

# ***SERVICE MANUAL***

*notebook*



**P775DM2 (-G)**



**Notebook Computer  
P775DM2 (-G)  
Service Manual**

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Version 1.0

July 2016

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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 **P775DM2 (-G)** 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

## 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 with an AC Input of 100 - 240V, 50 - 60Hz, DC Output of 19.5V, 11.8A (**230** Watts) minimum AC/DC Adapter.

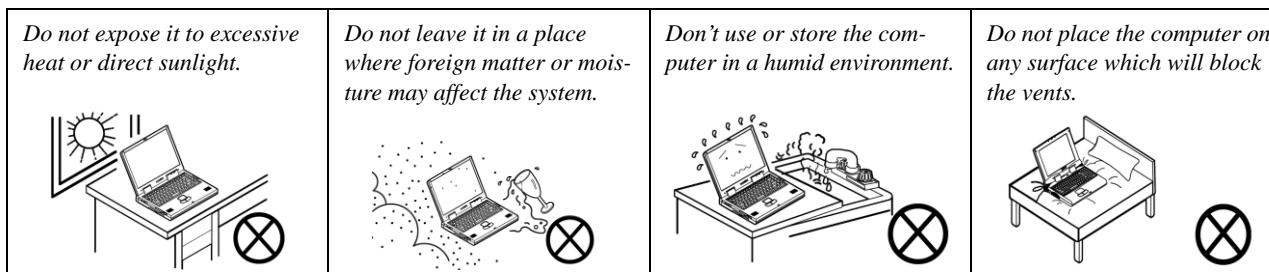
## Instructions for Care and Operation

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

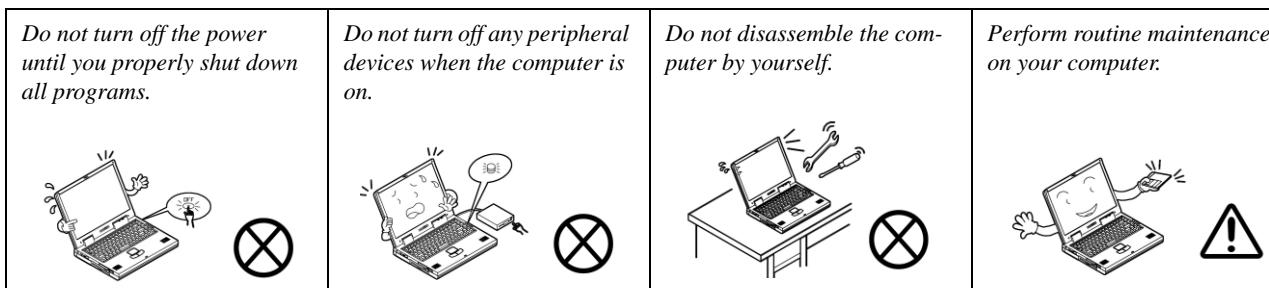
- 1. Don't drop it, or expose it to shock.** If the computer falls, the case and the components could be damaged.



- 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.



## Preface

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### Removal Warning

When removing any cover(s) and screw(s) for the purposes of device upgrade, remember to replace the cover(s) and screw(s) before restoring power to the system.

Also note the following when the cover is removed:

- Hazardous moving parts.
- Keep away from moving fan blades

### 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 and power cord). You must also remove your battery in order to prevent accidentally turning the machine on.

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

*Use only approved brands of peripherals.*



*Unplug the power cord before attaching peripheral devices.*



## Power Safety

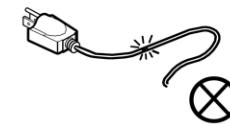
The computer has specific power requirements:

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

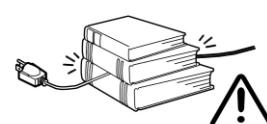
*Do not plug in the power cord if you are wet.*



*Do not use the power cord if it is broken.*



*Do not place heavy objects on the power cord.*



## Battery Precautions

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

## Battery Guidelines

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

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



### Battery Disposal

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

### Caution

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

### Battery Level

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

## Related Documents

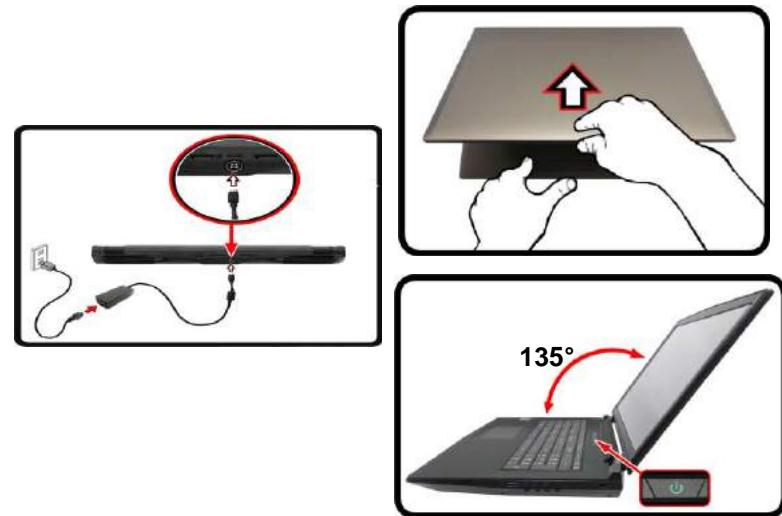
You may also need to consult the following manual for additional information:

### User's Manual on Disc

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.

## System Startup

1. Remove all packing materials.
2. Place the computer on a stable surface.
3. Insert the battery and make sure it is locked in position.
4. Securely attach any peripherals you want to use with the computer (e.g. keyboard and mouse) to their ports.
5. Attach the AC/DC adapter to the DC-In jack at the rear of the computer, then plug the AC power cord into an outlet, and connect the AC power cord to the AC/DC adapter (**make sure you use the adapter when first setting up the computer**, as to safeguard the computer during shipping the battery will be locked to not power the system until first connected to the AC/DC adapter).
6. Use one hand to raise the lid/LCD to a comfortable viewing angle (do not exceed 135 degrees); use the other hand (as illustrated in *Figure 1*) to support the base of the computer (**Note: Never lift the computer by the lid/LCD**).
7. Press the power button to turn the computer "on".



*Figure 1*  
Opening the Lid/LCD/  
Computer with AC/DC  
Adapter Plugged-In

# Contents

## **Introduction .....1-1**

Overview .....	1-1
External Locator - Top View with LCD Panel Open .....	1-4
External Locator - Front & Right side Views .....	1-5
External Locator - Left Side & Rear View .....	1-6
External Locator - Bottom View .....	1-7
Mainboard Overview - Top (Key Parts) .....	1-8
Mainboard Overview - Bottom (Key Parts) .....	1-9
Mainboard Overview - Top (Connectors) .....	1-10
Mainboard Overview - Bottom (Connectors) .....	1-11

## **Disassembly .....2-1**

Overview .....	2-1
Maintenance Tools .....	2-2
Connections .....	2-2
Maintenance Precautions .....	2-3
Disassembly Steps .....	2-4
Removing the Battery .....	2-5
Removing and Installing the Hard Disk Drive .....	2-6
Removing the M.2 SSD Module .....	2-9
Removing the Primary System Memory (RAM) .....	2-10
Removing and Installing the Processor .....	2-12
Removing the System Memory (RAM) from Under the Keyboard .....	2-15
Removing the Wireless LAN Module .....	2-17
Wireless LAN, Combo Module Cables .....	2-18
Removing the WiGig Module .....	2-19
Removing the M.2 SATA Module .....	2-20
Removing and Installing the Video Card .....	2-22

## **Part Lists .....A-1**

Part List Illustration Location .....	A-2
Top .....	A-3
Bottom .....	A-4
LCD (LG-AU) .....	A-5
LCD (AU) .....	A-6
MB .....	A-7
HDD .....	A-8
VGA (G1) .....	A-9
VGA (G2/G3) .....	A-10

## **Schematic Diagrams.....B-1**

Block Diagram .....	B-2
Processor 1/5 .....	B-3
Processor 2/5 .....	B-4
Processor 3/5 .....	B-5
Processor 4/5 .....	B-6
Processor 5/5 .....	B-7
DDR4 CHA SO-DIMM_0 .....	B-8
DDR4 CHA SO-DIMM_1 .....	B-9
DDR4 CHB SO-DIMM_0 .....	B-10
DDR4 CHB SO-DIMM_1 .....	B-11
Panel, Inverter, CRT .....	B-12
Display Port A .....	B-13
Display Port B .....	B-14
HDMI .....	B-15
MXM PCI-E .....	B-16
Lynix Point 1/7 .....	B-17
Lynix Point 2/7 .....	B-18
Lynix Point 3/7 .....	B-19
Lynix Point 4/7 .....	B-20
Lynix Point 5/7 .....	B-21

## Preface

---

Lynix Point 6/7 .....	B-22
Lynix Point 7/7 .....	B-23
USB3.1, USB Charging .....	B-24
CCD, USB Port3 .....	B-25
M.2 3G+USB & WLAN+BT .....	B-26
M.2 PCIE4X SSD1 & SSD2 .....	B-27
Realtek ALC892 .....	B-28
PCM1861 + TAS5766DCA .....	B-29
Subwoofer .....	B-30
EC IT8587 .....	B-31
Second EC IT8587 .....	B-32
Backlight Keyboard .....	B-33
LID SW, Fan, LED Conn .....	B-34
Fan, TP, FP, Multi-Con .....	B-35
LAN E2400 .....	B-36
PS8338B + PS8330B .....	B-37
TBT .....	B-38
Power .....	B-39
TPS65982 .....	B-40
TPS65982 .....	B-41
Cardreader RTS5250 .....	B-42
TPM SLB9655TT & NPCT420 .....	B-43
VCCIO / 1P0A .....	B-44
DDR 1.2V/0.6VS/VCCPLL_OC .....	B-45
VDD3, VDD5 .....	B-46
5V/5VS, 3V/3.3VS, 3.3VA .....	B-47
5VS_2 .....	B-48
Fan CPU, VGA Power .....	B-49
VCORE .....	B-50
VCORE Output Stage .....	B-51
VCCSA / VCCGT .....	B-52
Power Charger, DC-In .....	B-53

P750DM HDD Board .....	B-54
P750DM Power LED Board .....	B-55
P750DM Click Board .....	B-56
P750DM Audio Board .....	B-57
P750DM Audio ESS DAC .....	B-58
P750DM Audio HP AMP .....	B-59
P750DM Audio 3D AMP .....	B-60
P775DM Audio Board .....	B-61
P775DM Audio ESS DAC .....	B-62
P775DM Audio HP AMP .....	B-63
P775DM Audio Board .....	B-64
P750DM BOT LED Board .....	B-65
P750DM LID Switch Board .....	B-66
P750DM Charge LED Board .....	B-67
P750DM Finger Sensor Board .....	B-68
P775DM Charge LED Board .....	B-69
P775DM Power LED Board .....	B-70
Power On Sequence .....	B-71

## Updating the FLASH ROM BIOS..... C-1

# Chapter 1: Introduction

## Overview

This manual covers the information you need to service or upgrade the **P775DM2 (-G)** 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 8.1*, 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 **P775DM2 (-G)** 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.

## Introduction

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# Specifications



### Latest Specification Information

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



### CPU Speed & Computer in DC Mode

Note that when the computer is in DC mode (powered by the battery only) the CPU may not run at full speed. This is a design feature implemented in order to protect the battery.

### Processor Options

#### i7-6700K (4.00GHz)\*

8MB Smart Cache, 14nm, DDR4-2133MHz, TDP 91W

#### i5-6600K (3.50GHz)\*

6MB Smart Cache, 14nm, DDR4-2133MHz, TDP 91W

#### i7-6700 (3.40GHz)

8MB Smart Cache, 14nm, DDR4-2133MHz, TDP 65W

#### i5-6500 (3.20GHz)

6MB Smart Cache, 14nm, DDR4-2133MHz, TDP 65W

*\*Supports Intel® XTU overclocking technology depending on CPU SKU*

### LCD Options

17.3" (43.94cm), 16:9, QFHD (3840x2160)/FHD (1920x1080)

### Core Logic

Intel® Z170 Chipset

### BIOS

AMI BIOS (64Mb SPI Flash-ROM)

### Pointing Device

Built-In Secure Pad (with Microsoft PTP Multi Gesture & Scrolling Functionality)

### Keyboard

Full Color **Illuminated** Full-size Winkey Keyboard (with numeric keypad and anti-ghost keys)

### Video Adapter Options

#### NVIDIA® GeForce GTX 1060 PCIe Video Card

**6GB** GDDR5 Video RAM on board

Supports GPU Overclocking

#### NVIDIA® GeForce GTX 1070 PCIe Video Card

**8GB** GDDR5 Video RAM

Supports GPU Overclocking

### Memory

Four 260 Pin SO-DIMM Sockets Supporting **DDR4 2133/2400 MHz** Memory

(The real memory operating frequency depends on the FSB of the processor.)

Memory Expandable from **8GB (minimum)** up to **64GB (maximum)**

*Support XMP 2666/3000 MHz (XMP depends on processor)*



### SO-DIMM Memory Types

All SO-DIMM memory modules installed in the system should be identical (the same size and brand) in order to prevent unexpected system behavior.

Do not mix SO-DIMM memory module sizes and brands otherwise unexpected system problems may occur.

### Security

Security (Kensington® Type) Lock Slot

BIOS Password

Fingerprint Reader Module

Trusted Platform Module 2.0

Intel PTT for Systems Without TPM Hardware

### Storage

Two changeable 2.5" (6cm) 7.0mm (h)/ 9.5mm (h) SATA (Serial) Hard Disk Drives/Solid State Drives (SSD) supporting RAID level 0/1

**(Factory Option)** Two M.2 **SATA** 2280 SSDs supporting RAID level 0/1

Or

**(Factory Option)** Two M.2 **PCIe**

**Gen3 x4** 2280 SSDs supporting RAID level 0/1

## Introduction

### Audio

High Definition Audio Compliant Interface  
S/PDIF Digital Output  
Two Speakers  
Sound Blaster Audio  
ESS™ SABRE HIFI DAC for High Resolution Headphone Audio  
Built-In Array Microphone  
Sub-Woofers

**Note:** External 7.1CH Audio Output Supported by 2-In-1 Audio Jacks, Microphone, Line-In and Line-Out Jacks

### Interface

One USB 3.1 Gen 2 Type C Port  
One USB 3.1 Gen 2/Thunderbolt 3 Combo Port (Type C)  
Two Mini DisplayPorts (1.3)  
One HDMI-Out Port  
One 2-In-1 Audio Jack (Headphone/ S/PDIF Optical Output Combo Jack)  
One Microphone-In Jack  
One Line-Out Jack  
One Line-In Jack  
One RJ-45 LAN Jacks  
One DC-In Jack  
Four USB 3.0 (USB 3.1 Gen 1) Ports (Including one AC/DC Powered USB port)

### Communication

Built-In Qualcomm 10/100/1000Mb Base-TX Ethernet LAN  
2.0M FHD PC Camera Module

### WLAN/ Bluetooth M.2 Modules:

(**Factory Option**) Intel® Wireless-AC 8260 Wireless LAN (802.11ac) + Bluetooth 4.1  
(**Factory Option**) Intel® Wireless-N 7265 Wireless LAN (802.11b/g/n) + Bluetooth 4.0  
(**Factory Option**) Intel® Wireless-AC 3165 Wireless LAN (802.11ac) + Bluetooth 4.0  
(**Factory Option**) Qualcomm® Atheros Killer™ Wireless-AC 1535 Wireless LAN (802.11ac) + Bluetooth 4.1  
(**Factory Option**) Qualcomm® Wireless LAN (802.11ac/ad) + Bluetooth 4.1

### M.2 Slots

Slot 1 for **Combo WLAN and Bluetooth Module**  
Slot 2 for **SATA or PCIe Gen3 x4 SSD**  
Slot 3 for **SATA or PCIe Gen3 x4 SSD**

### Card Reader

Embedded Multi-In-1 Push-Push Card Reader  
MMC (MultiMedia Card) / RS MMC  
SD (Secure Digital) / Mini SD / SDHC/ SDXC (up to UHS-II)

### Features

Supports NVIDIA® G-SYNC™ Technology  
(G-SYNC is only supported if you have a G-SYNC capable display and a GTX series video adapter)  
Virtual Reality Ready

### Environmental Spec

#### Temperature

Operating: 10°C - 35°C  
Non-Operating: -20°C - 60°C

#### Relative Humidity

Operating: 20% - 80%  
Non-Operating: 10% - 90%

### Power

Removable 8-cell Smart Lithium-Ion Battery Pack, 82WH

Full Range AC/DC Adapter

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

DC Output: 19.5V, 11.8A (**230W**)

### Dimensions & Weight

418mm (w) \* 295.3mm (d) \* 40.9mm (h)

3.9kg (Barebone System with Video Card and 82WH Battery)

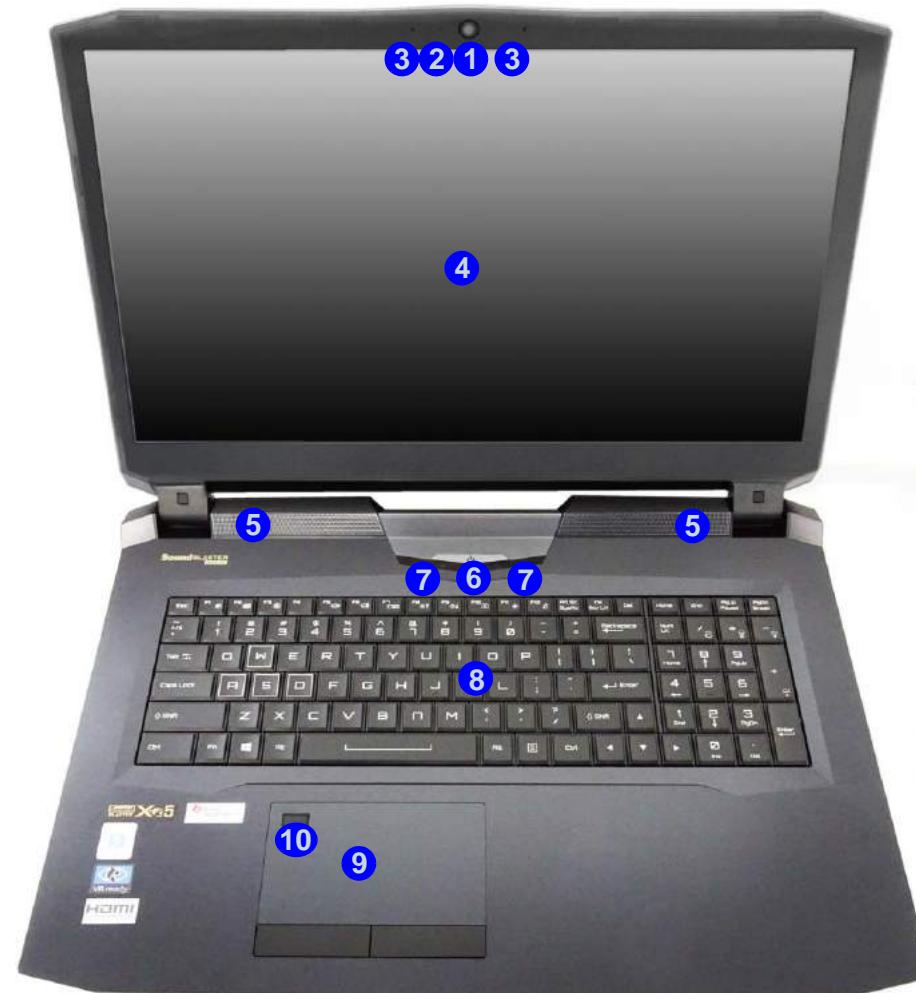
Or

4.3kg (Barebone System with Video Card and 82WH Battery)

## Introduction

Figure 1  
Top View

1. PC Camera
2. PC Camera LED
3. Built-In Microphone
4. LCD
5. Speakers
6. Power Button
7. LED Lock Indicators
8. Keyboard
9. TouchPad and Buttons
10. Fingerprint Reader



## External Locator - Front & Right side Views

Figure 2  
Front Views

1. LED Power Indicators

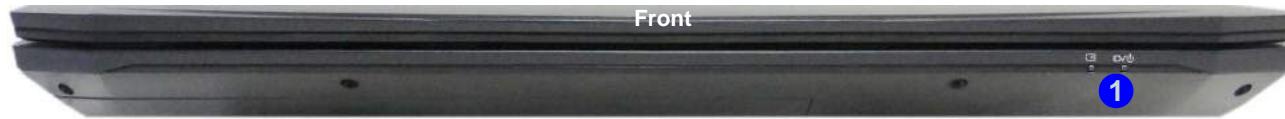


Figure 3  
Right Side Views

1. Line-In Jack
2. Microphone Jack
3. Line-Out Jack
4. Headphone and S/PDIF Combo Jack
5. USB 3.0/3.1 Ports
6. Security Lock Slot

## Introduction

### External Locator - Left Side & Rear View

Figure 4  
Left Side View

1. RJ-45 LAN Jack
2. USB 3.1/  
Thunderbolt  
Combo Port
3. USB 3.1 Port
4. USB 3.0/3.1 Port
5. Powered USB 3.1  
Port
6. Multi-in-1 Card  
Reader



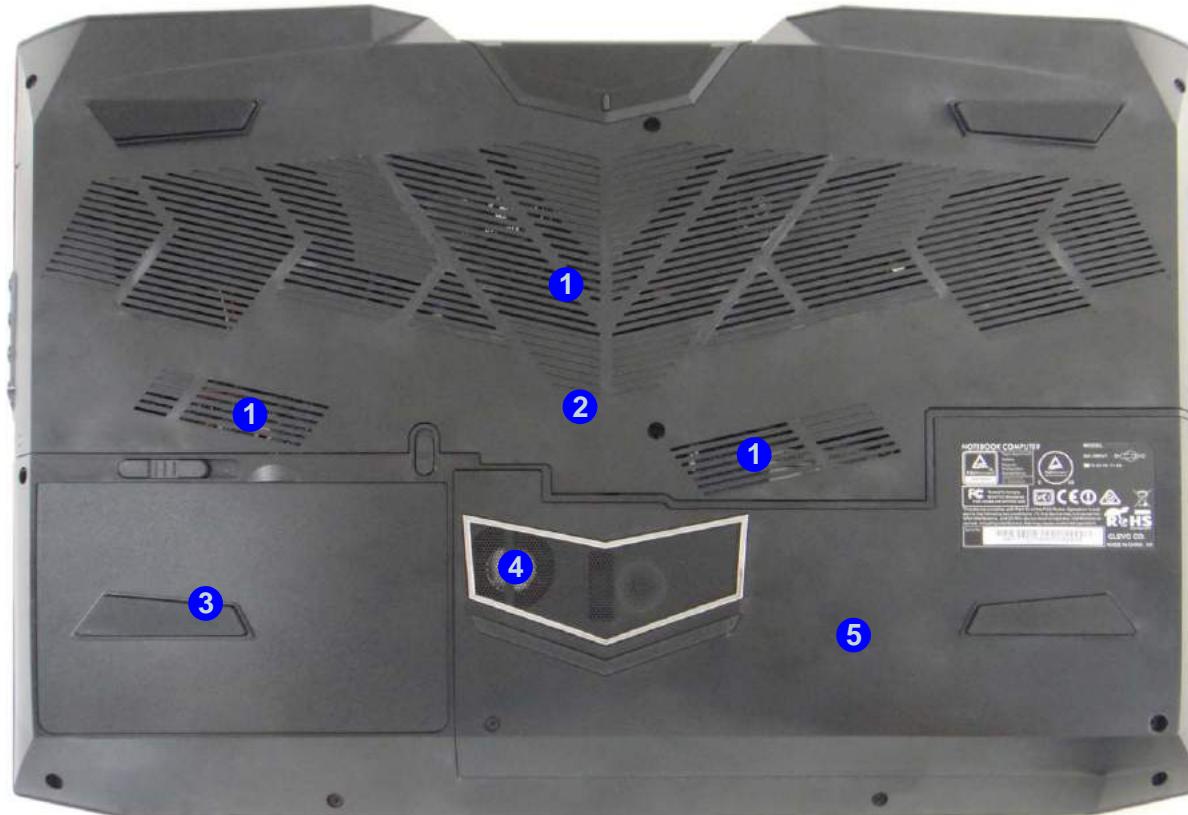
Figure 5  
Rear View

1. Vent/Fan Intake
2. HDMI-Out Port
3. Mini Display Port 1
4. Mini Display Port 2
5. DC-In Jack



### External Locator - Bottom View

Figure 6  
Bottom View



#### Overheating

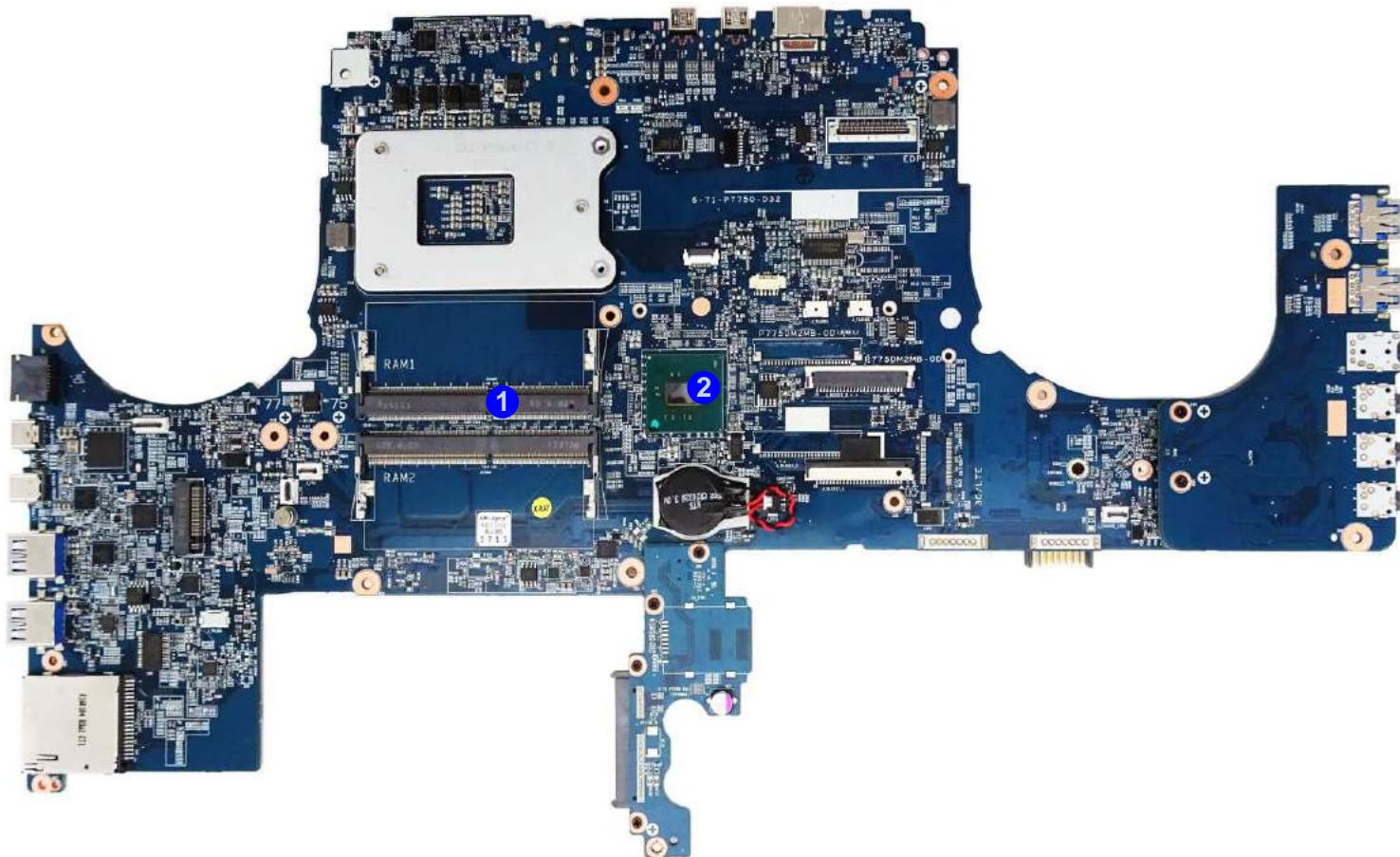
To prevent your computer from overheating make sure nothing blocks the vent/fan intakes while the computer is in use.

## Introduction

*Figure 7*  
**Mainboard Top  
Key Parts**

1. Memory Slots  
DDR4 SO-DIMM
2. Platform  
Controller Hub

## Mainboard Overview - Top (Key Parts)



## Mainboard Overview - Bottom (Key Parts)

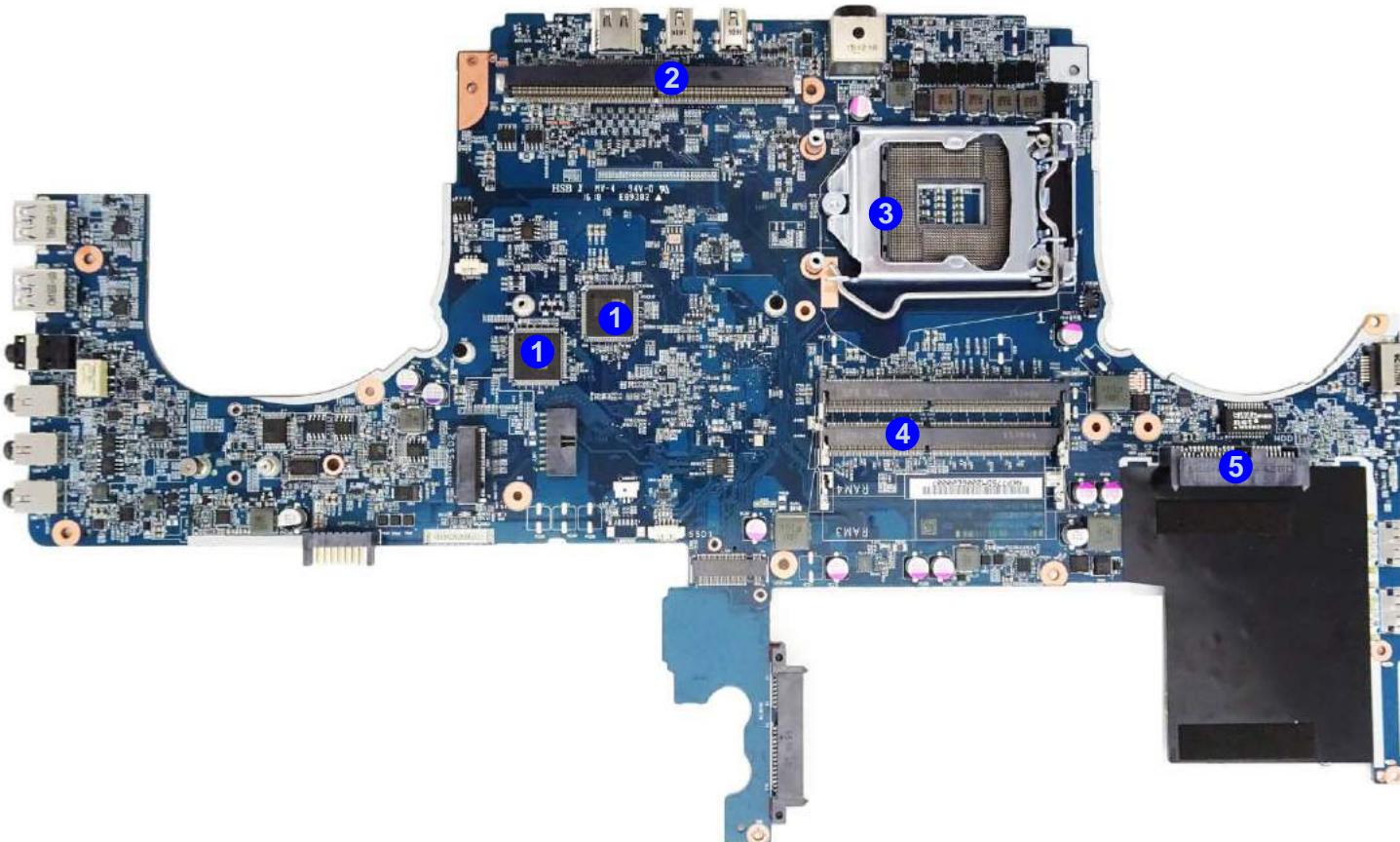


Figure 8  
Mainboard Bottom  
Key Parts

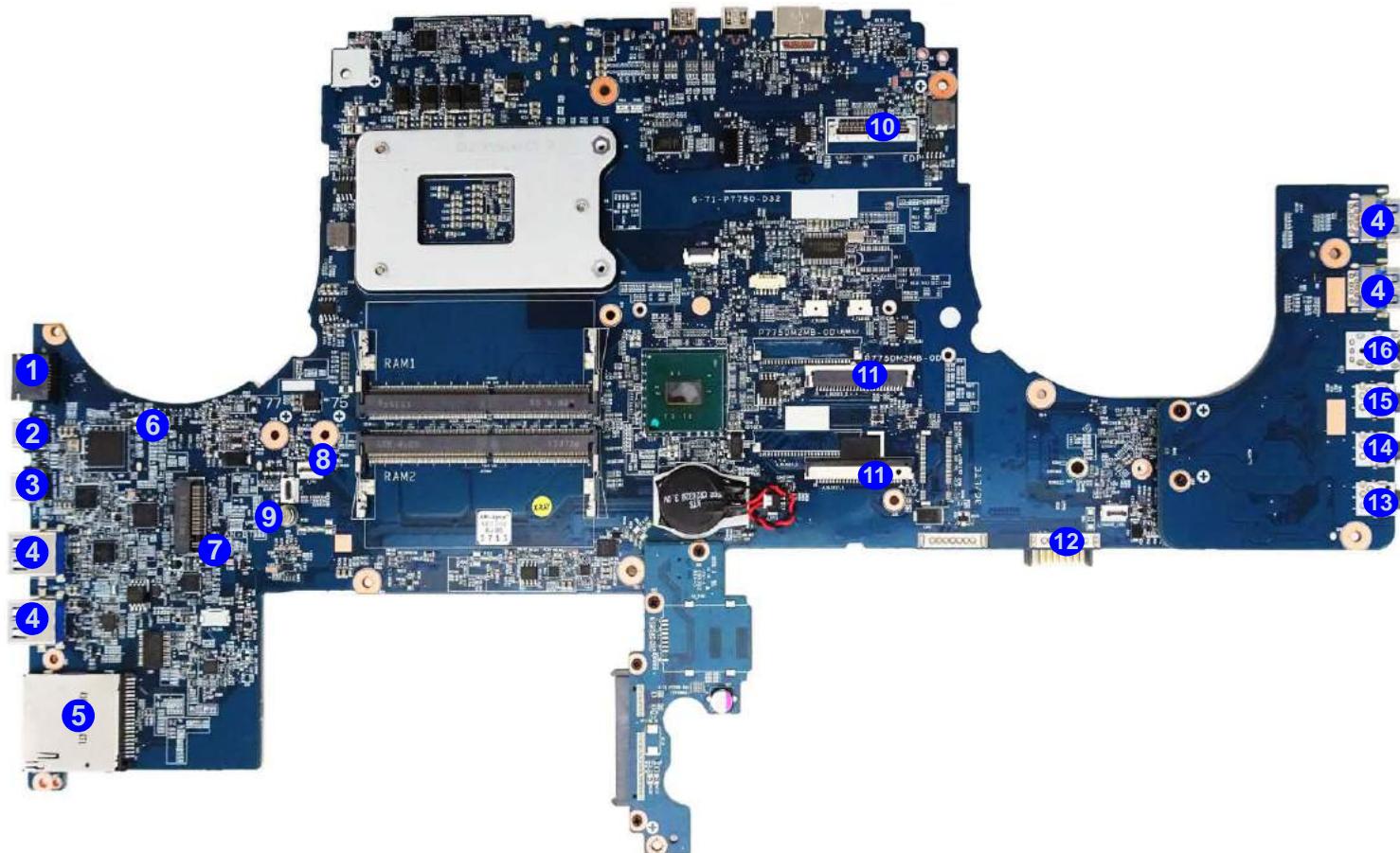
1. KBC ITE IT8587
2. VGA-Card Connector
3. CPU Socket (no CPU installed)
4. Memory Slots DDR4 SO-DIMM (Primary)
5. Hard Disk Connector

### Introduction

Figure 9  
Mainboard Top  
Connectors

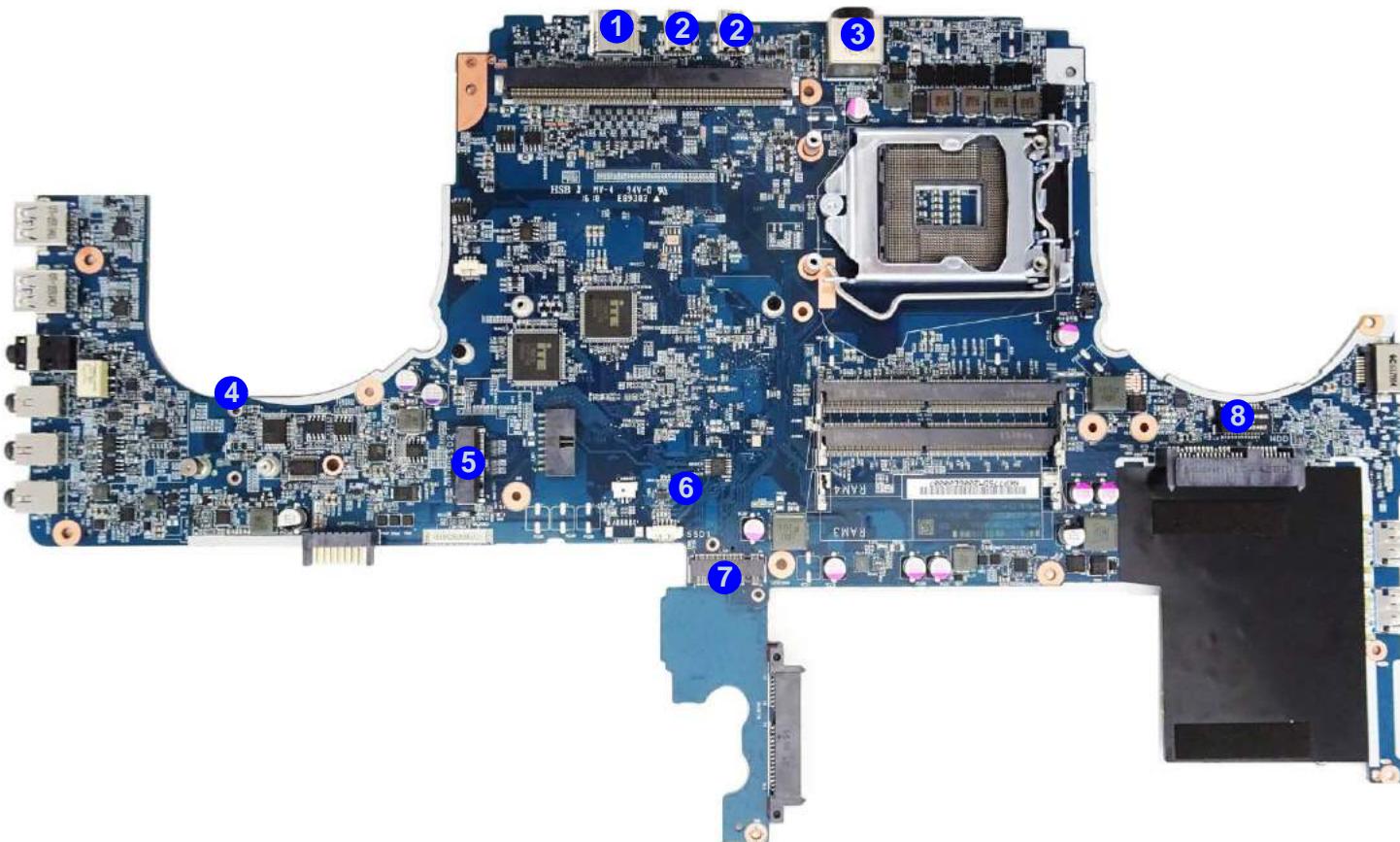
1. RJ-45 LAN Jack
2. USB 3.1/  
Thunderbolt  
Combo Port
3. USB 3.1 Port
4. USB 3.0/3.1 Port
5. Multi-in-1 Card  
Reader
6. KB LED  
Connector
7. WLAN Card  
Connector
8. Fingerprint  
Connector
9. TP FFC Cable  
Connector
10. Panel Cable  
Connector
11. Keyboard Cable  
Connector
12. Battery  
Connector
13. Line-In Jack
14. Microphone Jack
15. Line-Out Jack
16. Headphone and  
S/PDIF Combo  
Jack

### Mainboard Overview - Top (Connectors)



## Mainboard Overview - Bottom (Connectors)

Figure 10  
Mainboard Bottom  
Connectors



## Introduction

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# Chapter 2: Disassembly

## Overview

This chapter provides step-by-step instructions for disassembling the **P775DM2 (-G)** series notebook's parts and subsystems. When it comes to reassembly, reverse the procedures (unless otherwise indicated).

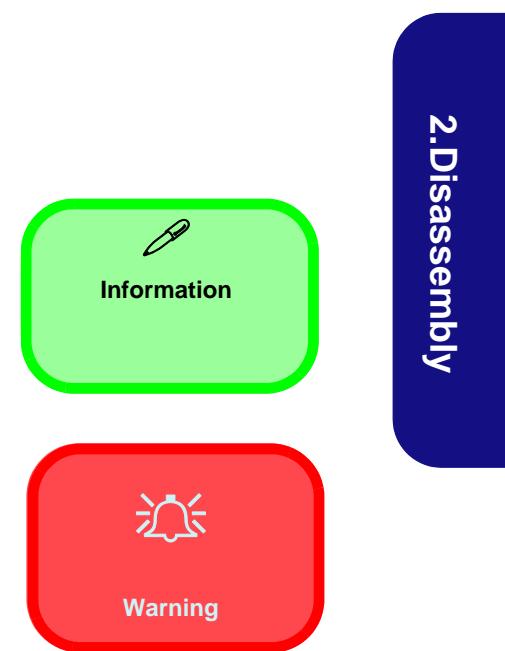
We suggest you completely review any procedure before you take the computer apart.

Procedures such as upgrading/replacing the RAM, 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.



## 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 and power cord). You must 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
2. Remove the HDD

[page 2 - 5](#)  
[page 2 - 6](#)

### To remove the M.2 SSD:

1. Remove the battery
2. Remove the HDD
3. Remove the M.2 SSD

[page 2 - 5](#)  
[page 2 - 6](#)  
[page 2 - 9](#)

### To remove the Primary System Memory:

1. Remove the battery
2. Remove the primary system memory

[page 2 - 5](#)  
[page 2 - 10](#)

### To remove and install the Processor:

1. Remove the battery
2. Remove the system memory
3. Remove the processor
4. Install the processor

[page 2 - 5](#)  
[page 2 - 10](#)  
[page 2 - 12](#)  
[page 2 - 14](#)

### To remove the System Memory under the Keyboard:

1. Remove the battery
2. Remove the processor
3. Remove the keyboard

[page 2 - 5](#)  
[page 2 - 12](#)  
[page 2 - 15](#)

4. Remove the system memory

[page 2 - 16](#)

### To remove the WLAN Module:

1. Remove the battery
2. Remove the processor
3. Remove the keyboard
4. Remove the wireless LAN

[page 2 - 5](#)  
[page 2 - 12](#)  
[page 2 - 10](#)  
[page 2 - 17](#)

### To remove the WiGig Module:

1. Remove the battery
2. Remove the processor
3. Remove the keyboard
4. Remove the WiGig

[page 2 - 5](#)  
[page 2 - 12](#)  
[page 2 - 10](#)  
[page 2 - 19](#)

### To remove and install the M.2 SATA:

1. Remove the battery
2. Remove the primary system memory
3. Remove the M.2 SATA
4. Install the M.2 SATA

[page 2 - 5](#)  
[page 2 - 10](#)  
[page 2 - 20](#)  
[page 2 - 21](#)

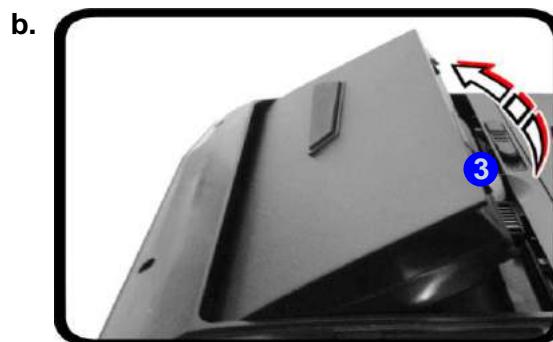
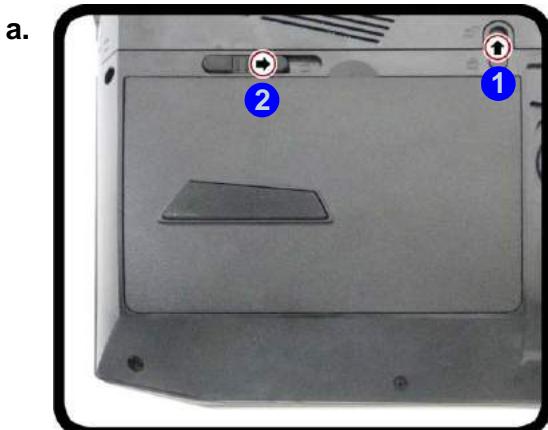
### To remove and install the Video Card:

1. Remove the battery
2. Remove the video card
3. Install the video card

[page 2 - 5](#)  
[page 2 - 22](#)  
[page 2 - 23](#)

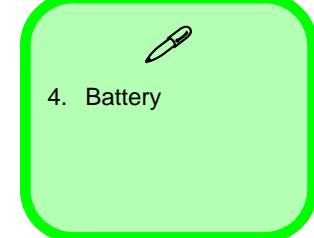
## Removing the Battery

1. Turn the computer **off**, and turn it over.
2. Slide the latch **1** in the direction of the arrow (*Figure 1a*).
3. Slide the latch **2** in the direction of the arrow, and hold it in place (*Figure 1a*).
4. Lift the battery in the direction of the arrow **3**.
5. Lift the battery **4** out of the compartment (*Figure 1c*).



*Figure 1*  
**Battery Removal**

- a. Slide the latch and hold in place.
- b. Lift the battery up toward the direction of the arrow.
- c. Lift the battery out.



## Disassembly

### Figure 2 HDD Assembly Removal

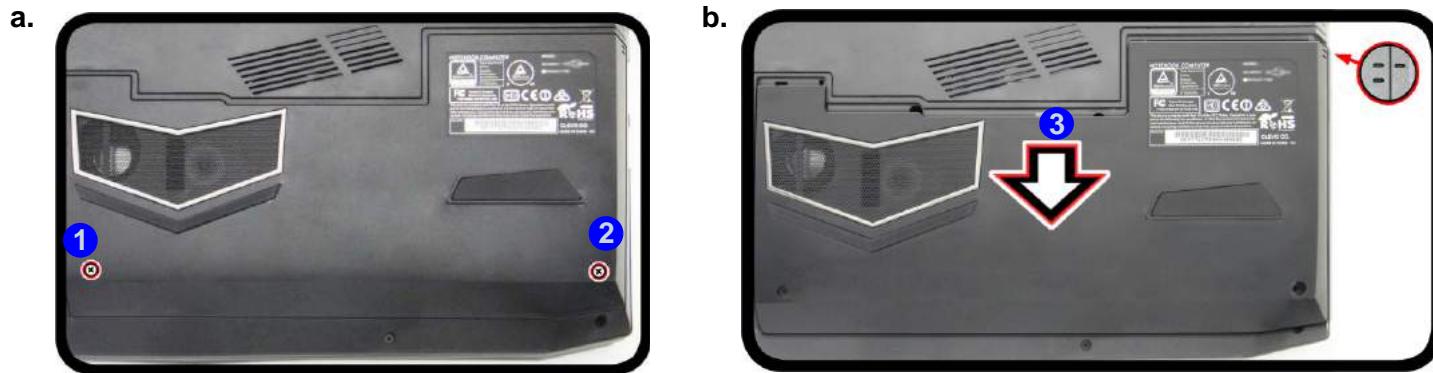
- a. Locate the HDD bay cover and remove the screws.
- b. Remove the hard disk bay cover by sliding the cover at point **3**.

## Removing and Installing 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 7mm/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 Removal Process

1. Turn **off** the computer, and remove the battery ([page 2 - 5](#)).
2. Locate the hard disk bay cover and remove screws **1** - **2** ([Figure 2a](#)).
3. Remove the hard disk bay cover by sliding the cover at point **3** ([Figure 2b](#)).



- 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.

## 2. Disassembly

### Disassembly

4. Lift the hard disk bay cover **4** off the computer (**Figure 3c**)
5. Remove the screw **5**. Slightly lift and pull the HDD-1 assembly in the direction of the arrow **6** to remove the hard disk assembly **7** (**Figure 3d**).
6. Remove the screw **8**. Slightly lift and pull the HDD-2 assembly (if available) in the direction of the arrow **9** to remove the hard disk assembly **10** (**Figure 3e**).
7. Remove screws **11** - **16**, HDD bracket **17** and the adhesive cover **18** from the hard disk **19** (**Figure 3f**).
8. Reverse the process to install a new hard disk (do not forget to replace all the screws and covers).

