ap_v1[11C2]mlb[2]
C512	CAP_402-LF	ap_v1[11B1]mlb[2]
C513	CAP_402-LF	ap_v1[11B1]mlb[2]
C514	CAP_P_CASE-AL-SM	ap_v1[12C7]mlb[2]
C515	CAP_P_CASE-AL-SM	ap_v1[12C7]mlb[2]
C516	CAP_402	ap_v1[16A3]mlb[2]
C518	CAP_201	ap_v1[16B1]mlb[2]
C519	CAP_201	ap_v1[16B1]mlb[2]
C520	CAP_201	ap_v1[17A6]mlb[2]
C521	CAP_603	ap_v1[15D8]mlb[2]
C522	CAP_402	ap_v1[15A7]mlb[2]
C523	CAP_201	ap_v1[15D7]mlb[2]
C524	CAP_201	ap_v1[15D6]mlb[2]
C525	CAP_201	ap_v1[15D6]mlb[2]
C526	CAP_402	ap_v1[15D6]mlb[2]
C527	CAP_0201	ap_v1[15A6]mlb[2]
C528	CAP_603	ap_v1[15A5]mlb[2]
C529	CAP_201	ap_v1[15B2]mlb[2]
C530	CAP_402	ap_v1[11B4]mlb[2]
C531	CAP_402	ap_v1[11B4]mlb[2]
C537	CAP_402	ap_v1[11B3]mlb[2]
C538	CAP_402	ap_v1[11B3]mlb[2]
C544	CAP_201	ap_v1[4B2]mlb[2]
C554	CAP_402-LF	charger[20A4]ap_v1[10]mlb[2]
C561	CAP_603	charger[20B4]ap_v1[10]mlb[2]
D1	DIODE_SCHOT_2P_SOD-923	radio_proto[24B7]mlb[2]
D2	DIODE_SCHOT_SM-201	charger[20C6]ap_v1[10]mlb[2]
D3	DIODE_SCHOT_2P_SOD-923	radio_proto[24B7]mlb[2]
D4	DIODE_SCHOT_2P_SOD-923	radio_proto[24A7]mlb[2]
D8	DIODE_SCHOT_SOD-323	ap_v1[15A6]mlb[2]
D18	DIODE_SCHOT_SM-201	charger[20C4]ap_v1[10]mlb[2]
D25	DIODE_SCHOT_2P_SOD-923	charger[20C6]ap_v1[10]mlb[2]
D26	DIODE_SCHOT_SM	charger[20B5]ap_v1[10]mlb[2]
DZ1	ZENER_GDZ-0201	charger[20C6]ap_v1[10]mlb[2]
DZ2	ZENER_GDZ-0201	charger[20C3]ap_v1[10]mlb[2]
DZ3	SUPPR_TRANSIENT1_201	ap_v1[12C3]mlb[2]
DZ4	SUPPR_TRANSIENT1_201	ap_v1[13C7]mlb[2]
DZ5	SUPPR_TRANSIENT1_201	ap_v1[13B3]mlb[2]
DZ6	SUPPR_TRANSIENT1_201	ap_v1[13B3]mlb[2]
DZ7	SUPPR_TRANSIENT1_201	ap_v1[13B3]mlb[2]
DZ9	SUPPR_TRANSIENT1_201	ap_v1[12B4]mlb[2]
DZ10	SUPPR_TRANSIENT1_201	ap_v1[12B4]mlb[2]
FL1	FILTER_2P_0201	radio_proto[24D5]mlb[2]
FL2	FILTER_2P_0201	ap_v1[4D6]mlb[2]
FL3	FILTER_2P_0201	ap_v1[4A5]mlb[2]
FL4	FILTER_2P_0201	ap_v1[5D3]mlb[2]
FL5	FILTER_2P_0402	ap_v1[6C1]mlb[2]
FL6	FILTER_2P_0201	radio_proto[24D5]mlb[2]
FL7	FIL_NUF2441FC_BGA	radio_proto[22C4]mlb[2]
FL8	FILTER_2P_0201	radio_proto[24D5]mlb[2]
FL9	FILTER_SAFEA2G44AA0F00_LLP	radio_proto[30C4]mlb[2]
FL10	FILTER_2P_0201	radio_proto[26D4]mlb[2]
FL11	FILTER_LFB2H_2.5X2X1-SM	radio_proto[30D4]mlb[2]
FL12	FILTER_SAFEB1G57KB_LLP	radio_proto[28B1]mlb[2]
FL13	FILTER_2P_0201	ap_v1[13D7]mlb[2]
FL14	FILTER_SAFEB1G57FM_LLP	radio_proto[28B4]mlb[2]
FL15	FIL_NUF2441FC_BGA	radio_proto[22D4]mlb[2]
FL16	FILTER_2P_0201	ap_v1[13A7]mlb[2]
FL17	FILTER_2P_0201	ap_v1[13C6]mlb[2]
FL18	FILTER_2P_0201	ap_v1[13B4]mlb[2]
FL19	FILTER_2P_0201	ap_v1[13B4]mlb[2]
FL20	FILTER_2P_0201	ap_v1[13A4]mlb[2]
FL21	FILTER_2P_0201	ap_v1[13A4]mlb[2]
FL22	FILTER_2P_0201	ap_v1[14D6]mlb[2]
FL23	FILTER_2P_0201	ap_v1[16D4]mlb[2]
FL34	FILTER_2P_0201	ap_v1[4D6]mlb[2]
FL35	FILTER_2P_0201	ap_v1[6D1]mlb[2]
FL36	FILTER_2P_0402	ap_v1[6C1]mlb[2]
FL37	FILTER_2P_0201	ap_v1[7C4]mlb[2]
FL38	FILTER_2P_0201	ap_v1[8D7]mlb[2]
FL39	FILTER_2P_0201	ap_v1[12C4]mlb[2]
FL40	FILTER_2P_0201	ap_v1[13B7]mlb[2]
FL41	FILTER_2P_0201	ap_v1[13A7]mlb[2]
FL42	FILTER_2P_0402	ap_v1[13C7]mlb[2]
FL43	FILTER_2P_0201	ap_v1[13A7]mlb[2]
G1	OSC_4PIN_EN1_2.5X2-SM	ap_v1[15B2]mlb[2]
G2	OSC_12014182_SM	radio_proto[25B8]mlb[2]
G3	OSC_DSB221SA_6P_SM	radio_proto[28D3]mlb[2]
J1	CON_F2ST_COAX_S2MT_SM-F-RT-SM	radio_proto[26D3]mlb[2]
J2	CON_M64ST_D_SM_M-ST-SM	radio_proto[27C3]mlb[2]
J3	CON_F2ST_COAX_S2MT_SM-F-ST-SM	radio_proto[28B1]mlb[2]
J4	CON_F2ST_COAX_S2MT_SM-F-ST-SM	radio_proto[30D4]mlb[2]
J7	CON_3HB_S_HB-SM-2P0	radio_proto[24D8]mlb[2]
J19	CON_F45RT_D_SM_F-RT-SM	ap_v1[13D2]mlb[2]
J20	CON_F24ST_SDCARD_SM_F-ST-SM	ap_v1[14C7]mlb[2]
J21	CON_M22ST_D4MT_SM_M-ST-SM	ap_v1[16C7]mlb[2]
J22	CON_F24ST_D4MT_SM_F-ST-SM	ap_v1[16A5]mlb[2]
J24	CON_M14ST_D4MT_SM_M-ST-SM	ap_v1[16B2]mlb[2]
J25	CON_M12ST_D4MT_SM_M-ST-SM	ap_v1[17B5]mlb[2]
J26	CON_M30ST_D4MT_SM_M-ST-SM	ap_v1[15D2]mlb[2]
L1	IND_0201	radio_proto[26D7]mlb[2]
L2	IND_0201	radio_proto[26C7]mlb[2]
L3	IND_0201	radio_proto[29C5]mlb[2]
L4	IND_0201	radio_proto[29C5]mlb[2]
L5	IND_0201	radio_proto[26A8]mlb[2]
L6	IND_0201	radio_proto[26D7]mlb[2]
L7	IND_0201	radio_proto[26D7]mlb[2]
L8	IND_0201	radio_proto[30A4]mlb[2]
L9	IND_0201	radio_proto[26A5]mlb[2]
L10	IND_0201	radio_proto[30B5]mlb[2]
L11	IND_0201	radio_proto[30A5]mlb[2]
L12	IND_0201	radio_proto[26A4]mlb[2]

L13	IND_0201	radio_proto[26C7]mlb[2]
L14	IND_0201	radio_proto[29D6]mlb[2]
L15	IND_03015	radio_proto[30C3]mlb[2]
L16	FIL_LDB18_0603	radio_proto[30B4]mlb[2]
L17	IND_0201	radio_proto[26C7]mlb[2]
L18	IND_0201	radio_proto[26C7]mlb[2]
L19	IND_0201	radio_proto[26C7]mlb[2]
L20	IND_0201	radio_proto[25B3]mlb[2]
L21	IND_0201	radio_proto[25A3]mlb[2]
L22	IND_0201	radio_proto[25B3]mlb[2]
L23	IND_0201	radio_proto[25A3]mlb[2]
L24	IND_0201	radio_proto[25A3]mlb[2]
L26	IND_0201	radio_proto[25A3]mlb[2]
L27	IND_0201	radio_proto[26A5]mlb[2]
L28	IND_0201	radio_proto[26A5]mlb[2]
L29	IND_0201	radio_proto[26A7]mlb[2]
L30	IND_0201	radio_proto[26A7]mlb[2]
L33	IND_0201	radio_proto[26C4]mlb[2]
L34	IND_VLF3012ST	radio_proto[24B7]mlb[2]
L37	IND_0201	radio_proto[25A6]mlb[2]
L38	IND_0201	radio_proto[25A6]mlb[2]
L39	IND_0201	radio_proto[25A6]mlb[2]
L40	IND_0201	radio_proto[25C4]mlb[2]
L41	IND_SM	radio_proto[25B2]mlb[2]
L42	IND_0201	radio_proto[26A3]mlb[2]
L43	IND_0201	radio_proto[26A3]mlb[2]
L47	IND_0201	radio_proto[26A6]mlb[2]
L48	IND_0201	radio_proto[26A4]mlb[2]
L49	IND_0201	radio_proto[26A3]mlb[2]
L50	IND_4P_2COIL_VLPW631 2T-100MR40-SM	radio_proto[24A7]mlb[2]
L51	IND_0201	radio_proto[30C3]mlb[2]
L52	IND_0201	radio_proto[28B5]mlb[2]
L54	IND_0201	radio_proto[28B2]mlb[2]
L60	IND_0201	radio_proto[28A2]mlb[2]
L61	FIL_LDB18_A_0603	radio_proto[26A5]mlb[2]
L62	FIL_LDB18_A_0603	radio_proto[26A2]mlb[2]
L64	FIL_LDB18_A_0603	radio_proto[26A7]mlb[2]
L65	IND_0201	radio_proto[26C4]mlb[2]
L66	IND_0201	radio_proto[25A6]mlb[2]
L69	IND_0201	radio_proto[25B3]mlb[2]
L70	IND_0201	radio_proto[25A3]mlb[2]
L71	IND_0201	radio_proto[25A3]mlb[2]
L72	IND_0201	radio_proto[25A2]mlb[2]
L73	IND_0201	radio_proto[25A2]mlb[2]
L74	IND_0201	radio_proto[25B2]mlb[2]
L75	IND_0201	radio_proto[25B5]mlb[2]
L76	IND_0201	radio_proto[26D8]mlb[2]
L77	IND_0201	radio_proto[26D8]mlb[2]
L78	IND_0201	radio_proto[26C8]mlb[2]
L79	IND_0201	radio_proto[26C8]mlb[2]
L80	IND_0201	radio_proto[26D7]mlb[2]
L81	IND_0201	radio_proto[26D7]mlb[2]
L82	IND_0201	radio_proto[26C7]mlb[2]
L83	IND_0201	radio_proto[26C7]mlb[2]
L97	IND_VLF	ap_v1[11B2]mlb[2]
L98	FILTER_4P_TCM1005	ap_v1[13C4]mlb[2]
L99	FILTER_10P_0603	ap_v1[16B4]mlb[2]
L100	FILTER_10P_0603	ap_v1[16C2]mlb[2]
L101	IND_4P_2COIL_WCDRH23 D09-SM	ap_v1[11C4]mlb[2]
L102	FILTER_2P_0402	ap_v1[12C5]mlb[2]
L103	FILTER_2P_0402	ap_v1[12C5]mlb[2]
L104	FILTER_10P_0603	ap_v1[16B7]mlb[2]
L105	FILTER_10P_0603	ap_v1[16B7]mlb[2]
L106	FILTER_10P_0603	ap_v1[16A7]mlb[2]
L107	IND_VLF3010AT-SM	ap_v1[15A6]mlb[2]
L113	IND_VLS3012-SM	charger[20B3]ap_v1[10]mlb[2]
L117	IND_CDH46D14-SM	charger[20C5]ap_v1[10]mlb[2]
Q1	TRA_SI8409DB_BGA	charger[20D6]ap_v1[10]mlb[2]
Q2	TRA_SI8402DB_BGA	charger[20D5]ap_v1[10]mlb[2]
Q3	TRA_SI8402DB_BGA	charger[20C3]ap_v1[10]mlb[2]
Q4	TRA_SI8409DB_BGA	charger[20B3]ap_v1[10]mlb[2]
Q5	TRA_DUAL_NPCH_NTZD31 55C_SOT-563	ap_v1[11D1]mlb[2]
Q5	TRA_DUAL_NPCH_NTZD31 55C_SOT-563	ap_v1[15B4]mlb[2]
Q6	TRA_DUAL_CMLDM7003_S OT563	ap_v1[16C3 16C4]mlb[2]
Q7	TRA_DUAL_MOSFET_NCHN 3_SOT-963	radio_proto[29B6]mlb[2]
Q7	TRA_DUAL_MOSFET_NCHN 3_SOT-963	radio_proto[30A8]mlb[2]
Q8	TRA_DUAL_MOSFET_NCHN 3_SOT-963	radio_proto[22B8]mlb[2]
Q12	TRA_DUAL_CMLDM7003_S OT563	ap_v1[9C2]mlb[2]
Q12	TRA_DUAL_CMLDM7003_S OT563	ap_v1[17C7]mlb[2]
Q13	TRA_DUAL_NPCH_NTZD31 55C_SOT-563	ap_v1[11C1]mlb[2]
Q13	TRA_DUAL_NPCH_NTZD31 55C_SOT-563	ap_v1[15B4]mlb[2]
Q15	TRA_NCH_SCHOT_6P_WDF N	ap_v1[11B3 11A3]mlb[2]
Q16	TRA_MOSFET_NCHN_3P_C ST3	ap_v1[4A8]mlb[2]
Q17	TRA_MOSFET_NCHN_3P_C ST3	ap_v1[4A7]mlb[2]
Q18	TRA_DUAL_CMLDM7003_S OT563	ap_v1[17C8]mlb[2]
R1	RES_201	radio_proto[28B8]mlb[2]
R2	RES_201	charger[20C6]ap_v1[10]mlb[2]
R3	RES_201	radio_proto[23A5]mlb[2]
R4	RES_201	radio_proto[23B5]mlb[2]
R5	RES_201	radio_proto[23B4]mlb[2]
R6	RES_201	radio_proto[23B4]mlb[2]
R7	RES_201	charger[20A5]ap_v1[10]mlb[2]
R8	RES_201	radio_proto[30B2]mlb[2]
R9	RES_201	radio_proto[25A5]mlb[2]
R10	RES_201	radio_proto[28B7]mlb[2]
R11	RES_201	radio_proto[23B4]mlb[2]
R12	RES_201	radio_proto[28B7]mlb[2]
R13	RES_201	radio_proto[28B3]mlb[2]
R14	RES_201	radio_proto[29D4]mlb[2]
R15	RES_201	radio_proto[28A8]mlb[2]
R16	RES_201	radio_proto[28A8]mlb[2]
R17	RES_201	radio_proto[28A7]mlb[2]
R18	RES_201	radio_proto[22C7]mlb[2]
R19	RES_201	radio_proto[23A5]mlb[2]
R20	RES_201	radio_proto[22C4]mlb[2]
R21	RES_201	radio_proto[22C7]mlb[2]
R22	RES_201	radio_proto[30B4]mlb[2]
R23	RES_201	radio_proto[22D4]mlb[2]
R24	RES_201	radio_proto[22D1]mlb[2]
R25	RES_201	radio_proto[22D2]mlb[2]
R26	RES_201	radio_proto[28A7]mlb[2]
R27	RES_201	radio_proto[22D4]mlb[2]
R28	RES_201	radio_proto[22A3]mlb[2]
R29	RES_201	radio_proto[28D2]mlb[2]
R30	RES_201	radio_proto[22D5]mlb[2]
R31	RES_201	radio_proto[22A4]mlb[2]
R32	RES_0201	radio_proto[24D7]mlb[2]
R33	RES_201	radio_proto[22D4]mlb[2]
R34	RES_201	radio_proto[23B4]mlb[2]
R35	RES_201	radio_proto[23B4]mlb[2]
R36	RES_201	radio_proto[24C5]mlb[2]
R37	RES_201	radio_proto[22A8]mlb[2]
R38	RES_201	radio_proto[26C4]mlb[2]
R39	RES_201	ap_v1[5D5]mlb[2]
R40	RES_201	ap_v1[5D5]mlb[2]
R41	RES_201	radio_proto[22A8]mlb[2]
R42	RES_201	radio_proto[22A8]mlb[2]
R43	RES_201	radio_proto[22A8]mlb[2]
R44	RES_201	radio_proto[29A5]mlb[2]
R45	RES_201	ap_v1[5B2]mlb[2]
R46	RES_201	ap_v1[5A2]mlb[2]
R47	RES_201	ap_v1[5A1]mlb[2]
R48	RES_201	radio_proto[22A8]mlb[2]
R49	RES_201	ap_v1[6D8]mlb[2]
R50	RES_201	radio_proto[22A8]mlb[2]
R51	RES_201	radio_proto[29A5]mlb[2]
R52	RES_201	radio_proto[25A7]mlb[2]
R53	RES_201	radio_proto[24A3]mlb[2]
R54	RES_201	radio_proto[29A5]mlb[2]
R55	RES_201	radio_proto[29A4]mlb[2]
R56	RES_201	radio_proto[29A4]mlb[2]
R58	RES_201	radio_proto[28C5]mlb[2]
R59	RES_201	radio_proto[28B5]mlb[2]
R60	RES_201	ap_v1[7A3]mlb[2]
R61	RES_201	ap_v1[7A2]mlb[2]
R62	RES_201	ap_v1[7A2]mlb[2]
R63	RES_201	ap_v1[8C7]mlb[2]
R64	RES_201	ap_v1[8C7]mlb[2]
R65	RES_201	ap_v1[8C7]mlb[2]
R66	RES_201	ap_v1[8C6]mlb[2]
R67	RES_201	ap_v1[8C6]mlb[2]
R68	RES_201	ap_v1[8C6]mlb[2]
R69	RES_201	ap_v1[8B6]mlb[2]
R70	RES_201	radio_proto[26C1]mlb[2]
R71	RES_201	radio_proto[25B8]mlb[2]
R72	RES_201	ap_v1[8B5]mlb[2]
R73	RES_201	radio_proto[25B8]mlb[2]
R74	RES_201	ap_v1[8A4]mlb[2]
R75	RES_201	radio_proto[30A8]mlb[2]
R76	RES_201	radio_proto[30B5]mlb[2]
R77	RES_201	radio_proto[25B5]mlb[2]
R78	RES_201	ap_v1[9A7]mlb[2]
R79	RES_201	ap_v1[9A7]mlb[2]
R80	RES_201	radio_proto[30B1]mlb[2]
R81	RES_201	radio_proto[30B1]mlb[2]
R82	RES_201	ap_v1[9C3]mlb[2]
R83	RES_201	radio_proto[25C4]mlb[2]
R84	RES_201	radio_proto[25D3]mlb[2]
R85	RES_201	radio_proto[25C3]mlb[2]
R86	RES_201	ap_v1[10A7]mlb[2]
R87	RES_201	radio_proto[30D6]mlb[2]
R88	RES_201	radio_proto[25C2]mlb[2]
R89	RES_201	radio_proto[22D7]mlb[2]
R92	RES_201	radio_proto[22D7]mlb[2]
R93	RES_201	radio_proto[23B4]mlb[2]
R94	RES_201	radio_proto[23B7]mlb[2]
R95	RES_201	radio_proto[30B8]mlb[2]
R96	RES_201	radio_proto[22D7]mlb[2]
R97	RES_201	radio_proto[22D3]mlb[2]
R98	RES_201	ap_v1[11D7]mlb[2]
R99	RES_201	radio_proto[22B3]mlb[2]
R100	RES_201	ap_v1[11A6]mlb[2]
R101	RES_201	radio_proto[30A5]mlb[2]
R102	RES_201	ap_v1[11A4]mlb[2]
R103	RES_201	radio_proto[30D6]mlb[2]
R104	RES_201	radio_proto[26D5]mlb[2]
R105	RES_201	radio_proto[26D6]mlb[2]
R106	RES_201	radio_proto[26D6]mlb[2]
R107	RES_201	radio_proto[26D8]mlb[2]
R108	RES_201	radio_proto[30D2]mlb[2]
R109	RES_201	radio_proto[26B6]mlb[2]
R110	RES_201	radio_proto[29A5]mlb[2]
R111	RES_201	radio_proto[30A6]mlb[2]
R112	RES_201	ap_v1[12B6]mlb[2]
R113	RES_201	ap_v1[12C5]mlb[2]
R114	RES_201	radio_proto[26B7]mlb[2]
R115	RES_201	ap_v1[12D5]mlb[2]
R116	RES_201	radio_proto[26B4]mlb[2]
R117	RES_201	ap_v1[13B7]mlb[2]
R118	RES_201	radio_proto[22C3]mlb[2]
R119	RES_201	radio_proto[22C3]mlb[2]
R120	RES_201	radio_proto[24C7]mlb[2]
R121	RES_201	radio_proto[24C7]mlb[2]
R122	RES_201	radio_proto[24C3]mlb[2]
R123	RES_201	ap_v1[14A5]mlb[2]
R124	RES_201	radio_proto[28B8]mlb[2]
R125	RES_201	radio_proto[28B8]mlb[2]
R126	RES_201	radio_proto[26B8]mlb[2]
R127	RES_201	ap_v1[16C6]mlb[2]
R128	RES_201	ap_v1[16C4]mlb[2]
R129	RES_201	ap_v1[16C4]mlb[2]
R130	RES_201	radio_proto[30B4]mlb[2]
R131	RES_201	radio_proto[30B4]mlb[2]
R132	RES_201	radio_proto[30A1]mlb[2]
R133	RES_201	radio_proto[29B7]mlb[2]
R134	RES_201	radio_proto[29B7]mlb[2]
R135	RES_201	radio_proto[30A8]mlb[2]
R136	RES_201	radio_proto[30A8]mlb[2]
R139	RES_201	ap_v1[15C6]mlb[2]
R140	RES_201	ap_v1[15C6]mlb[2]
R141	RES_201	ap_v1[15C5]mlb[2]
R142	RES_201	ap_v1[15A5]mlb[2]
R143	RES_201	radio_proto[30A4]mlb[2]
R144	RES_201	ap_v1[15B4]mlb[2]
R145	RES_201	ap_v1[15A4]mlb[2]
R150	RES_201	ap_v1[4A8]mlb[2]
R151	RES_201	ap_v1[4A6]mlb[2]
R152	RES_201	ap_v1[7D7]mlb[2]
R153	RES_201	radio_proto[26B7]mlb[2]
R154	RES_201	radio_proto[26B6]mlb[2]
R156	RES_201	radio_proto[30D2]mlb[2]
R240	THERMISTER_0201	radio_proto[25A7]mlb[2]
R241	RES_201	ap_v1[6C5]mlb[2]
R242	RES_201	ap_v1[9A5]mlb[2]
R249	RES_201	ap_v1[11B6]mlb[2]
R250	RES_201	ap_v1[12C5]mlb[2]
R251	RES_201	ap_v1[13C7]mlb[2]
R252	RES_201	ap_v1[17C8]mlb[2]
R253	RES_201	ap_v1[5B2]mlb[2]
R254	RES_201	ap_v1[6A6]mlb[2]
R255	RES_201	ap_v1[6A6]mlb[2]
R256	RES_201	ap_v1[6A6]mlb[2]
R257	RES_201	ap_v1[10A7]mlb[2]
R258	RES_201	ap_v1[4B7]mlb[2]
R259	RES_201	ap_v1[4D7]mlb[2]
R261	RES_201	ap_v1[4B8]mlb[2]
R262	RES_201	ap_v1[4B8]mlb[2]
R263	RES_201	ap_v1[4B6]mlb[2]
R264	RES_201	ap_v1[4A4]mlb[2]
R265	RES_201	ap_v1[4B4]mlb[2]
R266	RES_201	ap_v1[4B3]mlb[2]
R267	RES_201	ap_v1[4C3]mlb[2]
R268	RES_201	ap_v1[4C2]mlb[2]
R269	RES_201	ap_v1[4D2]mlb[2]
R270	RES_201	ap_v1[4C2]mlb[2]
R271	RES_201	ap_v1[4D2]mlb[2]
R272	RES_201	ap_v1[4C2]mlb[2]
R273	RES_201	ap_v1[4A2]mlb[2]
R274	RES_201	ap_v1[5D4]mlb[2]
R277	RES_201	ap_v1[5B1]mlb[2]
R278	RES_201	ap_v1[6D7]mlb[2]
R279	RES_201	ap_v1[6D7]mlb[2]
R280	RES_201	ap_v1[6D7]mlb[2]
R281	RES_201	ap_v1[6A6]mlb[2]
R282	RES_201	ap_v1[6C6]mlb[2]
R284	RES_201	ap_v1[7A6]mlb[2]
R285	RES_201	ap_v1[8B6]mlb[2]
R286	RES_201	ap_v1[8B5]mlb[2]
R287	RES_201	ap_v1[8C5]mlb[2]
R288	RES_201	ap_v1[8C3]mlb[2]
R289	RES_201	ap_v1[8C2]mlb[2]
R290	RES_201	ap_v1[8C2]mlb[2]
R291	RES_201	ap_v1[9B6]mlb[2]
R292	RES_201	ap_v1[9A6]mlb[2]
R293	RES_201	ap_v1[9C3]mlb[2]
R294	RES_201	ap_v1[9C2]mlb[2]
R295	RES_201	ap_v1[9B2]mlb[2]
R300	RES_201	ap_v1[11A8]mlb[2]
R301	RES_201	ap_v1[11A7]mlb[2]
R302	RES_201	ap_v1[11B7]mlb[2]
R303	RES_201	ap_v1[11D7]mlb[2]
R304	RES_201	ap_v1[11C7]mlb[2]
R305	RES_201	ap_v1[11C6]mlb[2]
R306	RES_201	ap_v1[11A4]mlb[2]
R307	RES_201	ap_v1[11A3]mlb[2]
R308	RES_201	ap_v1[11B3]mlb[2]
R309	RES_201	ap_v1[11B3]mlb[2]
R310	RES_201	ap_v1[11D2]mlb[2]
R311	RES_201	ap_v1[11A2]mlb[2]
R312	RES_201	ap_v1[11D1]mlb[2]
R313	RES_201	ap_v1[12B7]mlb[2]
R314	RES_201	ap_v1[12B6]mlb[2]
R315	RES_201	ap_v1[12D5]mlb[2]
R316	RES_201	ap_v1[13D6]mlb[2]
R317	RES_201	ap_v1[13D4]mlb[2]
R318	RES_201	ap_v1[13D3]mlb[2]
R319	RES_201	ap_v1[14B6]mlb[2]
R320	RES_201	ap_v1[14B6]mlb[2]
R321	RES_201	ap_v1[14A4]mlb[2]
R322	RES_201	ap_v1[16B6]mlb[2]
R323	RES_201	ap_v1[16B6]mlb[2]
R324	RES_201	ap_v1[16D3]mlb[2]
R325	RES_201	ap_v1[16C3]mlb[2]
R326	RES_201	ap_v1[16A1]mlb[2]
R327	RES_201	ap_v1[16A1]mlb[2]
R328	RES_201	ap_v1[17C8]mlb[2]
R329	RES_201	ap_v1[17A6]mlb[2]
R330	RES_201	ap_v1[17B6]mlb[2]
R331	RES_201	ap_v1[15A7]mlb[2]
R332	RES_201	ap_v1[15A5]mlb[2]
R333	RES_201	ap_v1[15B4]mlb[2]
R334	RES_201	ap_v1[15A4]mlb[2]
R335	RES_201	ap_v1[15A4]mlb[2]
R342	RES_201	ap_v1[9A5]mlb[2]
R346	RES_603	charger[20C7]ap_v1[10]mlb[2]
R367	RES_201	charger[20A4]ap_v1[10]mlb[2]
R368	RES_201	charger[20A4]ap_v1[10]mlb[2]
R369	RES_201	charger[20A3]ap_v1[10]mlb[2]
R370	RES_201	ap_v1[11C6]mlb[2]
R371	RES_201	ap_v1[11C6]mlb[2]
R372	RES_201	ap_v1[12C5]mlb[2]
R373	RES_201	ap_v1[4D8]mlb[2]
R374	RES_201	ap_v1[4B8]mlb[2]
R375	RES_201	ap_v1[4D7]mlb[2]
R376	RES_201	ap_v1[4D6]mlb[2]
R377	RES_201	ap_v1[7D7]mlb[2]
R389	RES_201	charger[20C7]ap_v1[10]mlb[2]
R390	RES_201	charger[20D5]ap_v1[10]mlb[2]
R391	RES_201	charger[20B4]ap_v1[10]mlb[2]
R392	RES_201	charger[20B4]ap_v1[10]mlb[2]
R393	RES_201	charger[20C4]ap_v1[10]mlb[2]
R394	RES_201	charger[20A4]ap_v1[10]mlb[2]
R395	RES_201	charger[20C4]ap_v1[10]mlb[2]
R396	RES_201	charger[20A3]ap_v1[10]mlb[2]
R397	RES_201	charger[20A3]ap_v1[10]mlb[2]
R398	RES_402	charger[20C2]ap_v1[10]mlb[2]
RP1	RPAK4P_4X0201	ap_v1[4C7]mlb[2]
SH1	SHLD_1P_SM	radio_proto[27B2]mlb[2]
SH2	SHLD_1P_SM	radio_proto[27B1]mlb[2]
SL1	SLOT_TH	radio_proto[27A2]mlb[2]
SL2	SLOT_TH	radio_proto[27A2]mlb[2]
SL3	SLOT_TH	radio_proto[27A2]mlb[2]
SL4	SLOT_TH	radio_proto[27A1]mlb[2]
SL9	SLOT_TH	ap_v1[17D2]mlb[2]
SL10	SLOT_TH	ap_v1[17D2]mlb[2]
SL11	SLOT_TH	ap_v1[17D2]mlb[2]
SL12	SLOT_TH	ap_v1[17D2]mlb[2]
T1	XFR_HHM1710D1_LLP	radio_proto[29C7]mlb[2]
TP1	TP_TP-P6	radio_proto[24A3]mlb[2]
TP2	TP_TP-P6	radio_proto[24A3]mlb[2]
TP3	TP_TP-P6	radio_proto[24A3]mlb[2]
TP4	TP_TP-P6	radio_proto[24A3]mlb[2]
TP5	TP_TP-P6	radio_proto[30A8]mlb[2]
TP6	TP_TP-1P0-TOP	radio_proto[27C3]mlb[2]
TP7	TP_TP-1P0-TOP	radio_proto[27B3]mlb[2]
TP8	TP_TP-1P0-TOP	radio_proto[27B3]mlb[2]
TP9	TP_TP-P6	radio_proto[27C1]mlb[2]
TP10	TP_TP-P6	radio_proto[27B1]mlb[2]
TP11	TP_TP-P6	radio_proto[27B1]mlb[2]
TP12	TP_TP-P6	radio_proto[27C4]mlb[2]
TP13	TP_TP-P6	radio_proto[27C4]mlb[2]
TP16	TP_TP-1P0-TOP	radio_proto[27C3]mlb[2]
TP17	TP_TP-P6	radio_proto[24A3]mlb[2]
TP18	TP_TP-P6	radio_proto[22B7]mlb[2]
TP19	TP_TP-P6	radio_proto[22B7]mlb[2]
TP20	TP_TP-P6	radio_proto[22C5]mlb[2]
TP21	TP_TP-P6	radio_proto[22C5]mlb[2]
TP22	TP_TP-P6	radio_proto[23A3]mlb[2]
TP23	TP_TP-P6	radio_proto[23A3]mlb[2]
TP24	TP_TP-P6	radio_proto[23A3]mlb[2]
TP25	TP_TP-P6	radio_proto[23A3]mlb[2]
TP26	TP_TP-P6	radio_proto[23A3]mlb[2]
TP27	TP_TP-P6	radio_proto[23A3]mlb[2]
TP28	TP_TP-P6	radio_proto[23A1]mlb[2]
TP29	TP_TP-P6	radio_proto[23A1]mlb[2]
TP30	TP_TP-P6	radio_proto[23A1]mlb[2]
TP31	TP_TP-P6	radio_proto[23A1]mlb[2]
TP32	TP_TP-P6	radio_proto[23A1]mlb[2]
TP54	TP_TP-P6	radio_proto[30A8]mlb[2]
TP57	TP_TP-P6	radio_proto[30B8]mlb[2]
TP58	TP_TP-P6	radio_proto[30A5]mlb[2]
TP61	TP_TP-P6	radio_proto[29B3]mlb[2]
TP62	TP_TP-P6	radio_proto[29B3]mlb[2]
TP63	TP_TP-P6	radio_proto[29B3]mlb[2]
U1	74AUP1G0832_SOT891	radio_proto[30D1]mlb[2]
U2	BC418143A_CSP	radio_proto[29C5]mlb[2]
U3	LTC4088EDE1_DFN14	charger[20B4]ap_v1[10]mlb[2]
U4	LMSP4LMA_QFN	radio_proto[26C5]mlb[2]
U5	SKY77436_MCM	radio_proto[26B5]mlb[2]
U6	SWI_XM0860SHDL0667_Q FN	radio_proto[30C2]mlb[2]
U7	MARIO_QFN	ap_v1[15D4]mlb[2]
U8	SN74AUP1T97_WCSP	radio_proto[30D2]mlb[2]
U12	74LVC2G34_SOT891	ap_v1[4A3 4A3]mlb[2]
U13	PSRAM_256MB64MB_BGA1 07_BGA	radio_proto[23D3]mlb[2]
U14	SKY77340_MCM	radio_proto[26D2]mlb[2]
U15	74LVC2G08_SOT833	ap_v1[5A2 5B2]mlb[2]
U16	PMB6952_BGA	radio_proto[25D2 25D6]mlb[2]
U17	LMRXJCA_QFN	radio_proto[25A5]mlb[2]
U18	SN74LVC1G99_BGA	ap_v1[11B8]mlb[2]
U19	AMP_TQM676021_LGA	radio_proto[26B3]mlb[2]
U20	OM3805_HUQFN	ap_v1[11C5]mlb[2]
U21	74LVC2G34_SOT891	ap_v1[13D6 13C8]mlb[2]
U22	PMB8878_P4_BGA	radio_proto[22D2 22D6]mlb[2]
U22	PMB8878_P4_BGA	radio_proto[23D7]mlb[2]
U23	74LVC1G08GF_SOT891	radio_proto[22D8]mlb[2]
U24	SUPPR_NUP412VP5_SOT9 53	ap_v1[13C5]mlb[2]
U25	PMB6820_WFSGA	radio_proto[24C5]mlb[2]
U26	LIS302DL_LGA	ap_v1[14D5]mlb[2]
U27	74LVC1G332_SOT891	radio_proto[22A3]mlb[2]
U28	88W8688B2_CSP67_CSP6 7	radio_proto[30C7]mlb[2]
U29	TPS61045_QFN	ap_v1[15A7]mlb[2]
U30	SWI_SPDT_DG2717_SOT6 66	radio_proto[30D6]mlb[2]
U31	PMB2525_BGA	radio_proto[28C7]mlb[2]
U33	BGA615L7_TSLP	radio_proto[28B3]mlb[2]
U34	FLASH_4GX8_48P4_TSOP	ap_v1[6B7]mlb[2]
U35	S5L8900X01_BGA	ap_v1[8C4]mlb[2]
U36	74LVC2G34_SOT891	ap_v1[7C7 7C6]mlb[2]
U37	SKY77434_MCM	radio_proto[26A8]mlb[2]
U38	PWRDIV_LDD182G4503A_ LLP	radio_proto[30A2]mlb[2]
U39	SN74AUP1T97_WCSP	ap_v1[7D5]mlb[2]
U40	SN74AUP1T97_WCSP	ap_v1[7C5]mlb[2]
U41	XM2500LB_QFN	radio_proto[30A3]mlb[2]
U44	MF2425PH_BL1767TMP_Q FN	radio_proto[30C3]mlb[2]
U53	THS7318_BGA	ap_v1[8C6]mlb[2]
U56	74LVC1G86_SOT891	ap_v1[11A8]mlb[2]
U57	74LVC2G66_BGA	ap_v1[14A4 14B5]mlb[2]
U58	74LVC2G04_SOT891	ap_v1[4C8 4C8]mlb[2]
U59	S5L8900X01_MOBILE_BG A	ap_v1[4D5]mlb[2]
U59	S5L8900X01_MOBILE_BG A	ap_v1[5C6]mlb[2]
U59	S5L8900X01_MOBILE_BG A	ap_v1[6D4 6D7]mlb[2]
U59	S5L8900X01_MOBILE_BG A	ap_v1[7B6]mlb[2]
U62	LM2512_UFBGA	ap_v1[7B3]mlb[2]
U64	SN74LVC1G99_BGA	ap_v1[11D8]mlb[2]
U65	SN74AUP1T97_WCSP	ap_v1[13D7]mlb[2]
U66	74LVC2G34_SOT891	ap_v1[13D7]mlb[2]
U66	74LVC2G34_SOT891	ap_v1[16B5]mlb[2]
U67	SUPPR_NUP412VP5_SOT9 53	ap_v1[13A3]mlb[2]
U68	SUPPR_NUP412VP5_SOT9 53	ap_v1[14C4]mlb[2]
U69	ZEPHYR2_BGA81_FBGA1	ap_v1[15D7]mlb[2]
U70	74LVC2G04_SOT891	ap_v1[4A6]mlb[2]
U70	74LVC2G04_SOT891	ap_v1[7B8]mlb[2]
U73	WM8758_QFN	ap_v1[9C6]mlb[2]
U78	FLASH_1MX8_16BGA_XFB GA	ap_v1[7D7]mlb[2]
U79	SN74AUP1T97_WCSP	ap_v1[7D5]mlb[2]
U81	SWREG_LT3493_DFN	charger[20C6]ap_v1[10]mlb[2]
U82	MAX4845_UDFN6	charger[20D5]ap_v1[10]mlb[2]
VR1	VREG_LP3986_BGA	ap_v1[10A7]mlb[2]
VR2	LREG_TK684_FC-4	radio_proto[30D8]mlb[2]
XW1	SHORT_SHORT-0201-NSM	ap_v1[4D6]mlb[2]
XW2	SHORT_SHORT-0201-NSM	ap_v1[4C3]mlb[2]
XW3	SHORT_SHORT-0201	radio_proto[28D5]mlb[2]
XW4	SHORT_SHORT-0201	radio_proto[22D2]mlb[2]
XW5	SHORT_SHORT-0201-NSM	radio_proto[30C4]mlb[2]
XW6	SHORT_SHORT-0201-NSM	ap_v1[4C2]mlb[2]
XW7	SHORT_SHORT-0201-NSM	ap_v1[4D2]mlb[2]
XW8	SHORT_SHORT-0201	radio_proto[23D4]mlb[2]
XW9	SHORT_SHORT-0201	radio_proto[23D4]mlb[2]
XW10	SHORT_SM	radio_proto[26D2]mlb[2]
XW11	SHORT_SM	radio_proto[24B7]mlb[2]
XW12	SHORT_SM	radio_proto[24B8]mlb[2]
XW13	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW14	SHORT_SHORT-0201-NSM	ap_v1[7B2]mlb[2]
XW15	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW16	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW17	SHORT_SHORT-0201-NSM	ap_v1[8D3]mlb[2]
XW19	SHORT_SHORT-0201-NSM	ap_v1[9D7]mlb[2]

XW20	SHORT_SHORT-0201-NSM	ap_v1[9D6]mlb[2]
XW21	SHORT_SM	radio_proto[23A7]mlb[2]
XW22	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW23	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW24	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW25	SHORT_SM	radio_proto[26D2]mlb[2]
XW26	SHORT_SM	radio_proto[24B8]mlb[2]
XW27	SHORT_SM	radio_proto[24A8]mlb[2]
XW28	SHORT_SM	radio_proto[24A6]mlb[2]
XW29	SHORT_SM	radio_proto[24A6]mlb[2]
XW30	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW31	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW32	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW33	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW34	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW35	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW36	SHORT_SHORT-0201-NSM	radio_proto[30A3]mlb[2]
XW37	SHORT_SHORT-0201	ap_v1[15C2]mlb[2]
XW38	SHORT_SHORT-0201	ap_v1[15C2]mlb[2]
XW39	SHORT_SHORT-0201	ap_v1[15C2]mlb[2]
XW40	SHORT_SHORT-0201	ap_v1[15B2]mlb[2]
XW60	SHORT_SHORT-0201	radio_proto[24D7]mlb[2]
XW64	SHORT_SHORT-0201-NSM	ap_v1[6B1]mlb[2]
XW65	SHORT_SHORT-0201-NSM	ap_v1[7B6]mlb[2]
XW66	SHORT_SHORT-0201-NSM	ap_v1[8D7]mlb[2]
XW67	SHORT_SHORT-0201-NSM	ap_v1[9D7]mlb[2]
XW68	SHORT_SM	ap_v1[9A4]mlb[2]
XW69	SHORT_SHORT-0201-NSM	ap_v1[10A7]mlb[2]
XW70	SHORT_SM	ap_v1[11A6]mlb[2]
XW71	SHORT_SHORT-0201-NSM	ap_v1[11D4]mlb[2]
XW72	SHORT_SM	ap_v1[11C4]mlb[2]
XW73	SHORT_SM	ap_v1[12B7]mlb[2]
XW74	SHORT_SHORT-0201-NSM	ap_v1[16A4]mlb[2]
XW75	SHORT_SHORT-0201-NSM	ap_v1[16A3]mlb[2]
XW77	SHORT_SHORT-0201-NSM	ap_v1[15D6]mlb[2]
XW78	SHORT_SHORT-0201-NSM	ap_v1[15D3]mlb[2]
XW79	SHORT_SHORT-0201-NSM	ap_v1[4C2]mlb[2]
XW80	SHORT_SHORT-0201-NSM	ap_v1[4C2]mlb[2]
XW81	SHORT_SHORT-0201-NSM	ap_v1[4B1]mlb[2]
XW82	SHORT_SHORT-0201-NSM	ap_v1[4A1]mlb[2]
XW83	SHORT_SHORT-0201-NSM	ap_v1[5D3]mlb[2]
XW84	SHORT_SHORT-0201-NSM	ap_v1[6B6]mlb[2]
XW85	SHORT_SHORT-0201-NSM	ap_v1[6C1]mlb[2]
XW86	SHORT_SM	ap_v1[8A6]mlb[2]
XW89	SHORT_SM	ap_v1[11C4]mlb[2]
XW91	SHORT_SM	ap_v1[12B5]mlb[2]
XW92	SHORT_SM	charger[20D2]ap_v1[10]mlb[2]
XW93	SHORT_SM	charger[20D2]ap_v1[10]mlb[2]
Y1	CRYSTAL_3.2X1.5X.6-SM	radio_proto[23A4]mlb[2]
Y2	CRYSTAL_4PIN_SM-2	ap_v1[8A4]mlb[2]
Y3	CRYSTAL_3.2X1.5X.6-SM	ap_v1[11A5]mlb[2]
Y5	CRYSTAL_4PIN_SM-2	ap_v1[4B6]mlb[2]
Y7	CRYSTAL_4PIN_SM-2	radio_proto[30A5]mlb[2]

U29_AP	FLASH_4GX8_48P1_TSOP	ap_v1[6B7]mlb[2]
U30_AP	ISL59121_WLCSP9	ap_v1[8C6]mlb[2]
U30_RF	SWI_SPDT_DG2717_SOT666	radio_proto[30D8]mlb[2]
U31_RF	PMB2525_BGA	radio_proto[28C7]mlb[2]
U33_RF	BGA615L7_TSLP	radio_proto[28B3]mlb[2]
U36_AP	74LVC1G08GF_SOT891	ap_v1[11A6]mlb[2]
U37_RF	SKY77434_MCM	radio_proto[26A8]mlb[2]
U40_AP	74LVC1G157_SOT891	ap_v1[17D7]mlb[2]
U41_AP	74LVC1G157_SOT891	ap_v1[17C7]mlb[2]
U42_AP	SN74AUP1T97_WCSP	ap_v1[17B7]mlb[2]
U56_AP	74LVC1G86_SOT891	ap_v1[14B7]mlb[2]
U59_AP	H1_N82_BGA	ap_v1[4C5]mlb[2]
U59_AP	H1_N82_BGA	ap_v1[5C6]mlb[2]
U59_AP	H1_N82_BGA	ap_v1[6D4 6D6]mlb[2]
U59_AP	H1_N82_BGA	ap_v1[7B6]mlb[2]
U59_AP	H1_N82_BGA	ap_v1[8C4]mlb[2]
VR1_AP	VREG_LP3986_BGA	ap_v1[16B2]mlb[2]
VR1_RF	LREG_TK684_FC-4	radio_proto[30C8]mlb[2]
XW1_AP	SHORT_SHORT-0201-NSM	ap_v1[4D6]mlb[2]
XW1_RF	SHORT_SHORT-0201-NSM	radio_proto[30B6]mlb[2]
XW2_AP	SHORT_SHORT-0201-NSM	ap_v1[17C2]mlb[2]
XW2_RF	SHORT8L25_WITH_ALTS_SM	radio_proto[24D7]mlb[2]
XW3_AP	SHORT_SHORT-0201-NSM	ap_v1[17C2]mlb[2]
XW3_RF	SHORT_SHORT-0201	radio_proto[28D5]mlb[2]
XW4_AP	SHORT_SHORT-0201-NSM	ap_v1[17C2]mlb[2]
XW4_RF	SHORT_SHORT-0201	radio_proto[22D3]mlb[2]
XW5_AP	SHORT_SHORT-0201-NSM	ap_v1[17C2]mlb[2]
XW6_AP	SHORT_SHORT-0201-NSM	ap_v1[4D3]mlb[2]
XW6_RF	SHORT8L25_WITH_ALTS_SM	radio_proto[24D7]mlb[2]
XW7_AP	SHORT_SHORT-0201-NSM	ap_v1[4D3]mlb[2]
XW8_AP	SHORT_SHORT-0201-NSM	ap_v1[4D3]mlb[2]
XW8_RF	SHORT_SHORT-0201	radio_proto[23D4]mlb[2]
XW9_AP	SHORT_SHORT-0201-NSM	ap_v1[11A3]mlb[2]
XW9_RF	SHORT_SHORT-0201	radio_proto[23D4]mlb[2]
XW10_AP	SHORT_SHORT-0201-NSM	ap_v1[6C6]mlb[2]
XW10_RF	SHORT_SM	radio_proto[26D2]mlb[2]
XW11_AP	SHORT_SHORT-0201-NSM	ap_v1[6D3]mlb[2]
XW11_RF	SHORT_SM	radio_proto[24B7]mlb[2]
XW12_AP	SHORT_SHORT-0201-NSM	ap_v1[13B6]mlb[2]
XW12_RF	SHORT_SM	radio_proto[24B8]mlb[2]
XW13_AP	SHORT_SHORT-0201-NSM	ap_v1[7B6]mlb[2]
XW13_RF	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW14_AP	SHORT_SHORT-0201-NSM	ap_v1[7B2]mlb[2]
XW15_AP	SHORT_SHORT-0201-NSM	ap_v1[8C2]mlb[2]
XW15_RF	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW16_AP	SHORT_SM	ap_v1[8A6]mlb[2]
XW16_RF	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW17_AP	SHORT_SHORT-0201-NSM	ap_v1[8D2]mlb[2]
XW18_AP	SHORT_SHORT-0201-NSM	ap_v1[9D5]mlb[2]
XW19_AP	SHORT_SHORT-0201-NSM	ap_v1[9D4]mlb[2]
XW20_AP	SHORT_SHORT-0201-NSM	ap_v1[13B6]mlb[2]
XW21_AP	SHORT_SM	ap_v1[9A5]mlb[2]
XW21_RF	SHORT_SM	radio_proto[23A7]mlb[2]
XW22_AP	SHORT_SHORT-0201-NSM	ap_v1[16B3]mlb[2]
XW22_RF	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW23_AP	SHORT_SM	ap_v1[11B6]mlb[2]
XW23_RF	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW24_AP	SHORT_SHORT-0201-NSM	ap_v1[17B4]mlb[2]
XW24_RF	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW25_AP	SHORT_SM	ap_v1[11C4]mlb[2]
XW25_RF	SHORT_SM	radio_proto[26D2]mlb[2]
XW26_AP	SHORT_SM	ap_v1[11C4]mlb[2]
XW26_RF	SHORT_SM	radio_proto[24B8]mlb[2]
XW27_AP	SHORT_SHORT-0201-NSM	ap_v1[17B4]mlb[2]
XW27_RF	SHORT_SM	radio_proto[24A8]mlb[2]
XW28_AP	SHORT_SHORT-0201-NSM	ap_v1[17B4]mlb[2]
XW28_RF	SHORT_SM	radio_proto[24A6]mlb[2]
XW29_AP	SHORT_SHORT-0201-NSM	ap_v1[16B6]mlb[2]
XW29_RF	SHORT_SM	radio_proto[24A6]mlb[2]
XW30_AP	SHORT_SHORT-0201-NSM	ap_v1[17B4]mlb[2]
XW30_RF	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW31_AP	SHORT_SHORT-0201-NSM	ap_v1[15D5]mlb[2]
XW31_RF	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW32_AP	SHORT_SHORT-0201-NSM	ap_v1[15D1]mlb[2]
XW32_RF	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW33_AP	SHORT_SHORT-0201	ap_v1[15B5]mlb[2]
XW33_RF	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW34_AP	SHORT_SHORT-0201	ap_v1[15B5]mlb[2]
XW34_RF	SHORT_SHORT-0201-NSM	radio_proto[24C1]mlb[2]
XW35_AP	SHORT_SHORT-0201	ap_v1[15C5]mlb[2]
XW35_RF	SHORT_SHORT-0201-NSM	radio_proto[24B1]mlb[2]
XW36_AP	SHORT_SHORT-0201	ap_v1[15C5]mlb[2]
XW37_AP	SHORT_SHORT-0201-NSM	ap_v1[17B4]mlb[2]
XW38_AP	SHORT_SHORT-0201-NSM	ap_v1[15A2]mlb[2]
XW39_AP	SHORT_SHORT-0201-NSM	ap_v1[15A2]mlb[2]
XW43_AP	SHORT_SHORT-0201-NSM	ap_v1[4C8]mlb[2]
XW60_RF	SHORT_SHORT-0201	radio_proto[24D7]mlb[2]
Y1_AP	CRYSTAL_4PIN_SM-2	ap_v1[4A6]mlb[2]
Y1_RF	CRYSTAL_3.2X1.5X.6-SM	radio_proto[23A4]mlb[2]
Y2_AP	CRYSTAL_4PIN_SM-2	ap_v1[8B4]mlb[2]
Y3_AP	CRYSTAL_3.2X1.5X.6-SM	ap_v1[11C8]mlb[2]

