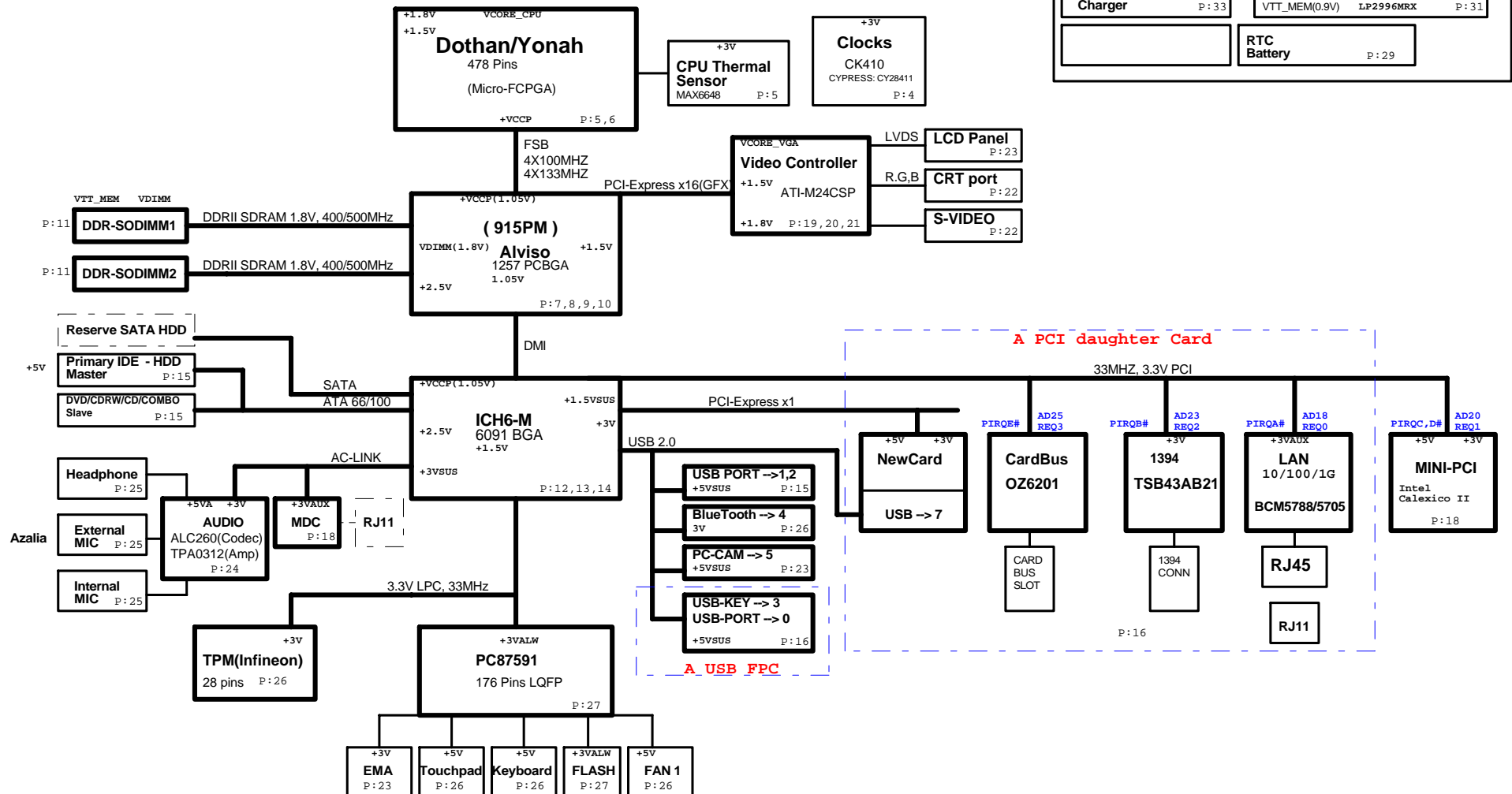




< SONOMA >

ARIES II BLOCK DIAGRAM Dothan(Yonah)/Alviso



DVTII Schematics Release

		LENOVO.PND ChengWJ ChengXR XangJS HuZW	
Title			
BLOCK DIAGRAM			
Size	Document Number	Rev	
C	A600	s1.3	
Date	Tuesday, September 21, 2004	Sheet	1 of 35
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 PND ChengWJ ChengXR XangJS HuZW	
Title Power Sequence Block			
Size C	Document Number A600		Rev s1.3
Date Tuesday, September 21, 2004	Sheet 2		of 35
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.*			

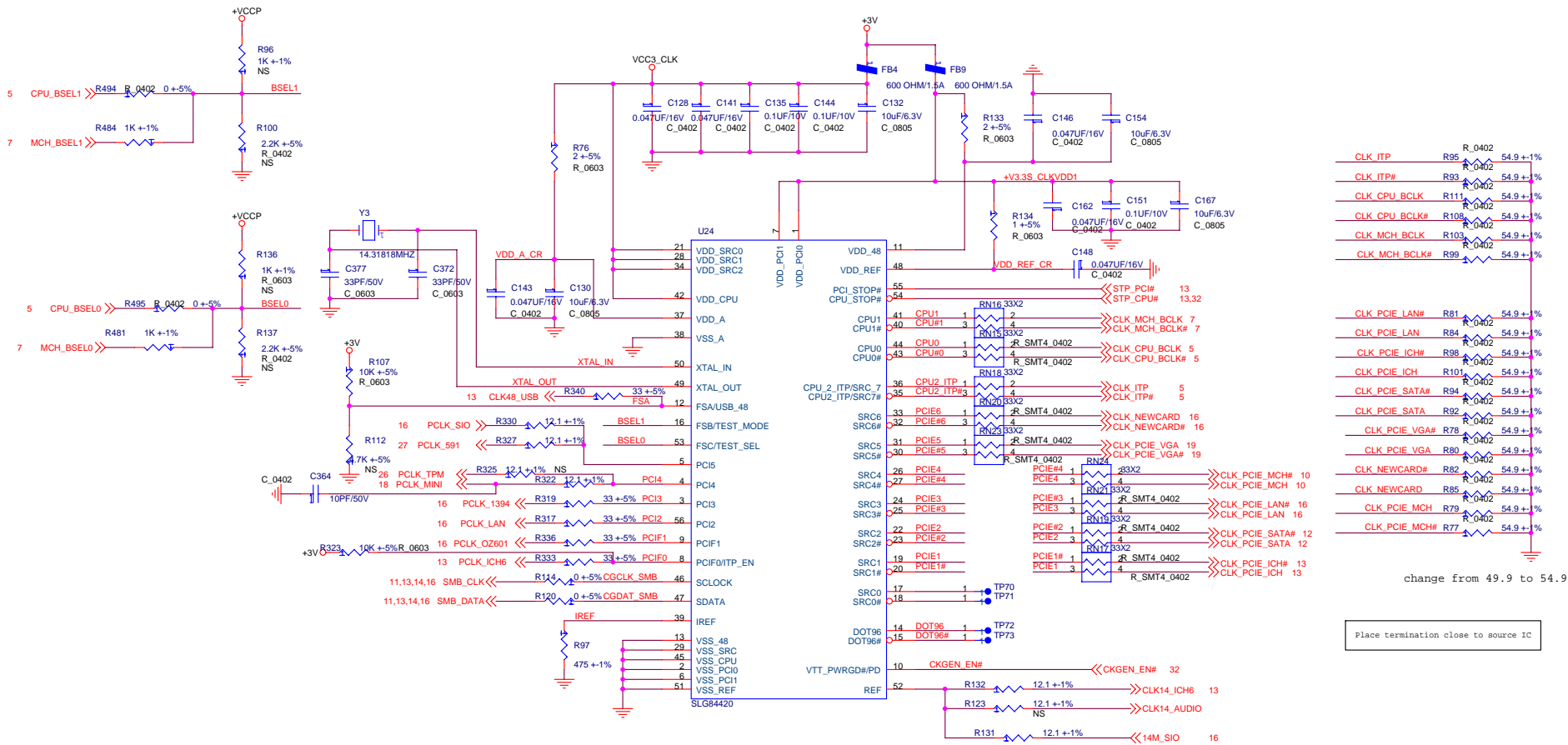
INDEX

Pg#	Description	DNI LIST
1	Block Diagram	
2	Power Sequence Block	
3	Frontpage	
4	Clock Generator	
5,6	Banias/Dothan CPU	
7-9	Odem/Odem+ MCH-M	
10	DDR SO-DIMM	
11-13	ICH4-M	
14	Device Bay & Bridge BATT	
15	USB ports	
16	Cardbus Connector	
17	Cardbus&MCR slot	
18	1394	
19	10M/100M/1G LAN	
20	RJ11&RJ45	
21	Mini-PCI&MDC	
22-24	VGA(ATI M9/10CSP,M9+32CL)	
25	CRT,TV	
26	LCD CONN	
27	Audio,Amplifier	
28	Audio Jack	
29	PC87391 Super I/O	
30	PCU-87591&Flash	
31	TP,KEY,FAN,LED BD	
32	VGA Core,2.5V&1.25V	
33	CPUIO,1.5V,1.8V	
34	System Power(max1999)	
35	CPU Power(max1987)	
36	Discharge	
37	Charger(max1772)&AC/BAT CONN	
38	EMI PADs& Screws	

