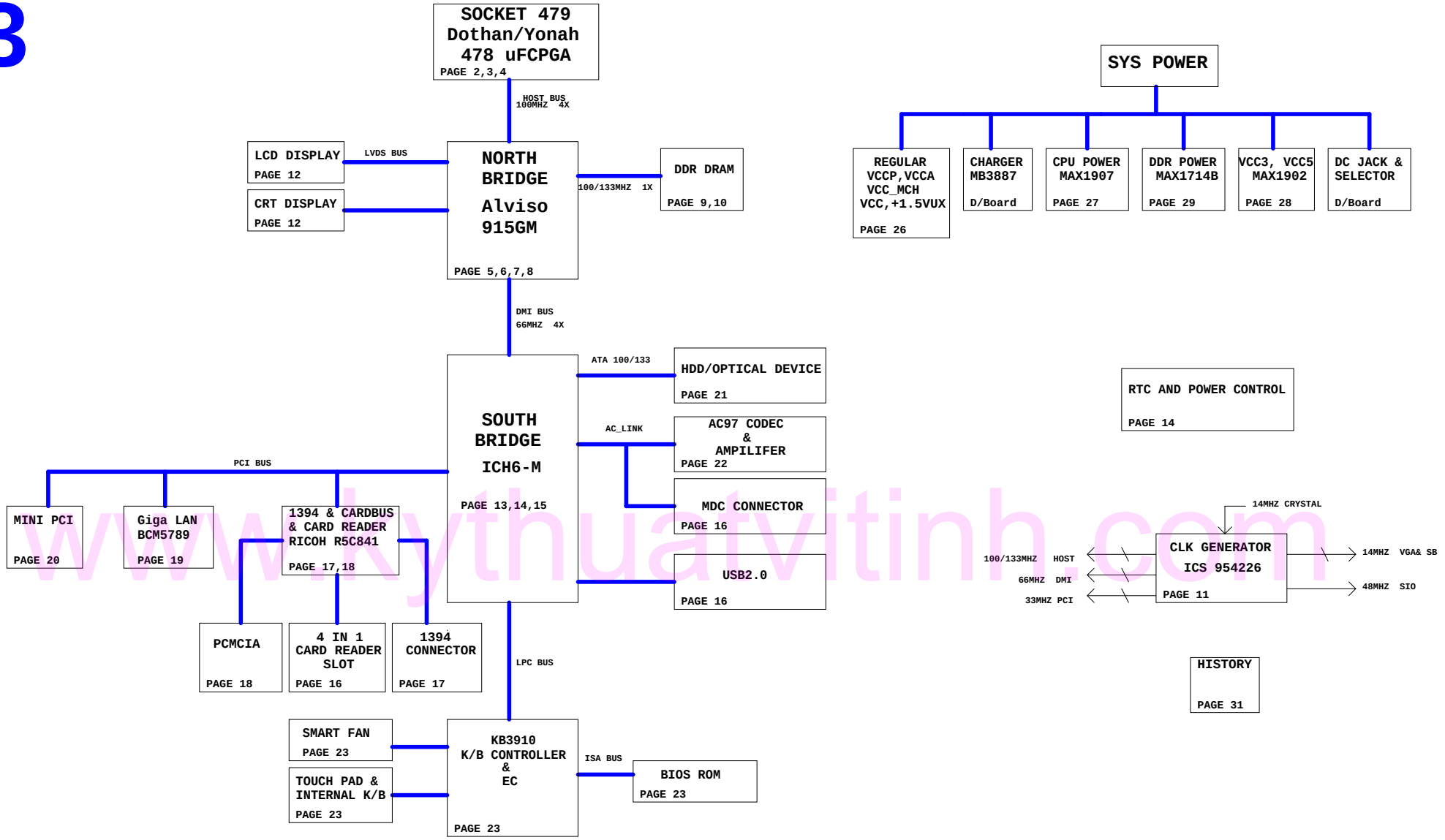
223



PCB P/N:15-F63-011000

PAGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
REV	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
DATE	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05

PAGE	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
REV	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0				
DATE	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05	06/24/05				

Digitally signed by fdsf
DN: cn=fdsf, o=fsdfsd, ou=ffsdf, email=fdfsd@fsdff, c=US
Date: 2010.01.06 06:15:34 +07'00'

