

SERVICE MANUAL

P955HQ3

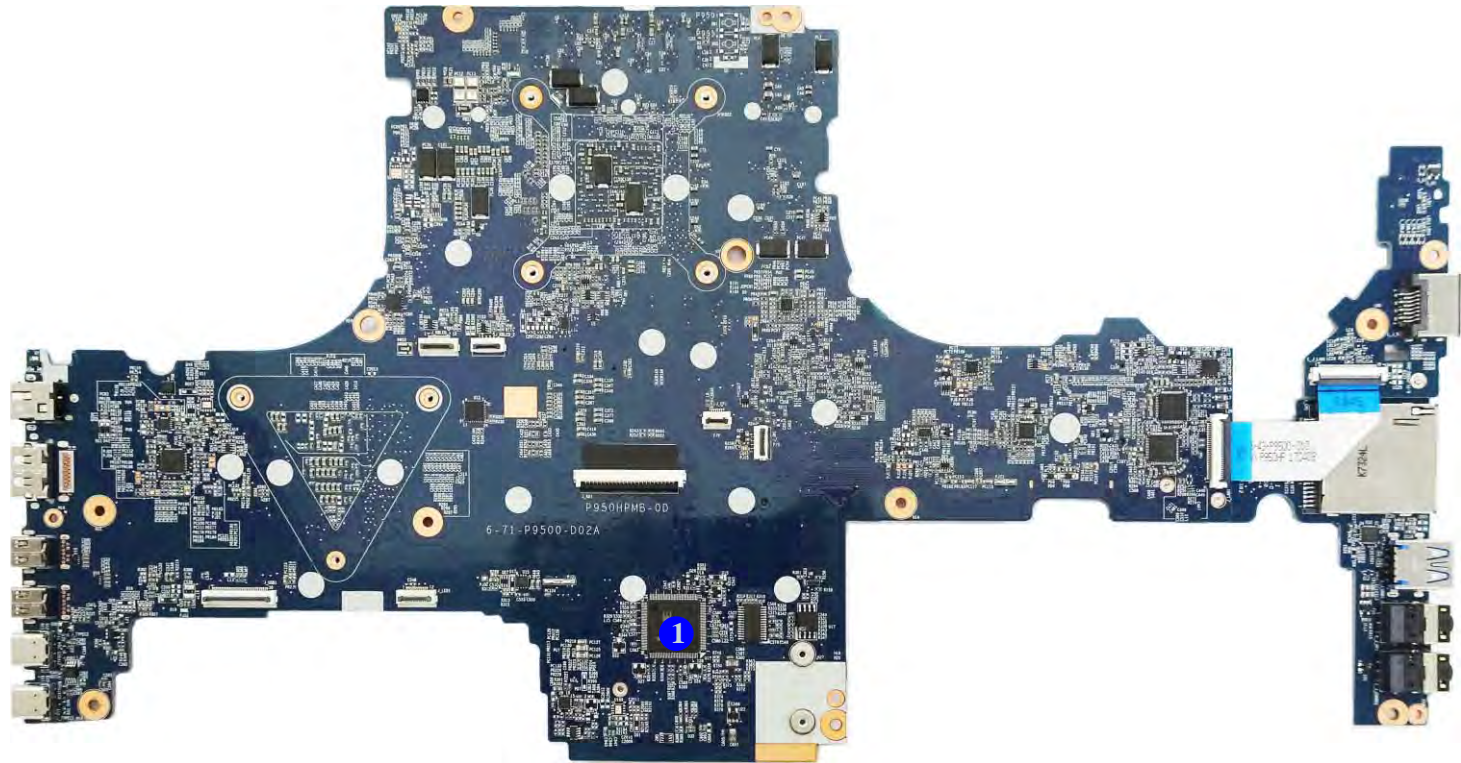
notebook



Figure 7
**Mainboard Top
Key Parts**

1. KBC-ITE IT8587

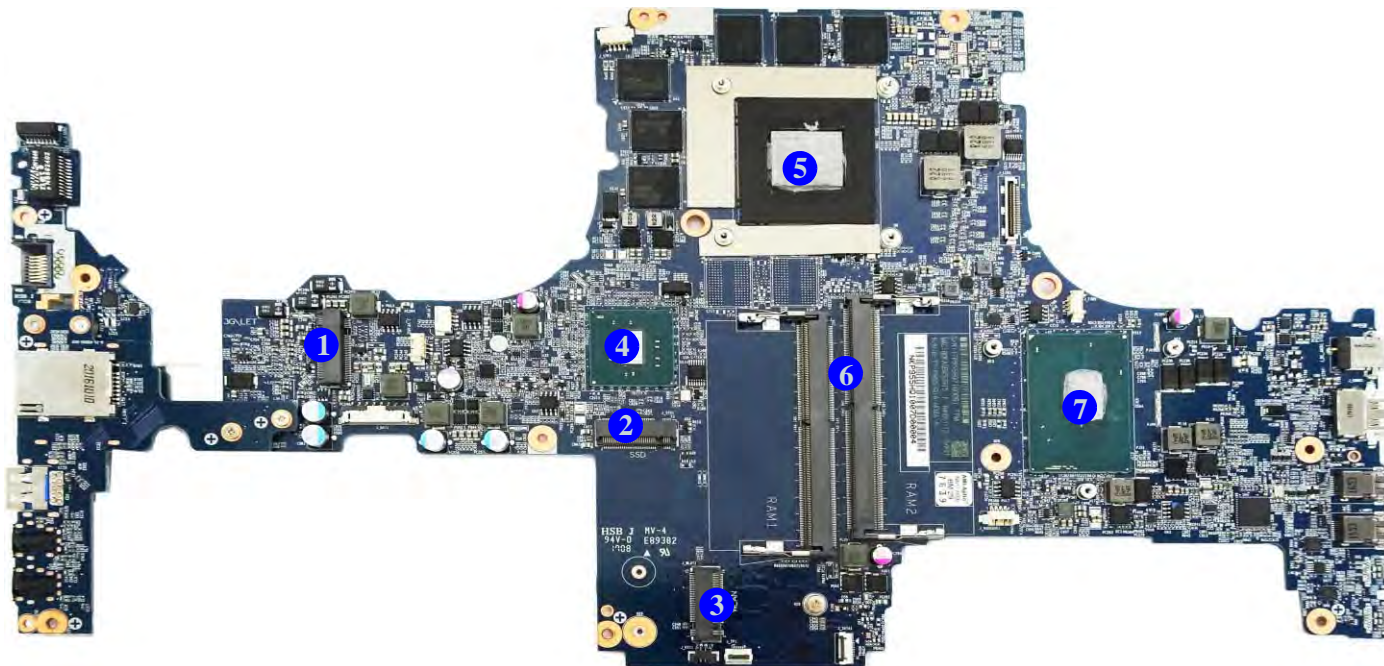
Mainboard Overview - Top (Key Parts)



Mainboard Overview - Bottom (Key Parts)

Figure 8
**Mainboard Bottom
Key Parts**

1. Mini-Card Connector (M.2 3G/SATA Module)
2. Mini-Card Connector (M.2 PCIE/SATA SSD Module)
3. Mini-Card Connector (WLAN Module)
4. PCH
5. GPU-GTX1060M
6. Memory Slots DDR4 SO-DIMM
7. CPU



Introduction

Figure 9
**Mainboard Top
Connectors**

Mainboard Overview - Top (Connectors)

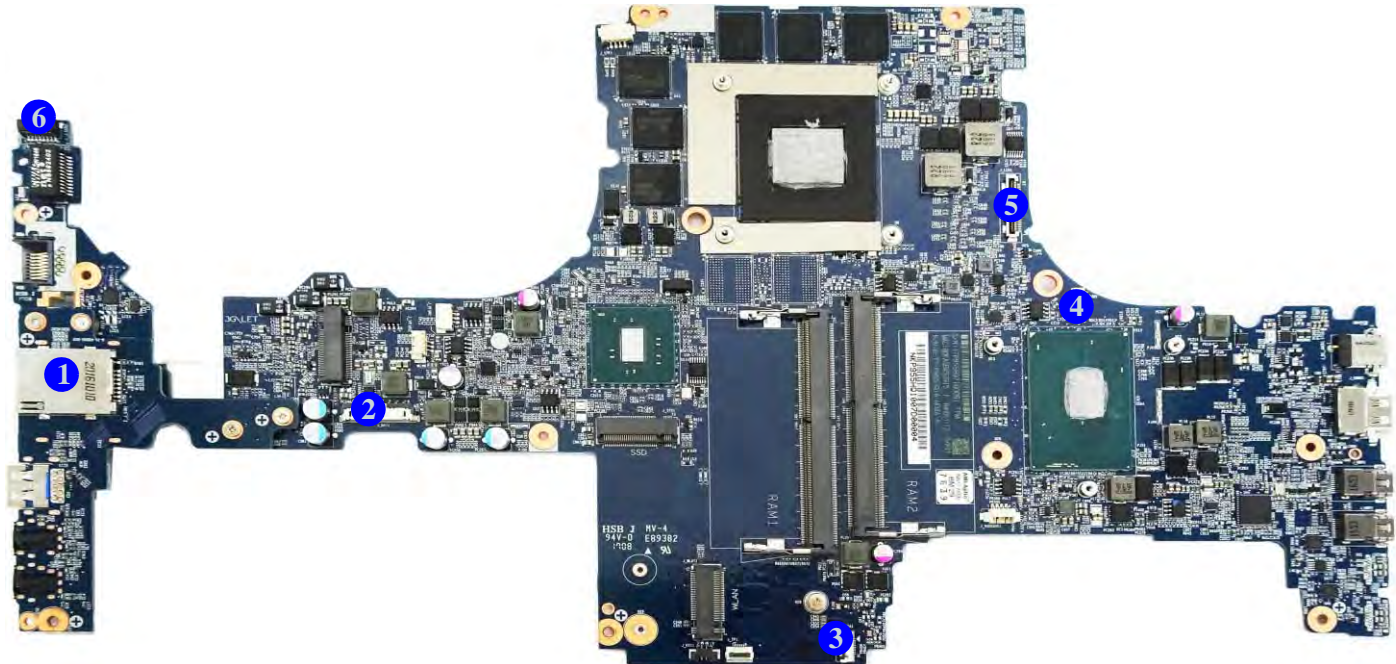
1. DC-In Jack
2. HDMI Port
3. Mini Display Ports
4. USB 3.1 Gen 2 Type-C Ports
5. TP Connector
6. Keyboard Cable Connector
7. Microphone-In Jack
8. Headphone & S/PDIF Combo Jack
9. USB 3.0 (USB 3.1 Gen 1) Port
10. Multi-in-1 Card Reader
11. RJ-45 LAN Jack



Mainboard Overview - Bottom (Connectors)

Figure 10
**Mainboard Bottom
Connectors**

1. USIM Card Reader
(for 3G/4G USIM
Cards)
2. Battery Connector
3. HDD Connector
4. Fan Connector
5. LCD Cable
Connector
6. CCD Connector



Appendix B: Schematic Diagrams

This appendix has circuit diagrams of the **P955HQ3** notebook's PCB's. The following table indicates where to find the appropriate schematic diagram.

Diagram - Page	Diagram - Page	Diagram - Page	Diagram - Page
System Block Diagram - Page B - 2	Frame Buffer Partition C_D - Page B - 23	3D AMP Headphone - Page B - 44	NVVD1 - Page B - 65
Processor 1/7 - Page B - 3	GPU Decoupling 1 - Page B - 24	ASM2142 1/3 - Page B - 45	NVVD2 - Page B - 66
Processor 2/7 - Page B - 4	GPU Decoupling 2 - Page B - 25	ASM2142 2/3 - Page B - 46	FBVDDQ - Page B - 67
Processor 3/7 - Page B - 5	Straps and XTAL - Page B - 26	ASM2142 3/3 - Page B - 47	LAN Board - Page B - 68
Processor 4/7 - Page B - 6	IFP I/O Interface - Page B - 27	M.2 3G/LTE - Page B - 48	USB Board, Receiver - Page B - 69
Processor 5/7 - Page B - 7	Misc - GPIO, I2C and ROM - Page B - 28	M.2 WLAN+BT, PCIE4X SSD - Page B - 49	USB Board - Page B - 70
Processor 6/7 - Page B - 8	GPU NVVDD, FBVDDQ - Page B - 29	TPM, TP - Page B - 50	LED Board - Page B - 71
Processor 7/7 - Page B - 9	GPU GND & Sequence - Page B - 30	Connector - Page B - 51	Click Board - Page B - 72
DDR4 CHA SO-DIMM_0 - Page B - 10	PCH 1/9 - Page B - 31	Fan, LID, KB LED - Page B - 52	Reader Board - Page B - 73
DDR4 CHB SO-DIMM_0 - Page B - 11	PCH 2/9 - Page B - 32	5V, 5VS, 3.3V, 3.3VS, 3.3VA - Page B - 53	Power Board - Page B - 74
Panel, Inverter - Page B - 12	PCH 3/9 - Page B - 33	1.0DX_VCCSTG/VCCSFR_OC/2.5V - Page B - 54	Power Sequence - Page B - 75
Mini DP Port - Page B - 13	PCH 4/9 - Page B - 34	IV8_RUN/AON, NV3V3 - Page B - 55	
HDMI Connector - Page B - 14	PCH 5/9 - Page B - 35	PEX_VDD - Page B - 56	
VGA PCI Express - Page B - 15	PCH 6/9 - Page B - 36	VDD3, VDD5 - Page B - 57	
GPU Frame Buffer Partition - Page B - 16	PCH 7/9 - Page B - 37	DDR 1.2V / 0.6VS - Page B - 58	
Frame Buffer Partition A - Page B - 17	PCH 8/9 - Page B - 38	Power 1.0V, VCCIO - Page B - 59	
Frame Buffer Partition B - Page B - 18	PCH 9/9 - Page B - 39	VCore & VCCGT Output 1 - Page B - 60	
Frame Buffer Partition A_B - Page B - 19	KBC IT8587 - Page B - 40	VCore & VCCGT Output 2 - Page B - 61	
GPU Frame Buffer Partition - Page B - 20	Backlight KB - Page B - 41	VCCSA - Page B - 62	
Frame Buffer Partition C - Page B - 21	Realtek ALC1220 - Page B - 42	AC_In, Charger - Page B - 63	
Frame Buffer Partition D - Page B - 22	Smart AMP ALC1306 - Page B - 43	NVVD5 - Page B - 64	

Table B - 1
**SCHEMATIC
DIAGRAMS**

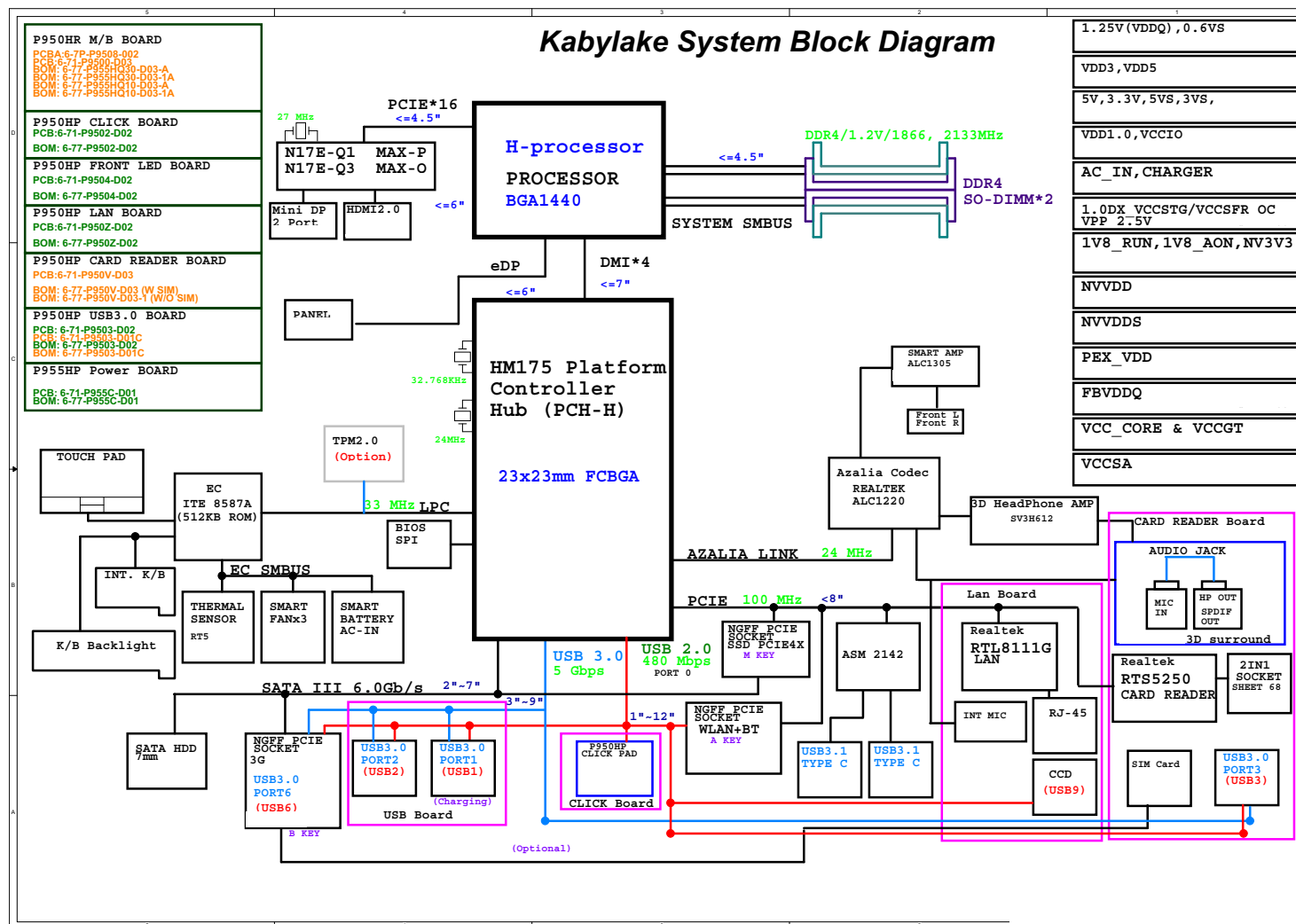


Version Note

The schematic diagrams in this chapter are based upon version 6-7P-P9508-001. If your mainboard (or other boards) are a later version, please check with the Service Center for updated diagrams (if required).

