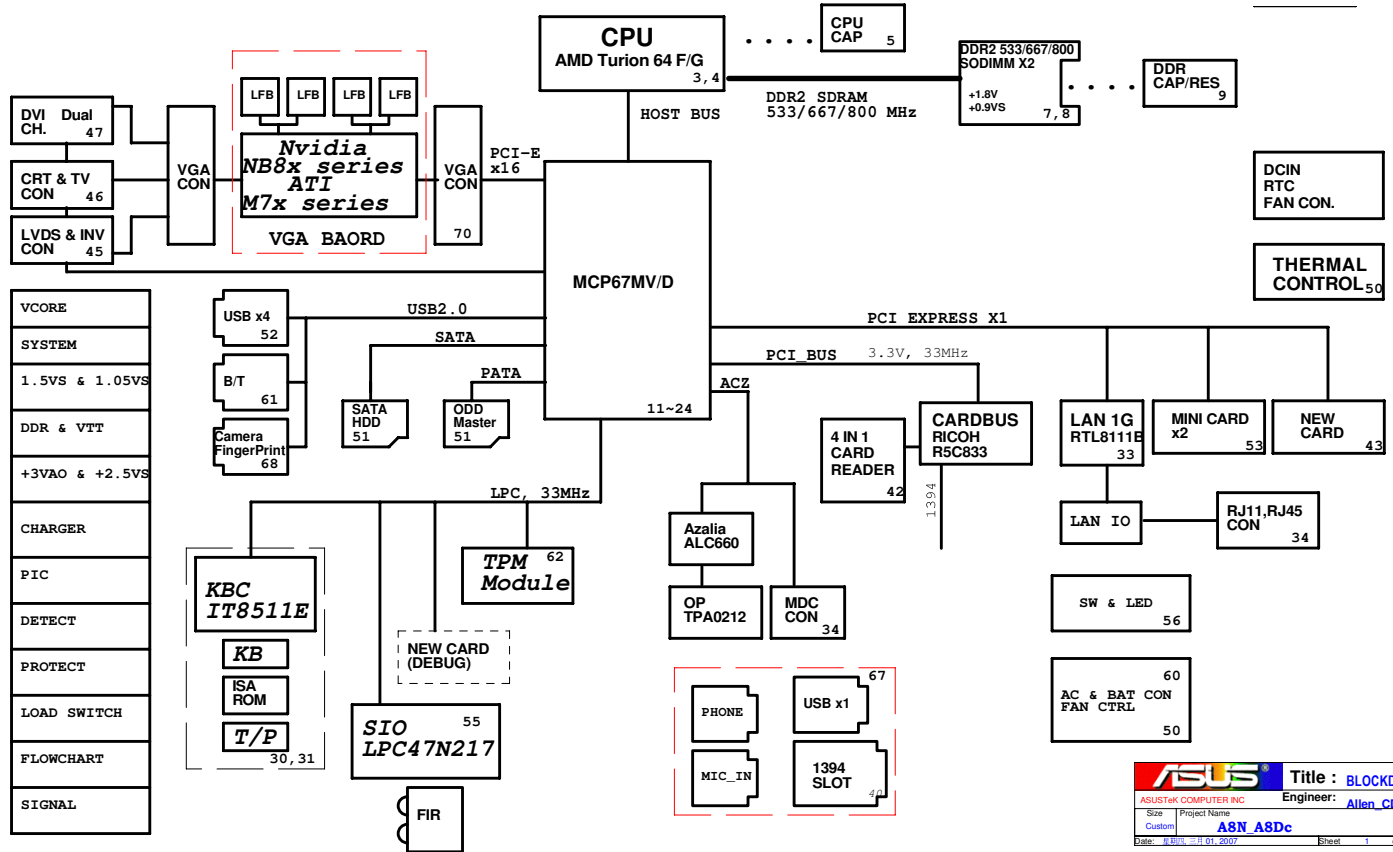
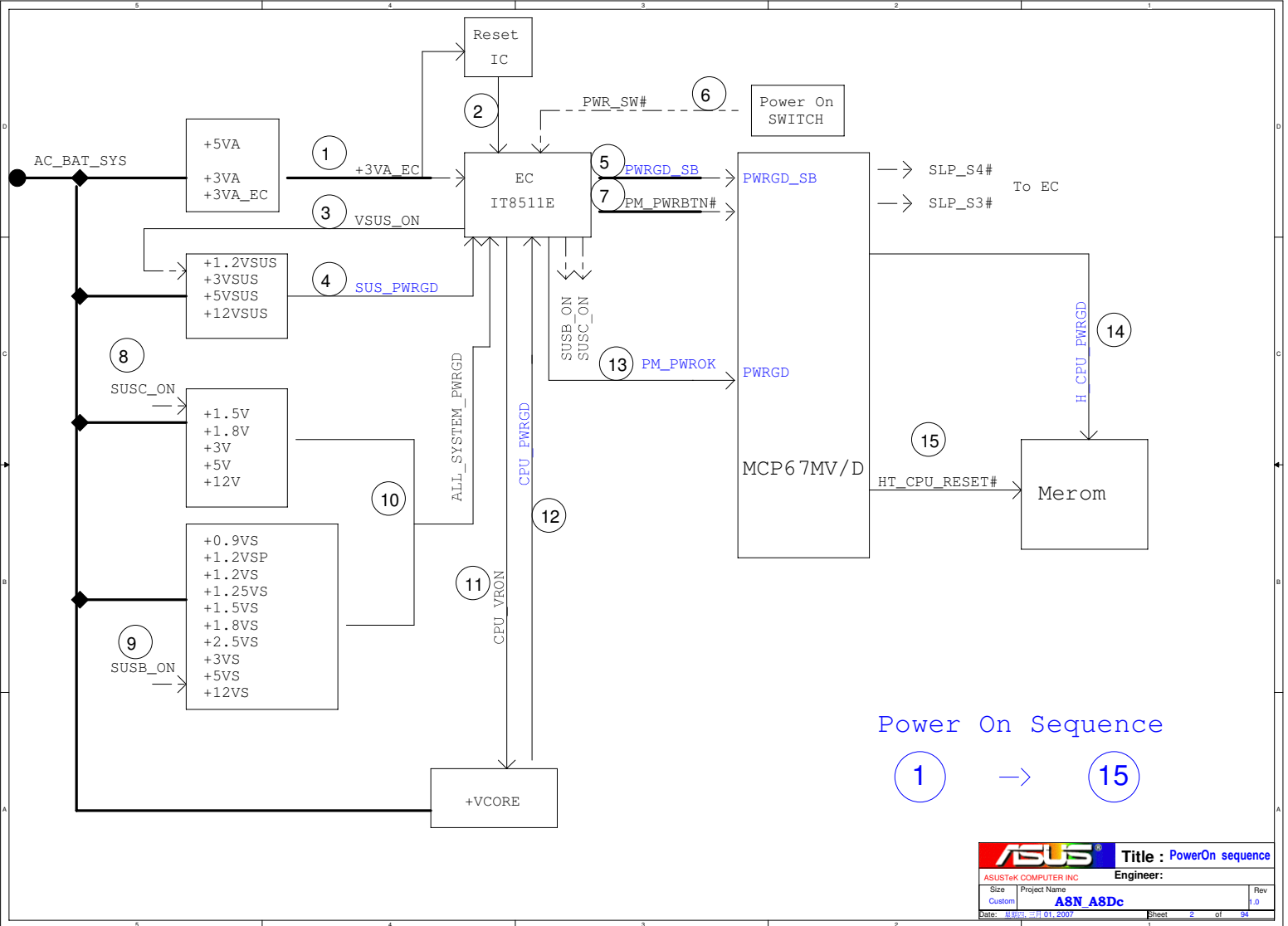


 淘本本
TBenBen.com

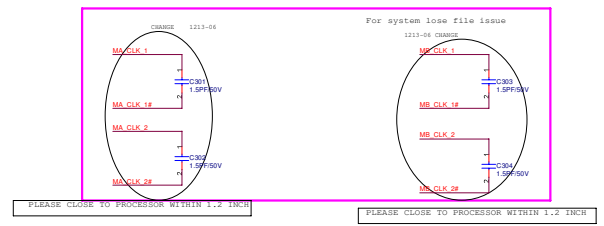
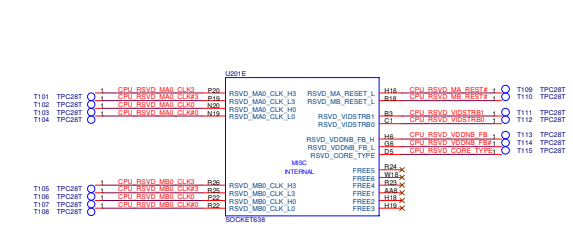
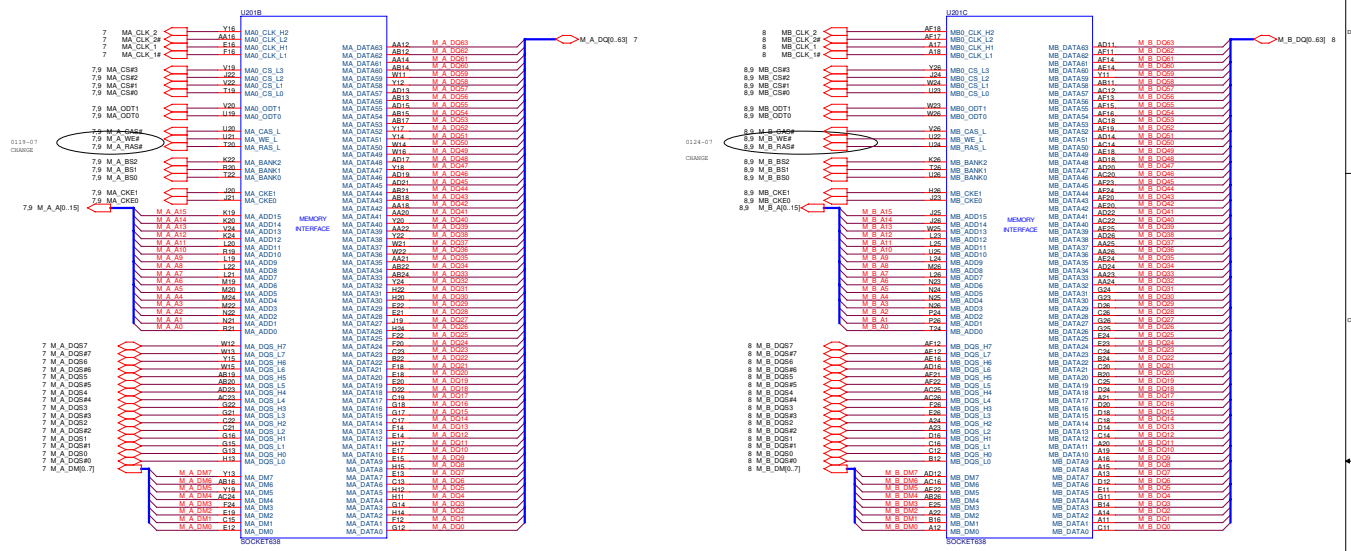
64

