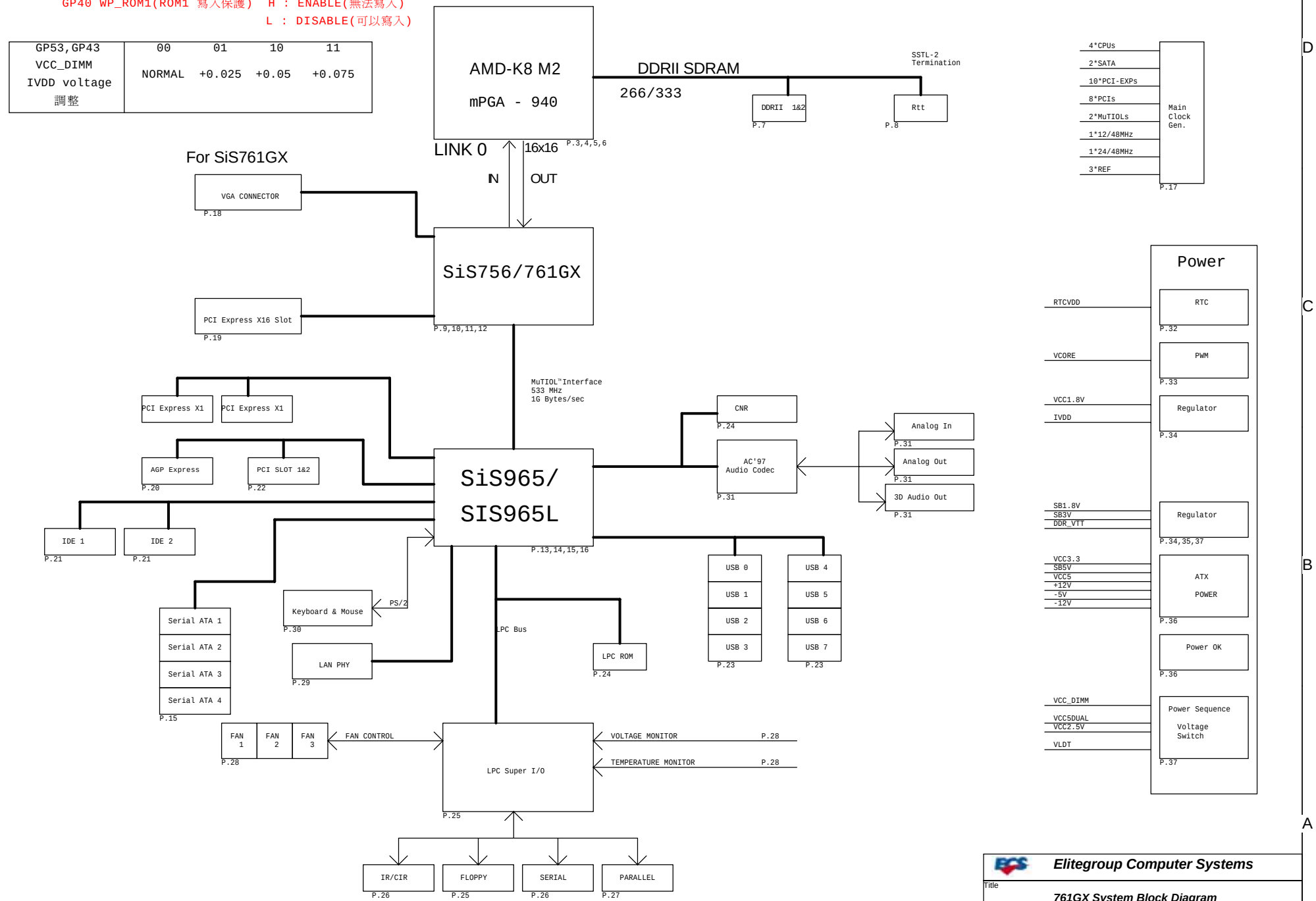
System Block Diagram

ITE8716 GP44 (AR1) H : real S3
L : pseudo S3
GP42 (AR2) : reserve
GP41 (AR3) : reserve
GP40 WP_ROM1(ROM1 寫入保護) H : ENABLE(無法寫入)
L : DISABLE(可以寫入)

GP53,GP43	00	01	10	11
VCC_DIMM IVDD voltage 調整	NORMAL	+0.025	+0.05	+0.075



Elitegroup Computer Systems

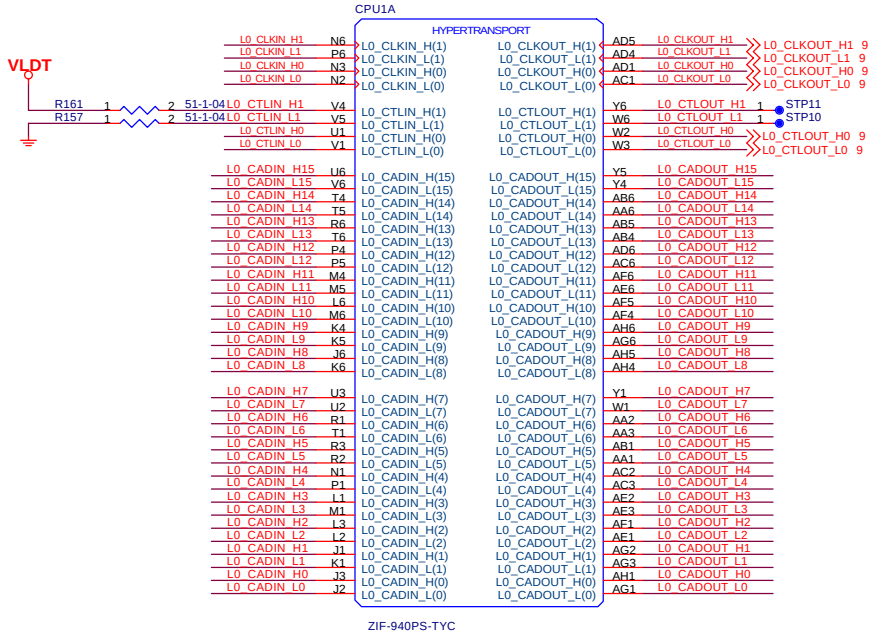
Title: 761GX System Block Diagram

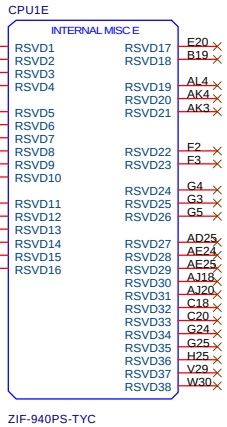
Size: B | Document Number: A33G | Rev: 1.0

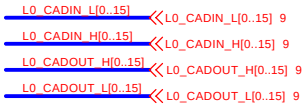
Date: Monday, May 08, 2006 | Sheet 1 of 37

DATE	Rev	Description
12/06/2005	A	1. A33G 由 A31G V1.1 修改而來
03/04/2006	B	1. page32 DEL (Q22,Q21,R192,R186,R189) , ADD D21 2. page34 SB3V 由 Q14(HM2222)+Q12(H431) 改爲 Q14(LD1117) 3. page37 Q24 G pin 改接 VCC5 4. page37 EC24 改 1000uF, add EC38,RN41,RN42 5. page36 R178 ?VCORE 改爲 IVDD 6. page28 CPU_FAN1 改爲 4pin 7. page29 RTL8201CL 線路變更爲 AC131
05/04/2006		1. page37 del R257 2. page37 U11 pin35 改接SB3V

Elitegroup Computer Systems	
Title	Cover Page
Size: Custom	Document Number: A33G
Rev: 1.0	
Date: Monday, May 08, 2006	Sheet 2 of 37





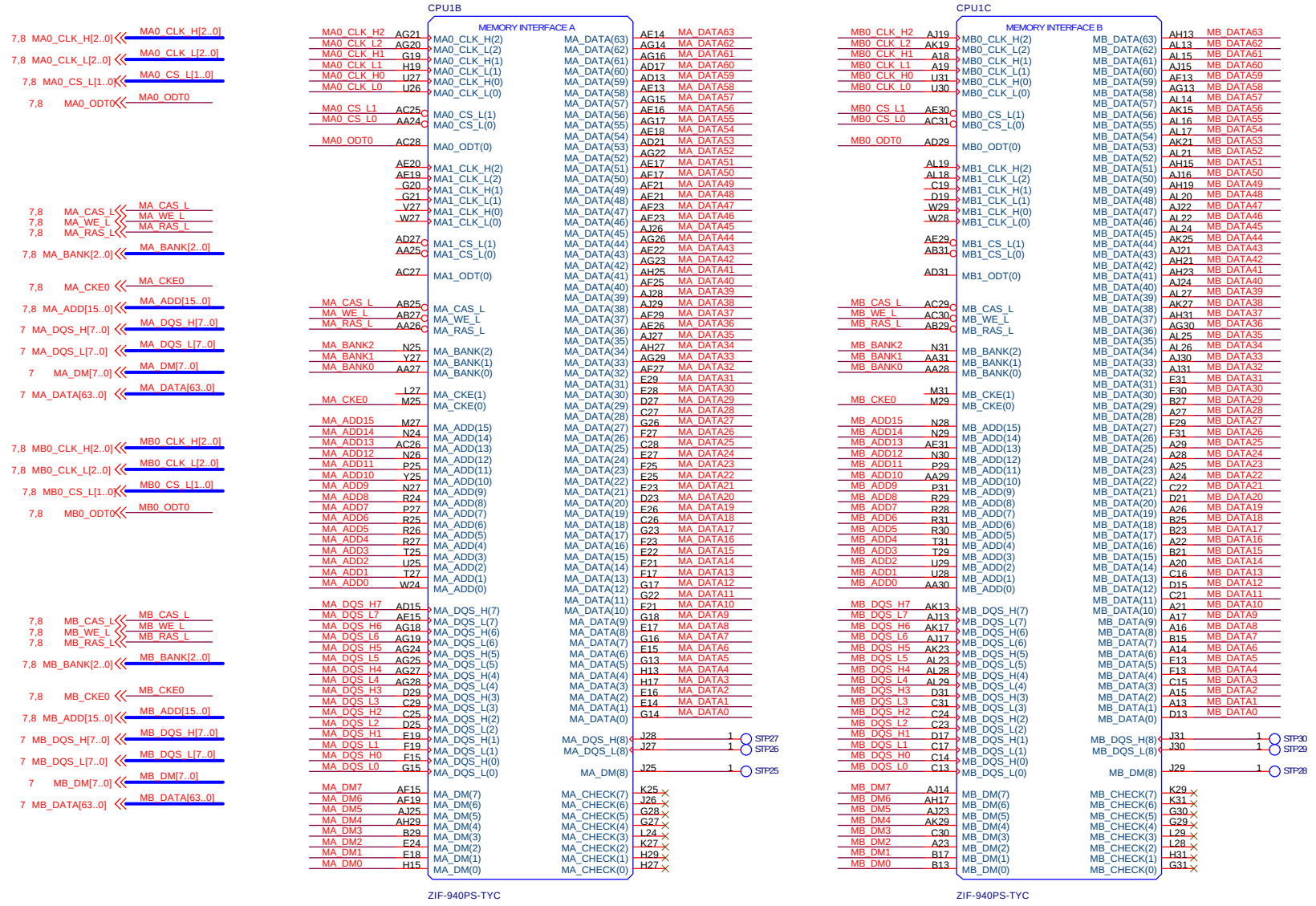


Elitegroup Computer Systems

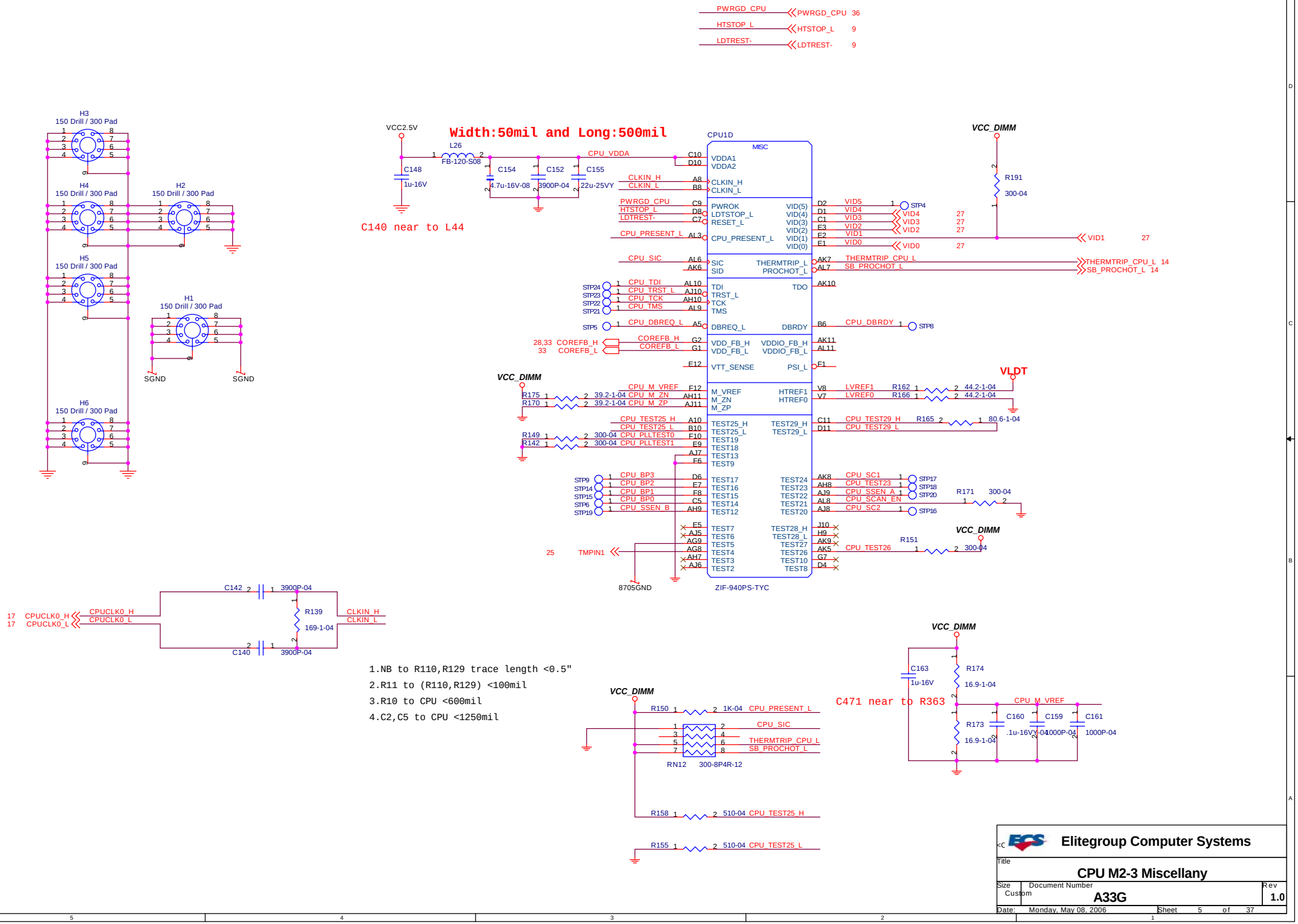
CPU M2-1 Hyper Transport

Size	Document Number	Rev
Custom	A33G	1.0

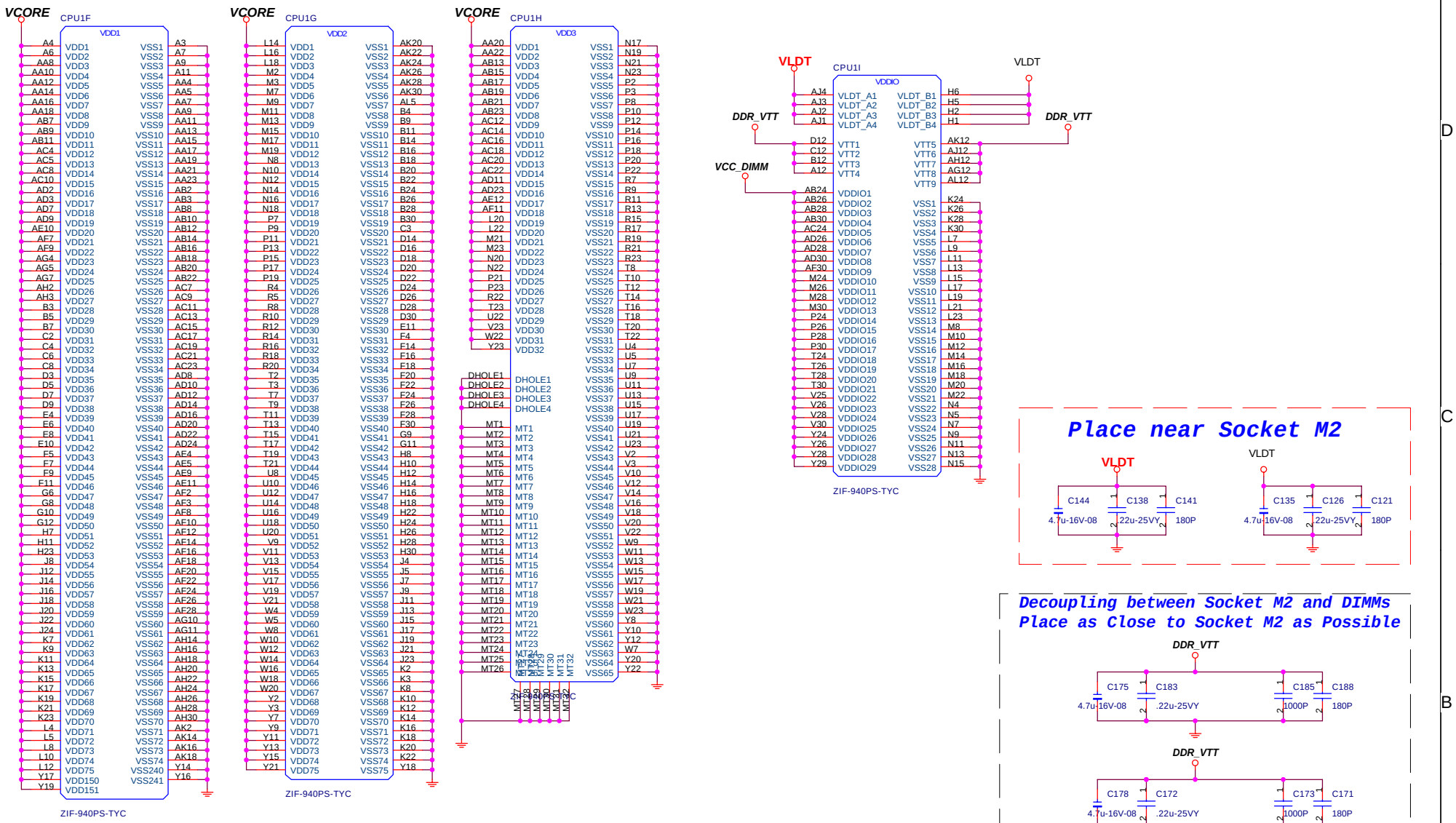
Date: Monday, May 08, 2006 Sheet 3 of 37

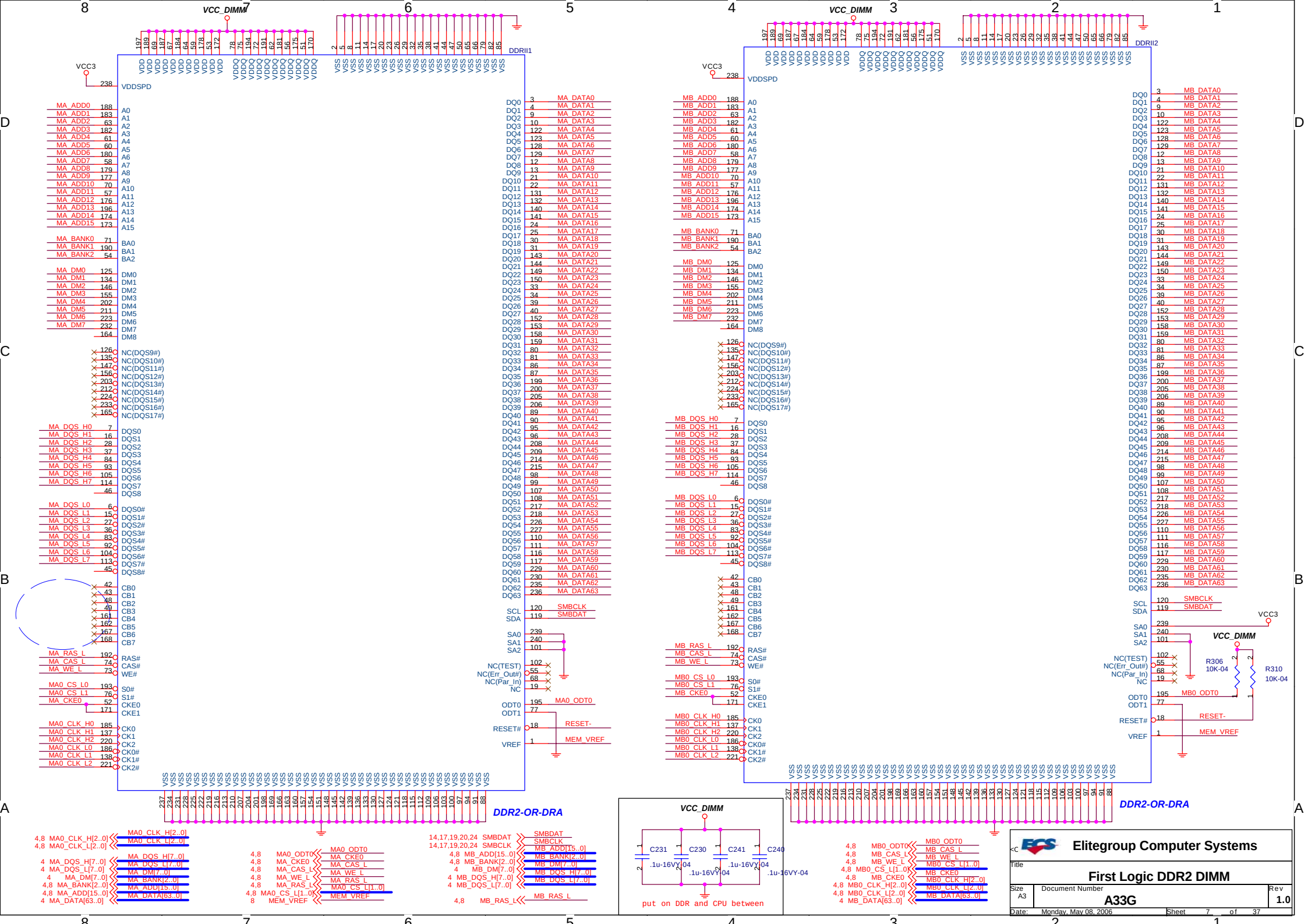


Elitegroup Computer Systems	
Title	CPU M2-2 DDR2
Size B	Document Number A33G
Rev	1.0
Date: Monday, May 08, 2006	Sheet 4 of 37