Approved by	Checked by	Designed by

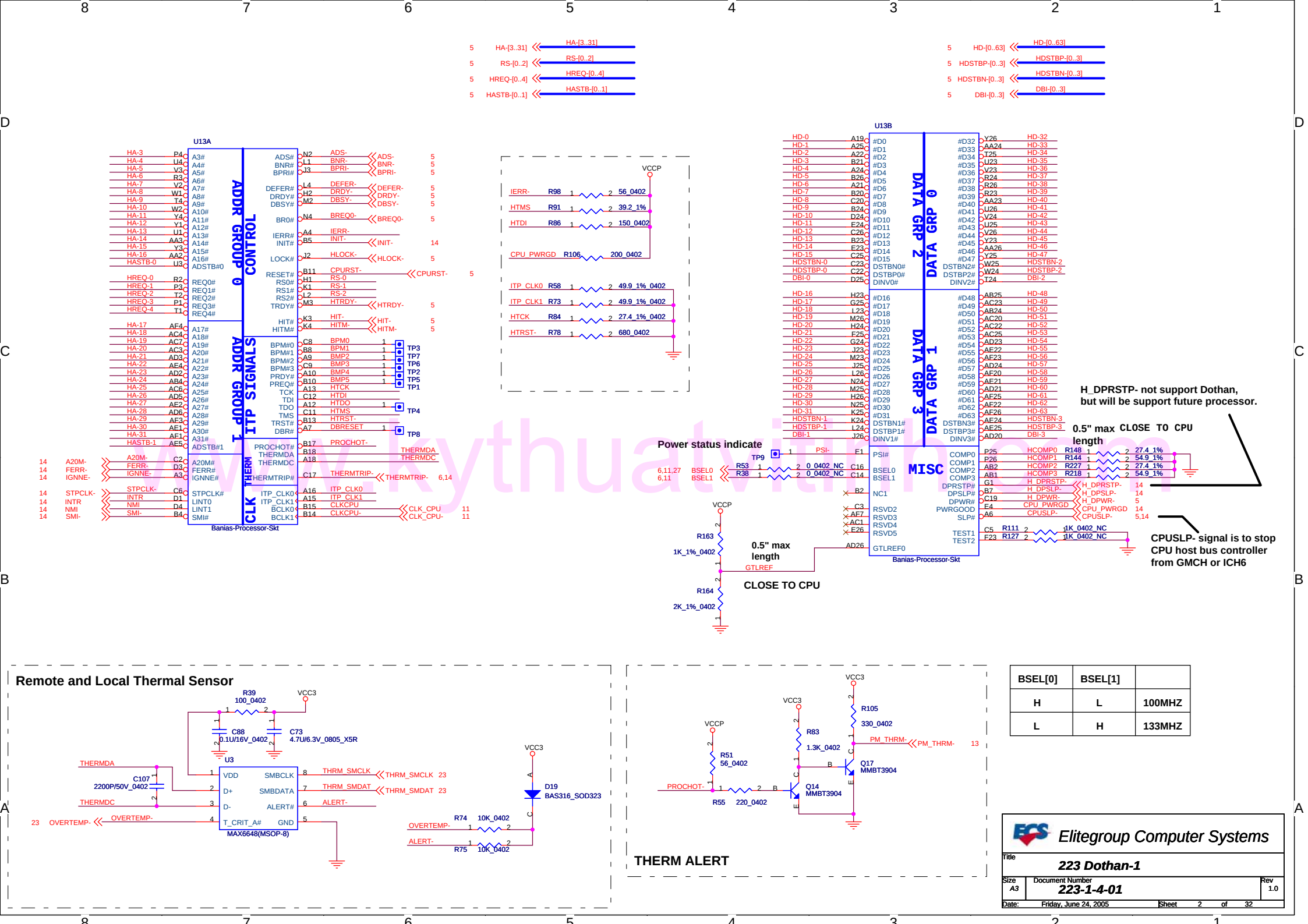
P.Leader

Elitegroup Computer Systems

Title: 223 BLOCK DIAGRAM

Size: A2 | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 1 of 32



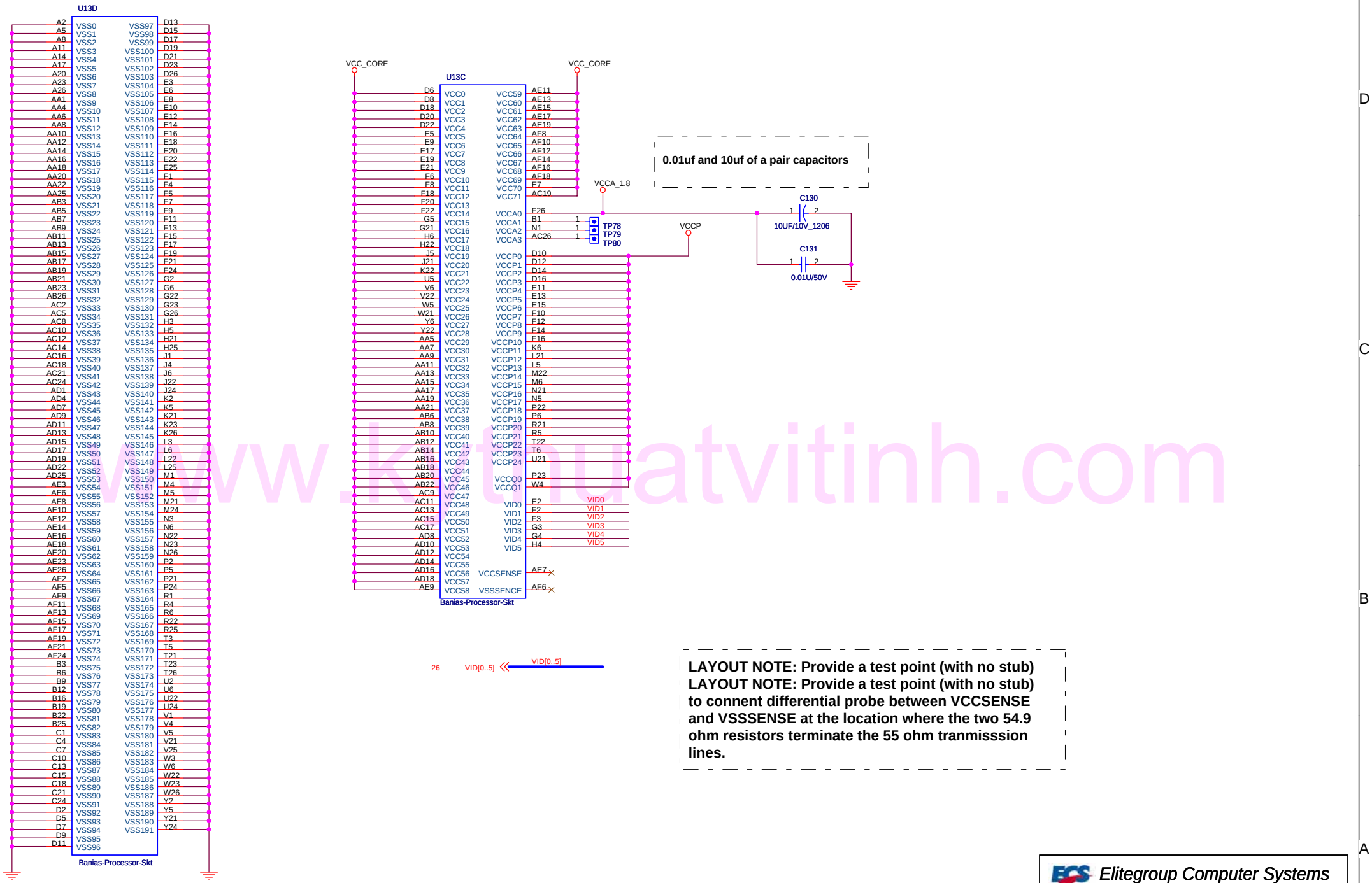
BSEL[0]	BSEL[1]	
H	L	100MHZ
L	H	133MHZ

Elitegroup Computer Systems

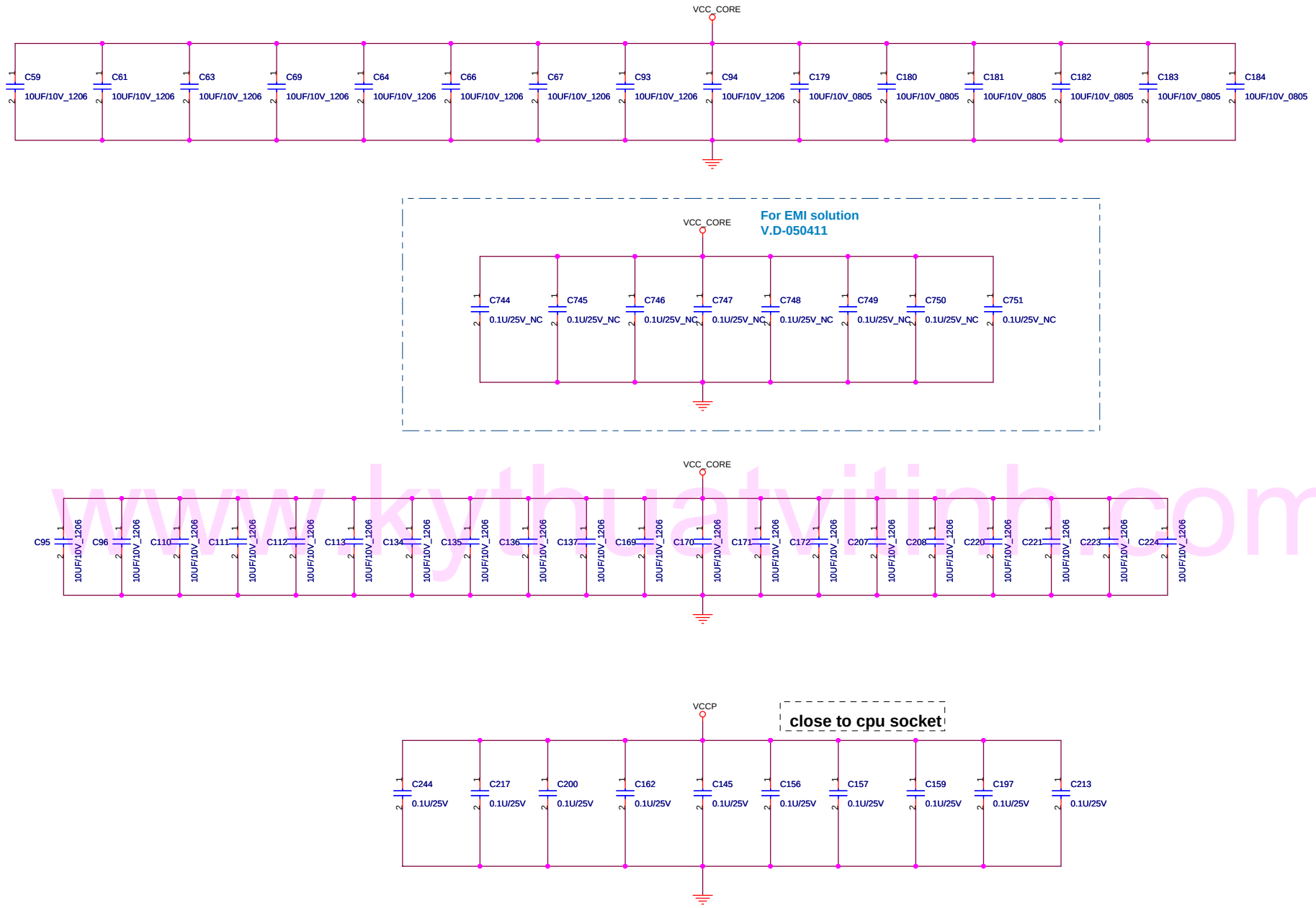
Title: 223 Dothan-1

Size: A3 | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 2 of 32

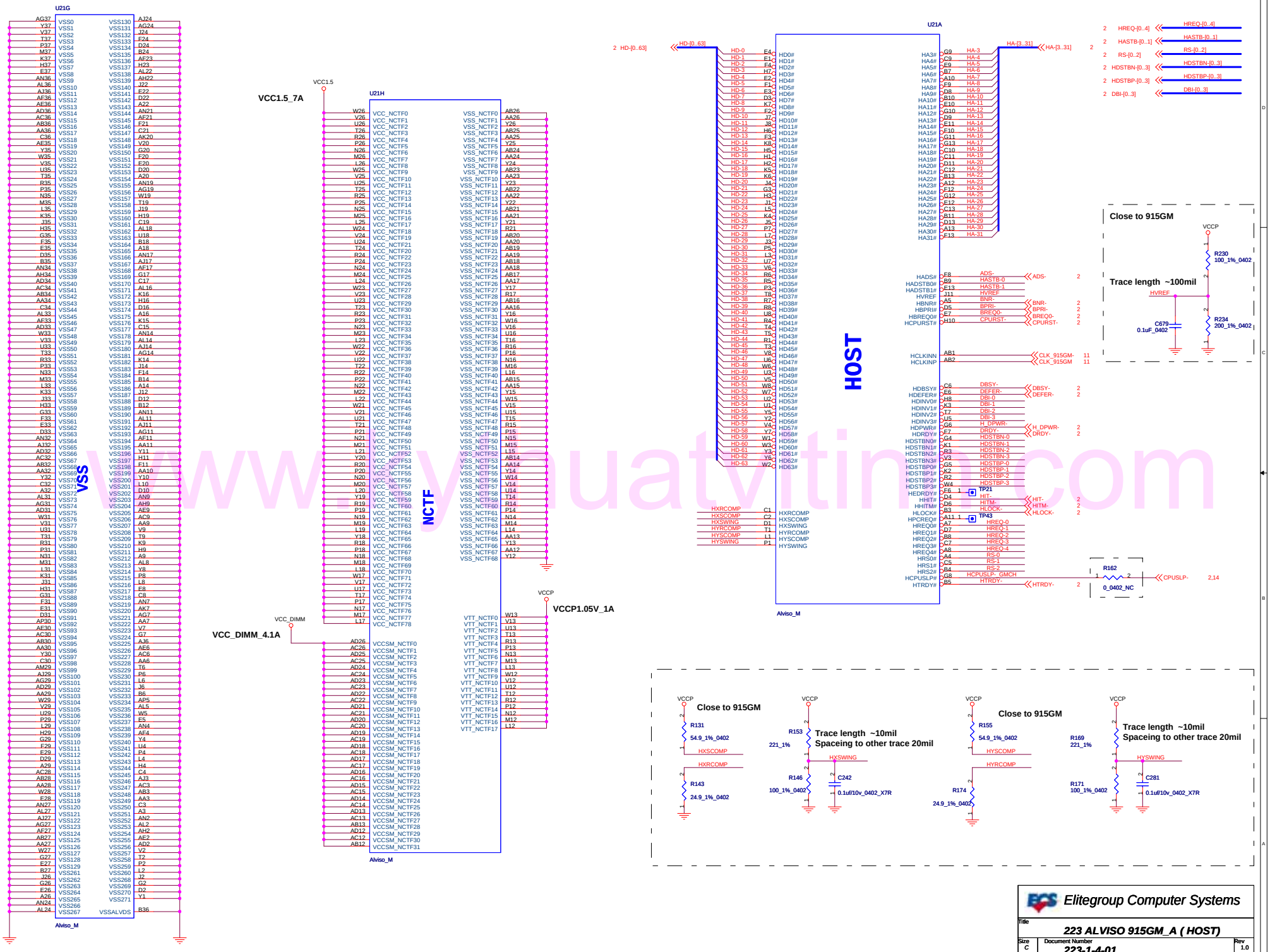


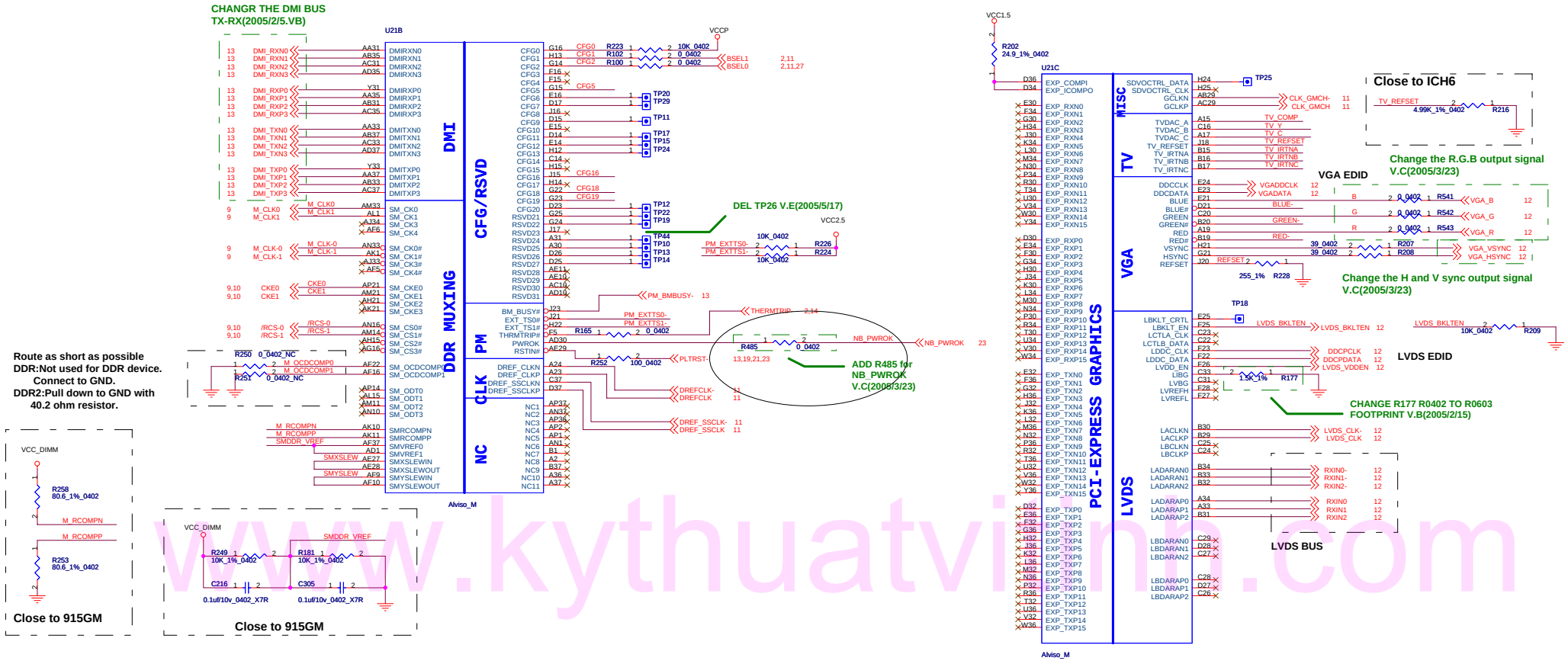
Elitegroup Computer Systems	
Title	223 Dothan-2
Size: A3	Document Number: 223-1-4-01
Rev: 1.0	
Date: Friday, June 24, 2005	Sheet 3 of 32



Elitegroup Computer Systems

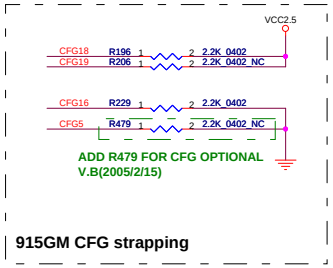
Title	223 Dothan-3	
Size: B	Document Number: 223-1-4-01	Rev: 1.0
Date: Friday, June 24, 2005	Sheet 4 of 32	

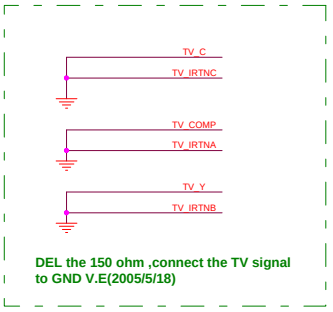


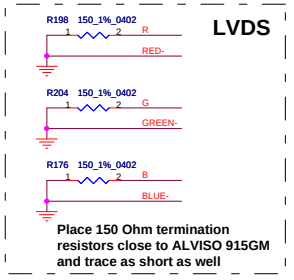


CFG[0..2] FSB Frequency Select
CFG[3..17] have internal pullup resistors
CFG[18..20] have internal pulldown resistors

CFG[2:0] 001= FSB 533 MHZ 101= FSB 400 MHZ	**CFG16** 0=Dynamic ODT Disable 1=Dynamic ODT Enable (default)
CFG5 0=DMIx2 1=DMIx4(default)	**CFG11** 0= CPU 533(default) NO FUNCTION NOW 1= CPU 400
CFG6 0=DDR2 1=DDR (default)	**CFG18** 0=1.05V(default) for 915PM 1=1.5V for 915GM Alviso 915GM core voltage select
CFG7 0=Mobile Prescott 1=Dothan (deault)	**CFG19** 0= 1.05V(default) 1= 1.2V FSB I/O volltage (CPU VTT select)
CFG9 0=Lane Reversal Enable 1=Normal Operation (deault)	0= No SDVO device(default) 1= SDVO device present
CFG[13:12] 01=XOR MODE 10=All ZMODE 11=Normal Operation (Default)	





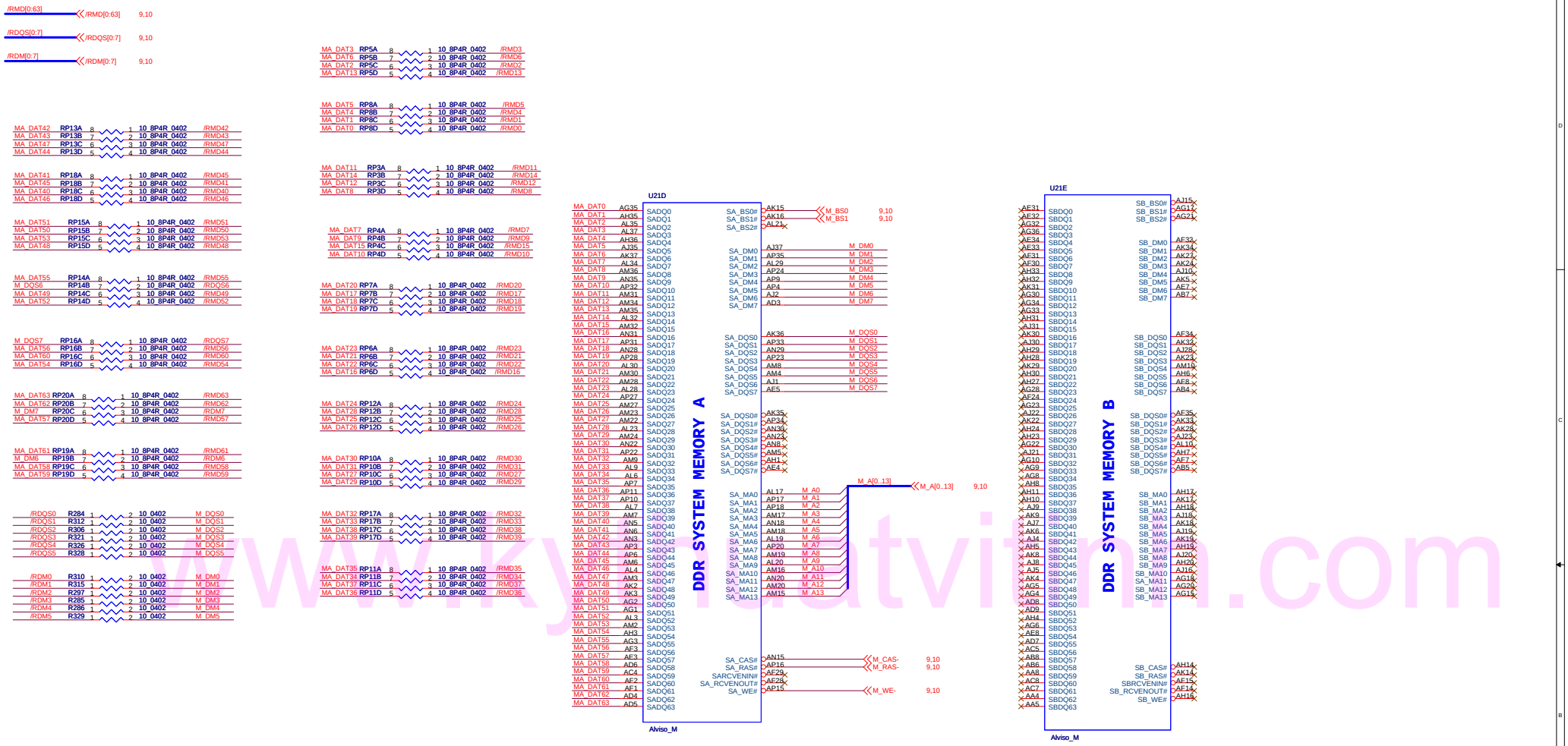


Elitegroup Computer Systems

Title: 223 ALVISO 915GM_B (VGA,DMI)

Size	Document Number	Rev
C	223-1-4-01	1.0

Date: Friday, June 24, 2005 Sheet 6 of 32

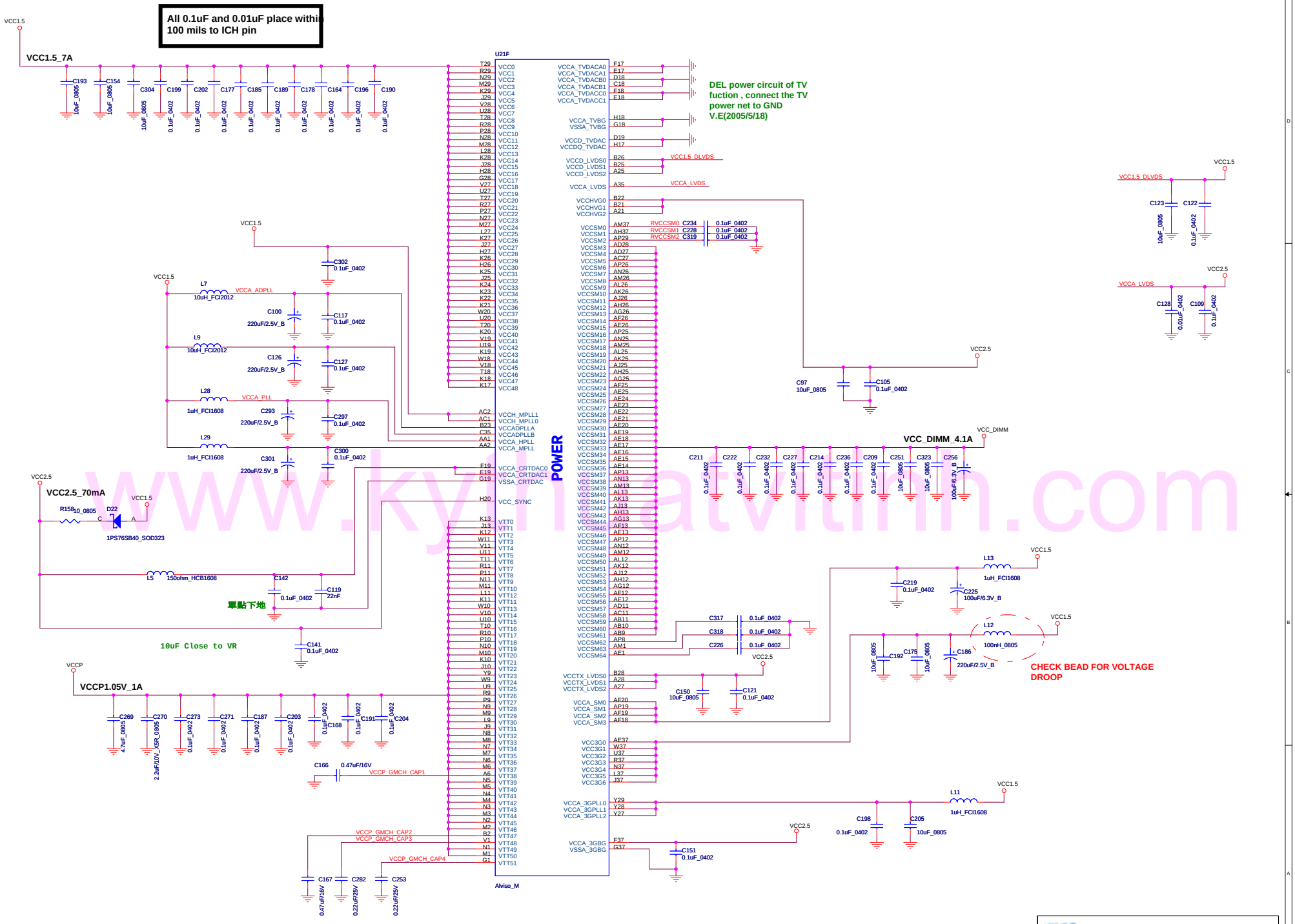


Elitegroup Computer Systems

Title: 223 ALVISO_C (DDR)

