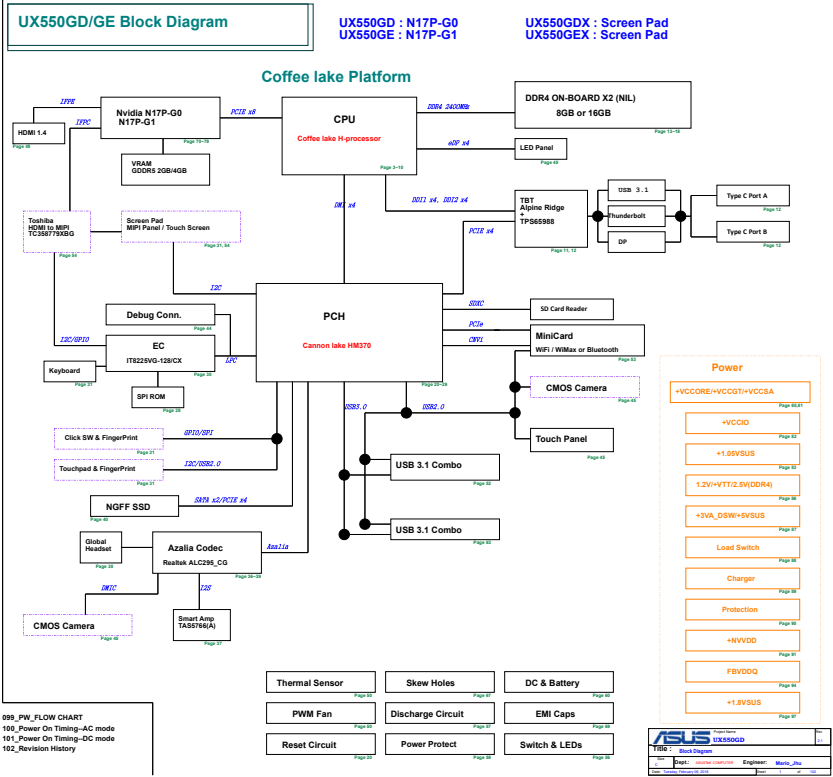


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The screenshot displays a detailed project management Gantt chart. The chart is organized into columns representing time periods, with dates ranging from 11/1/2018 to 12/1/2018. The tasks are listed on the left, including 'Project Management', 'Design', 'Development', 'Testing', and 'Deployment'. The Gantt bars show the duration of each task, with some tasks having multiple sub-tasks or milestones. The chart uses various colors (yellow, green, blue, black) to distinguish between different tasks or phases. The right side of the chart shows a summary of the project's progress and key dates.

	12/20/2016	12/21/2016	12/22/2016	12/23/2016	12/24/2016	12/25/2016	12/26/2016	12/27/2016	12/28/2016	12/29/2016	12/30/2016	12/31/2016	1/1/2017	1/2/2017	1/3/2017	1/4/2017	1/5/2017	1/6/2017	1/7/2017	1/8/2017	1/9/2017	1/10/2017	1/11/2017	1/12/2017	1/13/2017	1/14/2017	1/15/2017	1/16/2017	1/17/2017	1/18/2017	1/19/2017	1/20/2017	1/21/2017	1/22/2017	1/23/2017	1/24/2017	1/25/2017	1/26/2017	1/27/2017	1/28/2017	1/29/2017	1/30/2017	1/31/2017	2/1/2017	2/2/2017	2/3/2017	2/4/2017	2/5/2017	2/6/2017	2/7/2017	2/8/2017	2/9/2017	2/10/2017	2/11/2017	2/12/2017	2/13/2017	2/14/2017	2/15/2017	2/16/2017	2/17/2017	2/18/2017	2/19/2017	2/20/2017	2/21/2017	2/22/2017	2/23/2017	2/24/2017	2/25/2017	2/26/2017	2/27/2017	2/28/2017	2/29/2017	3/1/2017	3/2/2017	3/3/2017	3/4/2017	3/5/2017	3/6/2017	3/7/2017	3/8/2017	3/9/2017	3/10/2017	3/11/2017	3/12/2017	3/13/2017	3/14/2017	3/15/2017	3/16/2017	3/17/2017	3/18/2017	3/19/2017	3/20/2017	3/21/2017	3/22/2017	3/23/2017	3/24/2017	3/25/2017	3/26/2017	3/27/2017	3/28/2017	3/29/2017	3/30/2017	3/31/2017	4/1/2017	4/2/2017	4/3/2017	4/4/2017	4/5/2017	4/6/2017	4/7/2017	4/8/2017	4/9/2017	4/10/2017	4/11/2017	4/12/2017	4/13/2017	4/14/2017	4/15/2017	4/16/2017	4/17/2017	4/18/2017	4/19/2017	4/20/2017	4/21/2017	4/22/2017	4/23/2017	4/24/2017	4/25/2017	4/26/2017	4/27/2017	4/28/2017	4/29/2017	4/30/2017	5/1/2017	5/2/2017	5/3/2017	5/4/2017	5/5/2017	5/6/2017	5/7/2017	5/8/2017	5/9/2017	5/10/2017	5/11/2017	5/12/2017	5/13/2017	5/14/2017	5/15/2017	5/16/2017	5/17/2017	5/18/2017	5/19/2017	5/20/2017	5/21/2017	5/22/2017	5/23/2017	5/24/2017	5/25/2017	5/26/2017	5/27/2017	5/28/2017	5/29/2017	5/30/2017	5/31/2017	6/1/2017	6/2/2017	6/3/2017	6/4/2017	6/5/2017	6/6/2017	6/7/2017	6/8/2017	6/9/2017	6/10/2017	6/11/2017	6/12/2017	6/13/2017	6/14/2017	6/15/2017	6/16/2017	6/17/2017	6/18/2017	6/19/2017	6/20/2017	6/21/2017	6/22/2017	6/23/2017	6/24/2017	6/25/2017	6/26/2017	6/27/2017	6/28/2017	6/29/2017	6/30/2017	7/1/2017	7/2/2017	7/3/2017	7/4/2017	7/5/2017	7/6/2017	7/7/2017	7/8/2017	7/9/2017	7/10/2017	7/11/2017	7/12/2017	7/13/2017	7/14/2017	7/15/2017	7/16/2017	7/17/2017	7/18/2017	7/19/2017	7/20/2017	7/21/2017	7/22/2017	7/23/2017	7/24/2017	7/25/2017	7/26/2017	7/27/2017	7/28/2017	7/29/2017	7/30/2017	7/31/2017	8/1/2017	8/2/2017	8/3/2017	8/4/2017	8/5/2017	8/6/2017	8/7/2017	8/8/2017	8/9/2017	8/10/2017	8/11/2017	8/12/2017	8/13/2017	8/14/2017	8/15/2017	8/16/2017	8/17/2017	8/18/2017	8/19/2017	8/20/2017	8/21/2017	8/22/2017	8/23/2017	8/24/2017	8/25/2017	8/26/2017	8/27/2017	8/28/2017	8/29/2017	8/30/2017	8/31/2017	9/1/2017	9/2/2017	9/3/2017	9/4/2017	9/5/2017	9/6/2017	9/7/2017	9/8/2017	9/9/2017	9/10/2017	9/11/2017	9/12/2017	9/13/2017	9/14/2017	9/15/2017	9/16/2017	9/17/2017	9/18/2017	9/19/2017	9/20/2017	9/21/2017	9/22/2017	9/23/2017	9/24/2017	9/25/2017	9/26/2017	9/27/2017	9/28/2017	9/29/2017	9/30/2017	10/1/2017	10/2/2017	10/3/2017	10/4/2017	10/5/2017	10/6/2017	10/7/2017	10/8/2017	10/9/2017	10/10/2017	10
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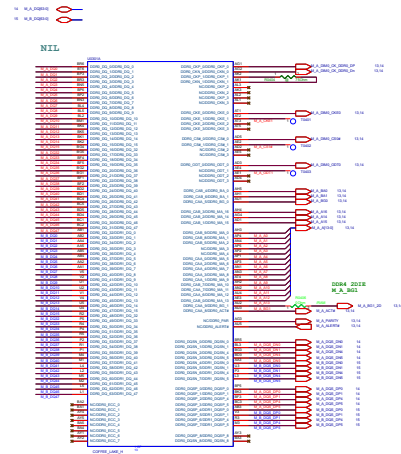
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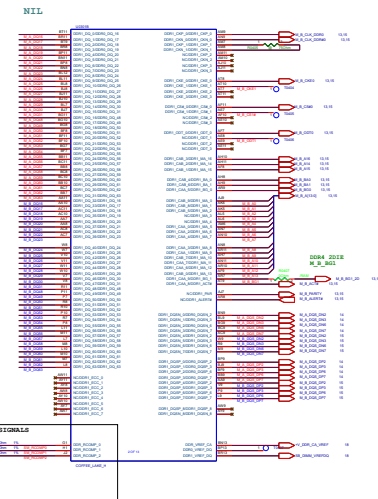
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012

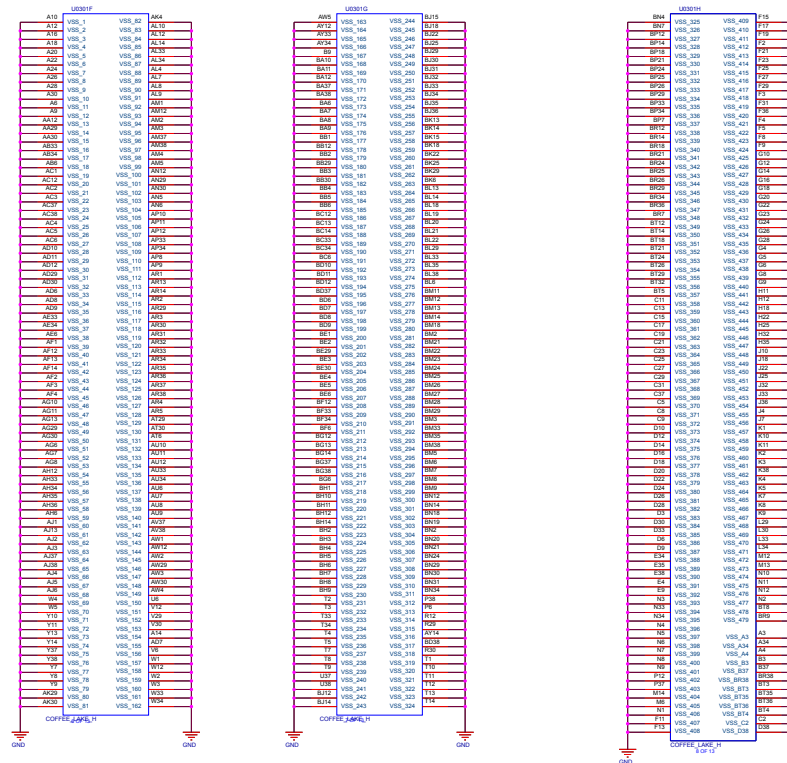
## Toggle FullScreen

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## MoveTo

Main Board



## UX550GD MB



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[illegible]

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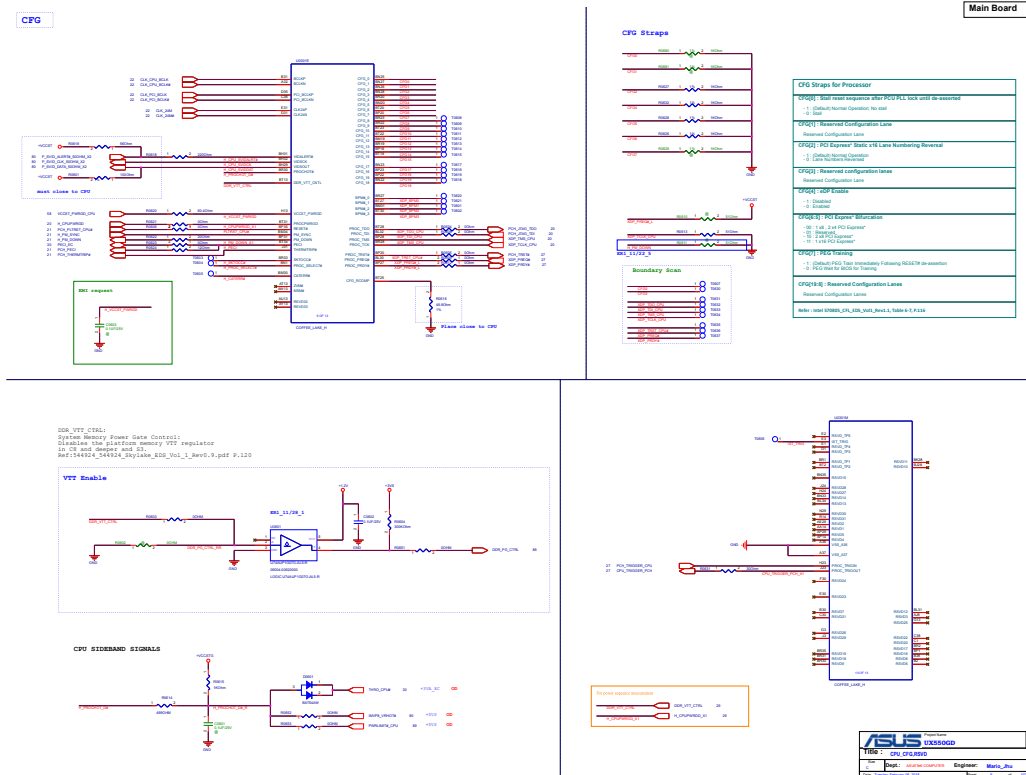
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001\_Block Diagram

002\_System Setting

003\_CPU\_DMI,PEG,eDP,DDI

004\_CPU\_DDR4

005\_CPU\_GND

006\_CPU\_CFG,RSVD

007\_CPU\_XDP

008\_CPU\_PWR

009\_CPU\_PWR

010\_CPU\_POWER\_CAP

011\_TBT\_Alpine-Ridge

012\_TBT\_TPS65988&amp;Type C

013\_DDR4\_TERMINATION

014\_DDR4\_ON-BOARD\_A

015\_DDR4\_ON-BOARD\_B

016\_

017\_\*\*\*\*\*

018\_DDR4\_CA/DQ Voltage

019\_\*\*\*\*\*

020\_PCH\_HDA,SMBUS,SYS PWR  
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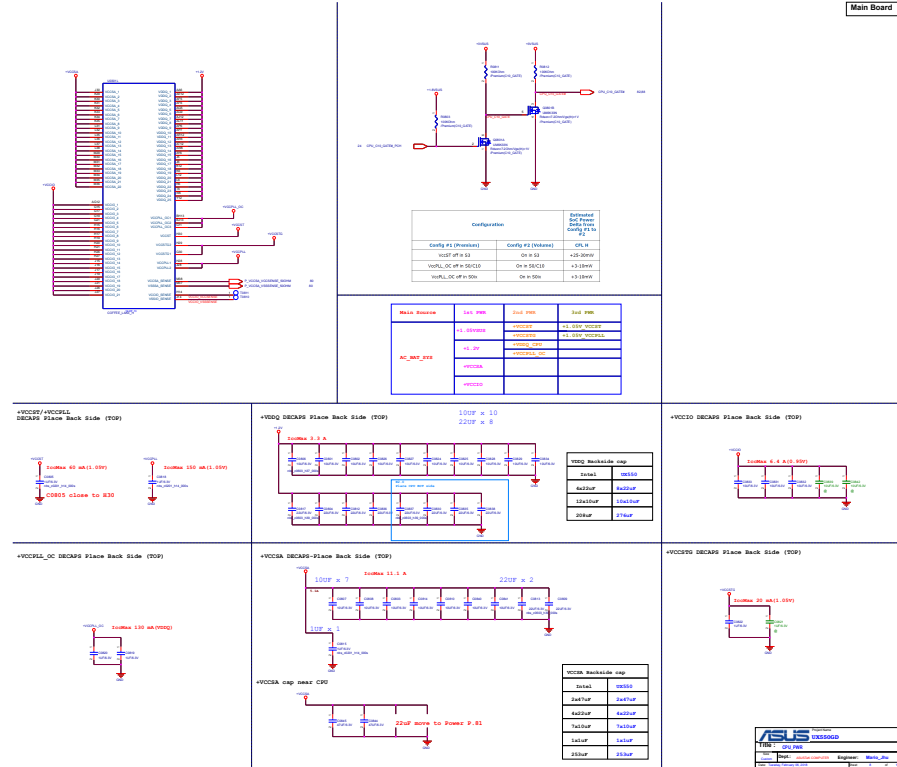
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012\_TBT\_TPS65988&Type C

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014\_DDR4\_ON-BOARD\_A

015\_DDR4\_ON-BOARD\_B

016\_

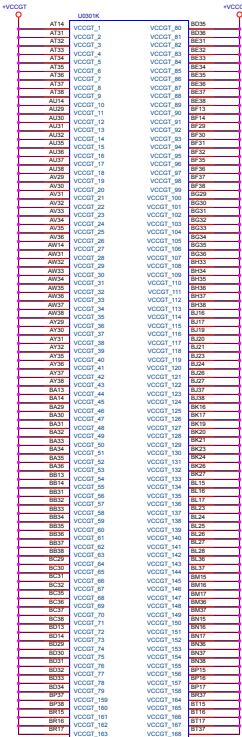
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018\_DDR4\_CA/DQ Voltage

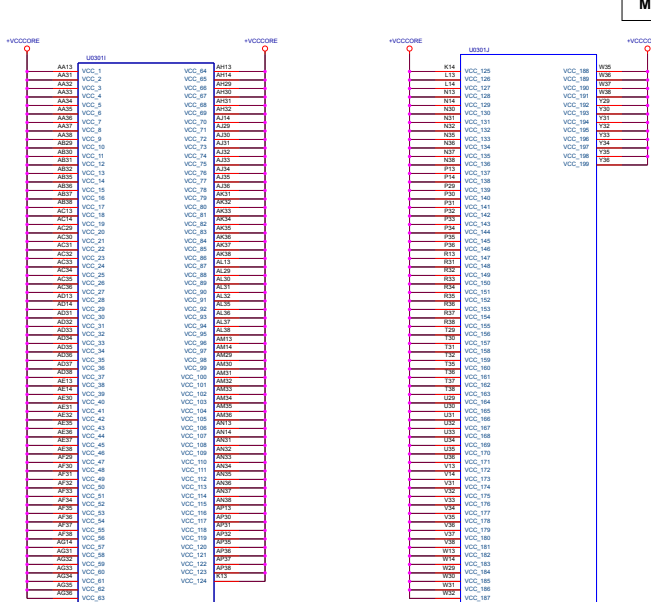
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020\_PCH\_HDA,SMBUS,SYS PW

R\_ITAG



COFFER\_LABELS<sup>1</sup>



COFFER\_LABELS<sup>1</sup>

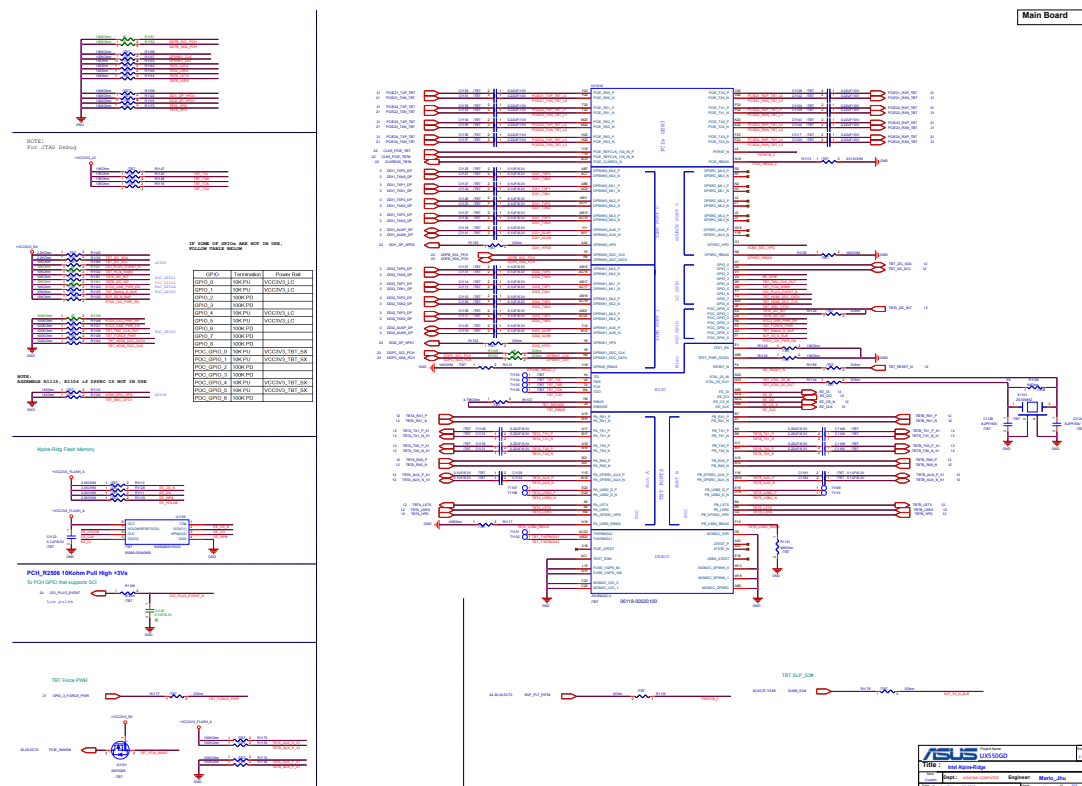


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006\_CPU\_CFG,RSVD  
007\_CPU\_XDP  
008\_CPU\_PWR  
009\_CPU\_PWR  
010\_CPU\_POWER\_CAP  
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002\_System Setting