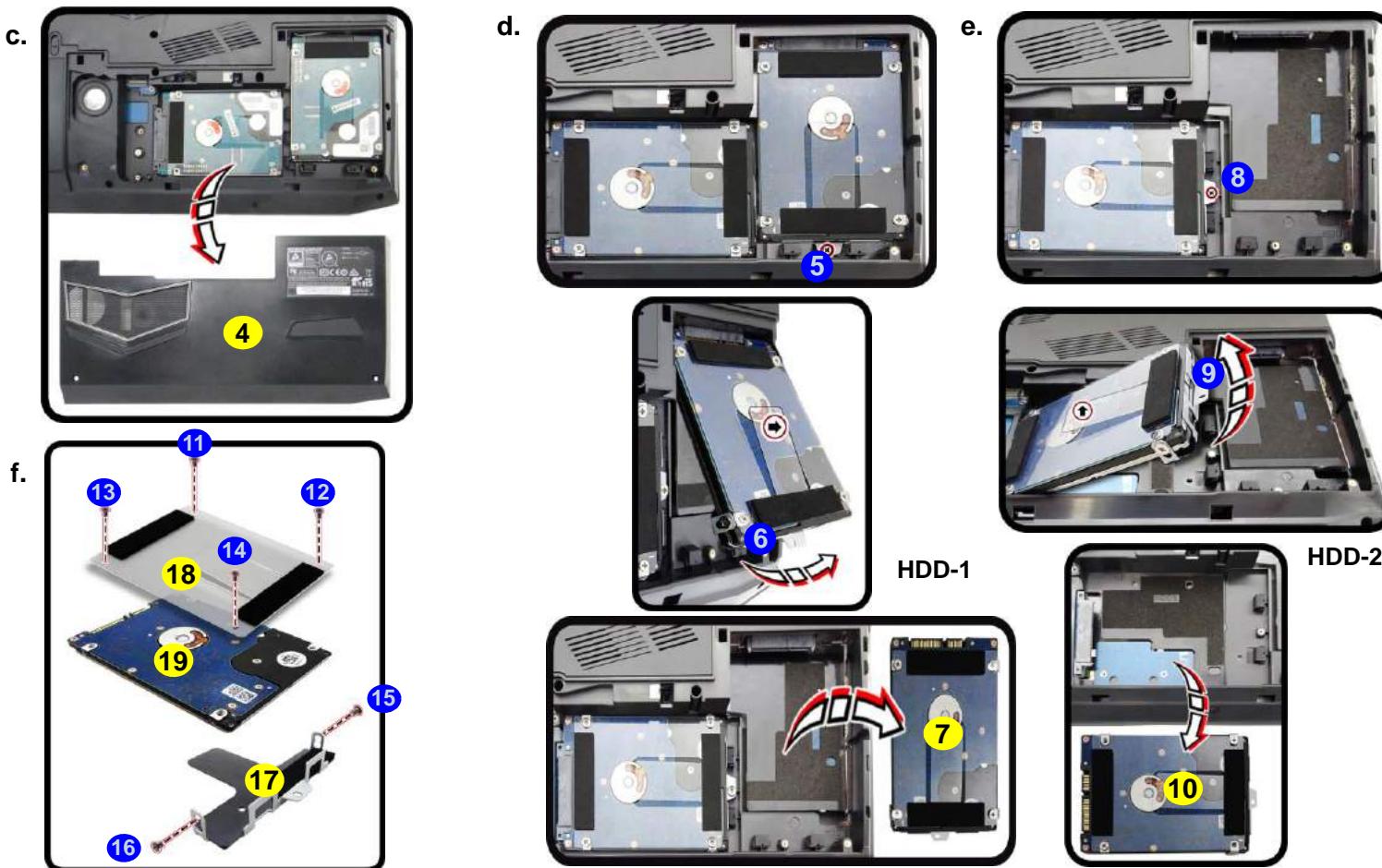


Figure 3  
HDD Assembly  
Removal (cont'd.)

- c. Remove the HDD bay cover.
- d. Remove the screw. Lift and pull the HDD-1 assembly in the direction of the arrow to remove the hard disk assembly.
- e. Remove the screw. Lift and pull the HDD-2 assembly in the direction of the arrow to remove the hard disk assembly.
- f. Remove the screws, hdd bracket and adhesive cover.

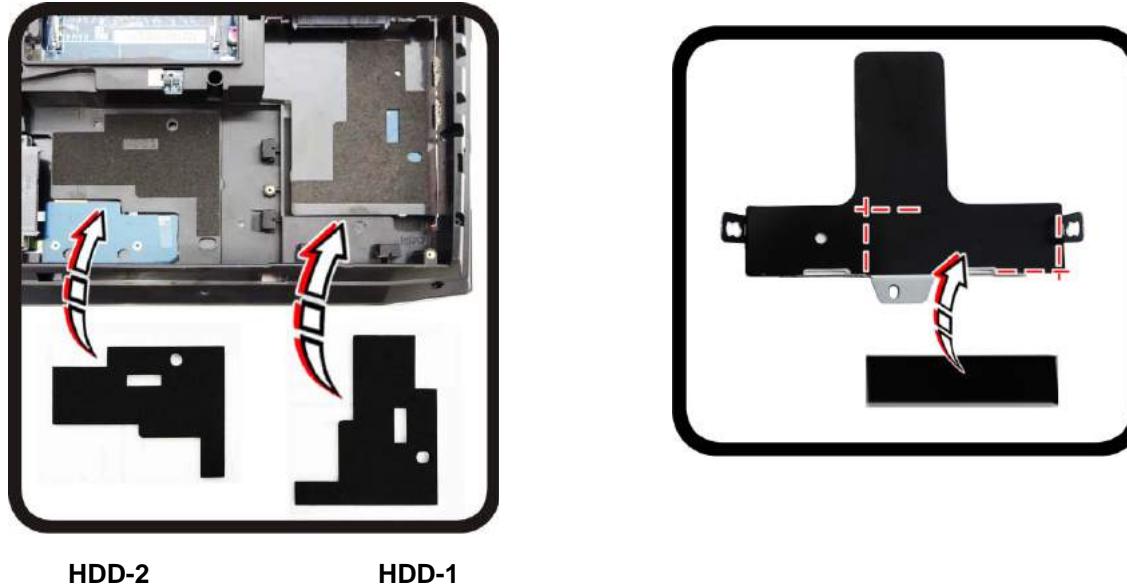
4. HDD Bay Cover  
7. HDD-1 Assembly  
10. HDD-2 Assembly  
17. Adhesive Cover  
18. HDD Bracket  
19. HDD  
• 8 Screws

## Disassembly

### Hard Disk Size Note (Foam Rubber Insert)

Note that the hard disks pictured on the following pages are all 9.5mm(H) hard disk drives. In some cases 7mm(H) hard disk drives will be installed.

*Figure 4*  
**Foam Rubber  
Insert for 7mm(H)  
HDDs**

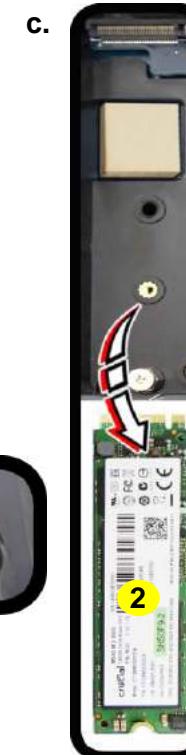
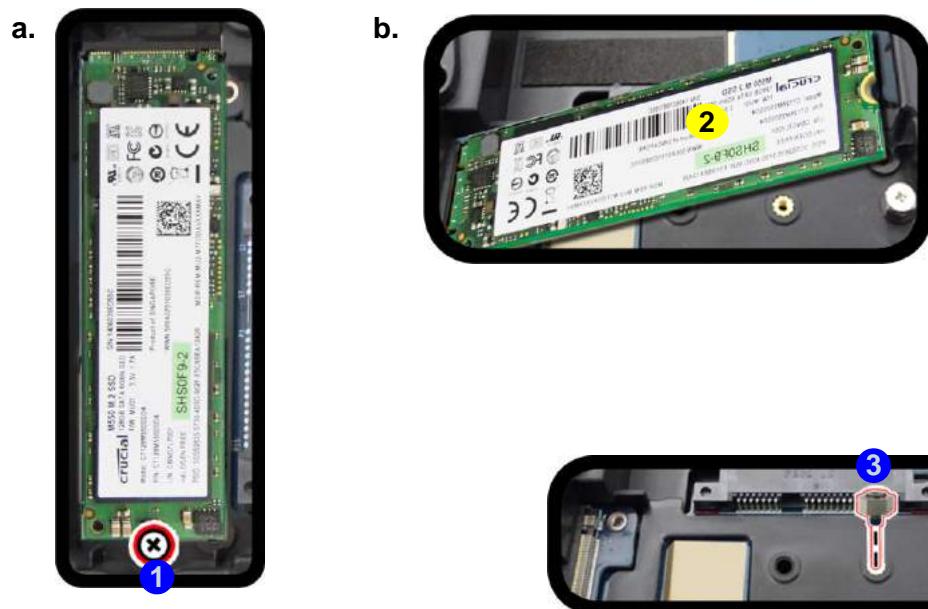


- If you are replacing a 9.5mm(H) HDD with a 7mm(H) HDD then insert the foam rubber insert.
- If you are replacing a 7mm(H) HDD with a 9.5mm(H) HDD then remove the foam rubber insert.

## Removing the M.2 SSD Module

Note that the SSD (if installed) is beside the HDD bay.

1. Turn **off** the computer, and turn it over, remove the battery ([page 2 - 5](#)).
2. Remove the screw **1** from the SSD ([Figure 5a](#)).
3. The M.2 SSD module **2** will pop-up ([Figure 5b](#)).
4. Lift the M.2 SSD module **2** up and off the computer ([Figure 5c](#)).
5. Reverse the process to install a new SSD (make sure that the hexagonal screw **3** is in the correct location depending upon the size of the module).



*Figure 5*  
**M.2 SSD Module  
Removal**

- a. Remove the screws.
- b. The module will pop up.
- c. Lift the module out.

2. M.2 SSD Module
- 1 Screw

## Disassembly

### Figure 6 RAM Module Removal

- a. Remove the screws.  
Slide the bottom cover until the cover and case indicators are aligned.

## Removing the Primary System Memory (RAM)

The computer has **four** memory sockets for 260 pin Small Outline Dual In-line (SO-DIMM) **DDR 4** type memory modules. The total memory size is automatically detected by the POST routine once you turn on your computer.

**Two primary memory sockets are located under component bay cover (the bottom case cover), and two secondary memory sockets are located under the keyboard (not user upgradable). If you are installing only two RAM modules then they should be installed in the primary memory sockets under the component bay cover.**

Note that the RAM located under the keyboard is not user upgradable.

### Memory Upgrade Process

1. Turn **off** the computer, and turn it over, remove the battery ([page 2 - 5](#)).
2. Remove screws **1** - **5**.
3. Slide the bottom cover until the cover and case indicators **6** are aligned ([Figure 6a](#)).

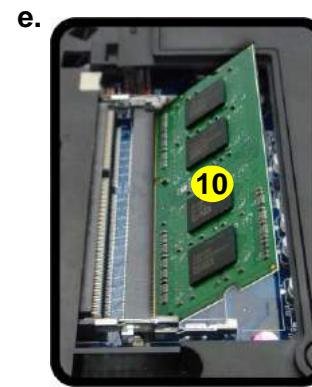


- 5 Screws

## 2. Disassembly

### Disassembly

4. Lift the component bay cover **6** off the computer case. The modules will be visible at point **7** (*Figure 7c*).
5. Gently pull the two release latches (**8** & **9**) on the sides of the memory socket(s) in the direction indicated below (*Figure 7d*).
6. The RAM module **10** will pop-up, and you can remove it (*Figure 7e*).
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.
12. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.



#### 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.

### Figure 7 RAM Module Removal (cont'd.)

- c. Lift the component bay cover off the computer case. The modules will be visible at point **7**.
- d. Gently pull the two release latches on the sides of the memory socket(s) in the direction indicated below.
- e. The RAM module will pop-up, and you can remove it.

- 6. Component Bay Cover
- 10. RAM Module
- 4 Screws

## Disassembly

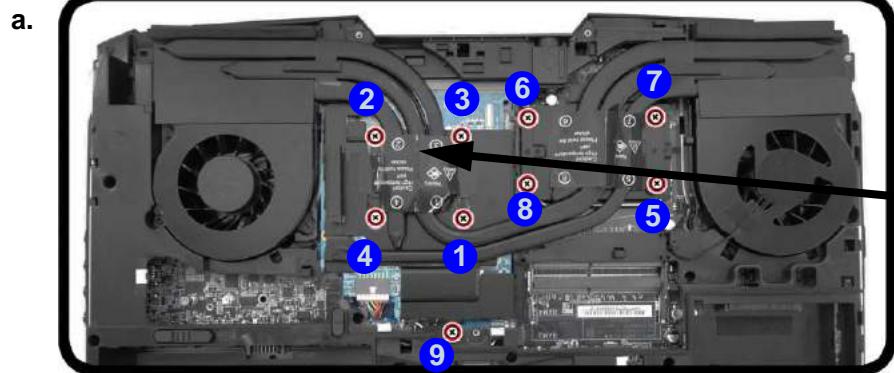
### Figure 8 Processor Removal Procedure

- a. Remove the screws in the correct order.
- b. Carefully remove the heat sink unit.

## Removing and Installing the Processor

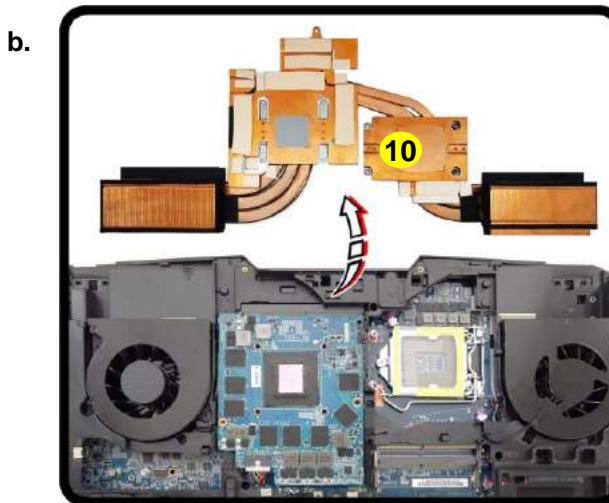
### Processor Removal Procedure

1. Turn off the computer, remove the battery ([page 2 - 5](#)), and component bay cover ([page 2 - 10](#)).
2. Remove screws ① - ⑨ from the heat sink unit in the order indicated on the label (i.e screw ⑨ first through to screw ① last [Figure 8a](#)).
3. Carefully (it may be hot) remove the heat sink unit ⑩ ([Figure 8b](#)).



#### Note:

Loosen the screws in the reverse order 9-8-7-6-5-4-3-2-1 as indicated.

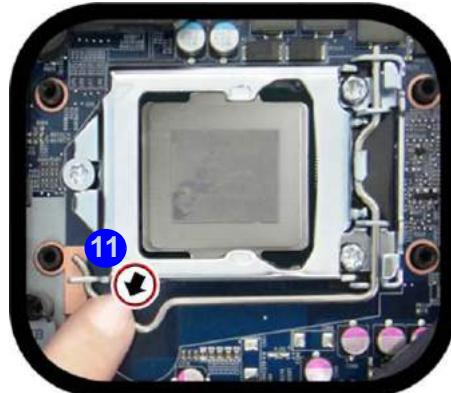


- 
10. Heat Sink Unit
- 9 Screws

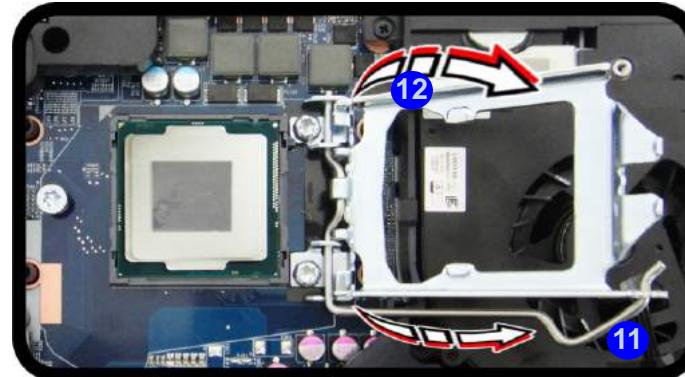
*Figure 9*  
**Processor Removal  
(cont'd)**

4. Press down and hold the latch ⑪ (with the latch held down you will be able to release it).
5. Move the latch ⑪ and bracket ⑫ fully in the direction indicated to unlock the CPU(*Figure 9c*).
6. Carefully (it may be hot) lift the CPU A up out of the socket (*Figure 9d*).
7. See [page 2 - 14](#) for information on inserting 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!).

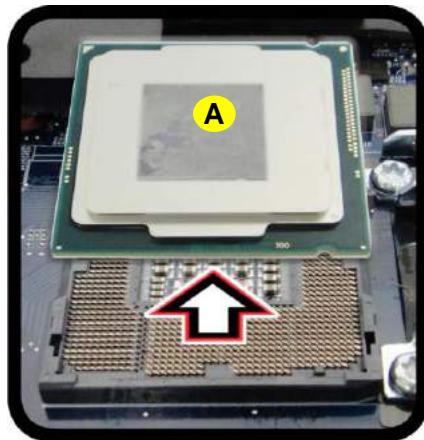
c.



Unlock



d.



## 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.

- c. Move the latch and bracket fully in the direction indicated to unlock the CPU.
- d. Lift the CPU out of the socket.


 A. CPU

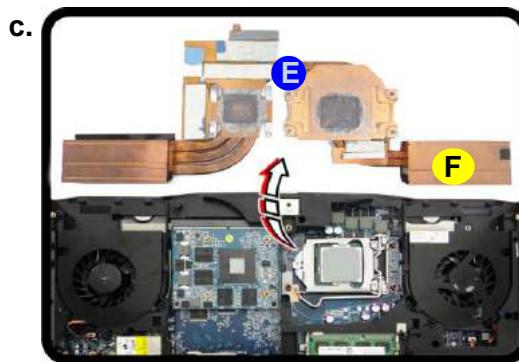
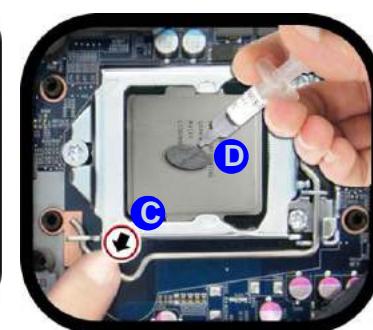
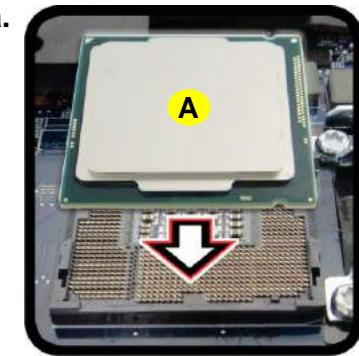
## Disassembly

*Figure 10*  
Processor  
Installation

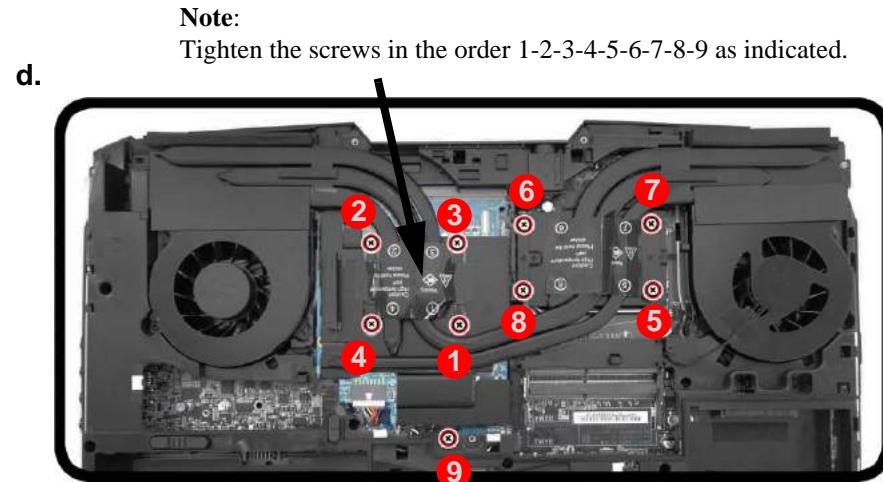
- a. Insert the CPU.
- b. Move the latch and bracket fully in the direction indicated to lock the CPU. Apply thermal grease.
- c. Remove the sticker from the heat sink unit and insert the heat sink.
- d. Tighten the screws.

### Processor Installation Procedure

1. Insert the CPU **A**; pay careful attention to the pin alignment (*Figure 10a*), it will fit only one way (DO NOT FORCE IT!).
2. Move the bracket **B** and latch **C** fully in the direction indicated to lock the CPU.
3. Apply the thermal grease **D** to the top of the CPU as shown (*Figure 10b*).
4. **Remove the sticker **E**** (*Figure 10c*) from the heat sink unit (if it is a new unit).
5. Insert the heat sink unit **F** as indicated in *Figure 10c*.
6. Tighten the CPU heat sink screws in the order **1 - 9** (the order as indicated on the label and *Figure 10d*).
7. Replace the CPU fan, component bay cover and tighten the screws (*page 2 - 12*).



A. CPU  
 F. Heat Sink  
 • 9 Screws



#### Note:

Tighten the screws in the order 1-2-3-4-5-6-7-8-9 as indicated.

## Removing the System Memory (RAM) from Under the Keyboard

The computer has **four** memory sockets for 260 pin Small Outline Dual In-line (SO-DIMM) **DDR 4** type memory modules. The total memory size is automatically detected by the POST routine once you turn on your computer.

**Two primary memory sockets are located under component bay cover (the bottom case cover), and two secondary memory sockets are located under the keyboard. If you are installing only two RAM modules then they should be installed in the primary memory sockets under the component bay cover.**

### Memory Upgrade Process

1. Turn off the computer, and turn it over, remove the battery ([page 2 - 5](#)).
2. Remove screws **1** - **5** and the component bay cover **6** ([Figure 11a](#)) and CPU heatsink ([page 2 - 12](#)).
3. Remove screws **7** - **8** from the bottom of the computer ([Figure 11b](#)).
4. Open it up with the LCD on a flat surface before pressing at point **9** to release the keyboard module (use an eject stick **10** to do this with a diameter no bigger than 2.5mm) while releasing the keyboard in the direction of the arrow **11** as shown ([Figure 11c](#)).

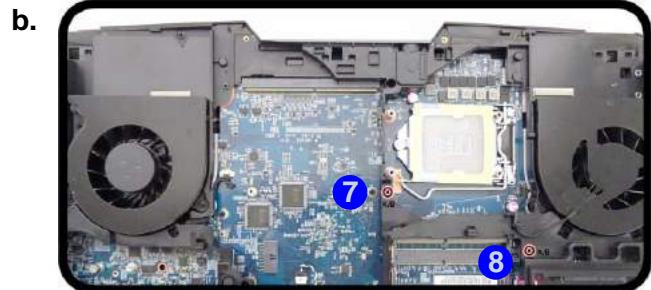
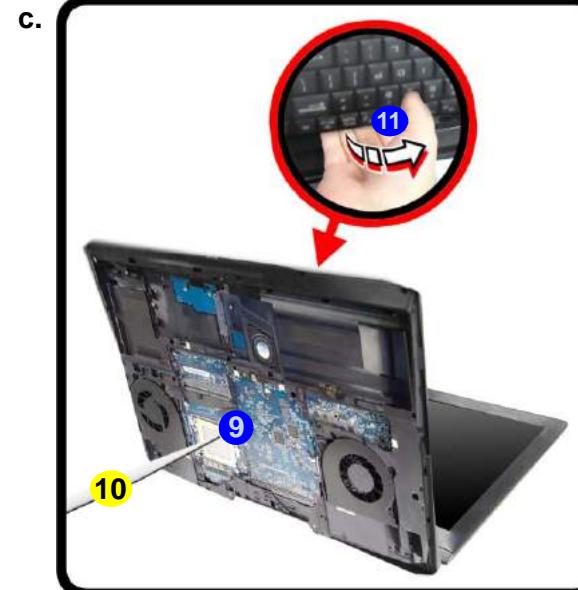
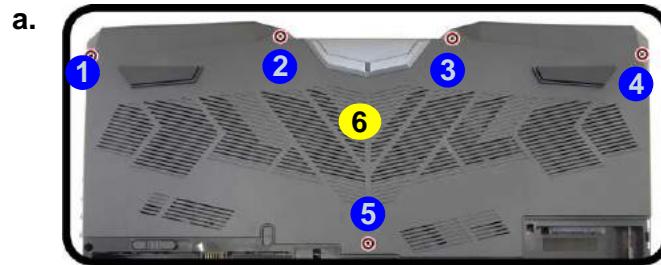


Figure 11  
Keyboard  
Removal

- a. Remove the screws and component bay cover.
- b. Remove the screws.
- c. Eject the keyboard using a special eject stick to push the keyboard out while releasing the keyboard as shown.



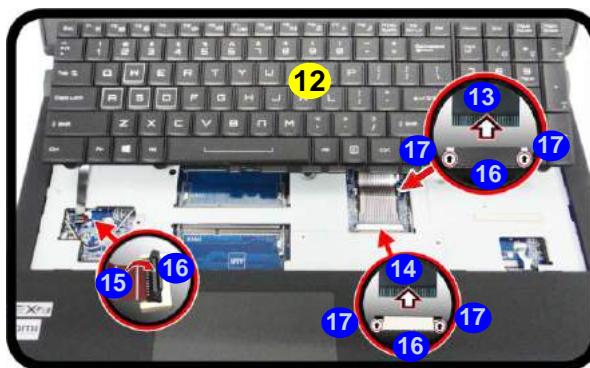
## Disassembly

**Figure 12**  
**RAM Module Removal**

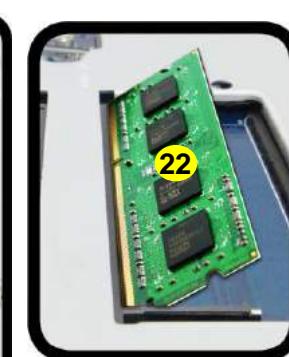
- d. Lift the keyboard up, and disconnect the keyboard ribbon cable from the locking collar socket.
- e. Remove the keyboard and the memory sockets will be visible.
- f. Pull the two release latches on the sides of the memory socket(s) in the direction indicated.

5. Carefully lift the keyboard **12** up, being careful not to bend the keyboard ribbon cables **13** - **15**.
6. Disconnect the keyboard ribbon cables **13** - **15** from the locking collar socket **16** by using a small flat-head screwdriver to pry the locking collar pins **17** away from the base (**Figure 12d**).
7. Remove the keyboard and the memory sockets **18** & **19** will be visible.
8. Gently pull the two release latches (**20** & **21**) on the sides of the memory socket(s) in the direction indicated below.
9. The RAM module **22** will pop-up, and you can remove it.
10. Pull the latches to release the second module if necessary.
11. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
12. 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.
13. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
14. Replace the bay cover and screws.
15. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.

**d.**



**f.**



12. Keyboard  
22. RAM Modules

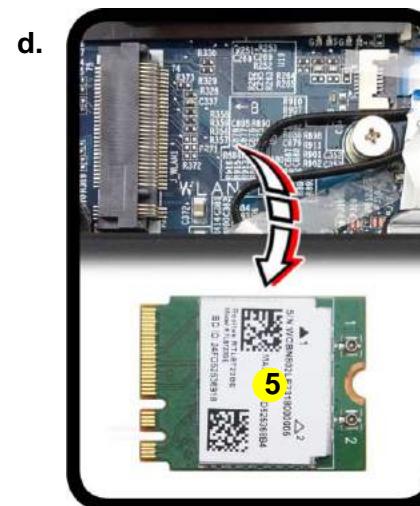
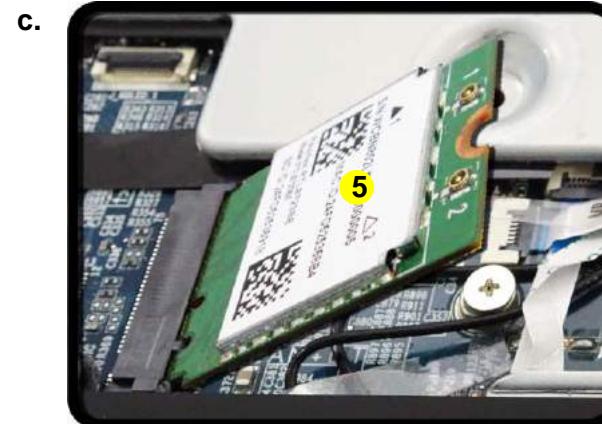


### Contact Warning

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.

## Removing the Wireless LAN Module

1. Turn off the computer, remove the battery ([page 2 - 5](#)), CPU ([page 2 - 12](#)) and the keyboard ([page 2 - 15](#)).
2. The Wireless LAN module will be visible at point **1** under the keyboard ([Figure 13a](#)).
3. Carefully disconnect cables **2** - **3**, then remove screw **4** from the module socket ([Figure 13b](#)).
4. The Wireless LAN module **5** will pop-up ([Figure 13c](#)).
5. Lift the Wireless LAN module ([Figure 13d](#)) up and off the computer.



*Figure 13  
Wireless LAN  
Module Removal*

- a. The Wireless LAN module will be visible at point **1** under the keyboard
- b. Disconnect the cables and remove the screw.
- c. The WLAN module will pop up.
- d. Lift the WLAN module out.

5. WLAN Module

- 1 Screw

## Disassembly

### Wireless LAN, Combo Module Cables

Note that the cables for connecting to the antennae on WLAN, WLAN & Bluetooth Combo, 3G and LTE modules are not labelled. The cables/covers (each cable will have either a black or transparent cable cover) are color coded for identification as outlined in the table below.

Module Type	Antenna Type	Cable Color	Cable Cover Type
WLAN/WLAN & Bluetooth Combo	WM 1	Black	Transparent
	WM 2	Gray	
	WM 3	White	
WiGig	WM 1	Blue	White
	WM 2	Black	Transparent
	WM 3	Black	

Cable 1 is usually connected to antenna 1 (Main) on the module, and cable 2 to antenna 2 (Aux).

Figure 14  
WiGig Module  
Removal

- The module will be visible at point 1 under the keyboard (Figure 13a).
- Disconnect cables 2 - 4, then remove screw 5 from the module socket (Figure 13b).
- The module 6 will pop-up (Figure 13c).
- Lift the module (Figure 13d) up and off the computer.

a.



c.



b.



d.



### 6. WiGig Module

- 1 Screw

## Disassembly

---

*Figure 15*

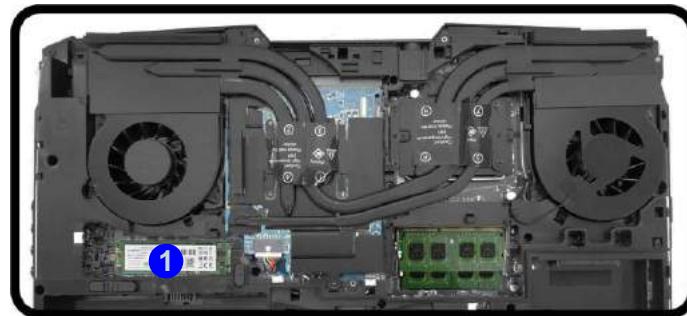
### M.2 SATA Module Removal

- Locate the module.
- Remove the screw.
- The module will pop-up.
- Lift the module up off the socket.

## Removing the M.2 SATA Module

- Turn **off** the computer, remove the battery ([page 2 - 5](#)), and component bay cover ([page 2 - 10](#)).
- Locate the module; it is visible at point **1** ([Figure 15a](#)).
- Carefully remove the screw **2** from the module ([Figure 15b](#)).
- The M.2 SATA module **3** will pop-up ([Figure 15c](#)).
- Lift the M.2 SATA module **3** up and off the computer ([Figure 15d](#)).
- Reverse the process to install a new SSD (make sure that the hexagonal screw **4** is in the correct location).

a.



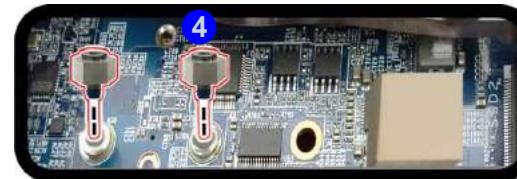
d.



b.



4.



c.



3. MSATA Module  
• 1 Screw

## Disassembly

### M.2 SATA Installation Procedure

1. Place the thermal pad **1** on the computer as shown (*Figure 16a*).
2. Insert the module **2** in the computer. Make sure that the hexagonal screw **3** is in the correct location (*Figure 16b*).
3. Tighten the screw **4** to secure it in place (*Figure 16c*).

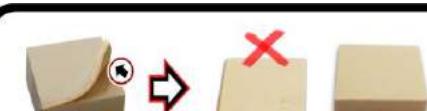


#### Thermal Pad

Make sure you place the thermal pad's adhesive side down onto the computer surface as illustrated.

The usage of the thermal pad will depend upon the thickness of the module being used.

- If you are using the thinner module, then apply the whole thermal pad provided on the computer.
- If you are using the thicker module, separate the pad into its two parts. Use the larger part and place the adhesive side onto the computer (discard the smaller part that you have separated).



*Figure 16*  
**M.2 SATA Module  
Installation**

- a. Place the thermal pad.
- b. Insert the module.
- c. Tighten the screw.



1. Thermal Pad
2. M.2 SATA Module
- 1 Screw

## Disassembly

---

*Figure 17*  
Video Card  
Removal Procedure

- a. Remove the screws in the correct order.
- b. Carefully remove the heat sink units.
- c. Remove the video card screws. The video card will pop up.
- d. Remove the video card.



### Caution

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



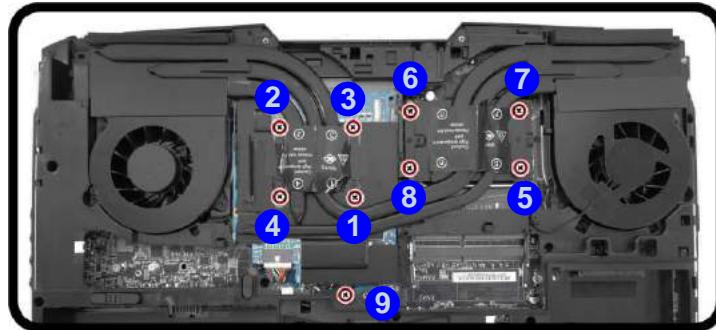
- 10. Heat Sink Units
- 13. Video Card
- 11 Screws

# Removing and Installing the Video Card

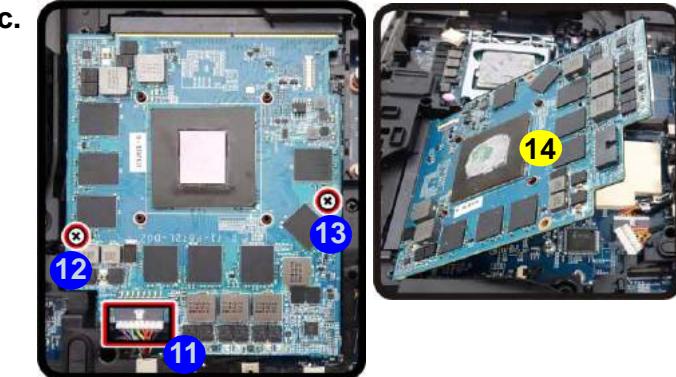
## Video Card Removal Procedure

1. Turn off the computer, turn it over and remove the battery ([page 2 - 5](#)) and component cover ([page 2 - 10](#)).
2. Remove screws ① - ⑨ from the heat sink unit in the order indicated on the label (i.e screw ⑨ first through to screw ① last) ([Figure 17a](#)).
3. Carefully (it may be hot) remove the heat sink unit ⑩ ([Figure 17b](#)).
4. Disconnect cable ⑪ and remove screws ⑫ & ⑬ from the video card. The video card ⑭ will pop up ([Figure 17c](#)).
5. Remove the video card ⑭ ([Figure 17d](#)).

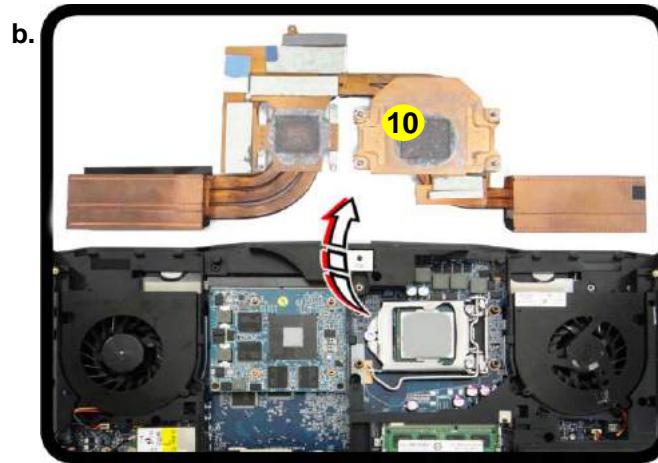
a.



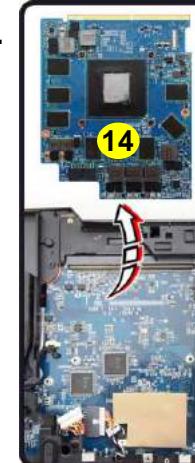
c.



b.



d.



### Heat Sink Screw Removal and Insertion

Remove the screws from the heat sink in the order indicated here: 9-8-7-6-5-4-3-2-1.

When tightening the screws, make sure that they are tightened in the order: 1-2-3-4-5-6-7-8-9.

## Disassembly

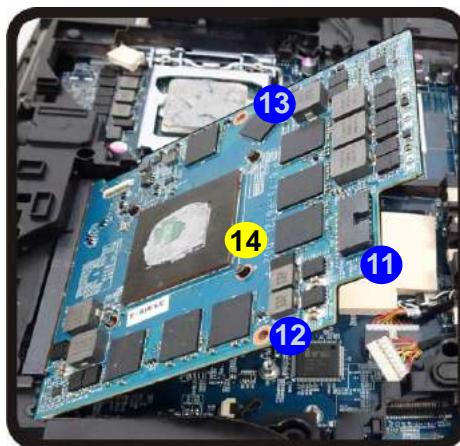
### Installing a New Video Card

1. Place the thermal pad **15** on the computer as shown (*Figure 18e*).
2. Prepare to fit the video card **14** into the slot by holding it at about a 30° angle (*Figure 18f*).
3. The card needs to be fully into the slot, and the video card and socket have a guide-key and pin which align to allow the card to fit securely (*Figure 18g*).
4. Fit the connectors firmly into the socket, straight and evenly.

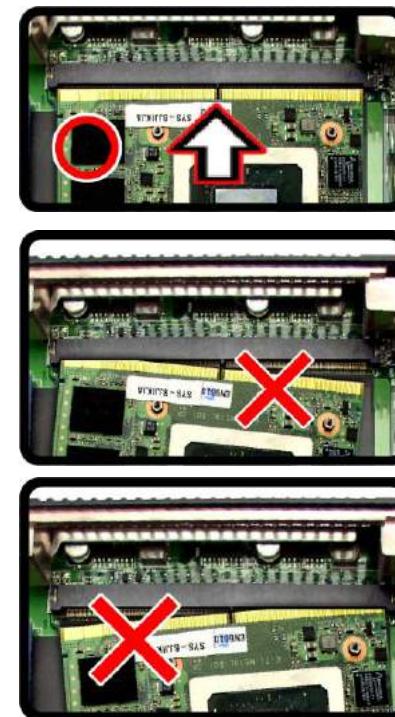
e.



f.



g.



5. DO NOT attempt to push one end of the card in ahead of the other.
6. The card's pin alignment will allow it to only fit one way. **Make sure the module is seated as far into the socket as it will go.** DO NOT FORCE the card; it should fit without much pressure.
7. Connect the cable **11** and secure the card with screws **12 & 13** (*Figure 17 on page 2 - 22*).
8. Place the heat sink back on the card, and secure the screws in the order indicated in *Figure 17 on page 2 - 22*.
9. Reinsert the component bay cover, and secure with the screws as indicated in *Figure 11 on page 2 - 15*.

*Figure 18*  
Installing a New  
Video Card

- e. Insert the video card at a 30 degree angle.
- f. Fit the connectors straight and even, and secure the card with the screws.



#### Caution

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



- 13. Video Card
- 14. Thermal Pad
- 2 Screws

## Disassembly

---

# Appendix A: Part Lists

This appendix breaks down the **P775DM2 (-G)** 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

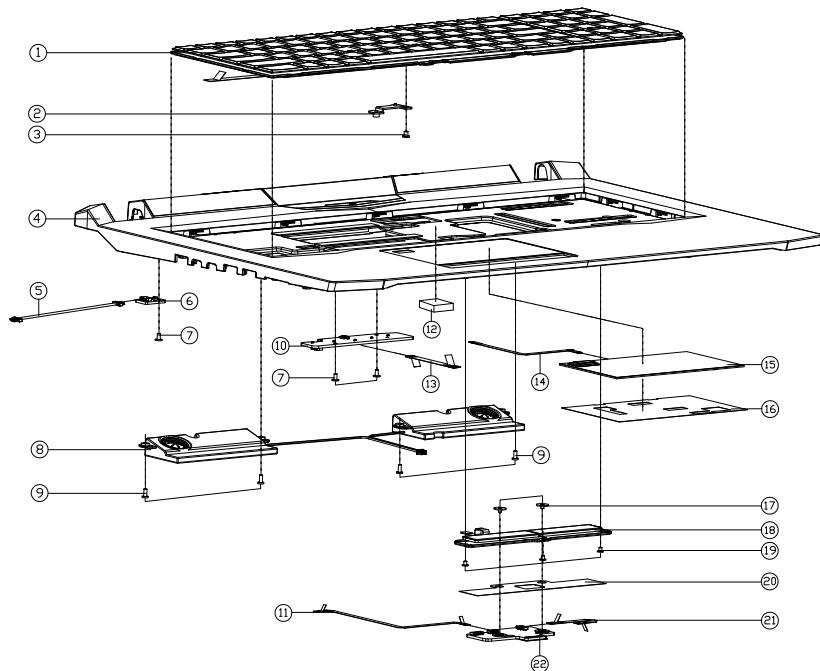
The following table indicates where to find the appropriate part list illustration.

*Table A- 1*

#### Part List Illustration Location

Parts	
Top	<i>page A - 3</i>
Bottom	<i>page A - 4</i>
LCD (LG-AU)	<i>page A - 5</i>
LCD (AU)	<i>page A - 6</i>
MB	<i>page A - 7</i>
HDD	<i>page A - 8</i>
VGA (G1)	<i>page A - 9</i>
VGA (G2/G3)	<i>page A - 10</i>

# Top

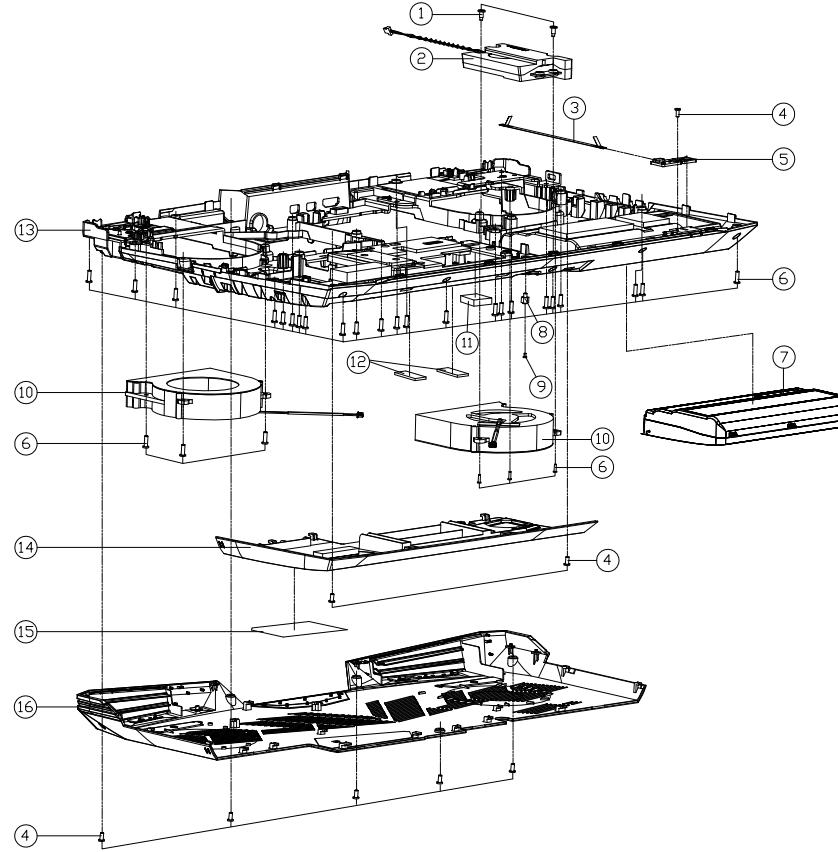


ITEM	PART NAME	PART NO	REMARK
1	MULTI BLK USA WIRELESS US P7500 BLACK GARING WITH WIND KEY SWING REFLECTOR PLATE	6-80-P7500-013-3	
2	TOP KB BKT SECC T=0.8MM P775DM2	6-33-P7752-251	
3	SCREW M2.5*3L K1 BZ ICT NY	6-35-B6125-3R0	
4	TOP CASE MODULE P775DM2	6-39-P7752-212	
5	VIRE CABLE FOR HALL SENSOR TO MB 16MM 3V 3PIN (BL) P750ZM	6-43-P7500-012-1	
6	LID SWITCH BOARD V1.0 P750DM2	6-77-P75DS-D01-A	
7	SCREW M2*4L K1 NI ICT NY (D=0.45,Df=0.4)	6-35-B1120-4RE	
8	SPK CABLE FRONT RAL R 904ML 160MM 2W 4P ECG9220A P750ZM	6-23-5P750-0S4	
9	SCREW M2*5L KICT=0.8 D=4.0 BK/Z ICT NY	6-35-B6120-5R0	
10	POWER LED BOARD V3.0 P775DM3	6-77-P7754-D03-B	
11	FFC CABLE FOR CLICK TO MB L=14MM 3V 6P P750M2	6-43-P75D0-011	
12	THERMAL PAD MA500 (17*17*4.0mm) W650SR	6-48-W6503-010	
13	FFC CABLE FOR POWER BD TO MB 47MM 9V 12PIN P775DM	6-43-P7750-020	
14	TP TO MB FFC CABLE 3V 6P PITCH:0.5MM L=100MM P750M2	6-43-P7752-211	
15	SIDE PAD CIRCUITS IN PCB IN TV POSITION PRINTED ON COATING 201000 PINS	6-49-P7753-312	
16	TOP TP MYLAR PET P775DM2	6-40-P7752-210	
17	SCREW M2*2L K1 BK/Z ICT NY (8, T=0.6)	6-35-B6120-2RE	
18	FUNCTION KEY FOR CLICK BUTTON MODULE W/D FINGER P650R6	6-23-KP655-RA2	
19	SCREW M2*2.5L K1 NI ICT NY (0.4 T=0.5 1#)	6-35-B1120-2R6	
20	CLICK MYLAR FOR FINGER P770ZM	6-40-P7702-011	
21	FFC CABLE FOR TP TO CLICK 70MM 5V 8P P770DM	6-43-P77D2-011-1	
22	CLICK BOARD V2.0A (W/D FP) P750M2	6-77-P75D2-D02A-1A	

Figure A - 1  
Top

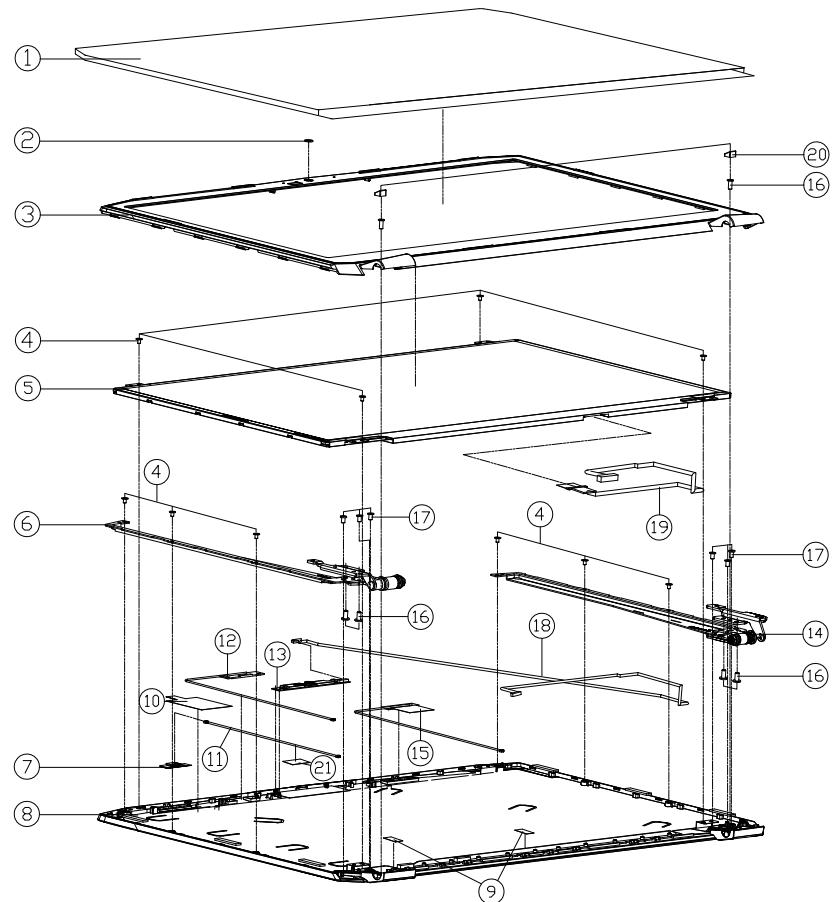
**Part Lists****Bottom**

*Figure A - 2*  
**Bottom**



ITEM	PART NAME	PART NO	REMARK
1	SCREW M2x6L NI ICT NY FOR SPEAKER	6-35-Z1120-6R2	
2	SPK+CABLE SUBWOFER 7.85x6.6MM 25V 4Ω SK3X5399A P270EM	6-23-5P37E-0W1	
3	FFC CABLE FOR FRONT LED TO MB 10MM 9V GRIN P750ZM	6-43-P7502-012	
4	SCREW M2x5L KIT=0.8 D=4.0 B/Z ICT NY	6-35-B6120-5R0	
5	CHARGER LED BOARD V1.0 P775DM3	6-77-P77DE-D01-A	
6	SCREW M2.5x8L KI BK/Z NY ICT	6-35-B6125-8R0	
7	HDD SAVING PAD ON THE BOTTOM CASE FOR 7MM HDD	6-87-P750S-4U73	
7	HDD SAVING PAD ON THE BOTTOM CASE FOR 9.5MM HDD	6-87-P750S-4272	
7	HDD SAVING PAD ON THE BOTTOM CASE FOR 12.5MM HDD	6-87-P750S-4U73	
7	HDD SAVING PAD ON THE BOTTOM CASE FOR 15MM HDD	6-87-P750S-4U74	
8	SCREW M2x3L Ø=2.5 D=5 STEEL ICT NY FOR NEUT CARTRIDGE MATERIAL	6-35-ZA120-2R5	
9	SCREW M2x2L KI NI ICT NY (D=0.5 ,T=0.5)	6-35-B1120-2R0	
10	12V 8219 FAN MODULE ADDA P750DM2	6-31-P75D3-202	
11	SSD-5.8MM THERMAL PAD RS3015x15x5MM P750MCHANGED	6-48-P7503-052	
12	7MM HDD SPONGE(40x10x2.15T) CR4382 P750ZM	6-47-0019A-409	ONLY FOR 7MM HDD
13	BOTTOM CASE MODULE P775DM2	6-39-P7753-212	
14	HDD COVER MODULE P775DM2	6-42-P775J-2A2	
15	PRODUCT LABEL FOR P775DM2	6-45-P775DM2-010	
15	PRODUCT LABEL FOR P775DM2-G	6-45-P775DM2G-010	
15	PRODUCT LABEL FOR P775DM3	6-45-P775DM3-010	
15	PRODUCT LABEL FOR P775DM3-G	6-45-P775DM3G-010	
16	CPU COVER MODULE P775DM2	6-42-P7758-2A2	

