Service Manual

notebook

D800P

Notebook Computer

D800P Series

Service Manual

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About this Manual

This manual is intended for service personnel who have completed sufficient training to undertake the maintenance and inspection of personal computers.

It is organized to allow you to look up basic information for servicing and/or upgrading components of the notebook PC.

The following information is included:

Chapter 1, Introduction, provides general information about the location of system elements and their specifications.
Chapter 2, Disassembly, provides step-by-step instructions for disassembling parts and subsystems and how to upgrade elements of the system.
Appendices A, Part Lists
Appendices B, Schematic Diagrams

Related Documents

You may also need to consult the following manual for additional information:

User's Manual on CD
This describes the notebook PC's features and the procedures for operating the computer and its ROM-based setup program. It also describes the installation and operation of the utility programs provided with the notebook PC.

Contents

Chapter 1: Introduction

Overview

This manual covers the information you need to service or upgrade the **D800P** series notebook computer. Information about operating the computer (e.g. getting started, and the *Setup* utility) is in the *User's Manual*. Information about drivers (e.g. VGA & audio) is also found in *User's Manual*. That manual is shipped with the computer.

Operating systems (e.g. *Windows 2000 & Windows XP*) have their own manuals as do application software (e.g. word processing and database programs). If you have questions about those programs, you should consult those manuals.

The D800P notebook is designed to be upgradeable. See ***"Disassembly" on page 2 - 1*** for a detailed description of the upgrade procedures for each specific component. Please note the warning and safety information indicated by the "  " symbol.

The balance of this chapter reviews the computer's technical specifications and features.

System Specifications

Table 1 - 1
D800P System Specifications

Feature	Specifications D800P
Processor Types	Intel Pentium 4 Processor - (478-pin) mFC-PGA2 package supporting Hyper Threading Technology (µ0.13) 0.13 Micron Process Technology, 512K L2 Cache & 800MHz FSB 2.40/ 2.60/ 2.80/ 3.00/ 3.20 GHz
Core Logic	Intel® 865PE + ICH5
Structure	Fully PC2001 Compliant ACPI 1.0B Compliant PC2001 Compliant
Security	Security (Kensington® Type) Lock Slot BIOS Password
Memory	64 bit data bus system memory Two 200-pin DDR SODIMM sockets, supporting Dual DDR SDRAM SODIMM (2.5V) - DDR400MHz or DDR333MHz compliant DDR **400MHz** memory expandable to **1GB** (compatible with 256/512 MB SODIMM Modules) DDR **333MHz** memory expandable to **2GB** (compatible with 256/512/1024 MB SODIMM Modules)
BIOS	One 512KB Flash ROM Phoenix BIOS with Smart Battery Plug and Play (1.0a), ACPI 1.0B
LCD Options	16.0" 1280 x 1024 SXGA TFT 15.0" 1600 x 1200 UXGA TFT
Display	ATI Radeon 9600 PRO High Performance Chip 128MB DDR Graphic Memory On Board UltraAGP™ 8x 128-bit 2D/3D Graphics Engine Motion Compensation and IDCT for DVD Content Playback Accelerator Fully DirectX 9 Compliant Graphics Engine

Feature	Specifications D800P
Audio	Virtual 6-Channel Audio Output AC'97 2.2 Compliant Interface Compatible with Sound-Blaster PRO™/ 16 Advanced Wavetable Synthesizer Direct Sound™ 3D Accelerator Full Duplex Virtual AC3 S/PDIF Digital Output (5.1 CH) for DVD content and Stereo Audio Built-In Microphone Audio DJ 2 Built-In Speakers
Interface	Built-in TouchPad (PS/2) Four USB 2.0 Ports (USB 1.1 compatible) One IEEE 1394 Port One S-Video-Out Jack for TV output One S-Video-In Jack (**option** included with TV Tuner only) One Parallel Port (LPT1), supporting ECP / EPP 1.7 and 1.9 One COM port Infrared Transceiver supporting FIR & IrDA 1.1 file transfer One DVI Video Output One External Keyboard/Mouse (through Y-Cable) One Headphone-Out/Speaker-Out Jack One S/PDIF Out Port/Microphone-In Jack (through Y-cable only) One Line-In Jack (**option** included with TV Tuner only) One RJ-45 Jack for 1000M/10M LAN One RJ-11 Jack for 56K MDC Modem DC-In Jack
Keyboard	“Win Key” Keyboard (including a numeric keypad) 3 Application Hot-keys for Web Browser, E-Mail, and Application
PC Card	Two Type II PCMCIA 3.3V/5V Sockets, OR one Type III PCMCIA 3.3V/5V Socket (no Zoomed Video support)

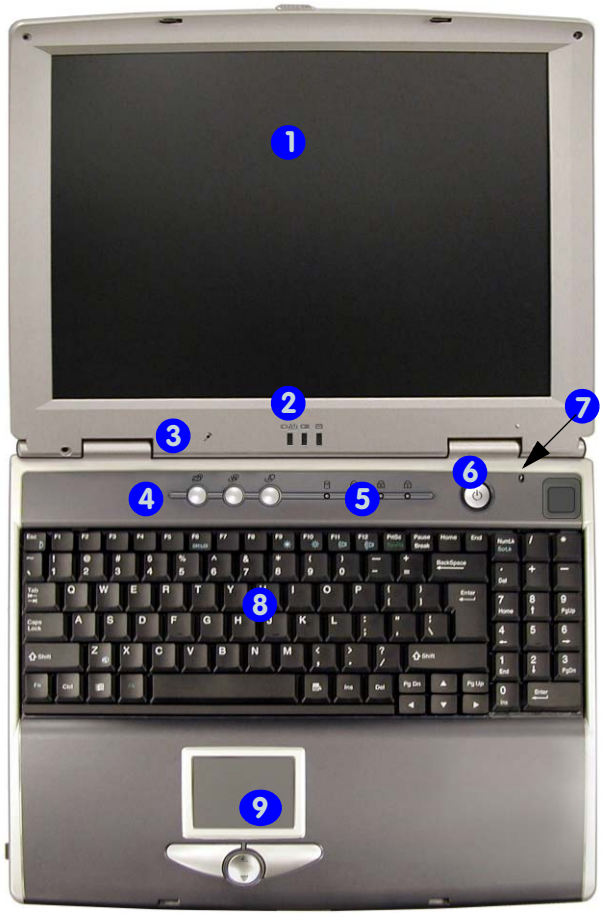
Feature	Specifications D800P
Storage	One Fixed FDD One Changeable 2.5" 9.5mm Primary HDD 1st Modular Drive Bay (**Bay One**) for **one** of the following: DVD-ROM (12.7mmH) CD-ROM CD-RW Combo Drive (DVD-ROM + CD-RW) IP Sharing Module 2nd HDD RAID HDD (RAID 0, RAID 1 HDD Fault-Tolerance System) DVD-RW 2nd Modular Drive Bay (**Bay Two**) for **one** of the following: DVD-ROM (12.7mmH) CD-ROM CD-RW Combo Drive (DVD-ROM + CD-RW / DVD-RW) DVD-RW 3rd Modular Drive Bay (**Bay Three**) for **one** of the following: 3rd HDD (**optional**) TV-Tuner (**optional**) 4th Modular Drive Bay (**Bay Four**) for **one** of the following: One Portable MP3 Player with Storage Disk (**optional**) One Portable 6-in-1 Flash Card Reader (**optional**)
Communication	Wireless Infrared Transfer IrDA 1.1, 1cm~1M Operating Distance, 4Mbps FIR 1000 BASE-T (Gigabit) Ethernet LAN on board (10/100 BASE-T compatible) 56K MDC Modem V.90 compliant (V.92 software driver upgradeable) 802.11b Wireless LAN, USB Interface (**optional**) IP Sharing Module for ADSL or Cable Modem (**optional**) Bluetooth Module with USB Interface (**optional**)

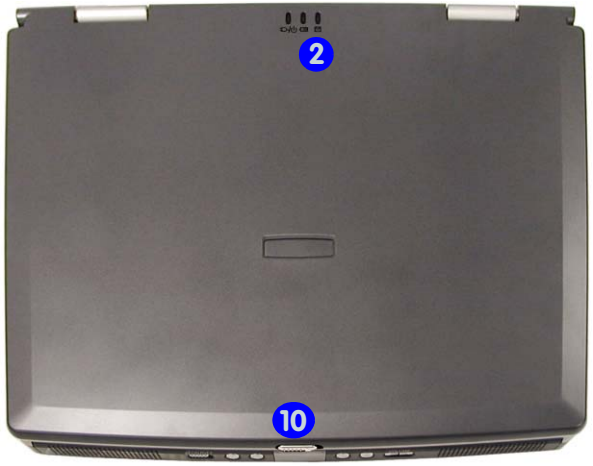
Feature	Specifications D800P
Indicators	LED Indicator (HDD, Power Status, Num Lock, Caps Lock, Scroll Lock, AC-In, Battery Charging, E-Mail) Audio DJ Control Display (Power, Play/Pause, FWD, RWD, Stop, Volume+, Volume-)
Power Management	Supports ACPI v1.0B Supports APM v1.2 Soft Off by System Power Button Supports Suspend to Disk Battery Low Suspend Resume From Alarm Close-Cover Switch
Power	Full Range 120 Watt AC adapter - AC in 100~240V, 47~63Hz Supports Smart Lithium-Ion Battery 14.8v, 6.6Ah (12 cells)
Weight	4.97 kg with 12-Cell Lithium-Ion Battery (Minimum)
Physical Dimensions	360 (w) x 299 (d) x 54.5 (h) mm
Environmental Spec	**Temperature** Operating: 5°C~ 35°C Non-Operating: -20°C ~ 60°C **Relative Humidity** Operating:20% ~ 80% Non-Operating:10% ~ 90%
Optional	DVD-ROM Drive (12.7mmH) CD-RW Drive (12.7mmH) Combo Drive (DVD-ROM and CD-RW, 12.7mmH) Portable MP3 Player USB Wireless LAN Module Software DVD Player IP Sharing Module TV-Tuner Module DVD-RW Drive (12.7mmH) Bluetooth Module 6-in-1 Flash Card Reader

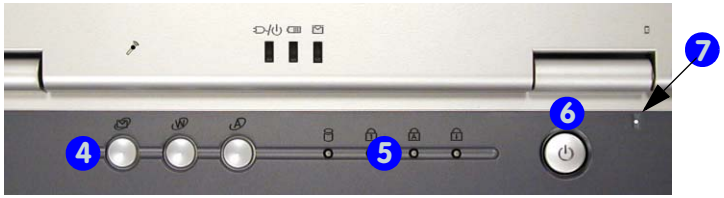
External Locator - Top Views

Figure 1 - 1
Top Views

1. LCD
2. LED Power, Battery & E-Mail Status Indicators
3. Built-In Microphone
4. Hot-Key Buttons
5. LED Status Indicators
6. Power Button
7. Close Cover Switch
8. Keyboard
9. TouchPad and Buttons
10. LCD Latch







External Locator - Front View & Left Side View

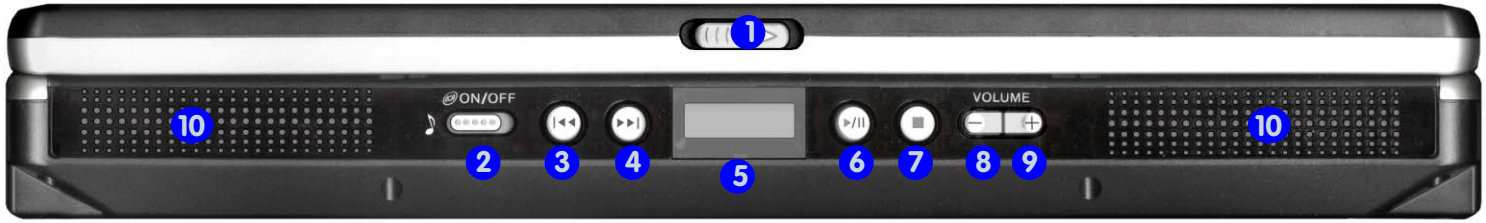


Figure 1 - 2
Front View

1. LCD Latch
2. Audio “DJ” CD Player Control Panel On/Off Switch
3. Previous Track
4. Next Track
5. LCD
6. Play/Pause
7. Stop
8. Volume Down
9. Volume Up
10. Speakers

Figure 1 - 3
Left Side View

1. S/PDIF Out Port/ Microphone-In Jack
2. Y-Cable
3. Line-In Jack
4. Headphone-Out Jack
5. Infrared Transceiver
6. PC Card Slot Eject Buttons
7. PC Card Slot
8. FDD
9. Drive Bay **One**
10. Drive Bay **Two**

S/PDIF Out & Microphone-In Functions

You must use the Y-cable provided to enable the S/PDIF Out and Microphone-In functions (S/PDIF connection is to the longer end of the cable).

Line-In Function with TV Tuner Installed

With the TV Tuner installed, the line-in jack will only be functional while the TV Studio software is running.

External Locator - Right Side & Rear Views

Figure 1 - 4
Right Side View

1. **4th** Modular Drive Bay (**Bay Four**) for MP3 Player (**Optional**) Or 6-in-1 Flash Card Reader (**Optional**)
2. Bay Four Release Switch
3. Fan Intake/Vent
4. Kensington Lock

Software Installation Warning

Make sure the MP3 player is **not** in the slot when installing **operating systems**, and any of the **drivers** listed in User's Manual.

Figure 1 - 5
Rear View

1. DC-In Jack
2. 4 * USB Ports
3. S-Video-In Port (**Optional**)
4. S-Video-Out Port
5. External Monitor (CRT) Port
6. Coaxial TV Antenna Input (Optional)
7. Serial Port
8. IEEE 1394 Port
9. Parallel Port
10. PS/2 Type Port
11. Giga LAN Jack
12. RJ-11 Phone Jack

S-Video-In Port

The S-Video-In port will only be available if you have the Optional TV Tuner installed.

External Locator - Bottom View

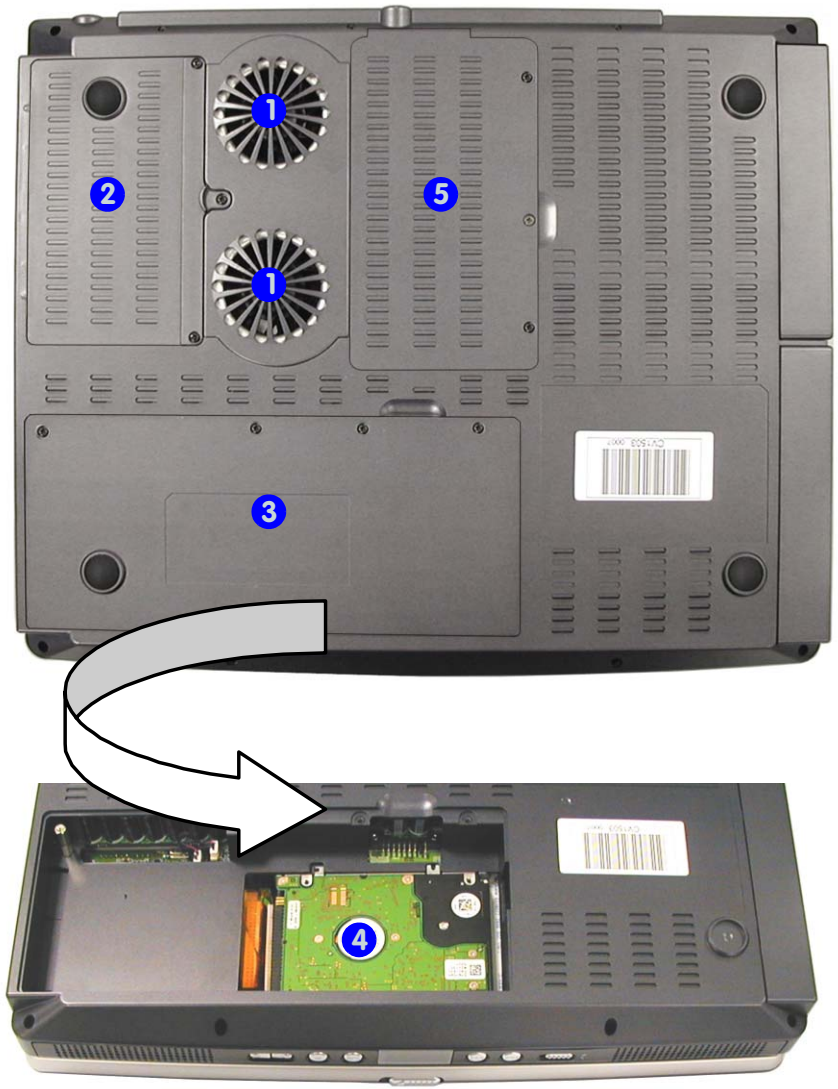


Figure 1 - 6
Bottom View

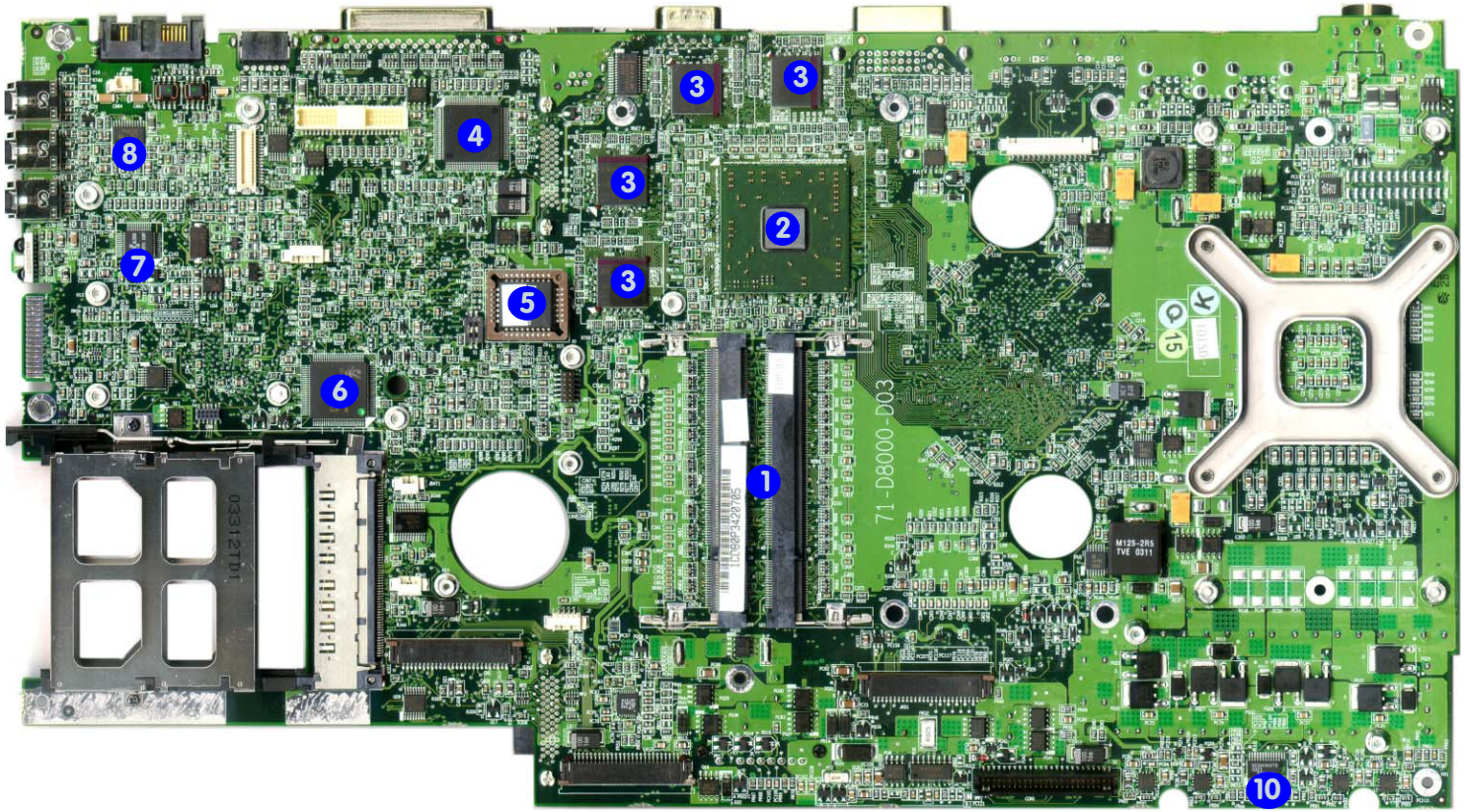
1. Vent/Fan Outlets
2. CPU Cover
3. Battery (the primary HDD is located under the battery)
4. Primary Hard Disk
5. Changeable Drive Bay **Three** (for TV Tuner or HDD)

Mainboard Overview - Top

Key Parts

Figure 1 - 7
Mainboard Top Key Parts

1. Memory Sockets (no memory installed)
2. ATI Mobility M10-P
3. VGA DDR DRAM
4. 1394 Controller TSB43AB21
5. Flash ROM BIOS
6. KBC H8 H8S-2149 HM
7. Audio Codec ALC650
8. TPA0132
9. LPC Super I/O
10. VCORE



Mainboard Overview - Bottom

Key Parts

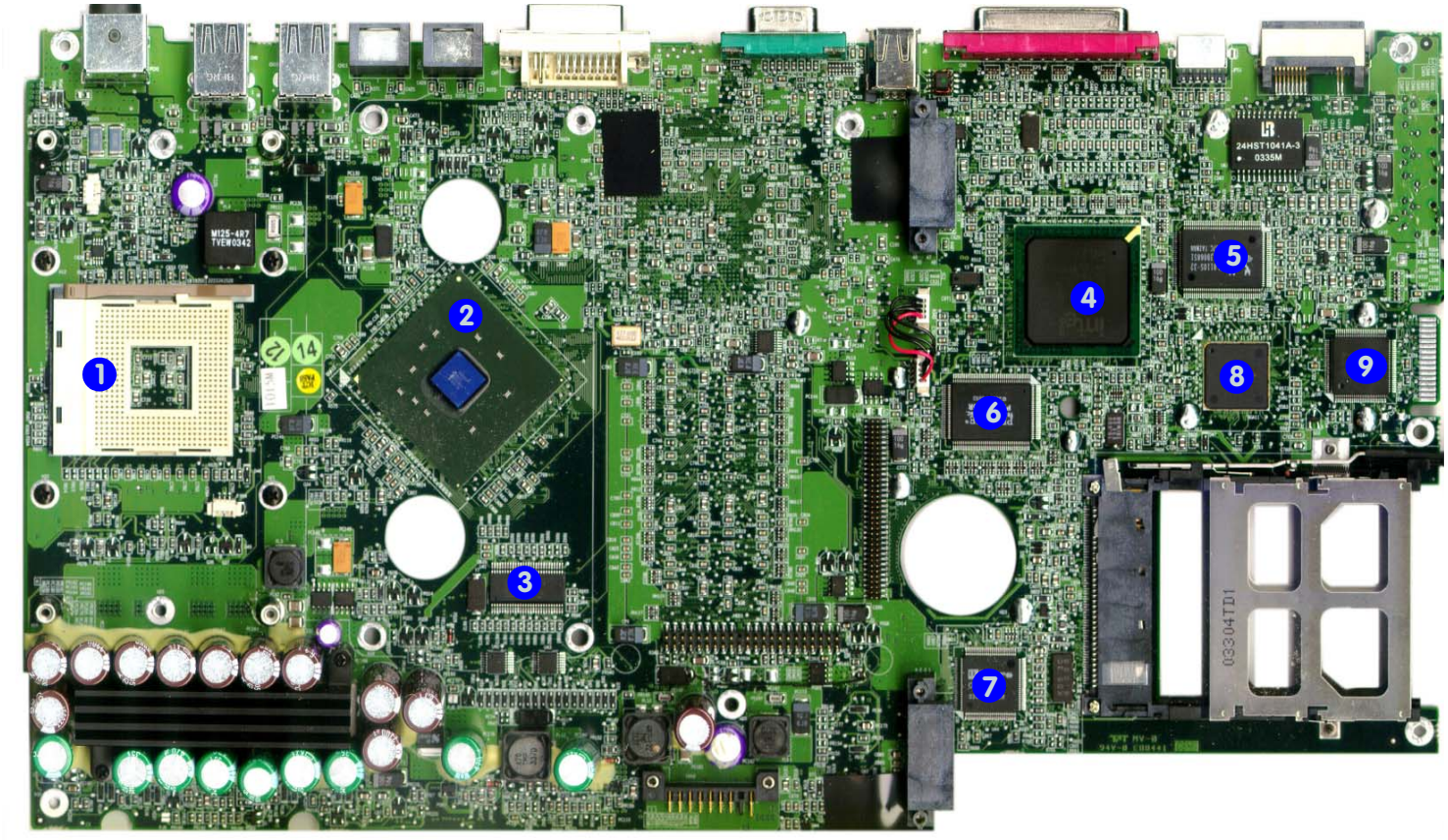


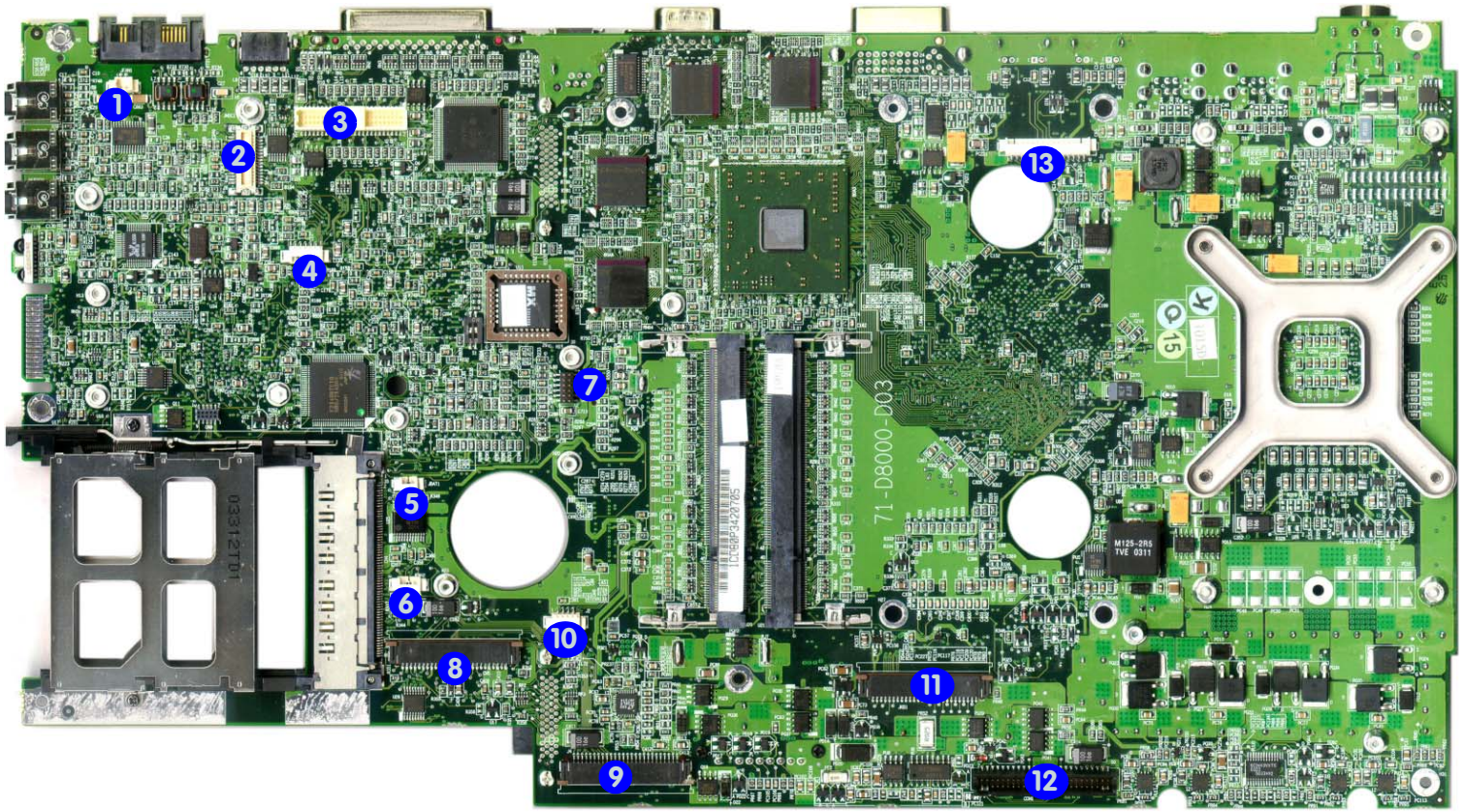
Figure 1 - 8
Mainboard Bottom Key Parts

1. CPU Socket (no CPU installed)
2. Intel Springdale 865PE
3. CLK 409
4. Intel ICH5
5. Realtek RTL8100C/ RTL8110S (B)-32
6. RAID PDC20265R
7. Audio DJ Controller
8. Cardbus TI1520
9. LPC Bridge & Super I/O

Mainboard Overview - Top

Connectors

Figure 1 - 9
Mainboard Top Connectors



1. Modem Cable (JFAN1)
2. Modem Connector (JMDC1)
3. LCD/Inverter connector (CN4)
4. WLAN Cable (JML1)
5. CMOS Battery (JBAT1)
6. Fan (JFAN2)
7. Bluetooth (JBT1)
8. Floppy Disk Drive Connector (CN5)
9. Audio Board Connector (J4)
10. TouchPad Connector (J2)
11. Keyboard Connector (JKB1)
12. Hard Disk Drive & MP3 Board Connector (CON1)
13. Switch Keyboard Connector(J1)

Mainboard Overview - Bottom

Connectors

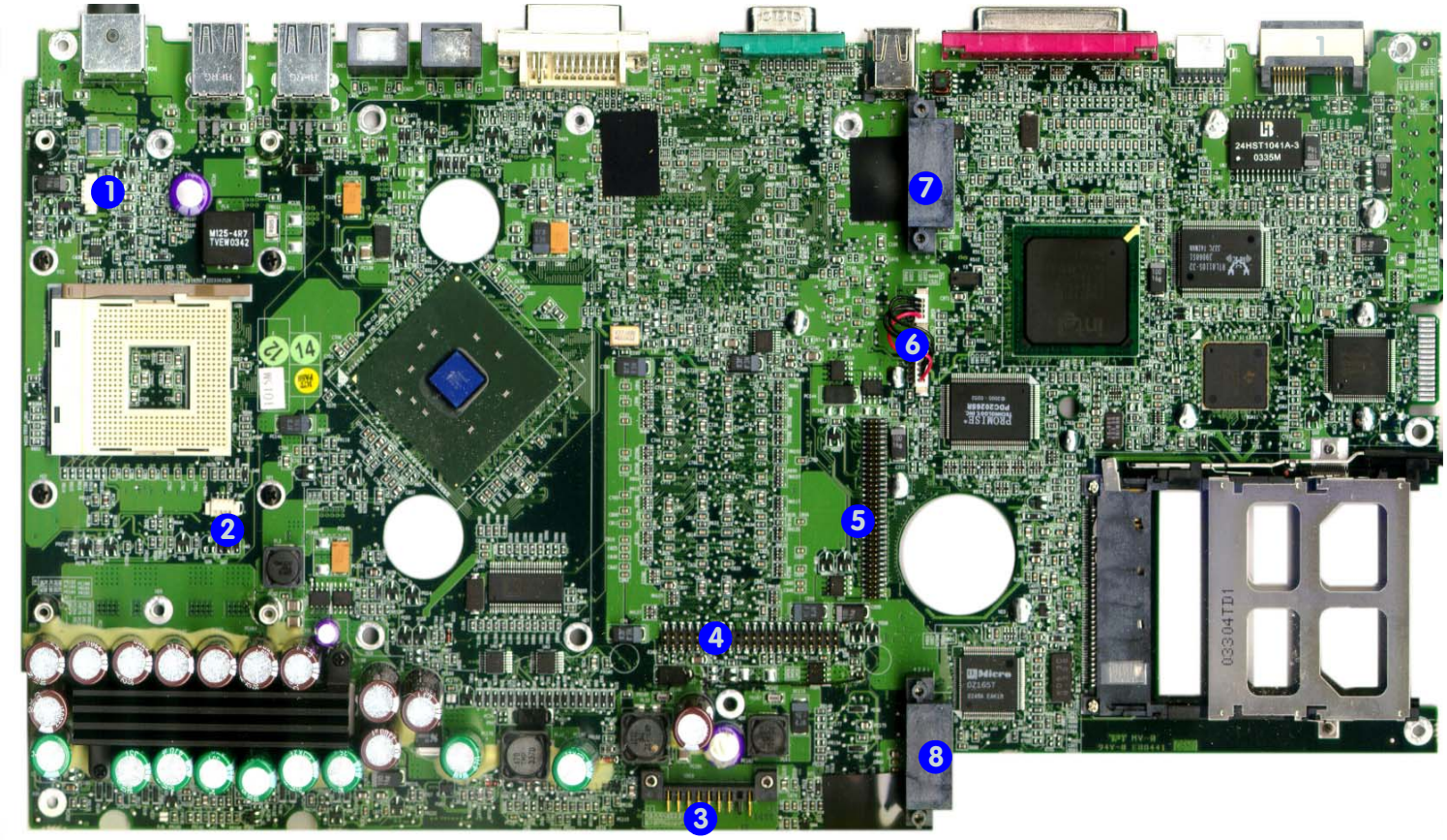


Figure 1 - 10
Mainboard Bottom Connectors

1. Fan Connector (JFAN3)
2. Fan Connector (JFAN4)
3. Battery Connector (CN16)
4. Hard Disk Connector (JHDD1)
5. TV Tuner Connector (CN14)
6. IP Sharing Module Jumper (J6 & J7)

Note: J6 & J7 must have a terminator inserted in order to use the IP sharing module.

7. Bay **One** Device Connector (CON2)
8. Bay **Two** Device Connector (JCD1)

2: Disassembly

Overview

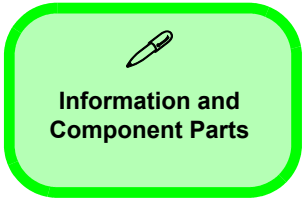
This chapter provides step-by-step instructions for disassembling parts and subsystems. When it comes to reassembly, reverse the procedures (unless otherwise indicated).

We suggest you completely review any procedure before you take the computer apart.

Procedures such as upgrading/replacing the RAM, CD device and hard disk are included in the User's Manual but are repeated here for your convenience.

To make the disassembly process easier each section may have a box in the page margin. Information contained under the figure # will give a synopsis of the sequence of procedures involved in the disassembly procedure. A box with a will provide any possible helpful information, and lists the relevant parts you will have after the disassembly process is complete. **Note**: The parts listed will be for the disassembly procedure listed ONLY, and not any previous disassembly step(s) required. Refer to the part list for the previous disassembly procedure. The amount of screws you should be left with will be listed here also. A box with a contains warnings.

An example of these types of boxes are shown in the sidebar.



NOTE: All disassembly procedures assume that the system is turned **OFF**, and disconnected from any power supply (the battery is removed too).

Maintenance Tools

The following tools are recommended when working on the notebook PC:

- M3 Philips-head screwdriver
- M2.5 Philips-head screwdriver (magnetized)
- M2 Philips-head screwdriver
- Small flat-head screwdriver
- Pair of needle-nose pliers
- Anti-static wrist-strap

Connections

Connections within the computer are one of four types:

Locking collar sockets for ribbon connectors	To release these connectors, use a small flat-head screwdriver to gently pry the locking collar away from its base. When replacing the connection, make sure the connector is oriented in the same way. The pin1 side is usually not indicated.
Pressure sockets for multi-wire connectors	To release this connector type, grasp it at its head and gently rock it from side to side as you pull it out. Do not pull on the wires themselves. When replacing the connection, do not try to force it. The socket only fits one way.
Pressure sockets for ribbon connectors	To release these connectors, use a small pair of needle-nose pliers to gently lift the connector away from its socket. When replacing the connection, make sure the connector is oriented in the same way. The pin1 side is usually not indicated.
Board-to-board or multi-pin sockets	To separate the boards, gently rock them from side to side as you pull them apart. If the connection is very tight, use a small flat-head screwdriver - use just enough force to start.

Maintenance Precautions

The following precautions are a reminder. To avoid personal injury or damage to the computer while performing a removal and/or replacement job, take the following precautions:

1. **Don't drop it**. Perform your repairs and/or upgrades on a stable surface. If the computer falls, the case and other components could be damaged.
2. **Don't overheat it**. Note the proximity of any heating elements. Keep the computer out of direct sunlight.
3. **Avoid interference**. Note the proximity of any high capacity transformers, electric motors, and other strong magnetic fields. These can hinder proper performance and damage components and/or data. You should also monitor the position of magnetized tools (i.e. screwdrivers).
4. **Keep it dry**. This is an electrical appliance. If water or any other liquid gets into it, the computer could be badly damaged.
5. **Be careful with power**. Avoid accidental shocks, discharges or explosions.
   - Before removing or servicing any part from the computer, turn the computer off and detach any power supplies.
   - When you want to unplug the power cord or any cable/wire, be sure to disconnect it by the plug head. Do not pull on the wire.
6. **Peripherals** – Turn off and detach any peripherals.
7. **Beware of static discharge**. ICs, such as the CPU and main support chips, are vulnerable to static electricity. Before handling any part in the computer, discharge any static electricity inside the computer. When handling a printed circuit board, do not use gloves or other materials which allow static electricity buildup. We suggest that you use an anti-static wrist strap instead.
8. **Beware of corrosion**. As you perform your job, avoid touching any connector leads. Even the cleanest hands produce oils which can attract corrosive elements.
9. **Keep your work environment clean**. Tobacco smoke, dust or other air-born particulate matter is often attracted to charged surfaces, reducing performance.
10. **Keep track of the components**. When removing or replacing any part, be careful not to leave small parts, such as screws, loose inside the computer.

Power Safety Warning

Before you undertake any upgrade procedures, make sure that you have turned off the power, and disconnected all peripherals and cables (including telephone lines). It is advisable to also remove your battery in order to prevent accidentally turning the machine on.

Cleaning

Do not apply cleaner directly to the computer, use a soft clean cloth.
Do not use volatile (petroleum distillates) or abrasive cleaners on any part of the computer.

Disassembly Steps

The following table lists the disassembly steps, and on which page to find the related information. **PLEASE PERFORM THE DISASSEMBLY STEPS IN THE ORDER INDICATED.**

To remove the Battery:

1. Remove the battery *page 2 - 6*

To remove the Bay One Device:

1. Remove the battery *page 2 - 6*
2. Remove the Bay One device *page 2 - 6*

To remove the Bay Two Device:

1. Remove the battery *page 2 - 6*
2. Remove the Bay Two device *page 2 - 8*

To remove the Primary HDD:

1. Remove the battery *page 2 - 6*
2. Remove the primary HDD *page 2 - 9*

To remove the HDD in Bay Two:

1. Remove the battery *page 2 - 6*
2. Remove the HDD in Bay Two *page 2 - 10*

To remove the HDD in Bay Three:

1. Remove the battery *page 2 - 6*
2. Remove the HDD in Bay Three *page 2 - 11*

To remove the TV Tuner Module:

1. Remove the battery *page 2 - 6*
2. Remove the TV Tuner module *page 2 - 12*

To remove the Keyboard:

1. Remove the battery *page 2 - 6*
2. Remove the keyboard *page 2 - 13*

To remove the System Memory:

1. Remove the battery *page 2 - 6*
2. Remove the keyboard *page 2 - 13*
3. Remove the memory *page 2 - 14*

To remove the CPU:

1. Remove the battery *page 2 - 6*
2. Remove the CPU *page 2 - 15*

To remove the Switch Keyboard Assembly:

1. Remove the battery *page 2 - 6*
2. Remove the keyboard *page 2 - 13*
3. Remove the switch keyboard assembly *page 2 - 17*

To remove the Bottom Case Assembly:

1. Remove the battery *page 2 - 6*
2. Remove the Bay One device *page 2 - 6*
3. Remove the Bay Two device *page 2 - 8*
4. Remove the primary HDD *page 2 - 9*
5. Remove the HDD in Bay Two *page 2 - 10*
6. Remove the HDD in Bay Three *page 2 - 11*
7. Remove the TV Tuner Module *page 2 - 12*
8. Remove the keyboard *page 2 - 13*

9. Remove the memory *page 2 - 14*
10. Remove the CPU *page 2 - 15*
11. Remove the switch keyboard assembly *page 2 - 17*
12. Remove the bottom case assembly *page 2 - 18*

To remove the HDD & MP3 Converter Board:

1. Remove the battery *page 2 - 6*
2. Remove the bottom case assembly *page 2 - 18*
3. Remove the HDD & MP3 con board *page 2 - 20*

To remove the Audio Board:

1. Remove the battery *page 2 - 6*
2. Remove the bottom case assembly *page 2 - 18*
3. Remove the audio board *page 2 - 21*

To remove the Modem:

1. Remove the battery *page 2 - 6*
2. Remove the bottom case assembly *page 2 - 18*
3. Remove the modem *page 2 - 22*

To remove the Floppy Disk Drive Assembly:

1. Remove the battery *page 2 - 6*
2. Remove the bottom case assembly *page 2 - 18*
3. Remove the FDD assembly *page 2 - 23*

To remove the TouchPad Module:

1. Remove the battery *page 2 - 6*
2. Remove the bottom case assembly *page 2 - 18*
3. Remove the TouchPad module *page 2 - 24*

To remove the Inverter Board:

1. Remove the battery *page 2 - 6*
2. Remove the bottom case assembly *page 2 - 18*
3. Remove the inverter board *page 2 - 25*

To remove the LCD:

1. Remove the battery *page 2 - 6*
2. Remove the bottom case assembly *page 2 - 18*
3. Remove the inverter board *page 2 - 25*
4. Remove the LCD *page 2 - 26*

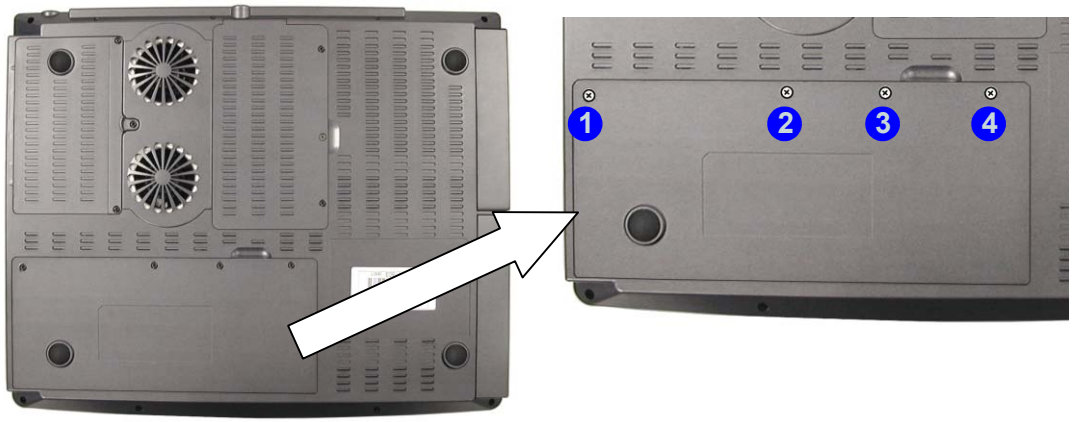
Figure 2 - 1
Battery Removal Sequence

a. Remove the 4 screws.
b. Apply pressure at point 5 to push the battery out.

