SERVICE MANUAL

C4100 / C4105

notebook

Notebook Computer

C4100/C4105

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 ***C4100/C4105*** series 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.

Appendix A, Part Lists
Appendix B, Schematic Diagrams

IMPORTANT SAFETY INSTRUCTIONS

Follow basic safety precautions, including those listed below, to reduce the risk of fire, electric shock and injury to persons when using any electrical equipment:

1. Do not use this product near water, for example near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
2. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electrical shock from lightning.
3. Do not use the telephone to report a gas leak in the vicinity of the leak.
4. Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.
5. This product is intended to be supplied by a Listed Power Unit (Full Range AC/DC Adapter - AC Input 100 - 240V, 50 - 60Hz/ DC Output 19V, 3.42A or 18.5V, 3.5A (65W) minimum).

CAUTION

Always disconnect all telephone lines from the wall outlet before servicing or disassembling this equipment.

TO REDUCE THE RISK OF FIRE, USE ONLY NO. 26 AWG OR LARGER, TELECOMMUNICATION LINE CORD

This Computer’s Optical Device is a Laser Class I Product

Instructions for Care and Operation

The notebook computer is quite rugged, but it can be damaged. To prevent this, follow these suggestions:

1. **Don't drop it, or expose it to shock.** If the computer falls, the case and the components could be damaged.

Do not expose the computer to any shock or vibration.	*Do not place it on an unstable surface.*	*Do not place anything heavy on the computer.*
		

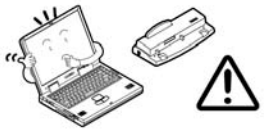
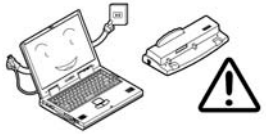
2. **Keep it dry, and don't overheat it.** Keep the computer and power supply away from any kind of heating element. This is an electrical appliance. If water or any other liquid gets into it, the computer could be badly damaged.

Do not expose it to excessive heat or direct sunlight.	*Do not leave it in a place where foreign matter or moisture may affect the system.*	*Don't use or store the computer in a humid environment.*	*Do not place the computer on any surface which will block the vents.*
			

3. **Follow the proper working procedures for the computer**. Shut the computer down properly and don't forget to save your work. Remember to periodically save your data as data may be lost if the battery is depleted.

Do not turn off the power until you properly shut down all programs.	*Do not turn off any peripheral devices when the computer is on.*	*Do not disassemble the computer by yourself.*	*Perform routine maintenance on your computer.*
			

4. **Avoid interference.** Keep the computer away from high capacity transformers, electric motors, and other strong magnetic fields. These can hinder proper performance and damage your data.
5. **Take care when using peripheral devices**.

Use only approved brands of peripherals.	*Unplug the power cord before attaching peripheral devices.*
	

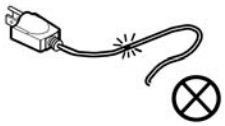
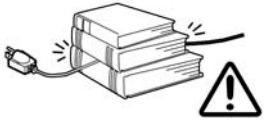
Power Safety

The computer has specific power requirements:

- Only use a power adapter approved for use with this computer.
- Your AC adapter may be designed for international travel but it still requires a steady, uninterrupted power supply. If you are unsure of your local power specifications, consult your service representative or local power company.
- The power adapter may have either a 2-prong or a 3-prong grounded plug. The third prong is an important safety feature; do not defeat its purpose. If you do not have access to a compatible outlet, have a qualified electrician install one.
- When you want to unplug the power cord, be sure to disconnect it by the plug head, not by its wire.
- Make sure the socket and any extension cord(s) you use can support the total current load of all the connected devices.
- Before cleaning the computer, make sure it is disconnected from any external power supplies (i.e. AC/DC adapter or car adapter).

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.

Do not plug in the power cord if you are wet.	*Do not use the power cord if it is broken.*	*Do not place heavy objects on the power cord.*
		

Battery Precautions

- Only use batteries designed for this computer. The wrong battery type may explode, leak or damage the computer.
- Do not continue to use a battery that has been dropped, or that appears damaged (e.g. bent or twisted) in any way. Even if the computer continues to work with a damaged battery in place, it may cause circuit damage, which may possibly result in fire.
- Recharge the batteries using the notebook's system. Incorrect recharging may make the battery explode.
- Do not try to repair a battery pack. Refer any battery pack repair or replacement to your service representative or qualified service personnel.
- Keep children away from, and promptly dispose of a damaged battery. Always dispose of batteries carefully. Batteries may explode or leak if exposed to fire, or improperly handled or discarded.
- Keep the battery away from metal appliances.
- Affix tape to the battery contacts before disposing of the battery.
- Do not touch the battery contacts with your hands or metal objects.

Battery Guidelines

The following can also apply to any backup batteries you may have.

- If you do not use the battery for an extended period, then remove the battery from the computer for storage.
- Before removing the battery for storage charge it to 60% - 70%.
- Check stored batteries at least every 3 months and charge them to 60% - 70%.

Battery Disposal

The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

Caution

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used battery according to the manufacturer's instructions.

Battery Level

Click the battery icon in the taskbar to see the current battery level and charge status. A battery that drops below a level of 10% will not allow the computer to boot up. Make sure that any battery that drops below 10% is recharged within one week.

Contents

1: Introduction

Overview

This manual covers the information you need to service or upgrade the ***C4100/C4105*** 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 Vista/ Window 7*, etc.) 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 ***C4100/C4105*** series 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.

Specifications

Latest Specification Information

The specifications listed in this here are correct at the time of going to press. Certain items (particularly processor types/speeds) may be changed, delayed or updated due to the manufacturer's release schedule. Check with your service center for details.

CPU

The CPU is not a user serviceable part. Accessing the CPU in any way may violate your warranty.

Processor Options

Intel® Core™2 Duo Processor

T6600 (2.2GHz), T6500 (2.1GHz), T6400 (2.0GHz)

2MB On-die L2 Cache & 800MHz FSB

Intel® Pentium® Processor

T4300 (2.12GHz), T4200 (2.0GHz)

1MB On-die L2 Cache & 800MHz FSB

Intel® Celeron Processor

900 (2.2GHz), T3100 (1.9GHz), T3000 (1.8GHz)

1MB On-die L2 Cache & 800MHz FSB

T1700 (1.83GHz), T1600 (1.66GHz)

1MB On-die L2 Cache & 667MHz FSB

LCD

14" HD TFT LCD

Core Logic

Intel ® GL40 + ICH9M

Memory

Two 204 Pin SO-DIMM Sockets Supporting **DDR3 1066/ 1333MHz** Memory

Memory Expandable up to 4GB

Video Adapter

Intel ® GL40 Integrated Video

Shared Memory Architecture of up to **1GB**

MS DirectX® 10 compatible

BIOS

One 16Mb SPI Flash ROM

Phoenix™ BIOS

Storage

(**Factory Option**) One Changeable 12.7mm(h) Optical Device Type Drive
(Super Multi Drive Module)

One Changeable 2.5" 9.5 mm (h) **SATA** (Serial) HDD

Audio

High Definition Audio Compliant Interface

2 * Built-In Speakers

Built-In Microphone

Keyboard

“WinKey” keyboard (with embedded numeric keypad)

Pointing Device

Built-in Touchpad

Security

Security (Kensington® Type) Lock Slot

BIOS Password

Interface

Three USB 2.0 Ports

One HDMI Out Port

One Headphone-Out Jack

One Microphone-In Jack

One RJ-45 LAN Jack

One RJ-11 Modem Jack

One DC-in Jack

One External Monitor Port

One ExpressCard/34 Slot

Communication

10Mb/100Mb Ethernet LAN

(**Factory Option**) 802.11b/g/n Wireless LAN Half Mini-Card Module

(**Factory Option**) 1.3M Pixel USB PC Camera Module

(**Factory Option**) Bluetooth 2.1 + EDR Module

(**Factory Option**) 3.75G/HSPA Mini-Card Module

Card Reader

Embedded 7-in-1 Card Reader (MS/ MS Pro/ SD/ Mini SD/ MMC/ RS MMC/ MS Duo)

Note: MS Duo/ Mini SD/ RS MMC Cards require a PC adapter

Power

6 Cell Smart Lithium-Ion Battery Pack, 48.84WH

(**Factory Option**) 6 Cell Battery Pack, 62.16WH

Full Range AC/DC Adapter

AC Input: 100 - 240V, 50 - 60Hz

DC Output: 19V, 3.42A or 18.5V, 3.5A (**65** Watts)

Energy Star 5.0 Compliant

Environmental Spec

Temperature

Operating: 5°C - 35°C

Non-Operating: -20°C - 60°C

Relative Humidity

Operating: 20% - 80%

Non-Operating: 10% - 90%

Dimensions & Weight

340mm (w) * 238mm (d) * 13.9 - 31.8mm (h)

2.2 kg With 6 Cell Battery and ODD

External Locator - Front View with LCD Panel Open

Figure 1
Front View with LCD Panel Open

1. Built-In PC Camera (**Optional**)
2. LCD
3. Power Button
4. Hot-Key Buttons
5. LED Status Indicators
6. Keyboard
7. Built-In Microphone
8. Touchpad & Buttons

External Locator - Front and Rear View

Figure 2
Front View

1. LED Power Indicators

Figure 3
Rear View

1. Battery

External Locator - Left & Right Side View

Figure 4
Left Side View

1. DC-In Jack
2. External Monitor Port
3. RJ-45 LAN Jack
4. HDMI Port
5. 2 * USB 2.0 Ports
6. Vent
7. ExpressCard/34 Slot
8. 7-in-1 Card Reader

Figure 5
Right Side View

1. Microphone-In Jack
2. Headphone-Out Jack
3. USB 2.0 Port
4. RJ-11 Modem Jack
5. Optical Device Drive Bay
6. Emergency Eject Hole
7. Security Lock Slot

External Locator - Bottom View

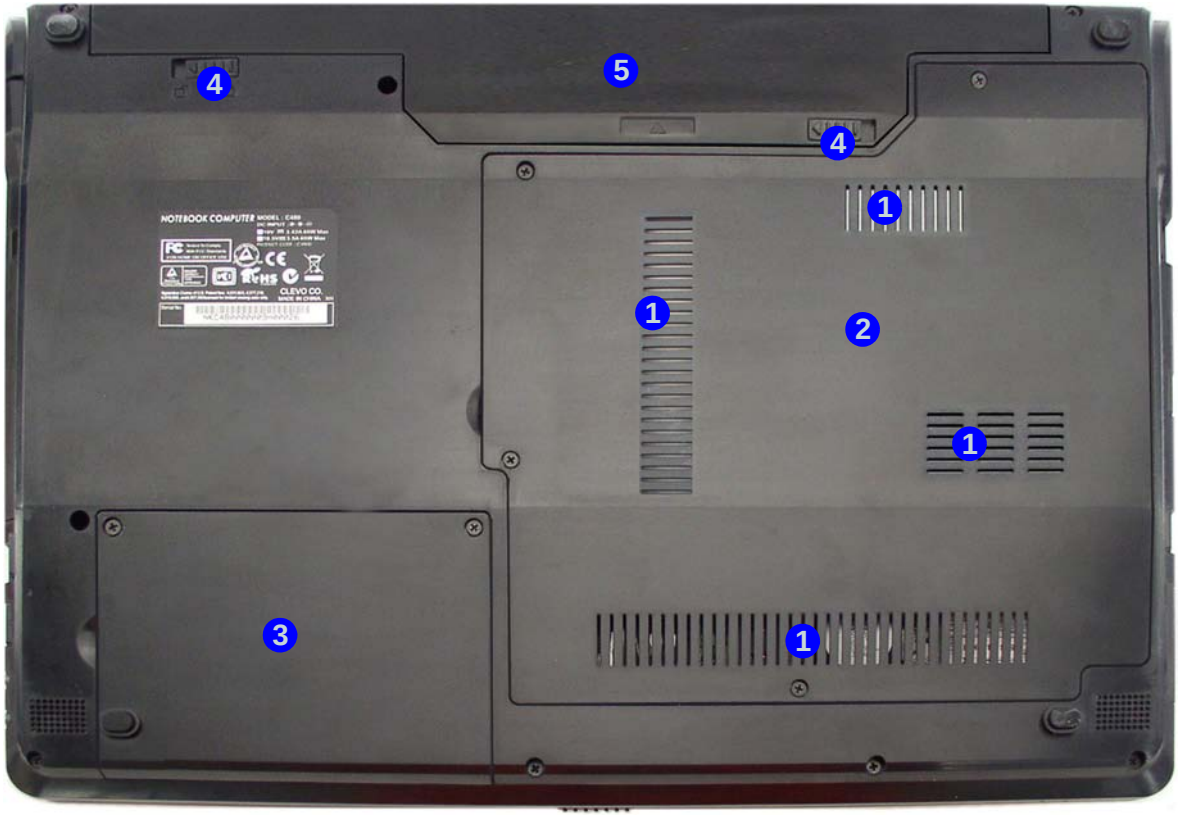


Figure 6
Bottom View

1. Vent
2. Component Bay Cover
3. Hard Disk Bay Cover
4. Battery Release Latch
5. Battery

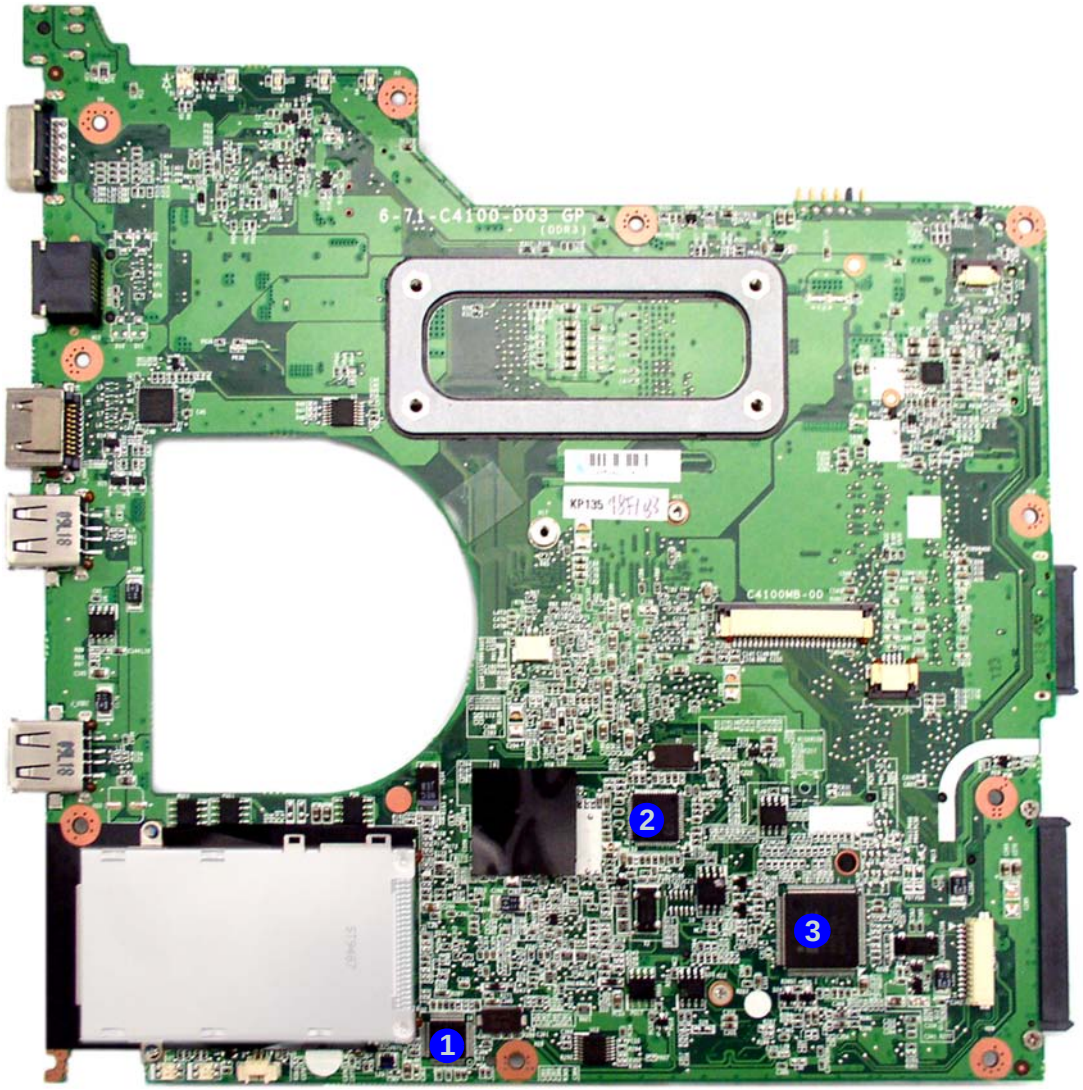
Overheating

To prevent your computer from overheating make sure nothing blocks the vent/fan intakes while the computer is in use.

Mainboard Overview - Top (Key Parts)

Figure 7
Mainboard Top Key Parts

1. JMB261
2. CLOCK GEN.
3. ITE 8502E



Mainboard Overview - Bottom (Key Parts)

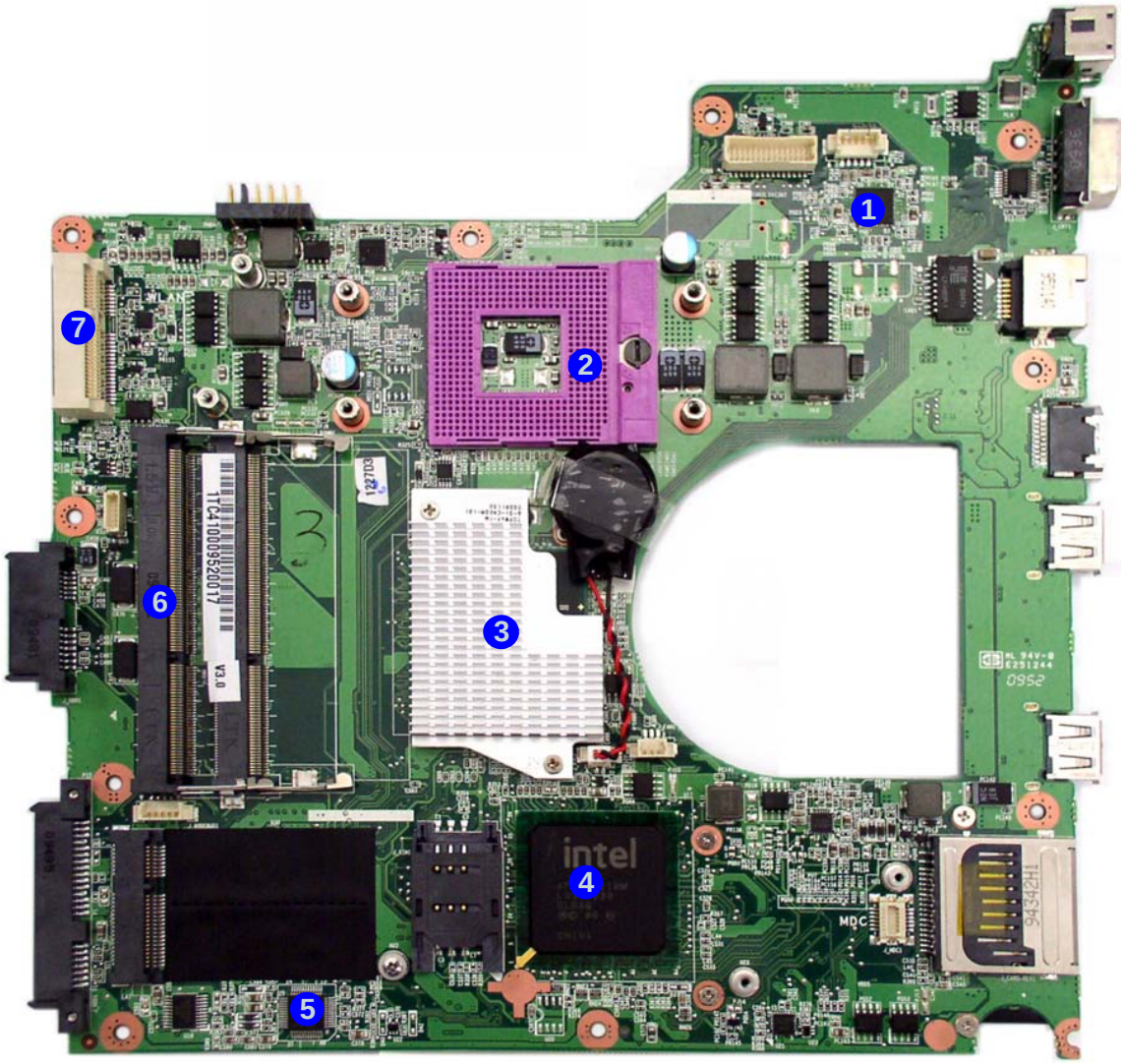


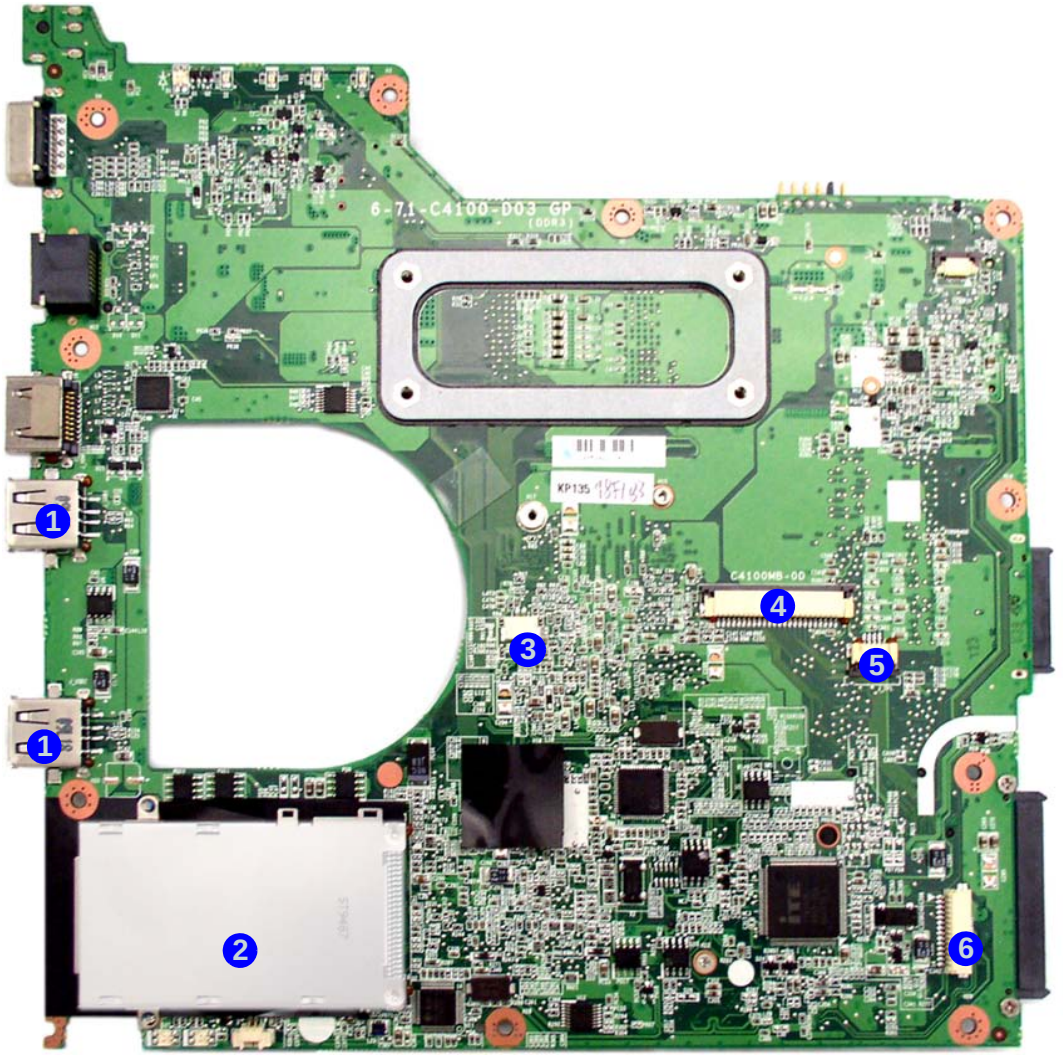
Figure 8
Mainboard Bottom Key Parts

1. SC452
2. CPU Socket (no CPU installed)
3. NorthBridge INTEL GL40
4. SorthBridge ICH9M
5. REALTEK ALC272
6. Memory Slots DDR3 So-DIMM
7. Mini-PCIe Socket (Wireless Lan Module)

Mainboard Overview - Top (Connectors)

Figure 9
Mainboard Top Connectors

1. USB Ports
2. ExpressCard/34 Slot
3. Microphone Cable Connector
4. Keyboard Cable Connector
5. TouchPad Cable Connector
6. Audio Cable Connector



Mainboard Overview - Bottom (Connectors)

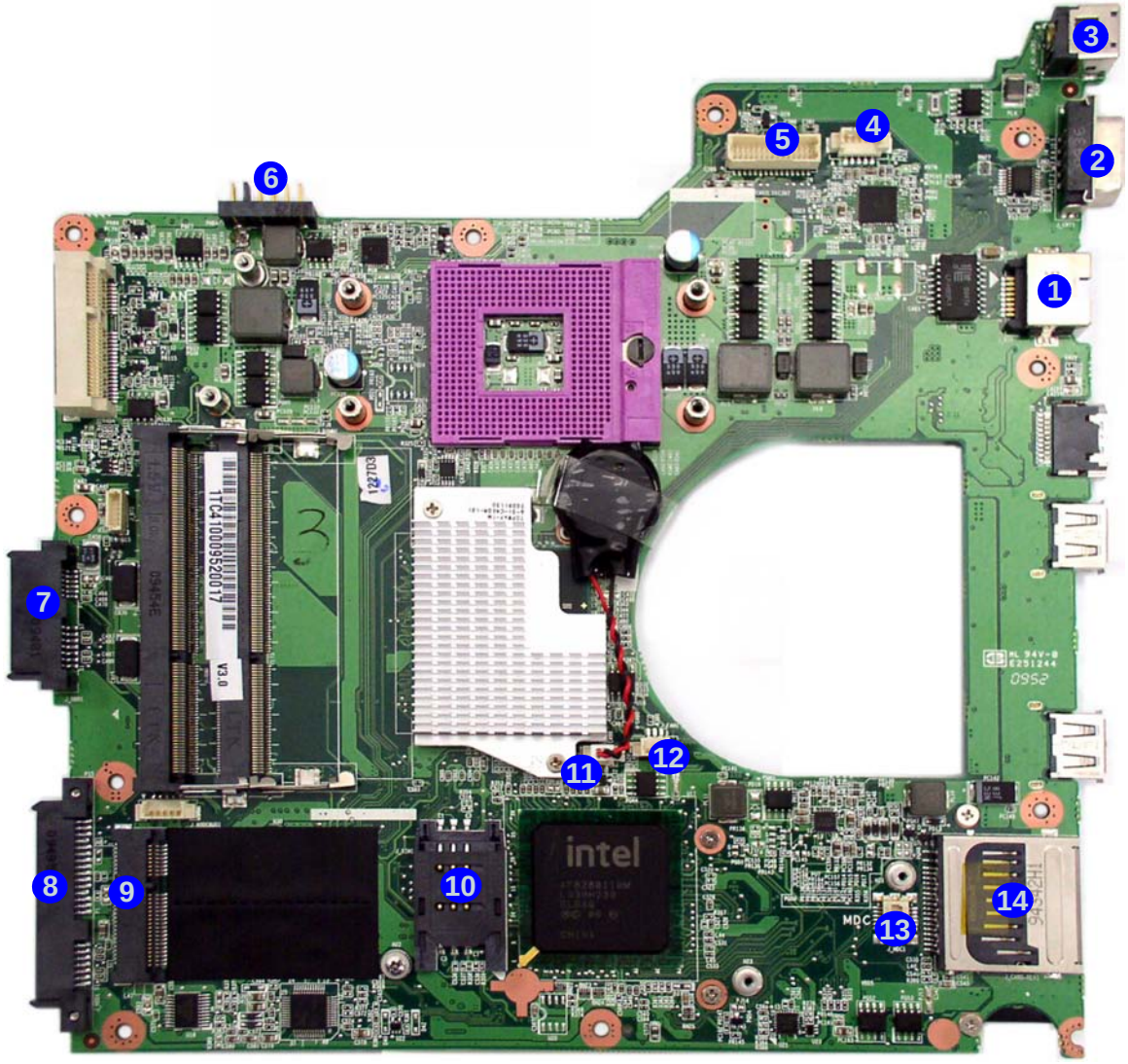


Figure 10
Mainboard Bottom Connectors

1. RJ-45 Jack
2. D-Sub-Out Port
3. DC-In Jack
4. CCD Cable Connector
5. LCD Cable Connector
6. Battery Connector
7. ODD Connector
8. HDD Connector
9. 3G Module Connector
10. SIMLOCK
11. CMOS Cable Connector
12. Fan Cable Connector
13. MDC Cable Connector
14. 7-in-1 Card Reader

2: Disassembly

Overview

This chapter provides step-by-step instructions for disassembling the ***C4100/C4105*** series notebook's parts and subsystems. When it comes to reassembly, reverse the procedures (unless otherwise indicated).

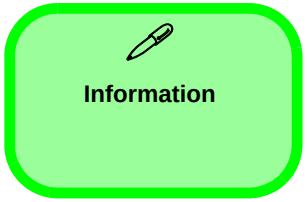
We suggest you completely review any procedure before you take the computer apart.

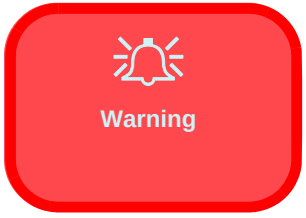
Procedures such as upgrading/replacing the RAM, CD device and hard disk are included in the User's Manual but are repeated here for your convenience.