System Block Diagram

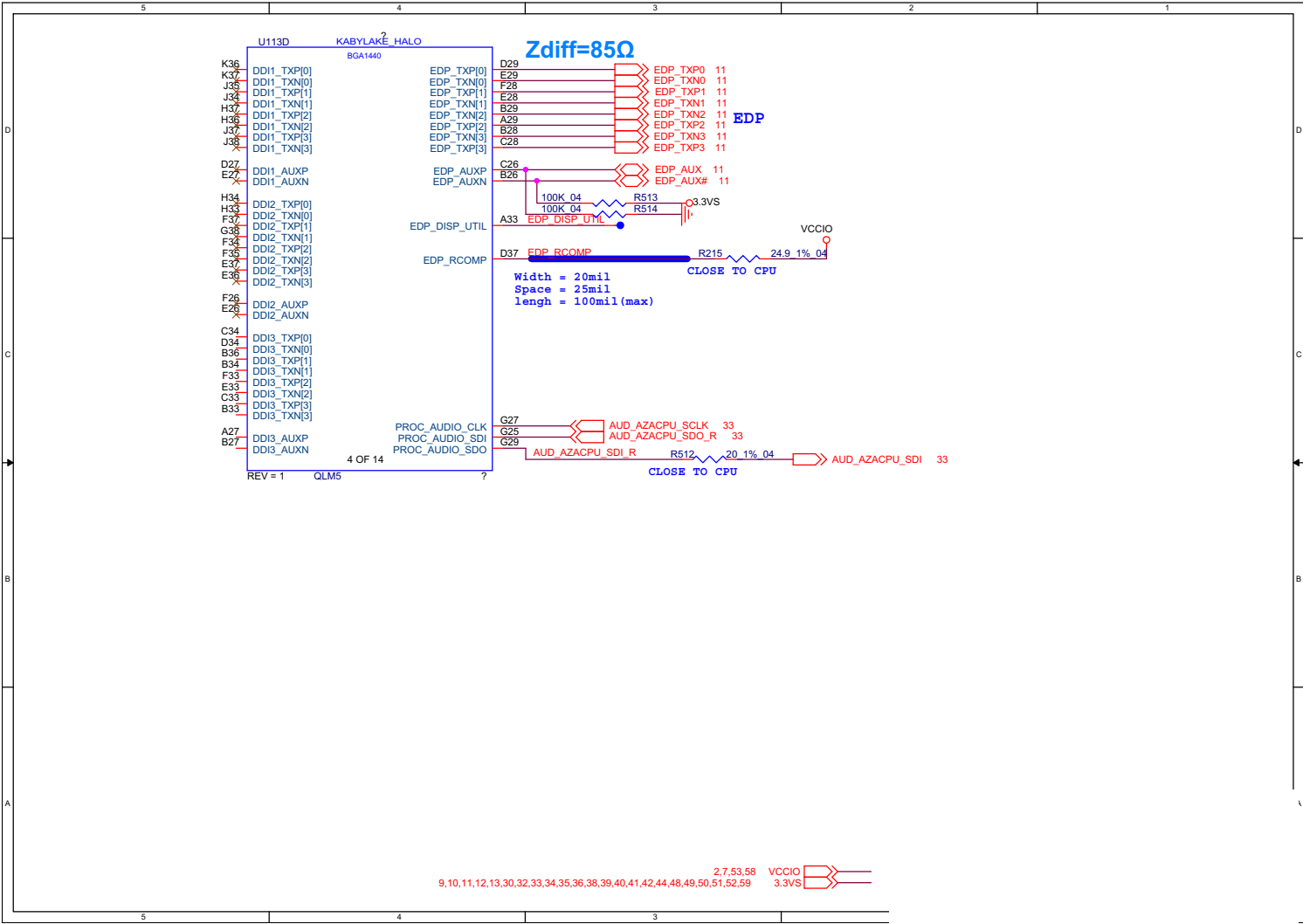
Sheet 1 of 74
System Block
Diagram



Processor 1/7

Sheet 2 of 74
Processor 1/7

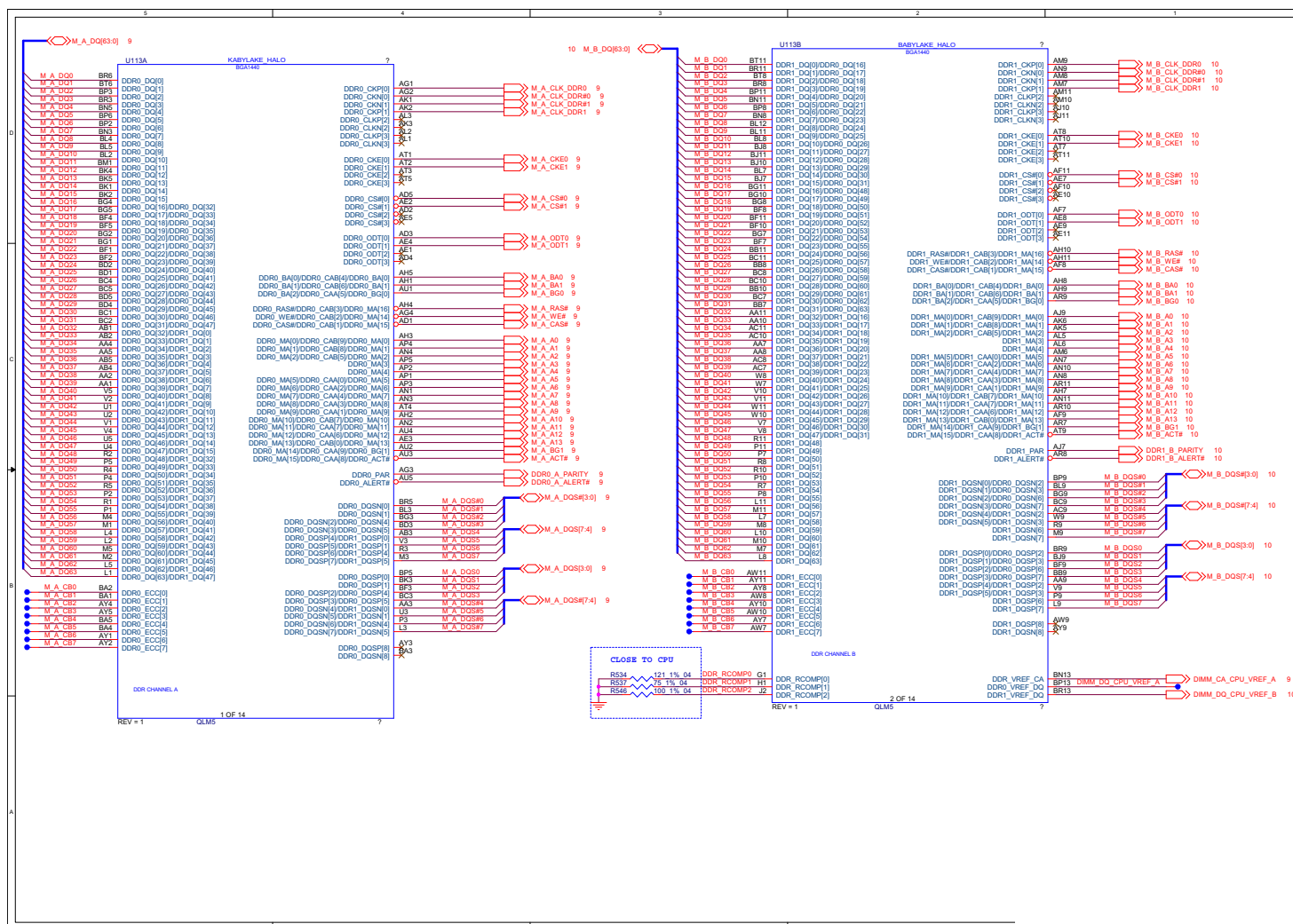
Processor 2/7



Sheet 3 of 74
Processor 2/7

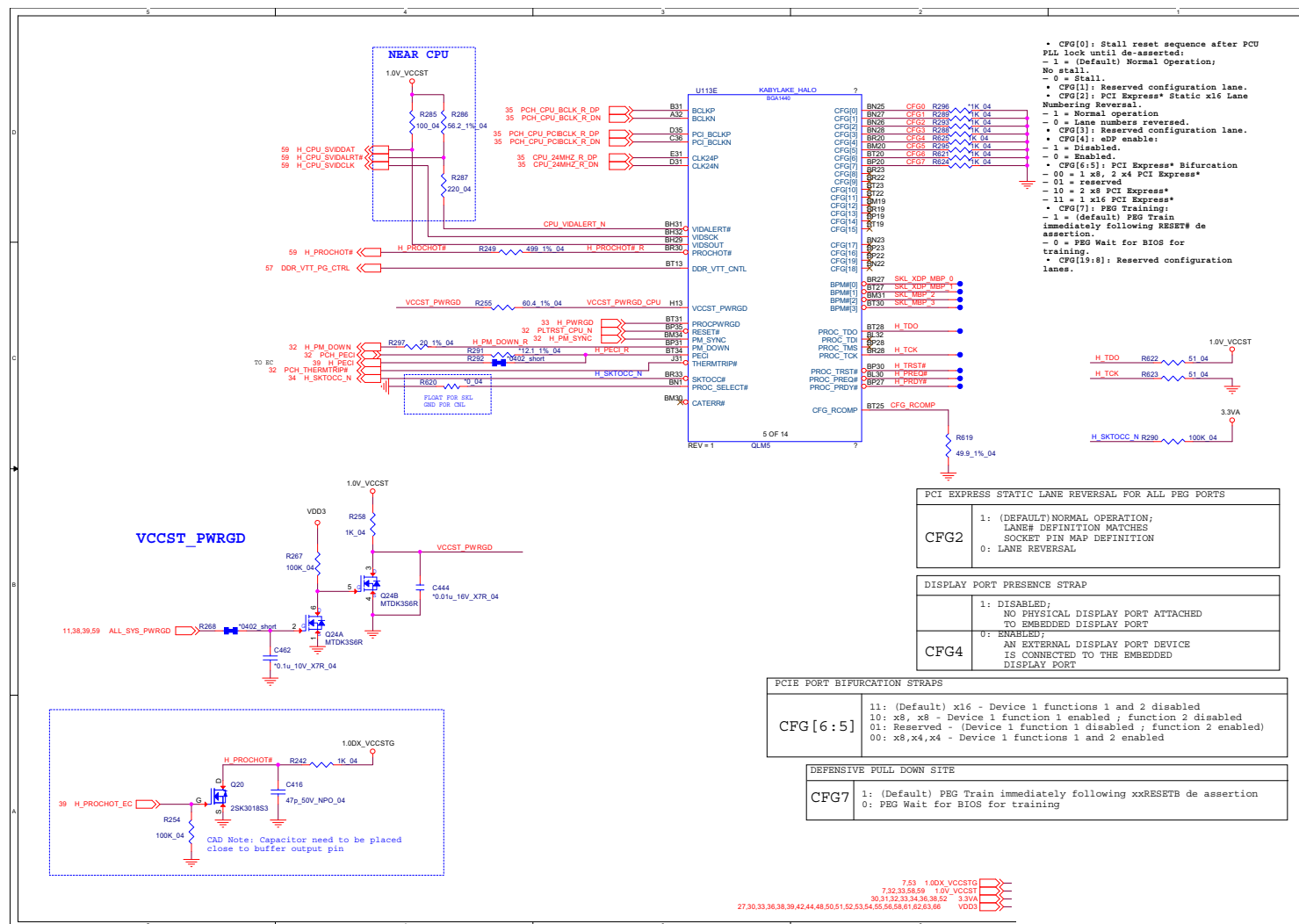
B.Schematic Diagrams

Processor 3/7

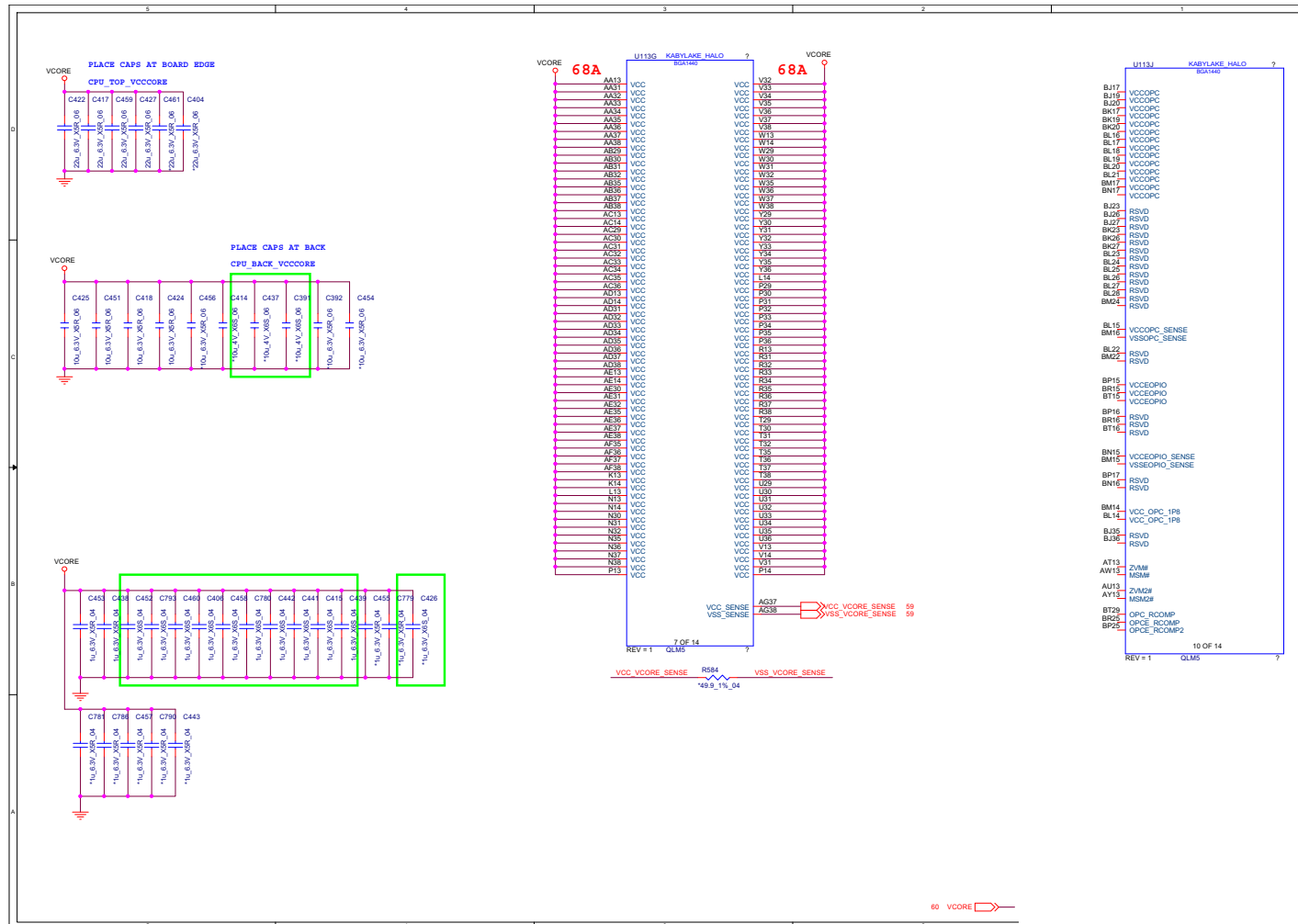
Sheet 4 of 74
Processor 3/7

B.Schematic Diagrams

Sheet 5 of 74
Processor 4/7



Processor 5/7

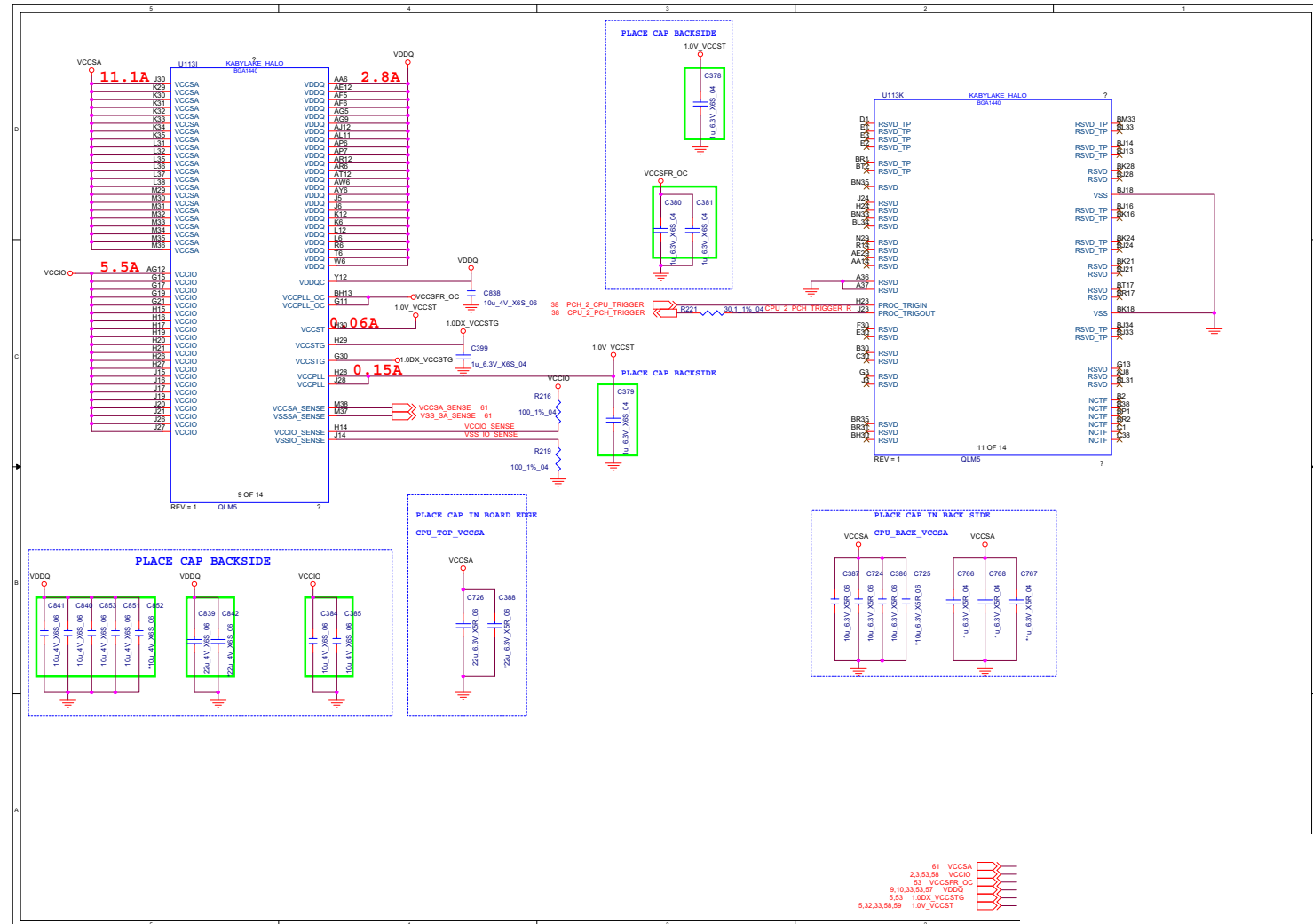


Sheet 6 of 74
Processor 5/7

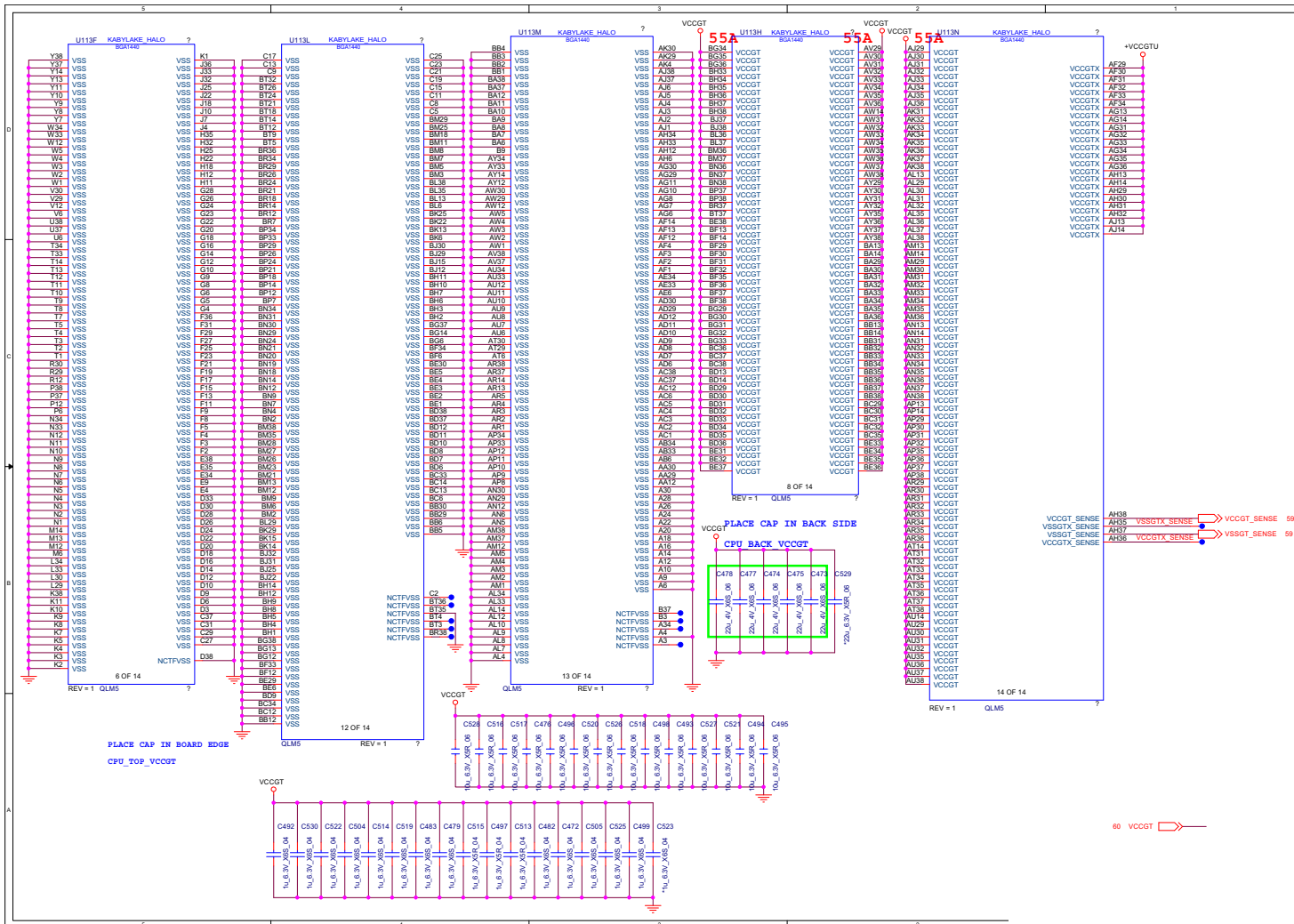
Processor 6/7

B. Schematic Diagrams

Sheet 7 of 74
Processor 6/



Processor 7/7

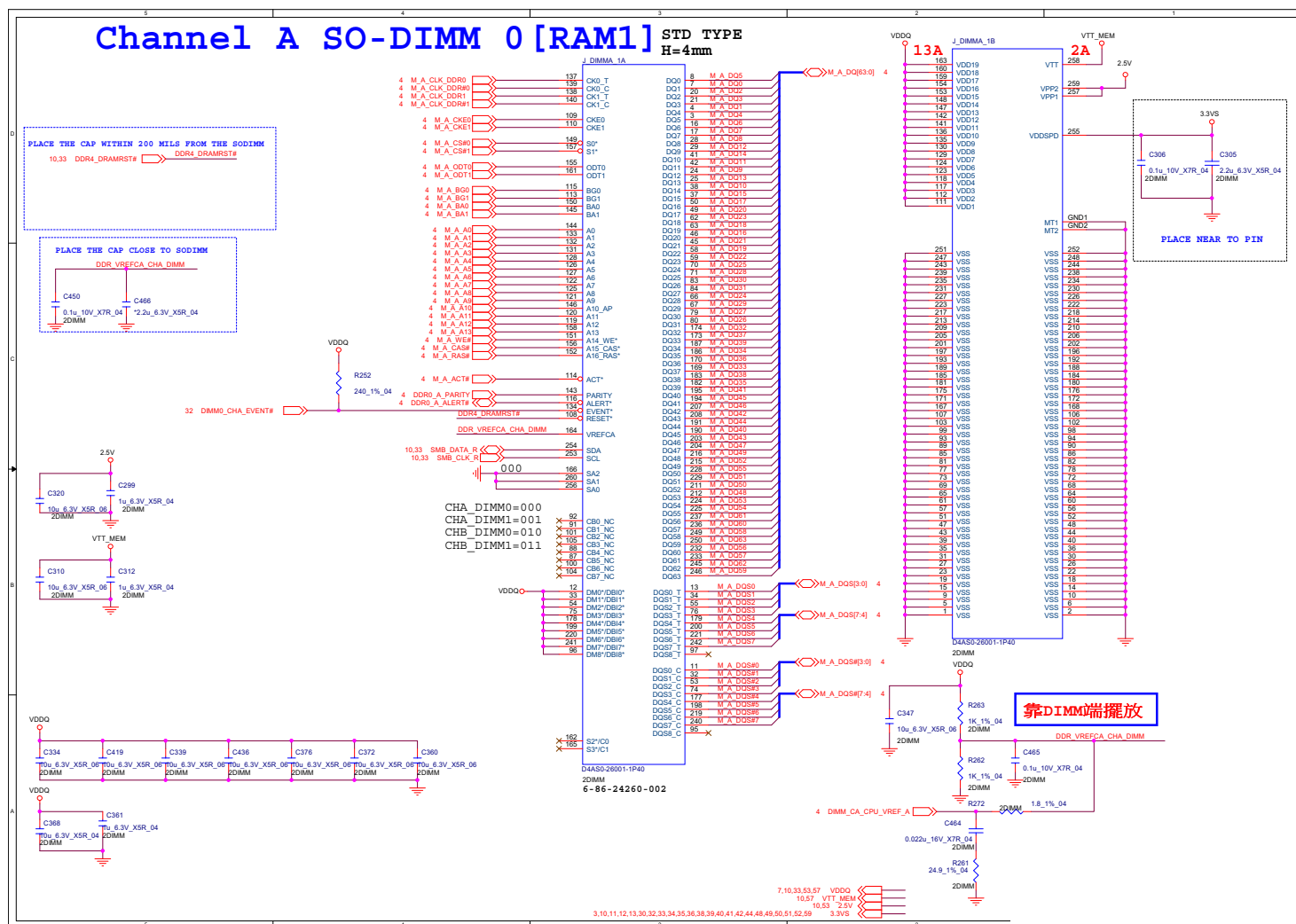


Sheet 8 of 74
Processor 7/7

DDR4 CHA SO-DIMM_0

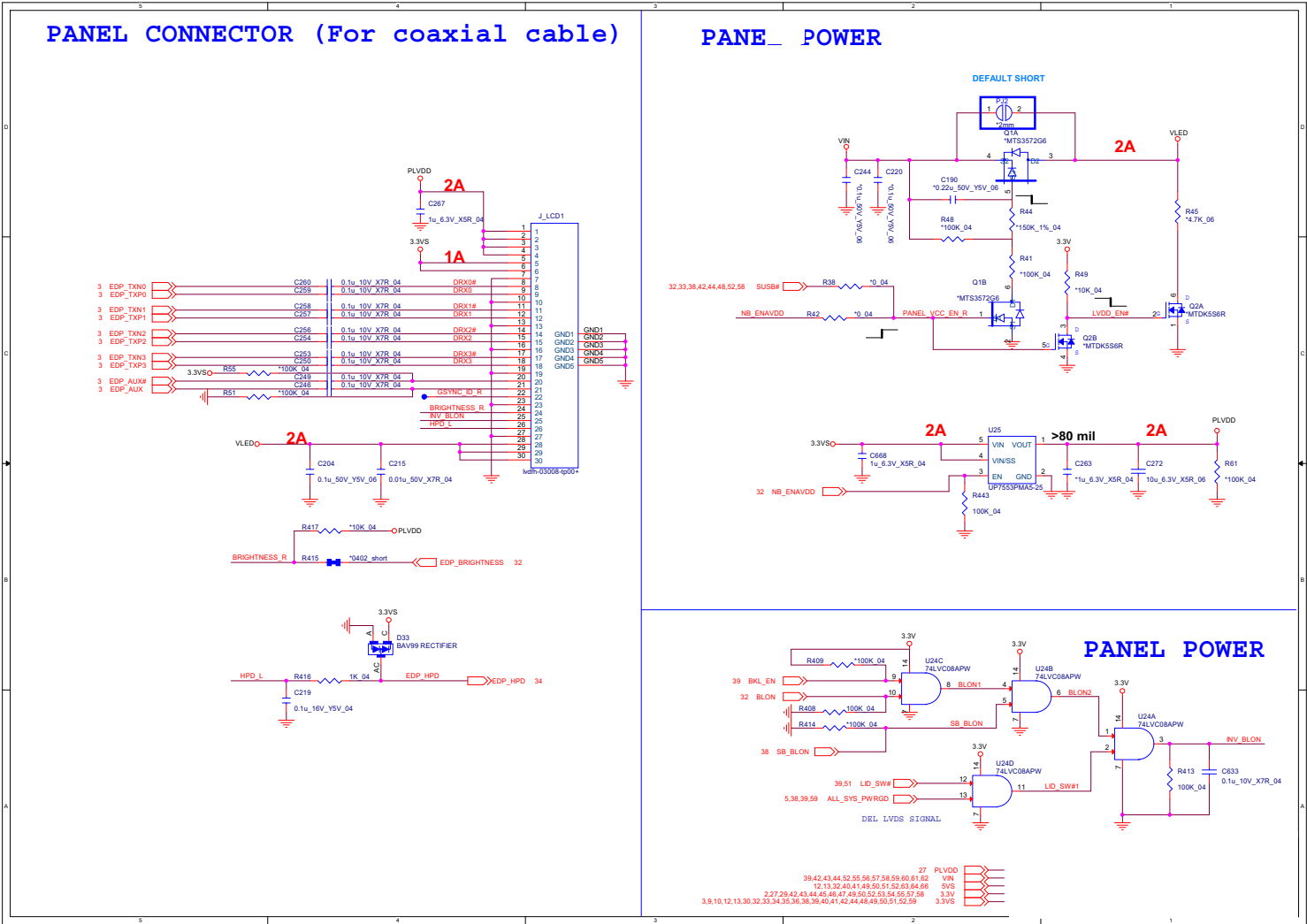
B.Schematic Diagrams

Sheet 9 of 74
DDR4 CHA SO-
DIMM 0



B.Schematic Diagrams

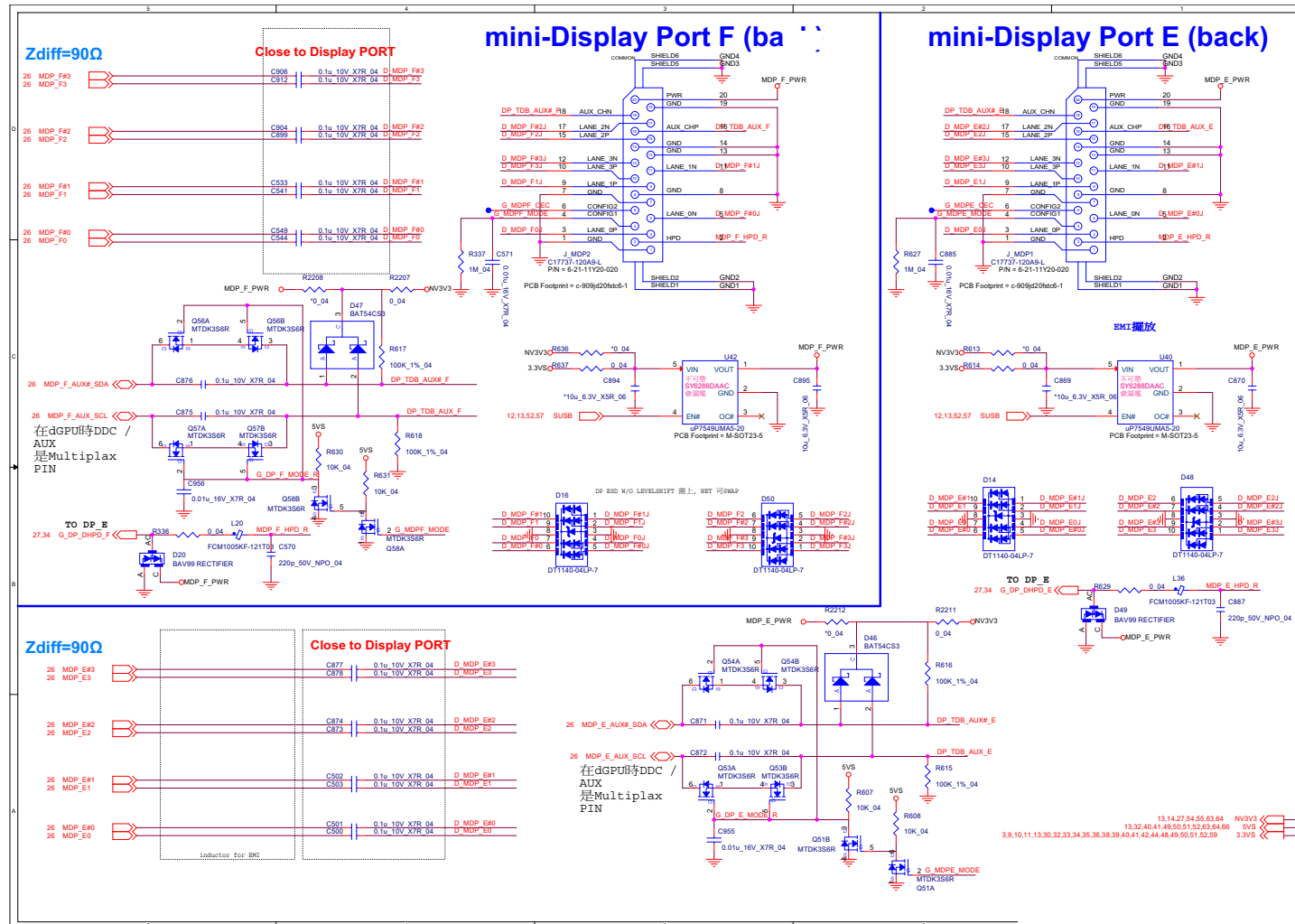