Size: C | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 7 of 32

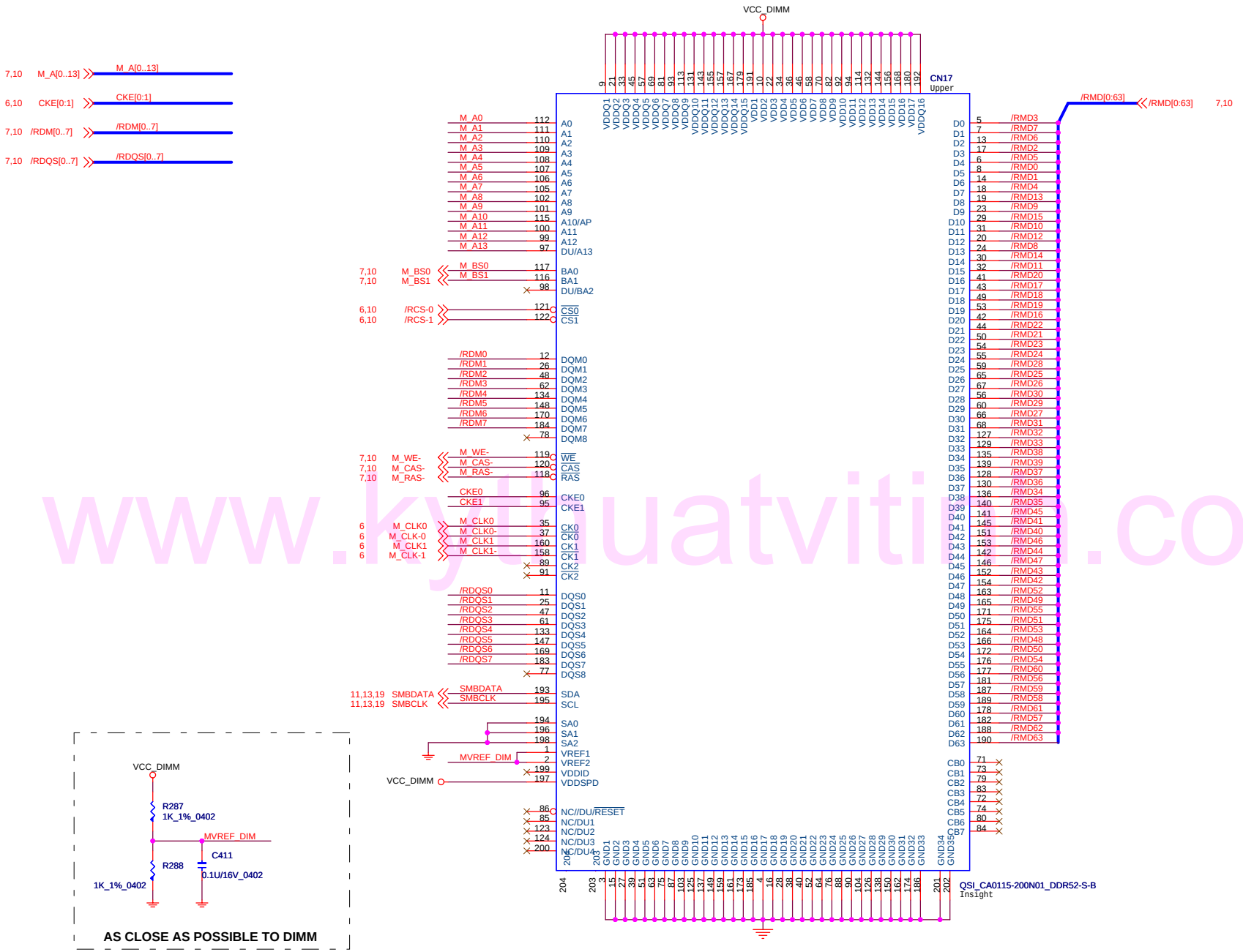


Elitegroup Computer Systems

Title: 223 ALVISO_D (POWER)

Size: C | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 8 of 32



Elitegroup Computer Systems

Title	223 DDR SODIMM	
Size A3	Document Number 223-1-4-01	Rev 1.0
Date: Friday, June 24, 2005	Sheet 9 of 32	

DDR Parallel Termination

/RMD[0..63] /RMD[0..63] 7,9
/RDQS[0..7] /RDQS[0..7] 7,9
M_A[0..13] M_A[0..13] 7,9
/RCS-[0..1] /RCS-[0..1] 6,9
CKE[0:1] CKE[0:1] 6,9
M_BS[0..1] M_BS[0..1] 7,9
/RDM[0..7] /RDM[0..7] 7,9

DDR_VTT

RP21A 8 1 56_8P4R_0402 /RMD5
RP21B 7 2 56_8P4R_0402 /RMD0
RP21C 6 3 56_8P4R_0402 /RDM0
RP21D 5 4 56_8P4R_0402 /RMD1

RP23A 8 1 56_8P4R_0402 /RMD6
RP23B 7 2 56_8P4R_0402 /RDQS0
RP23C 6 3 56_8P4R_0402 /RMD7
RP23D 5 4 56_8P4R_0402 /RMD3

RP24A 8 1 56_8P4R_0402 /RMD12
RP24B 7 2 56_8P4R_0402 /RMD8
RP24C 6 3 56_8P4R_0402 /RDM1
RP24D 5 4 56_8P4R_0402 /RMD14

RP25A 8 1 56_8P4R_0402 /RMD10
RP25B 7 2 56_8P4R_0402 /RDQS1
RP25C 6 3 56_8P4R_0402 /RMD9
RP25D 5 4 56_8P4R_0402 /RMD13

RP27A 8 1 56_8P4R_0402 /RMD16
RP27B 7 2 56_8P4R_0402 /RMD22
RP27C 6 3 56_8P4R_0402 /RDM2
RP27D 5 4 56_8P4R_0402 /RMD21

RP26A 8 1 56_8P4R_0402 /RDQS2
RP26B 7 2 56_8P4R_0402 /RMD18
RP26C 6 3 56_8P4R_0402 /RMD17
RP26D 5 4 56_8P4R_0402 /RMD20

RP29A 8 1 56_8P4R_0402 /RMD26
RP29B 7 2 56_8P4R_0402 /RDQS3
RP29C 6 3 56_8P4R_0402 /RMD28
RP29D 5 4 56_8P4R_0402 /RMD24

RP28A 8 1 56_8P4R_0402 /RMD30
RP28B 7 2 56_8P4R_0402 /RMD29
RP28C 6 3 56_8P4R_0402 /RDM3
RP28D 5 4 56_8P4R_0402 /RMD27

RP34A 8 1 56_8P4R_0402 /RMD37
RP34B 7 2 56_8P4R_0402 /RMD36
RP34C 6 3 56_8P4R_0402 /RMD34
RP34D 5 4 56_8P4R_0402 /RMD35

RP36A 8 1 56_8P4R_0402 /RDQS4
RP36B 7 2 56_8P4R_0402 /RMD39
RP36C 6 3 56_8P4R_0402 /RMD38
RP36D 5 4 56_8P4R_0402 /RMD33

RP37A 8 1 56_8P4R_0402 /RMD44
RP37B 7 2 56_8P4R_0402 /RMD47
RP37C 6 3 56_8P4R_0402 /RMD43
RP37D 5 4 56_8P4R_0402 /RMD42

RP42A 8 1 56_8P4R_0402 /RMD52
RP42B 7 2 56_8P4R_0402 /RMD46
RP42C 6 3 56_8P4R_0402 /RMD40
RP42D 5 4 56_8P4R_0402 /RDM5

RP43A 8 1 56_8P4R_0402 /RMD51
RP43B 7 2 56_8P4R_0402 /RMD55
RP43C 6 3 56_8P4R_0402 /RDQS6
RP43D 5 4 56_8P4R_0402 /RMD49

RP38A 8 1 56_8P4R_0402 /RMD53
RP38B 7 2 56_8P4R_0402 /RMD48
RP38C 6 3 56_8P4R_0402 /RDM6
RP38D 5 4 56_8P4R_0402 /RMD50

RP48A 8 1 56_8P4R_0402
RP48B 7 2 56_8P4R_0402 /RMD63
RP48C 6 3 56_8P4R_0402 /RMD58
RP48D 5 4 56_8P4R_0402 /RMD59

RP40A 8 1 56_8P4R_0402 /RMD61
RP40B 7 2 56_8P4R_0402 /RMD57
RP40C 6 3 56_8P4R_0402 /RDM7
RP40D 5 4 56_8P4R_0402 /RMD62

R305 1 2 56_0402 /RMD2
R308 1 2 56_0402 /RMD15
R309 1 2 56_0402 /RMD19
R311 1 2 56_0402 /RMD25

DDR_VTT

C465 1 2 10UF/10V_1206

RP35A 8 1 56_8P4R_0402 /RMD32
RP35B 7 2 56_8P4R_0402 /RCS-0
RP35C 6 3 56_8P4R_0402 M_WE- M_WE- 7,9
RP35D 5 4 56_8P4R_0402 M_BS0

RP33A 8 1 56_8P4R_0402 M_A10
RP33B 7 2 56_8P4R_0402 M_A1
RP33C 6 3 56_8P4R_0402 M_A3
RP33D 5 4 56_8P4R_0402 M_A5

RP32A 8 1 56_8P4R_0402 M_BS1
RP32B 7 2 56_8P4R_0402 M_RAS- M_RAS- 7,9
RP32C 6 3 56_8P4R_0402 M_CAS- M_CAS- 7,9
RP32D 5 4 56_8P4R_0402 /RCS-1

RP31A 8 1 56_8P4R_0402 M_A6
RP31B 7 2 56_8P4R_0402 M_A4
RP31C 6 3 56_8P4R_0402 M_A2
RP31D 5 4 56_8P4R_0402 M_A0

R314 1 2 56_0402 CKE1
R408 1 2 56_0402 M_A11
R410 1 2 56_0402 M_A8

RP30A 8 1 56_8P4R_0402 M_A13
RP30B 7 2 56_8P4R_0402 M_A7
RP30C 6 3 56_8P4R_0402 M_A9
RP30D 5 4 56_8P4R_0402 M_A12

RP41A 8 1 56_8P4R_0402 /RDQS5
RP41B 7 2 56_8P4R_0402 /RMD45
RP41C 6 3 56_8P4R_0402 /RMD41
RP41D 5 4 56_8P4R_0402 /RDM4

RP39A 8 1 56_8P4R_0402 /RMD54
RP39B 7 2 56_8P4R_0402 /RMD60
RP39C 6 3 56_8P4R_0402 /RMD56
RP39D 5 4 56_8P4R_0402 /RDQS7

R396 1 2 56_0402 /RMD4
R401 1 2 56_0402 /RMD11
R403 1 2 56_0402 /RMD23
R406 1 2 56_0402 /RMD31

DDR_VTT
CKE0 R407 1 2 56_0402

DDR_VTT
C449 2 1 0.1U/16V_0402
C448 2 1 0.1U/16V_0402
C444 2 1 0.1U/16V_0402
C443 2 1 0.1U/16V_0402
C447 2 1 0.1U/16V_0402
C442 2 1 0.1U/16V_0402

DIMM DECOUPLING

DDR_VTT
C441 1 2 0.1U/16V_0402
C446 1 2 0.1U/16V_0402
C445 1 2 0.1U/16V_0402
C513 1 2 0.1U/16V_0402
C514 1 2 0.1U/16V_0402
C516 1 2 0.1U/16V_0402
C509 1 2 0.1U/16V_0402
C506 1 2 0.1U/16V_0402
C508 1 2 0.1U/16V_0402
C503 1 2 0.1U/16V_0402
C510 1 2 0.1U/16V_0402
C511 1 2 0.1U/16V_0402
C502 1 2 0.1U/16V_0402

DDR_VTT
C504 1 2 0.1U/16V_0402
C505 1 2 0.1U/16V_0402
C512 1 2 0.1U/16V_0402
C517 1 2 0.1U/16V_0402
C500 1 2 0.1U/16V_0402
C498 1 2 0.1U/16V_0402

DDR_VTT
C458 1 2 0.1U/16V_0402
C463 1 2 0.1U/16V_0402
C459 1 2 0.1U/16V_0402
C462 1 2 0.1U/16V_0402
C460 1 2 0.1U/16V_0402
C461 1 2 0.1U/16V_0402
C455 1 2 0.1U/16V_0402
C456 1 2 0.1U/16V_0402
C457 1 2 0.1U/16V_0402
C450 1 2 0.1U/16V_0402
C451 1 2 0.1U/16V_0402

DDR_VTT
C454 1 2 0.1U/16V_0402
C452 1 2 0.1U/16V_0402
C453 1 2 0.1U/16V_0402

DIMM DECOUPLING

VCC_DIMM
C431 1 2 0.1U/16V_0402
C430 1 2 0.1U/16V_0402
C429 1 2 0.1U/16V_0402
C428 1 2 0.1U/16V_0402
C432 1 2 0.1U/16V_0402
C434 1 2 0.1U/16V_0402
C433 1 2 0.1U/16V_0402
C427 1 2 0.1U/16V_0402
C426 1 2 0.1U/16V_0402
C425 1 2 0.1U/16V_0402
C435 1 2 0.1U/16V_0402
C424 1 2 0.1U/16V_0402
C423 1 2 0.1U/16V_0402
C422 1 2 0.1U/16V_0402
C320 1 2 0.1U/16V_0402
C412 1 2 0.1U/16V_0402
C390 1 2 0.1U/16V_0402
C316 1 2 0.1U/16V_0402
C394 1 2 0.1U/16V_0402
C396 1 2 0.1U/16V_0402
C397 1 2 0.1U/16V_0402
C399 1 2 0.1U/16V_0402
C370 1 2 0.1U/16V_0402
C371 1 2 0.1U/16V_0402
C374 1 2 0.1U/16V_0402
C382 1 2 0.1U/16V_0402
C383 1 2 0.1U/16V_0402
C387 1 2 0.1U/16V_0402
C389 1 2 0.1U/16V_0402
C366 1 2 0.1U/16V_0402
C401 1 2 0.1U/16V_0402

DDR_VTT
C497 1 2 0.1U/16V_0402
C496 1 2 0.1U/16V_0402
C495 1 2 0.1U/16V_0402
C494 1 2 0.1U/16V_0402
C478 1 2 0.1U/16V_0402
C421 1 2 0.1U/16V_0402
C488 1 2 0.1U/16V_0402

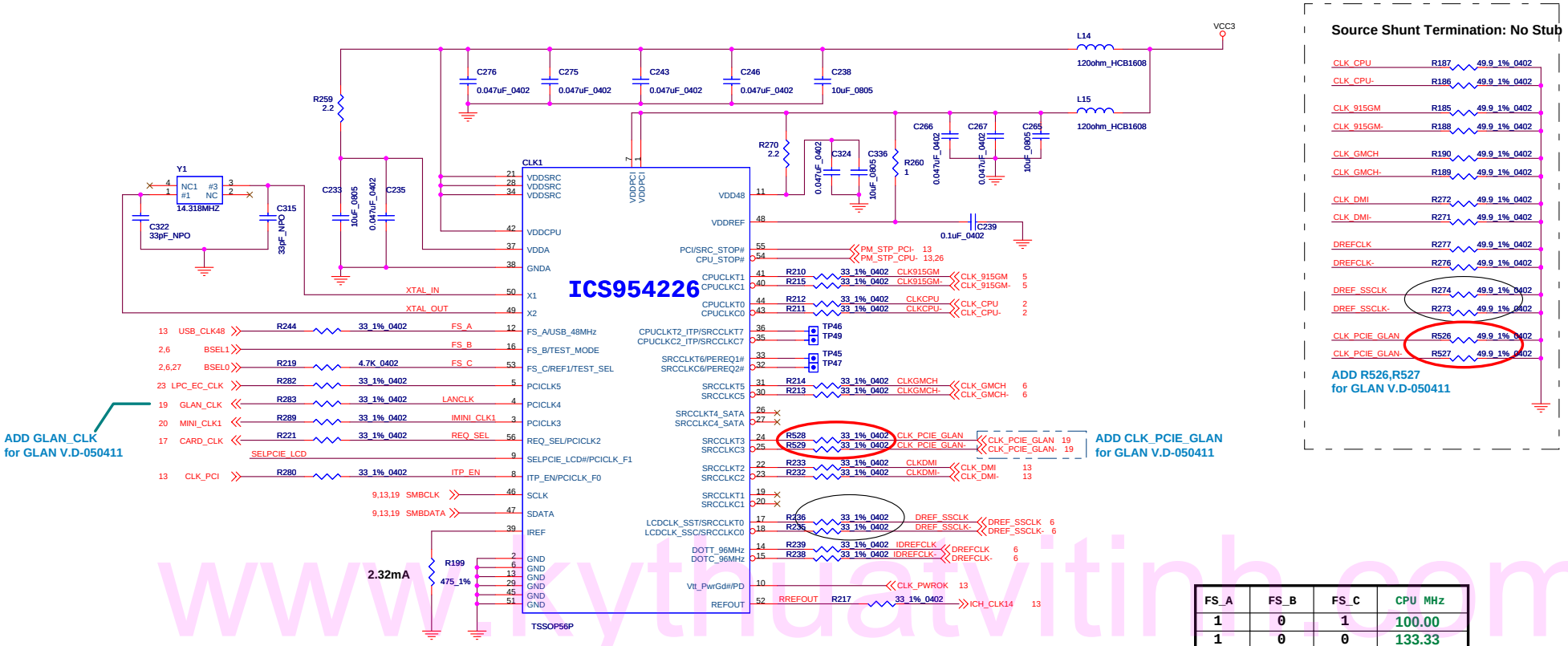
DDR_VTT
C420 1 2 0.1U/16V_0402
C485 1 2 0.1U/16V_0402
C483 1 2 0.1U/16V_0402
C419 1 2 0.1U/16V_0402
C418 1 2 0.1U/16V_0402
C481 1 2 0.1U/16V_0402
C479 1 2 0.1U/16V_0402

Elitegroup Computer Systems

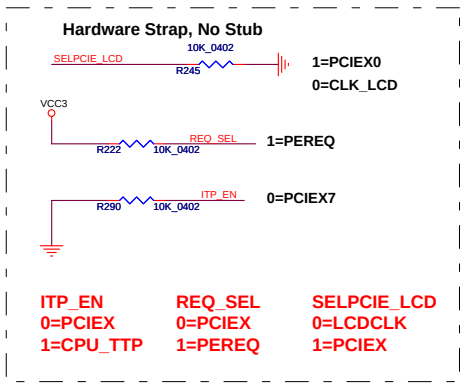
Title: 223 DDR Termination

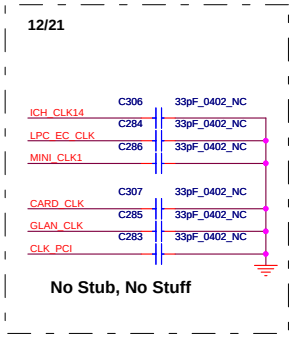
Size: A3 | Document Number: 223-1-4-01 | Rev: 1.0