003\_CPU\_DMI,PEG,eDP,DDI

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011\_TBT\_Alpine-Ridge

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020\_PCH\_HDA,SMBUS,SYS PW  
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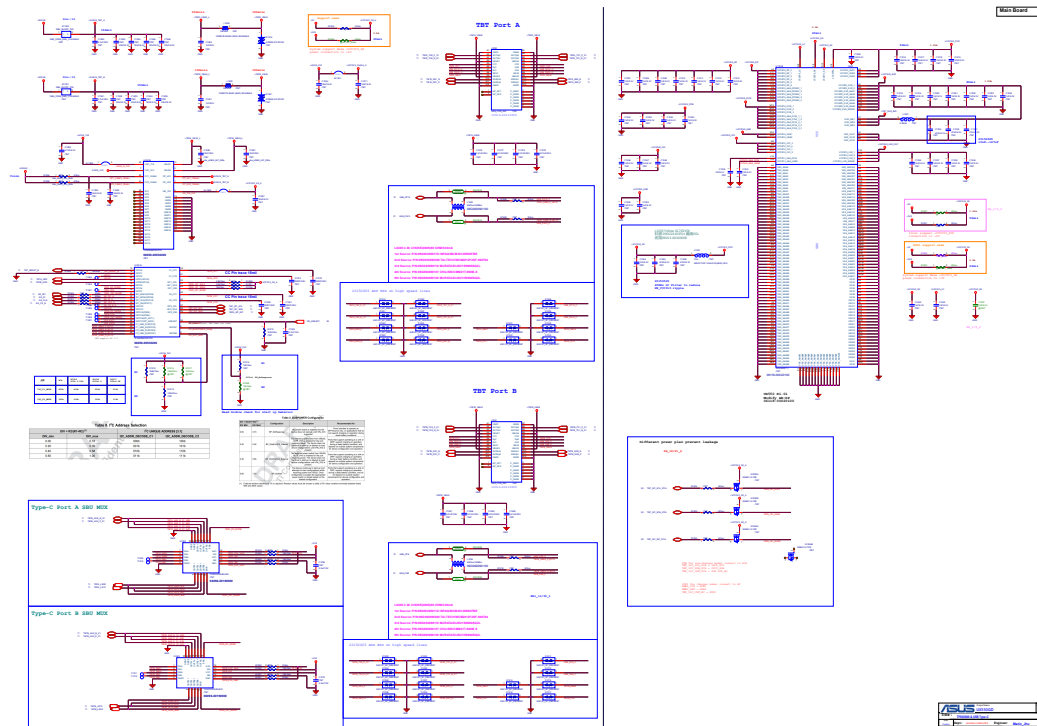
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- 018\_DDR4\_CA/DQ Voltage
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- 022\_PCH-CPT(3)\_CLK,LPC,USB3
- 023\_PCH-CPT(4)\_eDP,PCI,DP
- 024\_PCH-CPT(5)\_SPI,CNV
- 025\_PCH-CPT(6)\_GPIO
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- 028\_PCH-SPI ROM/OTH
- 029\_TEST POINT

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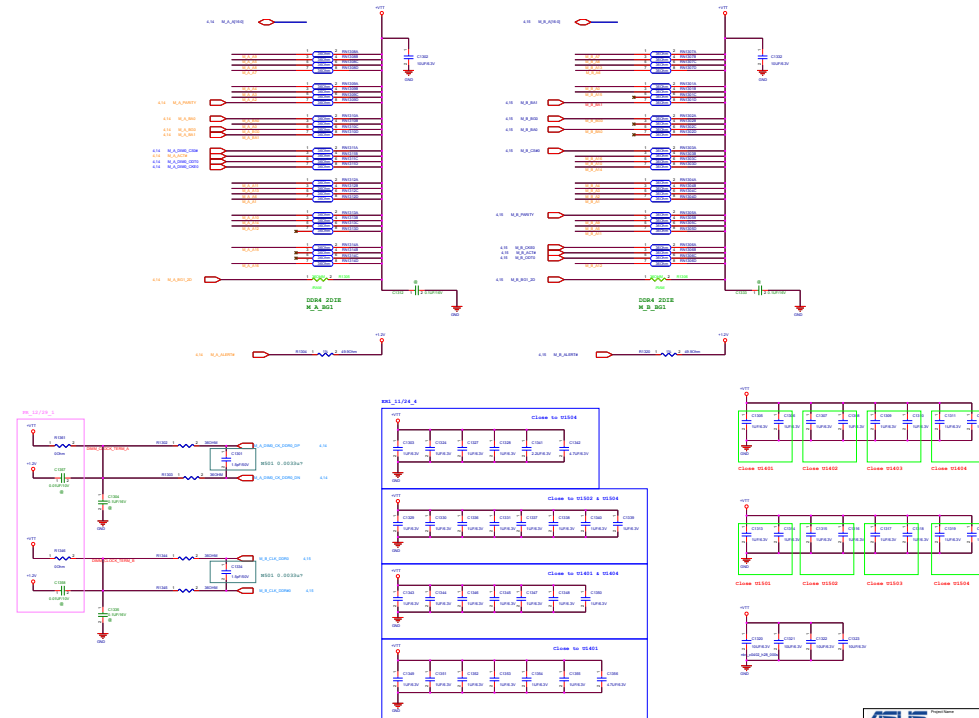
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 021\_PCH-CPT(2)\_PCIE,USB2,MIS  
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 023\_PCH-CPT(4)\_eDP,PCI,DP  
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 025\_PCH-CPT(6)\_GPIO  
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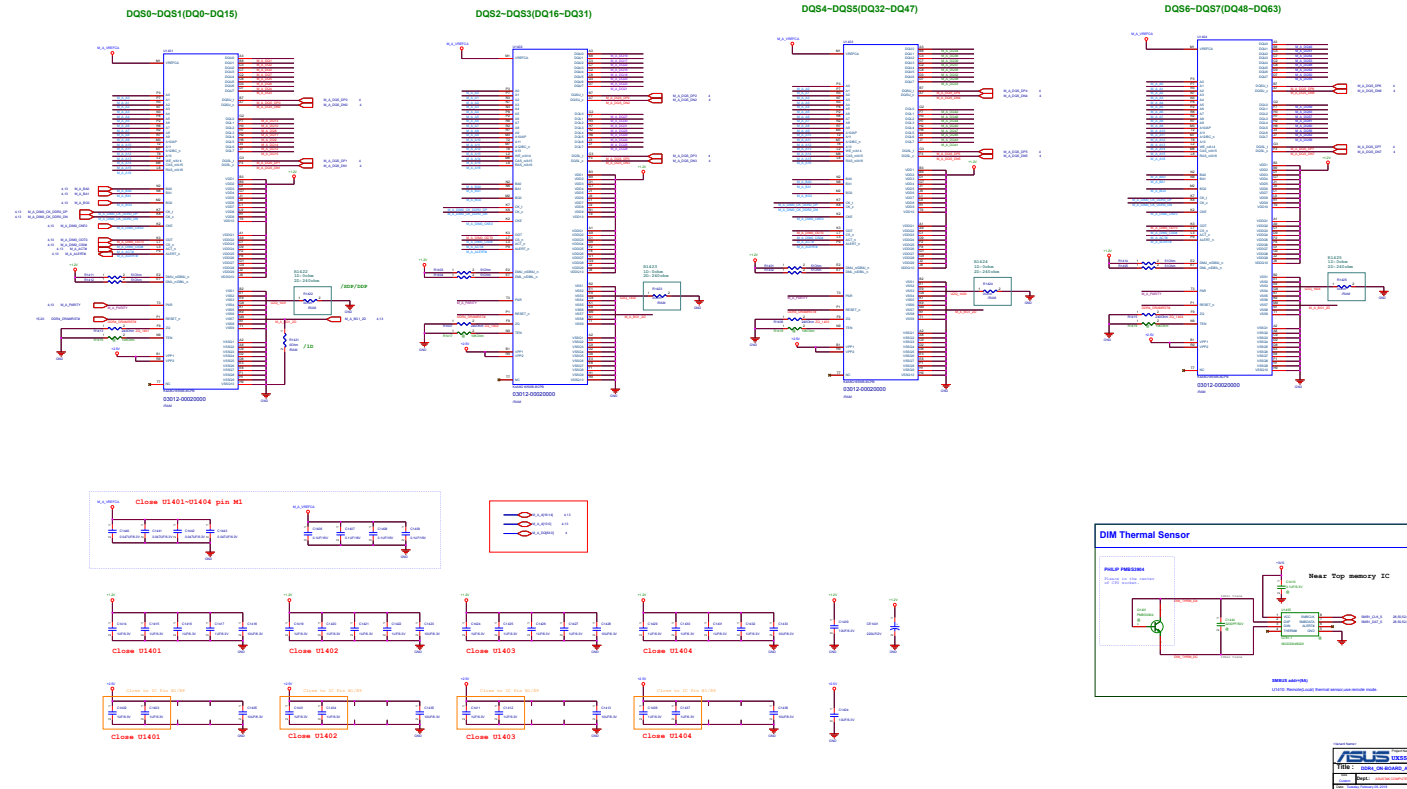
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- 025\_PCH-CPT(6)\_GPIO
- 026\_PCH-CPT(7)\_POWER,GND
- 027\_PCH-CPT(8)\_POWER,GND
- 028\_PCH-SPI ROM/OTH
- 029\_TEST POINT

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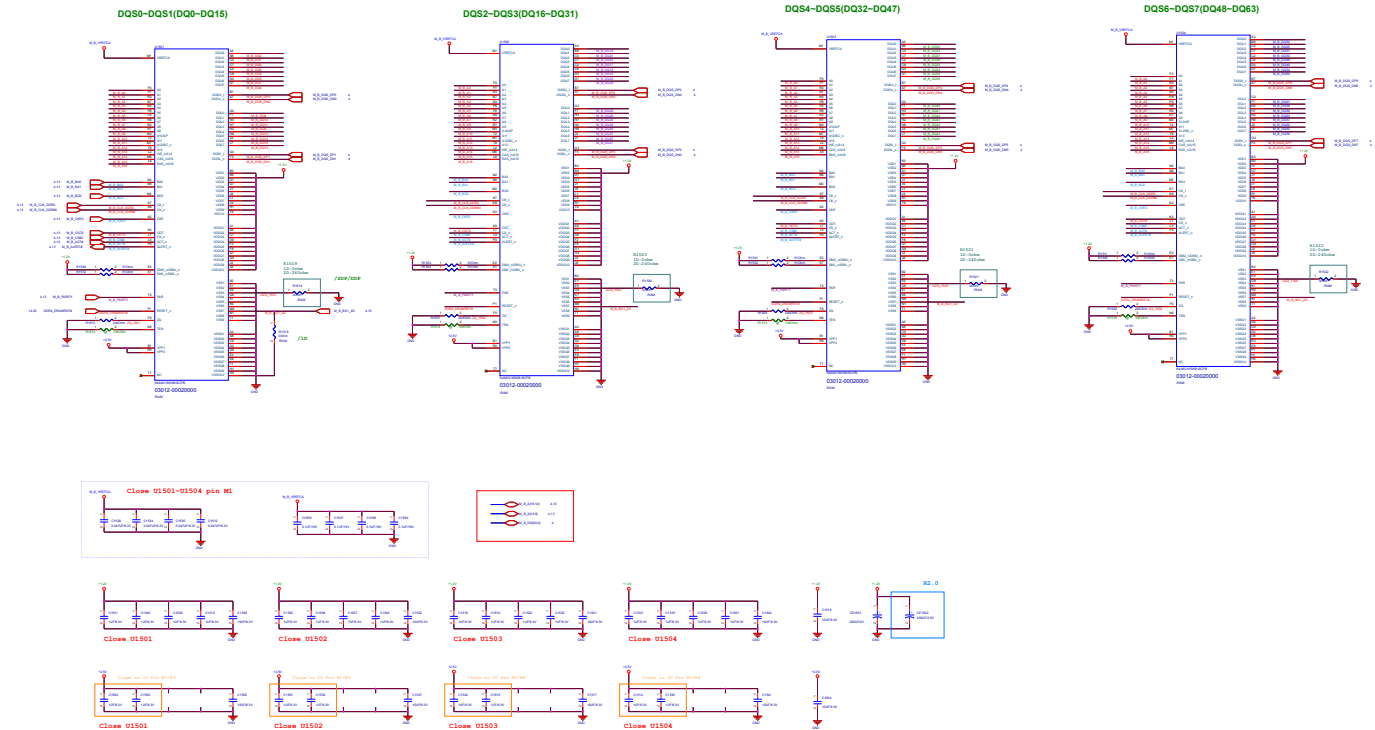
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017\_\*\*\*\*\*  
018\_DDR4\_CA/DQ Voltage  
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020\_PCH\_HDA,SMBUS,SYS PW  
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021\_PCH-CPT(2)\_PCIE,USB2,MIS  
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022\_PCH-CPT(3)\_CLK,LPC,USB3  
023\_PCH-CPT(4)\_eDP,PCI,DP  
024\_PCH-CPT(5)\_SPI,CNV  
025\_PCH-CPT(6)\_GPIO  
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028\_PCH-SPI ROM/OTH

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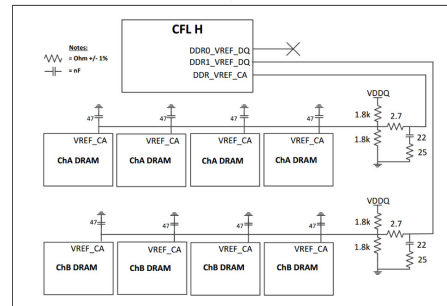
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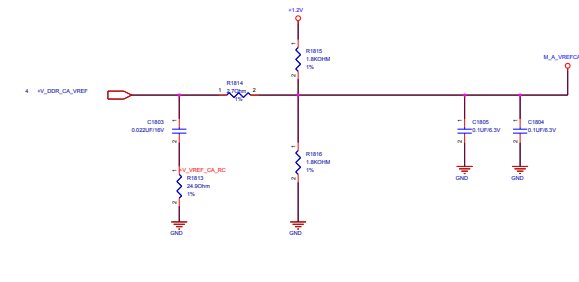
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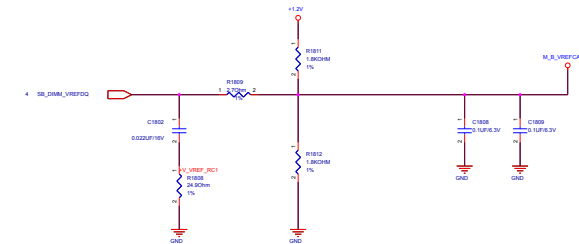
Figure 4-23. CFL-H DDR4 x16 Memory Down V<sub>REF-CA</sub> Overview

on-board CHA Vref

Main Board



on-board CHB Vref



ASUS		Product Name	Rev
UX550GD			2.1
Title : DDR4 CA/DQ Voltage			
Rev	Dept.	Engineer	
1	ASUS COMPUTER	Mario_jhu	
Date	Tuesday, February 06, 2016	Sheet	18 of 102

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R,JTAG  
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C  
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023\_PCH-CPT(4)\_eDP,PCI,DP  
024\_PCH-CPT(5)\_SPI,CNV  
025\_PCH-CPT(6)\_GPIO  
026\_PCH-CPT(7)\_POWER,GND  
027\_PCH-CPT(8)\_POWER,GND  
028\_PCH-SPI ROM/OTH

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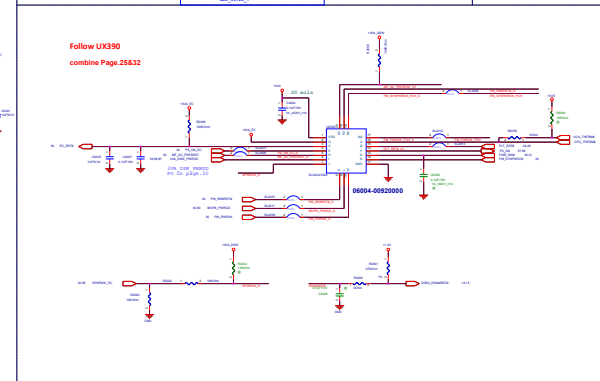
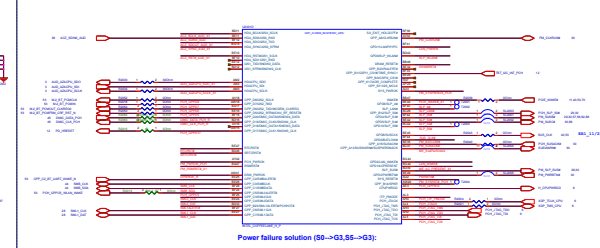
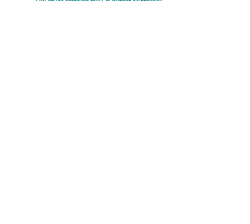
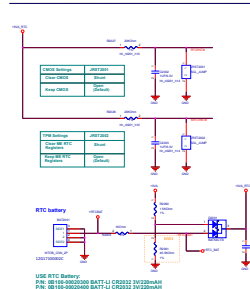
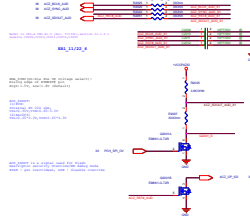
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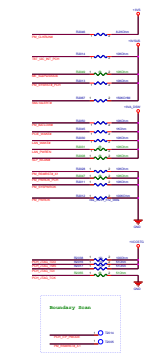
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HD Audio



Main Board



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015\_DDR4\_ON-BOARD\_B  
016\_  
017\_\*\*\*\*  
018\_DDR4\_CA/DQ Voltage  
019\_\*\*\*\*  
020\_PCH\_HDA,SMBUS,SYS PW  
R,JTAG  
021\_PCH-CPT(2)\_PCIE,USB2,MIS  
C  
022\_PCH-CPT(3)\_CLK,LPC,USB3  
023\_PCH-CPT(4)\_eDP,PCI,DP  
024\_PCH-CPT(5)\_SPI,CNV  
025\_PCH-CPT(6)\_GPIO  
026\_PCH-CPT(7)\_POWER,GND  
027\_PCH-CPT(8)\_POWER,GND  
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## UX550GD/GE Port Assignment

Cannon Lake BM370

## USB Setting

USB 2.0	USB 3.0
USB2_01	USB3_01
USB2_02	USB3_02
USB2_03	USB3_03
USB2_04	USB3_04
USB2_05	USB3_05
USB2_06	USB3_06
USB2_07	USB3_07
USB2_08	USB3_08
USB2_09	USB3_09
USB2_10	USB3_10
USB2_11	USB3_11
USB2_12	USB3_12
USB2_13	USB3_13
USB2_14	USB3_14
USB2_15	USB3_15
USB2_16	USB3_16
USB2_17	USB3_17
USB2_18	USB3_18
USB2_19	USB3_19
USB2_20	USB3_20
USB2_21	USB3_21
USB2_22	USB3_22
USB2_23	USB3_23
USB2_24	USB3_24
USB2_25	USB3_25
USB2_26	USB3_26
USB2_27	USB3_27
USB2_28	USB3_28
USB2_29	USB3_29
USB2_30	USB3_30
USB2_31	USB3_31
USB2_32	USB3_32
USB2_33	USB3_33
USB2_34	USB3_34
USB2_35	USB3_35
USB2_36	USB3_36
USB2_37	USB3_37
USB2_38	USB3_38
USB2_39	USB3_39
USB2_40	USB3_40
USB2_41	USB3_41
USB2_42	USB3_42
USB2_43	USB3_43
USB2_44	USB3_44
USB2_45	USB3_45
USB2_46	USB3_46
USB2_47	USB3_47
USB2_48	USB3_48
USB2_49	USB3_49
USB2_50	USB3_50
USB2_51	USB3_51
USB2_52	USB3_52
USB2_53	USB3_53
USB2_54	USB3_54
USB2_55	USB3_55
USB2_56	USB3_56
USB2_57	USB3_57
USB2_58	USB3_58
USB2_59	USB3_59
USB2_60	USB3_60
USB2_61	USB3_61
USB2_62	USB3_62
USB2_63	USB3_63
USB2_64	USB3_64
USB2_65	USB3_65
USB2_66	USB3_66
USB2_67	USB3_67
USB2_68	USB3_68
USB2_69	USB3_69
USB2_70	USB3_70
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USB2_72	USB3_72
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USB2_75	USB3_75
USB2_76	USB3_76
USB2_77	USB3_77
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USB2_79	USB3_79
USB2_80	USB3_80
USB2_81	USB3_81
USB2_82	USB3_82
USB2_83	USB3_83
USB2_84	USB3_84
USB2_85	USB3_85
USB2_86	USB3_86
USB2_87	USB3_87
USB2_88	USB3_88
USB2_89	USB3_89
USB2_90	USB3_90
USB2_91	USB3_91
USB2_92	USB3_92
USB2_93	USB3_93
USB2_94	USB3_94
USB2_95	USB3_95
USB2_96	USB3_96
USB2_97	USB3_97
USB2_98	USB3_98
USB2_99	USB3_99
USB2_100	USB3_100