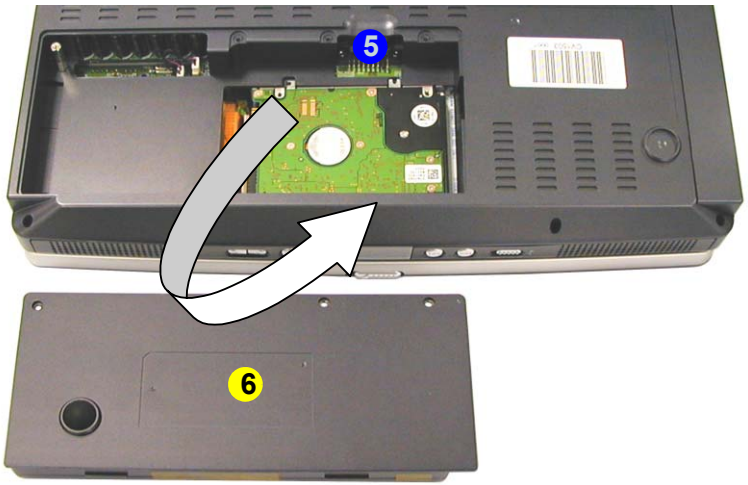
Removing the Battery

1. Turn the computer **OFF** and turn it over.
2. Remove screws 1 - 4 in **Figure 2 - 1a**.
3. Apply gentle pressure at point 5 to push the battery up and out of the computer.

a.



b.



6. Battery

- 4 Screws

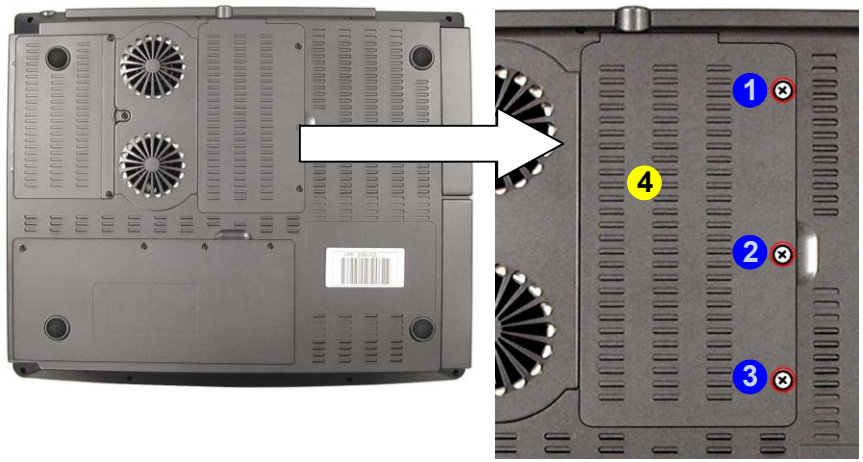
Removing the 2nd Modular Drive Bay (Bay Two) CD Device

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and turn it over.
2. Remove screws 1 - 3 in (**Figure 2 - 2a**), then lift the 3rd Modular Drive Bay cover off 4 and set it aside.
3. Remove screw 5 (**Figure 2 - 2b**), then gently push the device out of the bay (you may need to use a screwdriver to do this).

Figure 2 - 2
2nd Modular Drive Bay (Bay Two) CD Device Removal Sequence

a. Remove the screws from the Bay Three cover.
b. Remove screw 5.
c. Push the device out of the computer.

a.



b.

c.

4. Drive Bay Cover
6. CD Device

- 4 Screws

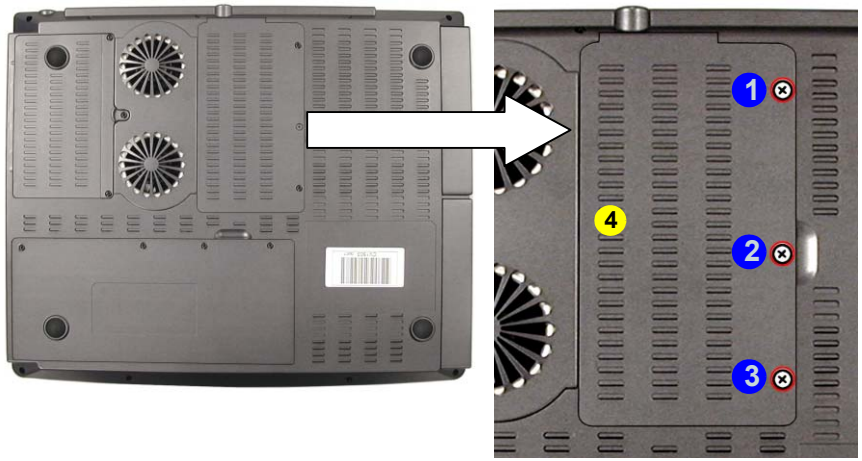
Removing the 1st Modular Drive Bay (Bay One) Device

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and turn it over.
2. Remove screws 1 - 3 in (**Figure 2 - 3a**), then lift the 3rd Modular Drive Bay cover off 4 and set it aside.
3. Remove screw 5 (**Figure 2 - 3b**), then gently push the device out of the bay (you may need to use a screwdriver).

Figure 2 - 3
1st Modular Drive (Bay One) Device Removal Sequence

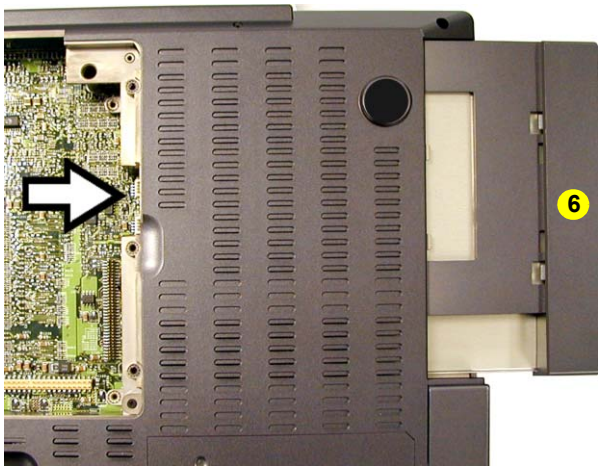
a. Remove the screws from the Bay Three cover.
b. Remove screw 5.
c. Push the device out of the computer.

a.



b.

c.



4. Drive Bay Cover
6. CD Device

- 4 Screws

Removing the Primary Hard Disk

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and turn it over.
2. Remove screws 1 and 2 (**Figure 2 - 4a**) and release the HDD connector cable 3.
3. Remove the HDD assembly from the bay.
4. Remove screws 5 and 8 (**Figure 2 - 4c**) and the HDD connector cable 3.

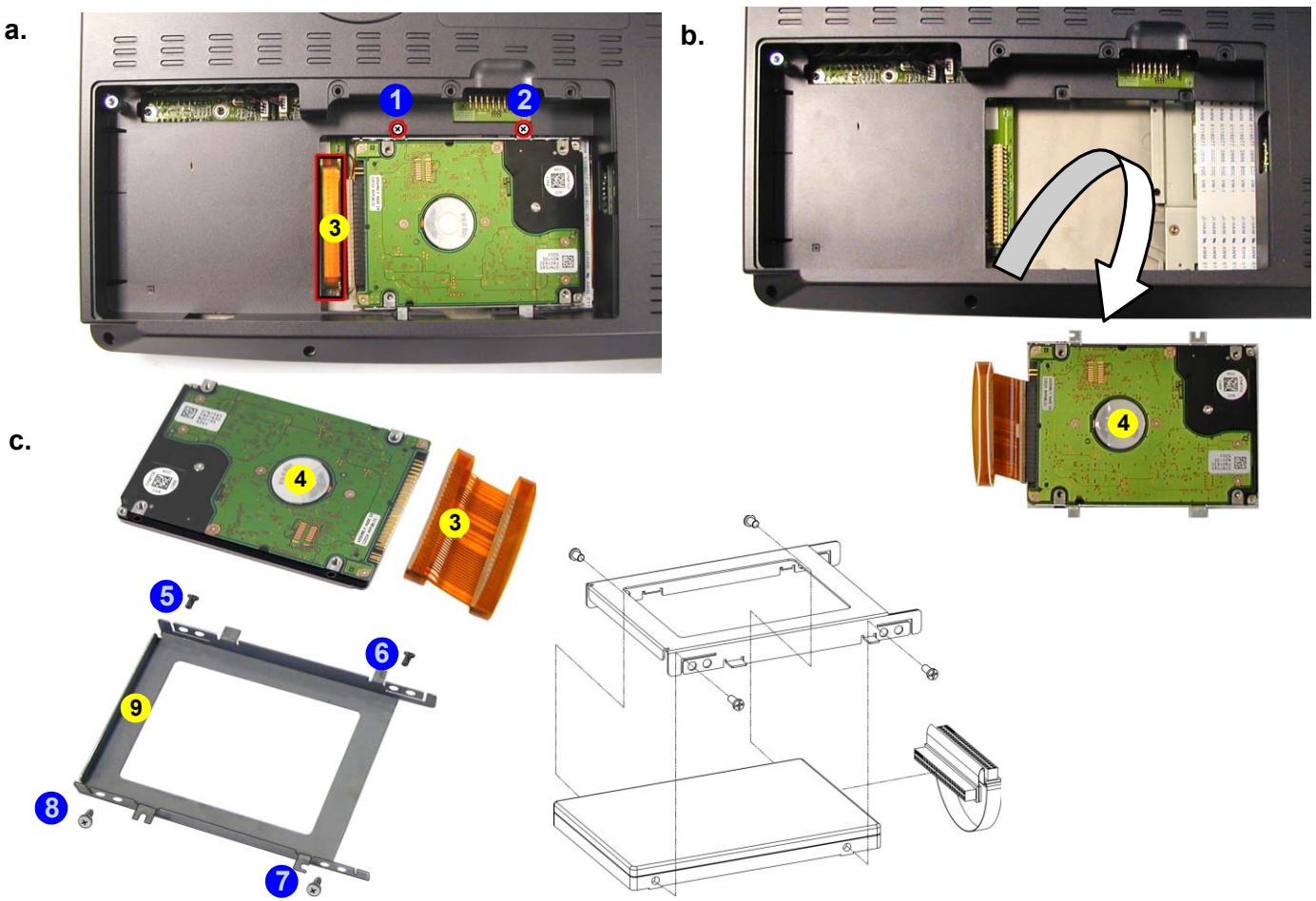


Figure 2 - 4
Primary Hard Disk Removal Sequence

a. Remove the 2 screws and release the HDD cable
b. Remove the HDD assembly.
c. Remove the 4 screws and HDD cable.

HDD Cables

The illustrated HDD cable may differ from the one in your model depending on the configuration purchased.

Be careful not to bend the pins on the hard disk when removing the cable.

3. HDD Cable
4. HDD
9. HDD Case

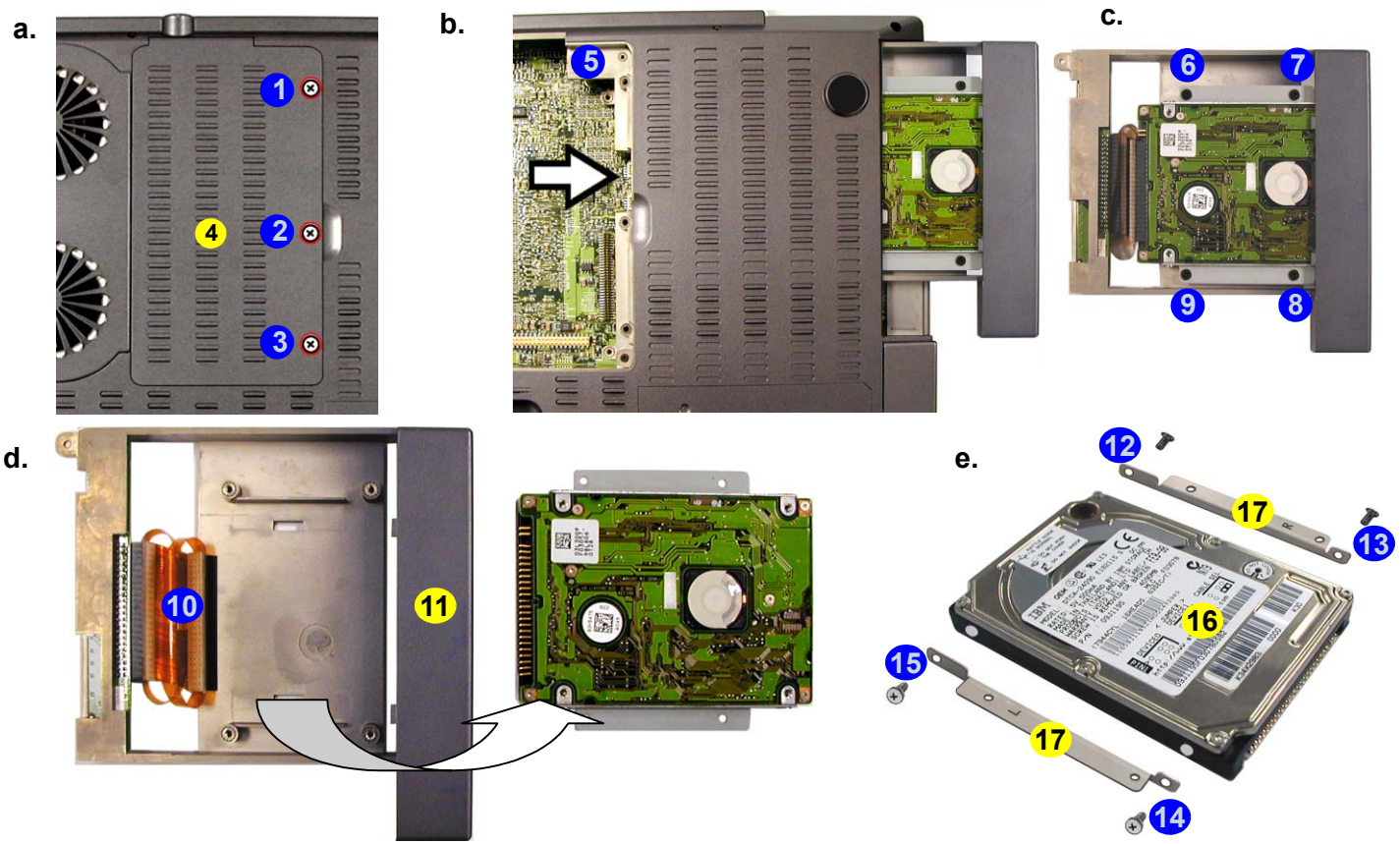
- 6 Screws

Removing the Hard Disk Drive in Bay One

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and turn it over.
2. Remove screws 1 - 3 in (**Figure 2 - 3a**), then lift the 3rd Modular Drive Bay cover off 4 and set it aside.
3. Remove screw 5 (**Figure 2 - 5b**), then gently push the device out of the bay (you may need to use a screwdriver to do this).
4. Remove screws 6 - 9 (**Figure 2 - 5c**), and disconnect cable 10 (**Figure 2 - 5d**), then take the HDD assembly out of the case.
5. Remove screws 12 - 15 (**Figure 2 - 5e**) from the HDD assembly (note the disk orientation within the brackets).

Figure 2 - 5
Bay One HDD Removal Sequence

a. Remove the screws from the Bay Three cover.
b. Remove screw 5 and push the device out of the computer.
c. Remove the 4 screws from the HDD case.
d. Disconnect the cable and remove the HDD assembly.
e. Remove the screws from the assembly brackets.



4. Drive Bay Cover
11. Drive Case
16. HDD
17. Assembly Brackets

- 9 Screws

Removing the Hard Disk Drive in Bay Three

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and turn it over.
2. Remove screws 1 - 3 in (**Figure 2 - 3a**), then lift the 3rd Modular Drive Bay cover off 4 and set it aside.
3. Remove screws 5 - 8 (**Figure 2 - 6b**), then lift the HDD assembly out of the bay.
4. Remove screws 9 - 12 (**Figure 2 - 6d**) to separate the HDD from the case, and disconnect cable 13 .

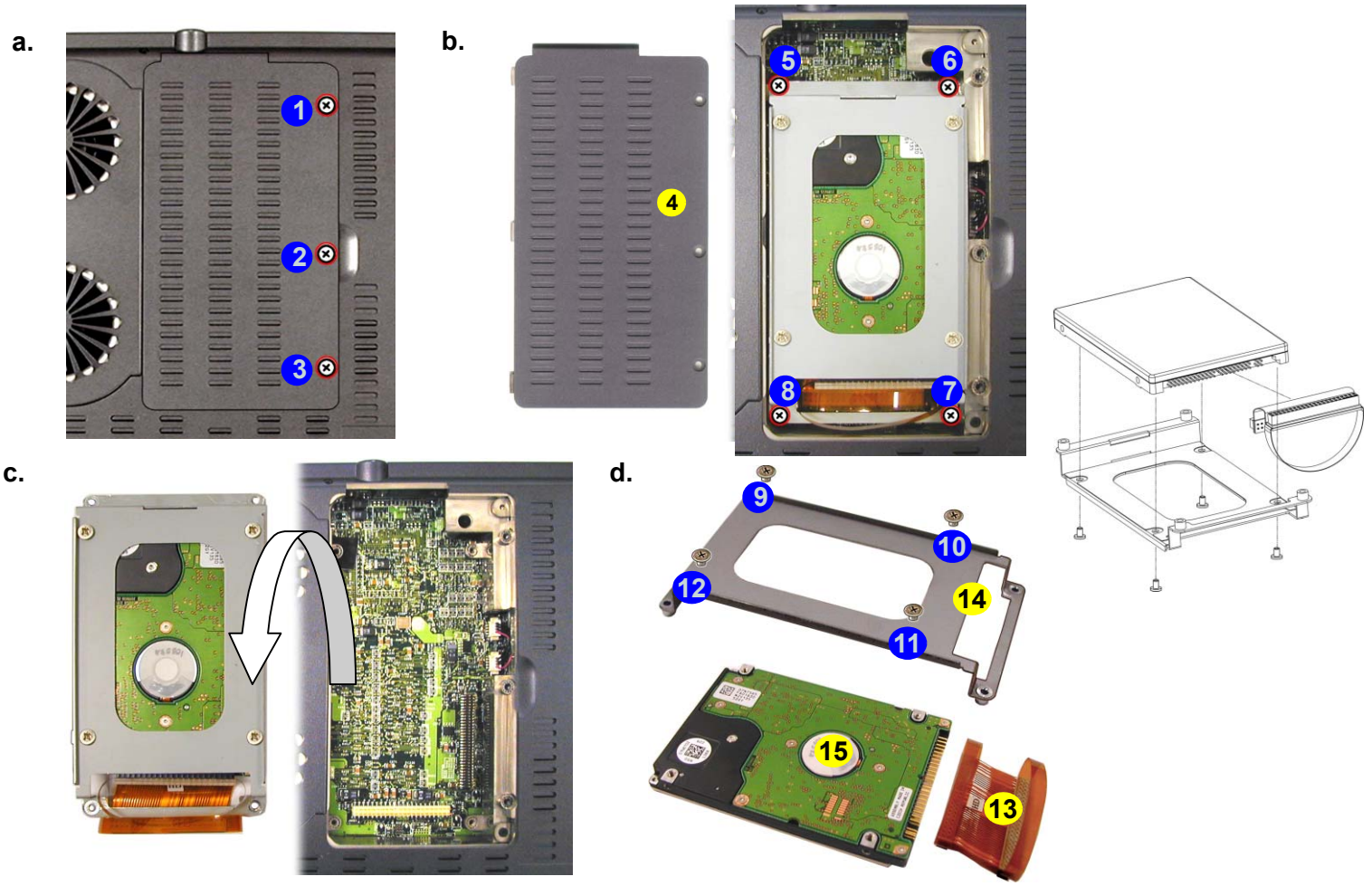


Figure 2 - 6
Bay Three HDD Removal Sequence

a. Remove the screws from the Bay Three cover.
b. Remove the 4 screws.
c. Lift the HDD assembly out of the bay.
d. Remove the 4 screws from the HDD case, and disconnect the cable.

4. Drive Bay Cover
13. HDD Cable
14. Drive Case
15. HDD

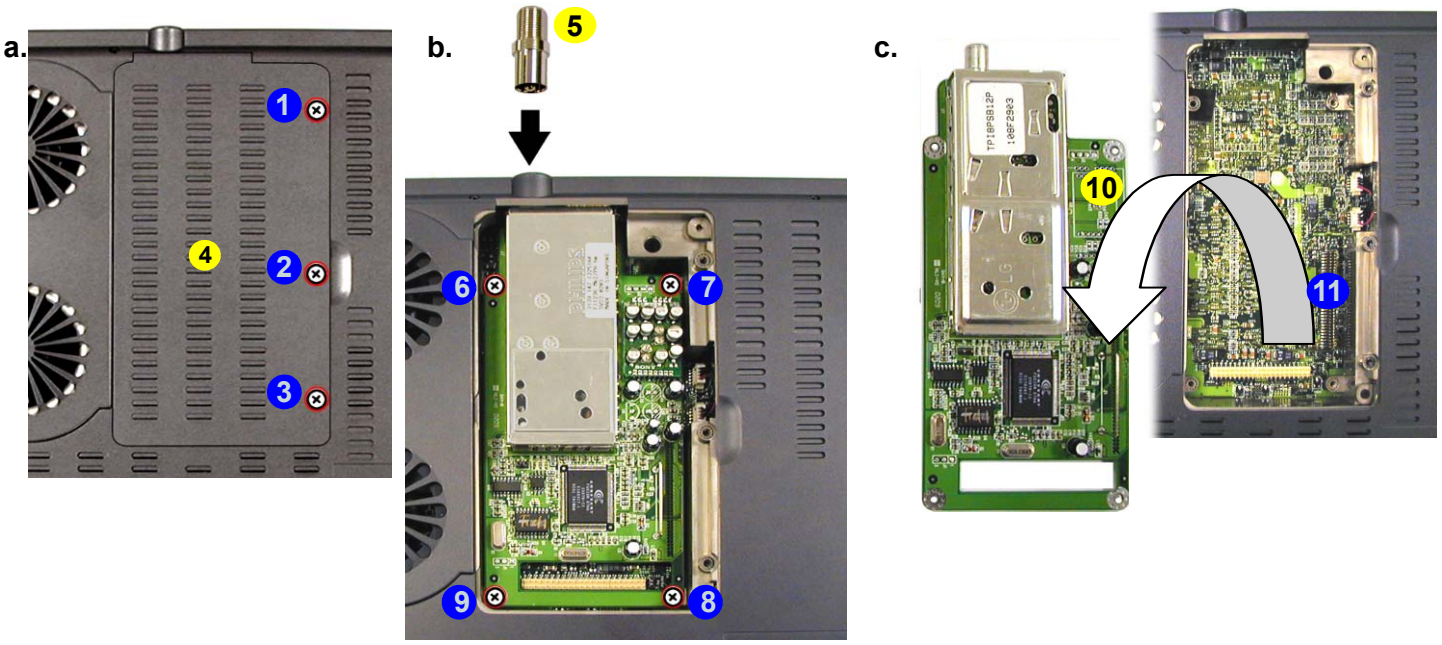
- 11 Screws

Figure 2 - 7
TV Tuner Module Removal Sequence

a. Remove the screws from the Bay Three cover.
b. Remove cable connector and the 4 screws.
c. Lift the TV Tuner module out of the computer.

Removing the TV Tuner Module

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and turn it over.
2. Remove screws 1 - 3 in (**Figure 2 - 3a**), then lift the 3rd Modular Drive Bay cover off 4 and set it aside.
3. Remove the cable connector 5 (**Figure 2 - 7b**).
4. Remove screws 6 - 9 (**Figure 2 - 7b**), and carefully lift the TV tuner module out of the computer.
5. When re-inserting the TV tuner, the module should align with the connecting pins at point 11 (push firmly down to make sure the module is secure).



4. Drive Bay Cover
5. Cable Connector
10. TV Tuner Module

- 7 Screws

Removing the Keyboard

1. Turn the computer **OFF** and remove the battery (*page 2 - 6*).
2. Press the **two** keyboard latches at the top of the keyboard to elevate the keyboard from its normal position (you may need to use a small screwdriver to do this).
3. Carefully lift the keyboard up and out, being careful not to bend the keyboard ribbon cable 3 (**Figure 2 - 8b**).
4. Disconnect the keyboard ribbon cable from the locking collar socket 4 (**Figure 2 - 8b**).

a.

b.

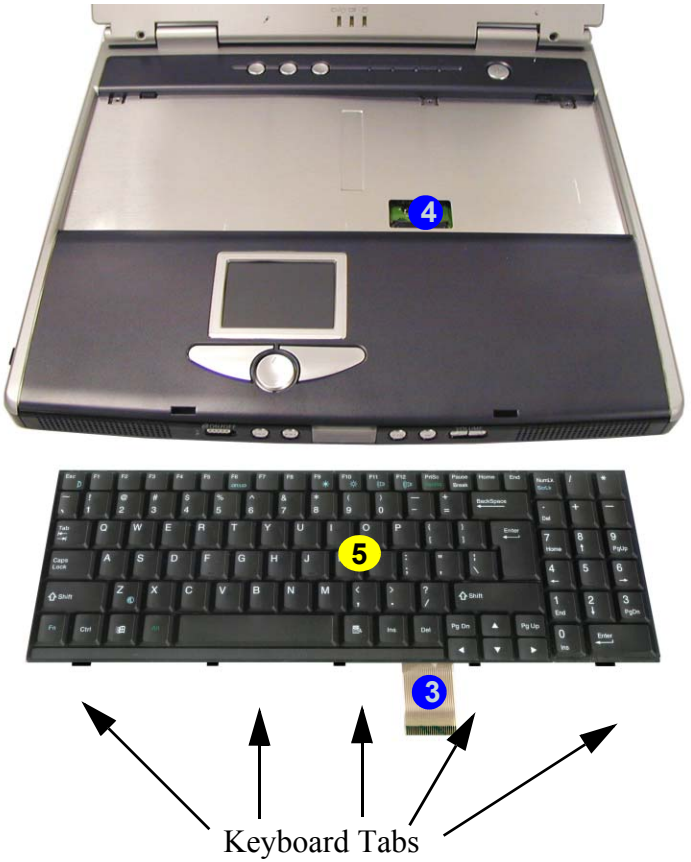


Figure 2 - 8
Keyboard Removal Sequence

a. Press the two latches to release the keyboard.
b. Lift the keyboard out and disconnect the cable from the locking collar.

Re-Inserting the Keyboard

When re-inserting the keyboard firstly align the **five** keyboard tabs (**Figure 2 - 8b**) at the bottom of the keyboard with the slots in the case.

5. Keyboard

Figure 2 - 9
Memory Removal Sequence

a. Remove the screws from the shielding plate.
b. Remove the shielding plate.
c. Pull the latches on the memory sockets to release the module(s). When the module pops up, lift it out.

Contact Warning

Be careful not to touch the metal pins on the module's connecting edge. Even the cleanest hands have oils which can attract particles, and degrade the module's performance.

4. Shielding Plate
7. Memory Module(s)

- 3 Screws

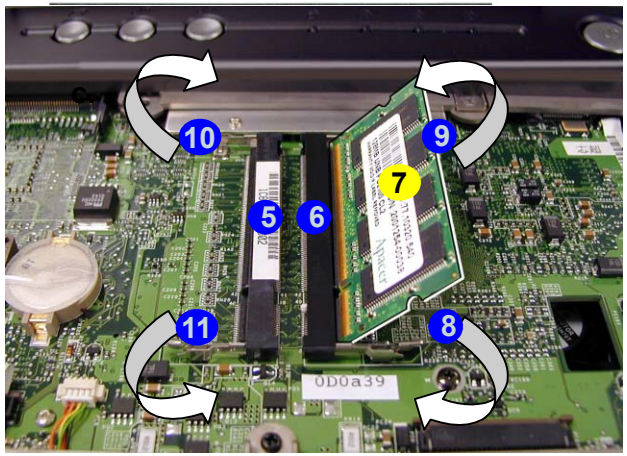
Removing the System Memory

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and keyboard (*page 2 - 13*).
2. Remove screws 1 - 3 (**Figure 2 - 9a**) from the shielding plate 4 (**Figure 2 - 9b**), and lift the plate up off the computer.
3. Locate the memory sockets 5 & 6 (**Figure 2 - 9c**), and gently pull the latches 8 & 9 (and/or 10 & 11) on the memory socket toward the front and rear of the computer as indicated.
4. The module 7 (**Figure 2 - 9c**) will pop-up, and you can remove it.
5. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.

a.

b.

c.



Removing the CPU

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and turn it over.
2. Remove screws 1 - 3 (**Figure 2 - 10a**), and lift the cover 5 (**Figure 2 - 10c**) up off the computer (it may be necessary to lift up the cover sticker 4 (**Figure 2 - 10b**) in order to reveal the heat sink caution label).

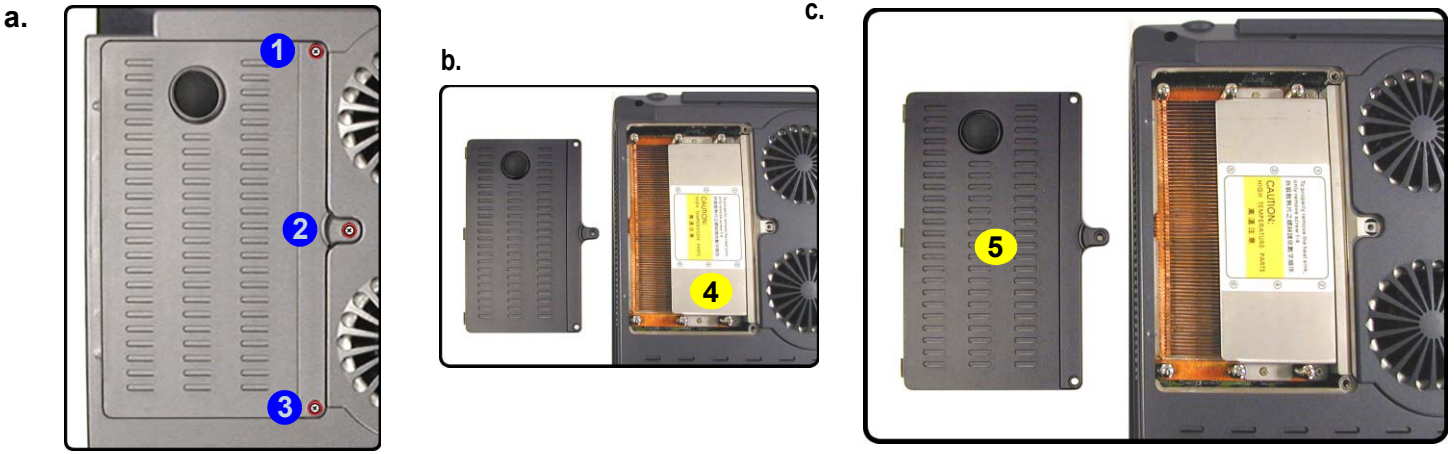


Figure 2 - 10
Processor Removal Sequence

a. Remove the three screws from the CPU cover.
b. Remove the CPU cover
c. Lift up the cover sticker if necessary.

3. Remove the **four** screws from the heat sink in order indicated on the label, and lift out the heat sink 6 **Figure 2 - 11**.

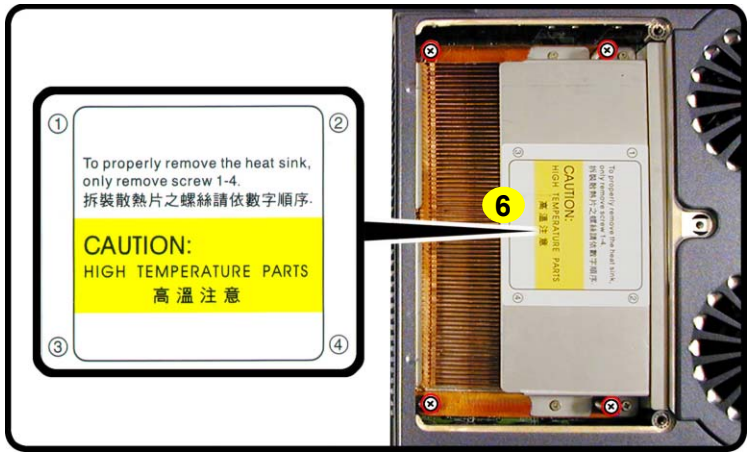


Figure 2 - 11
Processor Removal Sequence (cont'd)

Remove the four screws from the heat sink in **the order indicated**.

Caution

The heat sink, and CPU area in general, contains parts which are subject to high temperatures. Allow the area time to cool before removing these parts.

Reassembly Screw Order

When replacing the heat sink, make sure you insert the screws in the same order indicated on the label.

5. CPU Cover
6. Heat Sink

- 7 Screws

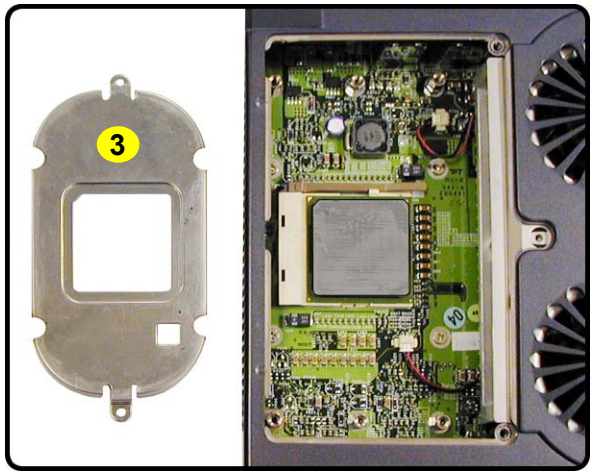
Figure 2 - 12
Processor Removal Sequence (cont'd)

a. Remove the screws from the bracket.
b. Lift the bracket up.
c. Raise the latch to unlock the CPU.
d. Lift the CPU out of the socket.

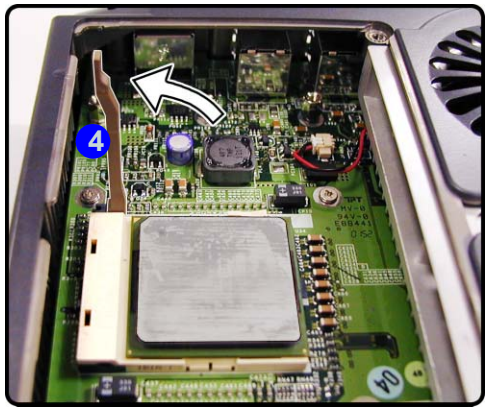
4. Remove screws 1 & 2 (**Figure 2 - 12a**) from the CPU bracket, then lift the bracket 3 off the CPU (**Figure 2 - 12b**).
5. Fully raise latch 4 in the direction indicated in **Figure 2 - 12c** to unlock the CPU.
6. Carefully (it may be hot) lift the CPU 5 up out of the socket. (**Figure 2 - 12d**).
7. When re-inserting the CPU pay careful attention to the pin alignment, it will fit only one way (don't force it!).

a.

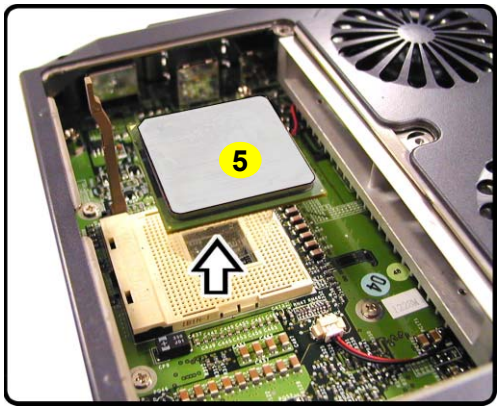
b.



c.



d.



3. CPU Bracket
5. CPU

- 2 Screws

Removing the Switch Keyboard Assembly

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*), keyboard (*page 2 - 13*), and memory (*page 2 - 14*).
2. Carefully slide the center cover assembly 1 (**Figure 2 - 13a**) forward.
3. Carefully disconnect the cable at point 2 (**Figure 2 - 13b**) and lift the center cover assembly out of the computer.
4. Remove screws 3 - 7 (**Figure 2 - 13c**) and disconnect the cable at point 8, then lift up the switch keyboard assembly 9.

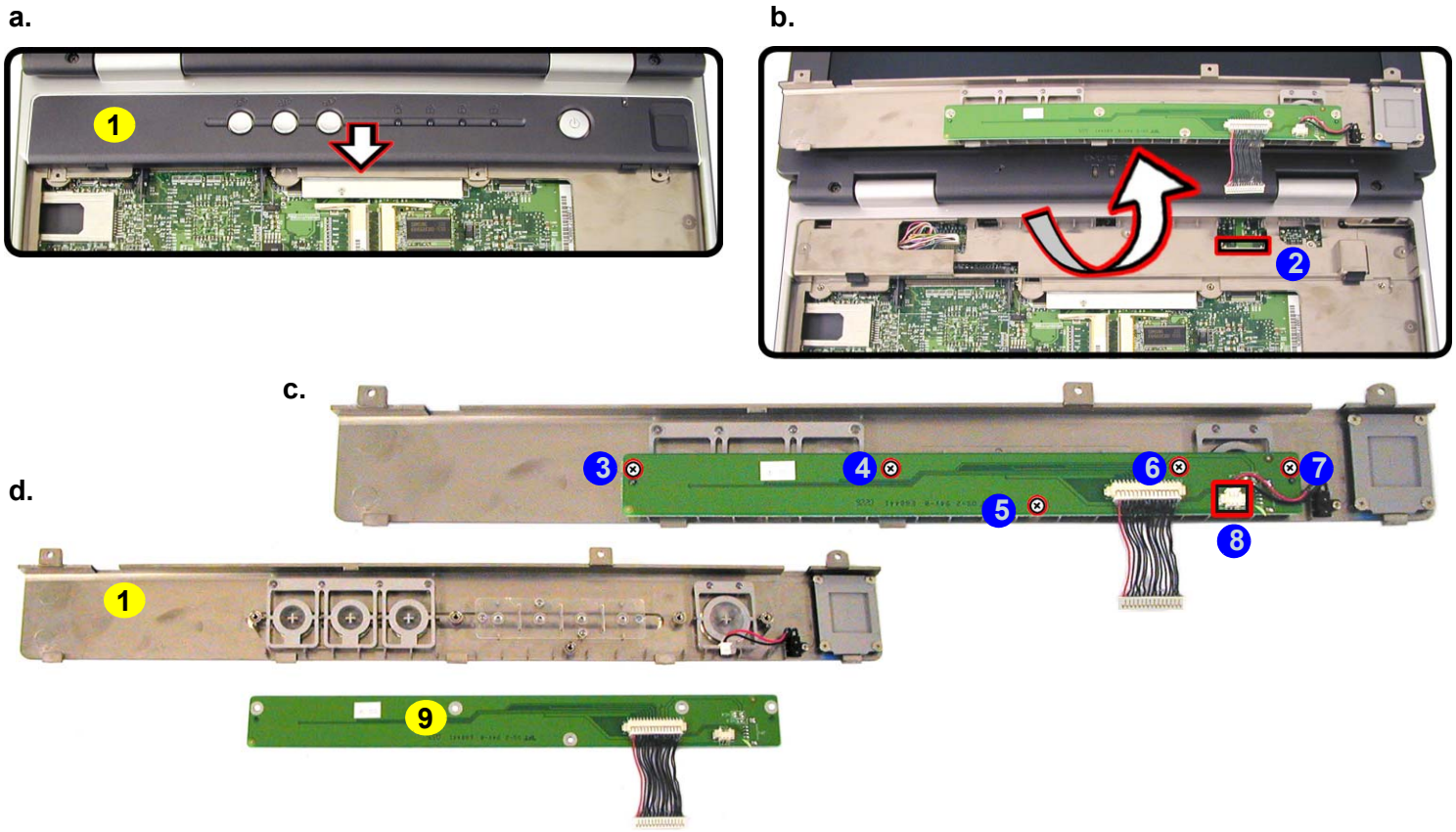


Figure 2 - 13
Switch Keyboard Assembly Removal Sequence

a. Slide the center cover assembly forward.
b. Disconnect the cable and lift off the cover assembly.
c. Remove the screws and disconnect the cable from the switch keyboard assembly.
d. Lift the switch keyboard assembly off the center cover assembly.

