

# Model : P71EN0

## Mobile Dothan with INTEL 915PM / ICH6-M Chipset

| Revision History |         |                  |
|------------------|---------|------------------|
| A                | 10/2004 | ORIGINAL RELEASE |
| B                | 1/2005  | REV.B RELEASE    |
|                  |         |                  |
|                  |         |                  |
|                  |         |                  |

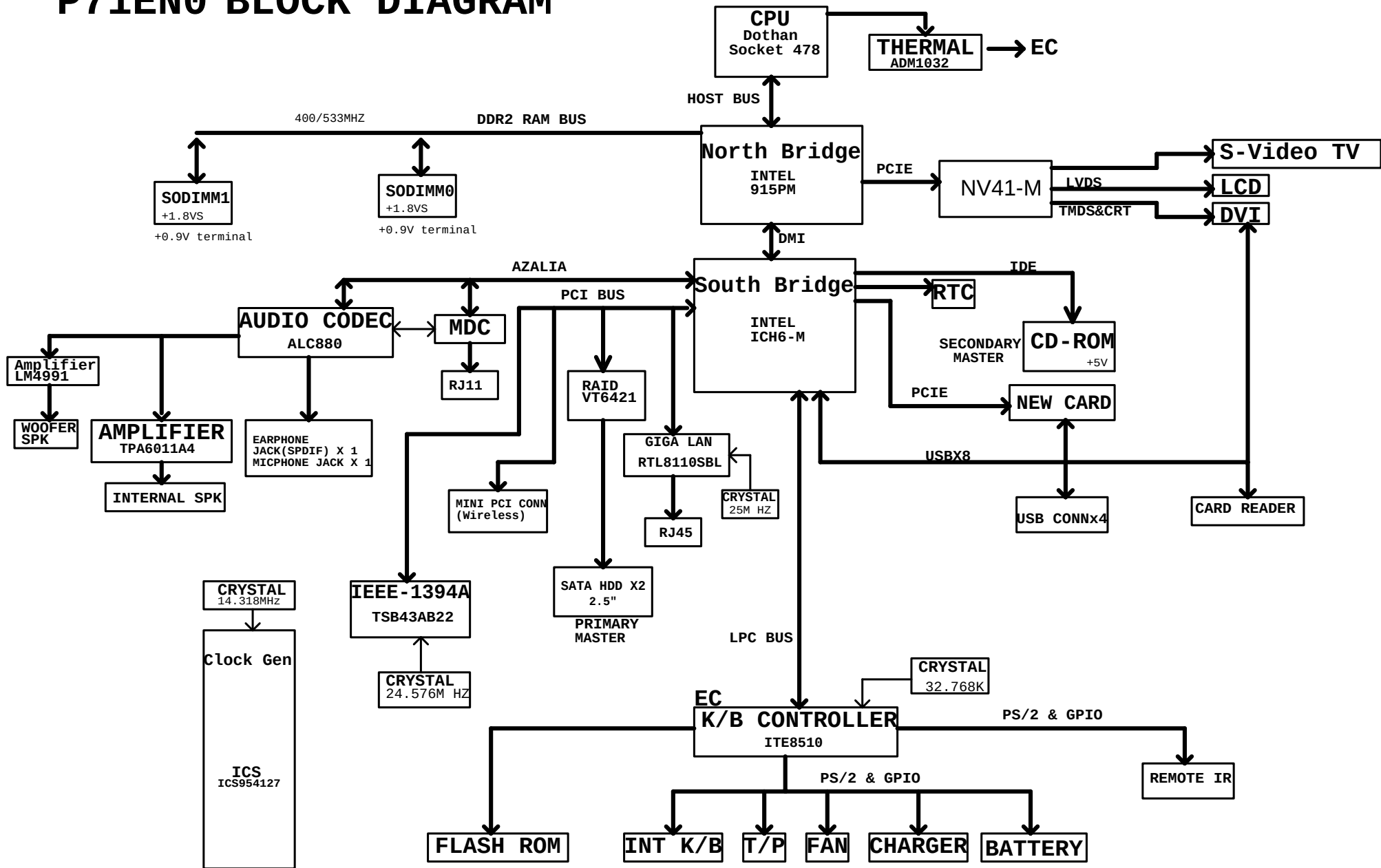
PG01 INDEX  
PG02 SYSTEM BLOCK DIAGRAM  
PG03 POWER DIAGRAM & SEQUENCE  
PG04 GPIO & POWER CONSUMPTION  
PG05 CPU Banias/Dothan-1/2  
PG06 CPU Banias/Dothan-2/2  
PG07 CLOCK GEN ICS954127  
PG08 NB\_Alviso Host-1/5  
PG09 NB\_DDRCLK\_VGA\_PCIEXP-2/5  
PG10 NB\_DDR\_MEM SYSTEM-3/5  
PG11 NB POWER-4/5  
PG12 NB\_VSS\_NCTF-5/5  
PG13 DDR2\_CHANNELA,B  
PG14 DDR2 Terminate / Smart Power  
PG15 PWR S/W& LCD/INVERTOR/CRT/TV  
PG16 AC IN  
PG17 SB ICH-6M-1/3  
PG18 SB ICH-6M-2/3  
PG19 SB ICH-6M-3/3  
PG20 HDD / CD-ROM

PG21 RAID IC VT6421  
PG22 NEW CARD  
PG23 MINI PCI(Wireless)  
PG24 I/O PORT CON  
PG25 AUDIO POWER / FAN CTL  
PG26 GIGA LAN RTL8110SBL  
PG27 IEEE1394A TSB43AB22A  
PG28 EC IT8510E / BIOS / TP CON  
PG29 VGA MXM CON  
PG30 CPU\_CORE  
PG31 1.05V/1.5V/1.8V/2.5V/0.9V  
PG32 +3.3V/+5V/+12V  
PG33 VCC SW/+1.05VS/+1.5VS  
PG34 BATT IN / Charger  
PG35 Appendix A. Ver. History

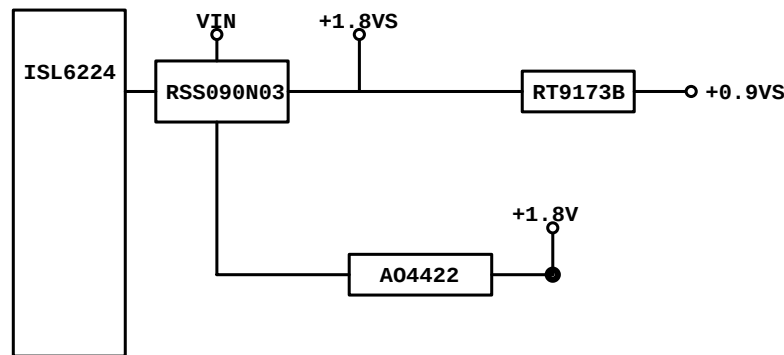
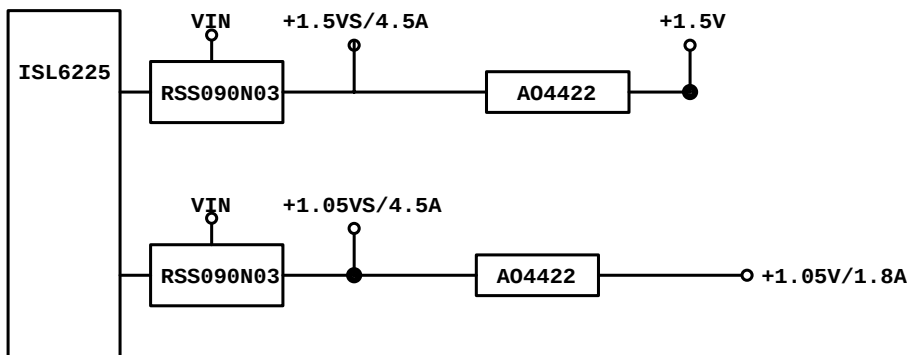
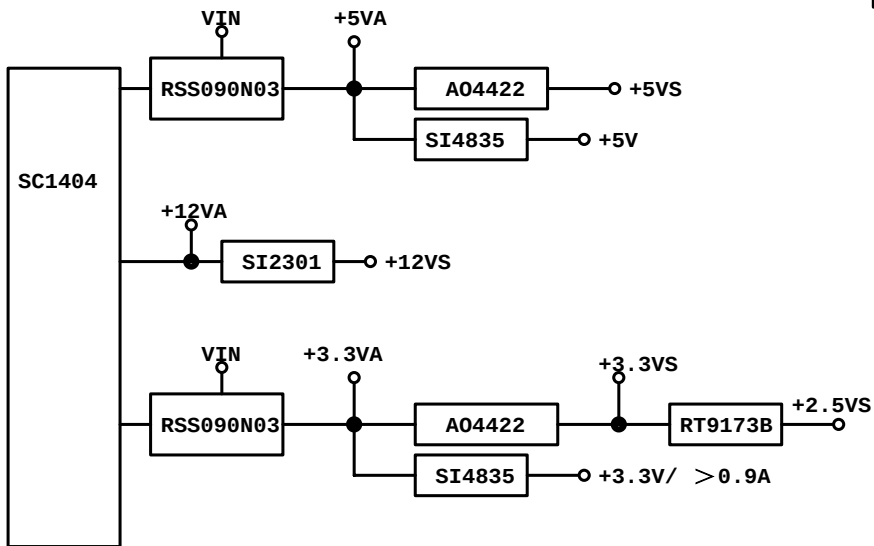
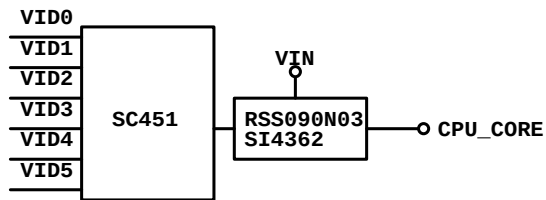
P71EN0 P/N: 37-UJ0000-00B ; 82-UJ0001-00B

| UNIWILL COMPUTER CORP. |                              |        |         |
|------------------------|------------------------------|--------|---------|
| Title                  |                              | P71EN0 |         |
| Size                   | Document Number              | Rev B  |         |
|                        | 2963                         | INDEX  |         |
| Date:                  | Wednesday, February 16, 2005 | Sheet  | 1 of 35 |

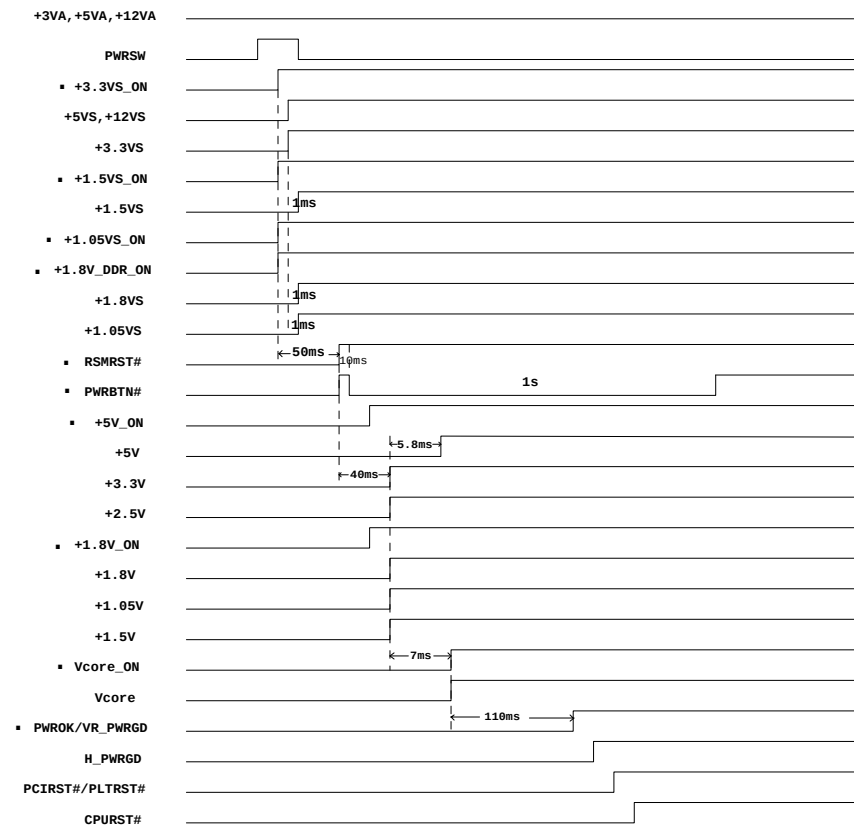
## P71EN0 BLOCK DIAGRAM



# POWER BLOCK DIAGRAM



## POWER Sequence



EC Control Pin

| UNIWILL COMPUTER CORP. |                 |                              |  |
|------------------------|-----------------|------------------------------|--|
| File                   |                 | P71EN0                       |  |
| Size                   | Document Number | POWER DIAGRAM                |  |
| C                      | 2963            | Rev B                        |  |
| Date                   |                 | Wednesday, February 16, 2005 |  |
|                        |                 | Sheet 3 of 35                |  |

| ICH6-M<br>GPIO |                |
|----------------|----------------|
| GPI6           | BM_BUSY#       |
| GP7            |                |
| GP8            | EC_EXTSMI#     |
| GPI11          | SMB_ALERT#     |
| GPI12          |                |
| GPI13          |                |
| GP018          | PM_STPPCI_ICH# |
| GP019          |                |
| GP020          | PM_STPCPU_ICH# |
| GP021          | TPM_EN         |
| GP023          |                |
| GPI024         |                |
| GPI025         |                |
| GPI026         | SATA0_GP       |
| GPI027         |                |
| GPI028         |                |
| GPI029         | PNLSW1         |
| GPI030         | PNLSW2         |
| GPI031         | PNLSW0         |
| GPI032         | PM_CLKRUN#     |
| GPI033         |                |
| GPI034         |                |
|                |                |
|                |                |
|                |                |
|                |                |
|                |                |

| ITE8510E<br>GPIO |                   |
|------------------|-------------------|
| GPCF0            | RF_SW#            |
| GPCF1            | SILENT#           |
| GPCF2            | IR_PS2CLK1        |
| GPCF3            | IR_PS2DAT1        |
| GPCF4            | TP_CLK            |
| GPCF5            | TP_DATA           |
| GPCF6            | MAIL#             |
| GPCF7            | BROWSER#          |
| GPI0             | SCROLL#           |
| GPI1             | CAPS#             |
| GPI2             | NUM#              |
| GPI3             | CHG_R_LED#        |
| GPI4             | CHG_G_LED#        |
| GPI5             | SUSLED_LED#       |
| GPI6             | <b>VOLMAX</b>     |
| GPH0             | +1.8V_DDR_ON      |
| GPH1             | +1.8V_ON          |
| GPH2             | +1.05VS_ON        |
| GPH3             | +3.3VS_ON         |
| GPH4             | +5V_ON            |
| GPH5             | SET_V             |
| GPH6             | +1.5VS_ON         |
| GPH7             | VCORE_ON          |
| GP64             | TP_DISABLE        |
| GP65             | LCDSW             |
| GP66             | MUTE#             |
| GP67             | EXTTS#0           |
| GPB0             | CELERON_VO_DET    |
| GPB1             | CPPE#             |
| GPB2             | PM_RSMRST#        |
| GPB3             | BAT_SMBCLK        |
| GPB4             | BAT_SMBDAT        |
| GPB5             | H_A20GATE         |
| GPB6             | H_RCIN#           |
| GPB7             | RFLED_ON#         |
| GPE0             | <b>NA</b>         |
| GPE1             | CPU_BSEL0         |
| GPE2             | <b>NA</b>         |
| GPE3             | <b>NA</b>         |
| GPE4             | PWRSW             |
| GPE5             | LID#              |
| GPE6             | PCM#              |
| GPE7             | PM_SLP_S3#        |
| GPD0             | ADAP_IN           |
| GPD1             | REMOTE_ON#        |
| GPD2             | PCI_RST#/PLT_RST# |
| GPD3             | EC_EXTSMI#        |
| GPD4             | PM_SLP_S4#        |
| GPD5             | PM_THROTTLING#    |
| GPD6             | FAN_SPD#          |
| GPD7             | EC_PREST#         |
| GPA0             | BTL_BEEP          |
| GPA1             | EC_VID1           |
| GPA2             | EC_VID2           |
| GPA3             | EC_VID3           |
| GPA4             | EC_VID4           |
| GPA5             | SMP1_EN#          |
| GPA6             | SMP2_EN#          |
| GPA7             | PWRBTN#           |

| ITE8510E<br>GPIO |             |
|------------------|-------------|
| GPC0             | PWR0K       |
| GPC1             | BAT2_SMBCLK |
| GPC2             | BAT2_SMBDAT |
| GPC3             | SB_ALERT#1  |
| GPC4             | SB_ALERT#2  |
| GPC5             | TP_LED#     |
| GPC6             | CHG_ON      |
| GPC7             | SILENT_LED# |
| ADC0             | BAT_TEMP    |
| ADC1             | ADAPTOR_I   |
| ADC2             | DDR2_TEMP   |
| ADC3             | VGA_TEMP    |
| DAC0             | BRIGHTADJ   |
| DAC1             | CHG_I       |
| DAC2             | FAN_CTRL0   |
| DAC3             | <b>NA</b>   |
|                  |             |
|                  |             |
|                  |             |
|                  |             |

| CPU         |         |       |          |    |
|-------------|---------|-------|----------|----|
| CPU CORE(V) | ICC(mA) | W     | TEMP(°C) |    |
| 2.0G        | 1.525   | 35.7  | 54.3     | 69 |
| 2.2G        | 1.525   | 37.5  | 57.1     | 70 |
| 2.26G       | 1.525   | 38.1  | 58.0     | 70 |
| 2.4G        | 1.525   | 39.3  | 59.8     | 71 |
| 2.5G        | 1.525   | 40    | 61.0     | 72 |
| 2.53G       | 1.525   | 40.4  | 61.5     | 72 |
| 2.6G        | 1.525   | 41.05 | 62.6     | 72 |
| 2.66G       | 1.525   | 43.35 | 66.1     | 74 |
| 2.8G        | 1.525   | 44.86 | 68.4     | 75 |
| 3.06G       | 1.525   | 55.9  | 85.2     | 81 |

| MCHE           |         |       |          |
|----------------|---------|-------|----------|
| VCC            | ICC(mA) | W     | TEMP(°C) |
| +3.3V          | 108.19  | 0.357 | 70       |
| +3.3VA         | 501.3   | 1.254 |          |
| +2.5V          | 1390    | 2.502 |          |
| +1.5V          | 33.4    | 0.084 |          |
| +VCCP          | 10      | 0.018 |          |
| +VCC_GRCR_CORE | 266     | 0.452 |          |

| ICH6-M     |         |         |          |
|------------|---------|---------|----------|
| VCC        | ICC(mA) | W       | TEMP(°C) |
| +3.3V      | 96      | 0.315   | 70       |
| +3.3VA     | 275     | 0.909   |          |
| +1.5V      | 487     | 0.876   |          |
| +1.5VA     | 27      | 0.049   |          |
| +3.3VA_RTC | 0.003   | 0.00001 |          |
|            |         |         |          |

| ITE8510E |         |   |          |
|----------|---------|---|----------|
| VCC      | ICC(mA) | W | TEMP(°C) |
| +3.3V    | 300     | 1 | 70       |

