



SERVICE MANUAL

M730T / M735T

notebook

Notebook Computer

M730T/M735T

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 *M730T*/*M735T* 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

Appendix C, Updating the FLASH ROM BIOS

Preface



Warning

Use only shielded cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the manufacturer for compliance with the above standards could void your authority to operate the equipment.

If your purchase option includes both **Wireless LAN** and **3.5G** modules, then the appropriate antennas will be installed. Note that in order to comply with FCC RF exposure compliance requirements, the antenna must not be co-located or operate in conjunction with any other antenna or transmitter.

FCC Statement

(Federal Communications Commission)

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the service representative or an experienced radio/TV technician for help.

Operation is subject to the following two conditions:

1. This device may not cause interference.
And
2. This device must accept any interference, including interference that may cause undesired operation of the device.

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and you body.

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 (DC Output 19V, 3.42A OR 18.5V, 3.5A (**65W**) minimum AC/DC Adapter).

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 1 Product

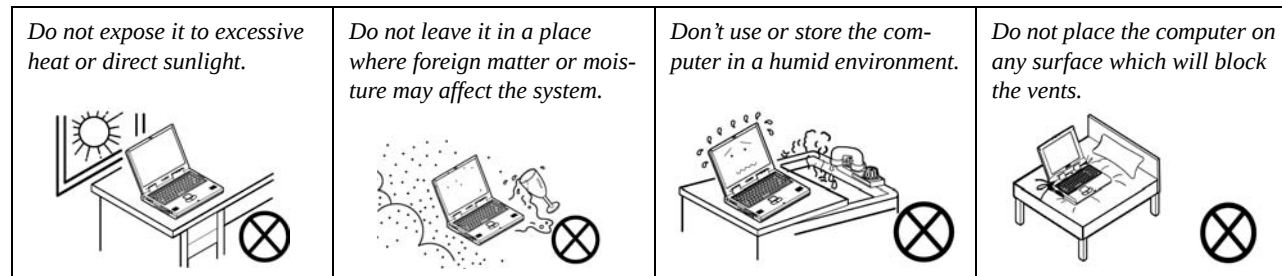
Instructions for Care and Operation

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

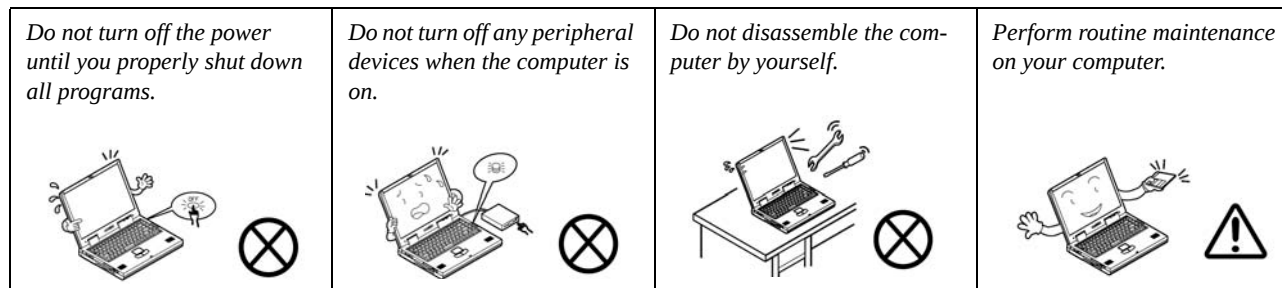
1. **Don't drop it, or expose it to shock.** If the computer falls, the case and the components could be damaged.



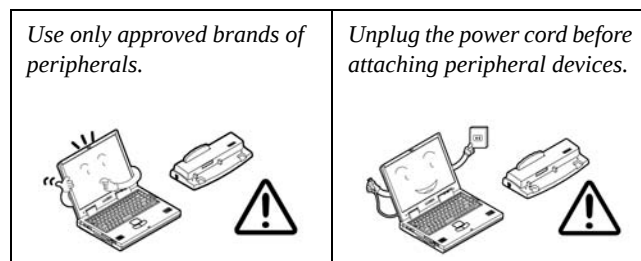
2. **Keep it dry, and don't overheat it.** Keep the computer and power supply away from any kind of heating element. This is an electrical appliance. If water or any other liquid gets into it, the computer could be badly damaged.



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.



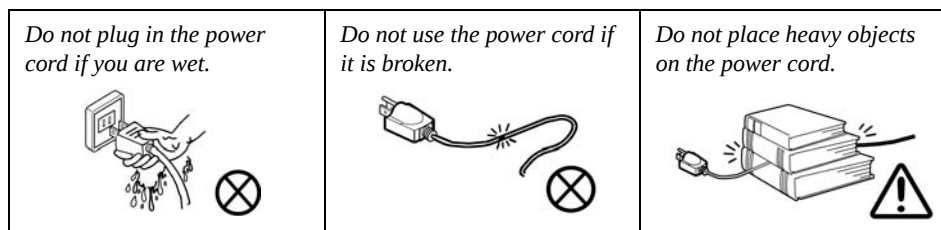
4. **Avoid interference.** Keep the computer away from high capacity transformers, electric motors, and other strong magnetic fields. These can hinder proper performance and damage your data.
5. **Take care when using peripheral devices.**



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.



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.

Preface

Battery Precautions

- Only use batteries designed for this computer. The wrong battery type may explode, leak or damage the computer.
- Do not remove any batteries from the computer while it is powered on.
- 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 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.

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.

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Chapter 1: Introduction

Overview

This manual covers the information you need to service or upgrade the **M730T/M735T** 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 XP*, *Windows Vista*, 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 **M730T/M735T** 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.

System Specifications

Feature	Specification	
Processor	Intel® Core™2 Duo Processor 35W - (478-pin) Micro-FC-PGA Package - Socket-P T9400/ T9600	45nm (45 Nanometer) Process Technology 6MB On-die L2 Cache & 1006MHz FSB 2.53/ 2.8 GHz
	Intel® Core™2 Duo Processor 25W - (478-pin) Micro-FC-PGA Package - Socket-P P9500	45nm (45 Nanometer) Process Technology 6MB On-die L2 Cache & 1066MHz FSB 2.53 GHz
	Intel® Core™2 Duo Processor 25W - (478-pin) Micro-FC-PGA Package - Socket-P P8400/ P8600	45nm (45 Nanometer) Process Technology 3MB On-die L2 Cache & 1006MHz FSB 2.4/ 2.53 GHz
Core Logic	Intel GM45 + ICH9M Chipset	
LCD	13.3" WXGA (1280 * 800) TFT LCD	LCD with LED Backlight (Option)
Memory	64-bit Wide DDRII (DDR2) Data Channel Supports Dual Channel DDRII (DDR2) SDRAM Two 200 Pin SO-DIMM Sockets Supporting DDRII (DDR2) 667MHz/800MHz RAM Modules Memory Expandable up to 4GB (1024/2048 MB DDR2 Modules) Intel Turbo Memory (Robson) NAND Flash 2G Memory Card Module (Factory Option)	
Video Adapter	Intel GM45 Integrated Video High Preference 3D/2D Graphic Accelerator Supports Dynamic Video Memory Technology DVMT (up to 256MB dynamically allocated from system memory where needed) Supports DirectX10 3D Graphics Engine Accelerator	
Security	Security (Kensington® Type) Lock Slot Fingerprint ID Reader Module (Factory Option)	BIOS Password Trusted Platform Module
BIOS	One 32Mb SPI Flash ROM	Phoenix™ BIOS
Storage	One Changeable 12.7mm(h) SATA (Serial) Optical Device (CD/DVD) Type Drive (see " Optional " on page 1 - 4) Easy Changeable 2.5" 9.5 mm (h) SATA (Serial) HDD	

Feature	Specification	
Audio	High Definition Audio (HDA) Compliant with Microsoft UAA (Universal Audio Architecture)	Direct Sound 3D™ Compatible 2 * Built-In Speakers Built-In Microphone
Keyboard & Pointing Device	Winkey Keyboard	Built-In TouchPad with Scrolling Function
Interface	Three USB 2.0 Ports One Headphone-Out Jack One Microphone-In Jack One S/PDIF Out Jack One Internal Microphone	One RJ-11 Modem Jack One RJ-45 LAN Jack One DC-In Jack One External Monitor Port
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	
ExpressCard Slot	One ExpressCard/34(54) Slot	
Mini-Card Slots	One Mini-Card Slot for Wireless LAN Module One Mini-Card Slot for 3.5G Module OR Turbo Memory Module	
Communication Note: *2.0M Pixel PC Camera Module and Intel WiFi Link 5300 Series Option are not available for computers with LED backlight. **The 3.5G and Intel Turbo Memory Modules cannot co-exist. There is only one slot available for either of these factory option modules.	10M/ 100/ 1000Mb Base-TX Ethernet LAN Azalia 56K Modem V.90 & V.92 Compliant Intel® WiFi Link 5300 Series (3*3 - 802.11a/g/n) Wireless LAN Mini-Card Module (Option) Intel® WiFi Link 5100 Series (1*2 - 802.11a/g/n) Wireless LAN Mini-Card Module (Option) 3rd Party 802.11b/g Wireless LAN Mini-Card Module with USB interface (Option) Bluetooth 2.0 + EDR (Enhanced Data Rate) Module (Factory Option) *1.3M or 2.0M Pixel PC Camera Module with USB interface (Factory Option) 3.5G Module (see sidebar): **UMTS/HSPDA-based 3.5G Mini-Card Module with USB Interface (Factory Option) Quad-band GSM/GPRS (850 MHz, 900 MHz, 1800 MHz, 1900 MHz) UMTS WCDMA FDD (2100 MHz)	



UMTS Modes

Note that UMTS modes CAN NOT be used in North America.

Introduction

Feature	Specification	
Power Management	Supports ACPI 3.0	Supports Wake on LAN Supports Resume from Modem Ring
Power	Full Range AC/DC Adapter AC Input 100 - 240V, DC Output 50 - 60Hz, 19V, 3.42A or 18.5V, 3.5A (65 Watts)	
Battery	4 Cell Smart Lithium-Ion Battery Pack, 14.8V/2.4AH 8 Cell Smart Lithium-Ion Battery Pack, 14.8V/4.4AH (Option)	
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	310mm (w) * 233mm (d) * 30-36mm (h) 2.0 kg With 4 Cell Battery and ODD	<u>Optional LCD with LED Backlight:</u> 310mm (w) * 233mm (d) * 18-31mm (h) 1.8 kg With 4 Cell Battery and ODD
Optional Note: *2.0M Pixel PC Camera Module and Intel WiFi Link 5300 Series Option are not available for computers with LED backlight . **The 3.5G and Intel Turbo Memory Modules cannot co-exist. There is only one slot available for either of these factory option modules.	<u>Optical Drive Module Options:</u> SATA DVD/CD-RW Combo Drive Module SATA DVD Dual (Super Multi) Drive Module Intel® WiFi Link 5300 Series (3*3 - 802.11a/g/n) Wireless LAN Mini-Card Module Intel® WiFi Link 5100 Series (1*2 - 802.11a/g/n) Wireless LAN Mini-Card Module 3rd Party 802.11b/g Wireless LAN Mini-Card Module with USB interface 8 Cell Smart Lithium-Ion Battery Pack *1.3M or 2.0M Pixel USB PC Camera Module (Factory Option) Bluetooth 2.0 + EDR (Enhanced Data Rate) Module (Factory Option)	Fingerprint ID Reader Module (Factory Option) *Intel Turbo Memory (Robson) NAND Flash Memory Card Module (Factory Option) OR **UMTS/HSPDA-based 3.5G Module with Mini Card Interface (Factory Option) Quad-band GSM/GPRS (850 MHz, 900 MHz, 1800 MHz, 1900 MHz) UMTS WCDMA FDD (2100 MHz)

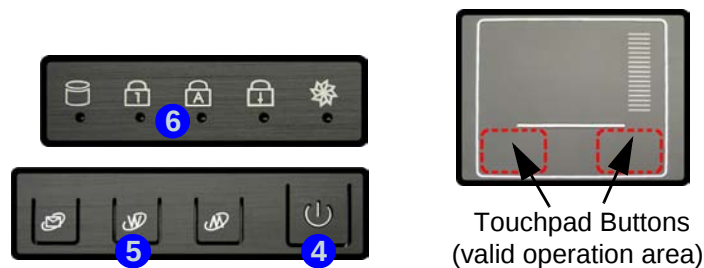


UMTS Modes

Note that UMTS modes CAN NOT be used in North America.

External Locator - Top View with LCD Panel Open

Figure 1
Top View



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

***Note:** This model may have either a fingerprint module or card reader module, depending on your purchase configuration.

Introduction

Figure 2
Front Views

1. LED Power & Communication Indicators
2. 7-in-1 Card Reader
3. S/PDIF-Out Jack
4. Microphone-In Jack
5. Headphone-Out Jack

External Locator - Front & Right side Views



Figure 3
Right Side Views

1. Optical Device Drive Bay
2. USB 2.0 Port
3. RJ-11 Phone Jack
4. Security Lock Slot



External Locator - Left Side & Rear View



Figure 4
Left Side View

1. DC-In Jack
2. RJ-45 LAN Jack
3. External Monitor Port
4. Vent/Fan Intake/Outlet
5. 2 * USB 2.0 Ports
6. ExpressCard Slot



Figure 5
Rear View

1. Battery

Introduction

External Locator - Bottom View

Figure 6
Bottom View

1. Battery (4 Cell Battery Pictured)
2. Hard Disk Bay Cover (3.5G Module Location)
3. RAM & CPU Bay Cover
4. Vent/Fan Intake/Outlet
5. Speakers



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)

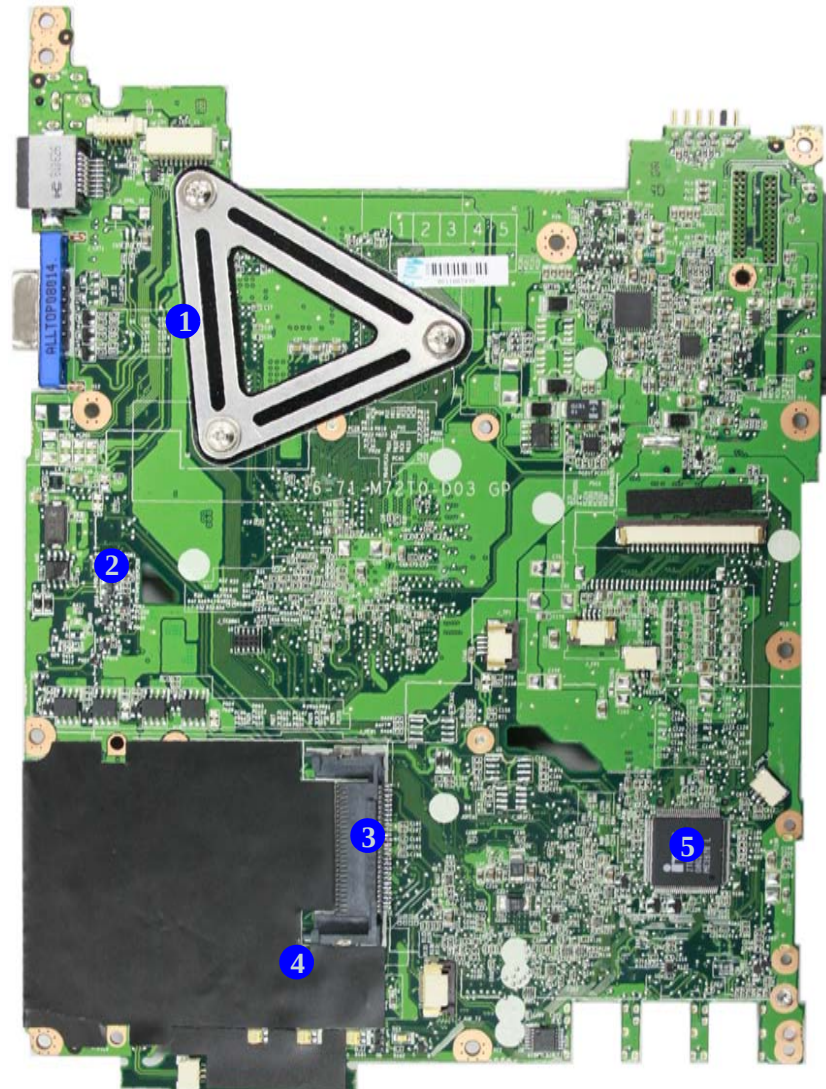


Figure 7
**Mainboard Top
Key Parts**

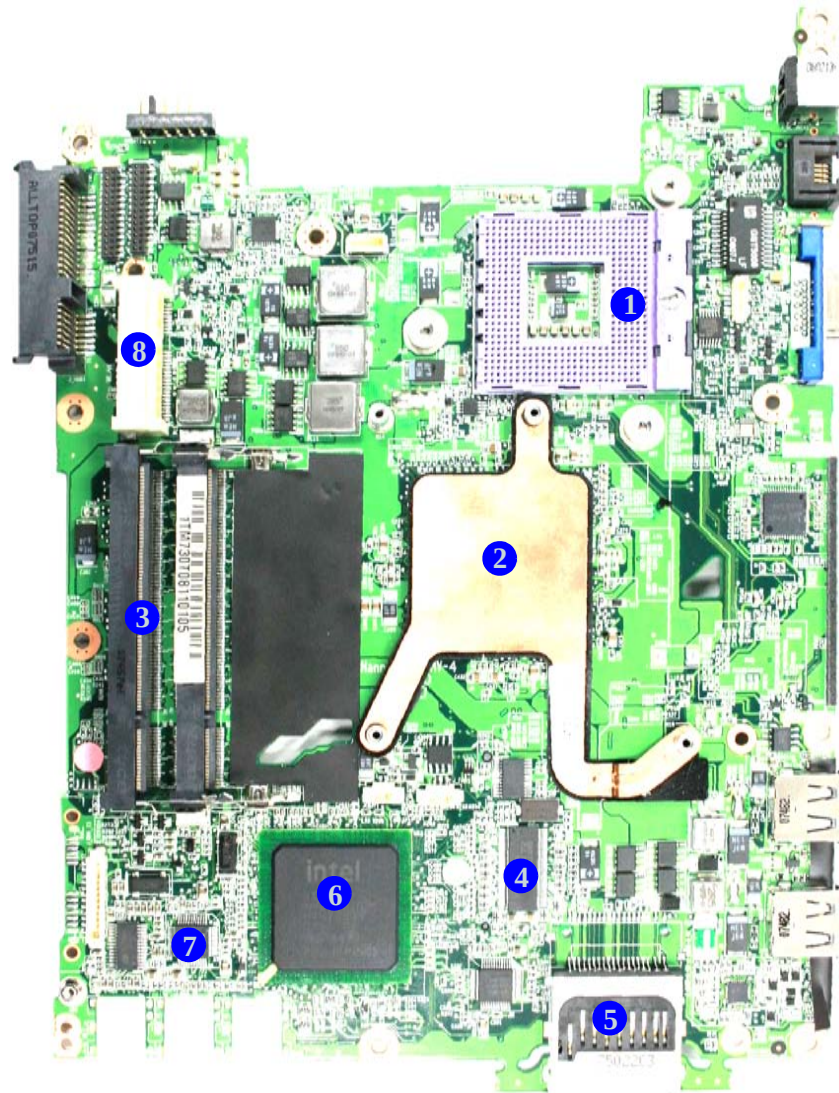
1. Transformer
2. RTL6111C
3. ExpressCard
Connector
4. JMB385
5. KBC ITE IT8502E

Introduction

Figure 8
**Mainboard Bottom
Key Parts**

1. CPU Socket (no CPU installed)
2. Northbridge
3. Memory Slots
DDR2 SO-DIMM
4. ICS
5. Card Reader
Socket
6. Southbridge
7. Audio Codec
8. Mini-Card
Connector (WLAN
Module)

Mainboard Overview - Bottom (Key Parts)



Mainboard Overview - Top (Connectors)

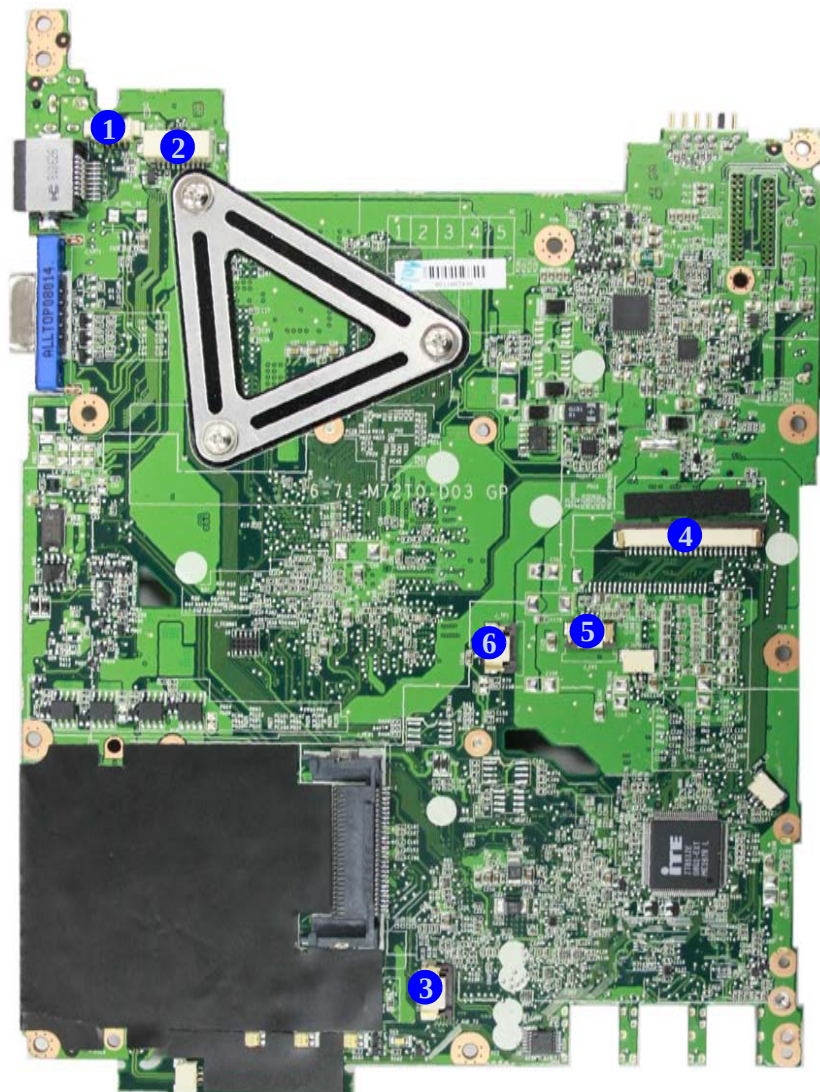


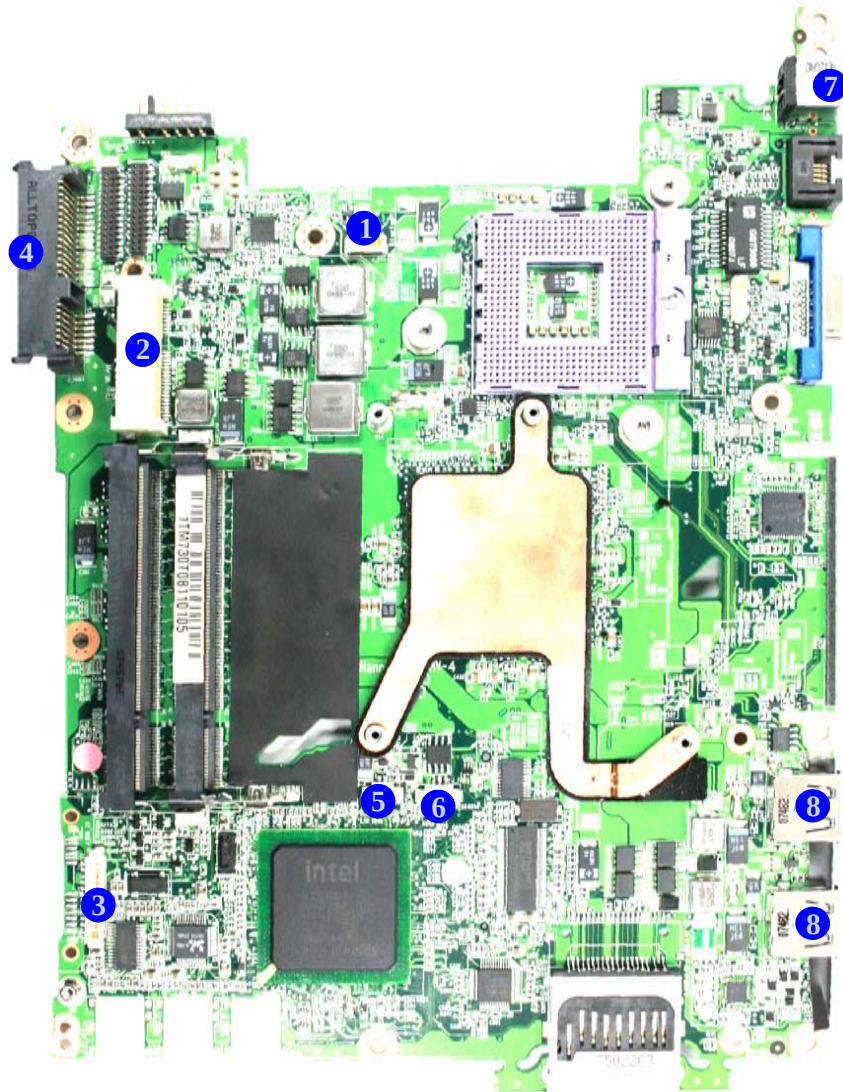
Figure 9
**Mainboard Top
Connectors**

1. Hot-key Connector
2. LCD Cable Connector
3. Keyboard Cable Connector
4. Audio Board Connector
5. Microphone Cable Connector
6. TouchPad Cable Connector

Introduction

Figure 10
**Mainboard Bottom
Connectors**

1. BT Cable Connector
2. Multi Board Connector
3. CD-ROM Connector
4. HDD Connector
5. CMOS Bat. Connector
6. CPU Fan Cable Connector
7. DC-In Jack
8. USB Port



Chapter 2: Disassembly

Overview

This chapter provides step-by-step instructions for disassembling the *M730T/M735T* series notebook's parts and sub-systems. 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, optical 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.


Information
Warning

Disassembly

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.

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.



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.

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 the Inverter Board:

1. Remove the battery [page 2 - 5](#)
2. Remove the inverter board [page 2 - 11](#)

To remove and install a Processor:

1. Remove the battery [page 2 - 5](#)
2. Remove the processor [page 2 - 12](#)

To remove the Wireless LAN Module:

1. Remove the battery [page 2 - 5](#)
2. Remove the wireless LAN [page 2 - 14](#)

To remove the Bluetooth Module:

1. Remove the battery [page 2 - 5](#)
2. Remove the Bluetooth [page 2 - 15](#)

To remove the Keyboard:

1. Remove the battery [page 2 - 5](#)
2. Remove the keyboard [page 2 - 16](#)

To remove the Modem:

1. Remove the battery [page 2 - 5](#)
2. Remove the HDD [page 2 - 6](#)
3. Remove the system memory [page 2 - 9](#)
4. Remove the Optical device [page 2 - 8](#)
5. Remove the processor [page 2 - 12](#)
6. Remove the keyboard [page 2 - 16](#)
7. Remove the modem [page 2 - 17](#)

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.

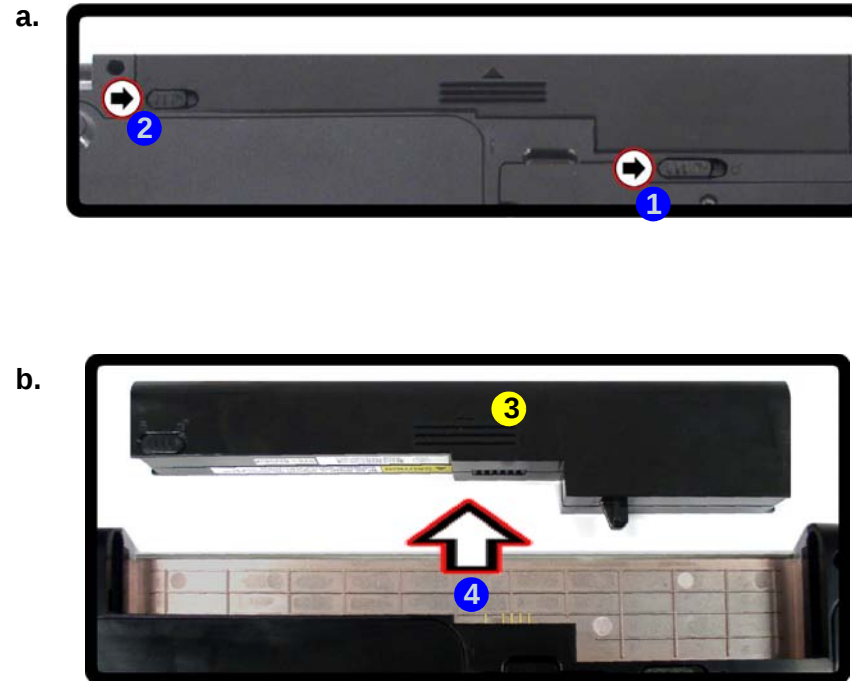
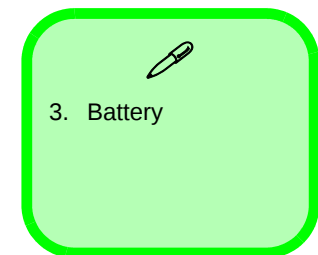


Figure 1
Battery Removal

- a. Slide the latch and hold in place.
- b. Slide the battery in the direction of the arrow.