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  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  will also provide any possible helpful information. 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 - 5*

To remove the HDD:

1. Remove the battery *page 2 - 5*
2. Remove the HDD *page 2 - 6*

To remove the Optical Device:

1. Remove the battery *page 2 - 5*
2. Remove the Optical device *page 2 - 8*

To remove the System Memory:

1. Remove the battery *page 2 - 5*
2. Remove the system memory *page 2 - 9*

To remove and install a Processor:

1. Remove the battery *page 2 - 5*
2. Remove the processor *page 2 - 10*
3. Install the processor *page 2 - 12*

To remove the 3G Module:

1. Remove the battery *page 2 - 5*
2. Remove the 3G module *page 2 - 13*

To remove the Wireless LAN Module:

1. Remove the battery *page 2 - 5*
2. Remove the WLAN module *page 2 - 14*

To remove the Bluetooth Module:

1. Remove the battery *page 2 - 5*
2. Remove the Bluetooth Module *page 2 - 15*

To remove the Modem:

1. Remove the battery *page 2 - 5*
2. Remove the Modem *page 2 - 16*

To remove the LCD Back Cover:

1. Remove the battery *page 2 - 5*
2. Remove the LCD Back Cover *page 2 - 17*

To remove the LCD Front Cover:

1. Remove the battery *page 2 - 5*
2. Remove the LCD Front Cover *page 2 - 19*

To remove the Keyboard:

1. Remove the battery *page 2 - 5*
2. Remove the keyboard *page 2 - 20*

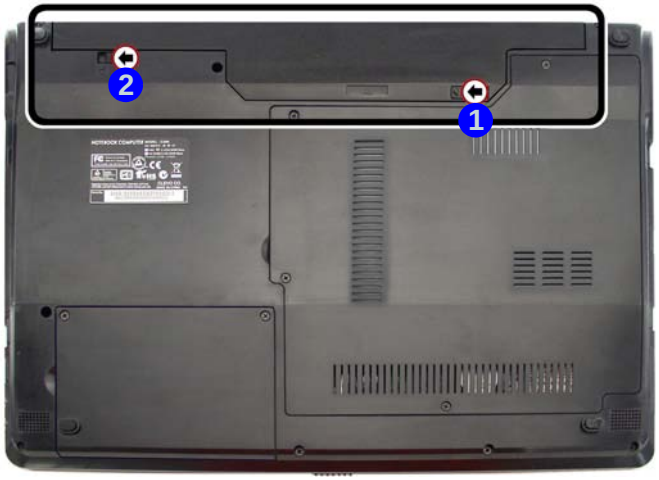
Removing the Battery

1. Turn the computer **off**, and turn it over.
2. Slide the latch 1 in the direction of the arrow.
3. Slide the latch 2 in the direction of the arrow, and hold it in place.
4. Slide the battery 3 in the direction of the arrow 4.

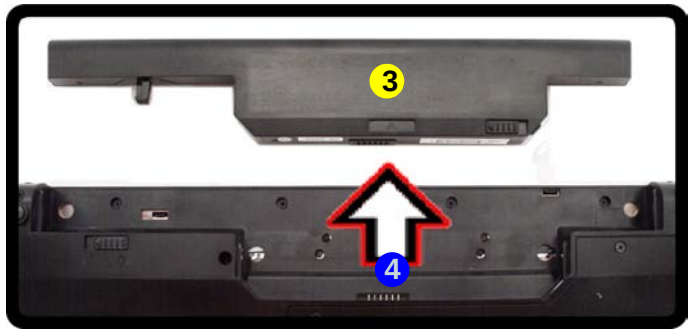
Figure 1
Battery Removal

a. Slide latch at point 1 towards the unlock symbol and hold it in place.
b. Slide the battery in the direction of the arrow.

a.



b.



2. Battery

Removing the Hard Disk Drive

The hard disk drive can be taken out to accommodate other 2.5" serial (SATA) hard disk drives with a height of 9.5mm (h). Follow your operating system's installation instructions, and install all necessary drivers and utilities (as outlined in **Chapter 4 of the User's Manual**) when setting up a new hard disk.

Figure 2
HDD Assembly Removal

a. Locate the HDD bay cover and remove th screw(s).

Hard Disk Upgrade Process

1. Turn **off** the computer, and remove the battery (*page 2 - 5*).
2. Locate the hard disk bay cover and remove screw 1 & 2.

a.

- 2 Screws

HDD System Warning

New HDD's are blank. Before you begin make sure:

You have backed up any data you want to keep from your old HDD.

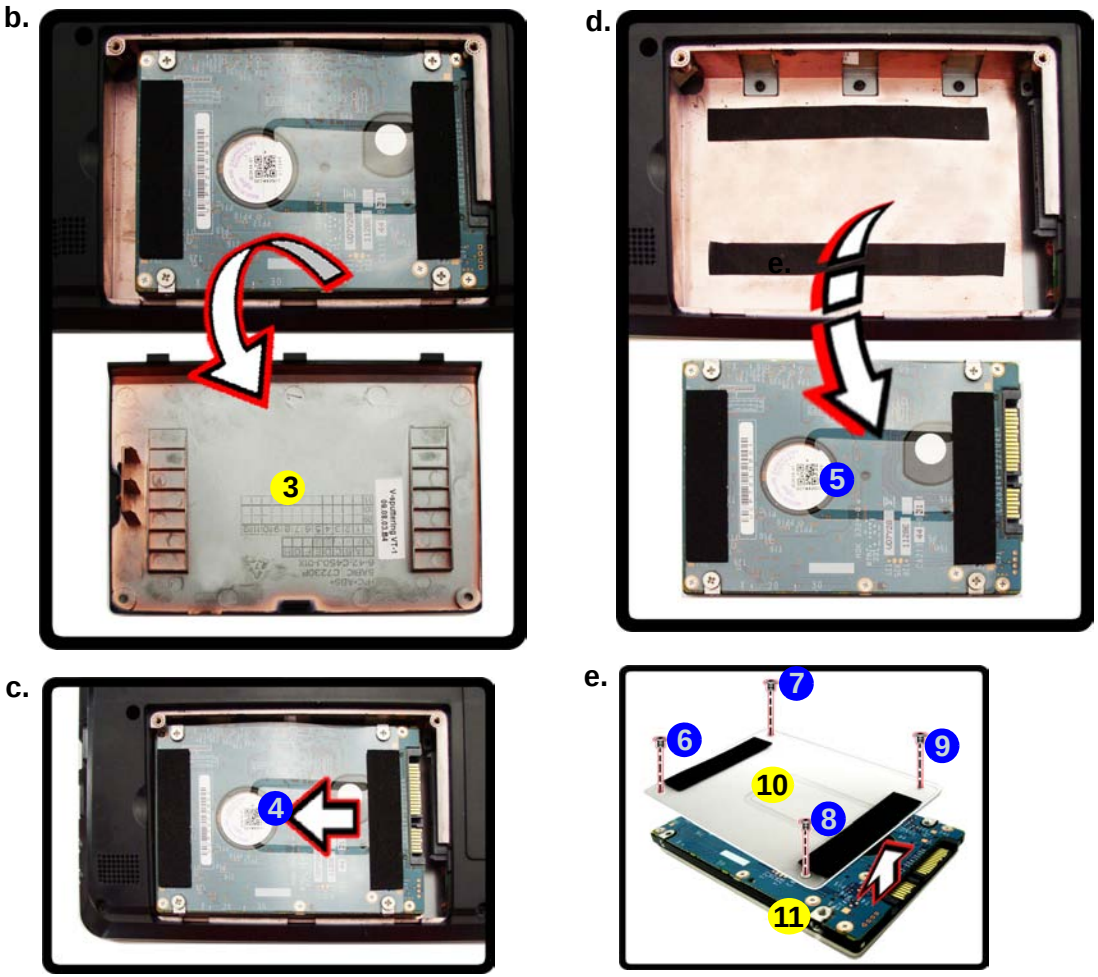
You have all the CD-ROMs and FDDs required to install your operating system and programs.

If you have access to the internet, download the latest application and hardware driver updates for the operating system you plan to install. Copy these to a removable medium.

3. Remove the hard disk bay cover 3.
4. Grip the tab and slide the hard disk in the direction of arrow 4.
5. Lift the hard disk out of the bay 5.
6. Remove the screw 6 - 9 and the adhesive cover 10 from the hard disk 11.
7. Reverse the process to install a new hard disk (do not forget to replace all the screws and covers).

Figure 3
HDD Assembly Removal (cont'd.)

b. Remove the HDD bay cover.
c. Grip the tab and slide the HDD in the direction of the arrow.
d. Lift the HDD assembly out of the bay.
e. Remove the screws and adhesive cover.



3. HDD Bay Cover
10. Adhesive Cover
11. HDD

- 4 Screws

Figure 4
Optical Device Removal

a. Remove the screws.
b. Remove the cover.
c. Remove the screw.
d. Slide the optical device out of the computer at point 9.

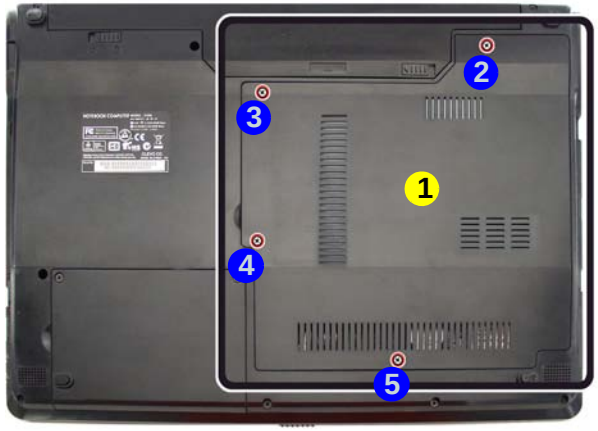
Removing the Optical (CD/DVD) Device

1. Turn **off** the computer, remove the battery (*page 2 - 5*).
2. Locate the component bay cover 1, and remove screws 2 - 5.
3. Carefully (**a fan and cable are attached to the under side of the cover**) lift up the bay cover.
4. Carefully disconnect the fan cable 6, and remove the cover 1.
5. Remove the screw at point 7, and use a screwdriver to carefully push out the optical device 8 at point 9.
6. Insert the new device and carefully slide it into the computer (the device only fits one way. DO NOT FORCE IT; The screw holes should line up).
7. Restart the computer to allow it to automatically detect the new device.

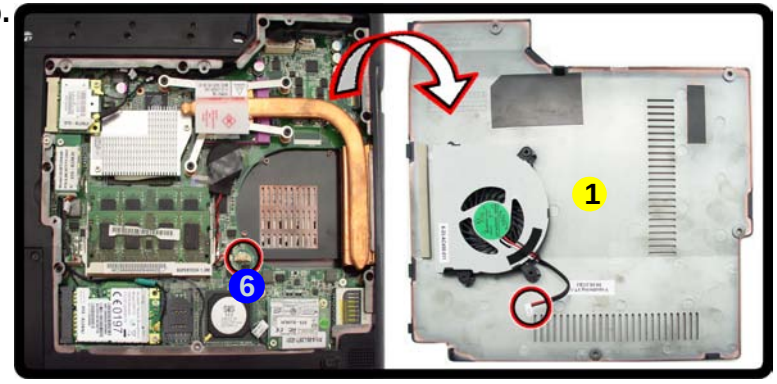
Fan Cable

Make sure you reconnect the fan cable 6 before screwing down the bay cover.

a.



b.



c.

d.

1. Component Bay Cover
8. Optical Device

- 5 Screws

Removing the System Memory (RAM)

The computer has two memory sockets for 200 pin Small Outline Dual In-line Memory Modules (SO-DIMM) supporting DDRIII (DDR3) Up to 1066/1333 MHz. The main memory can be expanded up to 4GB. The SO-DIMM modules supported are 1024MB and 2048MB **DDRIII** Modules. The total memory size is automatically detected by the POST routine once you turn on your computer.

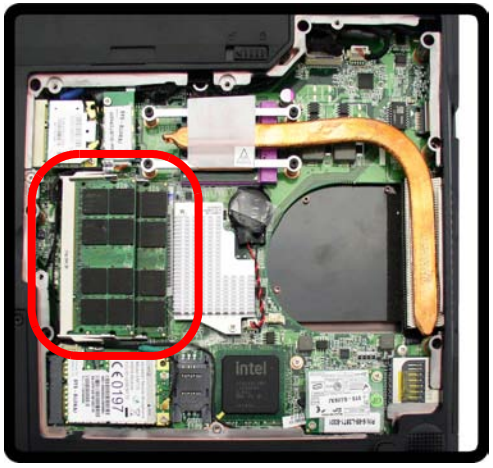
Memory Upgrade Process

1. Turn **off** the computer, turn it over and remove the battery (*page 2 - 5*) and the component bay cover (*page 2 - 8*).
2. The RAM module(s) will be visible at point 1 on the mainboard.
3. Gently pull the two release latches (2 & 3) on the sides of the memory socket in the direction indicated by the arrows (*Figure 5b*).

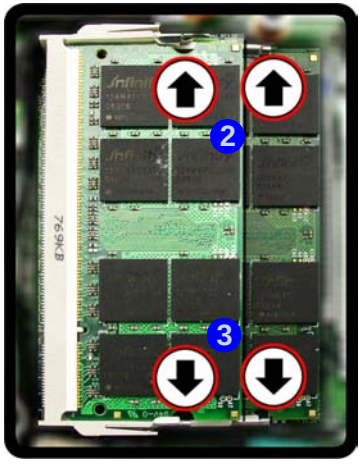
Figure 5
RAM Module Removal

a. Locate the memory socket.
b. Pull the release latch(es).
c. Remove the module(s).

a.



b.



c.

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. The RAM module(s) 4 will pop-up (*Figure 5c*), and you can then remove it.
5. Pull the latches to release the second module if necessary.
6. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
7. The module will only fit one way as defined by its pin alignment. Make sure the module is seated as far into the slot as it will go. DO NOT FORCE IT; it should fit without much pressure.
8. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
9. Replace the component bay cover and the screws (see *page 2 - 8*).
10. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.

4. RAM Module

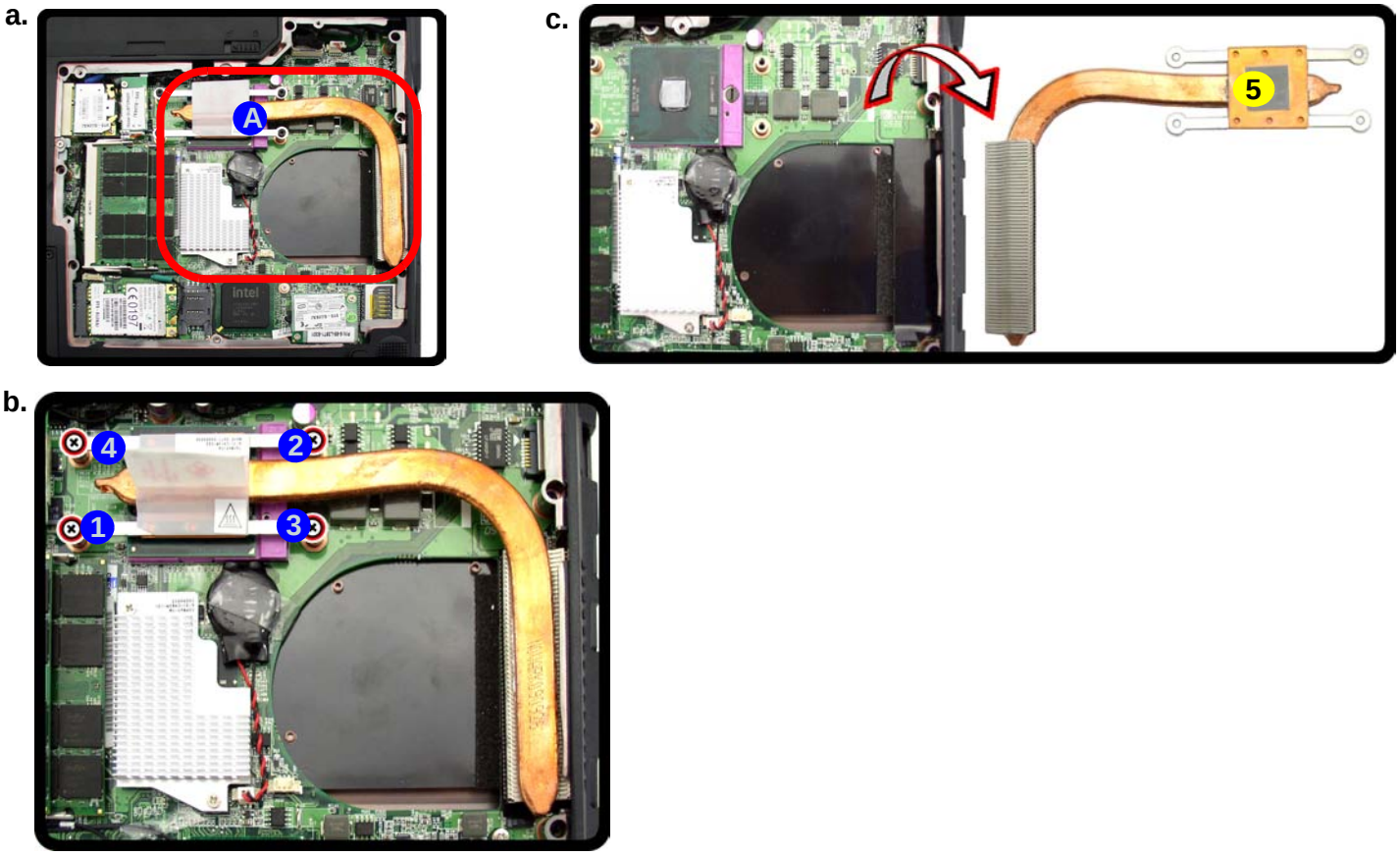
Removing and Installing a Processor

Processor Removal Procedure

1. Turn **off** the computer, turn it over, and remove the battery (*page 2 - 5*) and the component bay cover (*page 2 - 8*).
2. Locate the heat sink.
3. Loosen the CPU heat sink screws in the order 4, 3, 2 & 1 (the reverse order as indicated on the label).
4. Carefully lift up the heat sink 5 (*Figure 6c*) off the computer.

Figure 6
Processor Removal

a. Locate the heat sink.
b. Remove the screws from the CPU heatsink.
c. Remove the CPU heat sink.



5. Heat Sink

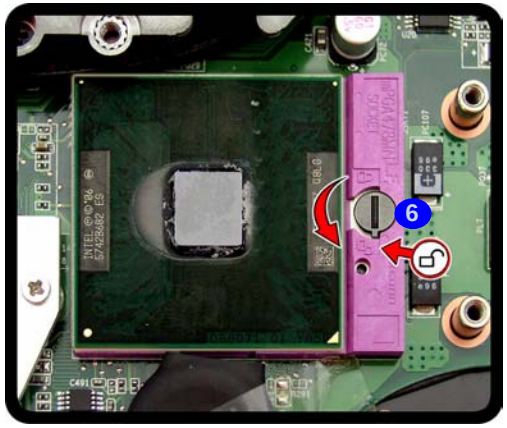
- 4 Screws

5. Turn the release latch 6 towards the unlock symbol to release the CPU.
6. Carefully (it may be hot) lift the CPU 7 up and out of the socket (***Figure 7e***).
7. Reverse the process to install a new CPU.
8. When re-inserting the CPU, pay careful attention to the pin alignment, it will fit only one way (DO NOT FORCE IT!).

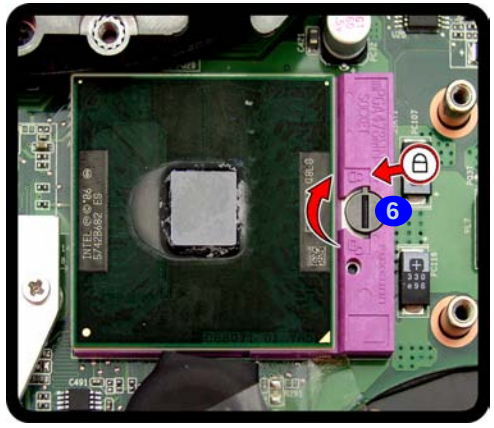
Figure 7
Processor Removal (cont'd)

d. Turn the release latch to unlock the CPU.
e. Lift the CPU out of the socket.

d.

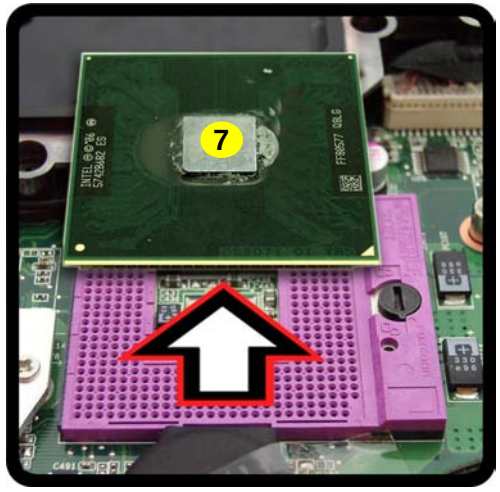


Unlock



Lock

e.



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.

7. CPU

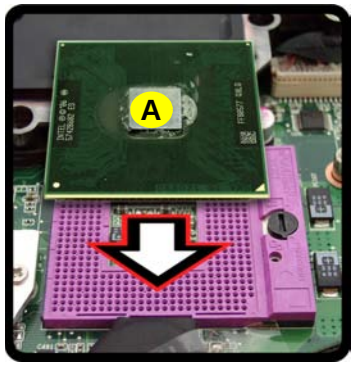
Figure 8
Processor Installation

a. Insert the CPU.
b. Turn the release latch towards the lock symbol.
c. Remove the sticker from the heat sink and insert the heat sink.
d. Tighten the screws.

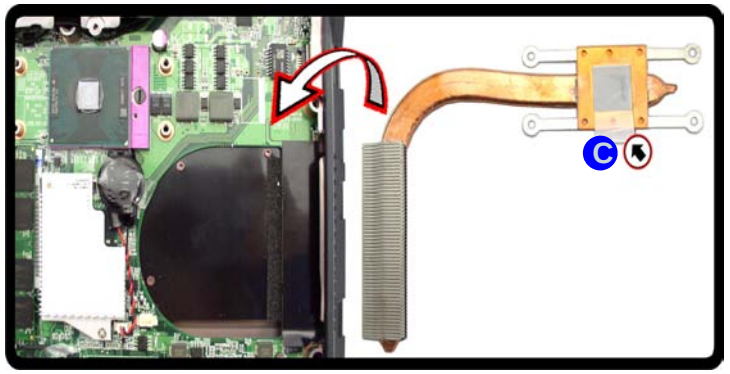
Processor Installation Procedure

1. Insert the CPU A, pay careful attention to the pin alignment, it will fit only one way (DO NOT FORCE IT!), and turn the release latch B towards the lock symbol (***Figure 8b***).
2. **Remove the sticker C** (***Figure 8c***) from the heat sink.
3. Insert the heat sink D as indicated in ***Figure 8d***.
4. Tighten the CPU heat sink screws in the order 1, 2, 3 & 4 (the order as indicated on the label and ***Figure 8d***).
5. Replace the component bay cover (don't forget to replace the fan cable) and tighten the screws (***page 2 - 8***).

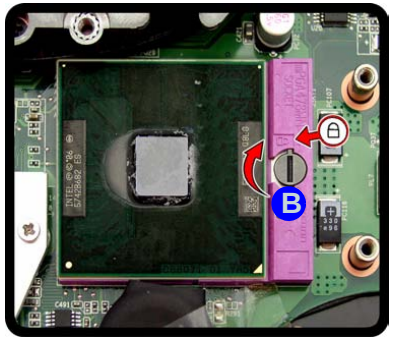
a.



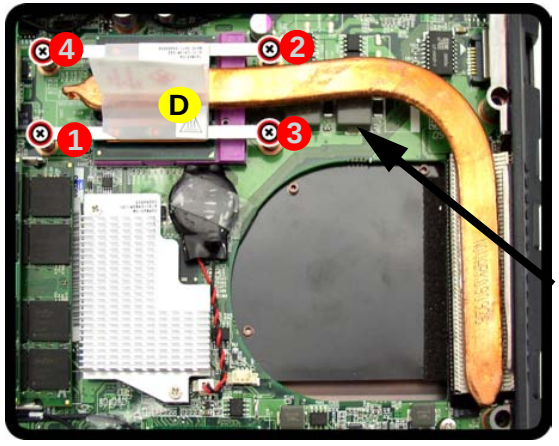
c.



b.



d.



A. CPU
D. Heat Sink

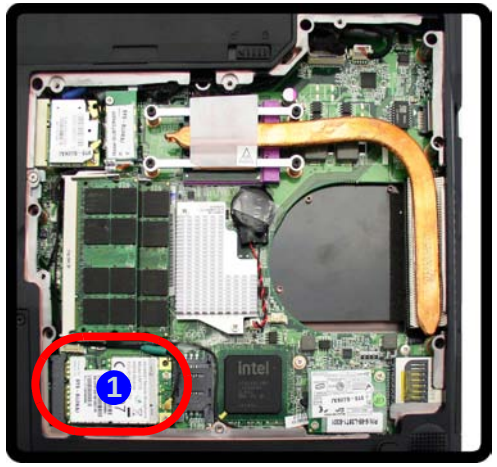
- 3 Screws

Note:
Tighten the screws in the order as indicated on the label.

Removing the 3G Module

1. Turn **off** the computer, turn it over, and remove the battery (***page 2 - 5***) and the component bay cover (***page 2 - 8***).
2. The 3G module will be visible at point 1 on the mainboard.
3. Carefully disconnect the cable 2, and then remove the screw 3.
4. The 3G module 4 (***Figure 10c***) will pop-up, and you can remove it from the computer.

a.



b.

c.

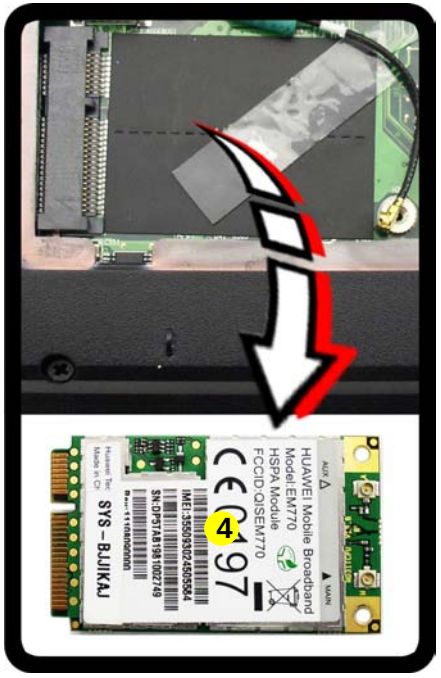


Figure 9
3G Module Removal

a. Locate the 3G module.
b. Disconnect the cable and remove the screw.
c. Remove the 3G module.

Note: Make sure you reconnect the antenna cable to socket (***Figure 9b***).

4. 3G Module

- 1 Screw

Figure 10
Wireless LAN Module Removal

a. Locate the WLAN.
b. Disconnect the cable and remove the screw.
c. The WLAN module will pop up.
d. Remove the Wireless LAN module.

Note: Make sure you reconnect the antenna cable to the "1 + 2" socket (***Figure 10b***).

5.Wireless LAN Module

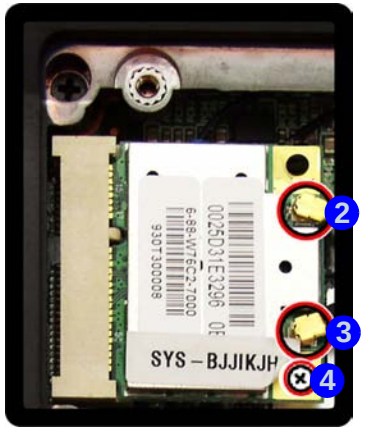
- 1 Screw

Removing the Wireless LAN Module

1. Turn **off** the computer, turn it over, and remove the battery (***page 2 - 5***) and the component bay cover (***page 2 - 8***).
2. The Wireless LAN module will be visible at point 1 on the mainboard.
3. Carefully disconnect the cables 2 & 3, and then remove the screw 4.
4. The Wireless LAN module 5 (***Figure 10c***) will pop-up, and you can remove it from the computer.

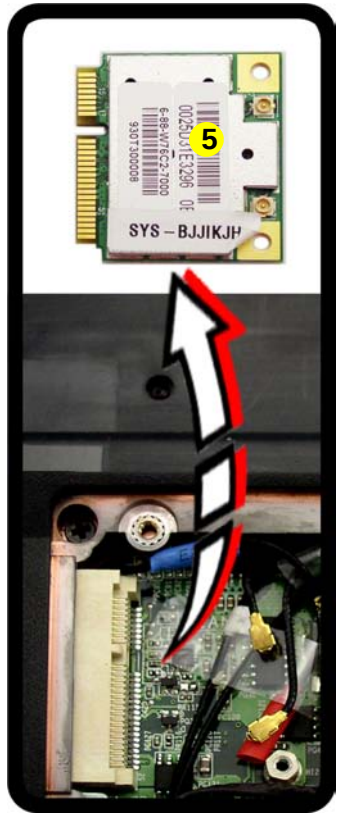
a.

b.



c.

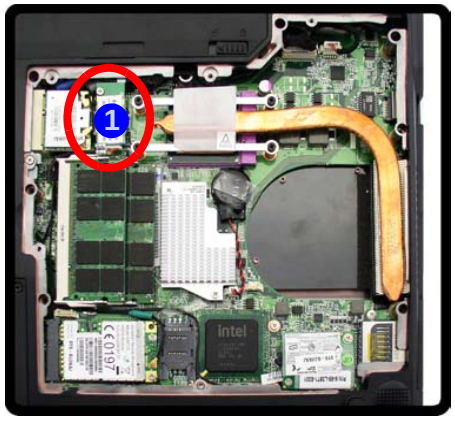
d.



Removing the Bluetooth Module

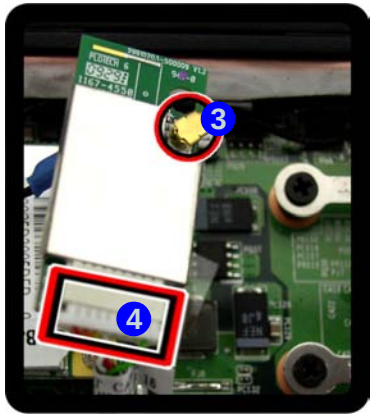
1. Turn **off** the computer, turn it over, and remove the battery (***page 2 - 5***) and the component bay cover (***page 2 - 8***).
2. The Bluetooth module will be visible at point 1 on the mainboard.
3. Remove the screw 2 and turn the module over.
4. Carefully disconnect the cable 3 and separate the connector 4 (***Figure 11b***) from the Bluetooth Module.
5. Lift the Bluetooth Module 5 (***Figure 11c***) up and off the computer.

a.



b.

c.



d.

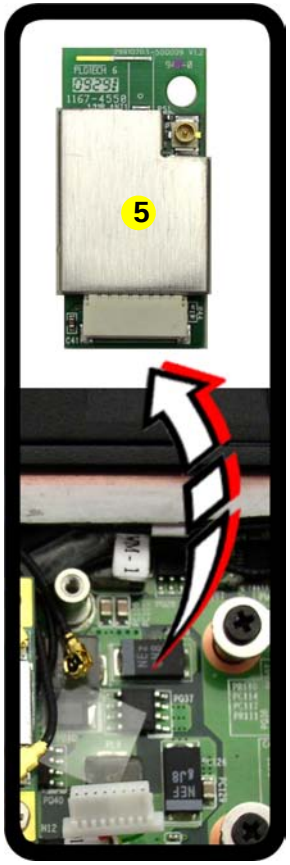


Figure 11
Bluetooth Module Removal

a. Locate the Bluetooth module.
b. Remove the screw.
c. Disconnect the cable and the connector from the Bluetooth module.
d. Lift the Bluetooth module out.

