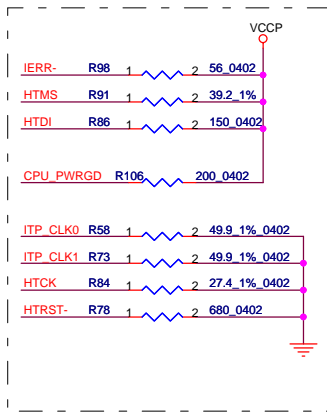
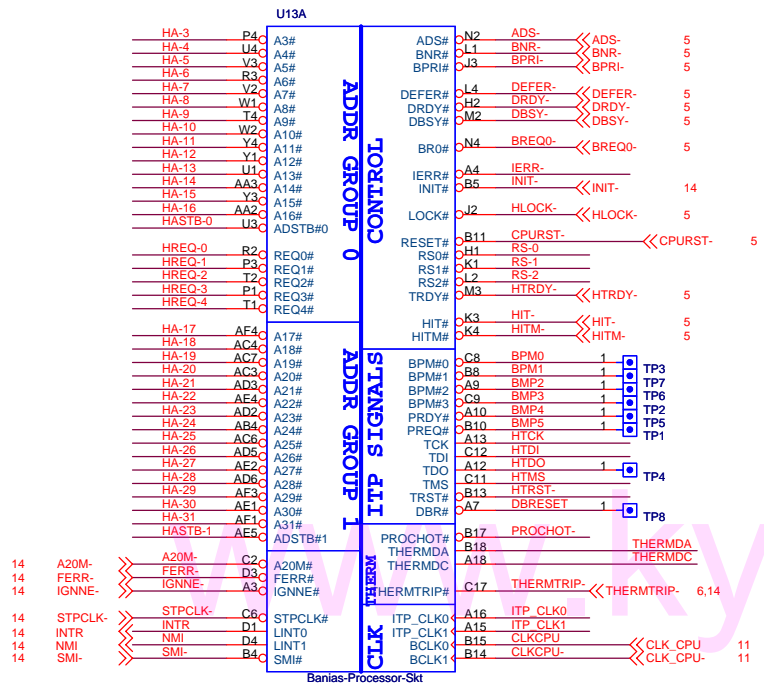


## PCB P/N:15-F63-011000

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					
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					

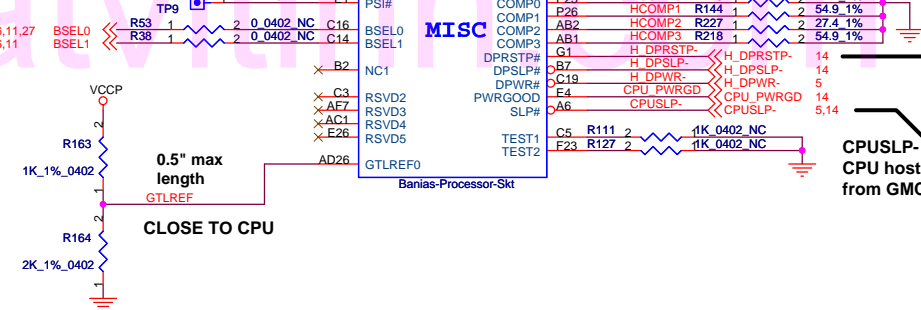
Approved by	Checked by	Designed by
<b>223 BLOCK DIAGRAM</b>		
File	Document Number	Rev
	223-1-4-01	1.0
Date:	Friday, June 24, 2005	Sheet 1 of 32

P. Leader



H DPRSTP- not support Dothan, but will support future processor.

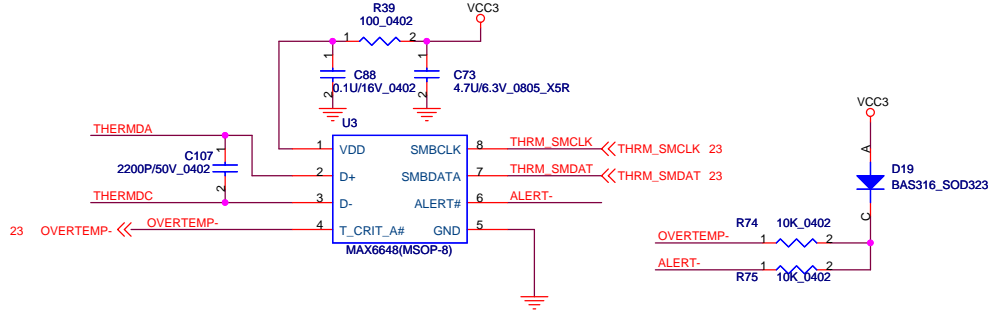
Power status indicate



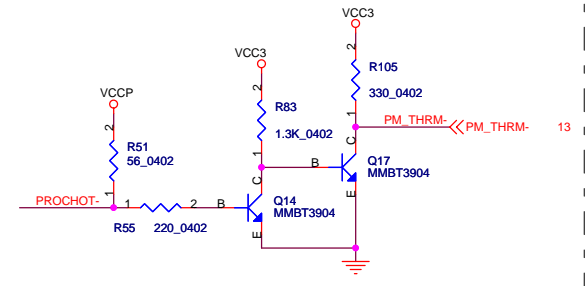
0.5" max CLOSE TO CPU length

CPUSLPL- signal is to stop CPU host bus controller from GMCH or ICH6

Remote and Local Thermal Sensor

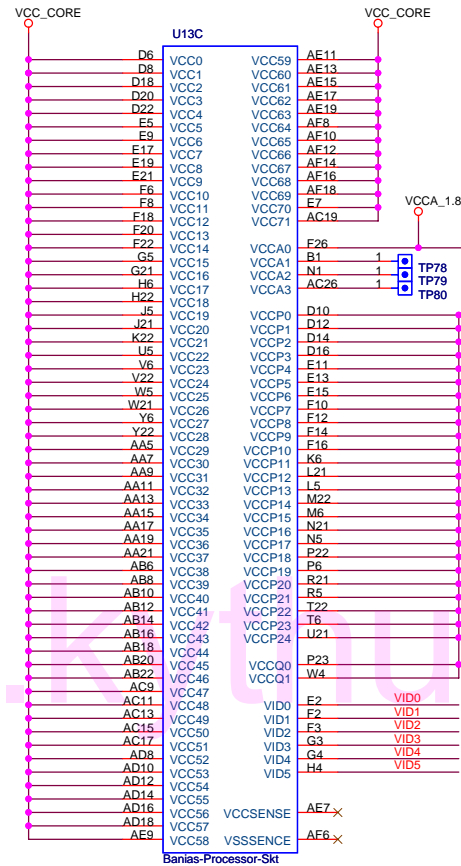
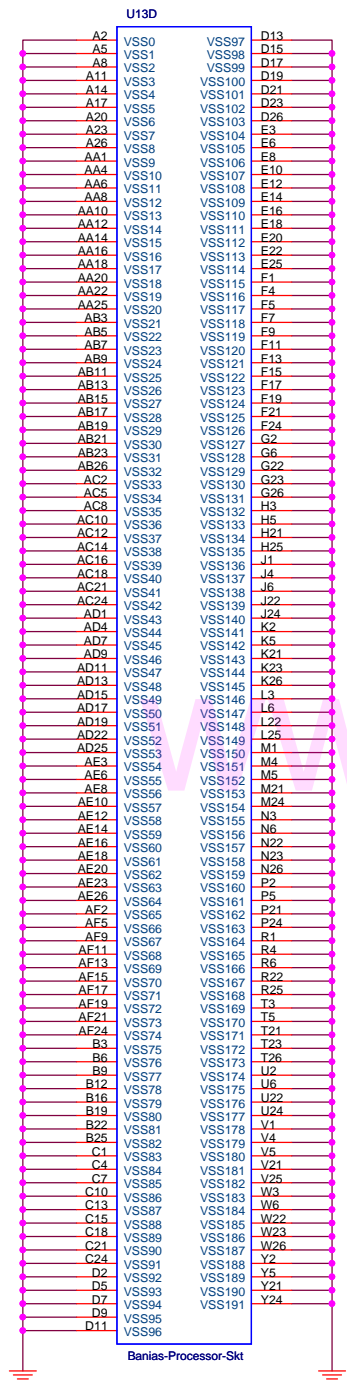


THERM ALERT

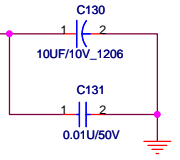


BSEL[0]	BSEL[1]	
H	L	100MHZ
L	H	133MHZ

**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



0.01uf and 10uf of a pair capacitors



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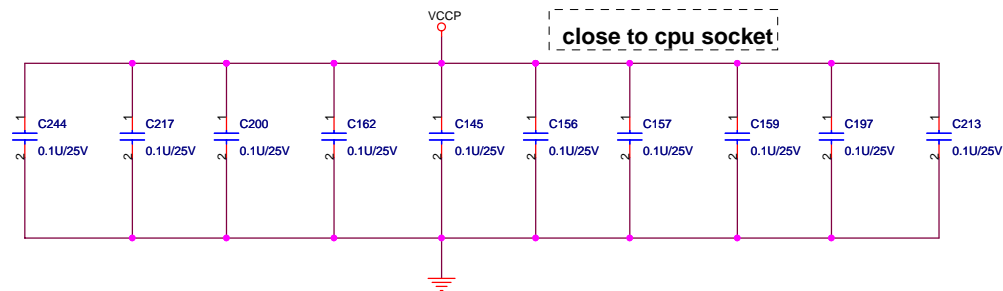
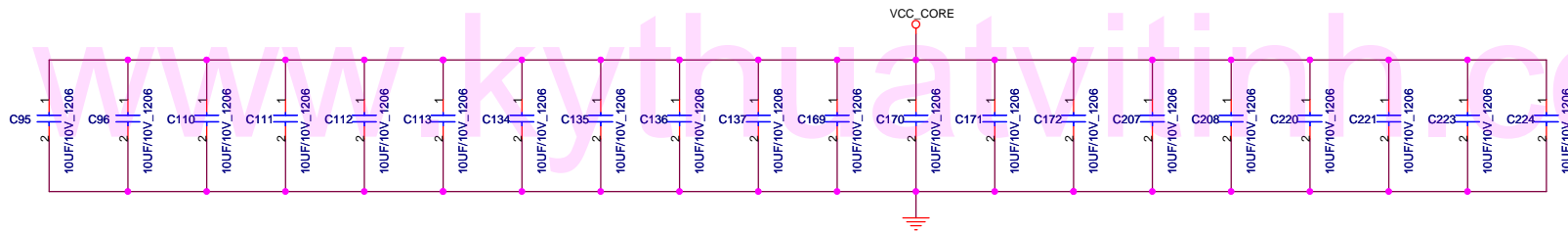
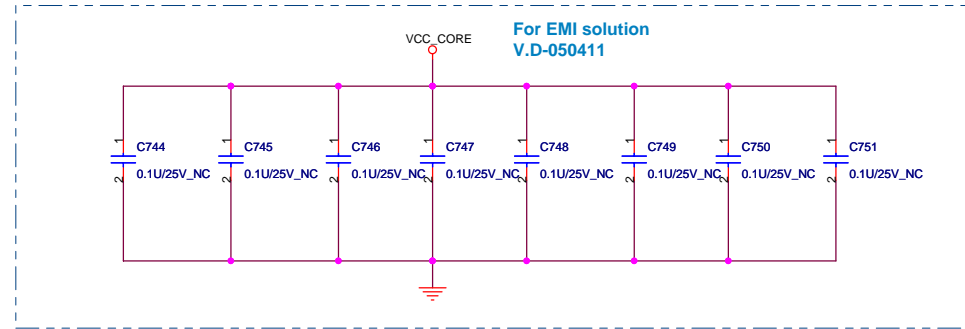
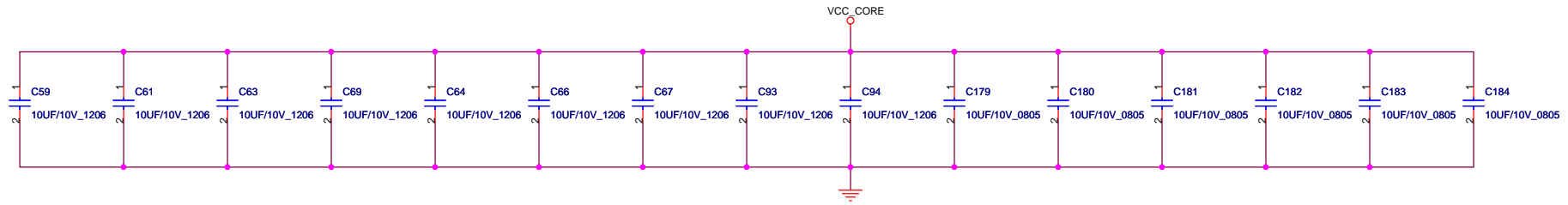
LAYOUT NOTE: Provide a test point (with no stub)  
 LAYOUT NOTE: Provide a test point (with no stub)  
 to connent differential probe between VCCSENSE  
 and VSSSENSE at the location where the two 54.9  
 ohm resistors terminate the 55 ohm transmission  
 lines.

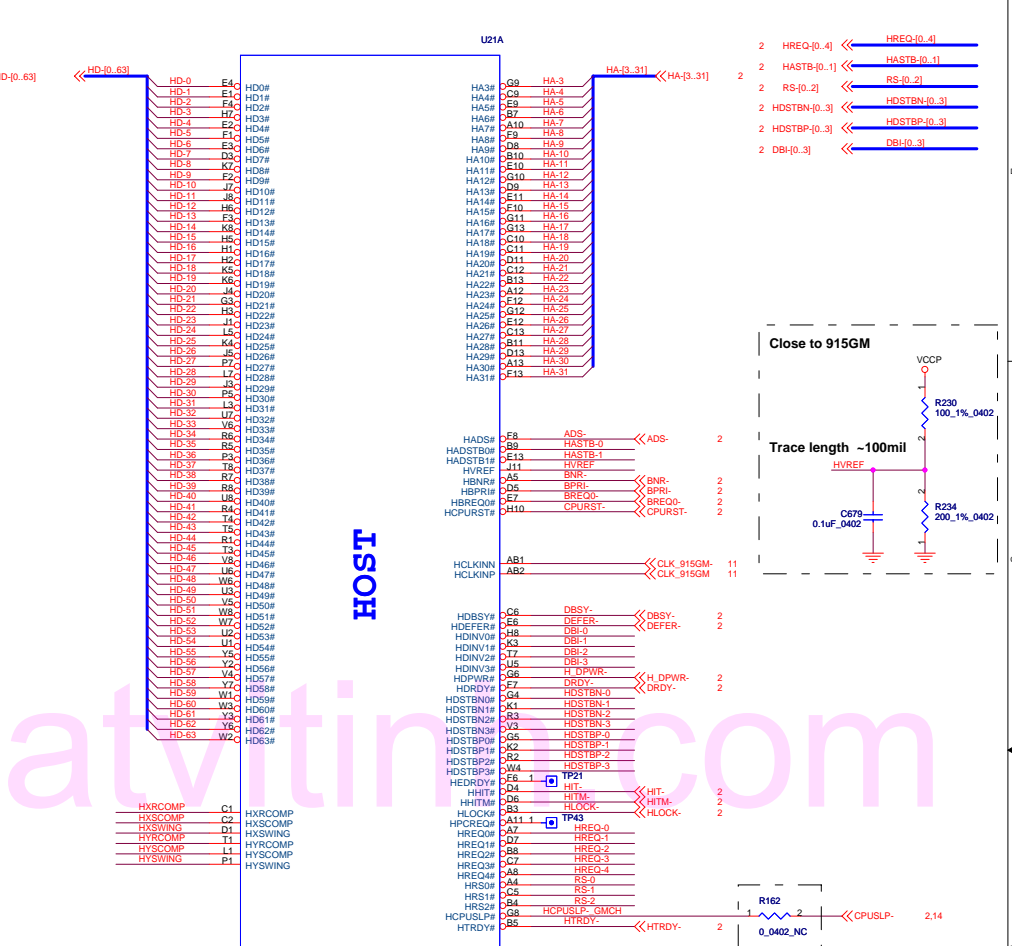
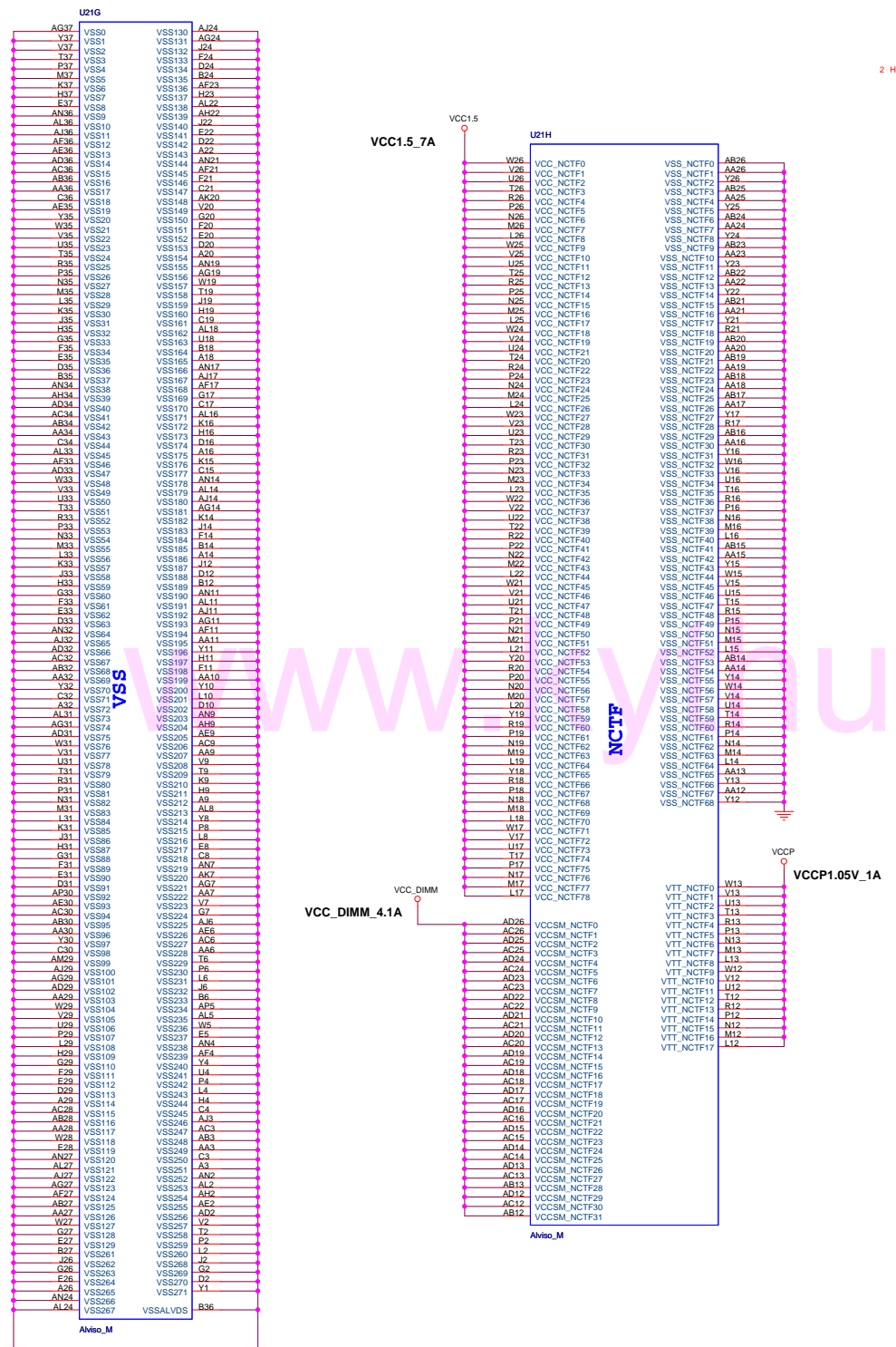
**ECS Elitegroup Computer Systems**

Title: **223 Dothan-2**

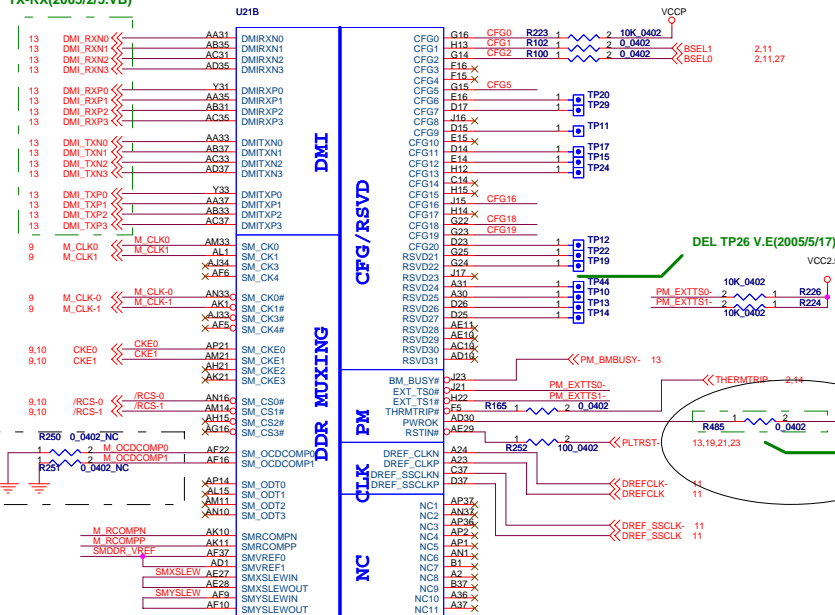
Size A3 Document Number: **223-1-4-01** Rev 1.0

Date: Friday, June 24, 2005 Sheet 3 of 32

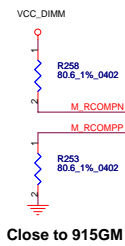




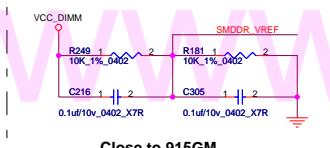
## CHANGR THE DMI BUS TX-RX(2005/2/5.VB)



Route as short as possible  
DDR:Not used for DDR device.  
Connect to GND.  
DDR2:Pull down to GND with  
40.2 ohm resistor.



