

SERVICE MANUAL

L295N L297N

LED PC



LCD Computer
L295N/L297N Series
Service Manual

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About this Manual

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

It is organized to allow you to look up basic information for servicing and/or upgrading components of the **L295N/L297N** computer.

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

Preface

Related Documents

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

User's Manual on CD

This describes the computer'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 computer.

Contents

Introduction	1-1	L295N - Front	A-5
Overview	1-1	L295N - Front - Touch Screen	A-6
System Specifications	1-2	L295N - Combo Drive	A-7
External Locator - Front View	1-5	L295N - DVD-RW Drive	A-8
External Location - Left & Right Side Views	1-6	L295N - FDD	A-9
External Locator - Rear View	1-7	L295N - HDD	A-10
Mainboard Overview - Top (Key Parts)	1-8	L297N - Base	A-11
Mainboard Overview - Bottom (Key Parts)	1-9	L297N - Bracket (Chi-Mei)	A-12
Mainboard Overview - Top (Cable Connectors & Switches)	1-10	L297N - Bracket - TouchScreen (AU)	A-13
Mainboard Overview - Bottom (Cable Connectors & Switches)	1-11	L297N - Bracket - TouchScreen (Chi-Mei)	A-14
Disassembly	2-1	L297N - Front	A-15
Overview	2-1	L297N - Combo Drive	A-16
Maintenance Tools	2-2	L297N - DVD-RW Drive	A-17
Connections	2-2	L297N - FDD	A-18
Maintenance Precautions	2-3	L297N - HDD	A-19
Disassembly Steps	2-4	Schematic Diagrams.....	B-1
Removing the Hard Disk Drive Assembly	2-5	System Block Diagram	B-2
Removing the LCD Back Cover	2-6	Clock Generator	B-3
Removing the System Memory	2-7	Yonah CPU - 1 of 2	B-4
Removing and Installing the Processor	2-8	Yonah CPU - 2 of 2	B-5
Removing the Modem	2-11	Calistoga 1/5 Host	B-6
Removing the Wireless LAN Module	2-12	Calistoga 2/5	B-7
Removing the Bluetooth Module	2-13	Calistoga 3/5 DDR	B-8
Removing the Floppy Disk Drive Assembly	2-14	Calistoga 4/5	B-9
Removing the Optical Device Assembly	2-15	Calistoga 5/5 POWER	B-10
Part Lists	A-1	DDRII RIMM	B-11
Part List Illustration Location	A-2	Chrontel CH7308	B-12
L295N - Base	A-3	LCD Connector	B-13
L295N - Bracket (AU)	A-4	VGA Interface	B-14
		ICH7-M 1/4 (SATA)	B-15

Preface


ICH7-M 2/4 (PCI, USB)	B-16
ICH7-M 3/4 (FWH)	B-17
ICH7-M 4/4	B-18
CD-ROM, Ext USB, Mini PCI	B-19
MDC, Mini Card, USB2.0, BT	B-20
LAN RTL8110SBL	B-21
TI PCI7412	B-22
PCM Socket, 3-in-1 Socket	B-23
Azalia CODEC ALC883 & MDC	B-24
H8	B-25
COM Port, Fan, Parallel Port	B-26
Super I/O PC87392, FDD	B-27
VDD3, VDD5, 3.3V, 5V	B-28
1.5VS, 1.05VS, 2.5VS	B-29
AC-IN, 1.8V, 0.9VS	B-30
VCORE	B-31
12VS	B-32
Button Board for L295N	B-33
Button Board for L297N	B-34
CD-ROM Board for L295N	B-35
CD-ROM Board for L297N	B-36
USB Board	B-37
CardReader Board	B-38
Screw Hole	B-39

1: Introduction

Overview

This manual covers the information you need to service or upgrade the **L295N/L297N** LCD 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. *DOS*, *Windows 9x*, *Windows NT 4.0*, *Windows 2000*, *Windows XP*, *OS/2 Warp*, *UNIX*, 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 L295N/L297N LCD computer 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



Latest Specification Information

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

Table 1 - 1
System Specifications

Feature	Specification
Processor Types	Intel® Core™ 2 Duo Processor (478-pin) Micro-FC-PGA Package T7200/ T7400/ T7600 65nm (65 Nanometer) Process Technology 4MB On-die L2 Cache & 667MHz FSB 2.0/ 2.16/ 2.33 GHz
	Intel® Core™ 2 Duo Processor (478-pin) Micro-FC-PGA Package T5500/ T5600 65nm (65 Nanometer) Process Technology 2MB On-die L2 Cache & 667MHz FSB 1.66/ 1.83 GHz
	Intel® Core™ Duo Processor (478-pin) Micro-FC-PGA Package T2300/ T2400/ T2500/ T2600/ T2700 65nm (65 Nanometer) Process Technology 2MB On-die L2 Cache & 667MHz FSB 1.66/ 1.83/ 2.0/ 2.16/ 2.33 GHz
	Intel® Core™ Solo Processor (478-pin) Micro-FC-PGA Package T1300/ T1400 65nm (65 Nanometer) Process Technology 2MB On-die L2 Cache & 667MHz FSB 1.66/ 1.83 GHz
	Intel® Celeron® M Processor (478-pin) Micro-FCPGA Package 410/ 420/ 430/ 440/ 450 65nm (65 Nanometer) Process Technology 1MB On-die L2 Cache & 533MHz FSB 1.46/ 1.60/ 1.73/ 1.86/ 2.0 GHz
Core Logic	Intel 945GM + ICH7-M

Feature	Specification	
LCD	L295N 15.0" XGA Anti-Glare Type Flat Panel TFT (1024*768) Touch Panel (Factory Option) Hard Glass (Factory Option)	L297N 17.0" SXGA Anti-Glare Type Flat Panel TFT (1280*1024) Touch Panel (Factory Option) Hard Glass (Factory Option)
Security	Security (Kensington® Type) Lock Slot	BIOS Password
Memory	Two 200 Pin SO-DIMM Sockets Supporting DDRII (DDR2) 533/667 MHz 64-bit Wide DDRII (DDR2) Data Channels Memory Expandable up to 2GB (256/ 512/ 1024 MB DDRII Modules) (Note: Do Not Use Other Module Types)	
Video Controller	Intel 945GM Integration Intel® Graphics Media Accelerator 950 (Intel® GMA 950) Dynamic Video Memory Technology DVMT - Supports up to 224MB of Video Memory (dynamically allocated from system memory where needed)	
BIOS	4MB Flash ROM	Phoenix BIOS
Storage	One 3.5", 25.4mm (h) Hard Disk (HDD) with SATA (Serial) Interface One 3.5", 1.44MB 3-Mode Floppy Disk Drive One changeable 12.7mm(h) Optical Device (CD/DVD) Type Drive (see " Optional " on page 1 - 4 for drive options)	
Audio	Intel AZALIA High Definition Audio Interface 3D Stereo Enhanced Sound System Sound-Blaster PRO™ Compatible	2 * Built-In Speakers Built-In Microphone, Line-In & Headphone Jacks
Keyboard	Multi-language External Keyboard (Option)	
PC Card Sockets	Supports One Type II PCMCIA Slot (Cardbus Support)	
Card Reader	Embedded 7-in-1 Card Reader (SD/ MMC/ MS/ MS PRO/ MS Duo/ Mini SD/ RSMMC)	
Interface	One Serial Port One Parallel Port One External Monitor Port One Headphone-Out Jack One Microphone-In Jack One Line-In Jack	Four USB 2.0 Ports One RJ-45 Jack for LAN One RJ-11 Jack for Modem One AC-In Jack One IEEE 1394a Port (Un-Powered)

Introduction

Feature	Specification	
Communication	1GB PCIe Ethernet LAN MDC 56K Fax Modem - V.90 & V.92 Compliant Intel PRO/Wireless 3945ABG PCIe Interface Wireless LAN Module (Optional) 802.11 b/g Wireless LAN Module (Optional) USB (2.0) Bluetooth Module (Factory Option)	
Power Management	Supports ACPI 2.0	Supports Wake On Modem Ring Supports Wake On LAN
Power	Full Range - 90W Built-in AC adapter	
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	L295N 369mm (W) * 188mm (D) * 384mm (H) 8.2Kg+/- 5% With Touch Screen 7.9Kg+/- 5% Without Touch Screen Tilt (0-15 deg), Swivel (270 deg)	L297N 395mm (W) * 179mm (D) * 418mm (H) 10.1Kg+/- 5% With Touch Screen 9.8Kg+/- 5% Without Touch Screen Tilt (0-15 deg), Swivel (270 deg)
Optional	Optical Drive Module Options: Combo Drive Module DVD-Dual Drive Module DVD Super Multi Drive Module Touch Panel (Factory Option) Hard Glass (Factory Option)	Intel PRO/Wireless 3945ABG PCIe Interface Wireless LAN Module 802.11 b/g Wireless LAN Module USB (2.0) Bluetooth Module (Factory Option)

External Locator - Front View



L295N



L297N



Figure 1 - 1
Front View

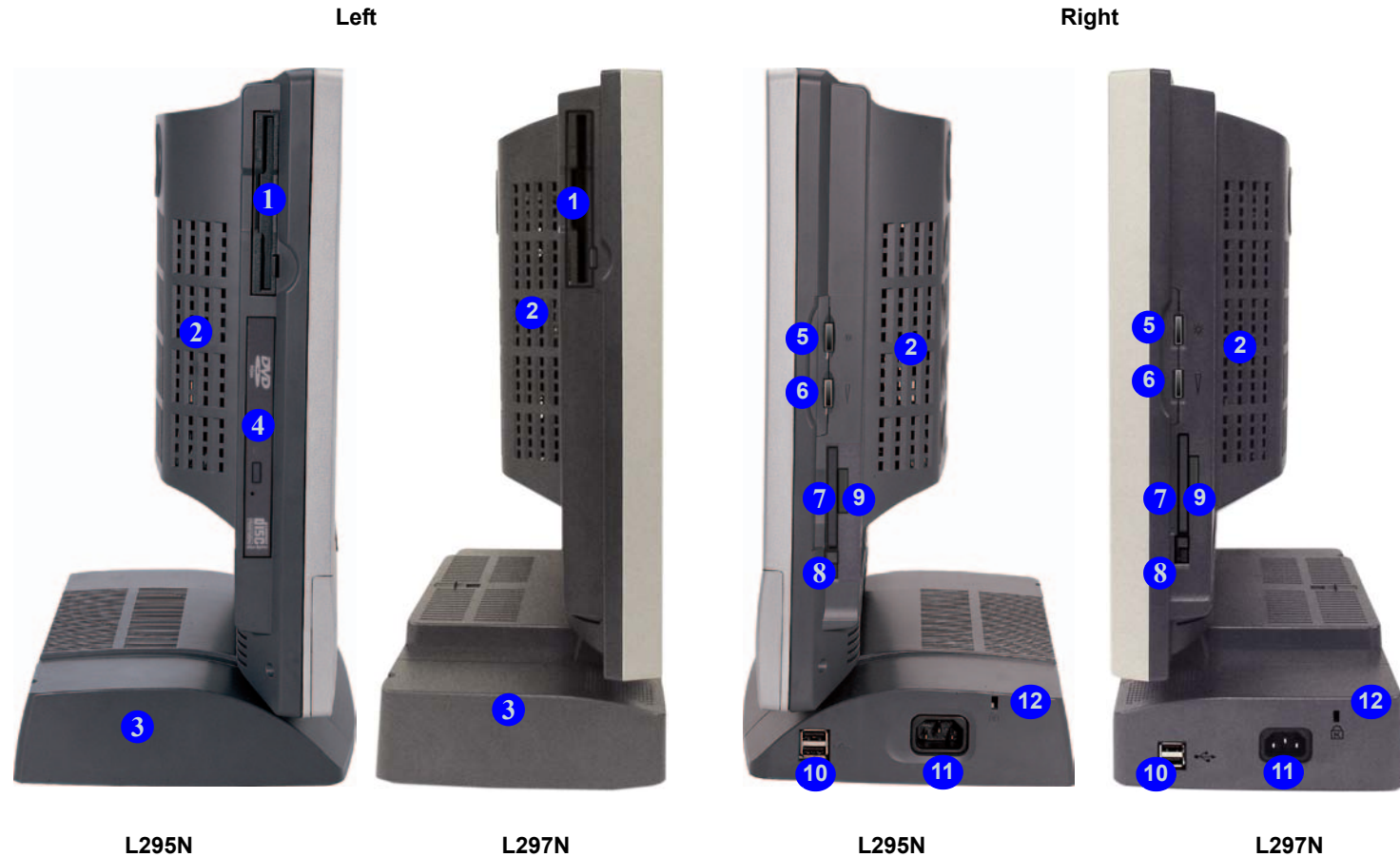
1. LCD Panel
2. Speakers
3. LED Activity indicators
4. Power Button
5. Optical (CD/DVD) Device Bay (L297N only)
6. Keyboard Holder (L297N only)

Introduction

Figure 1 - 2
Left & Right Views

External Location - Left & Right Side Views

1. Floppy Disk Drive*
2. Vent
3. Hard Disk Drive (HDD) Bay
4. CD Device (L295N only)
5. LCD Brightness Control Knob
6. Volume Control Knob
7. Dual PC Card Slots
8. PC Card Eject Buttons
9. 7-in-1 Card Reader
10. 2* USB Ports
11. AC Power-In Port
12. Security Lock Slot



External Locator - Rear View



L295N



L297N



Figure 1 - 3
Rear View

1. Carrying Handle
2. Headphone-Out Jack
3. Line-In Jack
4. Microphone-In Jack
5. RJ-45 LAN Jack
6. RJ-11 Phone Jack
7. 2* USB Ports
8. Unpowered - IEEE 1394 Port
9. Printer/Parallel Port
10. Serial Port
11. External Monitor Port
12. Vents
13. Hard Disk Bay Screw

Mainboard Overview - Bottom (Key Parts)

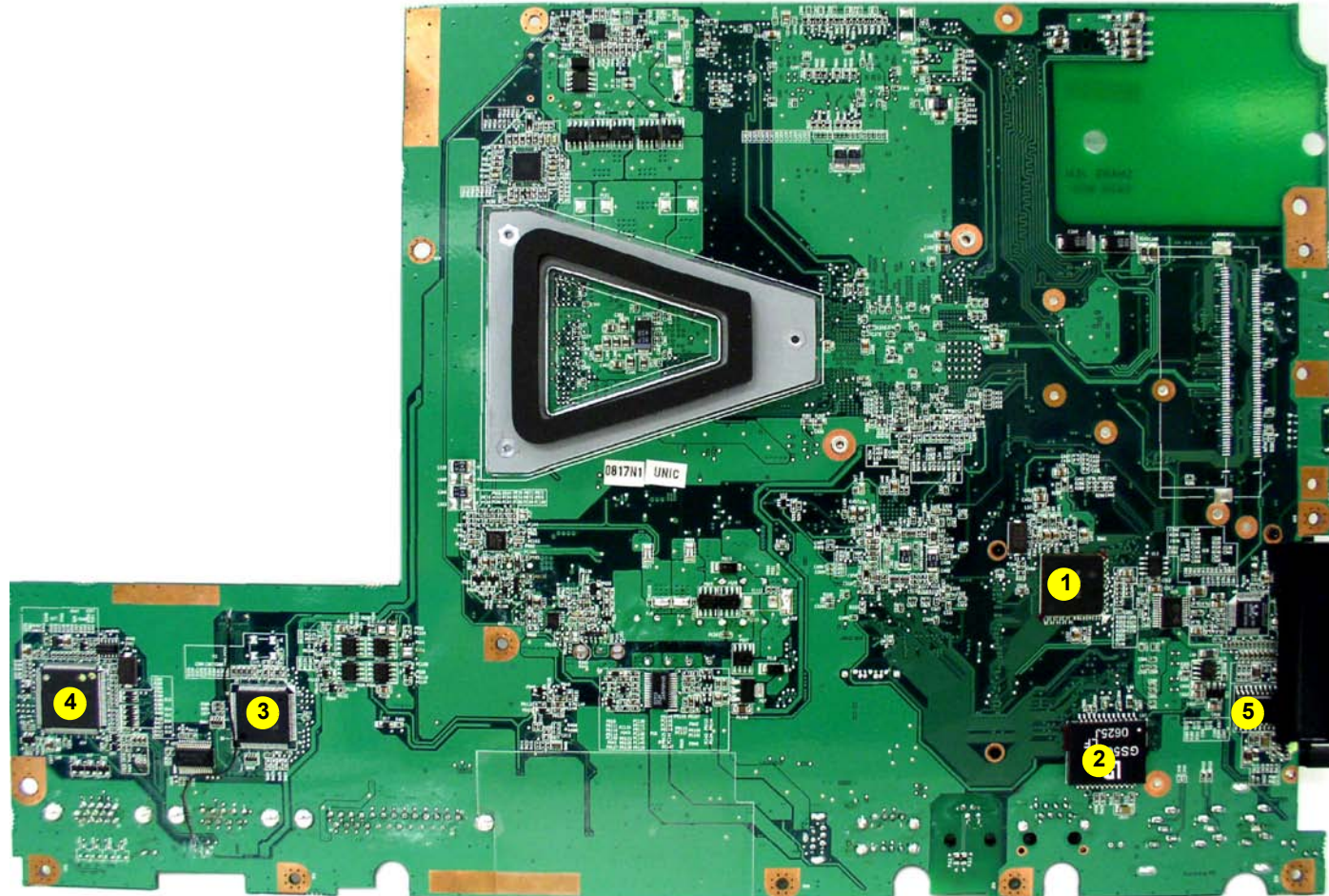


Figure 1 - 5
Mainboard Overview - Bottom Key Parts

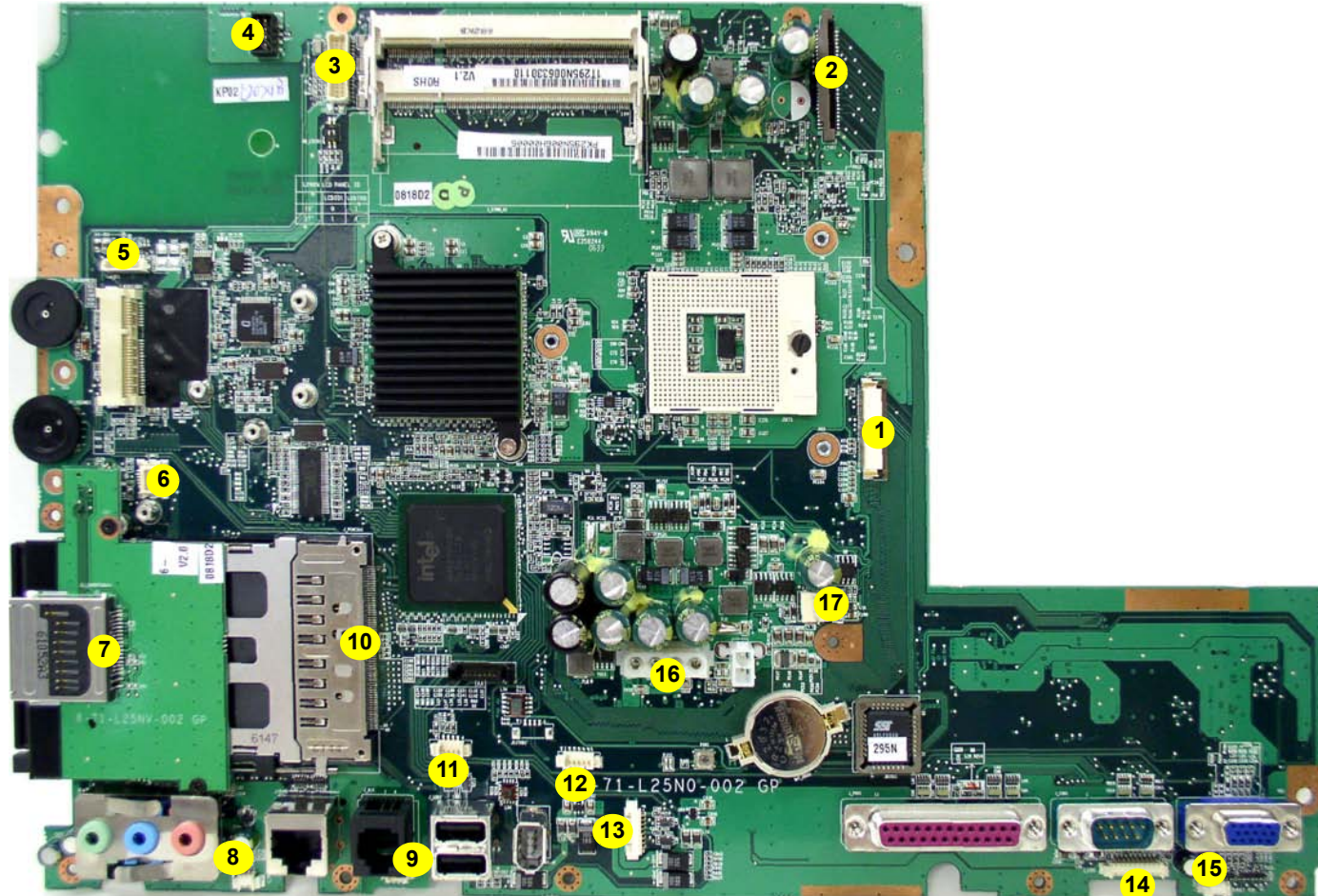
1. Chrontel CH7308
2. Clock Generator
3. Intel ICH7-M 652 mBGA (South Bridge)
4. SUPER I/O Winbond PC87392
5. AZALIA MDC Module

Introduction

Mainboard Overview - Top (Cable Connectors & Switches)

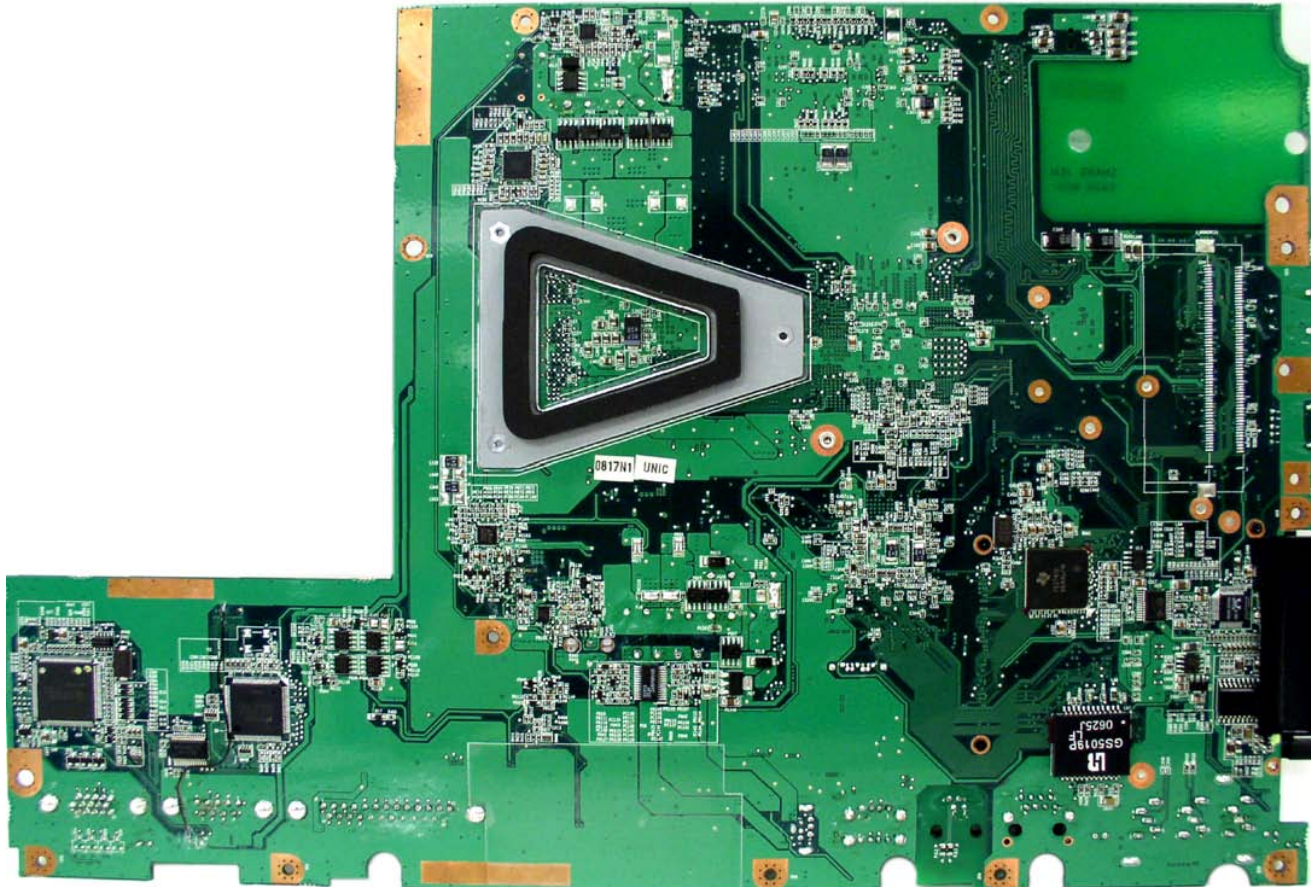
Figure 1 - 6
**Mainboard Top
Cable Connectors &
Switches**

1. CD/DVD Device (CN7)
2. Floppy Disk Drive (CN5)
3. CN35 (LCD Connector)
4. Inverter (CN1)
5. BT Module
6. Modem Module
7. Card Reader
8. Speaker (CN31)
9. Modem Cable (CN33)
10. PC CARD (CN13)
11. Touch Screen (CN16)
12. IEEE1394 (CN36)
13. USB 2.0 (CN17)
14. LED Board (CN30)
15. Speaker (CN32)
16. Power (CN12)
17. Fan Power (CN9)



Mainboard Overview - Bottom (Cable Connectors & Switches)

Figure 1 - 7
**Mainboard Bottom
Cable Connectors &
Switches**




2: Disassembly



Overview

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

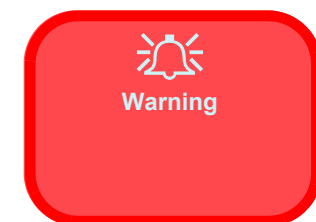
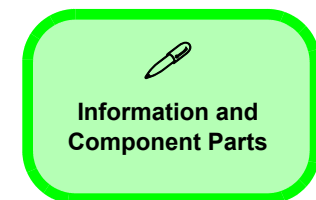
We suggest you completely review any procedure before you take the computer apart.

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

To make the disassembly process easier each section may have a box in the page margin. Information contained under the figure # will give a synopsis of the sequence of procedures involved in the disassembly procedure. A box with a  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 provide any possible helpful information. A box with a  contains warnings.

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



Disassembly

NOTE: All disassembly procedures assume that the system is turned **OFF**, and disconnected from any power supply, and that all peripheral cables are disconnected (including telephone lines and network cables).