5. Bluetooth Module

- 1 Screw

Figure 12
Modem Removal

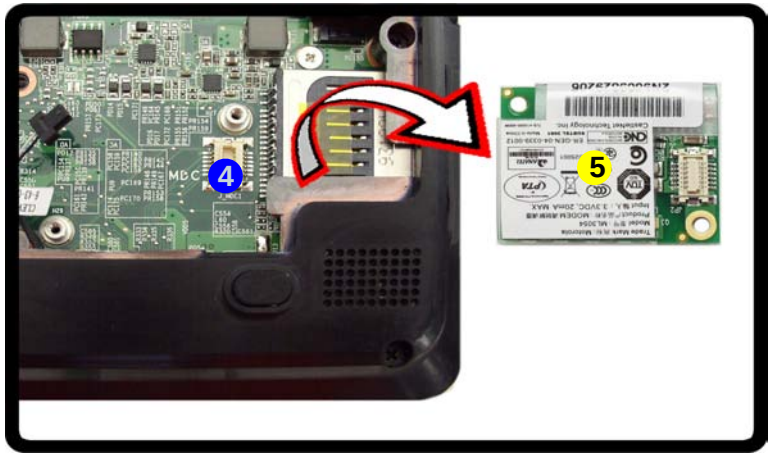
a. Locate the modem.
b. Remove the screws.
c. Lift the modem up and off the sockets.

Removing the Modem

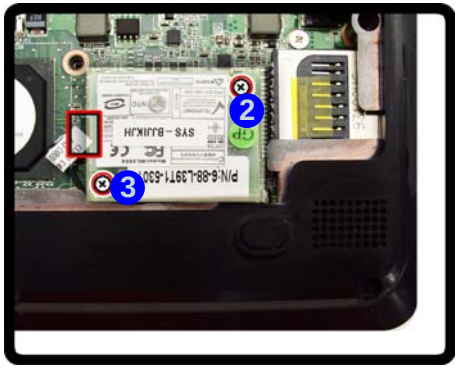
1. Turn **off** the computer, turn it over, and remove the battery (*page 2 - 5*) and the component bay cover (*page 2 - 8*).
2. The modem will be visible at point 1 on the mainboard.
3. Remove the screws 2 - 3,
4. Carefully lift the modem 5 up and off the socket 4.

a.

c.



b.



5. Modem

- 2 Screws

Removing the LCD Back Cover for MOFA

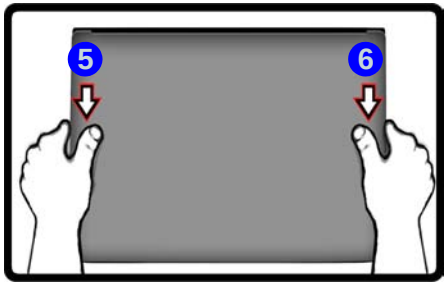
1. Turn **off** the computer, and turn the computer over to remove the battery (*page 2 - 5*).
2. Open the LCD and carefully remove the rubber screw covers 1 & 2 (2 corner rubber screw covers only) and set them aside.
3. Remove screws 3 & 4 from the front cover.
4. Carefully slide the cover forward in the direction of the arrows 5 & 6 as illustrated below.
5. Remove the LCD back cover 7 .

Figure 13
LCD Back Cover Removal

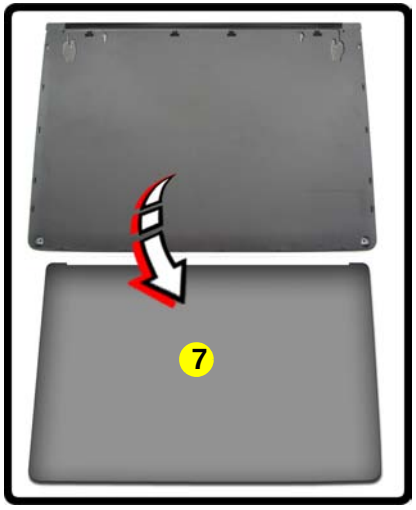
a. Remove the rubber covers and screws.
b. Slide the cover forward.
c. Remove the LCD back cover.

a.

b.



c.



Rubber Screw Covers

After removing the rubber screw covers, place them on a clean dry surface (or attach them to the front cover itself) in order to prevent loss of adhesive.

7. LCD Back Cover

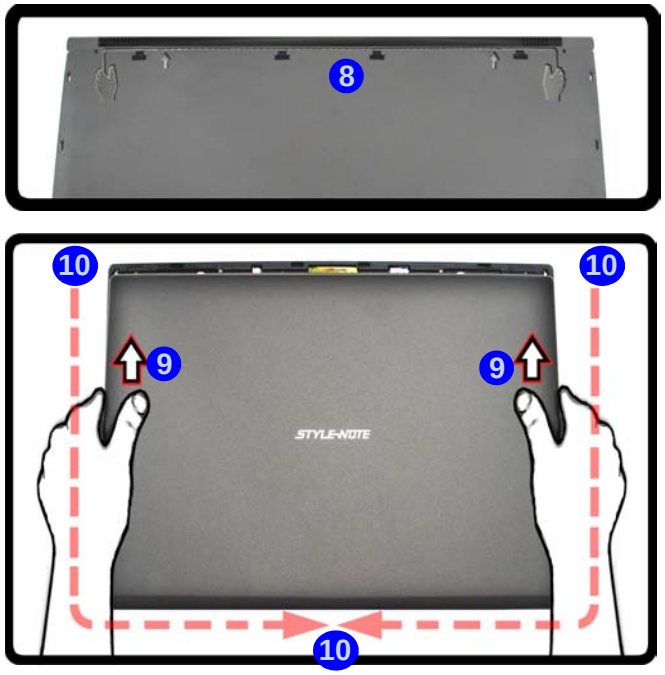
- 2 Screws

Figure 14
LCD Back Cover Removal (cont'd)

d. Align the replacement cover and slide forward to click firmly into place.

6. Align the replacement cover with the dotted line 8 as illustrated below (and as marked on the cover).

d.



7. Slide the back cover forward until it clicks firmly into place 9.
8. Run your hands around the sides and front of the cover 10 to make sure it is firmly aligned in place (carefully press down to make sure the fit is secure).
9. Replace the screws and rubber covers.

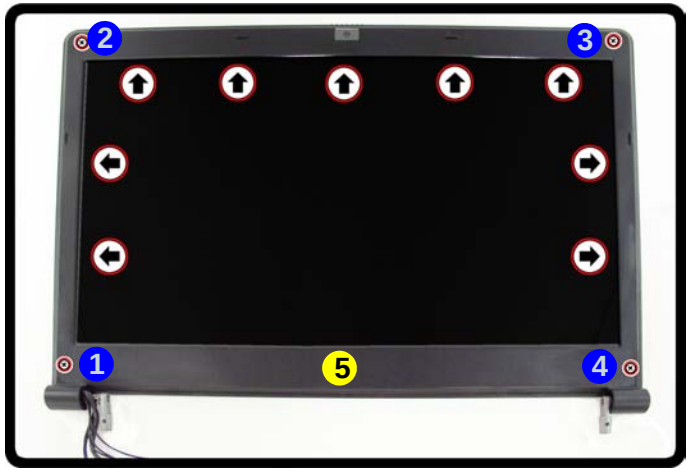
Removing the LCD Front Cover

1. Turn **off** the computer, and remove the battery (*page 2 - 5*), and remove the LCD back cover (*page 2 - 17*).
2. Remove the rubber covers and screws 1 - 4 (*Figure 15a*), then run your finger around the middle of the frame to carefully unsnap the LCD front cover 5 from the LCD panel.
3. After unsnapping all four sides of the LCD front cover, carefully slide the LCD front cover downwards in the direction of the arrow 6 (be careful of the LCD hinges at point 7).
4. You can now remove the LCD front cover.

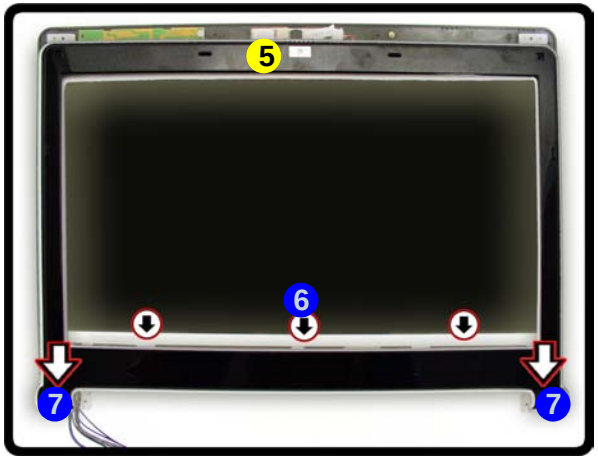
Figure 15
LCD Front Cover Removal

a. Remove the screws and unsnap the LCD front cover from the LCD panel.
b. Slide the LCD panel cover in the direction of the arrow.

a.



b.



Rubber Screw Covers

After removing the rubber screw covers, place them on a clean dry surface (or attach them to the front cover itself) in order to prevent loss of adhesive.

5. LCD Front Cover

- 4 Screws

Figure 16
Keyboard Removal

a. Press the four latches to release the keyboard.
b. Lift the keyboard up and disconnect the cable from the locking collar.
c. Remove the keyboard.

Removing the Keyboard

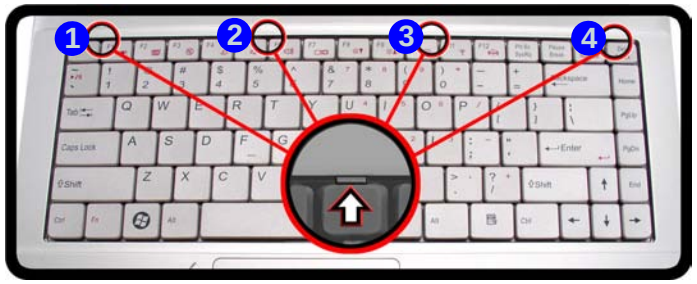
1. Turn **off** the computer, and remove the battery (*page 2 - 5*).
2. Press the **four** keyboard latches at the top of the keyboard to elevate the keyboard from its normal position (you may need to use a small screwdriver to do this).
3. Carefully lift the keyboard up, being careful not to bend the keyboard ribbon cable 5 (*Figure 16b*).
4. Disconnect the keyboard ribbon cable 5 from the locking collar socket 6.
5. Carefully lift up the keyboard 7 (*Figure 16c*) off the computer.

Re-Inserting the Keyboard

When re-inserting the keyboard firstly align the **four** keyboard tabs at the bottom (*Figure 16c*) at the bottom of the keyboard with the slots in the case.

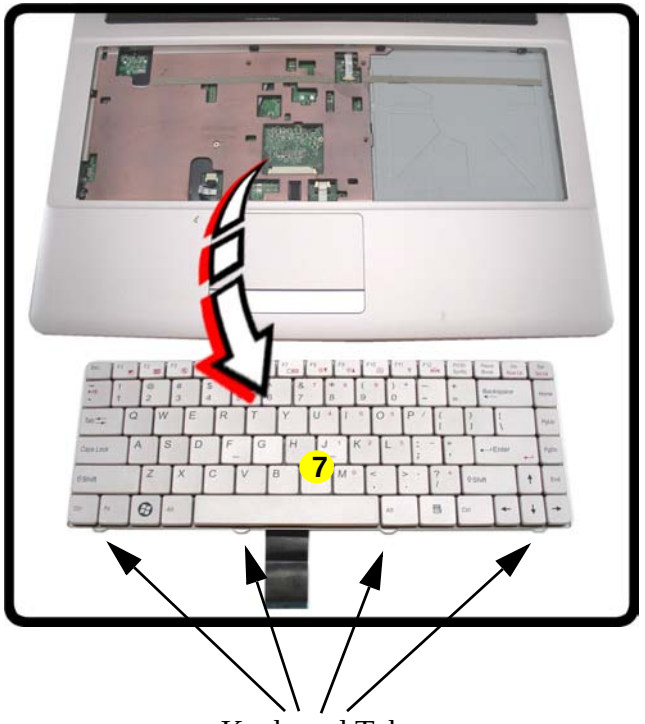
7. Keyboard

a.



b.

c.



Appendix A:Part Lists

This appendix breaks down the ***C4100/C4105*** series 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.

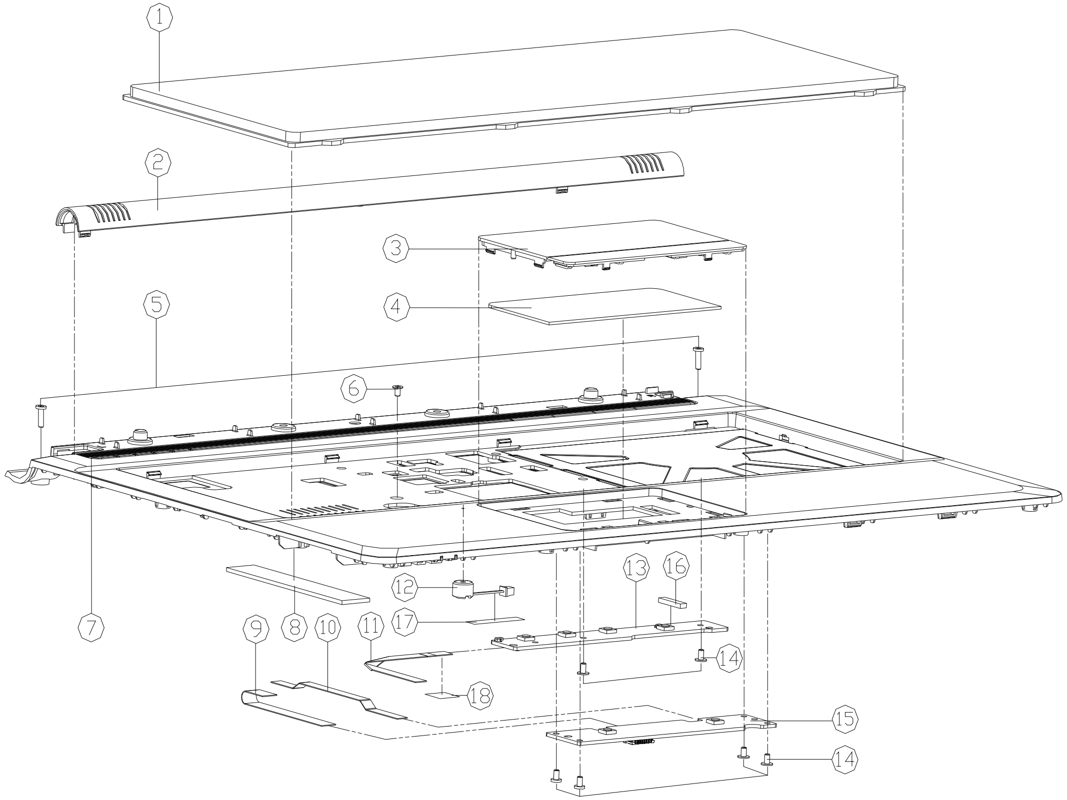
Part List Illustration Location

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

Table A - 1
Part List Illustration Location

Part	C4100/C4105
Top (C4100)	*page A - 3*
Top (C4105)	*page A - 4*
Bottom (C4100)	*page A - 5*
LCD (C4100)	*page A - 6*
LCD (C4105)	*page A - 7*
HDD	*page A - 8*
SATA-DVD-SUPER-MULTI	*page A - 9*

Top (C4100)

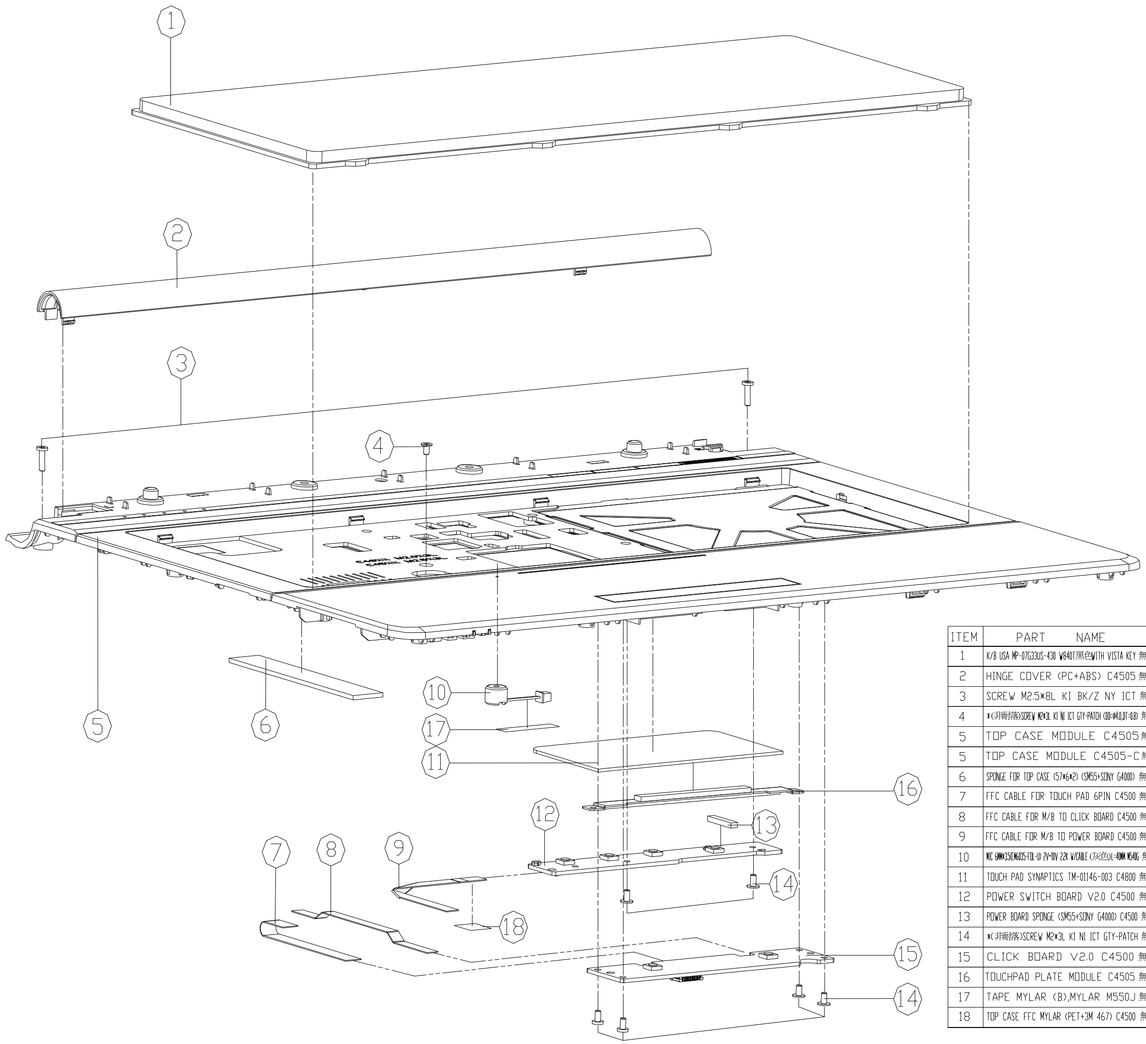


ITEM	PART NAME	PART NO	REMARK
1	K/B USA MP-07G33US64303 C4500香檳銀色 WITH VISTA KEY 無鉛	6-80-C4500-010-1	
2	HINGE COVER (PC+ABS) C4500 無鉛	6-42-C4502-071	
3	TP COVER MODULE C4500 無鉛	6-42-C4502-101	
4	TOUCH PAD SYNAPTICS TM-01146-003 C4800 無鉛	6-49-C4802-010	
5	SCREW M2.5*8L KI BK/Z NY ICT 無鉛	6-35-B6125-8R0	
6	*(非耐落)SCREW M2*3L KI NI ICT GTY-PATCH (DD=ø4.0,DT=0.8) 無鉛	6-35-B1120-3RD	
7	TOP CASE MODULE C4500 無鉛	6-39-C4502-014	FOR C4100
7	TOP CASE MODULE C4500-C 無鉛	6-39-C4502-011-C	FOR C4100-C
8	SPONGE FOR TOP CASE (57*6*2) (SM55+SONY G4000) 無鉛	6-47-0019A-570	
9	FFC CABLE FOR TOUCH PAD 6PIN C4500 無鉛	6-43-C4502-010	
10	FFC CABLE FOR M/B TO CLICK BOARD C4500 無鉛	6-43-C4500-022	
11	FFC CABLE FOR M/B TO POWER BOARD C4500 無鉛	6-43-C4500-031	
12	MIC 6MM*3.5(EM6035-FOL-U) 2V~10V 2.2K W/CABLE(灰色) L=40MM M540G 無鉛	6-23-EM54G-012	
13	POWER SWITCH BOARD V2.0 C4500 無鉛	6-77-C450S-D02	
14	*(非耐落)SCREW M2*3L K1 NI ICT GTY-PATCH 無鉛	6-35-B1120-3RE	
15	CLICK BOARD V2.0 C4500 無鉛	6-77-C4502-D02	
16	POWER BOARD SPONGE (SM55+SONY G4000) C4500 無鉛	6-47-C4502-021	
17	TAPE MYLAR (B),MYLAR M550J 無鉛	6-40-M55J2-020	
18	TOP CASE FFC MYLAR (PET+3M 467) C4500 無鉛	6-40-C4502-030	

Figure A - 1
Top (C4100)

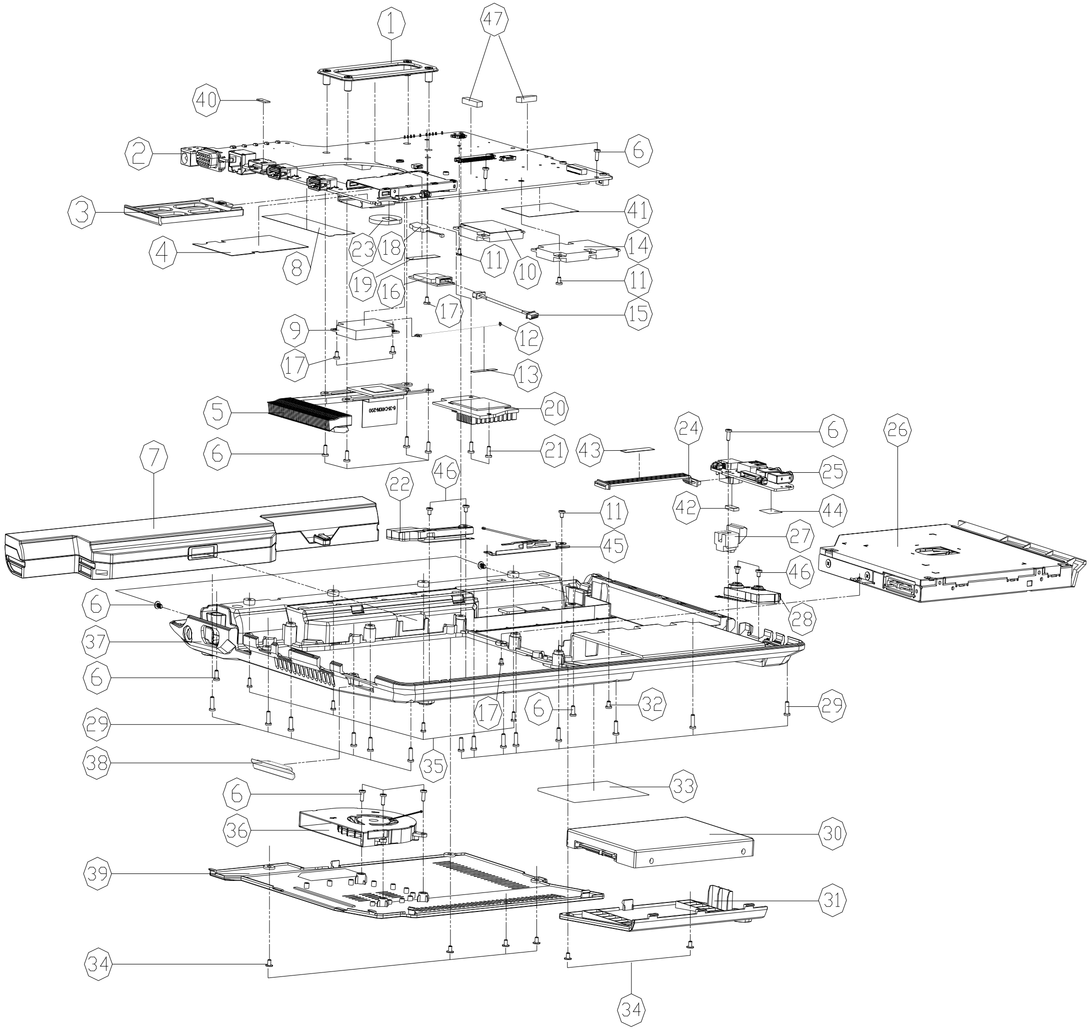
Top (C4105)

Figure A - 1
Top (C4105)



ITEM	PART NAME	PART NO	REMARK
1	K/B USA MP-07G33US-430 W840T黑色WITH VISTA KEY 無鉛	6-80-W84T0-011-1	
2	HINGE COVER (PC+ABS) C4505 無鉛	6-42-C4552-031	
3	SCREW M2.5*8L KI BK/Z NY ICT 無鉛	6-35-B6125-8R0	
4	*(非耐落)SCREW M2*3L KI NI ICT GTY-PATCH (DD=ø4.0,DT=0.8) 無鉛	6-35-B1120-3RD	
5	TOP CASE MODULE C4505 無鉛	6-39-C4552-012	FOR C4105
5	TOP CASE MODULE C4505-C 無鉛	6-39-C4552-011-C	FOR C4105-C
6	SPONGE FOR TOP CASE (57*6*2) (SM55+SONY G4000) 無鉛	6-47-0019A-570	
7	FFC CABLE FOR TOUCH PAD 6PIN C4500 無鉛	6-43-C4502-010	
8	FFC CABLE FOR M/B TO CLICK BOARD C4500 無鉛	6-43-C4500-022	
9	FFC CABLE FOR M/B TO POWER BOARD C4500 無鉛	6-43-C4500-031	
10	MIC 6MM*3.5(EM6035-FOL-U) 2V~10V 2.2K W/CABLE (灰色)L=40MM M540G 無鉛	6-23-EM54G-012	
11	TOUCH PAD SYNAPTICS TM-01146-003 C4800 無鉛	6-49-C4802-010	
12	POWER SWITCH BOARD V2.0 C4500 無鉛	6-77-C450S-D02	
13	POWER BOARD SPONGE (SM55+SONY G4000) C4500 無鉛	6-47-C4502-021	
14	*(非耐落)SCREW M2*3L K1 NI ICT GTY-PATCH 無鉛	6-35-B1120-3RE	
15	CLICK BOARD V2.0 C4500 無鉛	6-77-C4502-D02	
16	TOUCHPAD PLATE MODULE C4505 無鉛	6-33-C4552-101	
17	TAPE MYLAR (B),MYLAR M550J 無鉛	6-40-M55J2-020	
18	TOP CASE FFC MYLAR (PET+3M 467) C4500 無鉛	6-40-C4502-030	

Bottom (C4100)



