255 / 259KIX

255KIX REV:01

	PCB P/N	ASSY P/N
MB ID1	37-UH0000-01	82-UH0000-01
MB ID3	37-UH0003-01	82-UH0003-01
USB	35-UG5020-00A	80-UG5020-00A
HDD	35-UG5070-00A	80-UG5070-00A
LAN	35-UG5030-00C	80-UG5030-00C
T/P	35-UG5010-00B	80-UG5010-00B
LED ID1	35-UG5040-01	80-UG5040-01
SW ID1	35-UG5000-00B	80-UG5000-00B
LED ID3	35-UG5040-01	80-UG5041-01
SW ID3	35-UG5000-00C	80-UG5001-00C

MADE IN TAIWAN / RD1-HW3

UNIWILL COMPUTER CORP.

Title: **COVER PAGE**

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SIS963L GPIO

GPIO0	NC
GPIO1	NC
GPIO2	SB_THROTTLING#
GPIO3	EXTSMI#
GPIO4	CLKRUN#
GPIO5	HDDCDROM_RST#
GPIO6	NC
GPIO7	NC
GPIO8	PNLSW2
GPIO9	PNLSW0
GPIO10	PNLSW1
GPIO11	NC
GPIO12	NC
GPIO13	NC
GPIO14	S3AUXSW#
GPIO15	NC
GPIO16	NC
GPIO17	NC
GPIO18	NC
GPIO19	SMBCLK
GPIO20	SMBDAT

IT80510E GPIO

GPA0	BTL_BEEP
GPA1	NC
GPA2	NC
GPA3	NC
GPA4	NC
GPA5	NC
GPA6	SMP1_EN#
GPA7	PWRBTN#
GPB0	SUS_SKIP
GPB1	IDE_LED#
GPB2	NC
GPB3	BAT_SMBCLK
GPB4	BAT_SMBDATA
GPB5	NC
GPB6	NC
GPB7	RF LED#
GPC0	PWROK1
GPC1	SMBCLK1
GPC2	SMBDAT1
GPC3	NC
GPC4	NC
GPC5	NC
GPC6	CHG_ON
GPC7	NC
GPD0	AC_IN
GPD1	USERSW
GPD2	PCIRST#
GPD3	EXTSMI#
IOPD4	PSON#
IOPD5	THROTTLING#
GPD6	NC
GPD7	FAN_SPEED#
GPE0	NC
GPE1	NC
GPE2	NC
GPE3	NC
GPE4	PWRSW
GPE5	LID#
GPE6	RF_OFF#
GPE7	S3AUXSW#
GPCF0	CS
GPCF1	WR
GPCF2	DA
GPCF3	LCM_BKL
GPCF4	TP_CLK
GPCF5	TP_DATA
GPCF6	E_MAIL#
GPCF7	WWW#
GPH0	+2.5VS_ON
GPH1	+2.5V_ON
GPH2	+1.8V_ON
GPH3	+1.8VS_ON
GPH4	+5V_ON
GPH5	+3VS_ON
GPH6	+1.2V_ON
GPH7	CORE_ON

IT80510E GPIO

GPI0	SCROLED#
GPI1	CAPLED#
GPI2	NUMLED#
GPI3	CHG_LED#
GPI4	NC
GPI5	SUS_LED#
GPI6	PWR_LED#
ADC0	BATT_IN
ADC1	ADAPTOR_I
ADC2	I_CPU
ADC3	V_CPU
ADC4	NC
ADC5	NC
ADC6	NC
ADC7	NC
ADC8	NC
ADC9	NC
DA0	BRIGHTADJ
DA1	CHG_I
DA2	FAN_CTRL0
DA3	NC

CPU

	CPU CORE(V)	ICC(mA)	W	TEMP(℃)
2.0G	1.525			
2.2G	1.525			
2.26G	1.525			
2.4G	1.525			
2.5G	1.525			
2.53G	1.525			
2.6G	1.525			
2.66G	1.525			
2.8G	1.525			
3.06G	1.525			

SIS760

VCC	ICC(mA)	W	TEMP(℃)
+3V	100.2	0.4575	70
+1.2V	88	0.1056	
+1.8V	2208.2	2.1261	
AGPVDD	401.7	0.5107	
+1.5V			

SIS963L

VCC	ICC(mA)	W	TEMP(℃)
+3V	96	0.315	70
+1.8V	487	0.876	
+1.8V_AUX	27	0.049	
+3V_AUX	275	0.909	
RTCVDD	0.003	0.00001	
VTT(+1.8V)	15	0.027	

IT8510E

VCC	ICC(mA)	W	TEMP(℃)
+3V	300	1	70

CLOCK GENERATOR

VCC	ICC(mA)	W	TEMP(℃)
+3V	180	0.594	70

DEVICE ID

DEVICE	IDSEL	REQ	GNT#	INT
1394	AD17	PREQ#2	PGNT#2	INT#D
MINI PCI	AD22	PREQ#1	PGNT#1	INT#B INT#D
PCMCIA	AD20	PREQ#0	PGNT#0	INT#B

RTL8201CL

VCC	ICC(mA)	W	TEMP(℃)
+3V	200	0.66	70

VT1612A

VCC	ICC(mA)	W	TEMP(℃)
+3V(DVDD)	71	0.234	70
+3V(AMPVDD)	36	0.118	

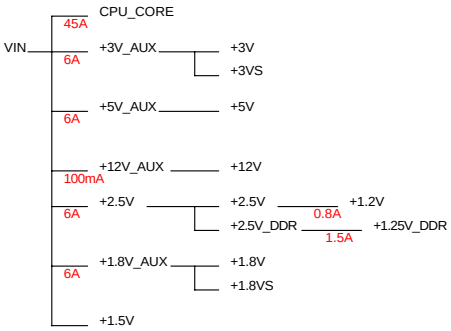
ADM1032

VCC	ICC	W	TEMP(℃)
+3V	170uA	0.56mW	150

OZ711MC1

VCC	ICC(mA)	W	TEMP(℃)
+3V	30	0.1	70

	S3	S5
+3VS +5VS +1.8VS +1.25_DDR +2.5V_DDR	ON	OFF
+3V +5V +2.5V +12V +1.8V +1.2V +1.5V	OFF	OFF
+3V_AUX +5V_AUX +12V_AUX +1.8V_AUX	ON	ON



UNIWILL COMPUTER CORP.

Title: GPIO DEFINITION & POWER CONSUMPTION

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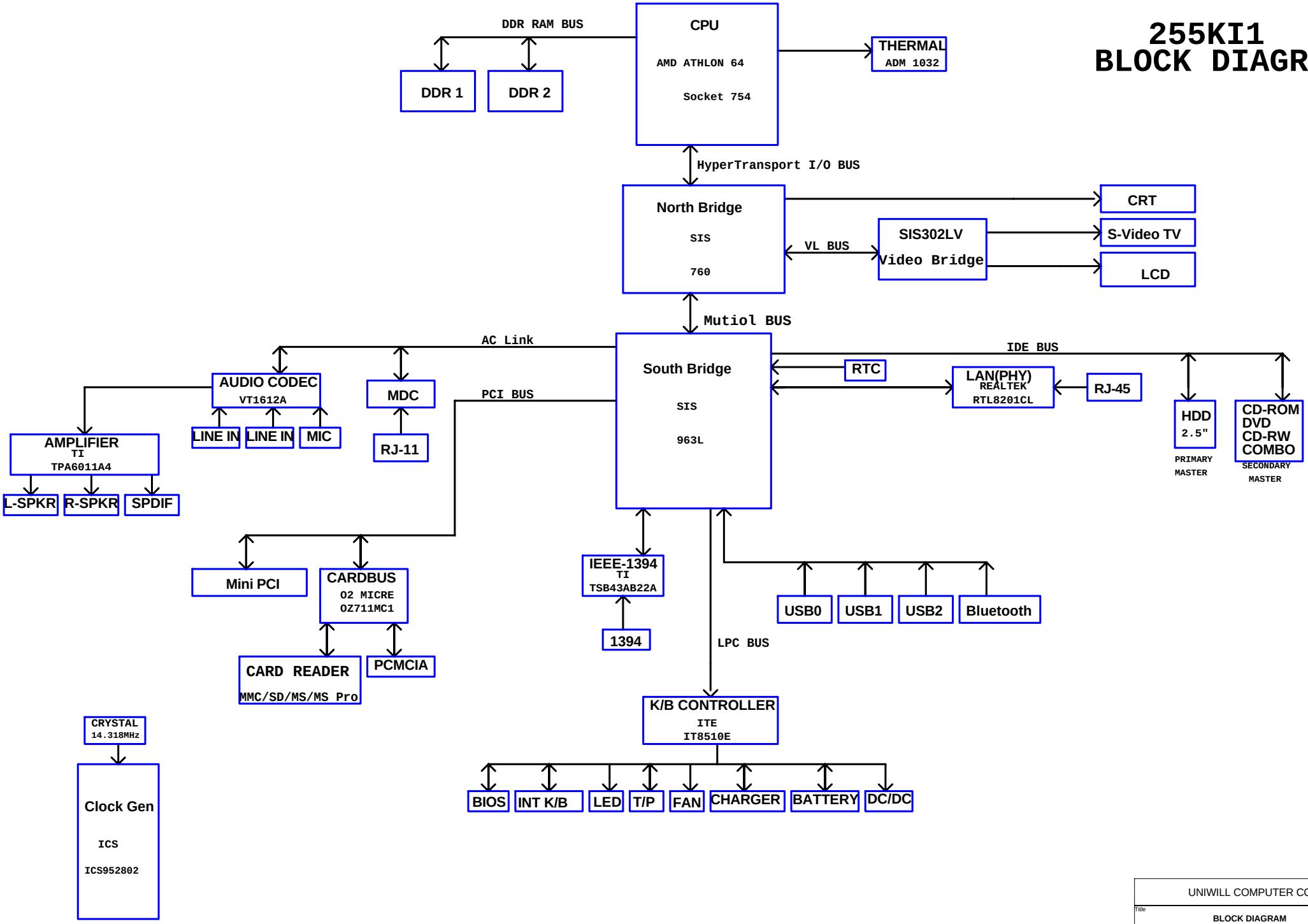
255KI1 BLOCK DIAGRAM



UNIWILL COMPUTER CORP.

Title	BLOCK DIAGRAM	
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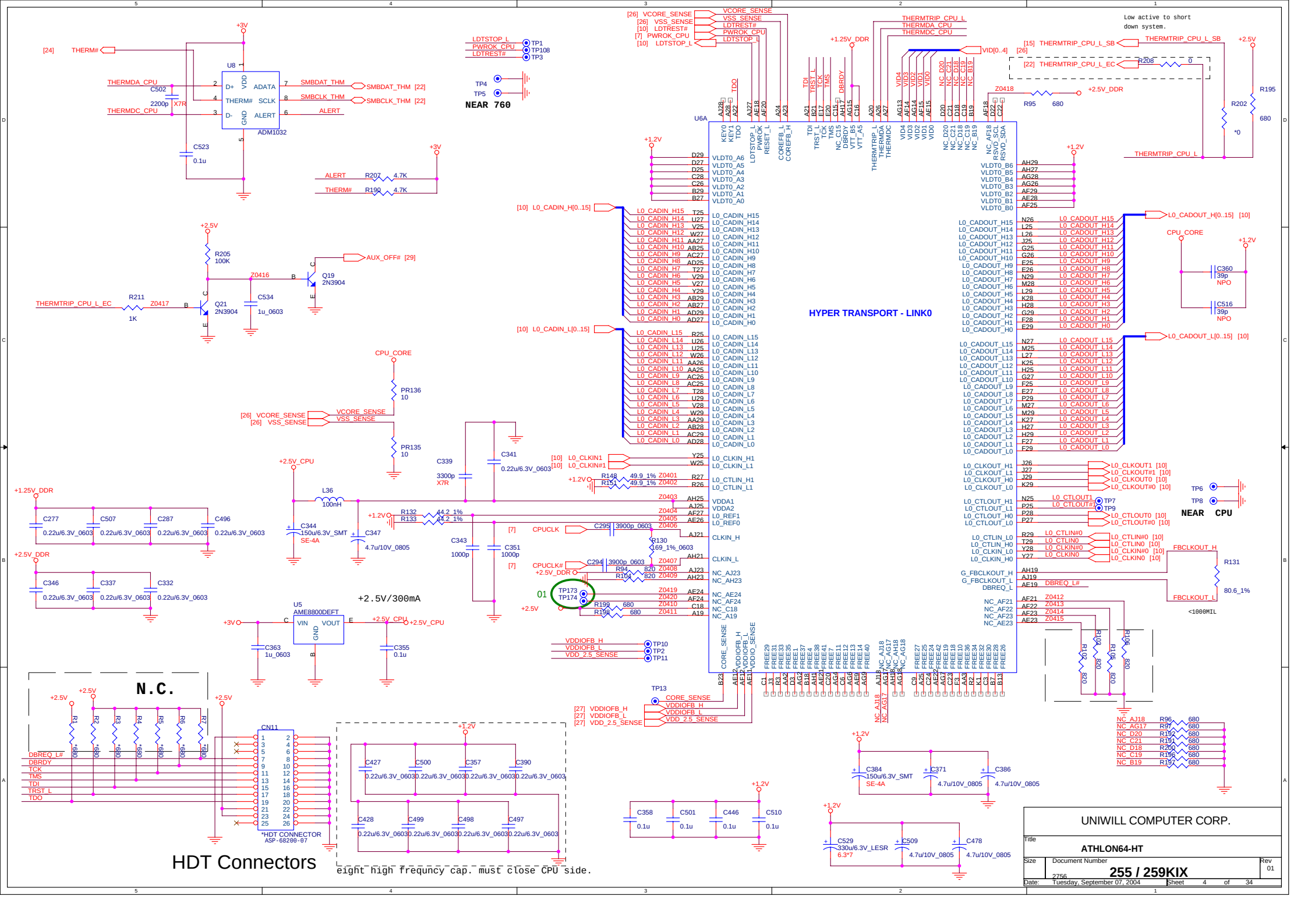
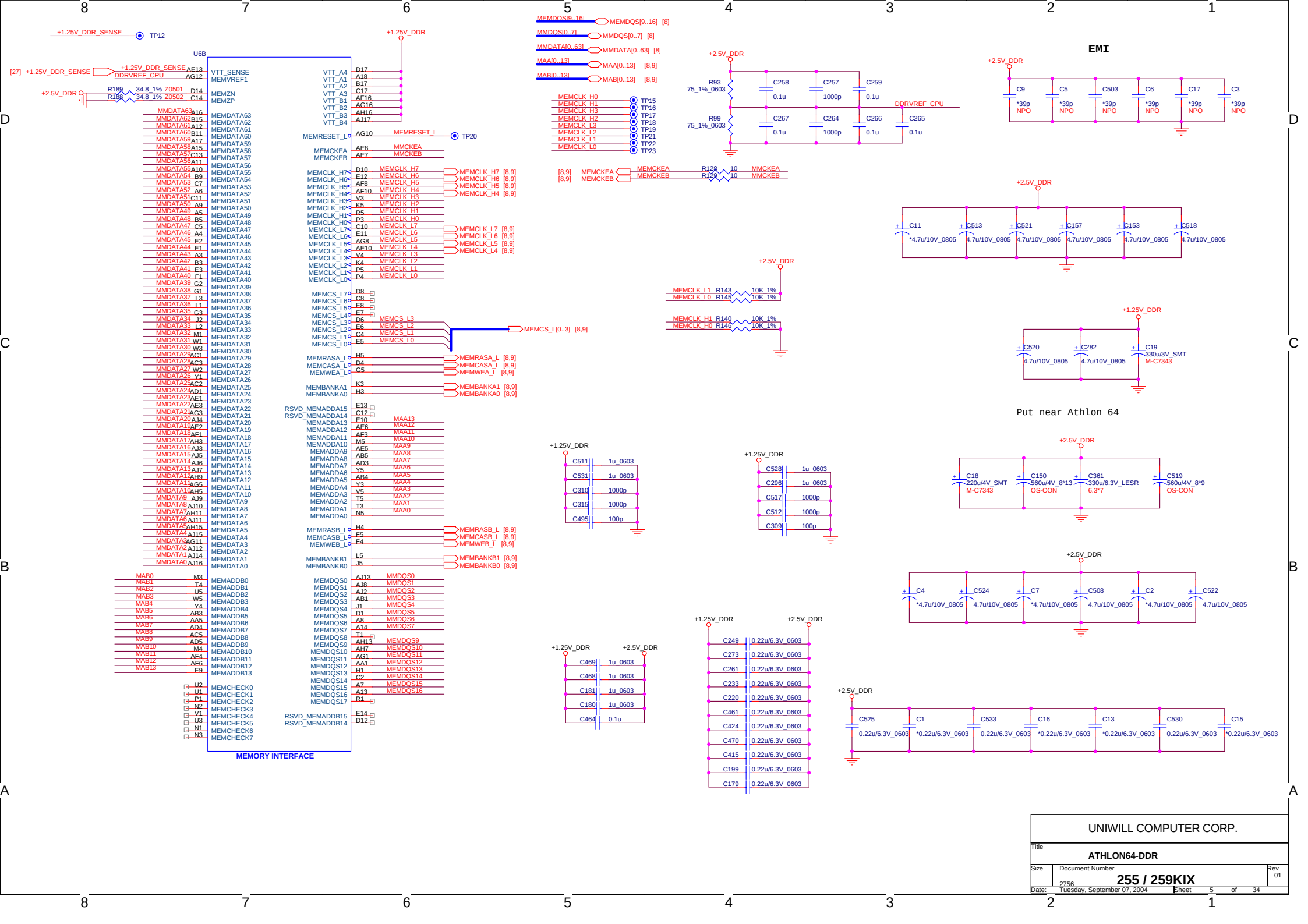

HYPER TRANSPORT - LINK0
N.C.
HDT Connectors
eight high frequncy cap. must close CPU side.
+2.5V/300mA
NEAR 760
NEAR CPU
Low active to short down system.
*HDT CONNECTOR ASP-68200-07
UNIWILL COMPUTER CORP.
ATHLON64-HT
255 / 259KIX
Tuesday, September 07, 2004