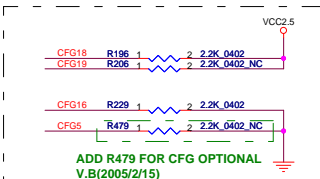
Close to 915GM



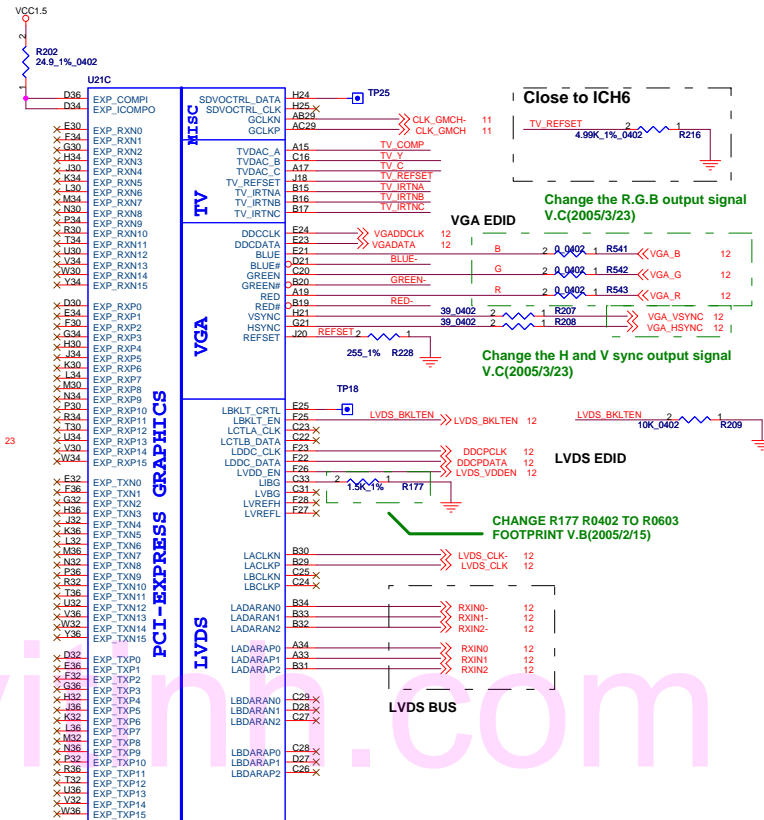
Close to 915GM

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

<b>CFG[2:0]</b> 001= FSB 533 MHZ 101= FSB 400 MHZ	<b>CFG16</b> 0=Dynamic ODT Disable 1=Dynamic ODT Enable (default)
<b>CFG5</b> 0=DMix2 1=DMix4(default)	<b>CFG11</b> 0= CPU 533(default) <b>NO FUNCTION NOW</b> 1= CPU 400
<b>CFG6</b> 0=DDR2 (default) 1=DDR (default)	<b>CFG18</b> 0=1.05V(default) for 915PM 1=1.5V for 915GM Aviso 915GM core voltage select
<b>CFG7</b> 0=Mobile Prescott 1=Dothan (default)	<b>CFG19</b> 0= 1.05V(default) 1= 1.2V FSB I/O voltlage (CPU VTT select)
<b>CFG9</b> 0=Lane Reversal Enable 1=Normal Operation (default)	<b>CFG13:12</b> 01=XOR MODE 10=All ZMODE 11=Normal Operation (Default)



915GM CFG strapping



DEL the 150 ohm ,connect the TV signal to GND V.E.(2005/5/18)

Place 150 Ohm termination resistors close to ALVISO 915GM and trace as short as well

Elitegroup Computer Systems

Title: **223 ALVISO 915GM\_B ( VGA, DMI )**

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

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

/RMD[0:63] <<RMD[0:63] 9,10

/RDQS[0:7] <<RDQS[0:7] 9,10

/RDM[0:7] <<RDM[0:7] 9,10

MA DAT3 RP5A 8 1 10 8P4R 0402 /RMD3  
MA DAT6 RP5B 7 2 10 8P4R 0402 /RMD6  
MA DAT7 RP5C 6 3 10 8P4R 0402 /RMD2  
MA DAT8 RP5D 5 4 10 8P4R 0402 /RMD5

MA DAT5 RP8A 8 1 10 8P4R 0402 /RMD5  
MA DAT4 RP8B 7 2 10 8P4R 0402 /RMD4  
MA DAT1 RP8C 6 3 10 8P4R 0402 /RMD1  
MA DAT0 RP8D 5 4 10 8P4R 0402 /RMD0

MA DAT11 RP3A 8 1 10 8P4R 0402 /RMD11  
MA DAT14 RP3B 7 2 10 8P4R 0402 /RMD14  
MA DAT13 RP3C 6 3 10 8P4R 0402 /RMD13  
MA DAT8 RP3D 5 4 10 8P4R 0402 /RMD8

MA DAT7 RP4A 8 1 10 8P4R 0402 /RMD7  
MA DAT6 RP4B 7 2 10 8P4R 0402 /RMD6  
MA DAT15 RP4C 6 3 10 8P4R 0402 /RMD15  
MA DAT10 RP4D 5 4 10 8P4R 0402 /RMD10

MA DAT20 RP7A 8 1 10 8P4R 0402 /RMD20  
MA DAT17 RP7B 7 2 10 8P4R 0402 /RMD17  
MA DAT18 RP7C 6 3 10 8P4R 0402 /RMD18  
MA DAT19 RP7D 5 4 10 8P4R 0402 /RMD19

MA DAT23 RP6A 8 1 10 8P4R 0402 /RMD23  
MA DAT21 RP6B 7 2 10 8P4R 0402 /RMD21  
MA DAT2 RP6C 6 3 10 8P4R 0402 /RMD2  
MA DAT16 RP6D 5 4 10 8P4R 0402 /RMD16

MA DAT24 RP12A 8 1 10 8P4R 0402 /RMD24  
MA DAT25 RP12B 7 2 10 8P4R 0402 /RMD25  
MA DAT25 RP12C 6 3 10 8P4R 0402 /RMD25  
MA DAT26 RP12D 5 4 10 8P4R 0402 /RMD26

MA DAT30 RP10A 8 1 10 8P4R 0402 /RMD30  
MA DAT31 RP10B 7 2 10 8P4R 0402 /RMD31  
MA DAT27 RP10C 6 3 10 8P4R 0402 /RMD27  
MA DAT29 RP10D 5 4 10 8P4R 0402 /RMD29

MA DAT32 RP17A 8 1 10 8P4R 0402 /RMD32  
MA DAT35 RP17B 7 2 10 8P4R 0402 /RMD35  
MA DAT38 RP17C 6 3 10 8P4R 0402 /RMD38  
MA DAT39 RP17D 5 4 10 8P4R 0402 /RMD39

MA DAT35 RP11A 8 1 10 8P4R 0402 /RMD35  
MA DAT34 RP11B 7 2 10 8P4R 0402 /RMD34  
MA DAT37 RP11C 6 3 10 8P4R 0402 /RMD37  
MA DAT36 RP11D 5 4 10 8P4R 0402 /RMD36

MA DAT42 RP13A 8 1 10 8P4R 0402 /RMD42  
MA DAT43 RP13B 7 2 10 8P4R 0402 /RMD43  
MA DAT47 RP13C 6 3 10 8P4R 0402 /RMD47  
MA DAT44 RP13D 5 4 10 8P4R 0402 /RMD44

MA DAT41 RP18A 8 1 10 8P4R 0402 /RMD41  
MA DAT45 RP18B 7 2 10 8P4R 0402 /RMD45  
MA DAT40 RP18C 6 3 10 8P4R 0402 /RMD40  
MA DAT46 RP18D 5 4 10 8P4R 0402 /RMD46

MA DAT51 RP15A 8 1 10 8P4R 0402 /RMD51  
MA DAT50 RP15B 7 2 10 8P4R 0402 /RMD50  
MA DAT53 RP15C 6 3 10 8P4R 0402 /RMD53  
MA DAT48 RP15D 5 4 10 8P4R 0402 /RMD48

MA DAT55 RP14A 8 1 10 8P4R 0402 /RMD55  
M DOS6 RP14B 7 2 10 8P4R 0402 /RDQS6  
MA DAT49 RP14C 6 3 10 8P4R 0402 /RMD49  
MA DAT52 RP14D 5 4 10 8P4R 0402 /RMD52

M DOS7 RP16A 8 1 10 8P4R 0402 /RDQS7  
MA DAT56 RP16B 7 2 10 8P4R 0402 /RMD56  
MA DAT60 RP16C 6 3 10 8P4R 0402 /RMD60  
MA DAT54 RP16D 5 4 10 8P4R 0402 /RMD54

MA DAT63 RP20A 8 1 10 8P4R 0402 /RMD63  
MA DAT62 RP20B 7 2 10 8P4R 0402 /RMD62  
M DM7 RP20C 6 3 10 8P4R 0402 /RDM7  
MA DAT57 RP20D 5 4 10 8P4R 0402 /RMD57

MA DAT8 RP18A 8 1 10 8P4R 0402 /RMD8  
M DM8 RP18B 7 2 10 8P4R 0402 /RDM8  
MA DAT58 RP18C 6 3 10 8P4R 0402 /RMD58  
MA DAT59 RP18D 5 4 10 8P4R 0402 /RMD59

/RDQS0 R28A 1 2 10 0402 M DOS0  
/RDQS1 R31A 1 2 10 0402 M DOS1  
/RDQS2 R36A 1 2 10 0402 M DOS2  
/RDQS3 R31A 1 2 10 0402 M DOS3  
/RDQS4 R32B 1 2 10 0402 M DOS4  
/RDQS5 R32B 1 2 10 0402 M DOS5

/RDM0 R310 1 2 10 0402 M DM0  
/RDM1 R315 1 2 10 0402 M DM1  
/RDM2 R291 1 2 10 0402 M DM2  
/RDM3 R285 1 2 10 0402 M DM3  
/RDM4 R286 1 2 10 0402 M DM4  
/RDM5 R329 1 2 10 0402 M DM5

Table listing components for DDR SYSTEM MEMORY A, including MA DAT0-MA DAT63, SA BS0W-SA BS2W, SA DM0-SA DM7, SA DQ00-SA DQ57, SA DQS0-SA DQS7, SA CAS0-SA WE0, and SA CASP-SA WE0.

Alviso\_M

U21E

Table listing components for DDR SYSTEM MEMORY B, including SB BS0W-SB BS2W, SB DM0-SB DM7, SB DQ00-SB DQ57, SB DQS0-SB DQS7, SB CAS0-SB WE0, and SB CASP-SB WE0.

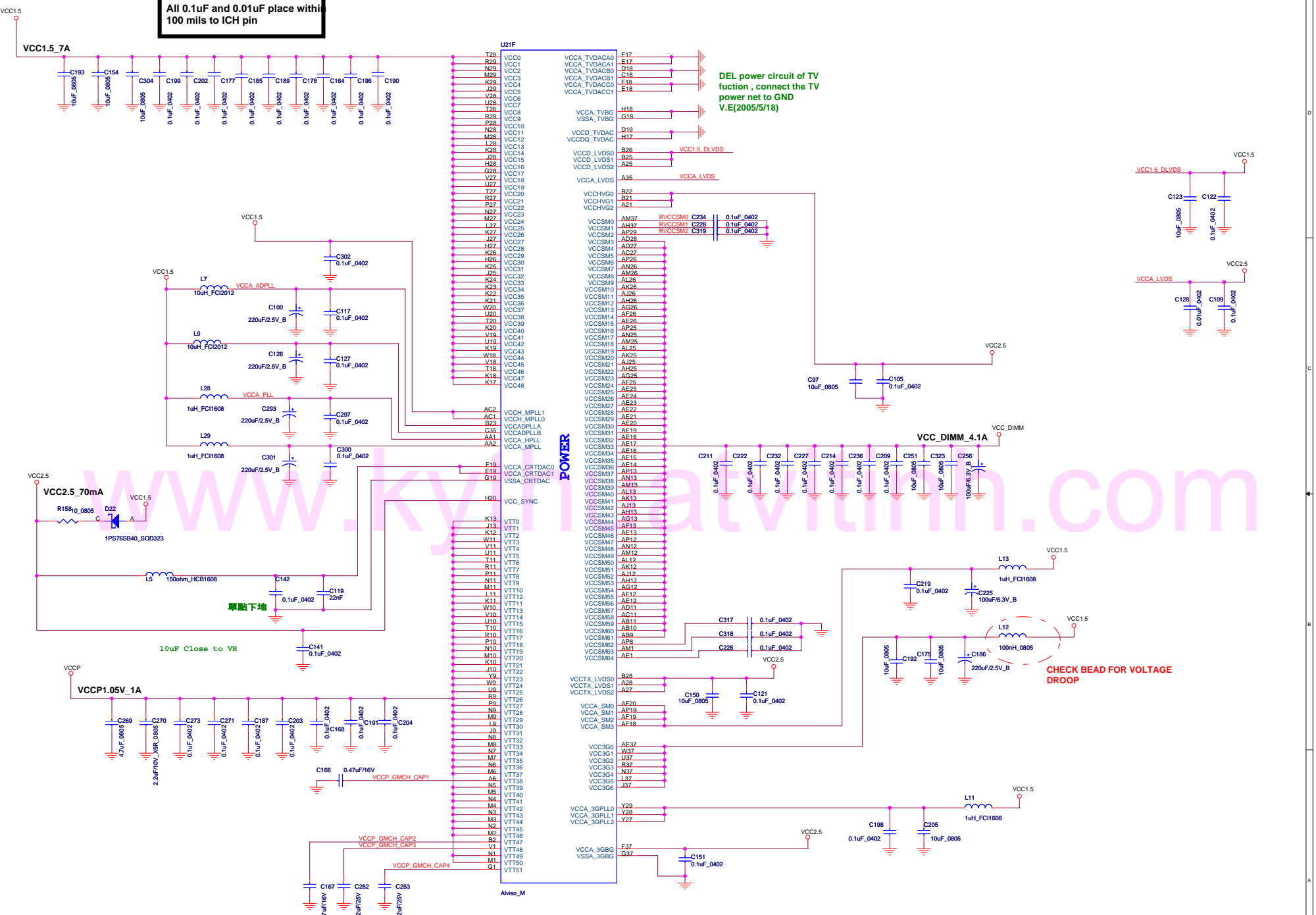
Alviso\_M

DDR SYSTEM MEMORY A

DDR SYSTEM MEMORY B

Elitegroup Computer Systems logo and document information: Title 223 ALVISO\_C (DDR), Document Number 223-1-4-01, Rev 1.0, Date Friday, June 24, 2005, Sheet 7 of 32.

All 0.1uF and 0.01uF place with 100 mils to ICH pin





7,10 M\_A[0..13] >> M\_A[0..13]  
 6,10 CKE[0:1] >> CKE[0:1]  
 7,10 /RDM[0..7] >> /RDM[0..7]  
 7,10 /RDQS[0..7] >> /RDQS[0..7]

M\_A0 112 A0  
 M\_A1 111 A1  
 M\_A2 110 A2  
 M\_A3 109 A3  
 M\_A4 108 A4  
 M\_A5 107 A5  
 M\_A6 106 A6  
 M\_A7 105 A7  
 M\_A8 102 A8  
 M\_A9 101 A9  
 M\_A10 115 A10/AP  
 M\_A11 100 A11  
 M\_A12 99 A12  
 M\_A13 97 DU/A13

M\_BS0 117 BA0  
 M\_BS1 116 BA1  
 X 98 DU/BA2

/RCS-0 121 CS0  
 /RCS-1 122 CS1

/RDM0 12 DQM0  
 /RDM1 26 DQM1  
 /RDM2 48 DQM2  
 /RDM3 62 DQM3  
 /RDM4 134 DQM4  
 /RDM5 148 DQM5  
 /RDM6 170 DQM6  
 /RDM7 184 DQM7  
 X 78 DQM8

M\_WE- 119 WE  
 M\_CAS- 120 CAS  
 M\_RAS- 118 RAS

CKE0 96 CKE0  
 CKE1 95 CKE1

M\_CLK0 35 CK0  
 M\_CLK-0 37 CK0  
 M\_CLK1 160 CK1  
 M\_CLK-1 158 CK1  
 X 89 CK2  
 X 91 CK2

/RDQS0 11 DQS0  
 /RDQS1 25 DQS1  
 /RDQS2 47 DQS2  
 /RDQS3 61 DQS3  
 /RDQS4 133 DQS4  
 /RDQS5 147 DQS5  
 /RDQS6 169 DQS6  
 /RDQS7 183 DQS7  
 X 77 DQS8

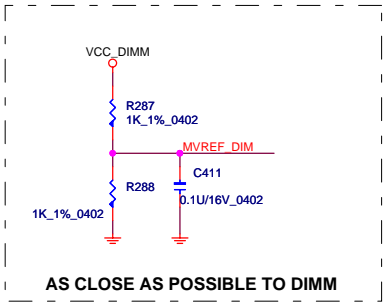
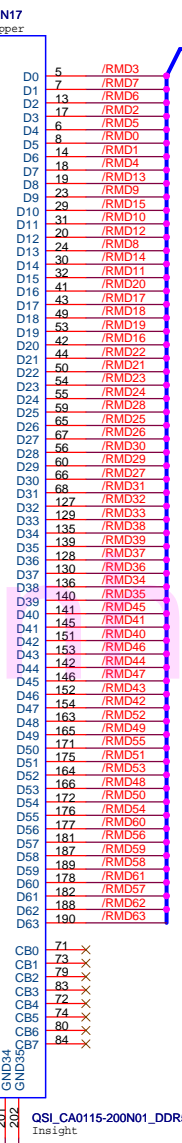
SMBDATA 193 SDA  
 SMBCLK 195 SCL