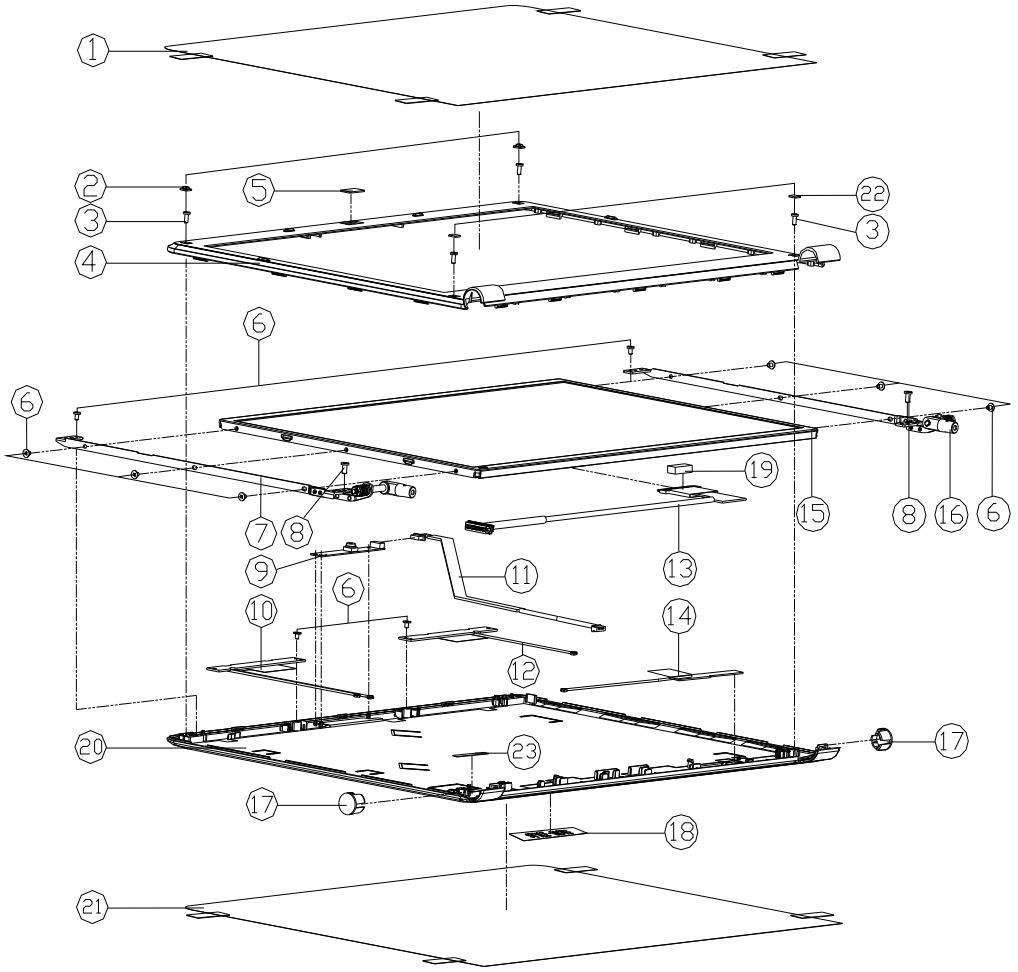
ITEM	PART NAME	PART NO	REMARK
1	CPU SUPPORT MODULE C4100 無鉛	6-33-C410S-101	
2	MAIN BOARD V2.0 (W/3G) C4100 無鉛	6-77-C4100-D02	
2	MAIN BOARD V2.0 (W/O 3G) C4100 無鉛	6-77-C4100-D02-1	
3	DUMMY NEW CARD (ABS+PC) C4500 無鉛	6-42-C4508-021	
4	MYLAR FOR NEW CARD (BLACK PET+SONY G4000) 無鉛	6-40-C450S-020	
5	CPU HEATSINK MODULE (PIPE NOVARK 0.5MM/ AL FIN)C4100 無鉛	6-31-C410N-200	
6	SCREW M2.5*5L KI BK/Z ICT NY- 無鉛	6-35-B6125-5RA	
7	BAT.P S LI 11.1V/4.4AH/48.84WH 3S2P SMP/BAK 980T2007 F C4800 無鉛	6-87-C480S-4P42	(OPTION)
7	BAT.P S LI 11.1V/4.4AH/48.84WH 3S2P MITAC/LISHEN 541382960002 C4800 無鉛	6-87-C480S-4G4	(OPTION)
8	MYLAR FOR M/B FIN C4500 無鉛	6-40-C450S-010	
9	MODEM AZALIA+AC97 ML3054(2.0) 凱碩 MDC 12 PIN MOTOROLA (LOW POWER) L390T 無鉛	6-88-L39T1-5301	(OPTION)
9	MODEM AZALIA+AC97 M56(ML-V0ONT-ROHS) 亞旭 MDC 12 PIN MOTOROLA (LOW POWER) 無滷 M760S 無鉛	6-88-M76S1-8111	(OPTION)
9	MODEM AZALIA+AC97 D40 AM5 凱碩 MDC 12 PIN AGERE (LOW POWER) V760S 無鉛	6-88-W76S1-5300	(OPTION)
9	MODEM AZALIA+AC97 D40 AM5 (456(ML-T60NT-ROHS) 亞旭 MDC 12 PIN AGERE (LOW POWER) V760H 無鉛	6-88-W76H1-8110	(OPTION)
10	WLAN 802.11BGN RTL8191SE 海華 AW-NE104H HALF MINI-CARD PCI-E RTL8191SE V760C 無鉛	6-88-W76C2-7001	(OPTION)
10	WLAN 802.11BGN RTL8191SE 展達 XW7AE HALF MINI-CARD PCI-E RTL8191SE 電容變更無鉛	6-88-W76C2-8702	(OPTION)
10	WLAN 802.11AGN INTEL CONDOR PEAK (WIFI LINK 1000 112BN HMWG B2 MINI-CARD PCI-E (半卡) NEW 無鉛	6-88-M77C2-4200	(OPTION)
10	WLAN 802.11BGN RTL8191SE 微星 MS-6897 HALF MINI-CARD PCI-E 變更 LABEL 無鉛	6-88-C4802-4702	(OPTION)
10	WLAN 802.11BGN RTL8191SE 展達 XW7AE HALF MINI-CARD PCI-E RTL8191SE 電容變更無鉛	6-88-W76C2-8701	(OPTION)
10	WLAN 802.11BGN RTL8191SE 海華 AW-NE104H HALF MINI-CARD PCI-E RTL8191SE V760C 無鉛	6-88-W76C2-7000	(OPTION)
11	*(非耐落)SCREW M2*3L K1 NI ICT GTY-PATCH 無鉛	6-35-B1120-3RE	
12	MDC CABLE 2P 華力 ,C4800 無鉛	6-43-C480U-010	
13	TAPE MYLAR (B),MYLAR M550J 無鉛	6-40-M55J2-020	
14	WCDMA HSPA EM770 HUAWEI MIN-CARD REV:11126 無鉛	6-88-M810W-8801	(OPTION)
14	WCDMA HSPA H20 QISDA MIN-CARD USB 3.75G 無鉛	6-88-M810W-7900	(OPTION)
15	WIRE CABLE 6PIN M/B TO 8PIN BLUETOOTH MODULE FOR M760S 無鉛	6-43-M76SB-011	
16	BLUETOOTH V2.1 GUBTCR42M-NS-藍天7 互億 8 PIN USB CSR BC04_A07 WITH MS BT SOFTWARE W7301 無鉛	6-88-M73T5-3901	
16	BLUETOOTH V2.1 BTOMR2800 凱碩 8 PIN USB CSR BC04 A07 (4839) WITH MS BT 無鉛	6-88-M77C5-5300	
16	BLUETOOTH V2.1 GUBTCR42M-NS-藍天7互億 8 PIN USB CSR BC04_A07 WITH MS BT SOFTWARE W7301 無鉛	6-88-M73T5-3900	
17	*(非耐落)SCREW M2*3L K1 NI ICT GTY-PATCH (OD=Ø4.0,DT=0.8)無鉛	6-35-B1120-3RD	
18	BAT. 20MM 3V 210MAH W/CABLE 56MM CR2032C1-LF-MITSUBISHI 無鉛	6-23-22015-P2C	
19	TAPE MYLAR (A),MYLAR M550J 無鉛	6-40-M55J2-010	
20	NORTH BRIDGE HEATSINK MODULE C4800 無鉛	6-31-C480N-101	
21	SCREW M2*5L K1 NI ICT NY 無鉛	6-35-B1120-5R0	
22	SPK+CABLE L Ø20*T5.2 2.5W 8Ω 36MM P18CUG08LF-A C4800 紘立無鉛	6-23-5C480-022	
23	RTC SPONGE 圓形直徑 21 (CR4305+SONY G4000)C4800 無鉛	6-47-0019A-211	
24	WIRE CABLE 14PIN M/B TO AUDIO 191MM C4500 無鉛	6-43-C4500-013	
25	PHONE JACK & USB & RJ11 BOARD V1.0 C4100 無鉛	6-77-C410A-D01	
26	SATA DVD SUPER MULTI ASS'Y (OPTION) 無鉛	6-79-C480000Q-000	
26	SATA DVD SUPER MULTI ASS'Y (OPTION) 無鉛	6-79-C410000Q-010	
27	RUBBER RJ11 DUMMY (RUBBER+SONY G9000) BLACK C4800 無鉛	6-47-C4803-020	
28	SPK+CABLE R Ø20*T5.2 2.5W 8Ω 25MM P18CUG08LF-A C4800 紘立無鉛	6-23-5C480-012	
29	SCREW M2.5*8L KI BK/Z NY ICT 無鉛	6-35-B6125-8R0	
30	W/O HDD ASS'Y C4800 無鉛	6-79-C480000J-010	
31	HDD COVER MODULE C4500 無鉛	6-42-C450J-102	FOR C410X
31	HDD COVER MODULE C4500-C 無鉛	6-42-C450J-100-C	FOR C410X-C
32	SCREW M2*2L KI BK/Z ICT NY (Ø6,T=0.5) 無鉛	6-35-B6120-2RC	
33	PRODUCT LABEL FOR C4100 無鉛	6-45-C4100003-010	
33	PRODUCT LABEL C4105 無鉛	6-45-C4105003-010	
34	SCREW M2.5*3L K1 BZ ICT NY- 無鉛	6-35-B6125-3R0	
35	SCREW M2*4L KI BZ ICT NY- 無鉛	6-35-B6120-4RA	
36	FAN+CON. 65*60*8.1 5V 0.35A AB6505HX-J03 4800RPM ADDA C4500 無鉛	6-23-AC450-012	
37	BOTTOM CASE MODULE C4500 無鉛	6-39-C4503-013	FOR C410X
37	BOTTOM CASE MODULE C4500-C 無鉛	6-39-C4503-011-C	FOR C410X-C
38	DUMMY CARD READER (黑色 SILICON-KE5612G,硬度 60 度+NITTO 5140 C4500 無鉛	6-47-C4508-011	
39	CPU COVER MODULE C4800 無鉛	6-42-C4803-102	
40	GASKET (L10*W5*H1.5) FOR USB T890M 無鉛	6-47-00190-1A9	
41	MYLAR 40*30*0.1T (FR83 + 3M-467) M735T 無鉛	6-40-M7351-020	ONLY W/3G 使用
42	GASKET (12*5*4) W:5MM H:4MM L:12MM FOR 1394 無鉛	6-47-00190-120	
43	TAPE MYLAR (C),MYLAR M550J 無鉛	6-40-M55J2-030	
44	AUDIO BOARD MYLAR 20*20*0.15T (黑色 PET+3M 467) C4500 無鉛	6-40-C450S-030	
45	ANTENNA WIMAX 2.4G/3.7G/5G PIFA WM3 220MM 無鉛	6-23-7C450-040	
46	SCREW M2*6.2L NI ICT NY FOR SPEAKER 無鉛	6-35-Z1120-6R2	
47	RUBBER FOR TOP CASE (11*6T*5) C4505 無鉛	6-47-C4552-030	ONLY FOR C4105 使用

Figure A - 2
Bottom (C4100)

A.Part Lists

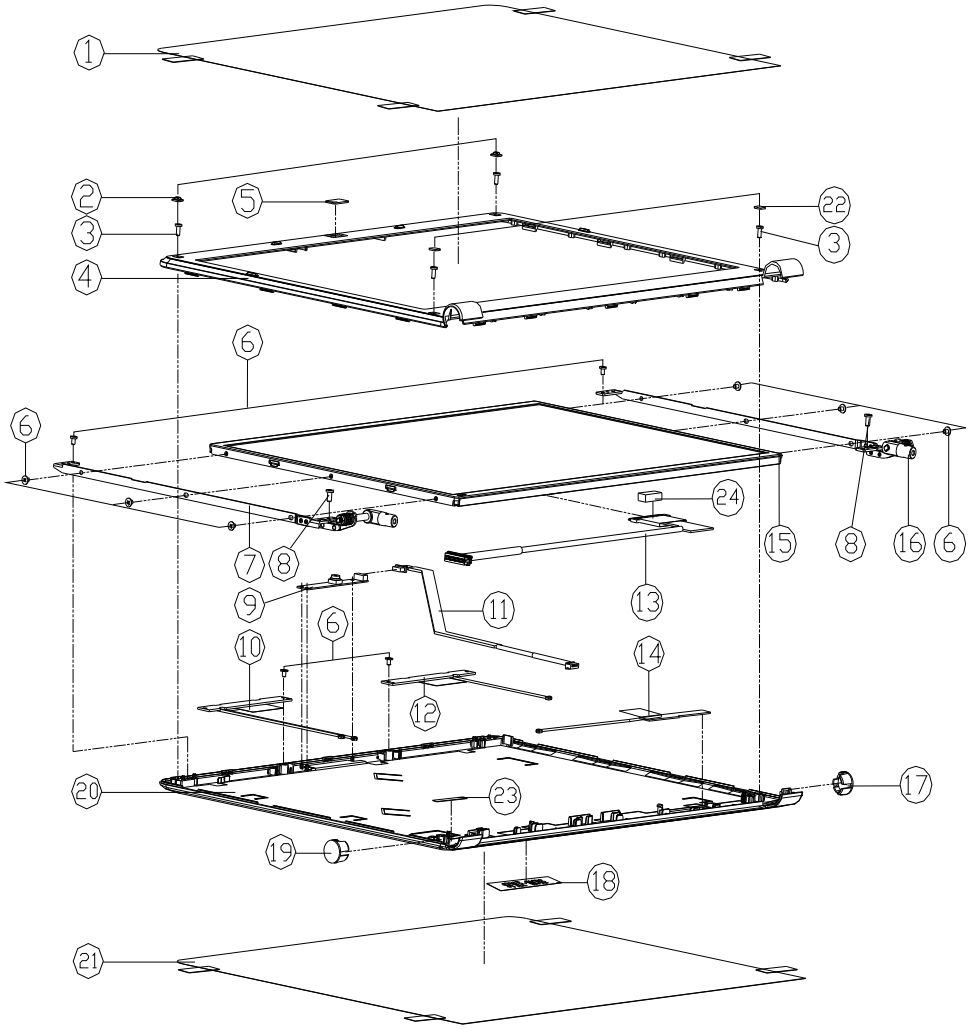
LCD (C4100)

Figure A - 3
LCD (C4100)



ITEM	PART NAME	PART NO	REMARK
1	LCD FRONT COVER PROTECTION MYLAR (PET+3M9895) C4500	6-40-C4501-011	
2	LCD FRONT COVER SCREW RUBBER SILICON C4500	6-47-C4501-031	
3	SCREW M2*5L KIKT-BB D=4.0 BK/Z ICT NY	6-35-B6120-5R0	
4	LCD FRONT COVER MODULE C4500	6-39-C4501-012	
5	CCD PMMA M810L	6-42-M8101-011	
5	W/O CCD LENS PMMA 0.5T C4800	6-42-C480T-010	
6	SCREW M2*5L KI NI ICT GIY-PATCH	6-35-B1120-3RE	
7	LCD HINGE-L SECC C4500	6-33-C4501-011	
8	SCREW M2.5*5L KI BK/Z ICT NY-	6-35-B6125-5RA	
9	VVC CAMERA BRACKET FIX	6-88-M810C-4910	OPTION
9	VVC CAMERA CHASSIS FIX	6-88-M74TC-5100	OPTION
10		6-23-7C480-020	
11	WIRE CABLE FOR CCD 5P 310MM C4500	6-43-C450T-011	
12	ANTENNA WCDMA PCB 3L	6-23-7C480-010	
13	WIRE CABLE FOR LVDS 300MM C4800	6-43-C4801-090	EXCEPT FOR
13	WIRE CABLE FOR LVDS 250MM C4800	6-43-C4801-031	ONLY FOR
14	ANTENNA BLUETOOTH 2.4G PCB	6-23-7C480-030	
15	LCD 14.0" HD ANGLUX	6-50-J8152-V01	
15	LCD 14.0" HD CHIMEI	6-50-J8152-D00	
15	LCD 14.0" HD HANNSTAR	6-50-J8152-N00	
16	LCD HINGE-R SECC C4500	6-33-C4501-021	
17	HINGE COSMETIC RING ABS PA727 C4500	6-42-C4508-011	
18	STYLE NOTE	6-45-M741S-020	
19	GASKET	6-47-00190-102	
20	LCD BACK COVER MODULE C4500	6-39-C4501-022	FOR C4100
20	LCD BACK COVER MODULE C4500-C	6-39-C4501-022-C	FOR C4100-C
21	BACK COVER PROTECTION MYLAR	6-40-C4501-020	
22	FRONT COVER PC FOR SCREW C4500	6-40-C4501-071	
23	TAPE MYLAR (B),MYLAR M550J	6-40-M55J2-020	

LCD (C4105)

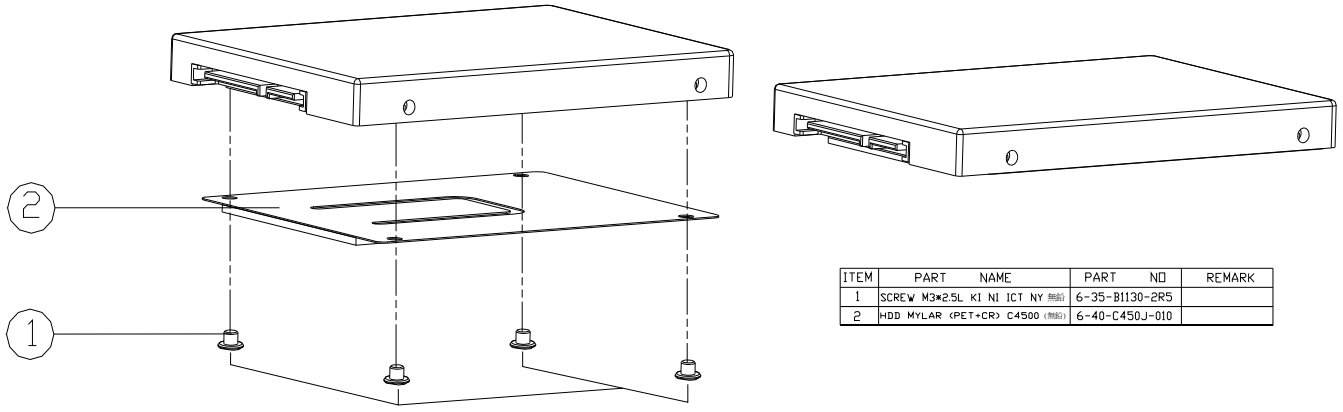


ITEM	PART NAME	PART NO	REMARK
1	LCD FRONT COVER PROTECTION MYLAR (PET+3M9965) C450	6-40-C4501-011	
2	LCD FRONT COVER SCREW RUBBER SILICON C4500	6-47-C4501-031	
3	SCREW M2*5L KI(T=0.8 D=4.0) BK/Z ICT NY	6-35-B6120-5R0	
4	LCD FRONT COVER MODULE C4500	6-39-C4501-012	
5	CCD PMMA M810L	6-42-M8101-011	
5	W/O CCD LENS PMMA 0.5T C4800	6-42-C480T-010	
6	SCREW M2*5L KI NI ICT GTY-PATCH	6-35-B1120-3RE	
7	LCD HINGE-L SECC C4500	6-33-C4501-011	
8	SCREW M2.5*5L KI BK/Z ICT NY-	6-35-B6125-5RA	
9	CAMERA	6-88-M810C-4910	OPTION
9	CAMERA	6-88-M74TC-5100	OPTION
10		6-23-7C480-020	
11	WIRE CABLE FOR CCD SP 31P.5MM C4501	6-43-C450T-011	
12		6-23-7C480-010	
13	WIRE CABLE FOR LVDS 30MM CABLE	6-43-C4801-090	EXCEPT FOR
13	WIRE CABLE FOR LVDS 25PIN CABLE FOR	6-43-C4801-031	ONLY FOR
14		6-23-7C480-030	
15	LCD 14.0" HD CHIMEI N140B6-L02 GLARE TYPE	6-50-J8152-V01	
15	LCD 14.0" HD CHIMEI N140B6-L02 GLARE TYPE	6-50-J8152-D00	
15	LCD 14.0" HD HANNSTAR HSD140PHW1-A00 GLAR	6-50-J8152-N00	
16	LCD HINGE-R SECC C4500	6-33-C4501-021	
17	HINGE COSMETIC RING R (CM6140) C4505	6-42-C4558-011	
18	STAND	6-45-M741S-020	
19	HINGE COSMETIC RING L (CM6140) C4505	6-42-C4558-021	
20	LCD BACK COVER MR MODULE C4505	6-39-C4551-021	FOR C4105
20	LCD BACK COVER MR MODULE C4505-C	6-39-C4551-021-C	FOR C4105-C
21	BACK COVER PROTECTION MYLAR(BS25+3M9965) C450	6-40-C4501-020	
22	FRONT COVER PC FOR SCREW C4500	6-40-C4501-071	
23	TAPE MYLAR (B),MYLAR M550J	6-40-M55J2-020	
24	GASKET (CM6140) FOR TV CONN TOP CASE M5701U	6-47-00190-102	

Figure A - 4
LCD (C4105)

HDD

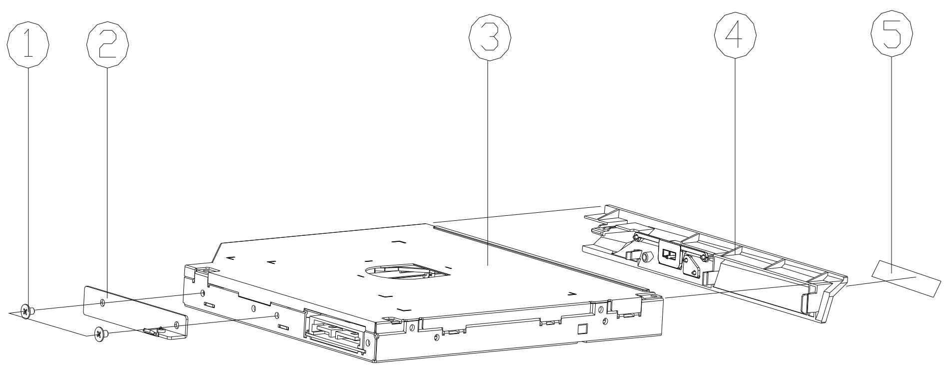
Figure A - 5
HDD

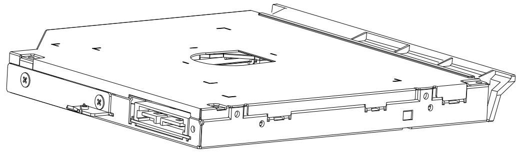


ITEM	PART NAME	PART NO	REMARK
1	SCREW M3*2.5L KI NI ICT NY 無鉛	6-35-B1130-2R5	
2	HDD MYLAR (PET+CR) C4500 (無鉛)	6-40-C450J-010	

SATA-DVD-SUPER MULTI

Figure A - 6
SATA-DVD-SUPER MULTI





ITEM	PART NAME	PART NO	REMARK
1	*(非耐落)SCREW M2*3L KI NI ICT GTY-PATCH (DD=ø4.0,DT=0.8) 無鉛	6-35-B1120-3RD	
2	ODD BRACKET SECC C4500 無鉛	6-33-C450Z-010	
3	SATA DVD SUPER MULTI 5 1/4" 8X 12.7MM AD-7580S F/W: FX20 H/W: 101 (QSI, QSD) (GBAS, WIN7 VLK V1.4 AND (PCB)內縮2MM) 無鉛	6-85-A078X-C0C	FOR QSI
3	SATA DVD SUPER MULTI 5 1/4" 8X 12.7MM TS-L633C/TMCF F/W TM01 H/W: A VER.C (GBAS, WIN 7 VLK V1.4 SUPPORT) (PCB)內縮2MM TSST無鉛	6-85-A078X-T08	FOR TSST
3	SATA DVD SUPER MULTI 5 1/4" 8X 12.7MM GT30N ROM VER. AS02 (PCB 已內縮 (GBAS, VISTA, WIN 7) HLDS無鉛	6-85-A078X-503	FOR HLDS
3	SATA DVD SUPER MULTI 5 1/4" 8X 12.7MM DS-8A4S F/W: JX11 (PCB 已內縮) (GBAS, WINDOWS 7 VLK V1.4 SUPPORT) PLDS無鉛	6-85-A078X-L03	FOR PLDS
4	ODD BEZEL MODULE C4500 無鉛	6-42-C450Z-102	
5	ODD BEZEL LABEL (SUPER MULTI) C4500 無鉛	6-45-C450Z-010	

Appendix B:Schematic Diagrams

This appendix has circuit diagrams of the ***C4100/C4105*** notebook's PCB's. The following table indicates where to find the appropriate schematic diagram.

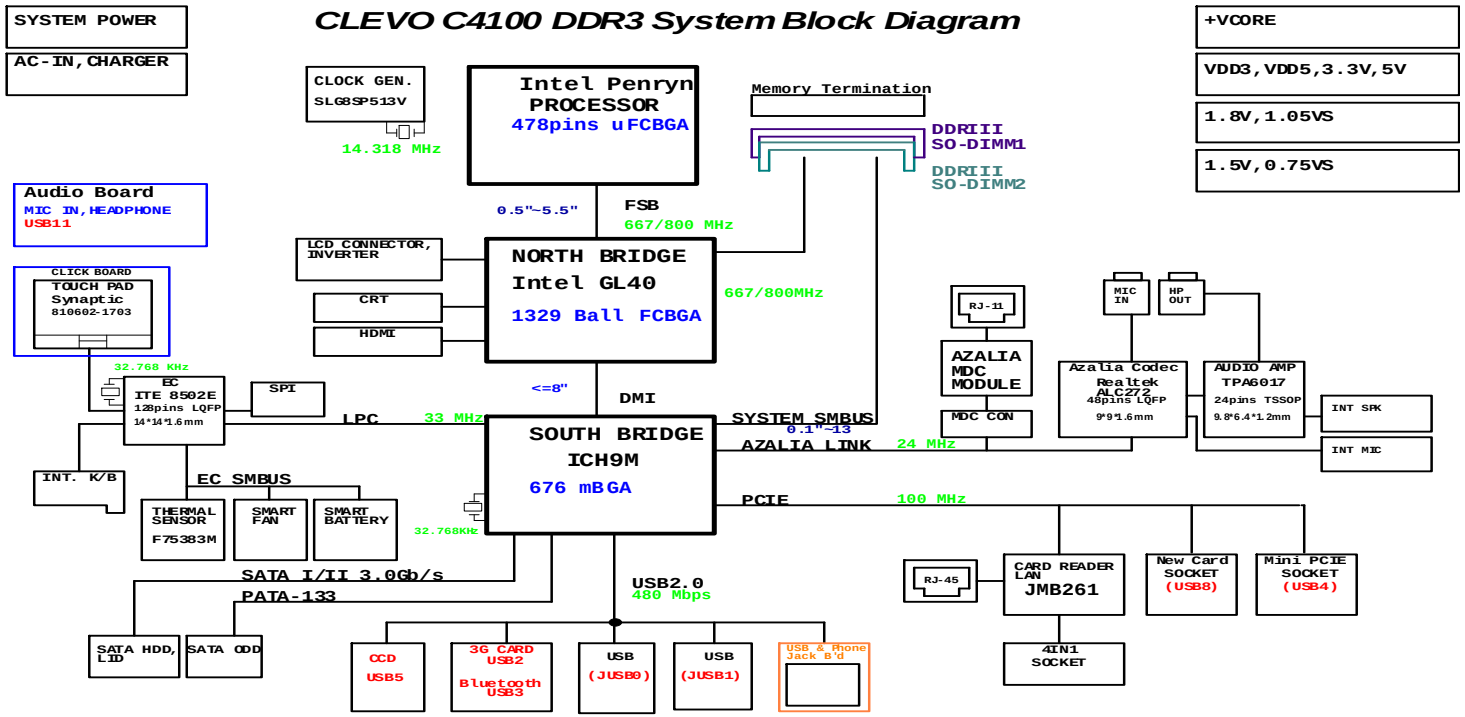
Table B - 1
Schematic Diagrams

Version Note

The schematic diagrams in this chapter are based upon version 6-7P-C4104-003. If your mainboard (or other boards) are a later version, please check with the Service Center for updated diagrams (if required).

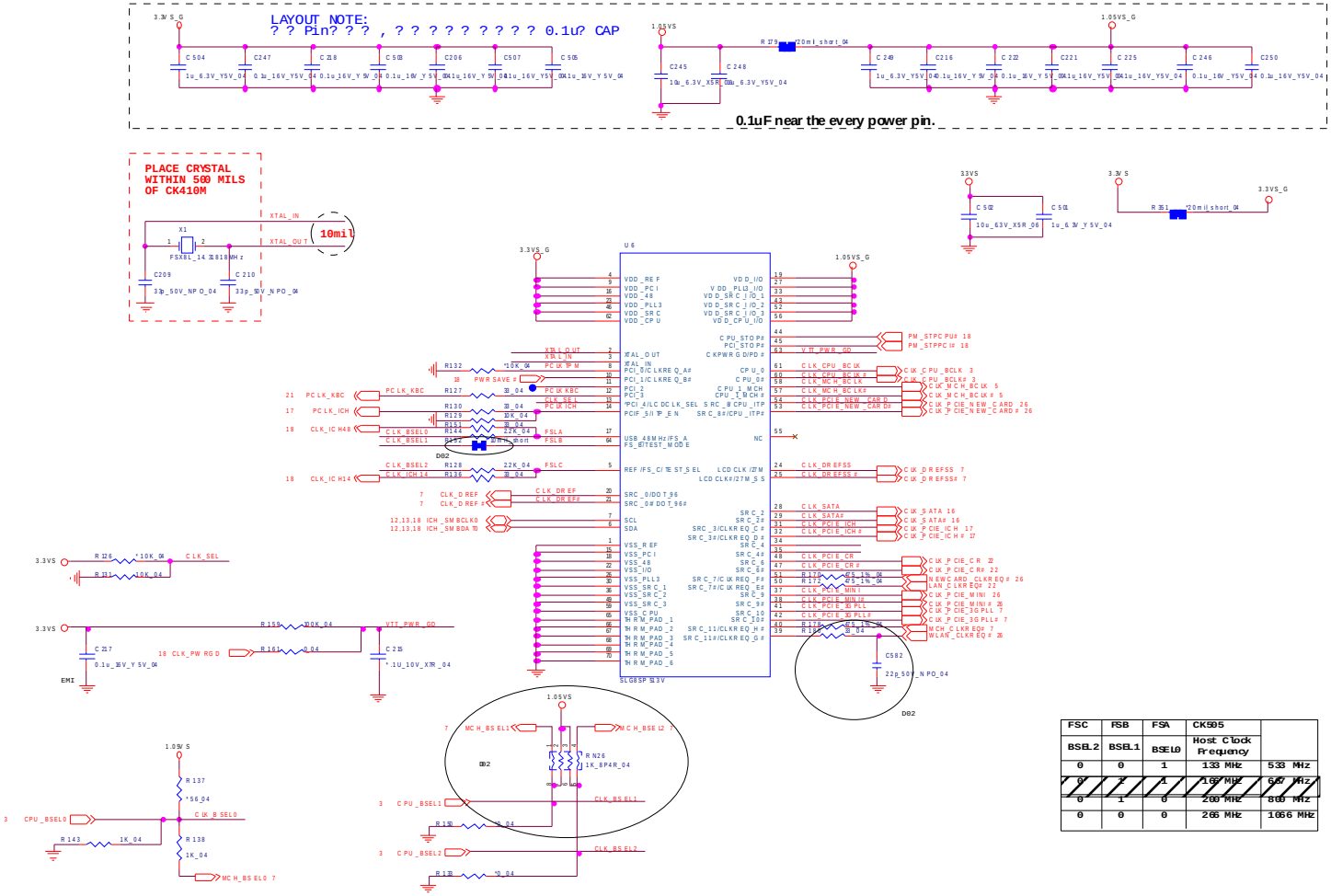
SYSTEM BLOCK DIAGRAM

Sheet 1 of 35
SYSTEM BLOCK DIAGRAM



CLOCK GENERATOR

CLOCK GENERATOR

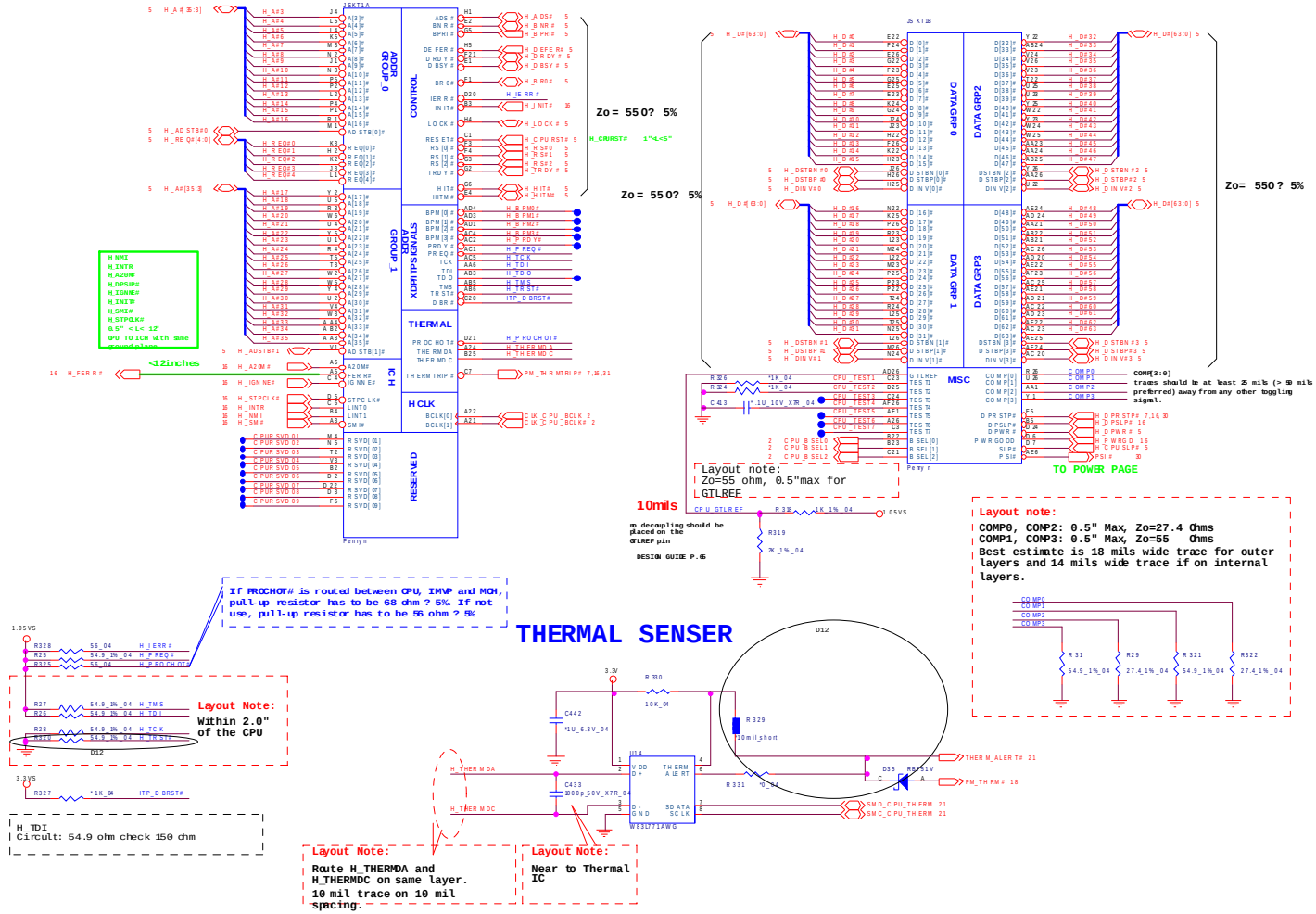


FSC	FSB	FSA	CK505	
BSEL2	BSEL1	BSEL0	Host Clock Frequency	
0	0	1	133 MHz	533 MHz
0	1	1	167 MHz	667 MHz
0	1	0	200 MHz	800 MHz
0	0	0	265 MHz	1066 MHz