Panel, Inverter



B.Schematic Diagrams

Sheet 11 of 74
Panel, Inverter

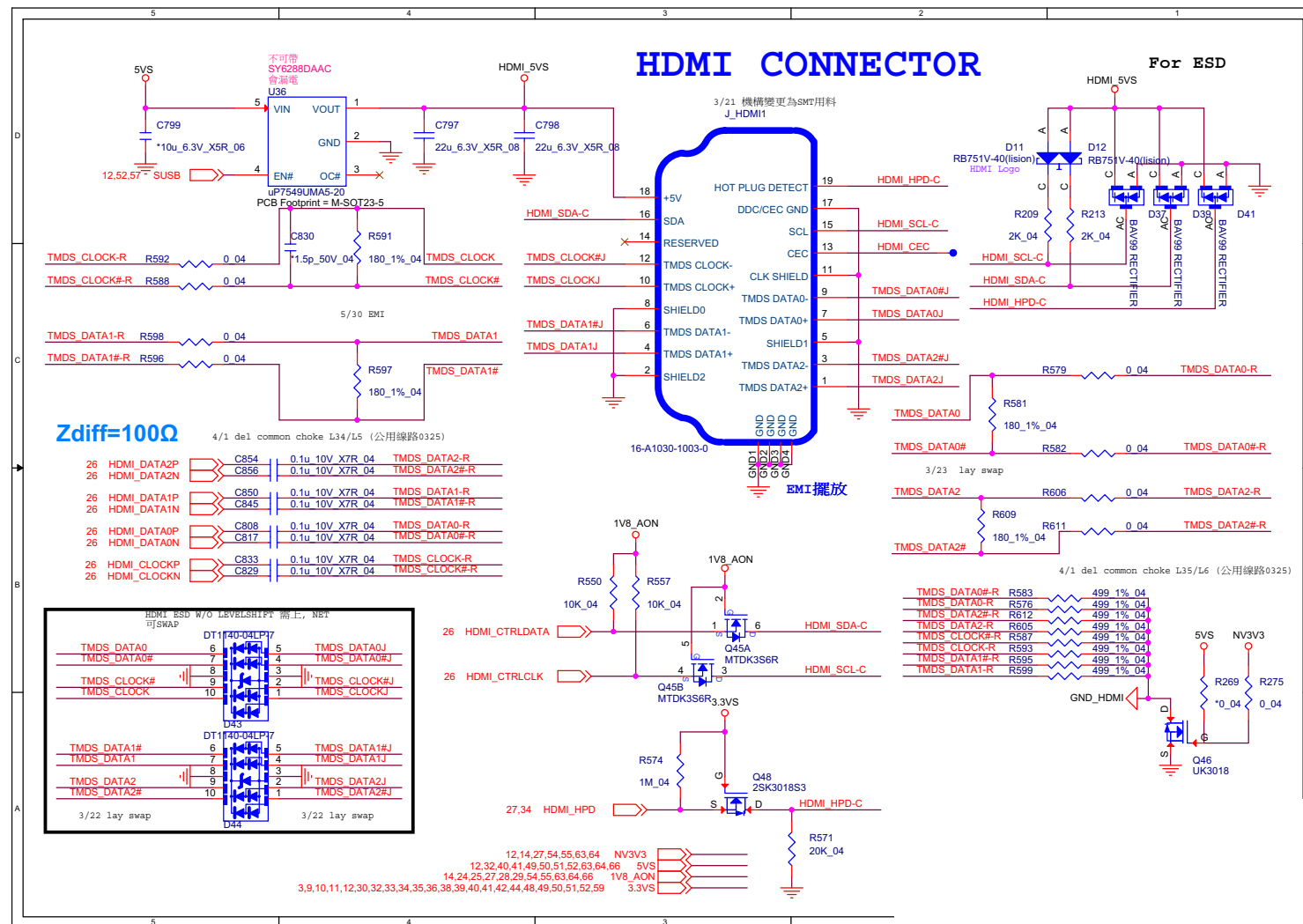
Mini DP Port B - 13



HDMI Connector

B. Schematic Diagrams

Sheet 13 of 74
HDMI Connector



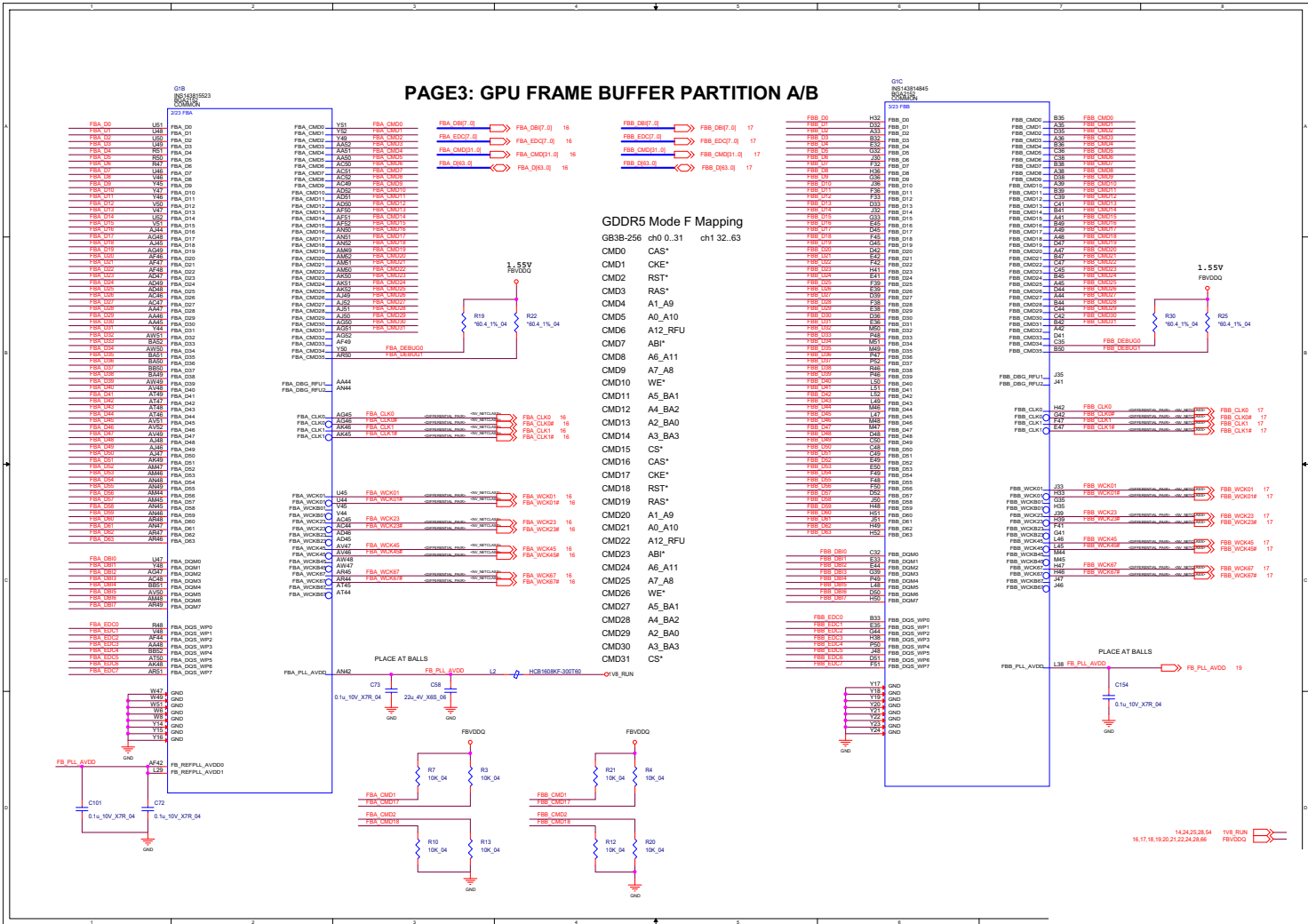
VGA PCI Express B - 15



GPU Frame Buffer Partition

B.Schematic Diagrams

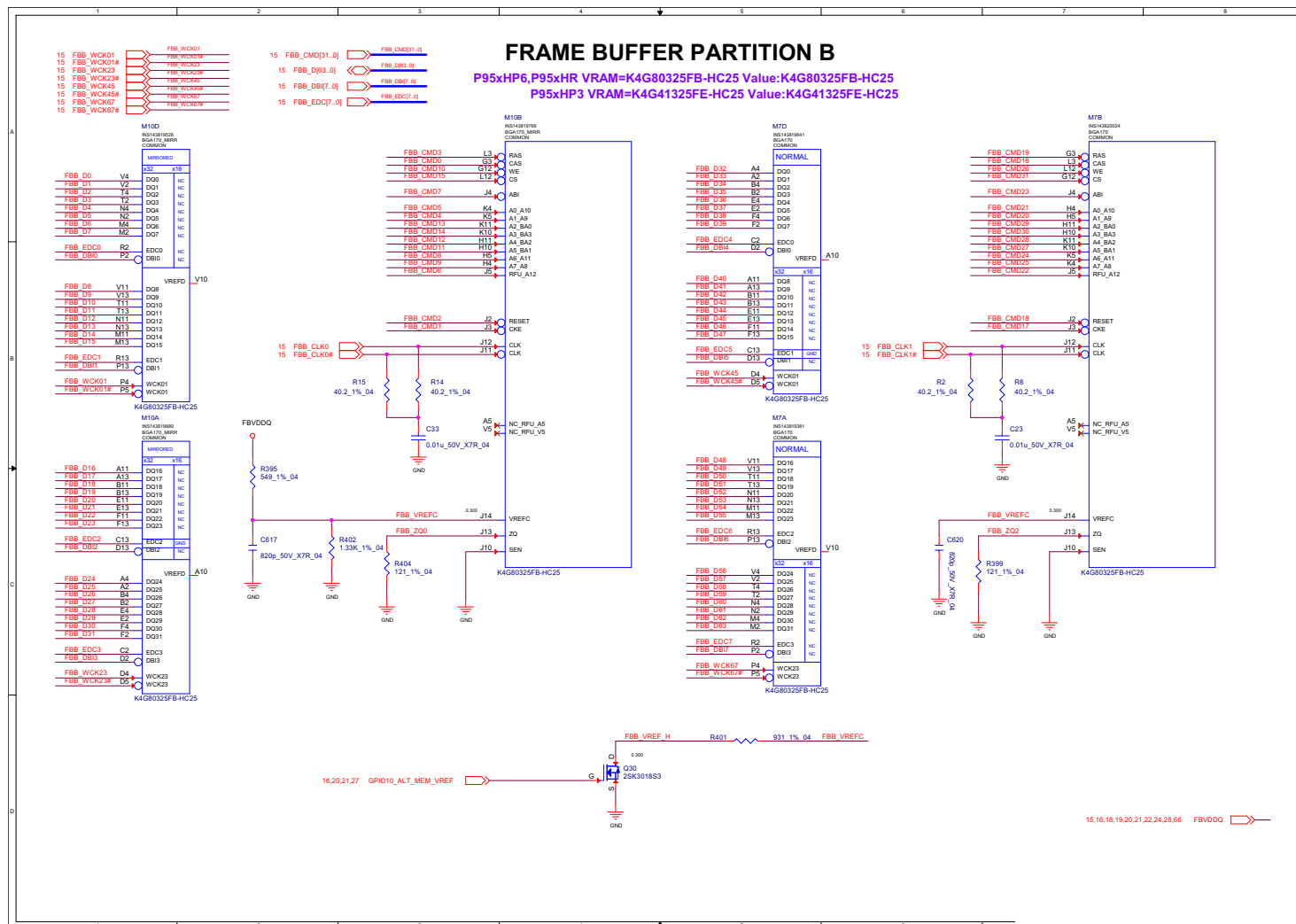
Sheet 15 of 74
GPU Frame Buffer
Partition



Frame Buffer Partition B

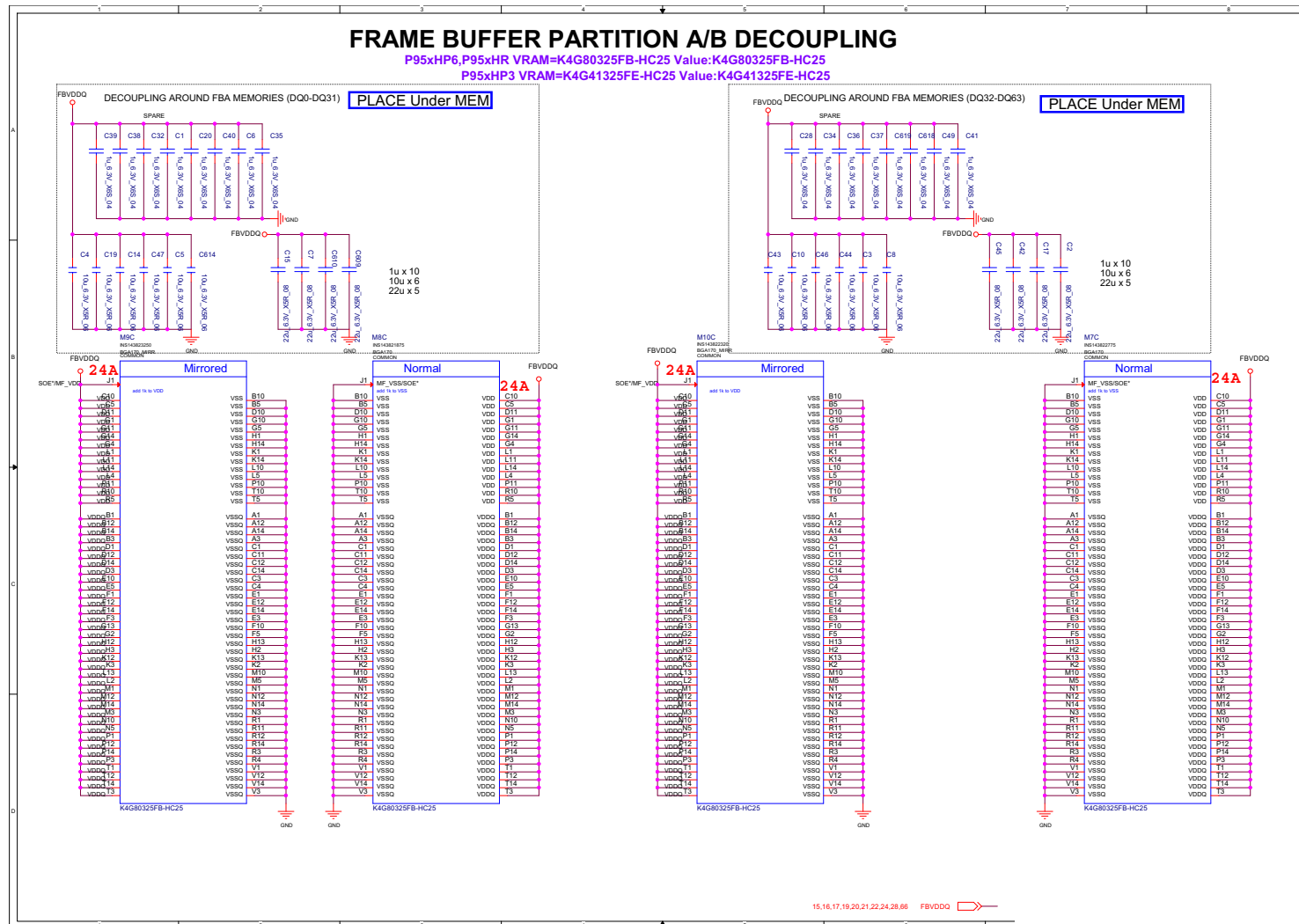
B. Schematic Diagrams

Sheet 17 of 74
Frame Buffer
Partition B

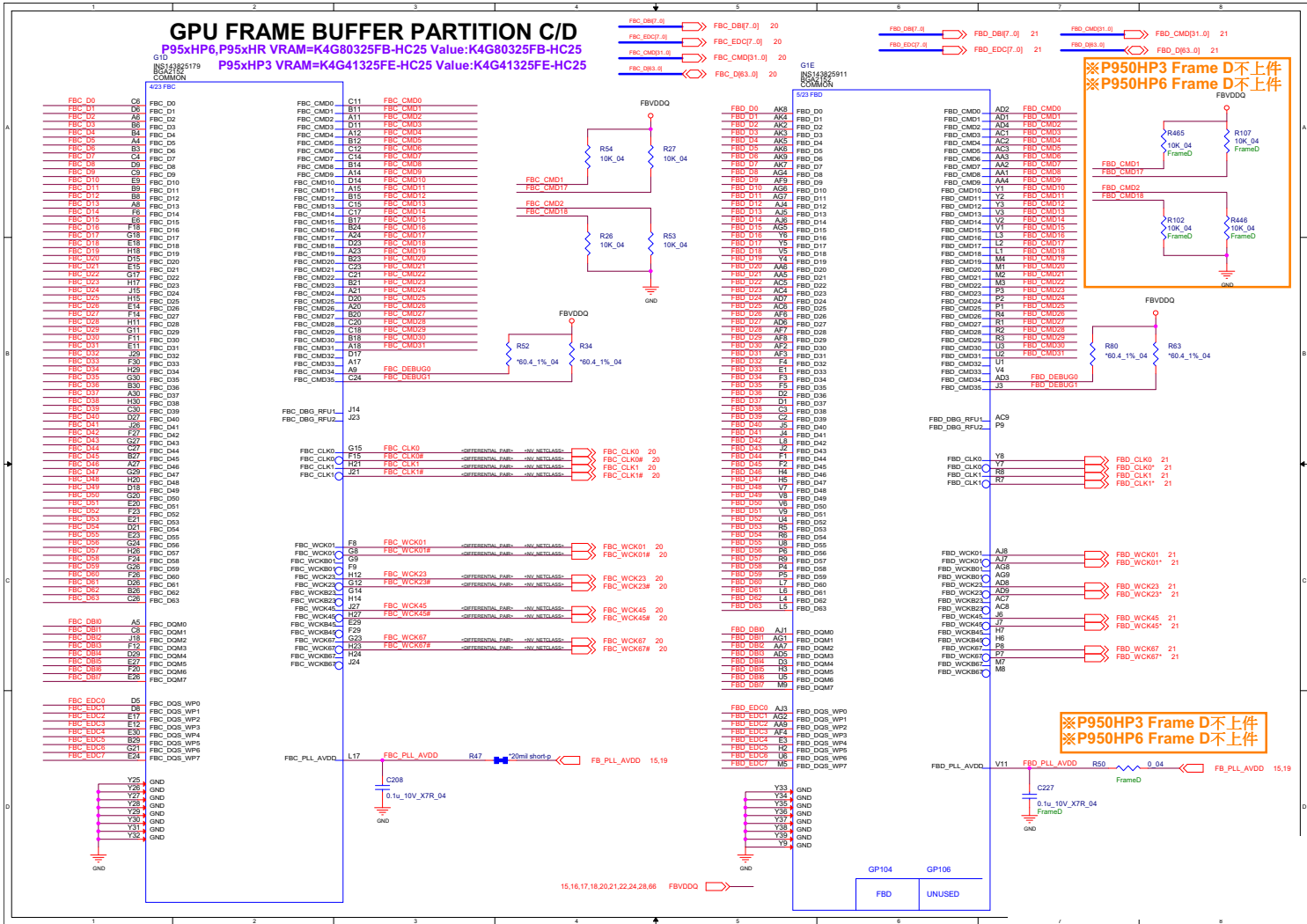


Frame Buffer Partition A_B

Sheet 18 of 74
Frame Buffer
Partition A_B

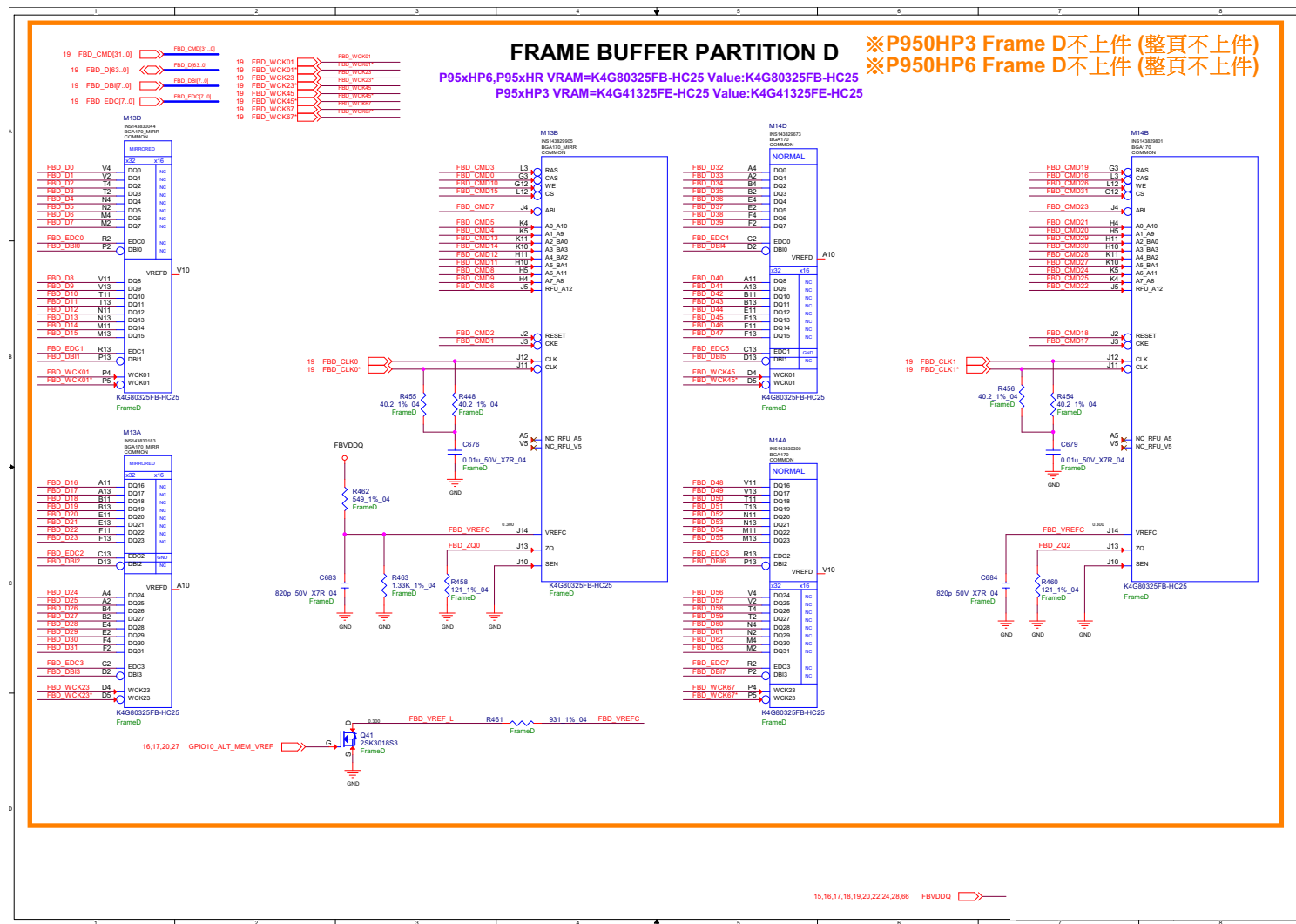


GPU Frame Buffer Partition



B. Schematic Diagrams

Sheet 21 of 74
Frame Buffer
Partition D



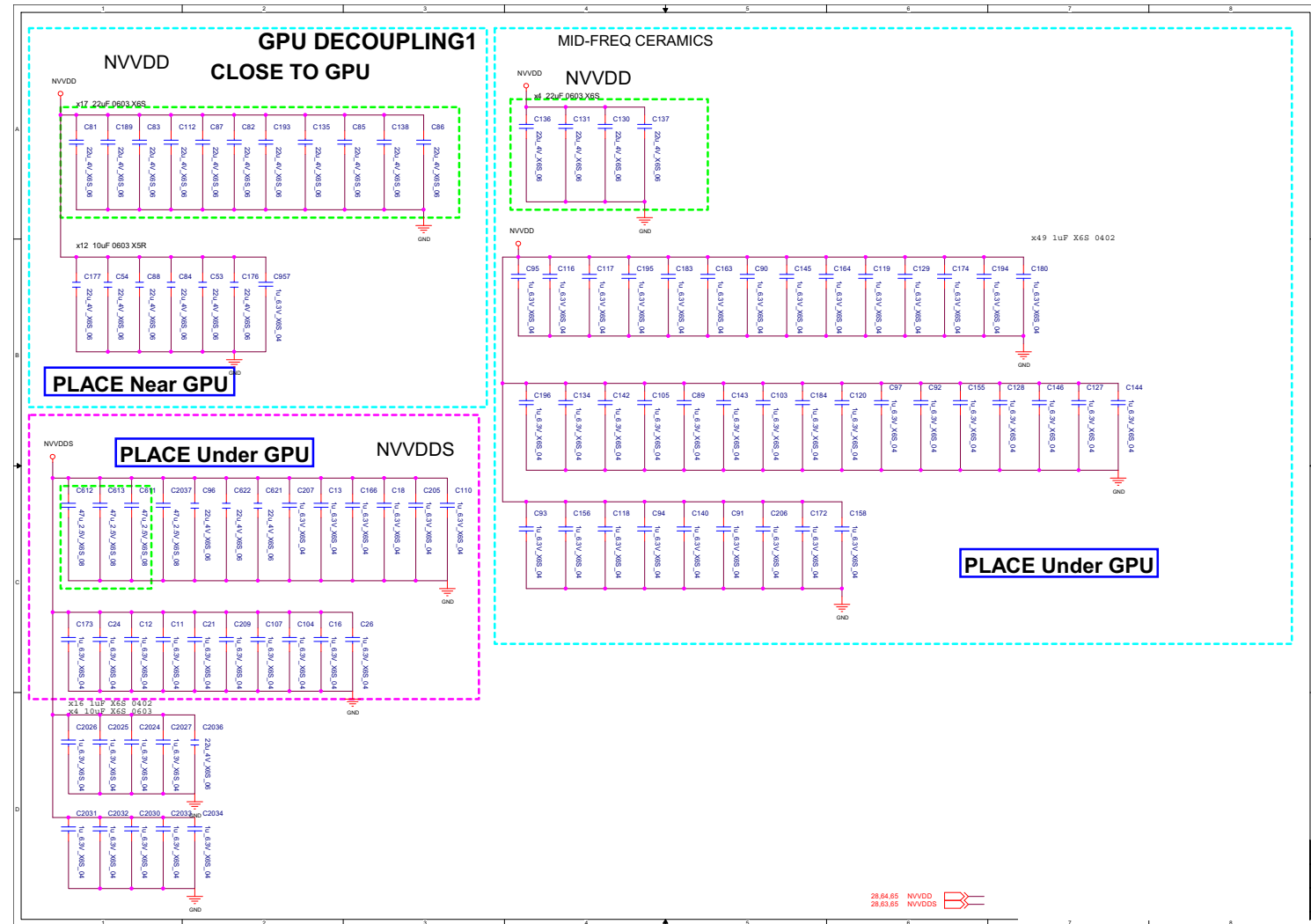
Sheet 22 of 74
Frame Buffer
Partition C D



