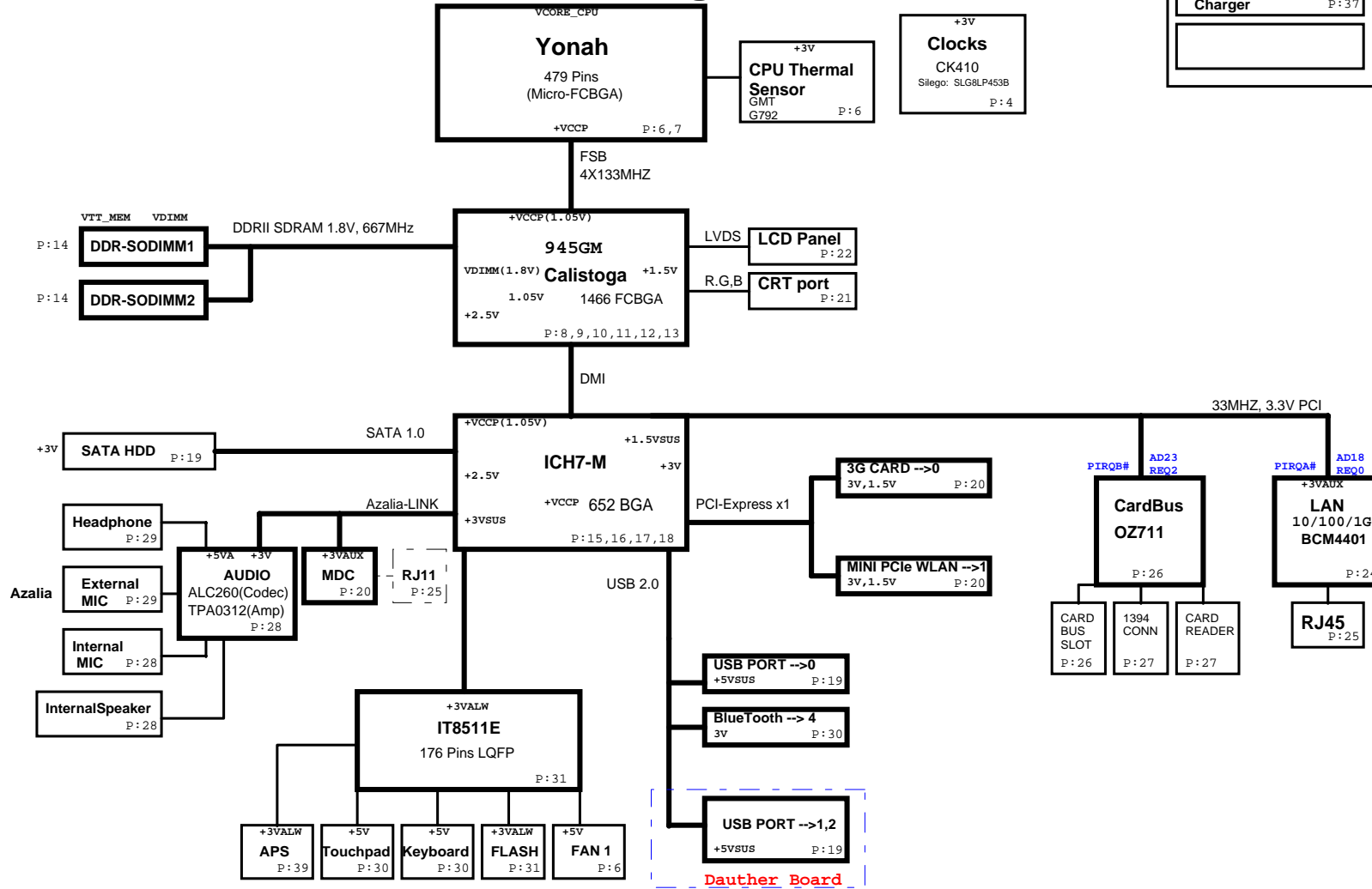


# < NAPA > TAURUS2 BLOCK DIAGRAM Yonah/Calistoga




## DC/DC & Charger

<b>CPU VR</b> ADI3207 P: 36	<b>Switching</b> 1.5V,+VCCP OZ813 P: 34 3V,5V MAX8734 P: 33
<b>AC/BATT Connector</b> P: 37	<b>LDO</b> 2.5V MAX8887EZK25 P: 35 VTT_MEM(0.9V) MAX8632 P: 35 VDIMM(1.8V) MAX8632 P: 35
<b>BATT Charger</b> OZ8602G_N P: 37	<b>RTC Battery</b> P: 15

PVT Schematics Release

<b>lenovo</b> 联想		LENOVO.NOD HuZwLXINP LjYJK LvXDA	
Title: BLOCK DIAGRAM			
Size: C	Document Number: TBURUS2	Sheet: 1 of 40	Rev: 40.1
Date: Thursday, June 29, 2006			
PROPERTY NOTE: This document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			

		LENOVO.NOD	
		HuZW LIXINP LIYJK LxKDA	
<b>Title</b>			
Power Sequence Block			
<b>Size</b>	<b>Document Number</b>	<b>Rev</b>	
C	T8URUS2	a0.1	
<b>Date:</b> Thursday, June 29, 2006 <b>Sheet</b> 2 <b>of</b> 40			
<small>PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.</small>			

INDEX

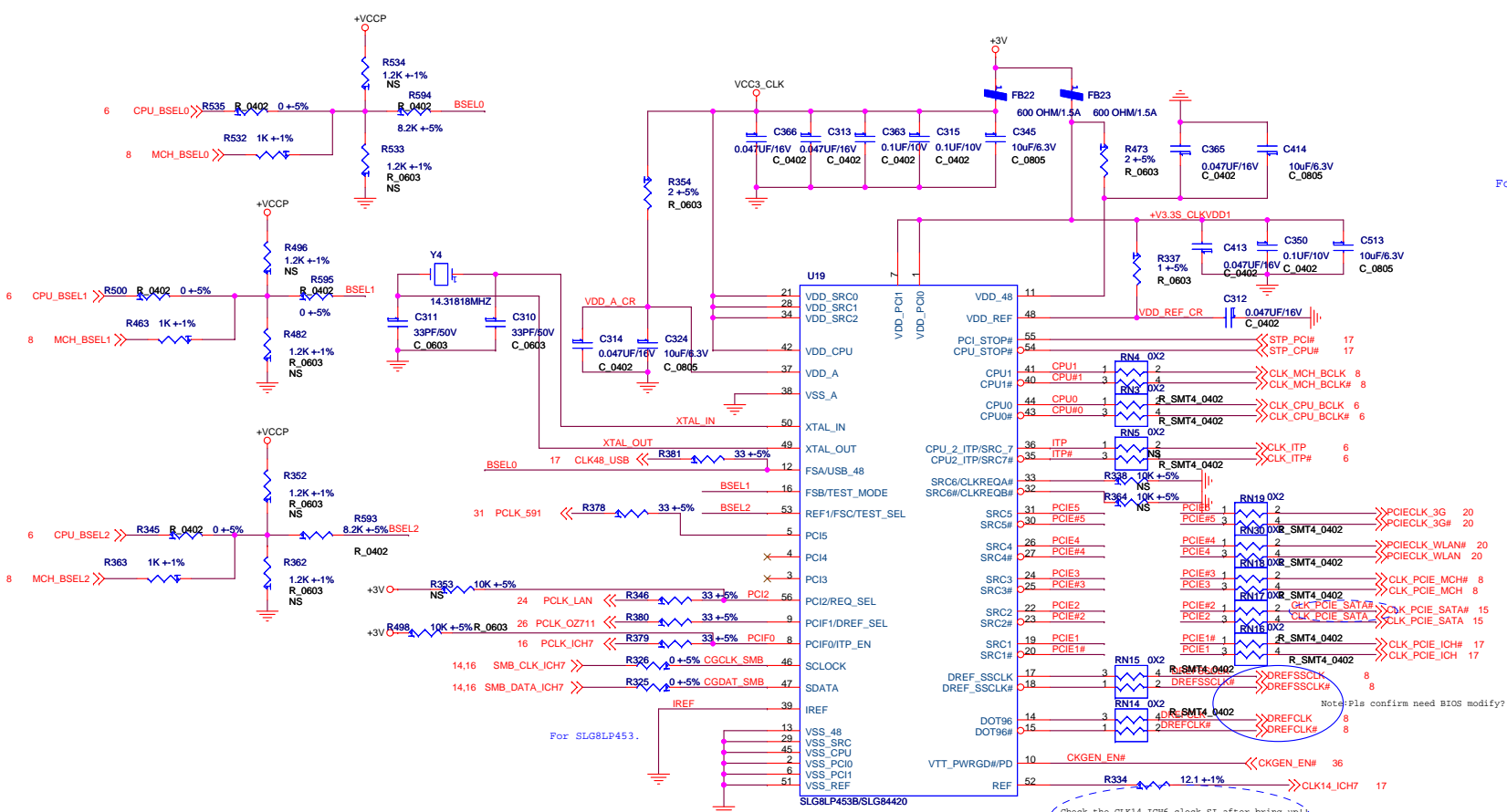
Pg#	Description	DNI LIST
1	Block Diagram	
2	Power Sequence Block	
3	Frontpage	
4	Clock Generator	
6,7	Yonah CPU	
8-13	Calistoga	
14	DDR SO-DIMM	
15-18	ICH7-M	
19	USB & SATA	
20	MINI PCIE, WWAN & MDC	
21	CRT	
22	LCD CONN	
23	SWITCH & LED	
24	BCM4401/5702 LAN	
25	RJ11&RJ45	
26	Cardbus OZ711	
27	CARDREADER & 1394	
28	AUDIO	
29	AUDIO JACK	
30	KB & TP & BT	
31	IT8511E & FLASH	
32	DISCHARGE	
33	SYSTEM POWER	
34	VCCP & GMCH CORE	
35	DDR CORE	
36	CPU CORE	
37	BATTERY CHARGER	
38	EMI PADS& Screws	
39	APS	
40	CHANGE LIST	

Power & Ground

ADIN

Label	Pg#	Description	Control Signal
ADIN	37	AC ADAPTER (19V)	
		MAIN BATTERY + (10~17V)	
VIN	22,33,34,35,36,37	MAIN POWER (10~20V)	
VCCRTC	15,18,31	RTC & PCL POWER (3.3V)	
+3VALW	15,17,22,23,30,31,33,37,39	EC 3V always power	
+5VALW	32,33	5V always power	
3VAUX	20,24,25,33,34	LAN power	3VAUXEN
		ICH7-M 1.5V SUS power	SUSON
VDIMM	8,10,14,32,35	DDRII RAM 1.8V power	SUSON
+3VSUS	16,17,18,23,31,32,33,35	3V	SUSON
+5VSUS	18,19,32,33	5V	SUSON
+1.5V	10,11,12,17,18,20,32,34	AGP I/O power	MAINON
+3V	4,6,8,11,12,14,15,16,17,18,19,20,21,22,23,24,26,27,28,30,31,32,33,36	+3V	MAINON
+5V	6,18,19,21,26,28,30,31,32,33,36	+5V	MAINON
+5VA	28	AUDIO analog 5V power	MAINON
+5V_FAN	6	FAN 5V power	VFAN
			RBAYON#
MOSVCC	22,26,27,30,32,33	High Voltage to control MOS	MAINON
VCORE_CPU	7,32,36	CPU power	VRON
+VCCP	4,6,7,8,10,11,15,18,32,34	CPUIO powers(1.05V)	MAINON
REF3V	37	EC analog 3V power	REFON
GND	ALL PAGES	DIGITAL GROUND	
AUDGND	28,29	AUDIO GND	

		LENOVO.NOD HuZW LXINP LYJK LxXDA	
Title Frontpage			
Size C	Document Number T8URUS2	Rev #0.1	
Date: Thursday, June 29, 2006	Sheet 3 of 40		
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			



For SLG8LP453 buildin Pulldown res.

CLK_CPU_BCLK	NS	R_0402	54.9+1%
CLK_CPU_BCLK#	NS	R_0402	54.9+1%
CLK_MCH_BCLK	NS	R_0402	54.9+1%
CLK_MCH_BCLK#	NS	R_0402	54.9+1%
DREFSSCLK	NS	R_0402	54.9+1%
DREFSSCLK#	NS	R_0402	54.9+1%
DREFCLK	NS	R_0402	54.9+1%
DREFCLK#	NS	R_0402	54.9+1%
CLK_PCIE_ICH	NS	R_0402	54.9+1%
CLK_PCIE_ICH#	NS	R_0402	54.9+1%
CLK_PCIE_SATA	NS	R_0402	54.9+1%
CLK_PCIE_SATA#	NS	R_0402	54.9+1%
CLK_PCIE_SATA	NS	R_0402	54.9+1%
CLK_PCIE_SATA#	NS	R_0402	54.9+1%
CLK_PCIE_MCH	NS	R_0402	54.9+1%
CLK_PCIE_MCH#	NS	R_0402	54.9+1%

change from 49.9 to 54.9

Place termination close to source IC

SLG8LP453 buildin dumping and terminal res.

For SLG8LP453 differential clock remove the 33R.

FS_C	FS_B	FS_A	CPU (MHz)
0	0	0	266.6
0	0	1	133.3
0	1	0	200.0
0	1	1	166.6
1	0	0	333.3
1	0	1	100.0
1	1	0	400.0
1	1	1	Reserve

**lenovo** 联想

LENOVO.NOD  
HuZw LIXINP LIYJK LvXDA

Title: **CLOCK GENERATOR**

Size: Custom Document Number: Taurus2 Rev: s0.1

Date: Thursday, June 29, 2006 Sheet: 4 of 40

PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.

5

4

3

2

1

b

b

c


c

b

b

a

a

		LENOVO.NOD
Title		
THERMAL MONITOR/ITP		
Size	Document Number	Rev
C	Taurus2	v0.1
Date:	Thursday, June 29, 2006	Sheet 5 of 40
<small>PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.*</small>		

5

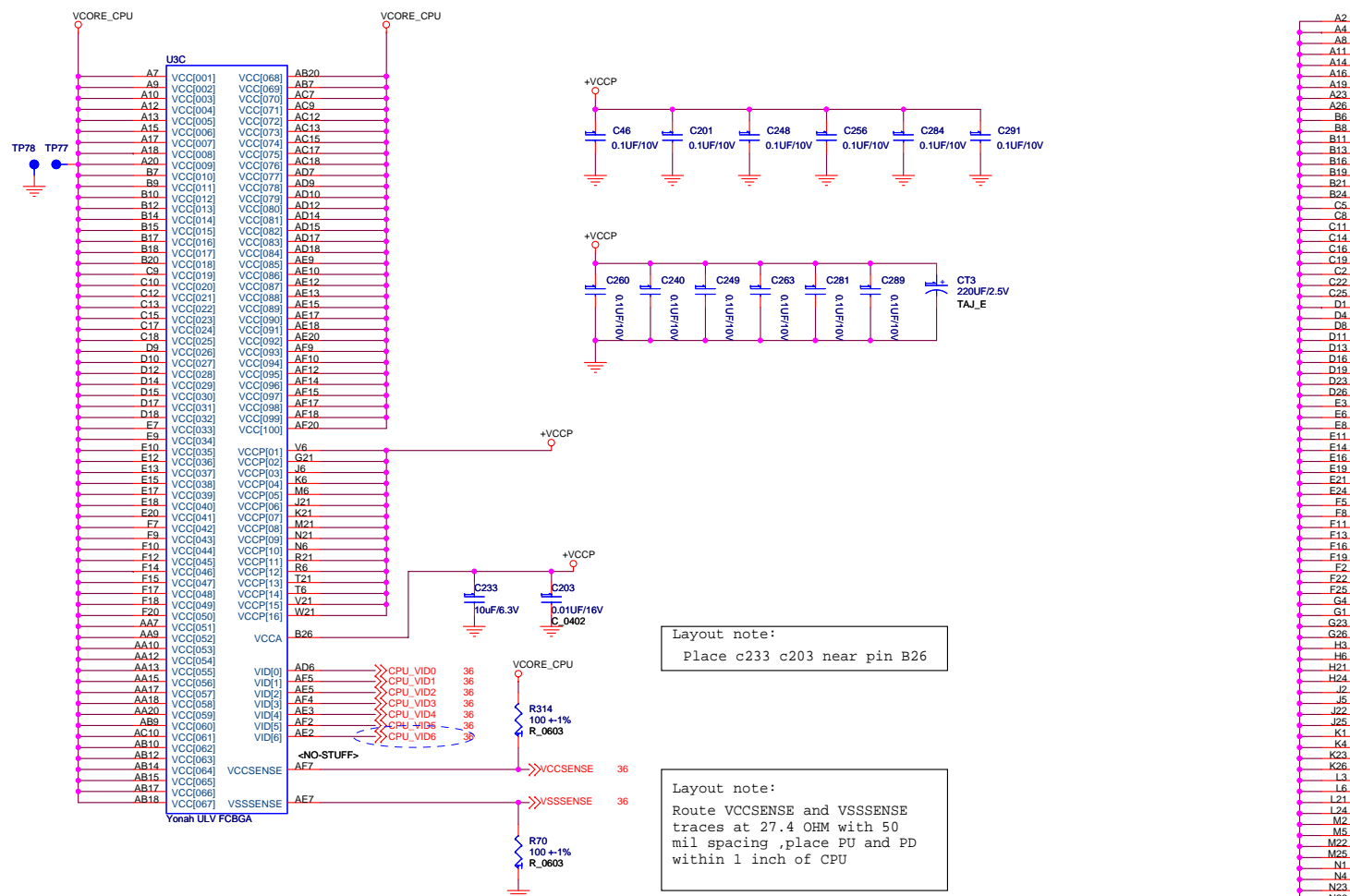
4

3

2

1



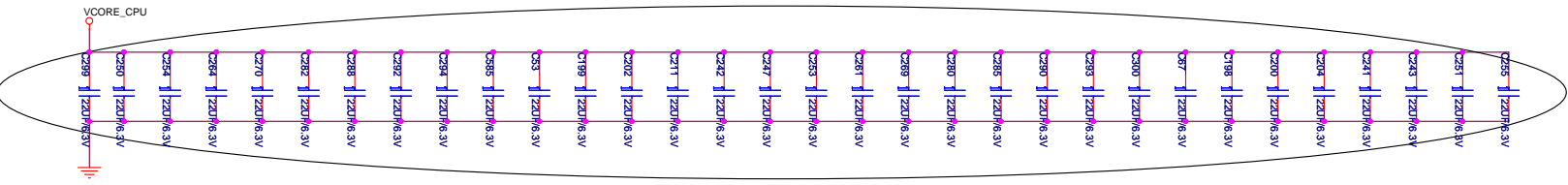


Layout note:  
Place c233 c203 near pin B26

Layout note:  
Route VCCSENSE and VSSSENSE traces at 27.4 OHM with 50 mil spacing ,place PU and PD within 1 inch of CPU