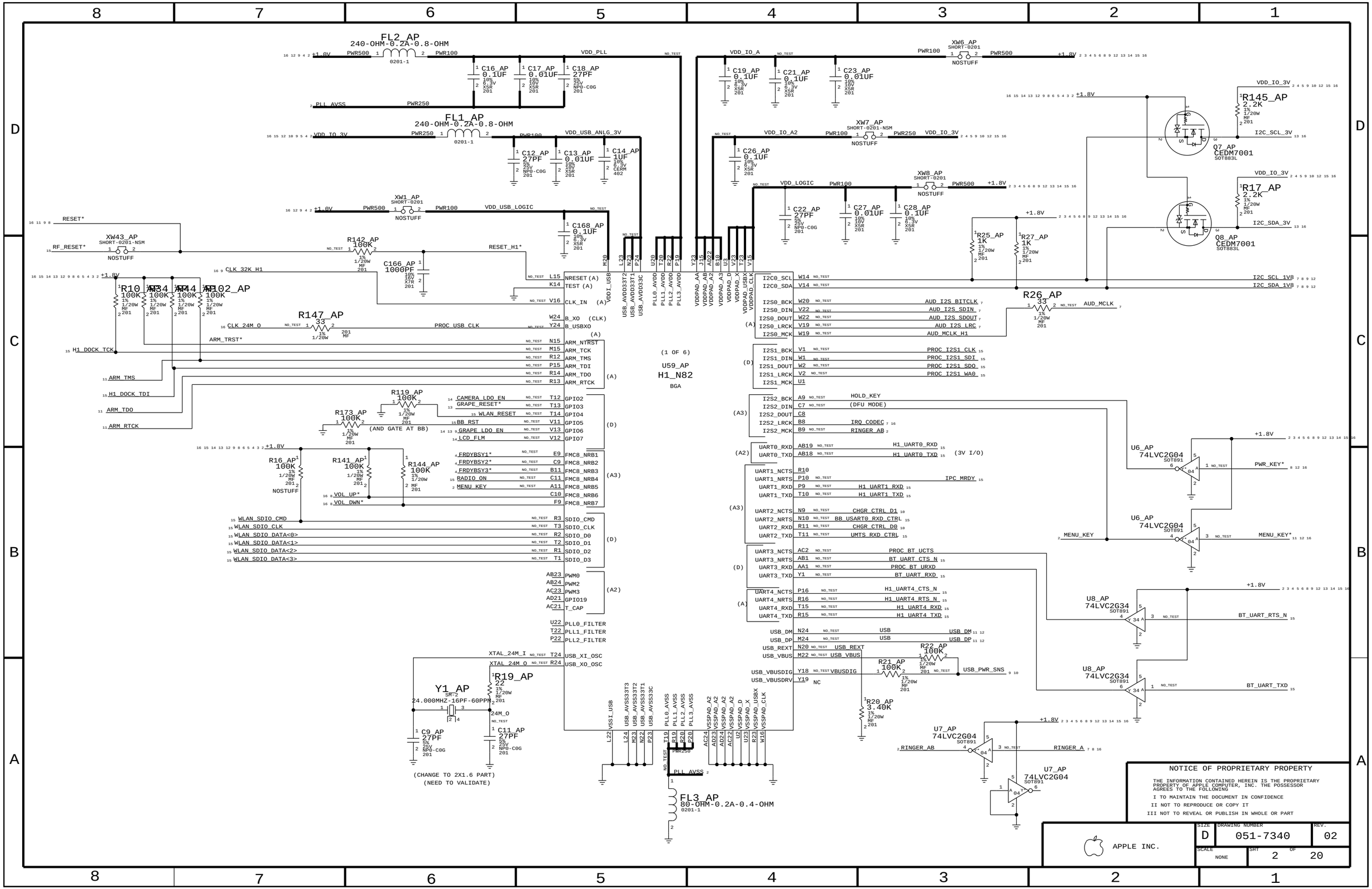
MLB EVT3B REV10

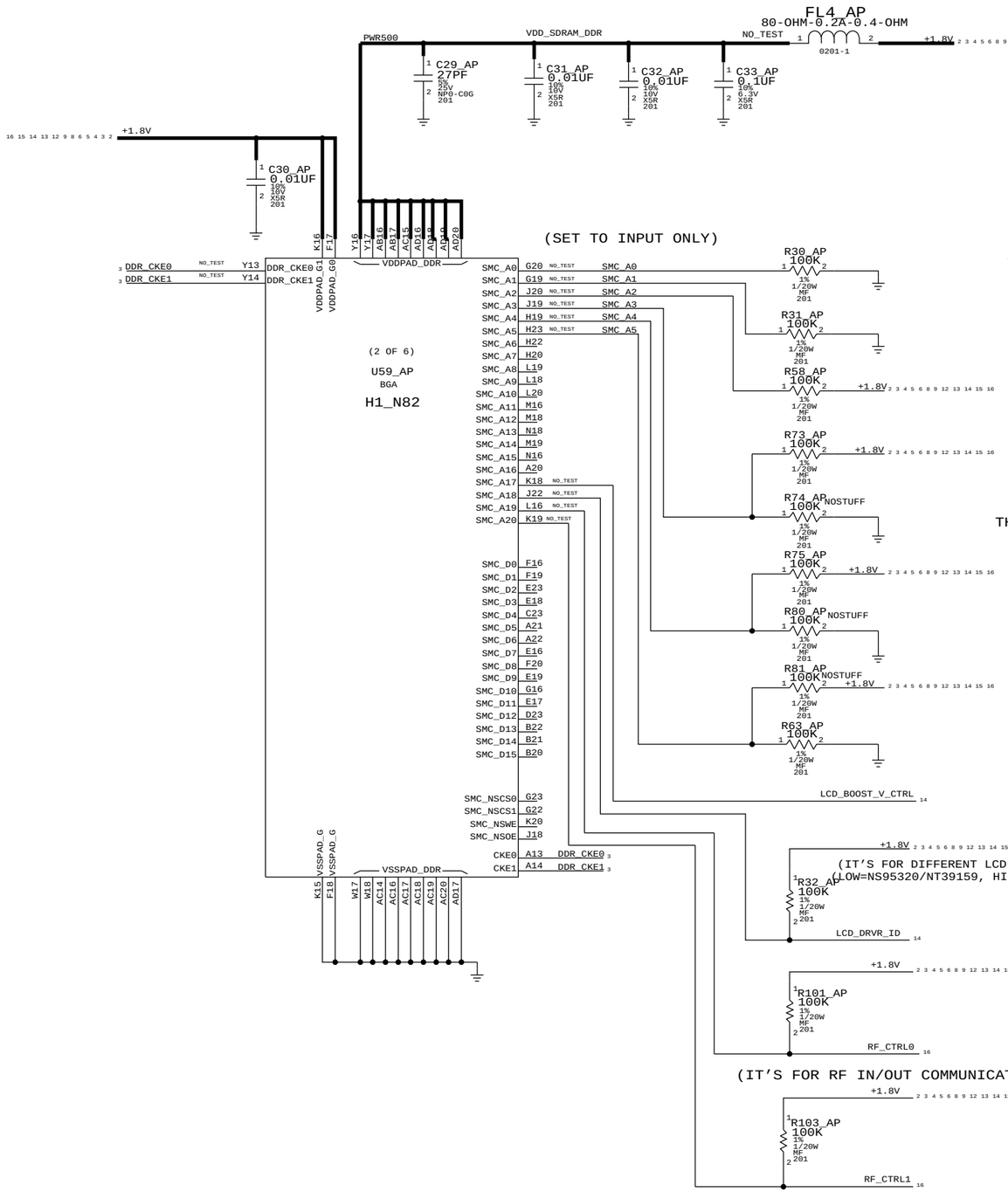
N82 SINGLE_BRD(MLB) AP -2/15/2008(I) REV10

APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02

SCALE	SHT	OF
NONE	1	20


FL2_AP
240-OHM-0.2A-0.8-OHM
0201-1
C16_AP 0.1UF 10% 6.3V X5R 201
C17_AP 0.01UF 10% 10V X5R 201
C18_AP 27PF 5% 25V NP0-C0G 201
FL1_AP
240-OHM-0.2A-0.8-OHM
0201-1
C12_AP 27PF 5% 25V NP0-C0G 201
C13_AP 0.01UF 10% 10V X5R 201
C14_AP 1UF 10% 6.3V CERM 402
XW1_AP SHORT-0201 NOSTUFF
C168_AP 0.1UF 10% 6.3V X5R 201
C166_AP 1000PF 10% 16V X7R 201
R142_AP 100K 1% 1/20W MF 201
XW43_AP SHORT-0201-NSM NOSTUFF
R10_AP R24_AP R44_AP R102_AP 100K 1% 1/20W MF 201
R147_AP 33 1% 1/20W MF 201
R119_AP 100K 1% 1/20W MF 201
R173_AP 100K 1% 1/20W MF 201
(AND GATE AT BB)
R16_AP 100K 1% 1/20W MF 201 NOSTUFF
R141_AP 100K 1% 1/20W MF 201
R144_AP 100K 1% 1/20W MF 201
Y1_AP SM-2 24.000MHZ-16PF-60PPM
R19_AP 22 1% 1/20W MF 201
C9_AP 27PF 5% 25V NP0-C0G 201
C11_AP 27PF 5% 25V NP0-C0G 201
(CHANGE TO 2X1.6 PART)
(NEED TO VALIDATE)
FL3_AP
80-OHM-0.2A-0.4-OHM
0201-1
U59_AP
H1_N82
BGA
(1 OF 6)
C19_AP 0.1UF 10% 6.3V X5R 201
C21_AP 0.1UF 10% 6.3V X5R 201
C23_AP 0.01UF 10% 10V X5R 201
XW6_AP SHORT-0201 NOSTUFF
XW7_AP SHORT-0201-NSM NOSTUFF
C26_AP 0.1UF 10% 6.3V X5R 201
XW8_AP SHORT-0201 NOSTUFF
C22_AP 27PF 5% 25V NP0-C0G 201
C27_AP 0.01UF 10% 10V X5R 201
C28_AP 0.1UF 10% 6.3V X5R 201
R25_AP 1K 1% 1/20W MF 201
R27_AP 1K 1% 1/20W MF 201
R26_AP 33 1% 1/20W MF 201
R145_AP 2.2K 1% 1/20W MF 201
Q7_AP CEDM7001 SOT883L
R17_AP 2.2K 1% 1/20W MF 201
Q8_AP CEDM7001 SOT883L
R22_AP 100K 1% 1/20W MF 201
R21_AP 100K 1% 1/20W MF 201
R20_AP 3.40K 1% 1/20W MF 201
U6_AP 74LVC2G04 SOT891
U7_AP 74LVC2G04 SOT891
U8_AP 74LVC2G34 SOT891
NOTICE OF PROPRIETARY PROPERTY
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING
I TO MAINTAIN THE DOCUMENT IN CONFIDENCE
II NOT TO REPRODUCE OR COPY IT
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART
APPLE INC.
SIZE D
DRAWING NUMBER 051-7340
REV. 02
SCALE NONE
SHT 2 OF 20



THE 3 LSB ADDRESSES ARE USED FOR A PRODUCT ID

PID1 (SMC_A2)	PID0 (SMC_A1)	DEV (SMC_A0)	DESCRIPTION
0	0	0	M68,AP MLB
0	0	1	M68,AP DEV
0	1	0	N45,MLB
0	1	1	N45,DEV
1	0	0	N82,MLB
1	0	1	N82,DEV
1	1	0	EXTEND PROJECT, MLB
1	1	1	EXTEND PROJECT,DEV

THE 3 BITS ADDRESSES ARE USED FOR A PRODUCT VERSION

SMC_A5	SMC_A4	SMC_A3	DESCRIPTION
1	1	1	PROTO2
1	1	0	PROTO3
1	0	1	EVT1
1	0	0	EVT2
0	1	1	EVT3
0	1	0	?
0	0	1	?
0	0	0	PVT

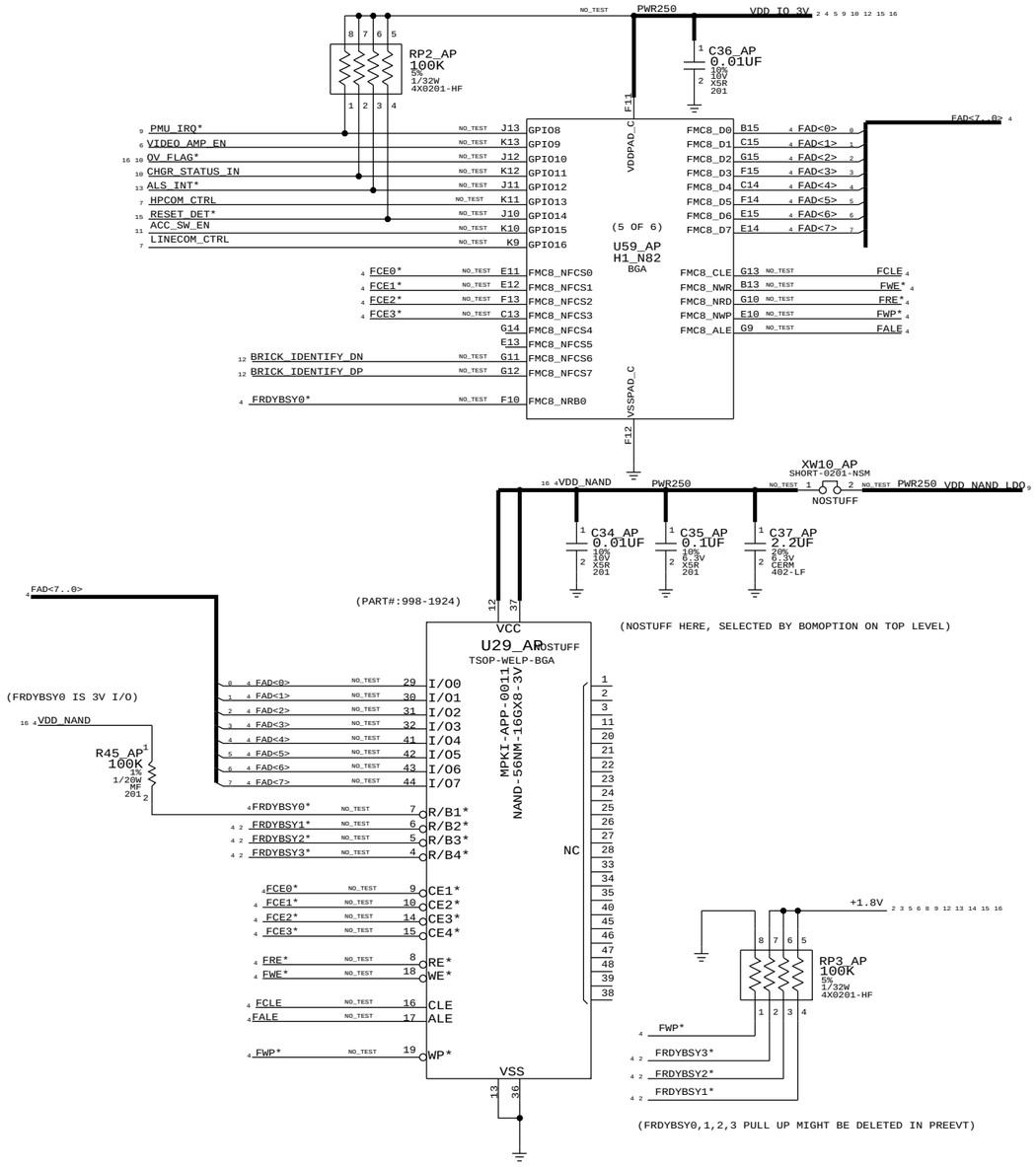
APPLE INC.

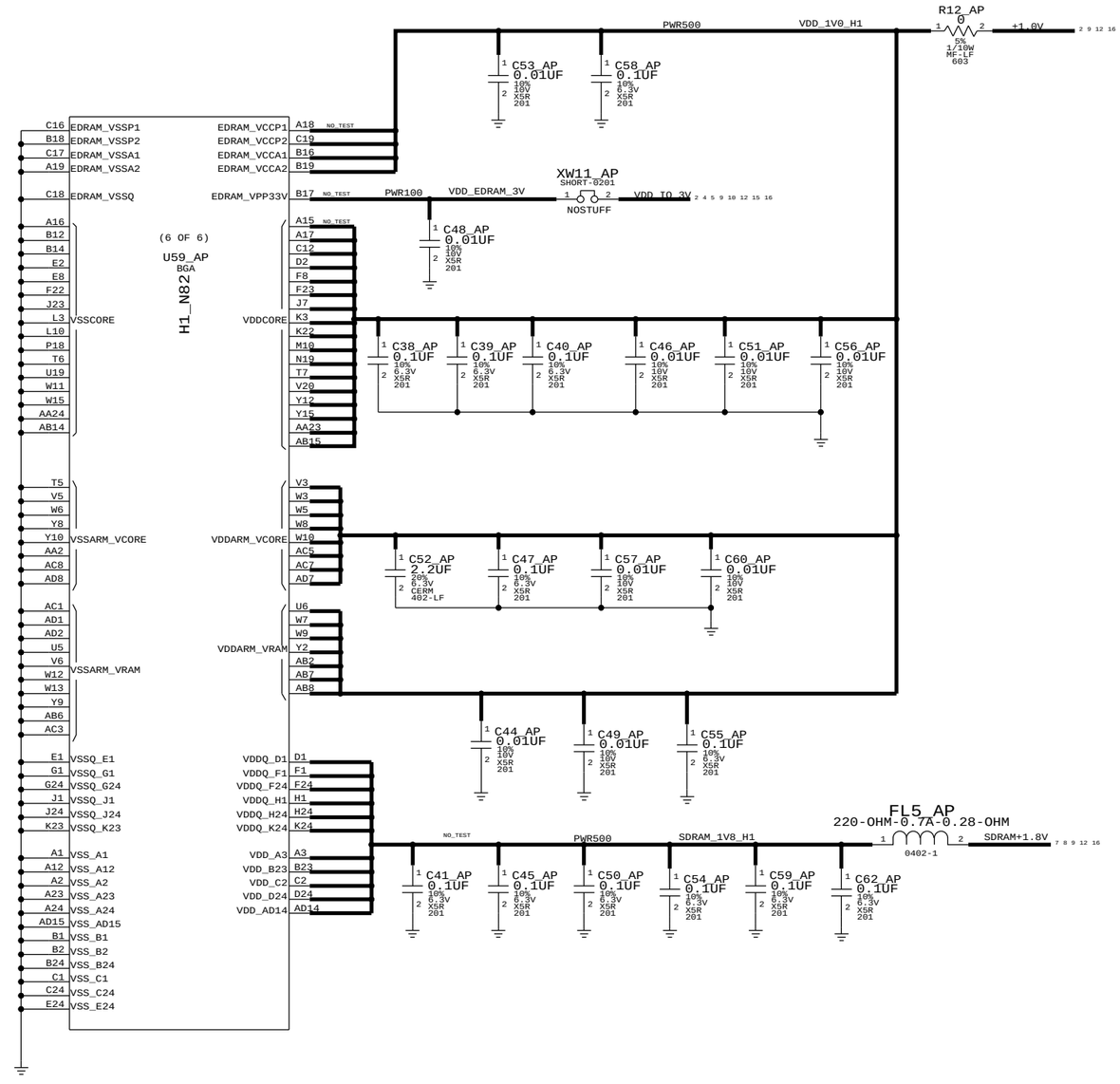
SIZE	DRAWING NUMBER	REV.
D	051-7340	02

SCALE: NONE

SHT 3 OF 20

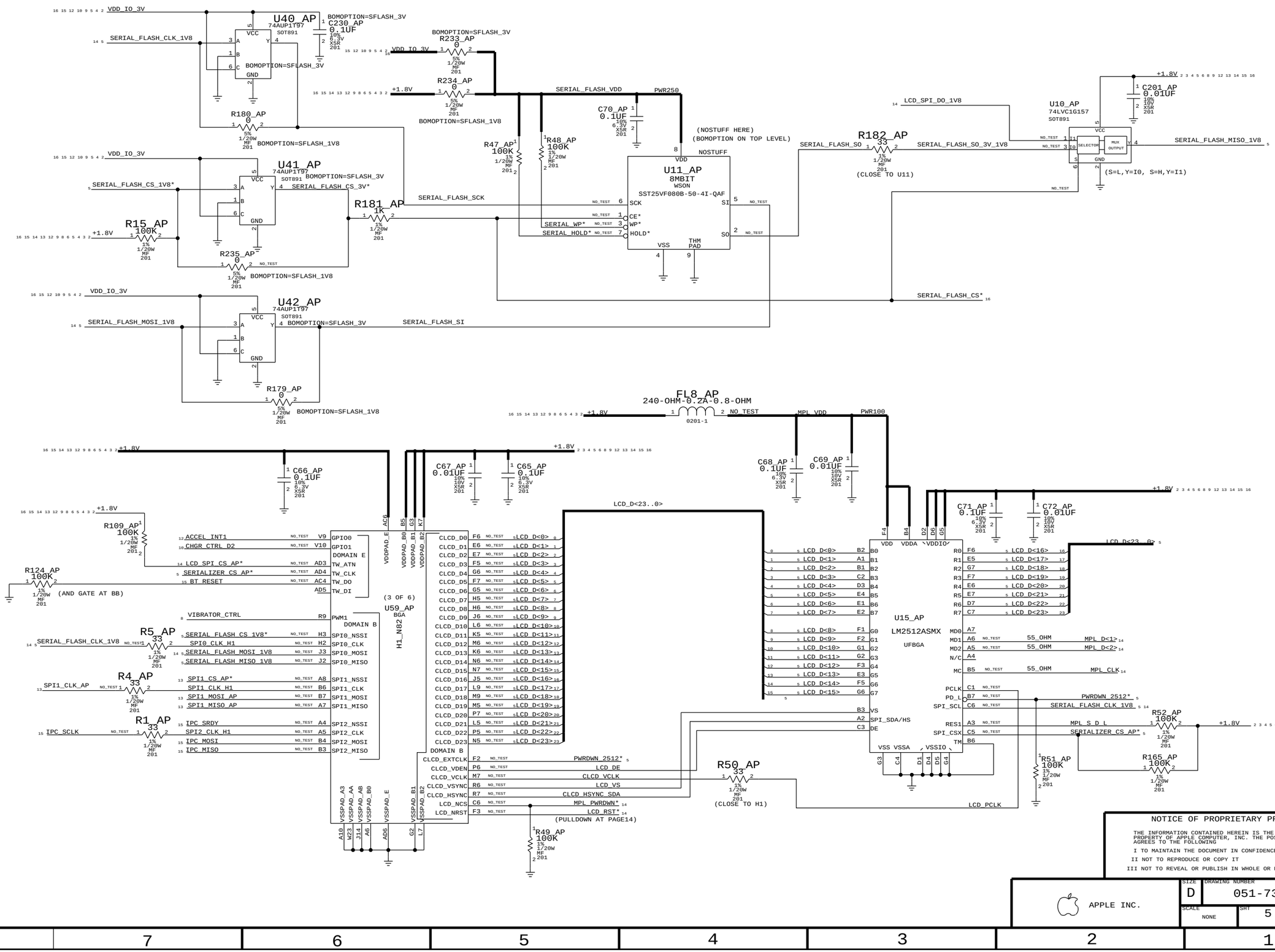
NAND FLASH & GPIO





APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 4 OF 20	



NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING

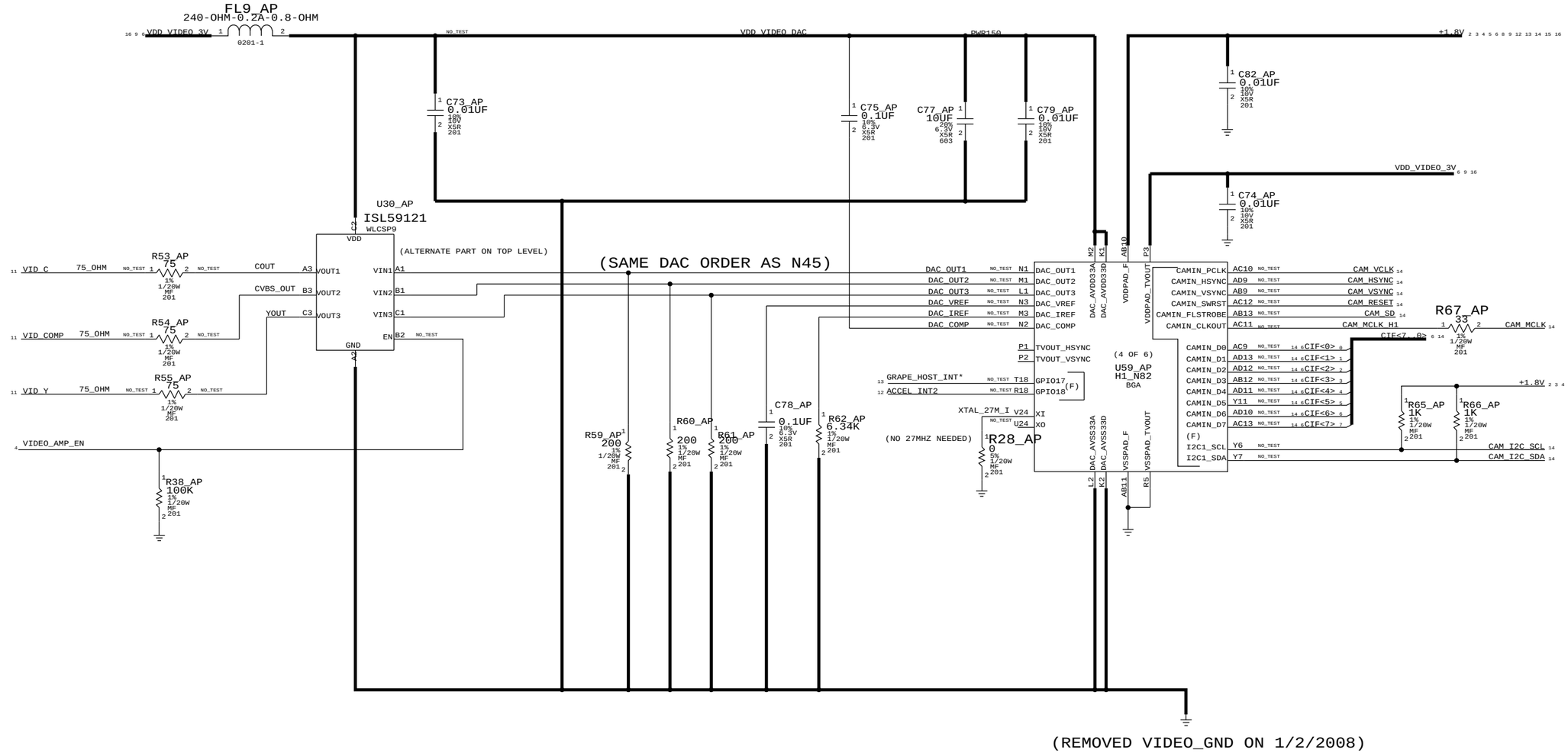
I TO MAINTAIN THE DOCUMENT IN CONFIDENCE

II NOT TO REPRODUCE OR COPY IT

III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 5 OF 20	



APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02

SCALE	SHT	OF
NONE	6	20

WM1817 AUDIO INTERFACE

(NEED TO TUNE A BEST VALUE)

(CAP PLACE IN PARALLEL)

(ANTI POP, VF<0.3V)

(CAP PLACE IN PARALLEL)

(CAP PLACE IN PARALLEL)

(47 OHM PULL-DOWN ADDED ON DOCK_FLEX)

I2C ADDRESS: 0011011X

(BIG CAP IN PAGE8)

(SET CODEC_A3V=3V)

(SET CODEC_3V=3V)

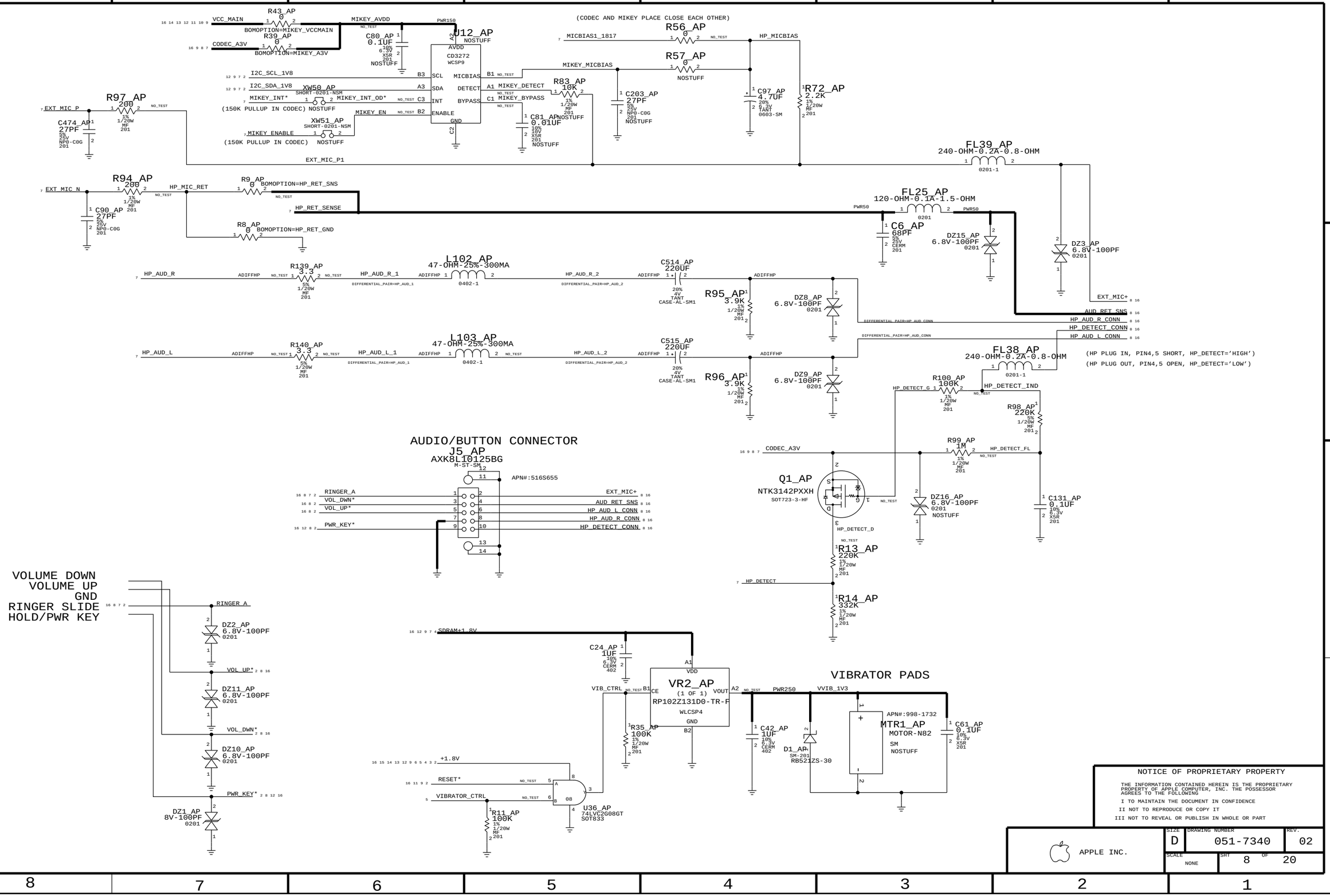
DCVDD (1.42V-3.6V, 1.8V TYP)
DBVDD (1.71V-3.6V, 1.8V TYP)
AVDD (2.7V-3.6V, 3V TYP)
SPKVDD (2.7V-5.5V)

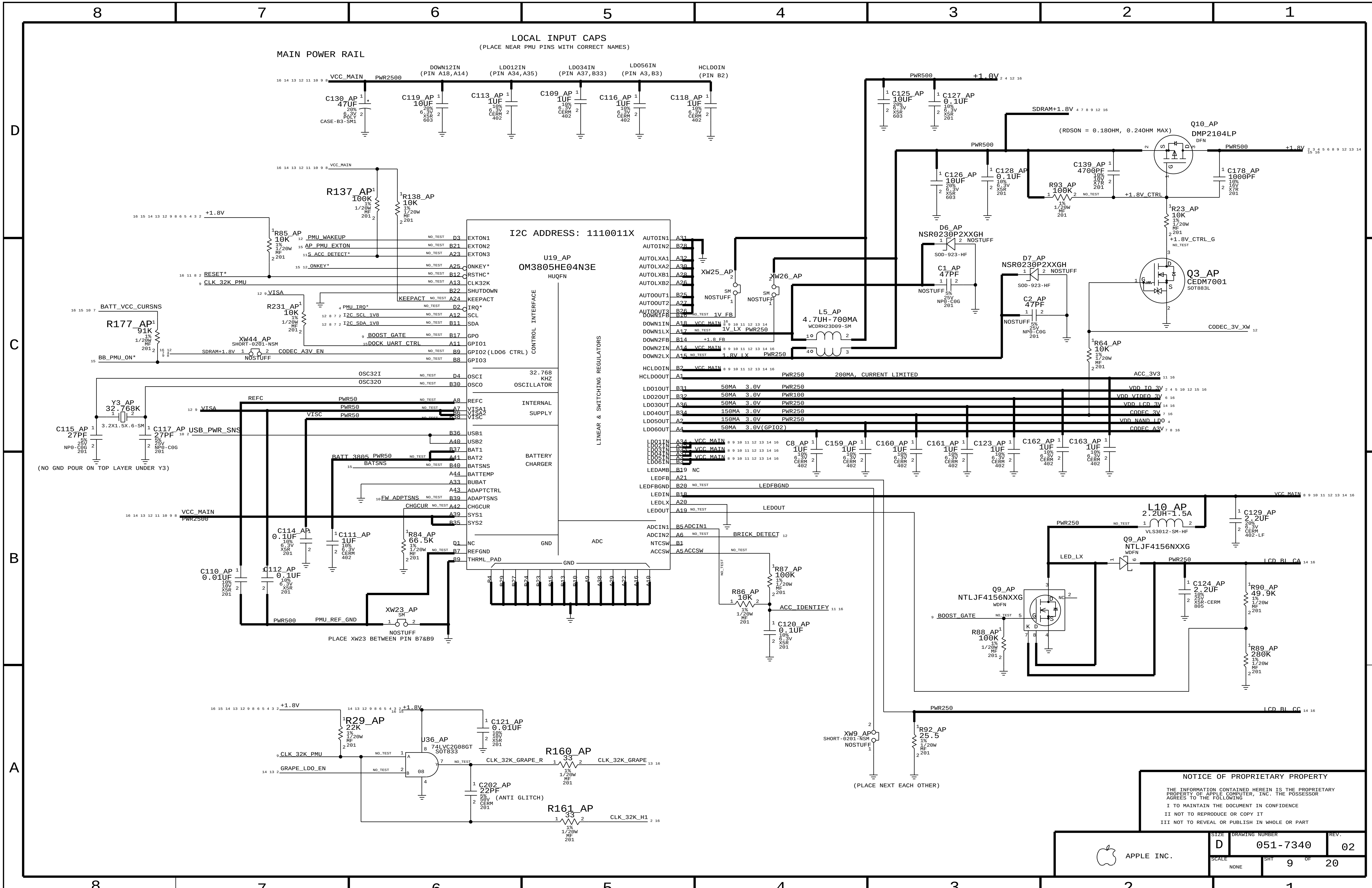
(CONFIG TO INPUT)
(CONFIG TO INTERNAL PULLUP)
(CONFIG TO INPUT)
(CONFIG TO INTERNAL PULLUP)

APPLE INC.

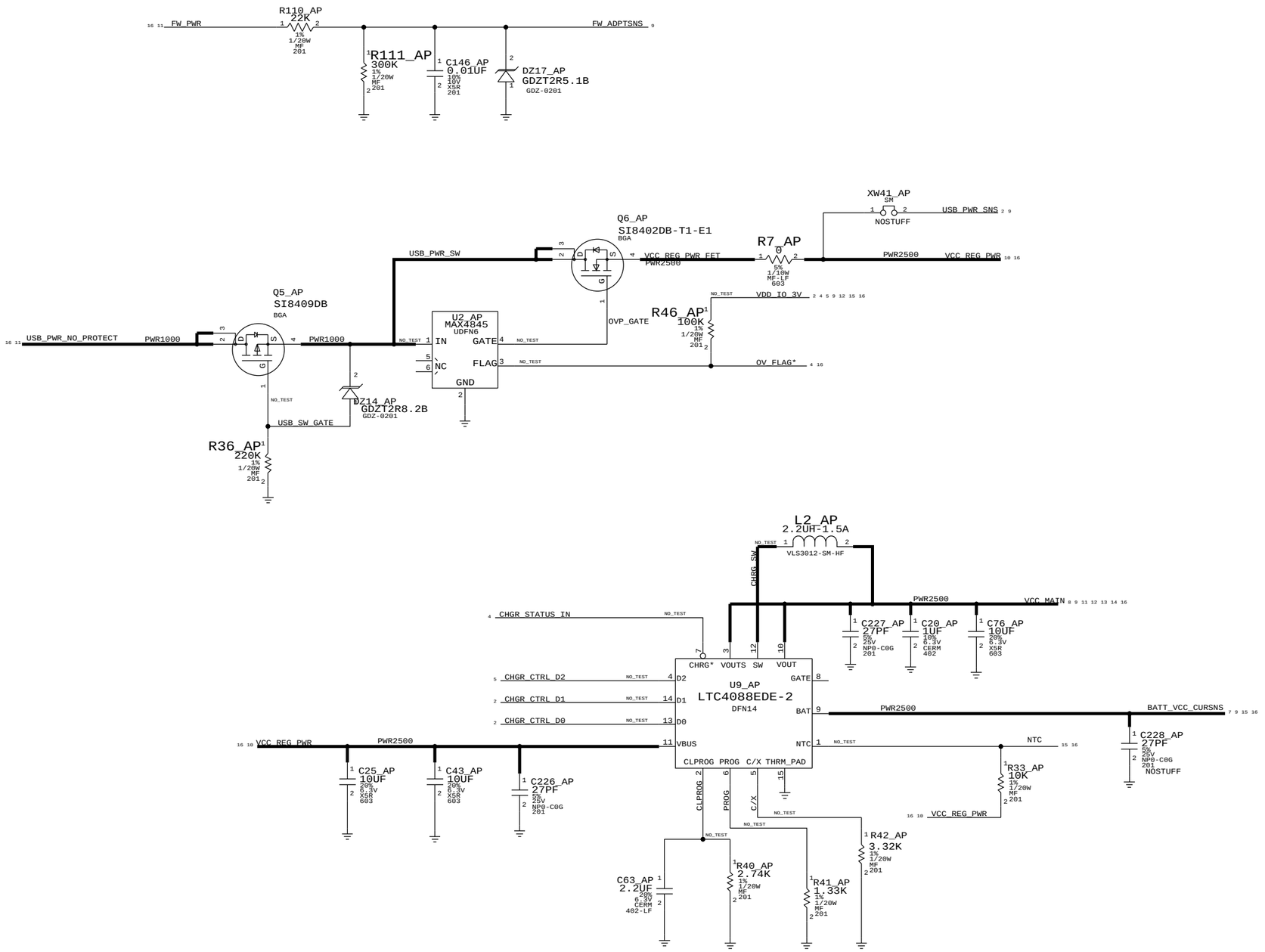
SIZE D | DRAWING NUMBER 051-7340 | REV. 02

SCALE NONE | SHT 7 OF 20


R43_AP 0 BOMOPTION=MIKEY_VCCMAIN
R39_AP 0 BOMOPTION=MIKEY_A3V
VCC_MAIN
CODEC_A3V
MIKEY_AVDD
C80_AP 0.1UF 10% 6.3V X5R 201 NOSTUFF
U12_AP NOSTUFF
CD3272 WCSP9
AVDD
I2C_SCL_1V8
I2C_SDA_1V8
MIKEY_INT*
MIKEY_INT_OD*
MIKEY_EN
MIKEY_ENABLE
XW50_AP SHORT-0201-NSM
XW51_AP SHORT-0201-NSM
SCL
SDA
INT
ENABLE
MICBIAS
DETECT
BYPASS
GND
MIKEY_DETECT
MIKEY_BYPASS
(150K PULLUP IN CODEC) NOSTUFF
(150K PULLUP IN CODEC) NOSTUFF
R83_AP 10K 1% 1/20W MF 201
C81_AP 0.01UF 10% 10V X5R 201 NOSTUFF
(CODEC AND MIKEY PLACE CLOSE EACH OTHER)
MICBIAS1_1817
R56_AP 0
R57_AP 0 NOSTUFF
HP_MICBIAS
MIKEY_MICBIAS
C203_AP 27PF 5% 25V NP0-C0G 201 NOSTUFF
C97_AP 4.7UF 20% 6.3V TANT 0603-SM
R72_AP 2.2K 1% 1/20W MF 201
EXT_MIC_P
R97_AP 200 1% 1/20W MF 201
C474_AP 27PF 5% 25V NP0-C0G 201
EXT_MIC_P1
EXT_MIC_N
R94_AP 200 1% 1/20W MF 201
C90_AP 27PF 5% 25V NP0-C0G 201
HP_MIC_RET
R9_AP 0 BOMOPTION=HP_RET_SNS
R8_AP 0 BOMOPTION=HP_RET_GND
HP_RET_SENSE
FL39_AP 240-OHM-0.2A-0.8-OHM 0201-1
FL25_AP 120-OHM-0.1A-1.5-OHM 0201
C6_AP 68PF 5% 25V CERM 201
DZ15_AP 6.8V-100PF 0201
DZ3_AP 6.8V-100PF 0201
EXT_MIC+
AUD_RET_SNS
HP_AUD_R_CONN
HP_DETECT_CONN
HP_AUD_L_CONN
HP_AUD_R
HP_AUD_L
R139_AP 3.3 5% 1/20W MF 201
R140_AP 3.3 5% 1/20W MF 201
L102_AP 47-OHM-25%-300MA 0402-1
L103_AP 47-OHM-25%-300MA 0402-1
HP_AUD_R_1
HP_AUD_L_1
HP_AUD_R_2
HP_AUD_L_2
C514_AP 220UF 20% 4V TANT CASE-AL-SM1
C515_AP 220UF 20% 4V TANT CASE-AL-SM1
R95_AP 3.9K 1% 1/20W MF 201
R96_AP 3.9K 1% 1/20W MF 201
DZ8_AP 6.8V-100PF 0201
DZ9_AP 6.8V-100PF 0201
FL38_AP 240-OHM-0.2A-0.8-OHM 0201-1
(HP PLUG IN, PIN4,5 SHORT, HP_DETECT='HIGH')
(HP PLUG OUT, PIN4,5 OPEN, HP_DETECT='LOW')
R100_AP 100K 1% 1/20W MF 201
R98_AP 220K 5% 1/20W MF 201
HP_DETECT_IND
HP_DETECT_G
R99_AP 1M 1% 1/20W MF 201
HP_DETECT_FL
Q1_AP NTK3142PXXH SOT723-3-HF
HP_DETECT_D
DZ16_AP 6.8V-100PF 0201 NOSTUFF
C131_AP 0.1UF 10% 6.3V X5R 201
R13_AP 220K 1% 1/20W MF 201
R14_AP 332K 1% 1/20W MF 201
HP_DETECT
AUDIO/BUTTON CONNECTOR
J5_AP
AXK8L10125BG
M-ST-SM
APN#:516S655
RINGER_A
VOL_DWN*
VOL_UP*
PWR_KEY*
EXT_MIC+
AUD_RET_SNS
HP_AUD_L_CONN
HP_AUD_R_CONN
HP_DETECT_CONN
VOLUME DOWN
VOLUME UP
GND
RINGER SLIDE
HOLD/PWR KEY
DZ2_AP 6.8V-100PF 0201
DZ11_AP 6.8V-100PF 0201
DZ10_AP 6.8V-100PF 0201
DZ1_AP 8V-100PF 0201
SDRAM+1.8V
C24_AP 1UF 10% 6.3V CERM 402
VR2_AP (1 OF 1) RP102Z131D0-TR-F WLCSP4
VIB_CTRL
R35_AP 100K 1% 1/20W MF 201
+1.8V
RESET*
VIBRATOR_CTRL
R11_AP 100K 1% 1/20W MF 201
U36_AP 74LVC2G08GT SOT833
VIBRATOR PADS
PWR250
VVIB_1V3
C42_AP 1UF 10% 6.3V CERM 402
D1_AP SM-201 RB521ZS-30
APN#:998-1732
MTR1_AP MOTOR-N82 SM NOSTUFF
C61_AP 0.1UF 10% 6.3V X5R 201
NOTICE OF PROPRIETARY PROPERTY
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING
I TO MAINTAIN THE DOCUMENT IN CONFIDENCE
II NOT TO REPRODUCE OR COPY IT
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART
APPLE INC.
SIZE D
DRAWING NUMBER 051-7340
REV. 02
SCALE NONE
SHT 8 OF 20