+1.25V_DDR_SENSE
TP12
U6B
VTT_SENSE
MEMVREF1
MEMZN
MEMZP
MEMORY INTERFACE
+1.25V_DDR
MEMRESET_L
TP20
MEMCKEA
MEMCKEB
MEMCS_L[0..3] [8,9]
MEMRASA_L
MEMCASA_L
MEMWEA_L
MEMBANKA1
MEMBANKA0
MEMRASB_L
MEMCASB_L
MEMWEB_L
MEMBANKB1
MEMBANKB0
MEMDQS[9..16] [8]
MMDQS[0..7] [8]
MMDATA[0..63] [8]
MAA[0..13] [8,9]
MAB[0..13] [8,9]
MEMCLK_H0
MEMCLK_H1
MEMCLK_H3
MEMCLK_H2
MEMCLK_L3
MEMCLK_L2
MEMCLK_L1
MEMCLK_L0
TP15
TP16
TP17
TP18
TP19
TP21
TP22
TP23
DDRVREF_CPU
R93 75_1%_0603
R99 75_1%_0603
C258 0.1u
C257 1000p
C259 0.1u
C267 0.1u
C264 1000p
C266 0.1u
C265 0.1u
R189 34.8_1% Z0501
R190 34.8_1% Z0502
R128 10 MMCKEA
R129 10 MMCKEB
R143 10K_1%
R145 10K_1%
R140 10K_1%
R146 10K_1%
EMI
C9 *39p NPO
C5 *39p NPO
C503 *39p NPO
C6 *39p NPO
C17 *39p NPO
C3 *39p NPO
C11 *4.7u/10V_0805
C513 4.7u/10V_0805
C521 4.7u/10V_0805
C157 4.7u/10V_0805
C153 4.7u/10V_0805
C518 4.7u/10V_0805
C520 4.7u/10V_0805
C282 4.7u/10V_0805
C19 330u/3V_SMT M-C7343
Put near Athlon 64
C511 1u_0603
C531 1u_0603
C310 1000p
C315 1000p
C495 100p
C528 1u_0603
C296 1u_0603
C517 1000p
C512 1000p
C309 100p
C18 220u/4V_SMT M-C7343
C150 560u/4V_8*13 OS-CON
C361 330u/6.3V_LESR 6.3*7
C519 560u/4V_8*9 OS-CON
C4 *4.7u/10V_0805
C524 4.7u/10V_0805
C7 *4.7u/10V_0805
C508 4.7u/10V_0805
C2 *4.7u/10V_0805
C522 4.7u/10V_0805
C469 1u_0603
C468 1u_0603
C181 1u_0603
C180 1u_0603
C464 0.1u
C249 0.22u/6.3V_0603
C273 0.22u/6.3V_0603
C261 0.22u/6.3V_0603
C233 0.22u/6.3V_0603
C220 0.22u/6.3V_0603
C461 0.22u/6.3V_0603
C424 0.22u/6.3V_0603
C470 0.22u/6.3V_0603
C415 0.22u/6.3V_0603
C199 0.22u/6.3V_0603
C179 0.22u/6.3V_0603
C525 0.22u/6.3V_0603
C1 *0.22u/6.3V_0603
C533 0.22u/6.3V_0603
C16 *0.22u/6.3V_0603
C13 *0.22u/6.3V_0603
C530 0.22u/6.3V_0603
C15 *0.22u/6.3V_0603
UNIWILL COMPUTER CORP.
Title
ATHLON64-DDR
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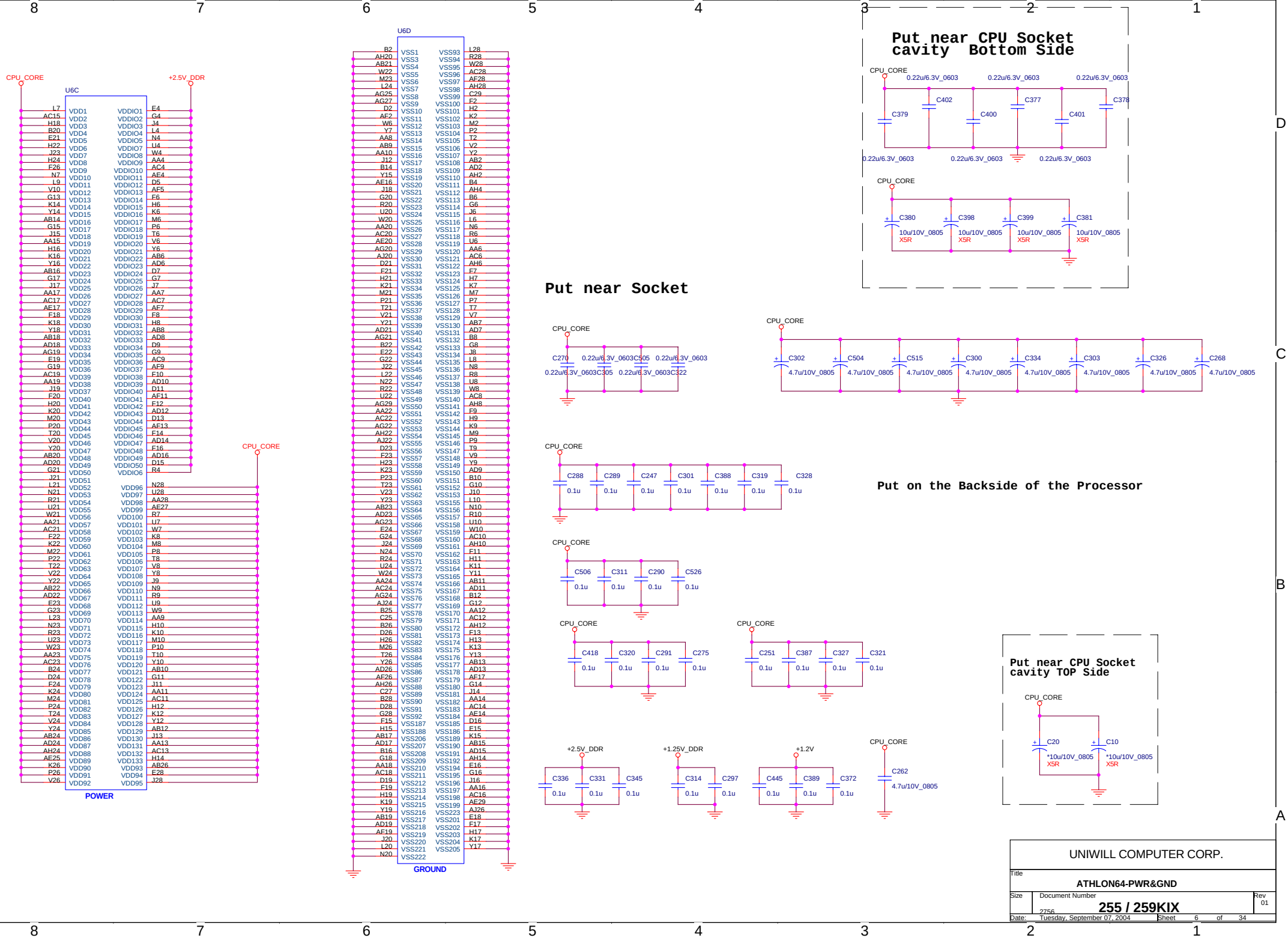

UNIWILL COMPUTER CORP.

Title: ATHLON64-PWR&GND

Size | Document Number: 255 / 259KIX (2256) | Rev: 01

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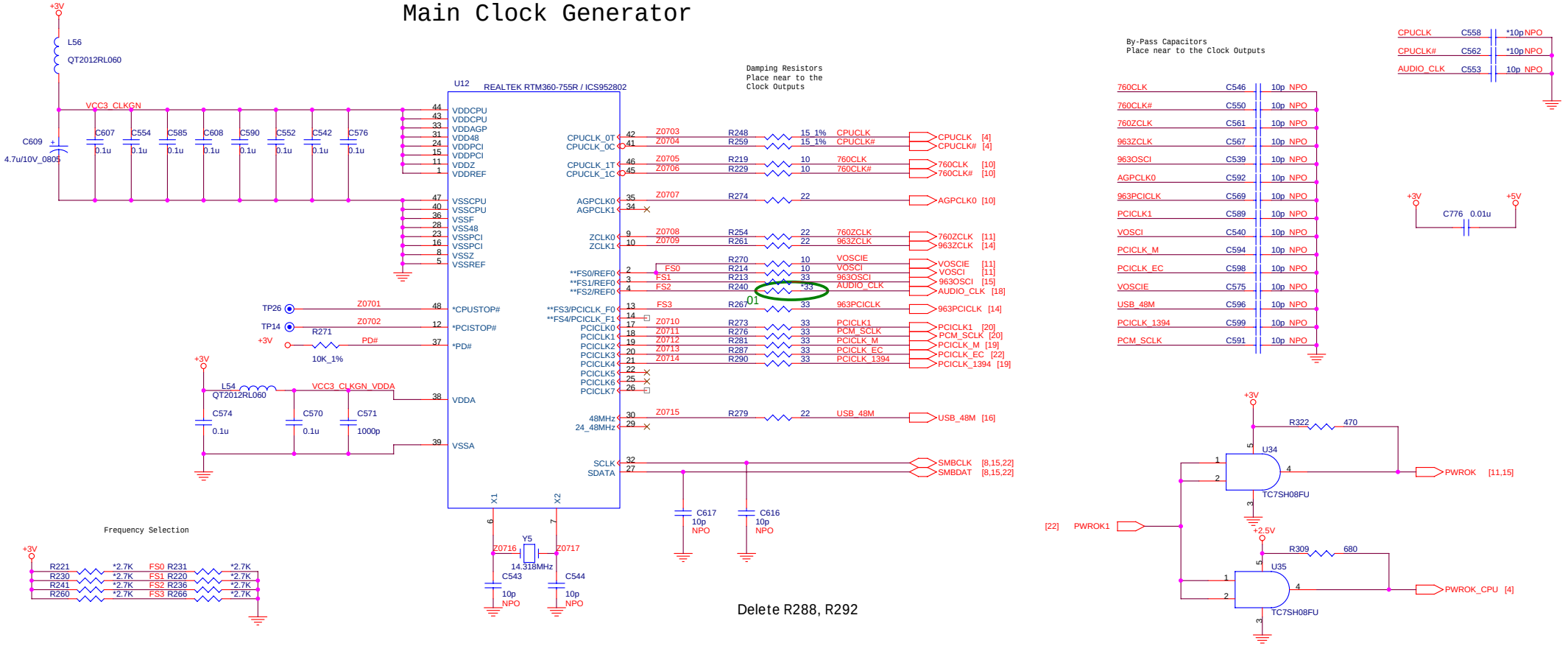
Main Clock Generator



Delete R288, R292

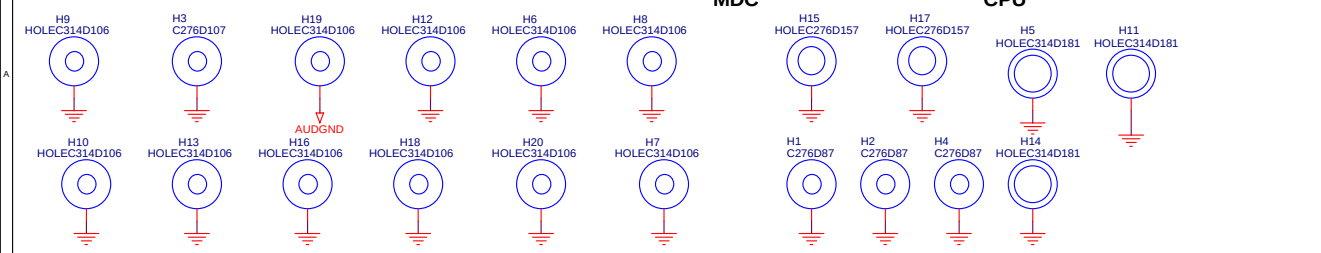
CLK Table for SiS755/760 (For ICS-952802)

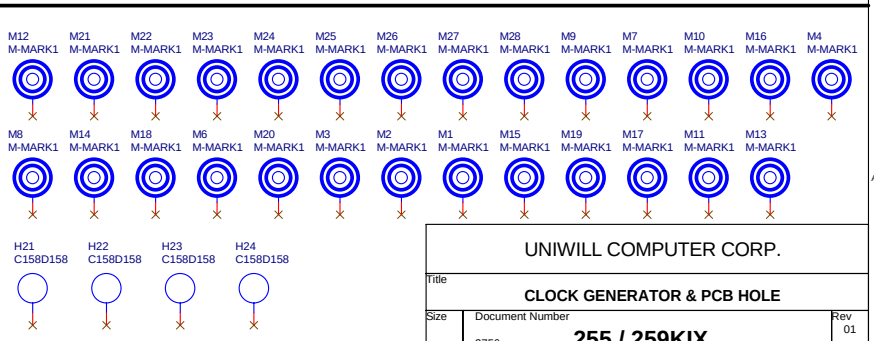
ICS 952802 Pin2 (*FS0) is internal pull up

SiS 755/760 CLOCK									SiS 755/760 CLOCK								
(FS4)	(FS3)	(FS2)	(FS1)	(FS0)	CPU (MHz)	ZCLK (MHz)	AGPCLK (MHz)	PCI (MHz)	(FS4)	(FS3)	(FS2)	(FS1)	(FS0)	CPU (MHz)	ZCLK (MHz)	AGPCLK (MHz)	PCI (MHz)
0	0	0	0	0	160.00	106.66	53.33	26.66	1	0	0	0	0	206.00	137.33	68.67	34.33
0	0	0	0	1	200	133.33	66.67	33.33	1	0	0	0	1	210.00	140.00	70.00	35.00
0	0	0	1	0	200	133.33	66.67	33.33	1	0	0	1	0	202.00	134.66	67.33	33.66
0	0	0	1	1	200	160.00	66.67	33.33	1	0	0	1	1	202.00	161.60	67.33	33.66
0	0	1	0	0	186.66	106.67	53.33	26.66	1	0	1	0	0	240.33	137.33	68.67	34.33
0	0	1	0	1	233.33	133.33	66.67	33.33	1	0	1	0	1	245.00	140.00	70.00	35.00
0	0	1	1	0	233.33	133.33	66.67	33.33	1	0	1	1	0	235.66	134.67	67.33	33.66
0	0	1	1	1	233.33	155.55	66.67	33.33	1	0	1	1	1	235.66	157.11	67.33	33.66
0	1	0	0	0	213.34	106.66	53.33	26.66	1	1	0	0	0	106.66	106.66	53.33	26.66
0	1	0	0	1	266.67	133.33	66.67	33.33	1	1	0	0	1	133.33	133.33	66.67	33.33
0	1	0	1	0	266.67	133.33	66.67	33.33	1	1	0	1	0	133.33	133.33	66.67	33.33
0	1	0	1	1	266.67	160.00	66.67	33.33	1	1	0	1	1	133.33	177.77	66.67	33.33
0	1	1	0	0	133.34	106.66	53.33	26.66	1	1	1	0	0	171.67	137.33	68.67	34.33
0	1	1	0	1	166.67	133.33	66.67	33.33	1	1	1	0	1	175.00	140.00	70.00	35.00
0	1	1	1	0	166.67	133.33	66.67	33.33	1	1	1	1	0	168.34	134.66	67.33	33.66
0	1	1	1	1	166.67	166.66	66.67	33.33	1	1	1	1	1	168.34	168.33	67.33	33.66

* internal pull up
* * internal pull down

Delete R336, C630, R302, Q31, R307, Q30, R322, C622, R309, Q29, C615.





UNIWILL COMPUTER CORP.

