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LPC

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I2C

ASUS

Project Name

Rev

1.0

Title : Block Diagram

Dept.: ASUS/NA COMPUTER INC

Engineer: Eddie2\_Lin

Date: Friday, February 23, 2018

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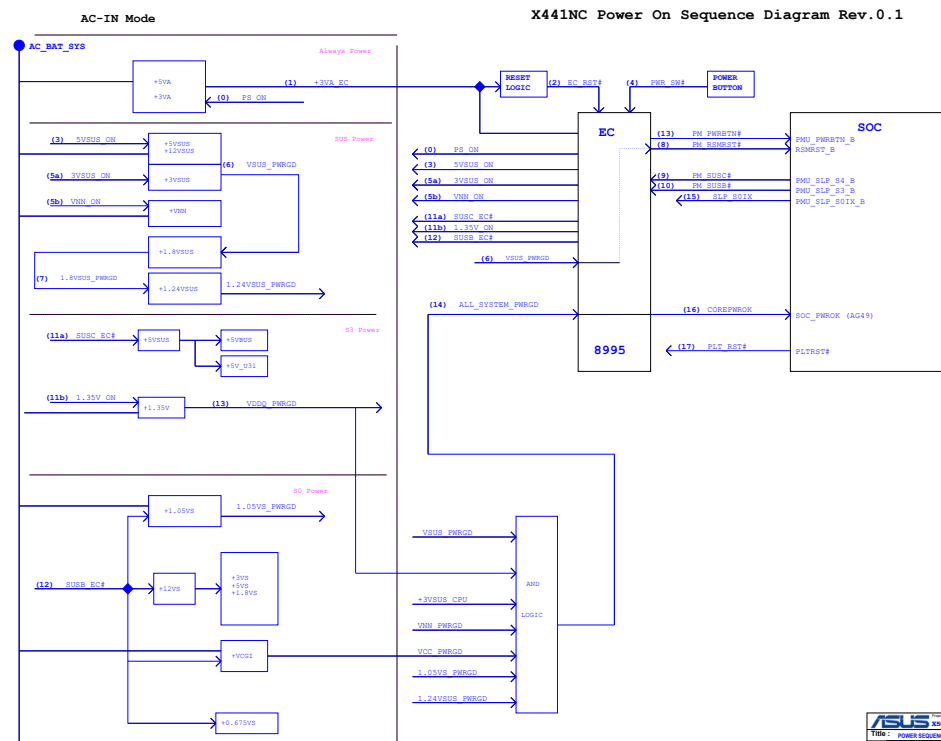
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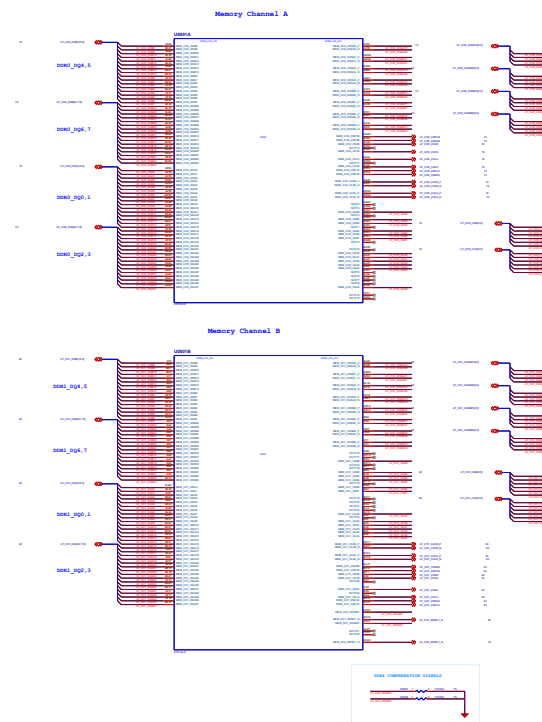
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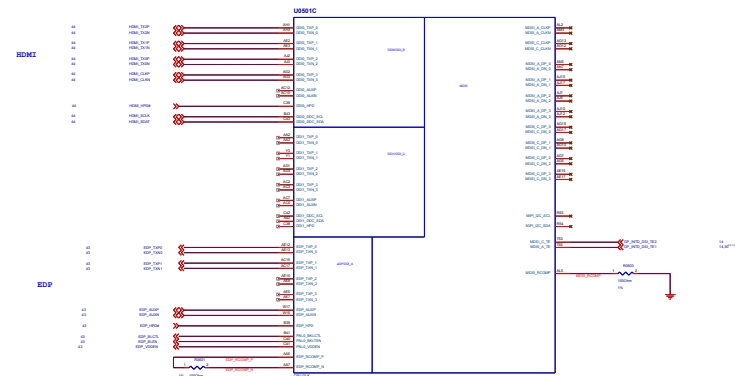
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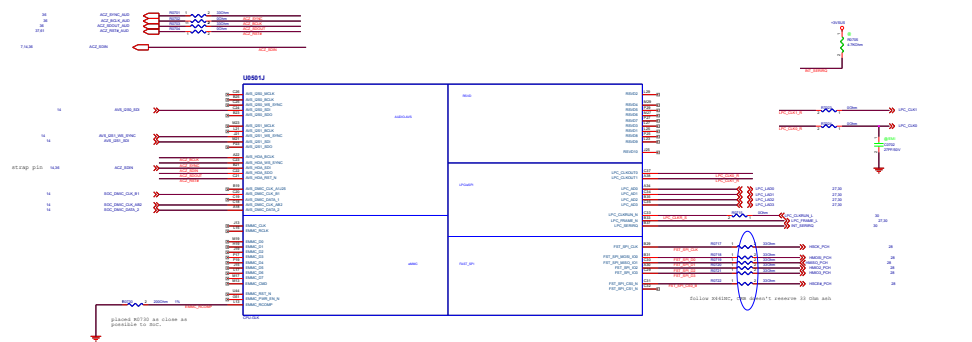
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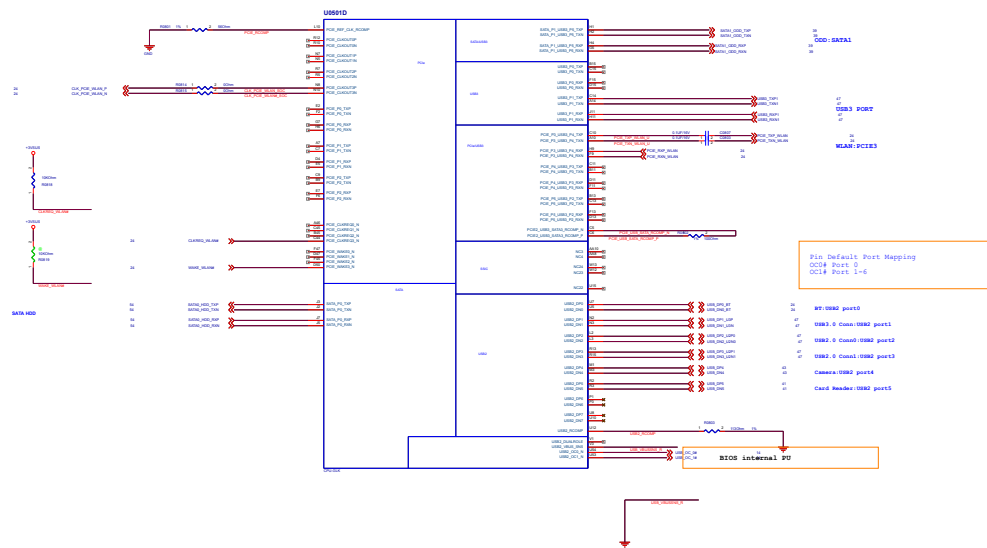
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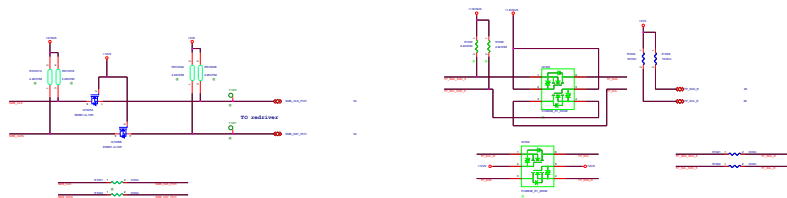
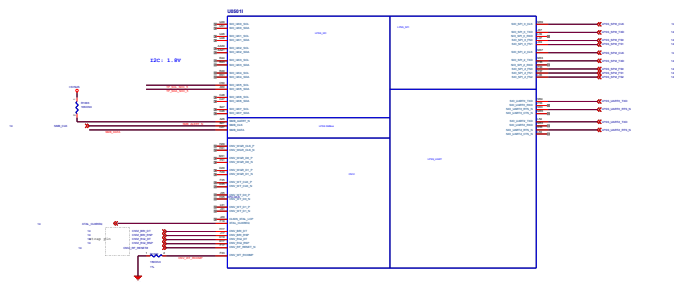
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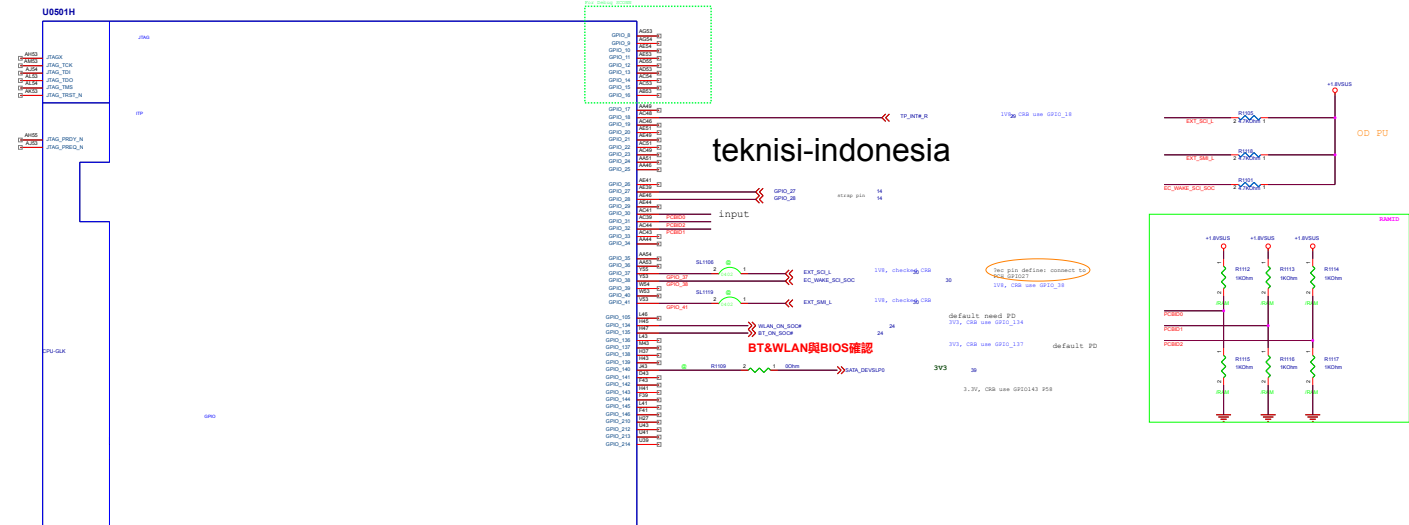
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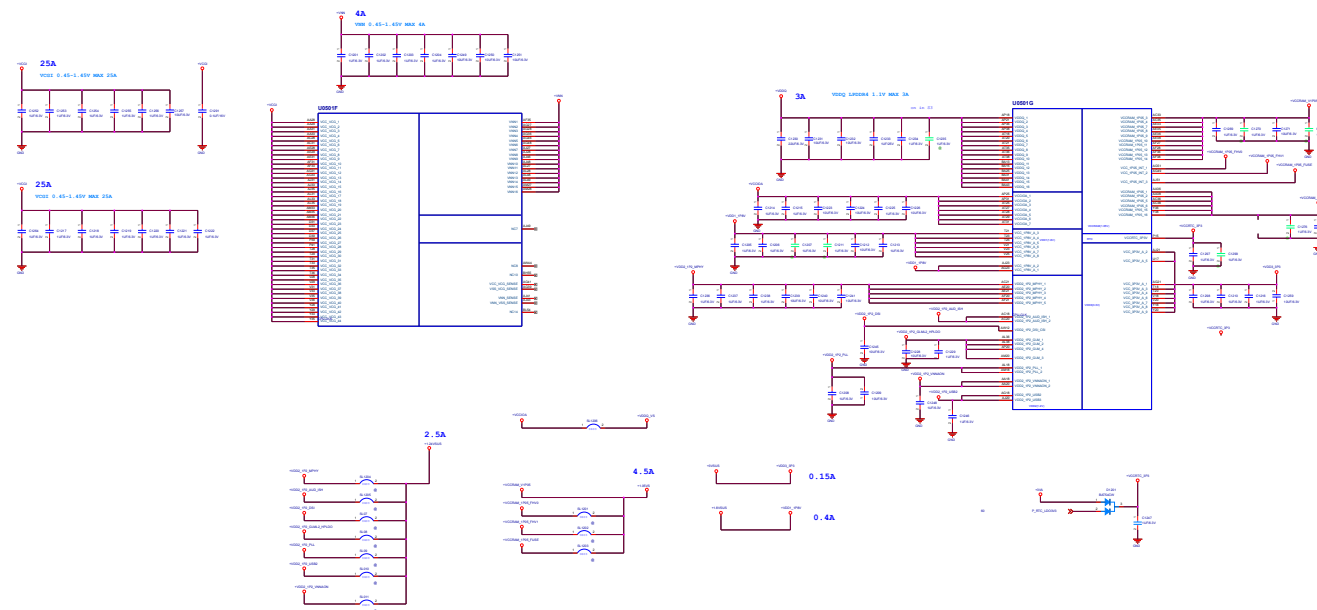
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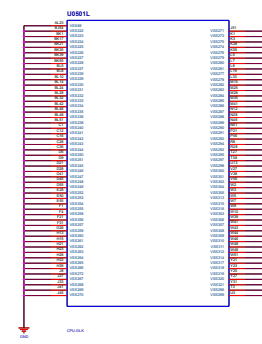
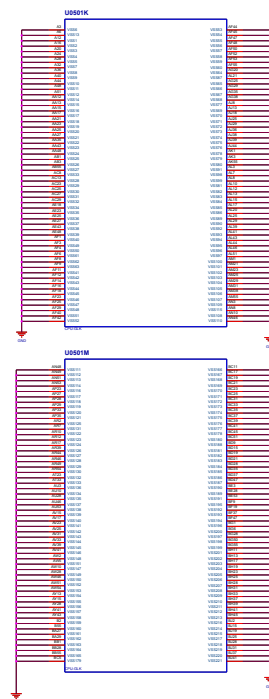