Disassembly

Figure 2
**HDD Assembly
Removal**

- a. Locate the HDD bay cover and loosen the screw(s).

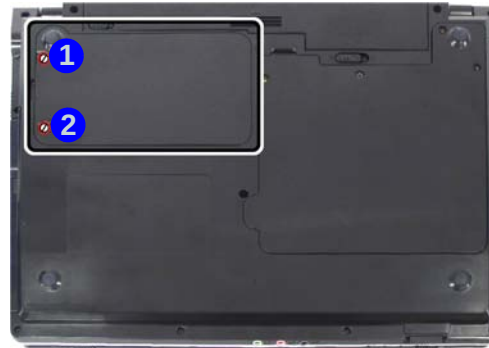
Removing the Hard Disk Drive

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.

Hard Disk Upgrade Process

1. Turn **off** the computer, and remove the battery ([page 2 - 5](#)).
2. Locate the hard disk bay cover and loosen screws **1** & **2**.

a.



Note:

Only one model is pictured here, however the component locations are the same for both models.



- 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 screws **6** & **7** and the adhesive cover **8** from the hard disk **9**.
7. Reverse the process to install a new hard disk (do not forget to replace all the screws and covers).

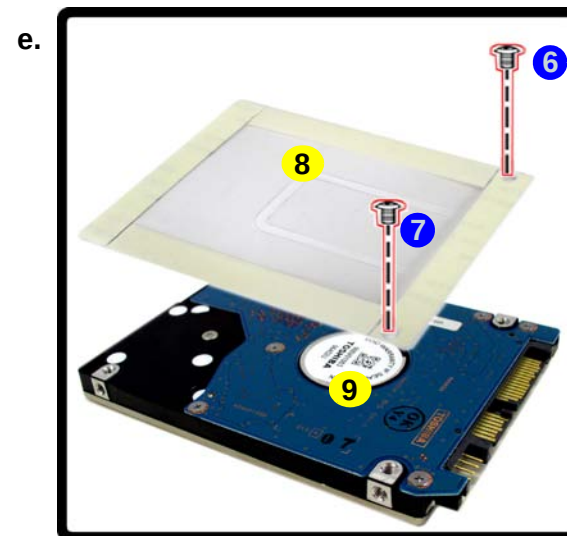
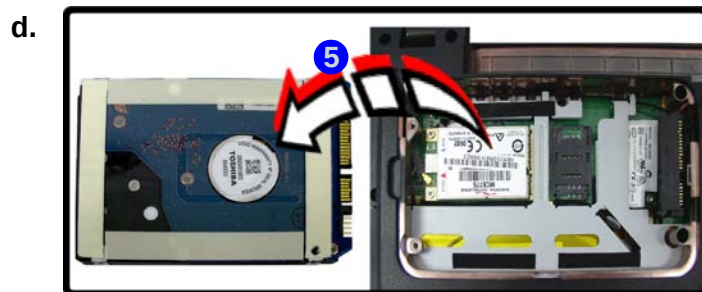


Figure 3
**HDD Assembly
Removal (cont'd.)**

- 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 screw and adhesive cover.



3. HDD Bay Cover
8. Adhesive Cover
9. HDD

- 2 Screws

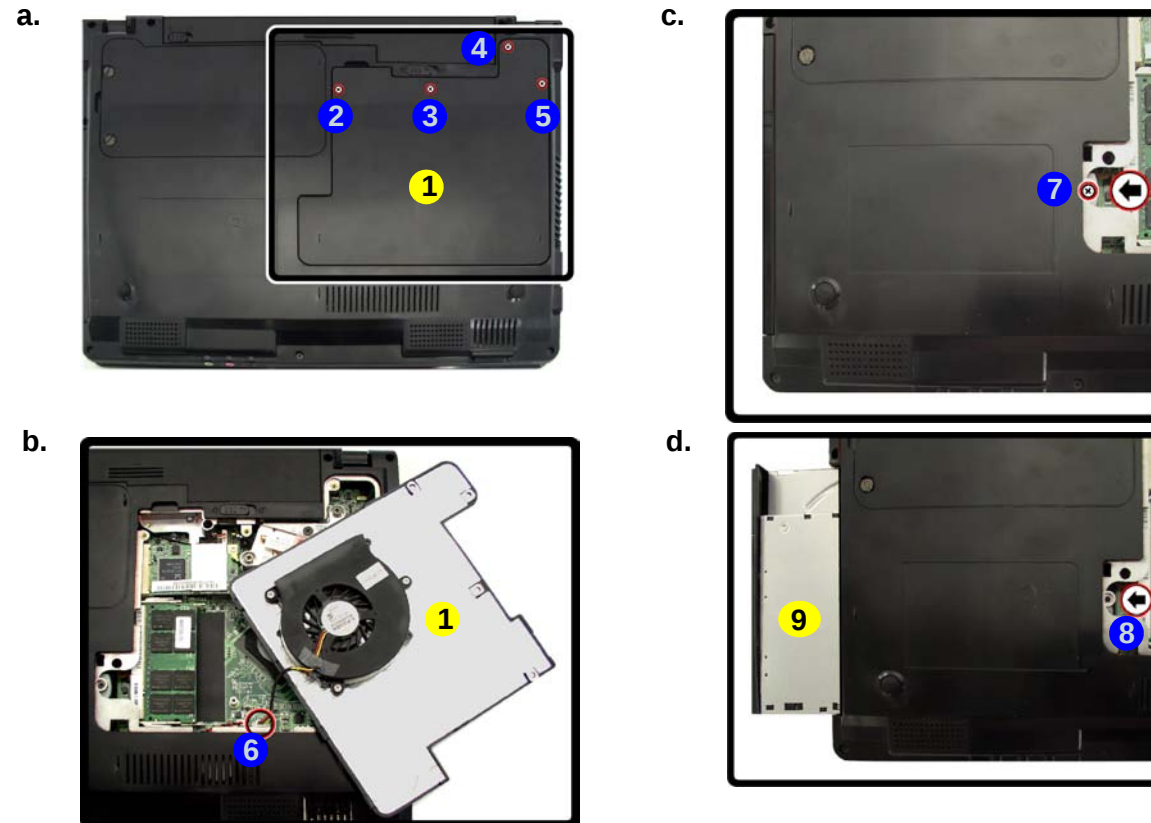
Disassembly

Figure 4
Optical Device
Removal

- Remove the screws.
- Disconnect the fan cable and remove the cover.
- Remove the screw.
- Push the optical device out off the computer at point 8.

Removing the Optical (CD/DVD) Device

- Turn **off** the computer, and remove the battery ([page 2 - 5](#)).
- Locate the component bay cover **1** and remove screws **2** - **5**.
- Carefully (**a fan and cable are attached to the under side of the cover**) lift up the bay cover.
- Carefully disconnect the fan cable **6** and remove the bay cover **1**.
- Remove the screw at point **7**, and use a screwdriver to carefully push out the optical device **9** at point **8**.
- 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).
- Restart the computer to allow it to automatically detect the new device.



- Component Bay Cover
- Optical Device

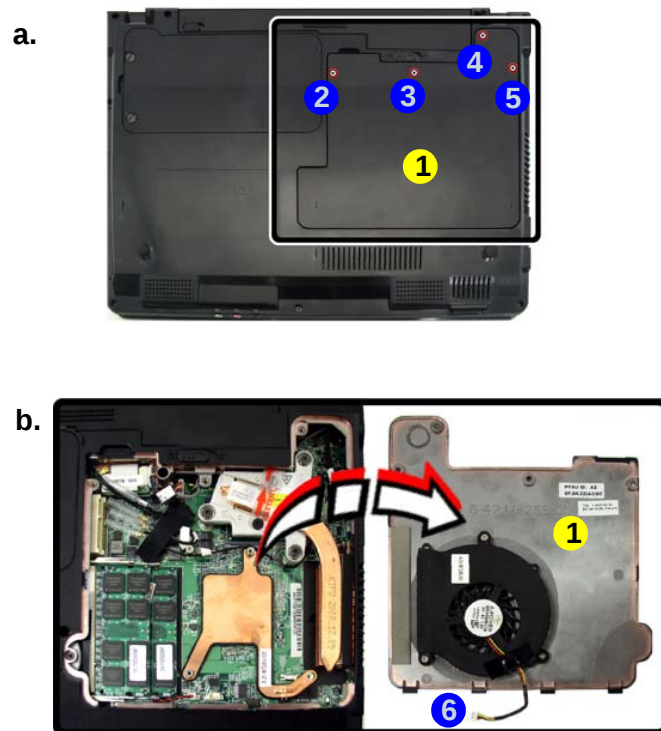
- 5 Screws

Removing the System Memory (RAM)

The computer has two memory sockets for 200 pin Small Outline Dual In-line Memory Modules (SO-DIMM) supporting **DDR2** 667/800MHz. The main memory can be expanded up to 4GB. The SO-DIMM modules supported are 1024MB, and 2048MB and **DDRII** 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, 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**.



Note:

Only one model is pictured here, however the component locations are the same for both models.

Figure 5
RAM Module Removal

- a. Remove the screws.
- b. Remove the cover.



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.



1. Component Bay Cover

- 4 Screws

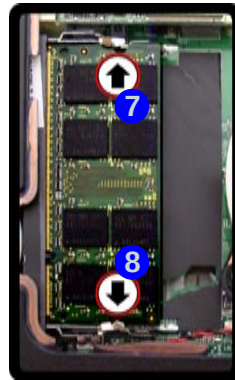
Disassembly

Figure 6
**RAM Module
Removal (cont'd.)**

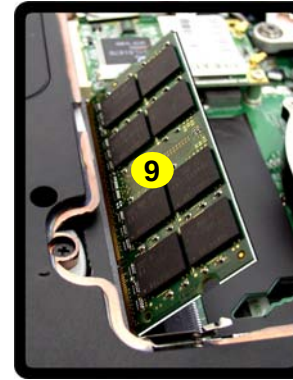
- c. Pull the release latch(es).
d. Remove the module(s).
e. Replace the bay cover.

5. Gently pull the two release latches (7 & 8) on the sides of the memory socket in the direction indicated by the arrows (*Figure 6c*).

c.



d.



6. The RAM module(s) 9 will pop-up (*Figure 6d*), and you can then remove it.
7. Pull the latches to release the second module if necessary.
8. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
9. The module's pin alignment will allow it to only fit one way. Make sure the module is seated as far into the slot as it will go. **DO NOT FORCE** the module; it should fit without much pressure.
10. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
11. Replace the bay cover and screws (**make sure you reconnect the fan cable before screwing down the bay cover**).

e.



Note:

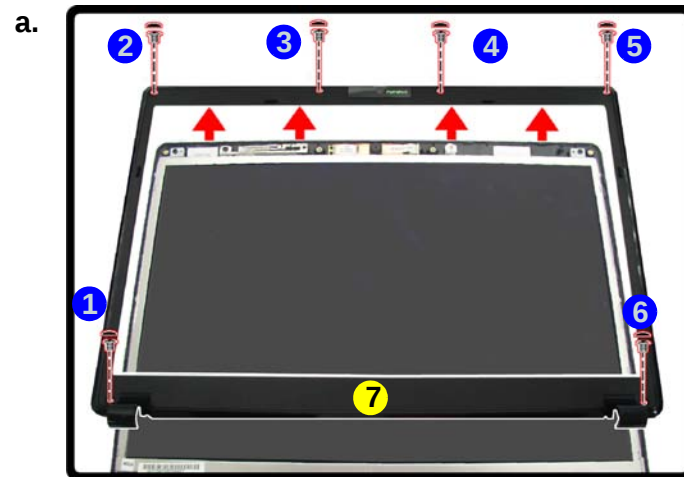
Only one model is pictured here, however the component locations are the same for both models.

12. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.

9. RAM Module(s)

Removing the Inverter Board

1. Turn **off** the computer, and remove the battery ([page 2 - 5](#)).
2. Remove any rubber covers, screws ① - ⑥ ([Figure 7a](#)), then run your finger around the middle of the frame to carefully unsnap the LCD front panel module ⑦ from the back.
3. Discharge the remaining system power (see [“Inverter Power Warning”](#) below).
4. Remove screws ⑧ - ⑨ ([Figure 7b](#)) from the inverter, and carefully lift the inverter board up slightly.
5. Disconnect cables ⑩ & ⑪ ([Figure 7c](#)) from the inverter, then remove the inverter ⑫ ([Figure 7d](#)) from the top case assembly.



Inverter Power Warning

In order to prevent a short circuit when removing the inverter it is necessary to discharge any remaining system power. To do so, press the computer's power button for a few seconds before disconnecting the inverter cable.



Figure 7
Inverter Board Removal

- a. Remove the 6 screws and unsnap the LCD front panel module from the back.
- b. Remove the screw and discharge the remaining power from the inverter board and lift the board up slightly.
- c. Disconnect the cables from the inverter.
- d. Remove the inverter.



7. LCD Front Panel
12. Inverter Board

- 8 Screws

Disassembly

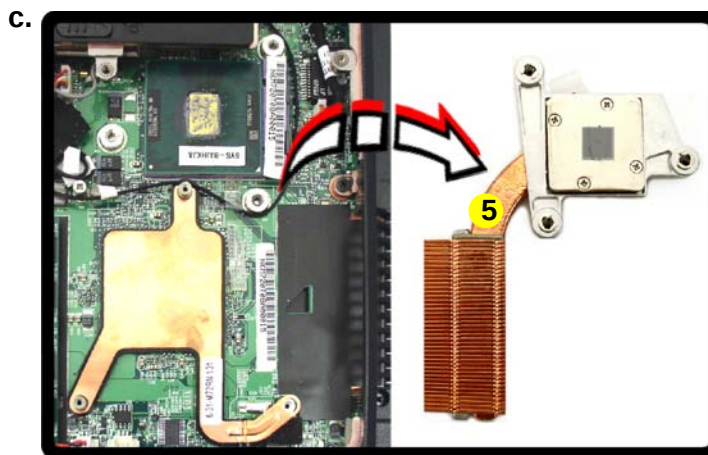
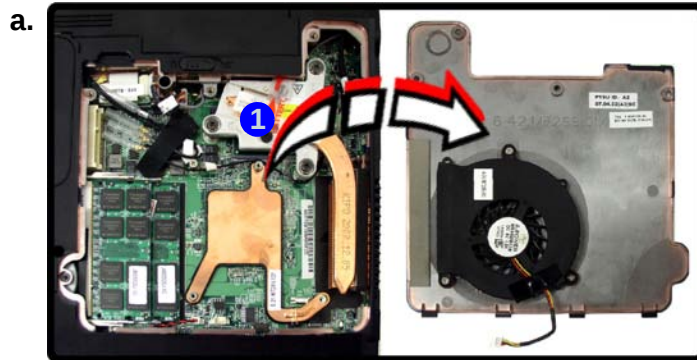
Figure 8

Processor Removal

- Remove the cover and locate the heat sink.
- Remove the 3 screws in the order indicated.
- Remove the heat sink.

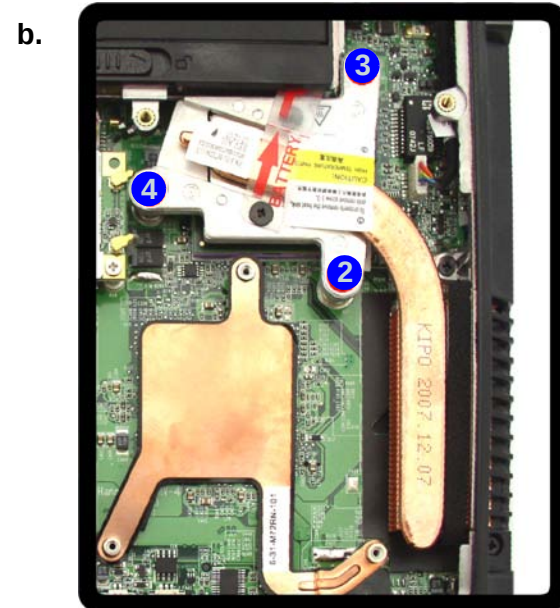
Removing the Processor

- Turn **off** the computer, and remove the battery ([page 2 - 5](#)) and the CPU/RAM bay cover ([page 2 - 9](#)).
- The CPU heat sink will be visible at point **1** on the mainboard.
- Loosen screws **2** - **4** from the heat sink in the order indicated.
- Carefully lift up the heat sink **5** ([Figure c](#)) off the computer.



Note:

Only one model is pictured here, however the component locations are the same for both models.

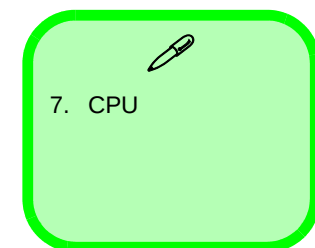
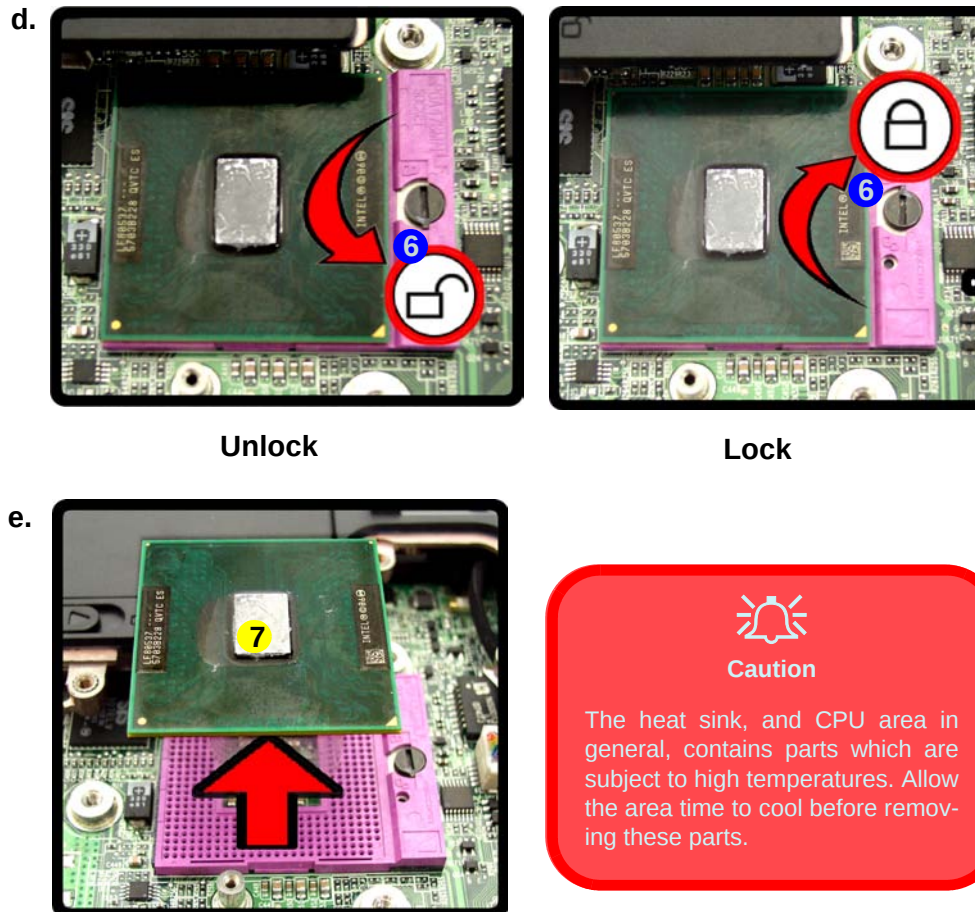


5. Heat Sink

5. Turn the release latch **6** towards the unlock symbol , to release the CPU (**Figure d**).
6. Carefully (it may be hot) lift the CPU **7** up out of the socket (**Figure e**).
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 9
Processor Removal Sequence

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



Disassembly

Figure 10
Wireless LAN
Module Removal

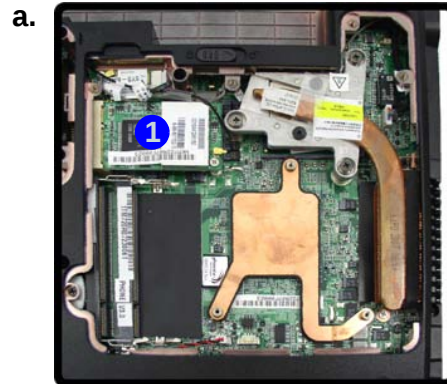
- Remove the cover.
- Disconnect the cables and remove the screw.
- The WLAN module will pop up.
- Lift the WLAN module out.

Note: Make sure you reconnect the antenna cable to “1” + “2” socket (Figure b).

- 
- WLAN Module.
 - 1 Screw

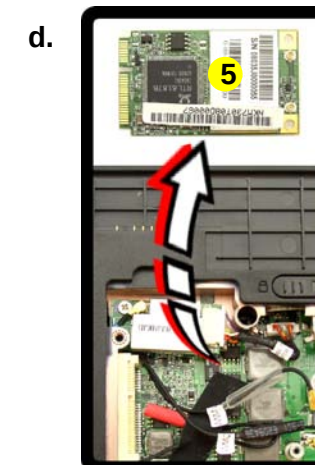
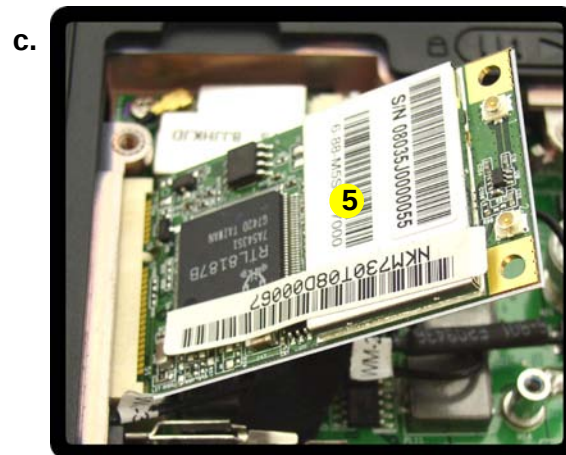
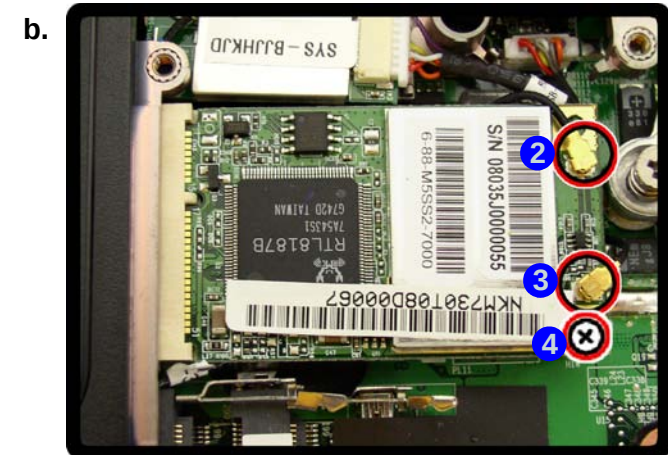
Removing the Wireless LAN Module

- Turn **off** the computer, remove the battery (page 2 - 5) and the component bay cover (page 2 - 9).
- The Wireless LAN module will be visible at point ① on the mainboard.
- Carefully disconnect cables ② - ③, then remove screw ④ from the module socket.
- The Wireless LAN module ⑤ will pop-up.
- Lift the Wireless LAN module (Figure 10d) up and off the computer.



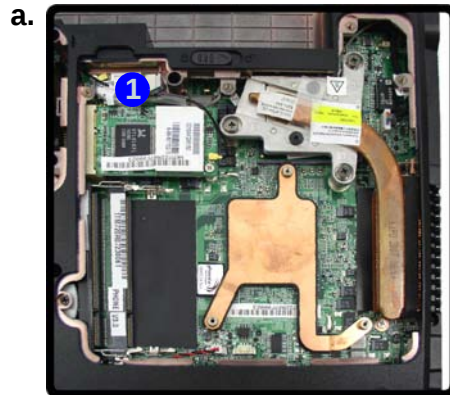
Note:

Only one model is pictured here, however the component locations are the same for both models.



Removing the Bluetooth Module

1. Turn **off** the computer, remove the battery ([page 2 - 5](#)).
2. The Bluetooth module will be visible at point **1** on the mainboard.
3. Remove screw **2** and carefully disconnect the cable **3** and separate the module from the connector **4**.
4. Lift the Bluetooth module **5** up and off the computer.



Note:

Only one model is pictured here, however the component locations are the same for both models.

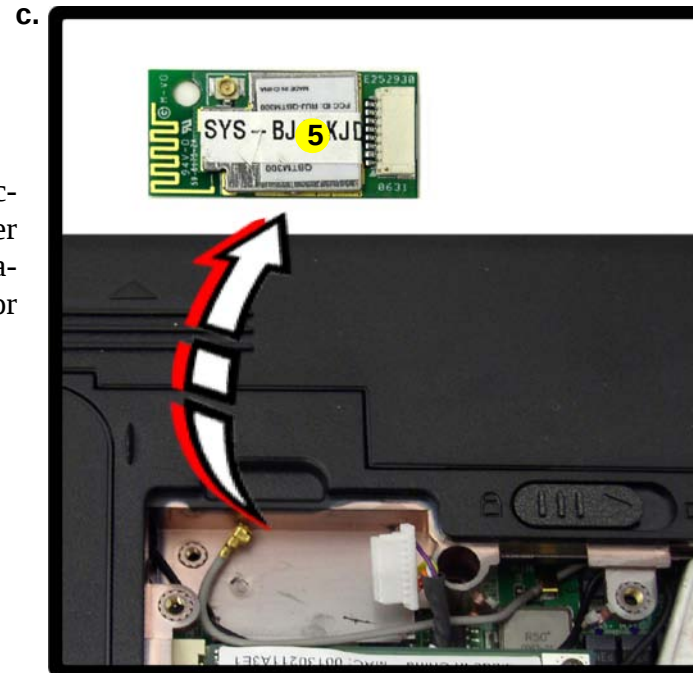
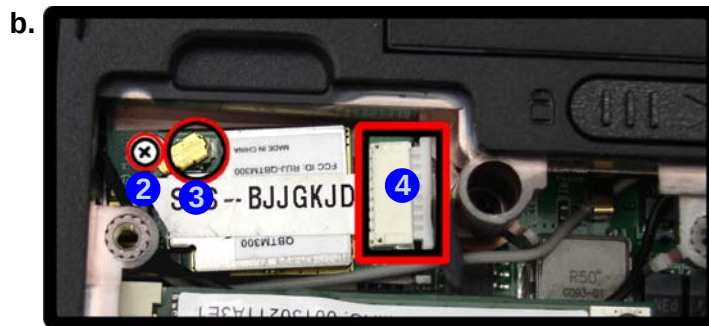


Figure 11
Bluetooth Removal

- a. Remove the cover and locate the Bluetooth module.
- b. Remove the screw and disconnect the cable and separate the connector.
- c. Lift the Bluetooth module out.