SA0 194  
 SA1 196  
 SA2 198

VREF1 1  
 VREF2 2

VDDID 199  
 VDDSPD 197

NC/DU/RESET 86  
 NC/DU1 85  
 NC/DU2 123  
 NC/DU3 124  
 NC/DU4 200



STANDARD

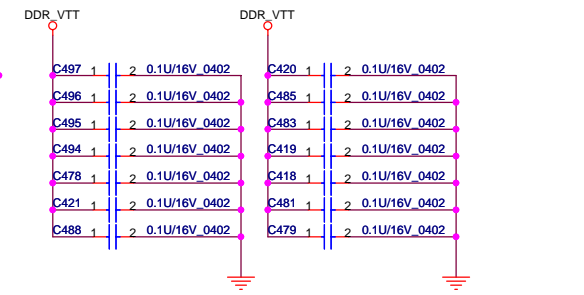
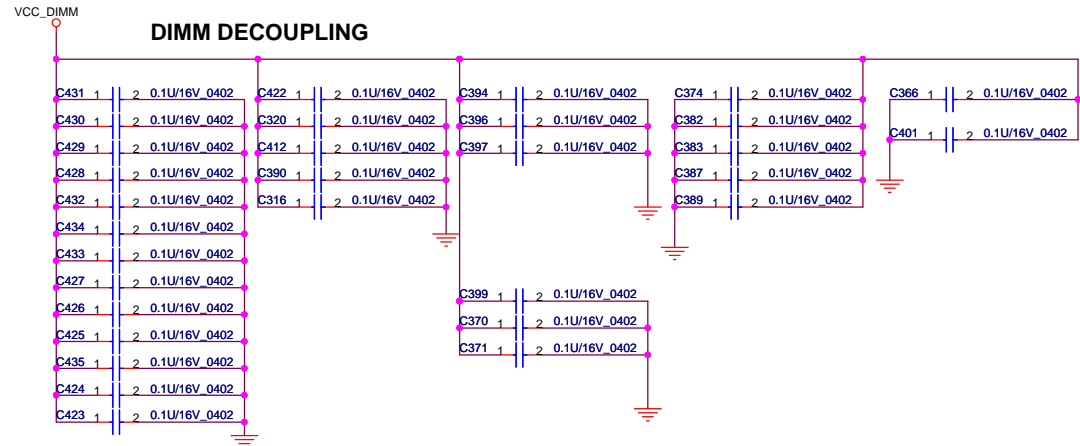
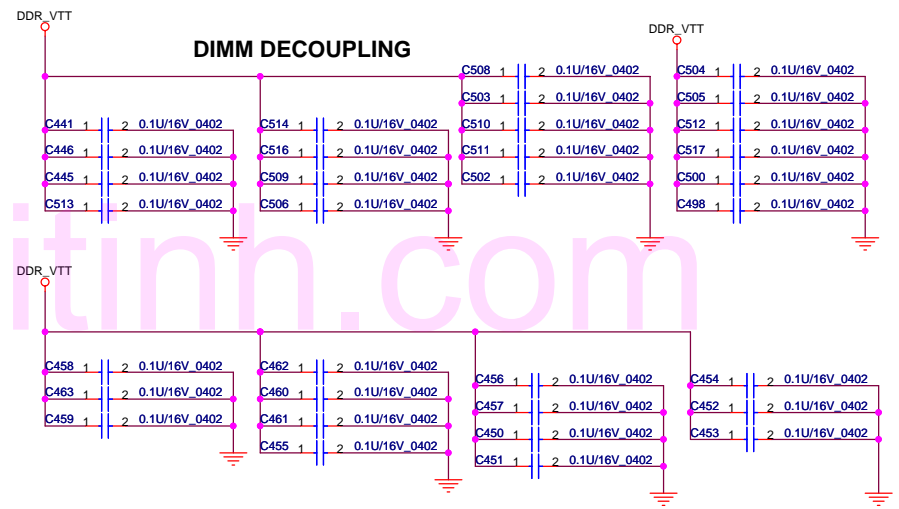
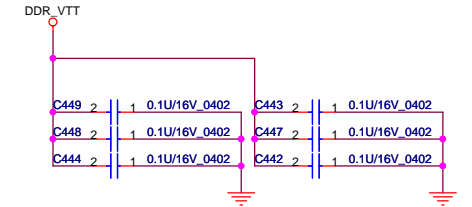
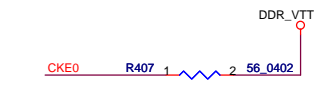
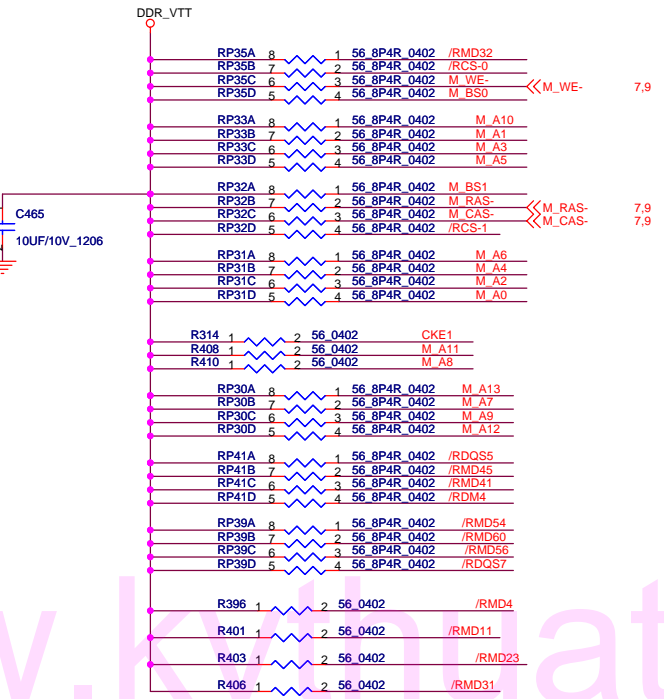
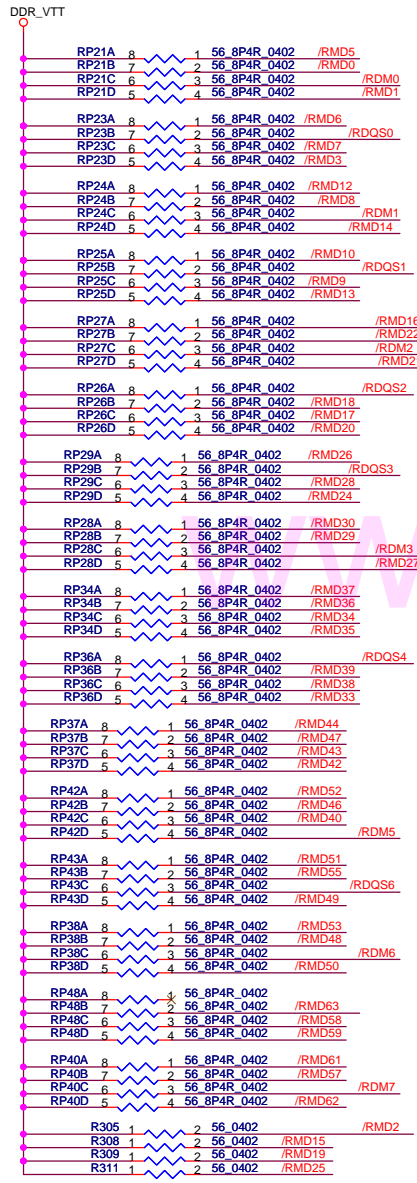
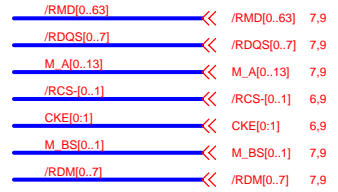
**Elitegroup Computer Systems**

Title: **223 DDR SODIMM**

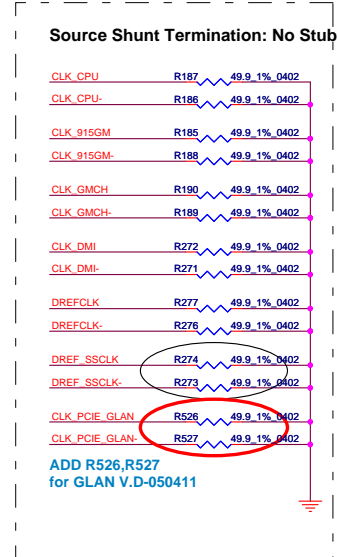
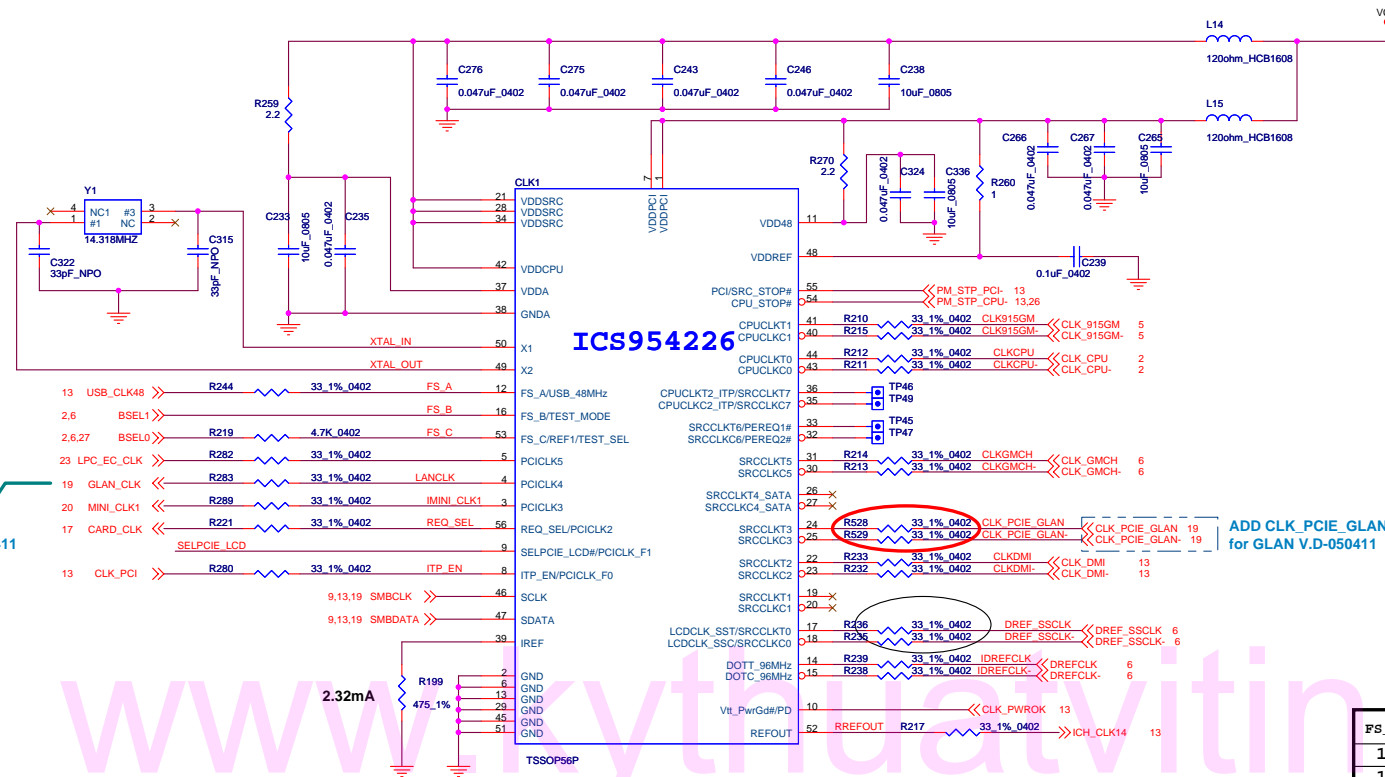
Size A3 Document Number: **223-1-4-01** Rev 1.0

Date: Friday, June 24, 2005 Sheet 9 of 32

# DDR Parallel Termination

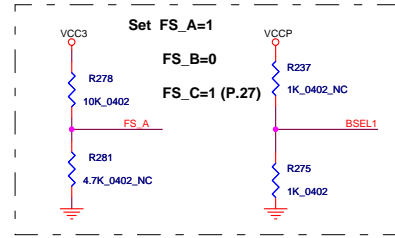
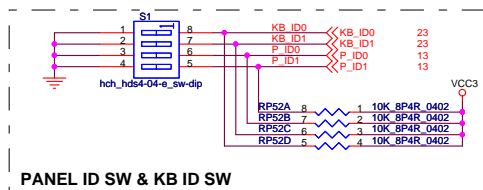
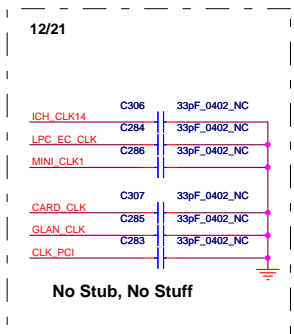
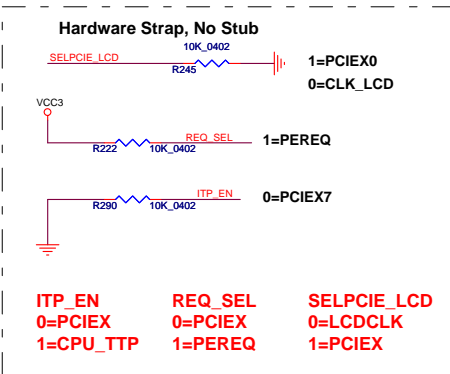


ADD GLAN\_CLK  
for GLAN V.D-050411

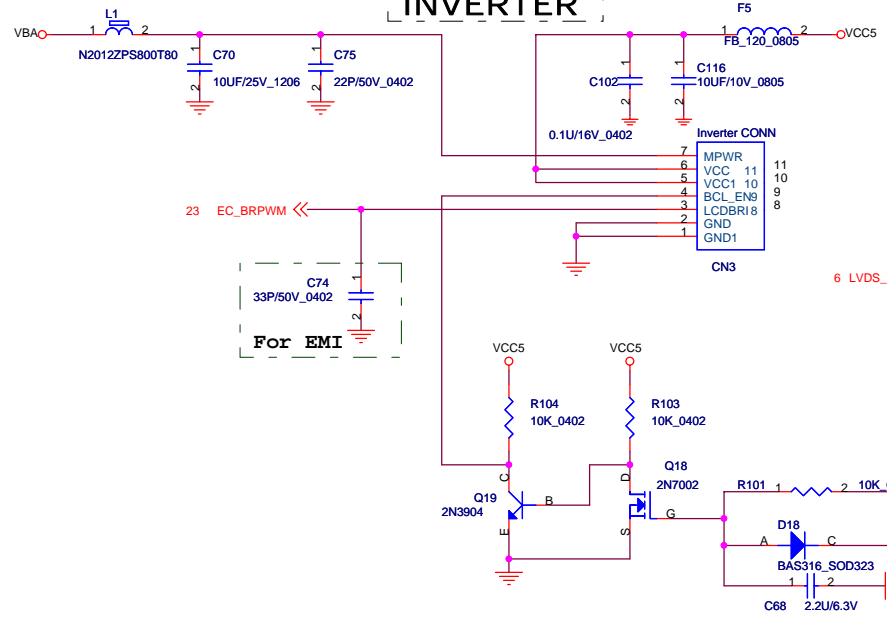


ADD CLK\_PCIE\_GLAN  
for GLAN V.D-050411

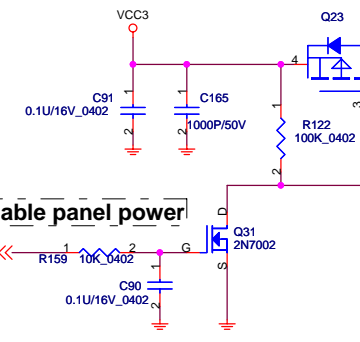
FS_A	FS_B	FS_C	CPU MHz
1	0	1	100.00
1	0	0	133.33
1	1	1	200.00
1	1	0	166.66
0	0	1	333.33
0	0	0	266.66
0	1	1	400.00
0	1	0	200.00



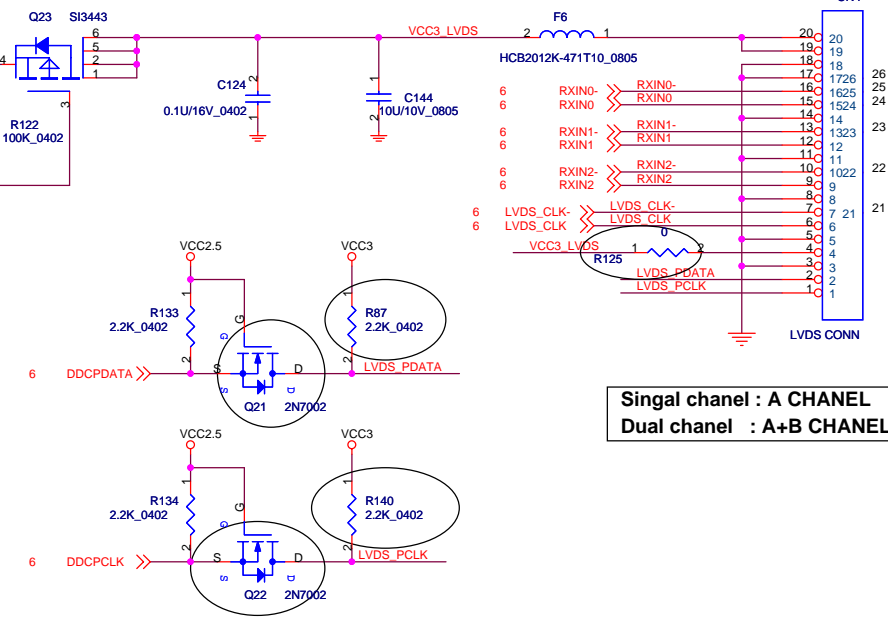
# INVERTER



# Enable panel power

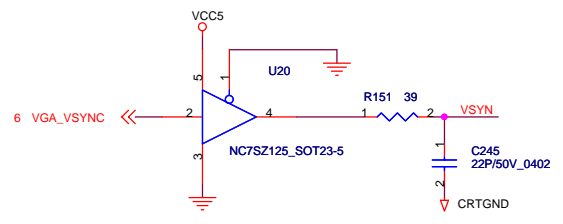
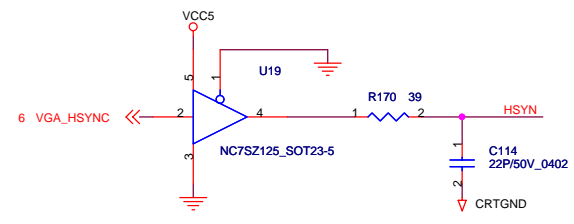
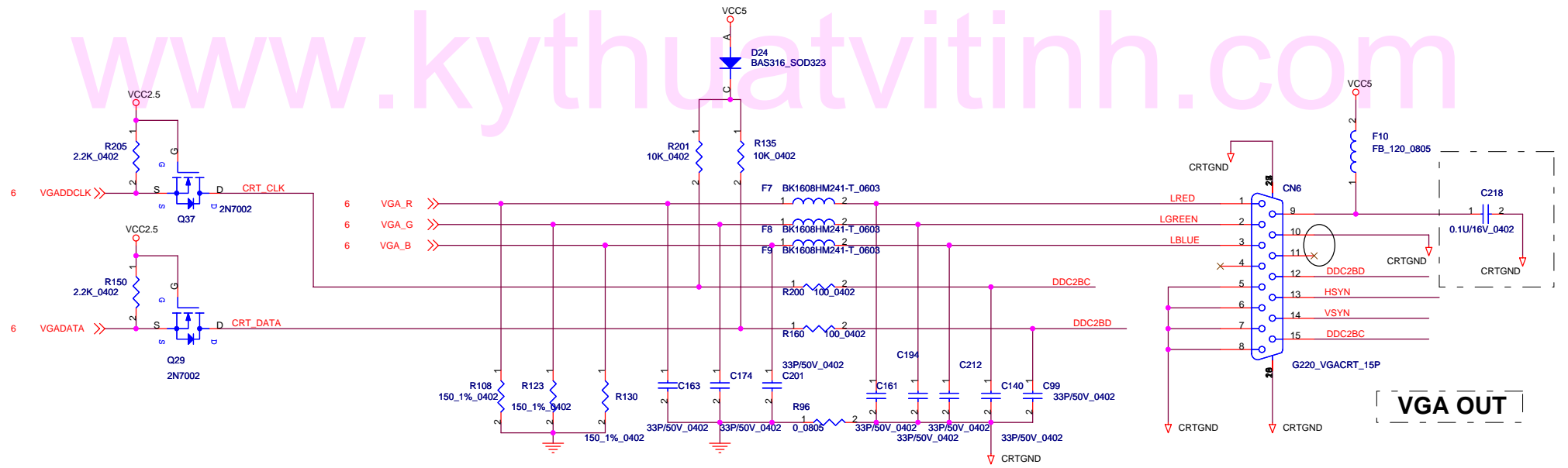


# LVDS



Single channel : A CHANEL  
Dual channel : A+B CHANEL

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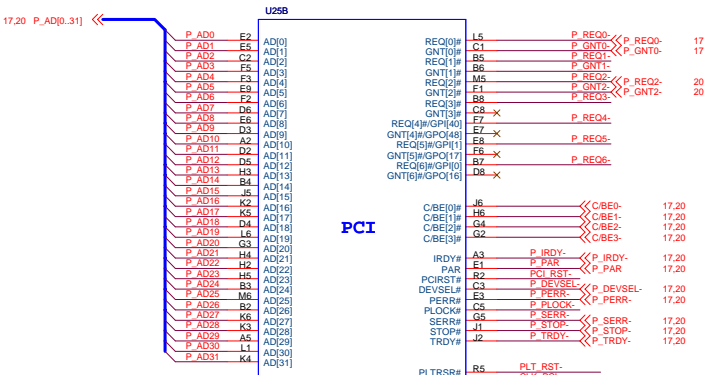


**Elitegroup Computer Systems**

Title: **223 LVDS & CRT**

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

Date: Friday, June 24, 2005 Sheet 12 of 32



REQ0 : CARDBUS  
GNT0 : CARDBUS

REQ2 : MINI PCI  
GNT2 : MINI PCI

**PCI**

**INT**

**RESERVED**

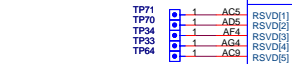
Close to ICH6 for EMI

MODIFY SB\_MUTE FROM GPI31 TO GPIO19 V.B(2005/2/15)

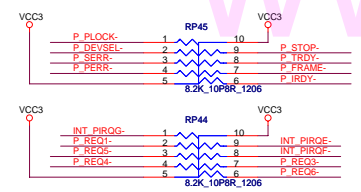
MODIFY P\_ID1 FROM GPI2 TO GPIO33 V.B(2005/2/15)

ADD R483 FOR PCI-EXPRESS WEAK V.B(2005/2/15)

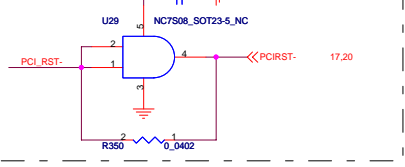
17,20 P\_AD[0..31] << P\_FRAME#



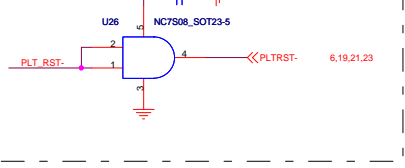
**PCI INTERFACE PULL UP**



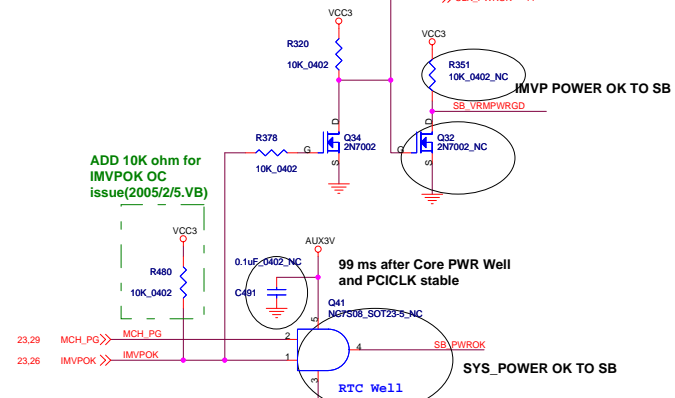
**PCI RESET**



**Platform Reset**



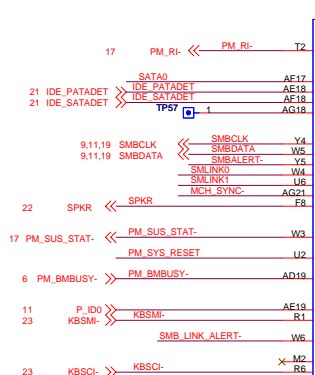
**POWER OK TO TURN ON CLOCK GEN**



ADD 10K ohm for IMVPOK OC issue(2005/2/5.VB)

