

# 255KIX

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02	GPIO DEFINITION & POWER CONSUMPTION
03	BLOCK DIAGRAM
04	CPU-ATHLON64-HT
05	CPU-ATHLON64-DDR
06	CPU-ATHLON64-PWR & GND
07	MAIN CLOCK & PCB HOLE
08	DDR CONN
09	DDR PULL UP TERMINATION
10	SIS760 HOST& AGP BUS
11	SIS760 MUTIOL&HW TRAP
12	SIS755 POWER & GND
13	SIS302LV
14	SIS963L (HYPERZIP & PCI & IDE )
15	SIS963L(HOST,AC97,MII,GPIO)
16	SIS963L(POWER &USB & 1394)
17	HDD & CD-ROM & USB CONN
18	LAN(PHY) & MDC CONN & S/P
19	1394 Controler & MINI_PCI
20	CARDBUS OZ711MC1 & MMC
21	AUDIO & AMP & Boonmer
22	IT8510E & BIOS & T/P & SW
23	LVDS & INVERTER & CRT
24	FAN & TV & 2nd AUDIO &HALL
25	VCC SWITCH&BATT CONTROL
26	CPUCORE_MAX1937
27	+1.2V & VCORE STOP-DOWN
28	+1.25V & +1.8V & +2.5V
29	DC-DC 5V/3.3V
30	Charger & Total Power
31	TP BOARD
32	LAN BOARD
33	USB BOARD
34	Change Notes B to 01

## 255KI1 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

IT8510E 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

IT8510E GPIO	
GPIO	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

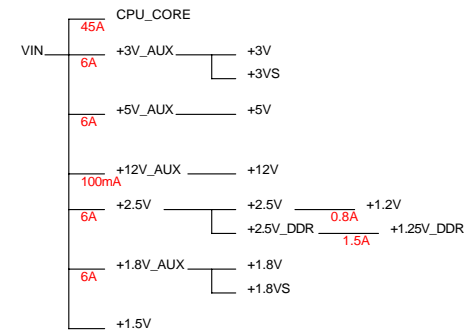
RTL8201CL			
VCC	ICC (mA)	W	TEMP ( )
+3V	200	0.66	70

VT1612A			
VCC	ICC (mA)	W	TEMP ( )
+3V (DVDD)	71	0.234	70
+3V (AMPVDD)	36	0.118	

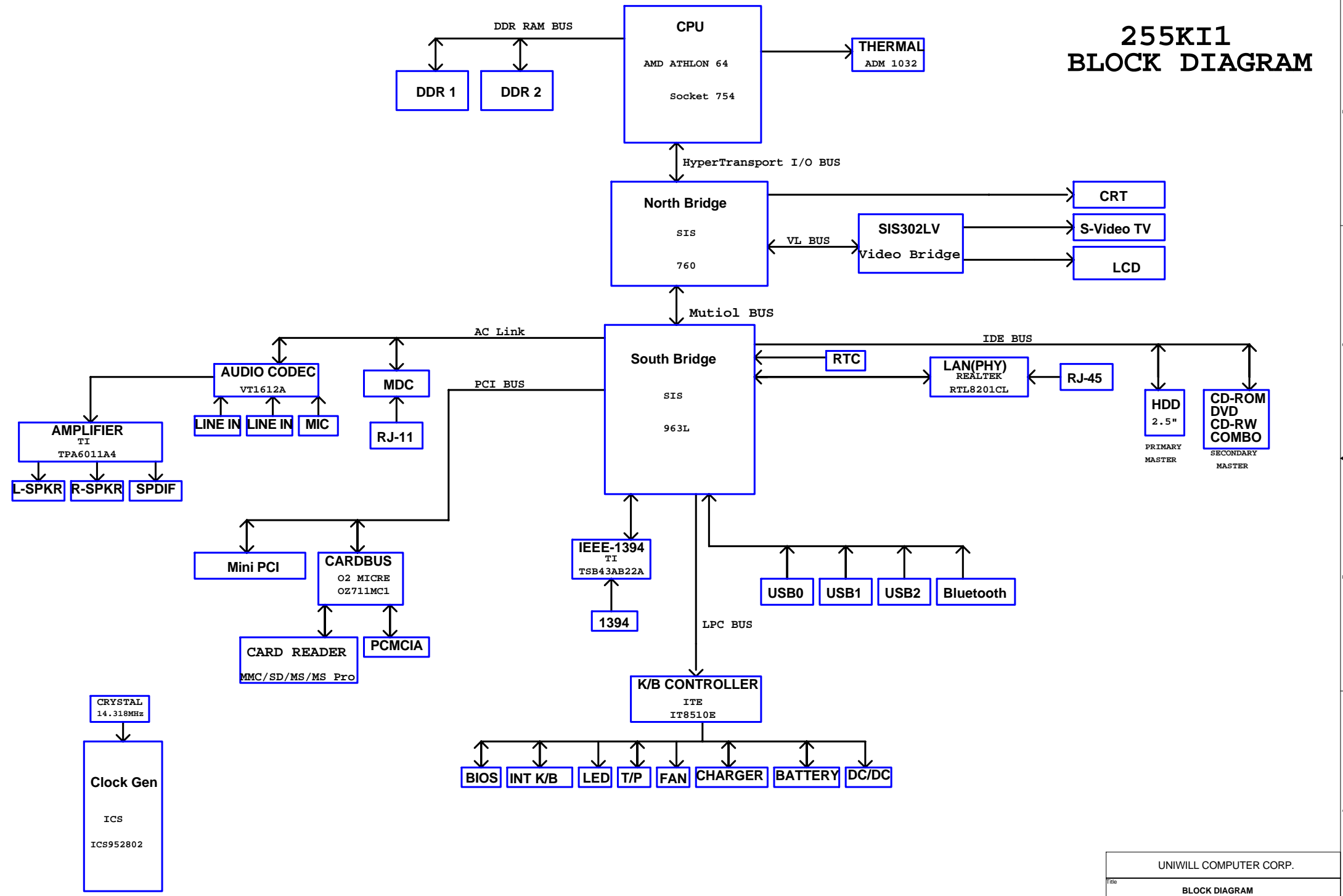
ADM1032			
VCC	ICC	W	TEMP ( )
+3V	170uA	0.56mW	150

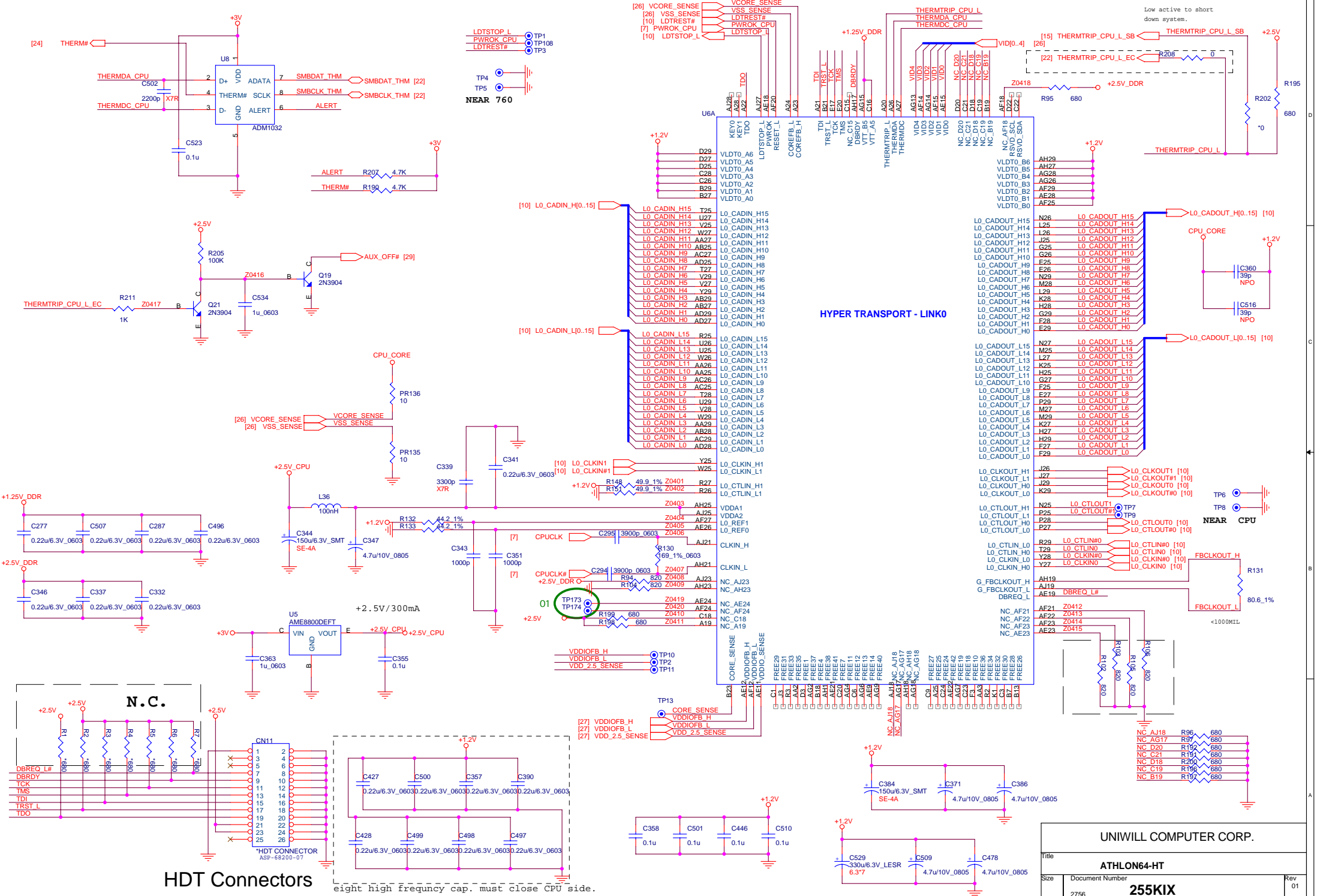
OZ711MC1			
VCC	ICC (mA)	W	TEMP ( )
+3V	30	0.1	70