5. Bluetooth Module

- 1 Screw

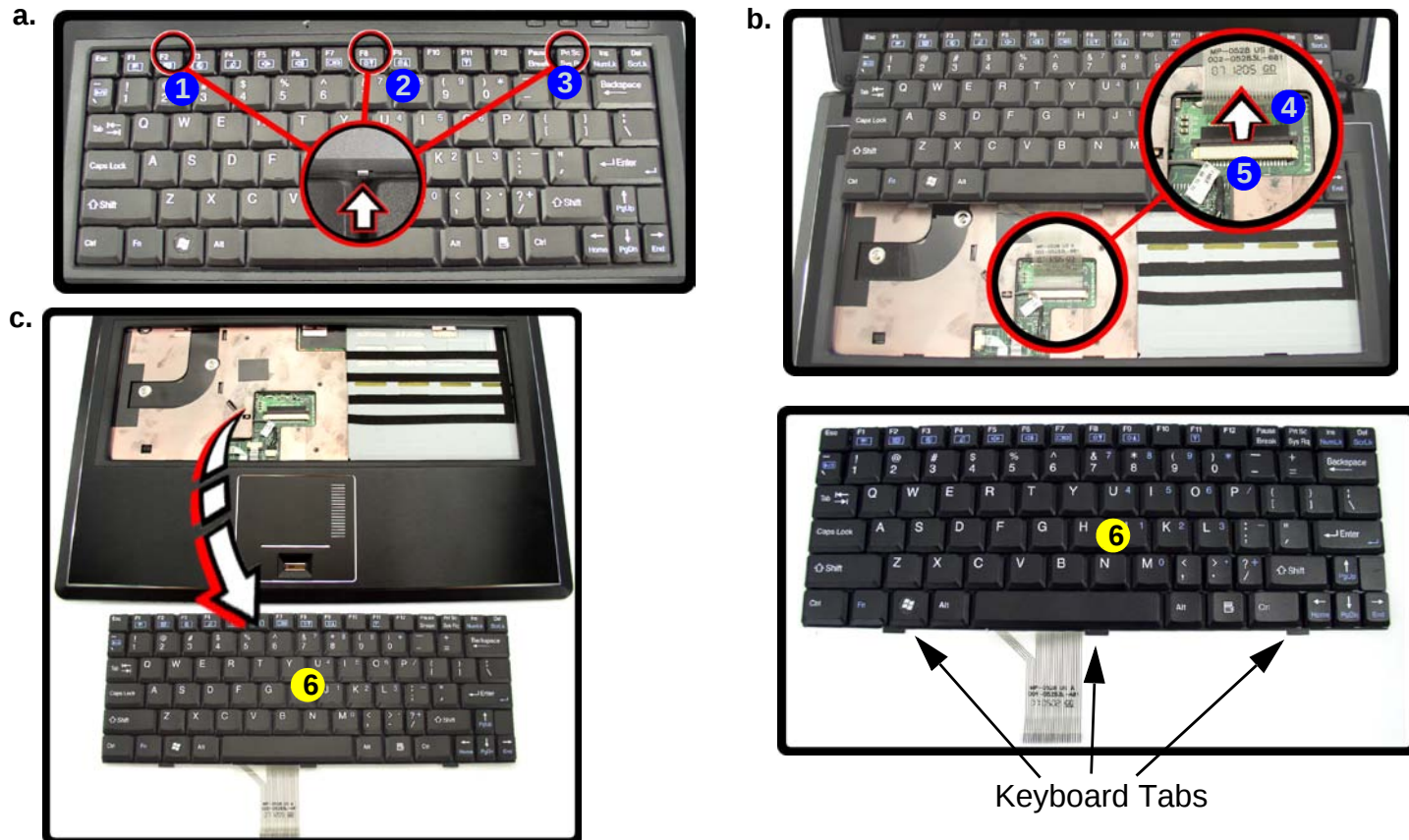
Disassembly

Figure 12
Keyboard Removal

- Press the three latches to release the keyboard.
- Lift the keyboard up and disconnect the cable from the locking collar.
- Remove the keyboard.

Removing the Keyboard

- Turn **off** the computer, and remove the battery ([page 2 - 5](#)).
- Press the **three** 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).
- Carefully lift the keyboard up, being careful not to bend the keyboard ribbon cable ([Figure 12b](#)).
- Disconnect the keyboard ribbon cable **4** from the locking collar socket **5**.
- Carefully lift up the keyboard **6** ([Figure 12c](#)) off the computer.



Re-Inserting the Keyboard

When re-inserting the keyboard firstly align the **three** keyboard tabs at the bottom of the keyboard with the slots in the case.

6. Keyboard Module.

Removing the Modem

1. Turn **off** the computer, remove the battery ([page 2 - 5](#)), HDD ([page 2 - 6](#)), component bay cover ([page 2 - 9](#)), optical device ([page 2 - 8](#)), CPU ([page 2 - 12](#)), bluetooth ([page 2 - 15](#)) and keyboard ([page 2 - 16](#)).
2. Disconnect the connectors **1** - **3** from under the keyboard and turn it over.
3. Remove screws **4** - **5** from the rear of the computer.

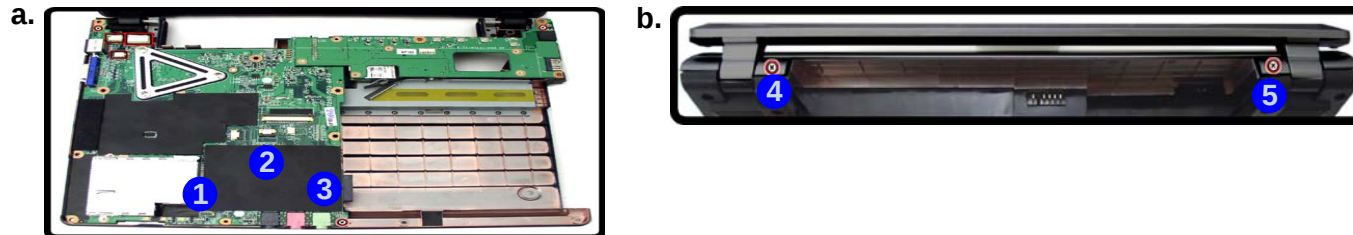
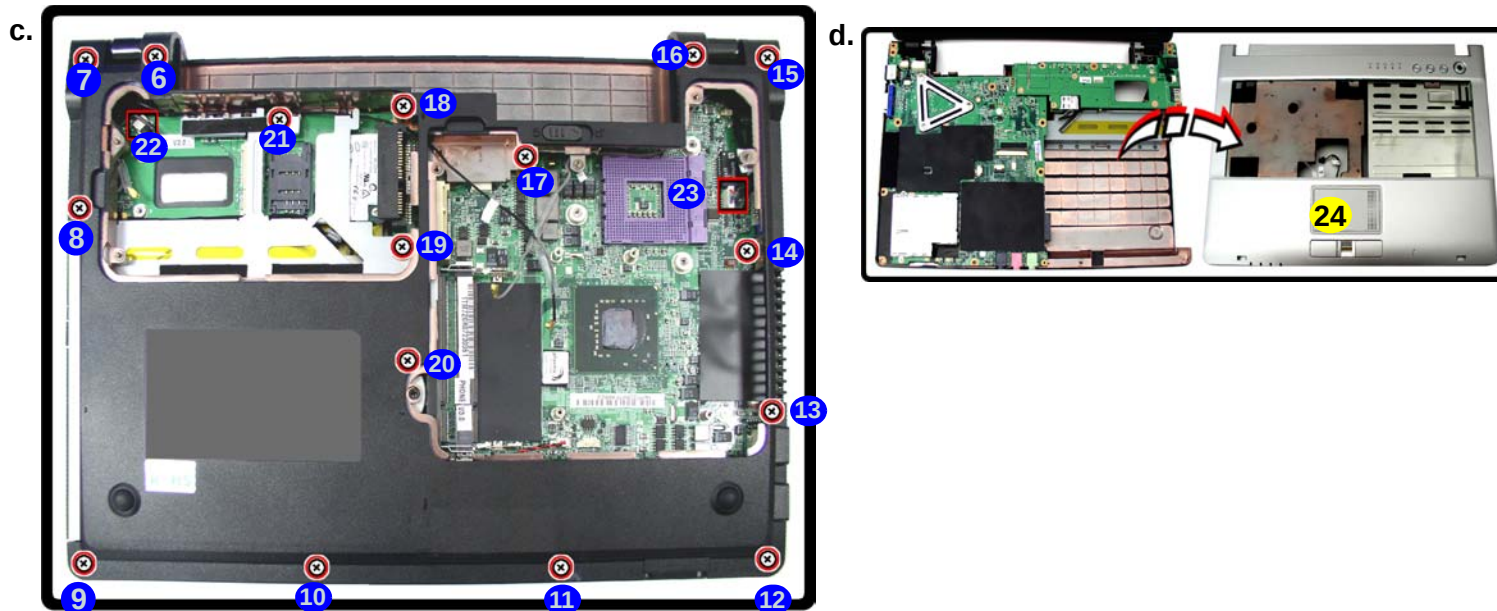


Figure 13
Modem Removal

- a. Disconnect the connectors from under the keyboard.
- b. Remove the screws.
- c. Remove the screws and disconnect the connectors from the mainboard.
- d. Remove the top case.

4. Remove the screws **6** - **21** from the bottom case and disconnect the connectors **22** - **23** on the mainboard.
5. Carefully lift up the top case **24** off the computer.



24. Top Case

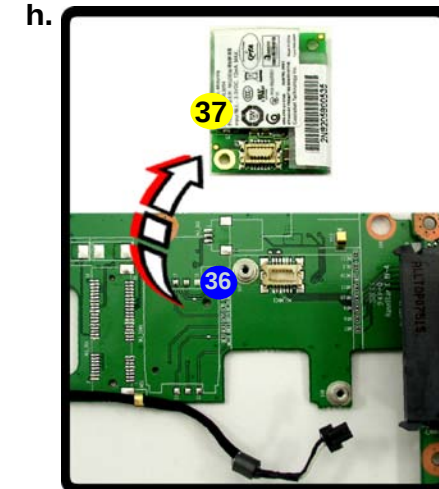
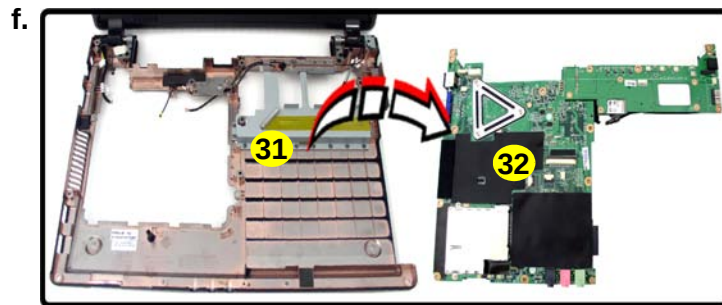
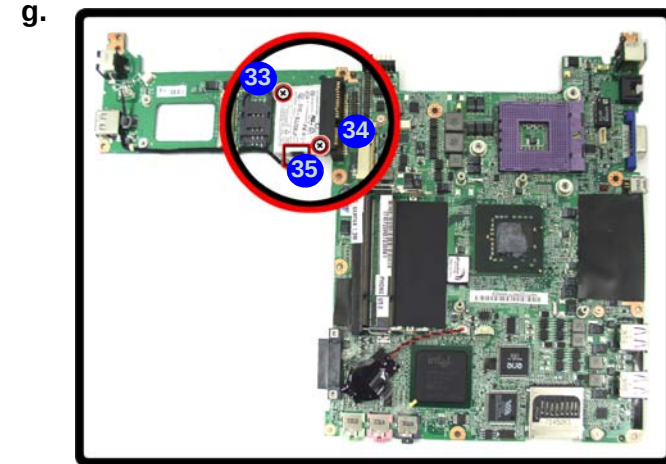
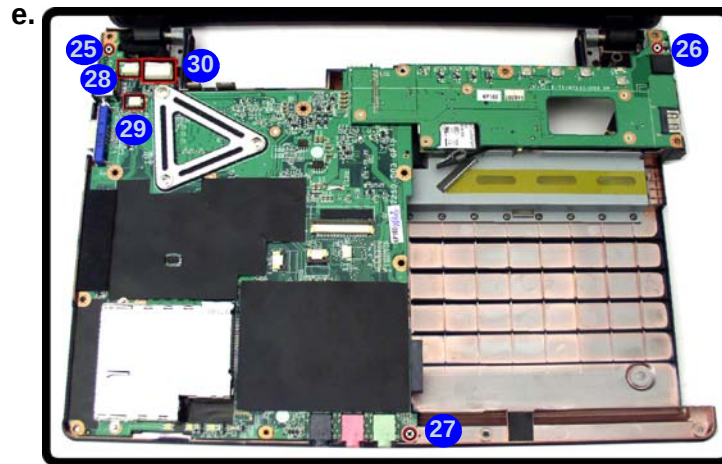
- 18 Screws

Disassembly

Figure 14
Modem Removal Sequence

- e. Remove the screws and disconnect the connectors.
- f. Separate the bottom case from the main board.
- g. Remove the screws and disconnect the connector.
- h. Lift the modem up off the socket.

6. Remove screws 25 - 27 and disconnect the connectors 28 - 30 from the mainboard.
7. Separate the bottom case 31 from the mainboard 32 and turn it over.
8. Remove the screws 33 - 34 and disconnect the connector 35 from the modem.
9. Lift the modem 37 up off the socket 36.



31. Bottom Case
32. Main Board
37. Modem

- 5 Screws

Appendix A: Part Lists

This appendix breaks down the *M730T/M735T* 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 Lists

Part List Illustration Location

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

Table A- 1
**Part List Illustration
Location**

Parts	M730T	M735T
Top with Fingerprint	<i>page A - 3</i>	<i>page A - 10</i>
Top without Fingerprint	<i>page A - 4</i>	<i>page A - 11</i>
Bottom	<i>page A - 5</i>	<i>page A - 12</i>
LCD	<i>page A - 6</i>	<i>page A - 13</i>
		<i>page A - 14</i>
HDD	<i>page A - 7</i>	<i>page A - 15</i>
COMBO	<i>page A - 8</i>	<i>page A - 16</i>
DVD-Dual Drive	<i>page A - 9</i>	<i>page A - 17</i>

Top with Fingerprint (M730T)

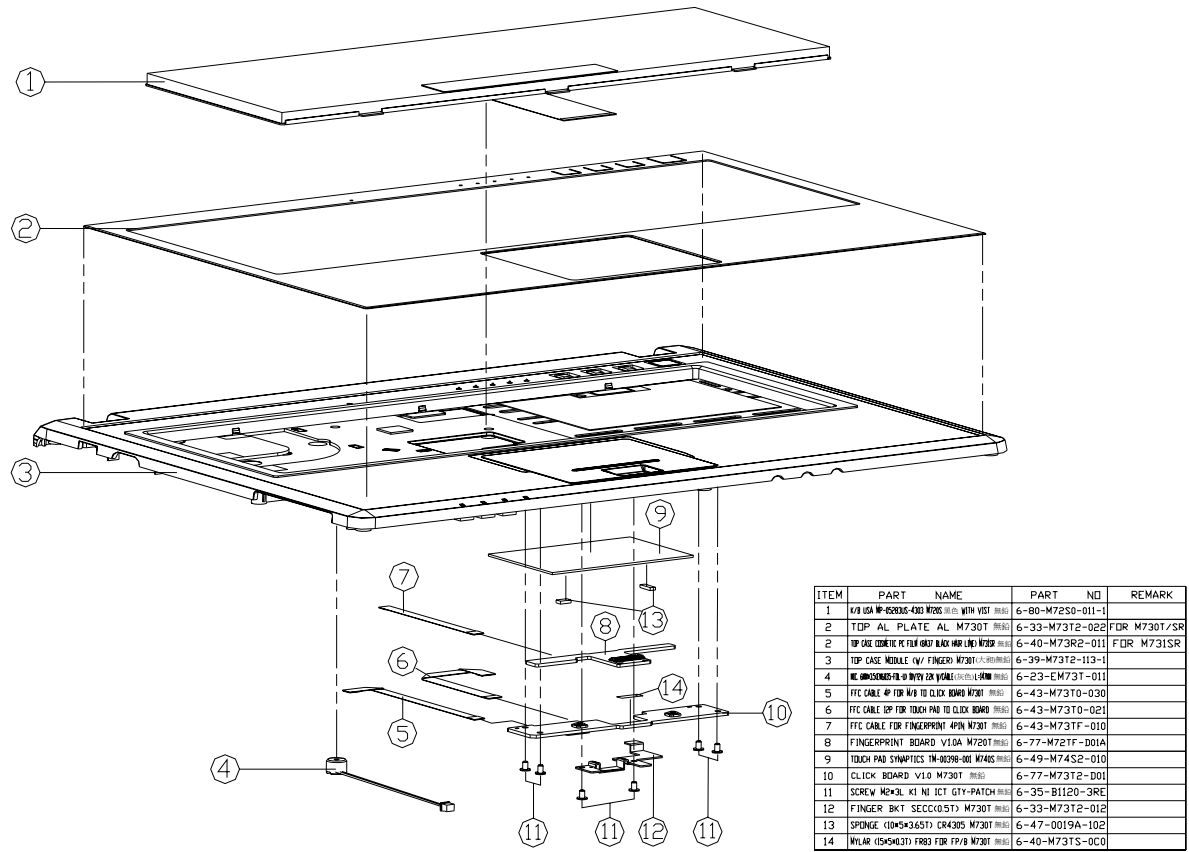
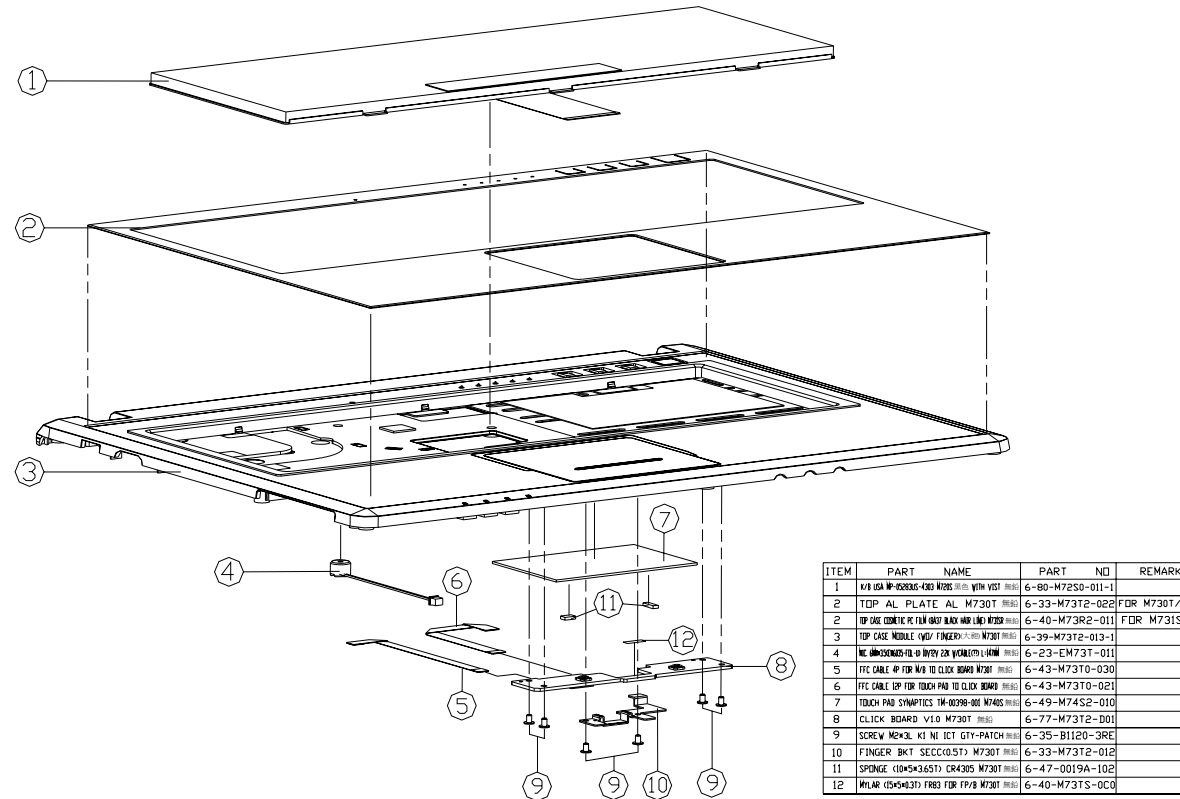


Figure A - 1
Top with
Fingerprint
(M730T)

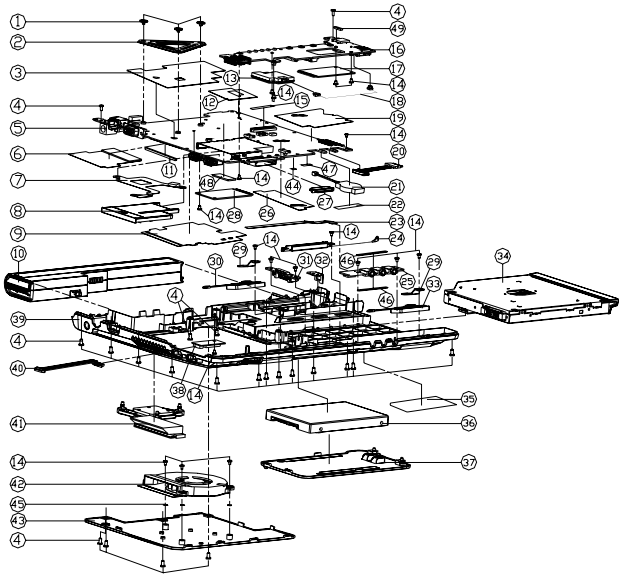
Part Lists

Top without Fingerprint (M730T)

Figure A - 2
Top without
Fingerprint
(M730T)



Bottom (M730T)



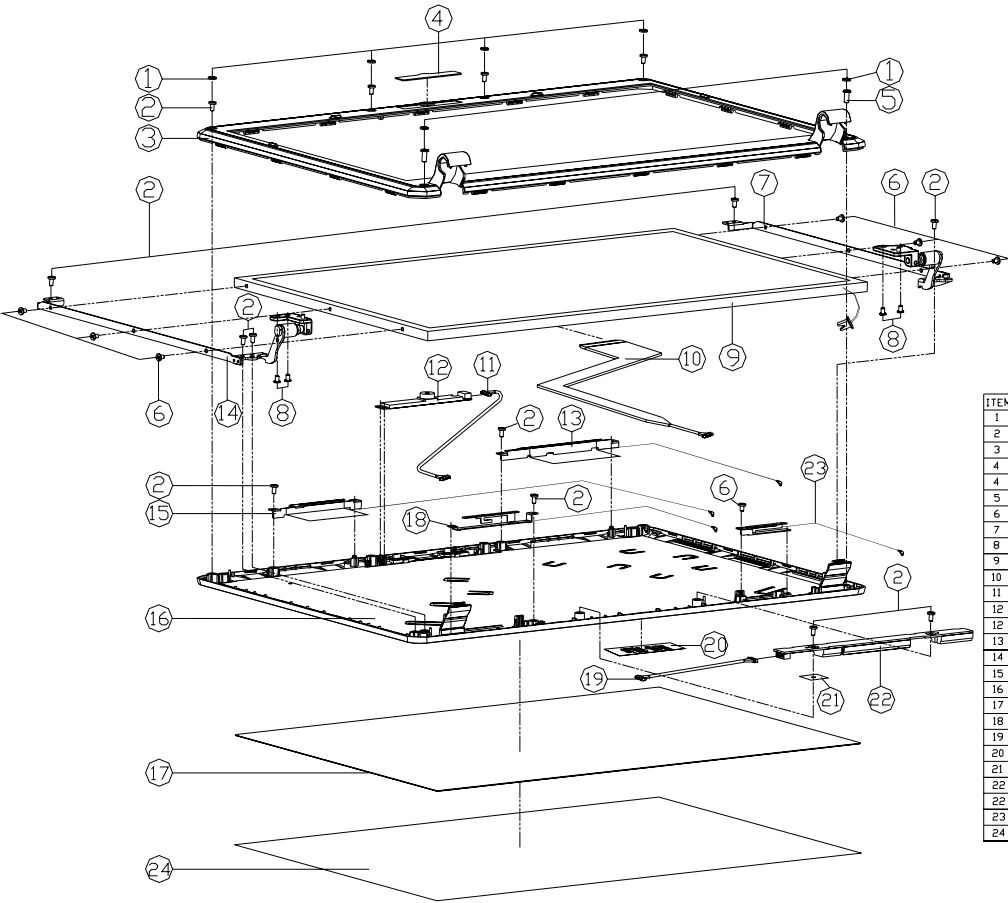
ITEM	PART NAME	PART NO	REMARK
1	CHASSIS COVER (M730T)	6-30-41025-285	
2	SCREW (M730T)	6-33-M7255-011	
3	MAIN BOARD (M730T)	6-40-M7315-010	
4	SCREW (M730T)	6-35-88105-680	
5	MAIN BOARD (M730T)	6-77-M7310-803A	
6	MAIN BOARD (M730T)	6-40-M7315-010	
7	MAIN BOARD (M730T)	6-31-M7286-101	
8	MAIN BOARD (M730T)	6-42-11293-011	
9	MAIN BOARD (M730T)	6-40-M7315-010	
10	MAIN BOARD (M730T)	6-87-M7255-402	
11	MAIN BOARD (M730T)	6-87-M7255-404	
12	MAIN BOARD (M730T)	6-87-M7255-501	
13	MAIN BOARD (M730T)	6-40-M7255-051	
14	MAIN BOARD (M730T)	6-40-M7315-040	
15	MAIN BOARD (M730T)	6-88-13911-500	
16	MAIN BOARD (M730T)	6-35-88100-38A	
17	MAIN BOARD (M730T)	6-40-M7205-060	
18	MAIN BOARD (M730T)	6-77-M7311-803A	
19	MAIN BOARD (M730T)	6-88-M7255-700	OPTIONAL
20	MAIN BOARD (M730T)	6-43-M7255-010	OPTIONAL
21	MAIN BOARD (M730T)	6-40-M7315-000	
22	MAIN BOARD (M730T)	6-43-M7317-011	
23	MAIN BOARD (M730T)	6-43-M7317-011	
24	MAIN BOARD (M730T)	6-43-M7317-011	
25	MAIN BOARD (M730T)	6-43-M7317-011	
26	MAIN BOARD (M730T)	6-43-M7317-011	
27	MAIN BOARD (M730T)	6-43-M7317-011	
28	MAIN BOARD (M730T)	6-43-M7317-011	
29	MAIN BOARD (M730T)	6-43-M7317-011	
30	MAIN BOARD (M730T)	6-43-M7317-011	
31	MAIN BOARD (M730T)	6-43-M7317-011	
32	MAIN BOARD (M730T)	6-43-M7317-011	
33	MAIN BOARD (M730T)	6-43-M7317-011	
34	MAIN BOARD (M730T)	6-43-M7317-011	
35	MAIN BOARD (M730T)	6-43-M7317-011	
36	MAIN BOARD (M730T)	6-43-M7317-011	
37	MAIN BOARD (M730T)	6-43-M7317-011	
38	MAIN BOARD (M730T)	6-43-M7317-011	
39	MAIN BOARD (M730T)	6-43-M7317-011	
40	MAIN BOARD (M730T)	6-43-M7317-011	
41	MAIN BOARD (M730T)	6-43-M7317-011	
42	MAIN BOARD (M730T)	6-43-M7317-011	
43	MAIN BOARD (M730T)	6-43-M7317-011	
44	MAIN BOARD (M730T)	6-43-M7317-011	
45	MAIN BOARD (M730T)	6-43-M7317-011	
46	MAIN BOARD (M730T)	6-43-M7317-011	
47	MAIN BOARD (M730T)	6-43-M7317-011	
48	MAIN BOARD (M730T)	6-43-M7317-011	
49	MAIN BOARD (M730T)	6-43-M7317-011	

Figure A - 3
Bottom
(M730T)

Part Lists

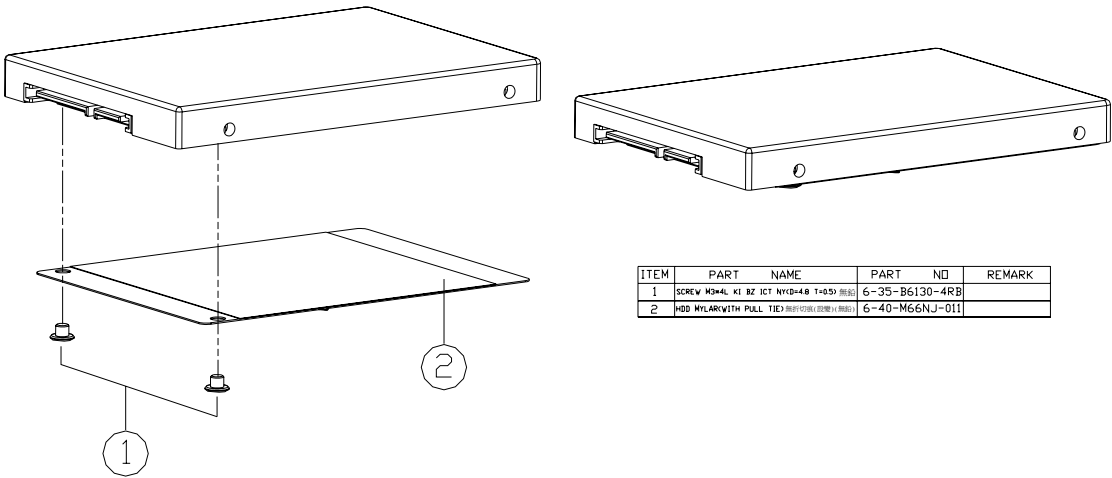
LCD (M730T)