U3D		
A2	VSS[999]	VSS[082]
A4	VSS[001]	VSS[083]
A8	VSS[002]	VSS[084]
A11	VSS[003]	VSS[085]
A14	VSS[004]	VSS[086]
A16	VSS[005]	VSS[087]
A19	VSS[006]	VSS[088]
A23	VSS[007]	VSS[089]
A26	VSS[008]	VSS[090]
B6	VSS[009]	VSS[091]
B8	VSS[010]	VSS[092]
B11	VSS[011]	VSS[093]
B13	VSS[012]	VSS[094]
B16	VSS[013]	VSS[095]
B19	VSS[014]	VSS[096]
B21	VSS[015]	VSS[097]
B24	VSS[016]	VSS[098]
C6	VSS[017]	VSS[099]
C8	VSS[018]	VSS[100]
C11	VSS[019]	VSS[101]
C14	VSS[020]	VSS[102]
C16	VSS[021]	VSS[103]
C19	VSS[022]	VSS[104]
C2	VSS[023]	VSS[105]
C22	VSS[024]	VSS[106]
C25	VSS[025]	VSS[107]
D1	VSS[026]	VSS[108]
D4	VSS[027]	VSS[109]
D8	VSS[028]	VSS[110]
D11	VSS[029]	VSS[111]
D13	VSS[030]	VSS[112]
D16	VSS[031]	VSS[113]
D19	VSS[032]	VSS[114]
D23	VSS[033]	VSS[115]
D26	VSS[034]	VSS[116]
E3	VSS[035]	VSS[117]
E6	VSS[036]	VSS[118]
E8	VSS[037]	VSS[119]
E11	VSS[038]	VSS[120]
E14	VSS[039]	VSS[121]
E16	VSS[040]	VSS[122]
E19	VSS[041]	VSS[123]
E21	VSS[042]	VSS[124]
E24	VSS[043]	VSS[125]
F5	VSS[044]	VSS[126]
F8	VSS[045]	VSS[127]
F11	VSS[046]	VSS[128]
F13	VSS[047]	VSS[129]
F16	VSS[048]	VSS[130]
F19	VSS[049]	VSS[131]
F2	VSS[050]	VSS[132]
F22	VSS[051]	VSS[133]
F25	VSS[052]	VSS[134]
G4	VSS[053]	VSS[135]
G1	VSS[054]	VSS[136]
G23	VSS[055]	VSS[137]
G26	VSS[056]	VSS[138]
H3	VSS[057]	VSS[139]
H6	VSS[058]	VSS[140]
H21	VSS[059]	VSS[141]
H24	VSS[060]	VSS[142]
J5	VSS[061]	VSS[143]
J2	VSS[062]	VSS[144]
J25	VSS[063]	VSS[145]
K1	VSS[064]	VSS[146]
K4	VSS[065]	VSS[147]
K23	VSS[066]	VSS[148]
K26	VSS[067]	VSS[149]
L3	VSS[068]	VSS[150]
L6	VSS[069]	VSS[151]
L21	VSS[070]	VSS[152]
L24	VSS[071]	VSS[153]
M2	VSS[072]	VSS[154]
M5	VSS[073]	VSS[155]
M22	VSS[074]	VSS[156]
M25	VSS[075]	VSS[157]
N1	VSS[076]	VSS[158]
N4	VSS[077]	VSS[159]
N23	VSS[078]	VSS[160]
N26	VSS[079]	VSS[161]
P3	VSS[080]	VSS[162]

Yonah ULV FCBGA



lenovo 联想

LENOVO.NOD  
HuZW LIXINP LIYJK LvXDA

Title: DOTHAN CPU (POWER/NC)-2

Size	Document Number	Rev
Custom	Taurus2	s0.1

Date: Thursday, June 29, 2006 Sheet 7 of 40

PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.







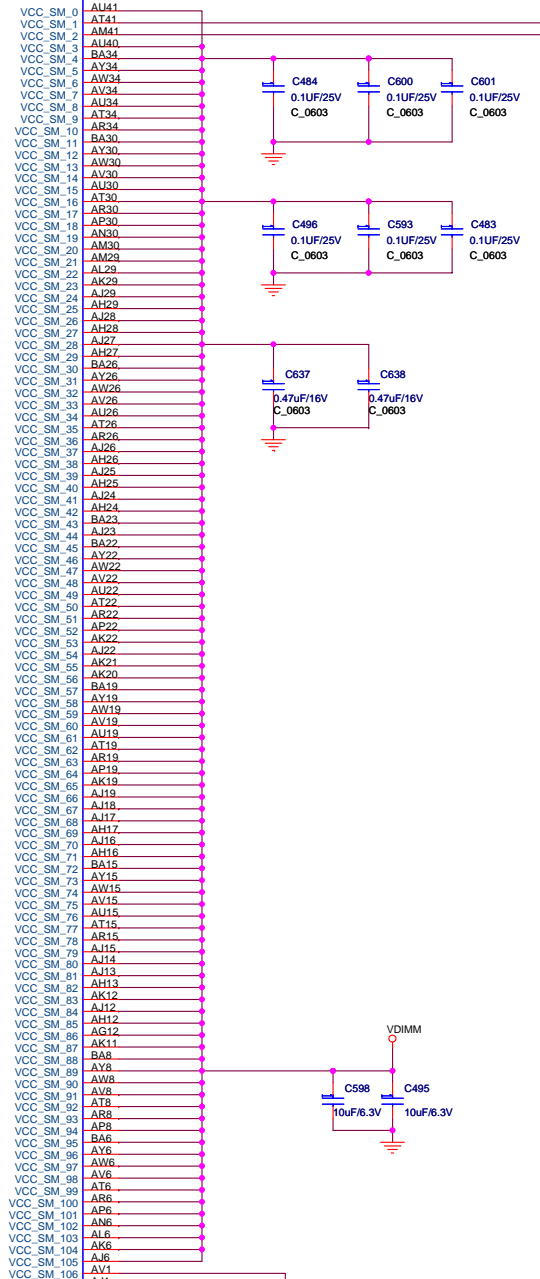
+VCCP

USG

- AA33 VCC\_0
- W33 VCC\_1
- P33 VCC\_2
- N33 VCC\_3
- L33 VCC\_4
- J33 VCC\_5
- AA32 VCC\_6
- Y32 VCC\_7
- W32 VCC\_8
- V32 VCC\_9
- P32 VCC\_10
- N32 VCC\_11
- M32 VCC\_12
- L32 VCC\_13
- J32 VCC\_14
- AA31 VCC\_15
- W31 VCC\_16
- V31 VCC\_17
- T31 VCC\_18
- R31 VCC\_19
- P31 VCC\_20
- N31 VCC\_21
- M31 VCC\_22
- AA30 VCC\_23
- Y30 VCC\_24
- W30 VCC\_25
- V30 VCC\_26
- P30 VCC\_27
- T30 VCC\_28
- R30 VCC\_29
- M30 VCC\_30
- L30 VCC\_31
- AA29 VCC\_32
- Y29 VCC\_33
- W29 VCC\_34
- V29 VCC\_35
- P29 VCC\_36
- M29 VCC\_37
- L29 VCC\_38
- AA28 VCC\_39
- Y28 VCC\_40
- W28 VCC\_41
- V28 VCC\_42
- P28 VCC\_43
- N28 VCC\_44
- L28 VCC\_45
- AA27 VCC\_46
- Y27 VCC\_47
- W27 VCC\_48
- V27 VCC\_49
- P27 VCC\_50
- N27 VCC\_51
- M27 VCC\_52
- L27 VCC\_53
- AA26 VCC\_54
- Y26 VCC\_55
- W26 VCC\_56
- V26 VCC\_57
- P26 VCC\_58
- N26 VCC\_59
- L26 VCC\_60
- N25 VCC\_61
- M25 VCC\_62
- L25 VCC\_63
- P24 VCC\_64
- N24 VCC\_65
- M24 VCC\_66
- AA23 VCC\_67
- Y23 VCC\_68
- P23 VCC\_69
- N23 VCC\_70
- M23 VCC\_71
- L23 VCC\_72
- AA22 VCC\_73
- Y22 VCC\_74
- W22 VCC\_75
- V22 VCC\_76
- P22 VCC\_77
- N22 VCC\_78
- M22 VCC\_79
- L22 VCC\_80
- AA21 VCC\_81
- Y21 VCC\_82
- W21 VCC\_83
- V21 VCC\_84
- P21 VCC\_85
- N21 VCC\_86
- M21 VCC\_87
- AA20 VCC\_88
- Y20 VCC\_89
- W20 VCC\_90
- V20 VCC\_91
- P20 VCC\_92
- N20 VCC\_93
- M20 VCC\_94
- L20 VCC\_95
- AA19 VCC\_96
- Y19 VCC\_97
- W19 VCC\_98
- V19 VCC\_99
- P19 VCC\_100
- N19 VCC\_101
- M19 VCC\_102
- L19 VCC\_103
- P17 VCC\_104
- N17 VCC\_105
- M17 VCC\_106
- L18 VCC\_107
- N16 VCC\_108
- M16 VCC\_109
- L16 VCC\_110

VCC

CALISTOGA\_1p0



+VCCP

USF

- AD27 VCC\_NCTF0
- AC27 VCC\_NCTF1
- AB27 VCC\_NCTF2
- AA27 VCC\_NCTF3
- W27 VCC\_NCTF4
- V27 VCC\_NCTF5
- U27 VCC\_NCTF6
- T27 VCC\_NCTF7
- R27 VCC\_NCTF8
- Q27 VCC\_NCTF9
- AD26 VCC\_NCTF10
- AC26 VCC\_NCTF11
- AB26 VCC\_NCTF12
- AA26 VCC\_NCTF13
- W26 VCC\_NCTF14
- V26 VCC\_NCTF15
- U26 VCC\_NCTF16
- T26 VCC\_NCTF17
- R26 VCC\_NCTF18
- Q26 VCC\_NCTF19
- AD25 VCC\_NCTF20
- AC25 VCC\_NCTF21
- AB25 VCC\_NCTF22
- AA25 VCC\_NCTF23
- W25 VCC\_NCTF24
- V25 VCC\_NCTF25
- U25 VCC\_NCTF26
- T25 VCC\_NCTF27
- R25 VCC\_NCTF28
- Q25 VCC\_NCTF29
- AD24 VCC\_NCTF30
- AC24 VCC\_NCTF31
- AB24 VCC\_NCTF32
- AA24 VCC\_NCTF33
- W24 VCC\_NCTF34
- V24 VCC\_NCTF35
- U24 VCC\_NCTF36
- T24 VCC\_NCTF37
- R24 VCC\_NCTF38
- Q24 VCC\_NCTF39
- AD23 VCC\_NCTF40
- AC23 VCC\_NCTF41
- AB23 VCC\_NCTF42
- AA23 VCC\_NCTF43
- W23 VCC\_NCTF44
- V23 VCC\_NCTF45
- U23 VCC\_NCTF46
- T23 VCC\_NCTF47
- R23 VCC\_NCTF48
- Q23 VCC\_NCTF49
- AD22 VCC\_NCTF50
- AC22 VCC\_NCTF51
- AB22 VCC\_NCTF52
- AA22 VCC\_NCTF53
- W22 VCC\_NCTF54
- V22 VCC\_NCTF55
- U22 VCC\_NCTF56
- T22 VCC\_NCTF57
- R22 VCC\_NCTF58
- Q22 VCC\_NCTF59
- AD21 VCC\_NCTF60
- AC21 VCC\_NCTF61
- AB21 VCC\_NCTF62
- AA21 VCC\_NCTF63
- W21 VCC\_NCTF64
- V21 VCC\_NCTF65
- U21 VCC\_NCTF66
- T21 VCC\_NCTF67
- R21 VCC\_NCTF68
- Q21 VCC\_NCTF69
- AD20 VCC\_NCTF70
- AC20 VCC\_NCTF71
- AB20 VCC\_NCTF72

NCTF

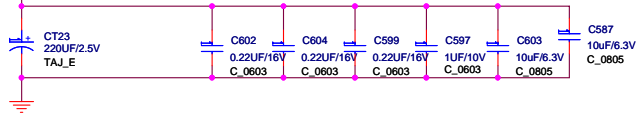
CALISTOGA\_1p0

- VSS\_NCTF0 AE27
- VSS\_NCTF1 AE26
- VSS\_NCTF2 AE25
- VSS\_NCTF3 AE24
- VSS\_NCTF4 AE23
- VSS\_NCTF5 AE22
- VSS\_NCTF6 AE21
- VSS\_NCTF7 AE20
- VSS\_NCTF8 AE19
- VSS\_NCTF9 AE18
- VSS\_NCTF10 AE17
- VSS\_NCTF11 Y17
- VSS\_NCTF12 U17

+1.5V

- VCCAUX\_NCTF0 AG27
- VCCAUX\_NCTF1 AF27
- VCCAUX\_NCTF2 AF26
- VCCAUX\_NCTF3 AF25
- VCCAUX\_NCTF4 AF24
- VCCAUX\_NCTF5 AF23
- VCCAUX\_NCTF6 AF22
- VCCAUX\_NCTF7 AF21
- VCCAUX\_NCTF8 AF20
- VCCAUX\_NCTF9 AF19
- VCCAUX\_NCTF10 AF18
- VCCAUX\_NCTF11 AF17
- VCCAUX\_NCTF12 AF16
- VCCAUX\_NCTF13 AF15
- VCCAUX\_NCTF14 AF14
- VCCAUX\_NCTF15 AF13
- VCCAUX\_NCTF16 AF12
- VCCAUX\_NCTF17 AF11
- VCCAUX\_NCTF18 AF10
- VCCAUX\_NCTF19 AF9
- VCCAUX\_NCTF20 AF8
- VCCAUX\_NCTF21 AF7
- VCCAUX\_NCTF22 AF6
- VCCAUX\_NCTF23 AF5
- VCCAUX\_NCTF24 AF4
- VCCAUX\_NCTF25 AF3
- VCCAUX\_NCTF26 AF2
- VCCAUX\_NCTF27 AF1
- VCCAUX\_NCTF28 W17
- VCCAUX\_NCTF29 T17
- VCCAUX\_NCTF30 R17
- VCCAUX\_NCTF31 Q16
- VCCAUX\_NCTF32 AF16
- VCCAUX\_NCTF33 AE16
- VCCAUX\_NCTF34 AD16
- VCCAUX\_NCTF35 AC16
- VCCAUX\_NCTF36 AB16
- VCCAUX\_NCTF37 AA16
- VCCAUX\_NCTF38 Y16
- VCCAUX\_NCTF39 W16
- VCCAUX\_NCTF40 V16
- VCCAUX\_NCTF41 U16
- VCCAUX\_NCTF42 T16
- VCCAUX\_NCTF43 R16
- VCCAUX\_NCTF44 Q15
- VCCAUX\_NCTF45 AF15
- VCCAUX\_NCTF46 AE15
- VCCAUX\_NCTF47 AD15
- VCCAUX\_NCTF48 AB15
- VCCAUX\_NCTF49 AA15
- VCCAUX\_NCTF50 Y15
- VCCAUX\_NCTF51 W15
- VCCAUX\_NCTF52 V15
- VCCAUX\_NCTF53 U15
- VCCAUX\_NCTF54 T15
- VCCAUX\_NCTF55 R15
- VCCAUX\_NCTF57 R15

+VCCP



LENOVO 联想

LENOVO.NOD  
HuZW LIXINP LIYJK LvXDA

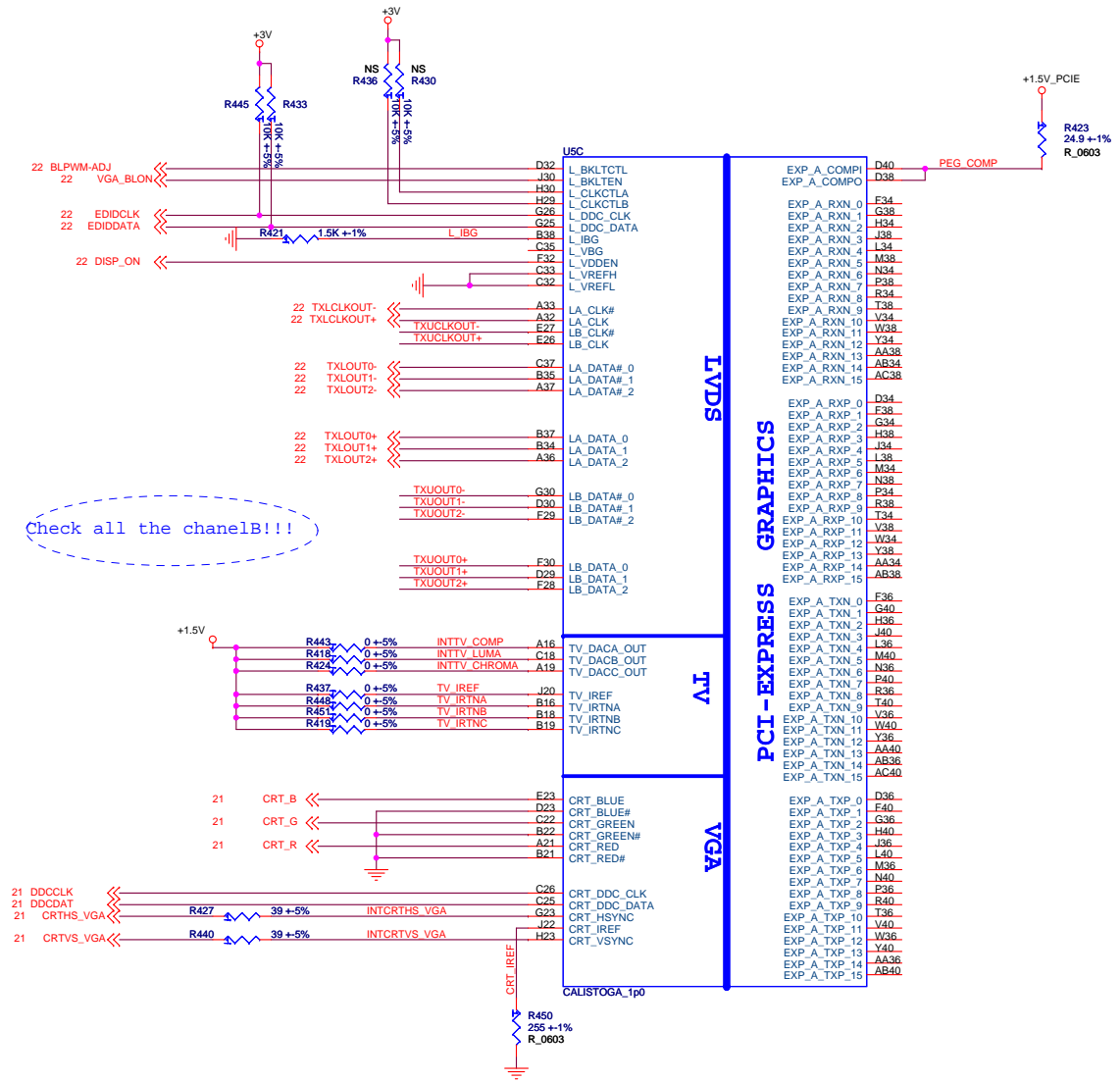
Title: MCH-M\_C (DDR, Rs&Rt)

Size	Document Number	Sheet	10	of	40
Custom	Taurus2	Rev	s0.1		

Date: Thursday, June 29, 2006

PROPERTY NOTE: This document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.