Title: **CLOCK GENERATOR & PCB HOLE**

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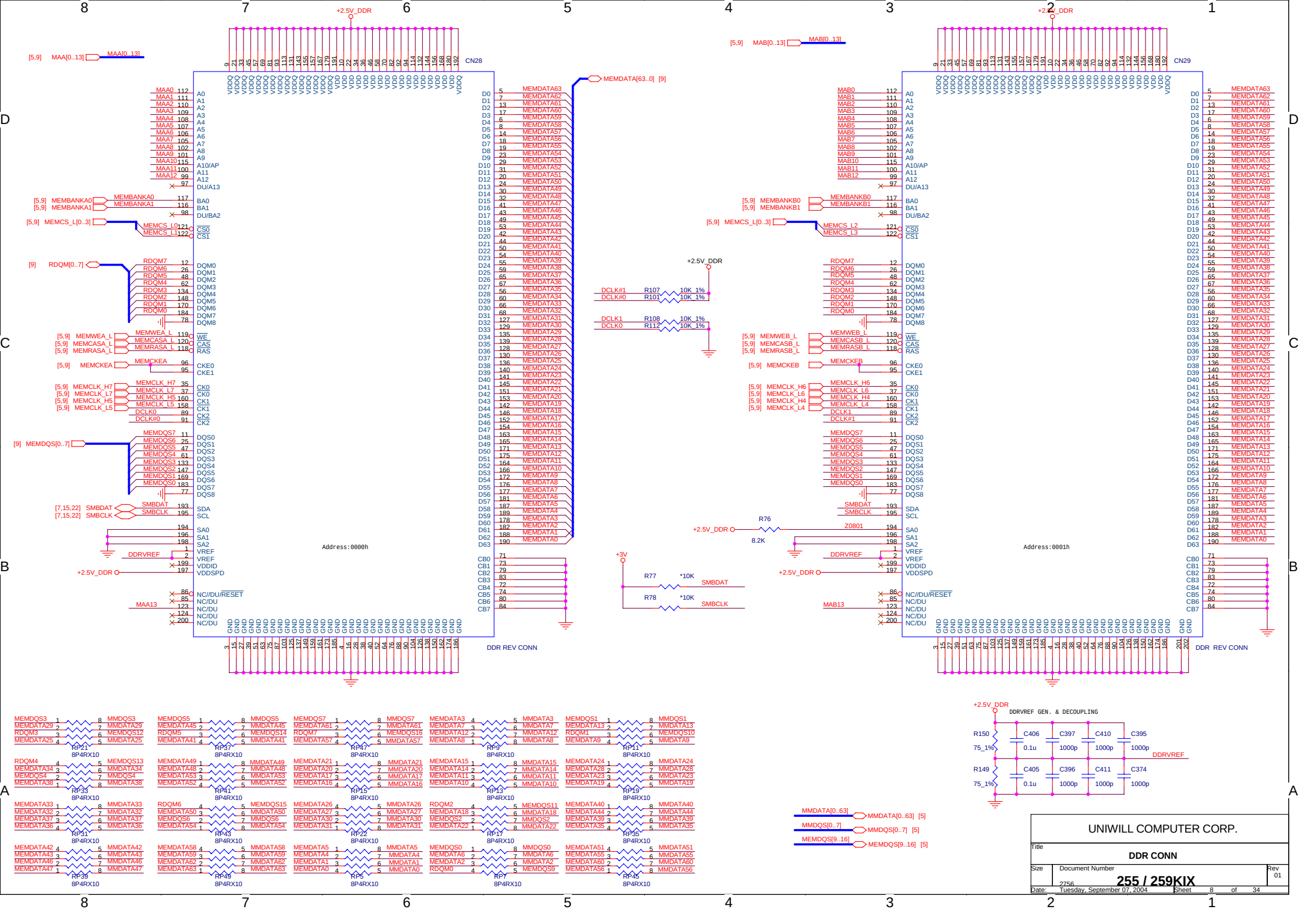
CN28
CN29
Address:0000h
Address:0001h
DDR REV CONN
+2.5V_DDR
MEMDATA[63..0] [9]
MAA[0..13]
MAB[0..13]
MEMBANKA0
MEMBANKA1
MEMBANKB0
MEMBANKB1
MEMCS_L[0..3]
RDQM[0..7]
MEMWEA_L
MEMCASA_L
MEMRASA_L
MEMWEB_L
MEMCASB_L
MEMRASB_L
MEMCKEA
MEMCKEB
MEMCLK_H7
MEMCLK_L7
MEMCLK_H5
MEMCLK_L5
MEMCLK_H6
MEMCLK_L6
MEMCLK_H4
MEMCLK_L4
DCLK#0
DCLK#1
DCLK0
DCLK1
MEMDQS[0..7]
SMBDAT
SMBCLK
DDRVREF
R107 10K_1%
R101 10K_1%
R108 10K_1%
R112 10K_1%
R76 8.2K
R77 *10K
R78 *10K
Z0801
MAA13
MAB13
RP21 8P4RX10
RP37 8P4RX10
RP47 8P4RX10
RP9 8P4RX10
RP11 8P4RX10
RP33 8P4RX10
RP41 8P4RX10
RP15 8P4RX10
RP13 8P4RX10
RP19 8P4RX10
RP31 8P4RX10
RP43 8P4RX10
RP22 8P4RX10
RP17 8P4RX10
RP35 8P4RX10
RP39 8P4RX10
RP49 8P4RX10
RP5 8P4RX10
RP7 8P4RX10
RP45 8P4RX10
DDRVREF GEN. & DECOUPLING
R150 75_1%
R149 75_1%
C406 0.1u
C397 1000p
C410 1000p
C395 1000p
C405 0.1u
C396 1000p
C411 1000p
C374 1000p
MMDATA[0..63]
MMDQS[0..7]
MMDQS[9..16]
UNIWILL COMPUTER CORP.
DDR CONN
Size
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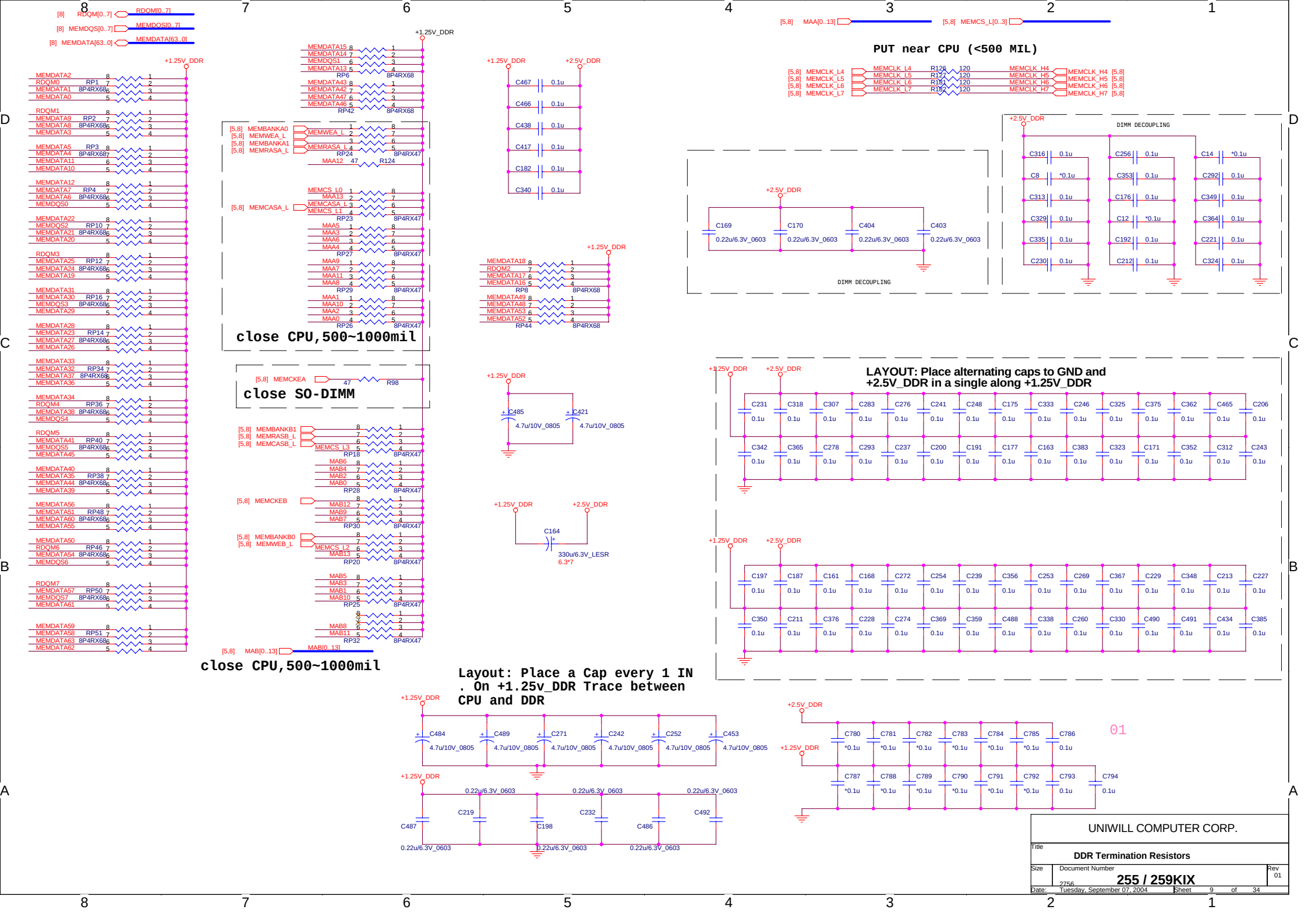
[8] RDQM[0..7]
RDQM[0..7]
[8] MEMDQS[0..7]
MEMDQS[0..7]
[8] MEMDATA[63..0]
MEMDATA[63..0]
+1.25V_DDR
MEMDATA2 RDQM0 MEMDATA1 MEMDATA0 RP1 8P4RX68
RDQM1 MEMDATA9 MEMDATA8 MEMDATA3 RP2 8P4RX68
MEMDATA5 MEMDATA4 MEMDATA11 MEMDATA10 RP3 8P4RX68
MEMDATA12 MEMDATA7 MEMDATA6 MEMDQS0 RP4 8P4RX68
MEMDATA22 MEMDQS2 MEMDATA21 MEMDATA20 RP10 8P4RX68
RDQM3 MEMDATA25 MEMDATA24 MEMDATA19 RP12 8P4RX68
MEMDATA31 MEMDATA30 MEMDQS3 MEMDATA29 RP16 8P4RX68
MEMDATA28 MEMDATA23 MEMDATA27 MEMDATA26 RP14 8P4RX68
MEMDATA33 MEMDATA32 MEMDATA37 MEMDATA36 RP34 8P4RX68
MEMDATA34 RDQM4 MEMDATA38 MEMDQS4 RP36 8P4RX68
RDQM5 MEMDATA41 MEMDQS5 MEMDATA45 RP40 8P4RX68
MEMDATA40 MEMDATA35 MEMDATA44 MEMDATA39 RP38 8P4RX68
MEMDATA56 MEMDATA51 MEMDATA60 MEMDATA55 RP48 8P4RX68
MEMDATA50 RDQM6 MEMDATA54 MEMDQS6 RP46 8P4RX68
RDQM7 MEMDATA57 MEMDQS7 MEMDATA61 RP50 8P4RX68
MEMDATA59 MEMDATA58 MEMDATA63 MEMDATA62 RP51 8P4RX68
+1.25V_DDR
MEMDATA15 MEMDATA14 MEMDQS1 MEMDATA13 RP6 8P4RX68
MEMDATA43 MEMDATA42 MEMDATA47 MEMDATA46 RP42 8P4RX68
[5,8] MEMBANKA0
[5,8] MEMWEA_L
[5,8] MEMBANKA1
[5,8] MEMRASA_L
RP24 8P4RX47
MAA12 47 R124
MEMCS_L0 MAA13 MEMCASA_L MEMCS_L1 RP23 8P4RX47
[5,8] MEMCASA_L
MAA5 MAA3 MAA6 MAA4 RP27 8P4RX47
MAA9 MAA7 MAA11 MAA8 RP29 8P4RX47
MAA1 MAA10 MAA2 MAA0 RP26 8P4RX47
close CPU,500~1000mil
[5,8] MEMCKEA
47 R98
close SO-DIMM
[5,8] MEMBANKB1
[5,8] MEMRASB_L
[5,8] MEMCASB_L
MEMCS_L3 RP18 8P4RX47
MAB6 MAB4 MAB2 MAB0 RP28 8P4RX47
[5,8] MEMCKEB
MAB12 MAB9 MAB7 RP30 8P4RX47
[5,8] MEMBANKB0
[5,8] MEMWEB_L
MEMCS_L2 MAB13 RP20 8P4RX47
MAB5 MAB3 MAB1 MAB10 RP25 8P4RX47
MAB8 MAB11 RP32 8P4RX47
[5,8] MAB[0..13]
MAB[0..13]
close CPU,500~1000mil
+1.25V_DDR
+2.5V_DDR
C467 C466 C438 C417 C182 C340 0.1u
+1.25V_DDR
MEMDATA18 RDQM2 MEMDATA17 MEMDATA16 RP8 8P4RX68
MEMDATA49 MEMDATA48 MEMDATA53 MEMDATA52 RP44 8P4RX68
+1.25V_DDR
C485 4.7u/10V_0805
C421 4.7u/10V_0805
+1.25V_DDR
+2.5V_DDR
C164
330u/6.3V_LESR 6.3*7
[5,8] MAA[0..13]
[5,8] MEMCS_L[0..3]
PUT near CPU (<500 MIL)
[5,8] MEMCLK_L4
[5,8] MEMCLK_L5
[5,8] MEMCLK_L6
[5,8] MEMCLK_L7
MEMCLK_L4 MEMCLK_L5 MEMCLK_L6 MEMCLK_L7
R120 R122 R161 R162 120
MEMCLK_H4 MEMCLK_H5 MEMCLK_H6 MEMCLK_H7
MEMCLK_H4 [5,8]
MEMCLK_H5 [5,8]
MEMCLK_H6 [5,8]
MEMCLK_H7 [5,8]
+2.5V_DDR
C169 C170 C404 C403 0.22u/6.3V_0603
DIMM DECOUPLING
+2.5V_DDR
DIMM DECOUPLING
C316 C8 C313 C329 C335 C230 0.1u
C256 C353 C176 C12 C192 C212 0.1u
C14 C292 C349 C364 C221 C324 0.1u
*0.1u
LAYOUT: Place alternating caps to GND and +2.5V_DDR in a single along +1.25V_DDR
+1.25V_DDR
+2.5V_DDR
C231 C318 C307 C283 C276 C241 C248 C175 C333 C246 C325 C375 C362 C465 C206
C342 C365 C278 C293 C237 C200 C191 C177 C163 C383 C323 C171 C352 C312 C243
C197 C187 C161 C168 C272 C254 C239 C356 C253 C269 C367 C229 C348 C213 C227
C350 C211 C376 C228 C274 C369 C359 C488 C338 C260 C330 C490 C491 C434 C385
0.1u
Layout: Place a Cap every 1 IN . On +1.25v_DDR Trace between CPU and DDR
+1.25V_DDR
C484 C489 C271 C242 C252 C453 4.7u/10V_0805
+1.25V_DDR
0.22u/6.3V_0603
C487 C219 C198 C232 C486 C492
+2.5V_DDR
+1.25V_DDR
C780 C781 C782 C783 C784 C785 C786
C787 C788 C789 C790 C791 C792 C793 C794
*0.1u
0.1u
01
UNIWILL COMPUTER CORP.
Title
DDR Termination Resistors
Size
Document Number
255 / 259KIX
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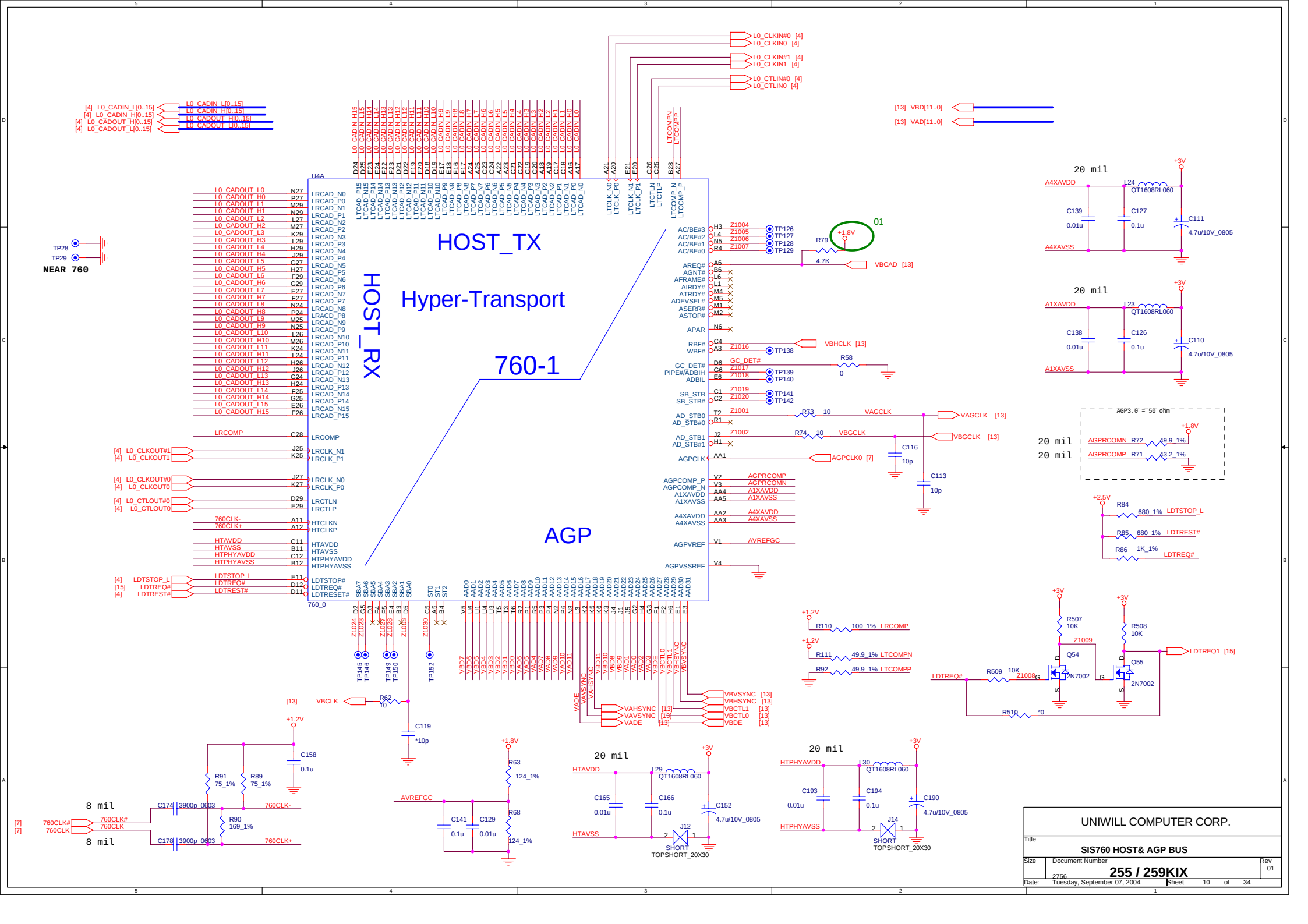
Rev
01
Date: Tuesday, September 07, 2004
Sheet 9 of 34


HOST_TX
Hyper-Transport
760-1
HOST_RX
AGP
U4A
760_0
L0_CADIN_L[0..15]
L0_CADIN_H[0..15]
L0_CADOUT_H[0..15]
L0_CADOUT_L[0..15]
L0_CLKIN#0 [4]
L0_CLKIN0 [4]
L0_CLKIN#1 [4]
L0_CLKIN1 [4]
L0_CTLIN#0 [4]
L0_CTLIN0 [4]
[13] VBD[11..0]
[13] VAD[11..0]
LTCOMPN
LTCOMPP
TP28
TP29
NEAR 760
LRCOMP
L0_CLKOUT#1
L0_CLKOUT1
L0_CLKOUT#0
L0_CLKOUT0
L0_CTLOUT#0
L0_CTLOUT0
760CLK-
760CLK+
HTAVDD
HTAVSS
HTPHYAVDD
HTPHYAVSS
LDTSTOP_L
LDTREQ#
LDTREST#
VBCLK [13]
R62 10
C119 *10p
+1.2V
+1.8V
+3V
+2.5V
R91 75_1%
R89 75_1%
C158 0.1u
8 mil
C174 3900p_0603
C178 3900p_0603
R90 169_1%
760CLK#
760CLK
[7]
AVREFGC
R63 124_1%
R68 124_1%
C141 0.1u
C129 0.01u
AC/BE#3
AC/BE#2
AC/BE#1
AC/BE#0
AREQ#
AGNT#
AFRAME#
AIRDY#
ATRDY#
ADEVSEL#
ASERR#
ASTOP#
APAR
RBF#
WBF#
GC_DET#
PIPE#/ADBIH
ADBIL
SB_STB
SB_STB#
AD_STB0
AD_STB0#
AD_STB1
AD_STB1#
AGPCLK
AGPCOMP_P
AGPCOMP_N
A1XAVDD
A1XAVSS
A4XAVDD
A4XAVSS
AGPVREF
AGPVSSREF
R79 4.7K
VBCAD [13]
VBHCLK [13]
R58 0
R73 10
R74 10
VAGCLK
VBGCLK
VAGCLK [13]
VBGCLK [13]
C116 10p
C113 10p
AGPCLK0 [7]
AGPRCOMP
AGPRCOMN
R110 100_1% LRCOMP
R111 49.9_1% LTCOMPN
R92 49.9_1% LTCOMPP
VBVSYNC [13]
VBHSYNC [13]
VBCTL1 [13]
VBCTL0 [13]
VBDE [13]
VAHSYNC [13]
VAVSYNC [13]
VADE [13]
20 mil
A4XAVDD
A4XAVSS
A1XAVDD
A1XAVSS
L24 QT1608RL060
L23 QT1608RL060
C139 0.01u
C127 0.1u
C111 4.7u/10V_0805
C138 0.01u
C126 0.1u
C110 4.7u/10V_0805
AGP3.0 = 50 ohm
AGPRCOMN R72 49.9_1%
AGPRCOMP R71 43.2_1%
R84 680_1% LDTSTOP_L
R85 680_1% LDTREST#
R86 1K_1% LDTREQ#
R507 10K
R508 10K
Q54 2N7002
Q55 2N7002
Z1009
Z1008
R509 10K
R510 *0
LDTREQ1 [15]
HTAVDD
HTAVSS
L29 QT1608RL060
C165 0.01u
C166 0.1u
C152 4.7u/10V_0805
J12 SHORT TOPSHORT_20X30
HTPHYAVDD
HTPHYAVSS
L30 QT1608RL060
C193 0.01u
C194 0.1u
C190 4.7u/10V_0805
J14 SHORT TOPSHORT_20X30
UNIWILL COMPUTER CORP.
SIS760 HOST& AGP BUS
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The differences between the traces of MuTIOL Strobes and Data should be smaller than 0.05"

760-3

MuTIOL

VGA

Control & Hardware Trap

760_0

760-2

760_0

The differences between the traces of MuTIOL Strobes and Data should be smaller than 0.05"

Place near 760 chip.

Mutiol 1.0 (Mutiol 533M) Verf=0.5*VCC1.8

Mutiol 2.0 (Mutiol 1G) Vref=0.25*VCC1.8

They need connected for SIS760 with or without local frame buffer.

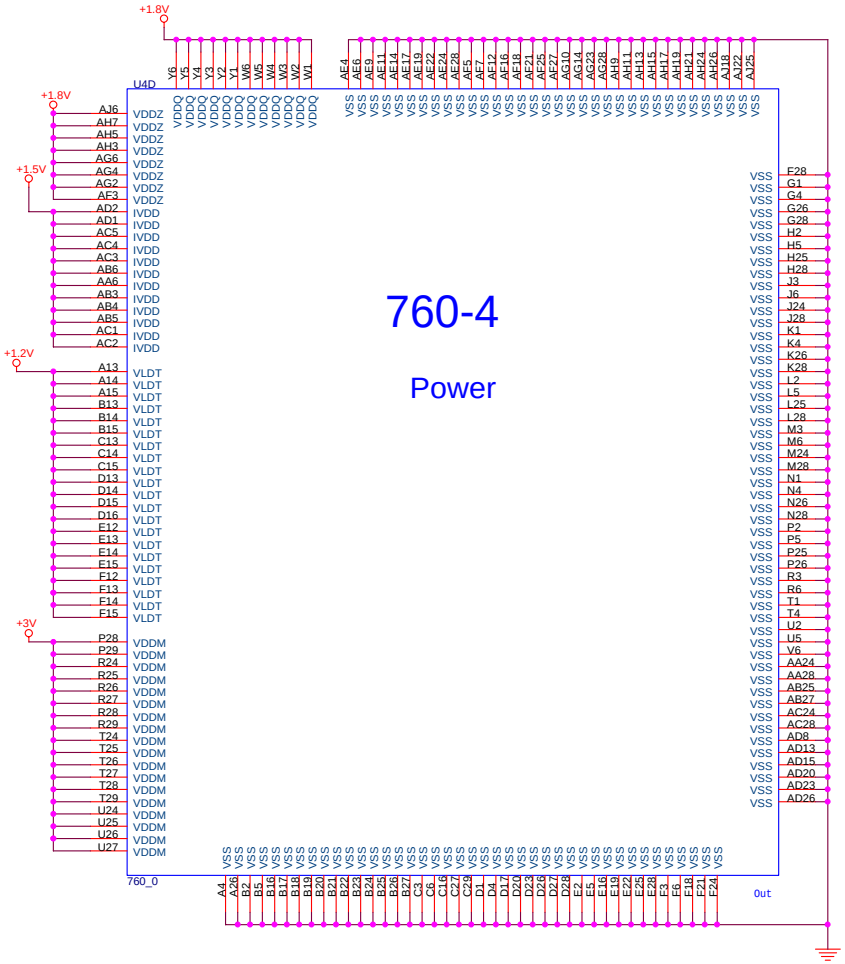
UNIWILL COMPUTER CORP.