## LCD (LG-AU)

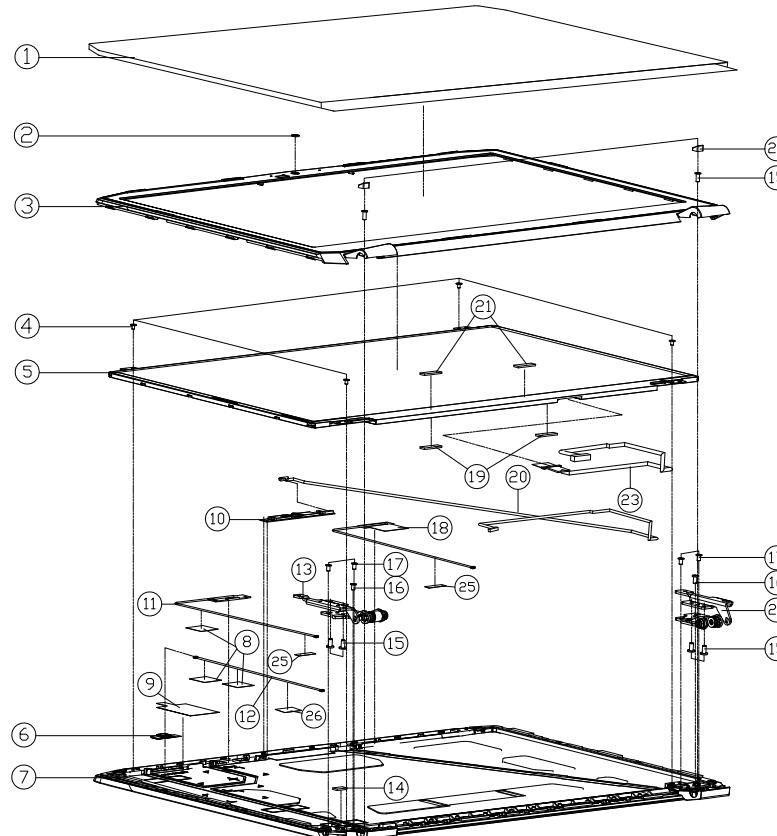


ITEM	PART NAME	PART NO	REMARK
1	BOPP MYLAR 272*437*T=0.05 FOR P670RS	6-40-P67S1-010	
2	CCD LENS (VIEWING AREA 4MMX(PMMAX)940TU	6-42-W9401-020	
3	LCD FRONT COVER MODULE ( MP ) P775DM	6-39-P7751-012	
4	SCREW M2*3L K1 BZ ICT NY (D=0.45,DT=0.4)	6-35-B6120-3RD	
5	LCD 17.3" FHD / IPS / EDP LG LP173WF4-SPL1 (LED) 4.0MM	6-50-NB240-L00	
5	LCD 17.3" FHD / IPS / EDP LG LP173WF4-SPL2 (LED) 4.0MM	6-50-NB240-G00	
5	LCD 17.3" FHD / IPS / EDP LG LP173WF4-SPL2 * SUPPORT SAV G-SYNC * LED 4.0MM	6-50-NB240-L01	
6	LCD HINGE L(SGCC+SK7) P775DM2	6-33-P7751-2L0	
7	802.11AD ANTENNA MODULE (SI SPANN R 802.11AC2.4GHZ FOR SPANN R 802.11AC MODULE POSITION)	6-88-P8722-8100	ONLY FOR 802.11AD ANTENNA 6-88-P872F-8100
8	LCD BACK COVER MODULE ( LG ) P775DM	6-39-P7751-023	
9	TAPE MYLAR TRANSPARENT (20*10*0.05) P180HM	6-40-P1803-020	
10	802.11AD COPPER FOIL P775DM2	6-47-P7751-211	ONLY FOR 802.11AD ANTENNA 6-88-P872F-8100
11	802.11AD CABLE 640MM MKJAH2JA6400TE MURATA CONNECTOR P870DM2	6-23-7P872-010	ONLY FOR 802.11AD ANTENNA 6-88-P872F-8100
12	ANTENNA PEKA WLAN WGT WLI PCB AL 245/56 WL1-650MM P775DM	6-23-7P775-010	
13	IR/CAMERA CIRCUIT FOR DIFFERENT MODELS OF THIS DEVICE FROM VARIOUS MANUFACTURERS	6-88-W65DC-5100	
14	LCD HINGE R (SGCC+SK7) ( MP ) P775DM	6-33-P7751-0R2	
15	ANTENNA PEKA WLAN WGT WL2 PCB AL 245/56 WL2-950MM P775DM2	6-23-7P775-221	
16	SCREW M2.5*6L K BZ ICT NY	6-35-82125-6RA	
17	SCREW M2.5*4L K1 NJ ICT NY	6-35-21125-4R0	
18	WIRE CABLE FOR CCD TO MB 550MM 5V 8PIN (HLD) P775DM	6-43-P775T-011	
19	WIRE CABLE FOR EDP 30PIN 30V 30P (DXL/LV CONVLG13-212-HF) P775DM	6-43-P7751-010-N	
19	WIRE CABLE FOR EDI INVERTER (APPLY 30MM 33V 100A) BLAC CONBLG13-HD P775DM	6-43-P7751-211-L	
20	FRONT COVER SCREW RUBBER ( MP ) P775DM	6-47-P7751-032	
21	802.11AD TAPE MYLAR(BLACK)(35*20*0.2T) P870DM2	6-40-P872S-030	ONLY FOR 802.11AD ANTENNA 6-88-P872F-8100

Figure A - 3  
LCD (LG-AU)

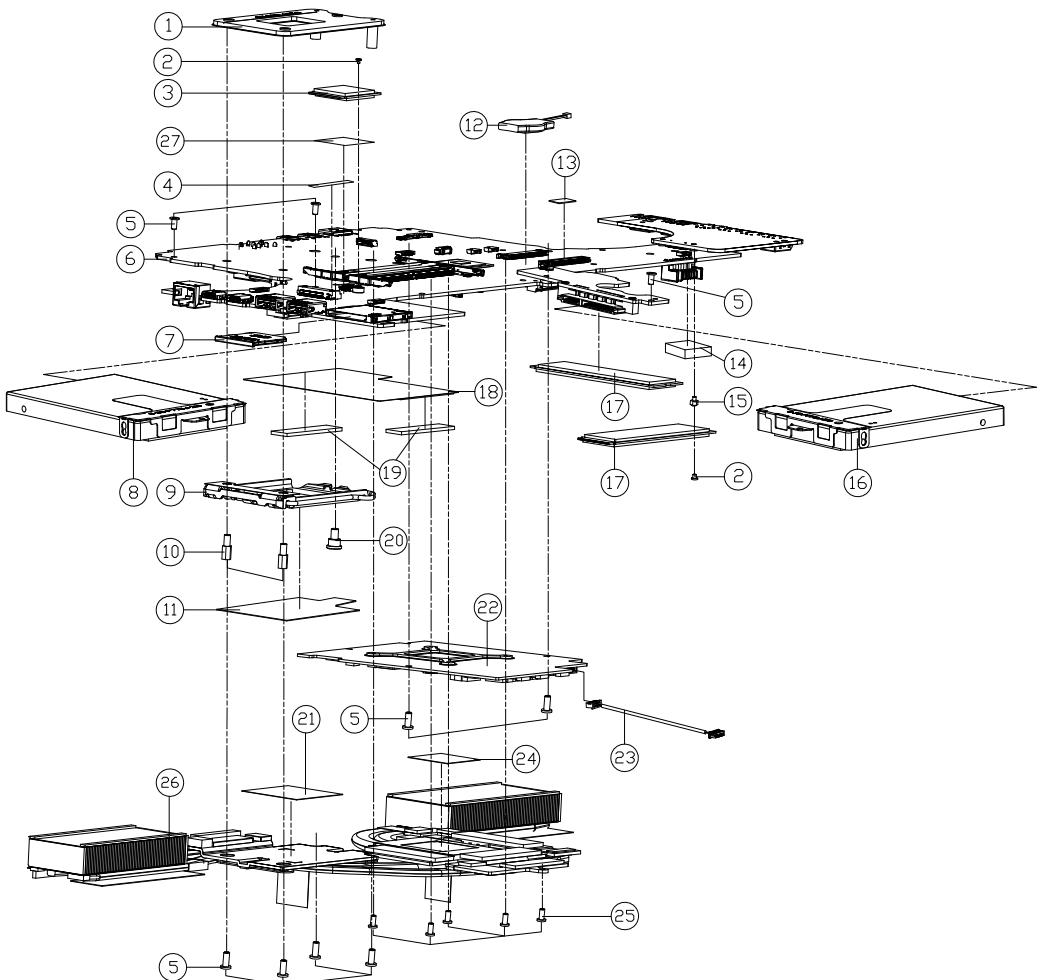
**Part Lists****LCD (AU)**

**Figure A - 4**  
**LCD (AU)**



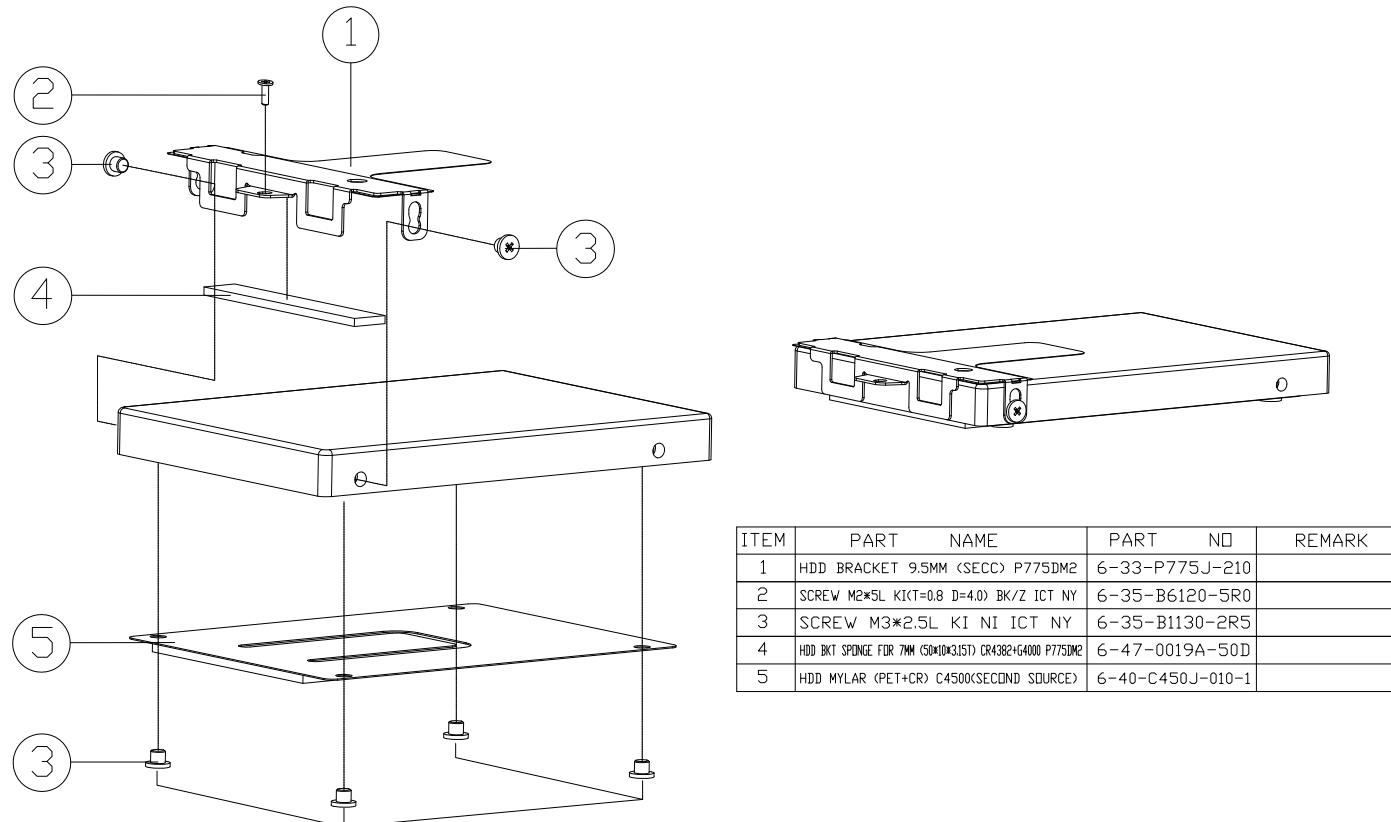
ITEM	PART NAME	PART NO	REMARK
1	BOPP MYLAR 272*437*T=0.05 FDR P670RS	6-40-P67S1-010	
2	CCD LENS (VIEWING AREA 4MMXPMMA)W940TU	6-42-W9401-020	
3	LCD FRONT COVER MODULE ( MP ) P775DM	6-39-P7751-012	
4	SCREW M2*3L K1 CZ ICT NY (D=94.5,DT=0.6,LADDER-1.0)	6-35-B3120-3R0	
5	LCD 12" LED / IPS (HWA / EIP AU B72EMLA) SUPPORT SV 6-SIDE LED WLN	6-50-N1240-G00	
6	802.11AD ANTENNA MODULE (S) SUPPORT P750MM P775DM2	6-88-P8722-8100	ONLY FOR 802.11AD ANTENNA 6-88-P872F-8100
7	LCD BACK COVER MODULE (AU) P775DM	6-39-P7751-120	
8	TAPE MYLAR T60+TESA4965 P775DM	6-40-P7751-030	
9	802.11AD COPPER FOIL P775DM2	6-47-P7751-211	ONLY FOR 802.11AD ANTENNA 6-88-P872F-8100
10	INC CABLE CIRCUIT BOARD (H) 0274W 1500C EXGAR VANTTE LED W/PCB	6-88-W65DC-5100	
11	ANTENNA IPEX WLAN WGT WL1 PCB GL 245/56 WL1: 650MM P775DM	6-23-7P775-010	
12	802.11AD CABLE 640MM MCJ402J46-100TE MURATA CONNECTOR P870DM2	6-23-7P872-010	ONLY FOR 802.11AD ANTENNA 6-88-P872F-8100
13	LCD HINGE L(SGCC+SK7)(AU) P775DM2	6-33-P7751-2L0-1	
14	MIDDLE COVER SPONGE 10*5*1 CR438Z P775DM	6-47-0019A-11G	
15	SCREW M2.5*6L K1 BZ ICT NY	6-35-82125-6RA	
16	SCREW M2.5*4L K1 NI ICT NY	6-35-21125-4R0	
17	SCREW M2.5*5L K1 BK/Z ICT NY	6-35-B6125-5RA	
18	ANTENNA IPEX WLAN WGT WL2 PCB GL 245/56 WL2: 950MM P775DM2	6-23-7P775-221	
19	SPONGE SM55 30*11*1.5T P775DM	6-47-0019A-30P	
20	WIRE CABLE FOR CCD TO MB 550MM 5V 8PIN (HL) P775DM	6-43-P775T-011	
21	SPONGE SM55 30*8*1T P775DM	6-47-0019A-30Q	
22	FRONT COVER SCREW RUBBER ( MP ) P775DM	6-47-P7751-032	
23	COAXIAL CABLE FOR EDK4200 300W 3V 4P ODBALY CONN424-22-H7 P775DM	6-43-P7751-020-N	
24	LCD HINGE R (SGCC+SK7) ( AU ) P775DM	6-33-P7751-1R0	
25	TAPE MYLAR (C)MYLAR M550J	6-40-M55J2-030	
26	802.11AD TAPE MYLAR(BLACK)(35*20*0.2T) P870DM2	6-40-P872S-030	ONLY FOR 802.11AD ANTENNA 6-88-P872F-8100

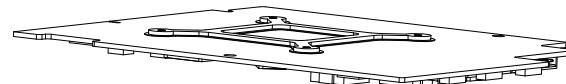
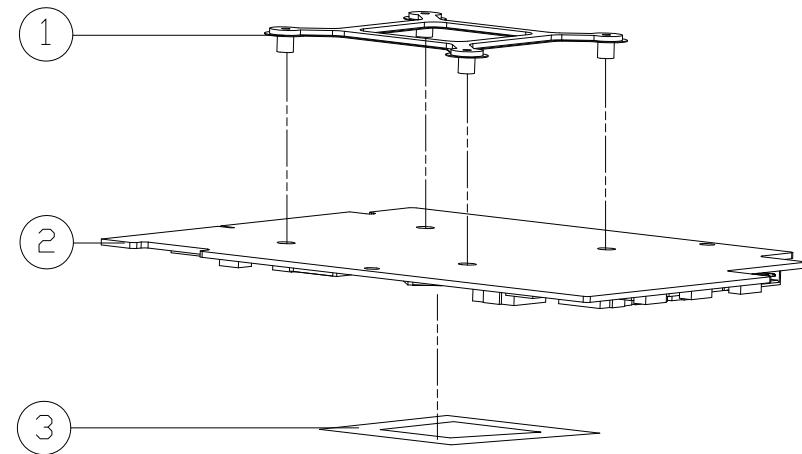
MB



*Figure A - 5*

ITEM	PART	NAME	PART NO	REMARK
1	CPU SUPPORT FOR LGA 1155 SPC 1-2MM	P775DM	6-33-P775S-210	
2	SCREW M2X6 KNI NCT YC NO.95-1-5		6-35-B120-2R0	
3	LANT DRIVERS FOR INTEL PRO 1000BT 1000BT		6-88-V9SLF-4240	
3	LANT DRIVERS FOR INTEL PRO 1000BT 1000BT		6-88-N240T-4200	
3	LANT DRIVERS FOR INTEL PRO 1000BT 1000BT		6-88-P82F7-8100	FOR P82F7-8100 ANTENNA 69-77-P775M2-200
3	LANT DRIVERS FOR INTEL PRO 1000BT 1000BT		6-88-P75DF-9601	
3	LANT DRIVERS FOR INTEL PRO 1000BT 1000BT		6-88-P67RF-4200	
4	TAPE NYLAR TRANSPARENT (30)5405 W25WP		6-40-W25P3-010	
5	SCREW M2.5X6 KZB IZC NTY		6-35-S82125-6RA	
6	MINI VGA DVI DPV 1920X1200 16BIT 128MB		6-77-P775M2A-NO2	
6	MINI DVI 24 PIN 1920X1200 16BIT 128MB		6-77-P775M2D-NO2	
6	MINI DVI 24 PIN 1920X1200 16BIT 128MB		6-77-P775M2D-NO2	
6	MINI DVI 24 PIN 1920X1200 16BIT 128MB		6-77-P775M2A-NO2	
7	SUNMI SD PS/2 PORT TYPE A (4PIN) 1000UF 10VDC		6-42-W790-010	
8	W/2ND HDD ASSY P775DM		6-77-P775M2J-030	
8	W/2ND HDD ASSY P775DM		6-77-P775M2J-040	
9	FOR CPU SOCKET(M) LGA1155 P14143-6400		6-86-B25500-001	
10	SCREW M3X45SL NI ICNT YC FOR CPU SOCKET		6-35-Z110-5R5	
11	CPG SOCKET NYLAR FOR D900		6-40-D90F-S-070	
12	INT 2W 2V 220W VCOOL SMD J30020305001000 QSGND		6-23-22015-T0	
13	M/B KEYBOARD NYLAR PET MB101		6-40-MB10S-011	
14	SUPPLY THERMAL PAD X3000 SMD/COATED		6-48-P7503-052	
15	SDH 1025 0.95 9.5 27 21 10 100% CERAMIC RESISTOR		6-35-Z1A20-2R5	
16	W/D MAIN HDD ASSY P775DM		6-77-P775M2E-010	
16	W/D MAIN HDD ASSY P775DM		6-77-P775M2E-020	
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D515A-100	OPTION
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D515B-100	OPTION
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D51R0-100	OPTION
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D513G-Z00	OPTION
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D51R5-B01	OPTION
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D51R6-S01	OPTION
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D51R6-S02	OPTION
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D51R6-S03	OPTION
17	SMD R 220 0.015W 0.001A 2000HRS 100MIL		6-85-D51R6-S04	OPTION
18	HDD MYPLACER+ P775DM		6-40-P775J-211	
19	7MM HD SPONGE(0.192)570		6-47-0019A-409	ONLY FOR 7MM HD
20	SCREW M3x3.5L B2/Z ICNT YC		6-35-Z2130-3R5	
21	GREASE GA-69000.6.GD P157SM		6-47-P1576-020	
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-C	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-D	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-H	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-K	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-E	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-F	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-G	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-I	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D02-L	FOR P775DM2/DMS
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D11-C	FOR P775DM3-G
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D11-F	FOR P775DM3-G
22	16A MINI WE 16 G 05 050200 1000UF		6-77-P772L-D11-G	FOR P775DM3-G
23	VIRE CABLE FOR IDE VGA CARD 160MM 10 TO 10		6-43-P775-210	
24	TERMAL PAD 25X25+20T M600U		6-48-M6008-020	FOR W/CPU
25	SCREW M6M 10X1.25 D40 D2/Z ICNT YC		6-35-B6120-SR0	
26	CPU & GPU HEATPIPE MEDIUM P775DM		6-31-P775H-2A2	
26	802.11ABG PDAK NYLAR 040203025 P7807M		40-P8275-020	ONLY FOR SECURE ANTENNA

**Part Lists****HDD****Figure A - 6**  
**HDD**

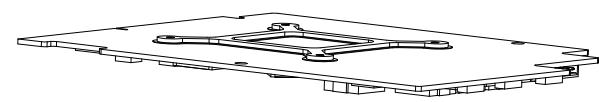
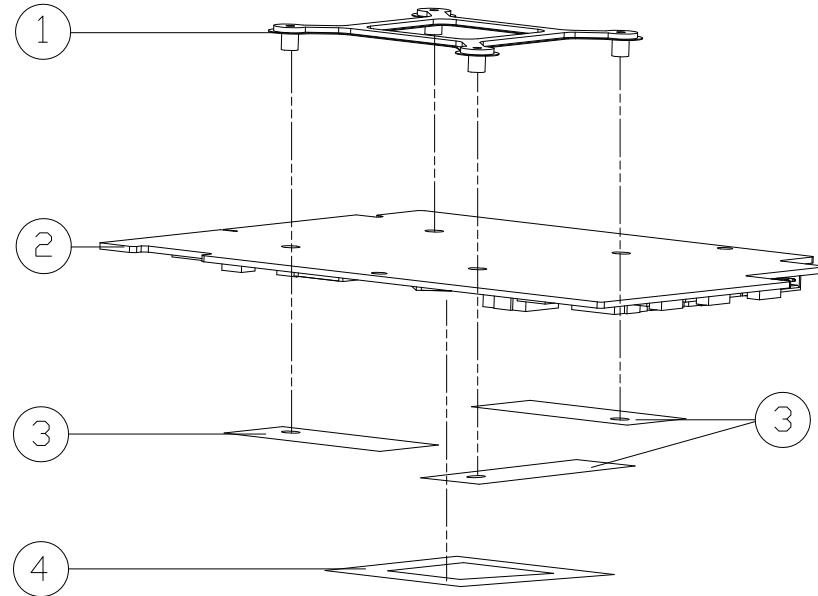
**VGA (G1)**

*Figure A - 7*  
**VGA (G1)**

ITEM	PART NAME	PART NO	REMARK
1	N17 VGA SUPPORTER MC SUS430 P750M2	6-33-P75DS-011	
2	VGA BOARD NVIDIA GeForce GRAPHIC BOARD G-SYNC K0H-III V2a P750M2-G	6-77-P872L-D02-D	FOR P750M2/G/DM3 FOR N17E-G1 QS
2	VGA BOARD NVIDIA GeForce GRAPHIC BOARD G-SYNC K0H-III V2a P750M2-G	6-77-P872L-D02-K	FOR P750M2/G/DM3 FOR N17E-G1 MP
2	VGA BOARD NVIDIA N17-E-G1 GS GIGABYTE G652EM4G K0H-III V2a P750M2-G	6-77-P872L-D02-F	FOR P750M2-G/DM3-G FOR N17E-G1 QS
2	VGA BOARD NVIDIA N17-E-G1 GS GIGABYTE G652EM4G K0H-III V2a P750M2-G	6-77-P872L-D02-L	FOR P750M2-G/DM3-G FOR N17E-G1 MP
3	N17E-G1 CHIP MYLAR PET(37.5*37.5*0.1-19*13) P750M2	6-40-P75D3-010	FOR N17E-G1 QS FOR N17E-G1 MP

**Part Lists****VGA (G2/G3)**

*Figure A - 8*  
**VGA (G2/G3)**



ITEM	PART NAME	PART NO	REMARK
1	N17 VGA SUPPORTER M2 SUS430 P750DM2	6-33-P75DS-011	FDR P775DM2 FDR N17E-G2 QS
2	VGA BOARD NVIDIA N17E-GX GODIS SAMSUNG 8G MM-III V20 P750M	6-77-P872L-D02-C	FDR P775DM2 FDR N17E-G2 QS
2	VGA BOARD NVIDIA N17E-GX GODIS SAMSUNG 8G MM-III V20 P750M	6-77-P872L-D02-H	FDR P775DM2 FDR N17E-G2 MP
2	VGA BOARD NVIDIA N17E-G2 8G GODIS SAMSUNG 8G S2M4G MM-III V20 P750M	6-77-P872L-D02-E	FDR P775DM2-G FDR N17E-G2 QS
2	VGA BOARD NVIDIA N17E-G2 8G GODIS SAMSUNG 8G S2M4G MM-III V20 P750M	6-77-P872L-D02-J	FDR P775DM2-G FDR N17E-G2 MP
2	VGA BOARD NVIDIA N17E-G3 8G GODIS NODON 8G S2M4G MM-III VIA P750M	6-77-P872L-D11-B	FDR P775DM3 FDR N17E-G3 QS
2	VGA BOARD NVIDIA N17E-G3 8G GODIS NODON 8G S2M4G MM-III VIA P750M	6-77-P872L-D11-E	FDR P775DM3 FDR N17E-G3 MP
2	VGA BOARD NVIDIA N17E-G3 8G GODIS NODON 8G S2M4G MM-III V20 P750M	6-77-P872L-D12-B	FDR P775DM3 FDR N17E-G3 MP
2	VGA BOARD NVIDIA N17E-G3 8G GODIS NODON 8G S2M4G MM-III V20 P750M	6-77-P872L-D11-C	FDR P775DM3-G FDR N17E-G3 QS
2	VGA BOARD NVIDIA N17E-G3 8G GODIS NODON 8G S2M4G MM-III V20 P750M	6-77-P872L-D11-F	FDR P775DM3-G FDR N17E-G3 MP
2	VGA BOARD NVIDIA N17E-G3 8G GODIS NODON 8G S2M4G MM-III V20 P750M	6-77-P872L-D12-C	FDR P775DM3-G FDR N17E-G3 MP
3	EMI ABSORBER (45*115*0.3) FDR N17 E2 VGA P750DM2	6-47-P75DS-010	FDR N17E-G2 QS
4	N17E-G2 CHIP MYLAR PET (37.5*37.5*0.1) P750DM2	6-40-P75DS-020	FDR N17E-G2 QS/MP

# Appendix B: Schematic Diagrams

This appendix has circuit diagrams of the **P775DM2 (-G)** notebook's PCB's. The following table indicates where to find the appropriate schematic diagram.

Diagram - Page	Diagram - Page	Diagram - Page
<i>Block Diagram - Page B - 2</i>	<i>M.2 3G+USB &amp; WLAN+BT - Page B - 26</i>	<i>VCore - Page B - 50</i>
<i>Processor 1/5 - Page B - 3</i>	<i>M.2 PCIE4X SSD1 &amp; SSD2 - Page B - 27</i>	<i>VCore Output Stage - Page B - 51</i>
<i>Processor 2/5 - Page B - 4</i>	<i>Realtek ALC892 - Page B - 28</i>	<i>VCCSA / VCCGT - Page B - 52</i>
<i>Processor 3/5 - Page B - 5</i>	<i>PCM1861 + TAS5766DCA - Page B - 29</i>	<i>Power Charger, DC-In - Page B - 53</i>
<i>Processor 4/5 - Page B - 6</i>	<i>Subwoofer - Page B - 30</i>	<i>P750DM HDD Board - Page B - 54</i>
<i>Processor 5/5 - Page B - 7</i>	<i>EC IT8587 - Page B - 31</i>	<i>P750DM Power LED Board - Page B - 55</i>
<i>DDR4 CHA SO-DIMM_0 - Page B - 8</i>	<i>Second EC IT8587 - Page B - 32</i>	<i>P750DM Click Board - Page B - 56</i>
<i>DDR4 CHA SO-DIMM_1 - Page B - 9</i>	<i>Backlight Keyboard - Page B - 33</i>	<i>P750DM Audio Board - Page B - 57</i>
<i>DDR4 CHB SO-DIMM_0 - Page B - 10</i>	<i>LID SW, Fan, LED Conn - Page B - 34</i>	<i>P750DM Audio ESS DAC - Page B - 58</i>
<i>DDR4 CHB SO-DIMM_1 - Page B - 11</i>	<i>Fan, TP, FP, Multi-Con - Page B - 35</i>	<i>P750DM Audio HP AMP - Page B - 59</i>
<i>Panel, Inverter, CRT - Page B - 12</i>	<i>LAN E2400 - Page B - 36</i>	<i>P750DM Audio 3D AMP - Page B - 60</i>
<i>Display Port A - Page B - 13</i>	<i>PS8338B + PS8330B - Page B - 37</i>	<i>P775DM Audio Board - Page B - 61</i>
<i>Display Port B - Page B - 14</i>	<i>TBT - Page B - 38</i>	<i>P775DM Audio ESS DAC - Page B - 62</i>
<i>HDMI - Page B - 15</i>	<i>Power - Page B - 39</i>	<i>P775DM Audio HP AMP - Page B - 63</i>
<i>MXM PCI-E - Page B - 16</i>	<i>TPS65982 - Page B - 40</i>	<i>P775DM Audio Board - Page B - 64</i>
<i>Lynix Point 1/7 - Page B - 17</i>	<i>TPS65982 - Page B - 41</i>	<i>P750DM BOT LED Board - Page B - 65</i>
<i>Lynix Point 2/7 - Page B - 18</i>	<i>Cardreader RTS5250 - Page B - 42</i>	<i>P750DM LID Switch Board - Page B - 66</i>
<i>Lynix Point 3/7 - Page B - 19</i>	<i>TPM SLB9655TT &amp; NPCT420 - Page B - 43</i>	<i>P750DM Charge LED Board - Page B - 67</i>
<i>Lynix Point 4/7 - Page B - 20</i>	<i>VCCIO / IP0A - Page B - 44</i>	<i>P750DM Finger Sensor Board - Page B - 68</i>
<i>Lynix Point 5/7 - Page B - 21</i>	<i>DDR 1.2V/0.6VS/VCCPLL_OC - Page B - 45</i>	<i>P775DM Charge LED Board - Page B - 69</i>
<i>Lynix Point 6/7 - Page B - 22</i>	<i>VDD3, VDD5 - Page B - 46</i>	<i>P775DM Power LED Board - Page B - 70</i>
<i>Lynix Point 7/7 - Page B - 23</i>	<i>5V/5VS, 3V/3.3VS, 3.3VA - Page B - 47</i>	<i>Power On Sequence - Page B - 71</i>
<i>USB3.1, USB Charging - Page B - 24</i>	<i>5VS_2 - Page B - 48</i>	
<i>CCD, USB Port3 - Page B - 25</i>	<i>Fan CPU, VGA Power - Page B - 49</i>	

**Table B - 1**  
**Schematic**  
**Diagrams**



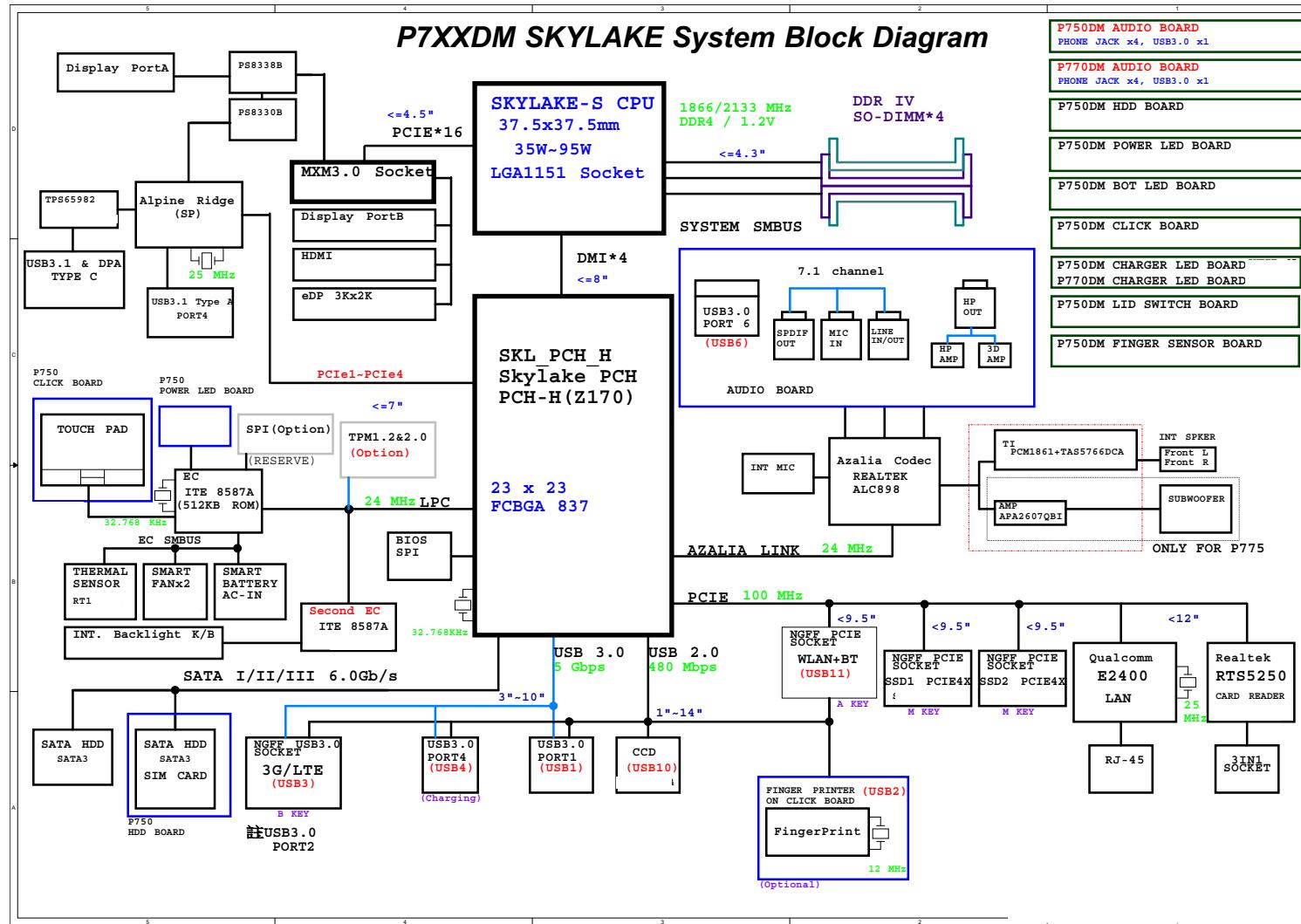
#### Version Note

The schematic diagrams in this chapter are based upon version 6-7P-P775C-002. If your mainboard (or other boards) are a later version, please check with the Service Center for updated diagrams (if required).

