SERVICE MANUAL

notebook

NV40MZ / NV41MZ

Notebook Computer

NV40MZ / NV41MZ

Service Manual

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Version 1.0
September 2020

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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 ***NV40MZ / NV41MZ*** series notebook PC.

The following information is included:

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

Appendix A, Part Lists
Appendix B, Schematic Diagrams

IMPORTANT SAFETY INSTRUCTIONS

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

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

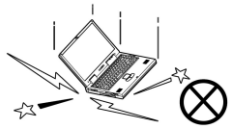
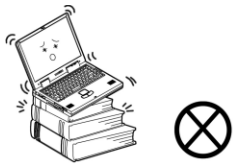
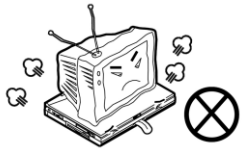
FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
This device may not cause harmful interference.
This device must accept any interference received, including interference that may cause undesired operation.

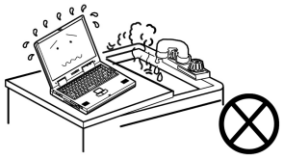
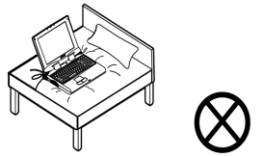
Instructions for Care and Operation

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

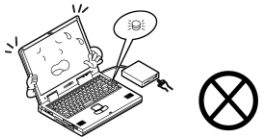
1. **Don't drop it, or expose it to shock.** If the computer falls, the case and the components could be damaged.

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

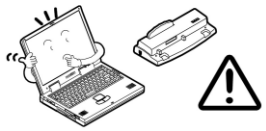
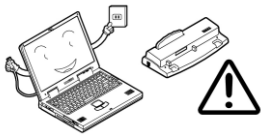
2. **Keep it dry, and don't overheat it.** Keep the computer and power supply away from any kind of heating element. This is an electrical appliance. If water or any other liquid gets into it, the computer could be badly damaged.

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

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

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

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

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

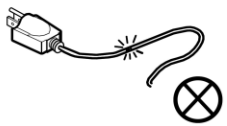
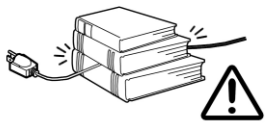
Power Safety

The computer has specific power requirements:

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

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). It is advisable to also remove your battery in order to prevent accidentally turning the machine on.

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

Battery Precautions

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

Battery Guidelines

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

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

Battery Disposal

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

Caution

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

Battery Level

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

Related Documents

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

User's Manual on CD/DVD

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. Securely attach any peripherals you want to use with the computer (e.g. keyboard and mouse) to their ports.
4. **When first setting up the computer use the following procedure** (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 and initially set up as below):
   - Attach the AC/DC adapter cord to the DC-In jack on the right of the computer, then plug the AC power cord into an outlet, and connect the AC power cord to the AC/DC adapter. The battery will now be unlocked.
5. Use one hand to raise the lid/LCD to a comfortable viewing angle (do not exceed 180 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).
6. Press the power button on the left side of the computer to turn the computer "on" (note that the lid/LCD must be open for the power button to function).

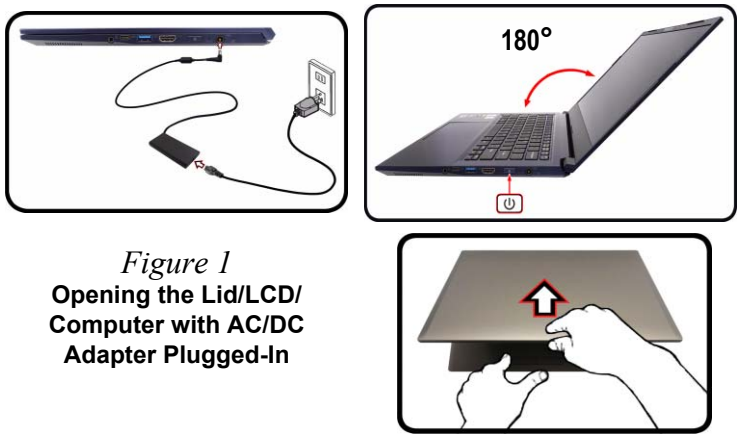


Figure 1
Opening the Lid/LCD/ Computer with AC/DC Adapter Plugged-In

Powering the Computer On

After every disassembly, make sure that the bottom case's screws are all inserted and tightened before turning the computer on.

Shut Down

Note that you should always shut your computer down by choosing the **Shut down** command in **Windows** (see below). This will help prevent hard disk or system problems.

Click **Settings** in the **Charms Bar** (use the **Windows Logo Key** + **C** key combination to access the Charms Bar) and choose **Shut down** from the **Power** menu.

Or

Choose **Shut down or sign out > Shut down** from the context menu (use the **Windows Logo Key** + **X** key combination to access the context menu).

Contents

Chapter 1: Introduction

Overview

This manual covers the information you need to service or upgrade the ***NV40MZ / NV41MZ*** series notebook computer. Information about operating the computer (e.g. getting started, and the *Setup* utility) is in the *User's Manual*. Information about dri-vers (e.g. VGA & audio) is also found in the *User's Manual*. The manual is shipped with the computer.

Operating systems (e.g. *Window 10,* etc.) have their own manuals as do application softwares (e.g. word processing and database programs). If you have questions about those programs, you should consult those manuals.

The ***NV40MZ / NV41MZ*** 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 take note of the warning and safety information indicated by the "  " symbol.

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

Specifications

Latest Specification Information

The specifications listed 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

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

Processor Options

Intel® Core™ i7 Processor
i7-1165G7 (2.80GHz), TDP 28W
Intel® Core™ i5 Processor
i5-1135G7 (2.40GHz), TDP 28W
Intel® Core™ i3 Processor
i3-1115G4 (3.00GHz), TDP 28W
Intel® Pentium® Processor
Gold 7505U (2.00GHz), TDP 28W
Intel® Celeron Processor
Celeron 6305U (1.80GHz), TDP 28W

BIOS

128Mb SPI Flash ROM
Insyde BIOS

Memory

Dual Channel DDR4
Two 260 Pin SO-DIMM Sockets
Supporting up to **3200MHz DDR4** Memory
Expandable Memory from **8GB** up up to **64GB**
Compatible with 4GB, 8GB,16GB or 32GB Modules

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

LCD Options

LCD, 14" (35.56cm), 16:9, FHD (1920x1080)

Card Reader

6-In-1 Card Reader - MMC/ RS MMC- SD/ Mini SD / SDHC/ SDXC
*Note: Some of these cards require adapters, which are usually supplied with the cards.

Storage

One M.2 **PCIe Gen4 x4** Solid State Drive (SSD)

Video Adapter

Intel Iris™ Xe Graphics (i7-1165G7, i5-1135G7)
HDR Support
Microsoft DirectX® 12 Compatible
Intel UHD Graphics (i3-1115G4, Pentium Gold 7505U, Celeron 6305U)
Dynamic Frequency
Intel Dynamic Video Memory Technology
Microsoft DirectX® 12 Compatible

Pointing Device

Built-in Clickpad (with Microsoft PTP Multi Gesture & Scrolling Functionality)

Keyboard

Multi languages A4 size isolated keyboard
Or
(**Factory Option**) Multi languages A4 size isolated illuminated keyboard (**White-**LED)

Audio

High Definition Audio Compliant Interface
2 * Built-In Speakers
Built-In Array Microphone

Security

Security (Kensington® Type) Lock Slot
BIOS Password
Intel PTT for Systems Without TPM Hardware
(**Factory Option**) TPM 2.0

M.2 Slots

Slot 1 for Combo **WLAN and Bluetooth** Module
Slot 2 for **PCIe Gen4 x4 SSD**

Communication

Built-In 10/100/1000Mb Base-TX Ethernet LAN
1.0M HD Camera Module
Or
(**Factory Option**) Windows Hello Camera Module

WLAN/ Bluetooth M.2 Modules:

(**Factory Option**) Intel® Dual Band Wi-Fi 6 AX200 Wireless LAN (**802.11ax**) + Bluetooth

(**Factory Option**) Intel® Dual Band Wi-Fi 6 AX201 Wireless LAN (**802.11ax**) + Bluetooth
(**Factory Option**) Intel® Dual Band Wireless-AC 9462 Wireless LAN (**802.11ac**) + Bluetooth

Interface

One Thunderbolt 4 Port with Power Delivery DC-In (Type C)
One USB 3.2 Gen 2 Type-C Port*
Two USB 3.2 Gen 1 Type-A Ports
One HDMI-Out Port
One 2-In-1 Audio Jack (Headphone / Microphone)
One RJ-45 LAN Jack
One DC-in Jack

Power

Embedded 4 Cell Smart Lithium-Ion Battery Pack, 49WH
Full Range AC/DC Adapter
AC Input: 100 - 240V, 50 - 60Hz
DC Output: 19V, 3.42A (**65W**)

Environmental Spec

Temperature
Operating: 5°C - 35°C
Non-Operating: -20°C - 60°C
Relative Humidity
Operating: 20% - 80%
Non-Operating: 10% - 90%

Dimensions & Weight

324.9mm (w) * 225mm (d) * 17.6mm (h)
1.35g (Barebone and 49WH Battery)

External Locator - Top View with LCD Panel Open

Figure 1
Top View

1. PC Camera
   Or
   (**Factory Option**)
   Windows Hello Camera
2. *Camera LED
   **When the PC camera is in use, the LED will be illuminated in white.*
3. Built-In Array Microphone
4. Display
5. Keyboard
6. Touchpad & Buttons

External Locator - Front & Right Side Views

Figure 2
Front View

FRONT VIEW

Figure 3
Right Side View

RIGHT SIDE VIEW

1. Speaker
2. 2-In-1 Audio Jack (Headphone / Microphone)
3. USB 3.2 Gen 2 Type-C Port
4. USB 3.2 Gen 1 Type-A Port
5. HDMI-Out Port
6. Power Button
7. DC-In Jack
8. LED Indicator

External Locator - Left Side & Rear View

Figure 4
Left Side View

1. Security Lock Slot
2. RJ-45 LAN Jack
3. USB 3.2 Gen 1 Type-A Port
4. SD Card Reader
5. Thunderbolt 4 Port with Power Delivery (DC-In)*
6. Speaker

LEFT SIDE VIEW

Figure 5
Rear View

1. Vent

REAR VIEW

External Locator - Bottom View

Figure 6
Bottom View

1. Vent
2. RJ-45 LAN Jack
3. Speakers

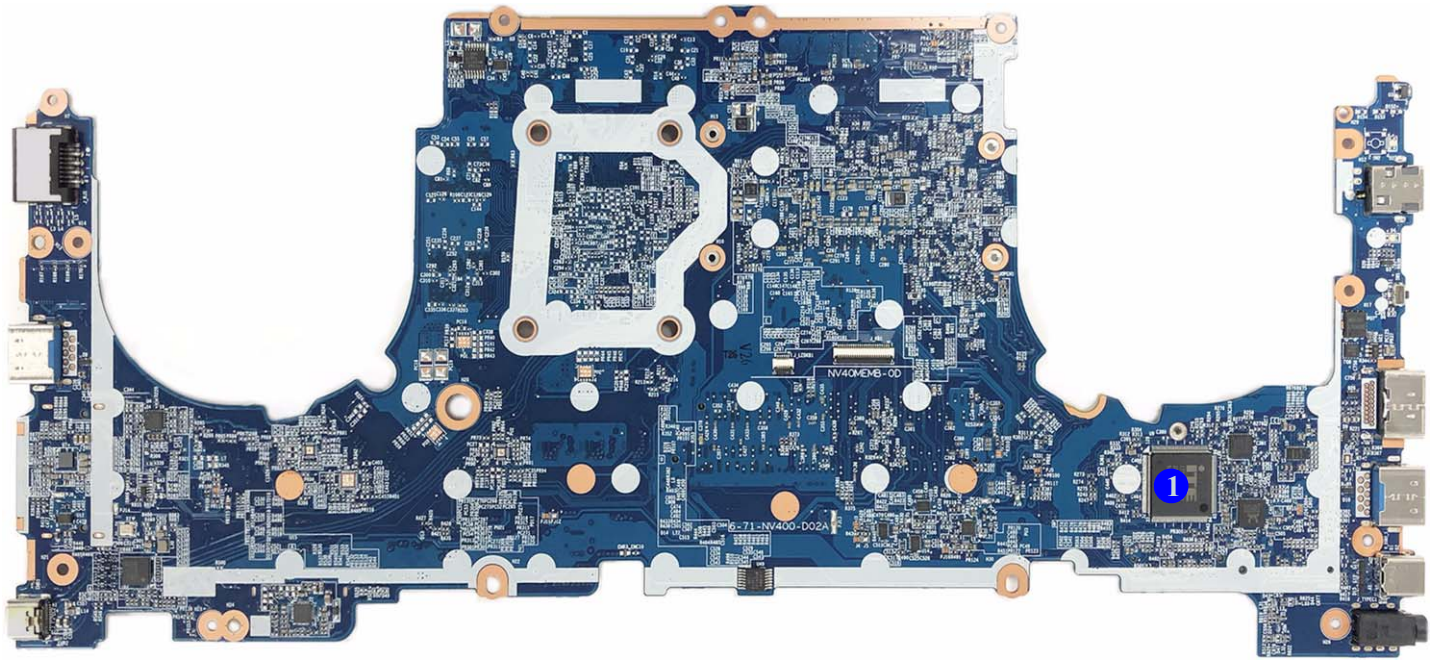
Overheating

To prevent your computer from overheating, make sure nothing blocks any vent while the computer is in use.

Mainboard Overview - Top (Key Parts)

Figure 7
Mainboard Top Key Parts

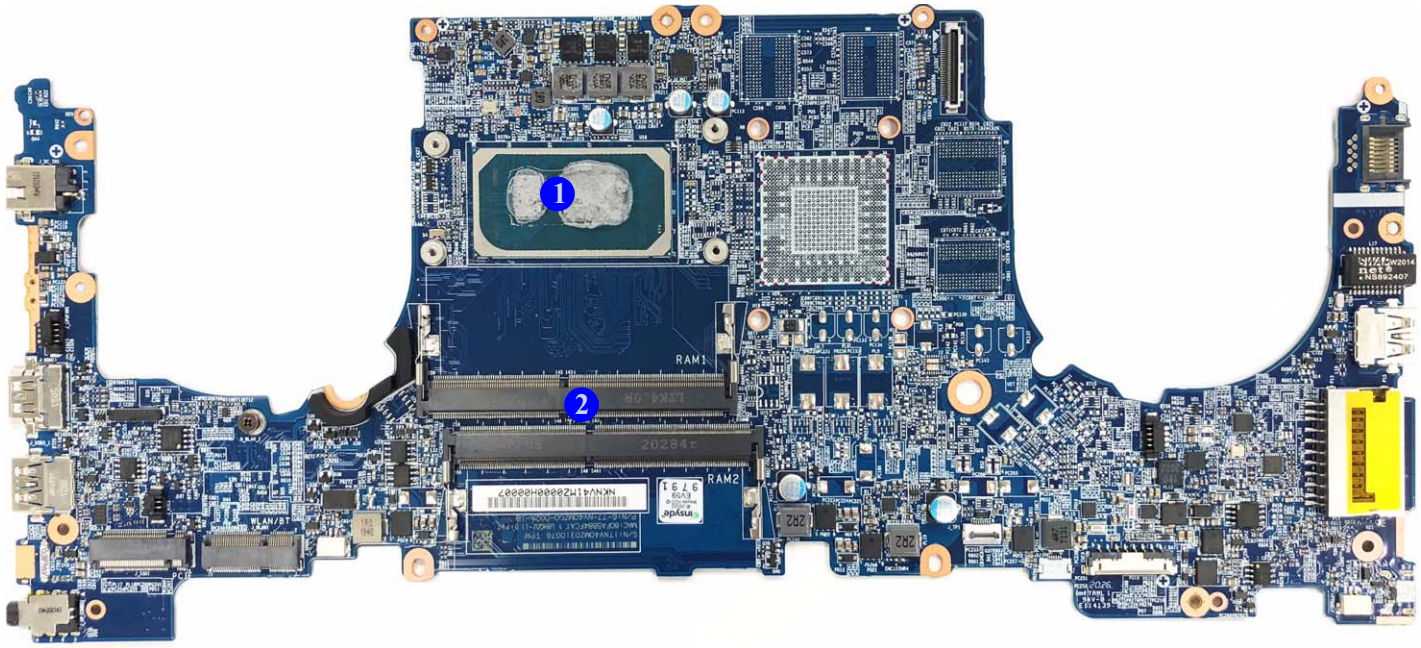
1. KBC-ITE IT5570



Mainboard Overview - Bottom (Key Parts)

Figure 8
Mainboard Bottom Key Parts

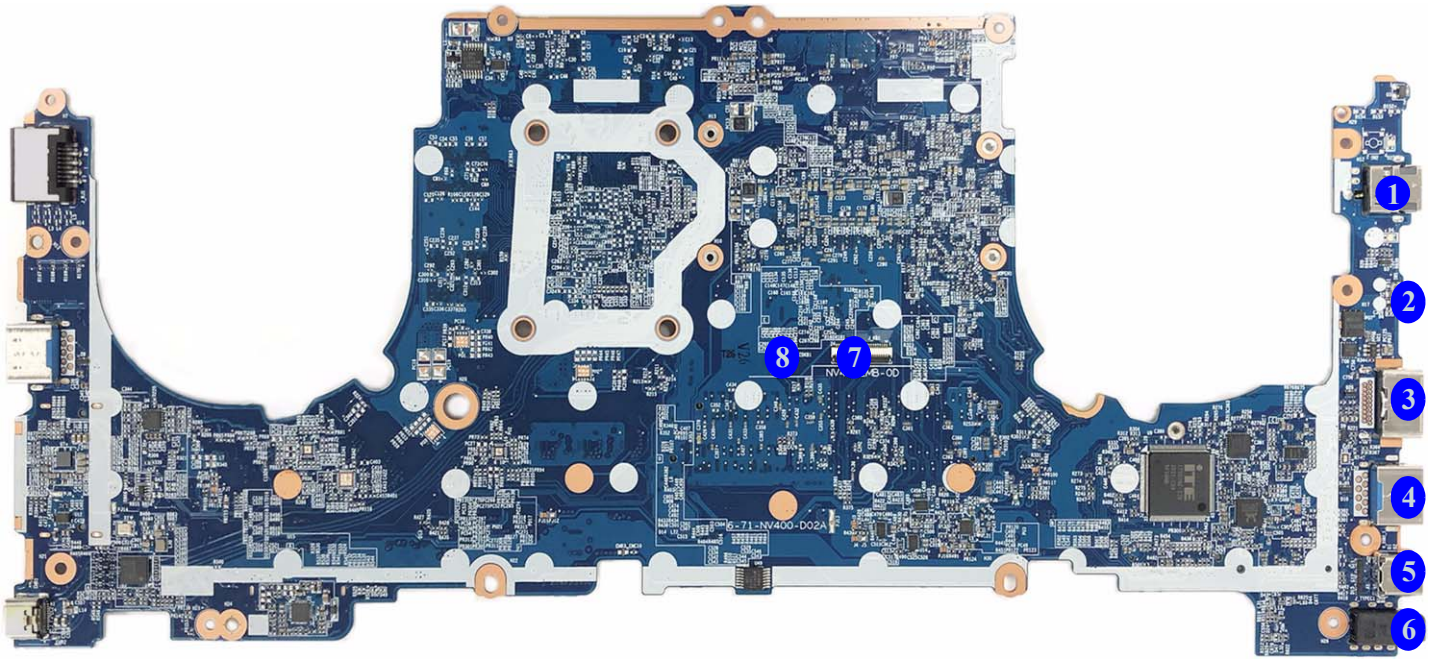
1. CPU
2. Memory Slots DDR4 SO-DIMM



Mainboard Overview - Top (Connectors)

Figure 9
Mainboard Top Connectors

1. DC-In Jack
2. Power Button
3. HDMI-Out Port
4. USB 3.1 Gen 2 Type-A Port
5. USB 3.1 Gen 2 Type-C Port
6. 2-In-1 Audio Jack (Headphone / Microphone)
7. Keyboard Connector
8. LED KB Connector



Mainboard Overview - Bottom (Connectors)

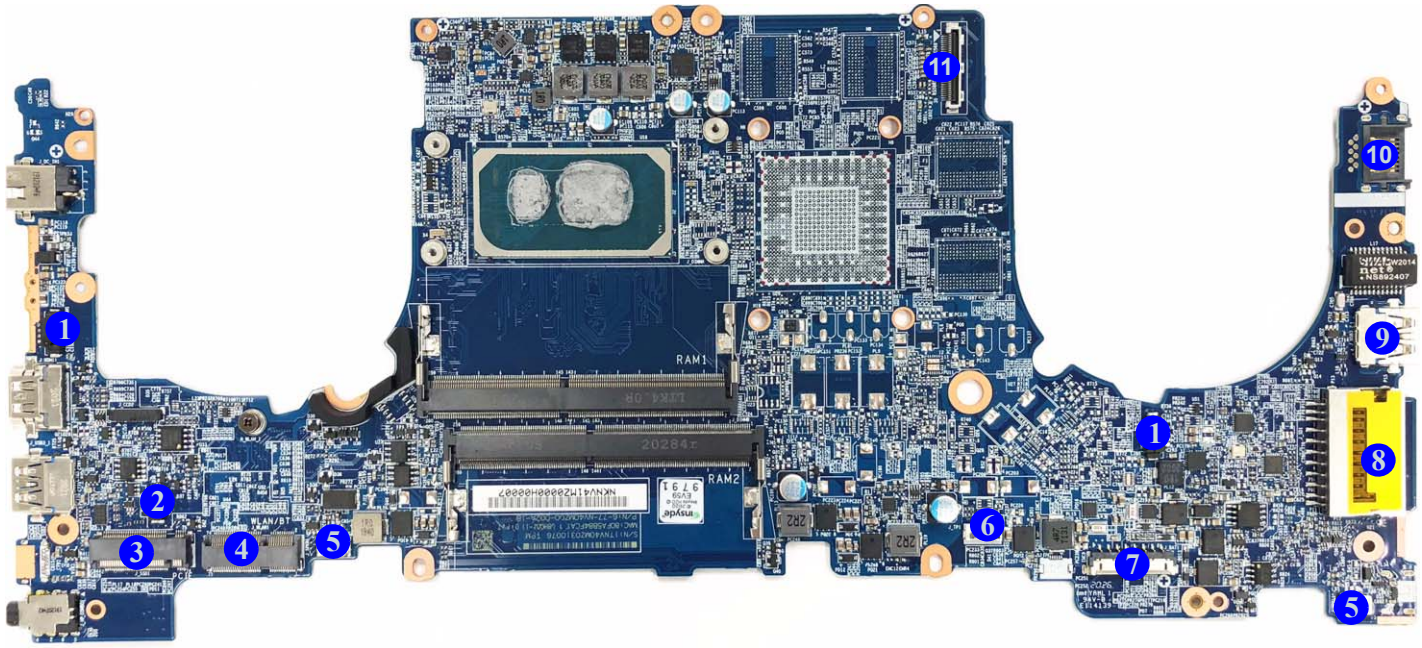


Figure 10
Mainboard Bottom Connectors

1. Fan Connector
2. CMOS Battery Connector
3. M.2 Card Connector
4. WLAN/BT Connector
5. Speaker Connecto
6. Touchpad Connector
7. Battery Connector
8. SD Card Reader
9. USB 3.1 Gen 2 Type-A Port
10. RJ-45 LAN Jack
11. LCD Cable Connector

Chapter 2: Disassembly

Overview

This chapter provides step-by-step instructions for disassembling the ***NV40MZ / NV41MZ*** series notebook's parts and subsystems. When it comes to reassembly, reverse the procedures (unless otherwise indicated).

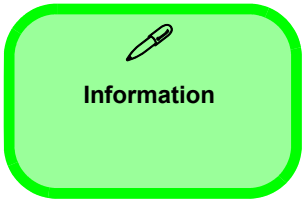
We suggest you completely review any procedure before you take the computer apart.

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.

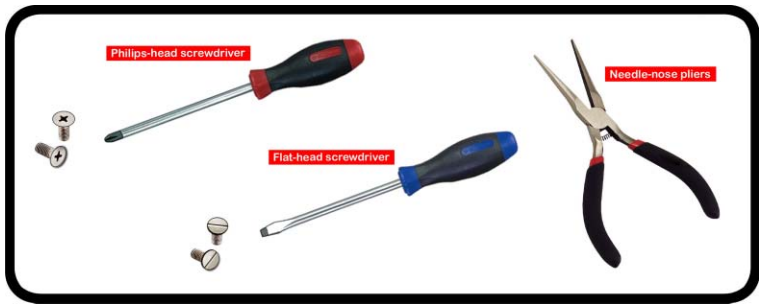


NOTE: All disassembly procedures assume that the system is turned **OFF**, and disconnected from any power supply (the battery is removed too).

Maintenance Tools

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

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



Connections

Connections within the computer are one of four types:

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

Maintenance Precautions

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

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

Power Safety Warning

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

Cleaning

Do not apply cleaner directly to the computer, use a soft clean cloth.

Do not use volatile (petroleum distillates) or abrasive cleaners on any part of the computer.

(For Computer Models Supplied with Light Blue Cleaning Cloth) Some computer models in this series come supplied with a light blue cleaning cloth. To clean the computer case with this cloth follow the instructions below.

- Power off the computer and peripherals.
- Disconnect the AC/DC adapter from the computer.
- Use a little water to dampen the cloth slightly.
- Clean the computer case with the cloth.
- Dry the computer with a dry cloth, or allow it time to dry before turning on.
- Reconnect the AC/DC adapter and turn the computer 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 Keyboard:

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

To remove the System Memory:

1. Remove the battery *page 2 - 5*
2. Remove the system memory *page 2 - 7*

To remove the Wireless LAN Module:

1. Remove the battery *page 2 - 5*
2. Remove the WLAN *page 2 - 9*

To remove and install the M.2 SSD Module:

1. Remove the battery *page 2 - 5*
2. Remove the SSD-1 module *page 2 - 11*

To remove the CCD Module:

1. Remove the battery *page 2 - 5*
2. Remove the CCD module *page 2 - 12*

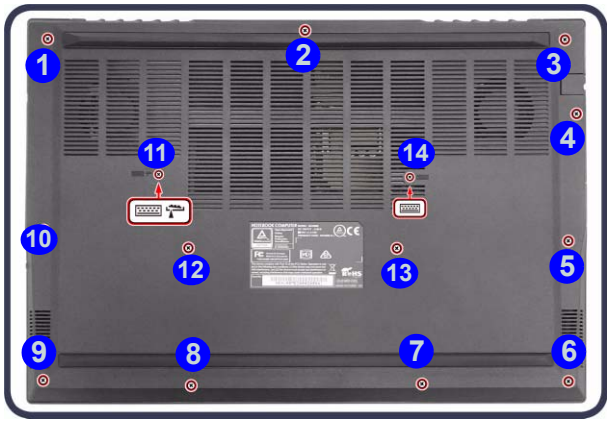
Removing the Battery

1. Turn **off** the computer, turn it over.
2. Remove screws 1 - 14 on the bottom case (*Figure 1a*).
3. Carefully lift the bottom case 15 up from point 16 (*Figure 1b*).
4. The battery will be visible at point 17 on the computer (*Figure 1c*).
5. Carefully disconnect the cable 18, then remove screws 19 - 23 (*Figure 1d*).
6. Lift the battery 24 off the computer (*Figure 1e*).
7. Reverse the process to install a new battery (do not forget to replace all the screws and bottom cover).

Figure 1
Battery Removal

a. Remove the screws.
b. Remove the bottom case.
c. Locate the battery.
d. Disconnect the cable and remove the screws.
e. Lift the battery off the computer.

a.



b.

c.

d.

e.

Powering the Computer On

After every disassembly, make sure that the bottom case's screws are all inserted and tightened before turning the computer on.

15. Bottom Case
24. Battery

- 19 Screws

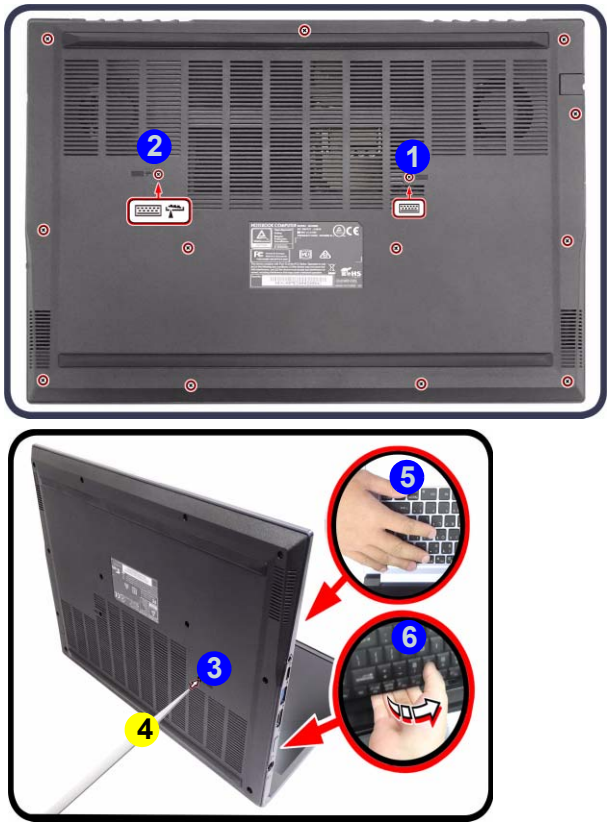
Figure 2
Keyboard Removal

a. Remove the screws and press at point 3 to un-snap keyboard from the bottom of the computer .
b. Lift the keyboard up and disconnect the keyboard ribbon cable from the locking collar socket.
c. Remove the keyboard.

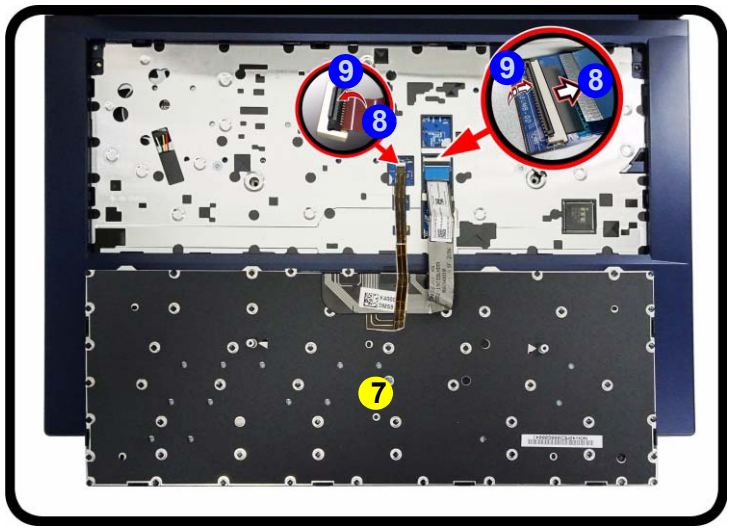
Removing the Keyboard

1. Turn **off** the computer, turn it over, remove the battery (***page 2 - 5***).
2. Remove screws 1 - 2 from the bottom of the computer
3. Open it up with the LCD on a flat surface before pressing at point 3 to release the keyboard module (use a special eject stick 4 size - φ2.0mm to do this, do not exert too much pressure to avoid damaging the keyboard) while supporting 5 the keyboard and then releasing the keyboard in the direction of the arrow 6 as shown (***Figure 2a***)
4. Carefully lift the keyboard 7 up, being careful not to bend the keyboard ribbon cable 8. Disconnect the keyboard ribbon cable 8 from the locking collar socket by using a flat-head screwdriver to pry the locking collar pins 9 (***Figure 2b***).
5. Carefully lift the keyboard 6 off the computer (***Figure 2c***).

a.



b.



c.

Re-inserting the Keyboard

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

4. Eject Stick
7. Keyboard

- 2 Screws

Removing the System Memory (RAM)

The computer has two memory sockets for 260 pin Small Outline Dual In-line Memory Modules (SO-DIMM) supporting DDR4 3200MHz. The main memory can be expanded up to 32GB. The total memory size is automatically detected by the POST routine once you turn on your computer.

Memory Upgrade Process

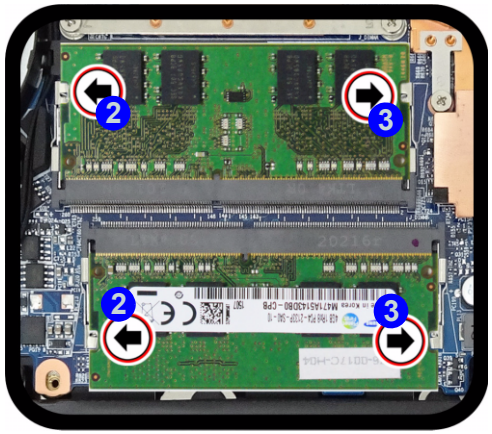
1. Turn **off** the computer, turn it over to remove the battery (*page 2 - 5*).
2. The RAM modules will be visible at point 1 on the mainboard (*Figure 3b*).
3. Gently pull the two release latches (2 & 3) on the sides of the memory socket in the direction indicated by the arrows (*Figure 3b*).
4. The RAM module 4 will pop-up (*Figure 3c*), and you can then remove it.

Figure 3
RAM Module Removal

a. The RAM modules will be visible at point 1 on the mainboard.
b. Pull the release latches.
c. Remove the module.

a.

b.



c.

Contact Warning

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

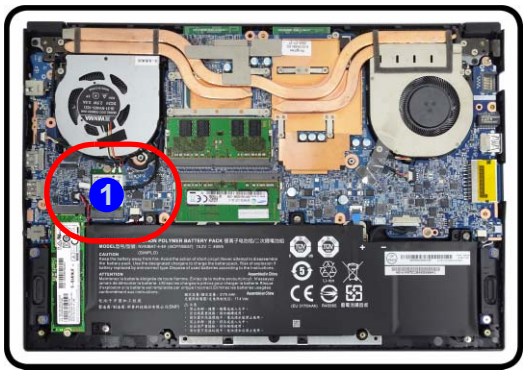
4. RAM Module

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

Removing the Wireless LAN Module

1. Turn **off** the computer, turn it over to remove the battery (*page 2 - 5*).
2. The Wireless LAN module will be visible at point 1 on the mainboard (*Figure 4a*).
3. Carefully disconnect the cables 2 & 3, and then remove the screw 4 (*Figure 4b*)
4. The Wireless LAN module 5 (*Figure 4c*) will pop-up, and you can remove it from the computer.
5. Reverse the process to install a new module (do not forget to replace all the screws and bottom cover).

a.



b.

c.

Figure 4
Wireless LAN Module Removal

a. Locate the WLAN.
b. Disconnect the cable and remove the screw.
c. The WLAN module will pop up and lift it out of the computer.

Note: Make sure you reconnect the antenna cable to the "1 + 2" socket (*Figure 4b*).

5.Wireless LAN Module

- 1 Screw

Wireless LAN, and 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	WL 1	Black	Transparent
	WL 2	Black	White

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

Removing and Installing the M.2 SSD Module

M.2 SSD Removal Procedure

1. Turn **off** the computer, turn it over to remove the battery (*page 2 - 5*).
2. The M.2 SSD module will be visible at point 1 on the mainboard (*Figure 5a*).
3. Remove the screw 2 (*Figure 5b*)
4. The M.2 SSD module 3 (*Figure 5c*) will pop-up, and you can remove it from the computer.
5. Reverse the process to install a new module (do not forget to replace the thermal pad 4 (as shown below), screws and bottom cover).

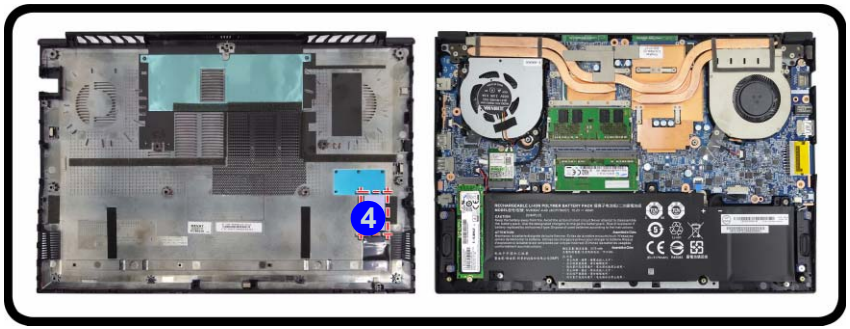
Figure 5
M.2 SSD Module Removal

a. Locate the M.2 SSD.
b. Remove the screw.
c. The M.2 SSD module will pop up.

a.

c.

b.