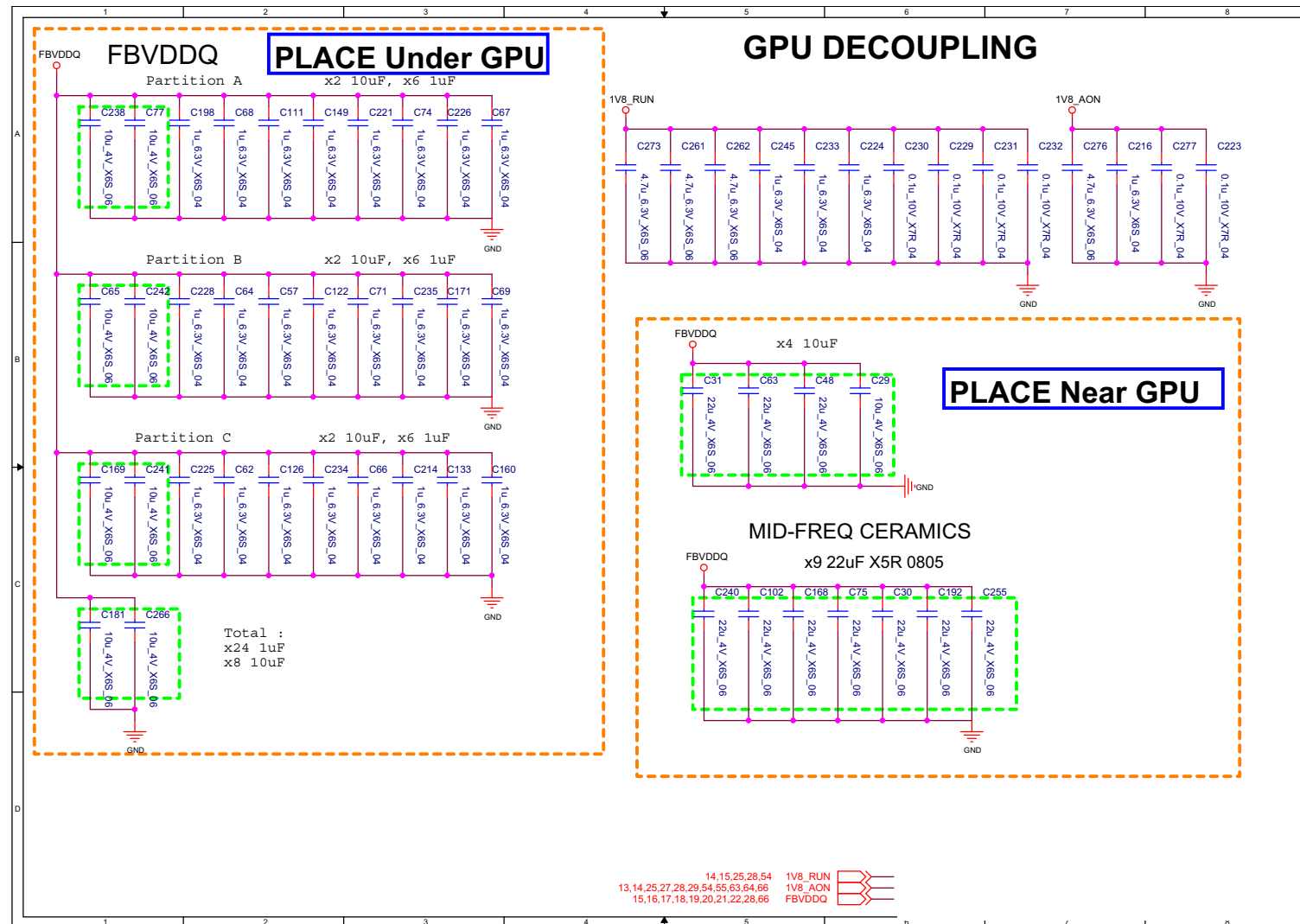
Schematic Diagrams

GPU Decoupling 1

Sheet 23 of 74
GPU Decoupling 1

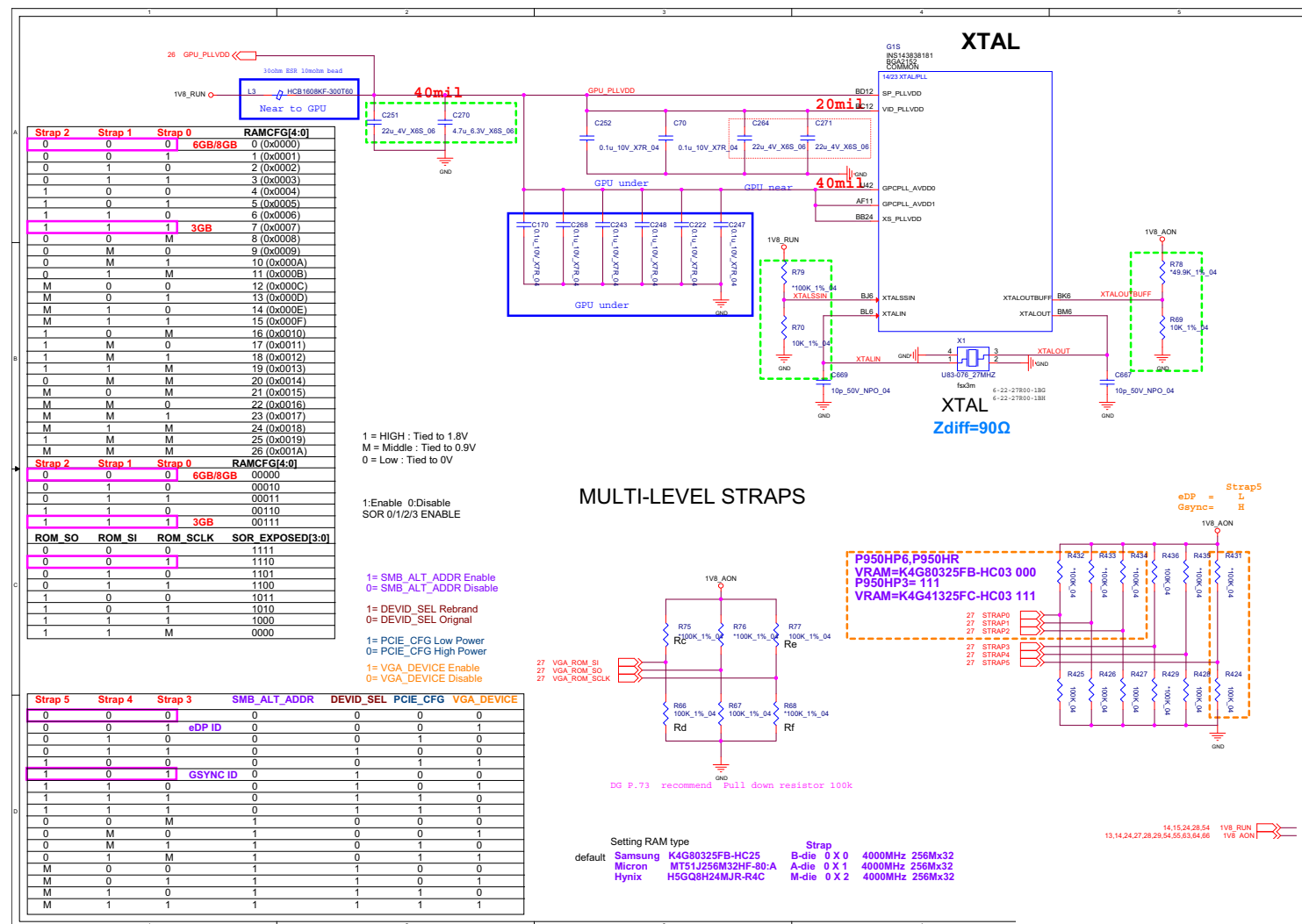


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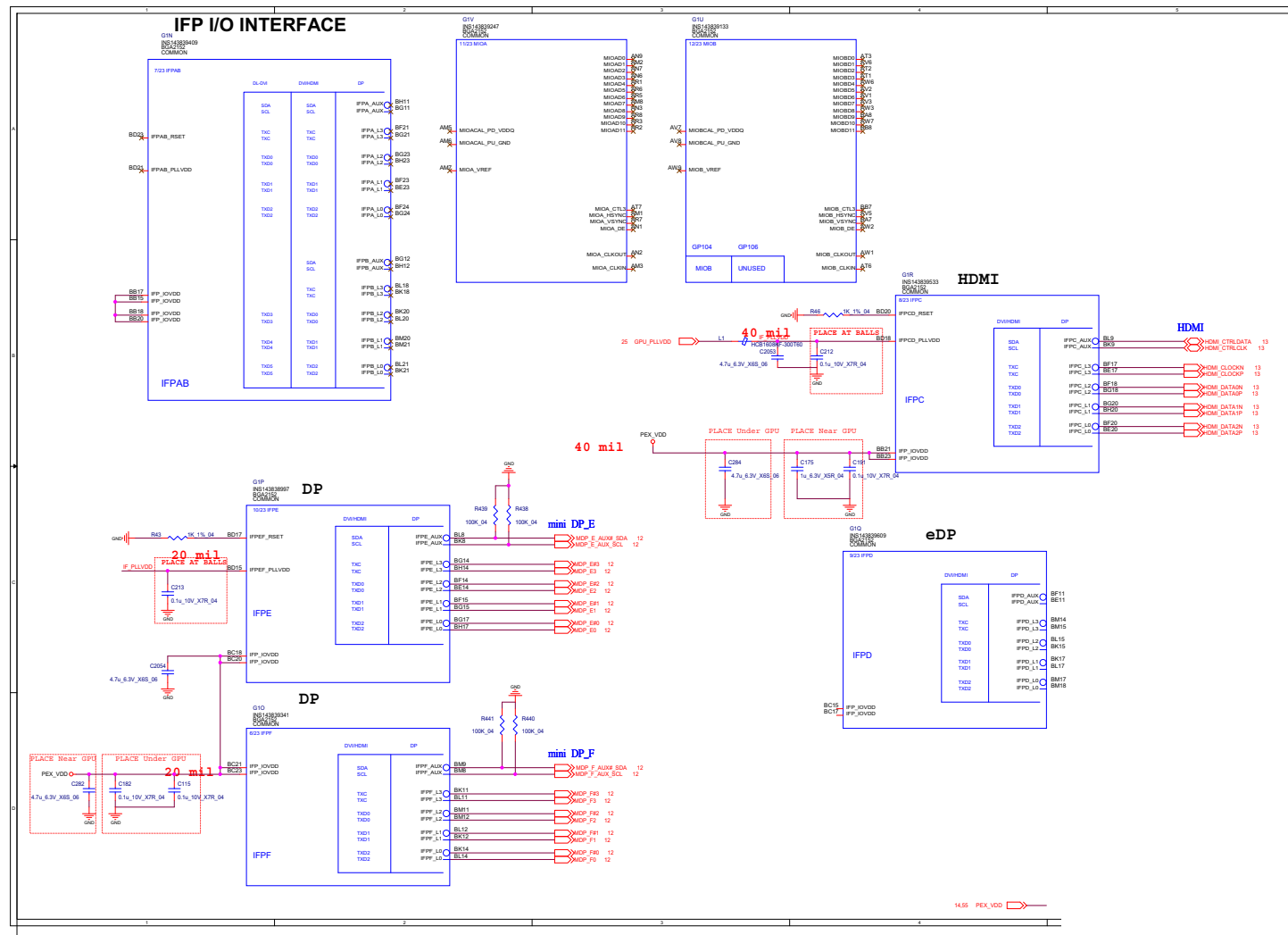