## Schematic Diagrams

### Block Diagram

Sheet 1 of 70  
Block Diagram



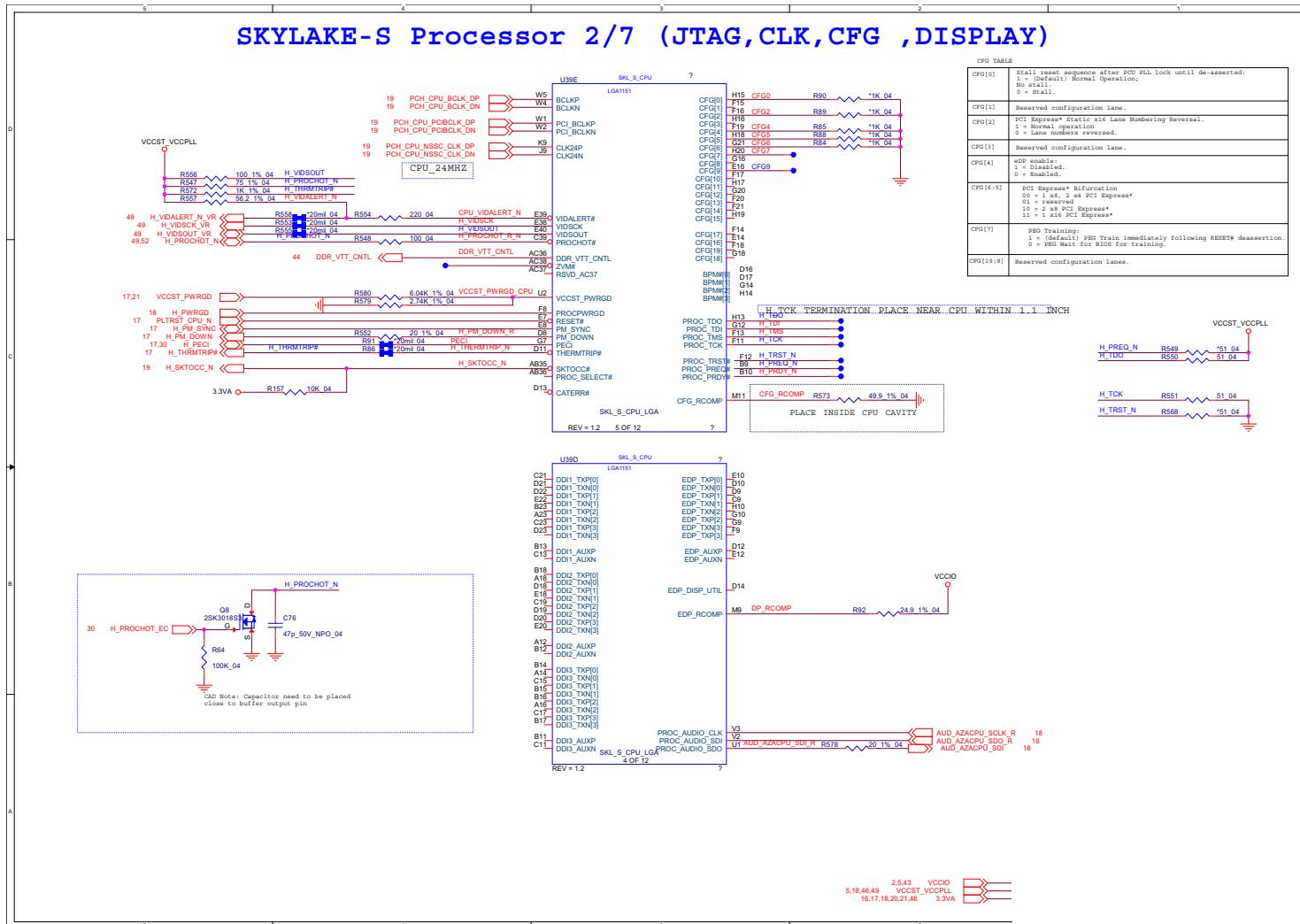
B - 2 Block Diagram

### Processor 1/5



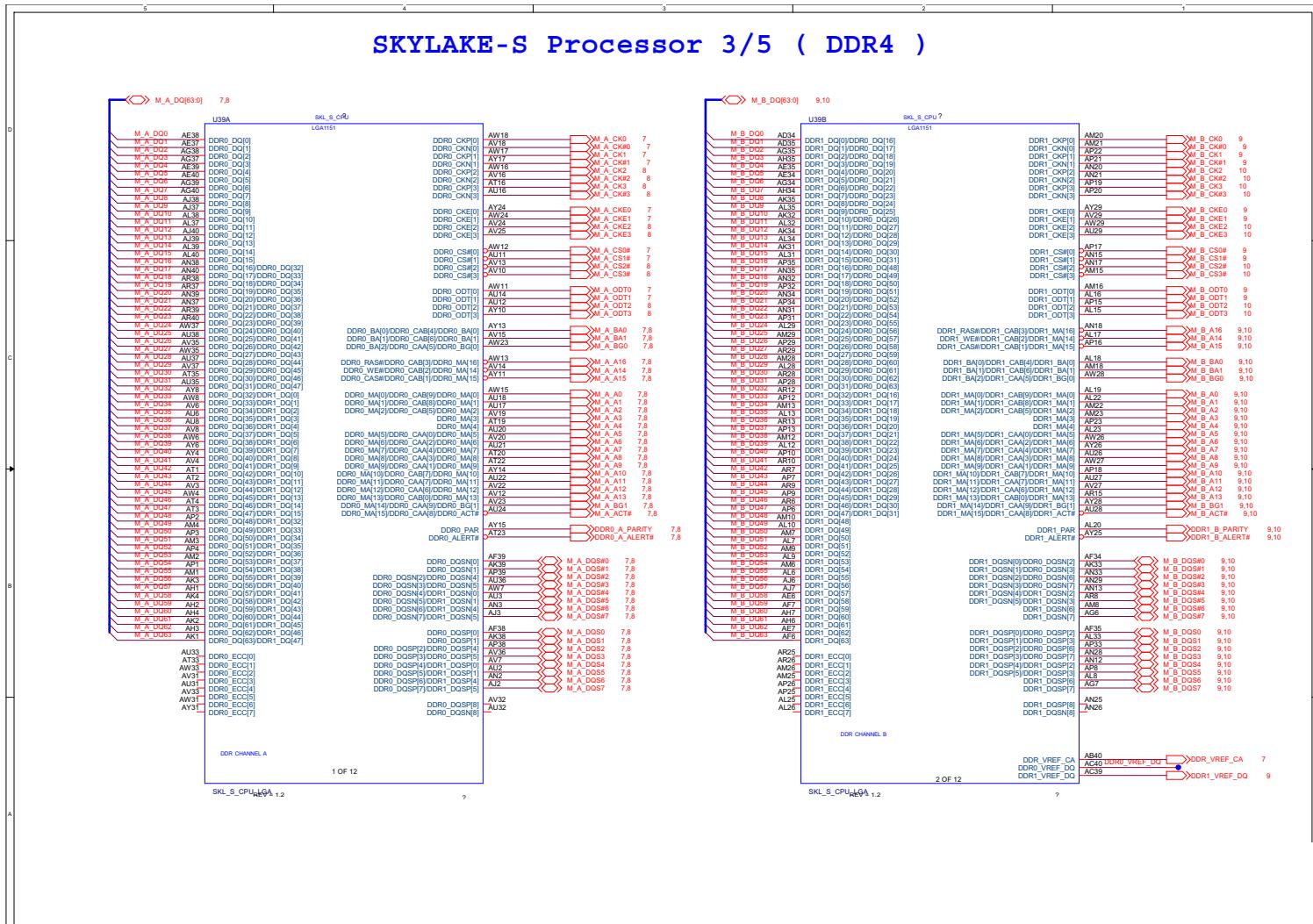
## Schematic Diagrams

# Processor 2/5



## Schematic Diagrams

### Processor 3/5



### B.Schematic Diagrams

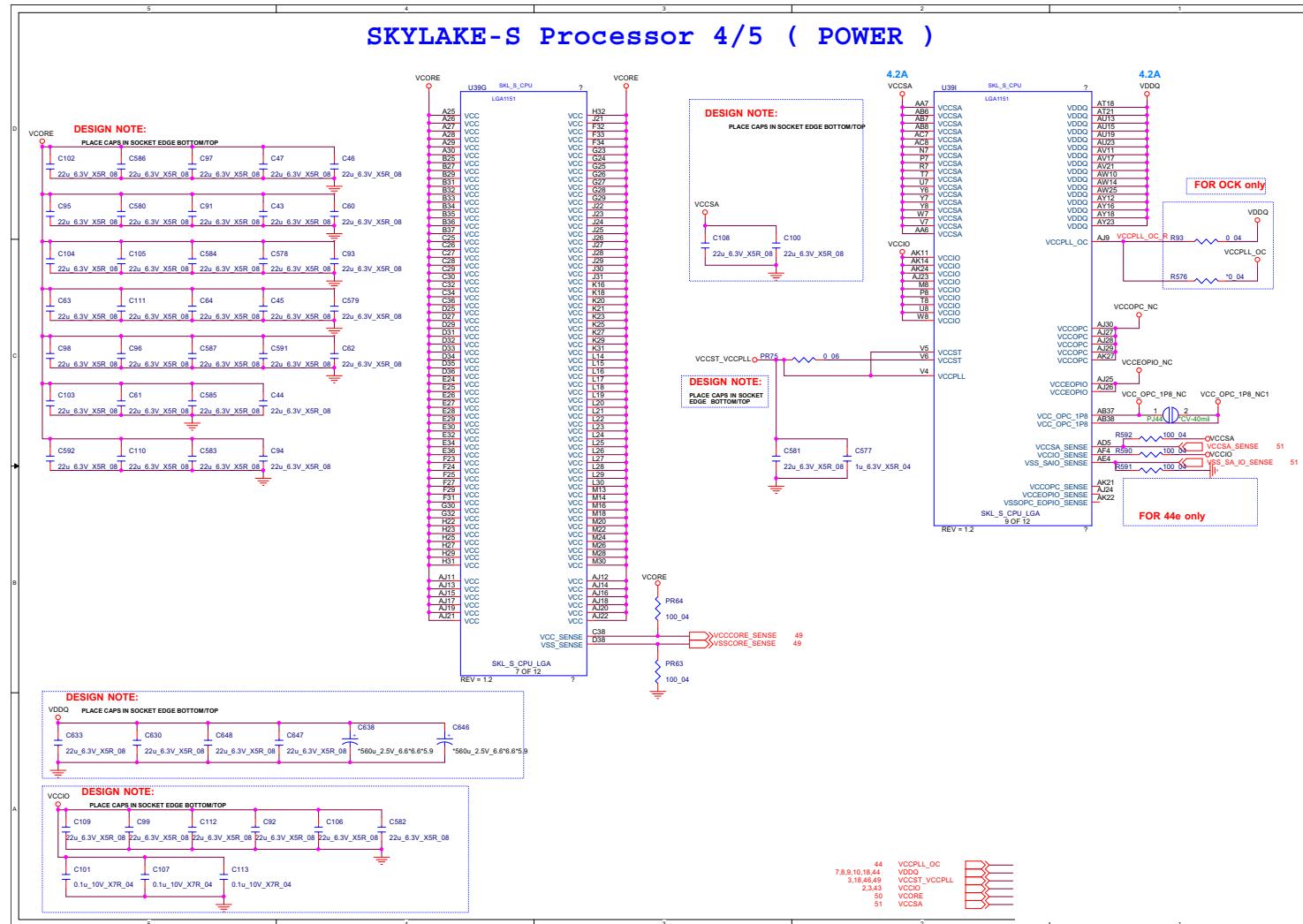
Sheet 4 of 70  
Processor 3/5

Processor 3/5 B - 5

## Schematic Diagrams

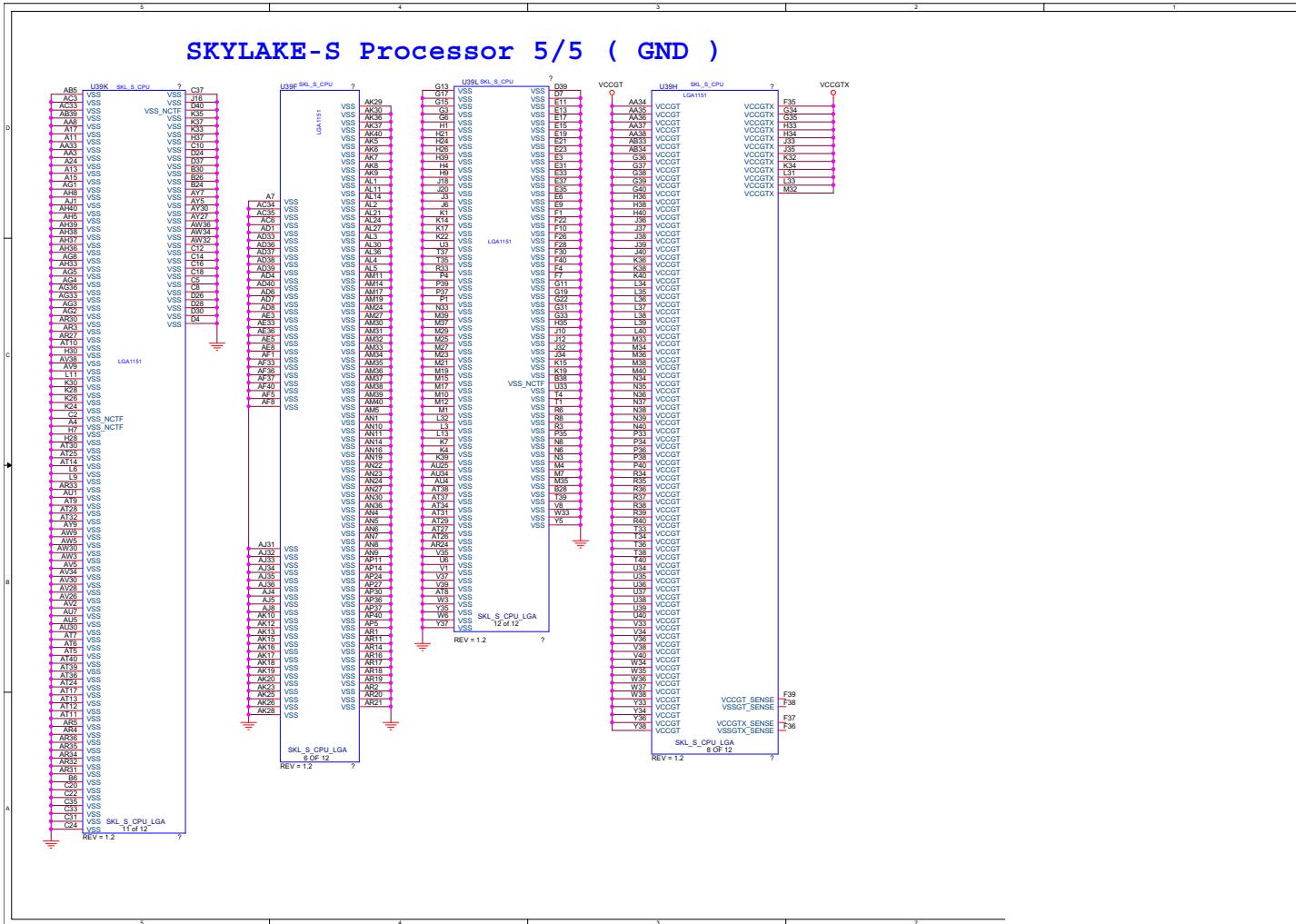
# Processor 4/5

Sheet 5 of 70  
Processor 4/5



B - 6 Processor 4/5

## Processor 5/5



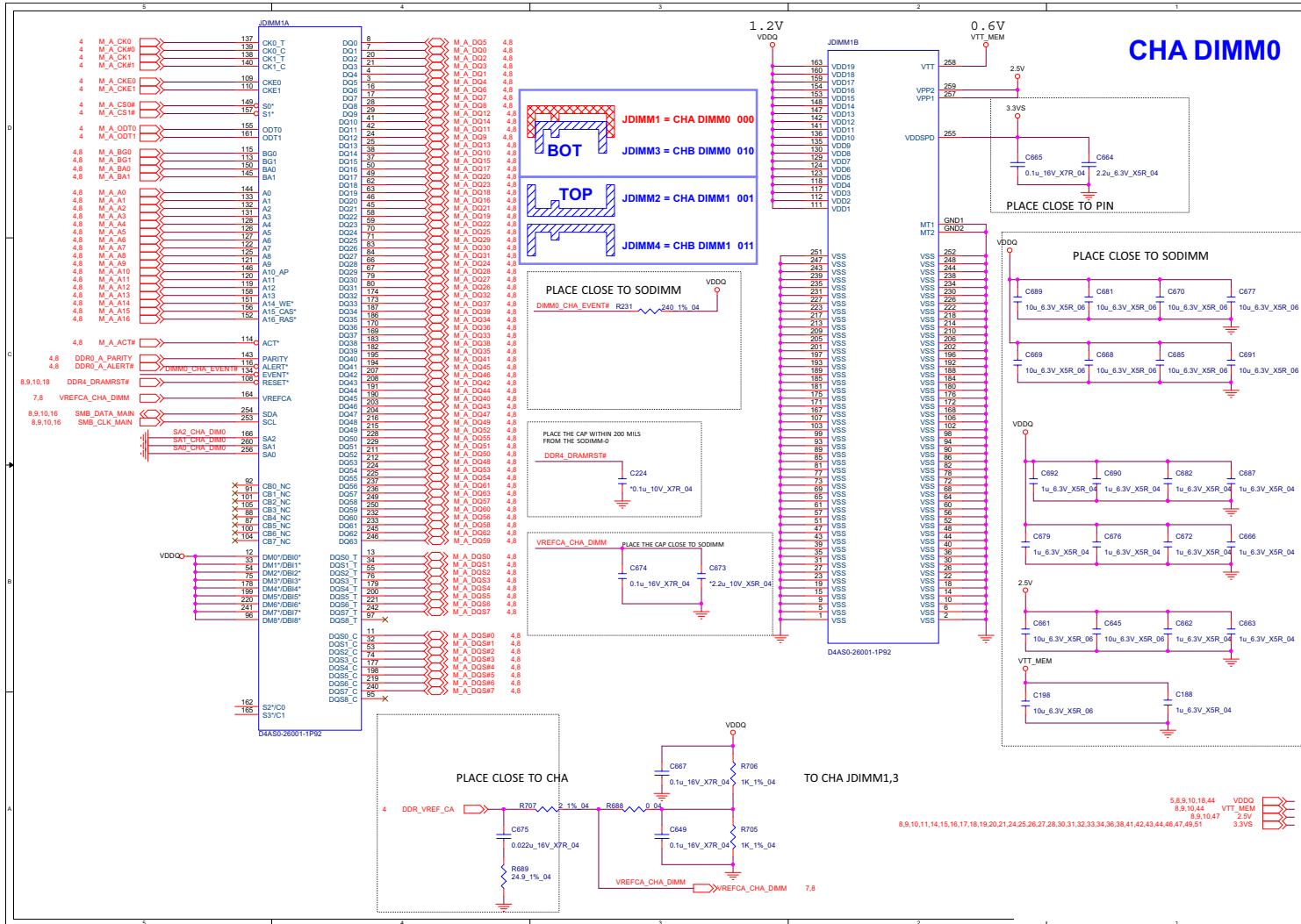
Sheet 6 of 70  
Processor 5/5

## B.Schematic Diagrams

# Schematic Diagrams

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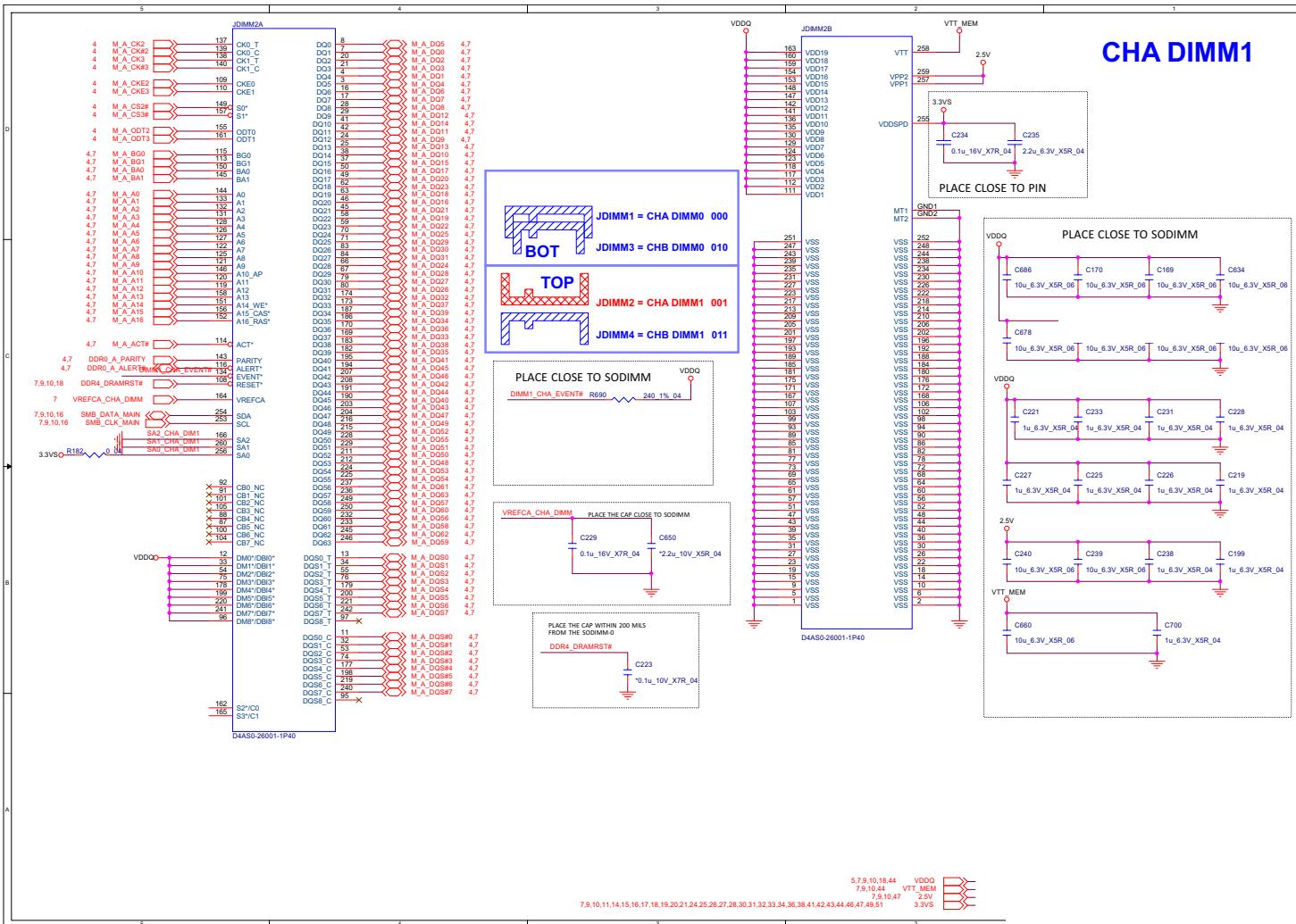
## **DDR4 CHA SO-DIMM\_0**



## B.Schematic Diagrams

**Sheet 8 of 70**  
**DDR4 CHA SO-**  
**DIMM 1**

## **DDR4 CHA SO-DIMM\_1**



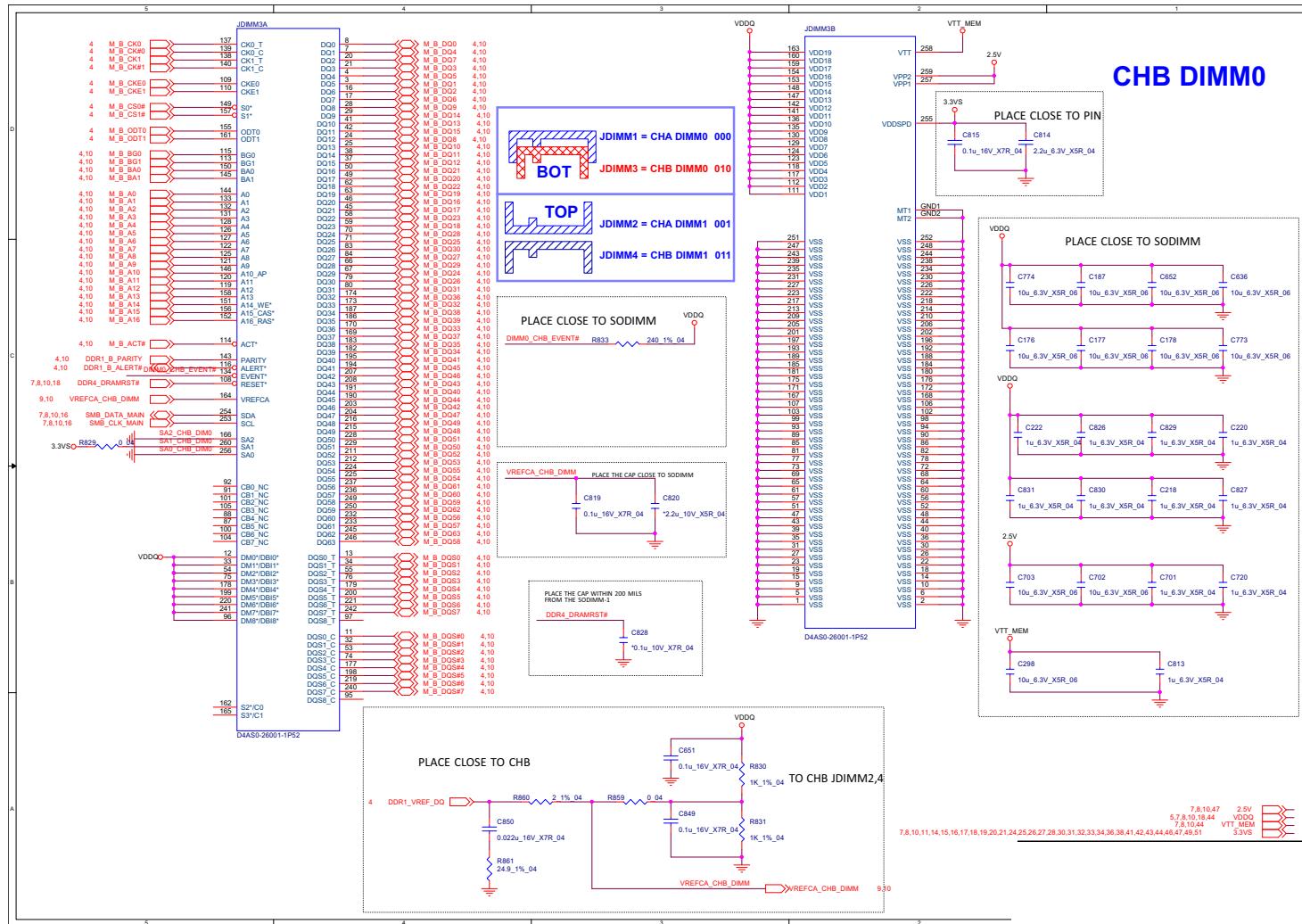
## B.Schematic Diagrams

## **Schematic Diagrams**

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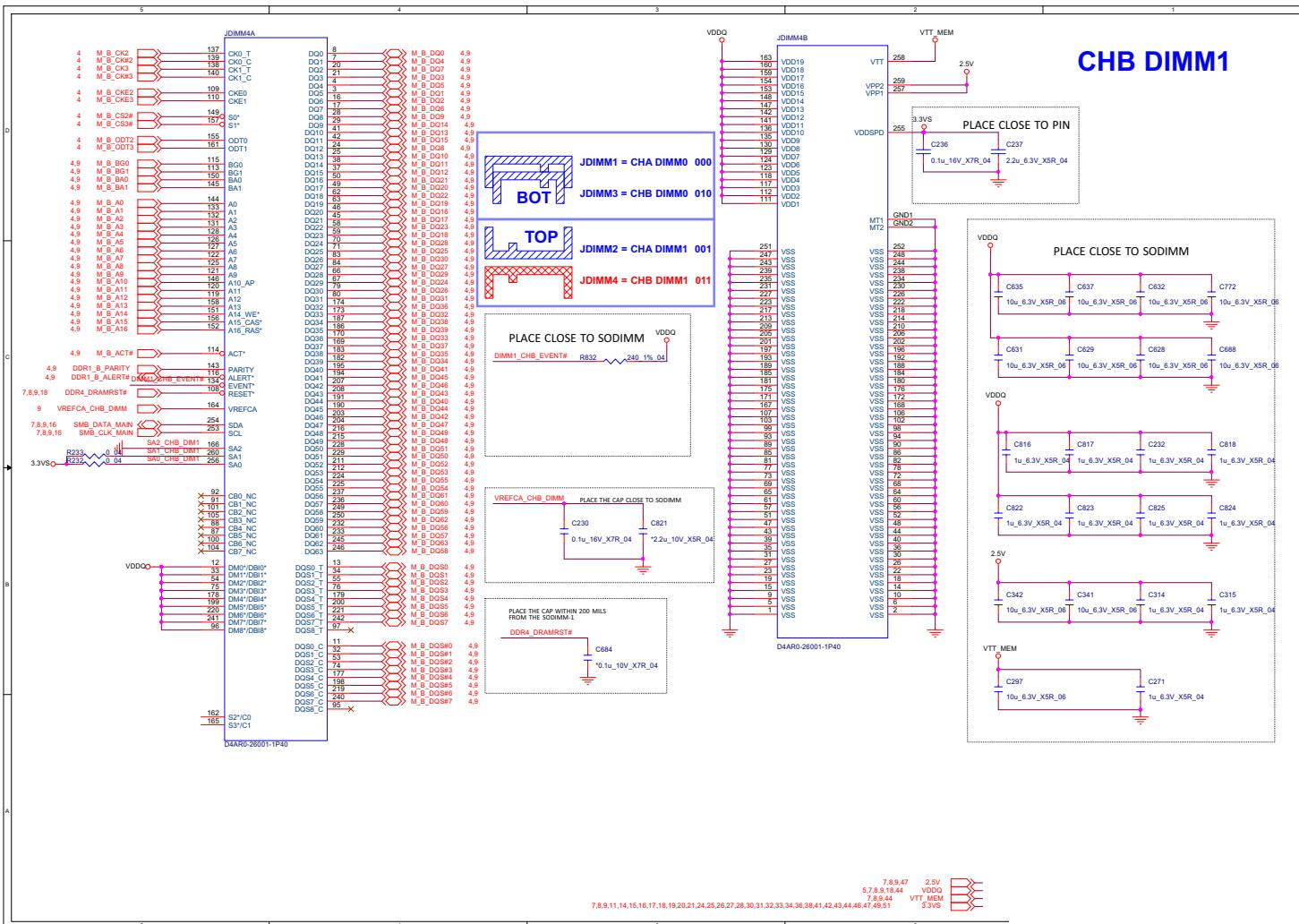
# **DDR4 CHB SO-DIMM\_0**

**Sheet 9 of 70**  
**DDR4 CHB SO-**  
**DIMM \_0**



## B.Schematic Diagrams

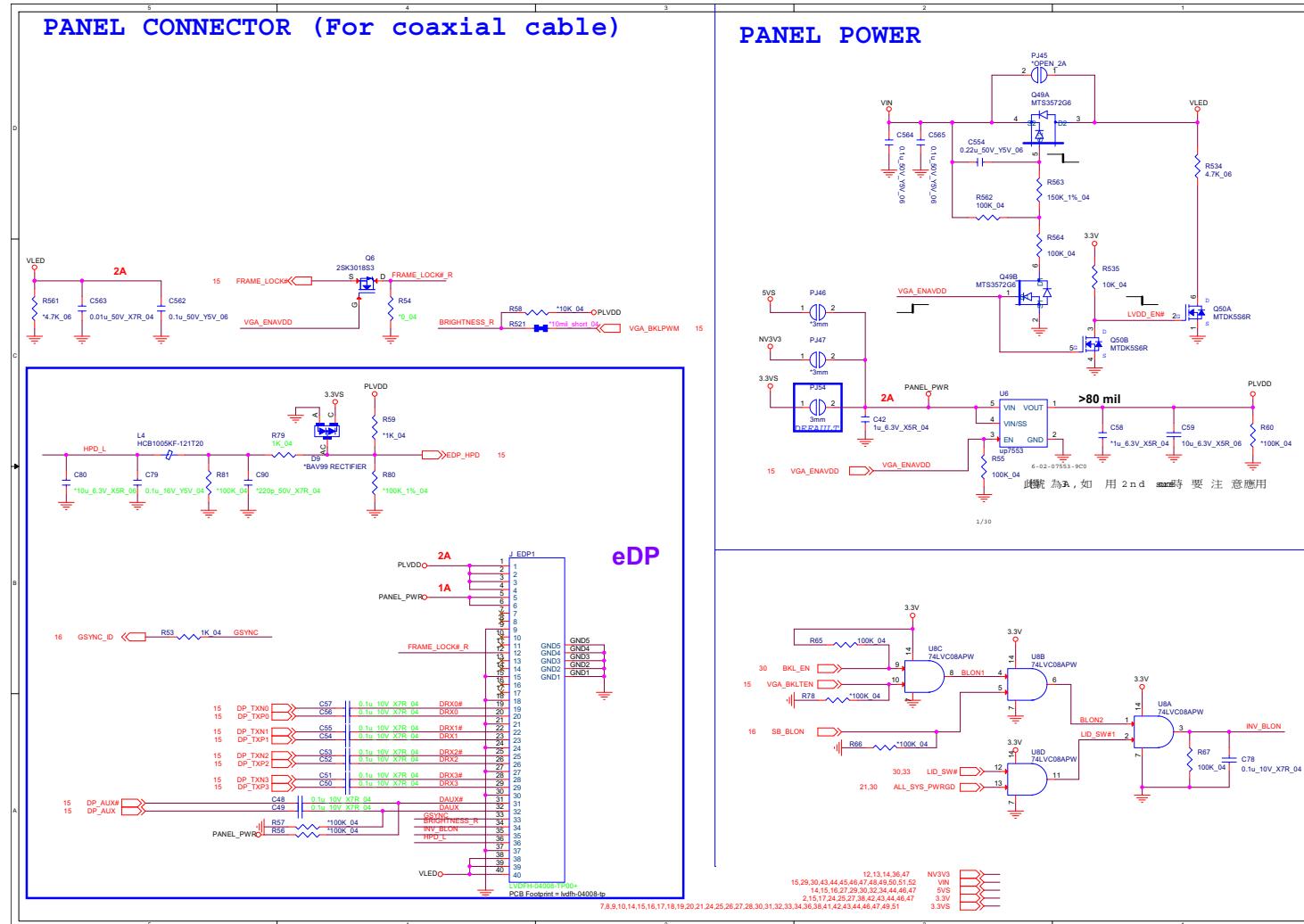
**Sheet 10 of 70**  
**DDR4 CHB SO-**  
**DIMM 1**