LOCAL INPUT CAPS
(PLACE NEAR PMU PINS WITH CORRECT NAMES)
MAIN POWER RAIL
VCC_MAIN PWR2500
DOWN12IN (PIN A18,A14)
LDO12IN (PIN A34,A35)
LDO34IN (PIN A37,B33)
LDO56IN (PIN A3,B3)
HCLDOIN (PIN B2)
C130_AP 47UF
C119_AP 10UF
C113_AP 1UF
C109_AP 1UF
C116_AP 1UF
C118_AP 1UF
I2C ADDRESS: 1110011X
U19_AP
OM3805HE04N3E
HUQFN
CONTROL INTERFACE
LINEAR & SWITCHING REGULATORS
32.768 KHZ OSCILLATOR
INTERNAL SUPPLY
BATTERY CHARGER
R137_AP 100K
R138_AP 10K
R85_AP 10K
R231_AP 10K
R177_AP 91K
XW44_AP
Y3_AP 32.768K
C115_AP 27PF
C117_AP 27PF
(NO GND POUR ON TOP LAYER UNDER Y3)
PMU_WAKEUP
AP_PMU_EXTON
S_ACC_DETECT*
ONKEY*
RESET*
CLK_32K_PMU
BATT_VCC_CURSNS
BB_PMU_ON*
CODEC_A3V_EN
BOOST_GATE
DOCK_UART_CTRL
USB_PWR_SNS
C114_AP 0.1UF
C111_AP 1UF
R84_AP 66.5K
C110_AP 0.01UF
C112_AP 0.1UF
XW23_AP
PLACE XW23 BETWEEN PIN B7&B9
PWR500
+1.0V
C125_AP 10UF
C127_AP 0.1UF
SDRAM+1.8V
(RDSON = 0.18OHM, 0.24OHM MAX)
Q10_AP DMP2104LP
C126_AP 10UF
C128_AP 0.1UF
R93_AP 100K
C139_AP 4700PF
C178_AP 1000PF
+1.8V_CTRL
R23_AP 10K
+1.8V_CTRL_G
Q3_AP CEDM7001
D6_AP NSR0230P2XXGH
D7_AP NSR0230P2XXGH
C1_AP 47PF
C2_AP 47PF
XW25_AP
XW26_AP
L5_AP 4.7UH-700MA
R64_AP 10K
CODEC_3V_XW
200MA, CURRENT LIMITED
ACC_3V3
VDD_IO_3V
VDD_VIDEO_3V
VDD_LCD_3V
CODEC_3V
VDD_NAND_LDO
CODEC_A3V
C8_AP 1UF
C159_AP 1UF
C160_AP 1UF
C161_AP 1UF
C123_AP 1UF
C162_AP 1UF
C163_AP 1UF
LEDFBGND
LEDOUT
BRICK_DETECT
ACC_IDENTIFY
R87_AP 100K
R86_AP 10K
C120_AP 0.1UF
L10_AP 2.2UH-1.5A
C129_AP 2.2UF
Q9_AP NTLJF4156NXXG
C124_AP 2.2UF
R90_AP 49.9K
R89_AP 280K
R88_AP 100K
LED_LX
LCD_BL_CA
LCD_BL_CC
XW9_AP
R92_AP 25.5
(PLACE NEXT EACH OTHER)
R29_AP 22K
U36_AP 74LVC2G08GT
C121_AP 0.01UF
R160_AP 33
CLK_32K_GRAPE_R
CLK_32K_GRAPE
GRAPE_LDO_EN
C202_AP 22PF
(ANTI GLITCH)
R161_AP 33
CLK_32K_H1
NOTICE OF PROPRIETARY PROPERTY
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING
I TO MAINTAIN THE DOCUMENT IN CONFIDENCE
II NOT TO REPRODUCE OR COPY IT
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART
APPLE INC.
SIZE D
DRAWING NUMBER 051-7340
REV. 02
SCALE NONE
SHT 9 OF 20



NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING

I TO MAINTAIN THE DOCUMENT IN CONFIDENCE

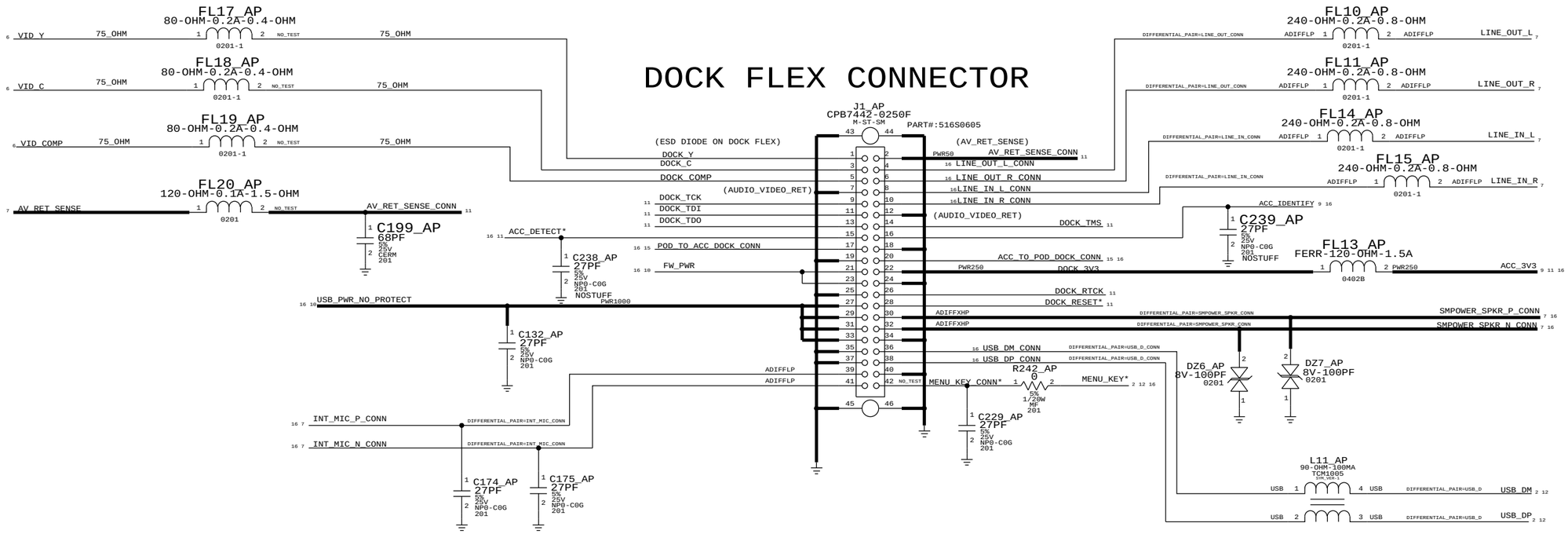
II NOT TO REPRODUCE OR COPY IT

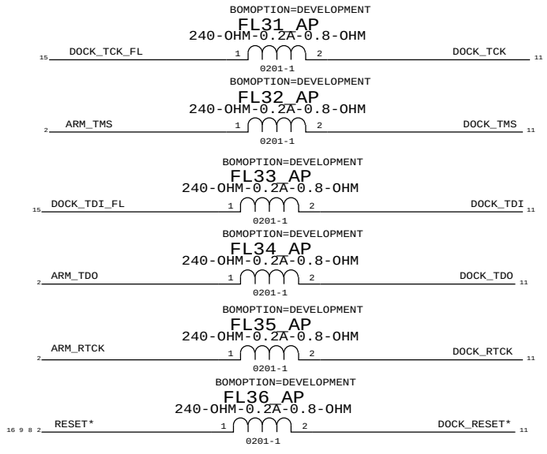
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 10 OF 20	

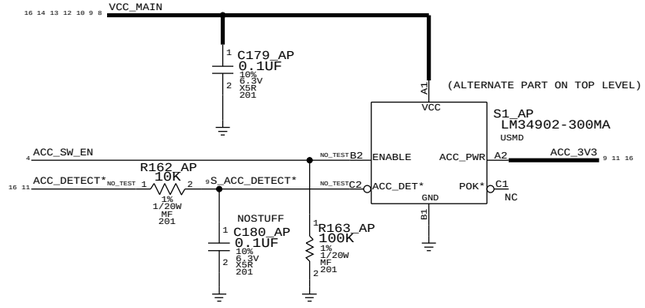
DOCK FLEX CONNECTOR





(PLACE THESE INDUCTOR CLOSE TO DOCK CONNECTOR)

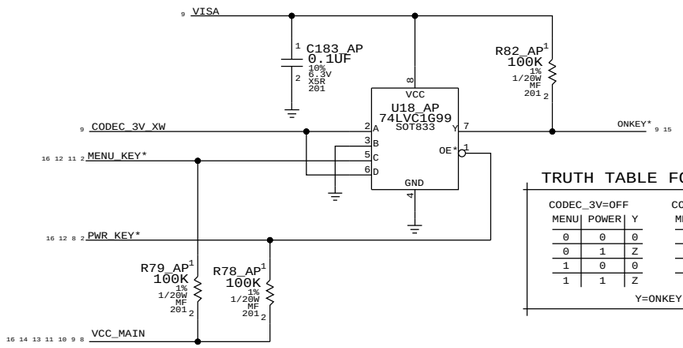
ACCESSORY SWITCH



APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 11 OF 20	

U18+ONKEY* IS USED TO WAKE FROM OFF (PMU STANDBY)
ONKEY* HELD LOW FOR 6 SECONDS INITIATES PMU RESET SEQUENCE.

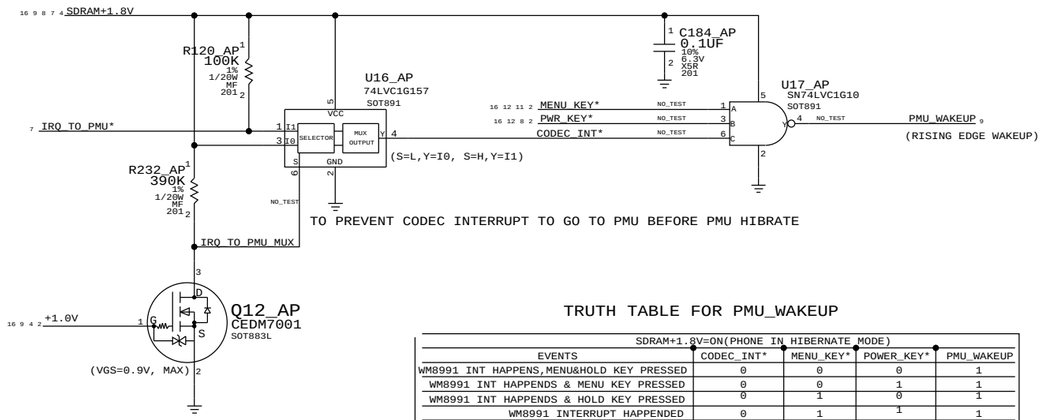


TRUTH TABLE FOR ONKEY*

CODEC_3V=OFF			CODEC_3V=ON		
MENU	POWER	Y	MENU	POWER	Y
0	0	0	0	0	0
0	1	Z	0	1	Z
1	0	0	1	0	1
1	1	Z	1	1	Z

Y=ONKEY*

U17+WAKEUP IS USED TO WAKE FROM HIBERNATE (SUSPEND TO RAM)



TO PREVENT CODEC INTERRUPT TO GO TO PMU BEFORE PMU HIBRATE

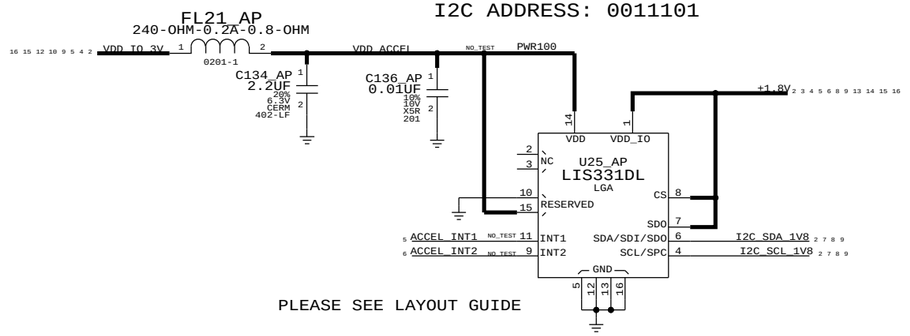
TRUTH TABLE FOR PMU_WAKEUP

	SDRAM+1.8V=ON(PHONE IN HIBERNATE MODE)			
EVENTS	CODEC_INT*	MENU_KEY*	POWER_KEY*	PMU_WAKEUP
WM8991 INT HAPPENS,MENU&HOLD KEY PRESSED	0	0	0	1
WM8991 INT HAPPENDS & MENU KEY PRESSED	0	0	1	1
WM8991 INT HAPPENDS & HOLD KEY PRESSED	0	1	0	1
WM8991 INTERRUPT HAPPENDED	0	1	1	1
MENU & HOLD KEY PRESSED	1	0	0	1
MENU KEY PRESSED	1	0	1	1
HOLD KEY PRESSED	1	1	0	1
NO KEY PRESSED	1	1	1	0

WM8991 INTERRUPT HAPPENS AT:
(1) RINGER KEY SLIDES
(2) HEAD PHONE PLUG IN/OUT
(3) HEAD PHONE SEND KEY PRESSED

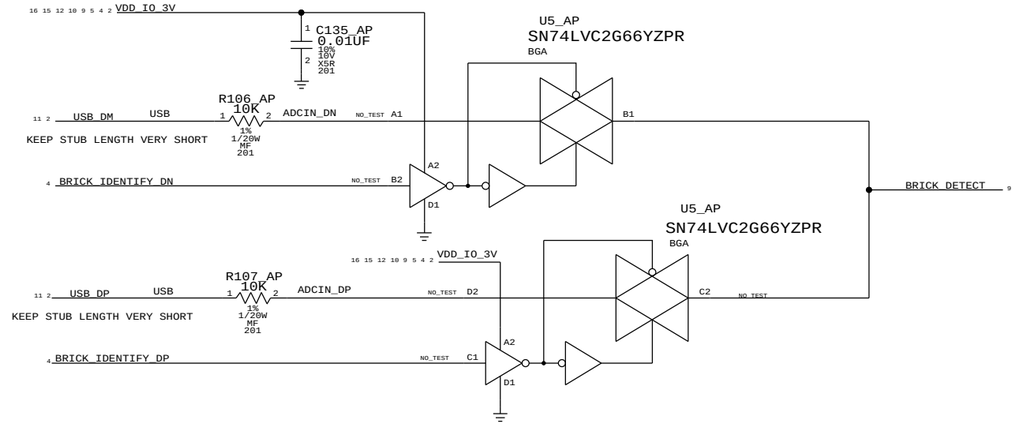
ACCELEROMETER

I2C ADDRESS: 0011101



PLEASE SEE LAYOUT GUIDE

ADAPTER CURRENT CAPACITY DETECTION



APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 12 OF 20	

ZEPHYR2 LITE A2

(1.5V) Z2_VDDCORE
C147_AP 10UF 20% 6.3V X5R 603
C164_AP 0.1UF 10% 6.3V X5R 201
(1.0V) Z2_VDDANA
C149_AP 2.2UF 20% 6.3V CERM 402-LF
Z2_VDD
C151_AP 0.1UF 10% 6.3V X5R 201
C152_AP 0.1UF 10% 6.3V X5R 201
C153_AP 0.1UF 10% 6.3V X5R 201
C154_AP 4.7UF 20% 6.3V X5R 402
C15_AP 4.7UF 20% 6.3V X5R 402
R91_AP 1.00 1% 1/20W MF 201 → GRAPE_VDD_1V8

(APN#:343S0459)

U27_AP
BCM5974VCKUFBG
UFBGA

VDDANA VDDCORE VDDIO VDDLDO

Z2_PANEL_IN<0>	A8	IN0_0	
Z2_PANEL_IN<1>	A7	IN1_0	
Z2_PANEL_IN<2>	B7	IN2_0	
Z2_PANEL_IN<3>	A6	IN3_0	
Z2_PANEL_IN<4>	B6	IN4_0	
Z2_PANEL_IN<5>	A5	IN5_0	
Z2_PANEL_IN<6>	B5	IN6_0	
Z2_PANEL_IN<7>	A4	IN7_0	
Z2_PANEL_IN<8>	B4	IN8_0	
Z2_PANEL_IN<9>	A3	IN9_0	
PROX_RX_IN	B3	IN10_0	
B_ADR0	F8	Z2_B_ADR<0>	
B_ADR1	F7	Z2_B_ADR<1>	
B_ADR2	G8	Z2_B_ADR<2>	
BON_L0	G7	Z2_BON_L<0>	
BON_L1	H7	Z2_BON_L<1>	
BON_L2	H6		
BON_L3	F6		
BON_L4	J7		
GPIO0	H1	Z2_HOST_INT*	
GPIO1	H2	GRAPE_BOOST_EN	
GPIO2	H5	PROX_EN	
GPIO3	J6		
JTAG_TCK	E7		
JTAG_TDI	E8		
JTAG_TDO	G5		
JTAG_TMS	D8		
H_CS*	J3	SPI1_CS_GRAPE*	
H_SCLK	J2	SPI1_CLK_GRAPE	
H_SDI	F2	SPI1_MOSI_GRAPE	
H_SDO	H3	SPI1_MISO_GRAPE	
A_CS*	E3	GRAPE_PANEL_CONFIG	
A_SCLK	G2		
A_SDI	J1	(PRODUCT CONFIG PIN)	
A_SDO	F3	(GND=IPHONE, NC=IPOD)	
TM0	D7		
TM1	F1		
CLKIN	A1	CLK_32K_GRAPE	
RESET*	A2	Z2_RESET*	GRAPE_RESET*

GND: B1 B2 B8 C2 C7 D6 G1 G6 J5 J8

C186_AP: PROX_RX — PROX_RX_IN, 47PF 5% 25V NP0-C0G 201
R131_AP 100K 1% 1/20W MF 201 (CAN BE DELETED): Z2_VDD — Z2_BOOT_CFG<0> — C8 BT_CFG0, E2 BT_CFG1

Z2 BOOT_CFG = 01, DEPENDENT MODE 2 (DEFAULT)
INTERNAL PULL-UP ON ARMTAPMD, FLOO, LFOO
INTERNAL PULL-DOWN ON EXTFLLIN

XW18_AP SHORT-0201 NOSTUFF
XW35_AP SHORT-0201 NOSTUFF
XW36_AP SHORT-0201 NOSTUFF
XW33_AP SHORT-0201 NOSTUFF
XW34_AP SHORT-0201 NOSTUFF
XW12_AP SHORT-0201 NOSTUFF

U1_AP 74AUP1T97 SOT891
PROX_VDD, GRAPE_HOST_INT*, GRAPE_BOOST_EN, PROX_EN → PROX_EN_3V
SPI1_CS_AP*, SPI1_CLK_AP, SPI1_MOSI_AP, SPI1_MISO_AP

1) OUTPUT FOR THE INTERNAL RESET GENERATOR
2) ALSO INPUT FOR EXTERNAL RESET

MARIO LITE

+18V → R6_AP 1.00 1% 1/20W MF 201 → +18V_MARIO
C3_AP 1UF 10% 25V X5R 603 NOSTUFF
C165_AP 0.1UF 10% 25V X5R 402
MARIO_VCCDIG → R118_AP 1.00 1% 1/20W MF 201 → GRAPE_VDD_1V8
C157_AP 0.1UF 10% 6.3V X5R 201

(APN#:343S0443)

U4_AP
MARIO_LITE
BGA

Z2_B_ADR<0>	B1	B_ADR0	
Z2_B_ADR<1>	B2	B_ADR1	
Z2_B_ADR<2>	A1	B_ADR2	
Z2_BON_L<0>	C1	BON_L0	
Z2_BON_L<1>	C2	BON_L1	
VSTM0	A2	Z2_VSTM_OUT<0>	
VSTM1	B3	Z2_VSTM_OUT<1>	
VSTM2	A3	Z2_VSTM_OUT<2>	
VSTM3	A4	Z2_VSTM_OUT<3>	
VSTM4	A5	Z2_VSTM_OUT<4>	
VSTM5	B4	Z2_VSTM_OUT<5>	
VSTM6	B5	Z2_VSTM_OUT<6>	
VSTM7	C4	Z2_VSTM_OUT<7>	
VSTM8	C5	Z2_VSTM_OUT<8>	
VSTM9	D4	Z2_VSTM_OUT<9>	
VSTM10	D5	Z2_VSTM_OUT<10>	
VSTM11	E5	Z2_VSTM_OUT<11>	
VSTM12	E4	Z2_VSTM_OUT<12>	
VSTM13	D3	Z2_VSTM_OUT<13>	
VSTM14	E3	Z2_VSTM_OUT<14>	
VSTM15	D2	PROX_VSTM	

R116_AP 10K 1% 1/20W MF 201 → PROX_TX
R117_AP 2K 1% 1/20W MF 201

GRAPE CONNECTOR

J6_AP CPB7430-0250F M-ST-SM APN#:516S0638
(GUARDED BY GND ON SAME LAYER)
(POUR GND ON UPPER &LOWER LAYER)

Z2_VSTM_OUT<8>	3	4	Z2_PANEL_IN<2>
Z2_VSTM_OUT<9>	5	6	Z2_PANEL_IN<3>
Z2_VSTM_OUT<10>	7	8	Z2_PANEL_IN<4>
Z2_VSTM_OUT<11>	9	10	Z2_PANEL_IN<5>
Z2_VSTM_OUT<12>	11	12	Z2_PANEL_IN<6>
Z2_VSTM_OUT<13>	13	14	Z2_PANEL_IN<7>
Z2_VSTM_OUT<14>	15	16	Z2_PANEL_IN<8>
Z2_VSTM_OUT<7>	17	18	Z2_PANEL_IN<9>
Z2_VSTM_OUT<6>	19	20	Z2_PANEL_IN<1>
Z2_VSTM_OUT<5>	21	22	Z2_PANEL_IN<0>
Z2_VSTM_OUT<4>	23	24	
Z2_VSTM_OUT<3>	25	26	Z2_VSTM_OUT<0>
	27	28	Z2_VSTM_OUT<1>
	29	30	Z2_VSTM_OUT<2>
	31	32	
	33	34	

GRAPE PANEL CONFIG PIN
(GND=NORMAL ROW ROUTING)
(NC=ALTERNATE ROW ROUTING)

PROX ZIF CONNECTOR

J7_AP APN#:518S0600
FF20-12A-R11A-3H
F-RT-SM-HF

RCVR_N_CONN	1	2	RCVR_P_CONN
PROX_TX	3	4	
PROX_VDD (ALIAS LED_PWR)	5	6	I2C_SDA_3V
I2C_SCL_3V	7	8	ALS_INT*
PROX_VDD	9	10	PROX_EN_3V
PROX_RX	11	12	

C143_AP 0.1UF 10% 6.3V X5R 201
C145_AP 0.1UF 10% 6.3V X5R 201

L9_AP 22UH-70MA 0603-HF
PROX_VDD → 18V_SW
D5_AP SM-201 RB521ZS-30
PWR250 → +18V

C150_AP 1UF 10% 6.3V CERM 402
C148_AP 0.1UF 10% 6.3V X5R 201
C155_AP 68PF 5% 25V CERM 201
R126_AP 750K 1% 1/20W MF 201
R243_AP 576K 1% 1/20W MF 201
C156_AP 1UF 10% 25V X5R 603

U28_AP
LT3460EDC
DFN
(APN#:353S2041)

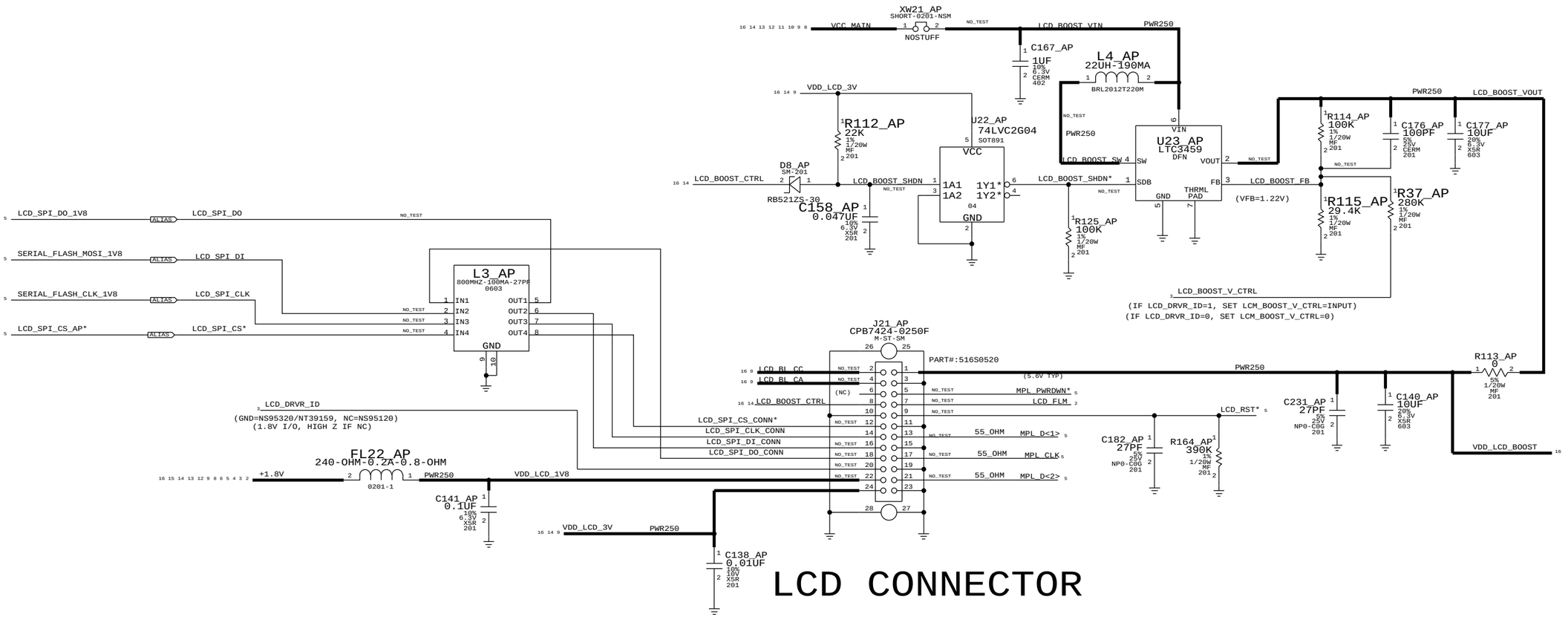
VIN, SW, SHDN*, FB, NC, THRML PAD
GRAPE_BOOST_EN
18V_FB
R127_AP 23.7K 1% 1/20W MF 201
R122_AP 100K 1% 1/20W MF 201

(RDSON = 0.18OHM, 0.24OHM MAX)
Q11_AP DMP2104LP DFN
+1.8V → PWR250 → GRAPE_VDD_1V8
C102_AP 4700PF 10% 16V X7R 201
C94_AP 1000PF 10% 16V X7R 201
R24_AP 1K 1% 1/20W MF 201
VCC_MAIN
R130_AP 100K 1% 1/20W MF 201
GP_SW_PG
R18_AP 10K 1% 1/20W MF 201
GP_CAMP
GP_CAMP_G
Q2_AP NTUD3128NXXG SOT-963 (N-CHN)
R128_AP 1K 1% 1/20W MF 201
GP_SW_NG
GRAPE_LDO_EN
Q2_AP NTUD3128NXXG SOT-963 (N-CHN)
(DISCHARGE GRAPE_VDD_1V8 TO GND WHEN OFF)

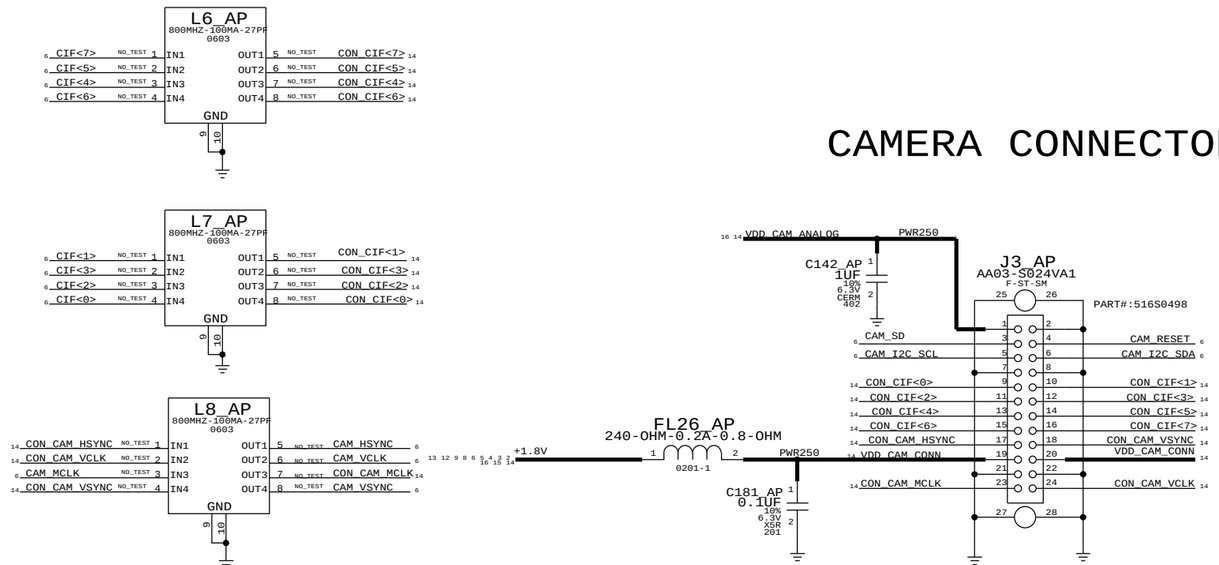
FL7_AP 80-OHM-0.2A-0.4-OHM 0201-1
RCVR_N → RCVR_N_CONN
FL27_AP 80-OHM-0.2A-0.4-OHM 0201-1
RCVR_P → RCVR_P_CONN
DIFFERENTIAL_PAIR=RCVR_CONN
DZ12_AP 6.8V-100PF 0201
DZ13_AP 6.8V-100PF 0201

APPLE INC.
SIZE D | DRAWING NUMBER 051-7340 | REV. 02
SCALE NONE | SHT 13 OF 20

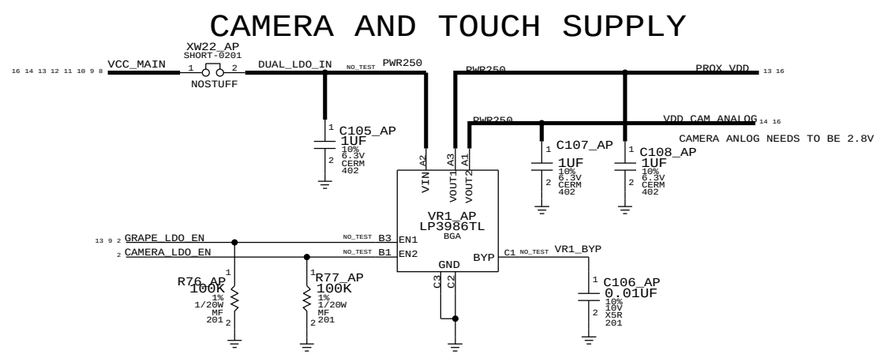
LCD CONNECTOR



CAMERA CONNECTOR



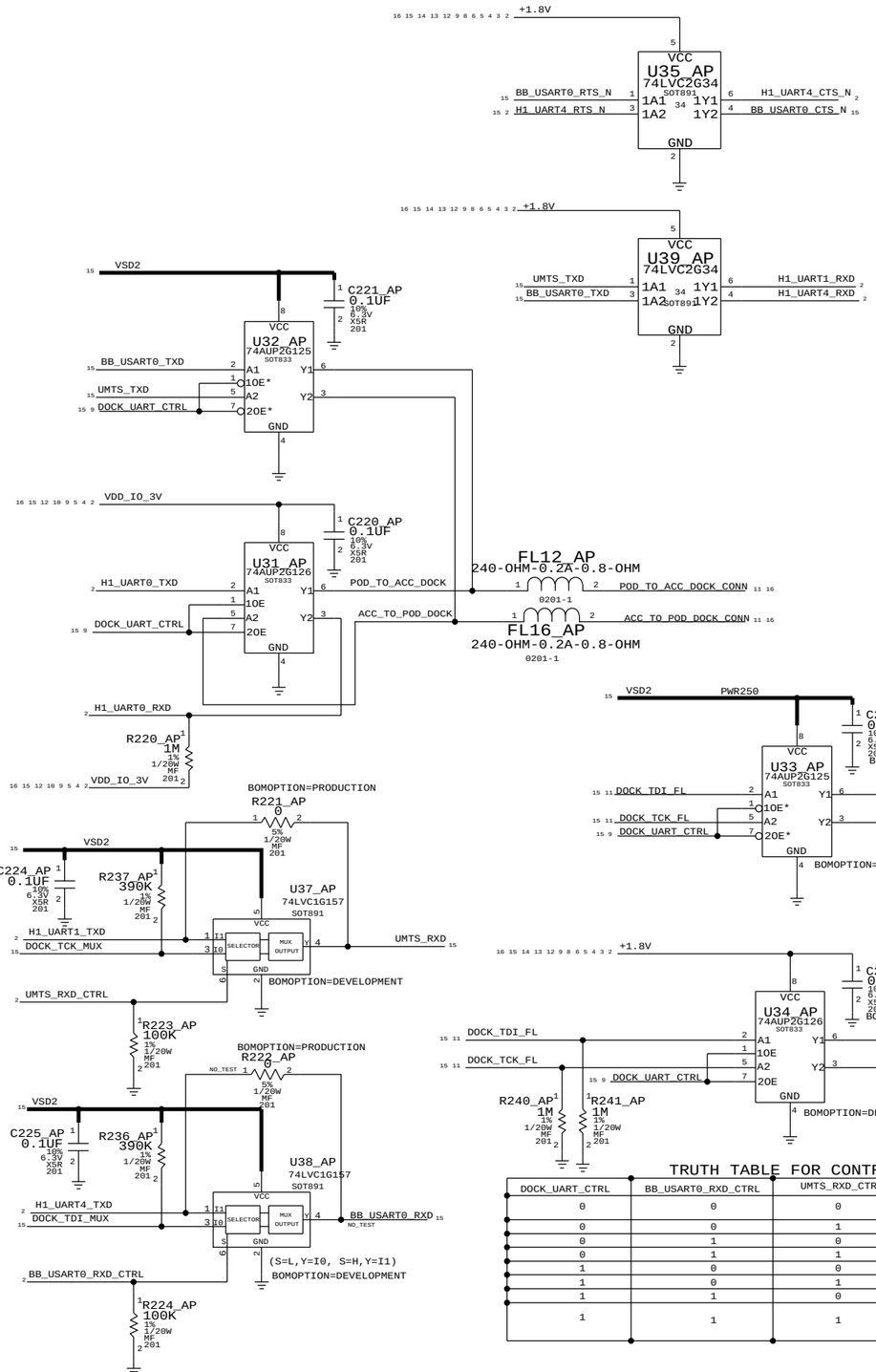
CAMERA AND TOUCH SUPPLY



APPLE INC.

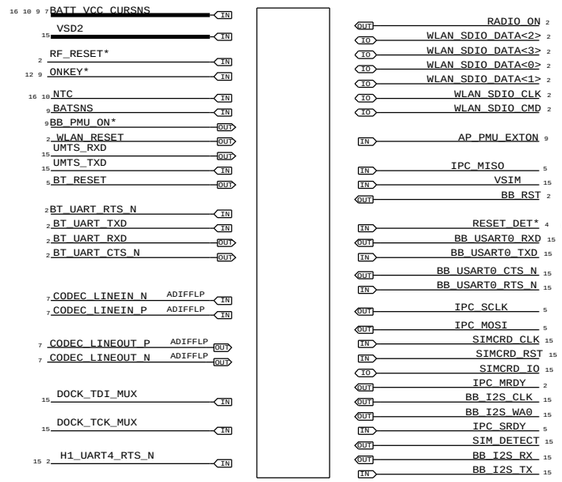
SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 14 OF 20	

RADIO INTERFACE



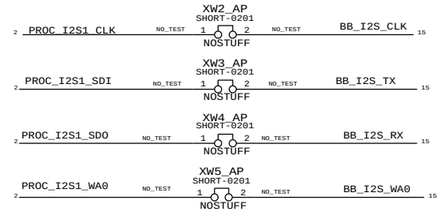
DOCK_UART_CTRL	BB_USART0_RXD_CTRL	UMTS_RXD_CTRL	DOCK MUX FUNCTION
0	0	0	DOCK UART TO BB&UMTS TXD DOCK TDI/TCK TO BB/UMTS RXD
0	0	1	NOT VALID
0	1	0	NOT VALID
0	1	1	H1 UART1 TO UMTS, H1_UART4 TO BB USART0
1	0	0	DOCK UART TO H1 UART0,DOCK JTAG TO H1 JTAG
1	0	1	NOT VALID
1	1	0	NOT VALID
1	1	1	H1 UART1 TO UMTS, H1_UART4 TO BB USART0 DOCK UART TO H1 UART0,DOCK JTAG TO H1 JTAG

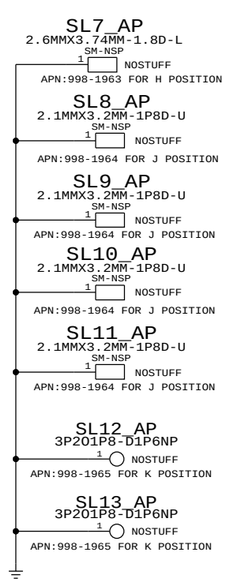
TRUTH TABLE FOR CONTROL SIGNAL

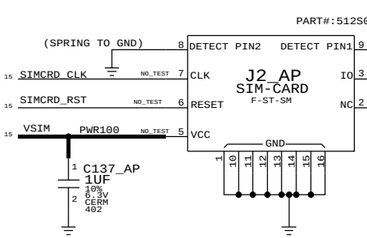


(OPEN DRAIN AT RADIO)

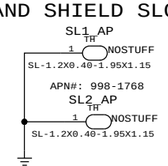
(OPEN DRAIN AT RADIO)



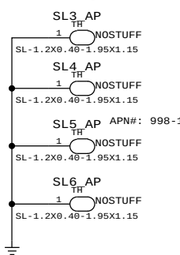




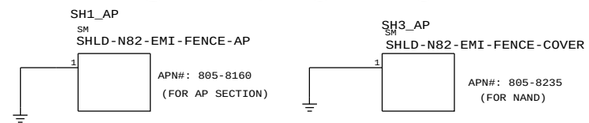
NAND SHIELD SLOTS

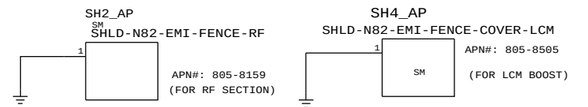


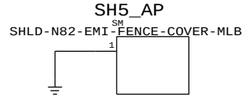
TOP SHIELD ALIGNMENT SLOTS



SHIELDING FENCE







APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 15 OF 20	

TEST POINTS

GPIO

IN	FUNC_TEST	PWR_KEY*	TP1_AP	NOSTUFF TP-P6
IN	FUNC_TEST	MENU_KEY*	TP2_AP	NOSTUFF TP-P6
IN	FUNC_TEST	RINGER_A	TP3_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VOL_UP*	TP5_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VOL_DWN*	TP6_AP	NOSTUFF TP-P6
IN	FUNC_TEST	IRQ_CODEC	TP74_AP	NOSTUFF TP-P6
IN	FUNC_TEST	RF_CTRL0	TP12_AP	NOSTUFF TP-P6
IN	FUNC_TEST	RF_CTRL1	TP13_AP	NOSTUFF TP-P6

AUDIO

SPEAKER

IN	FUNC_TEST	SMPOWER_SPKR_P_CONN	TP8_AP	NOSTUFF TP-P6
IN	FUNC_TEST	SMPOWER_SPKR_N_CONN	TP9_AP	NOSTUFF TP-P6

RECEIVER

IN	FUNC_TEST	RCVR_P_CONN	TP10_AP	NOSTUFF TP-P6
IN	FUNC_TEST	RCVR_N_CONN	TP11_AP	NOSTUFF TP-P6

MIC

IN	FUNC_TEST	INT_MIC_P_CONN	TP15_AP	NOSTUFF TP-P6
IN	FUNC_TEST	INT_MIC_N_CONN	TP16_AP	NOSTUFF TP-P6

LINE IN

IN	LINE_IN_L_CONN		TP60_AP	NOSTUFF TP-P6
IN	LINE_IN_R_CONN		TP61_AP	NOSTUFF TP-P6

LINE OUT

IN	LINE_OUT_L_CONN		TP64_AP	NOSTUFF TP-P6
IN	LINE_OUT_R_CONN		TP65_AP	NOSTUFF TP-P6

CLOCK

IN	FUNC_TEST	CLK_24M_O	TP17_AP	NOSTUFF TP-P6
IN	FUNC_TEST	CLK_32K_H1	TP19_AP	NOSTUFF TP-P6

RESET

IN	FUNC_TEST	RESET*	TP21_AP	NOSTUFF TP-P6

ACCESSORY DETECT

IN	FUNC_TEST	ACC_DETECT*	TP22_AP	NOSTUFF TP-P6
IN	FUNC_TEST	ACC_IDENTIFY	TP23_AP	NOSTUFF TP-P6

I2C PINS

IN	FUNC_TEST	I2C_SCL_3V	TP25_AP	NOSTUFF TP-P6
IN	FUNC_TEST	I2C_SDA_3V	TP26_AP	NOSTUFF TP-P6
IN	FUNC_TEST	SERIAL_FLASH_CS*	TP75_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VMID	TP78_AP	NOSTUFF TP-P6

HEADPHONE

IN	FUNC_TEST	EXT_MIC+	TP79_AP	NOSTUFF TP-P6
IN	FUNC_TEST	AUD_RET_SNS	TP80_AP	NOSTUFF TP-P6
IN	FUNC_TEST	HP_AUD_R_CONN	TP81_AP	NOSTUFF TP-P6
IN	FUNC_TEST	HP_AUD_L_CONN	TP82_AP	NOSTUFF TP-P6
IN	FUNC_TEST	HP_DETECT_CONN	TP83_AP	NOSTUFF TP-P6
			TP84_AP	NOSTUFF TP-P6

UART

IN	FUNC_TEST	POD_TO_ACC_DOCK_CONN	TP30_AP	NOSTUFF TP-P6
IN	FUNC_TEST	ACC_TO_POD_DOCK_CONN	TP31_AP	NOSTUFF TP-P6

USB

IN	FUNC_TEST	USB_DP_CONN	TP32_AP	NOSTUFF TP-P6
IN	FUNC_TEST	USB_DM_CONN	TP33_AP	NOSTUFF TP-P6

GRAPE

IN	FUNC_TEST	GRAPE_BOOST_EN	TP29_AP	NOSTUFF TP-P6
IN	FUNC_TEST	CLK_32K_GRAPE	TP27_AP	NOSTUFF TP-P6
IN	FUNC_TEST	PROX_TX	TP7_AP	NOSTUFF TP-P6

THERMISTOR

IN	FUNC_TEST	NTC	TP57_AP	NOSTUFF TP-P6

POWER GND

PWR2500	TP58_AP	NOSTUFF	TP-1P0-TOP
	TP59_AP	NOSTUFF	TP-1P0-TOP

SIGNAL GND

TP76_AP	NOSTUFF	TP-1P0-TOP	
TP77_AP	NOSTUFF	TP-1P0-TOP	

POWER

IN	FUNC_TEST	+18V	TP34_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VCC_MAIN	TP35_AP	NOSTUFF TP-1P0-TOP
IN	FUNC_TEST	FW_PWR	TP36_AP	NOSTUFF TP-P6
IN	FUNC_TEST	USB_PWR_NO_PROTECT	TP37_AP	NOSTUFF TP-1P0-TOP
IN	FUNC_TEST	BATT_VCC_CURSNS	TP38_AP	NOSTUFF TP-1P0-TOP
IN	FUNC_TEST	VCC_REG_PWR	TP14_AP	NOSTUFF TP-1P0-TOP
IN	FUNC_TEST	OV_FLAG*	TP42_AP	NOSTUFF TP-P6
IN	FUNC_TEST	+1.0V	TP43_AP	NOSTUFF TP-P6
IN	FUNC_TEST	SDRAM+1.8V	TP44_AP	NOSTUFF TP-P6
IN	FUNC_TEST	+1.8V	TP45_AP	NOSTUFF TP-P6
IN	FUNC_TEST	ACC_3V3	TP46_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VDD_IO_3V	TP47_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VDD_VIDEO_3V	TP48_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VDD_LCD_3V	TP49_AP	NOSTUFF TP-P6
IN	FUNC_TEST	CODEC_3V	TP50_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VDD_NAND	TP51_AP	NOSTUFF TP-P6
IN	FUNC_TEST	PROX_VDD	TP52_AP	NOSTUFF TP-P6
IN	FUNC_TEST	GRAPE_VDD_1V8	TP53_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VDD_CAM_ANALOG	TP54_AP	NOSTUFF TP-P6
IN	FUNC_TEST	LCD_BL_CC	TP55_AP	NOSTUFF TP-P6
IN	FUNC_TEST	LCD_BL_CA	TP56_AP	NOSTUFF TP-P6
IN	FUNC_TEST	CODEC_A3V	TP73_AP	NOSTUFF TP-P6
IN	FUNC_TEST	VDD_LCD_BOOST	TP24_AP	NOSTUFF TP-P6
IN	FUNC_TEST	LCD_BOOST_CTRL	TP20_AP	NOSTUFF TP-P6

APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	02
SCALE: NONE	SHT 16 OF 20	

Title: Basenet Report
Design: ap_v1
Date: Feb 14 18:02:47 2008

Base nets and synonyms for ap_v1_lib.AP_V1(@ap_v1_lib.ap_v1(sch_1))