Maintenance Tools

The following tools are recommended when working on the computer:

- 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-borne 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 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 hard disk drive assembly:

1. Remove the hard disk drive assembly *page 2 - 5*

To remove the LCD back cover:

1. Remove the LCD back cover *page 2 - 6*

To remove the system memory:

1. Remove the LCD back cover *page 2 - 6*
2. Remove the system memory *page 2 - 7*

To remove and install the Processor:

1. Remove the LCD back cover *page 2 - 6*
2. Remove the processor *page 2 - 8*
3. Install the processor *page 2 - 10*

To remove the modem:

1. Remove the LCD back cover *page 2 - 6*
2. Remove the modem *page 2 - 11*

To remove the WLAN module:

1. Remove the LCD back cover *page 2 - 6*
2. Remove the WLAN module *page 2 - 12*

To remove the Bluetooth module:

1. Remove the LCD back cover *page 2 - 6*
2. Remove the bluetooth module *page 2 - 13*

To remove the floppy disk drive assembly:

1. Remove the LCD back cover *page 2 - 6*
2. Remove the floppy disk drive assembly *page 2 - 14*

To remove the Optical Device:

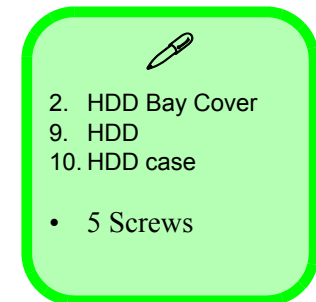
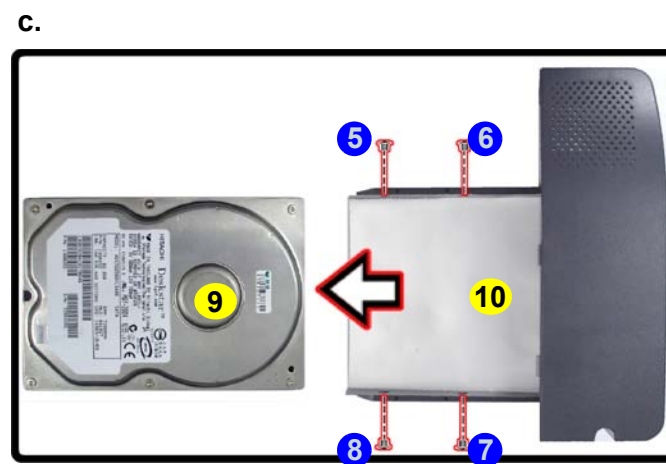
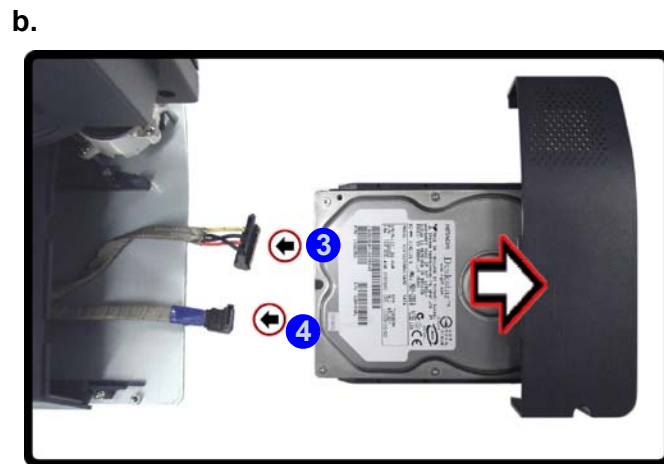
1. Remove the LCD back cover *page 2 - 6*
2. Remove the optical device *page 2 - 15*

Removing the Hard Disk Drive Assembly

1. Unplug the power cord and disconnect all peripheral cables (including the phone line) from the computer.
2. Turn **OFF** the computer and turn it around so that you may comfortably access the left side.
3. Remove screw **1** from the HDD Bay **2**.
4. Carefully pull the HDD assembly out from the bay and disconnect cables **3** & **4**.
5. Remove screws **5** - **8** and separate the hard disk **9** and case **10**.
6. Insert the new hard disk, and reverse the removal procedure to install the new hard disk.

Figure 2 - 1
Hard Disk Removal Sequence

- a. Remove the screw from the HDD Bay.
- b. Slide the HDD assembly in the direction of the arrow and disconnect the cables.
- c. Remove the screws and separate the HDD from the case.



Disassembly

Figure 2 - 2 LCD Back Cover Removal Sequence

- a. Remove the screws from the LCD back cover.
- b. Lift the cover out and set it aside.



Card Reader/PC Card Slots

Make sure you remove any cards or covers in the 7-in-1 Card Reader and PC Card slot before removing the rear case cover.



12. LCD back cover

- 11 Screws

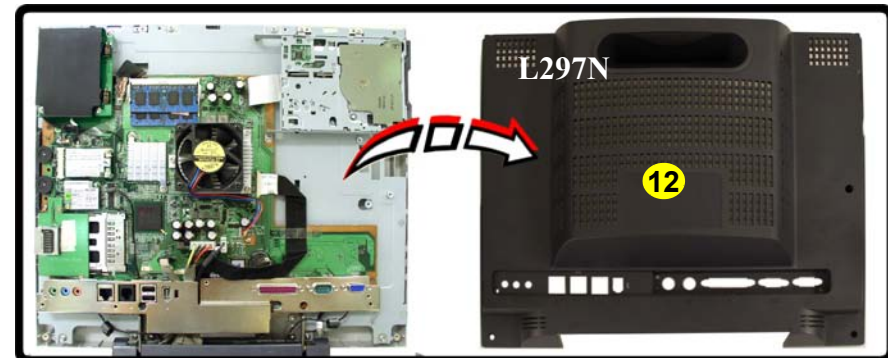
Removing the LCD Back Cover

1. Unplug the power cord and disconnect all peripheral cables (including the phone line) from the computer.
2. Turn **OFF** the computer and place it with its LCD display facing down on a clean, dry, level surface.
3. Remove screws ① - ⑪ from the LCD back cover and slide it up towards the top of the computer.
4. Carefully remove the LCD back cover ⑫ from the main unit and set it aside.

a.



b.

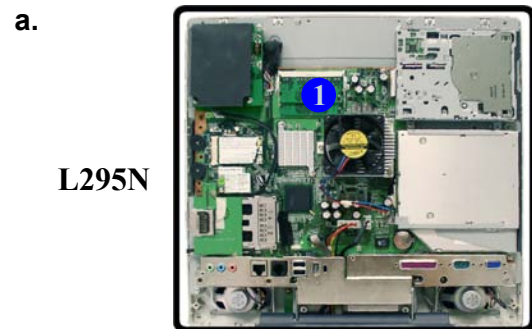


Removing the System Memory

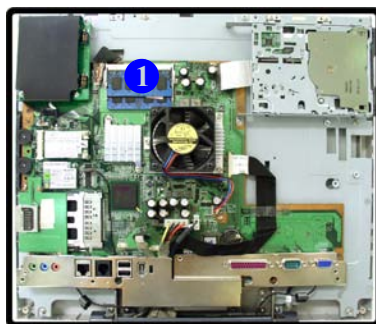
1. Remove the LCD back cover ([page 2 - 6](#)).
2. The memory sockets will be visible at point ① on the mainboard.
3. For each module you want to replace, gently push the latches ② and ③ toward the sides of the socket to release the module. Push the latches to release the second module if necessary.
4. The module ④ will pop-up, and you can remove it.
5. Insert the new module. The module will only fit one way as defined by the pin alignment.
6. Make sure the module is seated as far into the slot as it will go (DO NOT FORCE IT). The latches will click into place on the sides of the module. Make sure they are secure.
7. Reverse the procedures to put the computer back together, and do not forget all the screws. When you restart the computer the new memory configuration should be registered.
8. If the system doesn't properly detect the new memory, **and you are sure they are properly "seated"**, you may need to run the *Setup* utility.

Figure 2 - 3
Memory Removal Sequence

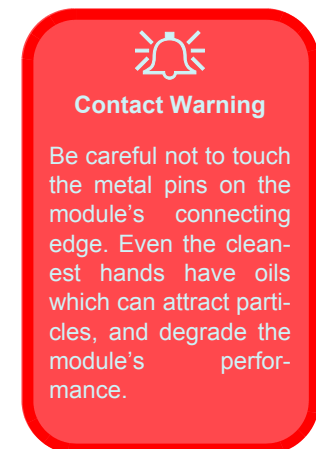
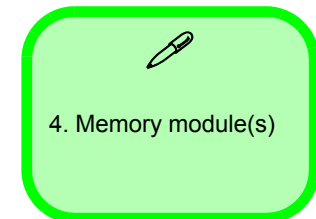
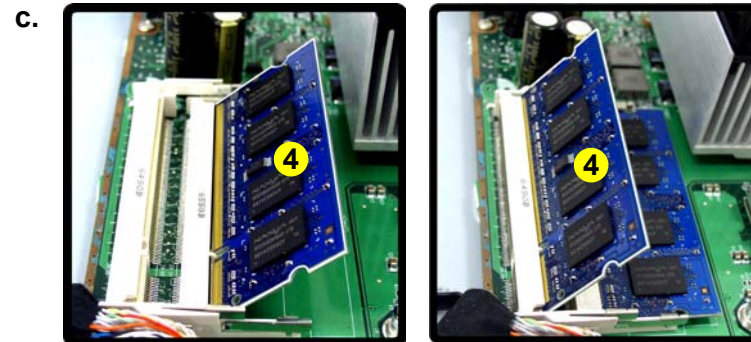
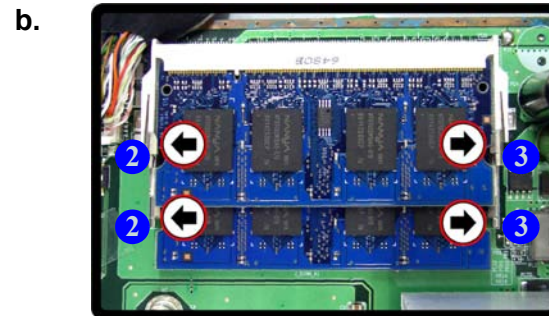
- a. Locate the memory sockets.
- b. Pull the latch(es) on the memory sockets to release the module(s) and lift it (them) out.
- c. Insert a new module.



L295N



L297N



Disassembly

Figure 2 - 4
Processor Removal Sequence

- a. Remove the screws from the CPU heat sink and fan unit.
- b. Release the power cable and lift the heat sink & fan unit out.



Caution

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



5. Heat Sink & Fan

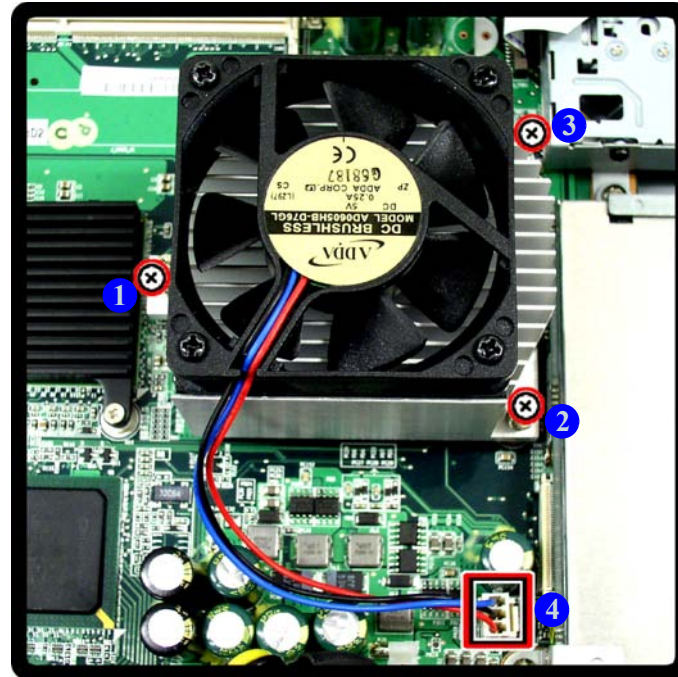
- 3 Screws

Removing and Installing the Processor

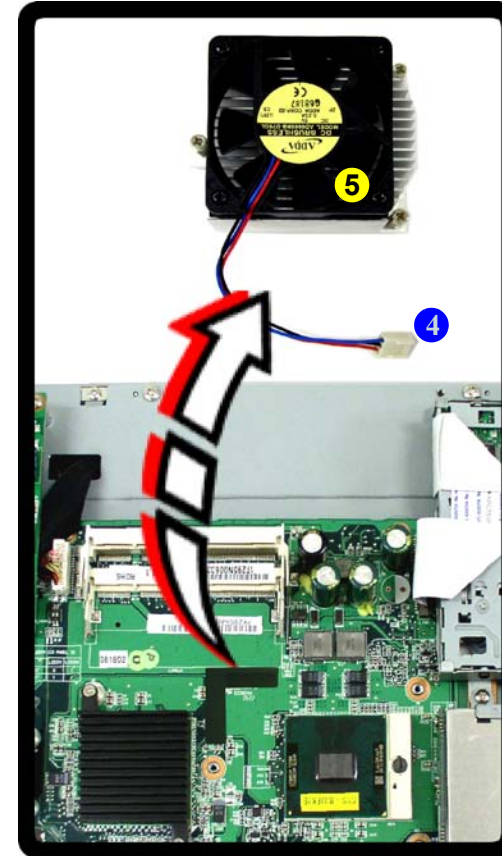
Processor Removal Procedure

1. Remove the LCD back cover ([page 2 - 6](#)).
2. Remove screws **1** - **3** from the CPU heat sink fan unit (in the order indicated in [Figure 2 - 5a](#)).
3. Disconnect the fan power cable **4** from the mainboard and lift out the CPU heat sink fan unit **5**.

a.



b.




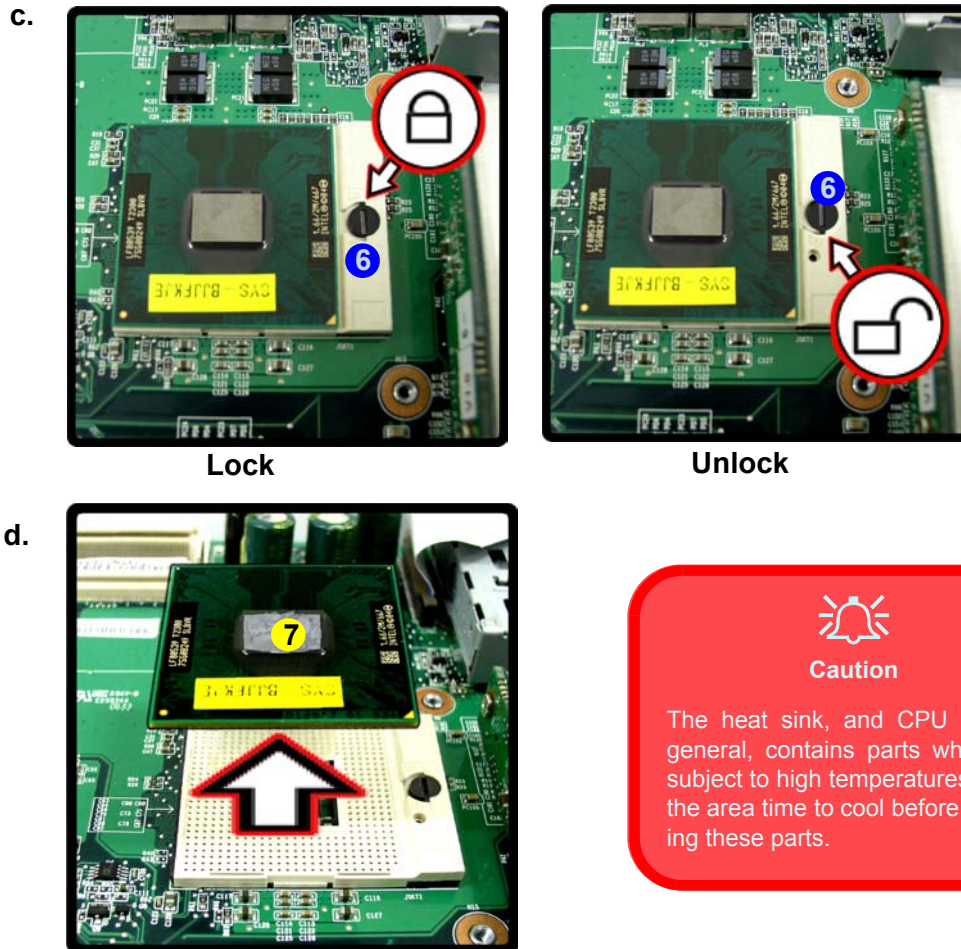

- Turn the release latch **6** towards the unlock symbol , to release the CPU (*Figure 2 - 5c*).
- Carefully (it may be hot) lift the CPU **7** up out of the socket (*Figure 2 - 5d*).
- See *page 2 - 10* for information on inserting a new CPU.
- When re-inserting the CPU, pay careful attention to the pin alignment, it will fit only one way (DO NOT FORCE IT!).

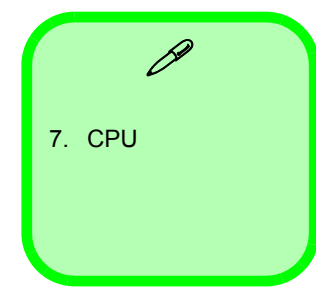
Figure 2 - 5
**Processor
Removal
Sequence (cont'd)**

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




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.



Disassembly

Figure 2 - 6
Processor
Installation
Sequence

- e. Insert the CPU.
- f. Turn the release latch towards the lock symbol.
- g. Apply thermal grease to the top of the CPU.
- h. Replace the heat sink.
- i. Tighten the 3 screws as instructed and connect the fan cable.



Caution


Take extra care not to damage the mainboard components when replacing the CPU heat sink fan unit and tightening the screws.



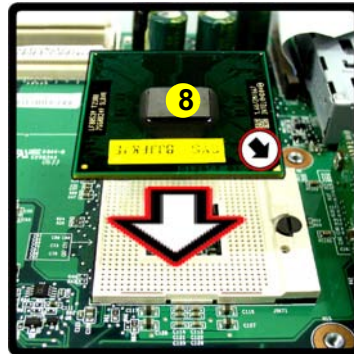
8. CPU
10. Heat Sink & Fan

- 3 Screws

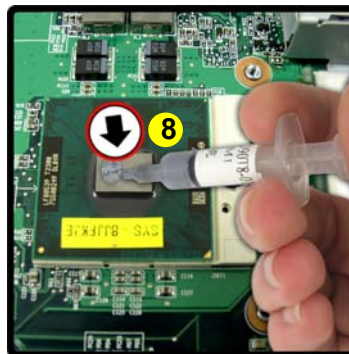
Processor Installation Procedure

1. Insert the CPU **8**, and pay careful attention to the pin alignment; it will fit only one way (DO NOT FORCE IT!).
2. Turn the release latch **9** towards the lock symbol  (*Figure 2 - 6f*).
3. Apply the thermal grease to the top of the CPU **8**.
4. Replace the heat sink fan unit **10** using the rubber **11** as alignment guide as indicated in *Figure 2 - 6h*.
5. Tighten screws **12** & **13** on the CPU heat sink fan unit to approximately 1/3 of the way.
6. Tighten screw **14** fully.
7. Tighten screw **13** fully, and then tighten the screw **12** fully.
8. Connect the fan power cable **15** to the mainboard.
9. Replace the LCD back cover and screws (*page 2 - 6*).

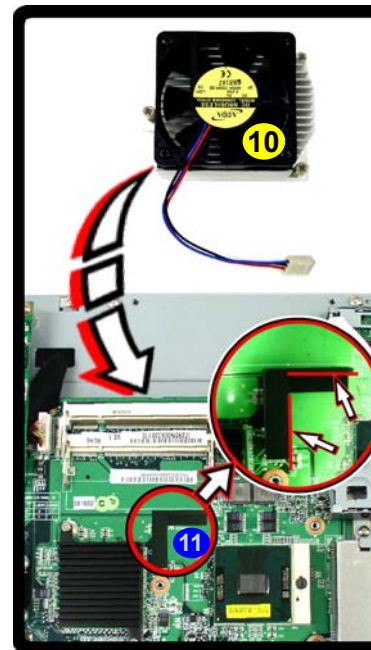
e.



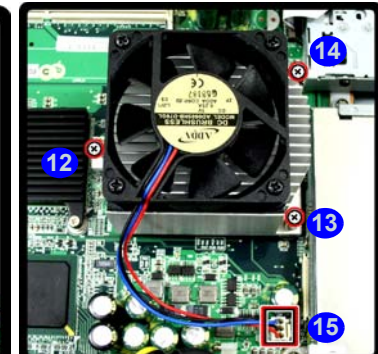
g.



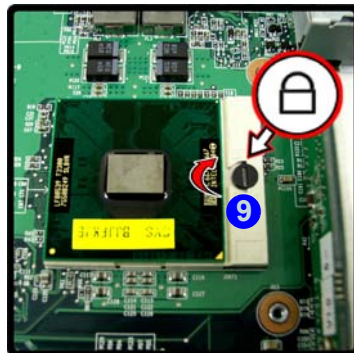
h.



i.



f.



Note

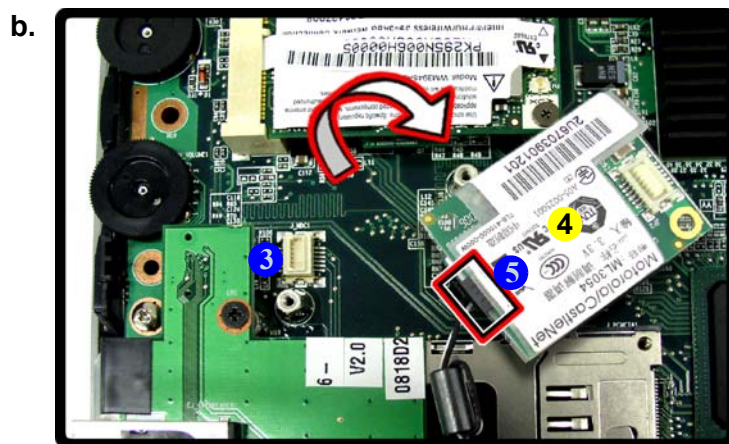
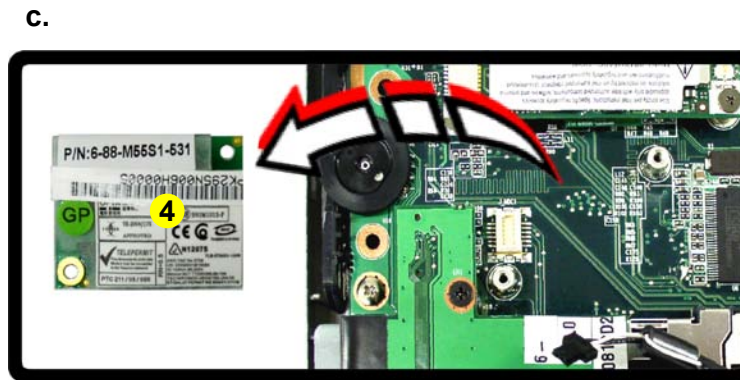
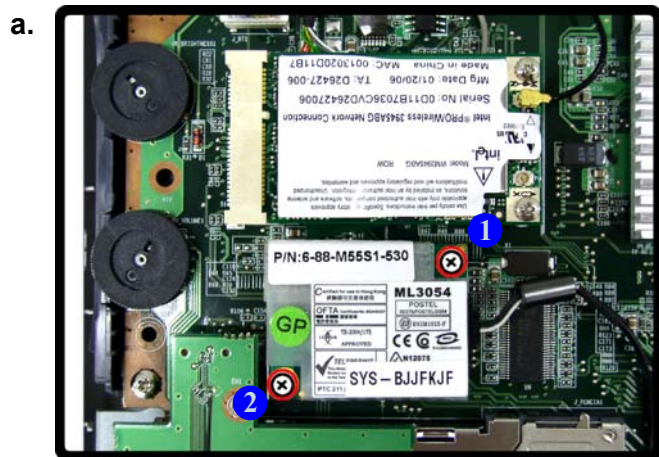
The screws should not be tightened in excess of 3Kg.

Removing the Modem

1. Remove the LCD back cover ([page 2 - 6](#)).
2. Remove screws ① and ② from the modem module.
3. Remove the modem module ④ from the connector socket ③, and disconnect the modem cable at point ⑤.
4. Lift the modem off the mainboard.

Figure 2 - 7
Modem Removal Sequence

- a. Remove the screws from the modem unit.
- b. Remove the modem from the connector and disconnect the cable.
- c. Lift the modem off the board.



✎

4. Modem module

- 2 Screws

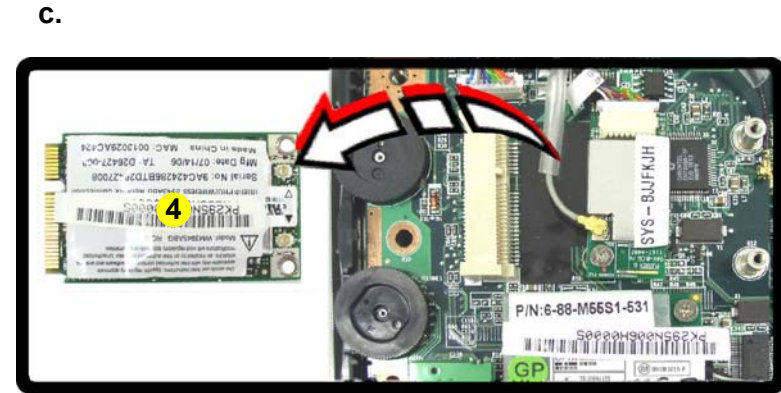
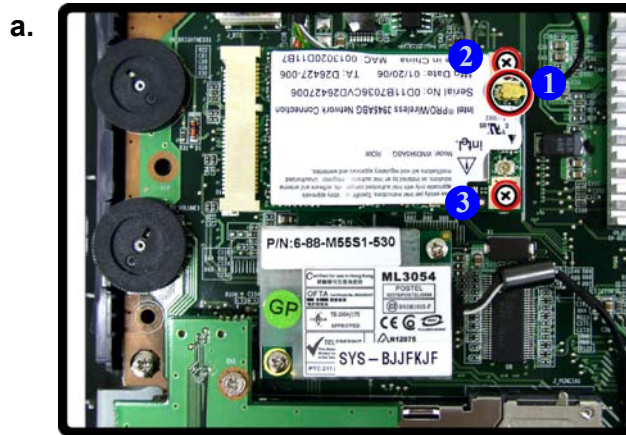
Disassembly

Figure 2 - 8 Wireless LAN Module Removal Sequence

- Disconnect the cable and remove the 2 screws.
- The WLAN module will pop-up.
- Remove the WLAN module.

Removing the Wireless LAN Module

- Remove the LCD back cover ([page 2 - 6](#)).
- Carefully disconnect cable ①, then remove screws ② & ③ from the module socket.
- The wireless LAN module ④ will pop-up.
- Lift the wireless LAN module ④ up and off the computer.



4. WLAN Module

- 2 Screws

Removing the Bluetooth Module

1. Remove the LCD back cover ([page 2 - 6](#)) and WLAN module ([page 2 - 12](#)).
2. Carefully disconnect cable ① & ②, then remove screw ③ from the module socket.
3. Lift the bluetooth module ④ up and off the computer.