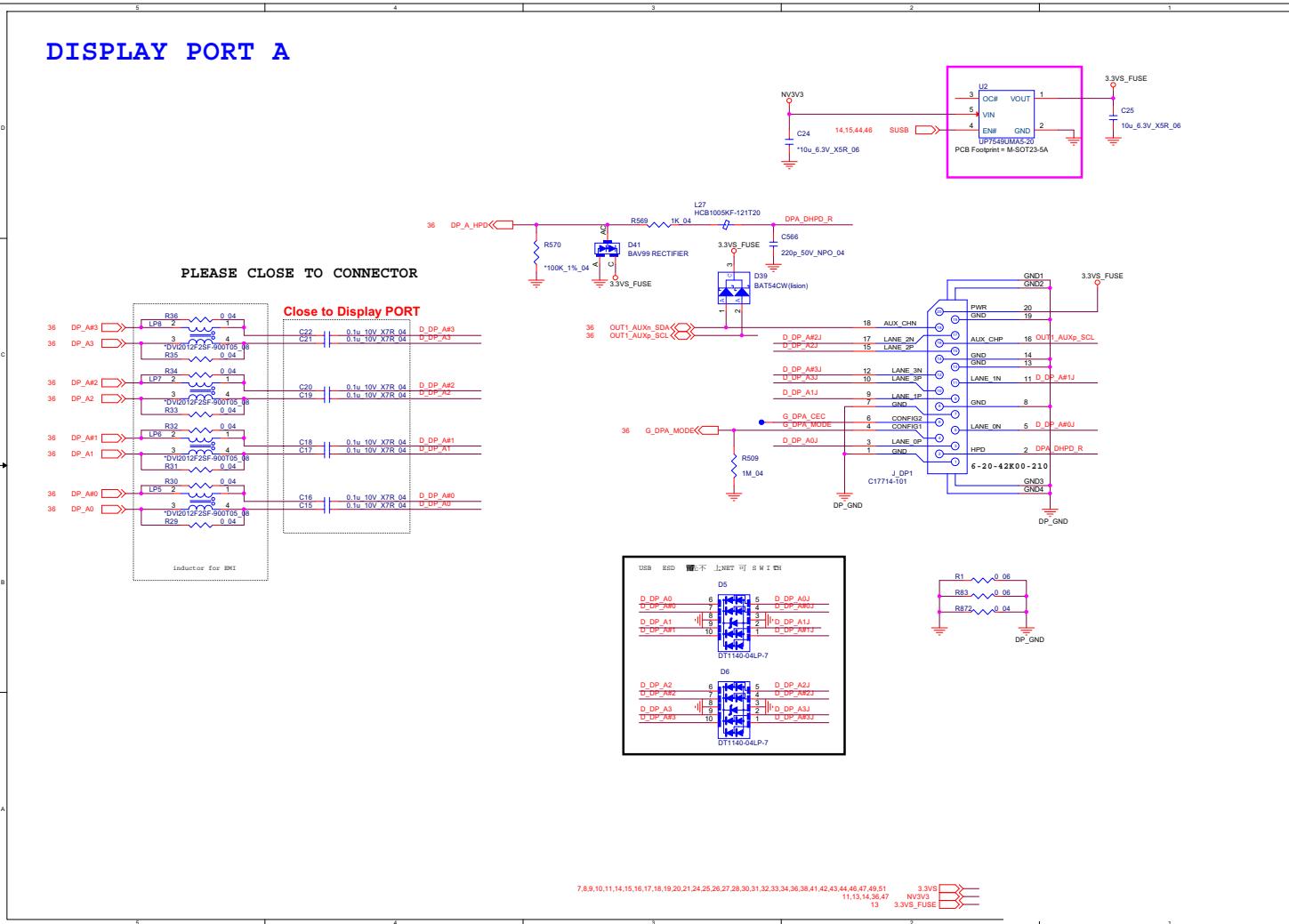
## Schematic Diagrams

### Panel, Inverter, CRT

Sheet 11 of 70  
Panel, Inverter,  
CRT



### Display Port A



Sheet 12 of 70  
Display Port A

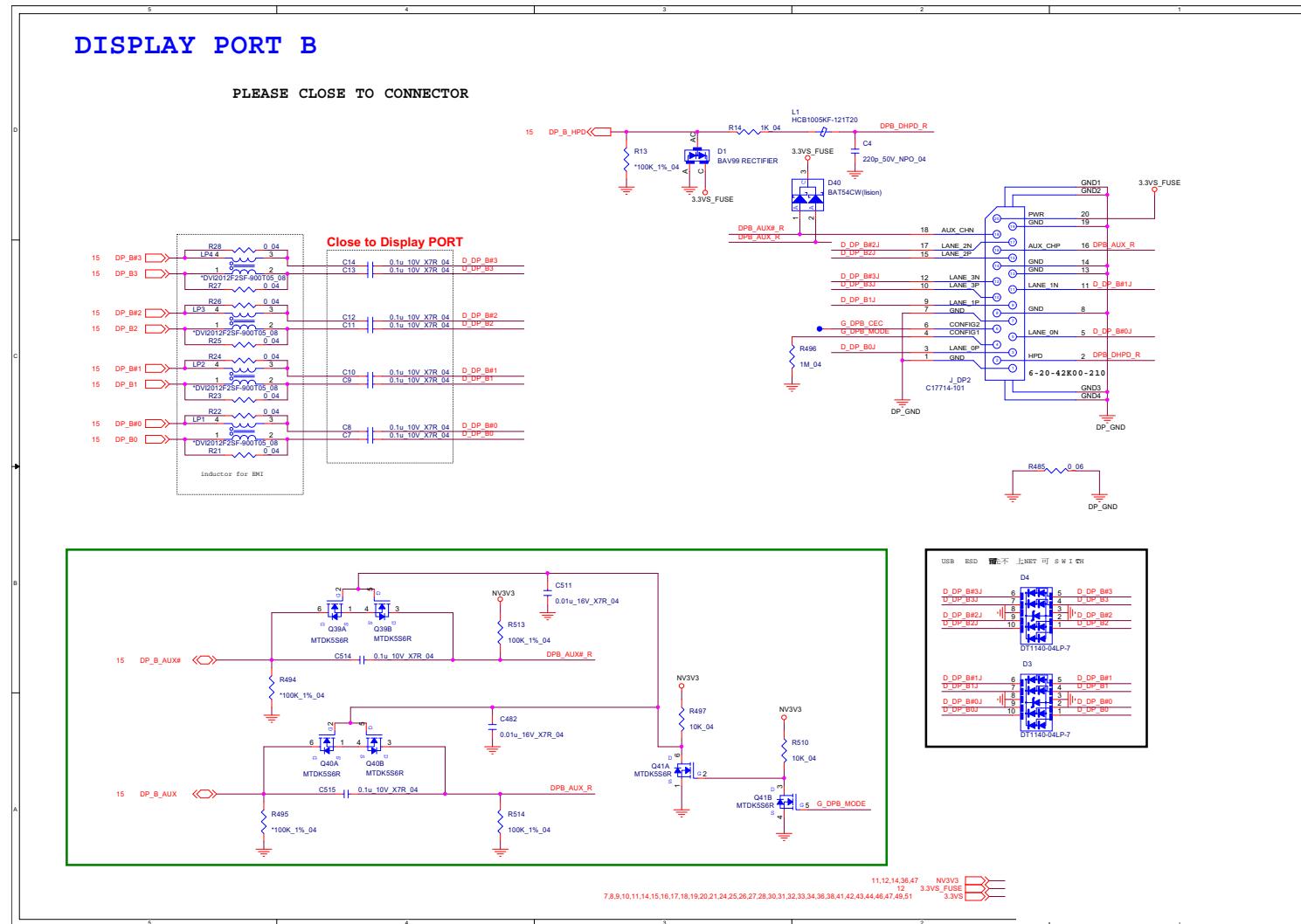
## **Schematic Diagrams**

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# Display Port B

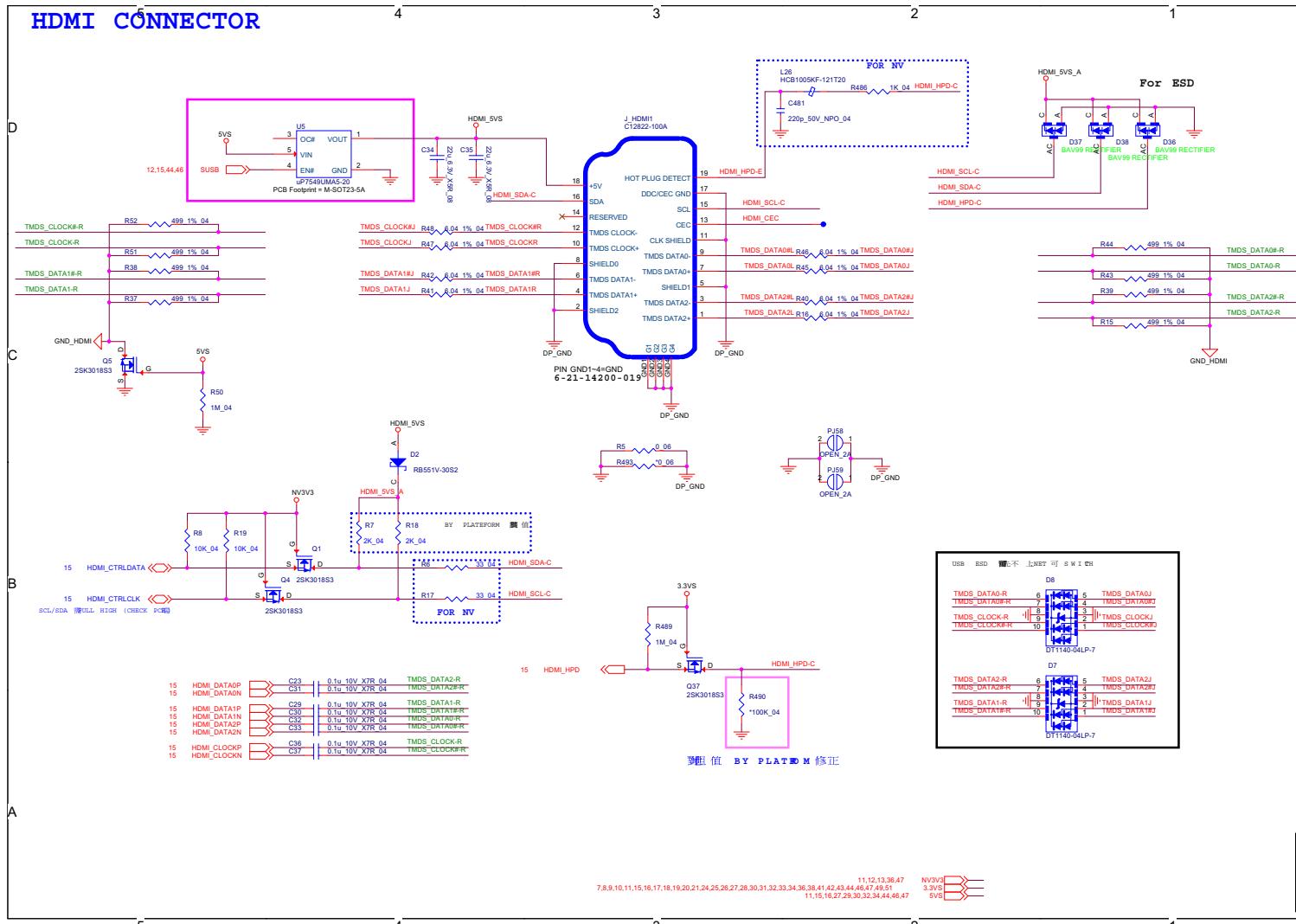
# Sheet 13 of 70

## Display Port B



## Schematic Diagrams

HDMI



Sheet 14 of 70  
HDMI

## B.Schematic Diagrams

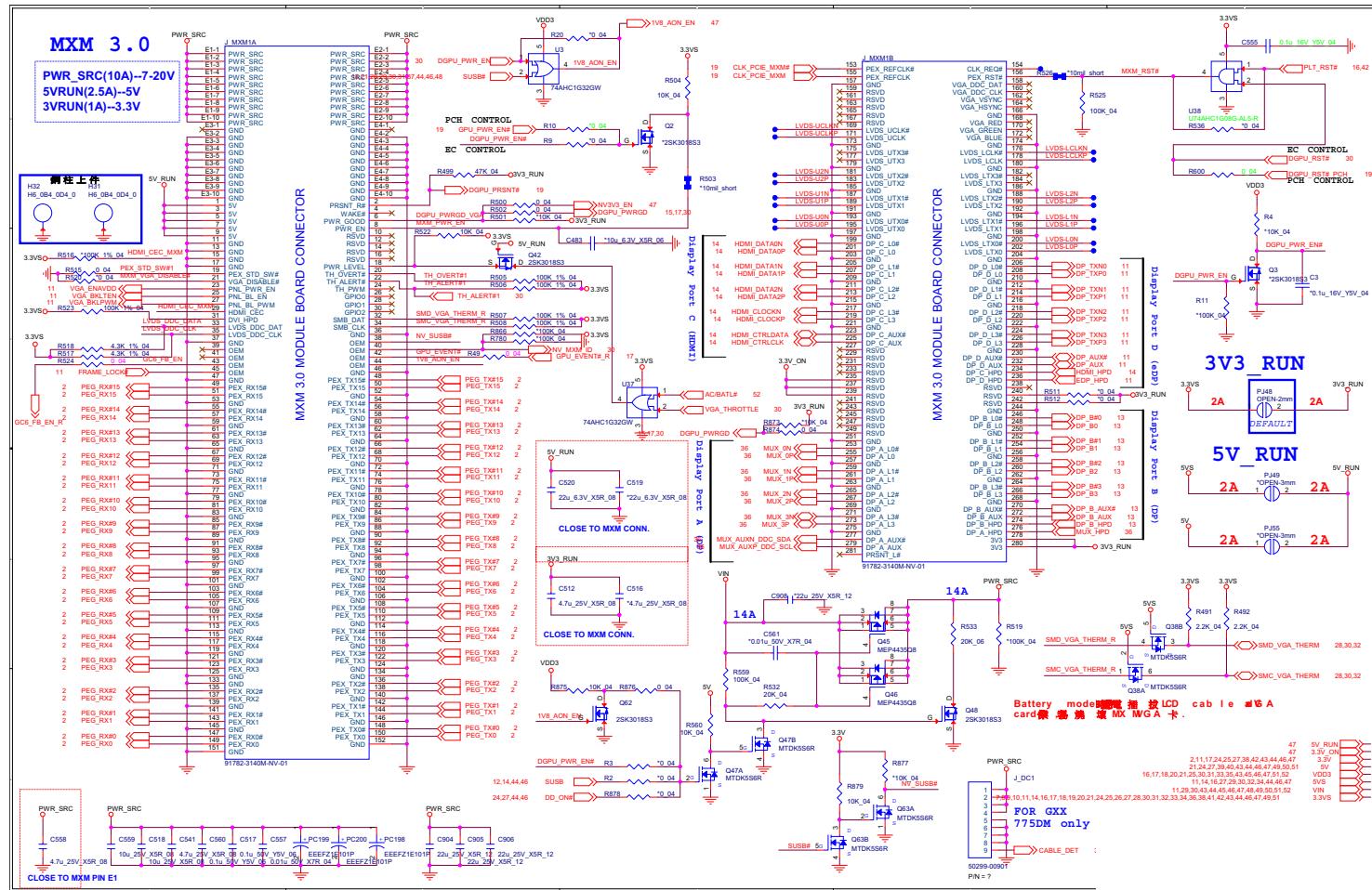
HDMI B - 15

## B.Schematic Diagrams

## Schematic Diagrams

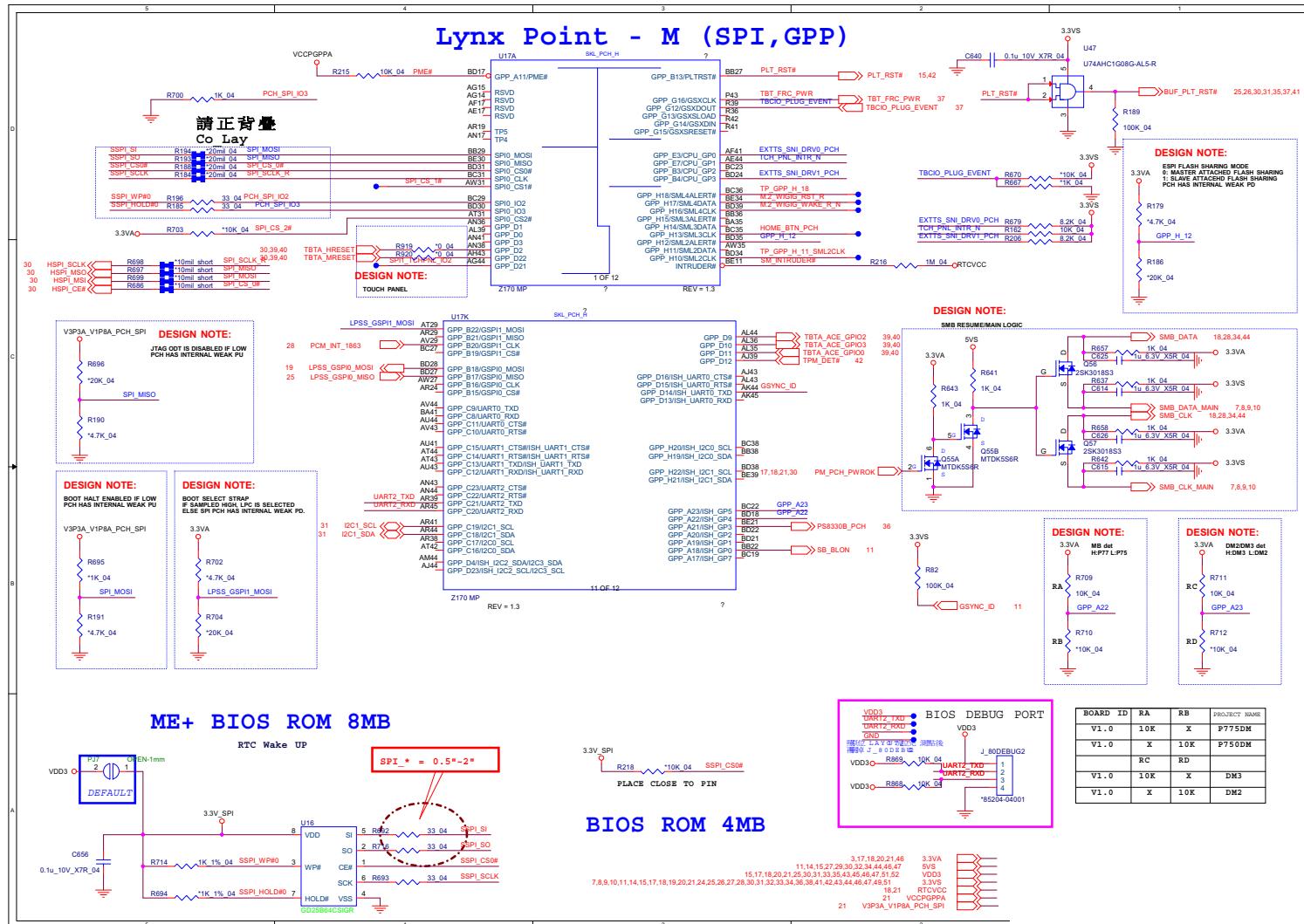
**MXM PCI-E**

Sheet 15 of 70  
MXM PCI-e



# Schematic Diagrams

# Lynix Point 1/7



Sheet 16 of 70  
Lynix Point 1/7

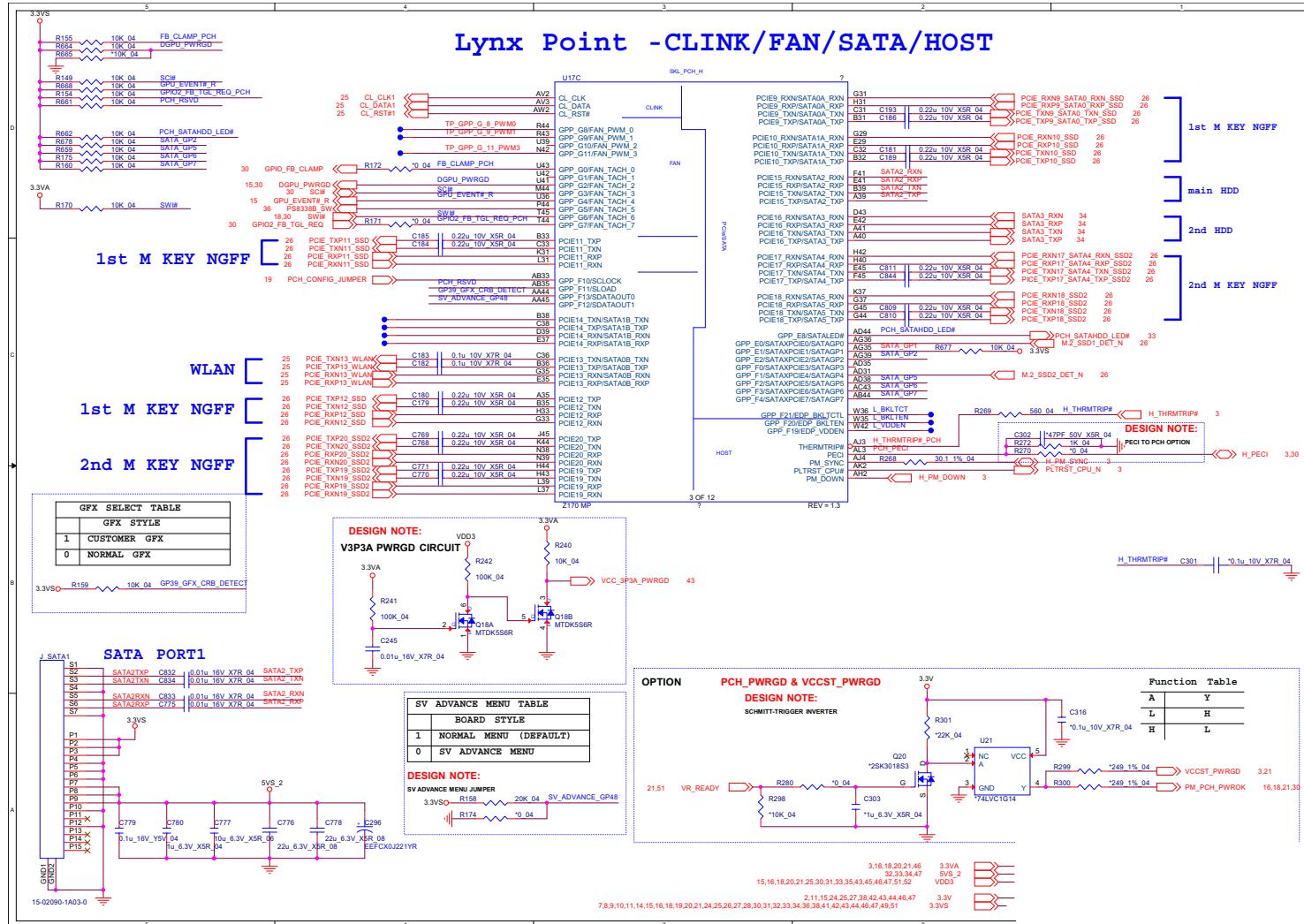
## B.Schematic Diagrams

## B.Schematic Diagrams

## Schematic Diagrams

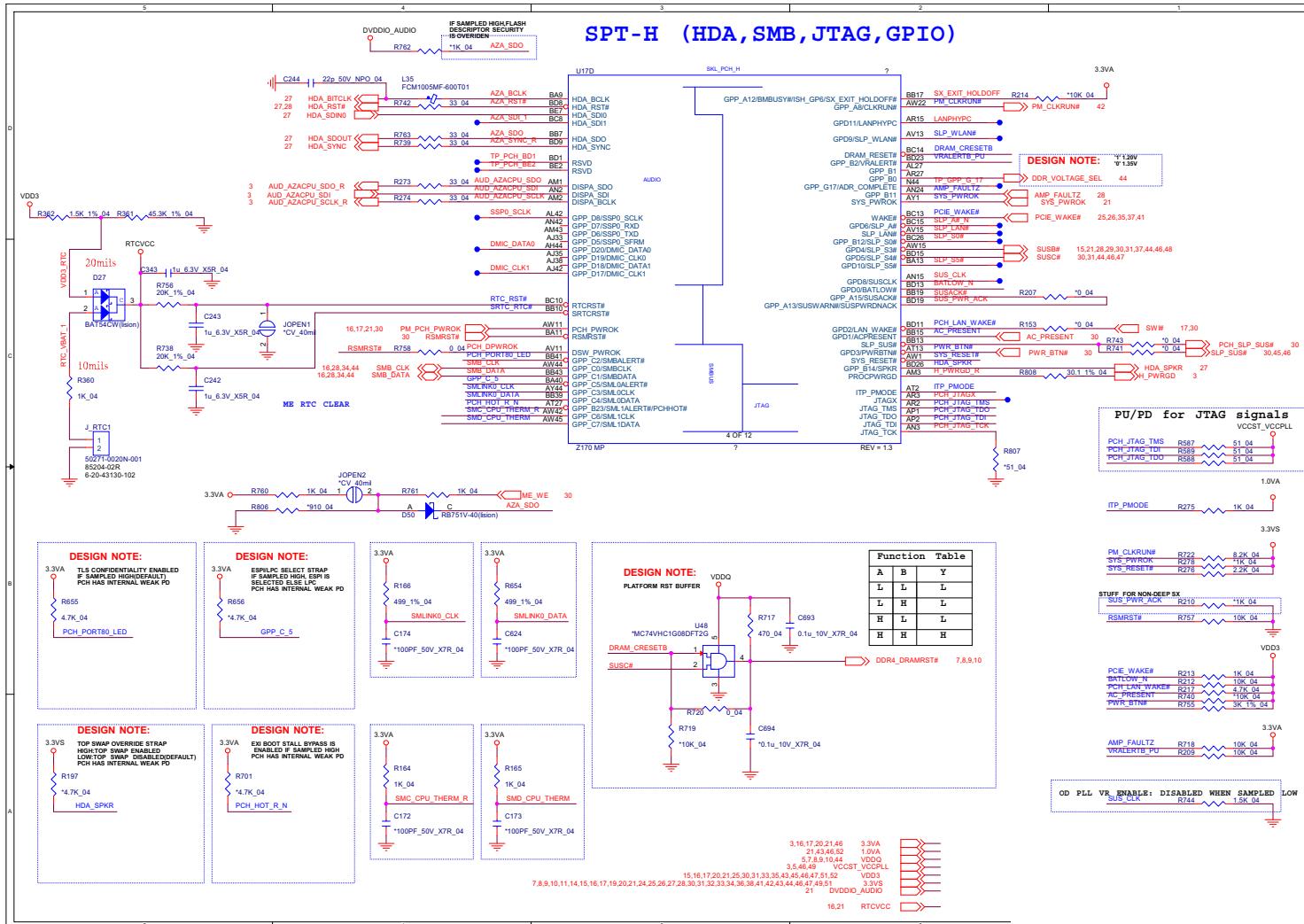
### Lynx Point 2/7

Sheet 17 of 70  
Lynx Point 2/7



## Schematic Diagrams

Lynix Point 3/7



## B.Schematic Diagrams

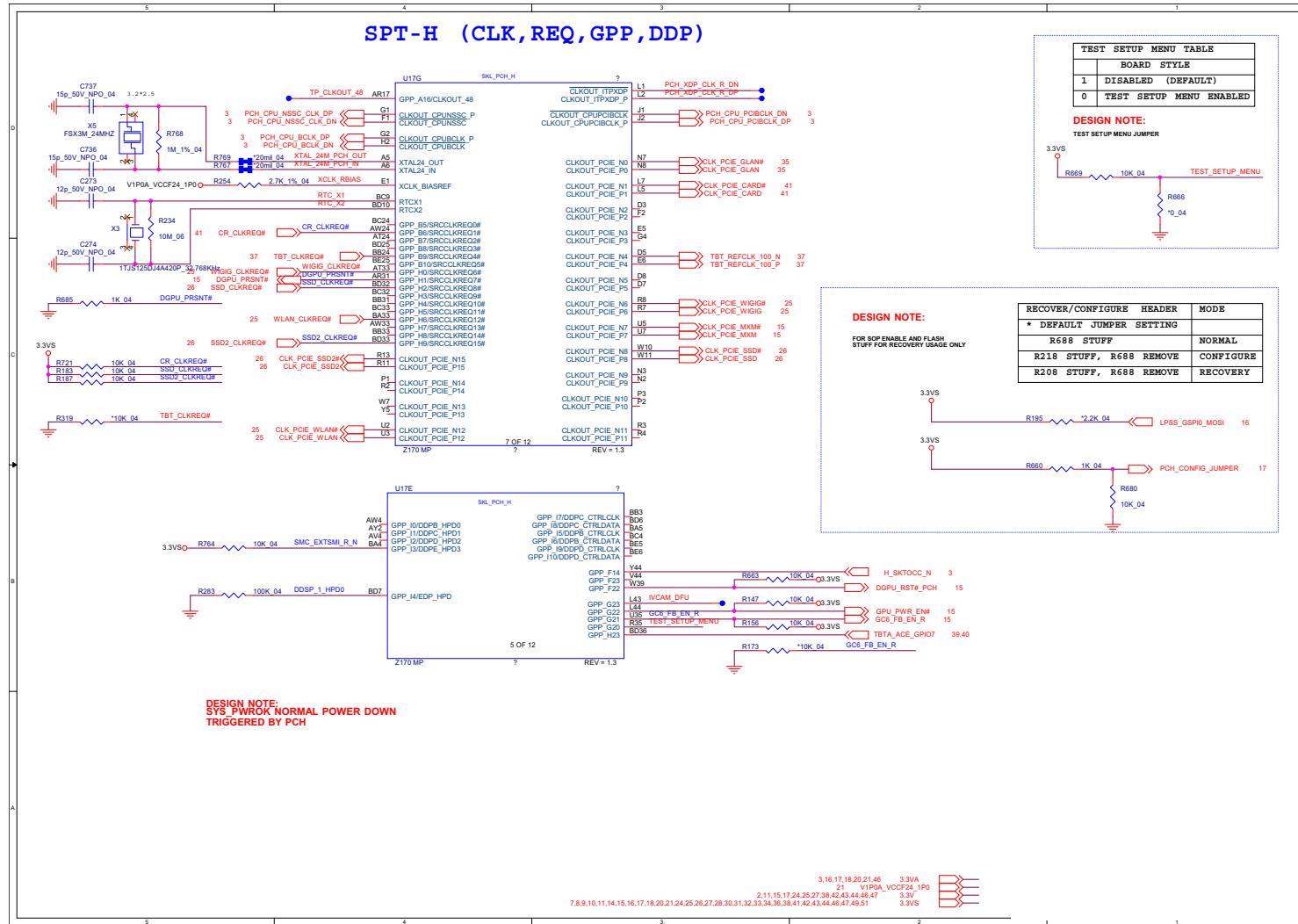
Sheet 18 of 70  
Lynix Point 3/7

## B.Schematic Diagrams

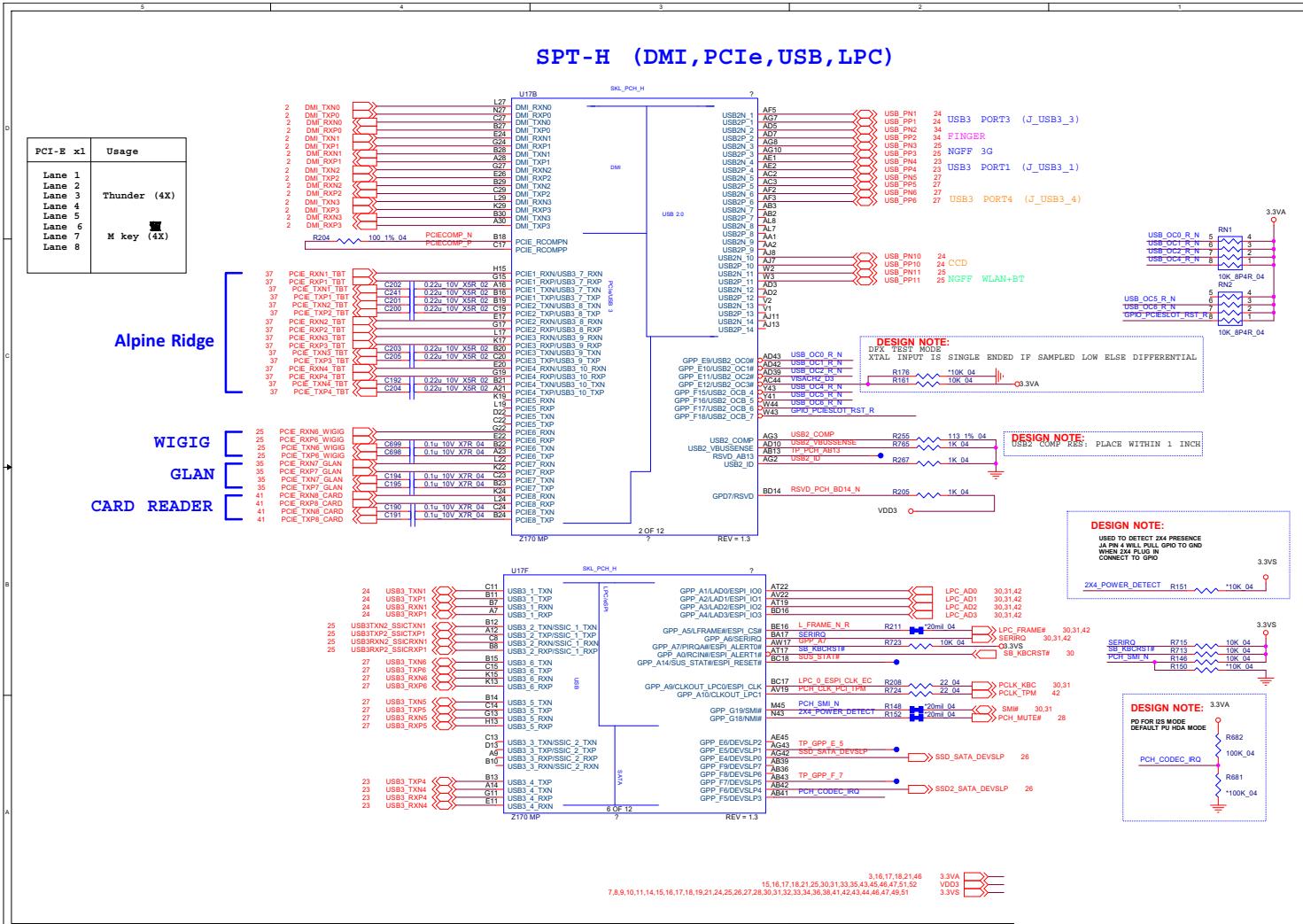
## Schematic Diagrams

# Lynix Point 4/7

Sheet 19 of 70  
Lynix Point 4/7



# Lynx Point 5/7

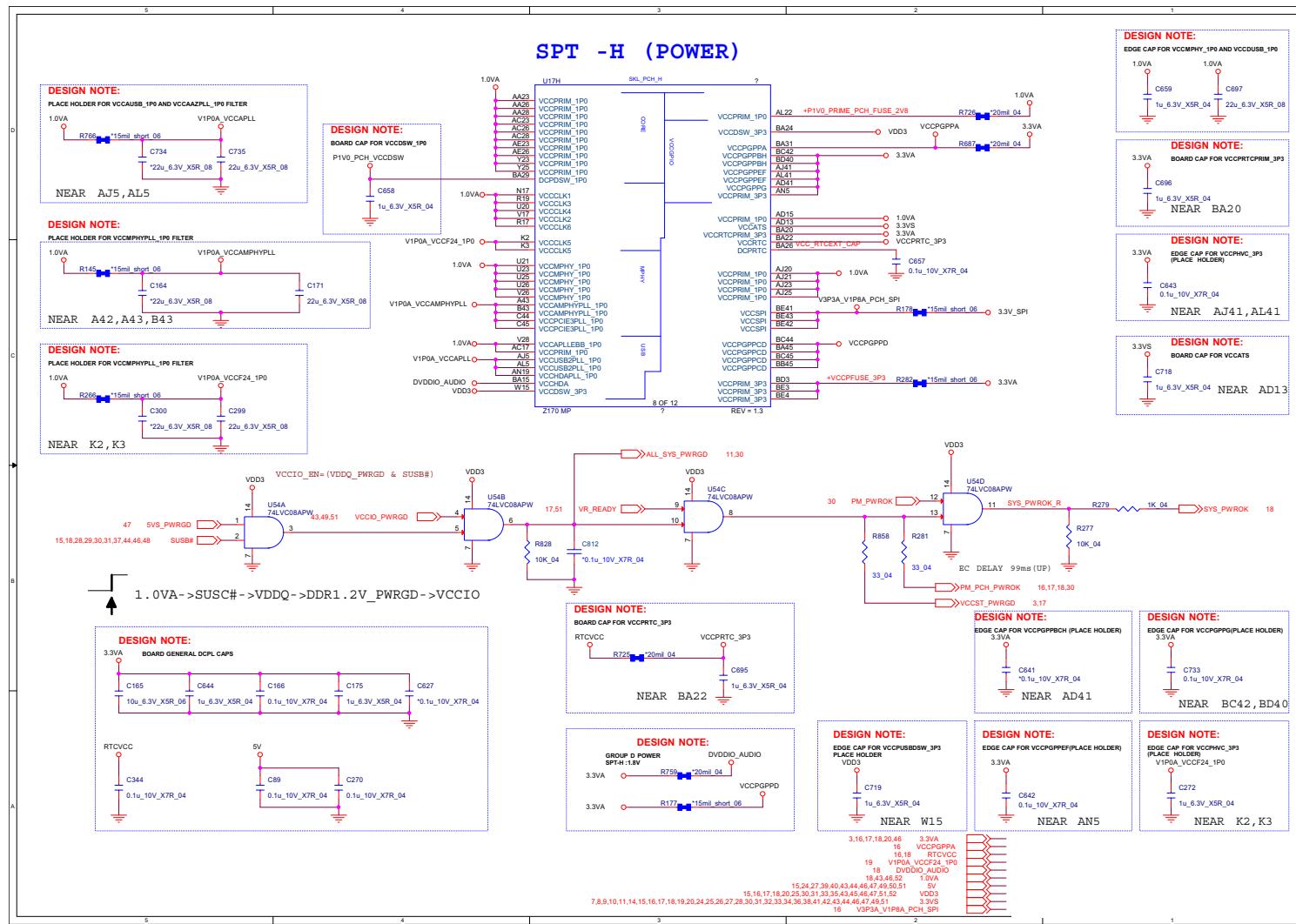


Sheet 20 of 70  
Lynx Point 5/7

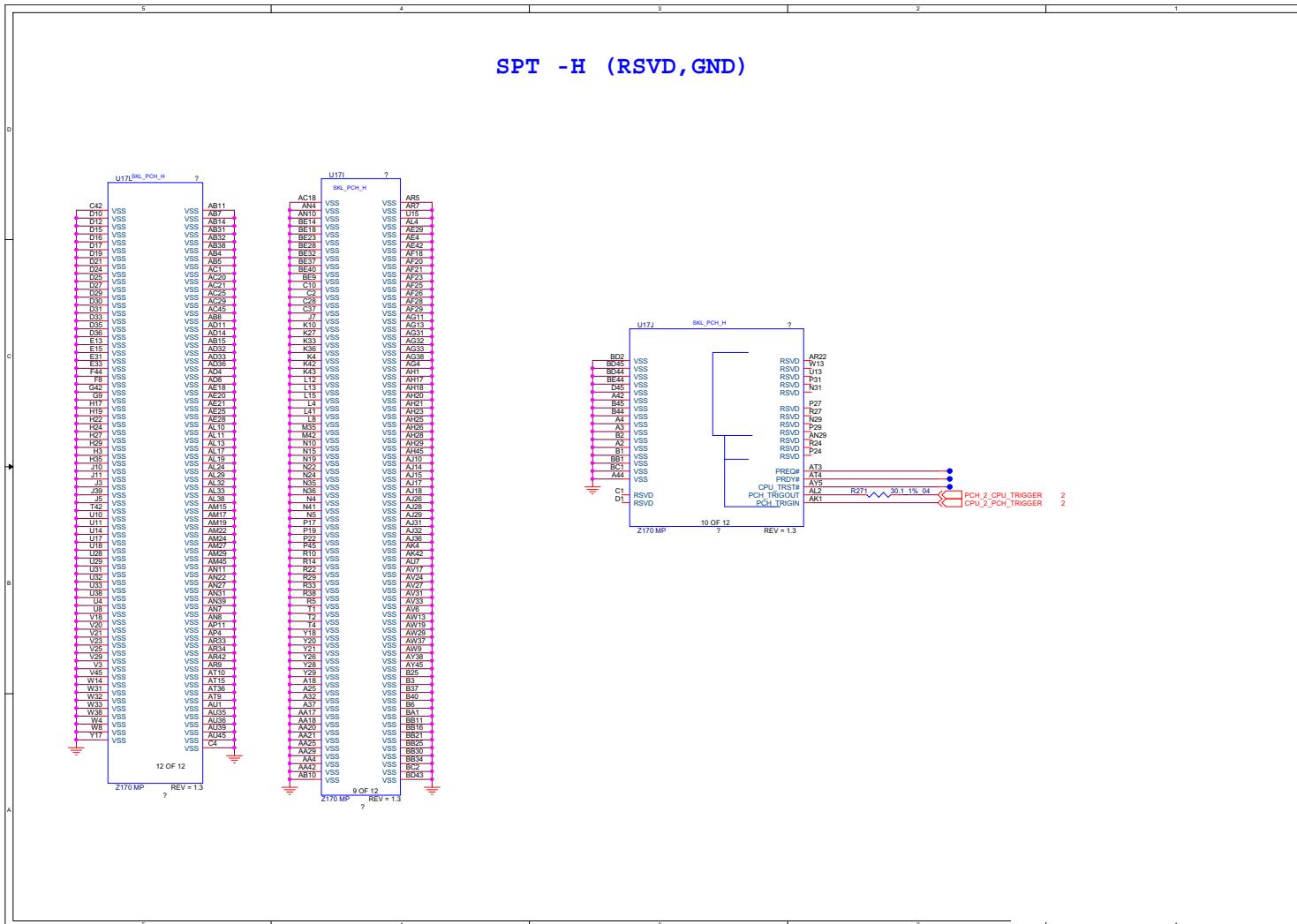
## Schematic Diagrams

# Lynix Point 6/7

Sheet 21 of 70  
Lynix Point 6/7



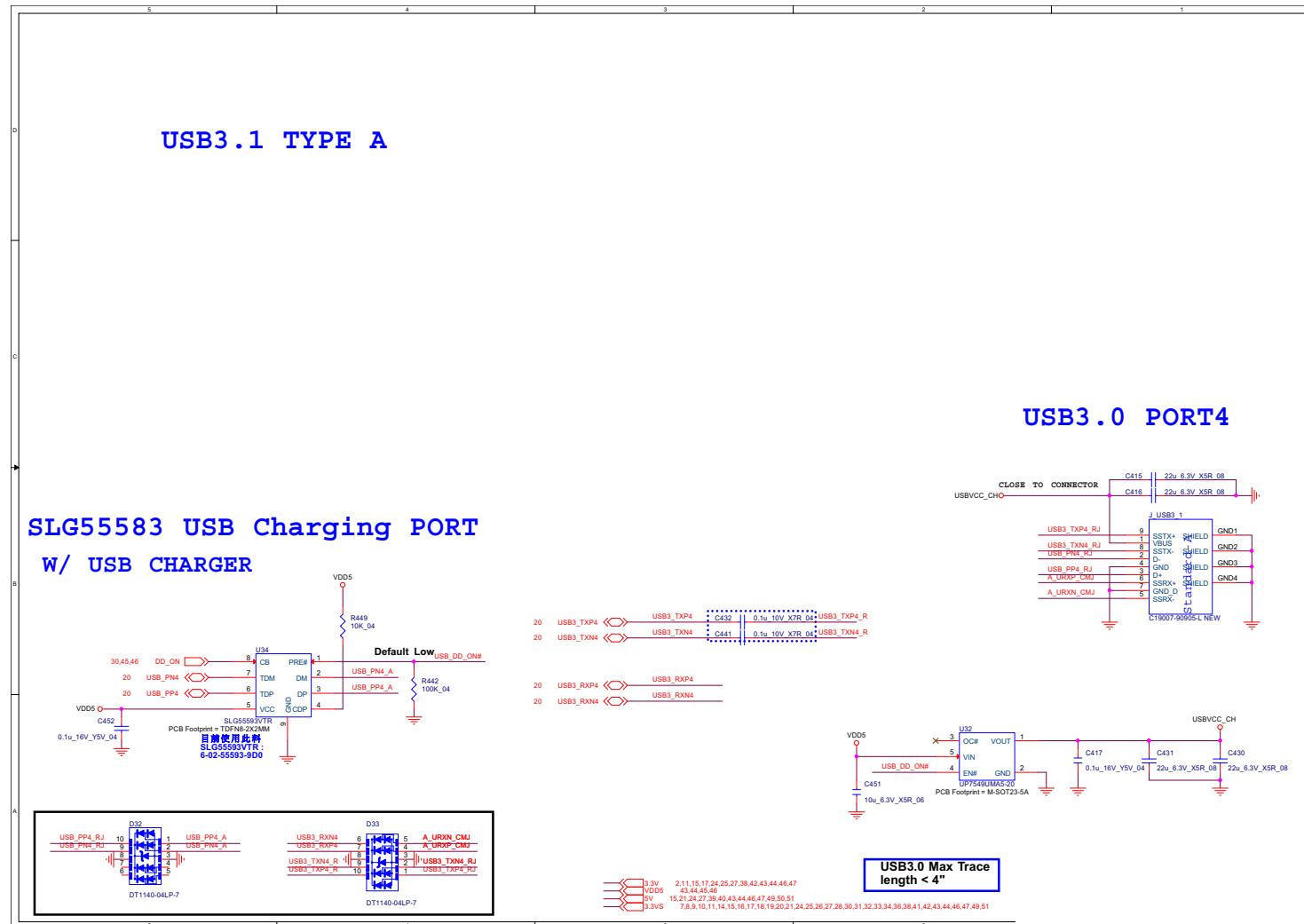
# Lynix Point 7/7



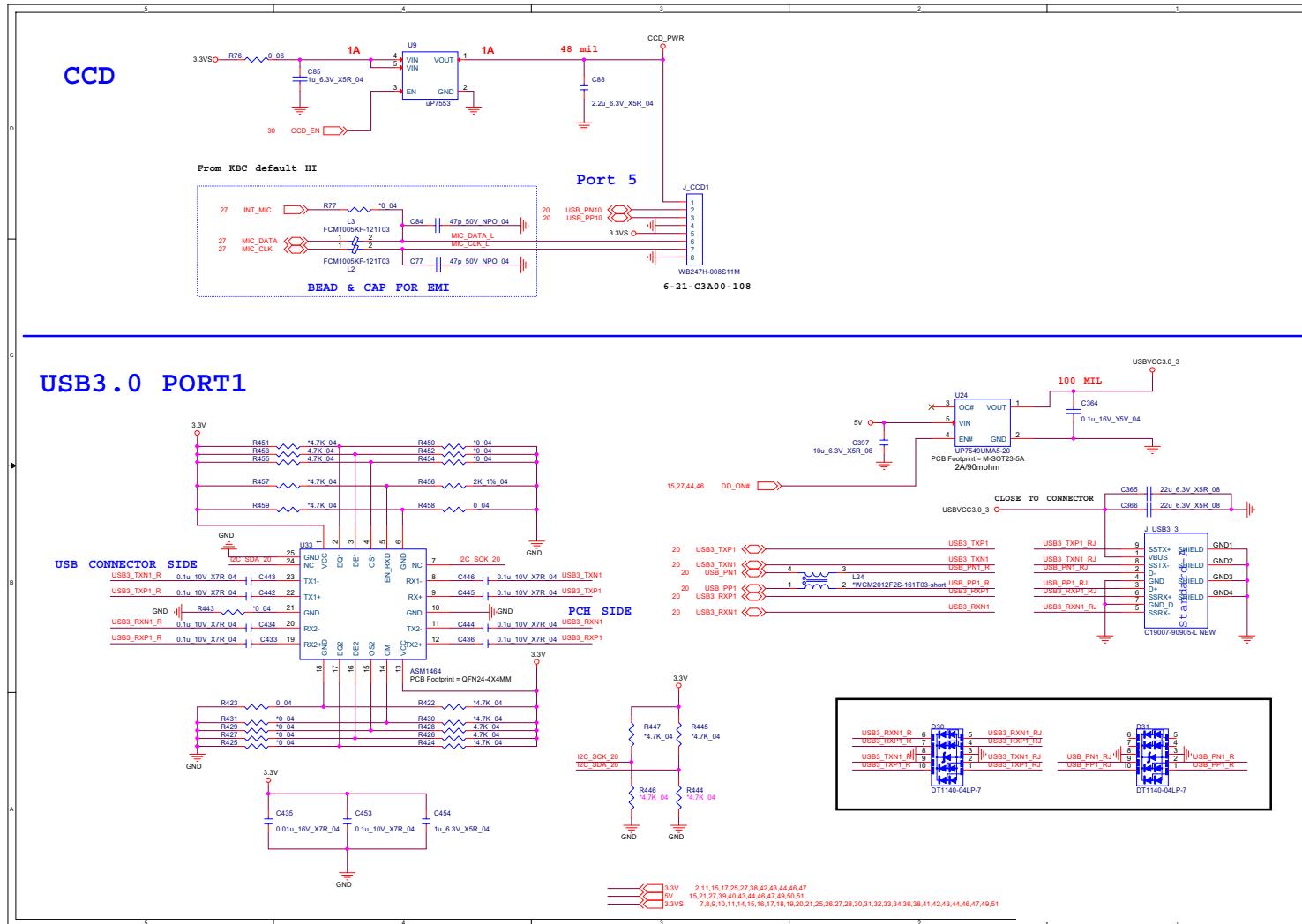
Sheet 22 of 70  
Lynix Point 7/7

**Schematic Diagrams****USB3.1, USB Charging**

Sheet 23 of 70  
USB3.1, USB  
Charging



# CCD, USB Port3



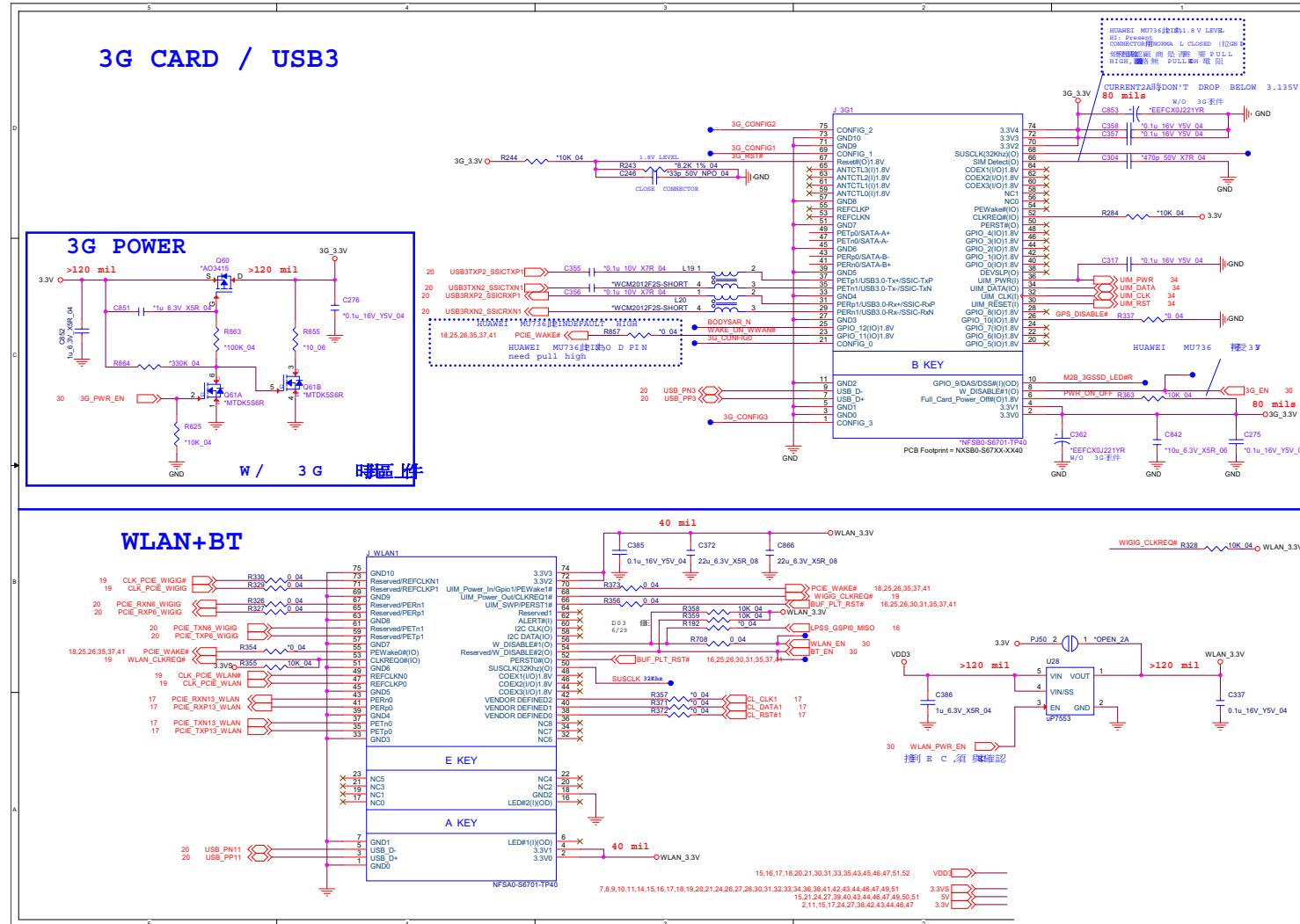
Sheet 24 of 70  
CCD, USB Port3

## B.Schematic Diagrams

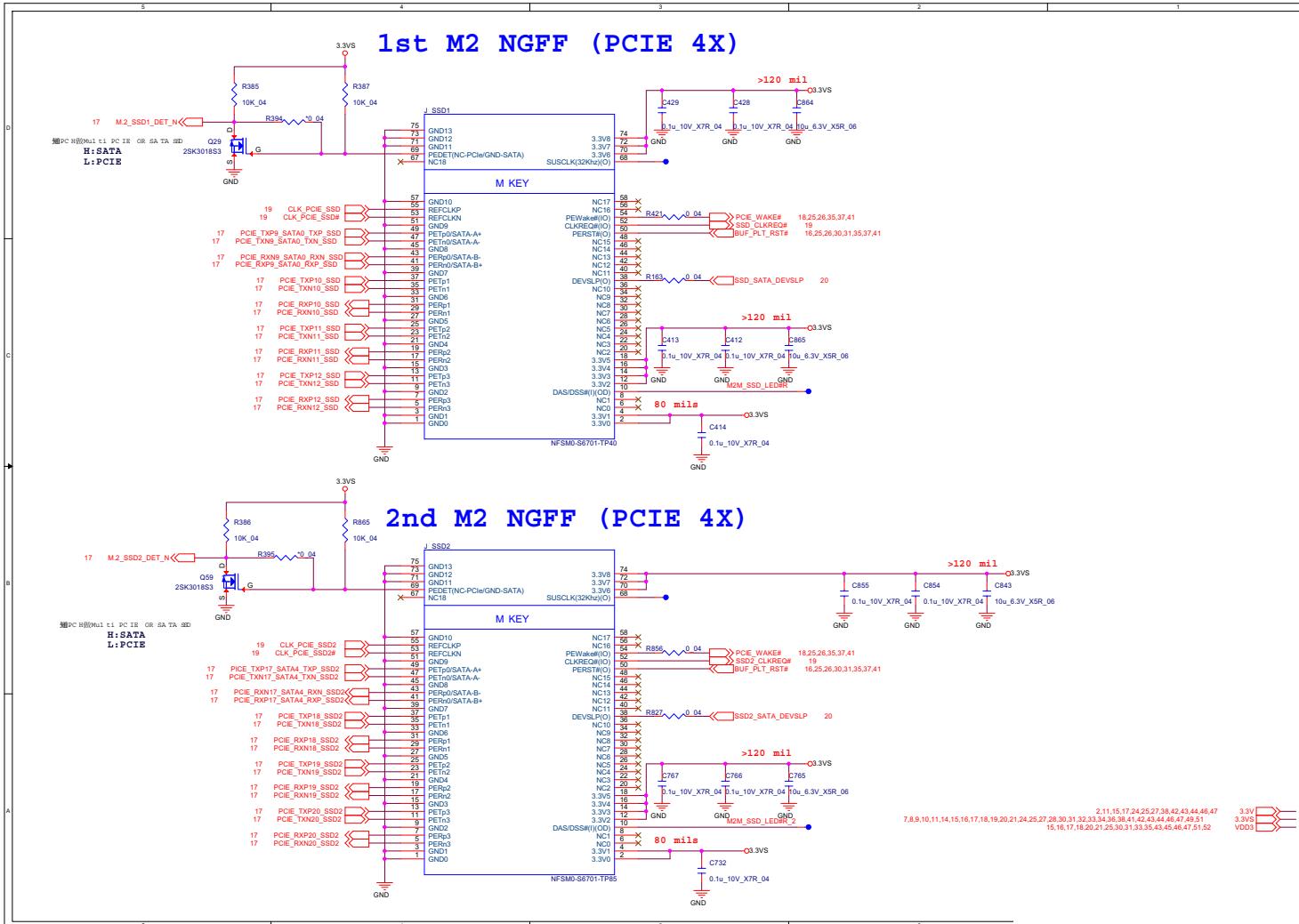
## Schematic Diagrams

## M.2 3G+USB & WLAN+BT

Sheet 25 of 70  
M.2 3G+USB &  
WLAN+BT



### M.2 PCIE4X SSD1 & SSD2

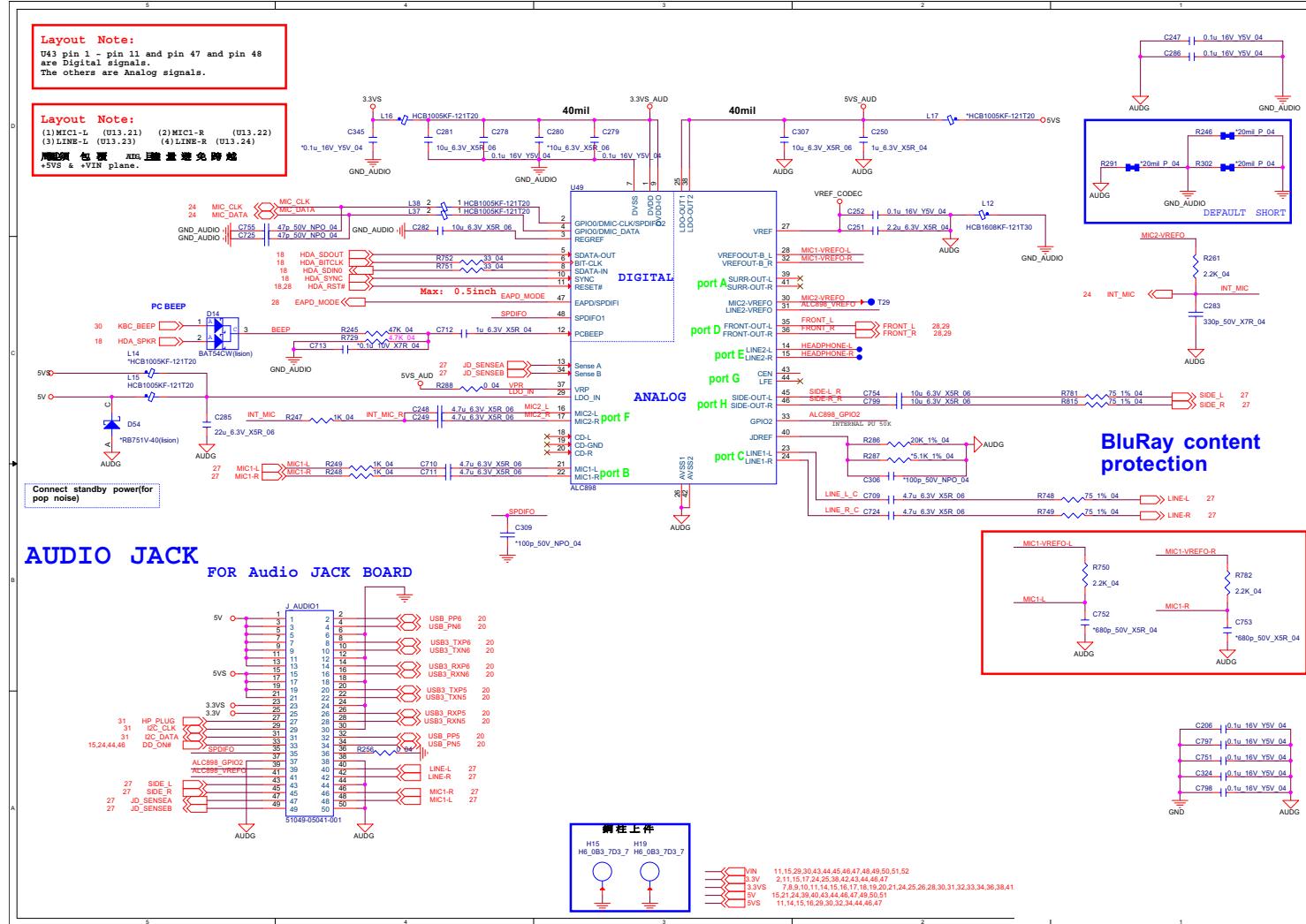


Sheet 26 of 70  
M.2 PCIE4X SSD1 & SSD2

## Schematic Diagrams

### Realtek ALC892

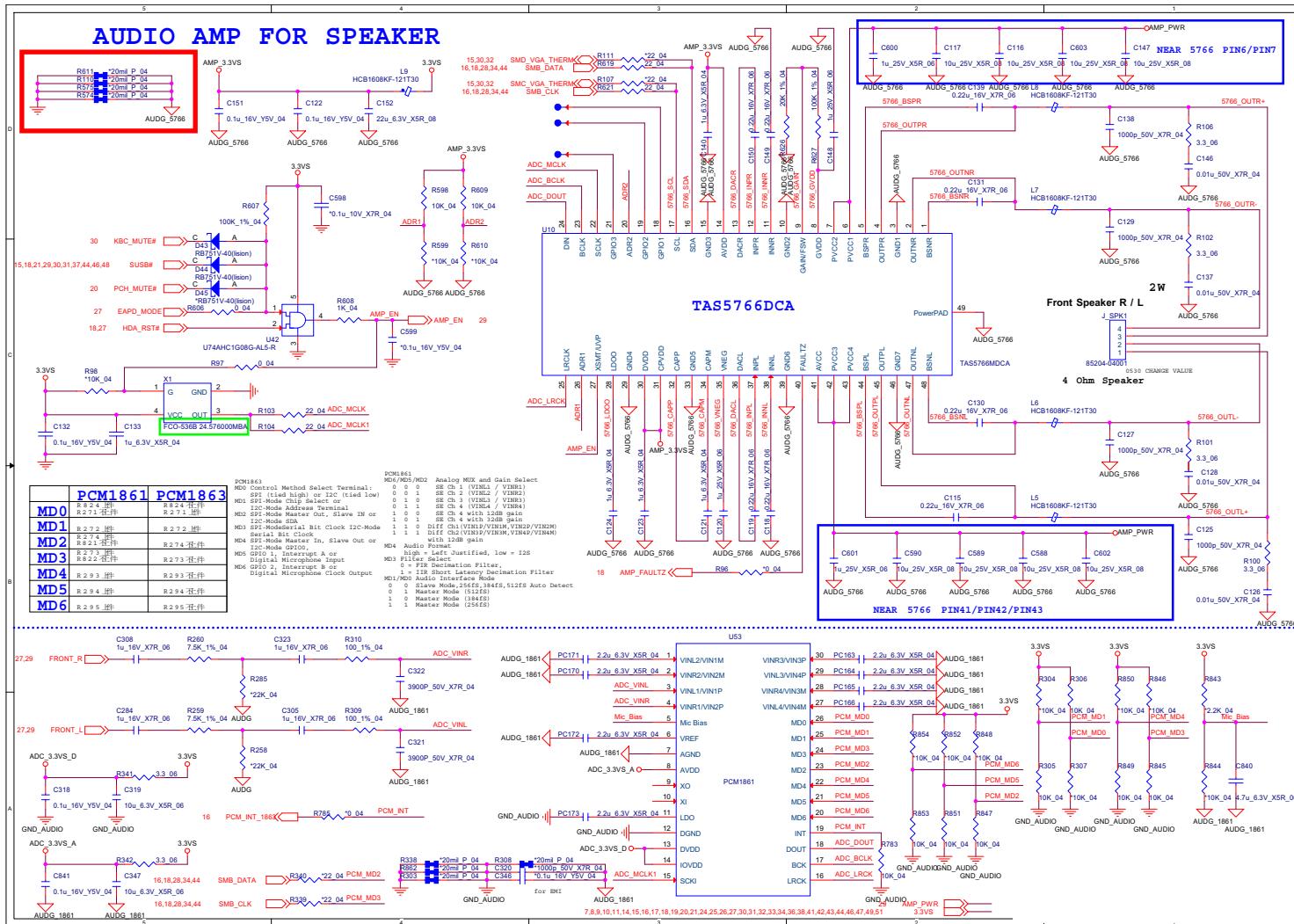
Sheet 27 of 70  
Realtek ALC892



## Schematic Diagrams

## B.Schematic Diagrams

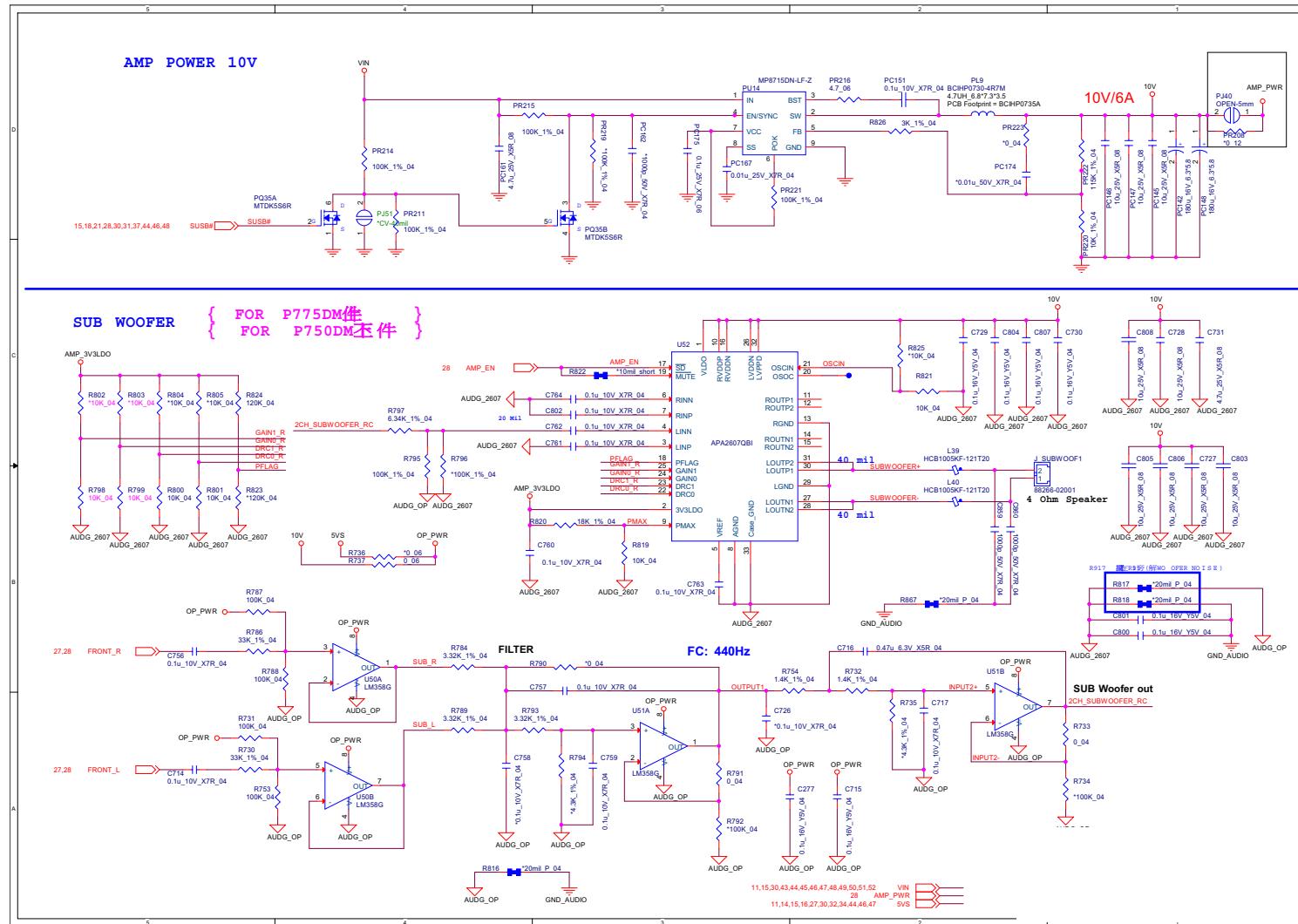
**Sheet 28 of 70**  
**PCM1861 +**  
**TAS5766DCA**