**PCI - EXPRESS GRAPHICS**

<b>USB</b>	
EXP_A_COMPI	D40
EXP_A_COMPO	D38
<b>LVDS</b>	
EXP_A_RXN_0	F34
EXP_A_RXN_1	G38
EXP_A_RXN_2	H34
EXP_A_RXN_3	I34
EXP_A_RXN_4	M38
EXP_A_RXN_5	N34
EXP_A_RXN_6	P38
EXP_A_RXN_7	R34
EXP_A_RXN_8	T38
EXP_A_RXN_9	V34
EXP_A_RXN_10	W38
EXP_A_RXN_11	Y34
EXP_A_RXN_12	AA38
EXP_A_RXN_13	AB34
EXP_A_RXN_14	AC38
EXP_A_RXN_15	AD38
EXP_A_RXP_0	D34
EXP_A_RXP_1	F38
EXP_A_RXP_2	G34
EXP_A_RXP_3	H38
EXP_A_RXP_4	I34
EXP_A_RXP_5	L38
EXP_A_RXP_6	M34
EXP_A_RXP_7	N38
EXP_A_RXP_8	P34
EXP_A_RXP_9	R38
EXP_A_RXP_10	T34
EXP_A_RXP_11	V38
EXP_A_RXP_12	W34
EXP_A_RXP_13	Y38
EXP_A_RXP_14	AA34
EXP_A_RXP_15	AB38
<b>TV</b>	
EXP_A_TXN_0	F36
EXP_A_TXN_1	G40
EXP_A_TXN_2	H36
EXP_A_TXN_3	J40
EXP_A_TXN_4	L36
EXP_A_TXN_5	M40
EXP_A_TXN_6	N36
EXP_A_TXN_7	P40
EXP_A_TXN_8	R36
EXP_A_TXN_9	T40
EXP_A_TXN_10	V36
EXP_A_TXN_11	W40
EXP_A_TXN_12	Y36
EXP_A_TXN_13	AA40
EXP_A_TXN_14	AB36
EXP_A_TXN_15	AC40
<b>VGA</b>	
EXP_A_TXP_0	D36
EXP_A_TXP_1	F40
EXP_A_TXP_2	G36
EXP_A_TXP_3	H40
EXP_A_TXP_4	J36
EXP_A_TXP_5	L40
EXP_A_TXP_6	M36
EXP_A_TXP_7	N40
EXP_A_TXP_8	P36
EXP_A_TXP_9	R40
EXP_A_TXP_10	T36
EXP_A_TXP_11	V40
EXP_A_TXP_12	W36
EXP_A_TXP_13	Y40
EXP_A_TXP_14	AA36
EXP_A_TXP_15	AB40

Check all the channelB!!!

<b>lenovo</b> 联想		LENOVO.NOD HuZW LIXINP LIYJK LvXDA	
Title <b>MCH-M_C (DDR, Rs&amp;Rt)</b>			
Size	Document Number	Rev s0.1	
Custom	Taurus2		
Date:	Thursday, June 29, 2006	Sheet	12 of 40
<small>PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.</small>			

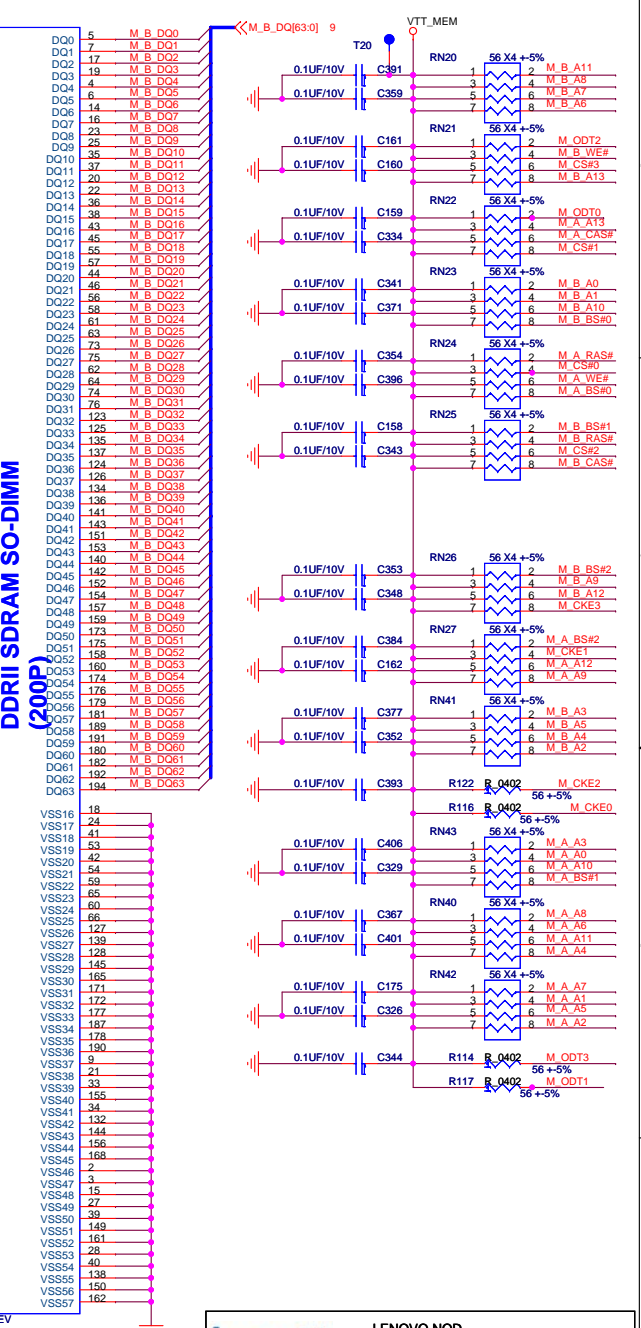
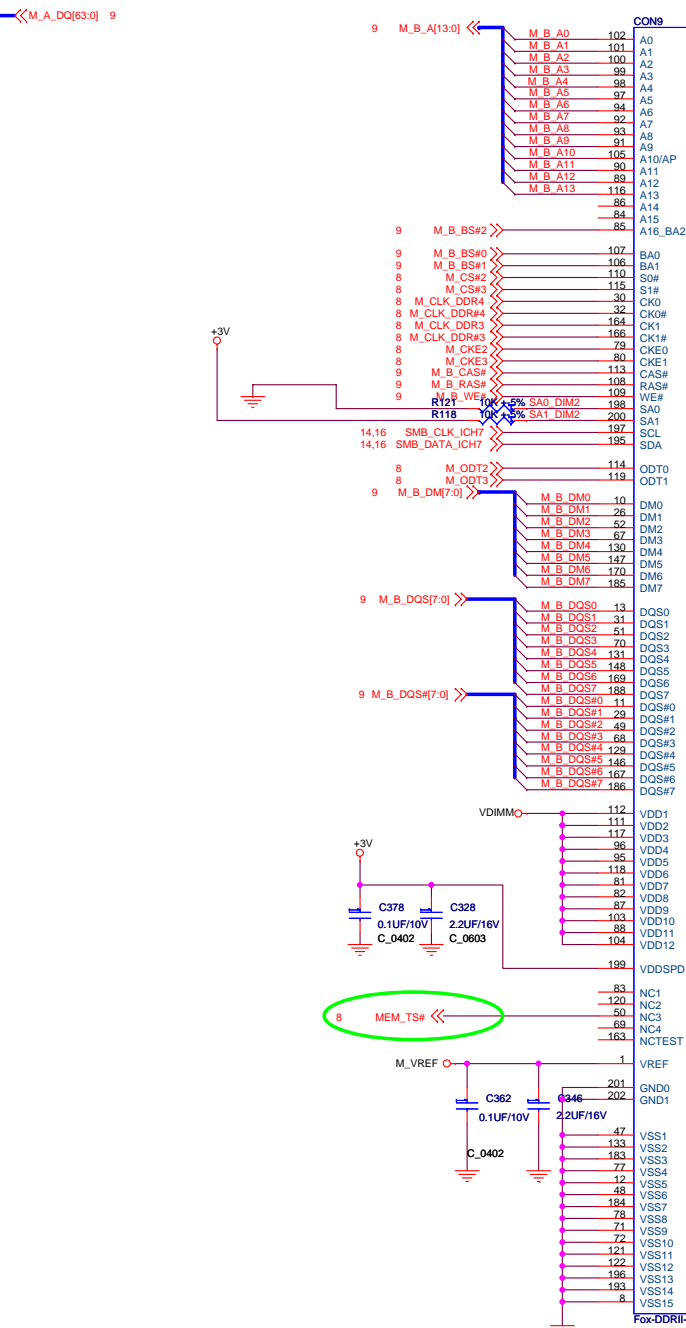
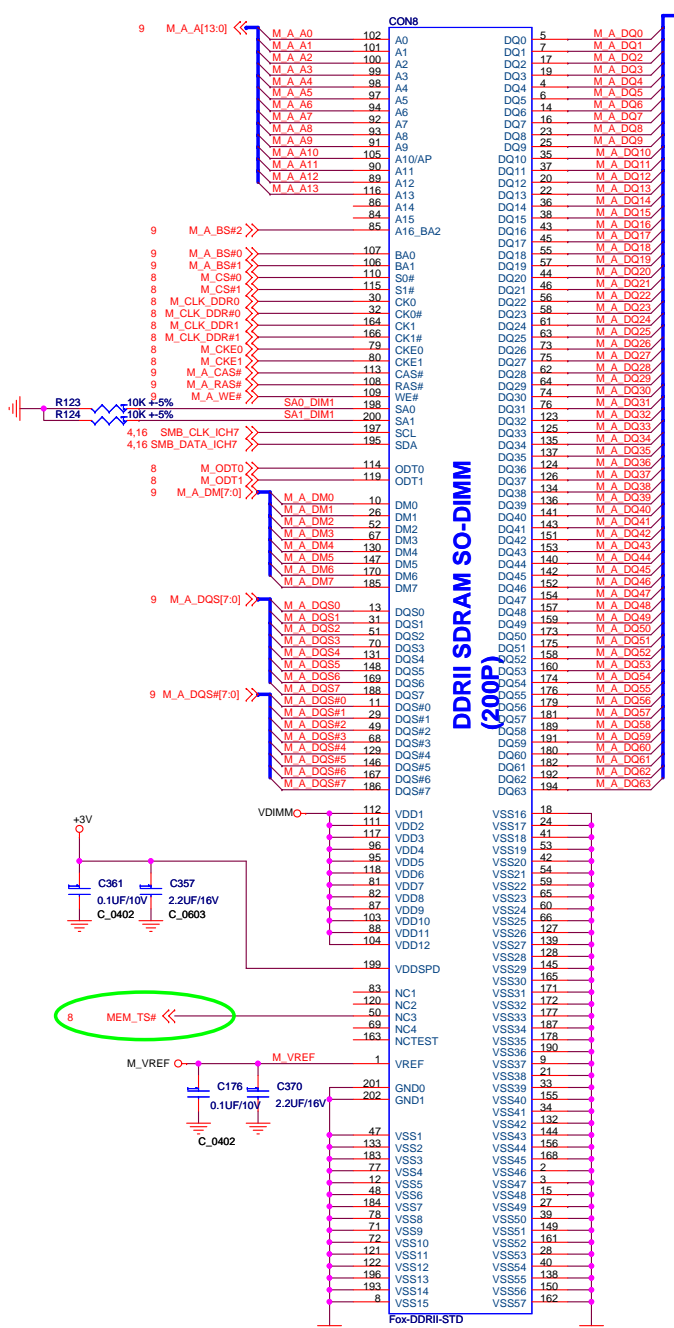
USI	VSS	AK34
AC41	VSS_0	VSS_97
AA41	VSS_1	VSS_98
W41	VSS_2	VSS_99
L41	VSS_3	VSS_100
F41	VSS_4	VSS_101
M41	VSS_5	VSS_102
F41	VSS_6	VSS_103
AV40	VSS_7	VSS_104
AP40	VSS_8	VSS_105
AK40	VSS_9	VSS_106
AV40	VSS_10	VSS_107
AK40	VSS_11	VSS_108
AJ40	VSS_12	VSS_109
AK40	VSS_13	VSS_110
AG40	VSS_14	VSS_111
AF40	VSS_15	VSS_112
AE40	VSS_16	VSS_113
B40	VSS_17	VSS_114
AV39	VSS_18	VSS_115
AW39	VSS_19	VSS_116
AV39	VSS_20	VSS_117
AB39	VSS_21	VSS_118
AN39	VSS_22	VSS_119
AJ39	VSS_23	VSS_120
AC39	VSS_24	VSS_121
AB39	VSS_25	VSS_122
AA39	VSS_26	VSS_123
V39	VSS_27	VSS_124
W39	VSS_28	VSS_125
V39	VSS_29	VSS_126
T39	VSS_30	VSS_127
P39	VSS_31	VSS_128
P39	VSS_32	VSS_129
N39	VSS_33	VSS_130
M39	VSS_34	VSS_131
L39	VSS_35	VSS_132
J39	VSS_36	VSS_133
H39	VSS_37	VSS_134
G39	VSS_38	VSS_135
F39	VSS_39	VSS_136
D39	VSS_40	VSS_137
AT38	VSS_41	VSS_138
AM38	VSS_42	VSS_139
AH38	VSS_43	VSS_140
AG38	VSS_44	VSS_141
AF38	VSS_45	VSS_142
AE38	VSS_46	VSS_143
C38	VSS_47	VSS_144
AK37	VSS_48	VSS_145
AH37	VSS_49	VSS_146
AB37	VSS_50	VSS_147
AA37	VSS_51	VSS_148
V37	VSS_52	VSS_149
W37	VSS_53	VSS_150
V37	VSS_54	VSS_151
T37	VSS_55	VSS_152
P37	VSS_56	VSS_153
P37	VSS_57	VSS_154
N37	VSS_58	VSS_155
M37	VSS_59	VSS_156
L37	VSS_60	VSS_157
J37	VSS_61	VSS_158
H37	VSS_62	VSS_159
G37	VSS_63	VSS_160
F37	VSS_64	VSS_161
D37	VSS_65	VSS_162
AV36	VSS_66	VSS_163
AW36	VSS_67	VSS_164
AV36	VSS_68	VSS_165
AH36	VSS_69	VSS_166
AG36	VSS_70	VSS_167
AF36	VSS_71	VSS_168
AE36	VSS_72	VSS_169
AC36	VSS_73	VSS_170
C36	VSS_74	VSS_171
B36	VSS_75	VSS_172
BA35	VSS_76	VSS_173
AV35	VSS_77	VSS_174
AR35	VSS_78	VSS_175
AH35	VSS_79	VSS_176
AB35	VSS_80	VSS_177
AA35	VSS_81	VSS_178
V35	VSS_82	VSS_179
W35	VSS_83	
V35	VSS_84	
T35	VSS_85	
R35	VSS_86	
P35	VSS_87	
N35	VSS_88	
M35	VSS_89	
L35	VSS_90	
J35	VSS_91	
H35	VSS_92	
G35	VSS_93	
F35	VSS_94	
D35	VSS_95	
AN34	VSS_96	