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

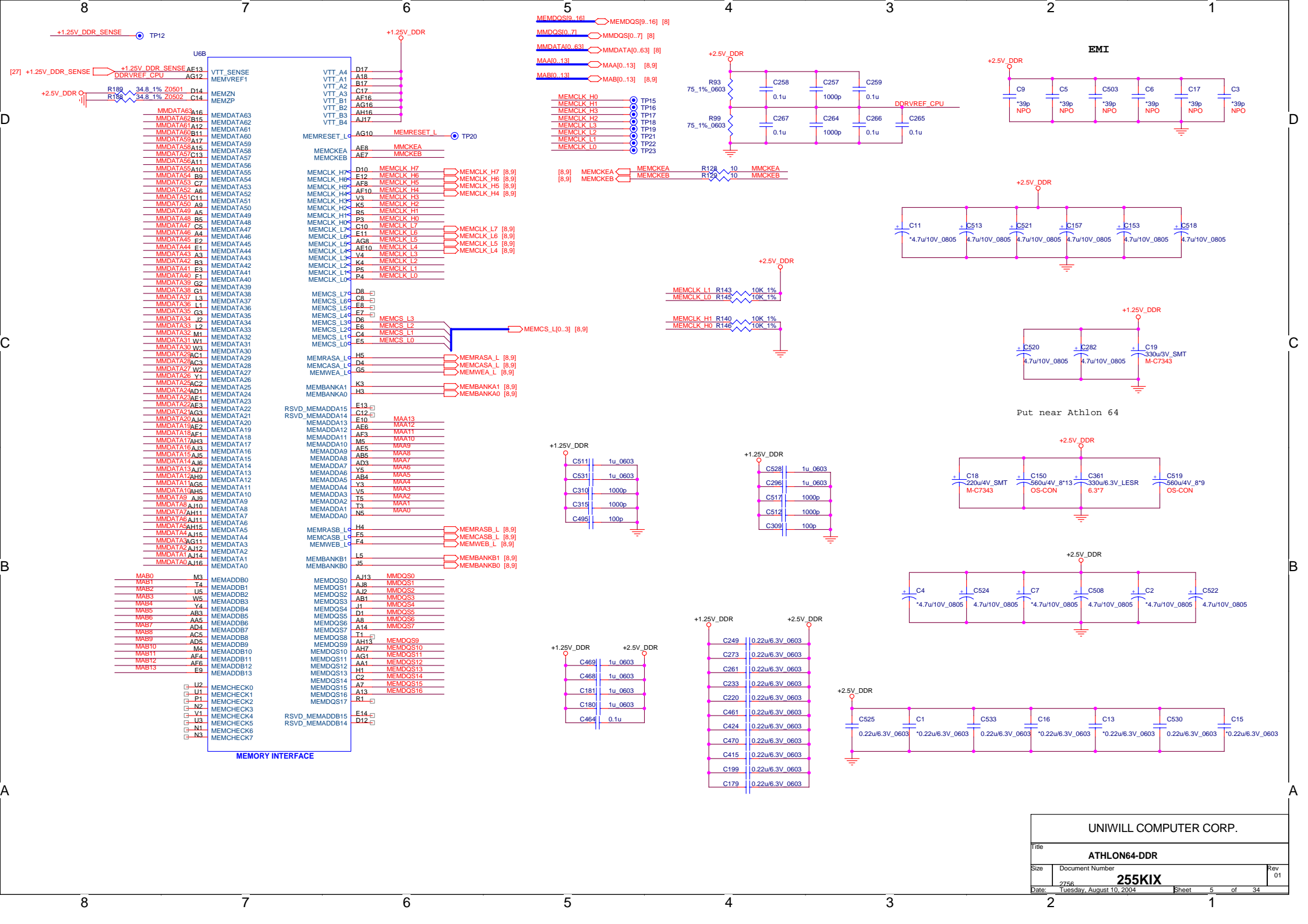


# 255KI1 BLOCK DIAGRAM

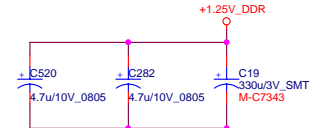
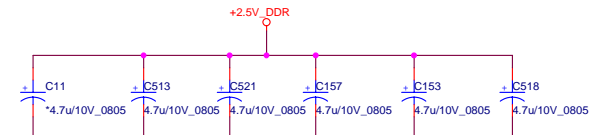
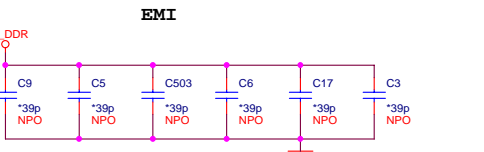
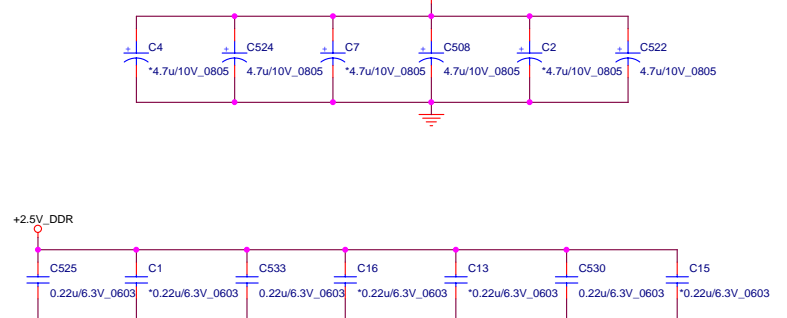
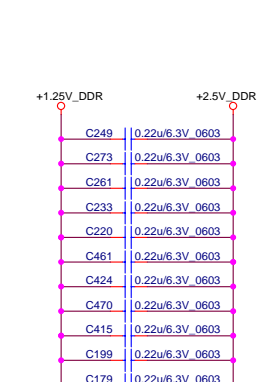
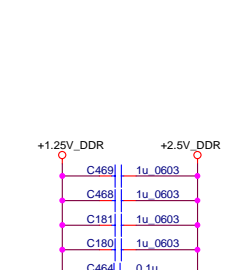
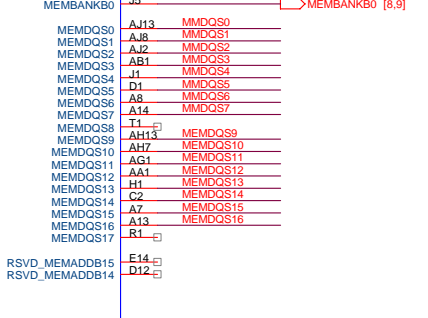
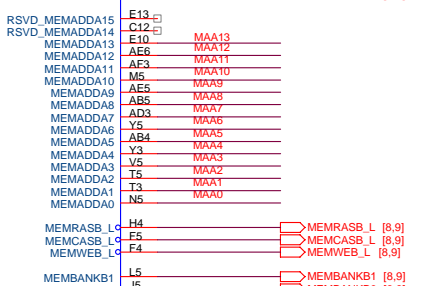
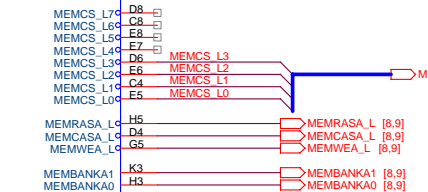
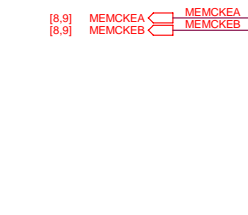
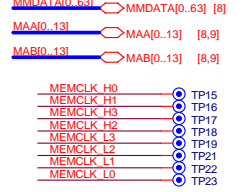
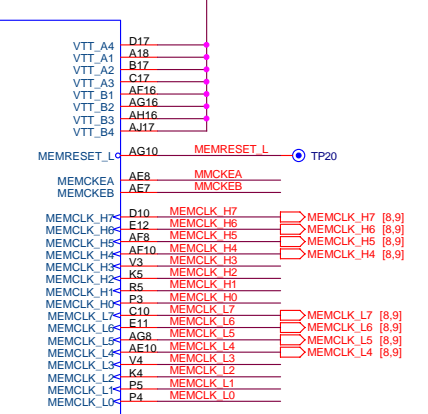
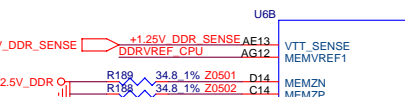