Thermal Pad

Make sure to place the thermal pad's adhesive side down on the cover's surface as illustrated.

3.M2 SATA Module

- 1 Screw

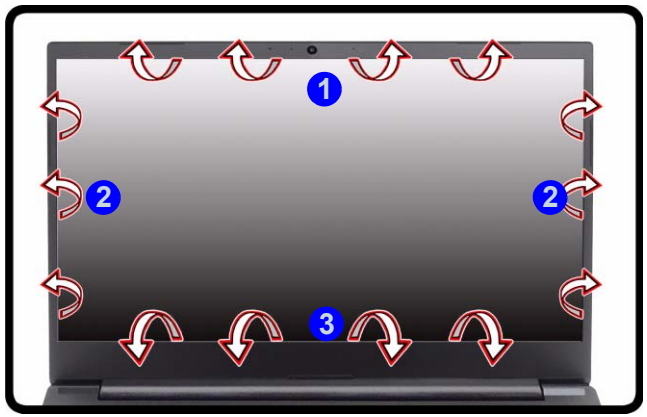
Figure 6
CCD Removal

a. Run your fingers around the inner frame of the LCD panel at the points indicated by the arrows.
b. Lay the computer down on a flat surface with the top case up forming a 130 degree angle. Lift the LCD front panel upwards.

Removing the CCD

1. Turn **off** the computer, turn it over to remove the battery (*page 2 - 5*).
2. Lift up the inner frame and run your fingers around the inner frame of the LCD panel at the points as indicated by the arrows 1 - 3 (*Figure 6a*).
3. Lay the computer down on a flat surface with the top case up forming a 90 degree angle. Carefully lift and remove the LCD front cover 4 upwards (*Figure 6b*).

a.



b.

4. LCD Front Cover

4. Disconnect the cable 5 (*Figure 7c*).
5. Remove the CCD module 6 (*Figure 7d*).
6. Reverse the process to install a new CCD module.

Figure 7
CCD Removal (cont'd.)

c. Disconnect the cable.
d. Remove the CCD module.

c.

d.

6. CCD Module

Appendix A: Part Lists

This appendix breaks down the ***NV40MZ / NV41MZ*** series notebook's construction into a series of illustrations. The component part numbers are indicated in the tables opposite the drawings.

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

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

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

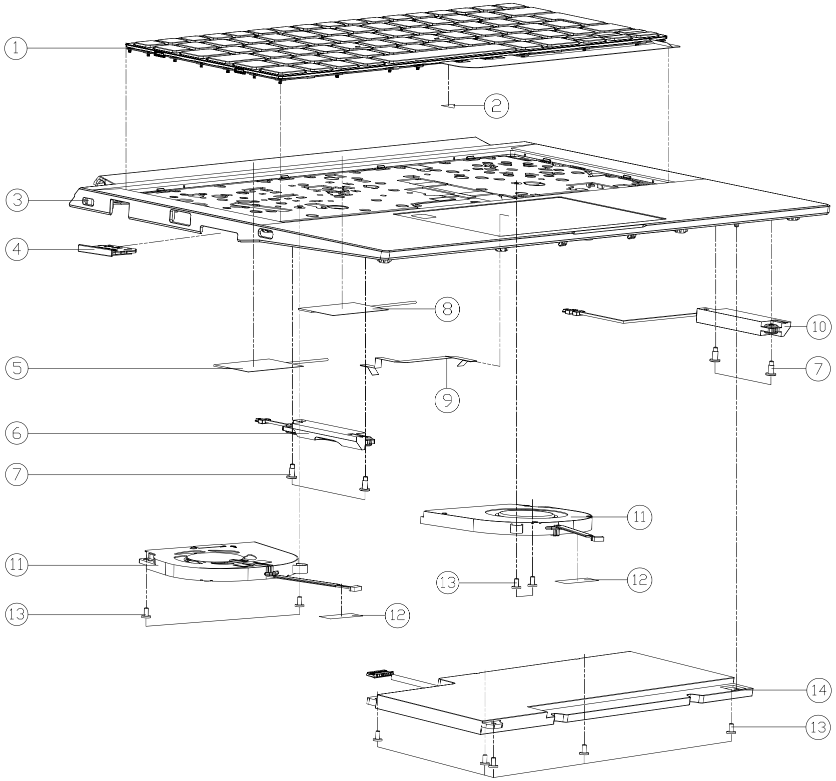
Part List Illustration Location

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

Table A - 1
Part List Illustration Location

Part	
Top	*page A - 3*
Bottom	*page A - 4*
LCD	*page A - 5*
MB	*page A - 6*

Top



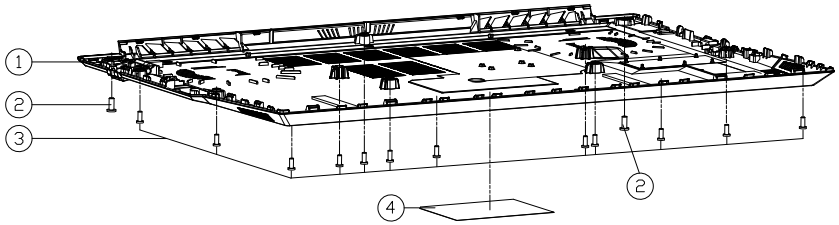
ITEM	PART NAME	PART NO	REMARK
1	KB FOR NON BL GB SERIES NV40ME	6-NV40ME-KB-NBL-GB	
1	KB FOR NON BL JP SERIES NV40ME	6-NV40ME-KB-NBL-JP	
1	KB FOR NON BL PA SERIES NV40ME	6-NV40ME-KB-NBL-PA	
1	KB FOR NON BL US SERIES NV40ME	6-NV40ME-KB-NBL-US	
1	KB FOR WHITE BL GB SERIES NV40ME	6-NV40ME-KB-WBL-GB	
1	KB FOR WHITE BL JP SERIES NV40ME	6-NV40ME-KB-WBL-JP	
1	KB FOR WHITE BL PA SERIES NV40ME	6-NV40ME-KB-WBL-PA	
1	KB FOR WHITE BL US SERIES NV40ME	6-NV40ME-KB-WBL-US	
1	KB FOR NON BL GB SERIES NV41ME	6-NV41ME-KB-NBL-GB	
1	KB FOR NON BL JP SERIES NV41ME	6-NV41ME-KB-NBL-JP	
1	KB FOR NON BL PA SERIES NV41ME	6-NV41ME-KB-NBL-PA	
1	KB FOR NON BL US SERIES NV41ME	6-NV41ME-KB-NBL-US	
1	KB FOR WHITE BL GB SERIES NV41ME	6-NV41ME-KB-WBL-GB	
1	KB FOR WHITE BL JP SERIES NV41ME	6-NV41ME-KB-WBL-JP	
1	KB FOR WHITE BL PA SERIES NV41ME	6-NV41ME-KB-WBL-PA	
1	KB FOR WHITE BL US SERIES NV41ME	6-NV41ME-KB-WBL-US	
2	KB ADHESIVE NV40ME	6-47-NV402-040	
3	(PRE-PROCESS) TOP CASE MODULE NV40ME	6-78-NV40ME02-010	
3	(PRE-PROCESS) TOP CASE MODULE NV41ME	6-78-NV41ME02-010	
4	DUMMY 3IN1 NON PUSH TYPE PC+ABS (C7230P-701DE) W970SUW	6-42-W9708-030	
5	ANTENNA IPEX4 WLAN WGT WL1 PCB DL 40X9MM 2.4G/5G/6G L= 200MM NV40ME	6-23-7NV40-011	
6	SPK+CABLE L 51*14 1.5W 4? 20MM 2010CP04-P4.0C NV40ME	6-23-5NV40-0L0	
7	.SCREW M2*6.2L NI ICT NY FOR SPEAKER	6-35-Z1120-6R2	
8	ANTENNA IPEX4 WLAN WGT WL2 PCB DL 40X9MM 2.4G/5G/6G L= 150MM NV40ME	6-23-7NV40-020	
9	FFC CLICK TO MB L=82MM 5V 8PIN NV40ME	6-43-NV400-011	
10	SPK+CABLE R 51*14 1.5W 4? 85MM 2010CP04-P4.0C NV40ME	6-23-5NV40-0R0	
11	FAN MODULE (WINMA) PWM NV40ME	6-31-NV40S-104	
12	TAPE MYLAR (C),MYLAR M550J	6-40-M55J2-030	
13	SCREW M2*4L KI NI ICT NY (DD=Ø4.5,DT=0.8)	6-35-B1120-4RC	
14	BAT.P S LI 15.2V/3250MAH/49WH 4S1P SMP/VEKEN (BQ40Z50) 980QA042H 3175MAH NV40ME	6-87-NV40S-41B01	

Figure A - 1
Top

A.Part Lists

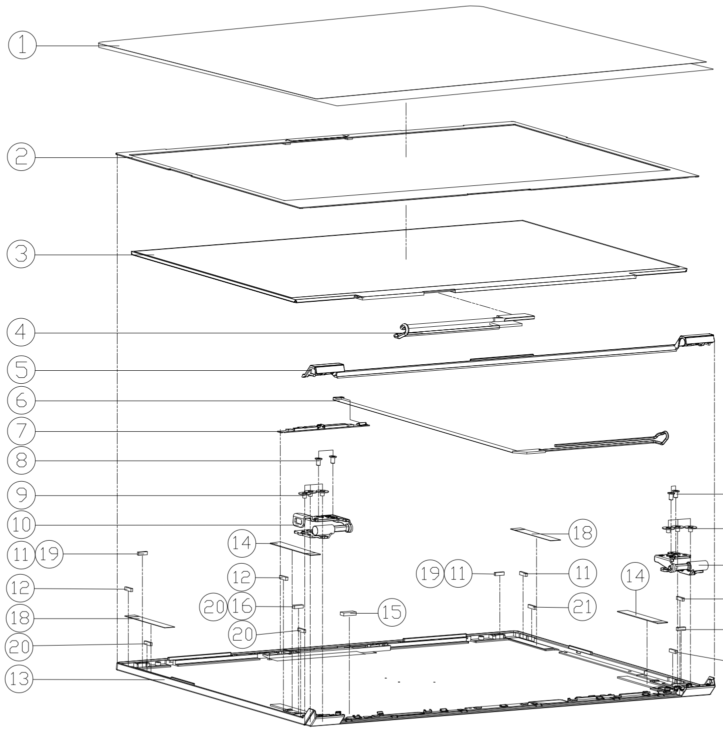
Bottom

Figure A - 2
Bottom



ITEM	PART NAME	PART NO	REMARK
1	BOTTOM CASE MODULE NV40MZ	6-39-NV4Z3-011	
2	.SCREW M2.5*6L K BZ ICT NY	6-35-82125-6RA	
3	SCREW M2*5L K(T=0.8 D=3.5) BK/Z ICT NY	6-35-B6120-5RC	
4	PRODUCT LABEL FOR NV40MZ	6-45-NV40MZ03-010	
4	PRODUCT LABEL FOR NV41MZ	6-45-NV41MZ03-010	

LCD

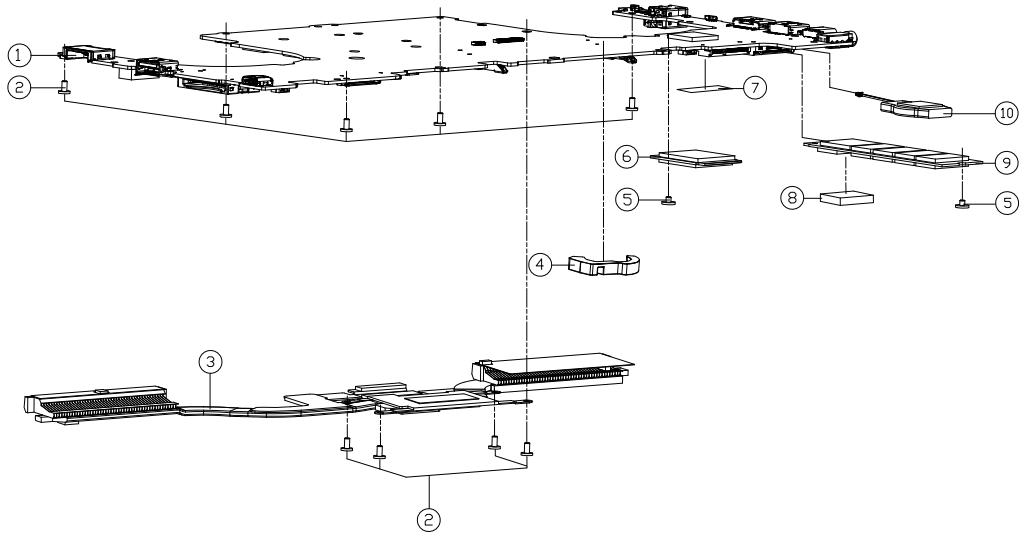


ITEM	PART NAME	PART NO	REMARK
1	LCD PROTECT BOPP L140CU	6-40-L1408-011	
2	FRONT COVER MYLAR W-IR NF40ME	6-40-NV401-031	
2	FRONT COVER MYLAR WO-IR NV40ME	6-40-NV401-011	
3	LCD N14.0" FHD/WVA/N7/NON GT/EDP BOE NV140FHM-N62 LED 2.4MM	6-50-JBB24-Z020	
3	LCD N14.0" FHD/WVA/N4/NON GT/ EDP PANDA LM140LF4L 01 (LED) 2.5MM	6-50-JBB25-Y010	
4	WIRE CABLE FOR EDP 250MM (LXHL) 30V 30P TO 30P (HL/LW CON:HLNV140EDP10) NV40ME	6-43-NV401-010-N	
5	HINGE COVER MODULE NV40ME	6-42-NV401-104	
6	WIRE+FFC CABLE FOR CCD 450MM 12P TO 12P 3.3V (HL) NV40ME	6-43-NV40T-020	
6	WIRE+FFC CABLE FOR CCD 450MM 12P TO 8P 3.3V (HL) NV40ME	6-43-NV40T-010	
7	UVC CAMERA CHICONY FIX(RGB) CNFIH3821003920LH 1M HD OV9734 N150ZU FW5404 W/WHITE-LED W/2D-MIC(NARROW BORDER WITH FFC)	6-88-N15ZC-5100	OPTION
7	UVC CAMERA BISON FIX(RGB) BNH419VXB-000 1M HD OV9734 N150ZU FWXXXX W/WHITE-LED W/2D-MIC(NARROW BORDER WITH FFC)	6-88-N15ZC-4900	OPTION
7	UVC CAMERA CHICONY FIX(RGBIR4.1) CKFIH3921003924LH 1M HD OV9738 N150ZU FW0012 W/WHITE-LED W/2D-MIC(NARROW BORDER WITH FFC)	6-88-N15ZC-5112	OPTION
8	.SCREW M2.5*5L KI NI ICT NY	6-35-B1125-5RA	
9	SCREW M2.5*2.3L KI NI ICT NY (Ø8,T=0.4)	6-35-B1125-2R3	
10	HINGE L (SK7) NV40ME	6-33-NV401-0L2	
11	LCD STOP RUBBER 6X2X1.2 NV40ME	6-47-NV401-031	FOR 6-50-JBB24-Z020
12	LCD STOP RUBBER 6X2X1.6 NV40ME	6-47-NV401-0B1	FOR 6-50-JBB24-Z020
13	BACK COVER MODULE NV40ME	6-39-NV401-024	
13	BACK COVER MODULE NV41ME	6-39-NV411-022	
14	DOUBLE TAPE DOWN 8X40X0.2 NV40ME	6-47-NV401-010	
15	BTM HDD SPONGE F (10*4*2.15T) CR4382+G4000 P775DM2	6-47-0019A-1A1	
16	LCD STOP RUBBER 6X2X2 NV40ME	6-47-NV401-041	FOR 6-50-JBB24-Z020
17	HINGE R (SK7) NV40ME	6-33-NH501-0R2	
18	DOUBLE TAPE UPPER 8X40X0.85 NV40ME	6-47-NV401-0A0	
19	LCD STOP RUBBER 6X2X1.6 NV40ME	6-47-NV401-0B1	FOR 6-50-JBB25-Y010
20	LCD STOP RUBBER 6X2X1.8 GRAY NV40ME	6-47-NV401-0C1	FOR 6-50-JBB25-Y010
21	LCD STOP RUBBER 6X2X1.4 BLACK NV40ME	6-47-NV401-051	FOR 6-50-JBB25-Y010

Figure A - 3
LCD

MB

Figure A - 4
MB



ITEM	PART NAME	PART NO	REMARK
1	MAIN BOARD(CPU/I7-10567/2.7G V20A (EIPXW/TPM1.0 CHARGE) NV40ME	6-77-NV40MZ00-D02A-A	
1	MAIN BOARD(CPU/I5-1135G7/2.4G) V20A (EIPXV/TPM) NV40MZ	6-77-NV40MZ00-D02A-1B	
1	MAIN BOARD(CPU/I3-1115G4/3.0G) V20A (EIPXV/D TPM) NV40MZ	6-77-NV40MZ00-D02A-2C	
1	MAIN BOARD(CPU/7505U/2.0G) V20A (EIPXV/D TPM) NV40MZ	6-77-NV40MZ00-D02A-2D	
1	MAIN BOARD(CPU/6305U/1.8G) V20A (EIPXV/D TPM) NV40MZ	6-77-NV40MZ00-D02A-2E	
2	SCREW M2*4L KI NI ICT NY (DD=Ø4.5,DT=0.8)	6-35-B1120-4RC	
3	CPU HEATSINK MODULE NV40MZ	6-31-NV4ZN-101	
4	RUBBER FOR MB NV40ME	6-47-NV402-051	
5	SCREW M2*3.2L BNI ICT NY FOR M2	6-35-Z9120-3R2	
6	[illegible]	6-88-N15CF-4210	OPTION
6	[illegible]	6-88-NV40F-4210	OPTION
6	[illegible]	6-88-N24GF-4200	OPTION
7	TAPE MYLAR (C),MYLAR M550J	6-40-M55J2-030	
8	THERMAL PAD FOR M2 SSD M4500 30X18 T1.0MM NV40ME	6-48-NV408-010	
9	[illegible]	6-85-D511T-S05	OPTION
9	[illegible]	6-85-D511T-S04	OPTION
9	[illegible]	6-85-D515B-S0A	OPTION
9	[illegible]	6-85-D515B-S0B	OPTION
9	[illegible]	6-85-D515B-H04	OPTION
9	[illegible]	6-85-D511T-H01	OPTION
9	[illegible]	6-85-D511T-W01	OPTION
9	[illegible]	6-85-D51R6-W02	OPTION
10	[illegible]	6-23-22015-TE0	

Appendix B: Schematic Diagrams

This appendix has circuit diagrams of the ***NV40MZ / NV41MZ*** notebook's PCB's. The following table indicates where to find the appropriate schematic diagram.

Diagram - Page	Diagram - Page	Diagram - Page
System Block Diagram - Page B - 2	*NVIDIA Power Sequence - Page B - 22*	*Conn Fan, CCD, TP, LED KB - Page B - 42*
Processor 1/12 - Page B - 3	*NVIDA GPIO Level Shift - Page B - 23*	*AC-In - Page B - 43*
Processor 2/12 - Page B - 4	*VGA PWR, GND, NC - Page B - 24*	*LED, LID SW - Page B - 44*
Processor 3/12 - Page B - 5	*VGA NVVDD Coupling - Page B - 25*	*VCCIN - Page B - 45*
Processor 4/12 - Page B - 6	*DDR4 SO-DIMM A - Page B - 26*	*VCCIN Aux - Page B - 46*
Processor 5/12 - Page B - 7	*DDR4 SO-DIMM B - Page B - 27*	*1.8VA, 1.5VS - Page B - 47*
Processor 6/12 - Page B - 8	*Panel - Page B - 28*	*3.3V, 5V, 3VS, 5VS, CTL - Page B - 48*
Processor 7/12 - Page B - 9	*HDMI - Page B - 29*	*V1.05A / VNN - Page B - 49*
Processor 8/12 - Page B - 10	*Audio Codec - Page B - 30*	*VDD3, VDD5 - Page B - 50*
Processor 9/12 - Page B - 11	*M Key PCIE SSD - Page B - 31*	*VDDQ, VDDQ_VTT, 1.8VA - Page B - 51*
Processor 10/12 - Page B - 12	*USB Charger, TPM - Page B - 32*	*2.5V, VCCST, VCCSTG - Page B - 52*
Processor 11/12 - Page B - 13	*USB, LED - Page B - 33*	*Charger, AC-In - Page B - 53*
Processor 12/12 - Page B - 14	*IT5570 - Page B - 34*	*3.3VA, NV3V3 - Page B - 54*
VGA PCI-E, Straps, XTAL - Page B - 15	*RTL8111G - Page B - 35*	*NVVDD1 - Page B - 55*
VGA Frame Buffer Interface - Page B - 16	*WLAN/BT - Page B - 36*	*NVVDD2 - Page B - 56*
VGA Frame Buffer A - Page B - 17	*RTS5227S - Page B - 37*	*PEX_VDD - Page B - 57*
VGA Frame Buffer A - Page B - 18	*Type-C USB3.0 - Page B - 38*	*FBVDDQ - Page B - 58*
VGA Frame Buffer B - Page B - 19	*Type-C, Retimer 1/2 - Page B - 39*	*DGPU Power Measurement - Page B - 59*
VGA Frame Buffer B - Page B - 20	*Type-C, Retimer 2/2 - Page B - 40*	*1V8_AON/RUN, NV3V3 - Page B - 60*
VGA I/O - Page B - 21	*Type-C Con - Page B - 41*	*Power Sequence - Page B - 61*

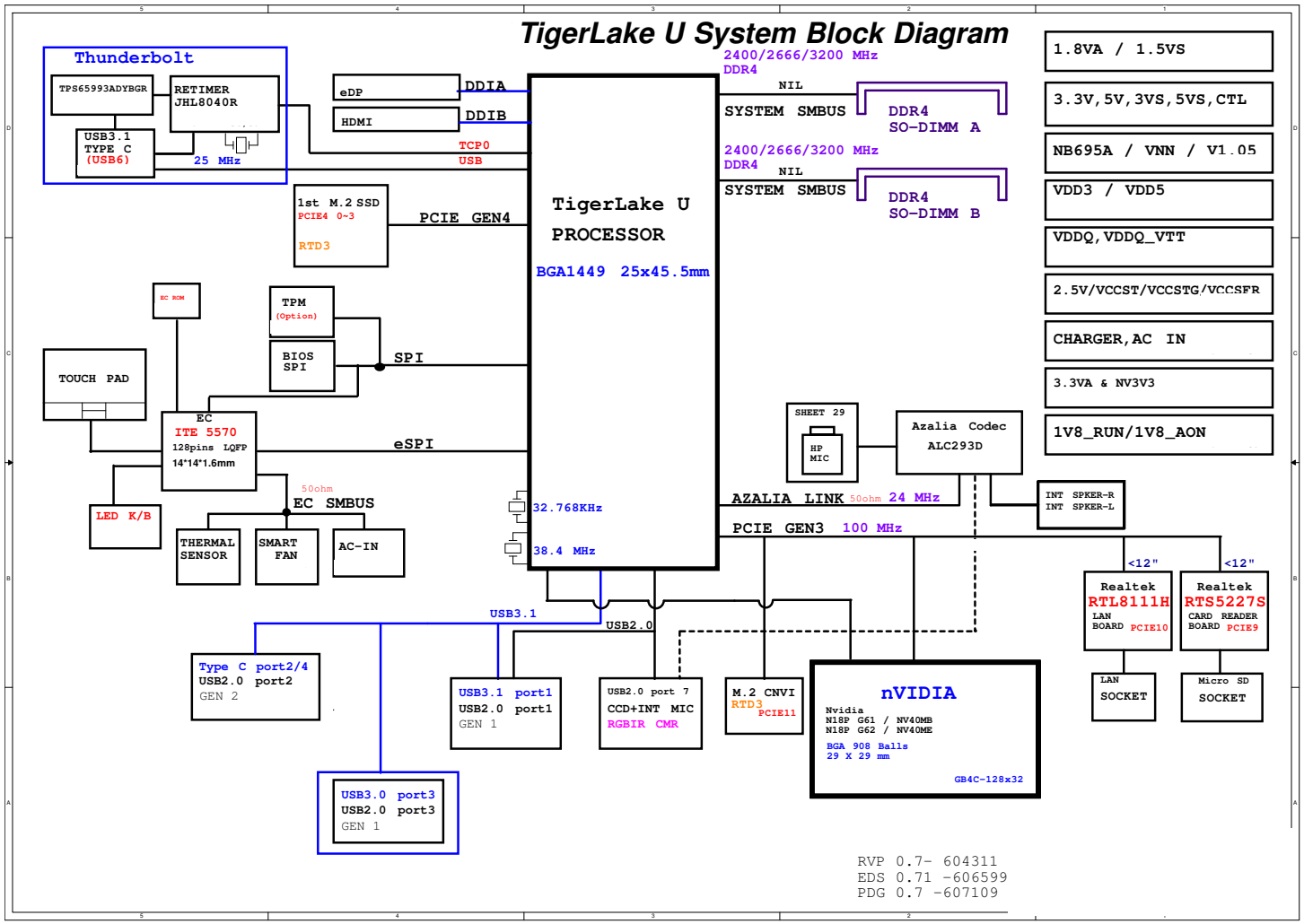
Table B - 1
SCHEMATIC DIAGRAMS

Version Note

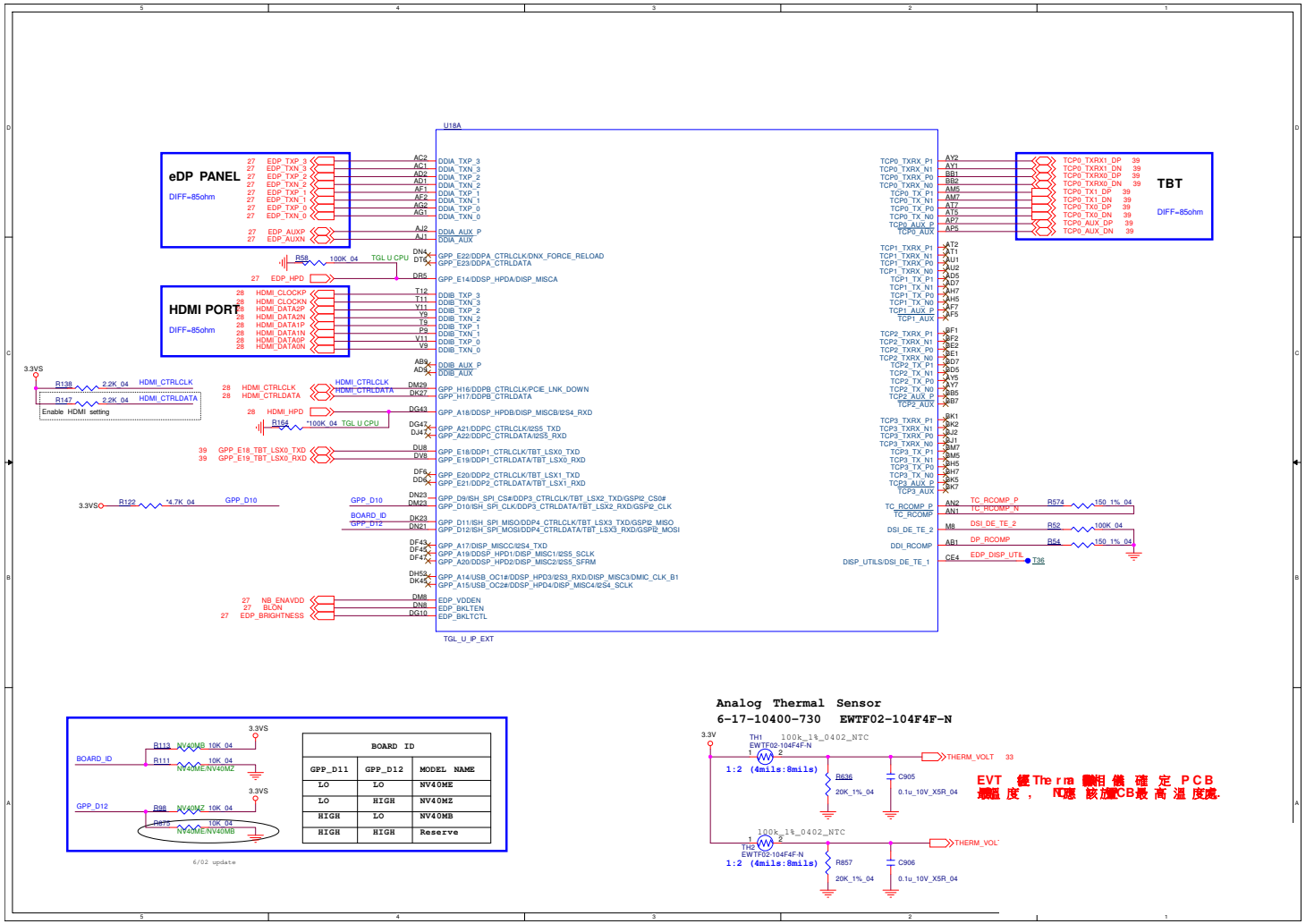
The schematic diagrams in this chapter are based upon version 6-71-NV400-D02A. If your mainboard (or other boards) are a later version, please check with the Service Center for updated diagrams (if required).