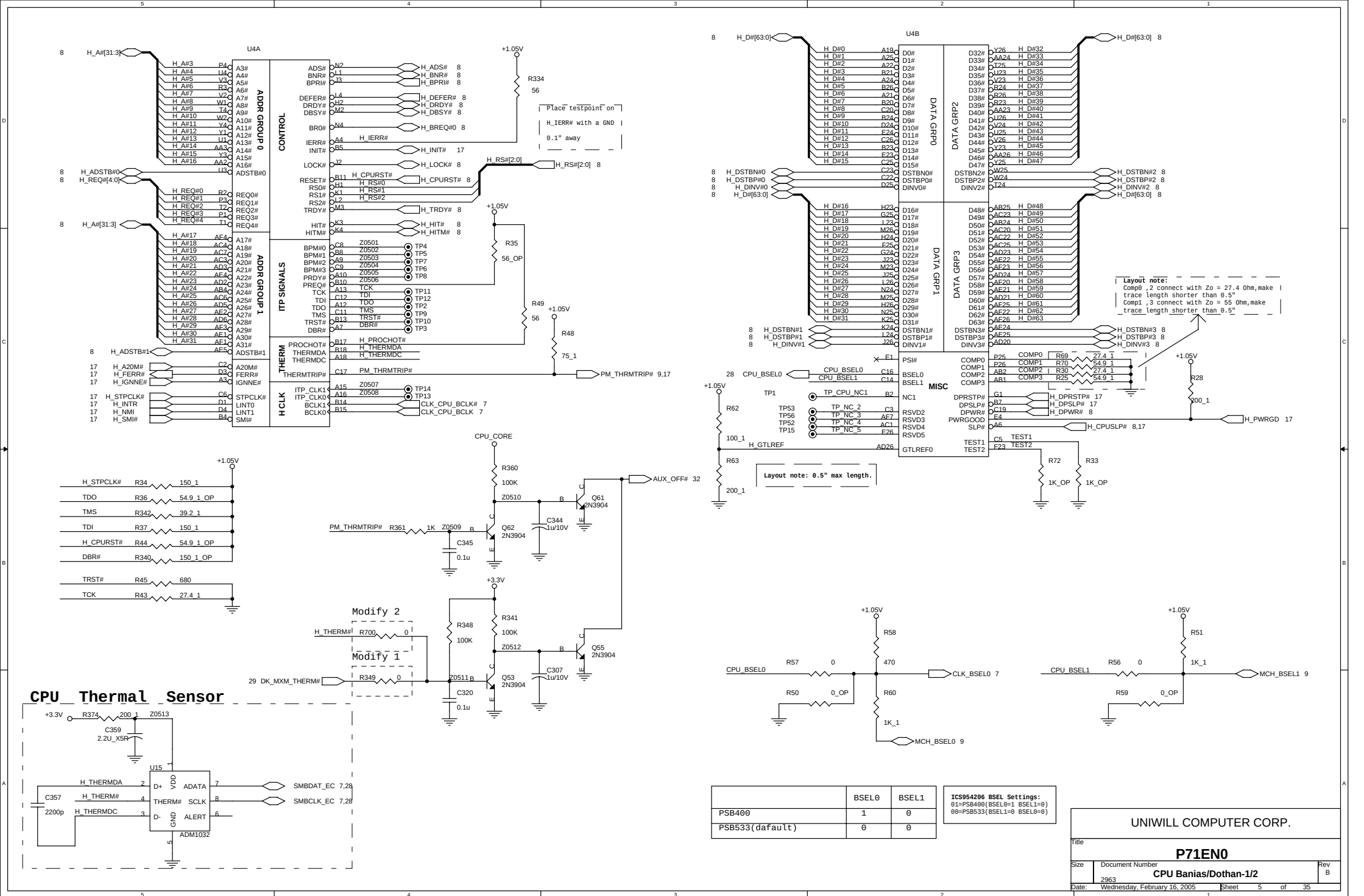
| CLOCK GENERATOR |         |       |          |
|-----------------|---------|-------|----------|
| VCC             | ICC(mA) | W     | TEMP(°C) |
| +3.3V           | 180     | 0.594 | 70       |

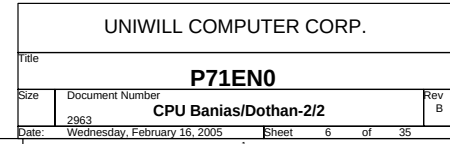
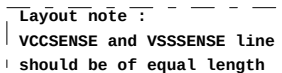
| ALC880      |         |       |          |
|-------------|---------|-------|----------|
| VCC         | ICC(mA) | W     | TEMP(°C) |
| +3.3V(DVDD) | 71      | 0.234 | 70       |
|             |         |       |          |

| TPA6011A4 |         |        |          |
|-----------|---------|--------|----------|
| VCC       | ICC(mA) | W      | TEMP(°C) |
| 3.3V      | 30      | 0.099W | 85       |

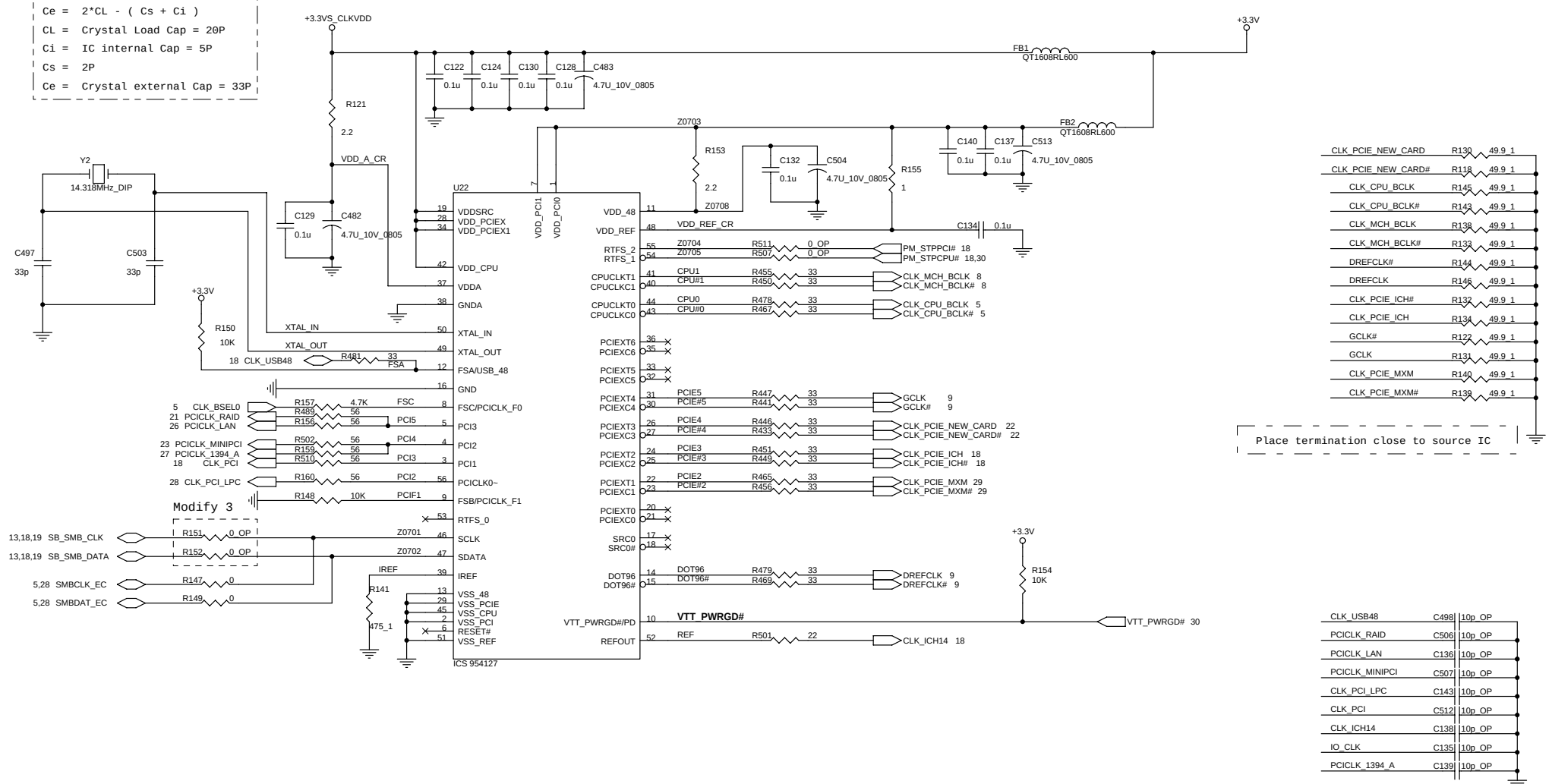
| ADM1032 |       |        |          |
|---------|-------|--------|----------|
| VCC     | ICC   | W      | TEMP(°C) |
| +3.3V   | 170uA | 0.56mW | 150      |

| UNIWILL COMPUTER CORP. |                              |        |         |
|------------------------|------------------------------|--------|---------|
| File                   |                              | P71EN0 |         |
| Size                   | Document Number              | Rev    |         |
| C                      | 2963                         | B      |         |
| Date                   | Wednesday, February 16, 2005 | Sheet  | 4 of 35 |





Ce = 2\*CL - ( Cs + Ci )  
CL = Crystal Load Cap = 20P  
Ci = IC internal Cap = 5P  
Cs = 2P  
Ce = Crystal external Cap = 33P

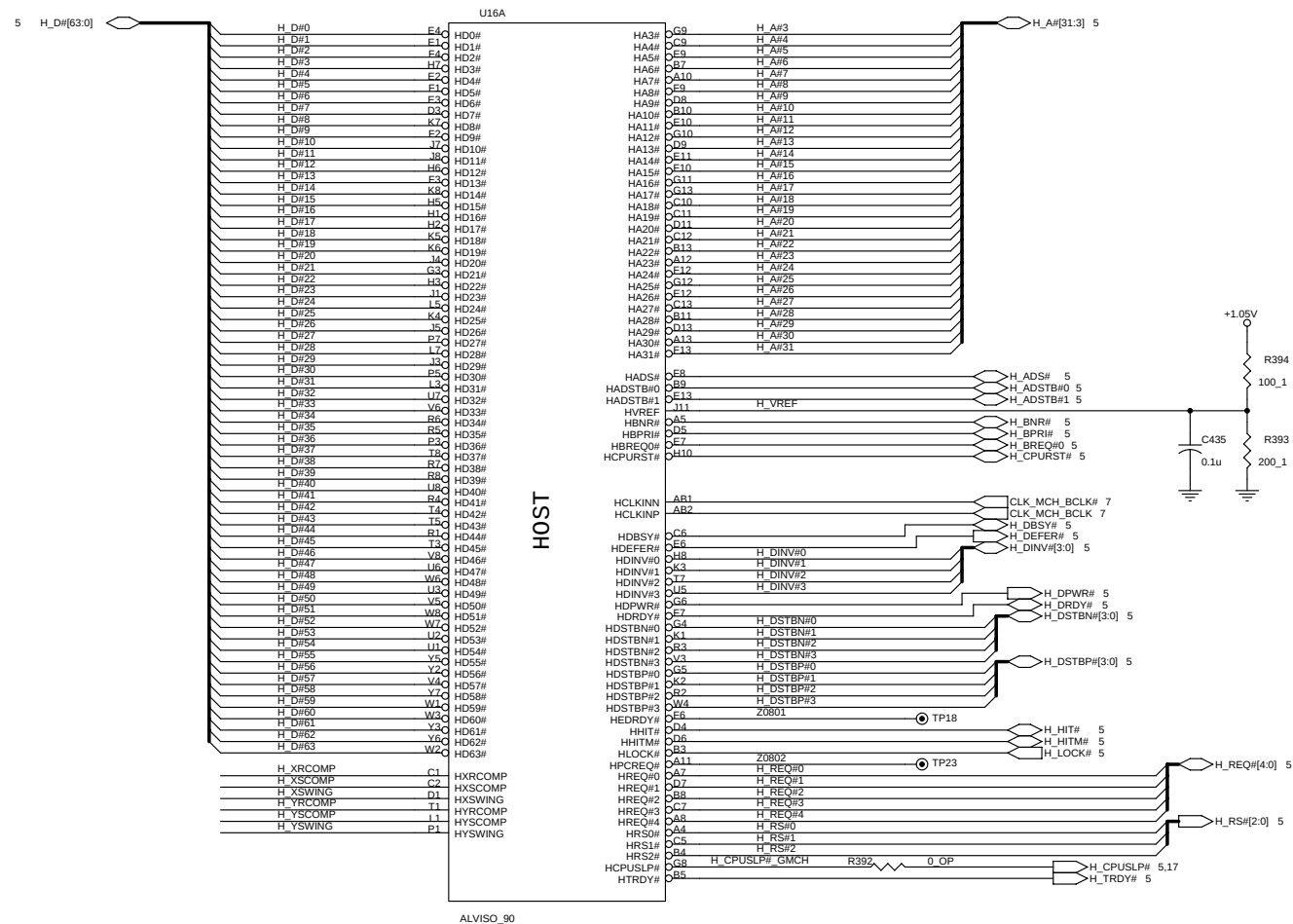
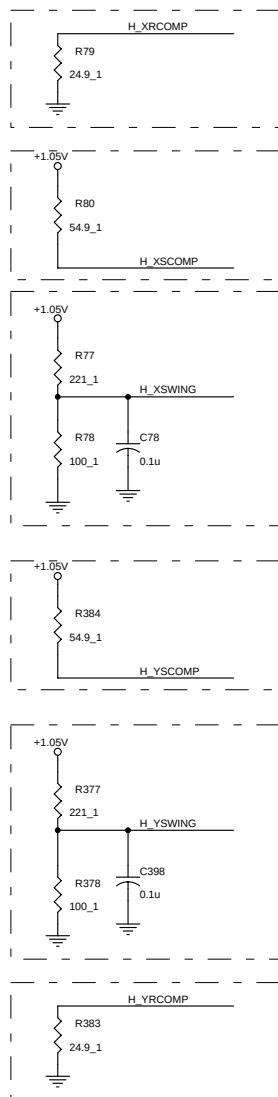