Sheet 24 of 74
GPU Decoupling 2

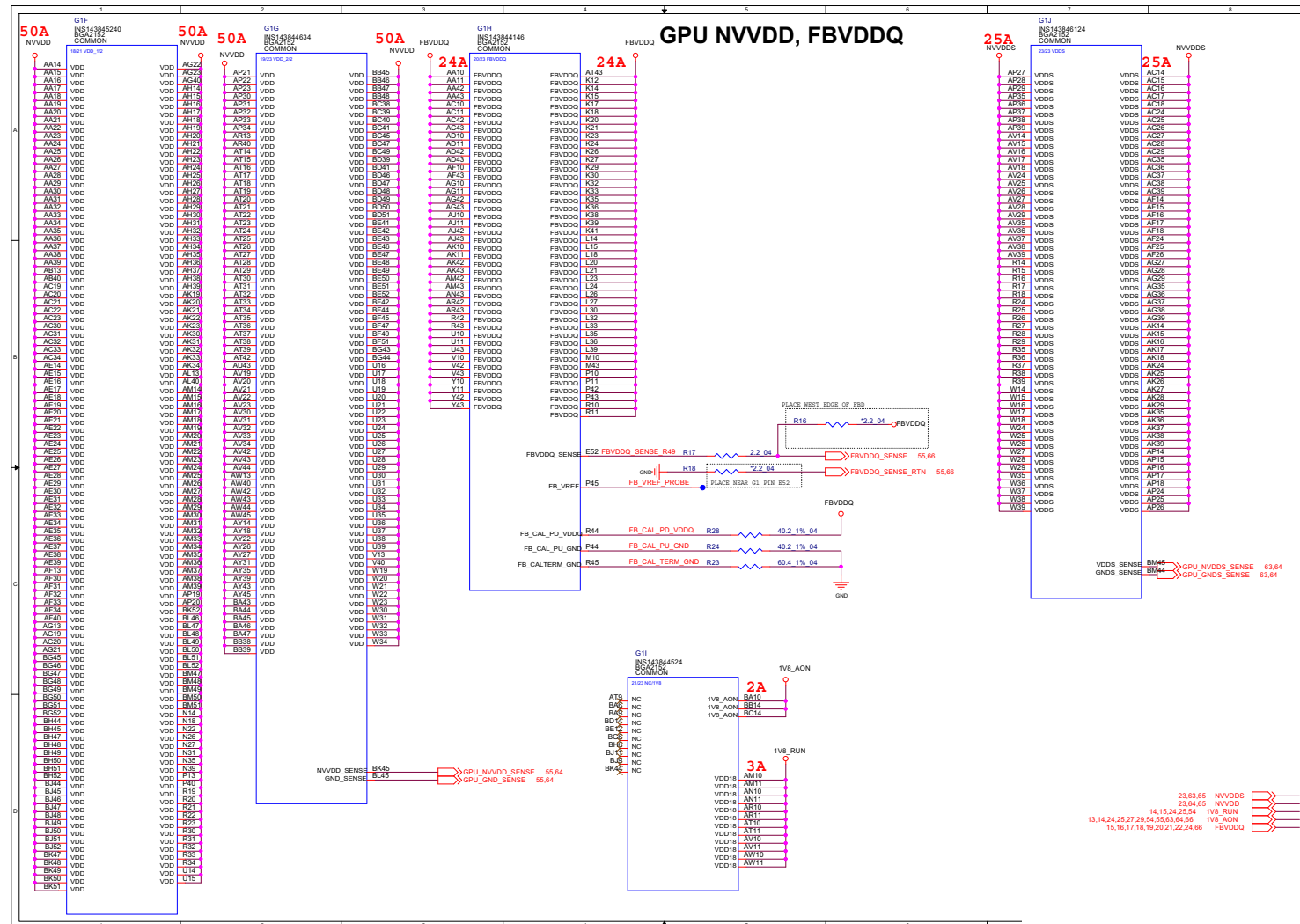
B - 26 Straps and XTAL



IFP I/O Interface B - 27



GPU NVVDD, FBVDDQ

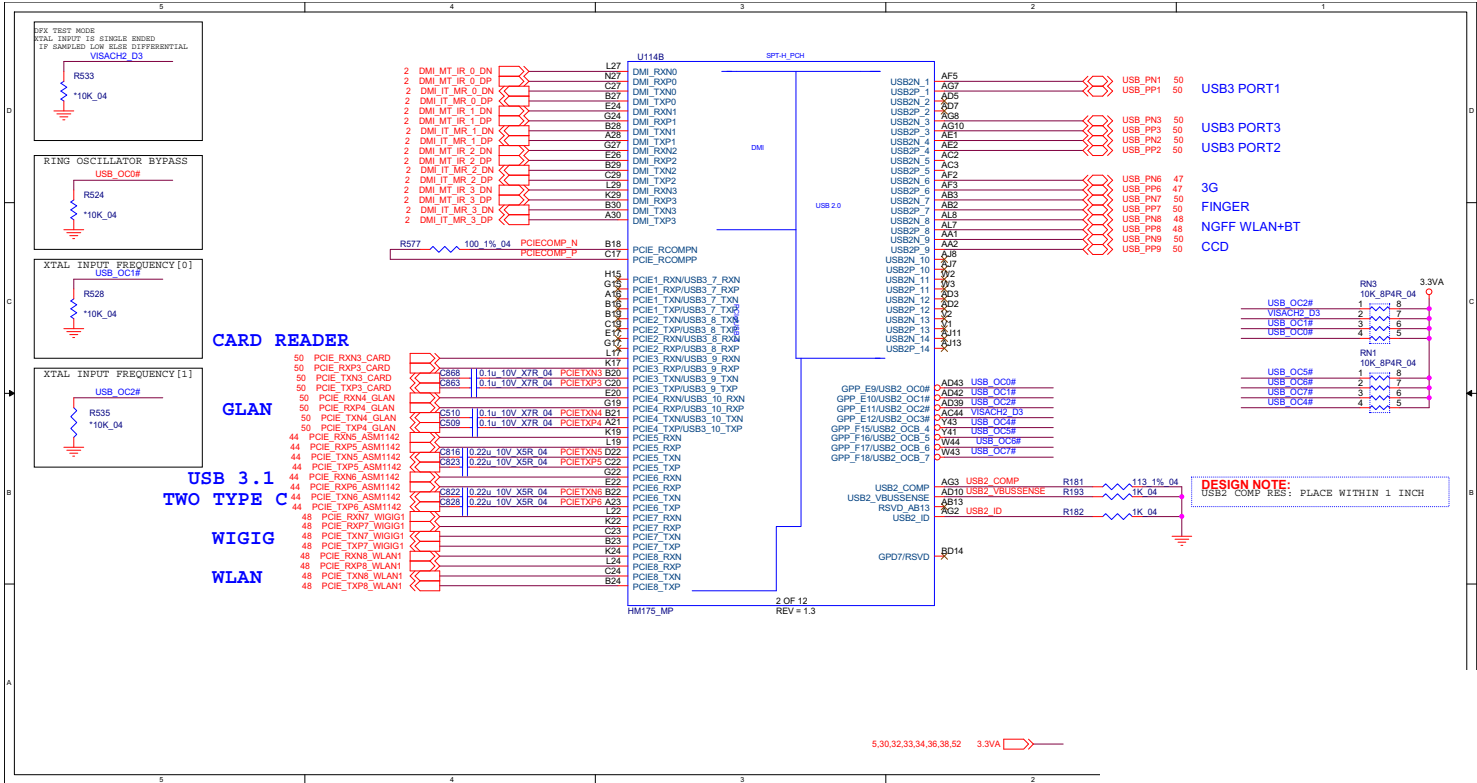


Sheet 28 of 74
GPU NVVDD,
FBVDDQ

Sheet 30 of 74
PCH 1/9



PCH 2/9

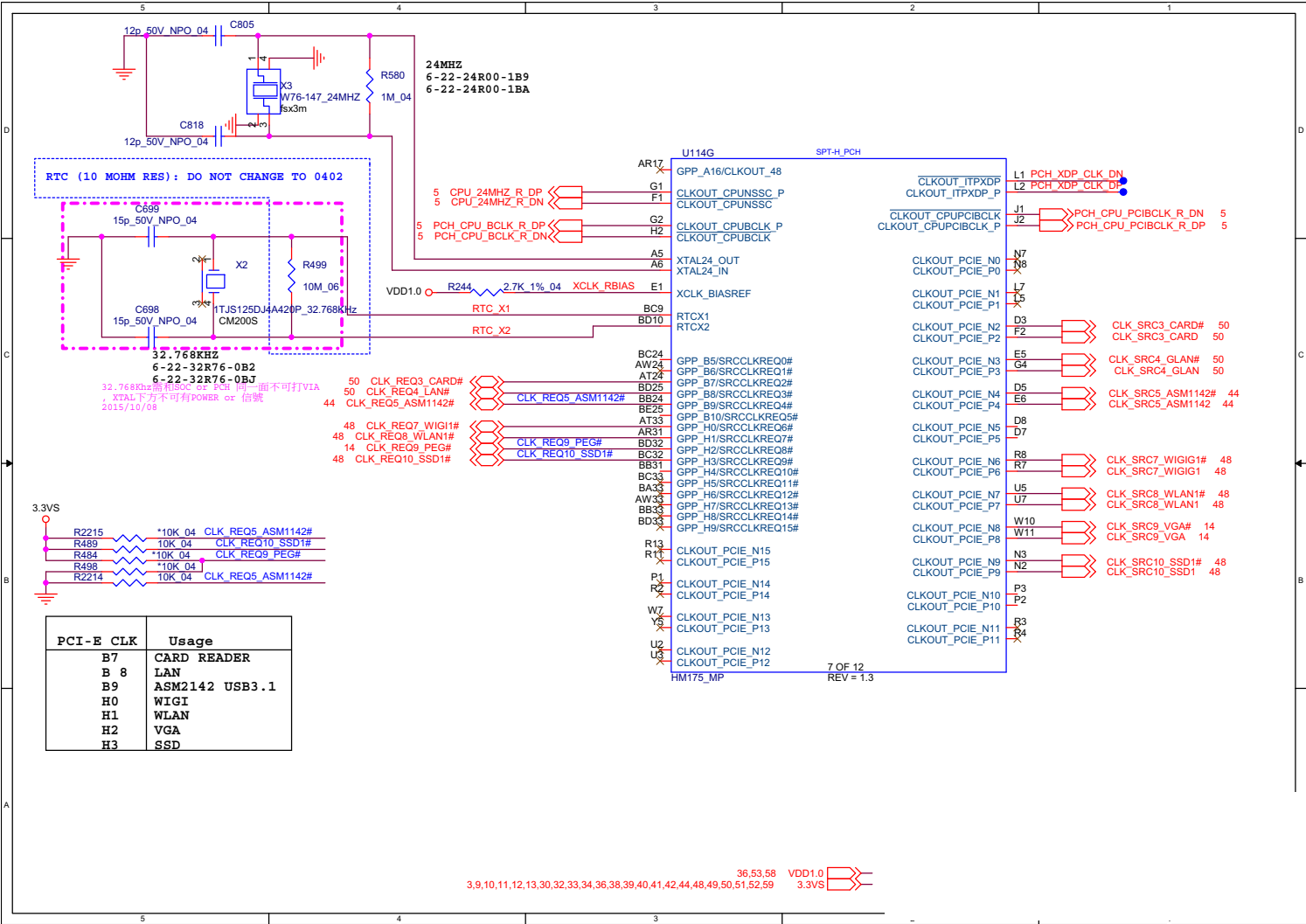


Sheet 31 of 74
PCH 2/9

B.Schematic Diagrams

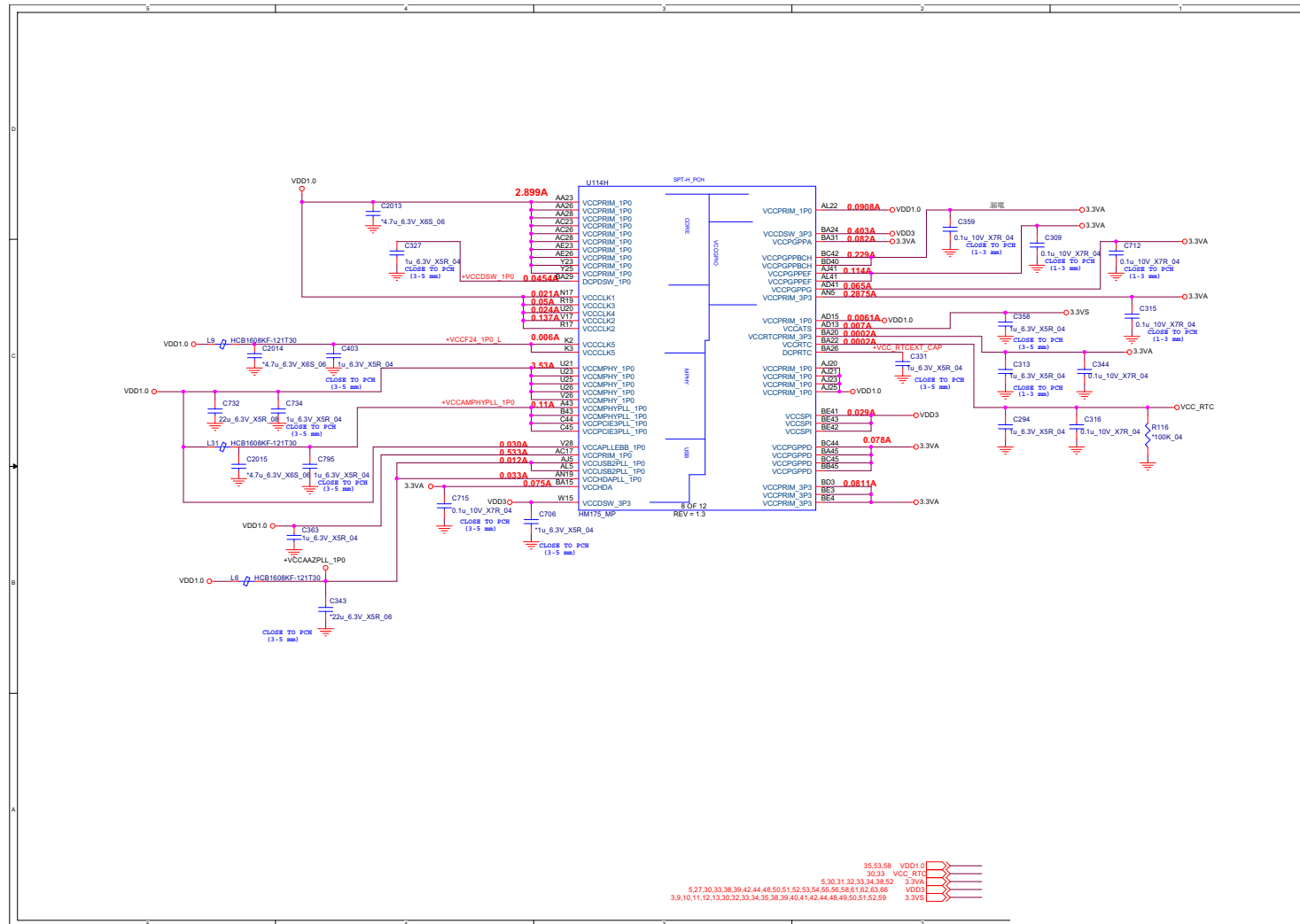


PCH 6/9



Sheet 35 of 74
PCH 6/9

PCH 7/9

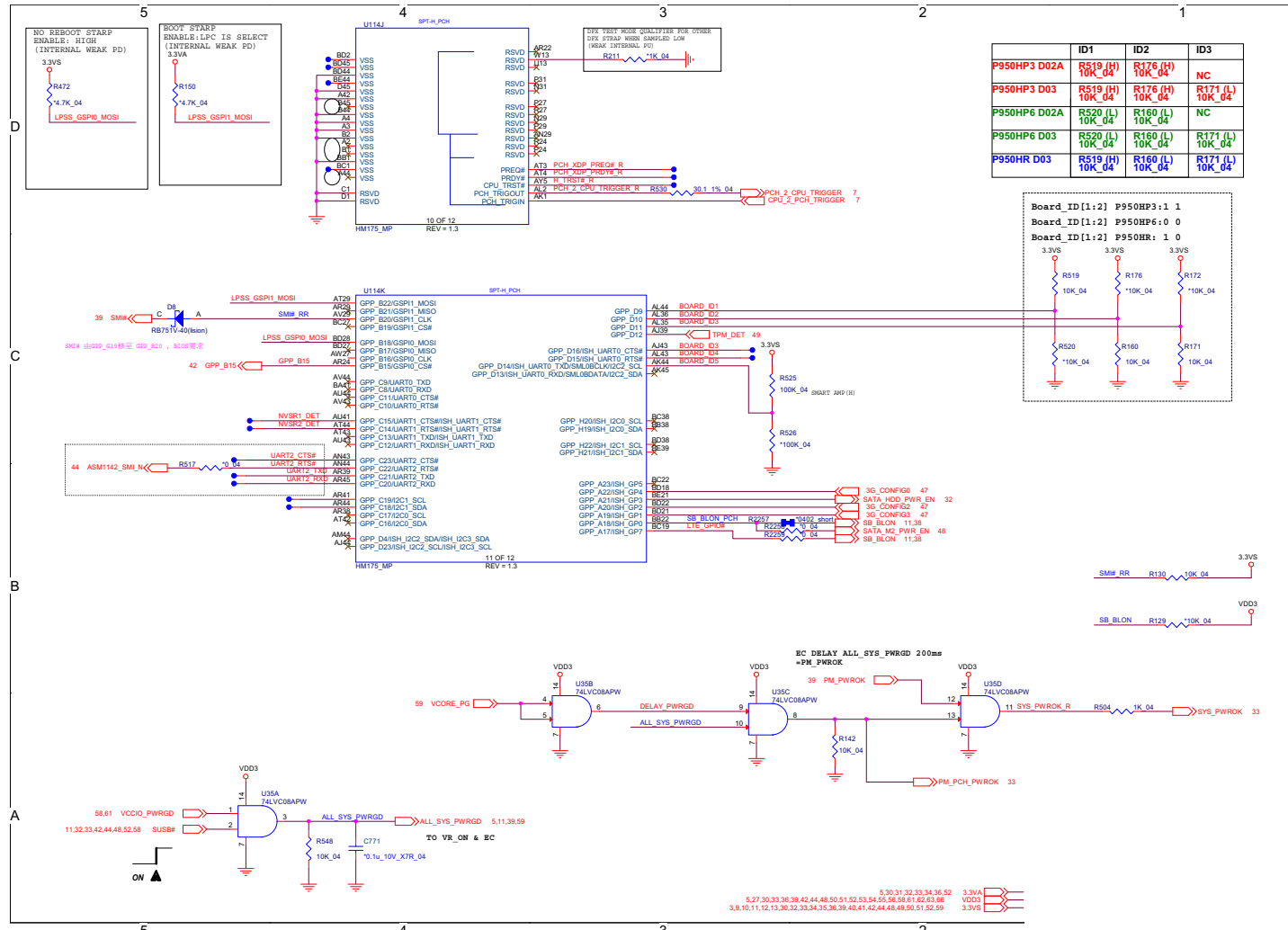
Sheet 36 of 74
PCH 7/9

PCH 8/9

Sheet 37 of 74
PCH 8/9

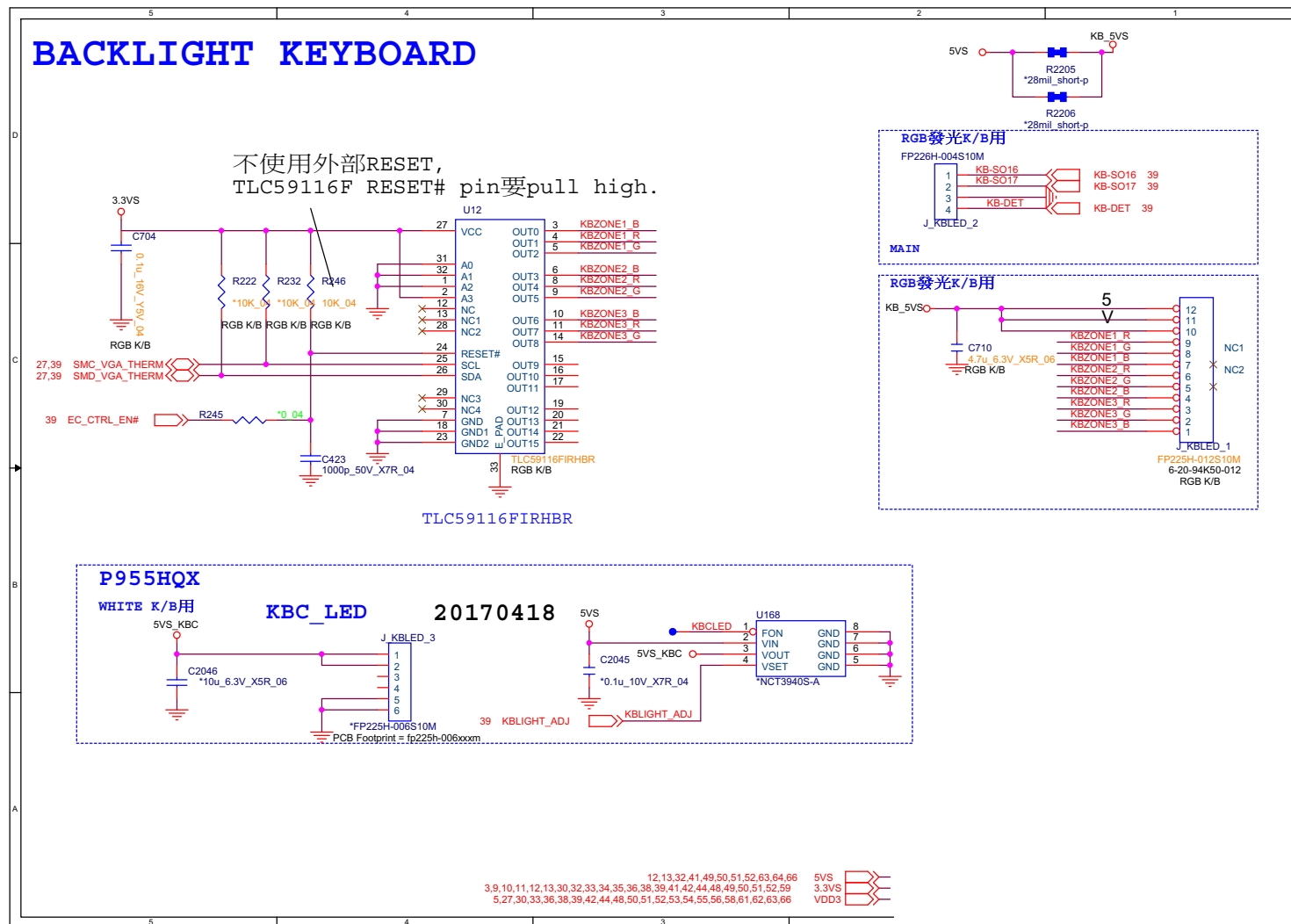


PCH 9/9



Sheet 38 of 74
PCH 9/9

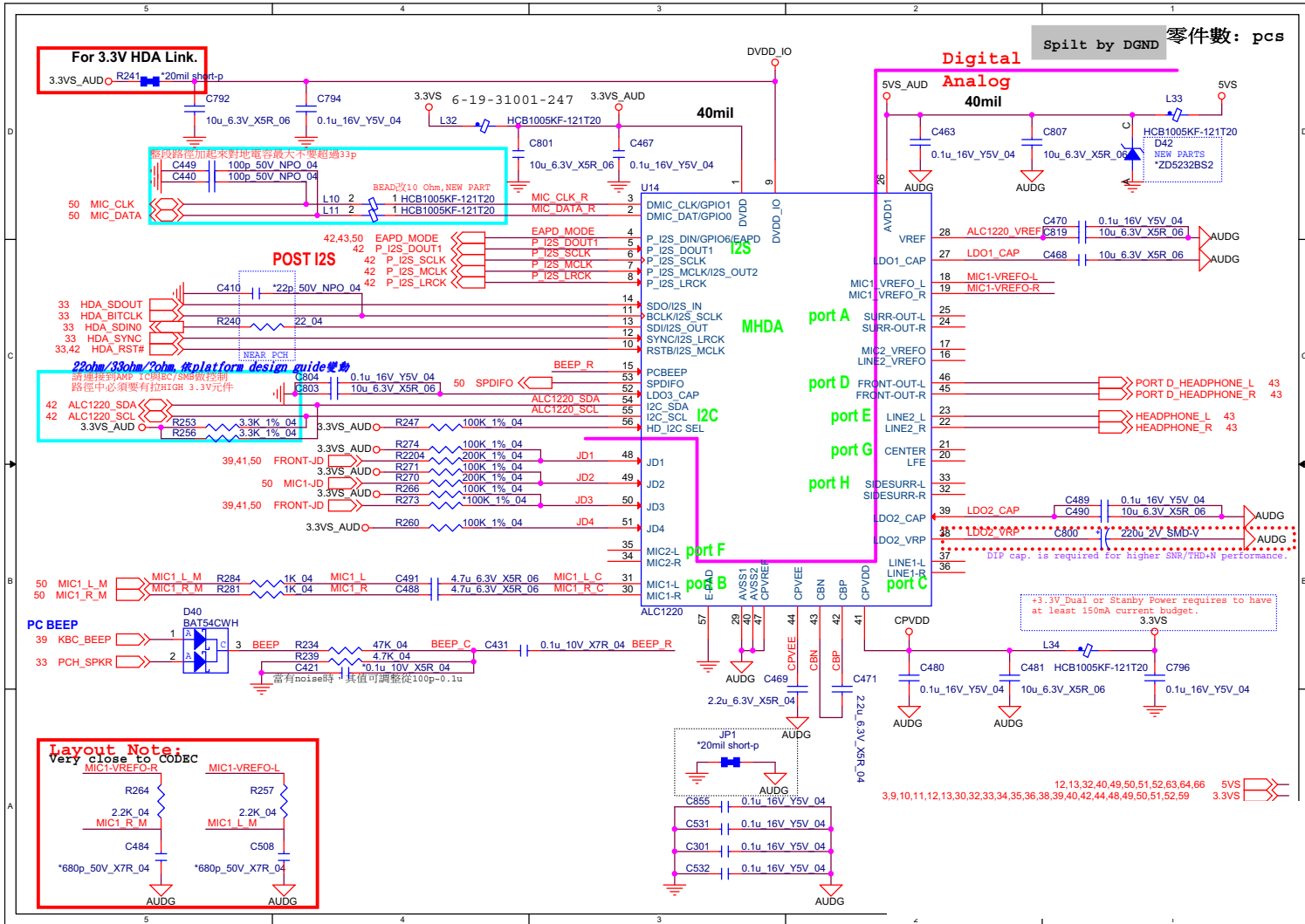
Backlight KB

Sheet 40 of 74
Backlight KB

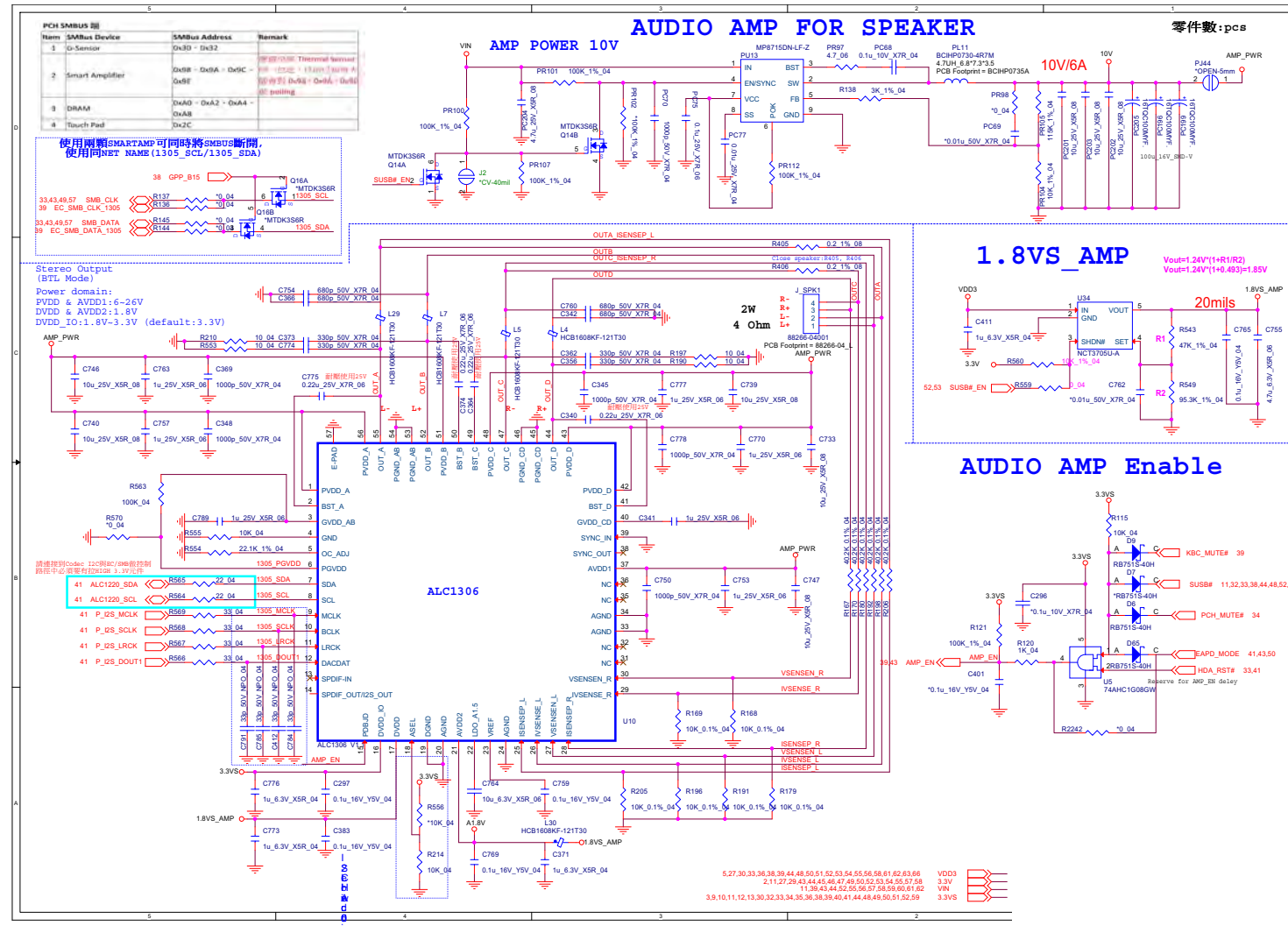