Base Signal	Synonyms	Location([Zone][dir])
+1.0V	+1.0V - @ap_v1_lib.AP_V1	2D7 2D7 4D1 9D3 12B8 16C3
+1.8V	+1.8V - @ap_v1_lib.AP_V1	2A2 2B1 2B1 2B7 2C2 2C8 2D2 2D2 2D3 3A3 3A3 3B3 3B3 3B3 3C3 3C3 3D3 3D6 4B5 5A1 5B2 5B5 5B7 5B7 5C5 5C7 5D1 5D6 6B1 6D2 8A6 9A6 9A7 9D1 9D7 12D2 13A4 14A6 14C7 15B6 15D6 15D6 16C3
+1.8V_CTRL	+1.8V_CTRL - @ap_v1_lib.AP_V1	9D2
+1.8V_CTRL_G	+1.8V_CTRL_G - @ap_v1_lib.AP_V1	9C2
+1.8_FB	+1.8_FB - @ap_v1_lib.AP_V1	9C4
+18V	+18V - @ap_v1_lib.AP_V1	13A5 13D4 16D3
+18V_MARIO	+18V_MARIO - @ap_v1_lib.AP_V1	13D3
1.8V_LX	1.8V_LX - @ap_v1_lib.AP_V1	9C4
1V_FB	1V_FB - @ap_v1_lib.AP_V1	9C4
1V_LX	1V_LX - @ap_v1_lib.AP_V1	9C4
18V_FB	18V_FB - @ap_v1_lib.AP_V1	13A6
18V_SW	18V_SW - @ap_v1_lib.AP_V1	13A7
24M_O	24M_O - @ap_v1_lib.AP_V1	2A6
ACCEL_INT1	ACCEL_INT1 - @ap_v1_lib.AP_V1	5B7 12C3
ACCEL_INT2	ACCEL_INT2 - @ap_v1_lib.AP_V1	6B4 12C3
ACCSW	ACCSW - @ap_v1_lib.AP_V1	9B5
ACC_3V3	ACC_3V3 - @ap_v1_lib.AP_V1	9C2 11A2 11C1 16C3
ACC_DETECT*	ACC_DETECT* - @ap_v1_lib.AP_V1	11A4 11C6 16C6
ACC_IDENTIFY	ACC_IDENTIFY - @ap_v1_lib.AP_V1	9B4 11D2 16C6
ACC_SW_EN	ACC_SW_EN - @ap_v1_lib.AP_V1	4D8 11A4
ACC_TO_POD_DOCK	ACC_TO_POD_DOCK - @ap_v1_lib.AP_V1	15C7
ACC_TO_POD_DOCK_CONN	ACC_TO_POD_DOCK_CONN - @ap_v1_lib.AP_V1	11C3 15C6 16D5
ADCIN1	ADCIN1 - @ap_v1_lib.AP_V1	9B5
ADCIN_DN	ADCIN_DN - @ap_v1_lib.AP_V1	12B3
ADCIN_DP	ADCIN_DP - @ap_v1_lib.AP_V1	12B3
ALS_INT*	ALS_INT* - @ap_v1_lib.AP_V1	4D8 13B1
AP_PMU_EXTON	AP_PMU_EXTON - @ap_v1_lib.AP_V1	9C7 15D3
ARM_RTCK	ARM_RTCK - @ap_v1_lib.AP_V1	2B8 11A7
ARM_TDO	ARM_TDO - @ap_v1_lib.AP_V1	2C8 11B7
ARM_TMS	ARM_TMS - @ap_v1_lib.AP_V1	2C8 11B7
ARM_TRST*	ARM_TRST* - @ap_v1_lib.AP_V1	2C7
AUD_I2S_BITCLK	AUD_I2S_BITCLK - @ap_v1_lib.AP_V1	2C3 7B3
AUD_I2S_LRC	AUD_I2S_LRC - @ap_v1_lib.AP_V1	2C3 7B3
AUD_I2S_SDIN	AUD_I2S_SDIN - @ap_v1_lib.AP_V1	2C3 7B3
AUD_I2S_SDOUT	AUD_I2S_SDOUT - @ap_v1_lib.AP_V1	2C3 7B6
AUD_MCLK	AUD_MCLK - @ap_v1_lib.AP_V1	2C2 7B6
AUD_MCLK_H1	AUD_MCLK_H1 - @ap_v1_lib.AP_V1	2C3
AUD_RET_SNS	AUD_RET_SNS - @ap_v1_lib.AP_V1	8B4 8C2 16A6
AVDD_1817	AVDD_1817 - @ap_v1_lib.AP_V1	7D4
AV_RET_SENSE	AV_RET_SENSE - @ap_v1_lib.AP_V1	7A6 11D8
AV_RET_SENSE_CONN	AV_RET_SENSE_CONN - @ap_v1_lib.AP_V1	11D3 11D6
BATSNS	BATSNS - @ap_v1_lib.AP_V1	9B6 15D5
BATT_3805	BATT_3805 - @ap_v1_lib.AP_V1	9B6
BATT_VCC_CURSNS	BATT_VCC_CURSNS - @ap_v1_lib.AP_V1	7C3 9C8 10B3 15D5 16C3
BB_I2S_CLK	BB_I2S_CLK - @ap_v1_lib.AP_V1	15C3 15D1
BB_I2S_RX	BB_I2S_RX - @ap_v1_lib.AP_V1	15C3 15D1
BB_I2S_TX	BB_I2S_TX - @ap_v1_lib.AP_V1	15C3 15D1
BB_I2S_WA0	BB_I2S_WA0 - @ap_v1_lib.AP_V1	15C3 15D1
BB_PMU_ON*	BB_PMU_ON* - @ap_v1_lib.AP_V1	9C8 15D5
BB_RST	BB_RST - @ap_v1_lib.AP_V1	2C6 15D3
BB_USART0_CTS_N	BB_USART0_CTS_N - @ap_v1_lib.AP_V1	15C3 15D5
BB_USART0_RTS_N	BB_USART0_RTS_N - @ap_v1_lib.AP_V1	15C3 15D6
BB_USART0_RXD	BB_USART0_RXD - @ap_v1_lib.AP_V1	15A7 15D3
BB_USART0_RXD_CTRL	BB_USART0_RXD_CTRL - @ap_v1_lib.AP_V1	2B3 15A8
BB_USART0_TXD	BB_USART0_TXD - @ap_v1_lib.AP_V1	15C3 15C6 15C8
BOOST_GATE	BOOST_GATE - @ap_v1_lib.AP_V1	9B3 9C6
BRICK_DETECT	BRICK_DETECT - @ap_v1_lib.AP_V1	9B4 12B1
BRICK_IDENTIFY_DN	BRICK_IDENTIFY_DN - @ap_v1_lib.AP_V1	4C7 12B4
BRICK_IDENTIFY_DP	BRICK_IDENTIFY_DP - @ap_v1_lib.AP_V1	4C7 12B4
BT_RESET	BT_RESET - @ap_v1_lib.AP_V1	5B7 15D5
BT_UART_CTS_N	BT_UART_CTS_N - @ap_v1_lib.AP_V1	2B3 15C5
BT_UART_RTS_N	BT_UART_RTS_N - @ap_v1_lib.AP_V1	2B1 15D5
BT_UART_RXD	BT_UART_RXD - @ap_v1_lib.AP_V1	2B3 15D5
BT_UART_TXD	BT_UART_TXD - @ap_v1_lib.AP_V1	2A1 15D5
C/X	C/X - @ap_v1_lib.AP_V1	10A5
CAMERA_LDO_EN	CAMERA_LDO_EN - @ap_v1_lib.AP_V1	2C6 14A3
CAM_HSYNC	CAM_HSYNC - @ap_v1_lib.AP_V1	6C2 14A7
CAM_I2C_SCL	CAM_I2C_SCL - @ap_v1_lib.AP_V1	6B1 14A5
CAM_I2C_SDA	CAM_I2C_SDA - @ap_v1_lib.AP_V1	6B1 14A4
CAM_MCLK	CAM_MCLK - @ap_v1_lib.AP_V1	6C1 14A8
CAM_MCLK_H1	CAM_MCLK_H1 - @ap_v1_lib.AP_V1	6C2
CAM_RESET	CAM_RESET - @ap_v1_lib.AP_V1	6C2 14A4
CAM_SD	CAM_SD - @ap_v1_lib.AP_V1	6C2 14A5
CAM_VCLK	CAM_VCLK - @ap_v1_lib.AP_V1	6C2 14A7
CAM_VSYNC	CAM_VSYNC - @ap_v1_lib.AP_V1	6C2 14A7
CHGCUR	CHGCUR - @ap_v1_lib.AP_V1	9B6
CHGR_CTRL_D0	CHGR_CTRL_D0 - @ap_v1_lib.AP_V1	2B3 10A6
CHGR_CTRL_D1	CHGR_CTRL_D1 - @ap_v1_lib.AP_V1	2B3 10B6
CHGR_CTRL_D2	CHGR_CTRL_D2 - @ap_v1_lib.AP_V1	5B7 10B6
CHGR_STATUS_IN	CHGR_STATUS_IN - @ap_v1_lib.AP_V1	4D8 10B6
CHRG_SW	CHRG_SW - @ap_v1_lib.AP_V1	10B5
CIF<0>	CIF<0> - @ap_v1_lib.AP_V1	6C2 14A8
CIF<7..0>	CIF<7..0> - @ap_v1_lib.AP_V1	6C2
CIF<1>	CIF<1> - @ap_v1_lib.AP_V1	6C2 14A8
CIF<2>	CIF<2> - @ap_v1_lib.AP_V1	6B2 14A8
CIF<3>	CIF<3> - @ap_v1_lib.AP_V1	6B2 14A8
CIF<4>	CIF<4> - @ap_v1_lib.AP_V1	6B2 14B8
CIF<5>	CIF<5> - @ap_v1_lib.AP_V1	6B2 14B8
CIF<6>	CIF<6> - @ap_v1_lib.AP_V1	6B2 14B8
CIF<7>	CIF<7> - @ap_v1_lib.AP_V1	6B2 14B8
CLCD_HSYNC_SDA	CLCD_HSYNC_SDA - @ap_v1_lib.AP_V1	5A5
CLCD_VCLK	CLCD_VCLK - @ap_v1_lib.AP_V1	5A5
CLK_24M_O	CLK_24M_O - @ap_v1_lib.AP_V1	2C7 16D6
CLK_32K_GRAPE	CLK_32K_GRAPE - @ap_v1_lib.AP_V1	9A5 13B6 16C5
CLK_32K_GRAPE_R	CLK_32K_GRAPE_R - @ap_v1_lib.AP_V1	9A6
CLK_32K_H1	CLK_32K_H1 - @ap_v1_lib.AP_V1	2C7 9A5 16D6
CLK_32K_PMU	CLK_32K_PMU - @ap_v1_lib.AP_V1	9A7 9C7
CLPROG	CLPROG - @ap_v1_lib.AP_V1	10A5
CODEC_3V	CODEC_3V - @ap_v1_lib.AP_V1	7D3 9C2 16B3
CODEC_3V_XW	CODEC_3V_XW - @ap_v1_lib.AP_V1	9C1 12D8
CODEC_A3V	CODEC_A3V - @ap_v1_lib.AP_V1	7D3 8B4 8D7 9C2 16A3
CODEC_A3V_EN	CODEC_A3V_EN - @ap_v1_lib.AP_V1	9C7
CODEC_INT*	CODEC_INT* - @ap_v1_lib.AP_V1	12B7
CODEC_LINEIN_N	CODEC_LINEIN_N - @ap_v1_lib.AP_V1	7C8 15C5
CODEC_LINEIN_N_1817	CODEC_LINEIN_N_1817 - @ap_v1_lib.AP_V1	7C6
CODEC_LINEIN_P	CODEC_LINEIN_P - @ap_v1_lib.AP_V1	7B8 15C5
CODEC_LINEIN_P_1817	CODEC_LINEIN_P_1817 - @ap_v1_lib.AP_V1	7C6
CODEC_LINEOUT_N	CODEC_LINEOUT_N - @ap_v1_lib.AP_V1	7C1 15C5
CODEC_LINEOUT_P	CODEC_LINEOUT_P - @ap_v1_lib.AP_V1	7C1 15C5
CON_CAM_HSYNC	CON_CAM_HSYNC - @ap_v1_lib.AP_V1	14A5 14A8
CON_CAM_MCLK	CON_CAM_MCLK - @ap_v1_lib.AP_V1	14A5 14A7
CON_CAM_VCLK	CON_CAM_VCLK - @ap_v1_lib.AP_V1	14A4 14A8
CON_CAM_VSYNC	CON_CAM_VSYNC - @ap_v1_lib.AP_V1	14A4 14A8
CON_CIF<0>	CON_CIF<0> - @ap_v1_lib.AP_V1	14A5 14A7
CON_CIF<1>	CON_CIF<1> - @ap_v1_lib.AP_V1	14A4 14A7
CON_CIF<2>	CON_CIF<2> - @ap_v1_lib.AP_V1	14A5 14A7
CON_CIF<3>	CON_CIF<3> - @ap_v1_lib.AP_V1	14A4 14A7
CON_CIF<4>	CON_CIF<4> - @ap_v1_lib.AP_V1	14A5 14B7
CON_CIF<5>	CON_CIF<5> - @ap_v1_lib.AP_V1	14A4 14B7
CON_CIF<6>	CON_CIF<6> - @ap_v1_lib.AP_V1	14A5 14B7
CON_CIF<7>	CON_CIF<7> - @ap_v1_lib.AP_V1	14A4 14B7
COUT	COUT - @ap_v1_lib.AP_V1	6C7
CVBS_OUT	CVBS_OUT - @ap_v1_lib.AP_V1	6C7
DAC_COMP	DAC_COMP - @ap_v1_lib.AP_V1	6C4
DAC_IREF	DAC_IREF - @ap_v1_lib.AP_V1	6C4
DAC_OUT1	DAC_OUT1 - @ap_v1_lib.AP_V1	6C4
DAC_OUT2	DAC_OUT2 - @ap_v1_lib.AP_V1	6C4
DAC_OUT3	DAC_OUT3 - @ap_v1_lib.AP_V1	6C4
DAC_VREF	DAC_VREF - @ap_v1_lib.AP_V1	6C4
DDR_CKE0	DDR_CKE0 - @ap_v1_lib.AP_V1	3B4 3C6
DDR_CKE1	DDR_CKE1 - @ap_v1_lib.AP_V1	3A4 3C6
DOCK_3V3	DOCK_3V3 - @ap_v1_lib.AP_V1	11C3
DOCK_C	DOCK_C - @ap_v1_lib.AP_V1	11D5
DOCK_COMP	DOCK_COMP - @ap_v1_lib.AP_V1	11D5
DOCK_RESET*	DOCK_RESET* - @ap_v1_lib.AP_V1	11A6 11C3
DOCK_RTCK	DOCK_RTCK - @ap_v1_lib.AP_V1	11A6 11C3
DOCK_TCK	DOCK_TCK - @ap_v1_lib.AP_V1	11B6 11D5
DOCK_TCK_FL	DOCK_TCK_FL - @ap_v1_lib.AP_V1	11B7 15A6 15B6
DOCK_TCK_MUX	DOCK_TCK_MUX - @ap_v1_lib.AP_V1	15B5 15B8 15C5
DOCK_TDI	DOCK_TDI - @ap_v1_lib.AP_V1	11B6 11D5
DOCK_TDI_FL	DOCK_TDI_FL - @ap_v1_lib.AP_V1	11B7 15A6 15B6
DOCK_TDI_MUX	DOCK_TDI_MUX - @ap_v1_lib.AP_V1	15A8 15B5 15C5
DOCK_TDO	DOCK_TDO - @ap_v1_lib.AP_V1	11B6 11C5
DOCK_TMS	DOCK_TMS - @ap_v1_lib.AP_V1	11B6 11C3
DOCK_UART_CTRL	DOCK_UART_CTRL - @ap_v1_lib.AP_V1	9C6 15A6 15B6 15C8 15C8
DOCK_Y	DOCK_Y - @ap_v1_lib.AP_V1	11D5
DVDD_1817	DVDD_1817 - @ap_v1_lib.AP_V1	7B6 7C5
EXT_MIC+	EXT_MIC+ - @ap_v1_lib.AP_V1	8B4 8C2 16A6
EXT_MIC_N	EXT_MIC_N - @ap_v1_lib.AP_V1	7C8 8D8
EXT_MIC_N_1817	EXT_MIC_N_1817 - @ap_v1_lib.AP_V1	7C6
EXT_MIC_N_FL	EXT_MIC_N_FL - @ap_v1_lib.AP_V1	7C7
EXT_MIC_P	EXT_MIC_P - @ap_v1_lib.AP_V1	7D8 8D8
EXT_MIC_P1	EXT_MIC_P1 - @ap_v1_lib.AP_V1	8D6
EXT_MIC_P_1817	EXT_MIC_P_1817 - @ap_v1_lib.AP_V1	7C6
EXT_MIC_P_FL	EXT_MIC_P_FL - @ap_v1_lib.AP_V1	7D7
FAD<0>	FAD<0> - @ap_v1_lib.AP_V1	4B7 4D5
FAD<7..0>	FAD<7..0> - @ap_v1_lib.AP_V1	4C8 4D5
FAD<1>	FAD<1> - @ap_v1_lib.AP_V1	4B7 4D5
FAD<2>	FAD<2> - @ap_v1_lib.AP_V1	4B7 4D5
FAD<3>	FAD<3> - @ap_v1_lib.AP_V1	4B7 4D5
FAD<4>	FAD<4> - @ap_v1_lib.AP_V1	4B7 4D5
FAD<5>	FAD<5> - @ap_v1_lib.AP_V1	4B7 4D5
FAD<6>	FAD<6> - @ap_v1_lib.AP_V1	4B7 4D5
FAD<7>	FAD<7> - @ap_v1_lib.AP_V1	4B7 4D5
FALE	FALE - @ap_v1_lib.AP_V1	4A7 4C5
FCE0*	FCE0* - @ap_v1_lib.AP_V1	4B7 4C7
FCE1*	FCE1* - @ap_v1_lib.AP_V1	4B7 4C7
FCE2*	FCE2* - @ap_v1_lib.AP_V1	4B7 4C7
FCE3*	FCE3* - @ap_v1_lib.AP_V1	4B7 4C7
FCLE	FCLE - @ap_v1_lib.AP_V1	4A7 4C5
FRDYBSY0*	FRDYBSY0* - @ap_v1_lib.AP_V1	4B7 4C7
FRDYBSY1*	FRDYBSY1* - @ap_v1_lib.AP_V1	2B6 4A6 4B7
FRDYBSY2*	FRDYBSY2* - @ap_v1_lib.AP_V1	2B6 4A6 4B7
FRDYBSY3*	FRDYBSY3* - @ap_v1_lib.AP_V1	2B6 4A6 4B7
FRE*	FRE* - @ap_v1_lib.AP_V1	4B7 4C5
FWE*	FWE* - @ap_v1_lib.AP_V1	4B7 4C5
FWP*	FWP* - @ap_v1_lib.AP_V1	4A6 4A7 4C5
FW_ADPTSNS	FW_ADPTSNS - @ap_v1_lib.AP_V1	9B6 10D5
FW_PWR	FW_PWR - @ap_v1_lib.AP_V1	10D7 11C5 16D3
GP_CAMP	GP_CAMP - @ap_v1_lib.AP_V1	13A3
GP_CAMP_G	GP_CAMP_G - @ap_v1_lib.AP_V1	13A3
GP_SW_NG	GP_SW_NG - @ap_v1_lib.AP_V1	13A4
GP_SW_PG	GP_SW_PG - @ap_v1_lib.AP_V1	13A4
GRAPE_BOOST_EN	GRAPE_BOOST_EN - @ap_v1_lib.AP_V1	13A8 13C5 16C5
GRAPE_HOST_INT*	GRAPE_HOST_INT* - @ap_v1_lib.AP_V1	6B4 13C5
GRAPE_LDO_EN	GRAPE_LDO_EN - @ap_v1_lib.AP_V1	2B6 9A7 13A5 14A3
GRAPE_PANEL_CONFIG	GRAPE_PANEL_CONFIG - @ap_v1_lib.AP_V1	13B6
GRAPE_RESET*	GRAPE_RESET* - @ap_v1_lib.AP_V1	2C6 13B5
GRAPE_VDD_1V8	GRAPE_VDD_1V8 - @ap_v1_lib.AP_V1	13A3 13D1 13D5 16B3
H1_DOCK_TCK	H1_DOCK_TCK - @ap_v1_lib.AP_V1	2C8 15A5
H1_DOCK_TDI	H1_DOCK_TDI - @ap_v1_lib.AP_V1	2C8 15A5
H1_UART0_RXD	H1_UART0_RXD - @ap_v1_lib.AP_V1	2B3 15B8
H1_UART0_TXD	H1_UART0_TXD - @ap_v1_lib.AP_V1	2B3 15C8
H1_UART1_RXD	H1_UART1_RXD - @ap_v1_lib.AP_V1	2B3 15C5
H1_UART1_TXD	H1_UART1_TXD - @ap_v1_lib.AP_V1	2B3 15B8
H1_UART4_CTS_N	H1_UART4_CTS_N - @ap_v1_lib.AP_V1	2B3 15D5
H1_UART4_RTS_N	H1_UART4_RTS_N - @ap_v1_lib.AP_V1	2B3 15C5 15D6
H1_UART4_RXD	H1_UART4_RXD - @ap_v1_lib.AP_V1	2B3 15C5
H1_UART4_TXD	H1_UART4_TXD - @ap_v1_lib.AP_V1	2B3 15A8
HOLD_KEY	HOLD_KEY - @ap_v1_lib.AP_V1	2C4
HPCOM_CHG_SRC	HPCOM_CHG_SRC - @ap_v1_lib.AP_V1	7A7
HPCOM_CTRL	HPCOM_CTRL - @ap_v1_lib.AP_V1	4D8 7A8
HPCOM_CTRL_B	HPCOM_CTRL_B - @ap_v1_lib.AP_V1	7A7
HPVDD_1817	HPVDD_1817 - @ap_v1_lib.AP_V1	7D4
HP_AUD_L	HP_AUD_L - @ap_v1_lib.AP_V1	7D1 8C7
HP_AUD_L_1	HP_AUD_L_1 - @ap_v1_lib.AP_V1	8C6
HP_AUD_L_2	HP_AUD_L_2 - @ap_v1_lib.AP_V1	8C5
HP_AUD_L_CONN	HP_AUD_L_CONN - @ap_v1_lib.AP_V1	8B4 8C2 16A6
HP_AUD_R	HP_AUD_R - @ap_v1_lib.AP_V1	7A8 7D1 8C7
HP_AUD_R_1	HP_AUD_R_1 - @ap_v1_lib.AP_V1	8C6
HP_AUD_R_2	HP_AUD_R_2 - @ap_v1_lib.AP_V1	8C5
HP_AUD_R_CONN	HP_AUD_R_CONN - @ap_v1_lib.AP_V1	8B4 8C2 16A6
HP_COM	HP_COM - @ap_v1_lib.AP_V1	7B5
HP_COM_FL	HP_COM_FL - @ap_v1_lib.AP_V1	7A6
HP_DETECT	HP_DETECT - @ap_v1_lib.AP_V1	7B6 8B4
HP_DETECT_CONN	HP_DETECT_CONN - @ap_v1_lib.AP_V1	8B4 8C2 16A6
HP_DETECT_D	HP_DETECT_D - @ap_v1_lib.AP_V1	8B3
HP_DETECT_FL	HP_DETECT_FL - @ap_v1_lib.AP_V1	8B3
HP_DETECT_G	HP_DETECT_G - @ap_v1_lib.AP_V1	8C3
HP_DETECT_IND	HP_DETECT_IND - @ap_v1_lib.AP_V1	8C3
HP_MICBIAS	HP_MICBIAS - @ap_v1_lib.AP_V1	8D4
HP_MIC_RET	HP_MIC_RET - @ap_v1_lib.AP_V1	8D7
HP_RET_SENSE	HP_RET_SENSE - @ap_v1_lib.AP_V1	7A6 8C6
I2C_SCL_1V8	I2C_SCL_1V8 - @ap_v1_lib.AP_V1	2C1 7B6 8D7 9C7 12C2
I2C_SCL_3V	I2C_SCL_3V - @ap_v1_lib.AP_V1	2D1 13B2 16B6
I2C_SDA_1V8	I2C_SDA_1V8 - @ap_v1_lib.AP_V1	2C1 7B3 8D7 9C7 12C2
I2C_SDA_3V	I2C_SDA_3V - @ap_v1_lib.AP_V1	2C1 13B1 16B6
INT_MIC_N_1817	INT_MIC_N_1817 - @ap_v1_lib.AP_V1	7C5
INT_MIC_N_CONN	INT_MIC_N_CONN - @ap_v1_lib.AP_V1	7D8 11C6 16B8
INT_MIC_N_FL	INT_MIC_N_FL - @ap_v1_lib.AP_V1	7D7
INT_MIC_P_1817	INT_MIC_P_1817 - @ap_v1_lib.AP_V1	7C5
INT_MIC_P_CONN	INT_MIC_P_CONN - @ap_v1_lib.AP_V1	7D8 11C6 16B8
INT_MIC_P_FL	INT_MIC_P_FL - @ap_v1_lib.AP_V1	7D7
IPC_MISO	IPC_MISO - @ap_v1_lib.AP_V1	5A7 15D3
IPC_MOSI	IPC_MOSI - @ap_v1_lib.AP_V1	5A7 15C3
IPC_MRDY	IPC_MRDY - @ap_v1_lib.AP_V1	2B3 15C3
IPC_SCLK	IPC_SCLK - @ap_v1_lib.AP_V1	5A8 15C3
IPC_SRDY	IPC_SRDY - @ap_v1_lib.AP_V1	5A7 15C3
IRQ_CODEC	IRQ_CODEC - @ap_v1_lib.AP_V1	2C3 7B6 16C8
IRQ_TO_PMU*	IRQ_TO_PMU* - @ap_v1_lib.AP_V1	7B6 12B8
IRQ_TO_PMU_MUX	IRQ_TO_PMU_MUX - @ap_v1_lib.AP_V1	12B8
KEEPACT	KEEPACT - @ap_v1_lib.AP_V1	9C6
LCD_BL_CA	LCD_BL_CA - @ap_v1_lib.AP_V1	9B1 14C4 16B3
LCD_BL_CC	LCD_BL_CC - @ap_v1_lib.AP_V1	9A1 14C4 16B3
LCD_BOOST_CTRL	LCD_BOOST_CTRL - @ap_v1_lib.AP_V1	14C4 14D5 16A3
LCD_BOOST_FB	LCD_BOOST_FB - @ap_v1_lib.AP_V1	14D2
LCD_BOOST_SHDN	LCD_BOOST_SHDN - @ap_v1_lib.AP_V1	14D4
LCD_BOOST_SHDN*	LCD_BOOST_SHDN* - @ap_v1_lib.AP_V1	14D3
LCD_BOOST_SW	LCD_BOOST_SW - @ap_v1_lib.AP_V1	14D3
LCD_BOOST_VIN	LCD_BOOST_VIN - @ap_v1_lib.AP_V1	14D3
LCD_BOOST_VOUT	LCD_BOOST_VOUT - @ap_v1_lib.AP_V1	14D1
LCD_BOOST_V_CTRL	LCD_BOOST_V_CTRL - @ap_v1_lib.AP_V1	3B3 14C3
LCD_D<0>	LCD_D<0> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<23..0>	LCD_D<23..0> - @ap_v1_lib.AP_V1	5A4 5B2
LCD_D<1>	LCD_D<1> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<2>	LCD_D<2> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<3>	LCD_D<3> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<4>	LCD_D<4> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<5>	LCD_D<5> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<6>	LCD_D<6> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<7>	LCD_D<7> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<8>	LCD_D<8> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<9>	LCD_D<9> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<10>	LCD_D<10> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<11>	LCD_D<11> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<12>	LCD_D<12> - @ap_v1_lib.AP_V1	5B4 5B5
LCD_D<13>	LCD_D<13> - @ap_v1_lib.AP_V1	5A4 5B5
LCD_D<14>	LCD_D<14> - @ap_v1_lib.AP_V1	5A4 5B5
LCD_D<15>	LCD_D<15> - @ap_v1_lib.AP_V1	5A4 5B5
LCD_D<16>	LCD_D<16> - @ap_v1_lib.AP_V1	5A5 5B2
LCD_D<17>	LCD_D<17> - @ap_v1_lib.AP_V1	5A5 5B2
LCD_D<18>	LCD_D<18> - @ap_v1_lib.AP_V1	5A5 5B2
LCD_D<19>	LCD_D<19> - @ap_v1_lib.AP_V1	5A5 5B2
LCD_D<20>	LCD_D<20> - @ap_v1_lib.AP_V1	5A5 5B2
LCD_D<21>	LCD_D<21> - @ap_v1_lib.AP_V1	5A5 5B2
LCD_D<22>	LCD_D<22> - @ap_v1_lib.AP_V1	5A5 5B2
LCD_D<23>	LCD_D<23> - @ap_v1_lib.AP_V1	5A5 5B2
LCD_DE	LCD_DE - @ap_v1_lib.AP_V1	5A5
LCD_DRVR_ID	LCD_DRVR_ID - @ap_v1_lib.AP_V1	3A3 14C7
LCD_FLM	LCD_FLM - @ap_v1_lib.AP_V1	2B6 14C3
LCD_PCLK	LCD_PCLK - @ap_v1_lib.AP_V1	5A3
LCD_RST*	LCD_RST* - @ap_v1_lib.AP_V1	5A4 14C2
LCD_SPI_CLK	LCD_SPI_CLK - @ap_v1_lib.AP_V1	14C7
	SERIAL_FLASH_CLK_1V8 - @ap_v1_lib.AP_V1	5A2 5B8 5D7 14C8
LCD_SPI_CLK_CONN	LCD_SPI_CLK_CONN - @ap_v1_lib.AP_V1	14C5
LCD_SPI_CS*	LCD_SPI_CS* - @ap_v1_lib.AP_V1	14C7
	LCD_SPI_CS_AP* - @ap_v1_lib.AP_V1	5B7 14C8
LCD_SPI_CS_CONN*	LCD_SPI_CS_CONN* - @ap_v1_lib.AP_V1	14C5
LCD_SPI_DI	LCD_SPI_DI - @ap_v1_lib.AP_V1	14C7
	SERIAL_FLASH_MOSI_1V8 - @ap_v1_lib.AP_V1	5B7 5C7 14C8
LCD_SPI_DI_CONN	LCD_SPI_DI_CONN - @ap_v1_lib.AP_V1	14C5
LCD_SPI_DO	LCD_SPI_DO - @ap_v1_lib.AP_V1	14D7
	LCD_SPI_DO_1V8 - @ap_v1_lib.AP_V1	5D3 14D8
LCD_SPI_DO_CONN	LCD_SPI_DO_CONN - @ap_v1_lib.AP_V1	14C5
LCD_VS	LCD_VS - @ap_v1_lib.AP_V1	5A5
LEDFBGND	LEDFBGND - @ap_v1_lib.AP_V1	9B4
LEDOUT	LEDOUT - @ap_v1_lib.AP_V1	9B4
LED_LX	LED_LX - @ap_v1_lib.AP_V1	9B2
LED_PWR	LED_PWR - @ap_v1_lib.AP_V1	13B2
	PROX_VDD - @ap_v1_lib.AP_V1	13A8 13B2 13B2 13C5 14B1 16B3
LINECOM_CHG_SRC	LINECOM_CHG_SRC - @ap_v1_lib.AP_V1	7A5
LINECOM_CTRL	LINECOM_CTRL - @ap_v1_lib.AP_V1	4D8 7A4
LINECOM_CTRL_B	LINECOM_CTRL_B - @ap_v1_lib.AP_V1	7A4
LINE_COM	LINE_COM - @ap_v1_lib.AP_V1	7B5
LINE_COM_FL	LINE_COM_FL - @ap_v1_lib.AP_V1	7A5
LINE_IN_L	LINE_IN_L - @ap_v1_lib.AP_V1	7B8 11D1
LINE_IN_L_1817	LINE_IN_L_1817 - @ap_v1_lib.AP_V1	7C6
LINE_IN_L_C	LINE_IN_L_C - @ap_v1_lib.AP_V1	7B7
LINE_IN_L_CONN	LINE_IN_L_CONN - @ap_v1_lib.AP_V1	11D4 16A8
LINE_IN_R	LINE_IN_R - @ap_v1_lib.AP_V1	7B8 11D1
LINE_IN_R_1817	LINE_IN_R_1817 - @ap_v1_lib.AP_V1	7C6
LINE_IN_R_C	LINE_IN_R_C - @ap_v1_lib.AP_V1	7B7
LINE_IN_R_CONN	LINE_IN_R_CONN - @ap_v1_lib.AP_V1	11D4 16A8
LINE_OUT_L	LINE_OUT_L - @ap_v1_lib.AP_V1	7D1 11D1
LINE_OUT_L_1817	LINE_OUT_L_1817 - @ap_v1_lib.AP_V1	7A4 7C4
LINE_OUT_L_CONN	LINE_OUT_L_CONN - @ap_v1_lib.AP_V1	11D4 16A8
LINE_OUT_R	LINE_OUT_R - @ap_v1_lib.AP_V1	7C1 11D1
LINE_OUT_R_1817	LINE_OUT_R_1817 - @ap_v1_lib.AP_V1	7C4
LINE_OUT_R_CONN	LINE_OUT_R_CONN - @ap_v1_lib.AP_V1	11D4 16A8
MARIO_VCCDIG	MARIO_VCCDIG - @ap_v1_lib.AP_V1	13D2
MENU_KEY	MENU_KEY - @ap_v1_lib.AP_V1	2B2 2B6
MENU_KEY*	MENU_KEY* - @ap_v1_lib.AP_V1	2B1 11C3 12B7 12C8 16D8
MENU_KEY_CONN*	MENU_KEY_CONN* - @ap_v1_lib.AP_V1	11C4
MICBIAS1_1817	MICBIAS1_1817 - @ap_v1_lib.AP_V1	7B3 8D5
MICBIAS2_1817	MICBIAS2_1817 - @ap_v1_lib.AP_V1	7B3 7D8
MIKEY_AVDD	MIKEY_AVDD - @ap_v1_lib.AP_V1	8D6
MIKEY_BYPASS	MIKEY_BYPASS - @ap_v1_lib.AP_V1	8D5
MIKEY_DETECT	MIKEY_DETECT - @ap_v1_lib.AP_V1	8D5
MIKEY_EN	MIKEY_EN - @ap_v1_lib.AP_V1	8D6
MIKEY_ENABLE	MIKEY_ENABLE - @ap_v1_lib.AP_V1	7B6 8D7
MIKEY_INT*	MIKEY_INT* - @ap_v1_lib.AP_V1	7B6 8D7
MIKEY_INT_OD*	MIKEY_INT_OD* - @ap_v1_lib.AP_V1	8D6
MIKEY_MICBIAS	MIKEY_MICBIAS - @ap_v1_lib.AP_V1	8D5
MPL_CLK	MPL_CLK - @ap_v1_lib.AP_V1	5B2 14C3
MPL_D<1>	MPL_D<1> - @ap_v1_lib.AP_V1	5B2 14C3
MPL_D<2>	MPL_D<2> - @ap_v1_lib.AP_V1	5B2 14C3
MPL_PWRDWN*	MPL_PWRDWN* - @ap_v1_lib.AP_V1	5A4 14C3
MPL_S_D_L	MPL_S_D_L - @ap_v1_lib.AP_V1	5A2
MPL_VDD	MPL_VDD - @ap_v1_lib.AP_V1	5C4
NTC	NTC - @ap_v1_lib.AP_V1	10A3 15D5 16B5
ONKEY*	ONKEY* - @ap_v1_lib.AP_V1	9C7 12D6 15D5
OSC32I	OSC32I - @ap_v1_lib.AP_V1	9C6
OSC32O	OSC32O - @ap_v1_lib.AP_V1	9C6
OVP_GATE	OVP_GATE - @ap_v1_lib.AP_V1	10C5
OV_FLAG*	OV_FLAG* - @ap_v1_lib.AP_V1	4D8 10C4 16C3
PLL_AVSS	PLL_AVSS - @ap_v1_lib.AP_V1	2A4 2D7
PMU_IRQ*	PMU_IRQ* - @ap_v1_lib.AP_V1	4D8 9C7
PMU_REF_GND	PMU_REF_GND - @ap_v1_lib.AP_V1	9B7
PMU_WAKEUP	PMU_WAKEUP - @ap_v1_lib.AP_V1	9C7 12B5
POD_TO_ACC_DOCK	POD_TO_ACC_DOCK - @ap_v1_lib.AP_V1	15C7
POD_TO_ACC_DOCK_CONN	POD_TO_ACC_DOCK_CONN - @ap_v1_lib.AP_V1	11C5 15C6 16D5
PROC_BT_UCTS	PROC_BT_UCTS - @ap_v1_lib.AP_V1	2B3
PROC_BT_URXD	PROC_BT_URXD - @ap_v1_lib.AP_V1	2B3
PROC_I2S1_CLK	PROC_I2S1_CLK - @ap_v1_lib.AP_V1	2C3 15D2
PROC_I2S1_SDI	PROC_I2S1_SDI - @ap_v1_lib.AP_V1	2C3 15D2
PROC_I2S1_SDO	PROC_I2S1_SDO - @ap_v1_lib.AP_V1	2C3 15D2
PROC_I2S1_WA0	PROC_I2S1_WA0 - @ap_v1_lib.AP_V1	2C3 15D2
PROC_USB_CLK	PROC_USB_CLK - @ap_v1_lib.AP_V1	2C6
PROG	PROG - @ap_v1_lib.AP_V1	10A5
PROX_EN	PROX_EN - @ap_v1_lib.AP_V1	13C5
PROX_EN_3V	PROX_EN_3V - @ap_v1_lib.AP_V1	13B1 13C4
PROX_RX	PROX_RX - @ap_v1_lib.AP_V1	13B2 13C8
PROX_RX_IN	PROX_RX_IN - @ap_v1_lib.AP_V1	13C8
PROX_TX	PROX_TX - @ap_v1_lib.AP_V1	13B2 13C1 16C5
PROX_VSTM	PROX_VSTM - @ap_v1_lib.AP_V1	13C2
PWRDWN_2512*	PWRDWN_2512* - @ap_v1_lib.AP_V1	5A2 5A4
PWR_KEY*	PWR_KEY* - @ap_v1_lib.AP_V1	2B1 8A7 8B6 12B7 12C8 16D8
RADIO_ON	RADIO_ON - @ap_v1_lib.AP_V1	2B6 15D3
RCVR_N	RCVR_N - @ap_v1_lib.AP_V1	7B1 13A3
RCVR_N_CONN	RCVR_N_CONN - @ap_v1_lib.AP_V1	13A1 13B2 16B8
RCVR_P	RCVR_P - @ap_v1_lib.AP_V1	7B1 13A3
RCVR_P_CONN	RCVR_P_CONN - @ap_v1_lib.AP_V1	13A1 13B1 16B8
REFC	REFC - @ap_v1_lib.AP_V1	9C7
RESET*	RESET* - @ap_v1_lib.AP_V1	2C8 8A6 9C7 11A7 16C6
RESET_DET*	RESET_DET* - @ap_v1_lib.AP_V1	4D8 15D3
RESET_H1*	RESET_H1* - @ap_v1_lib.AP_V1	2C6
RF_CTRL0	RF_CTRL0 - @ap_v1_lib.AP_V1	3A3 16C8
RF_CTRL1	RF_CTRL1 - @ap_v1_lib.AP_V1	3A3 16C8
RF_RESET*	RF_RESET* - @ap_v1_lib.AP_V1	2C8 15D5
RINGER_A	RINGER_A - @ap_v1_lib.AP_V1	2A2 7B6 8B6 8B7 16D8
RINGER_AB	RINGER_AB - @ap_v1_lib.AP_V1	2A3 2B3
SDRAM+1.8V	SDRAM+1.8V - @ap_v1_lib.AP_V1	4B1 7B6 7D5 8B6 9C8 9D2 12B8 16C3
SDRAM_1V8_H1	SDRAM_1V8_H1 - @ap_v1_lib.AP_V1	4B2
SERIALIZER_CS_AP*	SERIALIZER_CS_AP* - @ap_v1_lib.AP_V1	5A2 5B7
SERIAL_FLASH_CS*	SERIAL_FLASH_CS* - @ap_v1_lib.AP_V1	5C3 16B6
SERIAL_FLASH_CS_1V8*	SERIAL_FLASH_CS_1V8* - @ap_v1_lib.AP_V1	5B7 5D7
SERIAL_FLASH_CS_3V*	SERIAL_FLASH_CS_3V* - @ap_v1_lib.AP_V1	5D6
SERIAL_FLASH_MISO_1V8	SERIAL_FLASH_MISO_1V8 - @ap_v1_lib.AP_V1	5B7 5D1
SERIAL_FLASH_SCK	SERIAL_FLASH_SCK - @ap_v1_lib.AP_V1	5D6
SERIAL_FLASH_SI	SERIAL_FLASH_SI - @ap_v1_lib.AP_V1	5C6
SERIAL_FLASH_SO	SERIAL_FLASH_SO - @ap_v1_lib.AP_V1	5D4
SERIAL_FLASH_SO_3V_1V8	SERIAL_FLASH_SO_3V_1V8 - @ap_v1_lib.AP_V1	5D3
SERIAL_FLASH_VDD	SERIAL_FLASH_VDD - @ap_v1_lib.AP_V1	5D5
SERIAL_HOLD*	SERIAL_HOLD* - @ap_v1_lib.AP_V1	5C5
SERIAL_WP*	SERIAL_WP* - @ap_v1_lib.AP_V1	5C5
SIMCRD_CLK	SIMCRD_CLK - @ap_v1_lib.AP_V1	15B2 15B3 15C3
SIMCRD_IO	SIMCRD_IO - @ap_v1_lib.AP_V1	15B1 15B2 15C3
SIMCRD_RST	SIMCRD_RST - @ap_v1_lib.AP_V1	15B1 15B3 15C3
SIM_DETECT	SIM_DETECT - @ap_v1_lib.AP_V1	15B1 15C3
SMC_A0	SMC_A0 - @ap_v1_lib.AP_V1	3C4
SMC_A1	SMC_A1 - @ap_v1_lib.AP_V1	3C4
SMC_A2	SMC_A2 - @ap_v1_lib.AP_V1	3C4
SMC_A3	SMC_A3 - @ap_v1_lib.AP_V1	3C4
SMC_A4	SMC_A4 - @ap_v1_lib.AP_V1	3C4
SMC_A5	SMC_A5 - @ap_v1_lib.AP_V1	3C4
SMPOWER_SPKR_N_CONN	SMPOWER_SPKR_N_CONN - @ap_v1_lib.AP_V1	7A1 11C1 16B8
SMPOWER_SPKR_P_CONN	SMPOWER_SPKR_P_CONN - @ap_v1_lib.AP_V1	7B1 11C1 16C8
SPI0_CLK_H1	SPI0_CLK_H1 - @ap_v1_lib.AP_V1	5B7
SPI1_CLK_AP	SPI1_CLK_AP - @ap_v1_lib.AP_V1	5A8 13C4
SPI1_CLK_GRAPE	SPI1_CLK_GRAPE - @ap_v1_lib.AP_V1	13C6
SPI1_CLK_H1	SPI1_CLK_H1 - @ap_v1_lib.AP_V1	5A7
SPI1_CS_AP*	SPI1_CS_AP* - @ap_v1_lib.AP_V1	5A7 13C4
SPI1_CS_GRAPE*	SPI1_CS_GRAPE* - @ap_v1_lib.AP_V1	13C6
SPI1_MISO_AP	SPI1_MISO_AP - @ap_v1_lib.AP_V1	5A7 13B4
SPI1_MISO_GRAPE	SPI1_MISO_GRAPE - @ap_v1_lib.AP_V1	13C6
SPI1_MOSI_AP	SPI1_MOSI_AP - @ap_v1_lib.AP_V1	5A7 13B4
SPI1_MOSI_GRAPE	SPI1_MOSI_GRAPE - @ap_v1_lib.AP_V1	13C6
SPI2_CLK_H1	SPI2_CLK_H1 - @ap_v1_lib.AP_V1	5A7
SPKVDD_1817	SPKVDD_1817 - @ap_v1_lib.AP_V1	7C4
S_ACC_DETECT*	S_ACC_DETECT* - @ap_v1_lib.AP_V1	9C7 11A3
UMTS_RXD	UMTS_RXD - @ap_v1_lib.AP_V1	15B7 15D5
UMTS_RXD_CTRL	UMTS_RXD_CTRL - @ap_v1_lib.AP_V1	2B3 15A8
UMTS_TXD	UMTS_TXD - @ap_v1_lib.AP_V1	15C6 15C8 15D5
USB_DM	USB_DM - @ap_v1_lib.AP_V1	2B3 11C1 12B4
USB_DM_CONN	USB_DM_CONN - @ap_v1_lib.AP_V1	11C4 16C5
USB_DP	USB_DP - @ap_v1_lib.AP_V1	2A3 11B1 12B4
USB_DP_CONN	USB_DP_CONN - @ap_v1_lib.AP_V1	11C4 16C5
USB_PWR_NO_PROTECT	USB_PWR_NO_PROTECT - @ap_v1_lib.AP_V1	10C8 11C6 16C3
USB_PWR_SNS	USB_PWR_SNS - @ap_v1_lib.AP_V1	2A3 9B7 10C4
USB_PWR_SW	USB_PWR_SW - @ap_v1_lib.AP_V1	10C6
USB_REXT	USB_REXT - @ap_v1_lib.AP_V1	2A4
USB_SW_GATE	USB_SW_GATE - @ap_v1_lib.AP_V1	10C7
USB_VBUS	USB_VBUS - @ap_v1_lib.AP_V1	2A4
VBUSDIG	VBUSDIG - @ap_v1_lib.AP_V1	2A4
VCC_MAIN	VCC_MAIN - @ap_v1_lib.AP_V1	8D7 9B1 9B4 9B4 9B4 9B7 9C4 9C4 9C4 9D7 9D7 10B3 11B4 12C8 13A5 14B3 14D4 16D3
VCC_REG_PWR	VCC_REG_PWR - @ap_v1_lib.AP_V1	10A4 10A7 10C4 16C3
VCC_REG_PWR_FET	VCC_REG_PWR_FET - @ap_v1_lib.AP_V1	10C5
VDD_1V0_H1	VDD_1V0_H1 - @ap_v1_lib.AP_V1	4D2
VDD_ACCEL	VDD_ACCEL - @ap_v1_lib.AP_V1	12D3
VDD_CAM_ANALOG	VDD_CAM_ANALOG - @ap_v1_lib.AP_V1	14A6 14B1 16B3
VDD_CAM_CONN	VDD_CAM_CONN - @ap_v1_lib.AP_V1	14A4 14A5
VDD_EDRAM_3V	VDD_EDRAM_3V - @ap_v1_lib.AP_V1	4D3
VDD_IO_3V	VDD_IO_3V - @ap_v1_lib.AP_V1	2D1 2D1 2D3 2D7 4D2 4D5 5C7 5D6 5D7 5D7 9C2 10C4 12B3 12C4 12D4 15B8 15C8 16B3
VDD_IO_A	VDD_IO_A - @ap_v1_lib.AP_V1	2D4
VDD_IO_A2	VDD_IO_A2 - @ap_v1_lib.AP_V1	2D4
VDD_LCD_1V8	VDD_LCD_1V8 - @ap_v1_lib.AP_V1	14C6
VDD_LCD_3V	VDD_LCD_3V - @ap_v1_lib.AP_V1	9C2 14C5 14D4 16B3
VDD_LCD_BOOST	VDD_LCD_BOOST - @ap_v1_lib.AP_V1	14C1 16A3
VDD_LOGIC	VDD_LOGIC - @ap_v1_lib.AP_V1	2D4
VDD_NAND	VDD_NAND - @ap_v1_lib.AP_V1	4B8 4C6 16B3
VDD_NAND_LDO	VDD_NAND_LDO - @ap_v1_lib.AP_V1	4C5 9C2
VDD_PLL	VDD_PLL - @ap_v1_lib.AP_V1	2D5
VDD_SDRAM_DDR	VDD_SDRAM_DDR - @ap_v1_lib.AP_V1	3D5
VDD_USB_ANLG_3V	VDD_USB_ANLG_3V - @ap_v1_lib.AP_V1	2D5