Power & Ground

ADIN

Label	Pg#	Description	Control Signal
 VA		AC ADAPTER (20V)	
 MBAT+		MAIN BATTERY + (10~17V)	
 VIN	23,29,30,31,32,33	MAIN POWER (10~20V)	
 VCCRTC	12,14,27,29	RTC & PCL POWER (3..3V)	
 +3VALW	23,26,27,29,33	EC 3V always power	
 +5VALW	28,29	5V always power	
 3VAUX	16,18,29	LAN power	3VAUXEN
 +1.5VSUS	14,30	ICH4-M 1.5V SUS power	SUSON
 VDIMM	7,9,10,11,28,31	DDRII RAM 1.8V power	SUSON
 +3VSUS	5,13,14,17,18,28,29,31	3V	SUSON
 +5VSUS	14,15,16,28,29,30	5V	SUSON
 +1.5V	6,7,10,13,14,16,21,28,30	AGP I/O power	MAINON
 +1.8V	6,20,21,28,31	+1.8V	MAINON
 VCORE_VGA	21,28,31	VGA Core power	MAINON
 VMEM_VGA	20,21	VGA 2.5V power	MAINON
 +3V	4,5,11,12,13,14,15,16,17,18,19,21,22,23,24,26,27,28,29,30,32	+3V	MAINON
 +5V	5,12,14,15,16,18,22,23,24,25,26,27,28,29,32	+5V	MAINON
 +5VA	24	AUDIO analog 5V power	MAINON
 +5V_FAN	5	FAN 5V power	VFAN
 BAYVCC	15	MediaBay 5V power	RBAYON#
 +12V		High Voltage to control MOS	MAINON
 VCORE_CPU	6,32	CPU power	VRON
 +VCCP	4,5,6,7,9,10,12,14,30	CPUIO powers(1.05V)	MAINON
 +1.2V	21,30		VRON
 REF3V	33	EC analog 3V power	REFON
 GND	ALL PAGES	DIGITAL GROUND	
 AUDGND	16,24,25,34	AUDIO GND	



FSA	FSB	FSC	Host Clock frequency
BSEL2	BSEL1	BSEL0	
1	0	1	100
1	1	0	133
1	1	1	166
0	0	0	200
0	0	1	266
0	1	0	333
0	1	1	400
1	1	1	Reserved

Place termination close to source IC

LENOVO.PND

ChengWJ ChengXR XangJS HuZW

Title

CLOCK GENERATOR

Size

Document Number

Custom

A600

Rev

s1.1

Date

Tuesday, September 21, 2004

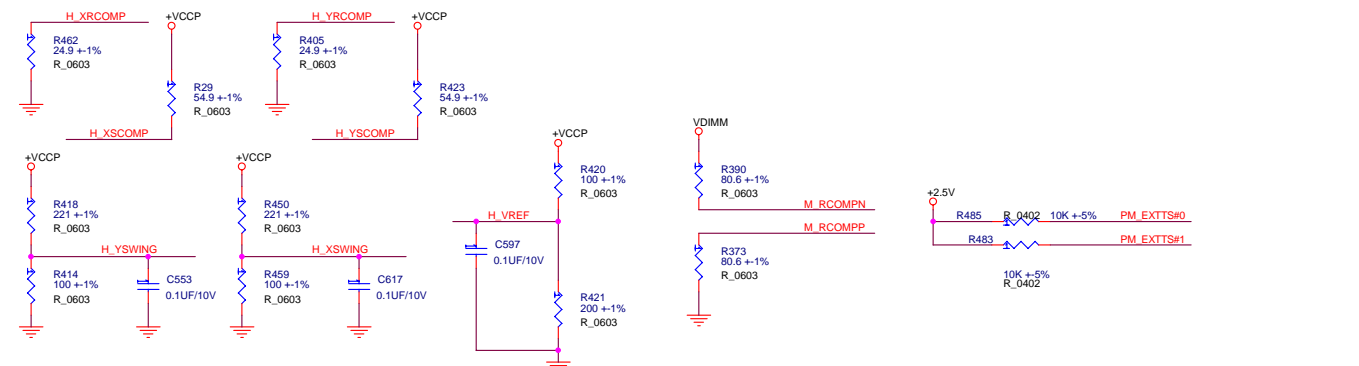
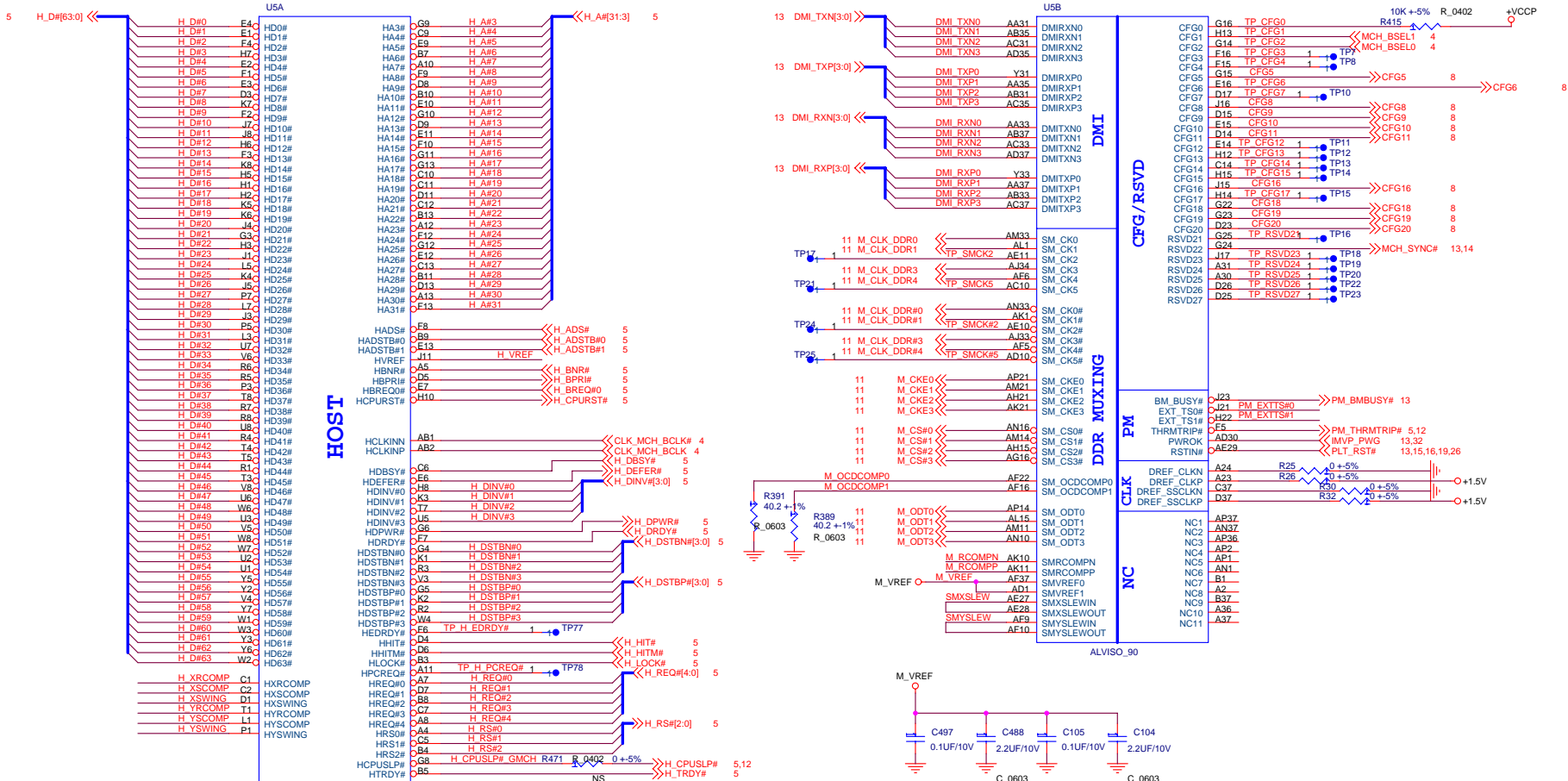
Sheet


4

of

35

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.PND
ChengWJ ChengXR XangJS HuZW

Title
MCH-M_A (HOST,HUB,VCC)