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GPIO #	Pin Name	Purpose	Internal Termination	Pin Strip (Image/Description/Polarity)
GPIO_175	AD_CONVERTER	eSPI vs. I2C	2K 1P	Leads to I2C eSPI - master (pull-up) I2C - master (pull-down) I2C - slave (pull-up) I2C - slave (pull-down) I2C - slave (pull-up) I2C - slave (pull-down)
GPIO_177	IMR0_0_1	eSPI	2K 1P	Ensure that this pin is pulled up when IMR0_0_1 is deasserted for normal operation.
GPIO_181	CW_M0_0_1	eSPI Host Master Enable	2K 1P	eSPI Host Master Enable I2C - master (pull-up) I2C - master (pull-down) I2C - slave (pull-up) I2C - slave (pull-down) I2C - slave (pull-up) I2C - slave (pull-down)
GPIO_182	CW_M0_1_RIS	EVSIO	2K 1P	Ensure that this pin is pulled up when IMR0_1_RIS is deasserted for normal operation.
GPIO_183	CW_M0_1_RIS	EVSIO	2K 1P	Ensure that this pin is pulled up when IMR0_1_RIS is deasserted for normal operation.
GPIO_184	CW_M0_2_RIS	EVSIO	2K 1P	Ensure that this pin is pulled up when IMR0_2_RIS is deasserted for normal operation.
GPIO_185	CW_M0_2_RIS_1	EVSIO	2K 1P	Ensure that this pin is pulled up when IMR0_2_RIS_1 is deasserted for normal operation.
GPIO_186	ATTN_CIRREQ	2K 1P	2K 1P	Ensure that this pin is pulled up when IMR0_1_RIS is deasserted for normal operation.