99 ms after Core PWR Well and PCICLK stable

SYS\_POWER OK TO SB



**PCI-EXPRESS**

**DMII**

**GPIO**

**USB**

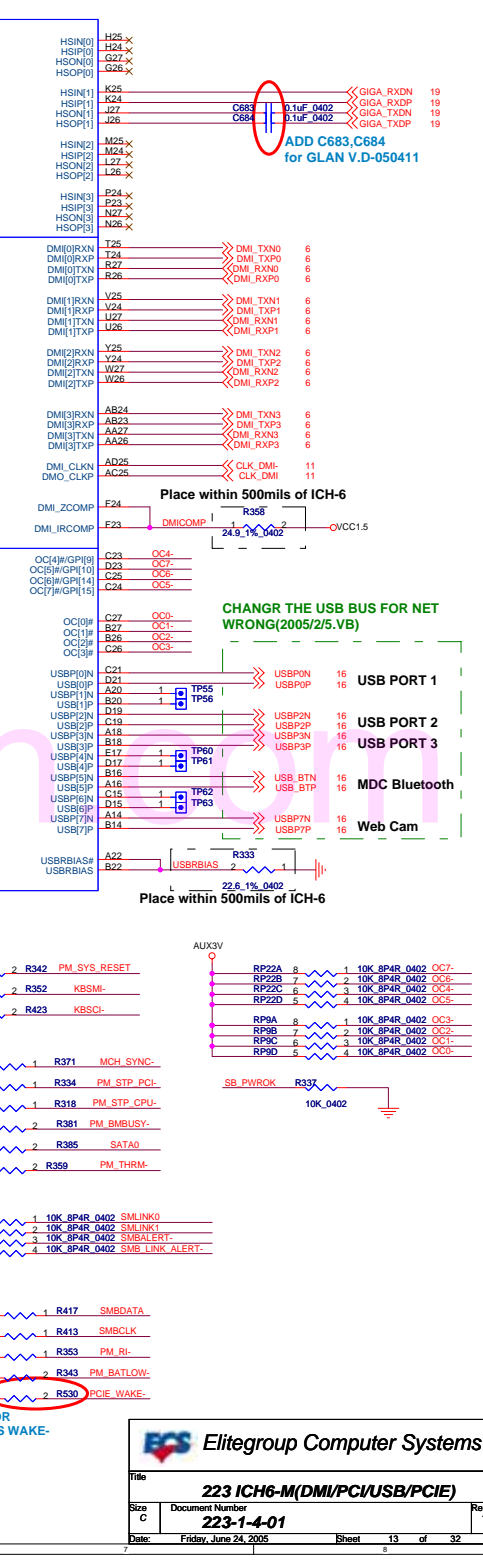
**POWER\_GMT**

**CLKS**

**USB**

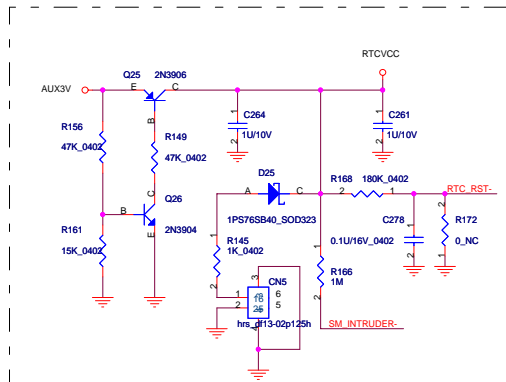
**POWER\_GMT**

**USB**

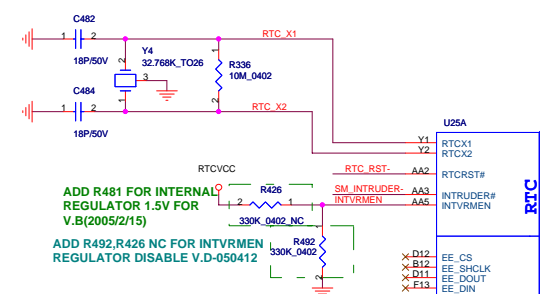


Elitegroup Computer Systems

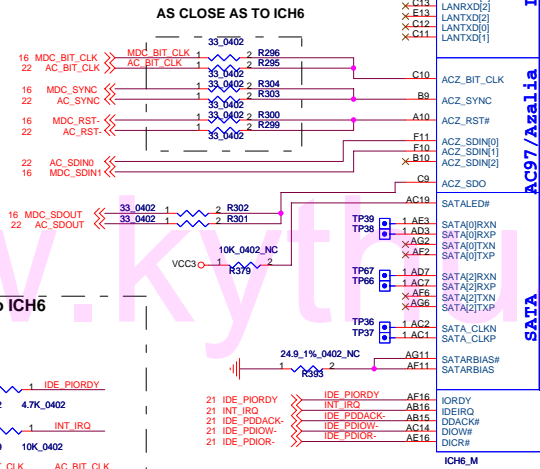
223 ICH6-M(DMI/PCI/USB/PCIE)  
223-1-4-01  
Rev 1.0



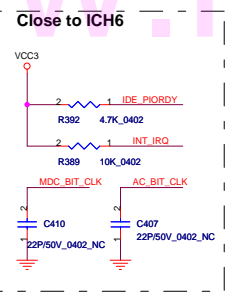
RTC CIRCUIT



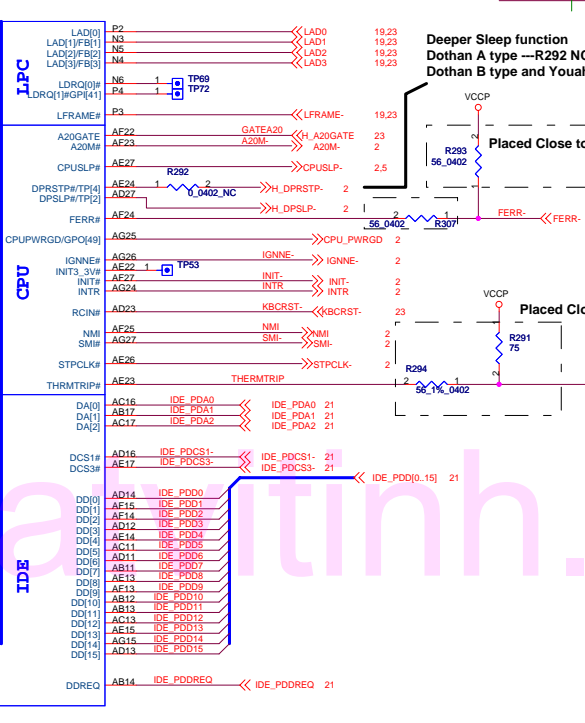
ADD R481 FOR INTERNAL REGULATOR 1.5V FOR V.B(2005/2/15)  
 ADD R492,R426 NC FOR INTVRMEN REGULATOR DISABLE V.D-050412



AS CLOSE AS TO ICH6



Close to ICH6



Add R339 and R335, EC internal pull up no stuff V.C(2005/3/25)

EC internal pull high, no stuff.

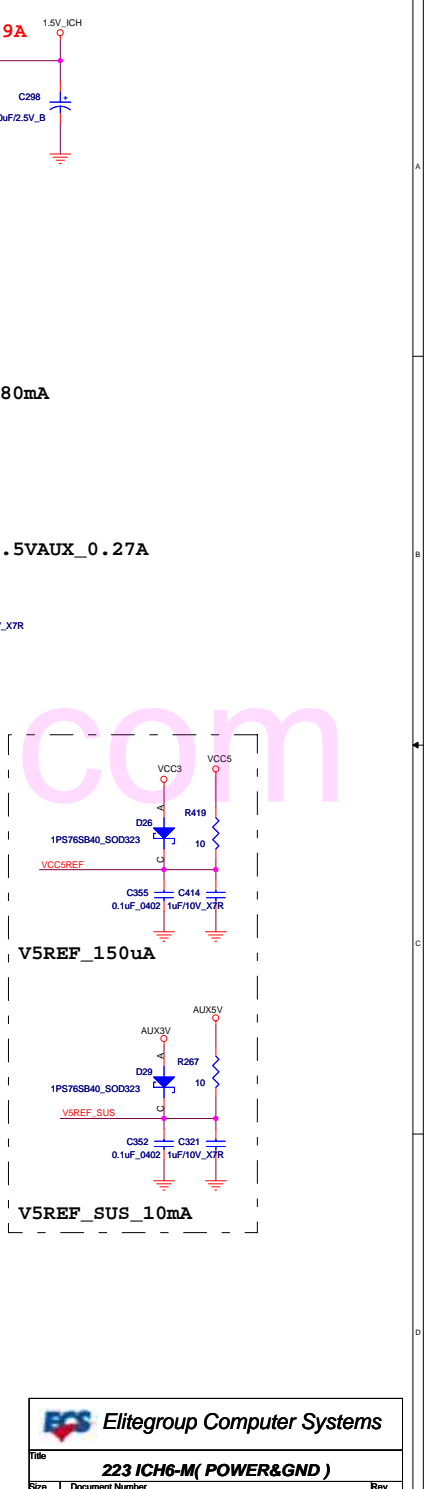
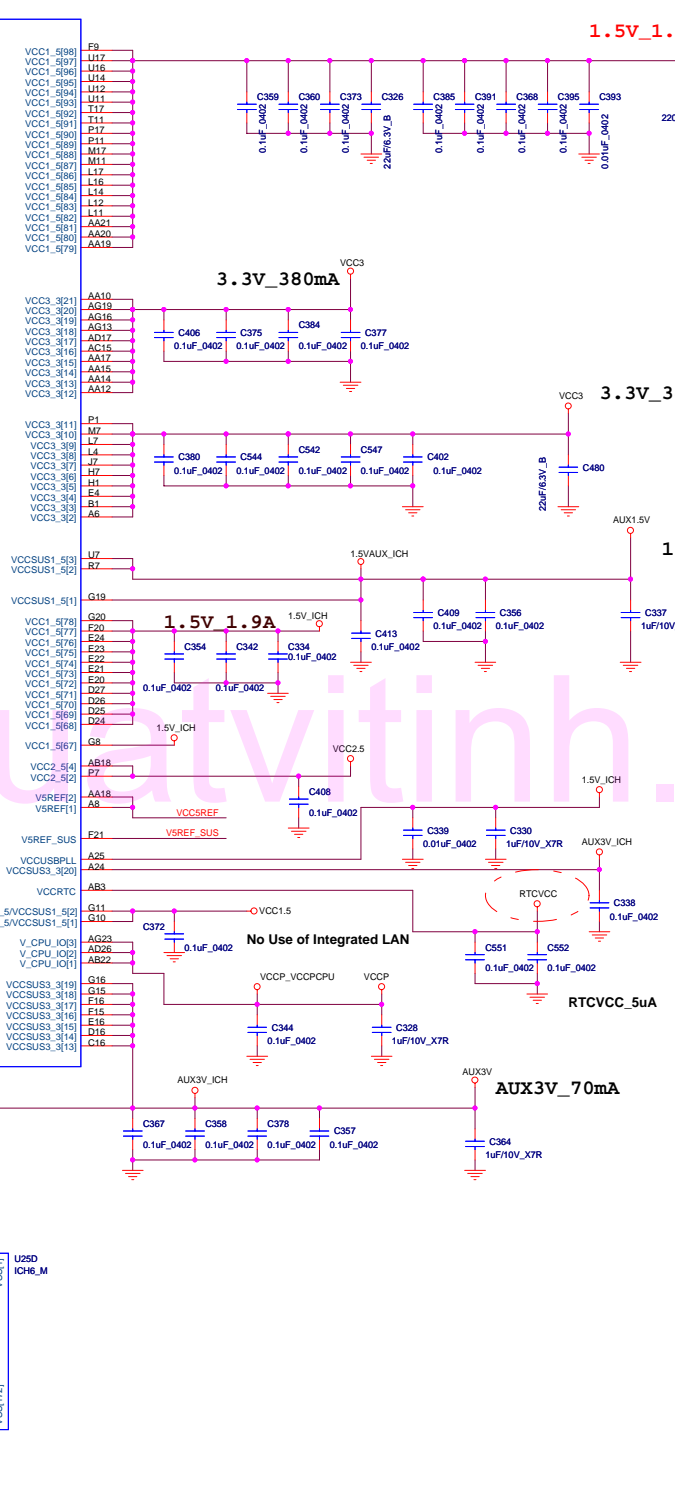
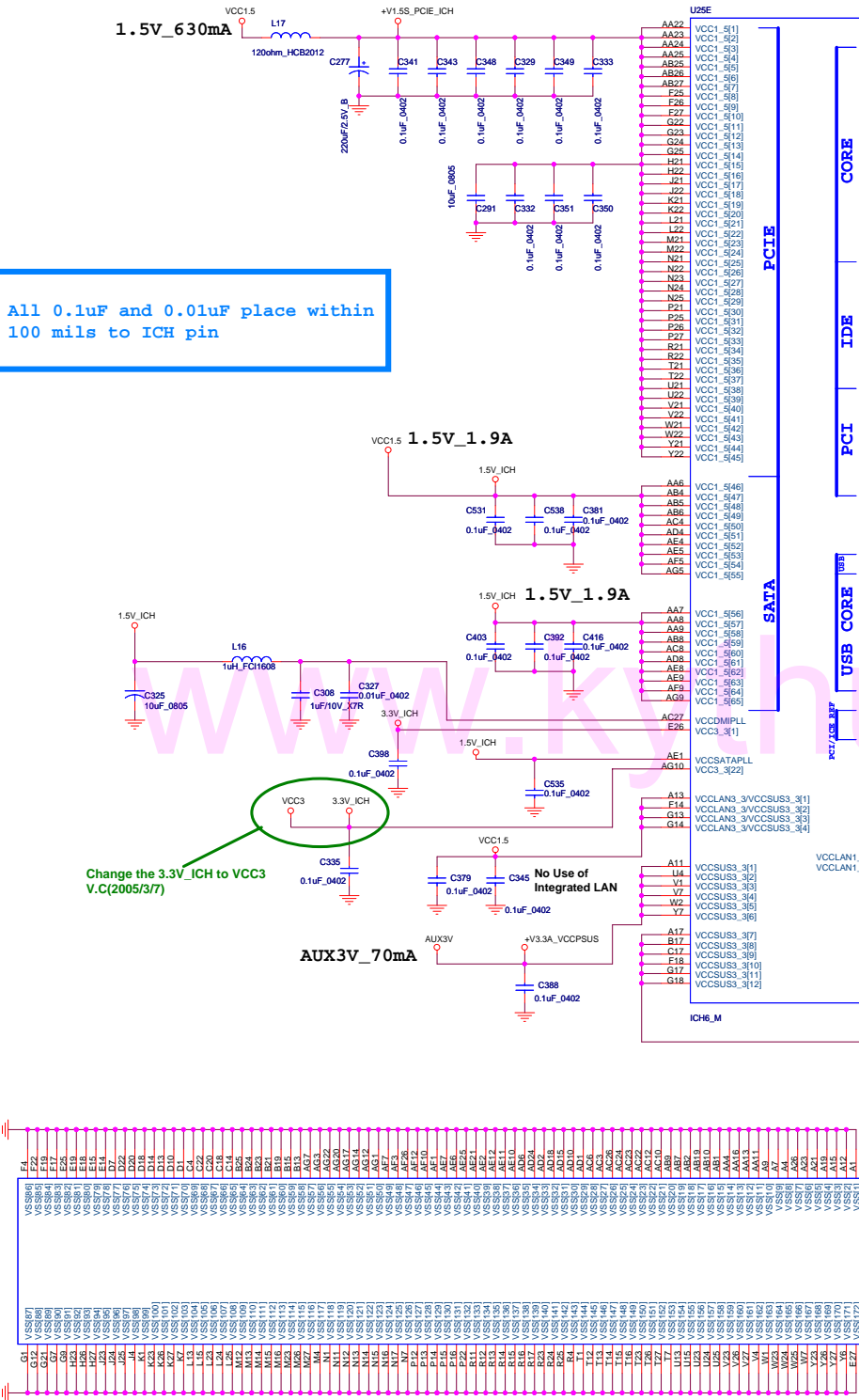
Deeper Sleep function Dothan A type ---R292 NC. Dothan B type and Youah type --- implement R292.

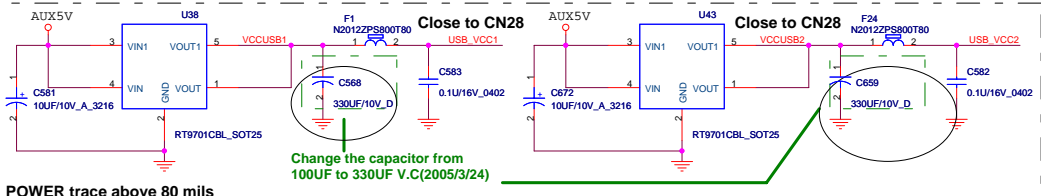
Placed Close to ICH6

Placed Close to ICH6

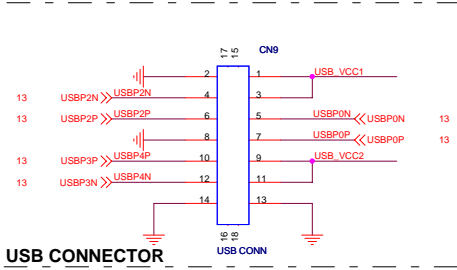
All 0.1uF and 0.01uF place within 100 mils to ICH pin

Change the 3.3V\_ICH to VCC3 V.C(2005/3/7)

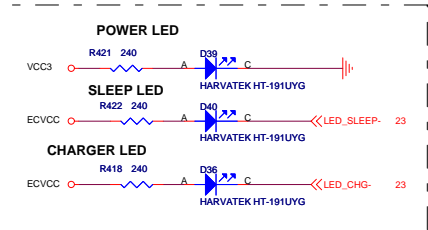




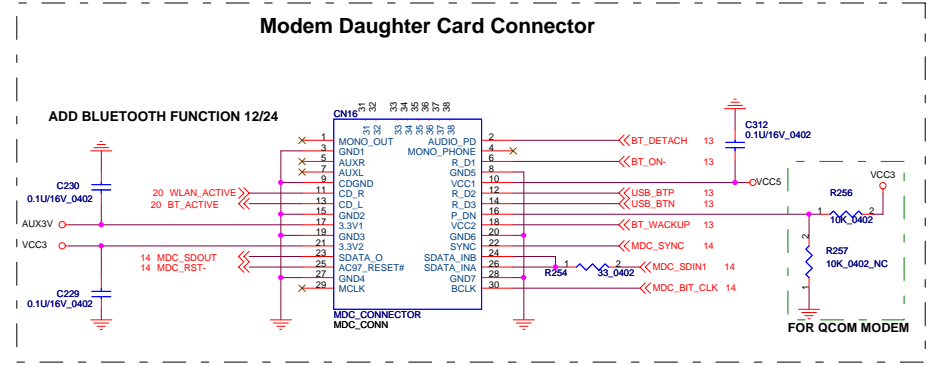
POWER trace above 80 mils



USB CONNECTOR



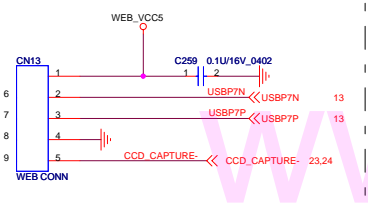
POWER LED  
SLEEP LED  
CHARGER LED



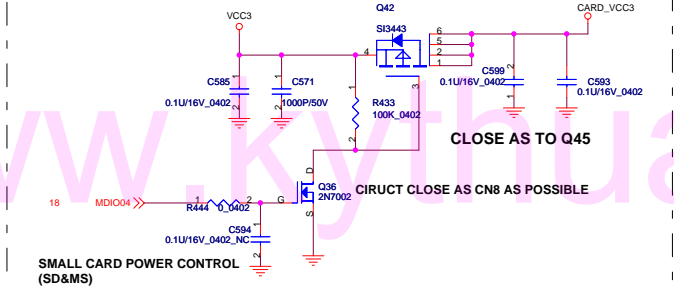
Modem Daughter Card Connector

ADD BLUETOOTH FUNCTION 12/24

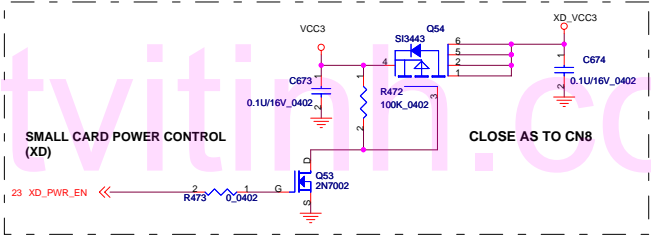
FOR QCOM MODEM



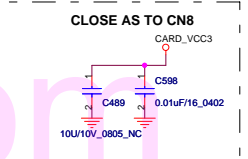
WEB CAM CONNECTOR



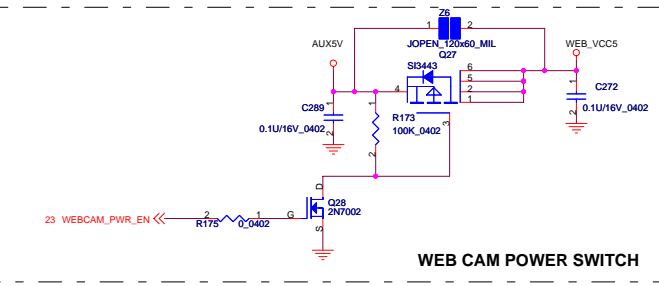
SMALL CARD POWER CONTROL (SD&MS)