Realtek ALC1220

B. Schematic Diagrams

Sheet 41 of 74
Realtek ALC1220



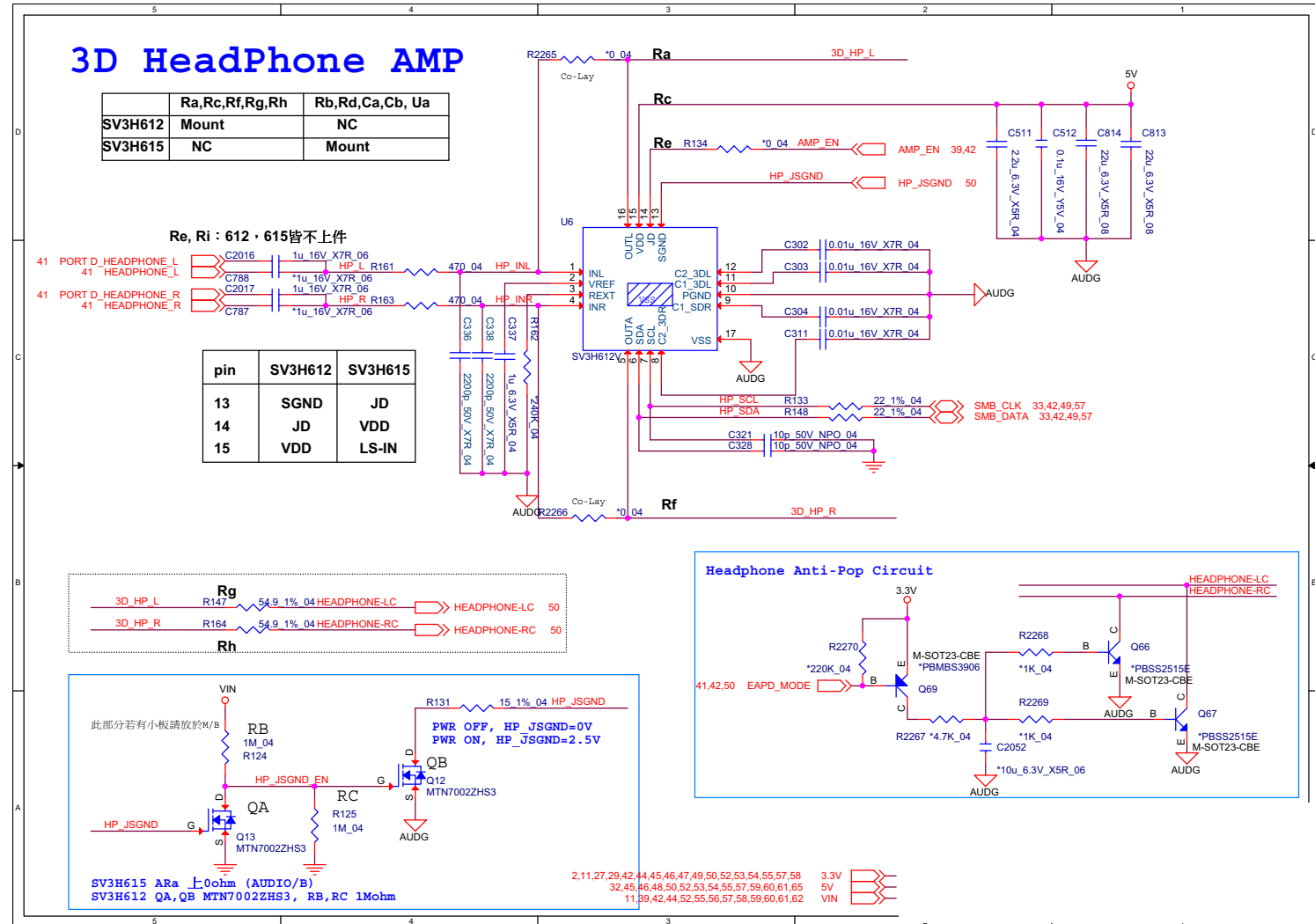
Smart AMP ALC1306



Sheet 42 of 74
Smart AMP
ALC1306

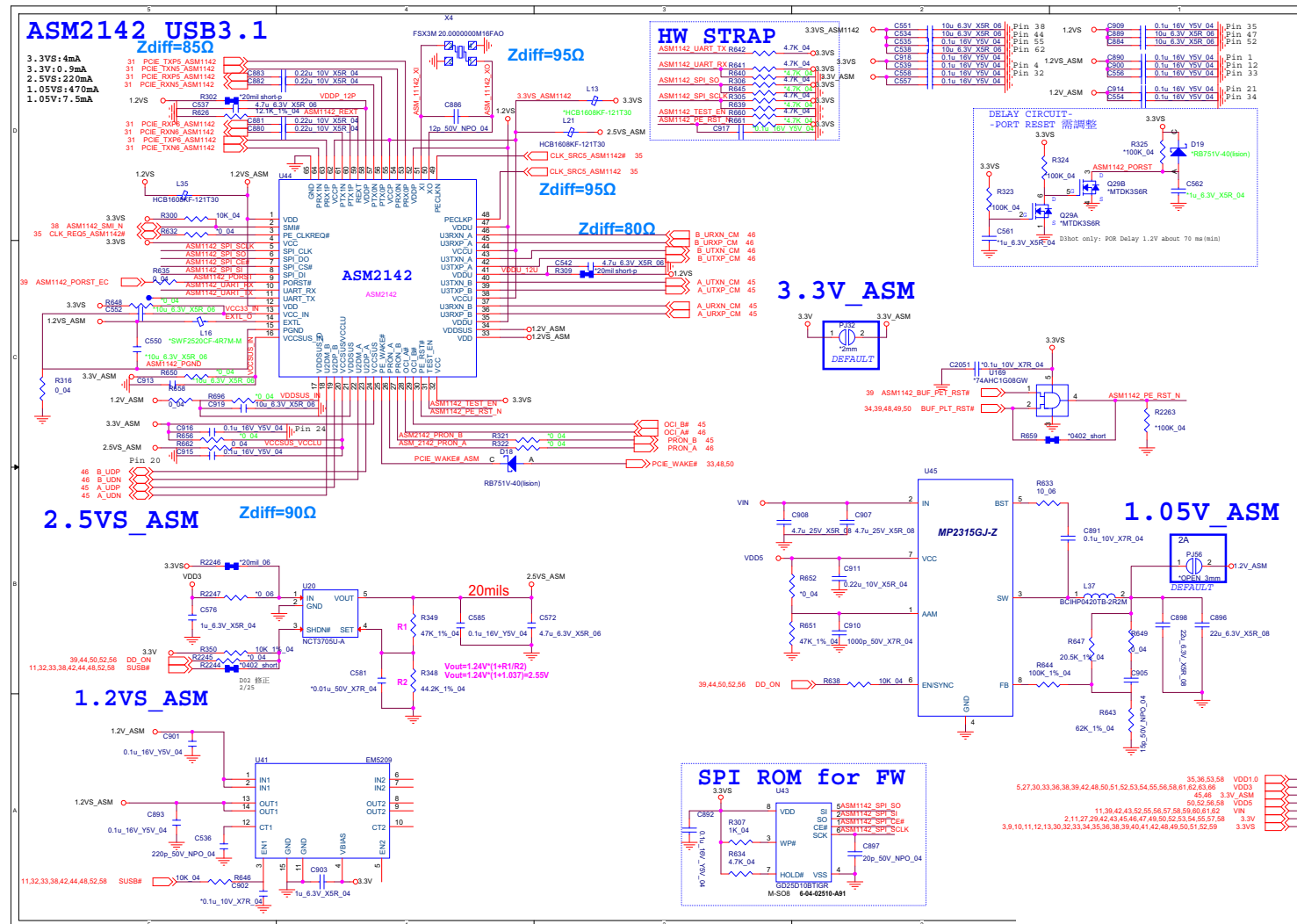
3D AMP Headphone

Sheet 43 of 74
3D AMP
Headphone



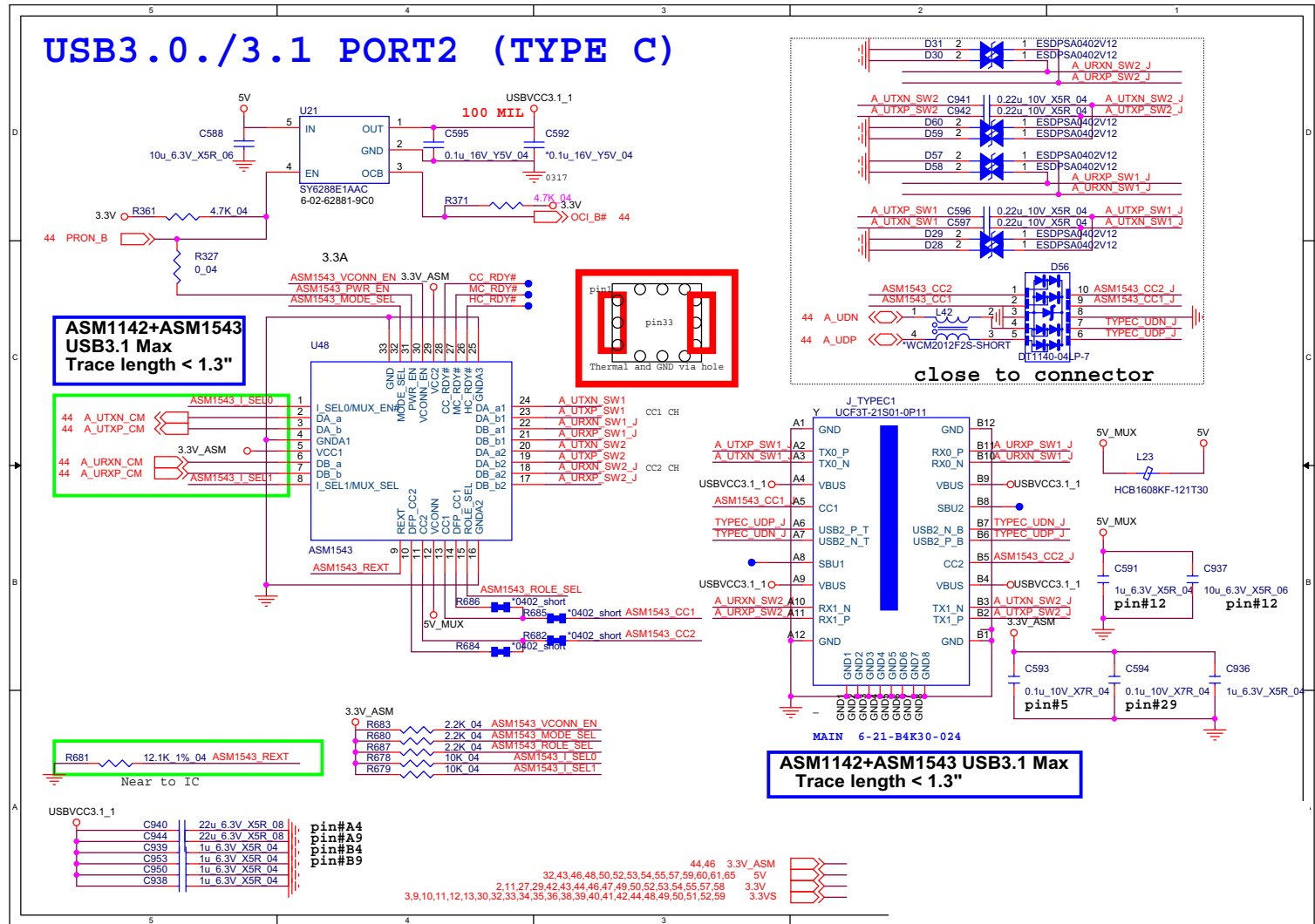
ASM2142 1/3 B - 45

B.Schematic Diagrams



ASM2142 2/3

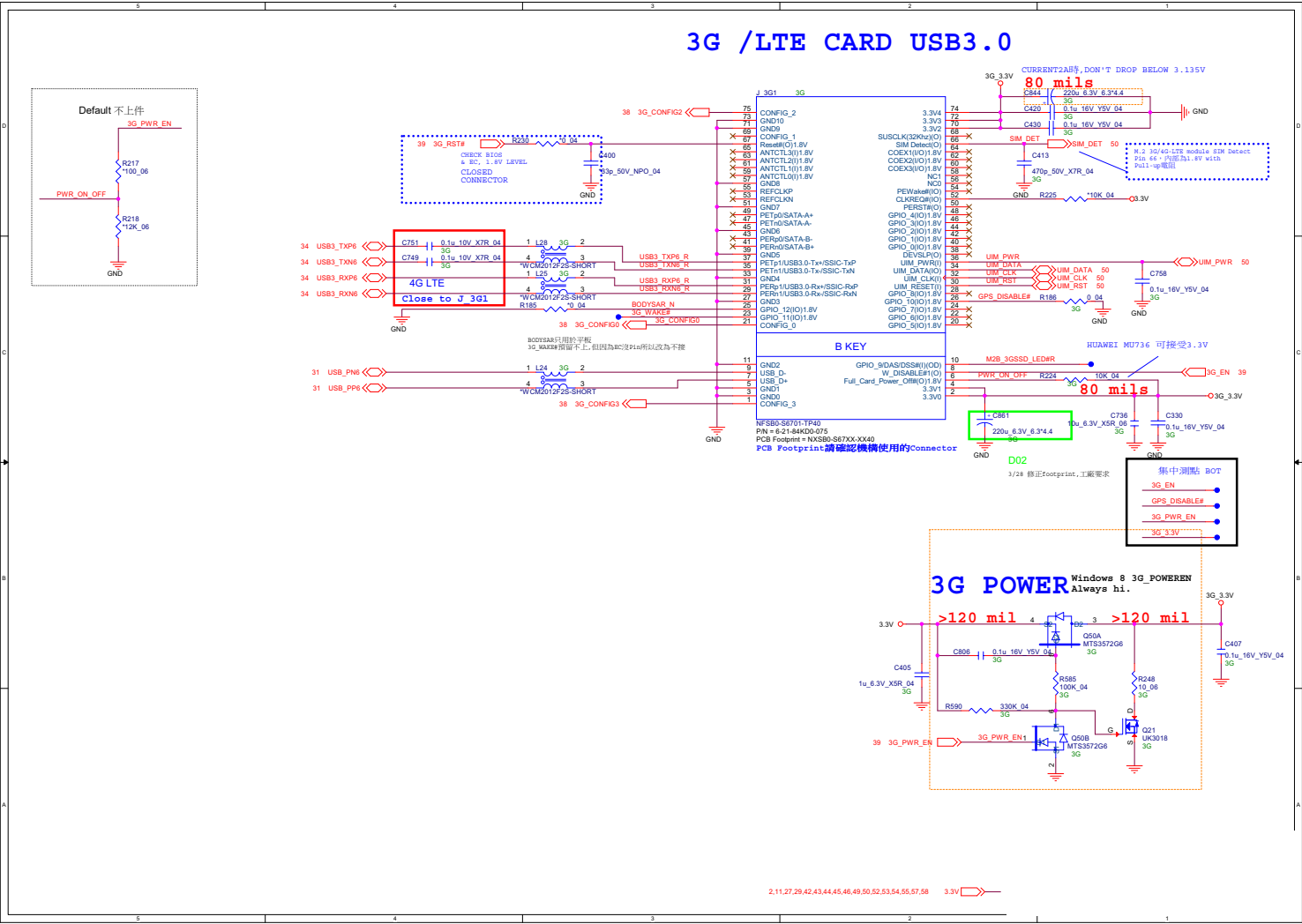
Sheet 45 of 74
ASM2142 2/3



Schematic Diagrams

M.2 3G/LTE

Sheet 47 of 74
M.2 3G/LTE

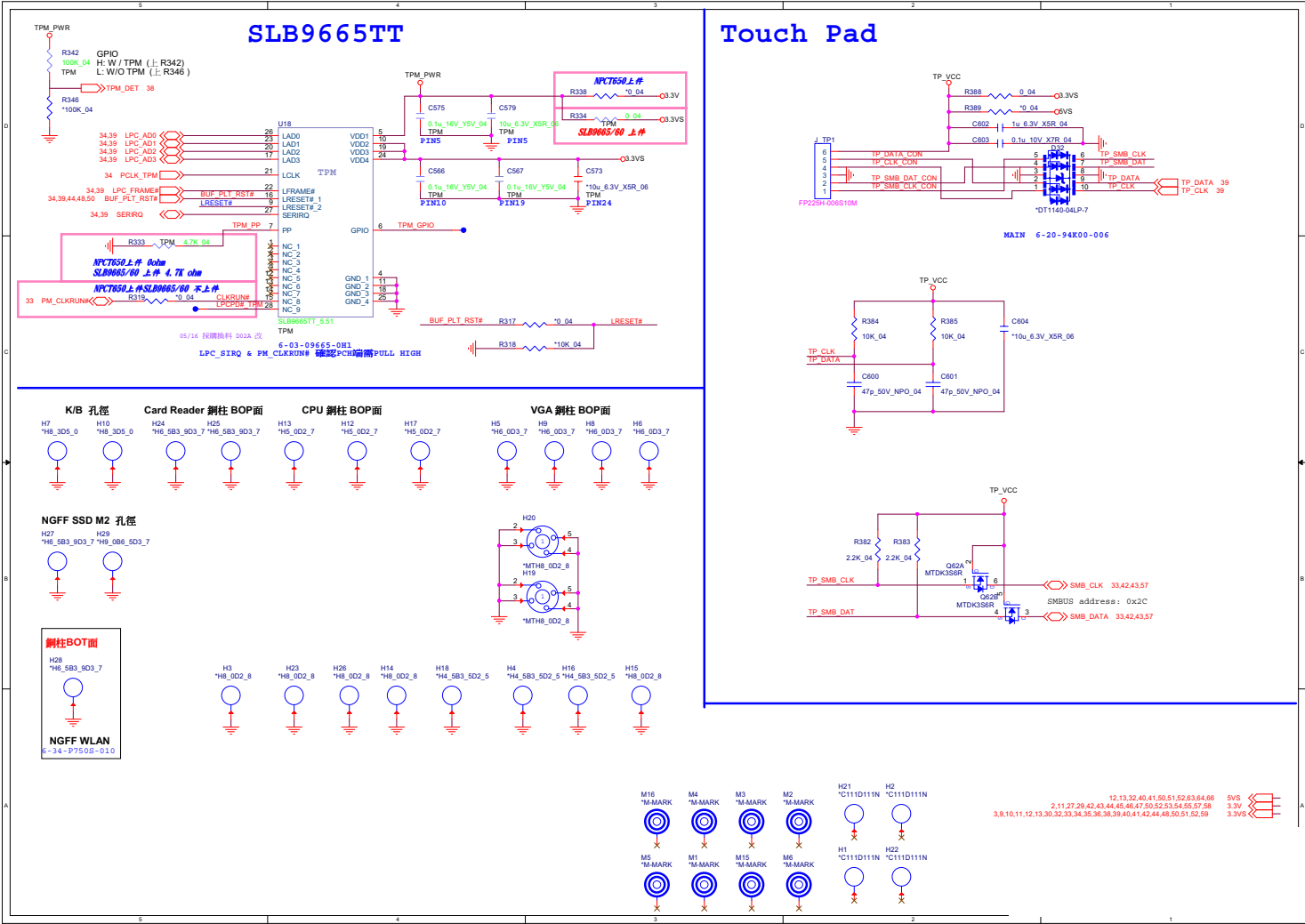


Sheet 48 of 74
M.2 WLAN+BT,
PCIE4X SSD

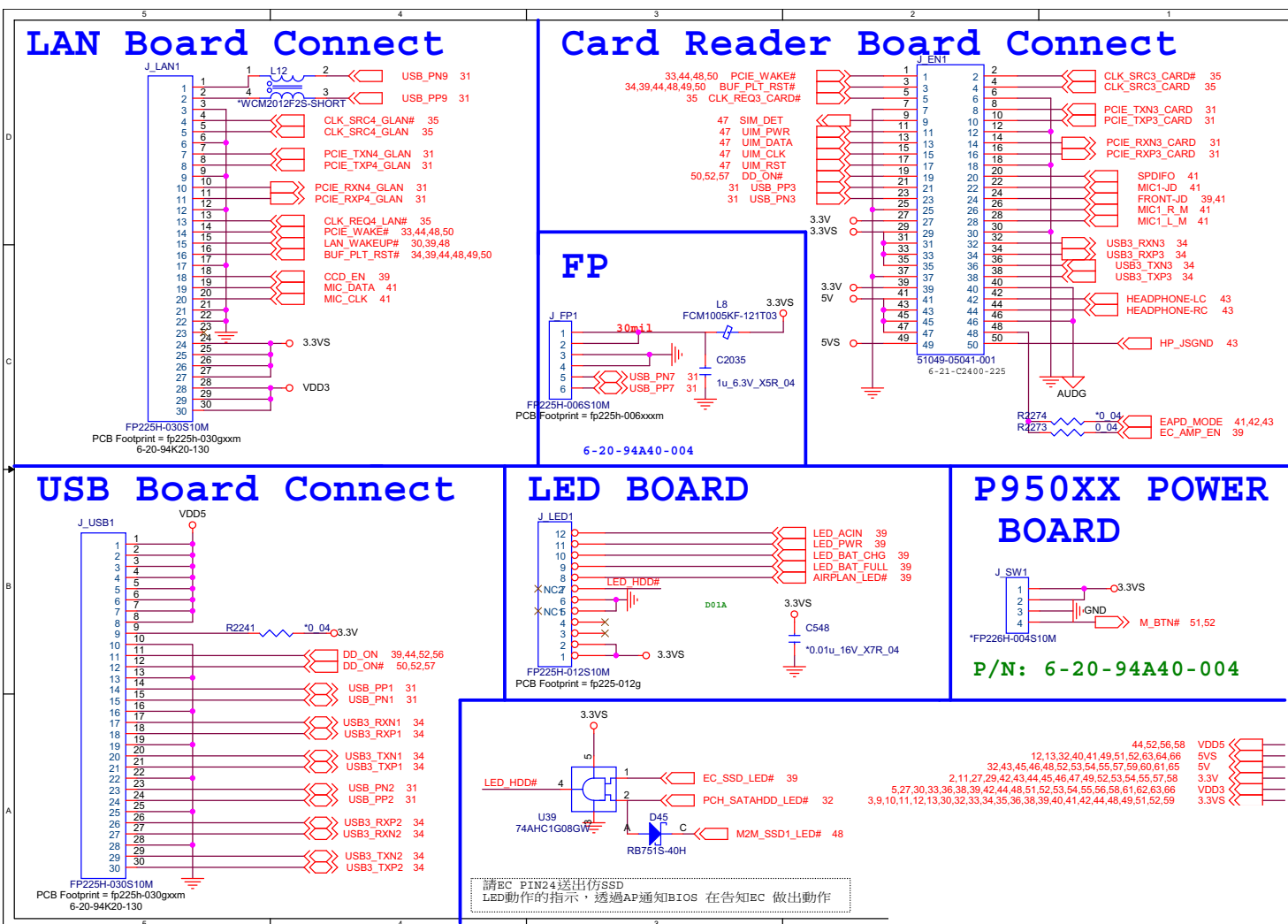
Schematic Diagrams

TPM, TP

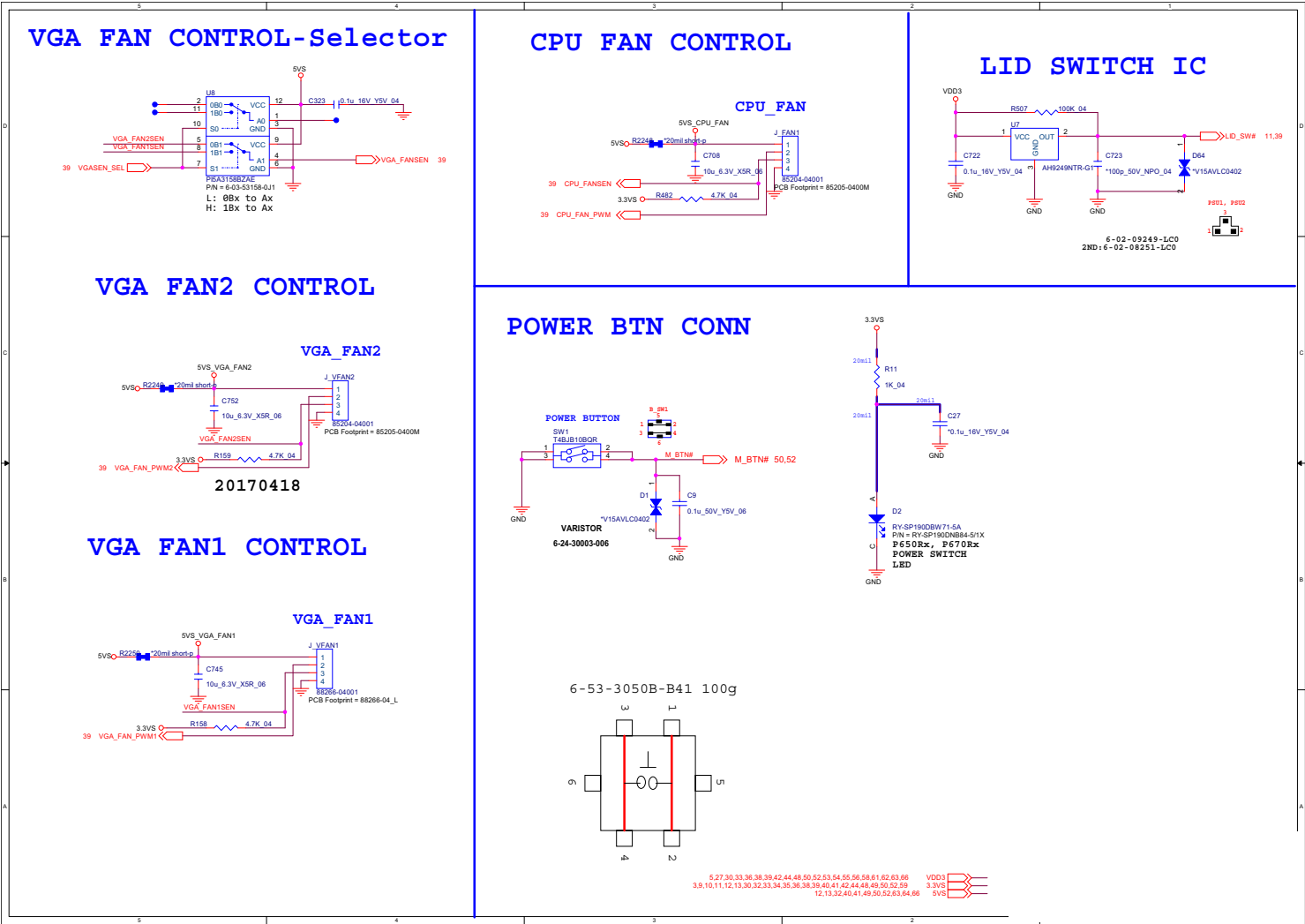
Sheet 49 of 74
TPM, TP



Connector

Sheet 50 of 74
Connector