Place termination close to source IC

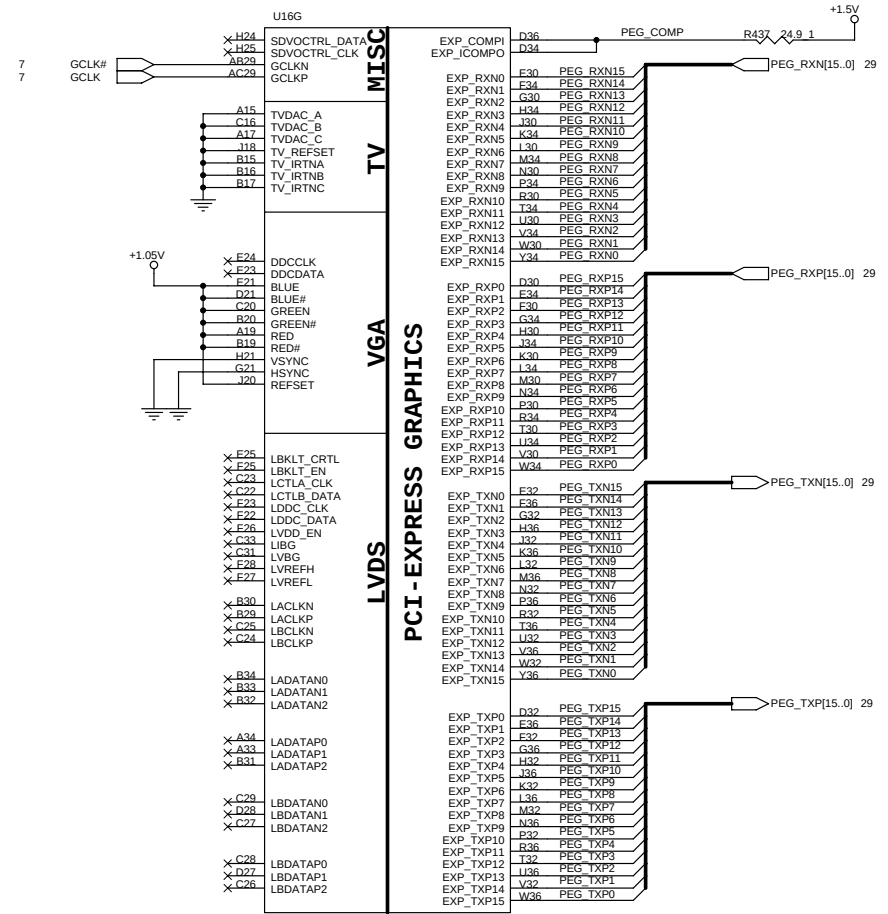
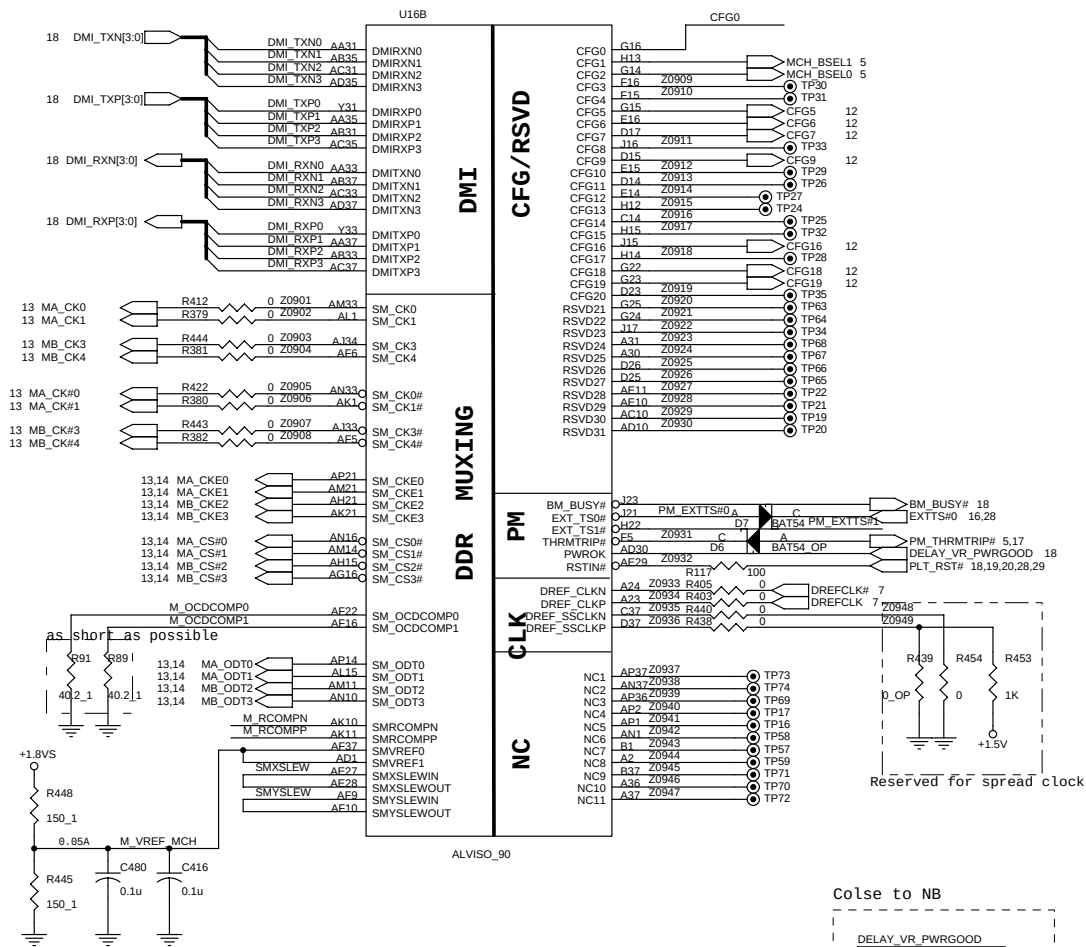
Reserved FOR EMI

| FSA<br>BSEL2 | FSB<br>BSEL1 | FSC<br>BSEL0 | Host<br>Clock<br>frequency |
|--------------|--------------|--------------|----------------------------|
| 1            | 0            | 1            | 100                        |
| 1            | 0            | 0            | 133                        |

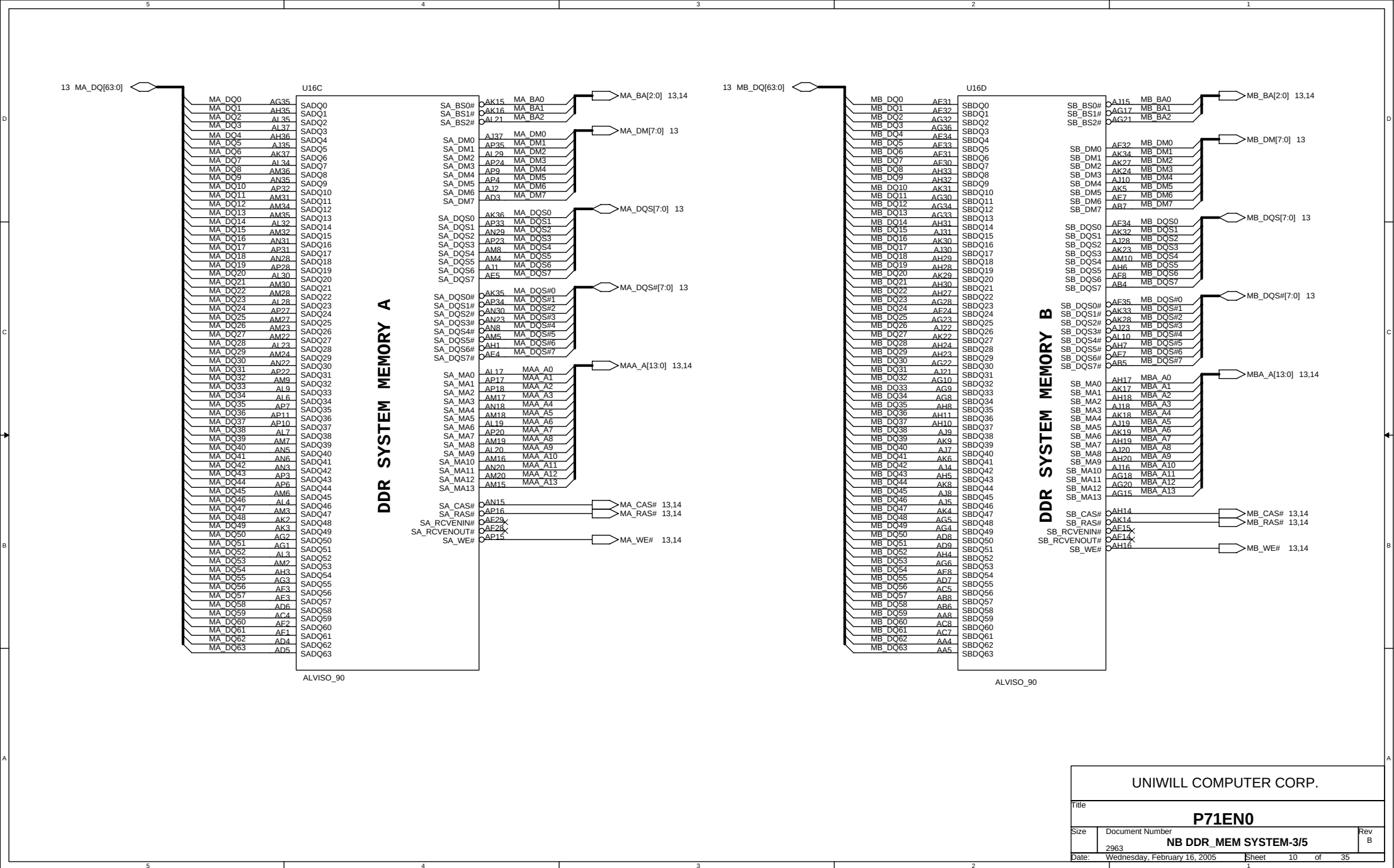
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| UNIWILL COMPUTER CORP.               |                                               |          |
| Title<br><b>P71EN0</b>               |                                               |          |
| Size<br>2963                         | Document Number<br><b>CLOCK GEN ICS954127</b> | Rev<br>B |
| Date<br>Wednesday, February 16, 2005 | Sheet<br>7                                    | of<br>35 |



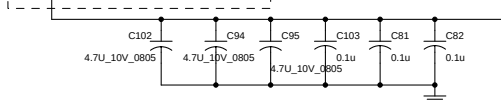




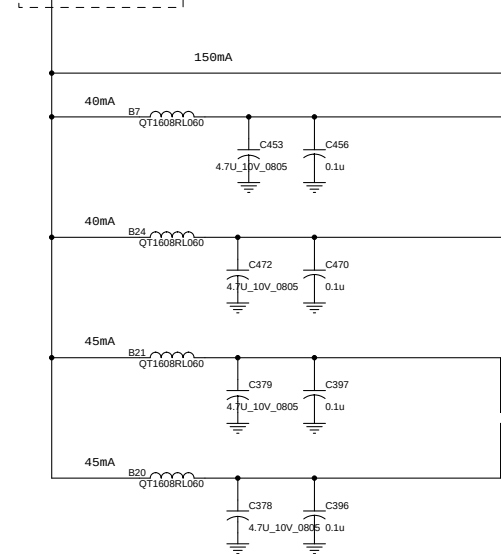
| CFG0 | CFG1 | CFG2 | Host clock frequency |
|------|------|------|----------------------|
| 1    | 0    | 1    | 100                  |
| 1    | 0    | 0    | 133                  |



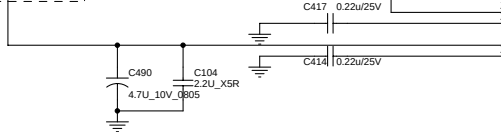
+1.05V  
1.05V--->3700mA  
1.5V--->6750mA



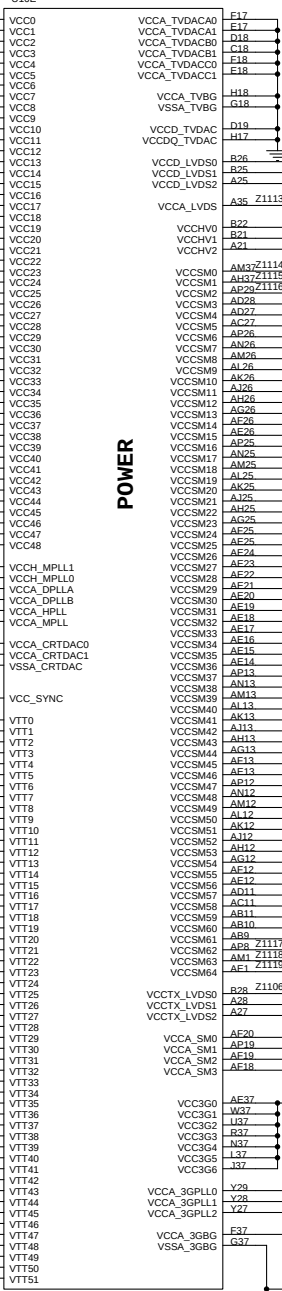
+1.5V  
Total 320mA



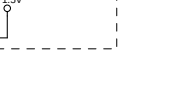
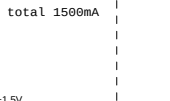
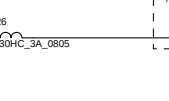
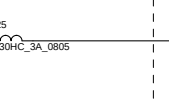
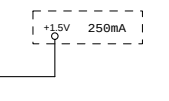
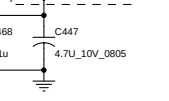
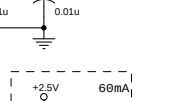
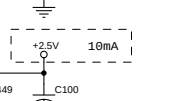
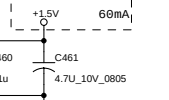
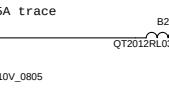
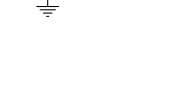
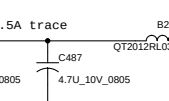
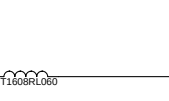
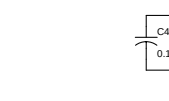
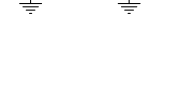
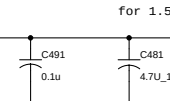
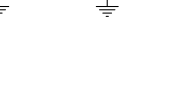
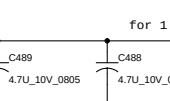
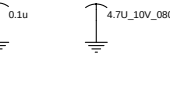
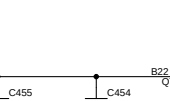
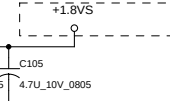
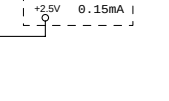
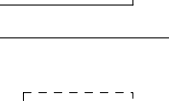
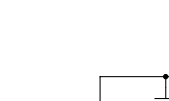
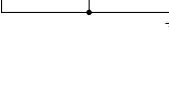
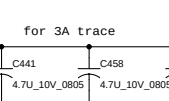
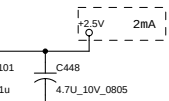
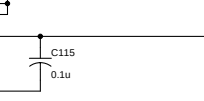
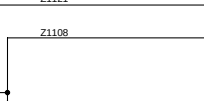
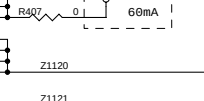
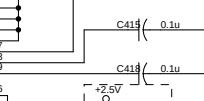
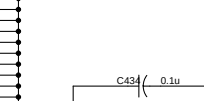
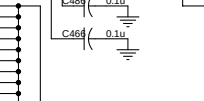
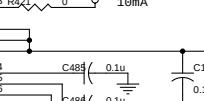
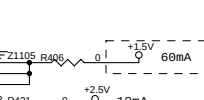
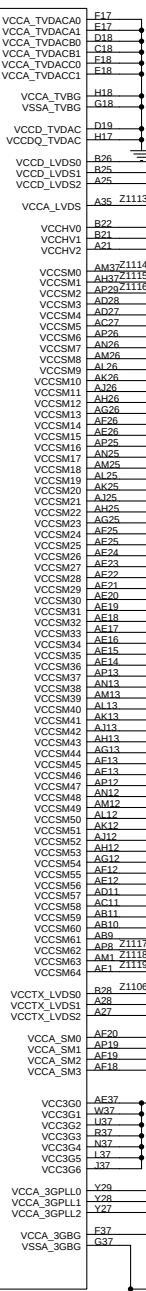
+1.05V  
640mA