CALISTOGA\_1p0

USJ	VSS	J11
AT23	VSS_180	VSS_273
AN23	VSS_181	VSS_274
AM23	VSS_182	VSS_275
AK23	VSS_183	VSS_276
AC23	VSS_184	VSS_277
AW23	VSS_185	VSS_278
K23	VSS_186	VSS_279
J23	VSS_187	VSS_280
AE23	VSS_188	VSS_281
AB23	VSS_189	VSS_282
C23	VSS_190	VSS_283
AA22	VSS_191	VSS_284
K22	VSS_192	VSS_285
G22	VSS_193	VSS_286
R22	VSS_194	VSS_287
E22	VSS_195	VSS_288
G22	VSS_196	VSS_289
Y21	VSS_197	VSS_290
BA21	VSS_198	VSS_291
AV21	VSS_199	VSS_292
BR21	VSS_200	VSS_293
AN21	VSS_201	VSS_294
AL21	VSS_202	VSS_295
AE21	VSS_203	VSS_296
Y21	VSS_204	VSS_297
P21	VSS_205	VSS_298
K21	VSS_206	VSS_299
J21	VSS_207	VSS_300
H21	VSS_208	VSS_301
C21	VSS_209	VSS_302
AW20	VSS_210	VSS_303
AN20	VSS_211	VSS_304
AM20	VSS_212	VSS_305
AA20	VSS_213	VSS_306
K20	VSS_214	VSS_307
Y21	VSS_215	VSS_308
A20	VSS_216	VSS_309
AC19	VSS_217	VSS_310
W19	VSS_218	VSS_311
K19	VSS_219	VSS_312
G19	VSS_220	VSS_313
N29	VSS_221	VSS_314
AH18	VSS_222	VSS_315
G29	VSS_223	VSS_316
E29	VSS_224	VSS_317
H18	VSS_225	VSS_318
C29	VSS_226	VSS_319
A18	VSS_227	VSS_320
AV17	VSS_228	VSS_321
AR17	VSS_229	VSS_322
AM17	VSS_230	VSS_323
AM17	VSS_231	VSS_324
AK17	VSS_232	VSS_325
AV16	VSS_233	VSS_326
AD28	VSS_234	VSS_327
AL16	VSS_235	VSS_328
W28	VSS_236	VSS_329
J28	VSS_237	VSS_330
E28	VSS_238	VSS_331
AN15	VSS_239	VSS_332
AM15	VSS_240	VSS_333
AK15	VSS_241	VSS_334
N15	VSS_242	VSS_335
G27	VSS_243	VSS_336
L15	VSS_244	VSS_337
C27	VSS_245	VSS_338
B27	VSS_246	VSS_339
BA14	VSS_247	VSS_340
AT14	VSS_248	VSS_341
AK14	VSS_249	VSS_342
AD14	VSS_250	VSS_343
D26	VSS_251	VSS_344
U14	VSS_252	VSS_345
P25	VSS_253	VSS_346
K25	VSS_254	VSS_347
H25	VSS_255	VSS_348
E25	VSS_256	VSS_349
AR13	VSS_257	VSS_350
AN13	VSS_258	VSS_351
BA24	VSS_259	VSS_352
AL13	VSS_260	VSS_353
AG13	VSS_261	VSS_354
P13	VSS_262	VSS_355
F13	VSS_263	VSS_356
D13	VSS_264	VSS_357
B13	VSS_265	VSS_358
AY12	VSS_266	VSS_359
AC12	VSS_267	VSS_360
K12	VSS_268	
H12	VSS_269	
E12	VSS_270	
AD11	VSS_271	
AA11	VSS_272	
Y11		

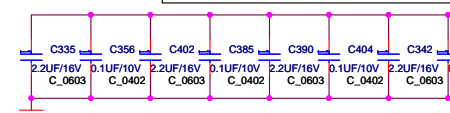
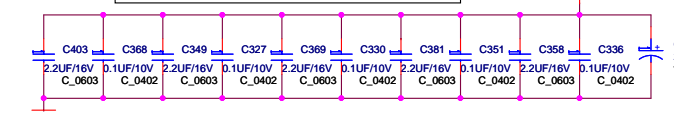
CALISTOGA\_1p0

<b>lenovo</b> 联想		LENOVO.NOD	
Title			
Calistoga(VSS)			
Size	Document Number	Rev V0.1	
Custom	Taurus2		
Date:	Thursday, June 29, 2006	Sheet	13 of 40
PROPERTY NOTE: This document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			



Layout Note: place these near dimm0

Layout Note: place these near dimm1



LENOVO.NOD  
HuZW LIXINP LIYJK LvXDA

lenovo 联想

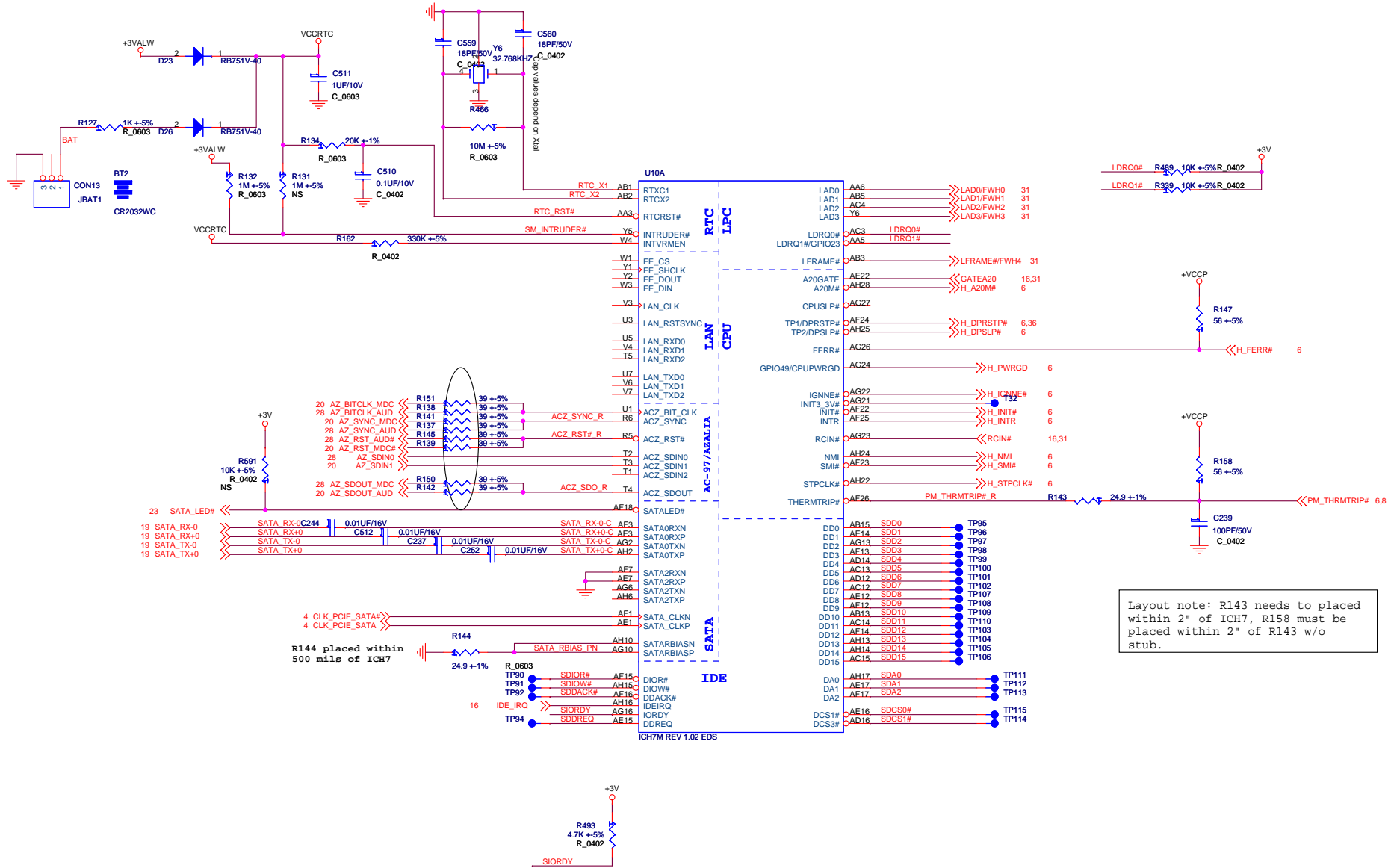
Title: **DDR SO-DIMM(200P)**

Size	Document Number	Sheet	Rev
Custom	Taurus2	14 of 40	s0.1

Date: Thursday, June 29, 2006

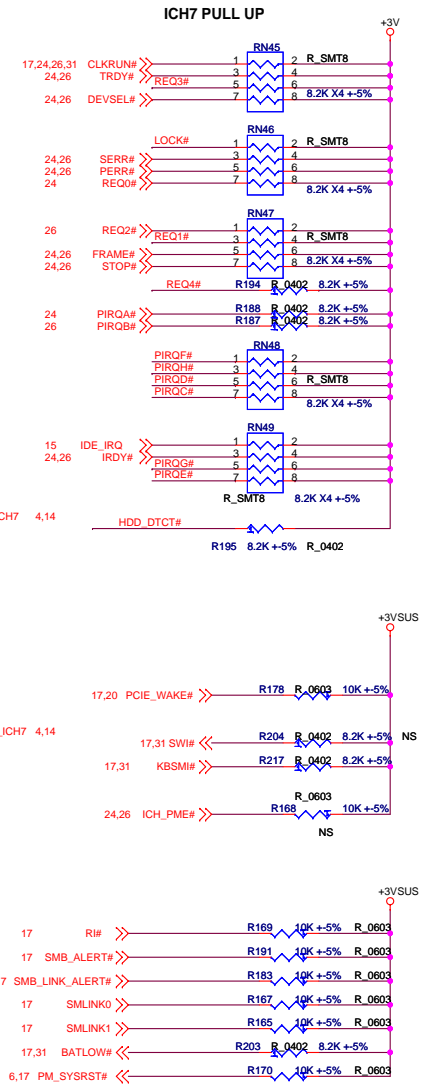
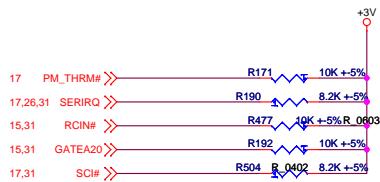
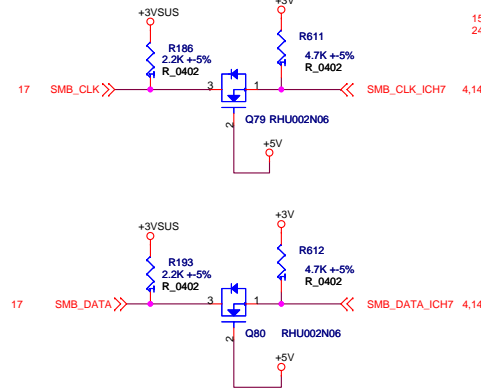
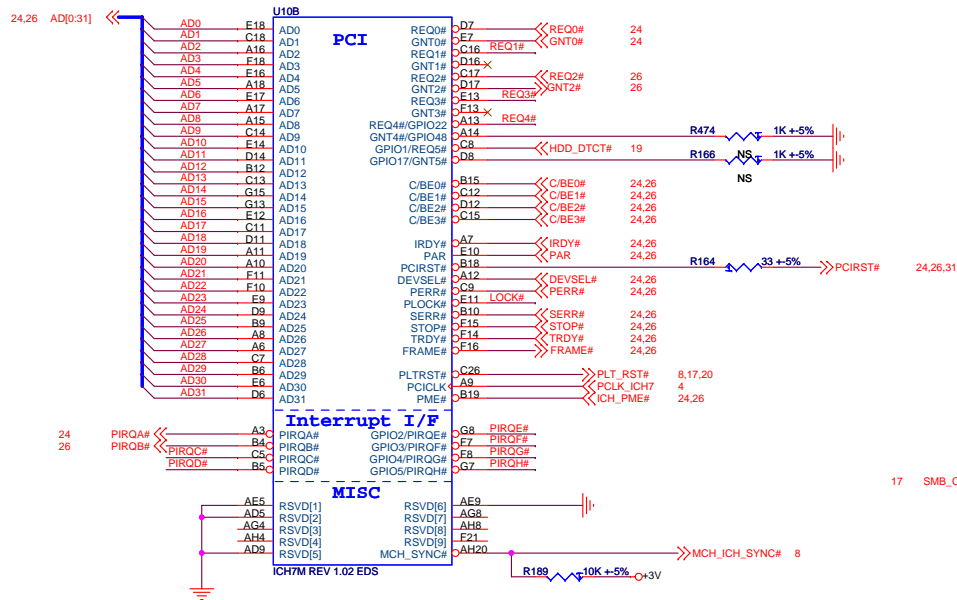
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.

Consider VCCRTC sources



Layout note: R143 needs to be placed within 2" of ICH7, R158 must be placed within 2" of R143 w/o stub.

lenovo 联想		LENOVO.NOD	
Title: ICH7-M(CPU/IDE/SATA)			
Size: Custom	Document Number: Taurus2	Rev: v0.1	
Date: Thursday, June 29, 2006	Sheet: 15	of 40	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			



	GNT5#	GNT4#
LPC	H	H
PCI	H	L
SPI	L	H

PIRQA# : BCM5705  
PIRQB# : OZ711EZ1TN

REQ0 : BCM4401  
REQ1 : NU  
REQ2 : OZ711EZ1TN  
REQ3 : NU

**lenovo** 联想

LENOVO.NOD

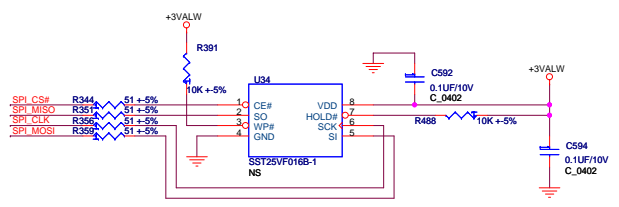
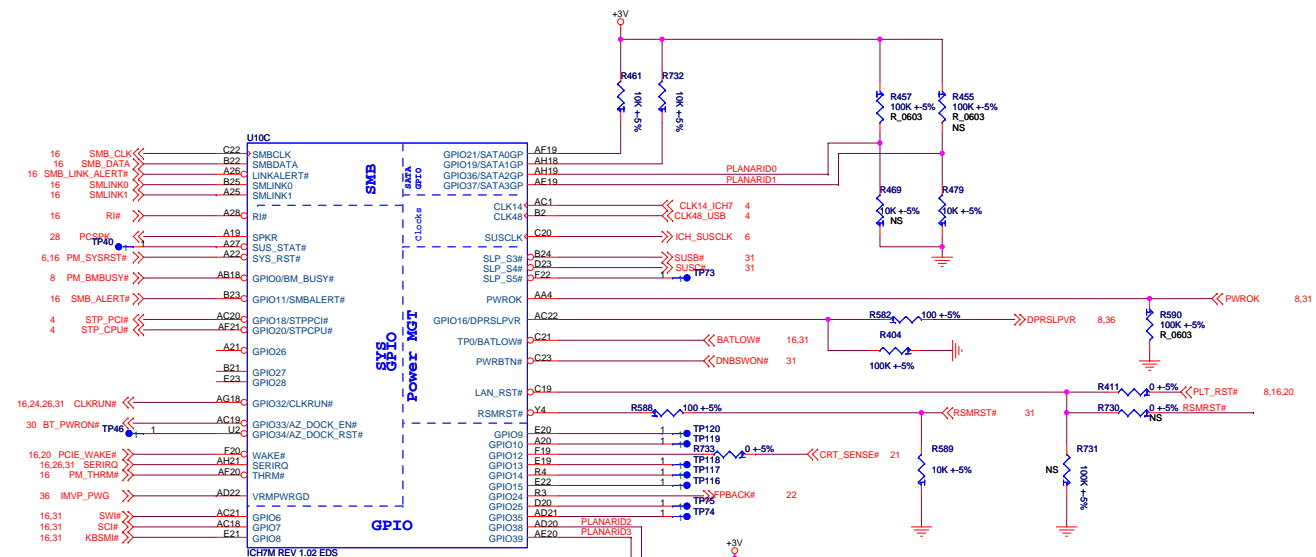
Title: ICH7-M(PCI)&PULL UP

Size	Document Number	Rev
Custom	Taurus2	v0.1

Date: Thursday, June 29, 2006 Sheet 16 of 40

PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.

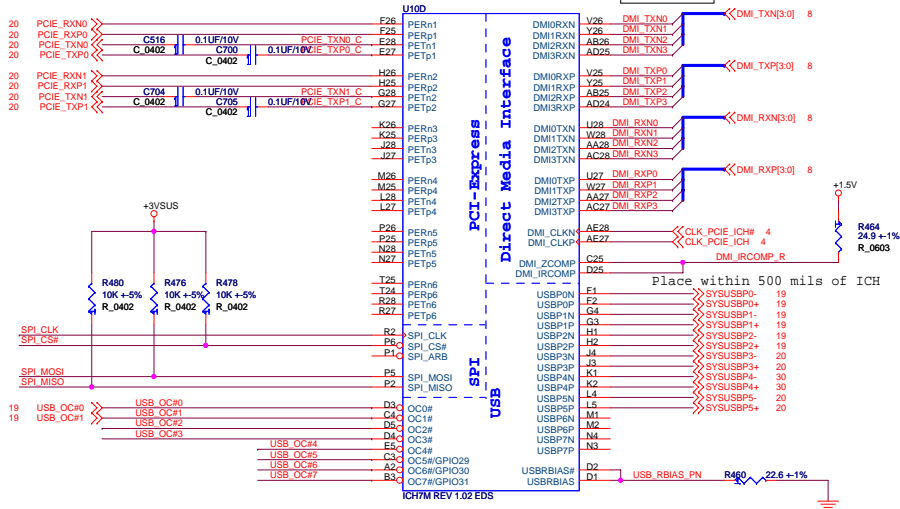




PLACE LESS THAN 2 INCH FROM THE ICH IF USING SHARED ARCHITECTURE.