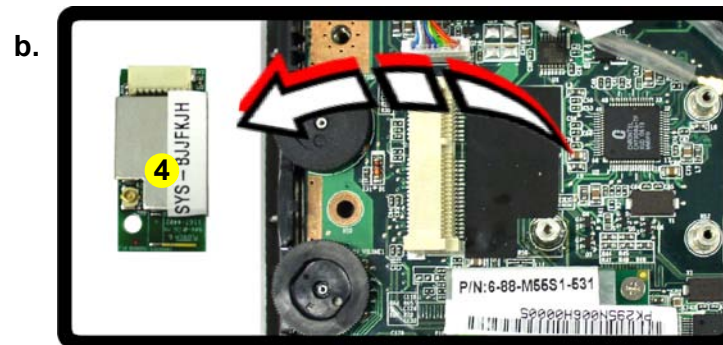
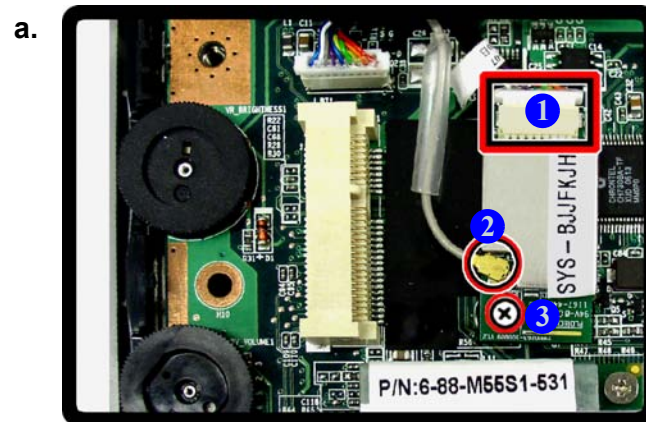
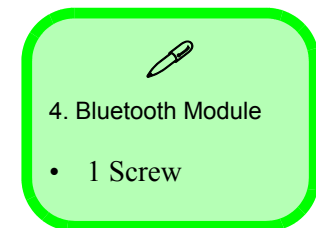


Figure 2 - 9
**Bluetooth Module
Removal
Sequence**

- a. Disconnect the cable and remove the 2 screws.
- b. Remove the bluetooth module.



Disassembly

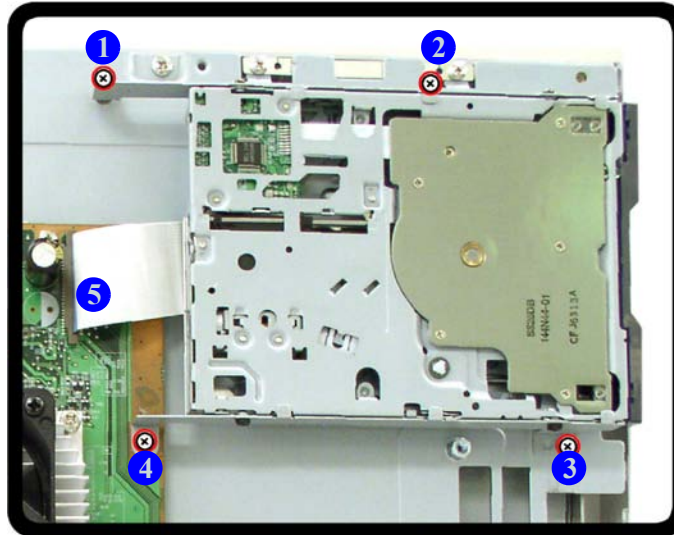
Figure 2 - 10 Floppy Disk Drive Assembly Removal Sequence

- a. Remove the screws from the FDD assembly and disconnect the FDD ribbon cable.
- b. Lift the FDD assembly off the board.

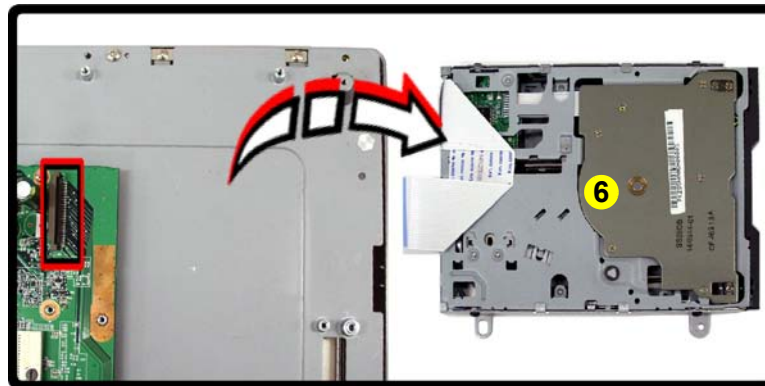
Removing the Floppy Disk Drive Assembly

1. Remove the LCD back cover ([page 2 - 6](#)).
2. Remove screws **1** - **4** from the floppy disk drive assembly.
3. Carefully disconnect the floppy disk drive ribbon cable at point **5**.
4. Lift the floppy disk drive assembly **6** off the mainboard.

a.



b.



6. FDD Assembly

- 4 Screws

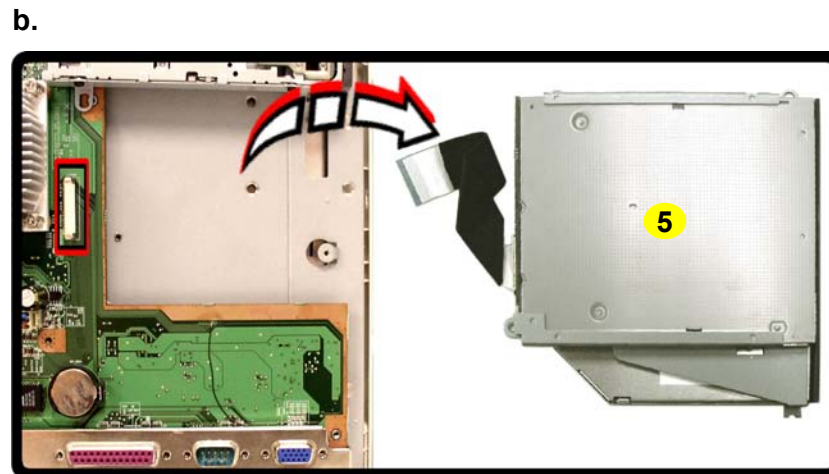
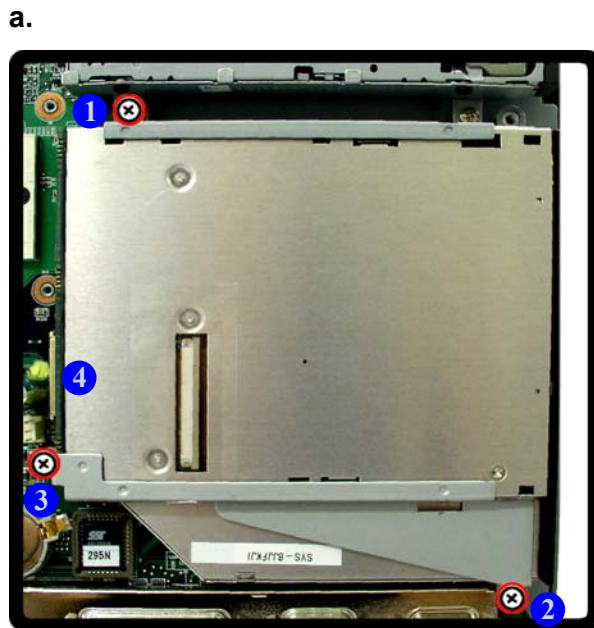
Removing the Optical Device Assembly


For L295N

1. Remove the LCD back cover (*page 2 - 6*).
2. Remove screws ① - ③, and disconnect cable ④, from the optical device.
3. Remove the optical device ⑤, and remove the screws in order to separate the optical device from the bracket.
4. Reverse the removal procedures to intall the new optical device.

Figure 2 - 11
Optical Device
Assembly
Removal
Sequence
(L295N)

- a. Remove the screws and disconnect the cable.
- b. Remove the Optical Device.





5. Optical Device

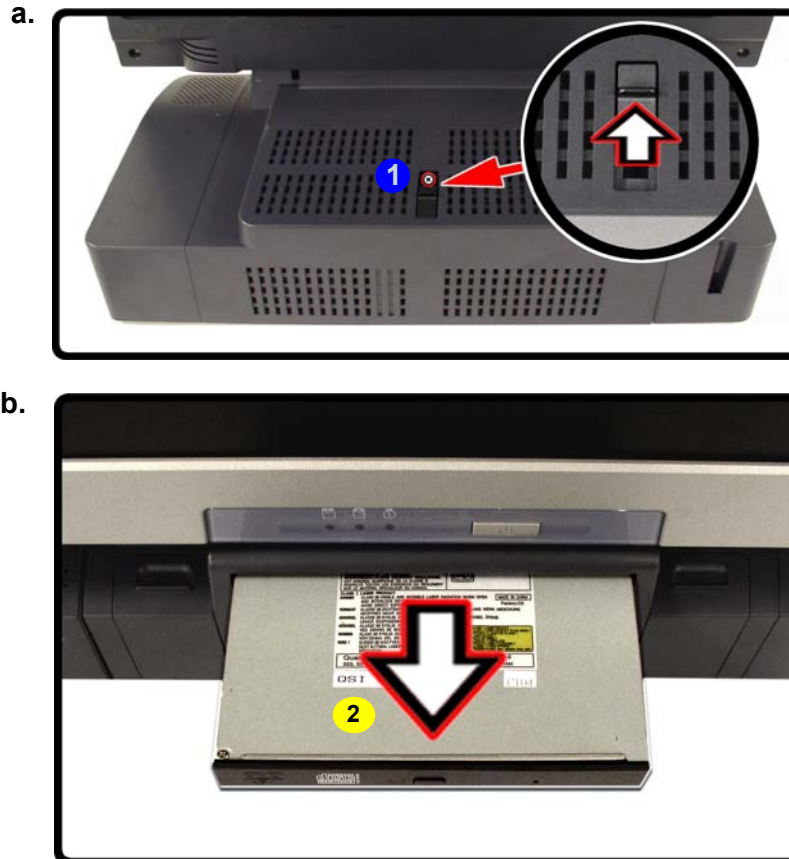
- 3 Screws

Disassembly

Figure 2 - 12
**Optical Device
 Assembly
 Removal
 Sequence
 (L297N)**

For L297N

1. Remove the LCD back cover ([page 2 - 6](#)).
 2. Locate the optical device eject switch and remove screw **1**.
 3. Push the optical device eject switch to slide the optical device assembly **2** out of the bay.
 4. Remove the optical device, and reverse the removal procedures to install the new optical device.
- a. Remove the screw, and push the switch to slide the optical device assembly out of the computer.
 - b. Remove the Optical Device.



2. Optical Device

- 1 Screw

Appendix A: Part Lists

This appendix breaks down the L295N/L297N computer'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	L295N	L297N
Base	<i>page A - 3</i>	<i>page A - 11</i>
Bracket (AU)	<i>page A - 4</i>	
Bracket (Chi-Mei)		<i>page A - 12</i>
Bracket - Touch Screen (AU)		<i>page A - 13</i>
Bracket - Touch Screen (Chi-Mei)		<i>page A - 14</i>
Front	<i>page A - 5</i>	<i>page A - 15</i>
Front - Touch Screen	<i>page A - 6</i>	
Combo	<i>page A - 7</i>	<i>page A - 16</i>
DVD-RW	<i>page A - 8</i>	<i>page A - 17</i>
FDD	<i>page A - 9</i>	<i>page A - 18</i>
HDD	<i>page A - 10</i>	<i>page A - 19</i>

L295N - Bracket (AU)

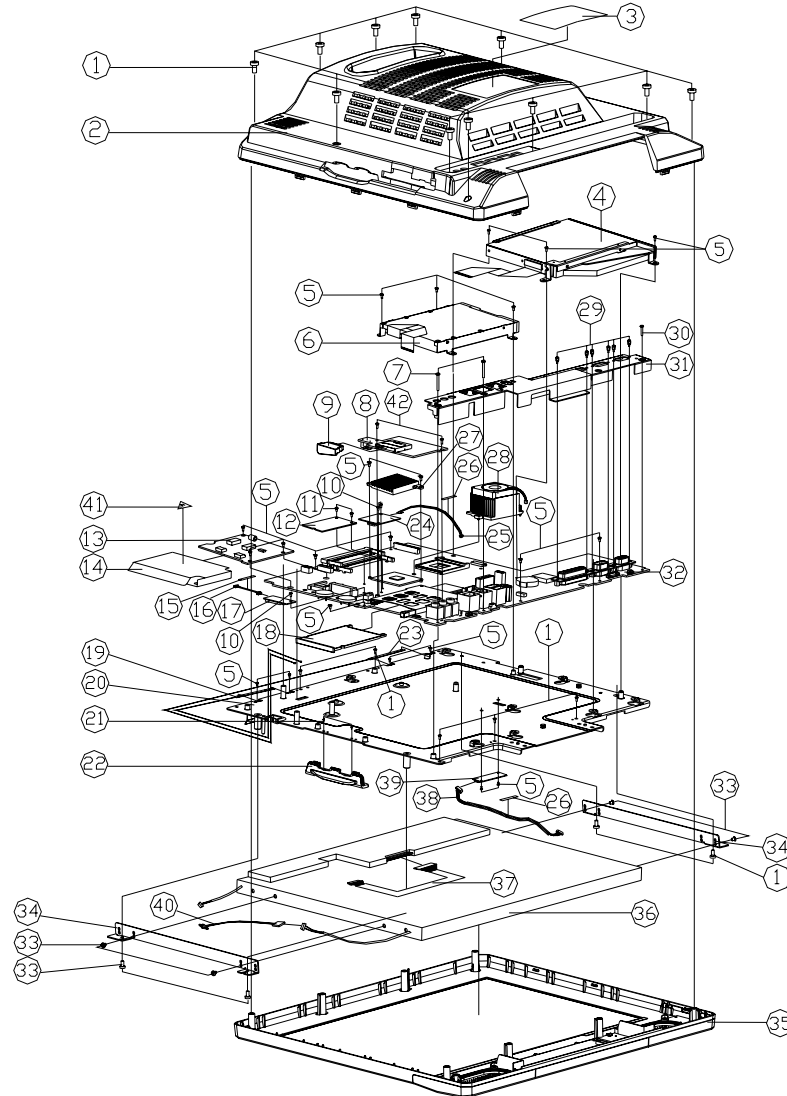


Figure A - 2
L295N Bracket (AU)

ITEM	PART NAME	PART NO	REMARK
1	SCREW M3*6L #0.5P B NI ICT	6-35-41130-6R0	
2	LCD BACK COVER MODULE L295N	6-39-L25N1-021	
3	PRODUCT LABEL FOR L295N	6-45-L25N3-011-C	
4	DVD/DUAL RW ASS'Y L295N	6-79-L25N0-010	
4	COMBO ASS'Y L295N	6-79-L25NX-010	
5	SCREW M2.5*5L B NI ICT	6-35-41125-5R0	
6	FDD (OPTION) ASS'Y L295N	6-79-L25NJ-020	
7	SCREW M2.5*2.5L K1 NI ICT	6-35-B1125-230	
8	CARD READER BOARD V2.0 L295N/L297N	6-77-L25NV-002	
9	CARD READER RUBBER COVER	6-47-M66NE-010	
10	SCREW M2*3L K1 NI ICT GTY-PATCH	6-35-B1120-3RE	
11	SCREW M2*4L K1 ICT (4.45 T=0.4)	6-35-B0120-4R0	
12	WLAN B021A+B+G MINI-CARD PCI-E 3945AG 1	6-88-M66N2-424	
12	B0211 B+G MINI CARD/USB REALTEK CHIPSET	6-88-M7702-701	
13	INVERTER MODULE EPS(S1690) V1.0 L295N	6-76-L25NR-011	
13	INVERTER MODULE MPT(M690) V1.0 L295N	6-76-L25NR-020	
14	INVERTER MYLAR_PC L297N	6-40-L27NS-010	
15	TAPE MYLAR (C)MYLAR M550J	6-40-M55J2-030	
16	WIRE CABLE FOR BLUETOOTH TO M/B 90 M550G	6-43-M55G0-071	
17	BLUETOOTH 2.0 B PIN MODULE GUSTORAN BELL	6-88-M55J5-390	
18	PCMCIA DUMMY CARTRIDGE/BOARD	6-42-M300P-012	
19	ANTENNA WLAN DUAL-BAND PIFA L295N BLACK	6-23-7L27N-020	
20	LCD BRACKET FOR 15" L295N	6-33-L25N1-010	
21	SCREW M2*5L K1 NI ICT	6-35-B1120-5RA	
22	VR COVER/PC/ABS(BK1A3B2) L295N	6-42-L25N1-010	
23	ANTENNA BLUETOOTH DUAL-BAND PIFA L400MM GR	6-23-7L27N-010	
24	MOBI 2 PIN MODULE SOLUTION M/B2A GREEN (LEVEL) 800 K20	6-88-M66S1-620	
24	MOBI 2 PIN MODULE SOLUTION M/B2A GREEN (LEVEL) 800 K20	6-88-M55S1-531	
25	WIRE CABLE FOR MDC MODEN V1.0 L287P	6-43-P700U-010	
26	TAPE MYLAR (A)MYLAR M550J	6-40-M55J2-010	
27	HEAT SINK FOR NORTH BRIDGE CHIP SET L297N	6-31-L27NN-010	
28	FAN-HEAT SINK MODULE ADDA L297N	6-31-L27NN-101	
29	HEX STUD SLM22 NI-PL 10mm	6-34-96002-000	
30	SCREW M2.5*4L K1 NI ICT (4.8,0.5)	6-35-B1125-14A	
31	ID BRACKET,SECC L297N	6-33-L27NS-010	
32	MAIN BOARD V2.0 L295N	6-77-L25N0-002	
33	SCREW M3*4L K1 NI ICT	6-35-B1130-4RB	
34	LCD BRACKET (GR) FOR ALUMINUM(D7) L295N	6-33-P2951-041	
35	LCD F-CVR COVER (V1.0) TOUCH SCREEN ASSY L295N	6-79-L25N1-001	
35	LCD F-CVR (V1.0) TOUCH SCREEN ASSY L295N	6-79-L25N1-002	
36	LED 1 AU 15" M2800 V2 VGA M24708 1 (2005) JIN 2000	6-50-L22C0-G02	
36	LOWAL M2800V2 TOUCH PANEL (2005) MODULE L29511	6-50-L22C0-G02-1	
37	WIRE CABLE FOR ALUMINUM(D7) L295N	6-43-L25N1-012	
38	TOUCH SCREEN CONTROLLER TO M/B CABLE L297N	6-43-L27T0-010	ONLY FOR L295NP
39	TOUCH PANEL CONTROLLER BOARD FOR D0 M/L L297N	6-76-L27TS-021	ONLY FOR L295NP
40	INVERTER WIRE CABLE FOR AU 15" L295N	6-43-L25NR-010	
41	ELECTRIC SHOCK CAUTION 82H	6-45-82004-000	
42	SCREW M2.5*6L K1 NI ICT NY (4.45 T=0.5)	6-35-B1125-6RB	

L295N - Front

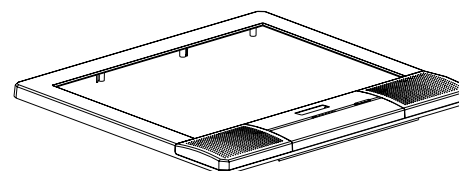
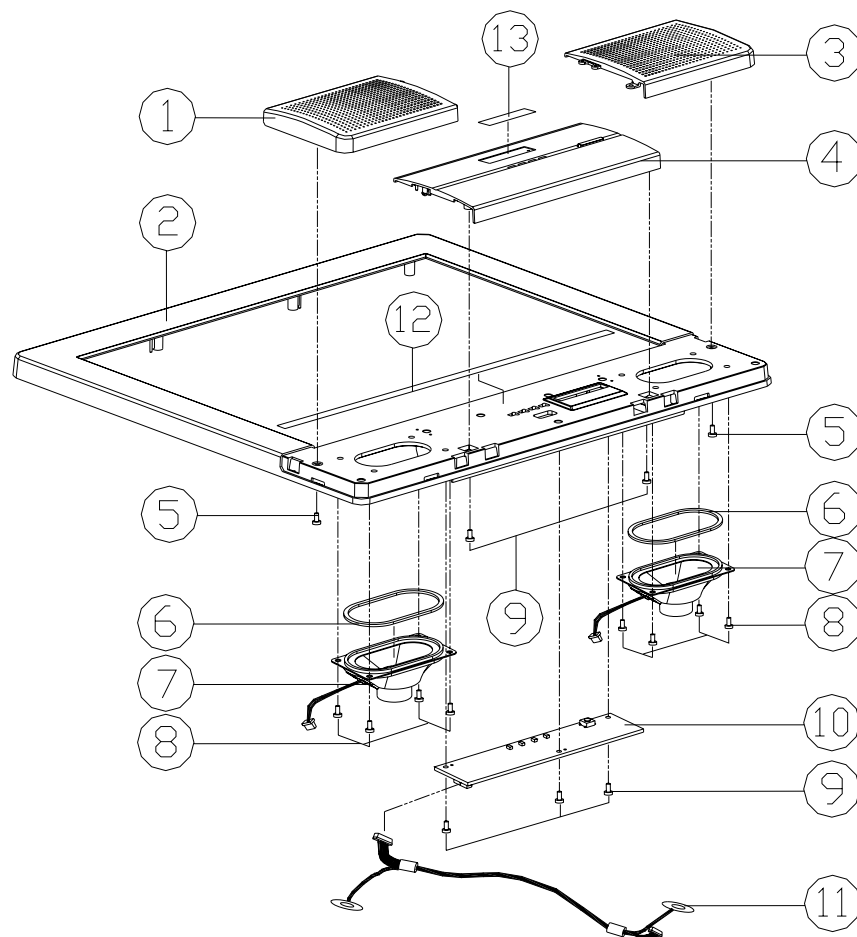


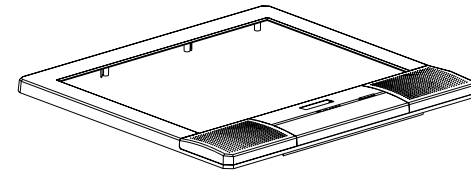
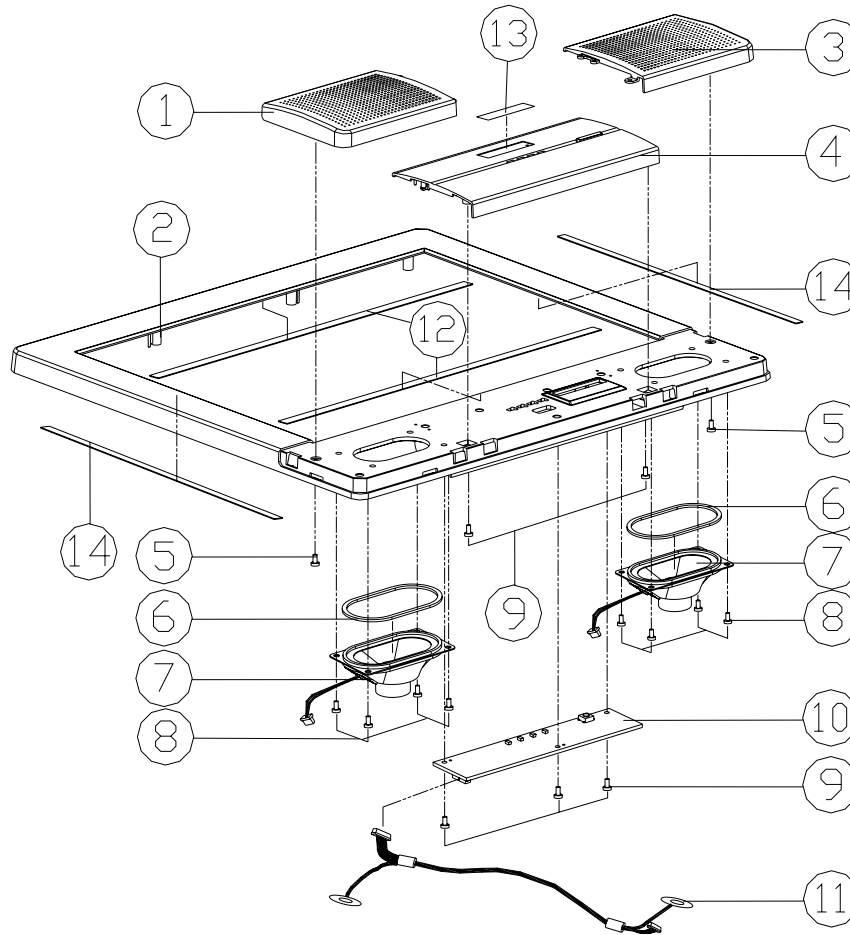
Figure A - 3
L295N - Front

ITEM	PART NAME	PART NO	REMARK
1	SPEAKER COVER(L)/PC/ABS(BR6119) L295N 無鉛	6-42-L25NT-020	
2	LED F-CVR MODULE FOR ORANGE/SHR 445 銀色 L285P 無鉛	6-39-P5201-011	
3	SPEAKER COVER(R)/PC/ABS(BR6119) L295N 無鉛	6-42-L25NT-010	
4	CONTROL PANEL MODULE L295N 無鉛	6-42-L25NI-100	
5	SCREW M2.5*4L B BNI ICT 三槽 無鉛	6-35-49125-4R0	
6	SPEAKER RUBBER, SILICONE LP200 無鉛	6-47-P2202-000	
7	SPK-CON 71MM1828.7H 2W 8RTG-4070ABD L295N 無鉛	6-23-5L25N-010	
8	SCREW M3*4L K1 NI ICT 無鉛	6-35-B1130-4RB	
9	SCREW M2.5*5L B NI ICT 無鉛	6-35-41125-5R0	
10	BUTTON BOARD V2.0 L295N 無鉛	6-77-L25NF-002	
11	WIRE CABLE FOR LED SIGNAL TOP L285P 無鉛	6-43-P500F-011	
12	SPONGE (300*40*5T) FOR F-CVR L285P 無鉛	6-47-0019A-300	
13	NAME PLATE (LCD PC LOGO) LP200SE 無鉛 (標準)	6-45-P2SE1-011-1	