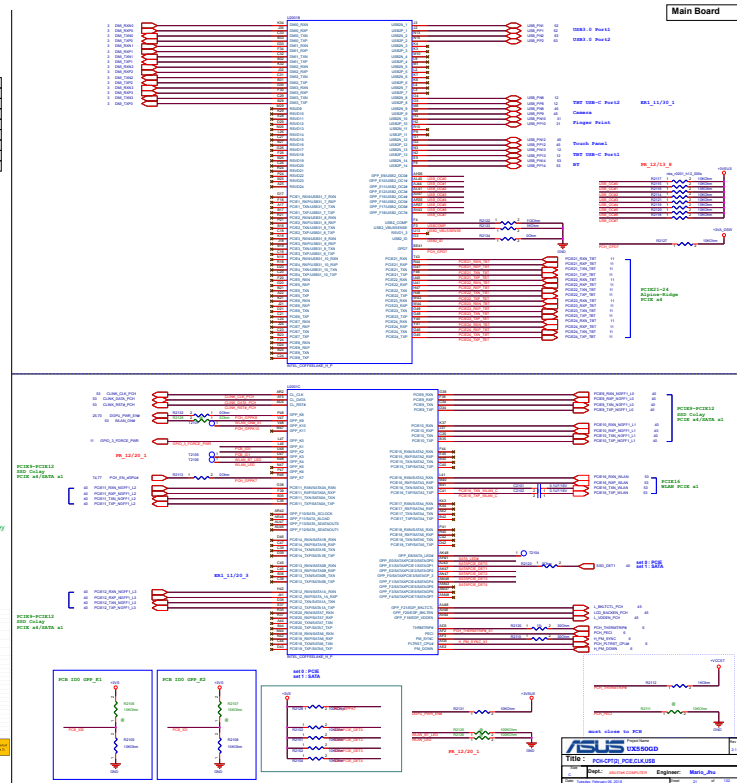
## PCIe/SATA Function define

Function	Card Reader
PCI0-01	PCI0-01
PCI0-02	PCI0-02
PCI0-03	PCI0-03
PCI0-04	PCI0-04
PCI0-05	PCI0-05
PCI0-06	PCI0-06
PCI0-07	PCI0-07
PCI0-08	PCI0-08
PCI0-09	PCI0-09
PCI0-10	PCI0-10
PCI0-11	PCI0-11
PCI0-12	PCI0-12
PCI0-13	PCI0-13
PCI0-14	PCI0-14
PCI0-15	PCI0-15
PCI0-16	PCI0-16
PCI0-17	PCI0-17
PCI0-18	PCI0-18
PCI0-19	PCI0-19
PCI0-20	PCI0-20
PCI0-21	PCI0-21
PCI0-22	PCI0-22
PCI0-23	PCI0-23
PCI0-24	PCI0-24
PCI0-25	PCI0-25
PCI0-26	PCI0-26
PCI0-27	PCI0-27
PCI0-28	PCI0-28
PCI0-29	PCI0-29
PCI0-30	PCI0-30
PCI0-31	PCI0-31
PCI0-32	PCI0-32
PCI0-33	PCI0-33
PCI0-34	PCI0-34
PCI0-35	PCI0-35
PCI0-36	PCI0-36
PCI0-37	PCI0-37
PCI0-38	PCI0-38
PCI0-39	PCI0-39
PCI0-40	PCI0-40
PCI0-41	PCI0-41
PCI0-42	PCI0-42
PCI0-43	PCI0-43
PCI0-44	PCI0-44
PCI0-45	PCI0-45
PCI0-46	PCI0-46
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PCI0-48	PCI0-48
PCI0-49	PCI0-49
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PCI0-74	PCI0-74
PCI0-75	PCI0-75
PCI0-76	PCI0-76
PCI0-77	PCI0-77
PCI0-78	PCI0-78
PCI0-79	PCI0-79
PCI0-80	PCI0-80
PCI0-81	PCI0-81
PCI0-82	PCI0-82
PCI0-83	PCI0-83
PCI0-84	PCI0-84
PCI0-85	PCI0-85
PCI0-86	PCI0-86
PCI0-87	PCI0-87
PCI0-88	PCI0-88
PCI0-89	PCI0-89
PCI0-90	PCI0-90
PCI0-91	PCI0-91
PCI0-92	PCI0-92
PCI0-93	PCI0-93
PCI0-94	PCI0-94
PCI0-95	PCI0-95
PCI0-96	PCI0-96
PCI0-97	PCI0-97
PCI0-98	PCI0-98
PCI0-99	PCI0-99
PCI0-100	PCI0-100

## Design IP

Function	Design IP
USB2_01	USB2_01
USB2_02	USB2_02
USB2_03	USB2_03
USB2_04	USB2_04
USB2_05	USB2_05
USB2_06	USB2_06
USB2_07	USB2_07
USB2_08	USB2_08
USB2_09	USB2_09
USB2_10	USB2_10
USB2_11	USB2_11
USB2_12	USB2_12
USB2_13	USB2_13
USB2_14	USB2_14
USB2_15	USB2_15
USB2_16	USB2_16
USB2_17	USB2_17
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USB2_22	USB2_22
USB2_23	USB2_23
USB2_24	USB2_24
USB2_25	USB2_25
USB2_26	USB2_26
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USB2_66	USB2_66
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USB2_71	USB2_71
USB2_72	USB2_72
USB2_73	USB2_73
USB2_74	USB2_74
USB2_75	USB2_75
USB2_76	USB2_76
USB2_77	USB2_77
USB2_78	USB2_78
USB2_79	USB2_79
USB2_80	USB2_80
USB2_81	USB2_81
USB2_82	USB2_82
USB2_83	USB2_83
USB2_84	USB2_84
USB2_85	USB2_85
USB2_86	USB2_86
USB2_87	USB2_87
USB2_88	USB2_88
USB2_89	USB2_89
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USB2_93	USB2_93
USB2_94	USB2_94
USB2_95	USB2_95
USB2_96	USB2_96
USB2_97	USB2_97
USB2_98	USB2_98
USB2_99	USB2_99
USB2_100	USB2_100

Function	Design IP
USB2_01	USB2_01
USB2_02	USB2_02
USB2_03	USB2_03
USB2_04	USB2_04
USB2_05	USB2_05
USB2_06	USB2_06
USB2_07	USB2_07
USB2_08	USB2_08
USB2_09	USB2_09
USB2_10	USB2_10
USB2_11	USB2_11
USB2_12	USB2_12
USB2_13	USB2_13
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USB2_15	USB2_15
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USB2_95	USB2_95
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USB2_98	USB2_98
USB2_99	USB2_99
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016\_  
017\_\*\*\*\*  
018\_DDR4\_CA/DQ Voltage  
019\_\*\*\*\*  
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021\_PCH-CPT(2)\_PCIE,USB2,MIS  
C  
022\_PCH-CPT(3)\_CLK,LPC,USB3  
023\_PCH-CPT(4)\_eDP,PCI,DP  
024\_PCH-CPT(5)\_SPI,CNV  
025\_PCH-CPT(6)\_GPIO  
026\_PCH-CPT(7)\_POWER,GND  
027\_PCH-CPT(8)\_POWER,GND  
028\_PCH-SPI ROM/OTH

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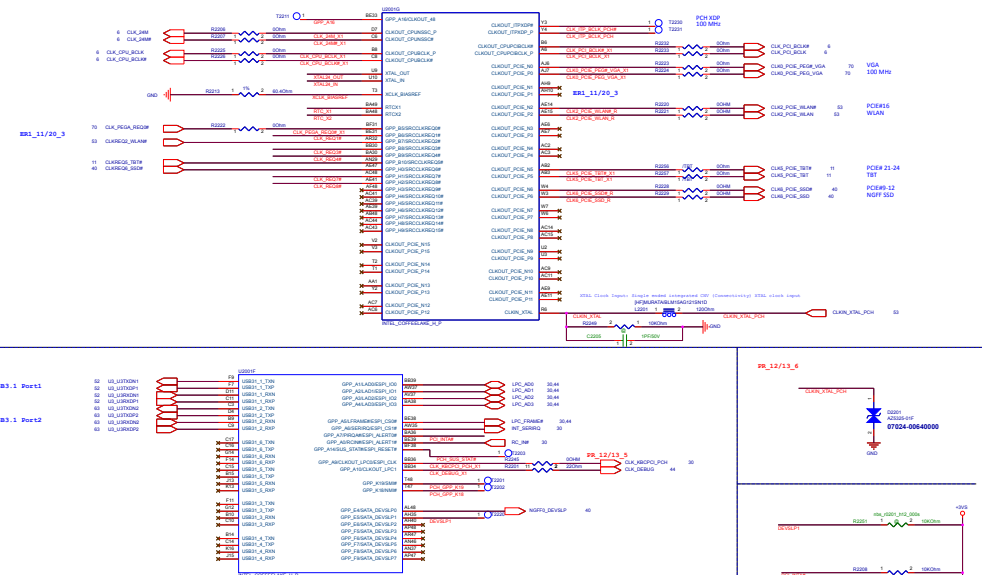
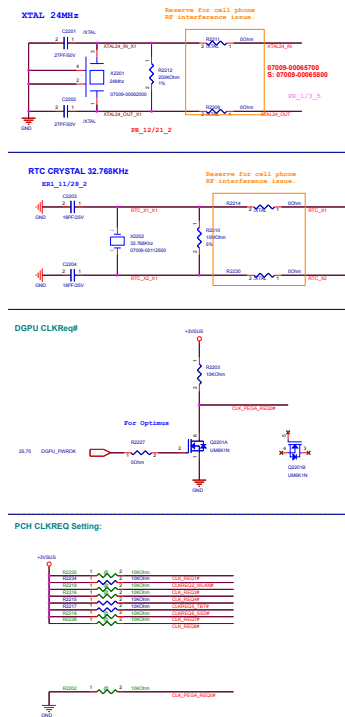
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016\_  
017\_\*\*\*\*  
018\_DDR4\_CA/DQ Voltage  
019\_\*\*\*\*  
020\_PCH\_HDA,SMBUS,SYS  
R,JTAG  
  
021\_PCH-CPT(2)\_PCIE,USB2  
C  
022\_PCH-CPT(3)\_CLK,LPC,U  
023\_PCH-CPT(4)\_eDP,PCI,DF  
024\_PCH-CPT(5)\_SPI,CNV  
025\_PCH-CPT(6)\_GPIO  
026\_PCH-CPT(7)\_POWER,GI  
027\_PCH-CPT(8)\_POWER,GI  
028\_PCH-SPI ROM/OTH  
029\_TEST\_POINT

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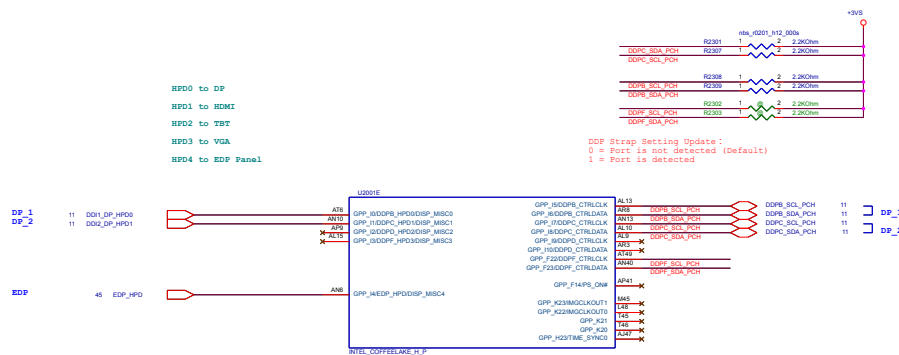
026

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011\_TBT\_Alpine-Ridge

012\_TBT\_TPS65988&amp;Type C

## 013 DDR4 TERMINATION

014 DDR4 ON-BOARD A

015 DDR4 ON-BOARD B

016

017 \*\*\*\*\*

018 DDR4 CA/DQ Voltage

019 \*\*\*\*\*

020\_PCH\_HDA,SMBUS,SYS PW  
R,JTAG021\_PCH-CPT(2)\_PCIE,USB2,MIS  
C

022\_PCH-CPT(3)\_CLK,LPC,USB3

023 PCH-CPT(4) eDP,PCI,DP

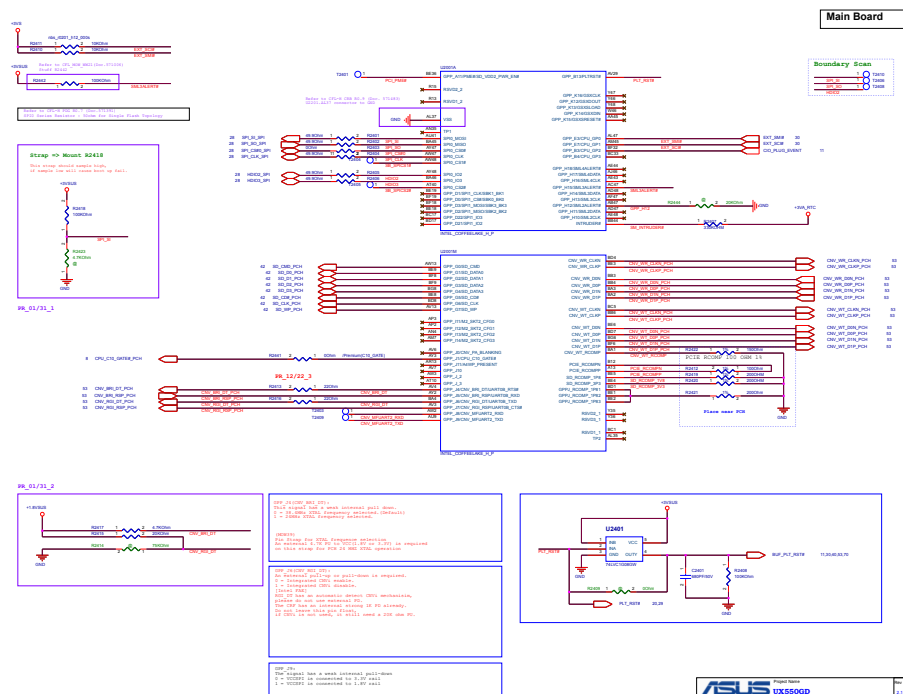
024 PCH-CPT(5) SPI,CNV

025 PCH-CPT(6) GPIO

026 PCH-CPT(7) POWER,GND

027 PCH-CPT(8) POWER,GND

028 PCH-SPI ROM/OTH





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016\_  
017\_\*\*\*\*\*  
018\_DDR4\_CA/DQ Voltage  
019\_\*\*\*\*\*  
020\_PCH\_HDA,SMBUS,SYS PW  
R,JTAG  
021\_PCH-CPT(2)\_PCIE,USB2,MIS  
C  
022\_PCH-CPT(3)\_CLK,LPC,USB3  
023\_PCH-CPT(4)\_eDP,PCI,DP  
024\_PCH-CPT(5)\_SPI,CNV  
025\_PCH-CPT(6)\_GPIO  
026\_PCH-CPT(7)\_POWER,GND  
027\_PCH-CPT(8)\_POWER,GND  
028\_PCH-SPI ROM/OTH  
029\_TEST POINT

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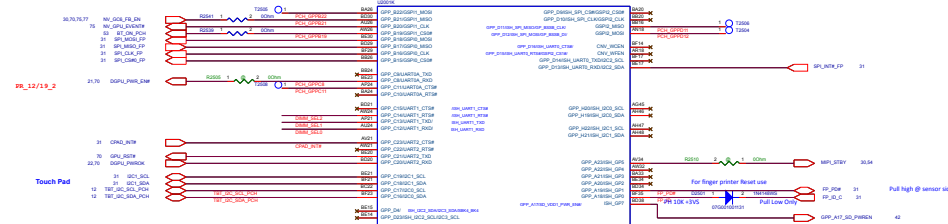
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Main Board



	Rev. (112-11)	Rev. (112-11)	Rev. (112-11)	Rev. (112-11)
DDR4_0	DDR4_0	DDR4_0	DDR4_0	DDR4_0
DDR4_1	DDR4_1	DDR4_1	DDR4_1	DDR4_1
DDR4_2	DDR4_2	DDR4_2	DDR4_2	DDR4_2
DDR4_3	DDR4_3	DDR4_3	DDR4_3	DDR4_3
DDR4_4	DDR4_4	DDR4_4	DDR4_4	DDR4_4
DDR4_5	DDR4_5	DDR4_5	DDR4_5	DDR4_5
DDR4_6	DDR4_6	DDR4_6	DDR4_6	DDR4_6
DDR4_7	DDR4_7	DDR4_7	DDR4_7	DDR4_7
DDR4_8	DDR4_8	DDR4_8	DDR4_8	DDR4_8
DDR4_9	DDR4_9	DDR4_9	DDR4_9	DDR4_9
DDR4_10	DDR4_10	DDR4_10	DDR4_10	DDR4_10
DDR4_11	DDR4_11	DDR4_11	DDR4_11	DDR4_11
DDR4_12	DDR4_12	DDR4_12	DDR4_12	DDR4_12
DDR4_13	DDR4_13	DDR4_13	DDR4_13	DDR4_13
DDR4_14	DDR4_14	DDR4_14	DDR4_14	DDR4_14
DDR4_15	DDR4_15	DDR4_15	DDR4_15	DDR4_15
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DDR4_17	DDR4_17	DDR4_17	DDR4_17	DDR4_17
DDR4_18	DDR4_18	DDR4_18	DDR4_18	DDR4_18
DDR4_19	DDR4_19	DDR4_19	DDR4_19	DDR4_19
DDR4_20	DDR4_20	DDR4_20	DDR4_20	DDR4_20
DDR4_21	DDR4_21	DDR4_21	DDR4_21	DDR4_21
DDR4_22	DDR4_22	DDR4_22	DDR4_22	DDR4_22
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DDR4_25	DDR4_25	DDR4_25	DDR4_25	DDR4_25
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DDR4_29	DDR4_29	DDR4_29	DDR4_29	DDR4_29
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DDR4_31	DDR4_31	DDR4_31	DDR4_31	DDR4_31
DDR4_32	DDR4_32	DDR4_32	DDR4_32	DDR4_32
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DDR4_42	DDR4_42	DDR4_42	DDR4_42	DDR4_42
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DDR4_46	DDR4_46	DDR4_46	DDR4_46	DDR4_46
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DDR4_52	DDR4_52	DDR4_52	DDR4_52	DDR4_52
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DDR4_64	DDR4_64	DDR4_64	DDR4_64	DDR4_64
DDR4_65	DDR4_65	DDR4_65	DDR4_65	DDR4_65
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DDR4_67	DDR4_67	DDR4_67	DDR4_67	DDR4_67
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DDR4_69	DDR4_69	DDR4_69	DDR4_69	DDR4_69
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DDR4_74	DDR4_74	DDR4_74	DDR4_74	DDR4_74
DDR4_75	DDR4_75	DDR4_75	DDR4_75	DDR4_75
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DDR4_79	DDR4_79	DDR4_79	DDR4_79	DDR4_79
DDR4_80	DDR4_80	DDR4_80	DDR4_80	DDR4_80
DDR4_81	DDR4_81	DDR4_81	DDR4_81	DDR4_81
DDR4_82	DDR4_82	DDR4_82	DDR4_82	DDR4_82
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DDR4_84	DDR4_84	DDR4_84	DDR4_84	DDR4_84
DDR4_85	DDR4_85	DDR4_85	DDR4_85	DDR4_85
DDR4_86	DDR4_86	DDR4_86	DDR4_86	DDR4_86
DDR4_87	DDR4_87	DDR4_87	DDR4_87	DDR4_87
DDR4_88	DDR4_88	DDR4_88	DDR4_88	DDR4_88
DDR4_89	DDR4_89	DDR4_89	DDR4_89	DDR4_89
DDR4_90	DDR4_90	DDR4_90	DDR4_90	DDR4_90
DDR4_91	DDR4_91	DDR4_91	DDR4_91	DDR4_91
DDR4_92	DDR4_92	DDR4_92	DDR4_92	DDR4_92
DDR4_93	DDR4_93	DDR4_93	DDR4_93	DDR4_93
DDR4_94	DDR4_94	DDR4_94	DDR4_94	DDR4_94
DDR4_95	DDR4_95	DDR4_95	DDR4_95	DDR4_95
DDR4_96	DDR4_96	DDR4_96	DDR4_96	DDR4_96
DDR4_97	DDR4_97	DDR4_97	DDR4_97	DDR4_97
DDR4_98	DDR4_98	DDR4_98	DDR4_98	DDR4_98
DDR4_99	DDR4_99	DDR4_99	DDR4_99	DDR4_99
DDR4_100	DDR4_100	DDR4_100	DDR4_100	DDR4_100