System Block Diagram

Sheet 1 of 61
System Block Diagram



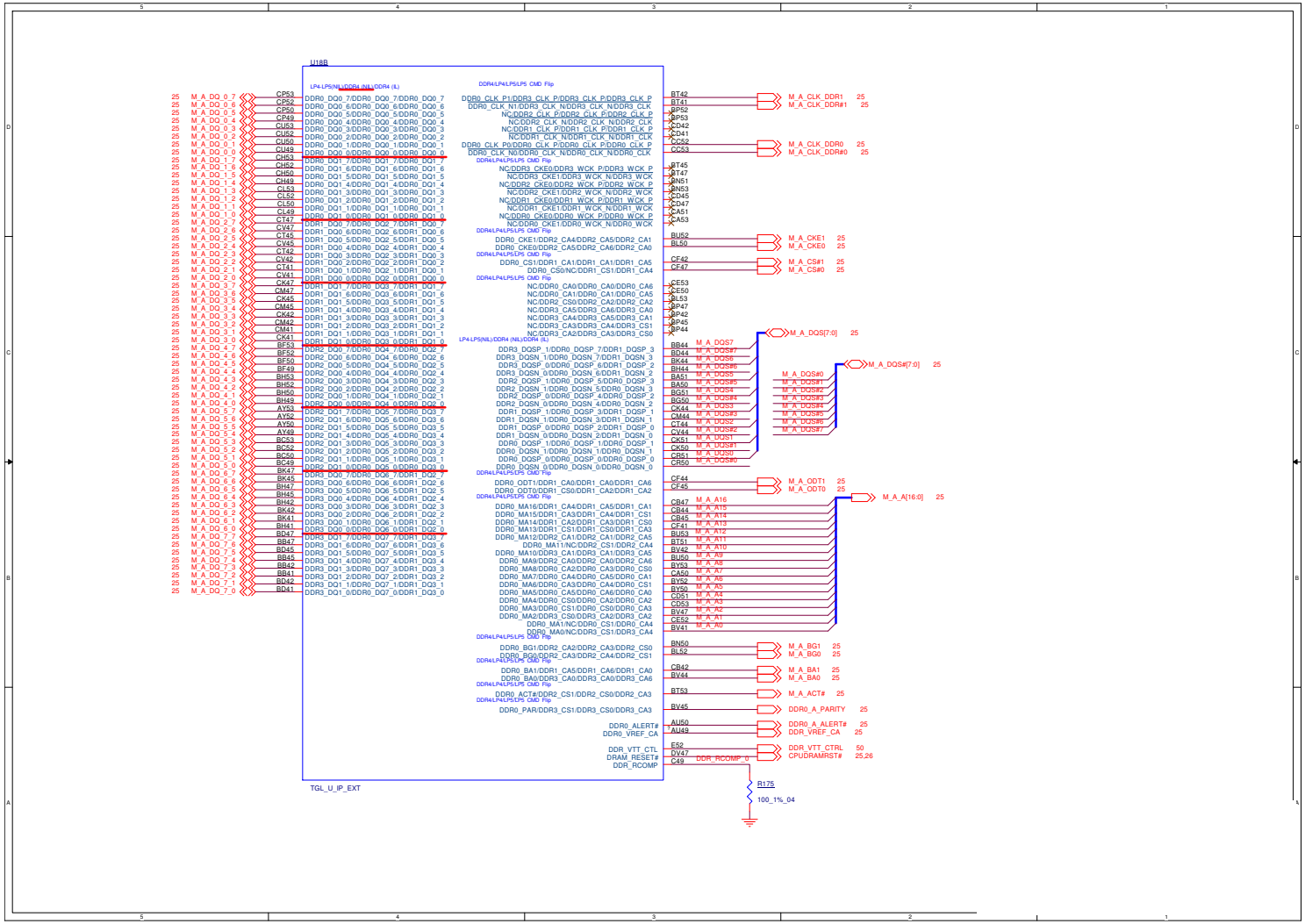
Processor 1/12



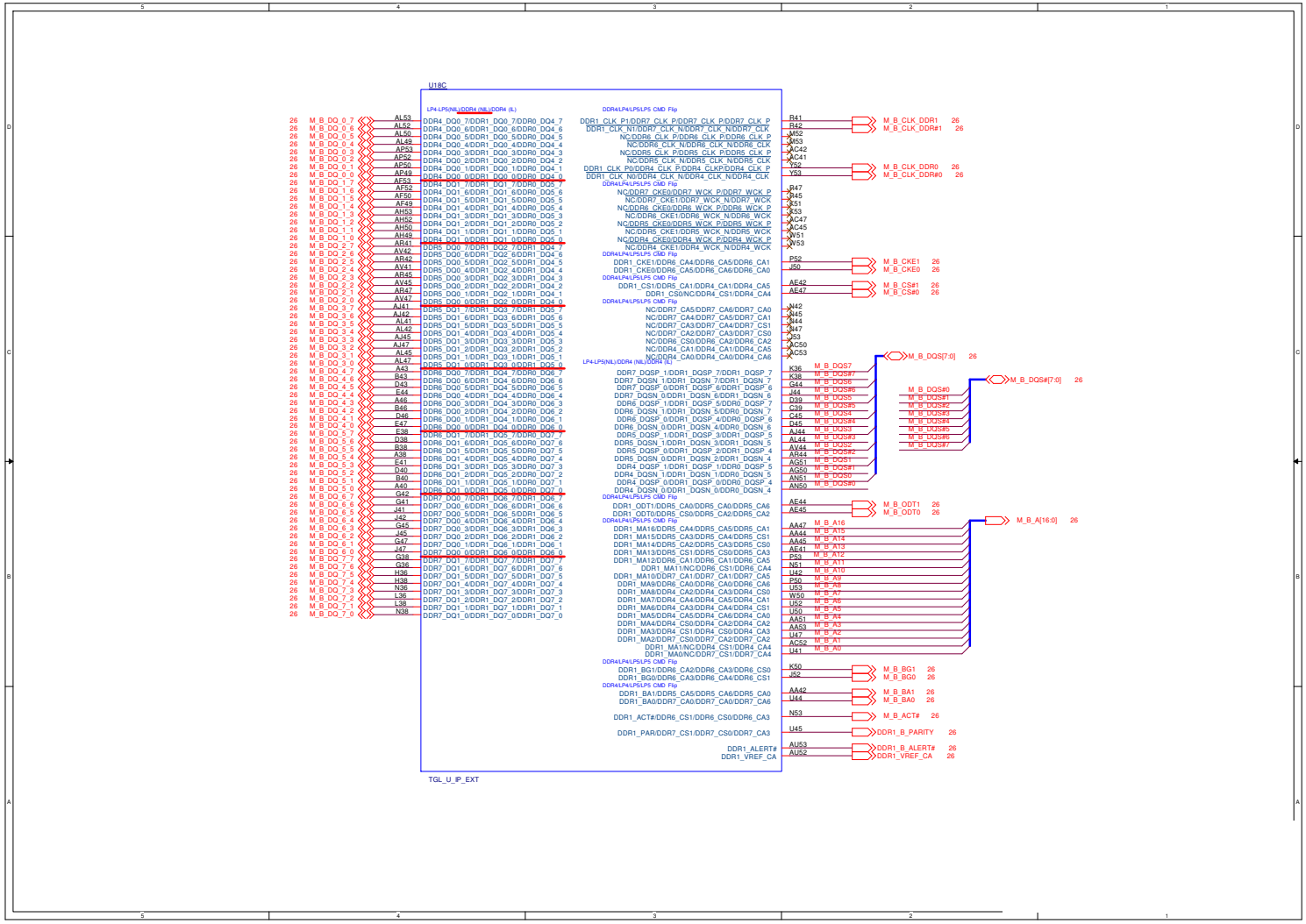
Sheet 2 of 61
Processor 1/12

Processor 2/12

Sheet 3 of 61
Processor 2/12



Processor 3/12



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Processor 3/12

Processor 4/12

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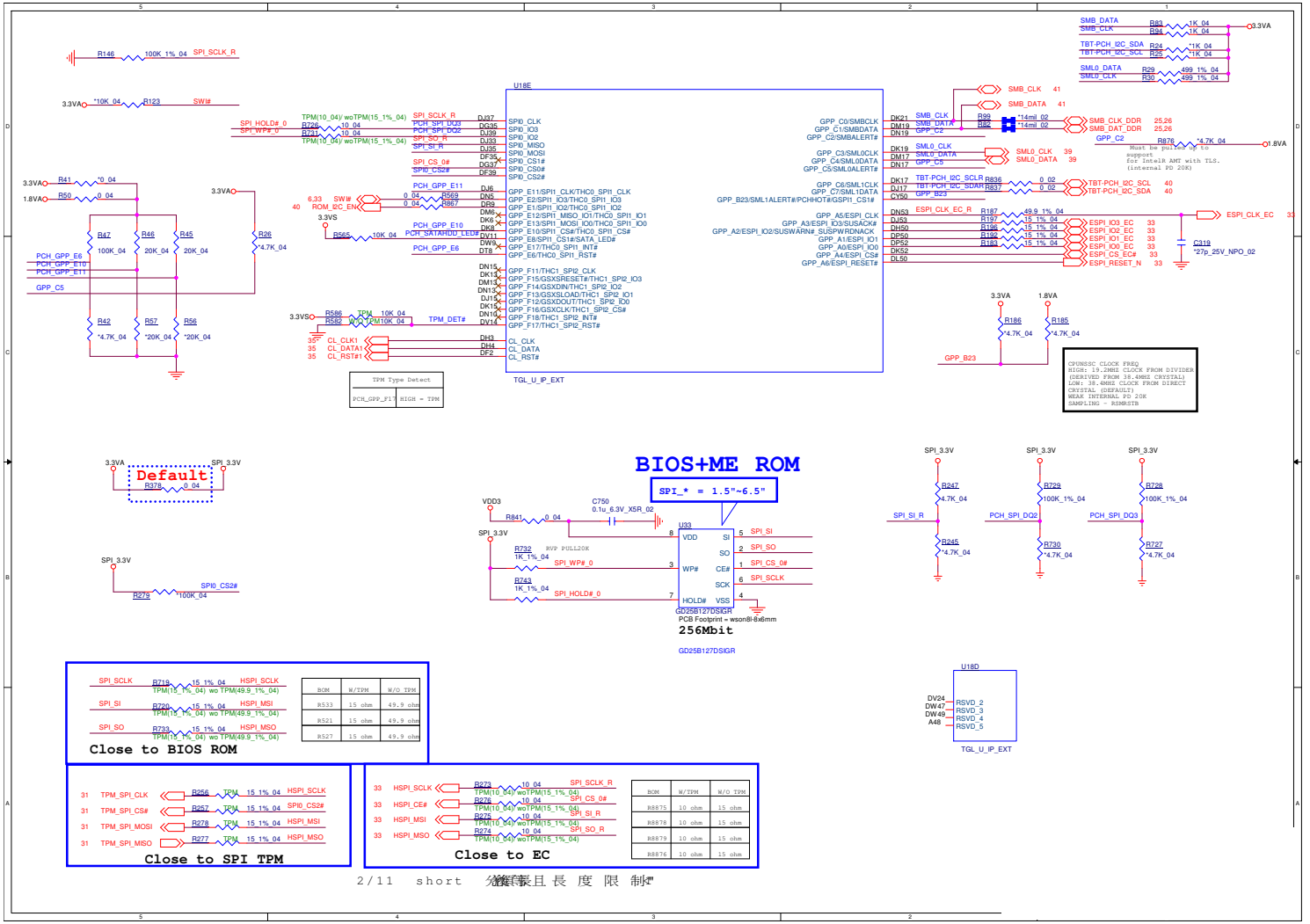
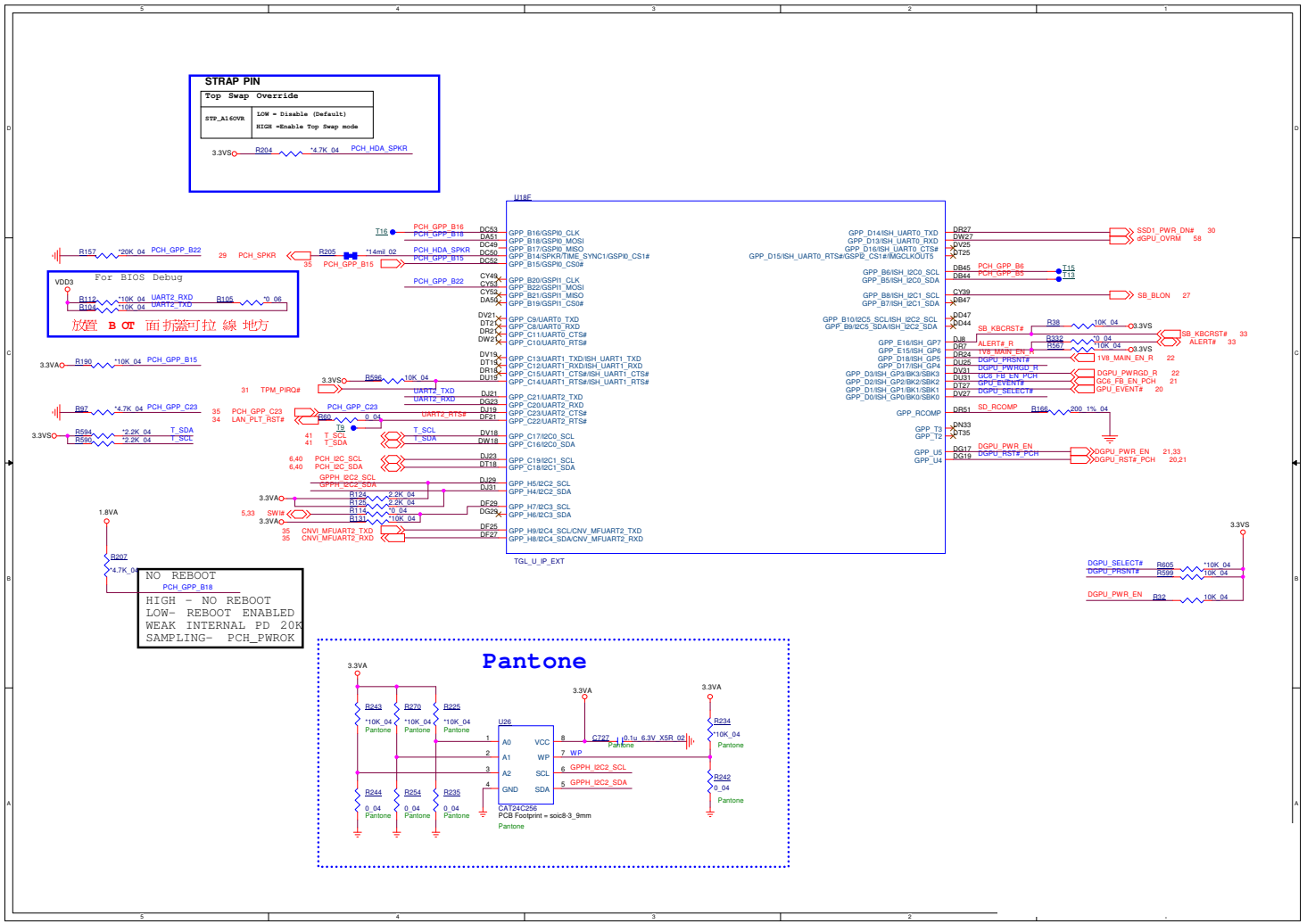
Processor 4/12



Processor 5/12



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Processor 5/12

Processor 6/12

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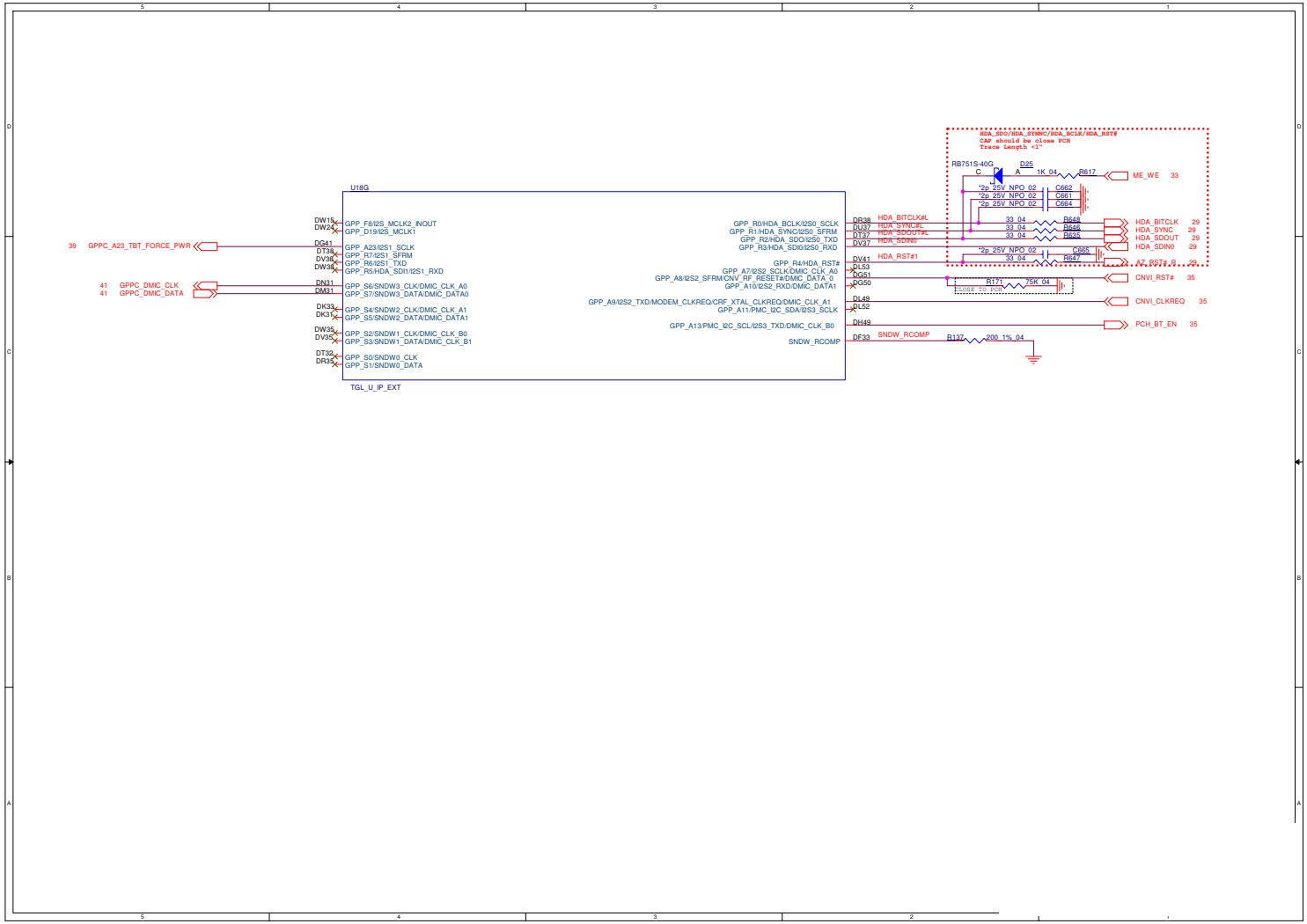
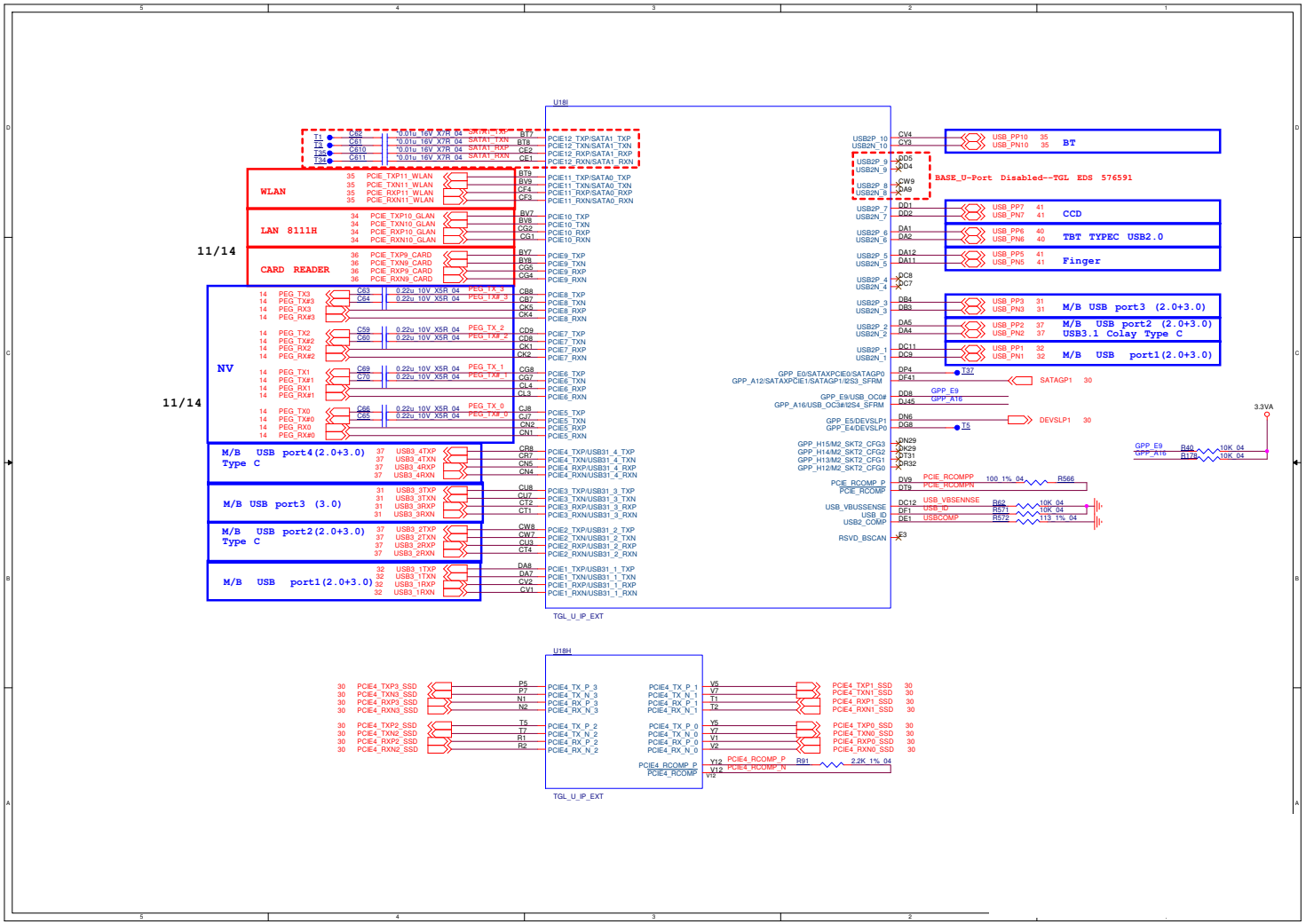
Processor 6/12



Processor 7/12



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Processor 7/12

Processor 8/12

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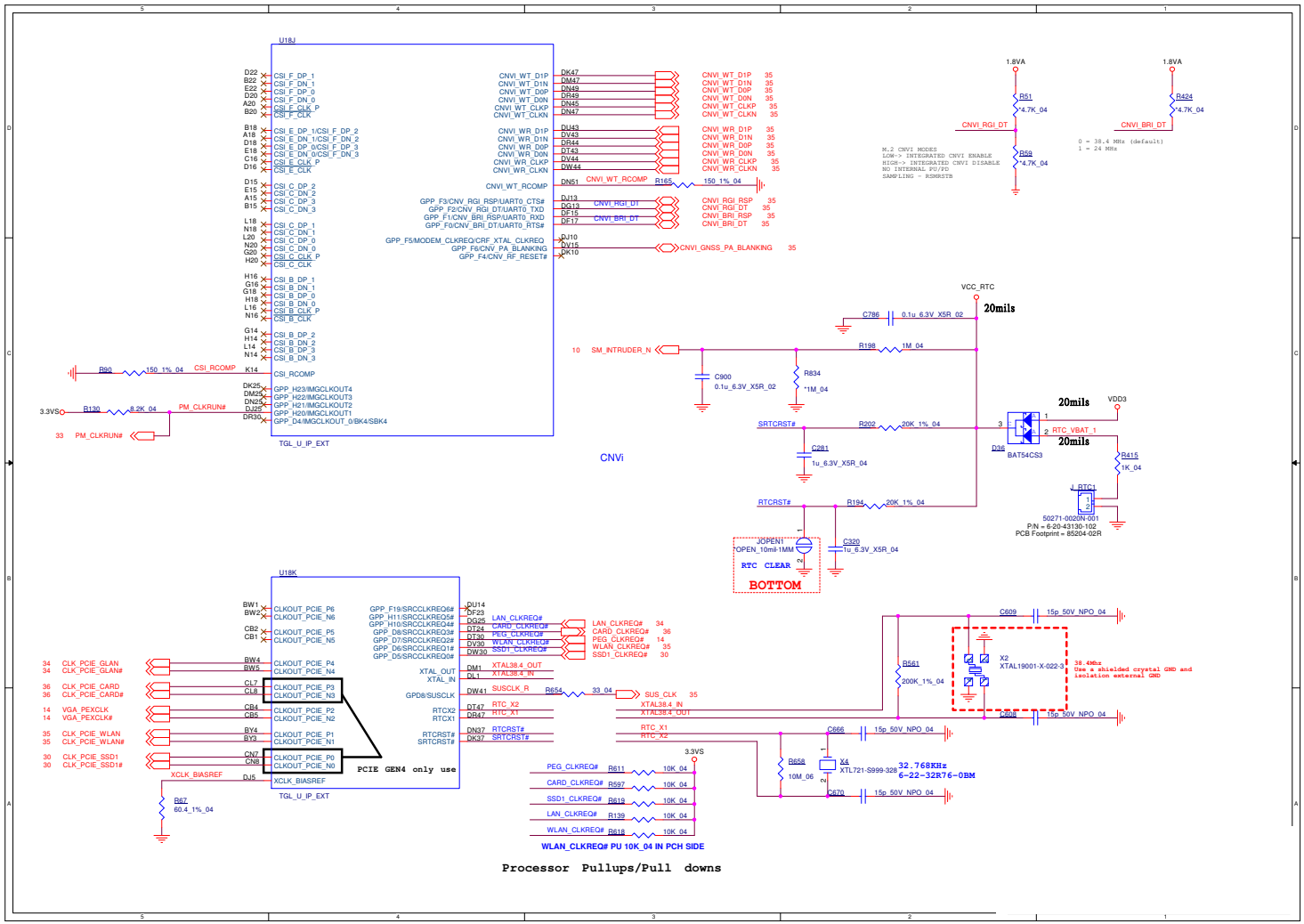
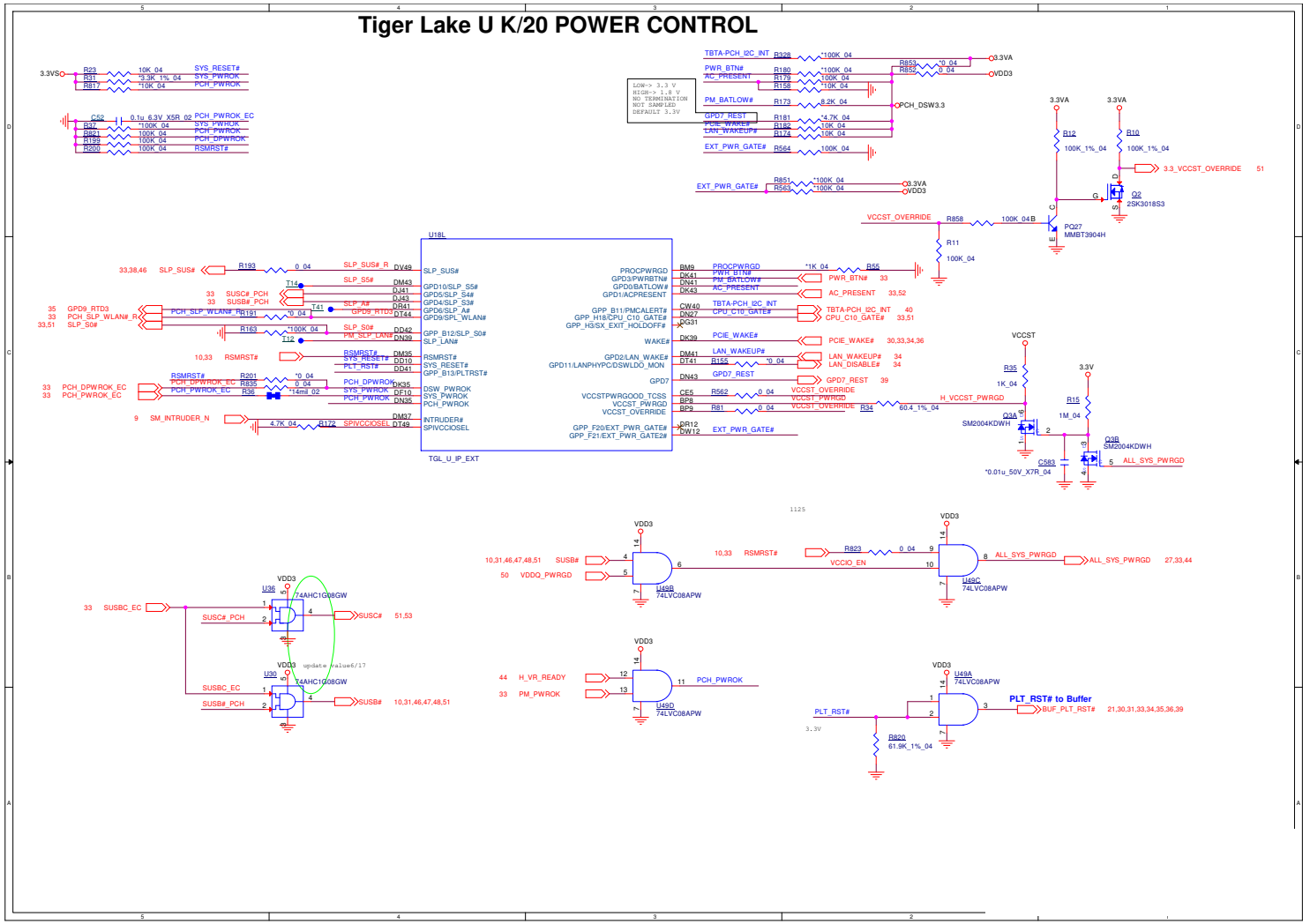
Processor 8/12



Processor 9/12



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Processor 9/12

Processor 10/12

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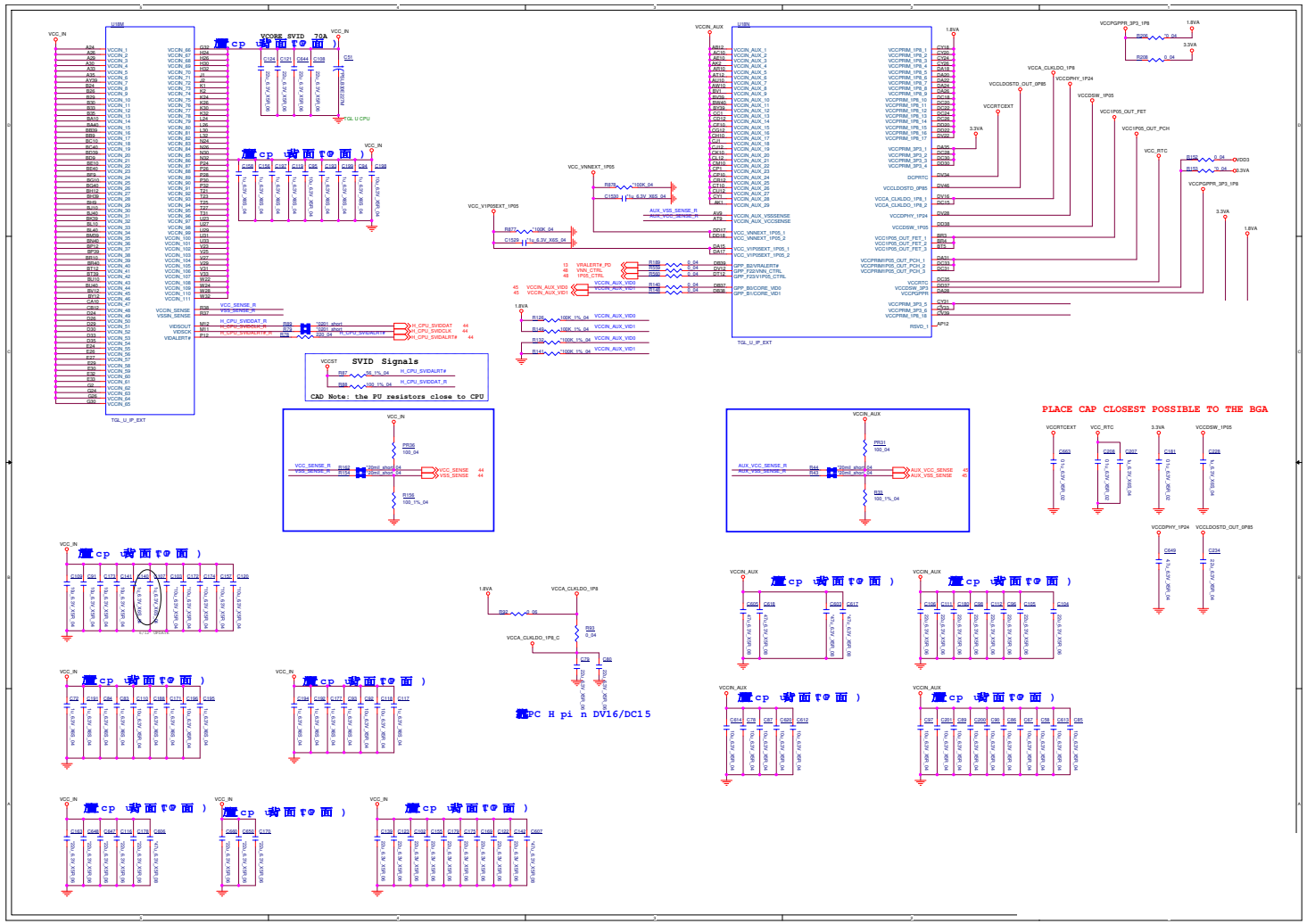
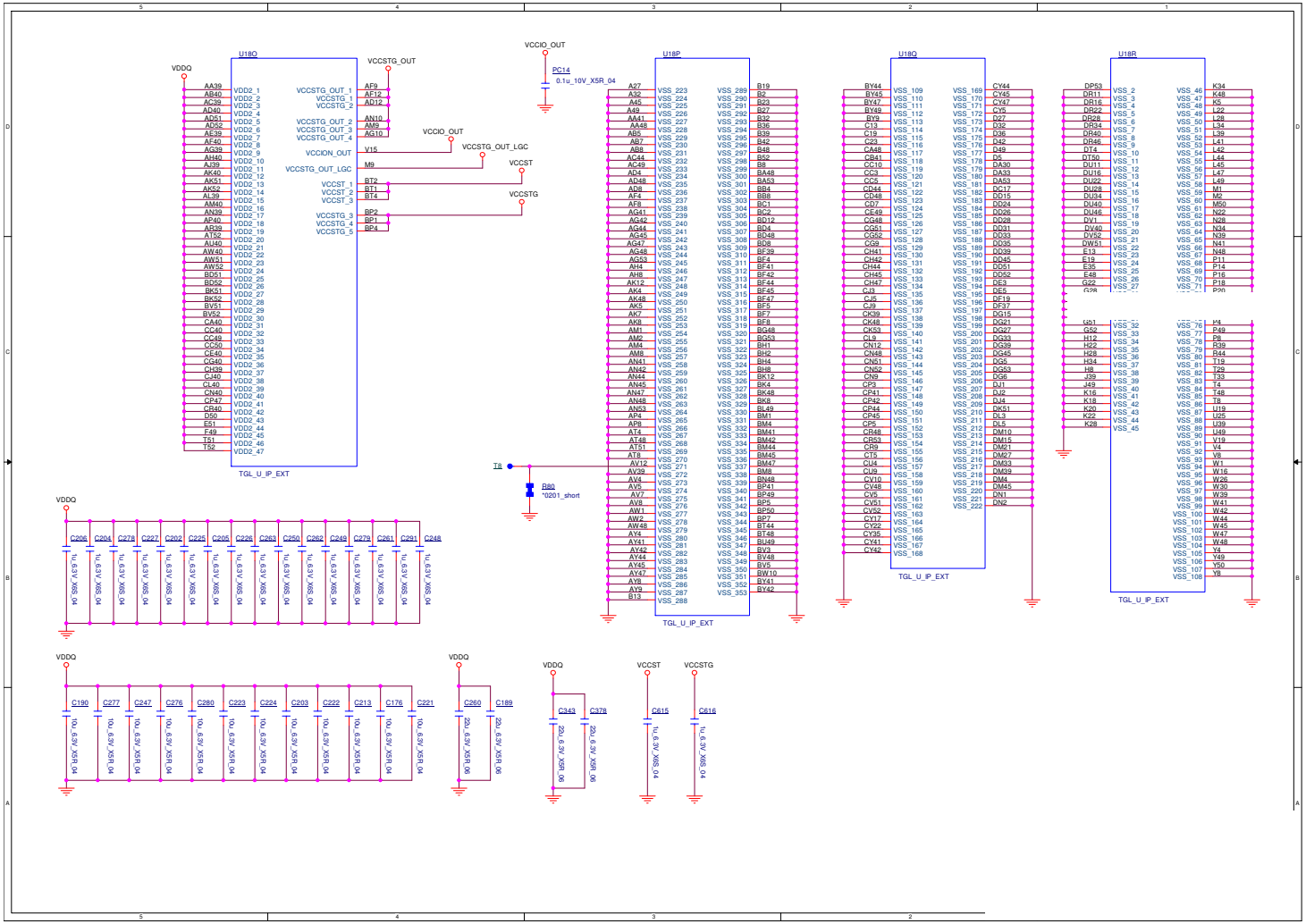
Processor 10/12



Processor 11/12



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Processor 11/12

Processor 12/12

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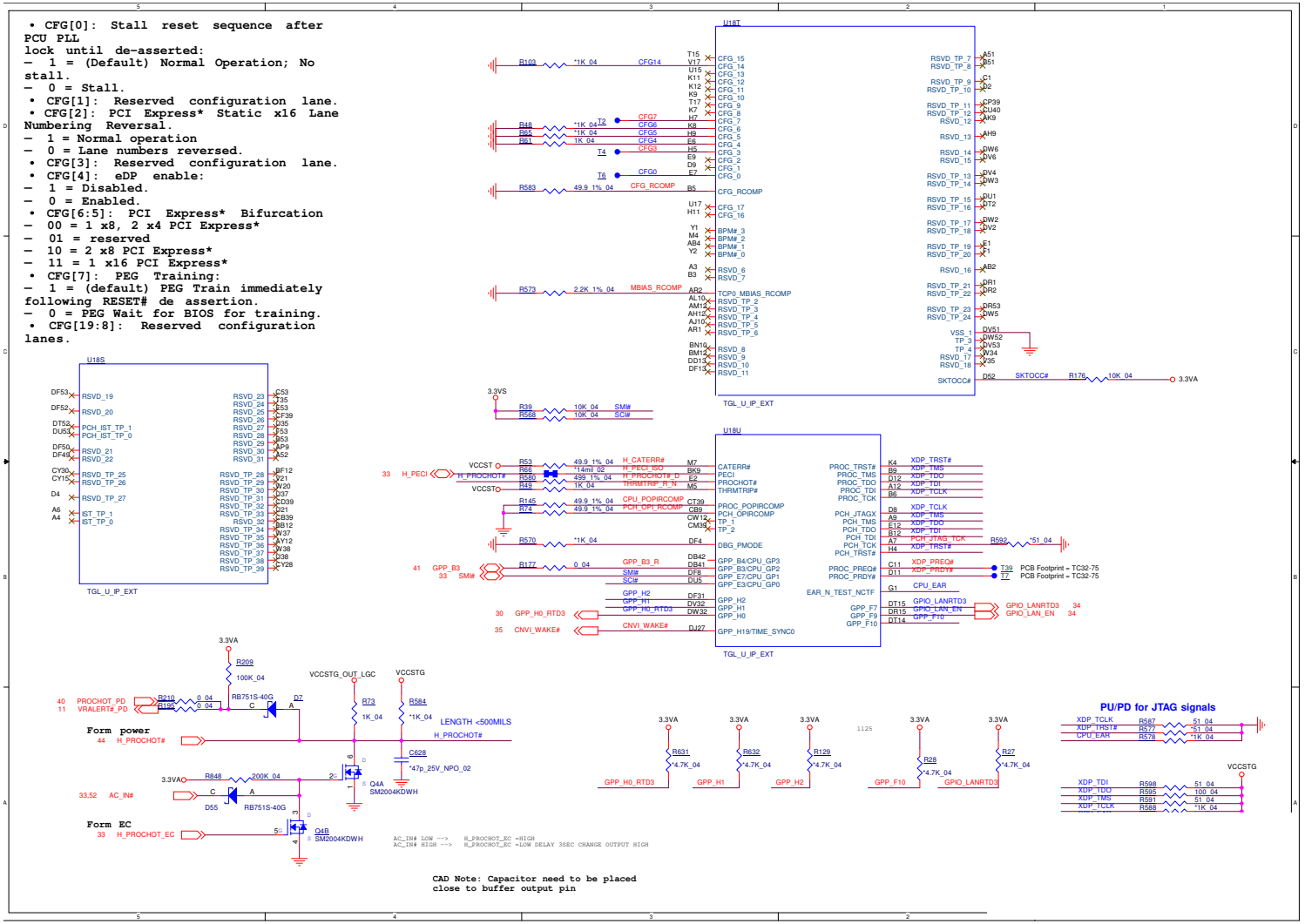
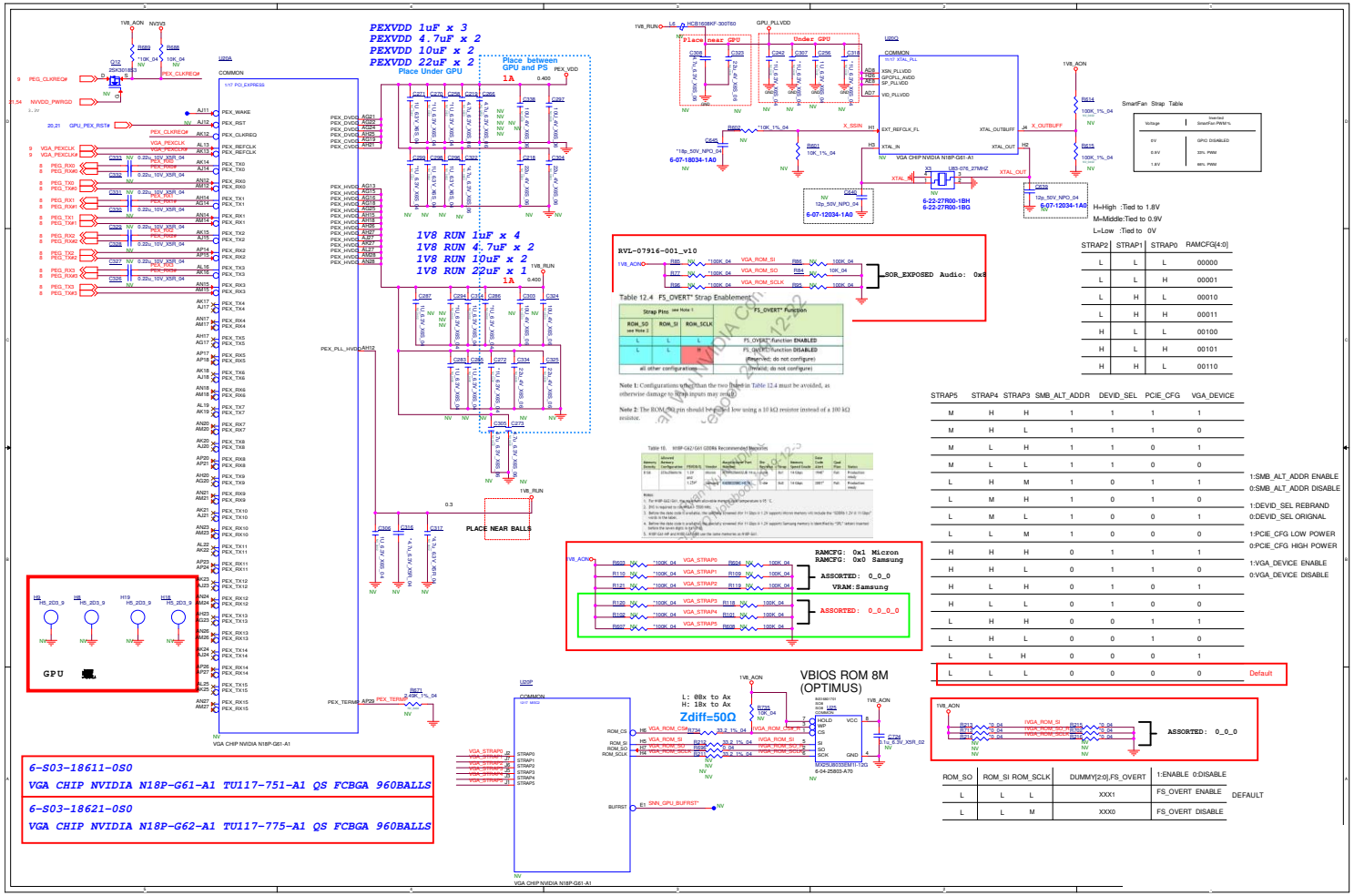
Processor 12/12