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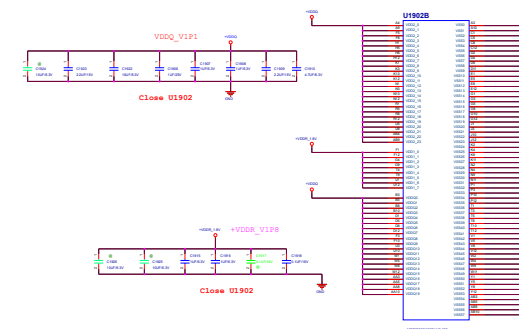
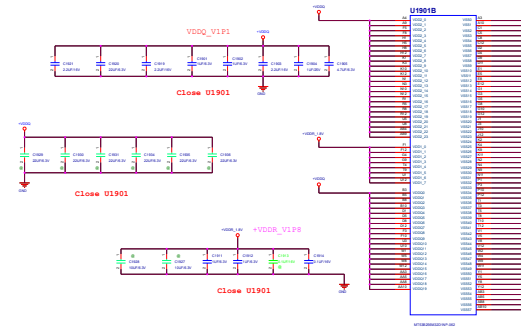
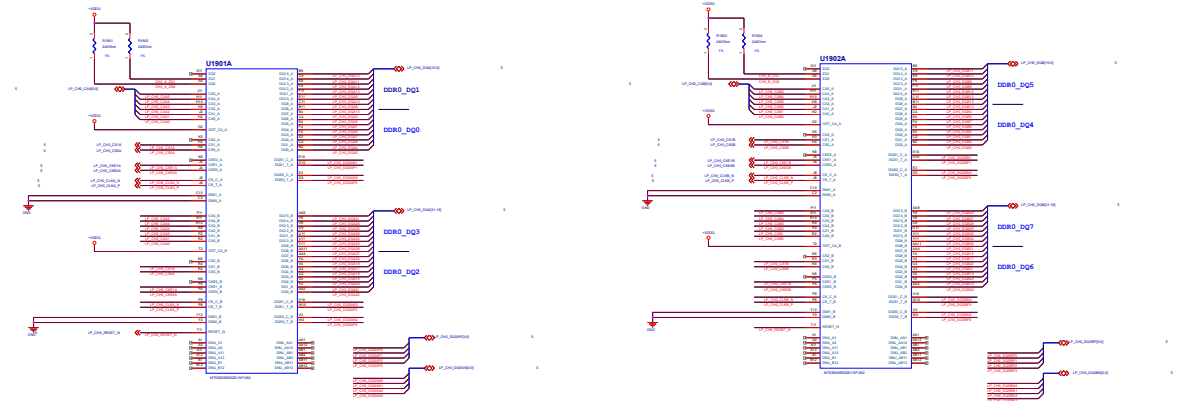
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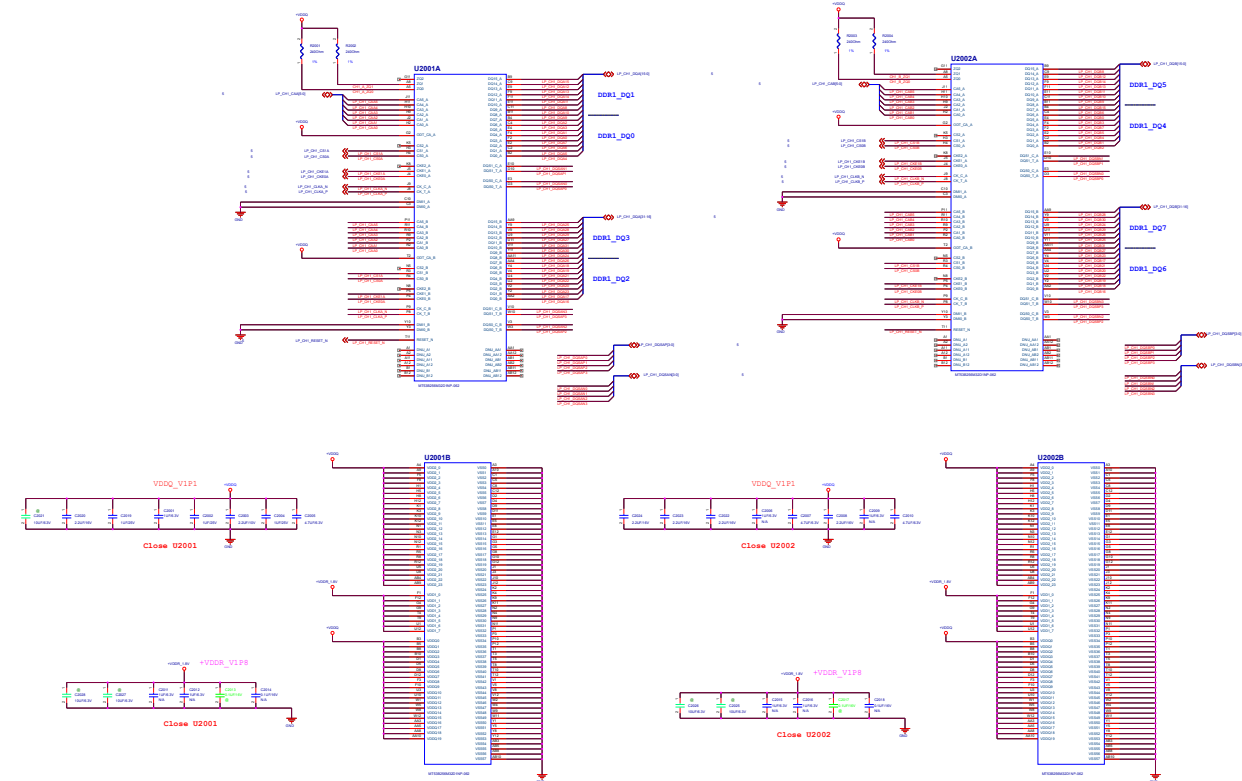
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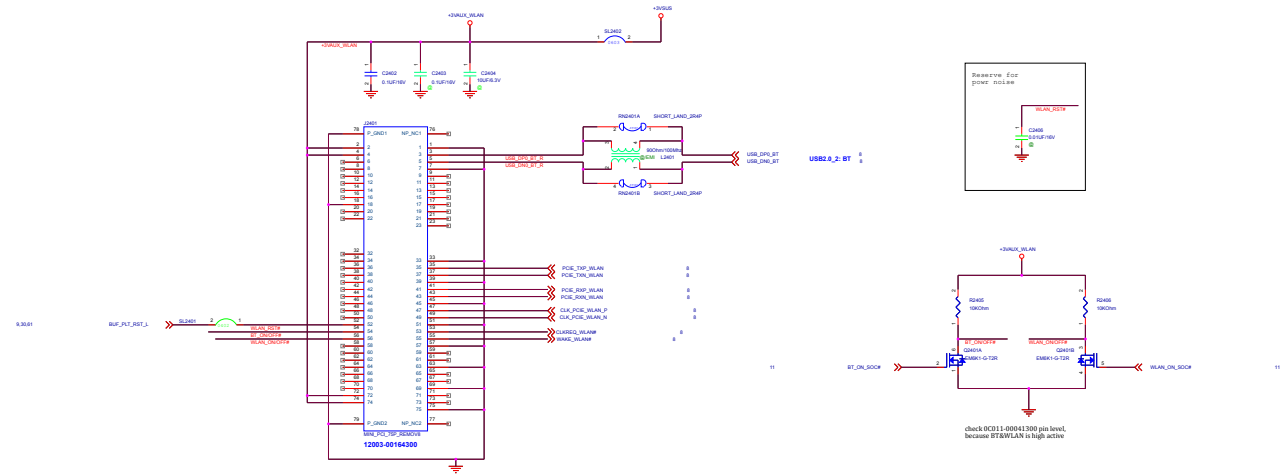
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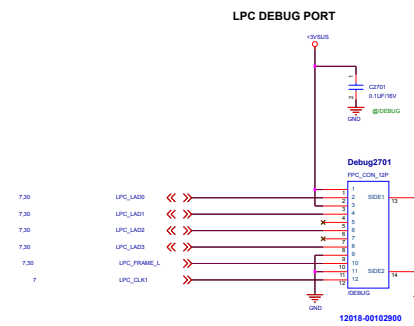
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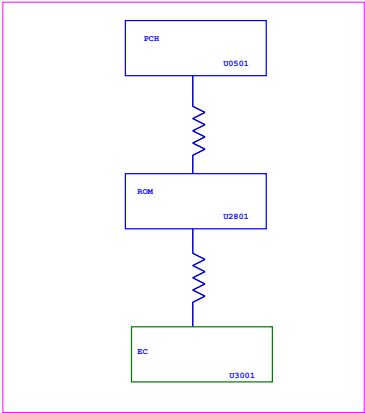
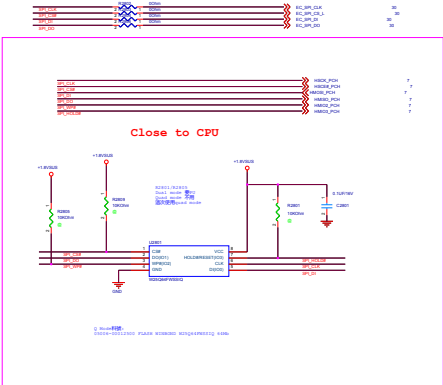
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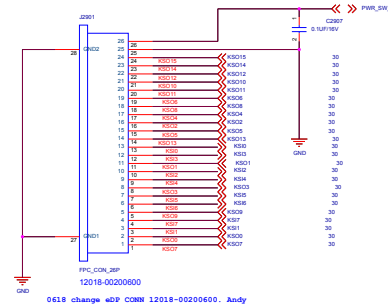
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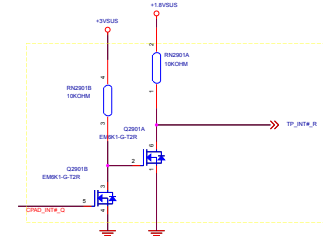
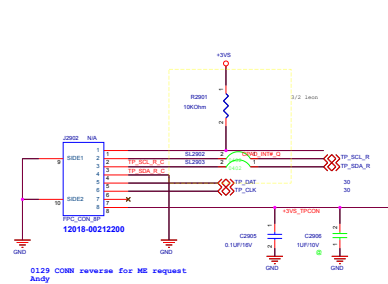
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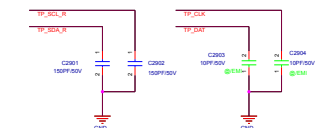
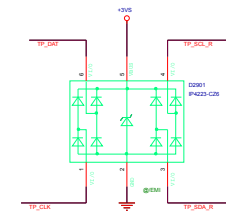
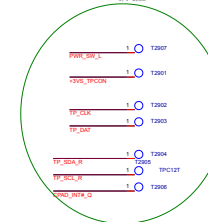
Keyboard Connector