VDD_USB_LOGIC	VDD_USB_LOGIC - @ap_v1_lib.AP_V1	2D6
VDD_VIDEO_3V	VDD_VIDEO_3V - @ap_v1_lib.AP_V1	6C2 6D7 9C2 16B3
VDD_VIDEO_DAC	VDD_VIDEO_DAC - @ap_v1_lib.AP_V1	6D5
VIBRATOR_CTRL	VIBRATOR_CTRL - @ap_v1_lib.AP_V1	5B7 8A6
VIB_CTRL	VIB_CTRL - @ap_v1_lib.AP_V1	8A5
VIDEO_AMP_EN	VIDEO_AMP_EN - @ap_v1_lib.AP_V1	4D8 6B8
VID_C	VID_C - @ap_v1_lib.AP_V1	6C8 11D8
VID_COMP	VID_COMP - @ap_v1_lib.AP_V1	6C8 11D8
VID_Y	VID_Y - @ap_v1_lib.AP_V1	6B8 11D8
VISA	VISA - @ap_v1_lib.AP_V1	9C7 9C7 12D8
VISC	VISC - @ap_v1_lib.AP_V1	9C7
VMID	VMID - @ap_v1_lib.AP_V1	7B3 16B6
VOL_DWN*	VOL_DWN* - @ap_v1_lib.AP_V1	2B7 8A7 8B6 16C8
VOL_UP*	VOL_UP* - @ap_v1_lib.AP_V1	2B7 8A7 8B6 16C8
VR1_BYP	VR1_BYP - @ap_v1_lib.AP_V1	14A2
VSD2	VSD2 - @ap_v1_lib.AP_V1	15A8 15B6 15B8 15D5 15D8
VSIM	VSIM - @ap_v1_lib.AP_V1	15B1 15B3 15D3
VVIB_1V3	VVIB_1V3 - @ap_v1_lib.AP_V1	8A3
WLAN_RESET	WLAN_RESET - @ap_v1_lib.AP_V1	2C6 15D5
WLAN_SDIO_CLK	WLAN_SDIO_CLK - @ap_v1_lib.AP_V1	2B7 15D3
WLAN_SDIO_CMD	WLAN_SDIO_CMD - @ap_v1_lib.AP_V1	2B7 15D3
WLAN_SDIO_DATA<0>	WLAN_SDIO_DATA<0> - @ap_v1_lib.AP_V1	2B7 15D3
WLAN_SDIO_DATA<1>	WLAN_SDIO_DATA<1> - @ap_v1_lib.AP_V1	2B7 15D3
WLAN_SDIO_DATA<2>	WLAN_SDIO_DATA<2> - @ap_v1_lib.AP_V1	2B7 15D3
WLAN_SDIO_DATA<3>	WLAN_SDIO_DATA<3> - @ap_v1_lib.AP_V1	2B7 15D3
XTAL_24M_I	XTAL_24M_I - @ap_v1_lib.AP_V1	2A6
XTAL_24M_O	XTAL_24M_O - @ap_v1_lib.AP_V1	2A6
XTAL_27M_I	XTAL_27M_I - @ap_v1_lib.AP_V1	6B4
YOUT	YOUT - @ap_v1_lib.AP_V1	6C7
Z2_BON_L<0>	Z2_BON_L<0> - @ap_v1_lib.AP_V1	13C6 13D3
Z2_BON_L<1>	Z2_BON_L<1> - @ap_v1_lib.AP_V1	13C6 13D3
Z2_BOOT_CFG<0>	Z2_BOOT_CFG<0> - @ap_v1_lib.AP_V1	13B8
Z2_B_ADR<0>	Z2_B_ADR<0> - @ap_v1_lib.AP_V1	13D3 13D6
Z2_B_ADR<1>	Z2_B_ADR<1> - @ap_v1_lib.AP_V1	13C6 13D3
Z2_B_ADR<2>	Z2_B_ADR<2> - @ap_v1_lib.AP_V1	13C6 13D3
Z2_HOST_INT*	Z2_HOST_INT* - @ap_v1_lib.AP_V1	13C6
Z2_PANEL_IN<0>	Z2_PANEL_IN<0> - @ap_v1_lib.AP_V1	13B3 13D8
Z2_PANEL_IN<1>	Z2_PANEL_IN<1> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_PANEL_IN<2>	Z2_PANEL_IN<2> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_PANEL_IN<3>	Z2_PANEL_IN<3> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_PANEL_IN<4>	Z2_PANEL_IN<4> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_PANEL_IN<5>	Z2_PANEL_IN<5> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_PANEL_IN<6>	Z2_PANEL_IN<6> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_PANEL_IN<7>	Z2_PANEL_IN<7> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_PANEL_IN<8>	Z2_PANEL_IN<8> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_PANEL_IN<9>	Z2_PANEL_IN<9> - @ap_v1_lib.AP_V1	13B3 13C8
Z2_RESET*	Z2_RESET* - @ap_v1_lib.AP_V1	13B6
Z2_VDD	Z2_VDD - @ap_v1_lib.AP_V1	13B8 13D7
Z2_VDDANA	Z2_VDDANA - @ap_v1_lib.AP_V1	13D7
Z2_VDDCORE	Z2_VDDCORE - @ap_v1_lib.AP_V1	13D7
Z2_VSTM_OUT<0>	Z2_VSTM_OUT<0> - @ap_v1_lib.AP_V1	13B3 13D1
Z2_VSTM_OUT<1>	Z2_VSTM_OUT<1> - @ap_v1_lib.AP_V1	13B3 13D1
Z2_VSTM_OUT<2>	Z2_VSTM_OUT<2> - @ap_v1_lib.AP_V1	13B3 13D1
Z2_VSTM_OUT<3>	Z2_VSTM_OUT<3> - @ap_v1_lib.AP_V1	13B4 13D1
Z2_VSTM_OUT<4>	Z2_VSTM_OUT<4> - @ap_v1_lib.AP_V1	13B4 13D1
Z2_VSTM_OUT<5>	Z2_VSTM_OUT<5> - @ap_v1_lib.AP_V1	13B4 13D1
Z2_VSTM_OUT<6>	Z2_VSTM_OUT<6> - @ap_v1_lib.AP_V1	13B4 13D1
Z2_VSTM_OUT<7>	Z2_VSTM_OUT<7> - @ap_v1_lib.AP_V1	13B4 13C1
Z2_VSTM_OUT<8>	Z2_VSTM_OUT<8> - @ap_v1_lib.AP_V1	13B4 13C1
Z2_VSTM_OUT<9>	Z2_VSTM_OUT<9> - @ap_v1_lib.AP_V1	13B4 13C1
Z2_VSTM_OUT<10>	Z2_VSTM_OUT<10> - @ap_v1_lib.AP_V1	13B4 13C1
Z2_VSTM_OUT<11>	Z2_VSTM_OUT<11> - @ap_v1_lib.AP_V1	13B4 13C1
Z2_VSTM_OUT<12>	Z2_VSTM_OUT<12> - @ap_v1_lib.AP_V1	13B4 13C1
Z2_VSTM_OUT<13>	Z2_VSTM_OUT<13> - @ap_v1_lib.AP_V1	13B4 13C1
Z2_VSTM_OUT<14>	Z2_VSTM_OUT<14> - @ap_v1_lib.AP_V1	13B4 13C1

Title: Cref Part Report
Design: ap_v1
Date: Feb 14 18:02:47 2008

C1	CAP_201	ap_v1[9C3]
C2	CAP_201	ap_v1[9C3]
C3	CAP_603	ap_v1[13D3]
C4	CAP_P_0603-SM	ap_v1[7A5]
C5	CAP_P_0603-SM	ap_v1[7A6]
C6	CAP_201	ap_v1[8C3]
C7	CAP_201	ap_v1[7D4]
C8	CAP_402	ap_v1[9B4]
C9	CAP_201	ap_v1[2A6]
C11	CAP_201	ap_v1[2A6]
C12	CAP_201	ap_v1[2D6]
C13	CAP_201	ap_v1[2D5]
C14	CAP_402	ap_v1[2D5]
C15	CAP_402	ap_v1[13D5]
C16	CAP_201	ap_v1[2D6]
C17	CAP_201	ap_v1[2D5]
C18	CAP_201	ap_v1[2D5]
C19	CAP_201	ap_v1[2D4]
C20	CAP_402	ap_v1[10B4]
C21	CAP_201	ap_v1[2D4]
C22	CAP_201	ap_v1[2D4]
C23	CAP_201	ap_v1[2D4]
C24	CAP_402	ap_v1[8A5]
C25	CAP_603	ap_v1[10A6]
C26	CAP_201	ap_v1[2D4]
C27	CAP_201	ap_v1[2D4]
C28	CAP_201	ap_v1[2D3]
C29	CAP_201	ap_v1[3D5]
C30	CAP_201	ap_v1[3D6]
C31	CAP_201	ap_v1[3D5]
C32	CAP_201	ap_v1[3D4]
C33	CAP_201	ap_v1[3D4]
C34	CAP_201	ap_v1[4C6]
C35	CAP_201	ap_v1[4C6]
C36	CAP_201	ap_v1[4D6]
C37	CAP_402-LF	ap_v1[4C6]
C38	CAP_201	ap_v1[4C3]
C39	CAP_201	ap_v1[4C3]
C40	CAP_201	ap_v1[4C3]
C41	CAP_201	ap_v1[4B3]
C42	CAP_402	ap_v1[8A4]
C43	CAP_603	ap_v1[10A6]
C44	CAP_201	ap_v1[4B3]
C45	CAP_201	ap_v1[4B3]
C46	CAP_201	ap_v1[4C2]
C47	CAP_201	ap_v1[4C3]
C48	CAP_201	ap_v1[4C3]
C49	CAP_201	ap_v1[4B3]
C50	CAP_201	ap_v1[4B3]
C51	CAP_201	ap_v1[4C2]
C52	CAP_402-LF	ap_v1[4C3]
C53	CAP_201	ap_v1[4D3]
C54	CAP_201	ap_v1[4B2]
C55	CAP_201	ap_v1[4B2]
C56	CAP_201	ap_v1[4C2]
C57	CAP_201	ap_v1[4C2]
C58	CAP_201	ap_v1[4D2]
C59	CAP_201	ap_v1[4B2]
C60	CAP_201	ap_v1[4C2]
C61	CAP_201	ap_v1[8A3]
C62	CAP_201	ap_v1[4B2]
C63	CAP_402-LF	ap_v1[10A5]
C65	CAP_201	ap_v1[5B5]
C66	CAP_201	ap_v1[5B6]
C67	CAP_201	ap_v1[5B5]
C68	CAP_201	ap_v1[5B4]
C69	CAP_201	ap_v1[5B3]
C70	CAP_201	ap_v1[5D4]
C71	CAP_201	ap_v1[5B2]
C72	CAP_201	ap_v1[5B2]
C73	CAP_201	ap_v1[6C6]
C74	CAP_201	ap_v1[6C3]
C75	CAP_201	ap_v1[6C4]
C76	CAP_603	ap_v1[10B4]
C77	CAP_603	ap_v1[6C4]
C78	CAP_201	ap_v1[6B5]
C79	CAP_201	ap_v1[6C4]
C80	CAP_201	ap_v1[8D6]
C81	CAP_201	ap_v1[8D5]
C82	CAP_201	ap_v1[6C3]
C83	CAP_402	ap_v1[7C7]
C84	CAP_402	ap_v1[7D7]
C85	CAP_201	ap_v1[7C7]
C86	CAP_201	ap_v1[7C7]
C87	CAP_201	ap_v1[7C7]
C88	CAP_P_0603-SM	ap_v1[7B7]
C89	CAP_P_0603-SM	ap_v1[7B7]
C90	CAP_201	ap_v1[8C8]
C91	CAP_201	ap_v1[7B7]
C92	CAP_201	ap_v1[7C4]
C93	CAP_201	ap_v1[7C5]
C94	CAP_201	ap_v1[13A3]
C95	CAP_P_0603-SM	ap_v1[7A3]
C96	CAP_201	ap_v1[7C1]
C97	CAP_P_0603-SM	ap_v1[8B4]
C98	CAP_201	ap_v1[7C1]
C99	CAP_P_603-SM	ap_v1[7C2]
C100	CAP_201	ap_v1[7D2]
C101	CAP_201	ap_v1[7D2]
C102	CAP_201	ap_v1[13A4]
C103	CAP_201	ap_v1[7B3]
C104	CAP_402	ap_v1[7C4]
C105	CAP_402	ap_v1[14B3]
C106	CAP_201	ap_v1[14A2]
C107	CAP_402	ap_v1[14B2]
C108	CAP_402	ap_v1[14B2]
C109	CAP_402	ap_v1[9D5]
C110	CAP_201	ap_v1[9B7]
C111	CAP_402	ap_v1[9B7]
C112	CAP_201	ap_v1[9B7]
C113	CAP_402	ap_v1[9D6]
C114	CAP_201	ap_v1[9B7]
C115	CAP_201	ap_v1[9B8]
C116	CAP_402	ap_v1[9D5]
C117	CAP_201	ap_v1[9B8]
C118	CAP_402	ap_v1[9D4]
C119	CAP_603	ap_v1[9D6]
C120	CAP_201	ap_v1[9B4]
C121	CAP_201	ap_v1[9A6]
C122	CAP_201	ap_v1[7A4]
C123	CAP_402	ap_v1[9B3]
C124	CAP_805	ap_v1[9B2]
C125	CAP_603	ap_v1[9D3]
C126	CAP_603	ap_v1[9D3]
C127	CAP_201	ap_v1[9D3]
C128	CAP_201	ap_v1[9D3]
C129	CAP_402-LF	ap_v1[9B1]
C130	CAP_P_CASE-B3-SM1	ap_v1[9D6]
C131	CAP_201	ap_v1[8B2]
C132	CAP_201	ap_v1[11C6]
C133	CAP_P_0603-SM	ap_v1[7A3]
C134	CAP_402-LF	ap_v1[12D3]
C135	CAP_201	ap_v1[12C3]
C136	CAP_201	ap_v1[12D3]
C137	CAP_402	ap_v1[15B3]
C138	CAP_201	ap_v1[14B5]
C139	CAP_201	ap_v1[9D2]
C140	CAP_603	ap_v1[14C2]
C141	CAP_201	ap_v1[14C6]
C142	CAP_402	ap_v1[14A5]
C143	CAP_201	ap_v1[13B2]
C145	CAP_201	ap_v1[13B1]
C146	CAP_201	ap_v1[10D6]
C147	CAP_603	ap_v1[13D8]
C148	CAP_201	ap_v1[13A7]
C149	CAP_402-LF	ap_v1[13D8]
C150	CAP_402	ap_v1[13A8]
C151	CAP_201	ap_v1[13D7]
C152	CAP_201	ap_v1[13D6]
C153	CAP_201	ap_v1[13D6]
C154	CAP_402	ap_v1[13D6]
C155	CAP_201	ap_v1[13A6]
C156	CAP_603	ap_v1[13A5]
C157	CAP_201	ap_v1[13D2]
C158	CAP_201	ap_v1[14D4]
C159	CAP_402	ap_v1[9B4]
C160	CAP_402	ap_v1[9B3]
C161	CAP_402	ap_v1[9B3]
C162	CAP_402	ap_v1[9B2]
C163	CAP_402	ap_v1[9B2]
C164	CAP_201	ap_v1[13D7]
C165	CAP_402	ap_v1[13D3]
C166	CAP_201	ap_v1[2C6]
C167	CAP_402	ap_v1[14D3]
C168	CAP_201	ap_v1[2C5]
C169	CAP_402	ap_v1[7C7]
C170	CAP_402	ap_v1[7B7]
C171	CAP_402	ap_v1[7D7]
C172	CAP_402	ap_v1[7D7]
C173	CAP_201	ap_v1[7D7]
C174	CAP_201	ap_v1[11C6]
C175	CAP_201	ap_v1[11C6]
C176	CAP_201	ap_v1[14D2]
C177	CAP_201	ap_v1[14D1]
C178	CAP_201	ap_v1[9D1]
C179	CAP_201	ap_v1[11B3]
C180	CAP_201	ap_v1[11A3]
C181	CAP_201	ap_v1[14A6]
C182	CAP_201	ap_v1[14C3]
C183	CAP_201	ap_v1[12D7]
C184	CAP_201	ap_v1[12B6]
C186	CAP_201	ap_v1[13C8]
C190	CAP_201	ap_v1[7B2]
C191	CAP_201	ap_v1[7B2]
C192	CAP_201	ap_v1[7B2]
C193	CAP_201	ap_v1[7A2]
C194	CAP_201	ap_v1[7B1]
C195	CAP_201	ap_v1[7A1]
C196	CAP_201	ap_v1[7C2]
C197	CAP_201	ap_v1[7C2]
C198	CAP_201	ap_v1[7B2]
C199	CAP_201	ap_v1[11C6]
C200	CAP_201	ap_v1[7A3]
C201	CAP_201	ap_v1[5D2]
C202	CAP_201	ap_v1[9A6]
C203	CAP_201	ap_v1[8D5]
C204	CAP_201	ap_v1[7B6]
C205	CAP_201	ap_v1[7B5]
C206	CAP_201	ap_v1[7B6]
C207	CAP_201	ap_v1[7A6]
C208	CAP_201	ap_v1[7C6]
C209	CAP_201	ap_v1[7C6]
C210	CAP_201	ap_v1[7D6]
C211	CAP_201	ap_v1[7D5]
C212	CAP_402	ap_v1[7C4]
C213	CAP_201	ap_v1[7C4]
C220	CAP_201	ap_v1[15C7]
C221	CAP_201	ap_v1[15C7]
C222	CAP_201	ap_v1[15B5]
C223	CAP_201	ap_v1[15B5]
C224	CAP_201	ap_v1[15B8]
C225	CAP_201	ap_v1[15A8]
C226	CAP_201	ap_v1[10A6]
C227	CAP_201	ap_v1[10B4]
C228	CAP_201	ap_v1[10A3]
C229	CAP_201	ap_v1[11C4]
C230	CAP_201	ap_v1[5D6]
C231	CAP_201	ap_v1[14C2]
C238	CAP_201	ap_v1[11C5]
C239	CAP_201	ap_v1[11C3]
C474	CAP_201	ap_v1[8D8]
C479	CAP_P_603-SM	ap_v1[7D2]
C514	CAP_P_CASE-AL-SM1	ap_v1[8C4]
C515	CAP_P_CASE-AL-SM1	ap_v1[8C4]
D1	DIODE_SCHOT_SM-201	ap_v1[8A4]
D2	DIODE_SCHOT_SM-201	ap_v1[7C7]
D3	DIODE_SCHOT_SM-201	ap_v1[7C7]
D4	DIODE_SCHOT_SM-201	ap_v1[7B7]
D5	DIODE_SCHOT_SM-201	ap_v1[13A6]
D6	DIODE_SCHOT_2P_SOD-9 23-HF	ap_v1[9C3]
D7	DIODE_SCHOT_2P_SOD-9 23-HF	ap_v1[9C3]
D8	DIODE_SCHOT_SM-201	ap_v1[14D4]
DZ1	SUPPR_TRANSIENT1_020 1	ap_v1[8A7]
DZ2	SUPPR_TRANSIENT1_020 1	ap_v1[8B7]
DZ3	SUPPR_TRANSIENT1_020 1	ap_v1[8C2]
DZ6	SUPPR_TRANSIENT1_020 1	ap_v1[11C3]
DZ7	SUPPR_TRANSIENT1_020 1	ap_v1[11C2]
DZ8	SUPPR_TRANSIENT1_020 1	ap_v1[8C3]
DZ9	SUPPR_TRANSIENT1_020 1	ap_v1[8C3]
DZ10	SUPPR_TRANSIENT1_020 1	ap_v1[8A7]
DZ11	SUPPR_TRANSIENT1_020 1	ap_v1[8A7]
DZ12	SUPPR_TRANSIENT1_020 1	ap_v1[13A2]
DZ13	SUPPR_TRANSIENT1_020 1	ap_v1[13A1]
DZ14	ZENER_GDZ-0201	ap_v1[10C6]
DZ15	SUPPR_TRANSIENT1_020 1	ap_v1[8C3]
DZ16	SUPPR_TRANSIENT1_020 1	ap_v1[8B3]
DZ17	ZENER_GDZ-0201	ap_v1[10D6]
FL1	FILTER_2P_0201-1	ap_v1[2D6]
FL2	FILTER_2P_0201-1	ap_v1[2D6]
FL3	FILTER_2P_0201-1	ap_v1[2A5]
FL4	FILTER_2P_0201-1	ap_v1[3D4]
FL5	FILTER_2P_0402-1	ap_v1[4B1]
FL6	FILTER_2P_0201-1	ap_v1[7D5]
FL7	FILTER_2P_0201-1	ap_v1[13A2]
FL8	FILTER_2P_0201-1	ap_v1[5C4]
FL9	FILTER_2P_0201-1	ap_v1[6D7]
FL10	FILTER_2P_0201-1	ap_v1[11D2]
FL11	FILTER_2P_0201-1	ap_v1[11D2]
FL12	FILTER_2P_0201-1	ap_v1[15C6]
FL13	IND_0402B	ap_v1[11C2]
FL14	FILTER_2P_0201-1	ap_v1[11D2]
FL15	FILTER_2P_0201-1	ap_v1[11D2]
FL16	FILTER_2P_0201-1	ap_v1[15C6]
FL17	FILTER_2P_0201-1	ap_v1[11D7]
FL18	FILTER_2P_0201-1	ap_v1[11D7]
FL19	FILTER_2P_0201-1	ap_v1[11D7]
FL20	FILTER_2P_0201	ap_v1[11D7]
FL21	FILTER_2P_0201-1	ap_v1[12D4]
FL22	FILTER_2P_0201-1	ap_v1[14C6]
FL23	FIL_NUF2441FC_BGA	ap_v1[7D6]
FL24	FIL_NUF2441FC_BGA	ap_v1[7C6]
FL25	FILTER_2P_0201	ap_v1[8C3]
FL26	FILTER_2P_0201-1	ap_v1[14A6]
FL27	FILTER_2P_0201-1	ap_v1[13A2]
FL28	FILTER_2P_0201-1	ap_v1[7D4]
FL29	FILTER_2P_0201-1	ap_v1[7D4]
FL30	FILTER_2P_0402-1	ap_v1[7C4]
FL31	FILTER_2P_0201-1	ap_v1[11B7]
FL32	FILTER_2P_0201-1	ap_v1[11B7]
FL33	FILTER_2P_0201-1	ap_v1[11B7]
FL34	FILTER_2P_0201-1	ap_v1[11B7]
FL35	FILTER_2P_0201-1	ap_v1[11A7]
FL36	FILTER_2P_0201-1	ap_v1[11A7]
FL38	FILTER_2P_0201-1	ap_v1[8C2]
FL39	FILTER_2P_0201-1	ap_v1[8D3]
J1	CON_M42ST_D4MT_SM_M-ST-SM	ap_v1[11D4]
J2	CON_F8ST_7MT_SIMCARD_SM_F-ST-SM	ap_v1[15B3]
J3	CON_F24ST_D4MT_SM_F-ST-SM	ap_v1[14A5]
J5	CON_M10ST_D4MT_SM_M-ST-SM	ap_v1[8B5]
J6	CON_M30ST_D4MT_SM_M-ST-SM	ap_v1[13C3]
J7	CON_F12RT_D_SM1_F-RT-HF	ap_v1[13B2]
J21	CON_M24ST_D4MT_SM_M-ST-SM	ap_v1[14C4]
L2	IND_VLS3012-SM-HF	ap_v1[10B4]
L3	FILTER_10P_0603	ap_v1[14C6]
L4	IND_BRL2012T220M	ap_v1[14D3]
L5	IND_4P_2C01L_WCDRH23D09-SM	ap_v1[9C4]
L6	FILTER_10P_0603	ap_v1[14B8]
L7	FILTER_10P_0603	ap_v1[14B8]
L8	FILTER_10P_0603	ap_v1[14A8]
L9	IND_0603-HF	ap_v1[13A7]
L10	IND_VLS3012-SM-HF	ap_v1[9B2]
L11	FILTER_4P_TCM1005	ap_v1[11B2]
L102	FILTER_2P_0402-1	ap_v1[8C5]
L103	FILTER_2P_0402-1	ap_v1[8C5]
MTR1	MOTOR_2P_SM	ap_v1[8A3]
Q1	TRA_NTK3142P_PCHN_3P_SOT723-3-HF	ap_v1[8B3]
Q2	TRA_DUAL_MOSFET_NCHN_3_SOT-963	ap_v1[13A4 13A3]
Q3	TRA_MOSFET_NCHN_3P_S OT883L	ap_v1[9C2]
Q4	TRA_DUAL_CMLT3906E_S OT563	ap_v1[7A4 7A7]
Q5	TRA_SI8409DB_BGA	ap_v1[10C7]
Q6	TRA_SI8402DB_BGA	ap_v1[10C5]
Q7	TRA_MOSFET_NCHN_3P_S OT883L	ap_v1[2D2]
Q8	TRA_MOSFET_NCHN_3P_S OT883L	ap_v1[2C1]
Q9	TRA_NCH_SCHOT_6P_WDFN	ap_v1[9B2 9B3]
Q10	TRA_SINGLE_MOSFET_PCHN_DFN	ap_v1[9D2]
Q11	TRA_SINGLE_MOSFET_PCHN_DFN	ap_v1[13A4]
Q12	TRA_MOSFET_NCHN_3P_S OT883L	ap_v1[12B8]
R1	RES_201	ap_v1[5A7]
R2	RES_201	ap_v1[7C2]
R3	RES_201	ap_v1[7C2]
R4	RES_201	ap_v1[5A7]
R5	RES_201	ap_v1[5B7]
R6	RES_201	ap_v1[13D3]
R7	RES_603	ap_v1[10C5]
R8	RES_201	ap_v1[8C7]
R9	RES_201	ap_v1[8D7]
R10	RES_201	ap_v1[2C8]
R11	RES_201	ap_v1[8A5]
R12	RES_603	ap_v1[4D1]
R13	RES_201	ap_v1[8B3]
R14	RES_201	ap_v1[8B3]
R15	RES_201	ap_v1[5C7]
R16	RES_201	ap_v1[2B7]
R17	RES_201	ap_v1[2D1]
R18	RES_201	ap_v1[13A4]
R19	RES_201	ap_v1[2A6]
R20	RES_201	ap_v1[2A3]
R21	RES_201	ap_v1[2A3]
R22	RES_201	ap_v1[2A3]
R23	RES_201	ap_v1[9C2]
R24	RES_201	ap_v1[13A3]
R25	RES_201	ap_v1[2C3]
R26	RES_201	ap_v1[2C2]
R27	RES_201	ap_v1[2C3]
R28	RES_201	ap_v1[6B4]
R29	RES_201	ap_v1[9A7]
R30	RES_201	ap_v1[3C4]
R31	RES_201	ap_v1[3C4]
R32	RES_201	ap_v1[3A4]
R33	RES_201	ap_v1[10A4]
R34	RES_201	ap_v1[2C8]
R35	RES_201	ap_v1[8A5]
R36	RES_201	ap_v1[10B7]
R37	RES_201	ap_v1[14D2]
R38	RES_201	ap_v1[6B7]
R39	RES_201	ap_v1[8D7]
R40	RES_201	ap_v1[10A5]
R41	RES_201	ap_v1[10A4]
R42	RES_201	ap_v1[10A4]
R43	RES_201	ap_v1[8D7]
R44	RES_201	ap_v1[2C8]
R45	RES_201	ap_v1[4B8]
R46	RES_201	ap_v1[10C5]
R47	RES_201	ap_v1[5D5]
R48	RES_201	ap_v1[5D5]
R49	RES_201	ap_v1[5A5]
R50	RES_201	ap_v1[5A4]
R51	RES_201	ap_v1[5A2]
R52	RES_201	ap_v1[5A2]
R53	RES_201	ap_v1[6C7]
R54	RES_201	ap_v1[6C7]
R55	RES_201	ap_v1[6B7]
R56	RES_201	ap_v1[8D4]
R57	RES_201	ap_v1[8D4]
R58	RES_201	ap_v1[3C4]
R59	RES_201	ap_v1[6B5]
R60	RES_201	ap_v1[6B5]
R61	RES_201	ap_v1[6B5]
R62	RES_201	ap_v1[6B4]
R63	RES_201	ap_v1[3B4]
R64	RES_201	ap_v1[9C2]
R65	RES_201	ap_v1[6B2]
R66	RES_201	ap_v1[6B2]
R67	RES_201	ap_v1[6C2]
R68	RES_201	ap_v1[7B7]
R69	RES_201	ap_v1[7A7]
R70	RES_201	ap_v1[7B7]
R71	RES_201	ap_v1[7B7]
R72	RES_201	ap_v1[8D4]
R73	RES_201	ap_v1[3C4]
R74	RES_201	ap_v1[3C4]
R75	RES_201	ap_v1[3B4]
R76	RES_201	ap_v1[14A3]
R77	RES_201	ap_v1[14A3]
R78	RES_201	ap_v1[12C7]
R79	RES_201	ap_v1[12C8]
R80	RES_201	ap_v1[3B4]
R81	RES_201	ap_v1[3B4]
R82	RES_201	ap_v1[12D6]
R83	RES_201	ap_v1[8D5]
R84	RES_201	ap_v1[9B6]
R85	RES_201	ap_v1[9C7]
R86	RES_201	ap_v1[9B4]
R87	RES_201	ap_v1[9B4]
R88	RES_201	ap_v1[9A3]
R89	RES_201	ap_v1[9A1]
R90	RES_201	ap_v1[9B1]
R91	RES_201	ap_v1[13D5]
R92	RES_201	ap_v1[9A3]
R93	RES_201	ap_v1[9D2]
R94	RES_201	ap_v1[8D7]
R95	RES_201	ap_v1[8C4]
R96	RES_201	ap_v1[8C4]
R97	RES_201	ap_v1[8D7]
R98	RES_201	ap_v1[8C2]
R99	RES_201	ap_v1[8B3]
R100	RES_201	ap_v1[8C3]
R101	RES_201	ap_v1[3A4]
R102	RES_201	ap_v1[2C7]
R103	RES_201	ap_v1[3A4]
R106	RES_201	ap_v1[12B3]
R107	RES_201	ap_v1[12B3]
R109	RES_201	ap_v1[5B7]
R110	RES_201	ap_v1[10D7]
R111	RES_201	ap_v1[10D6]
R112	RES_201	ap_v1[14D4]
R113	RES_201	ap_v1[14C1]
R114	RES_201	ap_v1[14D2]
R115	RES_201	ap_v1[14D2]
R116	RES_201	ap_v1[13C1]
R117	RES_201	ap_v1[13C1]
R118	RES_201	ap_v1[13D1]
R119	RES_201	ap_v1[2C6]
R120	RES_201	ap_v1[12B7]
R121	RES_201	ap_v1[7B6]
R122	RES_201	ap_v1[13A7]
R124	RES_201	ap_v1[5B8]
R125	RES_201	ap_v1[14D3]
R126	RES_201	ap_v1[13A6]
R127	RES_201	ap_v1[13A6]
R128	RES_201	ap_v1[13A4]
R130	RES_201	ap_v1[13A4]
R131	RES_201	ap_v1[13B8]
R137	RES_201	ap_v1[9D6]
R138	RES_201	ap_v1[9D6]
R139	RES_201	ap_v1[8C6]
R140	RES_201	ap_v1[8C6]
R141	RES_201	ap_v1[2B6]
R142	RES_201	ap_v1[2C6]
R144	RES_201	ap_v1[2B6]
R145	RES_201	ap_v1[2D1]
R147	RES_201	ap_v1[2C7]
R148	RES_201	ap_v1[7D7]
R149	RES_201	ap_v1[7D7]
R160	RES_201	ap_v1[9A5]
R161	RES_201	ap_v1[9A5]
R162	RES_201	ap_v1[11A3]
R163	RES_201	ap_v1[11A3]

R164	RES_201	ap_v1[14C2]
R165	RES_201	ap_v1[5A2]
R173	RES_201	ap_v1[2C6]
R177	RES_201	ap_v1[9C8]
R179	RES_201	ap_v1[5C6]
R180	RES_201	ap_v1[5D6]
R181	RES_201	ap_v1[5C6]
R182	RES_201	ap_v1[5D3]
R220	RES_201	ap_v1[15B7]
R221	RES_201	ap_v1[15B7]
R222	RES_201	ap_v1[15A7]
R223	RES_201	ap_v1[15A8]
R224	RES_201	ap_v1[15A8]
R231	RES_201	ap_v1[9C7]
R232	RES_201	ap_v1[12B8]
R233	RES_201	ap_v1[5D5]
R234	RES_201	ap_v1[5D5]
R235	RES_201	ap_v1[5C7]
R236	RES_201	ap_v1[15A8]
R237	RES_201	ap_v1[15B8]
R238	RES_201	ap_v1[7A6]
R239	RES_201	ap_v1[7A5]
R240	RES_201	ap_v1[15A6]
R241	RES_201	ap_v1[15A6]
R242	RES_201	ap_v1[11C3]
R243	RES_201	ap_v1[13A5]
R244	RES_201	ap_v1[7A6]
R245	RES_201	ap_v1[7A7]
R246	RES_201	ap_v1[7A5]
R247	RES_201	ap_v1[7A4]
RP2	RPAK4P_4X0201-HF	ap_v1[4D7]
RP3	RPAK4P_4X0201-HF	ap_v1[4B5]
S1	SWI_LM34902_USMD	ap_v1[11B3]
SH1	SHLD_1P_SM	ap_v1[15B2]
SH2	SHLD_1P_SM	ap_v1[15A2]
SH3	SHLD_1P_SM	ap_v1[15B1]
SH4	SHLD_1P_SM	ap_v1[15A1]
SH5	SHLD_1P_SM	ap_v1[15A2]
SL1	SLOT_TH	ap_v1[15B3]
SL2	SLOT_TH	ap_v1[15B3]
SL3	SLOT_TH	ap_v1[15A3]
SL4	SLOT_TH	ap_v1[15A3]
SL5	SLOT_TH	ap_v1[15A3]
SL6	SLOT_TH	ap_v1[15A3]
SL7	SMT_PAD_SM-NSP	ap_v1[15C4]
SL8	SMT_PAD_SM-NSP	ap_v1[15C4]
SL9	SMT_PAD_SM-NSP	ap_v1[15B4]
SL10	SMT_PAD_SM-NSP	ap_v1[15B4]
SL11	SMT_PAD_SM-NSP	ap_v1[15B4]
SL12	MTGHOLE	ap_v1[15B4]
SL13	MTGHOLE	ap_v1[15B4]
TP1	TP_TP-P6	ap_v1[16D7]
TP2	TP_TP-P6	ap_v1[16D7]
TP3	TP_TP-P6	ap_v1[16D7]
TP5	TP_TP-P6	ap_v1[16C7]
TP6	TP_TP-P6	ap_v1[16C7]
TP7	TP_TP-P6	ap_v1[16C4]
TP8	TP_TP-P6	ap_v1[16C7]
TP9	TP_TP-P6	ap_v1[16B7]
TP10	TP_TP-P6	ap_v1[16B7]
TP11	TP_TP-P6	ap_v1[16B7]
TP12	TP_TP-P6	ap_v1[16C7]
TP13	TP_TP-P6	ap_v1[16C7]
TP14	TP_TP-1P0-TOP	ap_v1[16C2]
TP15	TP_TP-P6	ap_v1[16B7]
TP16	TP_TP-P6	ap_v1[16B7]
TP17	TP_TP-P6	ap_v1[16D5]
TP19	TP_TP-P6	ap_v1[16D5]
TP20	TP_TP-P6	ap_v1[16A2]
TP21	TP_TP-P6	ap_v1[16C5]
TP22	TP_TP-P6	ap_v1[16C5]
TP23	TP_TP-P6	ap_v1[16C5]
TP24	TP_TP-P6	ap_v1[16A2]
TP25	TP_TP-P6	ap_v1[16B5]
TP26	TP_TP-P6	ap_v1[16B5]
TP27	TP_TP-P6	ap_v1[16C4]
TP29	TP_TP-P6	ap_v1[16C4]
TP30	TP_TP-P6	ap_v1[16D4]
TP31	TP_TP-P6	ap_v1[16D4]
TP32	TP_TP-P6	ap_v1[16C4]
TP33	TP_TP-P6	ap_v1[16C4]
TP34	TP_TP-P6	ap_v1[16D2]
TP35	TP_TP-1P0-TOP	ap_v1[16D2]
TP36	TP_TP-P6	ap_v1[16D2]
TP37	TP_TP-1P0-TOP	ap_v1[16C2]
TP38	TP_TP-1P0-TOP	ap_v1[16C2]
TP42	TP_TP-P6	ap_v1[16C2]
TP43	TP_TP-P6	ap_v1[16C2]
TP44	TP_TP-P6	ap_v1[16C2]
TP45	TP_TP-P6	ap_v1[16C2]
TP46	TP_TP-P6	ap_v1[16C2]
TP47	TP_TP-P6	ap_v1[16B2]
TP48	TP_TP-P6	ap_v1[16B2]
TP49	TP_TP-P6	ap_v1[16B2]
TP50	TP_TP-P6	ap_v1[16B2]
TP51	TP_TP-P6	ap_v1[16B2]
TP52	TP_TP-P6	ap_v1[16B2]
TP53	TP_TP-P6	ap_v1[16B2]
TP54	TP_TP-P6	ap_v1[16B2]
TP55	TP_TP-P6	ap_v1[16B2]
TP56	TP_TP-P6	ap_v1[16B2]
TP57	TP_TP-P6	ap_v1[16B4]
TP58	TP_TP-1P0-TOP	ap_v1[16A4]
TP59	TP_TP-1P0-TOP	ap_v1[16A4]
TP60	TP_TP-P6	ap_v1[16A7]
TP61	TP_TP-P6	ap_v1[16A7]
TP64	TP_TP-P6	ap_v1[16A7]
TP65	TP_TP-P6	ap_v1[16A7]
TP73	TP_TP-P6	ap_v1[16A2]
TP74	TP_TP-P6	ap_v1[16C7]
TP75	TP_TP-P6	ap_v1[16B5]
TP76	TP_TP-1P0-TOP	ap_v1[16A4]
TP77	TP_TP-1P0-TOP	ap_v1[16A4]
TP78	TP_TP-P6	ap_v1[16B5]
TP79	TP_TP-P6	ap_v1[16A5]
TP80	TP_TP-P6	ap_v1[16A5]
TP81	TP_TP-P6	ap_v1[16A5]
TP82	TP_TP-P6	ap_v1[16A5]
TP83	TP_TP-P6	ap_v1[16A5]
TP84	TP_TP-P6	ap_v1[16A5]
U1	74AUP1T97_SOT891	ap_v1[13C4]
U2	MAX4845_UDFN6	ap_v1[10C6]
U3	WM1817_BGA	ap_v1[7C5]
U4	MARIO_LITE_BGA	ap_v1[13D2]

U5	74LVC2G66_BGA	ap_v1[12B2 12B3]
U6	74LVC2G04_SOT891	ap_v1[2B2 2B2]
U7	74LVC2G04_SOT891	ap_v1[2A3 2A3]
U8	74LVC2G34_SOT891	ap_v1[2B2 2A2]
U9	LTC4088EDE2_DFN14	ap_v1[10B5]
U10	74LVC1G157_SOT891	ap_v1[5D2]
U11	FLASH_SST25VF080B_WSON	ap_v1[5D4]
U12	CD3272_WCSP9	ap_v1[8D6]
U15	LM2512_UFBGA	ap_v1[5B3]
U16	74LVC1G157_SOT891	ap_v1[12B7]
U17	74LVC1G10_SOT891	ap_v1[12B6]
U18	74LVC1G99_SOT833	ap_v1[12D7]
U19	OM3805_HUQFN	ap_v1[9C5]
U22	74LVC2G04_SOT891	ap_v1[14D4]
U23	DCDC_LTC3459_DFN	ap_v1[14D3]
U25	LIS331DL_LGA	ap_v1[12D3]
U26	SUPPR_NUP412VP5_SOT953	ap_v1[15B1]
U27	BCM5974_BGA57_UFBGA	ap_v1[13D7]
U28	LT3460EDC_DFN	ap_v1[13A7]
U29	FLASH_16GX8_48P_TSOP-WELP-BGA	ap_v1[4C7]
U30	ISL59121_WLCSP9	ap_v1[6C6]
U31	74AUP2G126_SOT833	ap_v1[15C7]
U32	74AUP2G125_SOT833	ap_v1[15C7]
U33	74AUP2G125_SOT833	ap_v1[15B5]
U34	74AUP2G126_SOT833	ap_v1[15B5]
U35	74LVC2G34_SOT891	ap_v1[15D6]
U36	74LVC2G08_SOT833	ap_v1[8A5]
U36	74LVC2G08_SOT833	ap_v1[9A6]
U37	74LVC1G157_SOT891	ap_v1[15B7]
U38	74LVC1G157_SOT891	ap_v1[15A7]
U39	74LVC2G34_SOT891	ap_v1[15D6]
U40	74AUP1T97_SOT891	ap_v1[5D7]
U41	74AUP1T97_SOT891	ap_v1[5D7]
U42	74AUP1T97_SOT891	ap_v1[5C7]
U59	H1_N82_BGA	ap_v1[2C5]
U59	H1_N82_BGA	ap_v1[3C6]
U59	H1_N82_BGA	ap_v1[4D4 4D6]
U59	H1_N82_BGA	ap_v1[5B6]
U59	H1_N82_BGA	ap_v1[6C4]
VR1	VREG_LP3986_BGA	ap_v1[14B2]
VR2	LREG_RP102Z_WLCSP4	ap_v1[8A4]
XW1	SHORT_SHORT-0201	ap_v1[2D6]
XW2	SHORT_SHORT-0201	ap_v1[15D2]
XW3	SHORT_SHORT-0201	ap_v1[15D2]
XW4	SHORT_SHORT-0201	ap_v1[15D2]
XW5	SHORT_SHORT-0201	ap_v1[15D2]
XW6	SHORT_SHORT-0201	ap_v1[2D3]
XW7	SHORT_SHORT-0201-NSM	ap_v1[2D3]
XW8	SHORT_SHORT-0201	ap_v1[2D3]
XW9	SHORT_SHORT-0201-NSM	ap_v1[9A3]
XW10	SHORT_SHORT-0201-NSM	ap_v1[4C5]
XW11	SHORT_SHORT-0201	ap_v1[4D3]
XW12	SHORT_SHORT-0201	ap_v1[13B6]
XW18	SHORT_SHORT-0201	ap_v1[13C5]
XW21	SHORT_SHORT-0201-NSM	ap_v1[14D4]
XW22	SHORT_SHORT-0201	ap_v1[14B3]
XW23	SHORT_SM	ap_v1[9B6]
XW25	SHORT_SM	ap_v1[9C4]
XW26	SHORT_SM	ap_v1[9C4]
XW33	SHORT_SHORT-0201	ap_v1[13B5]
XW34	SHORT_SHORT-0201	ap_v1[13B5]
XW35	SHORT_SHORT-0201	ap_v1[13C5]
XW36	SHORT_SHORT-0201	ap_v1[13C5]
XW41	SHORT_SM	ap_v1[10C4]
XW43	SHORT_SHORT-0201-NSM	ap_v1[2C8]
XW44	SHORT_SHORT-0201-NSM	ap_v1[9C7]
XW50	SHORT_SHORT-0201-NSM	ap_v1[8D6]
XW51	SHORT_SHORT-0201-NSM	ap_v1[8D6]
Y1	CRYSTAL_4PIN_SM-2	ap_v1[2A6]
Y3	CRYSTAL_3.2X1.5X.6-SM	ap_v1[9C8]

N82 HSDPA RADIO
EVT3B - 02/15/08:BRD REV10

BOARD - 820-2186
SCHEMATIC - 051-7340
BOM - 630-8772

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-7340	1	N82_RF_AND_AP_SCHEMATIC	SCH	Y	
820-2186	1	N82_RF_AND_AP_PCB	PCB	Y	
825-2029	1	EEE: Y5K(8GB), YEU(16GB)	EEE:Y5K	Y	

APPLE INC.