VGA PCI-E, Straps, XTAL



STRAP2	STRAP1	STRAP0	RAMCFG[4:0]
L	L	L	00000
L	L	H	00001
L	H	L	00010
L	H	H	00011
H	L	L	00100
H	L	H	00101
H	H	L	00110

STRAP5	STRAP4	STRAP3	SMB_ALT_ADDR	DEVID_SEL	PCIE_CFG	VGA_DEVICE	
M	H	H	1	1	1	1	
M	H	L	1	1	1	0	
M	L	H	1	1	0	1	
M	L	L	1	1	0	0	
L	H	M	1	0	1	1	1:SMB_ALT_ADDR ENABLE
L	M	H	1	0	1	0	0:SMB_ALT_ADDR DISABLE
L	M	L	1	0	0	1	1:DEVID_SEL REBRAND
L	L	M	1	0	0	0	0:DEVID_SEL ORIGNAL
H	H	H	0	1	1	1	1:PCIE_CFG LOW POWER
H	H	L	0	1	1	0	0:PCIE_CFG HIGH POWER
H	L	H	0	1	0	1	1:VGA_DEVICE ENABLE
H	L	L	0	1	0	0	0:VGA_DEVICE DISABLE
L	H	H	0	0	1	1	
L	H	L	0	0	1	0	
L	L	H	0	0	0	1	
L	L	L	0	0	0	0	Default

ROM_SO	ROM_SI	ROM_SCLK	DUMMY[2:0],FS_OVERT	
L	L	L	XXX1	1:ENABLE 0:DISABLE
L	L	M	XXX0	FS_OVERT ENABLE DEFAULT
				FS_OVERT DISABLE

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VGA PCI-E, Straps, XTAL

VGA Frame Buffer Interface

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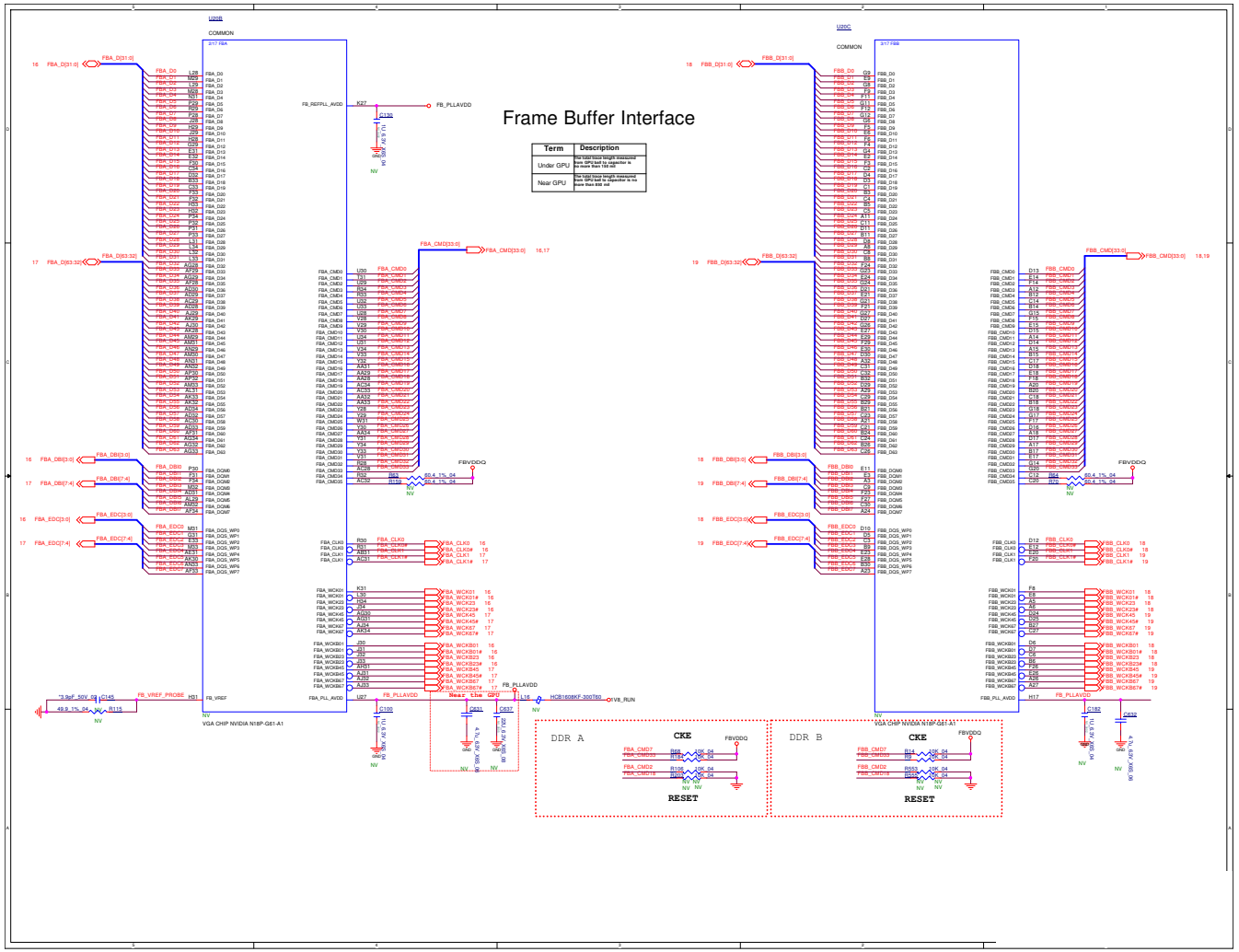
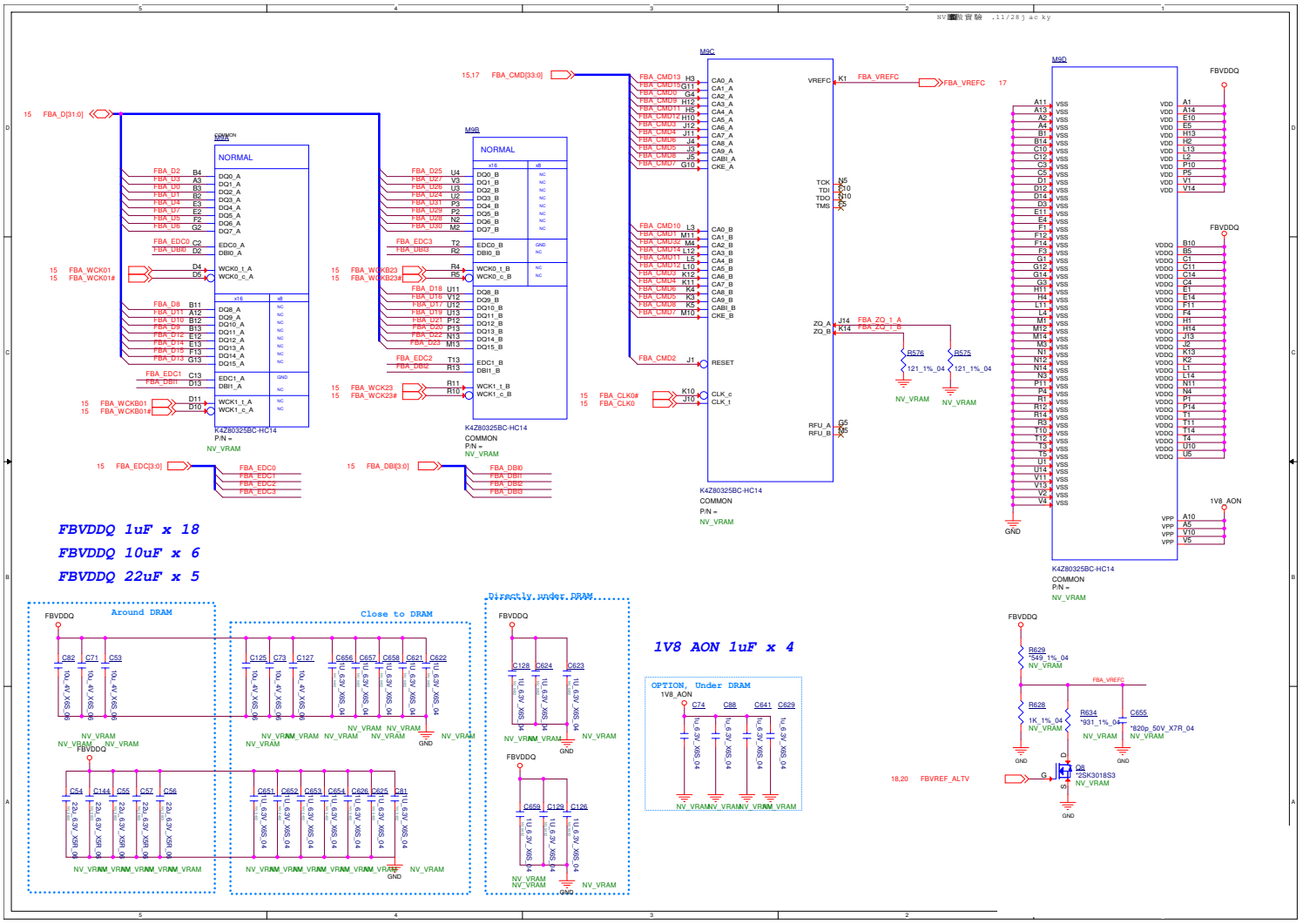
VGA Frame Buffer Interface



VGA Frame Buffer A



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VGA Frame Buffer A

VGA Frame Buffer A

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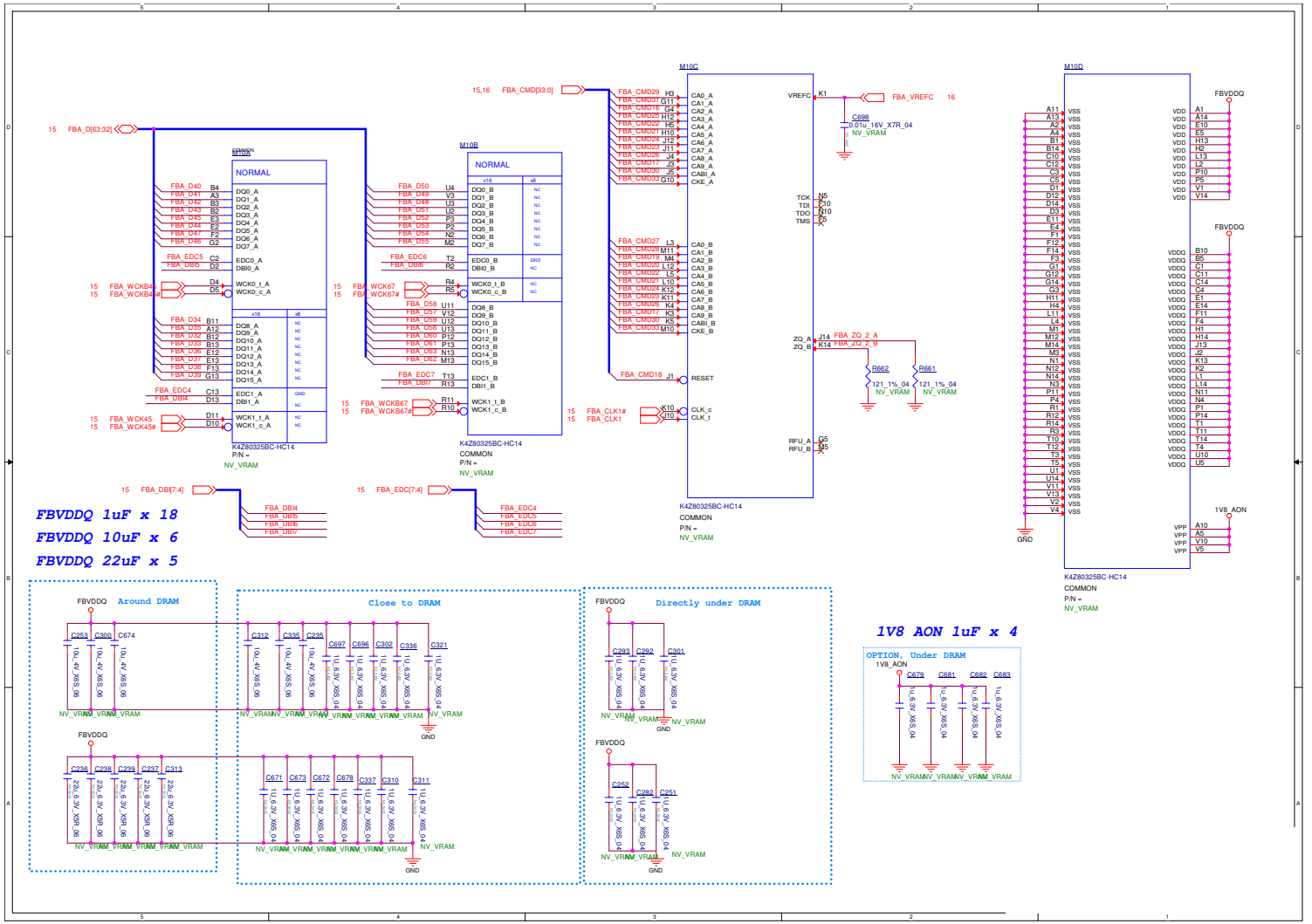
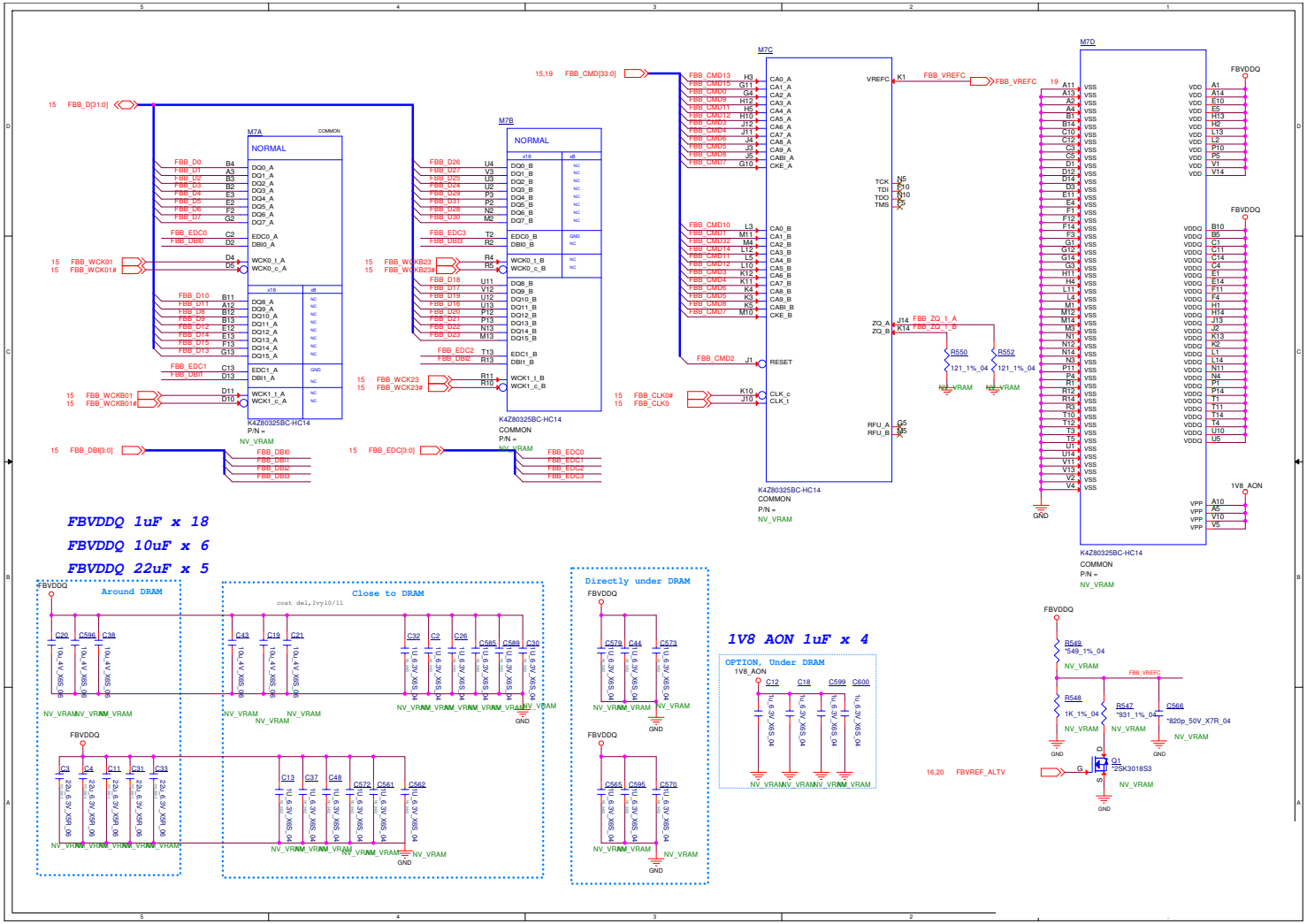
VGA Frame Buffer A



VGA Frame Buffer B



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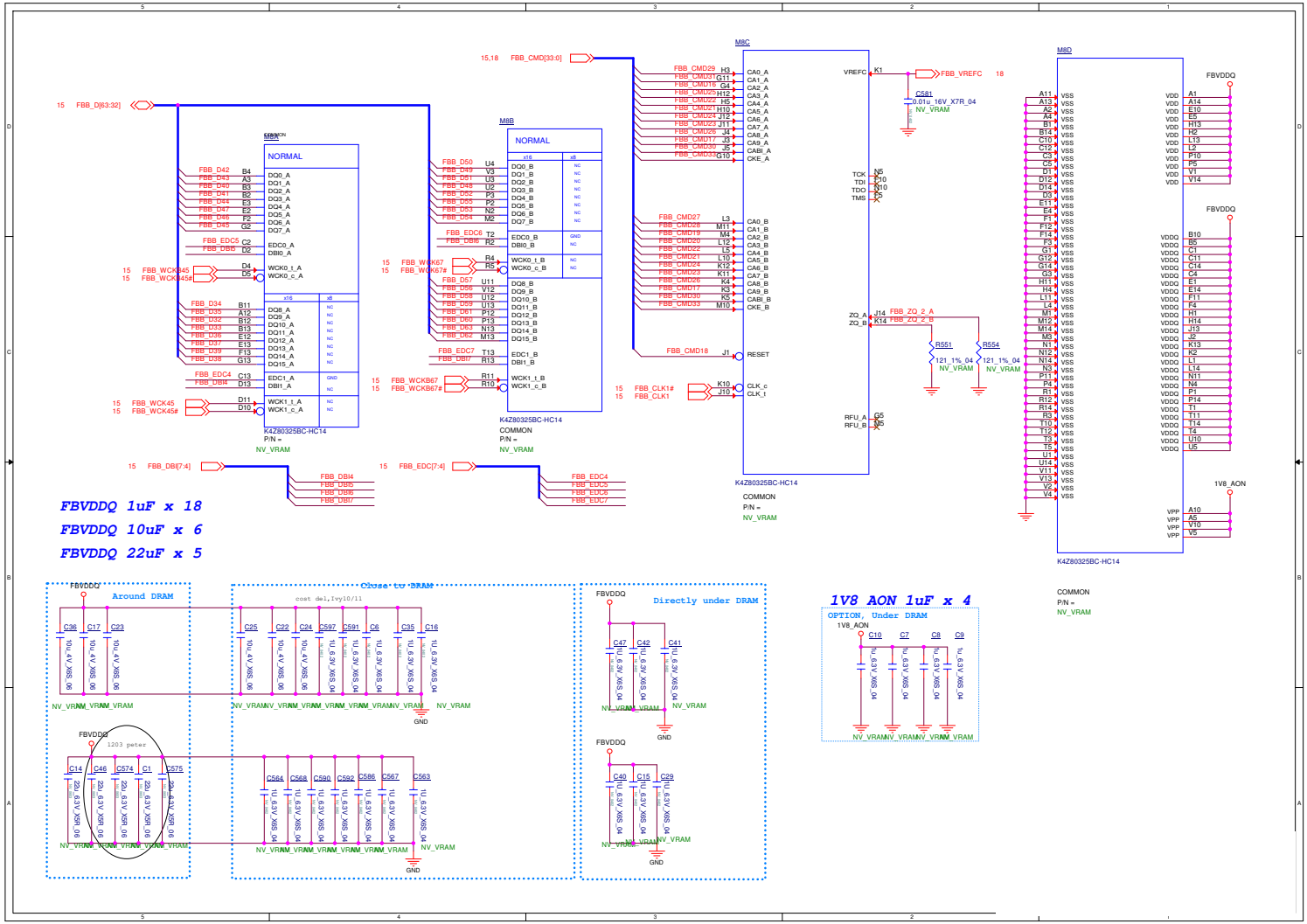
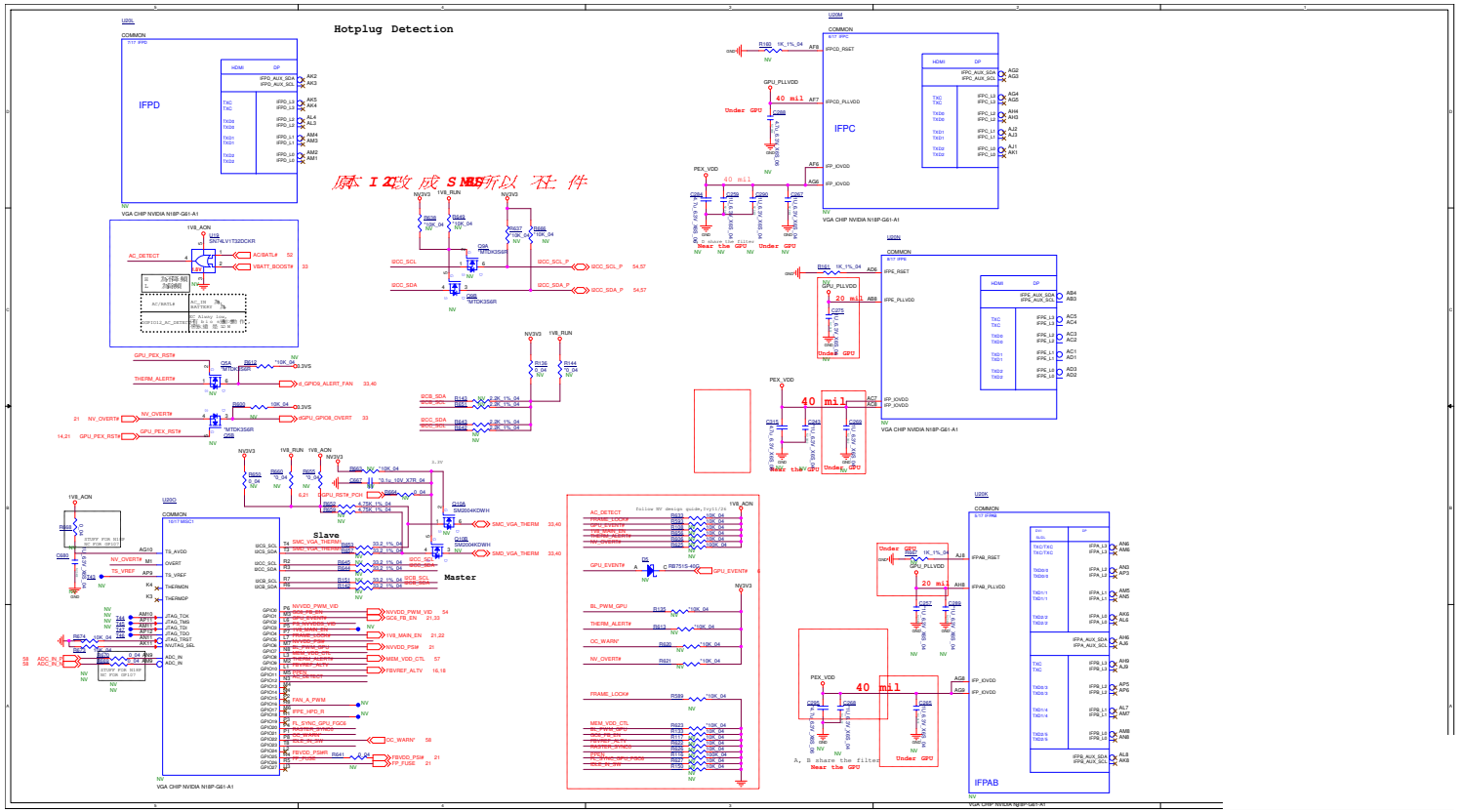
VGA Frame Buffer B

VGA Frame Buffer B

Sheet 19 of 61
VGA Frame Buffer B



VGA I/O



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VGA I/O

NVIDIA Power Sequence

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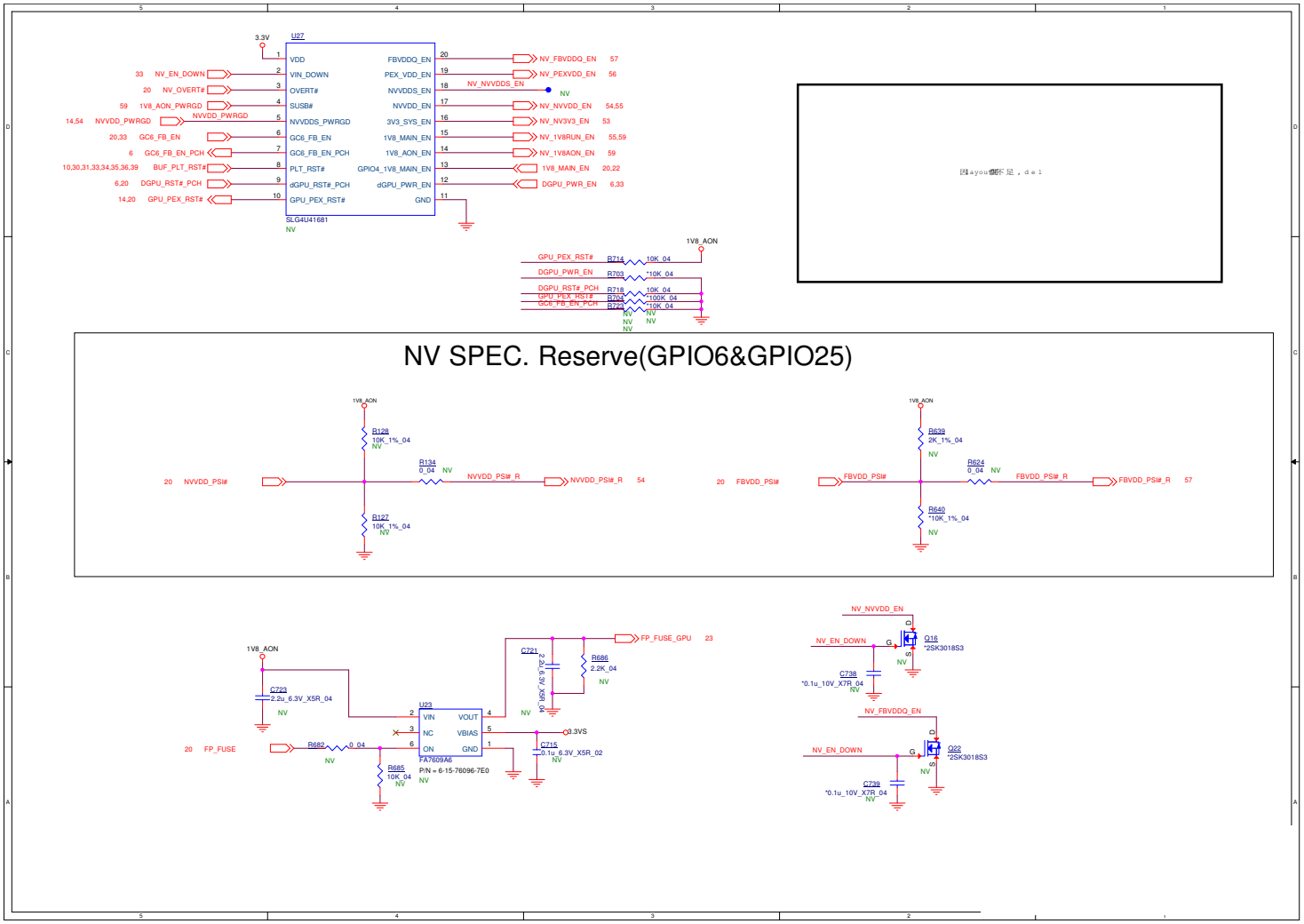
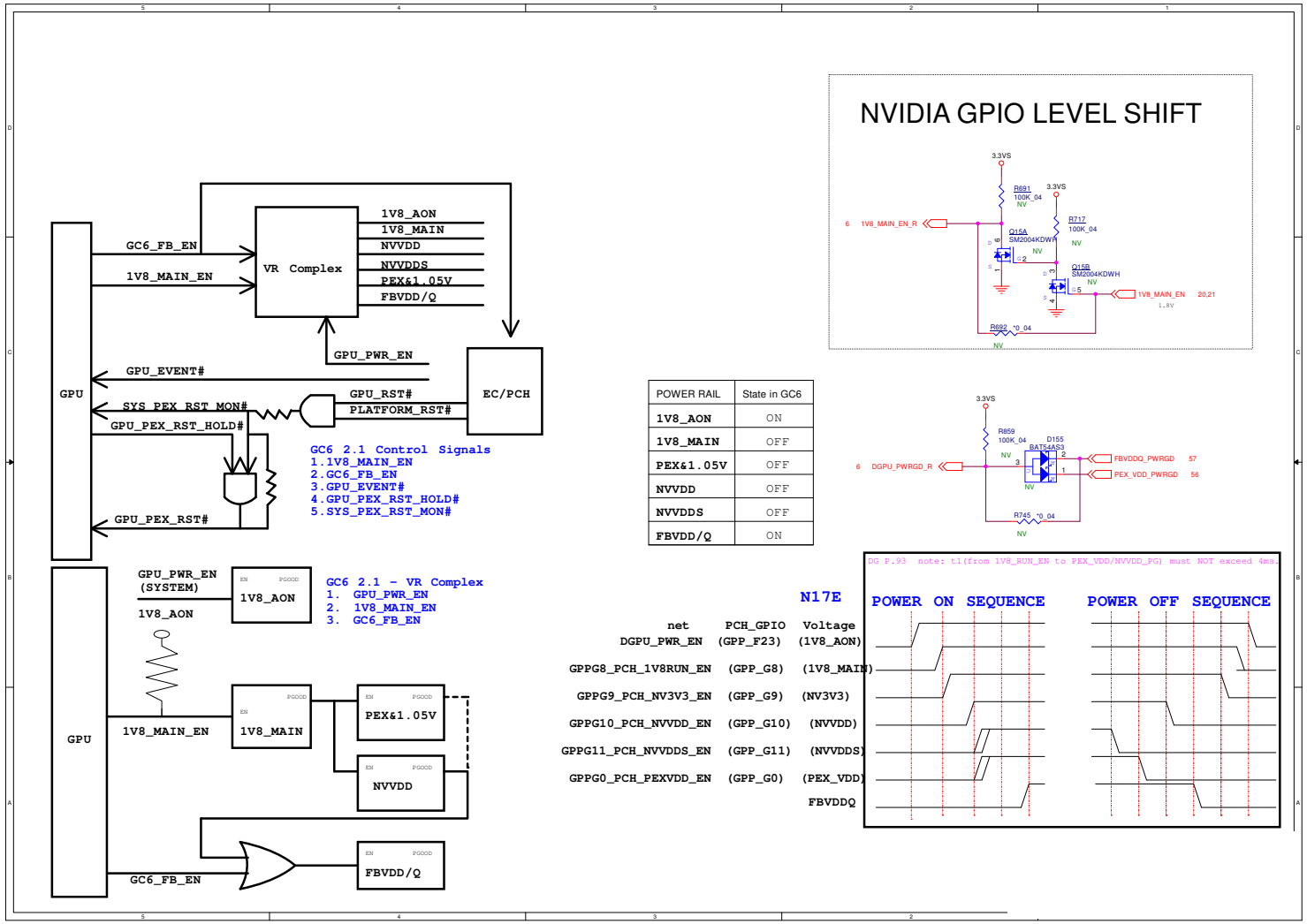
NVIDIA Power Sequence