Elitegroup Computer Systems			
Title: CPU M2-3 Miscellany			
Size: Custom	Document Number: A33G		Rev: 1.0
Date: Monday, May 08, 2006	Sheet 5 of 37		


VCORE
CPU1F
VDD1
ZIF-940PS-TYC
CPU1G
VDD2
ZIF-940PS-TYC
CPU1H
VDD3
DHOLE1
DHOLE2
DHOLE3
DHOLE4
MT1
MT2
MT3
MT4
MT5
MT6
MT7
MT8
MT9
MT10
MT11
MT12
MT13
MT14
MT15
MT16
MT17
MT18
MT19
MT20
MT21
MT22
MT23
MT24
MT25
MT26
ZIF-940PS-TYC
VLDT
CPU1I
VDDIO
DDR_VTT
VCC_DIMM
ZIF-940PS-TYC
Place near Socket M2
C144
C138
C141
4.7u-16V-08
22u-25VY
180P
C135
C126
C121
Decoupling between Socket M2 and DIMMs
Place as Close to Socket M2 as Possible
C175
C183
C185
C188
1000P
C178
C172
C173
C171
Place Decoupling Capacitors on Bottom Side underneath Socket M2
SC11
SC23
SC14
SC8
SC10
SC25
SC24
SC26
SC27
SC13
SC12
SC82
4.7u-16V-08-X
SC33
SC15
SC22
SC83
SC28
SC9
.22u-25VY-X
180P-X
SC40
SC43
SC39
SC44
SC41
SC42
.01u-X
Elitegroup Computer Systems
CPU M2-4 Power and Ground
Size
B
Document Number
A33G
Rev
1.0
Date:
Monday, May 08, 2006
Sheet
6
of
37


VCC_DIMM
DDRII1
VCC3
VDDSPD
MA_ADD0
MA_ADD1
MA_ADD2
MA_ADD3
MA_ADD4
MA_ADD5
MA_ADD6
MA_ADD7
MA_ADD8
MA_ADD9
MA_ADD10
MA_ADD11
MA_ADD12
MA_ADD13
MA_ADD14
MA_ADD15
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
MA_BANK0
MA_BANK1
MA_BANK2
BA0
BA1
BA2
MA_DM0
MA_DM1
MA_DM2
MA_DM3
MA_DM4
MA_DM5
MA_DM6
MA_DM7
DM0
DM1
DM2
DM3
DM4
DM5
DM6
DM7
DM8
NC(DQS9#)
NC(DQS10#)
NC(DQS11#)
NC(DQS12#)
NC(DQS13#)
NC(DQS14#)
NC(DQS15#)
NC(DQS16#)
NC(DQS17#)
MA_DQS_H0
MA_DQS_H1
MA_DQS_H2
MA_DQS_H3
MA_DQS_H4
MA_DQS_H5
MA_DQS_H6
MA_DQS_H7
DQS0
DQS1
DQS2
DQS3
DQS4
DQS5
DQS6
DQS7
DQS8
MA_DQS_L0
MA_DQS_L1
MA_DQS_L2
MA_DQS_L3
MA_DQS_L4
MA_DQS_L5
MA_DQS_L6
MA_DQS_L7
DQS0#
DQS1#
DQS2#
DQS3#
DQS4#
DQS5#
DQS6#
DQS7#
DQS8#
CB0
CB1
CB2
CB3
CB4
CB5
CB6
CB7
MA_RAS_L
MA_CAS_L
MA_WE_L
RAS#
CAS#
WE#
MA0_CS_L0
MA0_CS_L1
MA_CKE0
S0#
S1#
CKE0
CKE1
MA0_CLK_H0
MA0_CLK_H1
MA0_CLK_H2
MA0_CLK_L0
MA0_CLK_L1
MA0_CLK_L2
CK0
CK1
CK2
CK0#
CK1#
CK2#
DQ0
DQ1
DQ2
DQ3
DQ4
DQ5
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DQ8
DQ9
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DQ12
DQ13
DQ14
DQ15
DQ16
DQ17
DQ18
DQ19
DQ20
DQ21
DQ22
DQ23
DQ24
DQ25
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DQ31
DQ32
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DQ34
DQ35
DQ36
DQ37
DQ38
DQ39
DQ40
DQ41
DQ42
DQ43
DQ44
DQ45
DQ46
DQ47
DQ48
DQ49
DQ50
DQ51
DQ52
DQ53
DQ54
DQ55
DQ56
DQ57
DQ58
DQ59
DQ60
DQ61
DQ62
DQ63
MA_DATA0
MA_DATA1
MA_DATA2
MA_DATA3
MA_DATA4
MA_DATA5
MA_DATA6
MA_DATA7
MA_DATA8
MA_DATA9
MA_DATA10
MA_DATA11
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MA_DATA13
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MA_DATA15
MA_DATA16
MA_DATA17
MA_DATA18
MA_DATA19
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MA_DATA24
MA_DATA25
MA_DATA26
MA_DATA27
MA_DATA28
MA_DATA29
MA_DATA30
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MA_DATA38
MA_DATA39
MA_DATA40
MA_DATA41
MA_DATA42
MA_DATA43
MA_DATA44
MA_DATA45
MA_DATA46
MA_DATA47
MA_DATA48
MA_DATA49
MA_DATA50
MA_DATA51
MA_DATA52
MA_DATA53
MA_DATA54
MA_DATA55
MA_DATA56
MA_DATA57
MA_DATA58
MA_DATA59
MA_DATA60
MA_DATA61
MA_DATA62
MA_DATA63
SCL
SDA
SMBCLK
SMBDAT
SA0
SA1
SA2
NC(TEST)
NC(Err_Out#)
NC(Par_In)
NC
ODT0
ODT1
MA0_ODT0
RESET#
RESET-
VREF
MEM_VREF
DDR2-OR-DRA
DDRII2
MB_ADD0
MB_ADD1
MB_ADD2
MB_ADD3
MB_ADD4
MB_ADD5
MB_ADD6
MB_ADD7
MB_ADD8
MB_ADD9
MB_ADD10
MB_ADD11
MB_ADD12
MB_ADD13
MB_ADD14
MB_ADD15
MB_BANK0
MB_BANK1
MB_BANK2
MB_DM0
MB_DM1
MB_DM2
MB_DM3
MB_DM4
MB_DM5
MB_DM6
MB_DM7
MB_DQS_H0
MB_DQS_H1
MB_DQS_H2
MB_DQS_H3
MB_DQS_H4
MB_DQS_H5
MB_DQS_H6
MB_DQS_H7
MB_DQS_L0
MB_DQS_L1
MB_DQS_L2
MB_DQS_L3
MB_DQS_L4
MB_DQS_L5
MB_DQS_L6
MB_DQS_L7
MB_RAS_L
MB_CAS_L
MB_WE_L
MB0_CS_L0
MB0_CS_L1
MB_CKE0
MB0_CLK_H0
MB0_CLK_H1
MB0_CLK_H2
MB0_CLK_L0
MB0_CLK_L1
MB0_CLK_L2
MB_DATA0
MB_DATA1
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MB_DATA10
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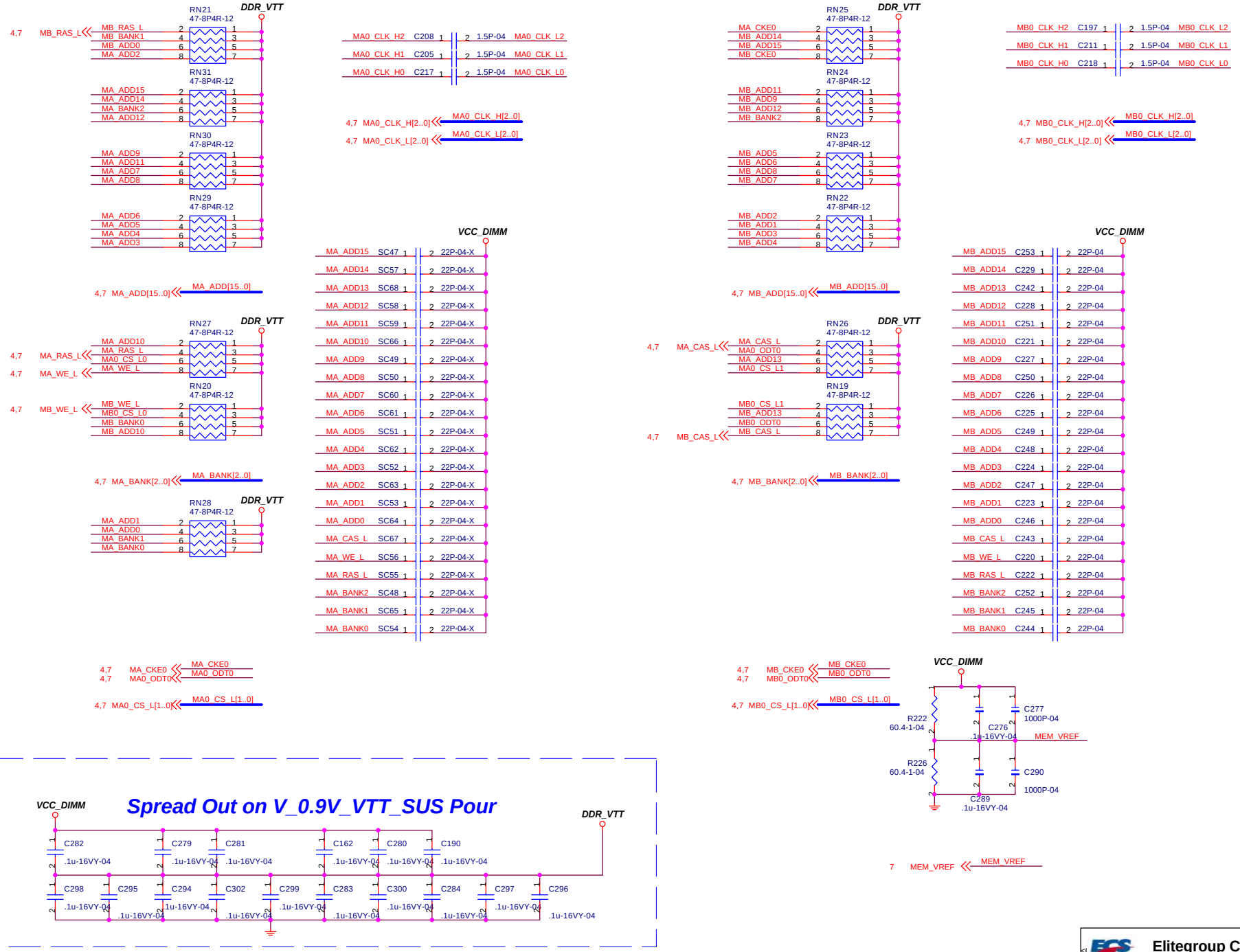
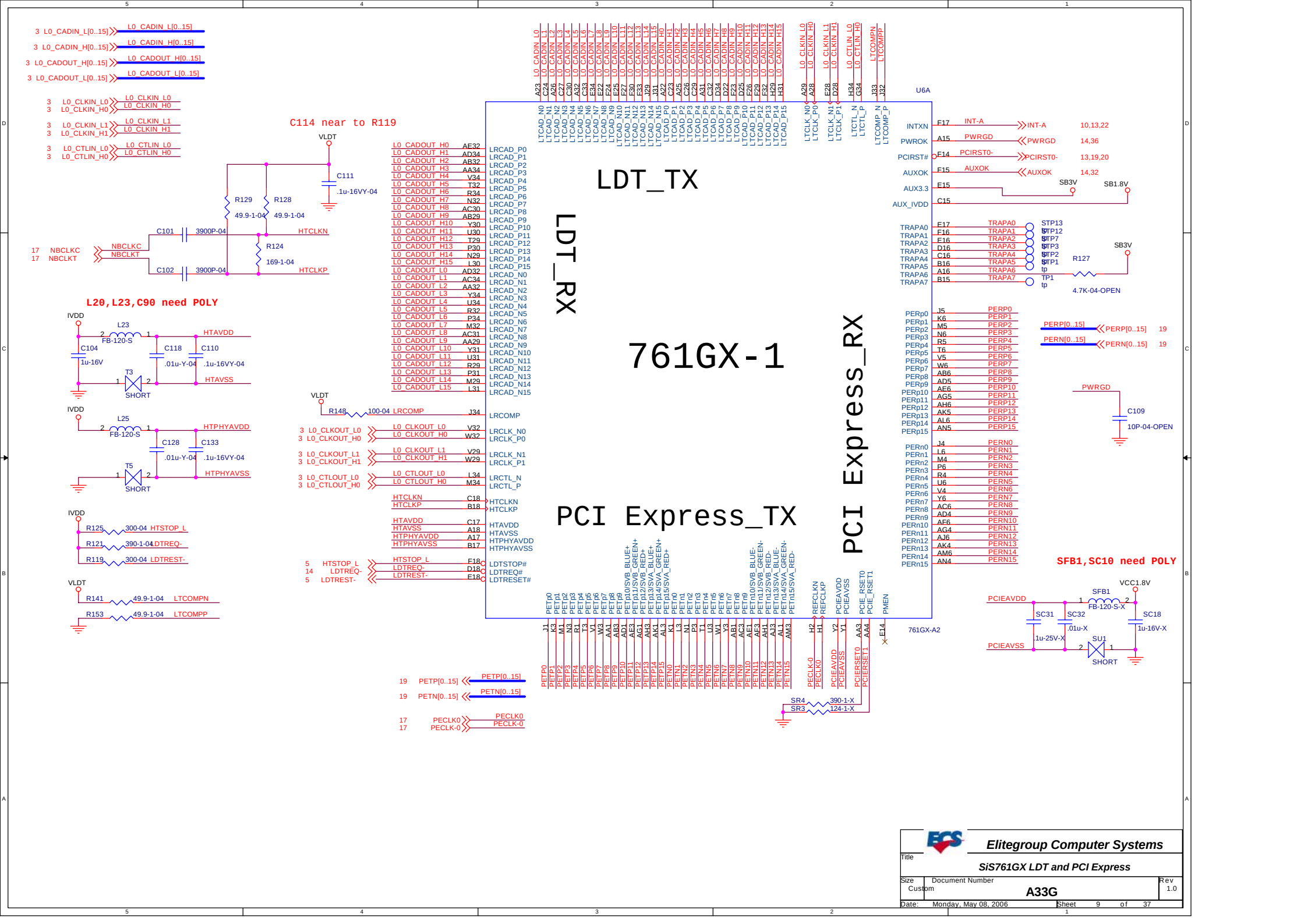
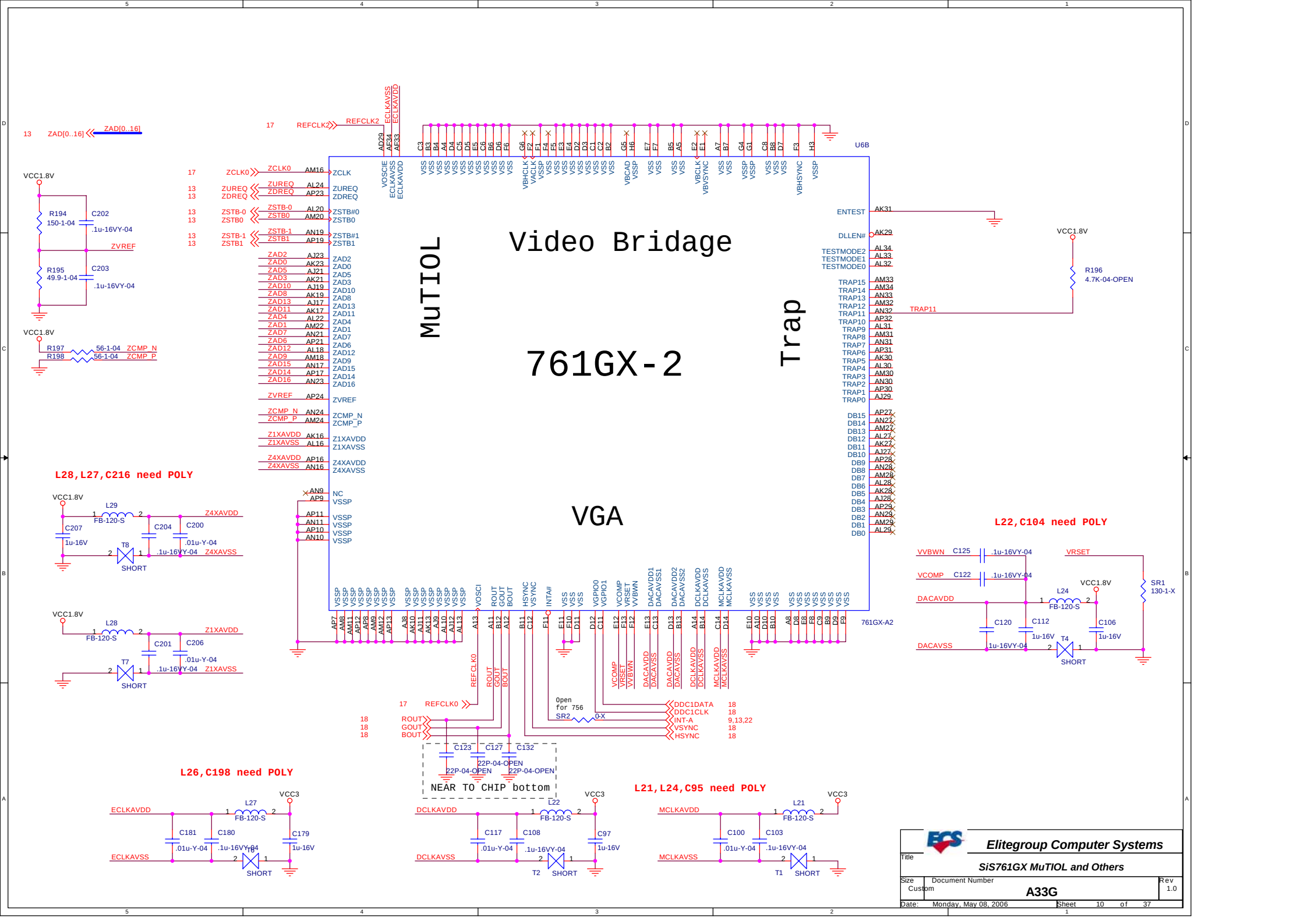
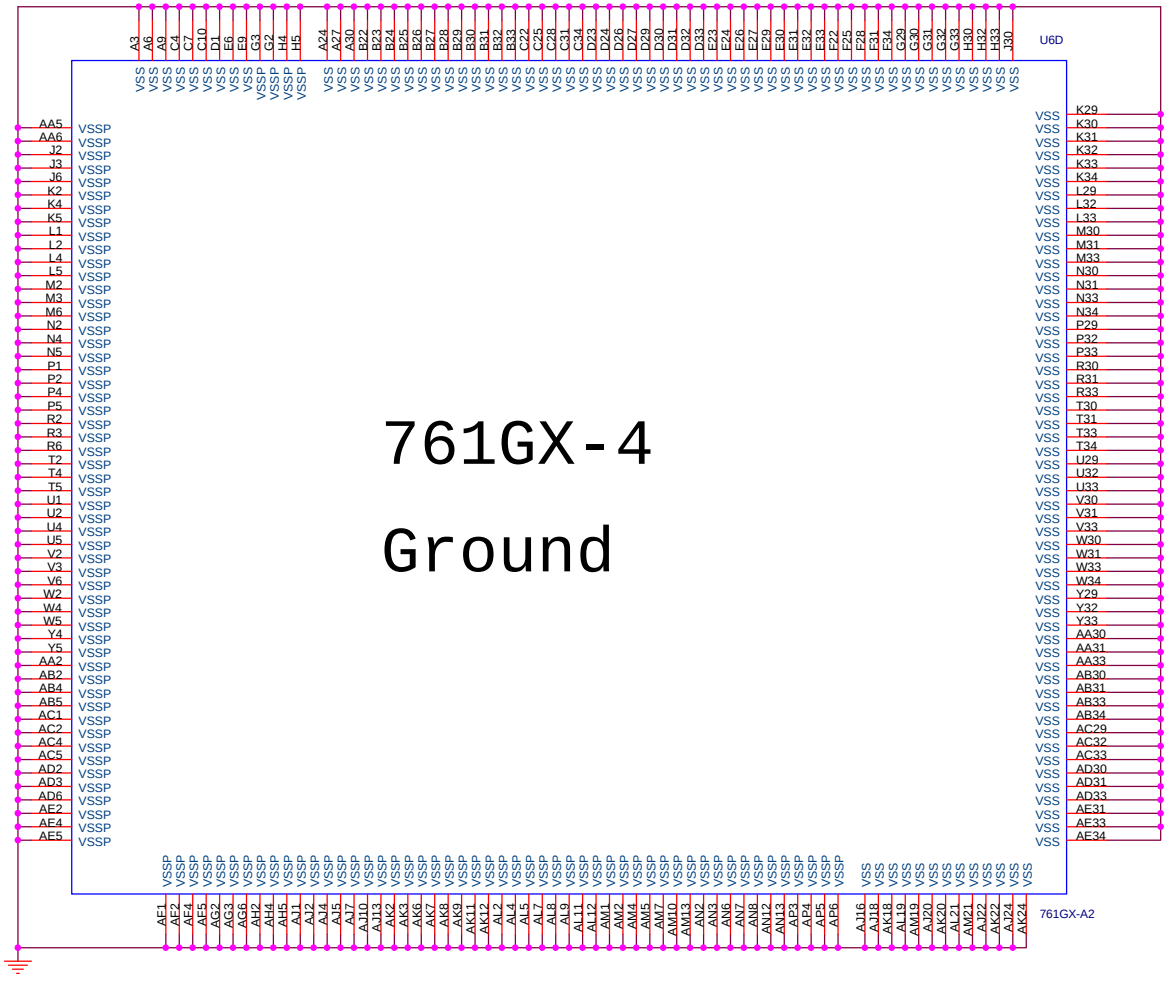
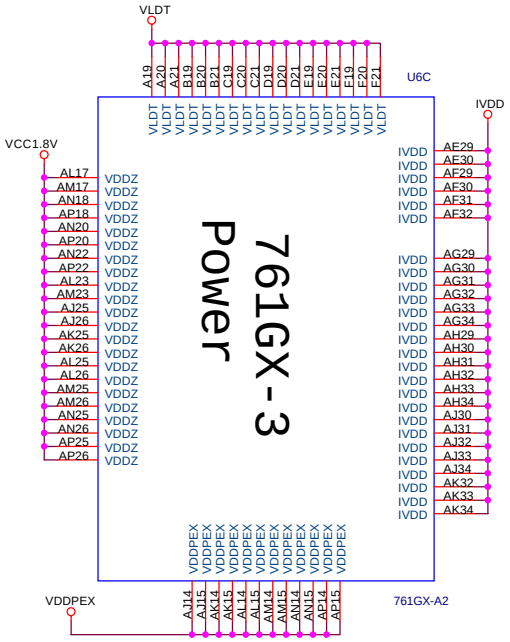
MB_DATA50
MB_DATA51
MB_DATA52
MB_DATA53
MB_DATA54
MB_DATA55
MB_DATA56
MB_DATA57
MB_DATA58
MB_DATA59
MB_DATA60
MB_DATA61
MB_DATA62
MB_DATA63
R306
10K-04
R310
10K-04
MA0_CLK_H[2..0]
MA0_CLK_L[2..0]
MA_DQS_H[7..0]
MA_DQS_L[7..0]
MA_DM[7..0]
MA_BANK[2..0]
MA_ADD[15..0]
MA_DATA[63..0]
MA0_ODT0
MA_CKE0
MA_CAS_L
MA_WE_L
MA_RAS_L
MA0_CS_L[1..0]
MEM_VREF
SMBDAT
SMBCLK
MB_ADD[15..0]
MB_BANK[2..0]
MB_DM[7..0]
MB_DQS_H[7..0]
MB_DQS_L[7..0]
MB_RAS_L
MB0_ODT0
MB_CAS_L
MB_WE_L
MB0_CS_L[1..0]
MB_CKE0
MB0_CLK_H[2..0]
MB0_CLK_L[2..0]
MB_DATA[63..0]
C231
C230
C241
C240
.1u-16VY-04
put on DDR and CPU between
Elitegroup Computer Systems
First Logic DDR2 DIMM
A33G
1.0
Monday, May 08, 2006
7
37