TouchPad Connector



Reserved for EMI

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R2.0 新增\_20150825

ASUS		Project Name	Rev
X540NA			1.0
Title : 25KB_TP			
Drawn	Dept.	Engineer	
PCB	PCB	Eddie2_Lin	
Date	Friday, February 25, 2016	Sheet	25 of 31

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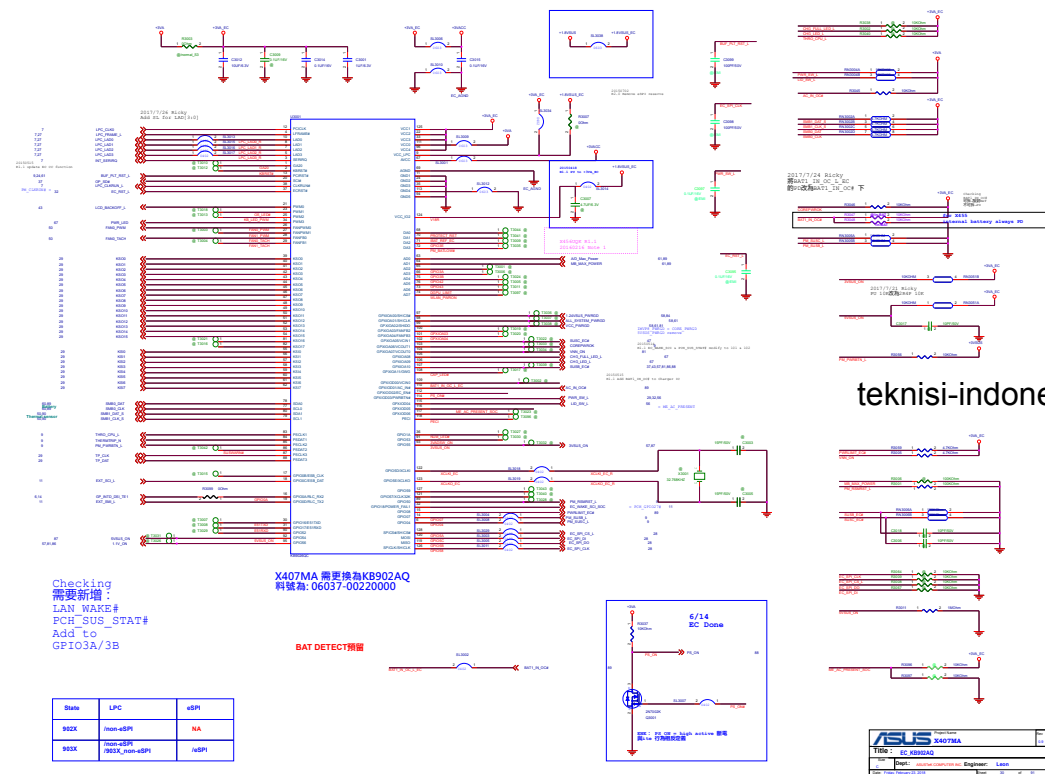
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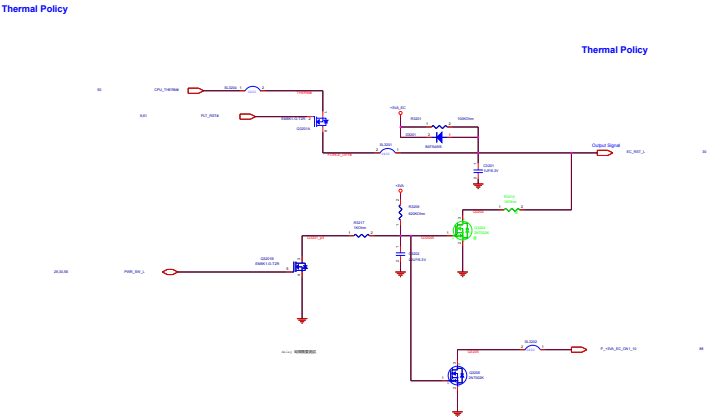
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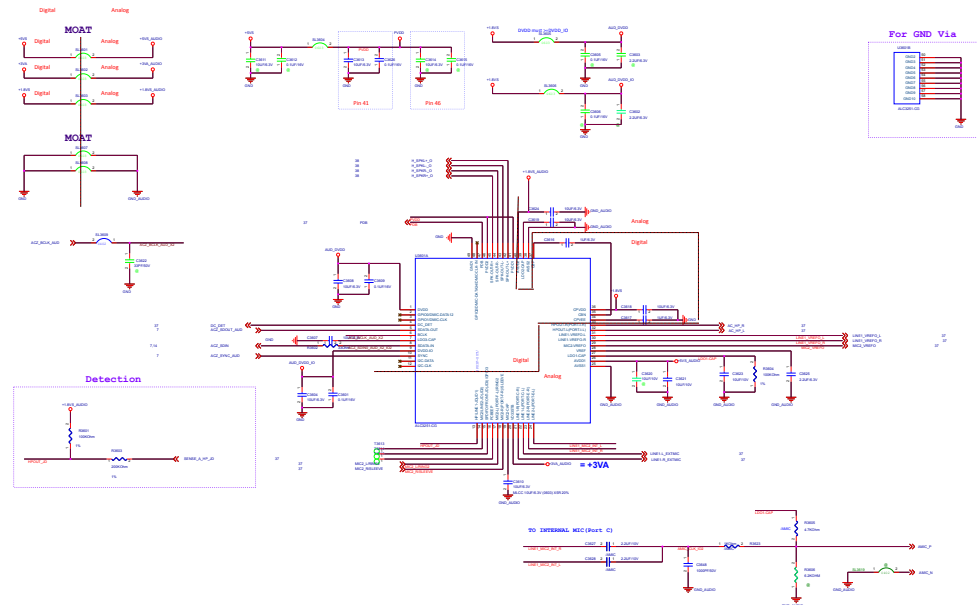
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41.Card\_Reader

42.

43.EDP

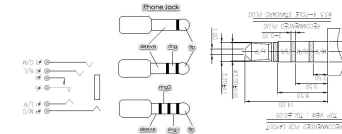
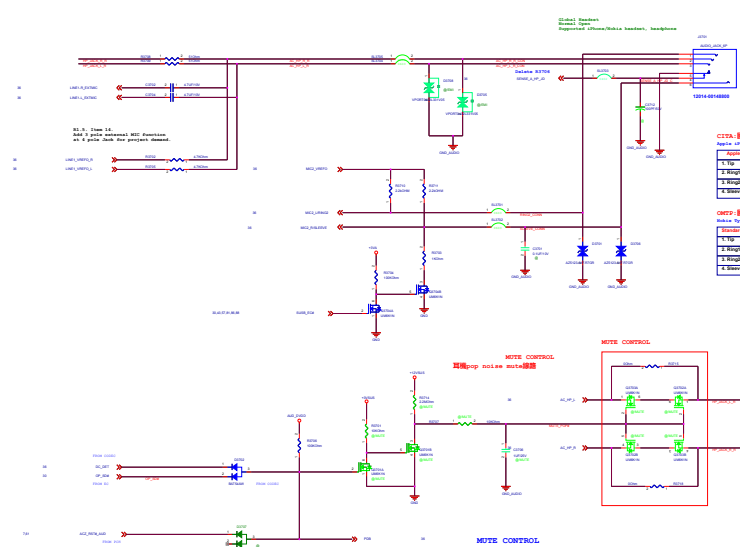
44.HDMI

45.

## Universal Jack (Normal open type)

Rev. 1.0, Date 12/12/2011  
Add a phone headset jack support.  
Open type for project demand.

Rev. 1.1, Date 12/12/2011  
Support the 10-ohm impedance 10-ohm for 10-ohm impedance.  
Support 10-ohm impedance 10-ohm for 10-ohm impedance.  
Support 10-ohm impedance 10-ohm for 10-ohm impedance.



CTIA: 通用插孔 定义			
Signal	Pin	Signal	Pin
1 Tip	Left channel	Left channel	Left channel
2 Ring	Right channel	Right channel	Right channel
3 Sleeve	Ground	Ground	Ground

OMTP: 通用插孔 定义			
Signal	Pin	Signal	Pin
1 Tip	Left channel	Left channel	Left channel
2 Ring	Right channel	Right channel	Right channel
3 Sleeve	Ground	Ground	Ground



## Schematic Page List

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47.VERIN

25.\*\*\*\*\*

26.

27.Debug

28.SPI ROM

29.KB\_TP

30\_ENE\_KB902AQ

31.

32.RESET CIRCUIT

33.

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35.

36.AUD-ALC3251

37.AUD-HEADPHONE JACK

38.Speaker

39.FPC Connector

40.

41.Card\_Reader

42.

43.EDP

44.HDMI

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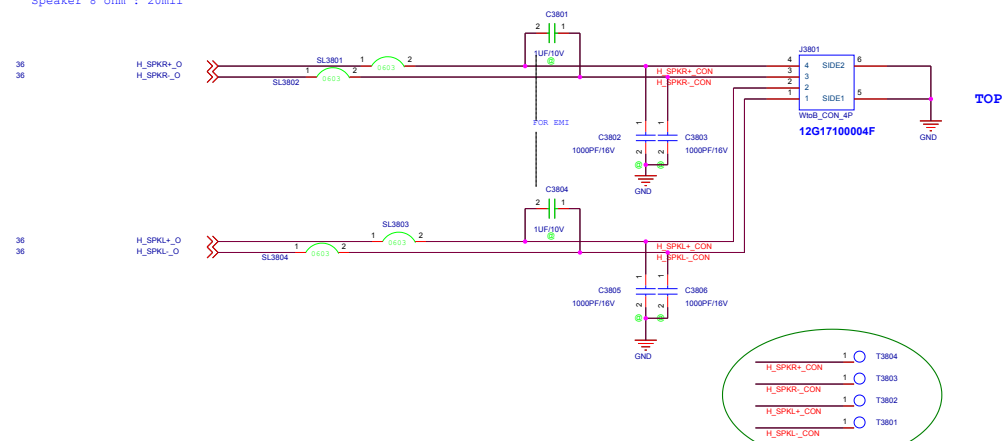
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Trace width for SPK-L+/SPK-L-/SPK-R+/SPK-RSpeaker  
4 ohm : 40mil  
Speaker 8 ohm : 20mil