A.Part Lists

L295N - Front - Touch Screen

Figure A - 4
L295N - Front - Touch Screen



ITEM	PART NAME	PART NO	REMARK
1	SPEAKER COVER(L)PC/ABS(BR6119) L295N 無鉛	6-42-L25NT-020	
2	LCD F-CVR MODULE FOR CHINA/SHIP 415/ 無鉛 L285F 無鉛	6-39-P5201-011	
3	SPEAKER COVER(R)PC/ABS(BR6119) L295N 無鉛	6-42-L25NT-010	
4	CONTROL PANEL MODULE L295N 無鉛	6-42-L25N1-100	
5	SCREW M2.5*4L B BNI ICT 三層鍍 無鉛	6-35-49125-4R0	
6	SPEAKER RUBBER, SILICONE LP200 無鉛	6-47-P2202-000	
7	SPEAKER 71W410287H 3W 837G-4070A0 L295N 無鉛	6-23-5L25N-010	
8	SCREW M3*4L K1 NI ICT 無鉛	6-35-B1130-4RB	
9	SCREW M2.5*5L B NI ICT 無鉛	6-35-41125-5R0	
10	BUTTON BOARD V2.0 L295N 無鉛	6-77-L25NF-002	
11	WIRE CABLE FOR LED SIGNAL TOP L285F 無鉛	6-43-P500F-011	
12	EVA (310*40.5MM) FOR F-CVR L285SF 無鉛	6-47-0019A-310	
13	NAME PLATE (LCD PC LOZED) LP200SE 無鉛(鍍金)	6-45-P2SE1-011-1	
14	EVA (230*40.5T) FOR F-CVR L285SF 無鉛	6-47-0019A-230	

L295N - Combo Drive

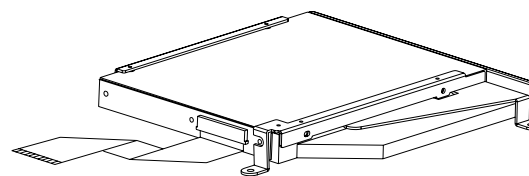
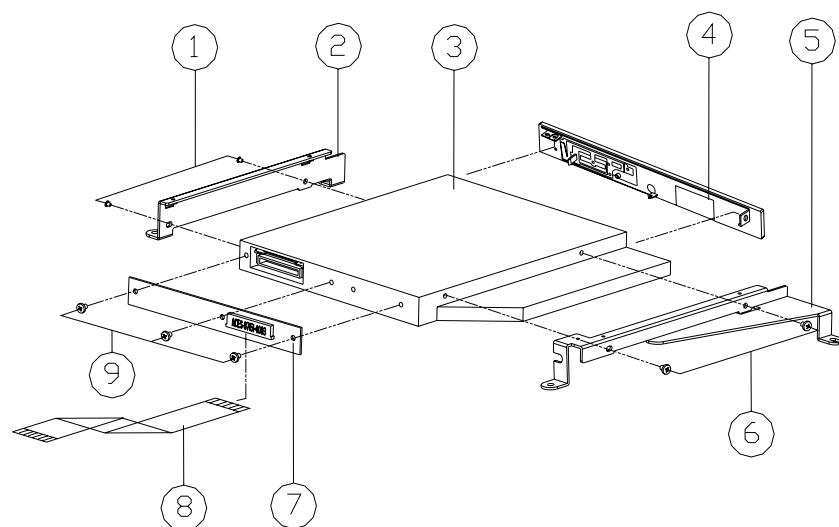


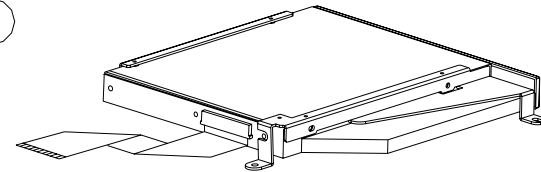
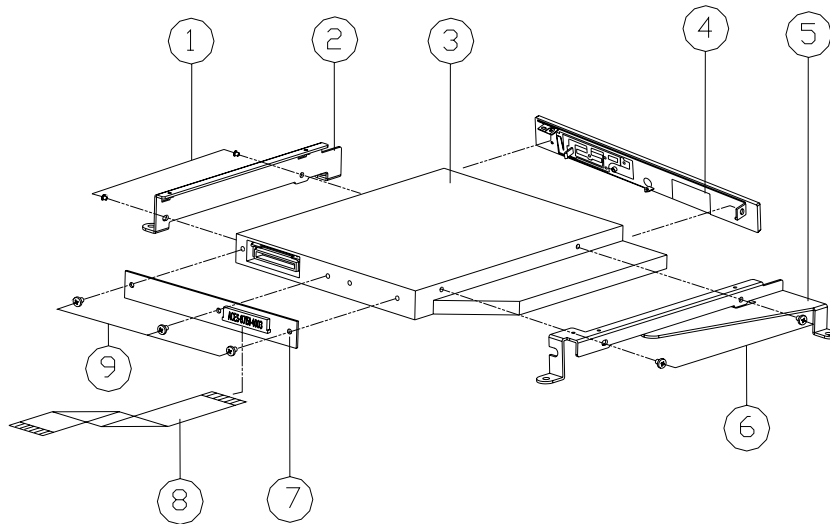
Figure A - 5
L295N -
Combo Drive

ITEM	PART NAME	PART NO	REMARK
1	SCREW M2.0*3L F NI ICT NY 無鉛	6-35-21120-3RA	
2	CD-R/DVD BRACKET (L),SECC L285P 無鉛	6-33-P500Z-030	
3	CD-R/DVD 5 1/4" 24X 12.7MM UJDA770CL-A PANASONIC 無鉛	6-85-907PX-P00	
3	CD-R/DVD 5 1/4" 24X 12.7MM SC85265 PHILIP 無鉛	6-85-907PX-C02	
3	CD-R/DVD 5 1/4" 24X 12.7MM TS-L4620 6/N/INDO TSST 無鉛	6-85-907PX-T01	
4	COMBO BEZEL MODULE (BK1A382) L295N 無鉛	6-42-L25NX-100	(UJDA770CL-A)
5	CD-R/DVD BRACKET (R) L295T 無鉛	6-33-L25TZ-010	
6	SCREW M2*3.5L F BNI ICT NY 無鉛	6-35-21120-35B	
7	CD-R/DVD TRANSFER BOARD V1.0 L295N 無鉛	6-77-L25NH-001	
8	FFC CABLE FOR CD-R/DVD L295P 無鉛	6-43-P295Z-010	
9	SCREW M2*0.4P*4L B NI ICT 無鉛	6-35-41120-4R0	

A.Part Lists

L295N - DVD-RW Drive

Figure A - 6
L295N -
DVD-RW Drive



ITEM	PART NAME	PART NO	REMARK
1	SCREW M2.0*3L F NI ICT NY 無鉛	6-35-21120-3RA	
2	CD-RDM BRACKET (L),SECC L285P 無鉛	6-33-P500Z-030	
3	DVD/DUAL RW 5 1/4" 8X 12.7MM TS-L632D 無鉛	6-85-A078X-T02	
3	DVD/DUAL RW 5 1/4" 8X 12.7MM DVR-K16RS 無鉛	6-85-A078X-B04	
3	DVD/DUAL RW 5 1/4" 8X 12.7MM SV0802 F/4MM PHILIPS02D 無鉛	6-85-A078X-T02	
4	TOSHIBA DUAL DVDRW BEZEL MODULE 無鉛	6-42-L25NQ-200	(SUPER MULTI)
4	TOSHIBA DUAL DVDRW BEZEL MODULE 無鉛	6-42-L25NQ-100	(G-BASS)X(BK)A382
5	CD-RDM BRACKET (R) L295T 無鉛	6-33-L25TZ-010	
6	SCREW M2*3.5L F BNI ICT NY 無鉛	6-35-21120-35B	
7	CD-RDM TRANSFER BOARD V1.0 L295N 無鉛	6-77-L25NH-001	
8	FFC CABLE FOR CD-RDM L295P 無鉛	6-43-P295Z-010	
9	SCREW M2*0.4P*4L B NI ICT 無鉛	6-35-41120-4R0	

L295N - FDD

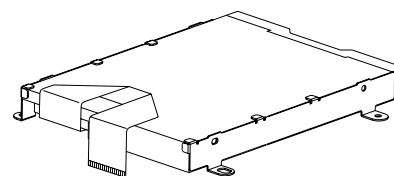
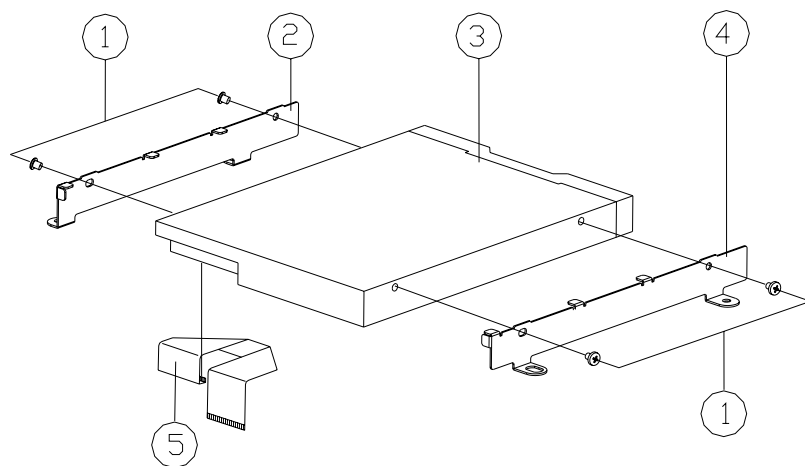


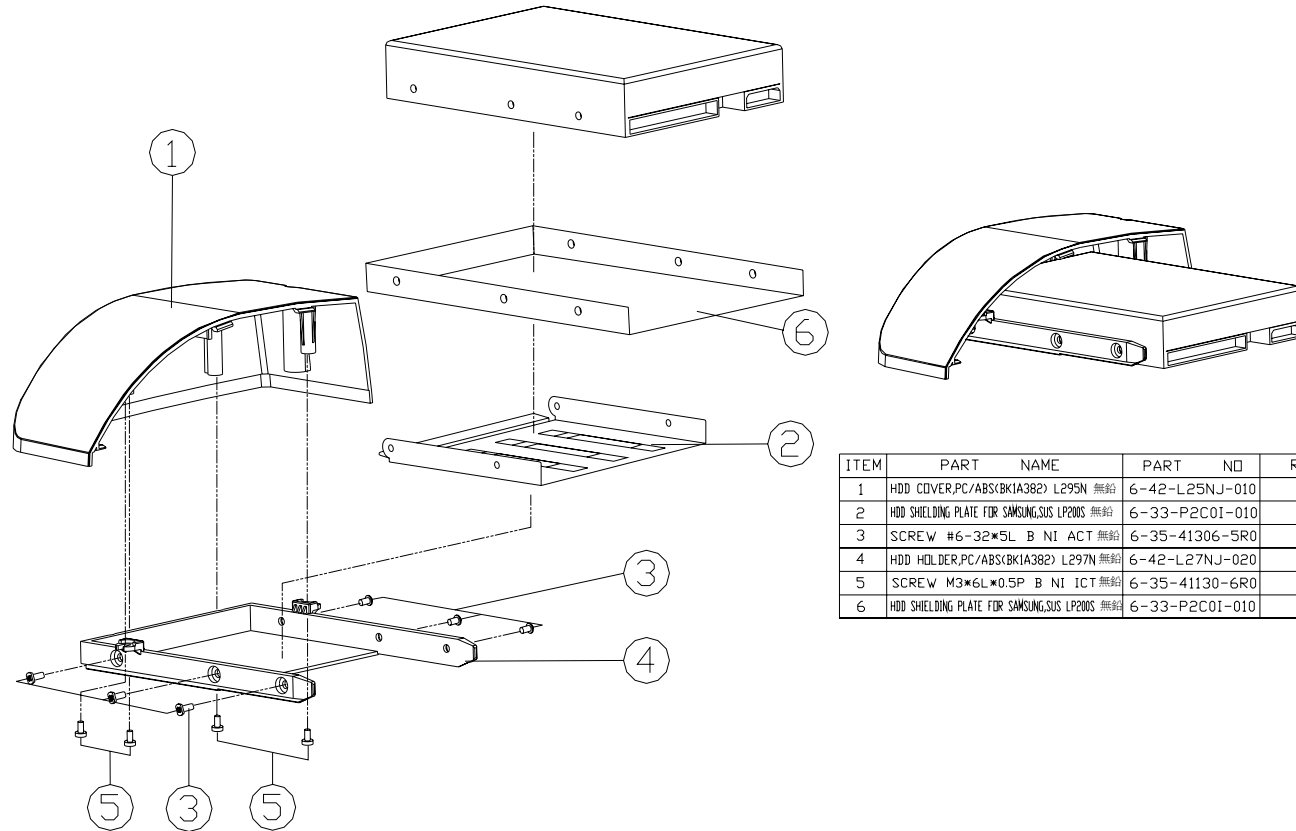
Figure A - 7
L295N - FDD

ITEM	PART NAME	PART NO	REMARK
1	SCREW M2.5*3L P BZ ICT NY 無鉛	6-35-06125-3R0	
2	FDD BRACKET (R) SECC L285P 無鉛	6-33-P500J-012	
3	FDD 35' 144MB 12.7MM YD-702J-6637J-644761 無鉛	6-85-11700-Y06-4	
4	FDD BRACKET (L) SECC L285P 無鉛	6-33-P500J-022	
5	FFC CABLE FOR FDD L295N 無鉛	6-43-L25NJ-011	

A.Part Lists

L295N - HDD

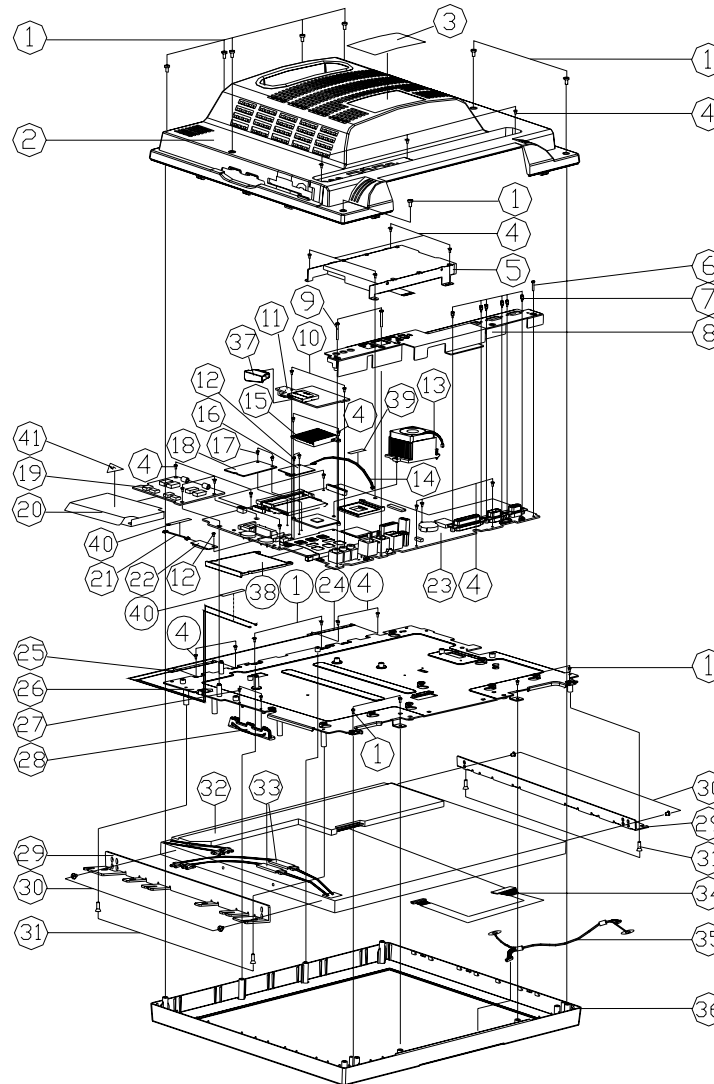
Figure A - 8
L295N - HDD



ITEM	PART NAME	PART NO	REMARK
1	HDD COVER,PC/ABS(BK1A382) L295N 無鉛	6-42-L25NJ-010	
2	HDD SHIELDING PLATE FOR SAMSUNG,SUS LP200S 無鉛	6-33-P2C01-010	
3	SCREW #6-32*5L B NI ACT 無鉛	6-35-41306-5R0	
4	HDD HOLDER,PC/ABS(BK1A382) L297N 無鉛	6-42-L27NJ-020	
5	SCREW M3*6L*0.5P B NI ICT 無鉛	6-35-41130-6R0	
6	HDD SHIELDING PLATE FOR SAMSUNG,SUS LP200S 無鉛	6-33-P2C01-010	

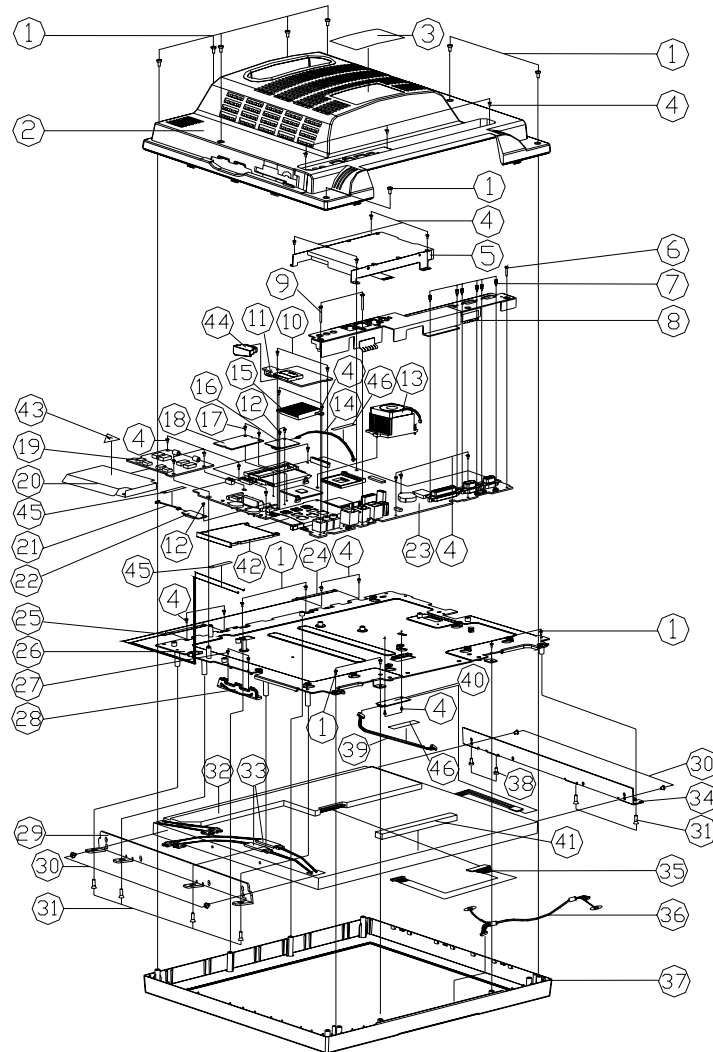
L297N - Bracket (Chi-Mei)

Figure A - 2
L297N - Bracket
(Chi-Mei)



ITEM	PART NAME	PART NO	REMARK
1	SCREW M3*6L*0.5P B NI ICT	6-35-41130-6R0	
2	LCD BACK COVER MODULE L297N	6-39-L27N1-021	
3	PRODUCT LABEL FOR L297N	6-45-L27N3-011-C	
4	SCREW M2.5*5L B NI ICT	6-35-41125-5R0	
5	FDD (OPTID) ASS'Y L297N	6-79-L27NJ-020	
6	SCREW M2.5*14L KI NI ICT (48.05)	6-35-B1125-14A	
7	HEX STUD SUM22 NI-PL 10mm	6-34-96002-000	
8	1/3 BRACKET+GASKET MODULE SECC L297N	6-33-L27NS-100	
9	SCREW M2.5*23L KI NI ICT	6-35-B1125-230	
10	SCREW M3*6L KI NI ICT N° 045 (H3500)	6-35-B1125-6RB	
11	CARD READER BOARD V20 L299V/L297N	6-77-L25NV-002	
12	SCREW M2*3L KI NI ICT GTY-PATCH	6-35-B1120-3RE	
13	FAN+HEAT SINK MODULE ADDA L297N	6-31-L27NN-101	
14	WIRE CABLE FOR MOD. MODERN V10 L287P	6-43-P700U-010	
15	HEAT SINK FOR NORTH BRIDGE CHIP SET L297N	6-31-L27NN-010	
16	WIRE PIN ATTACHED TO THE BOARD GREEN (L297N) MOD. MODERN	6-88-M66S1-620	
16	WIRE PIN ATTACHED TO THE BOARD GREEN (L297N) MOD. MODERN	6-88-M55S1-531	
17	SCREW M2*4L KI ICT (H4.5 T=0.4)	6-35-B0120-4R0	
18	WLAN BR211A+BG MINI-CARD PCI-E 3945BG I	6-88-M66N2-424	
18	BR211 B+G MINI CARD(USB) REALTEK CHIPSET	6-88-M7702-701	
19	INVERTER MIDDLE EPS1516890 V10 L297N	6-76-L27NR-011	
19	INVERTER MIDDLE MP104690 V10 L297N	6-76-L27NR-020	
20	INVERTER MYLAR.PC L297N	6-40-L27NS-010	
21	WIRE CABLE FOR BLUETOOTH TO M3 9P M506	6-43-M55G0-071	
22	BLUETOOTH 20 P PIN MODULE GUSTOR4GM B111	6-88-M55J5-390	
23	MAIN BOARD V20 L295N	6-77-L25N0-002	
24	ANTENNA BLUETOOTH DUAL-BAND PIFA L=40MM GR	6-23-7L27N-010	
25	ANTENNA WLAN DUAL-BAND PIFA L=219MM BLACK	6-23-7L27N-020	
26	LCD BRACKET 17".SECC L297N	6-33-L27N1-010	
27	SCREW M2*5L KI NI ICT	6-35-B1120-5RA	
28	VR COVER.PC/ABS(BK)A3827 L297N	6-42-L27N1-010	
29	LED BRACKET AL FOR CH. MEI.MILUSSECM L297N	6-33-L27N1-020	
30	SCREW M3*3L I NI ICT	6-35-C1130-3R0	
31	SCREW M3.5*10L F NH (D=7) ICT	6-35-21135-100	
32	LCD 17" T CHIMEI M170E7-01 12.8MM	6-50-N32C8-D00	
33	LED TO INVERTER CABLE FOR 001170 (D=10) L	6-43-P2971-030	
34	LCD TO CONV. WIRE CABLE FOR CHIMEI L297N	6-43-L27N1-012	
35	WIRE CABLE FOR LED SIGNAL TOP L287P	6-43-P700F-011	
36	LCD F-CVR MIDDLE.(475) (D=10) L297N	6-39-P7201-012	
37	CARD READER RUBBER.SILICON L297N	6-47-L27N8-010	
38	PONDA BUSH CARBON(INS)M001	6-42-M300P-012	
39	TAPE MYLAR (A).MYLAR M550J	6-40-M55J2-010	
40	TAPE MYLAR (C).MYLAR M550J	6-40-M55J2-030	
41	ELECTRIC SHOCK CAUTION B2H	6-45-82004-000	

L297N - Bracket - TouchScreen (AU)

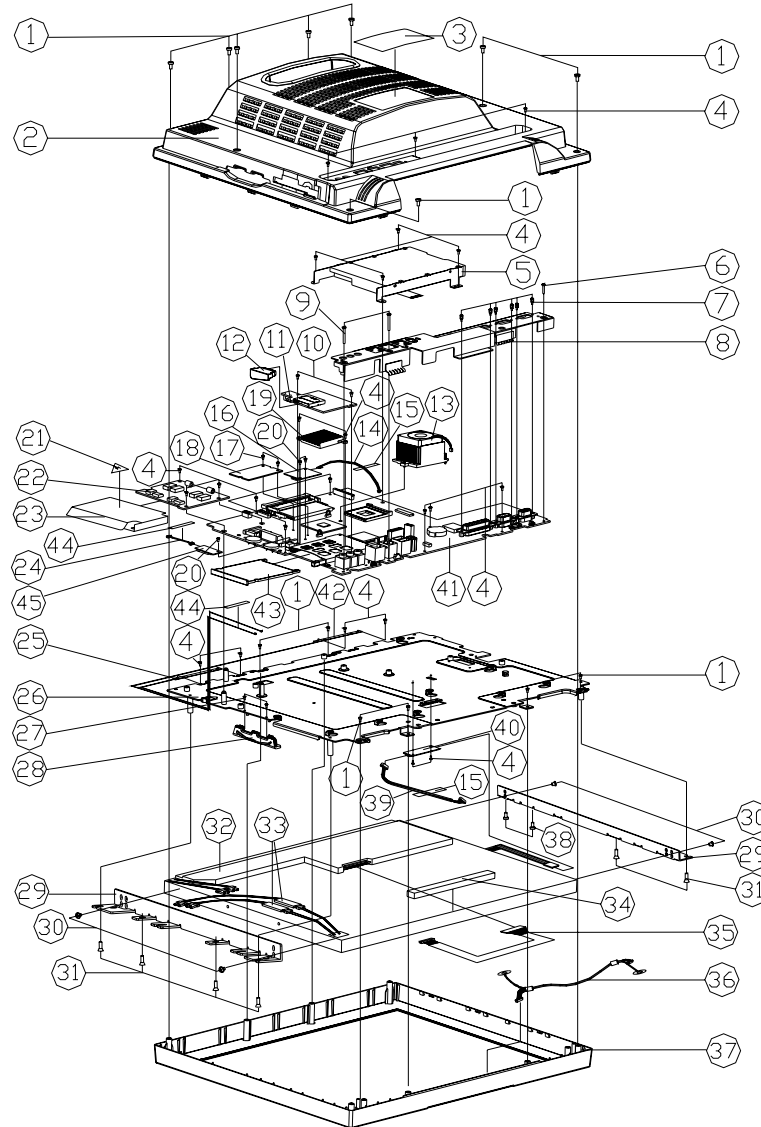


ITEM	PART NAME	PART NO	REMARK
1	SCREW M3*6L*0.5P B NI ICT	6-35-41130-6R0	
2	LCD BACK COVER MODULE L297N	6-39-L27N1-021	
3	PRODUCT LABEL FDR L297N	6-45-L27N3-011-C	
4	SCREW M2.5*5L B NI ICT	6-35-41125-5R0	
5	FDD (OPTION) ASS'Y L297N	6-79-L27N1-020	
6	SCREW M2.5*4L K1 NI ICT (4.0.5)	6-35-B1125-14A	
7	HEX STUD SUM22 NI-PL 10mm	6-34-96002-000	
8	I/O BRACKET-GADGET MODULE,SECC L297N	6-33-L27NS-100	
9	SCREW M2.5*2.5L K1 NI ICT	6-35-B1125-230	
10	SCREW M2.5*4L K1 NI ICT NY (04.5 1+0.5)	6-35-B1125-6RB	
11	CARD READER BOARD V2.0 L297N/L297N	6-77-L295NV-002	
12	SCREW M2*3L K1 NI ICT GTY-PATCH	6-35-B1120-3RE	
13	FAN+HEAT SINK MODULE ADDA L297N	6-31-L27NN-101	
14	WIRE CABLE FOR HDC MODULE V1.0 L297N	6-43-P700U-010	
15	HEAT SINK FOR NORTH BRIDGE CHIP SET L297N	6-31-L27NN-010	
16	WIRE PIV W/REVERSE SOLUTION IN 2.0mm (LEVEL) RIGID PCB	6-88-M66S1-620	
16	WIRE W/REVERSE PIV W/REVERSE SOLUTION IN 2.0mm (LEVEL) RIGID PCB	6-88-M55S1-531	
17	SCREW M2*4L K1 ICT (04.5 T+0.4)	6-35-B0120-4R0	
18	WLAN 802.11n+HG MINI-CARD PCIE 2945AG1	6-88-M66N2-424	
18	802.11 HG MINI CARDS(B) REALTEK CHIPSET	6-88-M7702-701	
19	INVERTER MODULE EP5151680 V1.0 L297N	6-76-L27NR-011	
19	INVERTER MODULE NP10639 V1.0 L297N	6-76-L27NR-020	
20	INVERTER MYLAR,PC L297N	6-40-L27NS-010	
21	WIRE CABLE FOR BLUETOOTH TO W/B W/ M55G	6-43-M55G0-071	
22	BLUETOOTH 2.0 B PIN MODULE G42C040M B011	6-88-M55J5-390	
23	MAIN BOARD V2.0 L295N	6-77-L295N0-002	
24	ANTENNA BLUETOOTH DUAL-BAND PIFA L=410MM GR	6-23-7L27N-010	
25	ANTENNA WLAN DUAL-BAND PIFA L=215MM BLACK	6-23-7L27N-020	
26	LCD BRACKET 17"-SECC L297N	6-33-L27N1-010	
27	SCREW M2*5L K1 NI ICT	6-35-B1120-5RA	
28	VR COVER,PC/ABS(BK)A380 L297N	6-42-L27N1-010	
29	LCD BRACKET(F) FOR AUTOMETE(GO) L2971	6-33-L27T1-011	
30	SCREW M3*5MM F NI ICT	6-35-F1130-5R0	
31	SCREW M3.5*10L F NIW (0.75) ICT	6-35-21135-100	
32	LCD AUTOMETE(GO)-TOUCH PANEL (0.9) 19.5" L297N	6-50-L27N1-010	
33	LCD TO INVERTER CABLE FOR 09170 (0.9) 19.5" L	6-43-P2971-030	
34	LCD BRACKET(L) FOR AUTOMETE(GO) L2971	6-33-L27T1-021	
35	LCD TO CONV. WIRE CABLE FOR CHINE L297N	6-43-L27N1-012	
36	WIRE CABLE FOR LED SIGNAL TOP L297P	6-43-P700F-011	
37	F-CVR FOR TOUCH SCREEN ASS'Y L297N	6-79-L27N1-001	
38	SCREW M3.5*5L 1 BNI ICT	6-35-C9135-5R0	
39	TOUCH SCREEN CONTROLLER TO W/B CABLE L2971	6-43-L27T0-010	
40	TOUCH PANEL CONTROLLER BOARD FOR CHINE L	6-76-L27T5-021	
41	SPONGE DISK-SUPPORT FOR LCD (0.9) 19.5" L297N	6-47-L27N1-010	
42	PCBIA DUMMY CARTRIDGE (0.9) (0.9) 19.5" L297N	6-42-M300P-012	
43	ELECTRIC SHOCK CAUTION 824	6-45-82004-000	
44	CARD READER RUBBER,SILICON L297N	6-47-L27NR-010	
45	TAPE MYLAR (C)MYLAR M55J2	6-40-M55J2-030	
46	TAPE MYLAR (A)MYLAR M55J2	6-40-M55J2-010	