NVIDA GPIO Level Shift



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NVIDIA GPIO Level Shift

VGA PWR, GND, NC

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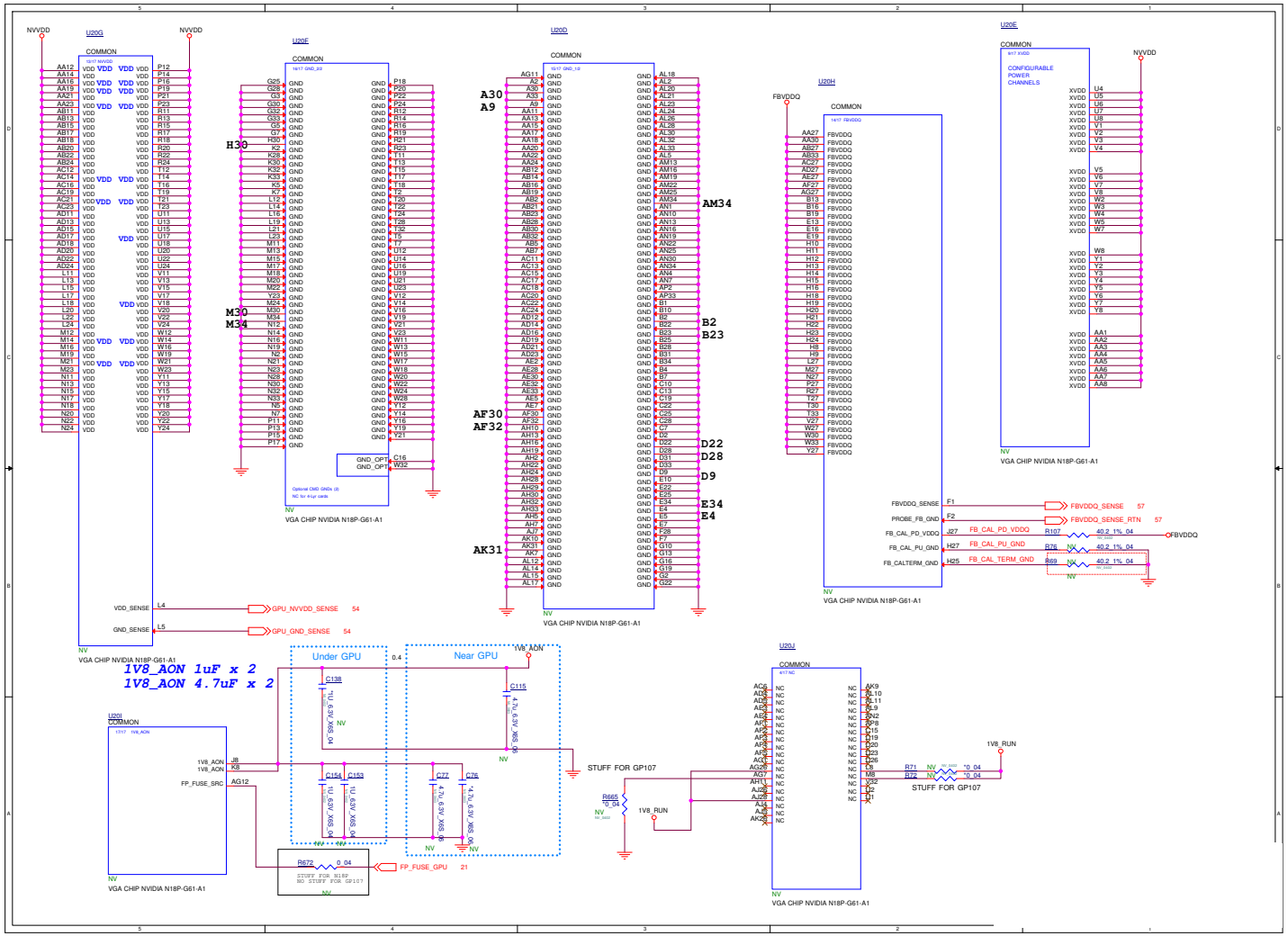
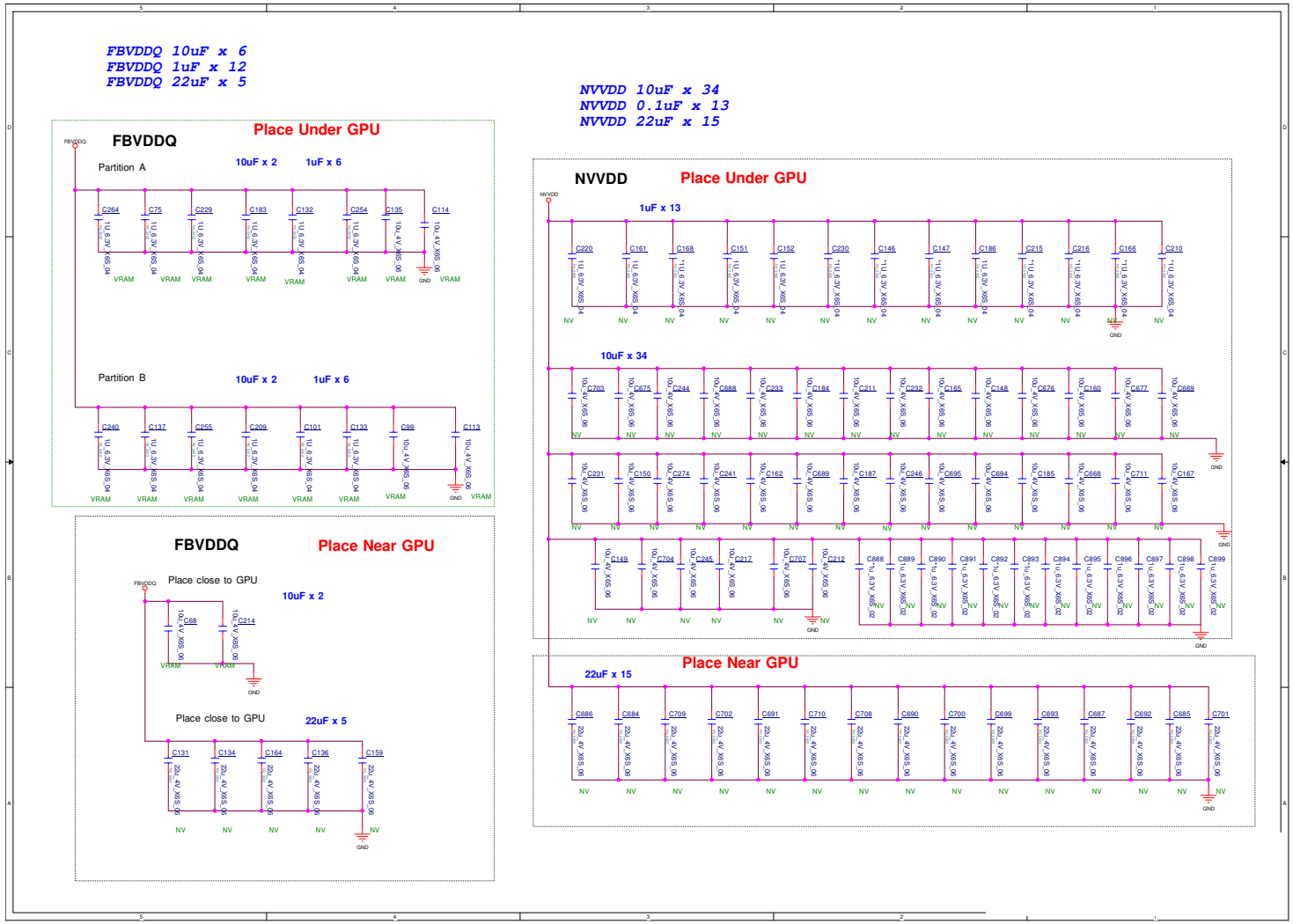
VGA PWR, GND, NC



VGA NVVDD Coupling



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VGA NVVDD Coupling

DDR4 SO-DIMM A

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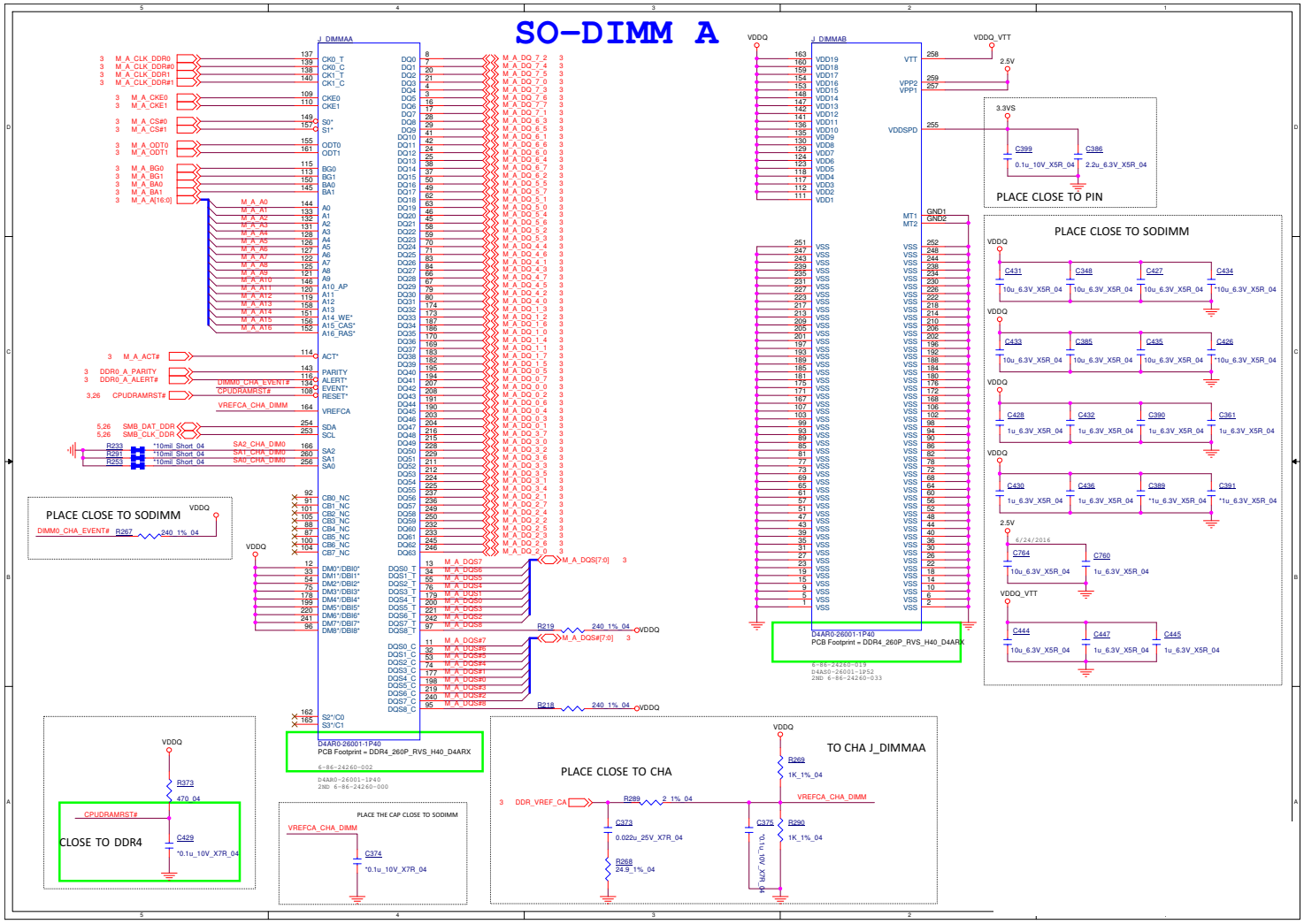
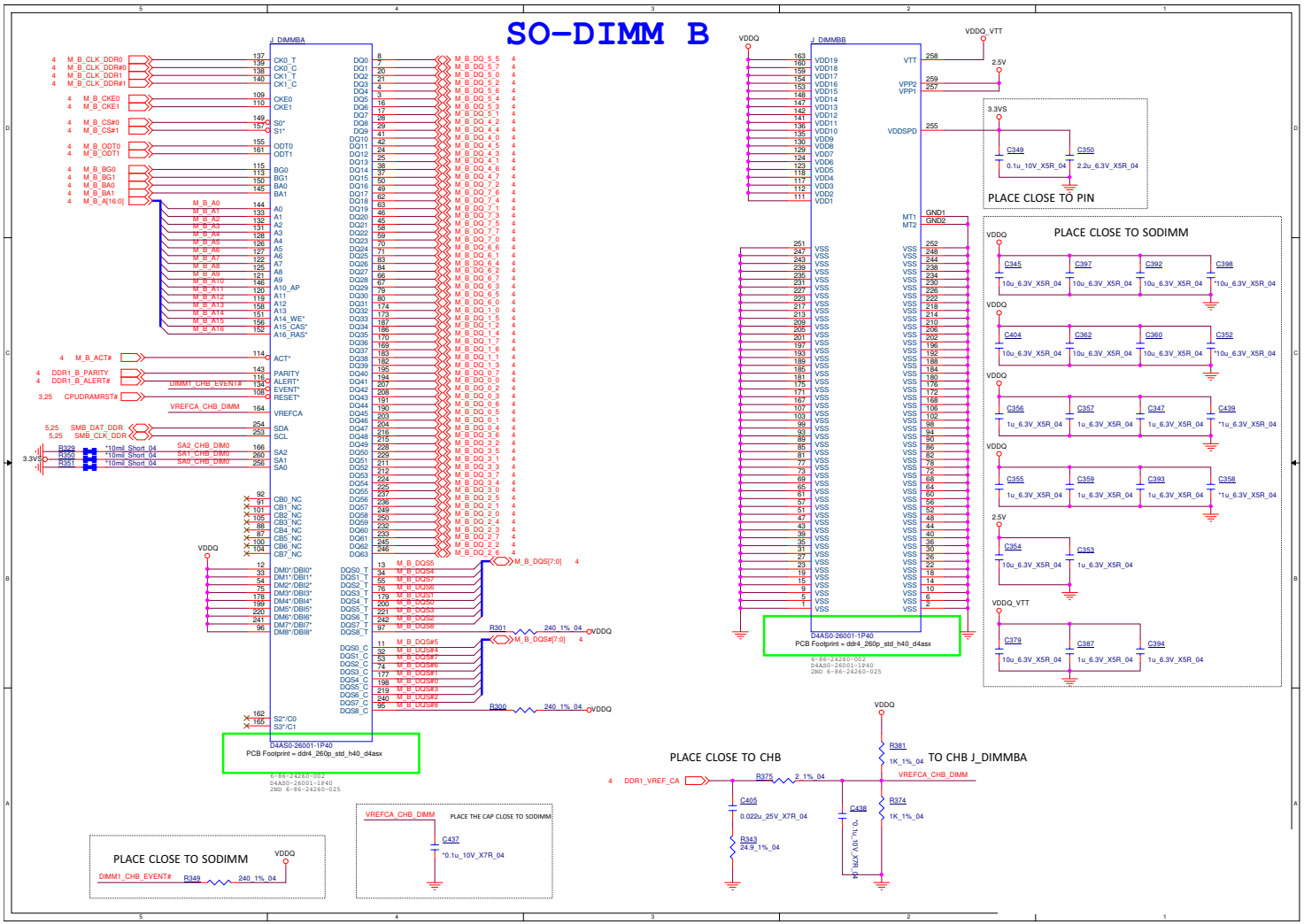
DDR4 SO-DIMM A



DDR4 SO-DIMM B



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DDR4 SO-DIMM B

Panel

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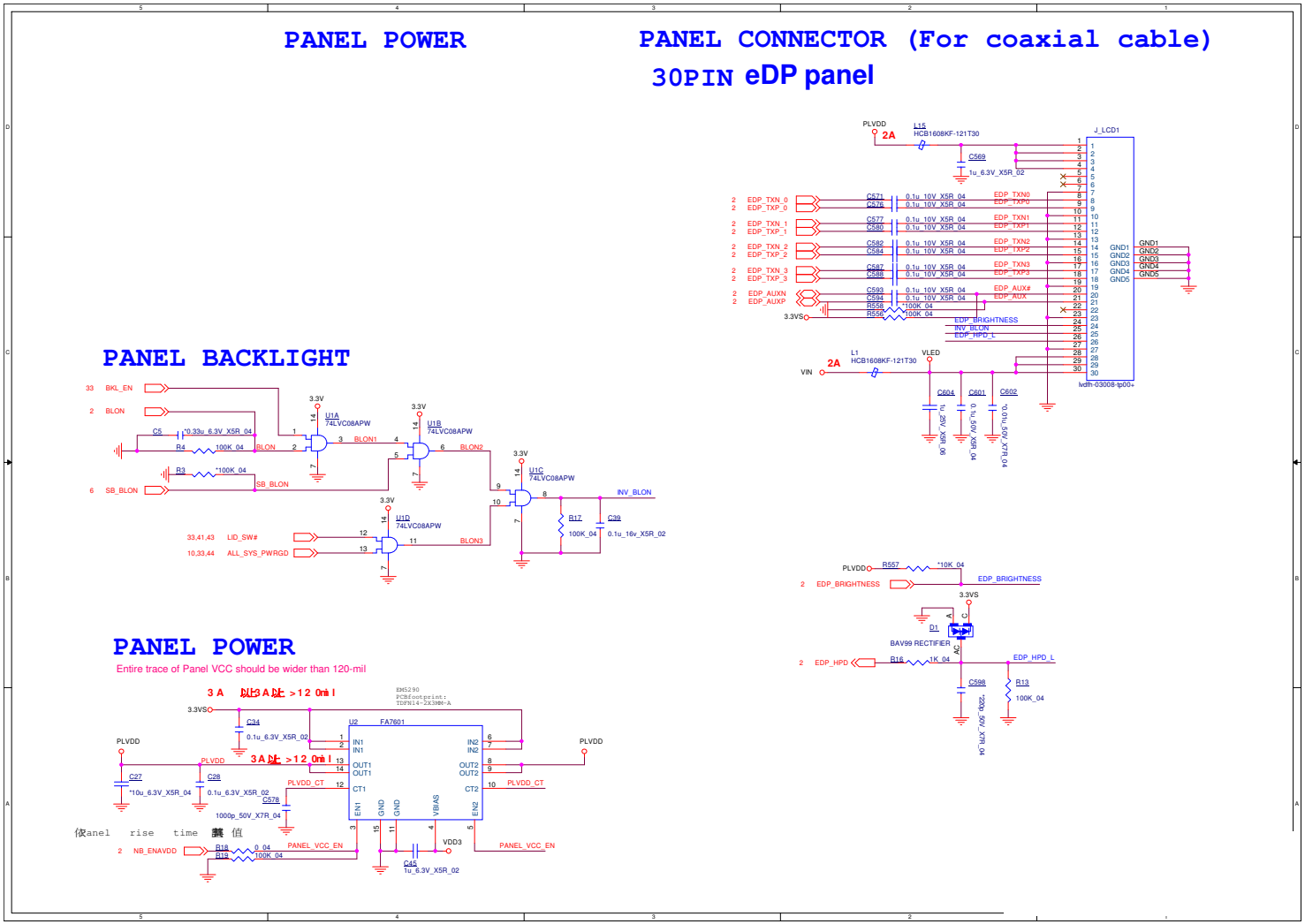
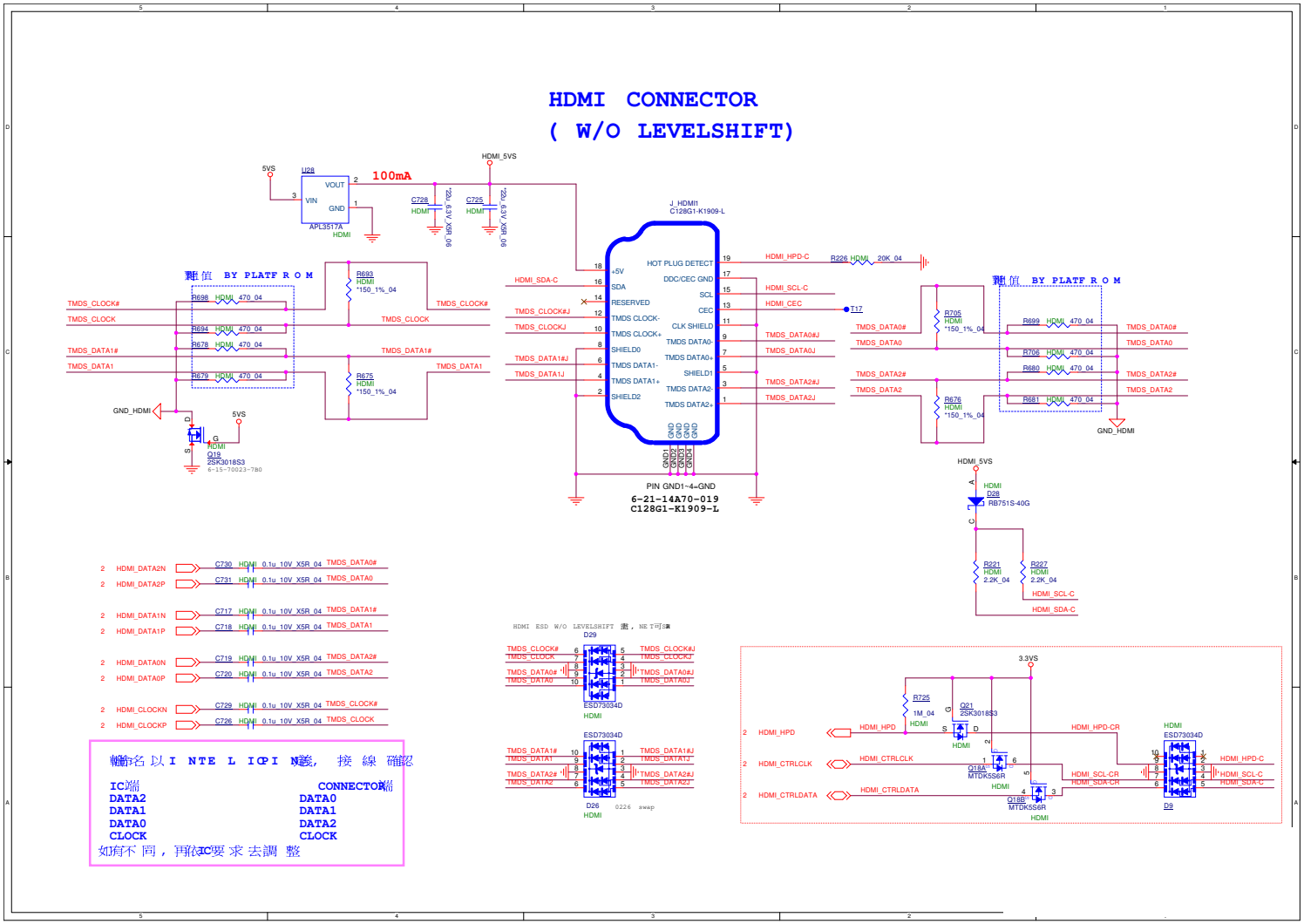
Panel



HDMI



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HDMI

Audio Codec

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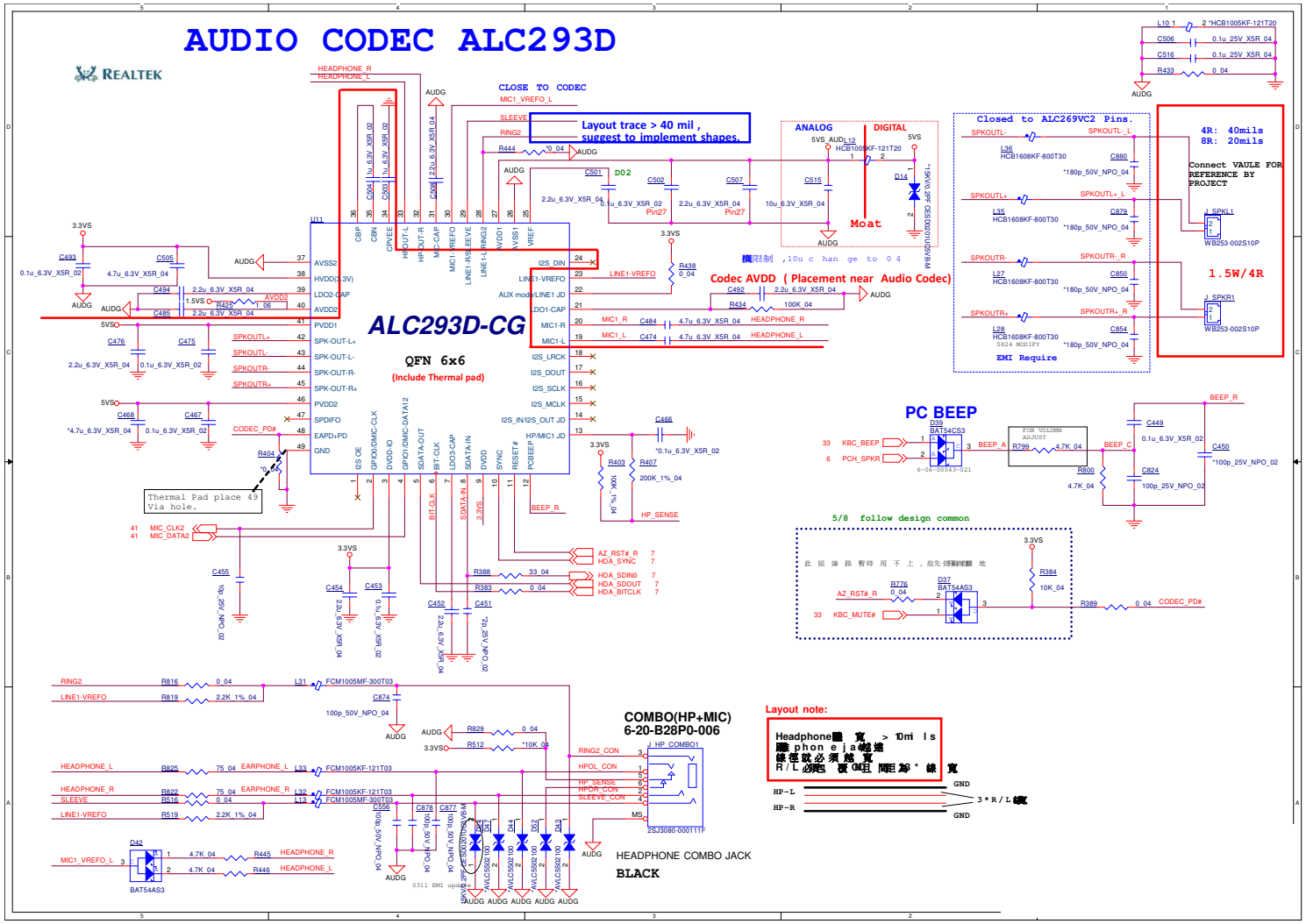
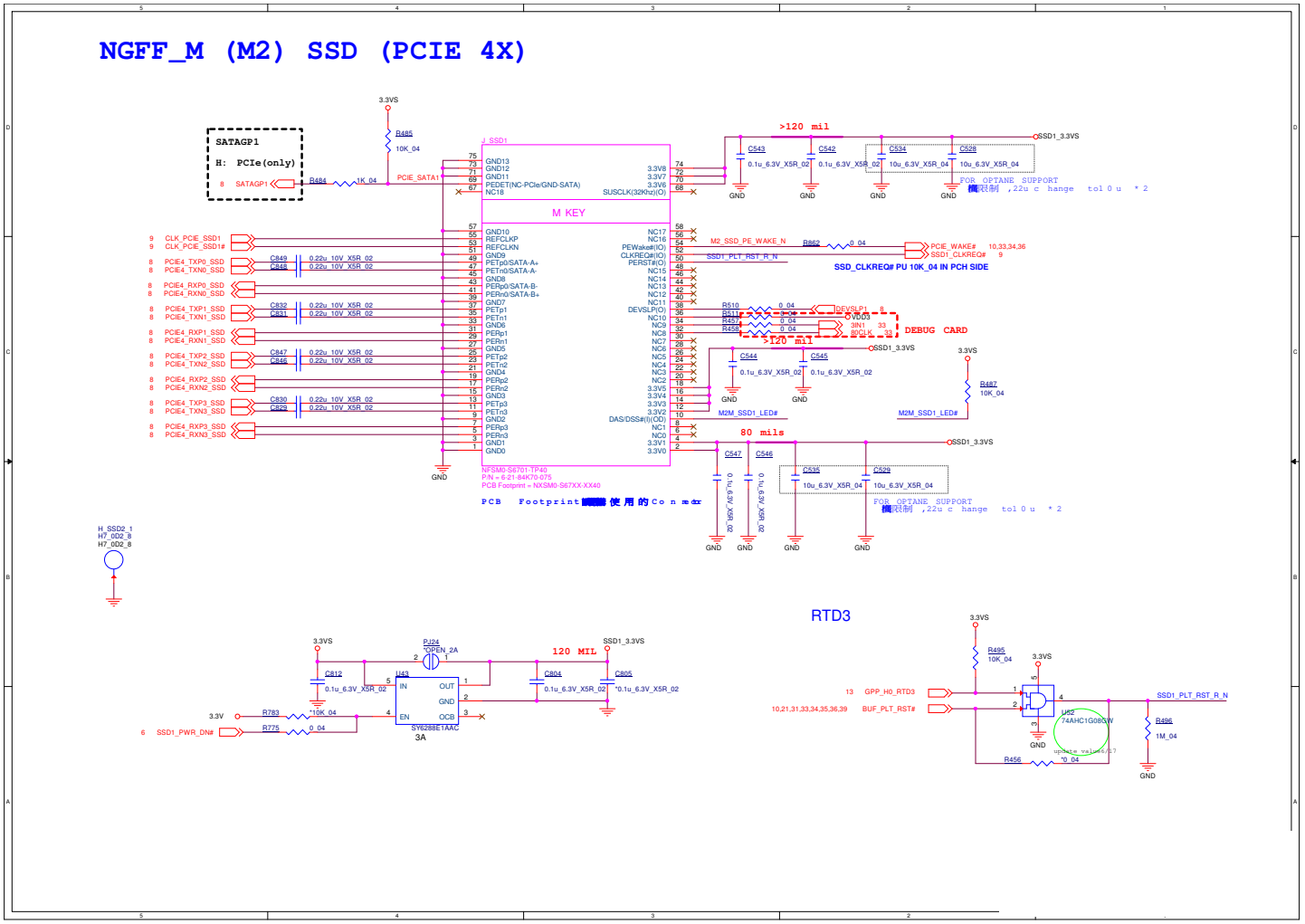
Audio Codec



M Key PCIE SSD



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M Key PCIE SSD

USB Charger, TPM

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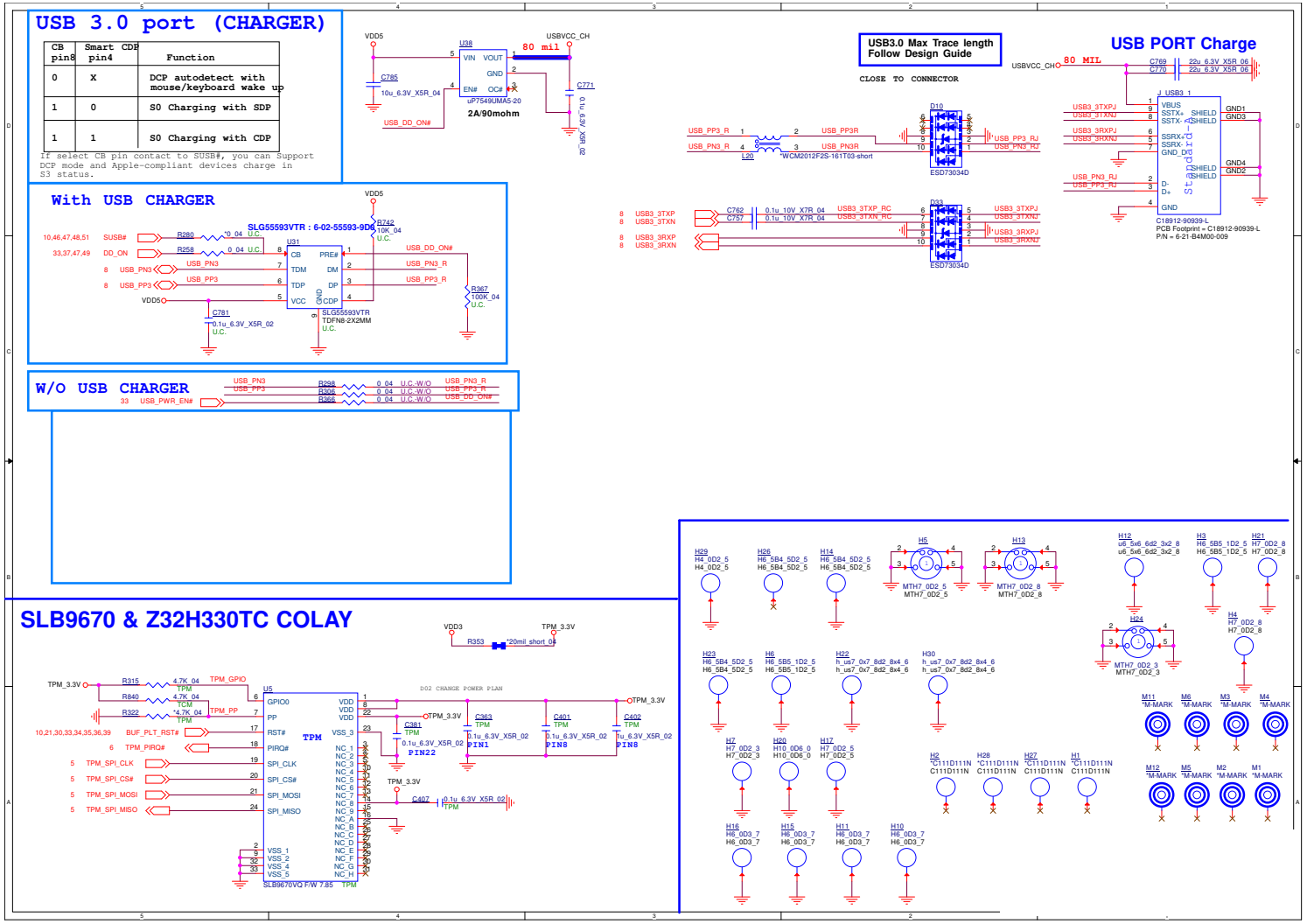
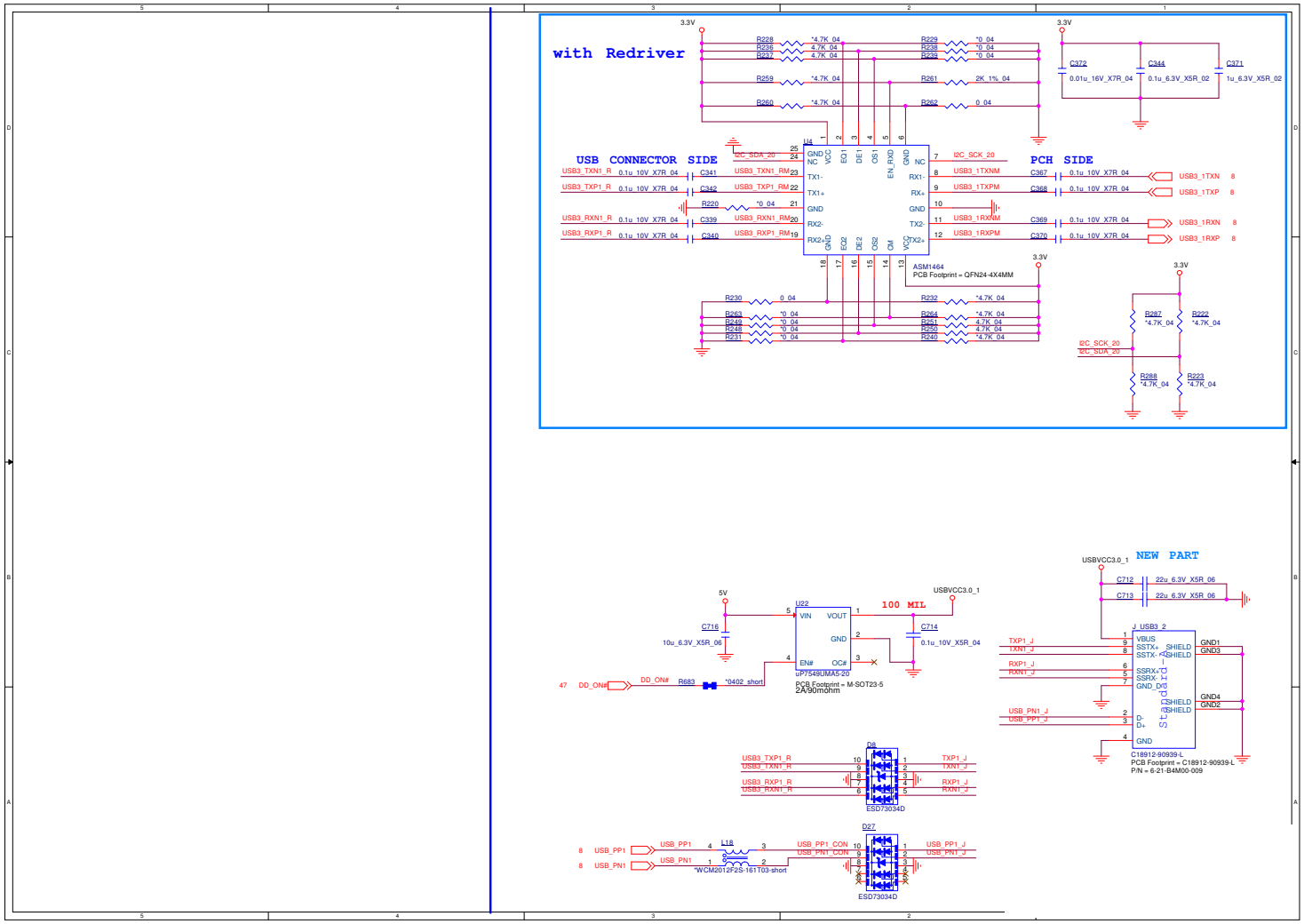
USB Charger, TPM