請將測試點至於TOP面  
R2.0 新增\_20150820

ASUS		Project Name	Rev
X540NA			1.0
Title : 38.Speaker			
Size	Dept.:	Engineer:	
A	PC2-RD1-SYS1-EE3	Eddie2_Lin	
Date: Friday, February 23, 2018	Sheet	38	of 91

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37.AUD-HEADPHONE JACK	
38.Speaker	
39.FPC Connector	
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41.Card_Reader	
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43.EDP	
44.HDMI	
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47.USB3_CON+2.0 CONN.	
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50.Thermal Sensor & Fan	
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53.	
54.SATA Redriver(ASM1467)	

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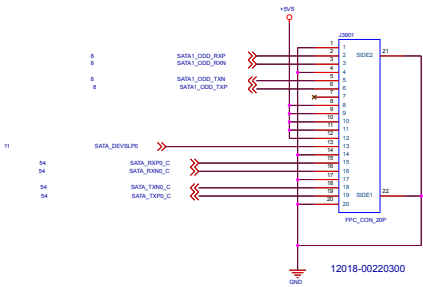
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FPC CONN : HDD & ODD



SATA PORT	SATA USAGE DEFAULT/OPTION
PORT 0	HDD
PORT 1	ODD

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47.USB5\_COIN+2.0 COIN.

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54.SATA Redriver(ASM1467)

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56.Hall Sensor &amp; Power Switch

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61.EMI

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65.ME\_Conn &amp; Skew Hole

66.

67.LED

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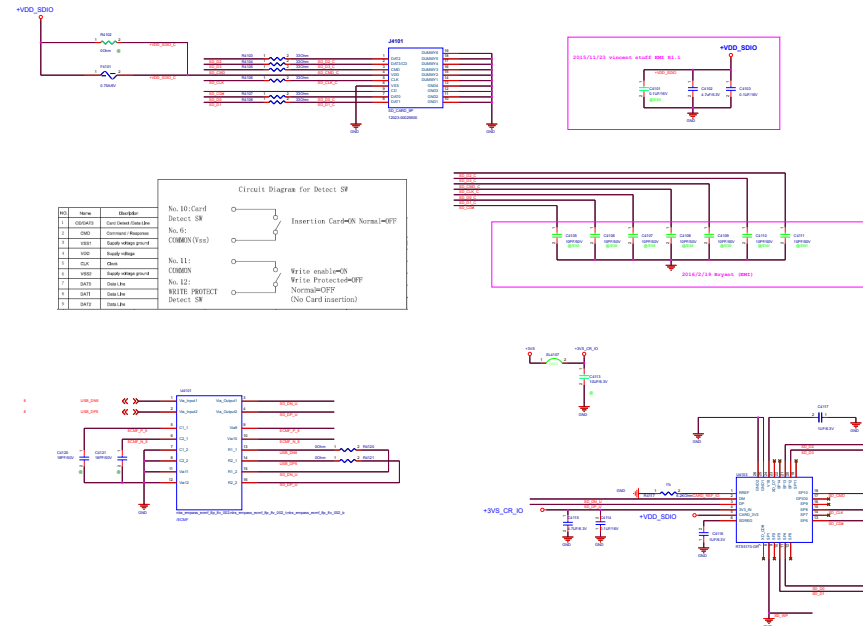
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56.Hall Sensor & Power Switch

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65.ME\_Conn & Skew Hole

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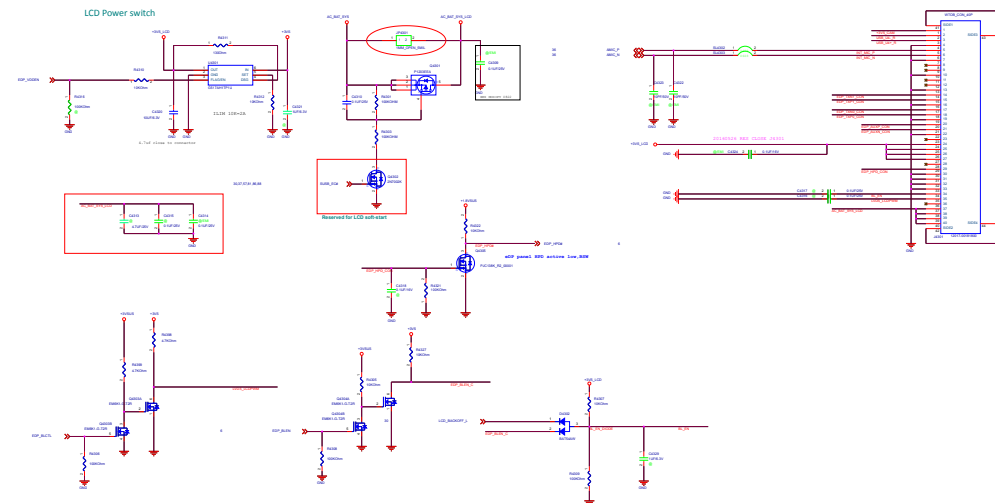
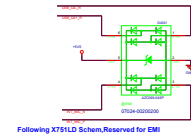
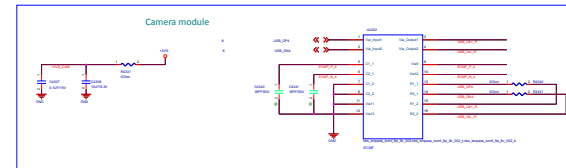
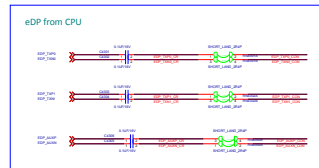
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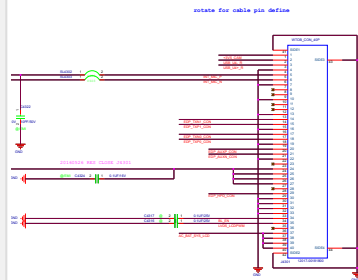
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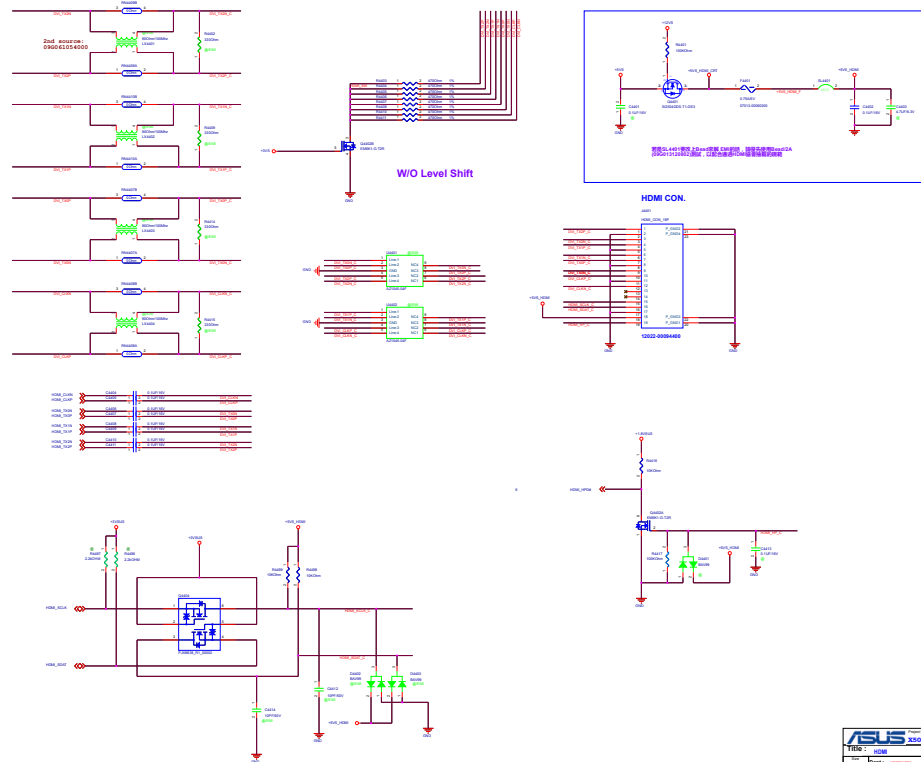
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56.Hall Sensor & Power Switch