Figure A - 3
L297N - Bracket - Touch Screen (AU)

L297N - Bracket - TouchScreen (Chi-Mei)

Figure A - 4
L297N - Bracket -
Touch Screen
(Chi-Mei)



ITEM	PART NAME	PART NO	REMARK
1	SCREW M3*6L*0.5P B NI ICT	6-35-41130-6R0	
2	LCD BACK COVER MODULE L297N	6-39-L27N1-021	
3	PRODUCT LABEL FOR L297N	6-45-L27N3-011-C	
4	SCREW M2.5*5L B NI ICT	6-35-41125-5R0	
5	FDD (OPTION) ASS'Y L297N	6-79-L27NJ-020	
6	SCREW M2.5*4L KI NI ICT (4.8,0.5)	6-35-B1125-14A	
7	HEX STUD SUM22 NI-PL 10mm	6-34-96002-000	
8	I/O BRACKET+GASKET MODULE SECC L297N	6-33-L27NS-100	
9	SCREW M2.5*23L KI NI ICT	6-35-B1125-230	
10	SCREW M2.5*6L KI NI ICT NY (#4.5 1*0.5)	6-35-B1125-6RB	
11	CARD READER BOARD V2.0 L295N/L297N	6-77-L25NV-002	
12	CARD READER RUBBER,SILICON	6-47-L27N8-010	
13	FAN+HEAT SINK MODULE ADDA L297N	6-31-L27NN-101	
14	WIRE CABLE FOR MOD MODEM V1.0 L287P	6-43-P700U-010	
15	TAPE MYLAR (A),MYLAR M550J	6-40-M55J2-010	
16	MAIN BOARD V2.0 L295N/L297N	6-88-M66S1-620	
17	SCREW M2*4L KI ICT (4*5 T=0.4)	6-35-B0120-4R0	
18	WLAN BR210+ENG MINI-CARD PCI-E 3945AG1	6-88-M66N2-424	
19	HEAT SINK FOR NORTH BRIDGE CHIP SET L297N	6-31-L27N8-010	
20	INVERTER MODULE MPT1069 V1.0 L297N	6-76-L27NR-020	
21	SCREW M2*3L KI NI ICT GTY-PATCH	6-35-B1120-3RE	
22	ELECTRIC SHOCK CAUTION 82H	6-45-82004-000	
23	INVERTER MIDDLE EPS103680 V1.0 L297N	6-76-L27NR-011	
24	INVERTER MYLAR_PC L297N	6-40-L27NS-010	
25	WIRE CABLE FOR BLUETOOTH TO W3 SP M550J	6-43-M55G0-071	
26	ANTENNA WLAN DUAL-BAND PIFA L-215MM BLACK	6-23-7L27N-020	
27	LCD BRACKET 17"-SECC L297N	6-33-L27N1-010	
28	VR COVER,PC+ABS(BK1A300) L297N	6-42-L27N1-010	
29	LCD BRACKET FOR CH MEI TOUCHSCREEN L297N	6-33-L27N1-020	
30	SCREW M3*5MM F NI ICT	6-35-F1130-5R0	
31	SCREW M3.5*10L F NH (D=7) ICT	6-35-21135-100	
32	LED CHINESE/ENGLISH TOUCH PANEL	6-50-L27N1-020	
33	LCD TO INVERTER CABLE FOR Q0110 (Q010) L	6-43-P2971-030	
34	SPRING CUSHION FOR LCD BRACKET MID L297N	6-47-L27N1-010	
35	LCD TO CONV. WIRE CABLE FOR CHMEI L297N	6-43-L27N1-012	
36	WIRE CABLE FOR LED SIGNAL TOP L287P	6-43-P700F-011	
37	F-CVR FOR TOUCH SCREEN ASS'Y L297N	6-79-L27N1-001	
38	SCREW M3.5*5L 1 BNI ICT	6-35-C9135-5R0	
39	TOUCH SCREEN CONTROLLER FOR CH MEI L	6-43-L27T0-010	
40	TOUCH PANEL CONTROLLER BOARD FOR CH MEI L	6-76-L27TS-021	
41	MAIN BOARD V2.0 L295N	6-77-L25N0-002	
42	ANTENNA BLUETOOTH DUAL-BAND PIFA L-410MM GR	6-23-7L27N-010	
43	PCMCIA DUMMY CARTRIDGE BOARD	6-42-M300P-012	
44	TAPE MYLAR (C),MYLAR M550J	6-40-M55J2-030	
45	BLUETOOTH 2.0 B PIN MODULE GUBTCRAEM BILL1	6-88-M55J5-390	

L297N - Front

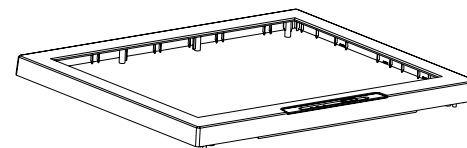
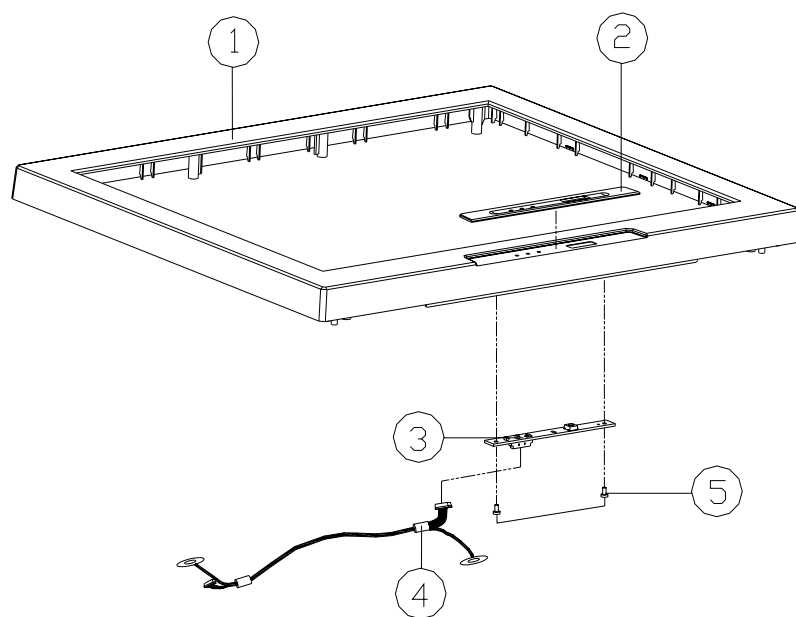
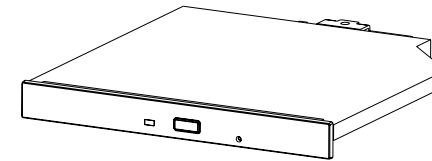
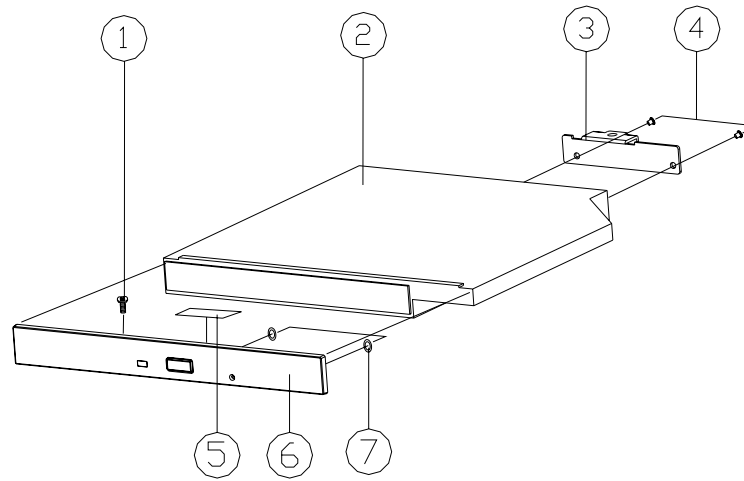


Figure A - 5
L297N - Front

ITEM	PART NAME	PART NO	REMARK
1	LCD F-CVR MODULE,(475/銀色) L287PB 無鉛	6-39-P7201-012	
2	CONTRDL PANEL_PC L287PB 無鉛	6-42-P7291-011	
3	BUTTON BOARD V2.0 L297N 無鉛	6-77-L27NF-002	
4	WIRE CABLE FOR LED SIGNAL 10P L287P 無鉛	6-43-P700F-011	
5	SCREW M2.5*5L B NI ICT 無鉛	6-35-41125-5R0	

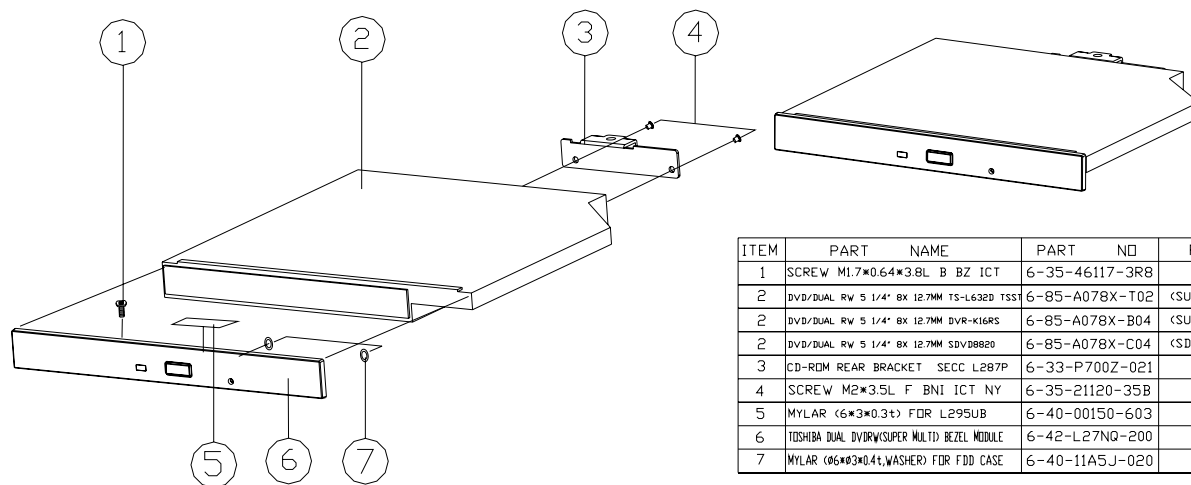
L297N - Combo Drive

Figure A - 6
L297N -
Combo Drive



ITEM	PART NAME	PART NO	REMARK
1	SCREW M1.7*0.64*3.8L B BZ ICT	6-35-46117-3R8	
2	CD-RW/DVD 5 1/4" 24X 12.7MM (UJDA770CL-A PANASONIC)	6-85-907PX-P00	(UJDA770CL-A)
2	CD-RW/DVD 5 1/4" 24X 12.7MM (SCB5265 PHILIPS08D)	6-85-907PX-C02	(SCB-5265)
2	CD-RW/DVD 5 1/4" 24X 12.7MM TS-L462D TSST	6-85-907PX-T01	TS-L462D
3	CD-ROM REAR BRACKET SECC L287P	6-33-P700Z-021	
4	SCREW M2*3.5L F BNI ICT NY	6-35-21120-35B	
5	MYLAR (6*3*0.3t) FOR L295UB	6-40-00150-603	
6	COMBO BEZEL MODULE (BK1A382)	6-42-L27NX-100	
7	MYLAR (06*03*0.4t,WASHER) FOR FDD CASE	6-40-11A5J-020	

L297N - DVD-RW Drive



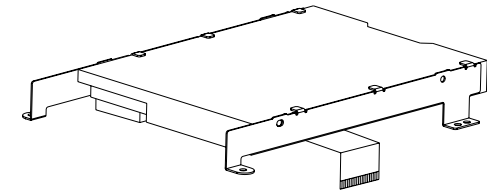
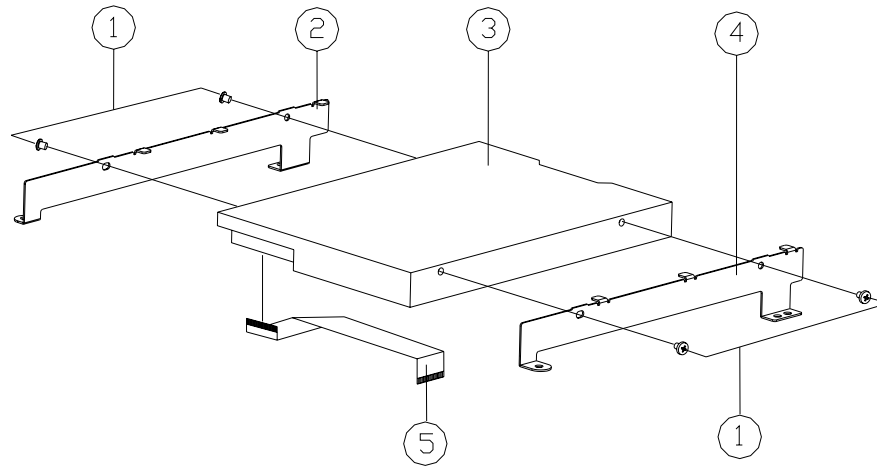
ITEM	PART NAME	PART NO	REMARK
1	SCREW M1.7*0.64*3.8L B BZ ICT	6-35-46117-3R8	
2	DVD/DUAL RW 5 1/4" 8X 12.7MM TS-L632D TSS	6-85-A078X-T02	<SUPER MULTI>
2	DVD/DUAL RW 5 1/4" 8X 12.7MM DVR-K16RS	6-85-A078X-B04	<SUPER MULTI>
2	DVD/DUAL RW 5 1/4" 8X 12.7MM SDVD8820	6-85-A078X-C04	<SDVD8820>
3	CD-ROM REAR BRACKET SECC L287P	6-33-P700Z-021	
4	SCREW M2*3.5L F BNI ICT NY	6-35-21120-35B	
5	MYLAR (6*3*0.3t) FDR L295UB	6-40-00150-603	
6	TOSHIBA DUAL DVDRW(SUPER MULTI) BEZEL MODULE	6-42-L27NQ-200	
7	MYLAR (06*03*0.4t,WASHER) FDR FDD CASE	6-40-11A5J-020	

Figure A - 7
L297N -
DVD-RW Drive

A.Part Lists

L297N - FDD

Figure A - 8
L297N - FDD



ITEM	PART NAME	PART NO	REMARK
1	SCREW M2.5*3L P BZ ICT NY 無鉛	6-35-06125-3R0	
2	FDD BRACKET (R) SECC L287P 無鉛	6-33-P700J-010	
3	FDD 35' 14MB 12.7MM YD-702J-6637J-64476(REV.1)	6-85-11700-Y06-4	FDR L297N
4	FDD BRACKET (L) SECC L285P 無鉛	6-33-P700J-020	
5	FFC CABLE FDR FDD L297N (規格無鉛)	6-43-L27NJ-011	

L297N - HDD

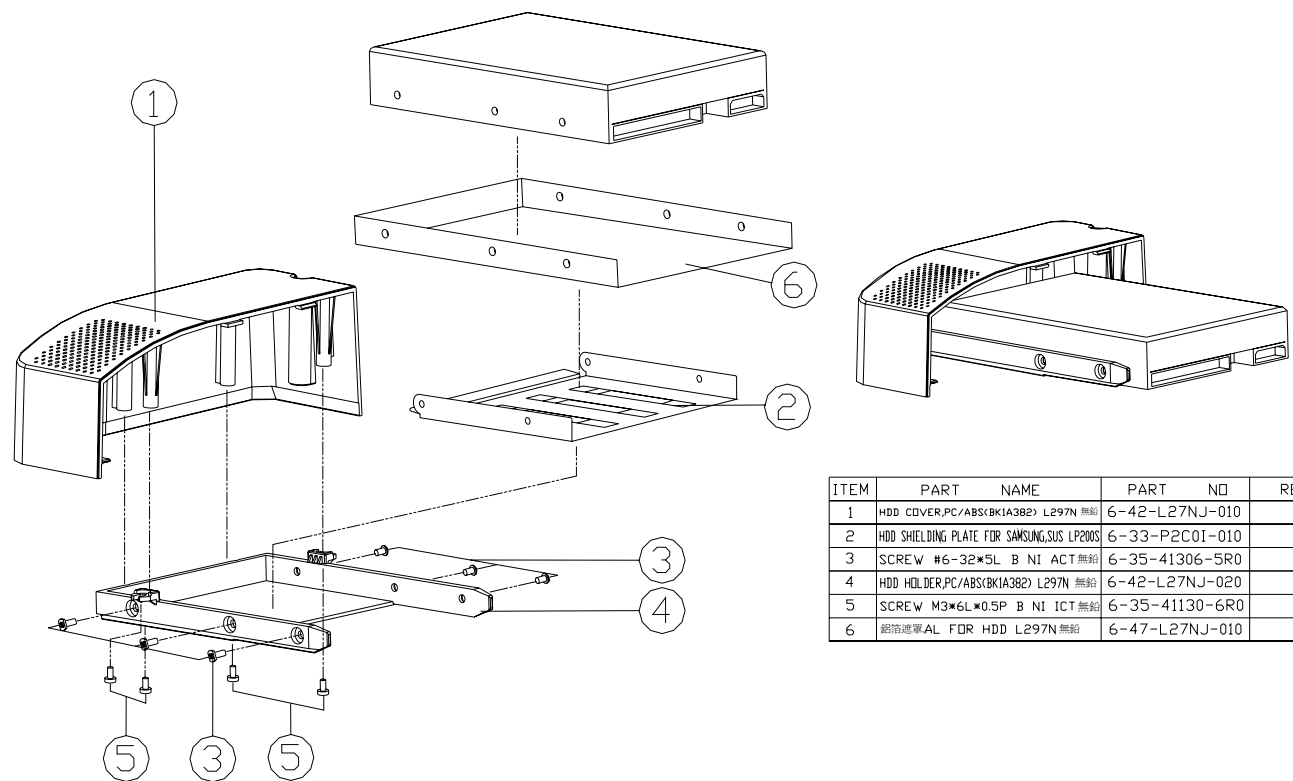


Figure A - 9
L297N - HDD

ITEM	PART NAME	PART NO	REMARK
1	HDD COVER,PC/ABS(BK1A382) L297N 無鉛	6-42-L27NJ-010	
2	HDD SHIELDING PLATE FOR SAMSUNG,SUS LP200S	6-33-P2C01-010	
3	SCREW #6-32*5L B NI ACT 無鉛	6-35-41306-5R0	
4	HDD HOLDER,PC/ABS(BK1A382) L297N 無鉛	6-42-L27NJ-020	
5	SCREW M3*6L*0.5P B NI ICT 無鉛	6-35-41130-6R0	
6	鋁箔遮光罩 FOR HDD L297N 無鉛	6-47-L27NJ-010	

A.Part Lists

Appendix B: Schematic Diagrams

This appendix has circuit diagrams of the L295N/L297N computer's PCB's. The following table indicates where to find the appropriate schematic diagram.

Diagram - Page	Diagram - Page	Diagram - Page
System Block Diagram - Page B - 2	ICH7-M 1/4 (SATA) - Page B - 15	VDD3, VDD5, 3.3V, 5V - Page B - 28
Clock Generator - Page B - 3	ICH7-M 2/4 (PCI, USB) - Page B - 16	1.5VS, 1.05VS, 2.5VS - Page B - 29
Yonah CPU - 1 of 2 - Page B - 4	ICH7-M 3/4 (FWH) - Page B - 17	AC-IN, 1.8V, 0.9VS - Page B - 30
Yonah CPU - 2 of 2 - Page B - 5	ICH7-M 4/4 - Page B - 18	VCORE - Page B - 31
Calistoga 1/5 Host - Page B - 6	CD-ROM, Ext USB, Mini PCI - Page B - 19	12VS - Page B - 32
Calistoga 2/5 - Page B - 7	MDC, Mini Card, USB2.0, BT - Page B - 20	Button Board for L295N - Page B - 33
Calistoga 3/5 DDR - Page B - 8	LAN RTL8110SBL - Page B - 21	Button Board for L297N - Page B - 34
Calistoga 4/5 - Page B - 9	TI PCI7412 - Page B - 22	CD-ROM Board for L295N - Page B - 35
Calistoga 5/5 POWER - Page B - 10	PCM Socket, 3-in-1 Socket - Page B - 23	CD-ROM Board for L297N - Page B - 36
DDRII RIMM - Page B - 11	Azalia CODEC ALC883 & MDC - Page B - 24	USB Board - Page B - 37
Chrontel CH7308 - Page B - 12	H8 - Page B - 25	CardReader Board - Page B - 38
LCD Connector - Page B - 13	COM Port, Fan, Parallel Port - Page B - 26	Screw Hole - Page B - 39
VGA Interface - Page B - 14	Super I/O PC87392, FDD - Page B - 27	

Table B - 1
Schematic Diagram



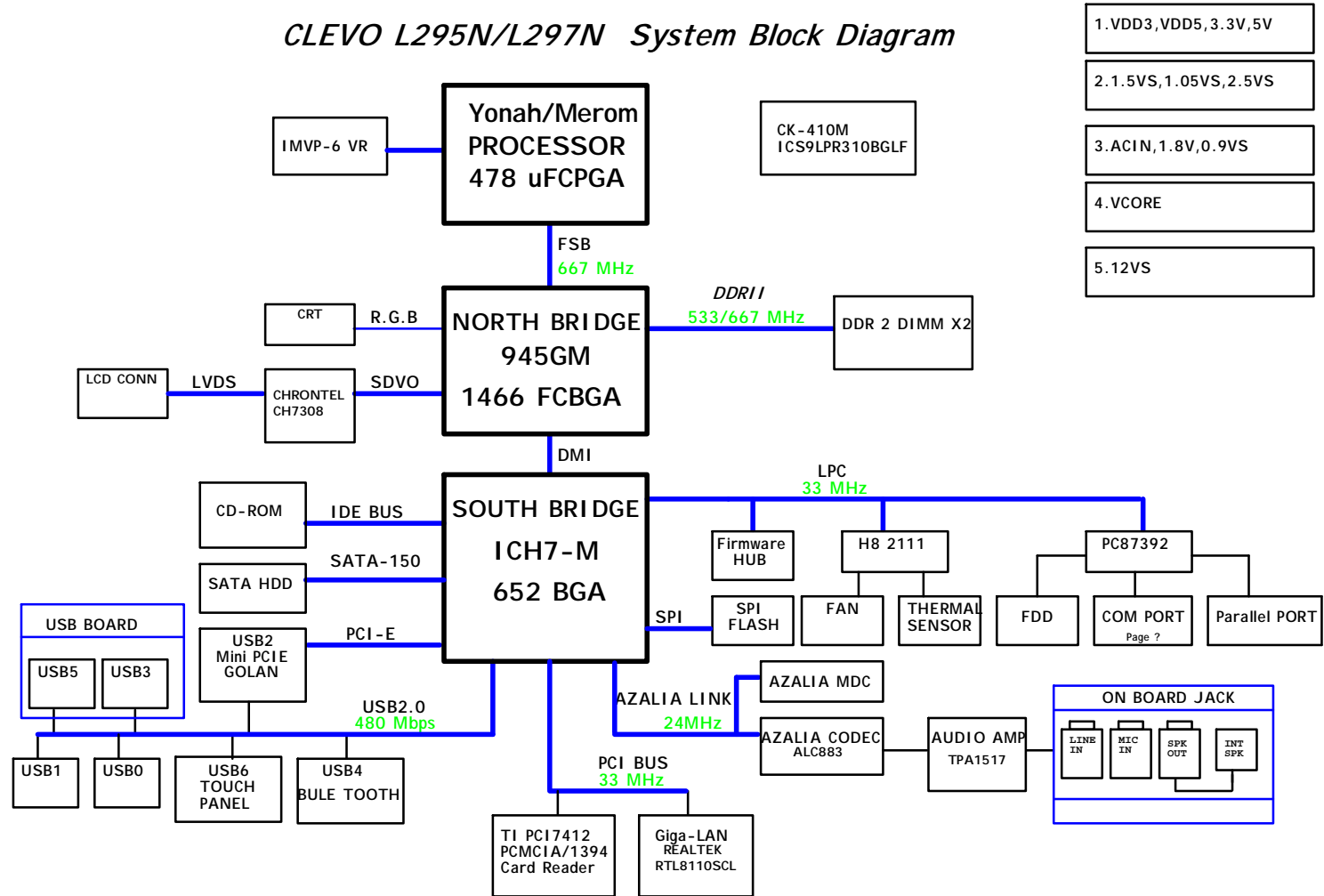
Version Note

The schematic diagrams in this chapter are based upon version **6-71-L25N0-002**. 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 38
Schematic Diagram