Figure A - 4
LCD
(M730T)



ITEM	PART NAME	PART NO	REMARK
1	LCD FRONT COVER SCREW HOLE RUBBER W/DS	6-47-M72SI-021	
2	SCREW M4x1.1 BZ ICT GY-PATCH IT-68 D-40	6-35-C6120-4RB	
3	LCD FRONT COVER MODULE M730T	6-39-M73T1-012	
4	CCD COSMETIC PLATE PMMA M730T	6-42-M73T1-010	W/CCD
4	CCD MYLAR FR700 M730T	6-40-M73T1-010	W/O CCD
5	SCREW M2.5x5L K1 BK/2 ICT NY	6-35-B6125-5RA	
6	SCREW M4x1.1 BZ ICT GY-PATCH IT-68 D-40	6-35-C6120-4RB	
7	LCD HINGE L SECC+SK7+ZN M730T	6-33-M73T1-021	
8	SCREW M2.5x6L K BK/2 ICT NY	6-35-B6125-6RO	
9	LCD EXP VISA AL RESIN V3 GLUE TWO SIDE	6-50-G8255-G00	
10	WIRE CABLE FOR LCD TO AL RESIN V3 GLUE TWO SIDE	6-43-M73T1-011	
11	WIRE CABLE M/B TO CCD M730T	6-43-M73T1-011	
12	INC CAMERA RESIN FOR INVERTER AND LCM M730T	6-88-M740C-4921	
13	INC CAMERA RESIN FOR INVERTER AND LCM M730T	6-88-M740C-4921	
14	LCD HINGE L SECC+SK7+ZN M730T	6-23-M73T1-050	(OPTION)
15	LCD HINGE L SECC+SK7+ZN M730T	6-23-M73T1-032	
16	LCD BACK COVER MODULE M730T	6-23-M73T1-031	(OPTION)
17	BACK COVER COSMETIC PLATE AL M730T	6-39-M73T1-022	
18	BACK COVER COSMETIC PLATE AL M730T	6-33-M73T1-011	
19	CABLE FOR INVERTER M730T	6-23-M73T1-021	
20	CABLE FOR INVERTER M730T	6-43-M73T1-011	
21	MYLAR FOR INVERTER (44x14x0.4) M730T	6-45-M74S1-012-1	
22	MYLAR FOR INVERTER (44x14x0.4) M730T	6-40-M66NS-060	
23	INVERTER MODULE FOR INVERTER (44x14x0.4) M730T	6-76-M66R-011	
24	INVERTER MODULE FOR INVERTER (44x14x0.4) M730T	6-76-M66R-010	
25	BACK COVER PROTECT MYLAR (88x25) M730T	6-23-M73T1-011	
26	BACK COVER PROTECT MYLAR (88x25) M730T	6-40-M73T1-020	

HDD (M730T)

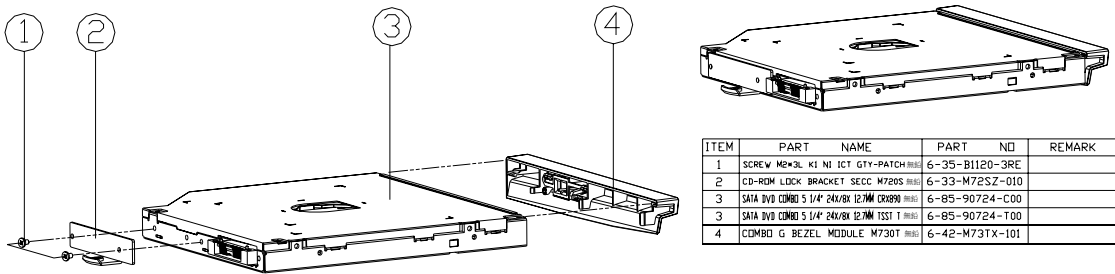


ITEM	PART NAME	PART NO	REMARK
1	SCREW M3x4L, KI BZ ICT NYD=4.8 T=0.50 (附注)	6-35-B6130-4RB	
2	HDD M730T WITH PULL TAB (附注)	6-40-M66NJ-011	

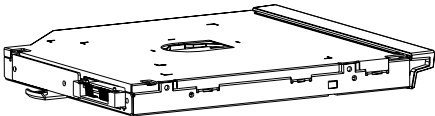
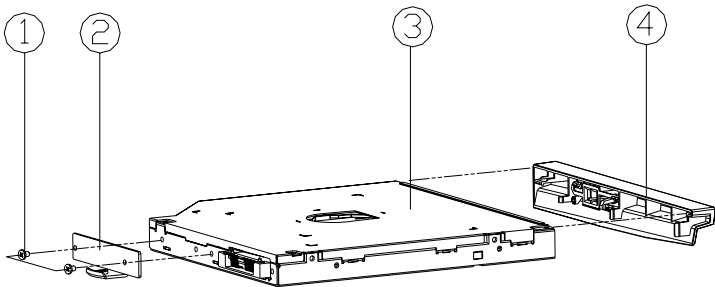
Figure A - 5
HDD
(M730T)

COMBO (M730T)

Figure A - 6
COMBO
(M730T)



DVD-Dual Drive (M730T)

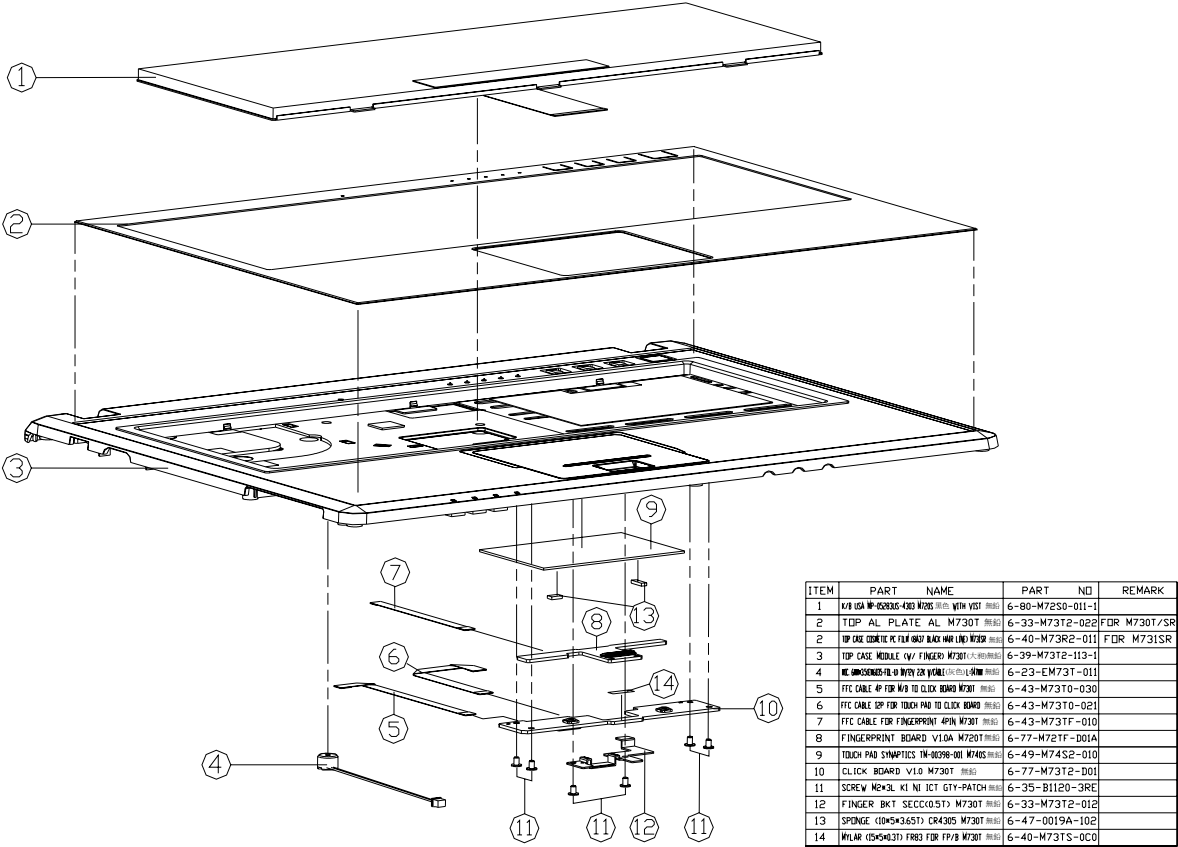


ITEM	PART NAME	PART NO	REMARK
1	SCREW M2*3L X1 N1 1CT GY-PATCH	6-35-B1120-3RE	
2	CD-ROM LOCK BRACKET SECC M720S	6-33-M72SZ-010	
3	SATA DVD SUPER MULTI 5 1/4 24X/8X 12.7MM	6-85-A0724-T01	
3	SATA DVD SUPER MULTI 5 1/4 24X/8X 12.7MM	6-85-A0724-C00	
4	SUPER MULTI G BEZEL MODULE M730T	6-42-M73TQ-102	

Figure A - 7
DVD-Dual Drive
(M730T)

Top with Fingerprint (M735T)

Figure A - 8
Top with
Fingerprint
(M735T)



Top without Fingerprint (M735T)

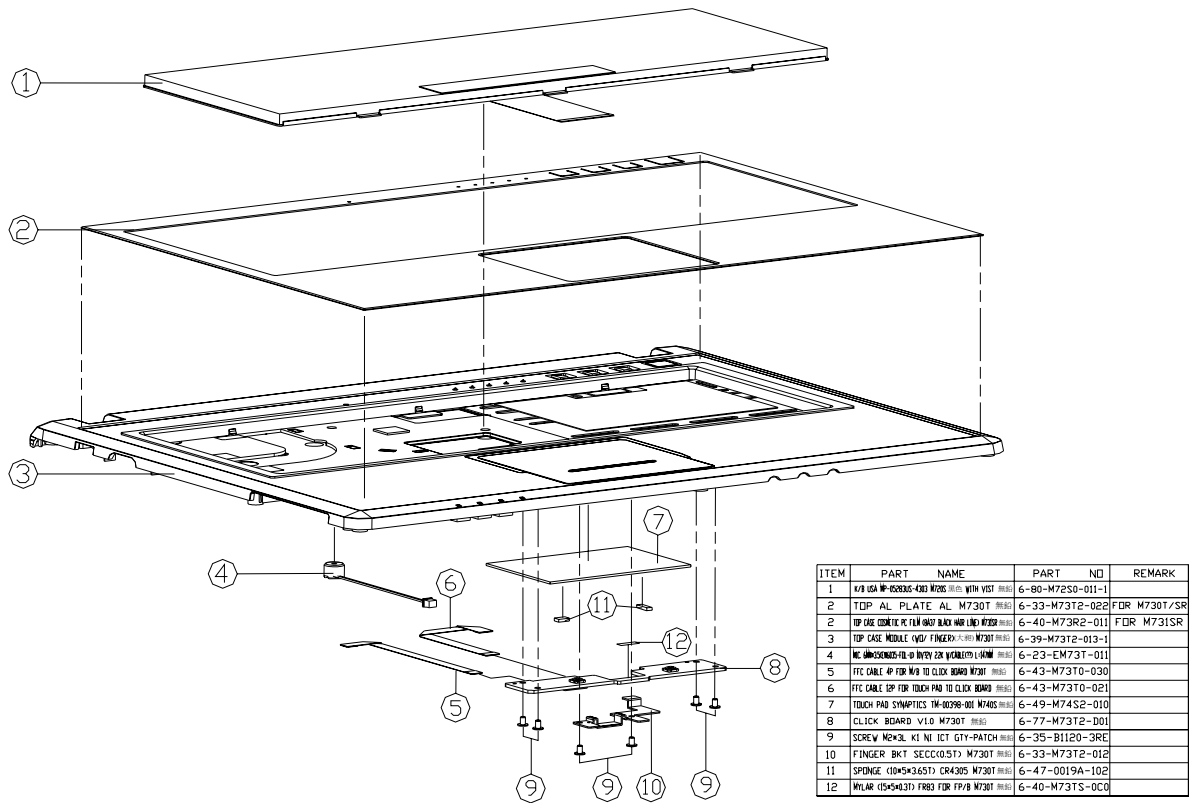
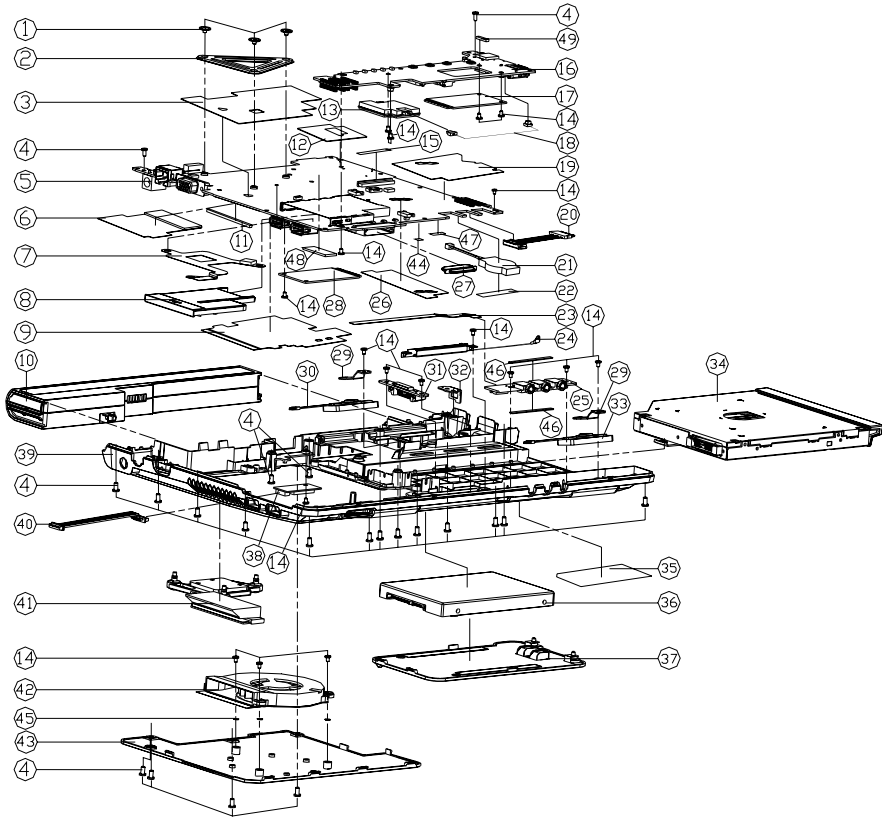


Figure A - 9
Top without
Fingerprint
(M735T)

Part Lists

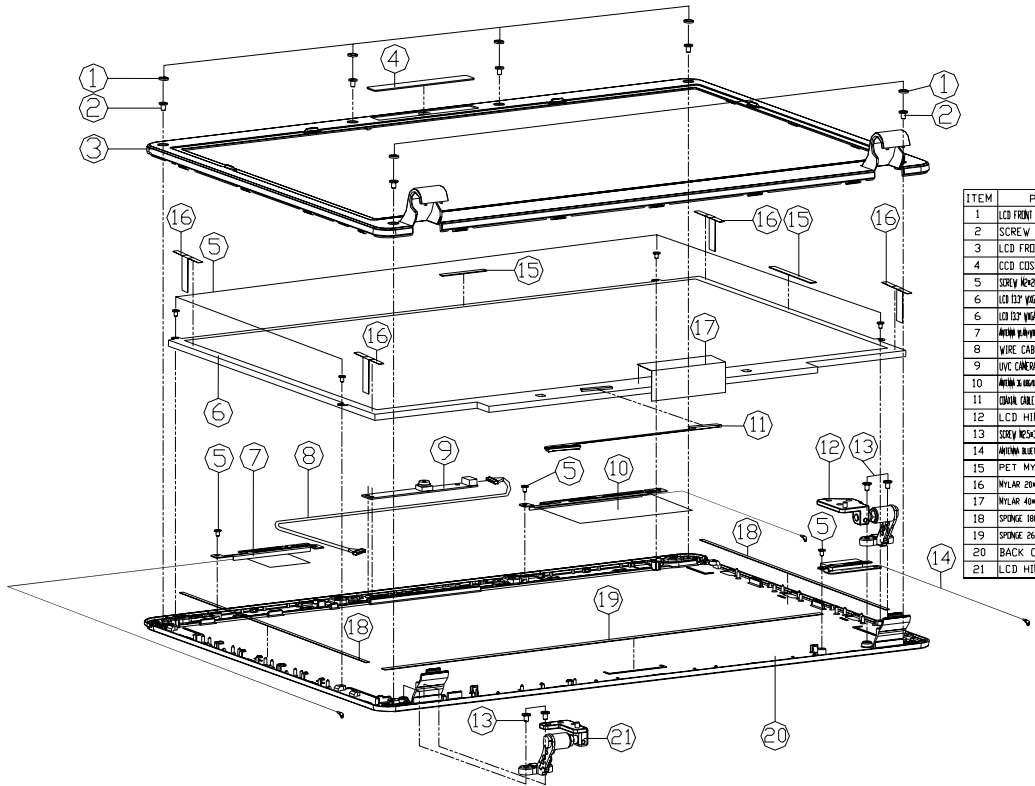
Bottom (M735T)

Figure A - 10
Bottom
(M735T)



ITEM	PART NAME	PART NO	REMARK
1	W/ID HED ASS'Y M730T	6-35-41025-2R5	
2	W/ID HED ASS'Y M730T	6-33-M72SS-011	
3	W/ID HED ASS'Y M730T	6-40-M73TS-010	
4	SCREW M2.5X6.3 K BZ ICT	6-35-B2125-6R0	
5	MAIN BOARD V3.0A M735T	6-77-M7350-D03A	
6	W/ID HED ASS'Y M730T	6-40-M73TS-021	
7	W/ID HED ASS'Y M730T	6-31-M72RN-101	
8	DUMMY NEW CARD PC+ABS T120R	6-42-T12R3-011	
9	W/ID HED ASS'Y M730T	6-40-M73TS-080	
10	W/ID HED ASS'Y M730T	6-87-M72SS-4M6	
11	W/ID HED ASS'Y M730T	6-87-M72SS-042	
12	W/ID HED ASS'Y M730T	6-87-M72SS-50P2	
13	W/ID HED ASS'Y M730T	6-40-M72SS-051	
14	W/ID HED ASS'Y M730T	6-40-M73TS-040	
15	W/ID HED ASS'Y M730T	6-88-M76S1-B110	
16	W/ID HED ASS'Y M730T	6-88-L39T1-5300	
17	SCREW M2.5X6.3 K1 NI ICT NY	6-35-B1120-3RA	
18	MS200 K/B CONN MYLAR	6-40-M52GS-060	
19	MULTI I/O BOARD V3.0A (V3.0M730T)	6-77-M73T1-D03A	
20	MULTI I/O BOARD V3.0 (V3.0M730T)	6-77-M73T1-D03A-1	
21	W/ID HED ASS'Y M730T	6-88-M72SN-720	(OPTION)
22	W/ID HED ASS'Y M730T	6-88-M57N9-4200	(OPTION)
23	W/ID HED ASS'Y M730T	6-43-M72SU-010	(OPTION)
24	W/ID HED ASS'Y M730T	6-40-M73TS-0D0	
25	W/ID HED ASS'Y M730T	6-43-M73T2-011	
26	W/ID HED ASS'Y M730T	6-23-22015-P2C	
27	W/ID HED ASS'Y M730T	6-40-M73TS-0A0	
28	W/ID HED ASS'Y M730T	6-43-M73T0-011-1	
29	W/ID HED ASS'Y M730T	6-23-M73T1-041	
30	W/ID HED ASS'Y M730T	6-77-M7318-D06A	
31	W/ID HED ASS'Y M730T	6-40-M73TS-060	
32	W/ID HED ASS'Y M730T	6-47-M7318-010	
33	W/ID HED ASS'Y M730T	6-88-M55S2-7000	(OPTION)
34	W/ID HED ASS'Y M730T	6-88-M72T2-4240	(OPTION)
35	W/ID HED ASS'Y M730T	6-88-M72T2-4241	(OPTION)
36	W/ID HED ASS'Y M730T	6-33-M73T3-021	
37	W/ID HED ASS'Y M730T	6-23-SM73T-022	
38	W/ID HED ASS'Y M730T	6-77-M73T1-D02	
39	W/ID HED ASS'Y M730T	6-33-M73T3-010	
40	W/ID HED ASS'Y M730T	6-23-SM73T-011	
41	W/ID HED ASS'Y M730T	6-79-M735T000-000	
42	W/ID HED ASS'Y M730T	6-79-M735T000-000	
43	W/ID HED ASS'Y M730T	6-45-M735T-010	
44	W/ID HED ASS'Y M730T	6-79-M730T000-010	
45	W/ID HED ASS'Y M730T	6-42-M73T3-102-1	
46	W/ID HED ASS'Y M730T	6-88-M5545-620	(OPTION)
47	W/ID HED ASS'Y M730T	6-88-M5545-390	(OPTION)
48	W/ID HED ASS'Y M730T	6-88-M73T5-3900	(OPTION)
49	W/ID HED ASS'Y M730T	6-39-M73T3-013-1	
	W/ID HED ASS'Y M730T	6-43-M72SB-010	
	W/ID HED ASS'Y M730T	6-31-M72SN-103	
	W/ID HED ASS'Y M730T	6-31-M72SS-102	
	W/ID HED ASS'Y M730T	6-42-M73TS-102-1	
	W/ID HED ASS'Y M730T	6-40-M72SS-040	
	W/ID HED ASS'Y M730T	6-47-M73TS-020	
	W/ID HED ASS'Y M730T	6-47-M73TS-010	
	W/ID HED ASS'Y M730T	6-40-M73TS-090	
	W/ID HED ASS'Y M730T	6-47-0019A-235	
	W/ID HED ASS'Y M730T	6-47-M73TS-030	

LCD 1 (M735T)



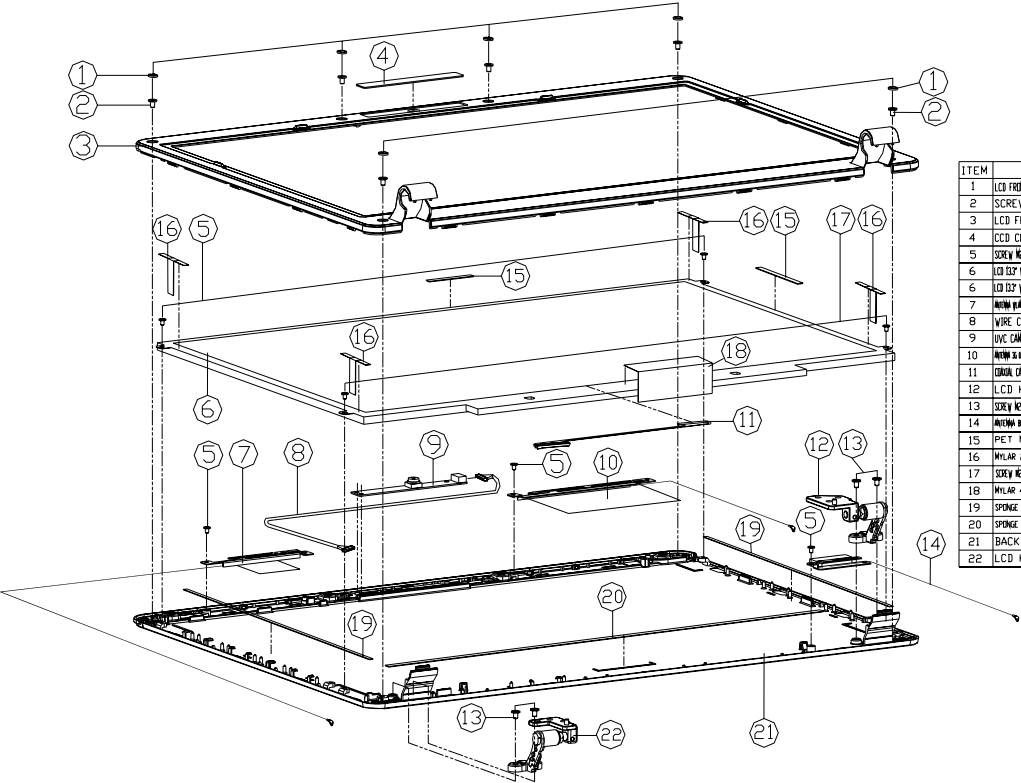
ITEM	PART NAME	PART NO	REMARK
1	LCD FRONT COVER SORRY HOLE RUBBER M735T	6-47-M72S1-021	
2	SCREW M2*3L 1 BK/2Z ICT NY	6-35-C6120-3R0	
3	LCD FRONT COVER MODULE M735T	6-39-M7351-011	
4	CCD COSMETIC PLATE PHMA M735T	6-42-M735T-010	W/CCD
5	SORRY HOLE 1 BK ICT GY-PATCH NY (145 140)	6-35-C2120-2R0	
6	LCD TOP PWA AU RESOLVED VLT GLARE PROXIED 3MM	6-50-G8230-G00	
6	LCD TOP PWA CHINESE M735T-18 GLARE PROXIED 3MM	6-50-G8230-D00	
7	ANTENNA BLUETOOTH 2.4G PWA (BUILT IN) 20MM M735T	6-23-7M735-020	(OPTION)
8	WIRE CABLE FOR CCD TO MB SP M735T	6-43-M735T-010	
9	UVIC CAMERA BISON FIX BIC20047-000 60*44.5	6-88-M735C-4910	
10	ANTENNA 3.5MM/4.0MM/5.0MM PWA 3.5 (BUILT IN) 20MM M735T	6-23-7M735-050	(OPTION)
11	CANAL CABLE (FROM FOR AU RESOLVED VLT GLARE PROXIED 3MM)	6-43-M7351-021	
12	LCD HINGE R SK7+2N M735T	6-33-M7351-021	
13	SORRY HOLE 1 BK ICT GY-PATCH NY (145 140)	6-35-C2125-3R0	
14	ANTENNA BLUETOOTH 2.4G PWA (BUILT IN) 20MM M735T	6-23-7M735-010	
15	PET MYLAR 40*3*0.3T M735T	6-40-M7351-030	
16	MYLAR 20*40*0.1T (FR83 + 3M-467) M735T	6-40-M7351-010	
17	MYLAR 40*30*0.1T (FR83 + 3M-467) M735T	6-40-M7351-020	
18	SPONGE 18*30*0.1T (FR435+3M-467) M735T	6-47-0019A-185	
19	SPONGE 28*30*0.1T (FR435+3M-467) M735T	6-47-0019A-265	
20	BACK COVER MODULE M735T	6-39-M7351-021	
21	LCD HINGE L SK7+2N M735T	6-33-M7351-031	

Figure A - 11
LCD 1
(M735T)

Part Lists

LCD 2 (M735T)

Figure A - 12
LCD 2
(M735T)



ITEM	PART NAME	PART NO	REMARK
1	LCD FRONT COVER SCREW HOLE RUBBER W/205	6-47-M72S1-021	
2	SCREW M2*3L I BK/Z ICT NY	6-35-C6120-3R0	
3	LCD FRONT COVER MODULE M735T	6-39-M7351-011	
4	CCD COSMETIC PLATE PMMA M735T	6-42-M7351-010	W/CCD
5	SCREW NICKEL I BL ICT GY-PATCH NY (1-45 3-0)	6-35-C2120-2R0	
6	LCD TSP VISA AL RECEIVED VIT CLARE TIRE ALID 30MM	6-50-G8236-G00	
7	WIRE CABLE FOR CCD TO MB SP M735T	6-23-7M735-020	(OPTION)
8	WIRE CABLE FOR CCD TO MB SP M735T	6-43-M7351-010	
9	UV-C CAMERA BISON FOR DISINFECTION 200 60045	6-88-M735C-4910	
10	WIRE CABLE FOR CCD TO MB SP M735T	6-23-7M735-050	(OPTION)
11	CABLE CABLE FOR AL RECEIVED VIT CLARE TIRE ALID 30MM	6-43-M7351-011	
12	LCD HINGE R SK7*ZN M735T	6-33-M7351-021	
13	SCREW NICKEL I BL ICT GY-PATCH NY (1-45 3-45)	6-35-C2125-3R0	
14	WIRE CABLE FOR CCD TO MB SP M735T	6-23-7M735-010	
15	PET MYLAR 40*34*0.3T M735T	6-40-M7351-030	
16	MYLAR 20*46*0.1T (1R83 + 3M-467) M735T	6-40-M7351-010	
17	SCREW NICKEL I BL ICT GY-PATCH NY (1-45 3-45)	6-35-C2125-2R0	
18	MYLAR 40*34*0.1T (1R83 + 3M-467) M735T	6-40-M7351-020	
19	SPONGE 180*180*15T (1R83+3M-467) M735T	6-47-0019A-184	
20	SPONGE 260*180*15T (1R83+3M-467) M735T	6-47-0019A-264	
21	BACK COVER MODULE M735T	6-39-M7351-021	
22	LCD HINGE L SK7*ZN M735T	6-33-M7351-031	