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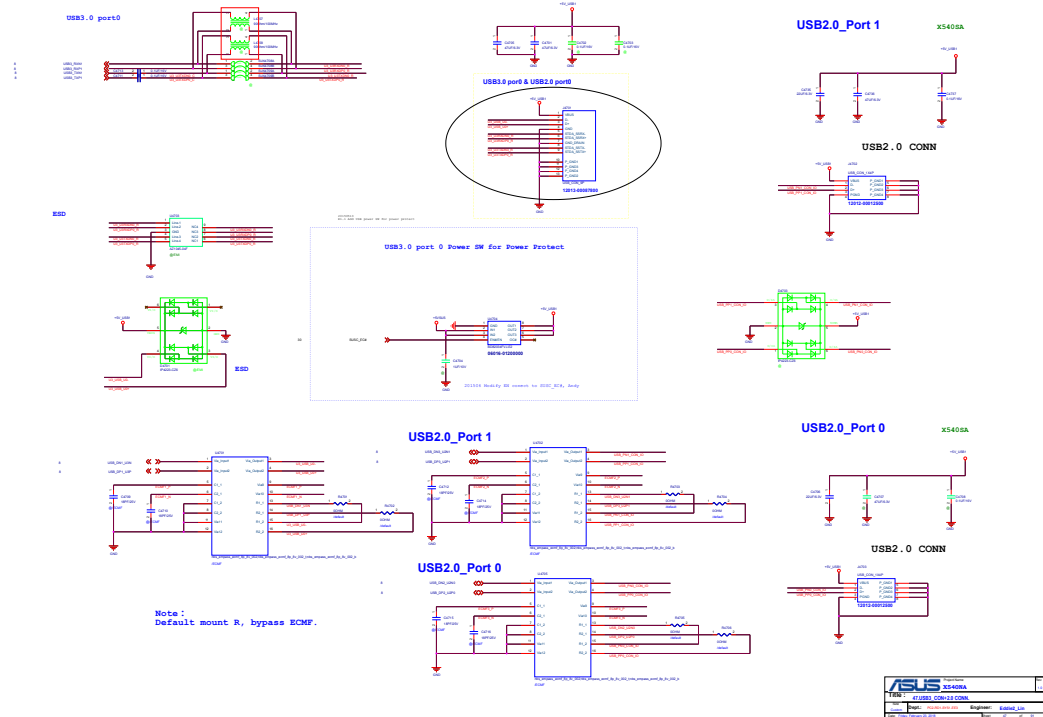
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teknisi-indonesia



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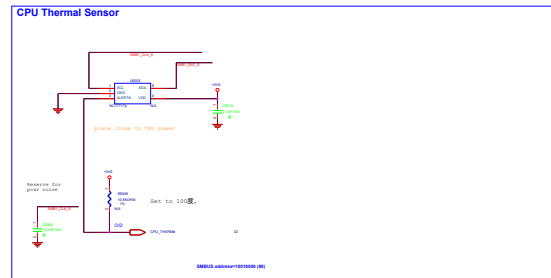
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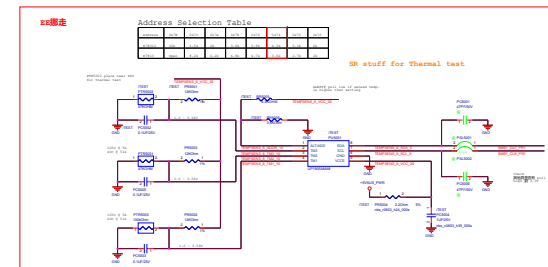
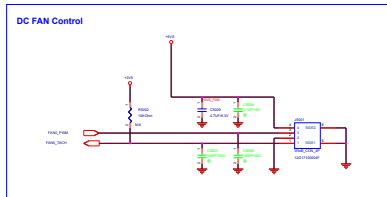
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Main Board



teknisi-indonesia



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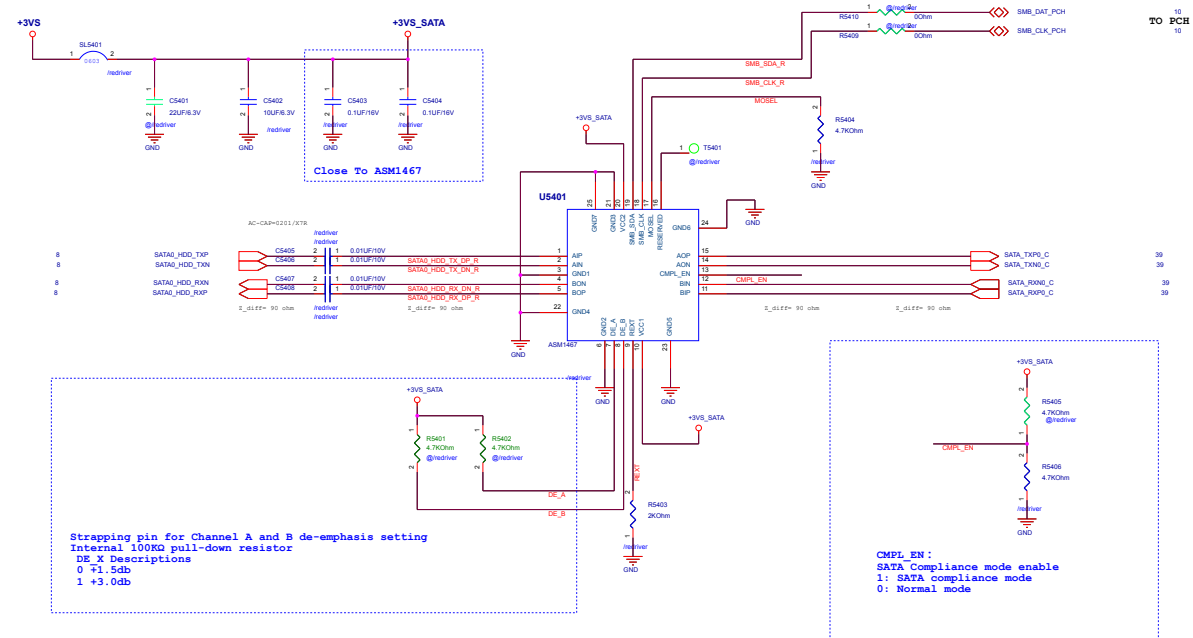
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ASUS		Project Name	Rev
X540NA			1.0
Title : 54.SATA Redriver(ASM1467)			
Size	Dept.:	PC2-RD1-SYS-EE3	Engineer: Eddie2_Lin
8	Date: Friday, February 23, 2018	Sheet	54 of 91

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54.SATA Redriver(ASM1467)

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56.Hall Sensor &amp; Power Switch

57.Discharge

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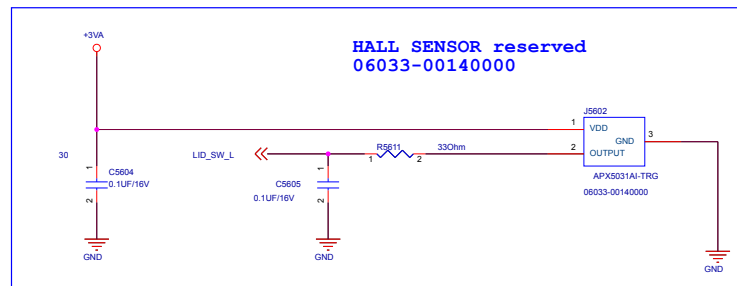
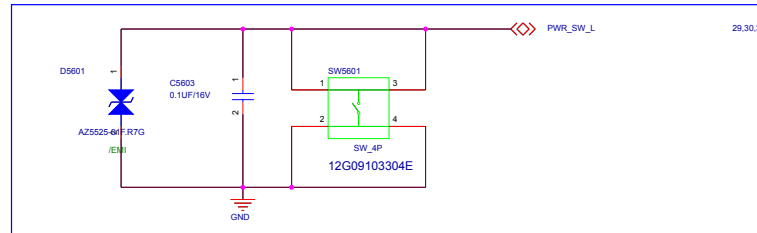
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&lt;Variant Name&gt;

<b>ASUS</b>		Title : Hall Sensor	
ASUSTeK COMPUTER INC.		Engineer: Leon	
Size	Project Name		Rev
A	X507MA		1.0
Date: Friday, February 23, 2018		Sheet 56 of 81	



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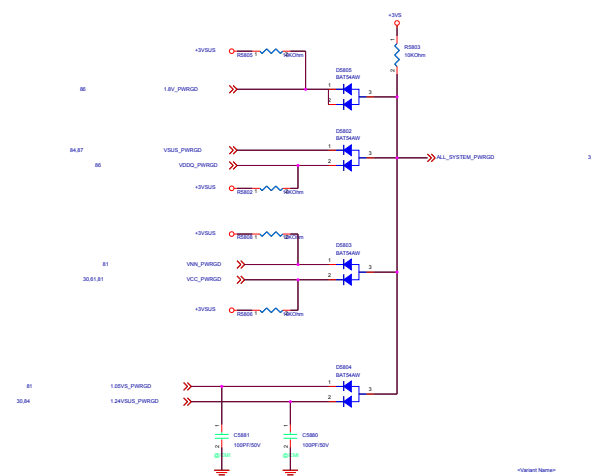
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## POWER GOOD DETECTOR



 <div> <div>Project Name</div> <div>XS07MA</div> </div>	
<div>Title :</div> <div>PWR_Protect</div>	
<div>Size</div> <div>Custom</div>	<div>Dept.: ASUS&amp;K COMPUTER INC. Engineer: Leon</div>
<div>Date: 2016-03-20</div> <div>Endtime: 2016-03-20</div>	<div>Drawn: 00</div> <div>et: 00</div>