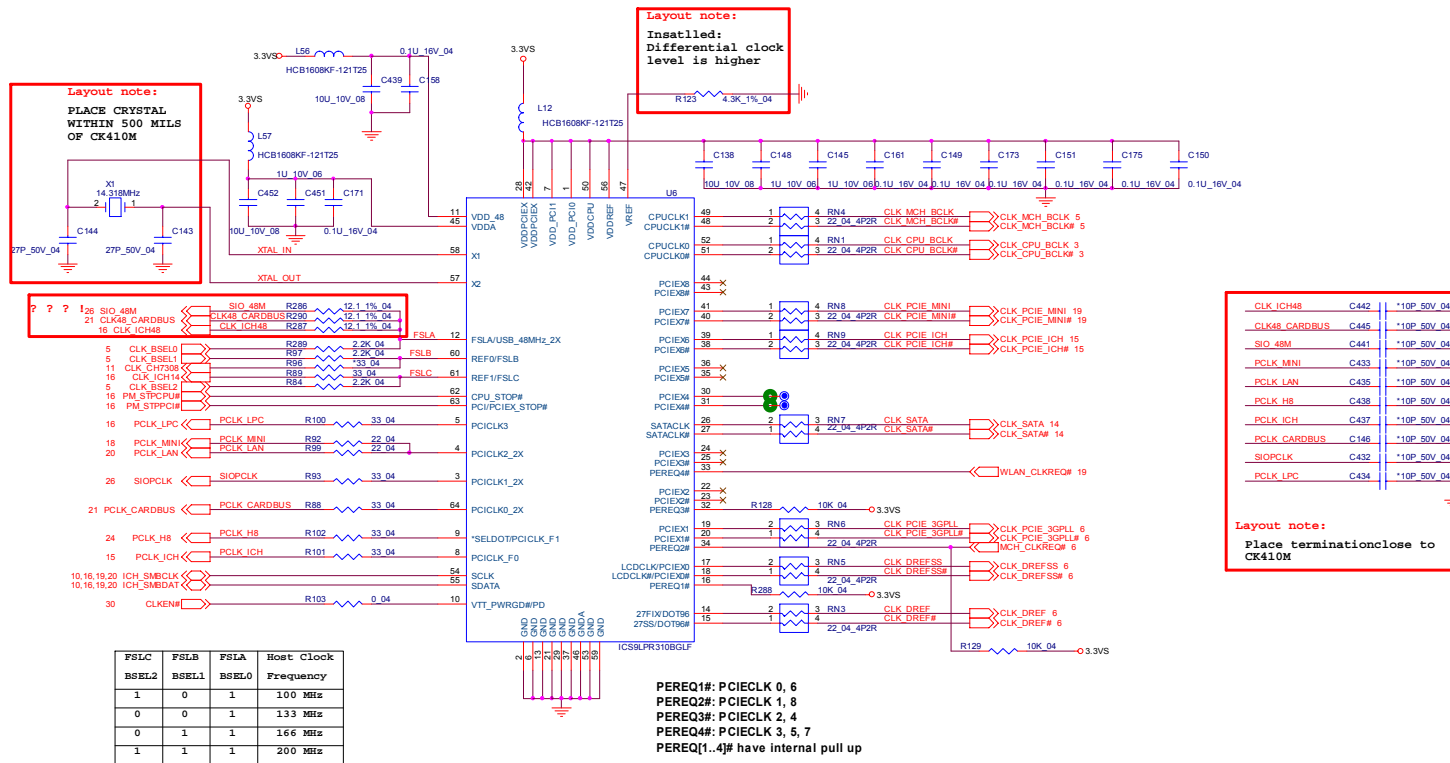
CLEVO L295N/L297N System Block Diagram



Clock Generator

Sheet 2 of 38
Clock Generator

CLOCK GENERATOR

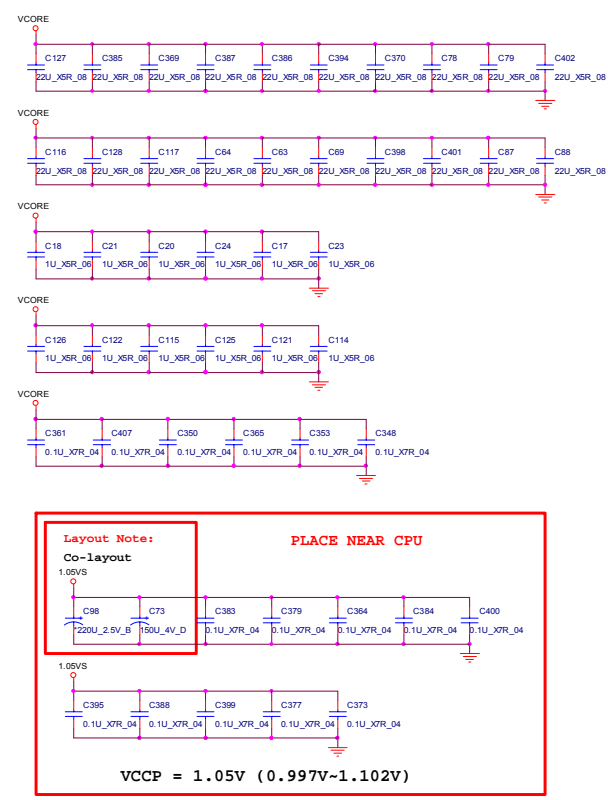
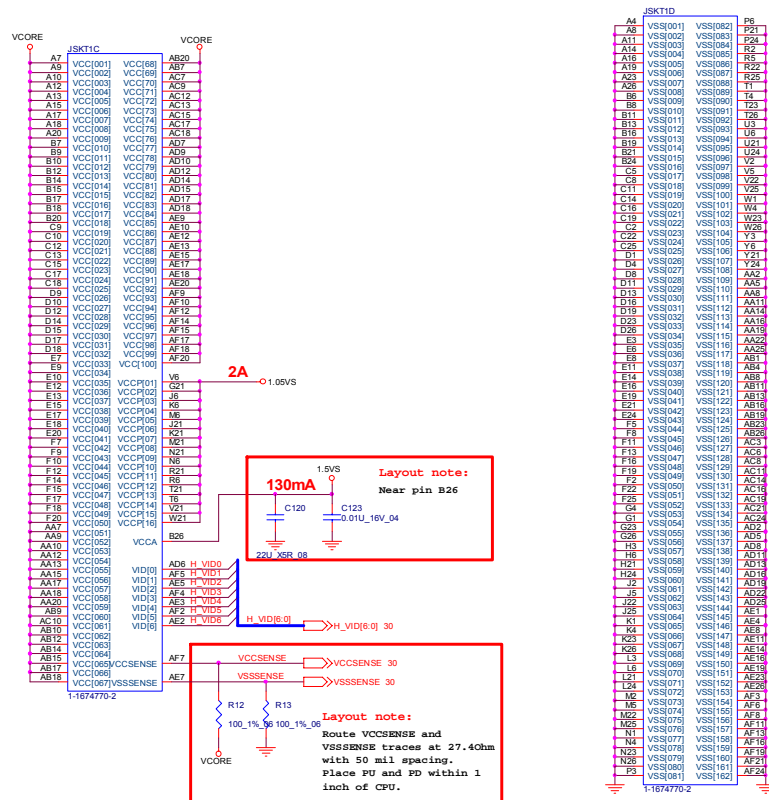