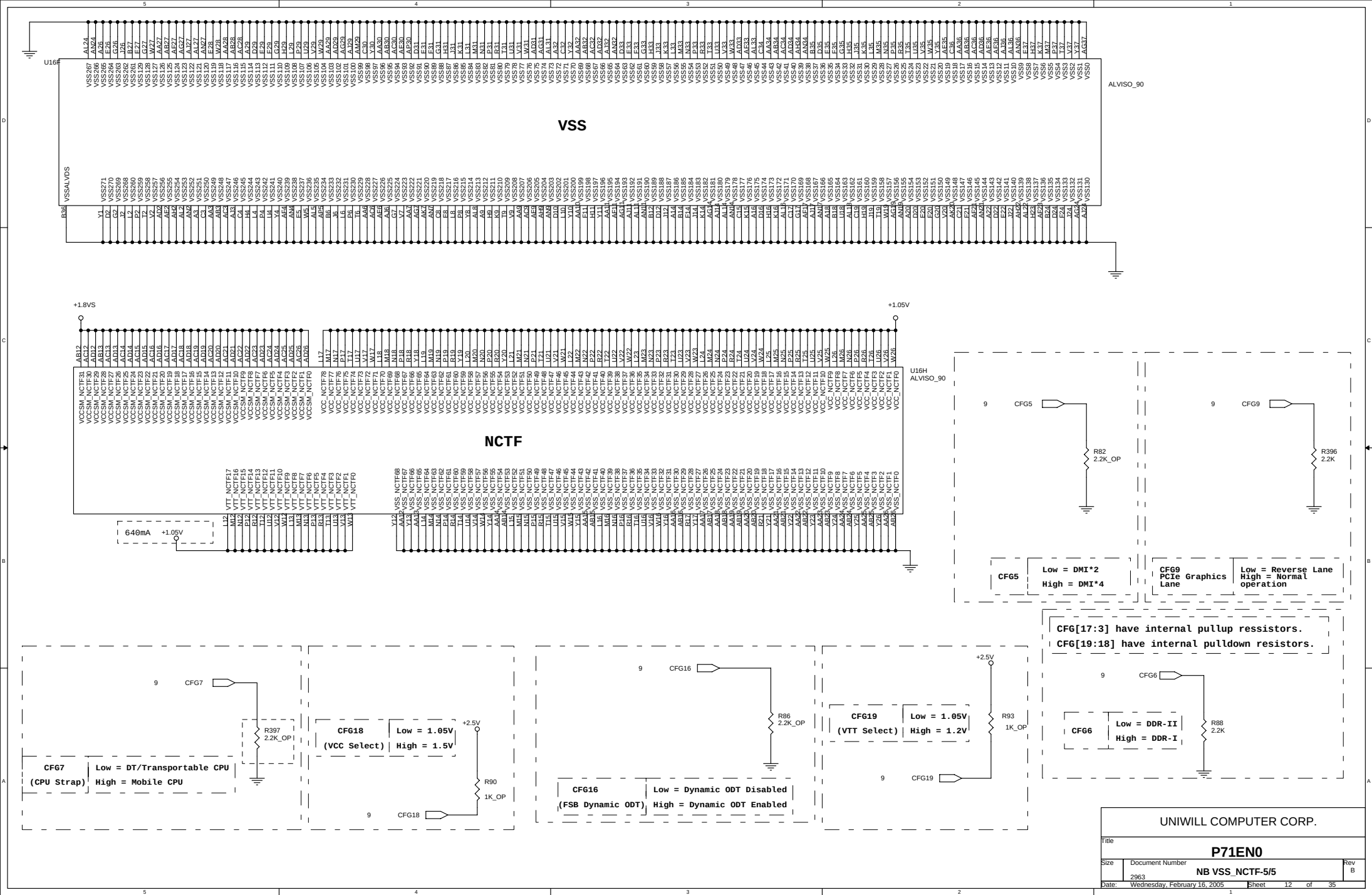


U16E



POWER





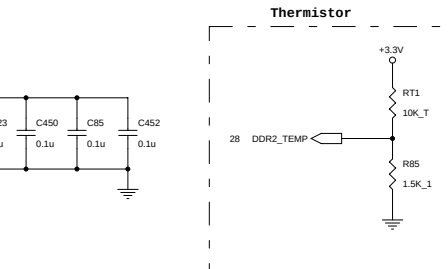
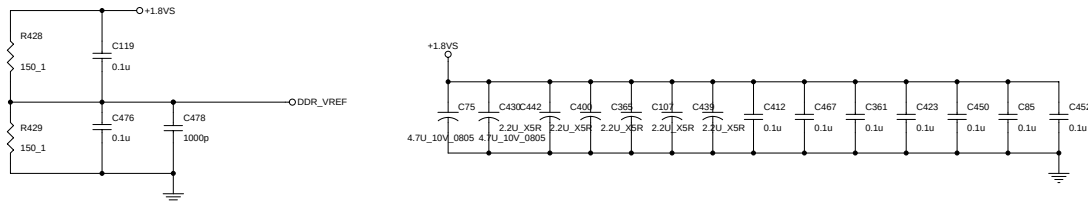
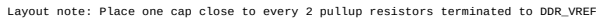


Figure 1 is a schematic diagram of the test circuit. It shows six parallel branches, each connected to a common ground. Each branch contains a 1.8V DC voltage source in series with a capacitor (labeled C384, C465, C451, C97, C471, and C469 respectively) and a 1000pF capacitor. The capacitors are connected to a common output node.

|        |                              |       |          |
|--------|------------------------------|-------|----------|
| Title  |                              |       |          |
| P71EN0 |                              |       |          |
| Size   | Document Number              |       | Rev      |
| 2963   | DDR2 CHANNELA,B SODIMMO,1    |       | B        |
| Date:  | Wednesday, February 16, 2005 | Sheet | 13 of 35 |

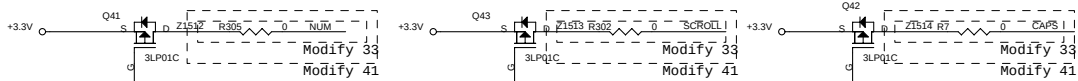
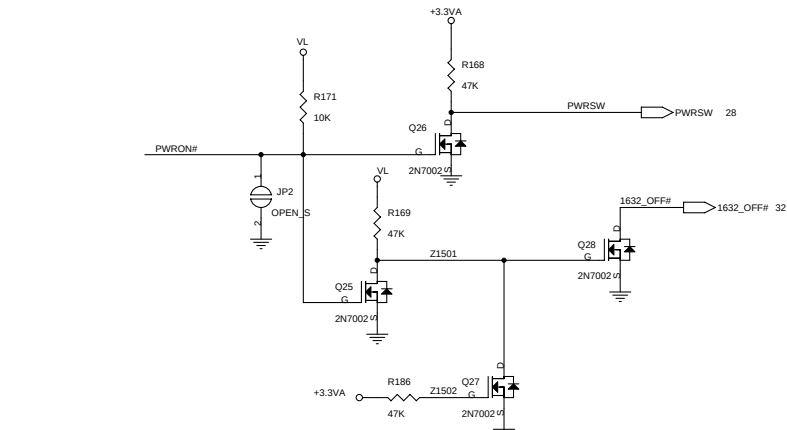
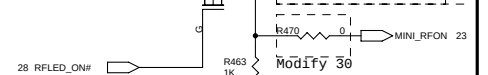
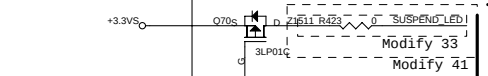
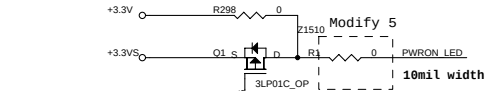
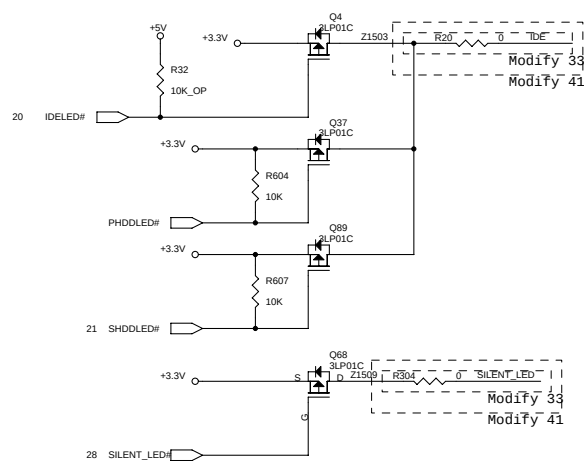
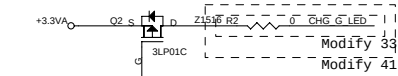
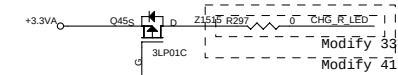
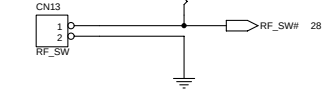
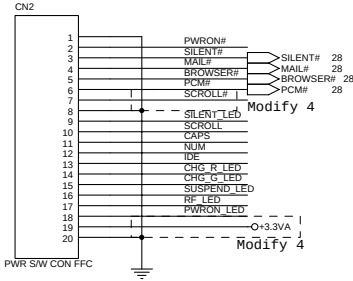
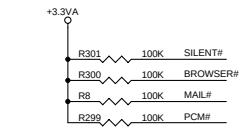


# SMART POWER

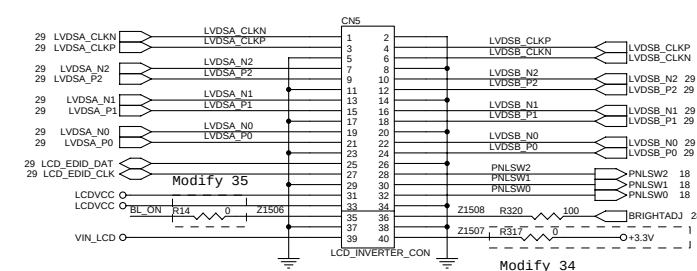
| VID5 | VID4 | VID3 | VID2 | VID1 | VID0 | VSCORE | +_mv |
|------|------|------|------|------|------|--------|------|
| 0    | 1    | 1    | 0    | 1    | 1    | 1.276  |      |
| 0    | 1    | 1    | 1    | 0    | 0    | 1.260  |      |
| 0    | 1    | 1    | 1    | 1    | 0    | 1.228  |      |
| 1    | 0    | 0    | 0    | 0    | 0    | 1.196  |      |
| 1    | 0    | 0    | 0    | 1    | 0    | 1.164  |      |
| 1    | 0    | 0    | 1    | 0    | 1    | 1.116  |      |
| 1    | 0    | 0    | 1    | 1    | 0    | 1.100  |      |
| 1    | 0    | 1    | 0    | 1    | 0    | 1.036  |      |
| 1    | 0    | 1    | 0    | 1    | 1    | 1.020  |      |
| 1    | 0    | 1    | 1    | 0    | 0    | 1.004  |      |
| 1    | 0    | 1    | 1    | 0    | 1    | 0.988  |      |
| 1    | 0    | 1    | 1    | 1    | 0    | 0.972  |      |
| 1    | 0    | 1    | 1    | 1    | 1    | 0.956  |      |
| 1    | 1    | 0    | 1    | 1    | 0    | 0.844  |      |
| 1    | 1    | 1    | 1    | 1    | 1    | 0.716  |      |

| V1D5 | V1D4 | V1D3 | V1D2 | V1D1 | V1D0 | VCORE | +_mV   |
|------|------|------|------|------|------|-------|--------|
| 0    | 0    | 0    | 0    | 0    | 0    | 1.708 | -6mV   |
| 0    | 0    | 0    | 0    | 1    | 0    | 1.676 | -32mV  |
| 0    | 0    | 0    | 1    | 0    | 0    | 1.644 | -64mV  |
| 0    | 0    | 1    | 0    | 0    | 0    | 1.580 | -128mV |
| 0    | 1    | 0    | 0    | 0    | 0    | 1.452 | -256mV |
| 0    | 0    | 1    | 0    | 1    | 0    | 1.548 |        |
| 0    | 0    | 1    | 0    | 1    | 1    | 1.532 |        |
| 0    | 0    | 1    | 1    | 0    | 0    | 1.516 |        |
| 0    | 0    | 1    | 1    | 1    | 0    | 1.484 |        |
| 0    | 1    | 0    | 0    | 0    | 1    | 1.436 |        |
| 0    | 1    | 0    | 0    | 1    | 0    | 1.420 |        |
| 0    | 1    | 0    | 1    | 0    | 0    | 1.388 |        |
| 0    | 1    | 0    | 1    | 1    | 0    | 1.356 |        |
| 0    | 1    | 1    | 0    | 0    | 1    | 1.308 |        |
| 0    | 1    | 1    | 0    | 1    | 0    | 1.292 |        |

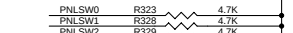




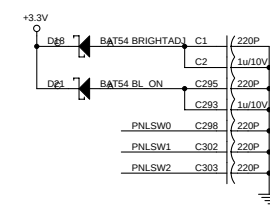
## LCD



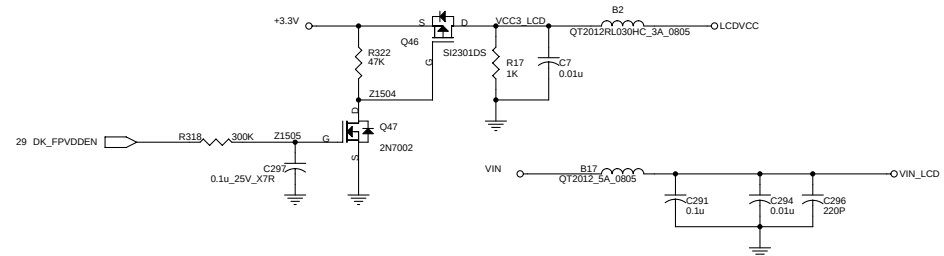
## PANNEL SELECT



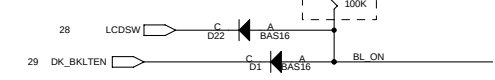
| PNLSW2 | PNLSW1 | PNLSW0 |           |
|--------|--------|--------|-----------|
| L      | L      | L      | reserved  |
| L      | L      | H      | reserved  |
| L      | H      | L      | reserved  |
| L      | H      | H      | 1280X800  |
| H      | L      | L      | 1440X900  |
| H      | L      | H      | 1680X1050 |
| H      | H      | L      | 1920X1200 |
| H      | H      | H      | reserved  |

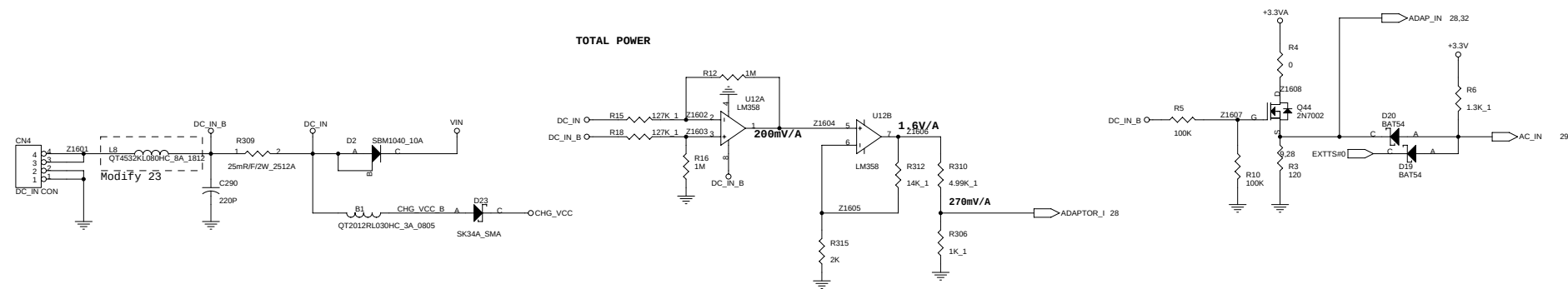
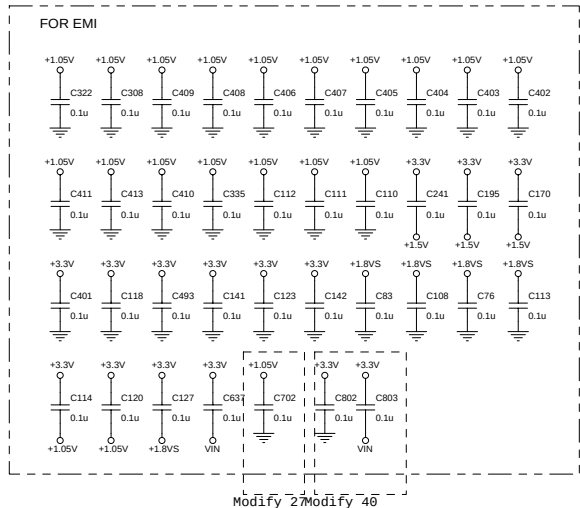