1. Center Cover Assembly
9. Switch Keyboard Assembly

- 5 Screws

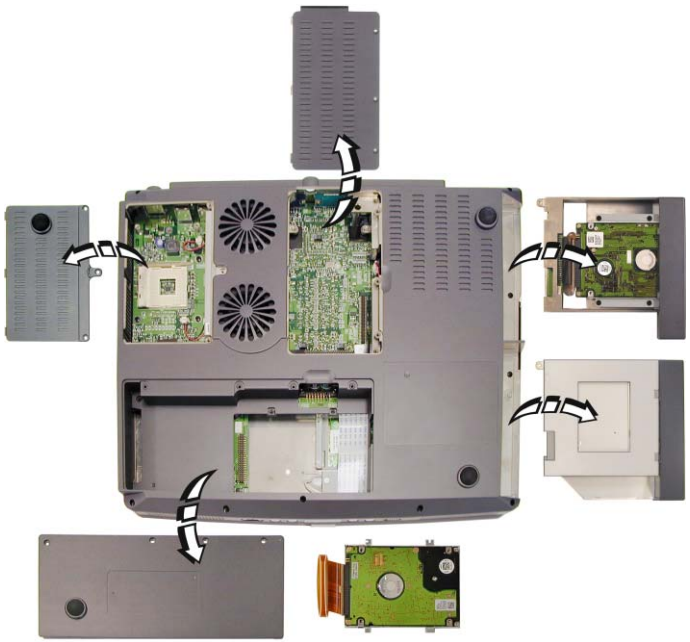
Removing the Bottom Case Assembly

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*), **and all applicable devices** listed in the previous pages (from *page 2 - 6* to *page 2 - 17*,).
2. Remove screws 1 - 14 (**Figure 2 - 14b**) from the bottom of the computer.

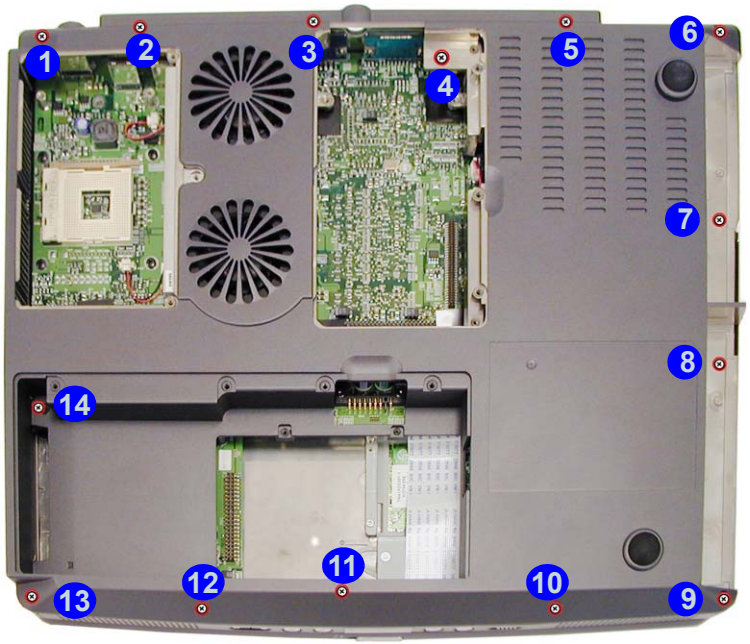
Figure 2 - 14
Bottom Case Assembly Removal Sequence

a. Remove all the previously listed devices and components prior to this page (as applicable).
b. Remove the 14 screws from the bottom of the computer.

a.



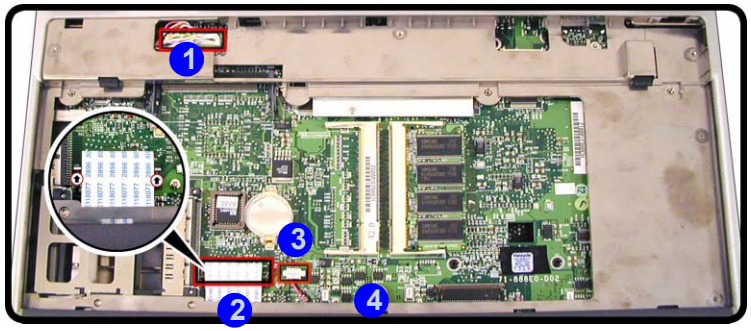
b.



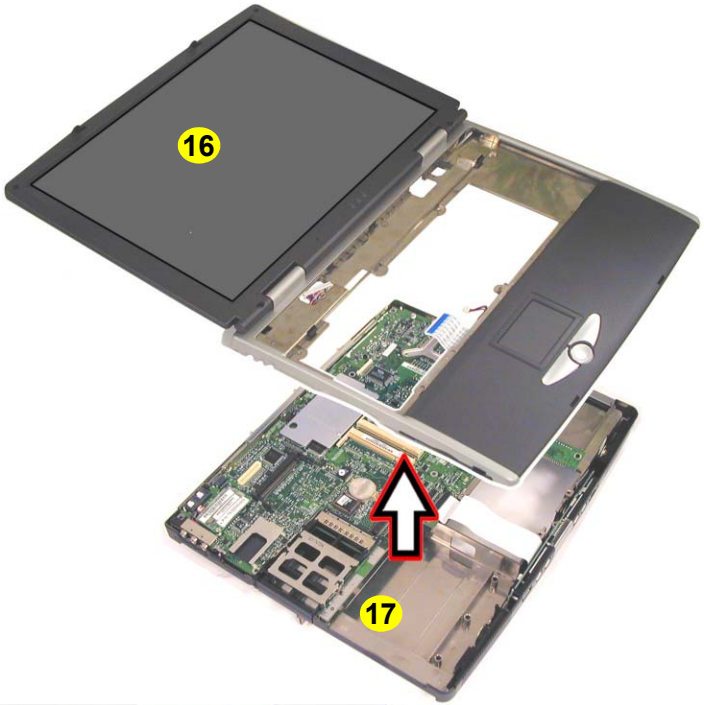
- 14 Screws

3. Turn the computer back over and disconnect cables 1 - 3 (**Figure 2 - 15a**), and remove screw 4.
4. Remove screws 5 - 15 (**Figure 2 - 15b**) from the rear of the computer.
5. Carefully ease the top case assembly 16 (**Figure 2 - 15c**) off the bottom case assembly 17 .

a.



c.



b.

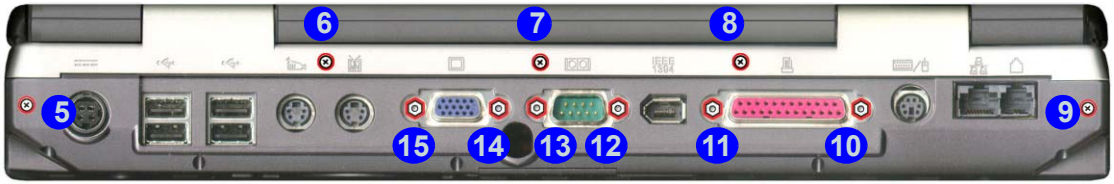


Figure 2 - 15
Bottom Case Assembly Removal Sequence (cont'd)

a. Disconnect the cables and remove the screw from inside the top case assembly.
b. Remove the 11 screws from the rear of the computer
c. Carefully lift the top case assembly up and off the bottom case assembly.

16.Top Case Assembly
17.Bottom Case Assembly

- 12 Screws

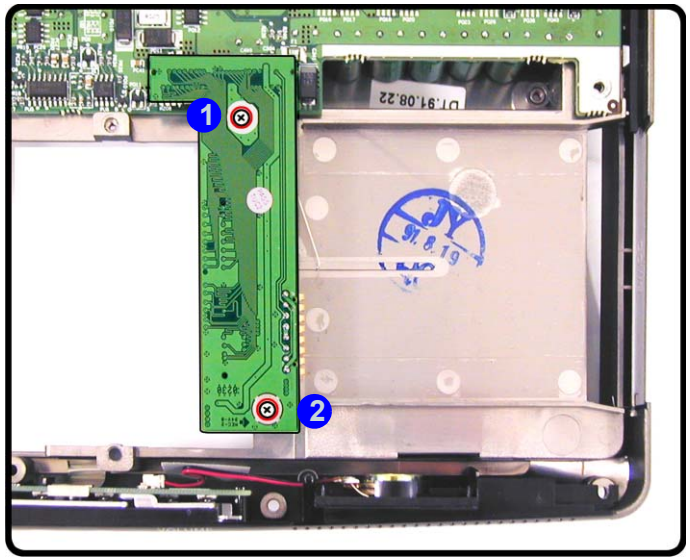
Removing the HDD & MP3 Converter Board

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*), and the bottom case assembly (*page 2 - 18*).
2. Remove screws 1 & 2 (**Figure 2 - 16a**) from the HDD & MP3 converter board.
3. Lift the converter board 3 (**Figure 2 - 16b**) off the connector 4 on the mainboard.

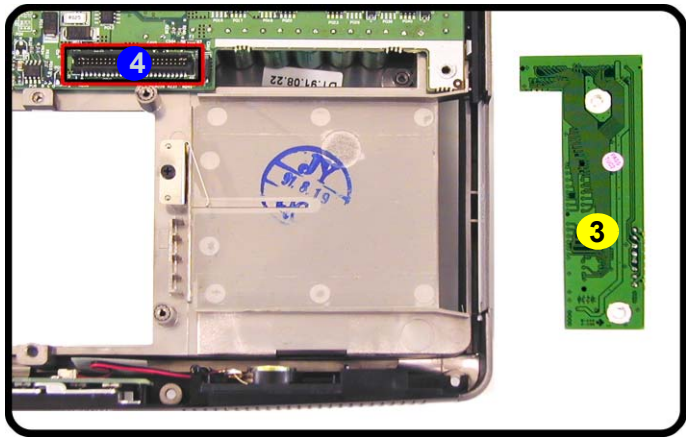
Figure 2 - 16
HDD & MP3 Converter Board Removal Sequence

a. Remove the 2 screws.
b. Lift the HDD & MP3 converter board off the connector.

a.



b.



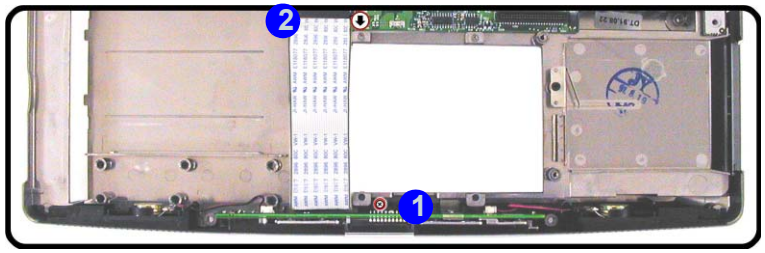
3. HDD & MP3 Converter Board

- 2 Screws

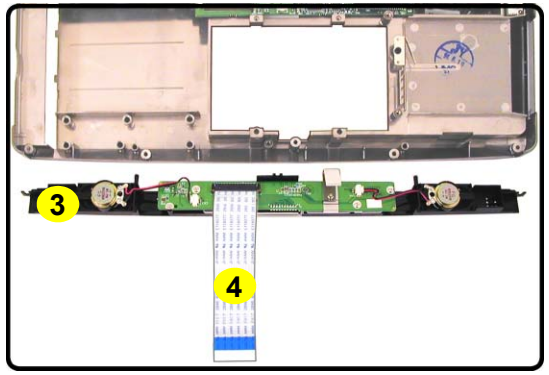
Removing the Audio Board

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*), and the bottom case assembly (*page 2 - 18*).
2. Remove screw 1 (**Figure 2 - 17a**) and disconnect cable 2 from the mainboard.
3. Lift the Audio DJ bezel module 3 (**Figure 2 - 17b**) out off the computer, and remove cable 4.
4. Remove screws 5 - 10 (**Figure 2 - 17c**), and disconnect cables 11 & 12.
5. Lift the audio board 13 (**Figure 2 - 17d**) off the Audio DJ bezel.

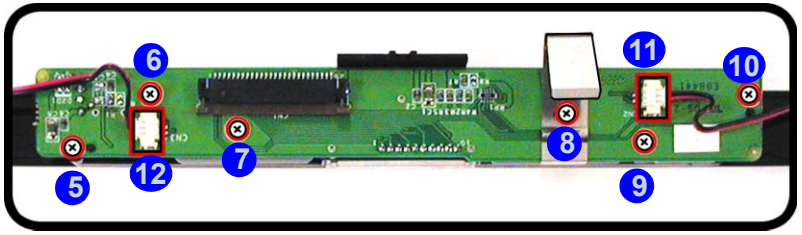
a.



b.



c.



d.

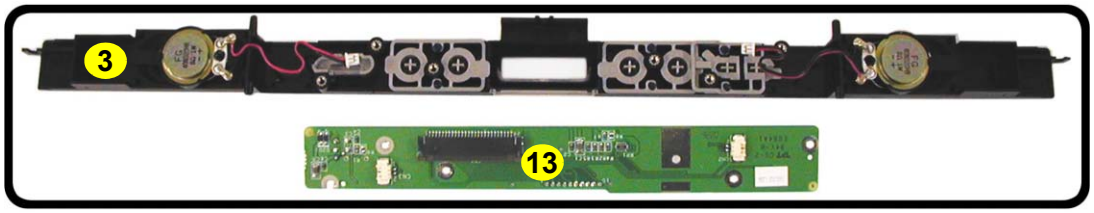


Figure 2 - 17
Audio Board Removal Sequence

a. Remove the screw and disconnect the cable.
b. Lift the Audio DJ bezel out of the computer and remove the connector cable.
c. Remove the screws and cables from the rear of the audio board.
d. Remove the audio board from the Audio DJ bezel.

3. Audio DJ Bezel
4. Audio DJ Cable
13. Audio Board

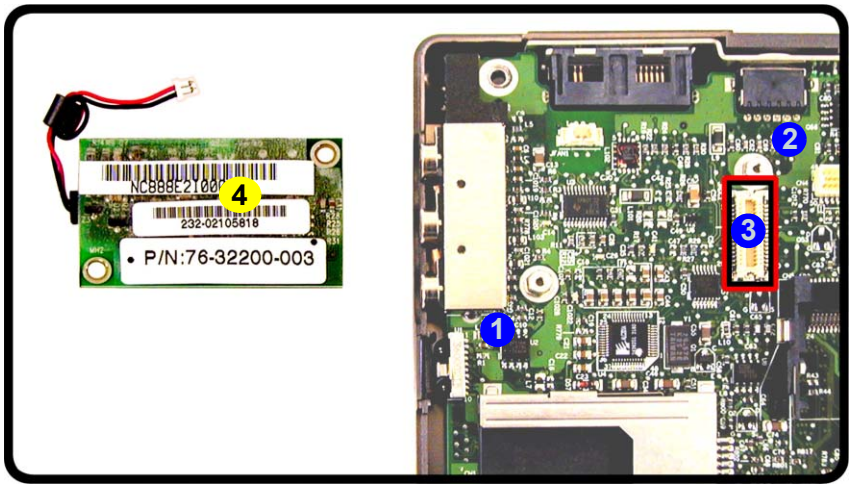
- 7 Screws

Removing the Modem Module

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*), and the bottom case assembly (*page 2 - 18*).
2. Remove screws 1 - 2 (**Figure 2 - 18**) and lift the modem module 4 off the mainboard modem connector 3.

Figure 2 - 18
Modem Module Removal Sequence

a. Remove the screws and lift the modem module off the mainboard.



4. Modem Module

- 2 Screws

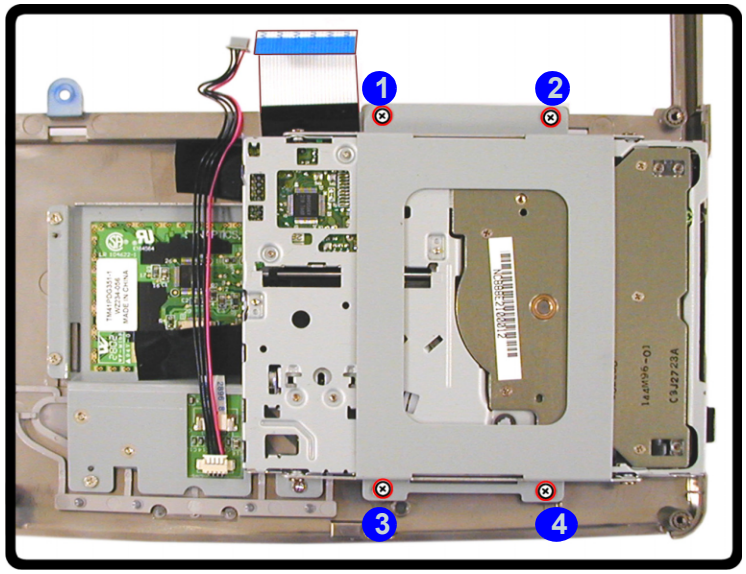
Removing the Floppy Disk Drive Assembly

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and the bottom case assembly (*page 2 - 18*).
2. Remove screws 1 - 4 (**Figure 2 - 19a**) on the floppy disk drive assembly 5 (located under the top case assembly).
3. Lift the floppy disk drive assembly off the top case.

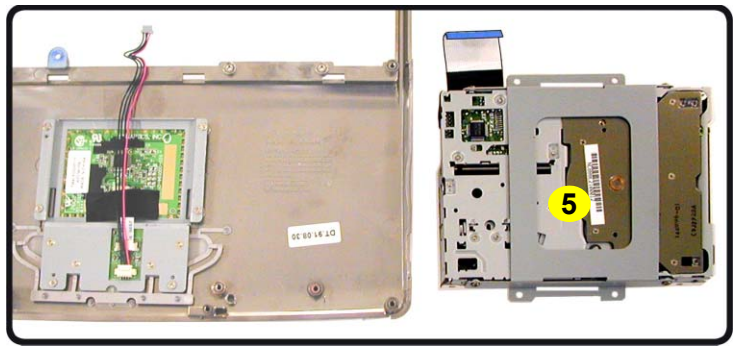
Figure 2 - 19
Floppy Disk Drive Assembly Removal Sequence

a. Remove the 4 screws.
b. Lift the FDD assembly off the top case.

a.



b.



5. FDD Assembly

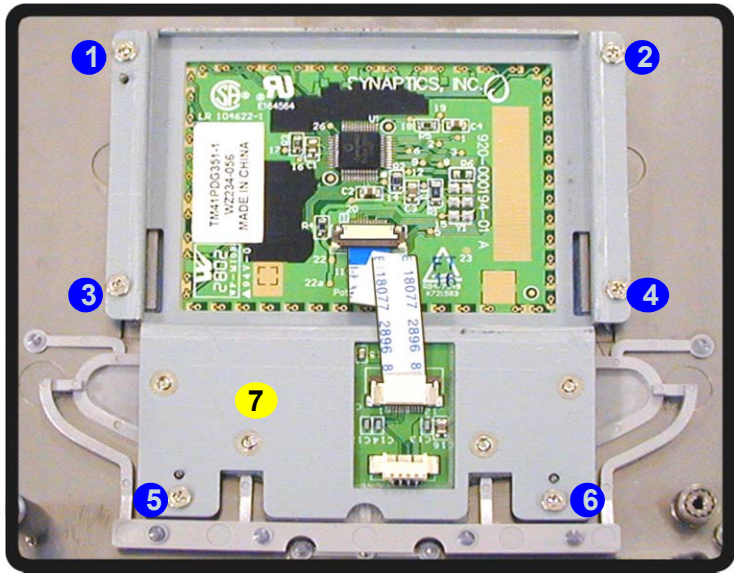
4 Screws

Figure 2 - 20
TouchPad Module Removal Sequence

Remove the 6 screws and lift the TouchPad module off the top case.

Removing the TouchPad Module

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*), the bottom case assembly (*page 2 - 18*) and the floppy disk drive assembly (*page 2 - 23*).
2. Remove screws 1 - 6 (**Figure 2 - 20**) on the TouchPad module 7.
3. Lift the TouchPad module off the top case.



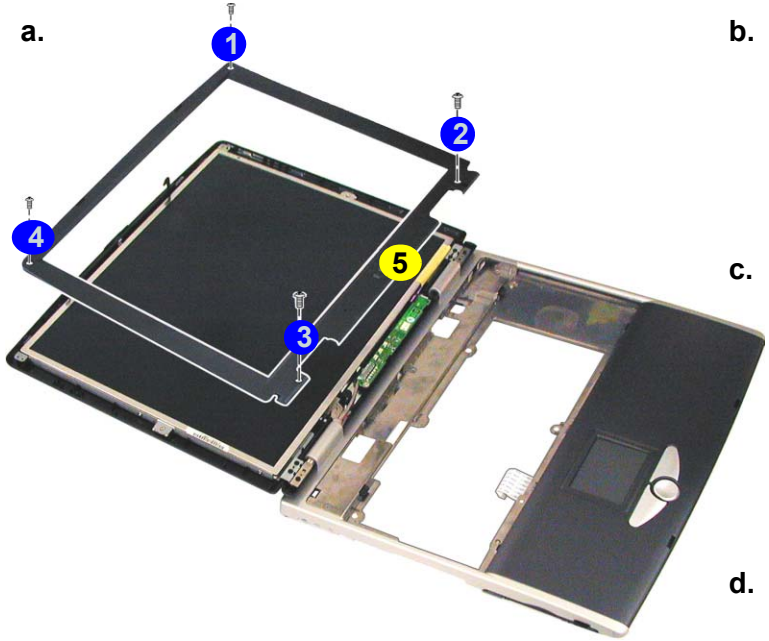
7. TouchPad Module

- 6 Screws

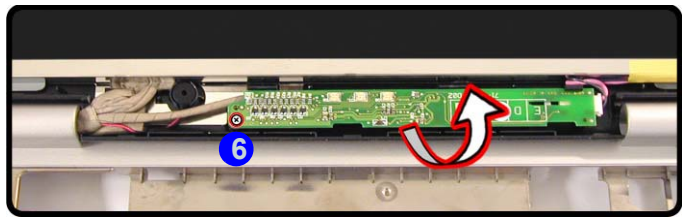
Removing the Inverter Board

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*) and the bottom case assembly (*page 2 - 18*).
2. Remove any rubber covers and screws 1 - 4 (**Figure 2 - 21a**), then run your finger around the middle of the frame to carefully unsnap the LCD front panel module 5 from the back.
3. Remove screw 6 (**Figure 2 - 21b**) from the inverter, and carefully lift the inverter board up slightly.
4. Disconnect cables 7 & 8 (**Figure 2 - 21c**) from the inverter, then remove the inverter 9 (**Figure 2 - 21d**) from the top case assembly.

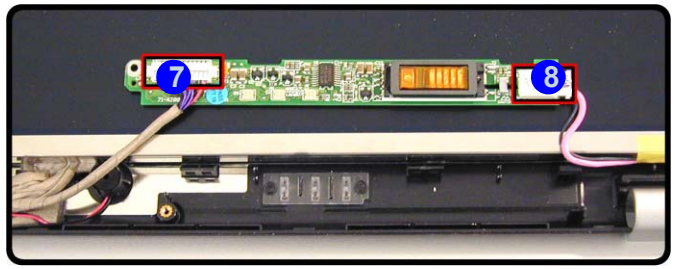
a.



b.



c.



d.

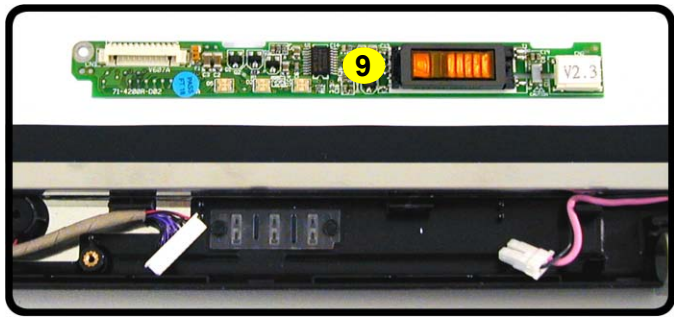


Figure 2 - 21
Inverter Board Removal Sequence

a. Remove the 4 screws and unsnap the LCD front panel module from the back.
b. Remove the screw from the inverter board and lift the board up slightly.
c. Disconnect the cables from the inverter.
d. Remove the inverter.

5. LCD Front Panel
9. Inverter Board

- 5 Screws

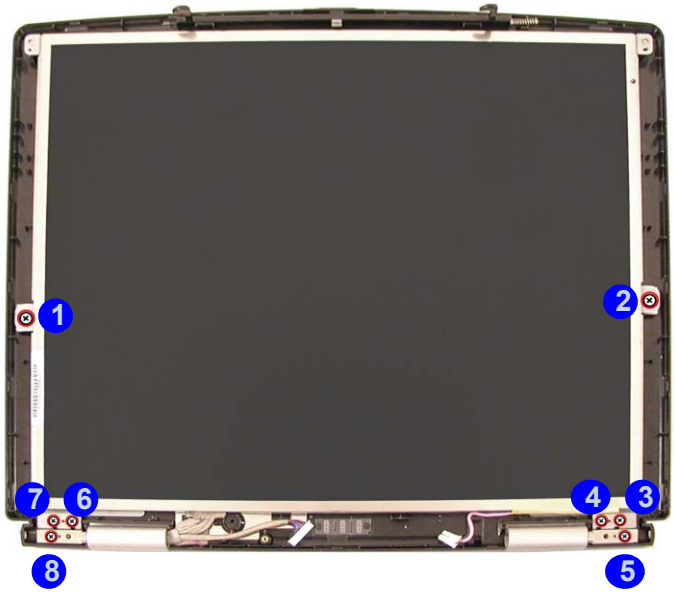
Removing the LCD

1. Turn the computer **OFF**, remove the battery (*page 2 - 6*), the bottom case assembly (*page 2 - 18*) and the inverter board (*page 2 - 25*).
2. Remove screws 1 - 8 (**Figure 2 - 22a**) from the LCD.
3. Disconnect the cable at point 9 (**Figure 2 - 22b**), then lift the LCD 10 up off the display back panel 11 and top case module.
4. Remove screws 13 - 18 (**Figure 2 - 22c**) from the LCD brackets 19 & 20 , then separate the LCD from the brackets.

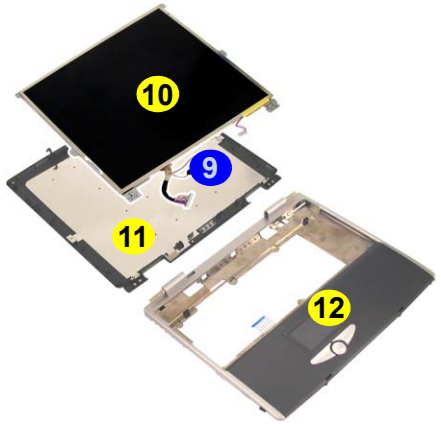
Figure 2 - 22
LCD Removal Sequence

a. Remove the 8 screws from the LCD.
b. Disconnect the cable and lift up the LCD.
c. Remove the screws and separate the brackets from the LCD.

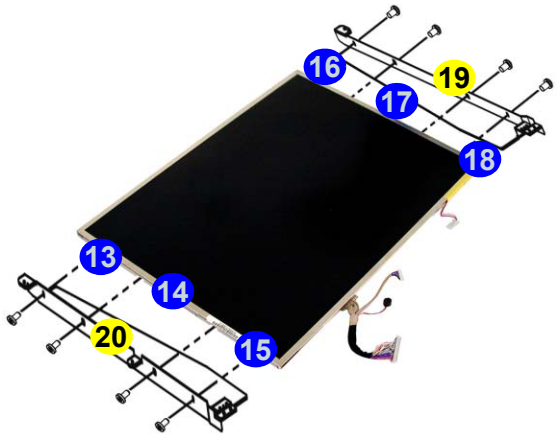
a.



b.



c.



10.LCD
11.Display Back Panel
12.Top Case Module
19.LCD Bracket
20.LCD Bracket

- 14 Screws

Appendix A:Part Lists for D800P

This appendix breaks down the **D800P** model notebook's construction into a series of illustrations. The component part numbers are indicated in the tables opposite the drawings.

Note: This section indicates the *manufacturer's* part numbers. Your organization may use a different system, so be sure to cross-check any relevant documentation.

Note: Some assemblies may have parts in common (especially screws). However, the part lists DO NOT indicate the total number of duplicated parts used.

Note: Be sure to check any update notices. The parts shown in these illustrations are appropriate for the system at the time of publication. Over the product life, some parts may be improved or re-configured, resulting in *new* part numbers.

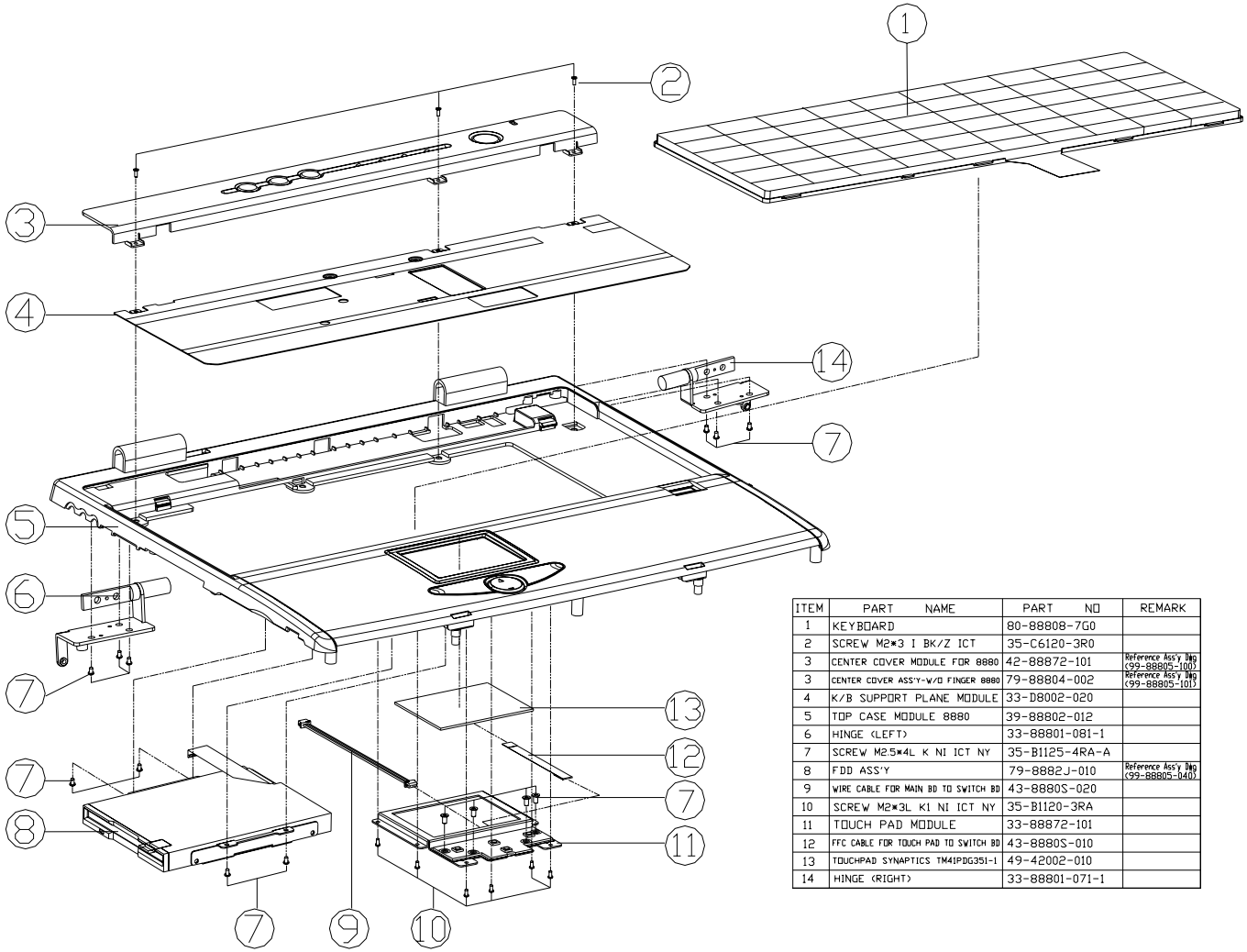
Part List Illustration Location

The following table indicates where to find the appropriate part list illustration.

Table A- 1
Part List Illustration Location

Part	D800P	Part	D800P
Top	*page A - 3*	DVD-ROM Drive	*page A - 13*
Bottom	*page A - 4*	Audio DJ	*page A - 14*
LCD 15"	*page A - 5*	Floppy Disk Drive	*page A - 15*
LCD 16"	*page A - 6*	First Hard Disk Drive	*page A - 16*
Battery	*page A - 7*	Second Hard Disk Drive	*page A - 17*
Center Cover	*page A - 8*	Third Hard Disk Drive	*page A - 18*
Center Cover Finger	*page A - 9*	Third Hard Disk - Dummy	*page A - 19*
CD-ROM Drive	*page A - 10*	IP Sharing Module	*page A - 20*
CD-RW Drive	*page A - 11*	MP3 Player	*page A - 21*
Combo Drive	*page A - 12*	Card Reader	*page A - 22*

Top



ITEM	PART NAME	PART NO	REMARK
1	KEYBOARD	80-88808-7G0	
2	SCREW M2*3 I BK/Z ICT	35-C6120-3R0	
3	CENTER COVER MODULE FOR 8880	42-88872-101	Reference Ass'y Dwg (99-88805-100)
3	CENTER COVER ASS'Y-W/O FINGER 8880	79-88804-002	Reference Ass'y Dwg (99-88805-101)
4	K/B SUPPORT PLANE MODULE	33-D8002-020	
5	TOP CASE MODULE 8880	39-88802-012	
6	HINGE (LEFT)	33-88801-081-1	
7	SCREW M2.5*4L K NI ICT NY	35-B1125-4RA-A	
8	FDD ASS'Y	79-8882J-010	Reference Ass'y Dwg (99-88805-040)
9	WIRE CABLE FOR MAIN BD TO SWITCH BD	43-8880S-020	
10	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
11	TOUCH PAD MODULE	33-88872-101	
12	FFC CABLE FOR TOUCH PAD TO SWITCH BD	43-8880S-010	
13	TOUCHPAD SYNAPTICS TM41PDG351-1	49-42002-010	
14	HINGE (RIGHT)	33-88801-071-1	

Figure A-1
Top

Bottom

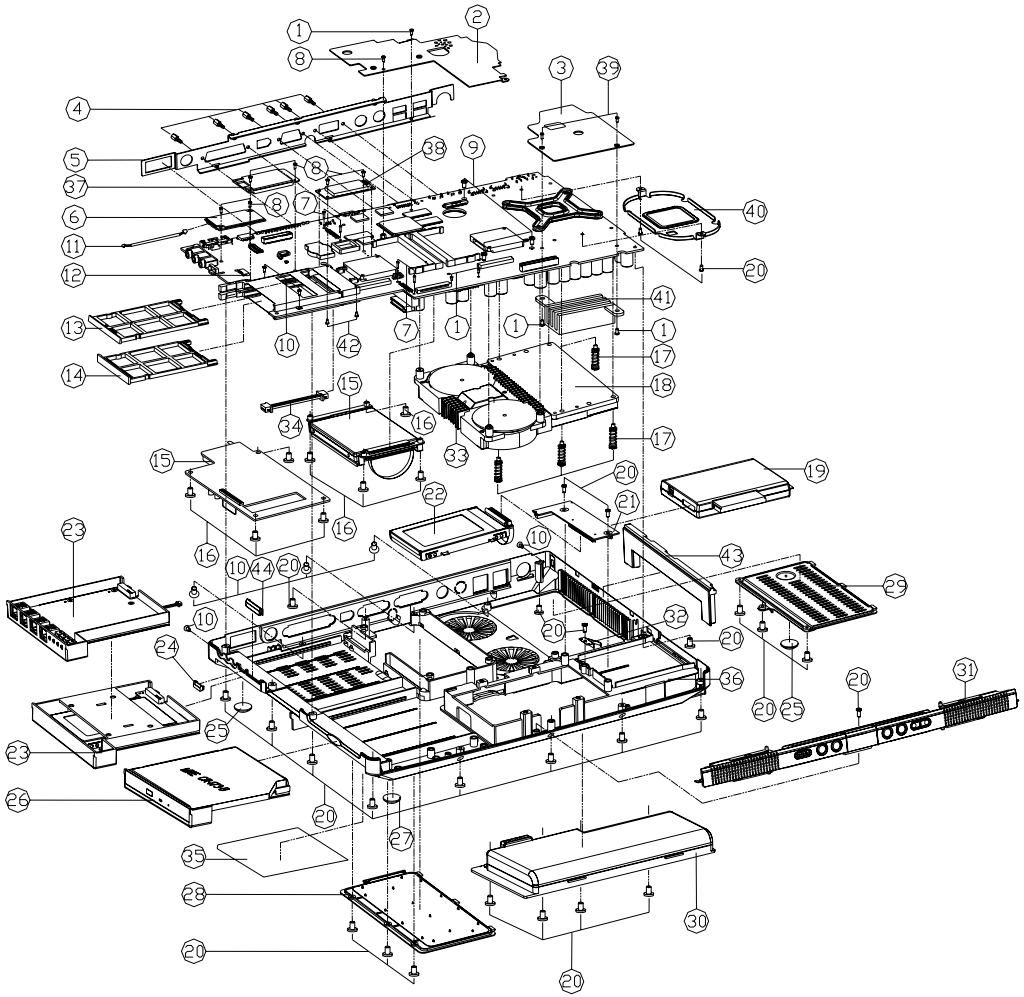
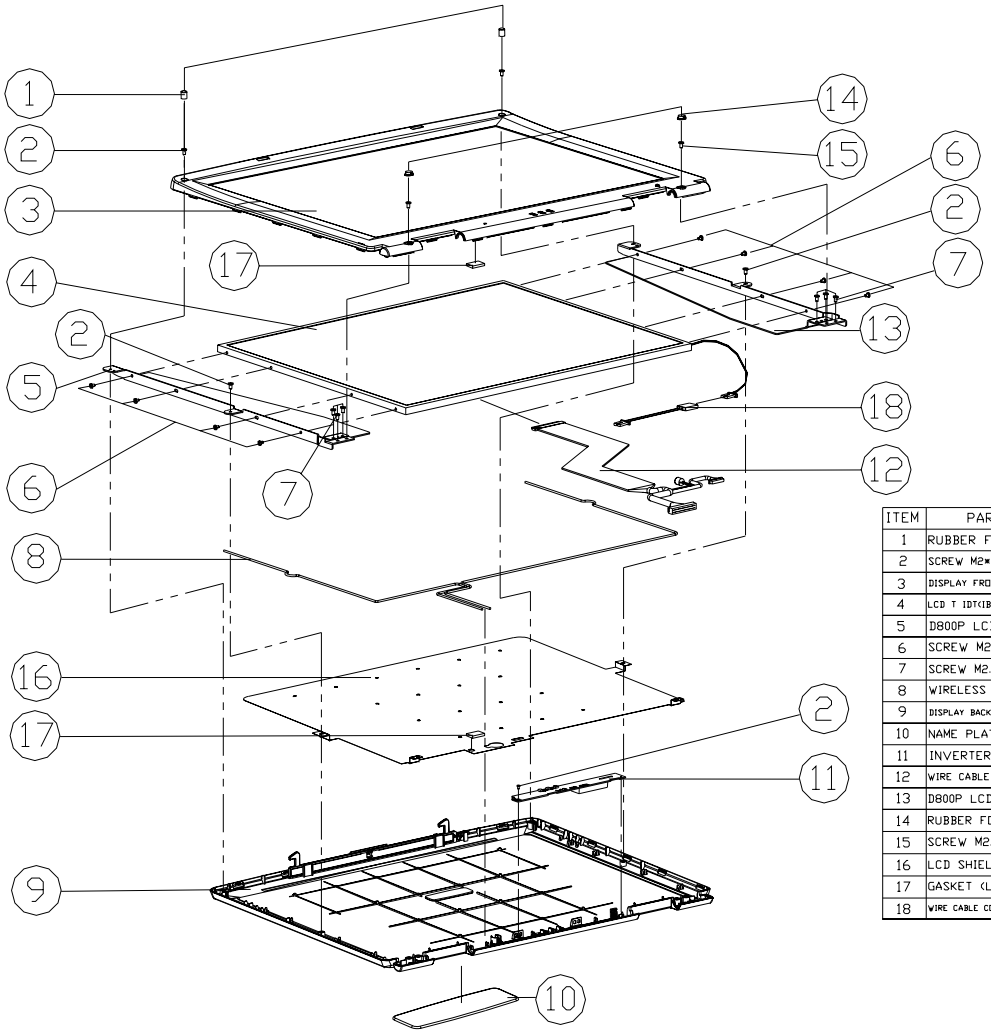