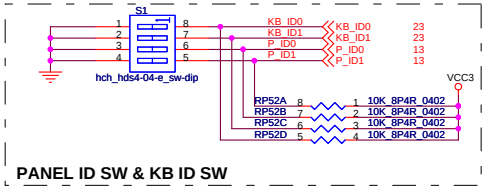
Date: Friday, June 24, 2005 | Sheet 10 of 32

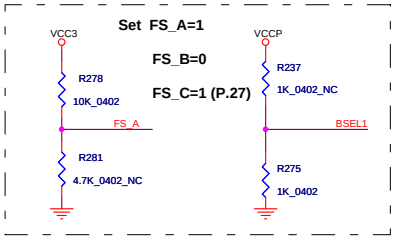


FS_A	FS_B	FS_C	CPU MHz
1	0	1	100.00
1	0	0	133.33
1	1	1	200.00
1	1	0	166.66
0	0	1	333.33
0	0	0	266.66
0	1	1	400.00
0	1	0	200.00







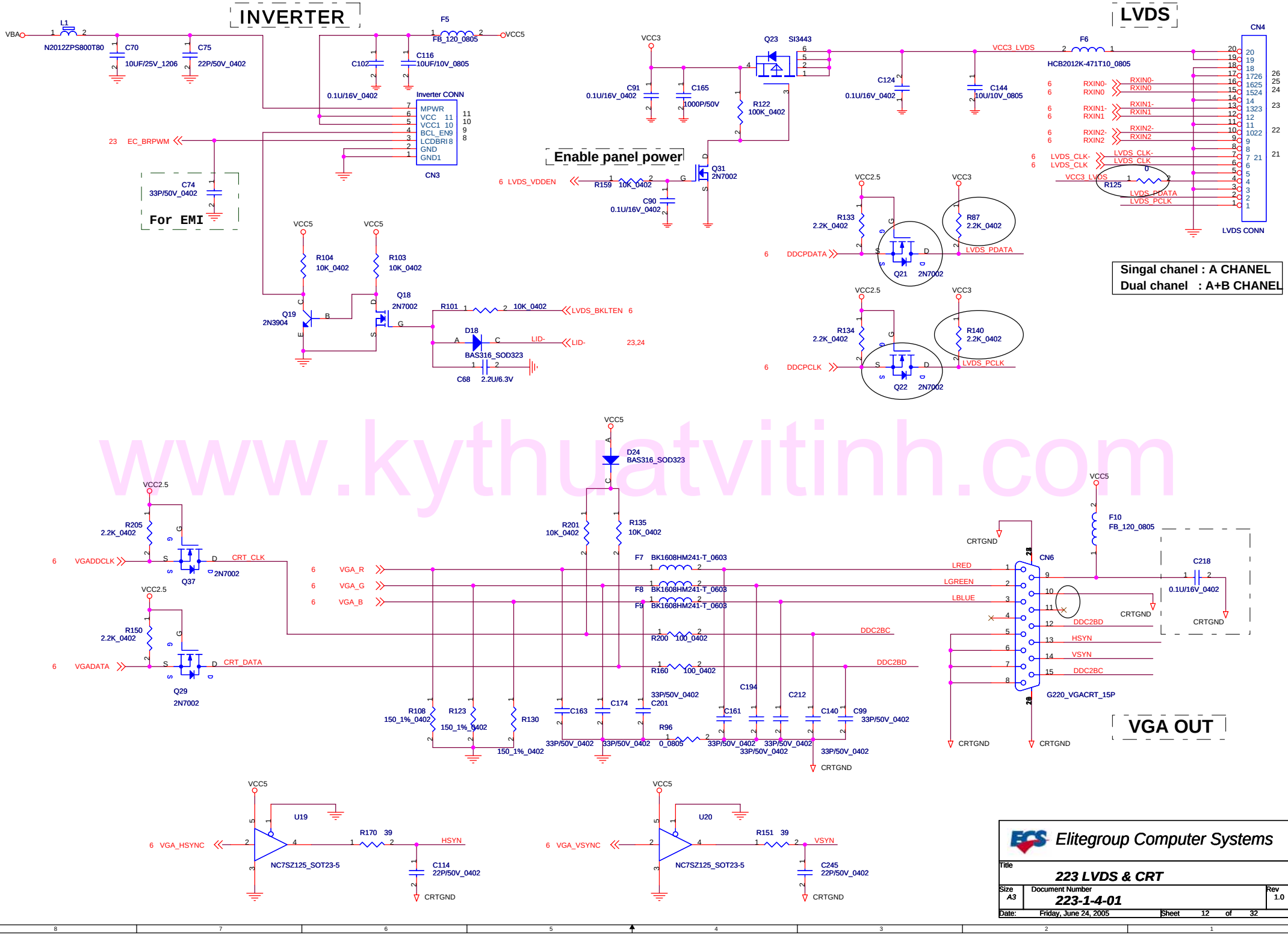


Elitegroup Computer Systems

Title: 223 CLOCK GENERATOR

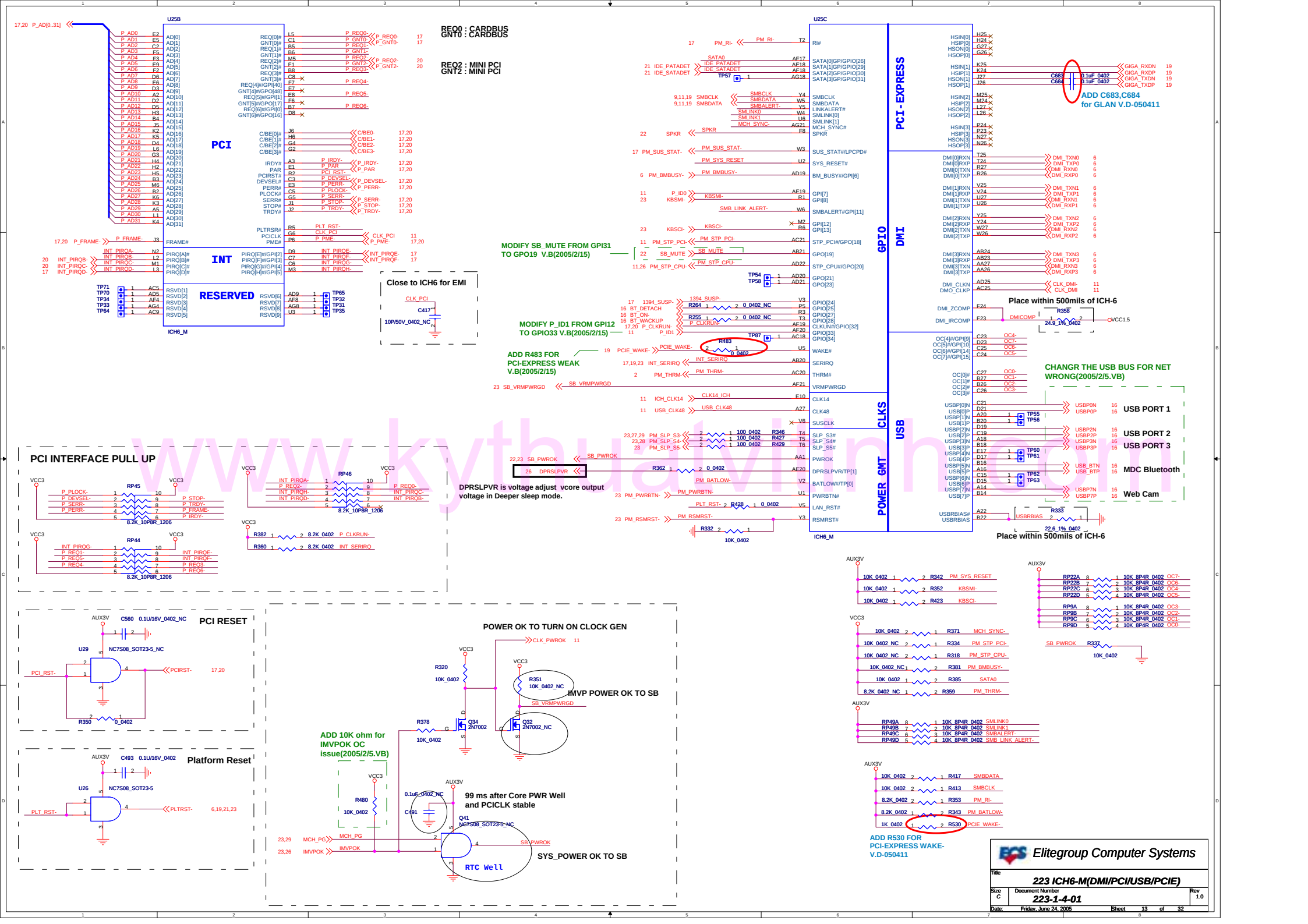
Size: Custom | Document Number: 223-1-4-01 | Rev: 1.0

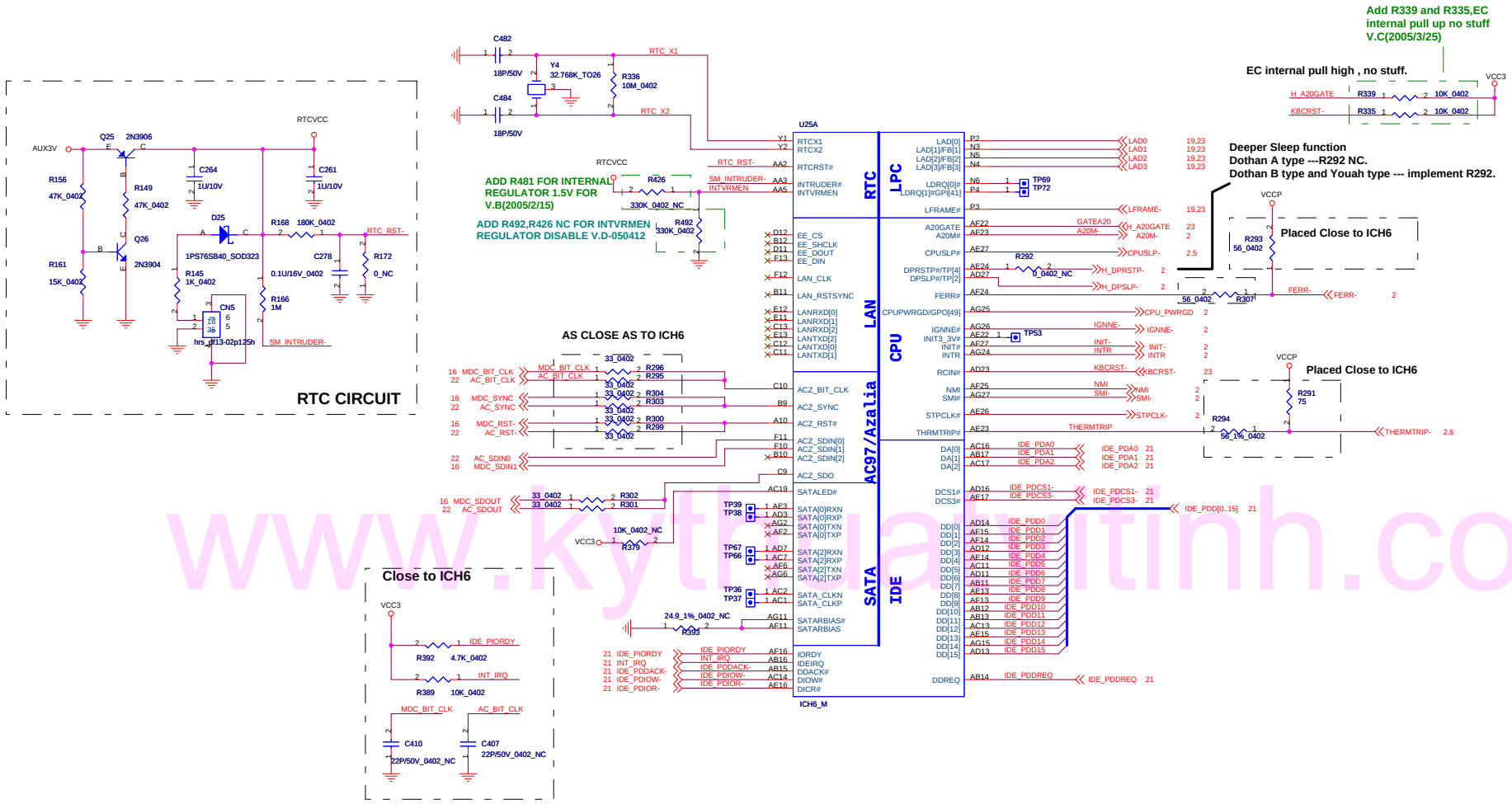
Date: Friday, June 24, 2005 | Sheet 11 of 32



Elitegroup Computer Systems

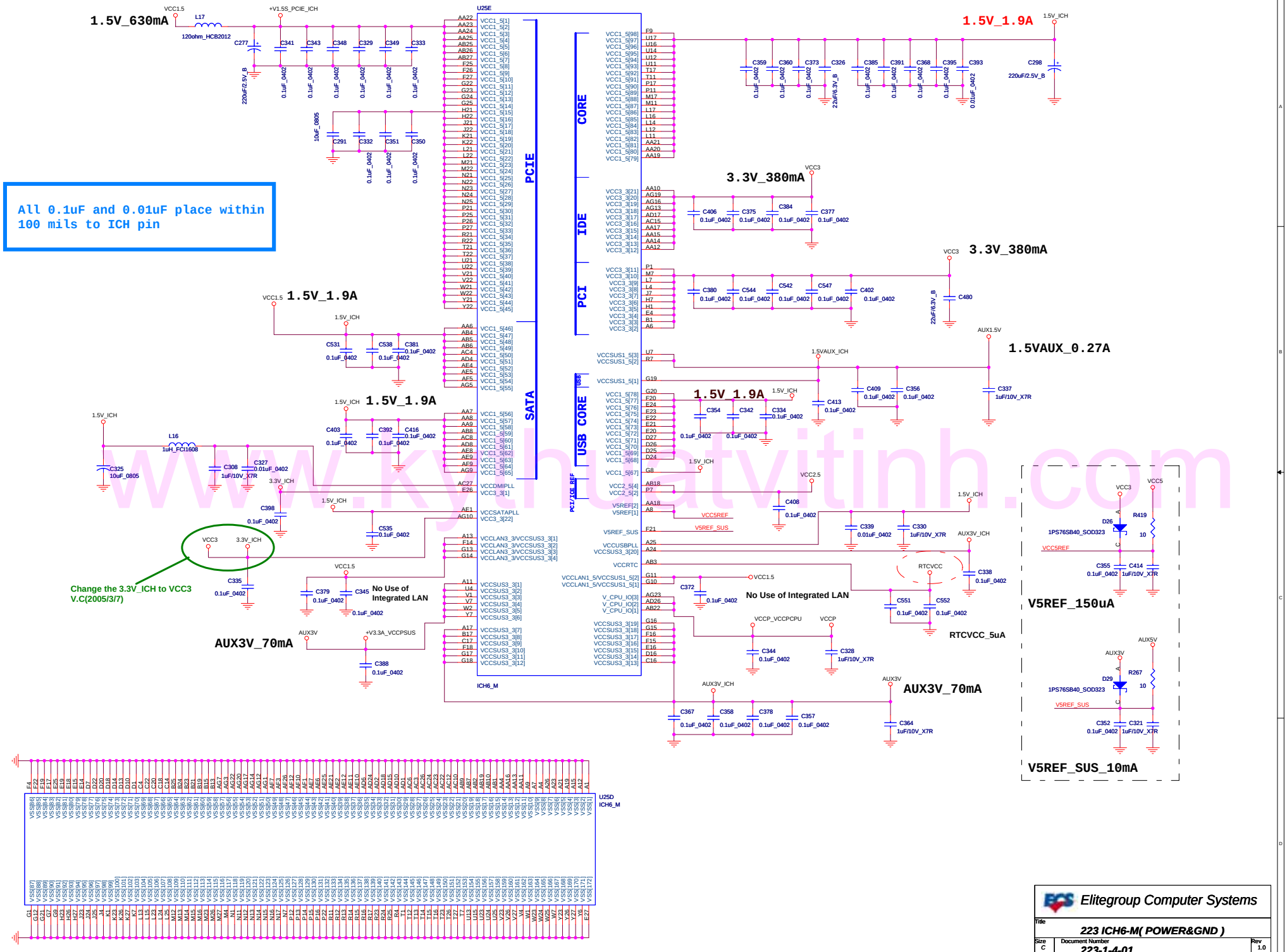
Title	223 LVDS & CRT	
Size A3	Document Number 223-1-4-01	Rev 1.0
Date: Friday, June 24, 2005	Sheet 12 of 32	





Elitegroup Computer Systems

Title	223 ICH6-M(CPU/RTC/IDE/ACZ)	
Size: Custom	Document Number: 223-1-4-01	Rev: 1.0
Date: Friday, June 24, 2005	Sheet 14 of 32	