## LCDVCC



## INVERTER

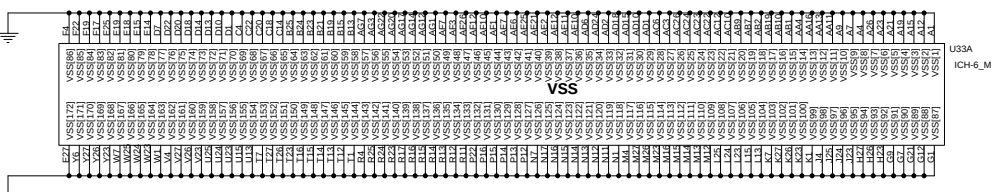
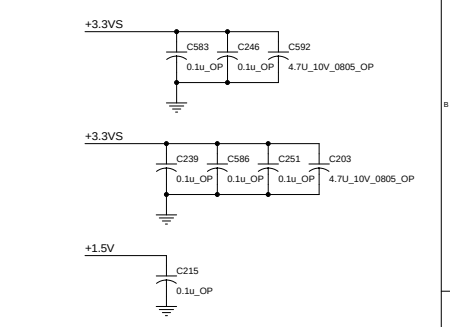
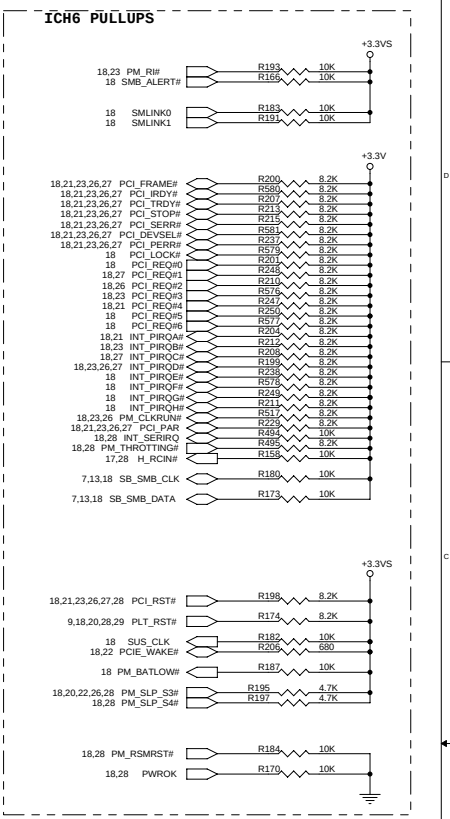
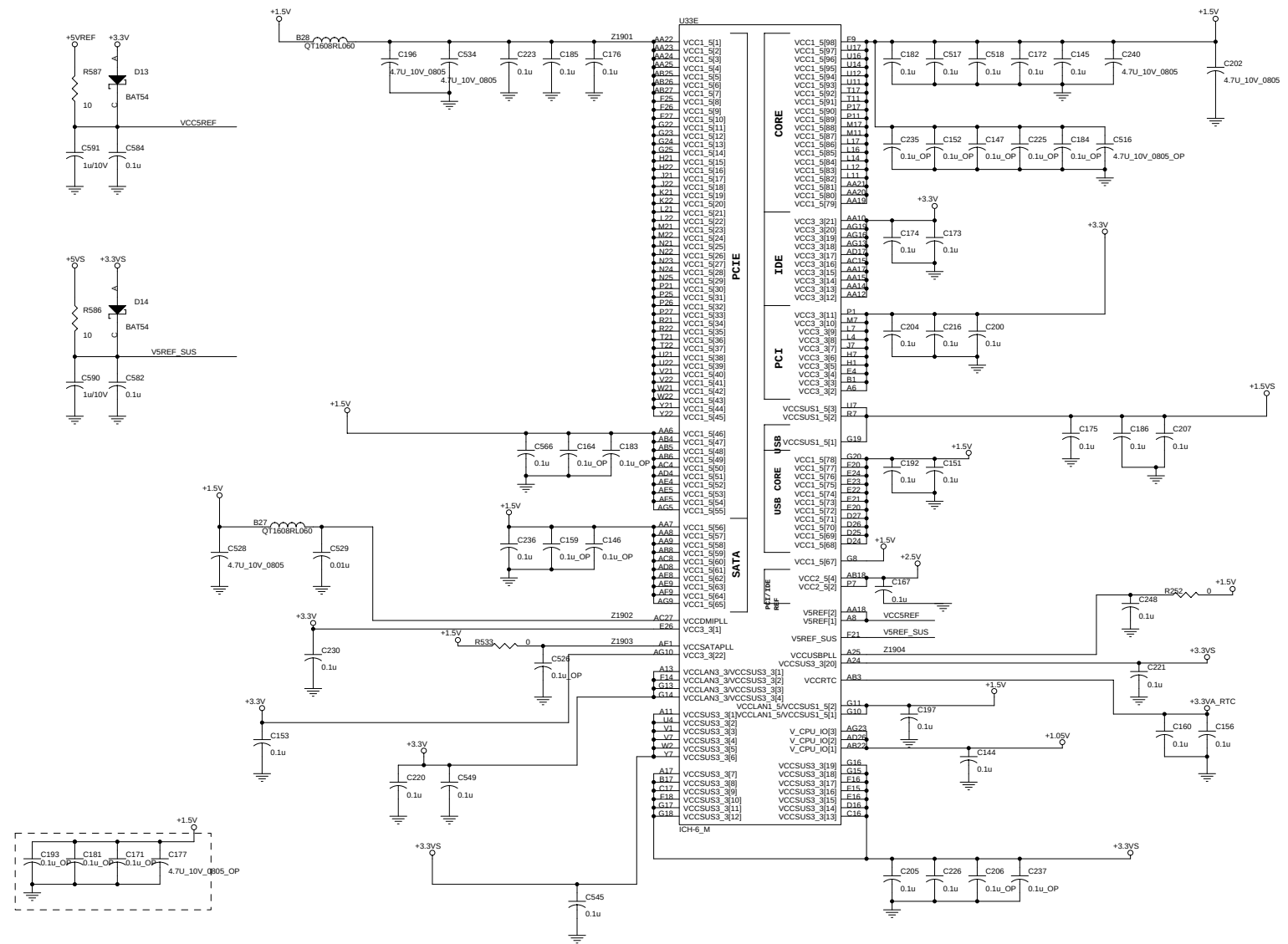




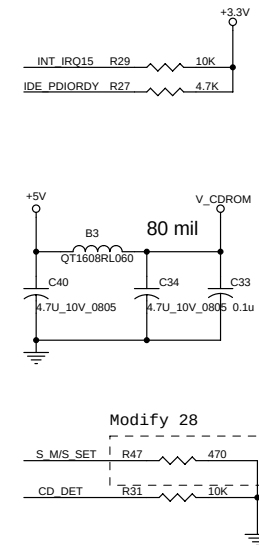




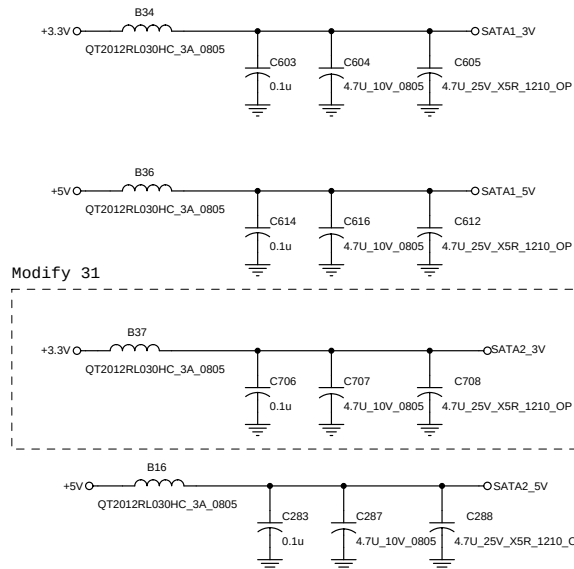




## HDD

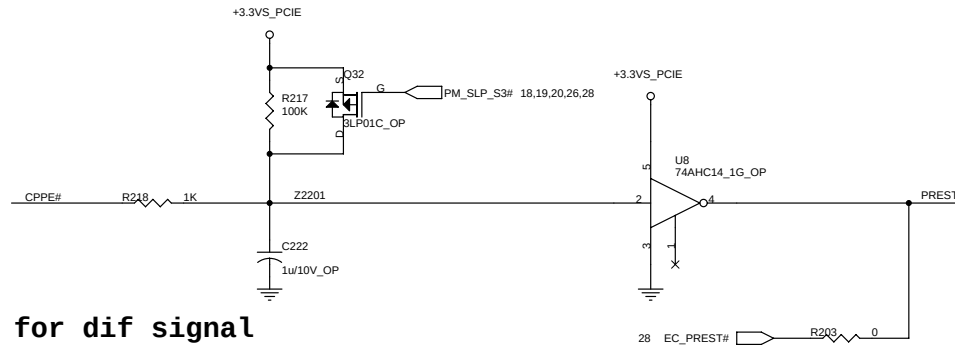
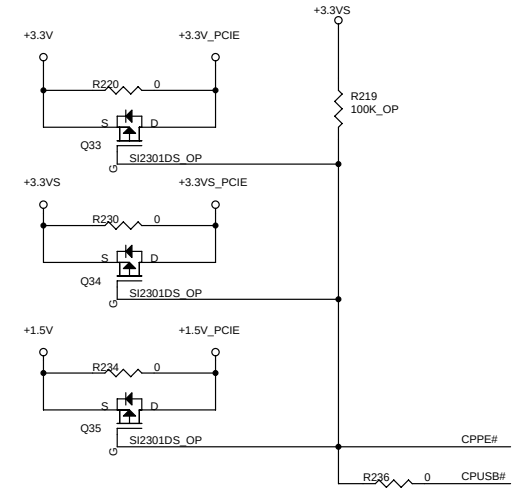
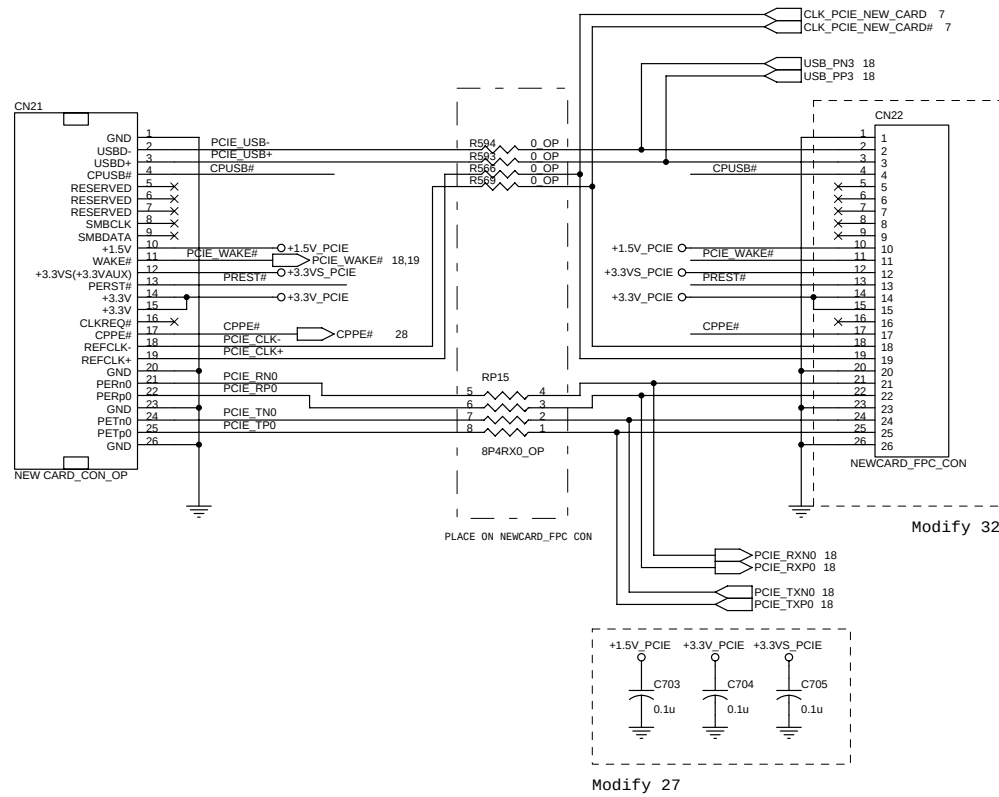


Modify 40



|                        |                              |                   |          |
|------------------------|------------------------------|-------------------|----------|
| UNIWILL COMPUTER CORP. |                              |                   |          |
| Title                  |                              |                   |          |
| P71EN0                 |                              |                   |          |
| Size                   | Document Number              |                   | Rev      |
|                        | 2963                         | HDD / CD-ROM CONN | B        |
| Date:                  | Wednesday, February 16, 2005 | Sheet             | 20 of 35 |





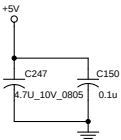
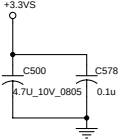
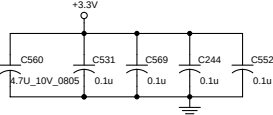
add resister for dif signal

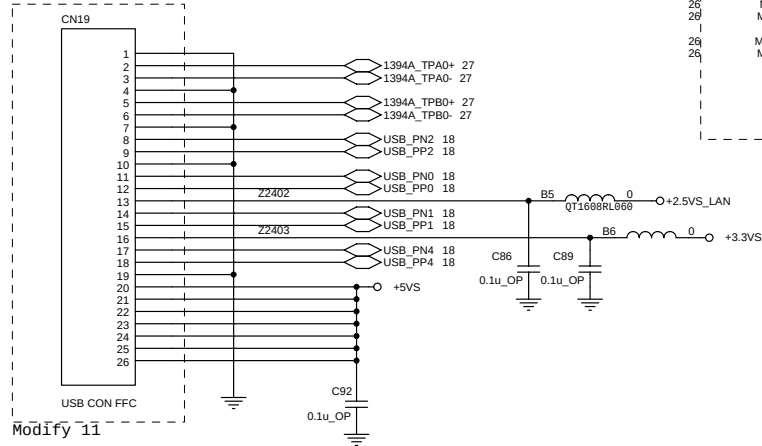
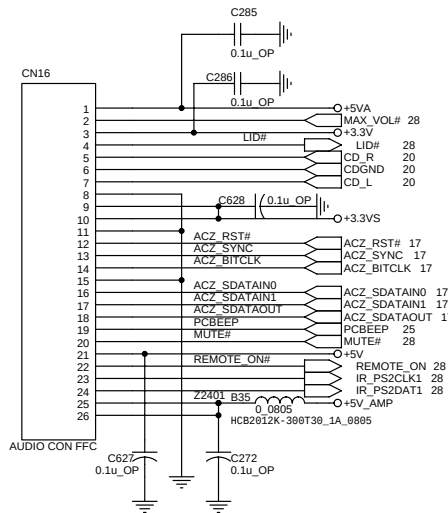
| UNIWILL COMPUTER CORP. |                              |                 |          |
|------------------------|------------------------------|-----------------|----------|
| Title                  |                              | <b>P71EN0</b>   |          |
| Size                   | Document Number              | Rev B           |          |
|                        | 2963                         | <b>NEW CARD</b> |          |
| Date:                  | Wednesday, February 16, 2005 | Sheet           | 22 of 35 |

MINI PCI CONN

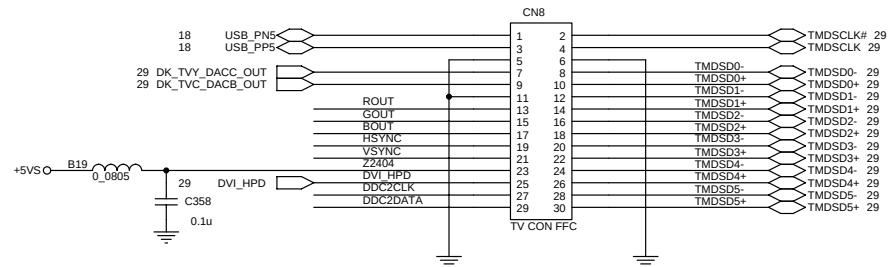
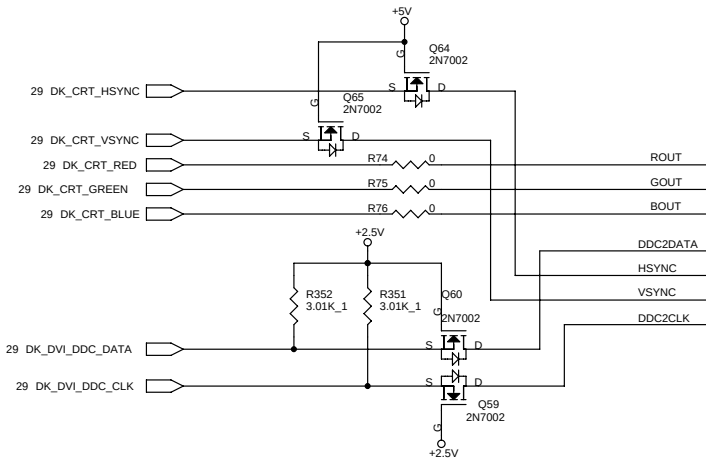
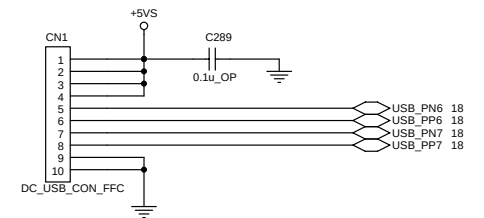
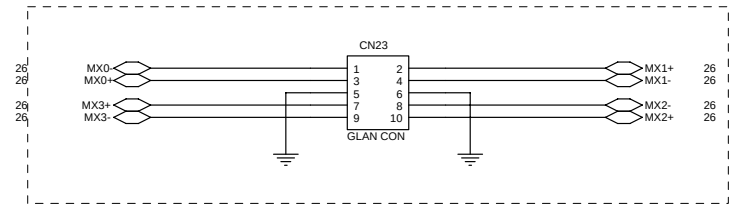
Intel PRO/Wireless 2100 LAN

|       |                  |                     |                                            |                                                                                                   |
|-------|------------------|---------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------|
| PIN11 | LED_WLAN_LINK    | HI(3.3V)<br>Low(0V) | Solid ON<br>1 Flash/3 sec<br>LED OFF       | Associated AP<br>Not Associated with an AP<br>Power OFF or RF Kill active                         |
| PIN12 | LED_WLAN_ACT     | HI(3.3V)<br>Low(0V) | Rapid Blinking<br>Slow Blinking<br>LED OFF | Passing data traffic to AP<br>Beacon traffic to AP<br>Power OFF or not activity or RF Kill active |
| PIN13 | W_RadioXMIT_Off# | HI(3.3V)<br>Low(0V) | Enable<br>Disable                          | Radio transmitter is ON<br>Radio transmitter turn off                                             |