HDD (M735T)

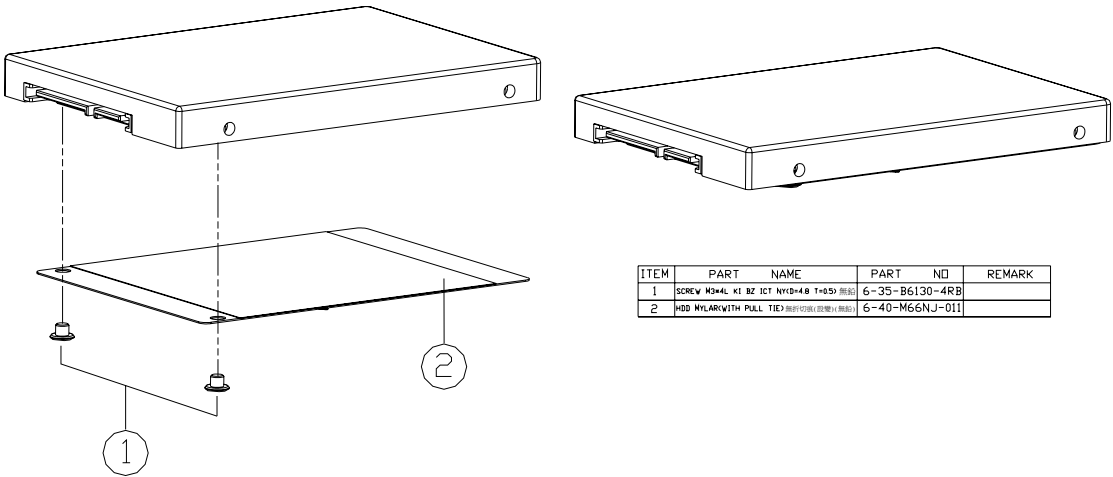
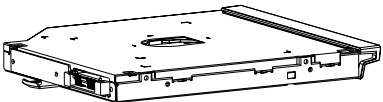
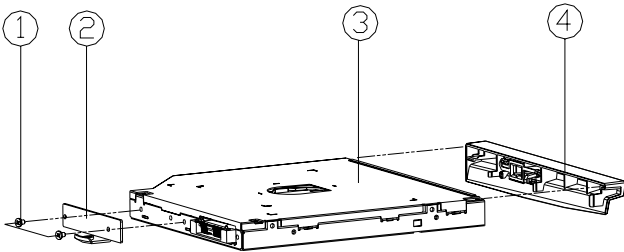


Figure A - 13
HDD
(M735T)

Part Lists

COMBO (M735T)

Figure A - 14
COMBO
(M735T)



ITEM	PART NAME	PART NO	REMARK
1	SCREW M2X3L K1 NI 1CT GTY-PATCH	6-35-B1120-3RE	
2	CD-ROM LOCK BRACKET SECC M720S	6-33-M72S2-010	
3	SATA DVD COMBO 5 1/4" 24X/8X 12.7MM TSST	6-85-90724-C01	
3	SATA DVD COMBO 5 1/4" 24X/8X 12.7MM TSST	6-85-90724-T01	
4	COMBO G BEZEL MODULE M730T	6-42-M73TX-101-1	

DVD-Dual Drive (M735T)

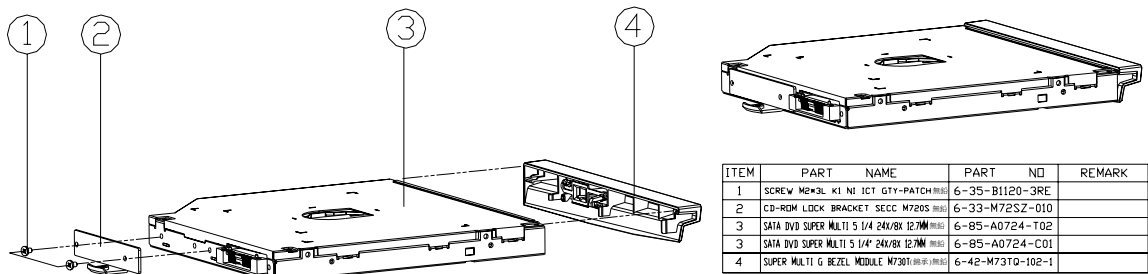


Figure A - 15
DVD-Dual Drive
(M735T)

Part Lists

Appendix B: Schematic Diagrams

This appendix has circuit diagrams of the *M730T/M735T* notebook's PCB's. The following table indicates where to find the appropriate schematic diagram.

Table B - 1
**Schematic
Diagrams**

Diagram - Page	Diagram - Page	Diagram - Page
<i>System Block Diagram - Page B - 2</i>	<i>ICH9-M 3/5 - GPIO, PWR Management - Page B - 16</i>	<i>Power 1.5VS, 1.05VS, 3.3V, 5V - Page B - 30</i>
<i>Intel Penryn (Socket-P) 1/2 - Page B - 3</i>	<i>ICH9-M 4/5 - Power - Page B - 17</i>	<i>Power 1.8V, 0.9VSM - Page B - 31</i>
<i>Intel Penryn (Socket-P) 2/2 - Page B - 4</i>	<i>ICH9-M 5/5 - GND - Page B - 18</i>	<i>Power VCORE - Page B - 32</i>
<i>Cantiga 1/6 - Host - Page B - 5</i>	<i>Clock Generator - Page B - 19</i>	<i>Power AC-IN, Charger - Page B - 33</i>
<i>Cantiga 2/6 - VGA, CRT - Page B - 6</i>	<i>Multi I/O, ODD, CCD, BT, TPM - Page B - 20</i>	<i>Multi I/O Board 1/2 - Page B - 34</i>
<i>Cantiga 3/6 - DDR - Page B - 7</i>	<i>New Card, Mini PCIE - Page B - 21</i>	<i>Multi I/O Board 2/2 - Page B - 35</i>
<i>Cantiga 4/6 - Power - Page B - 8</i>	<i>LED, FAN, TP, FP, USB - Page B - 22</i>	<i>Finger Printer Board - Page B - 36</i>
<i>Cantiga 5/6 - Power - Page B - 9</i>	<i>JMB385 Card Reader - Page B - 23</i>	<i>Click Board - Page B - 37</i>
<i>Cantiga 6/6 - GND - Page B - 10</i>	<i>PCI-E LAN RTL8111C - Page B - 24</i>	<i>M730T ODD Bridge Board - Page B - 38</i>
<i>DDRII CHANNEL A - Page B - 11</i>	<i>Audio Codec ALC662 - Page B - 25</i>	<i>M730T Audio Board - Page B - 39</i>
<i>DDRII CHANNEL B - Page B - 12</i>	<i>Audio AMP2056 - Page B - 26</i>	<i>Power Sequence Diagram - Page B - 40</i>
<i>Panel, Inverter, CRT - Page B - 13</i>	<i>KBC-ITE IT8512E - Page B - 27</i>	<i>Power Sequence v3.0 - Page B - 41</i>
<i>ICH9-M 1/5 - SATA - Page B - 14</i>	<i>System Power, LED BKLT - Page B - 28</i>	
<i>ICH9-M 2/5 - PCIE, PCI, USB - Page B - 15</i>	<i>Power VDD3, VDD5 - Page B - 29</i>	

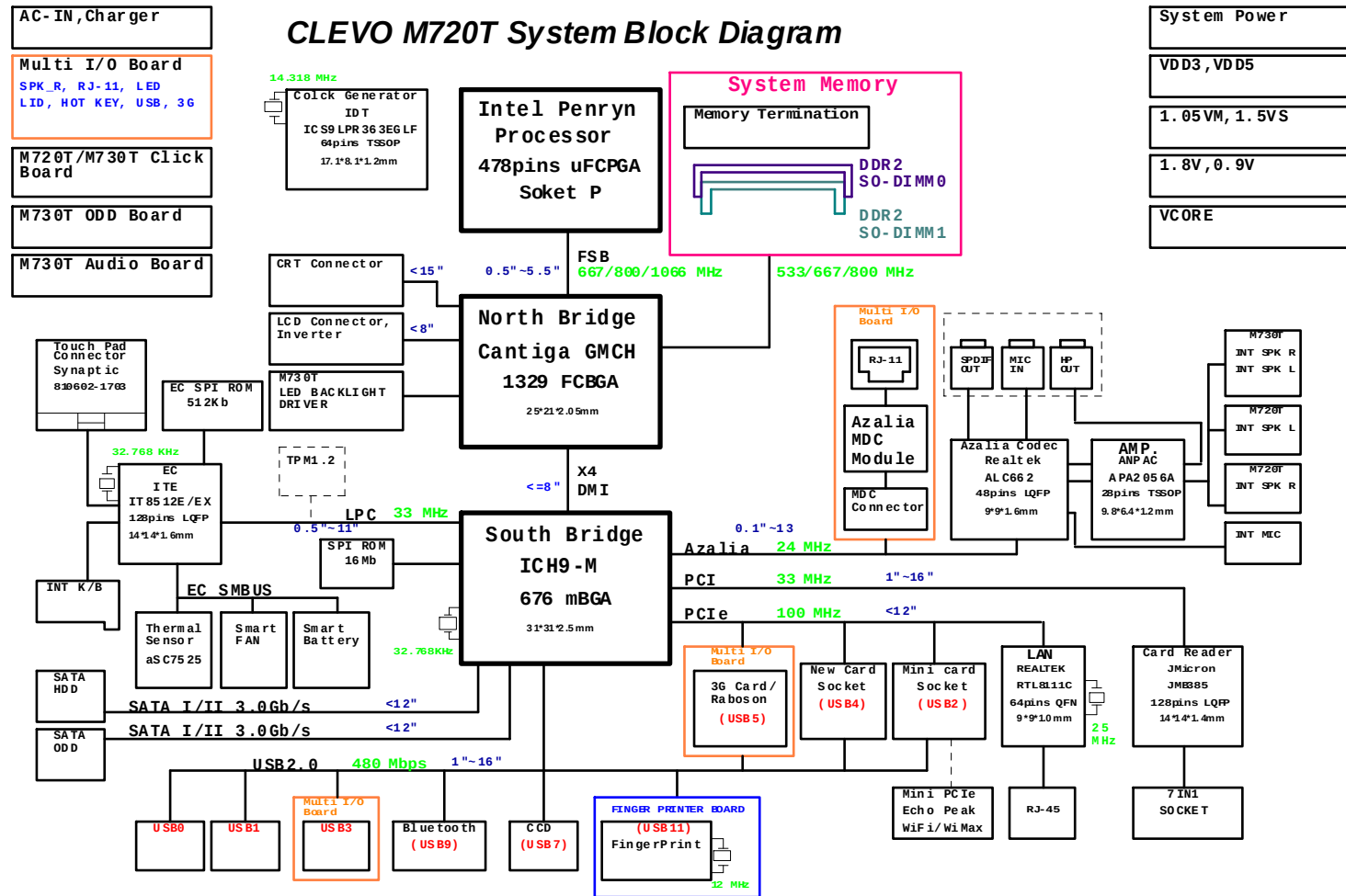


Version Note

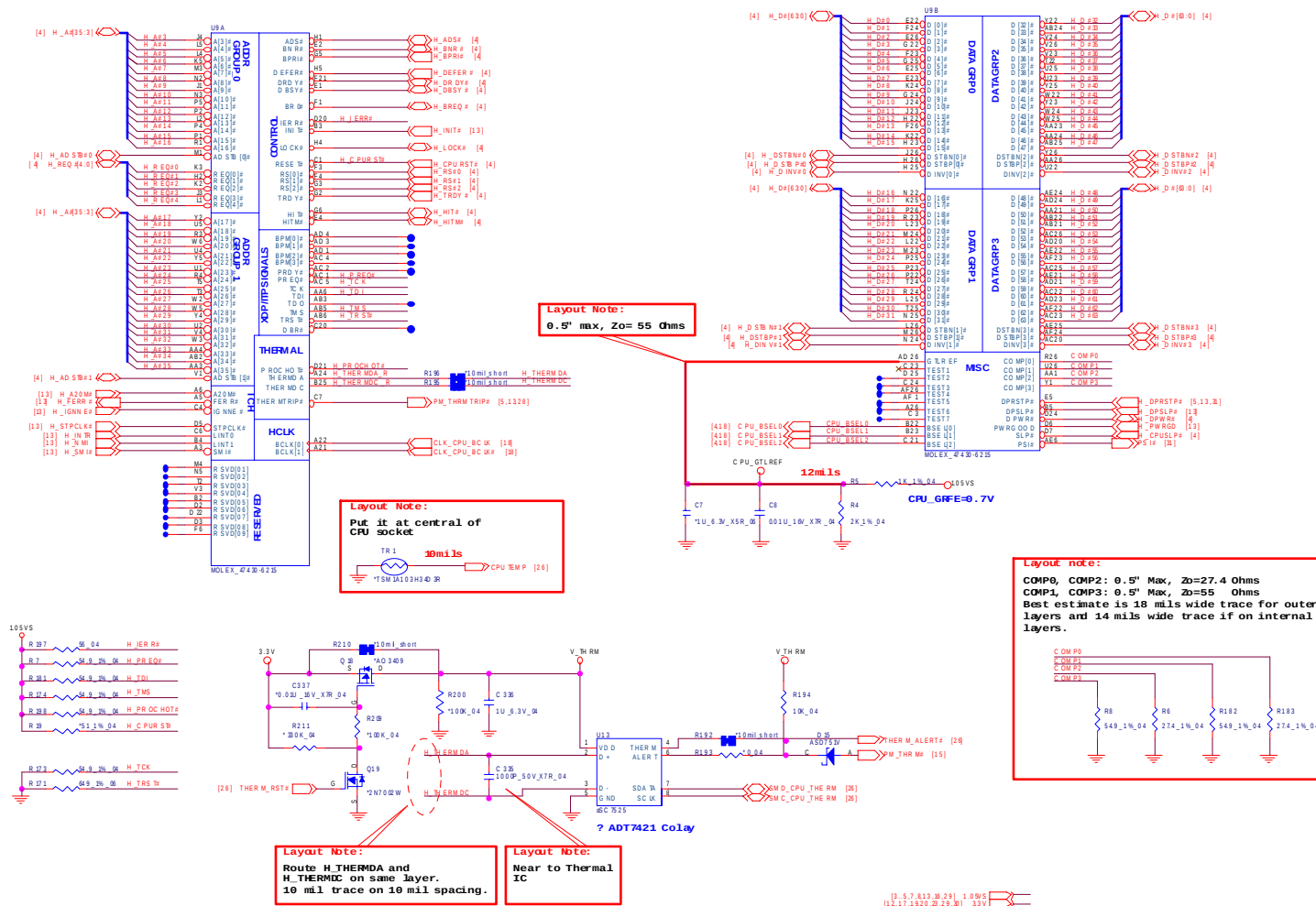
The schematic diagrams in this chapter are based upon version 6-7P-M72T6-005. If your mainboard (or other boards) are a later version, please check with the Service Center for updated diagrams (if required).

System Block Diagram

Sheet 1 of 40
System Block
Diagram



Sheet 2 of 40
Intel Penryn
(Socket-P) 1/2

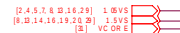
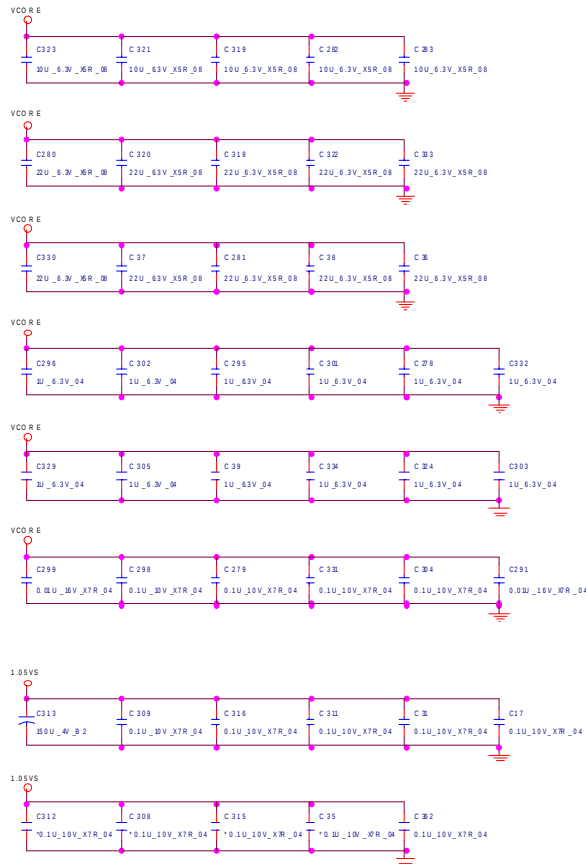
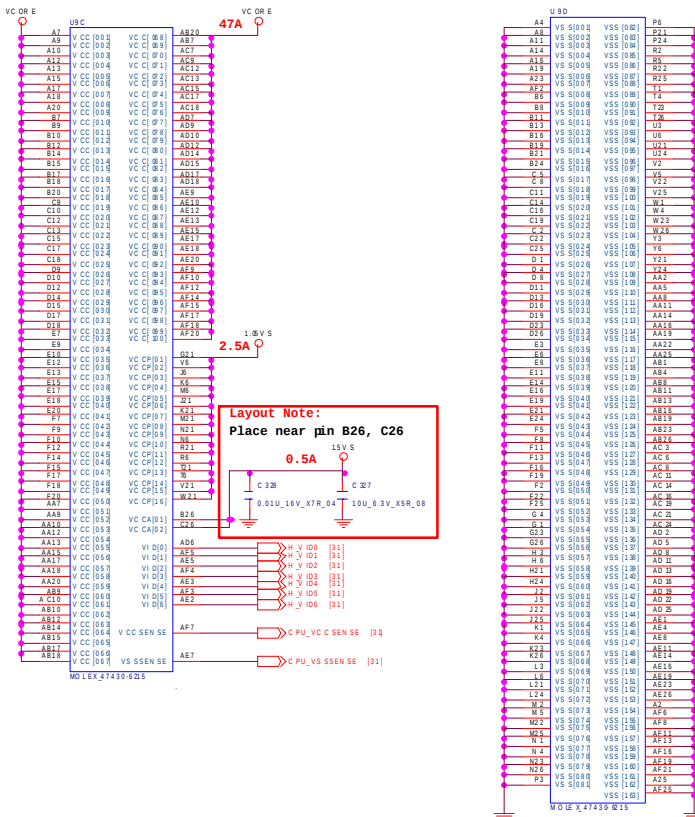


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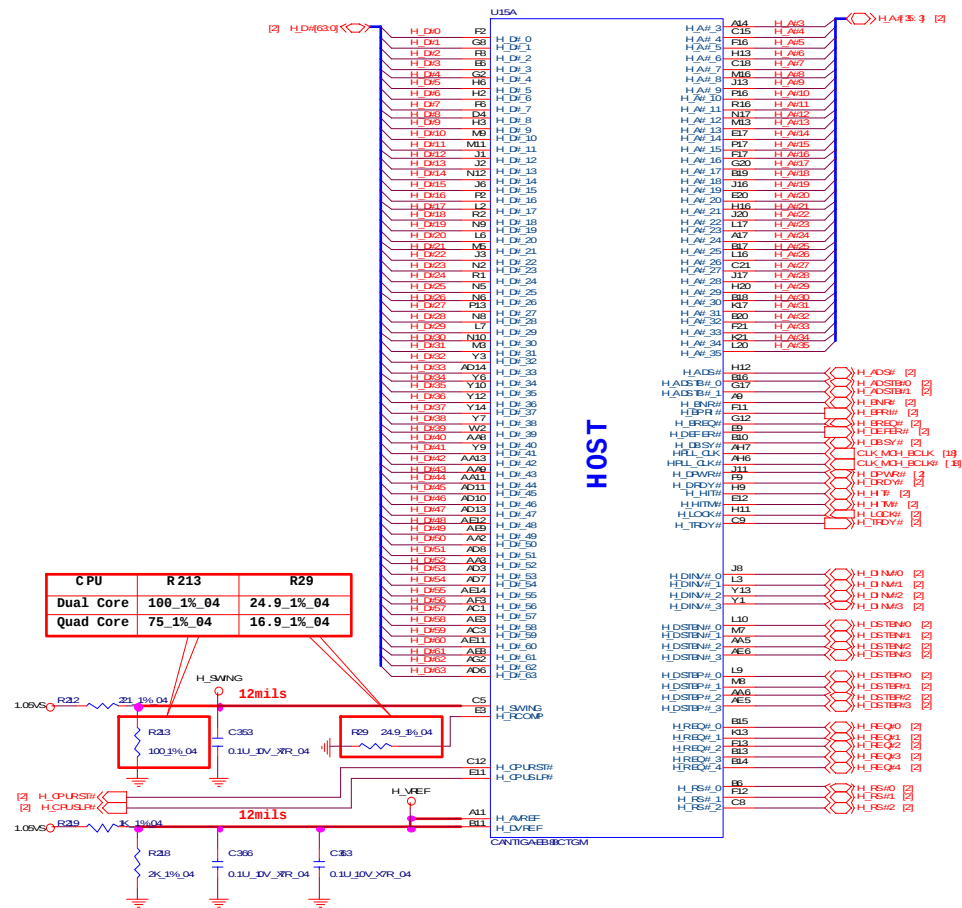
Intel Penryn (Socket-P) 2/2

B.Schematic Diagrams

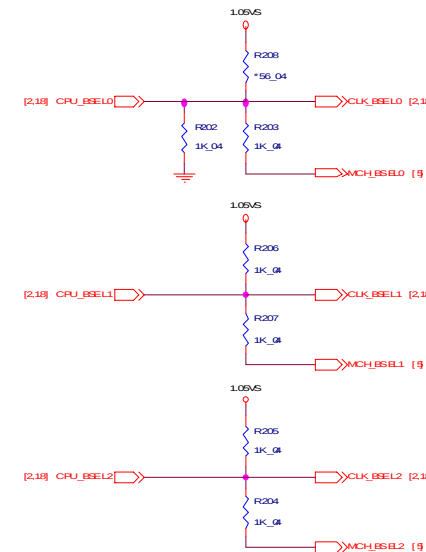
Sheet 3 of 40
Intel Penryn
(Socket-P) 2/2



Cantiga 1/6 - Host



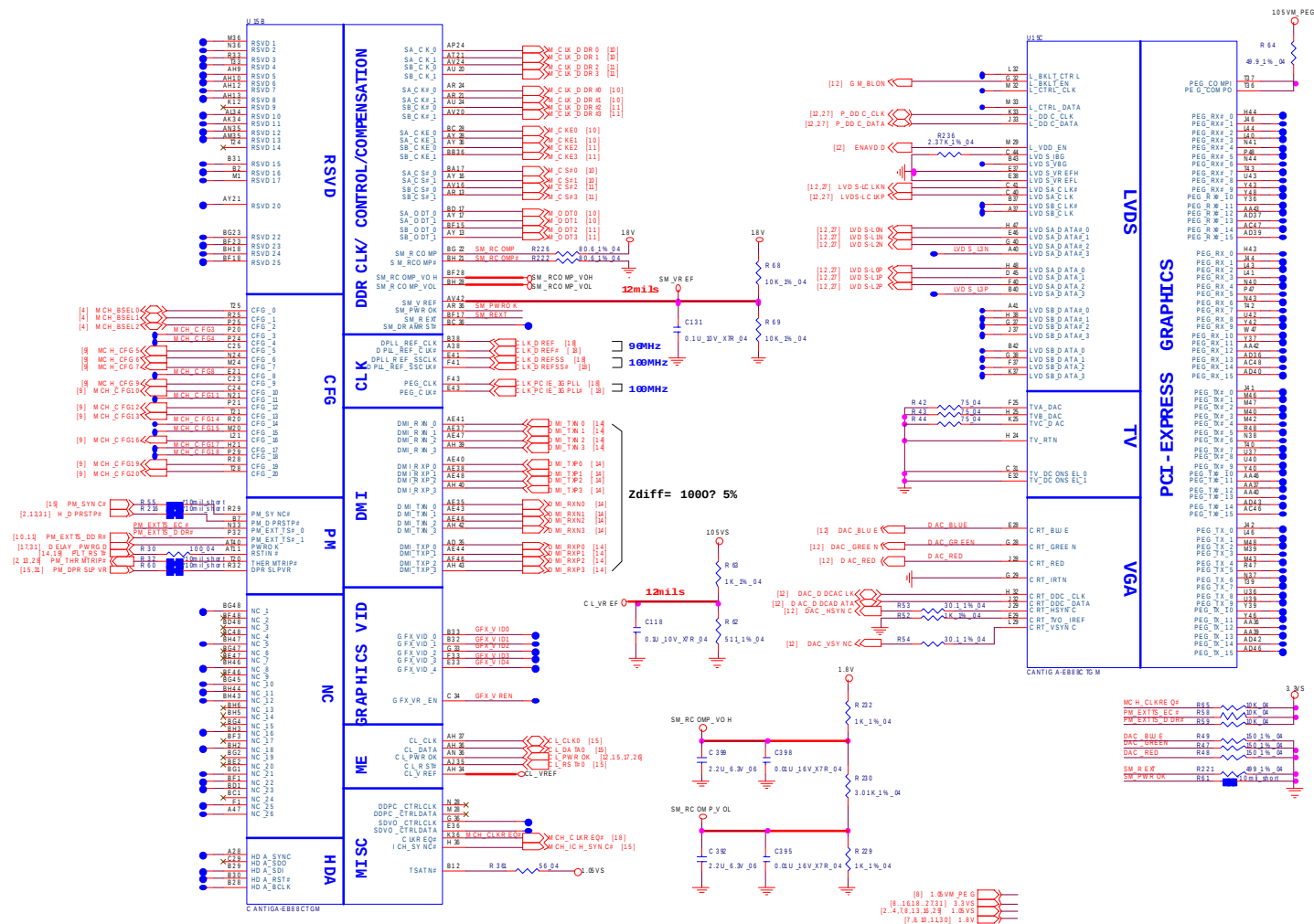
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	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
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200	L	H	L
166	L	H	H