Boot BIOS Strap Bit BBS

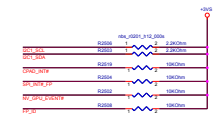
PCH\_GPPB21: weak internal pull down

PU	LPC
PU	SPI (Default)

No Reboot

PCH\_GPPB19: weak internal pull down

PU	Enable
PU	Disable (Default)



PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

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PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

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PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

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PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

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PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

PCH\_GPPB21: NV\_GDR\_FB\_EN

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## 013 DDR4 TERMINATION

014 DDR4 ON-BOARD A

015 DDR4 ON-BOARD B

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017 \*\*\*\*\*

018 DDR4 CA/DQ Voltage

019 \*\*\*\*\*

020\_PCH\_HDA,SMBUS,SYS PW  
R,JTAG021\_PCH-CPT(2)\_PCIE,USB2,MIS  
C

022\_PCH-CPT(3)\_CLK,LPC,USB3

023\_PCH-CPT(4)\_eDP,PCI,DP

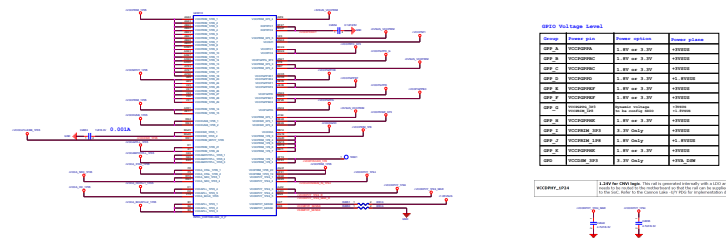
024 PCH-CPT(5) SPI,CNV

025\_PCH-CPT(6)\_GPIO

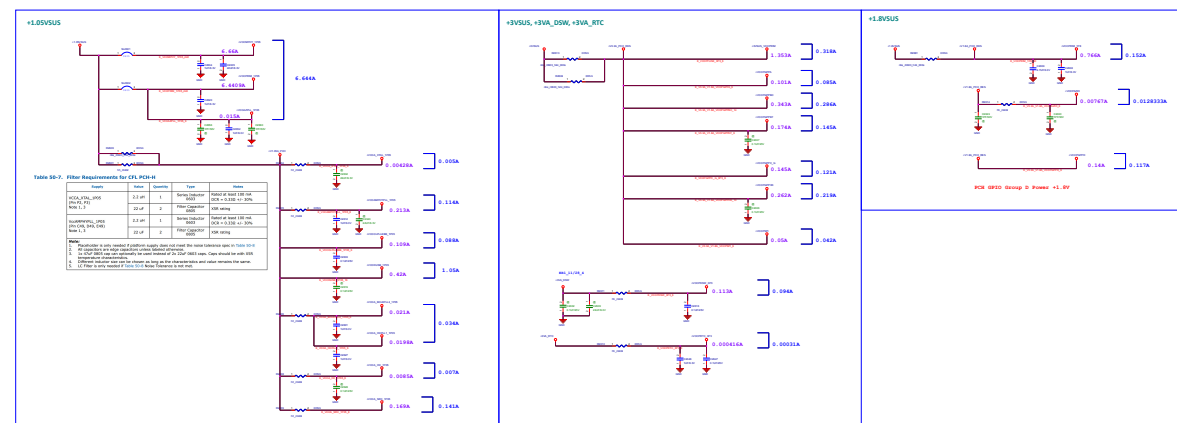
026\_PCH-CPT(7)\_POWER,GND

027\_PCH-CPT(8)\_POWER,GND

028 PCH-SPI ROM/OTH



Blue reference EDS  
Purple reference CRB

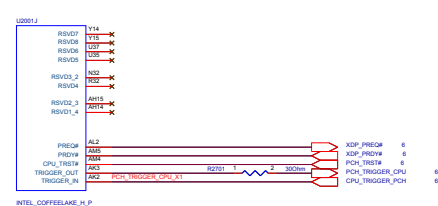
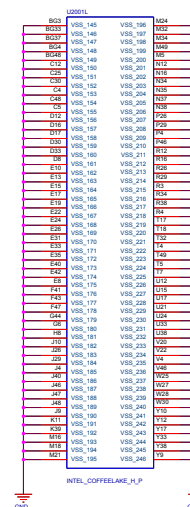
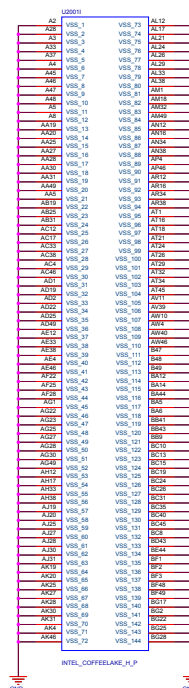


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052 USB3.1 Port1

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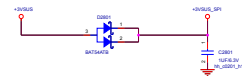
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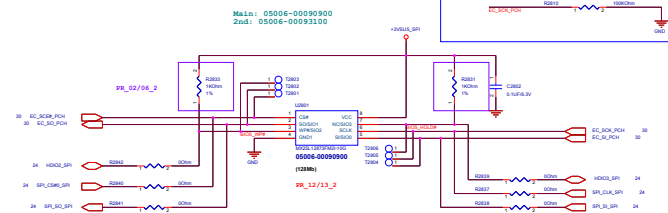
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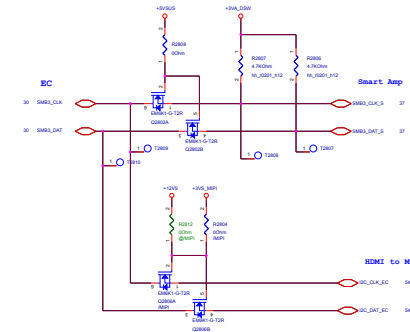
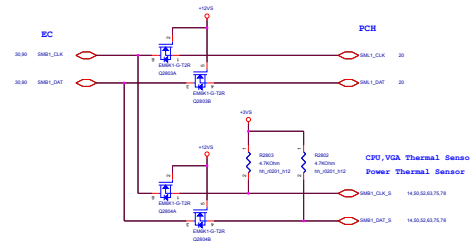
## SPI Power



## 1st SPI ROM



## System Management Interface



ASUS UX550GD		Rev	1.1
Title: PCHSPI ROM.0TH			
Dept.: ASUS COMPUTER	Engineer: Mario_jhu		
Date: 2014/04/04	Drawn: 28	of 102	

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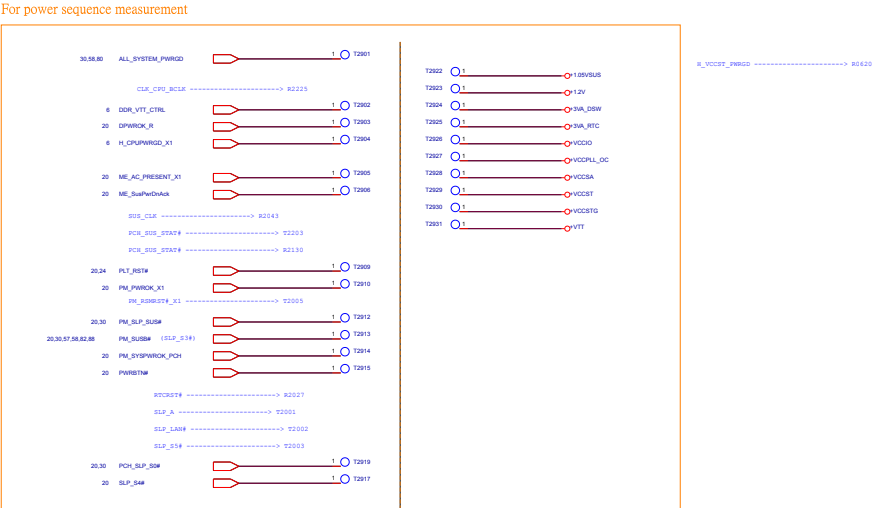
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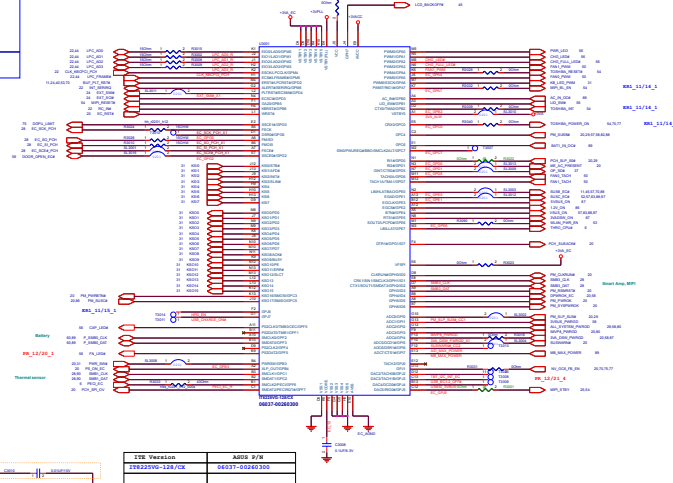
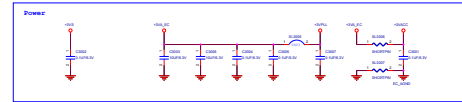
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BC 8385	
Only 3V Tolerance	
Q36 (V1, V2, V3, V4, V5, V6)	
Q37 (V7, V8, V9, V10, V11)	
Q38 (V12)	
Q39 (V13)	
Q40 (V14)	
Q41 (V15)	
Q42 (V16)	
Can be adjusted to Open-Drain for part:	
Q36 (V1, V2, V3, V4, V5, V6)	
Q37 (V7, V8, V9, V10, V11)	
Q38 (V12)	
Q39 (V13)	
Q40 (V14)	
Q41 (V15)	
Q42 (V16)	
BC Register	



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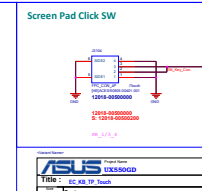
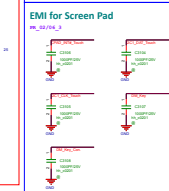
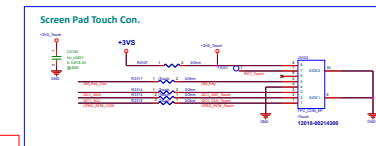
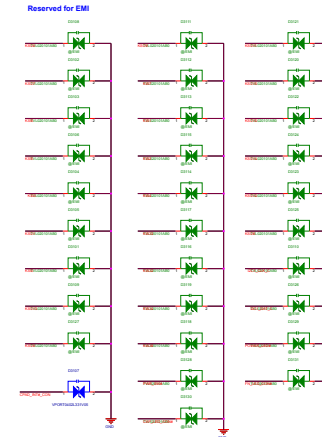
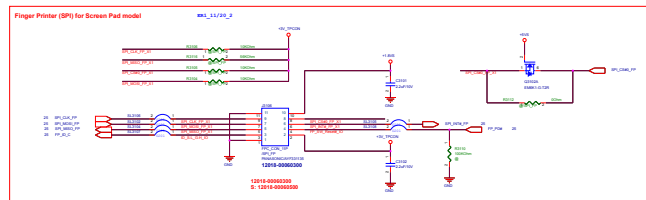
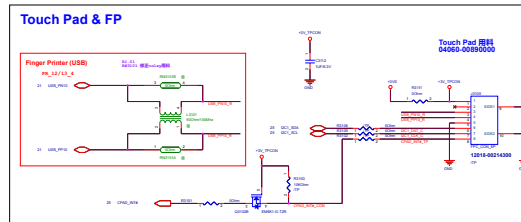
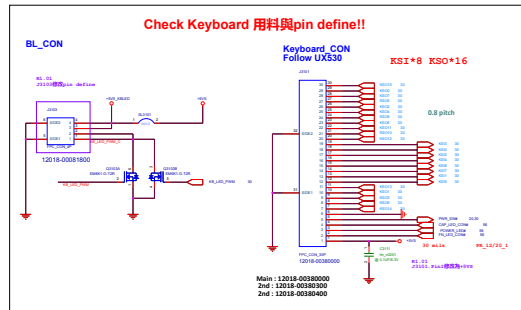
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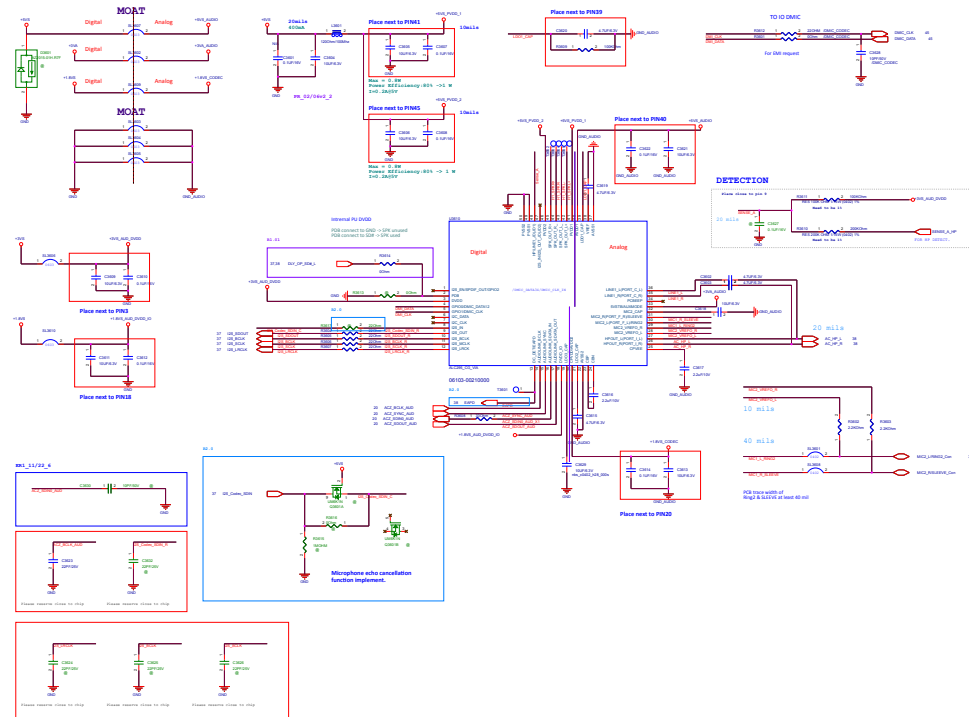
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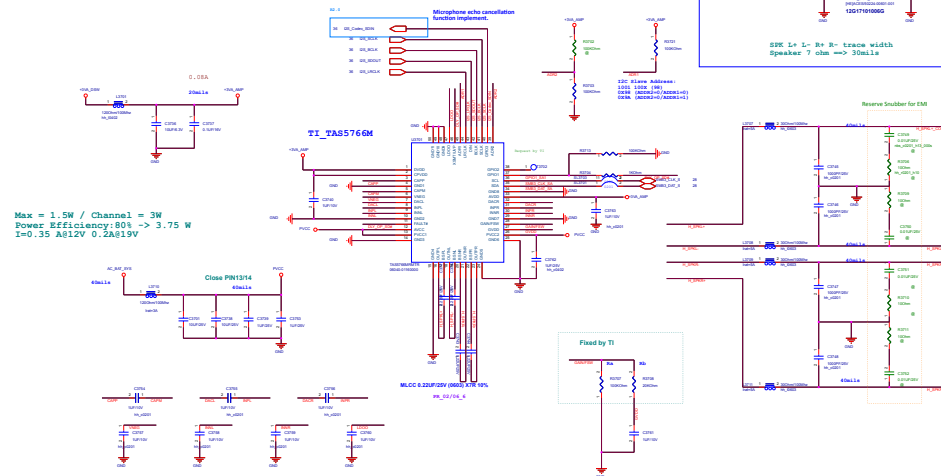
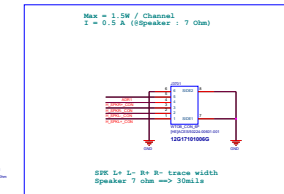
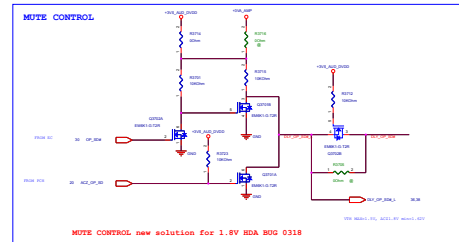
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HP & MIC Connector

HP ESD Protect

Headphone depop circuit

Speaker Connector

20161003 Reserve  
use smart Amp

ASUS  
TBS : Aud HP Jack MIC  
Dept:   
Engineer:   
Date:   
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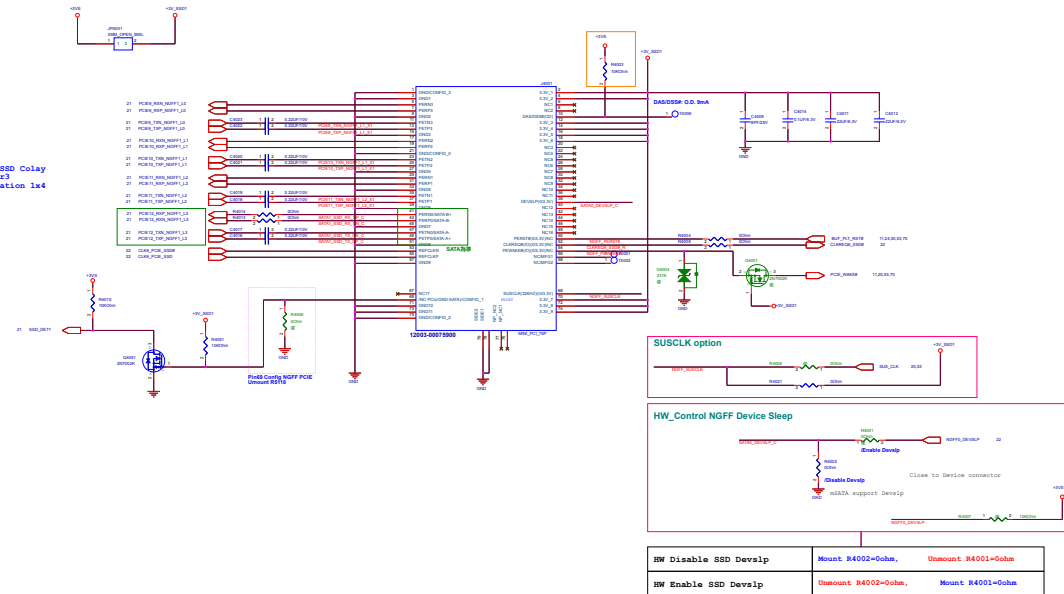
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NGFF\_SSD

PCIe9-PCIe12  
PCIe4 & SATA SSD Colay  
PCIe Controller  
PCIe\* Configuration 1x4



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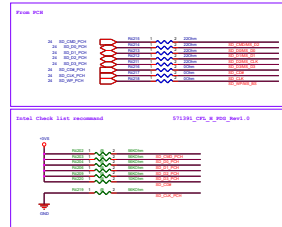
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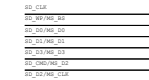
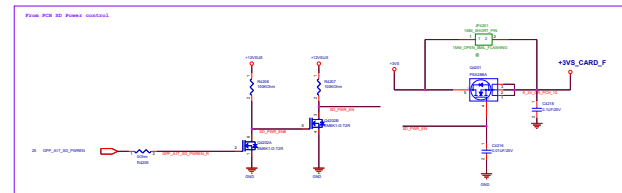
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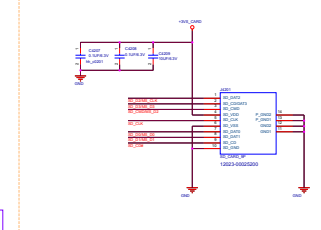
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CR CONN Power