Modify 11

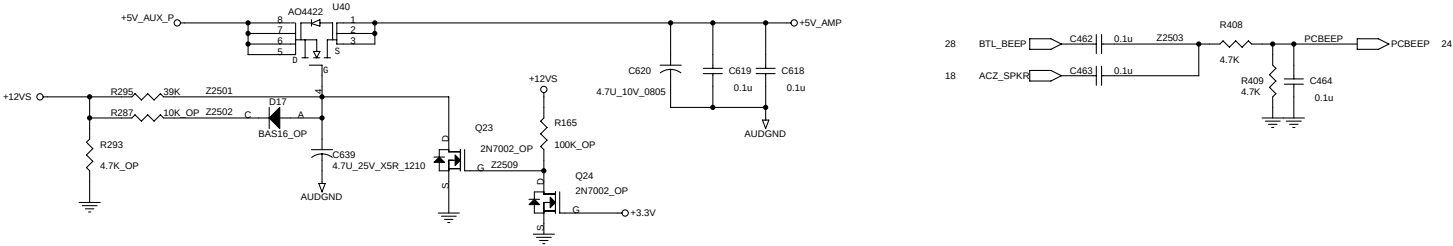


UNIWILL COMPUTER CORP.

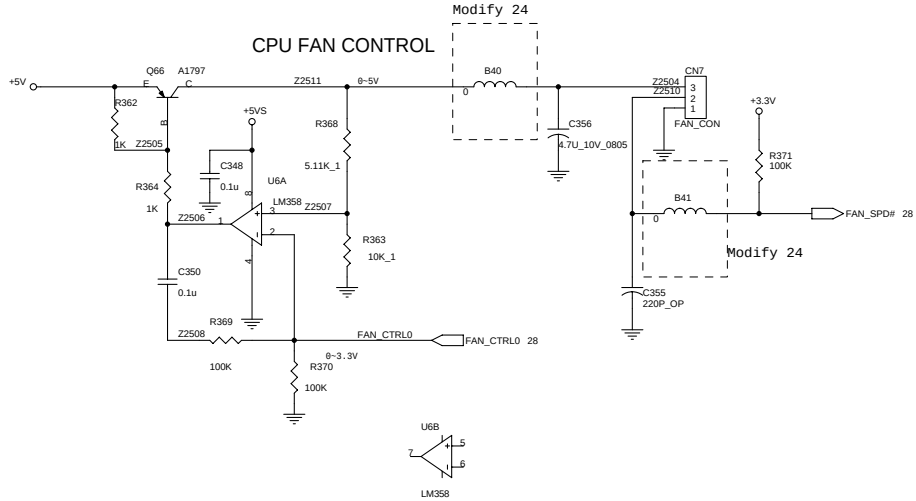
|       |                              |  |               |  |       |
|-------|------------------------------|--|---------------|--|-------|
| Title |                              |  | <b>P71EN0</b> |  |       |
| Size  | Document Number              |  |               |  | Rev   |
|       | 2963                         |  |               |  | B     |
| Date: | Wednesday, February 16, 2005 |  |               |  | Sheet |
|       | 24                           |  |               |  | of    |
|       | 35                           |  |               |  |       |



## AMP VDD

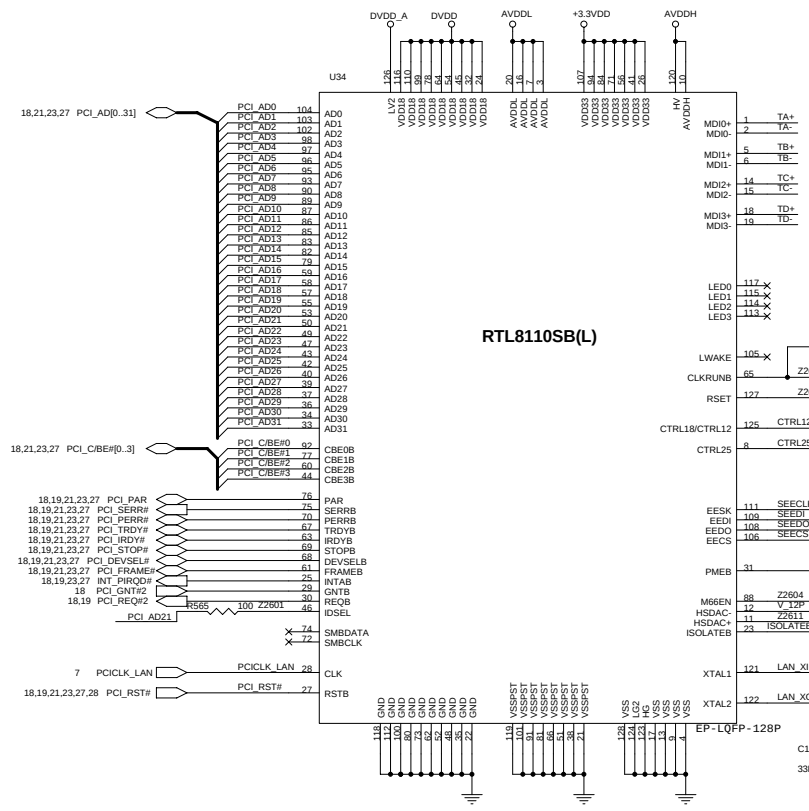
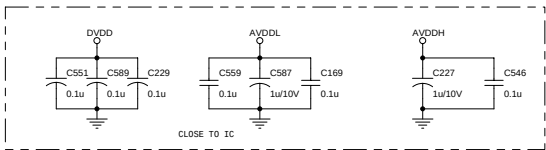


## CPU FAN CONTROL

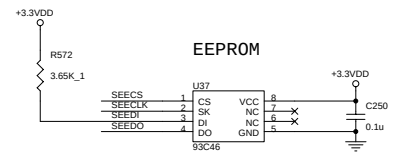
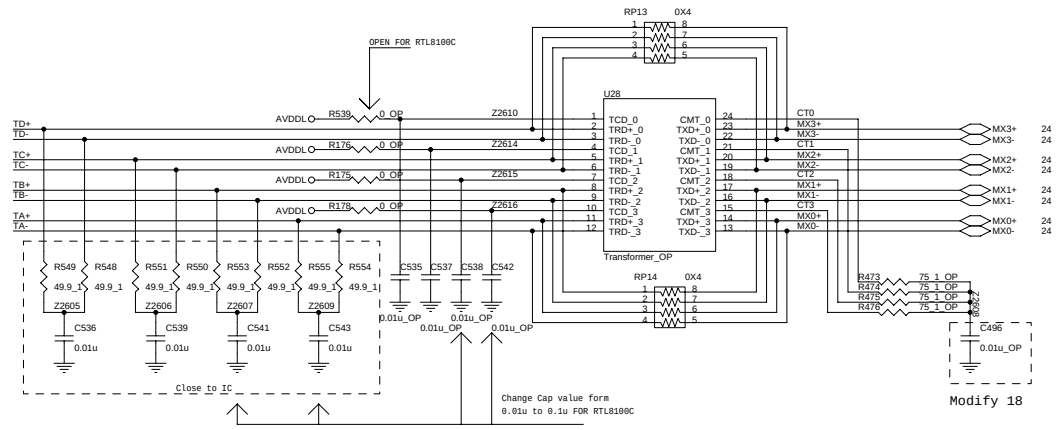


UNIWILL COMPUTER CORP.

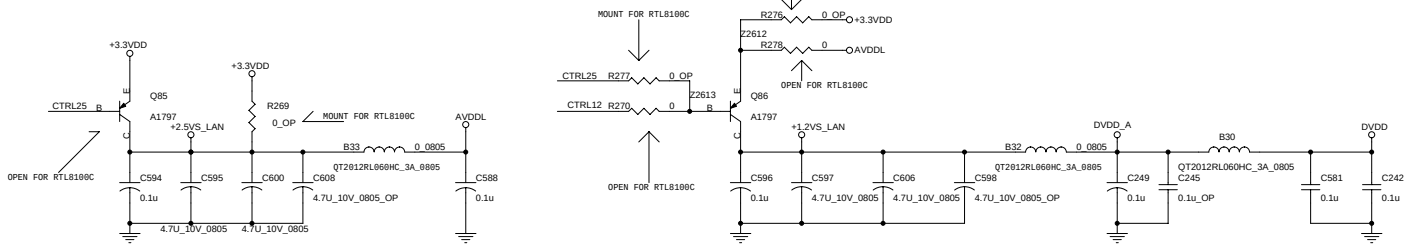
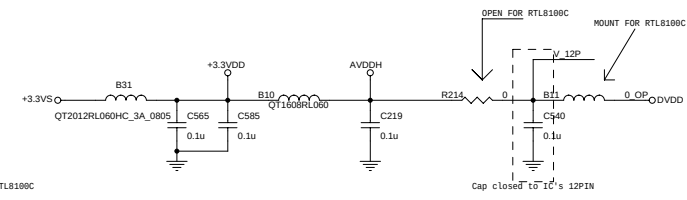
|        |                              |       |          |
|--------|------------------------------|-------|----------|
| Title  |                              |       |          |
| P71EN0 |                              |       |          |
| Size   | Document Number              |       | Rev      |
| 2963   | AZALIA AUDIO CODEC & MDC     |       | B        |
| Date:  | Wednesday, February 16, 2005 | Sheet | 25 of 35 |



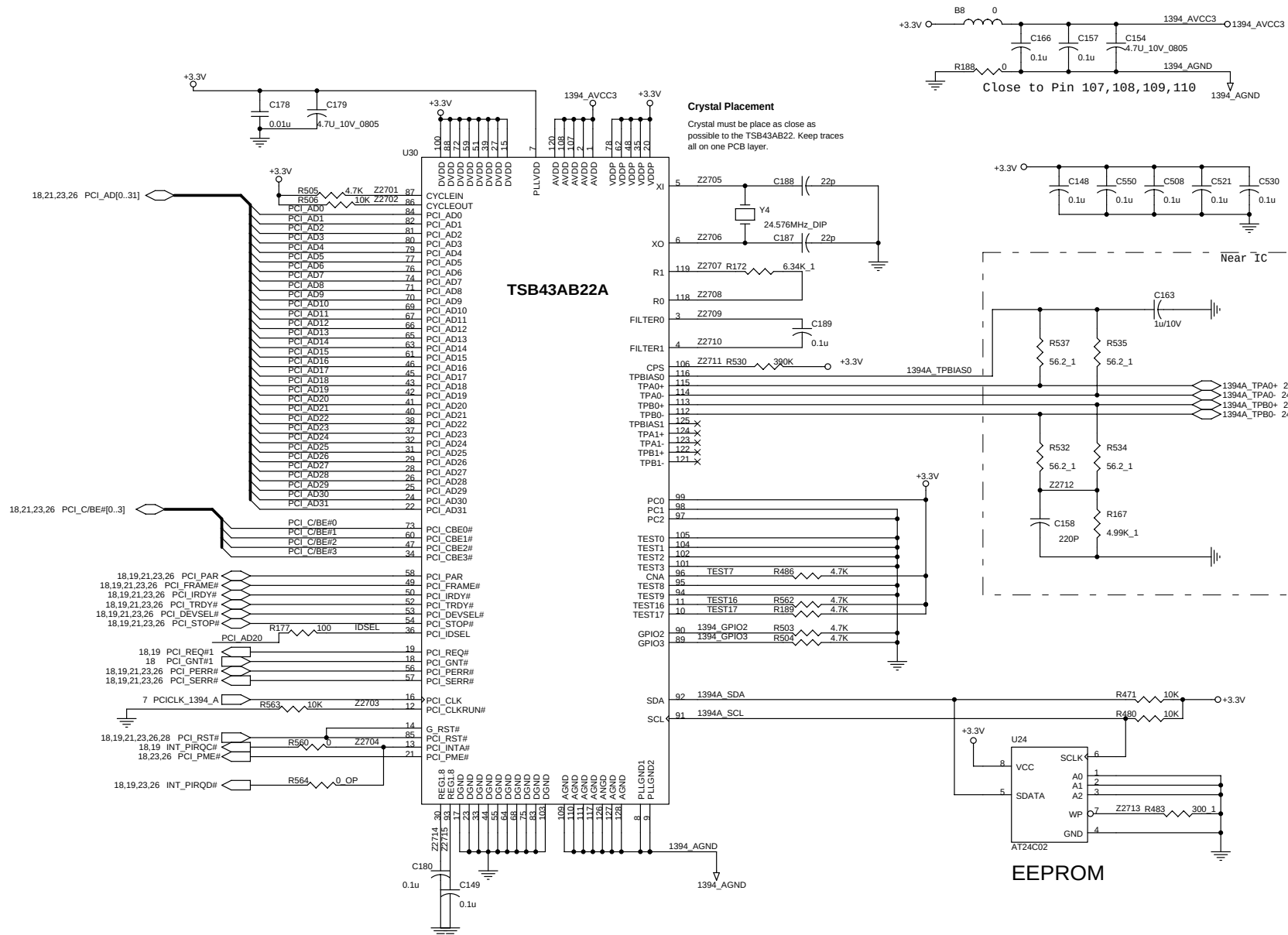
RTL8110SB(L)



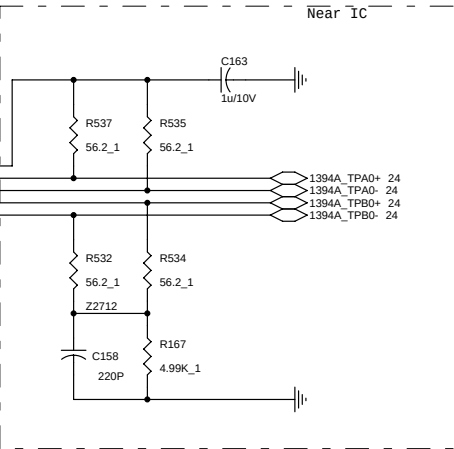
EEPROM



|        | RTL8100C | RTL8110S /<br>RTL8169S | RTL8110SB /<br>RTL8169SB |
|--------|----------|------------------------|--------------------------|
| AVDDH  | N/A      | 3.3AVDD                | 3.3AVDD                  |
| V_12P  | 2.5AVDD  | N/A                    | 3.3AVDD                  |
| AVDDL  | 3.3AVDD  | 2.5AVDD                | 2.5AVDD                  |
| V_DAC  | N/A      | 2.5AVDD                | 2.5AVDD                  |
| DVDD   | 2.5VDD   | 1.8VDD                 | 1.2VDD                   |
| DVDD_A | N/A      | 1.8AVDD                | 1.2AVDD                  |