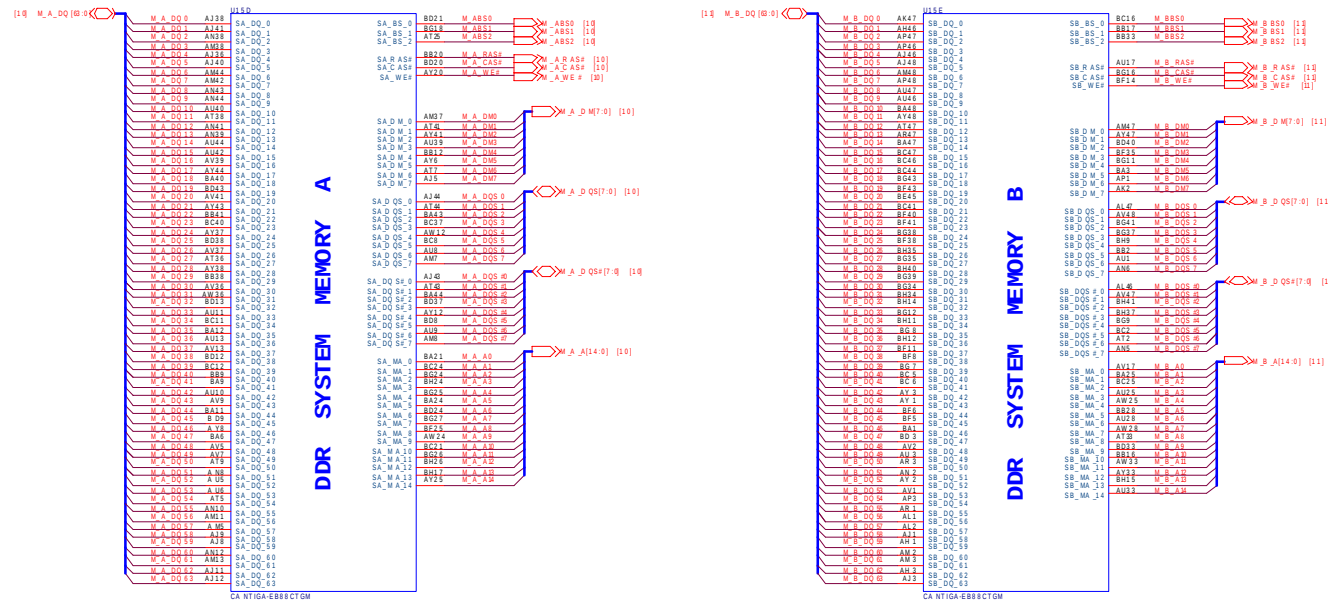
Sheet 4 of 40
Cantiga 1/6 - Host

B.Schematic Diagrams

Sheet 5 of 40
Cantiga 2/6 -
VGA, CRT

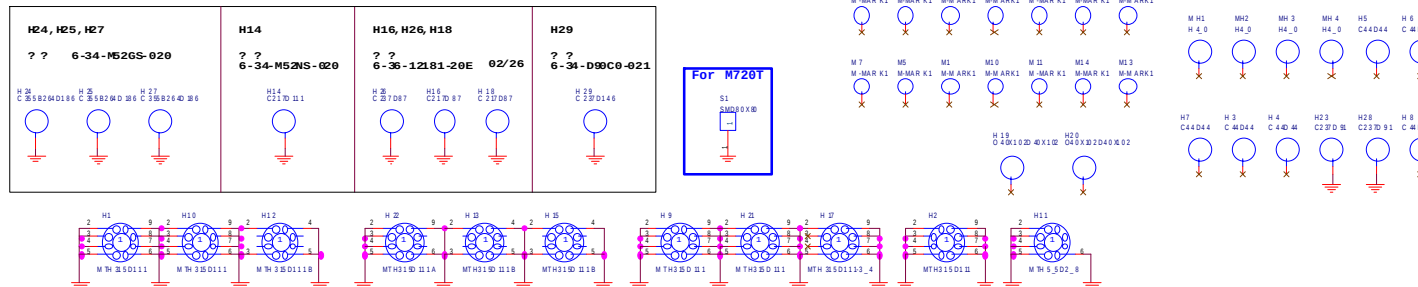


Cantiga 3/6 - DDR

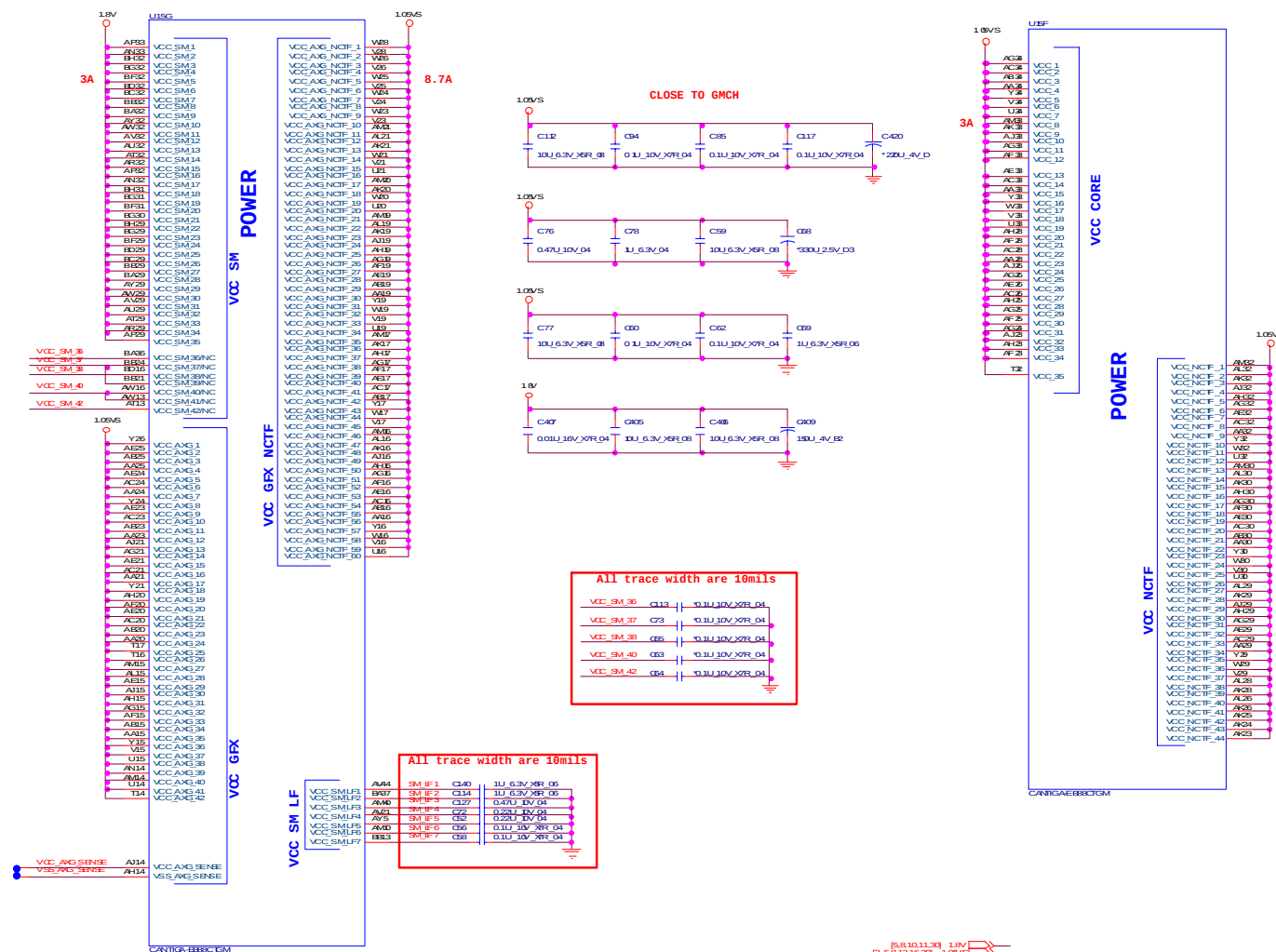


Sheet 6 of 40
Cantiga 3/6 -DDR

B.Schematic Diagrams



B - 8 Cantiga 4/6 - Power



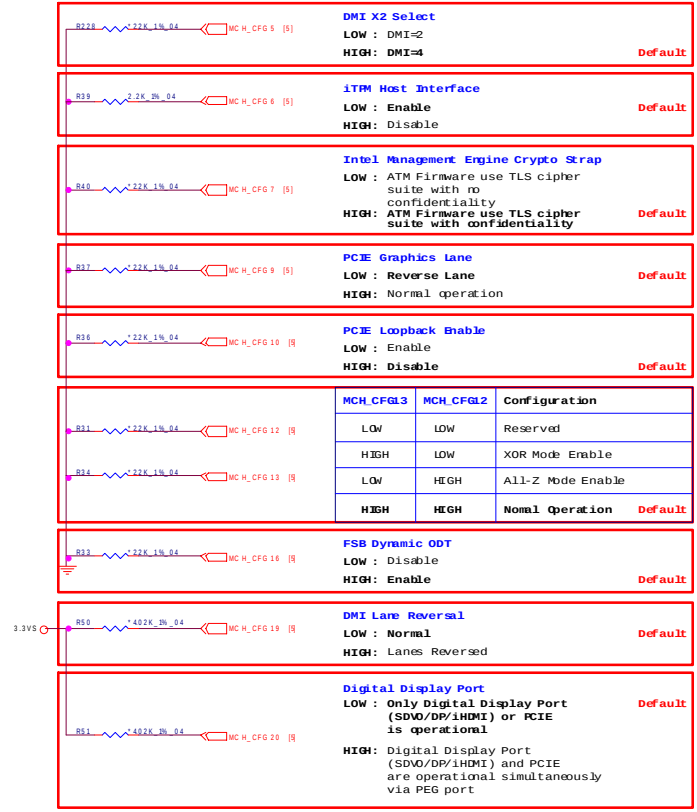
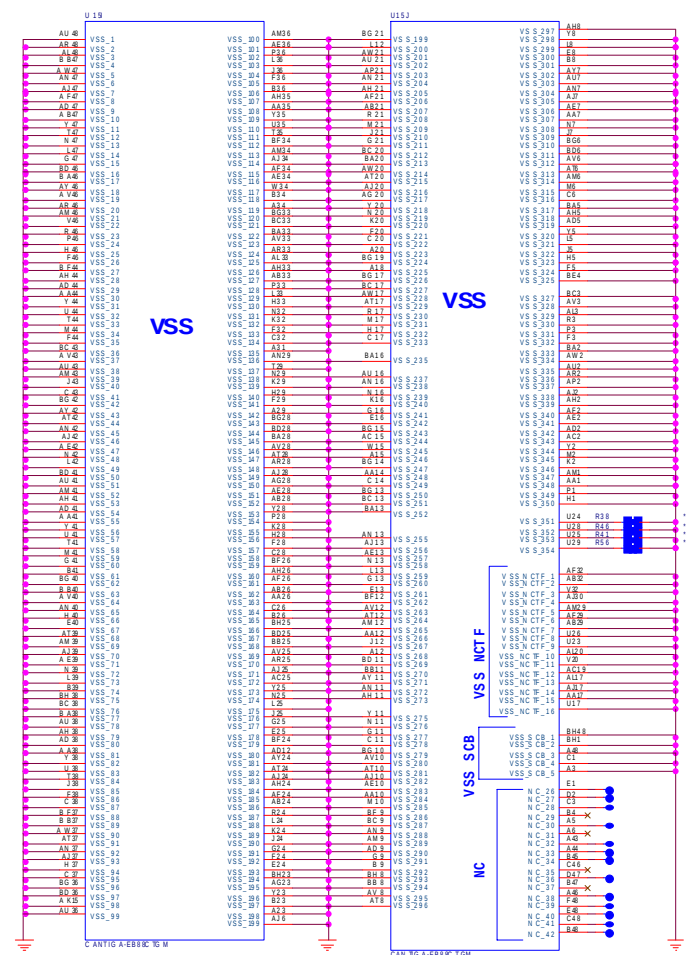
Sheet 8 of 40
Cantiga 5/6 - Power



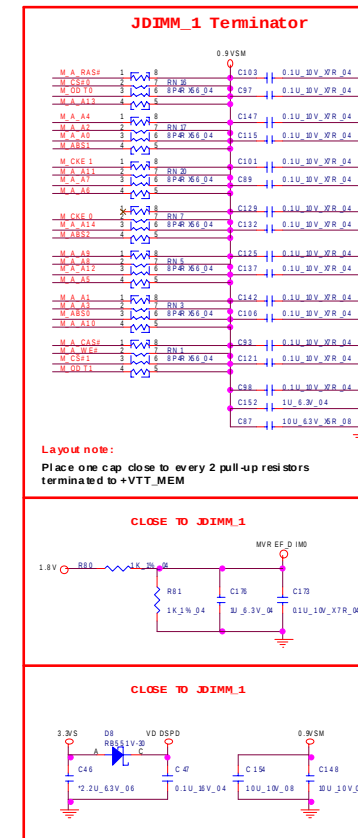
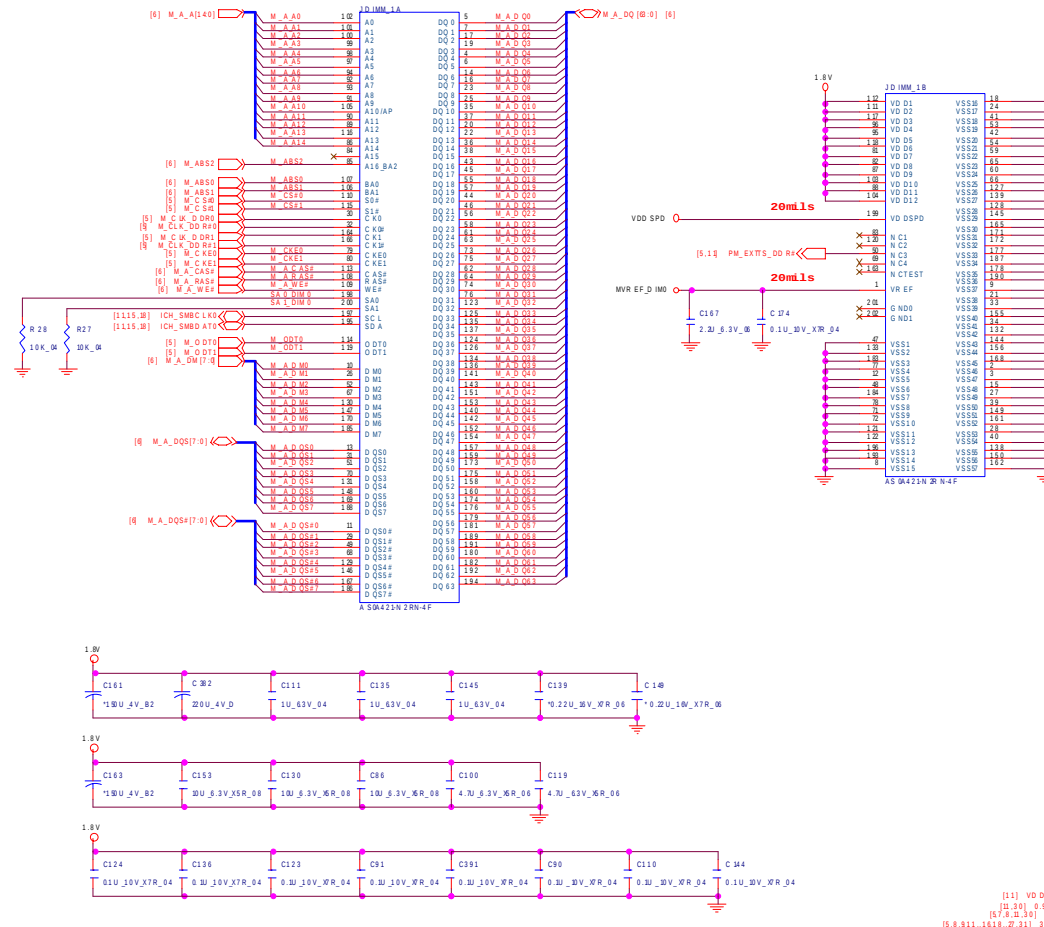
Schematic Diagrams

Cantiga 6/6 - GND

Sheet 9 of 40
Cantiga 6/6 - GND



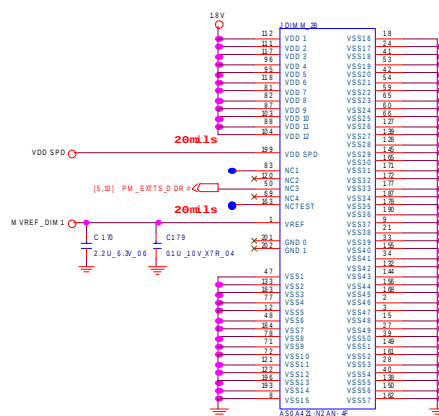
SO-DIMM 1



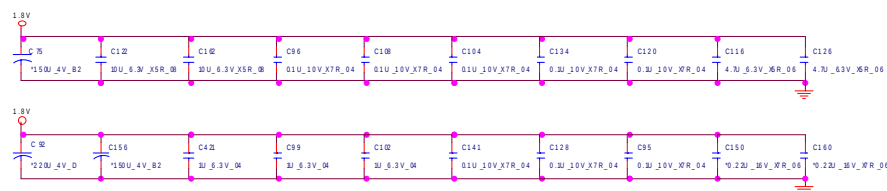
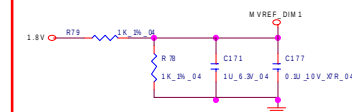
SO-DIMM 2

[illegible]

JDIMM_2 is placed farther from the GMCH than JDIMM_1

[illegible]

CLOSE TO JDIMM_2



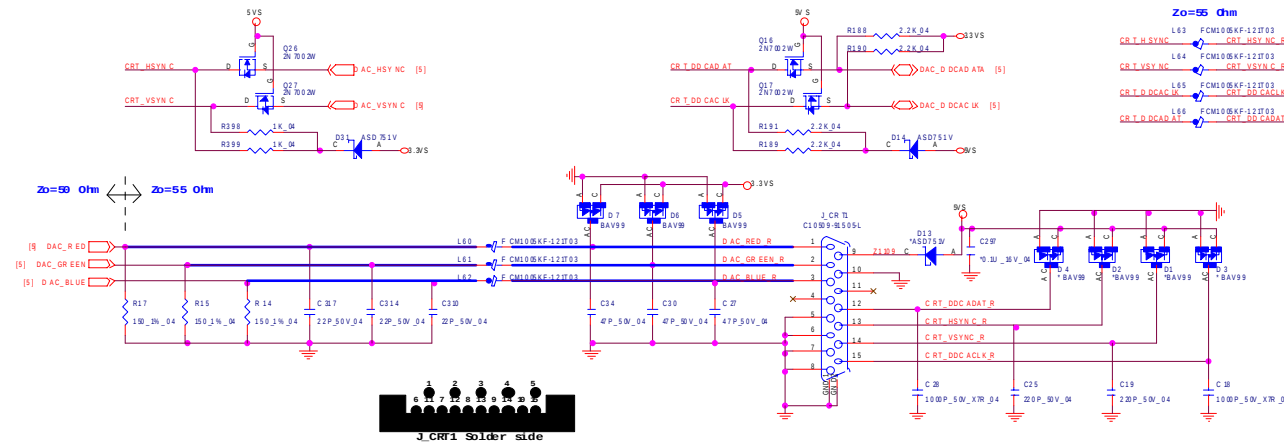
```

[10,30] 0.9VSM
[10] VD DSPD
[57,8,30,30] 1.8V
[58..1012..1618..27,31] 3.3/S

```

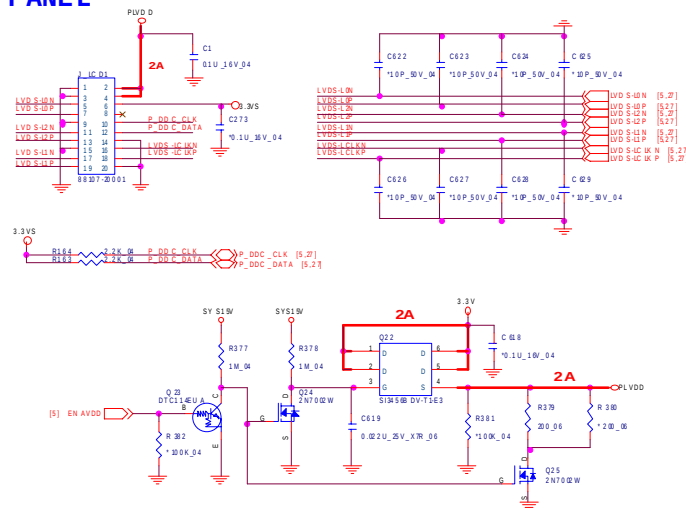
Panel, Inverter, CRT

CRT

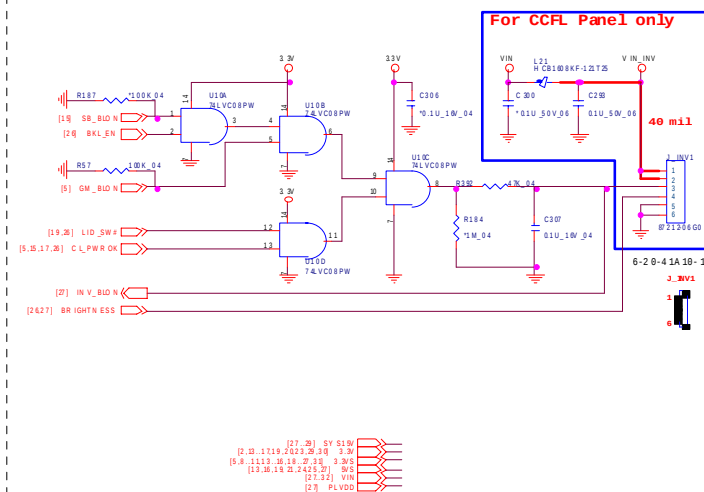


Sheet 12 of 40
Panel, Inverter,
CRT

PANEL

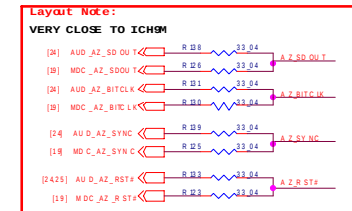


INVERTER CONNECTOR



B.Schematic Diagrams

Sheet 13 of 40
ICH9-M 1/5 - SATA



	Boot BIOS Strap		
	Strap	PCI_GNT#0	SPI_CS1#
SPI	01	Stuff	No stuff
PCI	10	No stuff	Stuff
IPC(default)	11	No stuff	No stuff

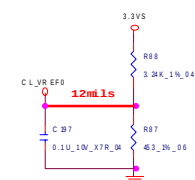
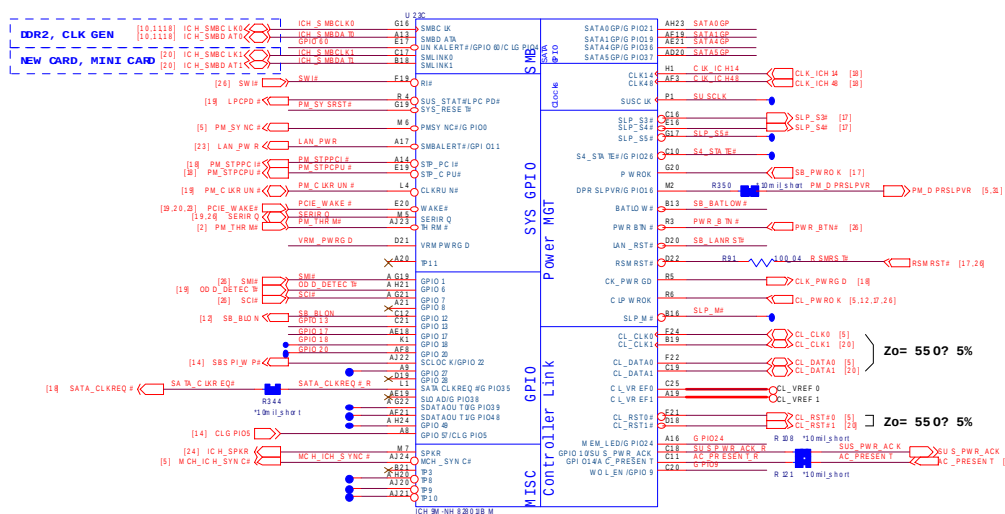
PC1_GNT#3	A16 swap override Strap
Stuff	Enable
No stuff	Disable Default

SPI_SI	iTQM Enable
Stuff	Enable Default
No stuff	Disable

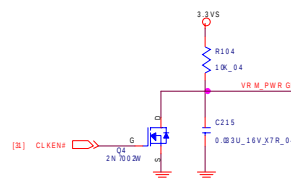
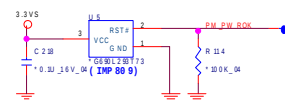
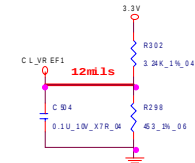
CLGPI05	iTPM Enable
HIGH	Enable Default
LOW	Disable



Sheet 15 of 40
ICH9-M 3/5 - GPIO,
PWR Mangement

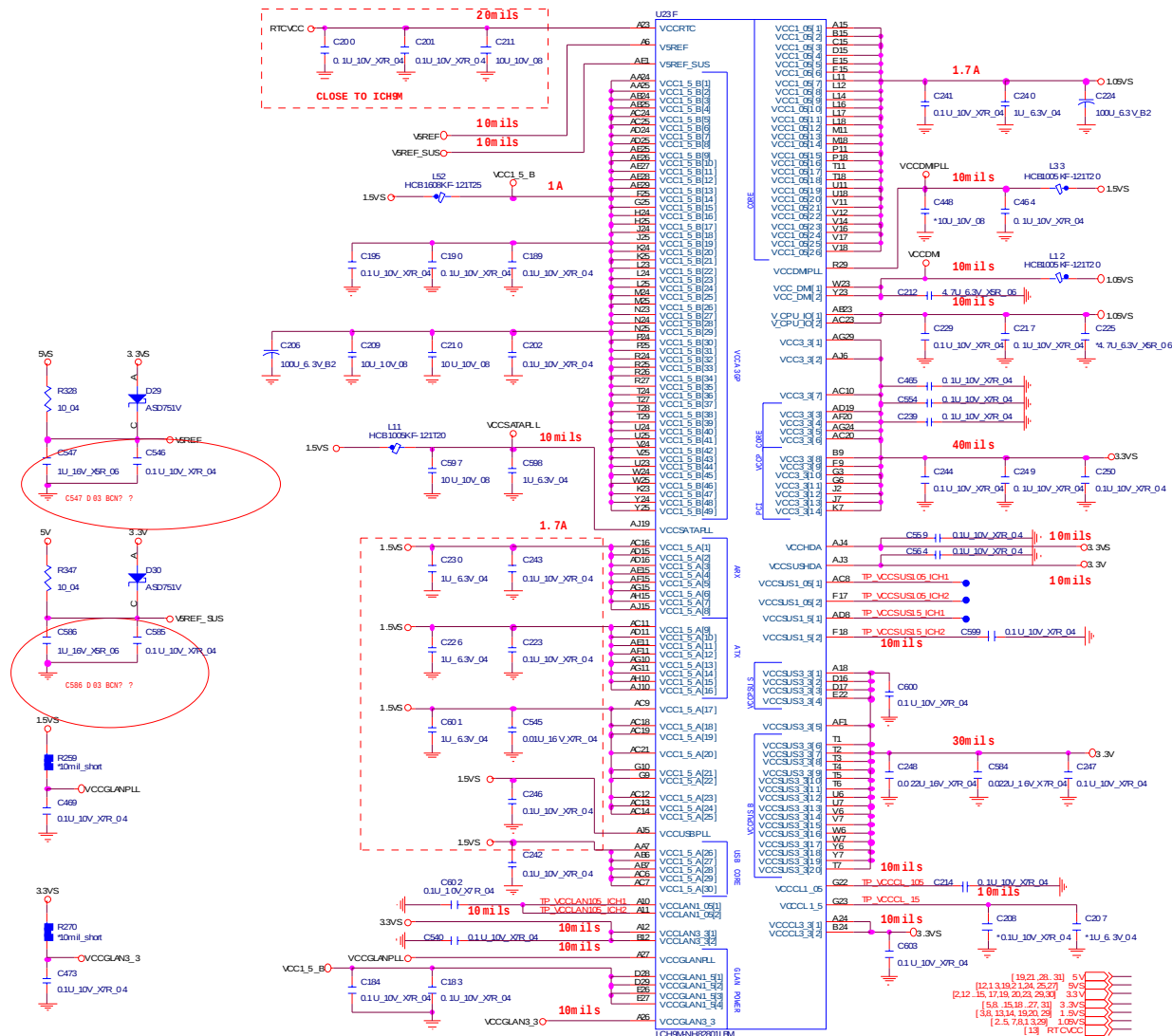


CL_VRET0/1=0.405V



[2,12..14,16,17,19,20,23,29,30] 3.3V
[5,9,14,16,19,27,31] 3.3V

ICH9-M 4/5 - Power



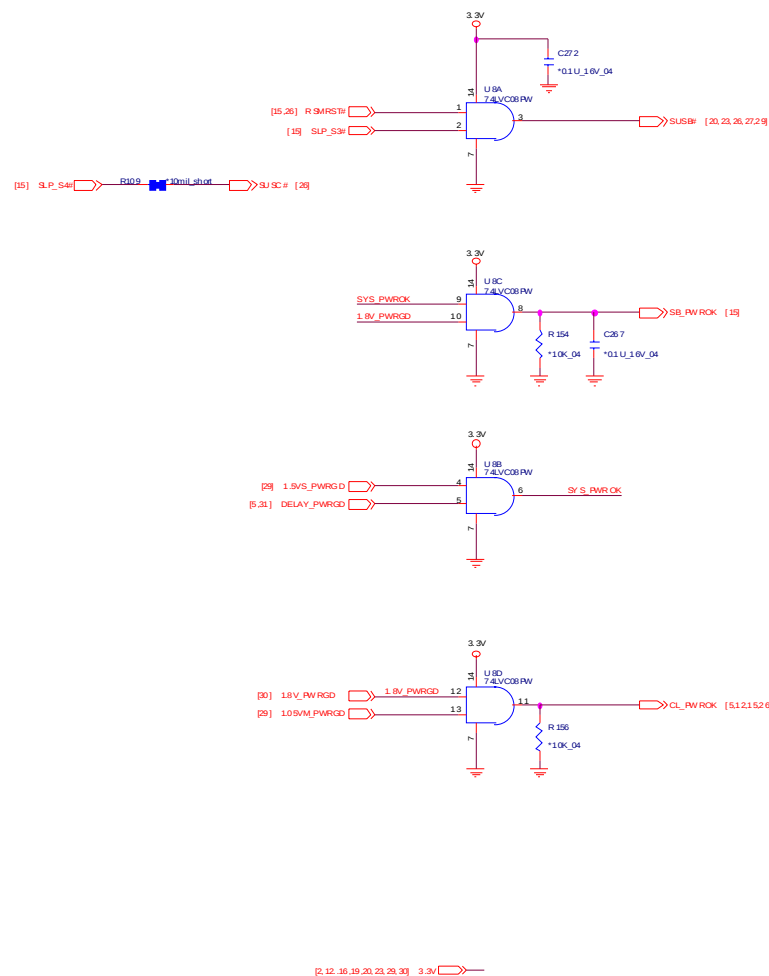
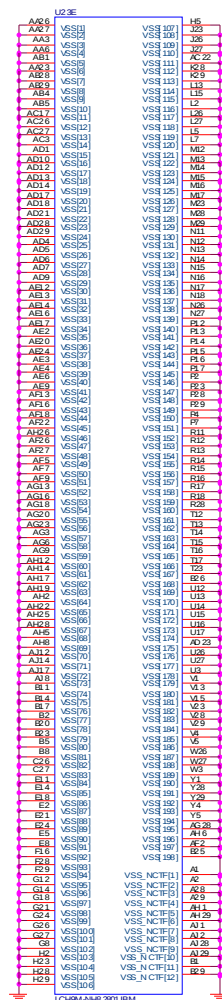
Sheet 16 of 40
ICH9-M 4/5 - Power