CR CONN



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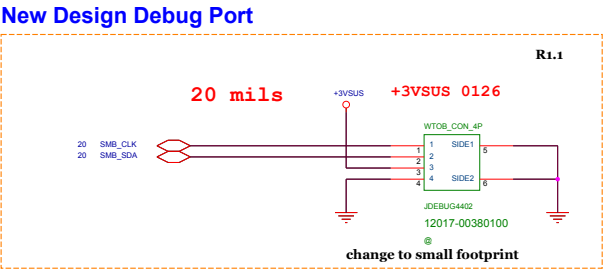
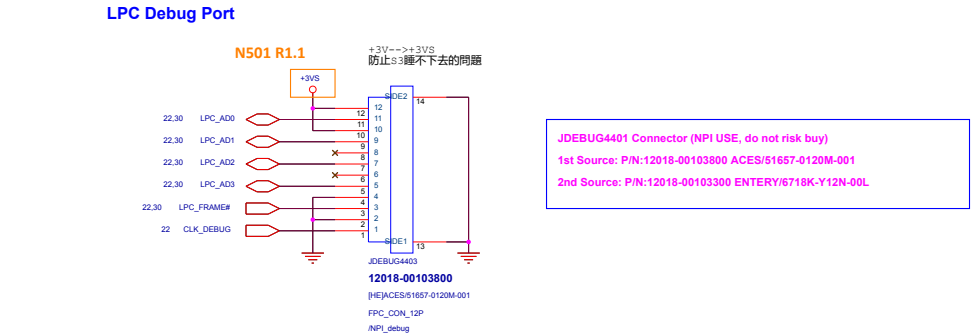
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ASUS		UX550GD	2.1
Title : DEBUG_LPC			
Size	Dept.:	ASUS/REK COMPUTER	Engineer: Mario_Jhu
A	Date:	Tuesday, February 06, 2018	Sheet 44 of 102

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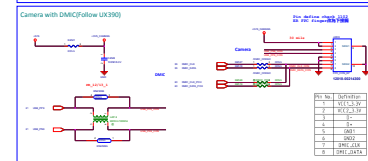
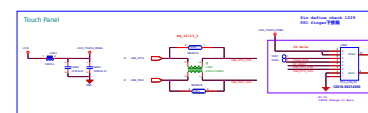
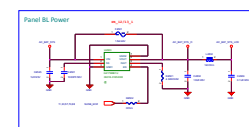
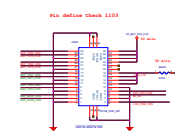
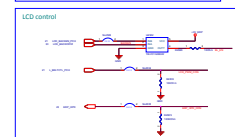
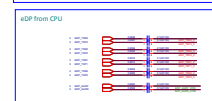
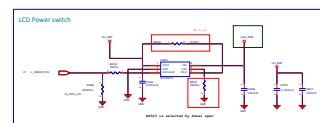
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ASUS  
Model: CRT\_40P

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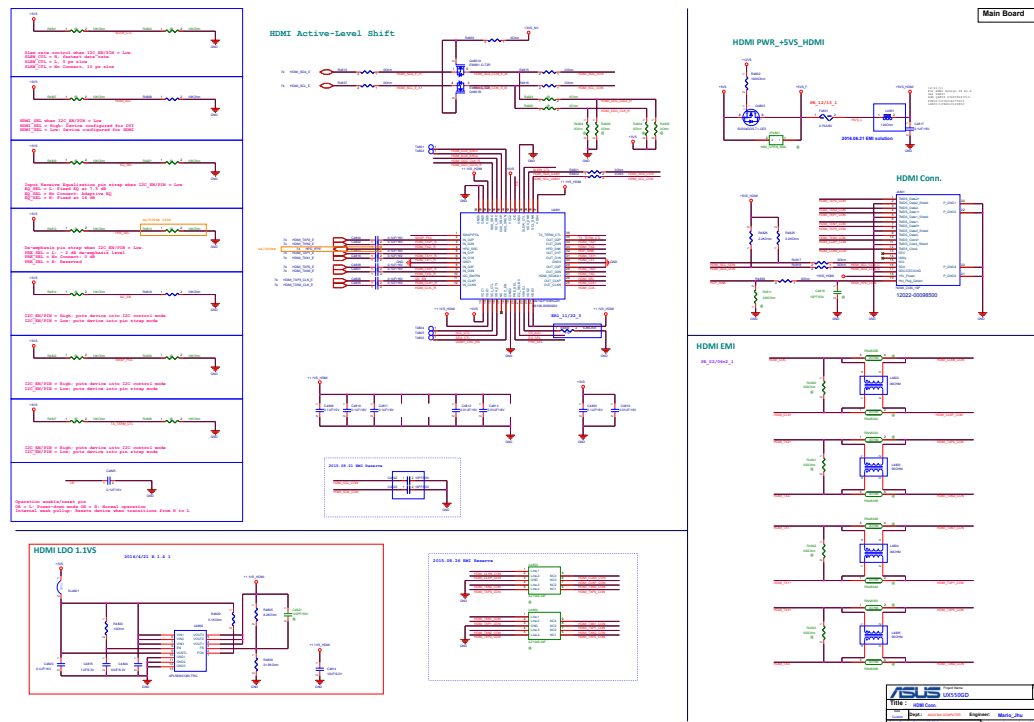
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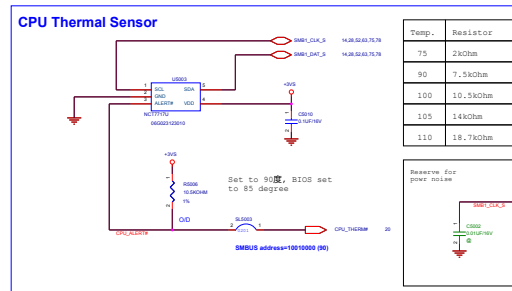
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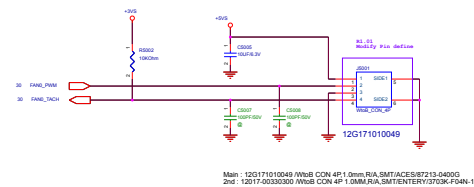
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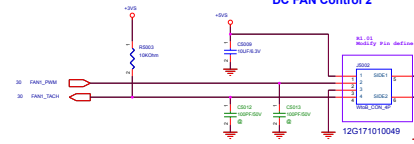
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DC FAN Control 1



DC FAN Control 2





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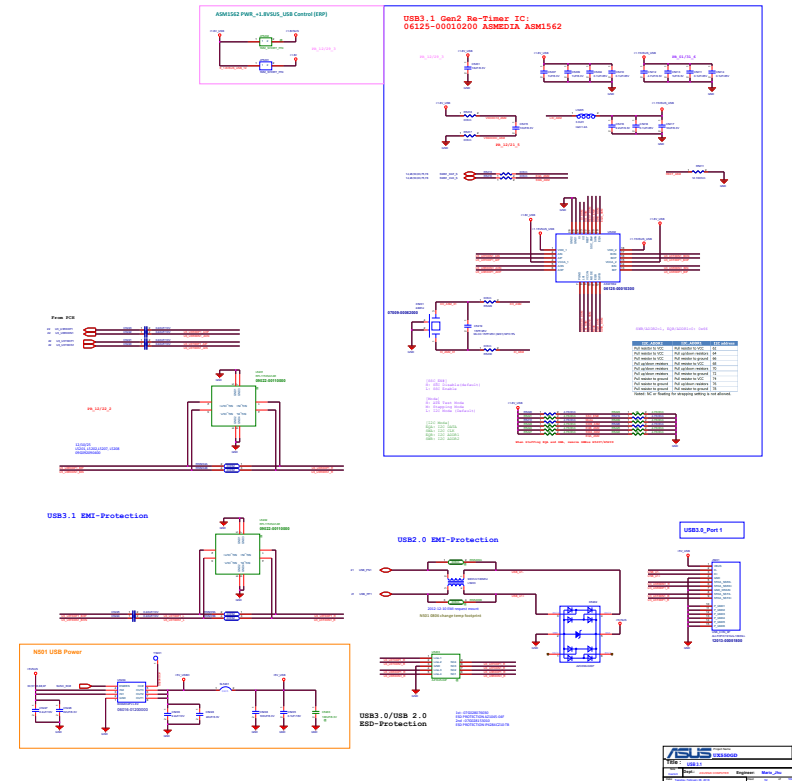
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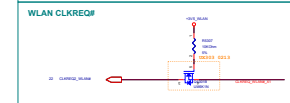
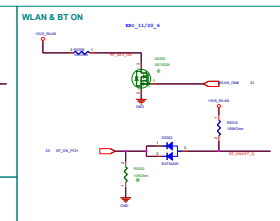
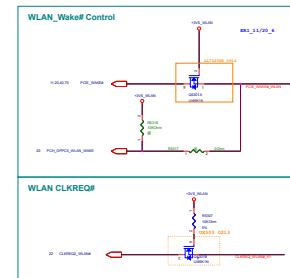
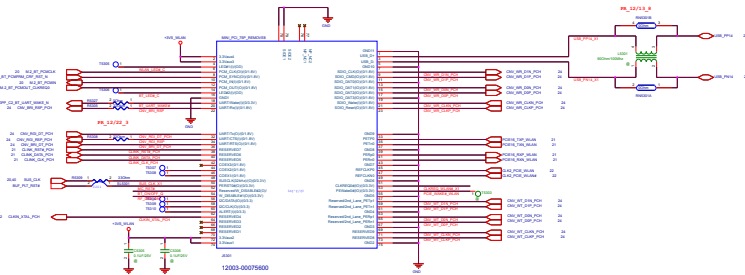
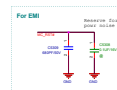
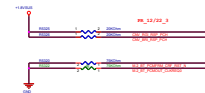
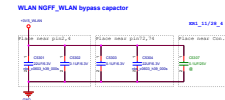
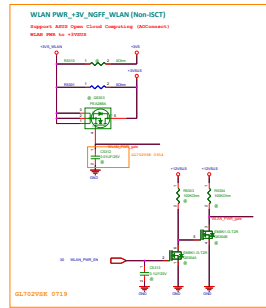
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W850GD	W850GD
W850GD	W850GD

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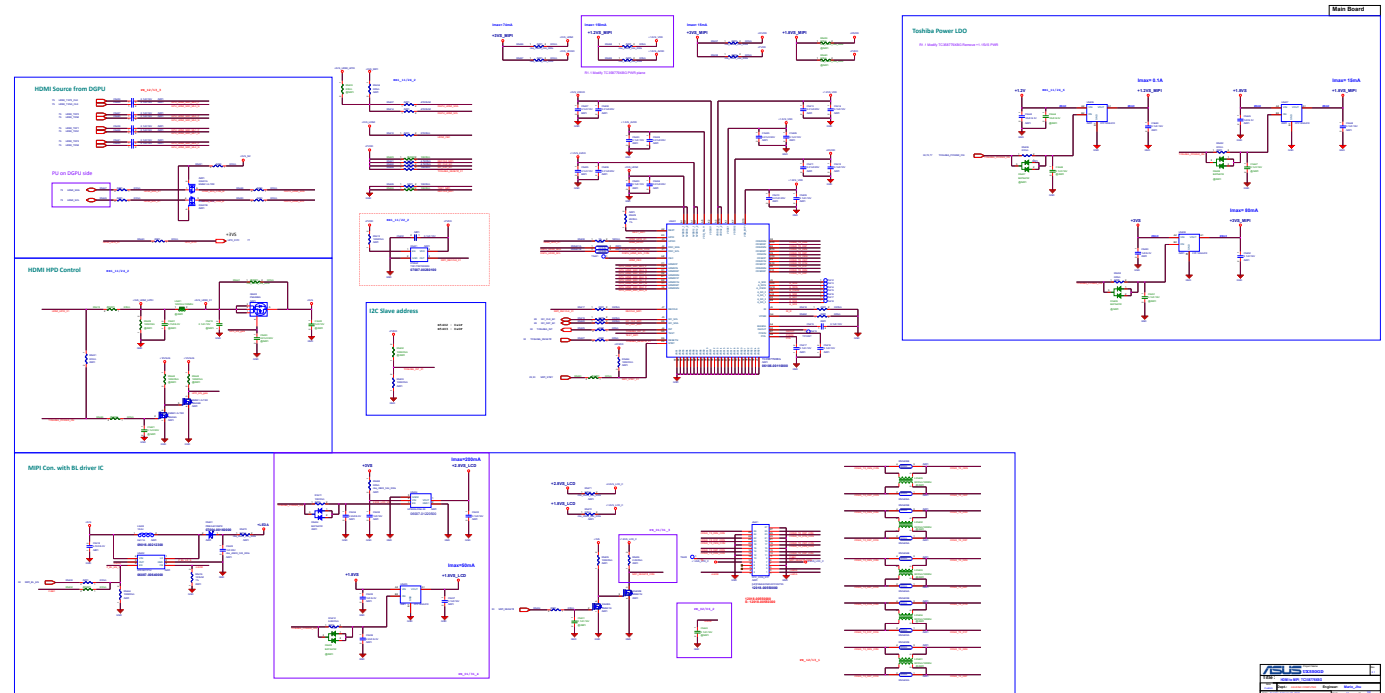
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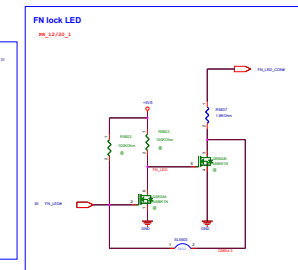
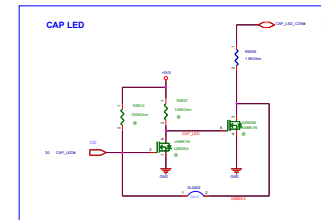
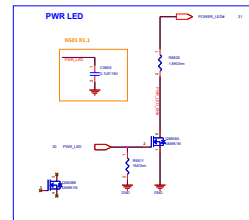
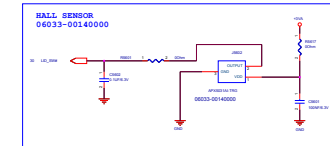
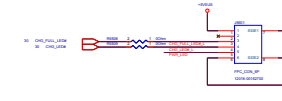
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2016/07/12 Check LED USE

2014/05/29 Add HDD &amp; SSD LED control circuit.

HDD LED

2016/11/02  
UX550 Remove

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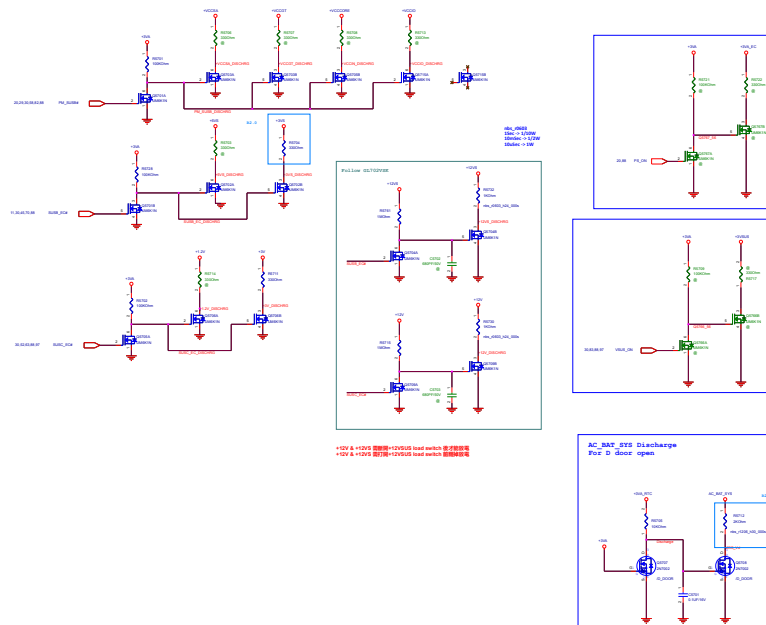
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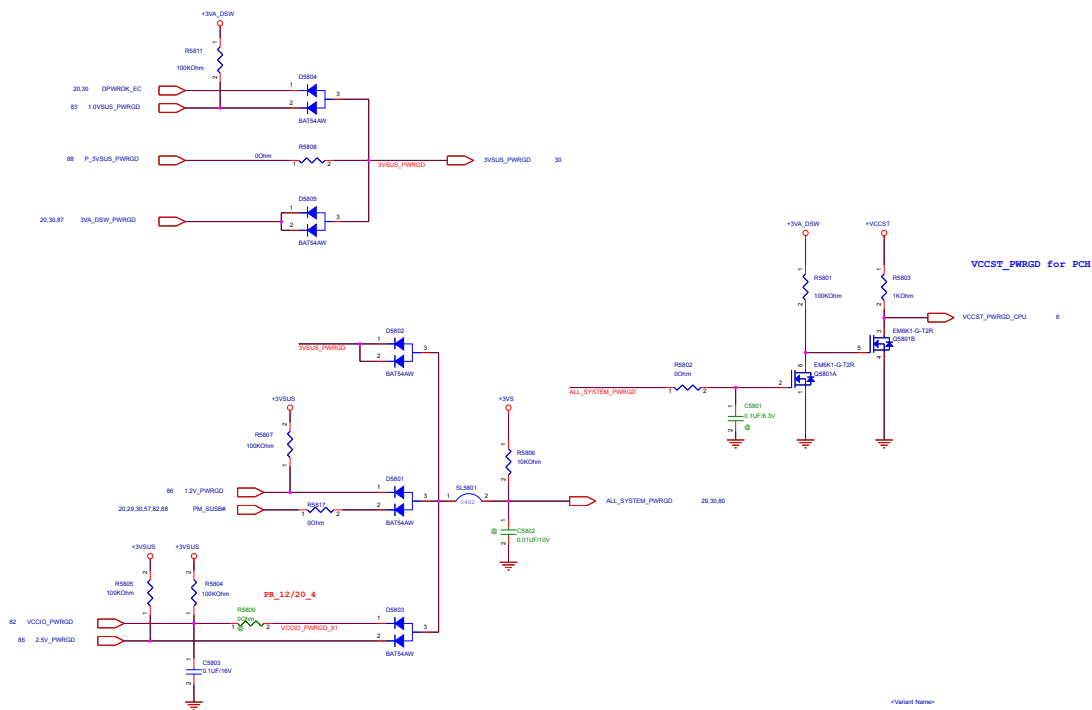
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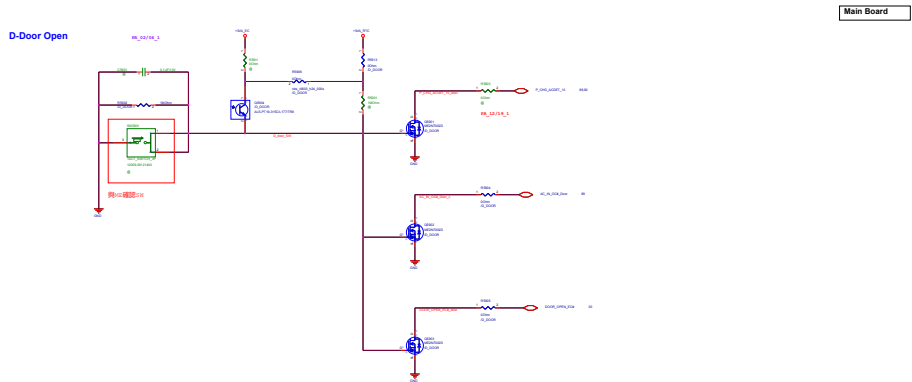


<Variant Name:

 Project Name <b>UX550GD</b>		Rev <b>2</b>
<b>Title :</b> <b>Power Protect</b>		
Size Custom	Dept.: <b>ASUSTek COMPUTER</b>	Engineer: <b>Mario_Jhu</b>
Date: <b>Tuesday, February 08, 2018</b>		Sheet <b>58</b> of <b>102</b>

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ASUS	U3000
Model	U3000
Rev	1.0
Drawn	Wenli_Fan
Checked	
Approved	

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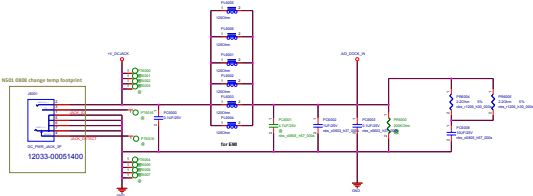
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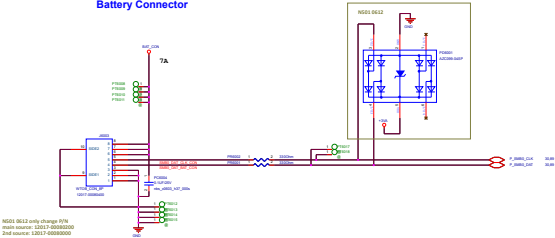
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DC-IN Connector



Battery Connector



ASUS

Title: DC & BAT IN

Author:

Version:

US058V0

1.0



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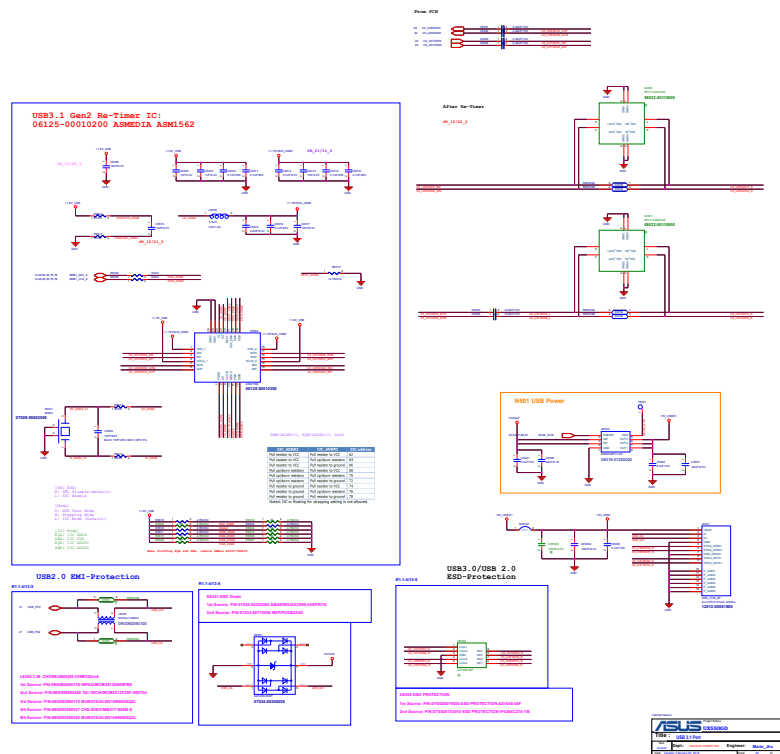
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067\_screw hold

068\_Power Net name

069\_OTH\_EMI

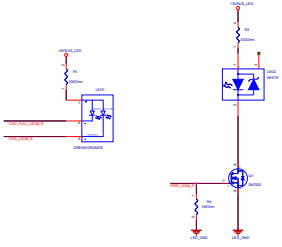
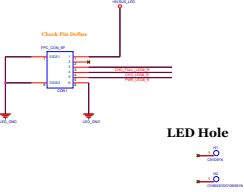
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LED FPC



LED Board

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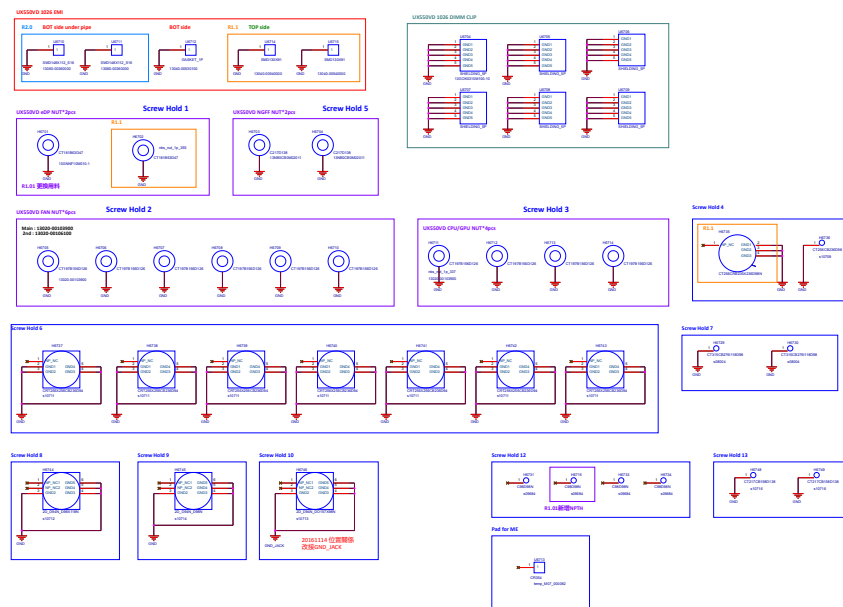
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AD\_DOCK\_IN

AD\_DOCK\_IN

60.89

AC\_BAT\_SYS

AC\_BAT\_SYS

37.45,57.69,61.82,63.86,67.89,91.94

BAT\_CON

BAT\_CON

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+12VSUS

+12VSUS

42.53,54.77,57.88

+12V

+12V

57.88

+12VS

+12VS

38.48,57.88

+5VA

+5VA

87

+5VSUS

+5VSUS

12.28,52.58,63.78,62.83,85.87,88,90.91,94

+5VS

+5VS

31.36,38.48,50.54,58.57,78.88

+3VA

+3VA

20.30,38.56,57.80,83.87,88.89

+3VA\_EIC

+3VA\_EIC

20.30,38.57,58.88

+3VA\_RTC

+3VA\_RTC

20.24,26.29,57.59

+3VA\_DSW

+3VA\_DSW

20.21,26.28,29.30,37.45,58.88,87.88,97

+3VSUS

+3VSUS

8.50,31.22,34.25,36.28,30.44,53.57,58.76,75.77,88

+3V

+3V

12.57,88

+3VS

+3VS

6.12,14.20,31.22,23.24,25.28,30.31,36.38,40.42,44.45,46.50,53.54,57.58,76.75,77.82,88.89

+1.8VSUS

+1.8VSUS

8.24,28.52,53.88,97

+1.8VS

+1.8VS

31.36,54.77,88

+2.5V

+2.5V

14.15,88

+1.2V

+1.2V

8.6,13.14,15.16,20.29,54.57,88,88

+VTT

+VTT

13.28,88

M\_A\_VREFCA

M\_A\_VREFCA

14.18

M\_B\_VREFCA

M\_B\_VREFCA

15.18

+1.0VSUS

+1.0VSUS

26.29,83.88

+VCCPAZIO

+VCCPAZIO

25.26

+VCCD

+VCCD

3.8,29.57,88

+VCCST

+VCCST

6.8,21.26,58.88,88

+VCCSTG

+VCCSTG

8.8,29.29,88

+VCCPLL

+VCCPLL

8.88

+VCCPLL\_OC

+VCCPLL\_OC

8.29,88

+VCCDOME

+VCCDOME

9.10,57.80,81

+VCCDST

+VCCDST

9.10,57.80,81

+VCCSA

+VCCSA

8.29,57.80,81

+HNVDD

+HNVDD

77.91

+FBVDDQ

+FBVDDQ

71.72,73.77,78.94

+PEX\_VDD

+PEX\_VDD

70.75,77.88

+VDD\_AON

+VDD\_AON

70.74,75.76,77

+VDD\_MANN

+VDD\_MANN

70.73,74.75,76,77

+VIB\_AON

+VIB\_AON

77.91

+3VS\_NV

+3VS\_NV

48.54,75.74,75.77

+VCCSVL\_LC

+VCCSVL\_LC

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+VCCSVL\_PDC

+VCCSVL\_PDC

12

+VCCSVL\_BK

+VCCSVL\_BK

11.12

ASUS

Project Name

Rev

2.1

Title : OTH\_for test only

Size

Dept.: ASUS/ux COMPUTER

Engineer: Mario\_jhu

Date: Tuesday, February 05, 2016

Draw

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UX550VD EMI request

R2.0  
EMI 上件 +14pcs 0.10F

Pogo pin EMI request

TOP side H=4.2

TOP side H=1.45

<Variant Name>

ASUS		Project Name	Rev
UX550GD			2.1
Title : OTH EMI			
Size	Dept.: ASUS&COMPUTER	Engineer:	Mario_jhu
Date:	Tuesday, February 05, 2019	Print	60 of 100

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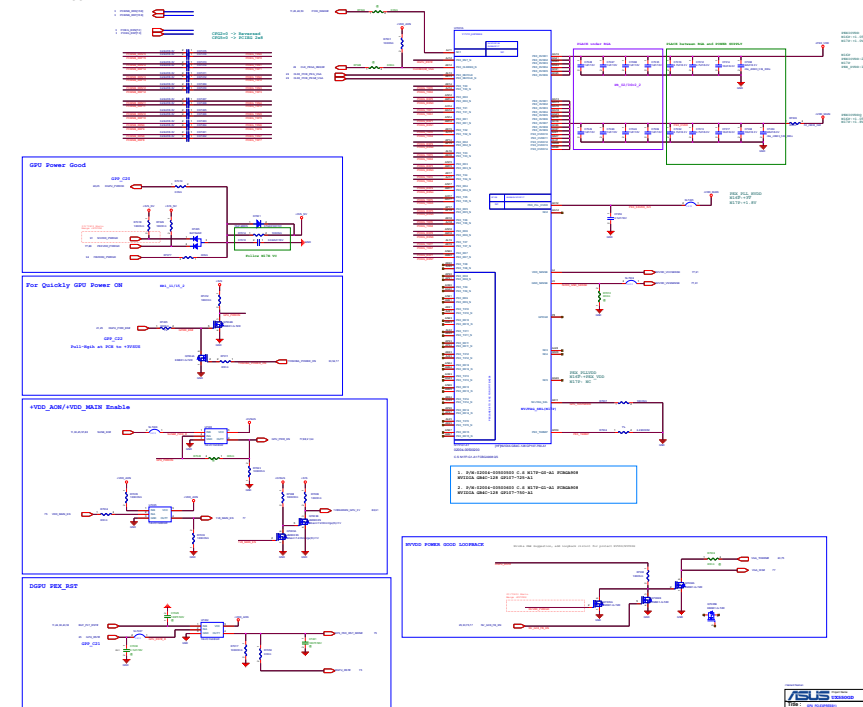
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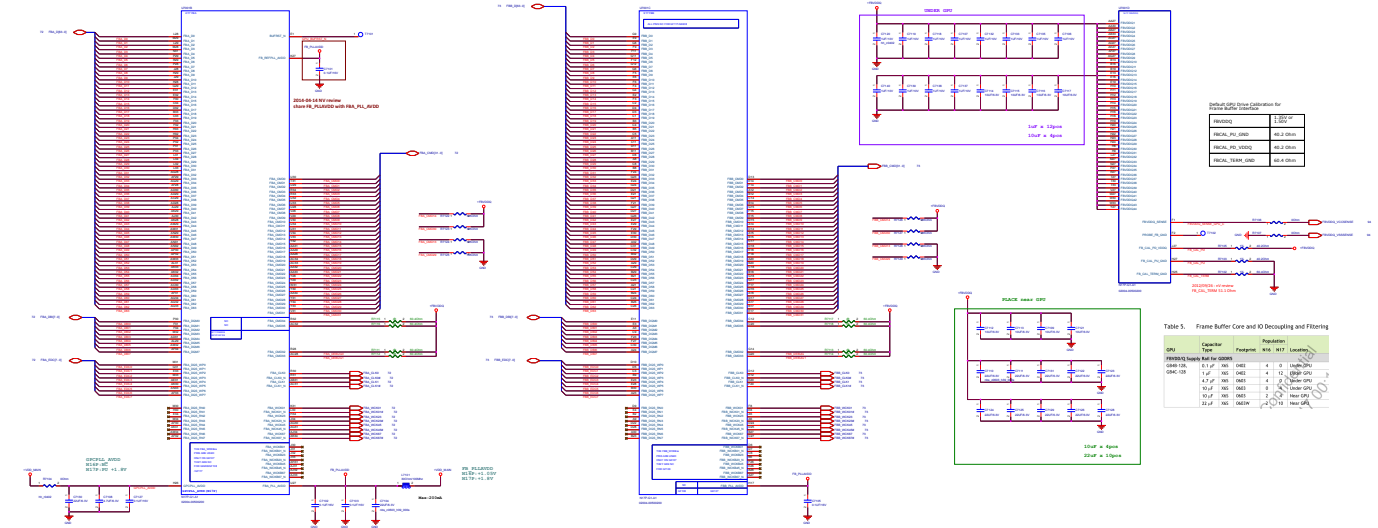
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GPU MEMORY INTERFACE: PARTITION A

GPU MEMORY INTERFACE: PARTITION B



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073\_FRAME BUFFER-B(4)  
074\_VGA\_CRT/LVDS(5)  
075\_VGA\_GPIO/DVI/DP(6)  
076\_VGA\_XTAL/STRAPPING(7)  
077\_VGA\_PWG/GND(8)  
078\_VRAM Cap/UP1905  
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081\_PW\_COFFEELAKE (2)  
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083\_PW\_+1.05VSUS  
084\_PW\_  
085\_PW

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MP+0: MIO0A1

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079\_\*\*\*\*

080\_PW\_COFFEELAKE (1)

081\_PW\_COFFEELAKE (2)

082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085\_PW

MP+1: MIO0A2

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080\_PW\_COFFEELAKE (1)

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083\_PW\_+1.05VSUS

084\_PW\_

085\_PW

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080\_PW\_COFFEELAKE (1)

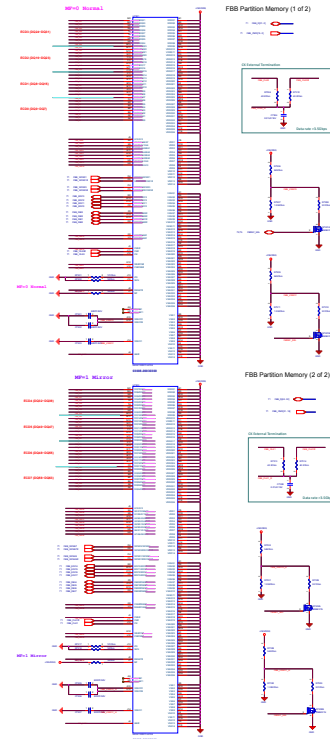
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USE CODES VRAM 20000 + 22 (1024MB)



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083\_PW\_+1.05VSUS

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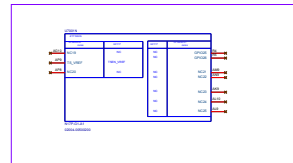
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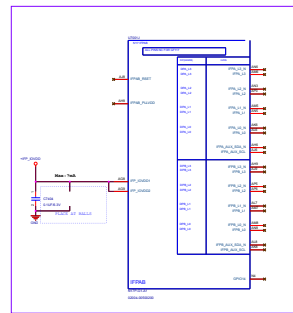
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MoveTo

CRT DAC\_A



LVDS IFPA/B



HDMI IFPE/F

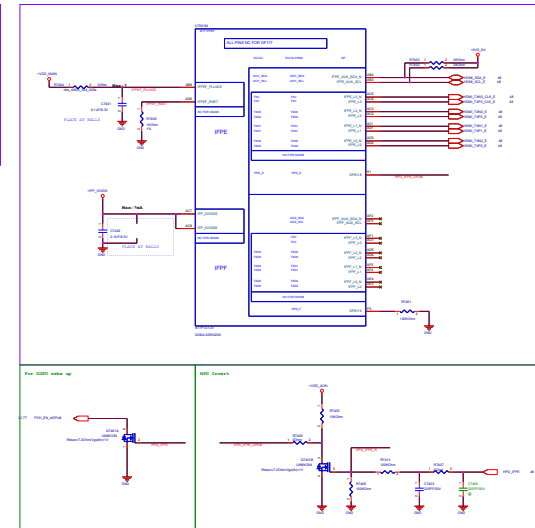


Table 10.5 Display-Link Power Rail Applicability

Display Link Rail	Display Links that Receive Power from This Rail					
	Link A	Link B	Link C	Link D	Link E	Link F
IFP_IOVDD	✓	✓	✓	✓	✓	✓
IFPAB_PLLVDD		✓				
IFPCD_PLLVDD			✓	✓		
IFPEF_PLLVDD					✓	✓



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066\_IO\_LED\_Board

067 screw hold

068 Power Net name

069 OTH EMI

070\_VGA\_PCI-EXPRESS(1)

071 GPU FB-IF GDDR5(2)

072 FRAME BUFFER-A(3)

073 FRAME BUFFER-B(4)

074\_VGA\_CRT/LVDS(5)

075 VGA GPIO/DVI/DP(6)

076 VGA XTAL/STRAPPING(7)

077 VGA PWG/GND(8)

078 VRAM Cap/UP1905

079 \*\*\*\*\*

080 PW COFFEELAKE (1)

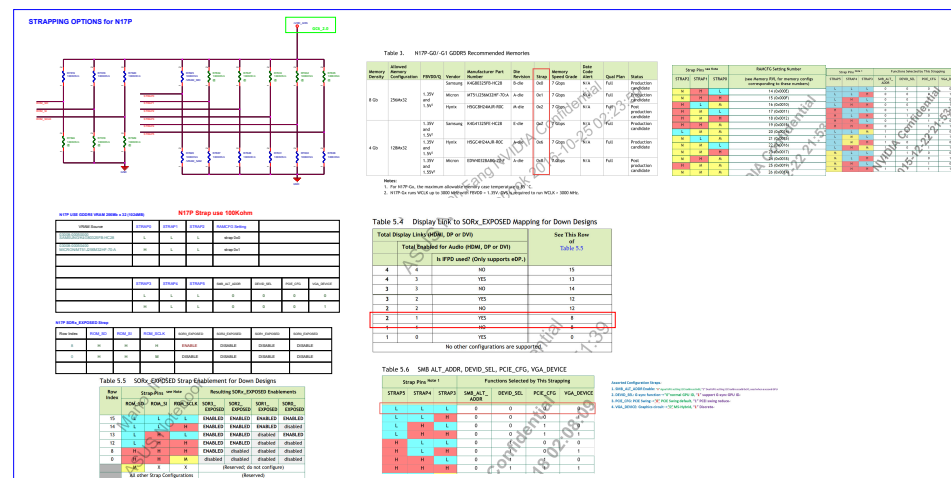
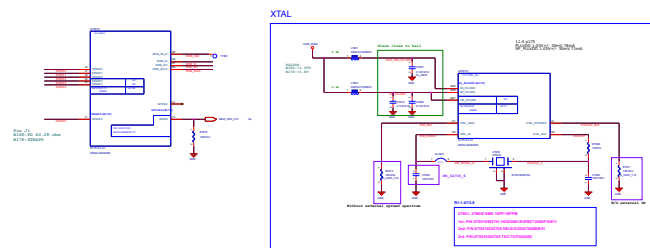
081 PW COFFEELAKE (2)

082\_PW\_+VCCIO

083 PW +1.05VSUS

084 PW

085 PW



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065\_

066\_IO\_LED\_Board

067\_screw hold

068 Power Net name

069\_OTH\_EMI

070\_VGA\_PCI-EXPRESS(1)

071\_GPU\_FB-IF\_GDDR5(2)

072\_FRAME BUFFER-A(3)

073\_FRAME BUFFER-B(4)

074\_VGA\_CRT/LVDS(5)

075\_VGA\_GPIO/DVI/DP(6)

076\_VGA\_XTAL/STRAPPING(7)

077\_VGA\_PWG/GND(8)

078\_VRAM Cap/UP1905

079\_\*\*\*\*\*

080\_PW\_COFFEELAKE (1)

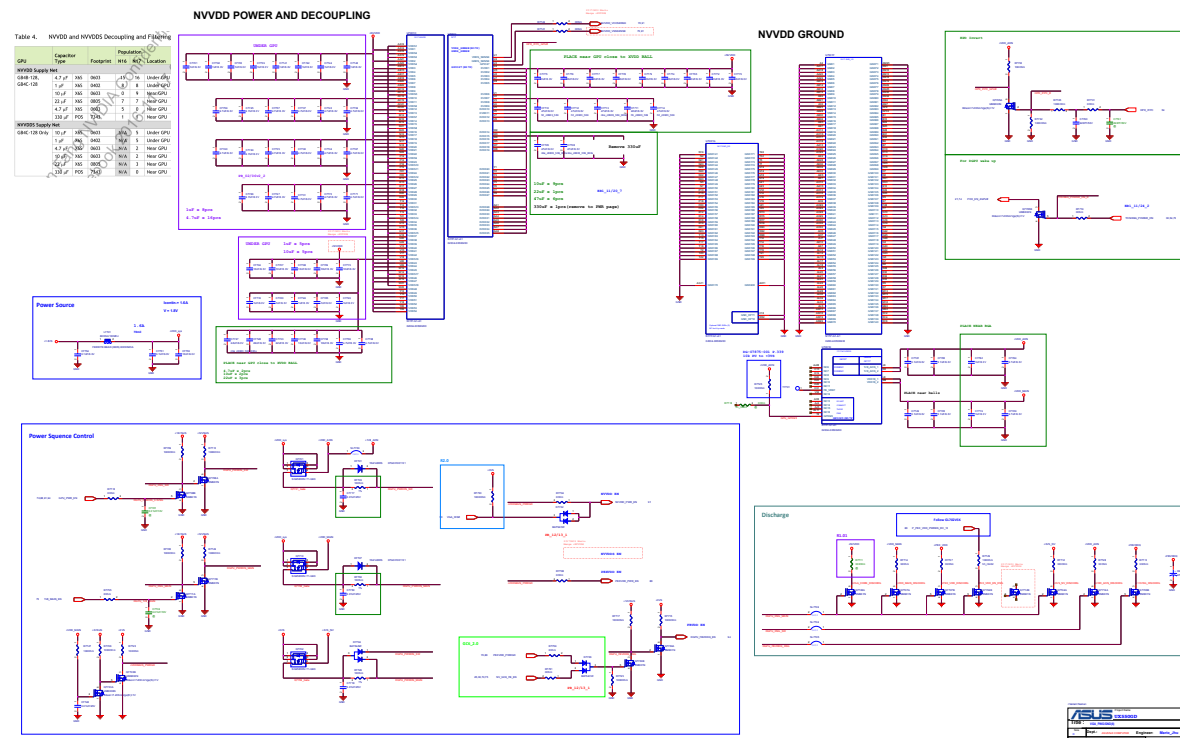
081\_PW\_COFFEELAKE (2)