USB, LED



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USB, LED

IT5570

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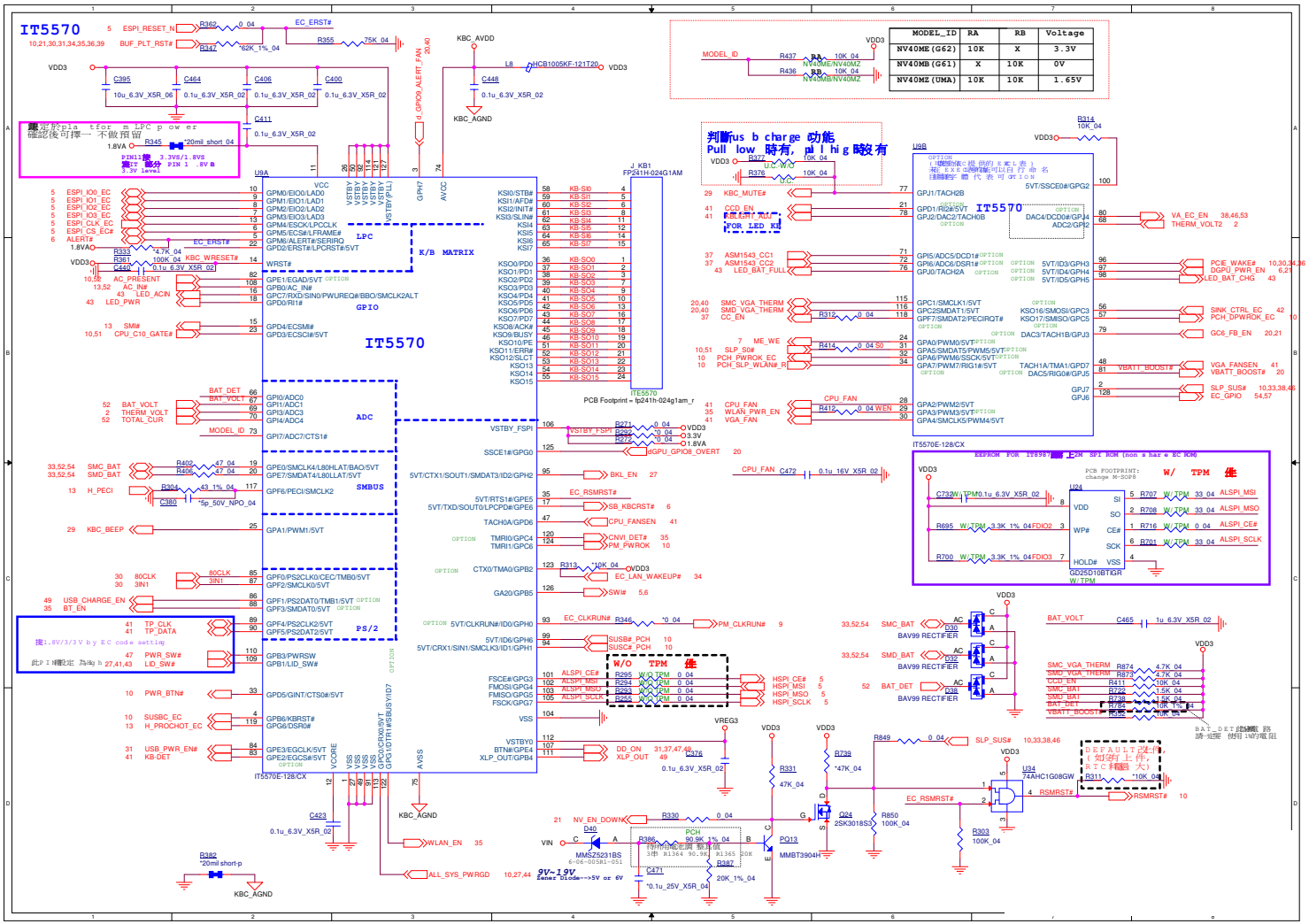
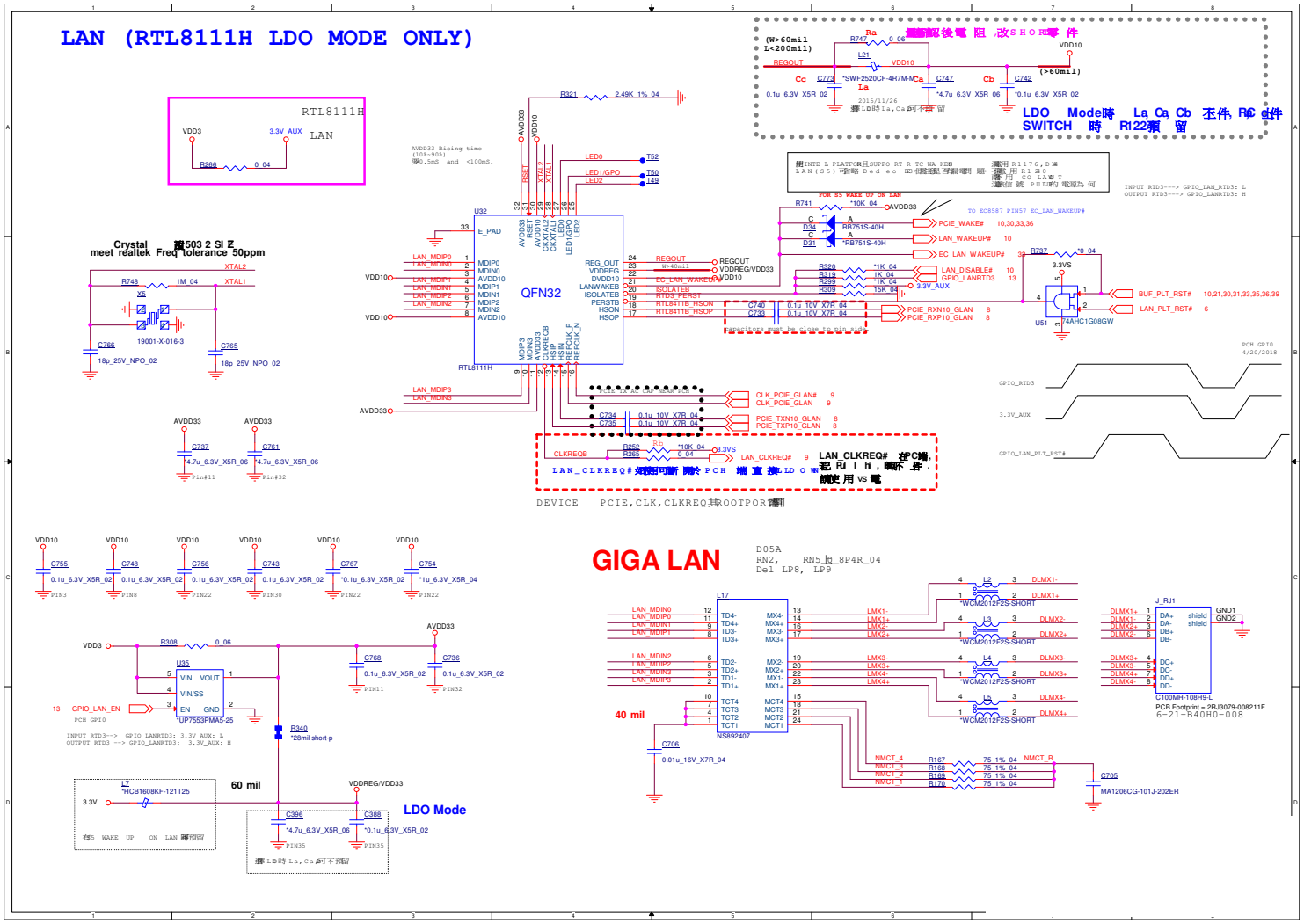
IT5570



RTL8111G



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RTL8111G

WLAN/BT

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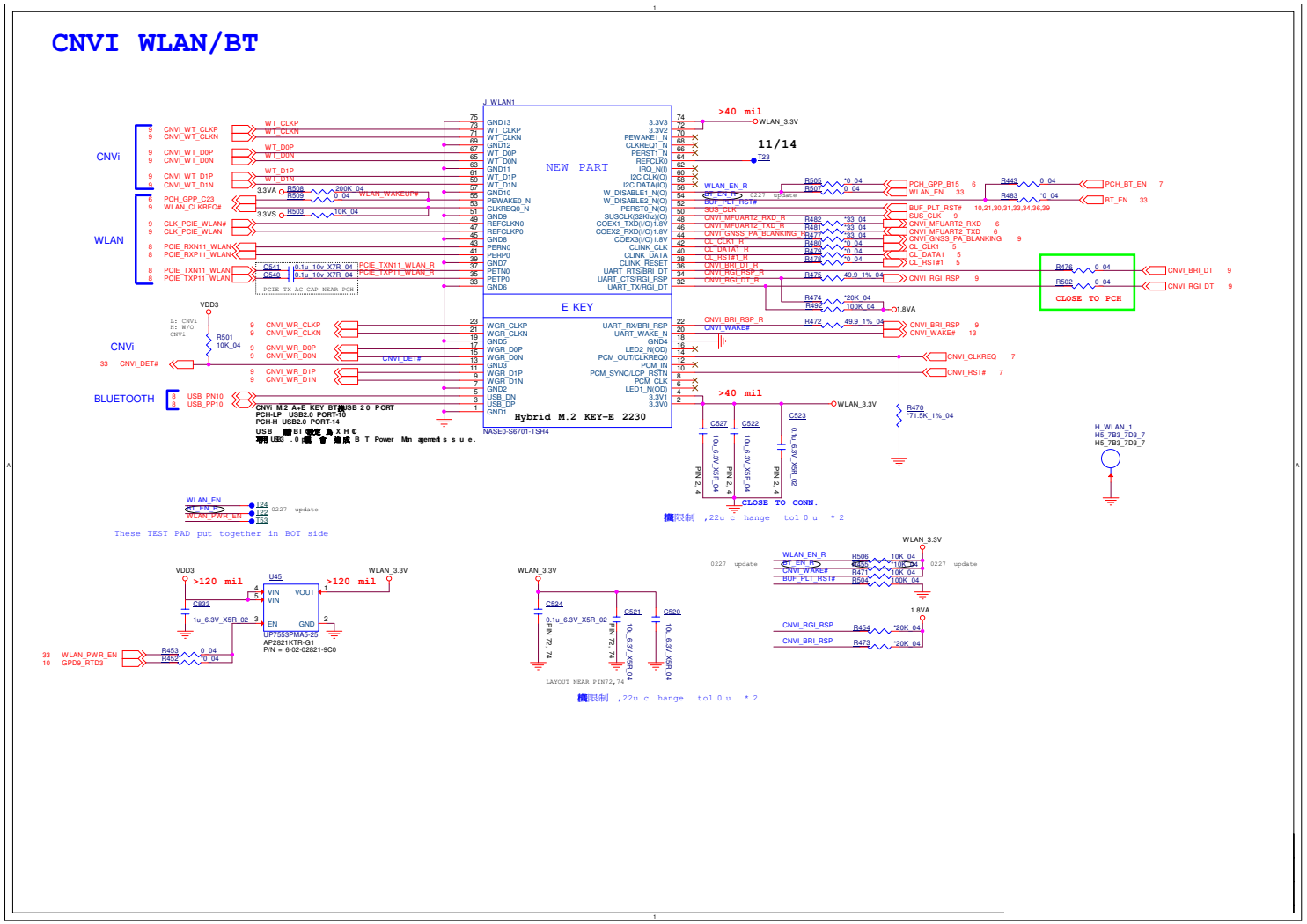
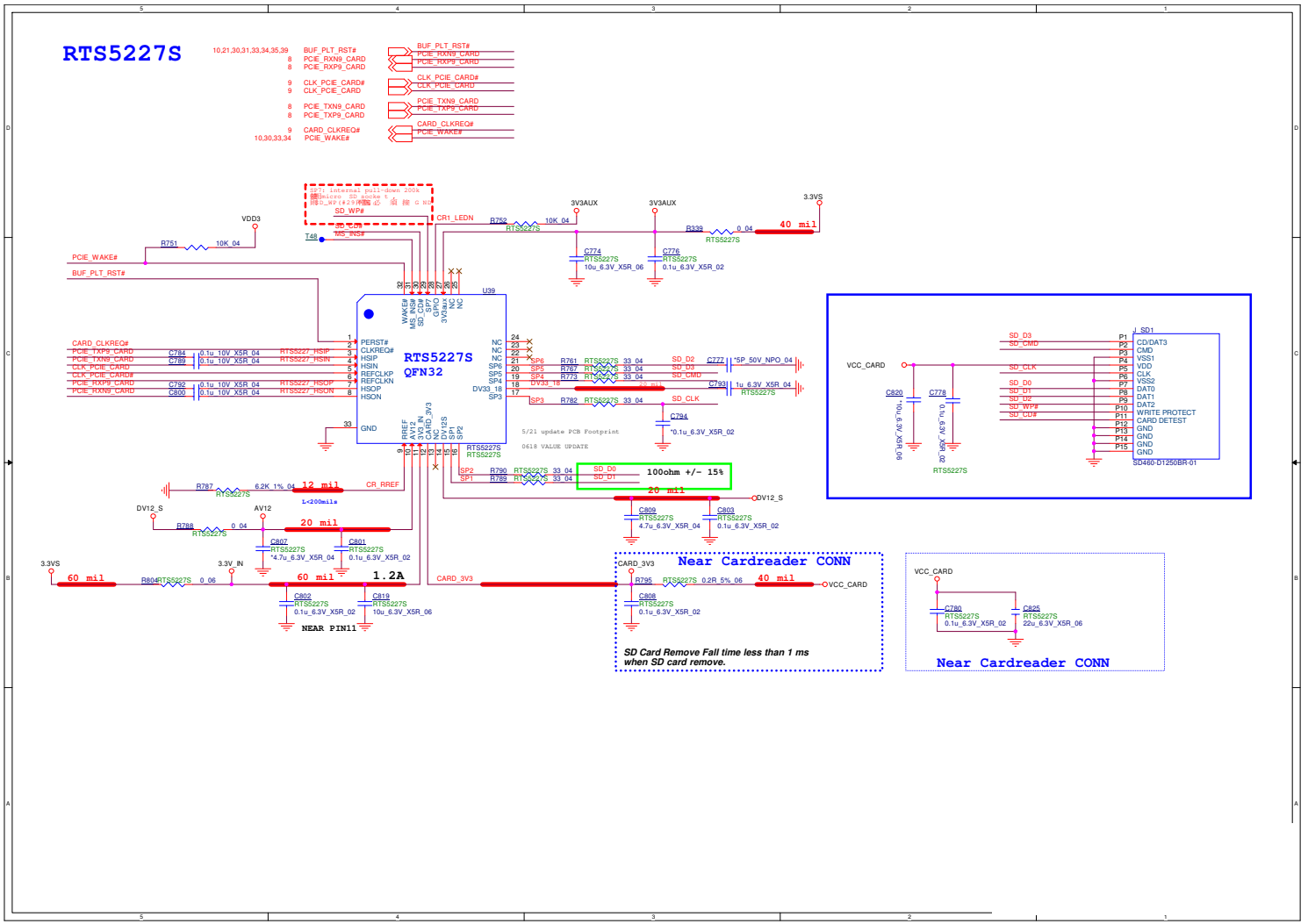
WLAN/BT



RTS5227S



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RTS5227S

Type-C USB3.0

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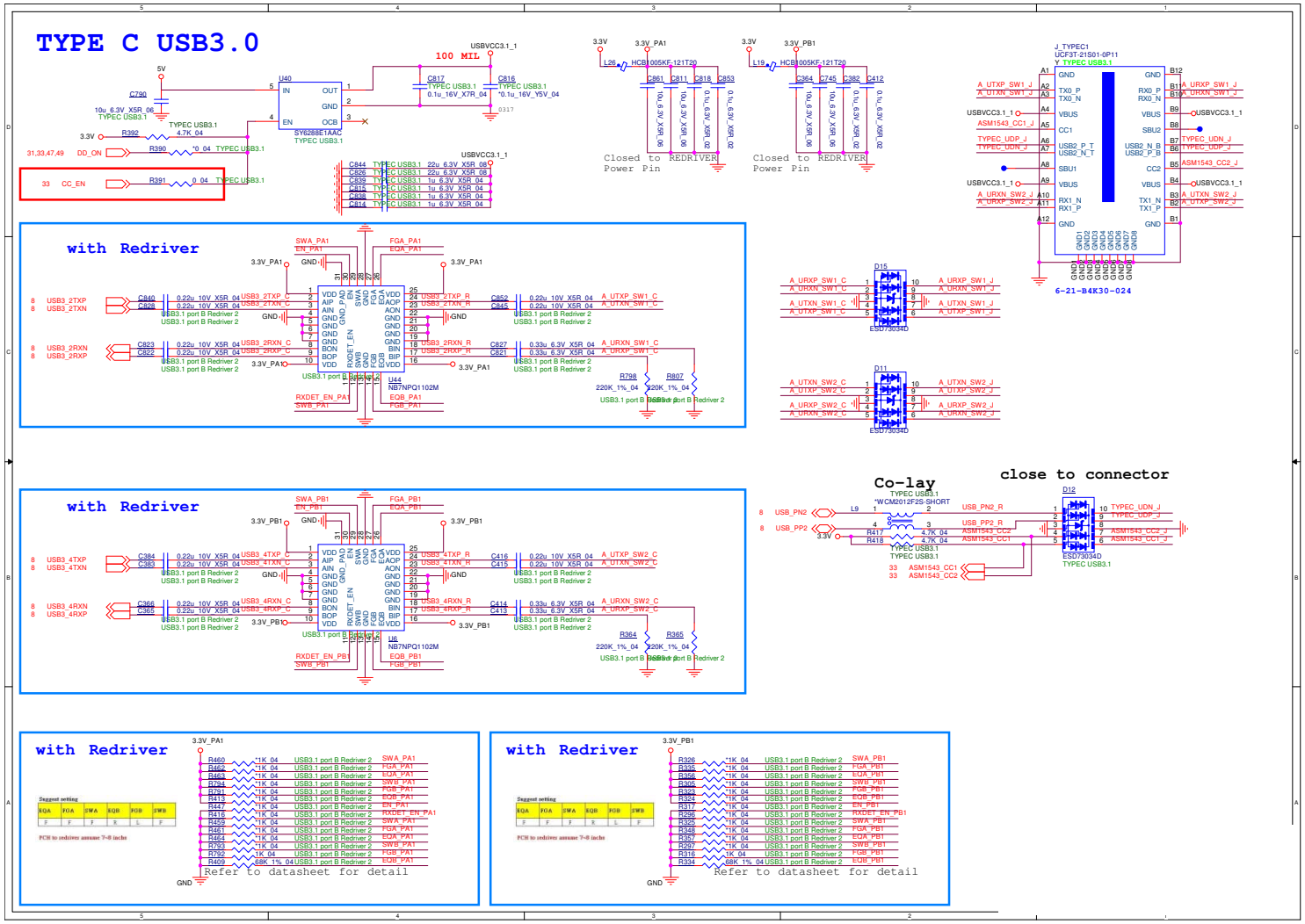
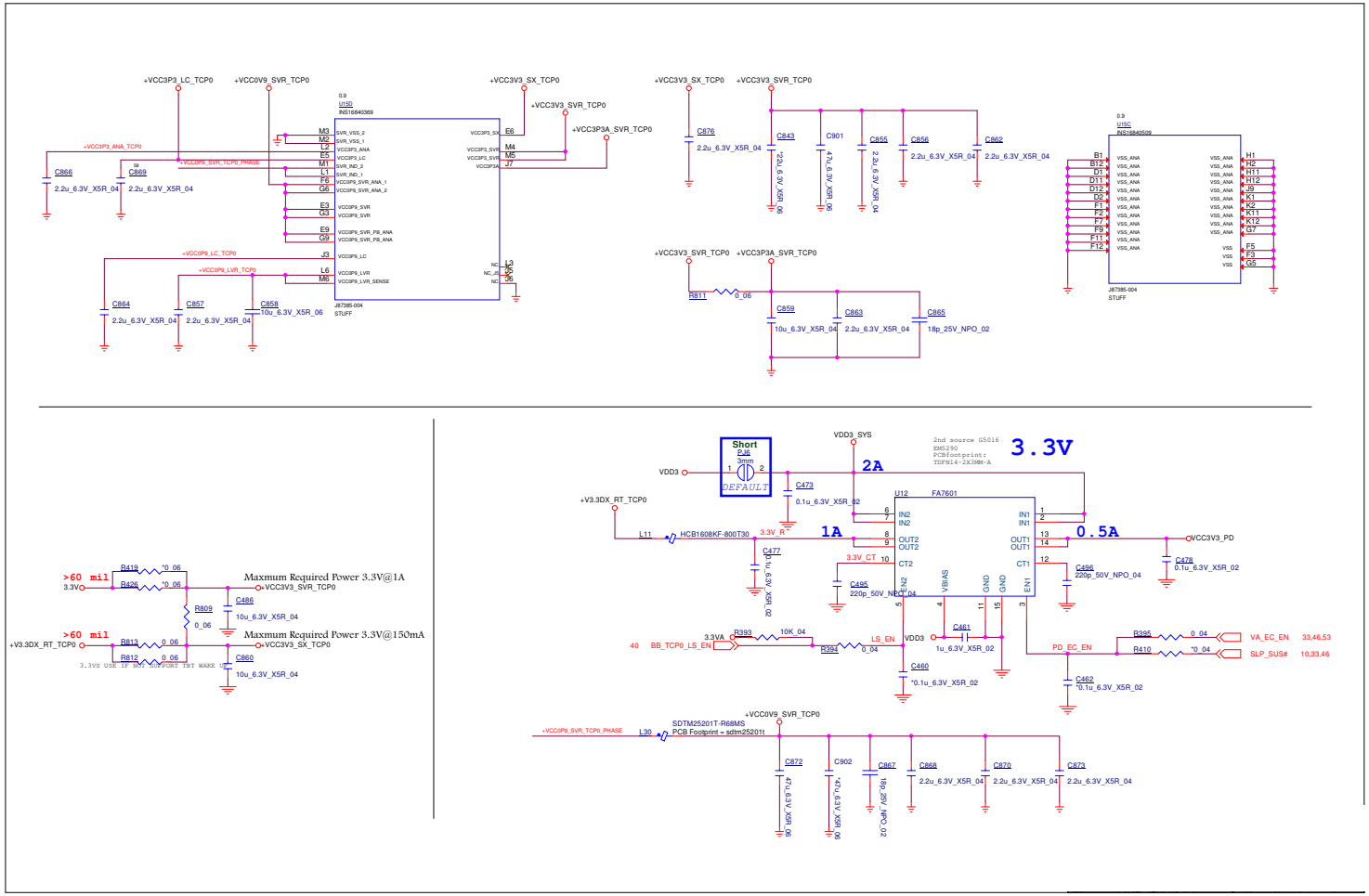
Type-C USB3.0



Type-C, Retimer 1/2



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Type-C, Retimer 1/2

Type-C, Retimer 2/2

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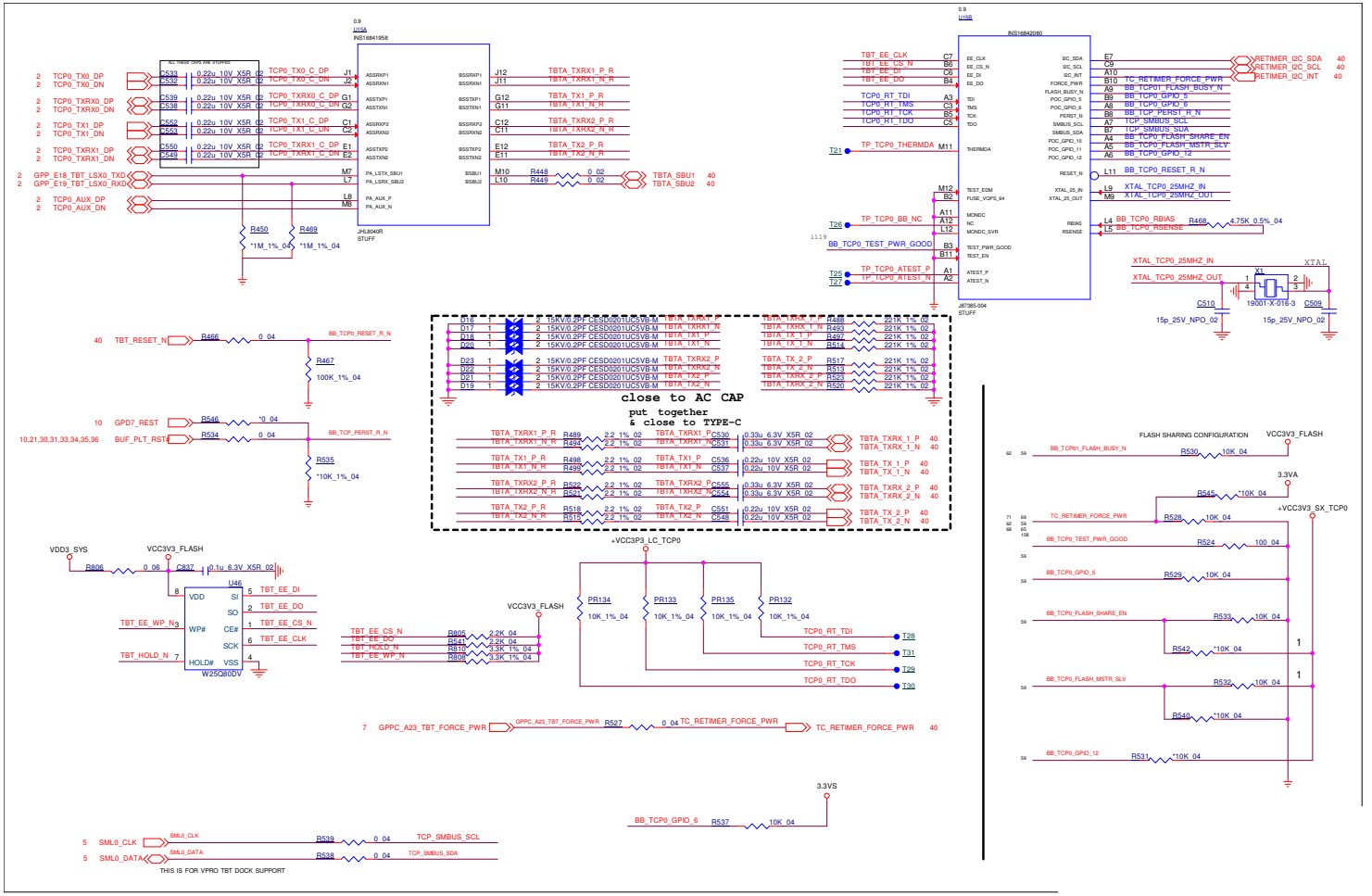
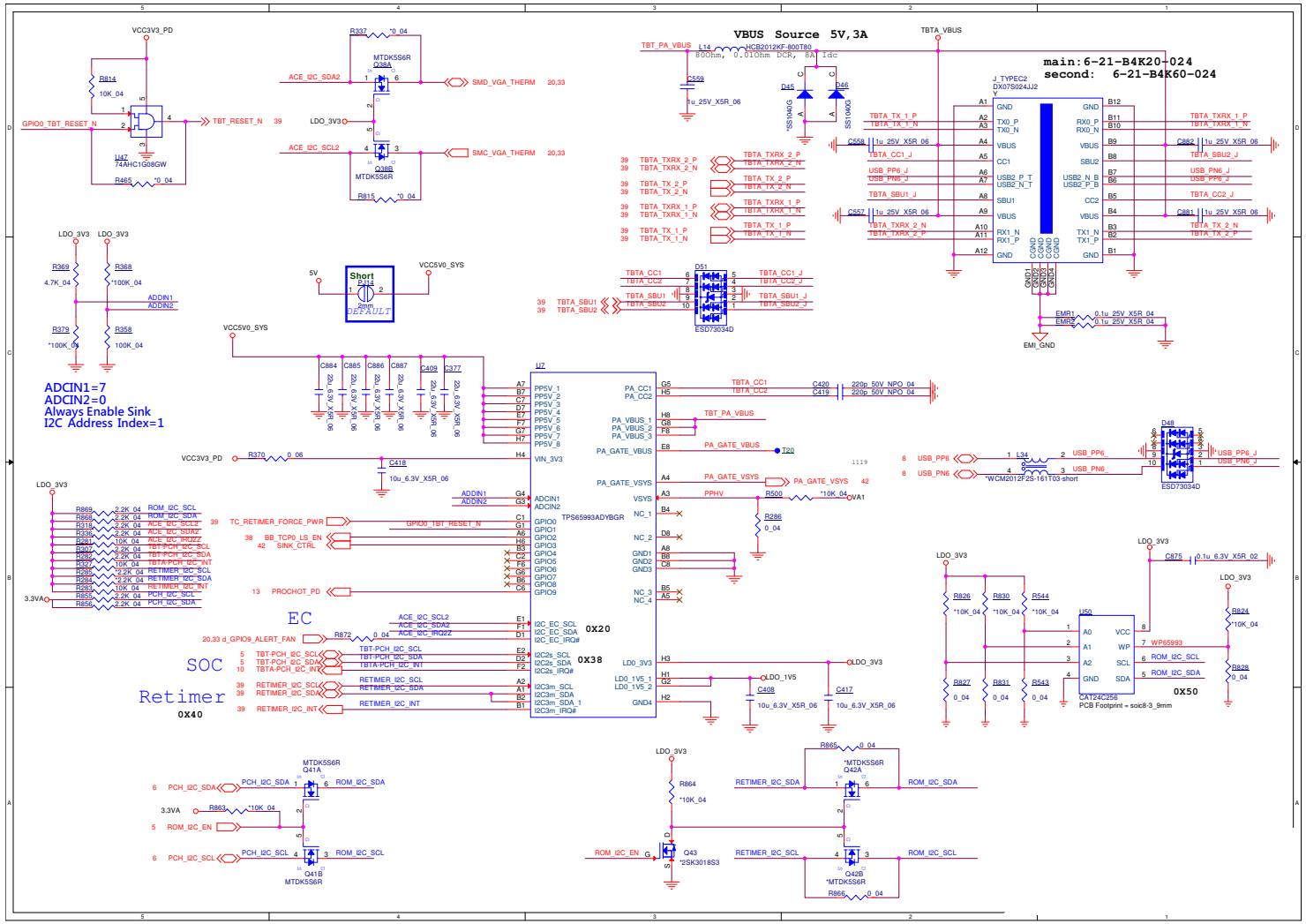
Type-C, Retimer 2/2



Type-C Con



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Type-C Con

Conn Fan, CCD, TP, LED KB

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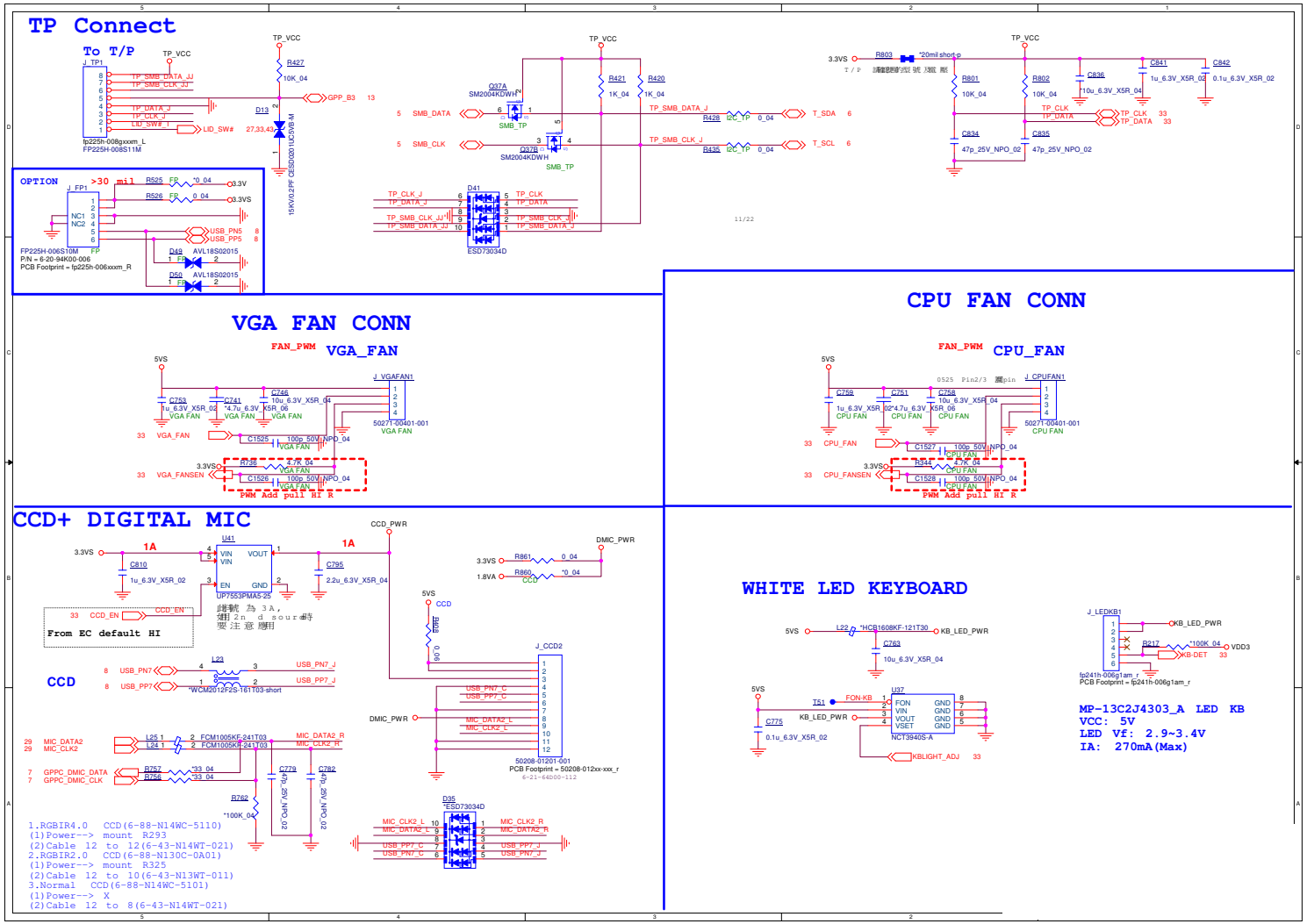
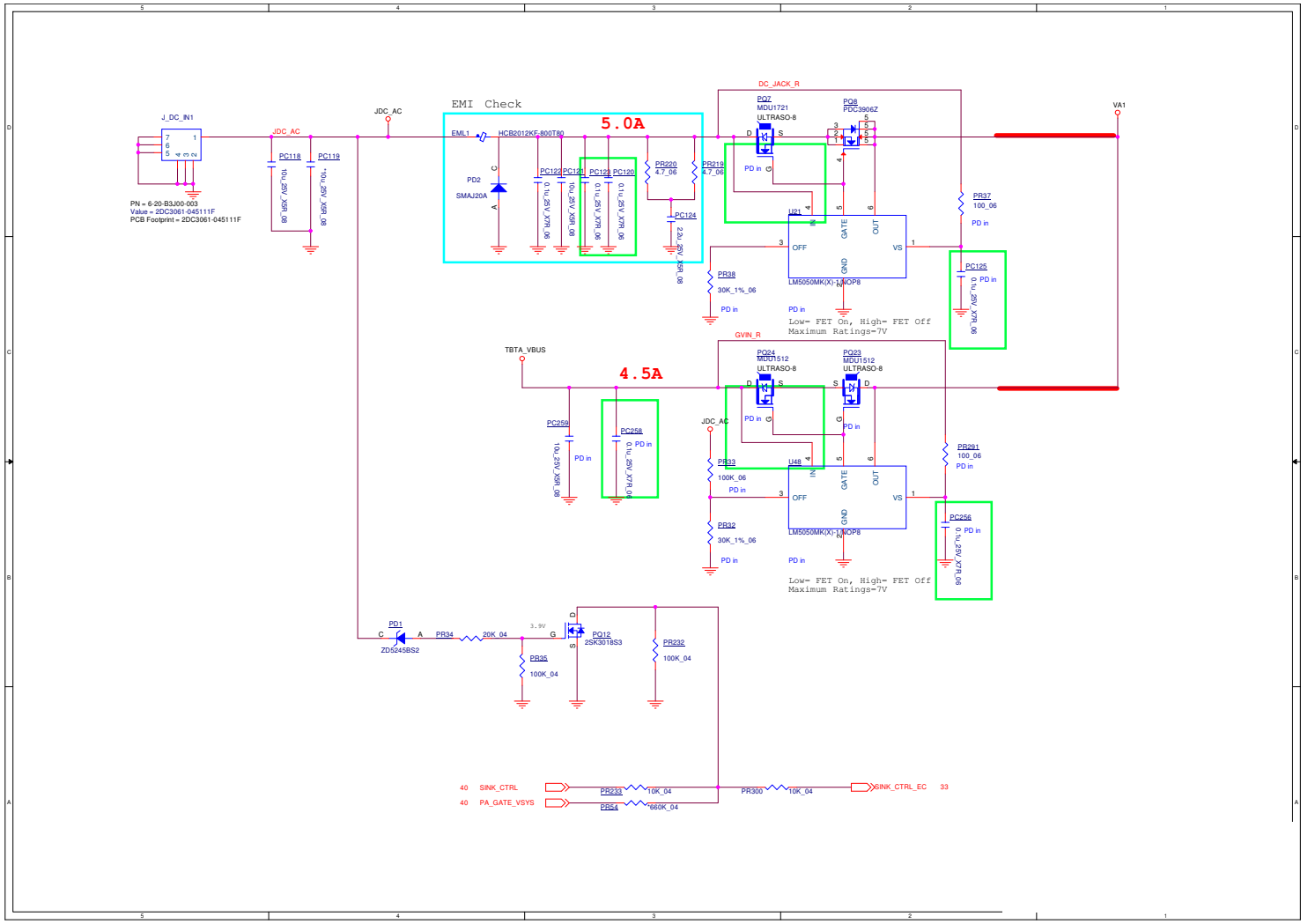
Conn Fan, CCD, TP, LED KB