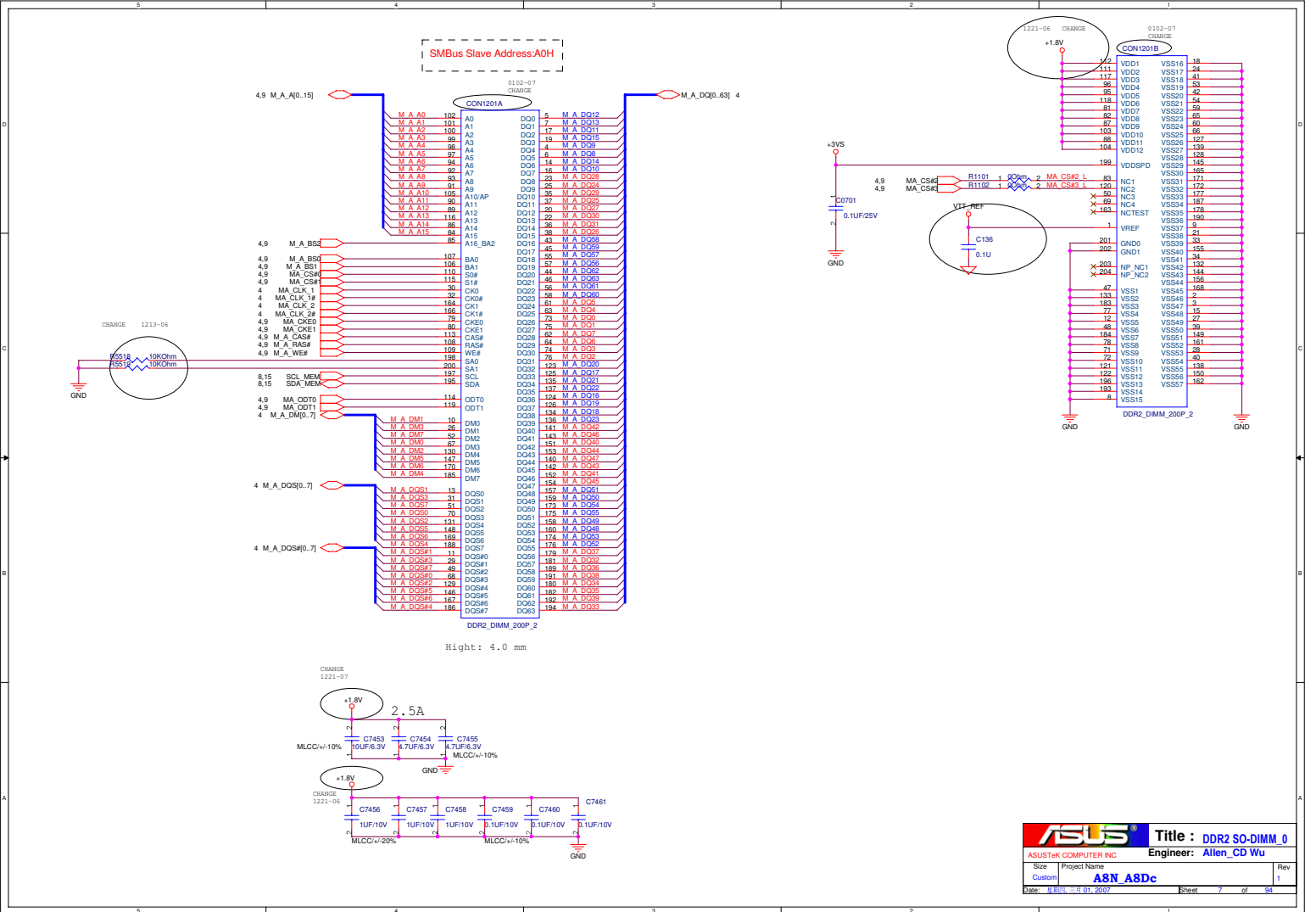


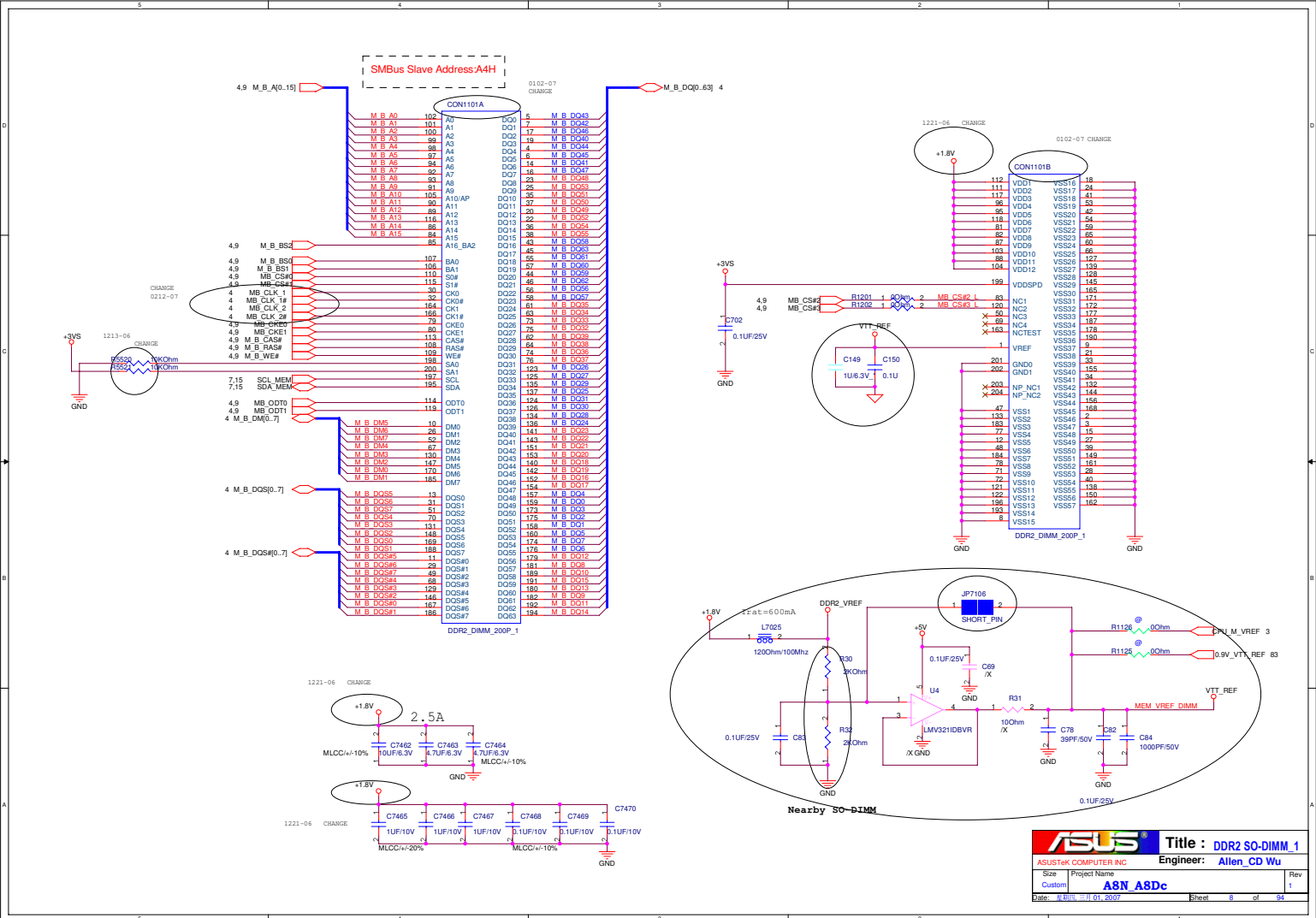
www.laptop-schematics.com



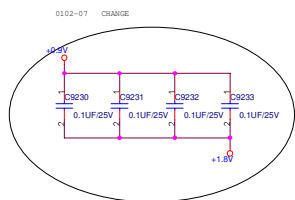
www.laptop-schematics.com



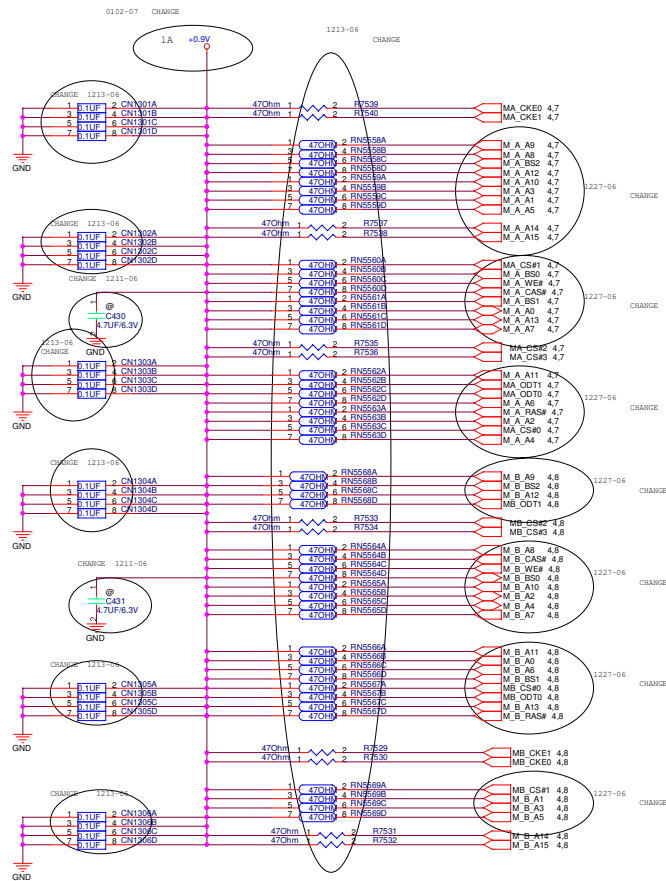




www.laptop-schematics.com



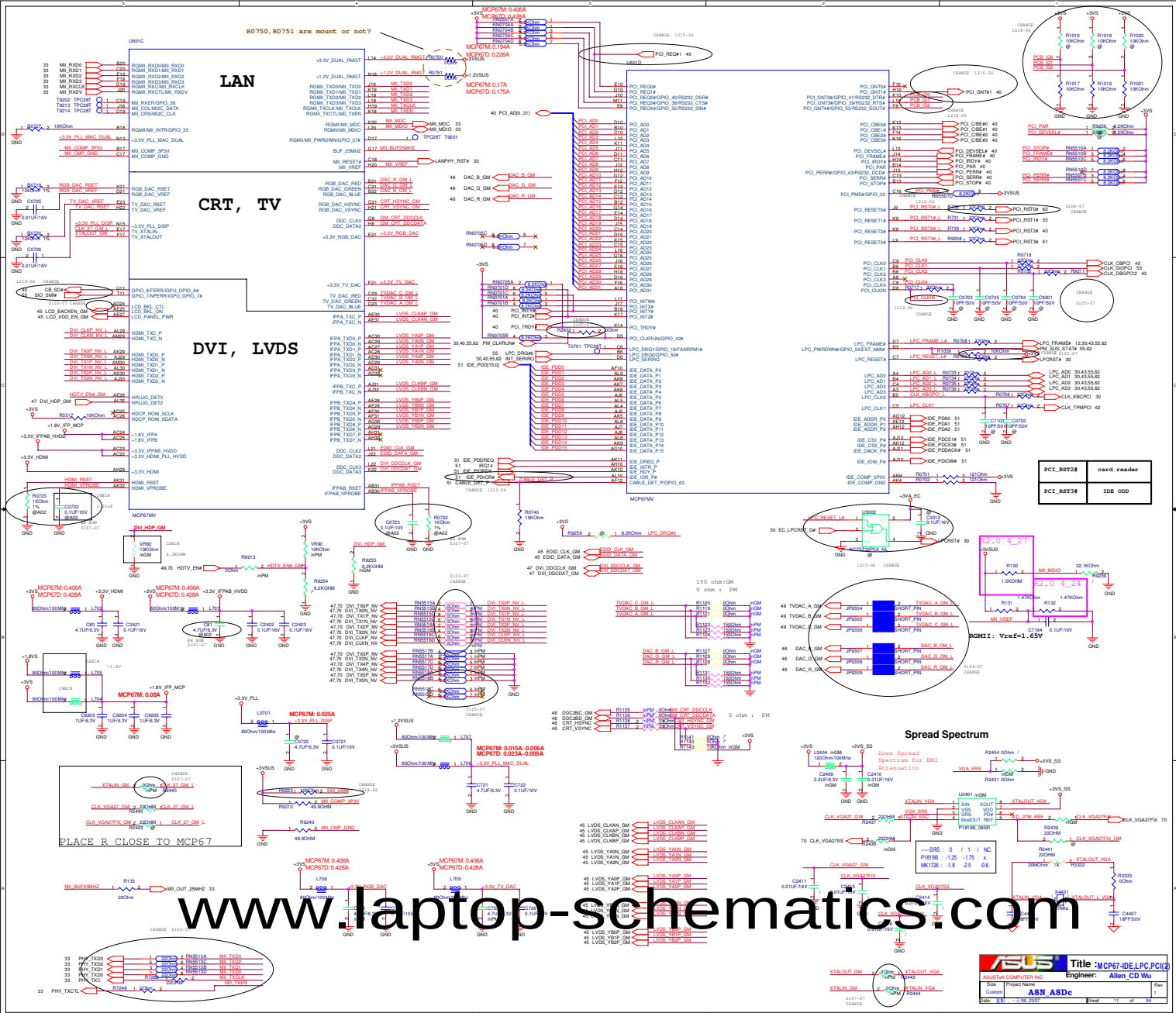
For Address/Command close to the area of plane switched

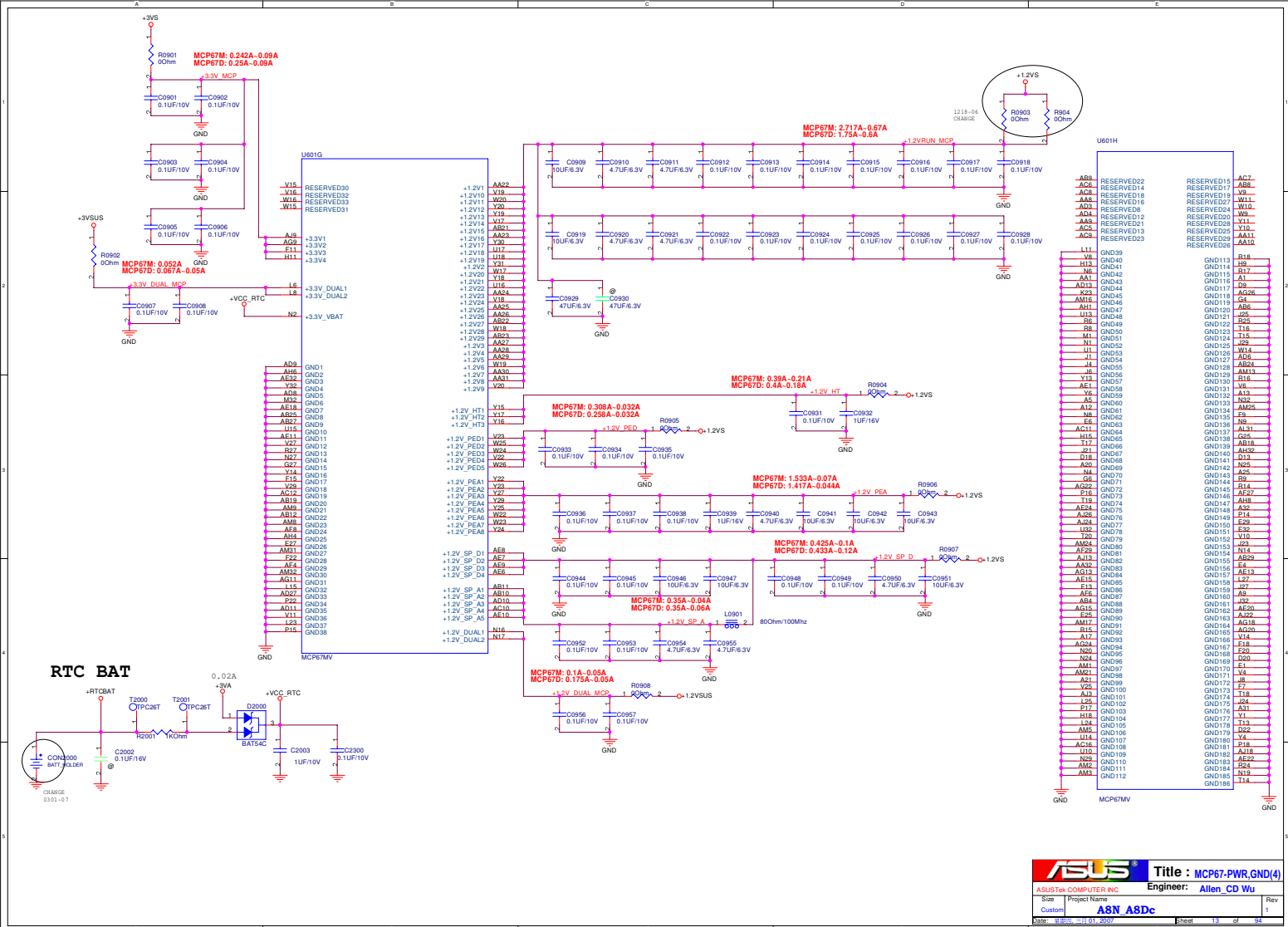


Layout note: Place array cap close to each pullup resistor terminated to +0.9V

ASUS			Title :DDR2 TERMINATION	
ASUSTek COMPUTER INC			Engineer: Allen_CD Wu	
Size	Project Name			Rev
Custom	A8N_A8Dc			1
Date: 11/10/07	11/10/2007	Sheet	6	of 94

www.laptop-schematics.com





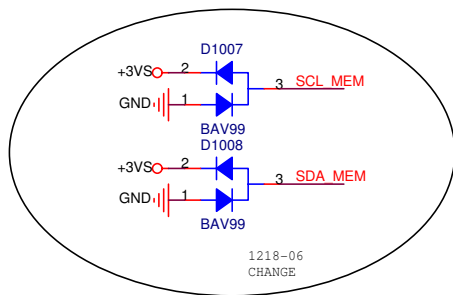
www.laptop-schematics.com

Check

Connect SMLINK and SMBUS
for SMBus 2.0 compliance.