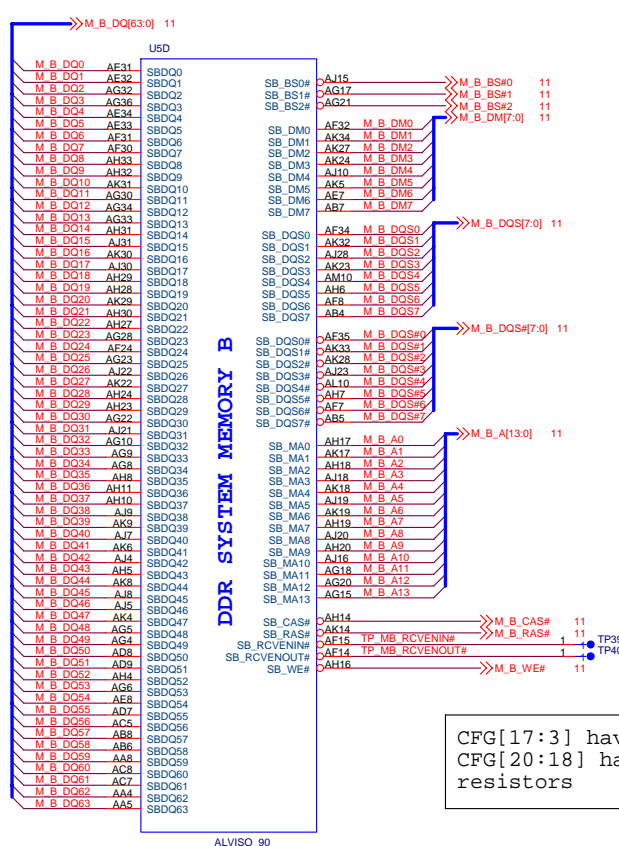
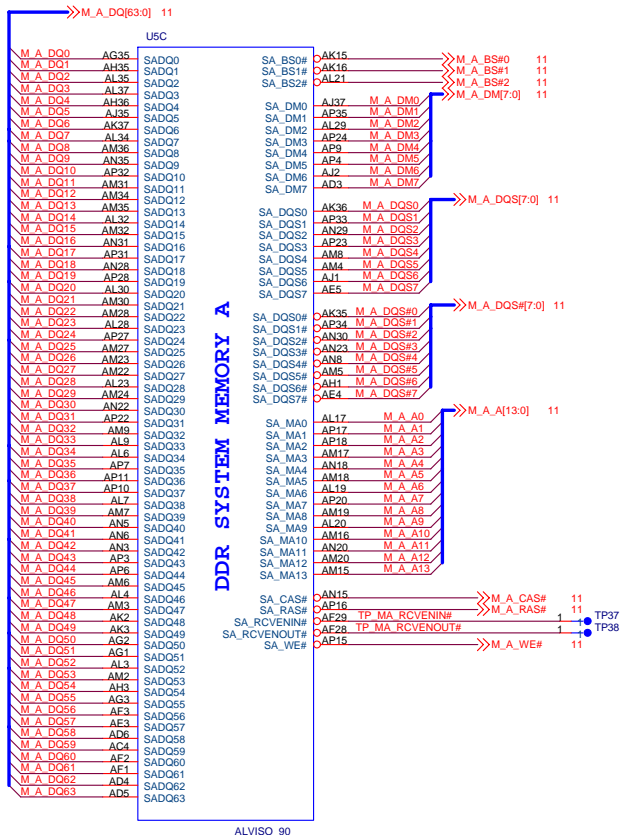
Size
Custom

Document Number
A600

Rev
s1.3

Date: Tuesday, September 21, 2004 Sheet 7 of 35

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.



CFG5	Low = DMix2 High = DMix4	X
------	-----------------------------	---

CFG8 (LP PCIE)	Low = Normal Mode High = Low Power Mode	X
----------------------	--	---

CFG9 PCIe Graphics Lane	Low = Reverse Lane High = Normal operation	X
-------------------------------	--	---

CFG10 (Host PLL VCC Solution Select)	Low = Portability Option High = Mobility Option	X
---	--	---

CFG11 (PSB 4x CLK Enable)	Low = HCLK 4x High = HCLK 8x	X
------------------------------	---------------------------------	---

CFG16 (FSB Dynamic ODT)	Low = Dynamic ODT Disabled High = Dynamic ODT Enabled	X
-------------------------------	--	---

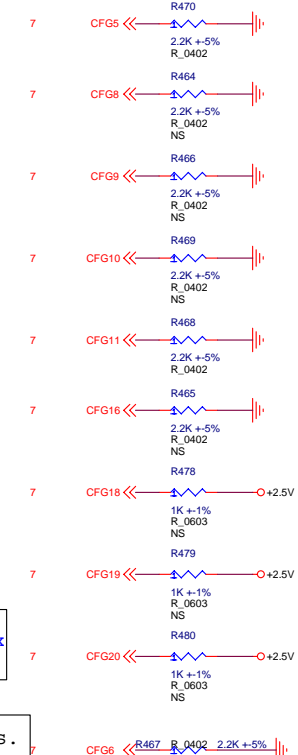
CFG18 (VCC Select)	Low = 1.05V High = 1.5V	X
-----------------------	----------------------------	---

CFG19 (VTT Select)	Low = 1.05V High = 1.2V	X
-----------------------	----------------------------	---

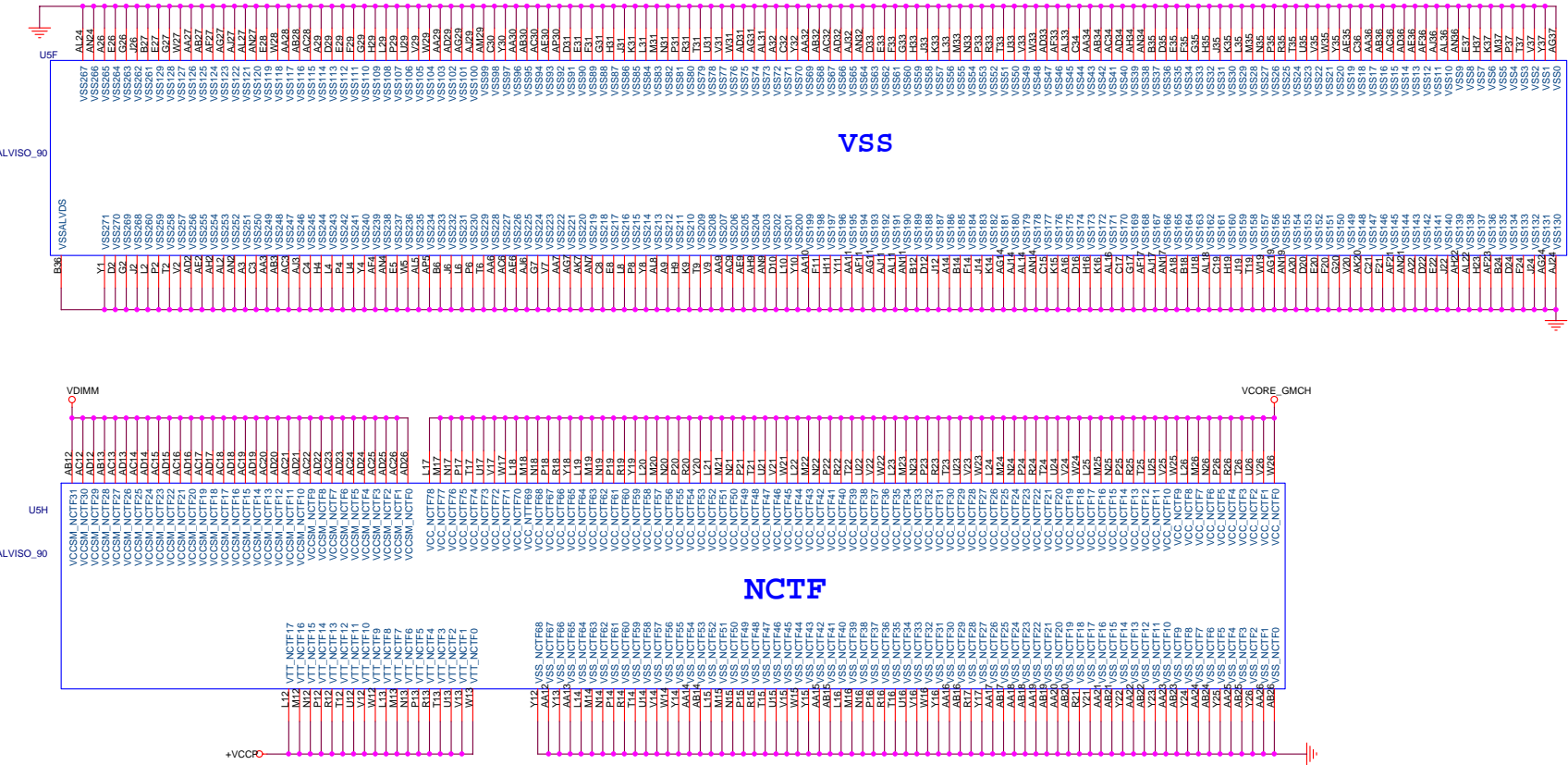
CFG20 (PCIe Backward Interoperability mode)	Low = Normal High = Backward Interoperability Enabled	X
---	--	---