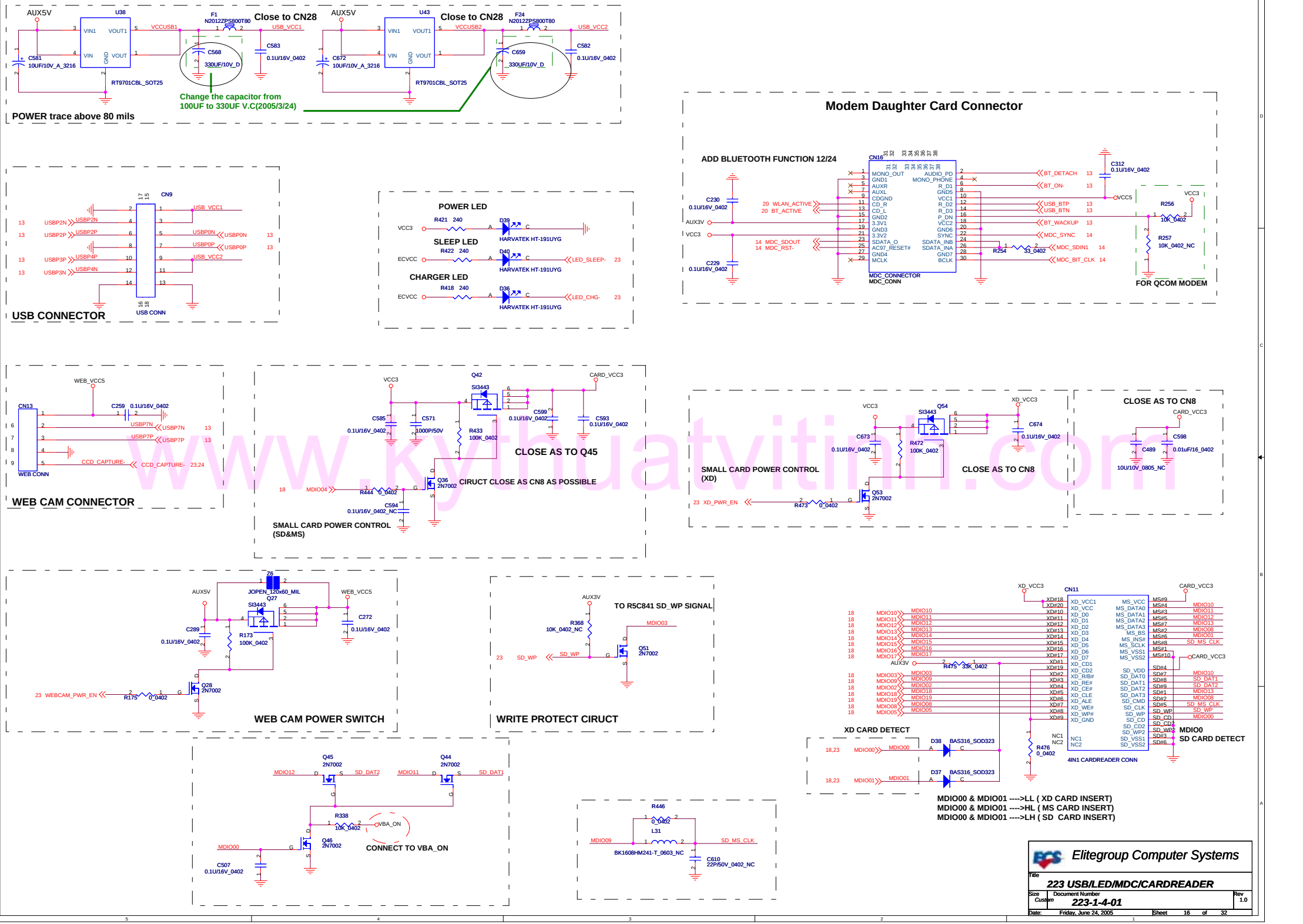


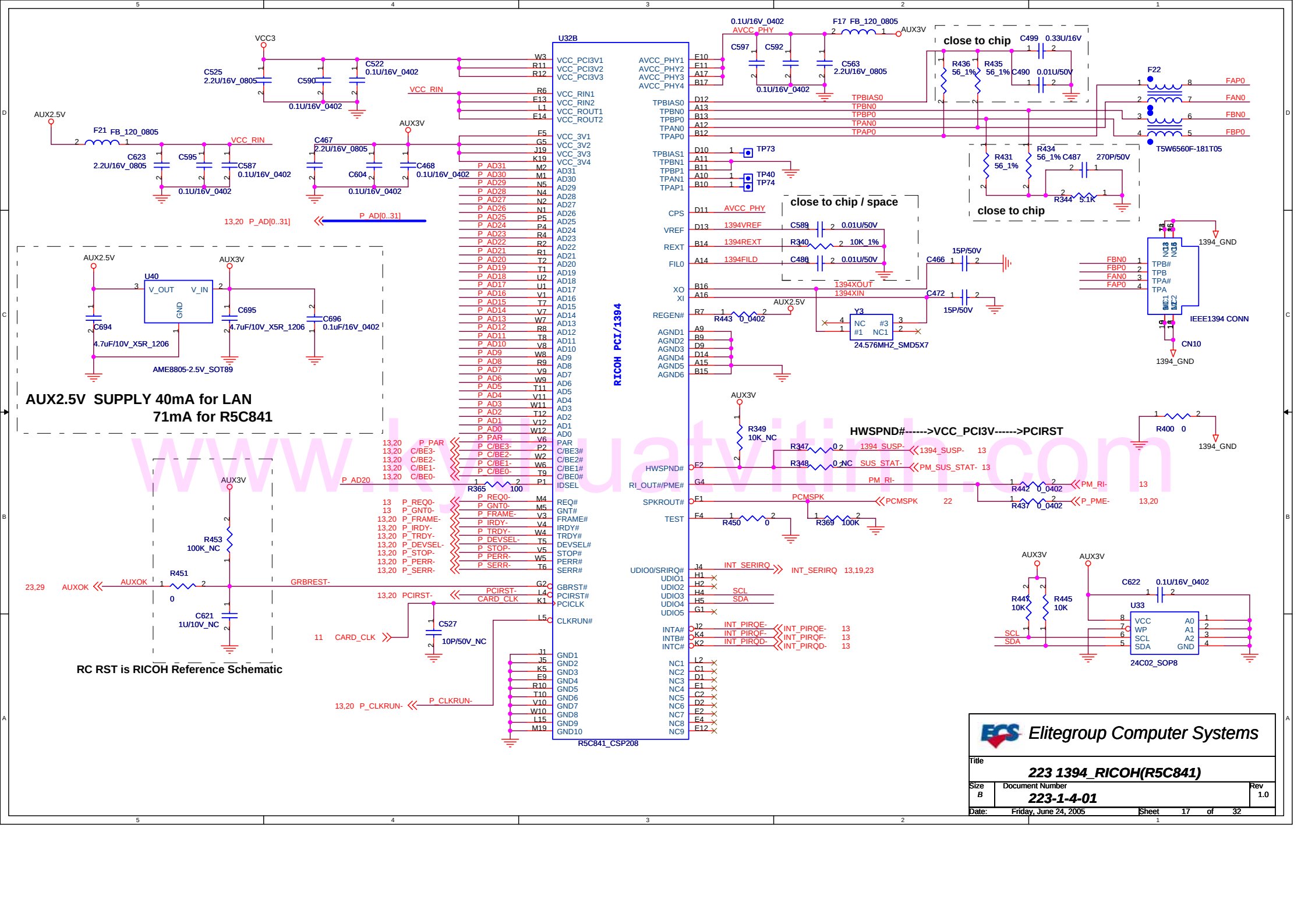
Elitegroup Computer Systems

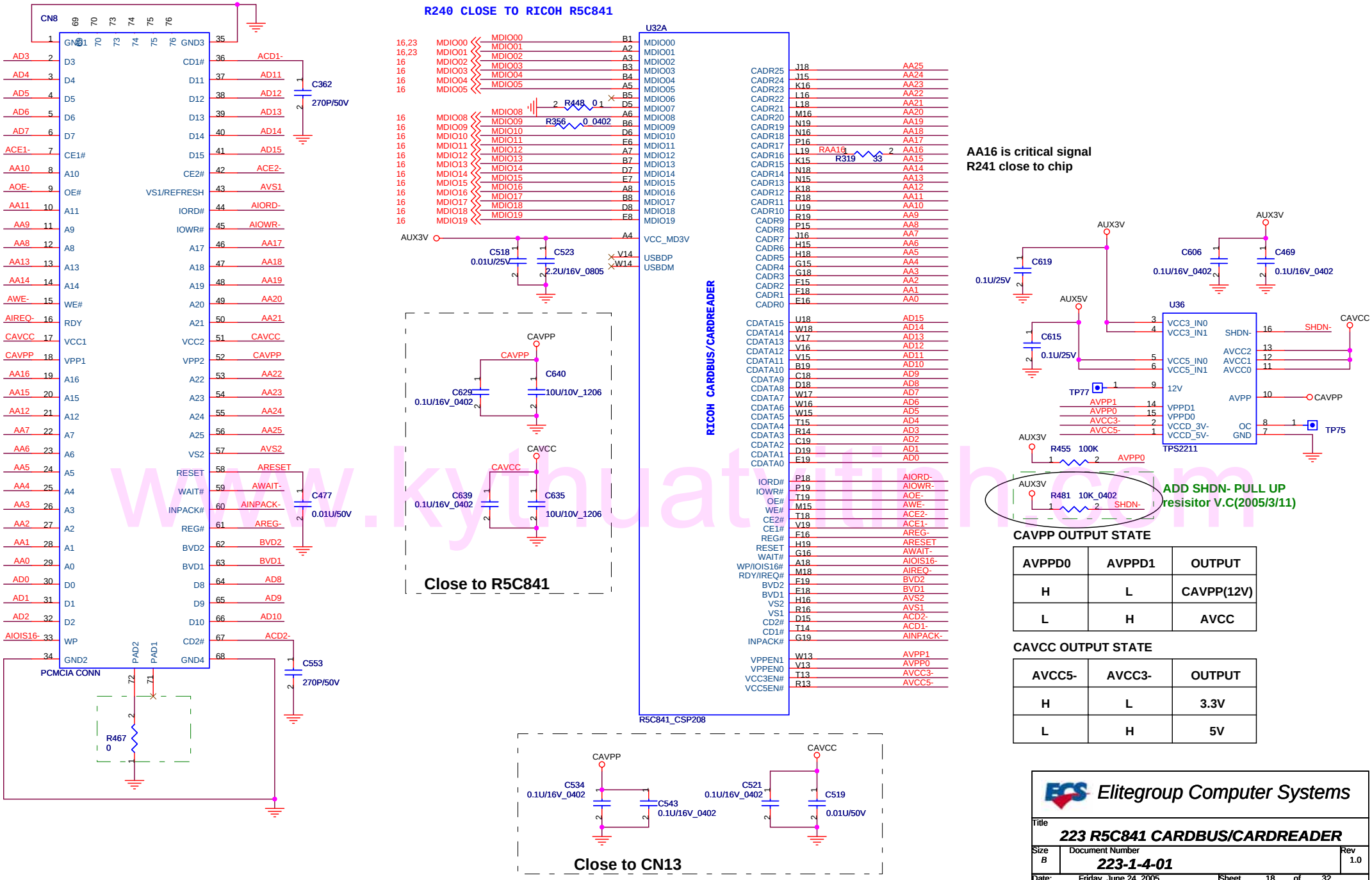
Title: 223 ICH6-M(POWER&GND)

Size: C | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 15 of 32

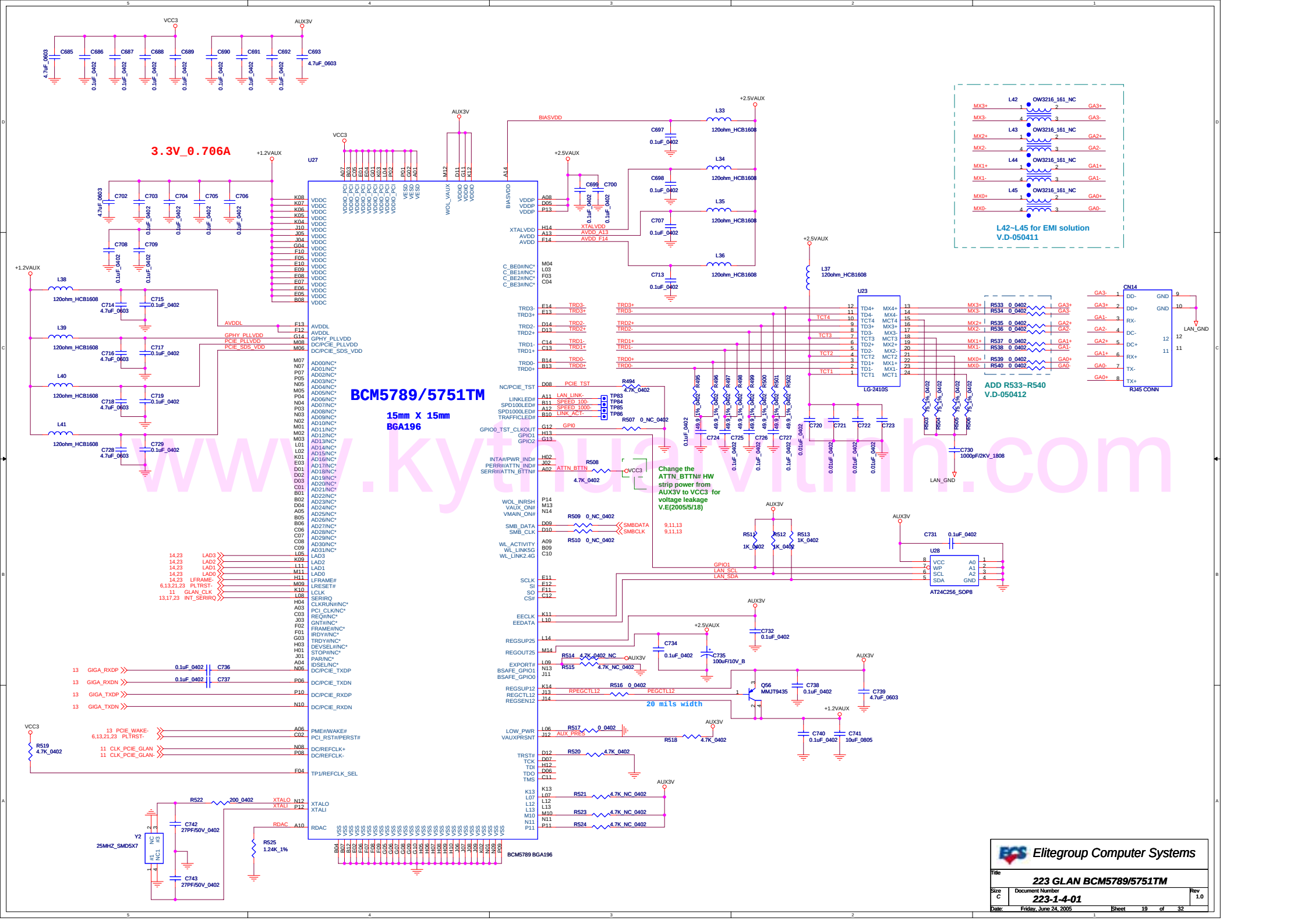


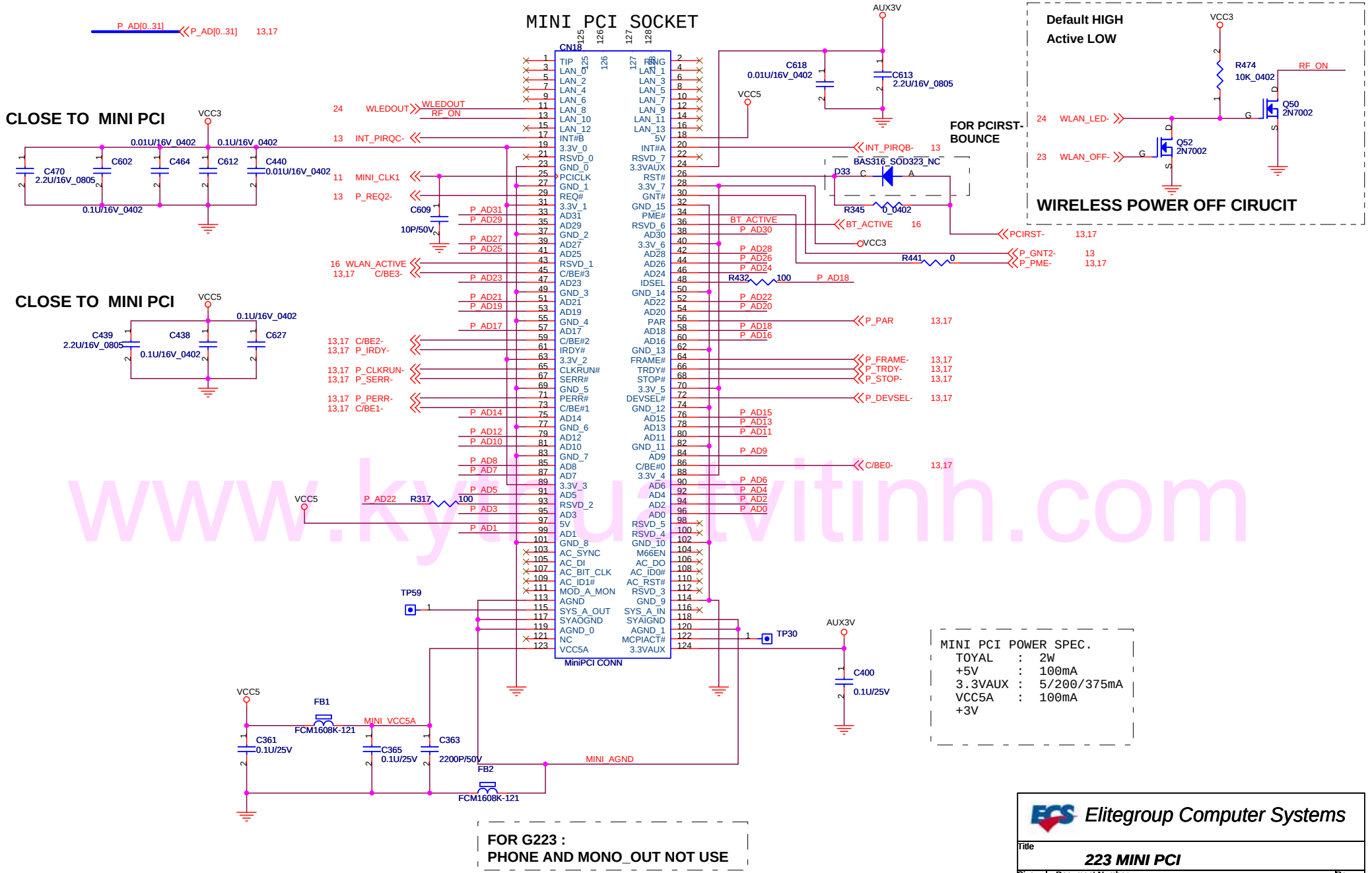

U32B
RICOH PCI/1394
R5C841_CSP208
AUX2.5V SUPPLY 40mA for LAN
71mA for R5C841
AME8805-2.5V_SOT89
RC RST is RICOH Reference Schematic
HWSPND#------>VCC_PCI3V------>PCIRST
close to chip
close to chip / space
T5W6560F-181T05
IEEE1394 CONN
24C02_SOP8
24.576MHZ_SMD5X7
Elitegroup Computer Systems
223 1394_RICOH(R5C841)
223-1-4-01
Friday, June 24, 2005
17 of 32