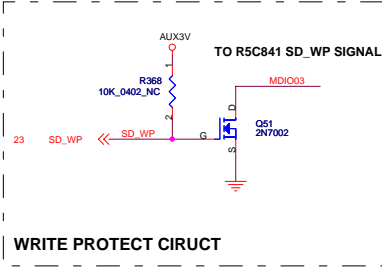
SMALL CARD POWER CONTROL (XD)



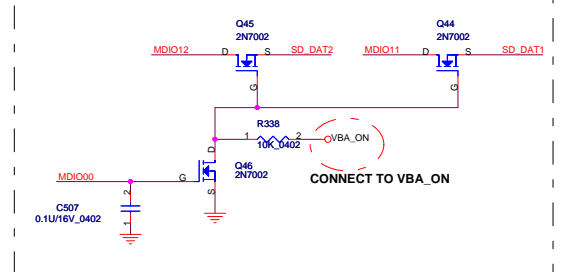
CLOSE AS TO CN8



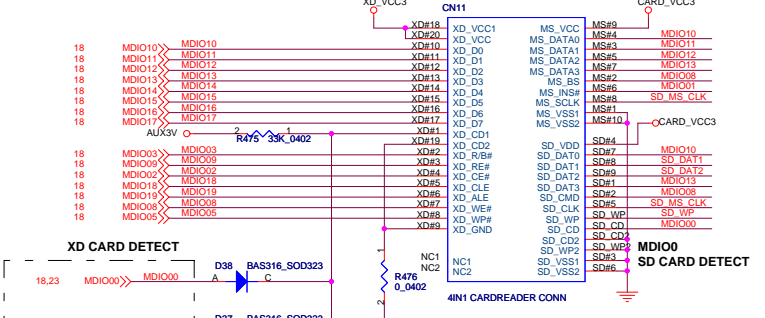
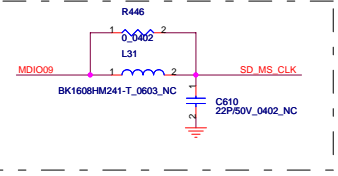
WEB CAM POWER SWITCH



WRITE PROTECT CIRCUIT



CONNECT TO VBA\_ON



XD CARD DETECT

MDIO00 & MDIO01 ---->HL (XD CARD INSERT)  
MDIO00 & MDIO01 ---->HL (MS CARD INSERT)  
MDIO00 & MDIO01 ---->LH (SD CARD INSERT)

**Elitegroup Computer Systems**

Title: **223 USB/LED/MDC/CARDREADER**

Size: **223-1-4-01**

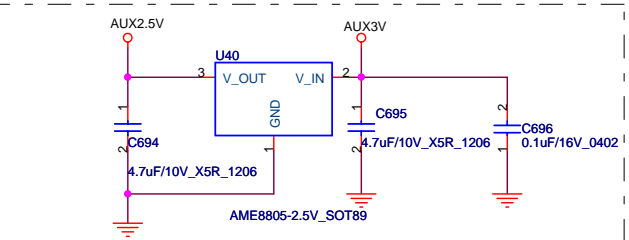
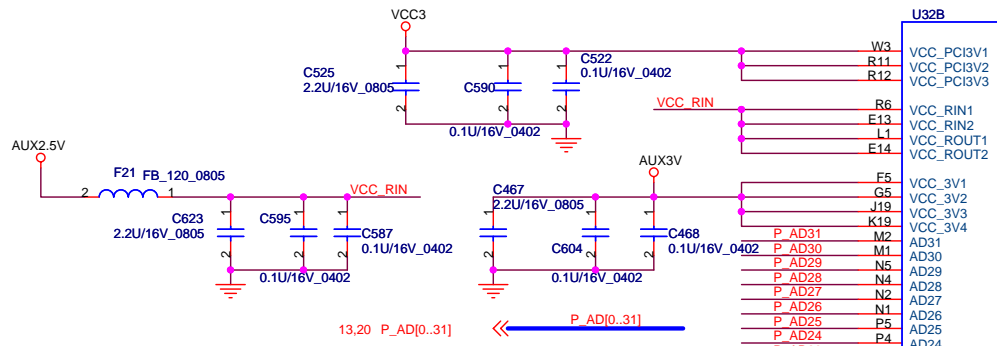
Document Number: **223-1-4-01**

Date: **Friday, June 24, 2005**

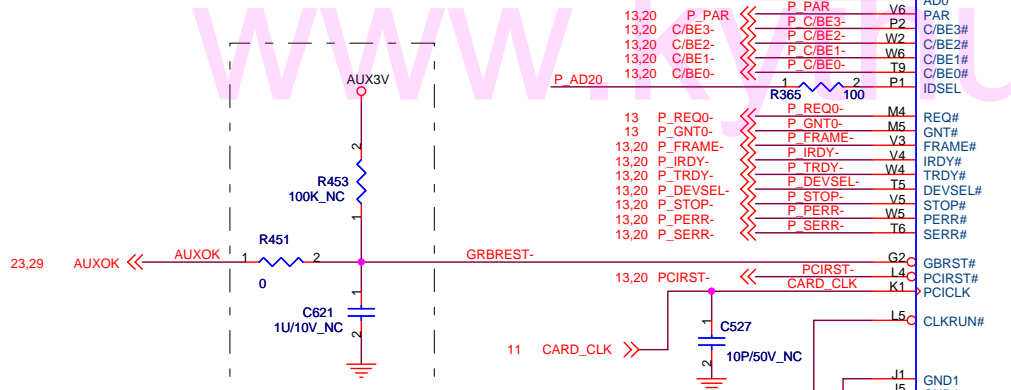
Sheet: **16** of **32**

Rev: **1.0**





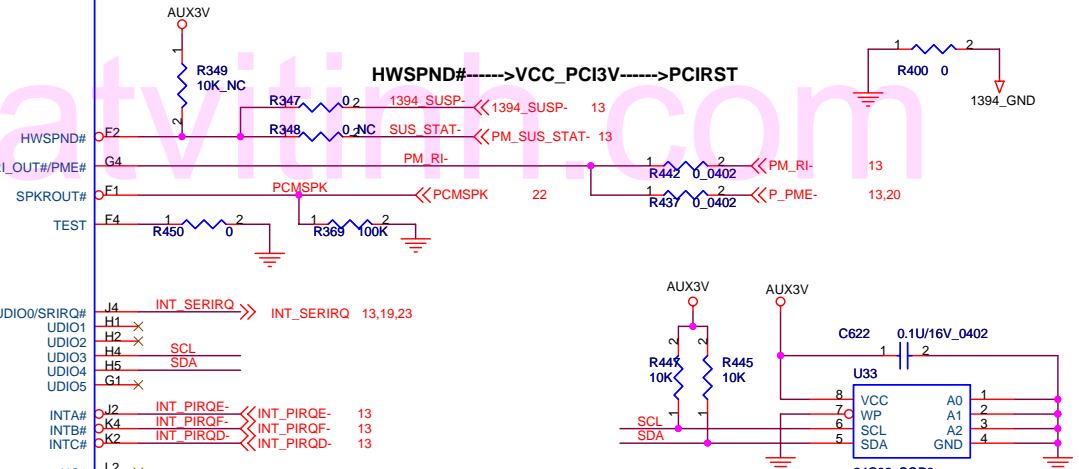
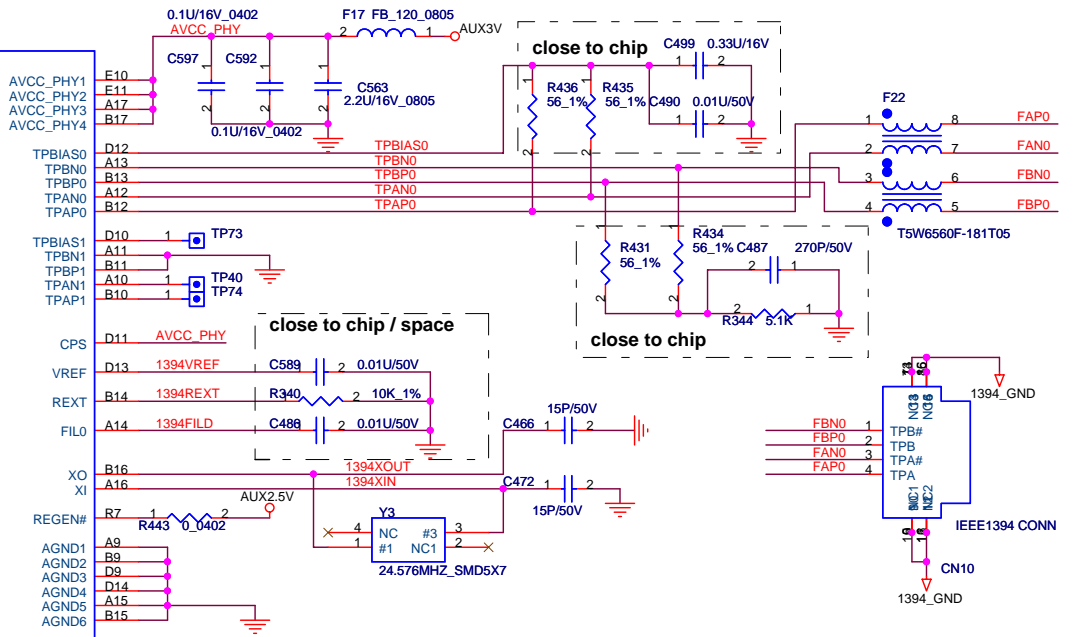
**AUX2.5V SUPPLY 40mA for LAN  
71mA for R5C841**



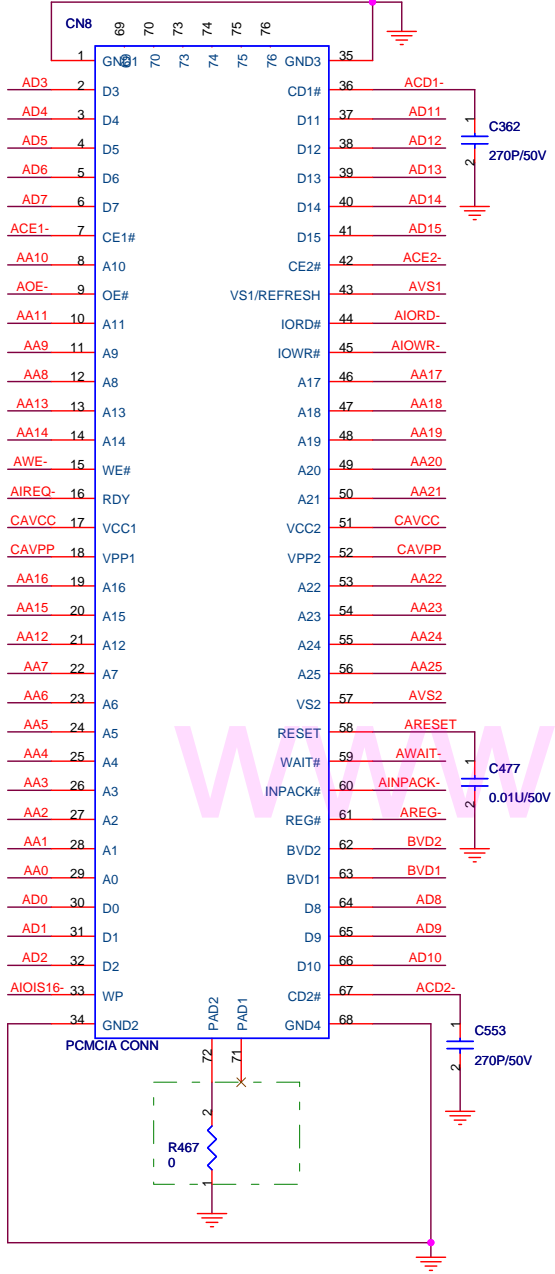
**RC RST is RICOH Reference Schematic**

- 13,20 P PAR <-< P PAR
- 13,20 C/BE3- <-< P C/BE3-
- 13,20 C/BE2- <-< P C/BE2-
- 13,20 C/BE1- <-< P C/BE1-
- 13,20 C/BE0- <-< P C/BE0-
- 13 P REQ0- <-< P REQ0-
- 13 P GNT0- <-< P GNT0-
- 13,20 P FRAME- <-< P FRAME-
- 13,20 P IRDY- <-< P IRDY-
- 13,20 P TRDY- <-< P TRDY-
- 13,20 P DEVSEL- <-< P DEVSEL-
- 13,20 P STOP- <-< P STOP-
- 13,20 P PERR- <-< P PERR-
- 13,20 P\_SERR- <-< P\_SERR-
- 1 P REQ0- <-< P REQ0-
- 1 P GNT0- <-< P GNT0-
- 1 P FRAME- <-< P FRAME-
- 1 P IRDY- <-< P IRDY-
- 1 P TRDY- <-< P TRDY-
- 1 P DEVSEL- <-< P DEVSEL-
- 1 P STOP- <-< P STOP-
- 1 P PERR- <-< P PERR-
- 1 P\_SERR- <-< P\_SERR-

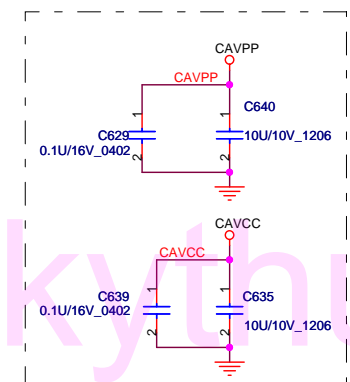
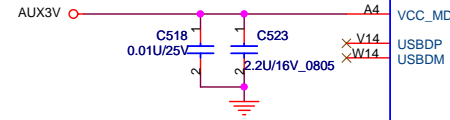
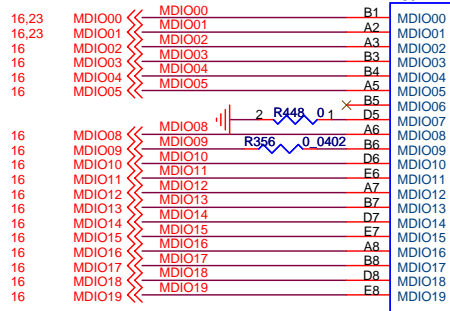
RICOH PCI/1394



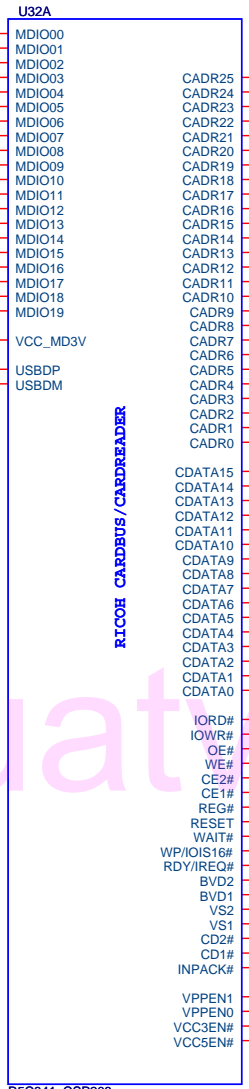
Title		
<b>223 1394_RICOH(R5C841)</b>		
Size B	Document Number	Rev 1.0
<b>223-1-4-01</b>		
Date:	Friday, June 24, 2005	Sheet 17 of 32



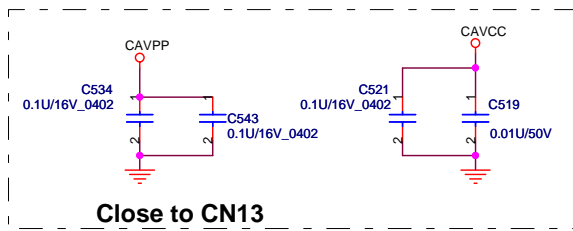
**R240 CLOSE TO RICOH R5C841**



**Close to R5C841**

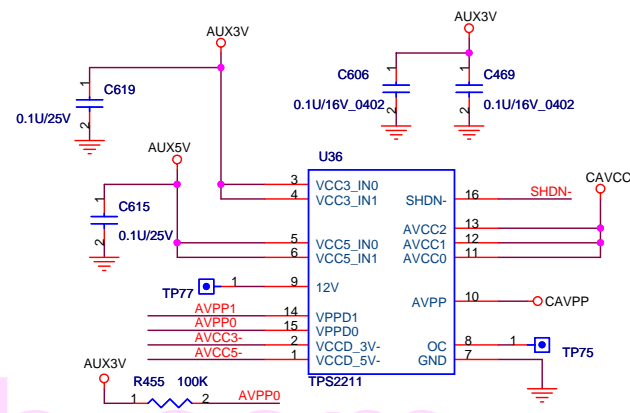


R5C841\_CSP208



**Close to CN13**

**AA16 is critical signal  
R241 close to chip**



**ADD SHDN- PULL UP  
resistor V.C(2005/3/11)**

**CAVPP OUTPUT STATE**

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

**CAVCC OUTPUT STATE**

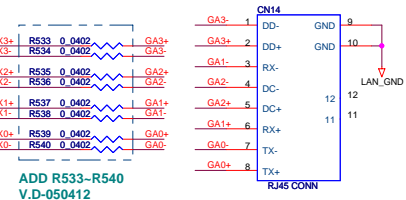
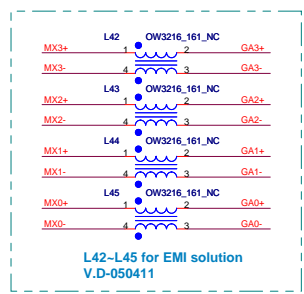
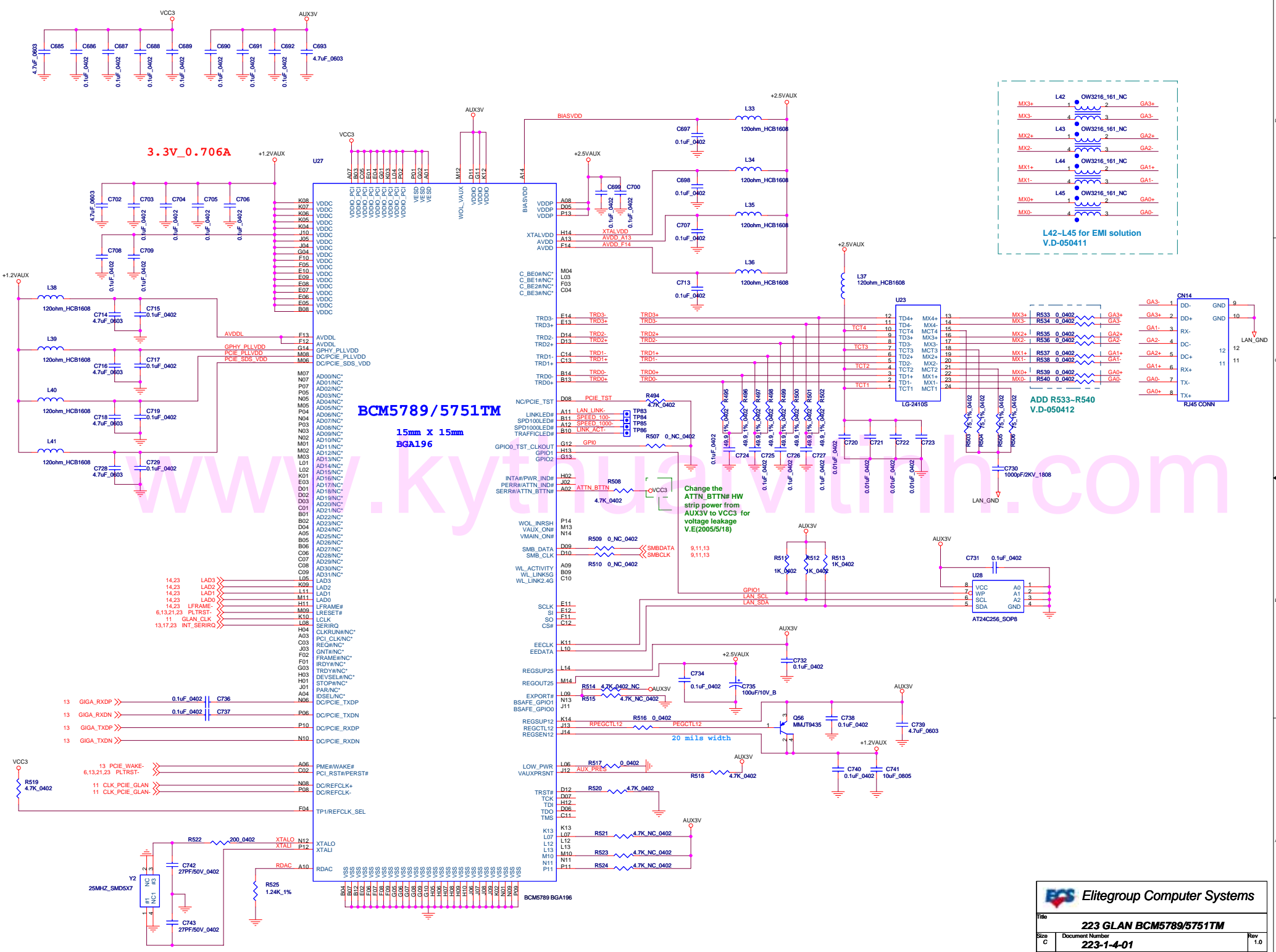
AVCC5-	AVCC3-	OUTPUT
H	L	3.3V
L	H	5V

**ECS Elitegroup Computer Systems**

Title: **223 R5C841 CARDBUS/CARDREADER**

Size B Document Number: **223-1-4-01** Rev 1.0

Date: Friday, June 24, 2005 Sheet 18 of 32



ADD R533-R540 V.D-050412

**Elitegroup Computer Systems**

Title: **223 GLAN BCM5789/5751TM**

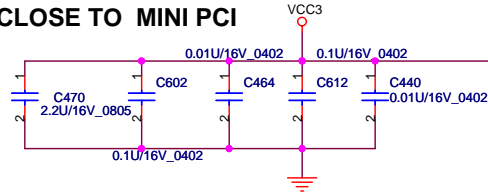
Size: C Document Number: **223-1-4-01** Rev: 1.0