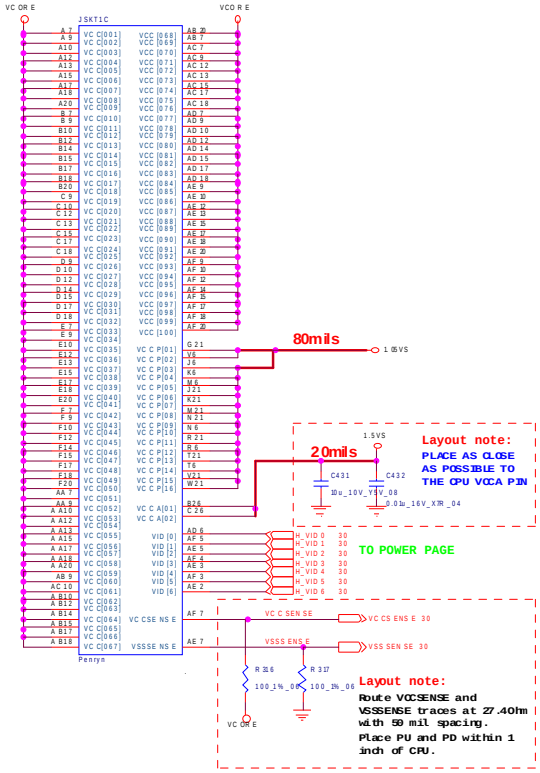
Sheet 2 of 36
CLOCK GENERATOR

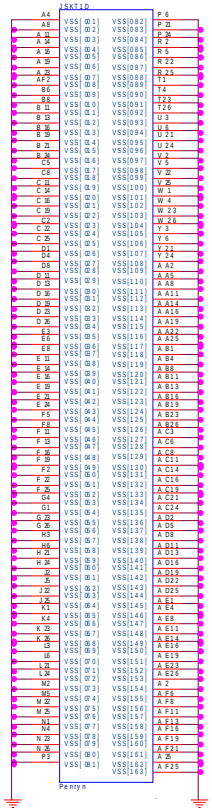
Penryn (Socket-P)1/2

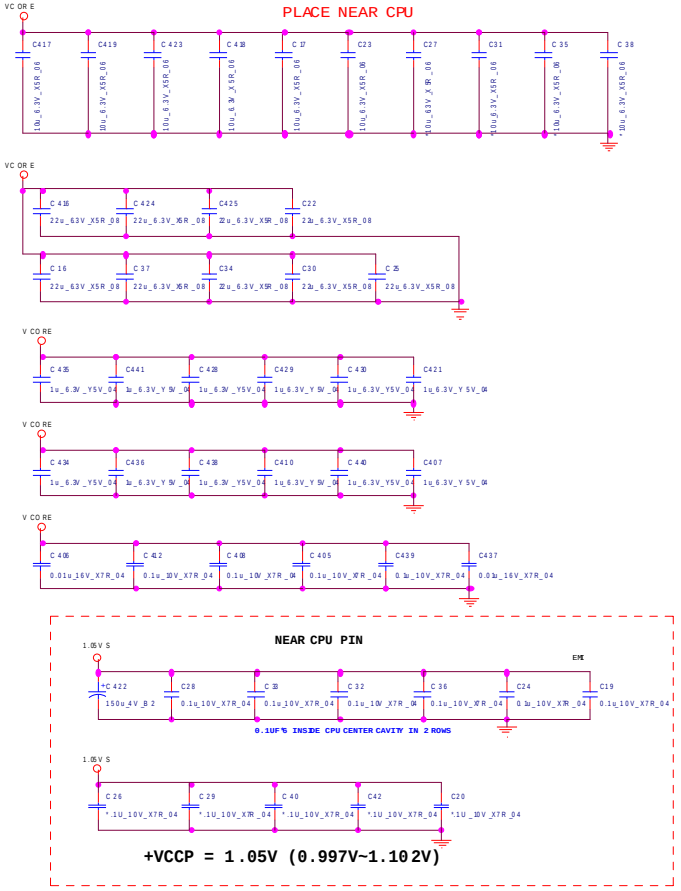
Sheet 3 of 36
Penryn (Socket-P)1/2



Penryn (Socket-P)2/2



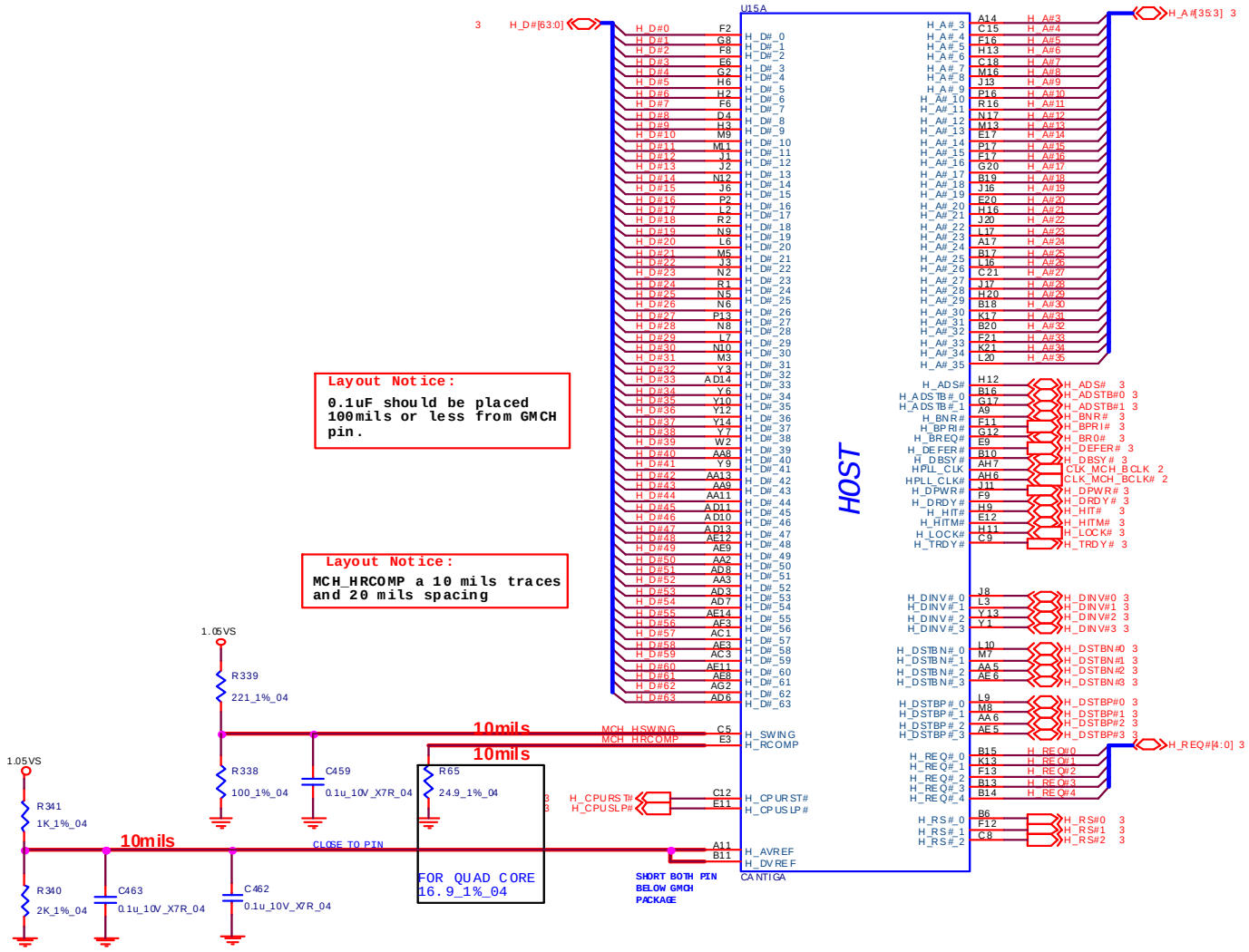




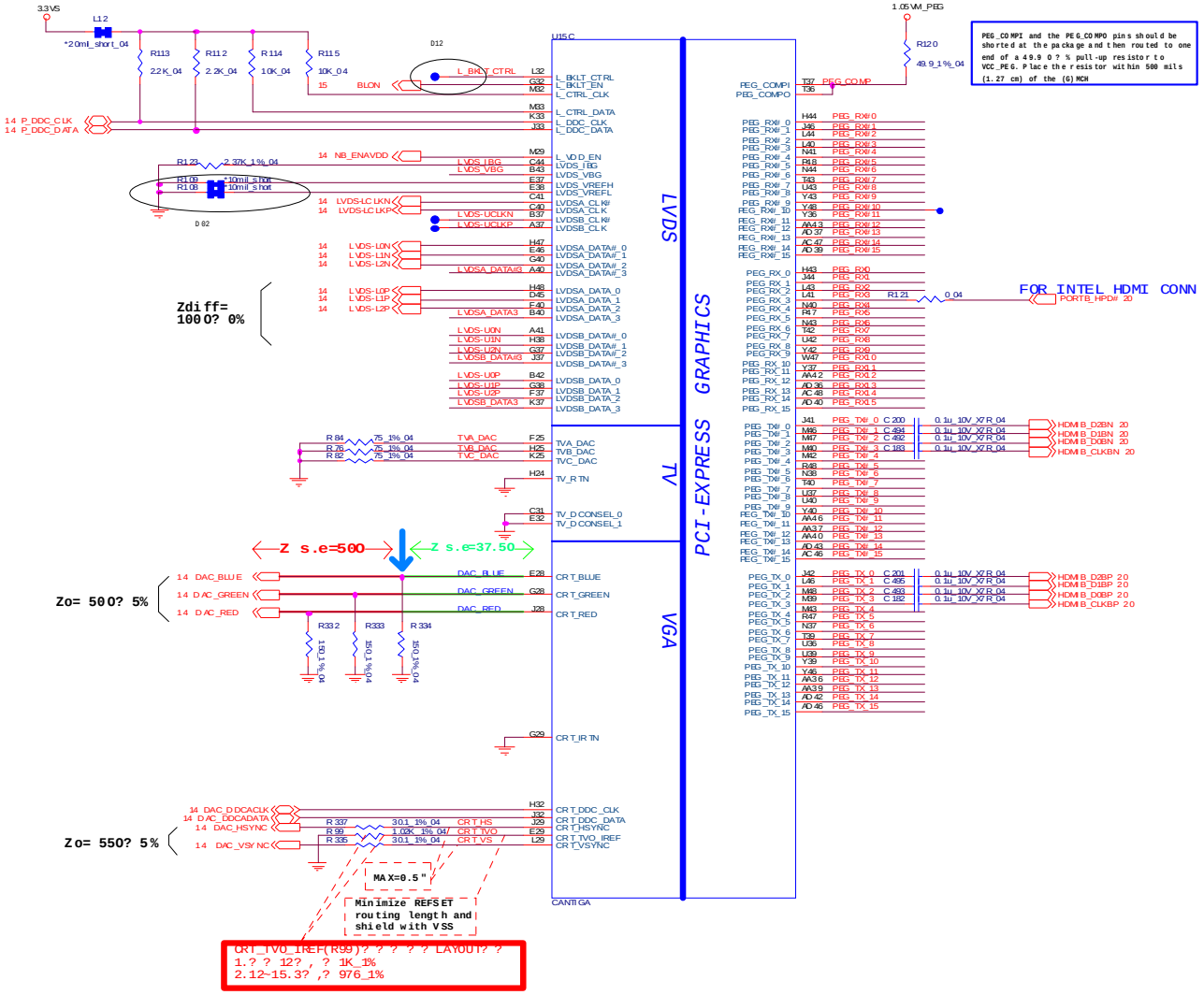
Sheet 4 of 36
Penryn (Socket-P)2/2

CANTIGA 1/7, HOST

Sheet 5 of 36
CANTIGA 1/7,
HOST



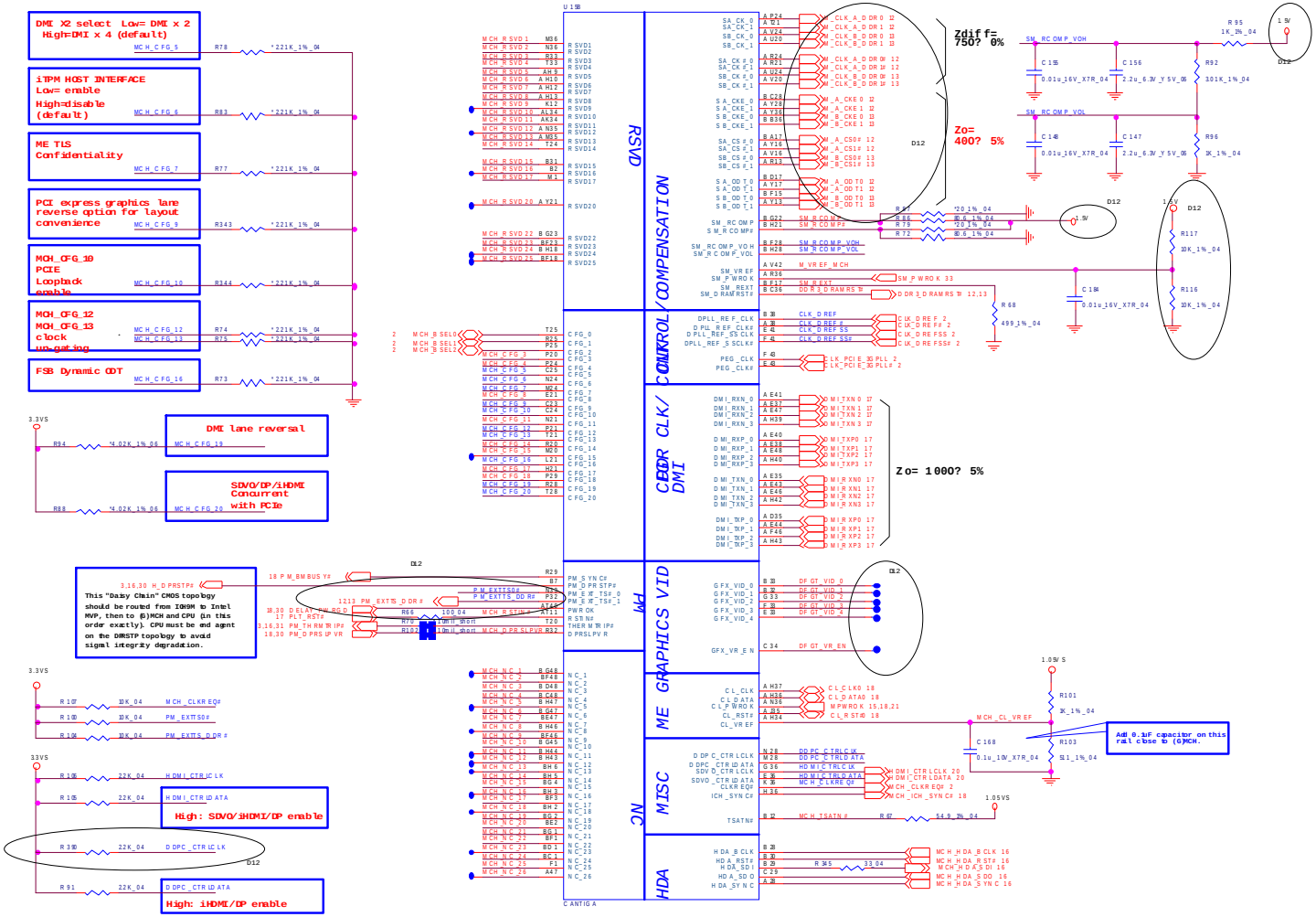
CANTIGA 2/7, Graphics



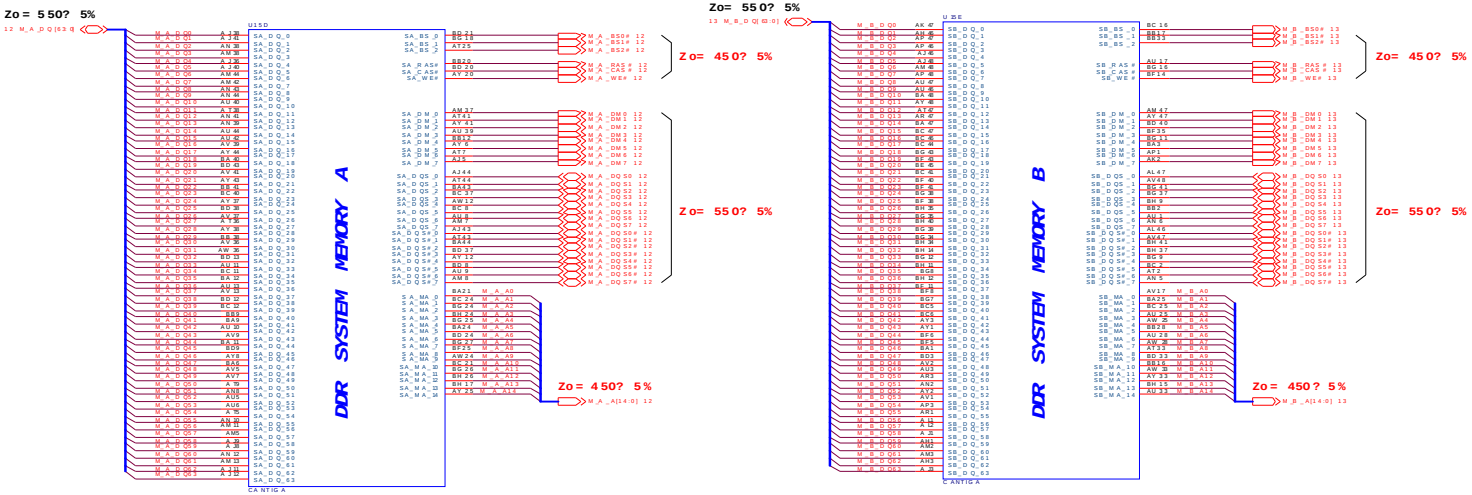
Sheet 6 of 36
CANTIGA 2/7, Graphics

CANTIGA 3/7

Sheet 7 of 36
CANTIGA 3/7



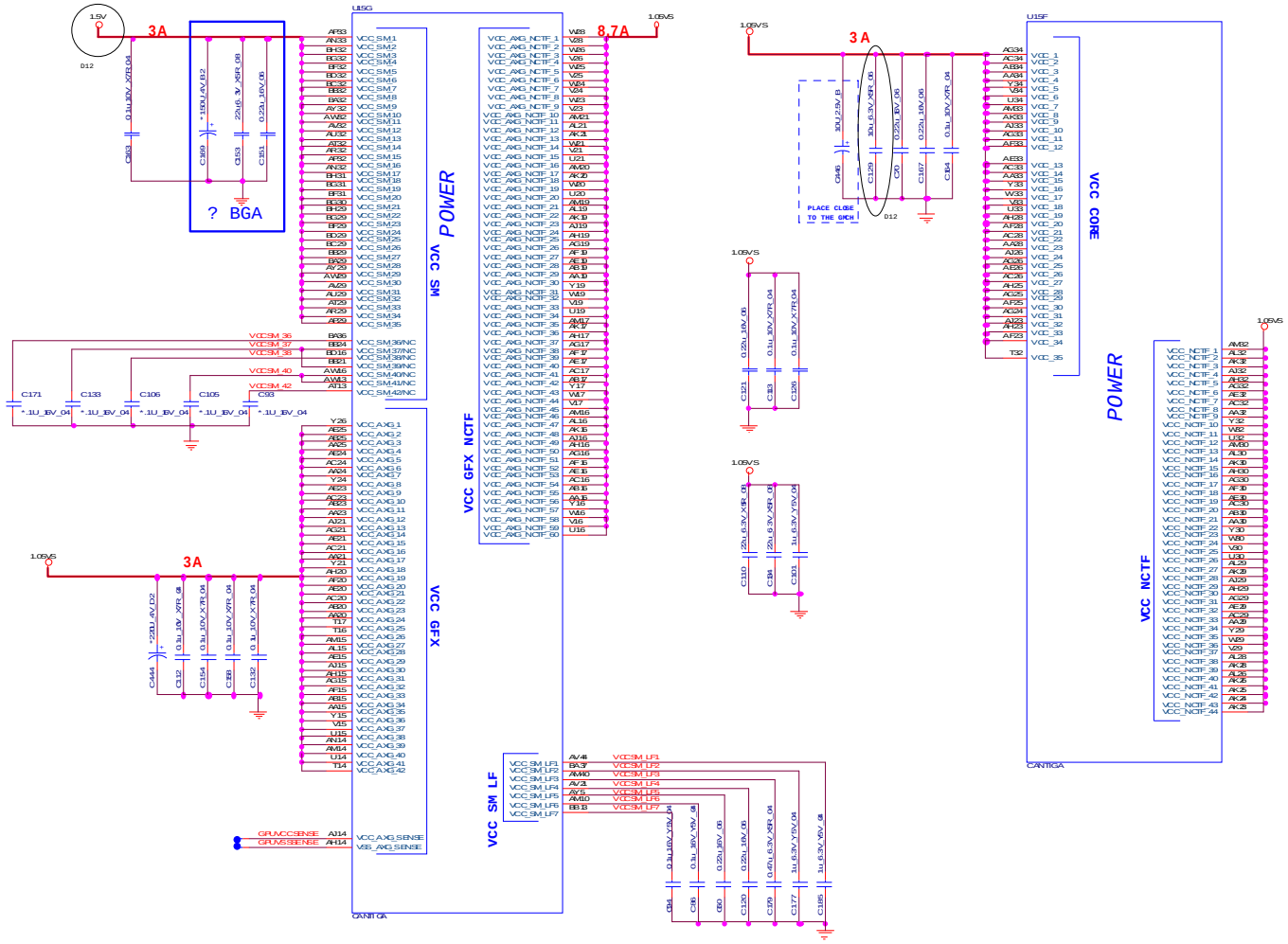
CANTIGA 4/7



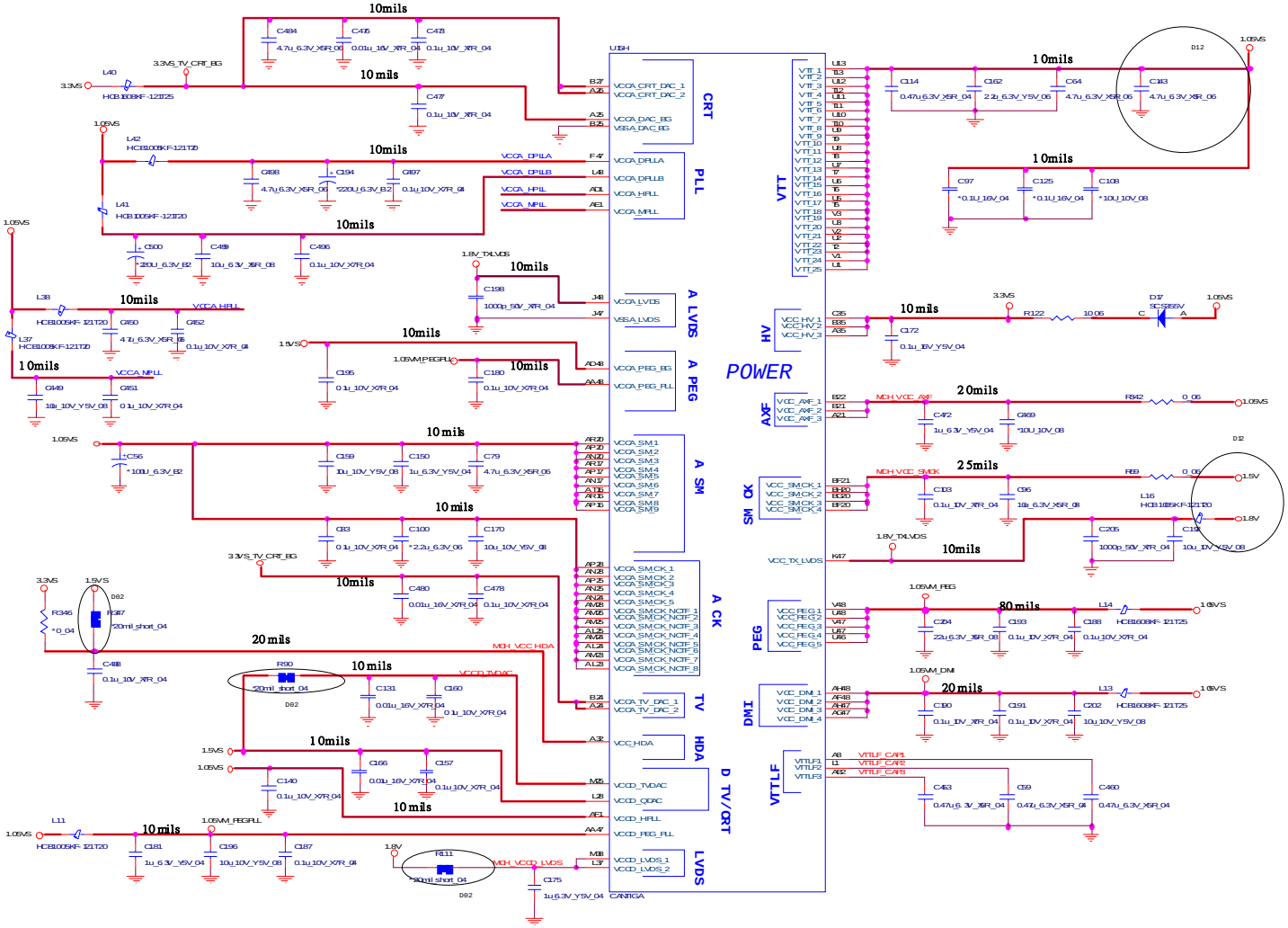
Sheet 8 of 36
CANTIGA 4/7

CANTIGA 5/7

Sheet 9 of 36
CANTIGA 5/7



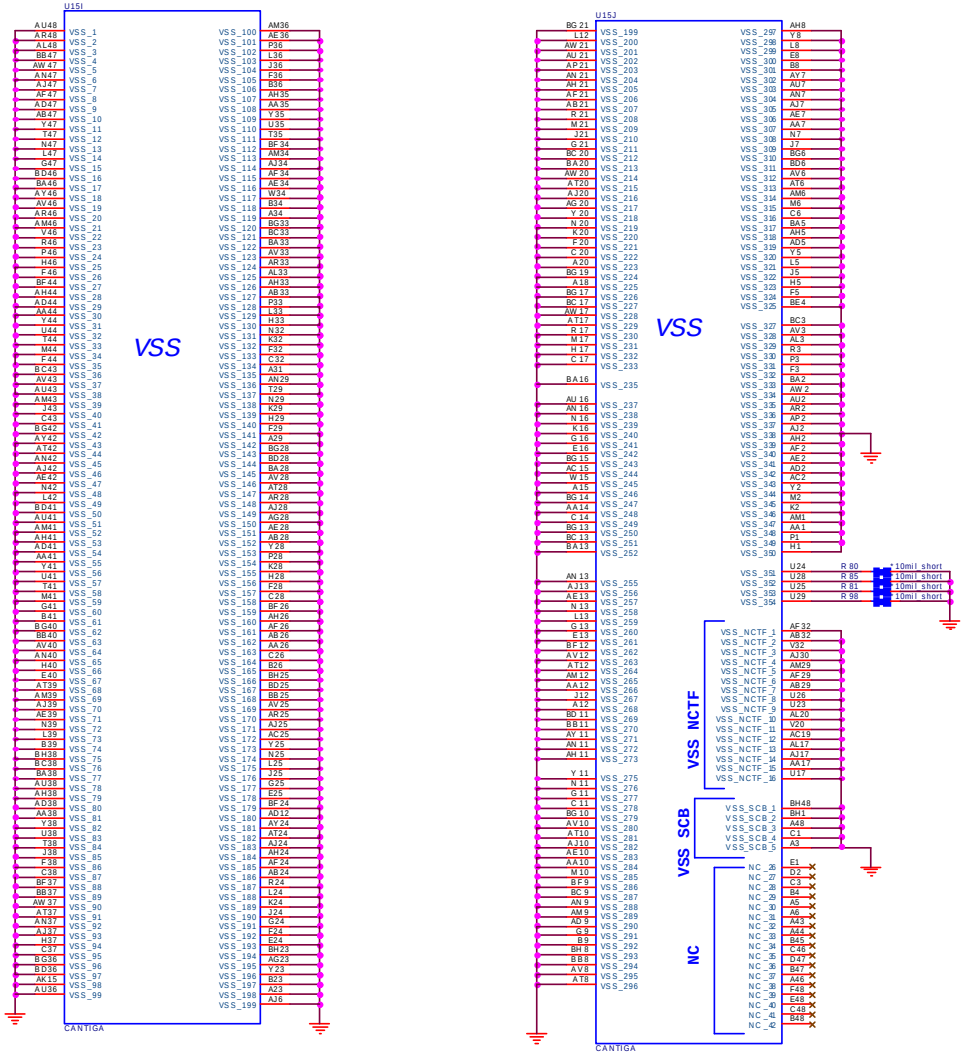
CANTIGA 6/7



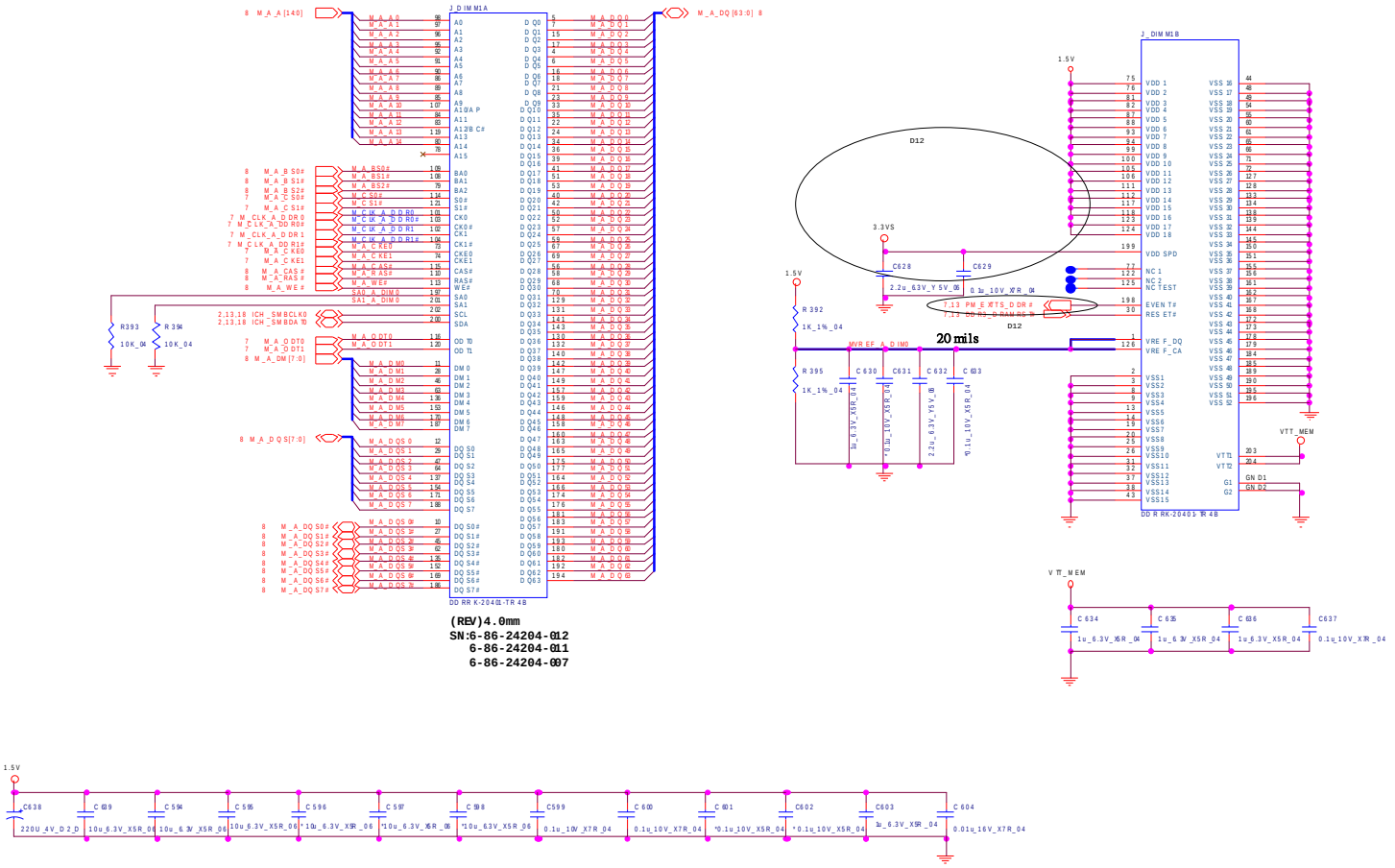
Sheet 10 of 36
CANTIGA 6/7

CANTIGA 7/7

Sheet 11 of 36