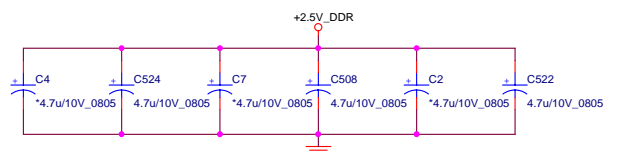
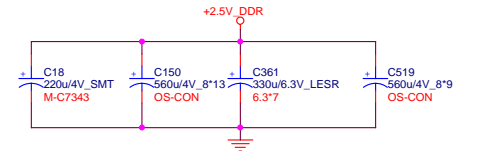
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Title	<b>ATHLON64-HT</b>	
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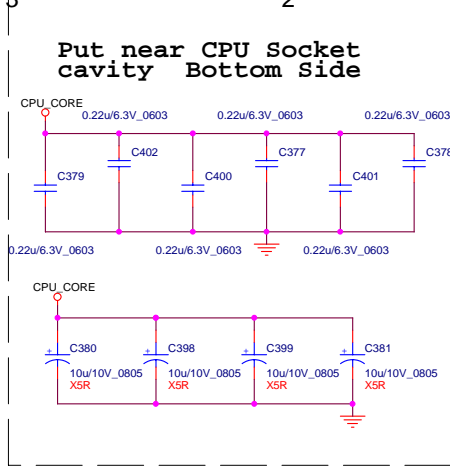
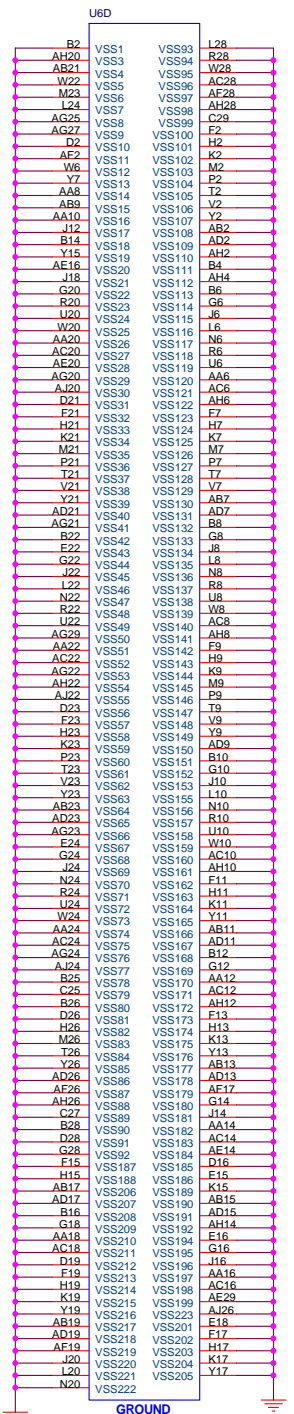
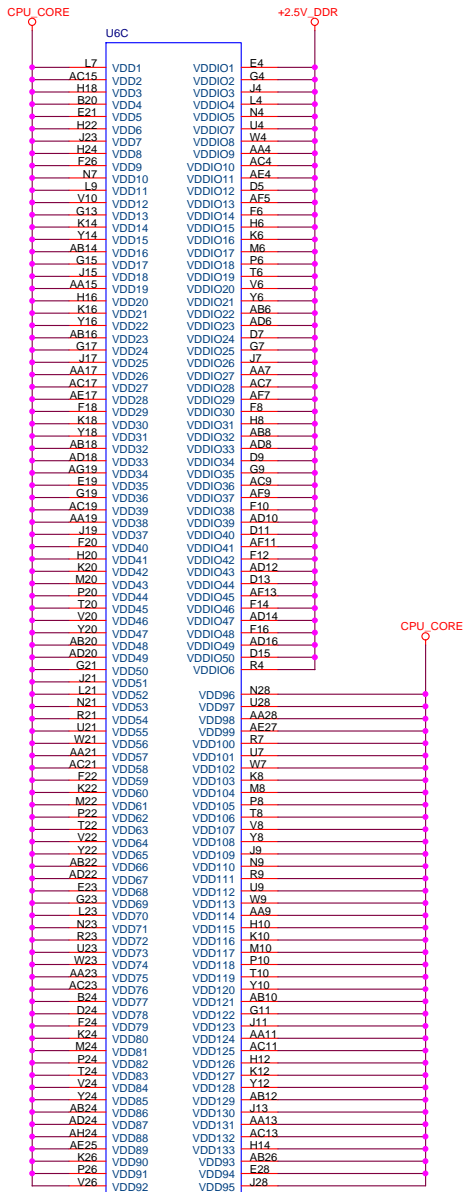
+1.25V\_DDR\_SENSE TP12



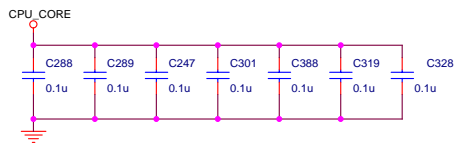
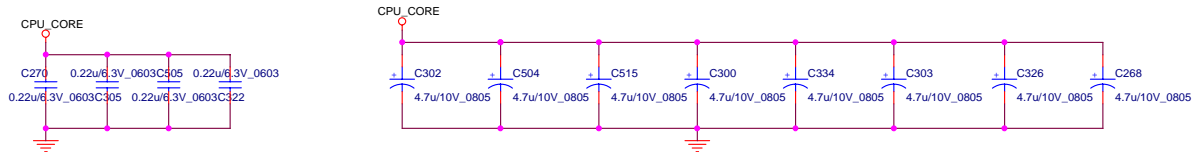
Put near Athlon 64



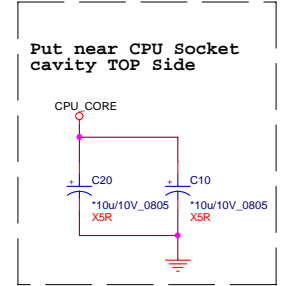
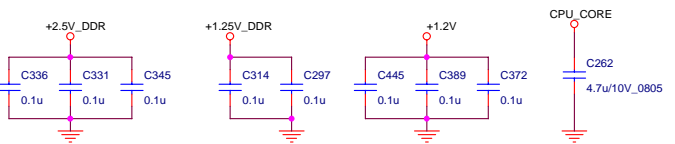
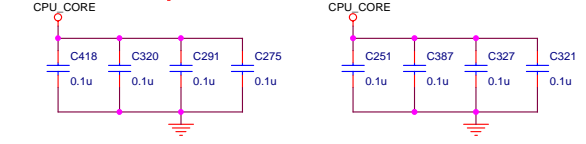
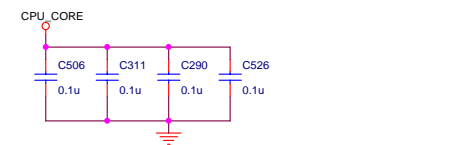
UNIWILL COMPUTER CORP.		
Title ATHLON64-DDR		
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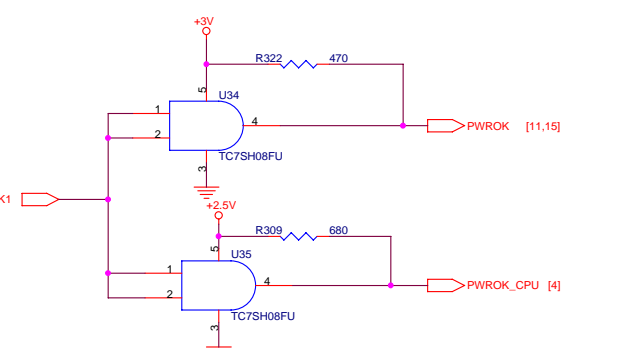
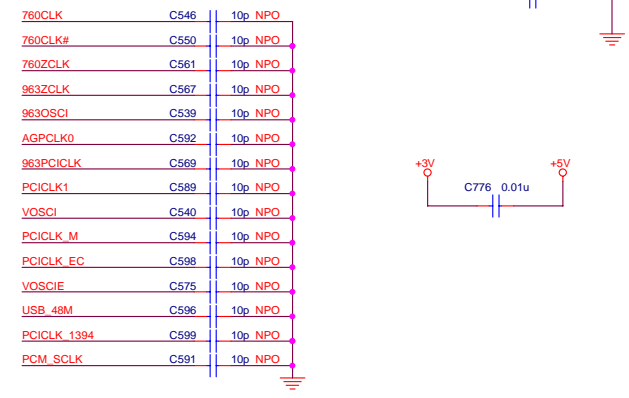
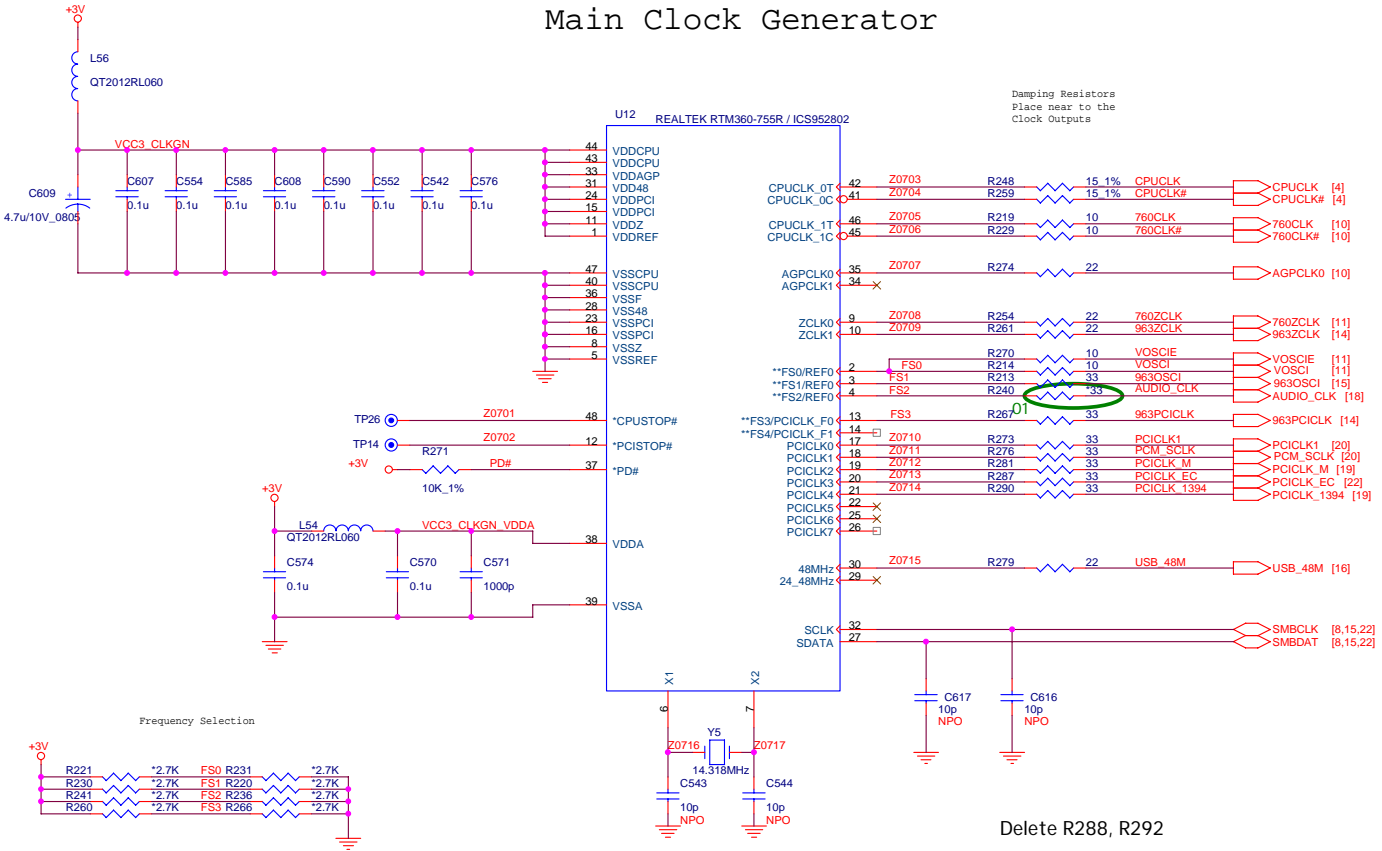
**Put near Socket**