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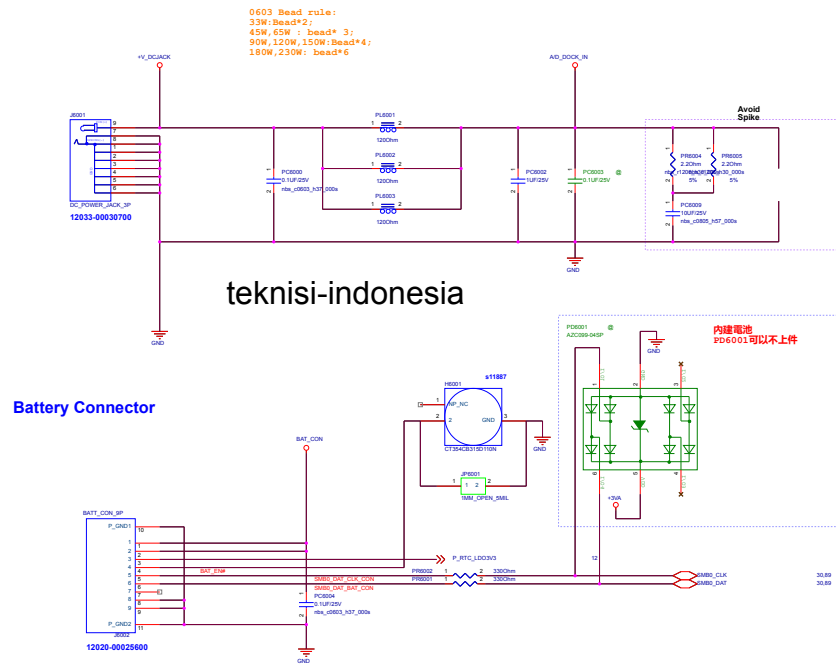
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Project Name		Rev
ASUS X540NA		1.0
Title : 60_DC & BAT IN		
Size	Dept.: PC2-RD1-0191-003	Engineer: Steve_Siao
Date: Friday, February 23, 2018	Sheet	60 of 91

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65.ME_Conn & Skew Hole	
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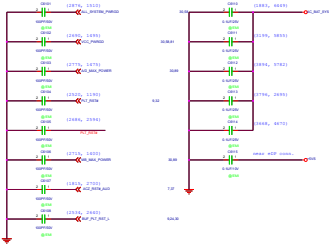
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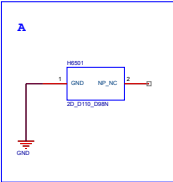
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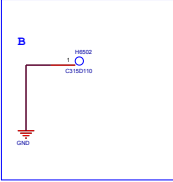
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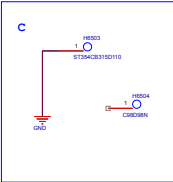
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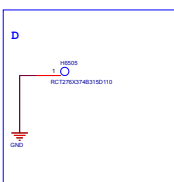
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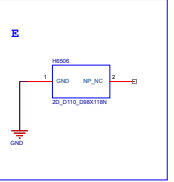
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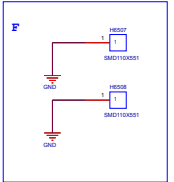
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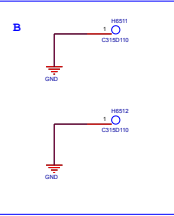
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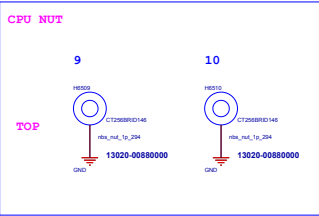
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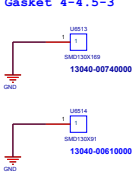
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CPU NUT



Gasket 4-4.5-3



ASUS

Project Name

Rev

Title :

85.ME Conn & Skew Hole

1.0

Size

Dept.

Engineer

Draw

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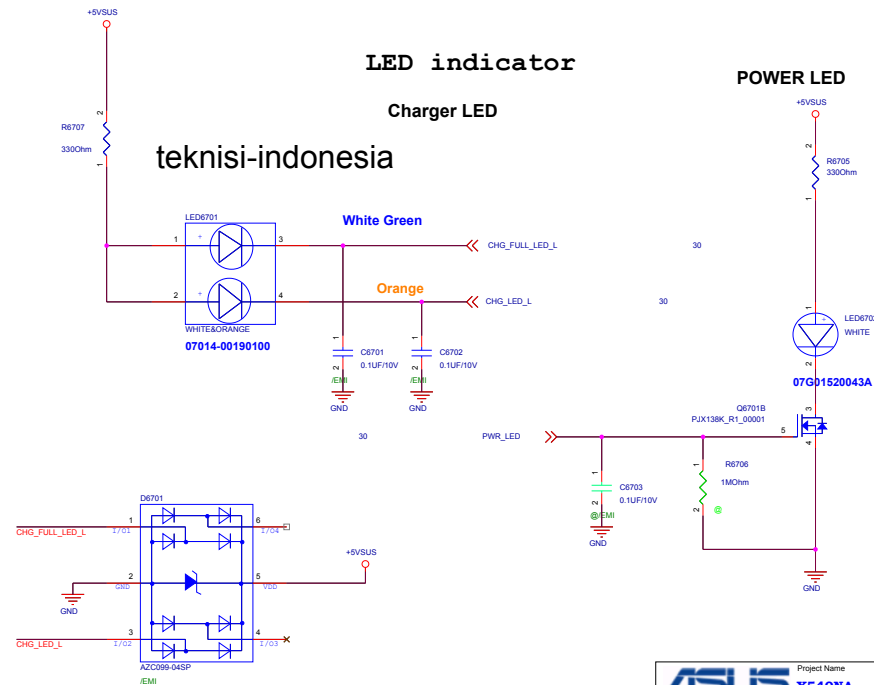
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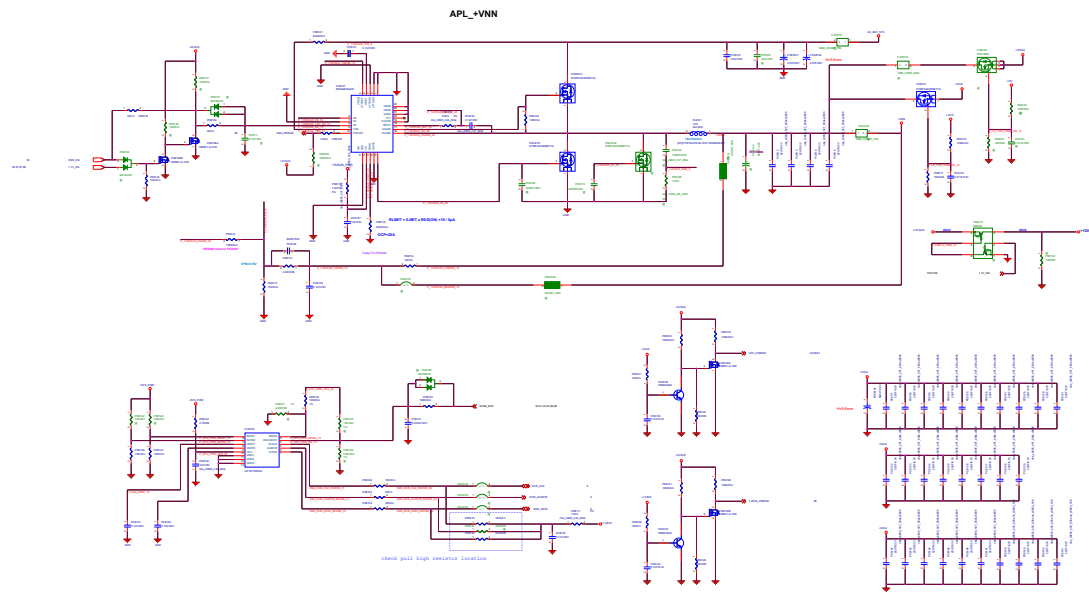
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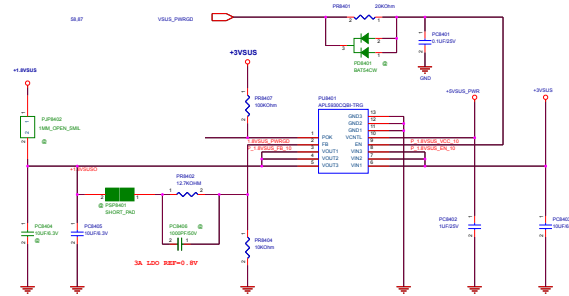
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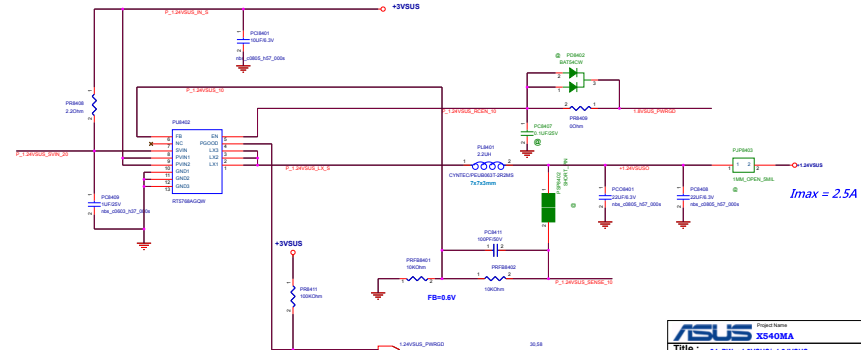
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+1.8VSUS



+1.24VSUS



ASUS		Project Name	Rev
Title : S4.PW.+1.8VSUS+1.24VSUS			0.1
Dept.:	Power	Engineer:	Steve_Riao
Date: 2016.04.28		Page	64 of 90