LEVEL	PLANAR ID			
	3	2	1	0
1	R458	R412	R455	R457
0	R459	R475	R479	R469

NOTE:  
RX--TX  
TX--RX



Place within 500 mils of ICH

lenovo 联想 LENOVO.NOD

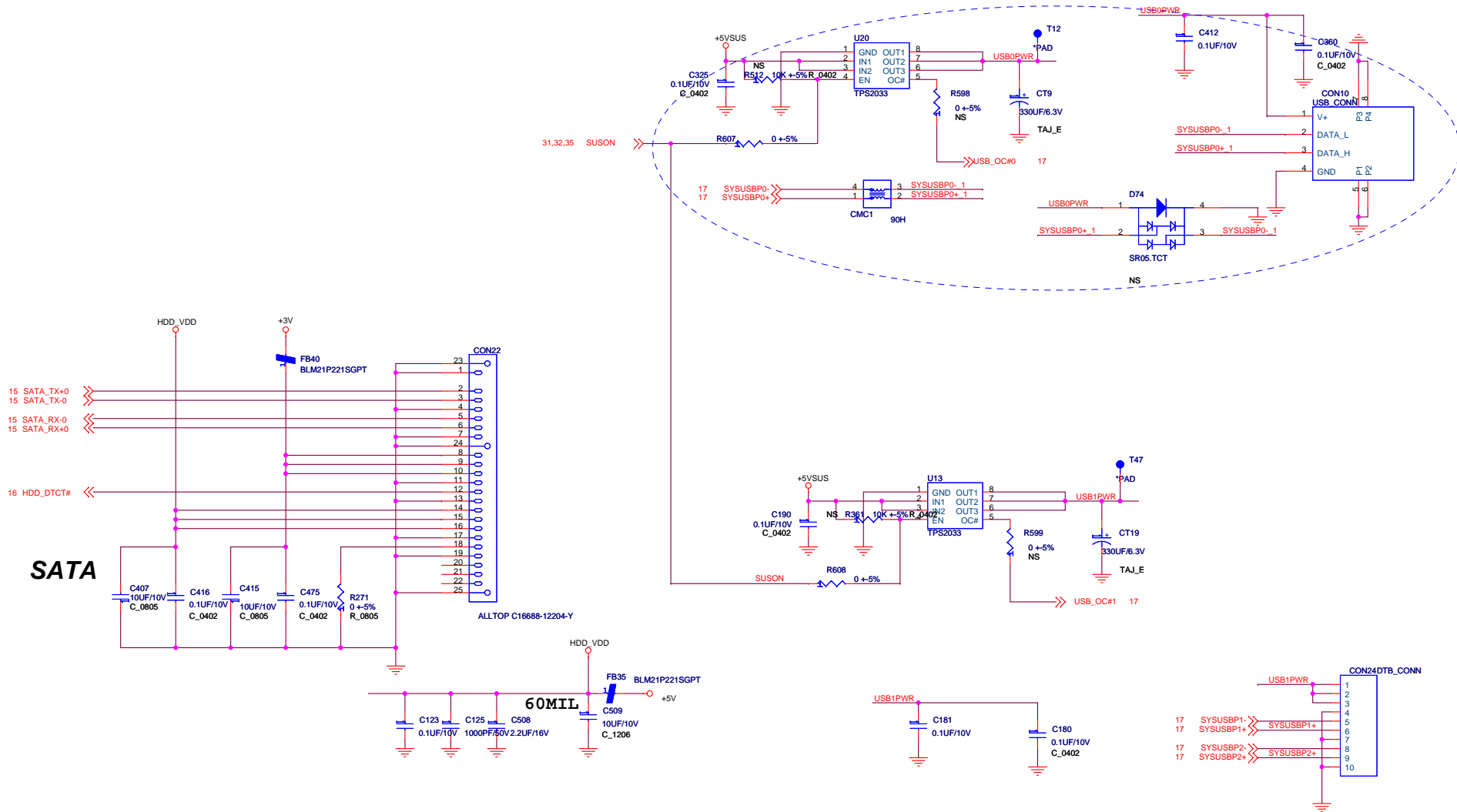
Title: ICH7-M(GPIO/PMUSB/SPI)

Size: Document Number  
Customer: Taurus2 Rev v0.1

Date: Thursday, June 29, 2006 Sheet 17 of 40

PROPERTY NOTE: This document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to others or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.



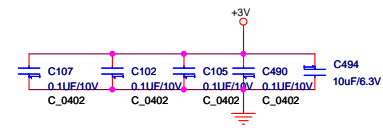
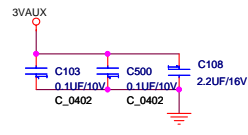
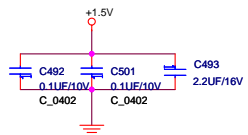
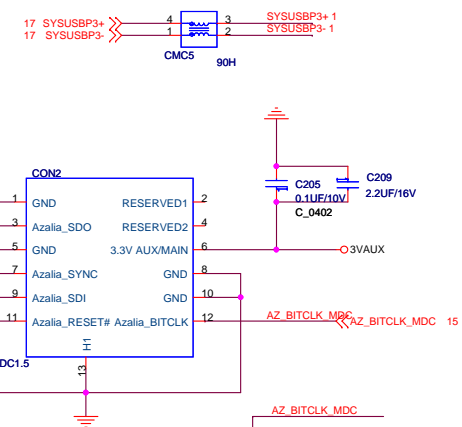
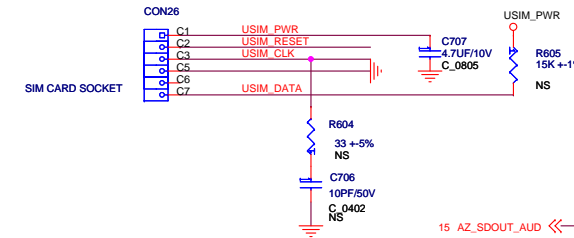
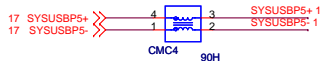
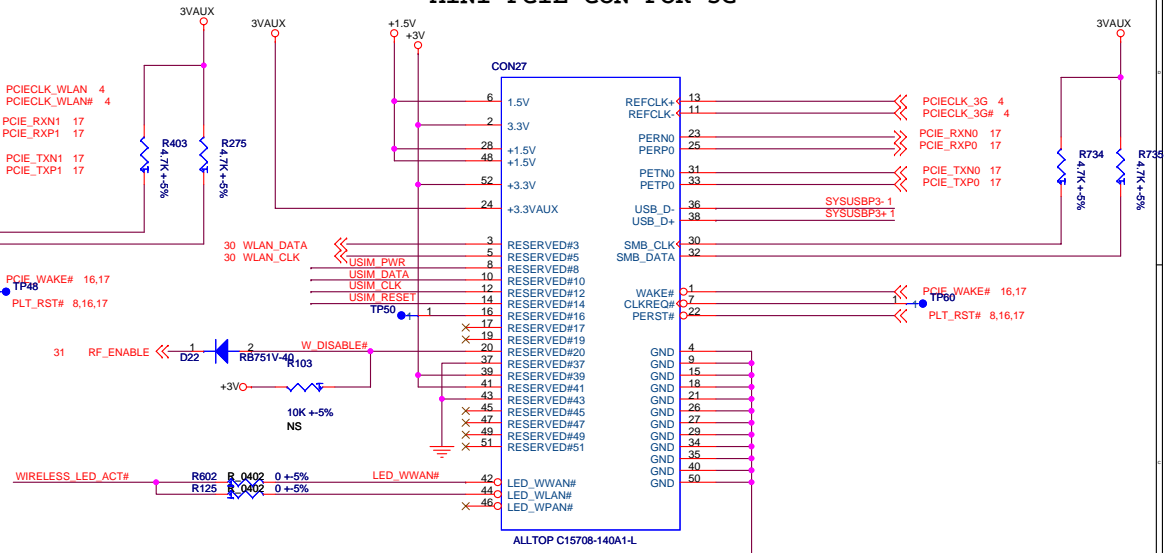
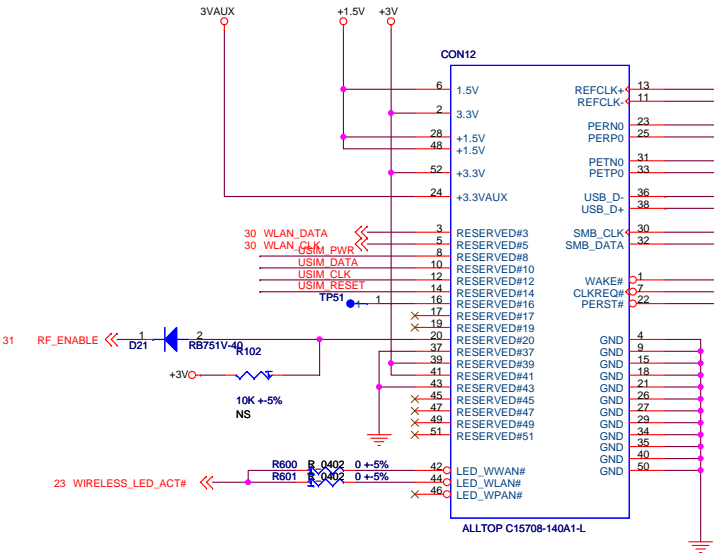


For external ODD, the USB Power need larger than 1A

lenovo 联想		LENOVO.NOD HuZW LIXINP LIYJK LvXDA	
Title USB HDD			
Size	Document Number	Rev s0.1	
Custom	Taurus2		
Date:	Thursday, June 29, 2006	Sheet	19 of 40
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			

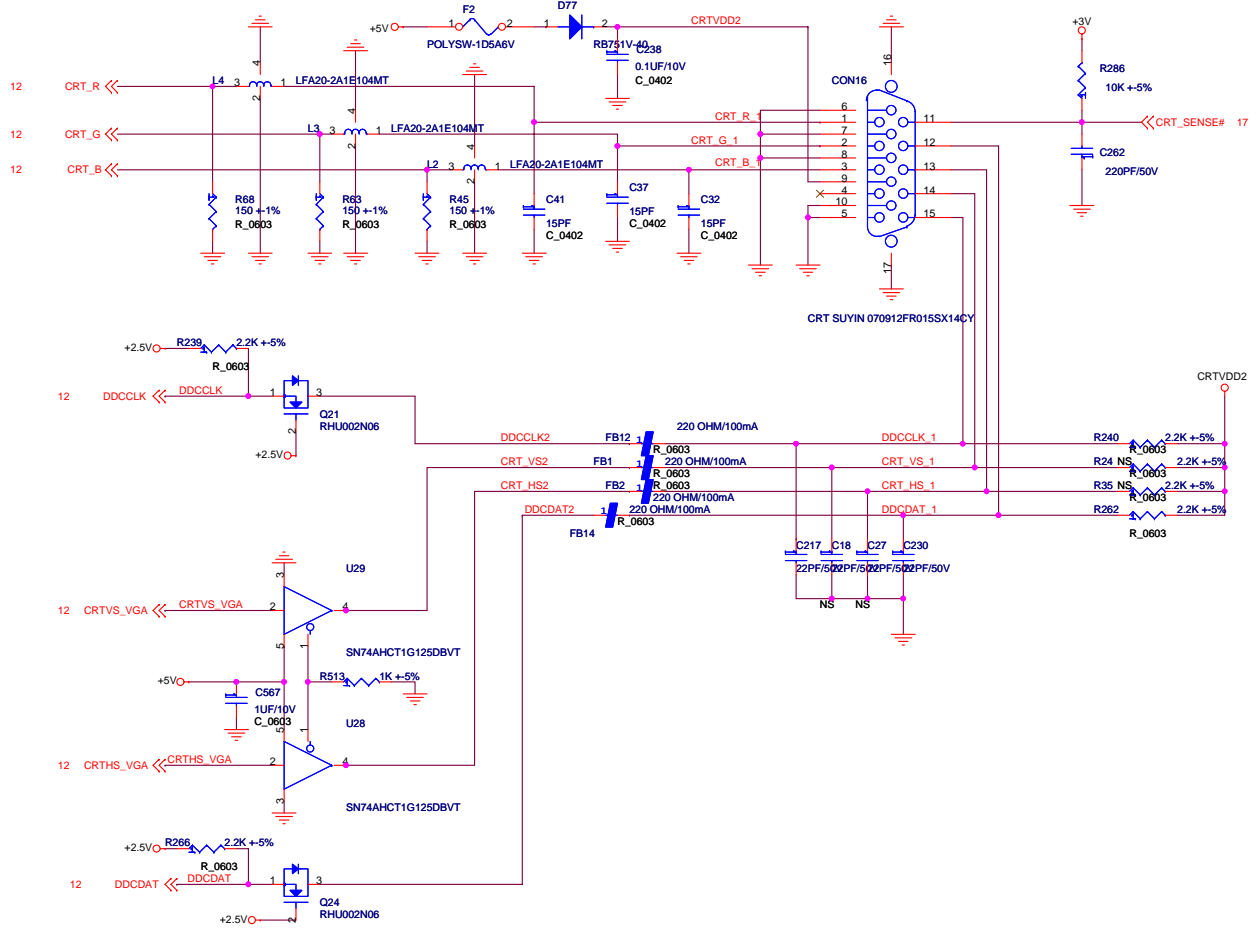
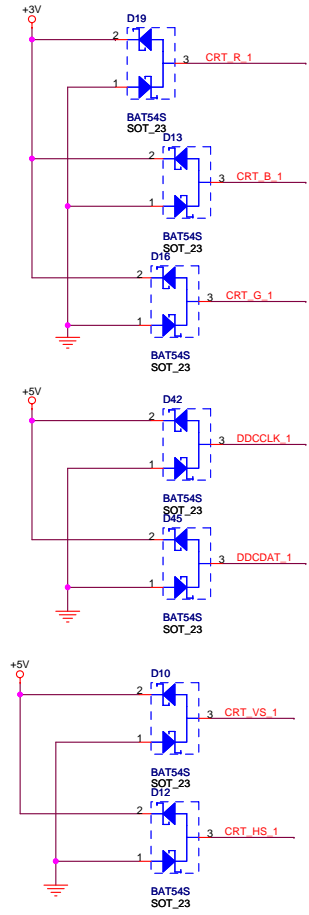
### MINI PCIE CON FOR WLAN

### MINI PCIE CON FOR 3G



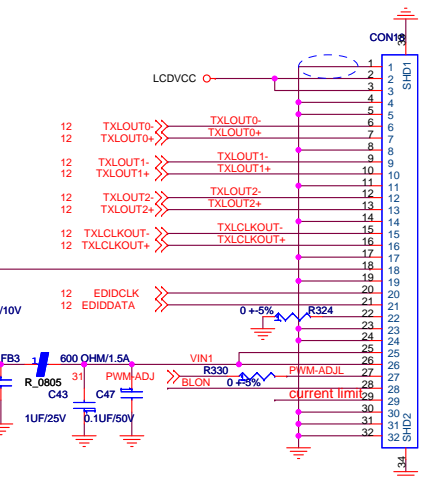
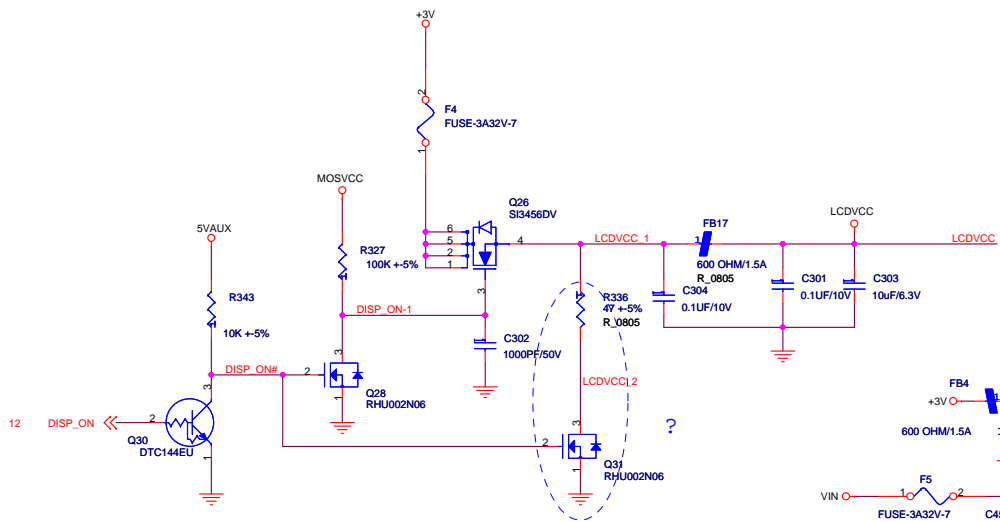
		LENOVO.NOD HuZW LiXINP LiYJK LvXDA	
File MINI-PCIE, WWAN ,MDC			
Size	Document Number	Rev	
Custom	Taurus2	s0.1	
Date:	Thursday, June 29, 2006	Sheet	20 of 40
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.*			

# CRT PORT

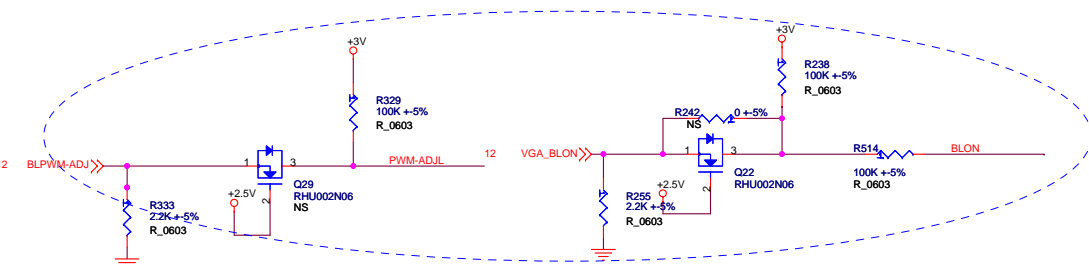
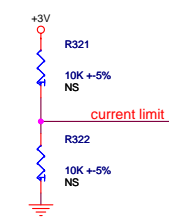
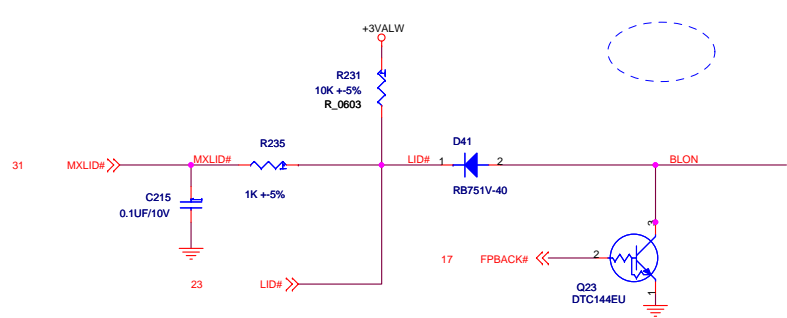
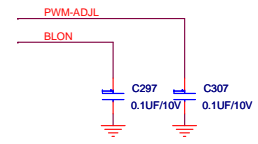


<b>lenovo</b> 联想		LENOVO.NOD HuZW LIXINP LIYJK LvXDA	
Title CRT			
Size Custom	Document Number Taurus2		Rev s0.1
Date:	Thursday, June 29, 2006	Sheet	21 of 40
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			

Change connector!!