## B.Schematic Diagrams

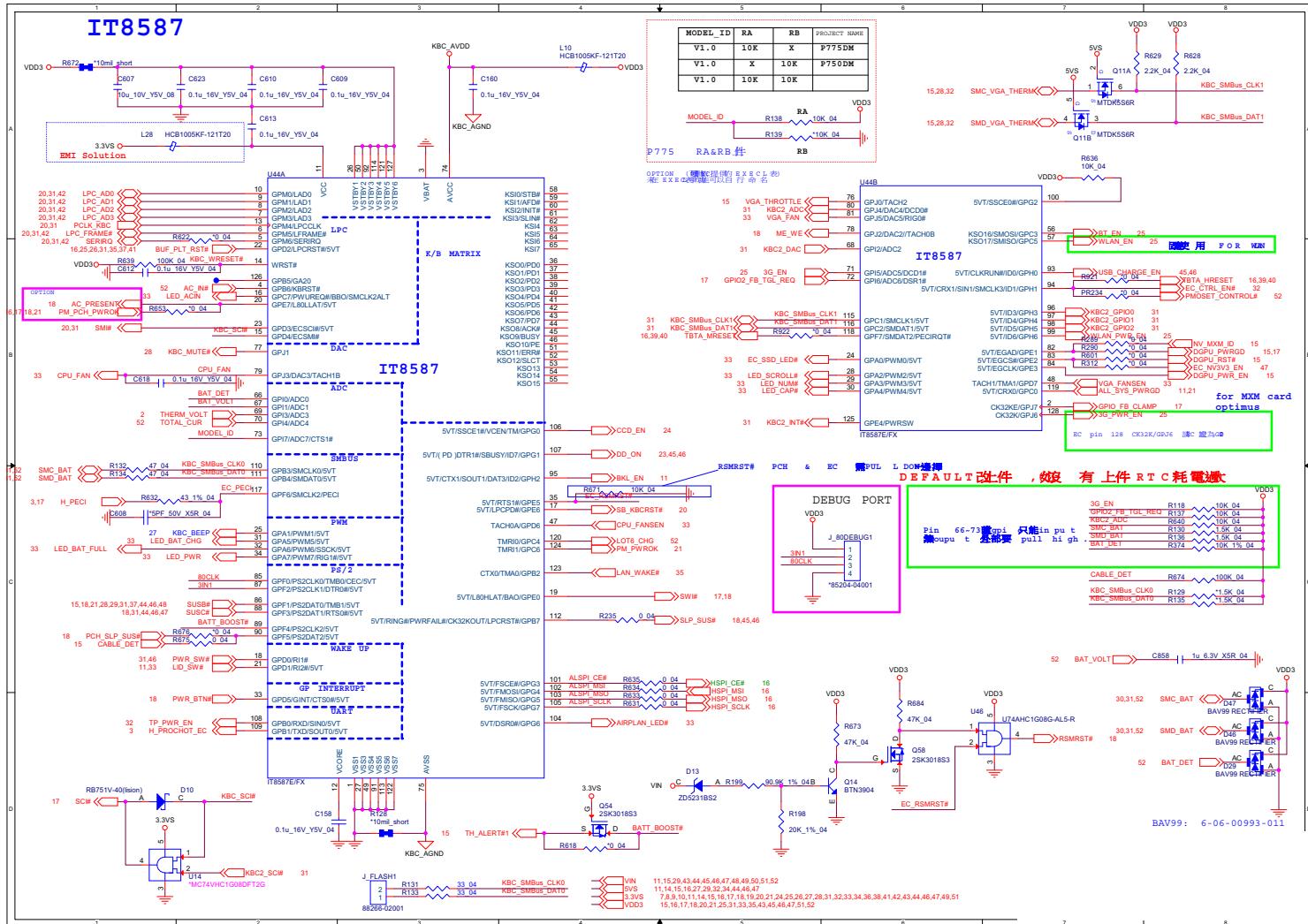
## Schematic Diagrams

### Subwoofer



## Schematic Diagrams

EC IT8587



B.Schematic Diagrams

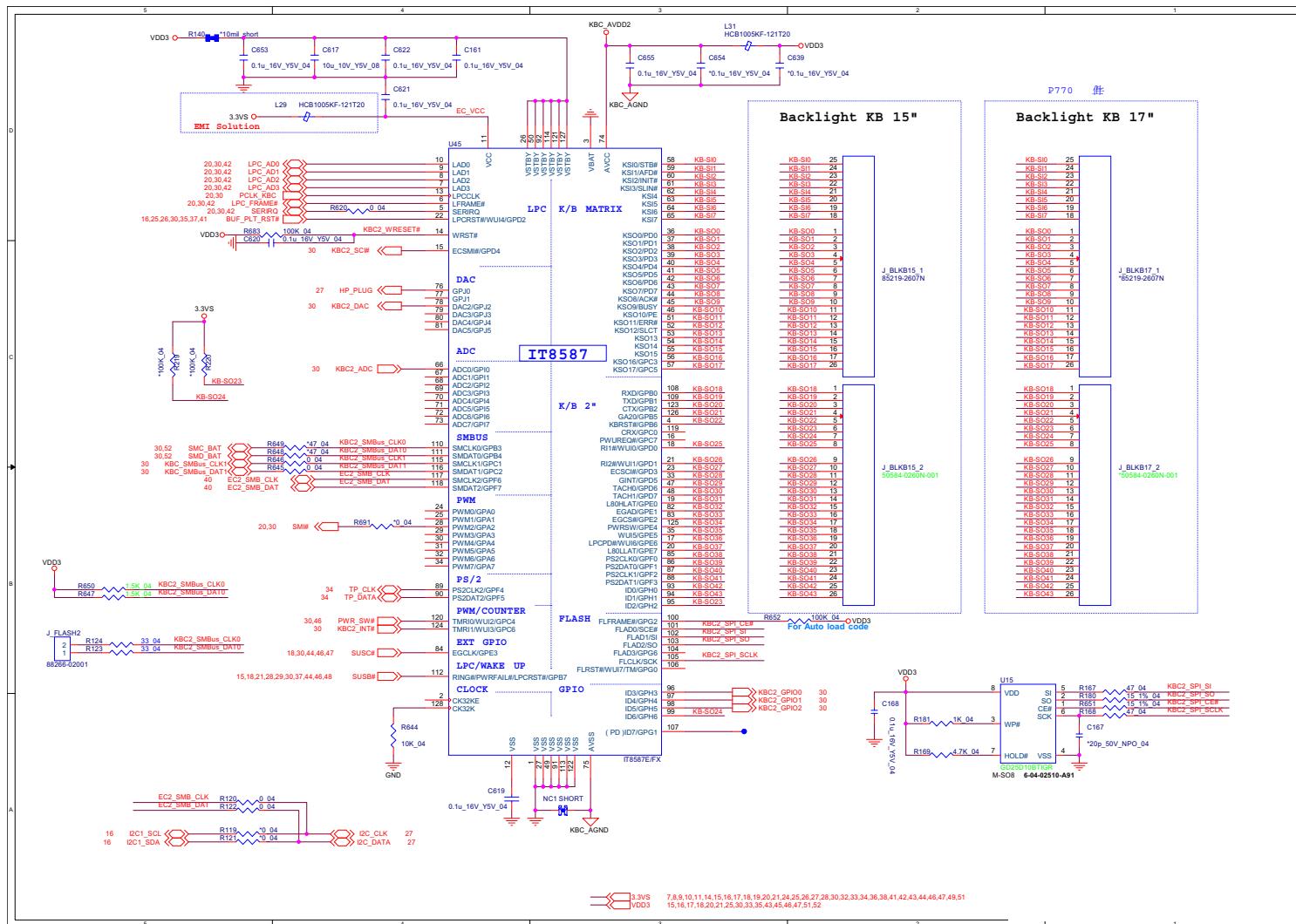
**Sheet 30 of 70**  
**FC IT8587**

## B.Schematic Diagrams

## Schematic Diagrams

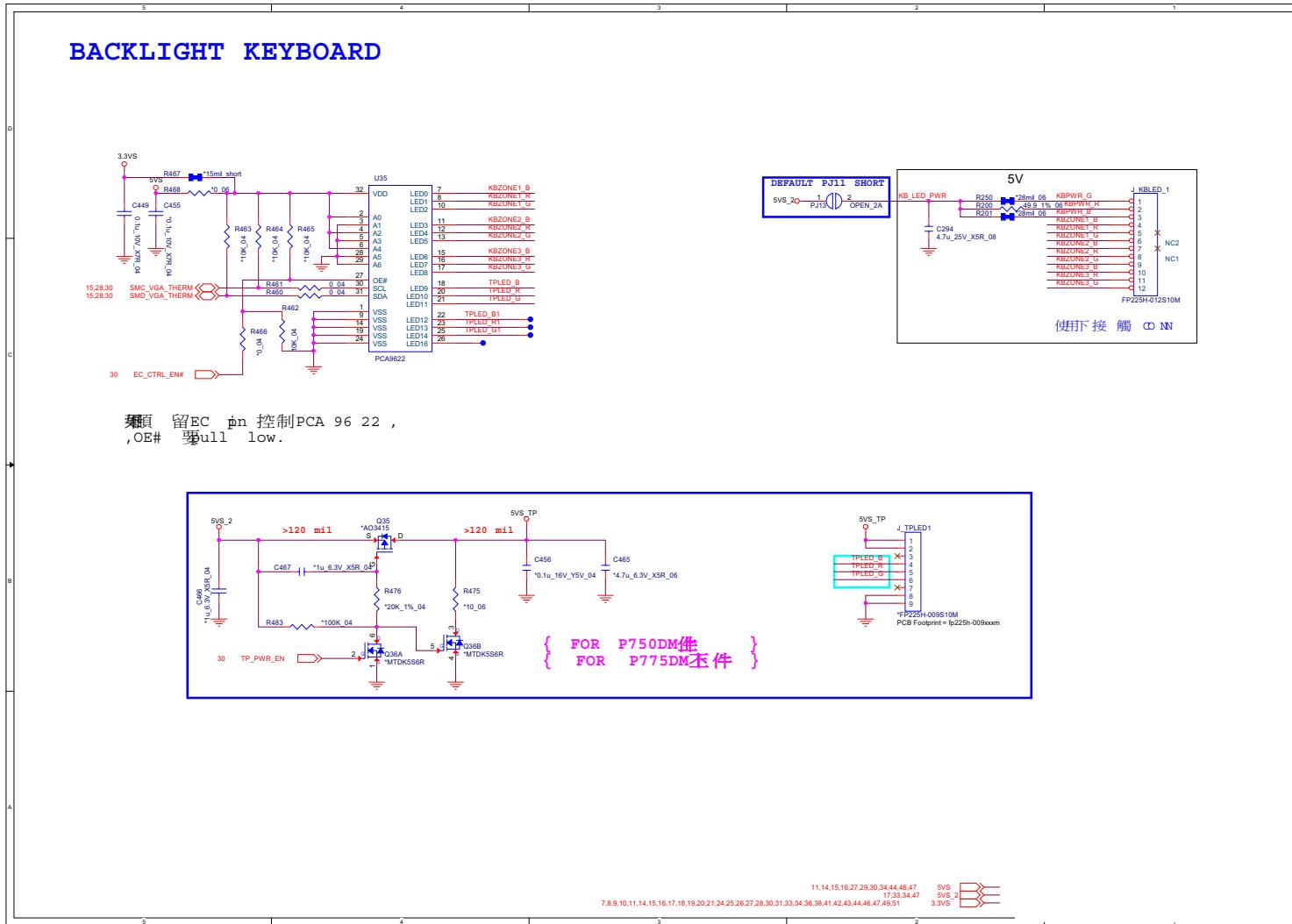
# Second EC IT8587

Sheet 31 of 70  
Second EC IT8587



**B - 32 Second EC IT8587**

# Backlight Keyboard

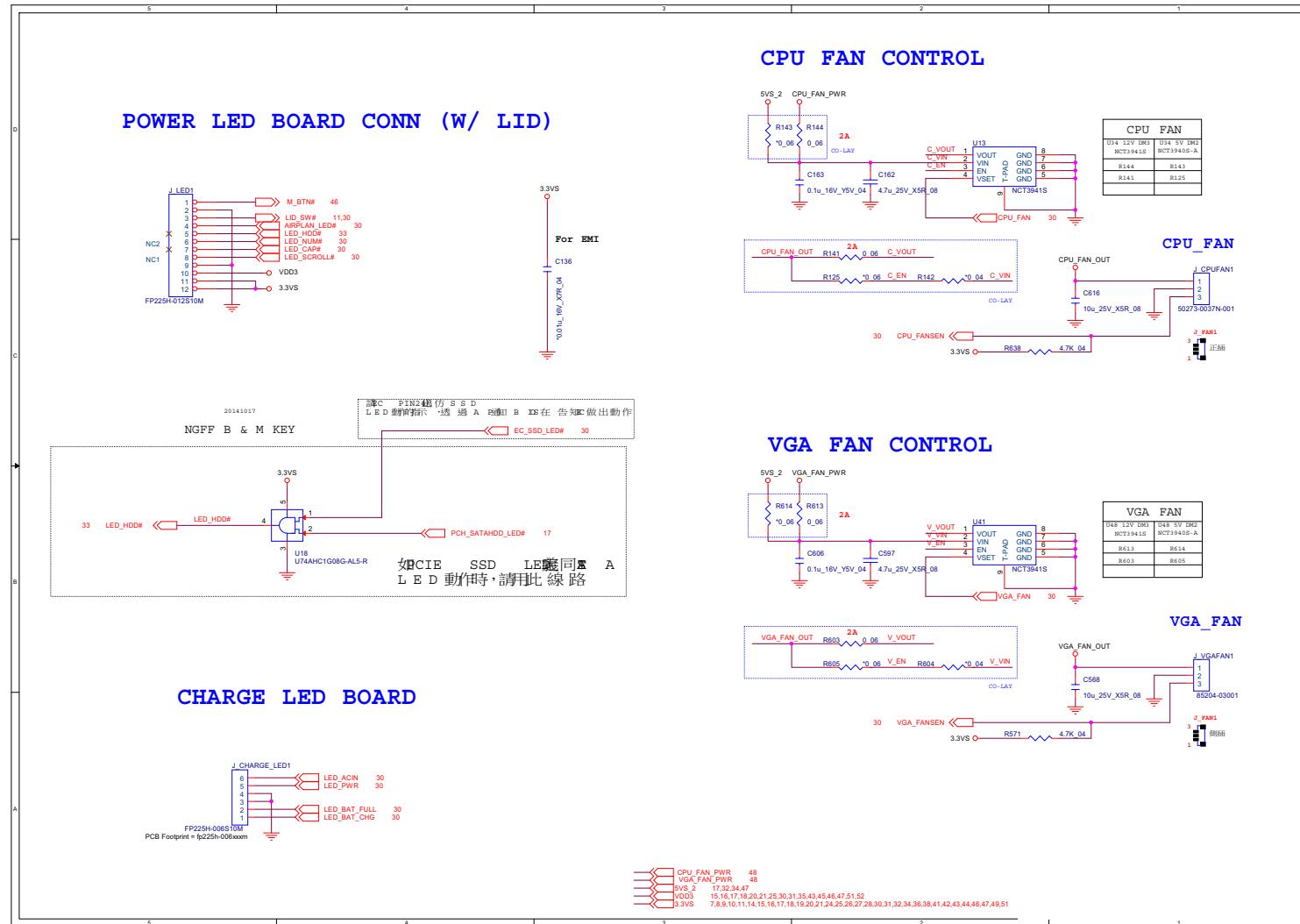


Sheet 32 of 70  
Backlight  
Keyboard

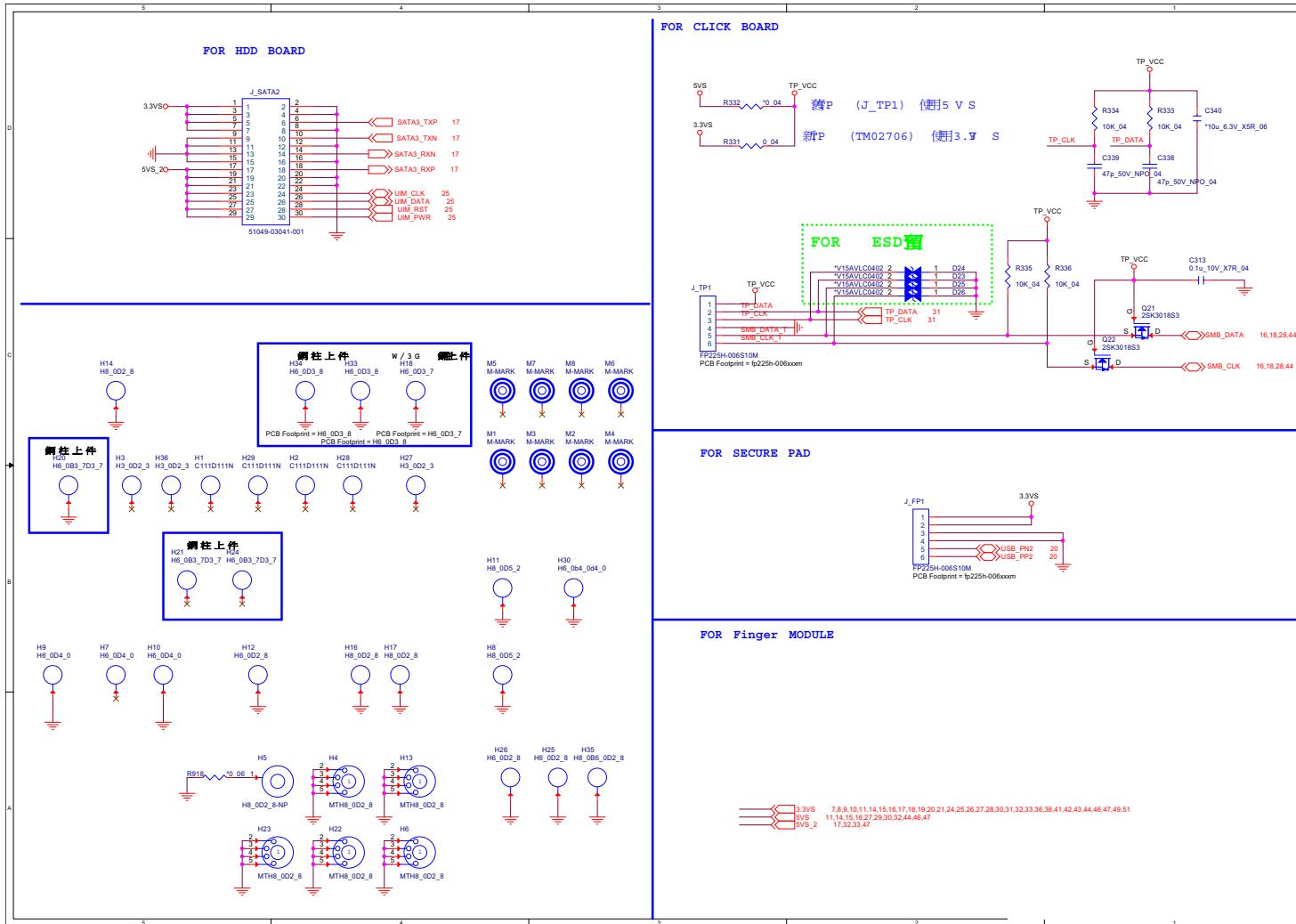
## Schematic Diagrams

### LID SW, Fan, LED Conn

Sheet 33 of 70  
LID SW, Fan,  
LED Conn



# Fan, TP, FP, Multi-Con



Sheet 34 of 70  
Fan, TP, FP, Multi-  
Con

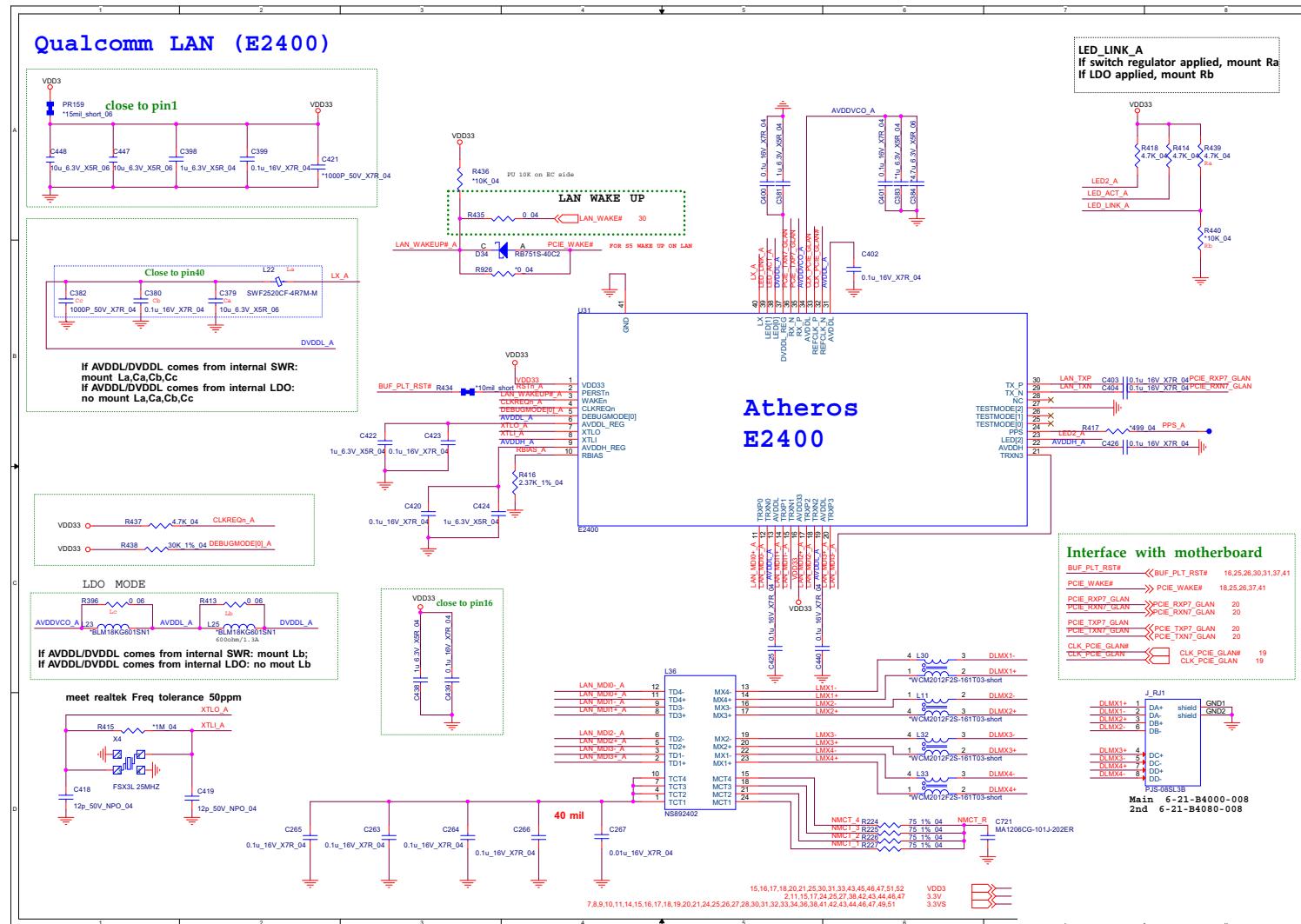
## B. Schematic Diagrams

## **Schematic Diagrams**

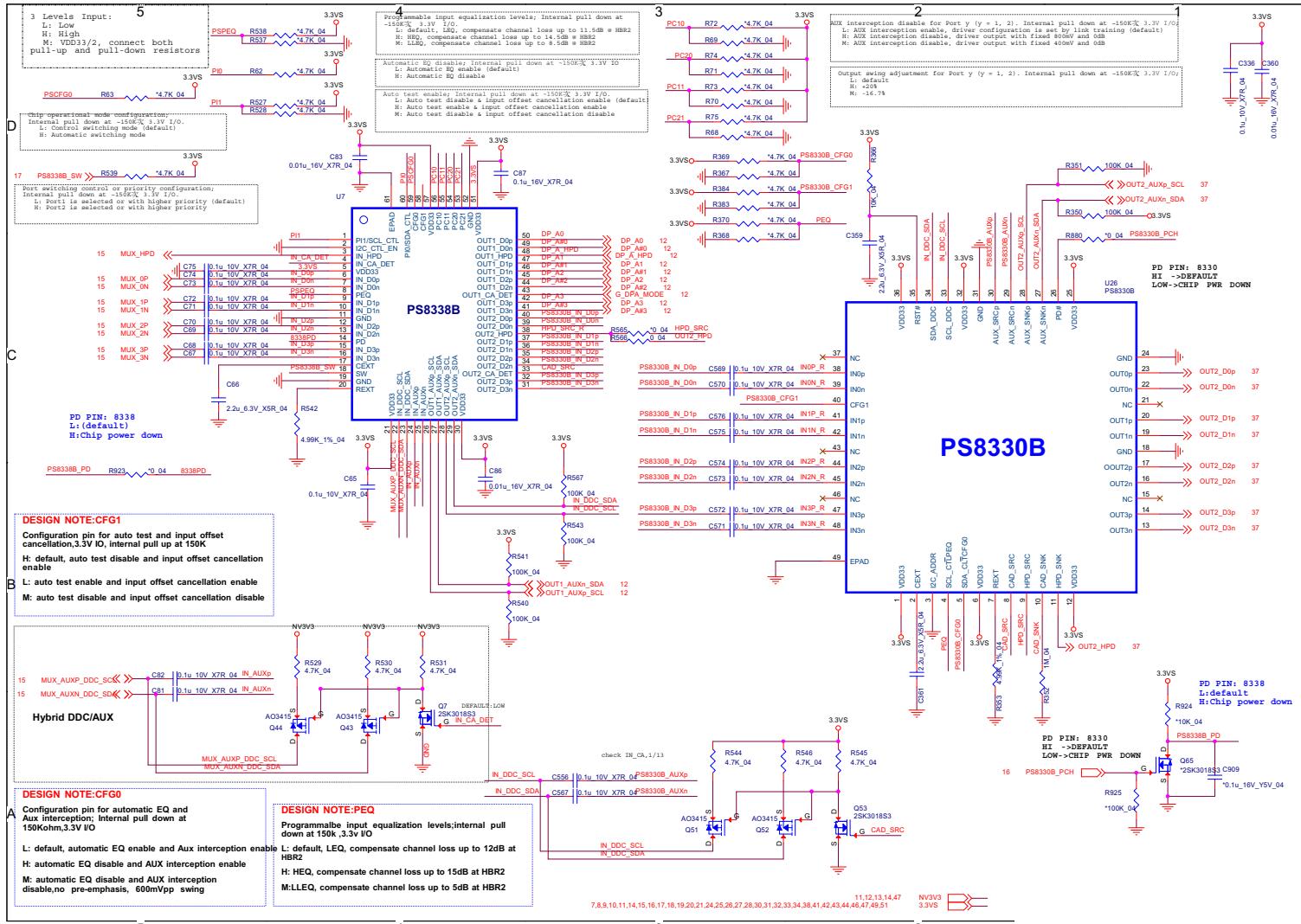
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LAN E2400

Sheet 35 of 70  
LAN E2400



## PS8338B + PS8330B



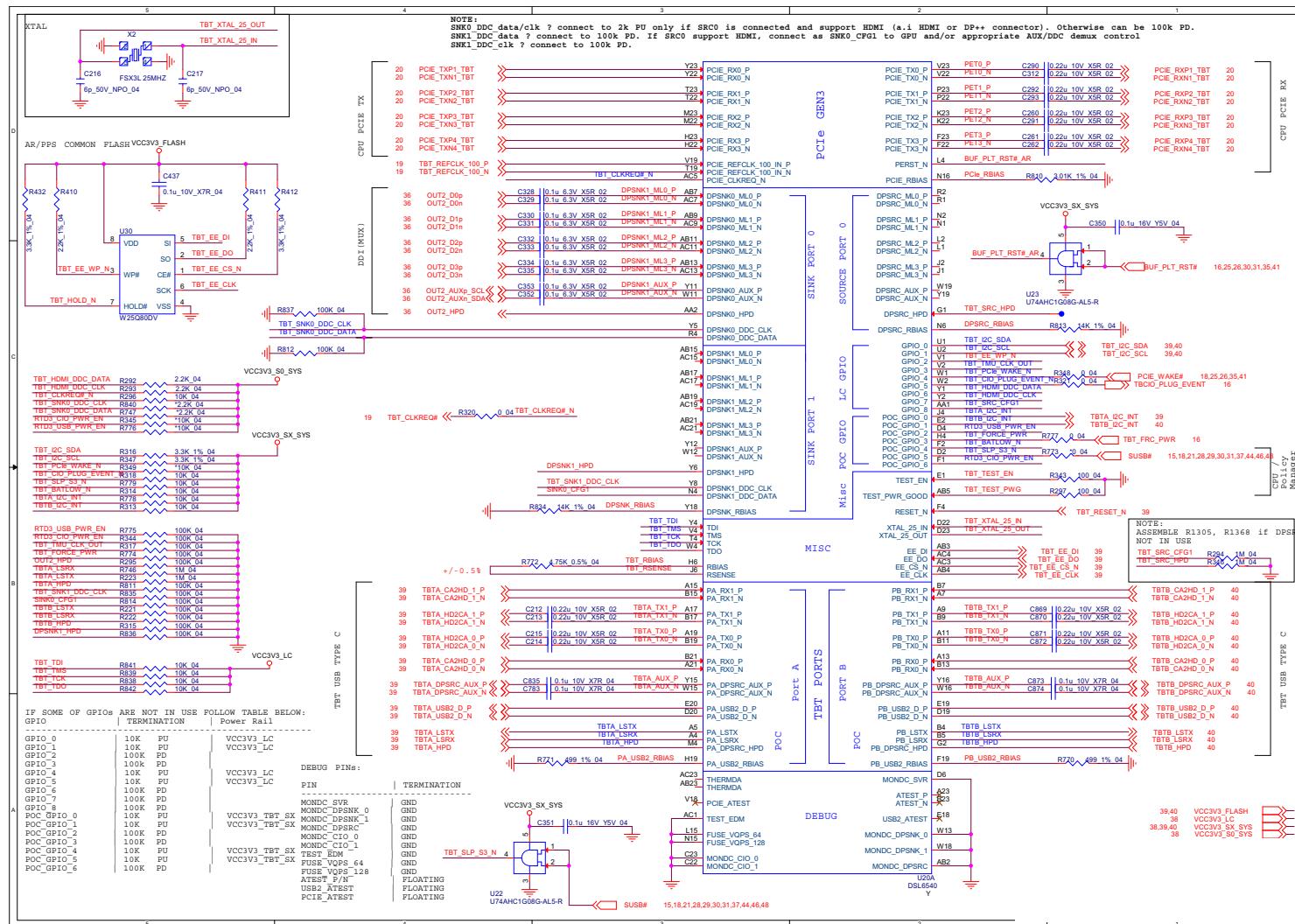
Sheet 36 of 70

## B.Schematic Diagrams

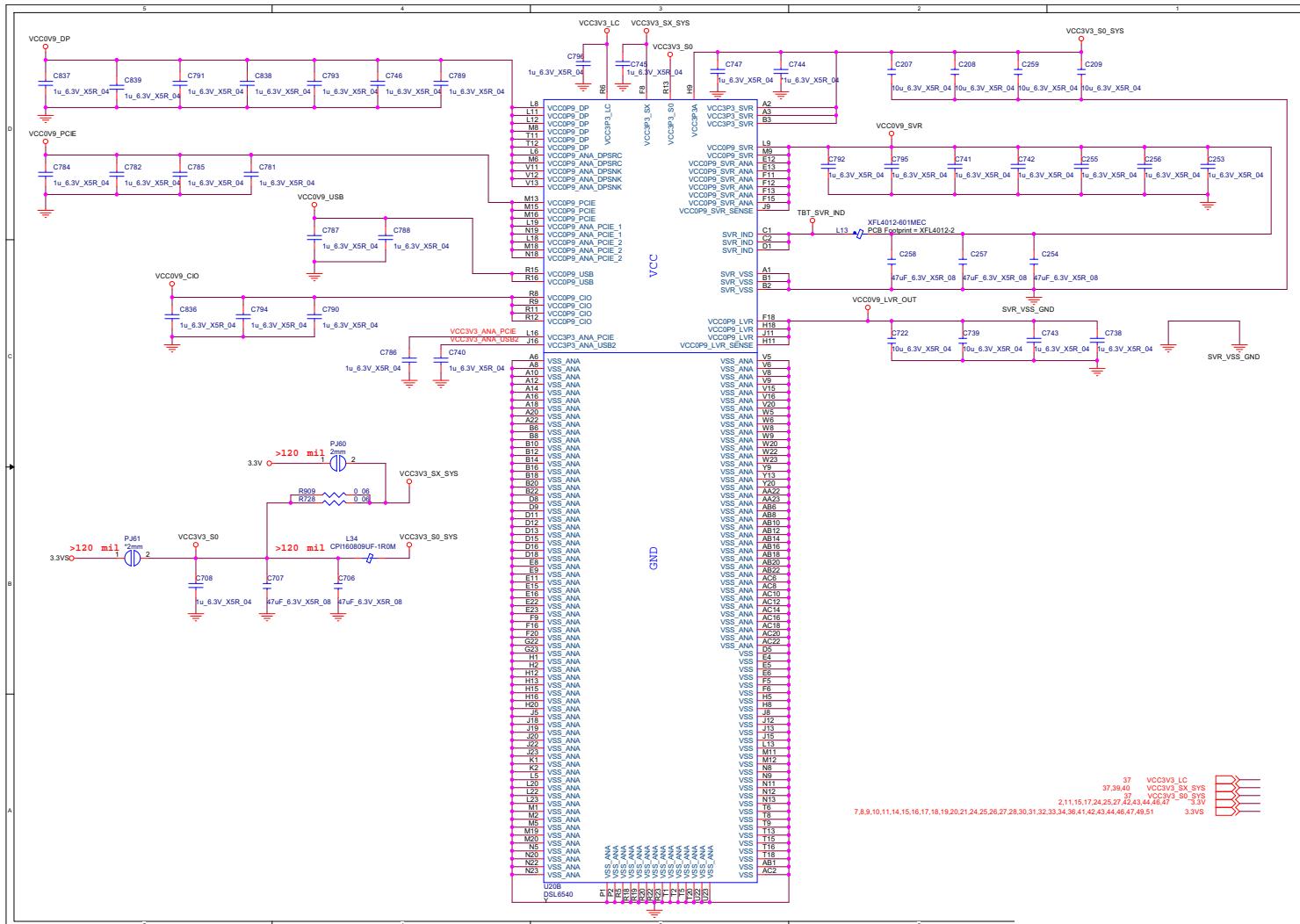
## Schematic Diagrams

TBT

**Sheet 37 of 70**  
**TBT**



# Power

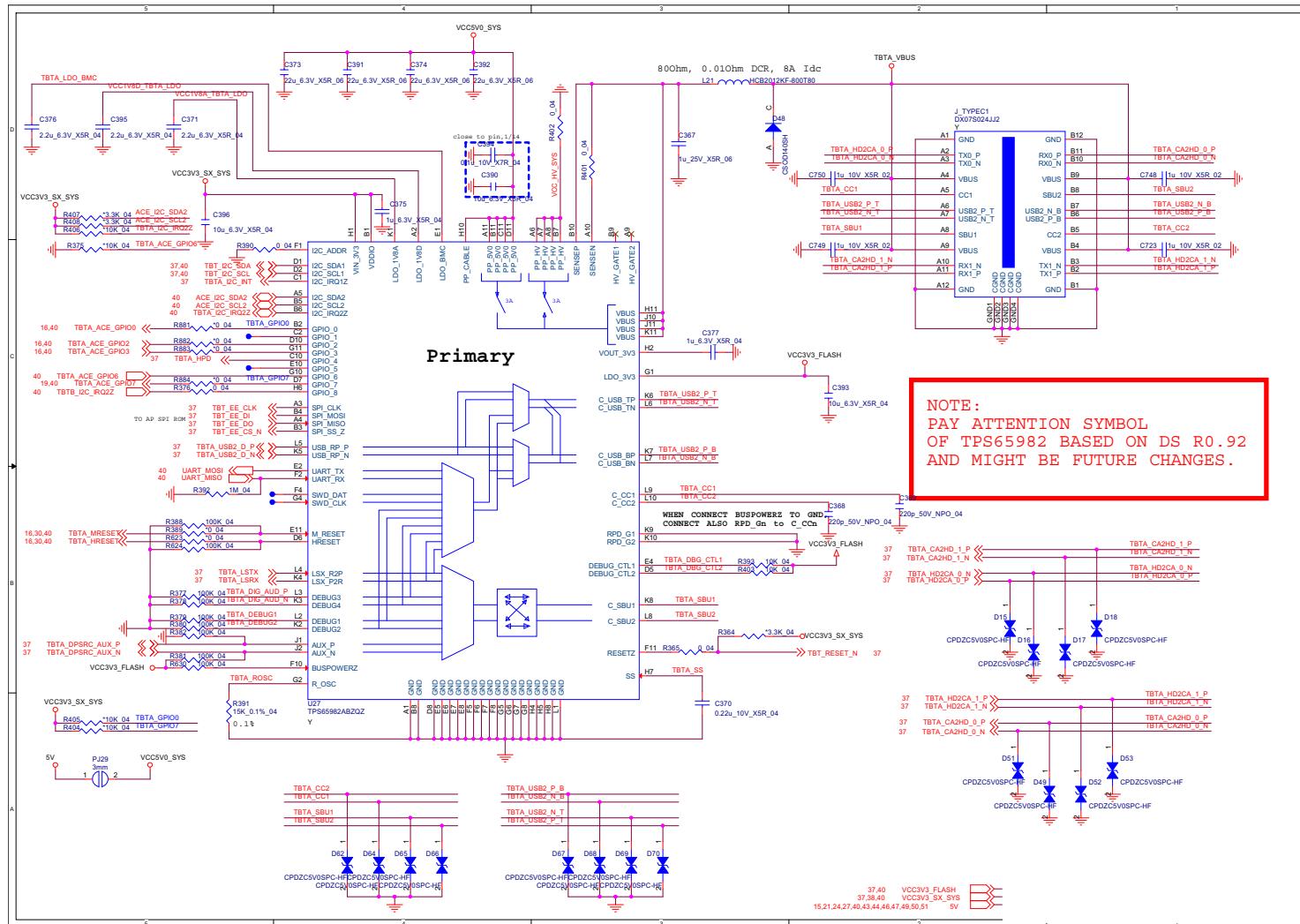


Sheet 38 of 70  
Power

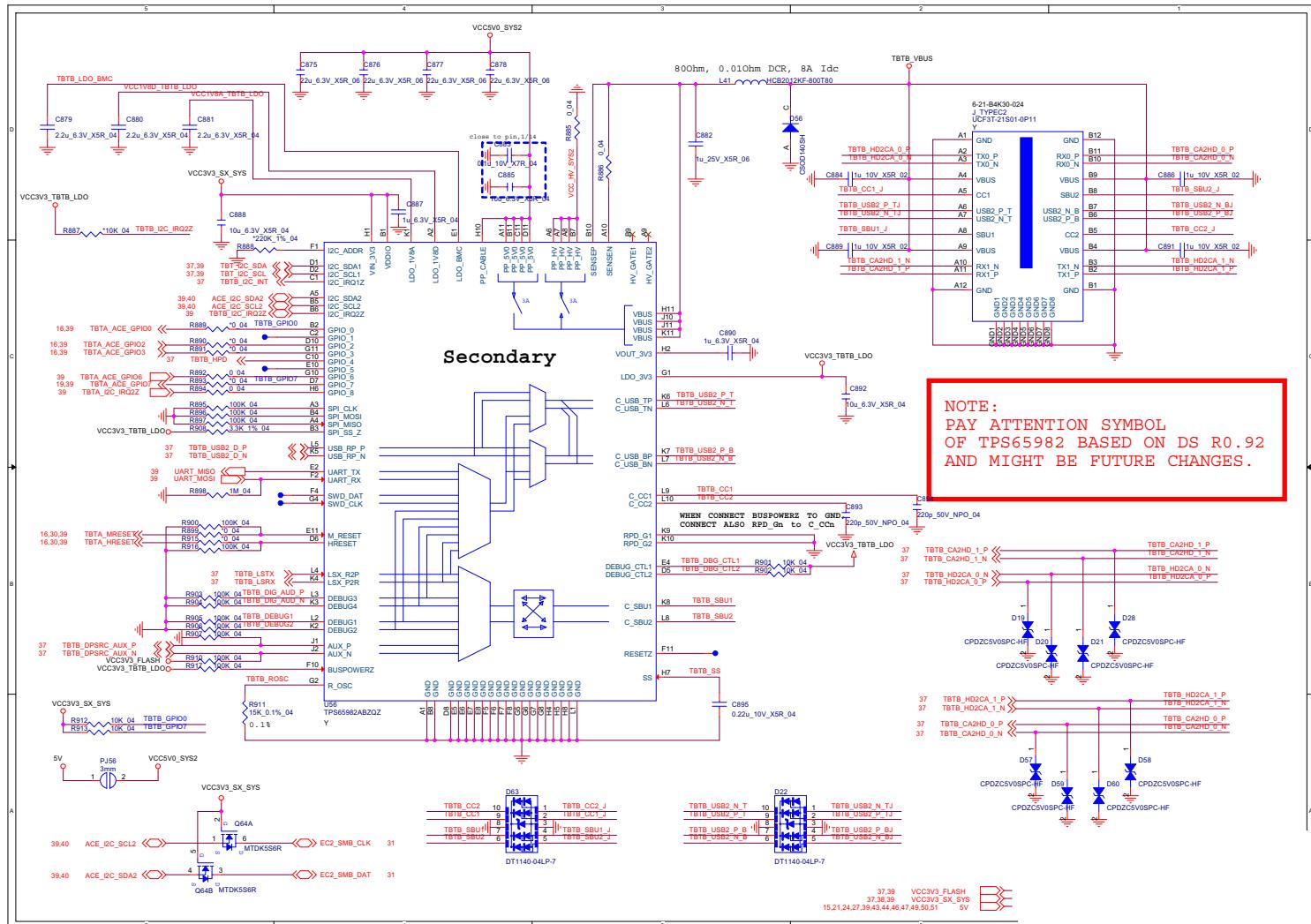
## Schematic Diagrams

### TPS65982

Sheet 39 of 70  
TPS65982



**TPS65982**



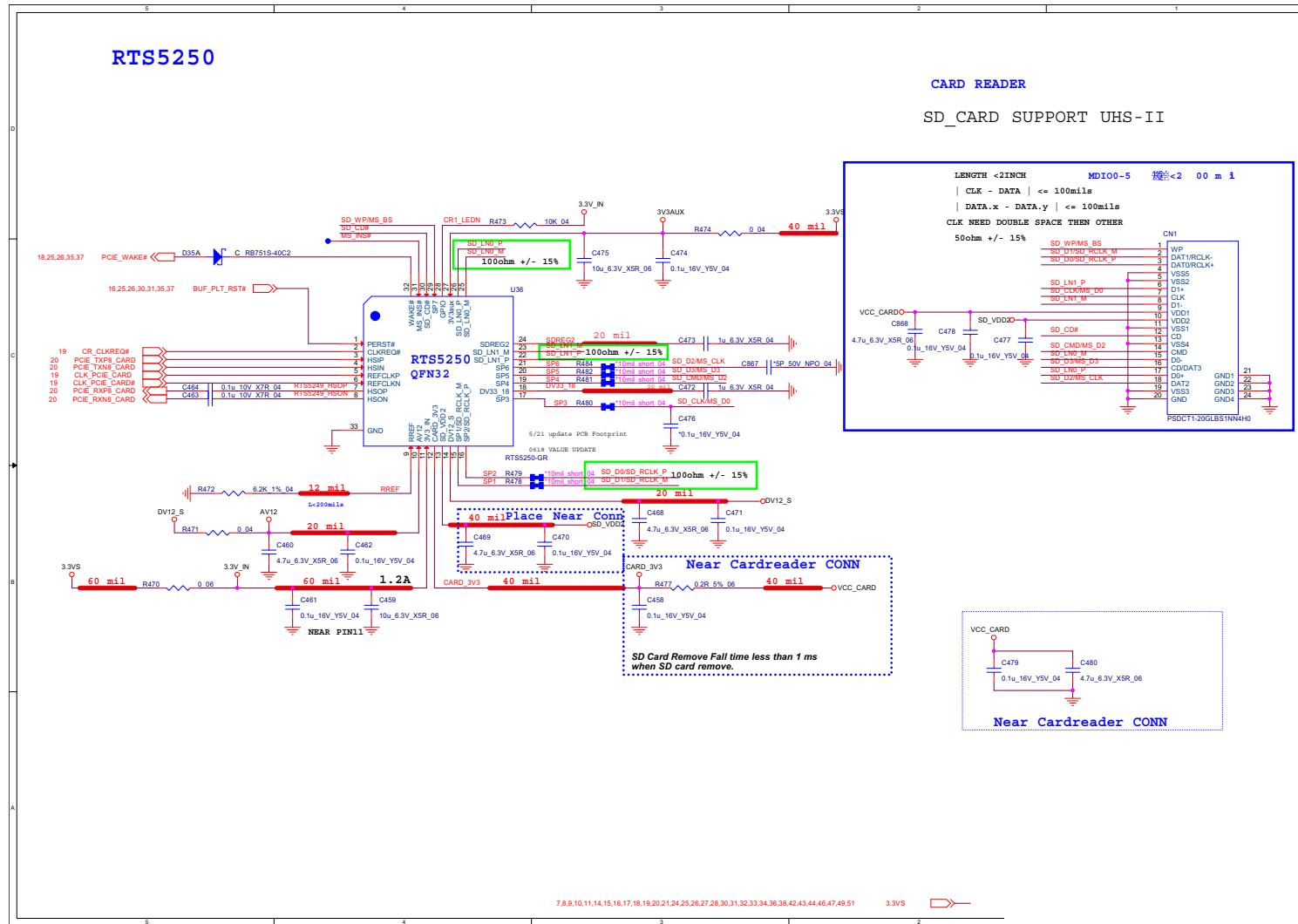
Sheet 40 of 70  
TPS65982

## **Schematic Diagrams**

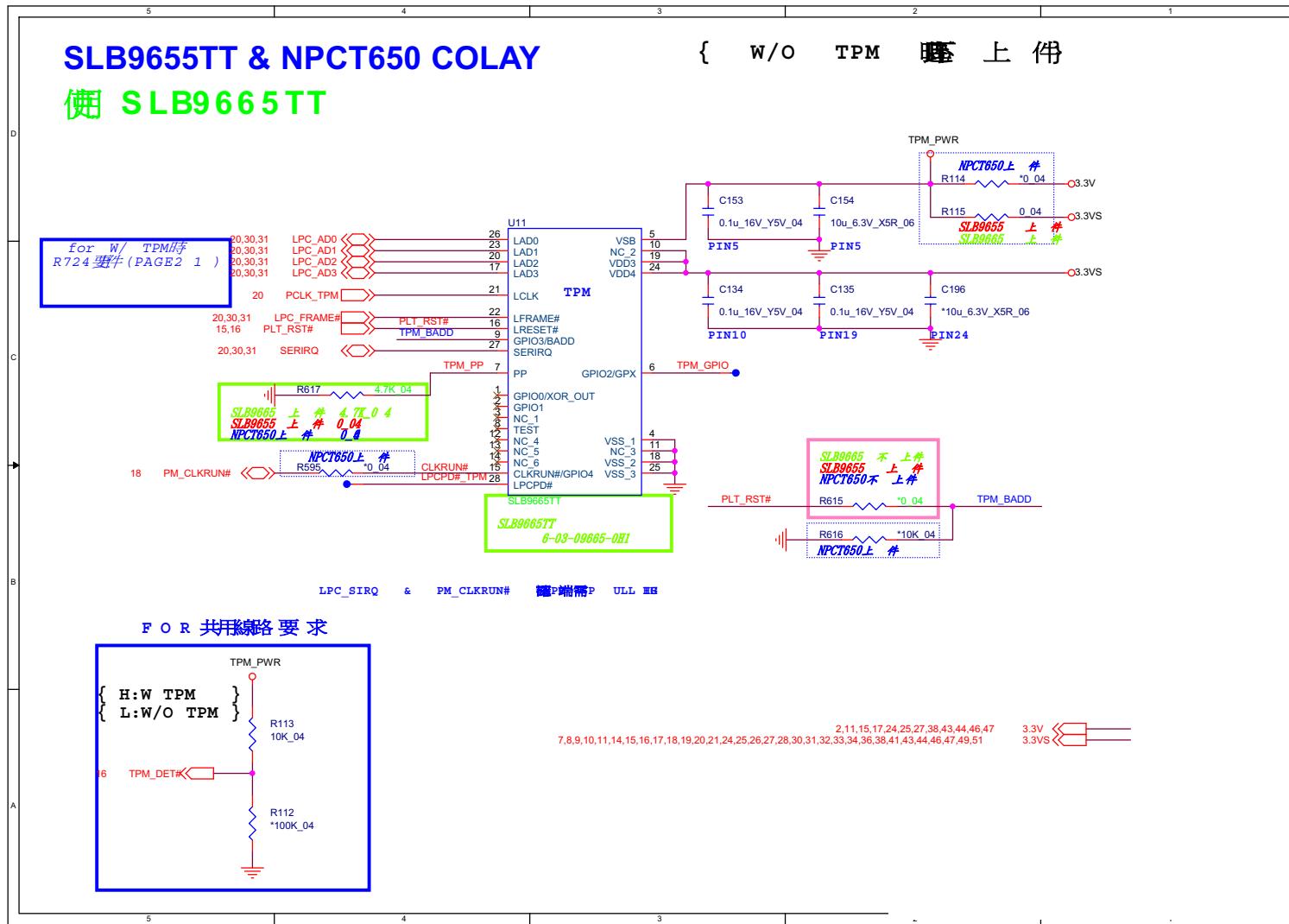
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# Cardreader RTS5250