RN21
47-8P4R-12
DDR_VTT
4,7 MB_RAS_L
MB_RAS_L
MB_BANK1
MB_ADD0
MA_ADD2
RN31
47-8P4R-12
MA_ADD15
MA_ADD14
MA_BANK2
MA_ADD12
RN30
47-8P4R-12
MA_ADD9
MA_ADD11
MA_ADD7
MA_ADD8
RN29
47-8P4R-12
MA_ADD6
MA_ADD5
MA_ADD4
MA_ADD3
4,7 MA_ADD[15..0]
MA_ADD[15..0]
MA0_CLK_H2 C208 2 1.5P-04 MA0_CLK_L2
MA0_CLK_H1 C205 2 1.5P-04 MA0_CLK_L1
MA0_CLK_H0 C217 2 1.5P-04 MA0_CLK_L0
4,7 MA0_CLK_H[2..0]
MA0_CLK_H[2..0]
4,7 MA0_CLK_L[2..0]
MA0_CLK_L[2..0]
VCC_DIMM
MA_ADD15 SC47 22P-04-X
MA_ADD14 SC57 22P-04-X
MA_ADD13 SC68 22P-04-X
MA_ADD12 SC58 22P-04-X
MA_ADD11 SC59 22P-04-X
MA_ADD10 SC66 22P-04-X
MA_ADD9 SC49 22P-04-X
MA_ADD8 SC50 22P-04-X
MA_ADD7 SC60 22P-04-X
MA_ADD6 SC61 22P-04-X
MA_ADD5 SC51 22P-04-X
MA_ADD4 SC62 22P-04-X
MA_ADD3 SC52 22P-04-X
MA_ADD2 SC63 22P-04-X
MA_ADD1 SC53 22P-04-X
MA_ADD0 SC64 22P-04-X
MA_CAS_L SC67 22P-04-X
MA_WE_L SC56 22P-04-X
MA_RAS_L SC55 22P-04-X
MA_BANK2 SC48 22P-04-X
MA_BANK1 SC65 22P-04-X
MA_BANK0 SC54 22P-04-X
RN27
47-8P4R-12
DDR_VTT
MA_ADD10
MA_RAS_L
MA0_CS_L0
MA_WE_L
4,7 MA_RAS_L
4,7 MA_WE_L
RN20
47-8P4R-12
4,7 MB_WE_L
MB_WE_L
MB0_CS_L0
MB_BANK0
MB_ADD10
4,7 MA_BANK[2..0]
MA_BANK[2..0]
RN28
47-8P4R-12
DDR_VTT
MA_ADD1
MA_ADD0
MA_BANK1
MA_BANK0
4,7 MA_CKE0
4,7 MA0_ODT0
MA_CKE0
MA0_ODT0
4,7 MA0_CS_L[1..0]
MA0_CS_L[1..0]
RN25
47-8P4R-12
DDR_VTT
MA_CKE0
MB_ADD14
MB_ADD15
MB_CKE0
RN24
47-8P4R-12
MB_ADD11
MB_ADD9
MB_ADD12
MB_BANK2
RN23
47-8P4R-12
MB_ADD5
MB_ADD6
MB_ADD8
MB_ADD7
RN22
47-8P4R-12
MB_ADD2
MB_ADD1
MB_ADD3
MB_ADD4
4,7 MB_ADD[15..0]
MB_ADD[15..0]
MB0_CLK_H2 C197 2 1.5P-04 MB0_CLK_L2
MB0_CLK_H1 C211 2 1.5P-04 MB0_CLK_L1
MB0_CLK_H0 C218 2 1.5P-04 MB0_CLK_L0
4,7 MB0_CLK_H[2..0]
MB0_CLK_H[2..0]
4,7 MB0_CLK_L[2..0]
MB0_CLK_L[2..0]
VCC_DIMM
MB_ADD15 C253 22P-04
MB_ADD14 C229 22P-04
MB_ADD13 C242 22P-04
MB_ADD12 C228 22P-04
MB_ADD11 C251 22P-04
MB_ADD10 C221 22P-04
MB_ADD9 C227 22P-04
MB_ADD8 C250 22P-04
MB_ADD7 C226 22P-04
MB_ADD6 C225 22P-04
MB_ADD5 C249 22P-04
MB_ADD4 C248 22P-04
MB_ADD3 C224 22P-04
MB_ADD2 C247 22P-04
MB_ADD1 C223 22P-04
MB_ADD0 C246 22P-04
MB_CAS_L C243 22P-04
MB_WE_L C220 22P-04
MB_RAS_L C222 22P-04
MB_BANK2 C252 22P-04
MB_BANK1 C245 22P-04
MB_BANK0 C244 22P-04
RN26
47-8P4R-12
DDR_VTT
4,7 MA_CAS_L
MA_CAS_L
MA0_ODT0
MA_ADD13
MA0_CS_L1
RN19
47-8P4R-12
MB0_CS_L1
MB_ADD13
MB0_ODT0
MB_CAS_L
4,7 MB_CAS_L
4,7 MB_BANK[2..0]
MB_BANK[2..0]
4,7 MB_CKE0
4,7 MB0_ODT0
MB_CKE0
MB0_ODT0
4,7 MB0_CS_L[1..0]
MB0_CS_L[1..0]
VCC_DIMM
R222
60.4-1-04
R226
60.4-1-04
C277
1000P-04
C276
.1u-16VY-04
MEM_VREF
C290
1000P-04
C289
.1u-16VY-04
7 MEM_VREF
MEM_VREF
Spread Out on V_0.9V_VTT_SUS Pour
VCC_DIMM
DDR_VTT
C282 .1u-16VY-04
C279 .1u-16VY-04
C281 .1u-16VY-04
C162 .1u-16VY-04
C280 .1u-16VY-04
C190 .1u-16VY-04
C298 .1u-16VY-04
C295 .1u-16VY-04
C294 .1u-16VY-04
C302 .1u-16VY-04
C299 .1u-16VY-04
C283 .1u-16VY-04
C300 .1u-16VY-04
C284 .1u-16VY-04
C297 .1u-16VY-04
C296 .1u-16VY-04
Elitegroup Computer Systems
Title
DDR2 Termination
Size Custom
Document Number
A33G
Rev
1.0
Date: Monday, May 08, 2006
Sheet 8 of 37

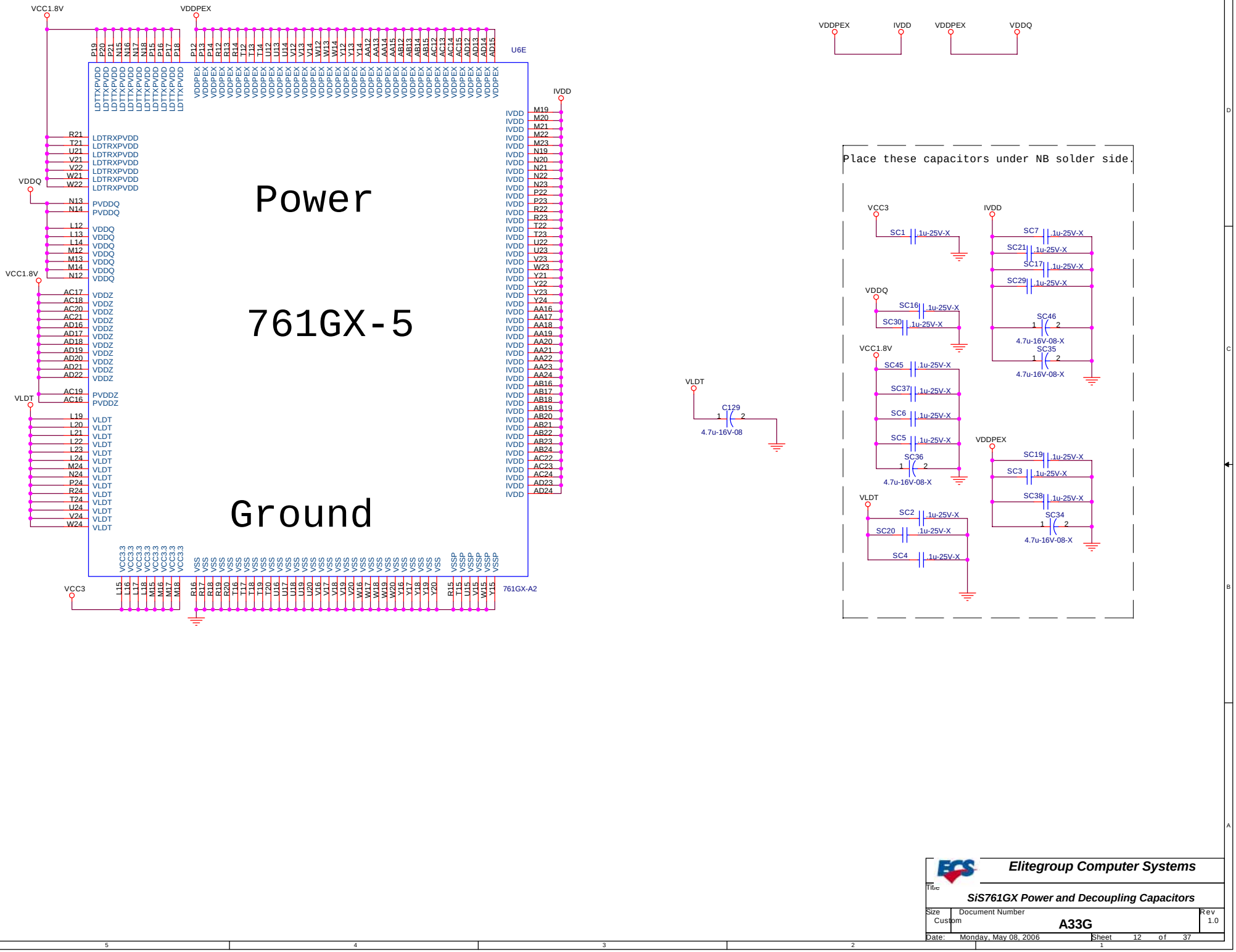

LDT_TX
LDT_RX
761GX-1
PCI Express_TX
PCI Express_RX
U6A
761GX-A2
C114 near to R119
L20,L23,C90 need POLY
SFB1,SC10 need POLY
Elitegroup Computer Systems
SiS761GX LDT and PCI Express
A33G
Monday, May 08, 2006


Video Bridge
761GX-2
MuTIOL
Trap
VGA
U6B
761GX-A2
L28,L27,C216 need POLY
L26,C198 need POLY
L21,L24,C95 need POLY
L22,C104 need POLY
NEAR TO CHIP bottom
Elitegroup Computer Systems
SiS761GX MuTIOL and Others
A33G
Monday, May 08, 2006





Elitegroup Computer Systems			
Title: SiS761GX Power and Ground			
Size: Custom	Document Number: A33G		Rev: 1.0
Date: Monday, May 08, 2006	Sheet 11 of 37		

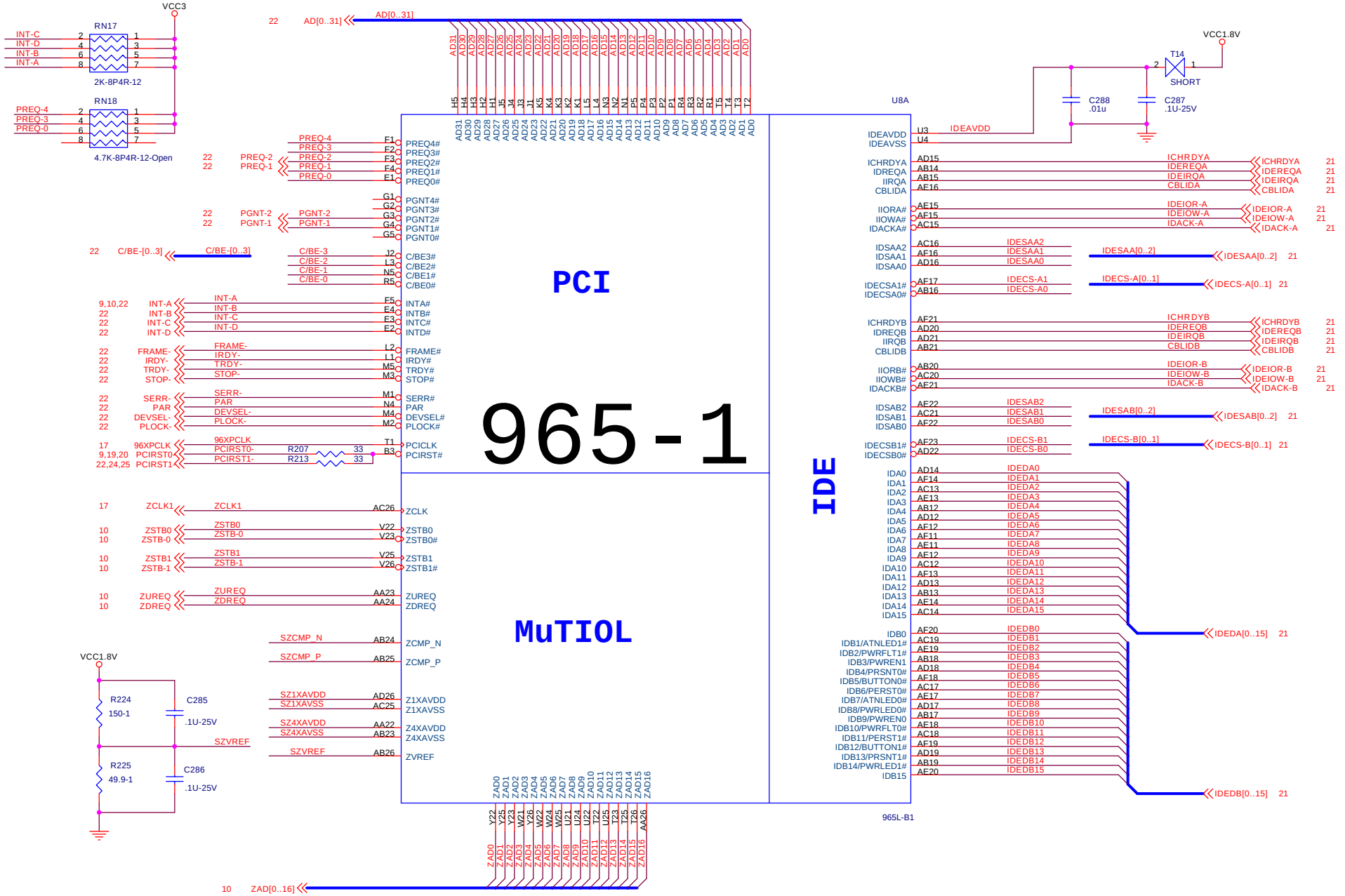


Elitegroup Computer Systems

Title: SiS761GX Power and Decoupling Capacitors

Size	Document Number	Rev
Custom	A33G	1.0

Date: Monday, May 08, 2006 Sheet 12 of 37


PCI
965-1
MuTIOL
IDE
965L-B1
RN17
2K-8P4R-12
RN18
4.7K-8P4R-12-Open
U8A
T14
SHORT
C288 .01u
C287 .1U-25V
R224 150-1
R225 49.9-1
C285 .1U-25V
C286 .1U-25V
SZVREF
L38,L39,C269 need POLY
L37 FB-120-S
L40 FB-120-S
C293 1u-16V
C292 .1U-25V
C291 .01u
C305 .1U-25V
C304 .01u
T15 SHORT
T16 SHORT
R234 56
R233 56
SZCMP_N
SZCMP_P
SZ1XAVDD
SZ1XAVSS
SZ4XAVDD
SZ4XAVSS
Elitegroup Computer Systems
SiS965 PCI, IDE, and Link
A33G
Monday, May 08, 2006
Sheet 13 of 37

965-2

CPU_S
VCC2.5V
R235 4.7K FERR-
AC23 INIT#
AE26 A20M#
AD23 SMI#
AC22 INTR
AE25 NMI
AF25 IGNNE#
AE24 FERR#
AF26 STPCLK#
AD24 CPUSLP#/CPUSTOP#

APIC
5 SB_PROCHOT_L
5 THERMTRIP_CPU_L
9 LDTREQ- LDTREQ- PICD0
Low active to short down system.
AF24 APICCK
AD25 APICD0
AC24 APICD1

LPC
24,25 LAD[0..3]
LAD0 Y5 LAD0
LAD1 Y4 LAD1
LAD2 AA2 LAD2
LAD3 AA3 LAD3
24,25 LFRAME- LFRAME- AA1 LFRAME#
25 LDRQ- LDRQ- AA4 LDRQ#
25 SIRQ SIRQ AA5 SIRQ

RTC
OSC32KHO C1 OSC32KHO
OSC32KHI C2 OSC32KHI
32 BATOK BATOK D4 BATOK
9,36 PWRGD PWRGD D2 PWROK
RTCVDD
C267 C_OPEN
C3 RTCVDD
D3 RTCVSS