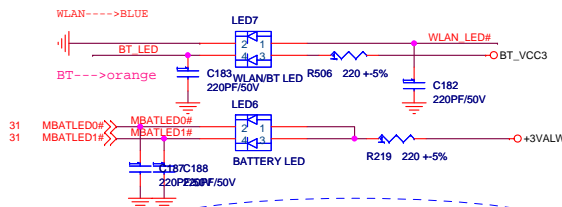
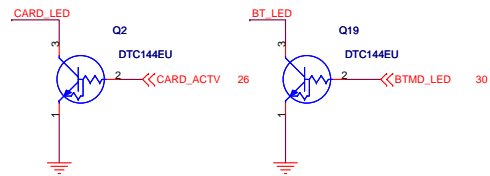


Check new spec and PIN1, 31

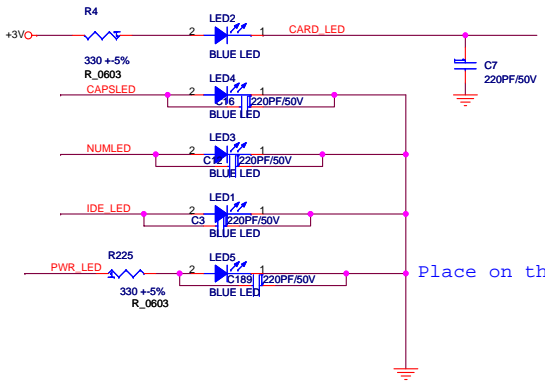


Tentative LVDS Voltage Translation Circuitry

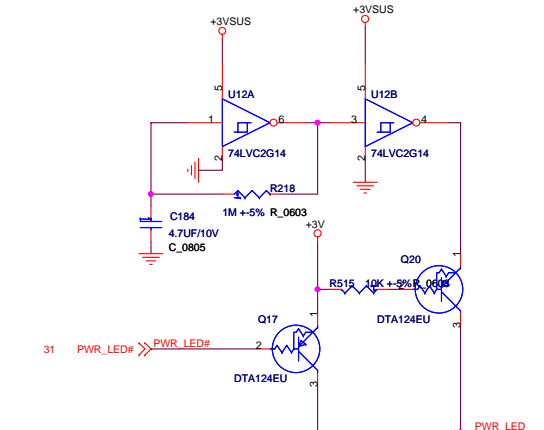
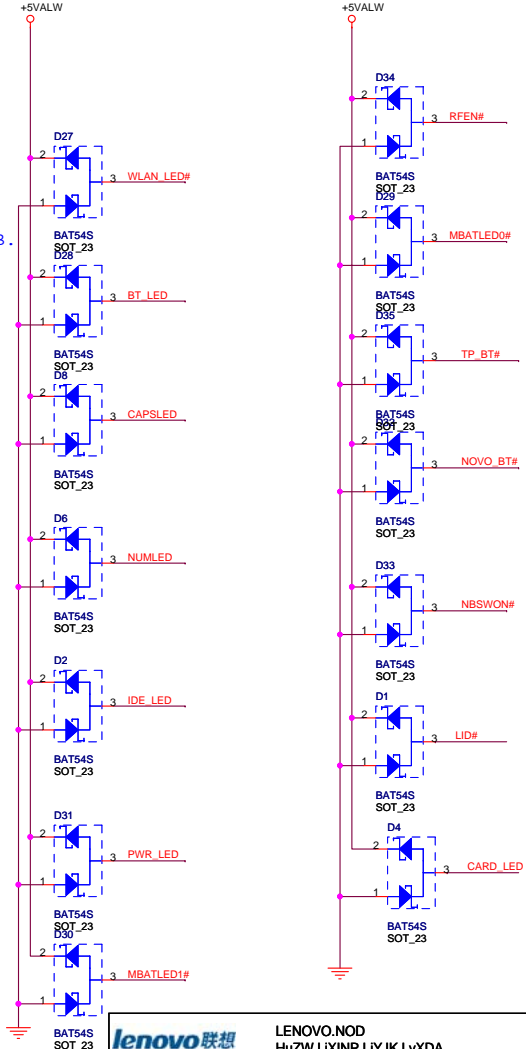
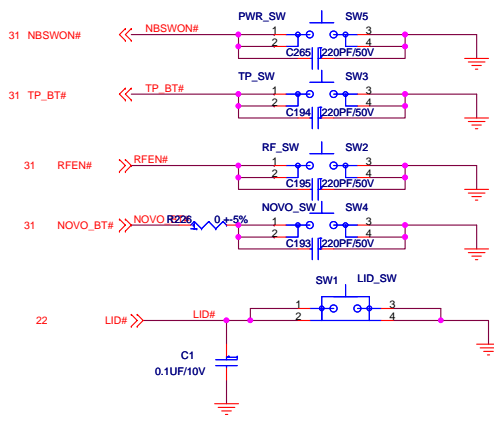
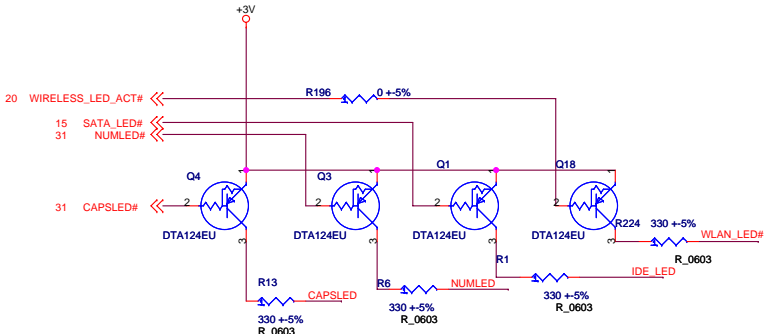
lenovo 联想		LENOVO.NOD HuZW LIXINP LIYJK LvXDA	
Title LCD CONN			
Size Custom	Document Number Taurus2	Rev s0.1	
Date: Thursday, June 29, 2006	Sheet 22	of 40	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			



Check the front LED!!!!!!



Place on the front of NB.



lenovo 联想

LENOVO.NOD  
HuZW LIXINP LIYJK LVXDA

Title SWITCH LED

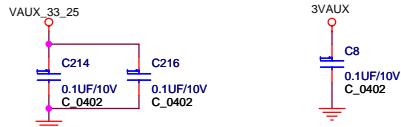
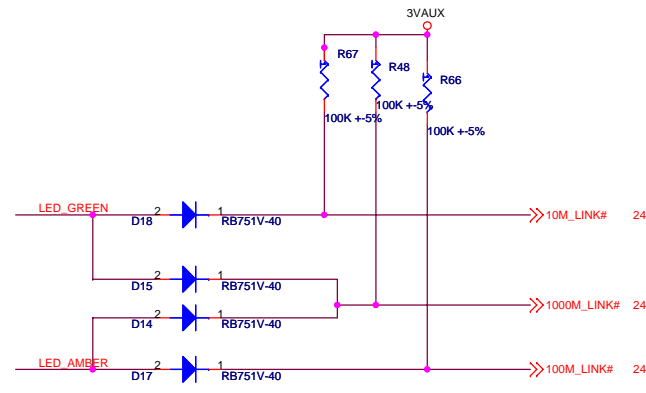
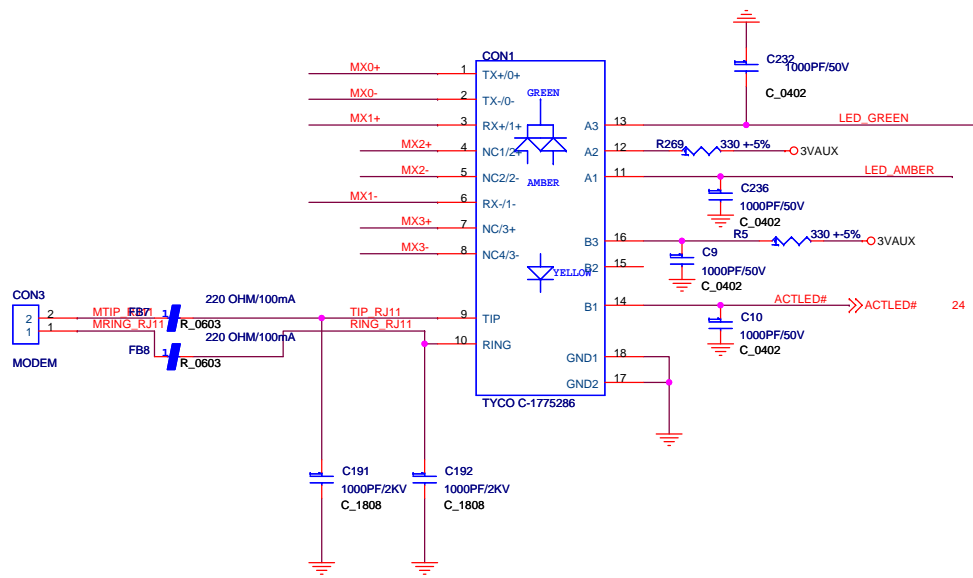
Size	Document Number	Rev
Custom	Taurus2	s0.1

Date: Thursday, June 29, 2006 Sheet 23 of 40

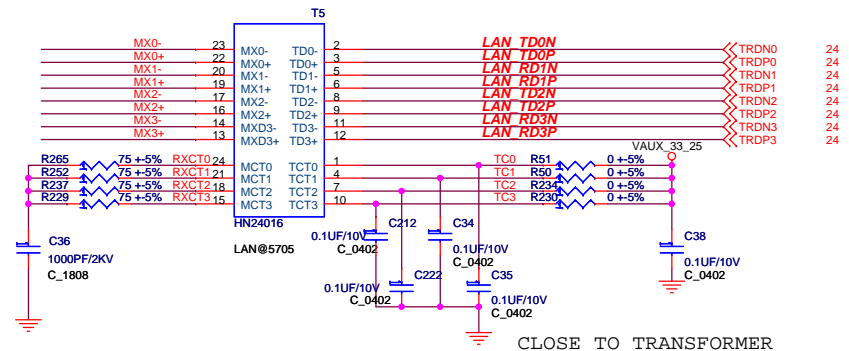
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.





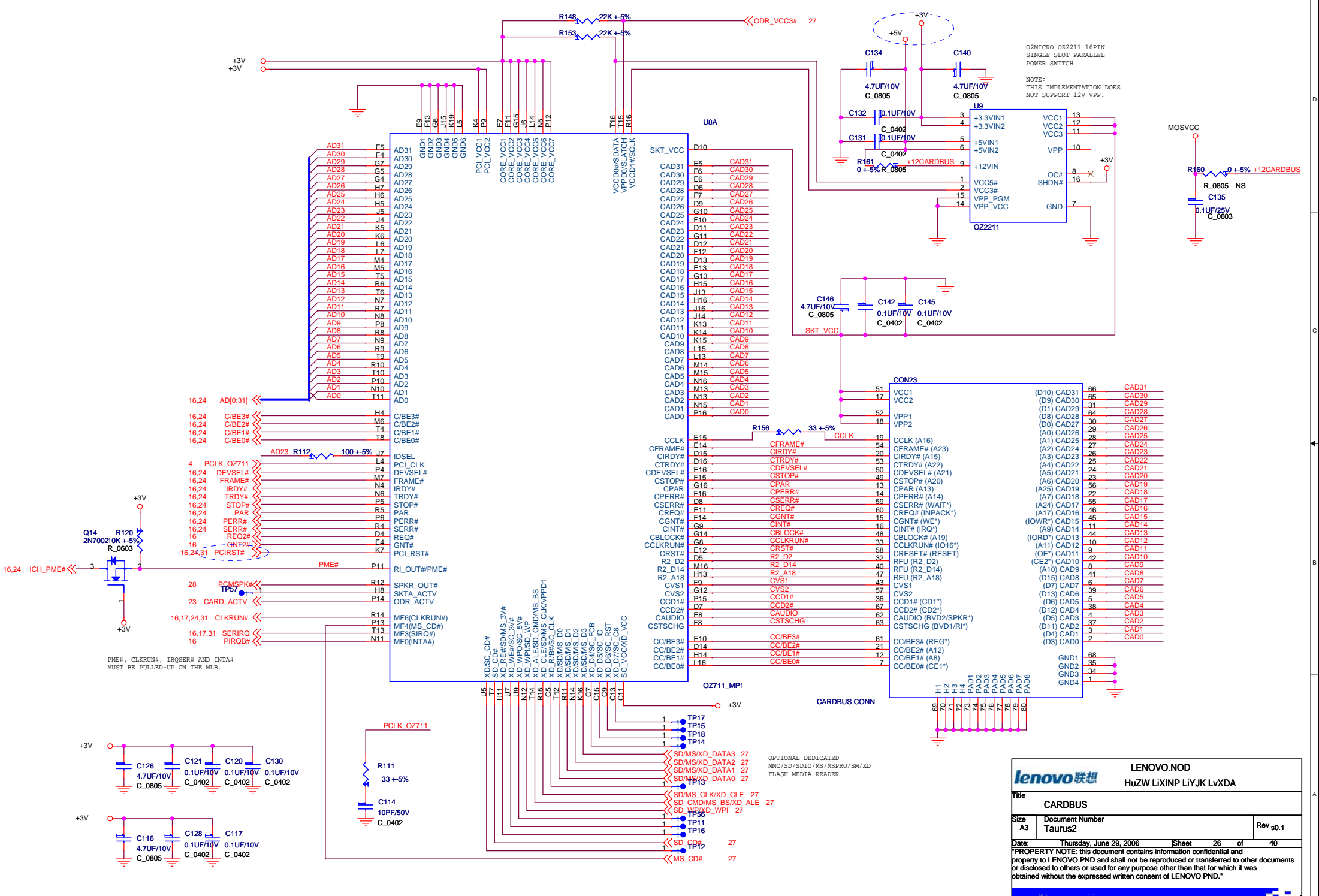


EMI PAD



CLOSE TO TRANSFORMER

		LENOVO.NOD HuZw LIXINP LIYJK LvXDA
Title		
RJ45 RJ11		
Size	Document Number	Rev
Custom	Taurus2	s0.1
Date:	Thursday, June 29, 2006	Sheet 25 of 40
*PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.*		



O2MICRO OZ2211 16PIN  
SINGLE SLOT PARALLEL  
POWER SWITCH

NOTE:  
THIS IMPLEMENTATION DOES  
NOT SUPPORT 1.2V VPP.

(D10) CAD31	66	CAD31
(D9) CAD30	65	CAD30
(D1) CAD29	31	CAD29
(D8) CAD28	64	CAD28
(D0) CAD27	30	CAD27
(A0) CAD26	28	CAD26
(A1) CAD25	27	CAD25
(A2) CAD24	26	CAD24
(A3) CAD23	26	CAD23
(A4) CAD22	25	CAD22
(A5) CAD21	24	CAD21
(A6) CAD20	56	CAD20
(A25) CAD19	22	CAD19
(A7) CAD18	55	CAD18
(A24) CAD17	23	CAD17
(A17) CAD16	46	CAD16
(A9) CAD15	11	CAD15
(A9) CAD14	11	CAD14
(IORD*) CAD13	10	CAD13
(A11) CAD12	9	CAD12
(OE*) CAD11	42	CAD11
(CE2*) CAD10	4	CAD10
(A10) CAD9	8	CAD9
(D15) CAD8	41	CAD8
(D7) CAD7	39	CAD7
(D13) CAD6	5	CAD6
(D6) CAD5	38	CAD5
(D12) CAD4	4	CAD4
(D5) CAD3	4	CAD3
(D11) CAD2	37	CAD2
(D4) CAD1	2	CAD1
(D3) CAD0	2	CAD0