**Sheet 41 of 70**  
**Cardreader**  
**RTS5250**



## TPM SLB9655TT &amp; NPCT420

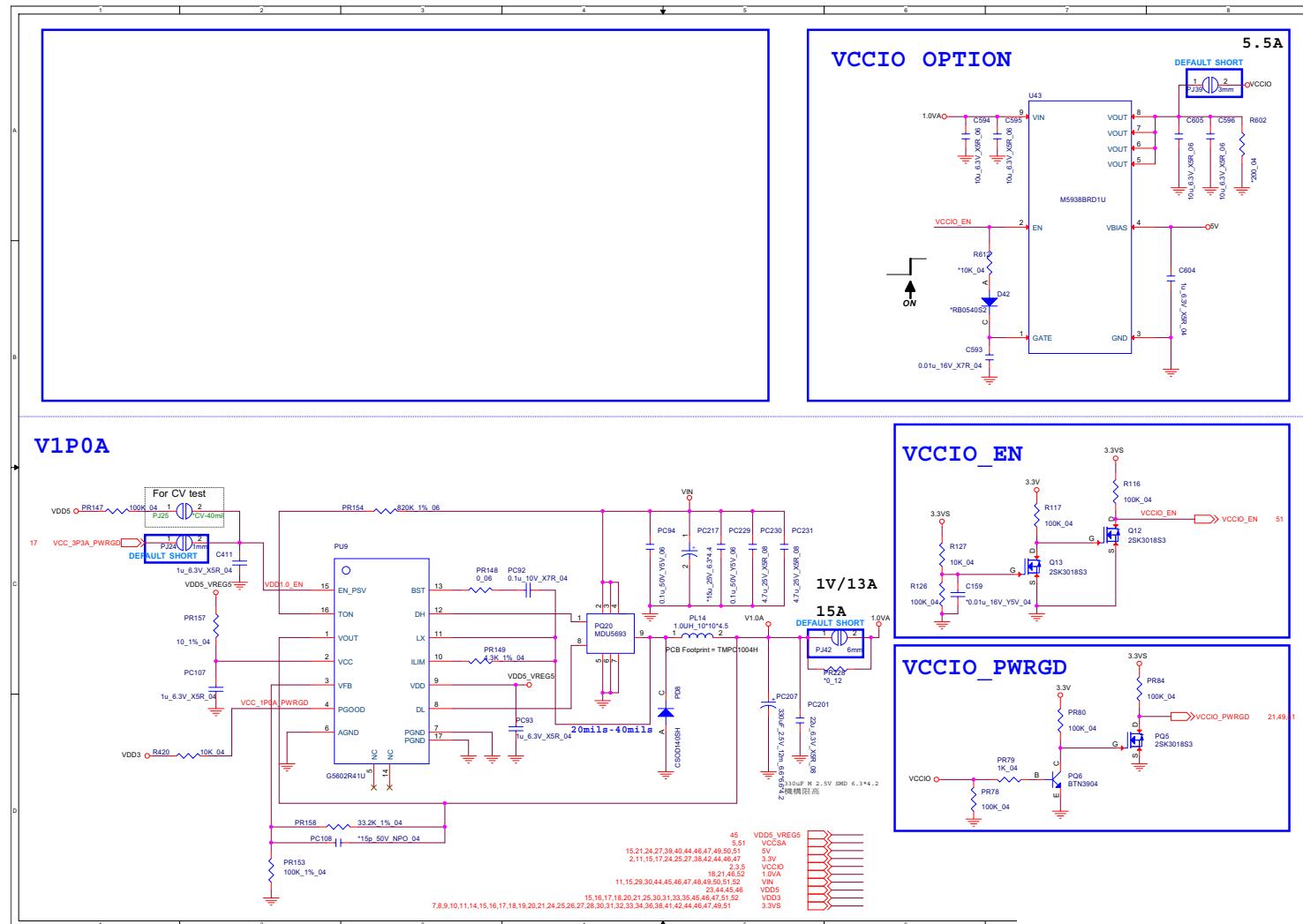


Sheet 42 of 70  
TPM SLB9655TT &  
NPCT420

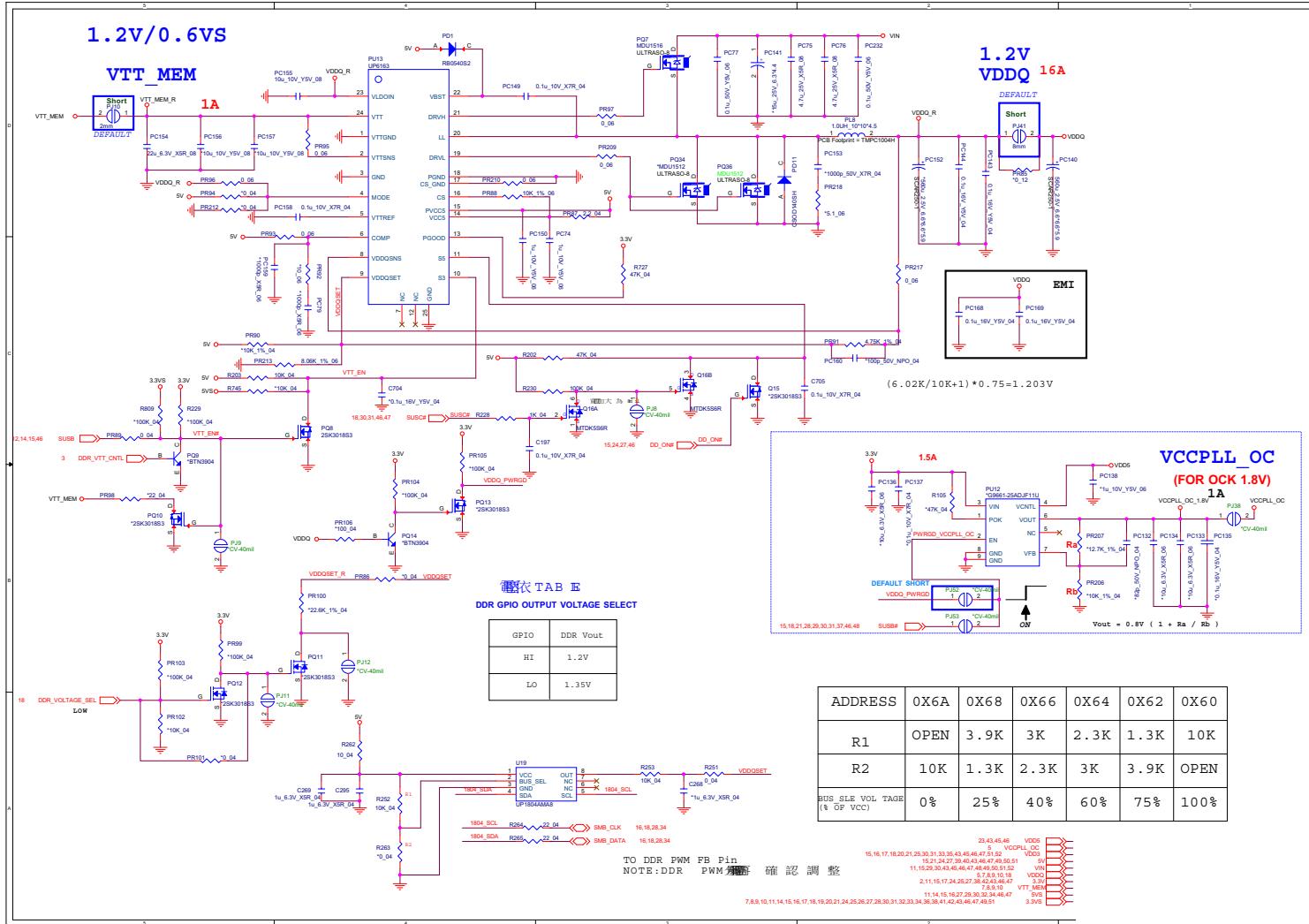
## Schematic Diagrams

VCCIO / 1P0A

Sheet 43 of 70  
VCCIO / 1P0A



# DDR 1.2V/0.6VS/VCCPLL\_OC

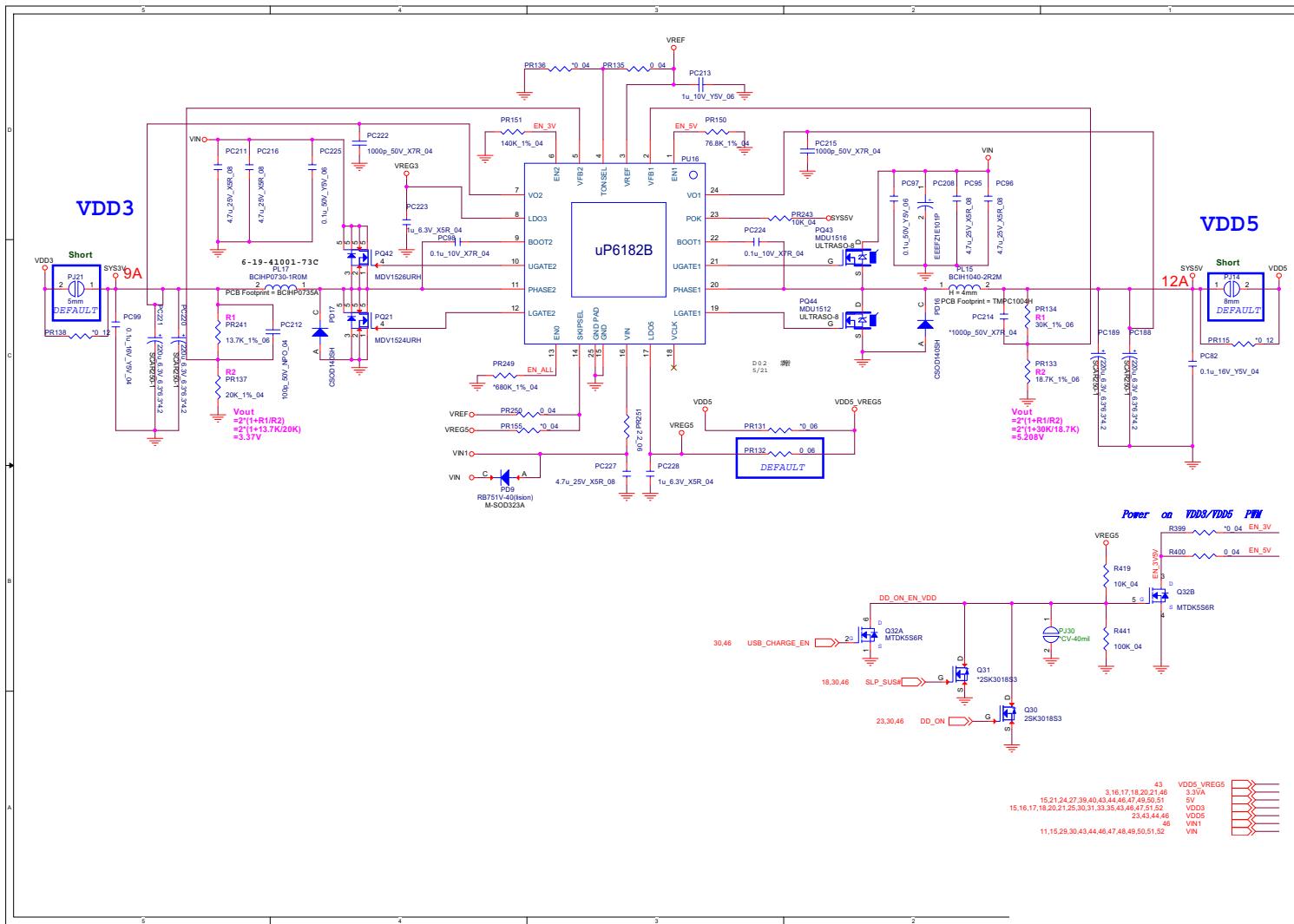


## B.Schematic Diagrams

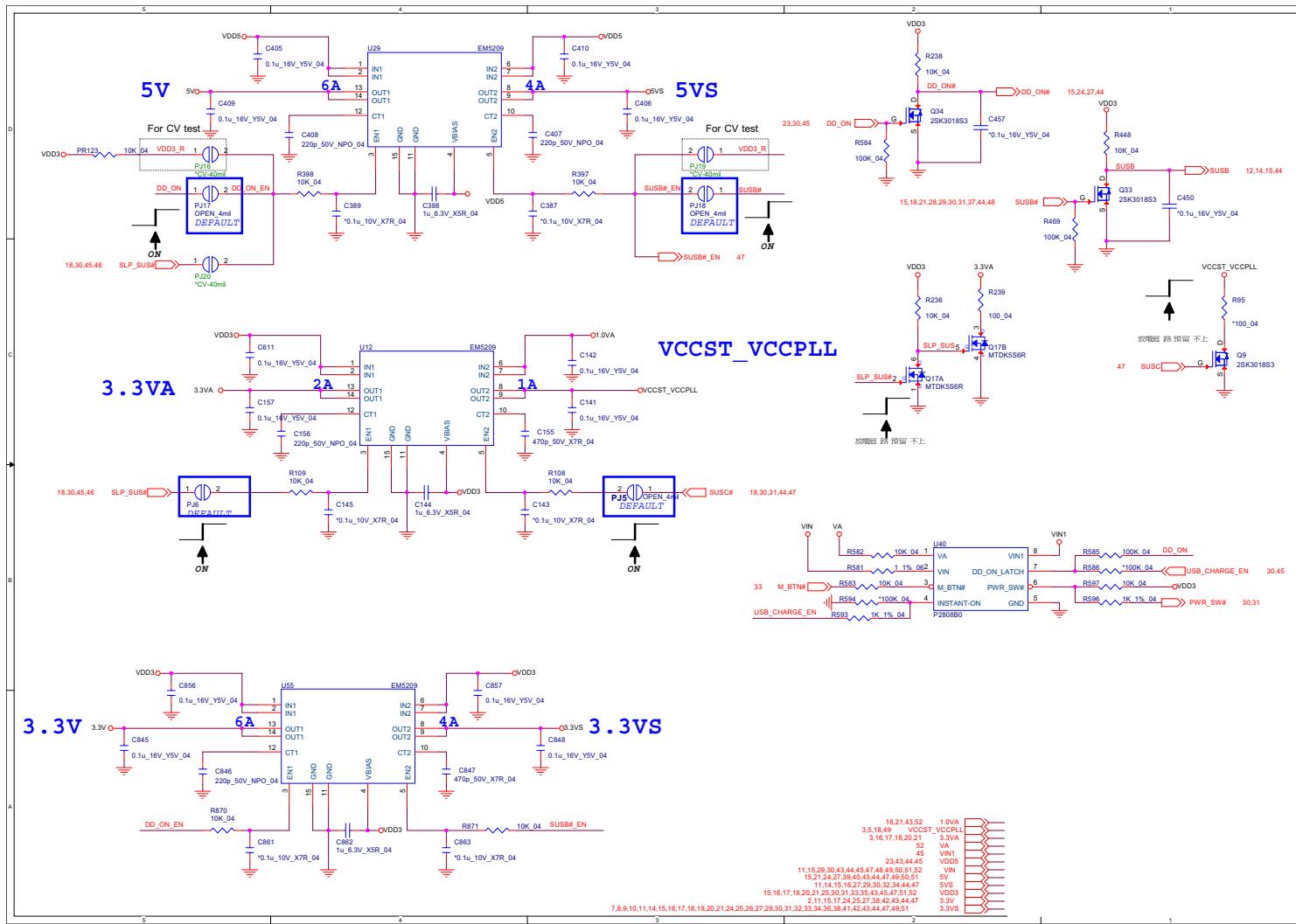
### Schematic Diagrams

#### VDD3, VDD5

Sheet 45 of 70  
VDD3, VDD5



### 5V/5VS, 3V/3.3VS, 3.3VA



Sheet 46 of 70  
5V/5VS, 3V/3.3VS,  
3.3VA

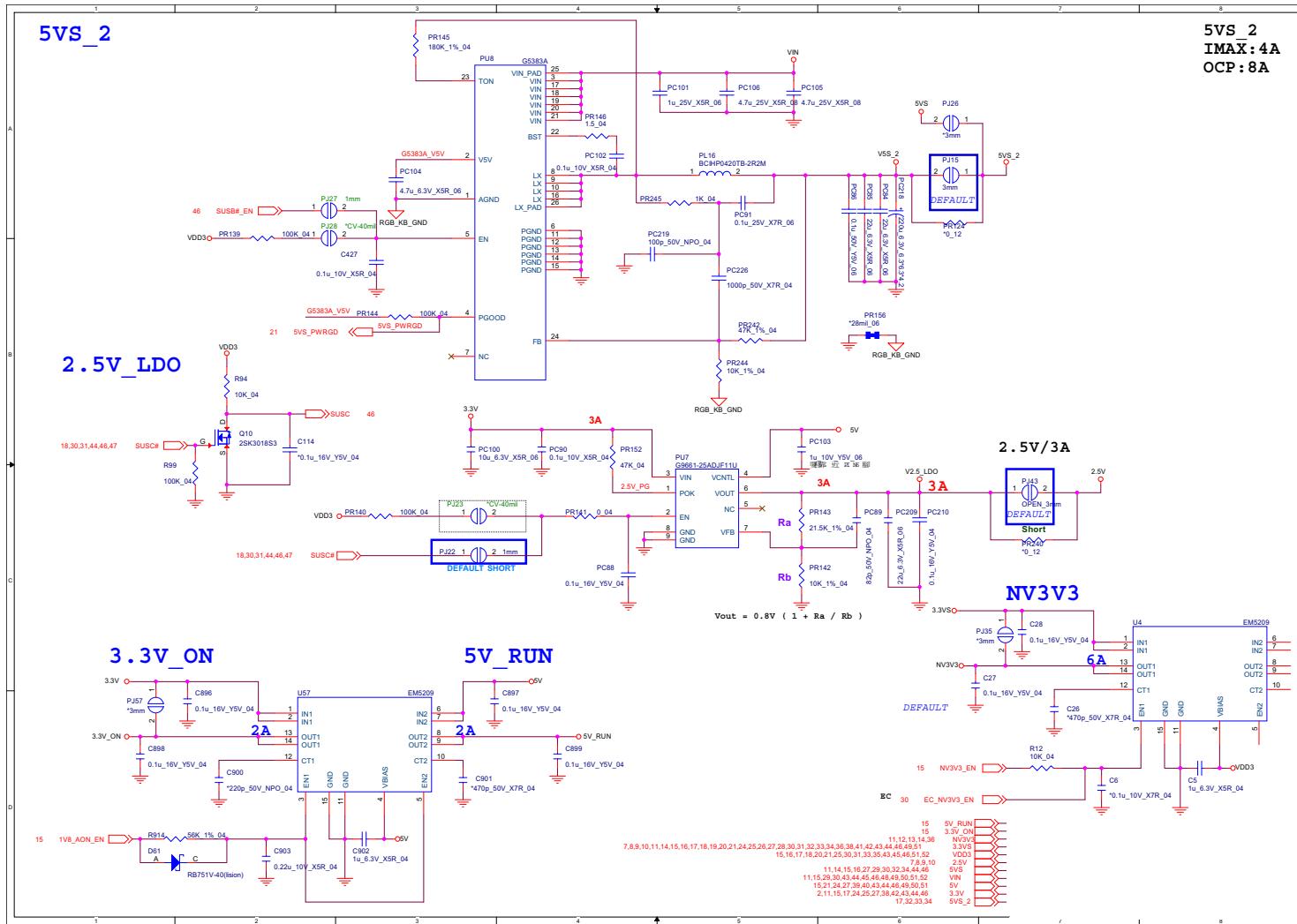
## B. Schematic Diagrams

## **Schematic Diagrams**

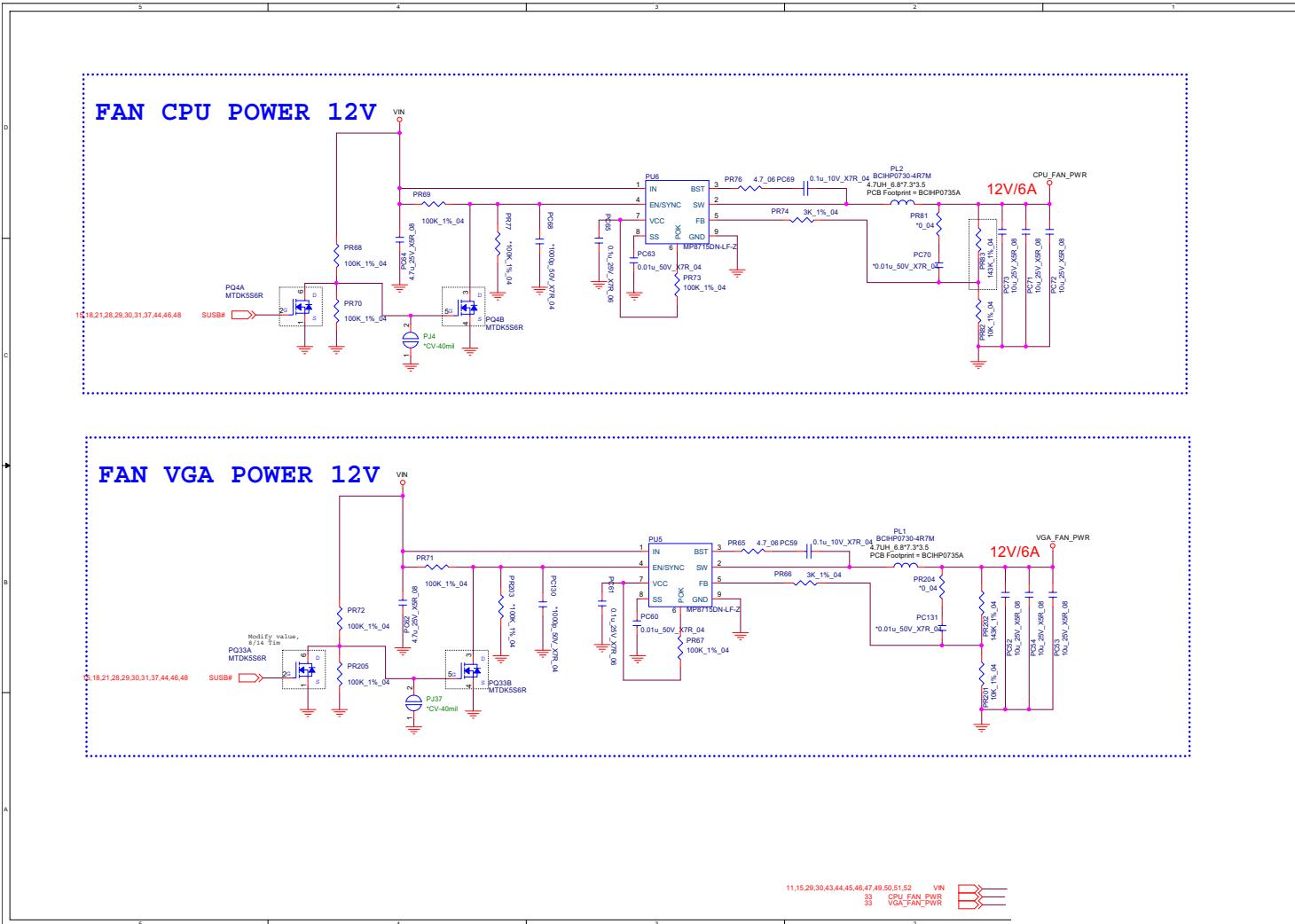
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5VS\_2

Sheet 47 of 70  
5VS\_2



# Fan CPU, VGA Power

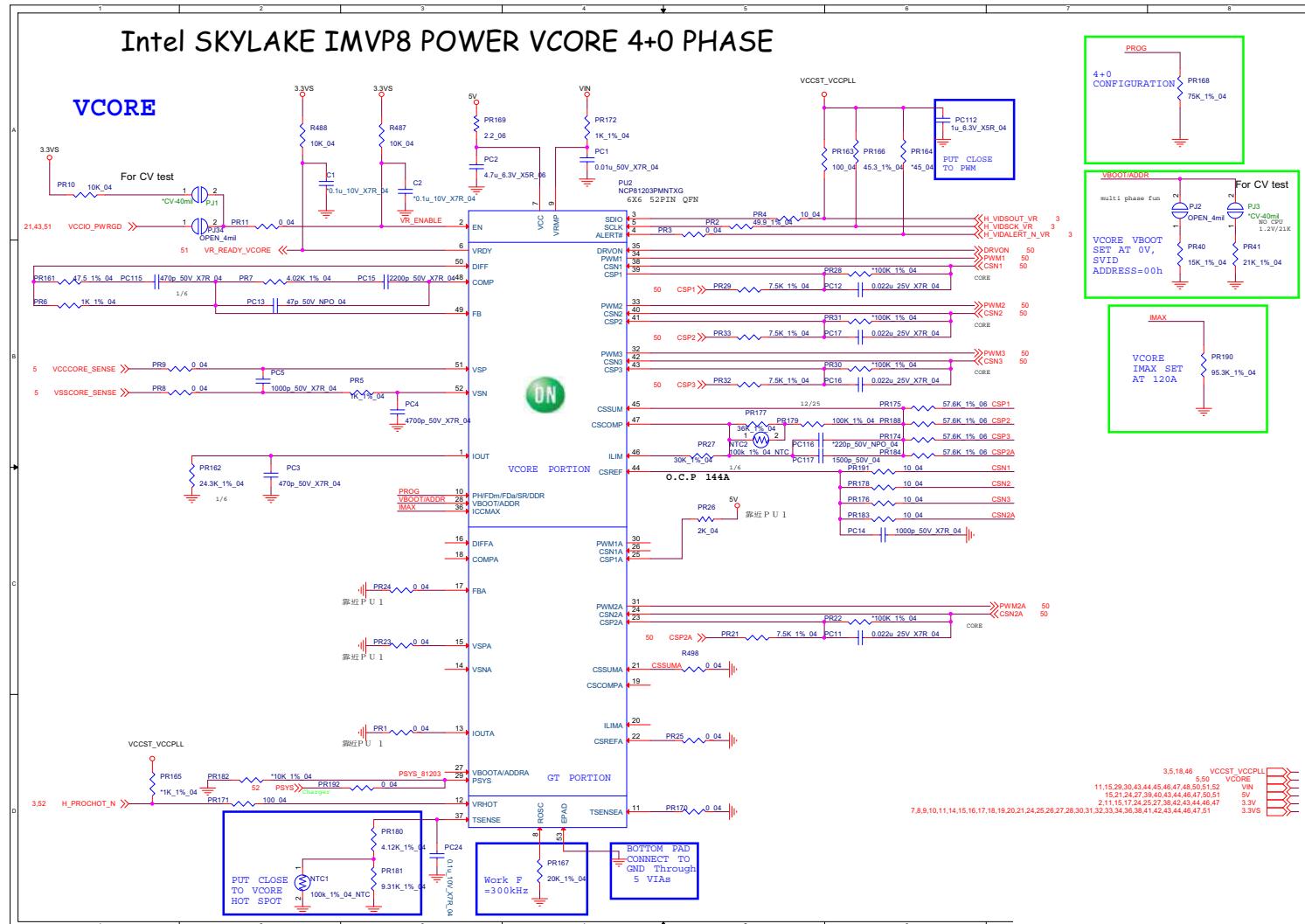


Sheet 48 of 70  
Fan CPU, VGA  
Power

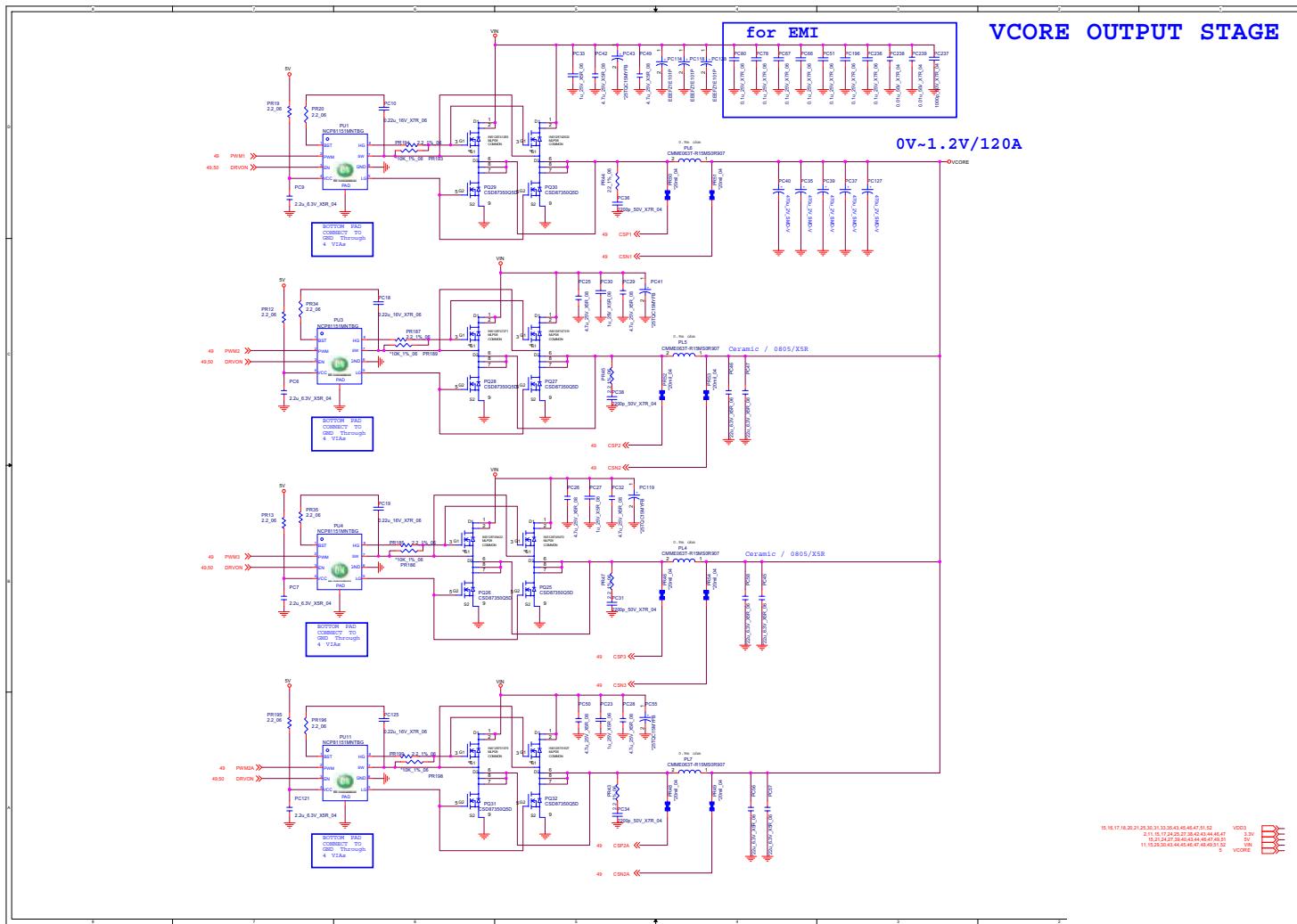
## Schematic Diagrams

### VCore

Sheet 49 of 70  
VCore



# VCore Output Stage



# Sheet 50 of 70

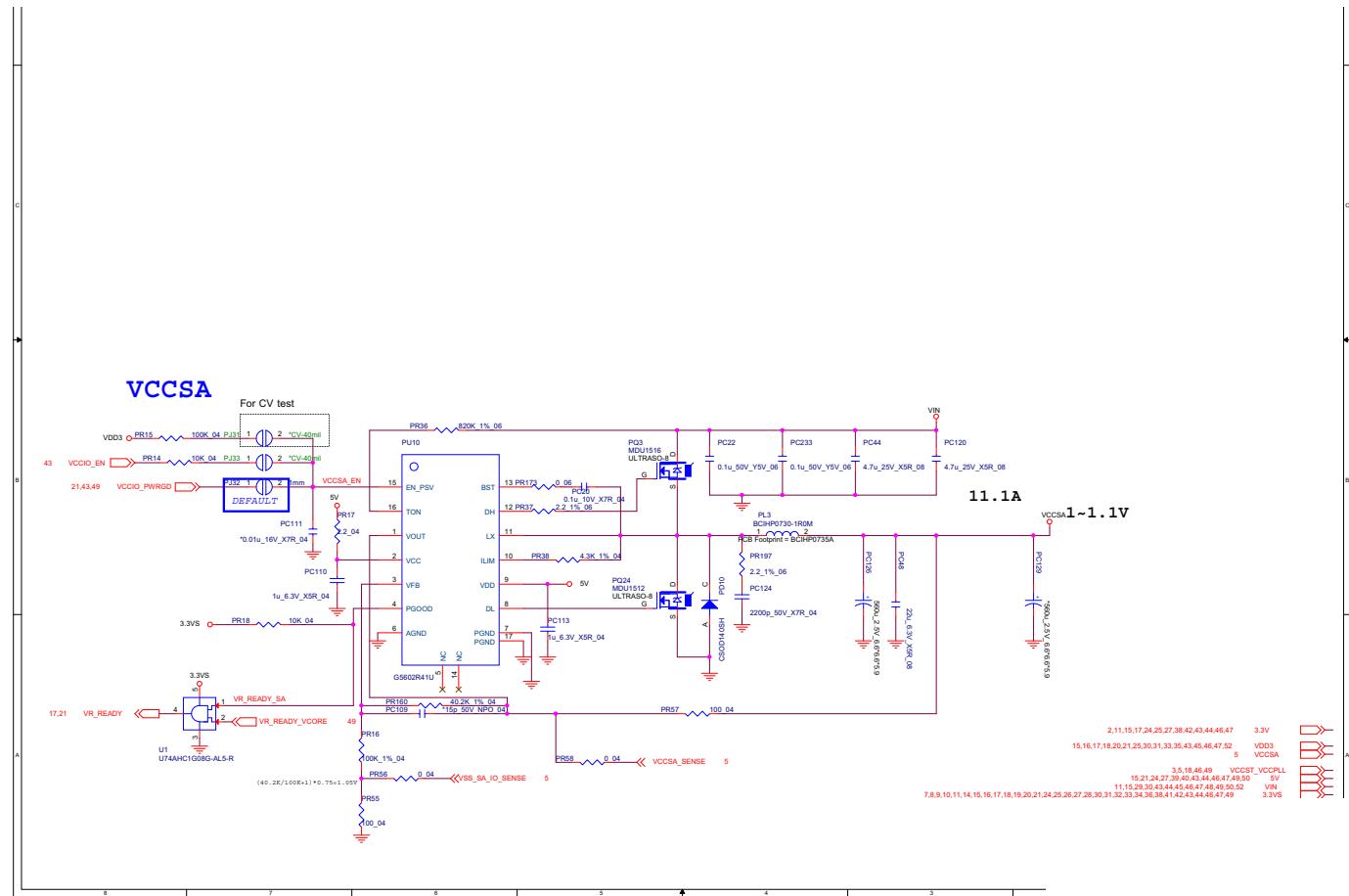
## VCore Output Stage

## **Schematic Diagrams**

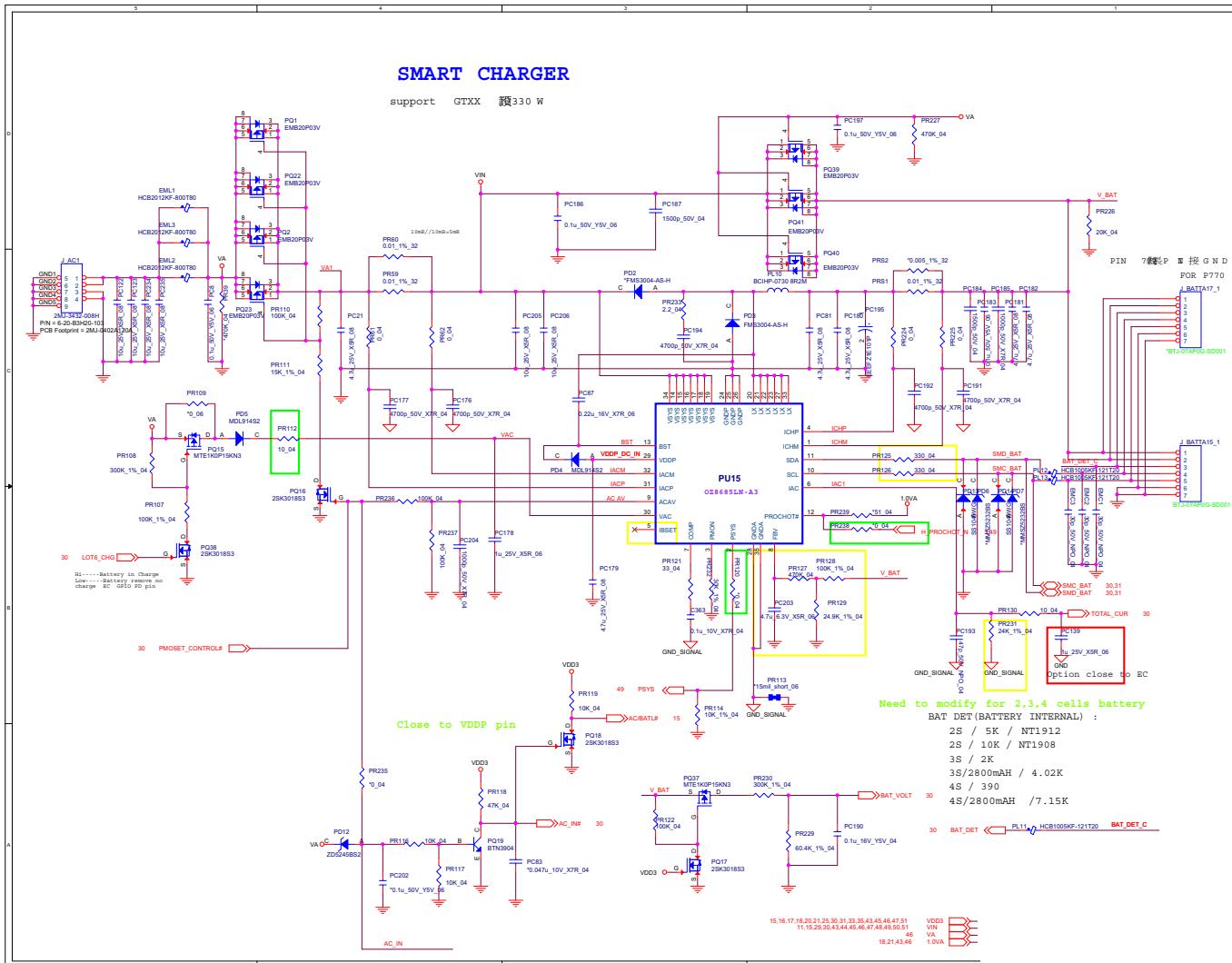
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# VCCSA / VCCGT

Sheet 51 of 70  
VCCSA / VCCGT



# Power Charger, DC-In

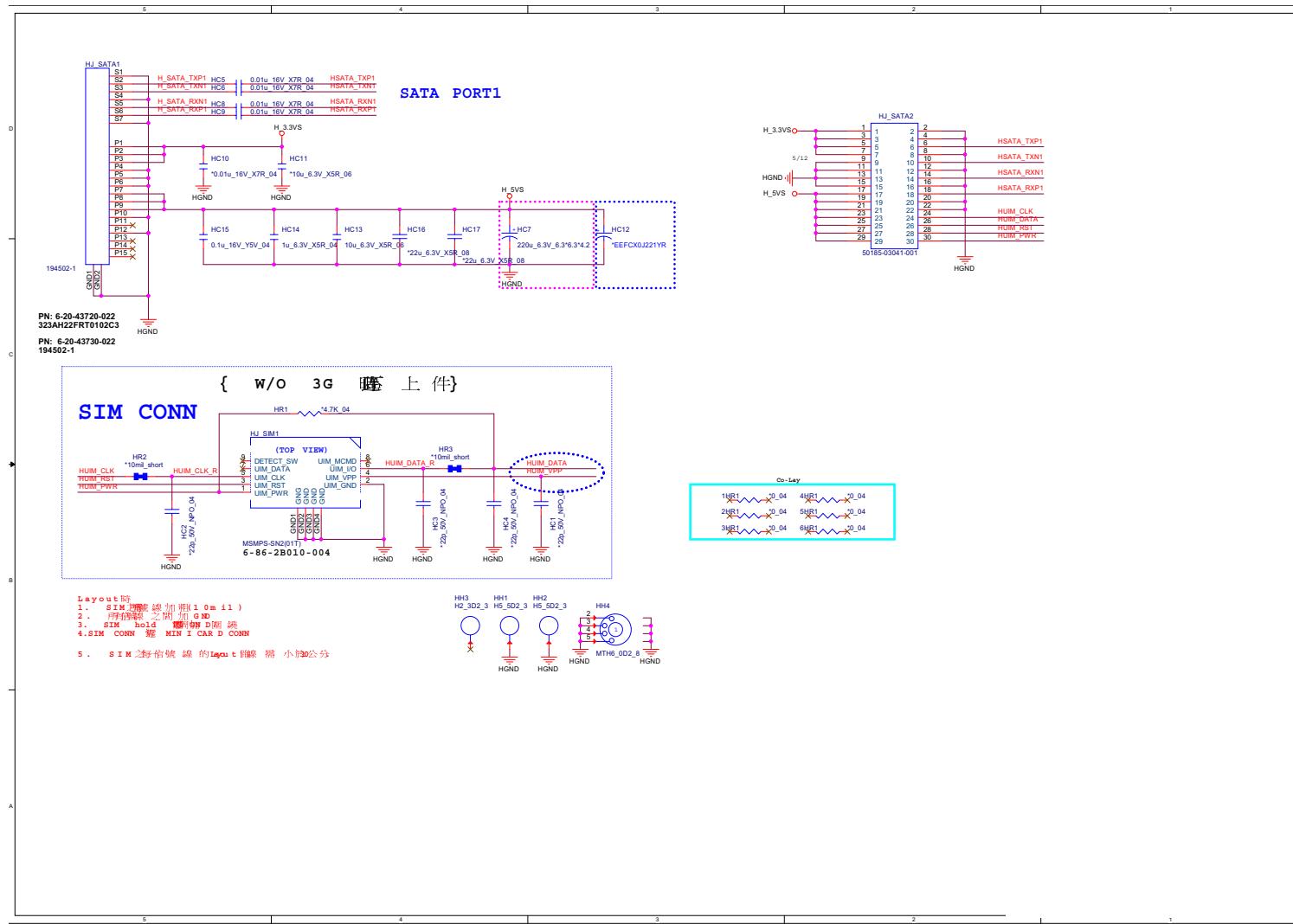


Sheet 52 of 70  
Power Charger,  
DC-In

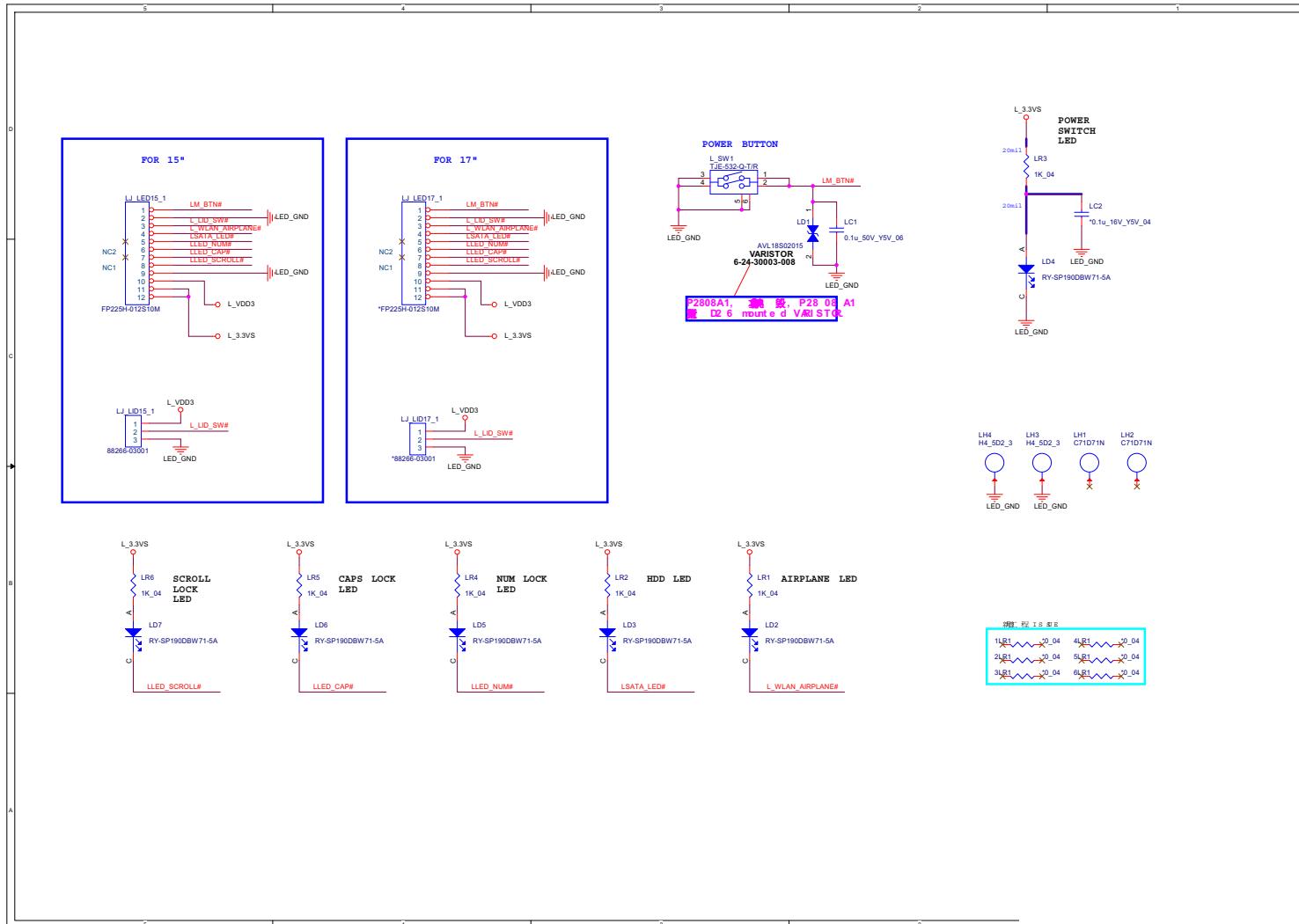
## Schematic Diagrams

### P750DM HDD Board

Sheet 53 of 70  
P750DM HDD  
Board



# P750DM Power LED Board

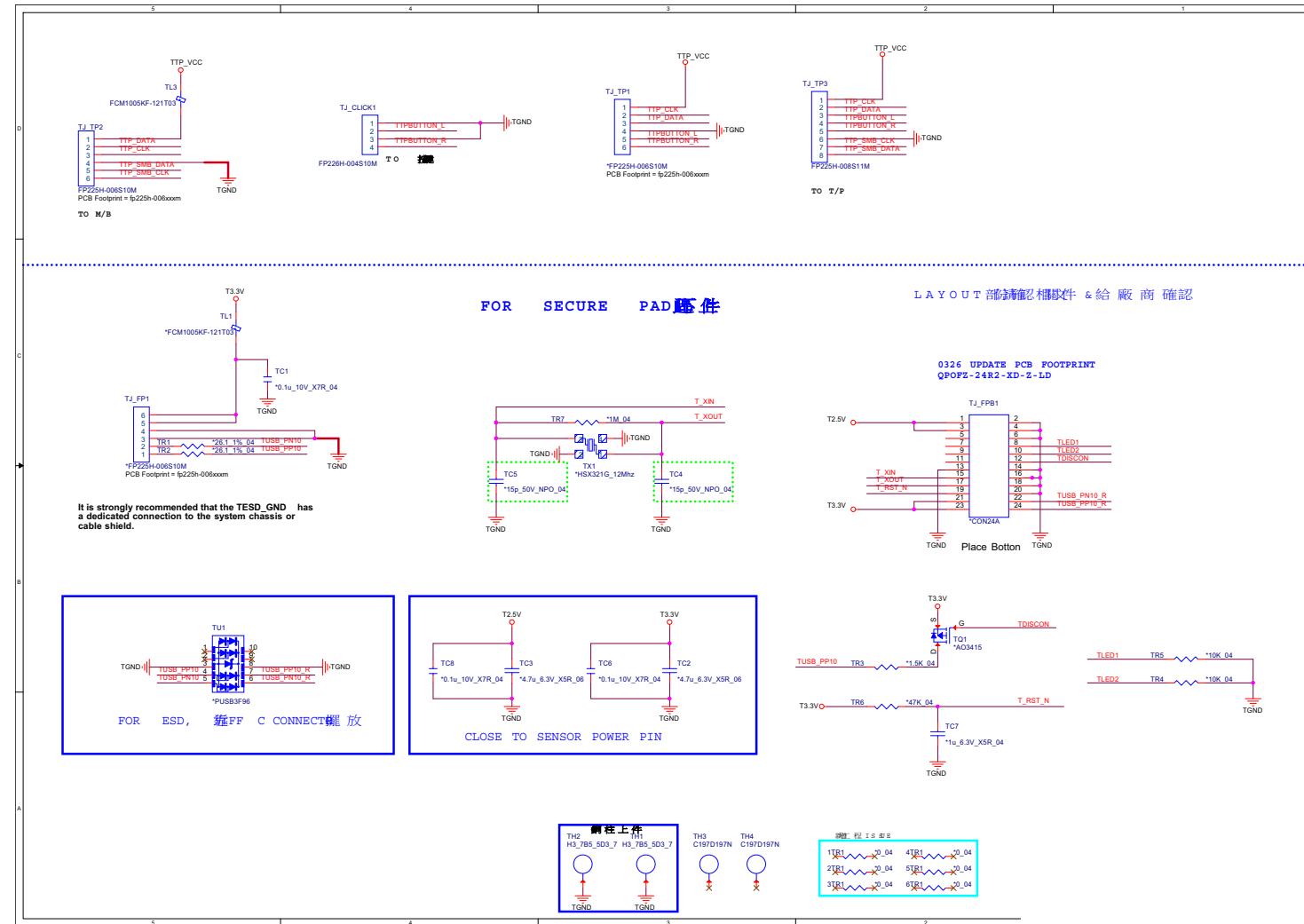


Sheet 54 of 70  
P750DM Power  
LED Board

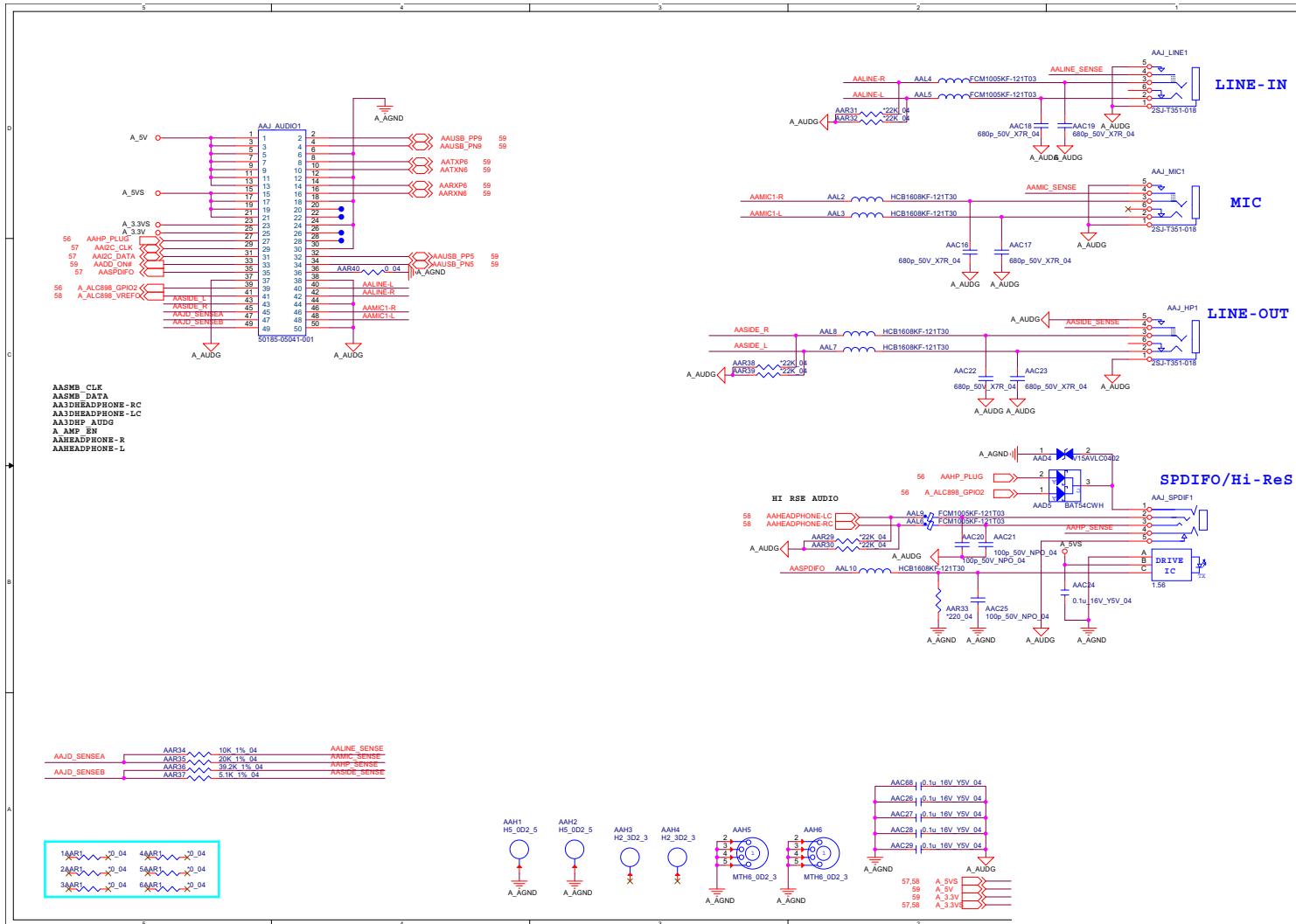
## Schematic Diagrams

### P750DM Click Board

**Sheet 55 of 70**  
**P750DM Click**  
**Board**



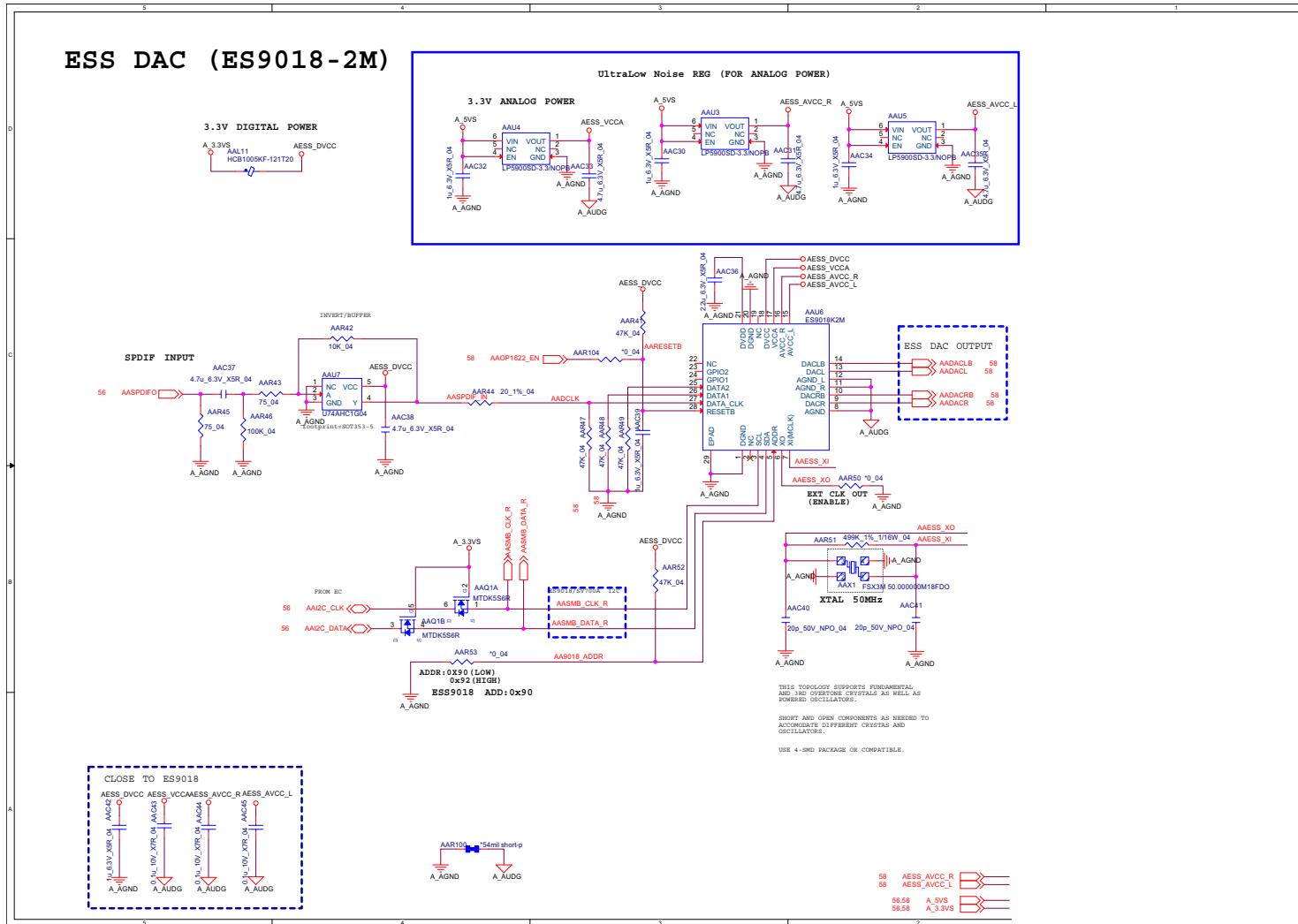
# P750DM Audio Board



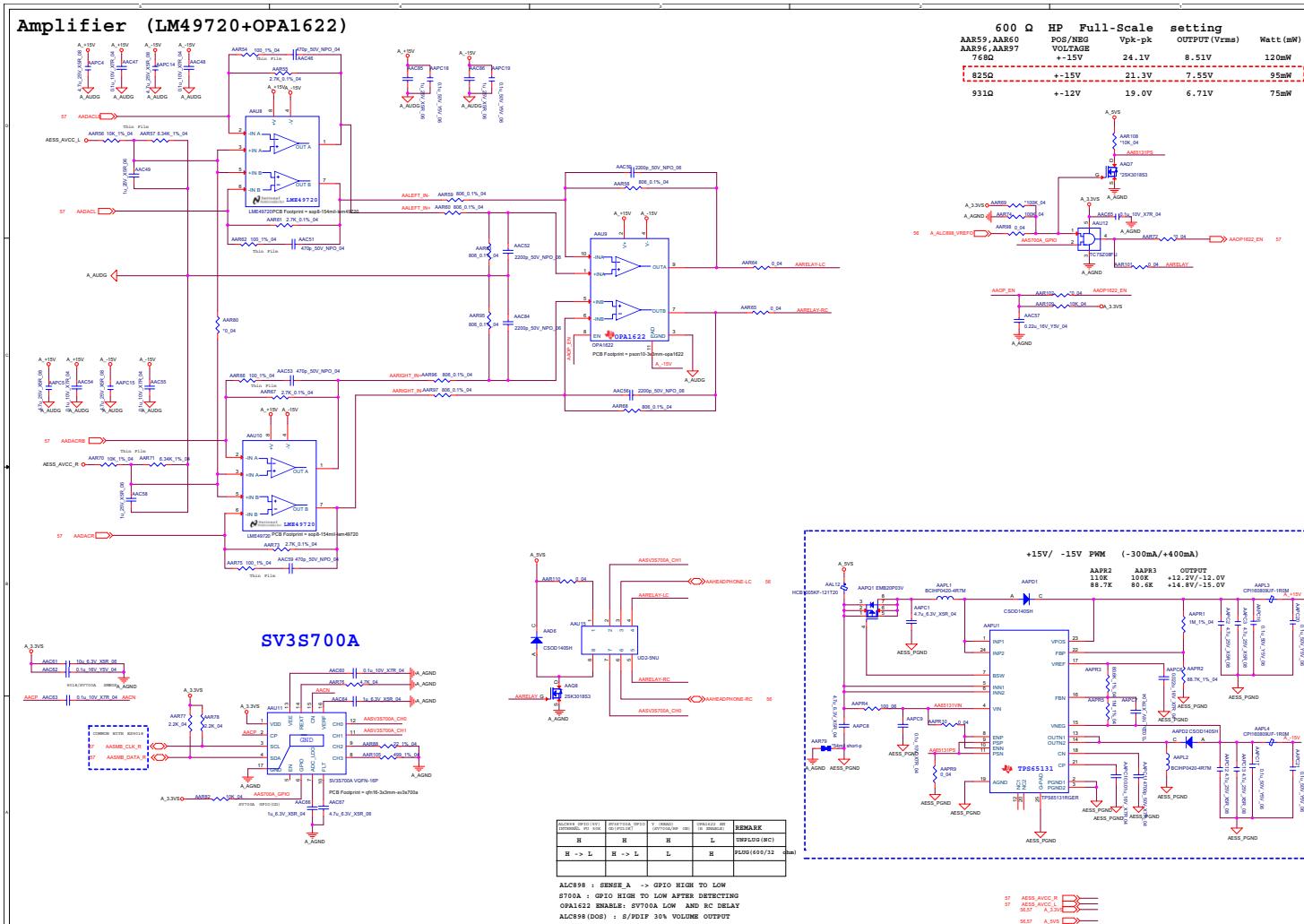
**Sheet 56 of 70  
P750DM Audio  
Board**