B.Schematic Diagrams

ICH9-M 5/5 - GND

B.Schematic Diagrams

Sheet 17 of 40
ICH9-M 5/5 - GND



CLOCK GENERATOR



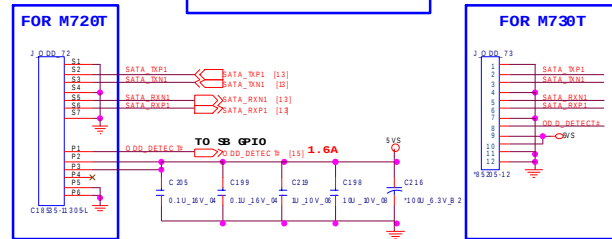
Sheet 18 of 40
Clock Generator

Schematic Diagrams

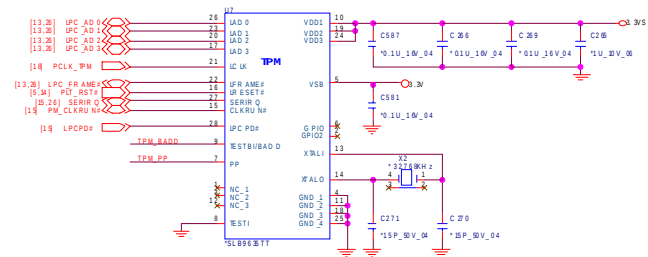
Multi I/O, ODD, CCD, BT, TPM

Sheet 19 of 40
Multi I/O, ODD,
CCD, BT, TPM

SATA ODD



TPM 1.2

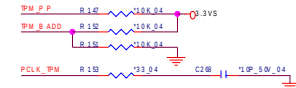


Asserted before entering S3

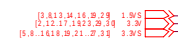
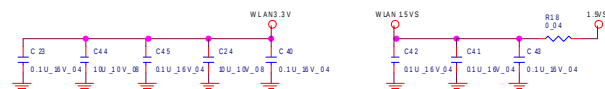
LPC reset timing:

LPCPD# inactive to LRSW# inactive 32-96us

TPM_PP	HI : ACCESS
TPM_B	LOW : NORMAL (Default)
TPM_A	HI : 4E / 4F h (Default)
TPM_B	LOW : 2E / 2F h

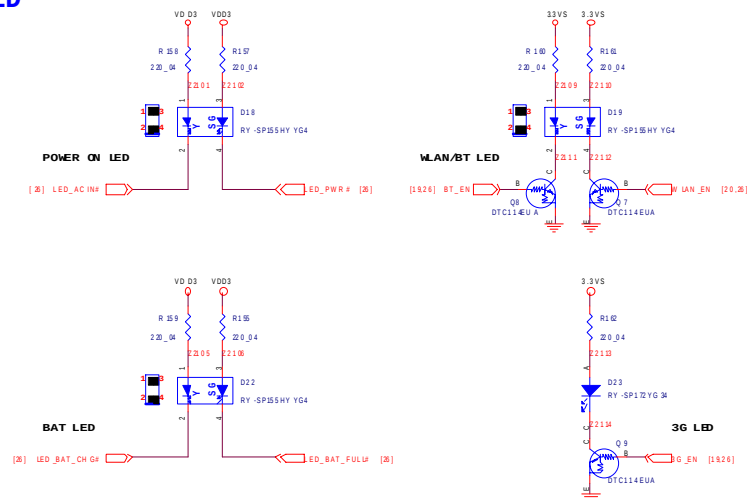


NEW CARD

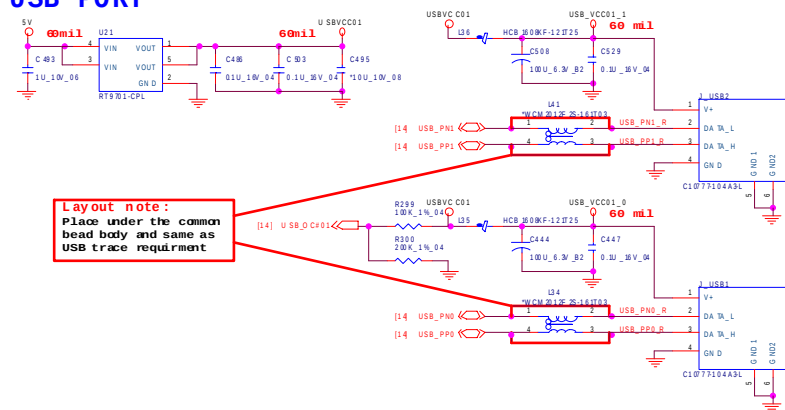


B.Schematic Diagrams

LED

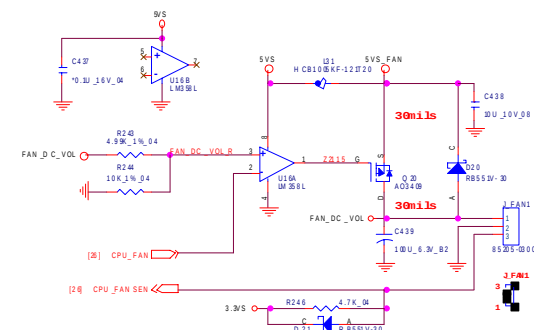


USB PORT

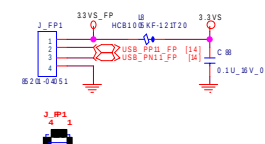


Layout note:
Place under the common
bead body and same as
USB trace requirement.

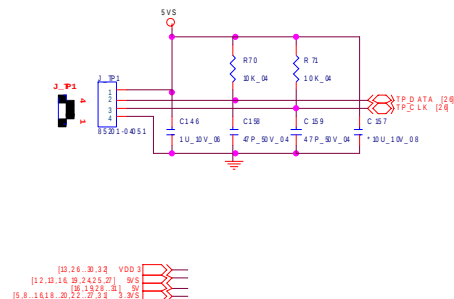
FAN CONTROL



FP CONN

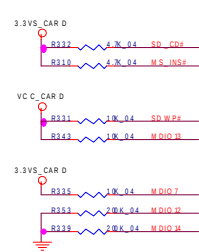


CLICK CONN

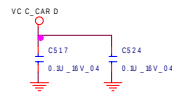
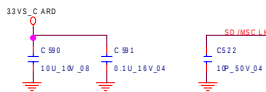


JMB385 Card Reader

JMB385 CARD READER

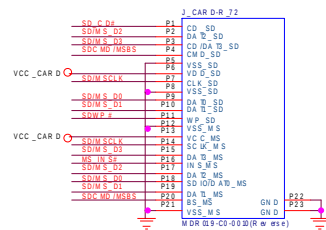


	HIGH	LOW
MDI07	On Board	Adi-in Card
MDI012	CRI_PCTLN High Active	CRI_PCTLN Low Active
MDI014	CRI_LEDN High Active	CRI_LEDN Low Active

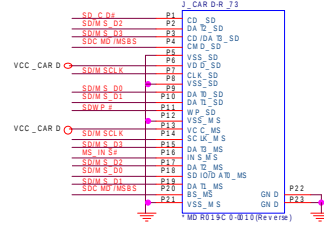


Near Cardreader COM

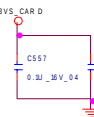
M720T Card Reader Connector



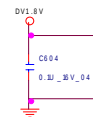
M730T Card Reader Connector



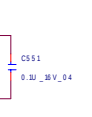
Layout note:
Very closed between
pin 19 and pin 20



Layout note:
Very closed to pin 5 (Trace width/length:
20mil / <120mil)



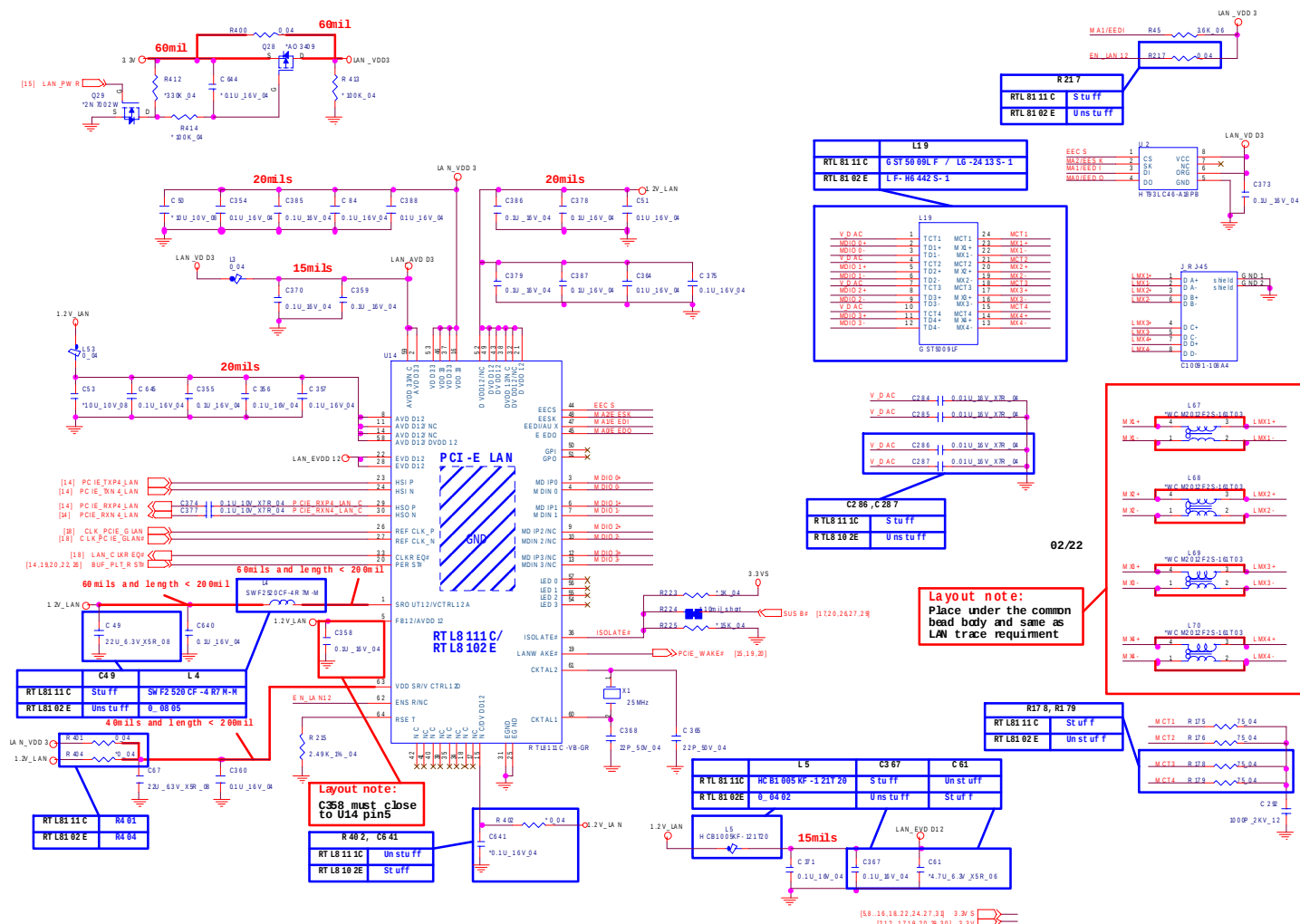
Layout note:
Very closed between
pin 10



[5.8, 18, 20, 23, 27, 31] 3.3V5

PCI-E LAN RTL8111C

B.Schematic Diagrams

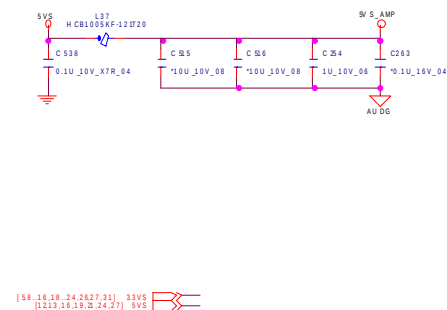
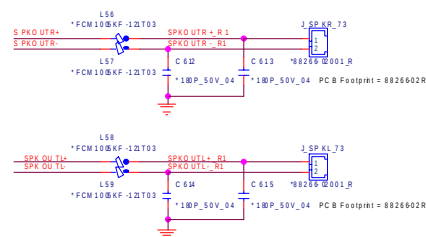
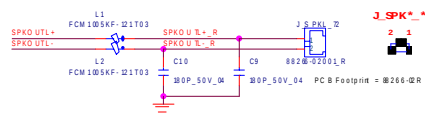
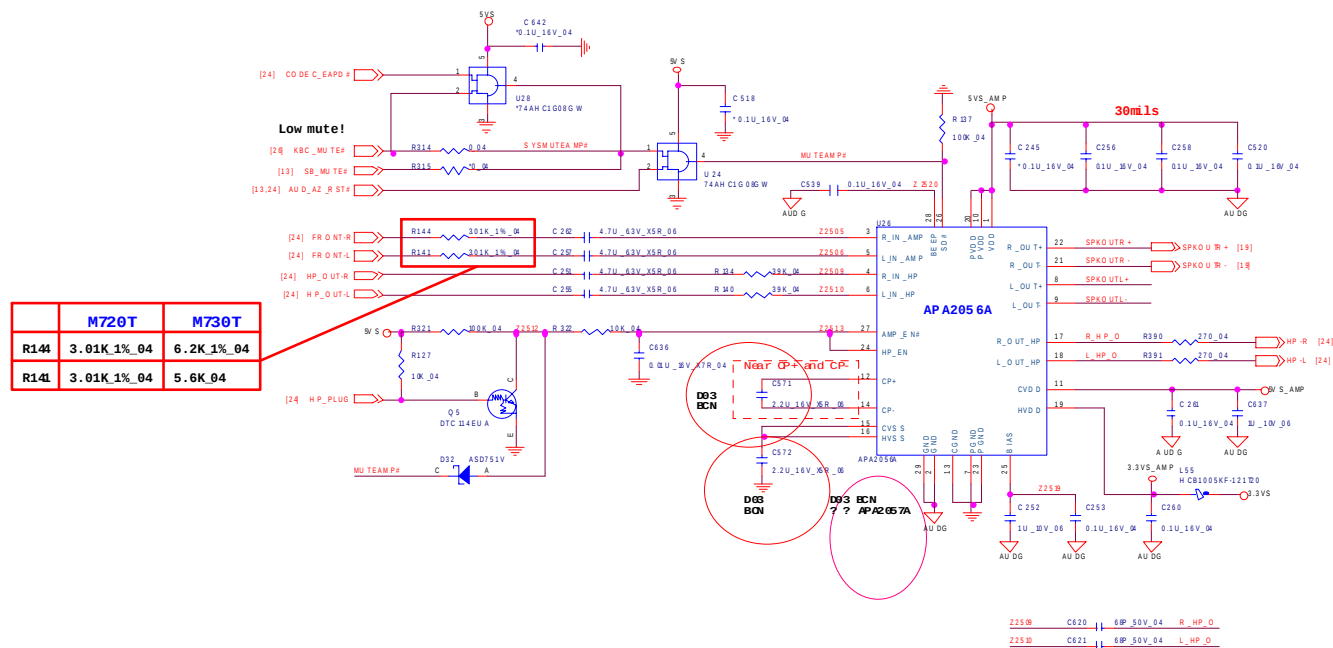


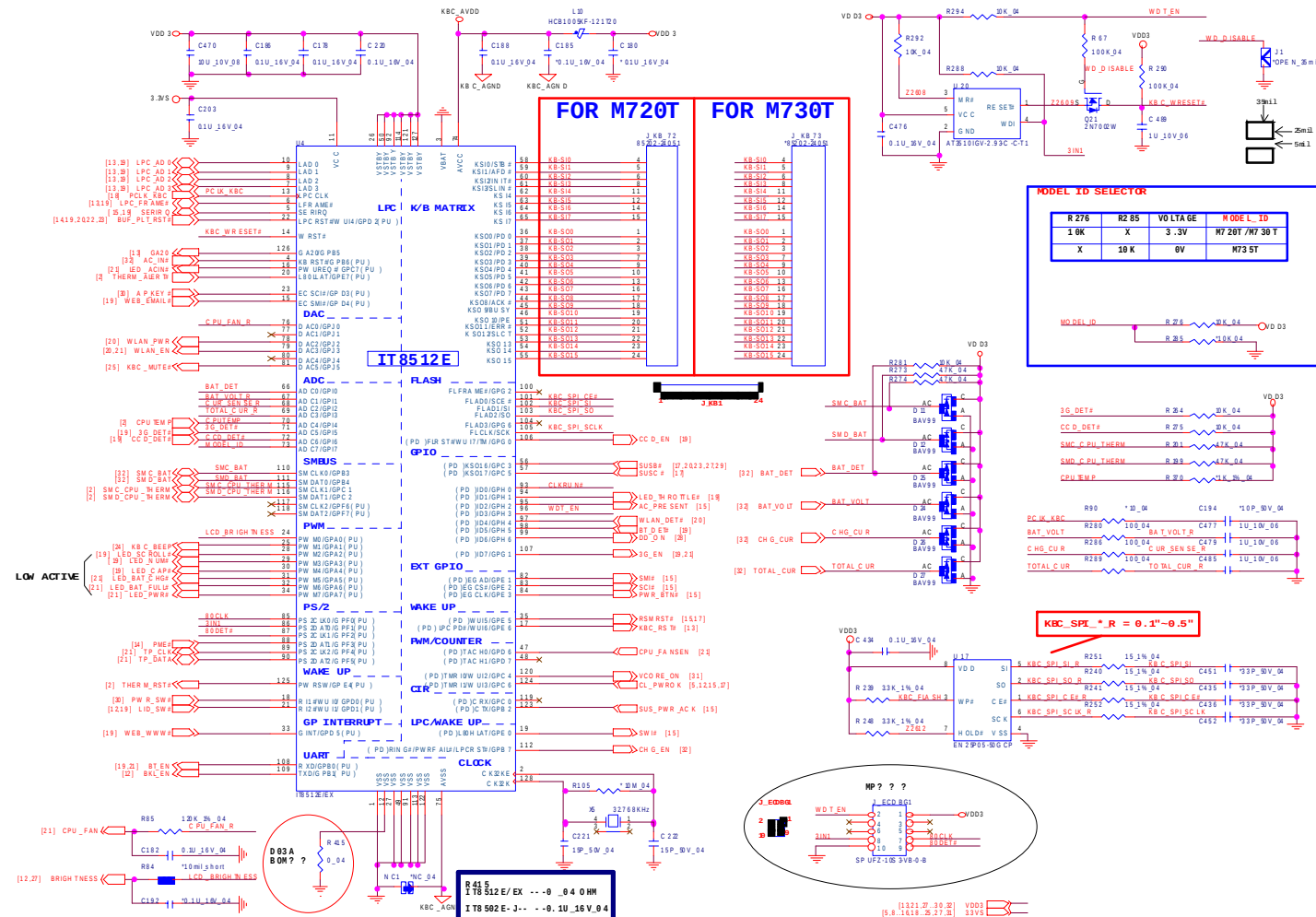
Sheet 24 of 40
Audio Codec
ALC662



B. Schematic Diagrams

Sheet 25 of 40
Audio AMP2056

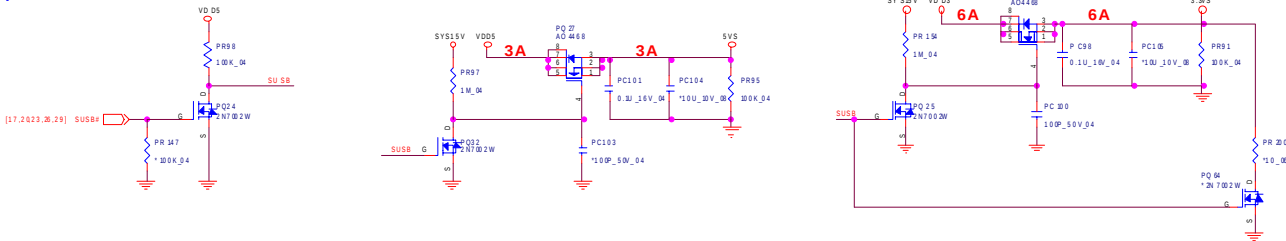




Schematic Diagrams

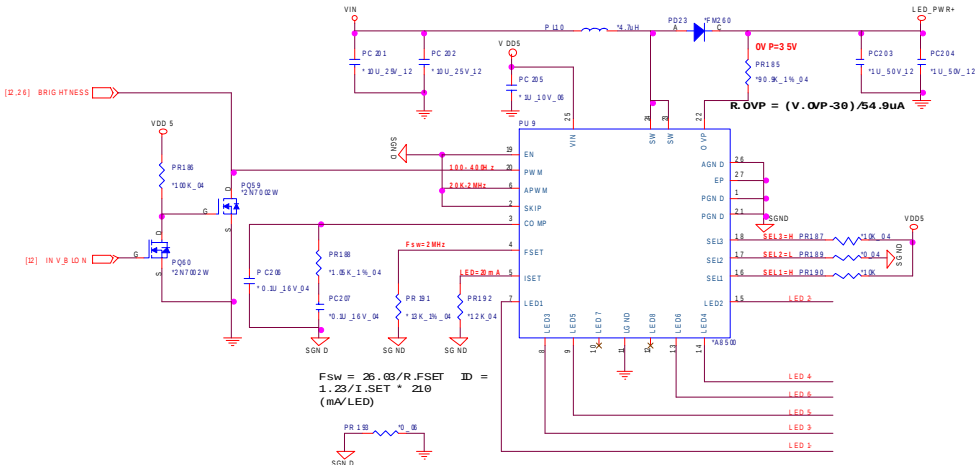
System Power, LED BKLT

5VS, 3.3VS

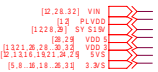
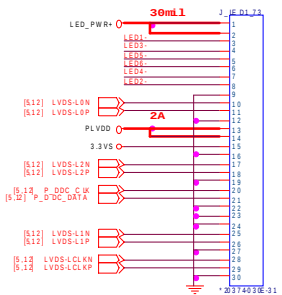


Sheet 27 of 40
System Power,
LED BKLT

M735T LED PANEL BACKLIGHT DRIVER

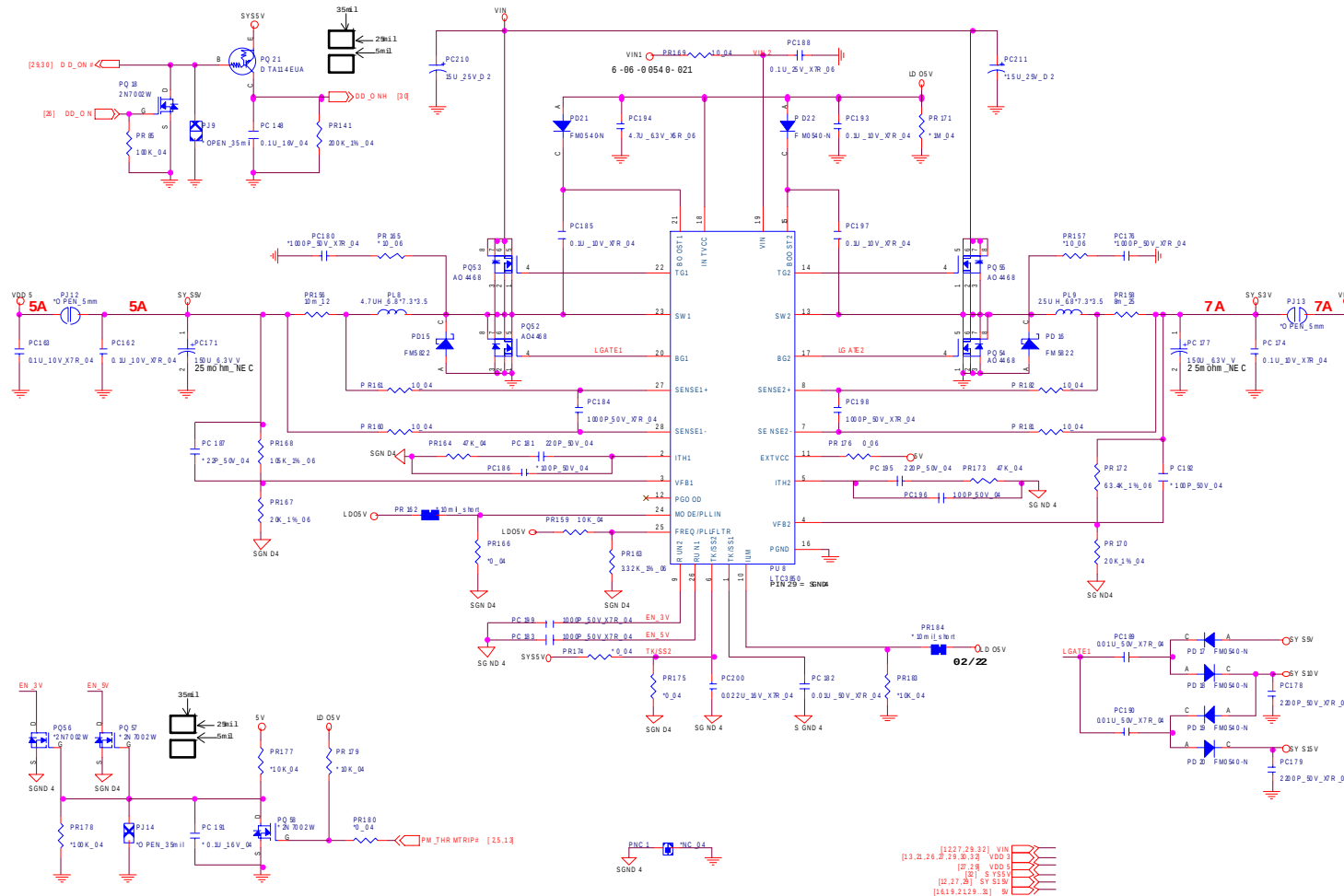


SEL1	SEL2	SEL3	LEDx Output
0	0	0	Only LED1 on
1	0	0	LED1 through LED2 on
0	1	0	LED1 through LED3 on
1	1	0	LED1 through LED4 on
0	0	1	LED1 through LED5 on
1	0	1	LED1 through LED6 on
0	1	1	LED1 through LED7 on
1	1	1	LED1 through LED8 on