082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085 PW



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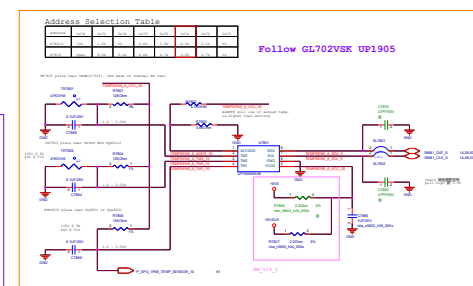
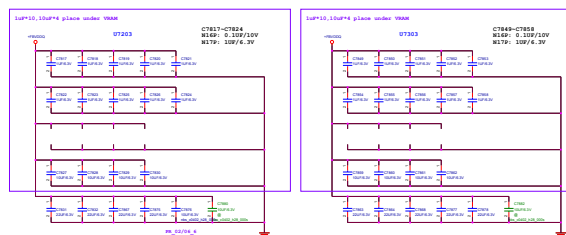
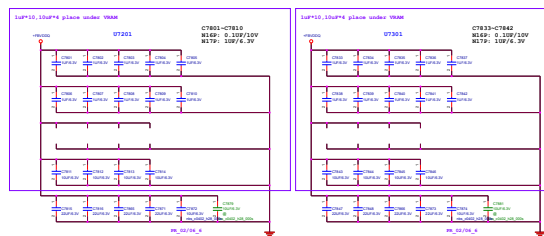
## MoveTo

065\_  
066\_IO\_LED\_Board  
067\_screw hold  
068\_Power Net name  
069\_OTH\_EMI

```
070_VGA_PCI-EXPRESS(1)
071_GPU_FB-IF_GDDR5(2)
072_FRAME BUFFER-A(3)
073_FRAME BUFFER-B(4)
074_VGA_CRT/LVDS(5)
075_VGA_GPIO/DVI/DP(6)
076_VGA_XTAL/STRAPPING(7)
077_VGA_PWG/GND(8)
078_VRAM Cap/UP1905
079_*****
080_PW_COFFEELAKE (1)
081_PW_COFFEELAKE (2)
082_PW_+VCCIO
083_PW_+1.05VSUS
084_PW_
085_PW_
```

VRAM Backside cap(pca)				
	NVIDIA		UX550	
	N16	N17	N16	N17
0.1uF	10	0	10	0
1uF	4	10	4	10
10uF	2	4	2	4

Location is close to DRAM for clamshell mode



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074\_VGA\_CRT/LVDS(5)  
075\_VGA\_GPIO/DVI/DP(6)  
076\_VGA\_XTAL/STRAPPING(7)  
077\_VGA\_PWG/GND(8)  
078\_VRAM Cap/UP1905  
079\_\*\*\*\*  
080\_PW\_COFFEELAKE (1)  
081\_PW\_COFFEELAKE (2)  
082\_PW\_+VCCIO  
083\_PW\_+1.05VSUS  
084\_PW\_  
085\_PW

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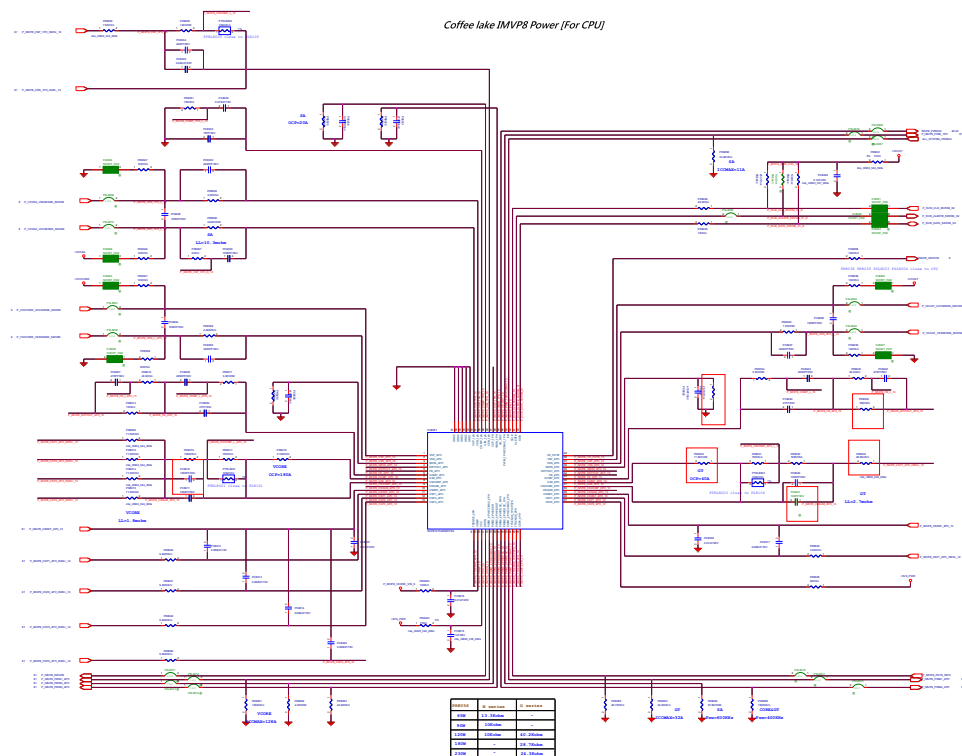
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067\_screw hold

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074\_VGA\_CRT/LVDS(5)

075\_VGA\_GPIO/DVI/DP(6)

076\_VGA\_XTAL/STRAPPING(7)

077\_VGA\_PWG/GND(8)

078\_VRAM Cap/UP1905

079\_\*\*\*\*

080\_PW\_COFFEELAKE (1)

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082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085\_PW

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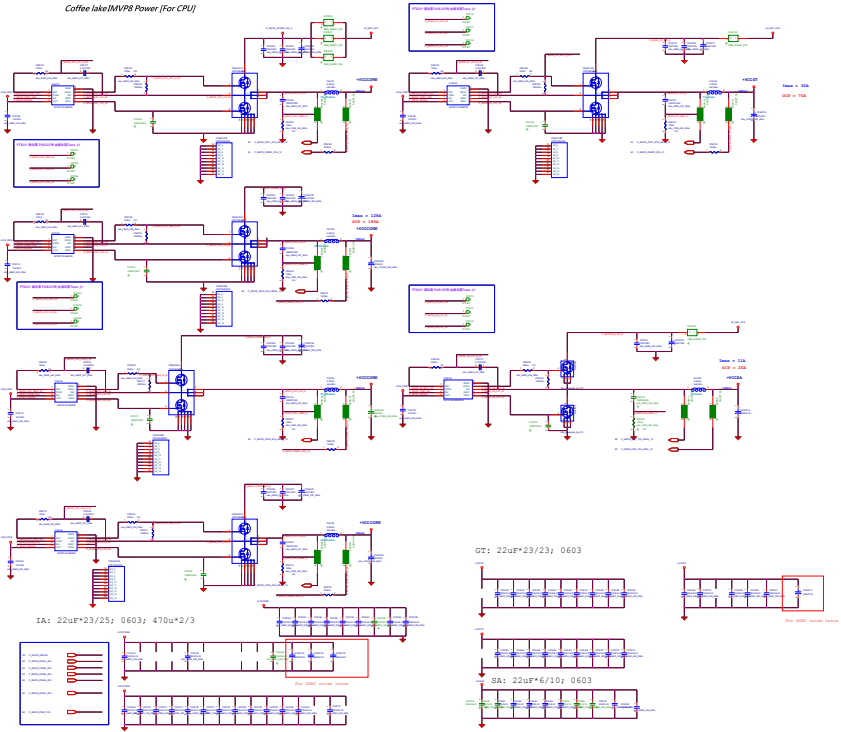
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MoveTo

Coffee lake(MVP8 Power (For CPU))



IA: 22uF\*23/25; 0603; 470u\*2/3

GT: 22uF\*23/23; 0603

SA: 22uF\*6/10; 0603

Fig. 0805\_VCCIO\_VRAM

ASUS



**Hide**

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066\_IO\_LED\_Board

067\_screw hold

068 Power Net name

069\_OTH\_EMI

070\_VGA\_PCI-EXPRESS(1)

071\_GPU\_FB-IF\_GDDR5(2)

072\_FRAME BUFFER-A(3)

073\_FRAME BUFFER-B(4)

074\_VGA\_CRT/LVDS(5)

075\_VGA\_GPIO/DVI/DP(6)

076\_VGA\_XTAL/STRAPPING(7)

077\_VGA\_PWG/GND(8)

078\_VRAM Cap/UP1905

079\_\*\*\*\*\*

080\_PW\_COFFEELAKE (1)

081\_PW\_COFFEELAKE (2)

082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085 PW

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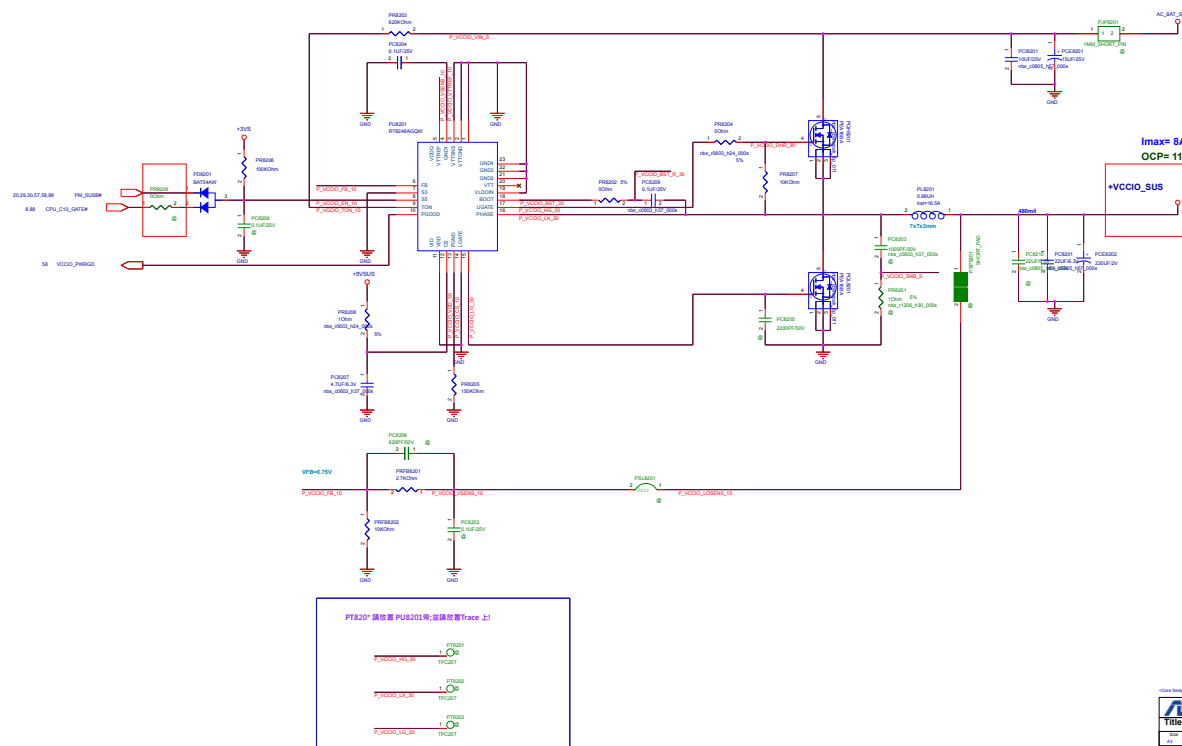
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+VCCIO [For CPU]



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066\_IO\_LED\_Board

067\_screw hold

068\_Power Net name

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070\_VGA\_PCI-EXPRESS(1)

071\_GPU\_FB-IF\_GDDR5(2)

072\_FRAME BUFFER-A(3)

073\_FRAME BUFFER-B(4)

074\_VGA\_CRT/LVDS(5)

075\_VGA\_GPIO/DVI/DP(6)

076\_VGA\_XTAL/STRAPPING(7)

077\_VGA\_PWG/GND(8)

078\_VRAM Cap/UP1905

079\_\*\*\*\*

080\_PW\_COFFEELAKE (1)

081\_PW\_COFFEELAKE (2)

082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085\_PW

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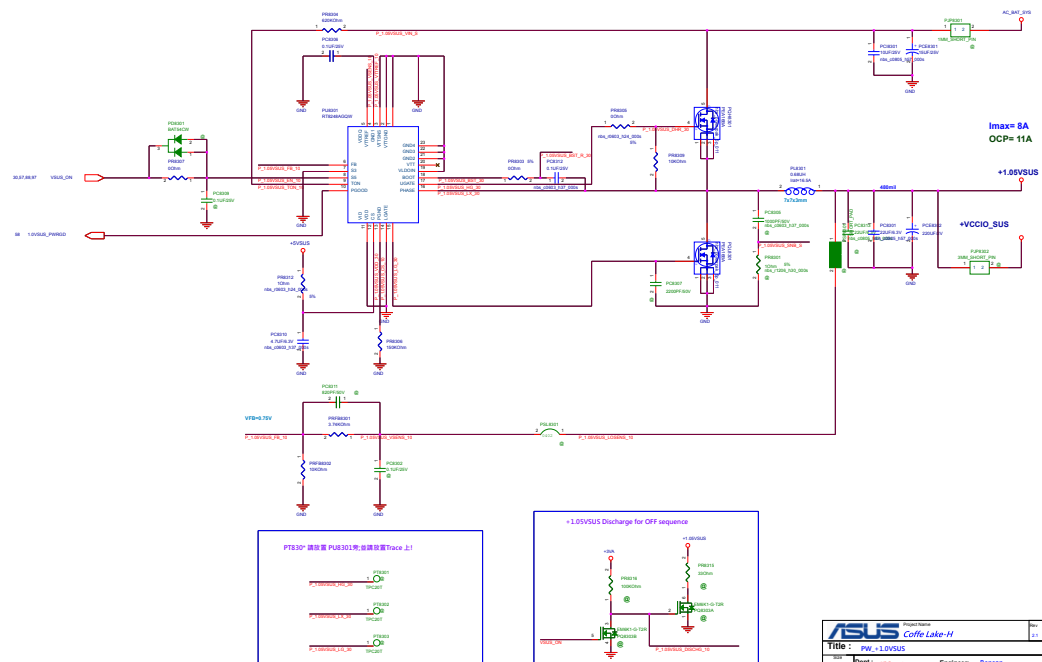
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+1.05VSUS [For PCH]



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083\_PW\_+1.05VSUS  
084\_PW\_  
085\_PW\_  
086\_PW\_1.2V/+VTT/2.5V  
087\_PW\_+3VADSW/+5VSUS  
088\_PW\_LOAD SWITCH  
089\_PW\_CHARGER  
090\_PW\_PROTECTION  
091\_PW\_+NVVDD (combine NVV  
DDS)  
092\_PW\_  
093\_PW\_  
094\_PW\_+FBVDDQ  
  
095\_PW\_\*\*\*  
096\_PW\_\*\*\*  
097\_PW\_+1.8VSUS  
098\_PW\_

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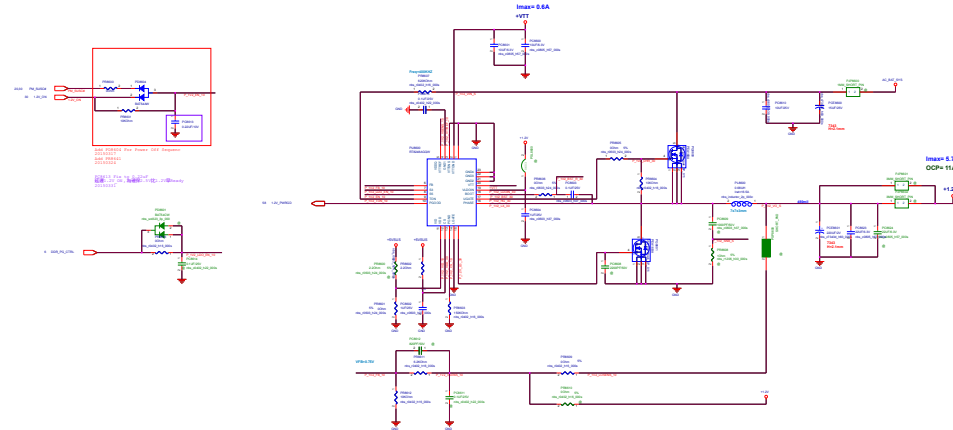
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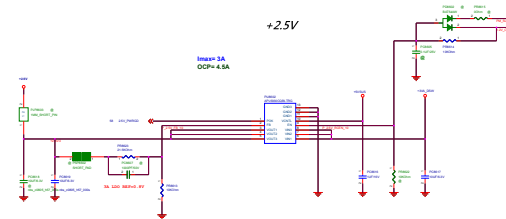
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Main Board

+1.2V / VTT / 2.5V[For Memory]



+2.5V



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080\_PW\_COFFEELAKE (1)

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082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085\_PW\_

086\_PW\_1.2V/+VTT/2.5V

087\_PW\_+3VADSW/+5VSUS

088\_PW\_LOAD SWITCH

089\_PW\_CHARGER

090\_PW\_PROTECTION

091\_PW\_+NVVDD (combine NVV  
DDS)

092\_PW\_

093\_PW\_

094\_PW\_+FBVDDQ

095\_PW\_\*\*\*

096\_PW\_\*\*\*

097\_PW\_+1.8VSUS

098\_PW\_

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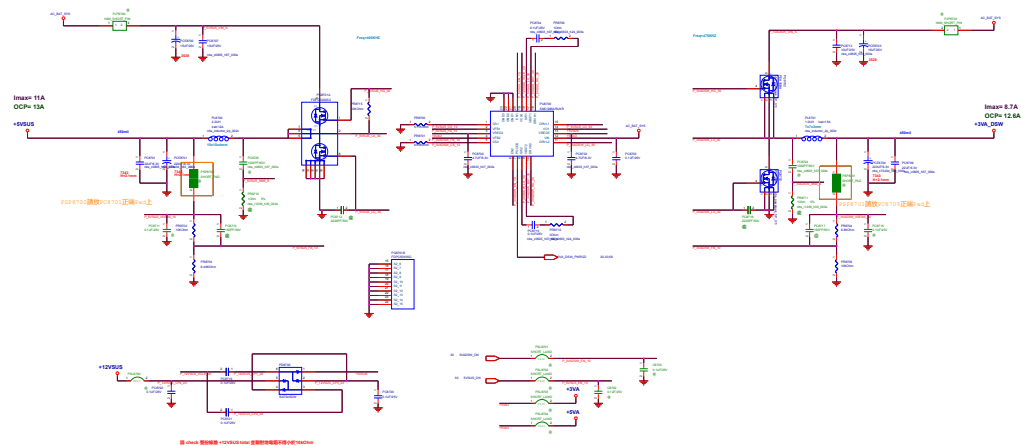
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MoveTo

+3VA\_DSW / +5VSUS [System Power]



Adapter Mode (BATT)									
Pin	1	2	3	4	5	6	7	8	9
VBUS	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9

Battery Mode (BATT)									
Pin	1	2	3	4	5	6	7	8	9
VBUS	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9
NC	1	2	3	4	5	6	7	8	9



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079 \*\*\*\*\*

080\_PW\_COFFEELAKE (1)

081\_PW\_COFFEELAKE (2)

082\_PW\_+VCCIO

083 PW +1.05VSUS

084\_PW\_

085\_PW

086\_PW\_1.2V/+VTT/2.5V

087 PW +3VADSW/+5VSUS

088\_PW\_LOAD SWITCH

089\_PW\_CHARGER

090 PW PROTECTION

091\_PW\_+NVVDD (combine NVV  
DDS)