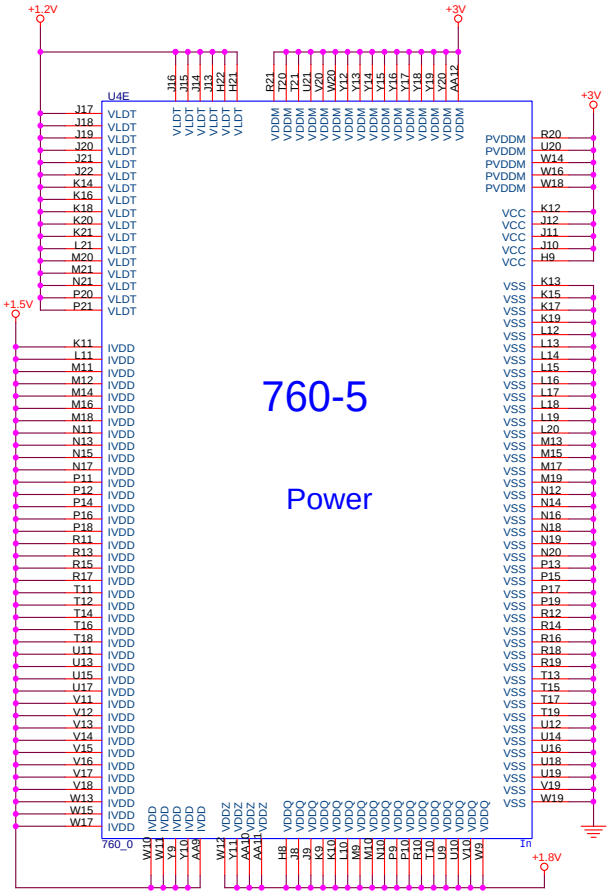
Title: SIS760 MUTIOL&HW TRAP

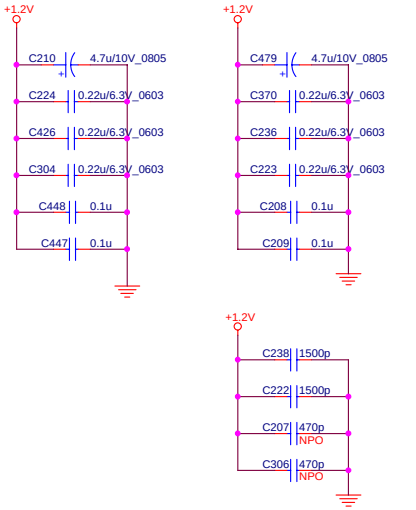
Size: | Document Number: 2756 255 / 259KIX | Rev: 01

Date: Tuesday, September 07, 2004 | Sheet 11 of 34

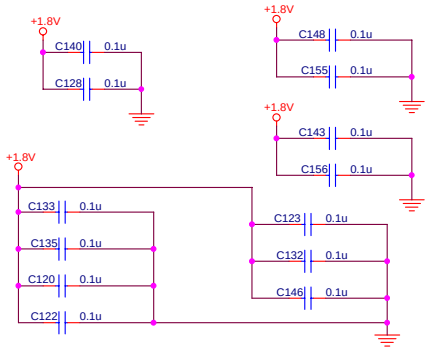
LAYOUT: Place HT bypass caps on topside near connected Lokar HT link.

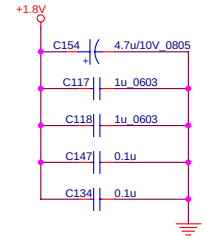


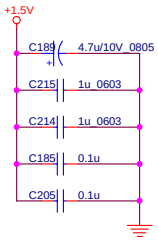


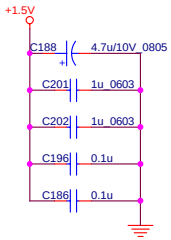


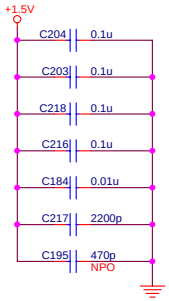
Place these capacitors under 760 solder side.

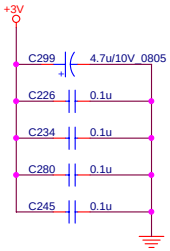


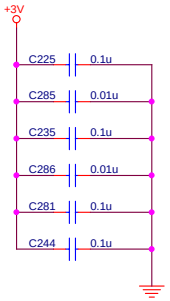












UNIWILL COMPUTER CORP.

Title: SIS760 PWR&GROUND

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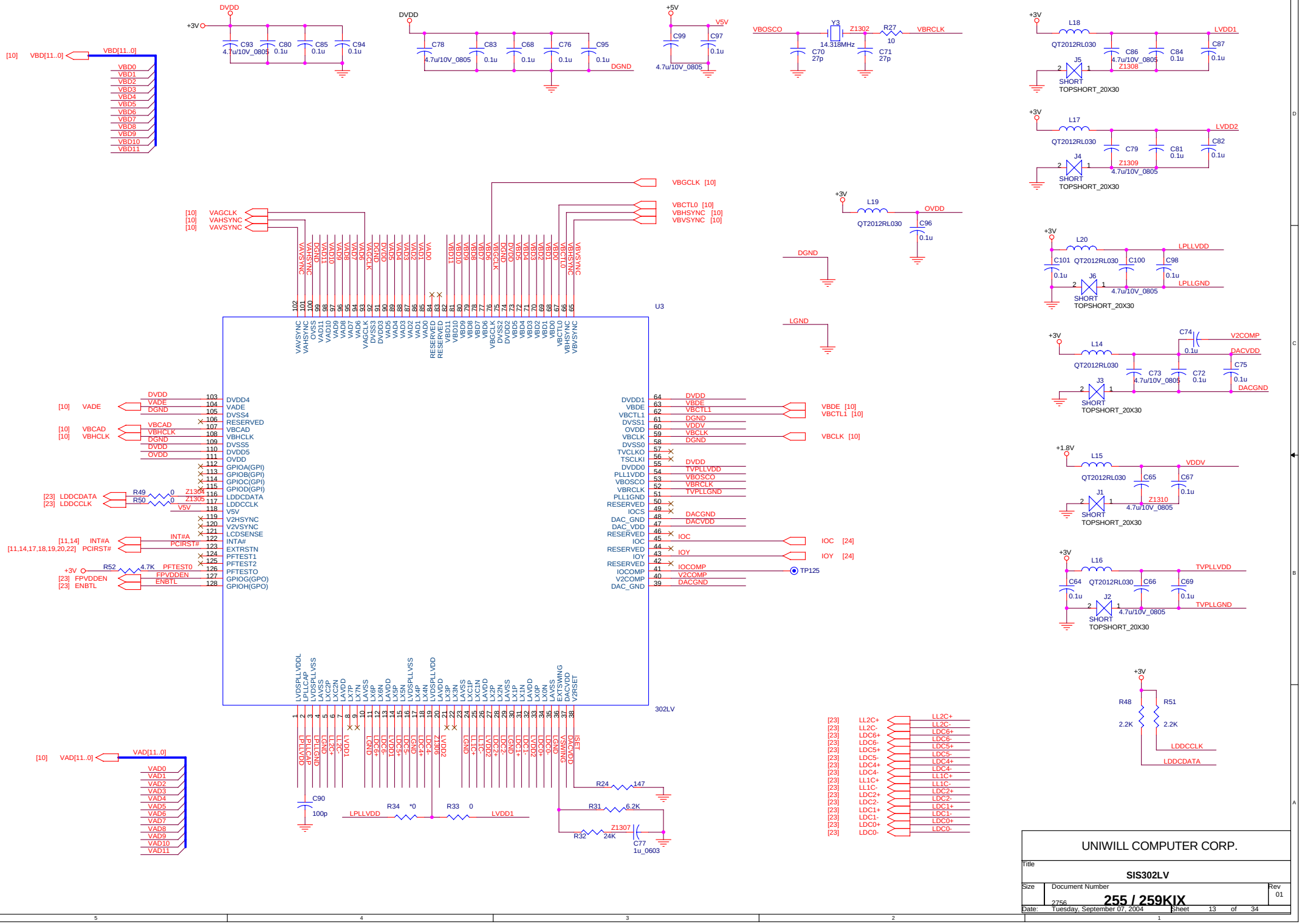

UNIWILL COMPUTER CORP.

Title: SIS302LV

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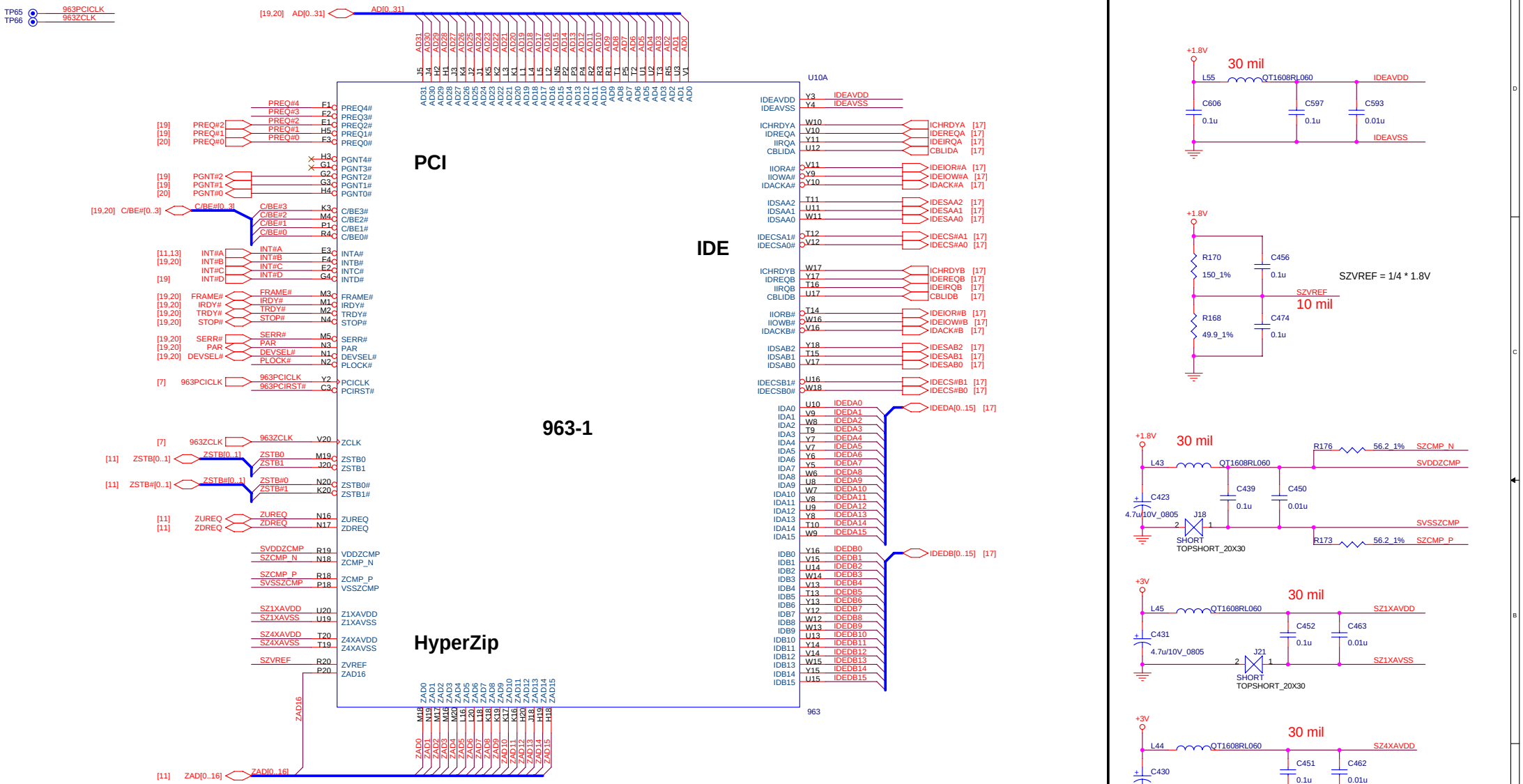
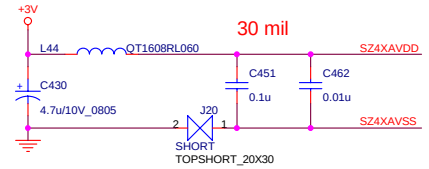
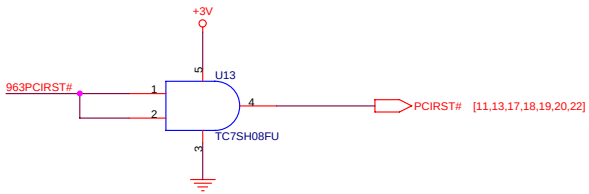
SOUTH BRIDGE -1

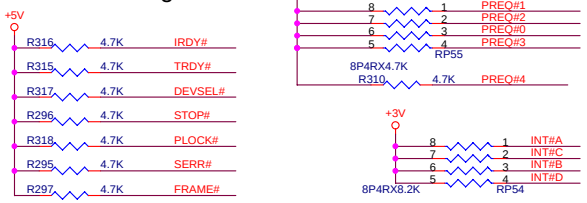


SZVREF = 1/4 * 1.8V





PCI Pull High



UNIWILL COMPUTER CORP.	
Title	SIS963L(HYPERZIP & PCI & IDE)
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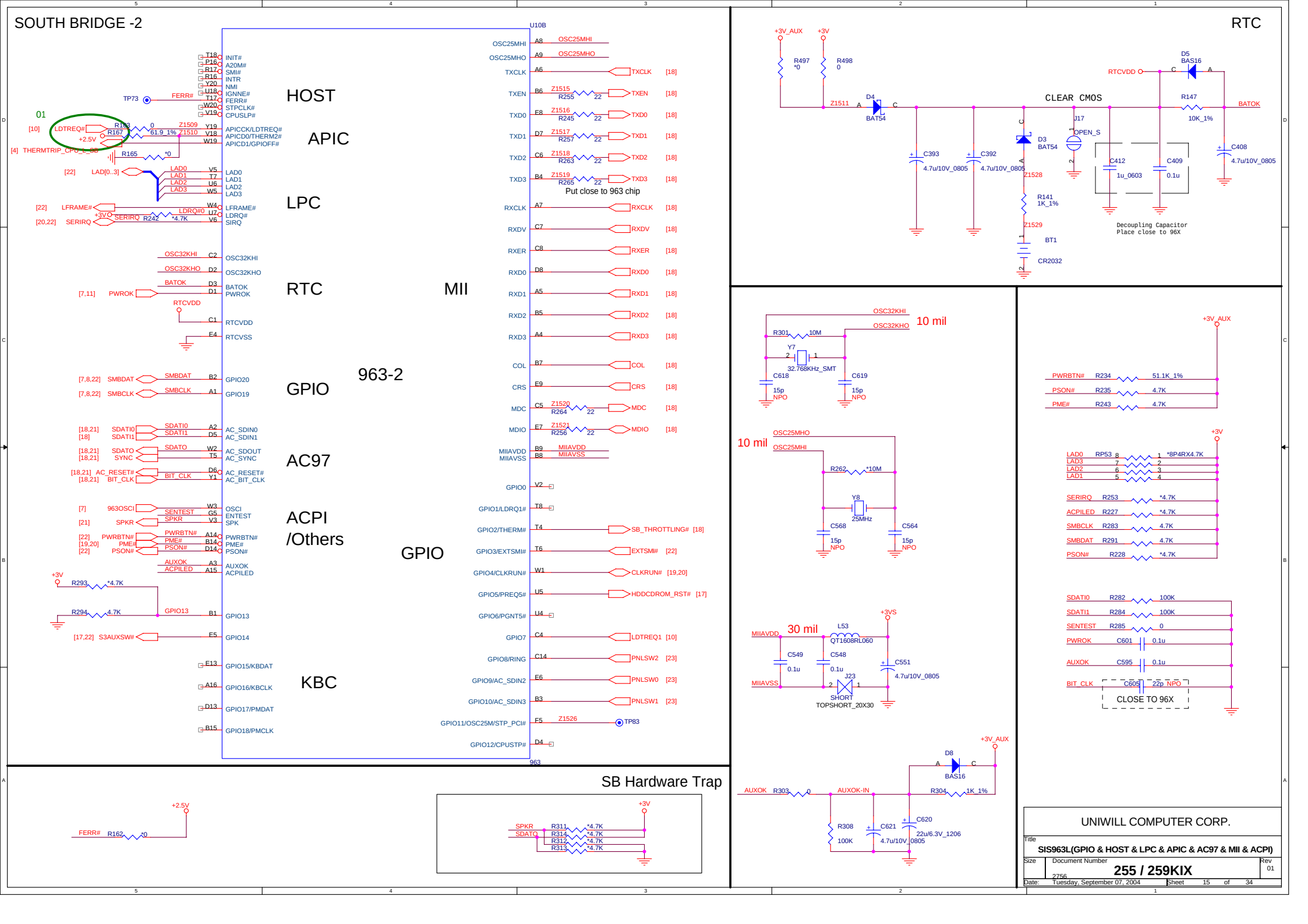
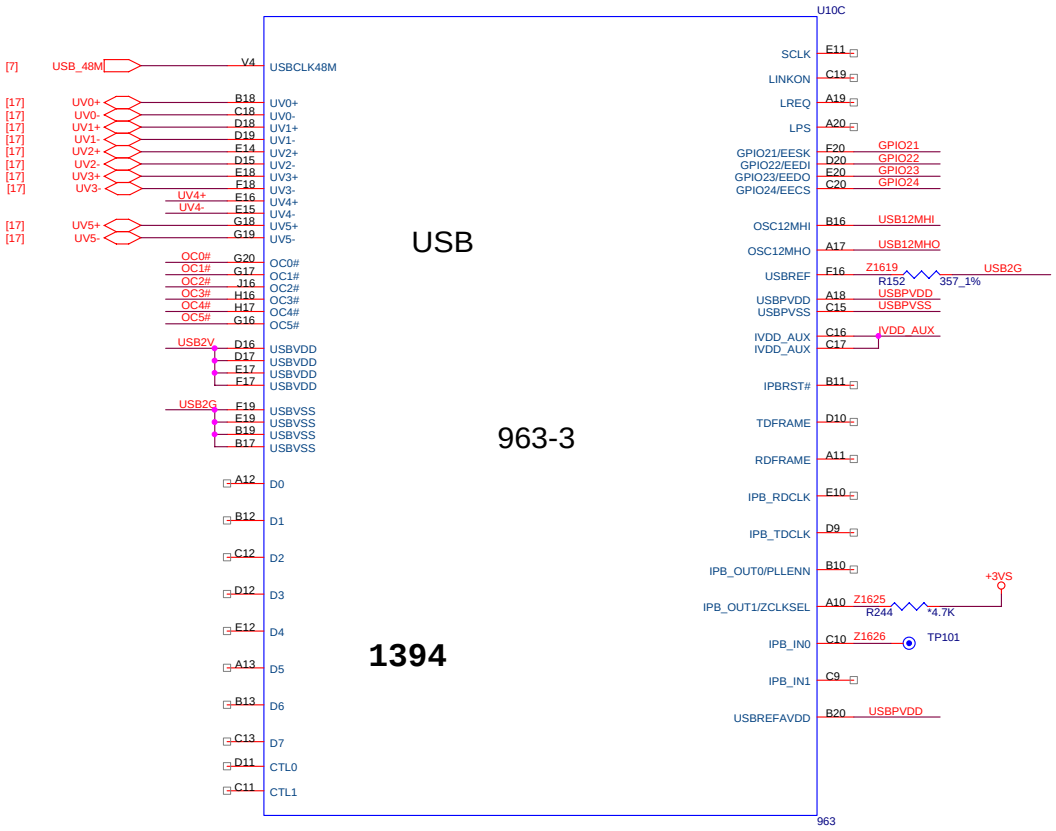
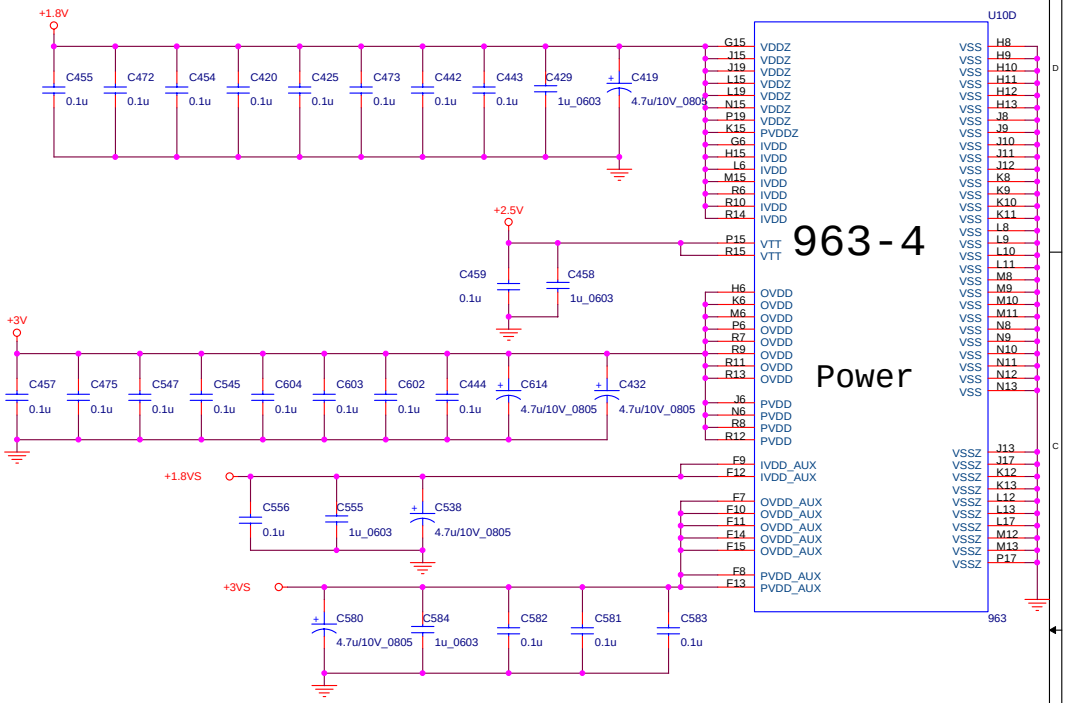
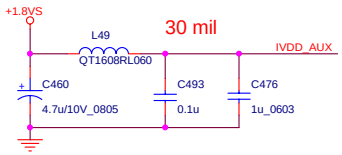