**Put on the Backside of the Processor**



# Main Clock Generator



Delete R288, R292

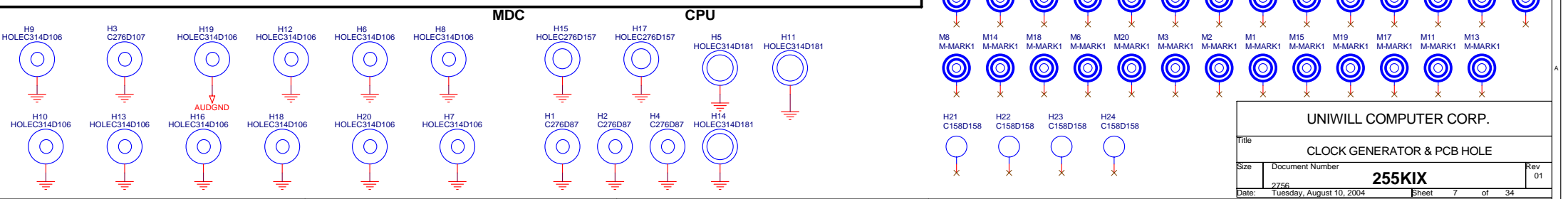
CLK Table for SiS755/760 ( For ICS-952802 )

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

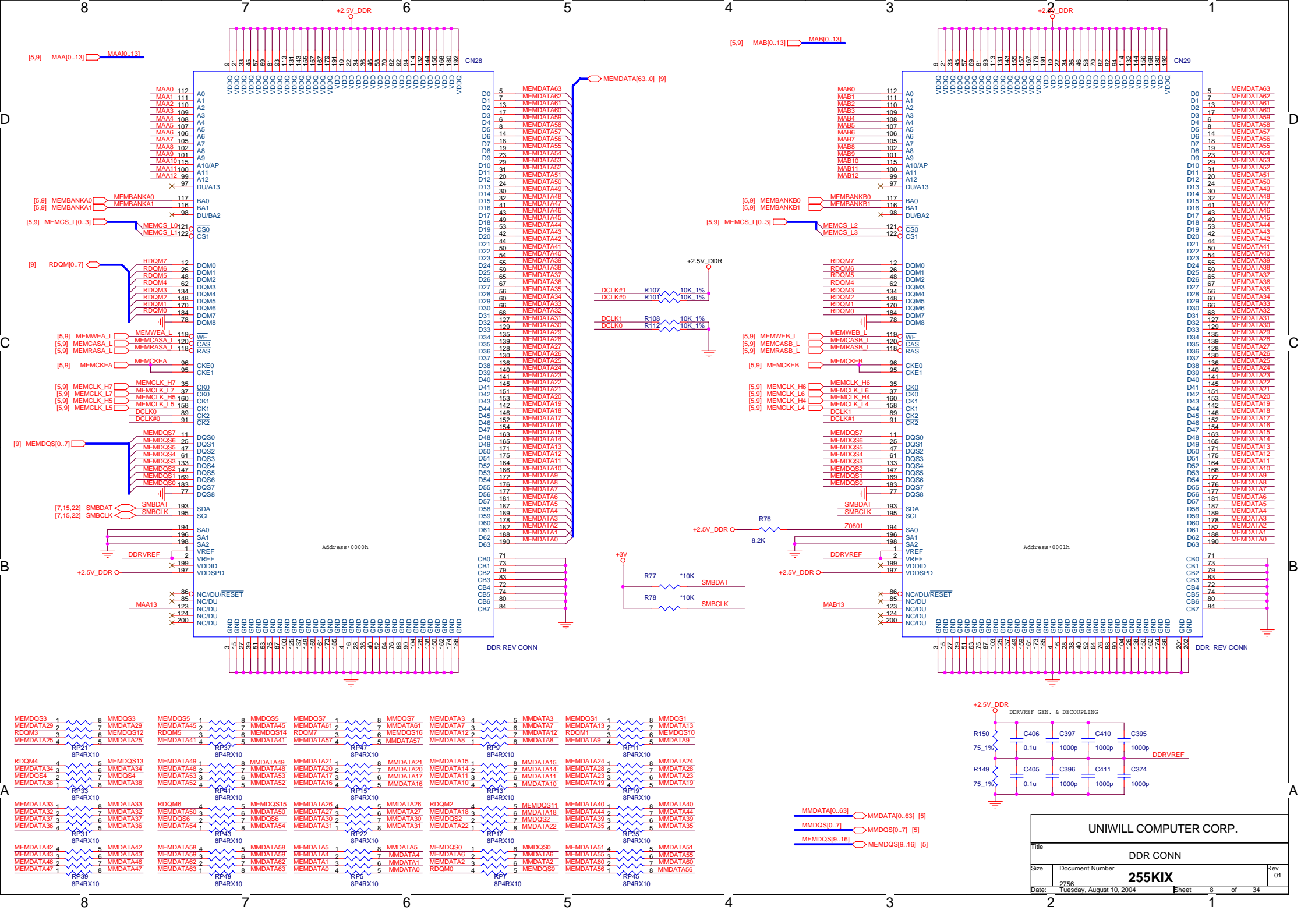
ICS 952802 Pin2 ( \*FS0 ) is internal pull up

\* internal pull up  
\*\* internal pull down

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



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Title: CLOCK GENERATOR & PCB HOLE  
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[5.9] MAA[0..13] MAA[0..13]

[5.9] MAB[0..13] MAB[0..13]