Fan, LID, KB LED



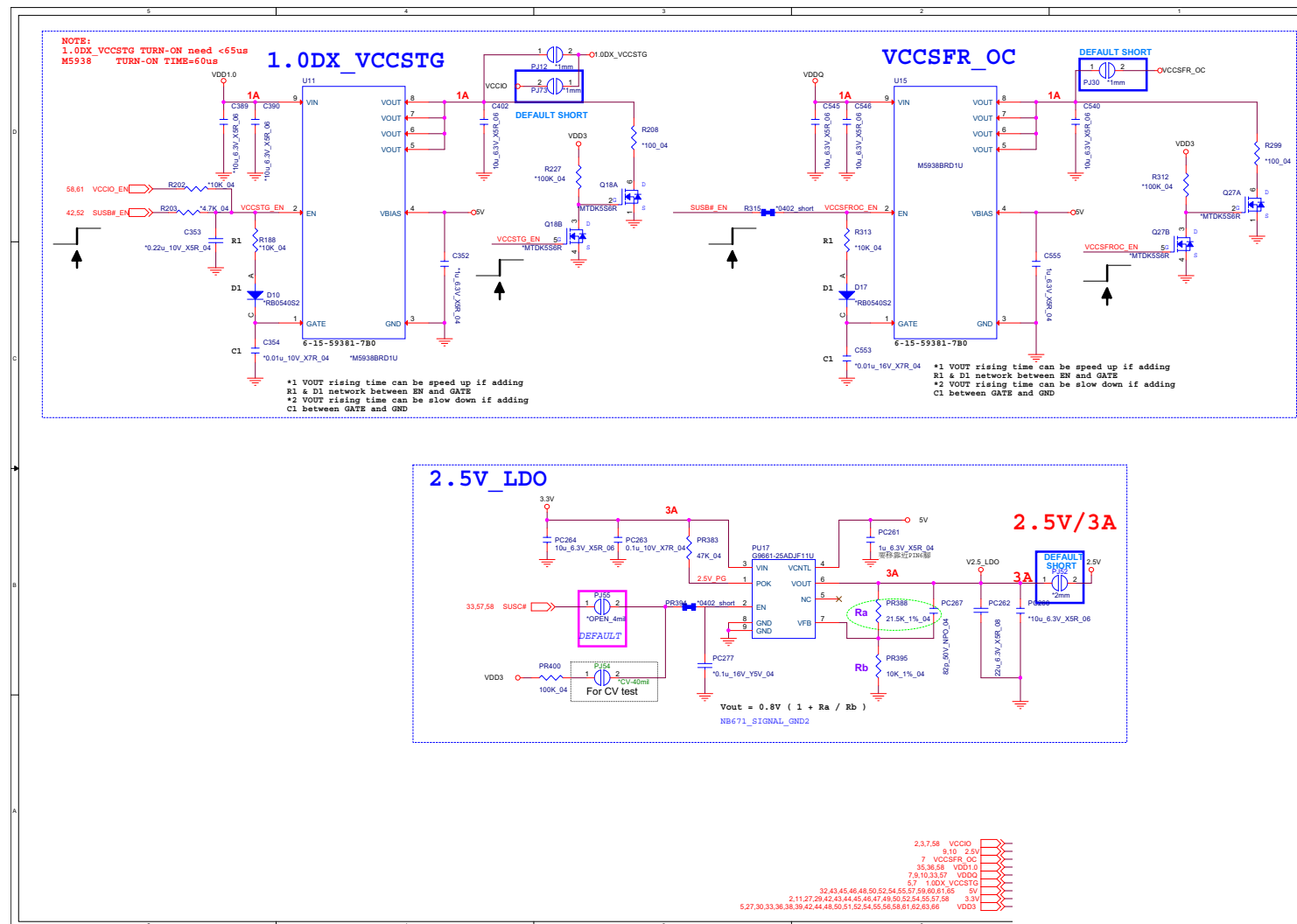
B.Schematic Diagrams

Sheet 51 of 74
Fan, LID, KB LED

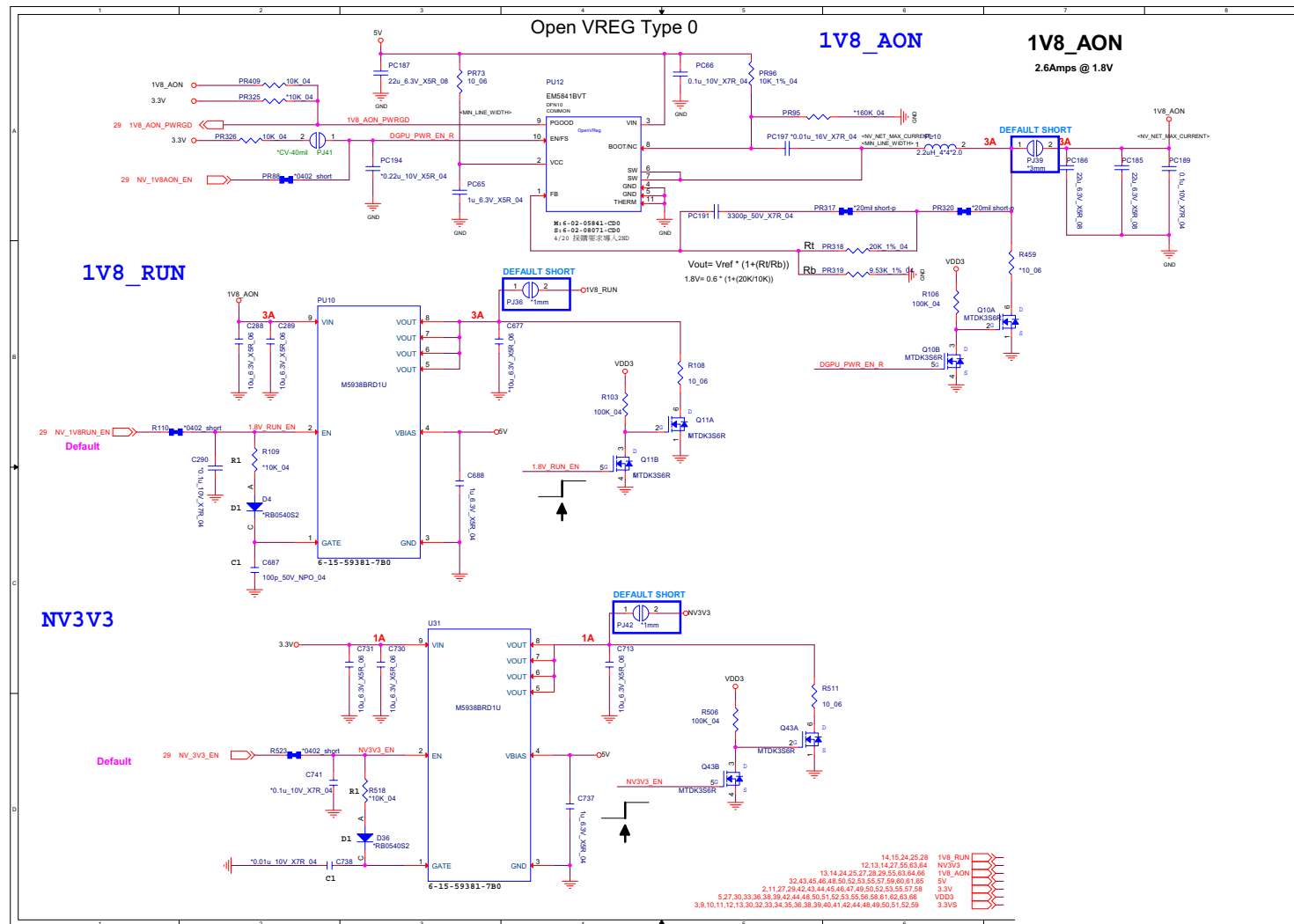
Schematic Diagrams

1.0DX_VCCSTG/VCCSFR_OC/2.5V

Sheet 53 of 74
1.0DX_VCCSTG/
VCCSFR_OC/2.5V



1V8_RUN/AON, NV3V3



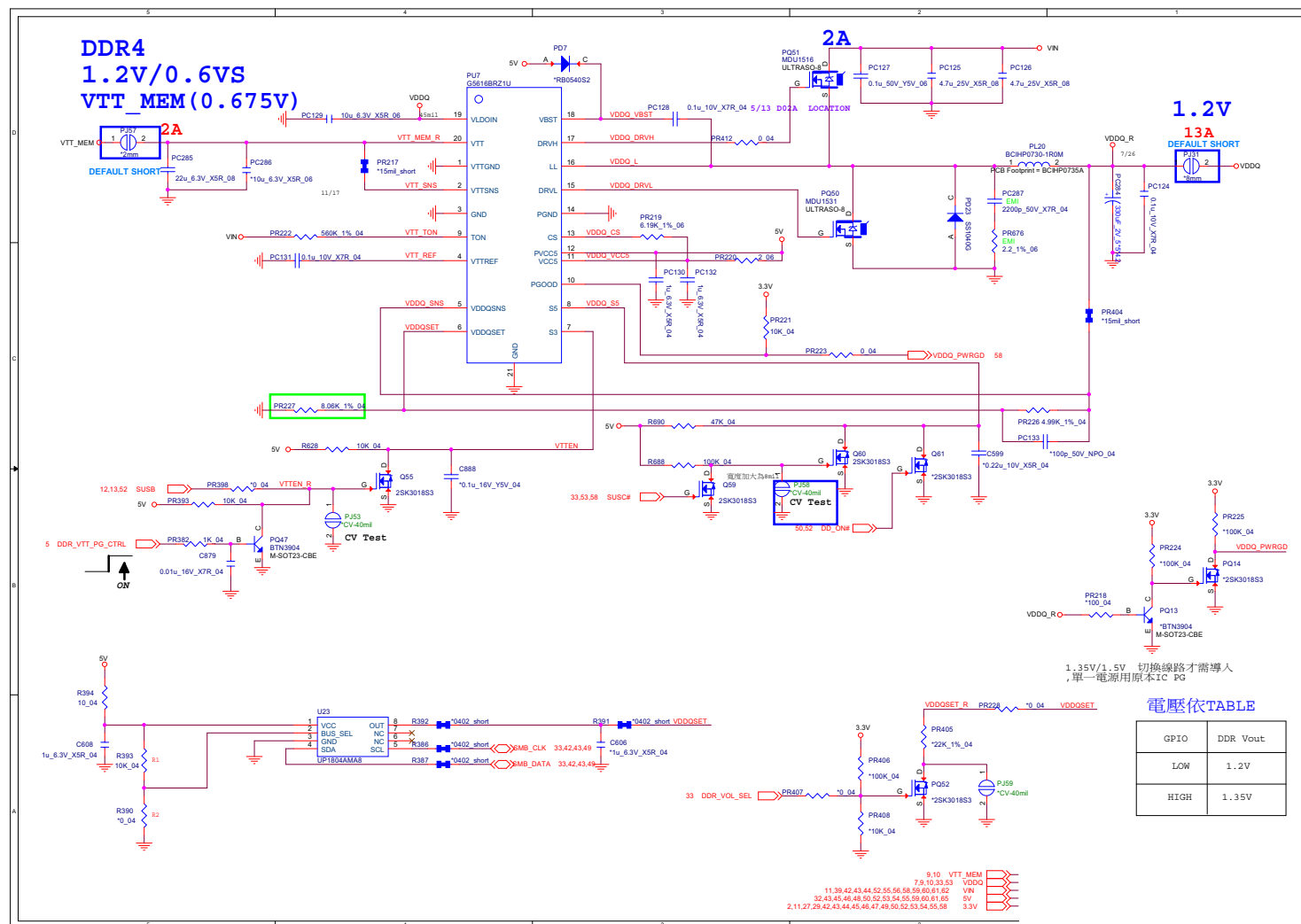
Sheet 54 of 74
1V8_RUN/AON,
NV3V3

Sheet 55 of 74
PEX_VDD

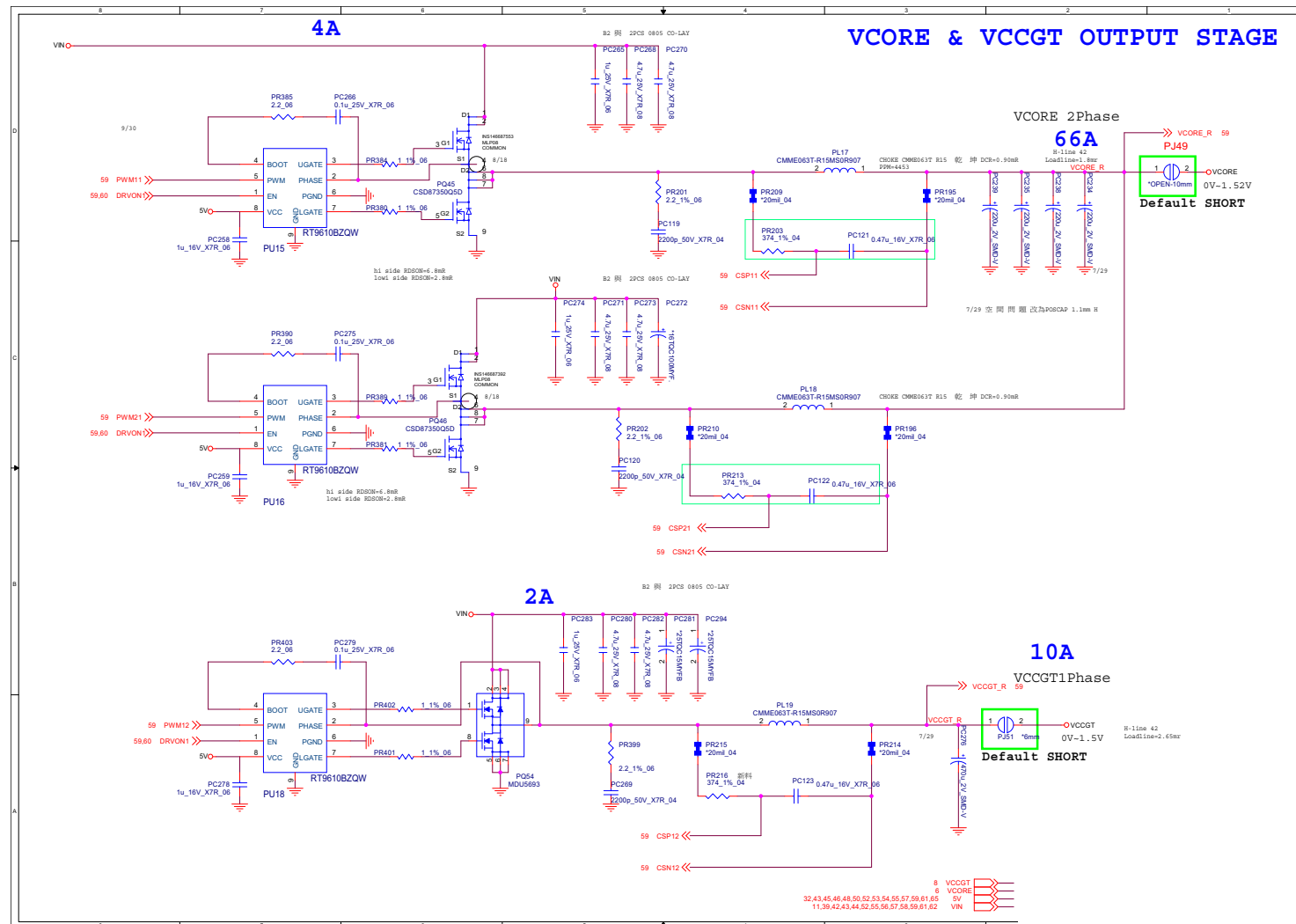


DDR 1.2V / 0.6VS

Sheet 57 of 74
DDR 1.2V / 0.6VS



VCore & VCCGT Output 2

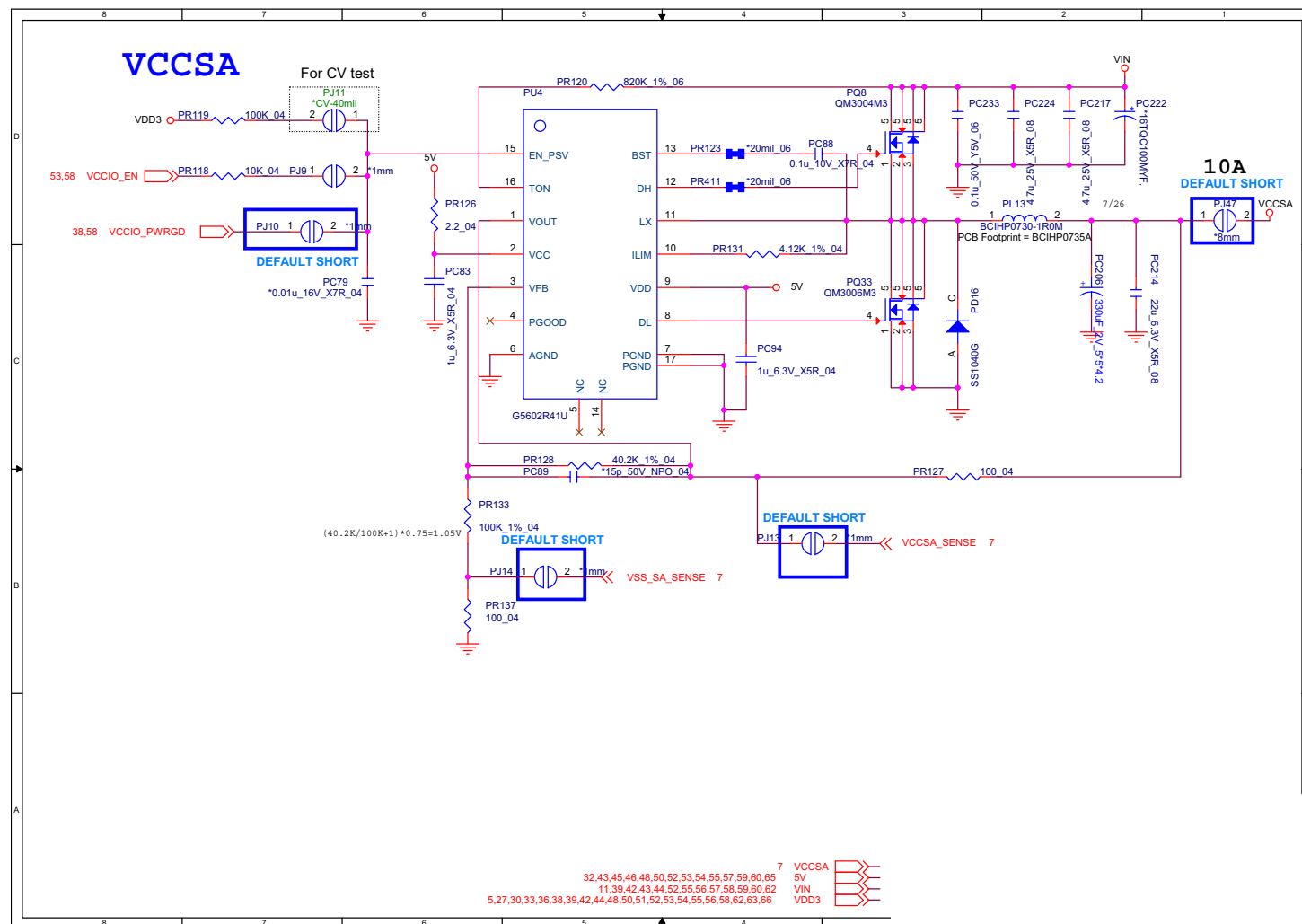


Sheet 60 of 74
VCore & VCCGT
Output 2

VCCSA

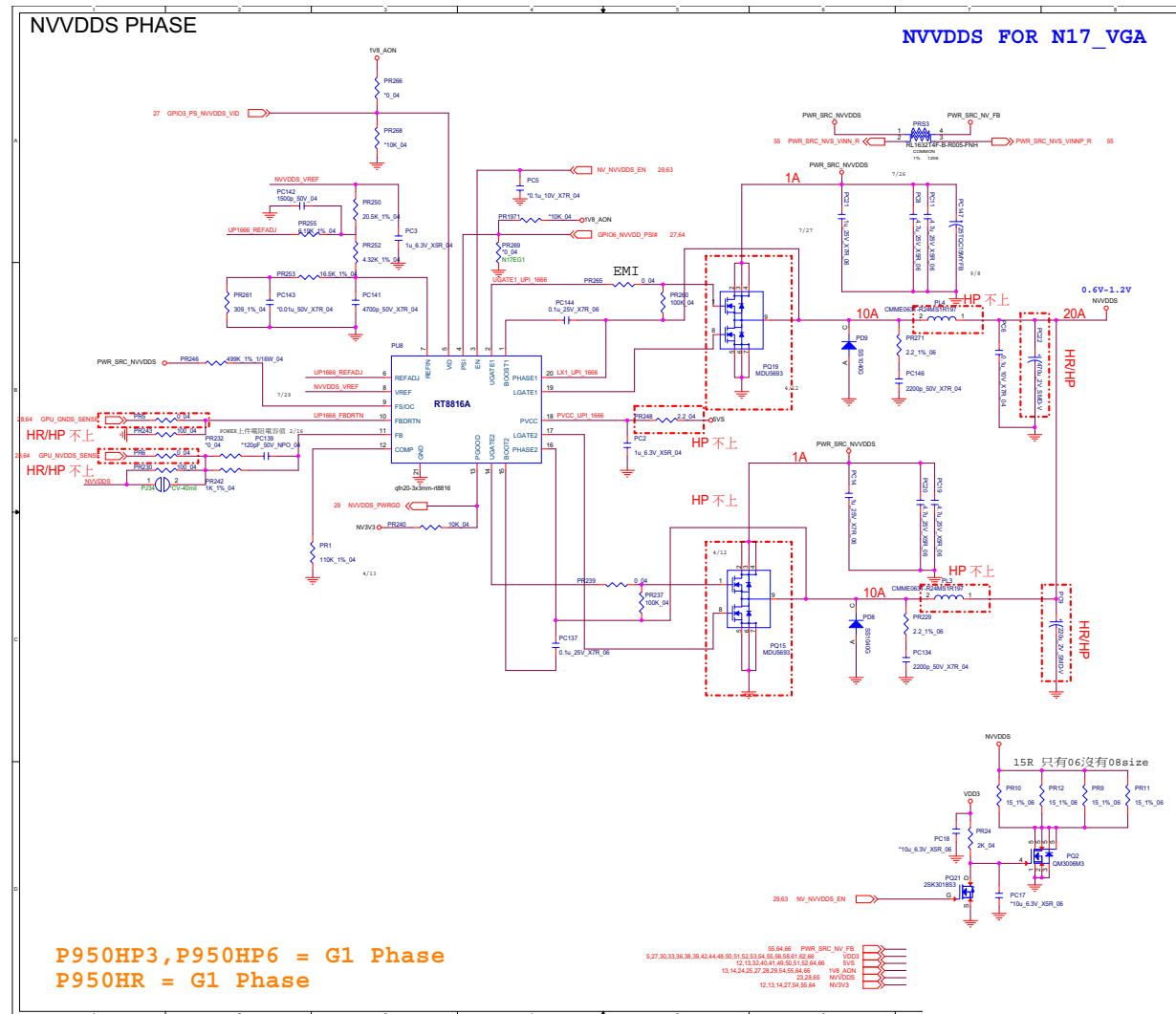
B. Schematic Diagrams

Sheet 61 of 74
VCCSA



Schematic Diagrams

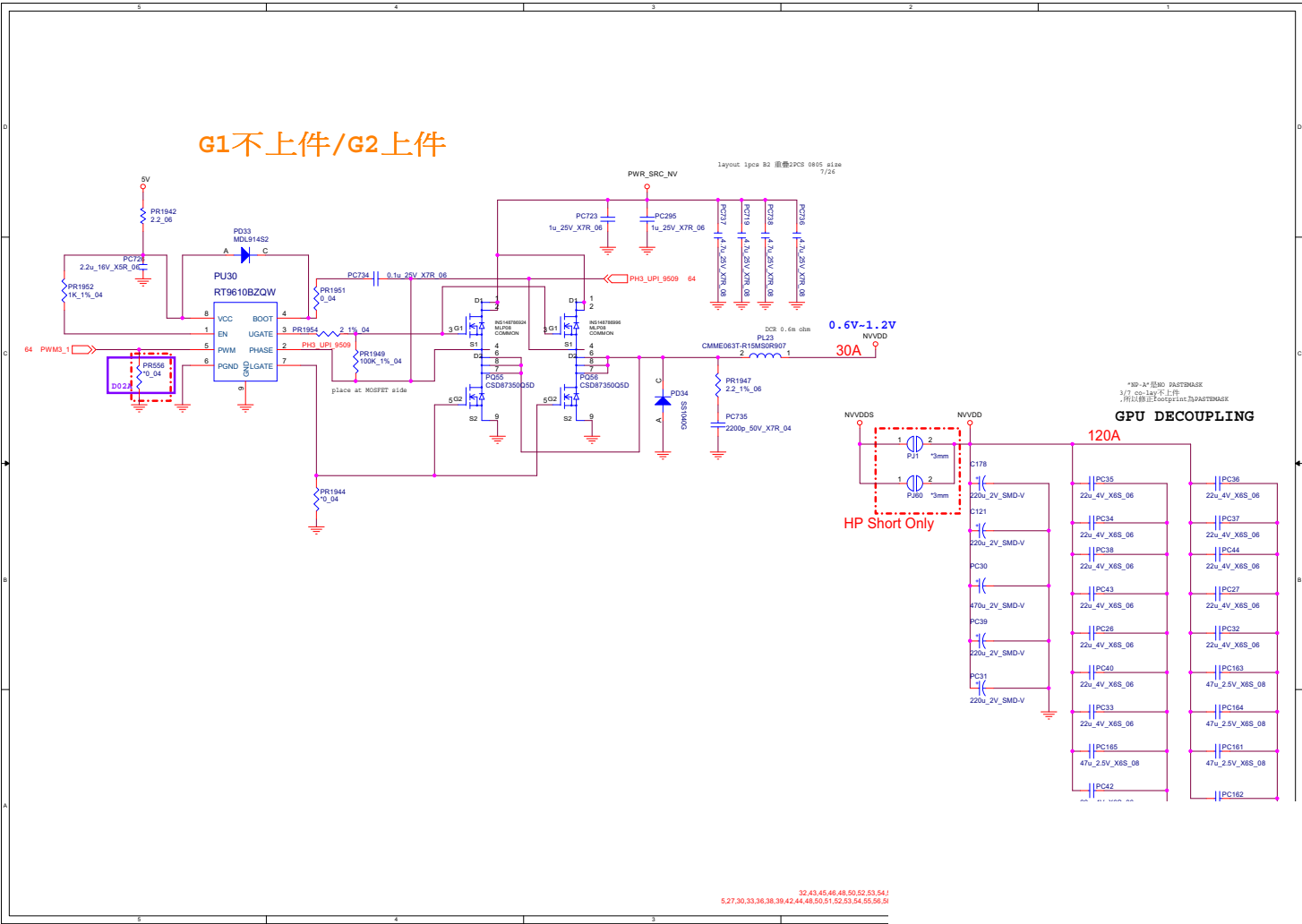
NVVDDS