Figure A-2
Bottom

ITEM	PART NAME	PART NO	REMARK
1	SCREW M2.5*6L K BZ ICT	35-82125-6R0	
2	VGA HEAT SINK	31-D800N-011	
3	MDS HEAT SINK	31-D800N-021	
4	HEX STUD (SUM22 NI-PL) 11MM	34-07009-011-A	
5	I/O BRACKET D800	33-D800S-010	
6	(INCLUDE TEL.CABLE) MDC MODEM MODULE	76-32200-003	
7	SCREW M2*10L B NI ICT	35-41120-100	
8	SCREW M2*3L K1 NI NY	35-81120-3RA	
9	SCREW M2.5*4L B BNI ICT	35-49125-4R0	
10	SCREW M2*4L P BN ICT	35-09120-4R0	
11	CABLE FOR MDC 30MM	43-8880Z-011-1	
12	MAIN BOARD	77-D8000-D0X	
13	CARBUS UP HOUSING 8880	42-88843-010	
14	CARBUS DOWN HOUSING 8880	42-88843-020	
15	TV TUNNER ASS'Y(OPTION)	79-8882T-000	Reference Ass'y No (99-88805-060)
16	SCREW M2.5*6L K BZ ICT	35-82125-6R0	
17	SCREW M2.5*0.45P*17 d=3.5 L=17.5 S=2.5 B	35-41025-175	
18	HEAT SINK MODULE FOR 888E	31-8887N-103	
19	CARD READER ASS'Y D800P	79-D800R-010	Reference Ass'y No (99-D8005-090)
20	SCREW M2.5*6LK BZ ICT	35-82125-6R0	
21	HDD & MP3 CONVERTER BOARD	77-8880N-D0X	
22	FIRST HDD ASS'Y	79-8882I-010	Reference Ass'y No (99-88805-051)
23	SECOND HDD(W/O) ASS'Y	79-8882I-020	Reference Ass'y No (99-88805-052)
23	THIRD HDD(W/O) ASS'Y	79-8882I-030	Reference Ass'y No (99-88805-053)
23	THIRD DUMMY HDD CASE ASS'Y	79-8882I-040	Reference Ass'y No (99-88805-053-1)
23	IP SHARE ASS'Y(OPTION)	79-8882U-010	Reference Ass'y No (99-88805-056)
23	CD-RW ASS'Y(OPTION)	79-8882W-010	Reference Ass'y No (99-88805-054)
23	COMBO ASS'Y(OPTION)	79-8882X-010	Reference Ass'y No (99-88805-055)
24	IR LENS 8880	42-88813-010	
25	BOTTOM CASE BACK RUBBER FOR 8880	47-88823-020	
26	CD-ROM ASS'Y (OPTION)	79-8882W-010	Reference Ass'y No (99-88805-061)
26	DVD ASS'Y (OPTION)	79-8882V-010	Reference Ass'y No (99-88805-062)
27	BOTTOM CASE RUBBER FOR 8880	47-88823-011	
28	2ND HDD COVER MODULE	42-8887I-200	
29	CPU COVER 8880	42-88873-020	
30	BATTERY(OPTION)	87-8888S-498	Reference Ass'y No (99-88805-070)
30	BATTERY(OPTION)	87-8888S-4E8	Reference Ass'y No (99-88805-070)
31	AUDIO DJ ASS'Y	79-88808-001	Reference Ass'y No (99-88805-060)
32	MP3 BRACKET(BATTERY PLATE)	33-8880H-030	
33	FAN MODULE FOR D800P	31-D800S-100	
34	WIRE CABLE FOR MAIN BD TO LAN	43-8880U-010	
35	PRODUCT LABEL FOR D800P	45-D8003-010	
36	BOTTOM CASE MODULE	39-D8003-010	
37	WIRELESS LAN ASS'Y D800P	79-D800Y-010	
38	BLUETOOTH V1.1 ASS'Y D800P	79-D800B-020	
39	SCREW M2*5L K NI ICT	35-81120-5R0	
40	CPU FIXED BRACKET FOR 8880	33-8880S-031	
41	CHOKE HEAT SINK	31-D800N-030	
42	SCREW M2*10 P NI ICT	35-01120-100	
43	SAFETY RUBBER	47-D8003-010	
44	MS DUMMY HOLDER	42-D800E-060	

LCD 15"

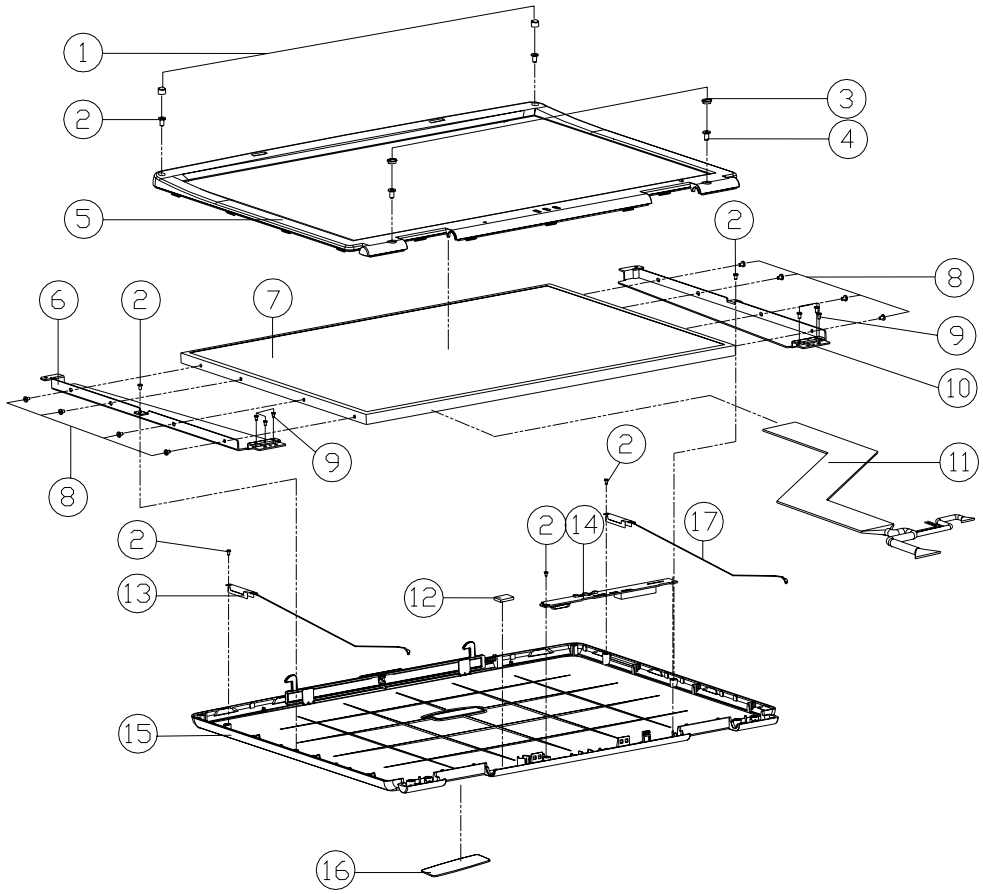


ITEM	PART NAME	PART NO	REMARK
1	RUBBER FOR LCD UP	47-88831-010	
2	SCREW M2*5L P NI ICT	35-01120-5R0-A	
3	DISPLAY FRONT PANEL MODULE FOR 15.0"	39-88801-011	
4	LCD T IDT(IBM) IAUX14(W/IPS) 15.0" UXGA	50-L4207-E02	
5	D800P LCD BRACKET IDT150 L	33-D8001-010	
6	SCREW M2*3L KI NI ICT NY	35-B1120-3RA	
7	SCREW M2.5*6L K BZ ICT NY	35-82125-6RA	
8	WIRELESS LAN ANTENNA	23-742R4-030	
9	DISPLAY BACK PANEL MODULE FOR 15.0"/15.7"	39-88801-022	
10	NAME PLATE "NOTEBOOK"	45-18N01-010	
11	INVERTER BOARD	76-D800R-001-1	
12	WIRE CABLE FOR 15.0" LCD UXGA IDT	43-D8001-010	
13	D800P LCD BRACKET IDT150 R	33-D8001-020	
14	RUBBER FOR LCD DOWN	47-88821-021	
15	SCREW M2.5*7L B BN ICT NY	35-49125-7R0	
16	LCD SHIELDING	33-88801-090	
17	GASKET (L20*W9*H4.5)	47-00190-1J0	
18	WIRE CABLE CONVERTER FOR LG PANEL,5600P	43-56P01-090	

Figure A-3
LCD 15"

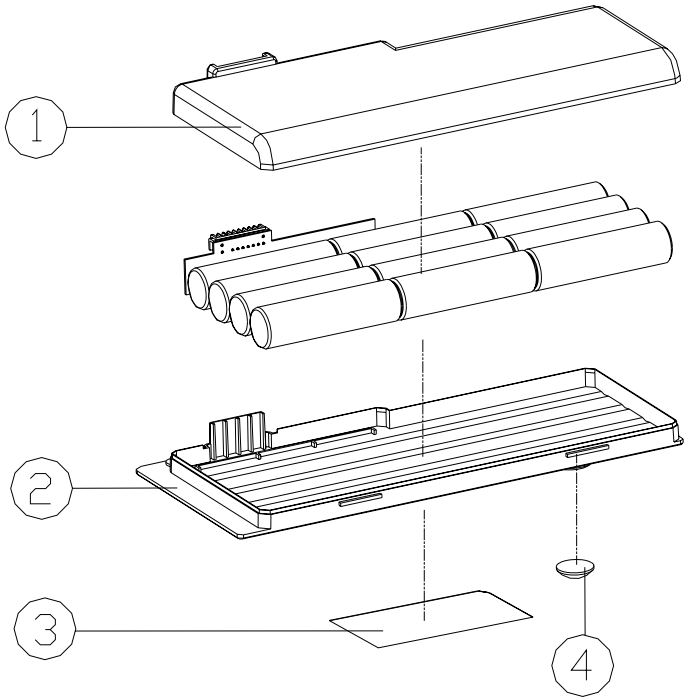
LCD 16"

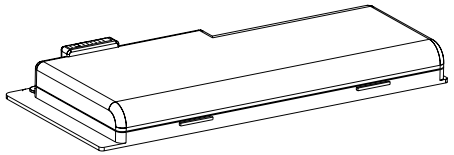
Figure A-4
LCD 16"



ITEM	PART NAME	PART NO	REMARK
1	RUBBER FOR LCD UP	47-88831-010	
2	SCREW M2*5L P NI ICT	35-01120-5R0-A	
3	RUBBER FOR LCD DOWN	47-88821-021	
4	SCREW M2.5*7L B BNI ICT	35-49125-7R0	
5	DISPLAY FRONT PANEL HITACHI 16.0 MODULE	39-888E1-112	
5	DISPLAY FRONT PANEL FOR HITACHI 16.0"	39-888E1-11C	
5	DISPLAY FRONT PANEL SHAPR 16.0 MODULE	39-888E1-011	
6	LCD BRACKET (LEFT) HITACHI 16.0"	33-888E1-021	
6	LCD BRACKET (LEFT) SHAPR 16.0"	33-888E1-040	
7	LCD T HITACHI TX41D96VCIFAA 16" SXGA+8.0MM	50-M4275-100	
7	LCD 16.0 SHARP LQ160E1LW02R 7.5MM	50-M4275-A00	
8	SCREW M2.5*4L K NI ICT NY	35-B1125-4RA-A	FOR HITACHI
8	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	FOR SHAPR
9	SCREW M2.5*6L K BZ ICT	35-82125-6R0	
10	LCD BRACKET (RIGHT) HITACHI 16.0"	33-888E1-011	
10	LCD BRACKET (RIGHT) SHAPR 16.0"	33-888E1-030	
11	LCD CABLE FOR HITACHI (16" UXGA)	43-888E1-030	
11	LCD CABLE FOR SHAPR (16" SXGA+)	43-888E1-021	
12	GASKET (L20*W9*H4.5)	47-00190-1J0	
13	ANTENNA PIFA PIFA 2.4G L L=460MM 888E	23-742R4-A51	
14	INVERTER MODULE FOR D800P (EPS)	76-D800R-001	
15	DISPLAY BACK PANEL MODULE 16.0"	39-888E1-022	
16	NAME PLATE "NOTEBOOK"	45-88801-010	
17	ANTENNA PIFA 2.4G R L=630MM(BLACK) 888E	23-742R4-A60	

Battery



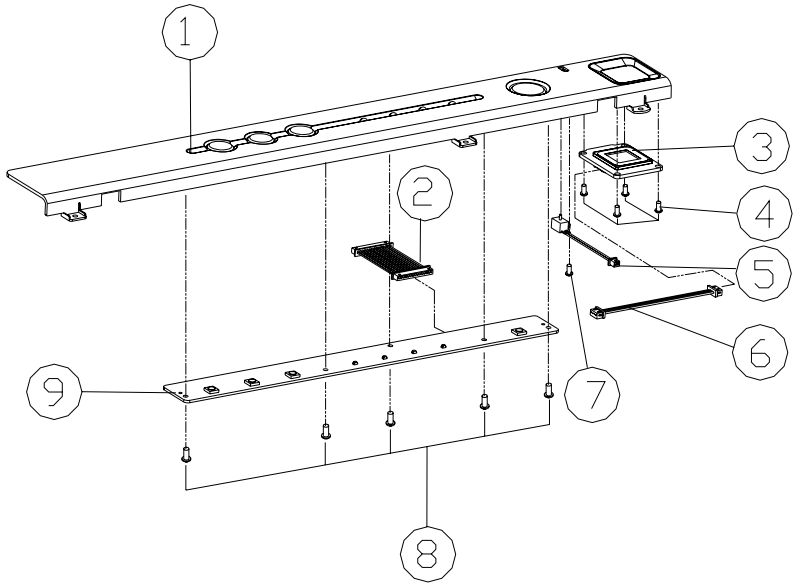


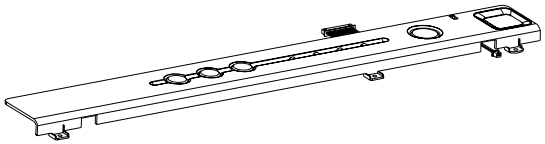
ITEM	PART NAME	PART NO	REMARK
1	BATTERY TOP CASE	42-8887M-010	
2	BATTERY BOTTOM CASE	42-8887M-020	
3	BATTERY LABEL	87-8888S-498	
3	BATTERY LABEL	87-8888S-4E8	
4	BOTTOM CASE RUBBER FOR 8880	47-88823-010	

Figure A-5
Battery

Center Cover

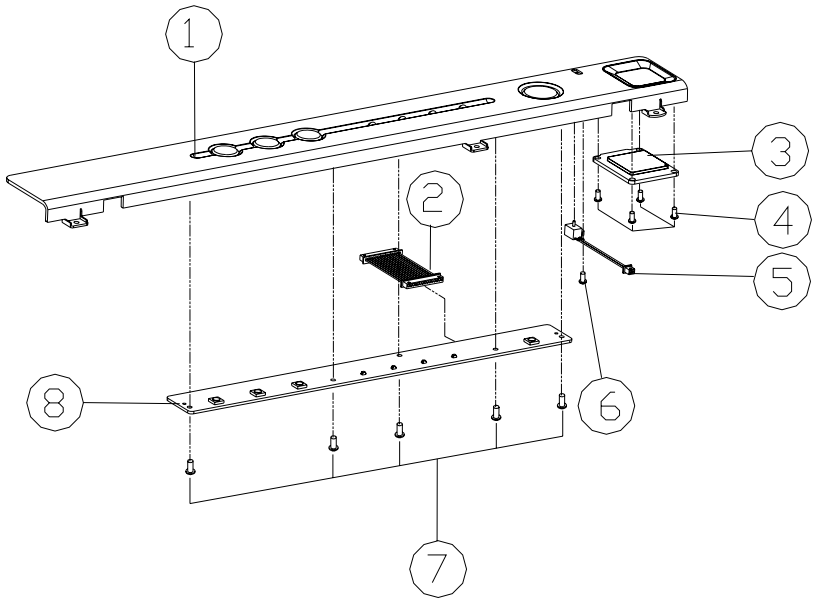
Figure A-6
Center Cover

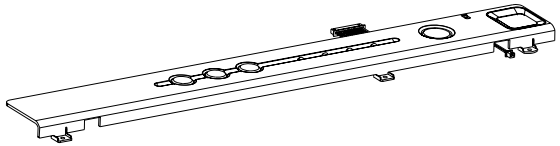




ITEM	PART NAME	PART NO	REMARK
1	CENTER COVER MODULE FOR 8880	42-88872-100	
2	WIRE CABLE FOR HOT KEY TO POWER SWITCH	43-8880S-031	
3	FINGER USB BOARD	77-8880F-D0X	
4	SCREW 11.4*3	35-01714-3R0	
5	WIRE CABLE FOR PANEL OFF 43-88804-010+53-7010B-020	43-88804-011	
6	WIRE CABLE FOR MAIN BD TO FINGERPRINT BD	43-8880F-010	
7	SCER 11.4*4	35-01714-4R0	
8	SCERW M2*3L K1 NI ICT NY	35-B1120-3RA	
9	SWITCH KEY BOARD	77-88804-D0X	

Center Cover Finger



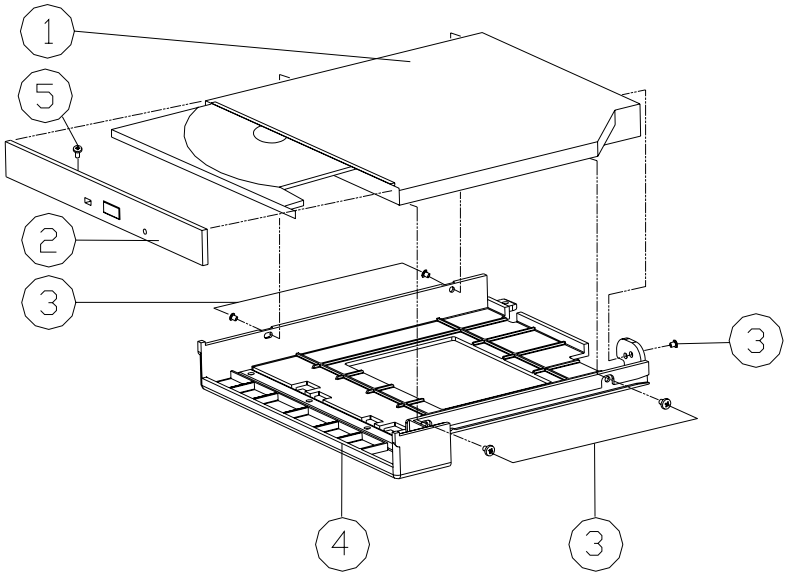


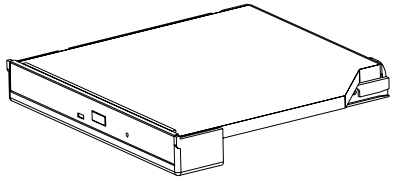
ITEM	PART NAME	PART NO	REMARK
1	CENTER COVER MODULE FOR 8880	42-88872-100	
2	WIRE CABLE FOR HOT KEY TO POWER SWITCH	43-8880S-031	
3	FINGER PRINT COVER	42-88882-060	
4	SCREW 11.4*3	35-01714-3R0	
5	WIRE CABLE FOR PANEL OFF 43-88804-010+53-7010B-020	43-88804-011	
6	SCER 11.4*4	35-01714-4R0	
7	SCERW M2*3L K1 NI ICT NY	35-B1120-3RA	
8	SWITCH KEY BOARD	77-88804-D0X	

Figure A-7
Center Cover Finger

CD-ROM Drive

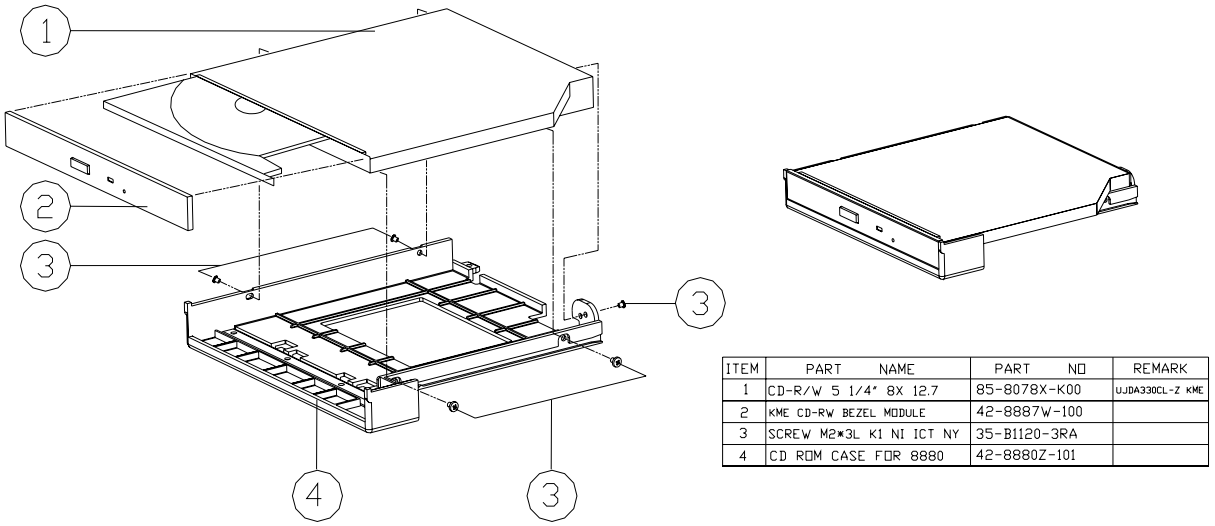
Figure A-8
CD-ROM Drive





ITEM	PART NAME	PART NO	REMARK
1-1	CD-ROM 5 1/4" 24X CAB SLIM 12.7MM	85-607□X-C00	QSI(SCR-242)
1-2	CD-ROM 5 1/4" 24X CD-224E-B20 12.7mm	85-607□X-706	TEAC(REV:A02)
2-1	CD-ROM BEZEL MODULE FOR QSI	42-8887Z-200	
2-2	CD-ROM BEZEL MODULE FOR TEAC	42-8887Z-300	
3	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
4	CD ROM CASE MODULE	42-8880Z-101	
5	SCREW M1.7*0.64*0.38L B BZ	35-46117-3R8	FOR QSI

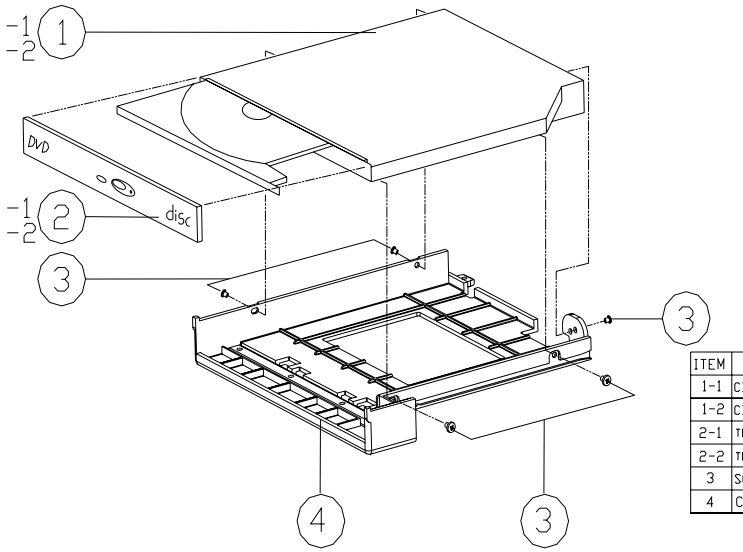
CD-RW Drive

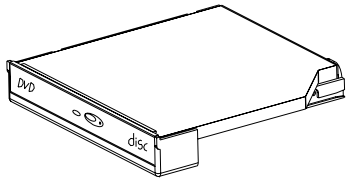


ITEM	PART NAME	PART NO	REMARK
1	CD-R/W 5 1/4" 8X 12.7	85-8078X-K00	UJDA330CL-Z KME
2	KME CD-RW BEZEL MODULE	42-8887W-100	
3	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
4	CD ROM CASE FOR 8880	42-8880Z-101	

Figure A-9
CD-RW Drive

Combo Drive

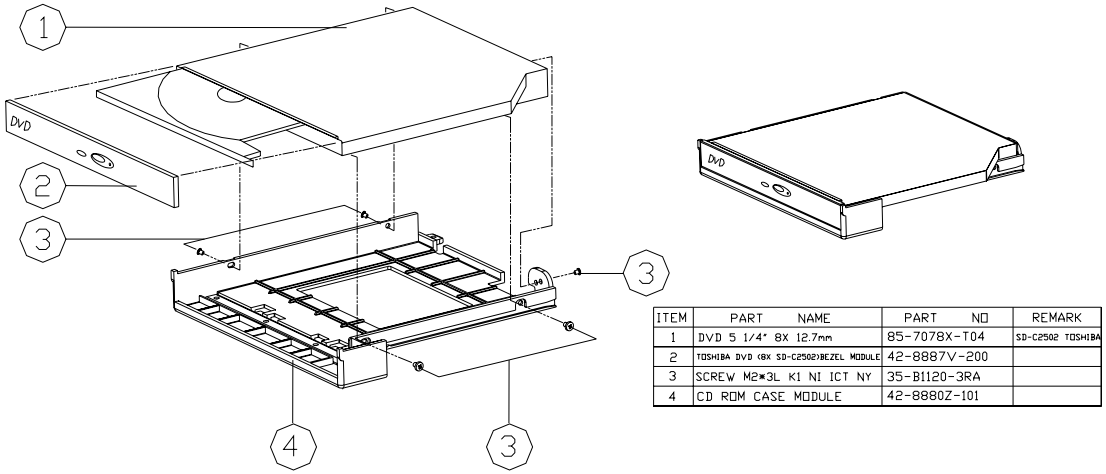




ITEM	PART NAME	PART NO	REMARK
1-1	CD-RW/DVD 5 1/4" 8X 12.7mm	85-8078X-T00	SD-R2102 TOSHIBA
1-2	CD-RW/DVD 5 1/4" 8X 12.7mm	85-9078X-700	DW-28E-B2 TEAC
2-1	TOSHIBA COMBO BEZEL MODULE	42-8887X-100	
2-2	TEAC COMBO BEZEL MODULE	42-8887X-200	
3	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
4	CD ROM CASE FOR 8880	42-8880Z-101	

Figure A-10
Combo Drive

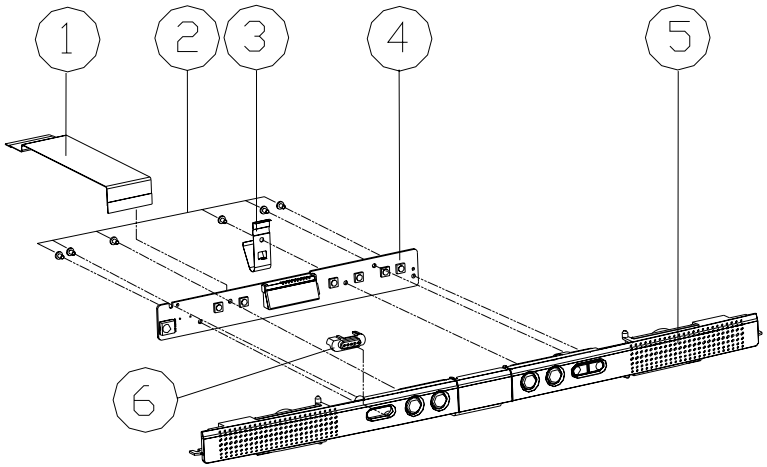
DVD-ROM Drive



ITEM	PART NAME	PART NO	REMARK
1	DVD 5 1/4" 8X 12.7mm	85-7078X-T04	SD-C2502 TOSHIBA
2	TOSHIBA DVD (8X SD-C2502)BEZEL MODULE	42-8887V-200	
3	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
4	CD ROM CASE MODULE	42-8880Z-101	

Figure A-11
DVD-ROM Drive

Audio DJ



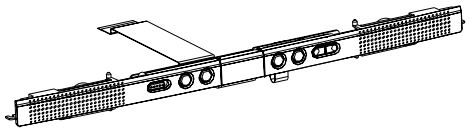
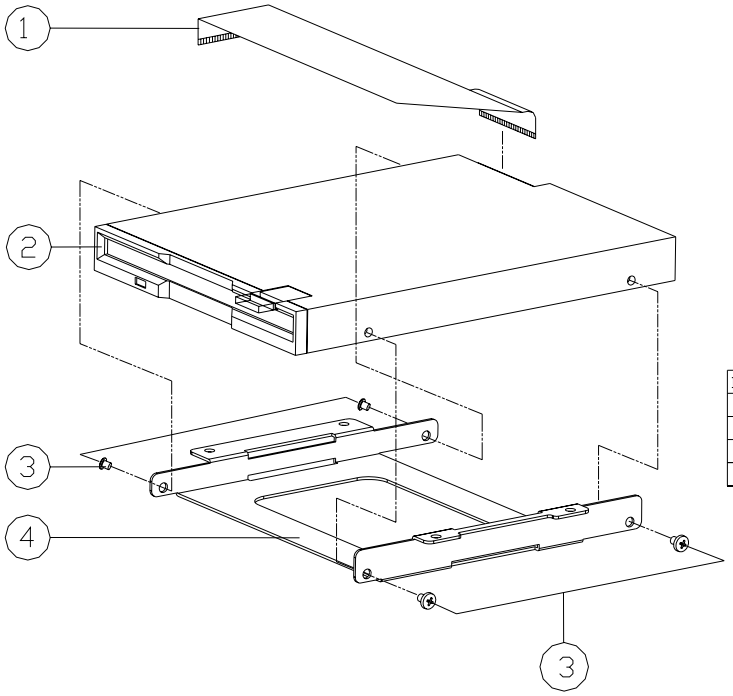
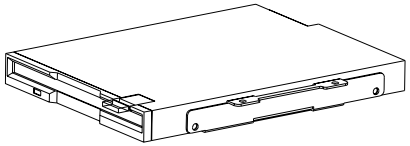


Figure A-12
Audio DJ

ITEM	PART NAME	PART NO	REMARK
1	FFC CABLE FOR MAIN BD TO LCM CTRL BD	43-88808-011	
2	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
3	AUDIO DJ EMI SPRING FOR 8880	38-88808-010	
4	AUDIO CONTROL LCM BOARD	77-88808-D03	
5	AUDIO JACK BEZEL MODULE FOR 8880	42-88878-100	
6	AUDIO DJ POWER KNOB FOR 8880	42-88888-020	

Floppy Disk Drive



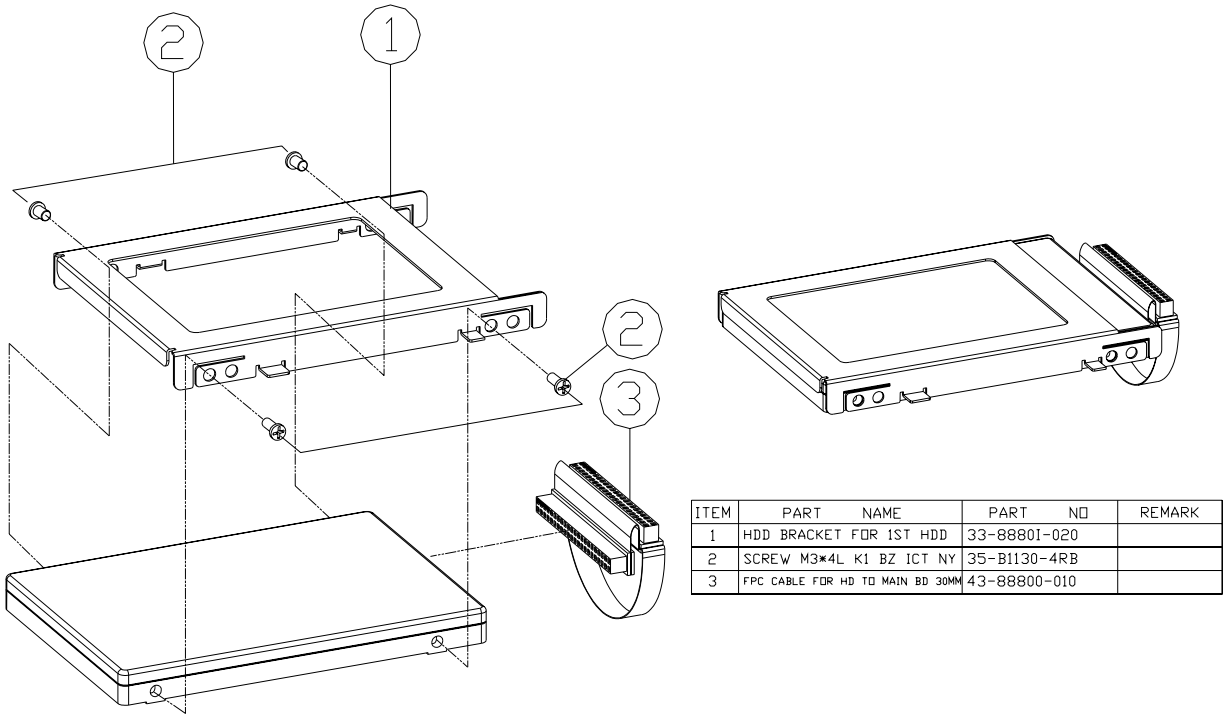


ITEM	PART NAME	PART NO	REMARK
1	FFC CABLE FOR MAIN BD TO FLOPPY DISK	43-8880I-010	
2	3.5" FDD 12.7mm Y-E DATA	85-11700-Y01-1	YD-702J-6637J
3	SCREW M2.5*3L K1 BK/D. NY	35-B4125-3RA	
4	FDD BRACKET FOR 8880	33-8880J-010	

Figure A-13
Floppy Disk Drive

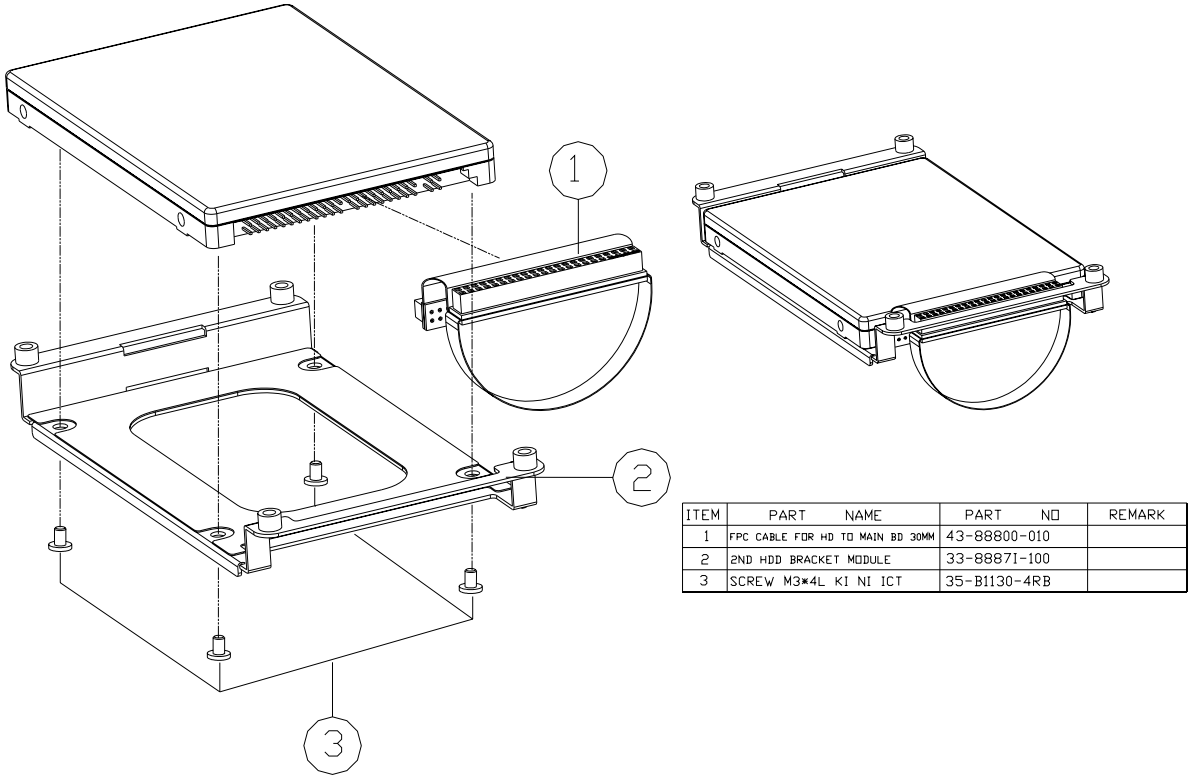
First Hard Disk Drive

Figure A-14
First HDD Drive



ITEM	PART NAME	PART NO	REMARK
1	HDD BRACKET FOR 1ST HDD	33-8880I-020	
2	SCREW M3*4L K1 BZ ICT NY	35-B1130-4RB	
3	FPC CABLE FOR HD TO MAIN BD 30MM	43-88800-010	

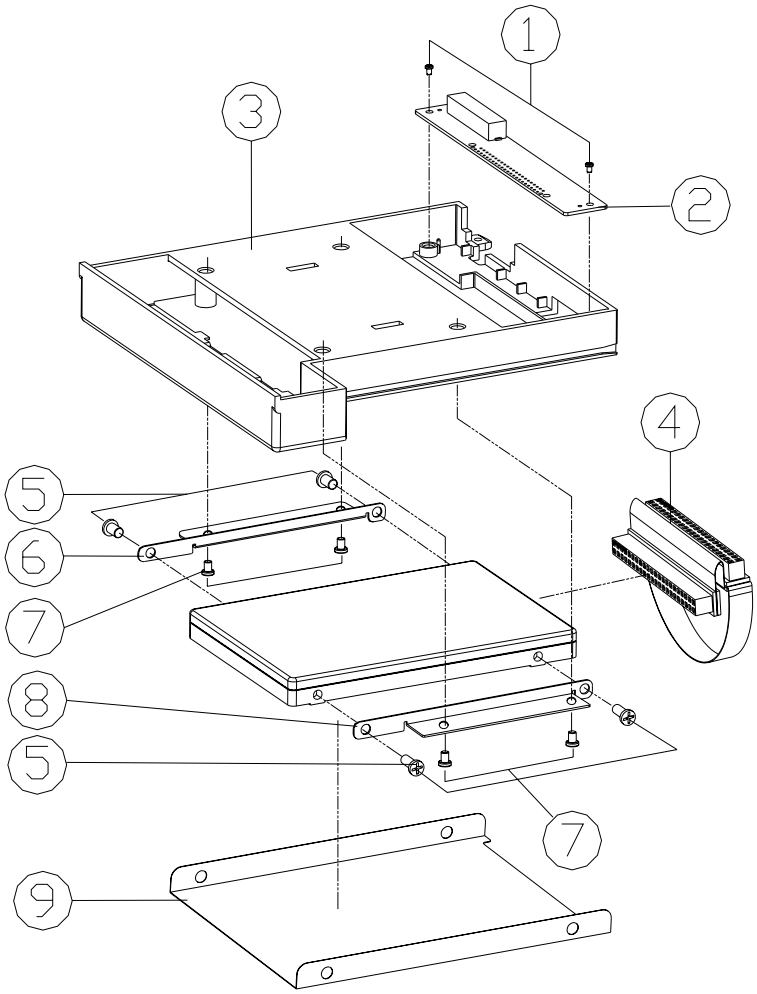
Second Hard Disk Drive



ITEM	PART NAME	PART NO	REMARK
1	FPC CABLE FOR HD TO MAIN BD 30MM	43-88800-010	
2	2ND HDD BRACKET MODULE	33-88871-100	
3	SCREW M3*4L KI NI ICT	35-B1130-4RB	

Figure A-15
Second HDD Drive

Third Hard Disk Drive



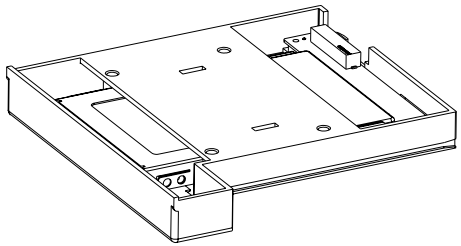
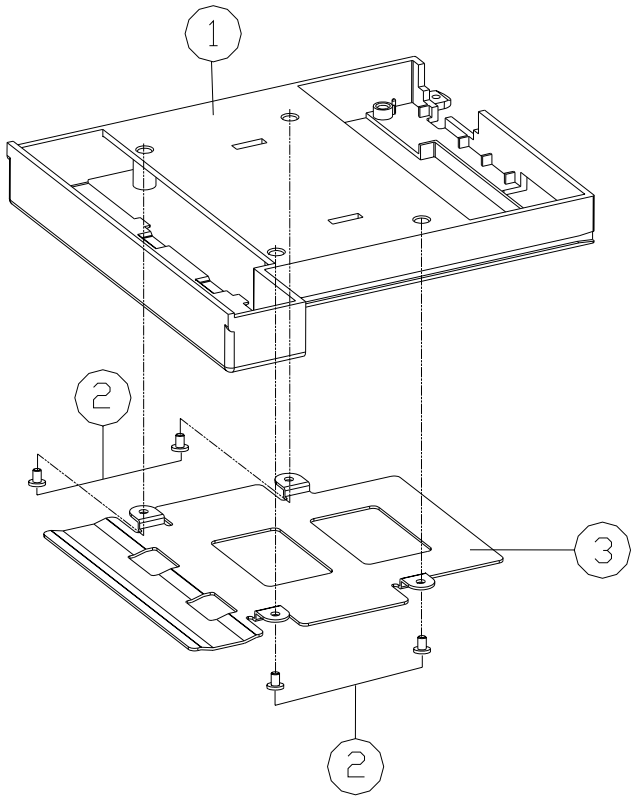
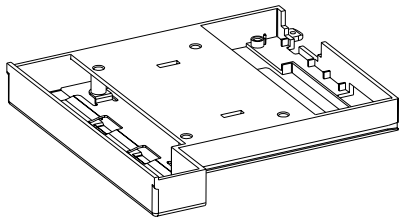


Figure A-16
Third Hard Disk Drive

ITEM	PART NAME	PART NO	REMARK
1	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
2	3RD HDD CONVERTER BOARD	77-8881N-D0X	
3	3RD HDD CASE FOR 8880	42-8887I-010	
4	FPC CABLE FOR HD TO MAIN BD 30MM	43-88800-010	
5	SCREW M3*4L K1 BZ ICT NY	35-B6130-4RA	
6	3RD HDD BRACKET-L	33-8880I-050	
7	SCREW M2.5*6L K BZ ICT	35-82125-6R0	
8	3RD HDD BRACKET-R	33-8880I-040	
9	3RD HDD MYLAR	40-8885I-020	