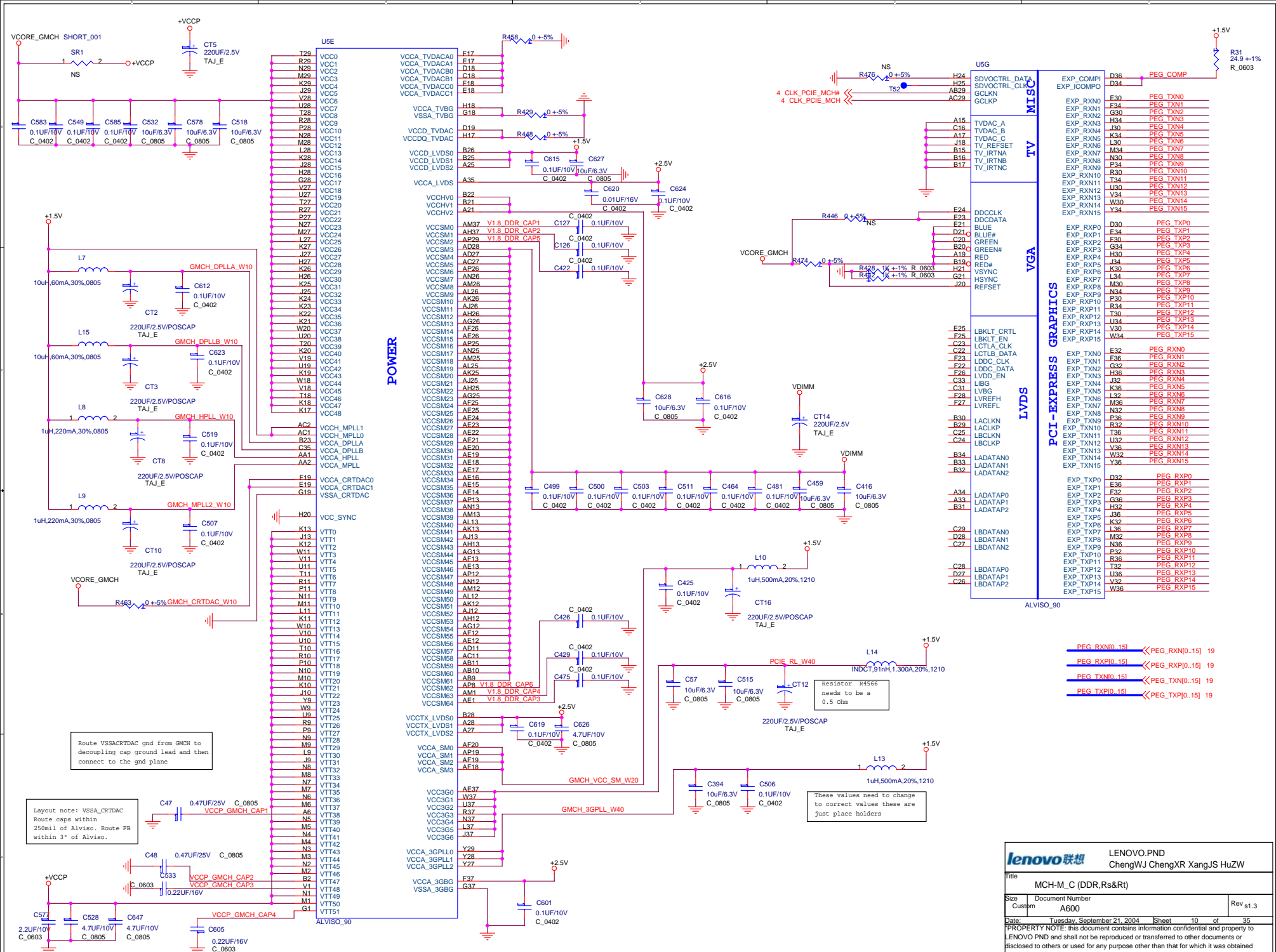
CFG[17:3] have internal pullup resistors.
CFG[20:18] have internal pulldown
resistors

CFG6 (DDR Select)	Low = DDR-II High = DDR-I	
-------------------------	------------------------------	--

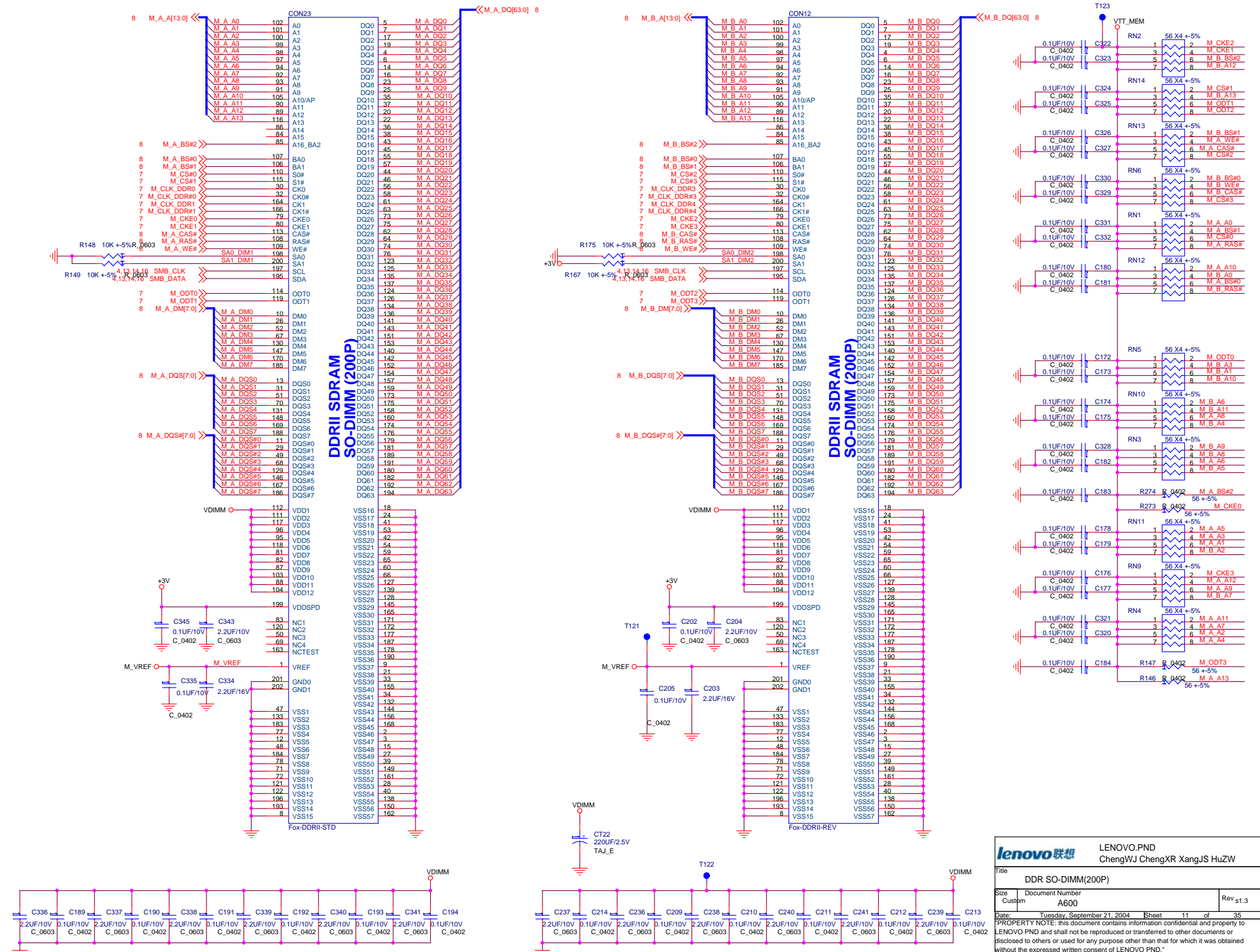



lenovo联想		LENOVO.PND ChengWJ ChengXR XangJS HuZW	
Title MCH-M_B (AGP, GND)			
Size Custom	Document Number A600	Rev s1.3	
Date: Tuesday, September 21, 2004 Sheet 8 of 35			
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred 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.PND ChengWJ ChengXR XangJS HuZW	
Title MCH-M_C (DDR,RS&Rt)			
Size	Document Number	Rev 1.3	
Custom	A600		
Date:	Tuesday, September 21, 2004	Sheet	10 of 35
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			