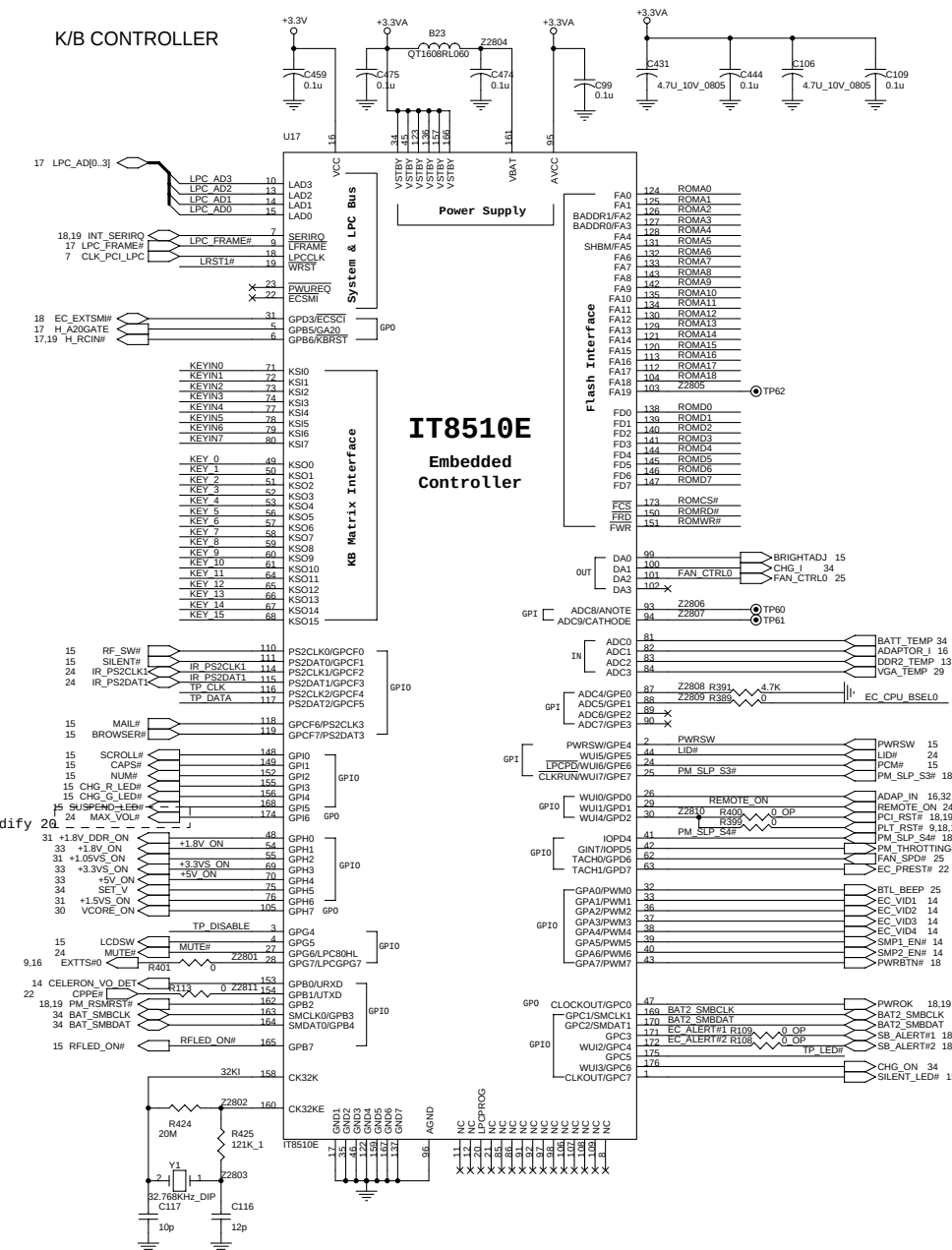


**Crystal Placement**  
Crystal must be placed as close as possible to the TSB43AB22. Keep traces all on one PCB layer.

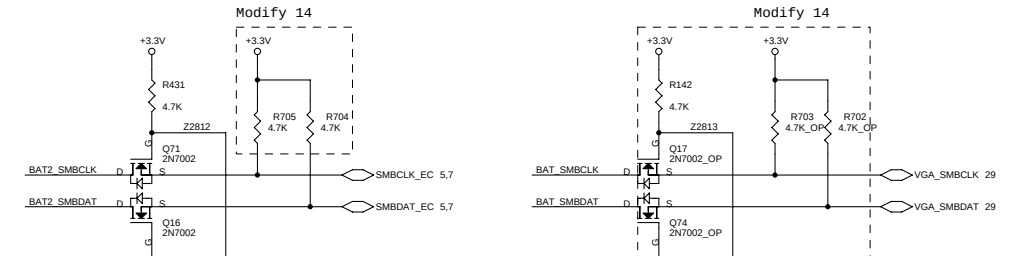
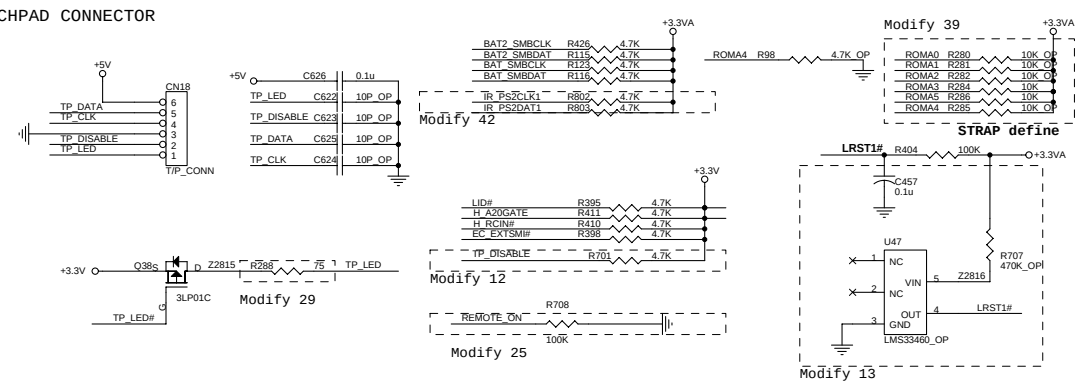


**EEPROM**

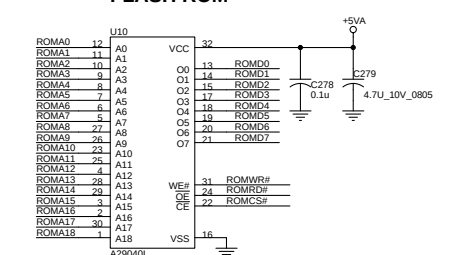
## K/B CONTROLLER



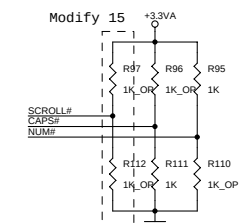
## TOCHPAD CONNECTOR



## FLASH ROM



## Modify 15

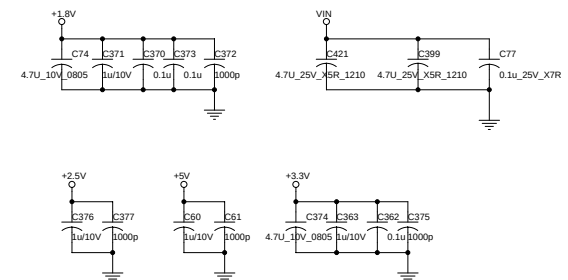
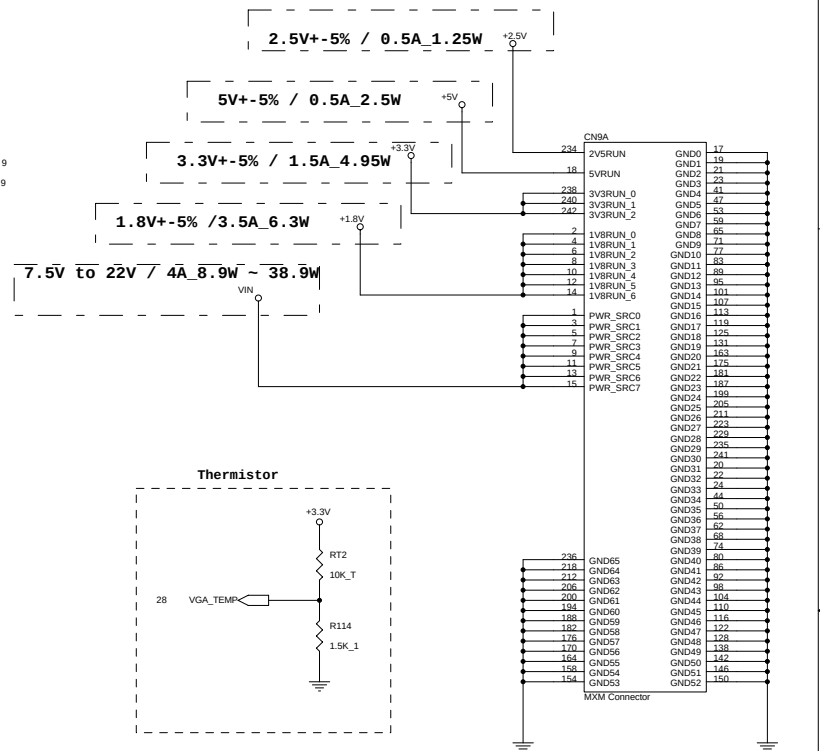
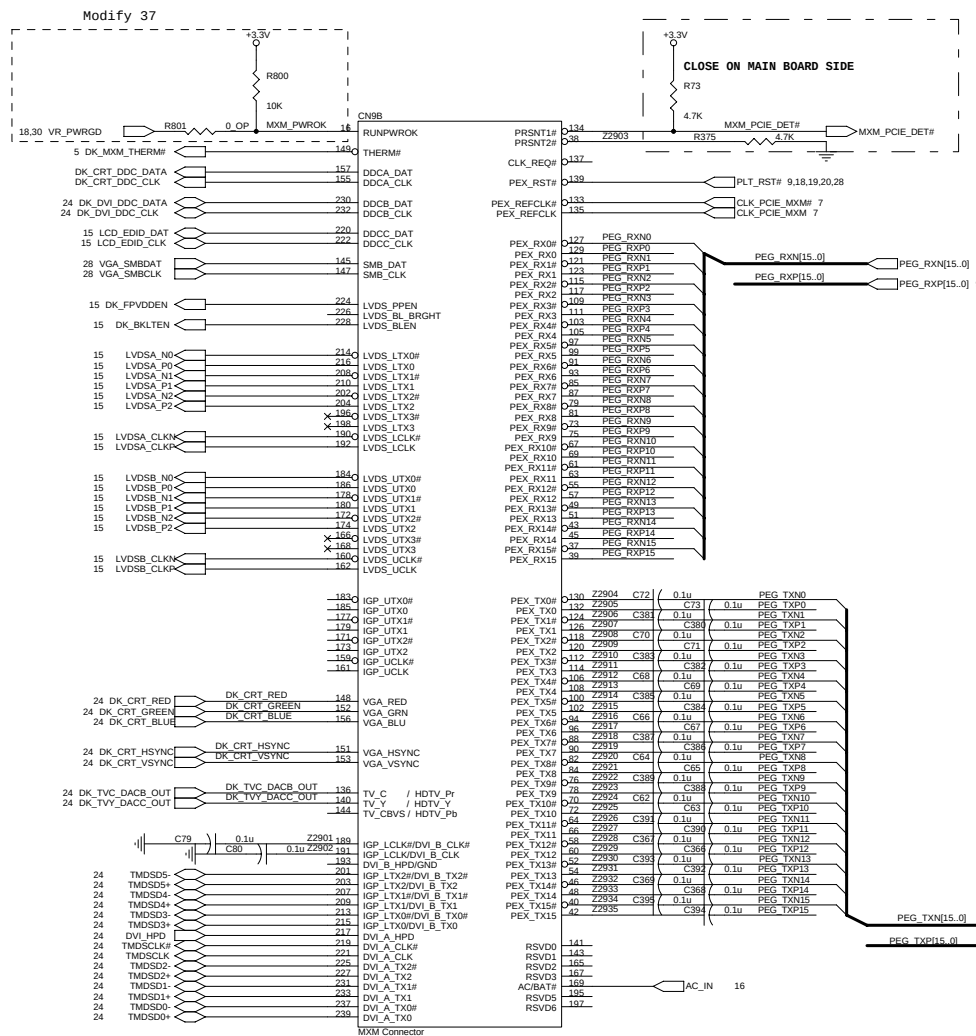


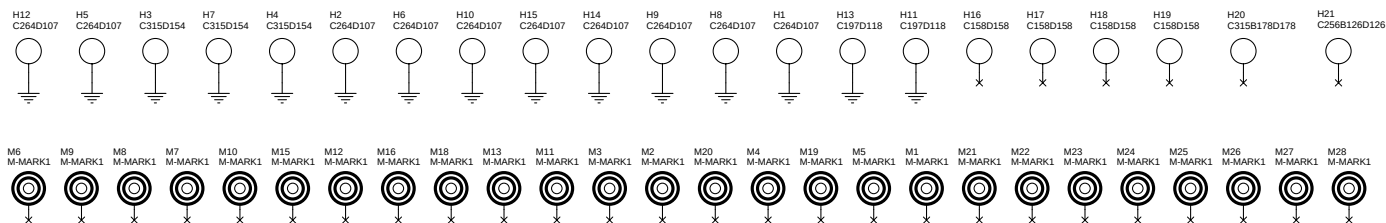
| (ID2) NUMLED# | (ID1) CAPLED# | (ID0) SCROLED# | ID     | MODEL |
|---------------|---------------|----------------|--------|-------|
| 0             | 0             | 0              | 223    |       |
| 0             | 0             | 1              | 245    |       |
| 0             | 1             | 0              | 255    |       |
| 0             | 1             | 1              | 259    |       |
| 1             | 0             | 0              | P71EN0 |       |
| 1             | 0             | 1              | P50EN0 |       |
| 1             | 1             | 0              | XXX    |       |
| 1             | 1             | 1              | XXX    |       |

UNIWILL COMPUTER CORP.

P71EN0

|                                    |                             |     |
|------------------------------------|-----------------------------|-----|
| File                               | Document Number             | Rev |
| 2963                               | EC IT8510E / BIOS / TP CONN | B   |
| Date: Wednesday, February 16, 2005 | Sheet 28 of 35              |     |

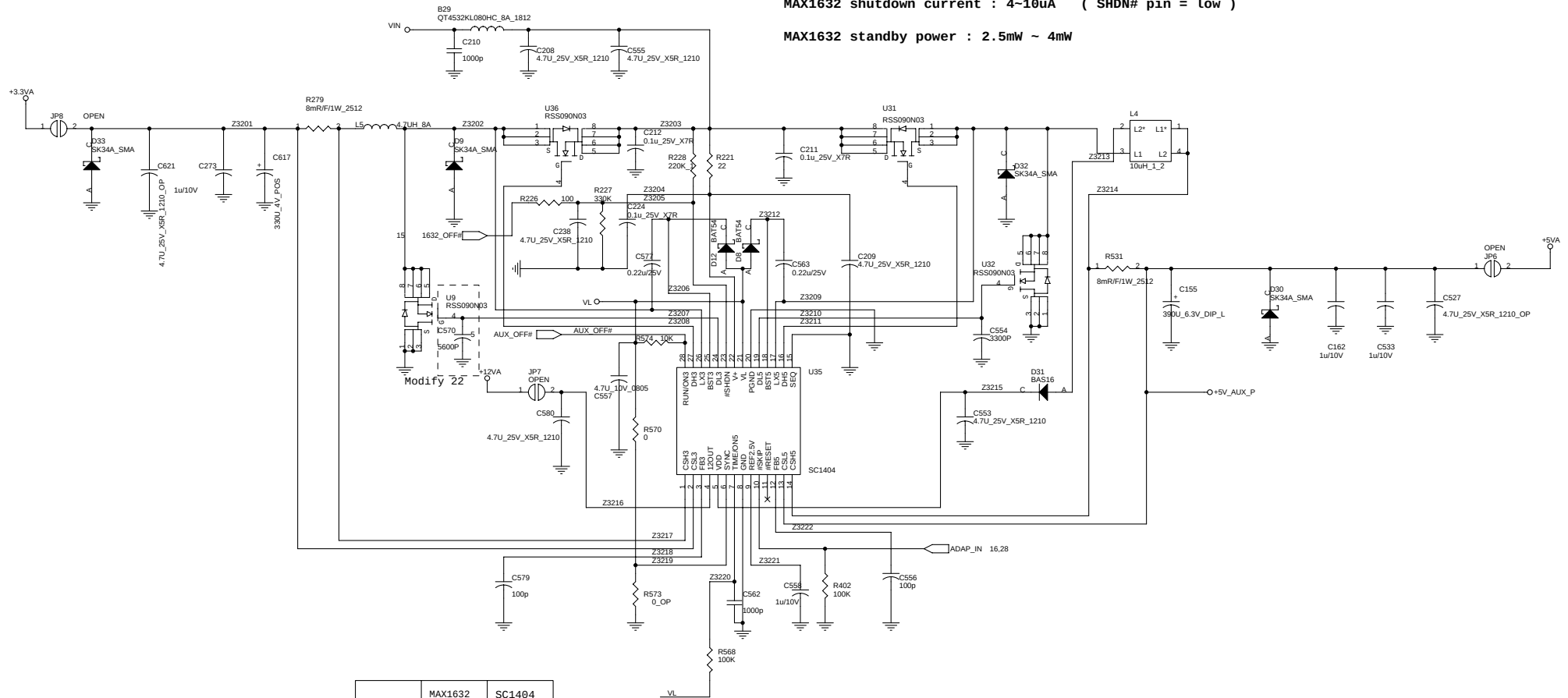




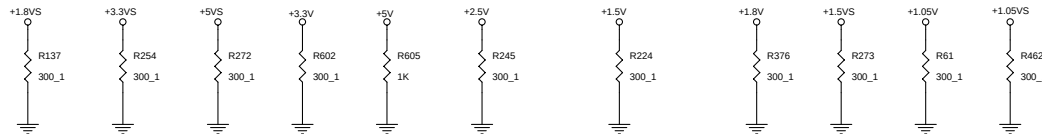


MAX1632 shutdown current : 4~10uA ( SHDN# pin = low )