SMBUS
7,17,19,20,24 SMBDAT SMBDAT W5 GPIO20
7,17,19,20,24 SMBCLK SMBCLK W4 GPIO19

AC'97
24,31 SDATI0 SDATI0 E6 AC_SDIN0
24 SDATI1 SDATI1 B4 AC_SDIN1
24,31 SDATO SDATO W3 AC_SDOUT
24,31 SYNC SYNC W2 AC_SYNC
24,31 AC_RESET- AC_RESET- B5 AC_RESET#
24,31 BIT_CLK BIT_CLK W1 AC_BIT_CLK

ACPI/Others
17 REFCLK1 REFCLK1 Y2 OSCI
SENTEST D1 ENTEST
31,35 SPKR SPKR Y1 SPK
35 PWRBTN- PWRBTN- D5 PWRBTN#
19,20,22,25 PME- PME- A6 PME#
37 PSON1 PSON1- E7 PSON#
9,32 AUXOK AUXOK A3 AUXOK
35 ACPILED ACPILED B6 ACPILED
C254 .1U-25V

SiS965 GPIO 0~7 internal pull up
SiS965 GPIO 9,10 internal pull down

TP5 tp GPIO13 B2 GPIO13
37 S3AUXSW- S3AUXSW- A5 GPIO14

Keyboard /Mouse
30 KBDAT KBDAT C7 GPIO15/KBDAT
30 KBCLK KBCLK B7 GPIO16/KBCLK
30 PMDAT PMDAT D7 GPIO17/PMDAT
30 PMCLK PMCLK D6 GPIO18/PMCLK

GMII/RGMII
TXCLK B8 TXCLK 29
GTXCLK(NC) A10
EXTCLK(NC) A13
TXEN B10 TXEN 29
TXER D11
TXD0 A8 TXD0 29
TXD1 C8 TXD1 29
TXD2 C9 TXD2 29
TXD3 A9 TXD3 29
TXD4(NC) E9
TXD5(NC) D9
TXD6(NC) E10
TXD7(NC) C10
RGMCMP_N A14 RGMCMP_N
RGMCMP_P B14 RGMCMP_P
RGMVREF C14 RGMVREF
RXCLK A11 RXCLK 29
RXDV C11 RXDV 29
RXER E11 RXER 29
RXD0 C13 RXD0 29
RXD1 C12 RXD1 29
RXD2 A12 RXD2 29
RXD3 B12 RXD3 29
RXD4(NC) D13
RXD5(NC) E14
RXD6(NC) F13
RXD7(NC) E12
COL F11 COL 29
CRS F12 CRS 29
MDC F13 MDC 29
MDIO F14 MDIO 29

PCI Express
PRX0+ M26 PRX0 PRX0 20
PRX0- M25 PRX-0 PRX-0 20
PTX0+ N24 PTX0 PTX0 20
PTX0- N23 PTX-0 PTX-0 20
PRX1+ K26
PRX1- K25
PTX1+ L24
PTX1- L23
NC11 F26
NC10 F25
NC9 G24
NC8 G23
NC7 H26
NC6 H25
NC5 J24
NC4 J23

VCC3
R295 10K
GPIO11
Q40 PMBS3904-S
LDTREQ- R293 10K
Q39 PMBS3904-S

PCLK100P P26 PECLK2 PECLK2 17
PCLK100N P25 PECLK-2 PECLK-2 17
PEXTRXAVDD R25 PEXTRXAVDD
PEXTRXAVSS R26 PEXTRXAVSS
RSET0 P22 PERSET0 SR5 499-1-X
RSET1 P21 PERSET1 SR6 124-1-X

VCC1.8V
L36 FB-120-S
L13,C152 need POLY
C273 1u-16V
C272 .01u
C271 .1U-25V
T12 SHORT
PEXTRXAVDD
PEXTRXAVSS

GPIO
GPIO0/SPDIF U5
GPIO1/LDRQ1# AA6 GPIO1 tp STP32
GPIO2/THERM# V5 THERM- tp STP31
GPIO3/EXTSMI# V4 EXTSMI- EXTSMI 35
GPIO4/CLKRUN# V3 CLKRUN- tp TP8
GPIO5/PREQ5# V2 GPIO5 tp TP7
GPIO6/PGNT5# V1
GPIO7 A4
GPIO8/RING C6 RING RING 26
GPIO9/AC_SDIN2 C5 GPIO9
GPIO10/AC_SDIN3 C4 GPIO10
GPIO11/OSC25M/STP_PCI# F6 GPIO11
GPIO12/CPUSTP# E5 GPIO12

SB3V
R205 150-1
C234 .01u
RGMVREF
C258 .01u
R209 150-1

Put closed to 96X CHIP
OSC32KHO
OSC32KHI
R217 10M
Y4 X-32.768K-17m12.5D
C263 15P
C262 20P

SB3V
PME- R210 2K
S3AUXSW- R200 1K
VCC3
SMBDAT R254 1K
SMBCLK R255 1K

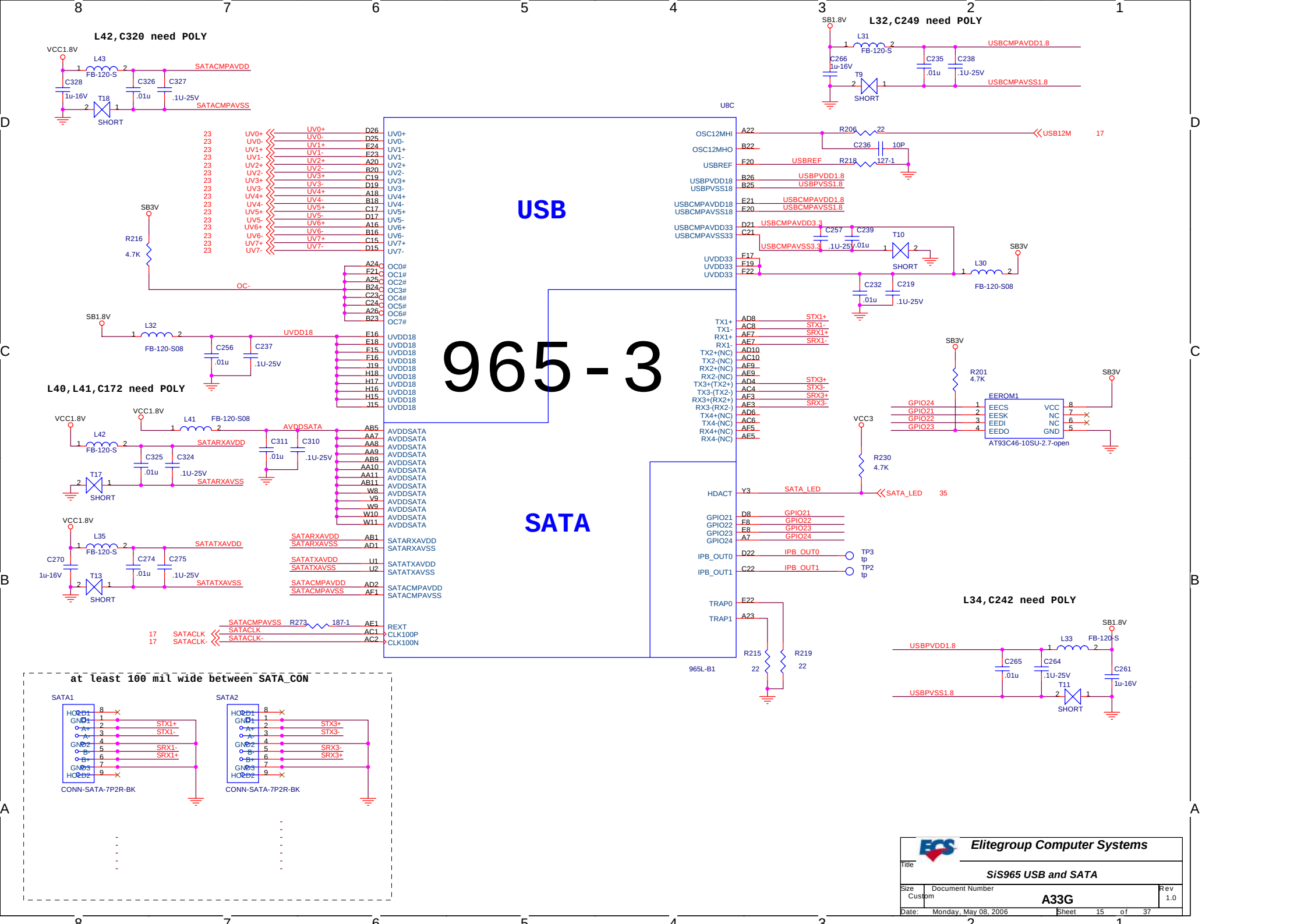
SENTEST

SB3V
GPIO11 RN16
GPIO12
GPIO9
GPIO10
4.7K-8P4R-12-open

Place near to 96X
BIT_CLK
C301 10P

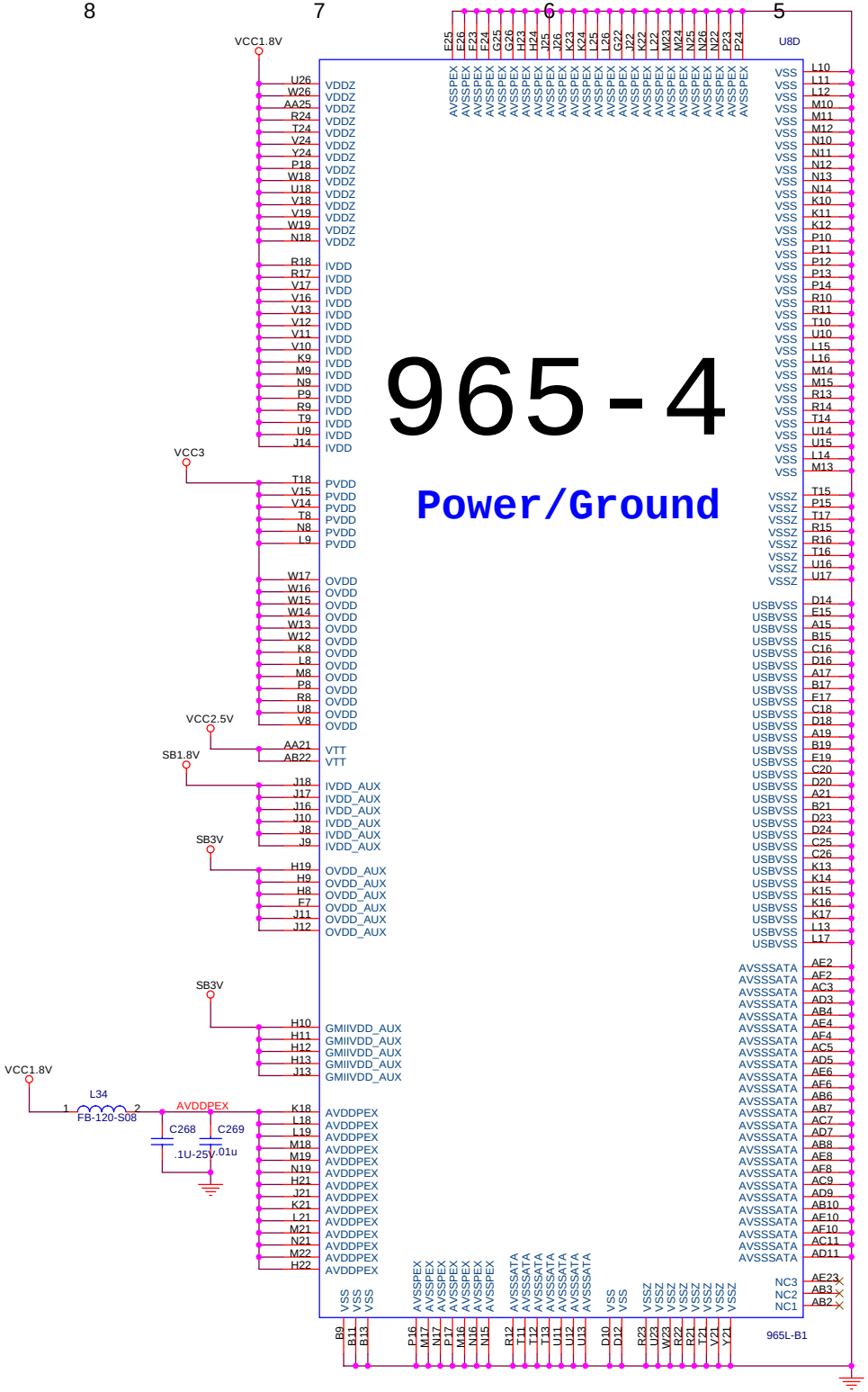
965L-B1
SB3V
RGMCMP_N R204 56
RGMCMP_P R212 56

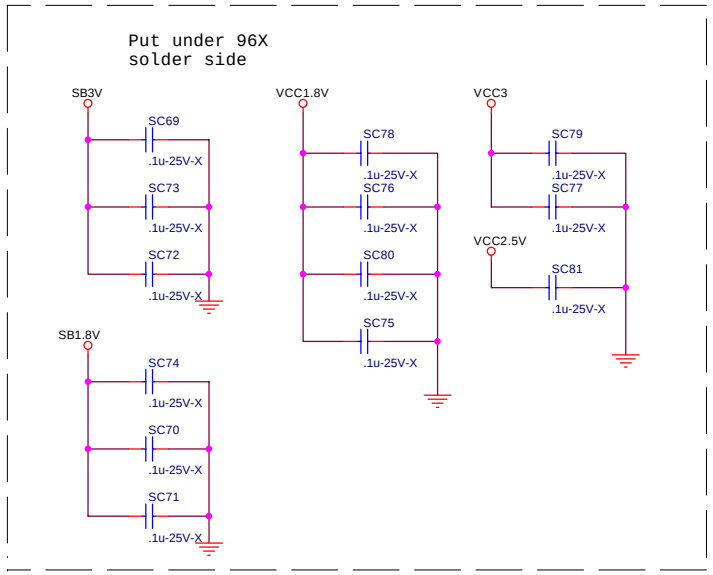
Elitegroup Computer Systems	
Title	SiS965 GMII, PCI Express, and GPIO
Size: Custom	Document Number: A33G
Rev: 1.0	
Date: Monday, May 08, 2006	Sheet 14 of 37


965-3
USB
SATA
U8C
L42,C320 need POLY
L32,C249 need POLY
L40,L41,C172 need POLY
L34,C242 need POLY
at least 100 mil wide between SATA_CON
SATA1
SATA2
CONN-SATA-7P2R-BK
CONN-SATA-7P2R-BK
965L-B1
AT93C46-10SU-2.7-open
Elitegroup Computer Systems
SiS965 USB and SATA
A33G
Monday, May 08, 2006
Sheet 15 of 37

965-4

Power/Ground



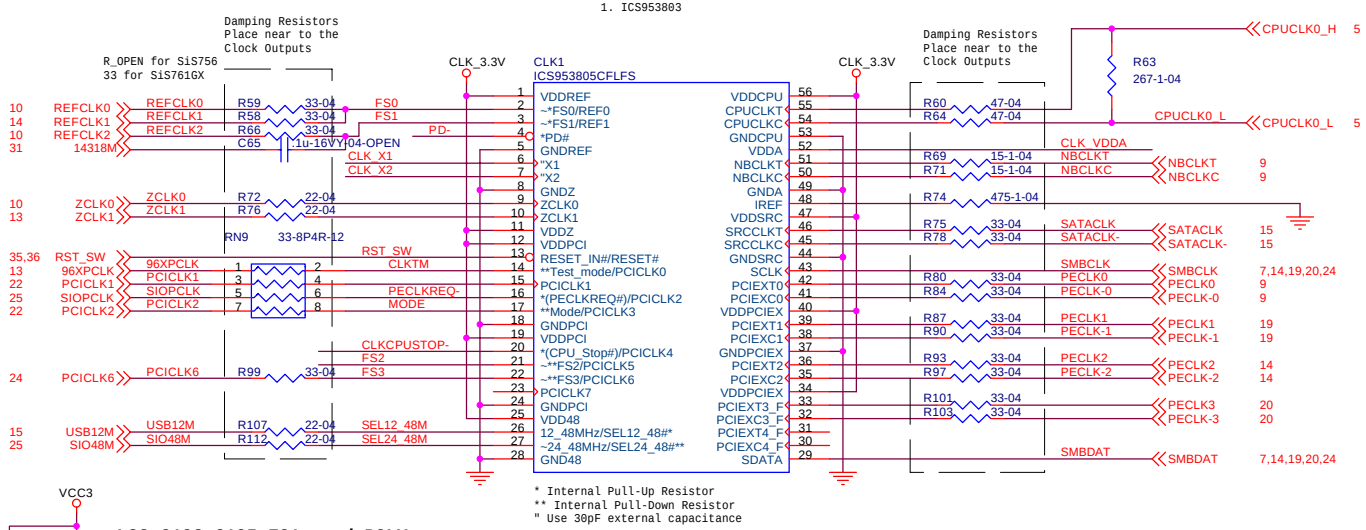


Elitegroup Computer Systems			
Title: SiS965 Power and Ground			
Size: Custom	Document Number: A33G		Rev: 1.0
Date: Monday, May 08, 2006	Sheet 16 of 37		

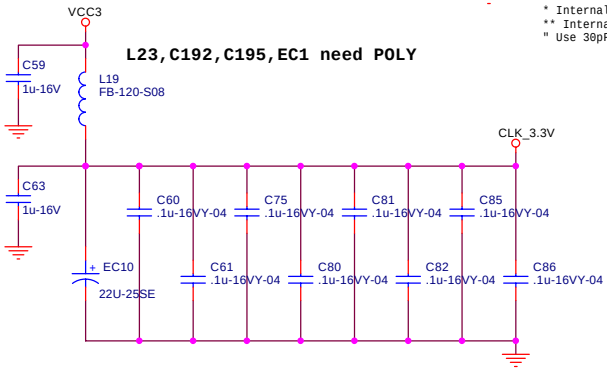
Main Clock Generator

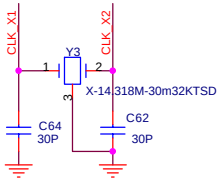
OPTIONS

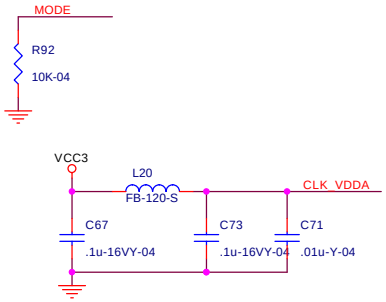
1. ICS953803

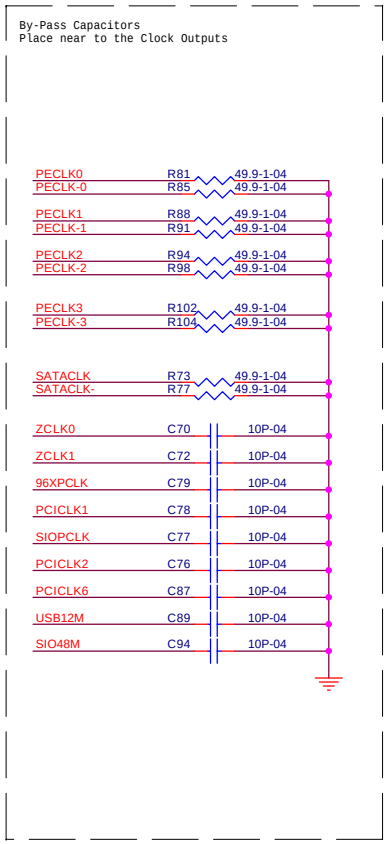


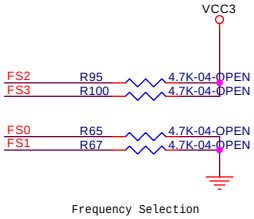
* Internal Pull-Up Resistor
** Internal Pull-Down Resistor
" Use 30pF external capacitance

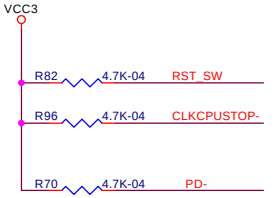












Different clock generator with different frequency define table

SiS 756/761GX CLOCK

(FS3)	(FS2)	(FS1)	(FS0)	CPUCLK (MHz)	NBCLK (MHz)	SRC (MHz)	ZCLK (MHz)	PEI-EX (MHz)	PCI (MHz)
0	0	0	0	100.00	100.00	100.00	133.33	100.00	33.33
0	0	0	1	133.33	133.33	100.00	133.33	100.00	33.33
0	0	1	0	166.66	166.66	100.00	133.33	100.00	33.33
0	0	1	1	200.00	200.00	100.00	133.33	100.00	33.33
0	1	0	0	250.00	250.00	100.00	133.33	100.00	33.33
0	1	0	1	266.66	266.66	100.00	133.33	100.00	33.33
0	1	1	0	333.33	333.33	100.00	133.33	100.00	33.33
0	1	1	1	400.00	400.00	100.00	133.33	100.00	33.33
1	0	0	0	100.00	125.00	100.00	133.33	100.00	33.33
1	0	0	1	133.33	166.66	100.00	133.33	100.00	33.33
1	0	1	0	166.66	222.22	100.00	133.33	100.00	33.33
1	0	1	1	200.00	250.00	100.00	133.33	100.00	33.33
1	1	0	0	250.00	333.33	100.00	133.33	100.00	33.33
1	1	0	1	266.66	400.00	100.00	133.33	100.00	33.33
1	1	1	0	333.33	500.00	100.00	133.33	100.00	33.33
1	1	1	1	100.00	125.00	100.00	133.33	100.00	33.33