[5.9] MEMBANKA0 MEMBANKA0  
[5.9] MEMBANKA1 MEMBANKA1

[5.9] MEMBANKB0 MEMBANKB0  
[5.9] MEMBANKB1 MEMBANKB1

[5.9] MEMCS\_L[0..3] MEMCS\_L0122  
MEMCS\_L1122

[5.9] MEMCS\_L[0..3] MEMCS\_L2  
MEMCS\_L3

[9] RDQM[0..7] RDQM7  
RDQM6  
RDQM5  
RDQM4  
RDQM3  
RDQM2  
RDQM1  
RDQM0

[5.9] MEMWEB\_L MEMWEB\_L  
[5.9] MEMCASB\_L MEMCASB\_L  
[5.9] MEMRASB\_L MEMRASB\_L

[5.9] MEMWEA\_L MEMWEA\_L  
[5.9] MEMCASA\_L MEMCASA\_L  
[5.9] MEMRASA\_L MEMRASA\_L

[5.9] MEMCKE\_B MEMCKE\_B  
[5.9] MEMCKE\_L MEMCKE\_L

[5.9] MEMCLK\_H7 MEMCLK\_H7  
[5.9] MEMCLK\_L7 MEMCLK\_L7  
[5.9] MEMCLK\_H5 MEMCLK\_H5  
[5.9] MEMCLK\_L5 MEMCLK\_L5

[5.9] MEMCKE\_B MEMCKE\_B  
[5.9] MEMCKE\_L MEMCKE\_L

[9] MEMDQS[0..7] MEMDQS7  
MEMDQS6  
MEMDQS5  
MEMDQS4  
MEMDQS3  
MEMDQS2  
MEMDQS1  
MEMDQS0

[5.9] MEMCKE\_B MEMCKE\_B  
[5.9] MEMCKE\_L MEMCKE\_L

[7.15.22] SMBDAT SMBDAT  
[7.15.22] SMBCLK SMBCLK

[5.9] MEMCKE\_B MEMCKE\_B  
[5.9] MEMCKE\_L MEMCKE\_L

DDRREF  
VREF  
VDDID  
VDDSPD

[5.9] MEMCKE\_B MEMCKE\_B  
[5.9] MEMCKE\_L MEMCKE\_L

MAA13

[5.9] MEMCKE\_B MEMCKE\_B  
[5.9] MEMCKE\_L MEMCKE\_L

MEMDQS3 MMDQS3  
MEMDATA29 MMDATA29  
RDQM3 MMDQS16  
MEMDATA25 MMDATA25

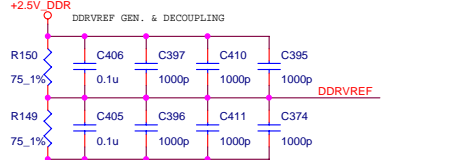
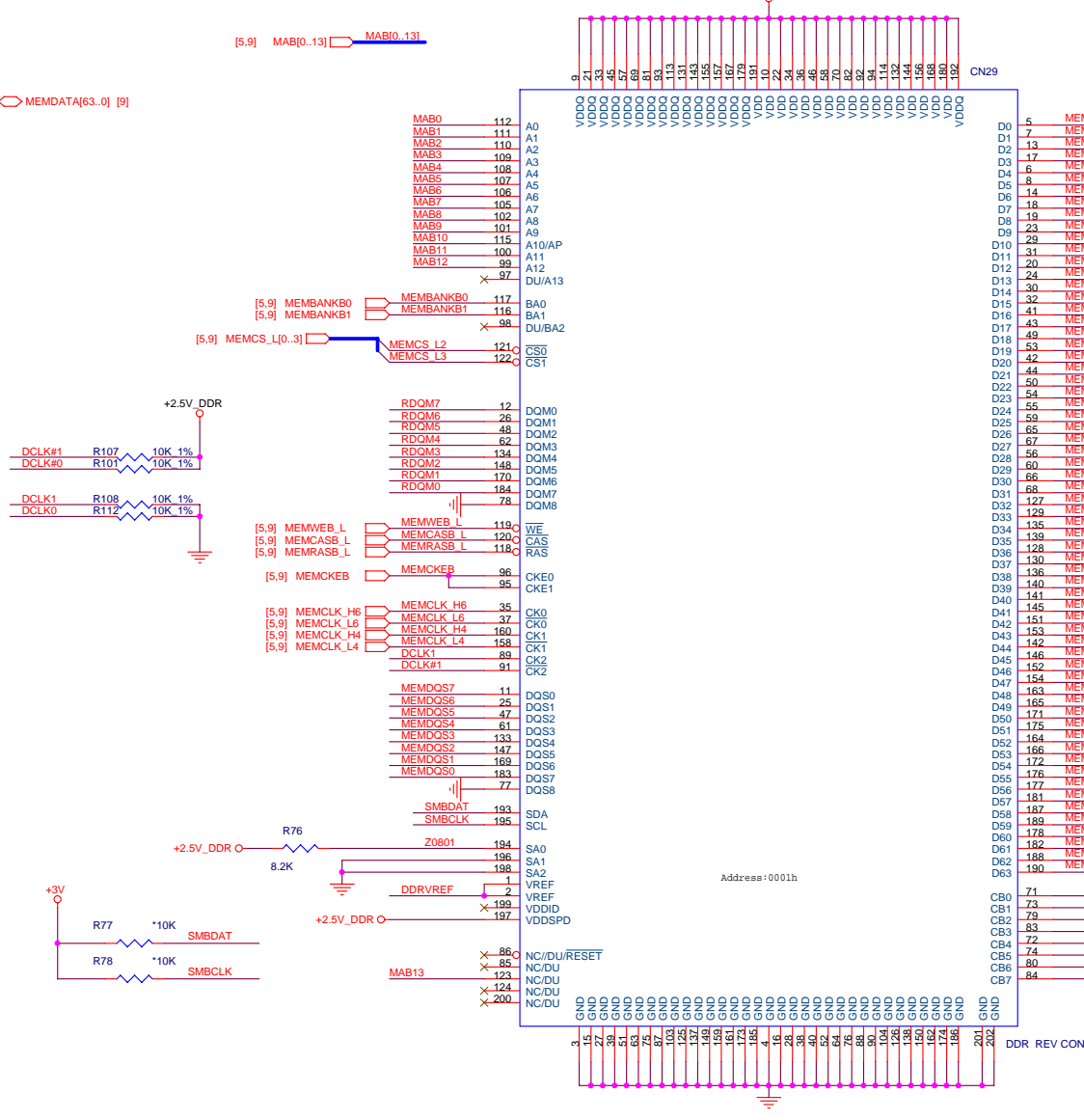
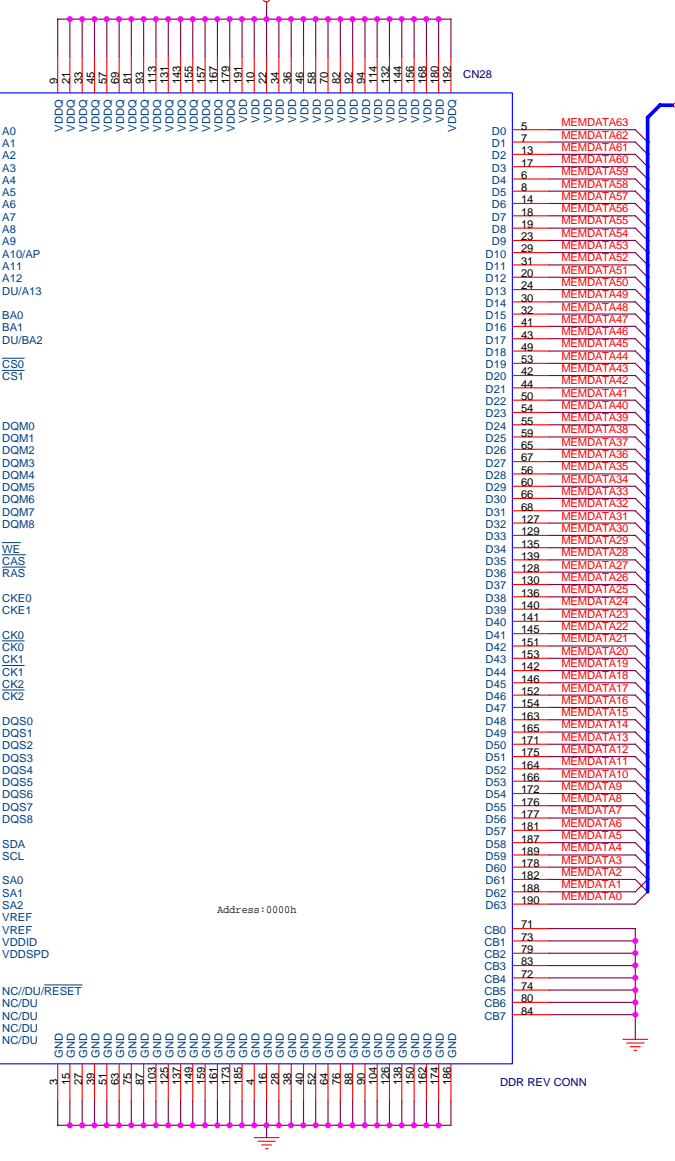
RDQM4 MMDQS13  
MEMDATA34 MMDATA34  
MEMDQS4 MMDQS14  
MEMDATA38 MMDATA38

MEMDATA33 MMDATA33  
MEMDATA32 MMDATA32  
MEMDATA37 MMDATA37  
MEMDATA36 MMDATA36

MEMDATA42 MMDATA42  
MEMDATA43 MMDATA43  
MEMDATA46 MMDATA46  
MEMDATA47 MMDATA47

MEMDATA58 MMDATA58  
MEMDATA59 MMDATA59  
MEMDATA63 MMDATA63

MEMDATA58 MMDATA58  
MEMDATA59 MMDATA59  
MEMDATA63 MMDATA63



MMDATA[0..63] MMDATA[0..63] [5]

MMDQS[0..7] MMDQS[0..7] [5]

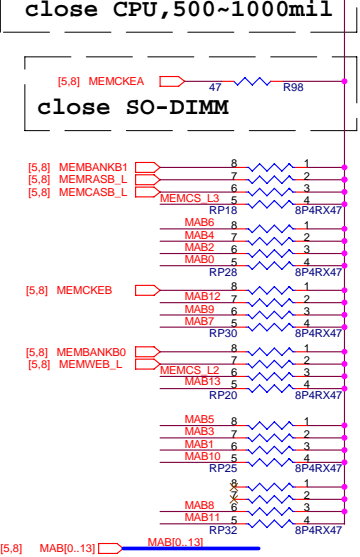
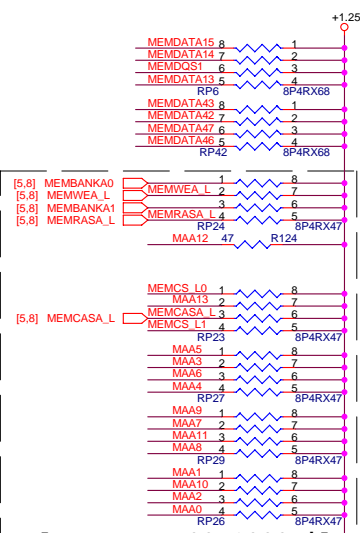
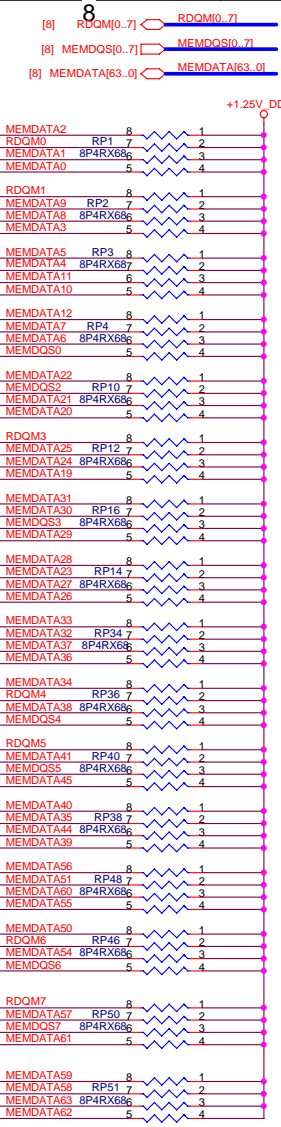
MMDQS[9..16] MMDQS[9..16] [5]

MMDATA[0..63] MMDATA[0..63] [5]

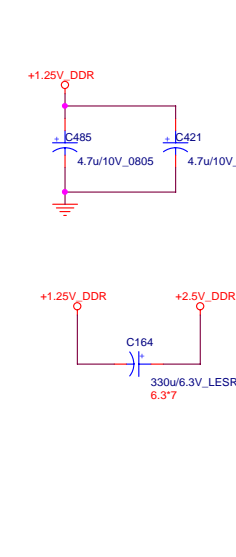
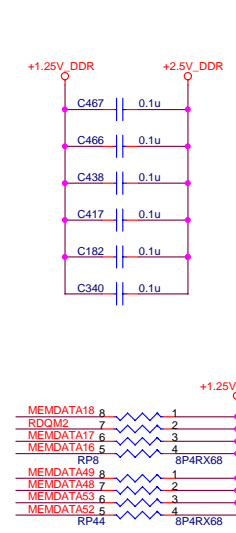
MMDQS[0..7] MMDQS[0..7] [5]

MMDQS[9..16] MMDQS[9..16] [5]