AC-In



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AC-In

LED, LID SW

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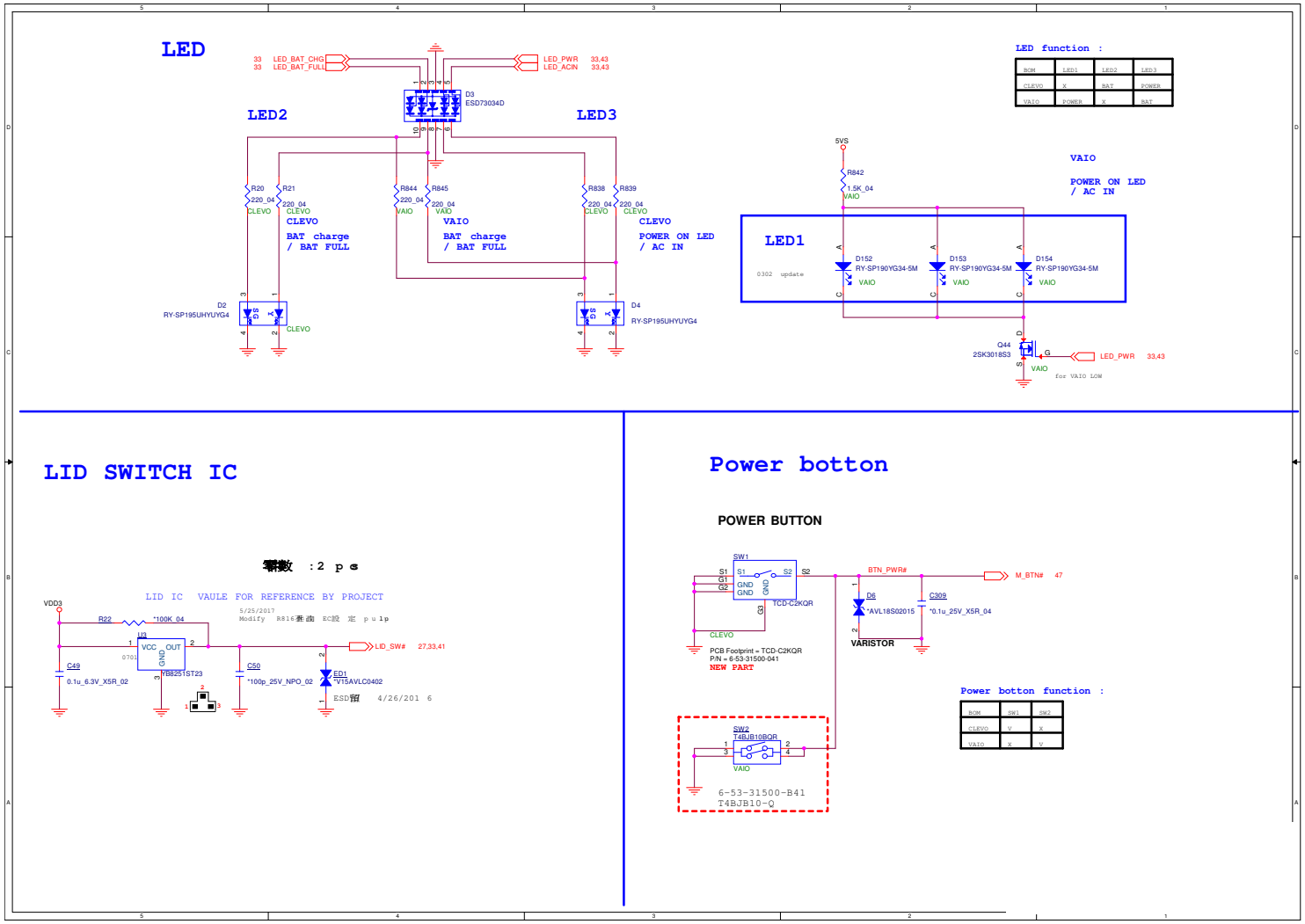
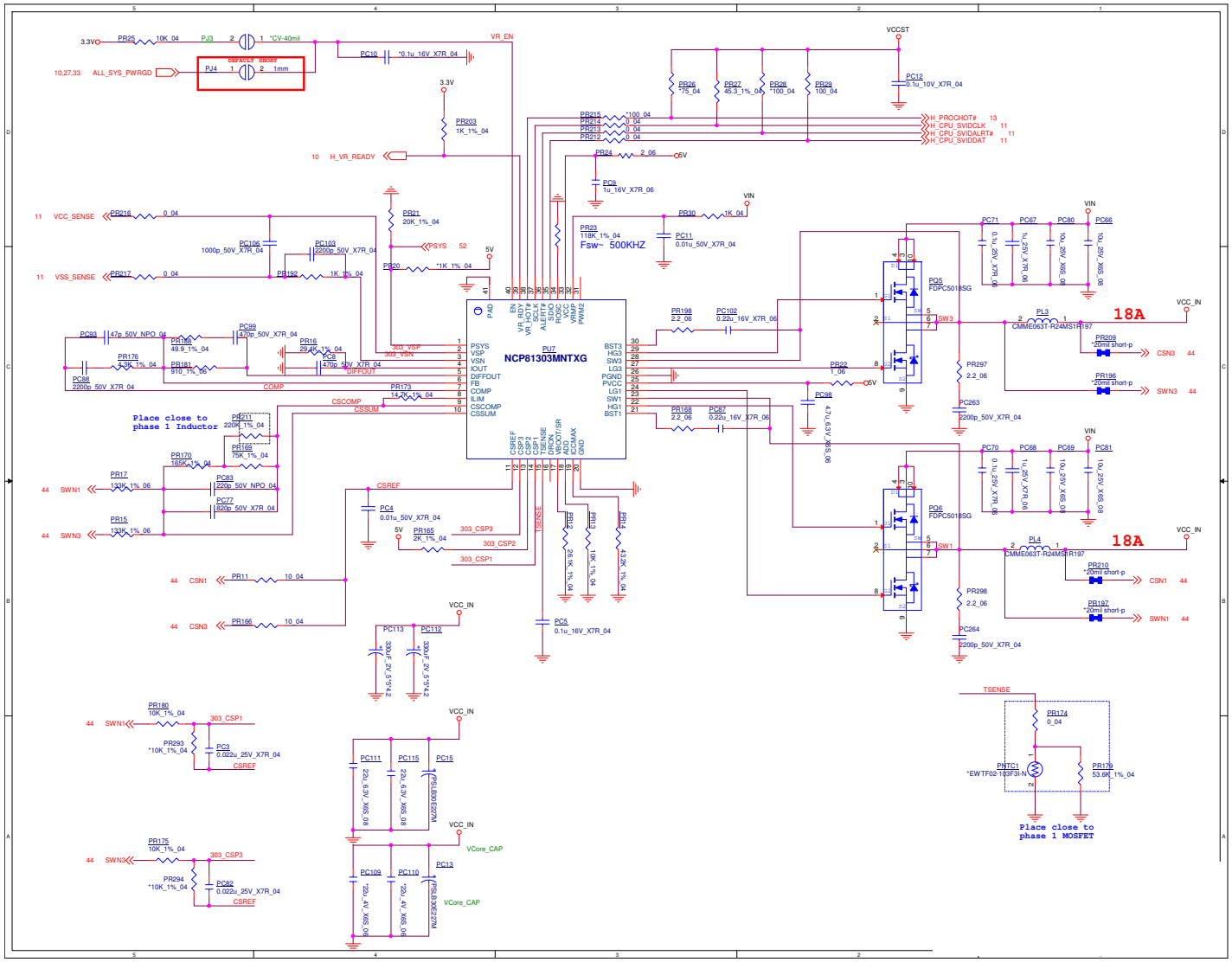
LED, LID SW



VCCIN



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VCCIN

VCCIN Aux

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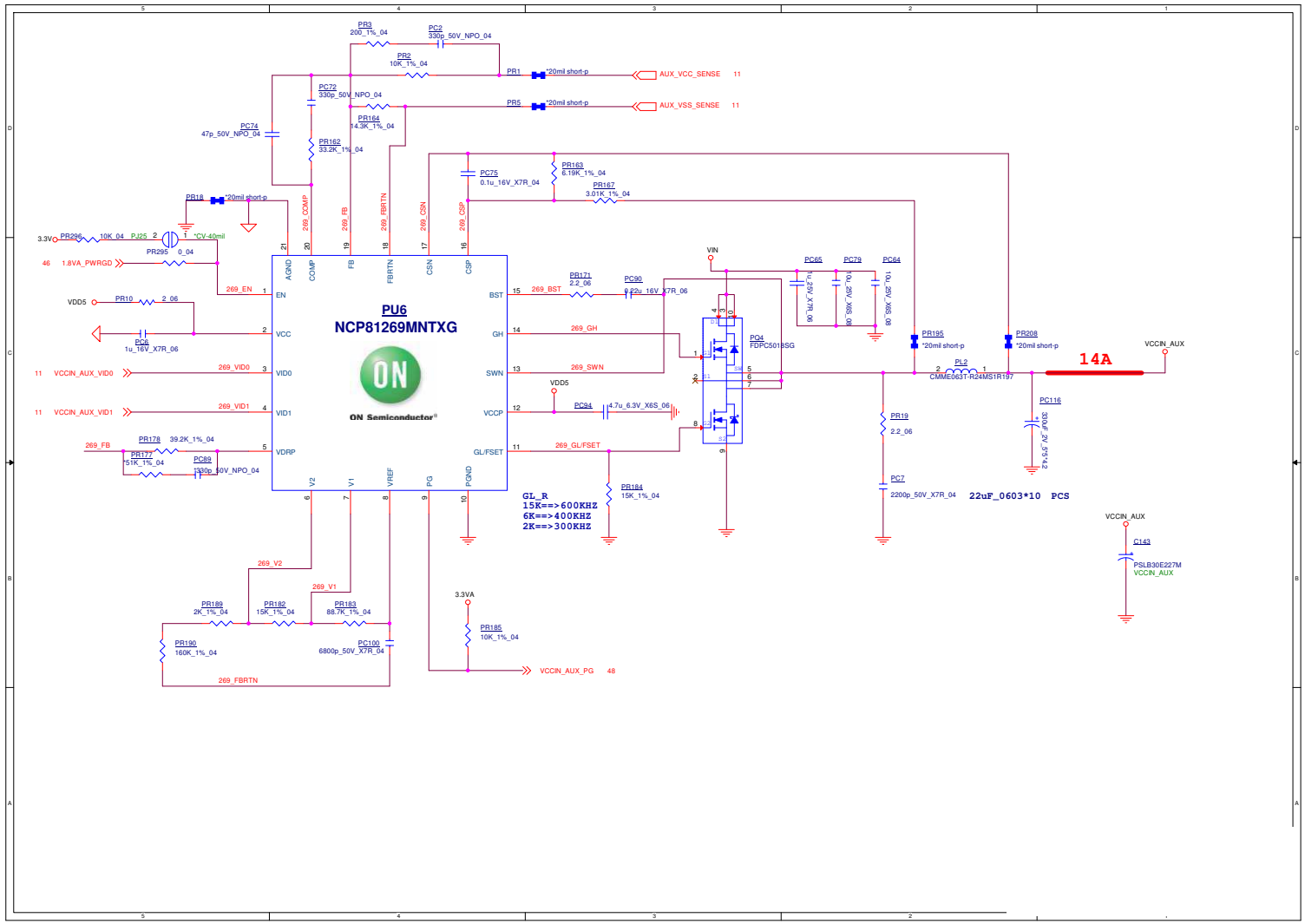
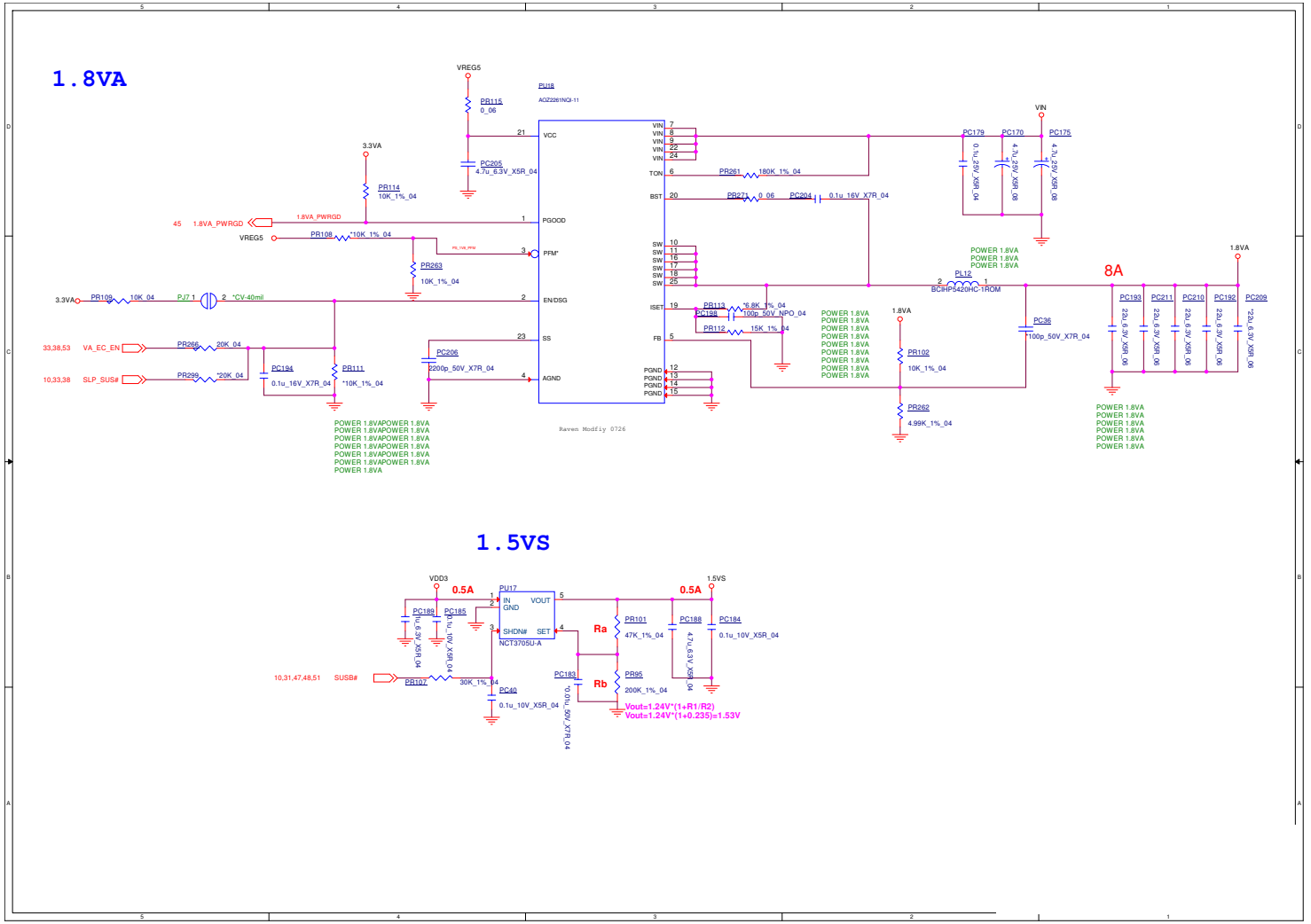
VCCIN Aux



1.8VA, 1.5VS



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1.8VA, 1.5VS

3.3V, 5V, 3VS, 5VS, CTL

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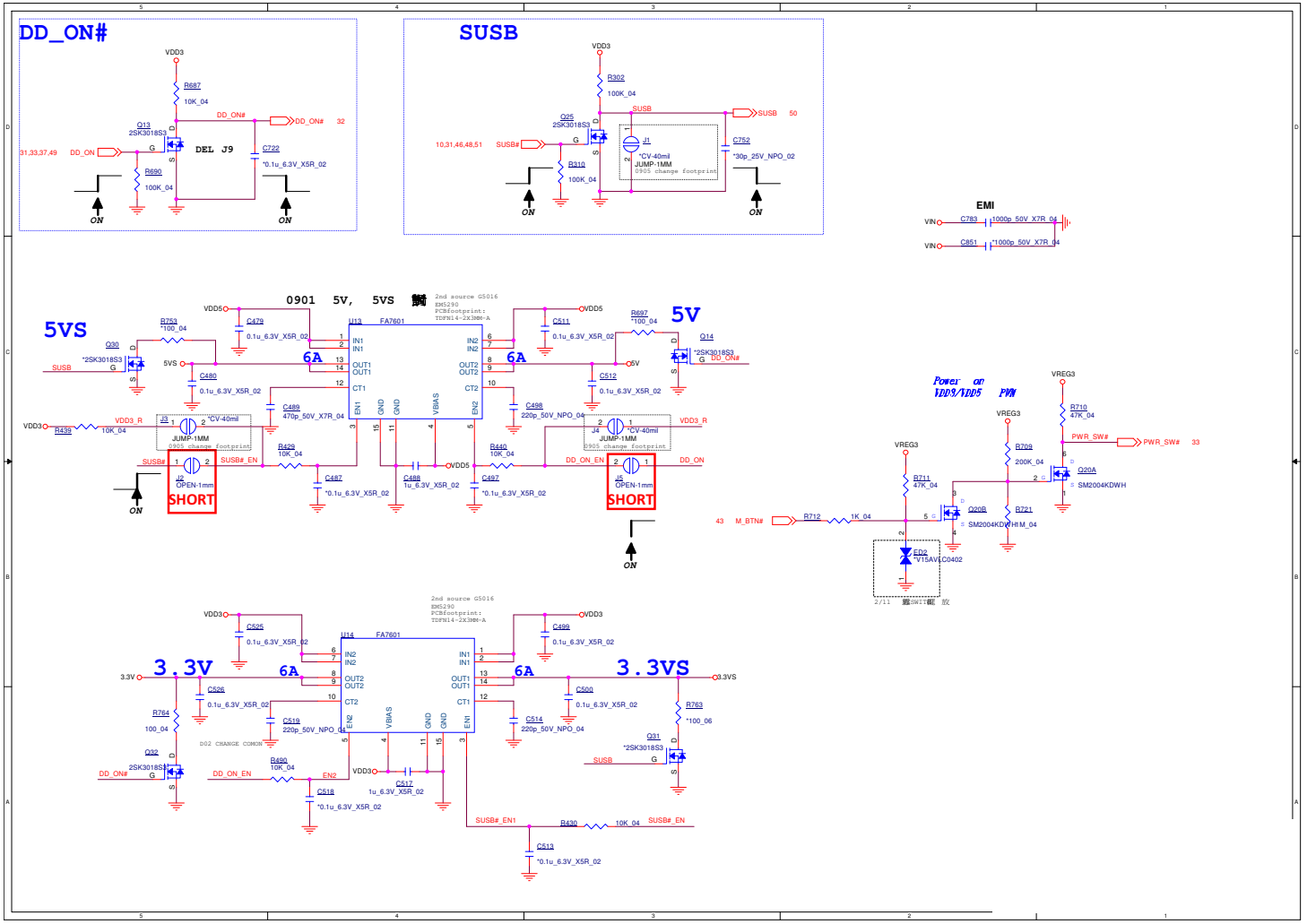
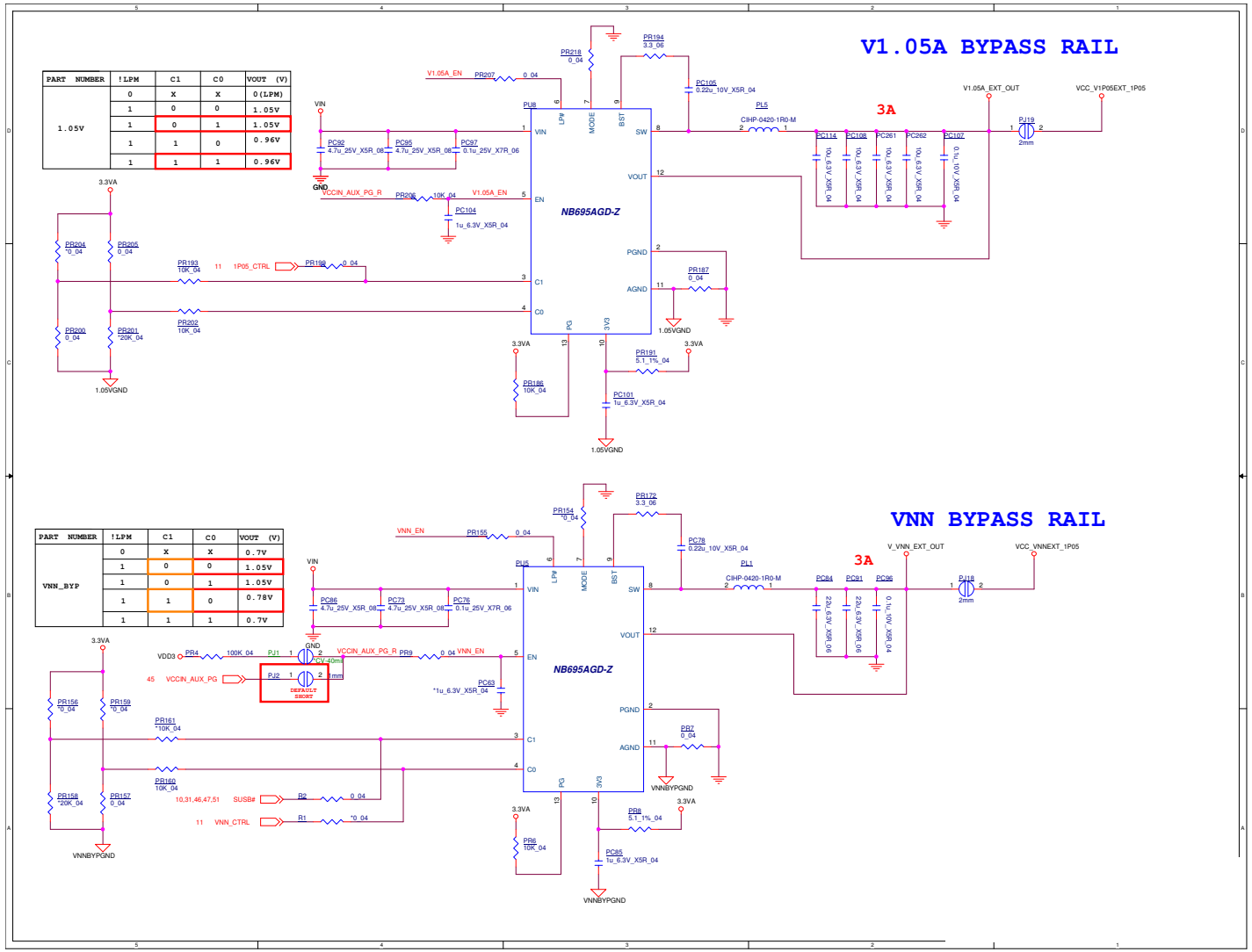
3.3V, 5V, 3VS, 5VS, CTL



V1.05A / VNN



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V1.05A / VNN

VDD3, VDD5

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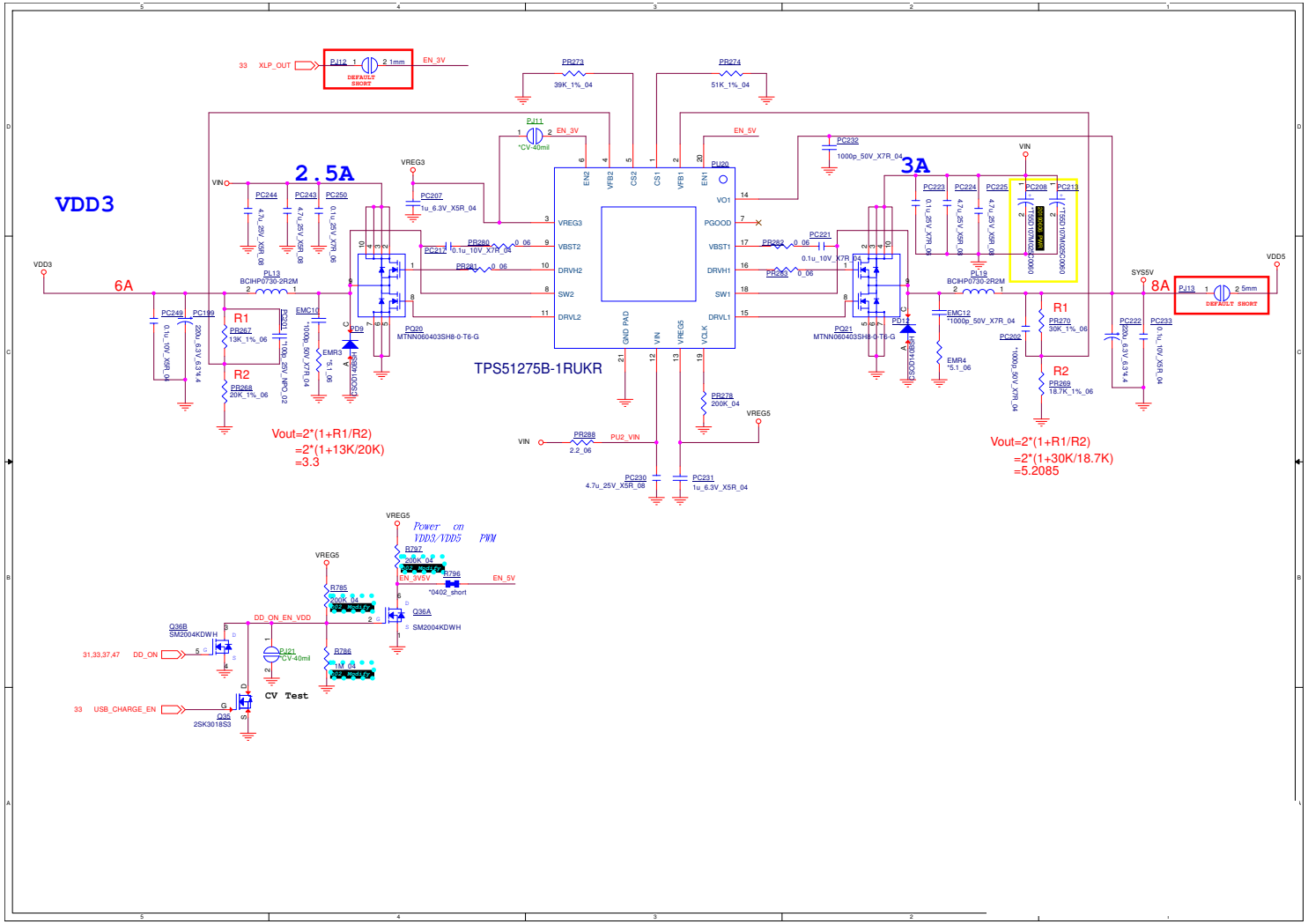
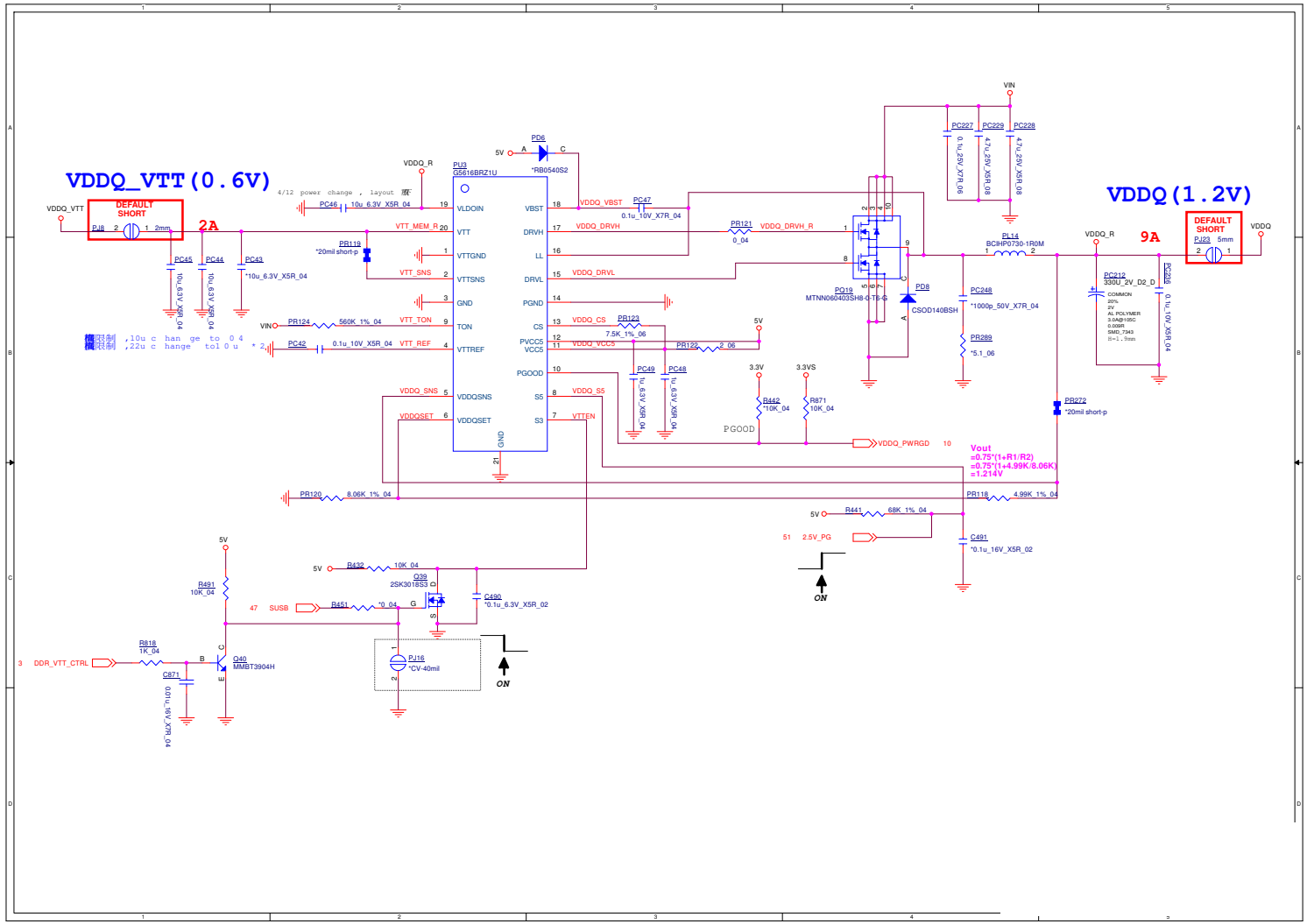
VDD3, VDD5



VDDQ, VDDQ_VTT, 1.8VA



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VDDQ, VDDQ_VTT, 1.8VA

2.5V, VCCST, VCCSTG

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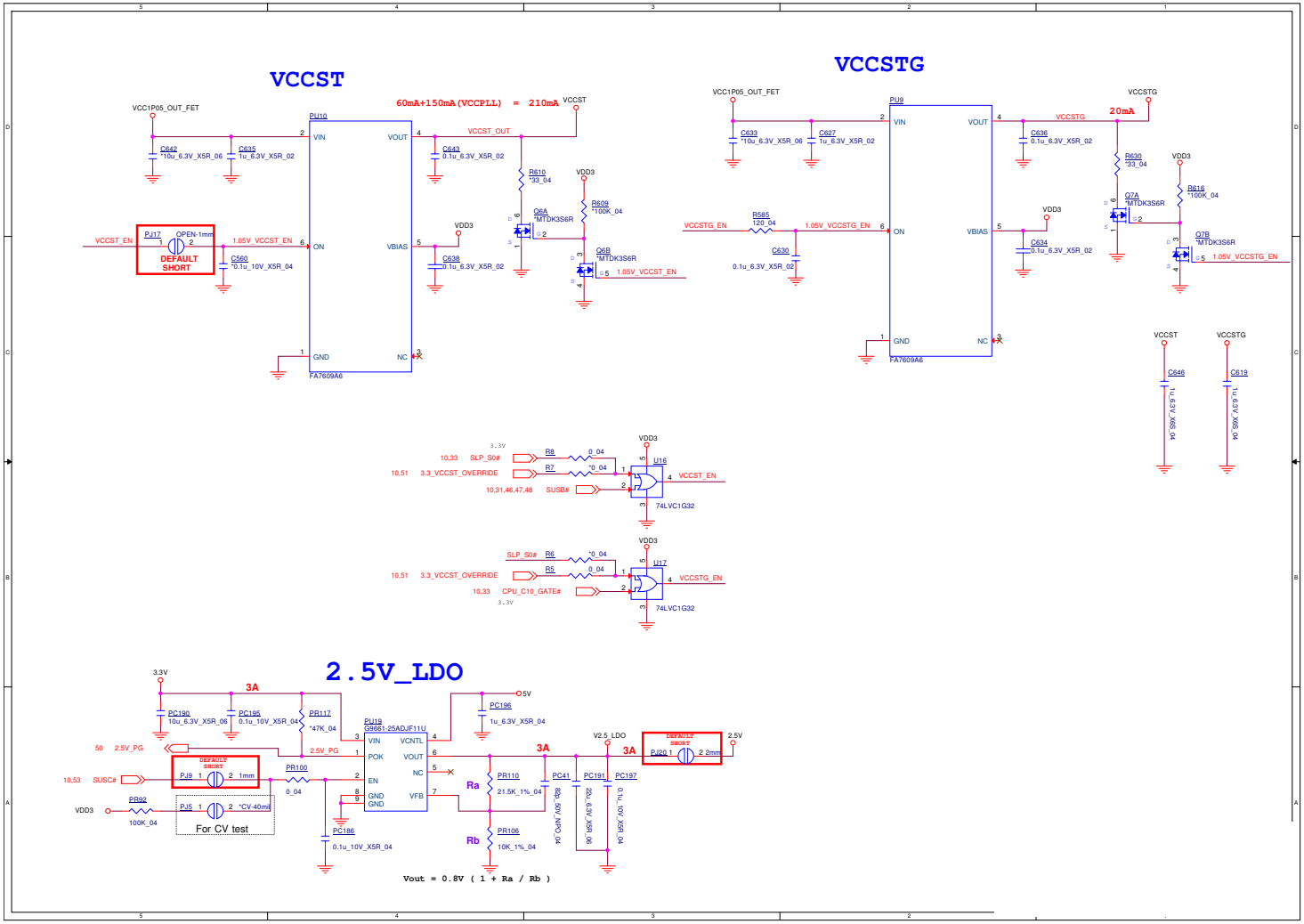
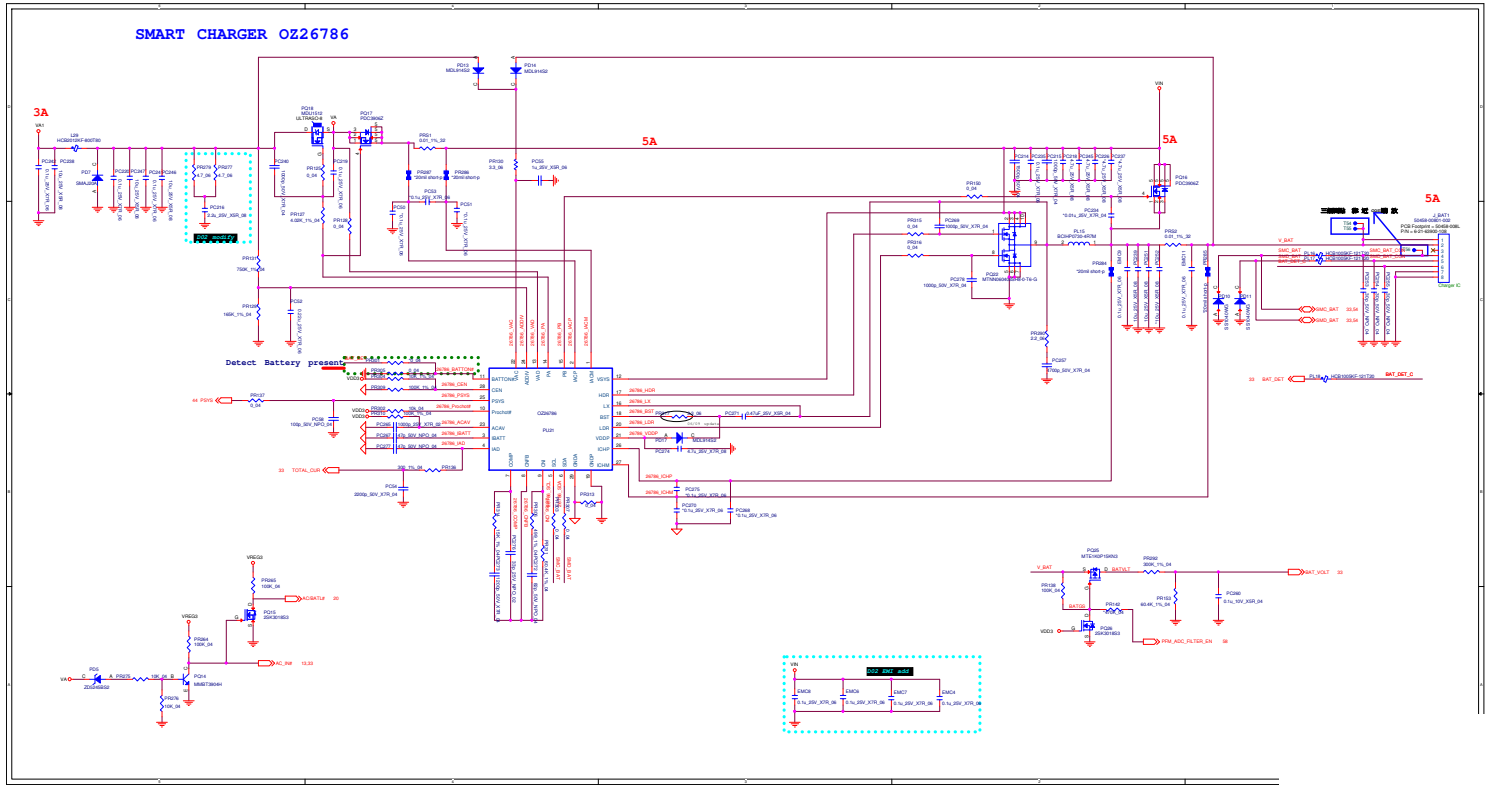
2.5V, VCCST, VCCSTG