SOUTH BRIDGE -2
HOST
APIC
LPC
RTC
GPIO
AC97
ACPI /Others
KBC
963-2
MII
GPIO
Put close to 963 chip
RTC
CLEAR CMOS
Decoupling Capacitor Place close to 96X
10 mil
30 mil
CLOSE TO 96X
SB Hardware Trap
UNIWILL COMPUTER CORP.
SIS963L(GPIO & HOST & LPC & APIC & AC97 & MII & ACPI)
255 / 259KIX
Tuesday, September 07, 2004

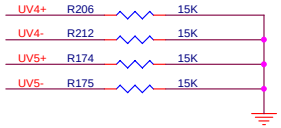
SOUTH BRIDGE -3/4



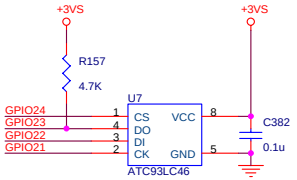


01

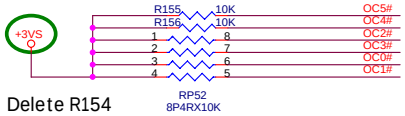


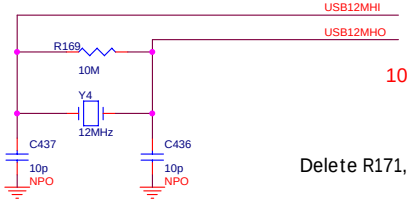


LAN EEPROM



Delete R154





Delete R171, R172

UNIWILL COMPUTER CORP.

Title: SIS963L(POWER & USB & 1394)

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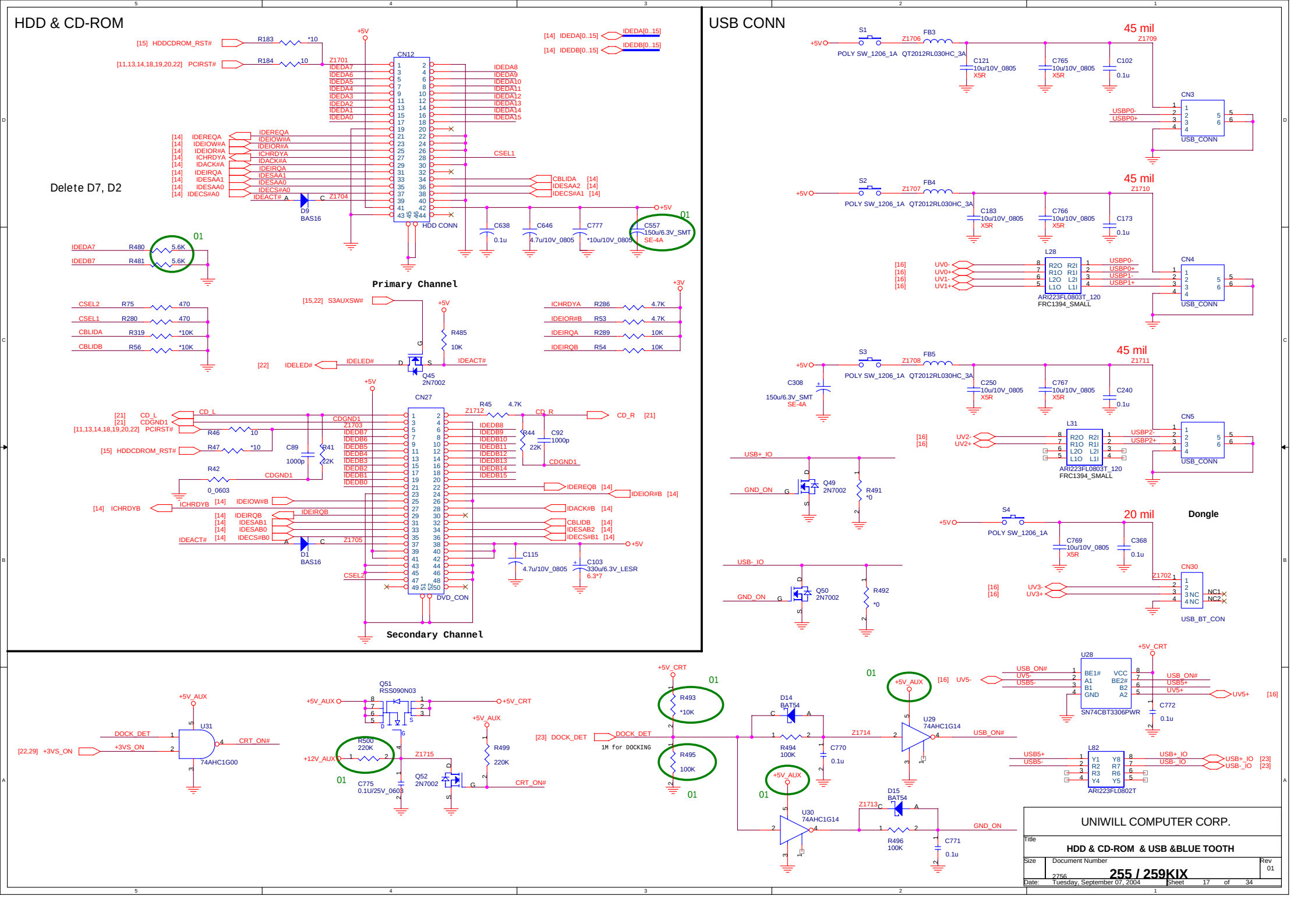
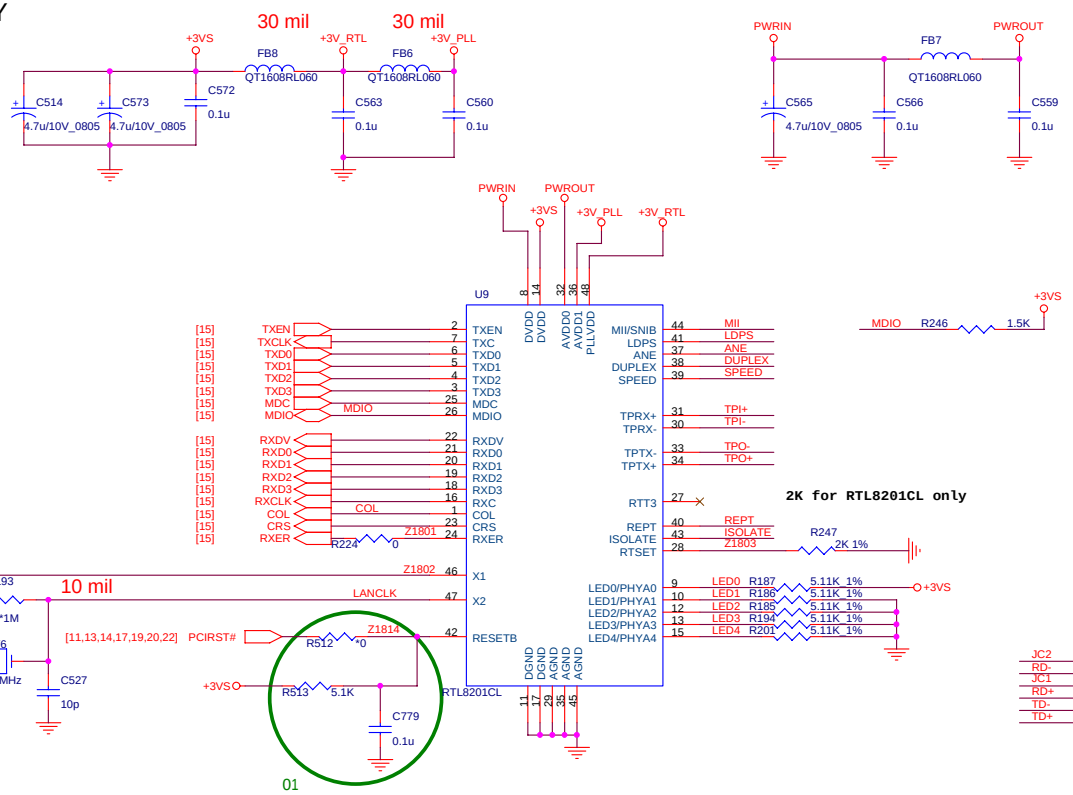
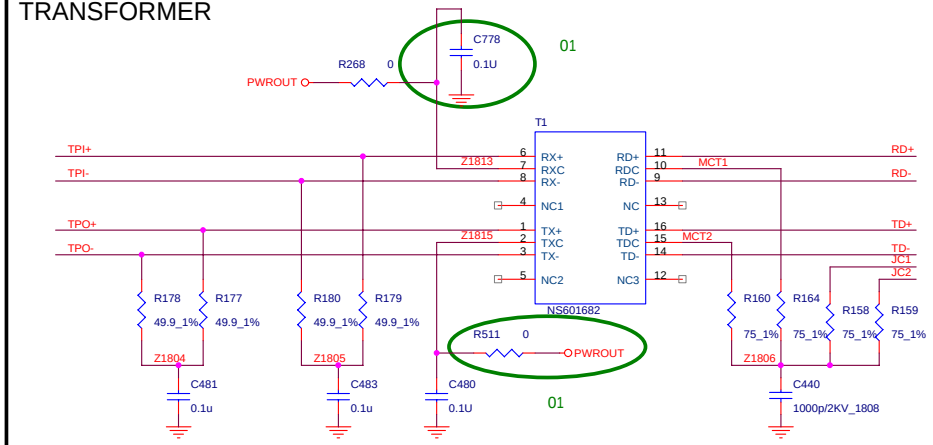

HDD & CD-ROM
Delete D7, D2
Primary Channel
Secondary Channel
HDD CONN
DVD_CON
USB CONN
45 mil
20 mil
Dongle
USB_CONN
USB_BT_CON
ARI223FL0803T_120
FRC1394_SMALL
ARI223FL0802T
SN74CBT3306PWR
74AHC1G00
74AHC1G14
UNIWILL COMPUTER CORP.
HDD & CD-ROM & USB &BLUE TOOTH
255 / 259KIX
Tuesday, September 07, 2004

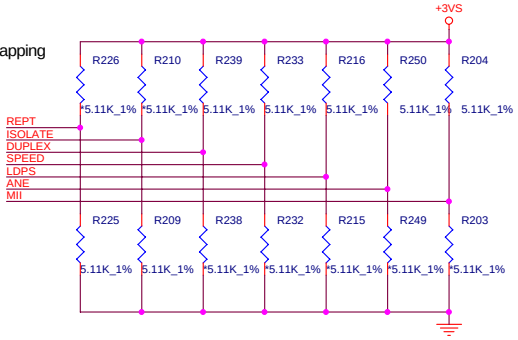
LAN PHY

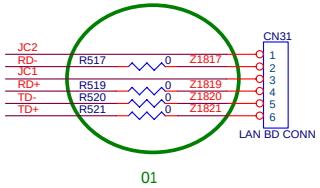


TRANSFORMER

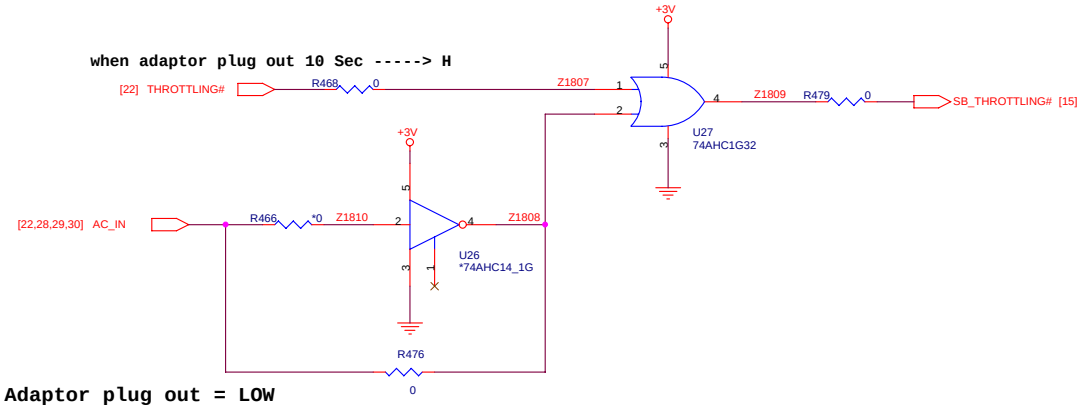


LAN Hardware Strapping

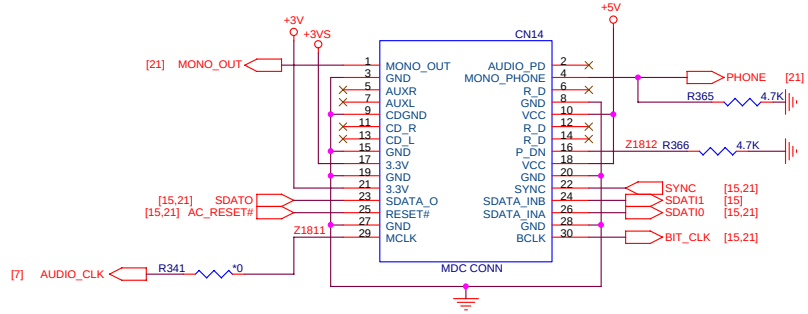




AMD THROTTLING MODE CONTROL



MDC



UNIWILL COMPUTER CORP.