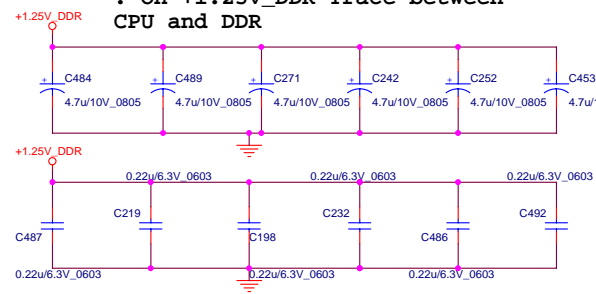




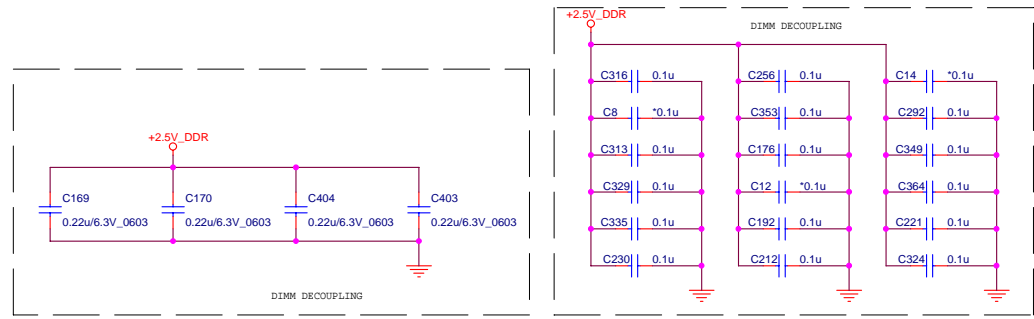
close CPU,500~1000mil



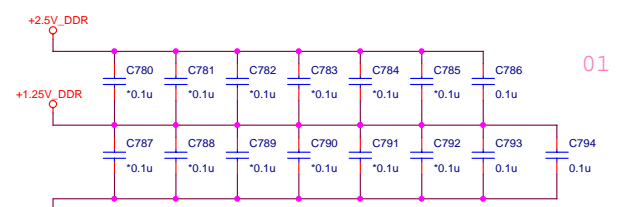
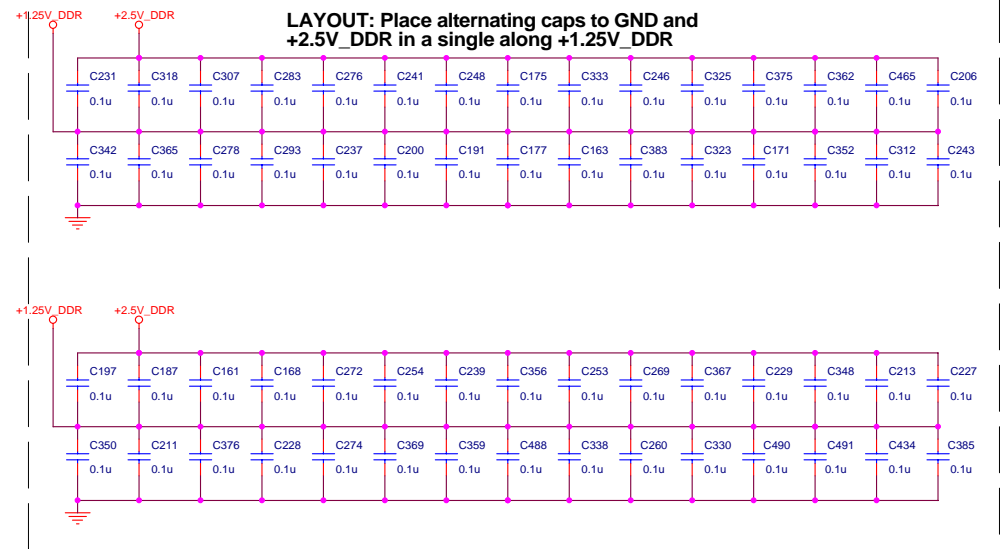
Layout: Place a Cap every 1 IN . On +1.25V\_DDR Trace between CPU and DDR



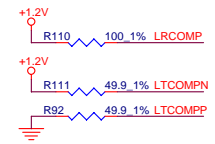
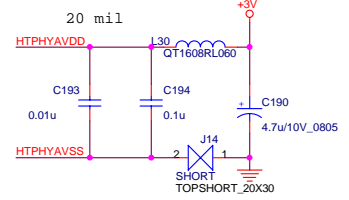
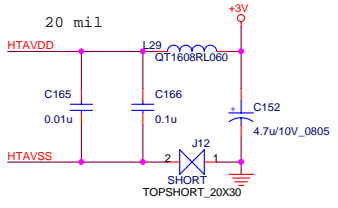
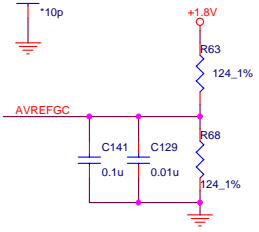
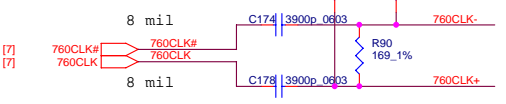
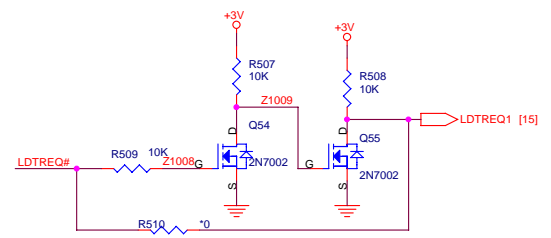
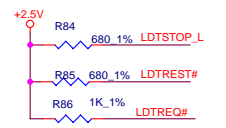
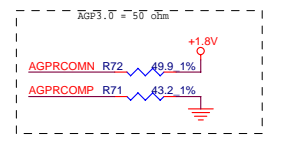
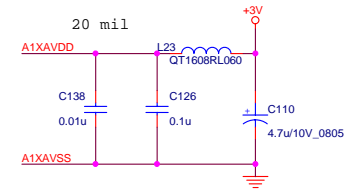
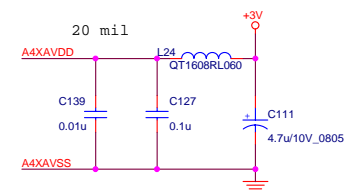
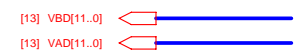
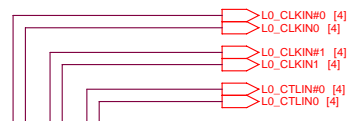
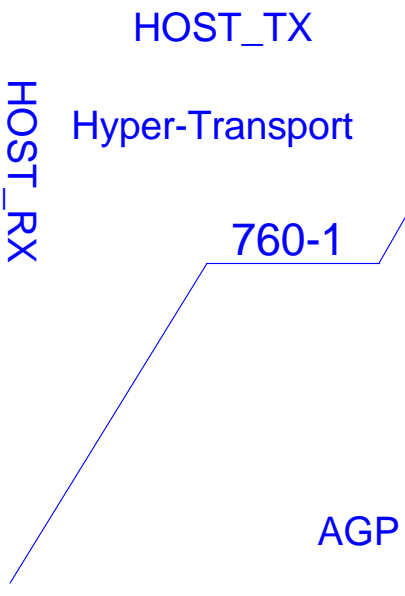
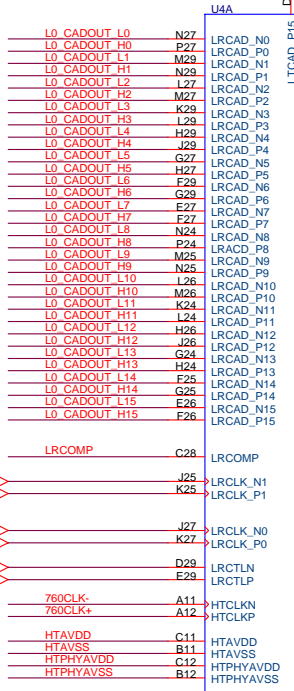
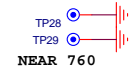
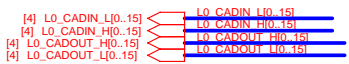
PUT near CPU (<500 MIL)



LAYOUT: Place alternating caps to GND and +2.5V\_DDR in a single along +1.25V\_DDR

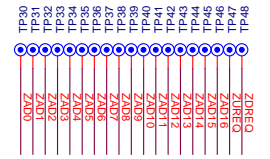
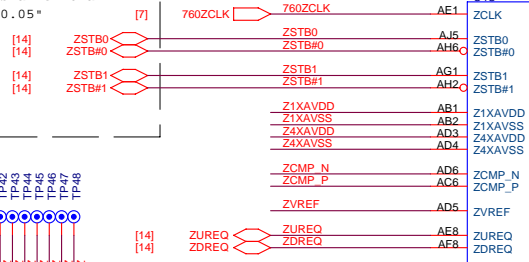