ICH8-M

ICH8-M

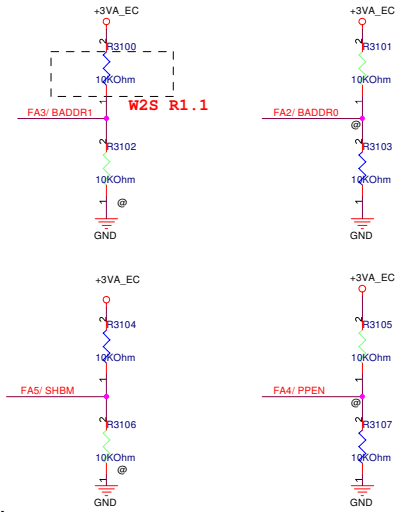


ASUS		Title : LEVEL SHIFTER	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size A	Project Name A8N_A8Dc		Rev 1.0
Date: 星期四, 三月 01, 2007		Sheet 15	of 94

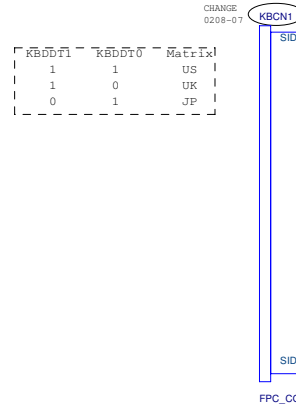
www.laptop-schematics.com



10:Determined by EC



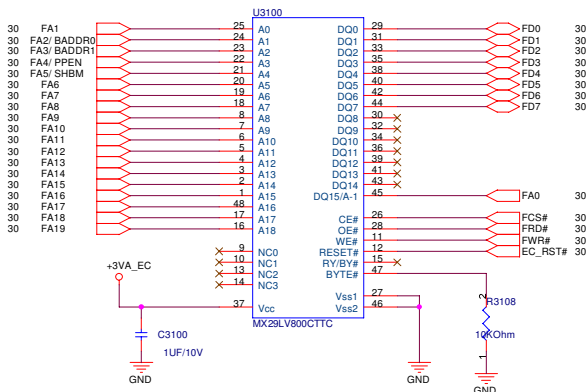
BADDR[1:0]
No pull up:
 The register pair to access PNPCFG is 002Eh and 002Fh.
Ext 10K up on BADDR0:
 The register pair to access PNPCFG is 004Eh and 004Fh.
Ext 10K up on BADDR1:
 The register pair to access PNPCFG is determined by EC domain registers SWCBALR and SWCAHR.



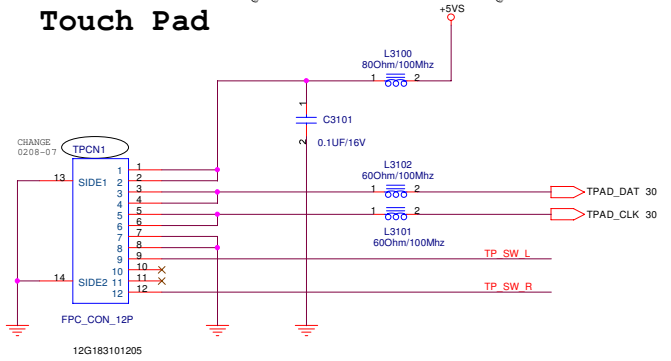
SHBM
No pull up:
 disable shared memory with host BIOS
Ext 10K up:
 enable shared memory with host BIOS

PPEN
No pull up:
 Normal
Ext 10K up:
 KBS interface pins are switched to parallel port interface for in-system programming.

8M TSOP

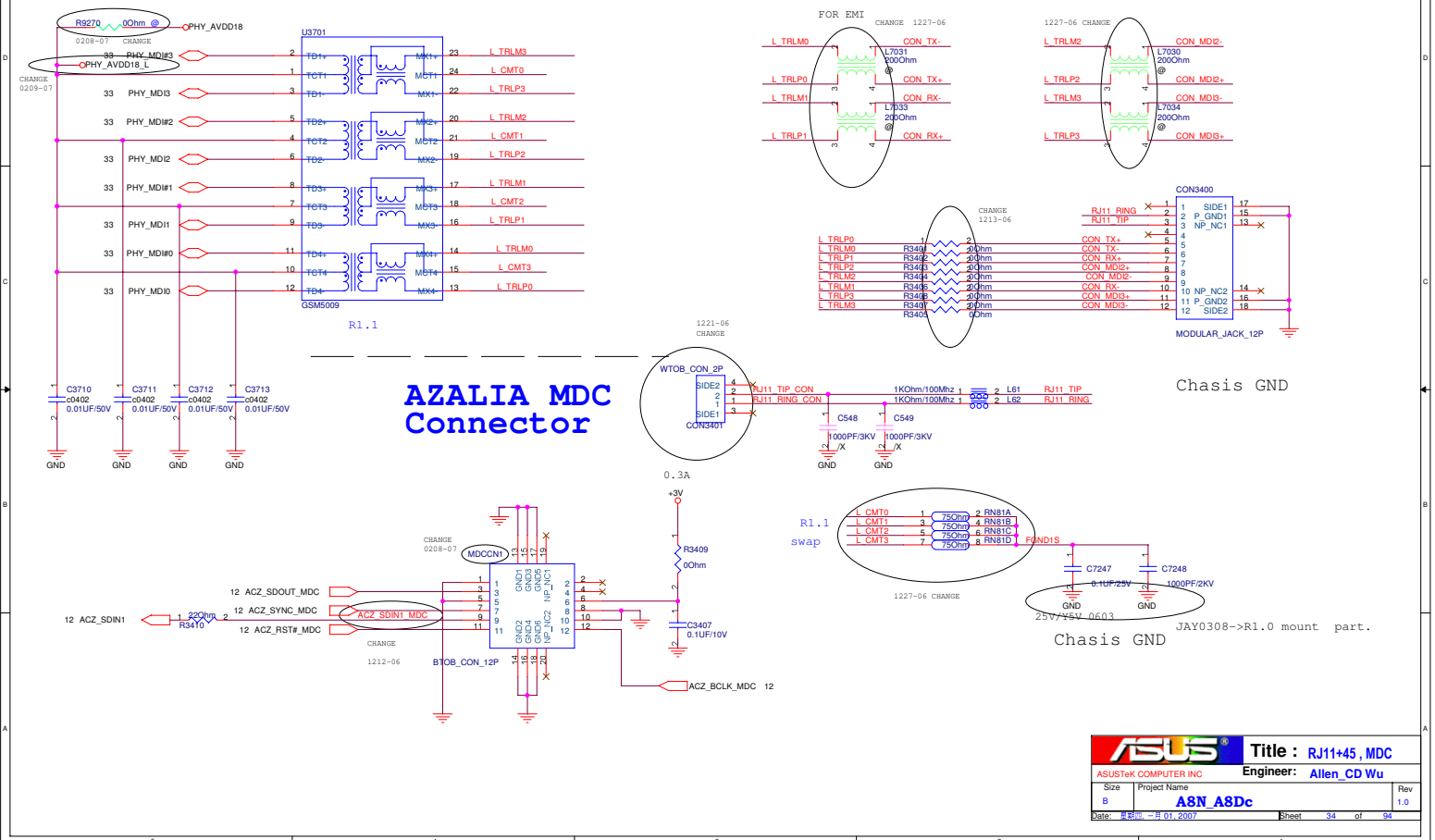


Touch Pad

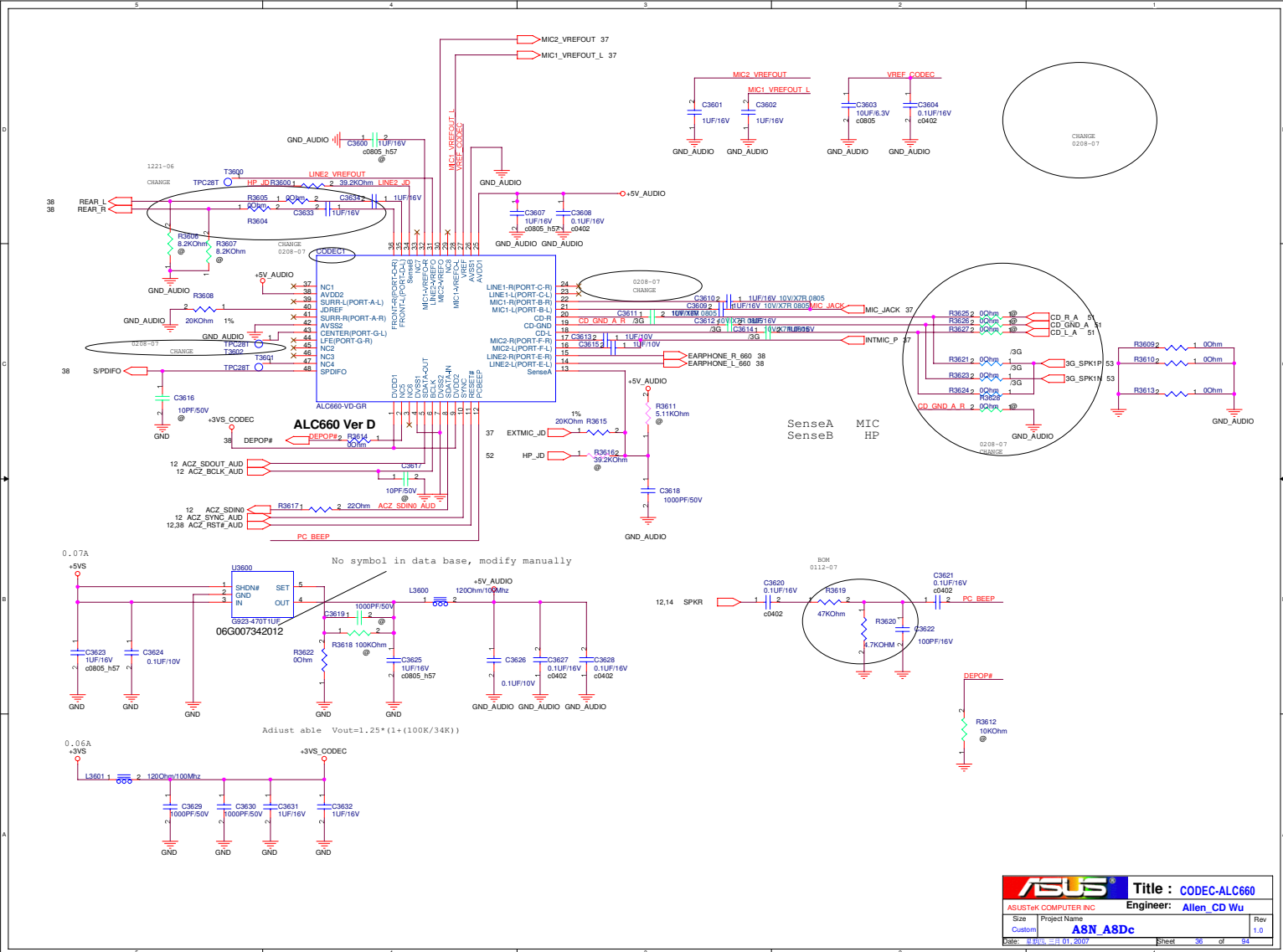


ASUS		Title : IT8510/8511(2/2)	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size	Project Name		Rev
Custom	A8N A8DC		1.0
Date: 01/01/2007	Sheet 31 of 94		