## Schematic Diagrams

# P750DM Audio ESS DAC



# P750DM Audio HP AMP



Sheet 58 of 70  
P750DM Audio HP  
AMP

## B. Schematic Diagrams

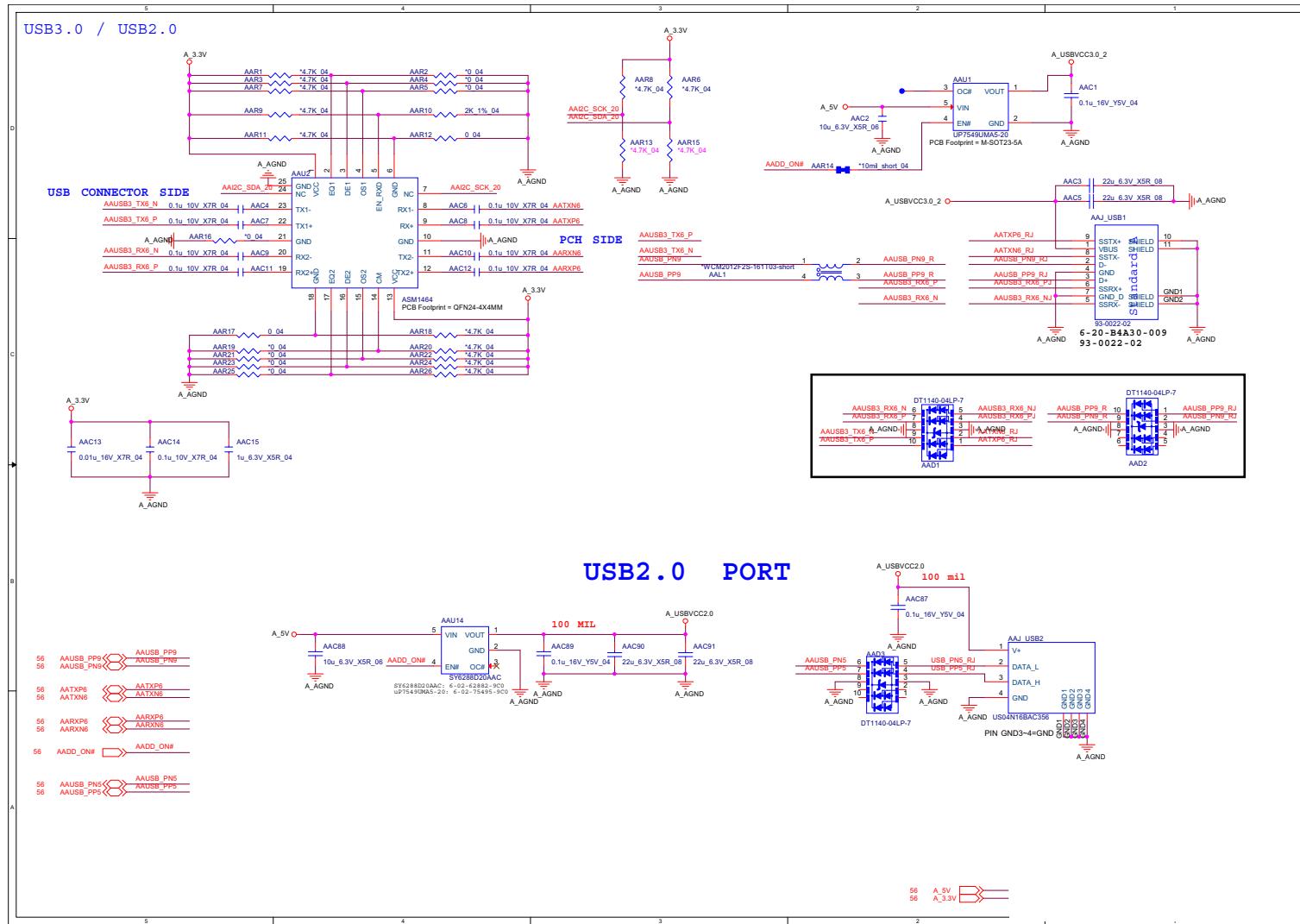
## **Schematic Diagrams**

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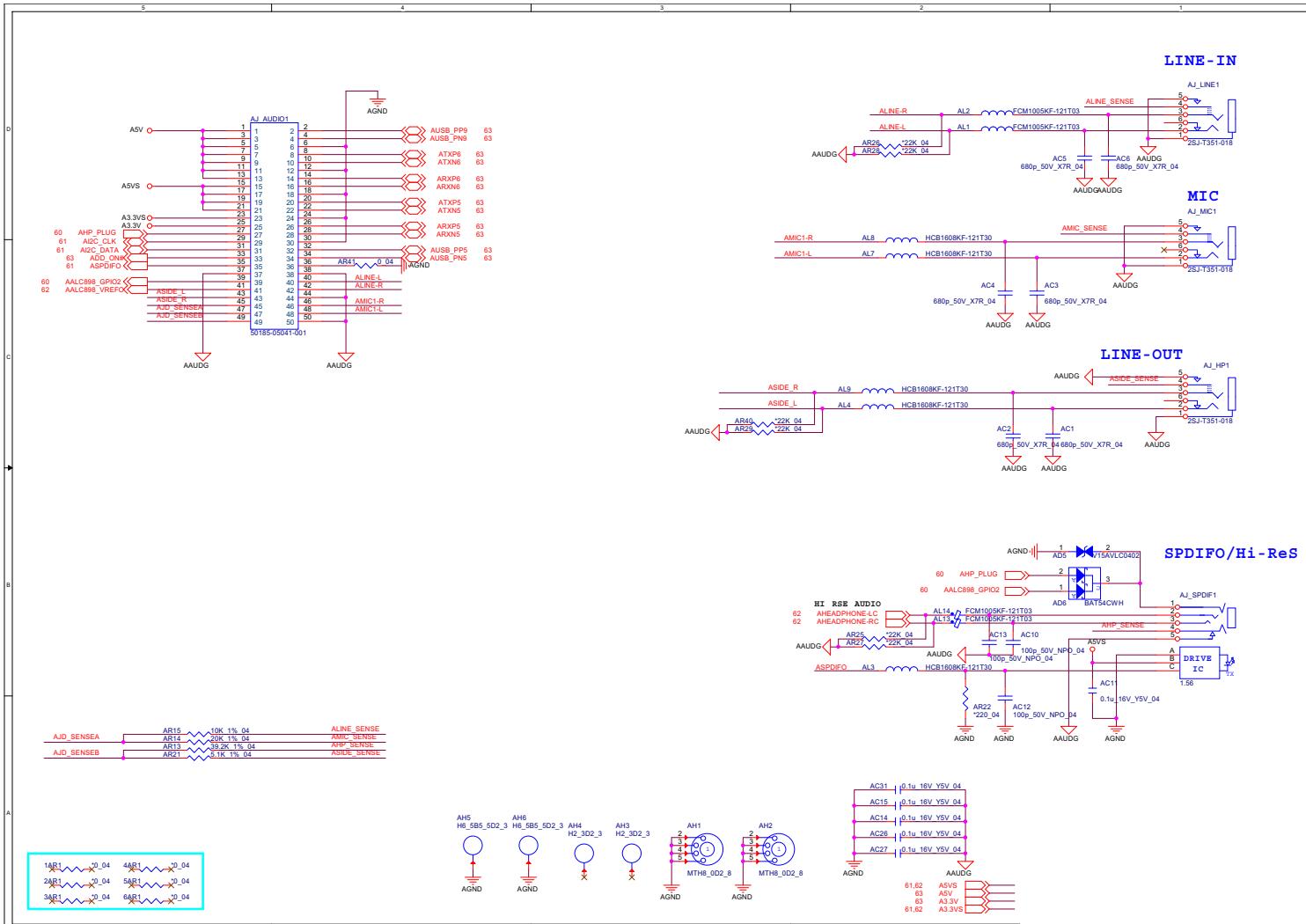
# P750DM Audio 3D AMP

# Sheet 59 of 70

## P750DM Audio 3D AMP



# P775DM Audio Board



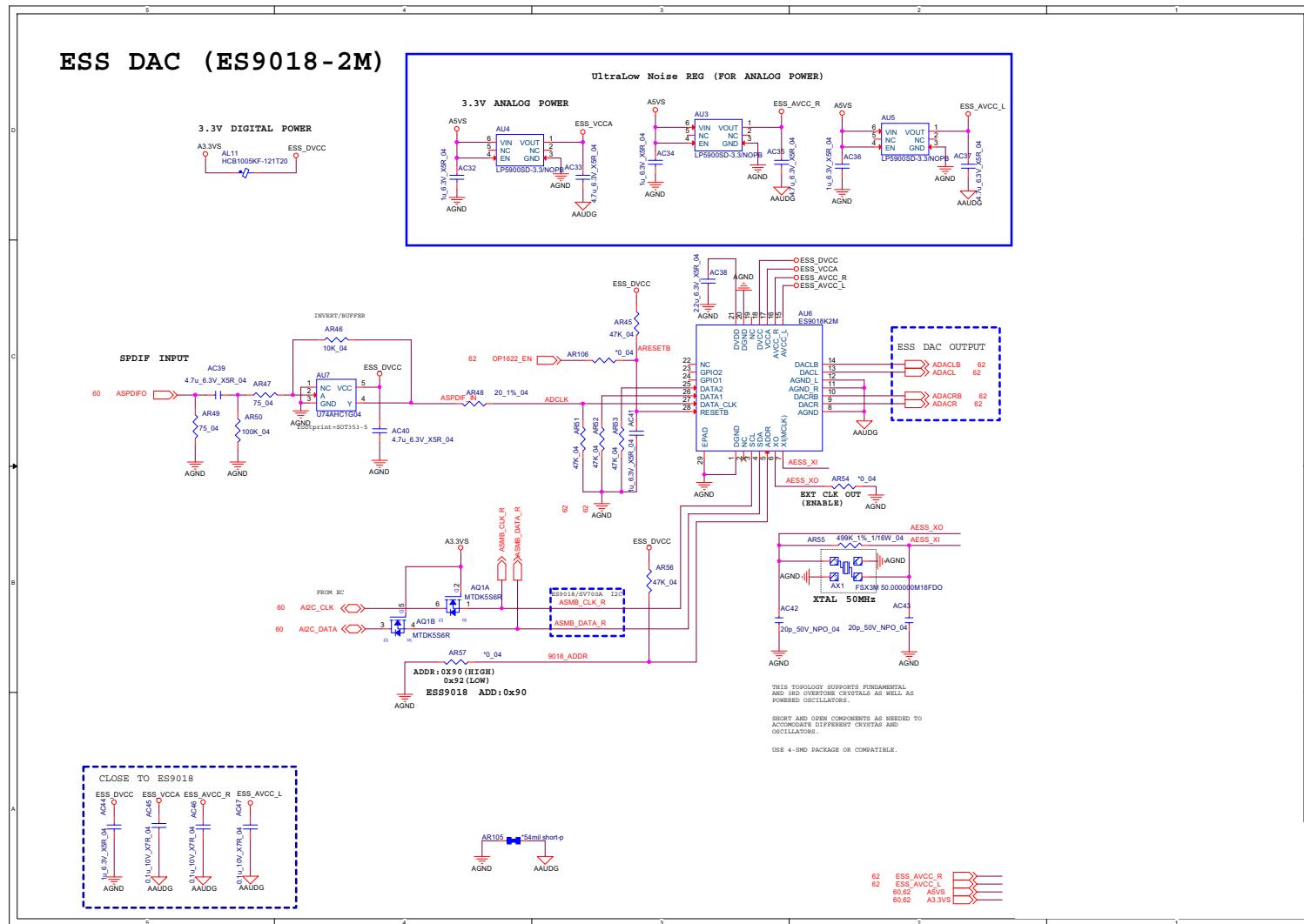
Sheet 60 of 70  
P775DM Audio  
Board

## B. Schematic Diagrams

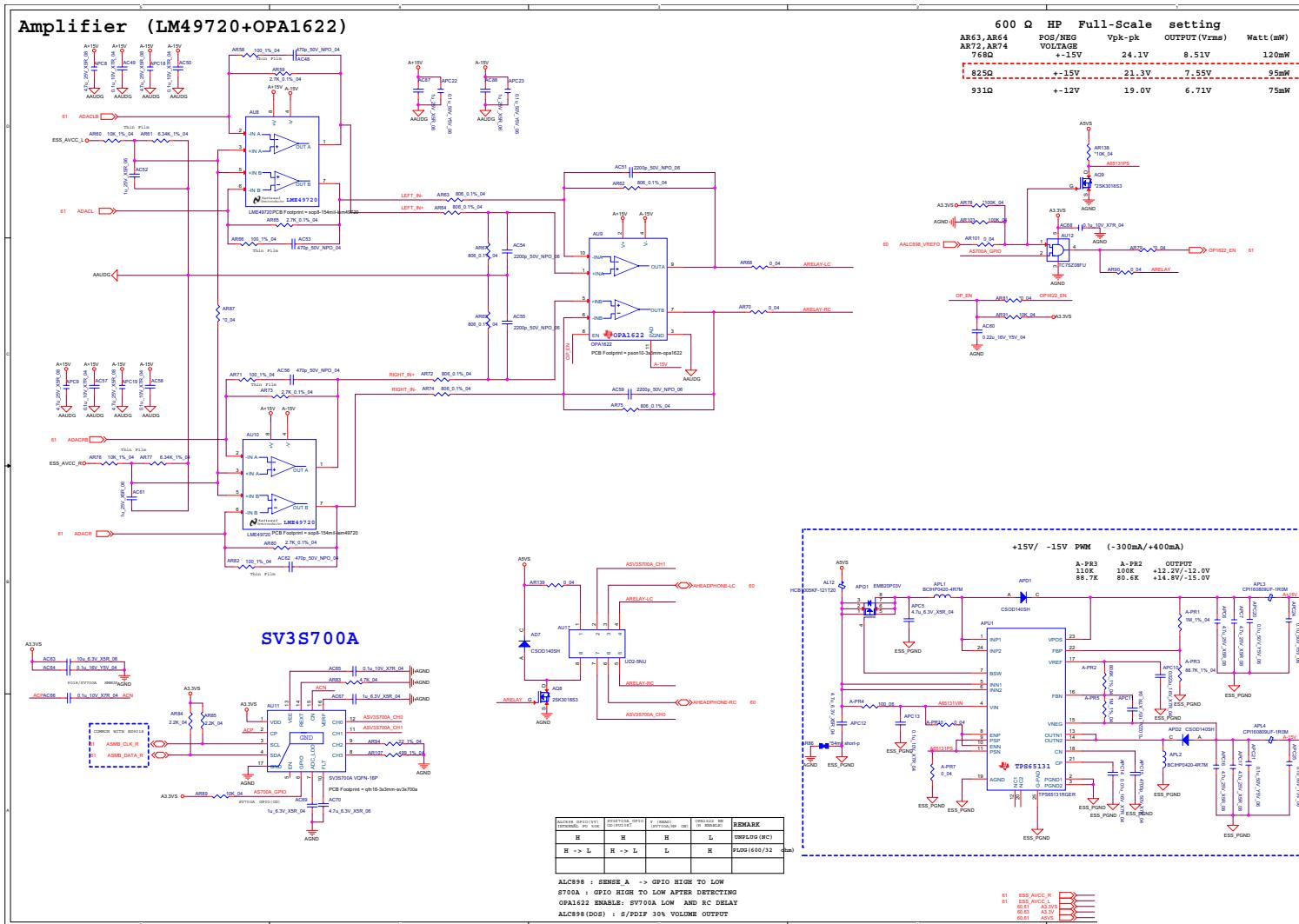
## **Schematic Diagrams**

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# P775DM Audio ESS DAC



# P775DM Audio HP AMP



Sheet 62 of 70  
P775DM Audio HP  
AMP

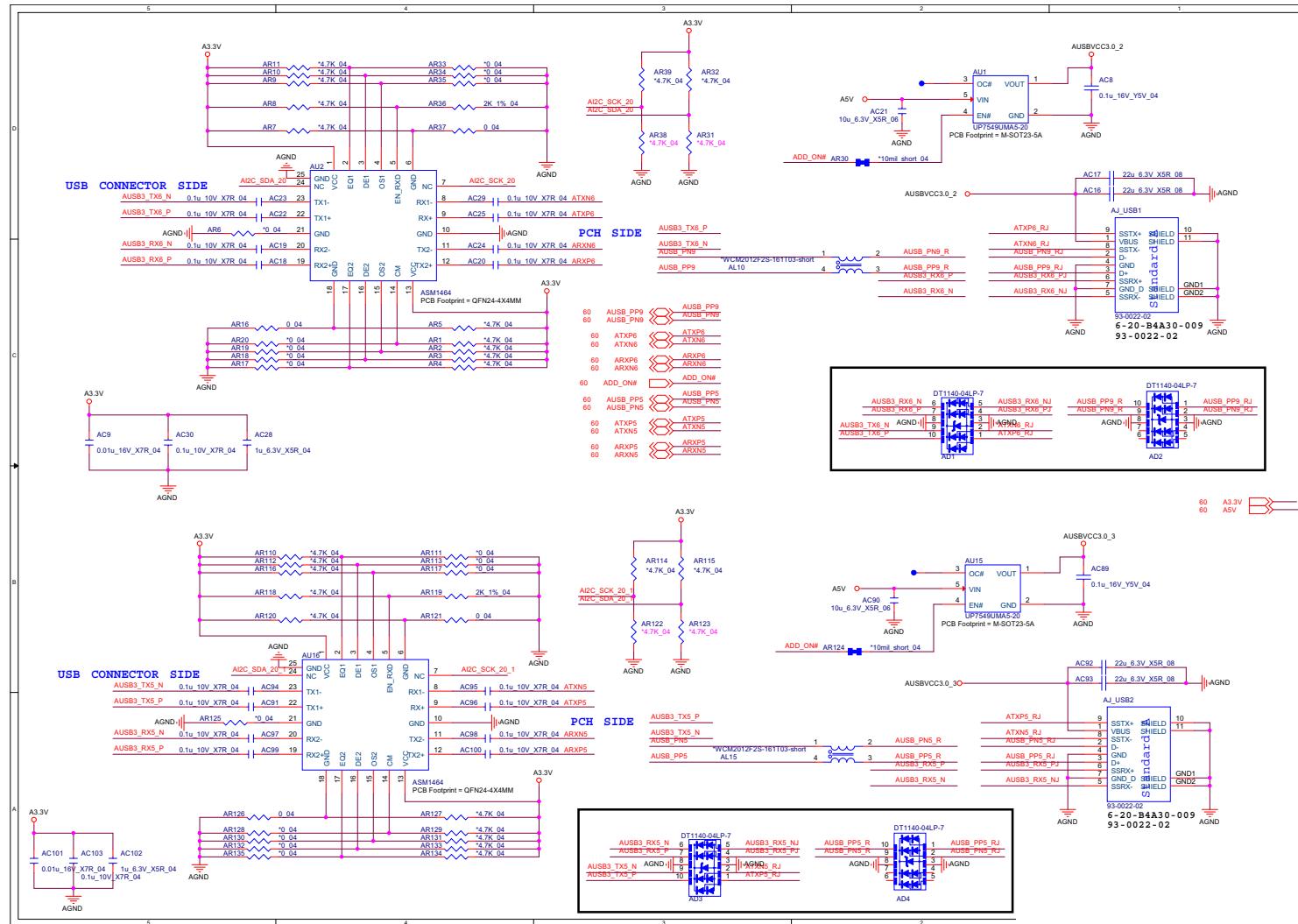
## **Schematic Diagrams**

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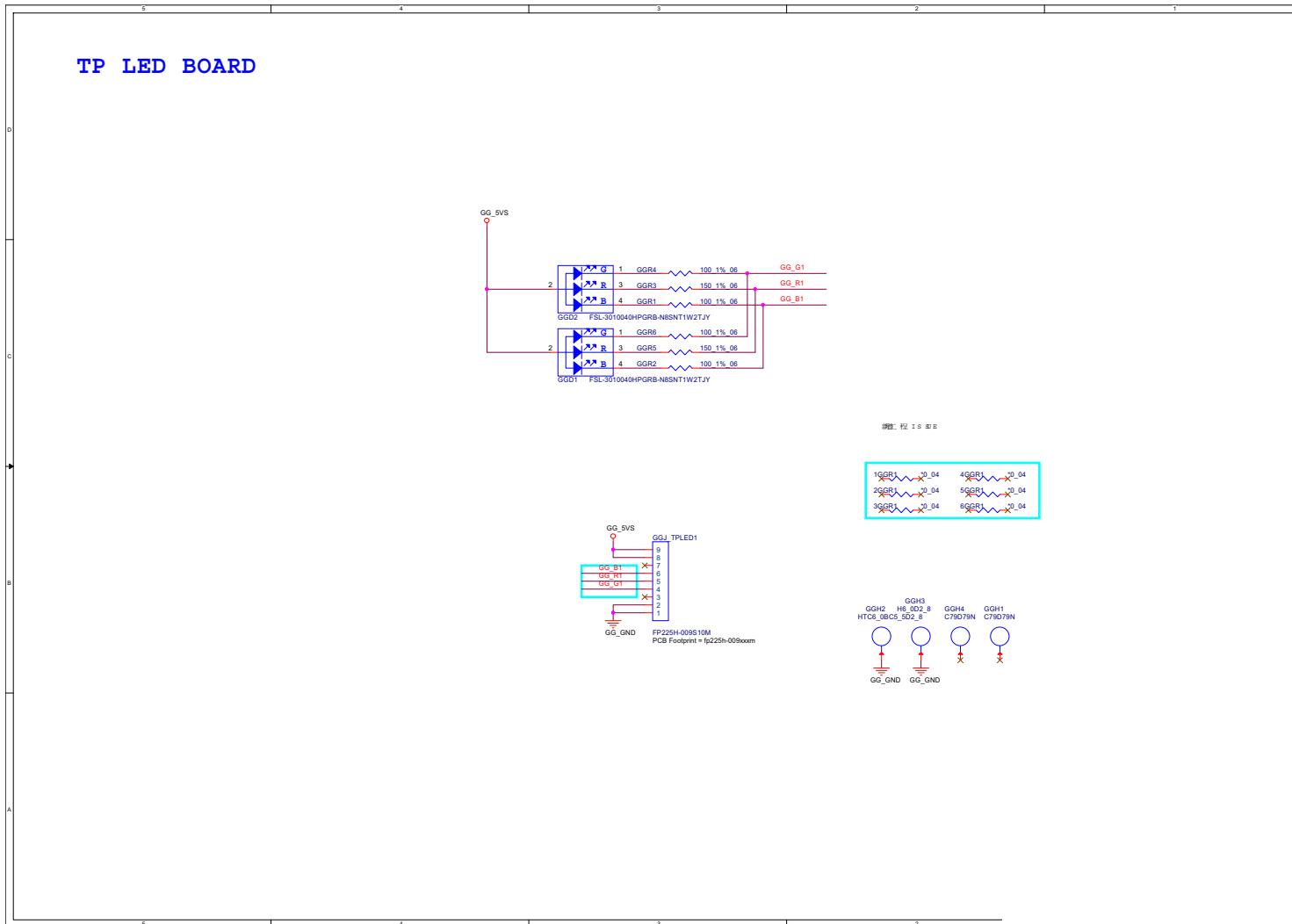
# P775DM Audio Board

# Sheet 63 of 70

## P775DM Audio Board



# P750DM BOT LED Board

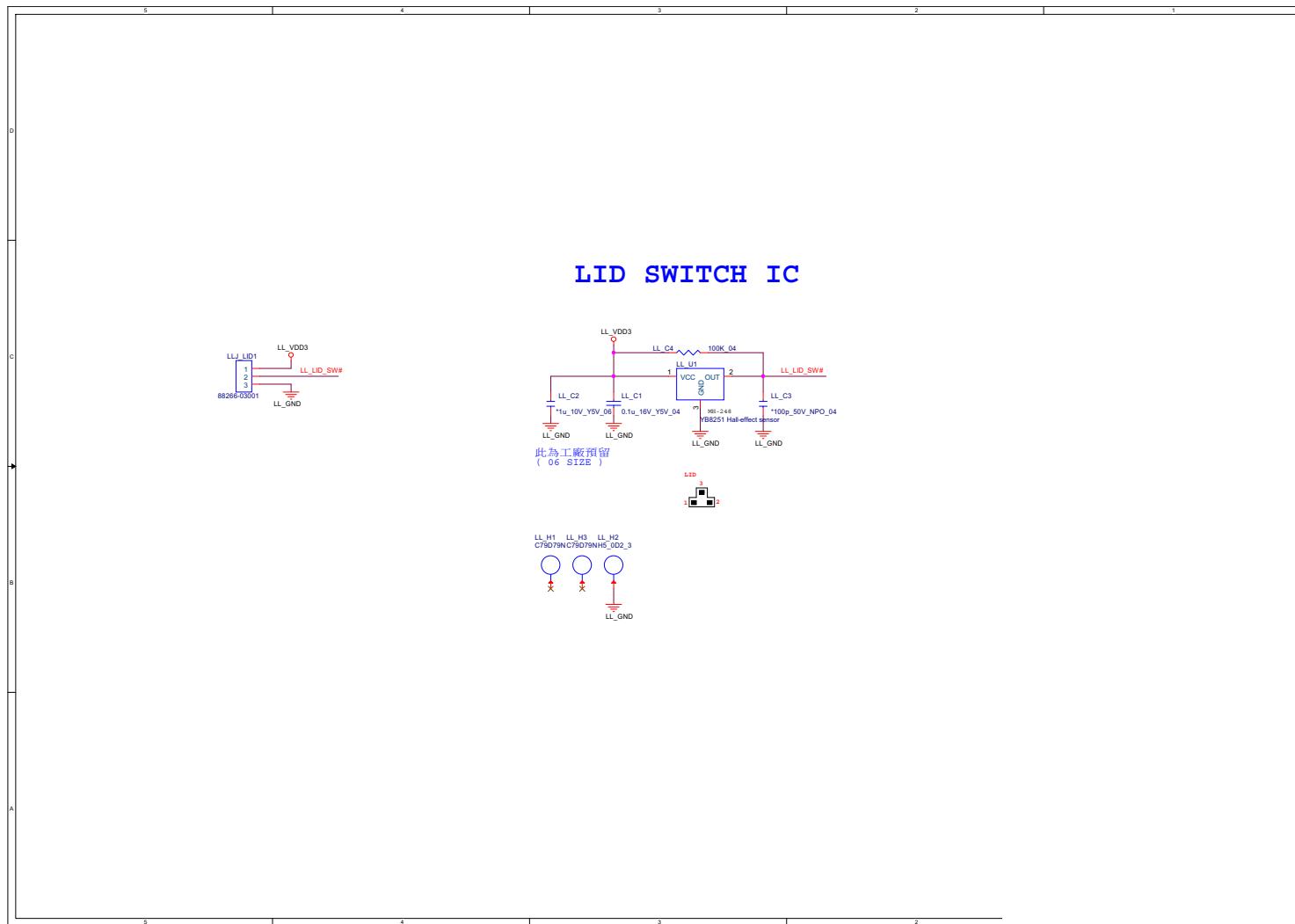


Sheet 64 of 70  
P775DM BOT LED  
Board

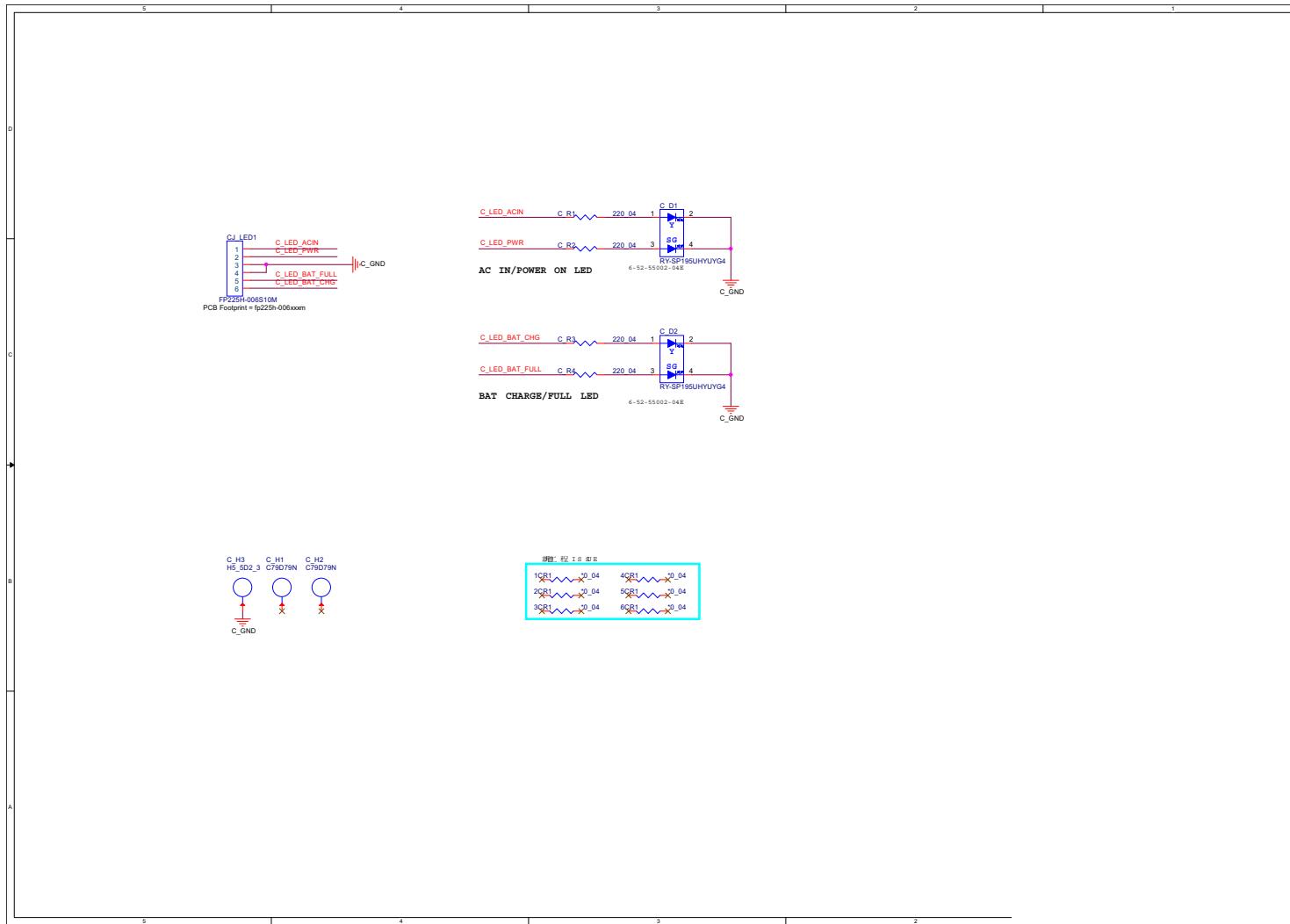
## Schematic Diagrams

# P750DM LID Switch Board

**Sheet 65 of 70  
P750DM LID  
Switch Board**



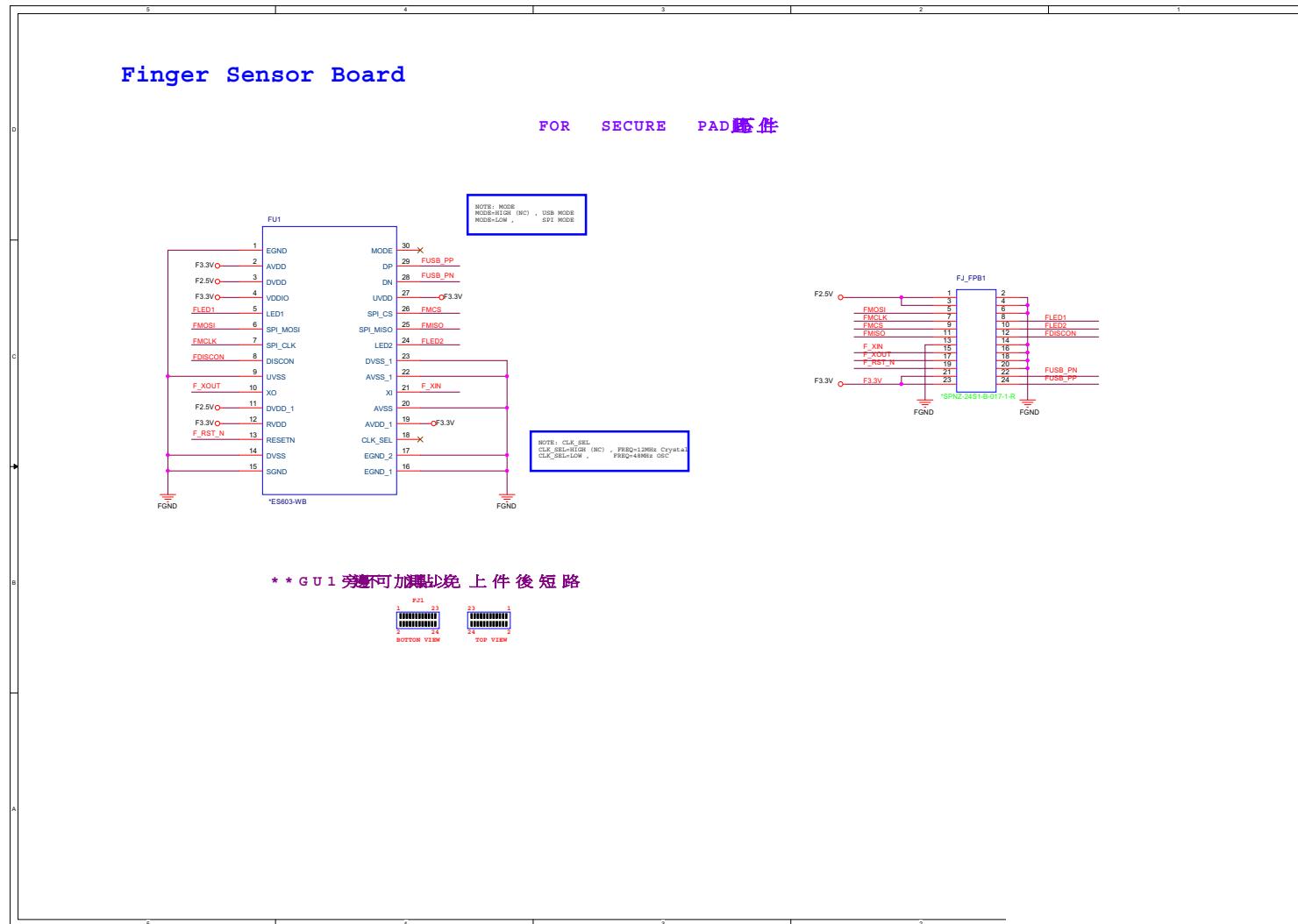
# P750DM Charge LED Board



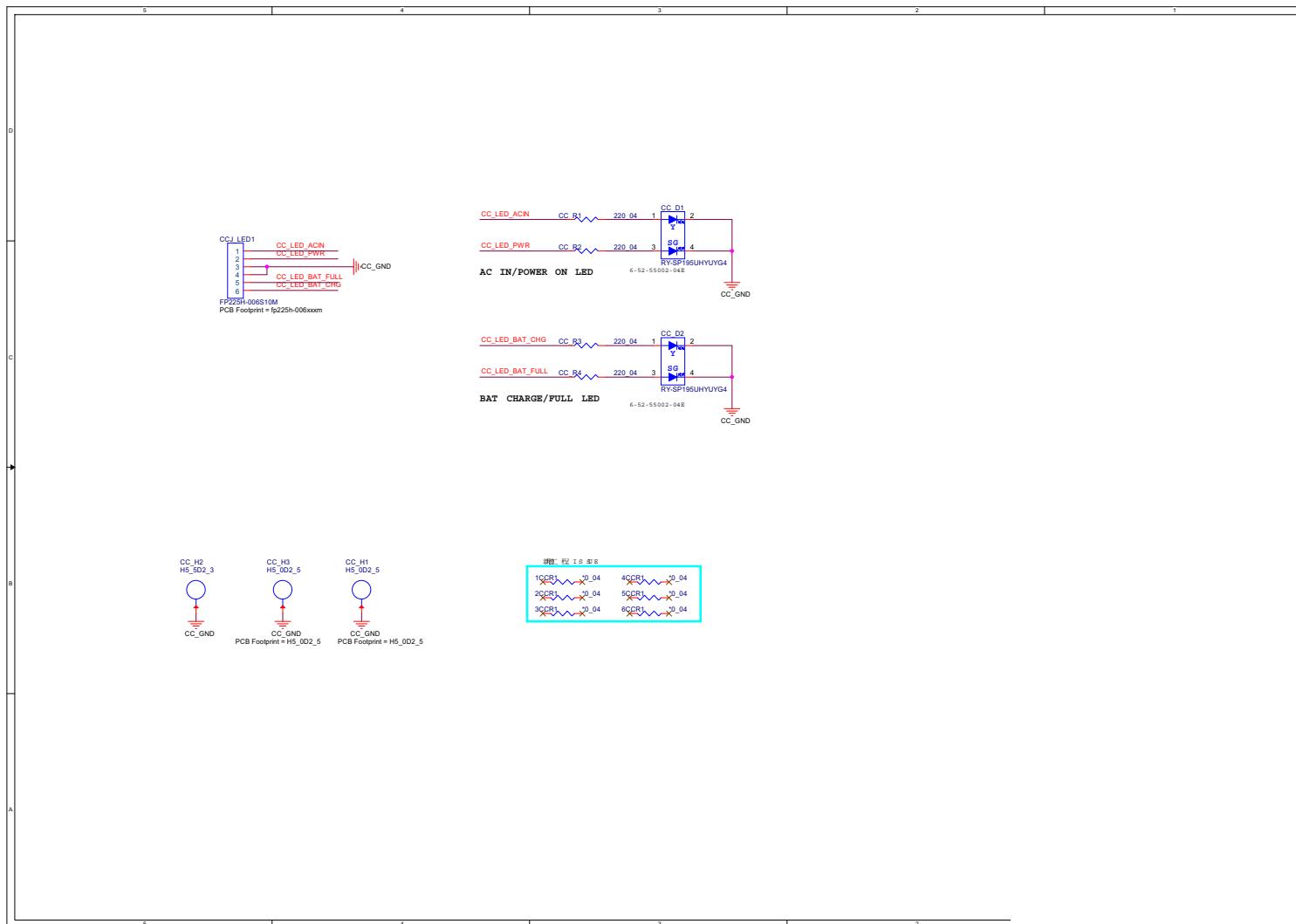
Sheet 66 of 70  
P750DM Charge  
LED Board

**Schematic Diagrams****P750DM Finger Sensor Board**

**Sheet 67 of 70**  
**P750DM Finger**  
**Sensor Board**



## P775DM Charge LED Board



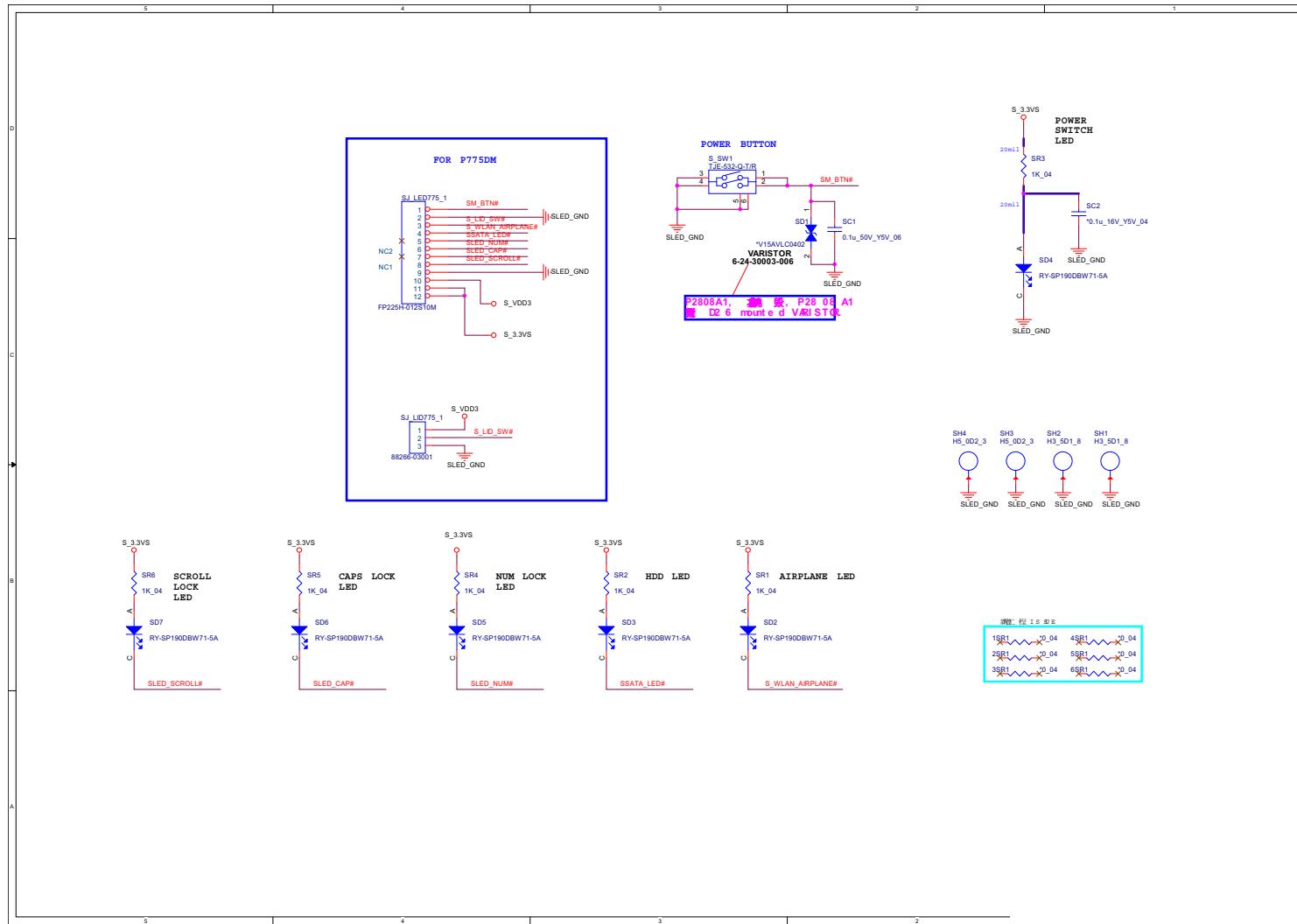
Sheet 68 of 70  
P775DM Charge  
LED Board

## **Schematic Diagrams**

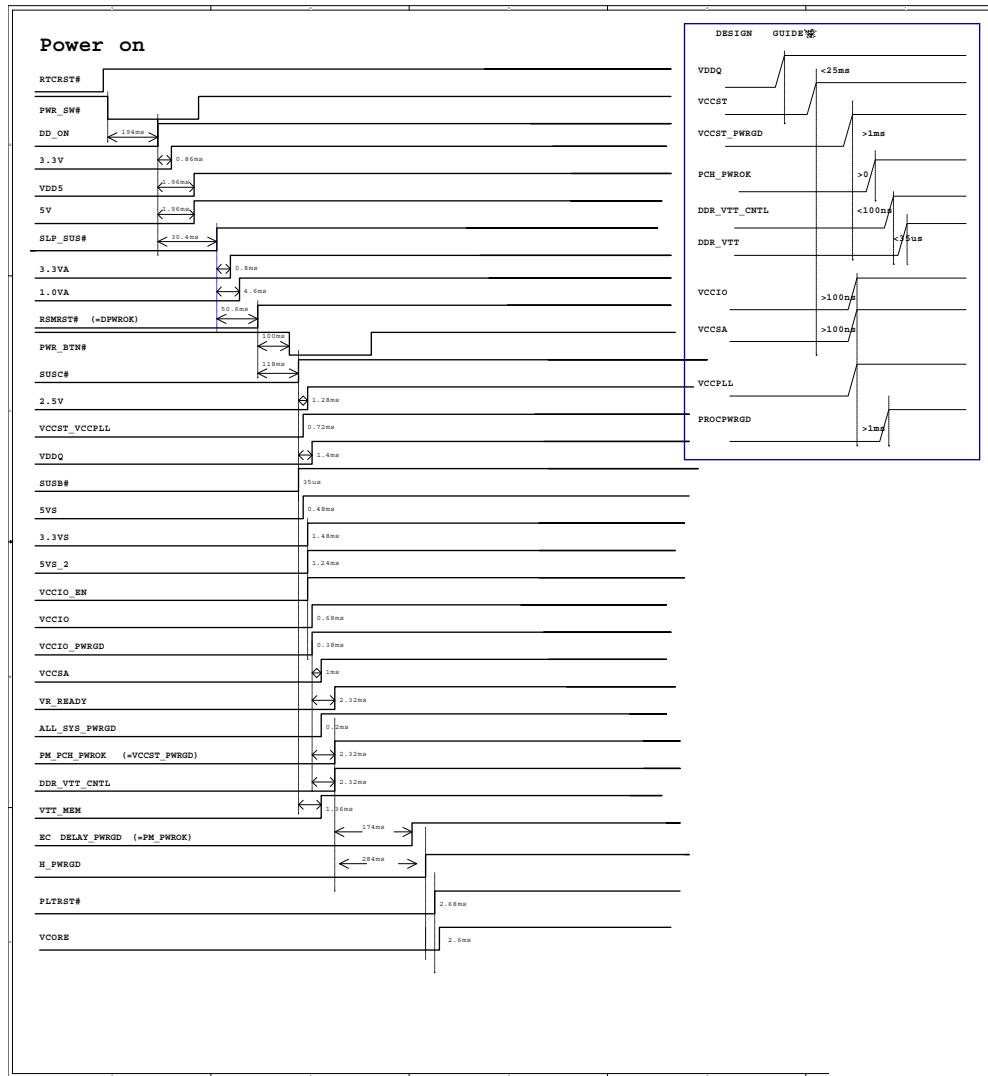
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# P775DM Power LED Board

Sheet 69 of 70  
P775DM Power  
LED Board



## Power On Sequence



Sheet 70 of 70  
Power On  
Sequence

## **Schematic Diagrams**

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# 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](http://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 **F4** 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 V1.0X.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:**> Flash.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 **F3**) and select “**Yes**” to confirm the selection.
5. Press **F4** 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.