Third Hard Disk - Dummy

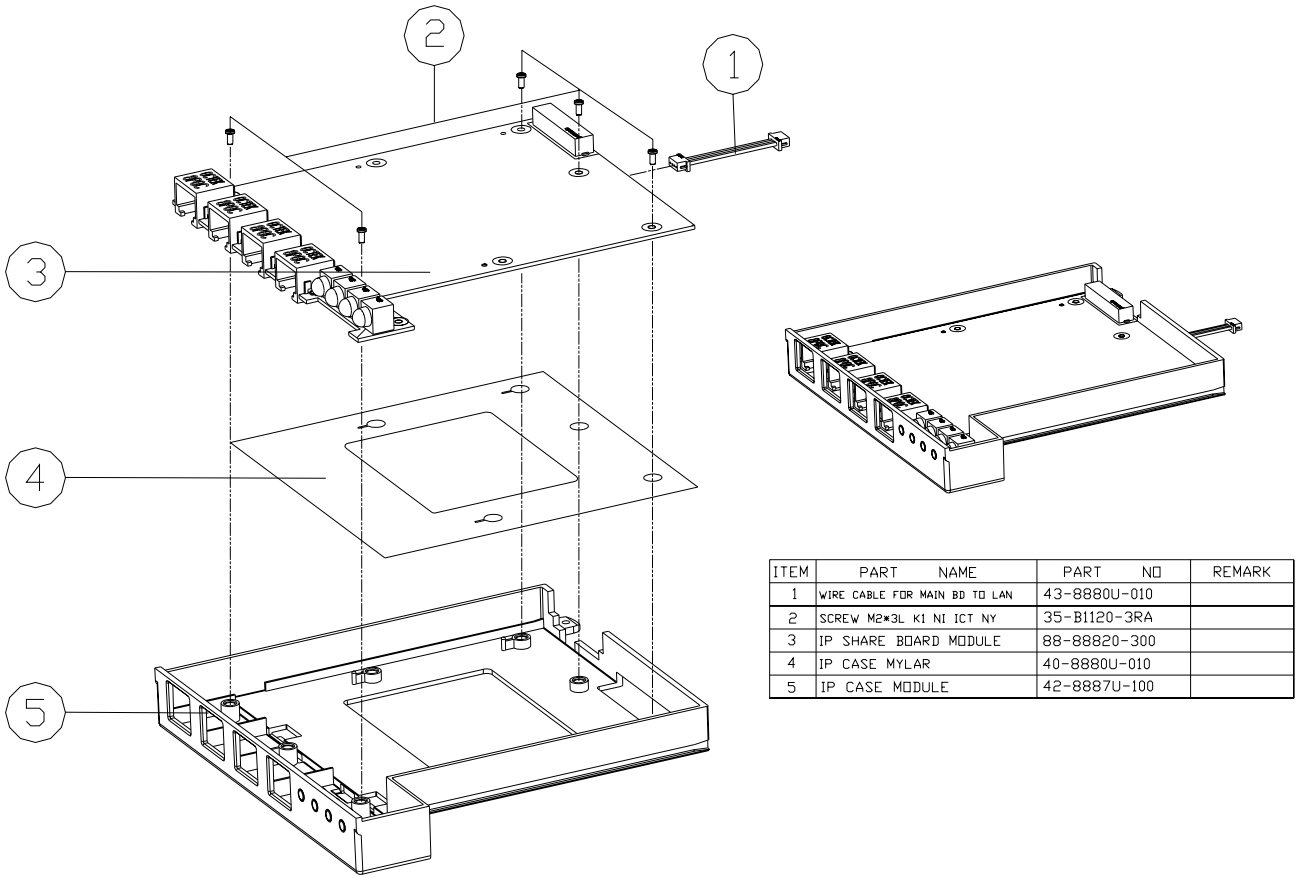




ITEM	PART NAME	PART NO	REMARK
1	3RD HDD CASE FOR 8880	42-8887I-010	
2	SCREW M2.5*6L K BZ ICT	35-82125-6R0	
3	SUPPORT BRACKET FOR 3RD HDD	33-8880I-060	

Figure A-17
Third Hard Disk - Dummy

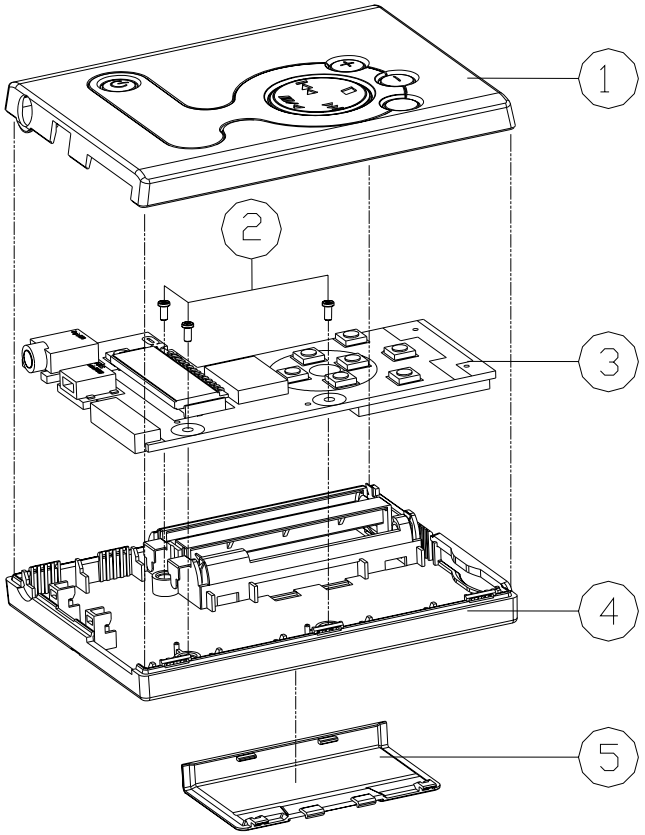
IP Sharing Module

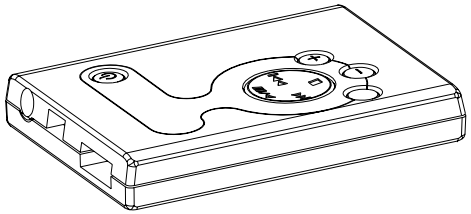


ITEM	PART NAME	PART NO	REMARK
1	WIRE CABLE FOR MAIN BD TO LAN	43-8880U-010	
2	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
3	IP SHARE BOARD MODULE	88-88820-300	
4	IP CASE MYLAR	40-8880U-010	
5	IP CASE MODULE	42-8887U-100	

Figure A-18
IP Sharing Module

MP3 Player

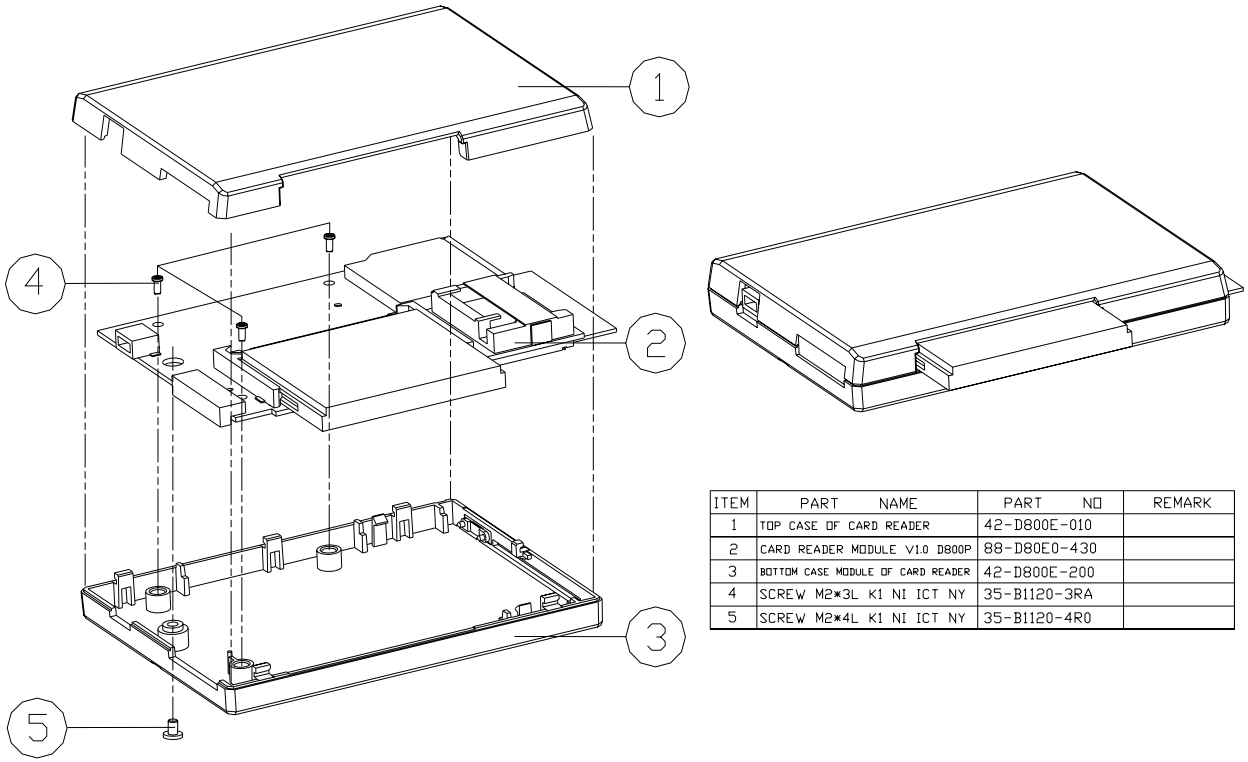




ITEM	PART NAME	PART NO	REMARK
1	MP3 TOP CASE MODULE 8880	42-8887H-500	
2	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
3	MP3 PLAYER BOARD	77-88809-D04A	
4	MP3 BOTTOM CASE MODULE	42-8887H-300	
5	MP3 BATTERY COVER 8880	42-88809-040	

Figure A-19
MP3 Player

Card Reader



ITEM	PART NAME	PART NO	REMARK
1	TOP CASE OF CARD READER	42-D800E-010	
2	CARD READER MODULE V1.0 D800P	88-D80E0-430	
3	BOTTOM CASE MODULE OF CARD READER	42-D800E-200	
4	SCREW M2*3L K1 NI ICT NY	35-B1120-3RA	
5	SCREW M2*4L K1 NI ICT NY	35-B1120-4R0	

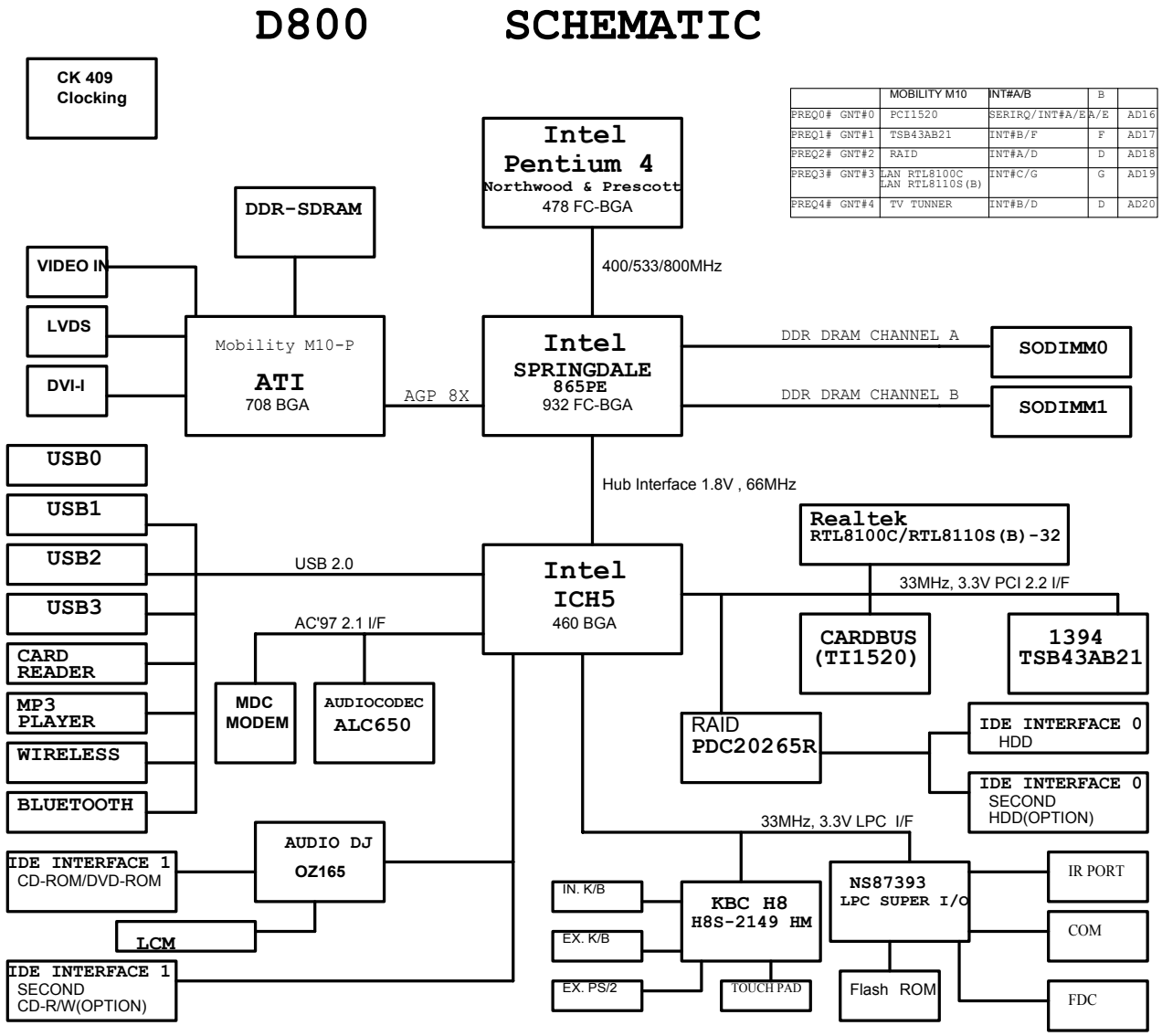
Figure A-20
Card Reader

Appendix B: Schematic Diagrams for D800P

This appendix has circuit diagrams of the **D800P notebook** computer's PCBs.

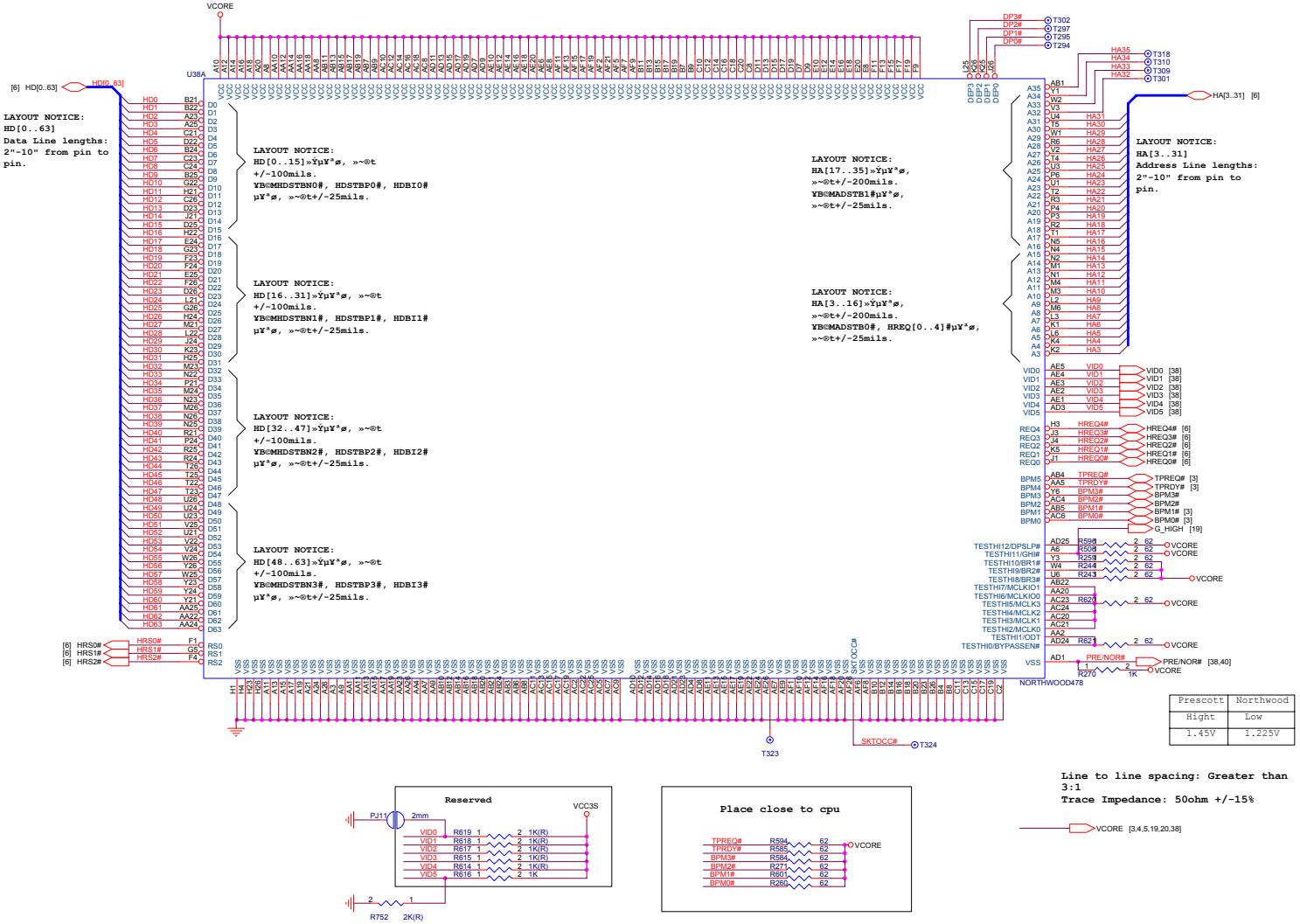
System Block Diagram

Sheet 1 of 42
System Block Diagram



	MOBILITY M10	INT#A/B	B	
PREQ0# GNT#0	PCI1520	SERIRQ/INT#A/E	A/E	AD16
PREQ1# GNT#1	TSB43AB21	INT#B/F	F	AD17
PREQ2# GNT#2	RAID	INT#A/D	D	AD18
PREQ3# GNT#3	LAN RTL8100C LAN RTL8110S(B)	INT#C/G	G	AD19
PREQ4# GNT#4	TV TUNNER	INT#B/D	D	AD20

CPU Northwood & Prescott (1 of 2)

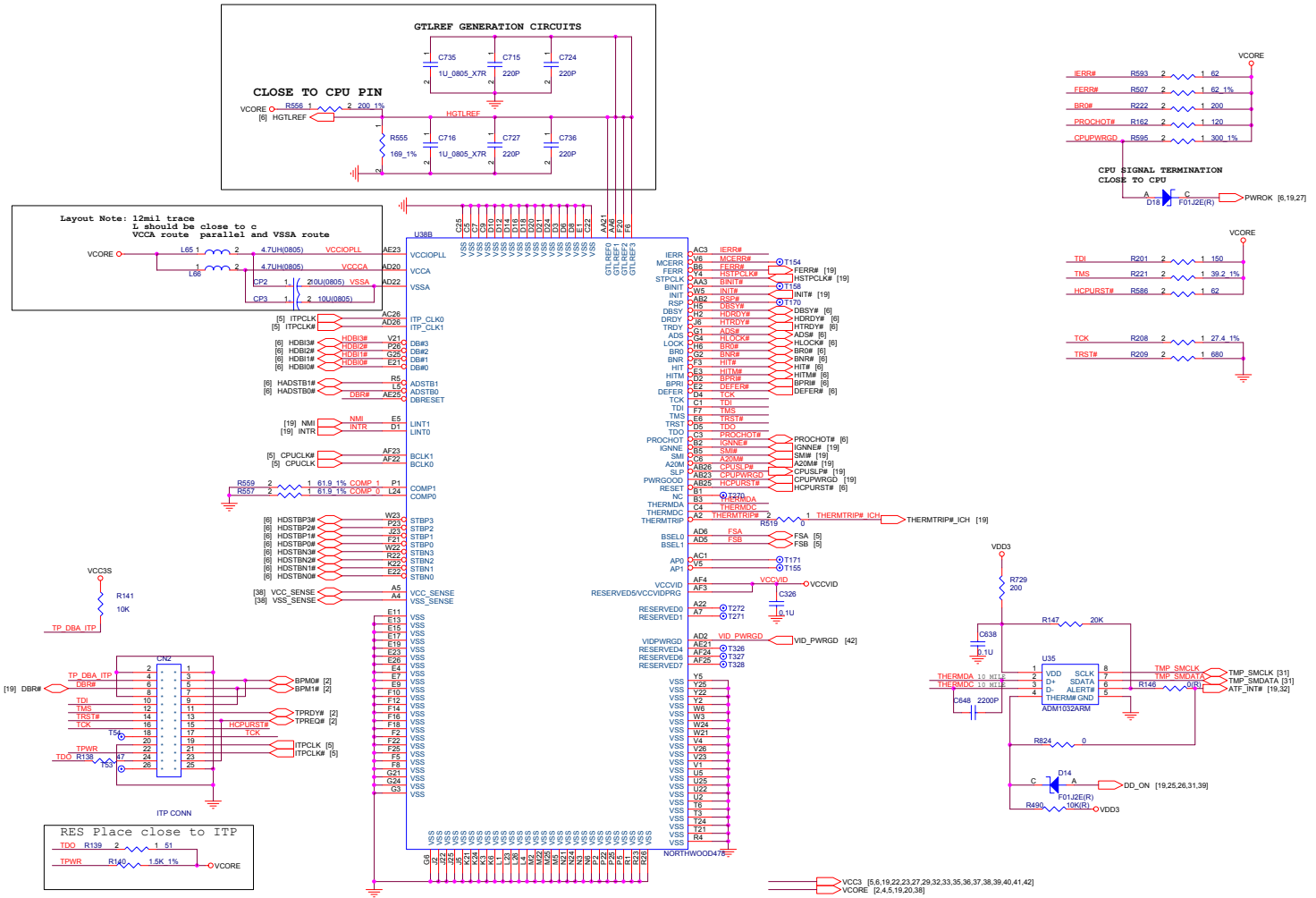


Prescott	Northwood
Hight	Low
1.45V	1.225V

Sheet 2 of 42
CPU Northwood & Prescott (1 of 2)

CPU Northwood & Prescott (2 of 2)

Sheet 3 of 42
CPU Northwood & Prescott
(2 of 2)

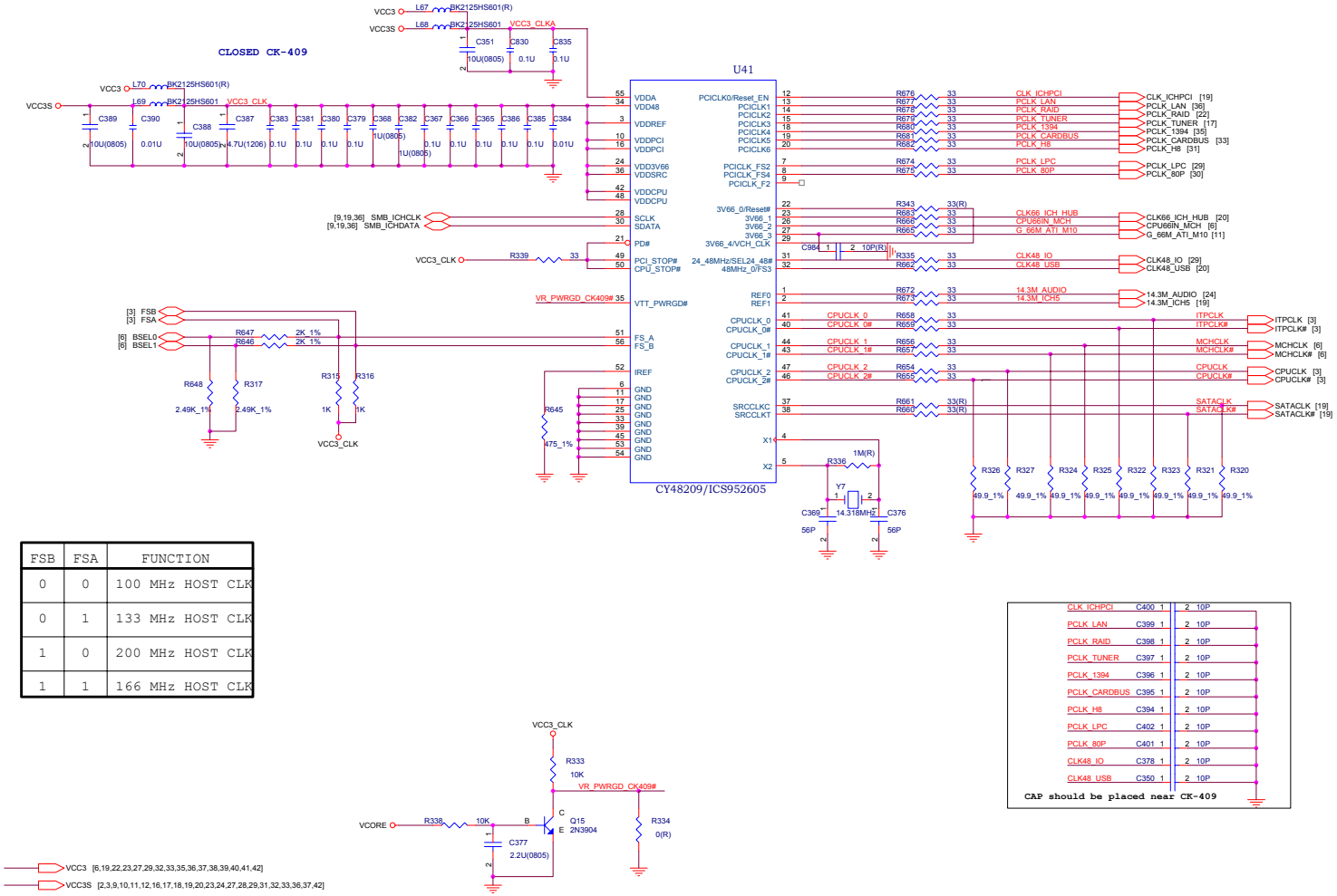


CPU Decoupling

Sheet 4 of 42
CPU Decoupling

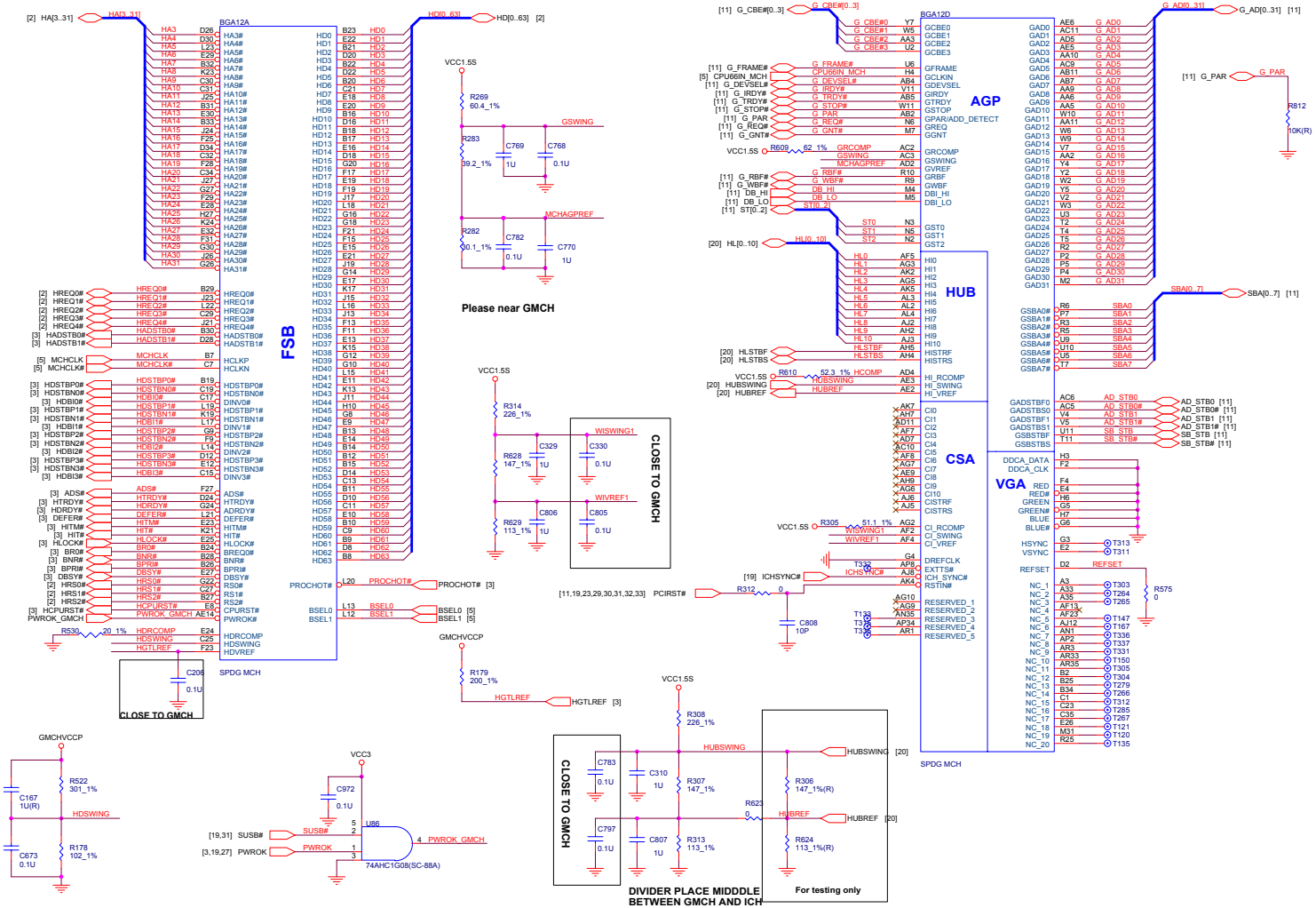
CLK409

Sheet 5 of 42
CLK409



FSB	FSA	FUNCTION
0	0	100 MHz HOST CLK
0	1	133 MHz HOST CLK
1	0	200 MHz HOST CLK
1	1	166 MHz HOST CLK

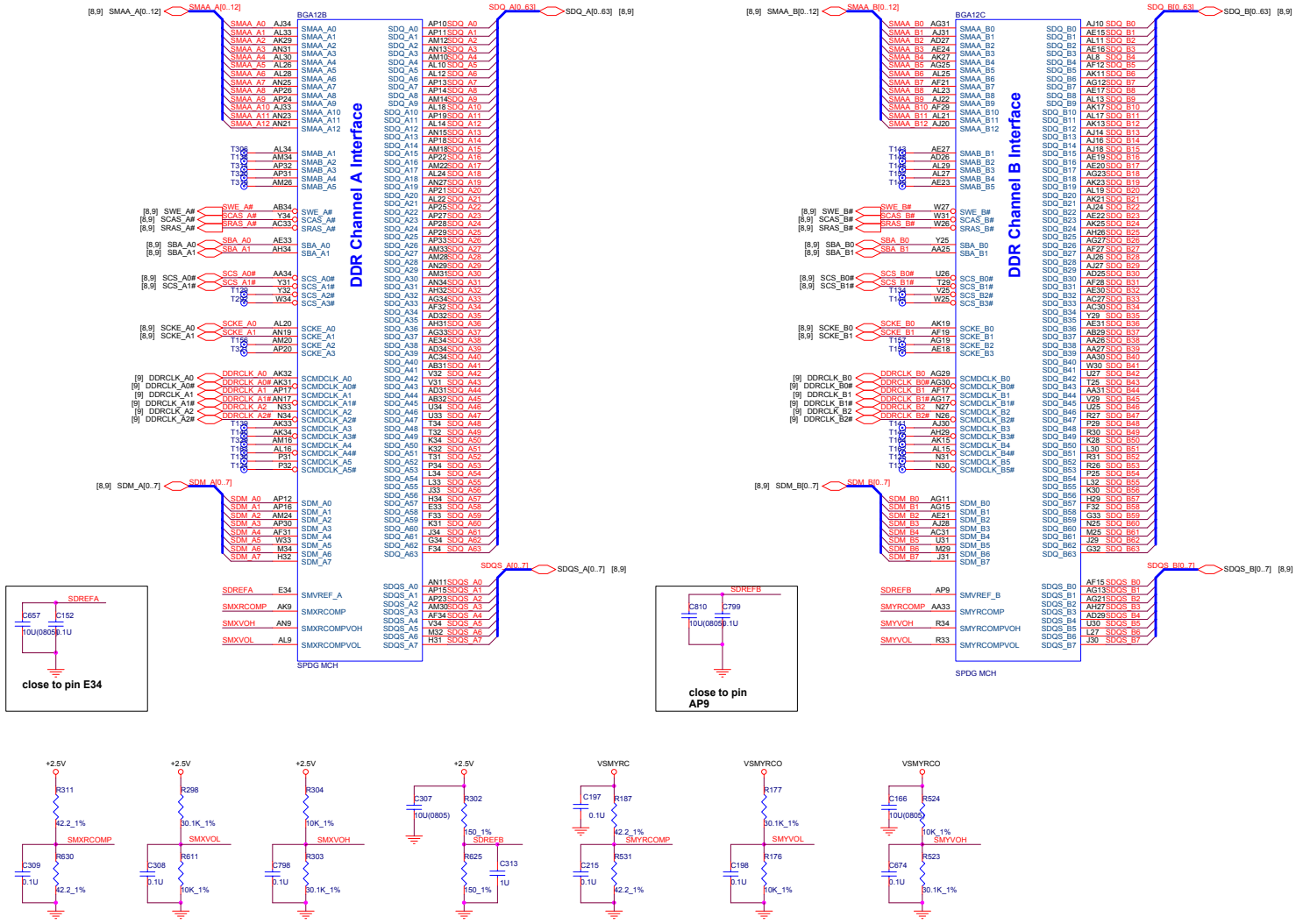
Springdale (HOST, AGP, Hub)



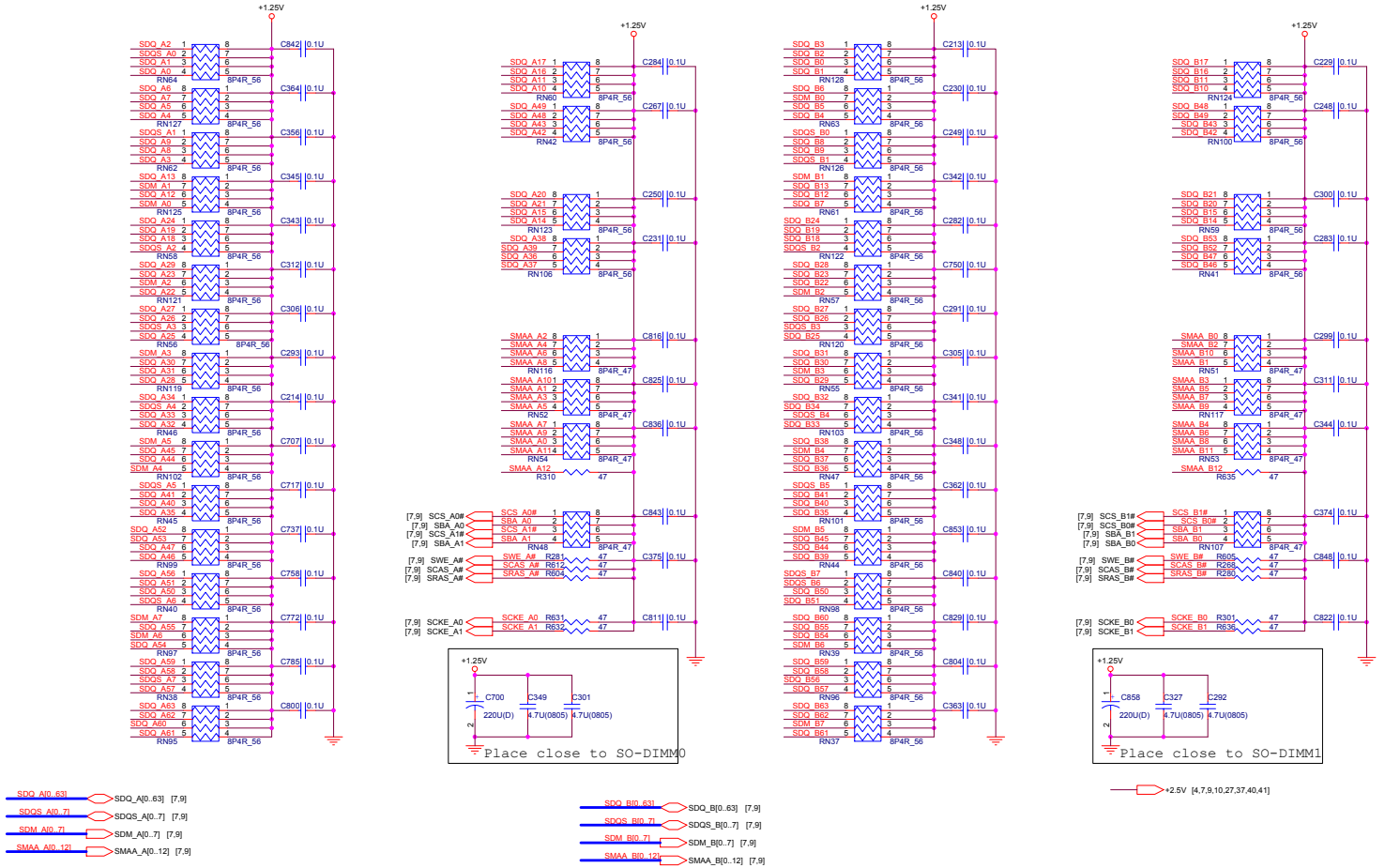
Sheet 6 of 42
Springdale
(HOST, AGP, Hub)

Springdale (DDR, Interface)

Sheet 7 of 42
Springdale
(DDR, Interface)



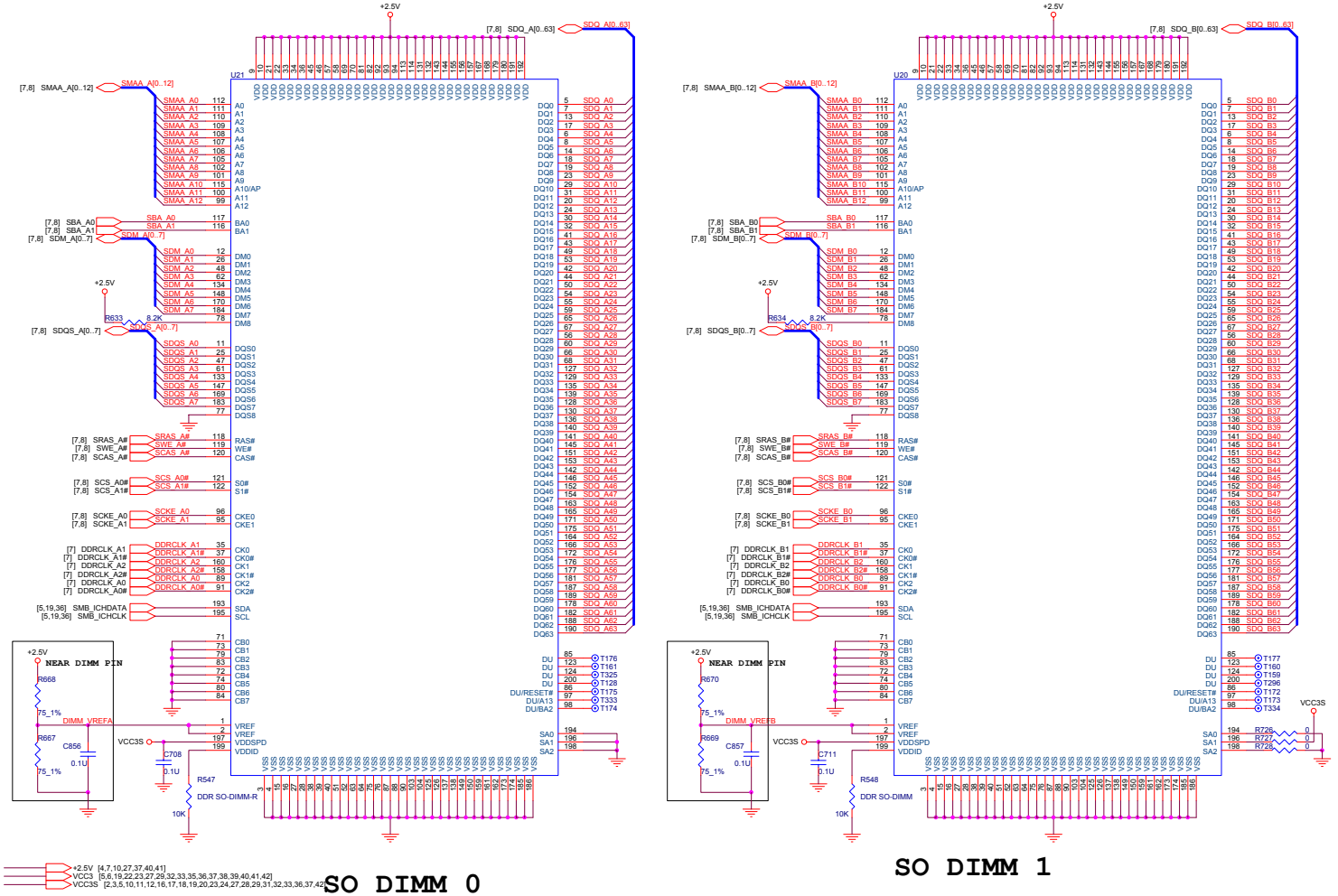
DDR Termination



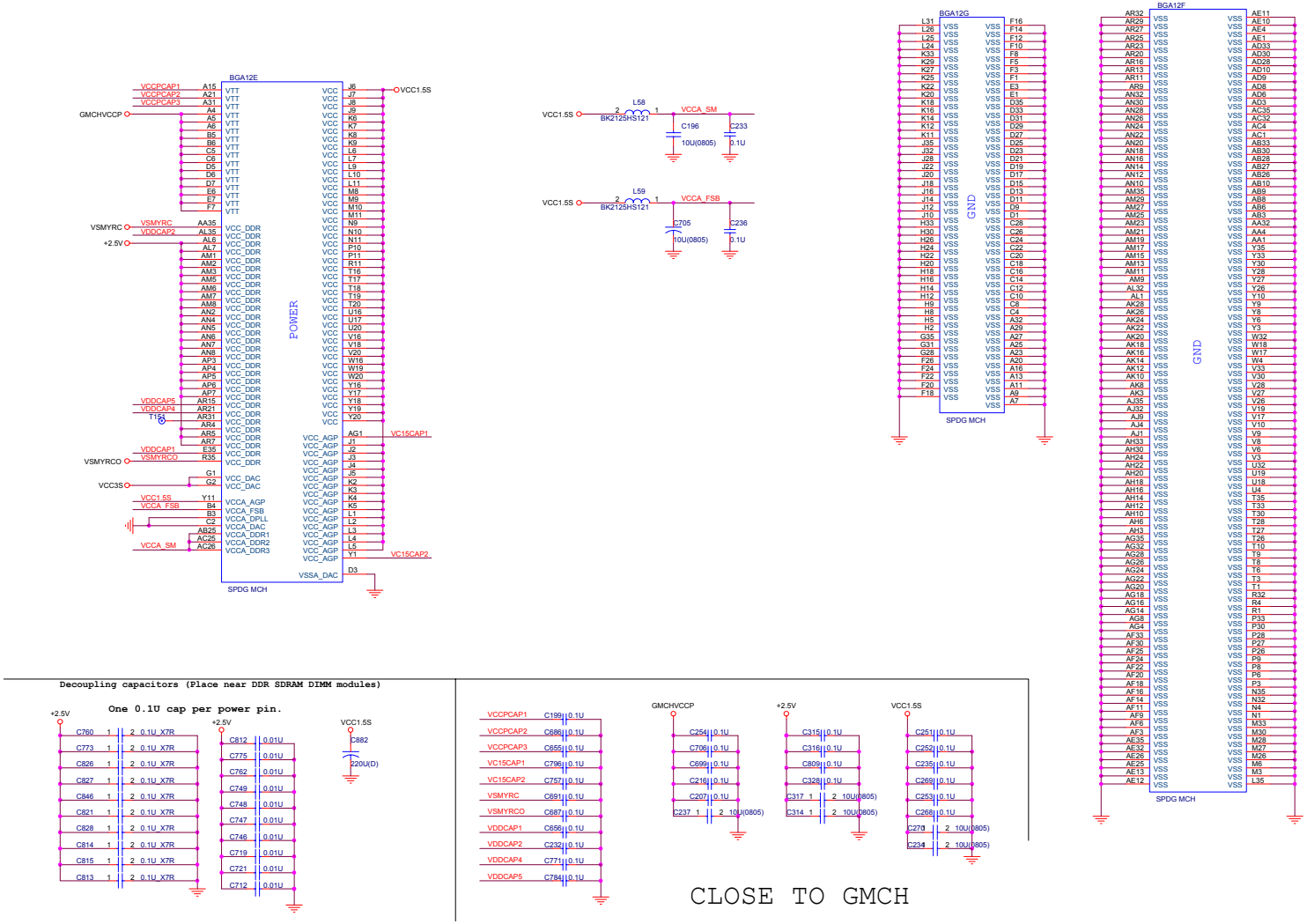
Sheet 8 of 42
DDR Termination

DDR SODIMM

Sheet 9 of 42
DDR SODIMM



Springdale (Voltage, PLL, VSS)