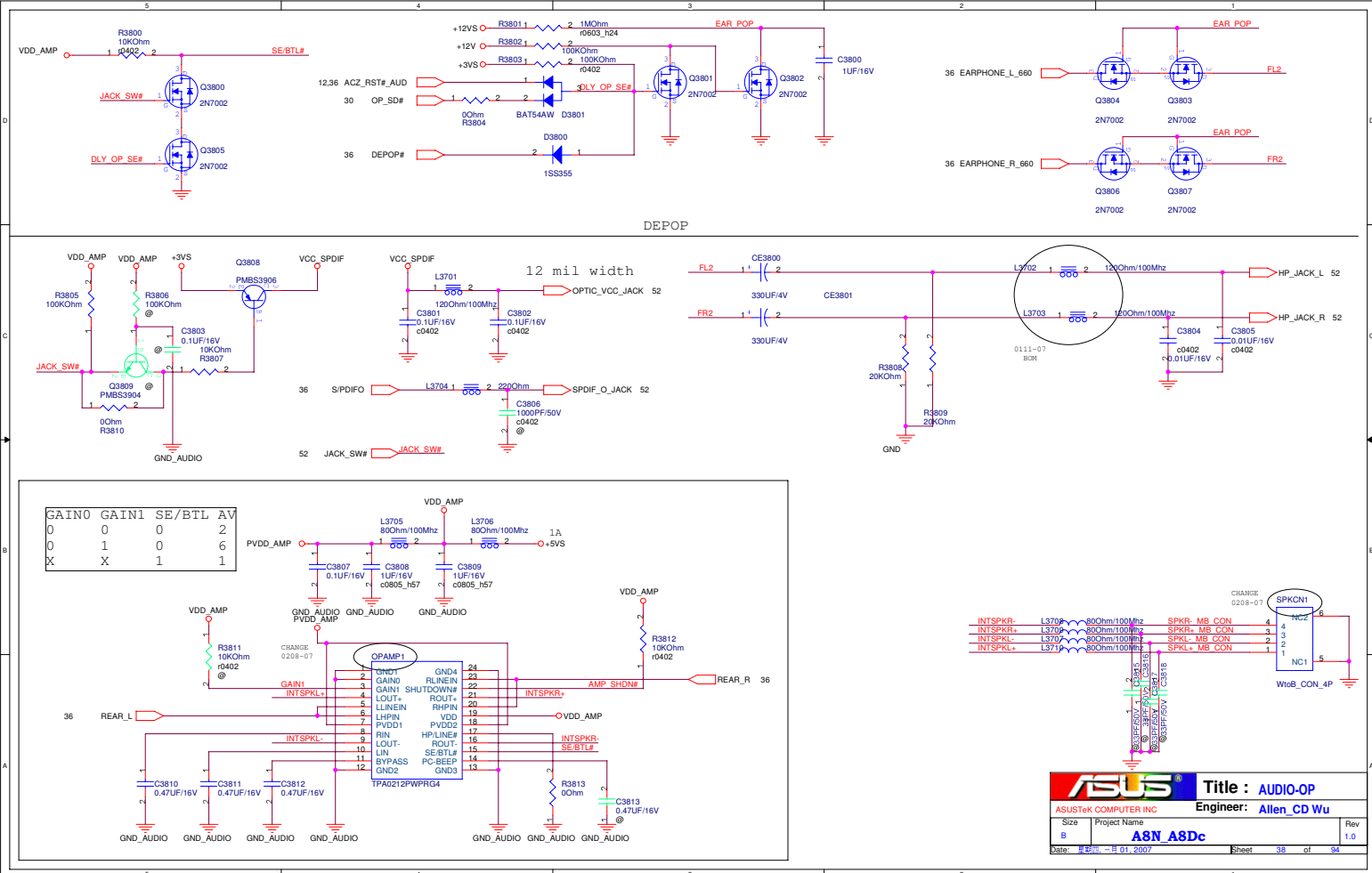
LAN PORT



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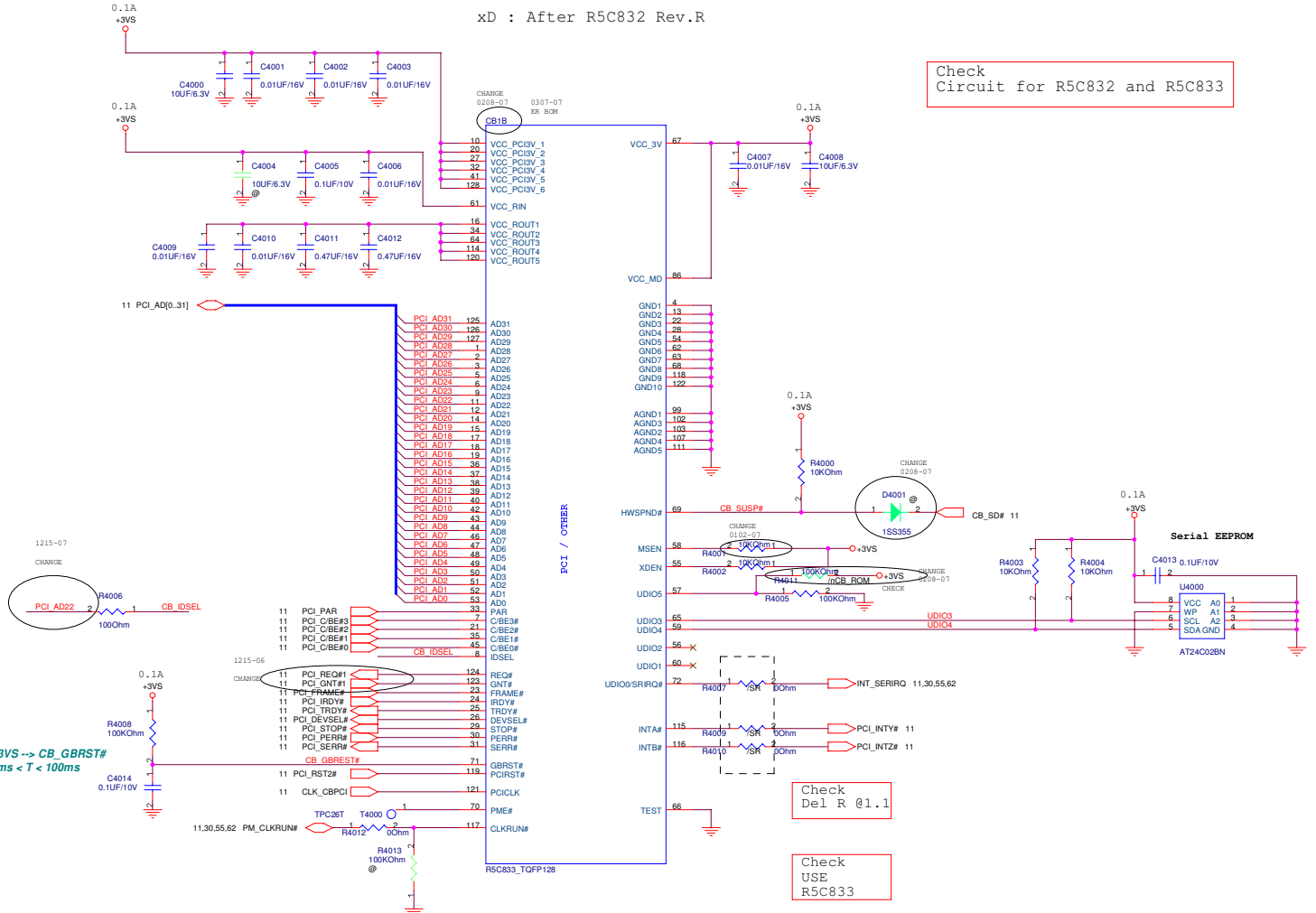


www.laptop-schematics.com



www.laptop-schematics.com

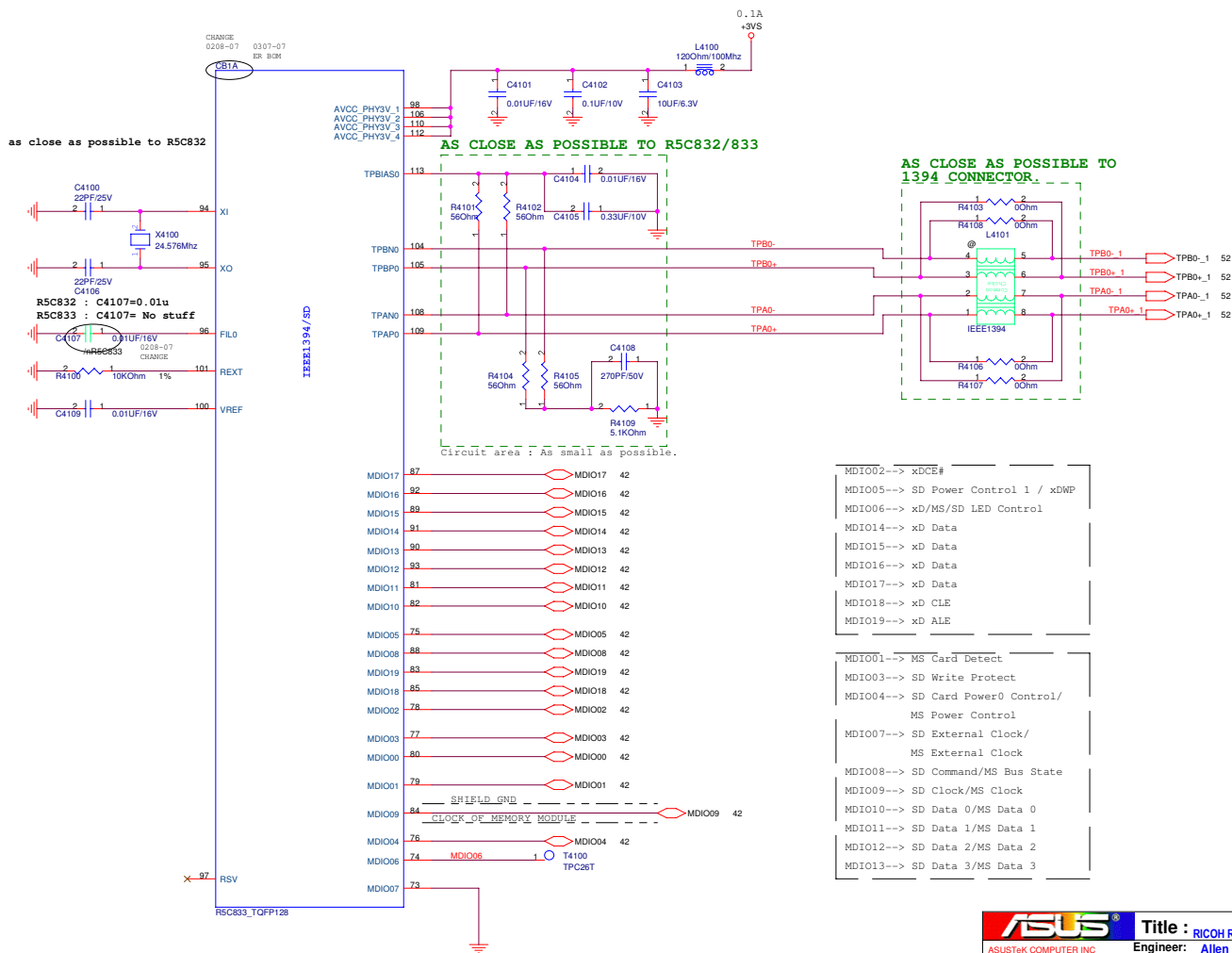
Check
Circuit for R5C832 and R5C833



Check
Del R @1.1

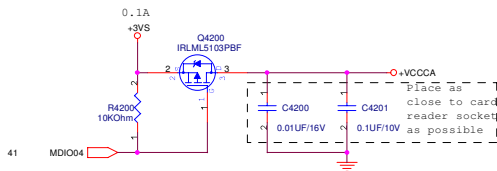
Check
USE
R5C833

ASUS		Title : RICOH R5C832/PCI B	
ASUSTek COMPUTER INC		Engineer: Allen_CD Wu	
Size	Project Name		
Custom	A8N A8Dc		
Date: 星期日 05/06/2007	Sheet	40	of 94

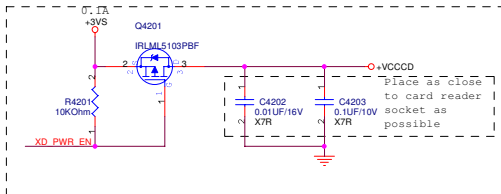


ASUS		Title : RICOH R5C832/PCI A	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size	Project Name	Rev	
Custom	A8N A8Dc	1.0	
Date: 星期日 05.06.2007	Sheet 41 of 94		

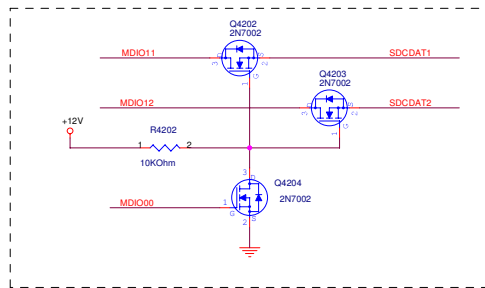
www.laptop-schematics.com



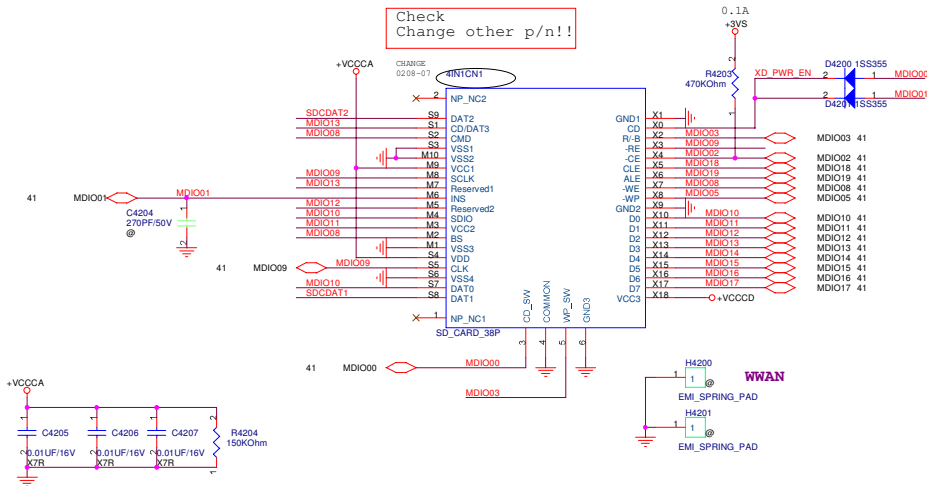
To correct the problem when MS Duo adaptor is in use.



Solve MS Duo Adaptor short issue.



Check
Change other p/n!!

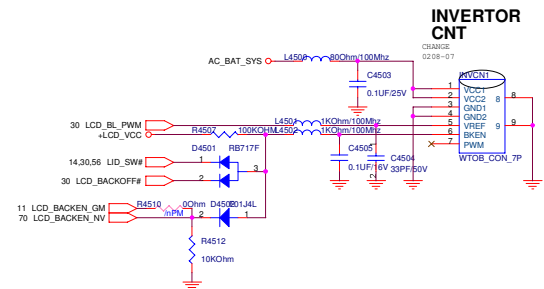
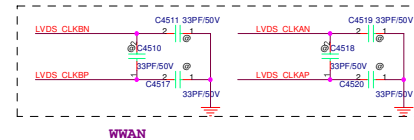
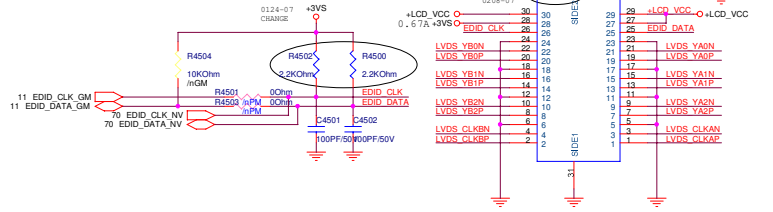
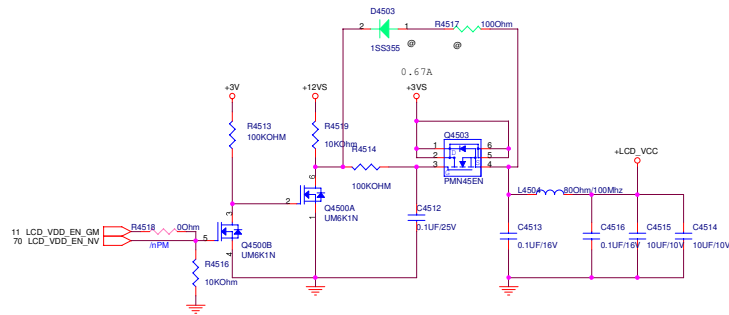
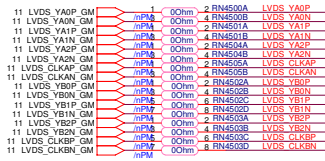
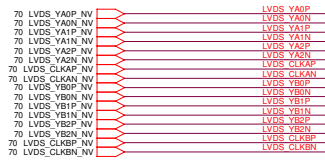


MDIO00--> SD Card Detect
MDIO01--> MS Card Detect
MDIO03--> SD Write Protect
MDIO04--> SD Card Power0 Control/
MS Power Control
MDIO08--> SD Command/MS Bus State
MDIO09--> SD Clock/MS Clock
MDIO10--> SD Data 0/MS Data 0
MDIO11--> SD Data 1/MS Data 1
MDIO12--> SD Data 2/MS Data 2
MDIO13--> SD Data 3/MS Data 3

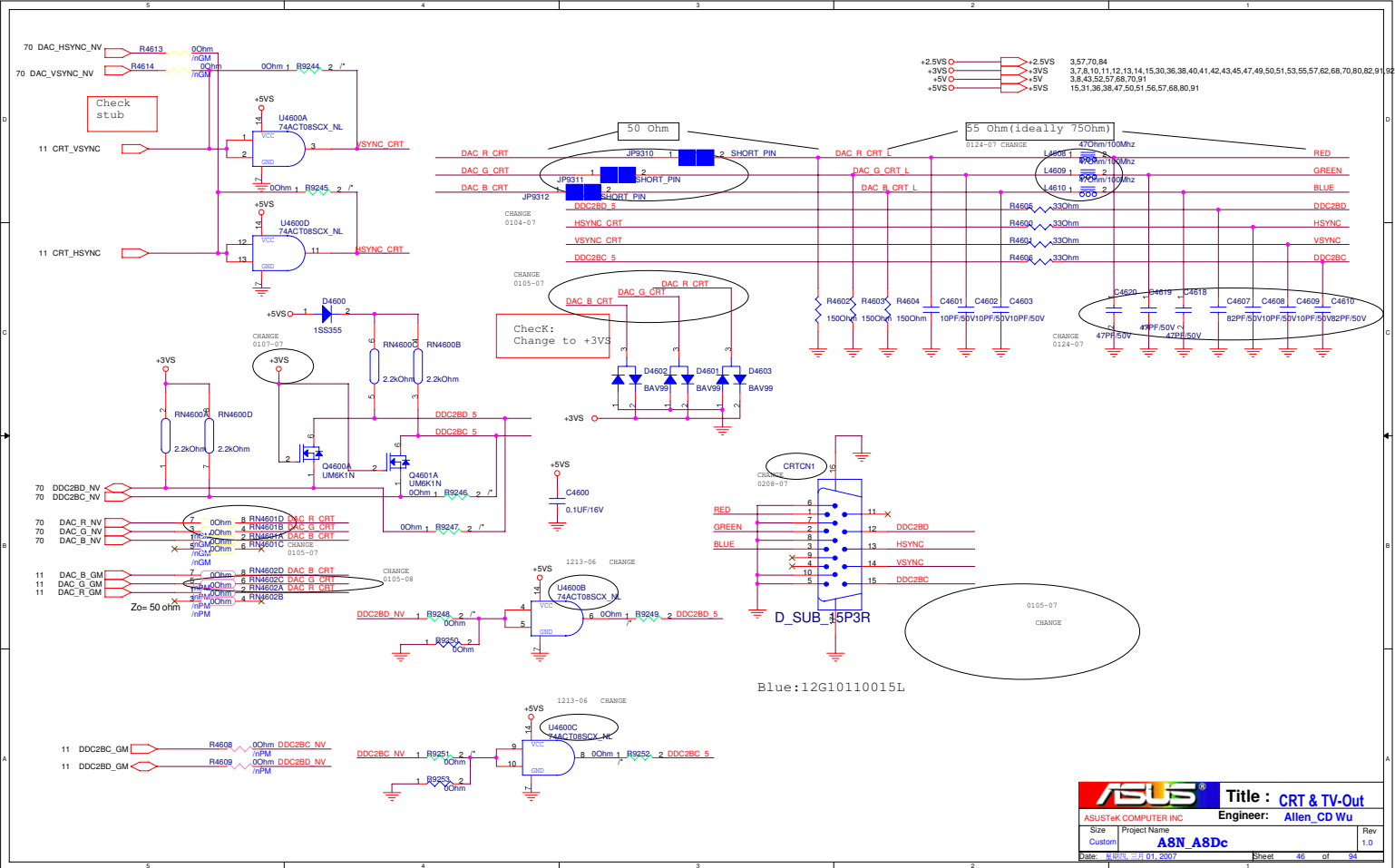
MDIO02--> xDCE#
MDIO05--> SD Power Control 1 / xDWP
MDIO06--> xD/MS/SD LED Control
MDIO14--> xD Data
MDIO15--> xD Data
MDIO16--> xD Data
MDIO17--> xD Data
MDIO18--> xD CLE
MDIO19--> xD ALE