Title	LAN(PHY) & MDC CONN & S/P	
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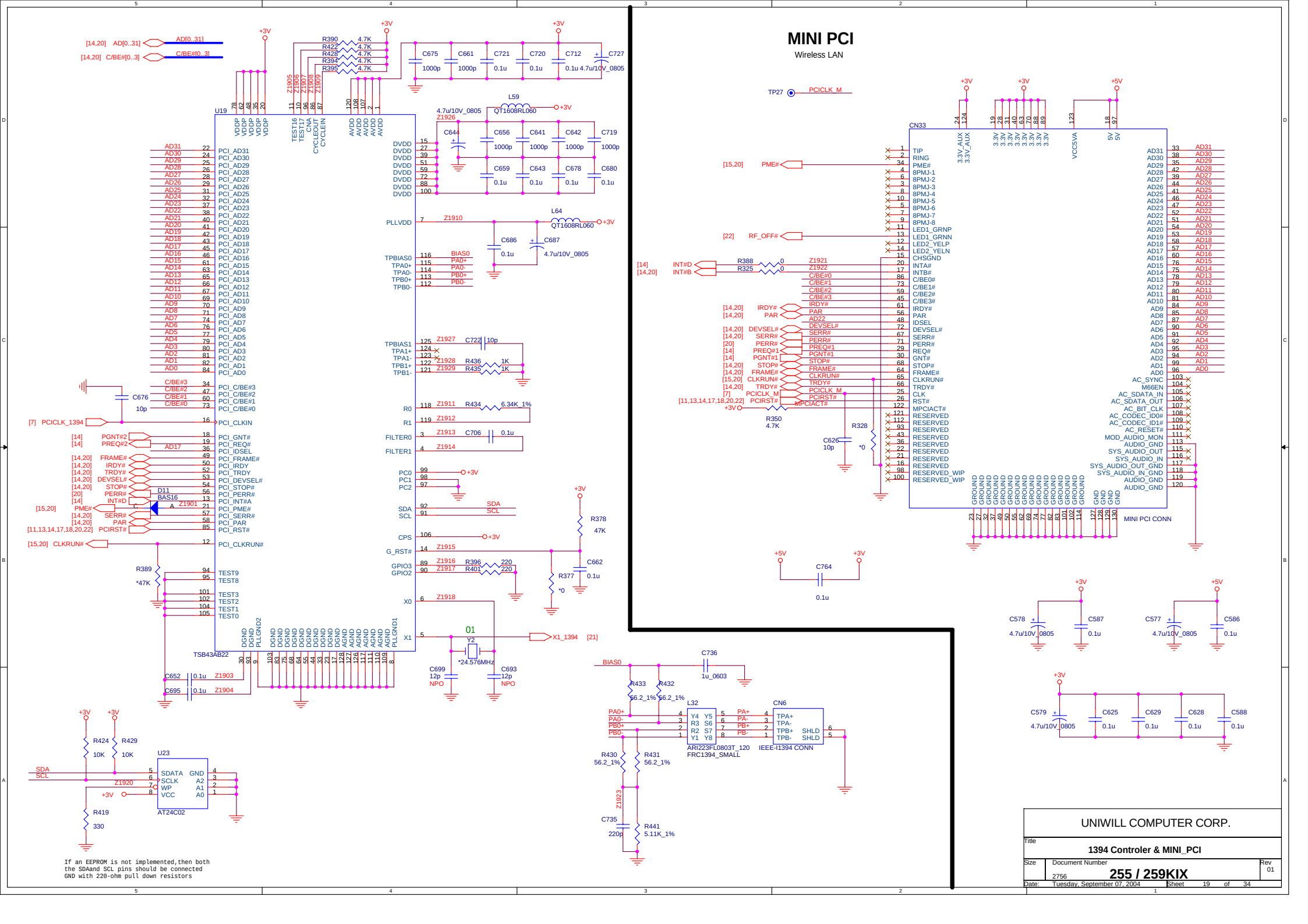
MINI PCI
Wireless LAN
U19
TSB43AB22
CN33
MINI PCI CONN
U23
AT24C02
L32
ARI223FL0803T_120
FRC1394_SMALL
CN6
IEEE-I1394 CONN
Y2
*24.576MHz
If an EEPROM is not implemented,then both the SDAand SCL pins should be connected GND with 220-ohm pull down resistors
UNIWILL COMPUTER CORP.
Title
1394 Controler & MINI_PCI
Size
Document Number
2756
255 / 259KIX
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01
Date: Tuesday, September 07, 2004
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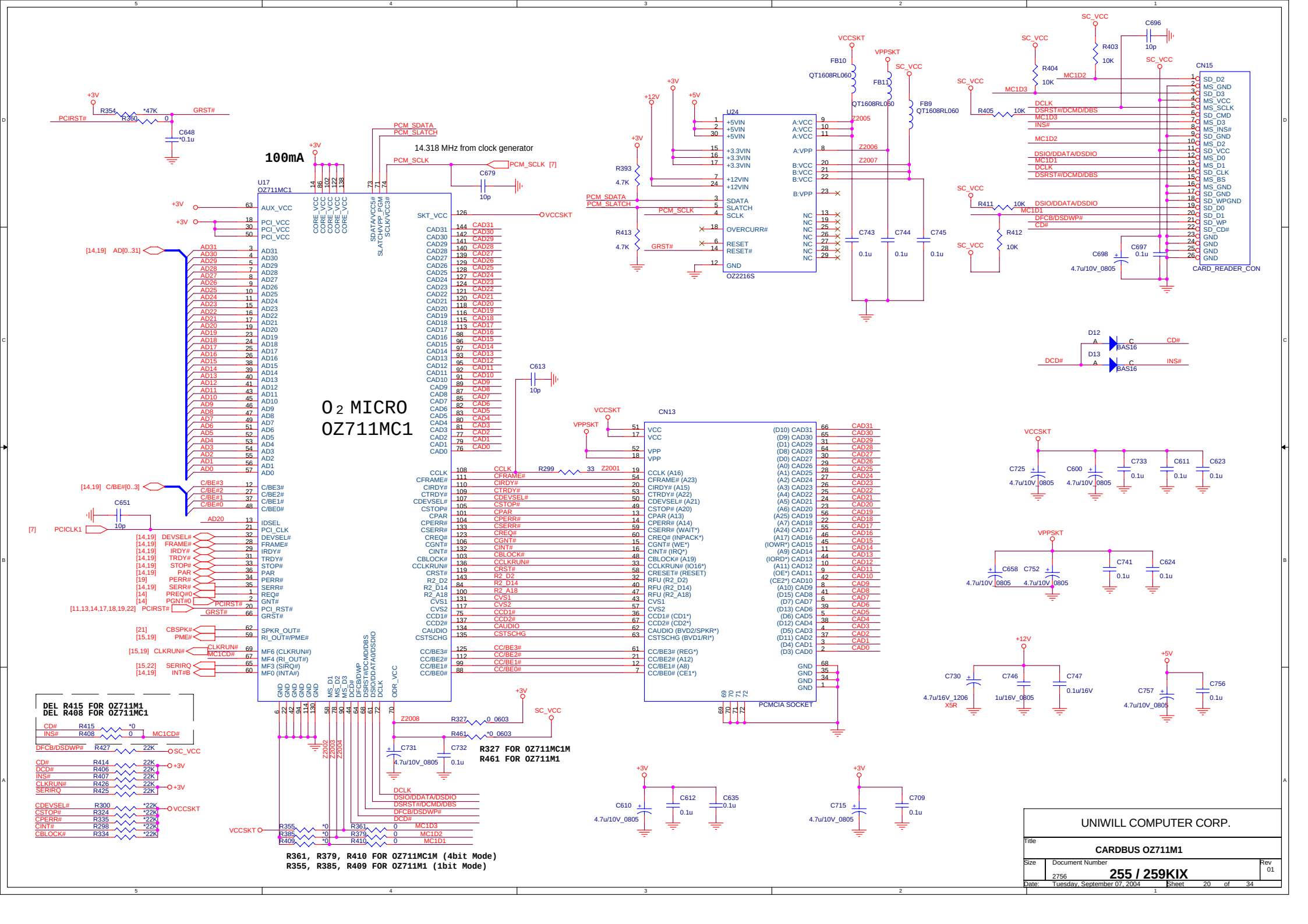
100mA
14.318 MHz from clock generator
O2 MICRO
OZ711MC1
U17
OZ711MC1
U24
OZ2216S
CN13
PCMCIA SOCKET
CN15
CARD_READER_CON
DEL R415 FOR OZ711M1
DEL R408 FOR OZ711MC1
R327 FOR OZ711MC1M
R461 FOR OZ711M1
R361, R379, R410 FOR OZ711MC1M (4bit Mode)
R355, R385, R409 FOR OZ711M1 (1bit Mode)
UNIWILL COMPUTER CORP.
CARDBUS OZ711M1
2756
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Tuesday, September 07, 2004
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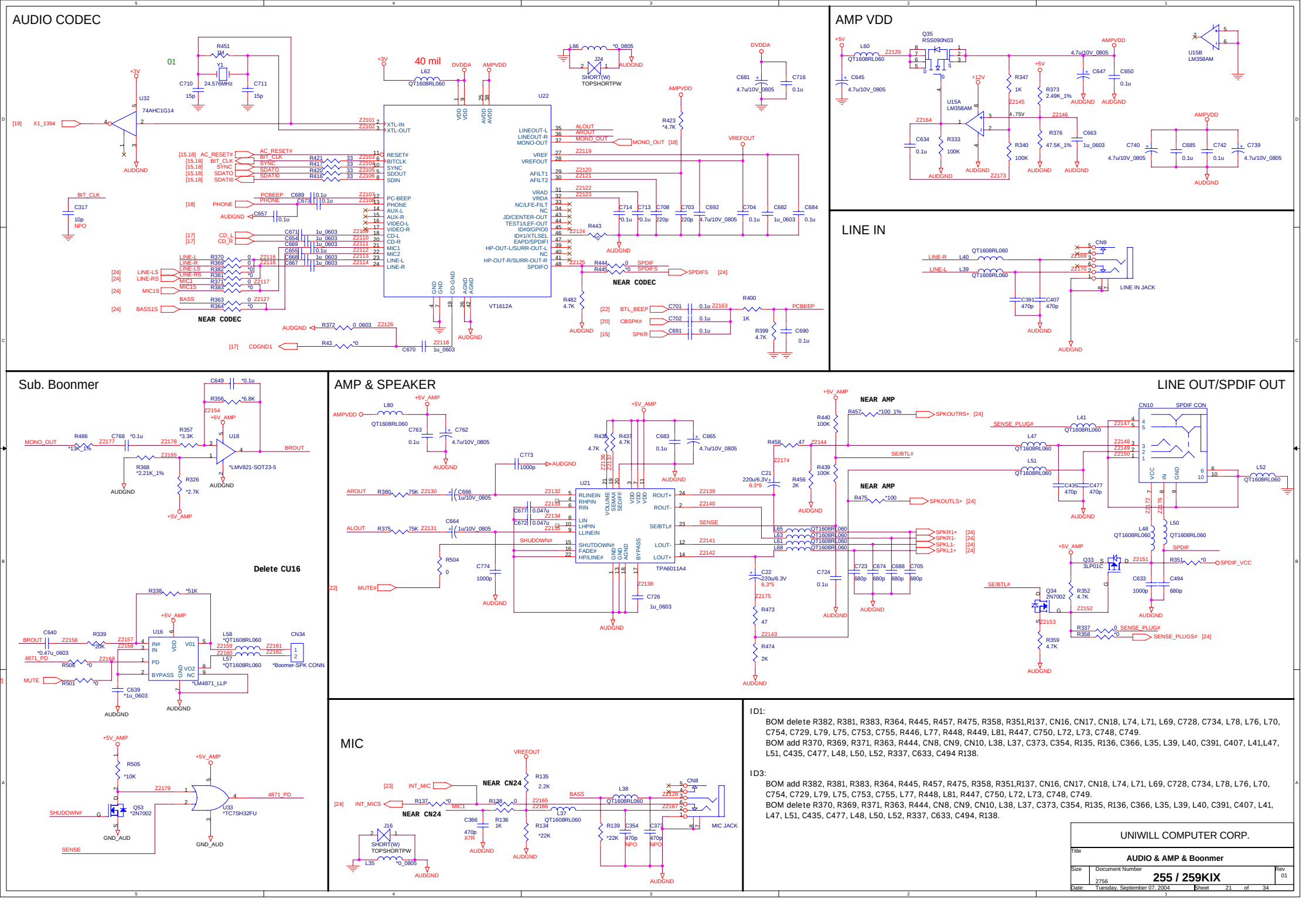
AUDIO CODEC
AMP VDD
LINE IN
Sub. Boonmer
AMP & SPEAKER
LINE OUT/SPDIF OUT
MIC
Delete CU16
NEAR CODEC
NEAR CN24
NEAR AMP
SHORT(W) TOPSHORTPW
LINE IN JACK
MIC JACK
SPDIF CON
*LMV821-SOT23-5
*LM4871_LLP
*Boomer-SPK CONN
TPA6011A4
VT1612A
ID1:
BOM delete R382, R381, R383, R364, R445, R457, R475, R358, R351,R137, CN16, CN17, CN18, L74, L71, L69, C728, C734, L78, L76, L70, C754, C729, L79, L75, C753, C755, R446, L77, R448, R449, L81, R447, C750, L72, L73, C748, C749.
BOM add R370, R369, R371, R363, R444, CN8, CN9, CN10, L38, L37, C373, C354, R135, R136, C366, L35, L39, L40, C391, C407, L41, L47, L51, C435, C477, L48, L50, L52, R337, C633, C494 R138.
ID3:
BOM add R382, R381, R383, R364, R445, R457, R475, R358, R351,R137, CN16, CN17, CN18, L74, L71, L69, C728, C734, L78, L76, L70, C754, C729, L79, L75, C753, C755, L77, R448, L81, R447, C750, L72, L73, C748, C749.
BOM delete R370, R369, R371, R363, R444, CN8, CN9, CN10, L38, L37, C373, C354, R135, R136, C366, L35, L39, L40, C391, C407, L41, L47, L51, C435, C477, L48, L50, L52, R337, C633, C494 R138.
UNIWILL COMPUTER CORP.
Title
AUDIO & AMP & Boonmer
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Date: Tuesday, September 07, 2004
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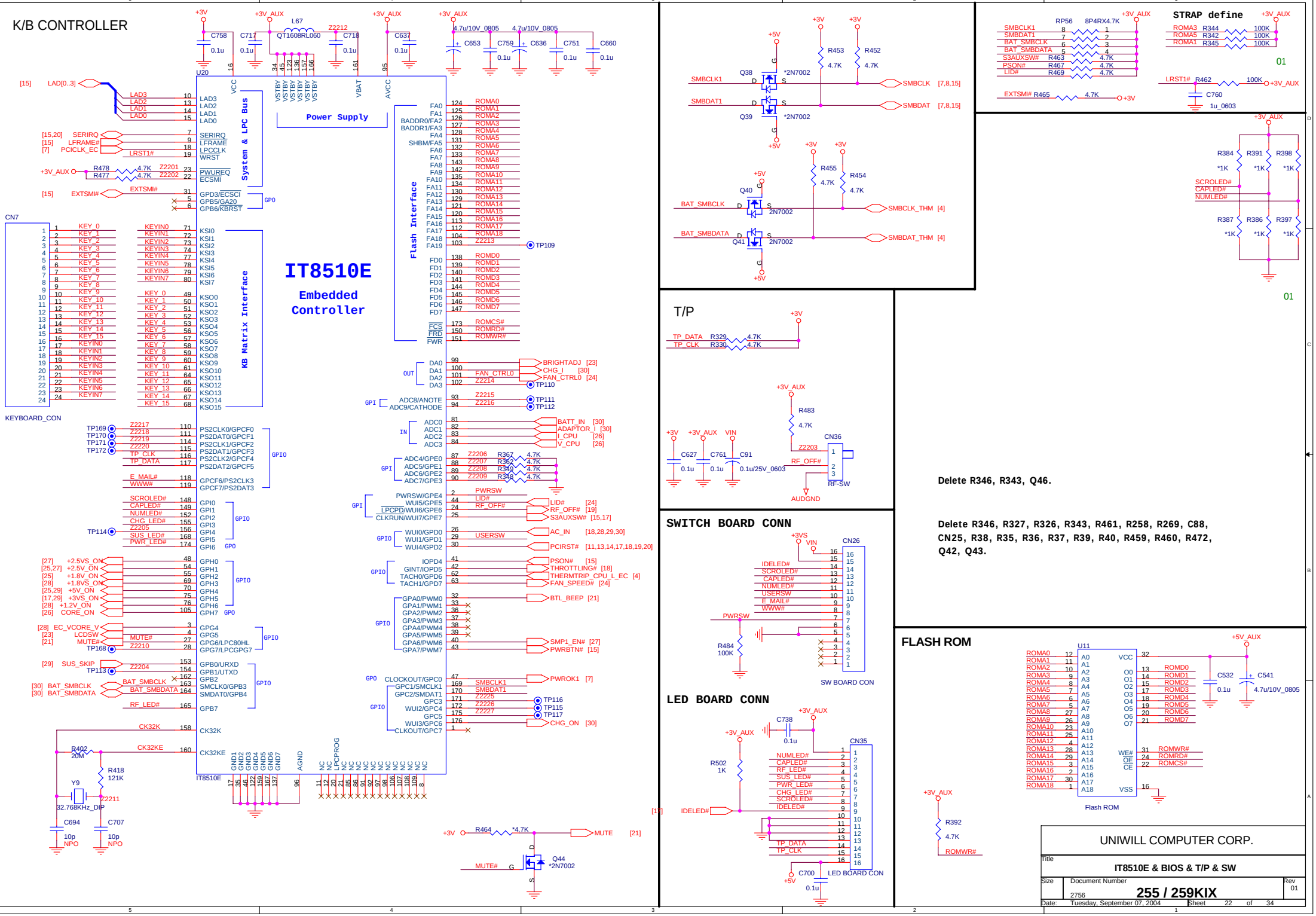
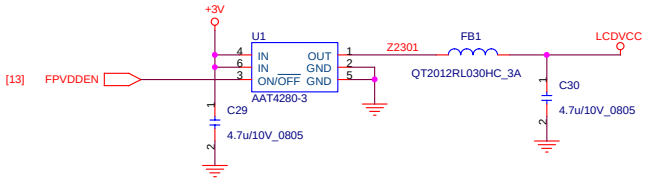
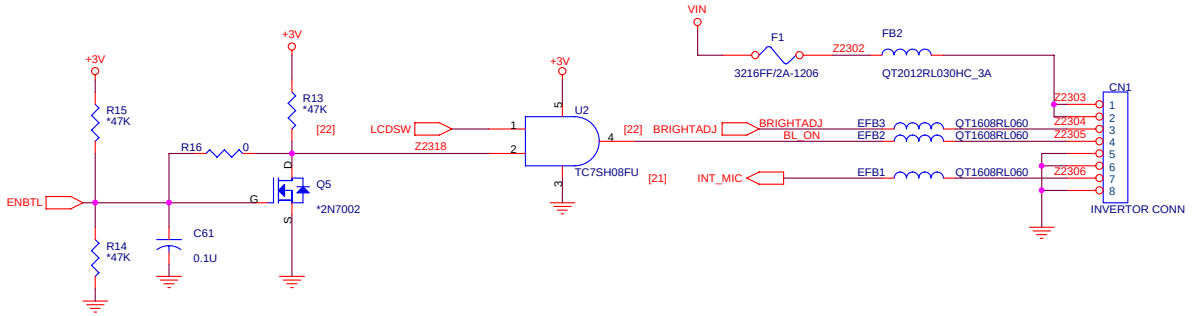
K/B CONTROLLER



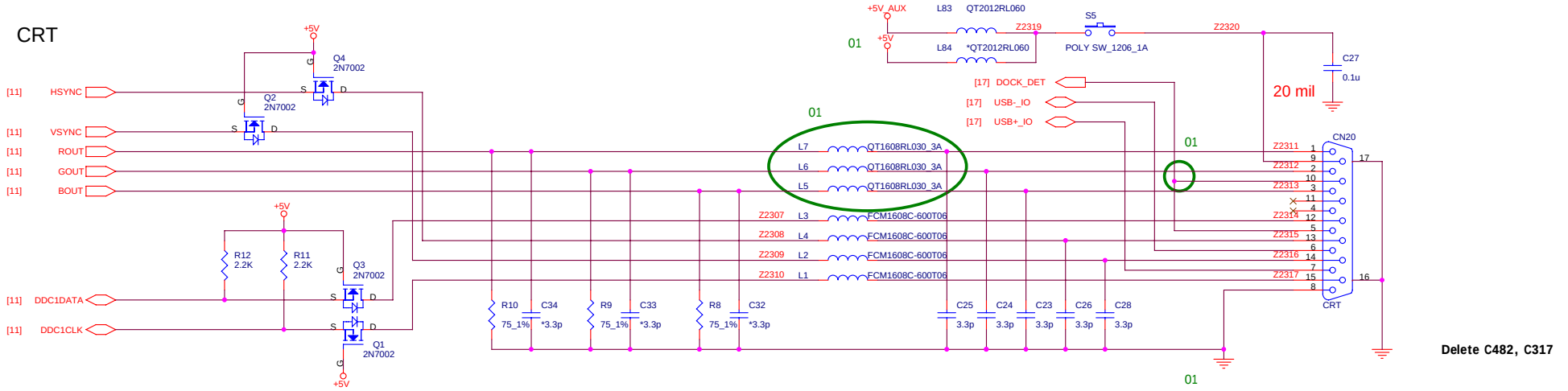
LCDVCC



INVERTER



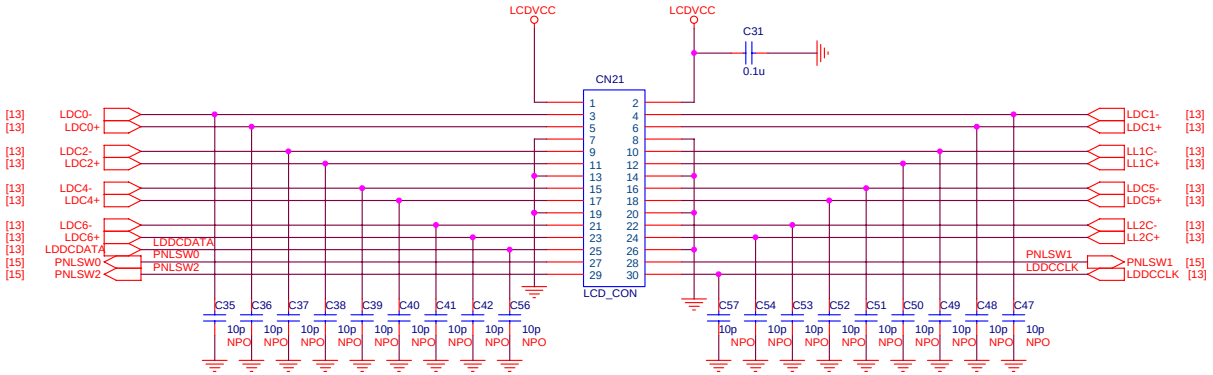
CRT



Delete C482, C317

Delete R258, R269

LCD



PNLSW2	PNLSW1	PNLSW0	
L	L	L	reserved
L	L	H	reserved
L	H	L	1600X1200
L	H	H	1400X1050
H	L	L	1280X1024
H	L	H	1280X854
H	H	L	1280X800
H	H	H	1024X768

PANNEL SELECT

Delete R18, R19

UNIWILL COMPUTER CORP.