Sheet 63 of 74
NVVDDS

Schematic Diagrams

NVVDD 2

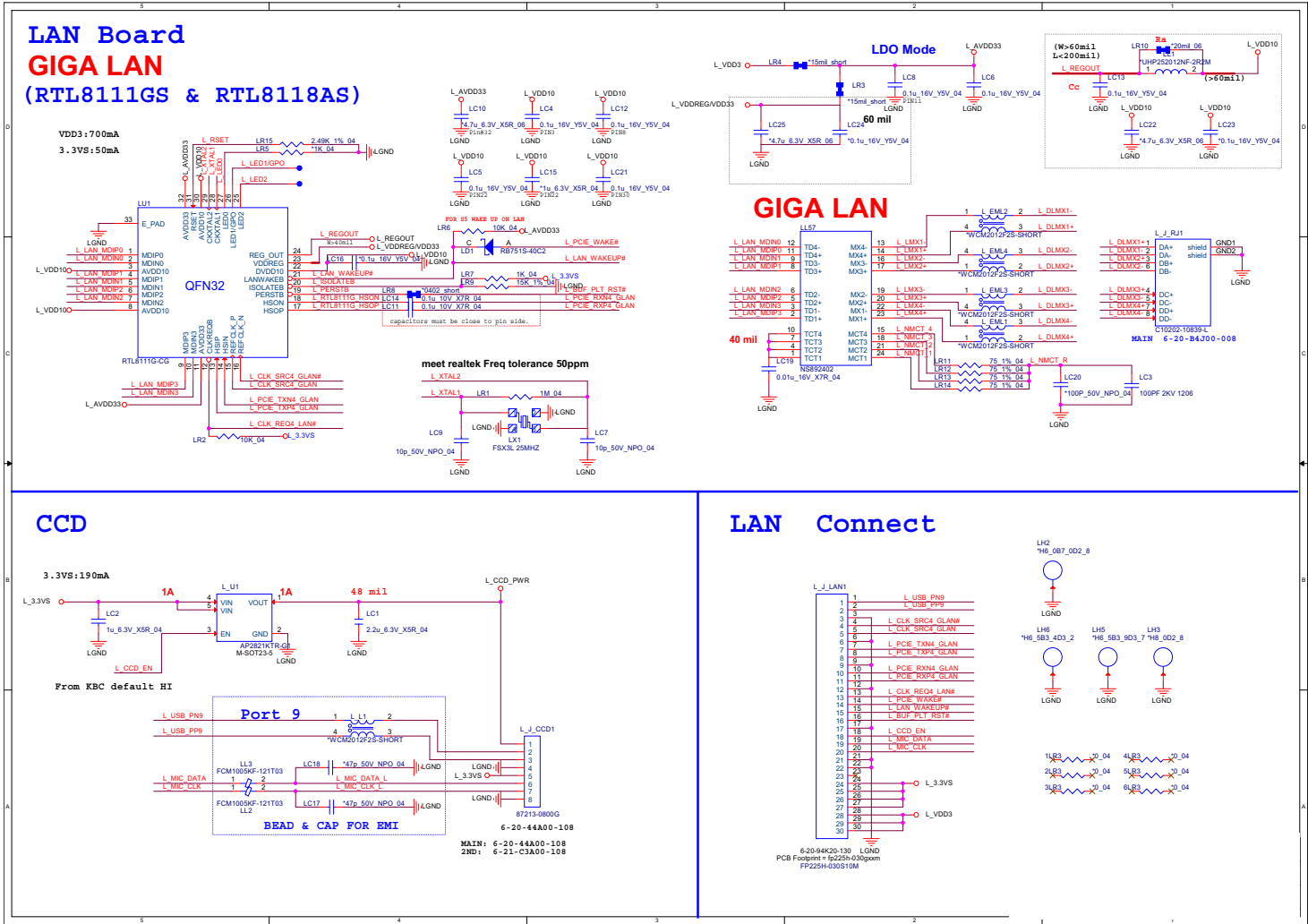
Sheet 65 of 74
NVVDD 2



FBVDDQ B - 67



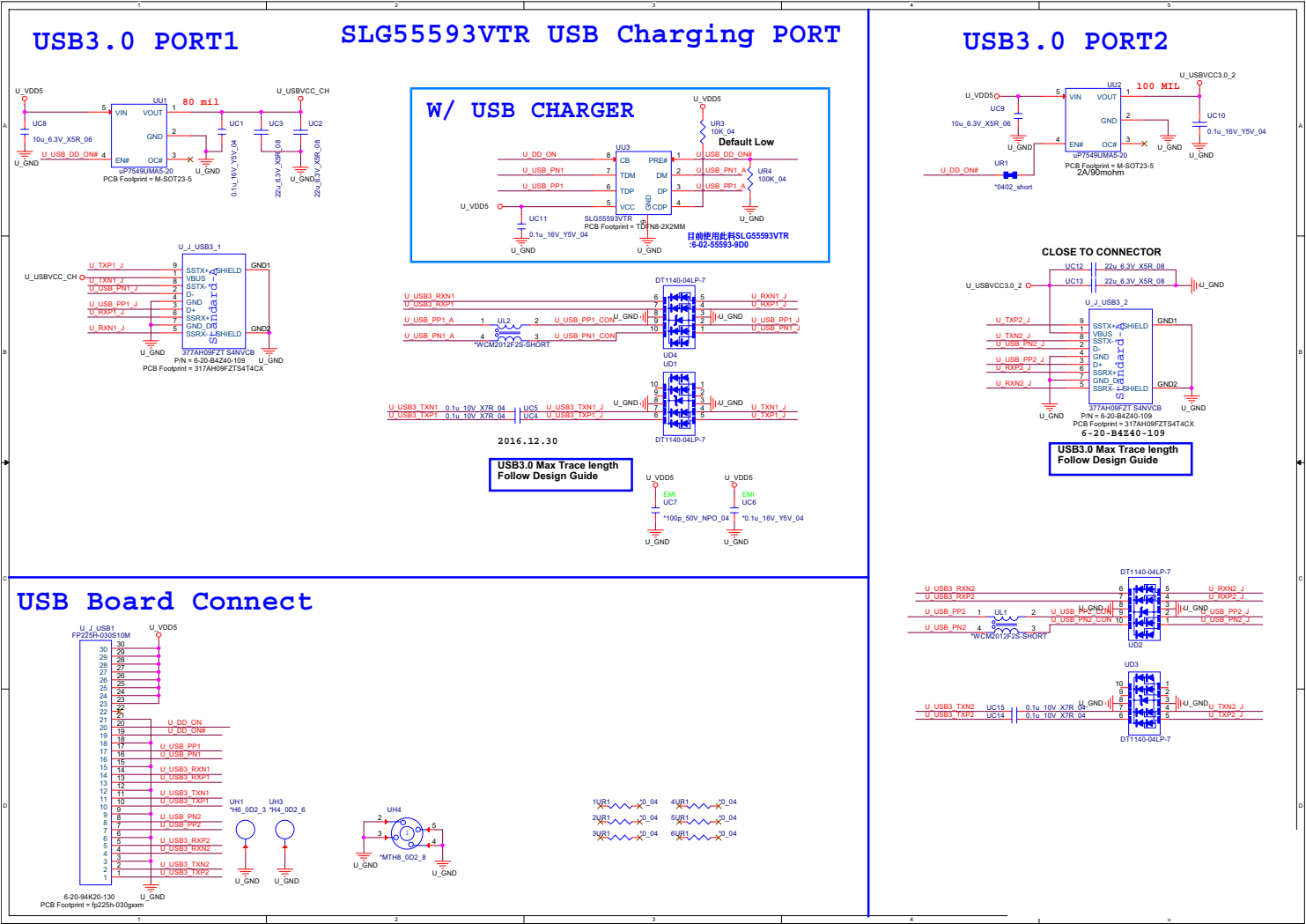
LAN Board



Sheet 68 of 74
USB Board,
Reciever

Schematic Diagrams

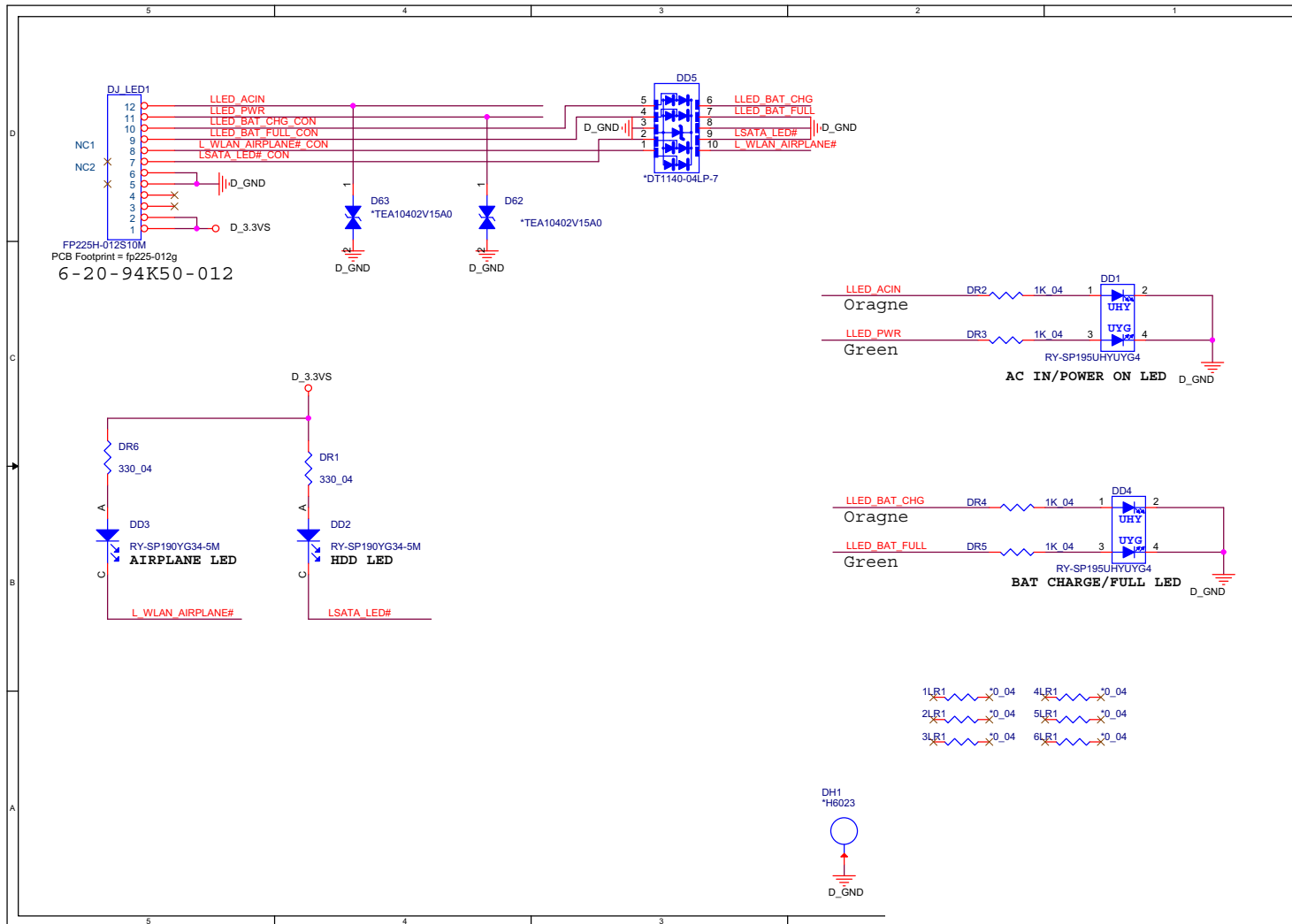
USB Board



Sheet 69 of 74
USB Board

B.Schematic Diagrams

LED Board

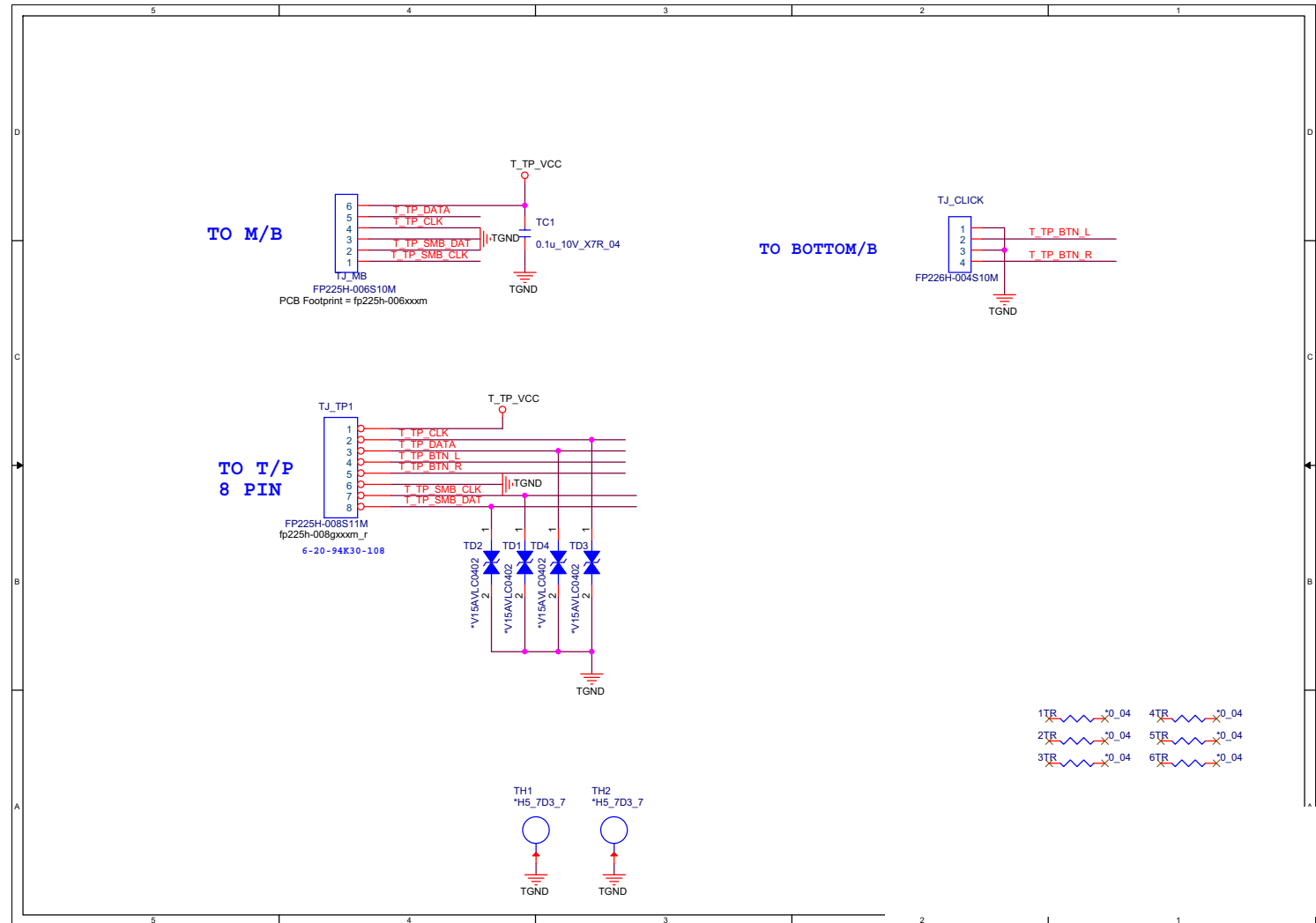


Sheet 70 of 74
LED Board

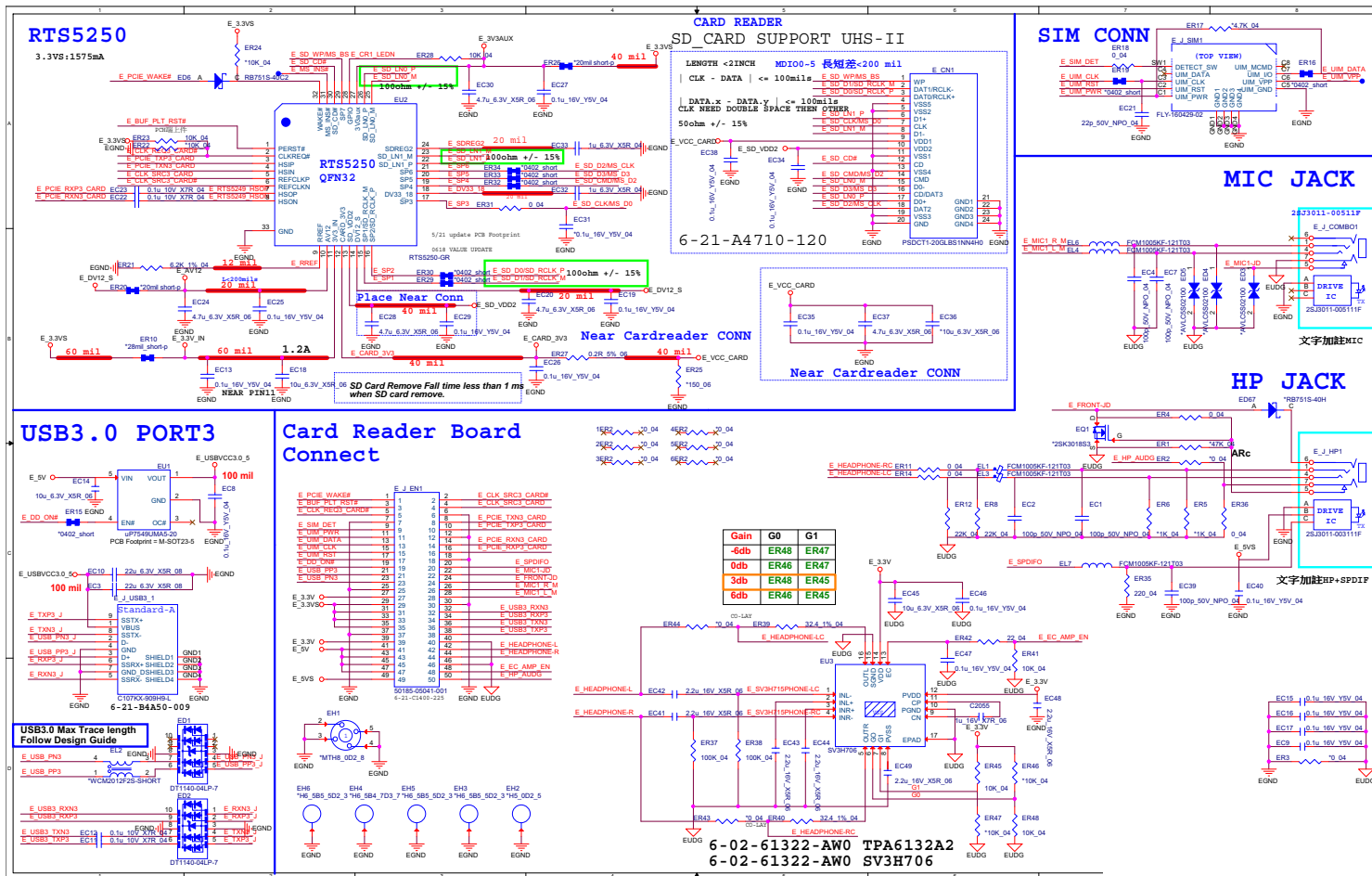
Click Board

B. Schematic Diagrams

Sheet 71 of 74
Click Board

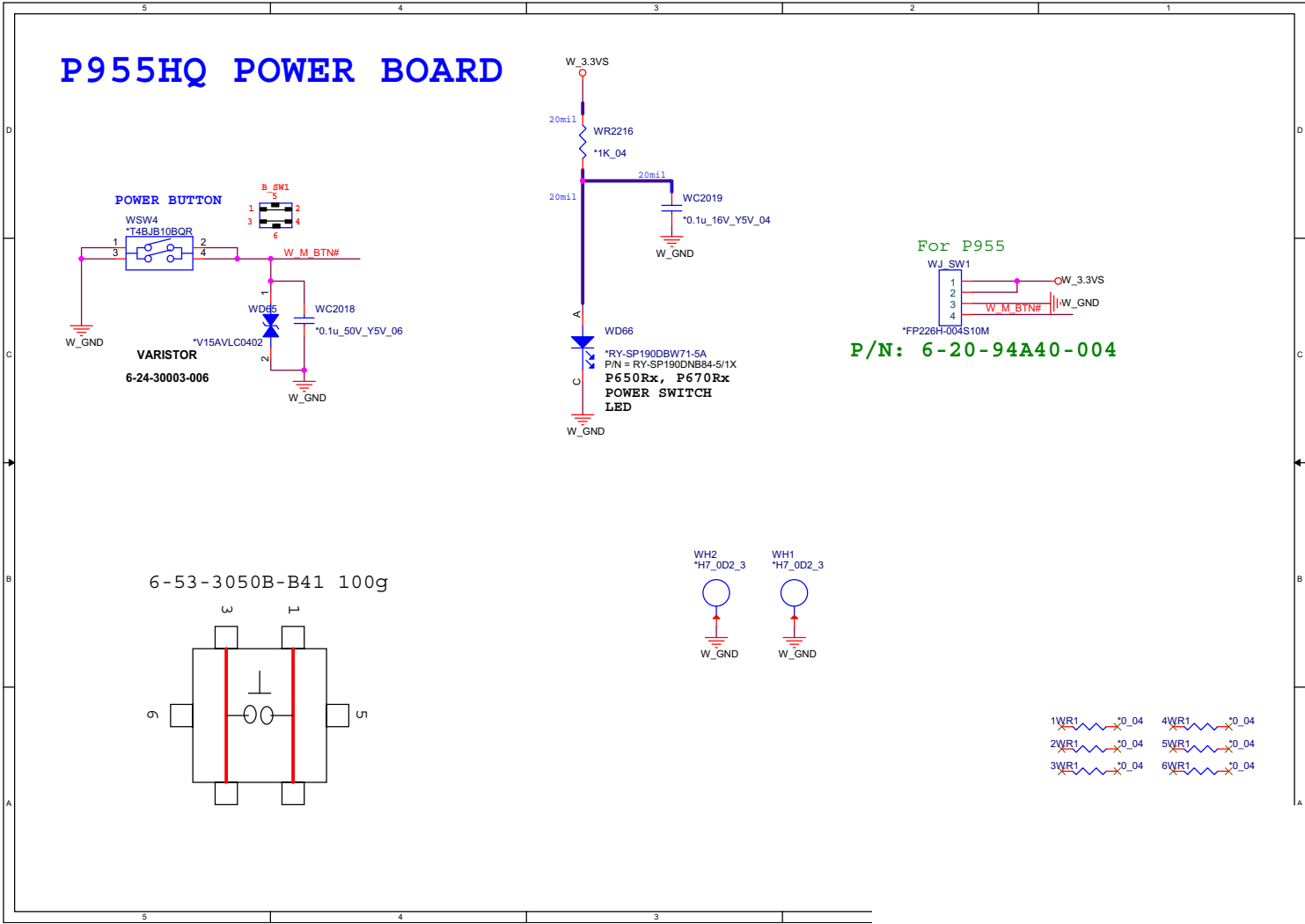


Reader Board

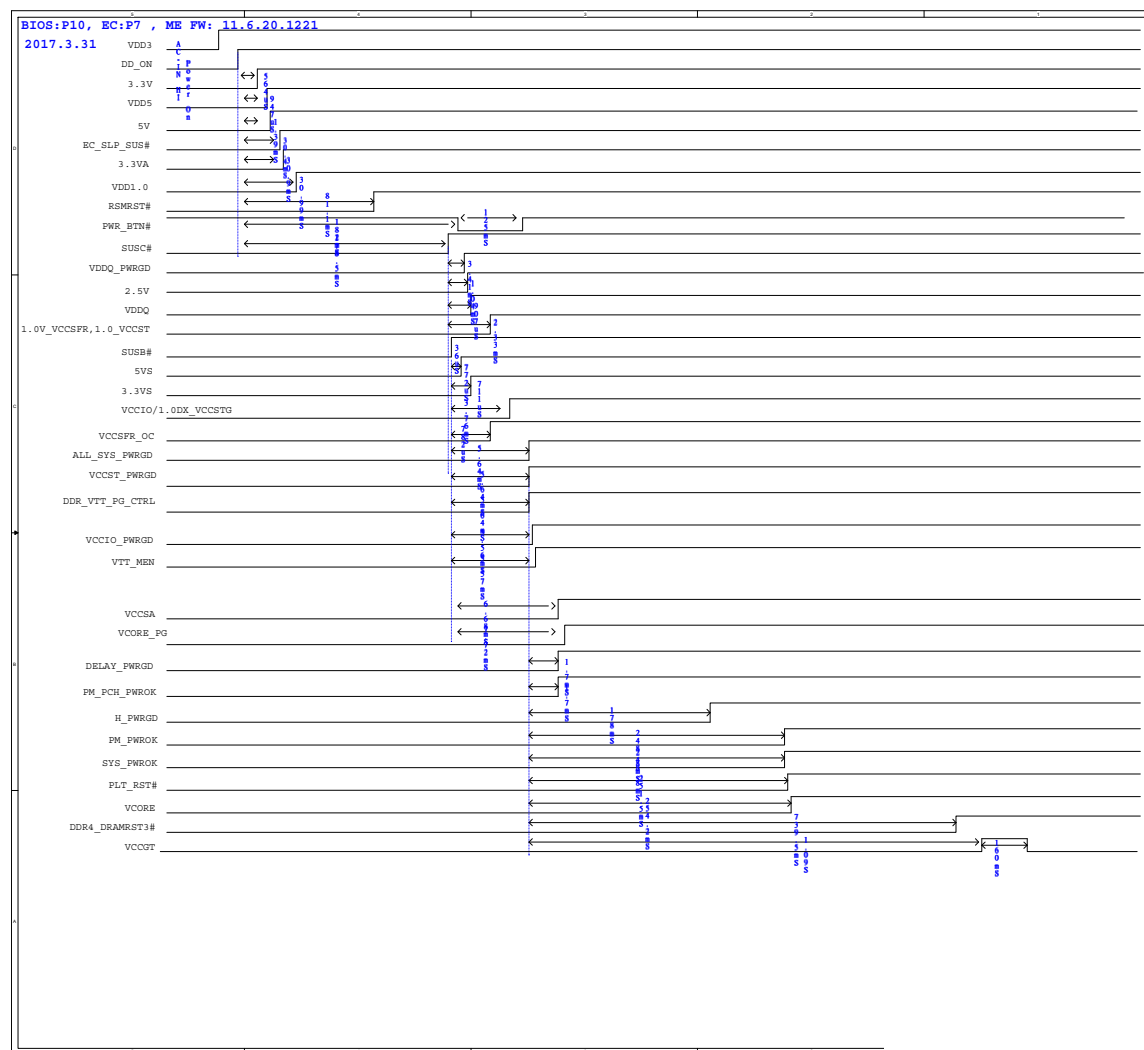
Sheet 72 of 74
Reader Board

Power Board

Sheet 73 of 74
Power Board



Power Sequence



Sheet 74 of 74
Power Sequence