Sheet 10 of 42
Springdale
(Voltage, PLL, VSS)

Mobility M10-P

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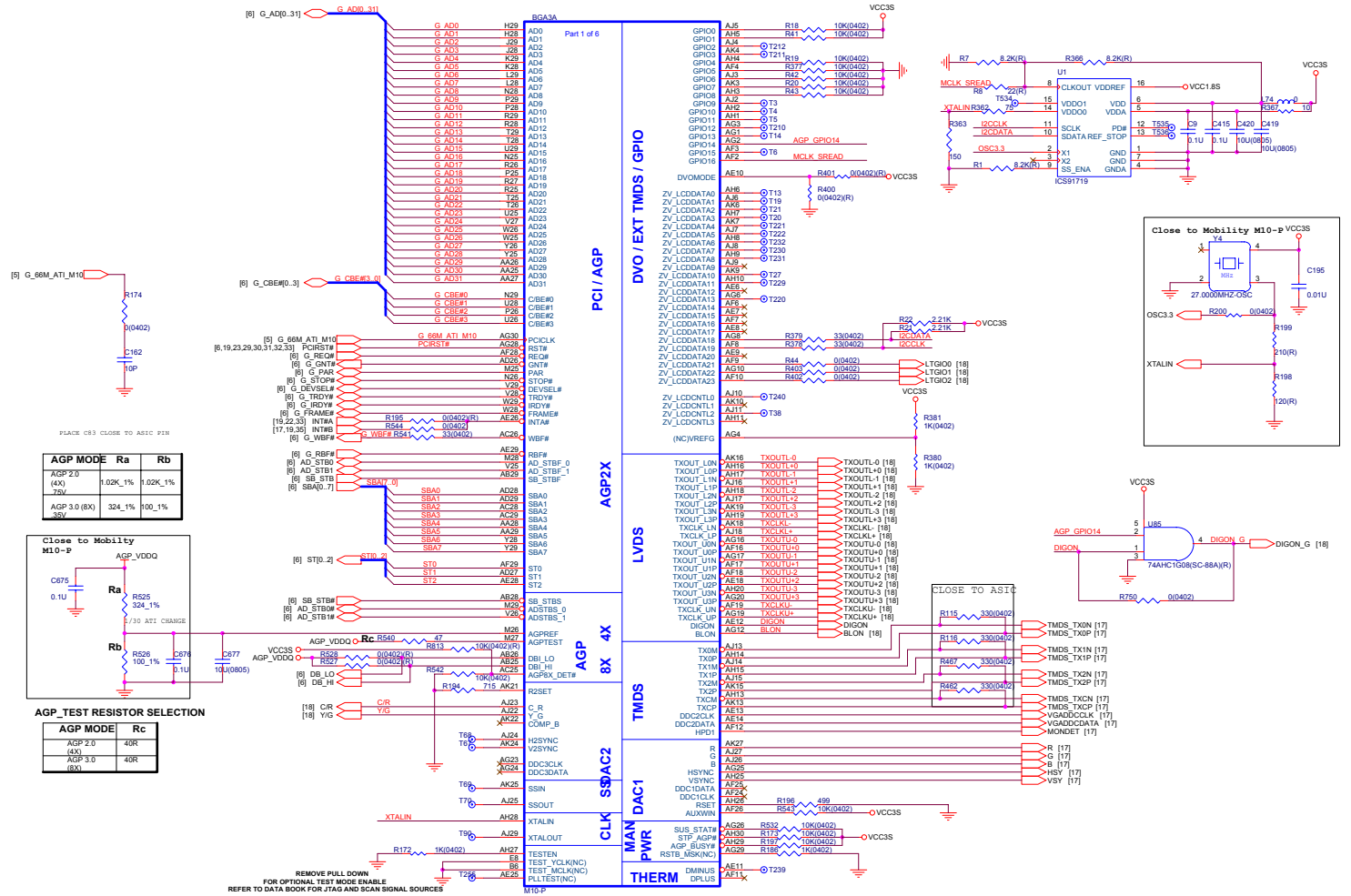
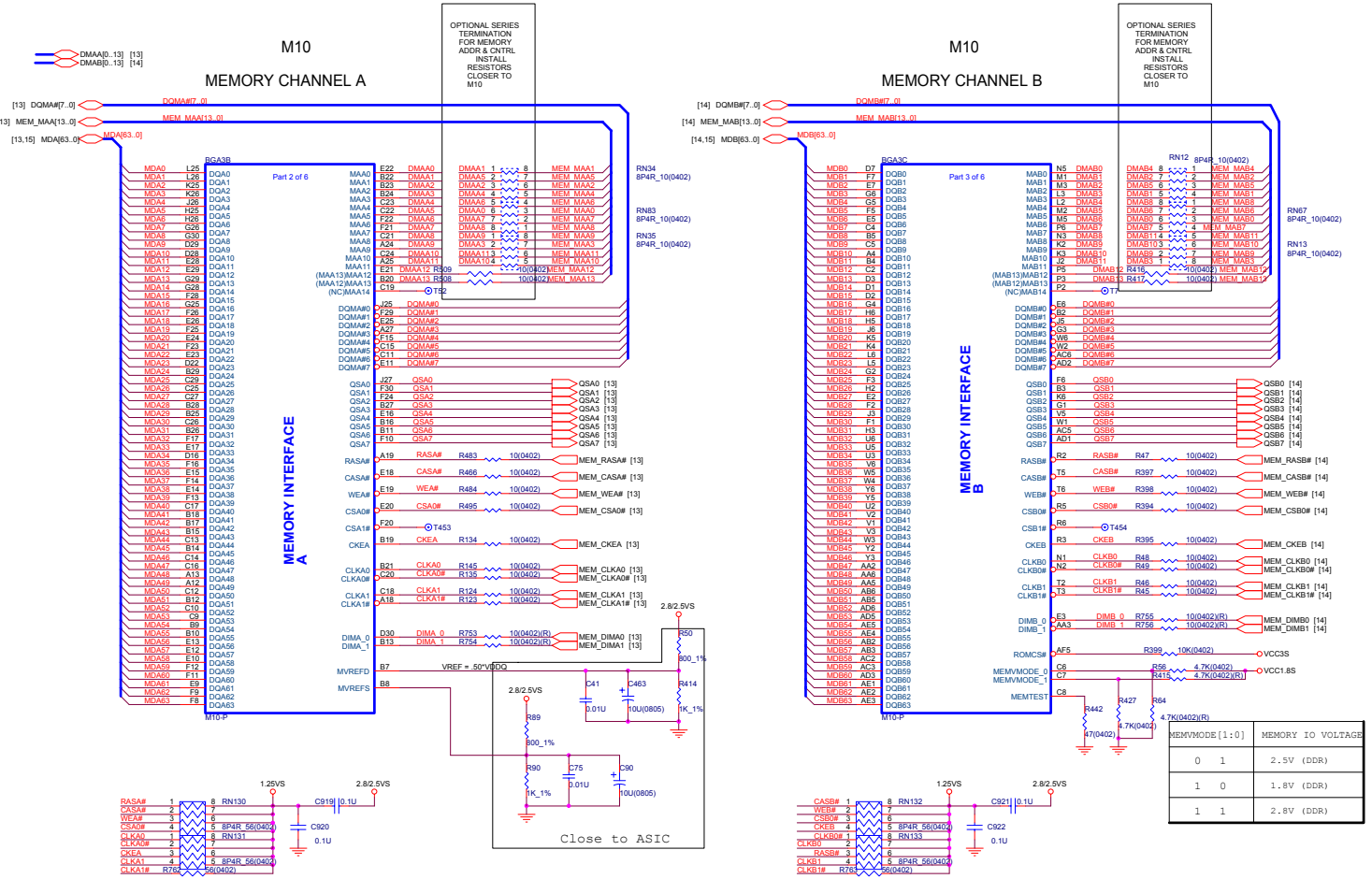
Mobility M10-P



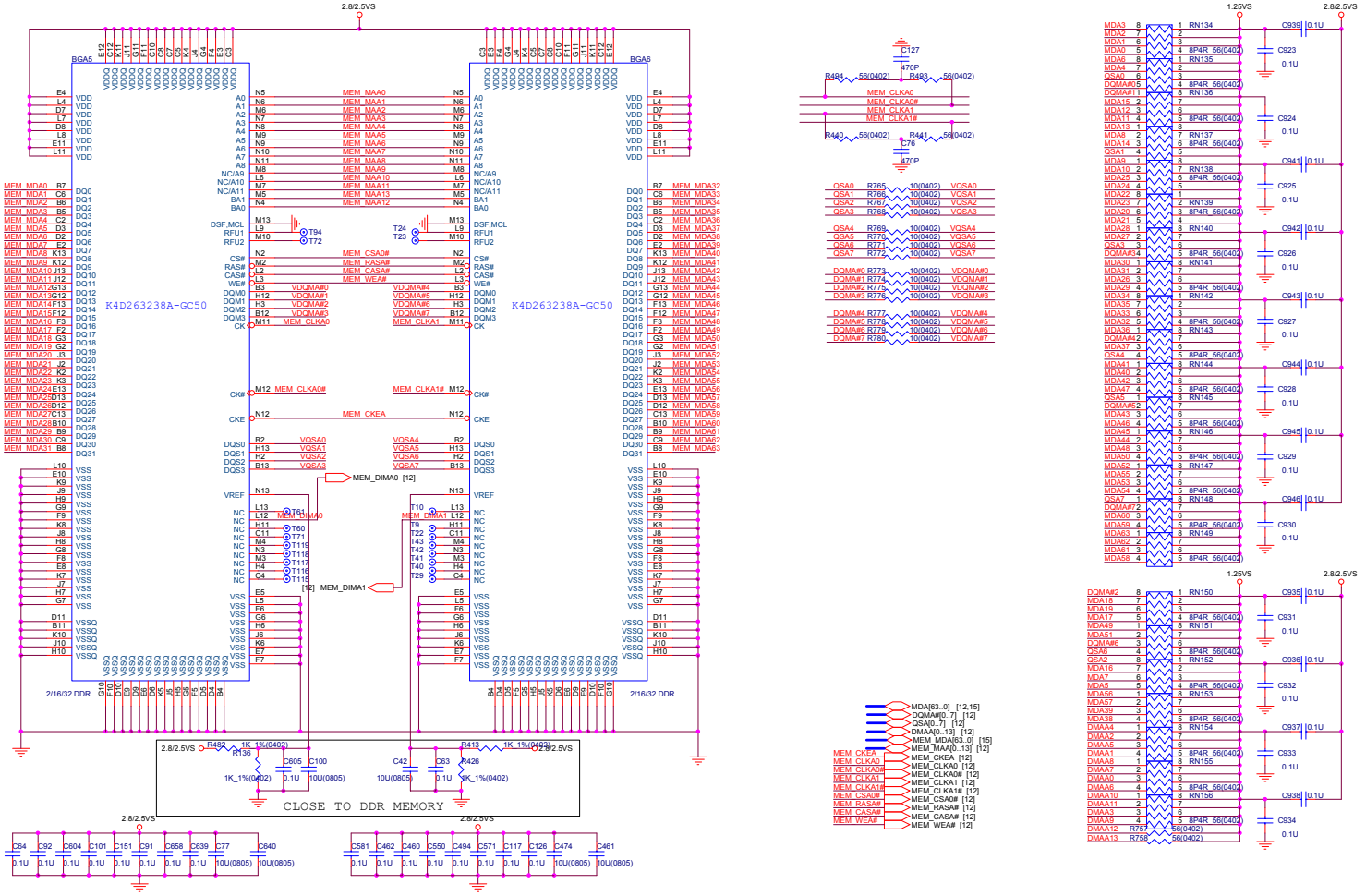
Mobility M10-P MEM A/B



Sheet 12 of 42
Mobility M10-P
MEM A/B

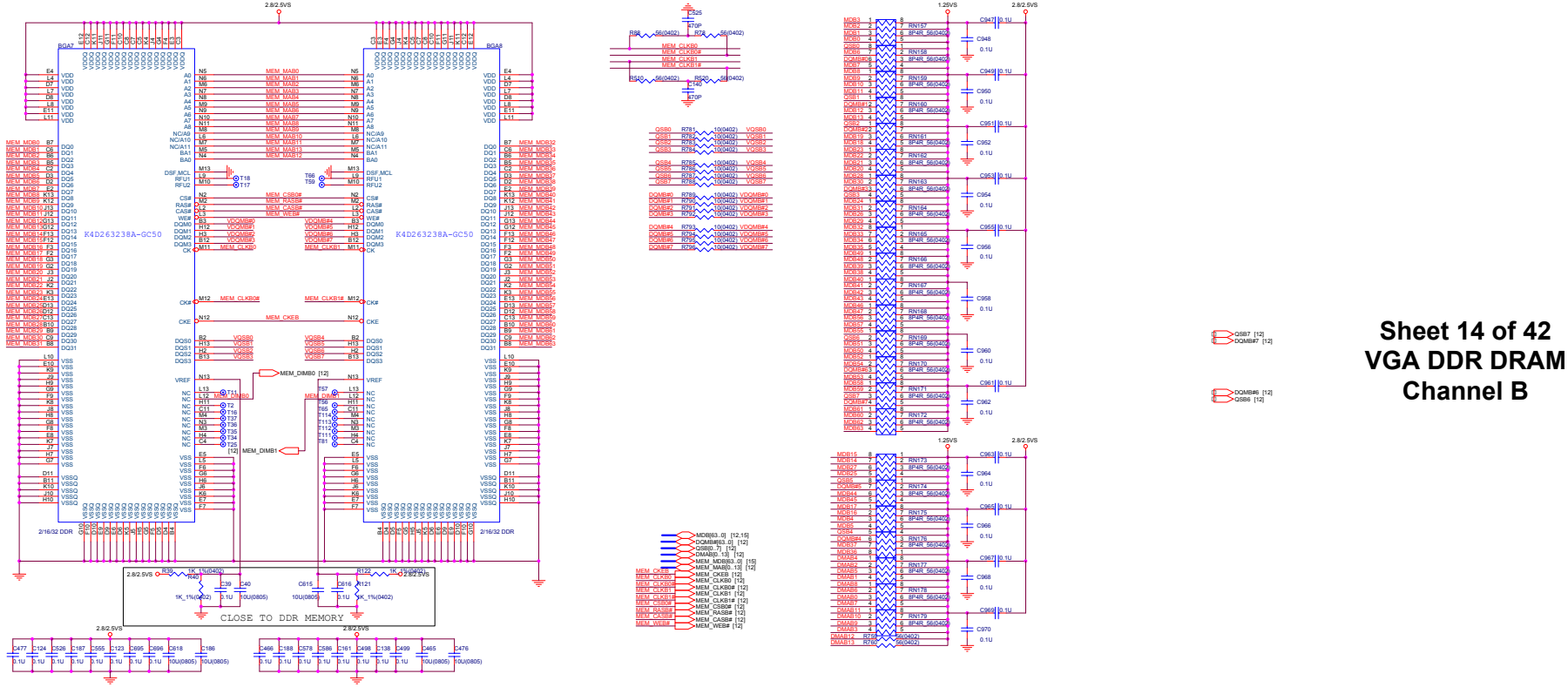
VGA DDR DRAM Channel A

Sheet 13 of 42
VGA DDR DRAM
Channel A



CHANNEL A

VGA DDR DRAM Channel B

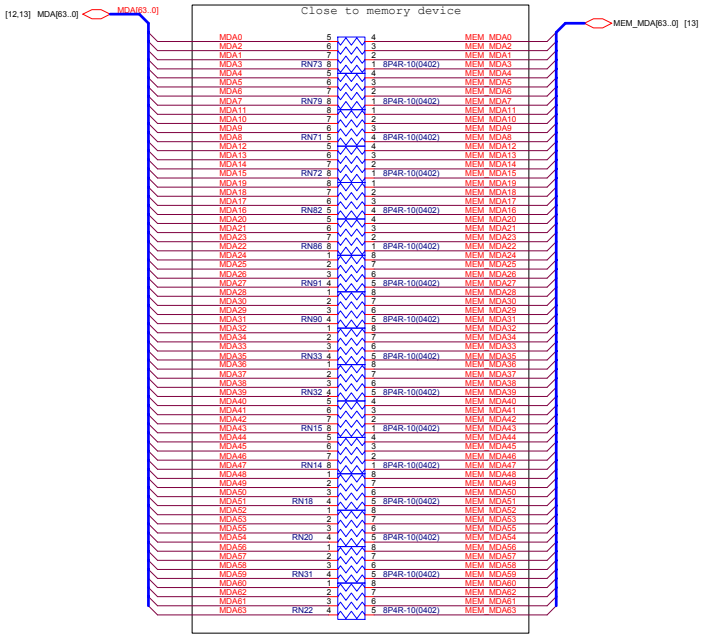


CHANNEL B

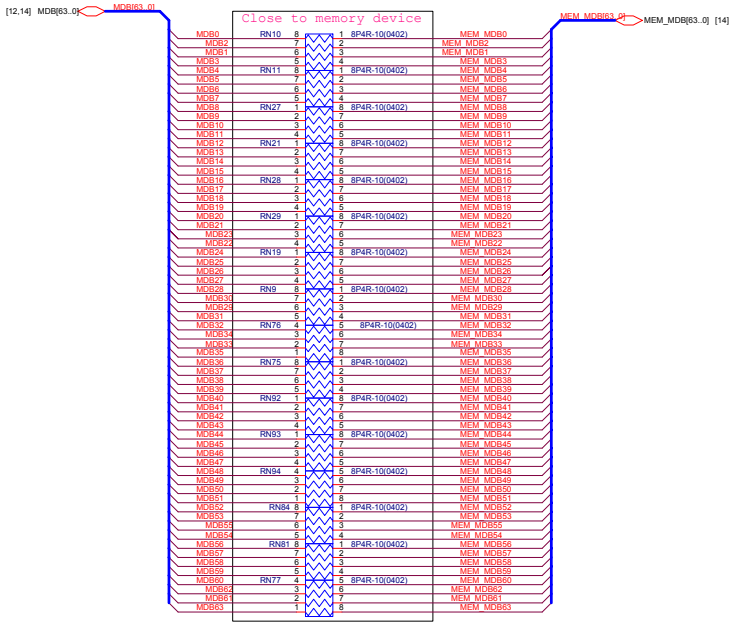
Sheet 14 of 42
VGA DDR DRAM
Channel B

VGA DDR DRAM Termination

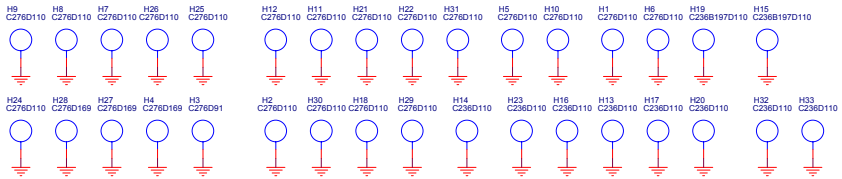
Sheet 15 of 42
VGA DDR DRAM Termination



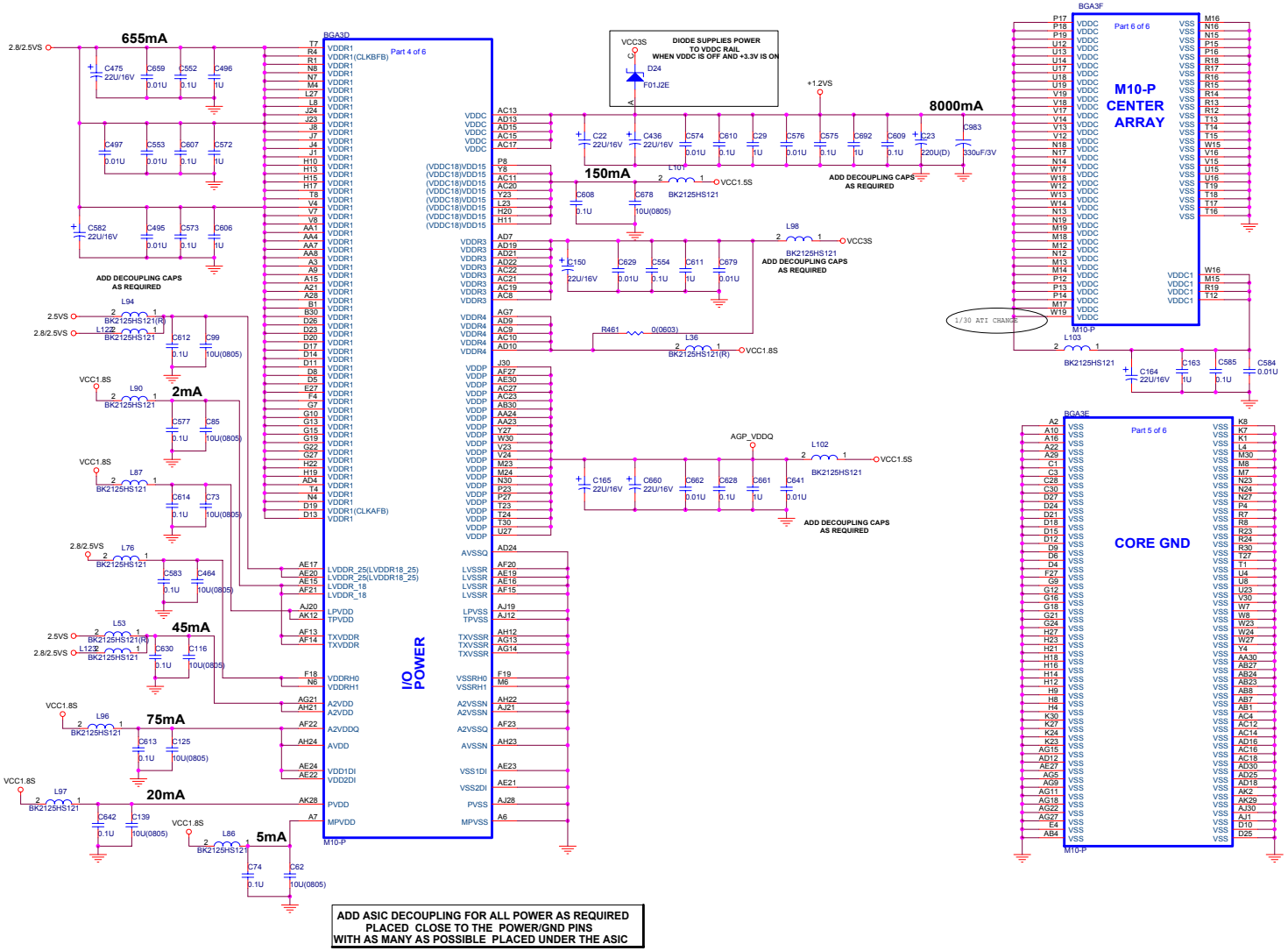
CHANNEL A



CHANNL B



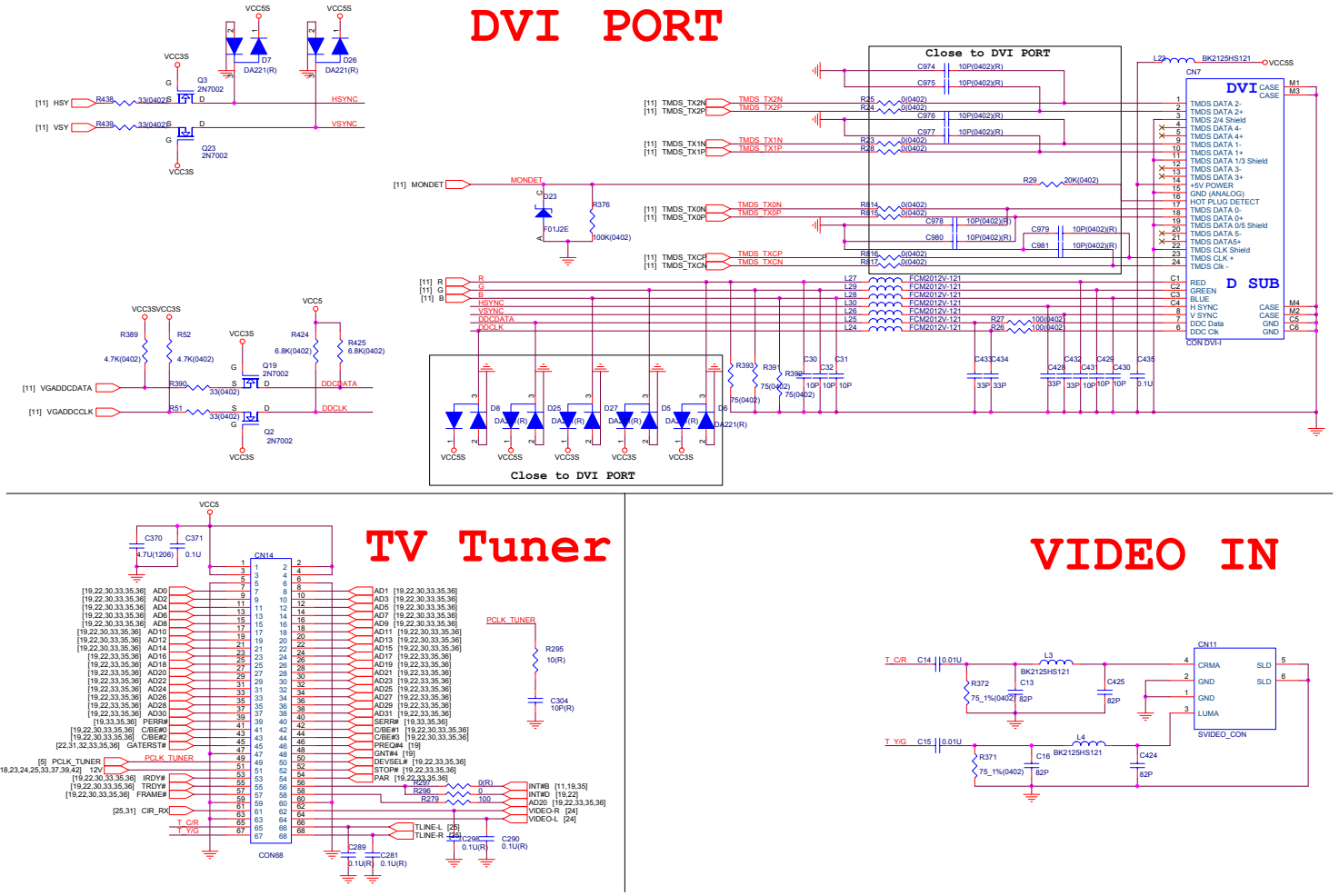
Mobility M10-P_POW



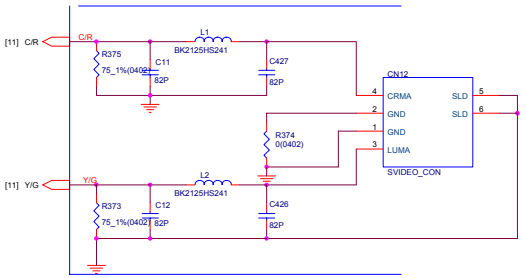
Sheet 16 of 42
Mobility M10-P_POW

TV Tuner, DVI & Video In

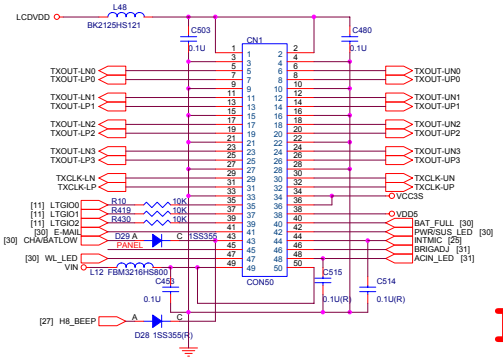
Sheet 17 of 42
TV Tuner, DVI & Video In



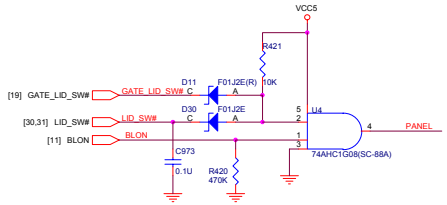
TV Out & LVDS

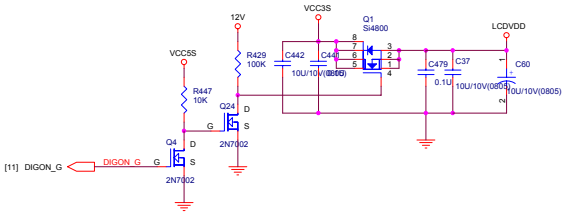


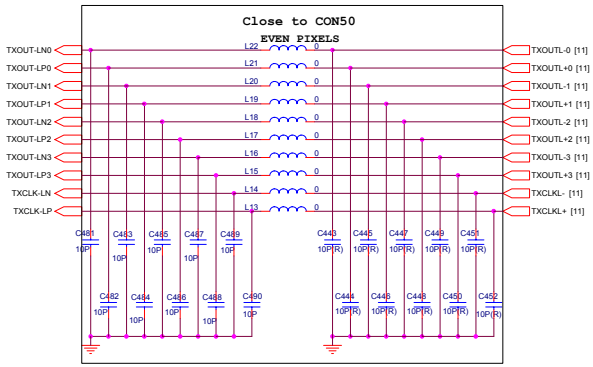
TV OUT

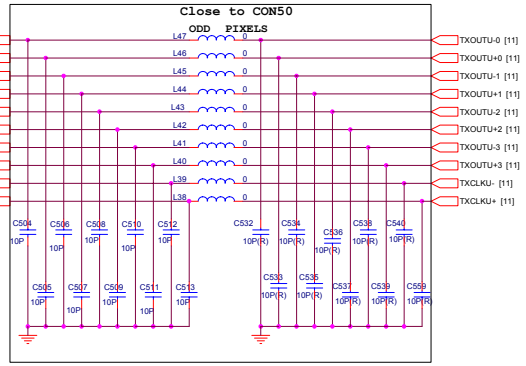


LVDS





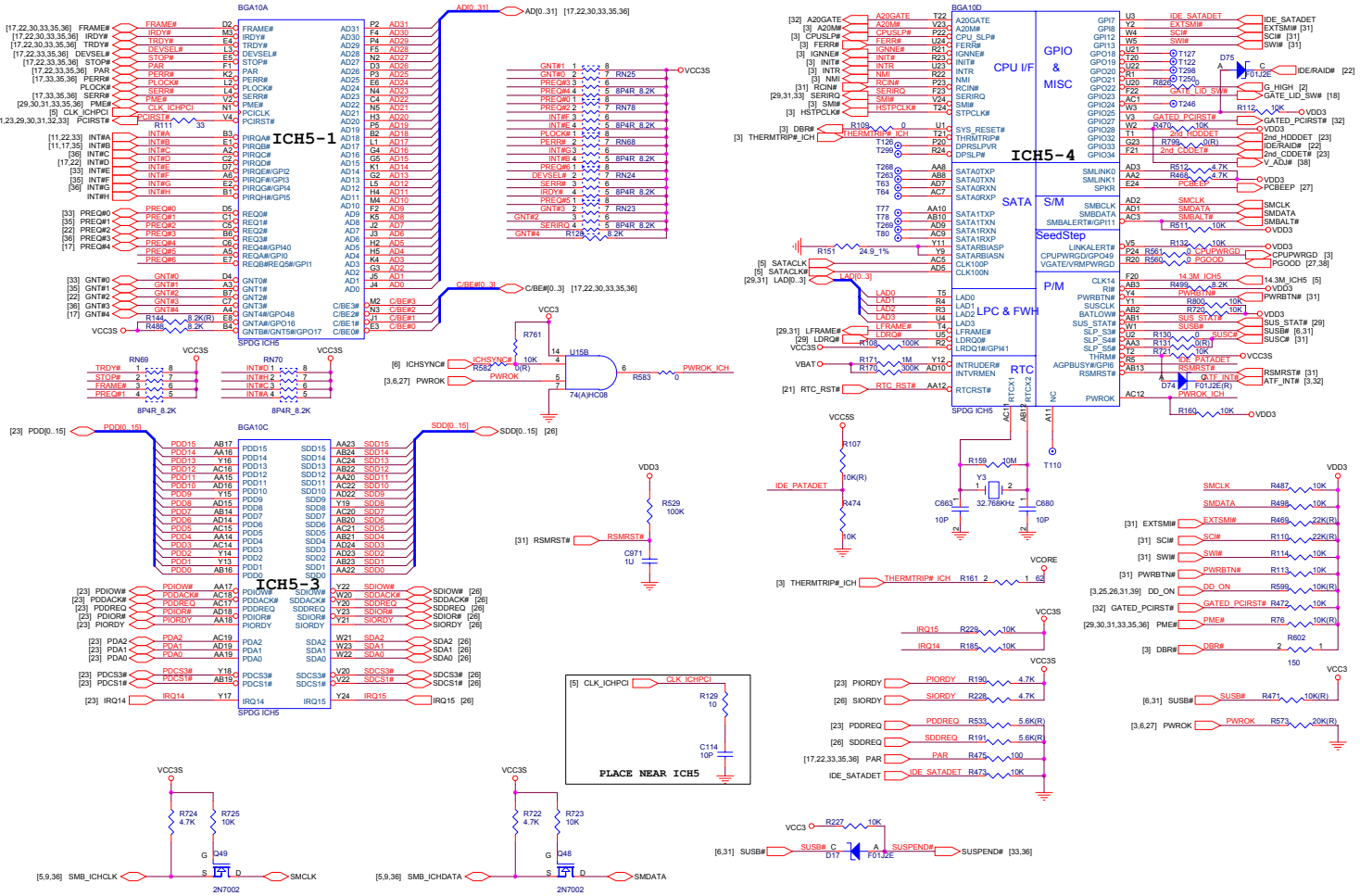




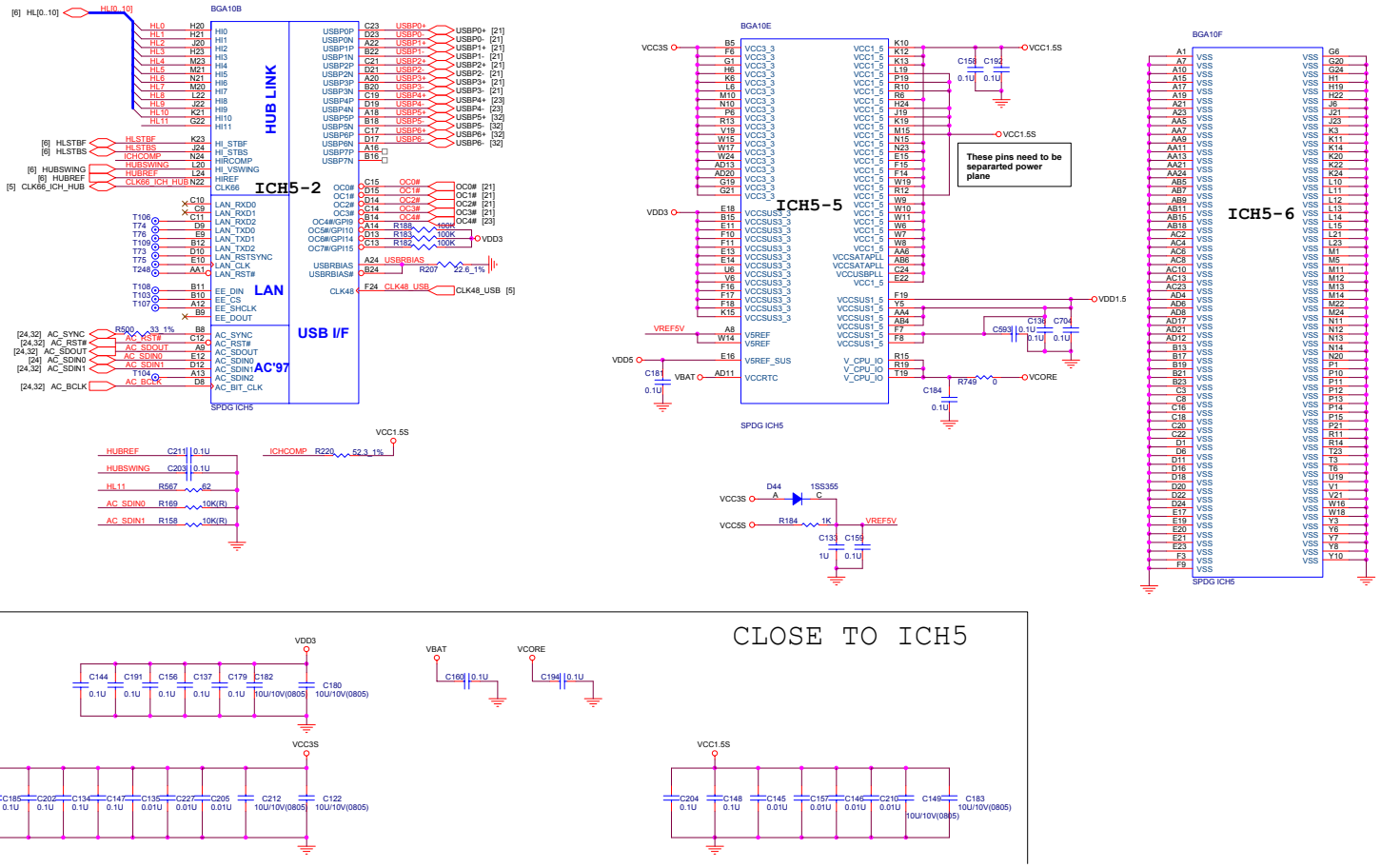
Sheet 18 of 42
TV Out & LVDS

ICH5 (1 of 2)

Sheet 19 of 42
ICH5 1/2



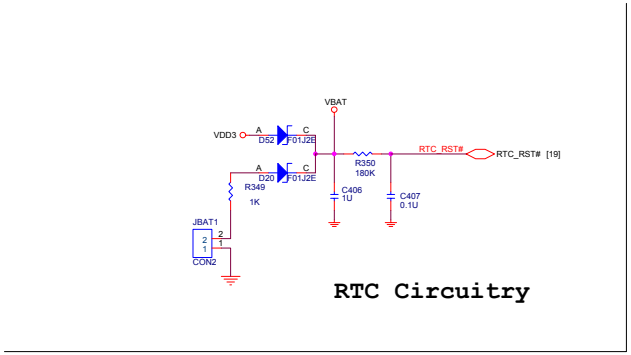
ICH5 (2 of 2)