ASUS		Title : CardReader	
ASUSTek COMPUTER INC		Engineer: Allen_CD Wu	
Size	Project Name	Rev	
Custom	A8N A8Dc	1.0	
Date: 2007.01.01		Sheet 42 of 94	

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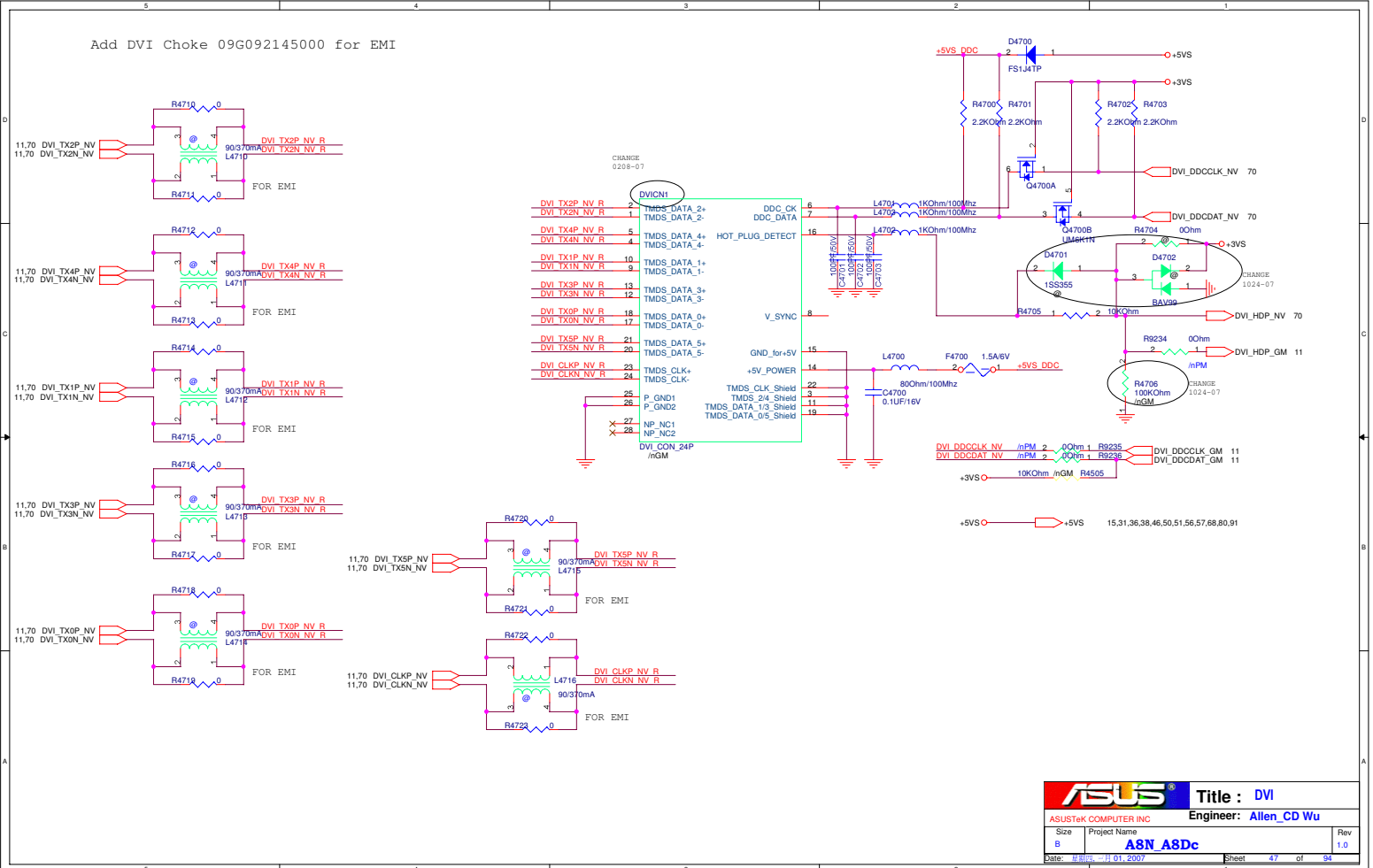


		Title : LVDS & Inverter	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size Custom	Project Name A8N A8Dc		Rev 1.0
Date: 2007.01.01		Sheet 45	of 94

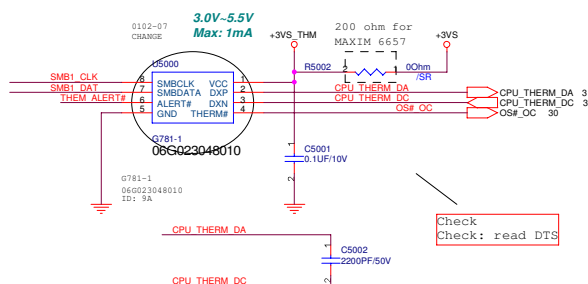
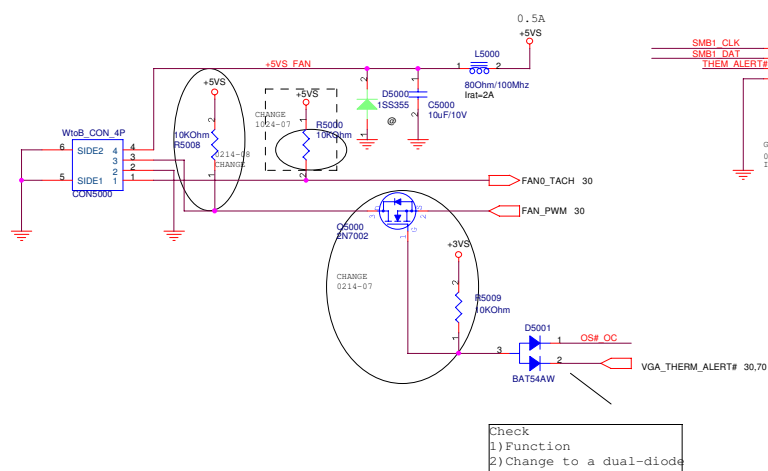


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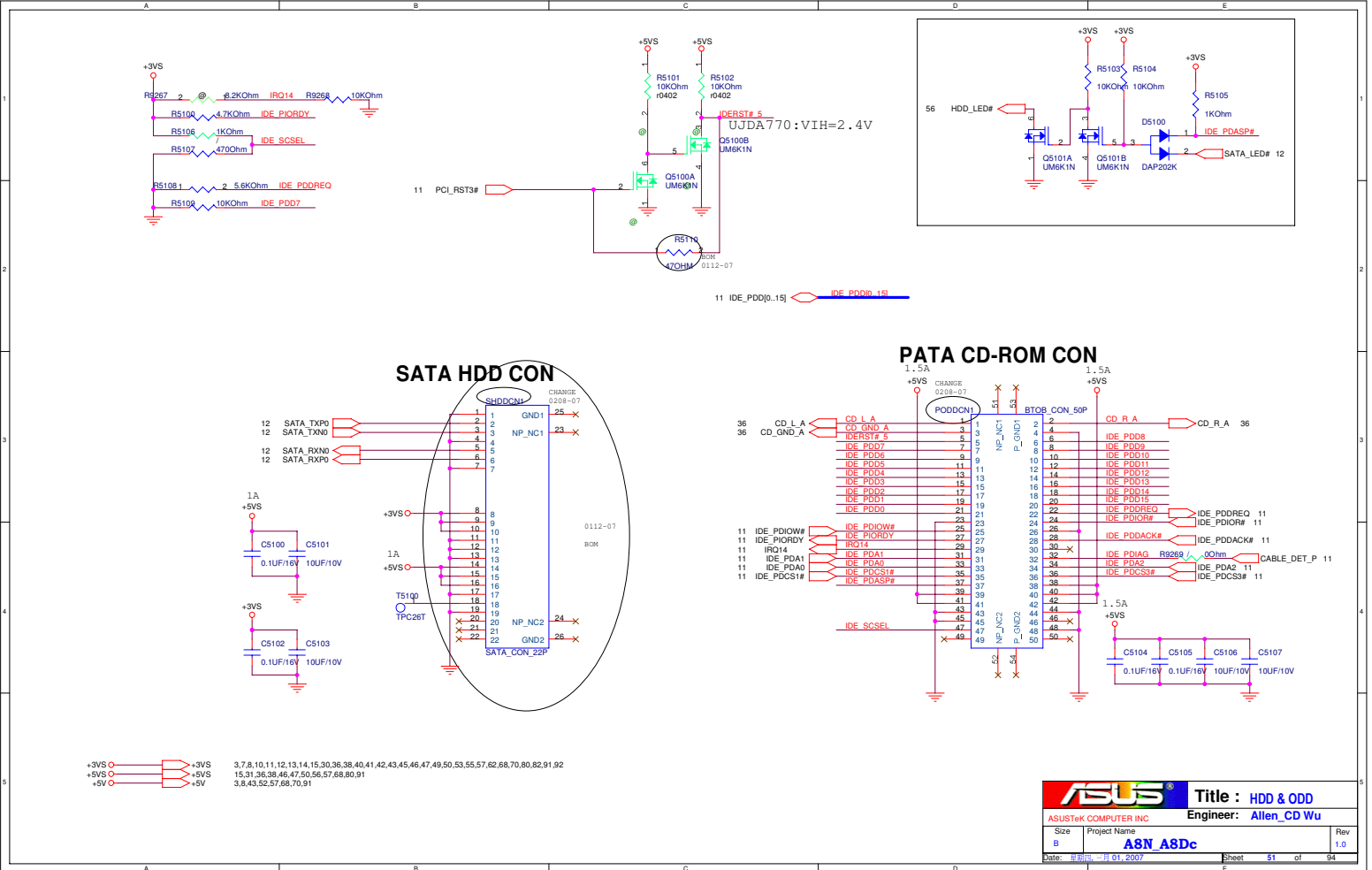


The schematic diagram illustrates the I2C interface circuit. A +3V supply is connected to the I2C lines through resistors R5001 and R5004. The I2C lines are connected to the SMB1_CLK and SMB1_DAT pins of the SMB1 module. The SMB1 module is also connected to the OS# and OC pins of the I2C module.



```
Check
Check: read DTS
```

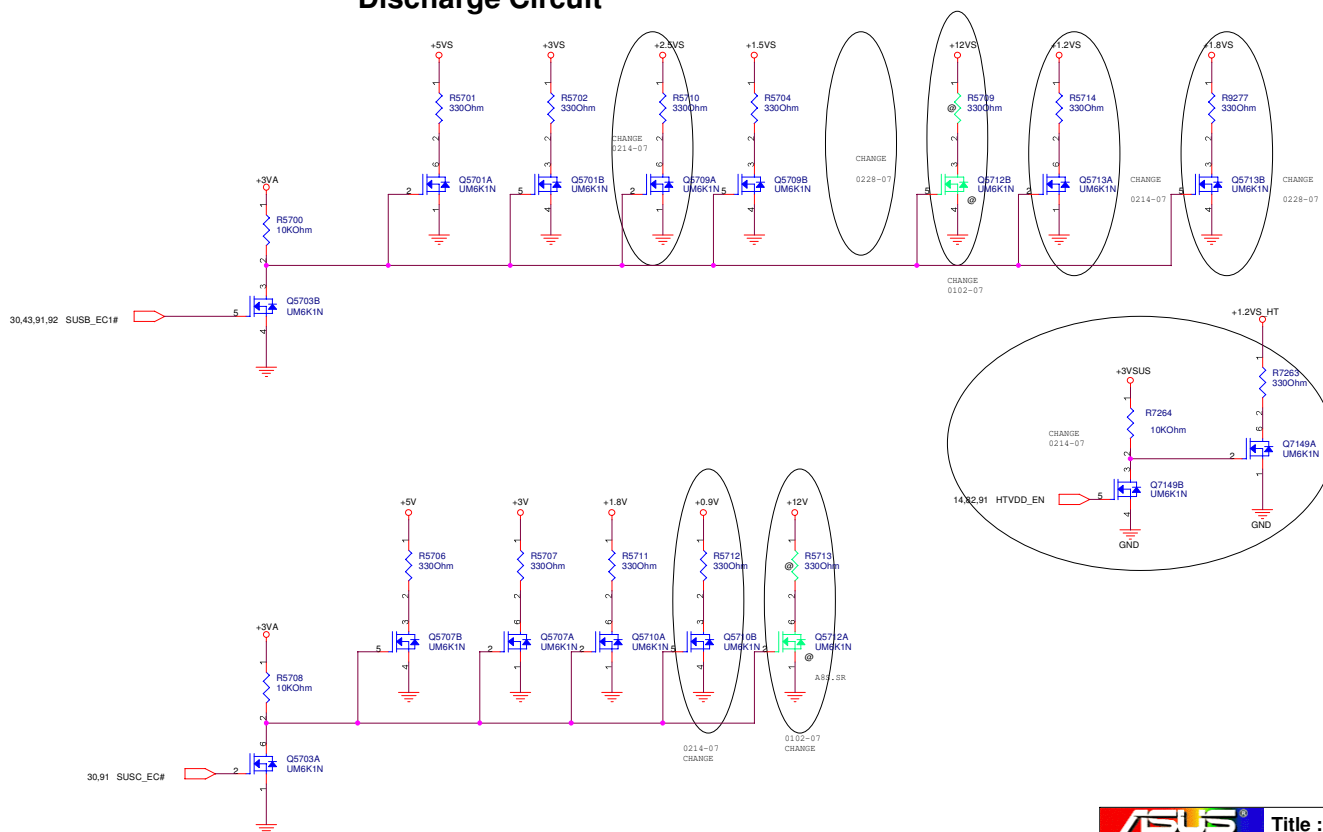
Check
1) Function
2) Change to a dual-diode