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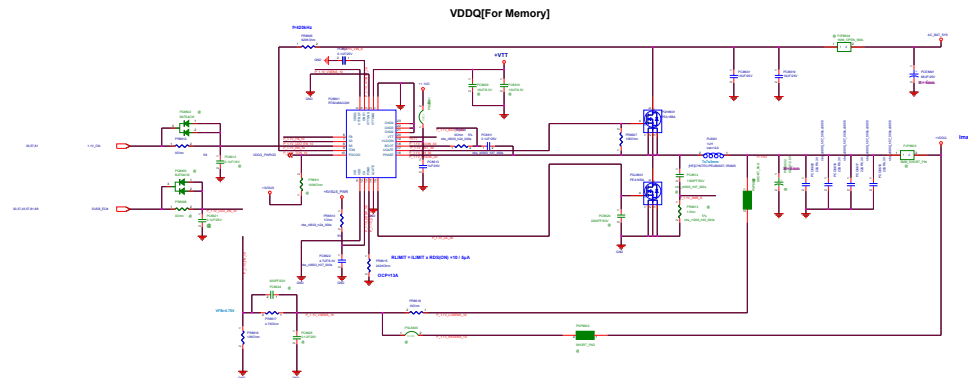
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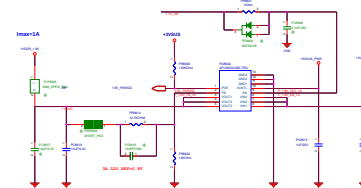
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+1.8V

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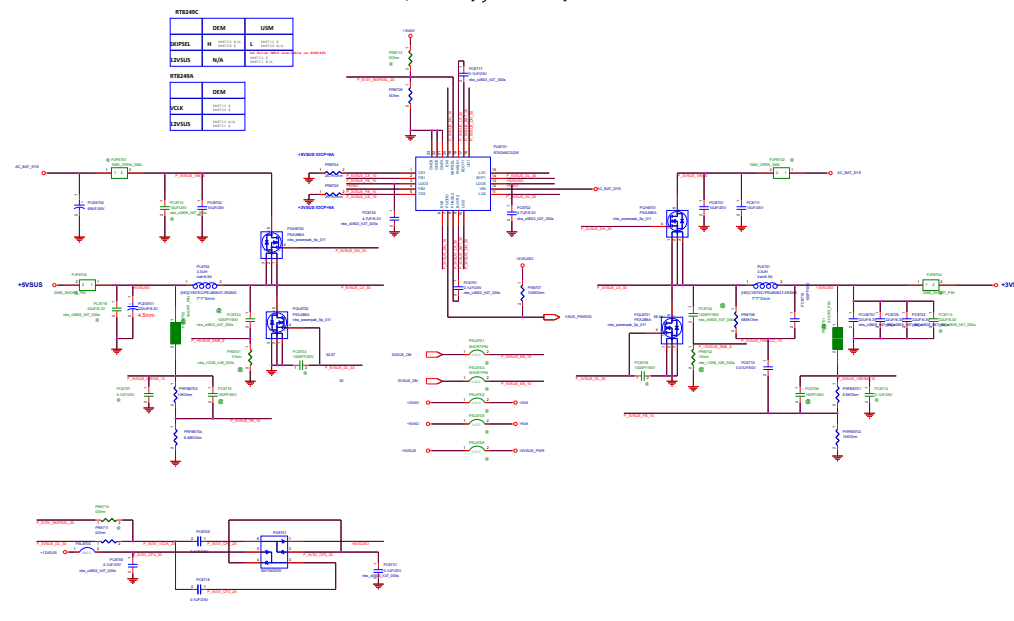
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+3VSUS / +5VSUS [System Power]



請 check 雙面電路 +5VSUS 是否 雙面銅箔電路 否則會有 1A 限制

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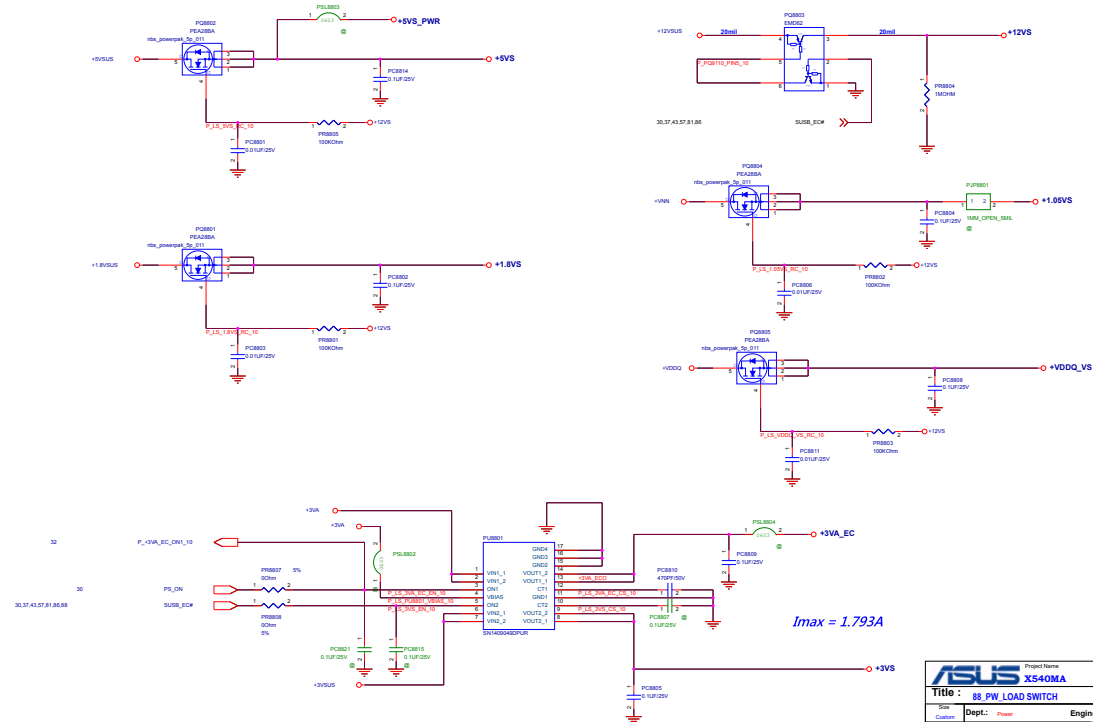
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### Load Switch


$$I_{max} = 1.793A$$

		Project Name	
		X540MA	
Title : 88_PW_LOAD SWITCH			
Size Custom	Dept.: Power	Engineer: Steve_Siso	
Date: Friday, February 23, 2018	Drawn: 88	of: 90	

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Global Search

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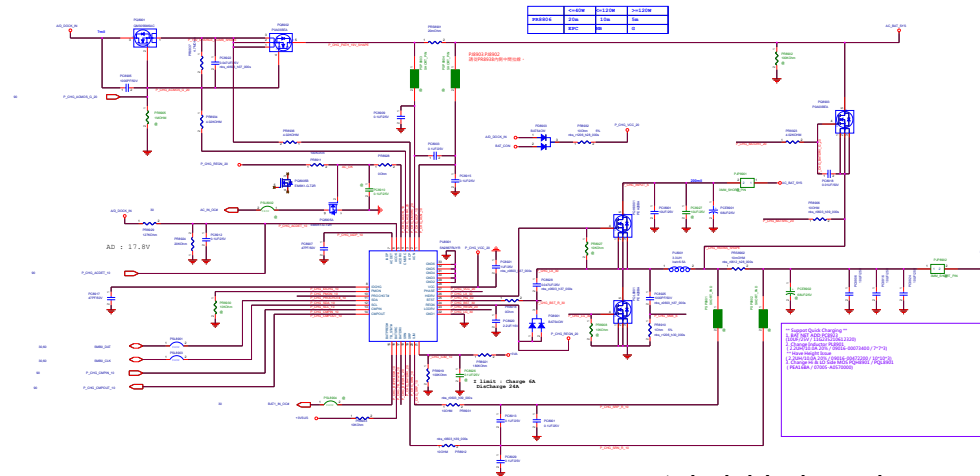
61.

Toggle FullScreen

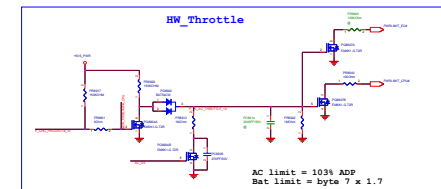
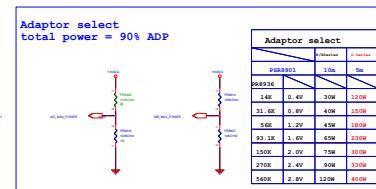
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81\_PW\_APL\_VCGI/VNN

82\_PW\_\*\*\*

83\_PW\_

84\_PW\_+1.8VSUS/+1.24VSUS

85\_PW\_\*\*\*

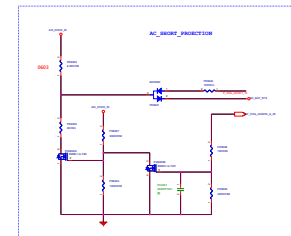
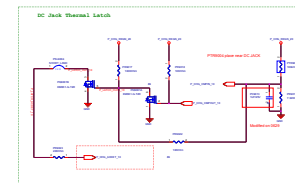
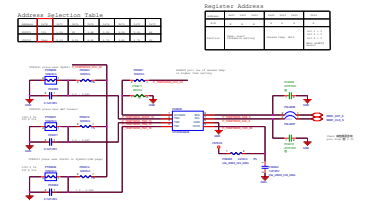
86\_PW\_+VDDQ/+VTT/+1.8V

87\_PW\_+3VSUS/+5VSUS

88\_PW\_LOAD SWITCH

89.PW\_CHARGER(SN2867RUYR)

90\_PW\_PROTECTION(w/o counte



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