092\_PW\_

093 PW

094\_PW\_+FBVDDQ

095\_PW\_\*\*\*

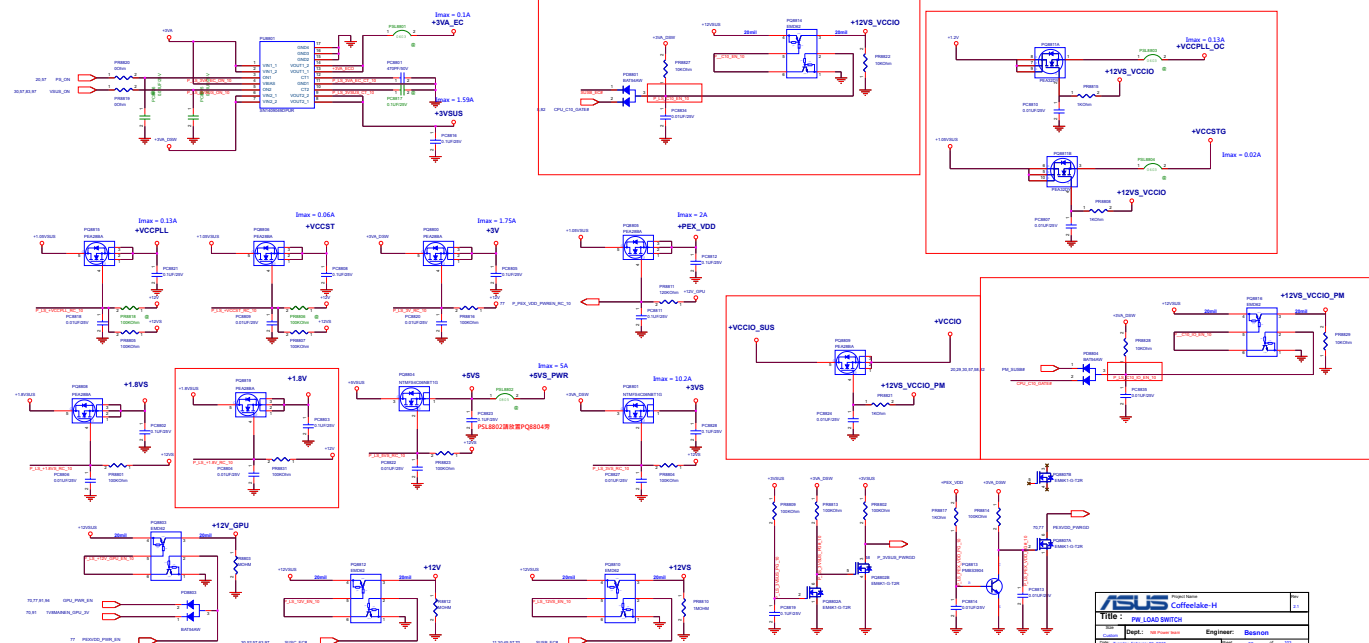
096 PW \*\*\*

097 PW +1.8VSUS

098 PW

*Load Switch*

Main Board



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080\_PW\_COFFEELAKE (1)  
081\_PW\_COFFEELAKE (2)  
082\_PW\_+VCCIO  
083\_PW\_+1.05VSUS  
084\_PW\_  
085\_PW\_  
086\_PW\_1.2V/+VTT/2.5V  
087\_PW\_+3VADSW/+5VSUS  
088\_PW\_LOAD SWITCH  
089\_PW\_CHARGER  
090\_PW\_PROTECTION  
091\_PW\_+NVVDD (combine NVV  
DDS)  
092\_PW\_  
093\_PW\_  
094\_PW\_+FBVDDQ  
  
095\_PW\_\*\*\*  
096\_PW\_\*\*\*  
097\_PW\_+1.8VSUS  
098\_PW\_

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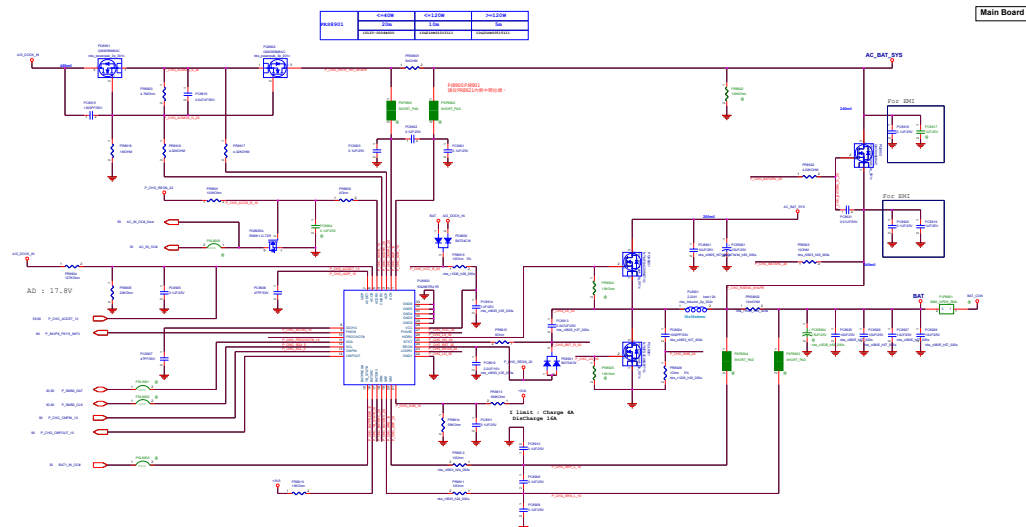
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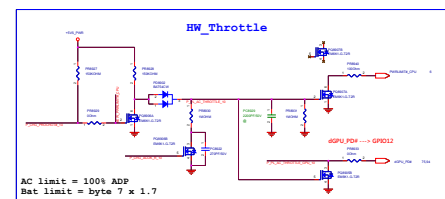
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Adaptor select	
VR-Series	G-Series
10W	5W
24W	150W
33W	150W
45W	230W
65W	280W
90W	330W
120W	-



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080\_PW\_COFFEELAKE (1)

081\_PW\_COFFEELAKE (2)

082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085\_PW

086\_PW\_1.2V/+VTT/2.5V

087\_PW\_+3VADSW/+5VSUS

088\_PW\_LOAD SWITCH

089\_PW\_CHARGER

090\_PW\_PROTECTION

091\_PW\_+NVVDD (combine NVV  
DDS)

092\_PW\_

093\_PW\_

094\_PW\_+FBVDDQ

095\_PW\_\*\*\*

096\_PW\_\*\*\*

097\_PW\_+1.8VSUS

098\_PW\_

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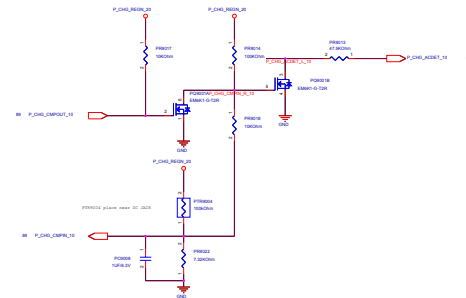
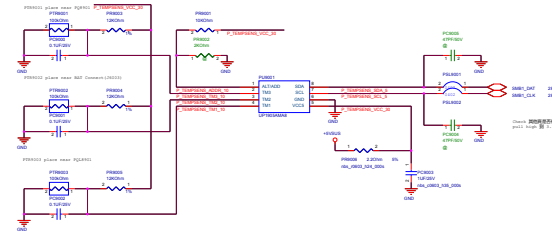
MoveTo

Address Selection Table

Address	DATA	DATA	DATA	DATA	DATA	DATA	DATA
00000000	0000	0000	0000	0000	0000	0000	0000
00000001	0000	0000	0000	0000	0000	0000	0000
00000002	0000	0000	0000	0000	0000	0000	0000
00000003	0000	0000	0000	0000	0000	0000	0000

Register Address

Register	DATA	DATA	DATA	DATA	DATA
0000	00	00	00	00	00
0001	00	00	00	00	00
0002	00	00	00	00	00
0003	00	00	00	00	00



ASUS		UX580VD	Rev. 1.1
Type:		PMU_PROTECTION	
Author:	Leo Chen	Engineer:	Joe
Date:		2018.08.15	100

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080\_PW\_COFFEELAKE (1)

081\_PW\_COFFEELAKE (2)

082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085\_PW

086\_PW\_1.2V/+VTT/2.5V

087\_PW\_+3VADSW/+5VSUS

088\_PW\_LOAD SWITCH

089\_PW\_CHARGER

090\_PW\_PROTECTION

091\_PW\_+NVVDD (combine NVV  
DDS)

092\_PW\_

093\_PW\_

094\_PW\_+FBVDDQ

095\_PW\_\*\*\*

096\_PW\_\*\*\*

097\_PW\_+1.8VSUS

098\_PW\_

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080\_PW\_COFFEELAKE (1)

081\_PW\_COFFEELAKE (2)

082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085\_PW\_

086\_PW\_1.2V/+VTT/2.5V

087\_PW\_+3VADSW/+5VSUS

088\_PW\_LOAD SWITCH

089\_PW\_CHARGER

090\_PW\_PROTECTION

091\_PW\_+NVVDD (combine NVV  
DDS)

092\_PW\_

093\_PW\_

094\_PW\_+FBVDDQ

095\_PW\_\*\*\*

096\_PW\_\*\*\*

097\_PW\_+1.8VSUS

098\_PW\_

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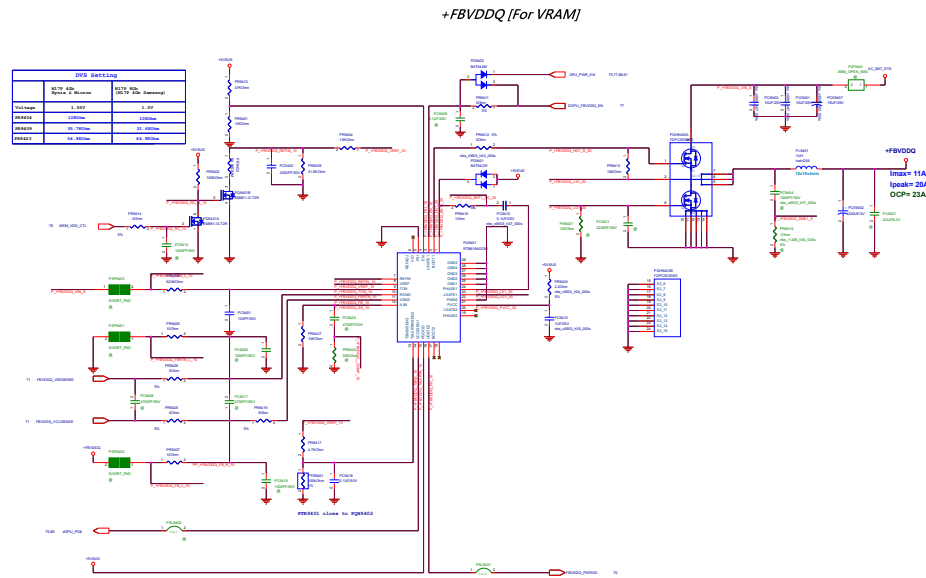
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ASUS	
Model	U3000V0
Version	1.0
Author	ASUS
Engineer	ASUS
Check	ASUS

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081\_PW\_COFFEELAKE (2)  
082\_PW\_+VCCIO  
083\_PW\_+1.05VSUS  
084\_PW\_  
085\_PW\_  
086\_PW\_1.2V/+VTT/2.5V  
087\_PW\_+3VADSW/+5VSUS  
088\_PW\_LOAD SWITCH  
089\_PW\_CHARGER  
090\_PW\_PROTECTION  
091\_PW\_+NVVDD (combine NVV  
DDS)  
092\_PW\_  
093\_PW\_  
094\_PW\_+FBVDDQ  
  
095\_PW\_\*\*\*  
096\_PW\_\*\*\*  
097\_PW\_+1.8VSUS  
098\_PW\_

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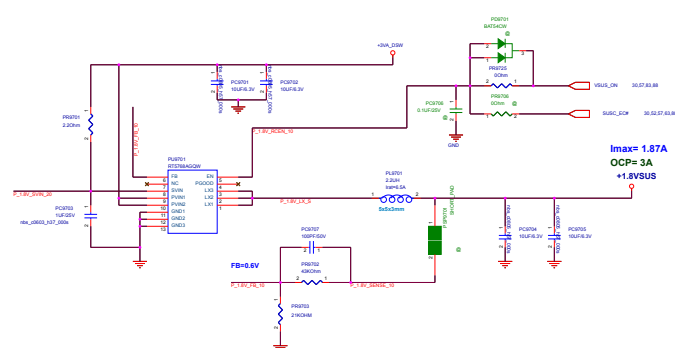
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+1.8VSUS [For GPU]



ASUS		Project Name	Rev
UX550VD			0.1
Title : PW_+1.8V_A00			
AS	Dept.: HW Power Team	Engineer:	Hon
Date: 2020-08-11 11:00		Drawn	02

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080\_PW\_COFFEELAKE (1)

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082\_PW\_+VCCIO

083\_PW\_+1.05VSUS

084\_PW\_

085\_PW

086\_PW\_1.2V/+VTT/2.5V

087\_PW\_+3VADSW/+5VSUS

088\_PW\_LOAD SWITCH

089\_PW\_CHARGER

090\_PW\_PROTECTION

091\_PW\_+NVVDD (combine NVV  
DDS)

092\_PW\_

093\_PW\_

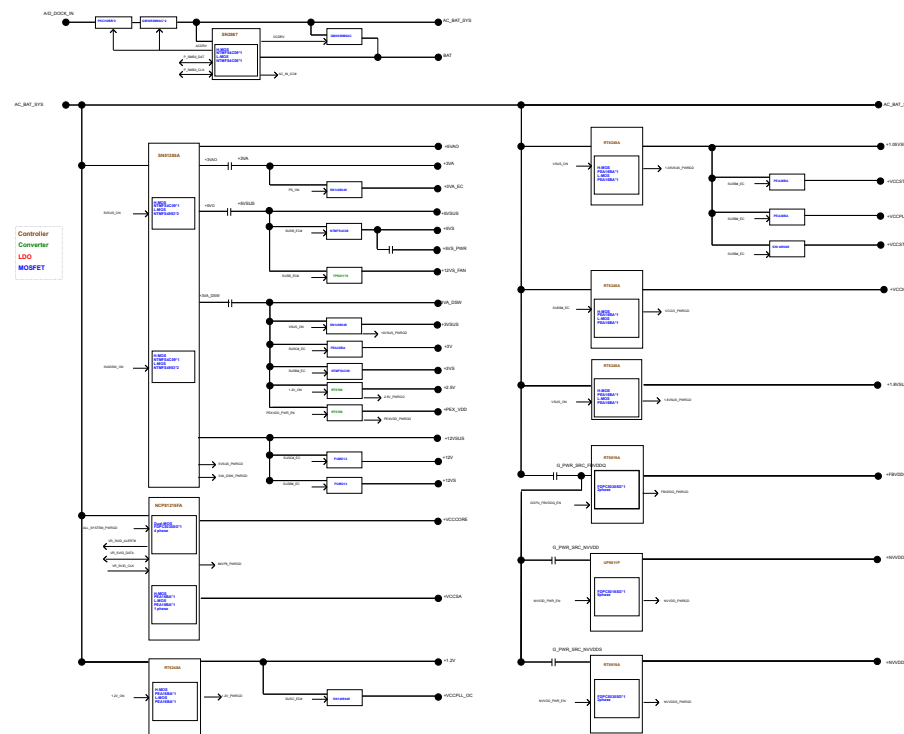
094\_PW\_+FBVDDQ

095\_PW\_\*\*\*

096\_PW\_\*\*\*

097 PW +1.8VSUS

098 PW



**Hide**

094 PW +FBVDDQ

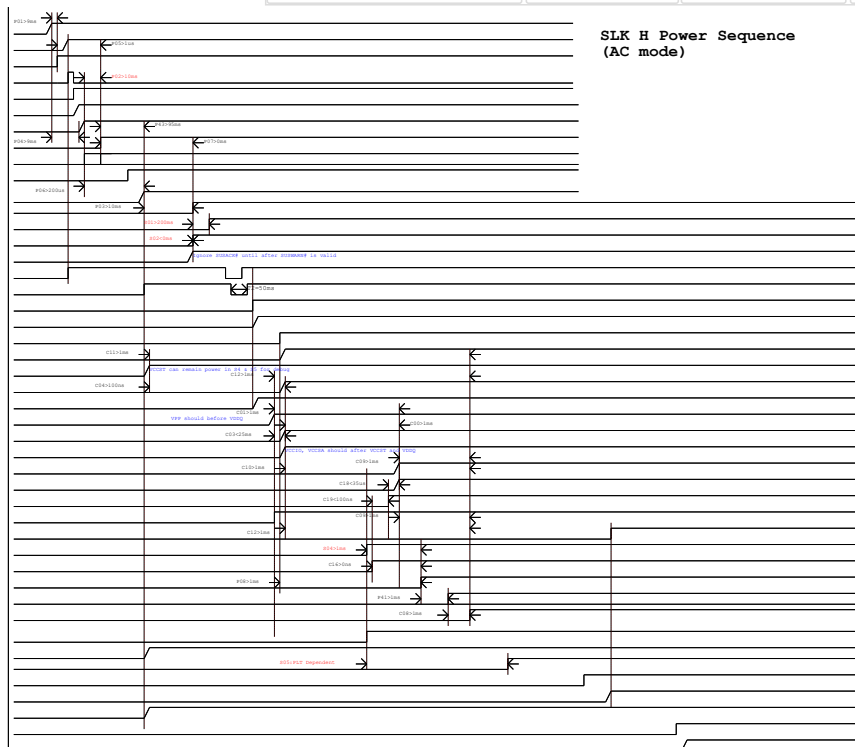
098 PW

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## MoveTo

### SLK H Power Sequence (AC mode)

AC-IN Mode

[illegible]

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081\_PW\_COFFEELAKE (2)  
082\_PW\_+VCCIO  
083\_PW\_+1.05VSUS  
084\_PW\_  
085\_PW  
086\_PW\_1.2V/+VTT/2.5V  
087\_PW\_+3VADSW/+5VSUS  
088\_PW\_LOAD SWITCH  
089\_PW\_CHARGER  
090\_PW\_PROTECTION  
091\_PW\_+NVVDD (combine NVV  
DDS)  
092\_PW\_  
093\_PW\_  
094\_PW\_+FBVDDQ  
  
095\_PW\_\*\*\*  
096\_PW\_\*\*\*  
097\_PW\_+1.8VSUS  
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MoveTo

## DC-IN Mode

C:CPU (+R0CBAT)+3VA\_R0C  
P:PCR (AC\_BAT\_030)+3VA/+5VA  
S:PLD (+3VA\_R0C)R0C030# (PCR)  
Power (Power)AC\_030\_OCR (BC)  
Signal (BC)PS\_ON (+3VA,BC)  
(PS\_ON)+3VA,BC (BC)  
(3VADSW\_ON)+3VA\_DSW (3VA\_DSW\_PWRGD)  
(BC)DPWR030\_R0C (PCR)  
(+3VA\_DSW)PM\_BATLOW# (PCR)  
(PCR)PM\_RLP\_030# (BC)  
(V030\_ON)+1.05V030\_VCCP030 (1.05V030\_PWRGD)  
(BC)PM\_R030R030\_R0C (PCR)  
(PCR)S030R030# (BC)  
(BC)MS\_AC\_PRESENT#\_PCR (PCR)  
(BC)PCR\_R030R030# (PCR)  
(PWR\_BatLow)PWR\_R030 (BC)  
(BC)PM\_R030R030# (PCR)  
(BC)R030\_R0C (Power)  
(R030\_R0C)+1.2V/+5V/+3V  
(BC)R030\_R0C (Power)  
(R030\_R0C)+1.2V/+5V/+3V  
(V030\_ON)+1.0V\_VCC030\_VCCP030 (VCC030\_PWRGD)  
(+VCC030)+VCC030  
(1.2V\_ON)+2.5V (1.2V\_PWRGD)  
(1.2V\_ON)+VCC0\_C030 (1.2V\_PWRGD)  
(+1.2V)+VCC030\_OC  
(R030\_R0C)+VCC030 (VCC030\_PWRGD)  
(ALL\_SYSTEM\_PWRGD)+VCC030 (DP030\_PWRGD)  
(DP030\_VTT\_CTRL)+0.6V  
(CPU)DP030\_VTT\_CTRL (Power)  
(Power)1.2V\_PWRGD (ARD)  
(Power)DP030\_PWRGD  
(ARD)ALL\_SYSTEM\_PWRGD (CPU/PCR/BC/Power)  
(ALL\_SYSTEM\_PWRGD)VCC030\_PWRGD (CPU)  
(BC)PM\_R030R030\_R0C (PCR)  
(PCR)CLM\_PCR\_BCLR (CPU)  
(PCR)S\_C030R030 (CPU)  
(ALL\_SYSTEM\_PWRGD)P\_DP030\_R030\_1.0 (Power)  
(CPU)P\_DP030\_DATA\_R2 (Power)  
(BC)PM\_R030R030\_R0C (PCR)  
(PCR)PLT\_R030 (CPU/BC/Device)  
(P\_DP030\_DRV030)+VCC030R030 (DP030\_PWRGD)  
(CPU)R\_TH030R030 (PCR)  
(PCR)S030\_R030R030# (Memory)

+VCC030