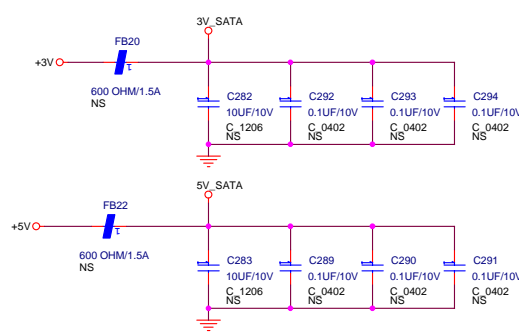


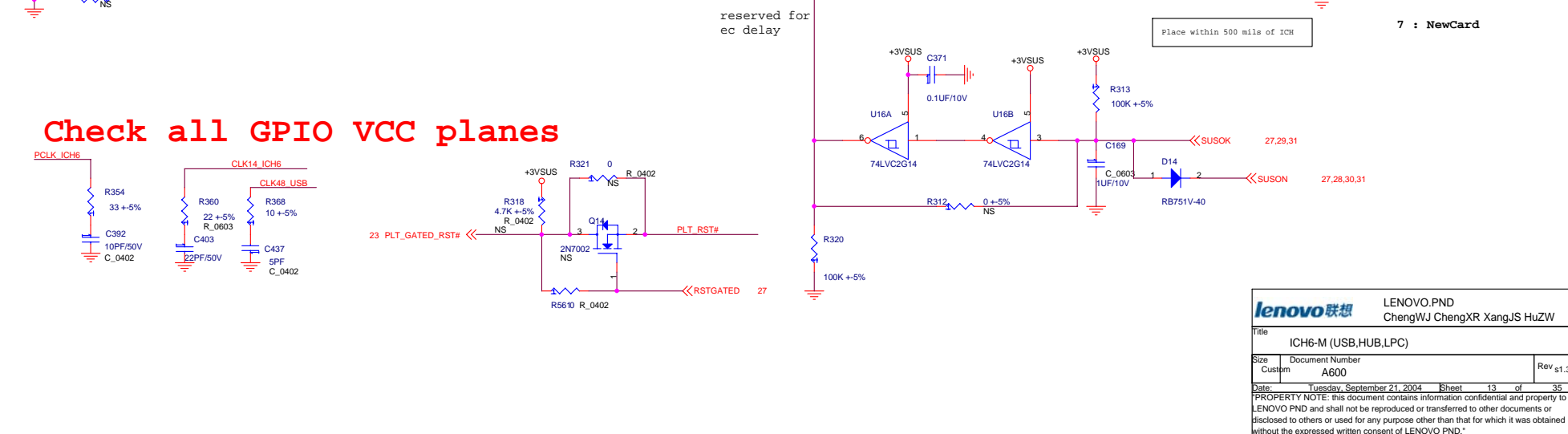
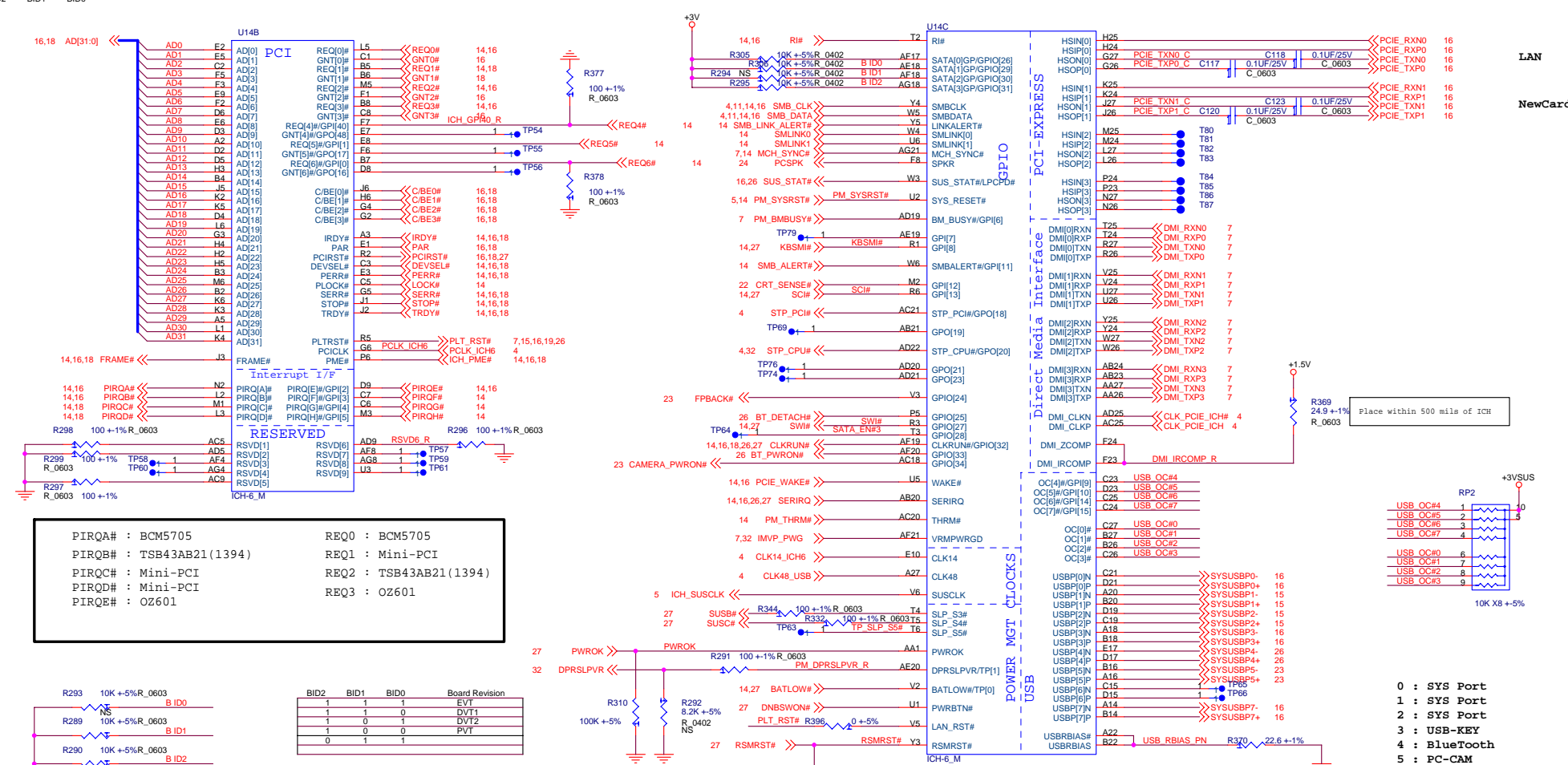


LENOVO.PND
ChengWJ ChengXR XangJS HuZW

Title DDR SO-DIMM(200P)		
Size Custom	Document Number A600	Rev s1.3
Date: Tuesday, September 21, 2004 Sheet 11 of 35		
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.		

WWW.AliSaler.Com





LENOVO 联想

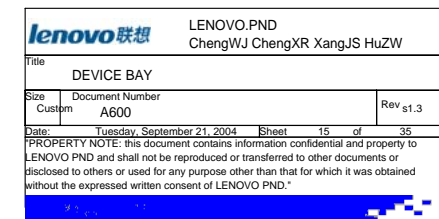
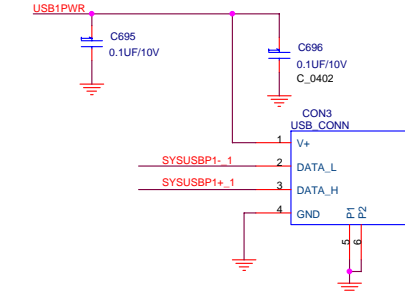
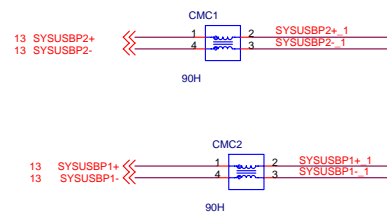
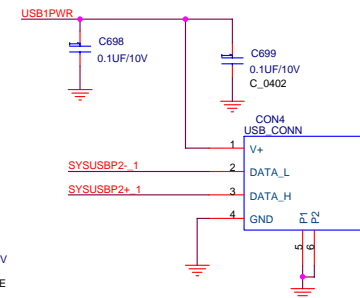
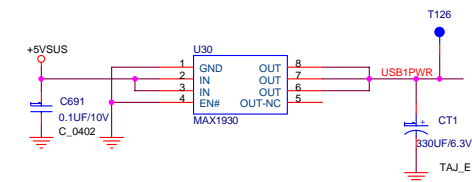
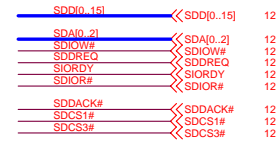
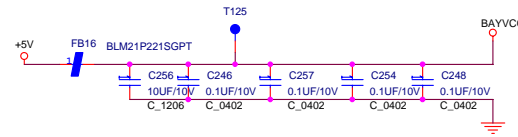
LENOVO.PND
ChengWJ ChengXR XangJS HuZW

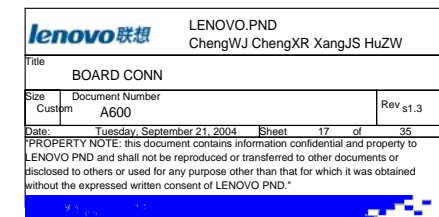
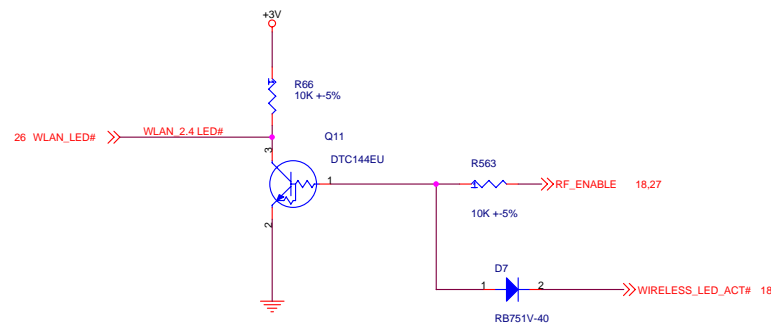
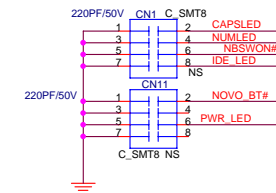
Title ICH6-M (USB,HUB,LPC)