Date: Friday, June 24, 2005 Sheet: 19 of 32

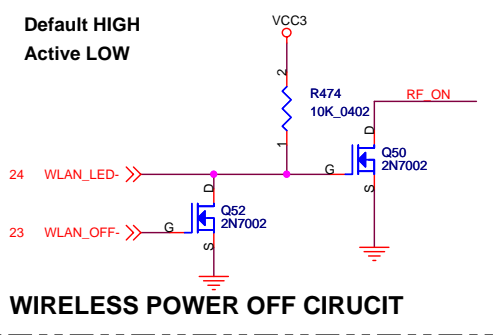
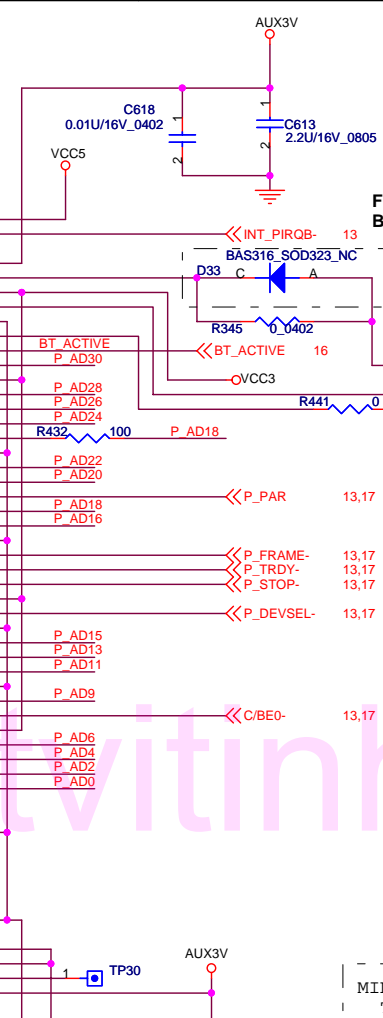
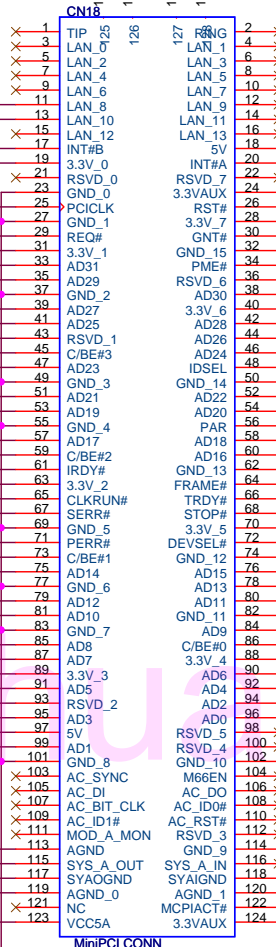
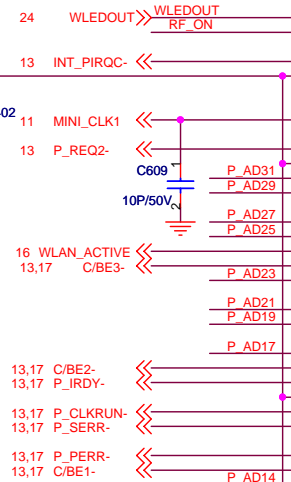
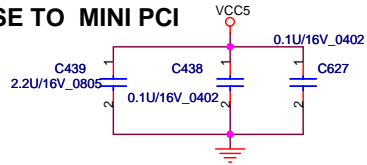
P\_AD[0..31] << P\_AD[0..31] 13,17

### MINI PCI SOCKET

#### CLOSE TO MINI PCI



#### CLOSE TO MINI PCI



FOR PCIRST- BOUNCE

FOR PCIRST- BOUNCE

MINI PCI POWER SPEC.  
 TOYAL : 2W  
 +5V : 100mA  
 3.3VAUX : 5/200/375mA  
 VCC5A : 100mA  
 +3V

FOR G223 :  
 PHONE AND MONO\_OUT NOT USE

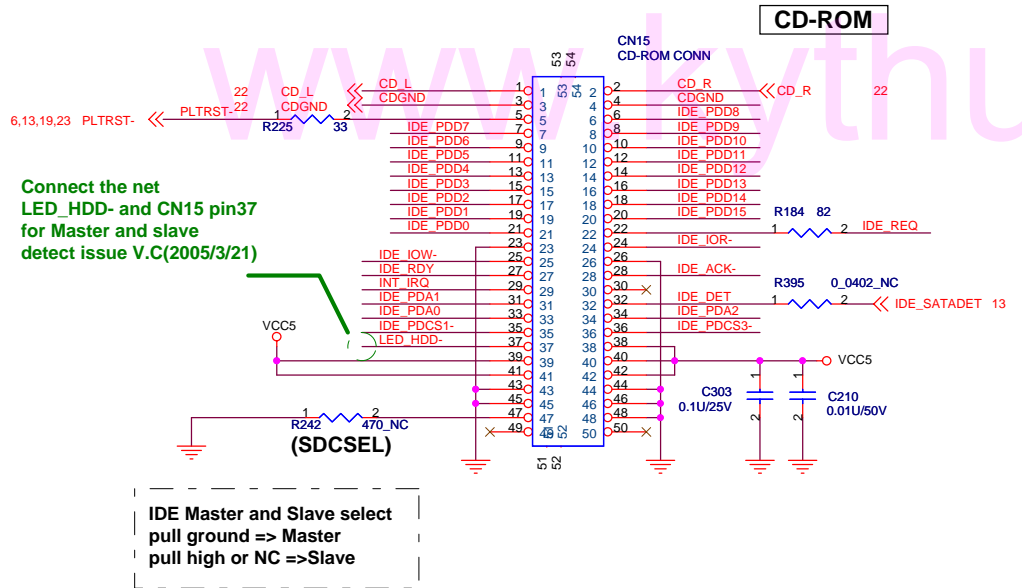
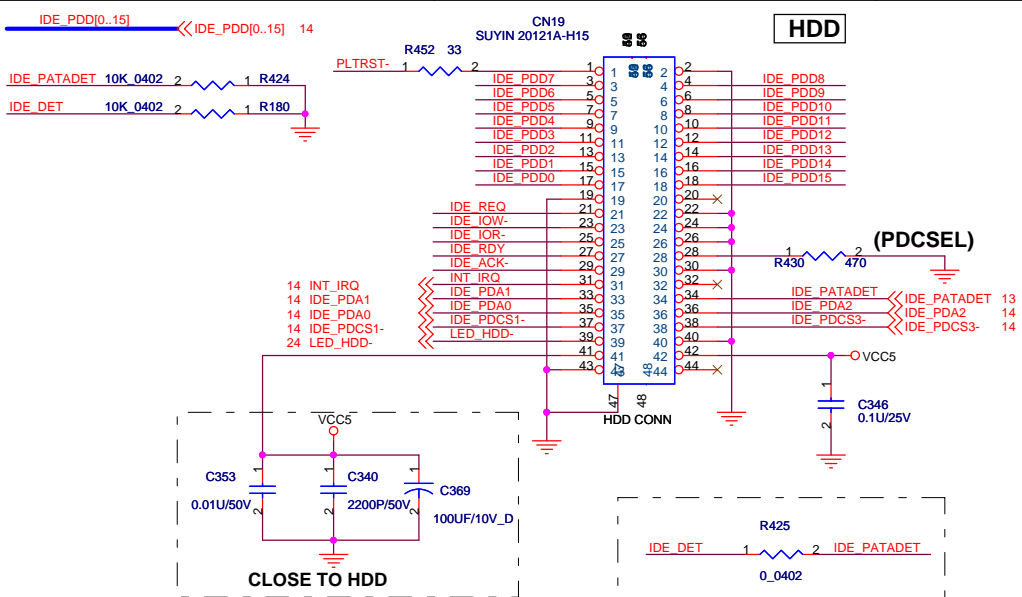
**ECS Elitegroup Computer Systems**

Title: **223 MINI PCI**

Size B Document Number: **223-1-4-01** Rev 1.0

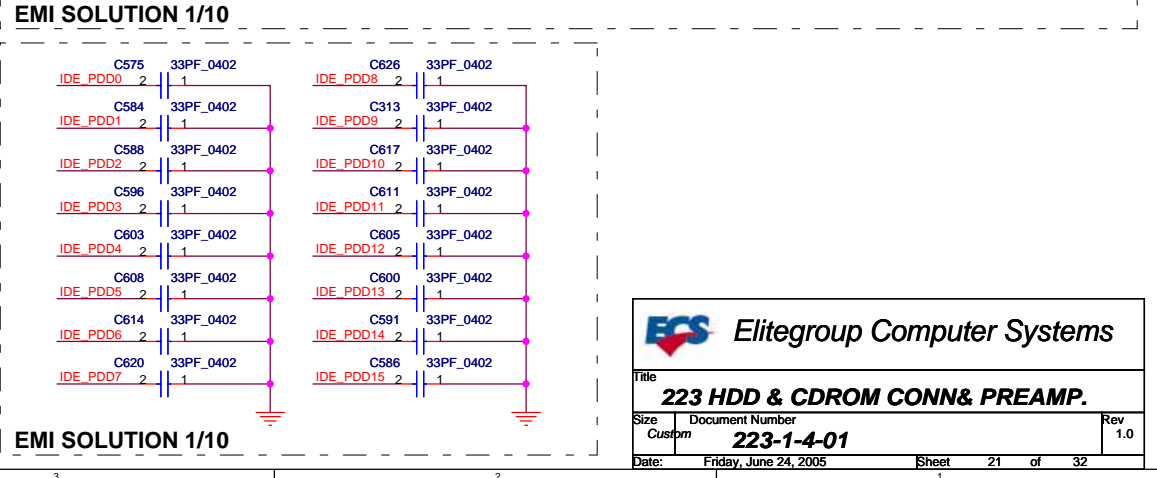
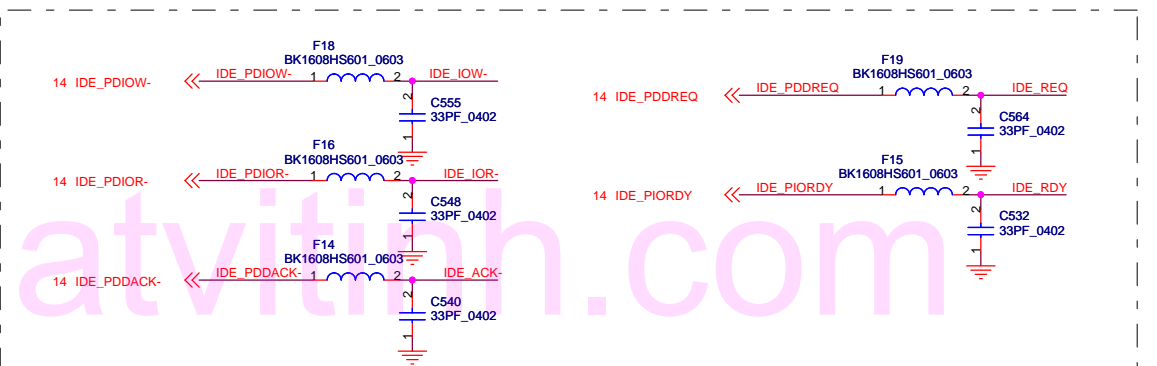
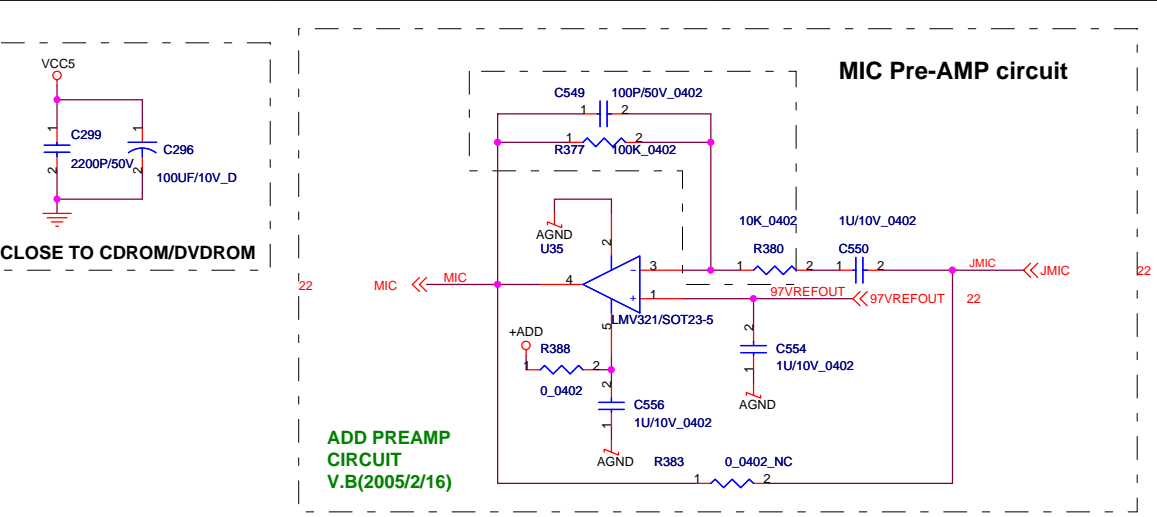
Date: Friday, June 24, 2005 Sheet 20 of 32

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Connect the net LED\_HDD- and CN15 pin37 for Master and slave detect issue V.C(2005/3/21)