Power VDD3, VDD5

VDD3, VDD5

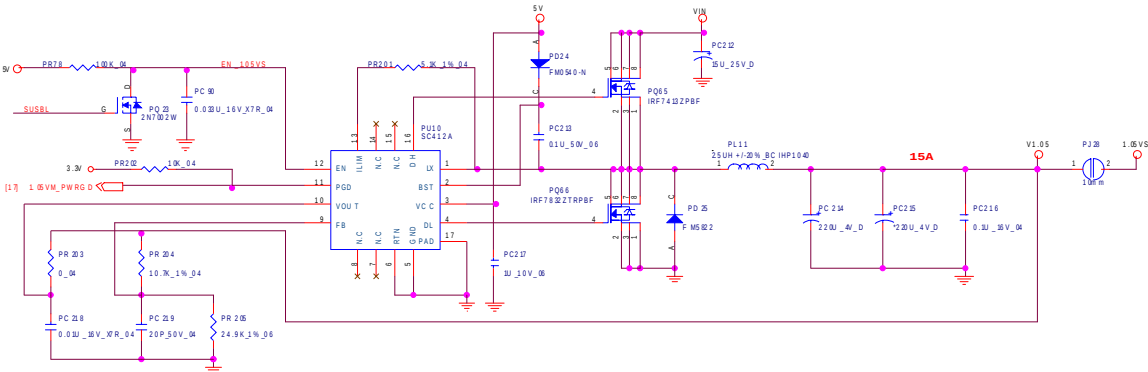


Sheet 28 of 40
Power VDD3, VDD5

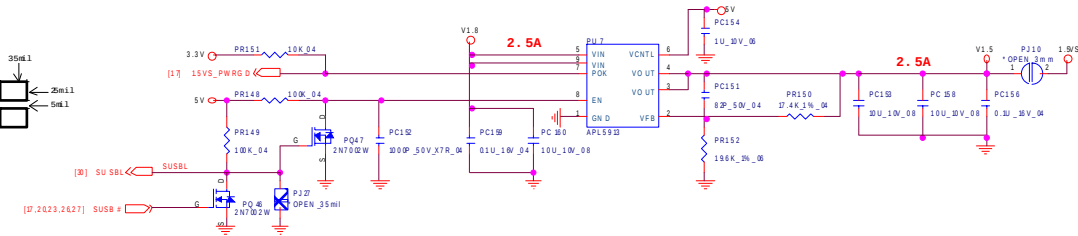
Schematic Diagrams

Power 1.5VS, 1.05VS, 3.3V, 5V

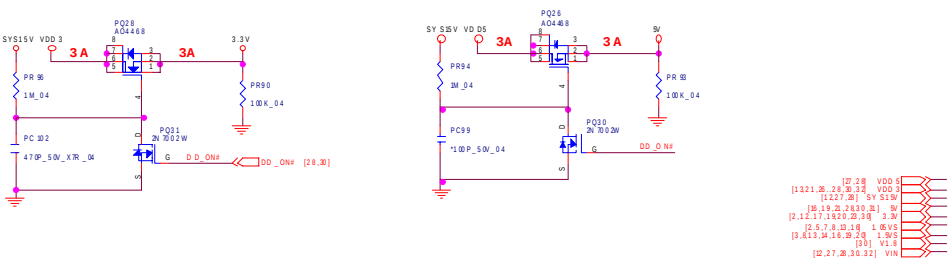
1.05VS



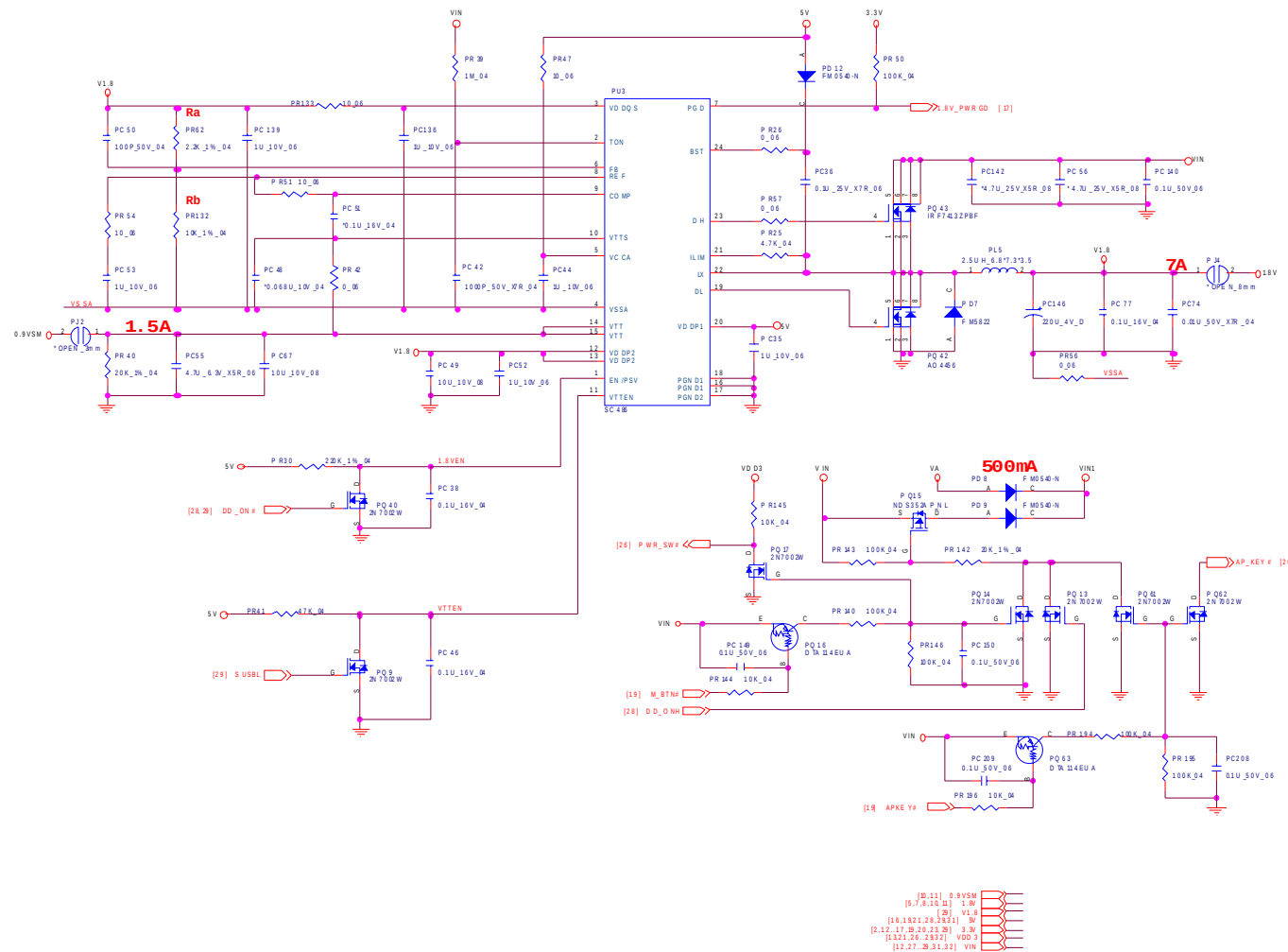
1.5V



3.3V, 5V

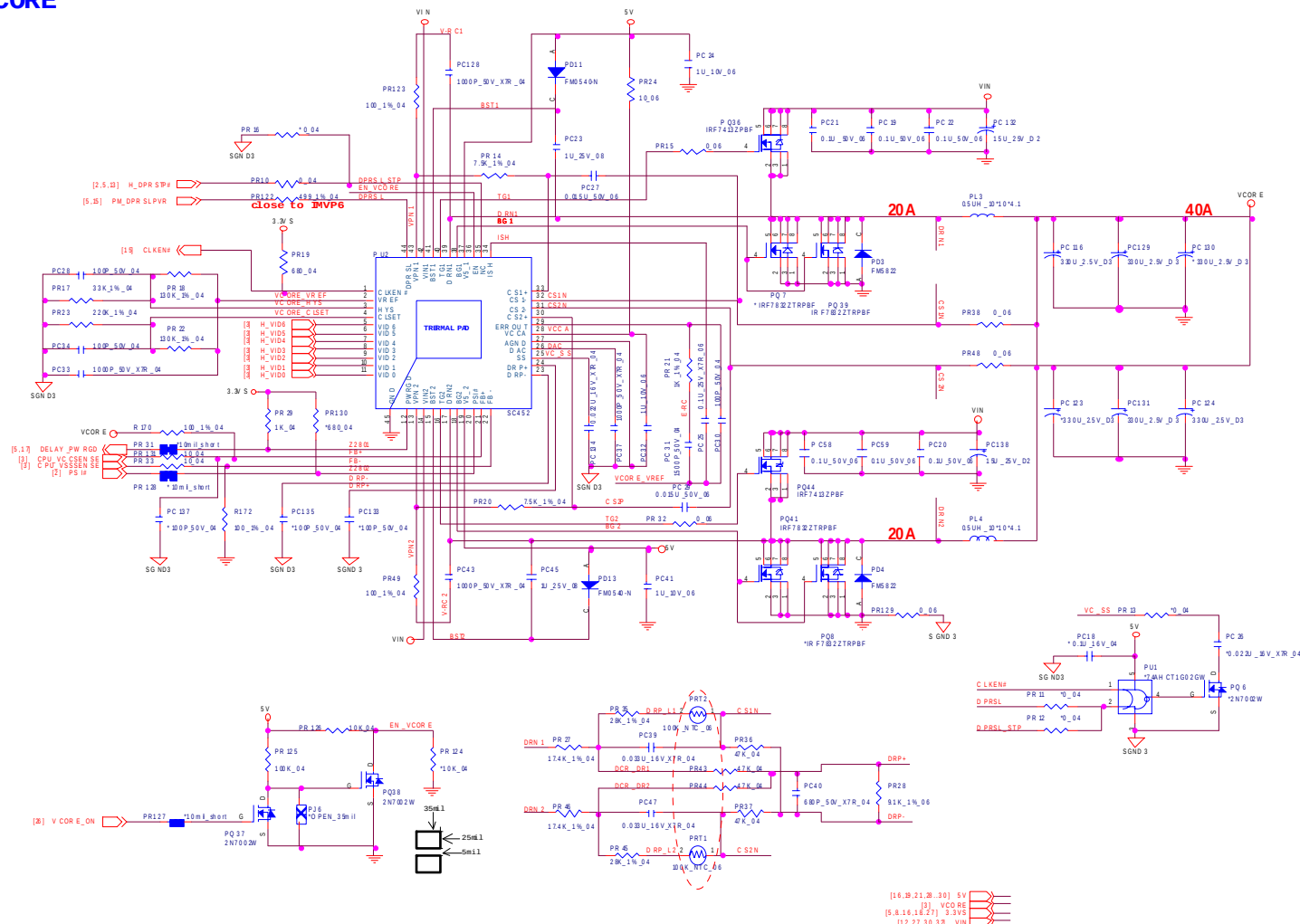


1.8V, 0.9VSM



Sheet 30 of 40
Power 1.8V,
0.9VSM

Power VCORE

VCORE

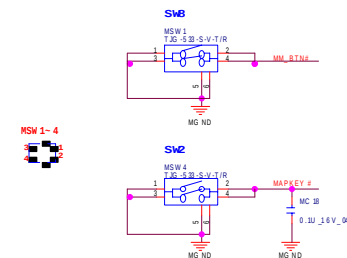
Schematic Diagrams

Schematic Diagrams

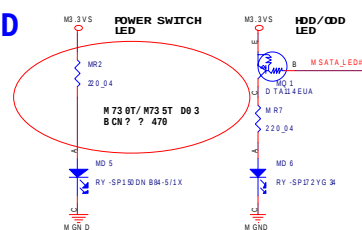
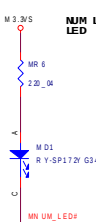


Schematic Diagrams

B - 34 Multi I/O Board 1/2



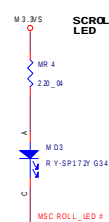
LED

NUM LOC
LED

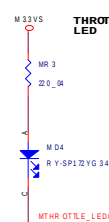
CAPS L
LED



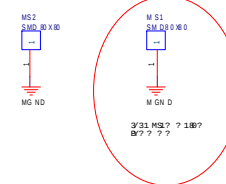
M 3.3/S



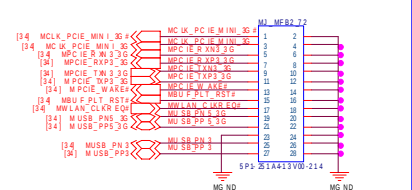
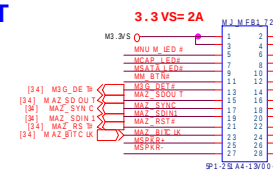
M 33VS



MS2
SMD 80 X 8



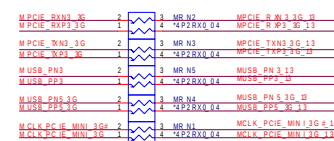
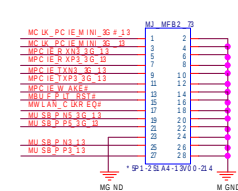
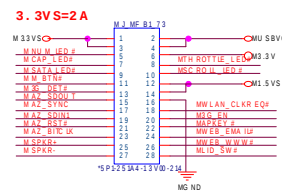
3.3 VS= 2A



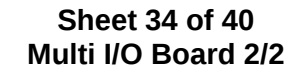
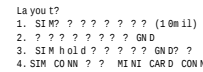
Three circuit diagrams are shown, each representing a power supply decoupling capacitor connection:

- Left Diagram:** A capacitor labeled **MC9** is connected between the **MUSBVCC 2** pin and the **M GND** pin. The capacitor value is **0.1uF_16V_04**.
- Middle Diagram:** A capacitor labeled **MC11** is connected between the **M3.3VS** pin and the **M GND** pin. The capacitor value is **0.1uF_16V_04**.
- Right Diagram:** A capacitor labeled **MC8** is connected between the **M1.5VS** pin and the **M GND** pin. The capacitor value is **0.1uF_16V_04**.

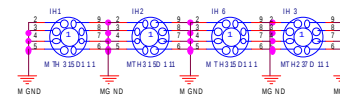
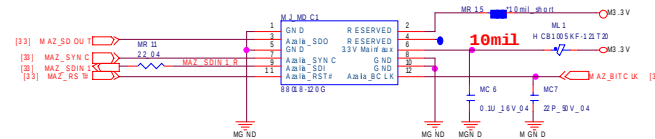
3. 3V S=2 A



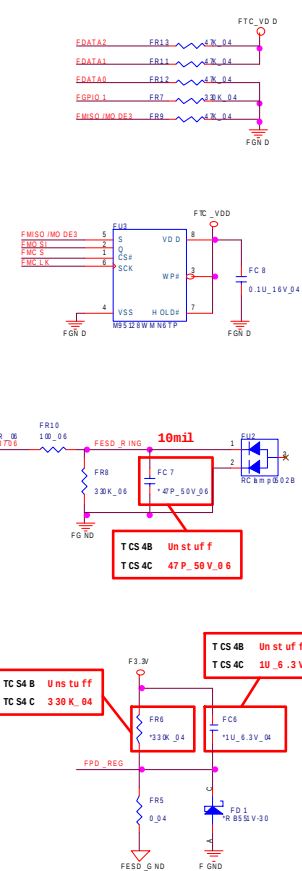
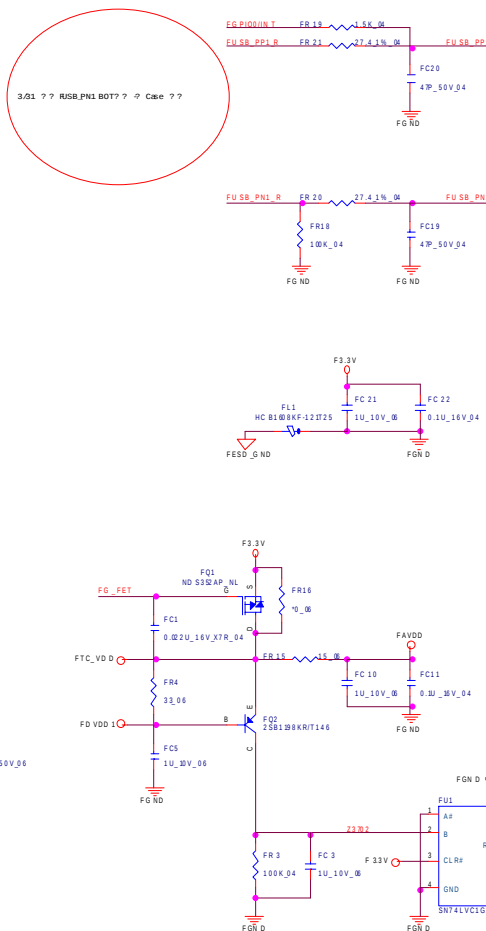
3G/Raboson



? ? ? ? ? ? ? ? ?
 ? ? 2.5mm ? ?



Finger Printer Board

[illegible]

B.Schematic Diagrams

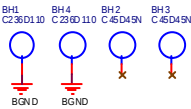
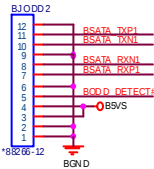
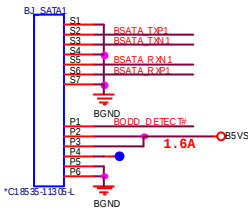
CLICK BOARD

M730T ODD Bridge Board

M730T ODD BRIDGE BOARD

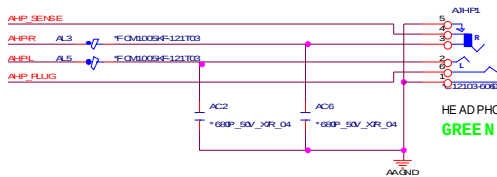
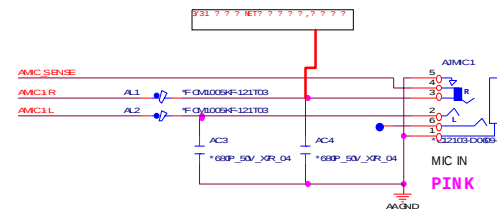
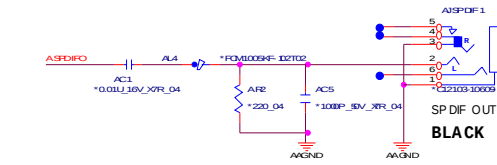
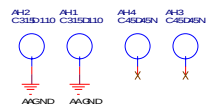
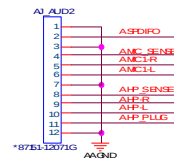
Sheet 37 of 40
M730T ODD Bridge
Board

B.Schematic Diagrams



M730T Audio Board

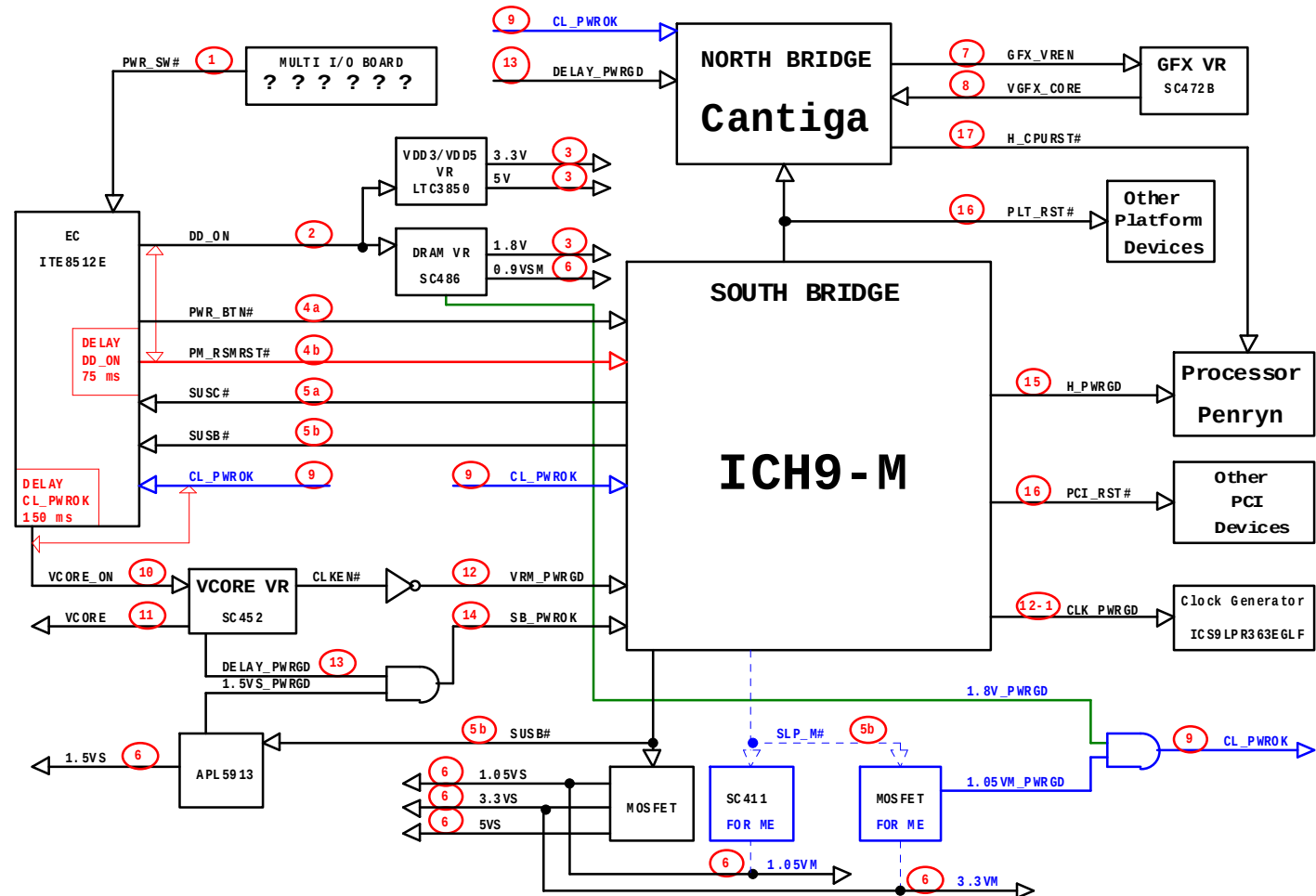
M730T AUDIO BRIDGE BOARD



Sheet 38 of 40
M730T Audio Board

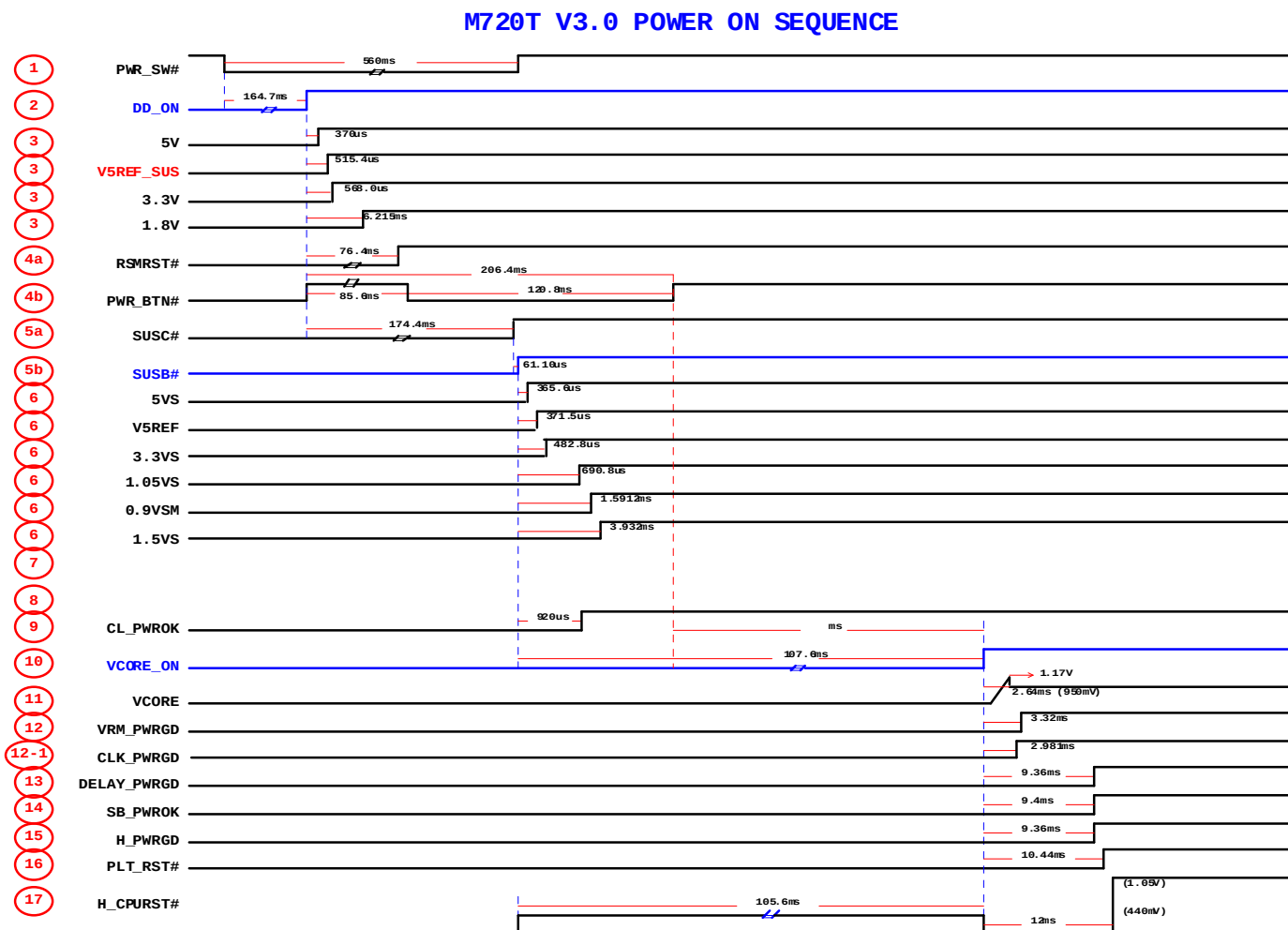
Power Sequence Diagram

M720T V0.0 BOOT BLOCK DIAGRAM



Sheet 39 of 40
Power Sequence
Diagram

Power Sequence v3.0



Sheet 40 of 40
Power Sequence
v3.0

Appendix C: Updating the FLASH ROM BIOS

To update the FLASH ROM BIOS you must:

- Download the BIOS update from the web site.
- Unzip the files onto a bootable CD/DVD/USB Flash Drive.
- Reboot your computer from an external CD/DVD/USB Flash Drive.
- Use the flash tools to update the flash BIOS using the commands indicated below.
- Restart the computer booting from the HDD and press **F2** at startup enter the BIOS.
- Load setup defaults from the BIOS and save the default settings and exit the BIOS to restart the computer.
- After rebooting the computer you may restart the computer again and make any required changes to the default BIOS settings.

Download the BIOS

1. Go to www.clevo.com.tw and point to **E-Services** and click **E-Channel**.
2. Use your user ID and password to access the appropriate download area (BIOS), and download the latest BIOS files (the BIOS file will be contained in a batch file that may be run directly once unzipped) for your computer model (see sidebar for important information on BIOS versions).

Unzip the downloaded files to a bootable CD/DVD/ or USB Flash drive

1. Insert a bootable CD/DVD/USB flash drive into the CD/DVD drive/USB port of the computer containing the downloaded files.
2. Use a tool such as Winzip or Winrar to unzip all the BIOS files and refresh tools to your bootable CD/DVD/USB flash drive (you may need to create a bootable CD/DVD with the files using a 3rd party software).

Set the computer to boot from the external drive

1. With the bootable CD/DVD/USB flash drive containing the BIOS files in your CD/DVD drive/USB port, restart the computer and press **F2** (in most cases) to enter the BIOS.
2. Use the arrow keys to highlight the **Boot** menu.
3. Use the “+” and “-” keys to move boot devices up and down the priority order.
4. Make sure that the CD/DVD drive/USB flash drive is set first in the boot priority of the BIOS.
5. Press **F10** to save any changes you have made and exit the BIOS to restart the computer.



BIOS Version

Make sure you download the latest correct version of the BIOS appropriate for the computer model you are working on.

You should only download BIOS versions that are **V1.01.XX or higher** as appropriate for your computer model.

Note that BIOS versions are not backward compatible and therefore you may not downgrade your BIOS to an older version after upgrading to a later version (e.g if you upgrade a BIOS to ver 1.01.05, you **MAY NOT** then go back and flash the BIOS to ver 1.01.04).

BIOS Update

Use the flash tools to update the BIOS

1. Make sure you are not loading any memory management programs such as HIMEM by holding the **F8** key as you see the message “**Starting MS-DOS**”. You will then be prompted to give “**Y**” or “**N**” responses to the programs being loaded by DOS. Choose “**N**” for any memory management programs.
2. You should now be at the DOS prompt e.g: `DISK C:\>` (C is the designated drive letter for the CD/DVD drive/USB flash drive).
3. **Type the following command** at the DOS prompt:

C:\> XXX.bat

4. The utility will then proceed to flash the BIOS.
5. You should then be prompted to press any key to restart the system or turn the power off, and then on again but make sure you remove the CD/DVD/USB flash drive from the CD/DVD drive/USB port before the computer restarts.

Restart the computer (booting from the HDD)

1. With the CD/DVD/USB flash drive removed from the CD/DVD drive/USB port the computer should restart from the HDD.
2. Press **F2** as the computer restarts to enter the BIOS.
3. Use the arrow keys to highlight the **Exit** menu.
4. Select **Load Setup Defaults** (or press **F9**) and select “**Yes**” to confirm the selection.
5. Press **F10** to save any changes you have made and exit the BIOS to restart the computer.

Your computer is now running normally with the updated BIOS

You may now enter the BIOS and make any changes you require to the default settings.