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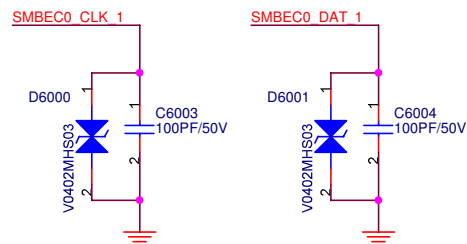
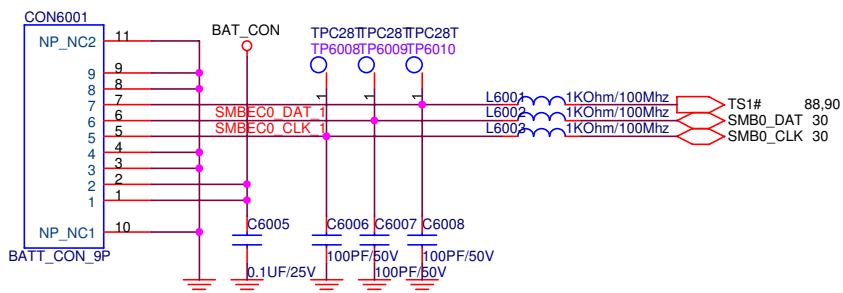
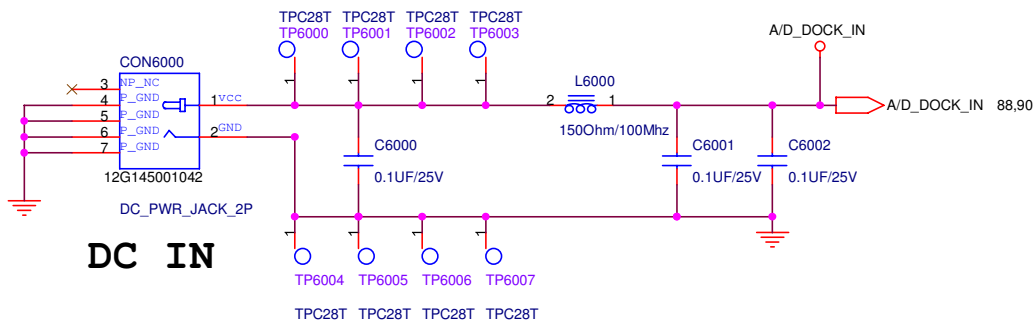


Discharge Circuit



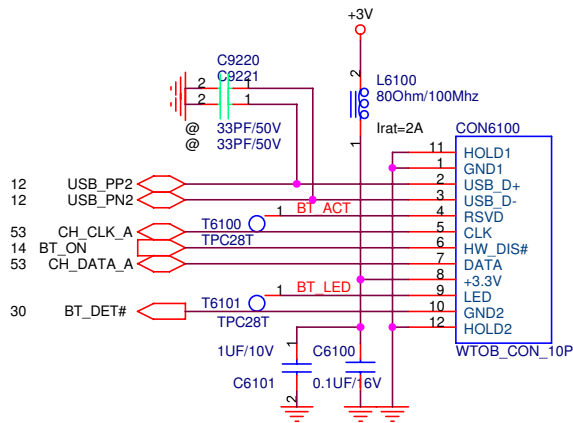
		Title : Discharge	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size B	Project Name A8N A8Dc		Re 1.0
Date: 星期日 - 月 01, 2007		Sheet	of 94

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ASUS		Title : DC IN / BAT	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size	Project Name		Rev
A	A8N_A8Dc		1.0
Date: 星期四, 三月 01, 2007		Sheet 60 of 94	

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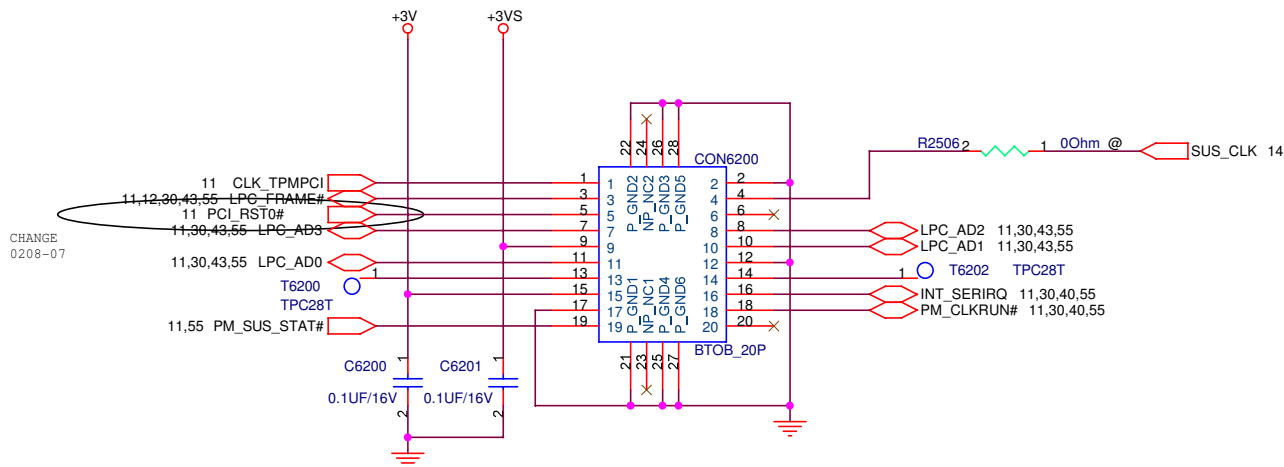


Bluetooth Module CON

ASUS		Title : BT/CAMERA	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size A	Project Name A8N_A8Dc		Rev 1.0
Date: 星期四, 三月 01, 2007		Sheet	61 of 94

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TPM 1.2 Module



ASUS		Title :TPM	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size A	Project Name A8N_A8Dc		Rev 1.0
Date: 星期四, 三月 01, 2007		Sheet 62 of 94	

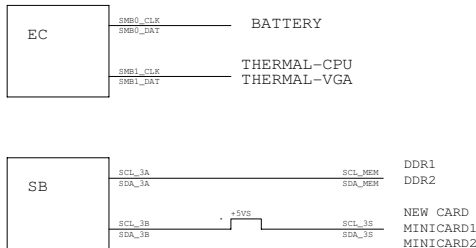
www.laptop-schematics.com

PCI Device	IDSEL#	REQ/GNT#	Interrupts
CARDBUS	AD22 CHANGE 1215-06	1	Y, Z

SM-Bus Device	SM-Bus Address
SO-DIMM 0 (low)	
SPD	A0
SO-DIMM 1(high)	
SPD	A4
G781-1	9A
G781(VGA board)	98

CHANGE 0102-07

Thermal Sensor (CPU)
SM-Bus Mapping 1001100



BOM option

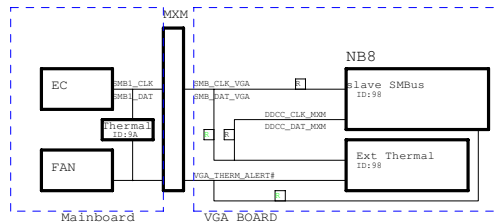
nGM:yellow
nPM:light red
=====

nGM :no stuff for A8N
nPM :no stuff for A8Dc
nGM1:no stuff for A8N, A8N/SR mount for debugging A8S in advance
3G :for Windigo, SR mount for debugging
SR :for SR debugging, should be removed or no stuff @ ER

Support ID2:

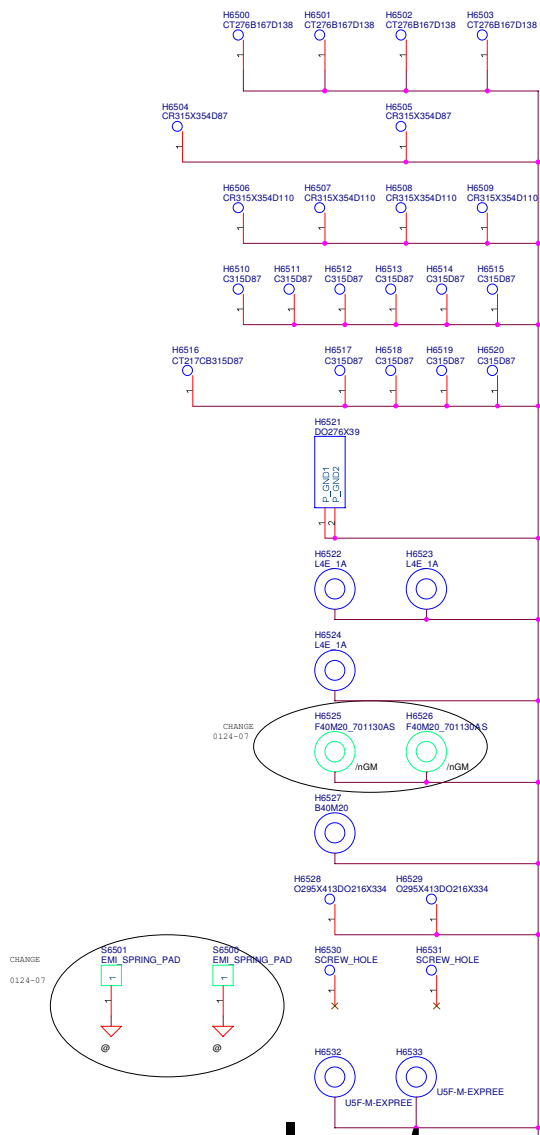
Support ID2:
page 68,Finger print
page 55,IR
Page 56,pwr switch and LED

Thermal block diagram



ASUS		Title :	
ASUSTek COMPUTER INC		Engineer: Allen_CD Wu	
Size	Project Name		Rev
B	A8N_A8Dc		1.0
Date: 11/01/2007		Sheet 64 of 94	

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CPU

SCREW

U HOLE

SCREW

IO Board

MDC_NUT

TPM_NUT

VGA_NUT

KB_NUT

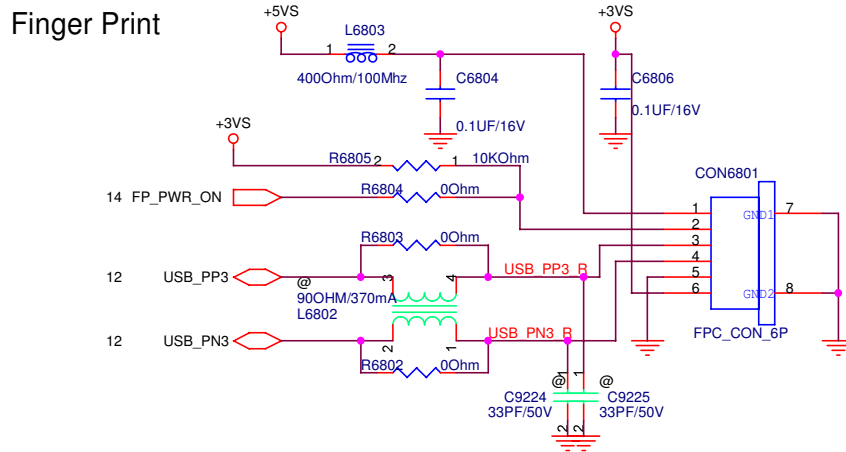
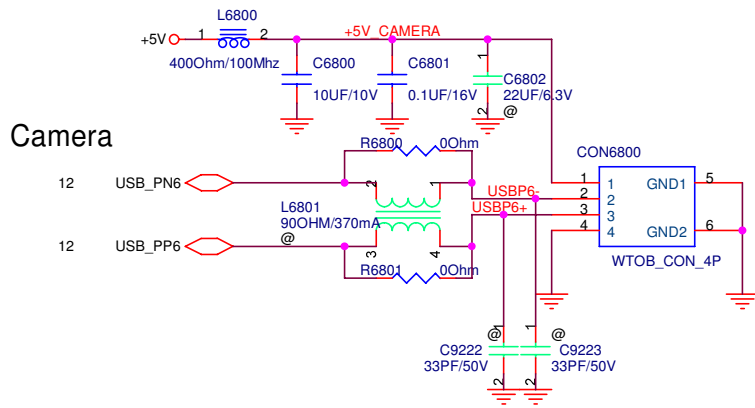
KEYBOARD

FIXED HOLE

miniCard

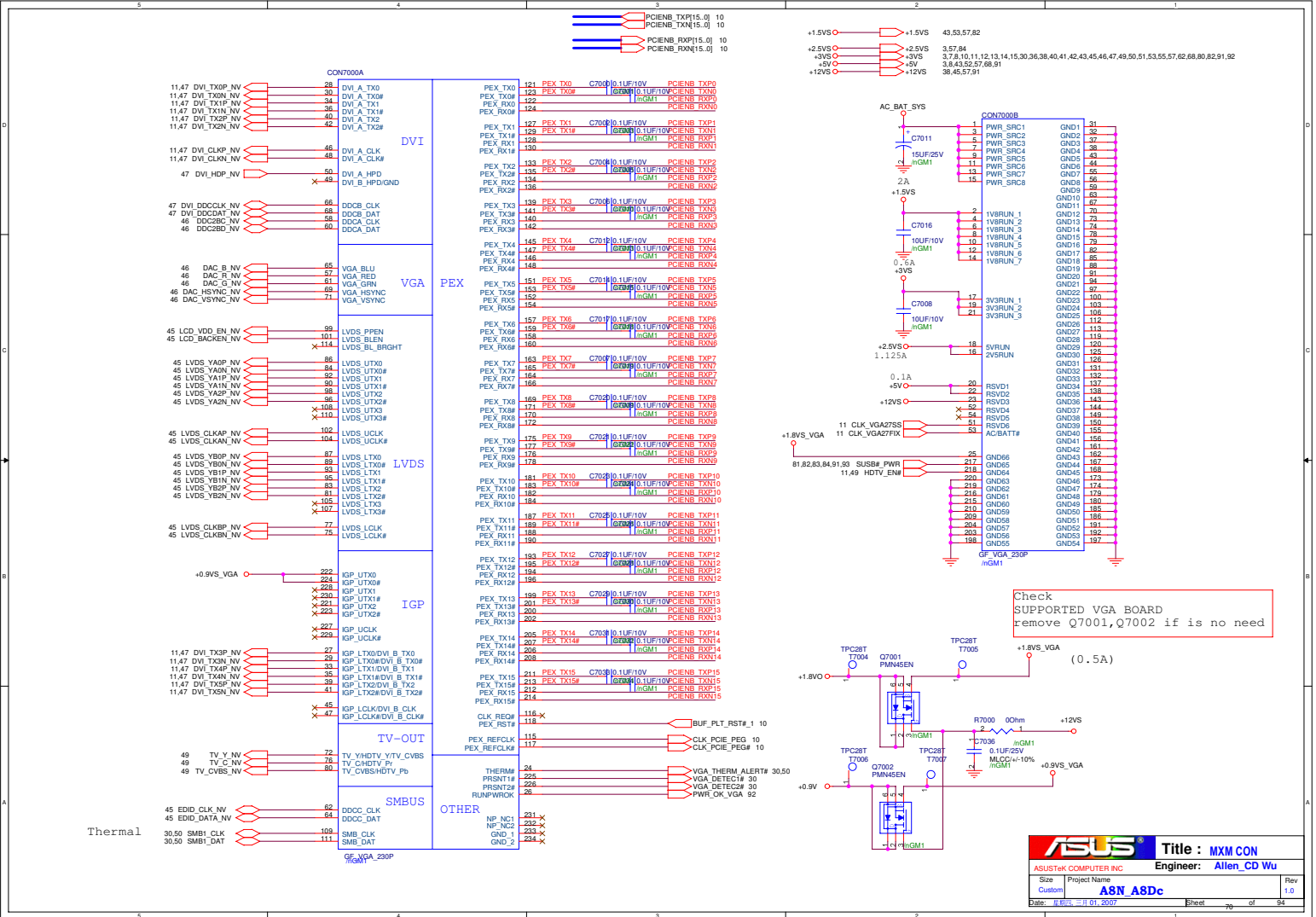
www.laptop-schematics.com

File	<Title>
Sheet	1 of 1
Author	www.laptop-schematics.com
Created	2023-07-07 10:00:00
Modified	2023-07-07 10:00:00



ASUS		Title : CAMERA/FingerPrinter	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size	Project Name	Rev	
A	A8N_A8Dc	1.0	
Date: 星期四, 三月 01, 2007		Sheet	60 of 94

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Change Note:

EE :

1. Reference name without 0 tail
2. Synchronize component size and type
3. Remove 0 ohm serial resistor
- 4.
- 5.
- 6.
- 7.
- 8.