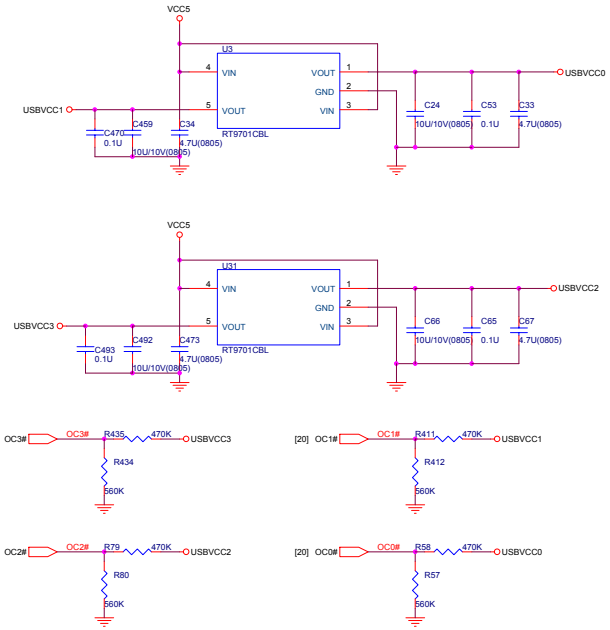


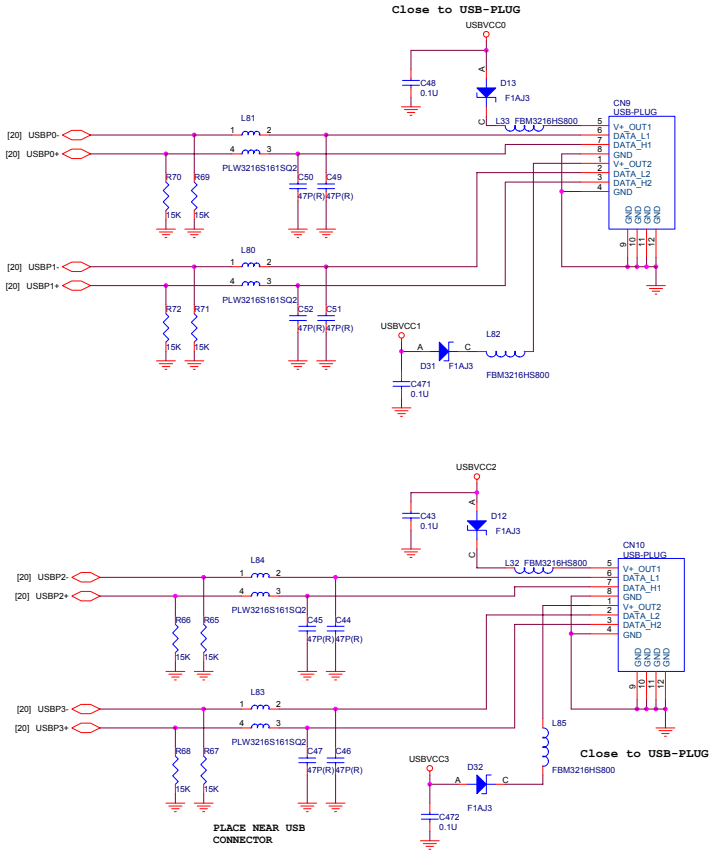
Sheet 20 of 42
ICH 2/2

USB Port & RTC

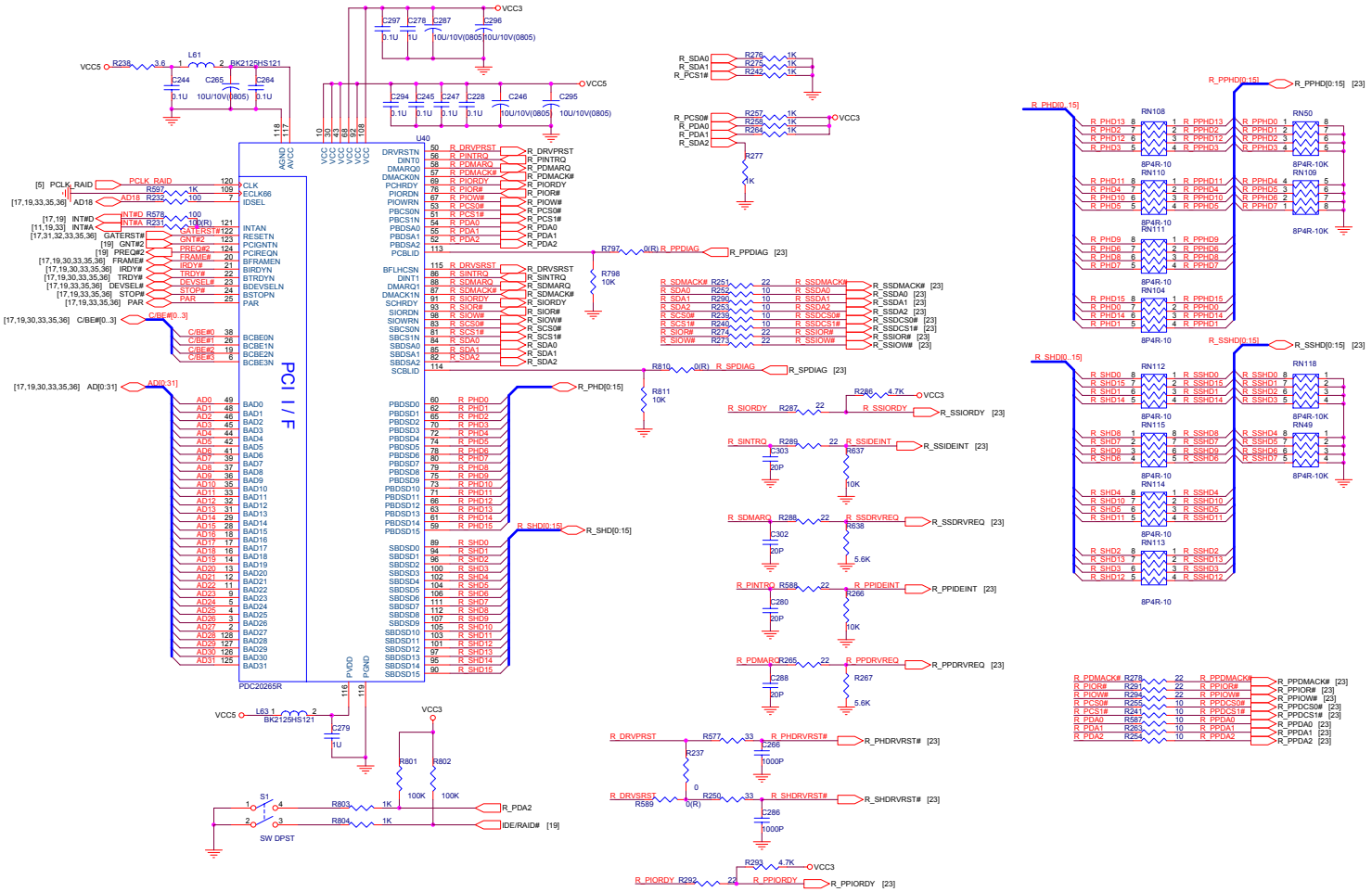
Sheet 21 of 42
USB Port & RTC







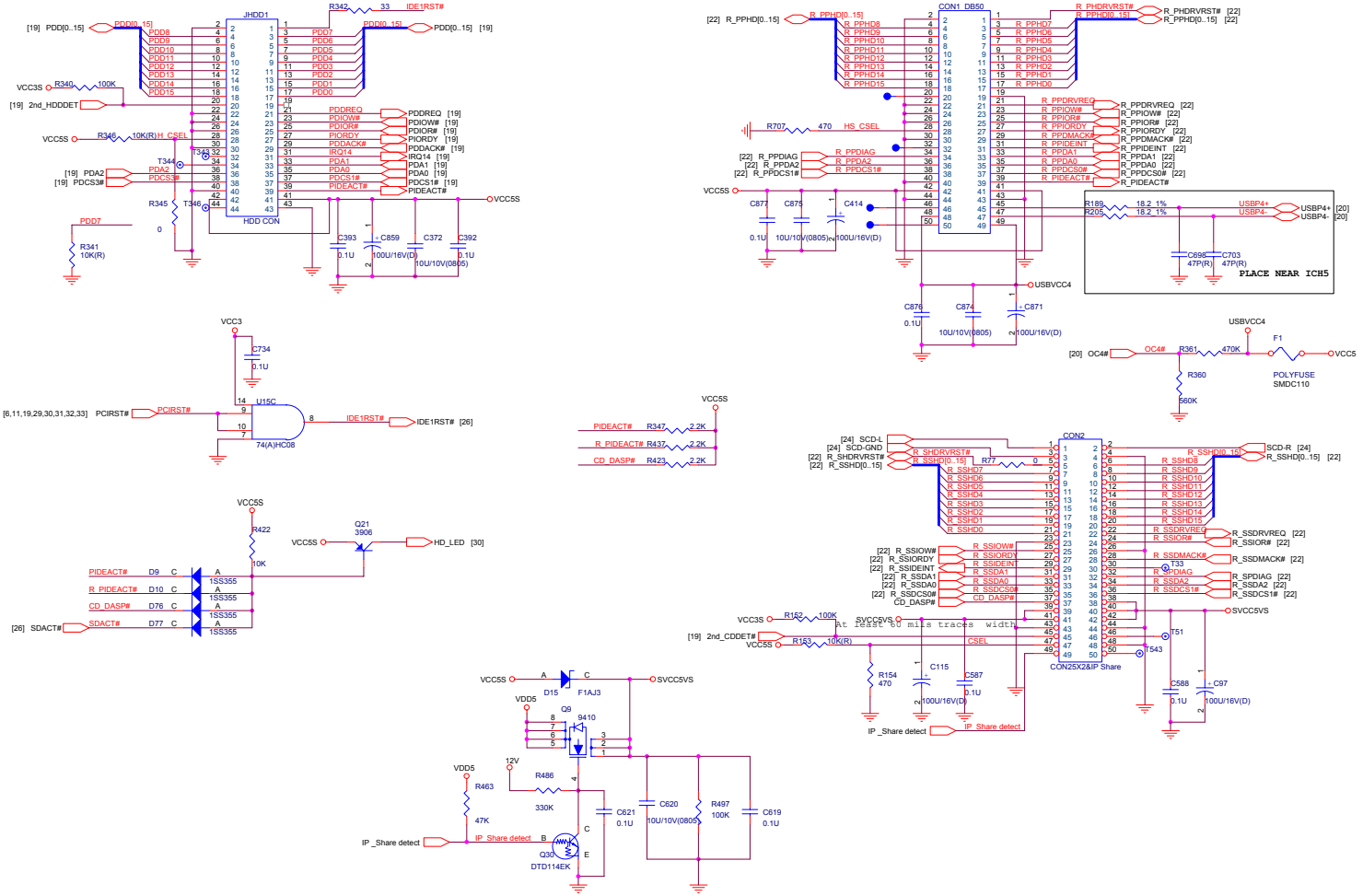
RAID PDC20265R



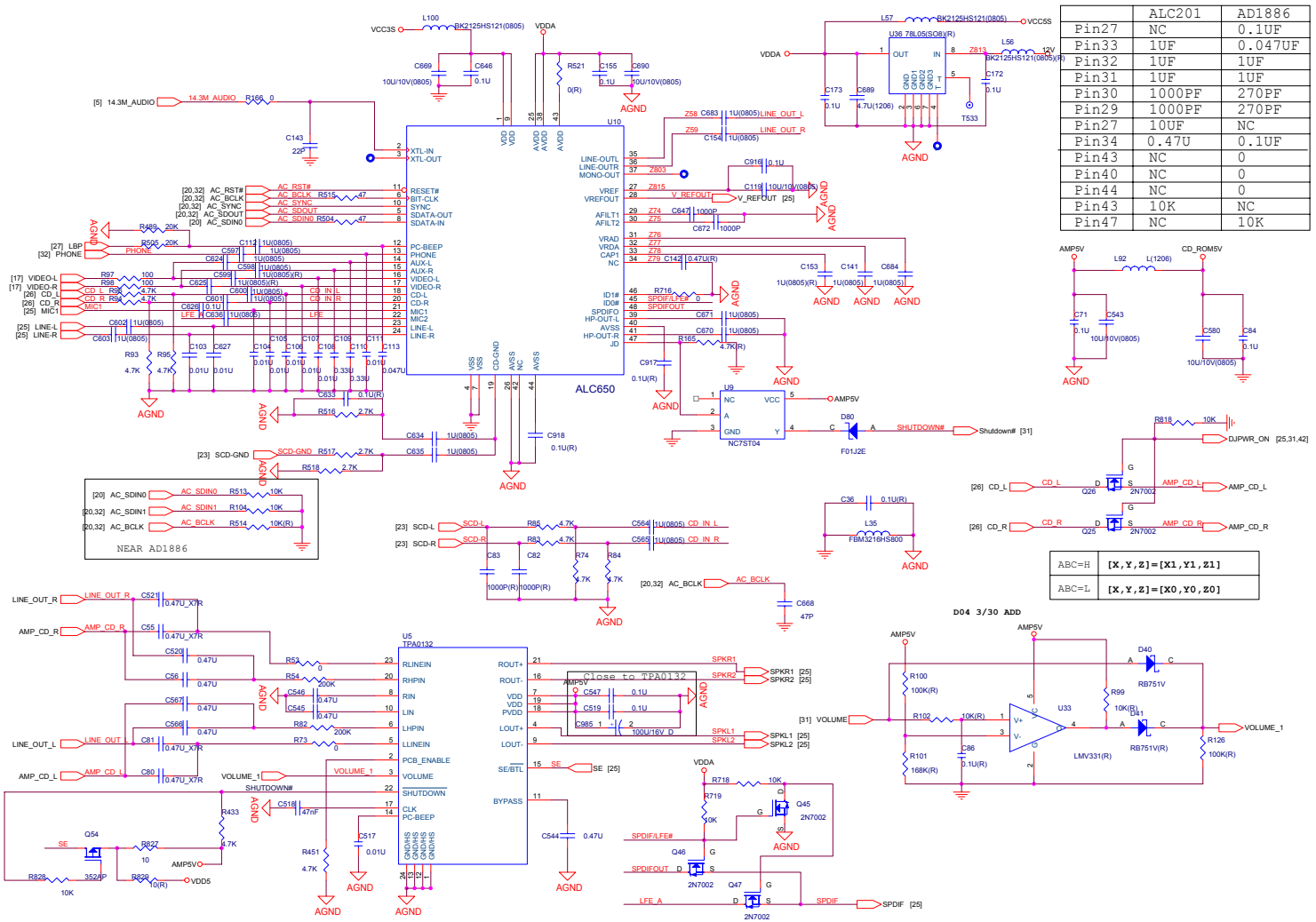
Sheet 22 of 42
RAID PDC20265R

HDD, CD-R/W & IP Sharer

Sheet 23 of 42
HDD, CD-R/W & IP Sharer



AMP TPA0132 / ALC650

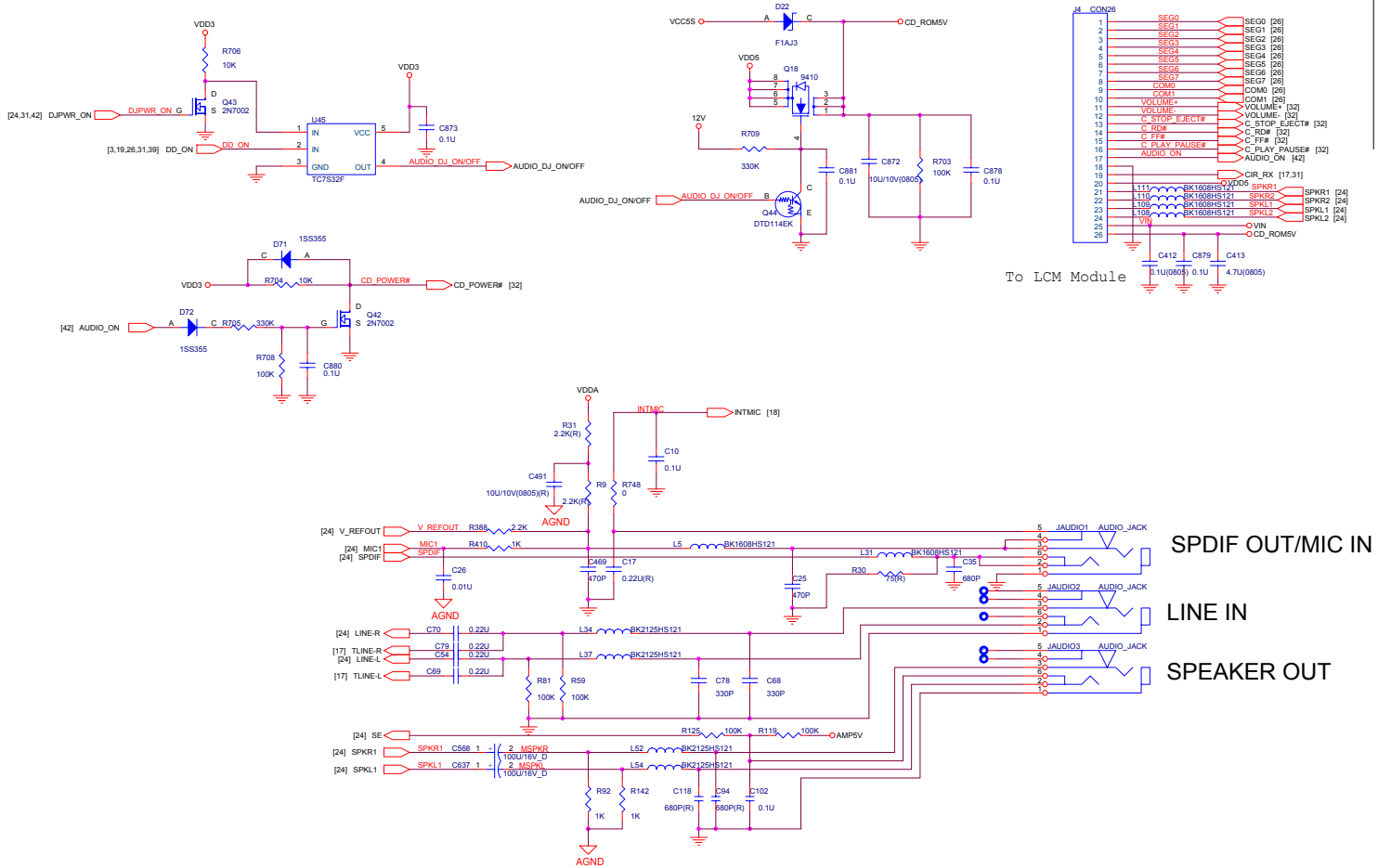


	ALC201	AD1886
Pin27	NC	0.1UF
Pin33	1UF	0.047UF
Pin32	1UF	1UF
Pin31	1UF	1UF
Pin30	1000PF	270PF
Pin29	1000PF	270PF
Pin27	10UF	NC
Pin34	0.47U	0.1UF
Pin43	NC	0
Pin40	NC	0
Pin44	NC	0
Pin43	10K	NC
Pin47	NC	10K

Sheet 24 of 42
AMP TPA0132 / ALC650

LCM & Audio Jack

Sheet 25 of 42
LCM & Audio Jack

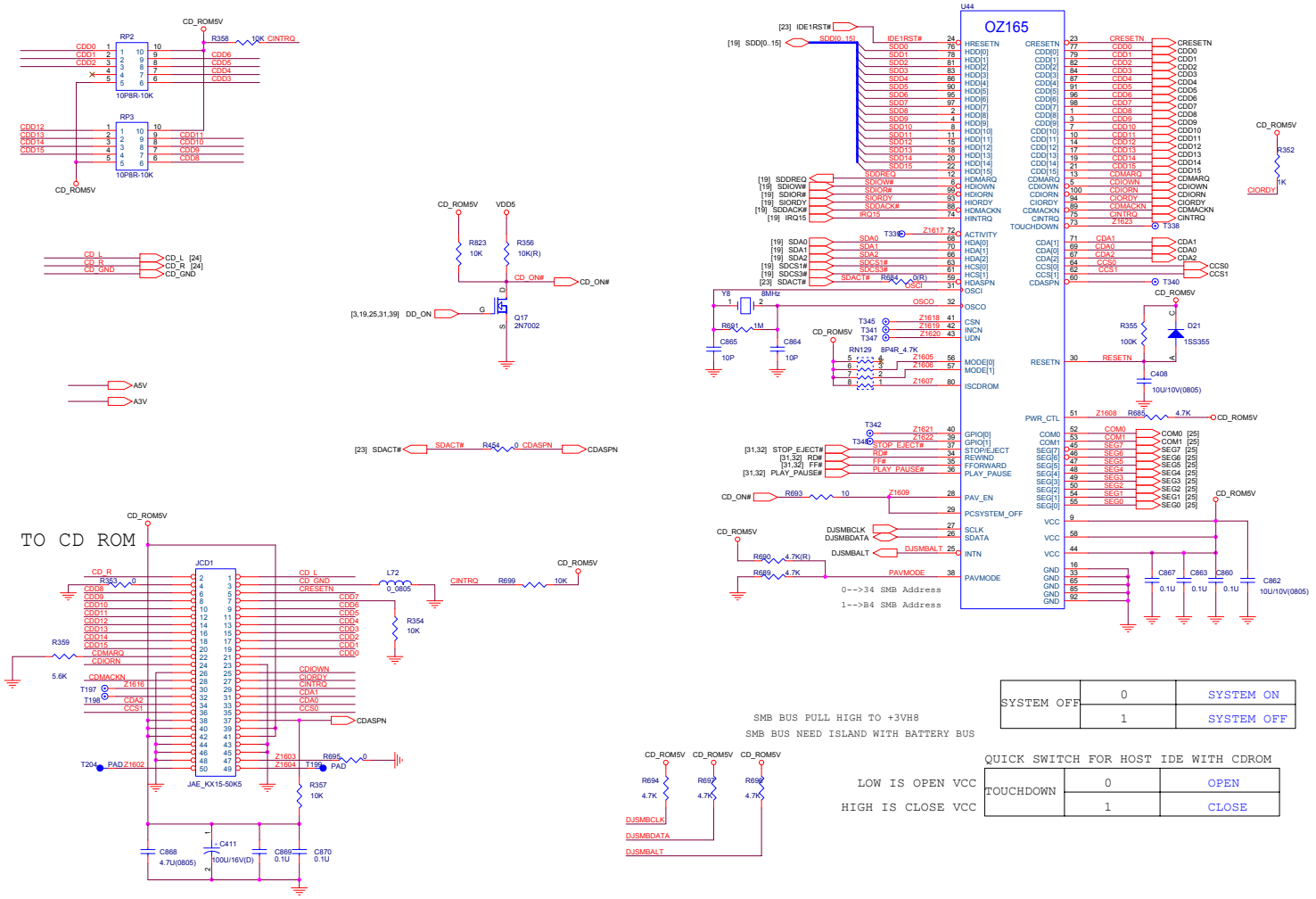


SPDIF OUT/MIC IN

LINE IN

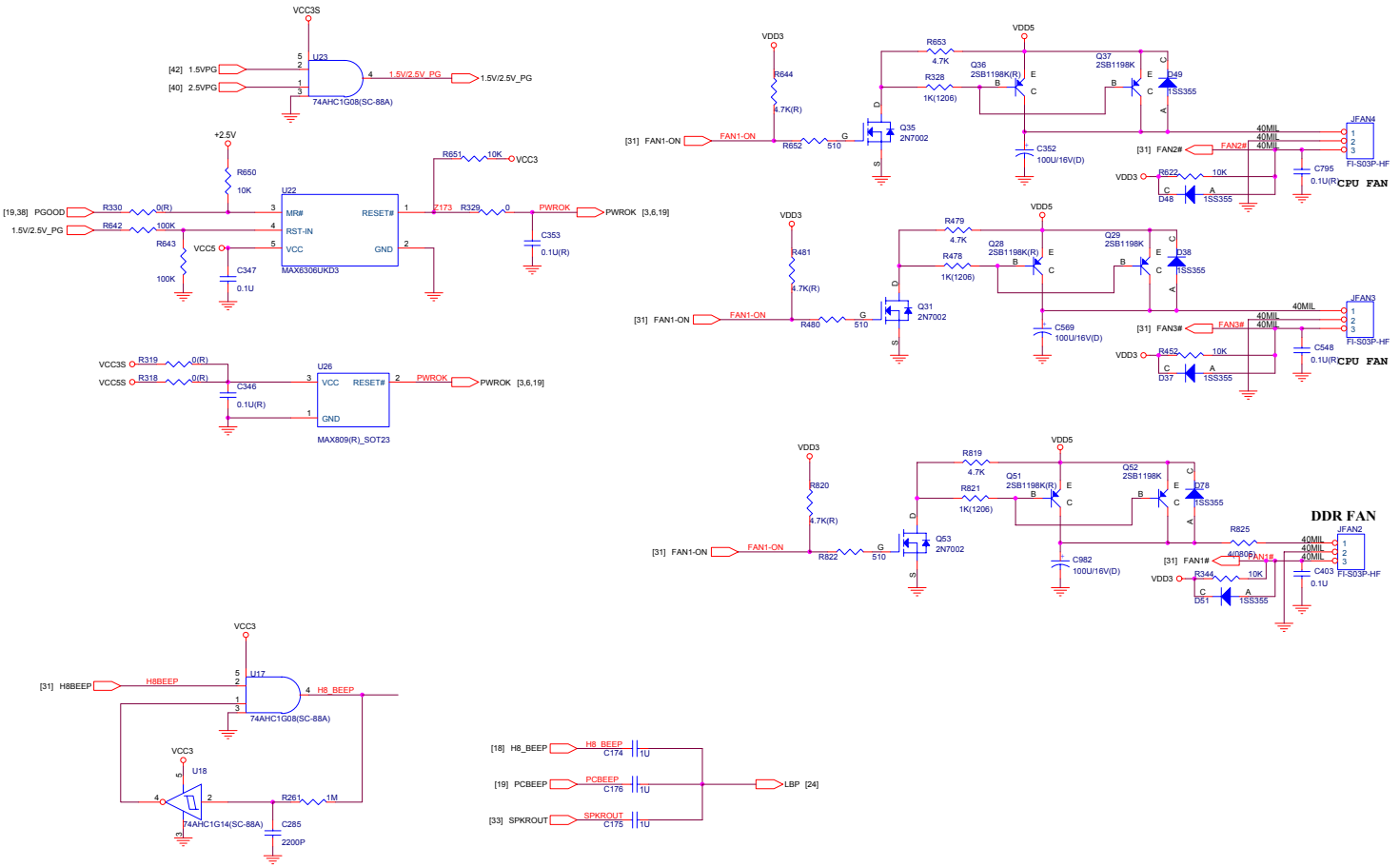
SPEAKER OUT

Audio DJ/CDROM

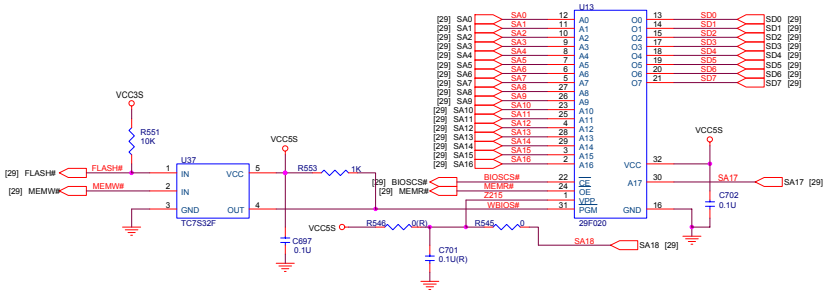


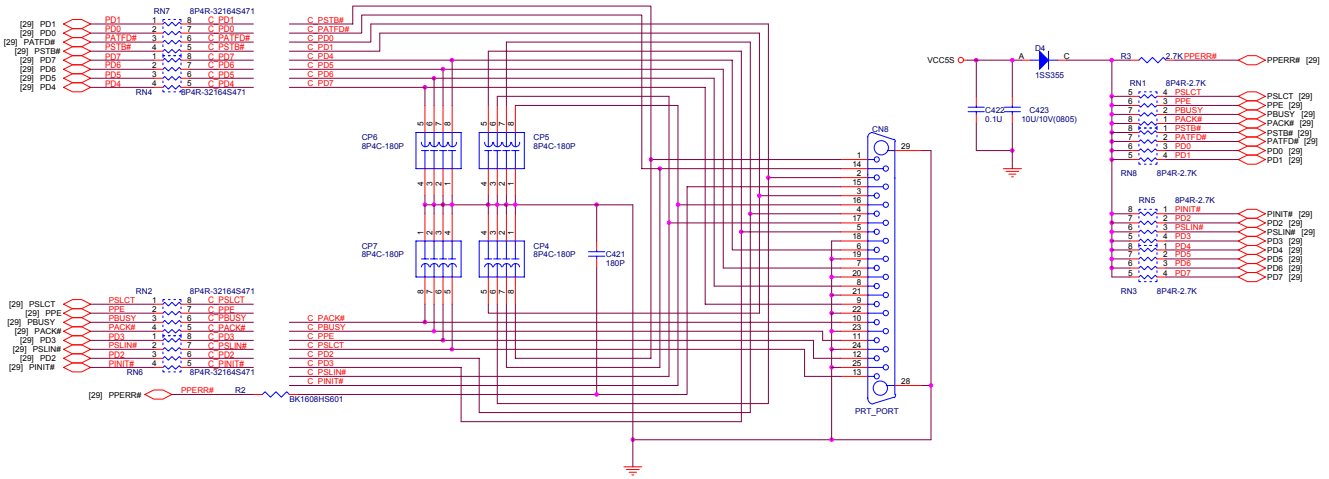
Fan Control & Beep

Sheet 27 of 42
Fan Control & Beep



Flash ROM/LPT1





NS87393 LPC Bridge & Super I/O

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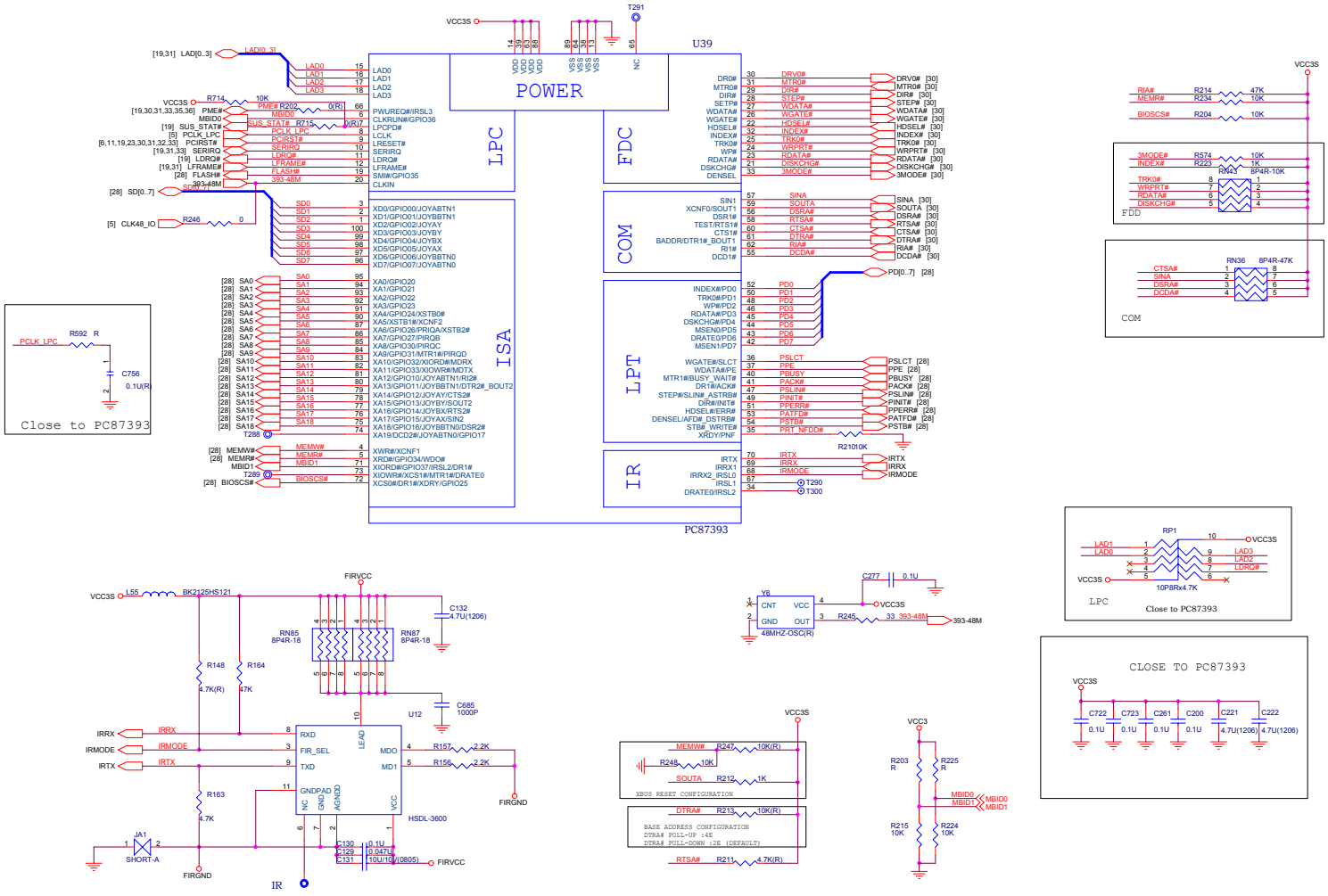
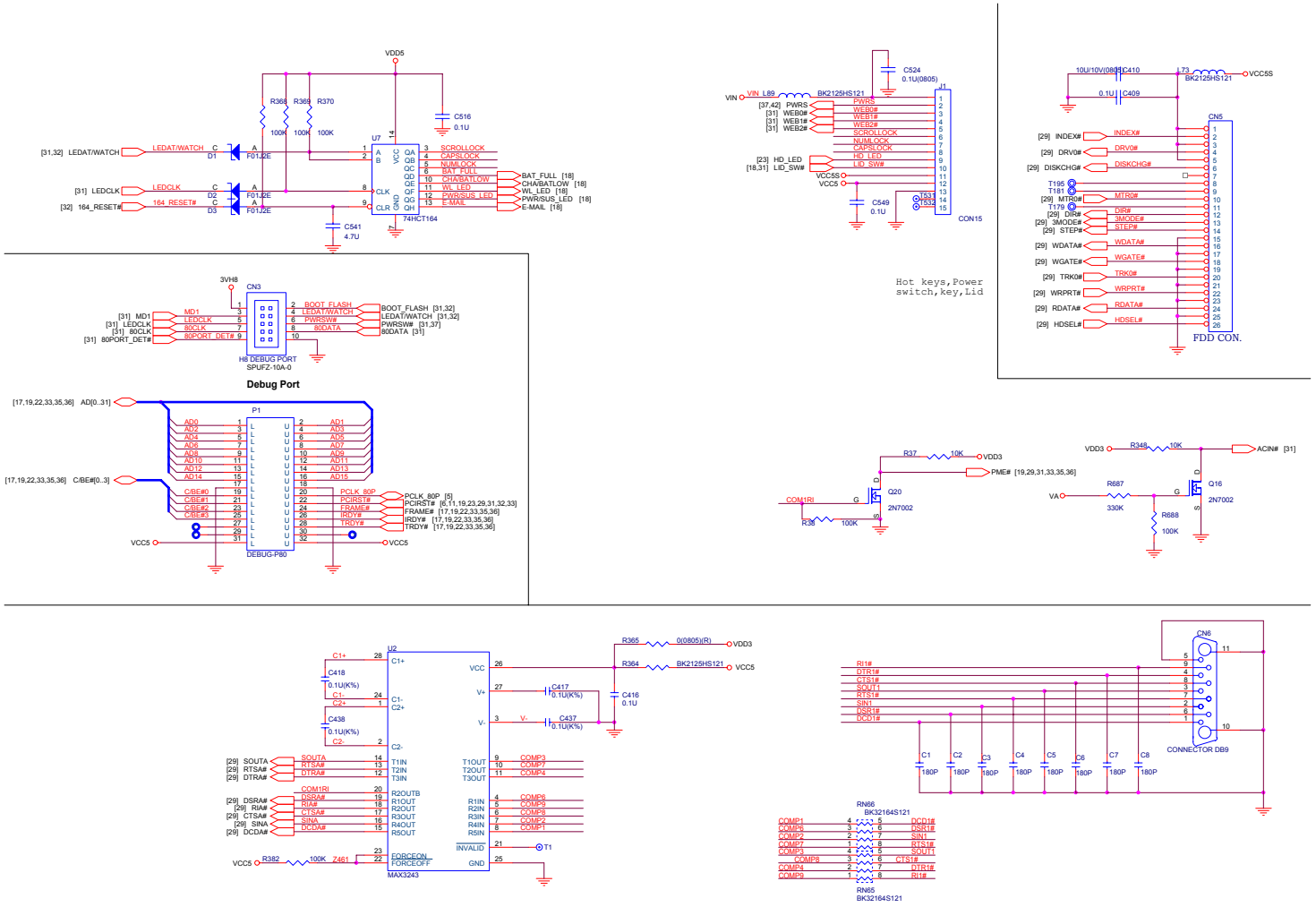
LPC Bridge & Super I/O



I/O, FDD, LED & Debug



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I/O, FDD, LED & Debug

KBC H8

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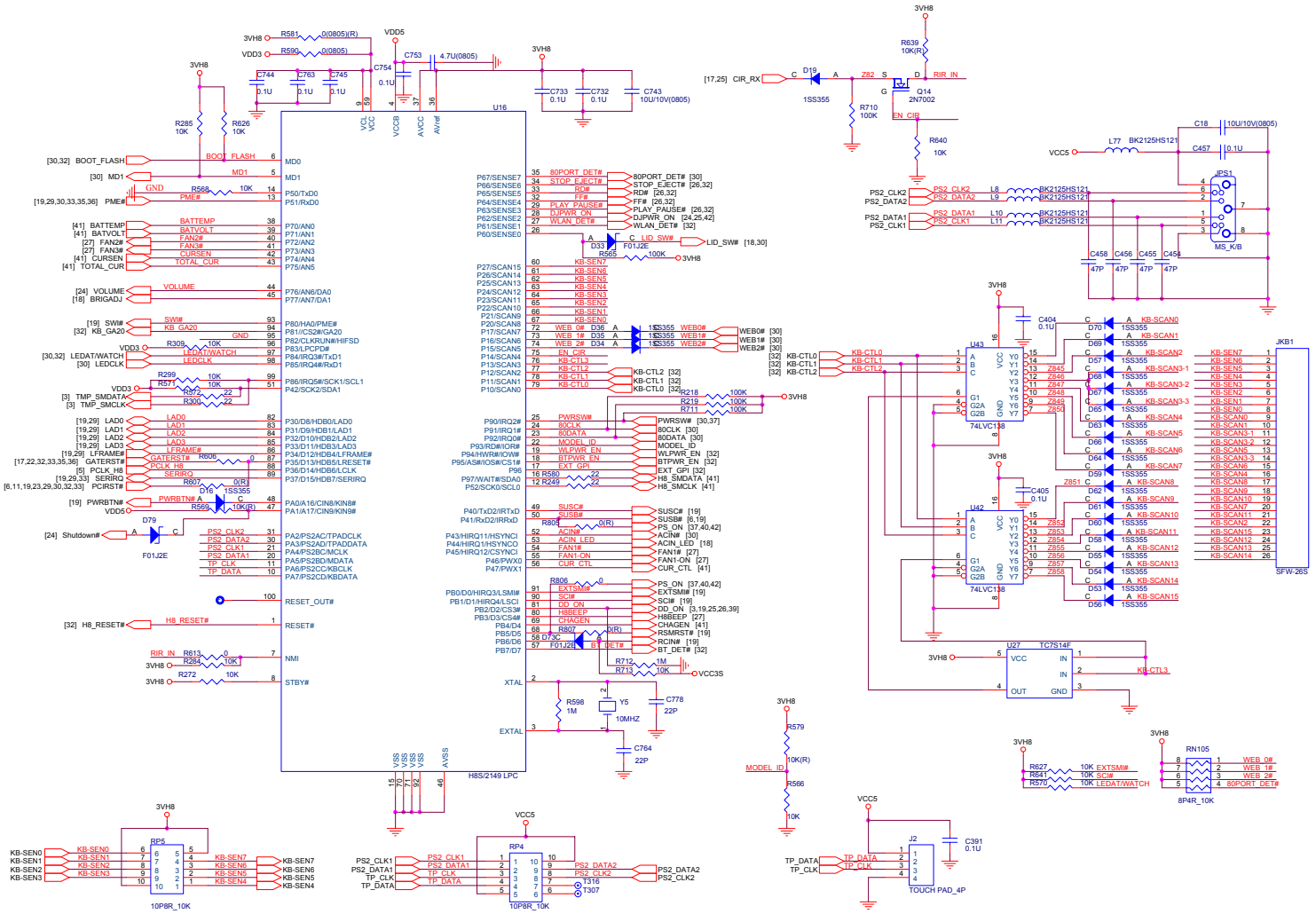
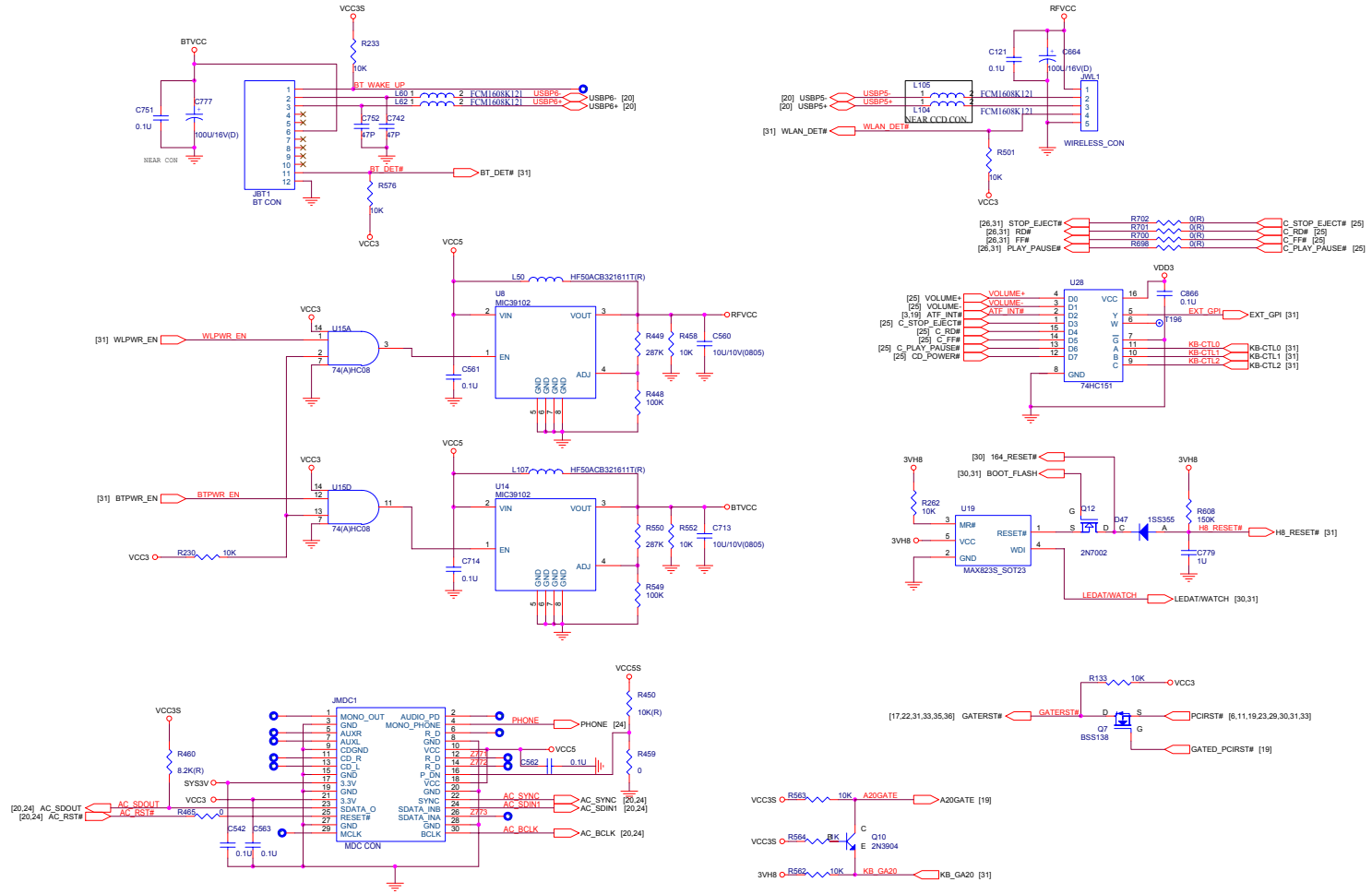
KBC H8