CANTIGA 7/7



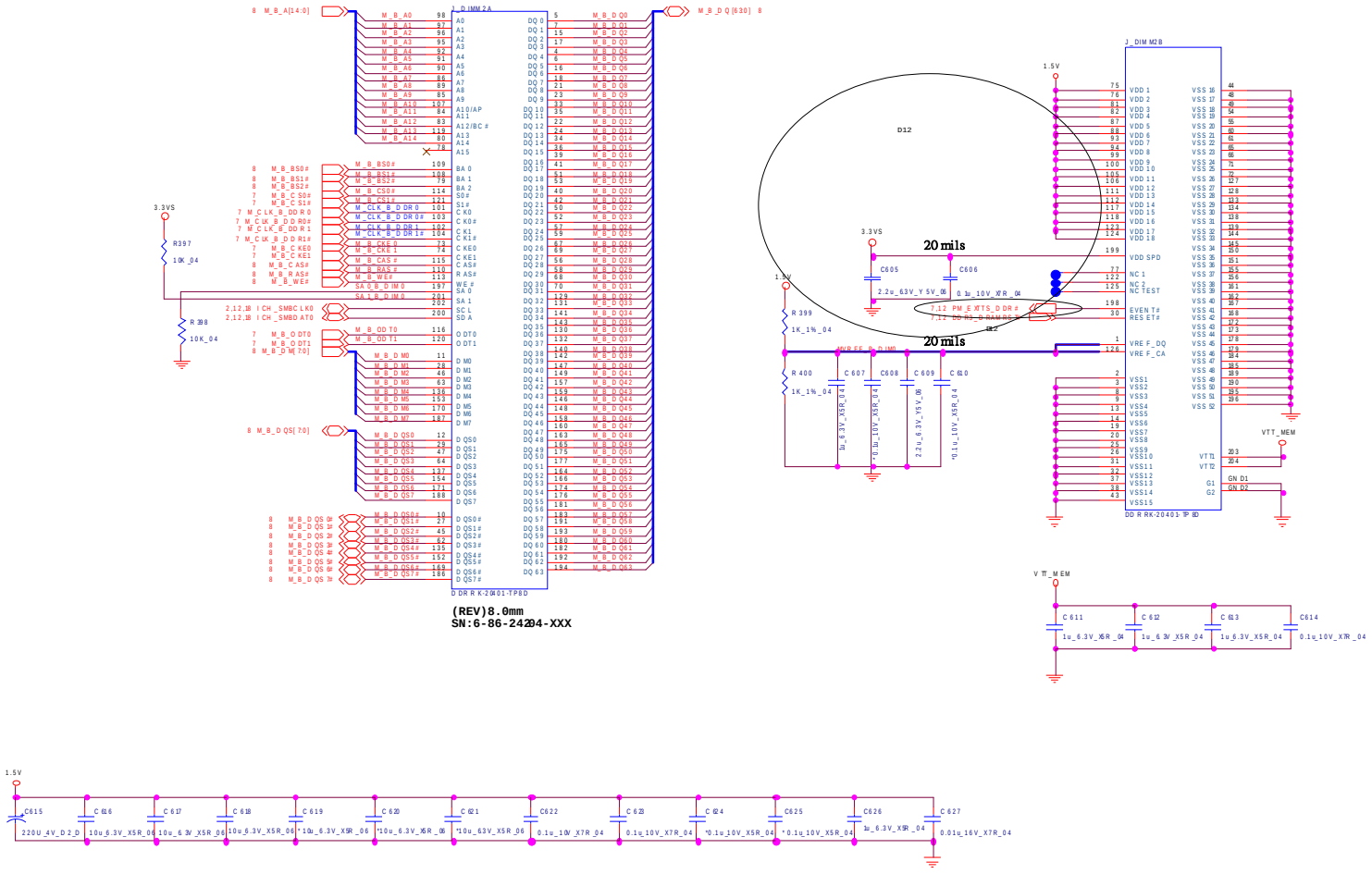
DDRIII SO-DIMM A



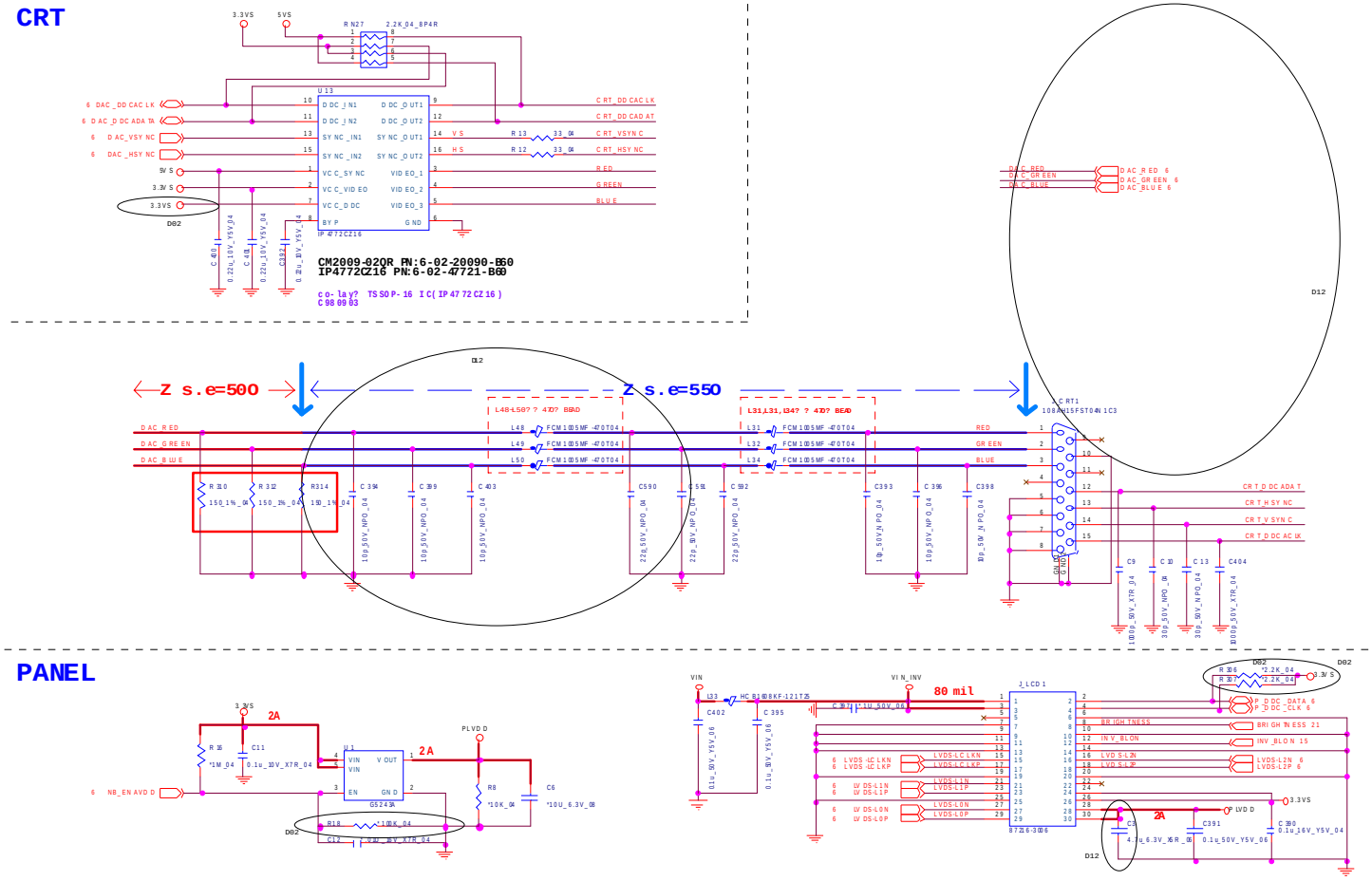
Sheet 12 of 36
DDRIII SO-DIMM A

DDRIII SO-DIMM B

Sheet 13 of 36
DDRIII SO-DIMM B



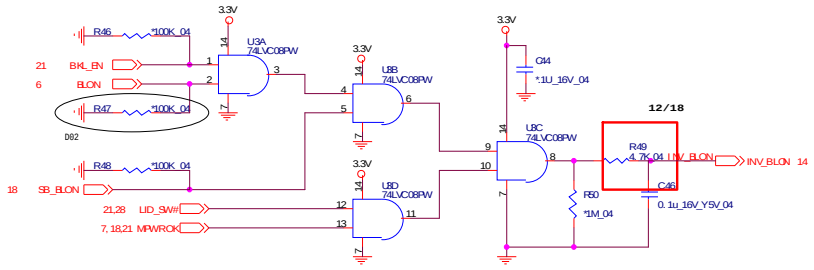
PANEL, CRT



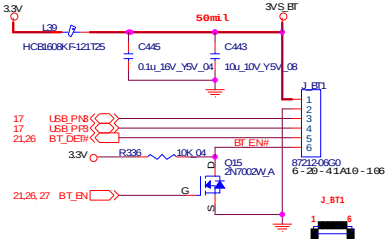
INVERTER, BLUETOOTH, FAN

Sheet 15 of 36
INVERTER,
BLUETOOTH, FAN

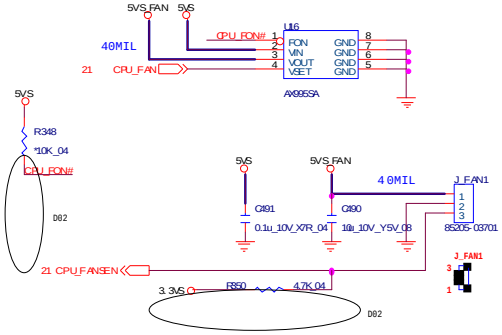
INVERTER CONNECTOR



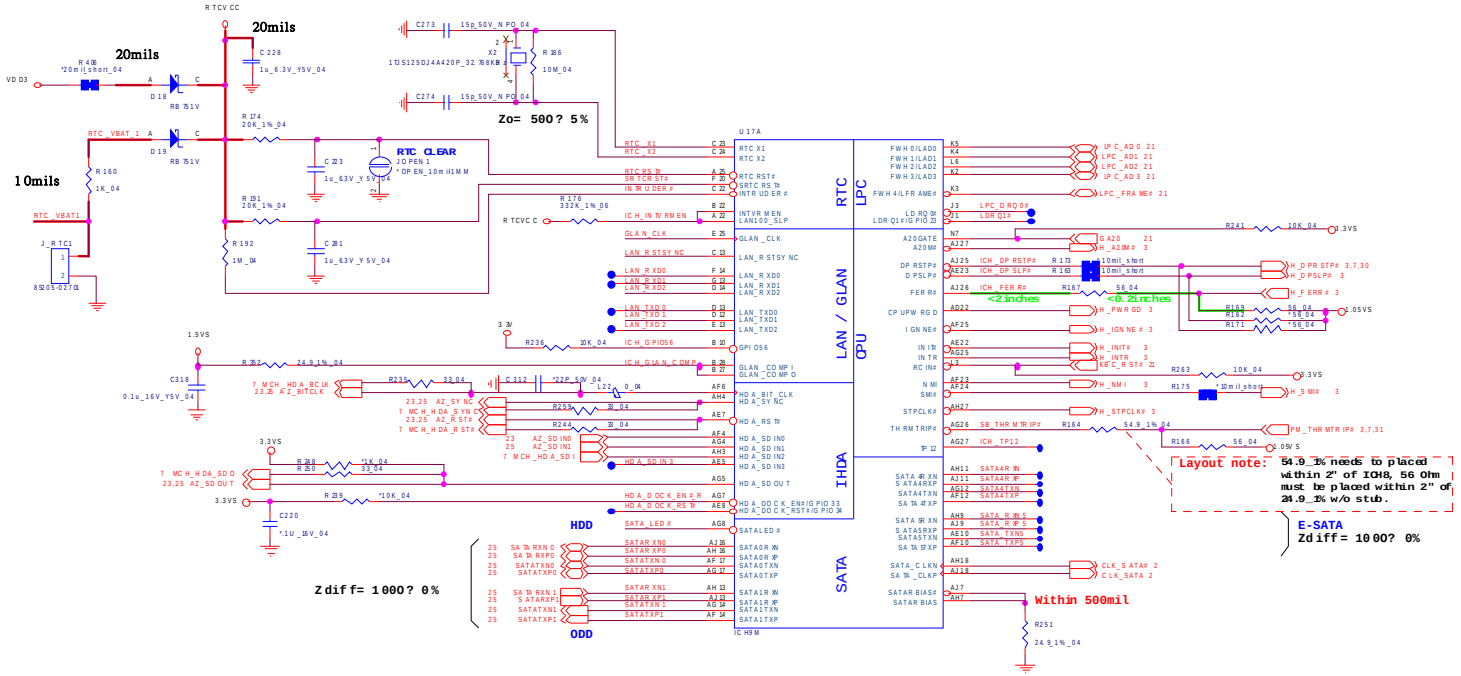
Bluetooth



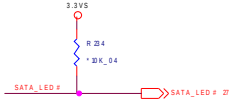
FAN CONTROL



ICH9M 1/4, SATA



SATA HDD & ODD LED

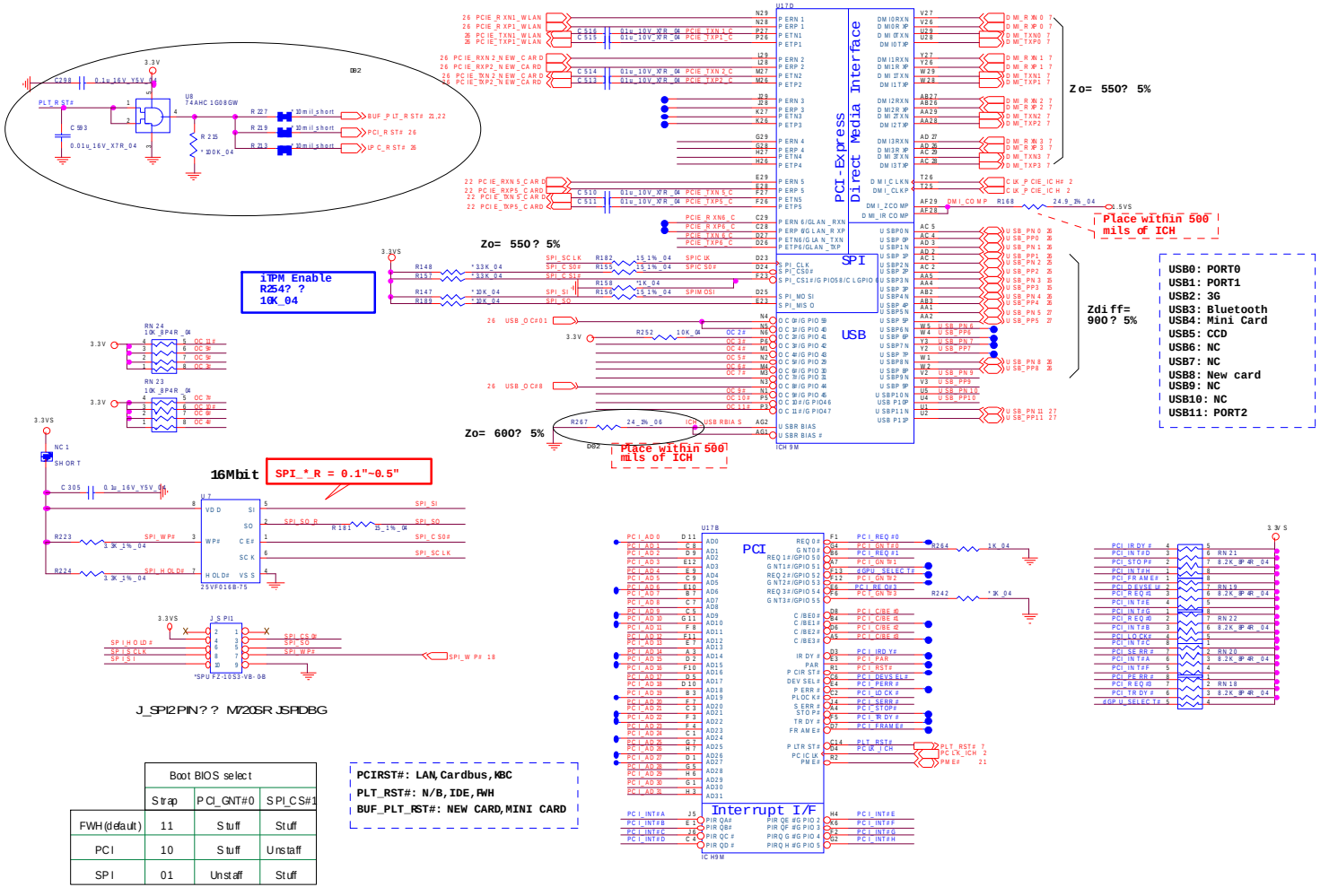


Sheet 16 of 36
ICH9M 1/4, SATA

B.Schematic Diagrams

ICH9M 2/4, PCI, USB

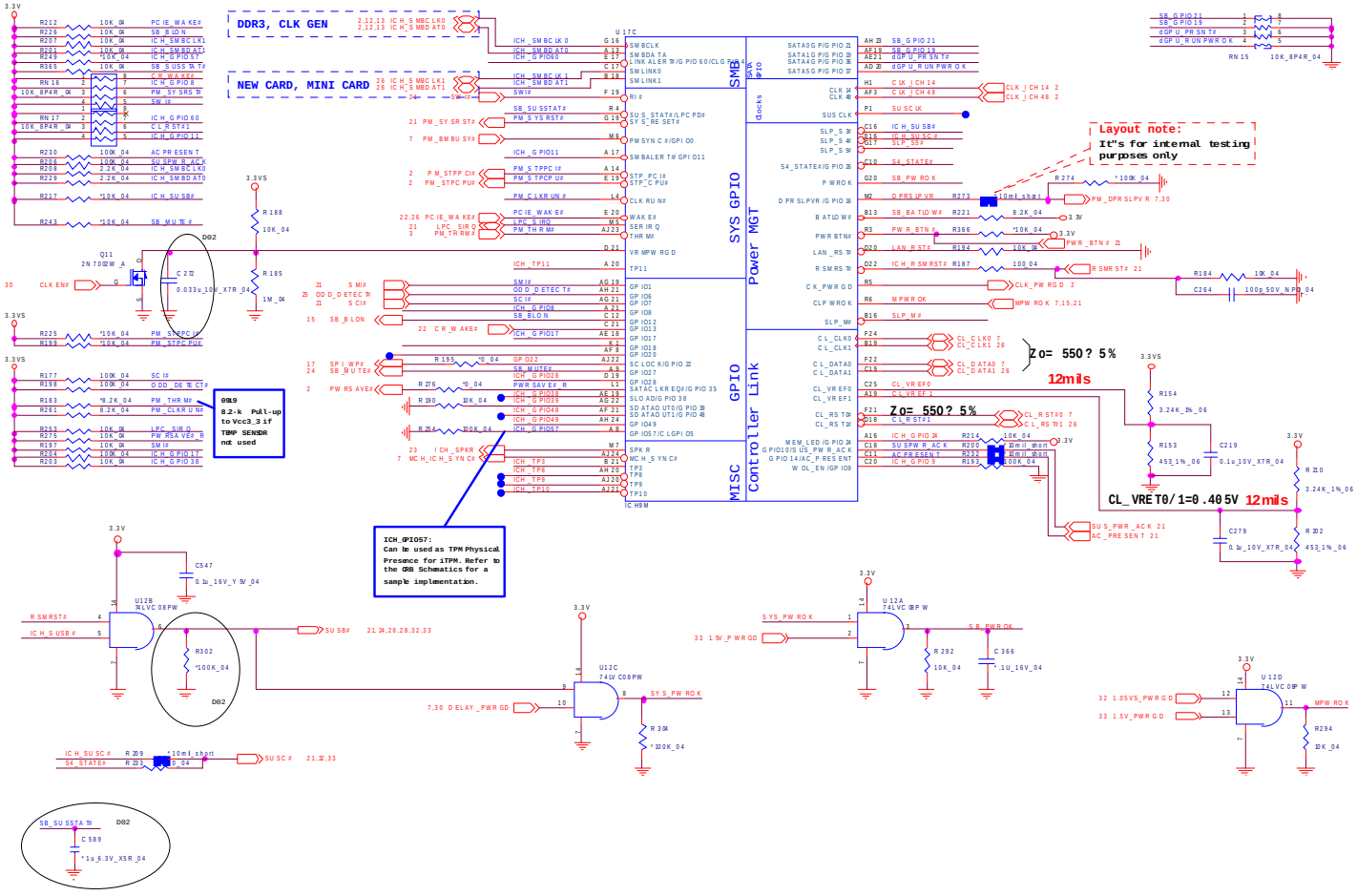
Sheet 17 of 36
ICH9M 2/4, PCI, USB



J_SPI2PIN?? M720SR JSPIDBG

	Boot BIOS select		
	Strap	PCI_GNT#0	SPI_CS#1
FWH(default)	11	Stuff	Stuff
PCI	10	Stuff	Unstaff
SPI	01	Unstaff	Stuff