UNIWILL COMPUTER CORP.			
Title <b>DDR Termination Resistors</b>			
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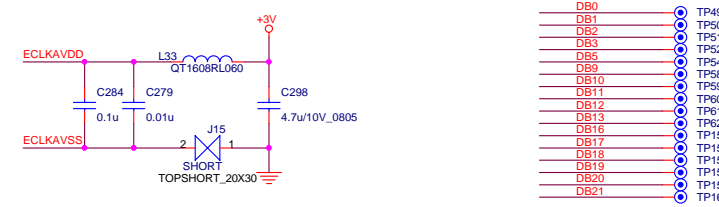
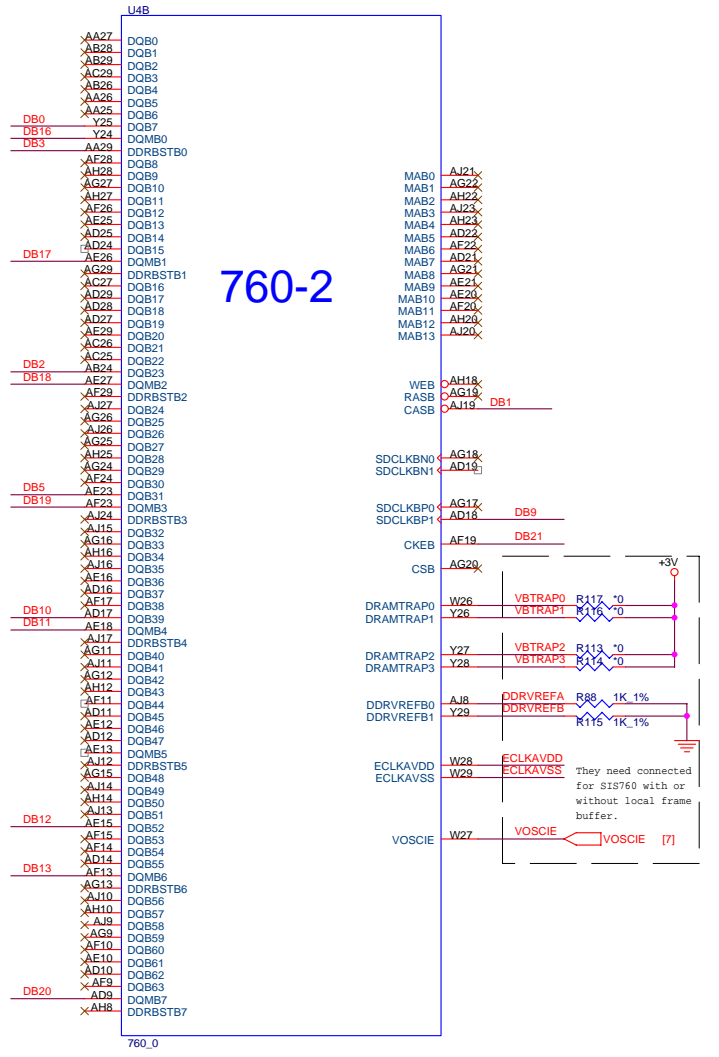
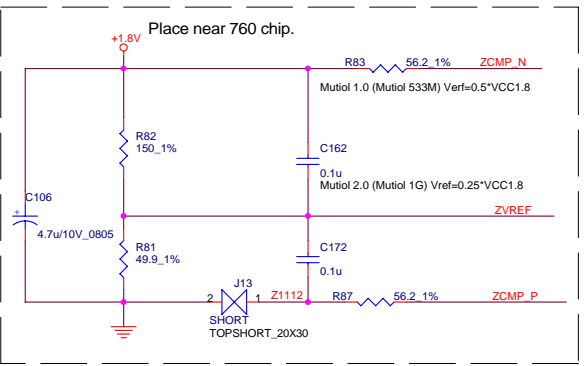
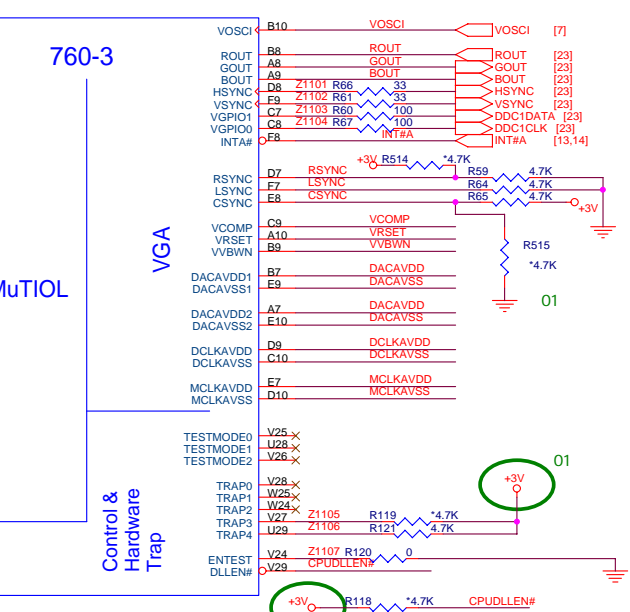
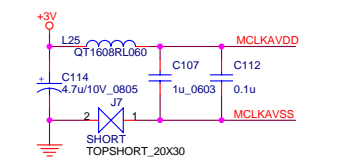
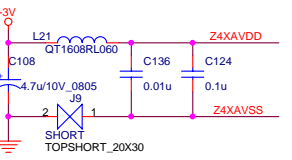
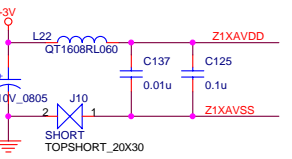
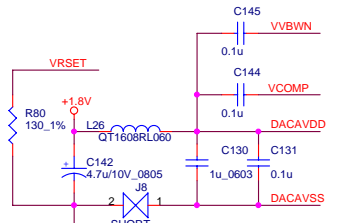
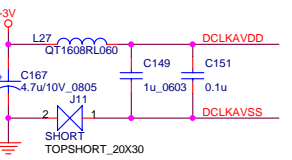
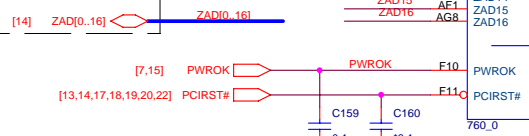


<b>UNIWILL COMPUTER CORP.</b>		
<b>SIS760 HOST &amp; AGP BUS</b>		
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The differences between the traces of MuTIOL Strobes and Data should be smaller than 0.05"

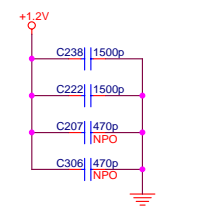
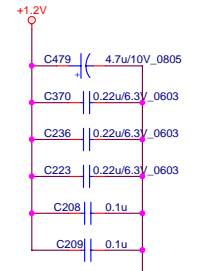
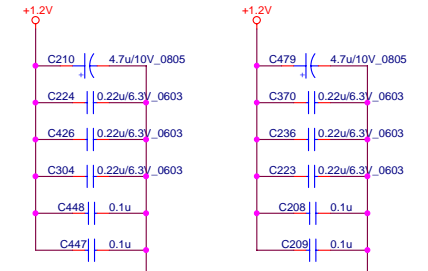
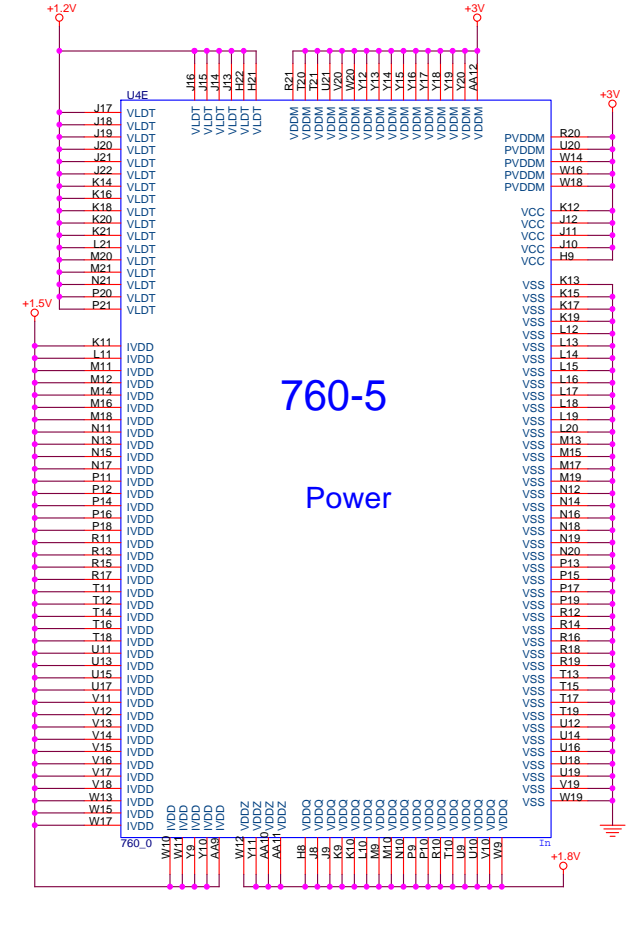
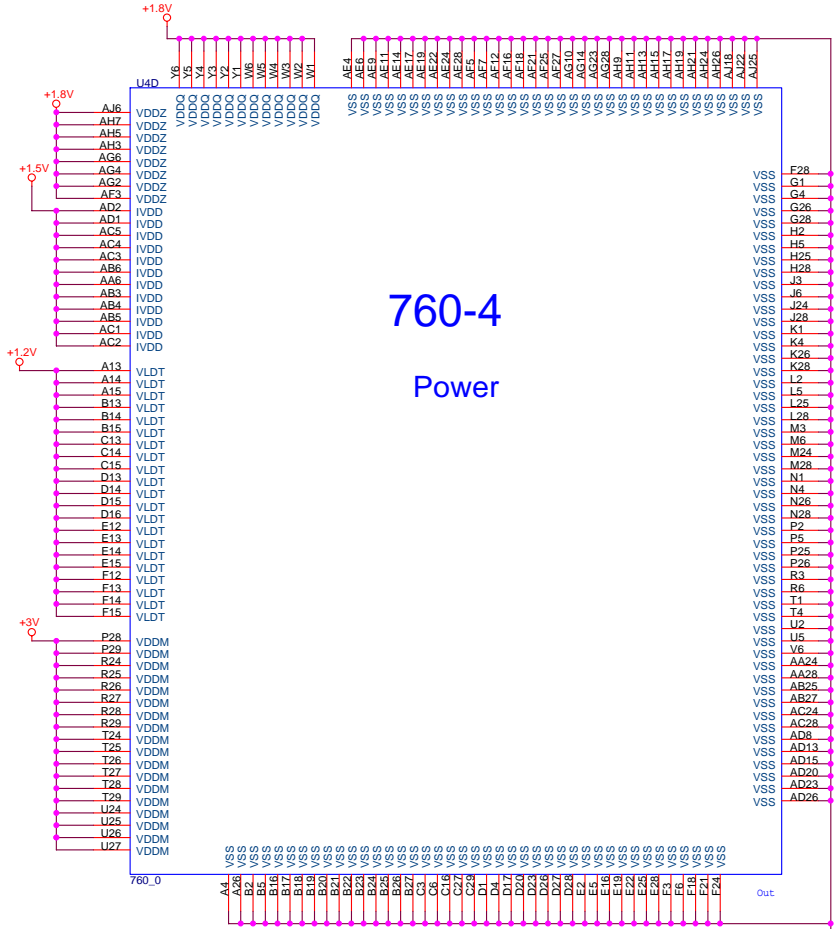