Title: **LVDS & INVERTER & PANNEL SELECT**

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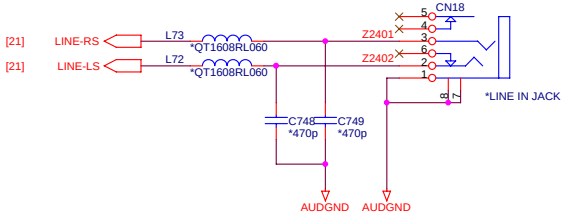
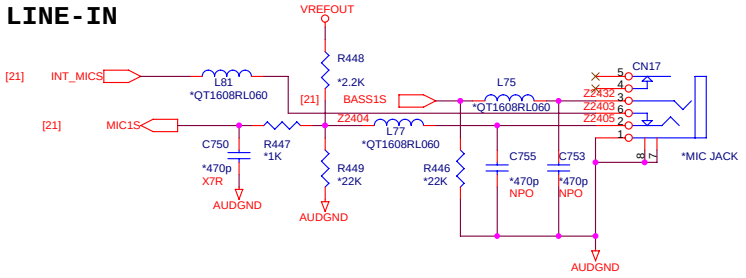
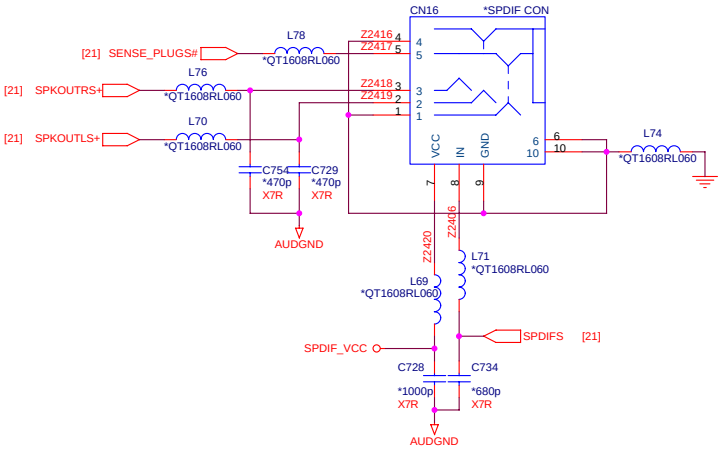
SECOND ID MIC



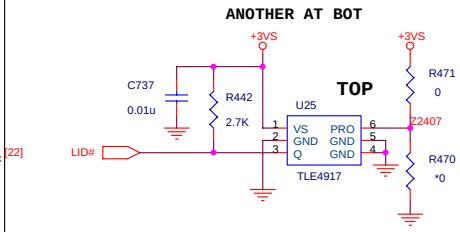
SECOND ID LINE-IN



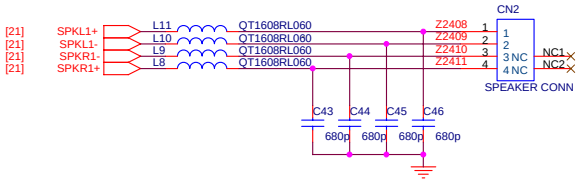
SECOND ID LINE/SPDIF OUT

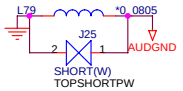


HALL SENSOR

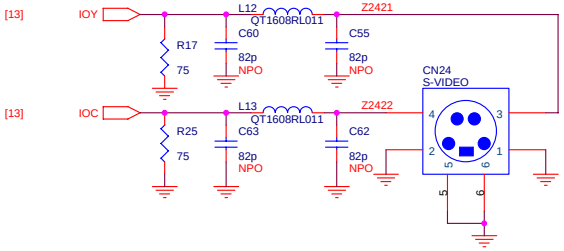


SPEAKER

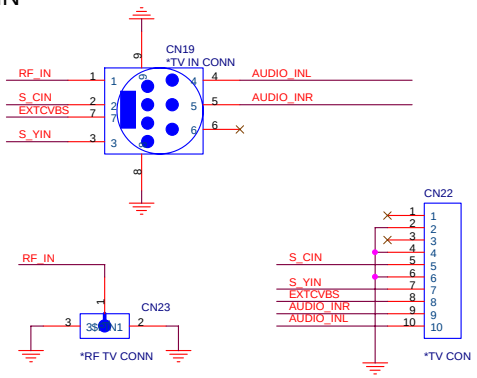




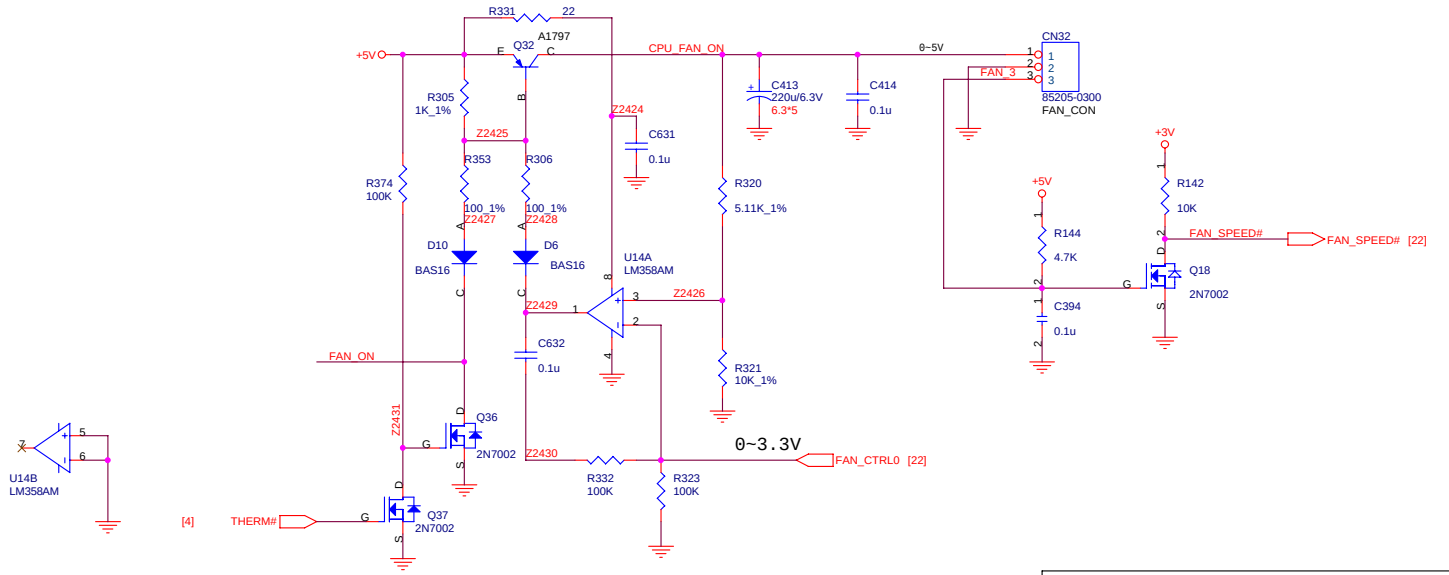
TV OUT



TV IN



CPU FAN



UNIWILL COMPUTER CORP.

Title: **FAN & TV & 2nd AUDIO &HALL**

Size	Document Number	Rev
	2756 **255 / 259KIX**	01

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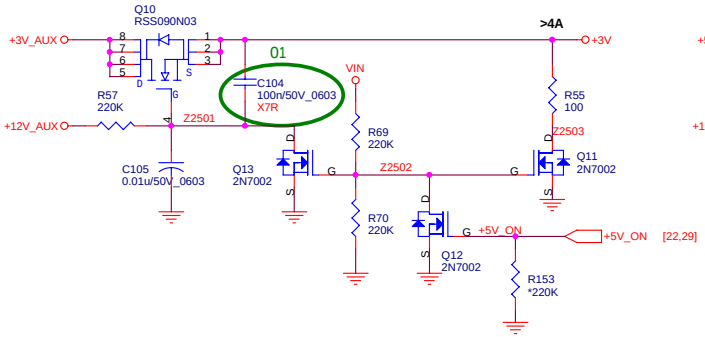

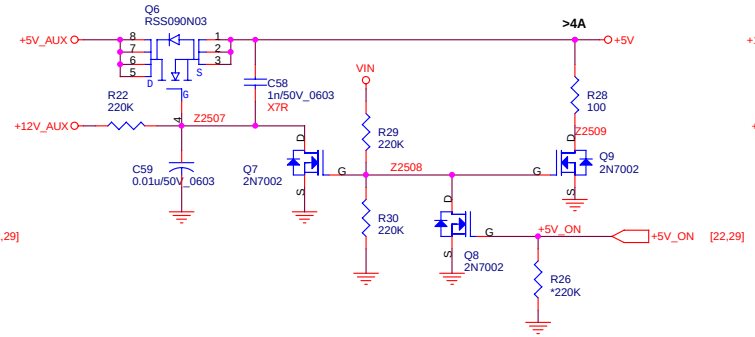

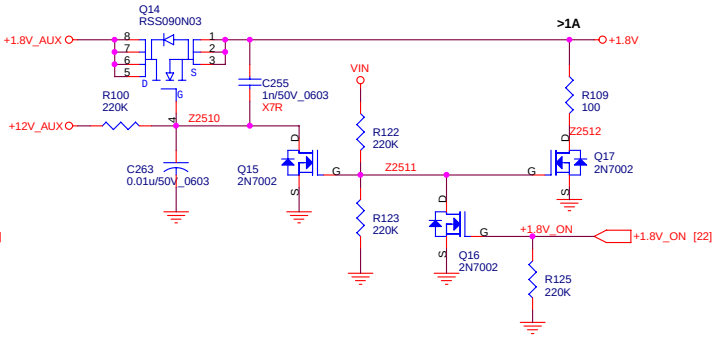

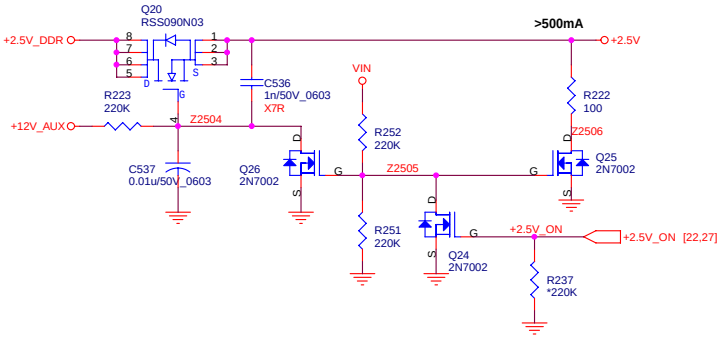

UNIWILL COMPUTER CORP.

Title: **VCC MOSFET SWITCH**

Size	Document Number	Rev
	2756 **255 / 259KIX**	01

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PSW1 Switch Table

	AMD K8	62W	35W	25W
Low-Power Mode	PSW1_1	OFF	ON	ON
Load-Line	PSW1_2	OFF	ON	ON

25V/2.5V

10A/2.5V

Mobile AMD Athlon 64
CPU_CORE/45A (62W max)

Mobile AMD Sempron
CPU_CORE/20A (25W max)

Mobile AMD Sempron (Low power mobile) 25W
100mV negative OFFSET (VID=1.35V)

Ros=Rfb*(5V-VID)/100mV **Rofs=Vofs*10/100uA**
Rds(on)*Iout=Rfb*72~108uA **Rfs=PR142=107K_1 ~ 250KHz**

259KIx Change List

PC108,PC109,PC110,PC111,PC112,PC113 Change to 820u/2.5V 8*9 OS-SPEC / NP-PSC

ISL6559CR
Mobile AMD Athlon 64
Mobile AMD Sempron

VID4	VID3	VID2	VID1	VID0	Vcore
1	1	1	1	1	0.000
0	0	1	1	0	1.400
0	1	0	0	0	1.350
0	1	0	1	0	1.300
0	1	1	0	0	1.250
0	1	1	1	0	1.200
1	0	0	1	0	1.100
1	0	1	1	1	0.975
1	1	0	0	0	0.950
1	1	0	1	0	0.900

UNIWILL COMPUTER CORP.

Title: CPUCORE_ISL6559

Size: | Document Number: 2756 **255 / 259KIX** | Rev: 01

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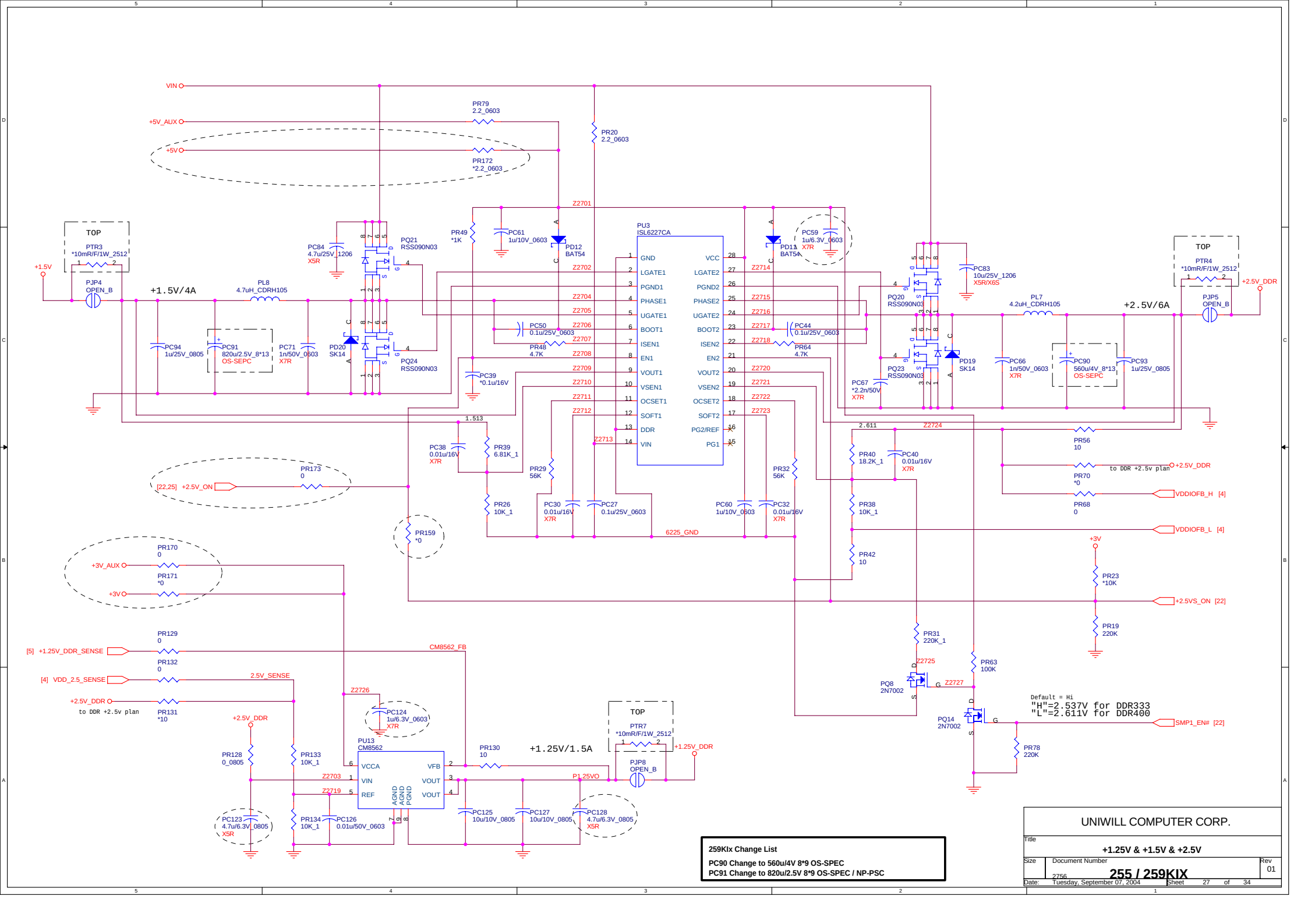
VIN
+5V_AUX
+5V
PR79 2.2_0603
PR172 *2.2_0603
PR20 2.2_0603
Z2701
TOP
PTR3 *10mR/F/1W_2512
+1.5V
PJP4 OPEN_B
+1.5V/4A
PL8 4.7uH_CDRH105
PC84 4.7u/25V_1206 X5R
PQ21 RSS090N03
PR49 *1K
PC61 1u/10V_0603
PD12 BAT54
PU3 ISL6227CA
PC59 1u/6.3V_0603 X7R
PD11 BAT54
PC83 10u/25V_1206 X5R/X6S
PQ20 RSS090N03
PL7 4.2uH_CDRH105
+2.5V/6A
TOP
PTR4 *10mR/F/1W_2512
+2.5V_DDR
PJP5 OPEN_B
PC94 1u/25V_0805
PC91 820u/2.5V_8*13 OS-SEPC
PC71 1n/50V_0603 X7R
PD20 SK14
PQ24 RSS090N03
PC50 0.1u/25V_0603
PC44 0.1u/25V_0603
PR48 4.7K
PR64 4.7K
PC39 *0.1u/16V
PQ23 RSS090N03
PD19 SK14
PC66 1n/50V_0603 X7R
PC90 560u/4V_8*13 OS-SEPC
PC93 1u/25V_0805
PC67 *2.2n/50V X7R
1.513
2.611
Z2724
PC38 0.01u/16V X7R
PR39 6.81K_1
PR29 56K
PR26 10K_1
PC30 0.01u/16V X7R
PC27 0.1u/25V_0603
PR32 56K
PC60 1u/10V_0603
PC32 0.01u/16V X7R
PR40 18.2K_1
PC40 0.01u/16V X7R
PR38 10K_1
PR42 10
PR56 10
to DDR +2.5v plan
+2.5V_DDR
PR70 *0
PR68 0
VDDIOFB_H [4]
VDDIOFB_L [4]
PR173 0
[22,25] +2.5V_ON
PR159 *0
6225_GND
+3V
PR23 *10K
+2.5VS_ON [22]
PR19 220K
PR170 0
+3V_AUX
PR171 *0
+3V
PR129 0
[5] +1.25V_DDR_SENSE
CM8562_FB
PR132 0
[4] VDD_2.5_SENSE
2.5V_SENSE
+2.5V_DDR
to DDR +2.5v plan
PR131 *10
Z2726
PC124 1u/6.3V_0603 X7R
PR31 220K_1
Z2725
PQ8 2N7002
Z2727
PR63 100K
PQ14 2N7002
Default = Hi
"H"=2.537V for DDR333
"L"=2.611V for DDR400
SMP1_EN# [22]
PR78 220K
PU13 CM8562
PR128 0_0805
PR133 10K_1
PR130 10
+1.25V/1.5A
TOP
PTR7 *10mR/F/1W_2512
+1.25V_DDR
PJP8 OPEN_B
P1.25VO
PC123 4.7u/6.3V_0805 X5R
PR134 10K_1
PC126 0.01u/50V_0603
PC125 10u/10V_0805
PC127 10u/10V_0805
PC128 4.7u/6.3V_0805 X5R
259KIx Change List
PC90 Change to 560u/4V 8*9 OS-SPEC
PC91 Change to 820u/2.5V 8*9 OS-SPEC / NP-PSC
UNIWILL COMPUTER CORP.
Title
+1.25V & +1.5V & +2.5V
Size
Document Number
2756
255 / 259KIX
Rev
01
Date: Tuesday, September 07, 2004
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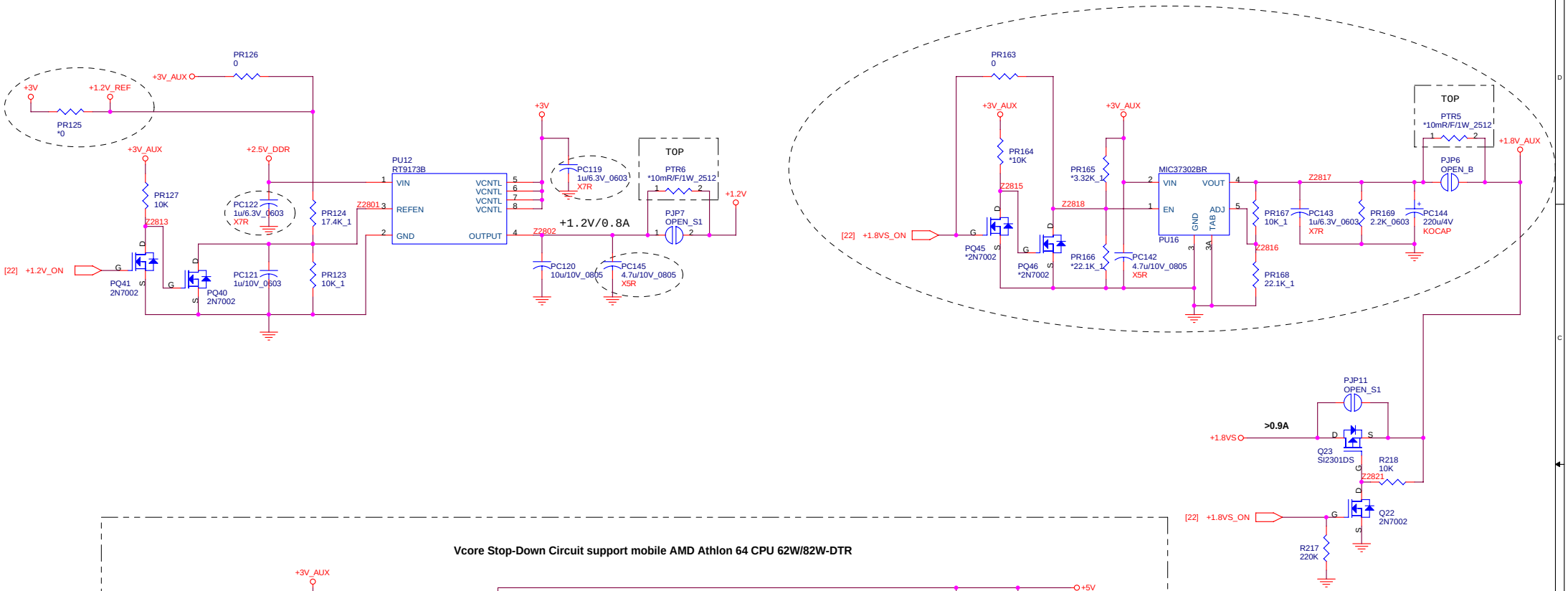