Size Document Number
Custom A600

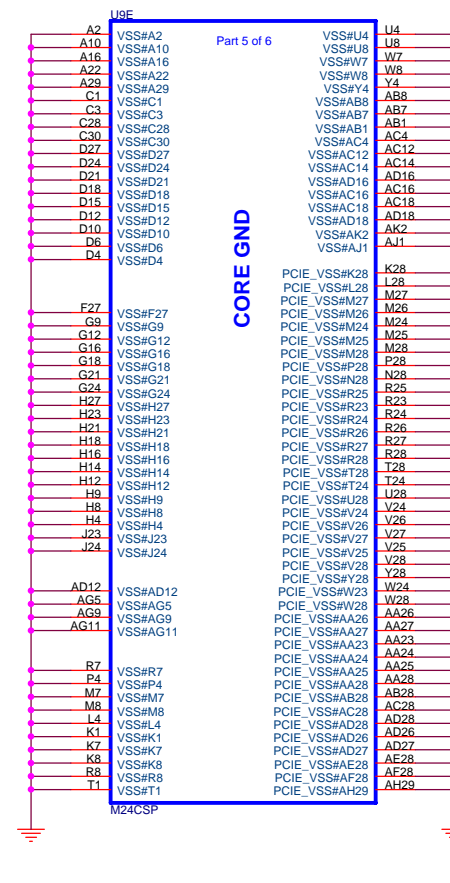
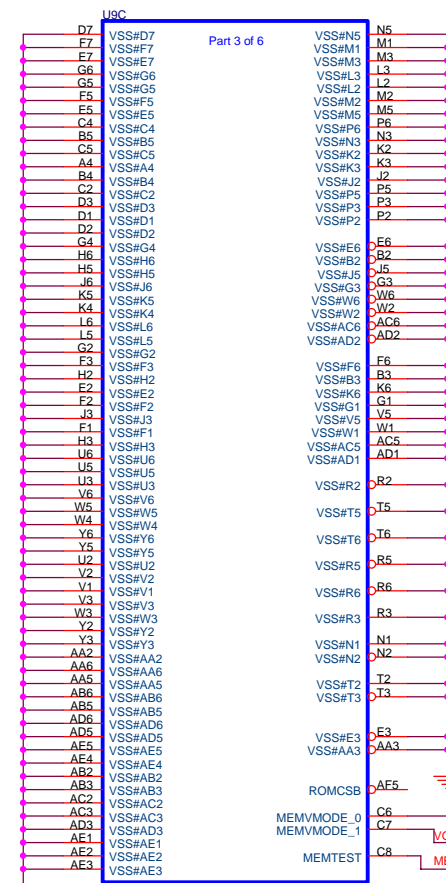
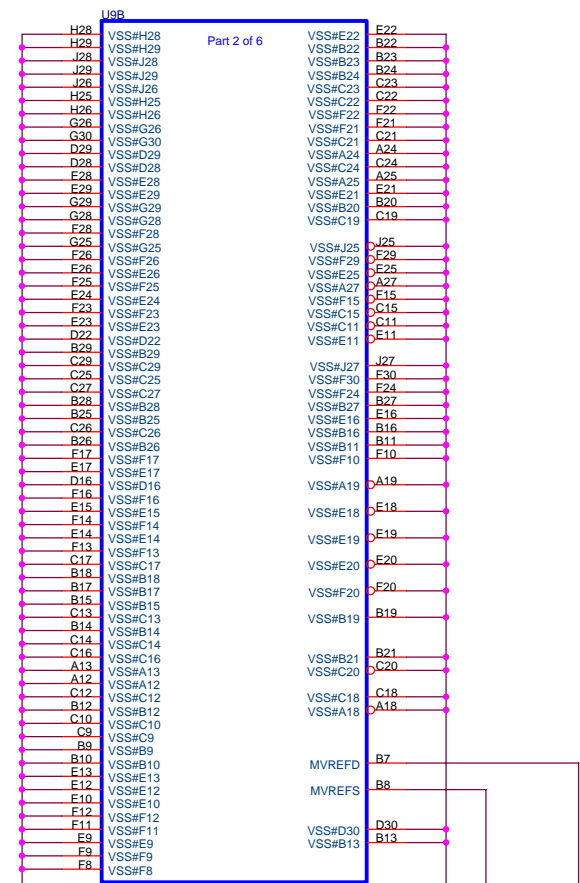
Date: Tuesday, September 21, 2004 Sheet 13 of 35


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.



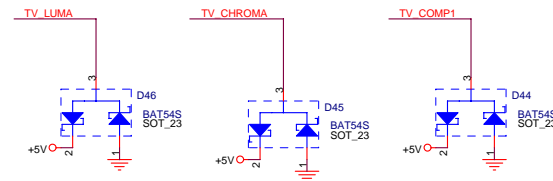
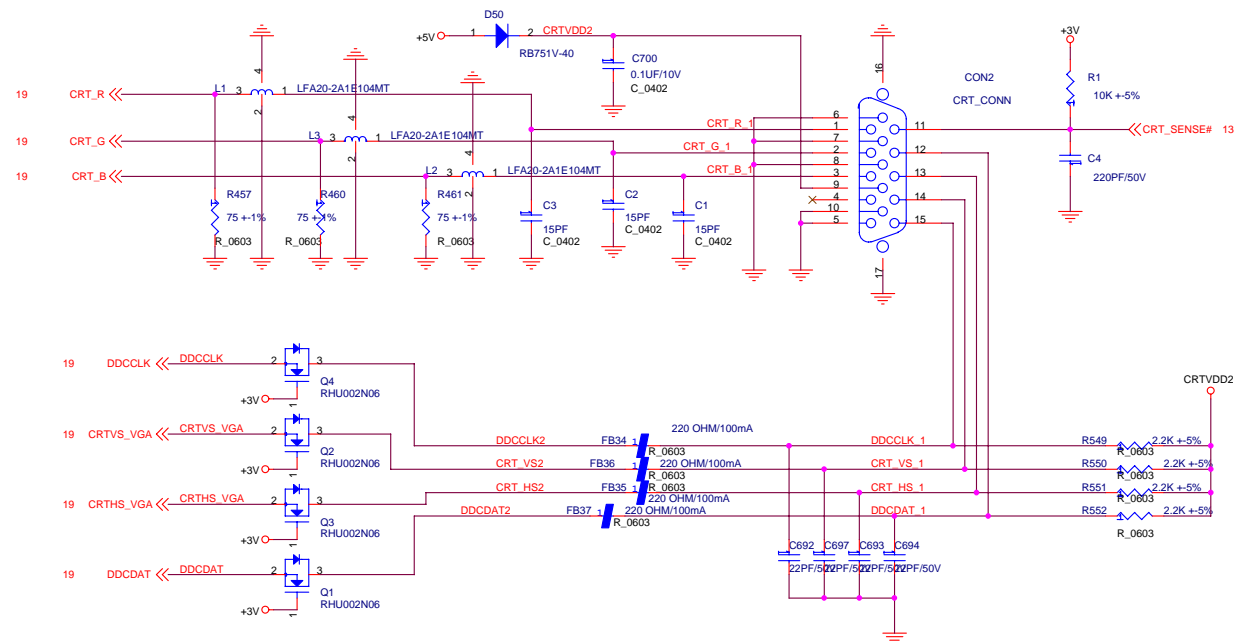







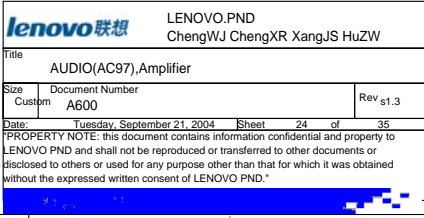
		LENOVO.PND ChengWJ ChengXR XangJS HuZW	
Title			
M24/M22 CSP(MEM)			
Size	Document Number	Rev	
A3	A600	s1.3	
Date:	Tuesday, September 21, 2004	Sheet	20 of 35
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents 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.			