MDC, Wireless & BT



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MDC, Wireless & BT

PCI 1520

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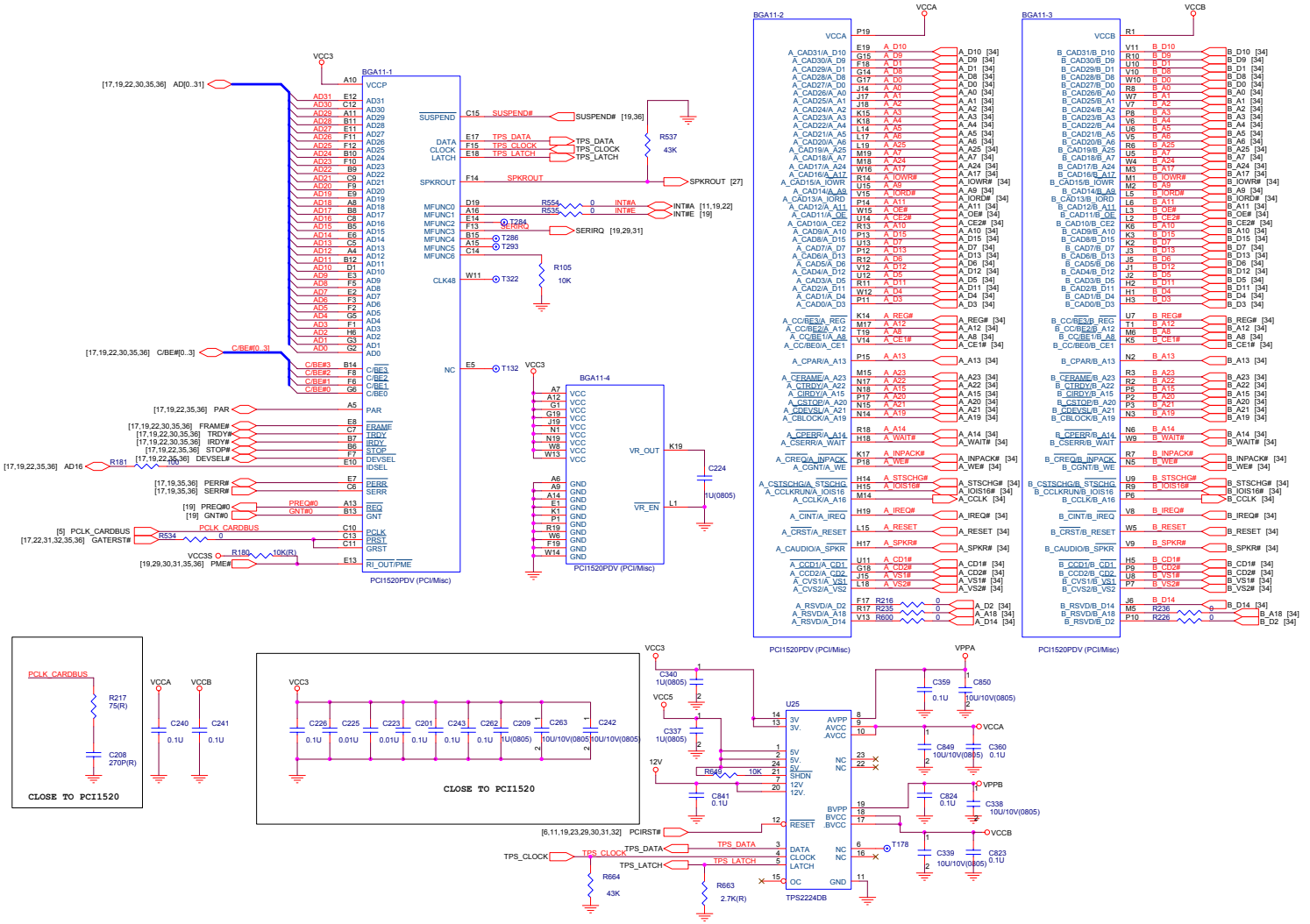
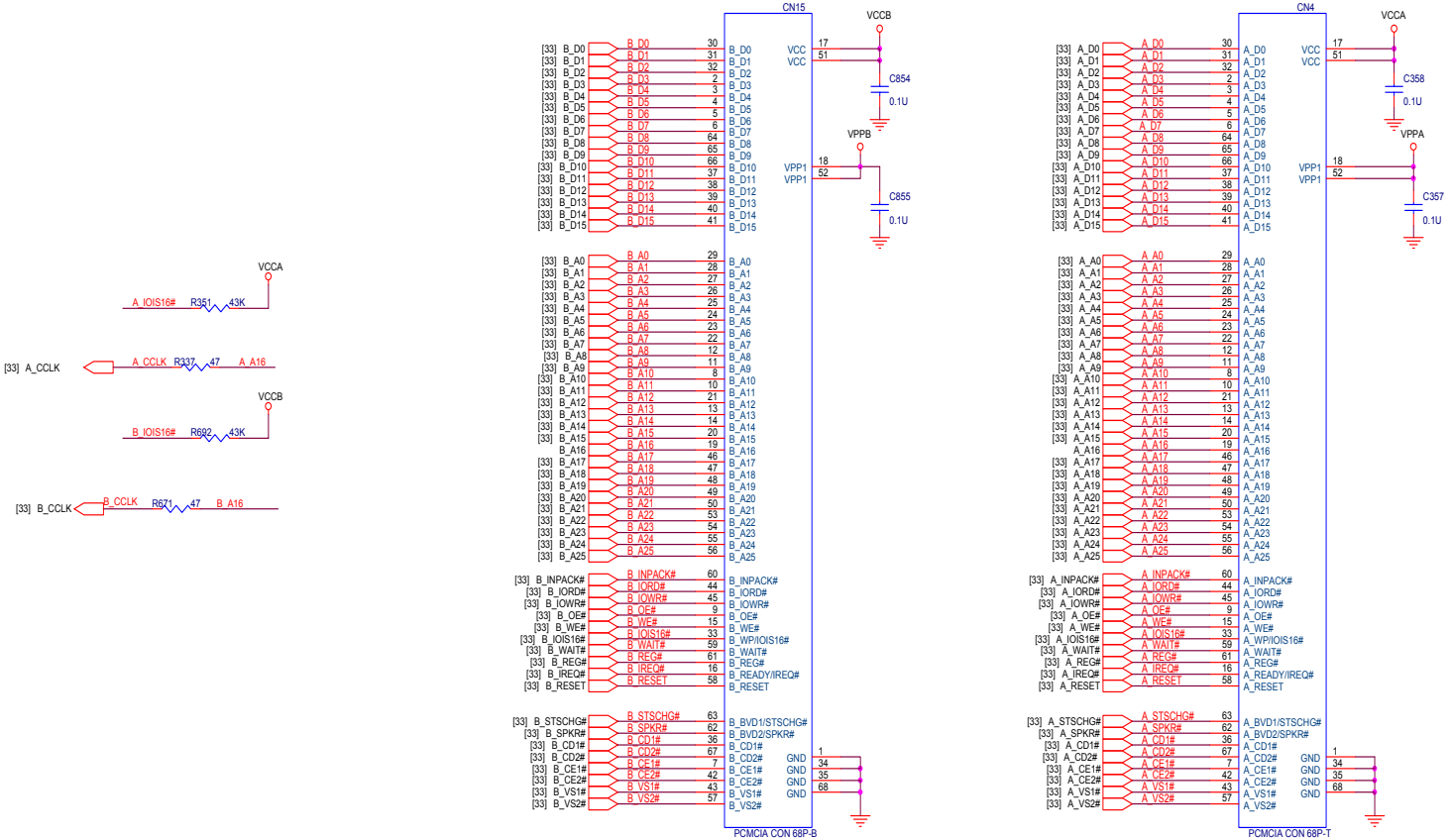
PCI 1520



PCMCIA Connector



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PCMICIA
Connector

IEEE 1394 TSB43AB21

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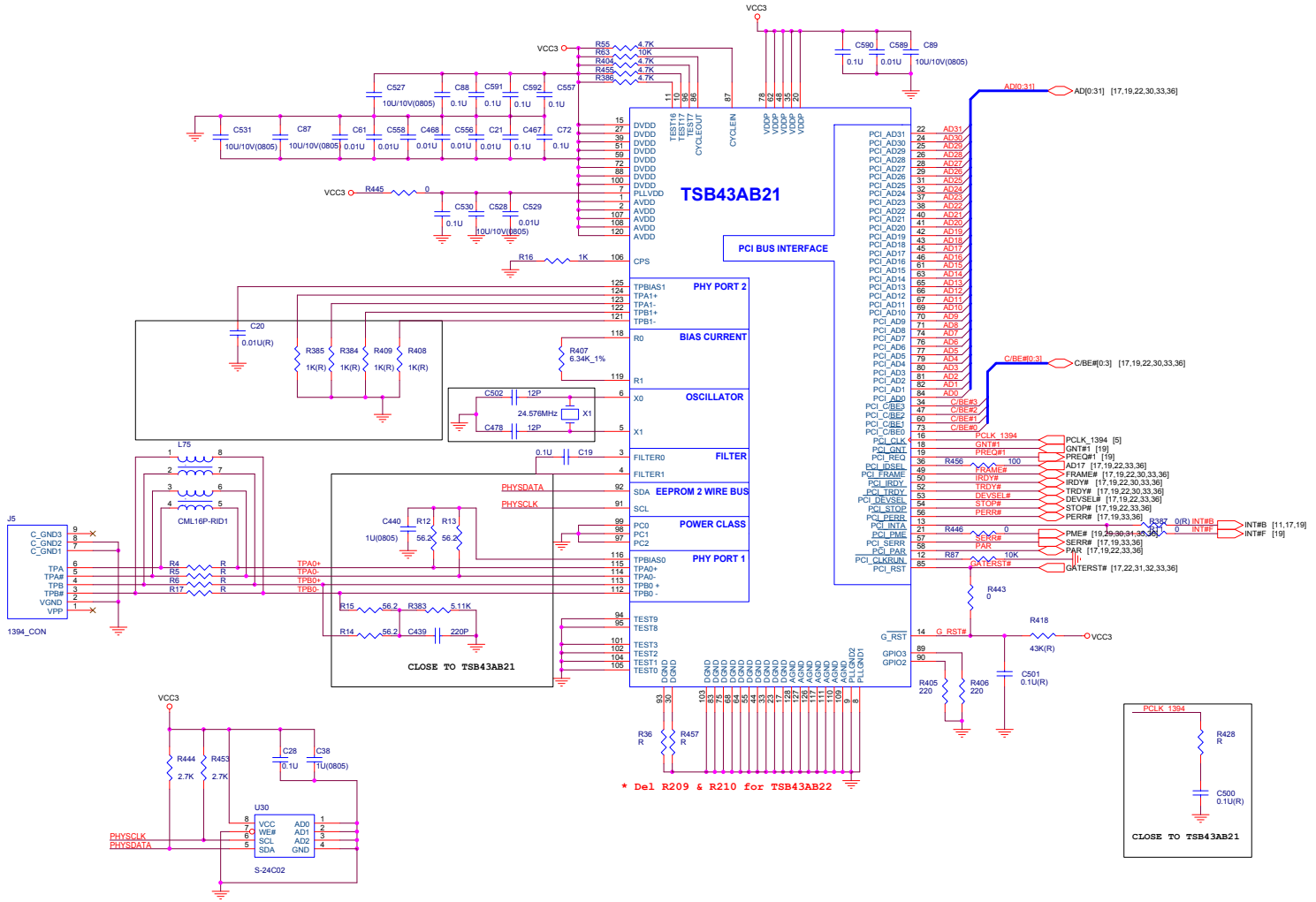
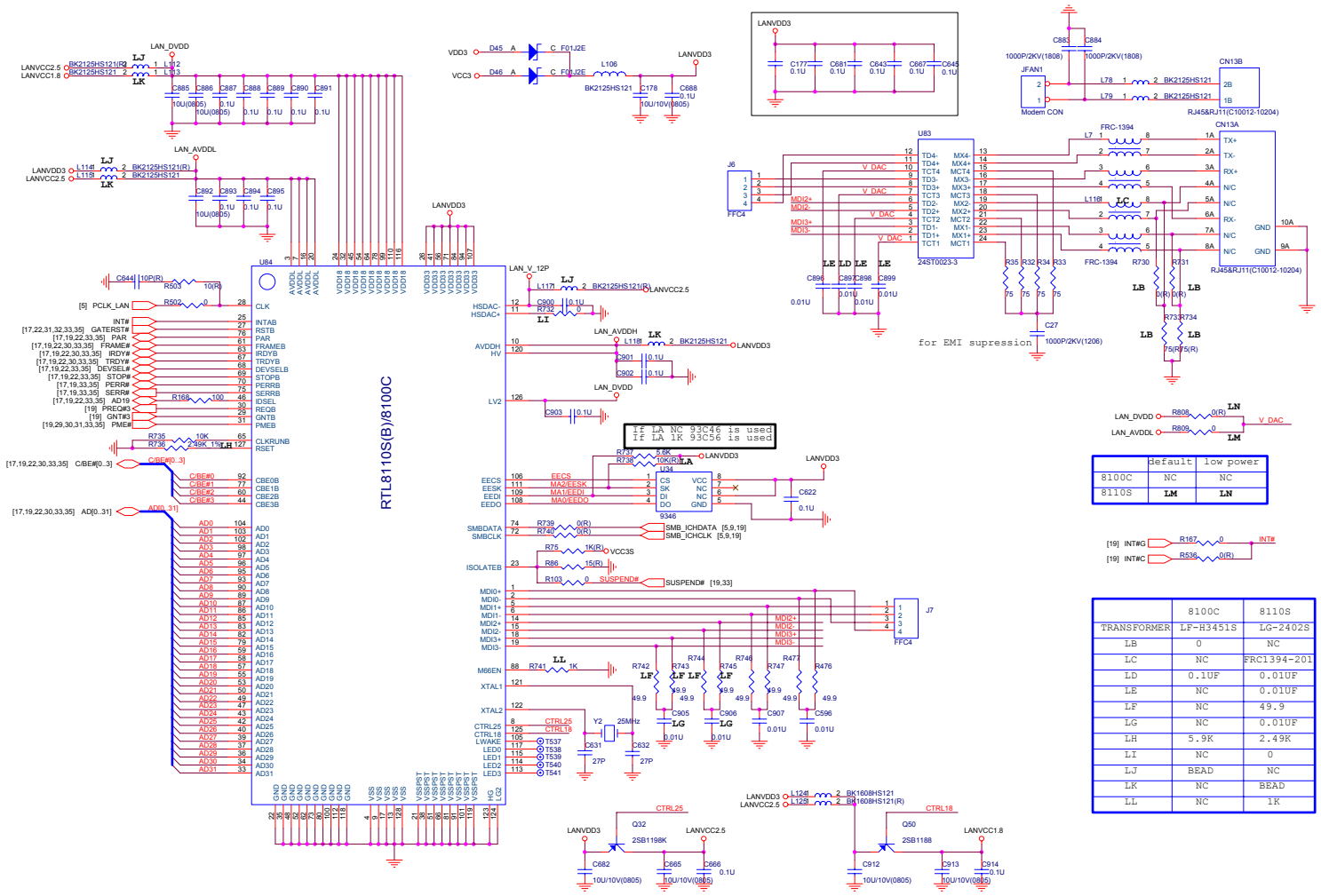
IEEE1394
TSB43AB21



LAN RTL8100C/RTL8110S(B)-32



	default	low power
8100C	NC	NC
8110S	LM	LN

	8100C	8110S
TRANSFORMER	LF-H3451S	LG-2402S
LB	0	NC
LC	NC	FRC1394-201
LD	0.1UF	0.01UF
LE	NC	0.01UF
LF	NC	49.9
LG	NC	0.01UF
LH	5.9K	2.49K
LI	NC	0
LJ	BEAD	NC
LK	NC	BEAD
LL	NC	1K

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LAN RTL8100C/
RTL8110S(B)-32

Power Plane

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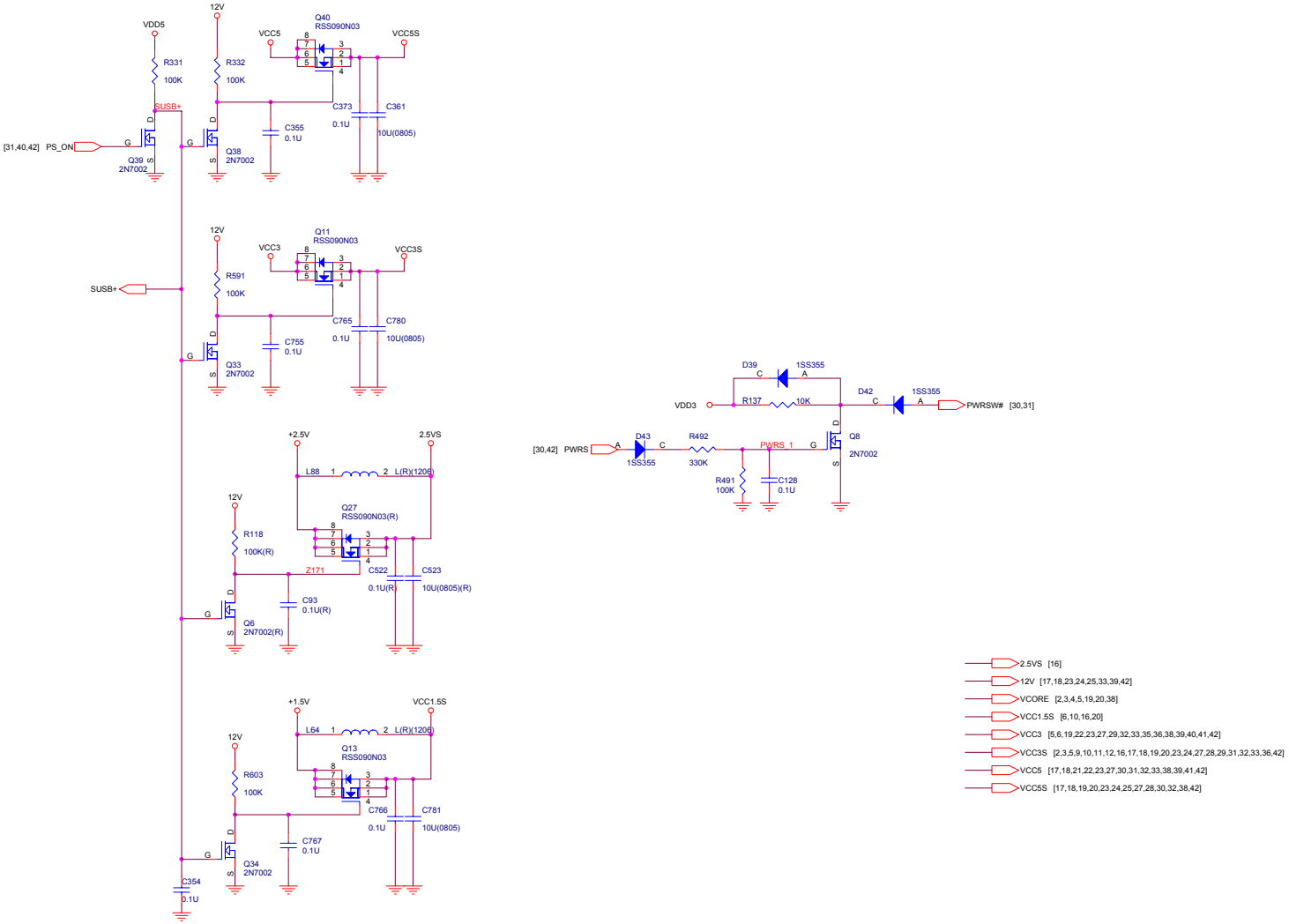
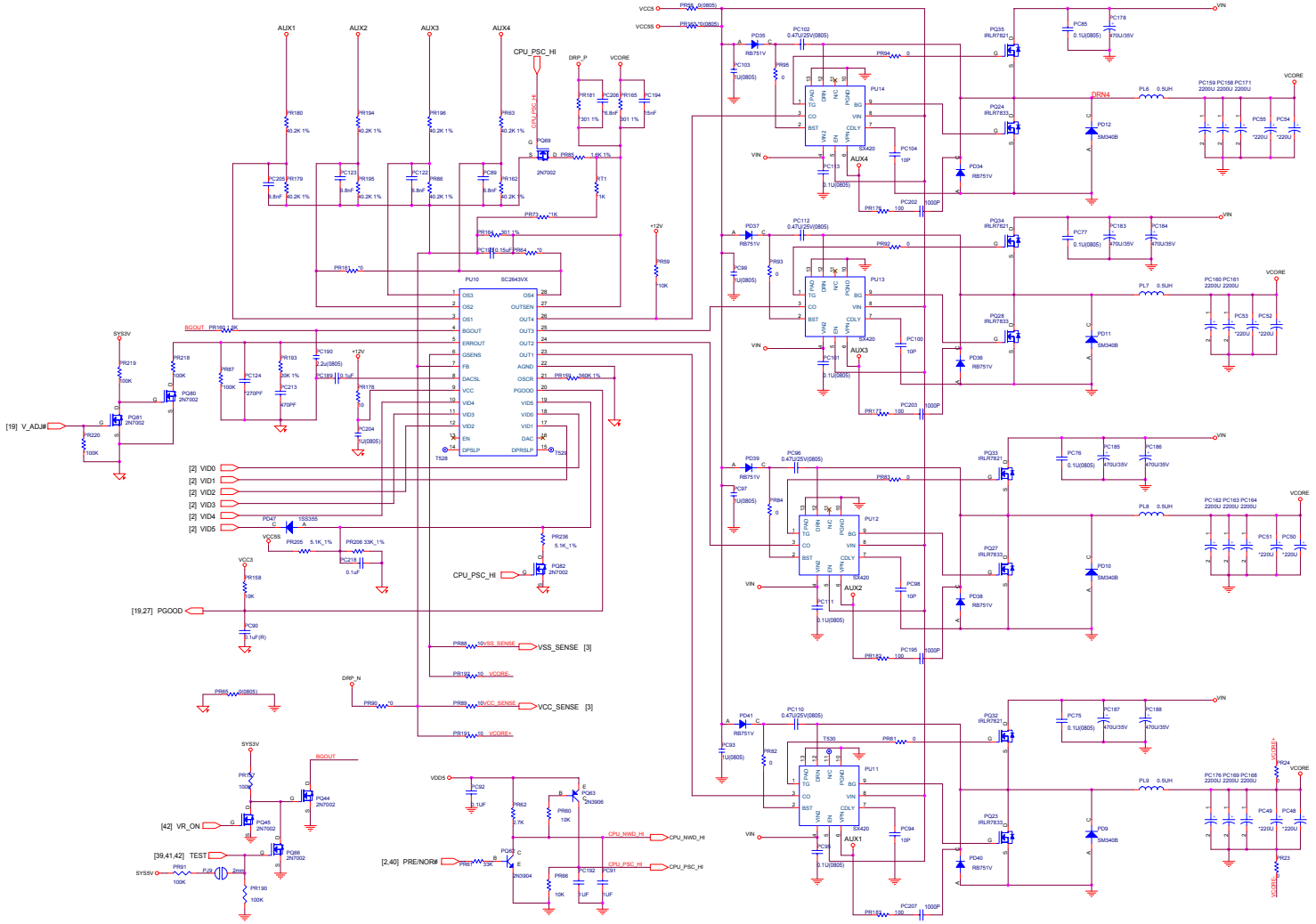
Power Plane



Vcore



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Vcore

System Power 1

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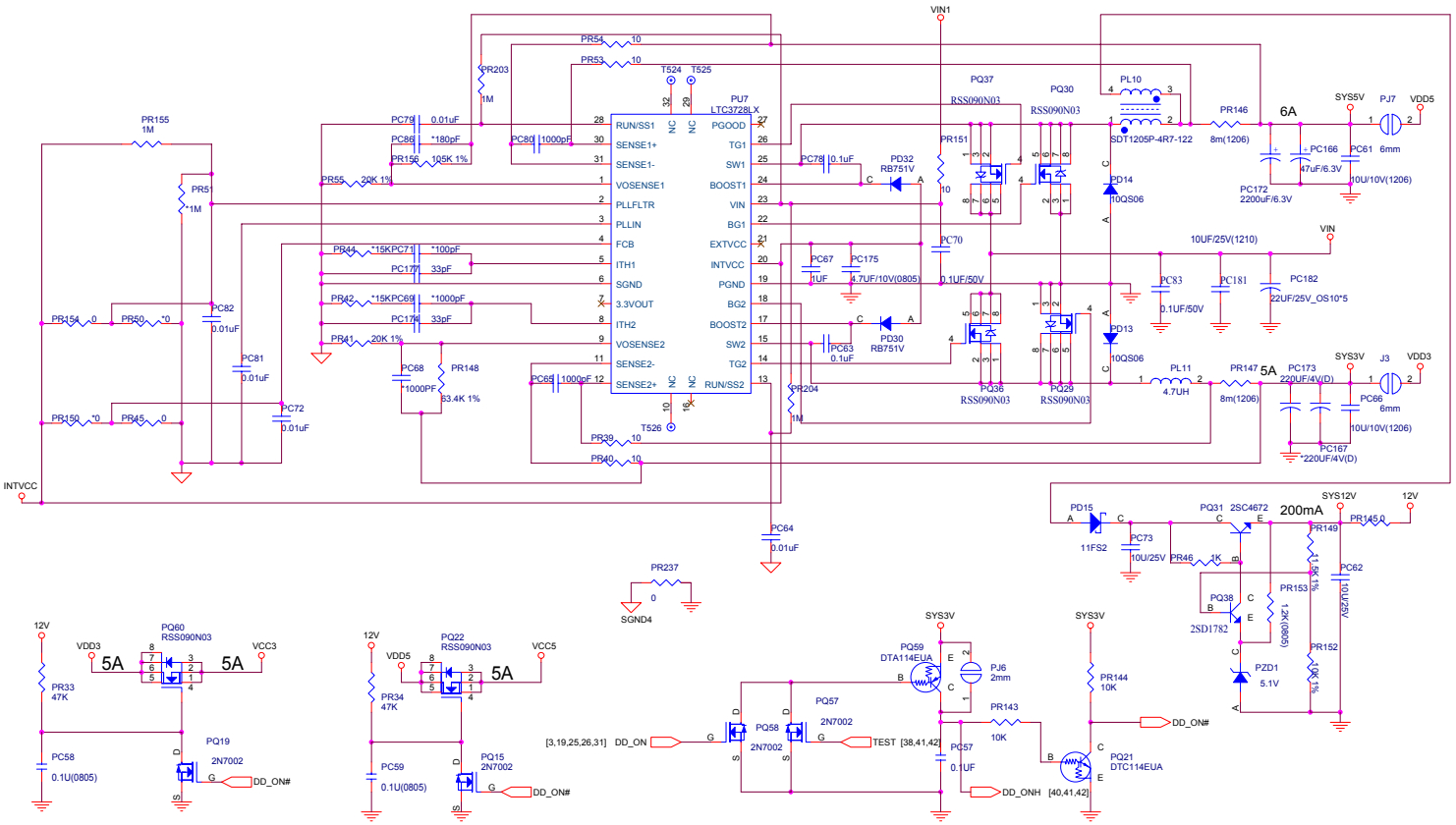
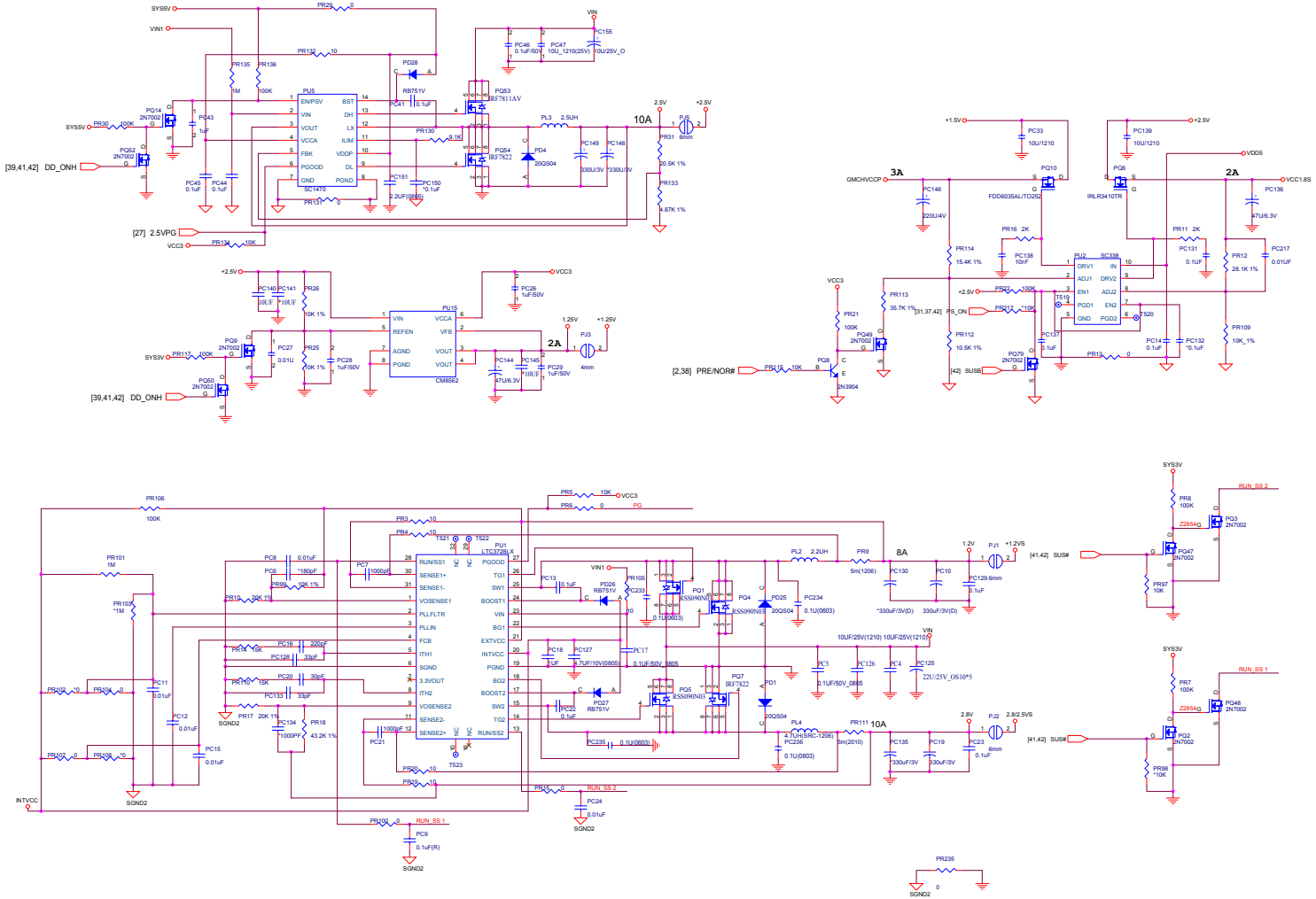
System Power 1



System Power 2



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System Power 2

Charger

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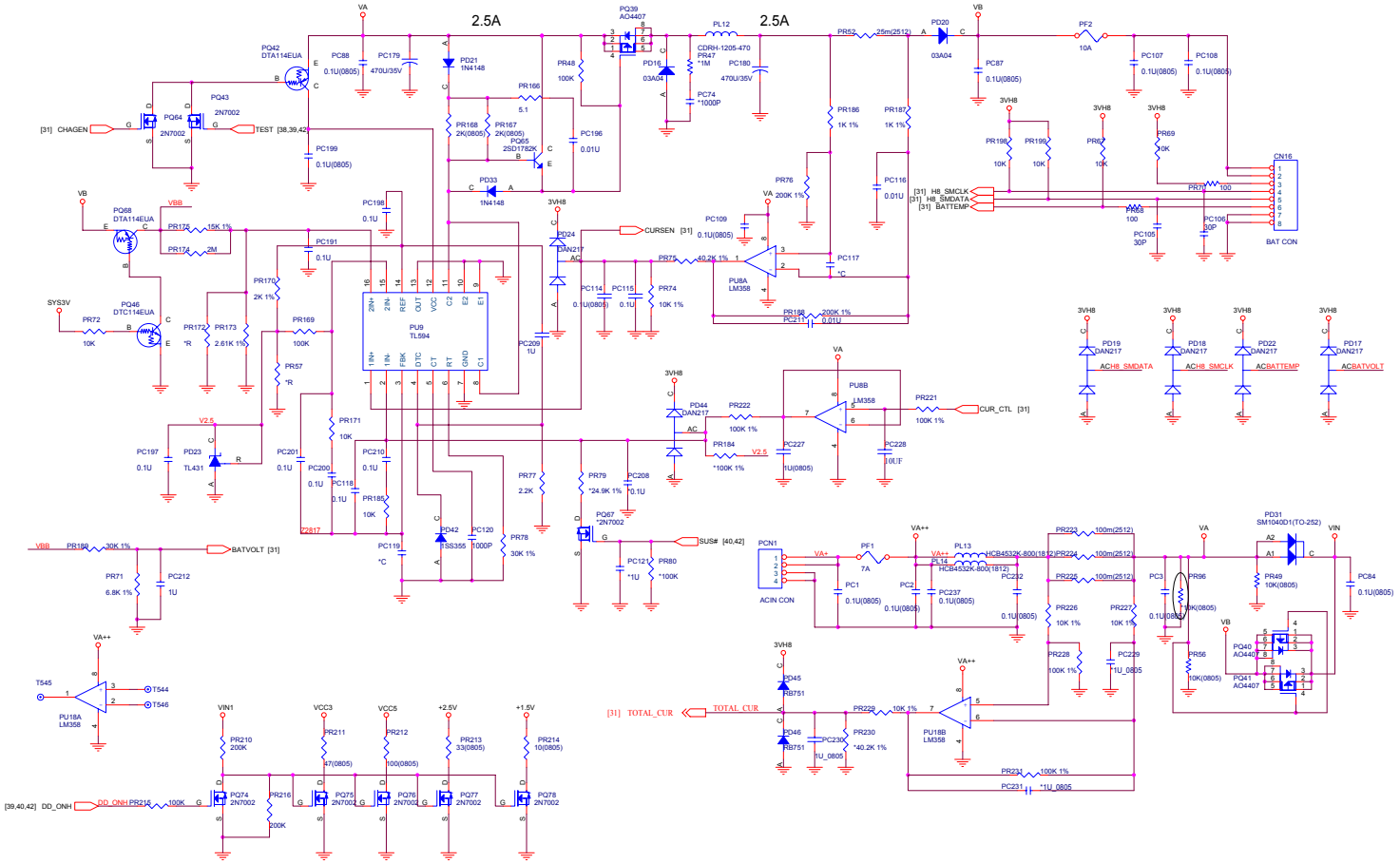
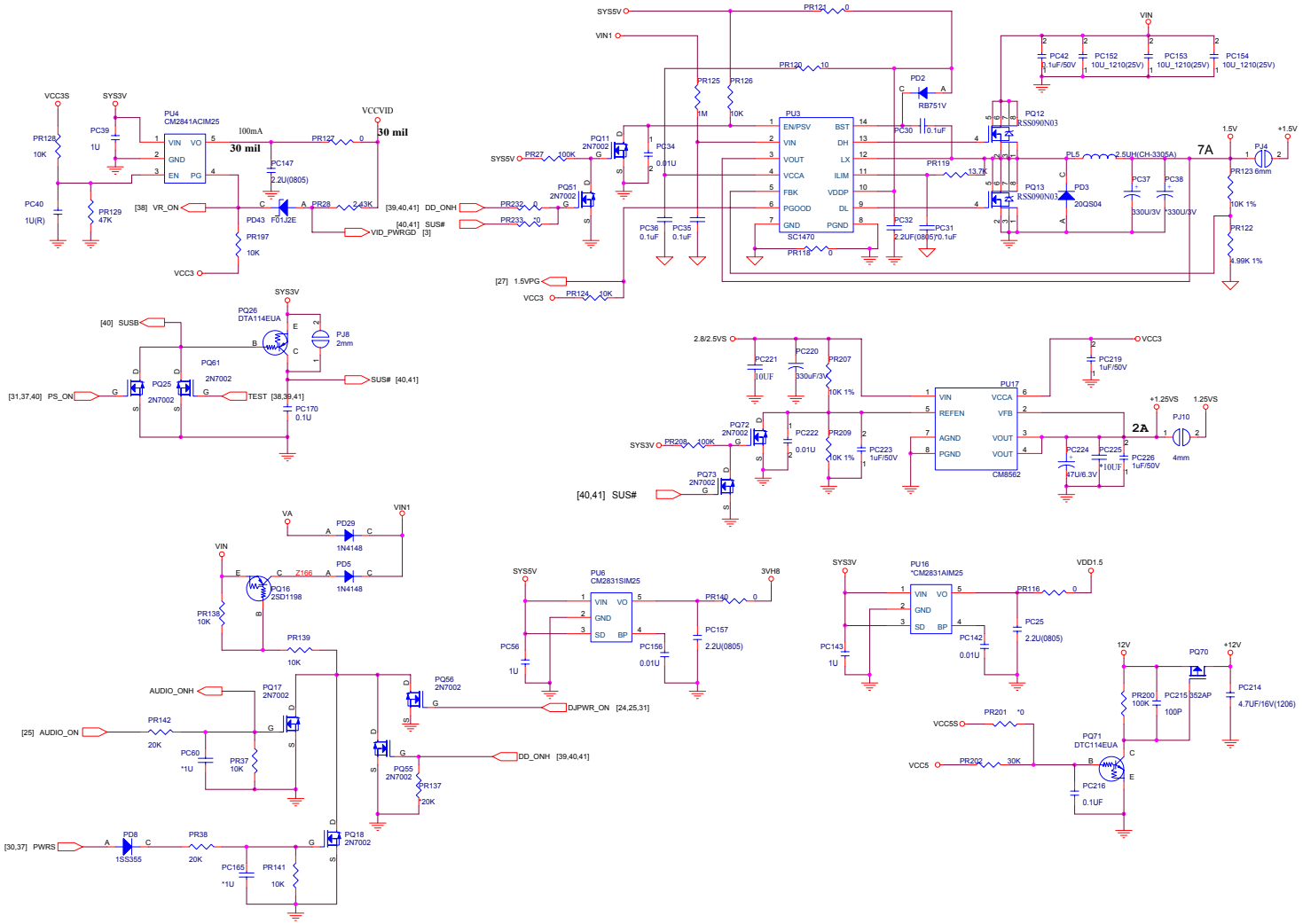
Charger



3VH8, VDD1.8



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3VH8, VDD1.8