IDE Master and Slave select pull ground => Master pull high or NC => Slave

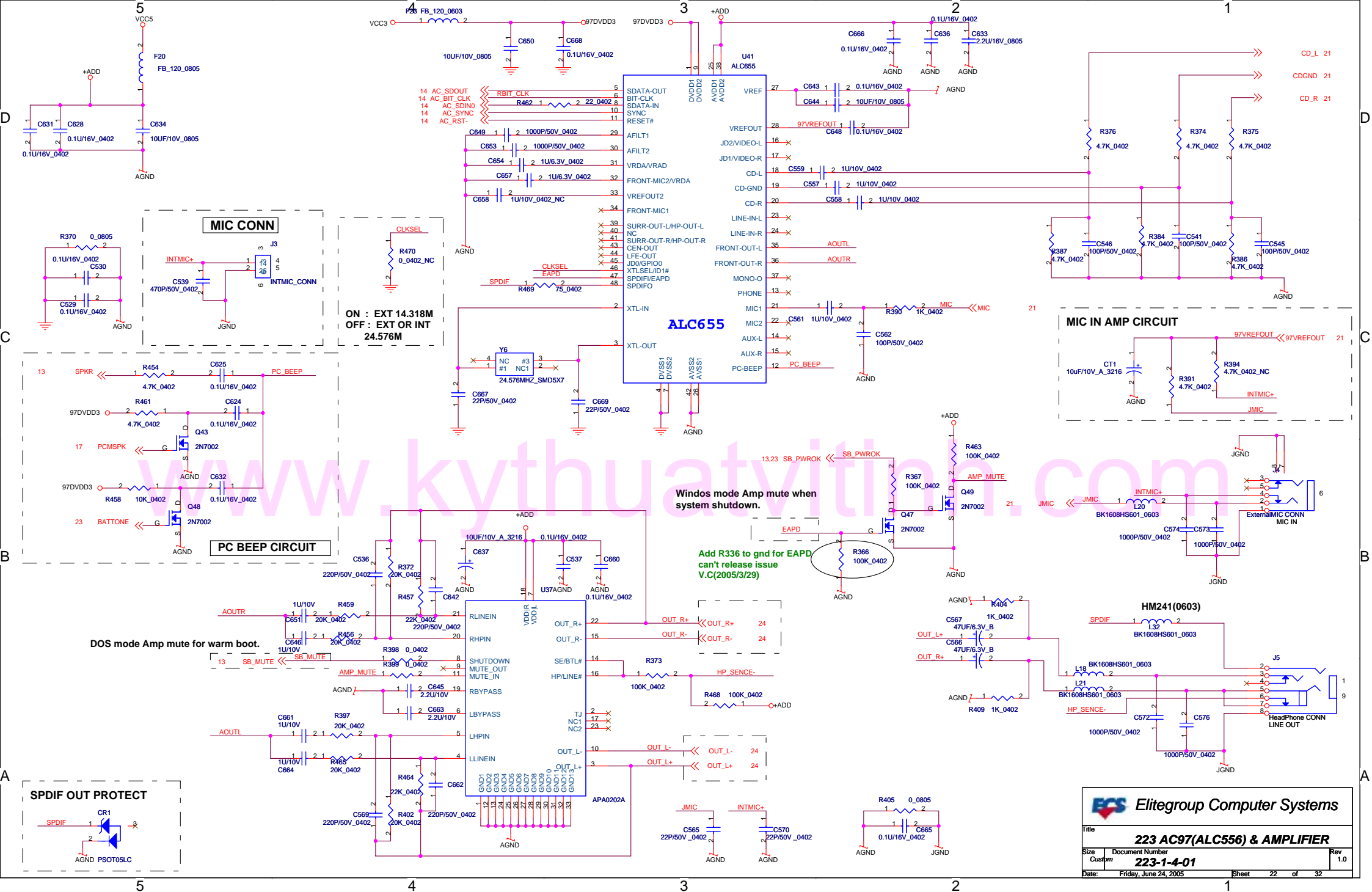


**ECS Elitegroup Computer Systems**

Title: **223 HDD & CDROM CONN& PREAMP.**

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

Date: Friday, June 24, 2005 Sheet: 21 of 32

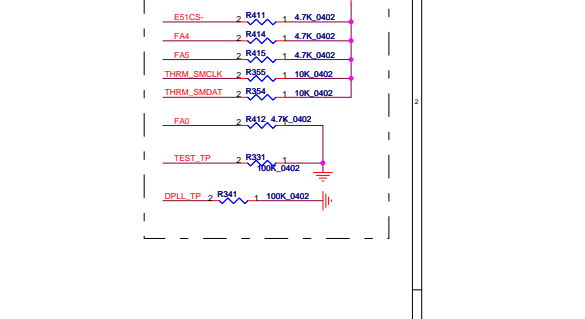
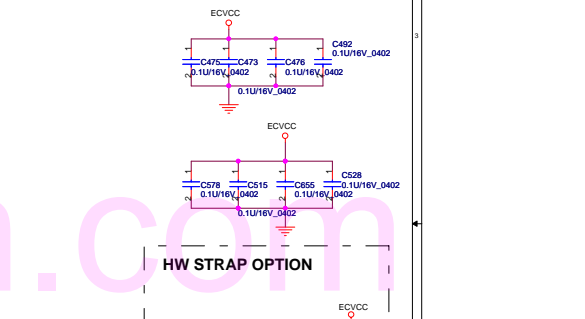
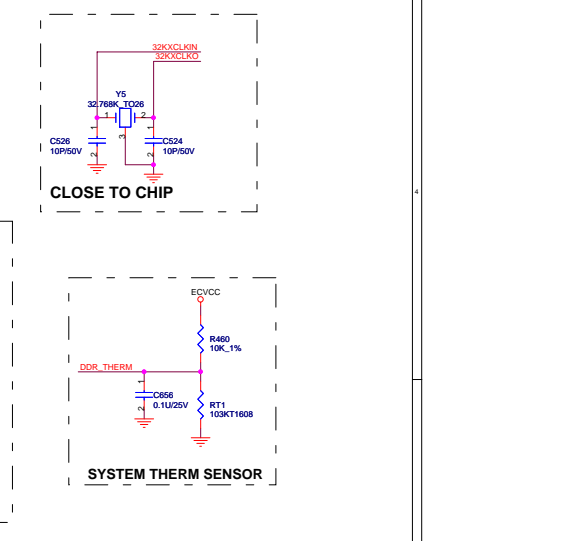
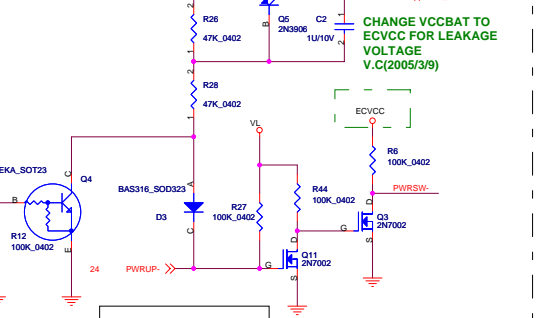
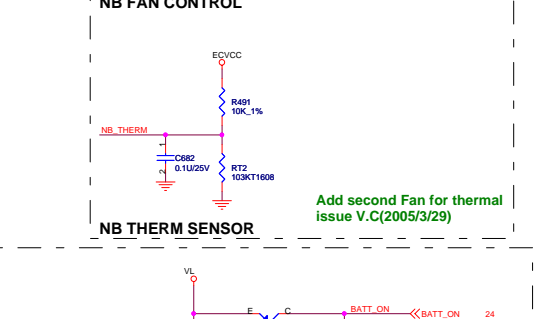
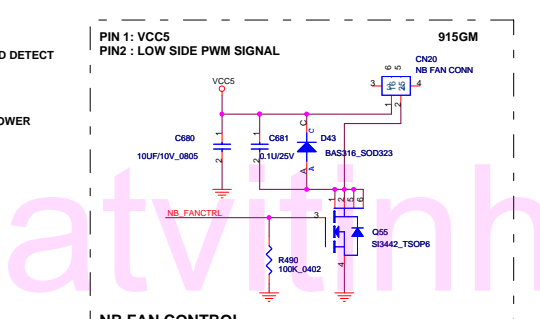
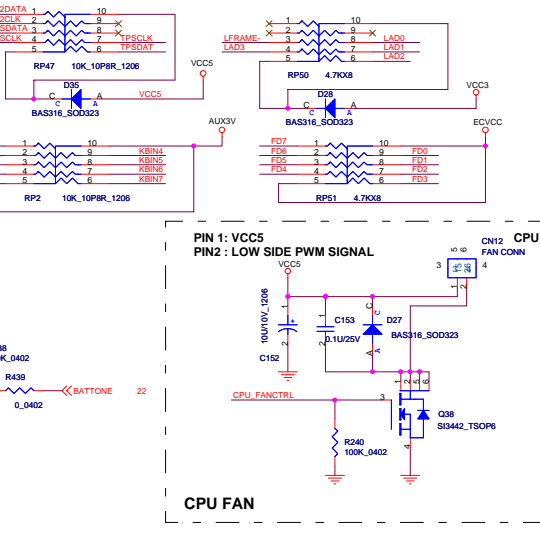
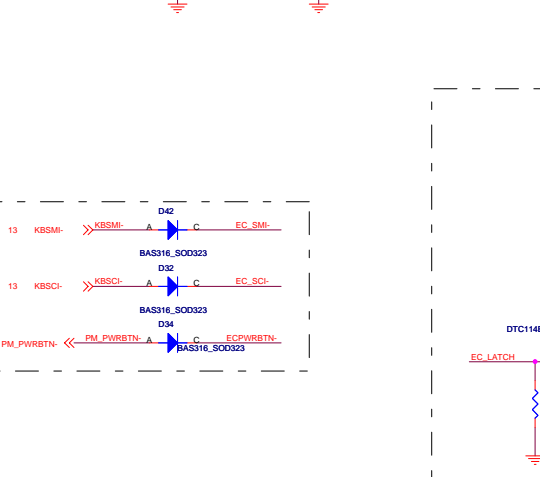
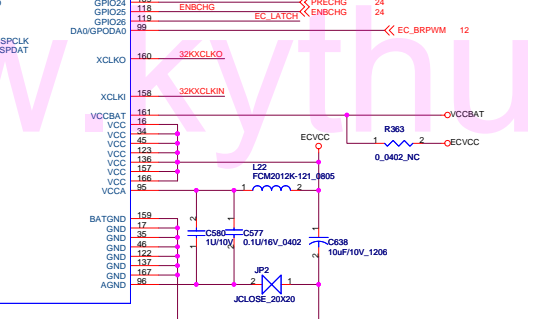
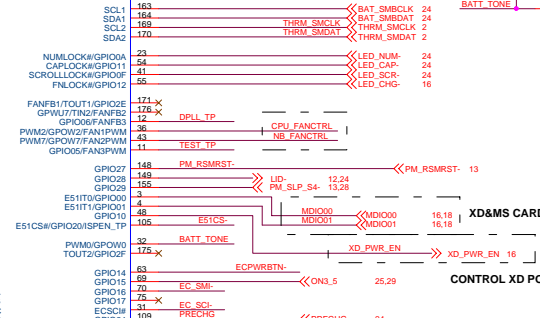
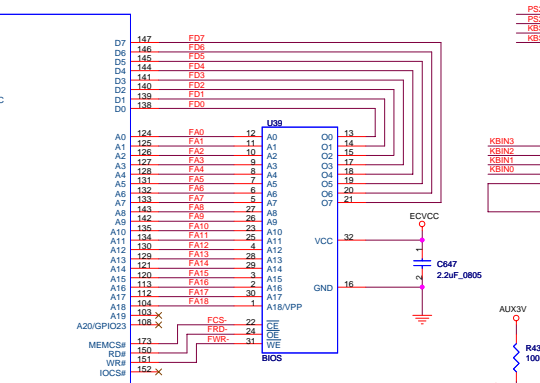
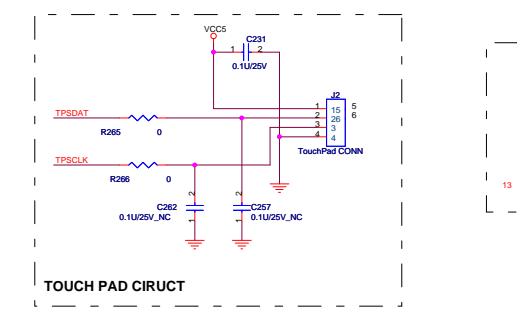
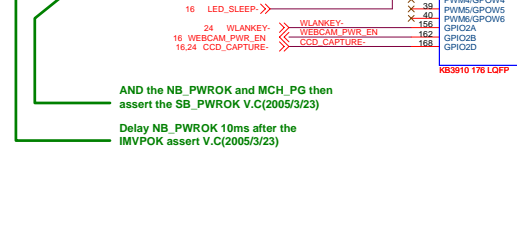
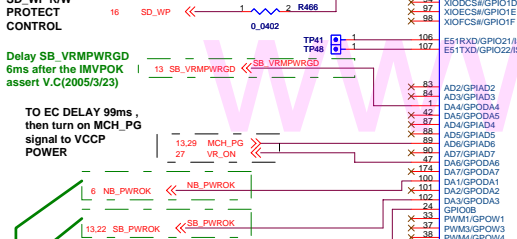
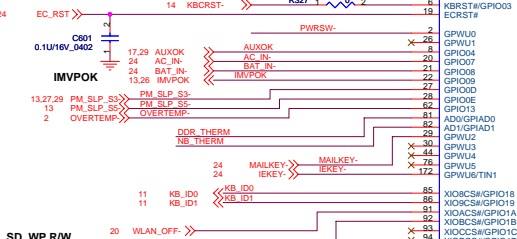
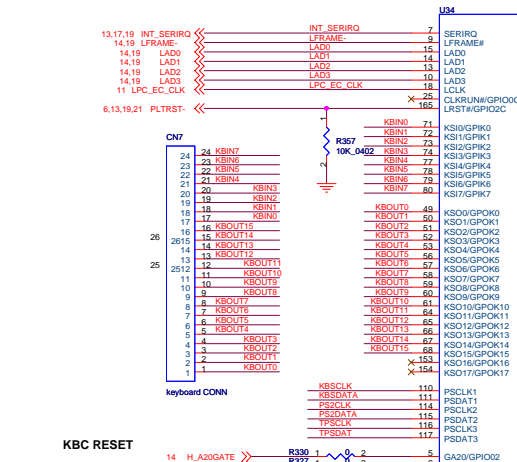


Windows mode Amp mute when system shutdown.

Add R336 to gnd for EAPD can't release issue V.C(2005/3/29)

DOS mode Amp mute for warm boot.

<b>Title</b> 223 AC97(ALC556) & AMPLIFIER			
<b>Size</b> 223-1-4-01	<b>Document Number</b> 223-1-4-01	<b>Rev</b> 1.0	
<b>Date:</b> Friday, June 24, 2005	<b>Sheet</b> 22	<b>of</b> 32	



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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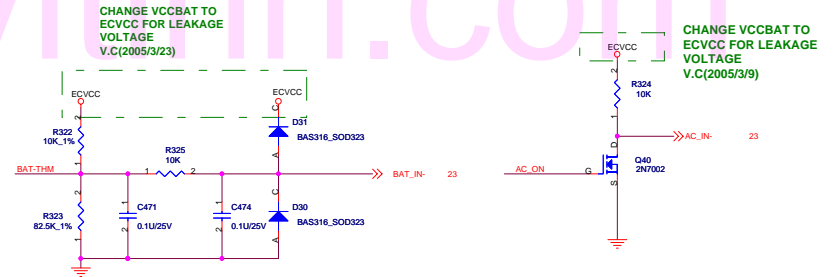
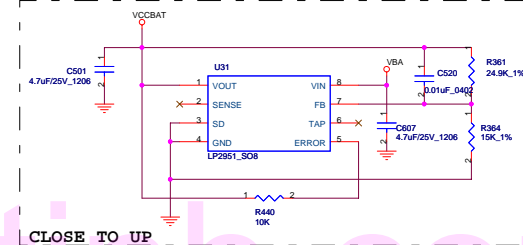
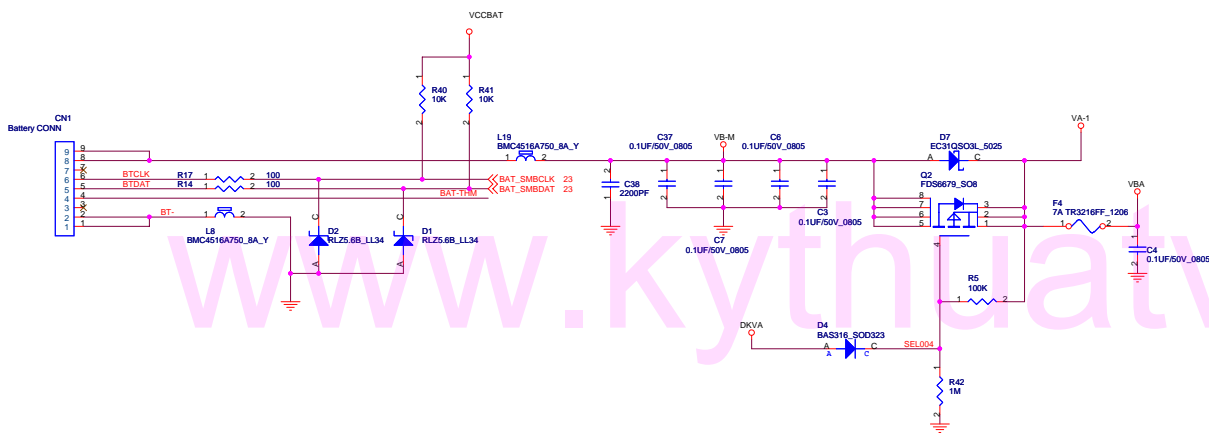
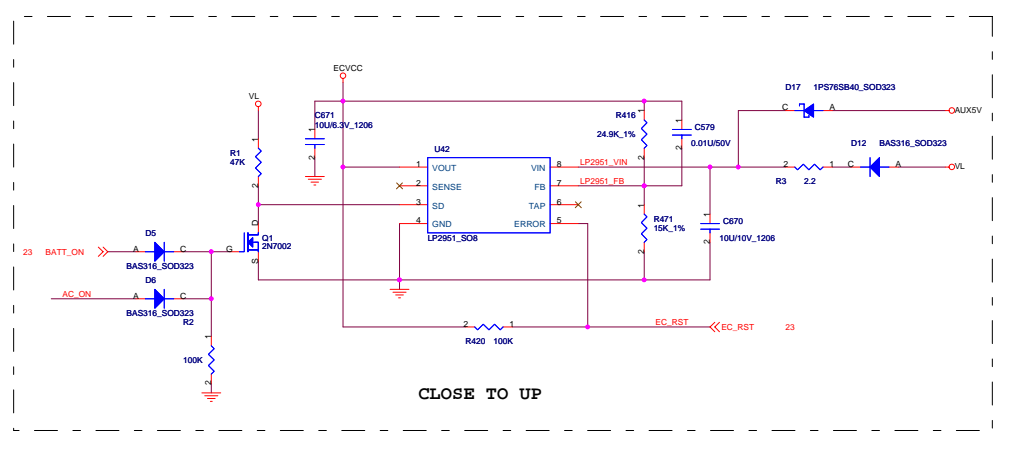
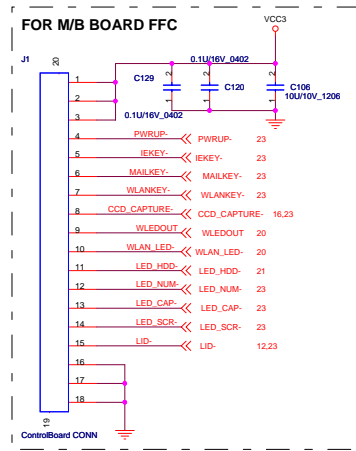
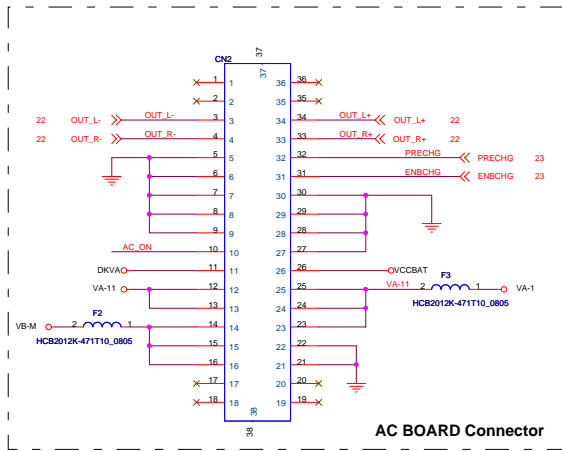
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Size: Document Number 223-1-4-01

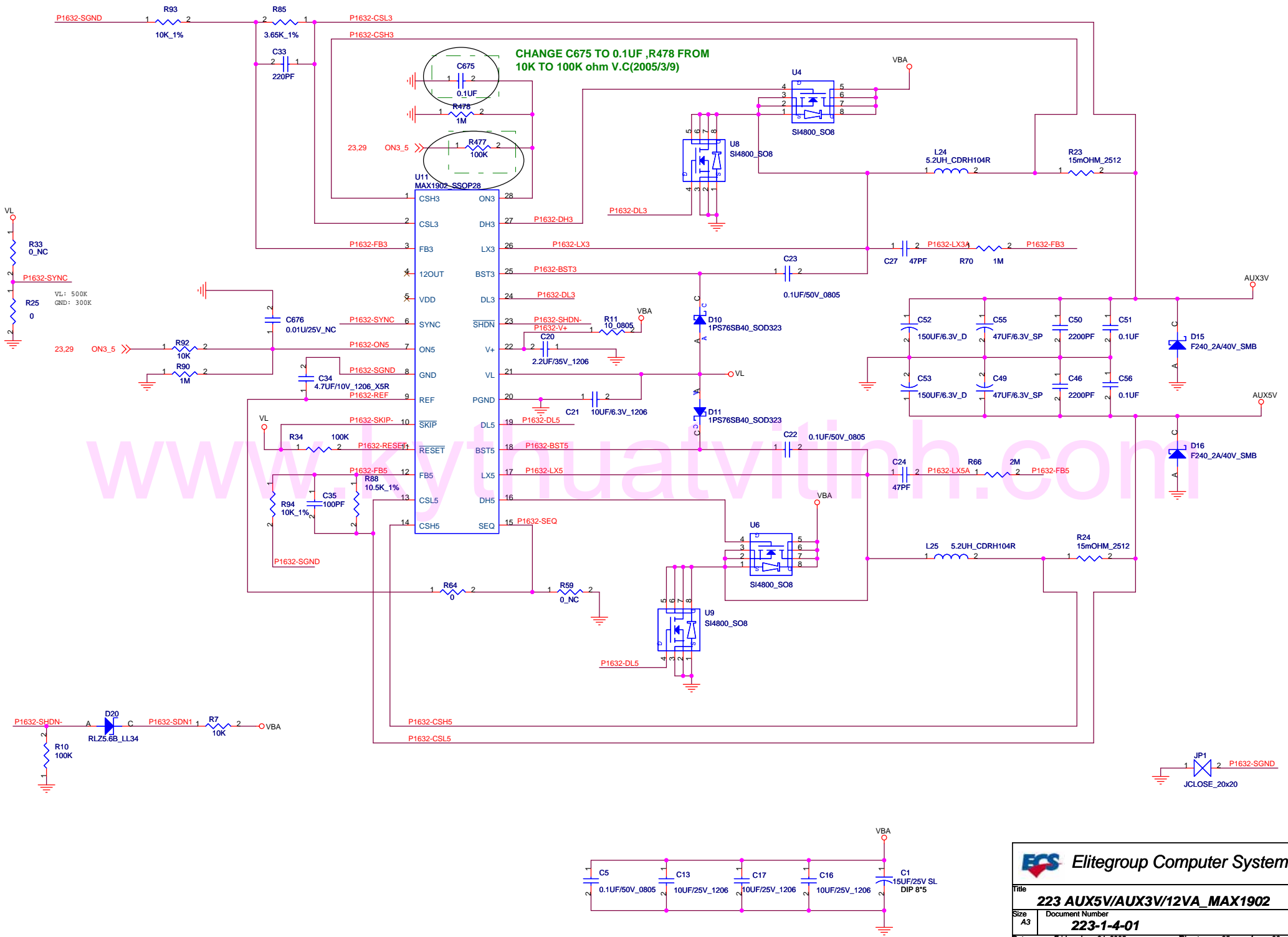
Customer: 223-1-4-01

Date: Friday, June 24, 2005

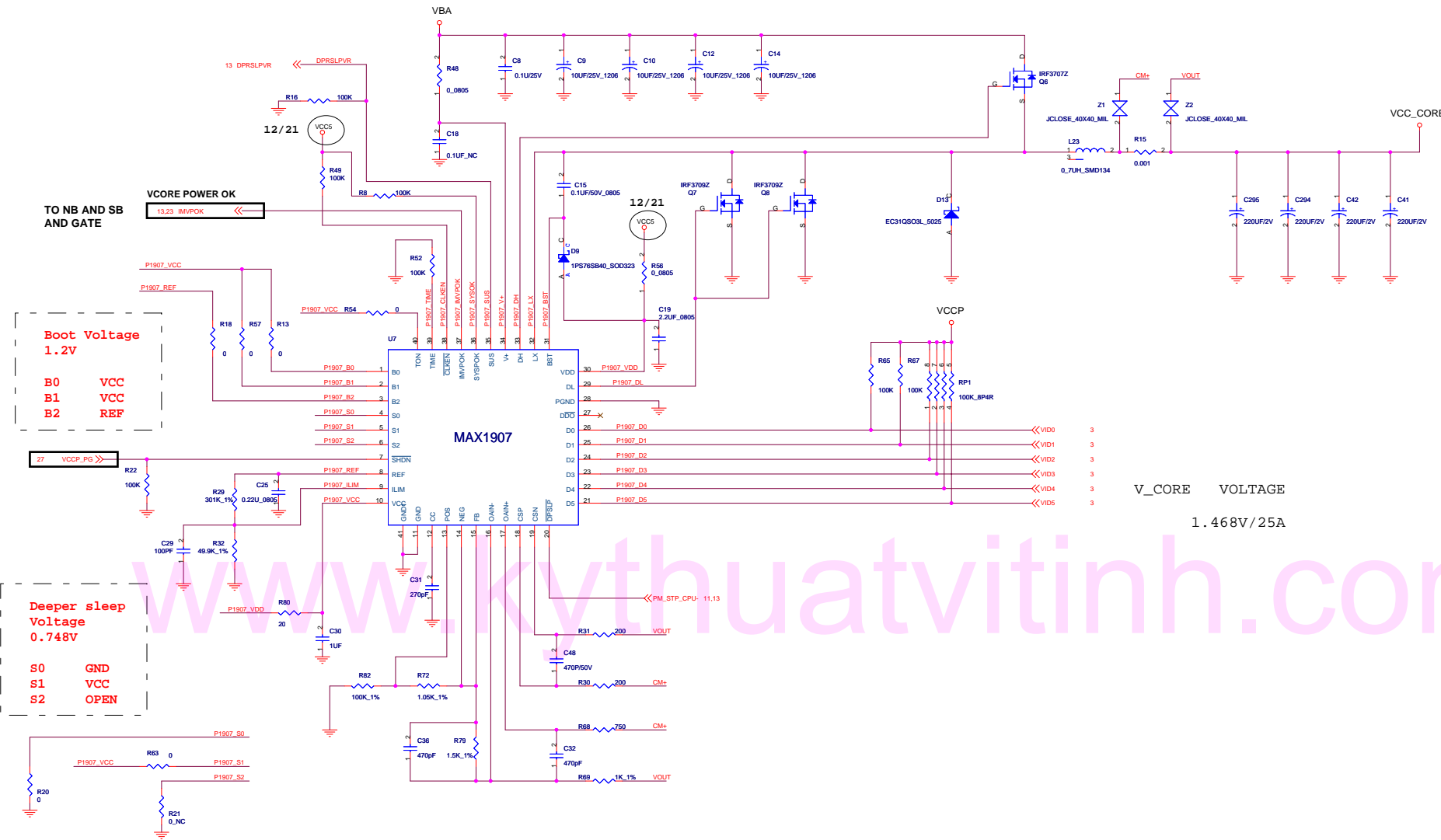
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<b>ECS Elitegroup Computer Systems</b>		
Title <b>223 AUX5V/AUX3V/12VA_MAX1902</b>		
Size A3	Document Number <b>223-1-4-01</b>	Rev 1.0
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TO NB AND SB AND GATE