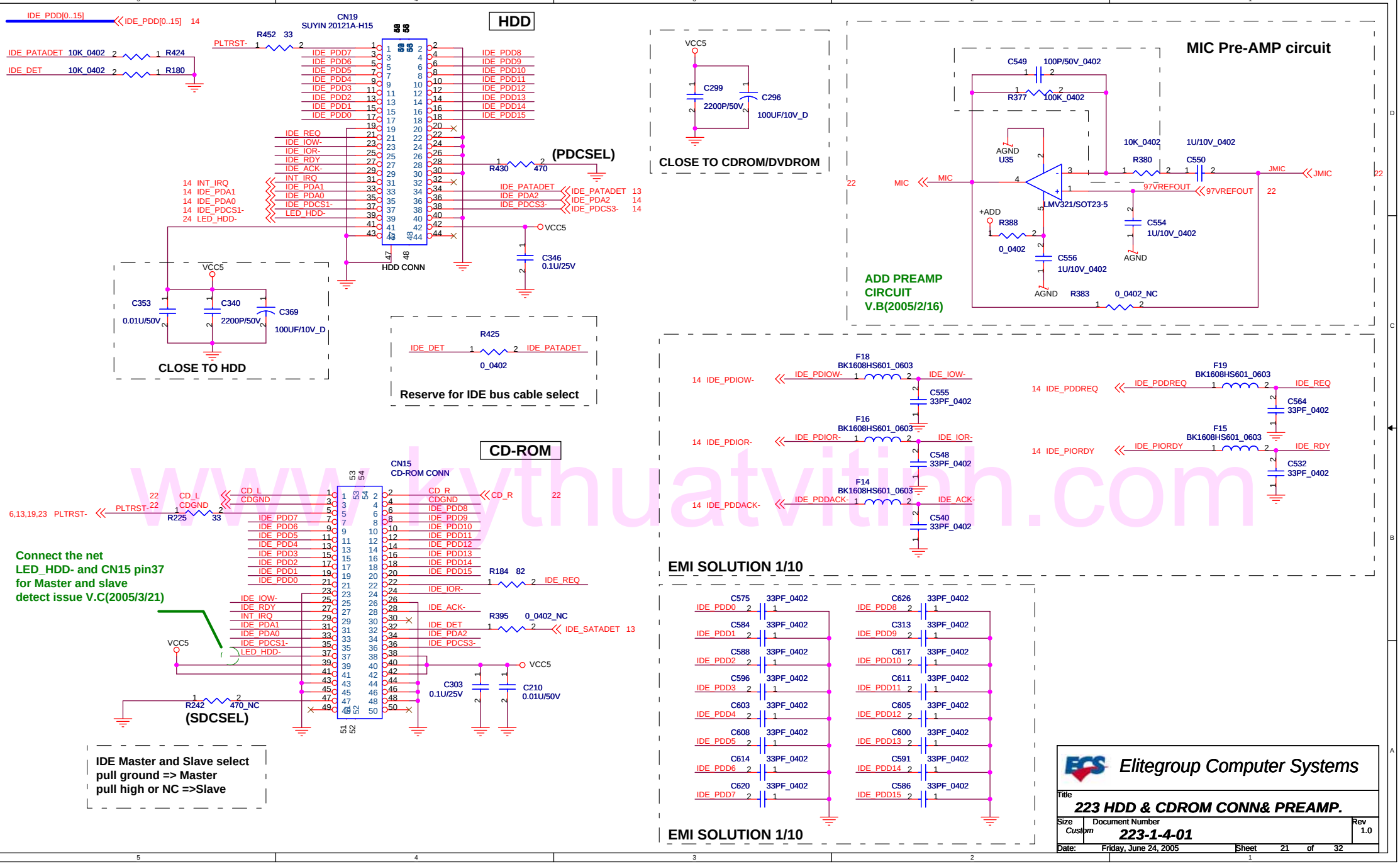


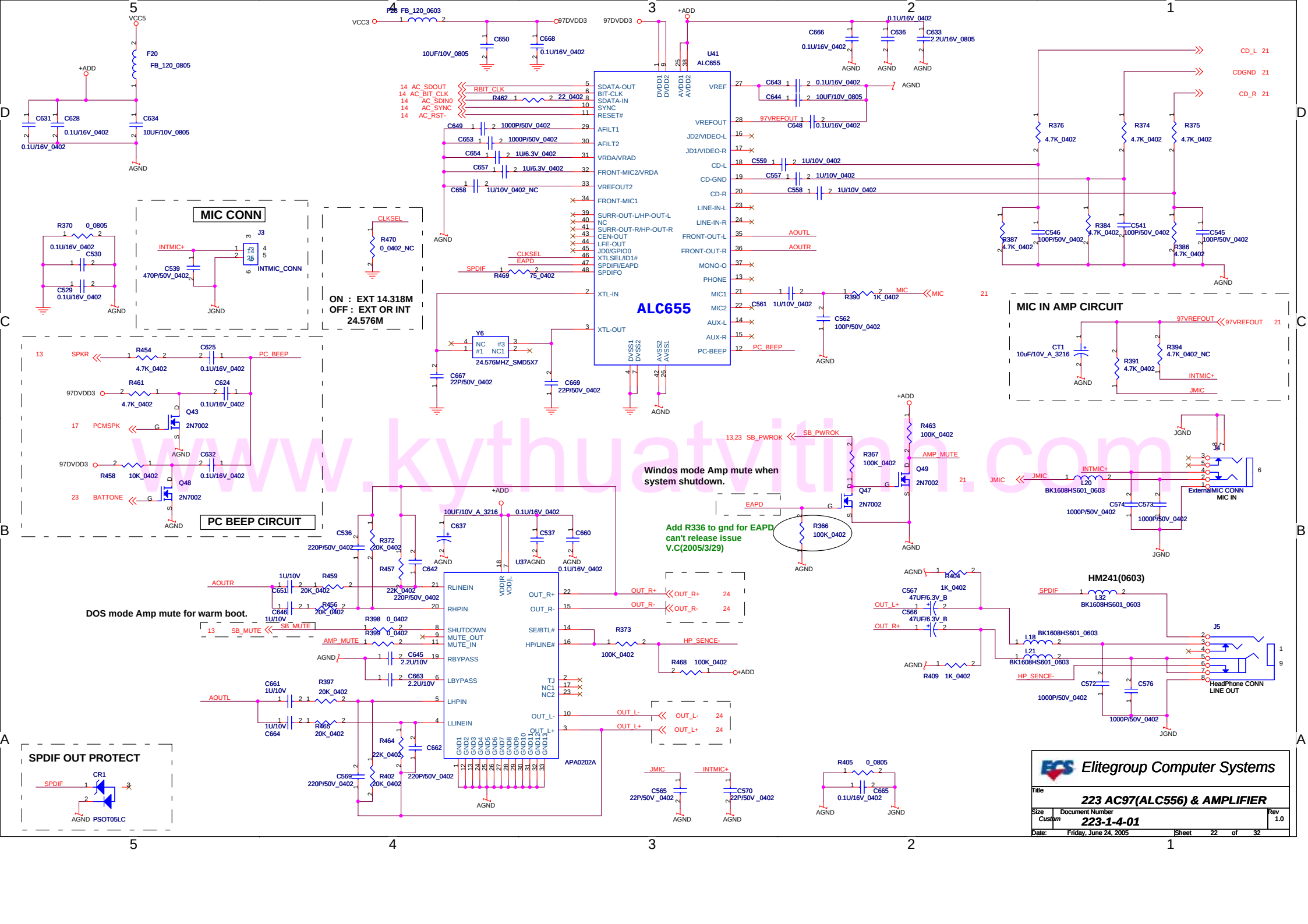
AVPPD0	AVPPD1	OUTPUT
H	L	CAVPP(12V)
L	H	AVCC

AVCC5-	AVCC3-	OUTPUT
H	L	3.3V
L	H	5V








ALC655
MIC CONN
PC BEEP CIRCUIT
SPDIF OUT PROTECT
MIC IN AMP CIRCUIT
ON : EXT 14.318M
OFF : EXT OR INT
24.576M
Windos mode Amp mute when
system shutdown.
DOS mode Amp mute for warm boot.
Add R336 to gnd for EAPD
can't release issue
V.C(2005/3/29)
HM241(0603)
APA0202A
Elitegroup Computer Systems
223 AC97(ALC556) & AMPLIFIER
223-1-4-01
Friday, June 24, 2005
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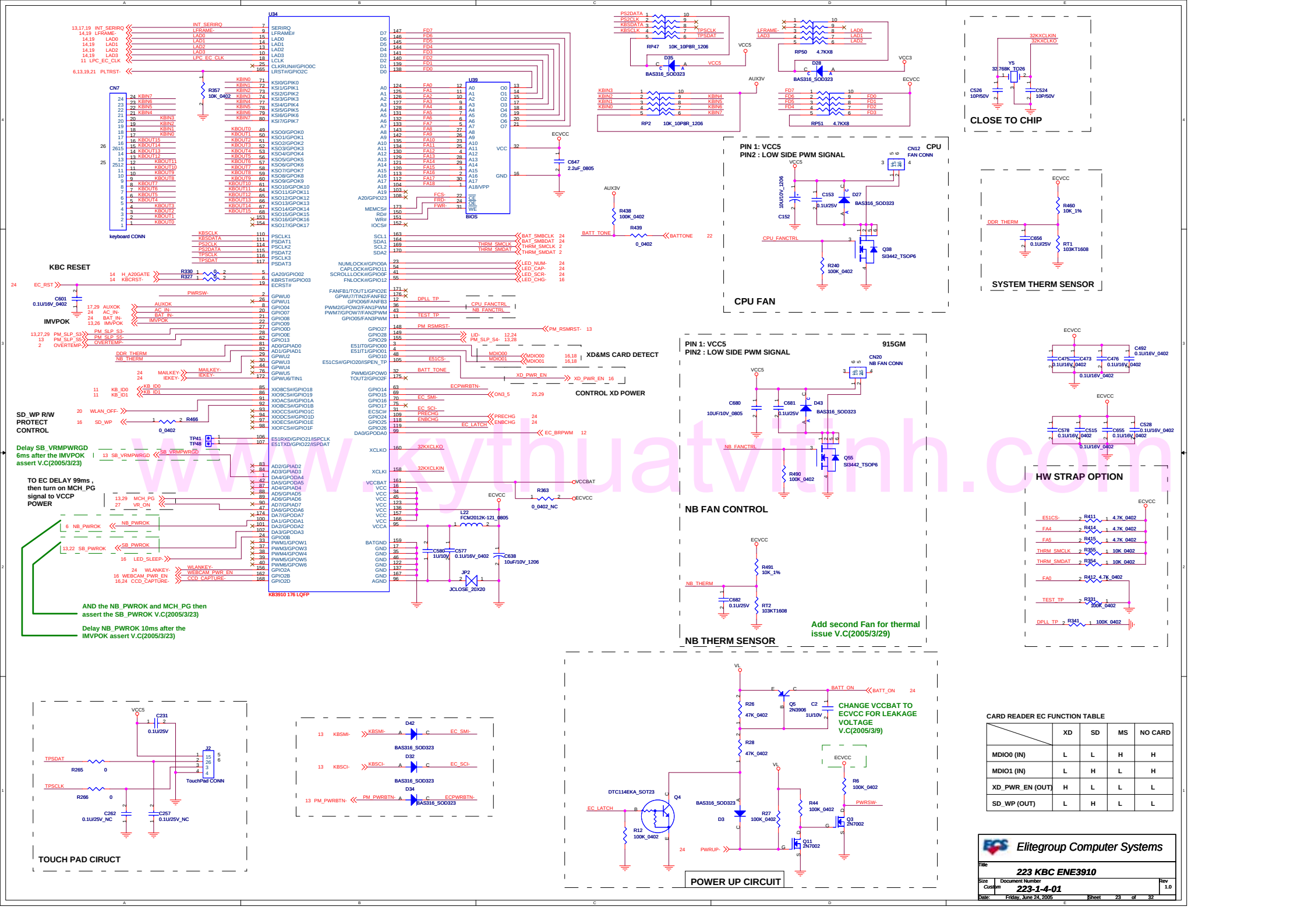

CARD READER EC FUNCTION TABLE

	XD	SD	MS	NO CARD
MDIO0 (IN)	L	L	H	H
MDIO1 (IN)	L	H	L	H
XD_PWR_EN (OUT)	H	L	L	L
SD_WP (OUT)	L	H	L	L

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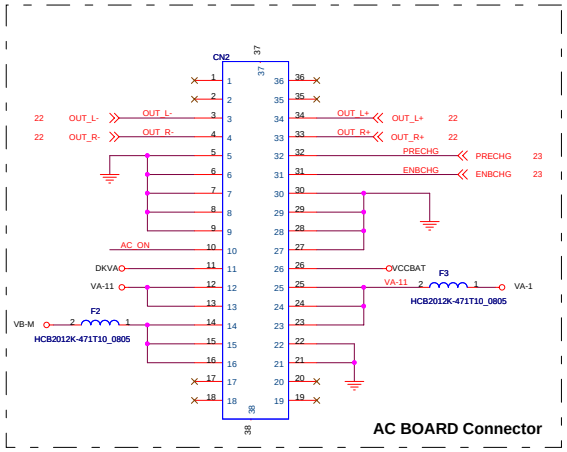
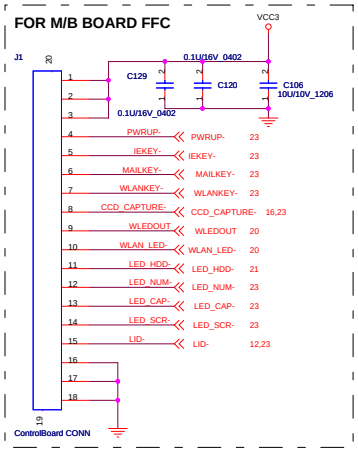
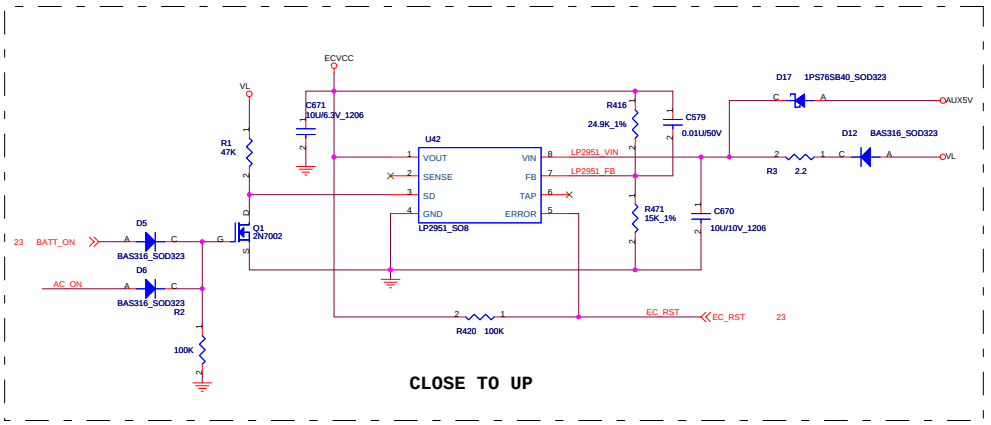
Title: 223 KBC ENE3910