LENOVO.NOD  
HuZW LIXINP LIYJK LVXDA

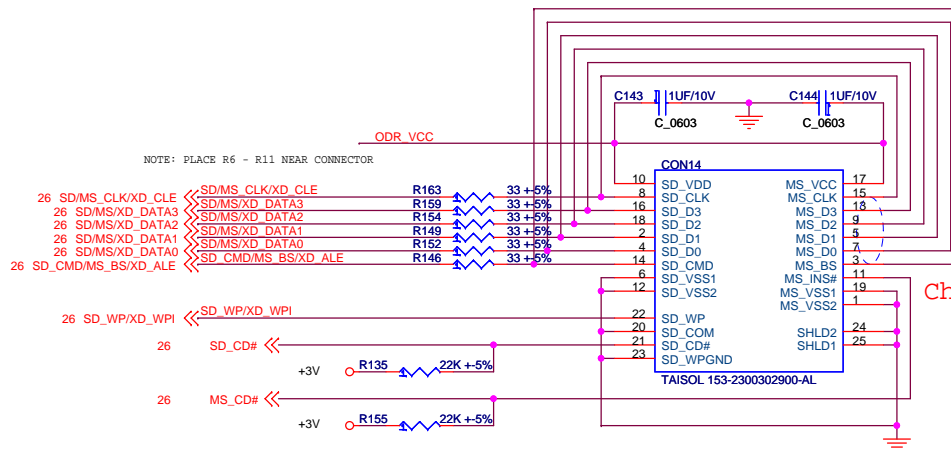
lenovo 联想

Title: CARDBUS

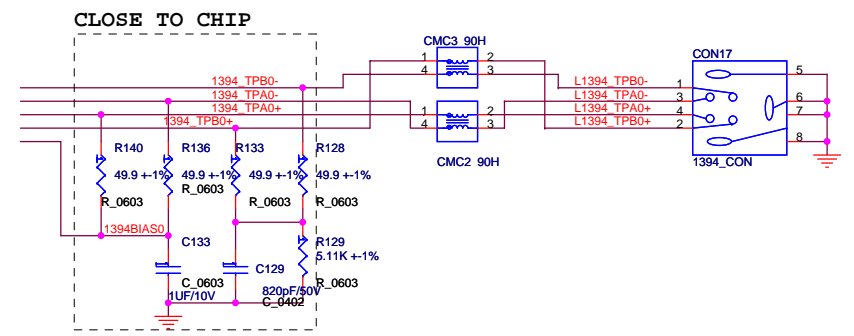
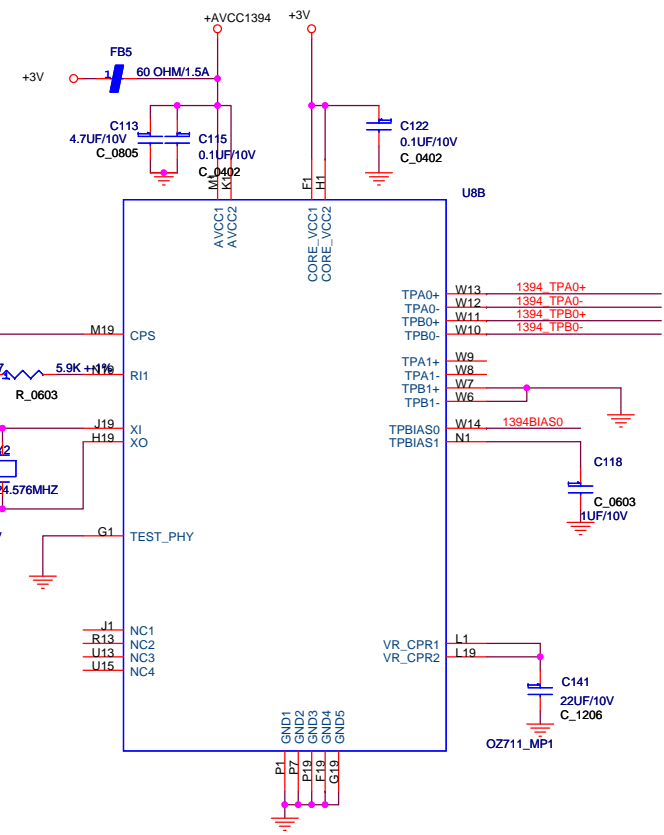
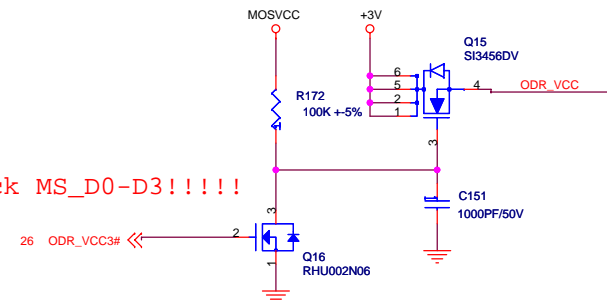
Size: A3	Document Number: Taurus2	Rev: g0.1
----------	--------------------------	-----------

Date: Thursday, June 29, 2006 Sheet 26 of 40

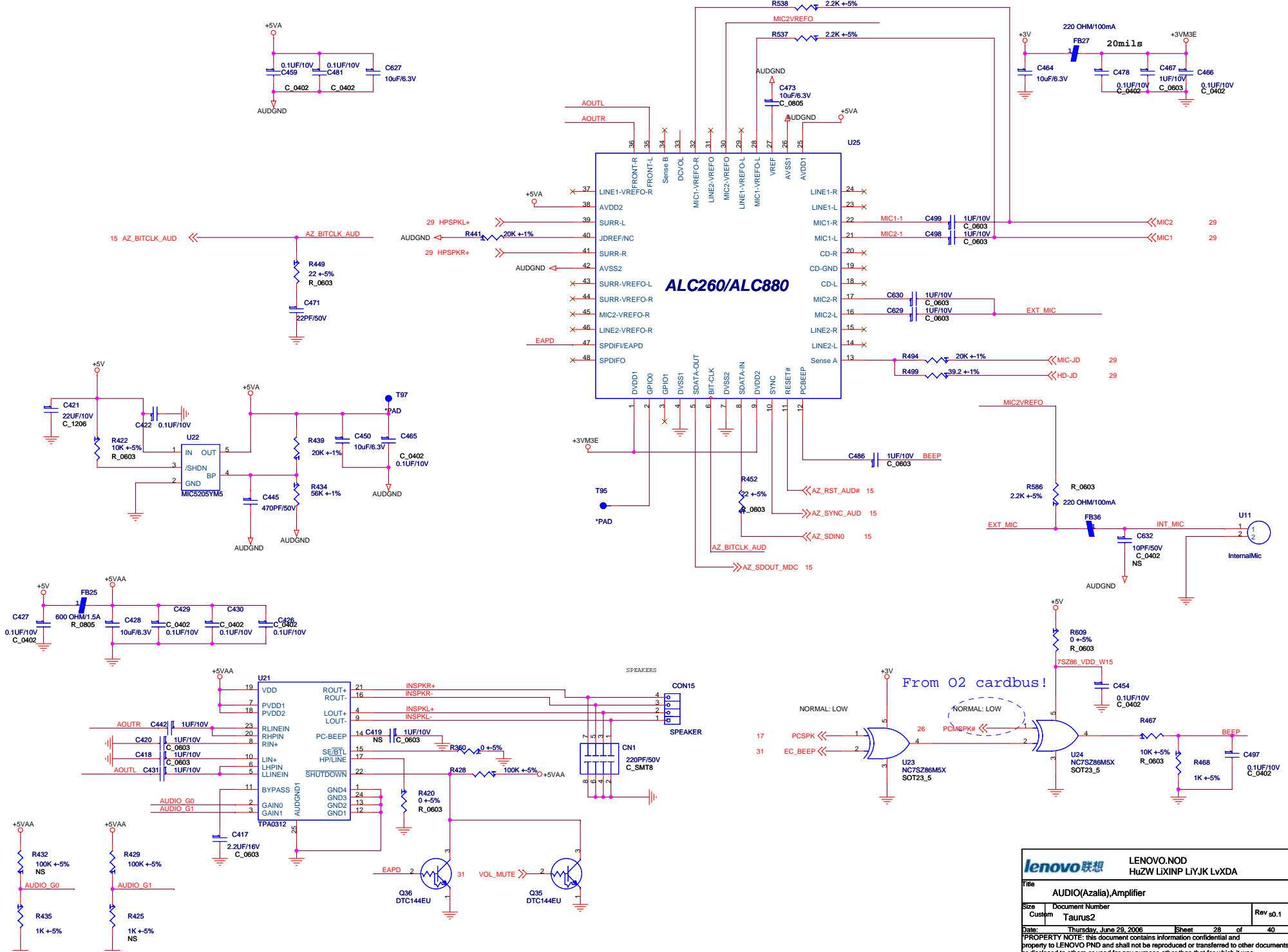
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.



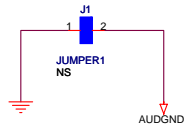
Check MS\_D0-D3!!!!



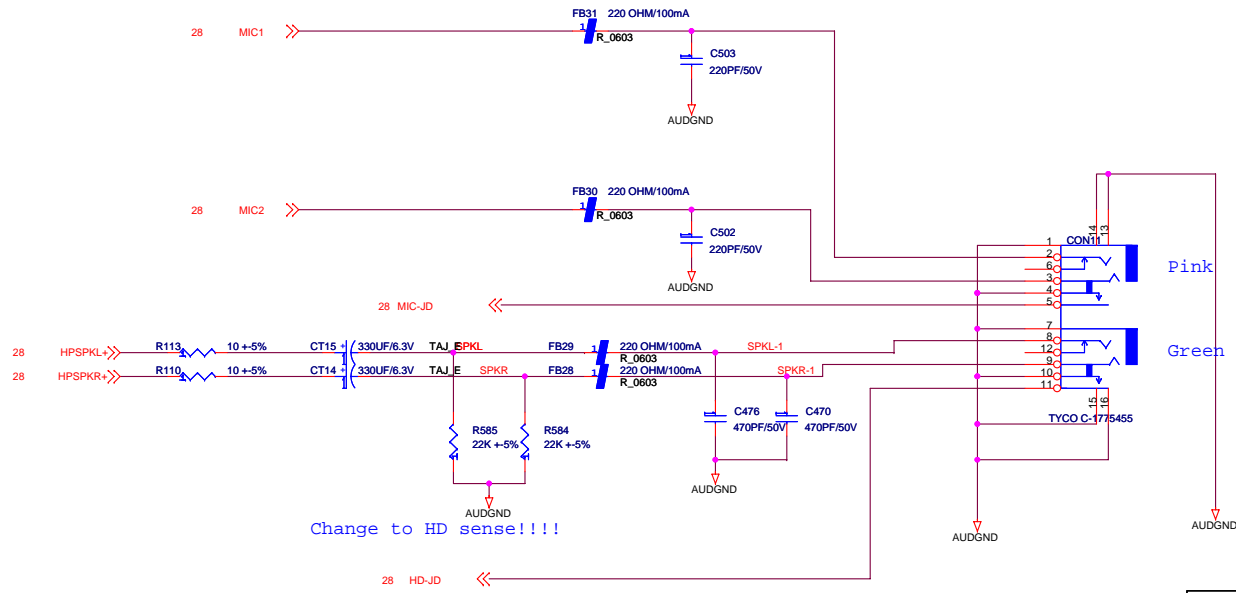
<b>lenovo</b> 联想		LENOVO.NOD	
		HuZW LiXINP LiYJK LvXDA	
Title			
1394 & Cardreader(Connector)			
Size	Document Number	Rev	
A3	Taurus2	s0.1	
Date:	Thursday, June 29, 2006	Sheet	27 of 40
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			



lenovo 联想		LENOVO.NOD HuZW LIXINP LIYJK LVXDA	
Title AUDIO(Azalia) Amplifier			
Size Custom	Document Number Taurus2	Sheet 28	of 40
Date: Thursday, June 29, 2006	Rev s0.1	Rev s0.1	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			



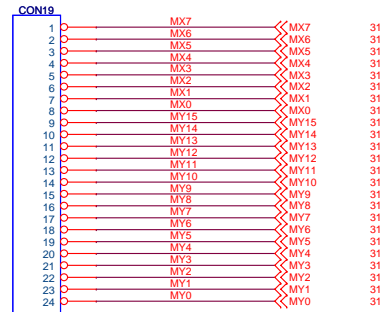
J1 is only for Layout convenience. GND and AUDGND must be connected in inner layer.



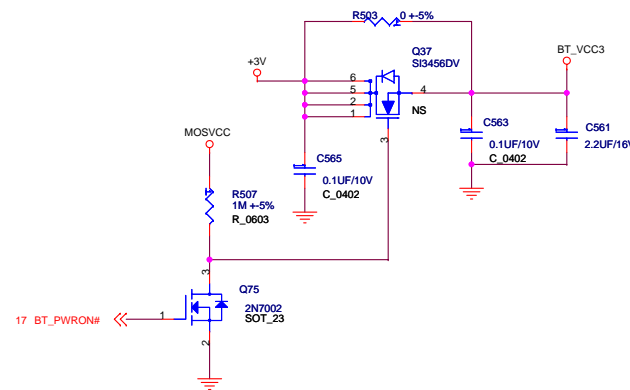
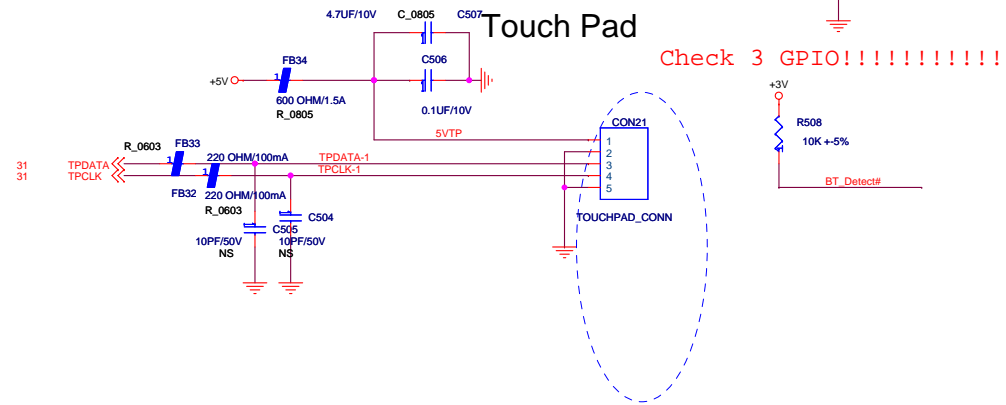
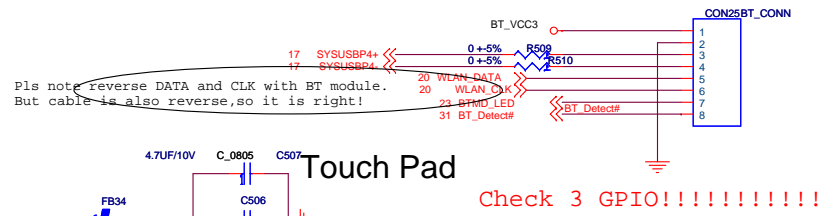
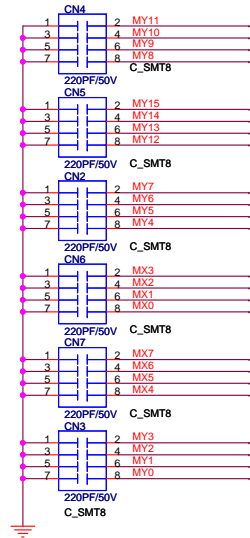
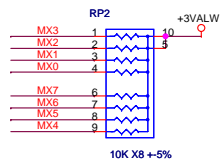
Consider to reserve PLUG signal in AC 97 platform

<b>lenovo</b> 联想		LENOVO.NOD HuZW LIXINP LiYJK LvXDA	
File AUDIO JACK			
Size Custom	Document Number Taurus2	Rev s0.1	
Date: Thursday, June 29, 2006	Sheet 29	of 40	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.*			

### Check Keyboard matrix

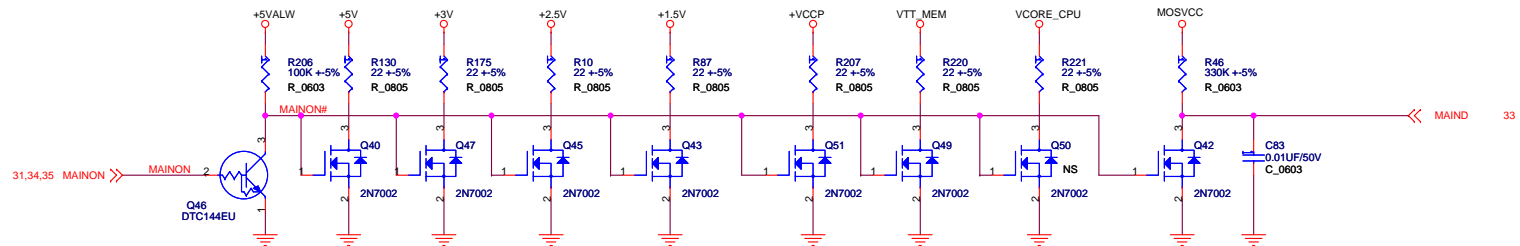
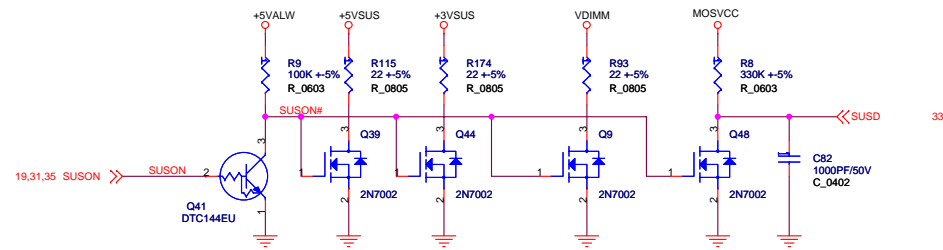