Charger, AC-In



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Charger, AC-In

3.3VA, NV3V3

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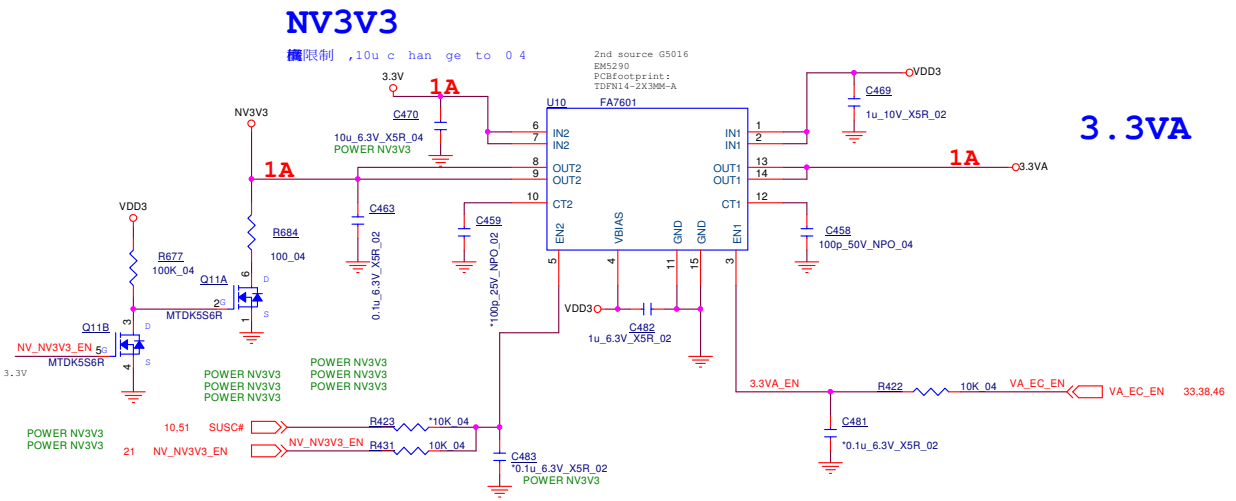
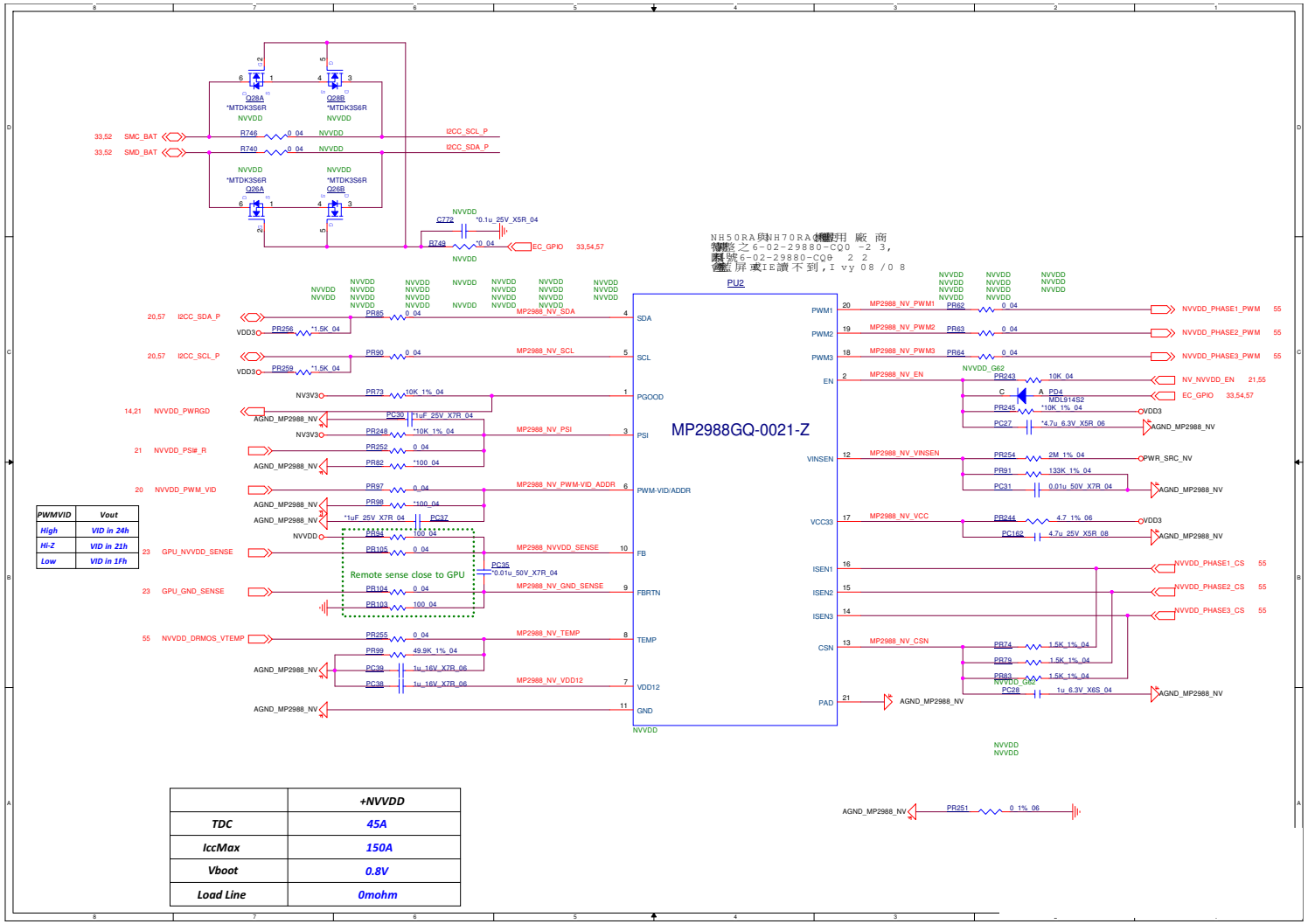
3.3VA, NV3V3



NVVDD1



PWMVID	Vout
High	VID in 24h
Hi-Z	VID in 21h
Low	VID in 1Fh

	+NVVDD
TDC	45A
IccMax	150A
Vboot	0.8V
Load Line	0mohm

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NVVDD1

NVVDD2

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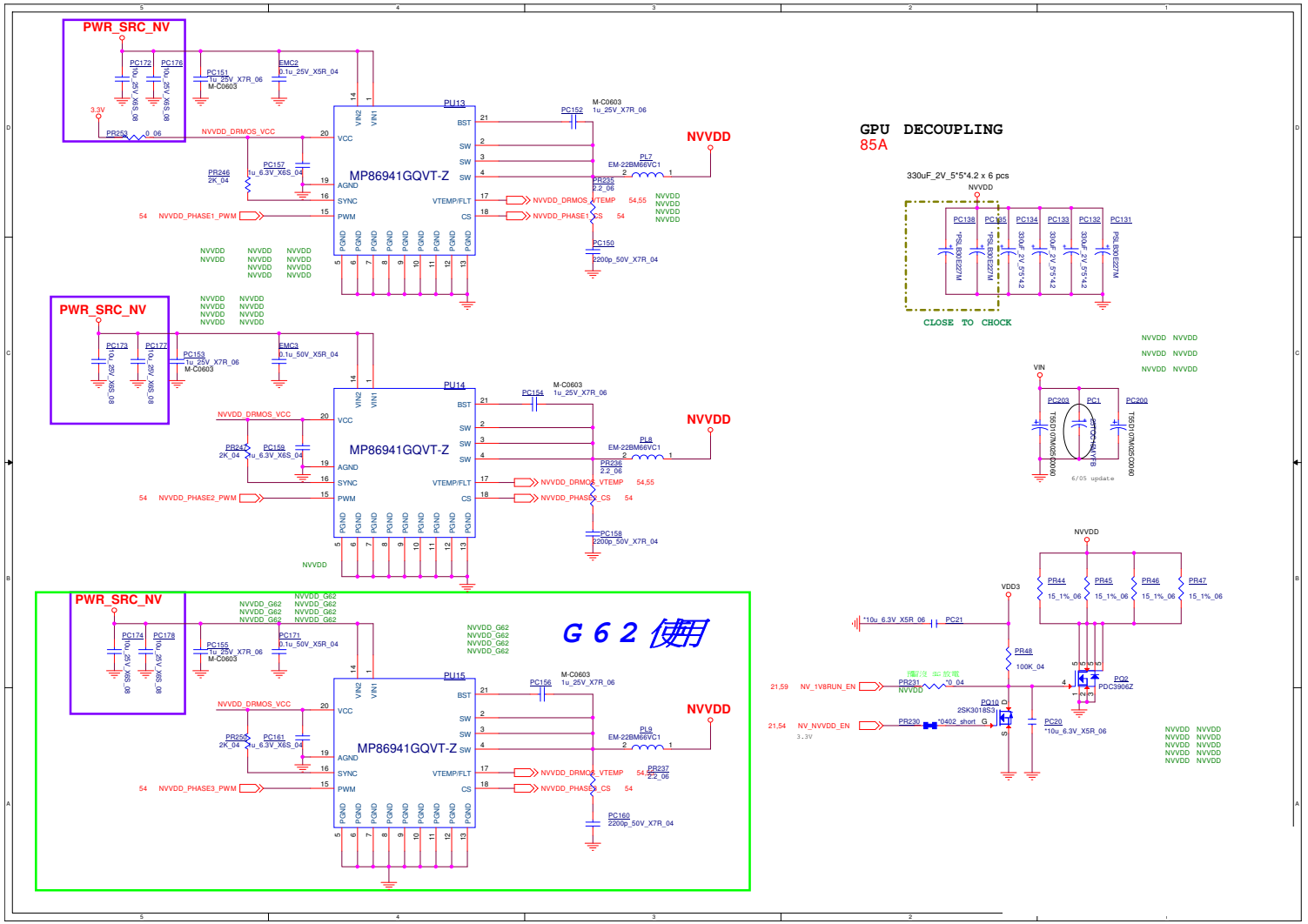
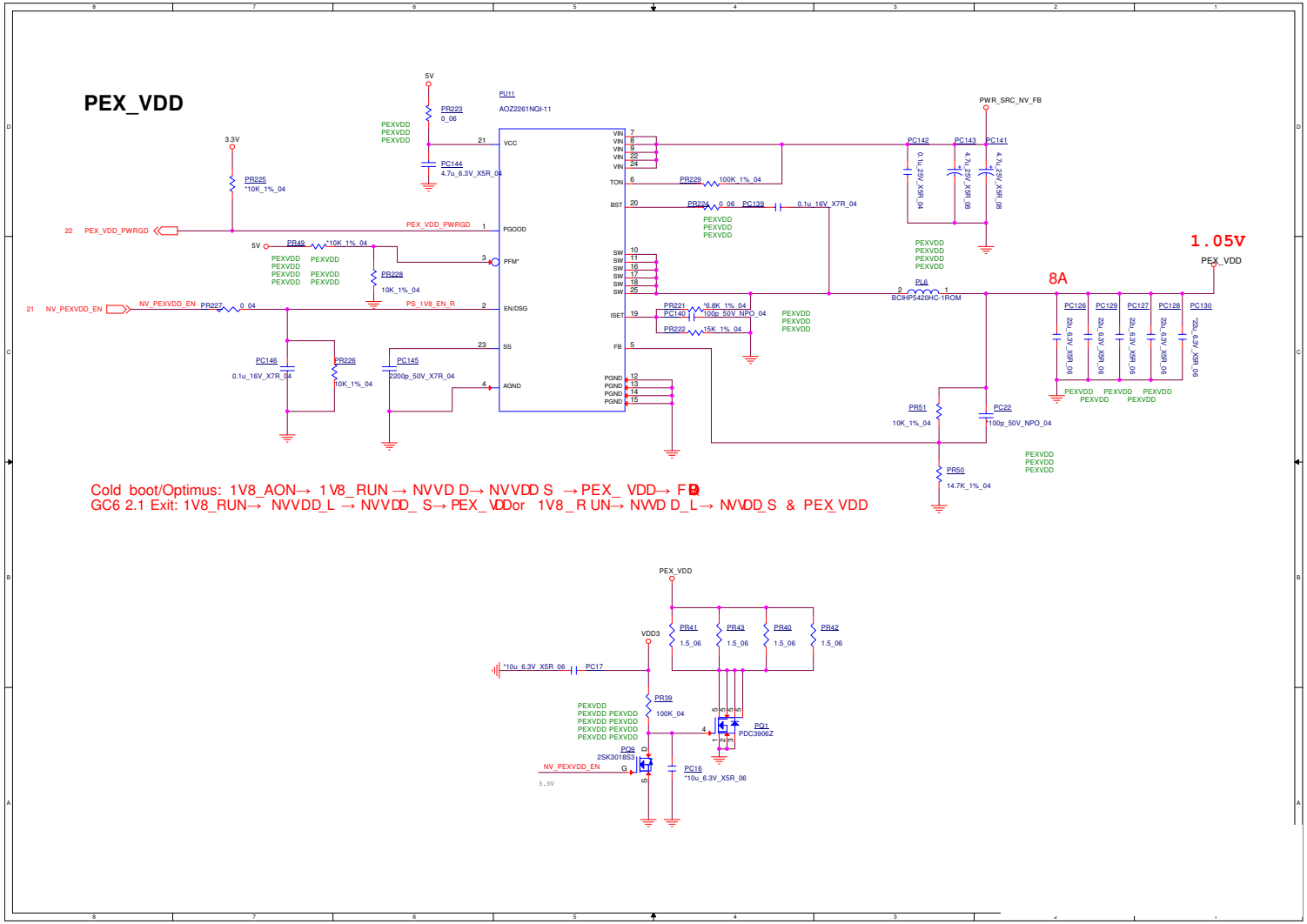
NVVDD2



PEX_VDD



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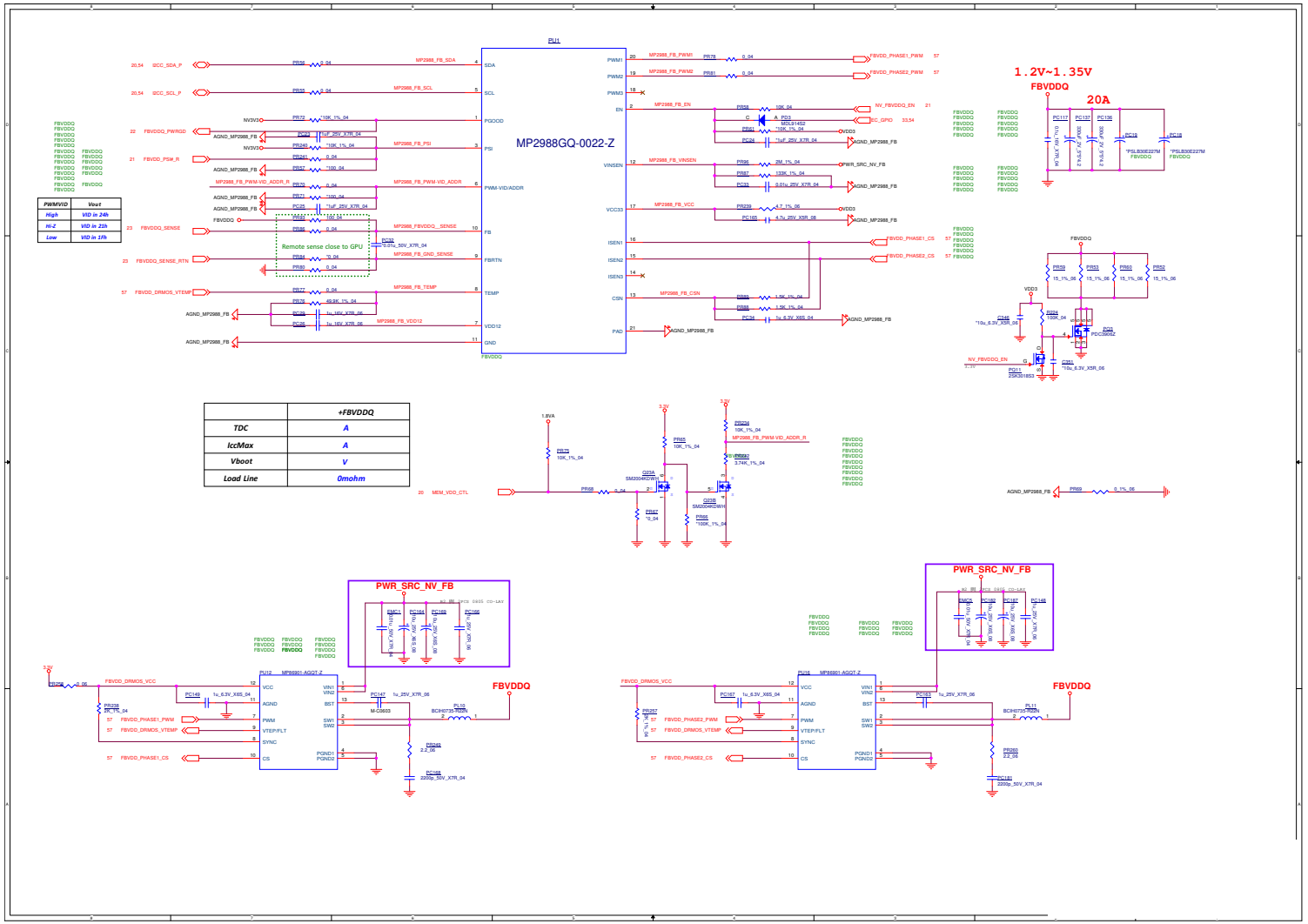
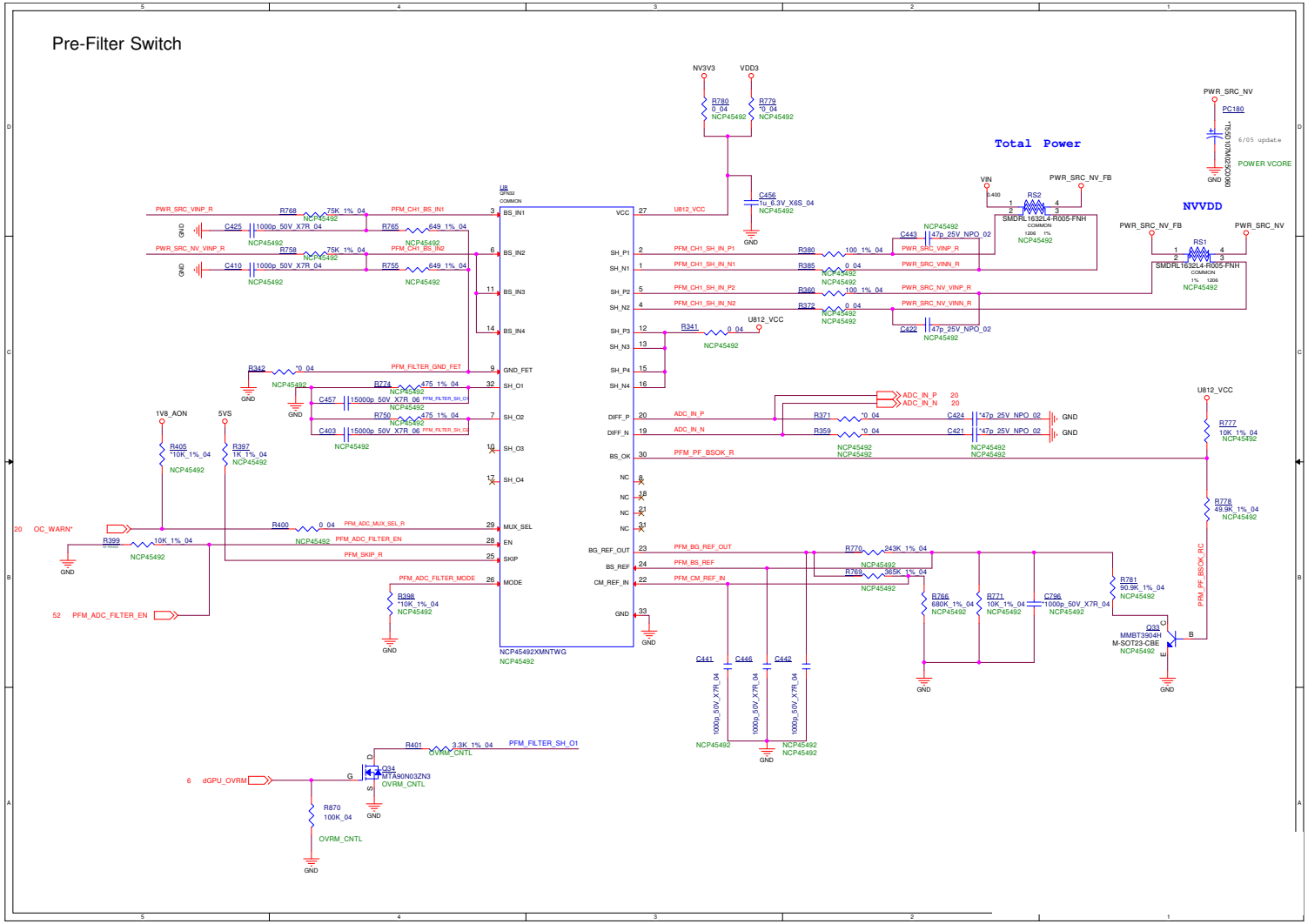
PEX_VDD

FBVDDQ

Sheet 57 of 61
FBVDDQ



DGPU Power Measurement



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DGPU Power Measurement

1V8_AON/RUN, NV3V3

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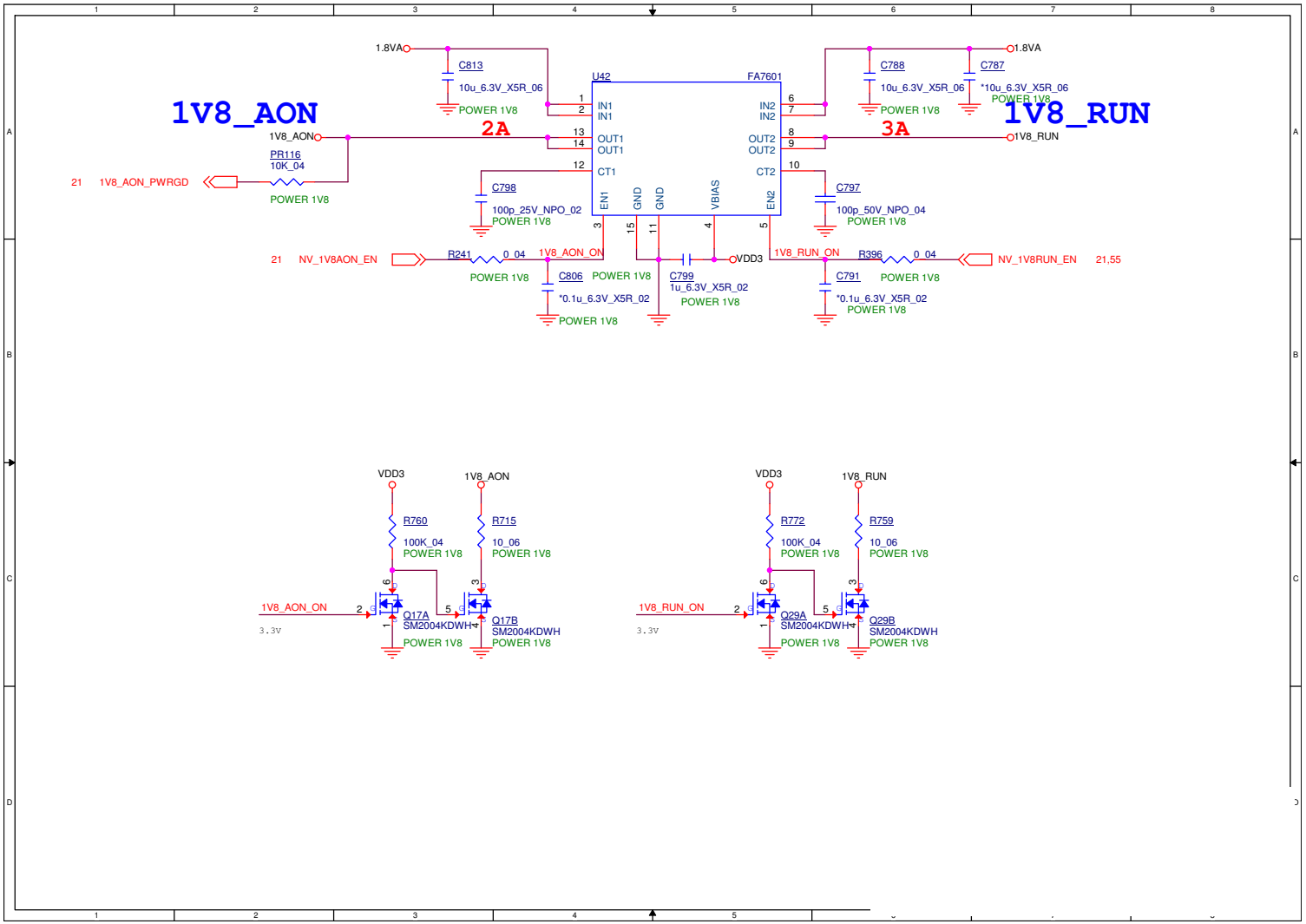
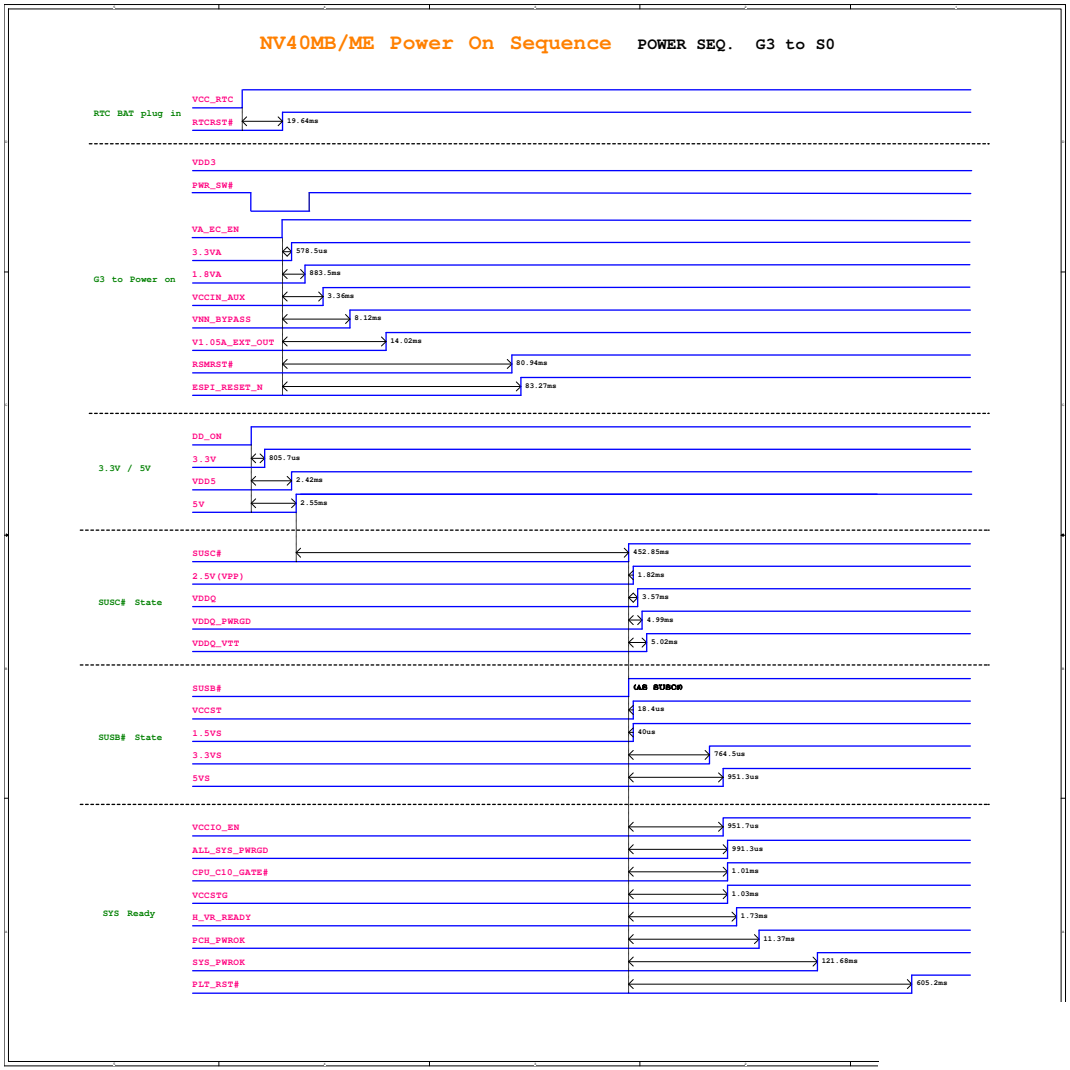
1V8_AON/RUN, NV3V3



Power Sequence



Sheet 60 of 61
Power Sequence

Option BOM

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Option BOM

PWR U6+2 (must add PWR4+2)		
C23	10u_6.3V_X5R_04	6-07-10611-2A0
C32	10u_6.3V_X5R_04	6-07-10611-2A0
C35	10u_6.3V_X5R_04	6-07-10611-2A0
C47	10u_6.3V_X5R_04	6-07-10611-2A0
C63	10u_6.3V_X5R_04	6-07-10611-2A0
C67	10u_6.3V_X5R_04	6-07-10611-2A0
C68	10u_6.3V_X5R_04	6-07-10611-2A0
C69	10u_6.3V_X5R_04	6-07-10611-2A0
C80	10u_6.3V_X5R_04	6-07-10611-2A0
C82	10u_6.3V_X5R_04	6-07-10611-2A0
C88	10u_6.3V_X5R_04	6-07-10611-2A0
C104	10u_6.3V_X5R_04	6-07-10611-2A0
C121	10u_6.3V_X5R_04	6-07-10611-2A0
C124	10u_6.3V_X5R_04	6-07-10611-2A0
C151	10u_6.3V_X5R_04	6-07-10611-2A0
C37	1u_6.3V_X6S_04	6-07-10521-5A0
C103	1u_6.3V_X6S_04	6-07-10521-5A0
C139	1u_6.3V_X6S_04	6-07-10521-5A0
C501	22u_6.3V_X5R_06	6-07-22611-2G0
C502	22u_6.3V_X5R_06	6-07-22611-2G0
C503	22u_6.3V_X5R_06	6-07-22611-2G0
C504	22u_6.3V_X5R_06	6-07-22611-2G0
C505	22u_6.3V_X5R_06	6-07-22611-2G0
C506	22u_6.3V_X5R_06	6-07-22611-2G0
C507	22u_6.3V_X5R_06	6-07-22611-2G0
C508	22u_6.3V_X5R_06	6-07-22611-2G0
C30	22u_6.3V_X5R_06	6-07-22611-2G0
C365	47u_6.3V_X5R_08	6-07-47611-2C0
C366	47u_6.3V_X5R_08	6-07-47611-2C0
C368	47u_6.3V_X5R_08	6-07-47611-2C0
C369	47u_6.3V_X5R_08	6-07-47611-2C0
C372	47u_6.3V_X5R_08	6-07-47611-2C0
C389	47u_6.3V_X5R_08	6-07-47611-2C0
C349	PSLB30E227M	6-11-2271P-8B3

PWR U4+2		
PR108	53.6K_1%_04	6-13-53621-28C
PC49	390p_50V_X7R_04	6-07-39124-3A0
PR30	1.47K_1%_04	6-13-14711-28B
EMC4	0.01u_50V_X7R_04	6-07-10324-3A0
PR103	0_04	6-14-0003B-01B
PR104	0_04	6-14-0003B-01B
PC57	10u_25V_X6S_08	6-07-10622-5C0
PC59	10u_25V_X6S_08	6-07-10622-5C0
PC46	1u_10V_X7R_06	6-07-1062L-3G0
PC47	1u_16V_X7R_06	6-07-1052D-3G0
PC48	1u_25V_X7R_06	6-07-10522-3G0
PR116	2.2_06	6-14-2R23B-01D
PC72	2200p_50V_X7R_04	6-07-22224-3A0
PL1	CMME063T-R15MS0R907	6-19-41001-043
PU6	MP86903-CGLT-Z	6-02-86903-BQ0
PC44	PSLB30E227M	6-11-2271P-8B3
PR114	62K_1%_04	6-13-62021-28B
PR121	10K_1%_04	6-13-10028-2B0

PWR U2+2		
PR108	107K_1%_04	6-13-10731-28C
PC49	220p_50V_NPO_04	6-07-22134-1A0
PR30	1.47K_1%_04	6-13-14711-28B
PR121	0_04	6-14-0003B-01B
PR114	NC	NC

W/ TPM		
C440	0.1u_6.3V_X5R_02	6-07-10421-2K0
C443	0.1u_6.3V_X5R_ 02	6-07-10421-2K0
C452	0.1u_6.3V_X5R_02	6-07-10421-2K0
C455	0.1u_6.3V_X5R_02	6-07-10421-2K0
R495	0_04	6-14-0003B-01B
R500	0_04	6-14-0003B-01B
R74	10K_04	6-14-1033B-01B
R126	10K_04	6-14-1033B-01B
C453	1u_6.3V_X5R_02	6-07-10511-2K0
R496	4.7K_04	6-14-4723B-11B
R499	4.7K_04	6-14-4723B-11B
R492	49.9_1%_04	6-13-49R91-28C
R497	49.9_1%_04	6-13-49R91-28C
R505	49.9_1%_04	6-13-49R91-28C
U27	SLB9670VQ	6-03-09670-030
R234	0_04	6-14-0003B-01B
R538	3.3K_1%_04	6-13-33011-28B
R541	3.3K_1%_04	6-13-33011-28B
R244	33_04	6-14-3303B-11B
R245	33_04	6-14-3303B-11B
R254	33_04	6-14-3303B-11B
U34	GD25D10BTIGR	6-04-02510-A91

W/O TPM		
R73	10K_04	6-14-1033B-01B
R235	0_04	6-14-0003B-01B
R246	0_04	6-14-0003B-01B
R255	0_04	6-14-0003B-01B
R256	0_04	6-14-0003B-01B

DDR GPP_D22		
R81	10K_04	6-14-1033B-01B
R81	10K_04	6-14-1033B-01B
R82	10K_04	6-14-1033B-01B
R82	10K_04	6-14-1033B-01B

DDR GPP_D10		
R550	10K_04	6-14-1033B-01B
R549	10K_04	6-14-1033B-01B
R550	10K_04	6-14-1033B-01B
R549	10K_04	6-14-1033B-01B

W/ USB CHARGER 3.1 TYPEA		
C281	0.1u_6.3V_X5R_02	6-07-10421-2K0
R236	0_04	6-14-0003B-01B
R221	100K_04	6-14-1043B-11B
R220	10K_04	6-14-1033B-01B
U8	SLG55593VTR	6-02-55593-9D0
R213	10K_04	6-14-1033B-01B

W/O USB CHARGER 3.1 TYPEA		
R222	0_04	6-14-0003B-01B
R509	0_04	6-14-0003B-01B
R510	0_04	6-14-0003B-01B
R212	10K_04	6-14-1033B-01B