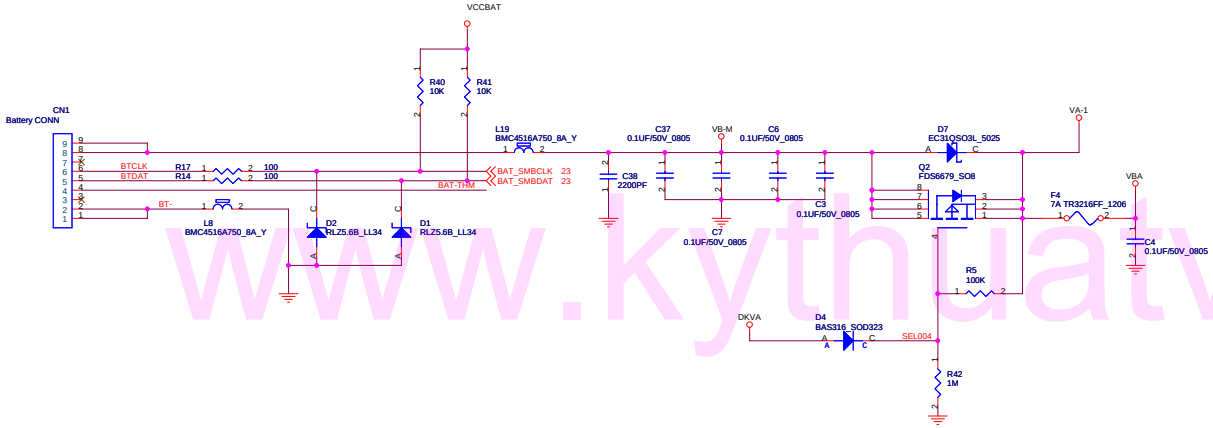
Size: Custom | Document Number: 223-1-4-01 | Rev: 1.0

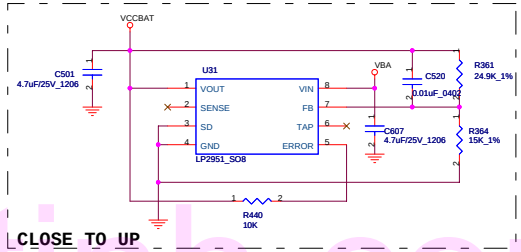
Date: Friday, June 24, 2005 | Sheet 23 of 32





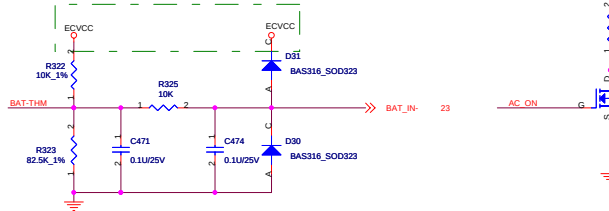


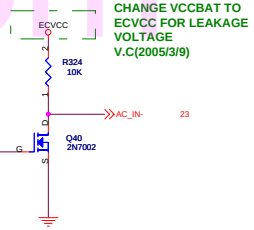




CHANGE VCCBAT TO ECVCC FOR LEAKAGE VOLTAGE V.C(2005/3/23)

CHANGE VCCBAT TO ECVCC FOR LEAKAGE VOLTAGE V.C(2005/3/9)