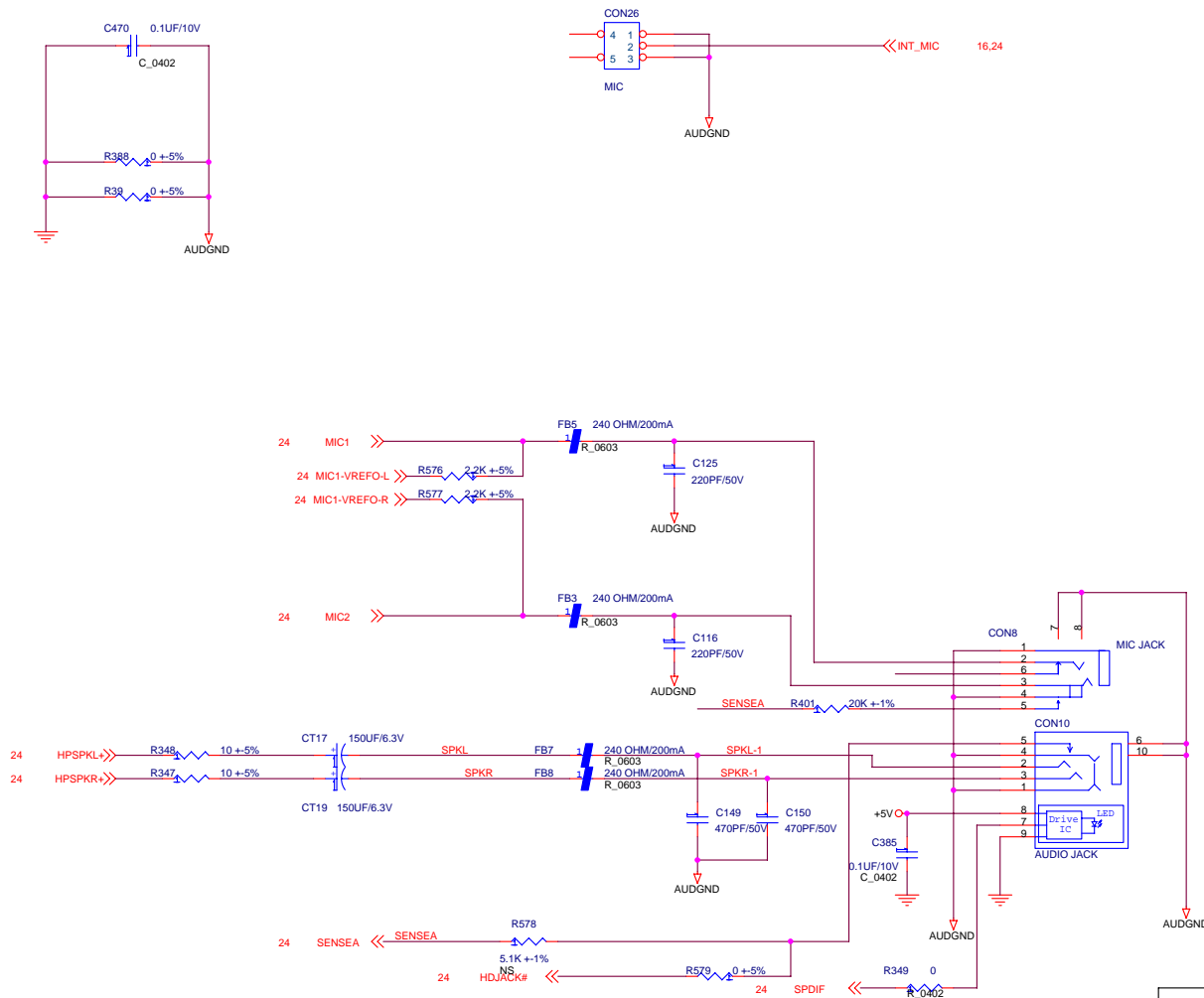




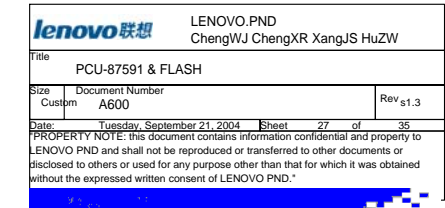
 联想		LENOVO PND ChengWJ ChengXR XangJS HuZW	
Title			
CRT,TV			
Size	Document Number	Rev	
Custom	A600	s1.3	
Date:	Tuesday, September 21, 2004	Sheet	22 of 35

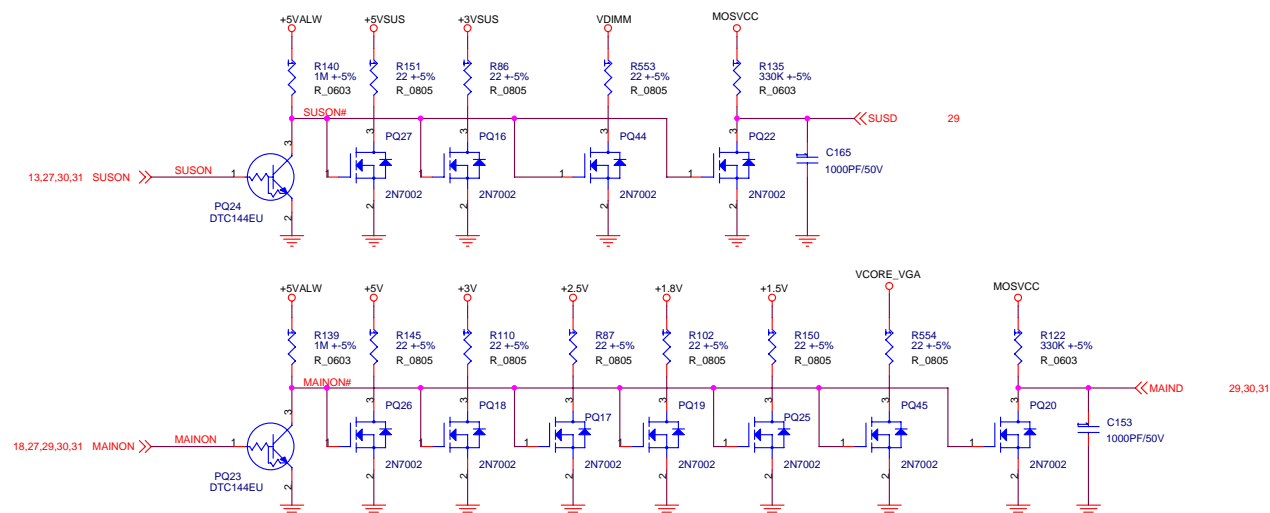
PROPERTY NOTICE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others if used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.



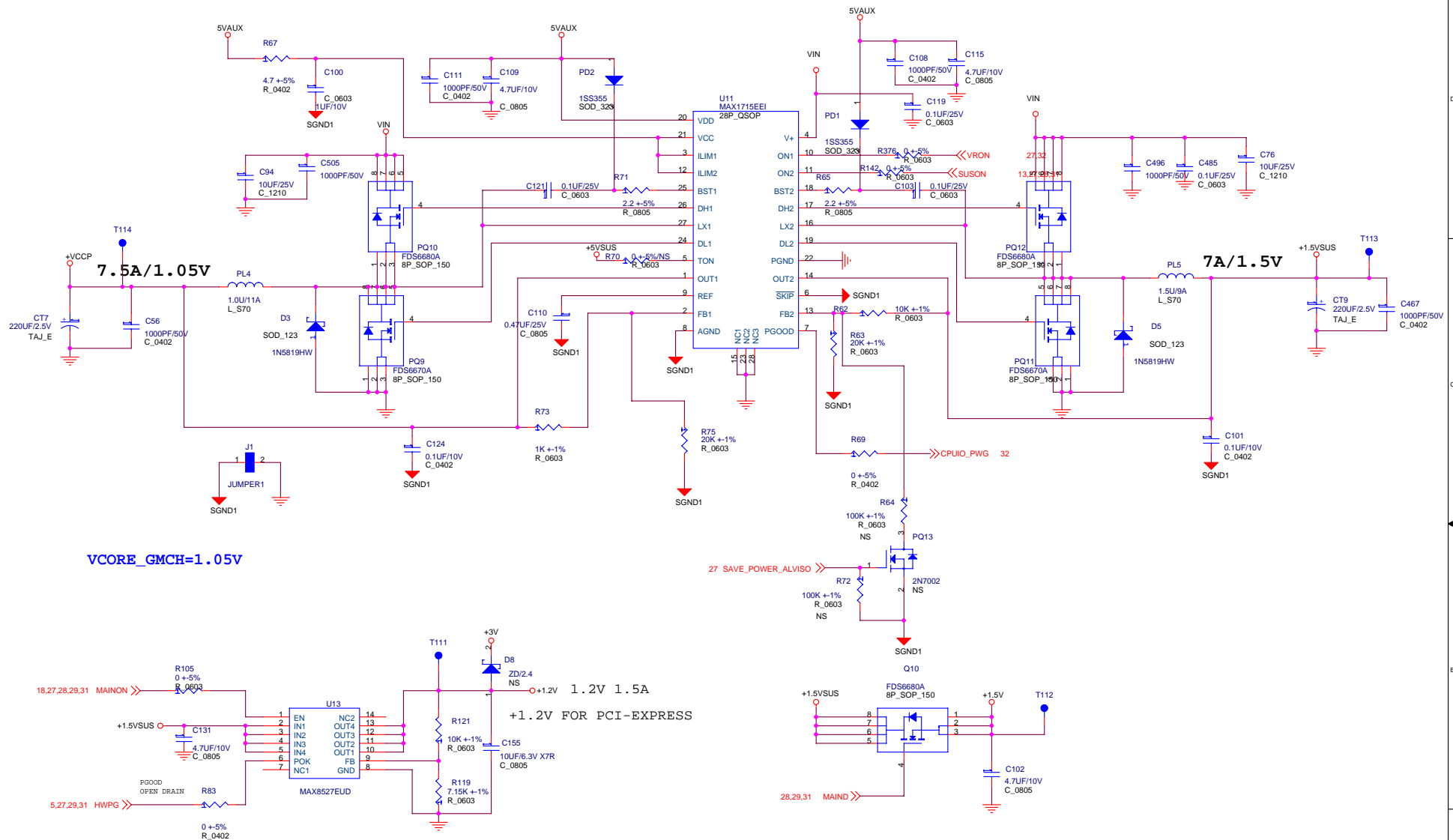


lenovo联想		LENOVO.PND ChengWJ ChengXR XangJS HuZW	
Title AUDIO JACK			
Size Custom	Document Number A600		Rev's 1.3
Date:	Tuesday, September 21, 2004	Sheet 25 of 35	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other 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.*			