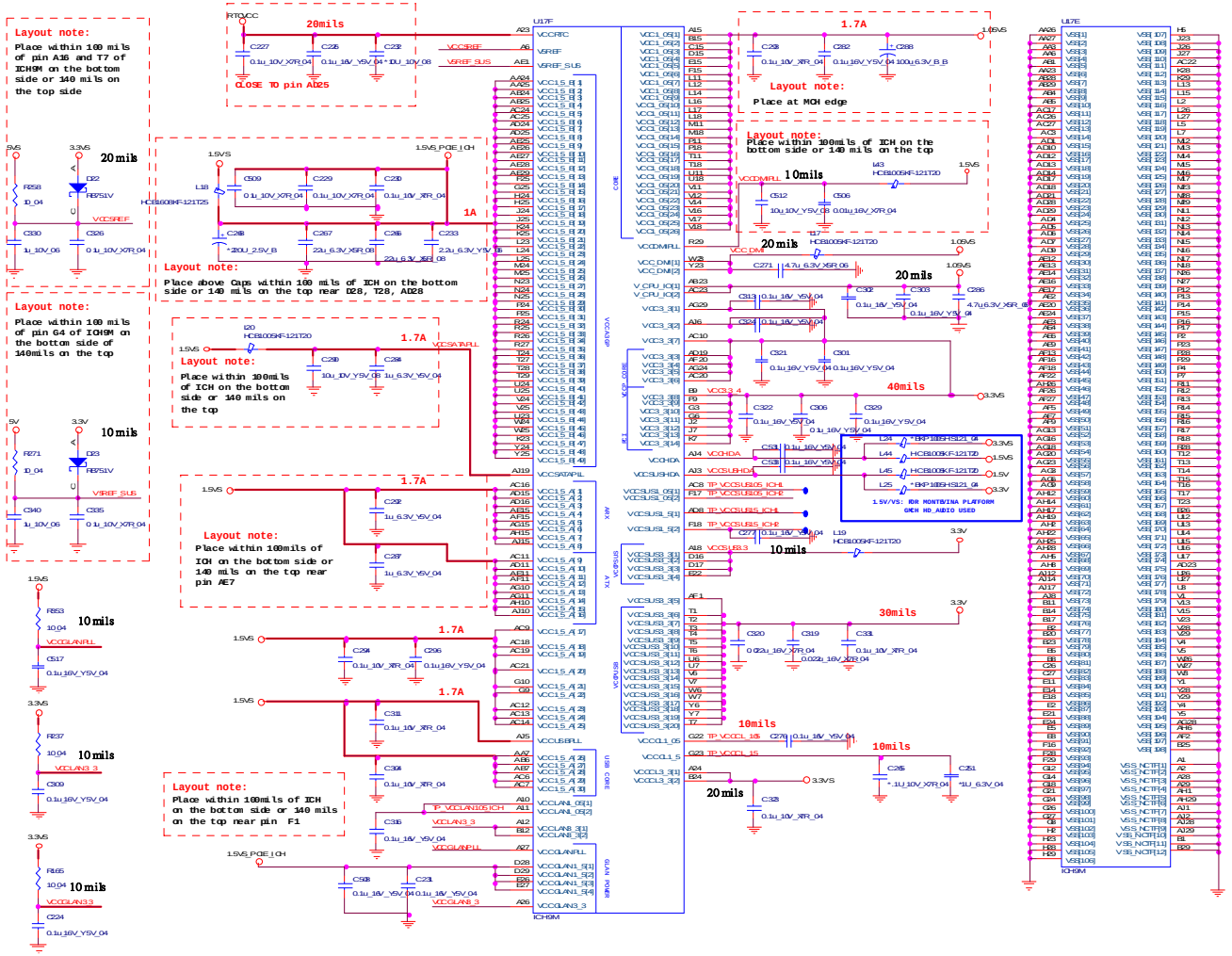
ICH9M 3/4



Sheet 18 of 36
ICH9M 3/4

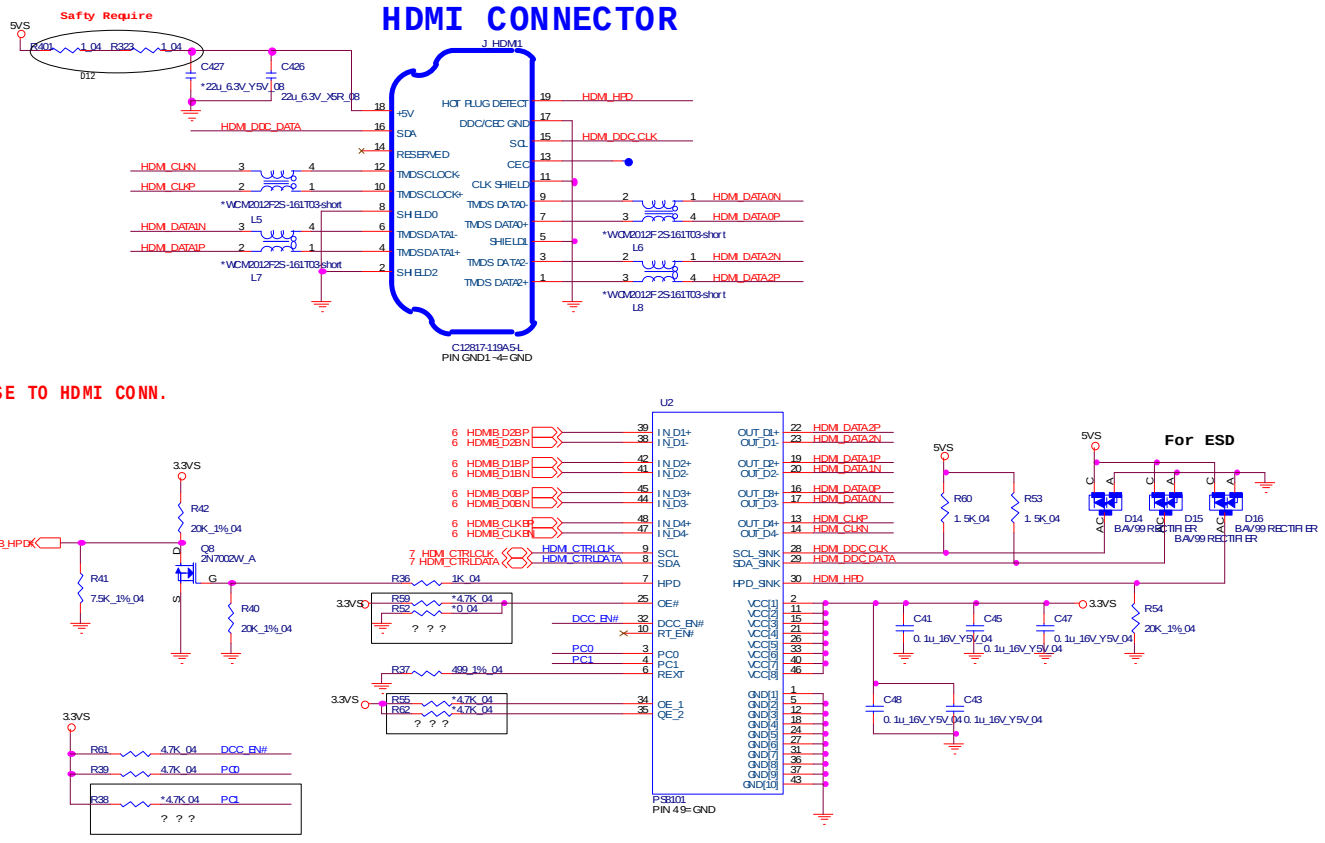
ICH9M 4/4

Sheet 19 of 36
ICH9M 4/4



HDMI

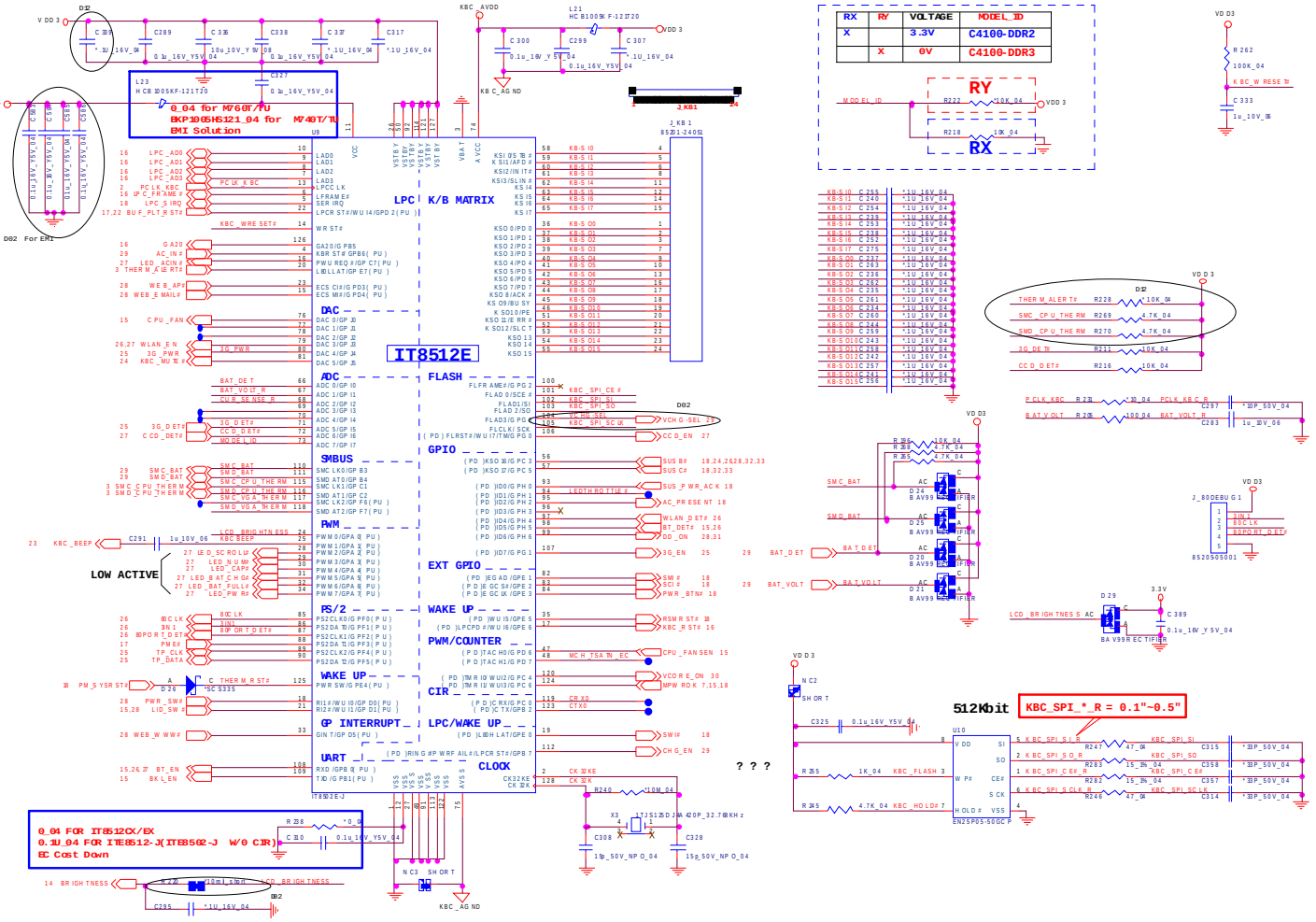
HDMI



Sheet 20 of 36
HDMI

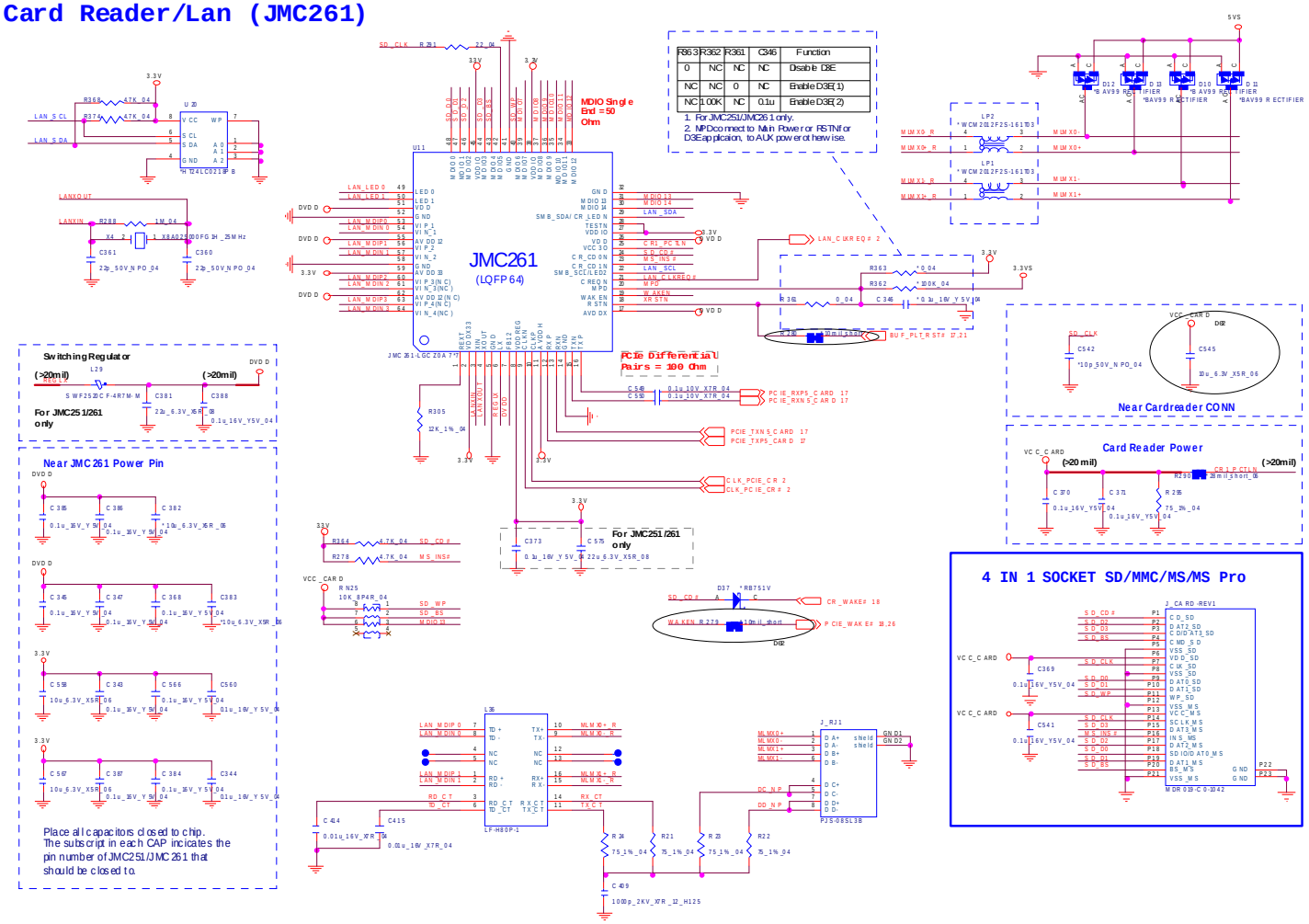
KBC-ITE IT8502E

Sheet 21 of 36
KBC-ITE IT8502E



JMC21 CARD READER/LAN

Card Reader/Lan (JMC261)



R363	R362	R361	C346	Function
0	NC	NC	NC	Disable D3E
NC	NC	0	NC	Enable D3E(1)
NC	100K	NC	0.1u	Enable D3E(2)

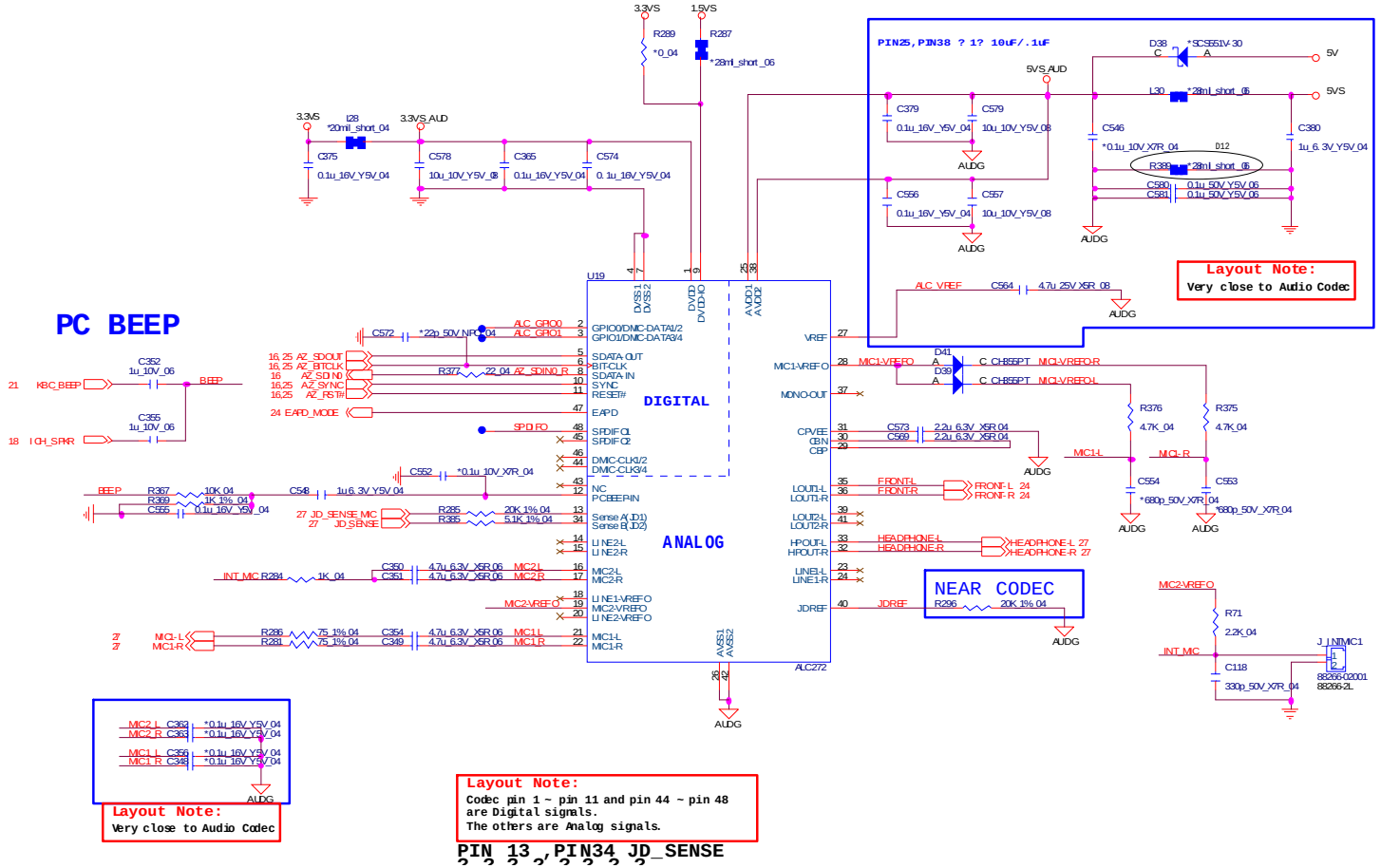
1. For JMC251/JMC261 only.
2. MP:connect to Main Power or RSTN for D3E application, to AUX power otherwise.

Sheet 22 of 36
JMC21 CARD READER/LAN

AUDIO CODEC ALC272

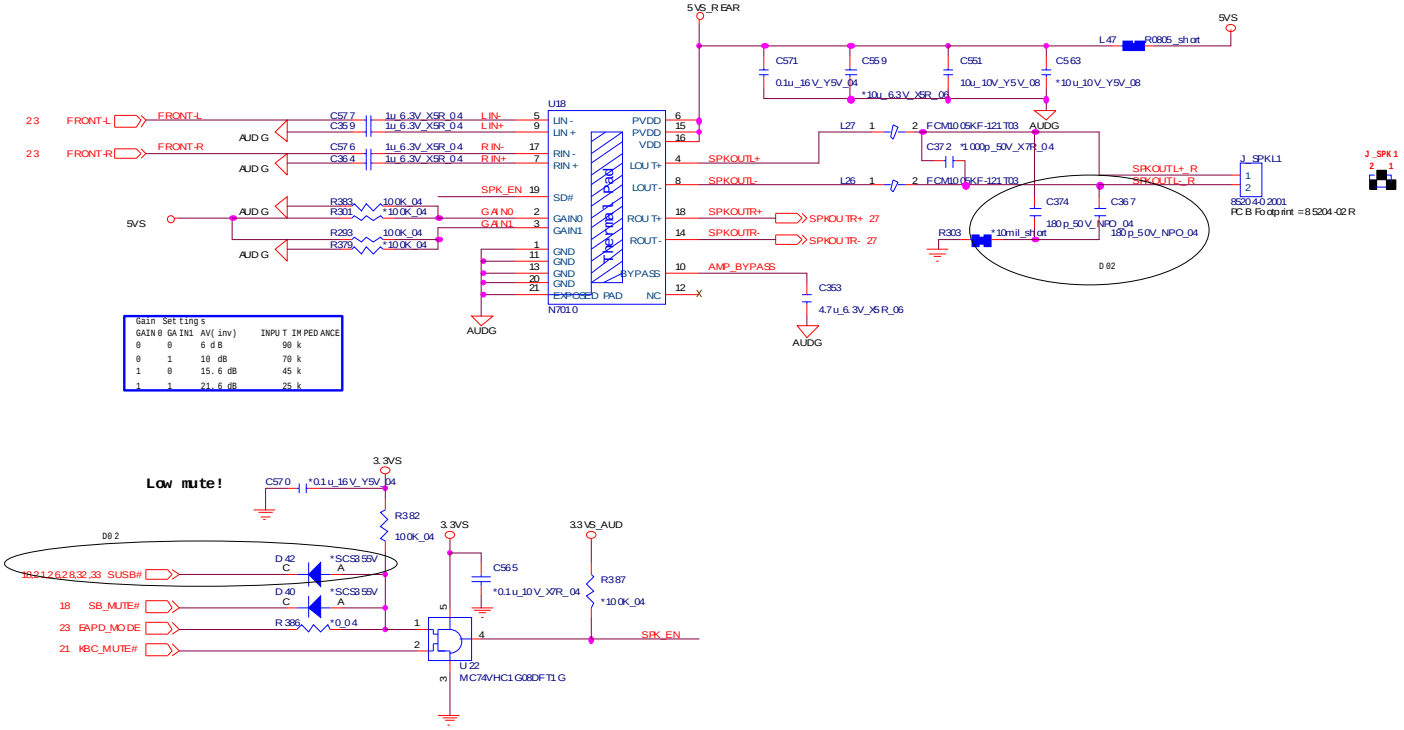
Sheet 23 of 36
AUDIO CODEC
ALC272

CODEC (ALC272-GR)



AUDIO AMP TPA6017

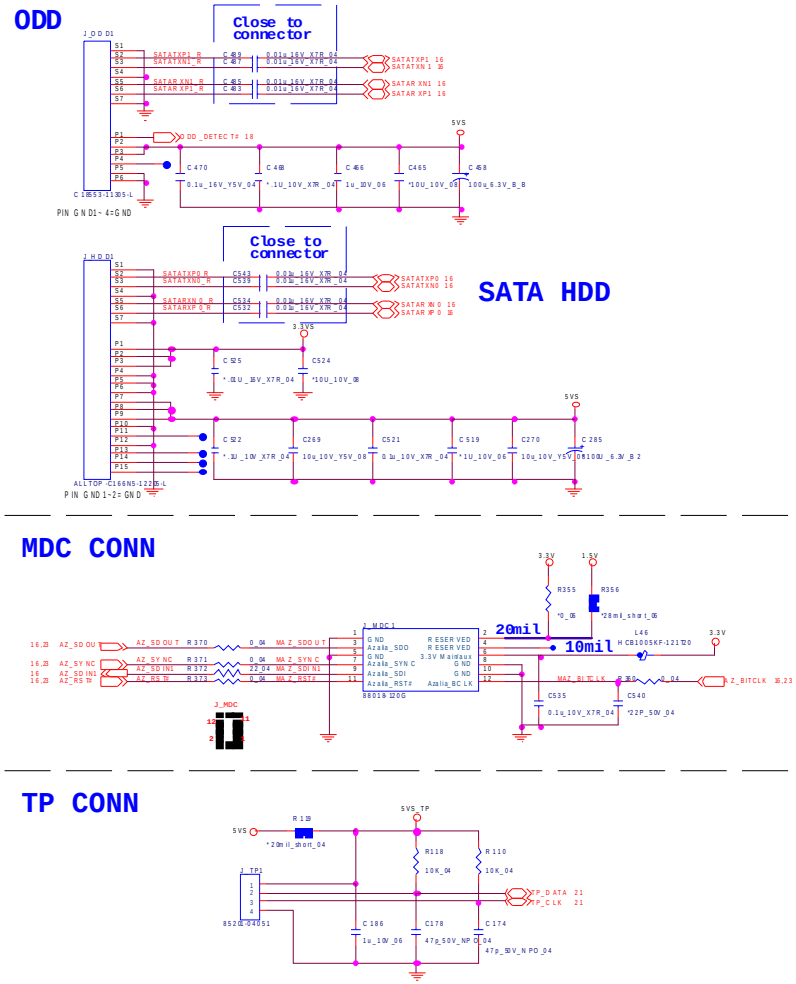
AMP (TPA6017)

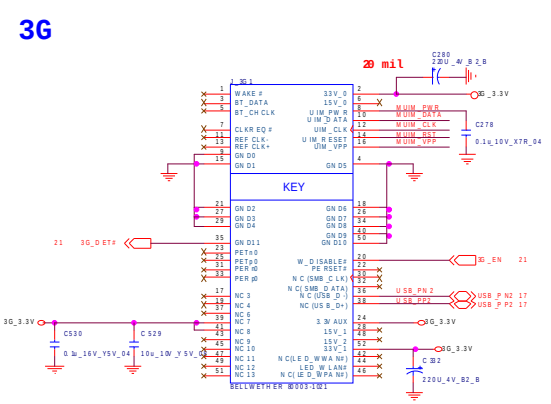


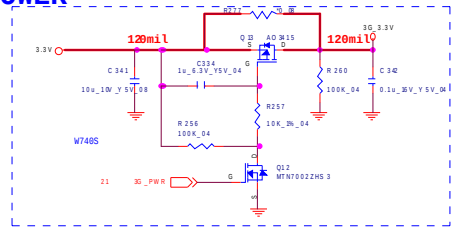
Sheet 24 of 36
AUDIO AMP
TPA6017

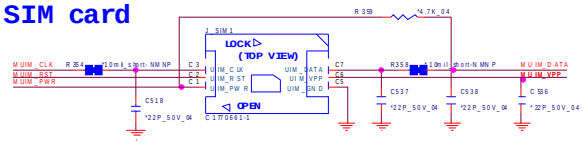
HDD, ODD, MDC, TP, Conn, 3G

Sheet 25 of 36
HDD, ODD, MDC, TP, Conn, 3G





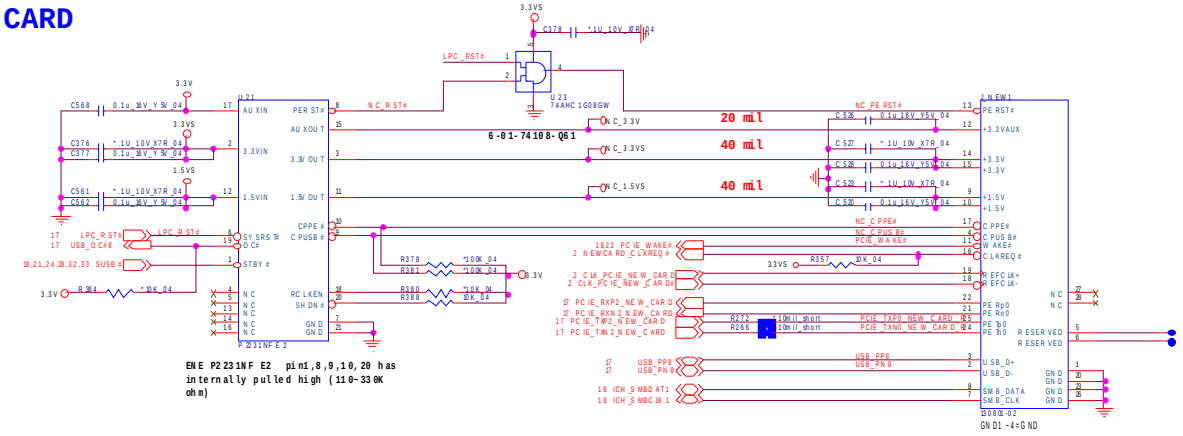




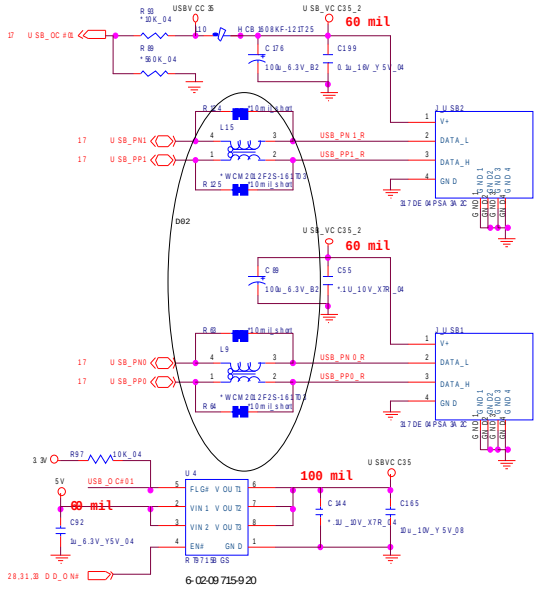
Layout?
1. SIM? ? ? ? ? ? ? ? (10mil)
2. ? ? ? ? ? ? ? ? ? GND
3. SIM hold ? ? ? ? ? GND? ?
4.SIM CONN ? ? MINICARD CONN