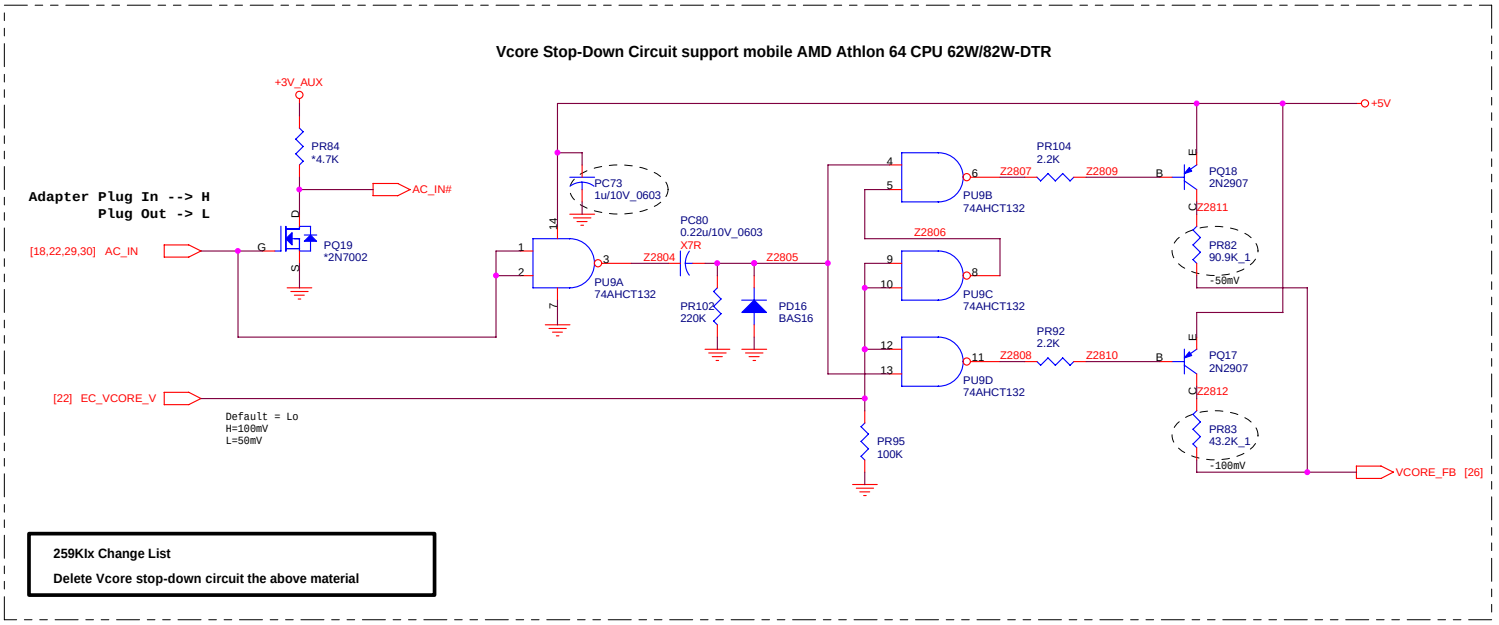

259KIx Change List

Delete Vcore stop-down circuit the above material

Unwill International Corp.

Title: **+1.2V/+1.8V & VCORE STOP-DOWN**

Size	Document Number	Rev
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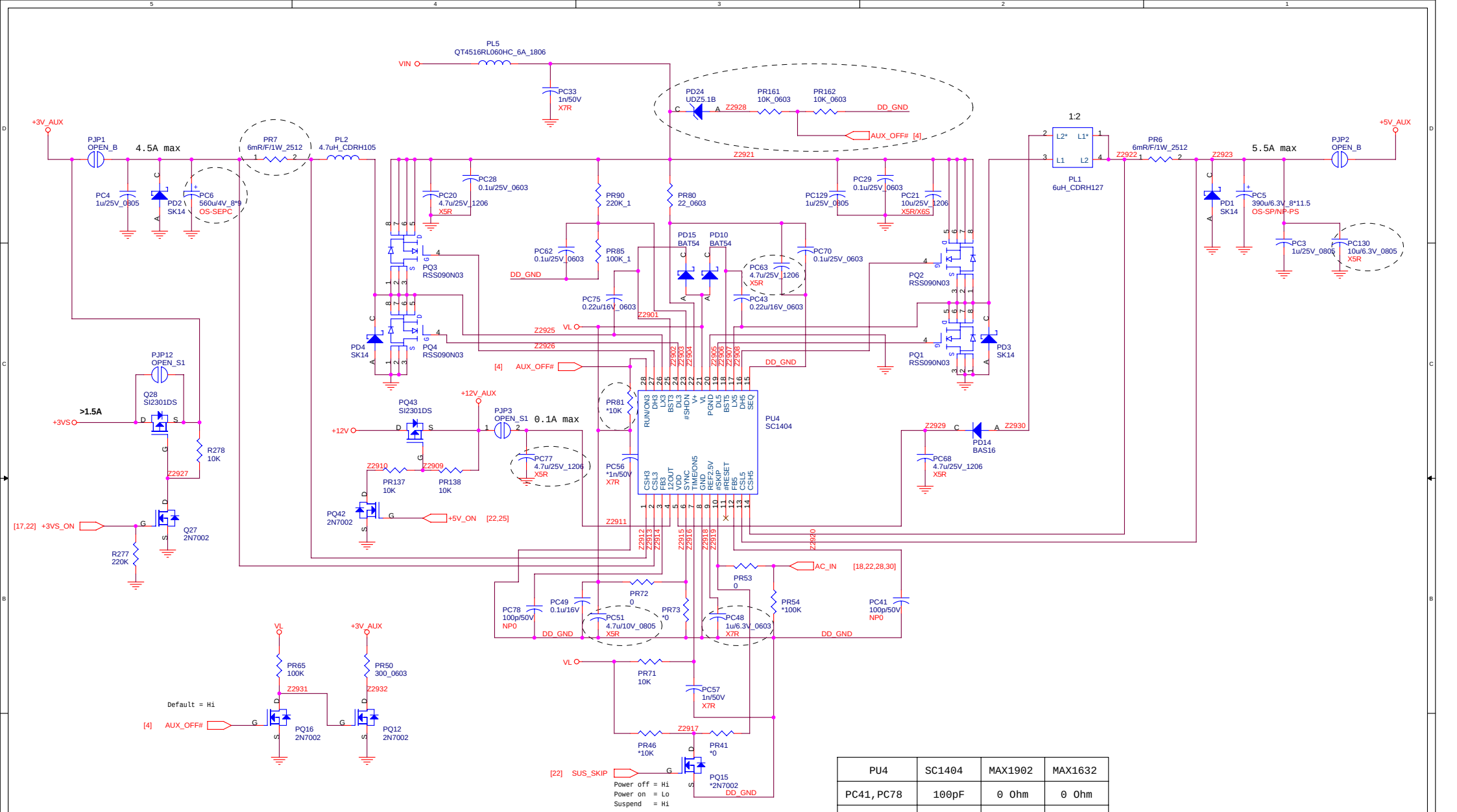

PU4	SC1404	MAX1902	MAX1632
PC41,PC78	100pF	0 Ohm	0 Ohm
PR71 ON5	10K	N.C	N.C
PR6,PR7	6mR,6mR	10mR,10mR	10mR,10mR
PR72 SYNC HI	0 Ohm 300K	N.C 500K	0 Ohm 300K
PR73 SYNC LO	N.C 200K	0 Ohm 300K	N.C 200K

THERMAL SOLUTION 1:
USE CPUHOT# TO IMPLEMENT H/W THROTTLING AND SHUT DOWN.
EC READ TEMPRATURE AND CONTROL FAN.

THERMAL SOLUTION 2:
USE 1617 TO READ TEMPRATURE AND EC CONTROL FAN, THROTTLING AND SHUT DOWN.
CPU SHUT DOWN PIN IS FOR H/W PROTECT

UNIWILL COMPUTER CORP.

Title: DC-DC (3.3V/5V)

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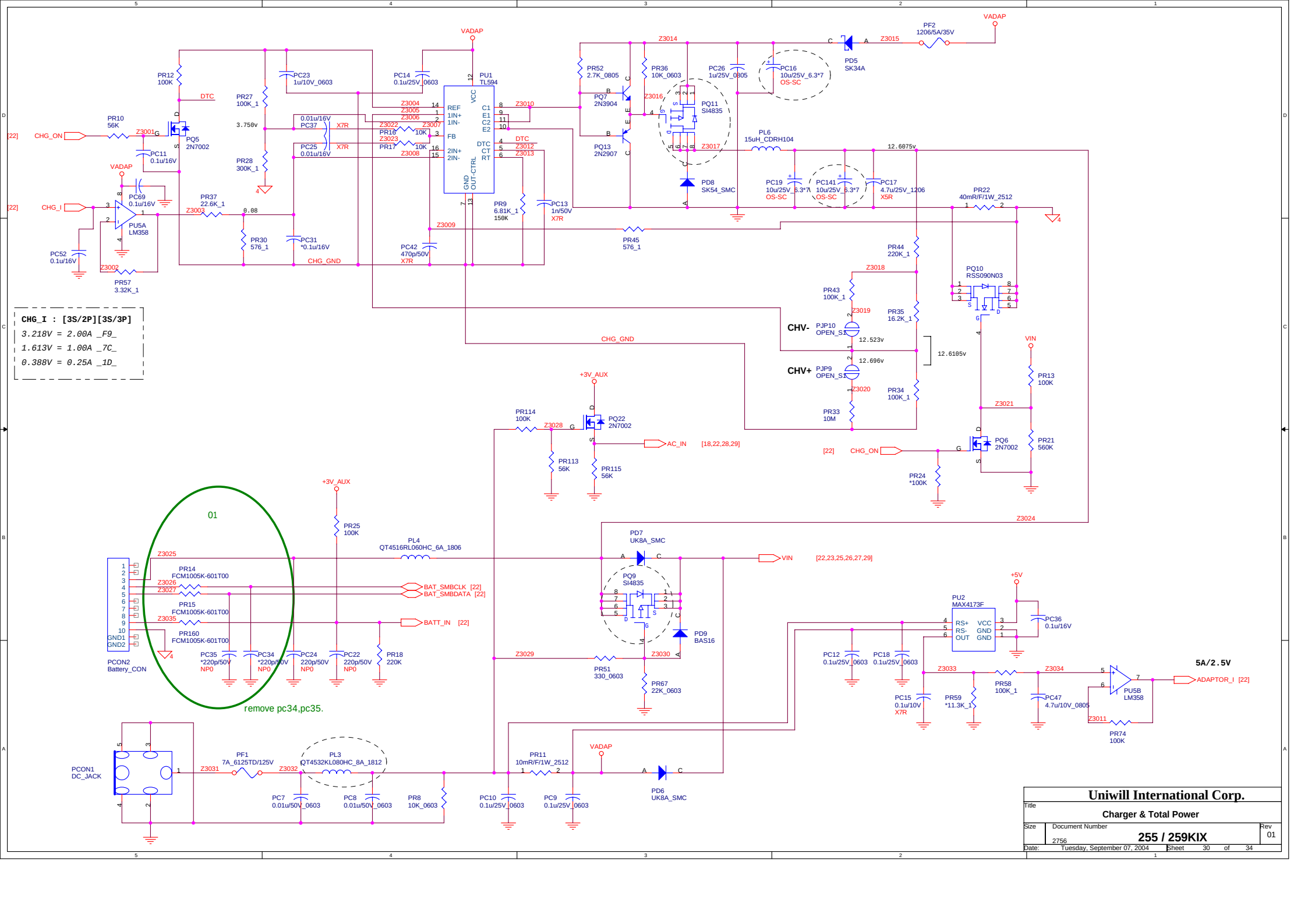
CHG_I : [3S/2P][3S/3P]
3.218V = 2.00A _F9_
1.613V = 1.00A _7C_
0.388V = 0.25A _1D_
01
remove pc34,pc35.
CHV-
CHV+
12.523v
12.696v
12.6105v
12.6075v
5A/2.5V
Uniwill International Corp.
Charger & Total Power
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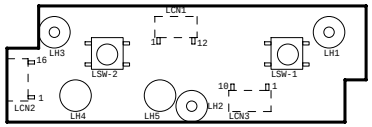
TouchPad BOARD

255/259XX1 TP/B VER: B
P/N: 35-UG5010-00B
MADE IN TAIWAN

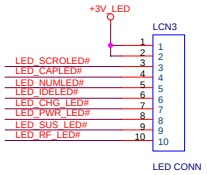


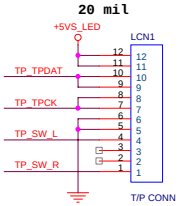
T/P FFC

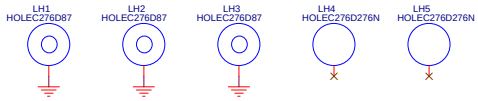
M/B FFC

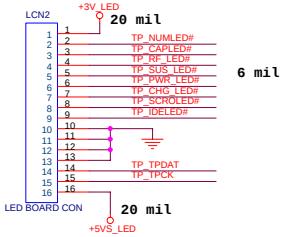
LAYER : 6

LAYER1 : TOP
LAYER2 : GND
LAYER3 : IN1
LAYER4 : IN2
LAYER5 : VCC
LAYER6 : BOT

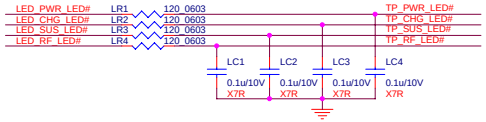


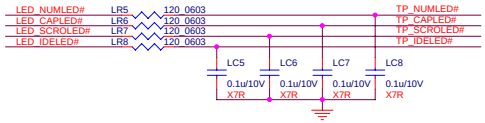


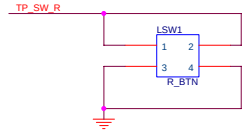


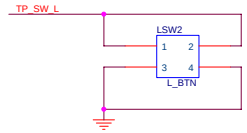


6 mil









UNIWILL COMPUTER CORP.		
Title: TouchPad BOARD		
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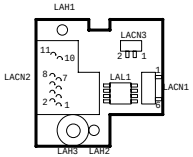
255/259XX1 LAN/B VER: C
P/N: 35-UG5030-00C
MADE IN TAIWAN

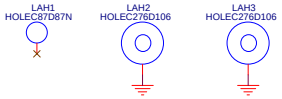
LAYER : 6

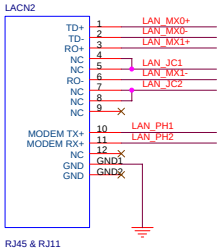
LAYER1 : TOP
LAYER2 : GND
LAYER3 : IN1
LAYER4 : IN2
LAYER5 : VCC
LAYER6 : BOT

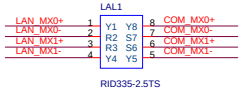
LAN/MODEM BOARD

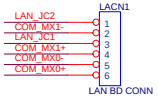


8 mil

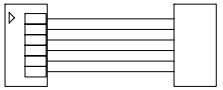




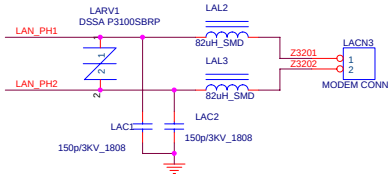




CABLE



MODEM ESD



UNIWILL COMPUTER CORP.

Title	LAN&MODEM CONN	
Size	Document Number 2756 255 / 259KIX	Rev 01
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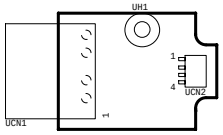
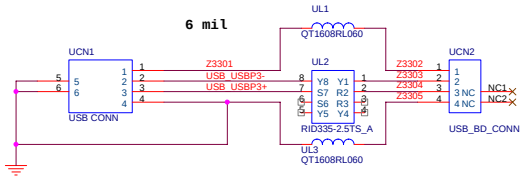
255/259XX1 USB/B VER: A
P/N: 35-UG5020-00A
MADE IN TAIWAN

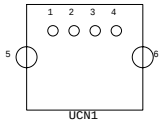
LAYER : 6

LAYER1 : TOP
LAYER2 : GND
LAYER3 : IN1
LAYER4 : IN2
LAYER5 : VCC
LAYER6 : BOT



CABLE





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From Version: B change to Version: 01

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01.Page23: CN20 pin 10 from GND change to DOCK_DET.
02.Page18: Add R512, R513, C779, R511, C778.

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03.Page04: U6 pin AF24, AE24 connect test point TP174, TP173.

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04.Page17: U29,U30 pin5 change to +5v_aux,DEL R493 10k ohm,R495 add 100k ohm.
05.Page17:C557 change to 150u/6.3v_SMT_SE-4A.

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06.Page23: DEL R258, R269 .
07.Page23:S5,L83 SWAP,L83 change to +5v_aux
08.Page30:remove pc34,pc35.
09.Page7:remove R240.

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10.Page16:L42,L46 change to +3VS.
11.Page17:R480,R481 ADD 5.6K.
12.Page16:DEL R154, OC1~OC5# change to +3VS.

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13.Page10:R79 change to +1.8V.
14.PAGE11:R118,R119,R121 change to +3V.
15.Page11:R65 change to +3V.
16.Page11:R59 change to GND.

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17.Page15:R167 change to +2.5V.

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18.Page19:remove Y2.
19.Page21: DEL R503 .
20.Page21:ADD R451,C710,C711,Y1.
21.Page30:ADD PR160.
22.Page30:PR14,PR15 change to BEAD600.

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23.Page18:ADD R517, R519, R520, R521.
24.Page22:remove R387,R391,R397.
25.Page17:R500 change to 220K.

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26.Page22:R342,R344,R345 change to 100k ohm.
27.Page18:Add R517,R519,R520,R521.
28.Page28:Del PC114,PC115,PC116,PC117,PC118,PD24,PR120,PR121,PR122,PU11.
Add PC142,PC143,PC144,PC145,PR163,PR165,PR167,PR168,PU16.
Change PC73,PC119,PC122,PR82,PR83.
29.Page29:Remove PR81.
Add PD24,PR161,PR162.
Change PC6,PC48,PC51,PC63,PC77,PC130,PR7.
30.Page30:Remove PC34,PC35.
Add PR160.
Change PC16,PC141,PQ9,PQ11.
31.Page31:Change PC59,PC123,PC124,PC128.
32.Page32:Remove PR152.
Add PD25,PC147,PC148,PC149,PR158,PR175,PSW1.
Change PR148,PR151,PR153.
33.Page09:Add C780, C781, C782, C783, C784, C785, C786, C787, C788, C789, C790, C791, C792, C793, C794.

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34.Page25:C104 from 1nF / 50V 0603 change to 100nF / 50V 0603.
35.Page23:L5, L6, L7 from FCM1608C-600T06 change to QT1608RL030_3A.
36.Page27:Del PR159 0 ohm
Add PR173 0 ohm

UNIWILL COMPUTER CORP.

Title: **Change Notes B to 01**

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