Layout :

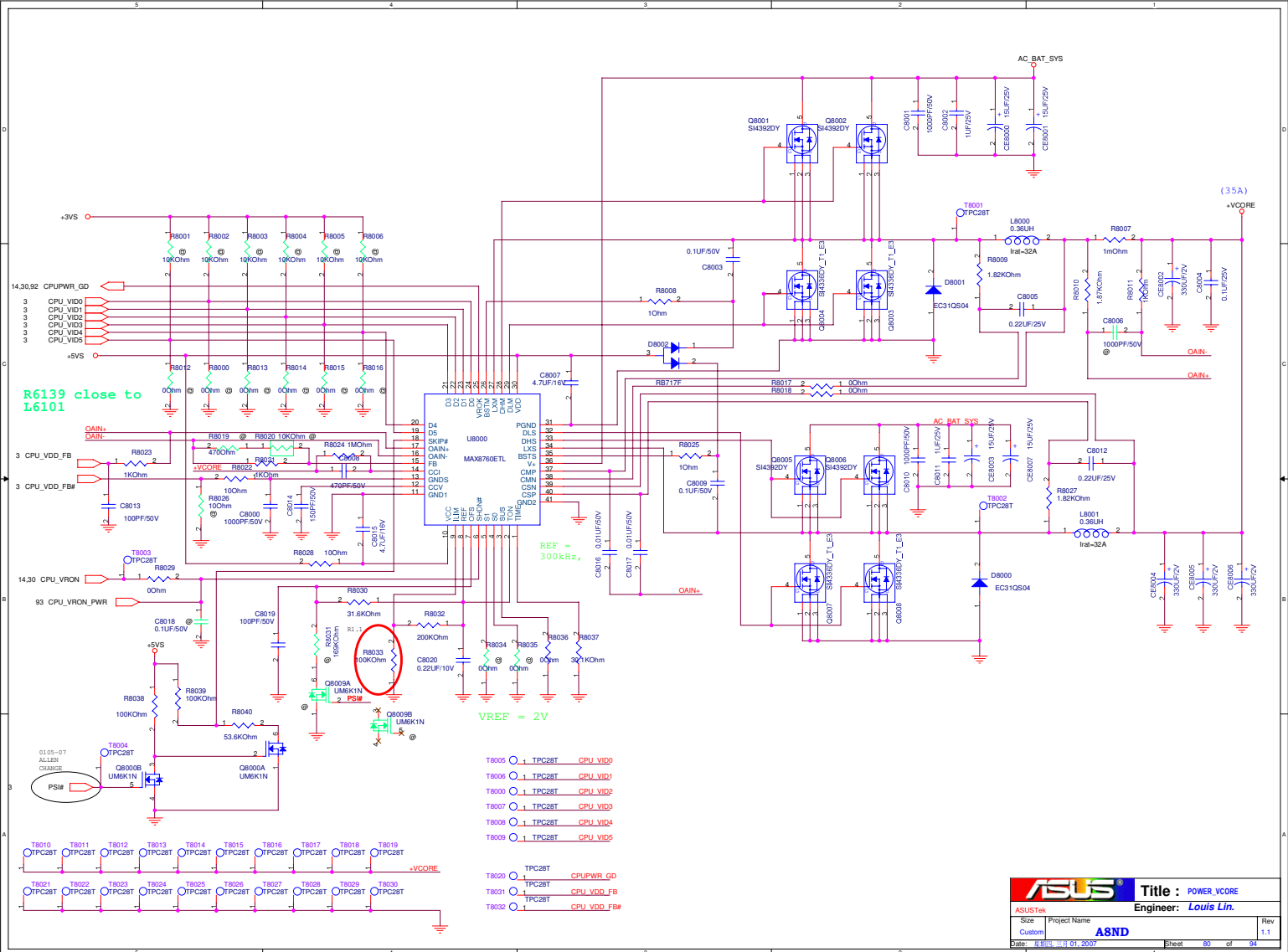
1. PCI MOAT
2. Equalize Crystal and PCI Clock Length
3. VGA Board
4. PCI-E Thread

SMT :

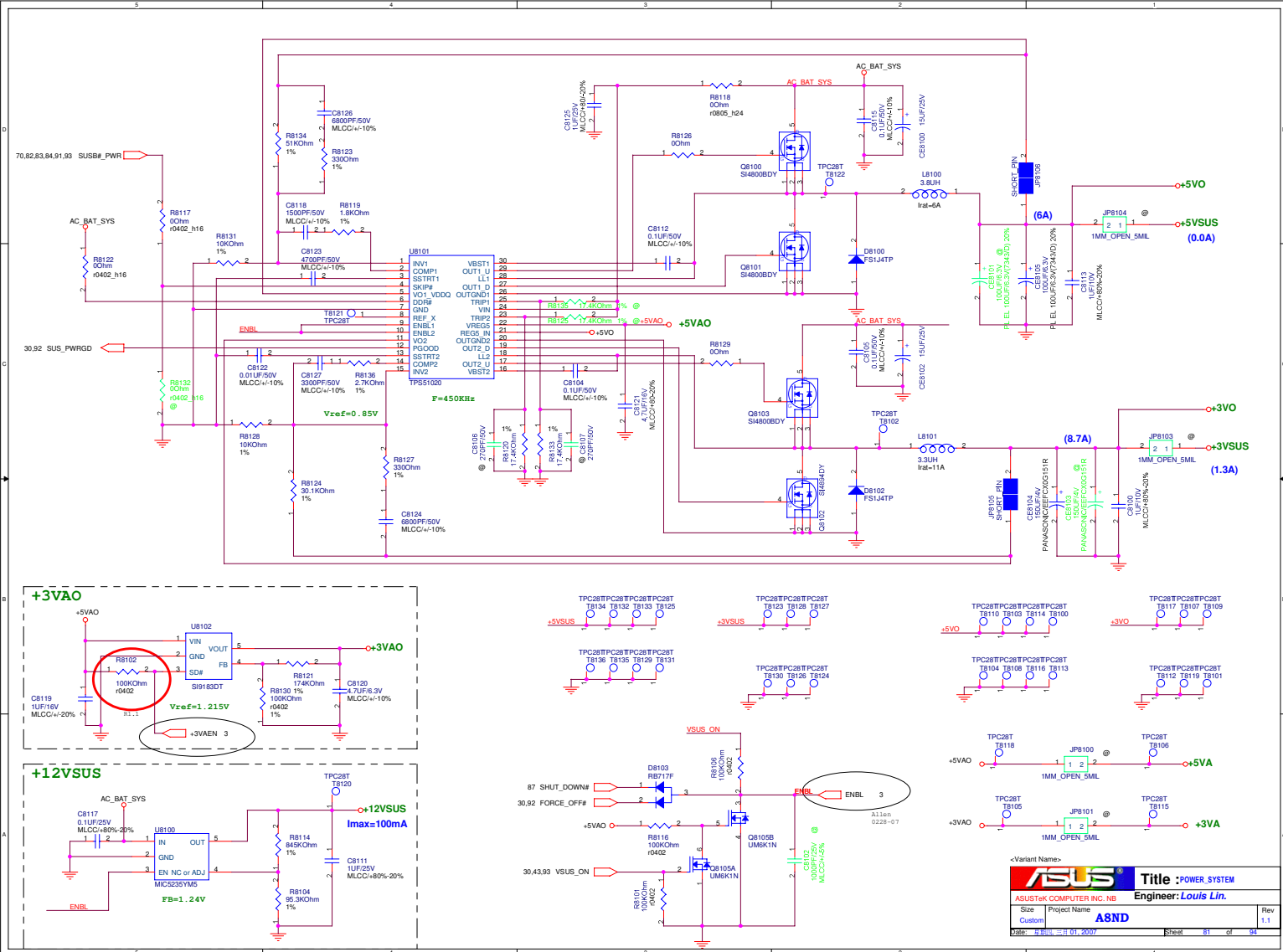
- 1.

		Title : History	
ASUSTeK COMPUTER INC		Engineer: Allen_CD Wu	
Size	Project Name	Rev	
Custom	A8N A8Dc	1.0	
Date: 4/20/07 11:01:2007		Sheet	79 of 94

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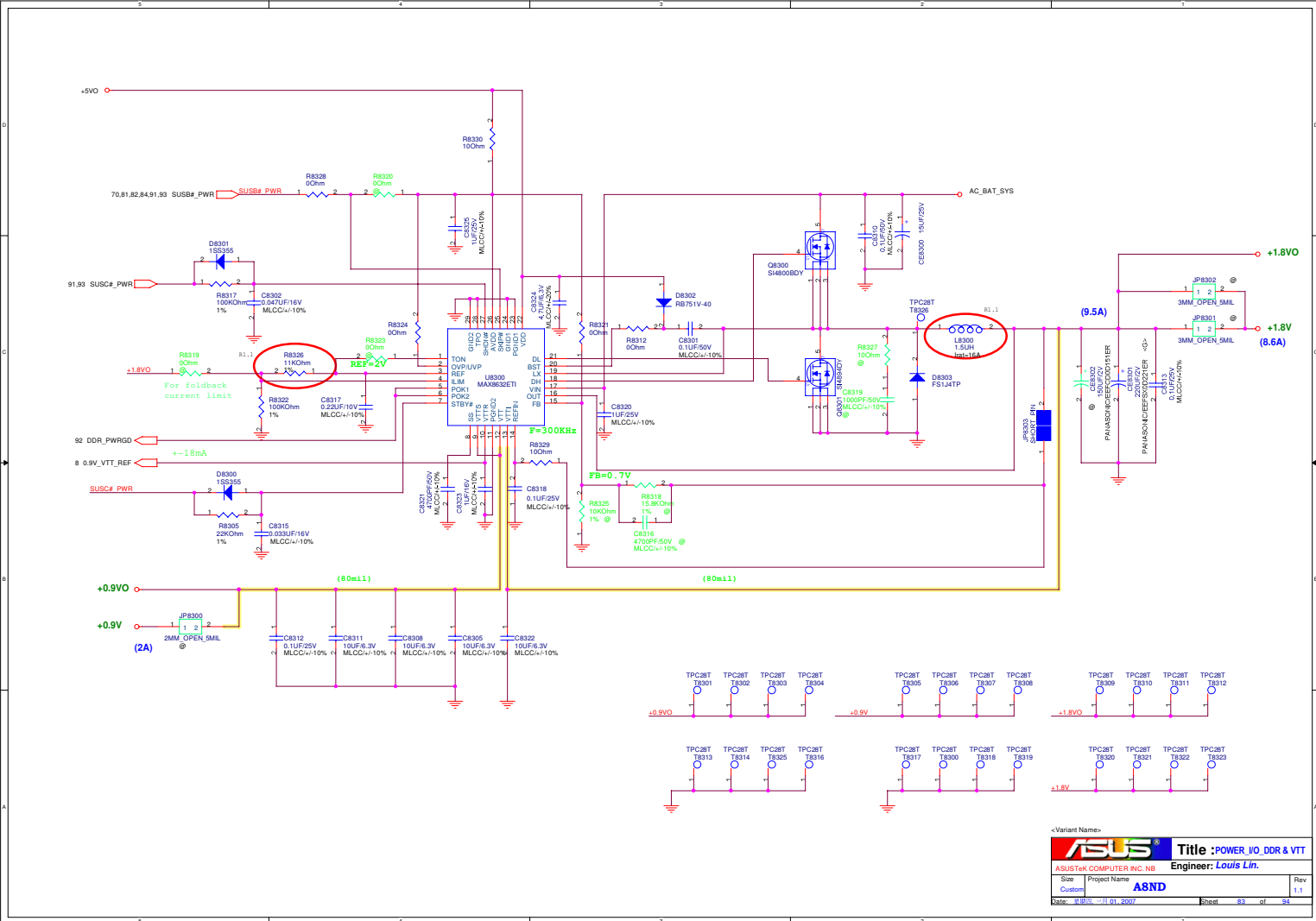


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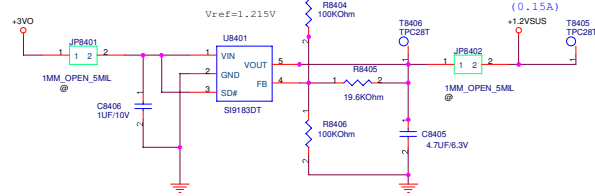




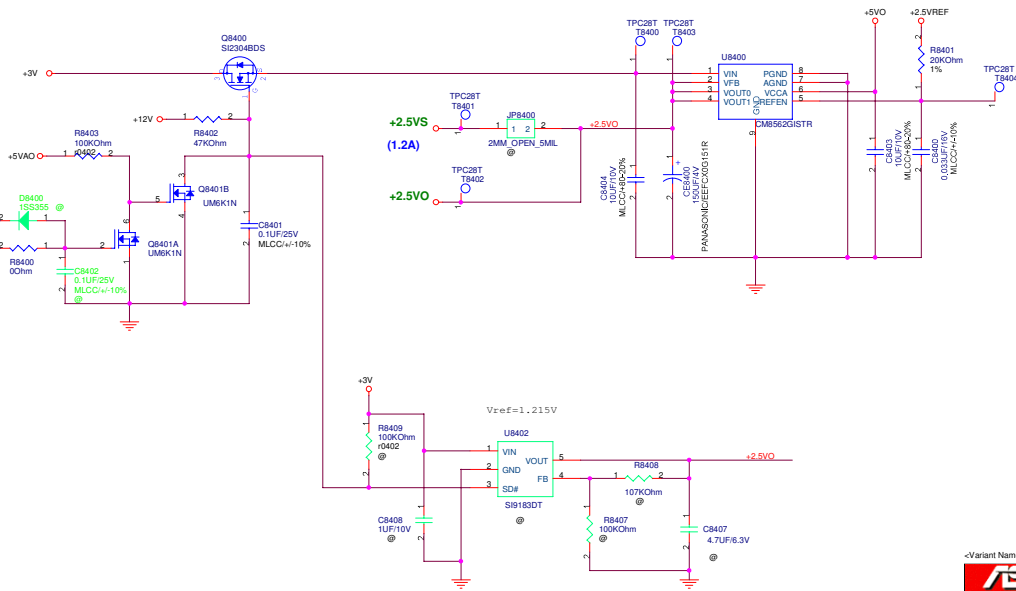
www.laptop-schematics.com

+1.2VSUS

+2.5VREF



+2.5VS



<Variant Name>
ASUS Title : POWER_IQ_+1.2VSUS & +2.5V
Engineer: Louis Lin.
Size Project Name Rev
Custom A8ND 1.1
Date: 08/01/2007 Sheet 84 of 84