SiS 756/761GX CLOCK

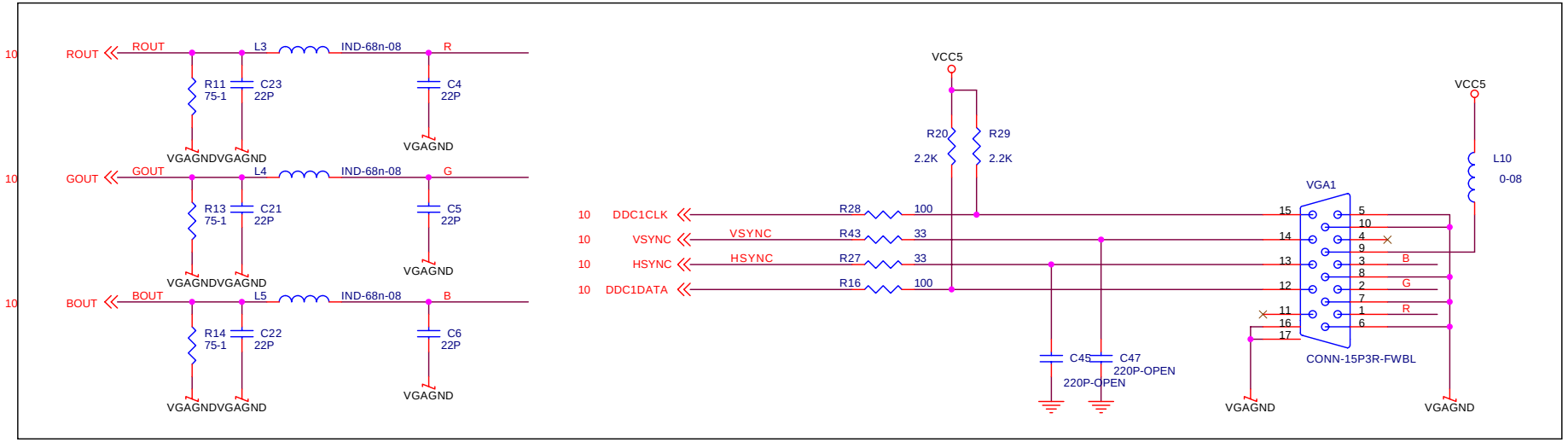
(FS3)	(FS2)	(FS1)	(FS0)	CPUCLK (MHz)	NBCLK (MHz)	SRC (MHz)	ZCLK (MHz)	PCI-EX (MHz)	PCI (MHz)
0	0	0	0	133.33	166.66	100.00	133.33	100.00	33.33
0	0	0	1	166.66	222.22	100.00	133.33	100.00	33.33
0	0	1	0	200.00	250.00	100.00	133.33	100.00	33.33
0	0	1	1	250.00	333.33	100.00	133.33	100.00	33.33
0	1	0	0	266.66	400.00	100.00	133.33	100.00	33.33
0	1	0	1	333.33	500.00	100.00	133.33	100.00	33.33
0	1	1	0	134.66	134.66	100.00	134.66	101.00	33.66
0	1	1	1	168.33	168.33	100.00	134.66	101.00	33.66
1	0	0	0	202.00	202.00	100.00	134.66	101.00	33.66
1	0	0	1	252.50	252.50	100.00	134.66	101.00	33.66
1	0	1	0	134.66	168.33	100.00	134.66	101.00	33.66
1	0	1	1	168.33	224.44	100.00	134.66	101.00	33.66
1	1	0	0	202.00	252.50	100.00	134.66	101.00	33.66
1	1	0	1	252.50	336.66	100.00	134.66	101.00	33.66
1	1	1	0	206.00	206.00	100.00	137.33	103.00	34.33
1	1	1	1	206.00	257.50	100.00	137.33	103.00	34.33

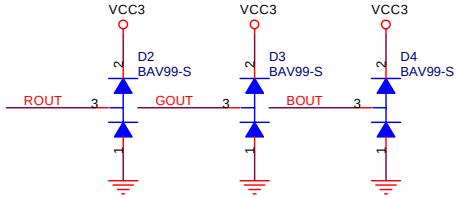
Elitegroup Computer Systems

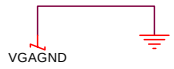
Title: Clock Generator

Size: Custom | Document Number: A33G | Rev: 1.0

Date: Monday, May 08, 2006 | Sheet 17 of 37







Elitegroup Computer Systems		
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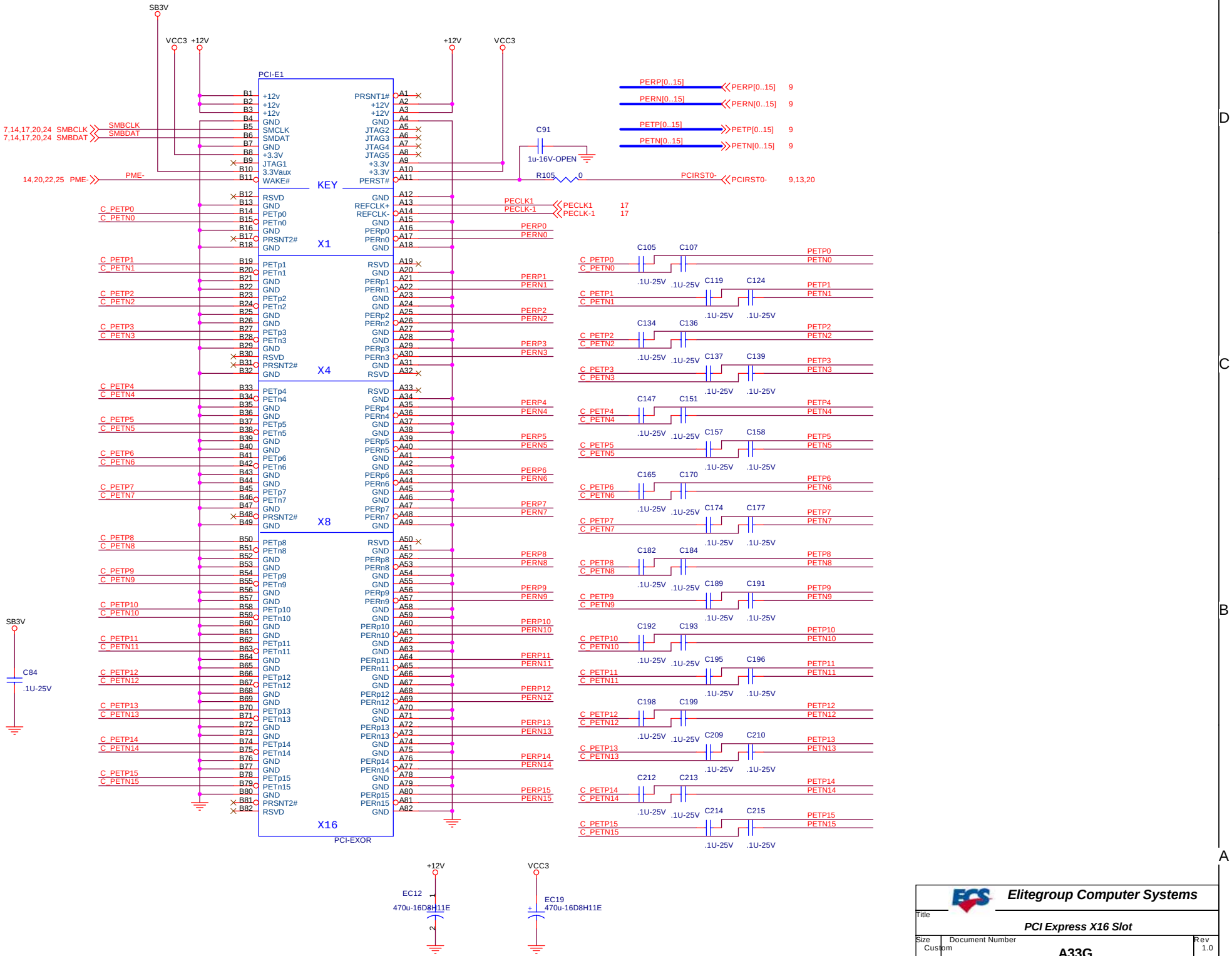
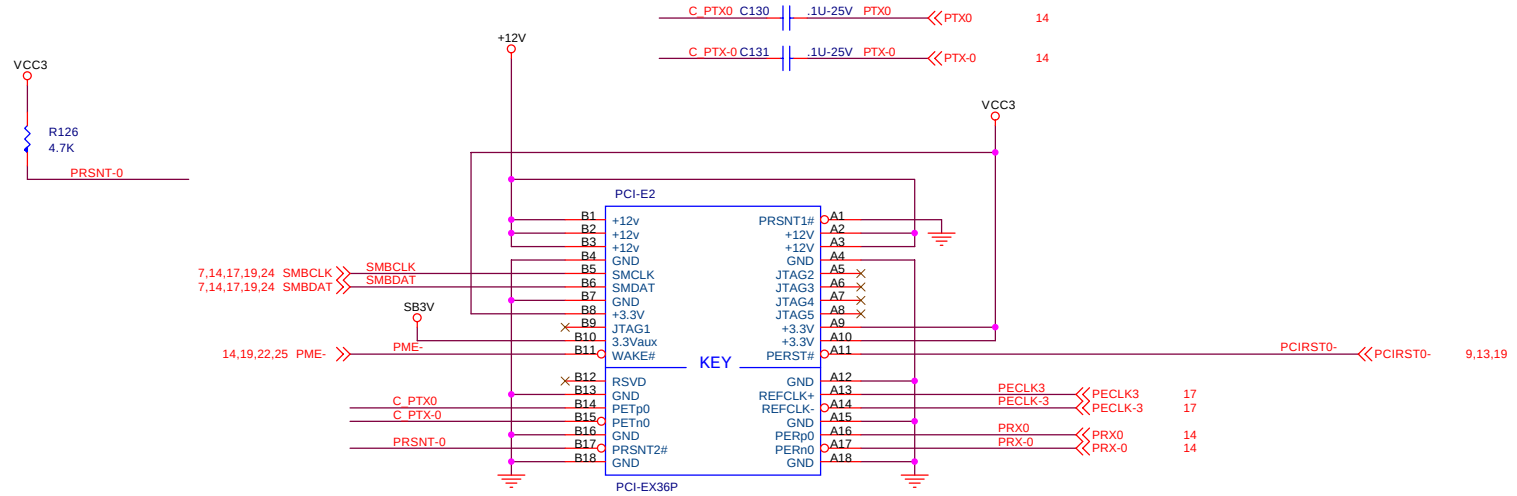
Size: B	Document Number: A33G	Rev: 1.0
Date: Monday, May 08, 2006	Sheet 18 of 37	


PCI-E1
KEY
X1
X4
X8
X16
PCI-EXOR
SB3V
VCC3
+12V
SMBCLK
SMBDAT
PME-
C91
1u-16V-OPEN
R105
0
PCIRST0-
PERP[0..15]
PERN[0..15]
PETP[0..15]
PETN[0..15]
PECLK1
PECLK-1
C84
.1U-25V
EC12
EC19
470u-16D8H11E
Elitegroup Computer Systems
PCI Express X16 Slot
A33G
Monday, May 08, 2006



ECS itegroup Computer Systems		
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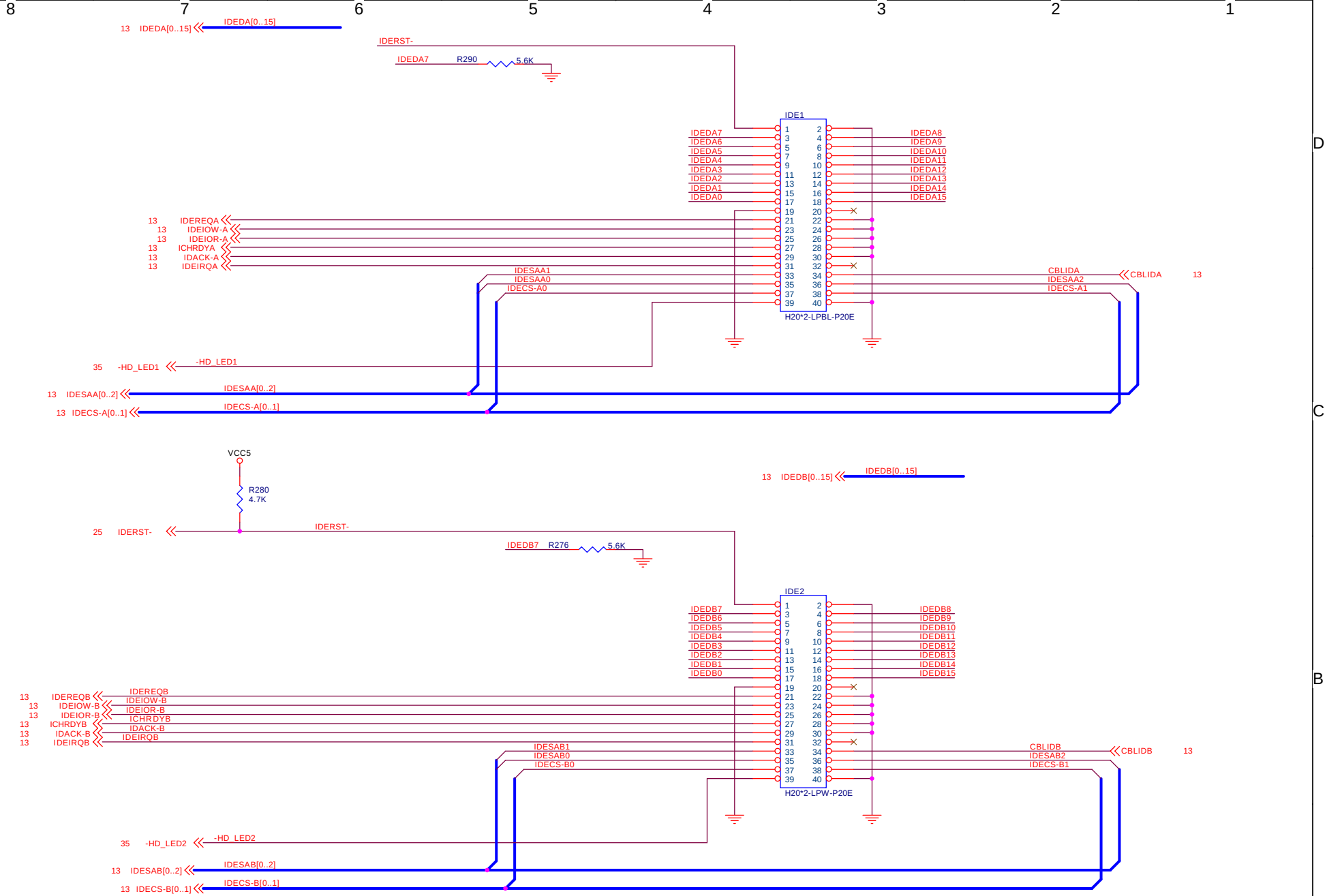
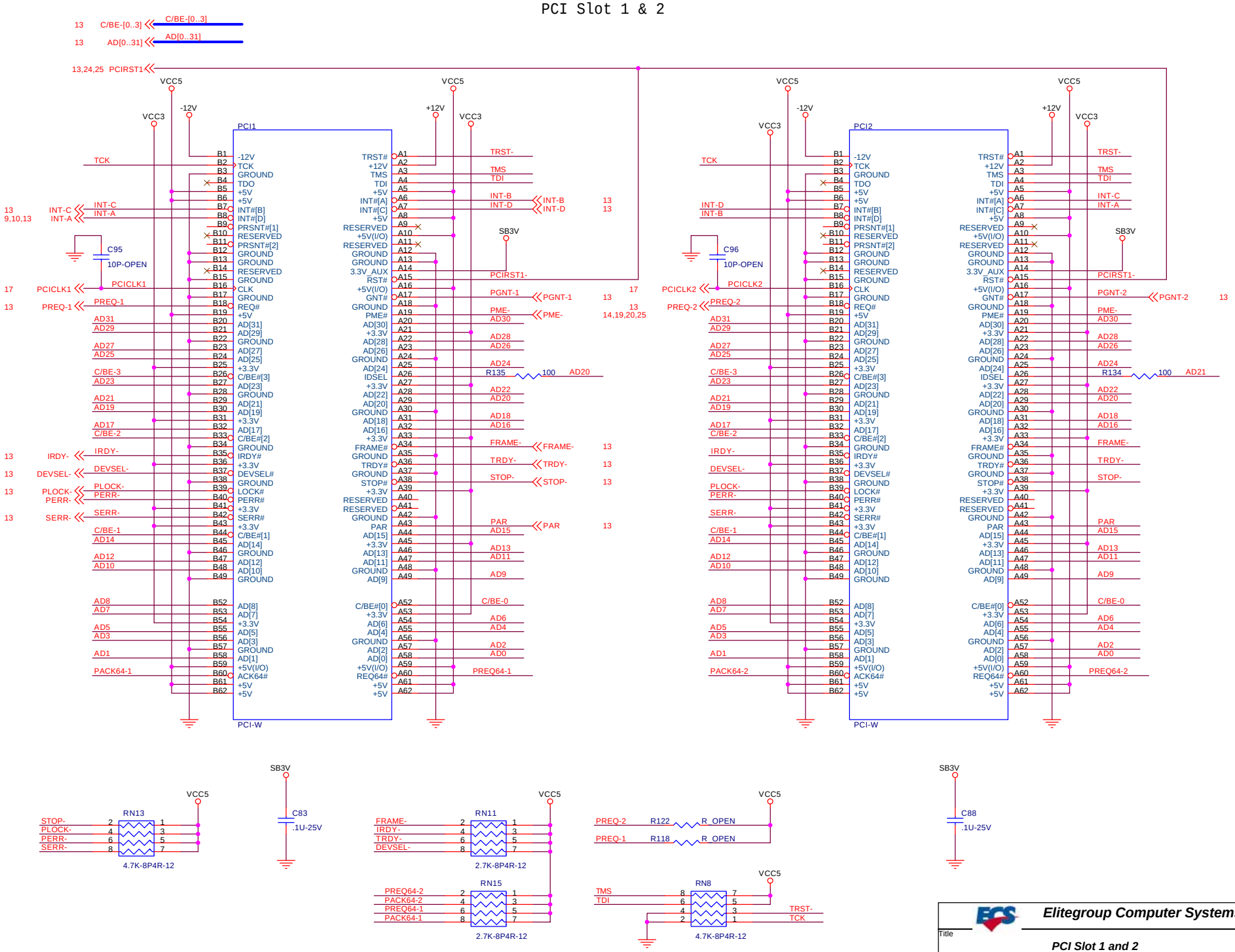
Size: Custom	Document Number: A33G	Rev: 1.0
Date: Monday, May 08, 2006	Sheet 20 of 37	



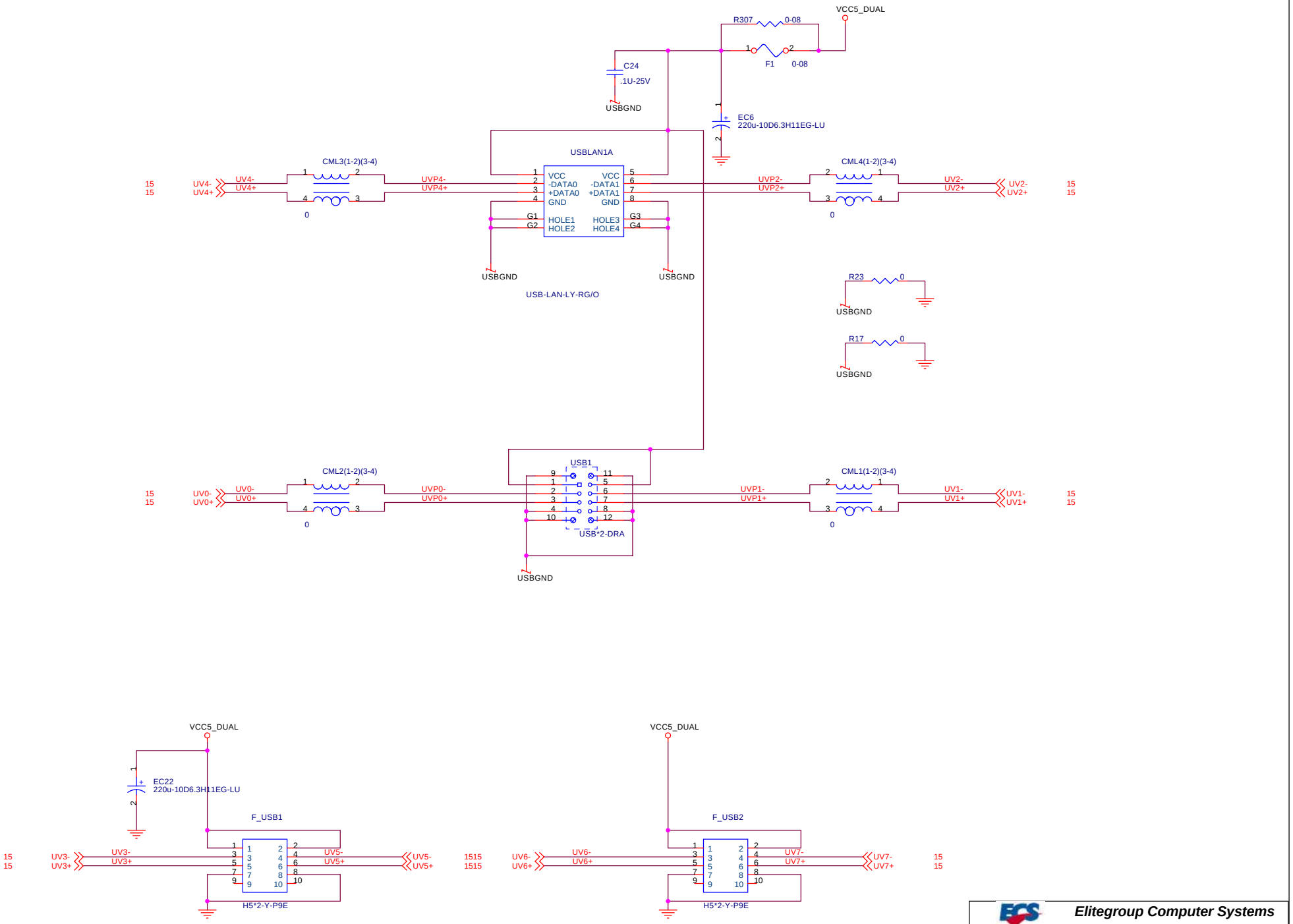
Elitegroup Computer Systems		
Title: IDE Slots		
Size: Custom	Document Number: A33G	Rev: 1.0
Date: Monday, May 08, 2006	Sheet 21 of 37	