MAX1632 standby power : 2.5mW ~ 4mW



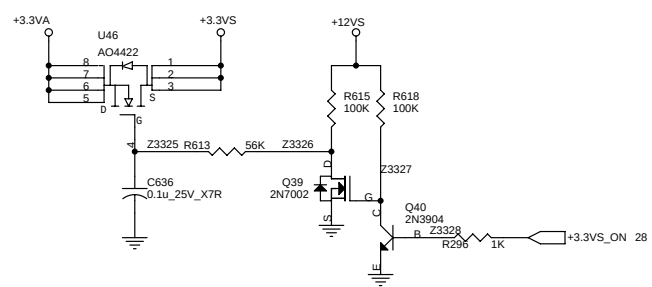
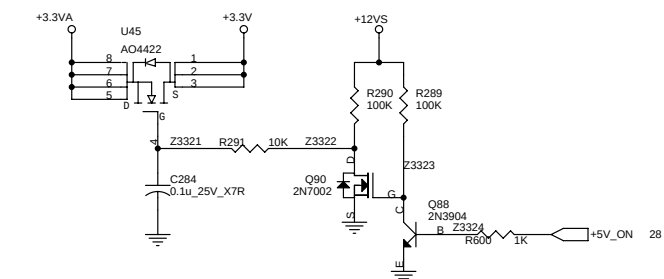
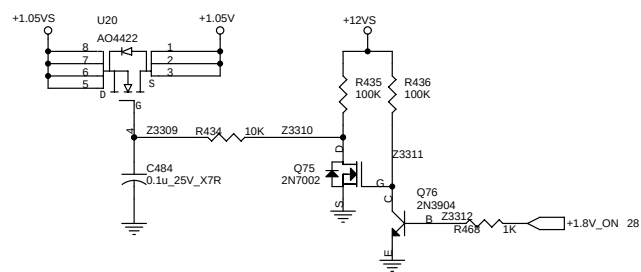
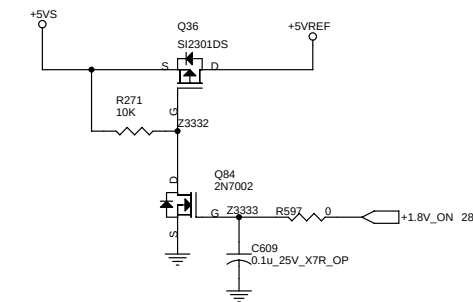
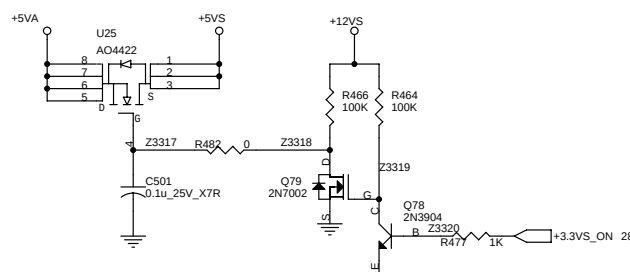
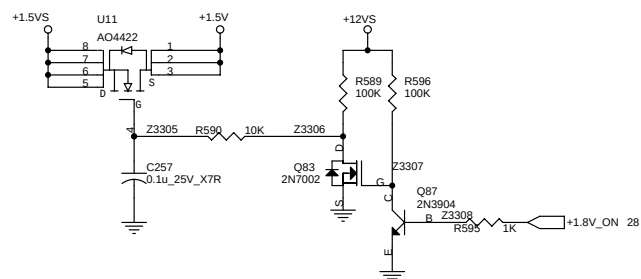
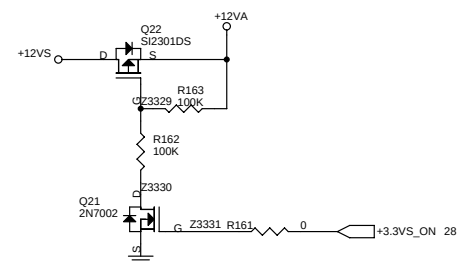
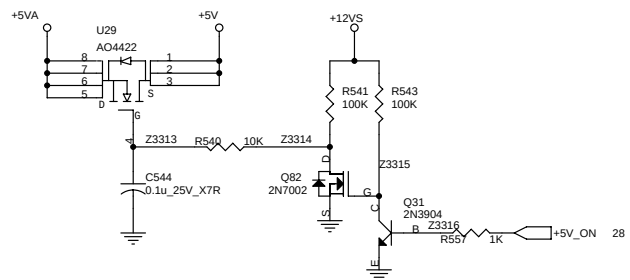
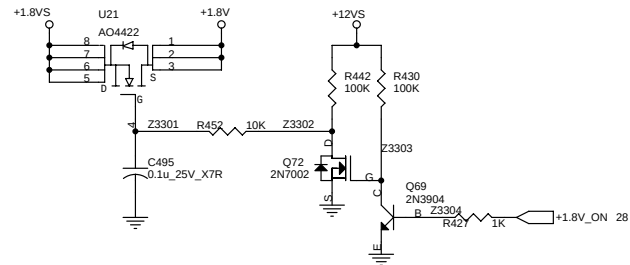
|            | MAX1632    | SC1404   |
|------------|------------|----------|
| C680       | 0          | 100pF    |
| R628       | 100K_OP    | 100K     |
| C681       | 0          | 100pF    |
| R618, R623 | 15mR, 15mR | 8mR, 8mR |



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| P71EN0 |                              |  |       |          |
| Size   | Document Number              |  |       | Rev      |
|        | 2963 +3.3VA+5VA+12VA         |  |       | B        |
| Date:  | Wednesday, February 16, 2005 |  | Sheet | 32 of 35 |







R:A INITINAL

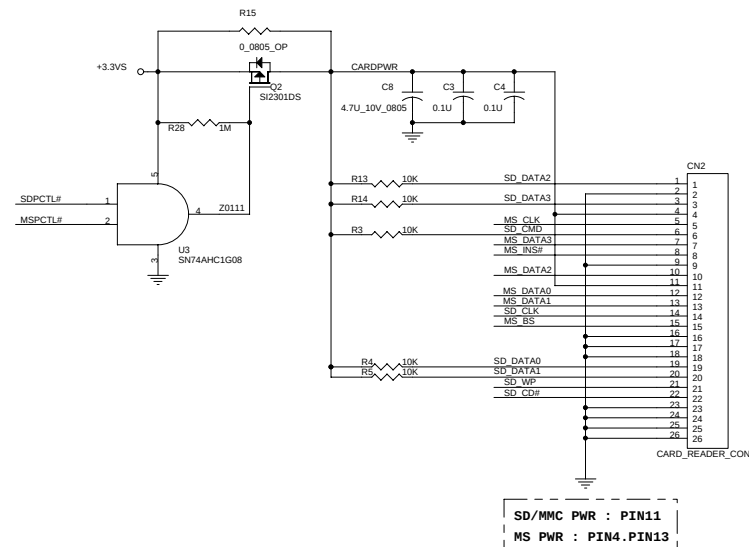
R:A to R:B modify:

- Modify 1: R349 value change from 1K to 0 ohm
- Modify 2: Add R700 0 ohm and H\_THERM# net for thertmal protection require by FSC
- Modify 3: R151&R152 value change from 0 ohm to OP for cut of net S/B SMBus to CLK GEN
- Modify 4: CN2.7 add net SCROLL# for project ID select by S/W BD
- Modify 5: R1 form 120 to 0 ohm for solving light three LED on daughter BD issue
- Modify 6: Del D29 for solving VIL too higher issue
- Modify 7: C165 & C532 change form 20p to 18p for solving RTC accurate
- Modify 8: Del R499, R518, R498 for solving design issue
- Modify 9: R514 form 100K to 10K for solving driving current lower issue
- Modify 10: CN17 was changed pin define for solving FPC layout smooth issue
- Modify 11: CN19 was changed from 36PIN to 26 PIN and add CN23 for solving Giga LAN signal impendence issue
- Modify 12: Add R701 4.7K pull high to +3.3V for solving net TP\_DISABLE# unstable issue
- Modify 13: C457 change form 1uF to 0.1uF for sloving EC reset fail issue ; Reserved reset IC U47\_OP and R707 470K\_OP
- Modify 14: Add R702 & R703 4.7K\_OP and R704 & R705 4.7K pull up to +3.3Vfor sloving SMBus voltage level unstable issue; Q17,Q74\_OP for solving S3 resume failed
- Modify 15: R97 change from 1K to 1K\_OP for solving project ID select issue.
- Modify 16: R99 1K->1K\_OP ; R101 1K\_OP-> 1K; R104&R106 0->0\_OP; R120 0\_OP->0; R126 1K\_OP-> 1K for improving smart power reliability(128mV->64mV).
- Modify 17: Power plan from +3.3VS to +3.3V for solving design issue
- Modify 18: C496 form 0.01u to 0.01u\_OP for solving lost issue
- Modify 19: Add C700, C701 0.1UF and R706 0 ohm for solving ESD issue
- Modify 20: Add net MAX\_VOL# reserved for ctrl AMP max gain
- Modify 21: R344, R346 change form 820 to 931 ohm for OCP on 27A
- Modify 22: C570 change form 3900p to 5600p for improving +3.3VA induce
- Modify 22: Add L8 for EMI require
- Modify 23: Modify CN15 CONN type and del CN14,R255,B9,C190,C548,C547 for FSC require
- Modify 24: Add B40, B41 reserved for EMI
- Modify 25: REMOTE\_ON net change form low to high actived and add R708 100K to GND for saving power
- Modify 26: Add L9 resvered for EMI
- Modify 27: Add C702, C703,C704,C705 for solving PCIE bus cross different power plane
- Modify 28: R47 change from 470\_OP to 470 for solving change ODD slaver to master on second IDE by FSC requirement
- Modify 29: R288 change from 120\_OP to 75 for solving T/P LED too dark
- Modify 30: R470 change from 1K to 0 ohm for solving desing lost issue
- Modify 31: Add B37(3A), C706(0.1u),C707(4.7u),C708(OP)for solving SATA HDD 3V issue
- Modify 32: CN22 CHANGE CONN TYPE for solving ME ssue
- Modify 33: R2, R7, R302, R305, R20, R304, R423, R432, R297change from 120 to 470 ohm for solving LED too bright issue

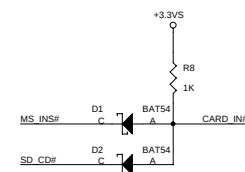
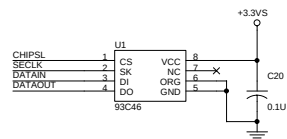
R:B to R:C modify:

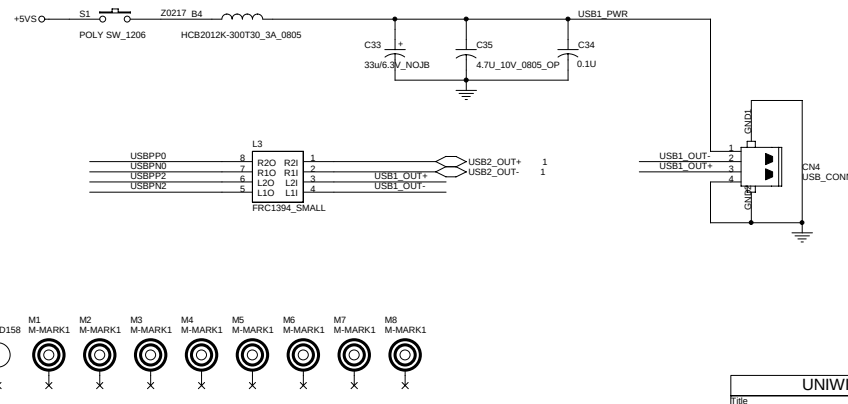
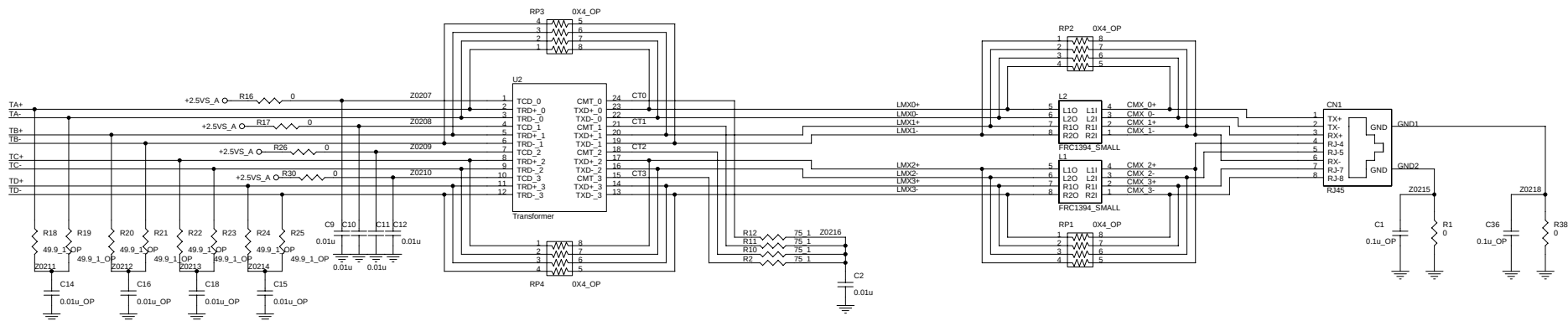
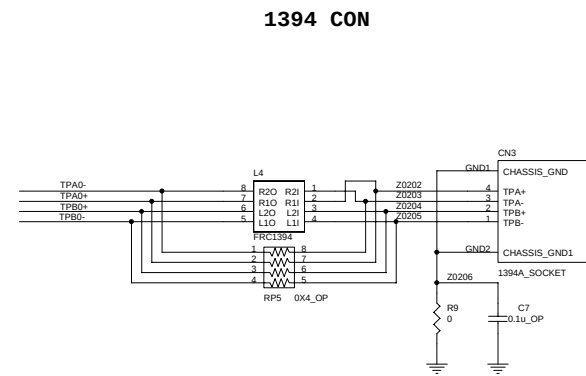
- Modify 34: R317 change from 0\_OP to 0 and +5V change to +3.3V for solving LCD white sreccn with S3 resume issue
- Modify 35: R312 change from 10K to 100K and R14 change from 100 to 0 ohm for solving inverter enable voltage lower (1.5V) issue
- Modify 36: R231 change from 4.7K to 6.49K for solving HDD can't detected issue
- Modify 37: Del NET PWROK and add R800 pull-up to +3.3V and reserve R801 tied to net VRPWRGD for solving NV42 S3 resume fail issue
- Modify 38: Del C502(1210) and add C800 4.7u/25V\_1206, C801 4.7u/25V\_1206 for solving C502 encroach upon top housing at P50EA0 issue
- Modify 39: R280 4.7K\_OP to 10K\_OP;R281 4.7K to 10K\_OP; R282 4.7K\_OP to 10K\_OP; R284 4.7K\_OP to 10K;R285 4.7K\_OP to 10K\_OP;R286 4.7K\_OP to 10K\_OP for solving system power off leakage current over 2mA@10.8V issue
- Modify 40: CN17 type changed for FPC(26PIN) to WTB(16PIN) CONN and add C802,C803 0.1u for improving SATA HDD signal quality
- Modify 41: R2,R7,R20,R297,R302,R304,R305,R423,R432 changed form 470 to 0 ohm for solving LED illumination issue
- Modify 42: Add R802, R803 4.7K to +3.3VA for solving IR remote controller's PS/2 pull high weak issue

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| Title                       |                              |  |                |
| Appendix A. Ver. History    |                              |  |                |
| Size                        | Document Number              |  | Rev            |
| 2963                        | P71EN0                       |  | B              |
| Date:                       | Wednesday, February 16, 2005 |  | Sheet 35 of 35 |



VREF=0.4~0.43V(510ohm~610ohm)





|                        |                             |       |        |       |
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| Title                  |                             |       |        |       |
| P71EN0                 |                             |       |        |       |
| Size C                 | Document Number             |       |        | Rev B |
|                        | 3046 USB/RJ45/1394 CON      |       |        |       |
| Date:                  | Thursday, February 17, 2005 | Sheet | 2 of 2 |       |