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POWER PATH & BAT_LEARN

● AC_IN Threshold: 2.648Vmax AD_DOCK_IN
 > 17.44V active

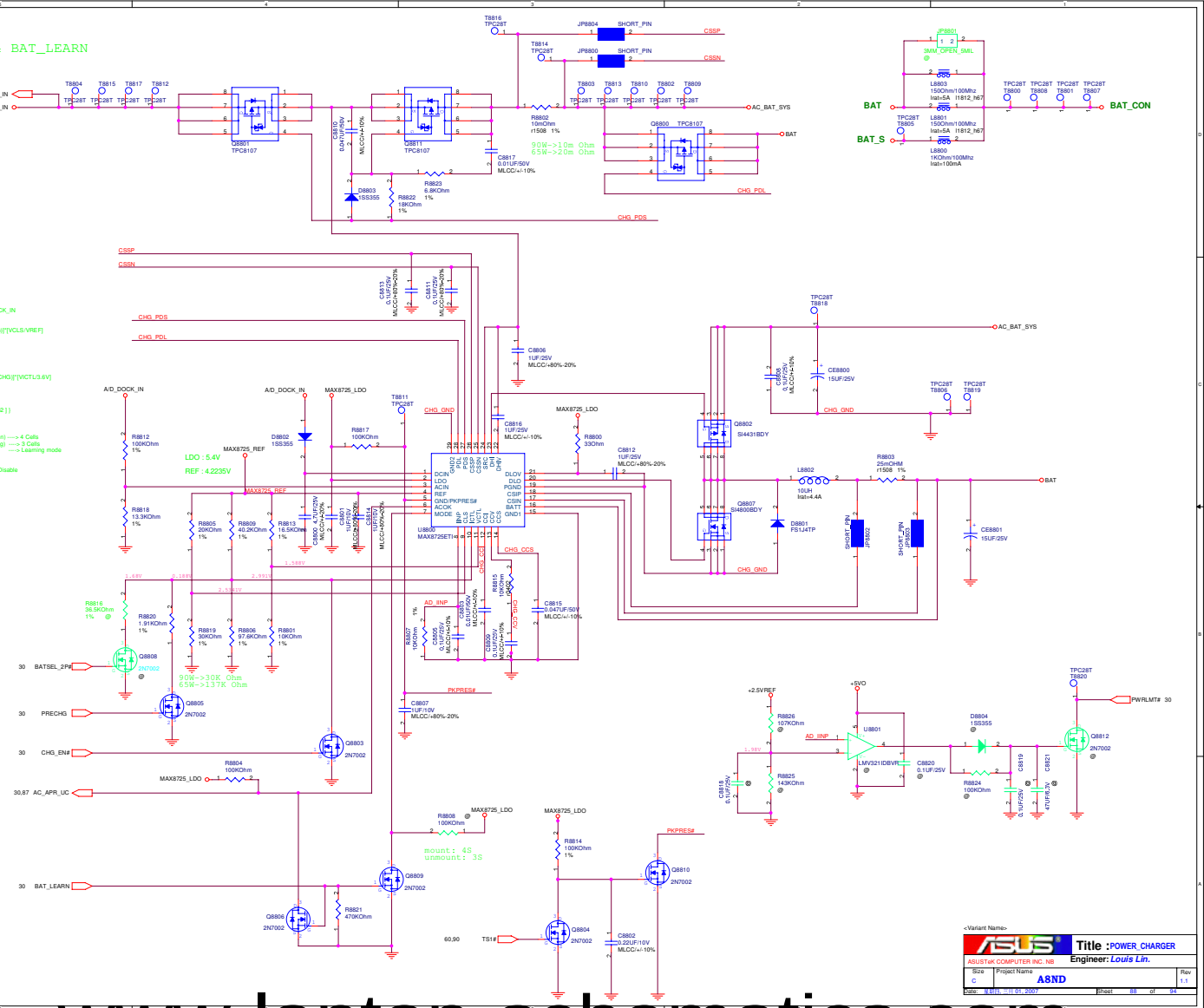
Adapter In(max) = (0.075V/Rsense/ADIN)(VCL5_VREF)
 Rsense/ADIN=0.010ohm
 VCL5=5.544V
 => In(max)=4.5A
 => Constant Power = 19 * 4.5 = 85.5W
 => RBB5=20K, RBB19=30K

Charge Current Ichg = (0.075V/Rsense/CHG5)(VCTL5_VREF)
 Rsense/CHG5=0.025ohm
 VCTL5_VREF = 1.0V
 => Ichg = 2.5A
 VCTL5 = 1.68V => Ichg = 1.4A
 => Vbat = 4.2V

Mode pin : Vmode > 2.8V (line to LDO pin) => 4 Cells
 2.8 > Vmode > 1.6V (floating) => 3 Cells
 0.8 > Vmode (line to GND) => Learning mode

VCTL5 0.8V or DCIN < 7V => Charger Disable

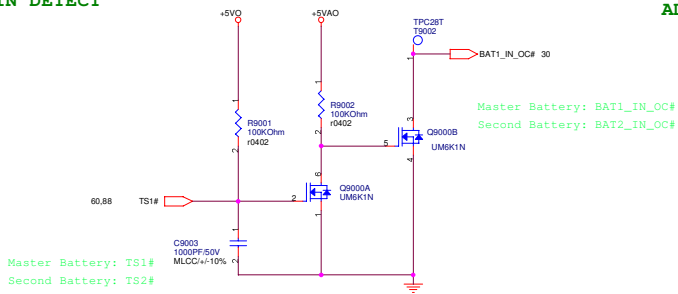
Precharge current=150mA



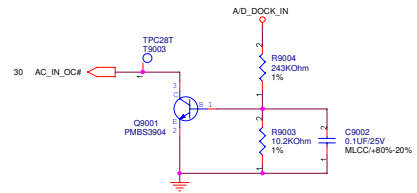
ASUS		Title : POWER CHARGER
ASUSTeK COMPUTER INC. NE		Engineer: LOUIS LIN
Size	Project Name	Rev
C	A8ND	1.1
Doc: A8ND-1103-01-00V	ESch: 88	of 94

www.laptop-schematics.com

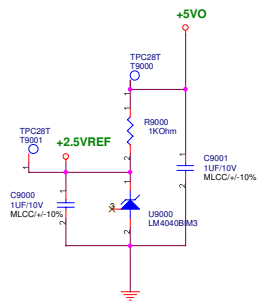
BATTERY IN DETECT



ADAPTER IN DETECT

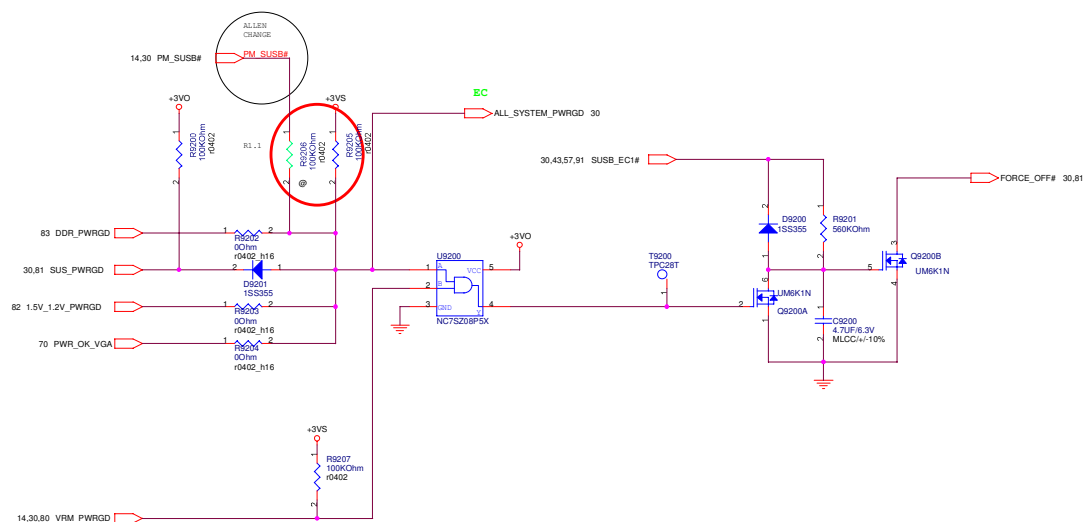


+2.5VREF



<Variant Name>			
ASUS		Title :POWER_DETECT	
ASUSTek COMPUTER INC. NB		Engineer: Louis Lin.	
Size	Project Name	Rev	
Custom	A8ND	1.1	
Date: 15/04/2007		Sheet	90 of 94

POWER GOOD DETECTOR



<Variant Name>



Title : POWER PROTECT

Engineer: *Louis Lin.*

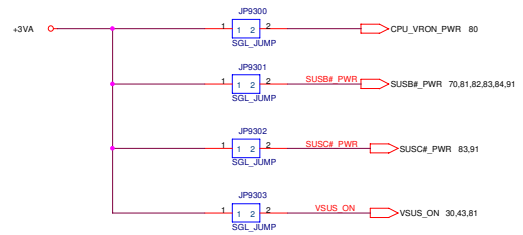
Size	Project Name
Custom	A8ND

Rev	1.1
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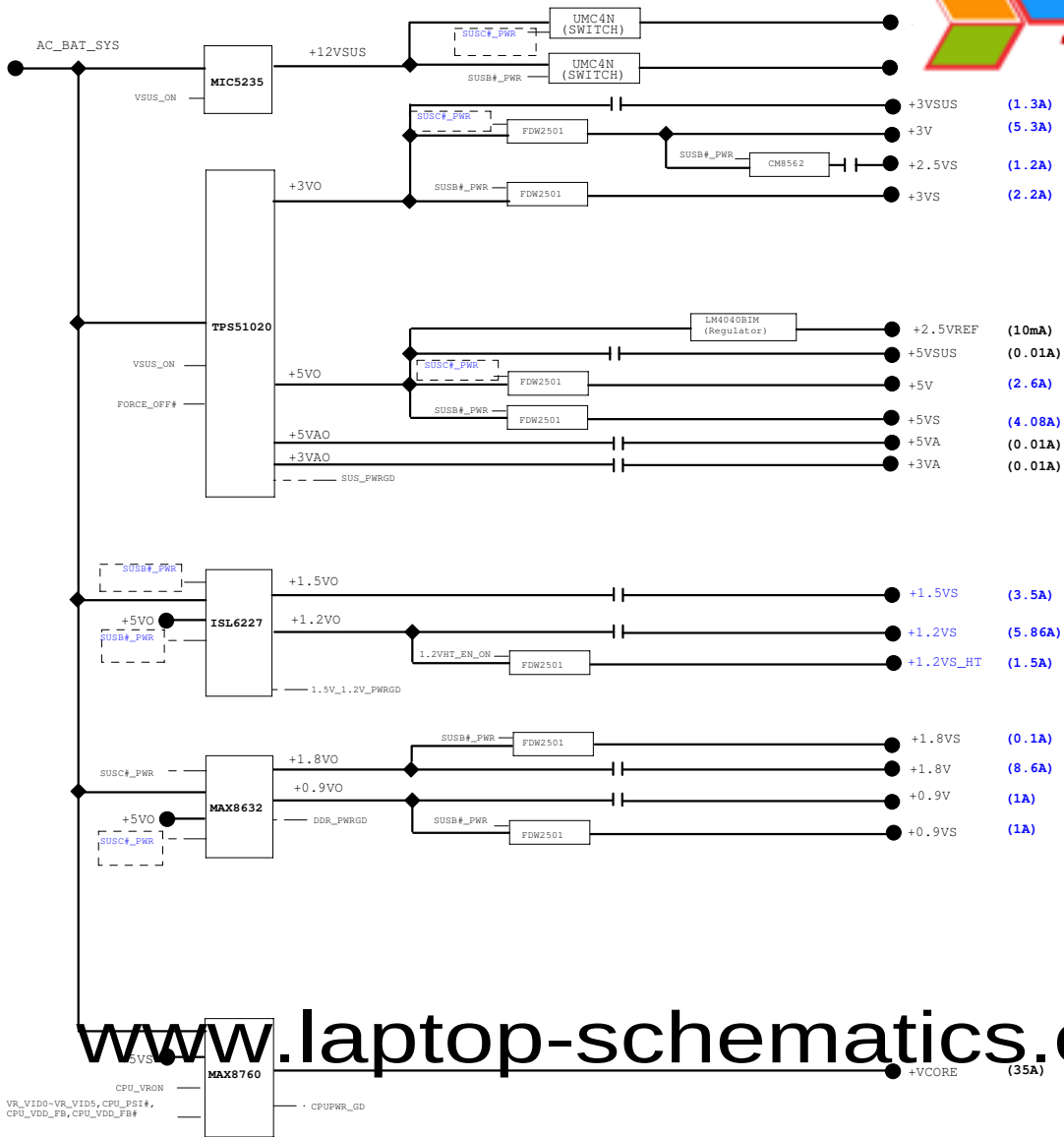
AC_BAT_SYS	AC_BAT_SYS	45,70,80,81,82,83,87,88
BAT	BAT	88
BAT_CON	BAT_CON	60,88
+2.5VREF	+2.5VREF	84,87,88,90
+3VA	+3VA	13,14,30,57,81,82
+5VAD	+5VAD	81,84,90
+5VO	+5VO	81,82,83,84,88,90,91
+5VSUS	+5VSUS	56,81,87
+5V	+5V	3,8,43,52,57,68,70,91
+5VS	+5VS	15,31,36,38,46,47,50,51,56,57,68,80,91
+3VO	+3VO	81,82,84,91,92
+3VSUS	+3VSUS	3,10,11,12,13,14,30,33,43,53,57,81,82
+3V	+3V	34,43,45,53,56,57,61,62,84,91
+3VS	+3VS	3,7,8,10,11,12,13,14,15,30,36,38,40,41,42,43,45,46,47,49,50,51,53,55,57,62,68,70,80,82,91,92
+12VSUS	+12VSUS	81,91
+12V	+12V	38,42,52,57,84,91
+12VS	+12VS	38,45,57,70,91
+1.8VO	+1.8VO	70,83,91
+1.8V	+1.8V	3,5,7,8,9,57,83
+1.8VS	+1.8VS	3,11,57,91
+0.9VS	+0.9VS	91
+0.9VO	+0.9VO	83,91
+1.5VO	+1.5VO	82
+1.5VS	+1.5VS	43,53,57,70,82
+2.5VO	+2.5VO	84
+2.5VS	+2.5VS	3,57,70,84
+VDDRE	+VDDRE	5,80
+1.25VS	+1.25VS	
+1.2VSUS	+1.2VSUS	11,13,84
+1.2VS	+1.2VS	10,12,13,57,82
+1.2VO	+1.2VO	82,91

FOR POWER TEST



<Variant Name>			Title : POWER_SIGNAL	
ASUS			Engineer: Louis Lin.	
Size	Project Name		Rev	
Custom	A8ND		1.1	
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