PCI Slot 1 & 2

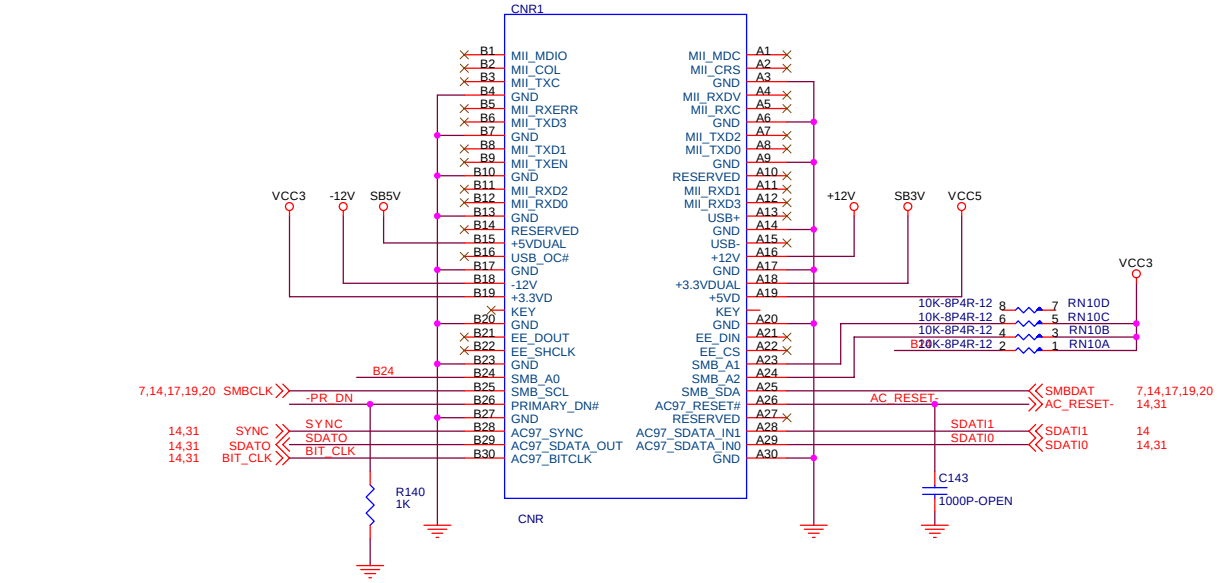


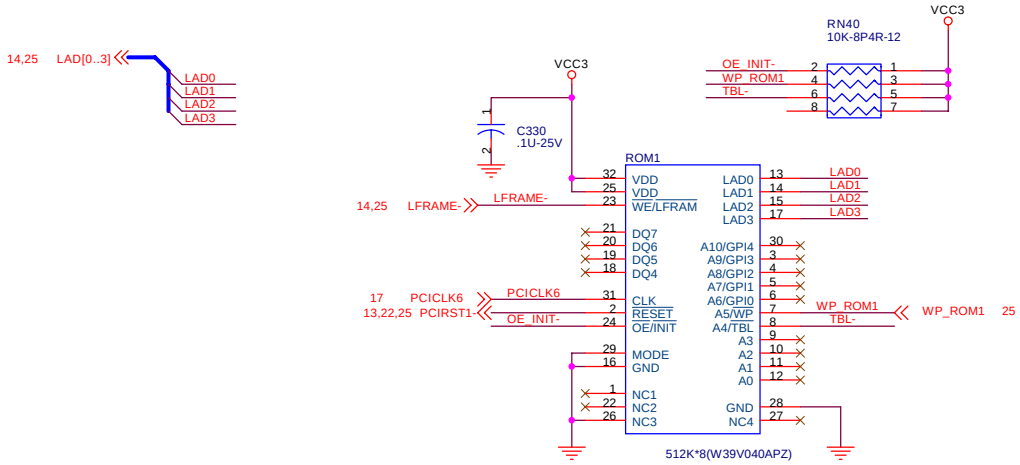
Title	PCI Slot 1 and 2
Size	Custom
Document Number	A33G
Rev	1.0
Date:	Monday, May 08, 2006
Sheet	22 of 37

Elitegroup Computer Systems



Elitegroup Computer Systems	
Title	USB CONNECTORS
Size: Custom	Document Number: A33G
Rev: 1.0	
Date: Monday, May 08, 2006	Sheet 23 of 37

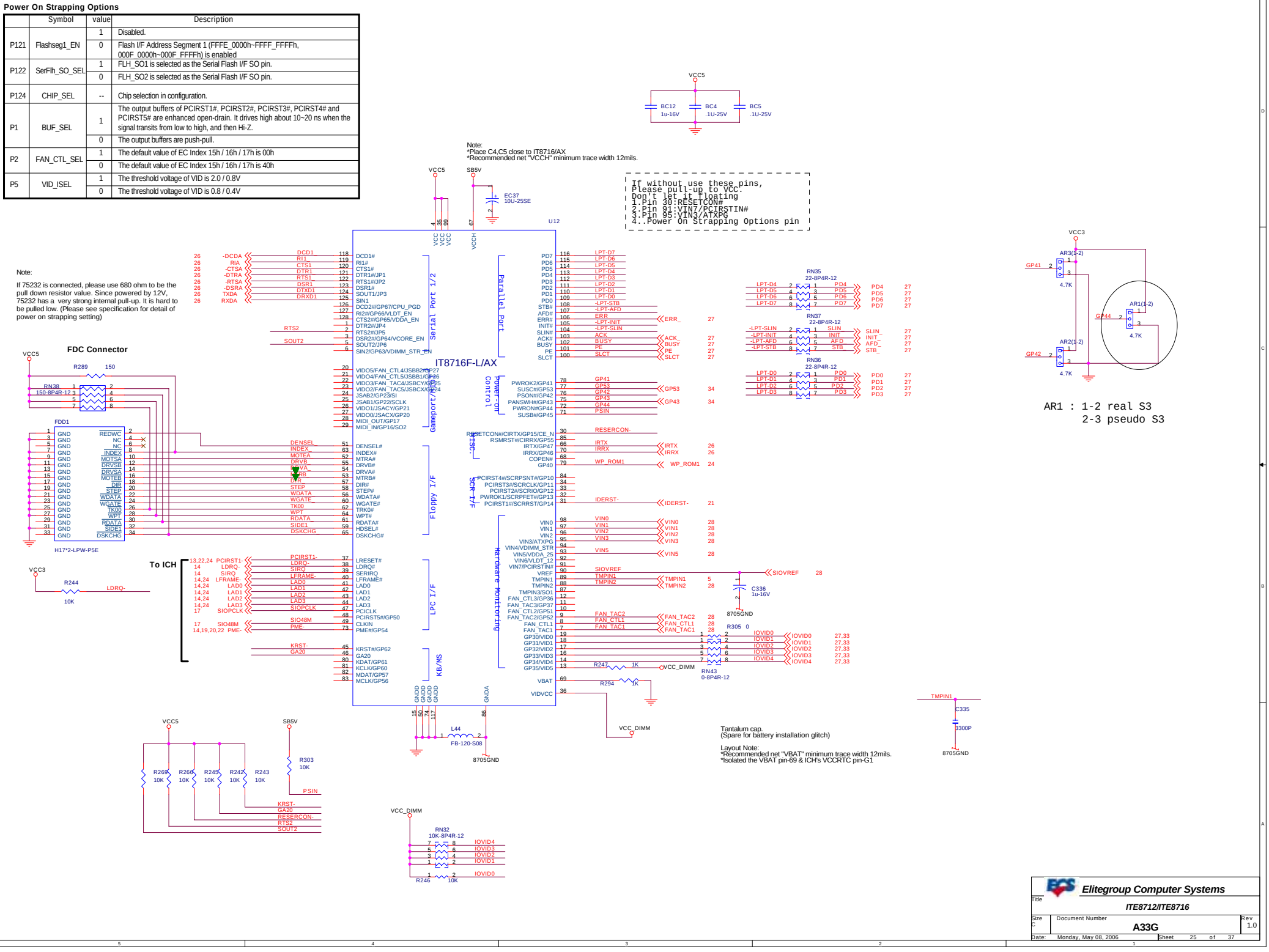




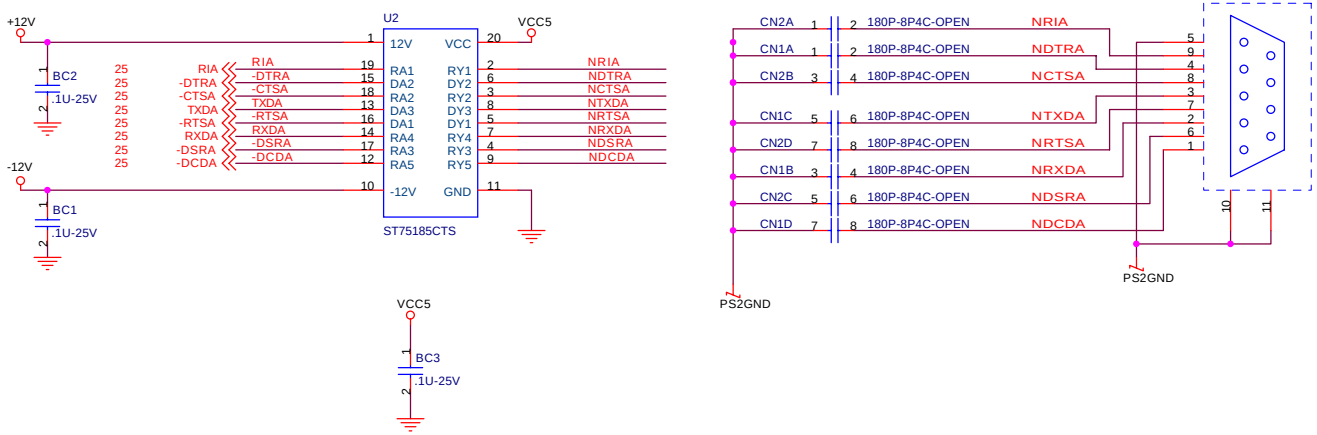
Elitegroup Computer Systems		
Title: CNR & LPC ROM		
Size: Custom	Document Number: A33G	Rev: 1.0
Date: Monday, May 08, 2006	Sheet 24 of 37	

Power On Strapping Options

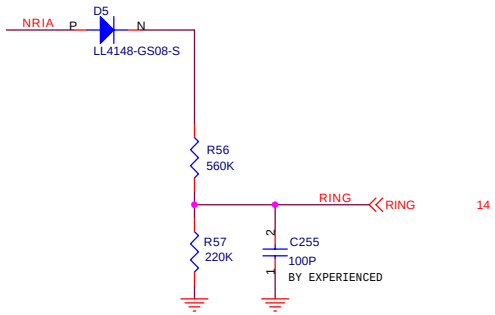
	Symbol	value	Description
P121	Flashseg1_EN	1	Disabled.
		0	Flash I/F Address Segment 1 (FFFE_0000h~FFFF_FFFFh, 000F_0000h~000F_FFFFh) is enabled
P122	SerFlh_SO_SEL	1	FLH_SO1 is selected as the Serial Flash I/F SO pin.
		0	FLH_SO2 is selected as the Serial Flash I/F SO pin.
P124	CHIP_SEL	--	Chip selection in configuration.
P1	BUF_SEL	1	The output buffers of PCIRST1#, PCIRST2#, PCIRST3#, PCIRST4# and PCIRST5# are enhanced open-drain. It drives high about 10~20 ns when the signal transits from low to high, and then Hi-Z.
		0	The output buffers are push-pull.
P2	FAN_CTL_SEL	1	The default value of EC Index 15h / 16h / 17h is 00h
		0	The default value of EC Index 15h / 16h / 17h is 40h
P5	VID_ISEL	1	The threshold voltage of VID is 2.0 / 0.8V
		0	The threshold voltage of VID is 0.8 / 0.4V



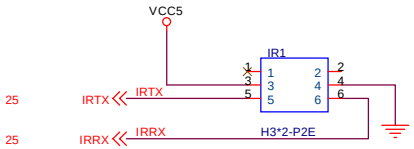
COM



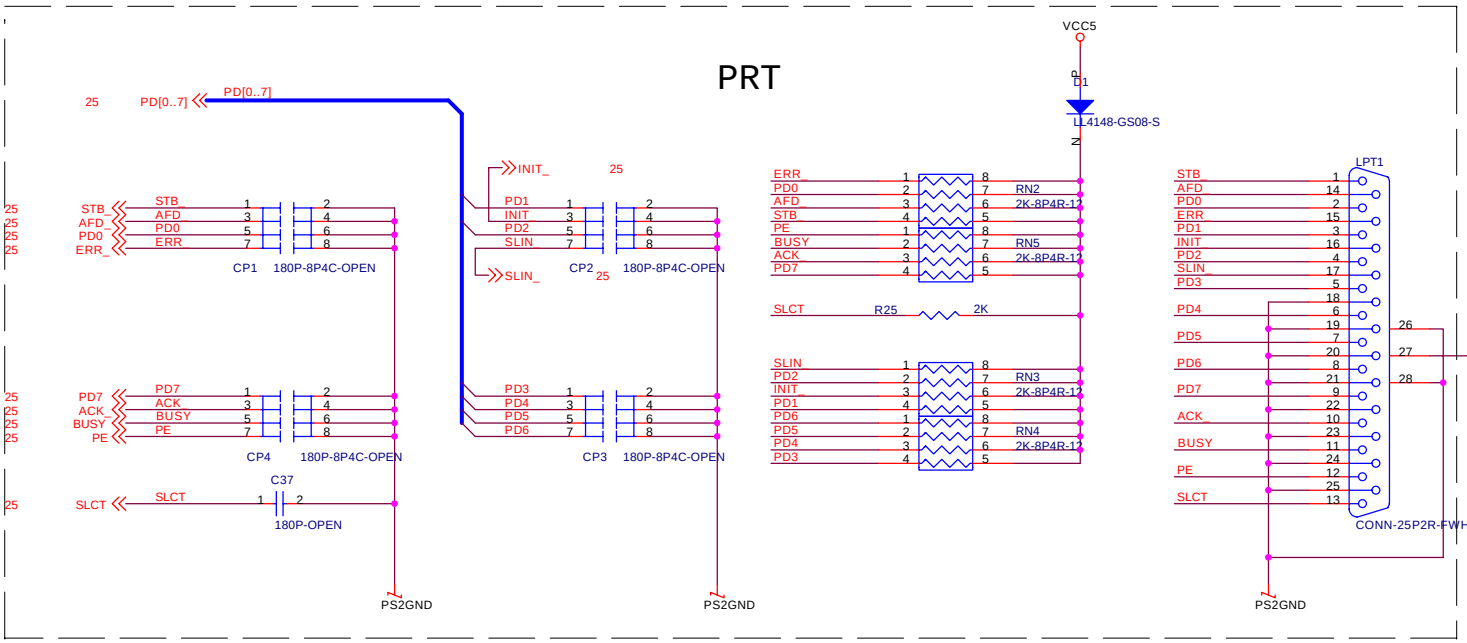
FOR MODEM WAKE-UP FUNCTION

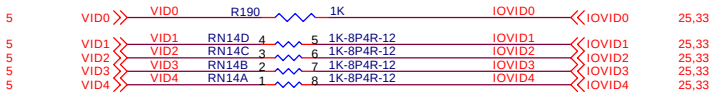


IR CONNECTOR



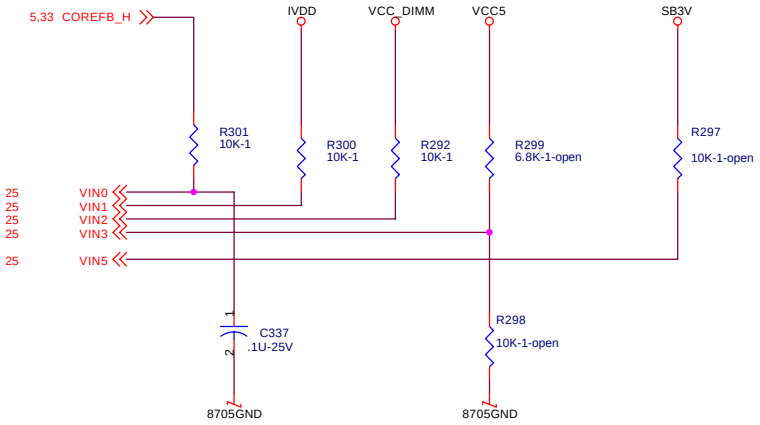
Elitegroup Computer Systems			
Title: SERIAL, IR, FLOPPY CONNECTORS			
Size: Custom	Document Number: A33G		Rev: 1.0
Date: Monday, May 08, 2006	Sheet 26 of 37		





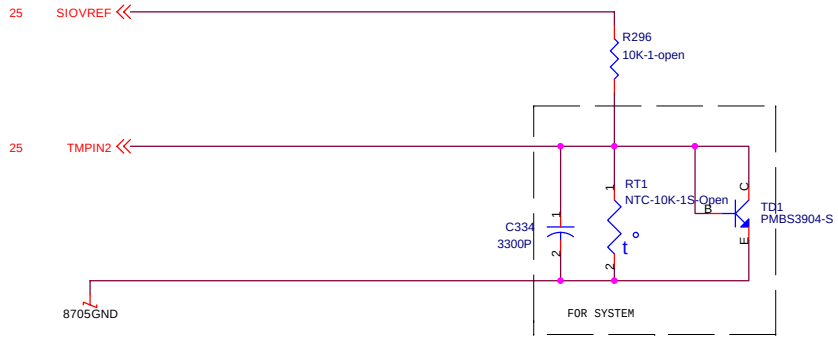
Elitegroup Computer Systems			
Title: PARALLEL PORT			
Size: Custom	Document Number: A33G		Rev: 1.0
Date: Monday, May 08, 2006	Sheet 27 of 37		