SIZE	DRAWING NUMBER	REV:
D	051-7340	08

SCALE: NONE

SHT 1 OF 11

BASEBAND

U22_RF PMB8878 BGA (2 OF 3)

BATT_TEMP	F3	M0			
RF_TEMP	G4	M1			
BOARD_TEMP	E2	M2			
NC	D1	M3			
NC	F4	M4			
NC	E3	M5			
NC	D3	M6			
BB_ADC_M_7	E4	M7			
BB_ADC_M_8	D2	M8			
LOAD	D4	M9			
NOTE: SG3H ERRATA DO NOT USE	NC	F5	M10		
PALEVEL	M8	PAOUT1_0			
NC	P4	PAOUT1_1			
Q_PM	ADIFFLP	M4	BB_Q		
QX_PM	ADIFFLP	P5	BB_QX		
I_PM	ADIFFLP	L5	BB_I		
IX_PM	ADIFFLP	M5	BB_IX		
TXON_PA	Y8	T_OUT0			
NC	AB7	T_OUT1			
BB_VC2	V9	T_OUT2			
NC	AA8	T_OUT3			
NC	W9	T_OUT4			
NC	V8	T_OUT5			
PA_MODE	AB3	T_OUT6			
FEM_VC1	AB4	T_OUT7			
FEM_VC3	W8	T_OUT8			
NC	AC1	T_OUT9			
GSM_TXBURST_IND	AB5	T_OUT10			
NC	AB1	T_IN0			
NC	AA3	T_IN1			
CLK32K	T16	DSPIN0			
NC	V18	DSPIN1			
WDOG	W14	DSPOUT1			
AFC	W6	AFC			
EN_PM	AA1	RF_STR0			
	AC3	RF_STR1			
CLK_PM	W7	RF_CLK			
DA_PM	W5	RF_DATA			
CLKOUT0	E8	CLKOUT0			
26M_BB	D7	F26M			
SIMCRD_IO	T4	CC_IO			
SIMCRD_CLK	P2	CC_CLK			
SIMCRD_RST	P3	CC_RST			
NOTE: SG3H ERRATA DO NOT PULL UP	NC	AB9	MMCI1_CLK		
	NC	W10	MMCI1_CMD		
	NC	AB6	MMCI1_DAT0		
	NC	Y11	MMCI1_DAT1		
	NC	V10	MMCI1_DAT2		
	NC	AA9	MMCI1_DAT3		
	NC	V14	MMCI2_CLK		
	NC	AB17	MMCI2_CMD		
	NC	AA17	MMCI2_DAT0		
	NC	AA7	TRIG_IN		
	NC	Y7	MON1		
	NC	Y9	MON2		
	NC	D16	TRACESYNC		
	NC	G9	TRACECLK		
	NC	D13	PIPESTAT0		
	NC	H10	PIPESTAT1		
	NC	G10	PIPESTAT2		
	NC	D12	TRACEPKT0		
	NC	E10	TRACEPKT1		
	NC	B7	TRACEPKT2		
	NC	D9	TRACEPKT3		
	NC	D11	TRACEPKT4		
	NC	G7	TRACEPKT5		
	NC	E9	TRACEPKT6		
	NC	D8	TRACEPKT7		
BB1_D0		V11	CIF_D0		
BB2_D1	NOTE: SG3H ERRATA DO NOT PULL UP	Y10	CIF_D1		
BB3_D2		AB10	CIF_D2		
BB4_D3		Y12	CIF_D3		
	NC	AB11	CIF_D4		
	NC	AD7	CIF_D5		
	NC	AA11	CIF_D6		
	NC	W12	CIF_D7		
	NC	AA12	CIF_PCLK		
	NC	W11	CIF_HSYNC		
USED ON N88	NC	AA13	CIF_VSYNC		
26M_GPS		AB14	CLKOUT2		
	NC	AB12	CIF_PD		
	NC	AA10	CIF_RESET		
DIF_D0	V13	NC USED ON N88			
DIF_D1	AB15	GPS_RST_N			
DIF_D2	AD16	GPS_ON			
DIF_D3	W13	GPS_IRQ			
DIF_D4	AA14	NC			
DIF_D5	AE18	NC			
DIF_D6	AC17	NC			
DIF_D7	AD18	NC			
DIF_D8	AD19	NC			
DIF_WR	AA16	VSD3_WAKEUP			
DIF_RD	Y14	HOST_WAKE_WLAN			
DIF_CS1	AC19	BB_AP_PMU_ON			
DIF_CS2	W15	BT_AP_PMU_ON			
DIF_CD	AA15	WLAN_1V8_EN_GPIO			
DIF_HD	AC18	NC USED ON N88			
DIF_VD	Y16	BB_RST_DET			
DIF_RESET1	V12	NC			
DIF_RESET2	Y13	UMTS_RSTN			
KP_IN0	W18	NC USED ON N88			
KP_IN1	P15	NC USED ON N88			
KP_IN2	U17	NC USED ON N88			
KP_IN3	R15	NC			
KP_IN4	T17	NC			
KP_IN5	U18	NC			
KP_IN6	R17	NC			
KP_OUT0	U16	NC NOTE: SG3H ERRATA DO NOT USE			
KP_OUT1	V17	NC			
KP_OUT2	AA19	NC			
KP_OUT3	U15	NC			
RSTOUT*	R2	NC			
EPN1_0	K2	ADIFFLP	CODEC_LINEIN_N	DIFFERENTIAL_PAIR=CODEC	
EPN1_1	K3				
EPP1_0	J1	ADIFFLP	CODEC_LINEIN_P	DIFFERENTIAL_PAIR=CODEC	
EPP1_1	J2				
EPPA1_0	H1				
EPPA1_1	H2				
EPREF0	G1				
EPREF1	G2				
EPPA2_0	F1				
EPPA2_1	F2				
MICN1	L1				
MICP1	K1	NC			
MICN2	M2				
MICP2	M3	ADIFFLP	DIFFERENTIAL_PAIR=MIC2		
AUXN1	N3	ADIFFLP	DIFFERENTIAL_PAIR=MIC2		
AUXP1	M1	NC			
AUXN2	N1	NC			
AUXP2	N2	NC			
VMICP	H5	NC			
VMICN	G5	NC			
I2S2_CLK0	U1	BB_I2S_CLK			
I2S2_CLK1	U5	IPC_SRDY			
I2S2 I2S2_RX	W1	BB_I2S_RX			
I2S2_TX	V2	BB_I2S_TX			
I2S2_WA0	U2	BB_I2S_WA0			
I2S2_WA1	U3	NC NOTE: SG3H ERRATA DO NOT PULL UP			
I2S1_CLK0	W4	BT_PCM_CLK			
I2S1_CLK1	Y1				
I2S1 I2S1_RX	W2	BT_PCM_OUT			
I2S1_TX	W3	BT_PCM_IN			
I2S1_WA0	Y2	BT_PCM_SYNC			
I2C1_SCL	AA6	PM_SCL1			
I2C1 I2C1_SDA	AA4	PM_SDA1			
PM_INT	E7	PM_INT			
I2C2_SCL	Y4	GPS_SCL2			
I2C2 I2C2_SDA	V5	GPS_SDA2			
USIF1_CTS_N	V16	BB_USART0_CTS_N			
USB USIF1_RTS_N	AB16	BB_USART0_RTS_N			
USIF1_RXD_MRST	V15	BB_USART0_RXD			
USIF1_TXD_MTSR	Y17	BB_USART0_TXD			
USIF2_CTS_N	V6	IPC_MRDY			
SERIAL IF 2 USIF2_RTS_N	U4	IPC_SCLK			
USIF2_RXD_MRST	T2	IPC_MISO			
USIF2_TXD_MTSR	R4	IPC_MOSI			
SERIAL IF 3 USIF3_SCLK	W16	NC			
USIF3_RXD_MRST	AB18	NC			
USIF3_TXD_MTSR	AA18	NC			
USIF_RXD	AE3	UMTS_RXD			
USIF_TXD	AD3	UMTS_TXD			
IRDA_RX	AB19	NC			
IRDA IRDA_TX	W17	NC			
1 WIRE IF SWIF_TXRX	T5	NC			

U22_RF PMB8878 BGA (3 OF 3)

UMTS_RSTN	A4	RST*			
AIREF_BB	AD12	AIREF			
RXIX_3G	ADIFFLP	AE16	ARXN_I		
RXI_3G	ADIFFLP	AD15	ARXP_I		
RXQX_3G	ADIFFLP	AE17	ARXN_Q		
RXQ_3G	ADIFFLP	AD17	ARXP_Q		
TXIX_3G	ADIFFLP	AD13	ATXN_I		
TXI_3G	ADIFFLP	AE13	ATXP_I		
TXQX_3G	ADIFFLP	AD14	ATXN_Q		
TXQ_3G	ADIFFLP	AE14	ATXP_Q		
3G_PA_DETECT	AE12	ATX_PA_ADC			
3G_PA_VBA	AE11	ATX_PA_DAC			
TXGC_3G	AD11	ATX_VGA_DAC			
	A5	BOOT_CFG0			
	A3	BOOT_CFG1			
	A6	CLK26M			
CLKOUT0	B1	CLK32K			
CLK32K EBU_ADV*	AD8	ESIF_ADV*			
EBU_BFCLKO	H19	ESIF_CLK			
EBU_CS3*	AE7	ESIF_CS*			
EBU_RD*	AE8	ESIF_RD*			
EBU_WR*	AD9	ESIF_WR*			
EBU_WAIT*	J19	ESIF_WAIT*			
DA_3G	C2	I2RF_DATA			
CLK_3G	C1	I2RF_SCLK			
EN_3G	B2	I2RF_STR0			
BB_RTCK	V4	JTAG0_RTCK			
BB_TCK	AA5	JTAG0_TCK			
BB_TDI	Y3	JTAG0_TDI			
BB_TDO	Y5	JTAG0_TDO			
BB_TMS	Y6	JTAG0_TMS			
BB_TRST_N	V7	JTAG0_TRST*			
UMTS_RTCK	AE6	JTAG1_RTCK			
UMTS_TDI	AD2	JTAG1_TDI			
UMTS_TDO	AE2	JTAG1_TDO			
UMTS_TMS	AE4	JTAG1_TMS			
UMTS_TRST_N	AE5	JTAG1_TRST*			
	AD6	VDD_CORE1			
	AE10	VDD_CORE2			
	B14	VDD_CORE3			
	B6	VDD_CORE4			
	AE15	VDD_AUX			
VAUDIOB	A7	VDD_EFUSE			
VDD_E_FUSE	A2	VDD_HIGH_OUT			
3G_VDDCORE_HI	B17	VDD_IO_HIGH1A			
	B11	VDD_IO_HIGH1B			
	AD4	VDD_IO_HIGH2			
	B4	VDD_IO_LOW1			
	AD1	VDD_IO_LOW2			
	AE9	VDD_IO_LOW3			
	T19	VDD_IO_LOW4A			
	K19	VDD_IO_LOW4B			
GPIO0	C19	NC			
GPIO1	B19	NC			
GPIO2	B18	NC			
GPIO3	A18	NC			
GPIO4	C17	NC			
GPIO5	A17	NC			
GPIO6	B16	NC			
GPIO7	A15	LOCDET			
GPIO8	B15	NC			
GPIO9	A14	NC			
GPIO10	B5	MASTERON_3G			
GPIO11	B13	3G_DCDC_EN			
GPIO12	A13	PA_LO_GAIN			
GPIO13	A12	NC			
GPIO14	B12	3GLNA_CTRL4			
GPIO15	A11	VMODE			
GPIO16	A10	VCA			
GPIO17	B10	FEM_VC4			
GPIO18	A9	NC USED ON 88			
GPIO19	A8	GPIO19			
UTMS_WKP	C3				
NC	A1	NC			
	A19	NC			
	AE1	NC			
	AE19	NC			
	A16				
	B3				
	B9				
	E5				
	E19				
	F10				
	F18				
	G3				
	G6				
	G19				
	H6				
	H8				
	J3				
	L3				
	L19				
VSS	M9				
	M10				
	M11				
	M12				
	N5				
	P8				
	P9				
	P10				
	P11				
	P12				
	P19				
	R1				
	V19				
	AC2				
	AD5				
	AD10				

Components

- R89_RF 390K 1% 1/20W MF 201 — BATT_VCC
- R92_RF 100K 1% 1/20W MF 201
- R96_RF 3.92K 0.1% 1/16W MF 402
- C289_RF 0.1UF 10% 6.3V X5R 201 — VRF1_2V8
- U23_RF 74LVC1G08 SOT891 — FEM_VC2, VCA
- R18_RF 0 5% 1/20W MF 201 — WLAN_32K_CLK
- R9_RF 1M 5% 1/20W MF 201 — VSD2
- SIM_DETECT
- R21_RF 4.7K 1% 1/20W MF 201 — VSIM
- R30_RF 0201 — BOARD_TEMP, 10KOHM-1%
- R2_RF 100K 1% 1/20W MF 201
- R63_RF 100K 1% 1/20W MF 201 NOSTUFF — VSD2
- R65_RF 0 5% 1/20W MF 201 NOSTUFF — WLAN_1V8_EN
- R56_RF 100K 1% 1/20W MF 201 — UMTS_RXD
- R57_RF 100K 1% 1/20W MF 201 — BB_USART0_RXD
- R49_RF 100K 1% 1/20W MF 201 — BB_USART0_CTS_N
- R47_RF 100K 1% 1/20W MF 201 NOSTUFF — IPC_SCLK
- R46_RF 100K 1% 1/20W MF 201 NOSTUFF — IPC_MOSI
- C127_RF 27PF 5% 25V NP0-C0G 201
- C133_RF 27PF 5% 25V NP0-C0G 201
- C142_RF 0.1UF 10% 6.3V X5R 201 — MIC2_N
- C143_RF 0.1UF 10% 6.3V X5R 201 — MIC2_P
- C134_RF 27PF 5% 25V NP0-C0G 201
- C138_RF 27PF 5% 25V NP0-C0G 201
- R97_RF 22K 1% 1/20W MF 201 — AIREF_BB
- R119_RF 0 201MF 5% 1/20W
- R118_RF 0 5% 1/20W MF 201
- TP40_RF TP-P6 NOSTUFF — GPIO19
- C262_RF 1UF 10% 10V X5R 402-1
- C263_RF 0.1UF 10% 6.3V X5R 201
- C274_RF 0.1UF 10% 6.3V X5R 201
- C144_RF 1UF 10% 10V X5R 402-1
- C146_RF 0.1UF 10% 6.3V X5R 201
- R99_RF 0 5% 1/20W MF 201 NOSTUFF — VAUDIOB
- C273_RF 1UF 10% 10V X5R 402-1 — VIO
- C275_RF 0.1UF 10% 6.3V X5R 201
- C227_RF 1UF 10% 10V X5R 402-1 — VSD2
- C228_RF 0.1UF 10% 6.3V X5R 201
- C229_RF 0.1UF 10% 6.3V X5R 201
- R37_RF 1K 1% 1/20W MF 201 NOSTUFF — VSD2
- R48_RF 1K 1% 1/20W MF 201 NOSTUFF
- R6_RF 1K 1% 1/20W MF 201 ALPS
- R41_RF 1K 1% 1/20W MF 201 NOSTUFF — BB1_D0
- R43_RF 1K 1% 1/20W MF 201 — BB2_D1
- R50_RF 1K 1% 1/20W MF 201 — BB3_D2
- R61_RF 1K 1% 1/20W MF 201 MURATA — BB4_D3
- Q8_RF CEDM7001 SOT883L — RESET_DET*, BB_RST_DET
- C269_RF 0.1UF 10% 6.3V X5R 201 — VSD2
- R28_RF 0 5% 1/20W MF 201 NOSTUFF
- U27_RF 74LVC1G332 SOT891 — BB_AP_PMU_ON, HOST_WAKE_WLAN, BT_AP_PMU_ON, AP_PMU_EXTON_GATE
- R51_RF 0 5% 1/20W MF 201 — AP_PMU_EXTON

D0	D1	D2	
NST	NST	NST	DEV1
NST	NST	1	DEV2
NST	1	NST	PROTO
NST	1	1	DEV3
1	NST	NST	PROTO2
1	NST	1	DEV4
1	1	NST	PROTO3
1	1	1	EVT1
NST	NST	0	EVT2
NST	0	NST	DEV5
NST	0	0	EVT3
0	NST	NST	
0	NST	0	

D3	WIFI/BT MODULE
0	MURATA
1	ALPS

POPULATE AS A BOM OPTION AT THE TOP

APPLE INC.

SIZE D | DRAWING NUMBER 051-7340 | REV. 08

SCALE NONE | SHT 2 OF 11

BASEBAND/RADIO MEM

U22_RF PMB8878 BGA (1 OF 3)

MEMORY

MEM_A0	G15	EBU_A<0>	0
MEM_A1	E16	EBU_A<1>	1
MEM_A2	G16	EBU_A<2>	2
MEM_A3	F14	EBU_A<3>	3
MEM_A4	E15	EBU_A<4>	4
MEM_A5	F16	EBU_A<5>	5
MEM_A6	G14	EBU_A<6>	6
MEM_A7	E14	EBU_A<7>	7
MEM_A8	E13	EBU_A<8>	8
MEM_A9	F13	EBU_A<9>	9
MEM_A10	G13	EBU_A<10>	10
MEM_A11	E11	EBU_A<11>	11
MEM_A12	E12	EBU_A<12>	12
MEM_A13	G12	EBU_A<13>	13
MEM_A14	G11	EBU_A<14>	14
MEM_A15	F11	EBU_A<15>	15
MEM_A16	J18	EBU_A<16>	16
MEM_A17	L15	EBU_A<17>	17
MEM_A18	H18	EBU_A<18>	18
MEM_A19	F19	EBU_A<19>	19
MEM_A20	J15	EBU_A<20>	20
MEM_A21	G18	EBU_A<21>	21
MEM_A22	K16	EBU_A<22>	22
MEM_A23	D19	EBU_A<23>	23
MEM_A24	K15	EBU_A<24>	24
MEM_A25	H16	NC	
MEM_A26	J16	NC	

EBU_A<24..0>

MEM_AD0	N19	EBU_AD<0>	0
MEM_AD1	N18	EBU_AD<1>	1
MEM_AD2	T15	EBU_AD<2>	2
MEM_AD3	R19	EBU_AD<3>	3
MEM_AD4	N17	EBU_AD<4>	4
MEM_AD5	M19	EBU_AD<5>	5
MEM_AD6	M18	EBU_AD<6>	6
MEM_AD7	M17	EBU_AD<7>	7
MEM_AD8	T18	EBU_AD<8>	8
MEM_AD9	R18	EBU_AD<9>	9
MEM_AD10	R16	EBU_AD<10>	10
MEM_AD11	P16	EBU_AD<11>	11
MEM_AD12	L18	EBU_AD<12>	12
MEM_AD13	M15	EBU_AD<13>	13
MEM_AD14	P18	EBU_AD<14>	14
MEM_AD15	L16	EBU_AD<15>	15

EBU_AD<15..0>

MEM_CS0*	K18	EBU_CS0*	
MEM_CS1*	L17	EBU_CS1*	
MEM_CS2*	M16	NC	
MEM_CS3*	N15	EBU_CS3*	
MEM_RD*	Y18	EBU_RD*	
MEM_WR*	K17	EBU_WR*	
MEM_ADV*	P17	EBU_ADV*	
MEM_WAIT*	Y19	EBU_WAIT*	
MEM_RAS*	H12	NC	
MEM_CAS*	D14	NC	
MEM_BC0*	F17	EBU_BC0*	
MEM_BC1*	H17	EBU_BC1*	
MEM_BC2*	F15	NC	
MEM_BC3*	F12	NC	
MEM_SDCLKO	C18	NC	
MEM_BFCLKO1	D18	EBU_BFCLKO	
MEM_BFCLKO2	E17	NC	
MEM_CKE	H11	NC	
MEM_CSA0*	G17	NC	
MEM_CSA1*	H15	NC	
MEM_CSA2*	H14	NC	
MEM_CSA3*	H13	NC	

R5_RF 22 5% 1/20W MF 201: EBU_BFCLKO — F_CLK

PLACE R5 CLOSE TO U22 PMB8878

PM_VCXOEN — R4_RF 3.3K 5% 1/20W MF 201 — EBU_WAIT*

EXTERNAL BUS INTERFACE

VDDP_MEM_ETM0	E18	
VDDP_MEM_ETM1	D15	
VDDP_MEM_ETM2	D17	
VDDP_MEM_ETM3	J17	
VDDP_MEM_ETM4	N16	
VDDP_MEM_ETM5	D10	
VDDP_DIGA	V3	
VDDP_DIGB	AB13	
VDDP_DIGC1	AB2	
VDDP_DIGC2	AA2	
VDDP_DIGD	Y15	
VDDP_DIGE	W19	
VDDP_MMC	AB8	
VDDP_SIM	P1	
VDD_RTC	F8	
VDD_PLL0	G8	
VDD_PLL1	B8	
VDD_FUSE_FS	U19	

VDD_FUSE — R94_RF 0 NOSTUFF 5% 1/20W MF 201

ANA POWER SUPPLY

VDDA_BB	K5	
VDDA_VBR1	E1	
VDDA_VBR2	H3	
VDDA_VBT	L2	
VDDA_D	H4	
VDDA_M	F6	
VDDA_BG	H7	
AGND	L4	
AUXGND	N4	
GUARD	R5	

RTC

RTC_OUT	F7	NC
F32K	D5	F32K_BB
OSC32K	D6	OSC32K
RESET*	E6	RESET_N
VREFN	K4	BB_VREFN
VREFP	J4	BB_VREFP
IREF	J5	BB_IREF
SPCU_RC_OUT0	T3	PM_VCXOEN
SPCU_RQ_IN0	T1	NC
SPCU_RQ_IN1	R3	BT_CLK_REQ_BB
SPCU_RQ_IN2	V1	NC

R3_RF 22K 1% 1/20W MF 201: PM_VCXOEN

R19_RF 0 5% 1/20W MF 201: BT_CLK_REQ — BT_CLK_REQ_BB

FLASH CONTROLLER FCDP_RB DNA PORT

FLASH FWP WRITE PROTECTION	F9	FLASH_WP
FCDP_RB	H9	P1_CRE

Y1_RF 32.768K 3.2X1.5X.6-SM

C60_RF 0.22UF 10% 6.3V CERM-X5R 402

C64_RF 18PF 5% 25V NP0-C0G 201: OSC32K_GND

C66_RF 18PF 5% 25V NP0-C0G 201

XW6_RF SHORT-0201 NOSTUFF

C47_RF 0.1UF 10% 6.3V X5R 201

XW21_RF SM NOSTUFF — BB_AGND

U13_RF 8MBX16 PF38F3050M0Y0CE BGA

NOSTUFF

NOSTUFF HERE, BOM OPTION ON TOP

EBU_A<0>	G2	A0	
EBU_A<1>	F2	A1	
EBU_A<2>	E2	A2	
EBU_A<3>	D2	A3	
EBU_A<4>	B2	A4	
EBU_A<5>	C2	A5	
EBU_A<6>	F3	A6	
EBU_A<7>	E3	A7	
EBU_A<8>	F7	A8	
EBU_A<9>	D8	A9	
EBU_A<10>	E8	A10	
EBU_A<11>	B9	A11	
EBU_A<12>	C9	A12	
EBU_A<13>	D9	A13	
EBU_A<14>	F8	A14	
EBU_A<15>	E9	A15	
EBU_A<16>	F9	A16	
EBU_A<17>	D3	A17	
EBU_A<18>	B3	A18	
EBU_A<19>	B4	A19	
EBU_A<20>	E7	A20	
EBU_A<21>	B8	A21	
EBU_A<22>	C8	A22	
EBU_A<23>	C4	A23	
EBU_A<24>	D4	A24	
NC	E4	A25	
NC	A5	A26	
NC	A4	A27	
F_CLK	C7	CLK	
EBU_ADV*	E6	ADV*	
PM_VCXOEN	A7	F_DPD	
EBU_WR*	F6	F_WE*	
FLASH_WP	E5	F_WP1*	
NC	F1	F_WP2*	
F_RESET_N	F5	F_RST*	
EBU_CS0*	K2	F1_CE*	
EBU_RD*	J3	F1_OE*	
NC	G9	F2_CE*	
NC	H9	F2_OE*	
NC	K4	F3_CE*	
NC	K1	F4_CE*	

EBU_AD<0>	H3	DQ0	
EBU_AD<1>	H4	DQ1	
EBU_AD<2>	G4	DQ2	
EBU_AD<3>	H5	DQ3	
EBU_AD<4>	J6	DQ4	
EBU_AD<5>	G6	DQ5	
EBU_AD<6>	J7	DQ6	
EBU_AD<7>	H8	DQ7	
EBU_AD<8>	G3	DQ8	
EBU_AD<9>	J4	DQ9	
EBU_AD<10>	G5	DQ10	
EBU_AD<11>	J5	DQ11	
EBU_AD<12>	H6	DQ12	
EBU_AD<13>	G7	DQ13	
EBU_AD<14>	H7	DQ14	
EBU_AD<15>	J8	DQ15	
EBU_WAIT*	G8	WAIT	
NC	A2	DU0	
NC	A9	DU1	
NC	B1	DU2	
NC	M1	DU3	
NC	M9	DU4	
NC	J1	RFU0	
NC	L1	RFU1	
NC	M3	RFU2	
NC	M4	RFU3	
NC	M5	RFU4	
NC	M6	RFU5	
NC	M7	RFU6	
NC	M8	RFU7	
EBU_RD*	H2	R_OE*	
EBU_WR*	D6	R_WE*	
EBU_CS1*	D7	P1_CS*	
NC	K3	P2_CS*	
EBU_BC0*	C3	R_LB*	
EBU_BC1*	F4	R_UB*	
NC	J2	S_CS1*	
NC	C6	S_CS2	
P1_CRE	K9	P_MODE*/P_CRE	
NC	C1	N_ALE	
NC	A3	N_CLE	
NC	M2	N_RY/BY*	

VCCQ: G1 J9 K8 L4 A6 K6 — P_VCC: B6 — F1_VCC: L5 — F2_VCC: B7 K7 — F_VPP: D5 — S_VCC: K5 — NC NC NC

VSS: A8 B5 C5 D1 E1 H1 L2 L3 L6 L7 L8 L9

XW8_RF SHORT-0201 NOSTUFF — V_FLASH PWR250

XW9_RF SHORT-0201 NOSTUFF — V_PSRAM PWR250

C104_RF 1UF 10% 6.3V CERM 402

C105_RF 0.01UF 10% 10V X5R 201

C84_RF 1UF 10% 6.3V CERM 402

C85_RF 0.01UF 10% 10V X5R 201

C83_RF 0.01UF 10% 10V X5R 201

R35_RF 100K 1% 1/20W MF 201: F_CLK

R11_RF 22K 1% 1/20W MF 201: RESET_N

R34_RF 100K 1% 1/20W MF 201: EBU_CS0* / EBU_RD*

VAUDIOA

C277_RF	0.1UF	10% 6.3V X5R 201

VAUDIOB

C276_RF	0.1UF	10% 6.3V X5R 201

VIO

C231_RF	0.1UF	10% 6.3V X5R 201
C233_RF	0.1UF	10% 6.3V X5R 201
C147_RF	0.1UF	10% 6.3V X5R 201
C157_RF	0.1UF	10% 6.3V X5R 201
C159_RF	0.1UF	10% 6.3V X5R 201
C204_RF	0.1UF	10% 6.3V X5R 201

VSIM

R33_RF 0 5% 1/20W MF 201: VRTC — VDD_RTC

C205_RF	0.1UF	10% 6.3V X5R 201
C235_RF	0.1UF	10% 6.3V X5R 201

VPLL

C230_RF	0.1UF	10% 6.3V X5R 201
C232_RF	0.1UF	10% 6.3V X5R 201

VSD1

C195_RF	1UF	10% 10V X5R 402-1
C198_RF	0.1UF	10% 6.3V X5R 201
C202_RF	0.01UF	10% 10V X5R 201
C196_RF	1UF	10% 10V X5R 402-1
C199_RF	0.1UF	10% 6.3V X5R 201
C203_RF	0.01UF	10% 10V X5R 201

VSD2

C197_RF	1UF	10% 10V X5R 402-1
C200_RF	0.1UF	10% 6.3V X5R 201
C201_RF	0.1UF	10% 6.3V X5R 201

APPLE INC.

SIZE D | DRAWING NUMBER 051-7340 | REV. 08

SCALE NONE | SHT 3 OF 11

SM POWER 3I PMU

BATTERY CONNECTOR

APN#: 998-1935

J7_RF
BATTERY-MLB-N82
SM-NSP

IO1 IO2 IO3 IO4

NTC_CONN
BATT_VCC
BATT_TEMP_CONN
PWR2500

C12_RF 33PF 5% 25V NP0-C0G 201 NOSTUFF
R80_RF 100K 1% 1/20W MF 201
C20_RF 33PF 5% 25V NP0-C0G 201 NOSTUFF

N82 BATTERY PAD

TP41_RF A BATT_VCC TP-1P0-TOP NOSTUFF FUNC_TEST
TP43_RF A TP-1P0-TOP NOSTUFF FUNC_TEST
TP42_RF A NTC_CONN TP-1P0-TOP NOSTUFF FUNC_TEST
TP44_RF A BATT_TEMP_CONN TP-1P0-TOP NOSTUFF FUNC_TEST

C9_RF 0.1UF 10% 6.3V X5R 201 NOSTUFF
XW2_RF SM NOSTUFF
XW4_RF SM NOSTUFF
ISENSE_IN1 ADIFFLP DIFFERENTIAL_PAIR=ISENSE
ISENSE_IN2 ADIFFLP DIFFERENTIAL_PAIR=ISENSE

R32_RF 0.050 1% 1/6W MF-HF 402
BATT_VCC_CURSNS
PWR2500

XW60_RF SHORT-0201 NOSTUFF
BATSNS

C11_RF 27PF 5% 25V NP0-C0G 201 NOSTUFF

FL1_RF 22-OHM-25%-900MA 0201
FL6_RF 22-OHM-25%-900MA 0201
FL8_RF 22-OHM-25%-900MA 0201

VDDSD3_IN PWR250
VDDSD2_IN PWR250
VDDSD1_IN PWR250

C155_RF 10UF 20% 6.3V X5R 603
C156_RF 10UF 20% 6.3V X5R 603
C256_RF 10UF 20% 6.3V X5R 603

XW5_RF SHORT-0402 NOSTUFF

C292_RF 1UF 10% 6.3V CERM 402
C293_RF 1UF 10% 6.3V CERM 402
C294_RF 1UF 10% 6.3V CERM 402

VDD_PMU_LDO_IN PWR2500

VIO

R36_RF 10K 1% 1/20W MF 201

R120_RF 4.7K 1% 1/20W MF 201
R121_RF 4.7K 1% 1/20W MF 201

VSD2

C28_RF 0.1UF 10% 6.3V X5R 201

U3_RF 08 74LVC1G08 SOT891

RF_RESET* → BB_RESET_GATED
BB_RST → DEBUG_RST_N
BB_PMU_ON*
PM_SCL1
PM_SDA1

R54_RF 10K 1% 1/20W MF 201
WLAN_CLK_REQ

RADIO_ON
3G_VDDCORE_HI
SD3_MODE
PM_VCXOEN
BT_CLK_REQ
WDOG
PM_INT
RESET_N

R60_RF 0 5% 1/20W MF 201
VSD3_WAKEUP

U25_RF PMB6820 WFSGA

VDDAUX	A8	BB_RESET	F2
VDDAUDIOA	A5	DEBUG_RST*	E4
VDDAUDIOB	B6	PMU_RESET	F1
VDDRF13AFC	J6	I2C_CLK	D1
VDDUSB	C9	I2C_DAT	D2
VDDRF2	J8	ONOFF1*	E2
VDDSD1	J2	ONOFF2	D3
VDDSD2	A2	RESOURCE_CTRL	D4
VDDSD3	B4	SD3_MODE	C1
VDDUMTS	H3	SLEEP1*	B7
VDD_MONO	F9	SLEEP2*	C7
VDDPLLIO	G9	WDOG	C4
VDDREF	J4	PM_INT	E3
		RESET*	A7

DIGITAL CONTROL LOGIC

VSD1	H1		
VSD1	J1		
SD1_FB	G4		SD1
SD1_FBL	G3		
VSD2	B1		
SD2_FB	B2		SD2
SD2_FBL	C5		
VSD3	A4		
SD3_FB	B3		SD3
SD3_FBL	C6		
VRTC	E1		POR
LED1_PWM	F3	NC	
LED2_PWM	G2	NC	LED

LINEAR VOLTAGE REGULATORS

VREF	E8		
RREF	D6		
VAUX	B8	VAUX_SRC	
VAUDIOA	A6	VAUDIOA_SRC	
VAUDIOB	B5	VAUDIOB_SRC	
VAFC	G5	VAFC_SRC	
VUSB	B9	VUSB_SRC	
VRF1	H5	VRF1_SRC	
VRF2	J7	VRF2_SRC	
VRF3	H6	VRF3_SRC	
VSIM	H4	VSIM	
VUMTS	J3	VUMTS_SIG	
VPLL	F8	VPLL_SIG	
VVIB	J5	NC	
VIO	G8	VIO_SRC	

CURRENT SENSE AMPLIFIER

ISENSE_IN1	H8	ISENSE_IN1	
ISENSE_IN2	H7	ISENSE_IN2	
ISENSE_VOUT	G7	CURRENT_SENSE_SRC	

AUDIO LOUDSPEAKER AMPLIFIER

MONO_INP	D7	NC	
MONO_INN	C8	NC	
MONO_OUTP	E9	NC	
MONO_OUTN	D9	NC	

A1			
NC	A9		
J9			

A_GND	E7	VSS	C3 D5 E5 E6 F4 F5 F6 F7 G6 H2
VSS_SD1	G1		
VSS_SD2	C2		
VSS_SD3	A3		
VSS_MONO	D8		
VSS_SENSE	H9		

REFERENCE

VREF → C89_RF 1UF 10% 6.3V CERM 402
RREF → R122_RF 100K 1% 1/20W MF 201

VDD_DCDC_IN PWR2500
3G_DCDC_EN
PA_LO_GAIN

C22_RF 10UF 20% 6.3V X5R 603

R20_RF 0 5% 1/20W MF 201 MAX_8836
R7_RF 1K 1% 1/20W MF 201 MAX_8805
R22_RF 1K 1% 1/20W MF 201

U1_PA_EN
U1_HP
U1_EN1

R27_RF 0 5% 1/20W MF 201 MAX_8805
R14_RF 0 5% 1/20W MF 201 MAX_8836
R23_RF 1K 1% 1/20W MF 201

U1_RF MAX8836ZEWEEE+T WLP

IN1A	C4	PA_EN	B2
IN1B	C3	HP	C2
IN2	C1	EN2	B3
PAA	D4		
PAB	D3		
LX	B4	3G_DC_DC_LX	
REFBP	A1	DC_DC_REFBP	
NC	B1		
AGND	A2		
PGND	A4		
NC0	A3		
NC2	D2		
NC1	D1		
U1_EN1			
LDO2			

NOSTUFF

PA_LO_GAIN		3G_PA_VCC
PA_LO_GAIN	0	3.44V
PA_LO_GAIN	1	3.14V

U1_REFIN

XW14_RF SHORT-0402 NOSTUFF
BATT_VCC_CURSNS PWR2500

R55_RF 100K 1% 1/20W MF 201 NOSTUFF

L4_RF VLS3012-SM-HF 2.2UH-1.5A

3G_PA_VCC PWR2500

C30_RF 0.01UF 10% 16V X5R 201

C24_RF 0.1UF 10% 6.3V X5R 201
PA_LO_GAIN

C34_RF 1UF 10% 6.3V CERM 402
DCDC_LDO1 PWR250

DCDC_LDO1

R24_RF 10.7K 1% 1/20W MF 201 MAX_8805
R25_RF 10K 1% 1/20W MF 201 MAX_8805
R44_RF 53.6K 1% 1/20W MF 201 MAX_8805
PA_GAIN_FET

Q1_RF CEDM7001 SOT883 MAX_8805

U1_REFIN

C32_RF 1000PF 10% 16V X7R 201 MAX_8805

XW32_RF SHORT-0201 NOSTUFF → VAUX PWR100
XW30_RF SHORT-0201 NOSTUFF → VAUDIOA PWR250
XW31_RF SHORT-0201 NOSTUFF → VAUDIOB PWR100
XW33_RF SHORT-0201 NOSTUFF → VAFC_2V65 PWR100
XW34_RF SHORT-0201 NOSTUFF → VDD_WLAN_3V1 PWR100
XW16_RF SHORT-0201 NOSTUFF → VRF1_2V8 PWR250
XW15_RF SHORT-0201 NOSTUFF → VRF1V5 PWR250
XW35_RF SHORT-0201 NOSTUFF → VRF3 PWR100
XW23_RF SHORT-0201 NOSTUFF → VDD_BT_2V85 PWR250
XW24_RF SHORT-0201 NOSTUFF → VPLL PWR100
XW13_RF SHORT-0201 NOSTUFF → VIO PWR100

C117_RF 1UF 10% 6.3V CERM 402
C120_RF 1UF 10% 6.3V CERM 402
C123_RF 1UF 10% 6.3V CERM 402
C260_RF 2.2UF 20% 6.3V CERM 402-LF
C125_RF 1UF 10% 6.3V CERM 402

C90_RF 1UF 10% 6.3V CERM 402
C101_RF 1UF 10% 6.3V CERM 402
C224_RF 1UF 10% 6.3V CERM 402
C124_RF 2.2UF 20% 6.3V CERM 402-LF
C118_RF 2.2UF 20% 6.3V CERM 402-LF
C121_RF 2.2UF 20% 6.3V CERM 402-LF
C288_RF 2.2UF 10% 10V X5R 603

R53_RF 22K 1% 1/20W MF 201
LOAD
C72_RF 0.01UF 10% 16V X5R 201 NOSTUFF

XW12_RF SM NOSTUFF
VSD1 PWR500
L34_RF 10UH-590MA VLF3012ST-HF
PWR500 → SD1_OUT PWR500

C140_RF 10UF 20% 6.3V X5R 603
C141_RF 10UF 20% 6.3V X5R 603
C145_RF 10UF 20% 6.3V X5R 603

D1_RF SOD-923-HF NSR0130P2XXGH
SD1_FB
VSD1_GND
XW11_RF SM NOSTUFF

XW26_RF SM NOSTUFF
VSD2 PWR250

C250_RF 10UF 20% 6.3V X5R 603
C252_RF 4.7UF 20% 4V X5R 402
C3_RF 4.7UF 20% 4V X5R 402
C4_RF 4.7UF 20% 4V X5R 402

SD2_OUT PWR250
D3_RF SOD-923-HF NSR0130P2XXGH
XW28_RF SM NOSTUFF

L50_RF 10UH-20%-500MA VLPW6312T-100MR40-SM-HF
SD3_OUT PWR250

C282_RF 2.2UF 20% 6.3V CERM 402-LF

XW27_RF SM NOSTUFF
VSD3 PWR100

C5_RF 4.7UF 20% 4V X5R 402
C6_RF 4.7UF 20% 4V X5R 402
C10_RF 4.7UF 20% 4V X5R 402
C253_RF 4.7UF 20% 4V X5R 402

D4_RF SOD-923-HF NSR0130P2XXGH
XW29_RF SM NOSTUFF

C25_RF 4.7UF 20% 4V X5R 402
C26_RF 4.7UF 20% 4V X5R 402 NOSTUFF

FL5_RF 240-OHM-0.2A-0.8-OHM 0201-1
NTC → NTC_CONN

FL7_RF 240-OHM-0.2A-0.8-OHM 0201-1
BATT_TEMP → BATT_TEMP_CONN

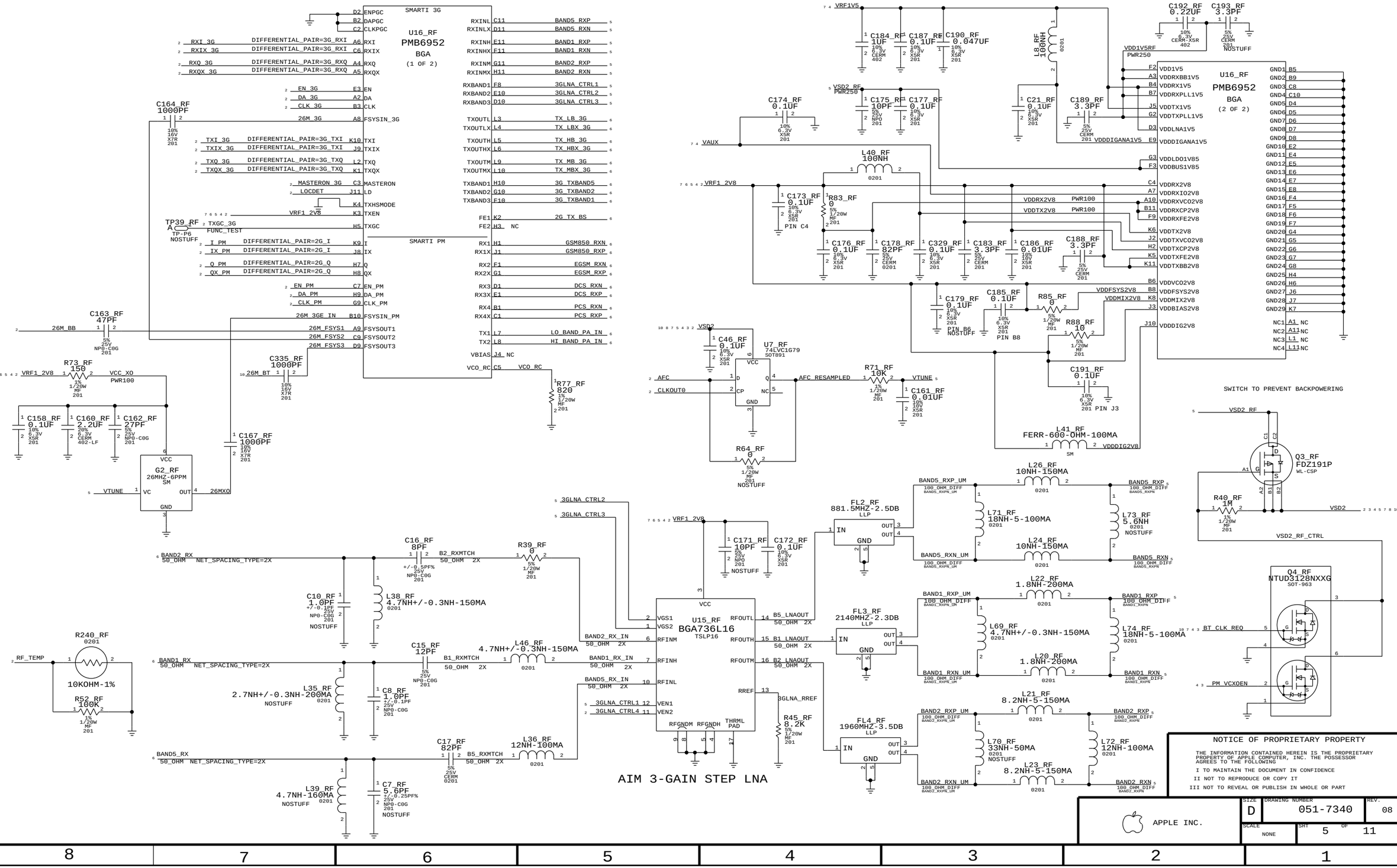
APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	08

SCALE: NONE
SHT 4 OF 11

GSM & UMTS TRANSCEIVER - SMARTI 3GE

SMARTI3GE SUPPLIES



POWER AMPS AND RF FRONT-END MODULE

L6_RF 3.3NH+/-0.3NH-180MA 0201
L76_RF 22NH-100MA 0201 NOSTUFF
L1_RF 3.3NH+/-0.3NH-180MA 0201
L80_RF 27NH-50MA 0201
GSM850_RXP DIFFERENTIAL_PAIR=GSM850_RX ADIFFLP
GSM850_RXN DIFFERENTIAL_PAIR=GSM850_RX ADIFFLP
GSM850_RXP_UM DIFFERENTIAL_PAIR=GSM850_UM ADIFFLP
GSM850_RXN_UM DIFFERENTIAL_PAIR=GSM850_UM ADIFFLP

L7_RF 5.6NH 0201
L77_RF 18NH-5-100MA 0201 NOSTUFF
L2_RF 5.6NH 0201
L81_RF 18NH-5-100MA 0201
EGSM_RXP DIFFERENTIAL_PAIR=EGSM_RX ADIFFLP
EGSM_RXN DIFFERENTIAL_PAIR=EGSM_RX ADIFFLP
EGSM_RXP_UM DIFFERENTIAL_PAIR=EGSM_UM ADIFFLP
EGSM_RXN_UM DIFFERENTIAL_PAIR=EGSM_UM ADIFFLP

L18_RF 10NH-150MA 0201
L78_RF 18NH-5-100MA 0201 NOSTUFF
L13_RF 10NH-150MA 0201
L82_RF 18NH-5-100MA 0201 NOSTUFF
DCS_RXP DIFFERENTIAL_PAIR=DCS_RX ADIFFLP
DCS_RXN DIFFERENTIAL_PAIR=DCS_RX ADIFFLP
DCS_RXP_UM DIFFERENTIAL_PAIR=DCS_UM ADIFFLP
DCS_RXN_UM DIFFERENTIAL_PAIR=DCS_UM ADIFFLP

L19_RF 8.2NH-5-150MA 0201
L79_RF 18NH-5-100MA 0201
L17_RF 8.2NH-5-150MA 0201
L83_RF 18NH-5-100MA 0201 NOSTUFF
PCS_RXP DIFFERENTIAL_PAIR=PCS_RX ADIFFLP
PCS_RXN DIFFERENTIAL_PAIR=PCS_RX ADIFFLP
PCS_RXP_UM DIFFERENTIAL_PAIR=PCS_UM ADIFFLP
PCS_RXN_UM DIFFERENTIAL_PAIR=PCS_UM ADIFFLP

R106_RF 1K 1% 1/20W MF 201
R105_RF 1K 1% 1/20W MF 201
R107_RF 1K 1% 1/20W MF 201
FEM_VC3_BUF1
FEM_VC2
FEM_VC1_BUF1
C306_RF 100PF 5% 25V CERM 201
C307_RF 100PF 5% 25V CERM 201
C308_RF 100PF 5% 25V CERM 201
VC3
VC2
VC1

R104_RF 1K 1% 1/20W MF 201
FEM_VC4
C309_RF 100PF 5% 25V CERM 201
VC4

FL10_RF 120-OHM-0.1A-1.5-OHM 0201
VRF1_2V8
VRF1_2V8_FIL
C1_RF 1000PF 10% 16V X7R 201
C315_RF 0.1UF 10% 6.3V X5R 201

U4_RF
LMSP4LMA-764TEMP
QFN
VC1 VC2 VC3 VC4 VDD
GSM850RX
GSM850RX
GSM900RX
GSM900RX
GSM1800RX
GSM1800RX
GSM1900RX
GSM1900RX
GSM850_900TX
GSM1800_1900TX
ANT
UMTS1
UMTS2
UMTS3
LO_BAND_TX 50_OHM 2X
HI_BAND_TX 50_OHM 2X
FEM_ANT 50_OHM 2X
BAND1_RF 50_OHM 2X
BAND2_RF 50_OHM 2X
BAND5_RF 50_OHM 2X
GND

C303_RF 10PF 5% 25V NPO 201
FEM_ANT_M 50_OHM 2X
L65_RF 12NH-100MA 0201
C2_RF 10PF 5% 25V NPO 201
CELL_ANT 50_OHM 2X

C45_RF 6.0PF +/-0.1PF 25V NP0-C0G-CERM 201
HB_TX 50_OHM 2X
L45_RF 3.9NH+/-0.2NH-170MA 0201
LB_TX 50_OHM 2X

R155_RF 0 5% 1/20W MF 201
HI_BAND_PA_OUT 50_OHM 2X
L9_RF 8.2NH-110MA 0201
C44_RF 18PF 5% 25V NP0-C0G 201
LO_BAND_PA_OUT 50_OHM 2X
C129_RF 1.0PF +/-0.1PF 25V NP0-C0G 201

SPRING CONTACT APN#:870-1576
SP1_RF EMI-SPRING SM
CELLULAR ANTENNA MATCH
L3_RF 3.6NH+/-0.2NH-850MA 0603-HF
CELL_ANT_M 50_OHM 2X
CELL_ANT_POGO 50_OHM
SP2_RF 1.5X2.0MM SM-NSP
POGO PIN CONTACT APN#:998-1765

J5_RF MM8130-2600XXX F-ST-SM
IN OUT GND

NOSTUFF XW10_RF SM
GSM_PA_VCC PWR2500
BATT_VCC PWR2500
C130_RF 1000PF 10% 16V X7R 201
C135_RF 33UF 20% 16V TANT-POLY CASE-A4

VRF1_2V8
C13_RF 1000PF 10% 16V X7R 201
U11_RF 74LVC2G34 SOT891
VCC
1A1 1Y1 1A2 1Y2 GND
FEM_VC1 FEM_VC1_BUF
FEM_VC3 FEM_VC3_BUF

SP4_RF EMC-SPRING ALH-802A
SPRING CONTACT APN#:870-1540

VBATT
U14_RF SKY77340I3 MCM-HF
DCS/PCS_OUT DCS/PCS_IN
MODE BS VBIAS VRAMP EN
RSVD2 GSM_OUT GSM_IN
PA_MODE 2G_TX_BS VRAMP TXON_PA
HI_BAND_PA_IN 50_OHM 2X
LO_BAND_PA_IN 50_OHM 2X
GND

R70_RF 1.33K 1% 1/20W MF 201
PALEVEL
C139_RF 680PF 10% 25V CERM 201

R116_RF 22K 1% 1/20W MF 201
TXBAND1_PA_DETECT

3G_PA_DETECT
NO STUFF
C283_RF 1000PF 10% 16V X7R 201
R126_RF 2K 1% 1/20W MF 201
3G_PA_VBA
VMODE
VMODE_DIV
R153_RF 680 1% 1/20W MF 201
TP22_RF A TP-P6 NOSTUFF FUNC_TEST
3G_TXBAND1
3G_TXBAND5
3G_TXBAND2
R154_RF 10K 1% 1/20W MF 201
C321_RF 1000PF 10% 16V X7R 201
R114_RF 22K 1% 1/20W MF 201
TXBAND2_PA_DETECT
R109_RF 22K 1% 1/20W MF 201
TXBAND5_PA_DETECT
C320_RF 1000PF 10% 16V X7R 201
C319_RF 1000PF 10% 16V X7R 201

3G_PA_VCC
C242_RF 220PF 10% 25V X7R-CERM 201
C237_RF 100PF 5% 25V CERM 201
C238_RF 10UF 20% 6.3V X5R 603
C241_RF 10UF 20% 6.3V X5R 603
C243_RF 1000PF 10% 16V X7R 201
C236_RF 100PF 5% 25V CERM 201
C245_RF 330PF 10% 16V X7R 201
C246_RF 10UF 20% 6.3V X5R 603
C244_RF 1000PF 10% 16V X7R 201

U37_RF BAND_2 TQM666032 LGA
VCC1 VCC2 VCCBIAS VBA VDET VEN VMODE
RFIN ANT RX THRML PAD
BAND2_RF_AT_PA 50_OHM 2X
BAND2_PA_MATCH 50_OHM 2X
BAND2_RX 50_OHM 2X
C301_RF 12PF 5% 25V NP0-C0G 201
C19_RF 12PF 5% 25V NP0-C0G 201 NOSTUFF
C40_RF 12PF 5% 25V NP0-C0G 201 NOSTUFF
C41_RF 12PF 5% 25V NP0-C0G 201

U5_RF BAND_5-6 TQM616035 LGA
TX_BAND5_PA_IN 50_OHM 2X
C326_RF 3.9PF +/-0.1PF 25V NP0-C0G-CERM 201
BAND5_RF_AT_PA 50_OHM 2X
BAND5_PA_MATCH 50_OHM 2X
BAND5_RX 50_OHM 2X
C304_RF 33PF 5% 25V NP0-C0G 201
C42_RF 33PF 5% 25V NP0-C0G 201 NOSTUFF
C36_RF 33PF 5% 25V NP0-C0G 201
C35_RF 33PF 5% 25V NP0-C0G 201 NOSTUFF

U19_RF BAND_1 TQM676031 LGA
TX_BAND1_PA_IN 2 50_OHM 2X
C328_RF 10PF 5% 25V NPO 201
TX_BAND1_PA_IN 50_OHM 2X
BAND1_RF_AT_PA1 50_OHM 2X
BAND1_PA_MATCH 50_OHM 2X
BAND1_RF 50_OHM 2X
BAND1_RX 50_OHM 2X
C37_RF 10PF 5% 25V NPO 201 NOSTUFF
C38_RF 1.0PF +/-0.1PF 25V NP0-C0G 201
C39_RF 3.9PF +/-0.1PF 25V NP0-C0G-CERM 201

L10_RF 3.9NH+/-0.2NH-170MA 0201

L84_RF 22NH-100MA 0201
TX_BAND5_PA_IN2 50_OHM 2X
L47_RF 22NH-100MA 0201
VRF1_2V8
TX_BIAS_BAND2
C322_RF 12PF 5% 25V NP0-C0G 201
TX_BAND2_PA_IN2 50_OHM 2X
TX_BAND2_PA_IN 50_OHM 2X
L64_RF 1810MHZ-1DB-50/100-OHM 0603
UNBAL_PORT BAL_PORT1 BAL_PORT2 NC NC GND
C278_RF 12PF 5% 25V NP0-C0G 201

L61_RF 836.5MHZ-1DB-50/100-OHM 0603
UNBAL_PORT BAL_PORT1 BAL_PORT2 NC NC GND
BAL_B5 B5_BAL_P1 ADIFFLP
L28_RF 18NH-5-100MA 0201
L27_RF 18NH-5-100MA 0201
B5_BAL_P2 ADIFFLP
C33_RF 0.5PF +/-0.05PF 25V CERM 201 NOSTUFF