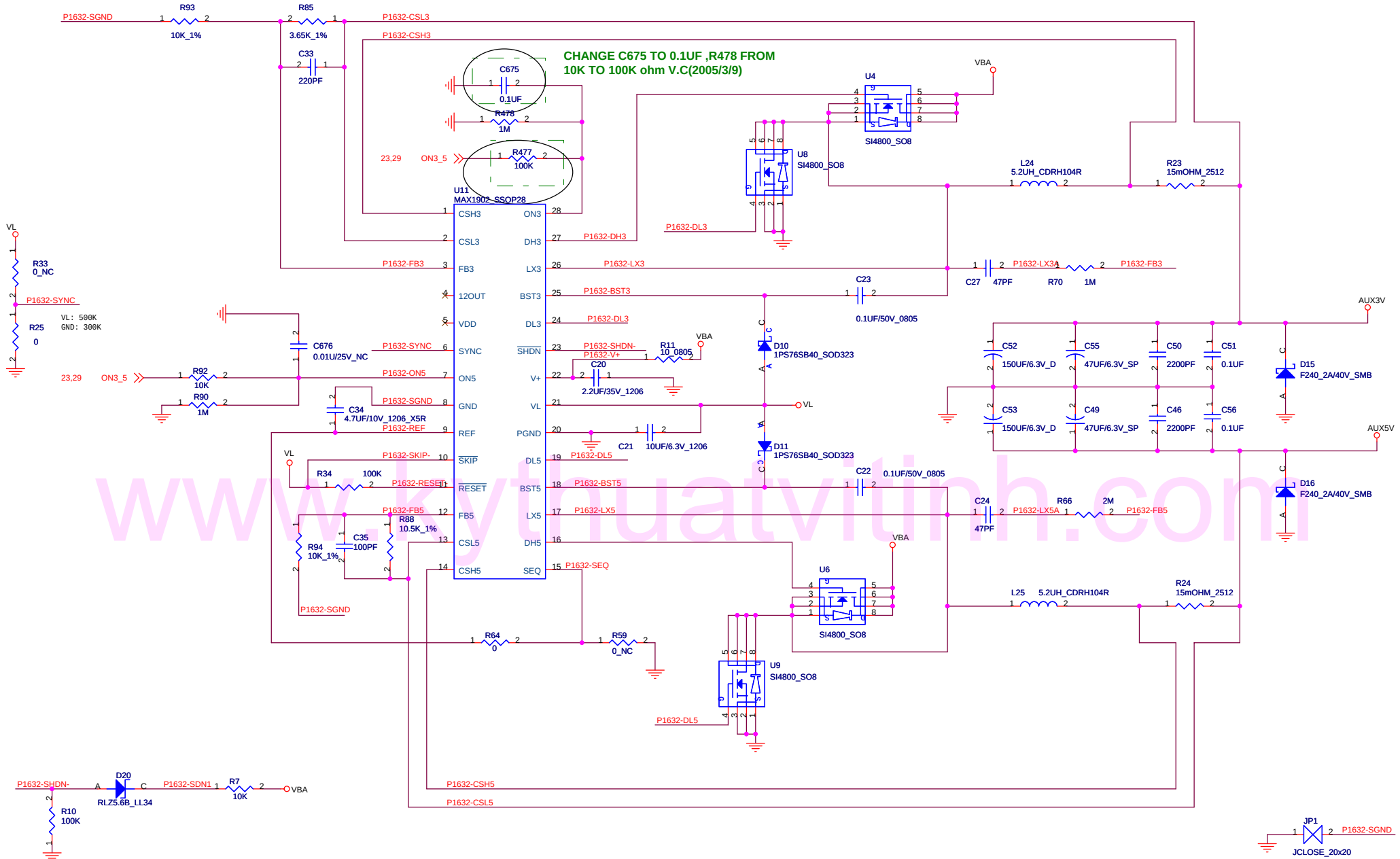


Elitegroup Computer Systems

Title: 223 POWER CHARGER

Size	Document Number	Rev
A2	223-1-4-01	1.0

Date: Friday, June 24, 2005 Sheet 24 of 32

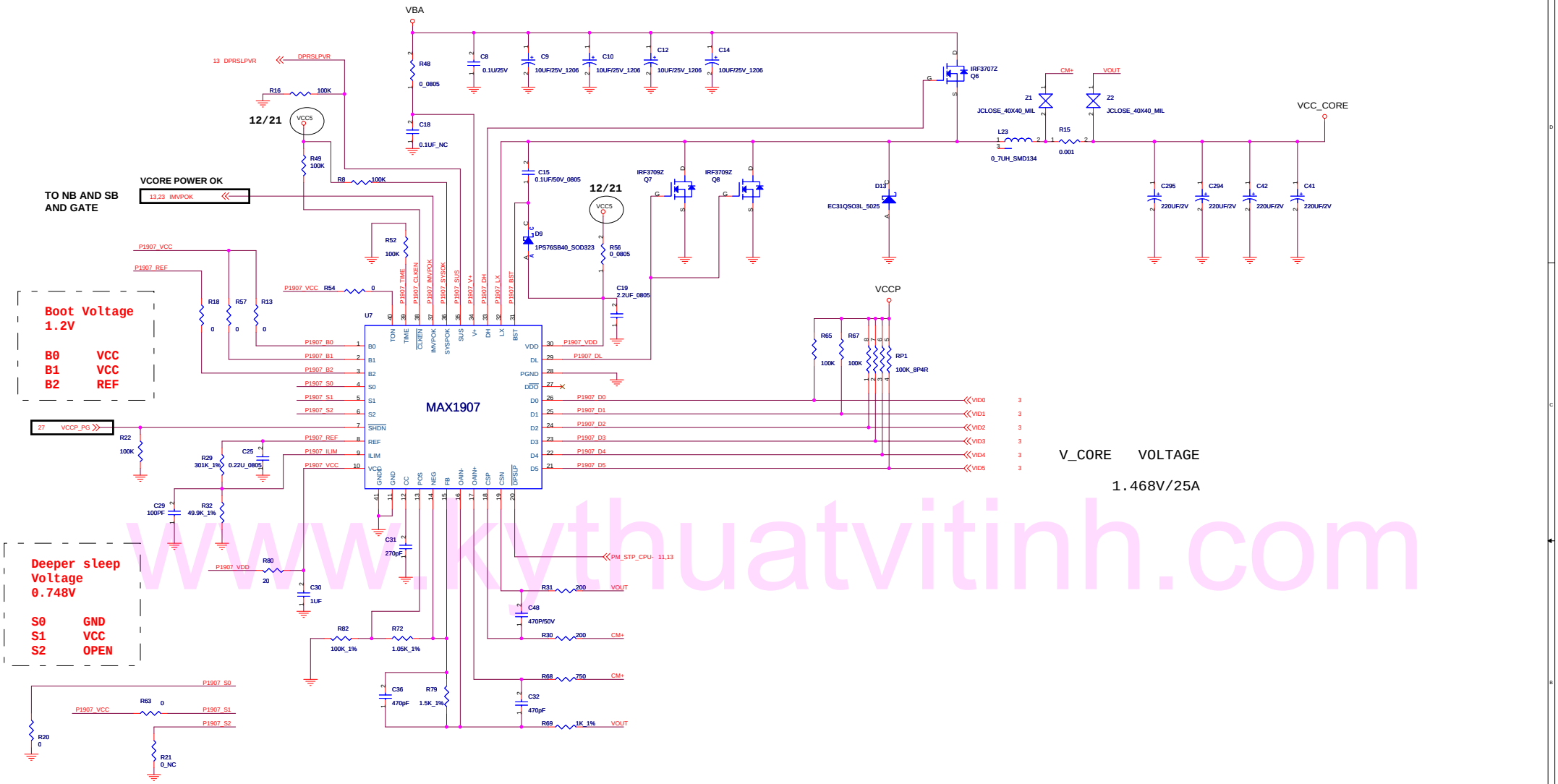


Elitegroup Computer Systems

Title: 223 AUX5V/AUX3V/12VA_MAX1902

Size: A3 | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 25 of 32

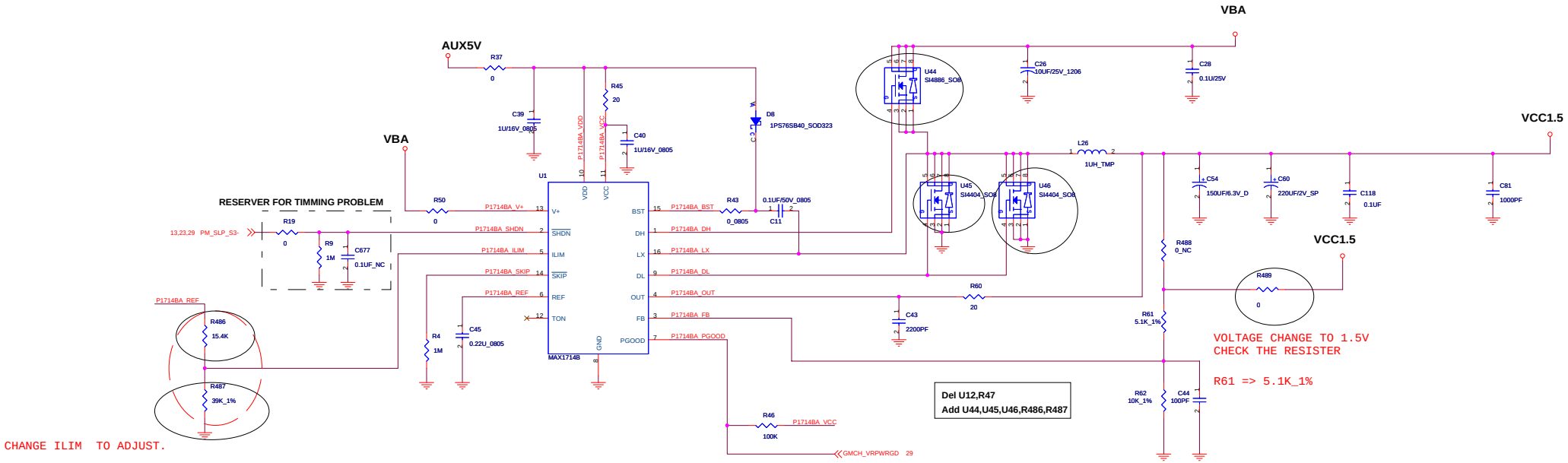


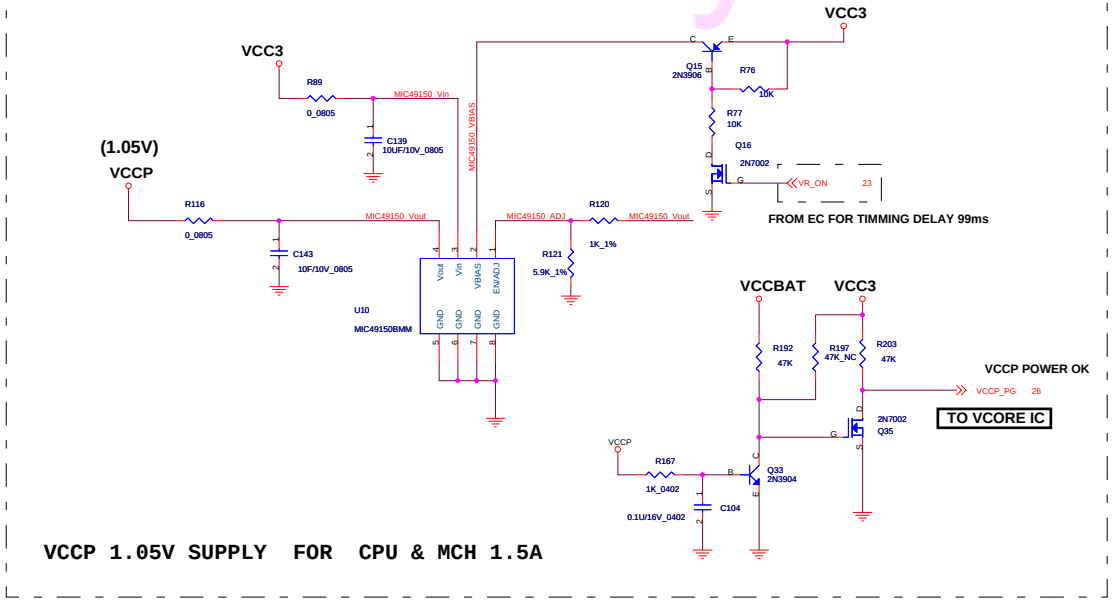
Elitegroup Computer Systems

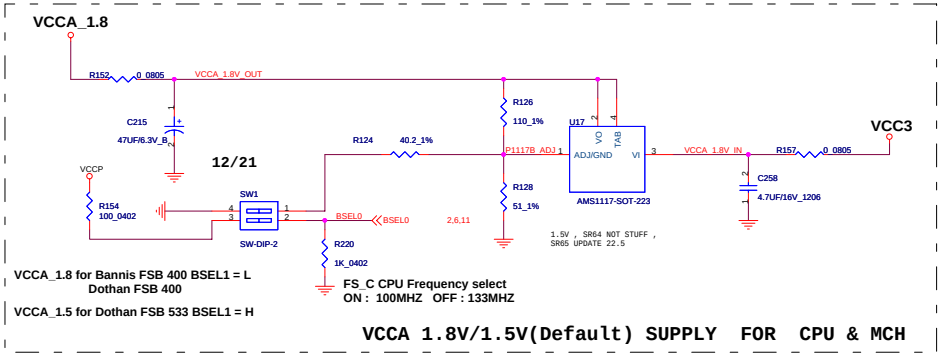
Title: 223 V_CORE MAX1907

Size: A2 | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 26 of 32

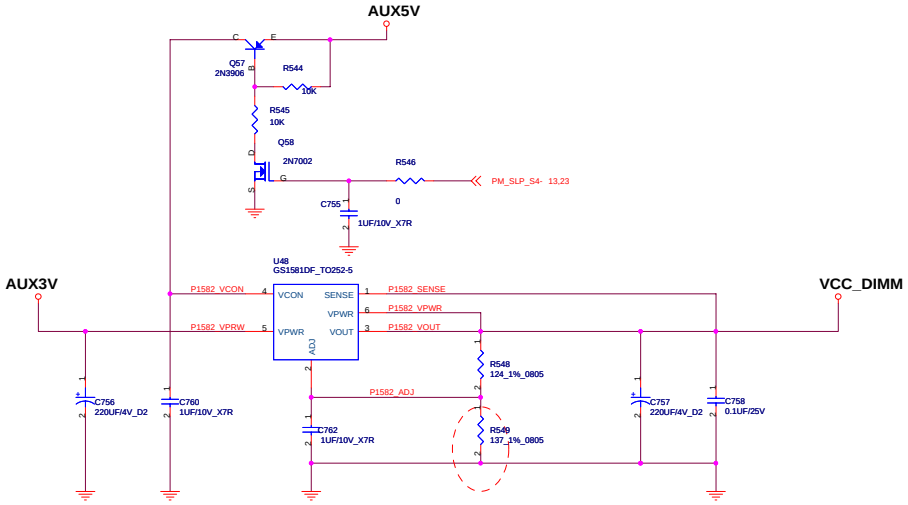


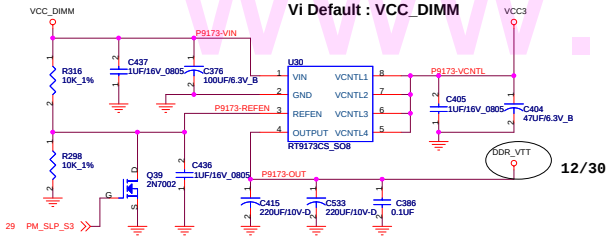


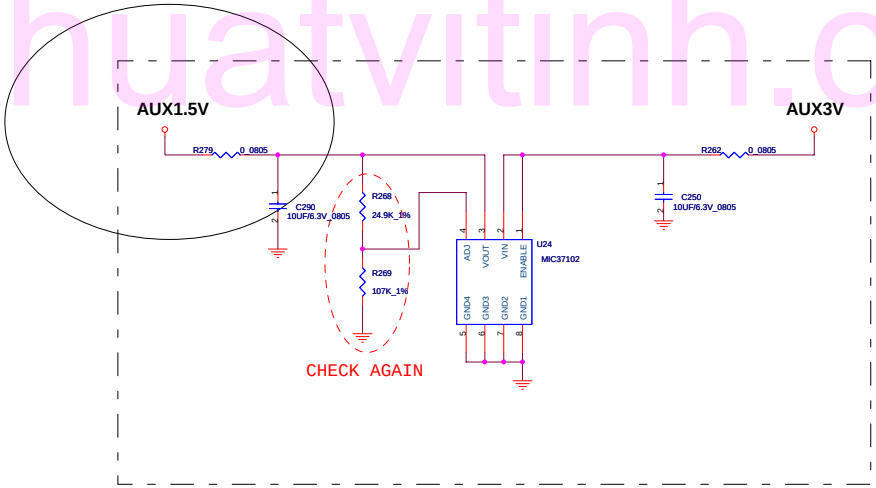


Elitegroup Computer Systems

Title	223 VCCA1.8V/VCCP1.05V/VCC1.5V	
Size A2	Document Number 223-1-4-01	Rev 1.0
Date: Friday, June 24, 2005	Sheet 27 of 32	



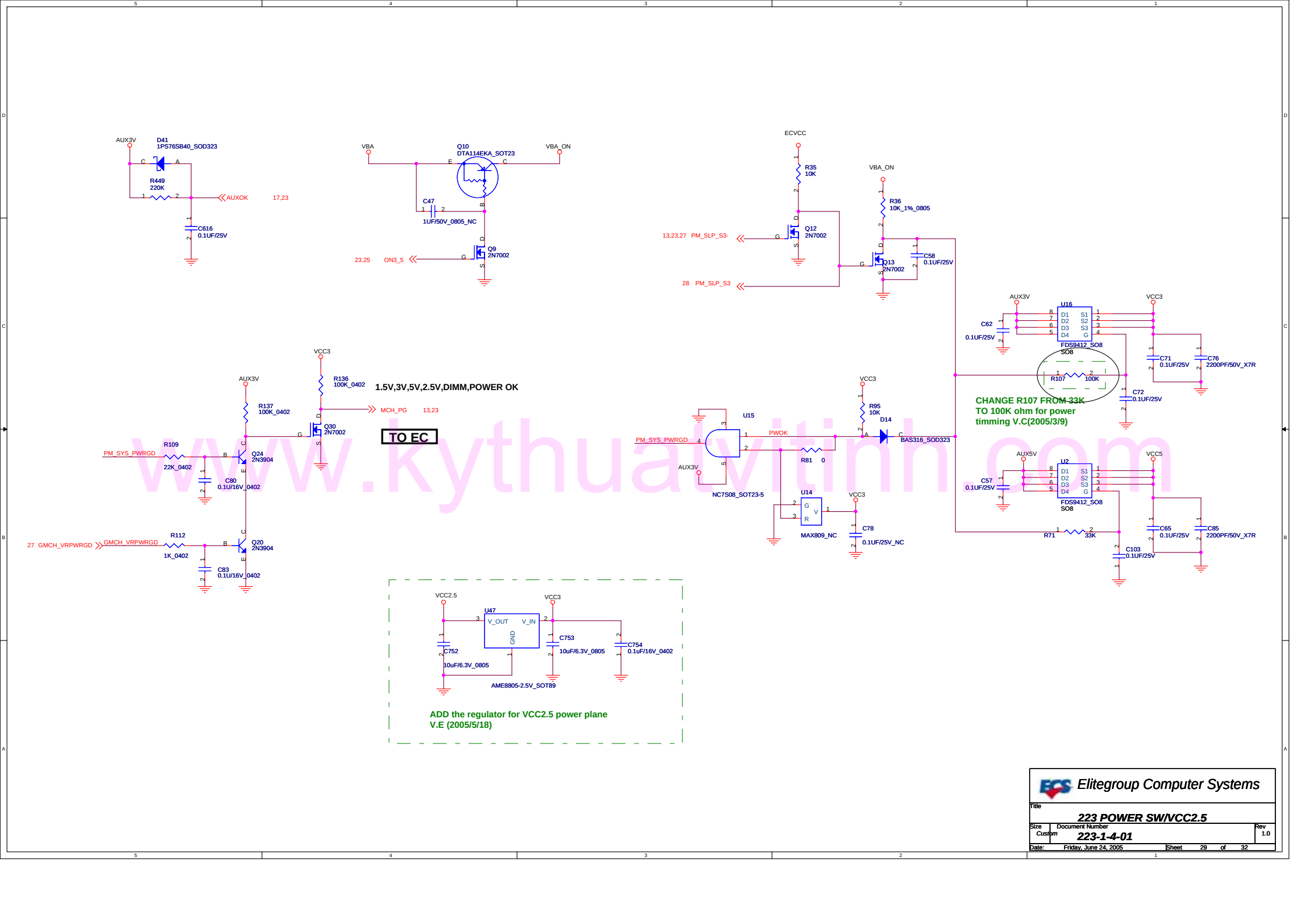




DIMM_2.5V SUPPLY 3.5A & VTT1.25V 1A FOR DDR

Elitegroup Computer Systems

Title	223 MAX1714B_VCCDIMM/AUX1.5V	
Size: A2	Document Number: 223-1-4-01	Rev: 1.0
Date: Friday, June 24, 2005	Sheet 28 of 32	



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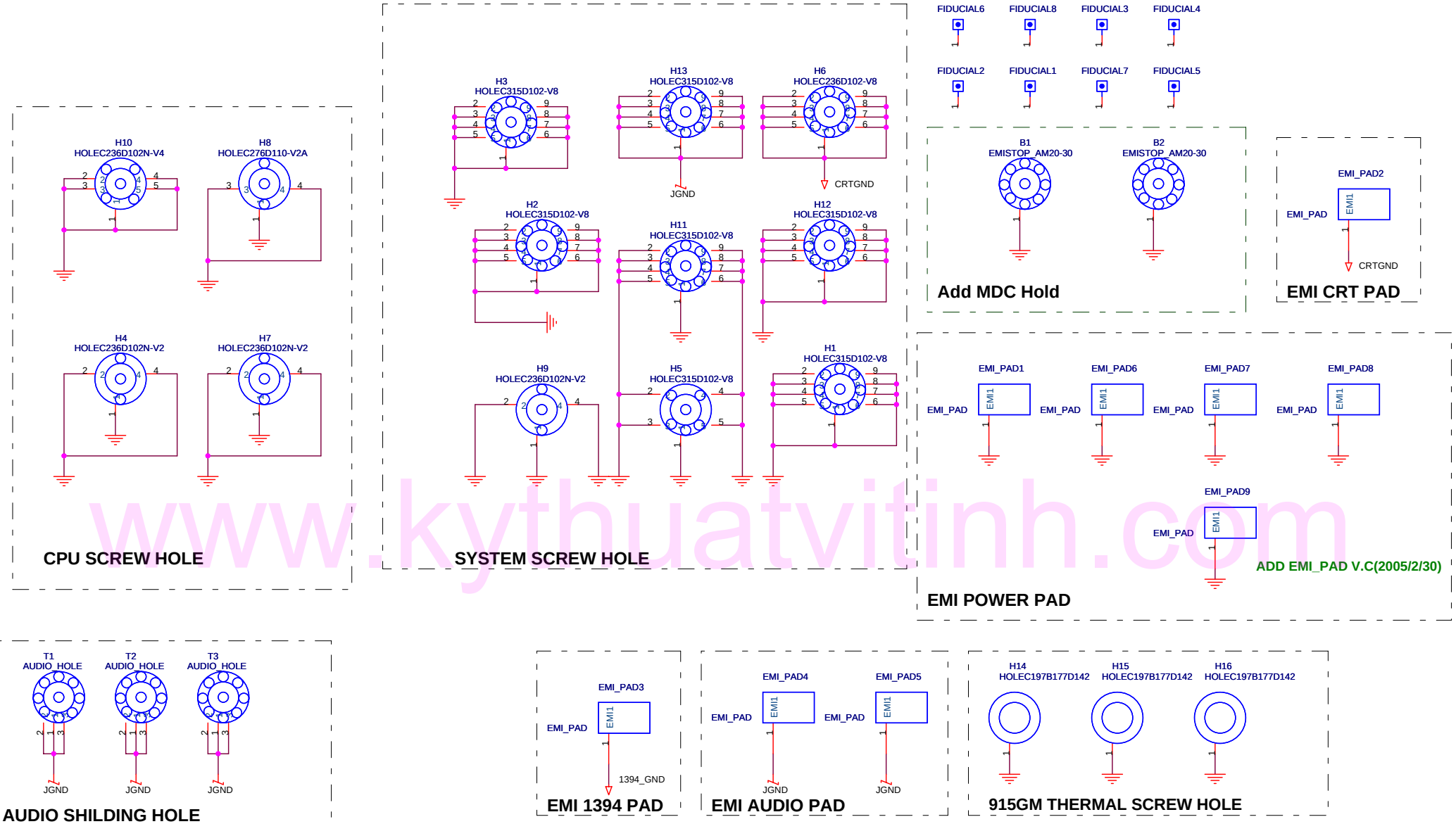
Title: 223 POWER SW/VCC2.5

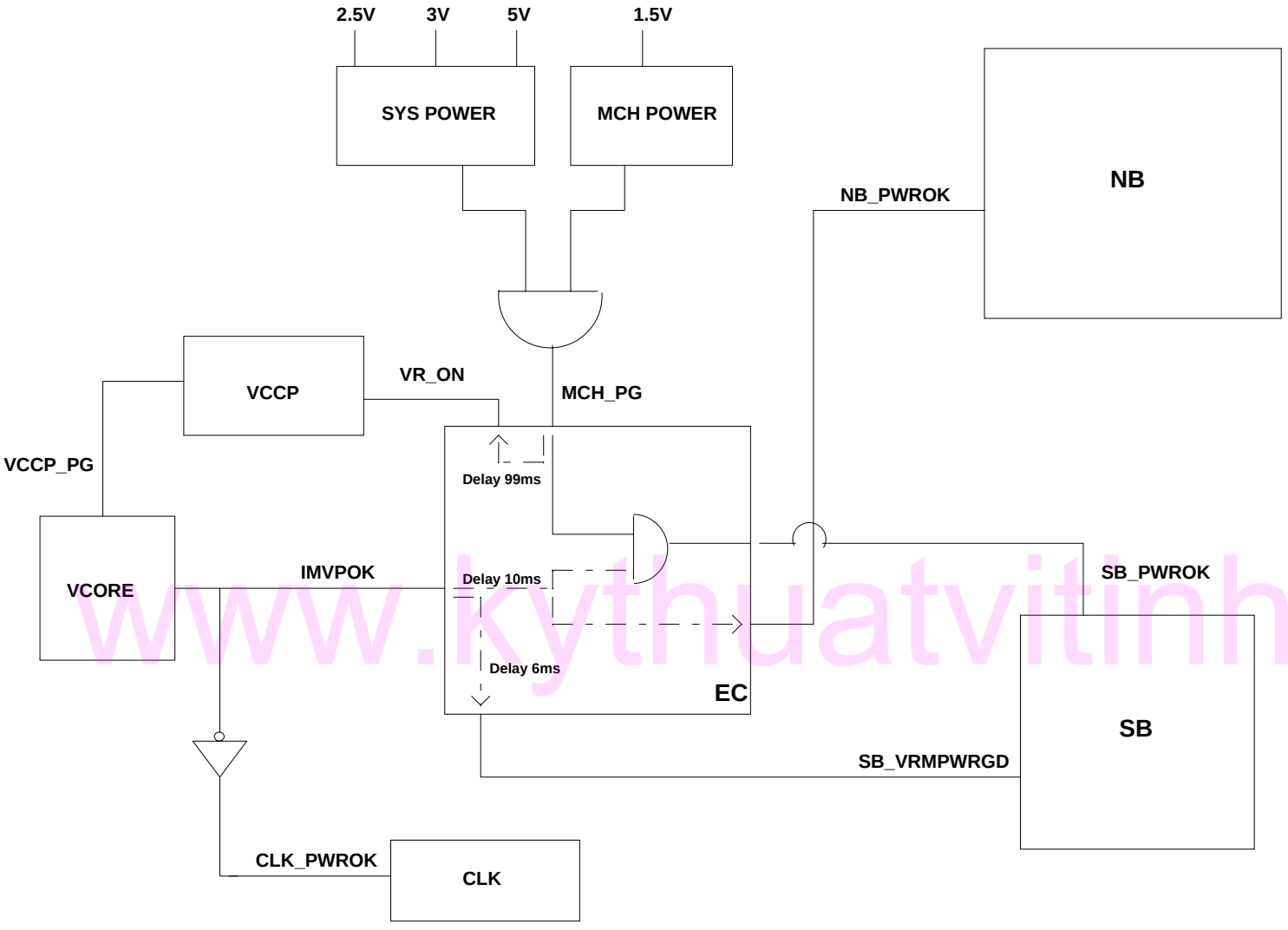
Size: Custom | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 29 of 32



Elitegroup Computer Systems

Title	223 SCREW HOLE	
Size B	Document Number 223-1-4-01	Rev 1.0
Date: Friday, June 24, 2005	Sheet 30 of 32	



Elitegroup Computer Systems

Title: 223 POWER SEQUENCE CHART

Size: C | Document Number: 223-1-4-01 | Rev: 1.0

Date: Friday, June 24, 2005 | Sheet 31 of 32

223 History List

A4 Stage V.A
1.Initial (2005/1/20)

A4 Stage V.B
1.Change the DMI bus error TX-RX(2005/2/5)
2.MODIFY SB_MUTE FROM GPI31 TO GPO19 (2005/2/15)
3.MODIFY P_ID1 FROM GPI12 TO GPIO33 (2005/2/15)
4.ADD R483 FOR PCI-EXPRESS WEAK (2005/2/15)
5.CHANGR THE USB BUS FOR NET WRONG(2005/2/5)
6.ADD 10K ohm for IMVPOK OC issue (2005/2/5)
7.ADD R481 FOR INTERNAL REGULATOR 1.5V (2005/2/15)

A4 Stage V.C
1.Change the SB power net 3.3V_ICH(2005/3/7)

A4 stage V.D
1.U27 from RTL8100 10/100 LAN change to BCM5789 for GIGA LAN.
2.ADD R528,R529 33_1%_0402
R526,R527 49.9_1%_0402
C683,C684 0.1uF_0402
R533~R540 0_0402 FOR GIGA LAN.

3.ADD R530 1K_0402 FOR PCIE_WAKE-.
4.ADD R492,R426 NC FOR INTVRMEN REGULATOR DISABLE.
5.ADD R132,R531 FOR VCC_DIMM CIRCUIT LIMIT-V.D 050412
6.ADD C274 47uF/6.3V_SP FOR-V.D 050412

A5 stage V1.0
1.Del Z3,Z4,Z5,Z7.
2.R457,R464 from 20K change to 22K.
3.SB GPIO[34] add test pad.

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Title: 223 HISTORY		
Size: A3	Document Number: 223-1-4-01	Rev: 1.0
Date: Friday, June 24, 2005	Sheet 32 of 32	