Voltage Monitor

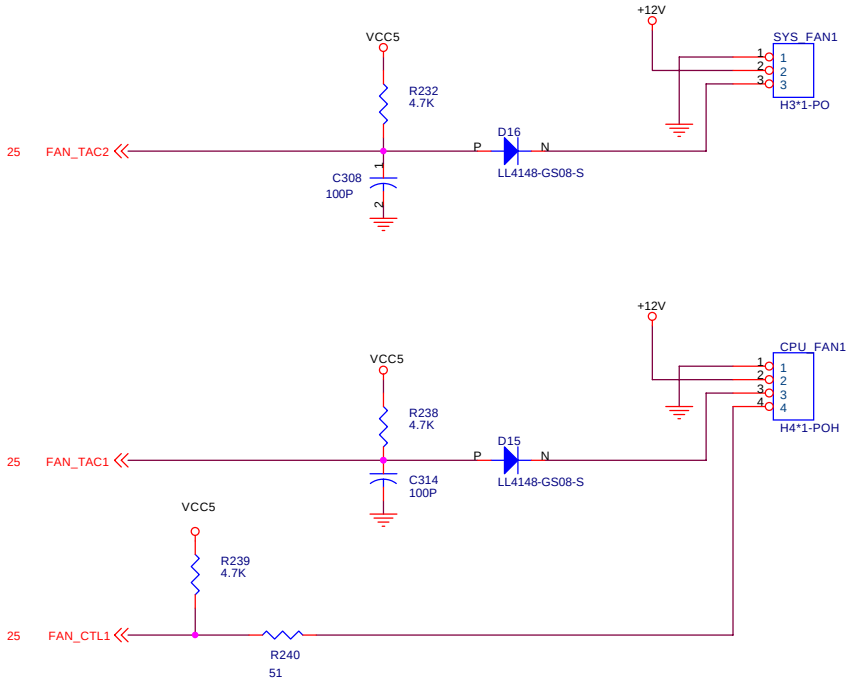


Temperature Monitor

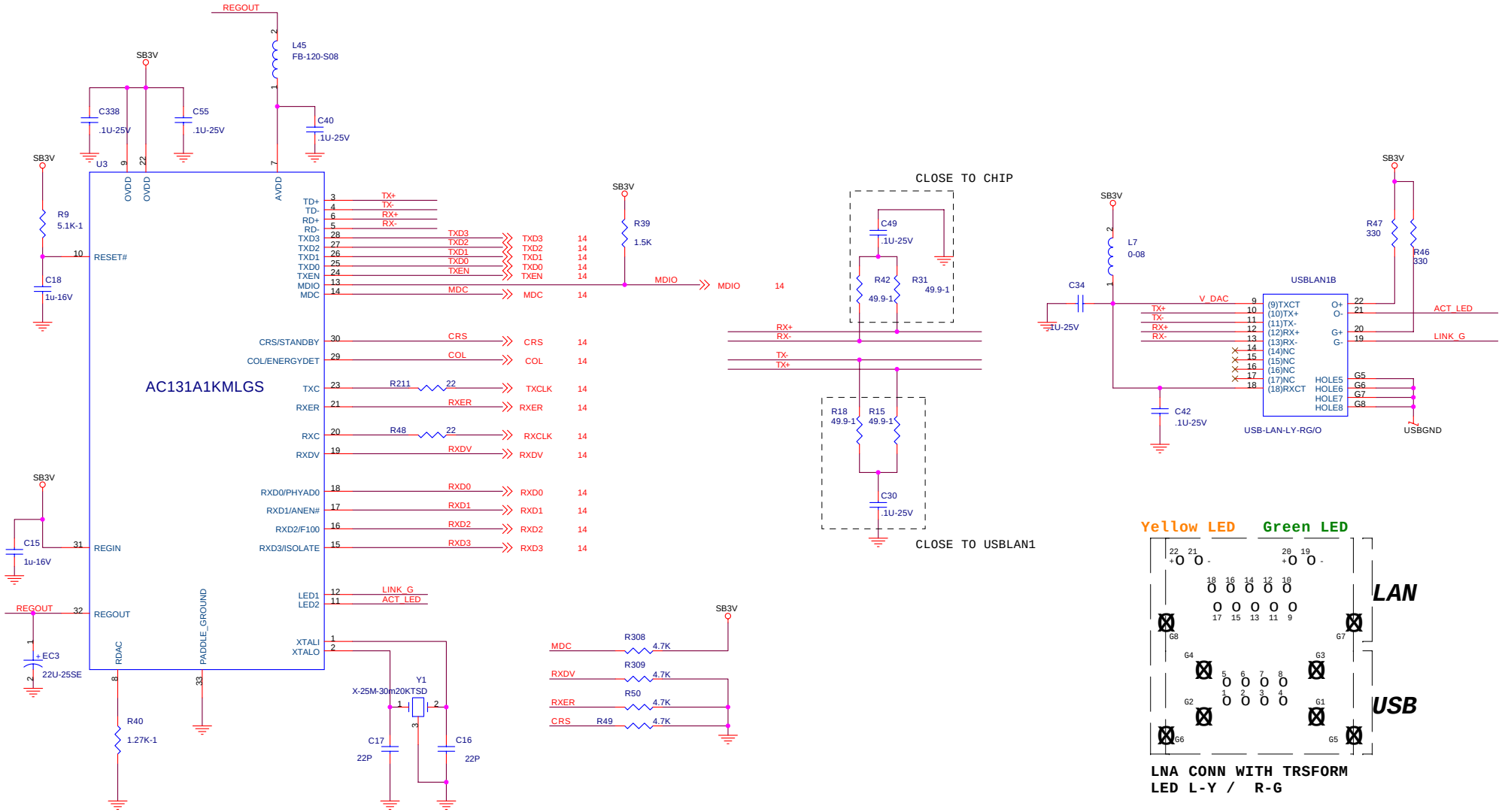
Choosing method of measuring temperature by either thermistor or diode



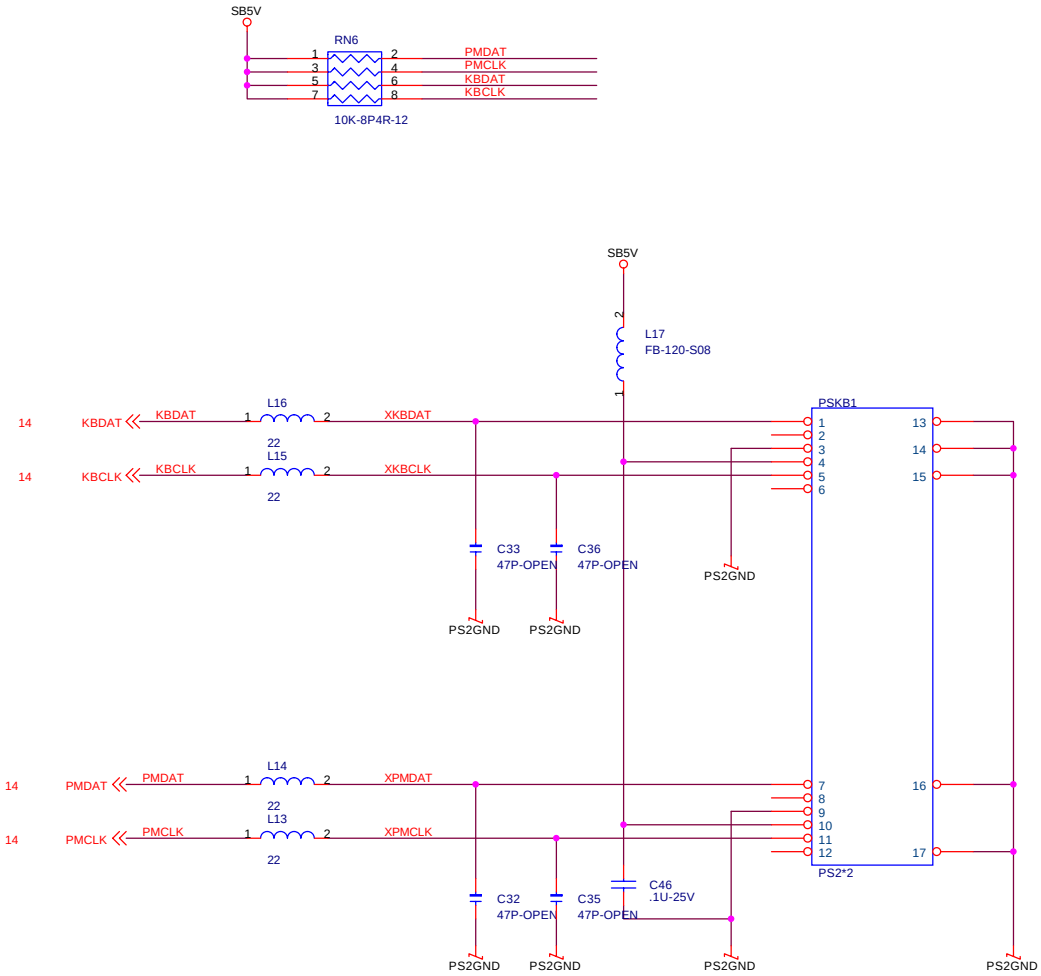
FAN Input and Output



Elitegroup Computer Systems			
Title: Hardware Monitor/FAN Contral			
Size: Custom	Document Number: A33G		Rev: 1.0
Date: Monday, May 08, 2006	Sheet 28 of 37		



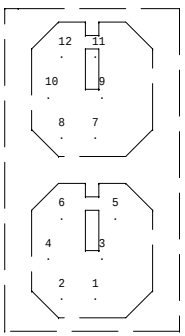
Elitegroup Computer Systems		
Title: 10/100 Lan PHY		
Size: Custom	Document Number: A33G	Rev: 1.0
Date: Monday, May 08, 2006	Sheet 29 of 37	



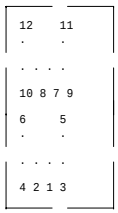
North Bridge Hardware Trap

Symbol	Description	Default
DLLEN-	CPUCLK/ZCLK PLL/DLL Circuit Enable 1: Disable 0: Enable	Internal Pull Down
TMODE0	Internal Test Modes 1: Test Mode 0: Normal	Internal Pull Down
TMODE1	Test Mode Selection 1: Mode 1 0: Mode 0	Internal Pull Down
TMODE2	Test Mode Enable 1: Enable 0: Disable	Internal Pull Down
TRAP[1..0]	NB ASLCLK Request Select 00: 133 MHz 01: 166/200 MHz 10: 66 MHz 11: 100 MHz	Internal Pull Down
TRAP2	NB ASL Serial Mode Initialization Enable 1: Packet mode 0: Serial mode	Internal Pull Down
TRAP[4..3]	Reserved	Internal Pull Down
TRAP5	PCIE PLL Bypass	Internal Pull Down
TRAP6	PCIE Symlock Test	Internal Pull Down
TRAP[8..7]	PCIE TX Fix Out	Internal Pull Down
TRAP[11..9]	Trap PLL1X Frequency Ratio Ratio 0 Ratio 1 000: divide 1 / divide 1 001: divide 2 / divide 2 010: divide 3 / divide 3 011: divide 4 / divide 4 100: divide 4 / divide 5	Internal Pull Down
TRAP[13..12]	Trap PLL2X Gain 00: PLL2X 200MHz 10: PLL2X 800MHz 11: PLL2X 1000MHz	Internal Pull Down
TRAP14	HyperTransport PLL Frequency Ratio Select 0: by logic decoded 1: by trapped	Internal Pull Down
TRAP15	HyperTransport PLL Gain Select 0: by logic decoded 1: by trapped	Internal Pull Down
TRAPA[1..0]	Trap PLL2X Frequency Ratio 0 00: divide 1 01: divide 2 10: divide 3 11: divide 4	Internal Pull Down
TRAPA[4..2]	Trap PLL2X Frequency Ratio 1 000: divide 1 001: divide 2 010: divide 3 011: divide 4 100: divide 5	Internal Pull Down
TRAPA[6..5]	TRAP PLL1X Gain 10: PLL1X 200MHz 11: PLL1X 250MHz (Recom. Value: 10)	Internal Pull Down
TRAPA7	For Internal Test	Internal Pull Down

CONNECTOR VIEW



TOP VIEW



	0	1	Default	internal pull-low (30~50K Ohm)
SPKR(First Flash Memory cycle type selection)	LPC Memory Cycle	Firmware Memory Cycle	0	Yes
SDATO(Trap from)	ROM	PCI AD	0	Yes
OC45-(SB debug mode)	enable	disable	1	No

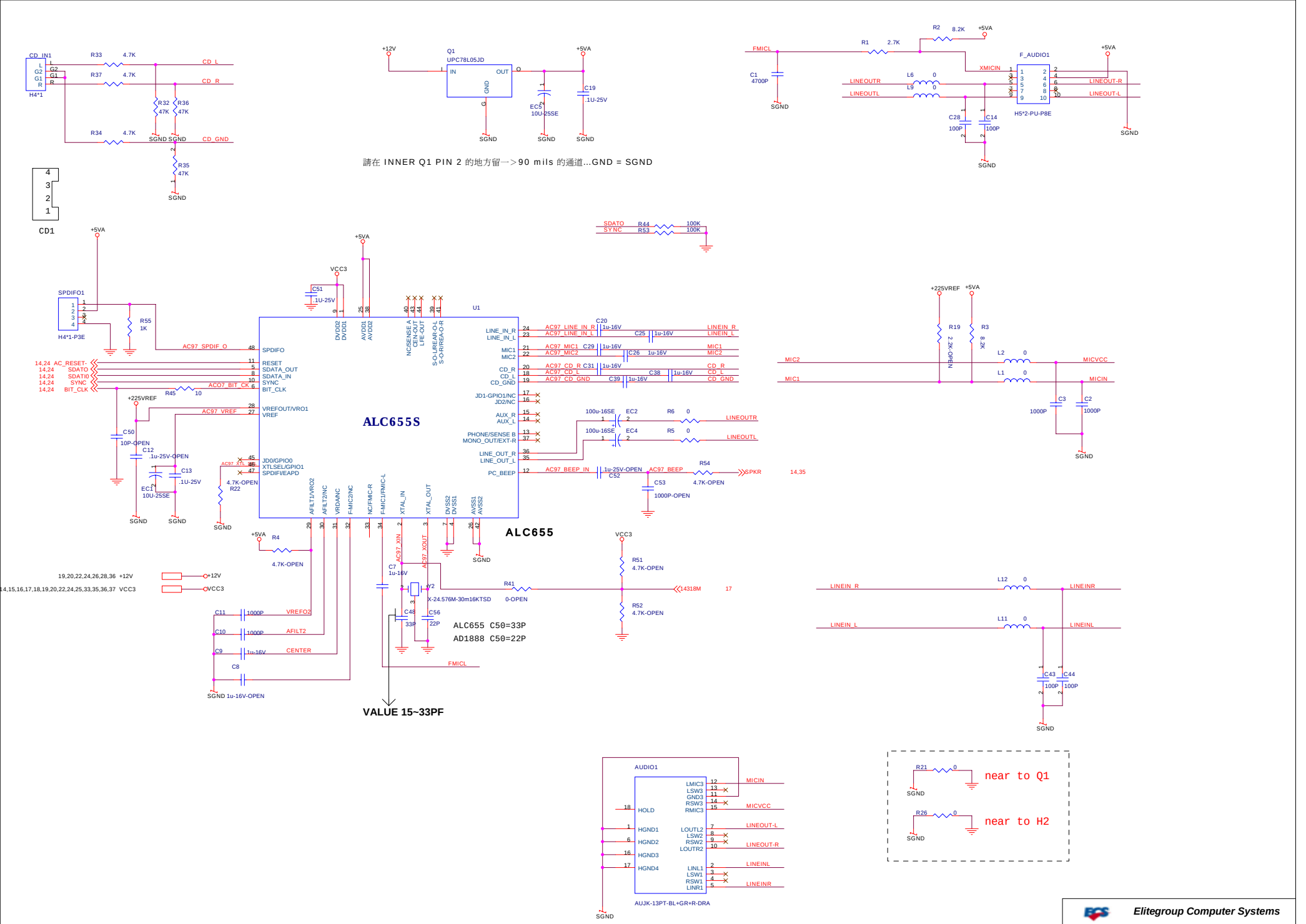
NOTE:
SIS IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THESE SCHEMATICS. THIS IS AN EXAMPLE ONLY.

Elitegroup Computer Systems

Title: KEYBOARD & MOUSE CONNECTORS

Size: Custom | Document Number: A33G | Rev: 1.0

Date: Monday, May 08, 2006 | Sheet 30 of 37

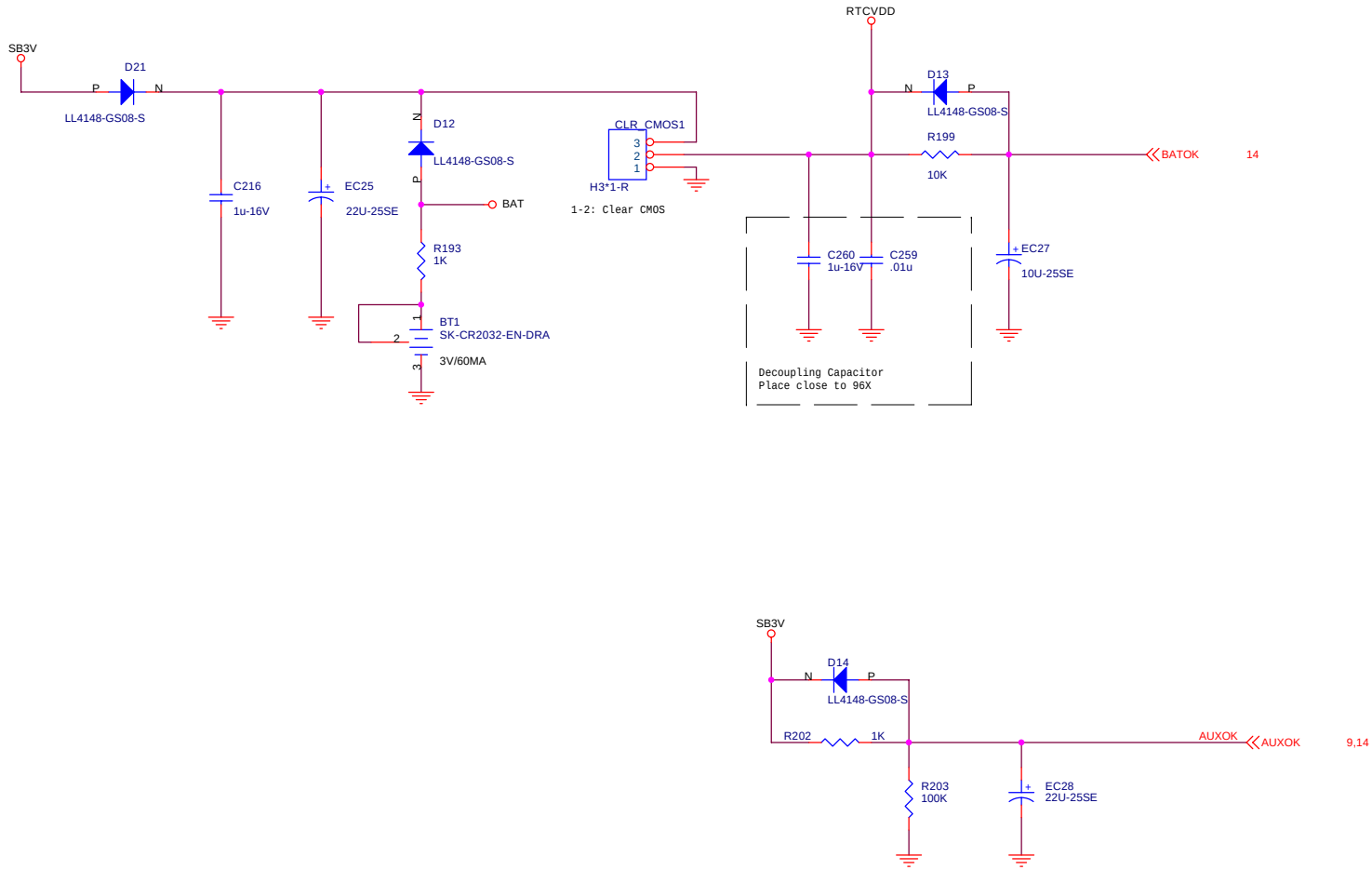


Elitegroup Computer Systems		
Title	AC97 CODEC ALC655/CMI9761A	
Size C	Document Number A33G	Rev 1.0
Date: Monday, May 08, 2006	Sheet 31 of 37	

RTC

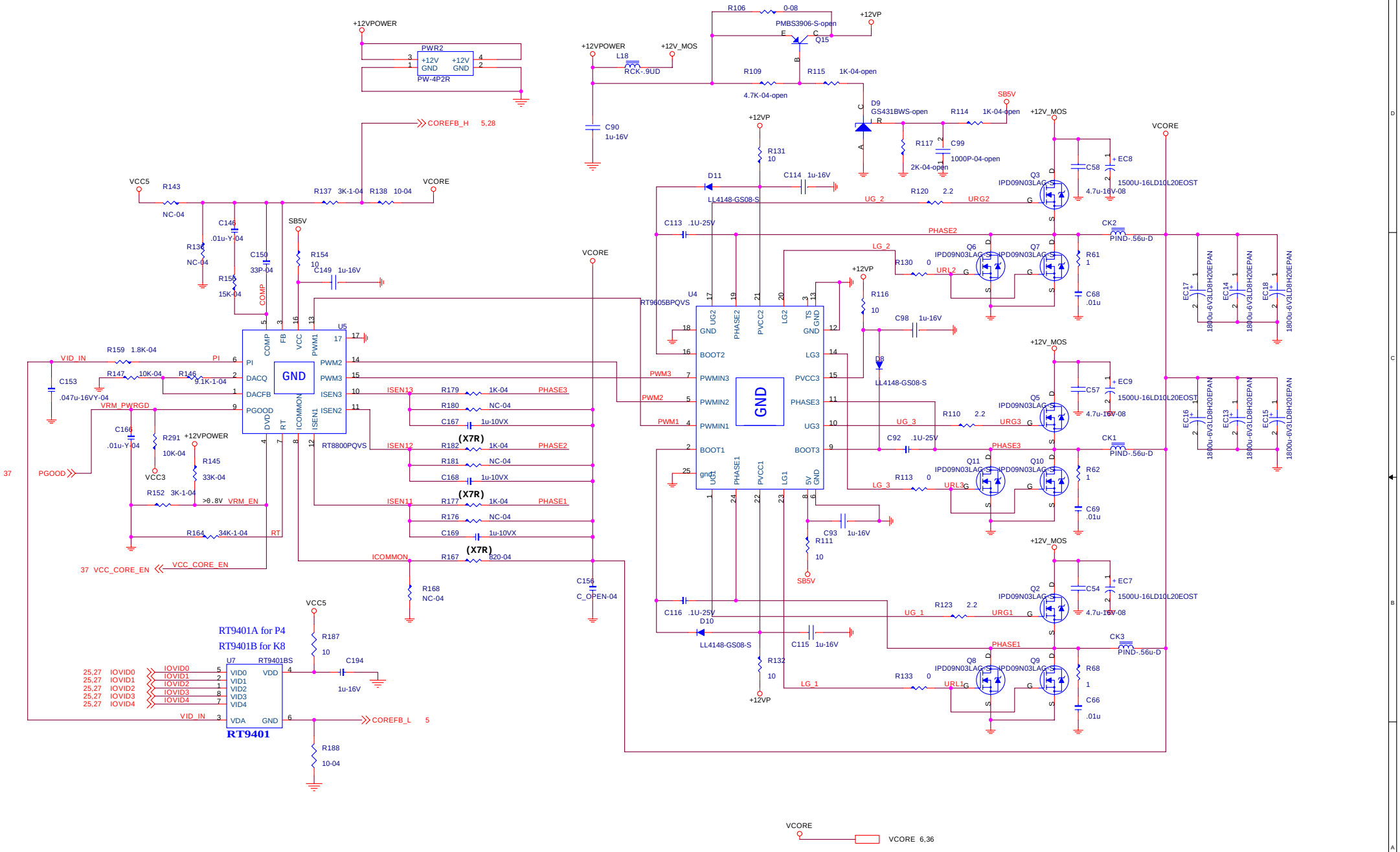
NOTE!
1.The RTCVDD is 3V
2.Decoupling capacitor must be close to 965 RTCVDD pin.