L43_RF 4.7NH+/-0.3NH-150MA 0201
L12_RF 12NH-100MA 0201
L42_RF 4.7NH+/-0.3NH-150MA 0201
DWD WANTS 1.8NH FOR L42,43 NO 0201 IN LIB
BAL_B1 B1_BAL_P1 ADIFFLP
B1_BAL_P2 ADIFFLP
TX_HBX_3G TX_HB_3G BAL_HBX ADIFFLP

L62_RF 1950MHZ-1.05DB-50/100-OHM 0603
UNBAL_PORT BAL_PORT1 BAL_PORT2 NC NC GND

L30_RF 6.8NH-150MA 0201
L5_RF 8.2NH-5-150MA 0201
L29_RF 6.8NH-150MA 0201
TX_MBX_3G TX_MB_3G BAL_MBX ADIFFLP
BAL_B2 B2_BAL_P1 ADIFFLP
B2_BAL_P2 ADIFFLP

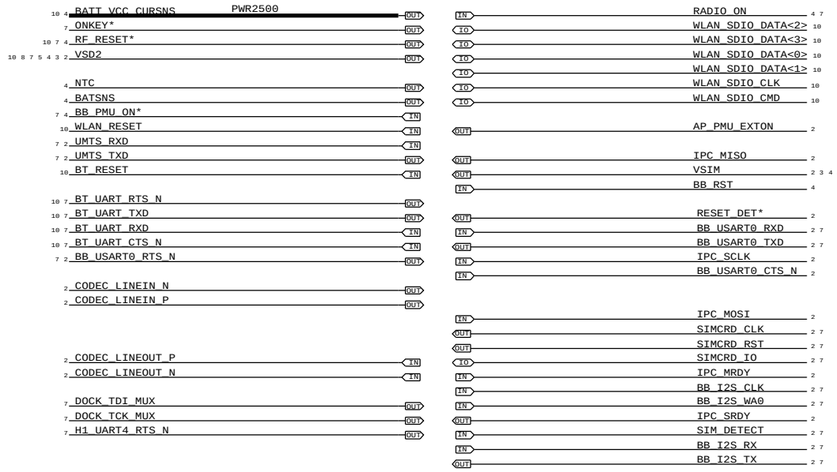
L48_RF 47NH-50MA 0201
L49_RF 22NH-100MA 0201
TX_BIAS_BAND5
TX_BIAS_BAND1
C279_RF 27PF 5% 25V NP0-C0G 201
C280_RF 12PF 5% 25V NP0-C0G 201

APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	08
SCALE: NONE	SHT 6 OF 11	

SYSTEM CONNECTORS

AP CONNECTIONS

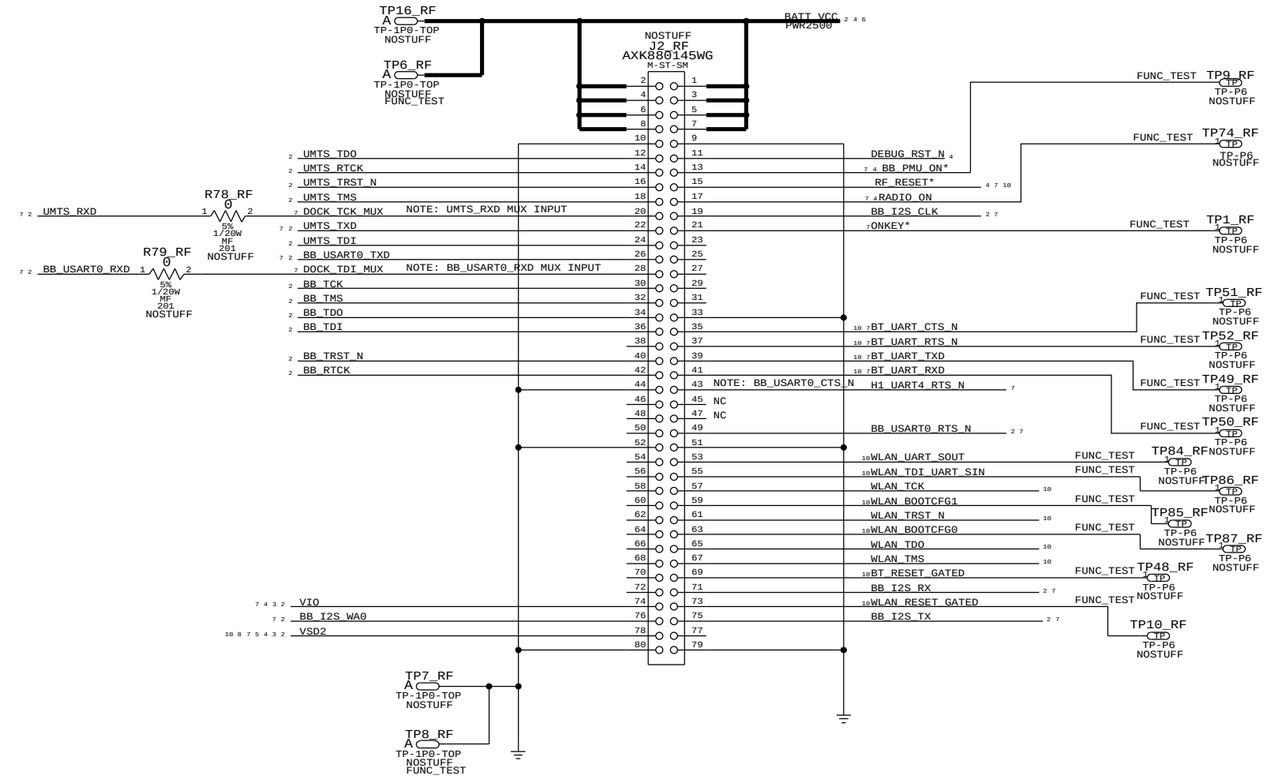


TP2_RF — VRTC — FUNC_TEST — TP-P6 NOSTUFF
TP3_RF — VSD1 — FUNC_TEST — TP-P6 NOSTUFF
TP4_RF — VSD2 — FUNC_TEST — TP-P6 NOSTUFF
TP5_RF — VSD3 — FUNC_TEST — TP-P6 NOSTUFF
TP12_RF — VDD_BT_2V85 — FUNC_TEST — TP-P6 NOSTUFF
TP13_RF — VRF1_2V8 — FUNC_TEST — TP-P6 NOSTUFF
TP23_RF — VIO — FUNC_TEST — TP-P6 NOSTUFF
TP24_RF — VRF1V5 — FUNC_TEST — TP-P6 NOSTUFF
TP25_RF — VAFC_2V65 — FUNC_TEST — TP-P6 NOSTUFF
TP26_RF — VPLL — FUNC_TEST — TP-P6 NOSTUFF
TP27_RF — VAUX — FUNC_TEST — TP-P6 NOSTUFF

TP14_RF — BB_USART0_TXD — FUNC_TEST — TP-P6 NOSTUFF
TP15_RF — DOCK_TDI_MUX — FUNC_TEST — TP-P6 NOSTUFF — NOTE: BB_USART0_RXD MUX INPUT
TP28_RF — BB_USART0_RTS_N — FUNC_TEST — TP-P6 NOSTUFF
TP29_RF — H1_UART4_RTS_N — FUNC_TEST — TP-P6 NOSTUFF — NOTE: BB_USART0_CTS BUFFER INPUT
TP11_RF — 3G_PA_VCC — FUNC_TEST — TP-P6 NOSTUFF
TP38_RF — 3G_DCDC_EN — FUNC_TEST — TP-P6 NOSTUFF
TP17_RF — BT_CLK_REQ — FUNC_TEST — TP-P6 NOSTUFF
TP33_RF — WDOG — FUNC_TEST — TP-P6 NOSTUFF
TP18_RF — GSM_TXBURST_IND — FUNC_TEST — TP-P6 NOSTUFF
TP34_RF — BB_USART0_RXD — FUNC_TEST — TP-P6 NOSTUFF — NOTE: FOR DEBUG FIXTURES WHEN UART MUXES ARE NOSTUFF

DEBUG CONNECTOR

516S0612

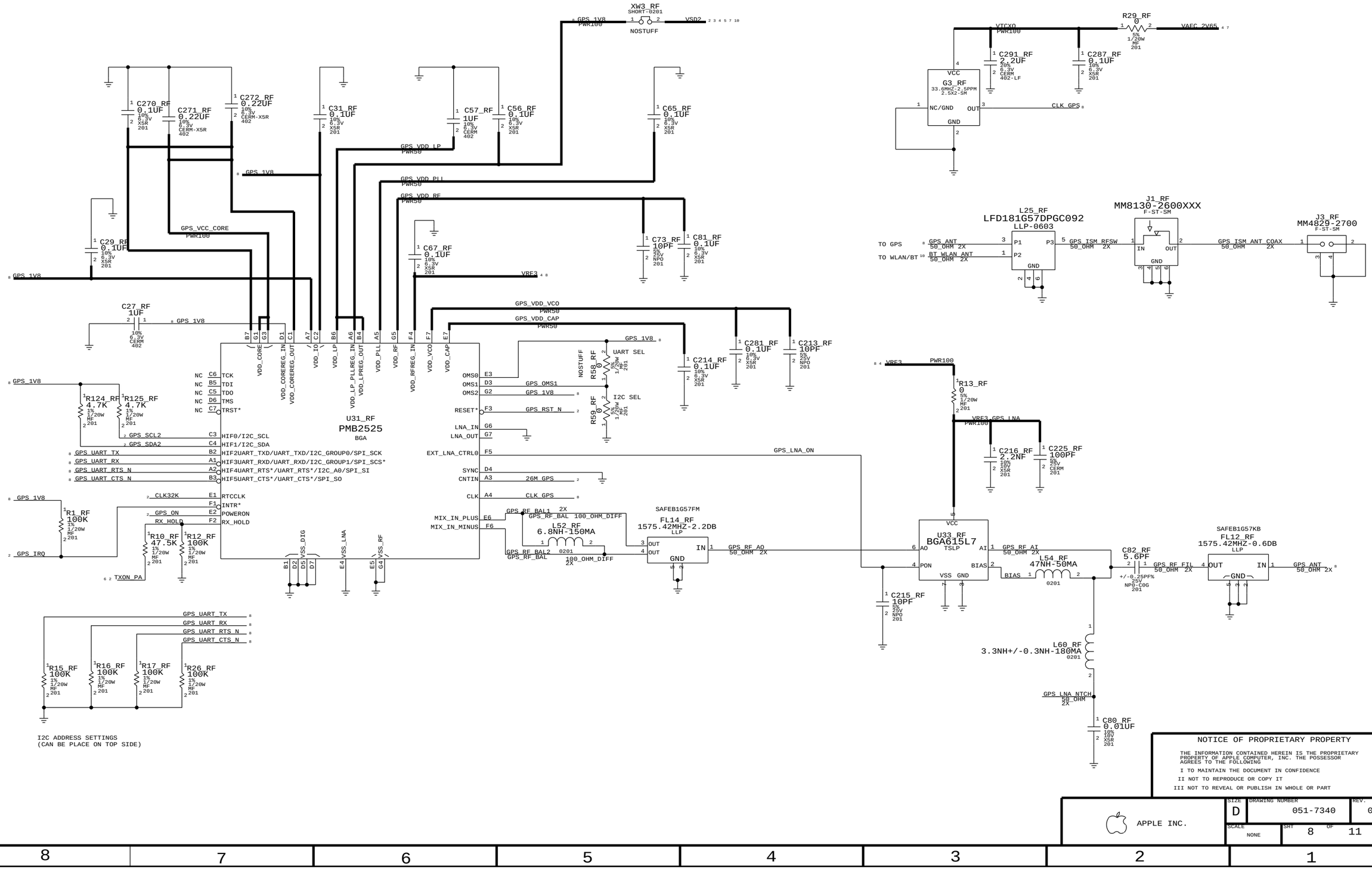


TP60_RF — VSIM — TP-P6 NOSTUFF
TP56_RF — SIMCRD_RST — TP-P6 NOSTUFF
TP59_RF — SIMCRD_CLK — TP-P6 NOSTUFF
TP65_RF — SIMCRD_IO — TP-P6 NOSTUFF
TP64_RF — SIM_DETECT — TP-P6 NOSTUFF

APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	08
SCALE: NONE	SHT 7 OF 11	

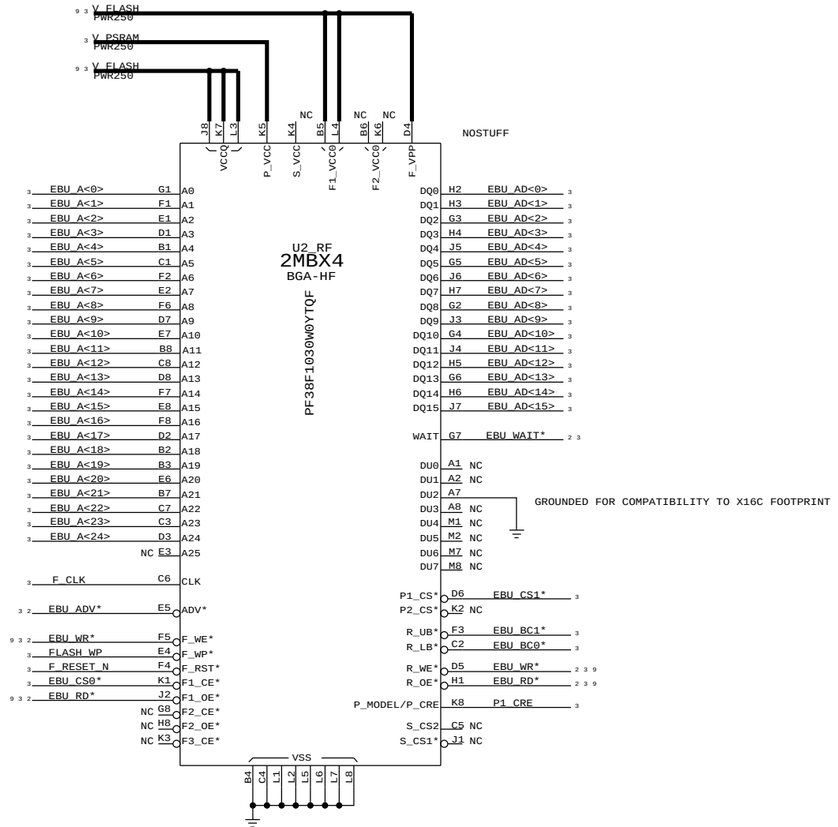
A-GPS



APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	08
SCALE: NONE	SHT 8 OF 11	

DUAL FOOTPRINTED LOW-COST MEMORY OPTION



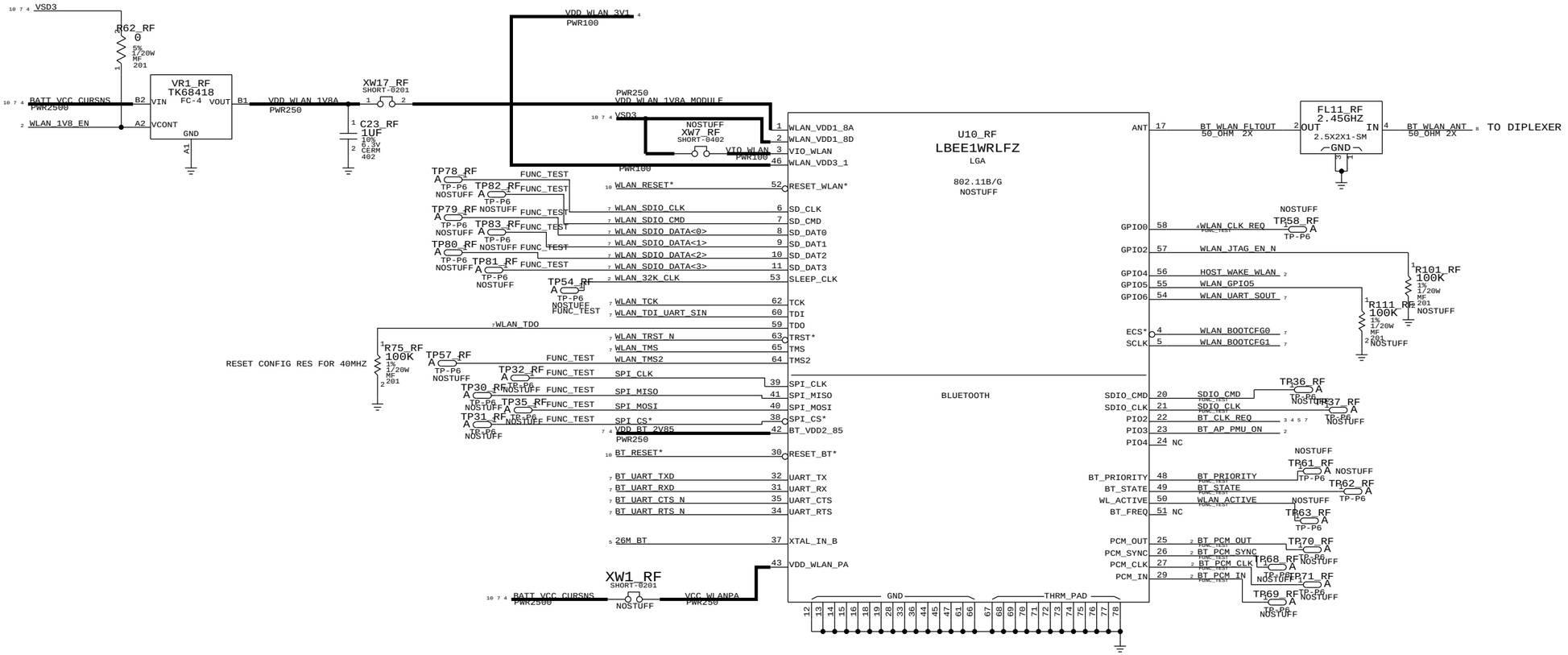
APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	08

SCALE: NONE

SHT 9 OF 11

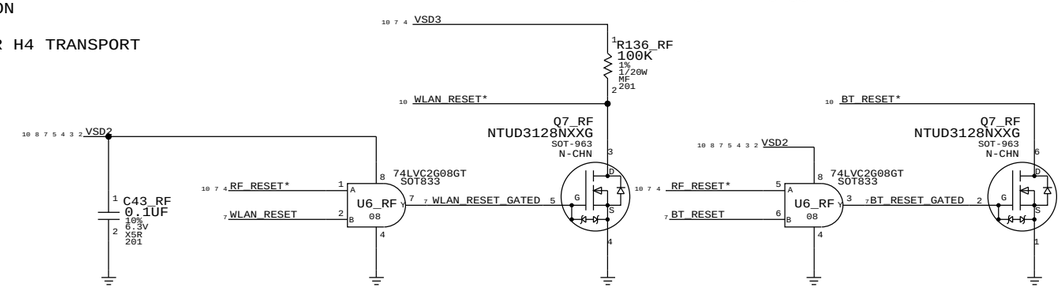
WLAN RADIO



HOST TRANSPORT CONFIGURATION

MODULE CONFIGURED INTERNALLY FOR H4 TRANSPORT

TO ALLOW AP TO USE ACTIVE HIGH



APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7340	08
SCALE: NONE	SHT 10 OF 11	

```
Title:        Basenet Report
Design:       radio_proto
Date:         Feb 15 9:18:04 2008

Base nets and synonyms for
radio_proto_lib.RADIO_PROTO(@radio_proto_lib.radio_proto(sch_1))
```

Base Signal	Synonyms	Location([Zone][dir])
2G_TX_BS	2G_TX_BS - @radio_proto_lib.RADIO_PROTO	5C5 6C2
3GLNA_CTRL1	3GLNA_CTRL1 - @radio_proto_lib.RADIO_PROTO	5A5 5D5
3GLNA_CTRL2	3GLNA_CTRL2 - @radio_proto_lib.RADIO_PROTO	5B5 5D5
3GLNA_CTRL3	3GLNA_CTRL3 - @radio_proto_lib.RADIO_PROTO	5B5 5D5
3GLNA_CTRL4	3GLNA_CTRL4 - @radio_proto_lib.RADIO_PROTO	2C1 5A5
3GLNA_RREF	3GLNA_RREF - @radio_proto_lib.RADIO_PROTO	5A4
3G_DCDC_EN	3G_DCDC_EN - @radio_proto_lib.RADIO_PROTO	2C1 4D4 7A6
3G_DC_DC_LX	3G_DC_DC_LX - @radio_proto_lib.RADIO_PROTO	4D2
3G_PA_DETECT	3G_PA_DETECT - @radio_proto_lib.RADIO_PROTO	2C3 6B7
3G_PA_VBA	3G_PA_VBA - @radio_proto_lib.RADIO_PROTO	2C3 6B8
3G_PA_VCC	3G_PA_VCC - @radio_proto_lib.RADIO_PROTO	4D1 6B4 6B6 6B8 7A6
3G_TXBAND1	3G_TXBAND1 - @radio_proto_lib.RADIO_PROTO	5C5 6B8
3G_TXBAND2	3G_TXBAND2 - @radio_proto_lib.RADIO_PROTO	5C5 6B8
3G_TXBAND5	3G_TXBAND5 - @radio_proto_lib.RADIO_PROTO	5C5 6B8
3G_VDDCORE_HI	3G_VDDCORE_HI - @radio_proto_lib.RADIO_PROTO	2B3 4C7
26MXO	26MXO - @radio_proto_lib.RADIO_PROTO	5B7
26M_3G	26M_3G - @radio_proto_lib.RADIO_PROTO	5D7
26M_3GE_IN	26M_3GE_IN - @radio_proto_lib.RADIO_PROTO	5C7
26M_BB	26M_BB - @radio_proto_lib.RADIO_PROTO	2C8 5C8
26M_BT	26M_BT - @radio_proto_lib.RADIO_PROTO	5C7 10B6
26M_FSYS1	26M_FSYS1 - @radio_proto_lib.RADIO_PROTO	5C7
26M_FSYS2	26M_FSYS2 - @radio_proto_lib.RADIO_PROTO	5C7
26M_FSYS3	26M_FSYS3 - @radio_proto_lib.RADIO_PROTO	5C7
26M_GPS	26M_GPS - @radio_proto_lib.RADIO_PROTO	2A6 8B5
AFC	AFC - @radio_proto_lib.RADIO_PROTO	2C7 5B5
AFC_RESAMPLED	AFC_RESAMPLED - @radio_proto_lib.RADIO_PROTO	5B4
AIREF_BB	AIREF_BB - @radio_proto_lib.RADIO_PROTO	2D3
AP_PMU_EXTON	AP_PMU_EXTON - @radio_proto_lib.RADIO_PROTO	2A2 7C5
AP_PMU_EXTON_GATE	AP_PMU_EXTON_GATE - @radio_proto_lib.RADIO_PROTO	2A3
AUXGND_BYP	AUXGND_BYP - @radio_proto_lib.RADIO_PROTO	3A7
B1_BAL_P1	B1_BAL_P1 - @radio_proto_lib.RADIO_PROTO	6A3
B1_BAL_P2	B1_BAL_P2 - @radio_proto_lib.RADIO_PROTO	6A3
B1_LNAOUT	B1_LNAOUT - @radio_proto_lib.RADIO_PROTO	5A4
B1_RXMTCH	B1_RXMTCH - @radio_proto_lib.RADIO_PROTO	5A6
B2_BAL_P1	B2_BAL_P1 - @radio_proto_lib.RADIO_PROTO	6A7
B2_BAL_P2	B2_BAL_P2 - @radio_proto_lib.RADIO_PROTO	6A7
B2_LNAOUT	B2_LNAOUT - @radio_proto_lib.RADIO_PROTO	5A4
B2_RXMTCH	B2_RXMTCH - @radio_proto_lib.RADIO_PROTO	5B6
B5_BAL_P1	B5_BAL_P1 - @radio_proto_lib.RADIO_PROTO	6A5
B5_BAL_P2	B5_BAL_P2 - @radio_proto_lib.RADIO_PROTO	6A5
B5_LNAOUT	B5_LNAOUT - @radio_proto_lib.RADIO_PROTO	5A4
B5_RXMTCH	B5_RXMTCH - @radio_proto_lib.RADIO_PROTO	5A6
BAND1_PA_MATCH	BAND1_PA_MATCH - @radio_proto_lib.RADIO_PROTO	6B1
BAND1_RF	BAND1_RF - @radio_proto_lib.RADIO_PROTO	6B1 6C4
BAND1_RF_AT_PA	BAND1_RF_AT_PA - @radio_proto_lib.RADIO_PROTO	6B2
BAND1_RX	BAND1_RX - @radio_proto_lib.RADIO_PROTO	5A7 6B2
BAND1_RXN	BAND1_RXN - @radio_proto_lib.RADIO_PROTO	5A2 5D5
BAND1_RXN_UM	BAND1_RXN_UM - @radio_proto_lib.RADIO_PROTO	5A3
BAND1_RXP	BAND1_RXP - @radio_proto_lib.RADIO_PROTO	5B2 5D5
BAND1_RXP_UM	BAND1_RXP_UM - @radio_proto_lib.RADIO_PROTO	5B3
BAND1_RX_IN	BAND1_RX_IN - @radio_proto_lib.RADIO_PROTO	5A5
BAND2_PA_MATCH	BAND2_PA_MATCH - @radio_proto_lib.RADIO_PROTO	6B6
BAND2_RF	BAND2_RF - @radio_proto_lib.RADIO_PROTO	6B6 6C4
BAND2_RF_AT_PA	BAND2_RF_AT_PA - @radio_proto_lib.RADIO_PROTO	6B7
BAND2_RX	BAND2_RX - @radio_proto_lib.RADIO_PROTO	5B7 6A7
BAND2_RXN	BAND2_RXN - @radio_proto_lib.RADIO_PROTO	5A2 5D5
BAND2_RXN_UM	BAND2_RXN_UM - @radio_proto_lib.RADIO_PROTO	5A3
BAND2_RXP	BAND2_RXP - @radio_proto_lib.RADIO_PROTO	5A2 5D5
BAND2_RXP_UM	BAND2_RXP_UM - @radio_proto_lib.RADIO_PROTO	5A3
BAND2_RX_IN	BAND2_RX_IN - @radio_proto_lib.RADIO_PROTO	5A5
BAND5_PA_MATCH	BAND5_PA_MATCH - @radio_proto_lib.RADIO_PROTO	6B4
BAND5_RF	BAND5_RF - @radio_proto_lib.RADIO_PROTO	6B3 6C4
BAND5_RF_AT_PA	BAND5_RF_AT_PA - @radio_proto_lib.RADIO_PROTO	6B4
BAND5_RX	BAND5_RX - @radio_proto_lib.RADIO_PROTO	5A7 6A4
BAND5_RXN	BAND5_RXN - @radio_proto_lib.RADIO_PROTO	5B2 5D5
BAND5_RXN_UM	BAND5_RXN_UM - @radio_proto_lib.RADIO_PROTO	5B3
BAND5_RXP	BAND5_RXP - @radio_proto_lib.RADIO_PROTO	5B2 5D5
BAND5_RXP_UM	BAND5_RXP_UM - @radio_proto_lib.RADIO_PROTO	5B3
BAND5_RX_IN	BAND5_RX_IN - @radio_proto_lib.RADIO_PROTO	5A5
BATSNS	BATSNS - @radio_proto_lib.RADIO_PROTO	4D7 7C8
BATT_TEMP	BATT_TEMP - @radio_proto_lib.RADIO_PROTO	2D7 4A4
BATT_TEMP_CONN	BATT_TEMP_CONN - @radio_proto_lib.RADIO_PROTO	4A3 4D7 4D7
BATT_VCC	BATT_VCC - @radio_proto_lib.RADIO_PROTO	2D8 4D7 4D8 6D2 7C2
BATT_VCC_CURSNS	BATT_VCC_CURSNS - @radio_proto_lib.RADIO_PROTO	4C4 4D1 4D7 7C8 10B6 10C8
BB1_D0	BB1_D0 - @radio_proto_lib.RADIO_PROTO	2A7
BB2_D1	BB2_D1 - @radio_proto_lib.RADIO_PROTO	2A7
BB3_D2	BB3_D2 - @radio_proto_lib.RADIO_PROTO	2A7
BB4_D3	BB4_D3 - @radio_proto_lib.RADIO_PROTO	2A7
BB_ADC_M_7	BB_ADC_M_7 - @radio_proto_lib.RADIO_PROTO	2D7
BB_ADC_M_8	BB_ADC_M_8 - @radio_proto_lib.RADIO_PROTO	2D7
BB_AGND	BB_AGND - @radio_proto_lib.RADIO_PROTO	3A7
BB_AP_PMU_ON	BB_AP_PMU_ON - @radio_proto_lib.RADIO_PROTO	2A4 2D5
BB_I2S_CLK	BB_I2S_CLK - @radio_proto_lib.RADIO_PROTO	2B5 7B5 7C2
BB_I2S_RX	BB_I2S_RX - @radio_proto_lib.RADIO_PROTO	2B5 7B1 7B5
BB_I2S_TX	BB_I2S_TX - @radio_proto_lib.RADIO_PROTO	2B5 7B1 7B5
BB_I2S_WA0	BB_I2S_WA0 - @radio_proto_lib.RADIO_PROTO	2B5 7B4 7B5
BB_IREF	BB_IREF - @radio_proto_lib.RADIO_PROTO	3A5
BB_PMU_ON*	BB_PMU_ON* - @radio_proto_lib.RADIO_PROTO	4C7 7C2 7C8
BB_RESET_GATED	BB_RESET_GATED - @radio_proto_lib.RADIO_PROTO	4C7
BB_RST	BB_RST - @radio_proto_lib.RADIO_PROTO	4C8 7C5
BB_RST_DET	BB_RST_DET - @radio_proto_lib.RADIO_PROTO	2B8 2D5
BB_RTCK	BB_RTCK - @radio_proto_lib.RADIO_PROTO	2B3 7C4
BB_TCK	BB_TCK - @radio_proto_lib.RADIO_PROTO	2B3 7C4
BB_TDI	BB_TDI - @radio_proto_lib.RADIO_PROTO	2B3 7C4
BB_TDO	BB_TDO - @radio_proto_lib.RADIO_PROTO	2B3 7C4
BB_TMS	BB_TMS - @radio_proto_lib.RADIO_PROTO	2B3 7C4
BB_TRST_N	BB_TRST_N - @radio_proto_lib.RADIO_PROTO	2B3 7C4
BB_USART0_CTS_N	BB_USART0_CTS_N - @radio_proto_lib.RADIO_PROTO	2A5 2C5 7C5
BB_USART0_RTS_N	BB_USART0_RTS_N - @radio_proto_lib.RADIO_PROTO	2A5 7B1 7B6 7C8
BB_USART0_RXD	BB_USART0_RXD - @radio_proto_lib.RADIO_PROTO	2A5 2C5 7A6 7C5 7C5
BB_USART0_TXD	BB_USART0_TXD - @radio_proto_lib.RADIO_PROTO	2A5 7B6 7C4 7C5
BB_VC2	BB_VC2 - @radio_proto_lib.RADIO_PROTO	2C7
BB_VREFN	BB_VREFN - @radio_proto_lib.RADIO_PROTO	3A5
BB_VREFP	BB_VREFP - @radio_proto_lib.RADIO_PROTO	3A5
BIAS	BIAS - @radio_proto_lib.RADIO_PROTO	8B3
BOARD_TEMP	BOARD_TEMP - @radio_proto_lib.RADIO_PROTO	2D4 2D7
BT_AP_PMU_ON	BT_AP_PMU_ON - @radio_proto_lib.RADIO_PROTO	2A4 2D5 10B3
BT_CLK_REQ	BT_CLK_REQ - @radio_proto_lib.RADIO_PROTO	3A5 4C7 5A2 7A6 10B3
BT_CLK_REQ_BB	BT_CLK_REQ_BB - @radio_proto_lib.RADIO_PROTO	3A6
BT_PCM_CLK	BT_PCM_CLK - @radio_proto_lib.RADIO_PROTO	2B5 10B4
BT_PCM_IN	BT_PCM_IN - @radio_proto_lib.RADIO_PROTO	2B5 10B4
BT_PCM_OUT	BT_PCM_OUT - @radio_proto_lib.RADIO_PROTO	2B5 10B4
BT_PCM_SYNC	BT_PCM_SYNC - @radio_proto_lib.RADIO_PROTO	2B5 10B4
BT_PRIORITY	BT_PRIORITY - @radio_proto_lib.RADIO_PROTO	10B4
BT_RESET	BT_RESET - @radio_proto_lib.RADIO_PROTO	7C8 10A4
BT_RESET*	BT_RESET* - @radio_proto_lib.RADIO_PROTO	10A3 10B6
BT_RESET_GATED	BT_RESET_GATED - @radio_proto_lib.RADIO_PROTO	7B2 10A3
BT_STATE	BT_STATE - @radio_proto_lib.RADIO_PROTO	10B4
BT_UART_CTS_N	BT_UART_CTS_N - @radio_proto_lib.RADIO_PROTO	7C2 7C8 10B6
BT_UART_RTS_N	BT_UART_RTS_N - @radio_proto_lib.RADIO_PROTO	7C2 7C8 10B6
BT_UART_RXD	BT_UART_RXD - @radio_proto_lib.RADIO_PROTO	7C2 7C8 10B6
BT_UART_TXD	BT_UART_TXD - @radio_proto_lib.RADIO_PROTO	7C2 7C8 10B6
BT_WLAN_ANT	BT_WLAN_ANT - @radio_proto_lib.RADIO_PROTO	8C3 10C2
BT_WLAN_FLTOUT	BT_WLAN_FLTOUT - @radio_proto_lib.RADIO_PROTO	10C4
CELL_ANT	CELL_ANT - @radio_proto_lib.RADIO_PROTO	6D4
CELL_ANT_M	CELL_ANT_M - @radio_proto_lib.RADIO_PROTO	6D3
CELL_ANT_POGO	CELL_ANT_POGO - @radio_proto_lib.RADIO_PROTO	6D2
CFG0	CFG0 - @radio_proto_lib.RADIO_PROTO	2C2
CFG1	CFG1 - @radio_proto_lib.RADIO_PROTO	2C2
CLK32K	CLK32K - @radio_proto_lib.RADIO_PROTO	2C3 2C7 8B7
CLKOUT0	CLKOUT0 - @radio_proto_lib.RADIO_PROTO	2C3 2C8 5B5
CLK_3G	CLK_3G - @radio_proto_lib.RADIO_PROTO	2B3 5D7
CLK_GPS	CLK_GPS - @radio_proto_lib.RADIO_PROTO	8B5 8D2
CLK_PM	CLK_PM - @radio_proto_lib.RADIO_PROTO	2C7 5C7
CODEC_LINEIN_N	CODEC_LINEIN_N - @radio_proto_lib.RADIO_PROTO	2C5 7C8
CODEC_LINEIN_P	CODEC_LINEIN_P - @radio_proto_lib.RADIO_PROTO	2C5 7C8
CODEC_LINEOUT_N	CODEC_LINEOUT_N - @radio_proto_lib.RADIO_PROTO	2C3 7B8
CODEC_LINEOUT_P	CODEC_LINEOUT_P - @radio_proto_lib.RADIO_PROTO	2B3 7B8
CURRENT_SENSE_SRC	CURRENT_SENSE_SRC - @radio_proto_lib.RADIO_PROTO	4B4
DA_3G	DA_3G - @radio_proto_lib.RADIO_PROTO	2C3 5D7
DA_PM	DA_PM - @radio_proto_lib.RADIO_PROTO	2C7 5C7
DCDC_LDO1	DCDC_LDO1 - @radio_proto_lib.RADIO_PROTO	4D1 4D2
DCS_RXN	DCS_RXN - @radio_proto_lib.RADIO_PROTO	5C5 6C8
DCS_RXN_UM	DCS_RXN_UM - @radio_proto_lib.RADIO_PROTO	6C7
DCS_RXP	DCS_RXP - @radio_proto_lib.RADIO_PROTO	5C5 6C8
DCS_RXP_UM	DCS_RXP_UM - @radio_proto_lib.RADIO_PROTO	6C7
DC_DC_REFBP	DC_DC_REFBP - @radio_proto_lib.RADIO_PROTO	4D2
DEBUG_RST_N	DEBUG_RST_N - @radio_proto_lib.RADIO_PROTO	4C7 7C2
DOCK_TCK_MUX	DOCK_TCK_MUX - @radio_proto_lib.RADIO_PROTO	7B8 7C4
DOCK_TDI_MUX	DOCK_TDI_MUX - @radio_proto_lib.RADIO_PROTO	7B6 7B8 7C4
EBU_A<0>	EBU_A<0> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<24..0>	EBU_A<24..0> - @radio_proto_lib.RADIO_PROTO	3C4 3D5
EBU_A<1>	EBU_A<1> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<2>	EBU_A<2> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<3>	EBU_A<3> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<4>	EBU_A<4> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<5>	EBU_A<5> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<6>	EBU_A<6> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<7>	EBU_A<7> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<8>	EBU_A<8> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<9>	EBU_A<9> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<10>	EBU_A<10> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<11>	EBU_A<11> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<12>	EBU_A<12> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<13>	EBU_A<13> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<14>	EBU_A<14> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9C5
EBU_A<15>	EBU_A<15> - @radio_proto_lib.RADIO_PROTO	3C3 3D6 9B5
EBU_A<16>	EBU_A<16> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_A<17>	EBU_A<17> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_A<18>	EBU_A<18> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_A<19>	EBU_A<19> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_A<20>	EBU_A<20> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_A<21>	EBU_A<21> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_A<22>	EBU_A<22> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_A<23>	EBU_A<23> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_A<24>	EBU_A<24> - @radio_proto_lib.RADIO_PROTO	3C3 3C6 9B5
EBU_AD<0>	EBU_AD<0> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<15..0>	EBU_AD<15..0> - @radio_proto_lib.RADIO_PROTO	3C5 3D1
EBU_AD<1>	EBU_AD<1> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<2>	EBU_AD<2> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<3>	EBU_AD<3> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<4>	EBU_AD<4> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<5>	EBU_AD<5> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<6>	EBU_AD<6> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<7>	EBU_AD<7> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<8>	EBU_AD<8> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<9>	EBU_AD<9> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<10>	EBU_AD<10> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<11>	EBU_AD<11> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<12>	EBU_AD<12> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<13>	EBU_AD<13> - @radio_proto_lib.RADIO_PROTO	3C2 3C6 9C4
EBU_AD<14>	EBU_AD<14> - @radio_proto_lib.RADIO_PROTO	3B6 3C2 9C4
EBU_AD<15>	EBU_AD<15> - @radio_proto_lib.RADIO_PROTO	3B6 3C2 9B4
EBU_ADV*	EBU_ADV* - @radio_proto_lib.RADIO_PROTO	2C2 3B3 3B5 9B5
EBU_BC0*	EBU_BC0* - @radio_proto_lib.RADIO_PROTO	3B1 3B5 9B4
EBU_BC1*	EBU_BC1* - @radio_proto_lib.RADIO_PROTO	3B1 3B5 9B4
EBU_BFCLKO	EBU_BFCLKO - @radio_proto_lib.RADIO_PROTO	2C3 3B5
EBU_CS0*	EBU_CS0* - @radio_proto_lib.RADIO_PROTO	3B4 3B5 9B5
EBU_CS1*	EBU_CS1* - @radio_proto_lib.RADIO_PROTO	3B1 3B5 9B4
EBU_CS3*	EBU_CS3* - @radio_proto_lib.RADIO_PROTO	2C3 3B5
EBU_RD*	EBU_RD* - @radio_proto_lib.RADIO_PROTO	2C3 3B1 3B4 3B5 9B4 9B5
EBU_WAIT*	EBU_WAIT* - @radio_proto_lib.RADIO_PROTO	2C3 3B5 3C1 9B4
EBU_WR*	EBU_WR* - @radio_proto_lib.RADIO_PROTO	2C3 3B1 3B3 3B5 9B4 9B5
EGSM_RXN	EGSM_RXN - @radio_proto_lib.RADIO_PROTO	5C5 6C8
EGSM_RXN_UM	EGSM_RXN_UM - @radio_proto_lib.RADIO_PROTO	6C7
EGSM_RXP	EGSM_RXP - @radio_proto_lib.RADIO_PROTO	5C5 6D8
EGSM_RXP_UM	EGSM_RXP_UM - @radio_proto_lib.RADIO_PROTO	6D7
EN_3G	EN_3G - @radio_proto_lib.RADIO_PROTO	2B3 5D7
EN_PM	EN_PM - @radio_proto_lib.RADIO_PROTO	2C7 5C7
F32K_BB	F32K_BB - @radio_proto_lib.RADIO_PROTO	3A5
FEM_ANT	FEM_ANT - @radio_proto_lib.RADIO_PROTO	6C5
FEM_ANT_M	FEM_ANT_M - @radio_proto_lib.RADIO_PROTO	6D4
FEM_VC1	FEM_VC1 - @radio_proto_lib.RADIO_PROTO	2C7 6D2
FEM_VC1_BUF	FEM_VC1_BUF - @radio_proto_lib.RADIO_PROTO	6D1 6D6
FEM_VC2	FEM_VC2 - @radio_proto_lib.RADIO_PROTO	2D8 6D6
FEM_VC3	FEM_VC3 - @radio_proto_lib.RADIO_PROTO	2C7 6D2
FEM_VC3_BUF	FEM_VC3_BUF - @radio_proto_lib.RADIO_PROTO	6D1 6D6
FEM_VC4	FEM_VC4 - @radio_proto_lib.RADIO_PROTO	2C1 6D4
FLASH_WP	FLASH_WP - @radio_proto_lib.RADIO_PROTO	3A5 3B4 9B5
F_CLK	F_CLK - @radio_proto_lib.RADIO_PROTO	3B3 3B4 9B5
F_RESET_N	F_RESET_N - @radio_proto_lib.RADIO_PROTO	3B4 9B5
GPIO19	GPIO19 - @radio_proto_lib.RADIO_PROTO	2C1
GPS_1V8	GPS_1V8 - @radio_proto_lib.RADIO_PROTO	8B5 8B8 8B8 8C5 8C7 8C7 8C8 8D5
GPS_ANT	GPS_ANT - @radio_proto_lib.RADIO_PROTO	8B1 8C3
GPS_IRQ	GPS_IRQ - @radio_proto_lib.RADIO_PROTO	2D5 8B8
GPS_ISM_ANT_COAX	GPS_ISM_ANT_COAX - @radio_proto_lib.RADIO_PROTO	8C2
GPS_ISM_RFSW	GPS_ISM_RFSW - @radio_proto_lib.RADIO_PROTO	8C2
GPS_LNA_NTCH	GPS_LNA_NTCH - @radio_proto_lib.RADIO_PROTO	8A3
GPS_LNA_ON	GPS_LNA_ON - @radio_proto_lib.RADIO_PROTO	8B4
GPS_OMS1	GPS_OMS1 - @radio_proto_lib.RADIO_PROTO	8B5
GPS_ON	GPS_ON - @radio_proto_lib.RADIO_PROTO	2D5 8B7
GPS_RF_AI	GPS_RF_AI - @radio_proto_lib.RADIO_PROTO	8B3
GPS_RF_AO	GPS_RF_AO - @radio_proto_lib.RADIO_PROTO	8B4
GPS_RF_BAL1	GPS_RF_BAL1 - @radio_proto_lib.RADIO_PROTO	8B5
GPS_RF_BAL2	GPS_RF_BAL2 - @radio_proto_lib.RADIO_PROTO	8B5
GPS_RF_FIL	GPS_RF_FIL - @radio_proto_lib.RADIO_PROTO	8B2
GPS_RST_N	GPS_RST_N - @radio_proto_lib.RADIO_PROTO	2D5 8B5
GPS_SCL2	GPS_SCL2 - @radio_proto_lib.RADIO_PROTO	2A5 8B8
GPS_SDA2	GPS_SDA2 - @radio_proto_lib.RADIO_PROTO	2A5 8B8
GPS_UART_CTS_N	GPS_UART_CTS_N - @radio_proto_lib.RADIO_PROTO	8A7 8B8
GPS_UART_RTS_N	GPS_UART_RTS_N - @radio_proto_lib.RADIO_PROTO	8A7 8B8
GPS_UART_RX	GPS_UART_RX - @radio_proto_lib.RADIO_PROTO	8A7 8B8
GPS_UART_TX	GPS_UART_TX - @radio_proto_lib.RADIO_PROTO	8A7 8B8
GPS_VCC_CORE	GPS_VCC_CORE - @radio_proto_lib.RADIO_PROTO	8C7
GPS_VDD_CAP	GPS_VDD_CAP - @radio_proto_lib.RADIO_PROTO	8C5
GPS_VDD_LP	GPS_VDD_LP - @radio_proto_lib.RADIO_PROTO	8C6

GPS_VDD_PLL	GPS_VDD_PLL - @radio_proto_lib.RADIO_PROTO	8C6
GPS_VDD_RF	GPS_VDD_RF - @radio_proto_lib.RADIO_PROTO	8C6
GPS_VDD_VCO	GPS_VDD_VCO - @radio_proto_lib.RADIO_PROTO	8C5
GSM850_RXN	GSM850_RXN - @radio_proto_lib.RADIO_PROTO	5C5 6D8
GSM850_RXN_UM	GSM850_RXN_UM - @radio_proto_lib.RADIO_PROTO	6D7
GSM850_RXP	GSM850_RXP - @radio_proto_lib.RADIO_PROTO	5C5 6D8
GSM850_RXP_UM	GSM850_RXP_UM - @radio_proto_lib.RADIO_PROTO	6D7
GSM_PA_VCC	GSM_PA_VCC - @radio_proto_lib.RADIO_PROTO	6D3
GSM_TXBURST_IND	GSM_TXBURST_IND - @radio_proto_lib.RADIO_PROTO	2C7 7A6
H1_UART4_RTS_N	H1_UART4_RTS_N - @radio_proto_lib.RADIO_PROTO	7B6 7B8 7C1
HB_TX	HB_TX - @radio_proto_lib.RADIO_PROTO	6C4
HI_BAND_PA_IN	HI_BAND_PA_IN - @radio_proto_lib.RADIO_PROTO	5C5 6C2
HI_BAND_PA_OUT	HI_BAND_PA_OUT - @radio_proto_lib.RADIO_PROTO	6C3
HI_BAND_TX	HI_BAND_TX - @radio_proto_lib.RADIO_PROTO	6C5
HOST_WAKE_WLAN	HOST_WAKE_WLAN - @radio_proto_lib.RADIO_PROTO	2A4 2D5 10C3
IPC_MISO	IPC_MISO - @radio_proto_lib.RADIO_PROTO	2A5 7C5
IPC_MOSI	IPC_MOSI - @radio_proto_lib.RADIO_PROTO	2A5 2C5 7C5
IPC_MRDY	IPC_MRDY - @radio_proto_lib.RADIO_PROTO	2A5 7B5
IPC_SCLK	IPC_SCLK - @radio_proto_lib.RADIO_PROTO	2A5 2C5 7C5
IPC_SRDY	IPC_SRDY - @radio_proto_lib.RADIO_PROTO	2B5 7B5
ISENSE_IN1	ISENSE_IN1 - @radio_proto_lib.RADIO_PROTO	4B3 4D7
ISENSE_IN2	ISENSE_IN2 - @radio_proto_lib.RADIO_PROTO	4B3 4D6
IX_PM	IX_PM - @radio_proto_lib.RADIO_PROTO	2D7 5C7
I_PM	I_PM - @radio_proto_lib.RADIO_PROTO	2D7 5C7
LB_TX	LB_TX - @radio_proto_lib.RADIO_PROTO	6C4
LOAD	LOAD - @radio_proto_lib.RADIO_PROTO	2D7 4A2
LOCDET	LOCDET - @radio_proto_lib.RADIO_PROTO	2C1 5C7
LO_BAND_PA_IN	LO_BAND_PA_IN - @radio_proto_lib.RADIO_PROTO	5C5 6C2
LO_BAND_PA_OUT	LO_BAND_PA_OUT - @radio_proto_lib.RADIO_PROTO	6C3
LO_BAND_TX	LO_BAND_TX - @radio_proto_lib.RADIO_PROTO	6C5
MASTERON_3G	MASTERON_3G - @radio_proto_lib.RADIO_PROTO	2C1 5C7
MIC2_N	MIC2_N - @radio_proto_lib.RADIO_PROTO	2C4
MIC2_P	MIC2_P - @radio_proto_lib.RADIO_PROTO	2B4
NTC	NTC - @radio_proto_lib.RADIO_PROTO	4A4 7C8
NTC_CONN	NTC_CONN - @radio_proto_lib.RADIO_PROTO	4A3 4D8 4D8
ONKEY*	ONKEY* - @radio_proto_lib.RADIO_PROTO	7C2 7C8
ONOFF1*	ONOFF1* - @radio_proto_lib.RADIO_PROTO	4C5
OSC32K	OSC32K - @radio_proto_lib.RADIO_PROTO	3A5
OSC32K_GND	OSC32K_GND - @radio_proto_lib.RADIO_PROTO	3A4
P1_CRE	P1_CRE - @radio_proto_lib.RADIO_PROTO	3A5 3B1 9B4
PALEVEL	PALEVEL - @radio_proto_lib.RADIO_PROTO	2D7 6C1
PA_GAIN_FET	PA_GAIN_FET - @radio_proto_lib.RADIO_PROTO	4D1
PA_LO_GAIN	PA_LO_GAIN - @radio_proto_lib.RADIO_PROTO	2C1 4D2 4D4
PA_MODE	PA_MODE - @radio_proto_lib.RADIO_PROTO	2C7 6C2
PCS_RXN	PCS_RXN - @radio_proto_lib.RADIO_PROTO	5C5 6C8
PCS_RXN_UM	PCS_RXN_UM - @radio_proto_lib.RADIO_PROTO	6C7
PCS_RXP	PCS_RXP - @radio_proto_lib.RADIO_PROTO	5C5 6C8
PCS_RXP_UM	PCS_RXP_UM - @radio_proto_lib.RADIO_PROTO	6C7
PM_INT	PM_INT - @radio_proto_lib.RADIO_PROTO	2A5 4C7
PM_SCL1	PM_SCL1 - @radio_proto_lib.RADIO_PROTO	2B5 4C7
PM_SDA1	PM_SDA1 - @radio_proto_lib.RADIO_PROTO	2A5 4C7
PM_VCXOEN	PM_VCXOEN - @radio_proto_lib.RADIO_PROTO	3A5 3B3 3B5 4C7 5A2
QX_PM	QX_PM - @radio_proto_lib.RADIO_PROTO	2D7 5C7
Q_PM	Q_PM - @radio_proto_lib.RADIO_PROTO	2D7 5C7
RADIO_ON	RADIO_ON - @radio_proto_lib.RADIO_PROTO	4C7 7C2 7C5
RESET_DET*	RESET_DET* - @radio_proto_lib.RADIO_PROTO	2B7 7C5
RESET_N	RESET_N - @radio_proto_lib.RADIO_PROTO	3A5 3B4 4C7
RF_RESET*	RF_RESET* - @radio_proto_lib.RADIO_PROTO	4C8 7C2 7C8 10A4 10A5
RF_TEMP	RF_TEMP - @radio_proto_lib.RADIO_PROTO	2D7 5A8
RREF	RREF - @radio_proto_lib.RADIO_PROTO	4C4
RXIX_3G	RXIX_3G - @radio_proto_lib.RADIO_PROTO	2C3 5D7
RXI_3G	RXI_3G - @radio_proto_lib.RADIO_PROTO	2C3 5D7
RXQX_3G	RXQX_3G - @radio_proto_lib.RADIO_PROTO	2C3 5D7
RXQ_3G	RXQ_3G - @radio_proto_lib.RADIO_PROTO	2C3 5D7
RX_HOLD	RX_HOLD -	8B7