KEYBOARD  
NEED CHECK STICK POINTER PIN DEFINE



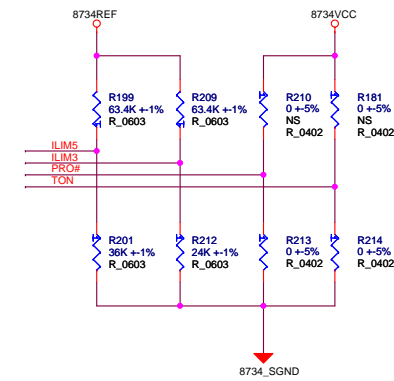
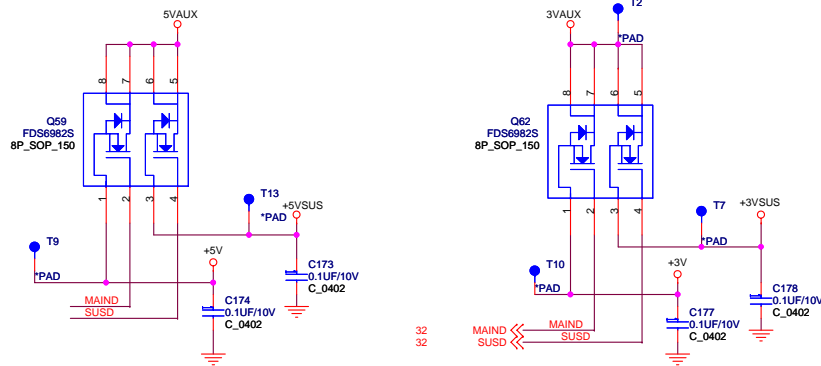
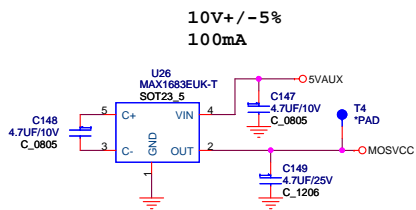
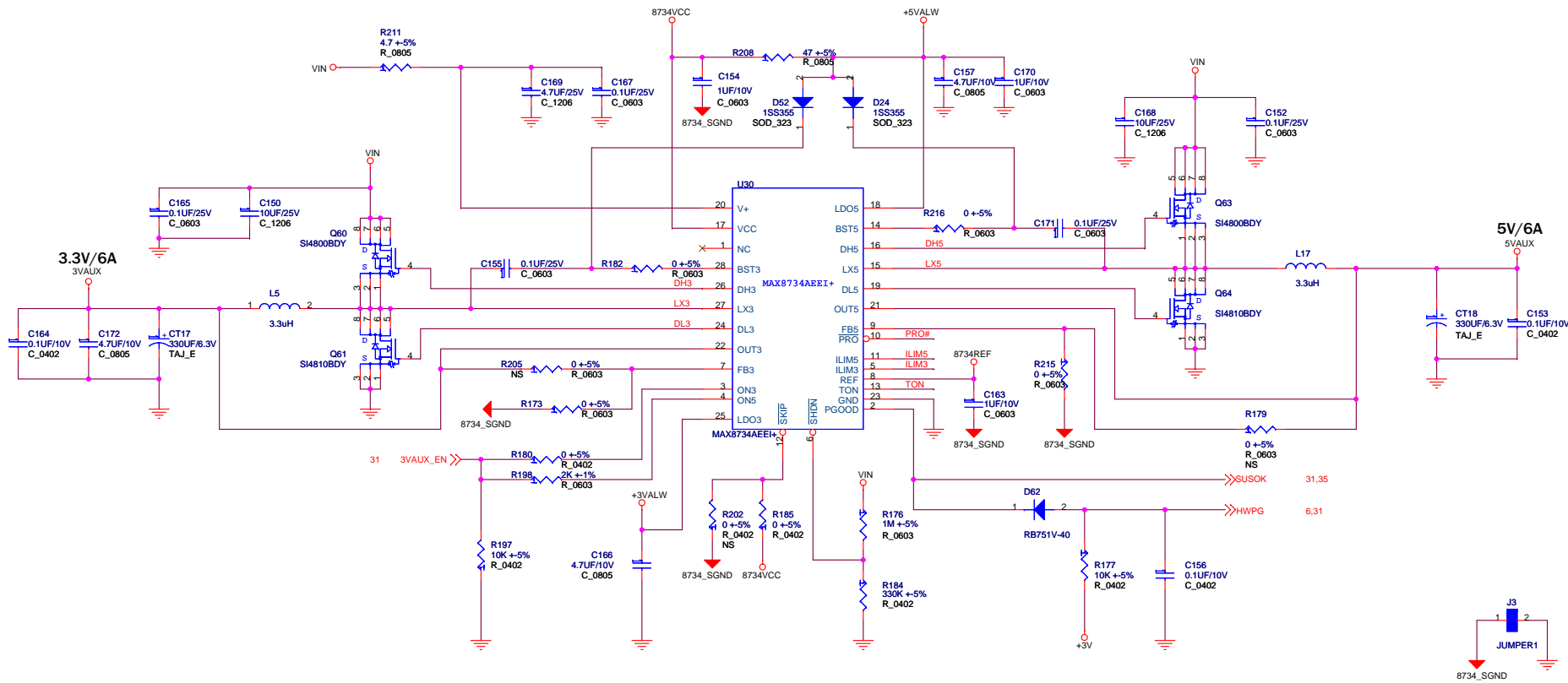
lenovo 联想		LENOVO.NOD HuZW LIXINP LIYJK LVXDA	
Title KeyBoard TP BT			
Size Custom	Document Number Taurus2		Rev s0.1
Date: Thursday, June 23, 2006	Sheet 30	of 40	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			





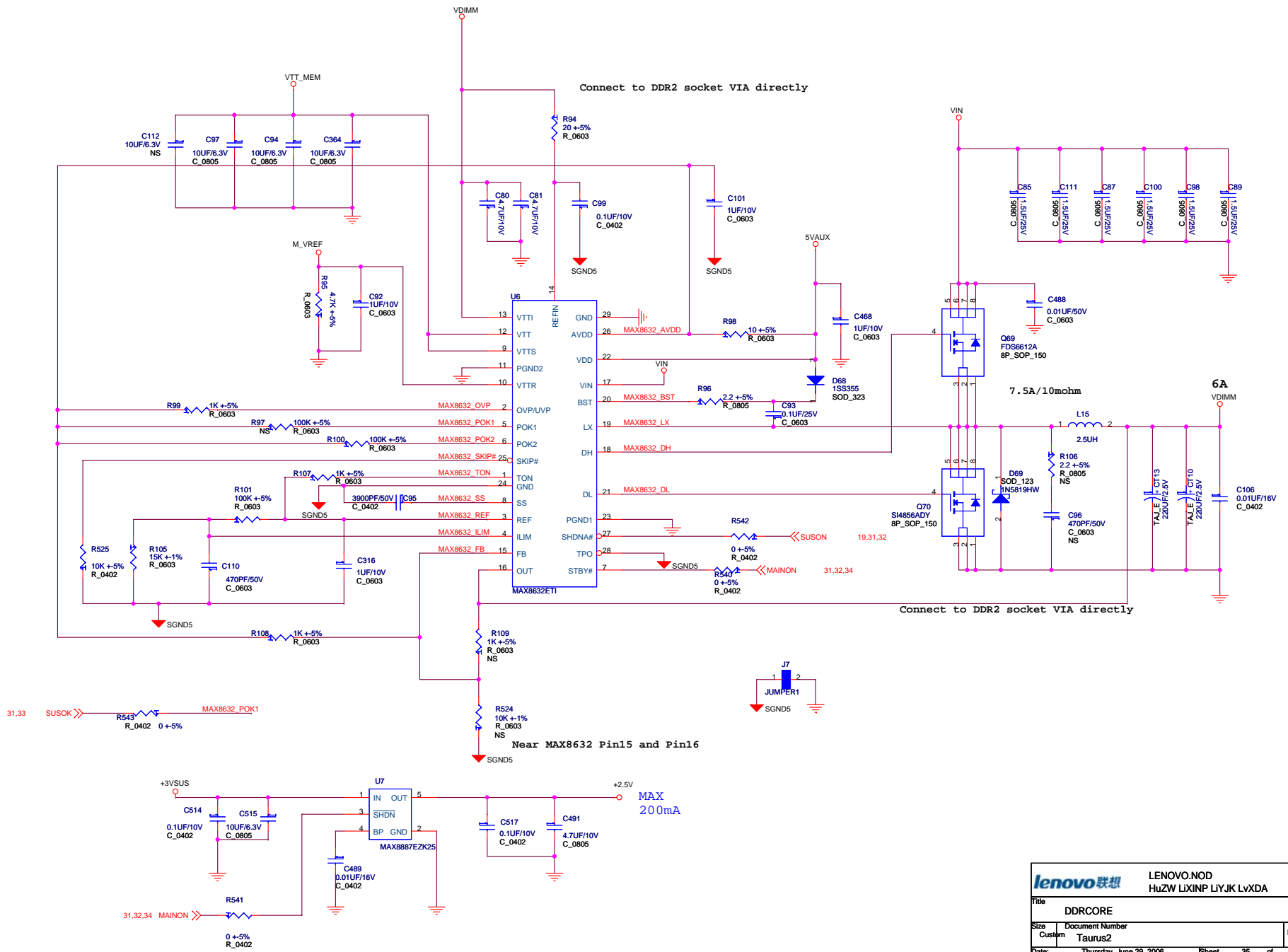
<b>lenovo</b> 联想		LENOVO.NOD HuZW LIXINP LIYJK LvXDA	
Title Discharge			
Size Custom	Document Number Taurus2		Rev s0.1
Date: Thursday, June 29, 2006	Sheet 32	of 40	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			



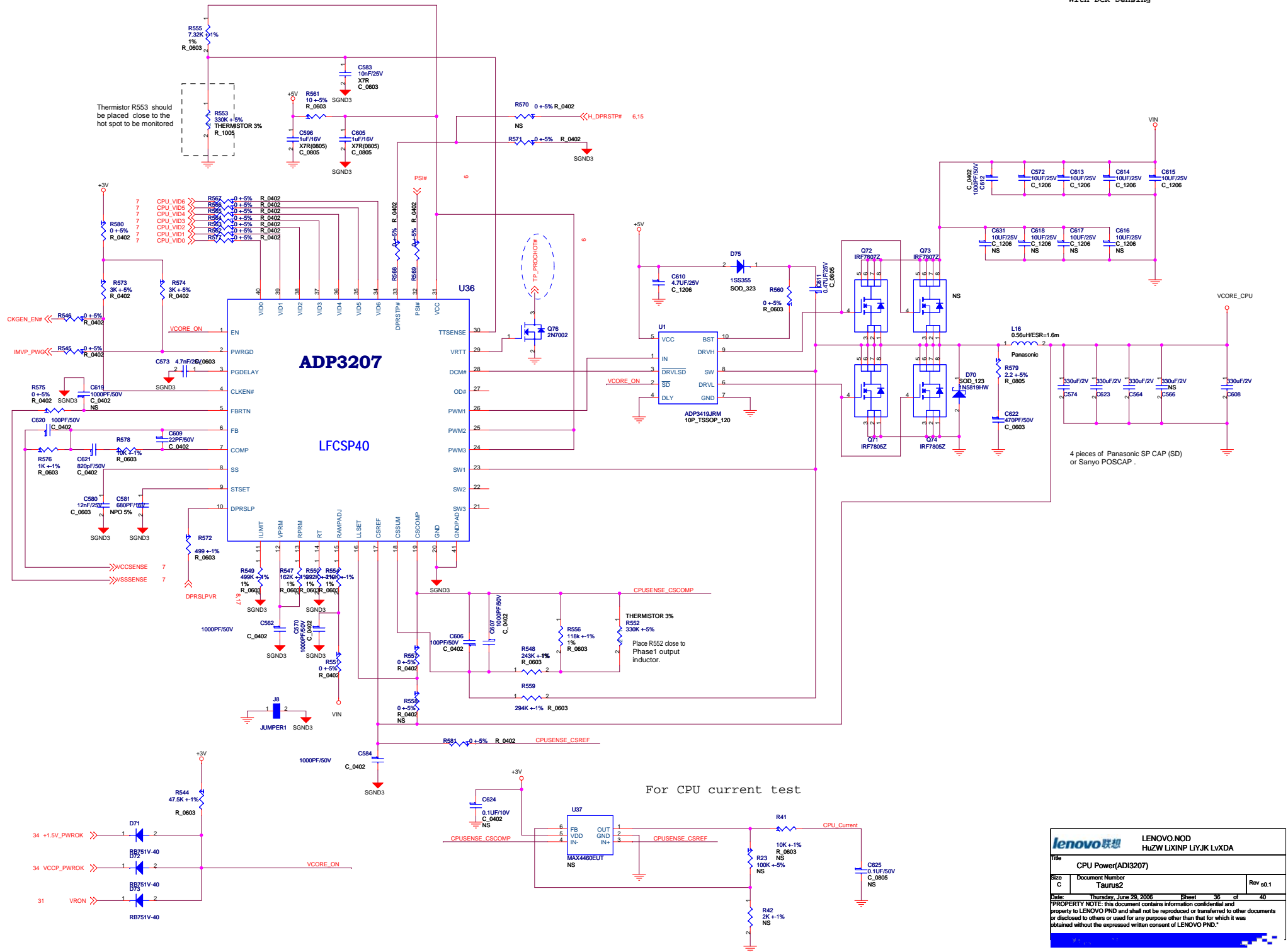


<b>lenovo</b> 联想		LENOVO.NOD HuZW LIXINP LIYJK LvXDA	
Title: System Power			
Size: Custom	Document Number: Taurus2	Rev: s0.1	
Date: Thursday, June 29, 2006	Sheet: 33	of 40	
<small>PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.</small>			





		LENOVO.NOD HuZu LIxINP LIYJK LVXDA	
Title: DDRCORE			
Size: Custom	Document Number: Taurus2		Rev: e.01
Date: Thursday, June 29, 2006	Sheet: 35	of 40	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			

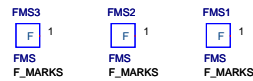
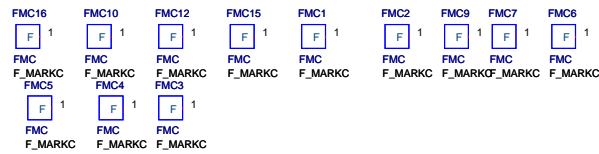
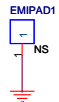
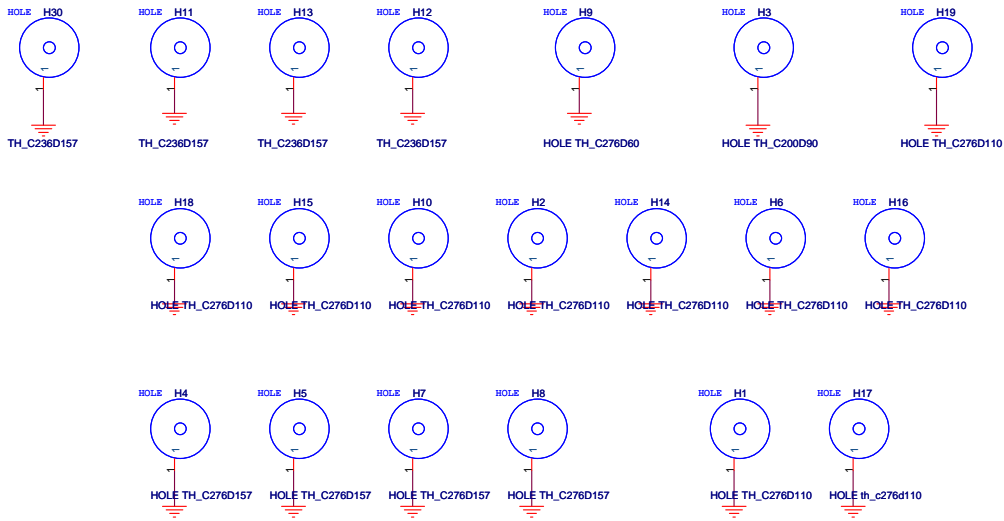


Thermistor R553 should be placed close to the hot spot to be monitored

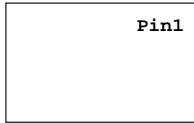
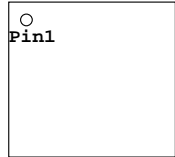
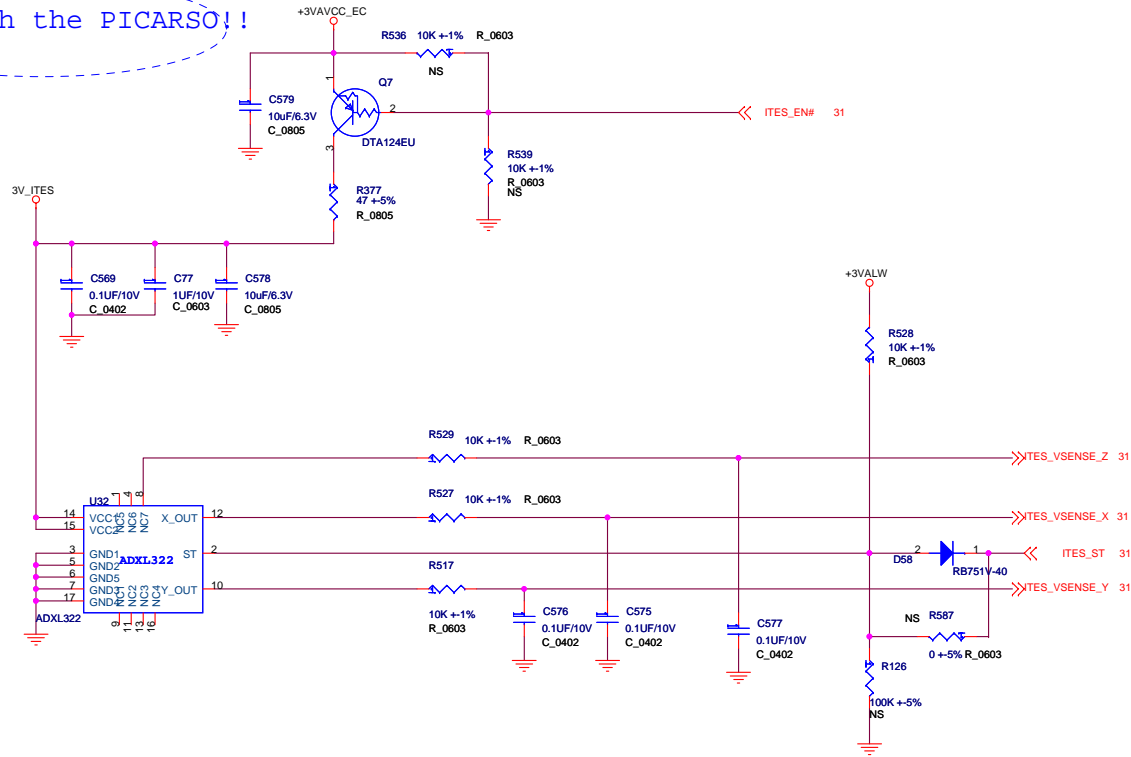
For CPU current test

<b>lenovo</b> 联想		LENOVO.NOD HUZW LIXINP LIYJK LVXDA	
Title CPU Power(AD13207)			
Size C	Document Number TBUUS2	Rev a0.1	
Date Thursday, June 29, 2006	Sheet 55	of 40	
PROPERTY NOTE: This document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.			





Check with the PICARSO!!



lenovo 联想		LENOVO.NOD HuZW LIXINP LiYJK LvXDA	
Title APS			
Size Custom	Document Number Taurus2		Rev s0.1
Date: Thursday, June 28, 2006	Sheet 39	of 40	
<small>PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.</small>			

5

4

3

2

1

D

D

C


C

B

B

A

A

		LENOVO.NOD	
		HuZW LiXINP LiYJK LvXDA	
Title			
Change list			
Size	Document Number	Rev	
A	Taurus2	s0.1	
Date:		Thursday, June 29, 2006	Sheet 40 of 40
<p>"PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND."</p>			

5

4

3

2

1