3.RTC circuit must strictly follow SiS's recommended design
SiS is not responsible for RTC problems from foreign designs.

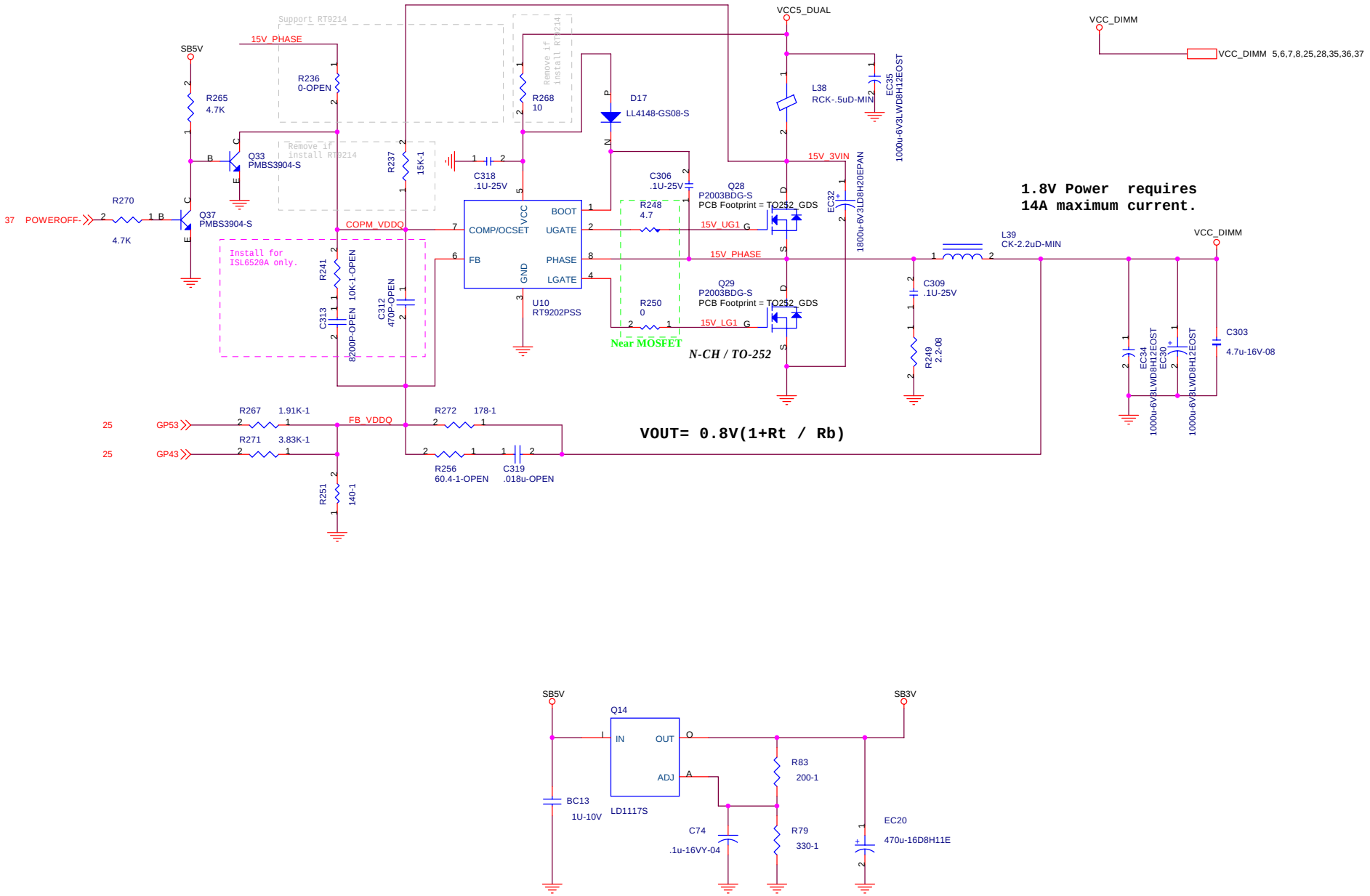


Elitegroup Computer Systems

Title	RTC Battery	
Size: Custom	Document Number: A33G	Rev: 1.0
Date: Monday, May 08, 2006	Sheet 32 of 37	

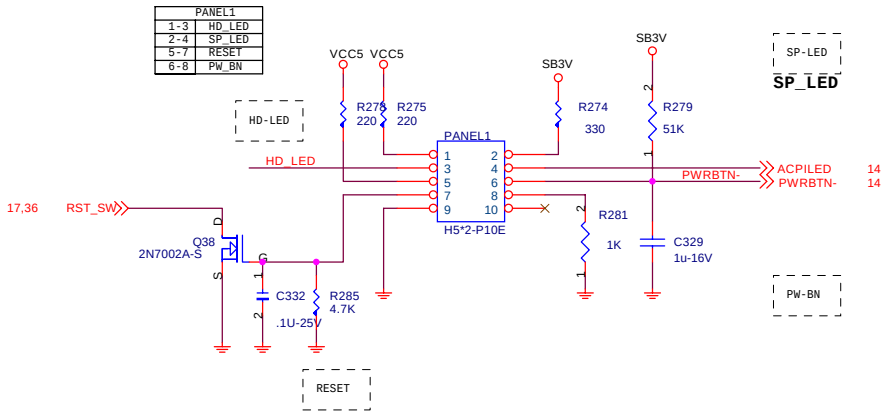

+12VPOWER
PWR2
+12V GND +12V GND
PW-4P2R
COREFB_H 5,28
VCC5
R143
NC-04
R137 3K-1-04
R138 10-04
VCORE
C146 .01u-Y-04
R136 NC-04
R155 15K-04
C150 33P-04
COMP
SB5V
R154 10
C149 1u-16V
U5
RT8800PQVS
VID_IN
R159 1.8K-04
PI
R147 10K-04
R146 9.1K-1-04
DACQ
DACFB
PGOOD
C153 .047u-16VY-04
VRM_PWRGD
C166 .01u-Y-04
R291 10K-04
+12VPOWER
R145 33K-04
R152 3K-1-04
>0.8V VRM_EN
R164 34K-1-04
RT
37 PGOOD
37 VCC_CORE_EN
VCC_CORE_EN
ICOMMON
R167 820-04
R168 NC-04
C156 C_OPEN-04
ISEN13
R179 1K-04
PHASE3
R180 NC-04
C167 1u-10VX
(X7R)
ISEN12
R182 1K-04
PHASE2
R181 NC-04
C168 1u-10VX
(X7R)
ISEN11
R177 1K-04
PHASE1
R176 NC-04
C169 1u-10VX
(X7R)
PWM3
PWM2
PWM1
RT9401A for P4
RT9401B for K8
U7 RT9401BS
25,27 IOVID0
25,27 IOVID1
25,27 IOVID2
25,27 IOVID3
25,27 IOVID4
VID_IN
RT9401
R187 10
C194 1u-16V
R188 10-04
COREFB_L 5
+12VPOWER
L18 RCK-.9UD
+12V_MOS
R106 0-08
PMBS3906-S-open
Q15
+12VP
R109 4.7K-04-open
R115 1K-04-open
C90 1u-16V
D9 GS431BWS-open
R114 1K-04-open
SB5V
R117 2K-04-open
C99 1000P-04-open
R131 10
D11 LL4148-GS08-S
C114 1u-16V
R120 2.2
UG_2
URG2
Q3 IPD09N03LAG
C58 4.7u-16V-08
EC8 1500U-16LD10L20EOST
C113 .1U-25V
PHASE2
CK2 PIND-.56u-D
LG_2
R130 0
URL2
Q6 IPD09N03LAG
Q7 IPD09N03LAG
R61 1
C68 .01u
EC17 EC14 EC18 1800u-6V3LD8H20EPAN
U4 RT9605BPQVS
UG2 PHASE2 PVCC2 LG2 TS GND
GND BOOT2 PWMIN3 PWMIN2 PWMIN1 BOOT1 gnd
LG3 PVCC3 PHASE3 UG3 BOOT3
UG1 PHASE1 PVCC1 LG1 5V GND
R116 10
C98 1u-16V
D8 LL4148-GS08-S
C92 .1U-25V
R110 2.2
UG_3
URG3
Q5 IPD09N03LAG
C57 4.7u-16V-08
EC9 1500U-16LD10L20EOST
CK1 PIND-.56u-D
LG_3
R113 0
URL3
Q11 IPD09N03LAG
Q10 IPD09N03LAG
R62 1
C69 .01u
EC16 EC13 EC15 1800u-6V3LD8H20EPAN
R111 10
C93 1u-16V
C116 .1U-25V
D10 LL4148-GS08-S
C115 1u-16V
R123 2.2
UG_1
URG1
Q2 IPD09N03LAG
C54 4.7u-16V-08
EC7 1500U-16LD10L20EOST
CK3 PIND-.56u-D
PHASE1
R132 10
LG_1
R133 0
URL1
Q8 IPD09N03LAG
Q9 IPD09N03LAG
R68 1
C66 .01u
VCORE
VCORE 6,36
Elitegroup Computer Systems
Title
VCORE
Size Custom
Document Number A33G
Rev 1.0
Date: Monday, May 08, 2006
Sheet 33 of 37

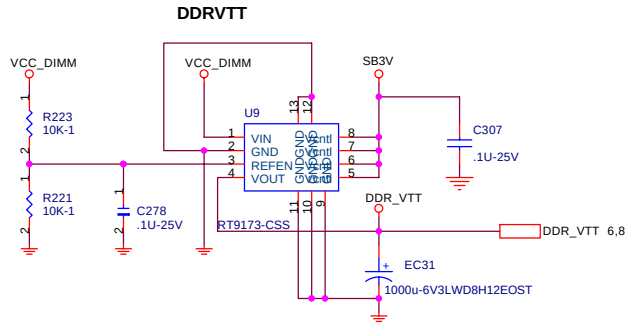
U17 只能使用 5V,那是不是那些零件不需要

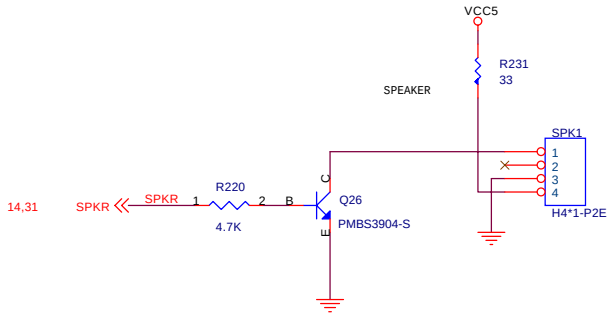


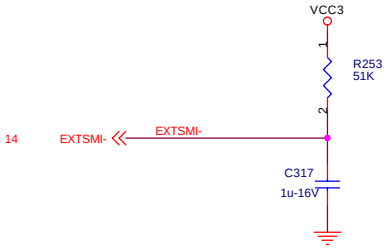
VCC_DIMM 5,6,7,8,25,28,35,36,37

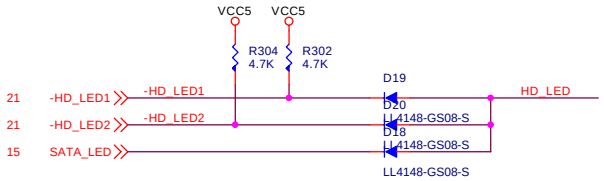
Elitegroup Computer Systems			
Title: VCC_DIMM & IVDD			
Size: Custom	Document Number: A33G		Rev: 1.0
Date: Monday, May 08, 2006	Sheet 34 of 37		

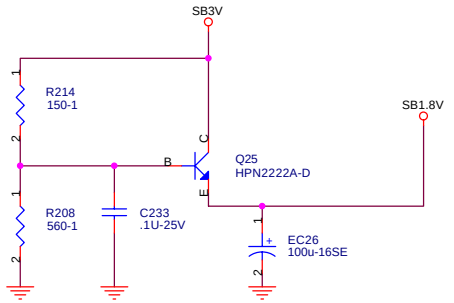












Elitegroup Computer Systems	
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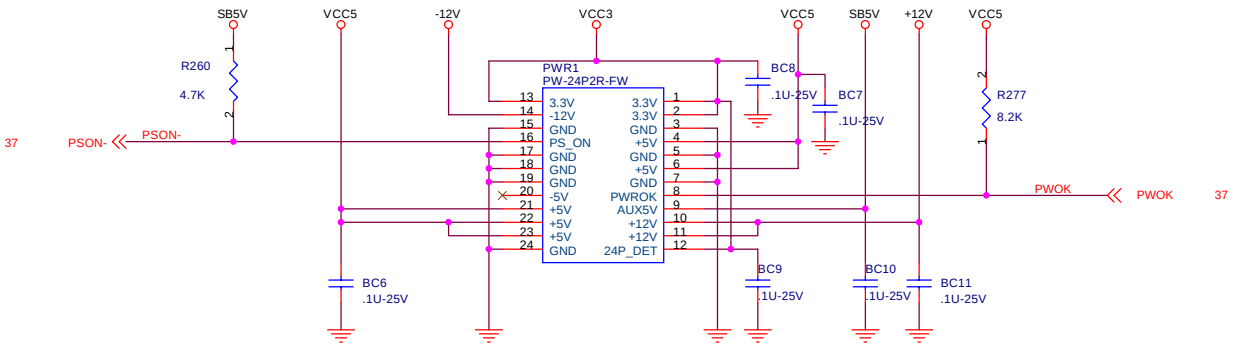
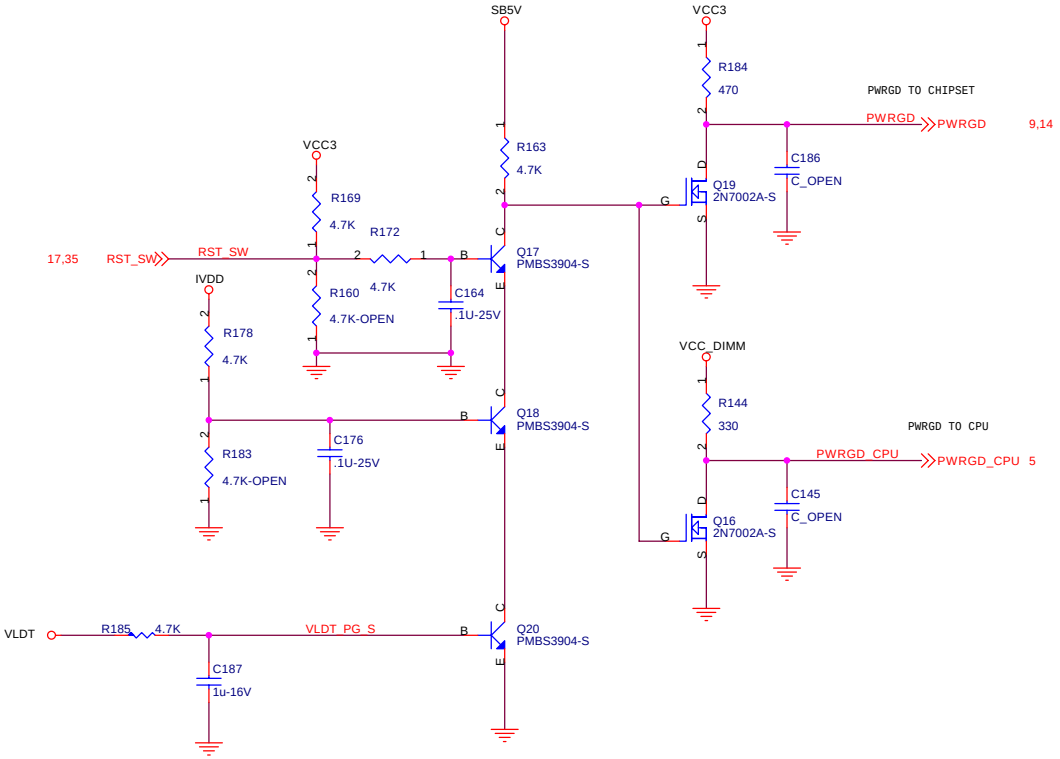
Size: Custom	Document Number: A33G
Rev: 1.0	
Date: Monday, May 08, 2006	Sheet 35 of 37





Elitegroup Computer Systems			
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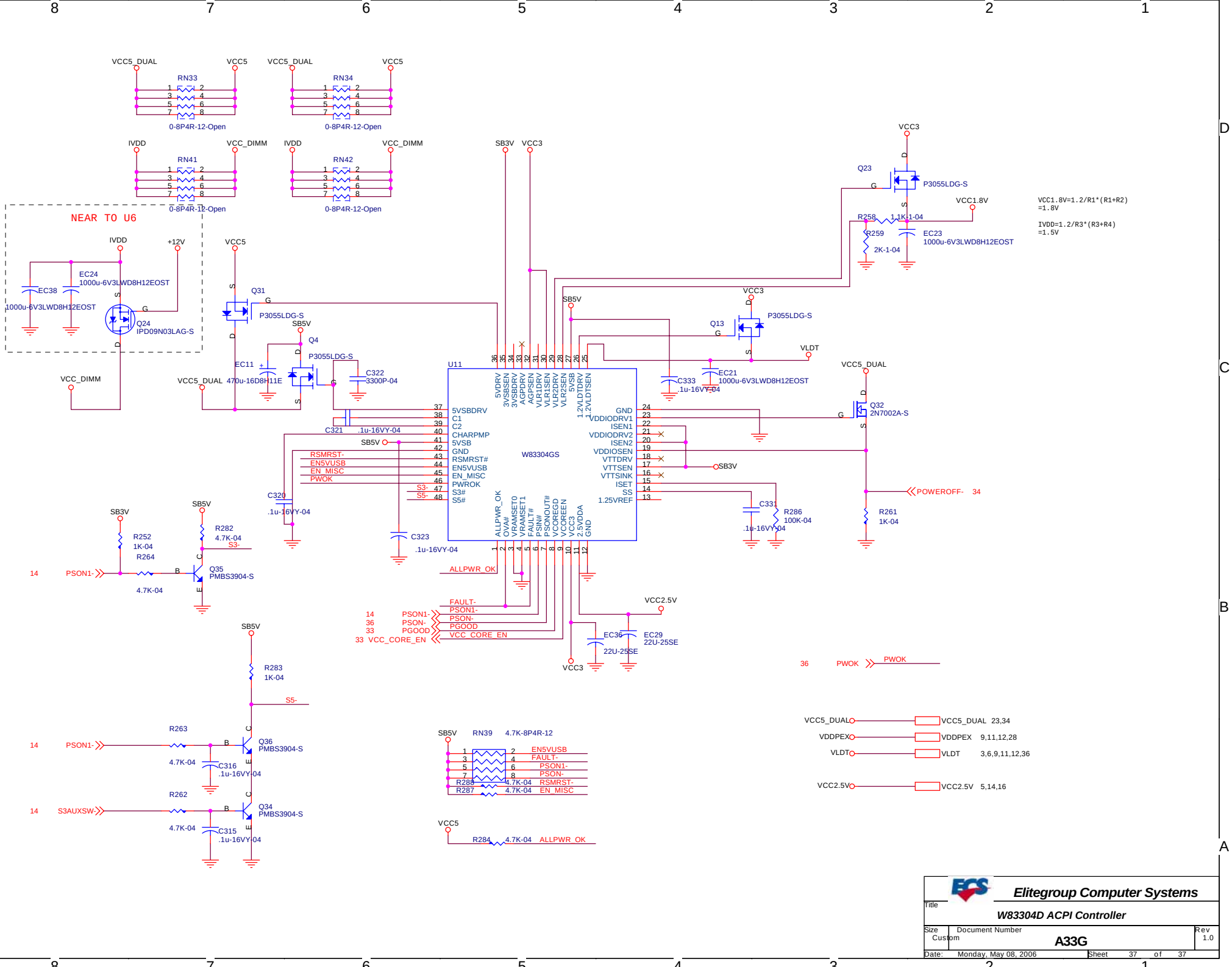
Size: Custom	Document Number: A33G		Rev: 1.0
Date: Monday, May 08, 2006	Sheet 36 of 37		



Title	Elitegroup Computer Systems
	W83304D ACPI Controller
Size: Custom	Document Number: A33G
Rev	1.0
Date: Monday, May 08, 2006	Sheet 37 of 37