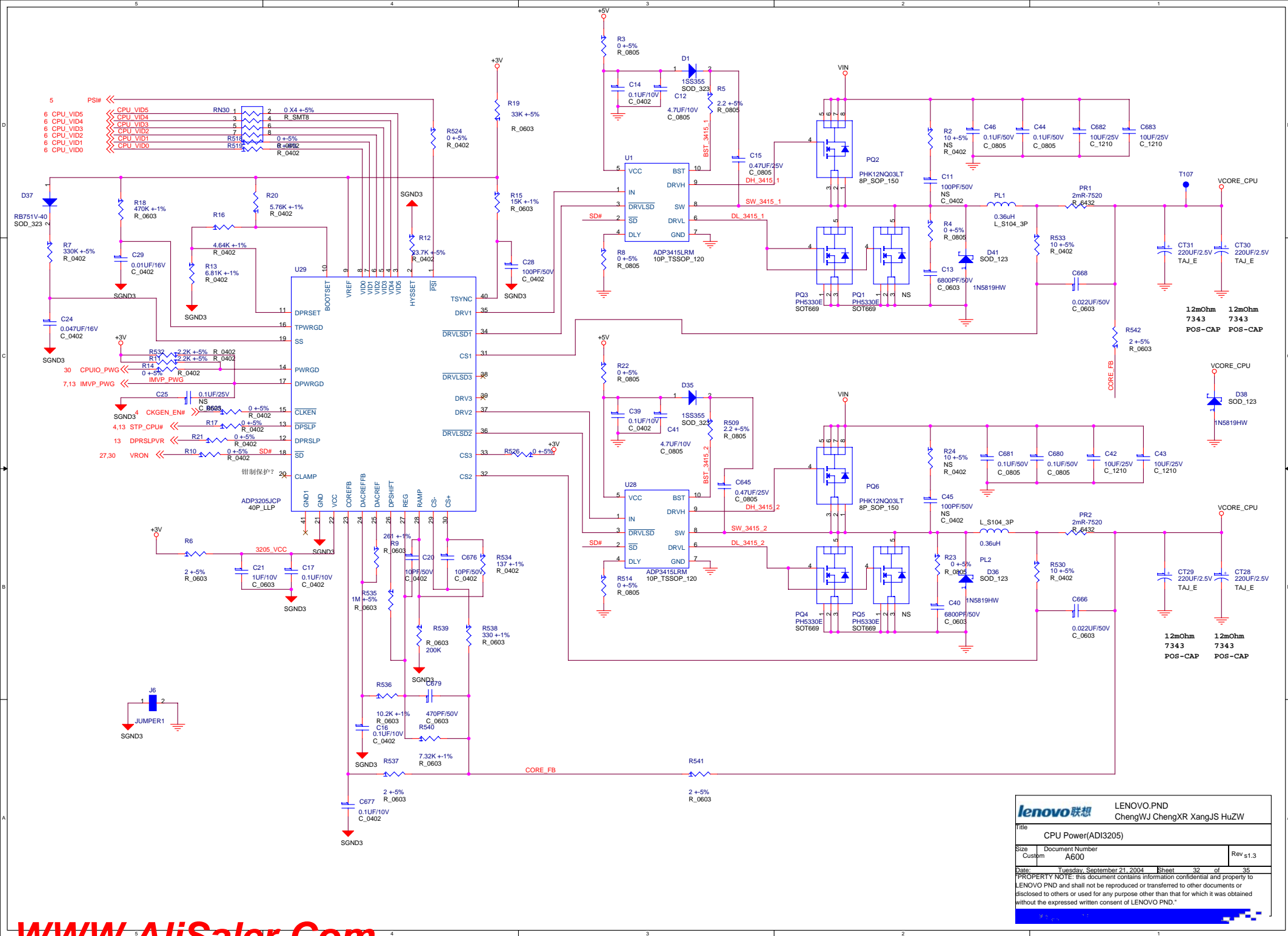





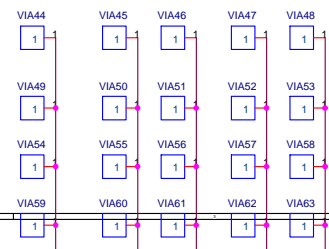
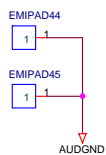
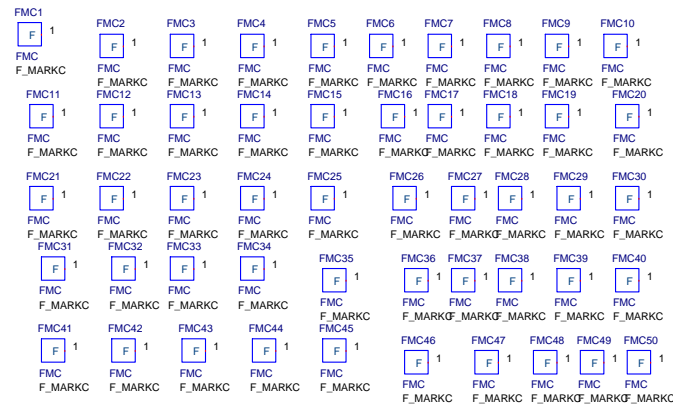
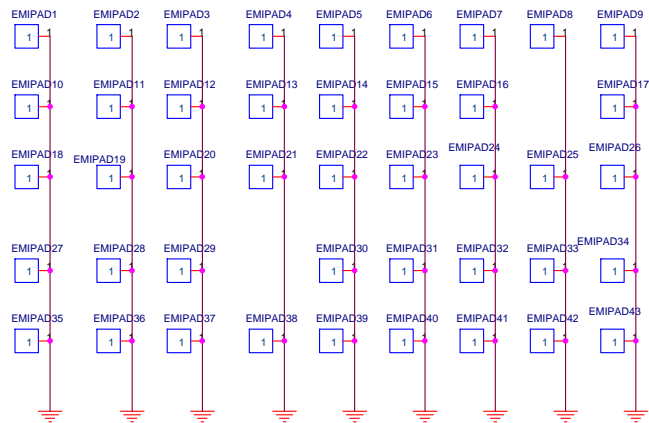
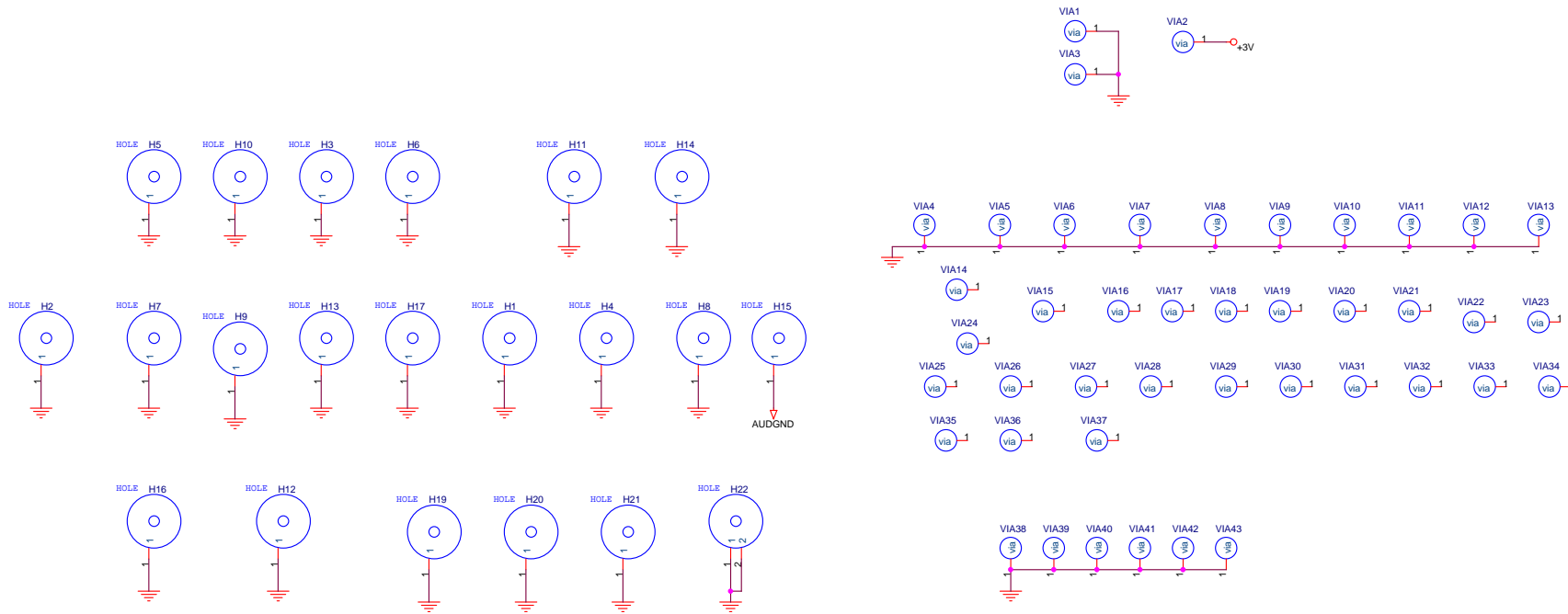
lenovo联想		LENOVO.PND ChengWJ ChengXR XangJS HuZW	
Title Discharge			
Size Custom	Document Number A600		Rev s1.3
Date:	Tuesday, September 21, 2004	Sheet 28 of 35	
PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other 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.PND ChengWJ ChengXR XangJS HuZW	
Title VGA Core,2.5V&+1.25V			
Size Custom	Document Number a600		Rev s1.3
Date: Tuesday, September 21, 2004	Sheet 30	of 35	
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.*			



 联想		LENOVO.PND	
File		ChengWJ ChengXR XangJS HuZW	
CPU Power(AD13205)			
Size	Document Number	Rev s1.3	
Custom	A600		
Date	Tuesday, September 21, 2004	Sheet	32 of 35
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."			



 联想		LENOVO.PND ChengWJ ChengXR XangJS HuZW	
Title EMI PADS & HOLES			
Size	Document Number a600		Rev s1.3
Date:	Tuesday, September 21, 2004	Sheet 34	of 35
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
D					
C					
B					
A					
	5	4	3	2	1

lenovo联想		LENOVO.PND ChengWJ ChengXR XangJS HuZW	
Title change list			
Size A	Document Number A600		Rev _{s1.1}
Date: Tuesday, September 21, 2004 Sheet 35 of 35			
"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."			