B.Schematic Diagrams

Yonah CPU - 2 of 2

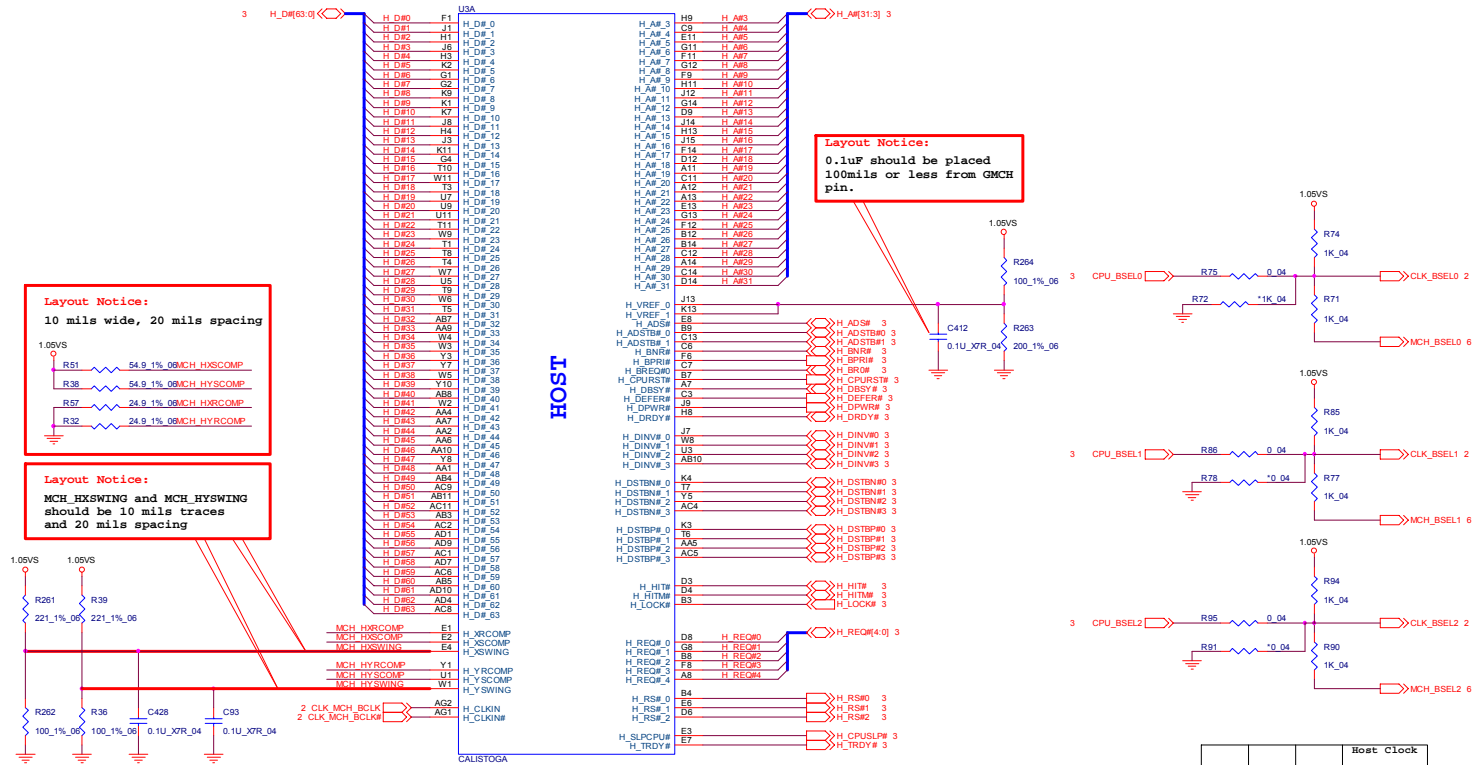
Sheet 4 of 38
Yonah CPU 2 of 2

B. Schematic Diagrams



Calistoga 1/5 Host

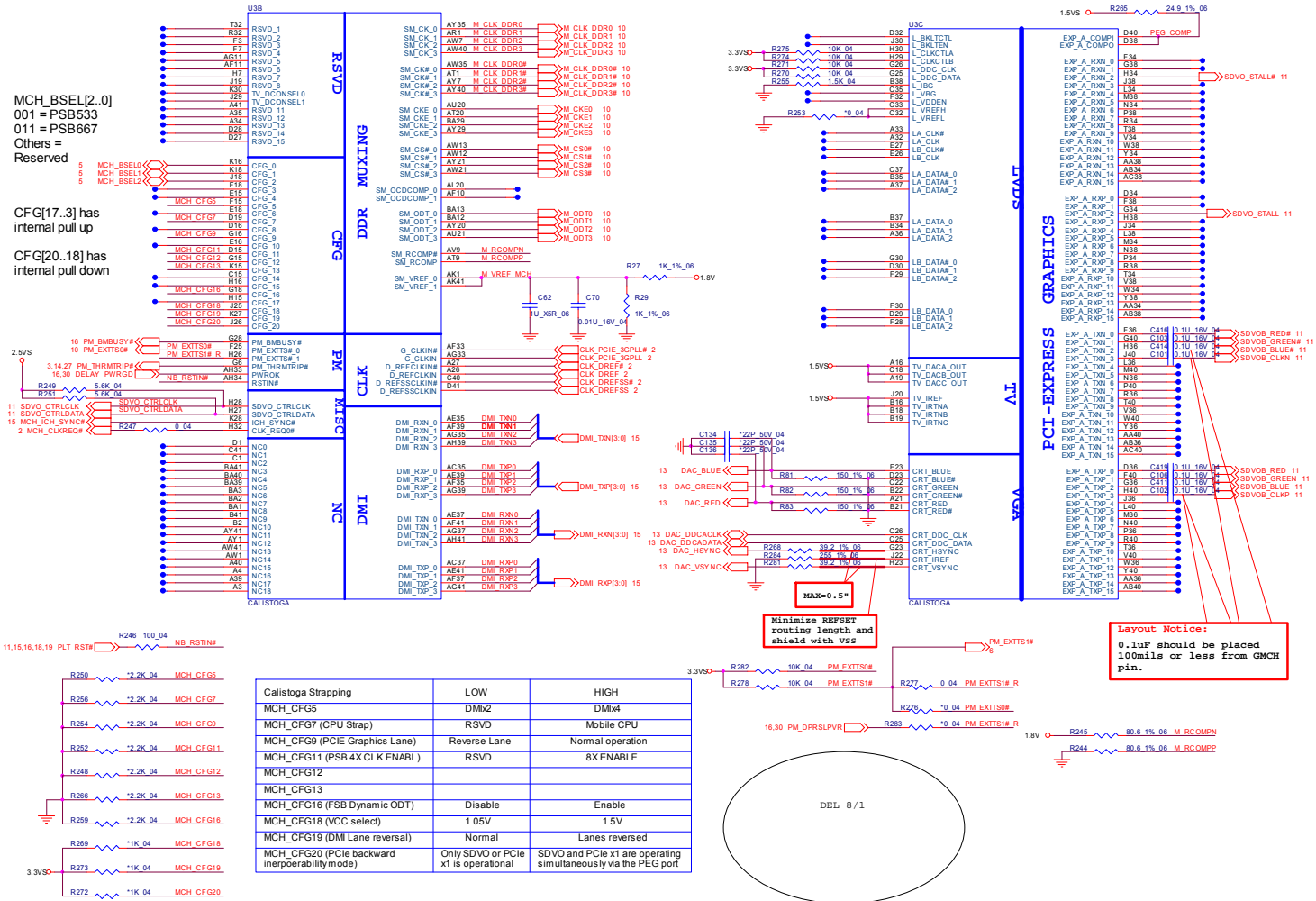
Sheet 5 of 38
Calistoga 1/5 Host



Calistoga 2/5

Sheet 6 of 38
Calistoga 2/5

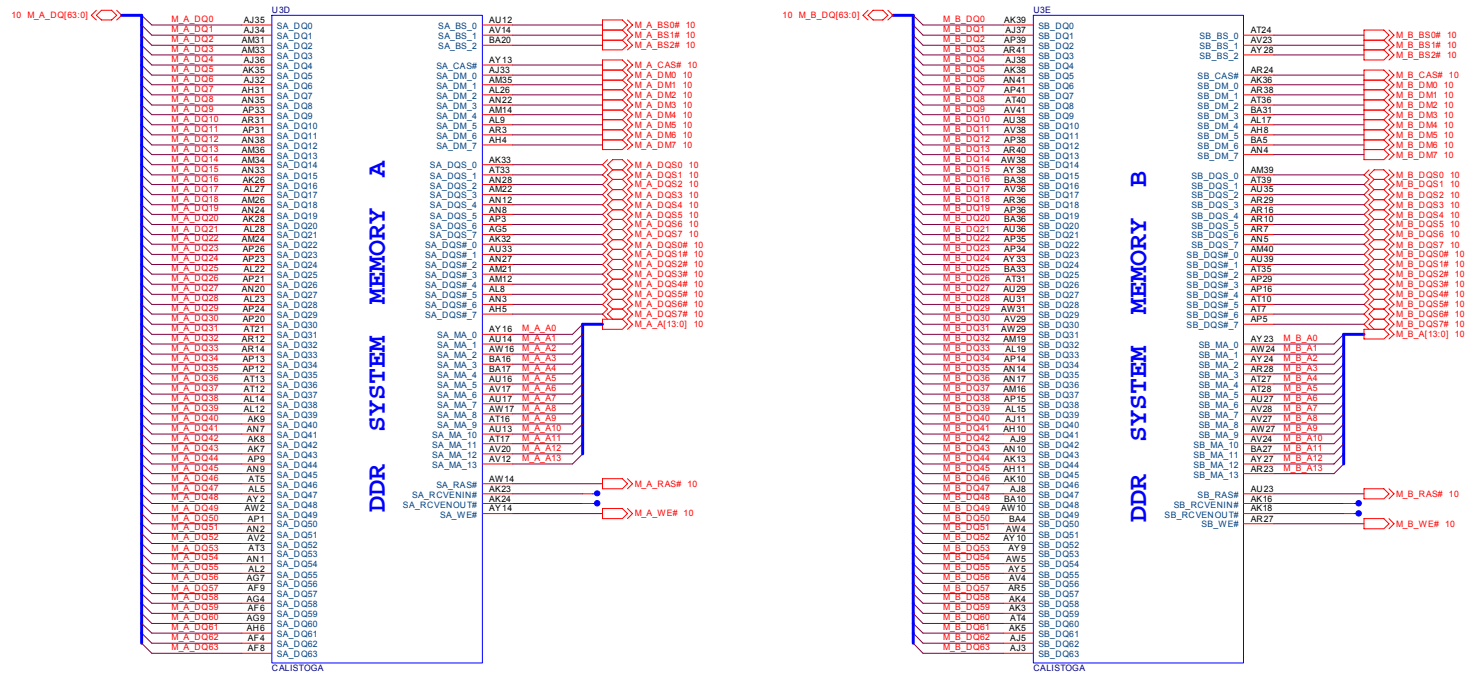
B. Schematic Diagrams



Calistoga 3/5 DDR

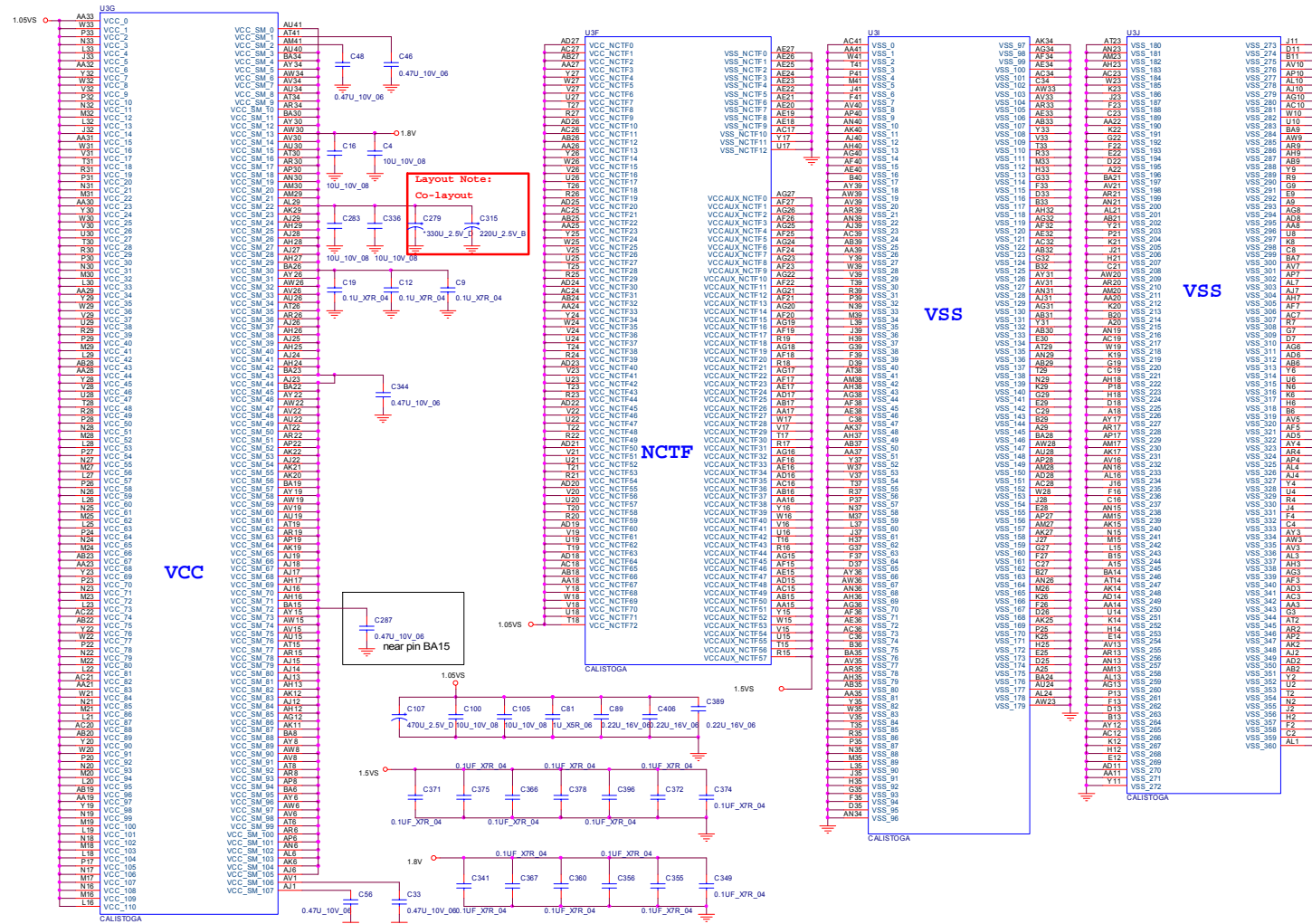
Sheet 7 of 38
Calistoga 3/5 DDR

B.Schematic Diagrams



Calistoga 4/5

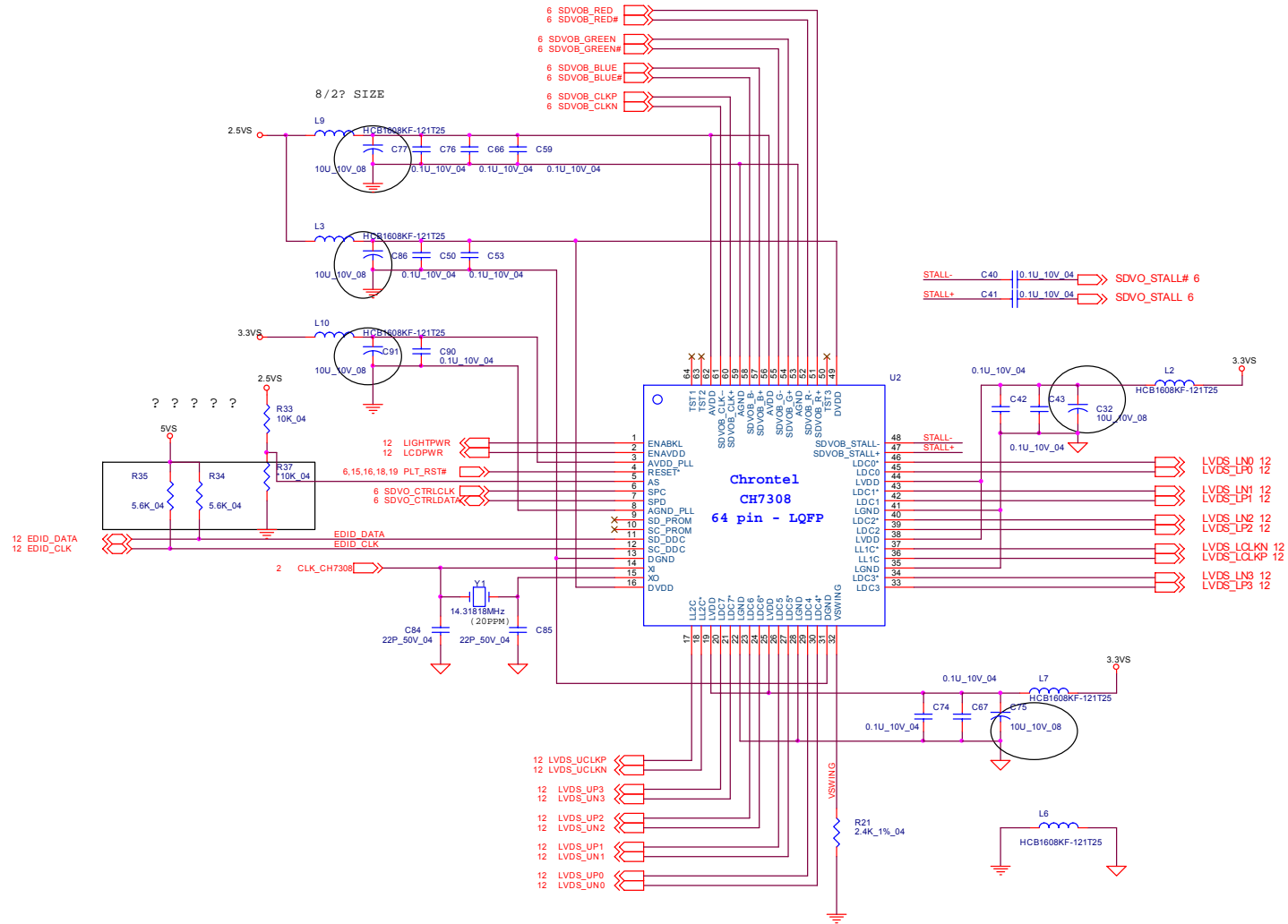
Sheet 8 of 38
Calistoga 4/5



B.Schematic Diagrams

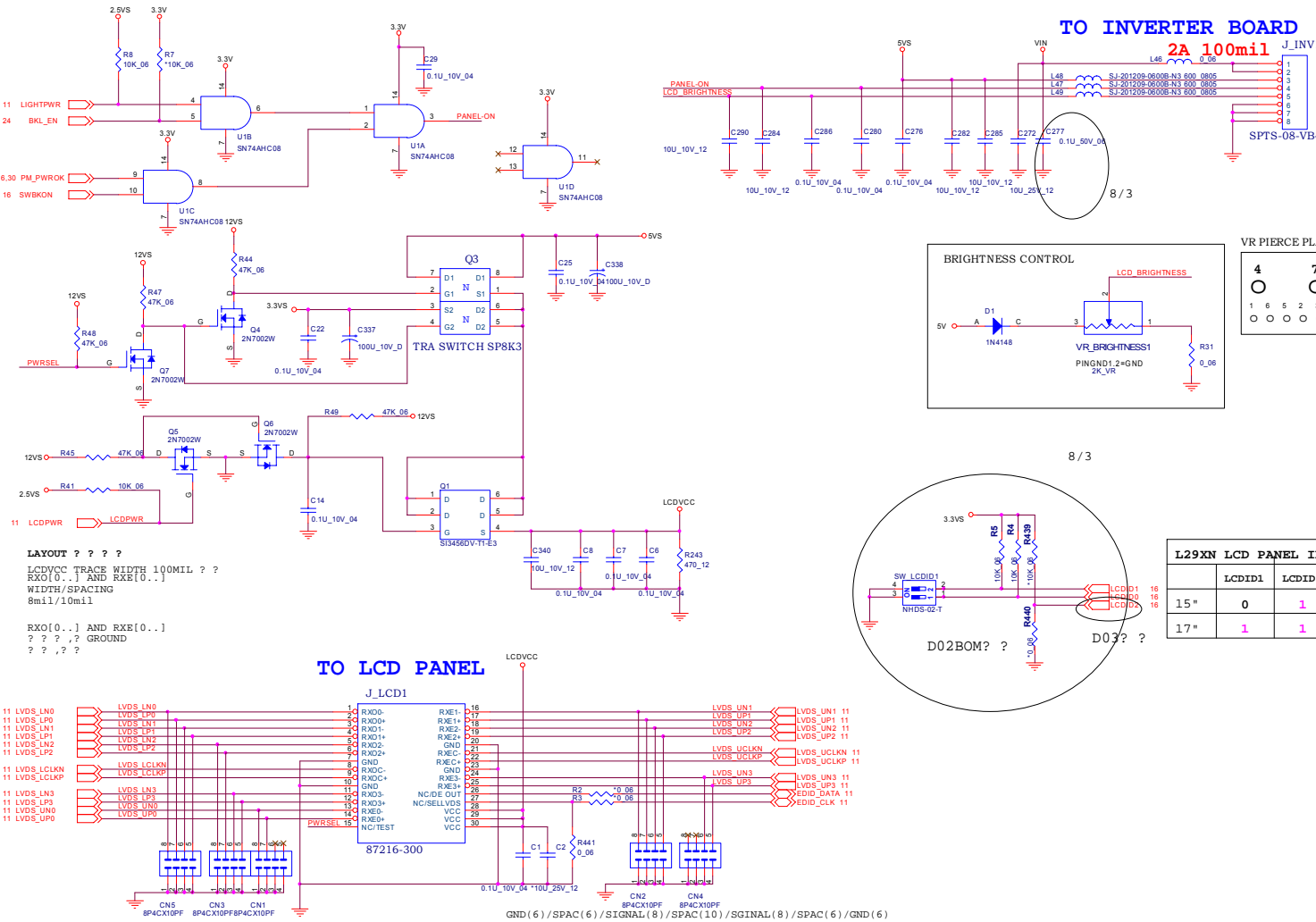
Chrontel CH7308

Sheet 11 of 38
Chrontel CH7308



LCD Connector

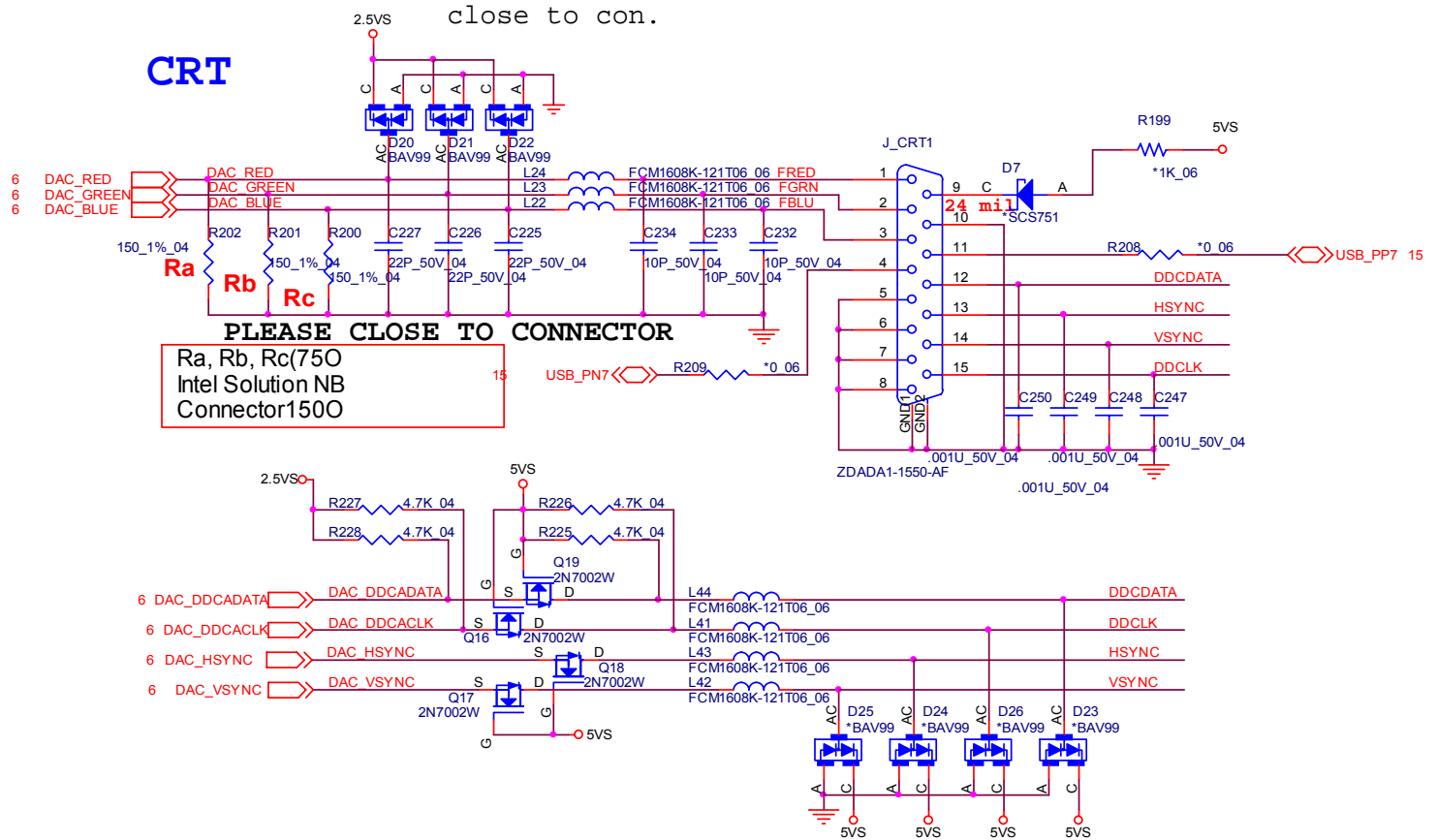
Sheet 12 of 38
LCD Connector



B.Schematic Diagrams

VGA Interface

Sheet 13 of 38
VGA Interface

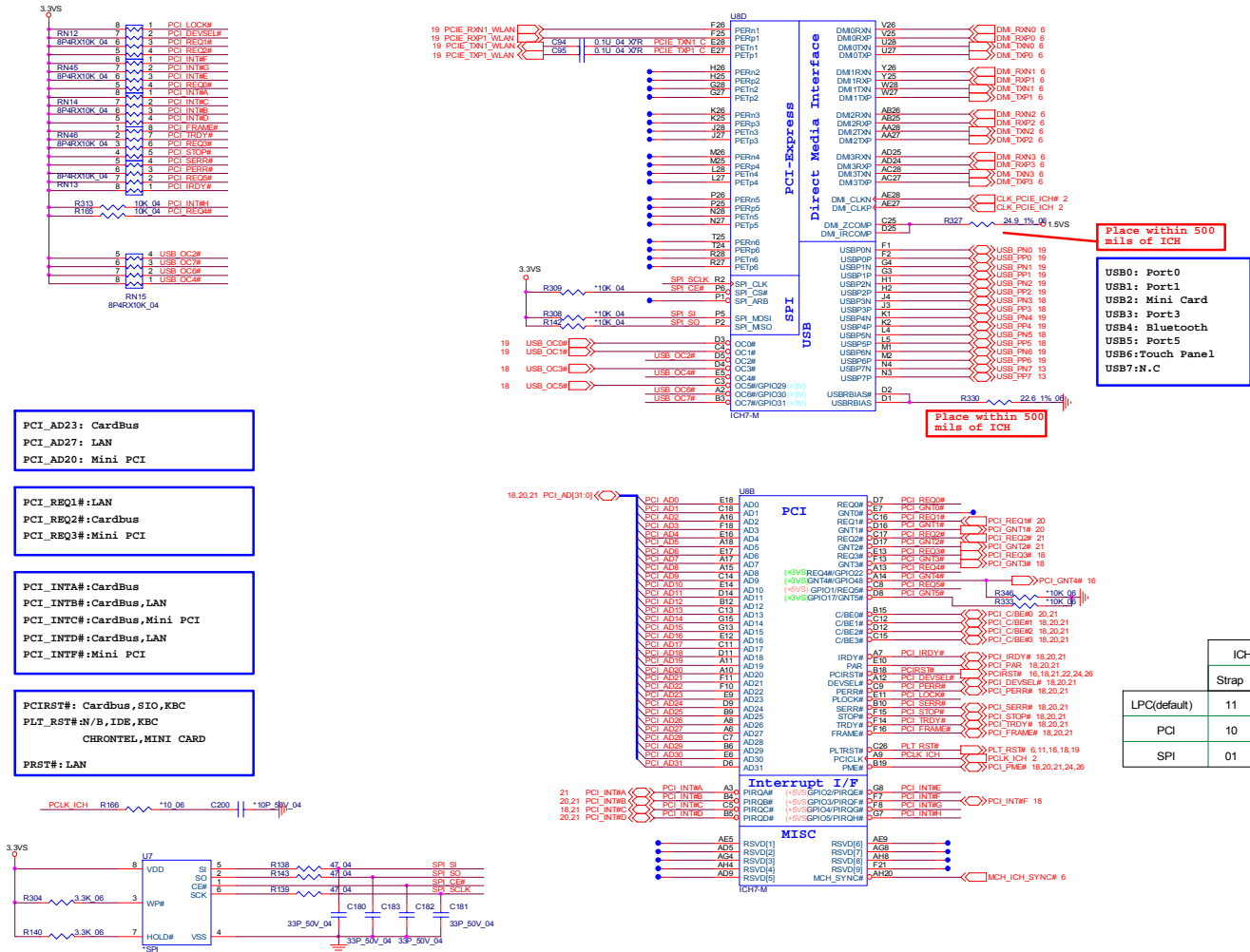


Schematic Diagrams

ICH7-M 2/4 (PCI, USB)

Sheet 15 of 38
ICH7-M 2/4
 (PCI, USB)

B.Schematic Diagrams



PCI_AD23: CardBus
 PCI_AD27: LAN
 PCI_AD20: Mini PCI

PCI_REQ1#:LAN
 PCI_REQ2#:Cardbus
 PCI_REQ3#:Mini PCI

PCI_INTA#:CardBus
 PCI_INTB#:CardBus,LAN
 PCI_INTC#:CardBus,Mini PCI
 PCI_INTD#:CardBus,LAN
 PCI_INTE#:Mini PCI

PCIRST#: Cardbus,SIO,KBC
 PLT_RST# :N/B, IDE,KBC
 CHRONTEL,MINI CARD
 PRST#: LAN

Place within 500 mils of ICH

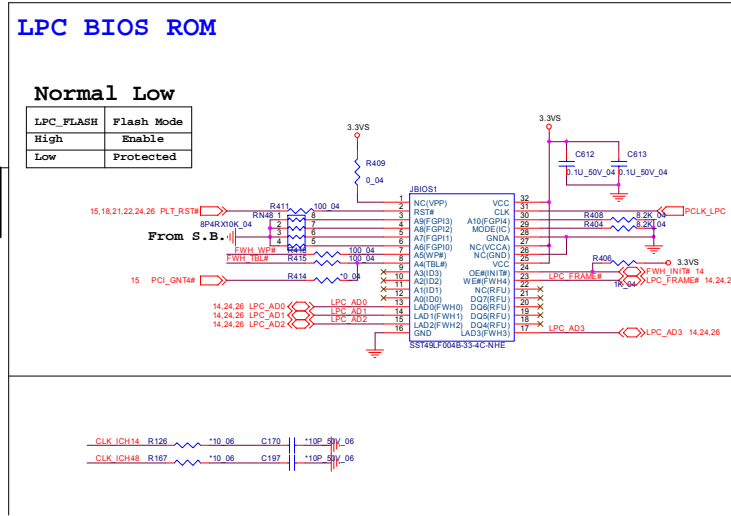
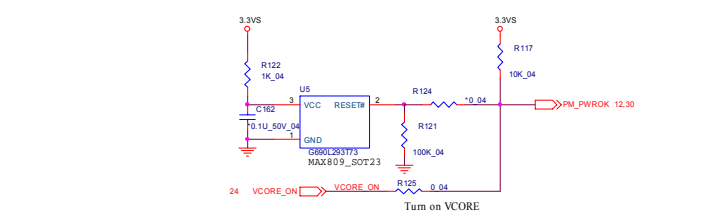
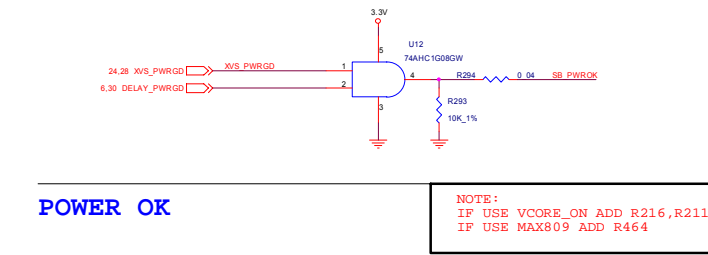
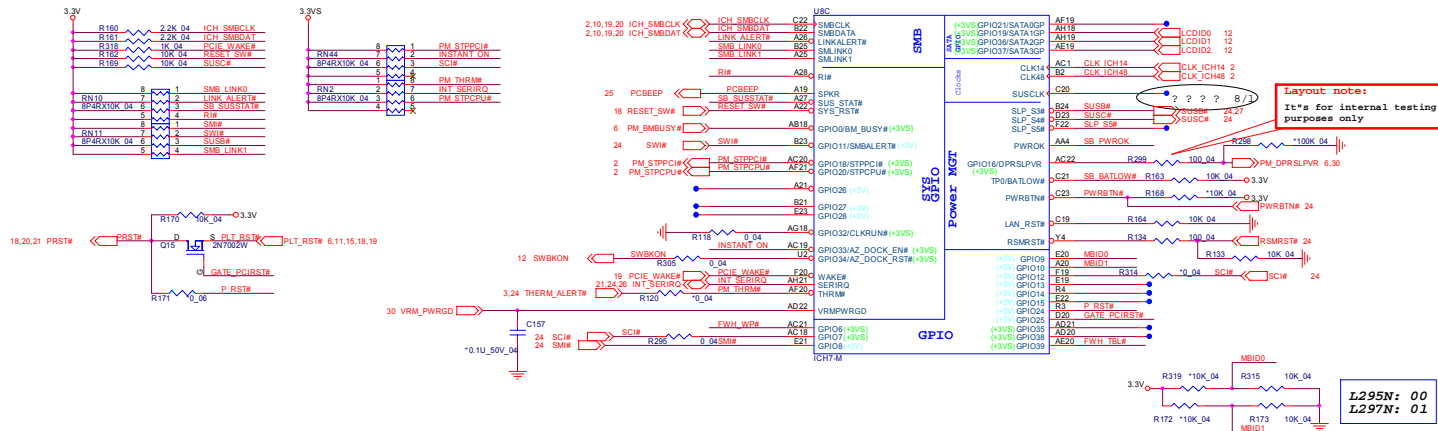
USB0: Port0
 USB1: Port1
 USB2: Mini Card
 USB3: Port3
 USB4: Bluetooth
 USB5: Port5
 USB6:Touch Panel
 USB7:N.C

Place within 500 mils of ICH

ICH7 Boot BIOS select			
	Strap	GNT5# RA	GNT4# RB
LPC(default)	11	Unstuff	Unstuff
PCI	10	Unstuff	Stuff
SPI	01	Stuff	Unstuff

ICH7-M 3/4 (FWH)

Sheet 16 of 38
ICH7-M 3/4 (FWH)