	@radio_proto_lib.RADIO_PROTO	
SD1_FB	SD1_FB - @radio_proto_lib.RADIO_PROTO	4B7
SD1_OUT	SD1_OUT - @radio_proto_lib.RADIO_PROTO	4B7
SD2_FB	SD2_FB - @radio_proto_lib.RADIO_PROTO	4B6
SD2_FBL	SD2_FBL - @radio_proto_lib.RADIO_PROTO	4B6
SD2_OUT	SD2_OUT - @radio_proto_lib.RADIO_PROTO	4B6
SD3_FB	SD3_FB - @radio_proto_lib.RADIO_PROTO	4B6
SD3_FBL	SD3_FBL - @radio_proto_lib.RADIO_PROTO	4B6
SD3_MODE	SD3_MODE - @radio_proto_lib.RADIO_PROTO	4C7
SD3_OUT	SD3_OUT - @radio_proto_lib.RADIO_PROTO	4B6
SDIO_CLK	SDIO_CLK - @radio_proto_lib.RADIO_PROTO	10B4
SDIO_CMD	SDIO_CMD - @radio_proto_lib.RADIO_PROTO	10C4
SIMCRD_CLK	SIMCRD_CLK - @radio_proto_lib.RADIO_PROTO	2B7 7A4 7C5
SIMCRD_IO	SIMCRD_IO - @radio_proto_lib.RADIO_PROTO	2B7 7A3 7B5
SIMCRD_RST	SIMCRD_RST - @radio_proto_lib.RADIO_PROTO	2B7 7A4 7B5
SIM_DETECT	SIM_DETECT - @radio_proto_lib.RADIO_PROTO	2C8 7A3 7B5
SPI_CLK	SPI_CLK - @radio_proto_lib.RADIO_PROTO	10C6
SPI_CS*	SPI_CS* - @radio_proto_lib.RADIO_PROTO	10B6
SPI_MISO	SPI_MISO - @radio_proto_lib.RADIO_PROTO	10C6
SPI_MOSI	SPI_MOSI - @radio_proto_lib.RADIO_PROTO	10B6
TXBAND1_PA_DETECT	TXBAND1_PA_DETECT - @radio_proto_lib.RADIO_PROTO	6B3
TXBAND2_PA_DETECT	TXBAND2_PA_DETECT - @radio_proto_lib.RADIO_PROTO	6B7
TXBAND5_PA_DETECT	TXBAND5_PA_DETECT - @radio_proto_lib.RADIO_PROTO	6B5
TXGC_3G	TXGC_3G - @radio_proto_lib.RADIO_PROTO	2C3 5C7
TXIX_3G	TXIX_3G - @radio_proto_lib.RADIO_PROTO	2C3 5D7
TXI_3G	TXI_3G - @radio_proto_lib.RADIO_PROTO	2C3 5D7
TXON_PA	TXON_PA - @radio_proto_lib.RADIO_PROTO	2C7 6C2 8B8
TXQX_3G	TXQX_3G - @radio_proto_lib.RADIO_PROTO	2C3 5C7
TXQ_3G	TXQ_3G - @radio_proto_lib.RADIO_PROTO	2C3 5C7
TX_BAND1_PA_IN	TX_BAND1_PA_IN - @radio_proto_lib.RADIO_PROTO	6A3
TX_BAND1_PA_IN_2	TX_BAND1_PA_IN_2 - @radio_proto_lib.RADIO_PROTO	6B3
TX_BAND2_PA_IN	TX_BAND2_PA_IN - @radio_proto_lib.RADIO_PROTO	6A7
TX_BAND2_PA_IN2	TX_BAND2_PA_IN2 - @radio_proto_lib.RADIO_PROTO	6A8
TX_BAND5_PA_IN	TX_BAND5_PA_IN - @radio_proto_lib.RADIO_PROTO	6A5
TX_BAND5_PA_IN2	TX_BAND5_PA_IN2 - @radio_proto_lib.RADIO_PROTO	6A6
TX_BIAS_BAND1	TX_BIAS_BAND1 - @radio_proto_lib.RADIO_PROTO	6A3
TX_BIAS_BAND2	TX_BIAS_BAND2 - @radio_proto_lib.RADIO_PROTO	6A6
TX_BIAS_BAND5	TX_BIAS_BAND5 - @radio_proto_lib.RADIO_PROTO	6A4
TX_HBX_3G	TX_HBX_3G - @radio_proto_lib.RADIO_PROTO	5D5 6A4
TX_HB_3G	TX_HB_3G - @radio_proto_lib.RADIO_PROTO	5D5 6A4
TX_LBX_3G	TX_LBX_3G - @radio_proto_lib.RADIO_PROTO	5D5 6A6
TX_LB_3G	TX_LB_3G - @radio_proto_lib.RADIO_PROTO	5D5 6A6
TX_MBX_3G	TX_MBX_3G - @radio_proto_lib.RADIO_PROTO	5C5 6A8
TX_MB_3G	TX_MB_3G - @radio_proto_lib.RADIO_PROTO	5C5 6A8
U1_EN1	U1_EN1 - @radio_proto_lib.RADIO_PROTO	4C3 4D3
U1_HP	U1_HP - @radio_proto_lib.RADIO_PROTO	4D3
U1_PA_EN	U1_PA_EN - @radio_proto_lib.RADIO_PROTO	4D3
U1_REFIN	U1_REFIN - @radio_proto_lib.RADIO_PROTO	4C3 4D1
UMTS_RSTN	UMTS_RSTN - @radio_proto_lib.RADIO_PROTO	2D3 2D5
UMTS_RTCK	UMTS_RTCK - @radio_proto_lib.RADIO_PROTO	2B3 7C4
UMTS_RXD	UMTS_RXD - @radio_proto_lib.RADIO_PROTO	2A5 2C5 7C5 7C8
UMTS_TDI	UMTS_TDI - @radio_proto_lib.RADIO_PROTO	2B3 7C4
UMTS_TDO	UMTS_TDO - @radio_proto_lib.RADIO_PROTO	2B3 7C4
UMTS_TMS	UMTS_TMS - @radio_proto_lib.RADIO_PROTO	2B3 7C4
UMTS_TRST_N	UMTS_TRST_N - @radio_proto_lib.RADIO_PROTO	2B3 7C4
UMTS_TXD	UMTS_TXD - @radio_proto_lib.RADIO_PROTO	2A5 7C4 7C8
VAFC_2V65	VAFC_2V65 - @radio_proto_lib.RADIO_PROTO	4C1 7A7 8D2
VAFC_SRC	VAFC_SRC - @radio_proto_lib.RADIO_PROTO	4C3
VAUDIOA	VAUDIOA - @radio_proto_lib.RADIO_PROTO	3B8 4C1
VAUDIOA_SRC	VAUDIOA_SRC - @radio_proto_lib.RADIO_PROTO	4C3
VAUDIOB	VAUDIOB - @radio_proto_lib.RADIO_PROTO	2B3 3A8 4C1
VAUDIOB_SRC	VAUDIOB_SRC - @radio_proto_lib.RADIO_PROTO	4C3
VAUX	VAUX - @radio_proto_lib.RADIO_PROTO	4C1 5D4 7A7

VAUX_SRC	VAUX_SRC - @radio_proto_lib.RADIO_PROTO	4C3
VC1	VC1 - @radio_proto_lib.RADIO_PROTO	6D5
VC2	VC2 - @radio_proto_lib.RADIO_PROTO	6D5
VC3	VC3 - @radio_proto_lib.RADIO_PROTO	6D5
VC4	VC4 - @radio_proto_lib.RADIO_PROTO	6D5
VCA	VCA - @radio_proto_lib.RADIO_PROTO	2C1 2D7
VCC_WLANPA	VCC_WLANPA - @radio_proto_lib.RADIO_PROTO	10B6
VCC_XO	VCC_XO - @radio_proto_lib.RADIO_PROTO	5C8
VCO_RC	VCO_RC - @radio_proto_lib.RADIO_PROTO	5C5
VDD1V5RF	VDD1V5RF - @radio_proto_lib.RADIO_PROTO	5D2
VDDDIG2V8	VDDDIG2V8 - @radio_proto_lib.RADIO_PROTO	5B2
VDDDIGANA1V5	VDDDIGANA1V5 - @radio_proto_lib.RADIO_PROTO	5D2
VDDFSYS2V8	VDDFSYS2V8 - @radio_proto_lib.RADIO_PROTO	5C2
VDDMIX2V8	VDDMIX2V8 - @radio_proto_lib.RADIO_PROTO	5C2
VDDRX2V8	VDDRX2V8 - @radio_proto_lib.RADIO_PROTO	5C3
VDDSD1_IN	VDDSD1_IN - @radio_proto_lib.RADIO_PROTO	4D5
VDDSD2_IN	VDDSD2_IN - @radio_proto_lib.RADIO_PROTO	4D5
VDDSD3_IN	VDDSD3_IN - @radio_proto_lib.RADIO_PROTO	4D5
VDDTX2V8	VDDTX2V8 - @radio_proto_lib.RADIO_PROTO	5C3
VDD_BT_2V85	VDD_BT_2V85 - @radio_proto_lib.RADIO_PROTO	4B1 7A7 10B6
VDD_DCDC_IN	VDD_DCDC_IN - @radio_proto_lib.RADIO_PROTO	4D4
VDD_E_FUSE	VDD_E_FUSE - @radio_proto_lib.RADIO_PROTO	2B3
VDD_FUSE	VDD_FUSE - @radio_proto_lib.RADIO_PROTO	3B7
VDD_PMU_LDO_IN	VDD_PMU_LDO_IN - @radio_proto_lib.RADIO_PROTO	4D5
VDD_RTC	VDD_RTC - @radio_proto_lib.RADIO_PROTO	3B7
VDD_WLAN_1V8A	VDD_WLAN_1V8A - @radio_proto_lib.RADIO_PROTO	10C7
VDD_WLAN_1V8A_MODULE	VDD_WLAN_1V8A_MODULE - @radio_proto_lib.RADIO_PROTO	10C6
VDD_WLAN_3V1	VDD_WLAN_3V1 - @radio_proto_lib.RADIO_PROTO	4C1 10D6
VIO	VIO - @radio_proto_lib.RADIO_PROTO	2B3 3B7 3C8 4B1 4C7 7A7 7B4
VIO_SRC	VIO_SRC - @radio_proto_lib.RADIO_PROTO	4B3
VIO_WLAN	VIO_WLAN - @radio_proto_lib.RADIO_PROTO	10C5
VMODE	VMODE - @radio_proto_lib.RADIO_PROTO	2C1 6B8
VMODE_DIV	VMODE_DIV - @radio_proto_lib.RADIO_PROTO	6B6
VPLL	VPLL - @radio_proto_lib.RADIO_PROTO	3B8 4B1 7A7
VPLL_SIG	VPLL_SIG - @radio_proto_lib.RADIO_PROTO	4B3
VRAMP	VRAMP - @radio_proto_lib.RADIO_PROTO	6C2
VREF	VREF - @radio_proto_lib.RADIO_PROTO	4C4
VRF1V5	VRF1V5 - @radio_proto_lib.RADIO_PROTO	4B1 5D4 7A7
VRF1_2V8	VRF1_2V8 - @radio_proto_lib.RADIO_PROTO	2D8 4C1 5B5 5C4 5C7 5C8 6A4 6A7 6D2 6D4 7A7
VRF1_2V8_FIL	VRF1_2V8_FIL - @radio_proto_lib.RADIO_PROTO	6D5
VRF1_SRC	VRF1_SRC - @radio_proto_lib.RADIO_PROTO	4B3
VRF2_SRC	VRF2_SRC - @radio_proto_lib.RADIO_PROTO	4B3
VRF3	VRF3 - @radio_proto_lib.RADIO_PROTO	4B1 8C3 8C5
VRF3_GPS_LNA	VRF3_GPS_LNA - @radio_proto_lib.RADIO_PROTO	8B3
VRF3_SRC	VRF3_SRC - @radio_proto_lib.RADIO_PROTO	4B3
VRTC	VRTC - @radio_proto_lib.RADIO_PROTO	3B8 4B6 7B7
VSD1	VSD1 - @radio_proto_lib.RADIO_PROTO	2B3 3D8 4B8 7B7
VSD1_GND	VSD1_GND - @radio_proto_lib.RADIO_PROTO	4B7
VSD2	VSD2 - @radio_proto_lib.RADIO_PROTO	2A3 2A4 2A8 2C8 2D4 3C8 3C8 3D4 4B8 4C4 4C8 5B1 5C5 7B4 7B7 7C8 8D4 10A3 10A6
VSD2_RF	VSD2_RF - @radio_proto_lib.RADIO_PROTO	5B2 5D4
VSD2_RF_CTRL	VSD2_RF_CTRL - @radio_proto_lib.RADIO_PROTO	5B1
VSD3	VSD3 - @radio_proto_lib.RADIO_PROTO	4A8 7B7 10A5 10C6 10D8
VSD3_WAKEUP	VSD3_WAKEUP - @radio_proto_lib.RADIO_PROTO	2D5 4C8
VSIM	VSIM - @radio_proto_lib.RADIO_PROTO	2C8 3B8 4B3 7A4 7C5
VTCXO	VTCXO - @radio_proto_lib.RADIO_PROTO	8D3
VTUNE	VTUNE - @radio_proto_lib.RADIO_PROTO	5B3 5B8
VUMTS_SIG	VUMTS_SIG - @radio_proto_lib.RADIO_PROTO	4B3
VUSB_SRC	VUSB_SRC - @radio_proto_lib.RADIO_PROTO	4B3
V_FLASH	V_FLASH - @radio_proto_lib.RADIO_PROTO	3C4 3D3 3D4 9C5 9D5
V_PSRAM	V_PSRAM - @radio_proto_lib.RADIO_PROTO	3D3 9C5
WDOG	WDOG - @radio_proto_lib.RADIO_PROTO	2C7 4C7 7A6
WLAN_1V8_EN	WLAN_1V8_EN - @radio_proto_lib.RADIO_PROTO	2D4 10C8
WLAN_1V8_EN_GPIO	WLAN_1V8_EN_GPIO - @radio_proto_lib.RADIO_PROTO	2D5
WLAN_32K_CLK	WLAN_32K_CLK - @radio_proto_lib.RADIO_PROTO	2C8 10C6
WLAN_ACTIVE	WLAN_ACTIVE - @radio_proto_lib.RADIO_PROTO	10B4
WLAN_BOOTCFG0	WLAN_BOOTCFG0 - @radio_proto_lib.RADIO_PROTO	7B2 10C3
WLAN_BOOTCFG1	WLAN_BOOTCFG1 - @radio_proto_lib.RADIO_PROTO	7B2 10C3
WLAN_CLK_REQ	WLAN_CLK_REQ -	4C8 10C4

	@radio_proto_lib.RADIO_PROTO	
WLAN_GPIO5	WLAN_GPIO5 - @radio_proto_lib.RADIO_PROTO	10C4
WLAN_JTAG_EN_N	WLAN_JTAG_EN_N - @radio_proto_lib.RADIO_PROTO	10C4
WLAN_RESET	WLAN_RESET - @radio_proto_lib.RADIO_PROTO	7C8 10A5
WLAN_RESET*	WLAN_RESET* - @radio_proto_lib.RADIO_PROTO	10A5 10C6
WLAN_RESET_GATED	WLAN_RESET_GATED - @radio_proto_lib.RADIO_PROTO	7B2 10A5
WLAN_SDIO_CLK	WLAN_SDIO_CLK - @radio_proto_lib.RADIO_PROTO	7C5 10C6
WLAN_SDIO_CMD	WLAN_SDIO_CMD - @radio_proto_lib.RADIO_PROTO	7C5 10C6
WLAN_SDIO_DATA<0>	WLAN_SDIO_DATA<0> - @radio_proto_lib.RADIO_PROTO	7C5 10C6
WLAN_SDIO_DATA<1>	WLAN_SDIO_DATA<1> - @radio_proto_lib.RADIO_PROTO	7C5 10C6
WLAN_SDIO_DATA<2>	WLAN_SDIO_DATA<2> - @radio_proto_lib.RADIO_PROTO	7C5 10C6
WLAN_SDIO_DATA<3>	WLAN_SDIO_DATA<3> - @radio_proto_lib.RADIO_PROTO	7C5 10C6
WLAN_TCK	WLAN_TCK - @radio_proto_lib.RADIO_PROTO	7B1 10C6
WLAN_TDI_UART_SIN	WLAN_TDI_UART_SIN - @radio_proto_lib.RADIO_PROTO	7B2 10C6
WLAN_TDO	WLAN_TDO - @radio_proto_lib.RADIO_PROTO	7B1 10C6
WLAN_TMS	WLAN_TMS - @radio_proto_lib.RADIO_PROTO	7B1 10C6
WLAN_TMS2	WLAN_TMS2 - @radio_proto_lib.RADIO_PROTO	10C6
WLAN_TRST_N	WLAN_TRST_N - @radio_proto_lib.RADIO_PROTO	7B1 10C6
WLAN_UART_SOUT	WLAN_UART_SOUT - @radio_proto_lib.RADIO_PROTO	7B2 10C3

Title: Cref Part Report
Design: radio_proto
Date: Feb 15 9:18:04 2008

C1	CAP_201	radio_proto[6D5]
C2	CAP_201	radio_proto[6D4]
C3	CAP_402	radio_proto[4A8]
C4	CAP_402	radio_proto[4A8]
C5	CAP_402	radio_proto[4A8]
C6	CAP_402	radio_proto[4A8]
C7	CAP_201	radio_proto[5A6]
C8	CAP_201	radio_proto[5A6]
C9	CAP_201	radio_proto[4D7]
C10	CAP_201	radio_proto[5A6]
C11	CAP_201	radio_proto[4D7]
C12	CAP_201	radio_proto[4D8]
C13	CAP_201	radio_proto[6D2]
C15	CAP_201	radio_proto[5A6]
C16	CAP_201	radio_proto[5B6]
C17	CAP_0201	radio_proto[5A6]
C18	CAP_402	radio_proto[4A7]
C19	CAP_201	radio_proto[6A7]
C20	CAP_201	radio_proto[4D8]
C21	CAP_201	radio_proto[5D3]
C22	CAP_603	radio_proto[4D3]
C23	CAP_402	radio_proto[10C7]
C24	CAP_201	radio_proto[4D2]
C25	CAP_402	radio_proto[4A8]
C26	CAP_402	radio_proto[4A7]
C27	CAP_402	radio_proto[8C7]
C28	CAP_201	radio_proto[4C8]
C29	CAP_201	radio_proto[8C8]
C30	CAP_201	radio_proto[4D2]
C31	CAP_201	radio_proto[8D6]
C32	CAP_201	radio_proto[4D1]
C33	CAP_201	radio_proto[5A6]
C34	CAP_402	radio_proto[4C2]
C35	CAP_201	radio_proto[6B4]
C36	CAP_201	radio_proto[6B4]
C37	CAP_201	radio_proto[6B2]
C38	CAP_201	radio_proto[6B1]
C39	CAP_201	radio_proto[6B1]
C40	CAP_201	radio_proto[5A6]
C41	CAP_201	radio_proto[6B6]
C42	CAP_201	radio_proto[6B4]
C43	CAP_201	radio_proto[10A6]
C44	CAP_201	radio_proto[6C4]
C45	CAP_201	radio_proto[6C4]
C46	CAP_201	radio_proto[5C4]
C47	CAP_201	radio_proto[3A7]
C56	CAP_201	radio_proto[8D5]
C57	CAP_402	radio_proto[8D6]
C60	CAP_402	radio_proto[3A5]
C64	CAP_201	radio_proto[3A4]
C65	CAP_201	radio_proto[8D5]
C66	CAP_201	radio_proto[3A4]
C67	CAP_201	radio_proto[8C6]
C72	CAP_201	radio_proto[4A2]
C73	CAP_201	radio_proto[8C5]
C80	CAP_201	radio_proto[8A2]
C81	CAP_201	radio_proto[8C4]
C82	CAP_201	radio_proto[8B2]
C83	CAP_201	radio_proto[3D3]
C84	CAP_402	radio_proto[3D3]
C85	CAP_201	radio_proto[3D3]
C89	CAP_402	radio_proto[4C3]
C90	CAP_402	radio_proto[4B3]
C101	CAP_402	radio_proto[4B3]
C104	CAP_402	radio_proto[3D2]
C105	CAP_201	radio_proto[3D2]
C117	CAP_402	radio_proto[4C3]
C118	CAP_402-LF	radio_proto[4B2]
C120	CAP_402	radio_proto[4C2]
C121	CAP_402-LF	radio_proto[4B2]
C123	CAP_402	radio_proto[4C2]
C124	CAP_402-LF	radio_proto[4B2]
C125	CAP_402	radio_proto[4C2]
C127	CAP_201	radio_proto[2C4]
C129	CAP_201	radio_proto[6C4]
C130	CAP_201	radio_proto[6D2]
C133	CAP_201	radio_proto[2C4]
C134	CAP_201	radio_proto[2B4]
C135	CAP_P_CASE-A4	radio_proto[6D2]
C138	CAP_201	radio_proto[2B4]
C139	CAP_201	radio_proto[6C1]
C140	CAP_603	radio_proto[4B8]
C141	CAP_603	radio_proto[4B8]
C142	CAP_201	radio_proto[2C4]
C143	CAP_201	radio_proto[2B4]
C144	CAP_402-1	radio_proto[2B3]
C145	CAP_603	radio_proto[4B8]
C146	CAP_201	radio_proto[2B3]
C147	CAP_201	radio_proto[3C8]
C155	CAP_603	radio_proto[4D4]
C156	CAP_603	radio_proto[4D4]
C157	CAP_201	radio_proto[3C7]
C158	CAP_201	radio_proto[5B8]
C159	CAP_201	radio_proto[3C7]
C160	CAP_402-LF	radio_proto[5B8]
C161	CAP_201	radio_proto[5B3]
C162	CAP_201	radio_proto[5B8]
C163	CAP_201	radio_proto[5C8]
C164	CAP_201	radio_proto[5D7]
C167	CAP_201	radio_proto[5B7]
C171	CAP_201	radio_proto[5B4]
C172	CAP_201	radio_proto[5B4]
C173	CAP_201	radio_proto[5C4]
C174	CAP_201	radio_proto[5D4]
C175	CAP_201	radio_proto[5D4]
C176	CAP_201	radio_proto[5C4]
C177	CAP_201	radio_proto[5D3]
C178	CAP_0201	radio_proto[5C4]
C179	CAP_201	radio_proto[5C3]
C183	CAP_201	radio_proto[5C3]
C184	CAP_402	radio_proto[5D4]
C185	CAP_201	radio_proto[5C3]
C186	CAP_201	radio_proto[5C3]
C187	CAP_201	radio_proto[5D3]
C188	CAP_201	radio_proto[5C2]
C189	CAP_201	radio_proto[5D2]
C190	CAP_201	radio_proto[5D3]
C191	CAP_201	radio_proto[5B2]
C192	CAP_402	radio_proto[5D2]
C193	CAP_201	radio_proto[5D2]
C195	CAP_402-1	radio_proto[3D8]
C196	CAP_402-1	radio_proto[3D8]
C197	CAP_402-1	radio_proto[3C8]
C198	CAP_201	radio_proto[3D7]
C199	CAP_201	radio_proto[3D7]
C200	CAP_201	radio_proto[3C7]
C201	CAP_201	radio_proto[3C7]
C202	CAP_201	radio_proto[3D7]
C203	CAP_201	radio_proto[3D7]
C204	CAP_201	radio_proto[3C7]
C205	CAP_201	radio_proto[3B8]
C213	CAP_201	radio_proto[8C4]
C214	CAP_201	radio_proto[8C4]
C215	CAP_201	radio_proto[8A3]
C216	CAP_201	radio_proto[8B3]
C224	CAP_402	radio_proto[4B2]
C225	CAP_201	radio_proto[8B3]
C227	CAP_402-1	radio_proto[2A3]
C228	CAP_201	radio_proto[2A3]
C229	CAP_201	radio_proto[2A3]
C230	CAP_201	radio_proto[3B8]
C231	CAP_201	radio_proto[3C8]
C232	CAP_201	radio_proto[3B7]
C233	CAP_201	radio_proto[3C8]
C235	CAP_201	radio_proto[3B7]
C236	CAP_201	radio_proto[6B3]
C237	CAP_201	radio_proto[6B6]
C238	CAP_603	radio_proto[6B5]
C241	CAP_603	radio_proto[6B3]
C242	CAP_201	radio_proto[6B6]
C243	CAP_201	radio_proto[6B3]
C244	CAP_201	radio_proto[6A8]
C245	CAP_201	radio_proto[6B8]
C246	CAP_603	radio_proto[6B8]
C250	CAP_603	radio_proto[4A8]
C252	CAP_402	radio_proto[4A8]
C253	CAP_402	radio_proto[4A7]
C256	CAP_603	radio_proto[4D5]
C260	CAP_402-LF	radio_proto[4C2]
C262	CAP_402-1	radio_proto[2B4]
C263	CAP_201	radio_proto[2B4]
C269	CAP_201	radio_proto[2A4]
C270	CAP_201	radio_proto[8D8]
C271	CAP_402	radio_proto[8D7]
C272	CAP_402	radio_proto[8D7]
C273	CAP_402-1	radio_proto[2A3]
C274	CAP_201	radio_proto[2B4]
C275	CAP_201	radio_proto[2A3]
C276	CAP_201	radio_proto[3A8]
C277	CAP_201	radio_proto[3A8]
C278	CAP_201	radio_proto[6A6]
C279	CAP_201	radio_proto[6A4]
C280	CAP_201	radio_proto[6A3]
C281	CAP_201	radio_proto[8C4]
C282	CAP_402-LF	radio_proto[4A6]
C283	CAP_201	radio_proto[6B8]
C287	CAP_201	radio_proto[8D2]
C288	CAP_603	radio_proto[4B2]
C289	CAP_201	radio_proto[2D8]
C291	CAP_402-LF	radio_proto[8D3]
C292	CAP_402	radio_proto[4D6]
C293	CAP_402	radio_proto[4D6]
C294	CAP_402	radio_proto[4D5]
C301	CAP_201	radio_proto[6B6]
C303	CAP_201	radio_proto[6D4]
C304	CAP_201	radio_proto[6B4]
C306	CAP_201	radio_proto[6D5]
C307	CAP_201	radio_proto[6D5]
C308	CAP_201	radio_proto[6D5]
C309	CAP_201	radio_proto[6D5]
C315	CAP_201	radio_proto[6D5]
C319	CAP_201	radio_proto[6B2]
C320	CAP_201	radio_proto[6B4]
C321	CAP_201	radio_proto[6B8]
C322	CAP_201	radio_proto[6A7]
C326	CAP_201	radio_proto[6A5]
C328	CAP_201	radio_proto[6A3]
C329	CAP_201	radio_proto[5C3]
C335	CAP_201	radio_proto[5C7]
D1	DIODE_SCHOT_2P_SOD-9 23-HF	radio_proto[4B7]
D3	DIODE_SCHOT_2P_SOD-9 23-HF	radio_proto[4A7]
D4	DIODE_SCHOT_2P_SOD-9 23-HF	radio_proto[4A7]
FL1	FILTER_2P_0201	radio_proto[4D5]
FL2	FILTER_B94_5P_LLP	radio_proto[5B4]
FL3	FILTER_B94_5P_LLP	radio_proto[5A4]
FL4	FILTER_B94_5P_LLP	radio_proto[5A4]
FL5	FILTER_2P_0201-1	radio_proto[4A3]
FL6	FILTER_2P_0201	radio_proto[4D5]
FL7	FILTER_2P_0201-1	radio_proto[4A3]
FL8	FILTER_2P_0201	radio_proto[4D5]
FL10	FILTER_2P_0201	radio_proto[6D4]
FL11	FILTER_LFB2H_2.5X2X1 -SM	radio_proto[10C3]
FL12	FILTER_SAFEB1G57KB_L LP	radio_proto[8B1]
FL14	FILTER_SAFEB1G57FM_L LP	radio_proto[8B4]
G2	OSC_6P_PN25VD_SM	radio_proto[5B8]
G3	OSC_4PIN_NCGND_2.5X2 -SM	radio_proto[8D3]
J1	CON_F2ST_COAX_4MT_SM _F-ST-SM	radio_proto[8C2]
J2	CON_M80ST_D_SMA_M-ST -SM	radio_proto[7C3]
J3	CON_F2ST_COAX_S2MT_S M_F-ST-SM	radio_proto[8C1]
J5	CON_F2ST_COAX_4MT_SM _F-ST-SM	radio_proto[6D3]
J7	BATTERY_4P2_SM-NSP	radio_proto[4D8]
L1	IND_0201	radio_proto[6D7]
L2	IND_0201	radio_proto[6C7]
L3	IND_0603-HF	radio_proto[6D3]
L4	IND_VLS3012-SM-HF	radio_proto[4D2]
L5	IND_0201	radio_proto[6A8]
L6	IND_0201	radio_proto[6D7]
L7	IND_0201	radio_proto[6D7]
L8	IND_0201	radio_proto[5D3]
L9	IND_0201	radio_proto[6C4]
L10	IND_0201	radio_proto[6B1]
L12	IND_0201	radio_proto[6A4]
L13	IND_0201	radio_proto[6C7]
L17	IND_0201	radio_proto[6C7]
L18	IND_0201	radio_proto[6C7]
L19	IND_0201	radio_proto[6C7]
L20	IND_0201	radio_proto[5A3]
L21	IND_0201	radio_proto[5A3]
L22	IND_0201	radio_proto[5B3]
L23	IND_0201	radio_proto[5A3]
L24	IND_0201	radio_proto[5B3]
L25	FIL_LFD181G57DPGC092 _LLP-0603	radio_proto[8C3]
L26	IND_0201	radio_proto[5B3]
L27	IND_0201	radio_proto[6A5]
L28	IND_0201	radio_proto[6A5]
L29	IND_0201	radio_proto[6A7]
L30	IND_0201	radio_proto[6A7]
L34	IND_VLF3012ST-HF	radio_proto[4B7]
L35	IND_0201	radio_proto[5A6]
L36	IND_0201	radio_proto[5A5]
L38	IND_0201	radio_proto[5A6]
L39	IND_0201	radio_proto[5A6]
L40	IND_0201	radio_proto[5C4]
L41	IND_SM	radio_proto[5B2]
L42	IND_0201	radio_proto[6A3]
L43	IND_0201	radio_proto[6A3]
L45	IND_0201	radio_proto[6C4]
L46	IND_0201	radio_proto[5A5]
L47	IND_0201	radio_proto[6A6]
L48	IND_0201	radio_proto[6A4]
L49	IND_0201	radio_proto[6A3]
L50	IND_4P_2COIL_VLPW631 2T-100MR40-SM-HF	radio_proto[4A7]
L52	IND_0201	radio_proto[8B5]
L54	IND_0201	radio_proto[8B2]
L60	IND_0201	radio_proto[8A2]
L61	FIL_LDB18_A_0603	radio_proto[6A5]
L62	FIL_LDB18_A_0603	radio_proto[6A2]
L64	FIL_LDB18_A_0603	radio_proto[6A7]
L65	IND_0201	radio_proto[6C4]
L69	IND_0201	radio_proto[5A3]
L70	IND_0201	radio_proto[5A3]
L71	IND_0201	radio_proto[5B3]
L72	IND_0201	radio_proto[5A2]
L73	IND_0201	radio_proto[5B2]
L74	IND_0201	radio_proto[5A2]
L76	IND_0201	radio_proto[6D8]
L77	IND_0201	radio_proto[6D8]
L78	IND_0201	radio_proto[6C8]
L79	IND_0201	radio_proto[6C8]
L80	IND_0201	radio_proto[6D7]
L81	IND_0201	radio_proto[6D7]
L82	IND_0201	radio_proto[6C7]
L83	IND_0201	radio_proto[6C7]
L84	IND_0201	radio_proto[6A6]
Q1	TRA_MOSFET_NCHN_3P_S OT883L	radio_proto[4D1]
Q3	TRA_PCH_FDZ191P_WL-C SP	radio_proto[5B1]
Q4	TRA_DUAL_MOSFET_NCHN 3_SOT-963	radio_proto[5B1]
Q7	TRA_DUAL_MOSFET_NCHN 3_SOT-963	radio_proto[10A4 10A3]
Q8	TRA_MOSFET_NCHN_3P_S OT883L	radio_proto[2B8]
R1	RES_201	radio_proto[8B8]
R2	RES_201	radio_proto[2D4]
R3	RES_201	radio_proto[3A5]
R4	RES_201	radio_proto[3B5]
R5	RES_201	radio_proto[3B5]
R6	RES_201	radio_proto[2A7]
R7	RES_201	radio_proto[4D4]
R8	RES_201	radio_proto[4D8]
R9	RES_201	radio_proto[2C8]
R10	RES_201	radio_proto[8B7]
R11	RES_201	radio_proto[3B4]
R12	RES_201	radio_proto[8B7]
R13	RES_201	radio_proto[8B3]
R14	RES_201	radio_proto[4D4]
R15	RES_201	radio_proto[8A8]
R16	RES_201	radio_proto[8A8]
R17	RES_201	radio_proto[8A7]
R18	RES_201	radio_proto[2C7]
R19	RES_201	radio_proto[3A6]
R20	RES_201	radio_proto[4D4]
R21	RES_201	radio_proto[2C7]
R22	RES_201	radio_proto[4D3]
R23	RES_201	radio_proto[4D3]
R24	RES_201	radio_proto[4D1]
R25	RES_201	radio_proto[4D1]
R26	RES_201	radio_proto[8A7]
R27	RES_201	radio_proto[4D4]
R28	RES_201	radio_proto[2A3]
R29	RES_201	radio_proto[8D2]
R30	THERMISTER_0201	radio_proto[2D4]
R32	RES_402	radio_proto[4D7]
R33	RES_201	radio_proto[3B8]
R34	RES_201	radio_proto[3B4]
R35	RES_201	radio_proto[3B3]
R36	RES_201	radio_proto[4C5]
R37	RES_201	radio_proto[2A8]
R39	RES_201	radio_proto[5B5]
R40	RES_201	radio_proto[5B2]
R41	RES_201	radio_proto[2A8]
R43	RES_201	radio_proto[2A8]
R44	RES_201	radio_proto[4D1]
R45	RES_201	radio_proto[5A4]
R46	RES_201	radio_proto[2C4]
R47	RES_201	radio_proto[2C4]
R48	RES_201	radio_proto[2A8]
R49	RES_201	radio_proto[2C4]
R50	RES_201	radio_proto[2A8]
R51	RES_201	radio_proto[2A3]
R52	RES_201	radio_proto[5A8]
R53	RES_201	radio_proto[4A3]
R54	RES_201	radio_proto[4C8]
R55	RES_201	radio_proto[4D2]
R56	RES_201	radio_proto[2C4]
R57	RES_201	radio_proto[2C4]
R58	RES_201	radio_proto[8C5]
R59	RES_201	radio_proto[8B5]
R60	RES_201	radio_proto[4C8]
R61	RES_201	radio_proto[2A7]
R62	RES_201	radio_proto[10D8]
R63	RES_201	radio_proto[2D5]
R64	RES_201	radio_proto[5B4]
R65	RES_201	radio_proto[2D4]
R70	RES_201	radio_proto[6C1]
R71	RES_201	radio_proto[5B4]
R73	RES_201	radio_proto[5C8]
R75	RES_201	radio_proto[10C7]
R77	RES_201	radio_proto[5B5]
R78	RES_201	radio_proto[7C4]
R79	RES_201	radio_proto[7C4]
R83	RES_201	radio_proto[5C4]
R85	RES_201	radio_proto[5C3]
R88	RES_201	radio_proto[5C2]
R89	RES_201	radio_proto[2D7]
R92	RES_201	radio_proto[2D7]
R94	RES_201	radio_proto[3B7]
R96	RES_402	radio_proto[2D7]
R97	RES_201	radio_proto[2D3]
R99	RES_201	radio_proto[2B3]
R101	RES_201	radio_proto[10C3]
R104	RES_201	radio_proto[6D5]
R105	RES_201	radio_proto[6D6]
R106	RES_201	radio_proto[6D6]
R107	RES_201	radio_proto[6D6]
R109	RES_201	radio_proto[6D6]
R111	RES_201	radio_proto[10C3]
R114	RES_201	radio_proto[6B7]
R116	RES_201	radio_proto[6B4]
R118	RES_201	radio_proto[2C3]
R119	RES_201	radio_proto[2C3]
R120	RES_201	radio_proto[4C7]
R121	RES_201	radio_proto[4C7]
R122	RES_201	radio_proto[4C3]
R124	RES_201	radio_proto[8B8]
R125	RES_201	radio_proto[8B8]
R126	RES_201	radio_proto[6B8]
R136	RES_201	radio_proto[10A4]
R153	RES_201	radio_proto[6B7]
R154	RES_201	radio_proto[6B6]
R155	RES_201	radio_proto[6C4]
R240	THERMISTER_0201	radio_proto[5A8]
SP1	SPRING_CLIP_2P_SM	radio_proto[6D3]
SP2	SMT_PAD_SM-NSP	radio_proto[6D2]
SP4	SPRING_CLIP_1P_EMI_A LH-802A	radio_proto[6D1]
TP1	TP_TP-P6	radio_proto[7C1]
TP2	TP_TP-P6	radio_proto[7B8]
TP3	TP_TP-P6	radio_proto[7B8]
TP4	TP_TP-P6	radio_proto[7B8]
TP5	TP_TP-P6	radio_proto[7B8]
TP6	TP_TP-1P0-TOP	radio_proto[7C3]
TP7	TP_TP-1P0-TOP	radio_proto[7B3]
TP8	TP_TP-1P0-TOP	radio_proto[7B3]
TP9	TP_TP-P6	radio_proto[7C1]
TP10	TP_TP-P6	radio_proto[7B1]
TP11	TP_TP-P6	radio_proto[7A7]
TP12	TP_TP-P6	radio_proto[7A8]
TP13	TP_TP-P6	radio_proto[7A8]
TP14	TP_TP-P6	radio_proto[7B7]
TP15	TP_TP-P6	radio_proto[7B7]
TP16	TP_TP-1P0-TOP	radio_proto[7C3]
TP17	TP_TP-P6	radio_proto[7A7]
TP18	TP_TP-P6	radio_proto[7A7]
TP22	TP_TP-P6	radio_proto[6B8]
TP23	TP_TP-P6	radio_proto[7A8]
TP24	TP_TP-P6	radio_proto[7A8]
TP25	TP_TP-P6	radio_proto[7A8]
TP26	TP_TP-P6	radio_proto[7A8]
TP27	TP_TP-P6	radio_proto[7A8]
TP28	TP_TP-P6	radio_proto[7B7]
TP29	TP_TP-P6	radio_proto[7B7]
TP30	TP_TP-P6	radio_proto[10C6]
TP31	TP_TP-P6	radio_proto[10B6]
TP32	TP_TP-P6	radio_proto[10C6]
TP33	TP_TP-P6	radio_proto[7A7]
TP34	TP_TP-P6	radio_proto[7A7]
TP35	TP_TP-P6	radio_proto[10B6]
TP36	TP_TP-P6	radio_proto[10C3]
TP37	TP_TP-P6	radio_proto[10B3]
TP38	TP_TP-P6	radio_proto[7A7]
TP39	TP_TP-P6	radio_proto[5C7]
TP40	TP_TP-P6	radio_proto[2C1]
TP41	TP_TP-1P0-TOP	radio_proto[4D8]
TP42	TP_TP-1P0-TOP	radio_proto[4D8]
TP43	TP_TP-1P0-TOP	radio_proto[4D8]
TP44	TP_TP-1P0-TOP	radio_proto[4D8]
TP48	TP_TP-P6	radio_proto[7B1]
TP49	TP_TP-P6	radio_proto[7C1]
TP50	TP_TP-P6	radio_proto[7B1]
TP51	TP_TP-P6	radio_proto[7C1]
TP52	TP_TP-P6	radio_proto[7C1]
TP54	TP_TP-P6	radio_proto[10C6]
TP56	TP_TP-P6	radio_proto[7A4]
TP57	TP_TP-P6	radio_proto[10C7]
TP58	TP_TP-P6	radio_proto[10C3]
TP59	TP_TP-P6	radio_proto[7A4]
TP60	TP_TP-P6	radio_proto[7A4]
TP61	TP_TP-P6	radio_proto[10B3]
TP62	TP_TP-P6	radio_proto[10B3]
TP63	TP_TP-P6	radio_proto[10B3]
TP64	TP_TP-P6	radio_proto[7A3]
TP65	TP_TP-P6	radio_proto[7A3]
TP68	TP_TP-P6	radio_proto[10B3]
TP69	TP_TP-P6	radio_proto[10B3]
TP70	TP_TP-P6	radio_proto[10B3]
TP71	TP_TP-P6	radio_proto[10B3]
TP74	TP_TP-P6	radio_proto[7C1]
TP78	TP_TP-P6	radio_proto[10C7]
TP79	TP_TP-P6	radio_proto[10C7]
TP80	TP_TP-P6	radio_proto[10C7]
TP81	TP_TP-P6	radio_proto[10C6]
TP82	TP_TP-P6	radio_proto[10C6]
TP83	TP_TP-P6	radio_proto[10C6]
TP84	TP_TP-P6	radio_proto[7B1]
TP85	TP_TP-P6	radio_proto[7B1]
TP86	TP_TP-P6	radio_proto[7B1]
TP87	TP_TP-P6	radio_proto[7B1]
U1	MAX8836_WLP	radio_proto[4D3]
U2	FLASH_2MBX4_BGA88_1_ BGA-HF	radio_proto[9C5]
U3	74LVC1G08GF_SOT891	radio_proto[4C8]
U4	LMSP4LMA_QFN	radio_proto[6C5]
U5	AMP_TQM616035_LGA	radio_proto[6B5]
U6	74LVC2G08_SOT833	radio_proto[10A5 10A3]
U7	74LVC1G79_SOT891	radio_proto[5C4]

U10	LBEE1WRLFZ_LGA	radio_proto[10C5]
U11	74LVC2G34_SOT891	radio_proto[6D1]
U13	PSRAM_8MBX16_BGA107_BGA	radio_proto[3D3]
U14	SKY77340_MCM-HF	radio_proto[6D2]
U15	BGA736L16_TSLP16	radio_proto[5B5]
U16	PMB6952_BGA	radio_proto[5D2 5D6]
U19	AMP_TQM676031_LGA	radio_proto[6B3]
U22	PMB8878_BGA	radio_proto[2D2 2D6]
U22	PMB8878_BGA	radio_proto[3D7]
U23	74LVC1G08GF_SOT891	radio_proto[2D8]
U25	PMB6820_WFSGA	radio_proto[4C5]
U27	74LVC1G332_SOT891	radio_proto[2A3]
U31	PMB2525_BGA	radio_proto[8C7]
U33	BGA615L7_TSLP	radio_proto[8B3]
U37	AMP_TQM666032_LGA	radio_proto[6A8]
VR1	LREG_TK684_FC-4	radio_proto[10D8]
XW1	SHORT_SHORT-0201	radio_proto[10B6]
XW2	SHORT10L25_WITH_ALTS_SM	radio_proto[4D7]
XW3	SHORT_SHORT-0201	radio_proto[8D5]
XW4	SHORT10L25_WITH_ALTS_SM	radio_proto[4D6]
XW5	SHORT_SHORT-0402	radio_proto[4D6]
XW6	SHORT10L25_WITH_ALTS_SM	radio_proto[3A4]
XW7	SHORT_SHORT-0402	radio_proto[10C6]
XW8	SHORT_SHORT-0201	radio_proto[3D3]
XW9	SHORT_SHORT-0201	radio_proto[3D3]
XW10	SHORT_SM	radio_proto[6D2]
XW11	SHORT_SM	radio_proto[4B7]
XW12	SHORT_SM	radio_proto[4B8]
XW13	SHORT_SHORT-0201	radio_proto[4B1]
XW14	SHORT_SHORT-0402	radio_proto[4D2]
XW15	SHORT_SHORT-0201	radio_proto[4B1]
XW16	SHORT_SHORT-0201	radio_proto[4C1]
XW17	SHORT_SHORT-0201	radio_proto[10C7]
XW21	SHORT_SM	radio_proto[3A7]
XW23	SHORT_SHORT-0201	radio_proto[4B1]
XW24	SHORT_SHORT-0201	radio_proto[4B1]
XW26	SHORT_SM	radio_proto[4B8]
XW27	SHORT_SM	radio_proto[4A8]
XW28	SHORT_SM	radio_proto[4A6]
XW29	SHORT_SM	radio_proto[4A6]
XW30	SHORT_SHORT-0201	radio_proto[4C1]
XW31	SHORT_SHORT-0201	radio_proto[4C1]
XW32	SHORT_SHORT-0201	radio_proto[4C1]
XW33	SHORT_SHORT-0201	radio_proto[4C1]
XW34	SHORT_SHORT-0201	radio_proto[4C1]
XW35	SHORT_SHORT-0201	radio_proto[4B1]
XW60	SHORT_SHORT-0201	radio_proto[4D7]
Y1	CRYSTAL_3.2X1.5X.6-SM	radio_proto[3A4]