NEW CARD, USB, MINI PCIE

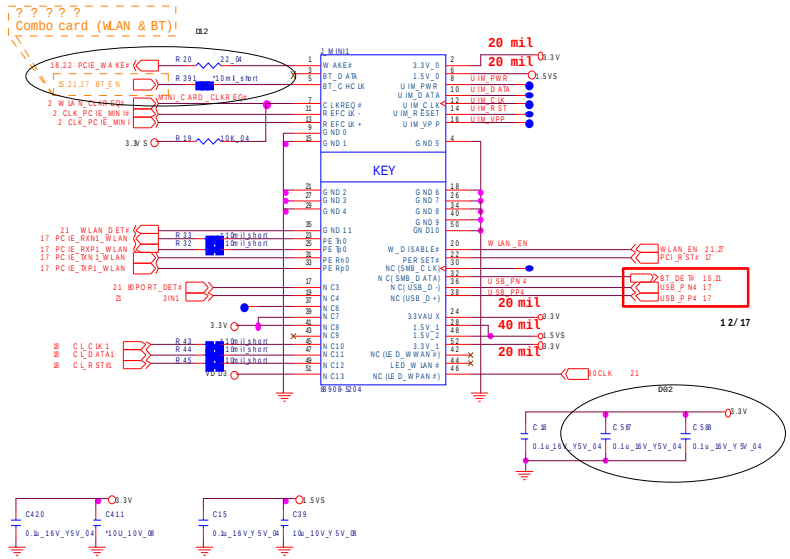
NEW CARD



USB PORT



MINI CARD

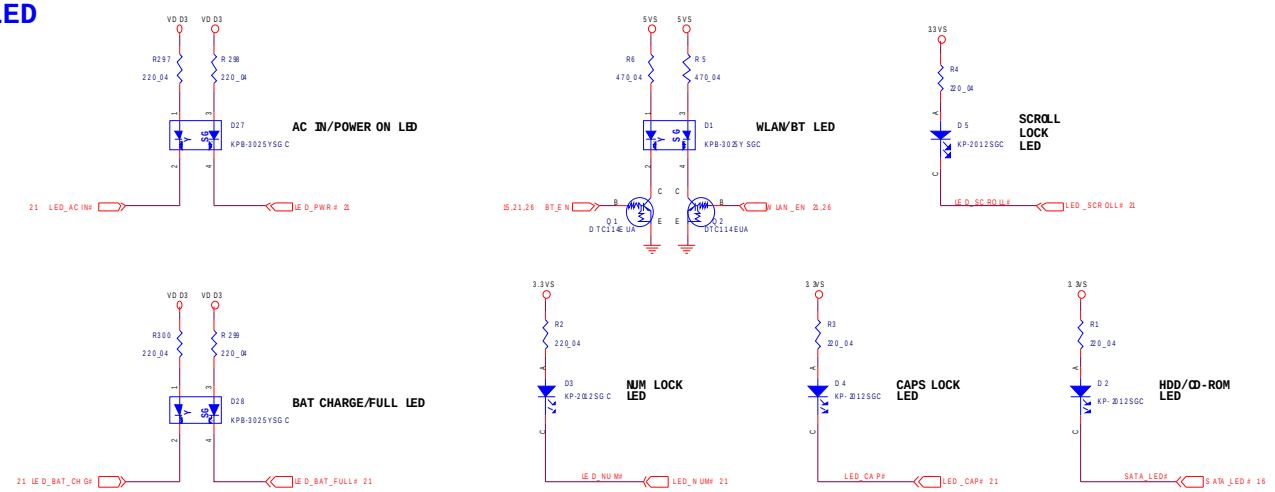


Sheet 26 of 36
NEW CARD, USB, MINI PCIE

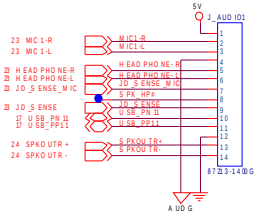
LED, CCD, AUDIO Conn

Sheet 27 of 36
LED, CCD, AUDIO Conn

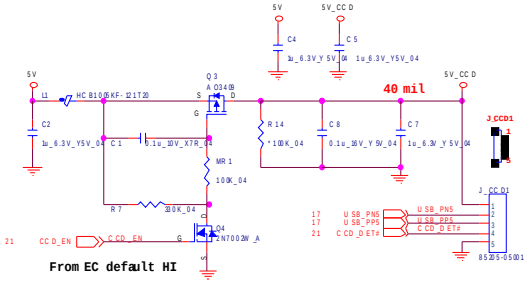
LED



Audio/USB CONN

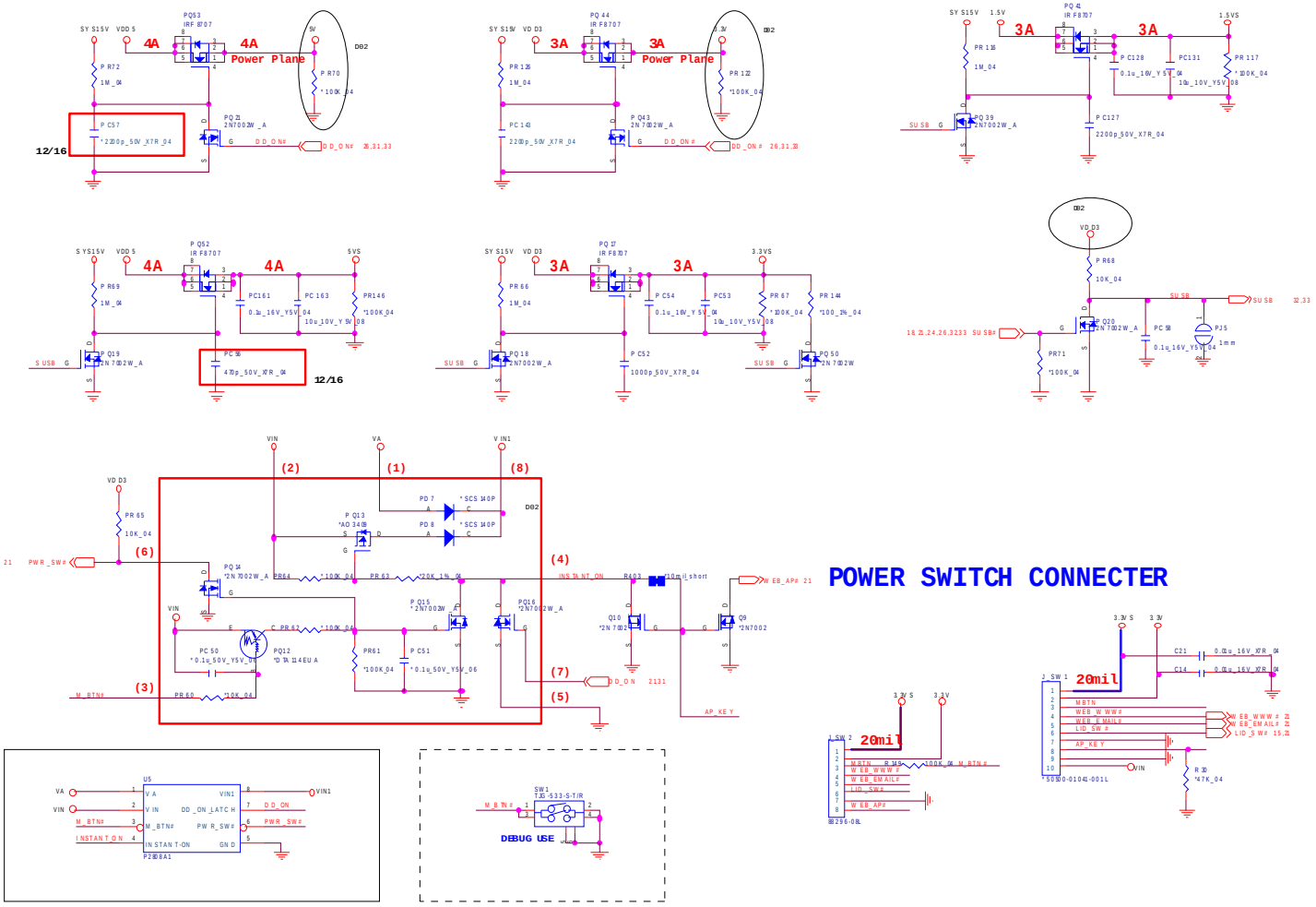


CCD



SYSTEM POWER, PWR SW

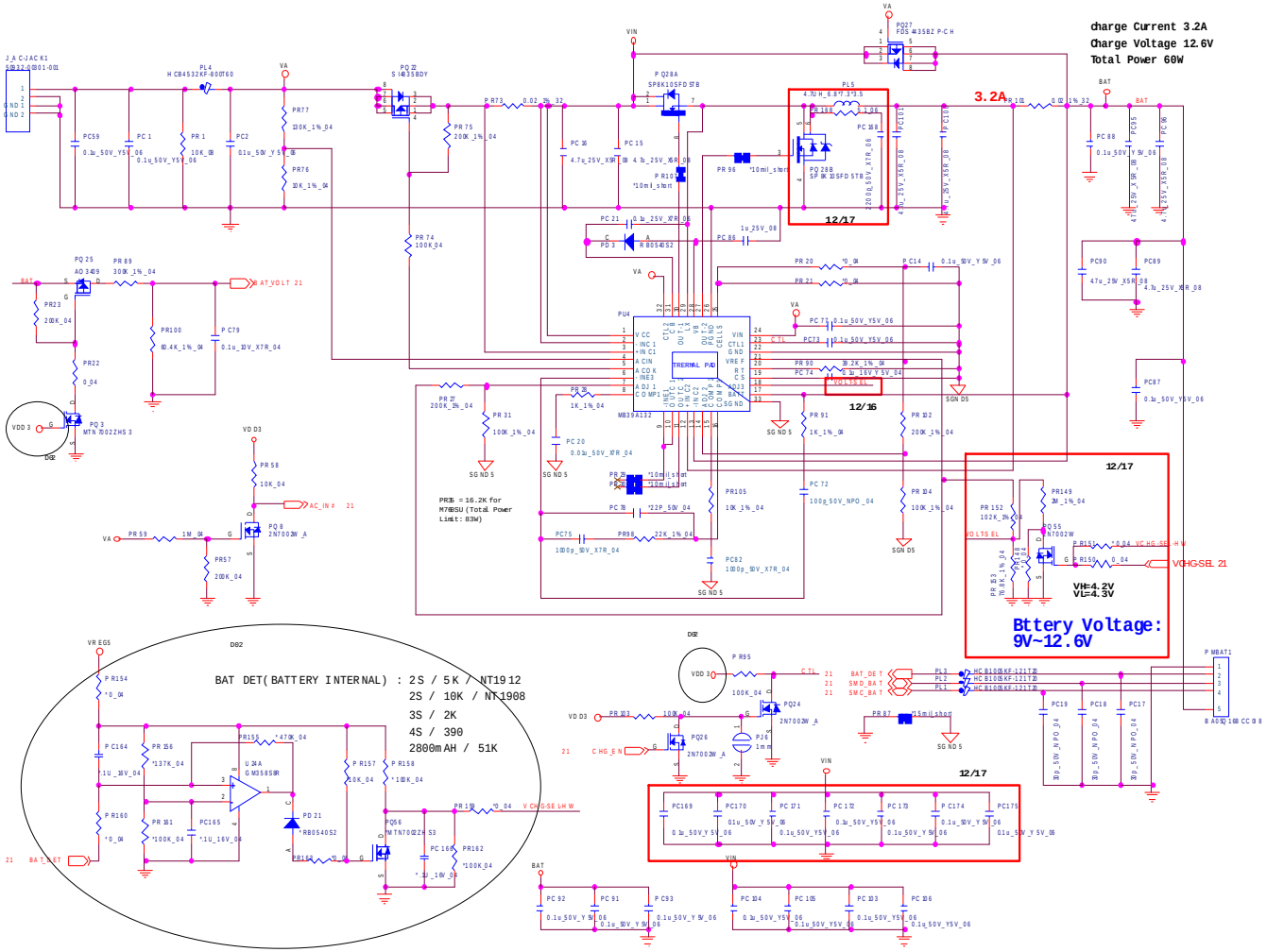
5V,3.3V,5VS,3.3VS,1.5VS



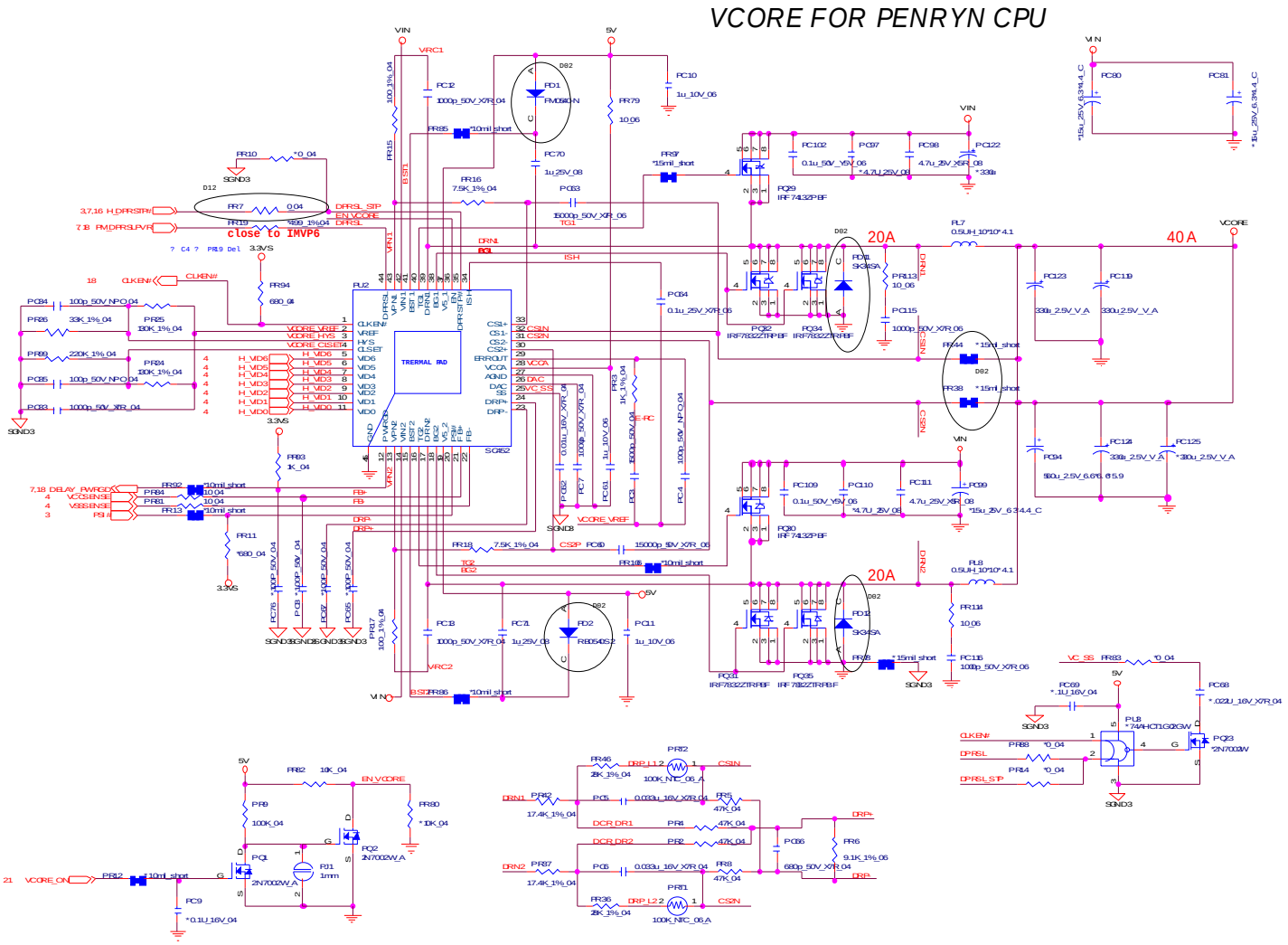
Sheet 28 of 36
SYSTEM POWER, PWR SW

AC_IN, CHARGER

Sheet 29 of 36
AC_IN, CHARGER



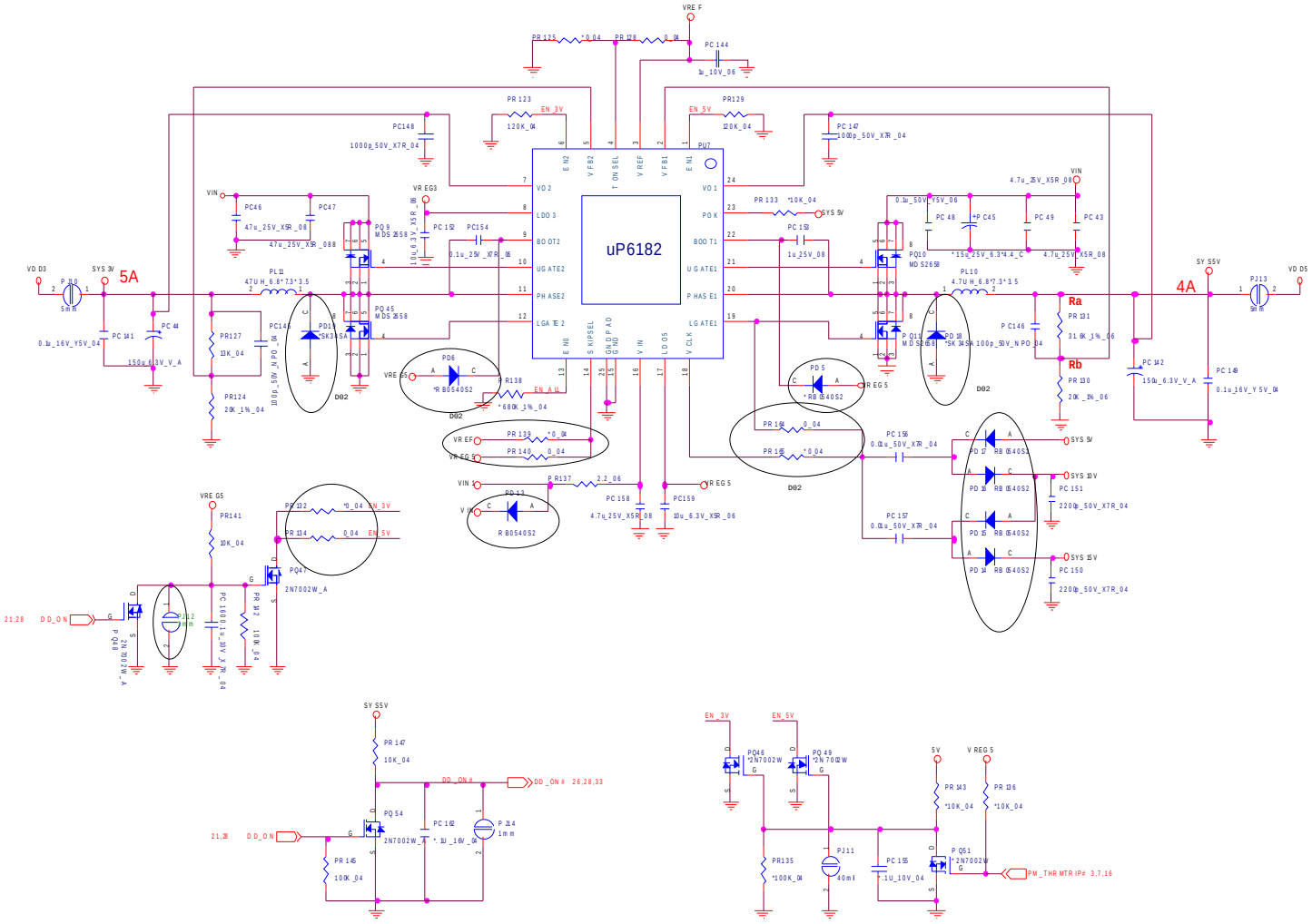
VCORE



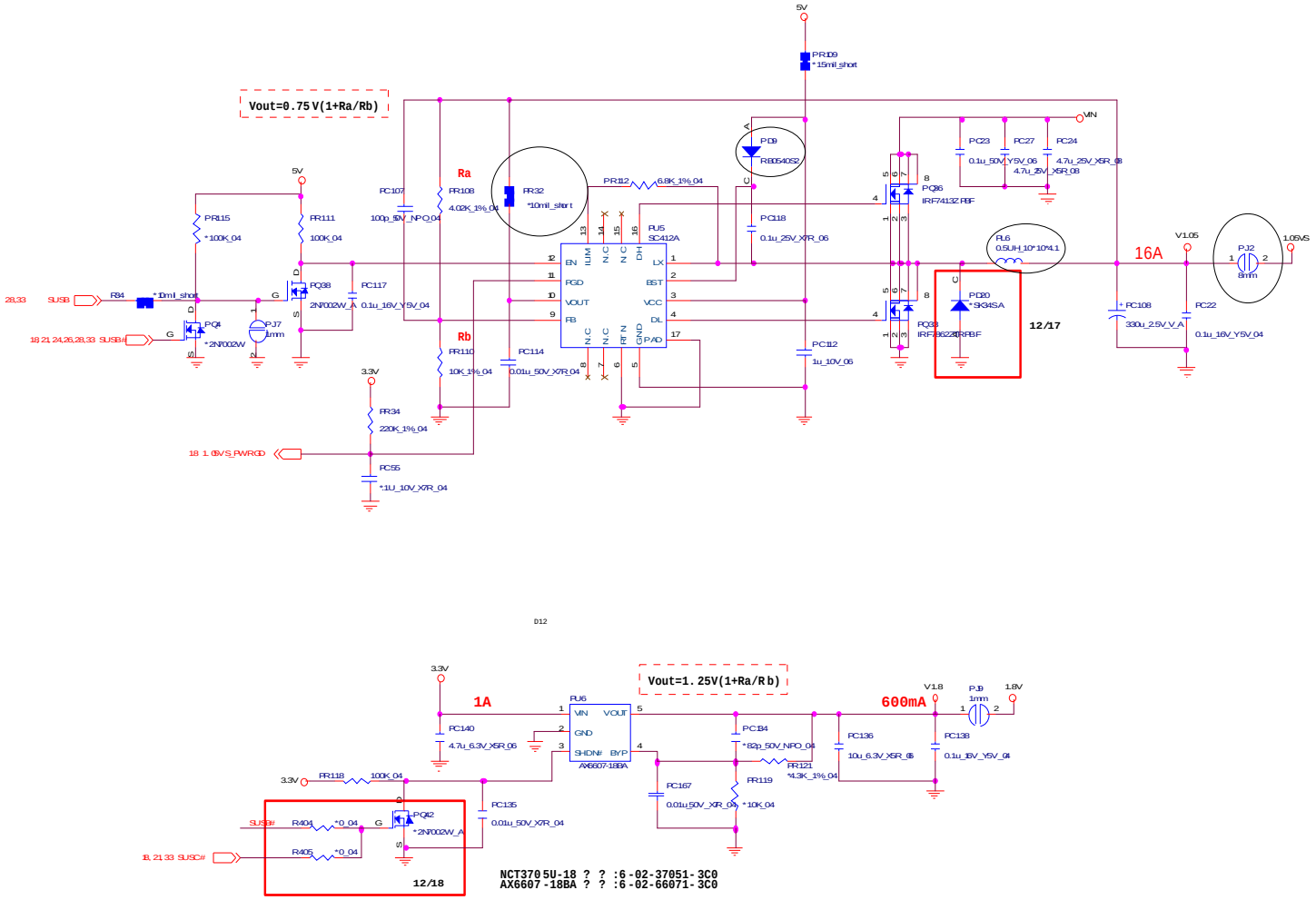
Sheet 30 of 36
VCORE

VDD3, VDD5

Sheet 31 of 36
VDD3, VDD5



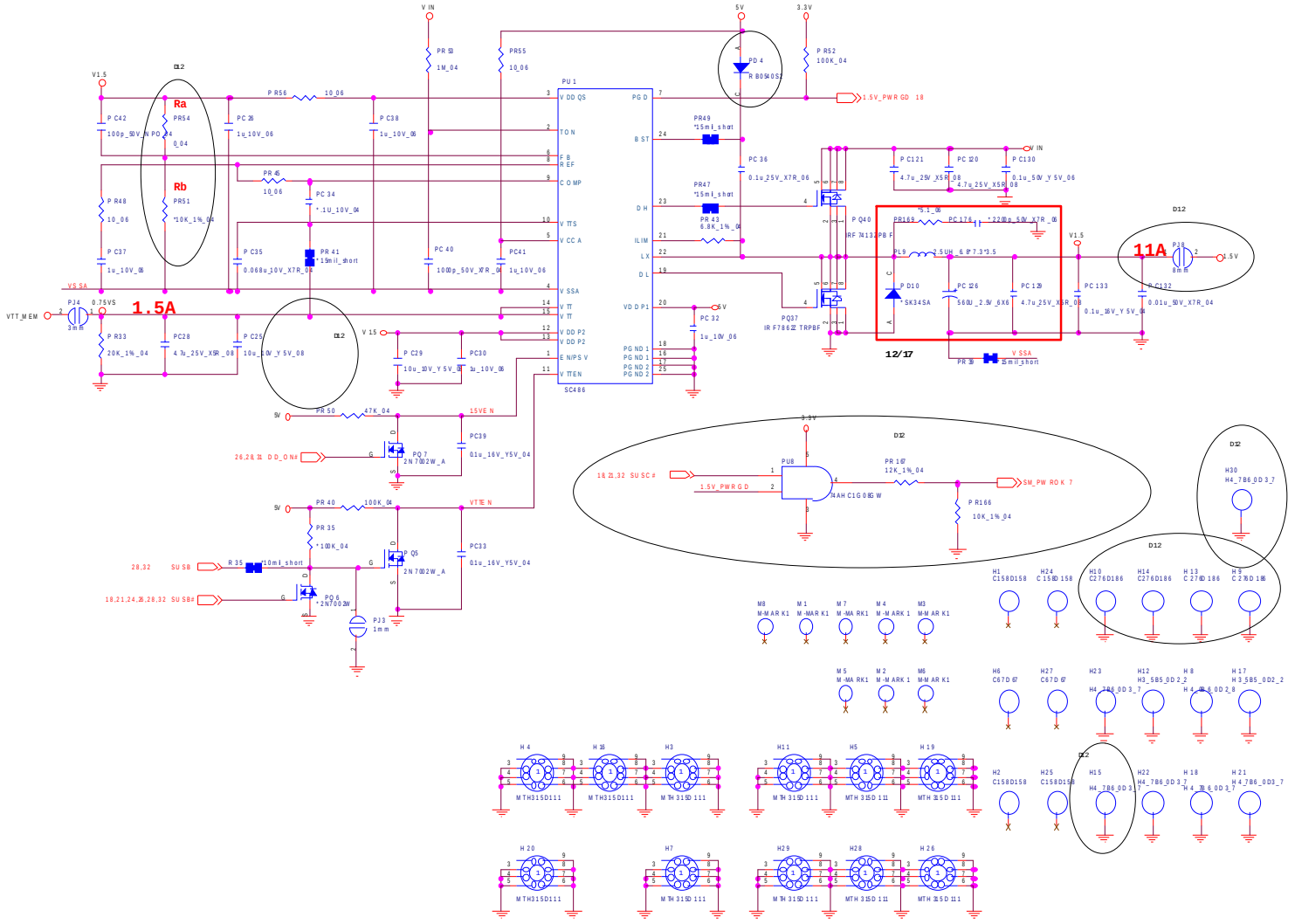
1.8V/1.05VS



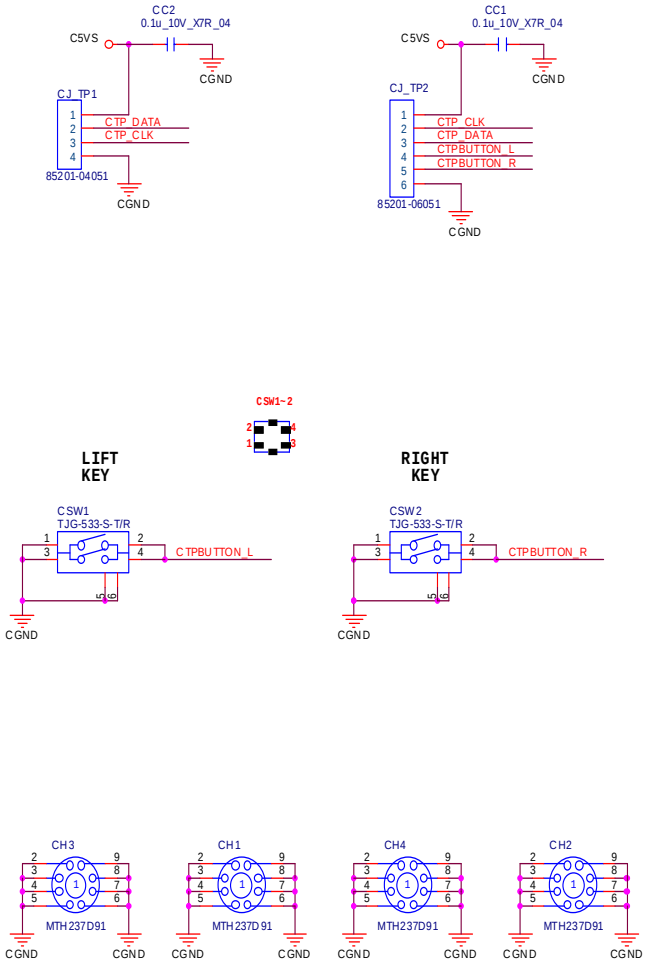
Sheet 32 of 36
1.8V/1.05VS

1.5V,0.75VS

Sheet 33 of 36
1.5V,0.75VS



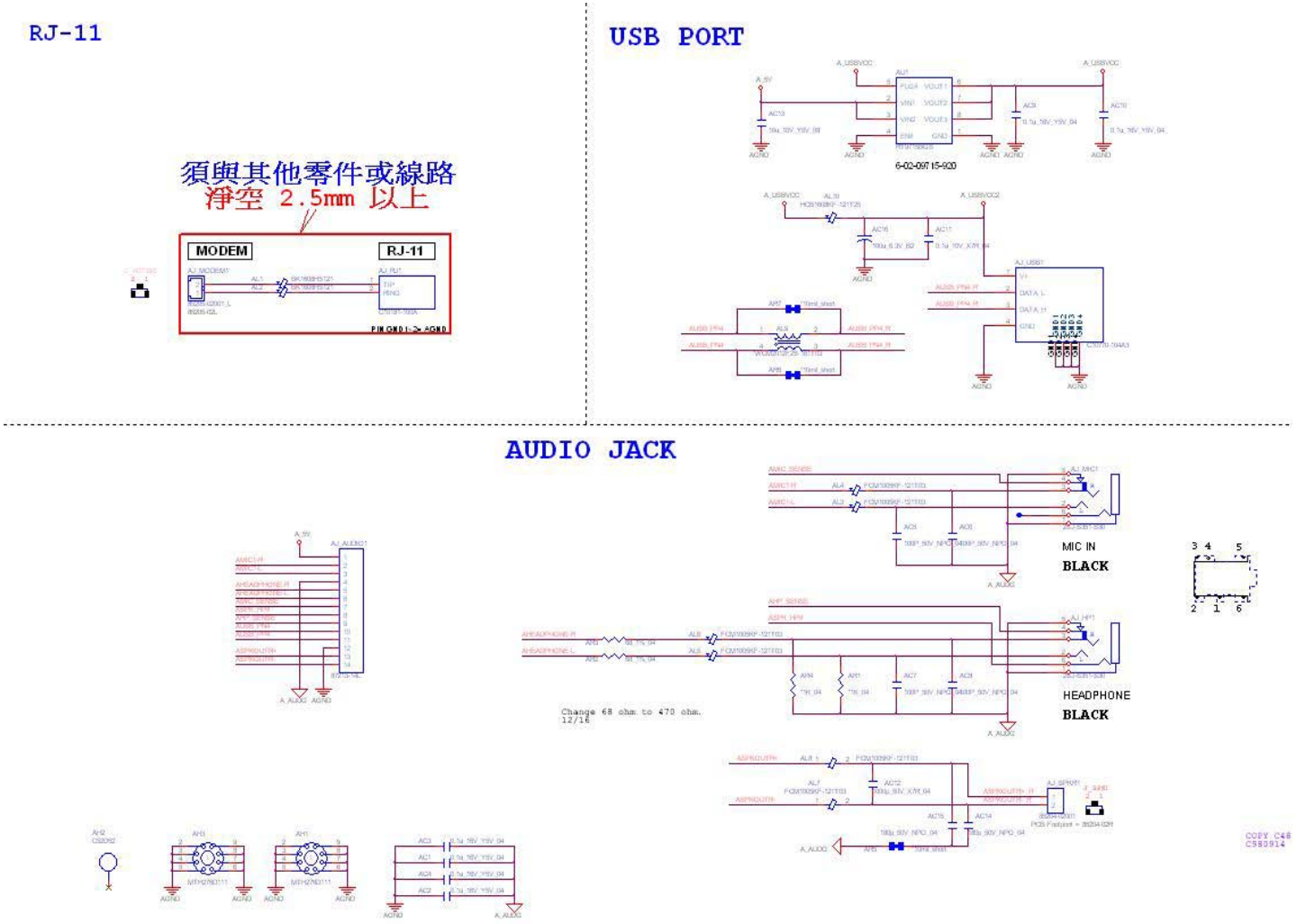
CLICK BOARD



Sheet 34 of 36
CLICK BOARD

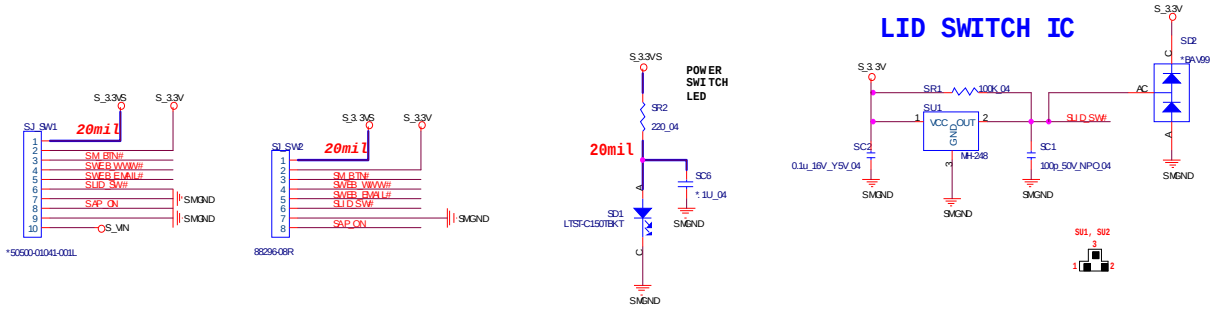
AUDIO/ USB/ RJ11 BOARD

Sheet 35 of 36
AUDIO/ USB/ RJ11
BOARD

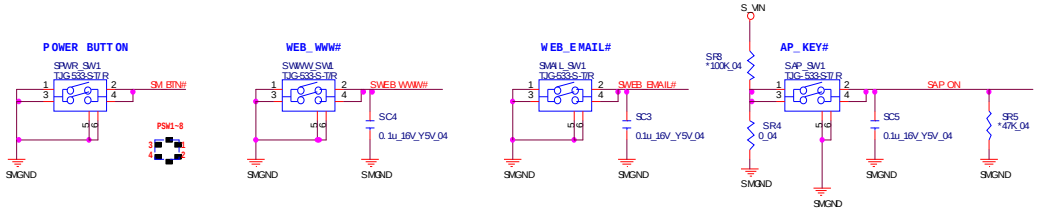


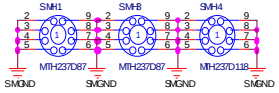
POWER SWITCH & LID BOARD

POWER SW & LED & HOT KEY



HOT KEY





COPY CAB
C980914

Sheet 36 of 36
POWER SWITCH & LID BOARD