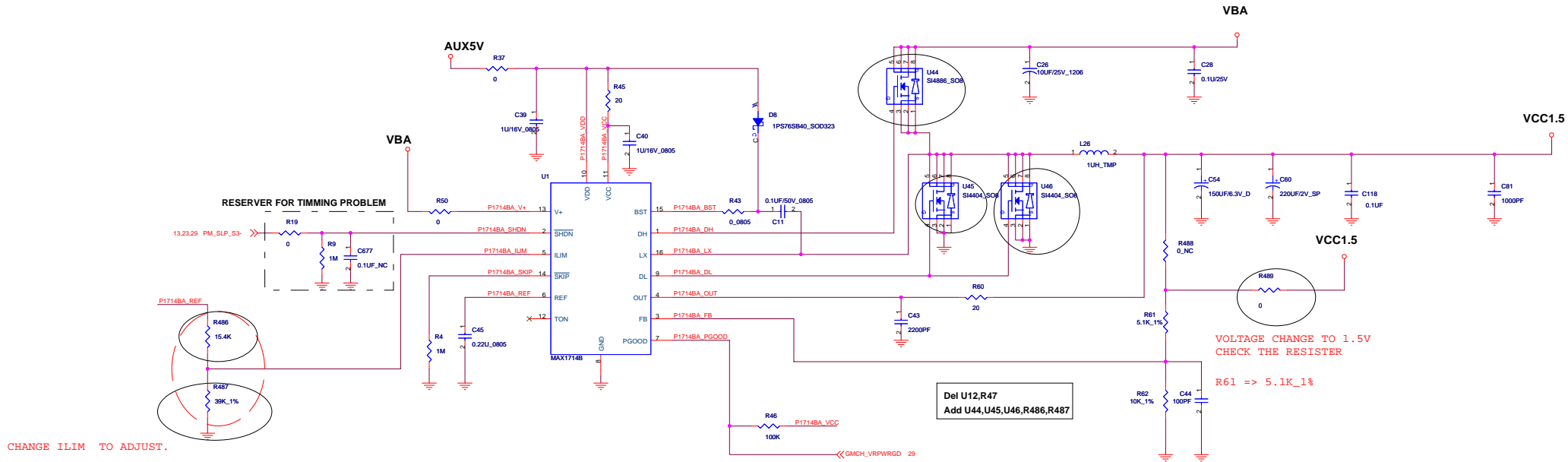
VCCORE POWER OK  
13.23 MVPOK

Boot Voltage  
1.2V  
B0 VCC  
B1 VCC  
B2 REF

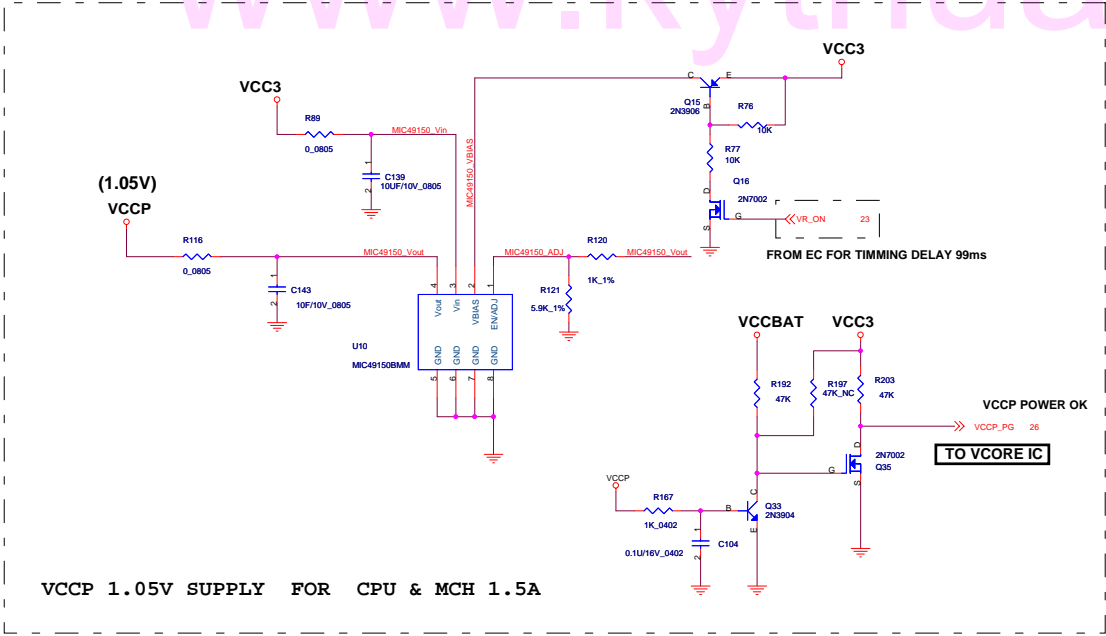
27 VCCP\_PG

Deeper sleep  
Voltage  
0.748V  
S0 GND  
S1 VCC  
S2 OPEN

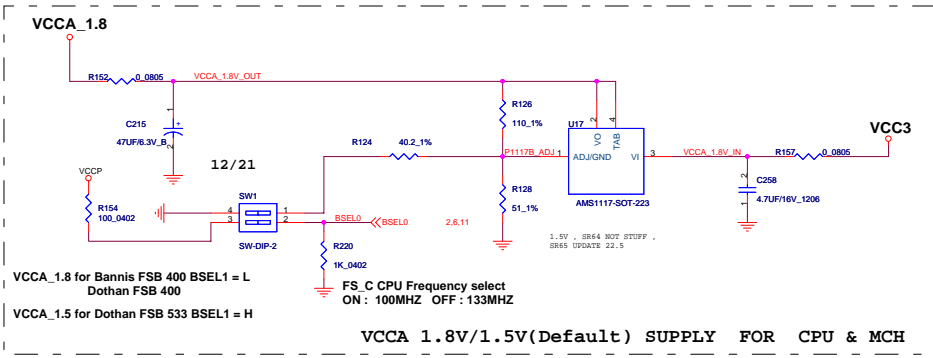
V\_CORE VOLTAGE  
1.468V/25A



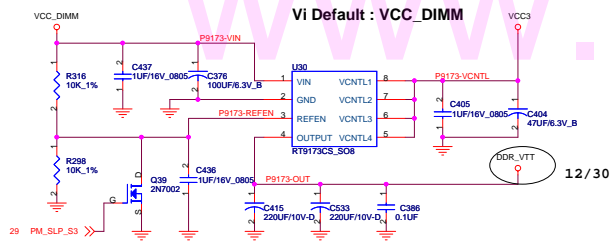
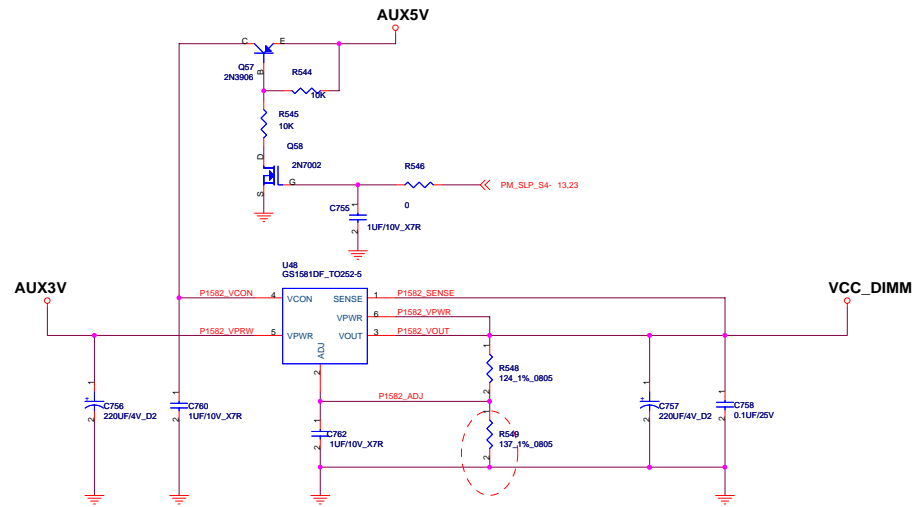
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VCCP 1.05V SUPPLY FOR CPU & MCH 1.5A



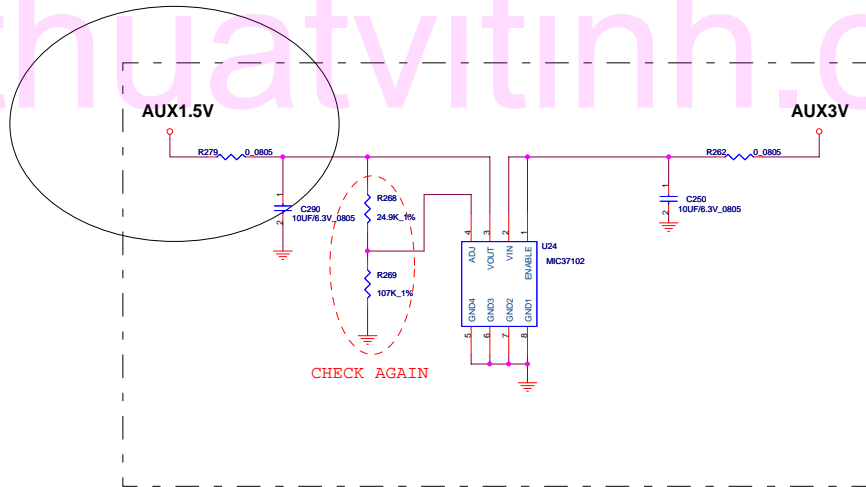
VCCA 1.8V/1.5V(Default) SUPPLY FOR CPU & MCH

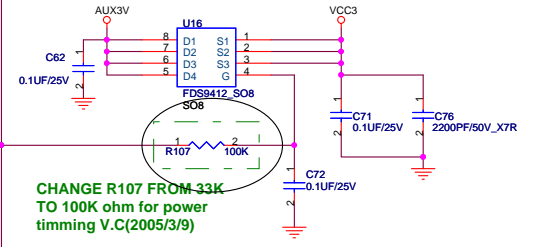
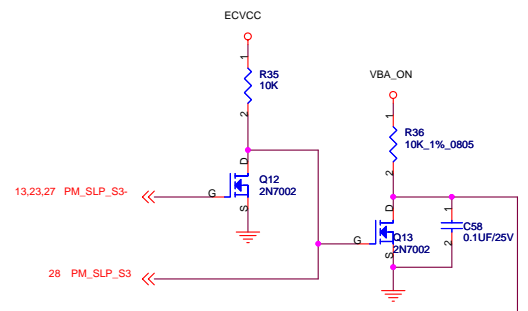
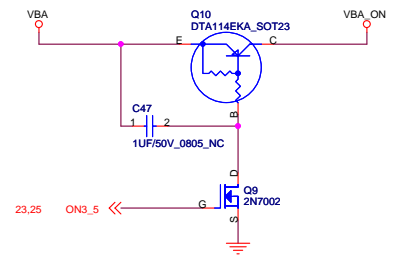
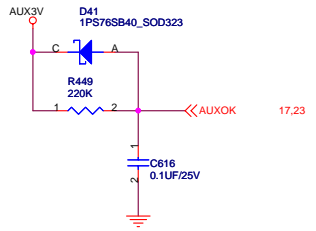


Vi Default : VCC\_DIMM

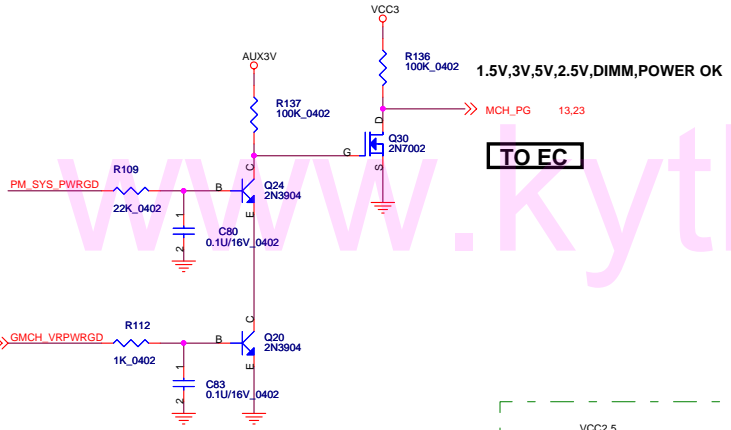
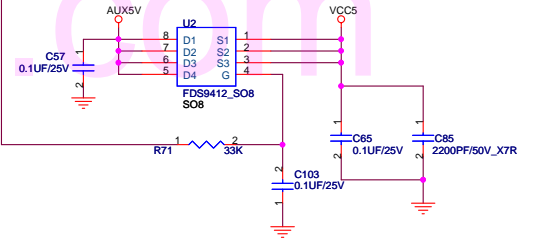
12/30

DIMM\_2.5V SUPPLY 3.5A & VTT1.25V 1A FOR DDR

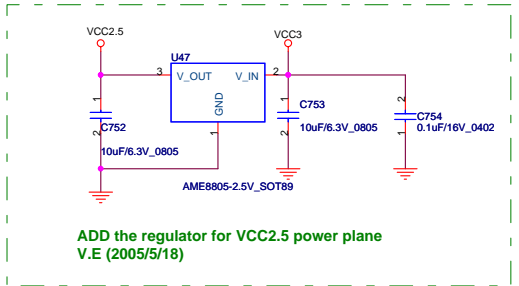
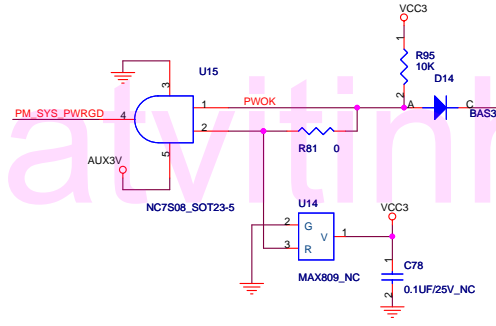
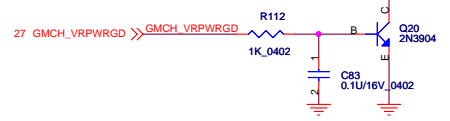




CHANGE R107 FROM 33K TO 100K ohm for power timing V.C(2005/3/9)

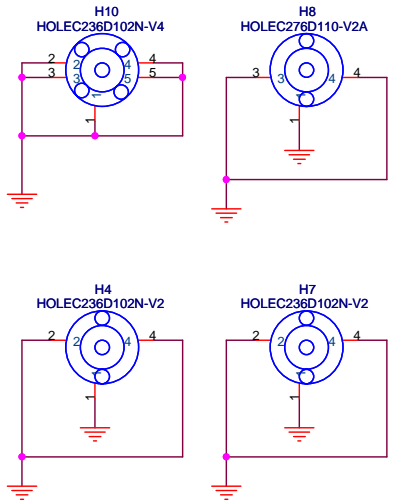


TO EC

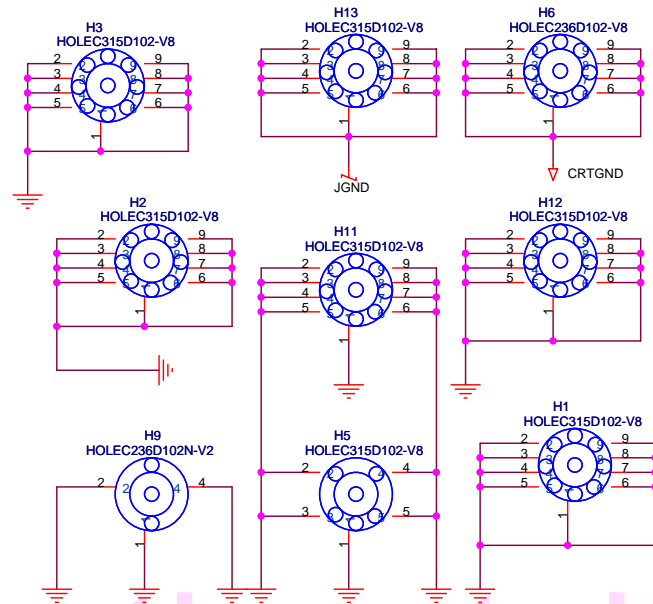


ADD the regulator for VCC2.5 power plane V.E (2005/5/18)

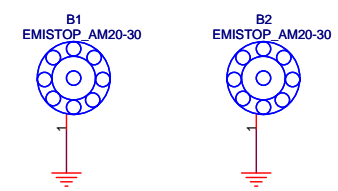
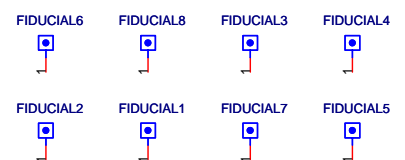
<b>223 POWER SW/VCC2.5</b>		
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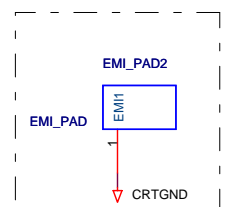
CPU SCREW HOLE



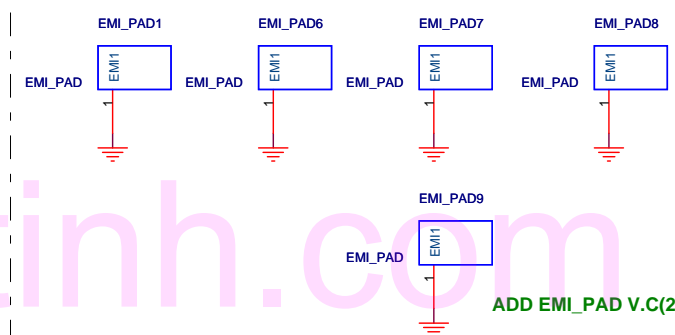
SYSTEM SCREW HOLE



Add MDC Hold

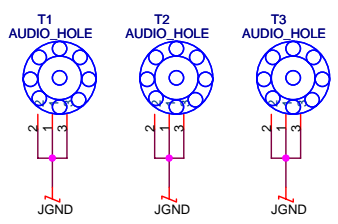


EMI CRT PAD

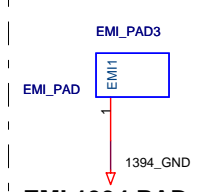


EMI POWER PAD

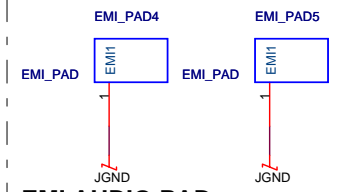
ADD EMI\_PAD V.C(2005/2/30)



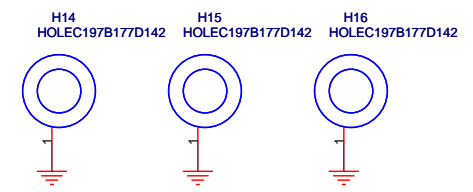
AUDIO SHILDING HOLE



EMI 1394 PAD

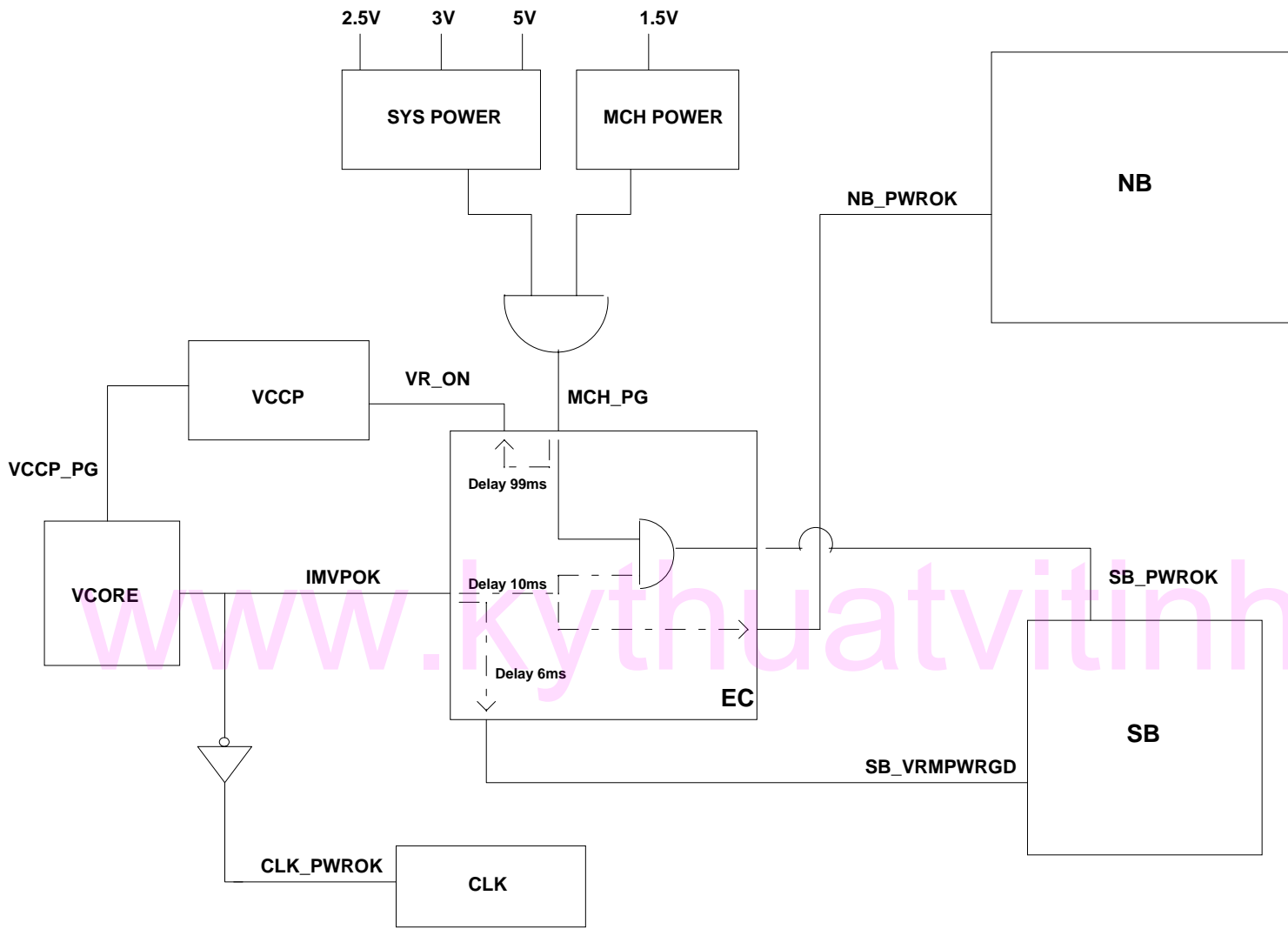


EMI AUDIO PAD



915GM THERMAL SCREW HOLE

<b>ECS</b> Elitegroup Computer Systems		
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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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<b>223 HISTORY</b>			
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