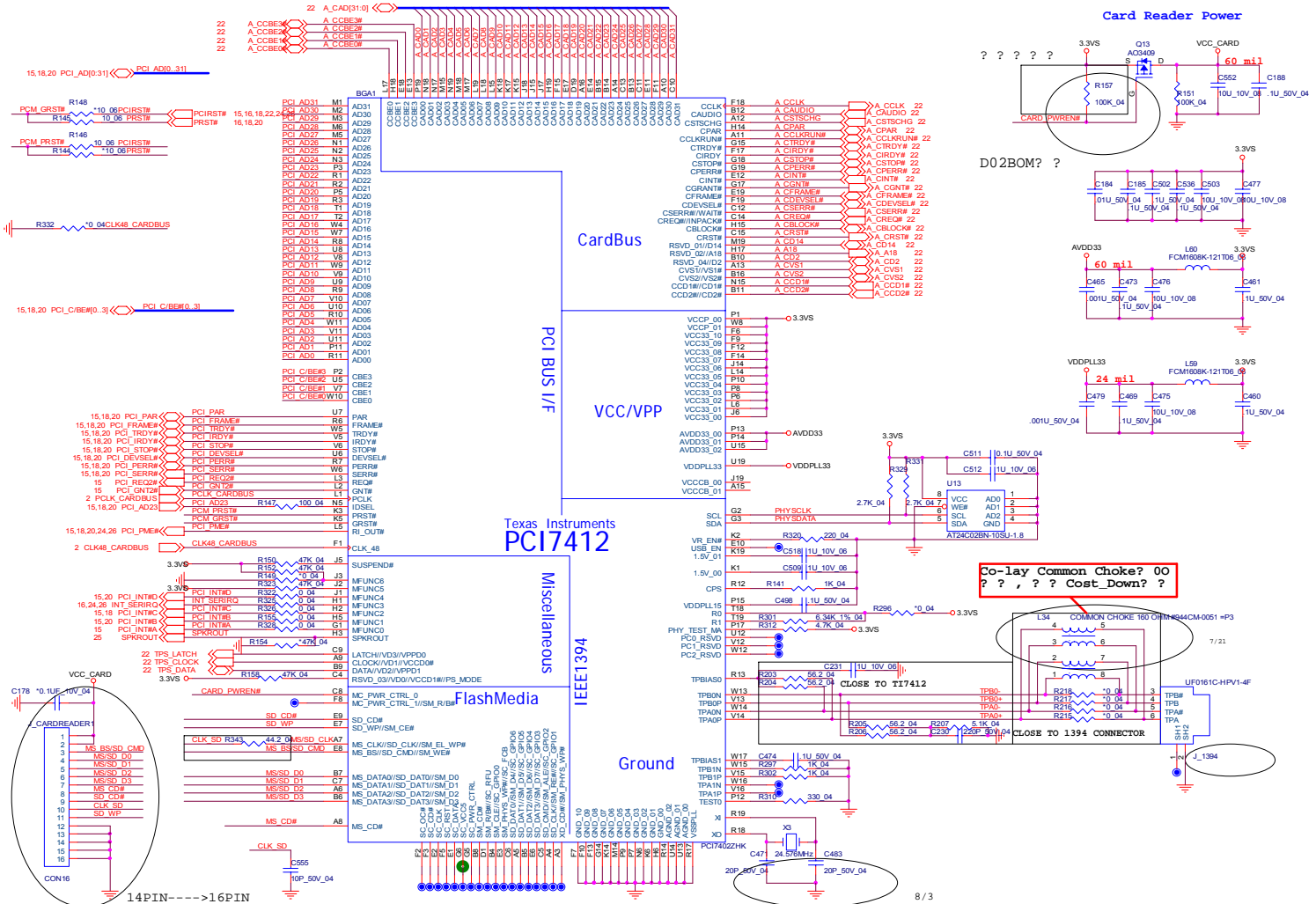


B.Schematic Diagrams

TI PCI7412

Sheet 21 of 38
TI PCI7412

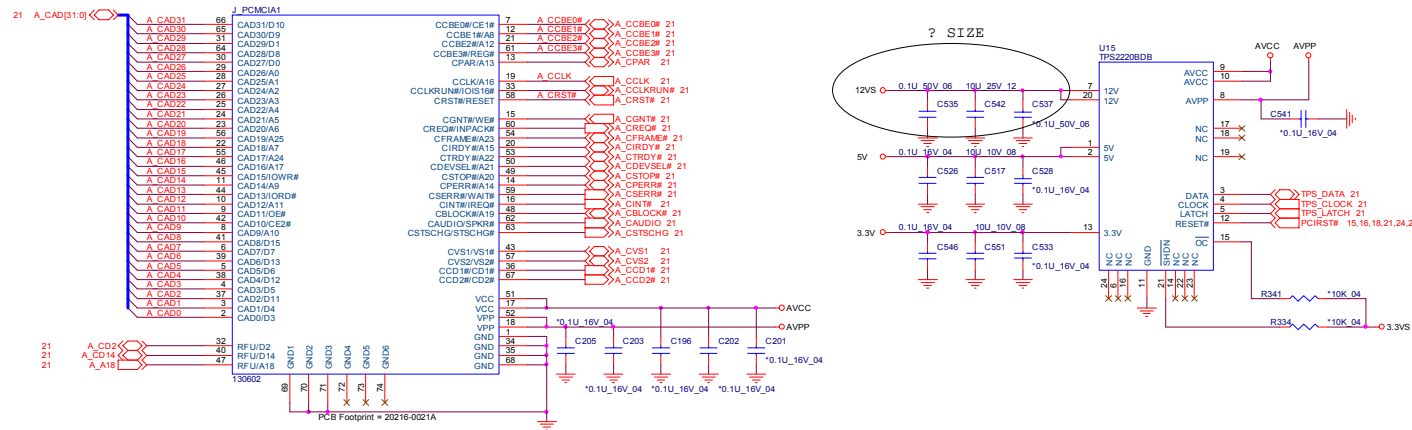
B.Schematic Diagrams



PCM Socket, 3-in-1 Socket

Sheet 22 of 38
PCM Socket,
3-in-1 Socket

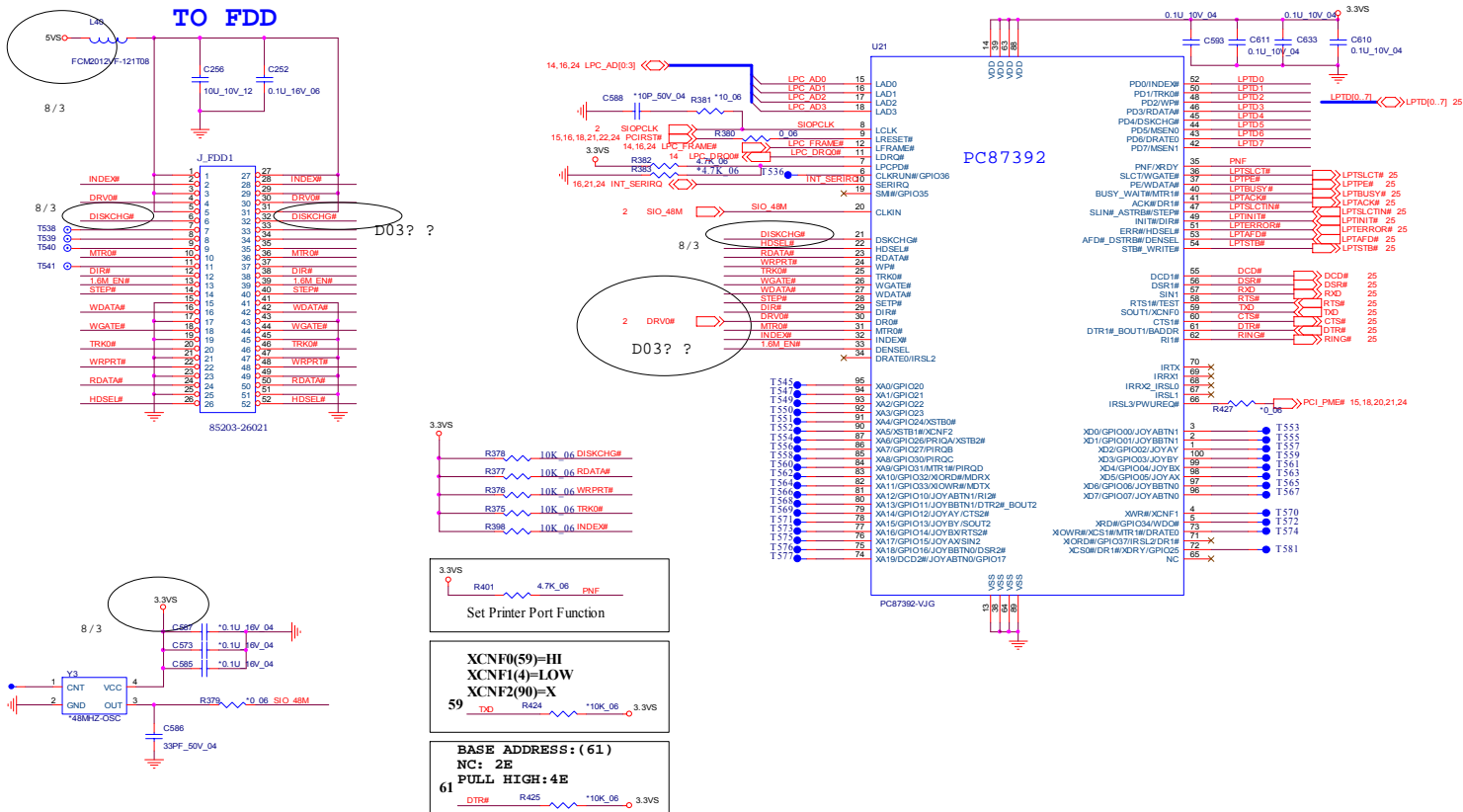
CARDBUS SOCKET



B. Schematic Diagrams

Super I/O PC87392, FDD

Sheet 26 of 38
Super I/O PC87392,
FDD



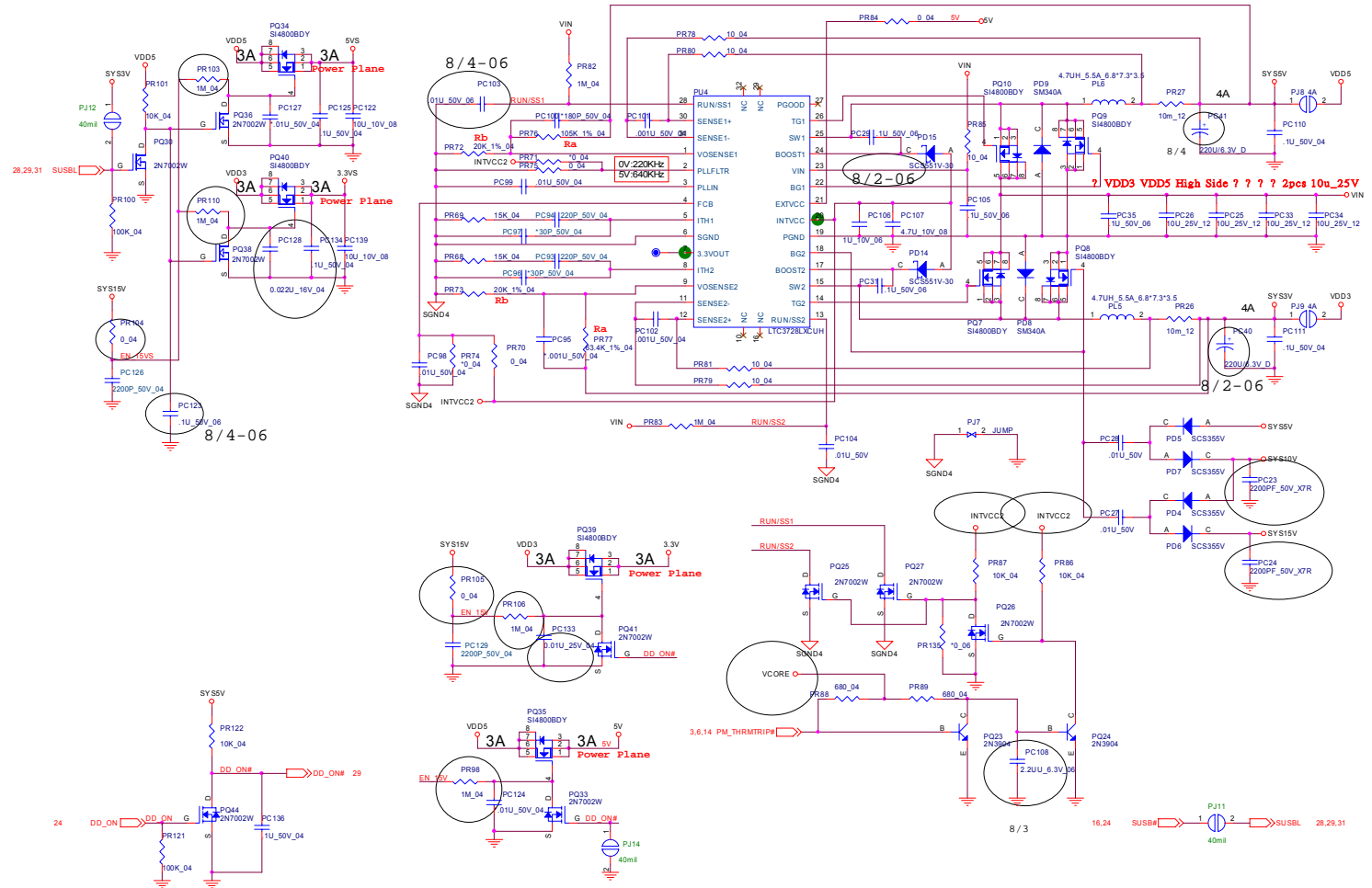
B.Schematic Diagrams

Schematic Diagrams

VDD3, VDD5, 3.3V, 5V

Sheet 27 of 38
VDD3, VDD5, 3.3V,
5V

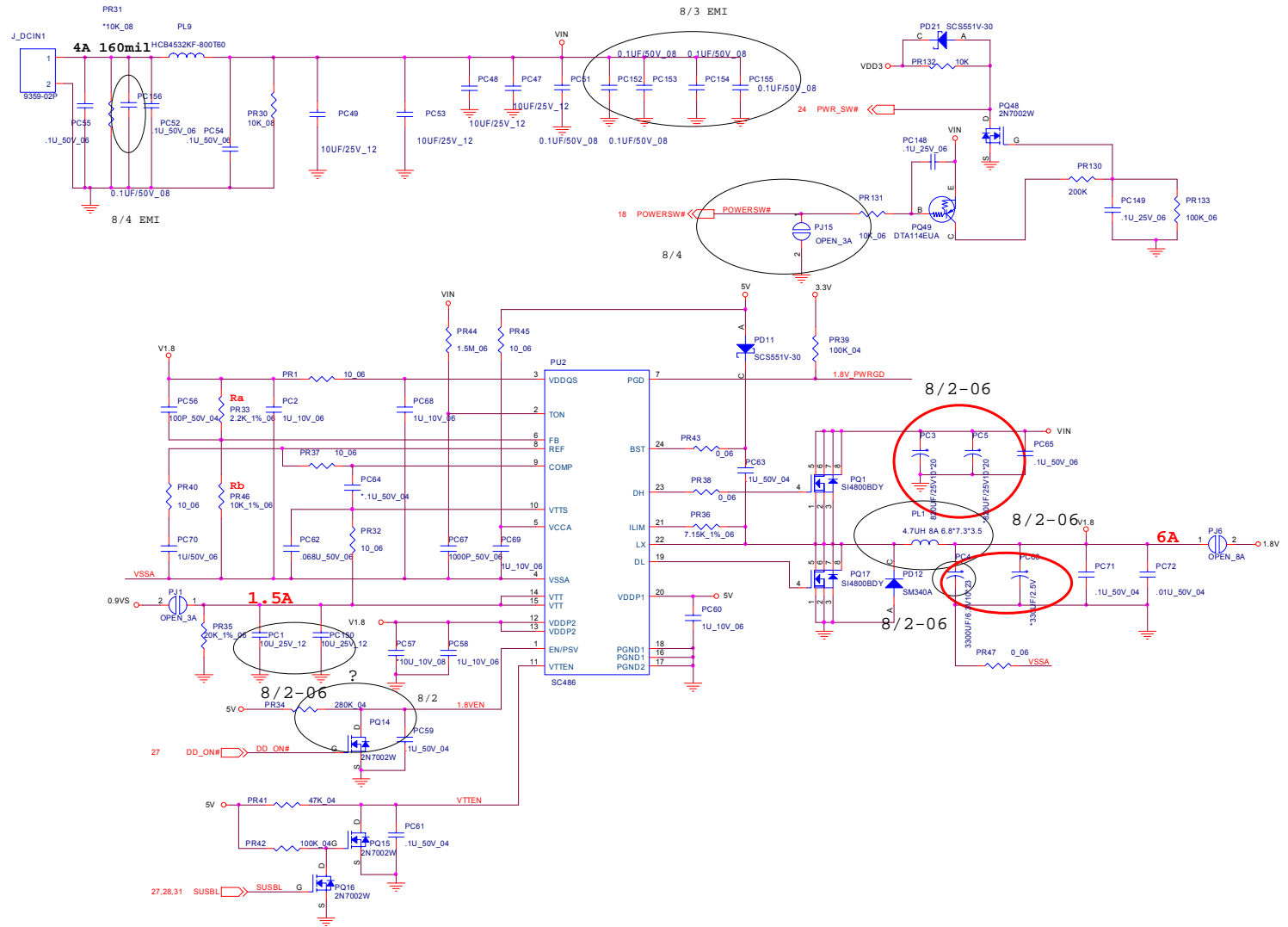
B.Schematic Diagrams



Schematic Diagrams

AC-IN, 1.8V, 0.9VS

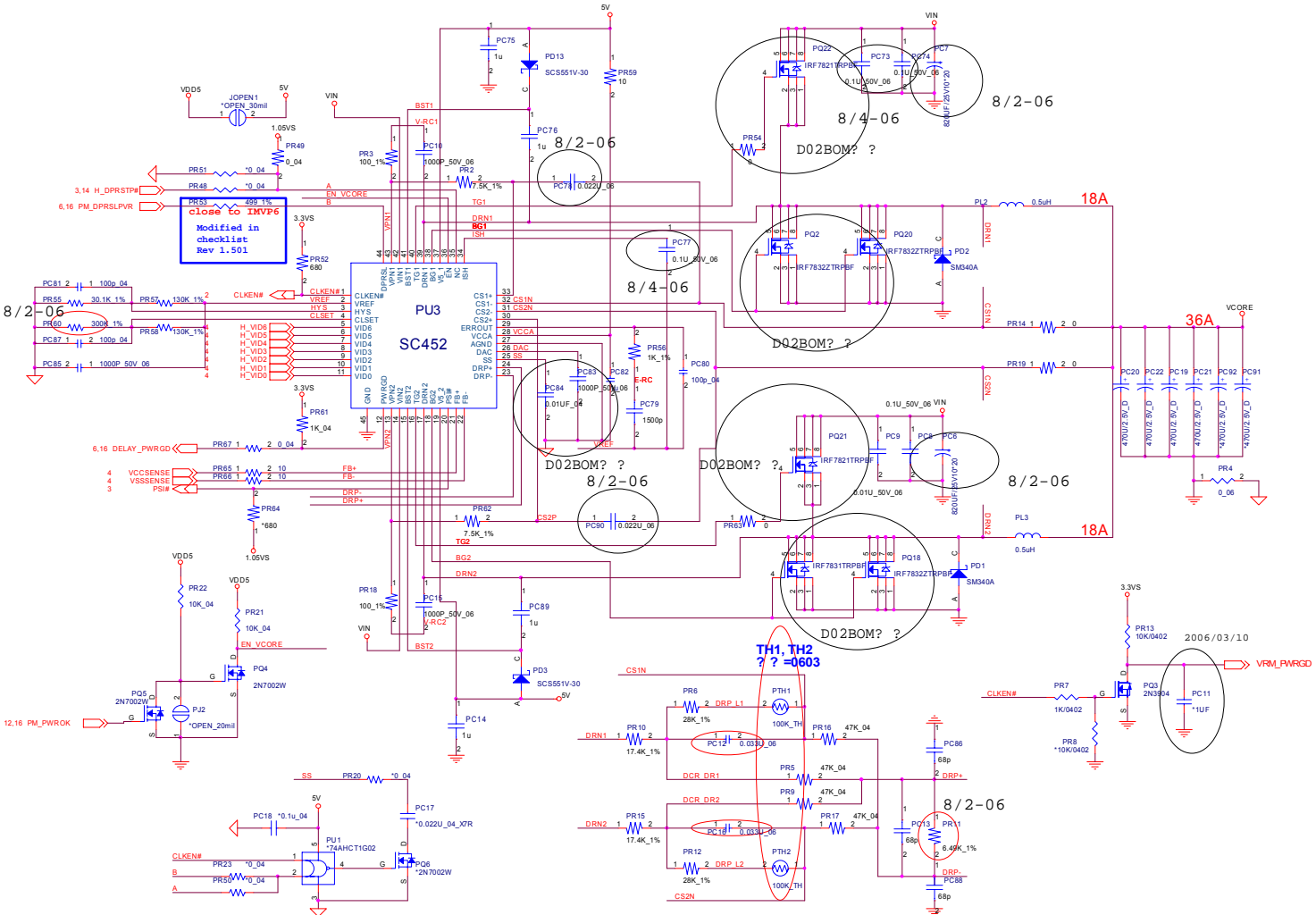
Sheet 29 of 38
AC-IN, 1.8V, 0.9VS



B.Schematic Diagrams

VCORE

Sheet 30 of 38
VCORE



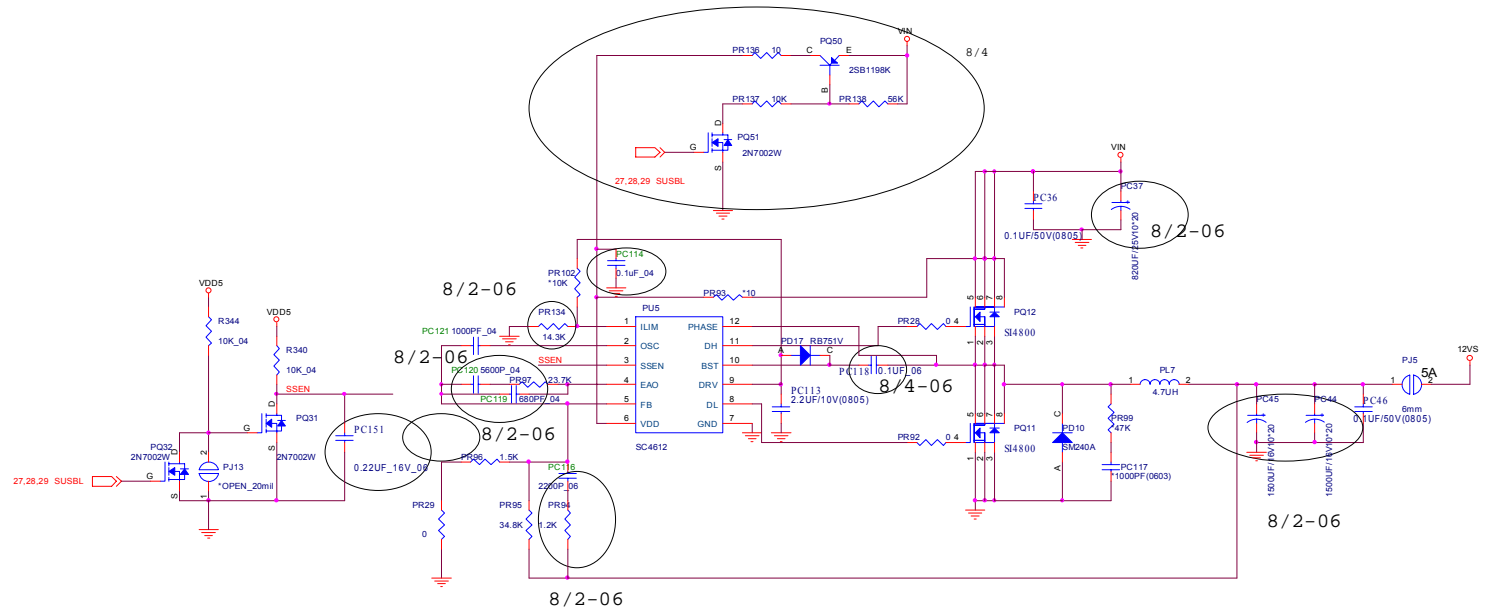
B.Schematic Diagrams

Schematic Diagrams

12VS

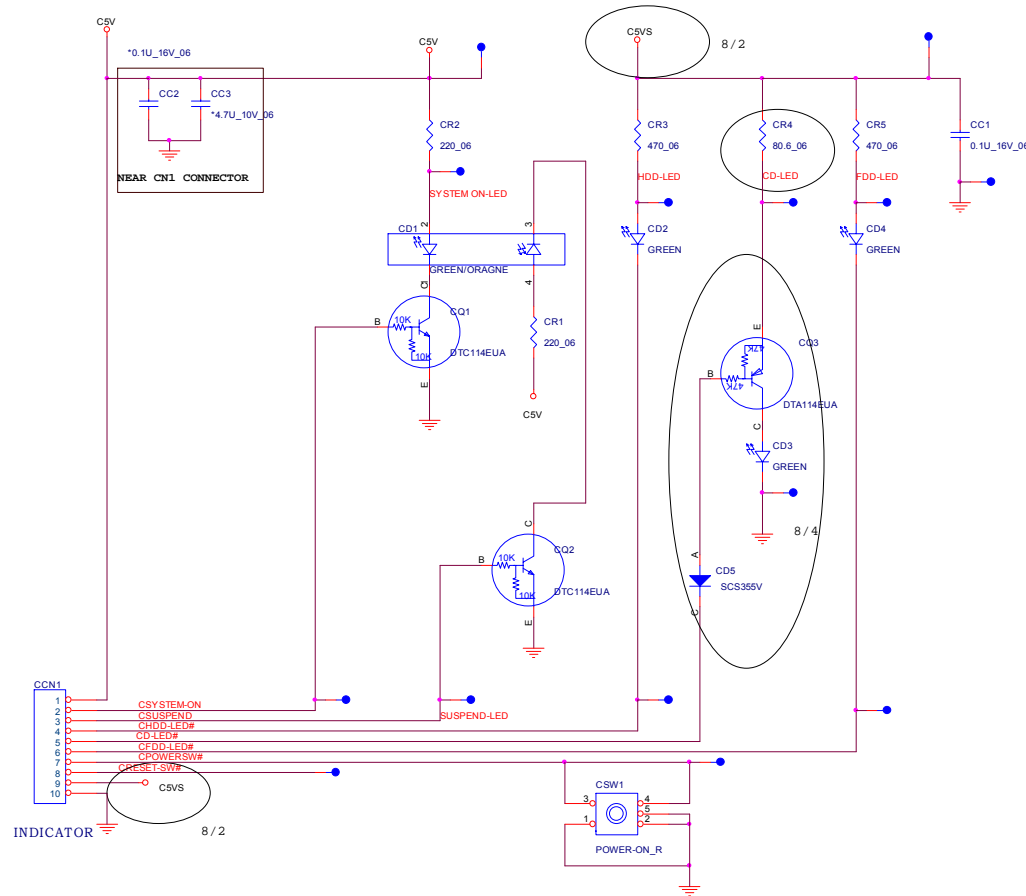
Sheet 31 of 38
12VS

B.Schematic Diagrams



Button Board for L295N

Sheet 32 of 38
 Button Board for
 L295N

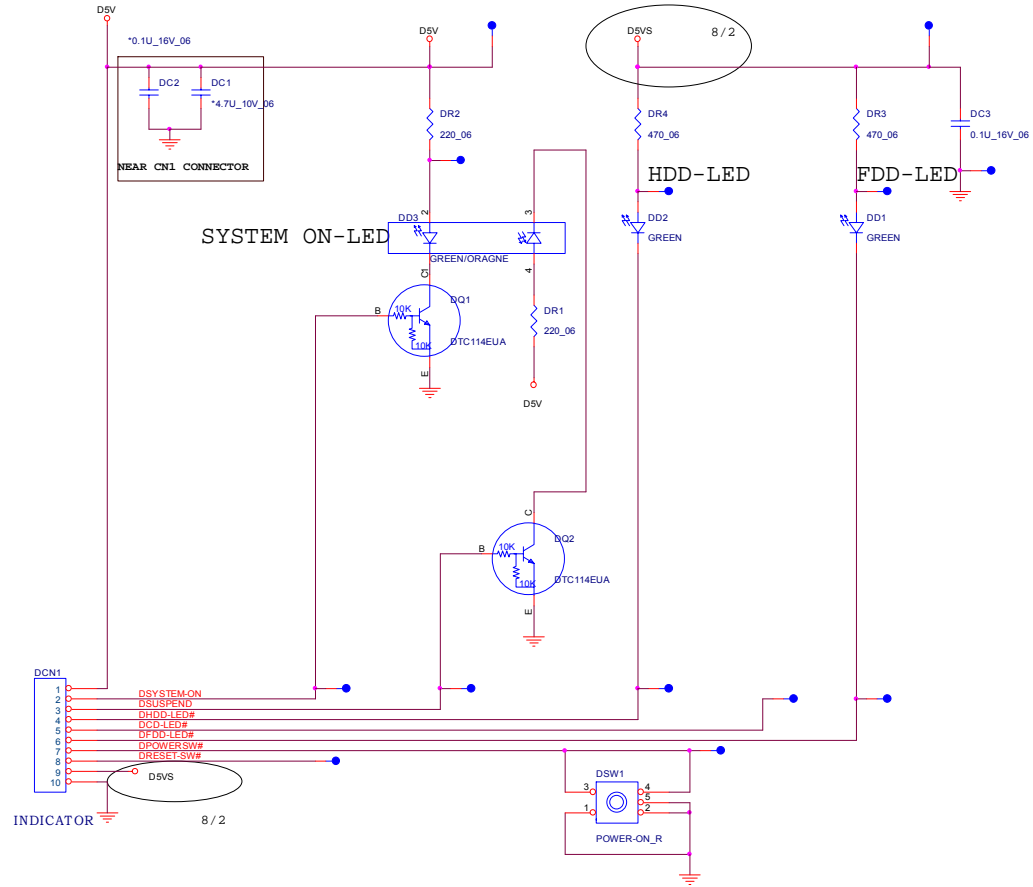


SW1 AND SW3 FOR Distribution

EPSON SW2 AND SW4

Button Board for L297N

Sheet 33 of 38
Button Board for
L297N

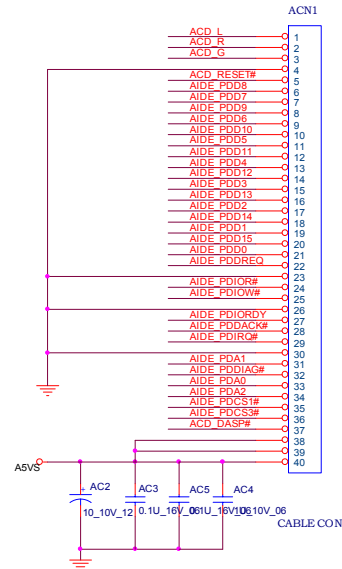


SW1 AND SW3 FOR Distribution

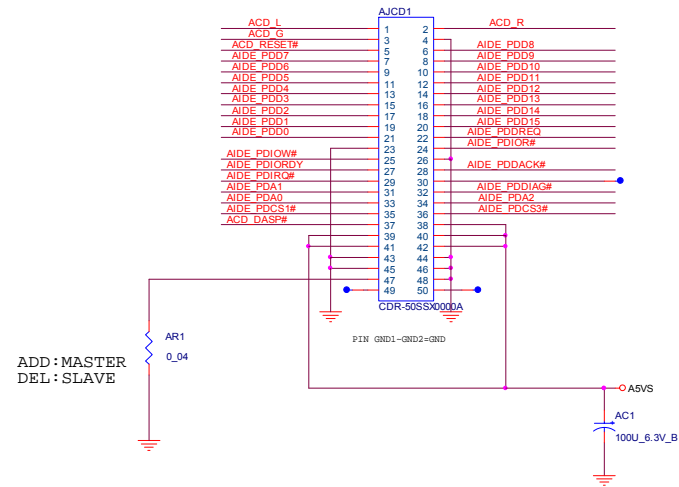
EPSON SW2 AND SW4

CD-ROM Board for L297N

Sheet 35 of 38
 CD-ROM Board for
 L297N

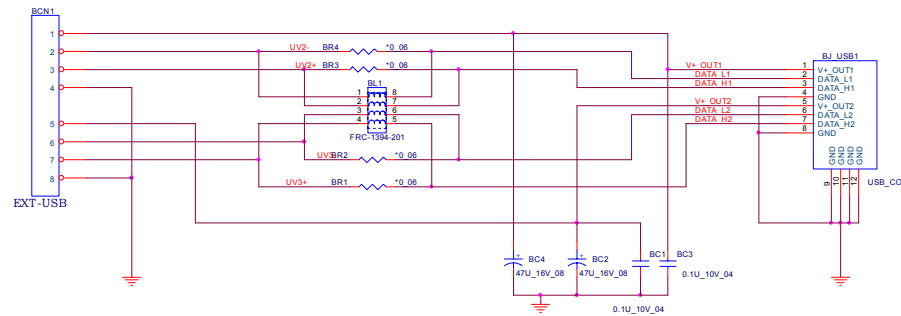


TO CD-ROM CONN



USB Board

Sheet 36 of 38
USB Board



LAYOUT
? ? ? ? ? ? ?

1:UV2+/- trace width 8 mil ,? width :space? 1:1? ? GND
? ? ? ?

2:UV3+/- trace width 8 mil ,? width :space ? 1:1? ? GND
? ? ?

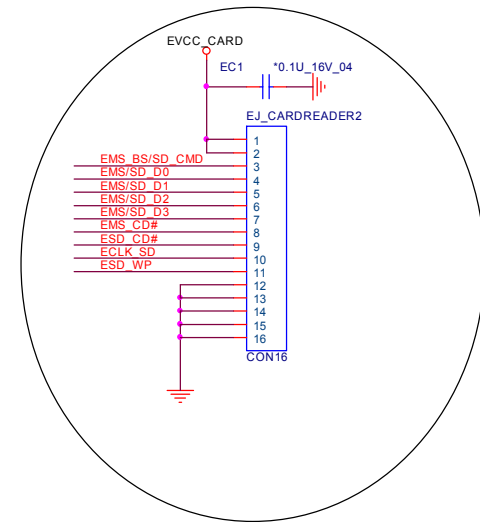
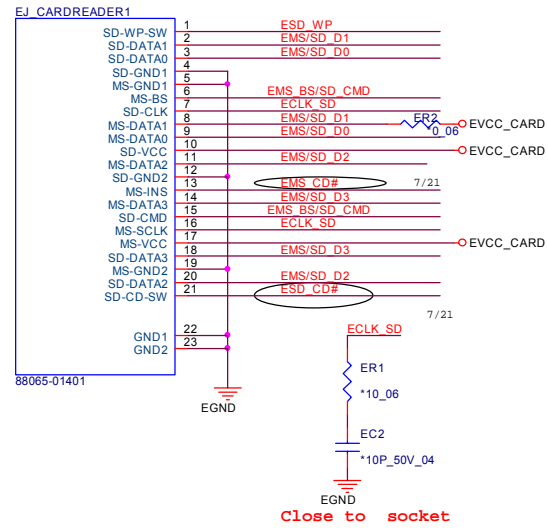
3:?? Power Line trace width 50 mil ?? (v+_out1,v+_out2)

4:GND ? ? ? ? ? ,? ? ? ? ?

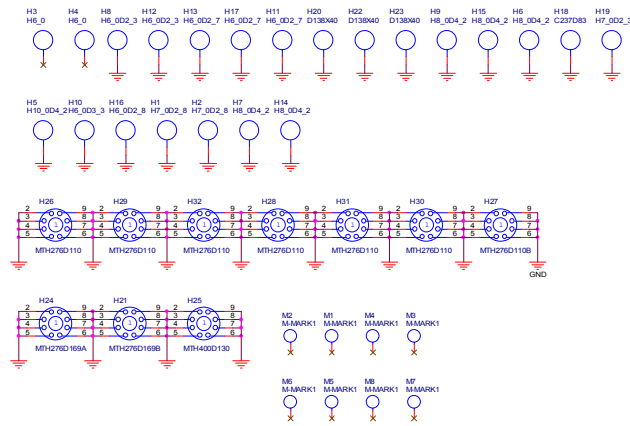
CardReader Board

Sheet 37 of 38
CardReader Board

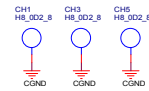
4 IN 1 SOCKET SD/MMC/MS/MS Pro



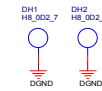
Screw Hole



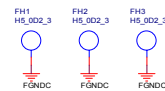
Main Board



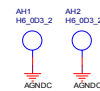
L295N
Button Board



L297N
Button Board



L295N
CDRom Board



L297N
CDRom Board



USB Board



CardReader Board

Sheet 38 of 38
Screw Hole

Schematic Diagrams