The differences between the traces of MuTIOL Strobes and Data should be smaller than 0.05"

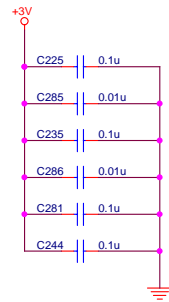
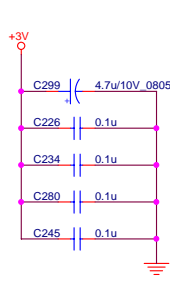
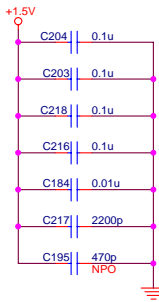
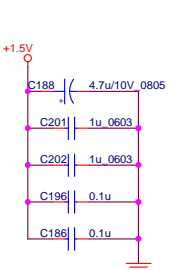
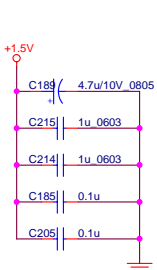
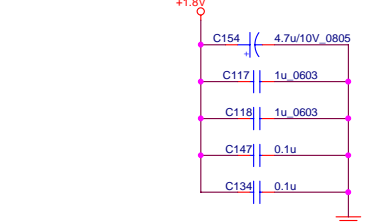
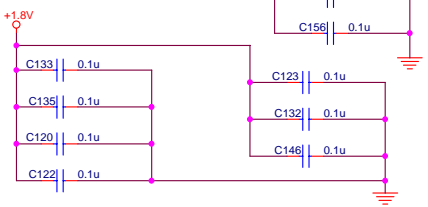
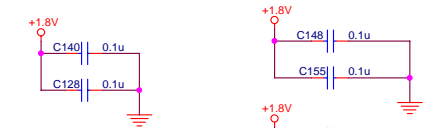


- DB0 TP49
- DB1 TP50
- DB2 TP51
- DB3 TP52
- DB5 TP53
- DB6 TP54
- DB8 TP55
- DB9 TP56
- DB10 TP57
- DB11 TP58
- DB12 TP59
- DB16 TP60
- DB17 TP61
- DB18 TP62
- DB19 TP63
- DB20 TP64
- DB21 TP65

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Title	SIS760 MUTIOL&HW TRAP	
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Place these capacitors under 760 solder side.

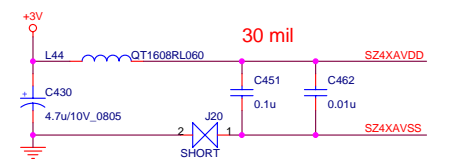
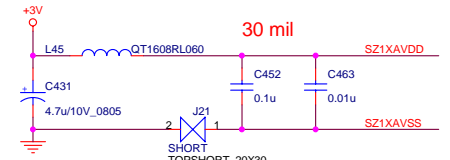
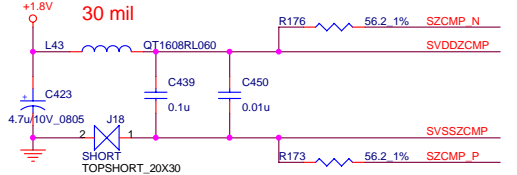
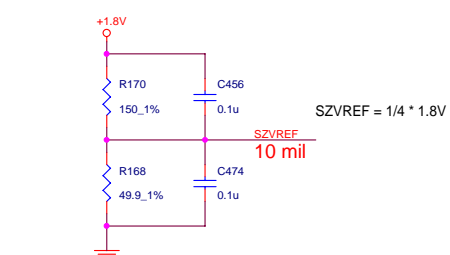
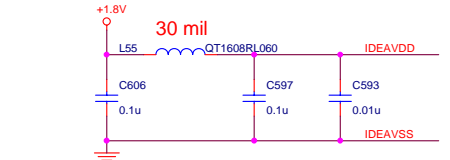
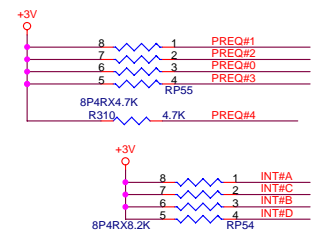
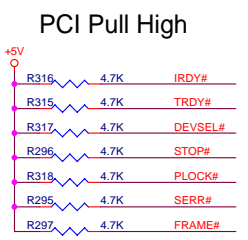
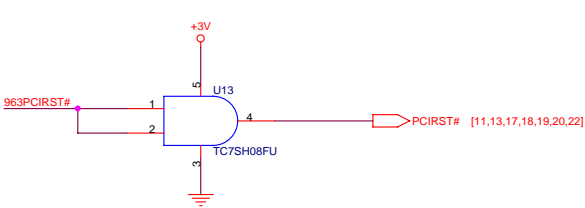
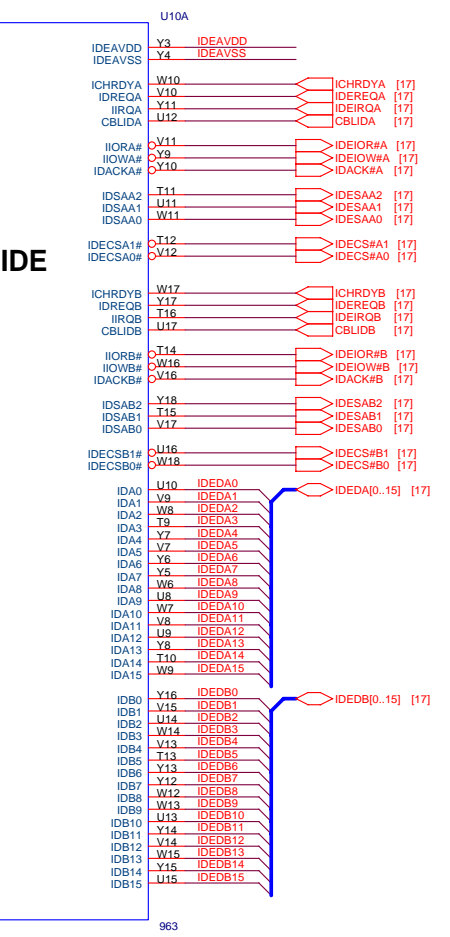
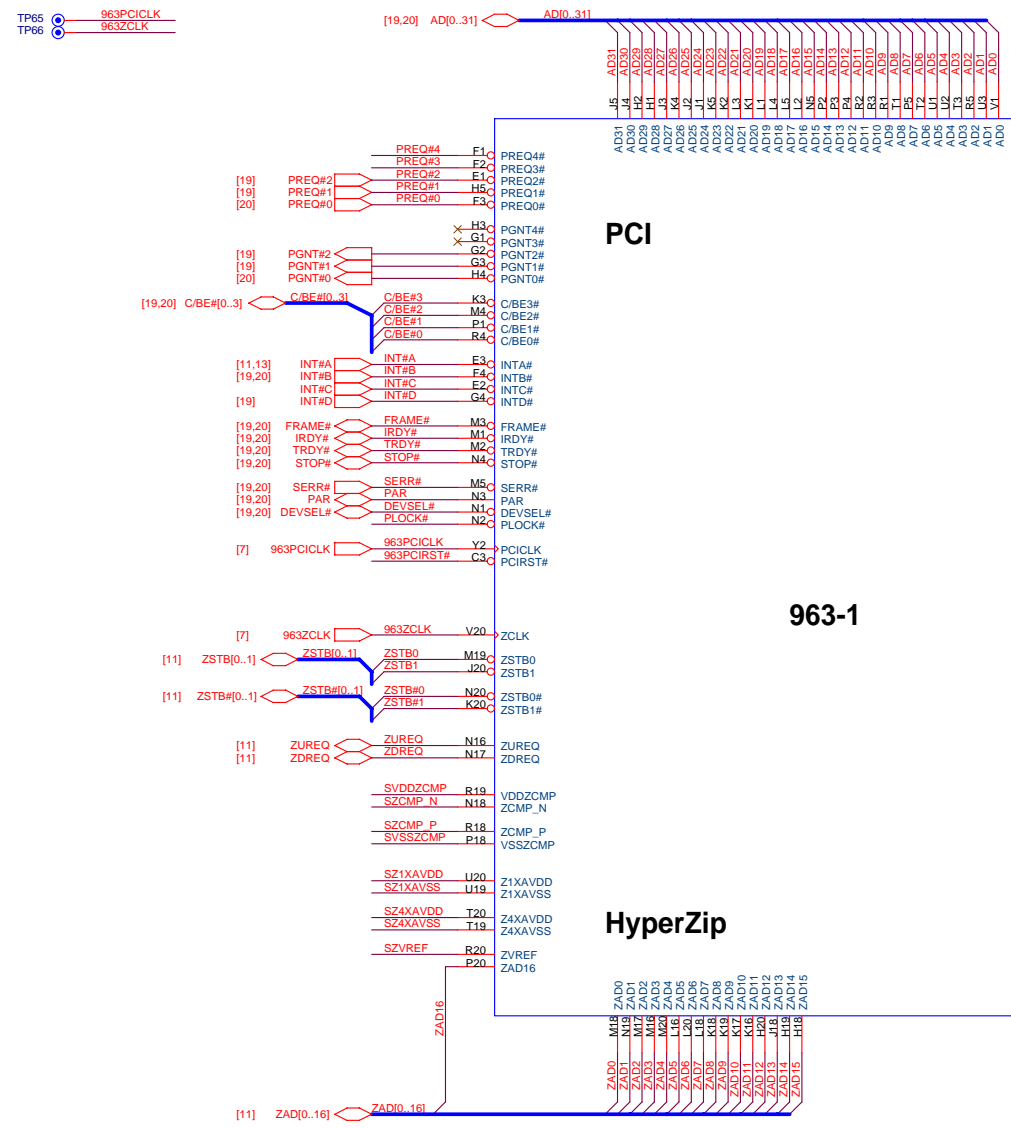


UNIWILL COMPUTER CORP.

Title			Rev 01
SIS760 PWR&GROUND			
Size	Document Number		
	2756	255KIX	
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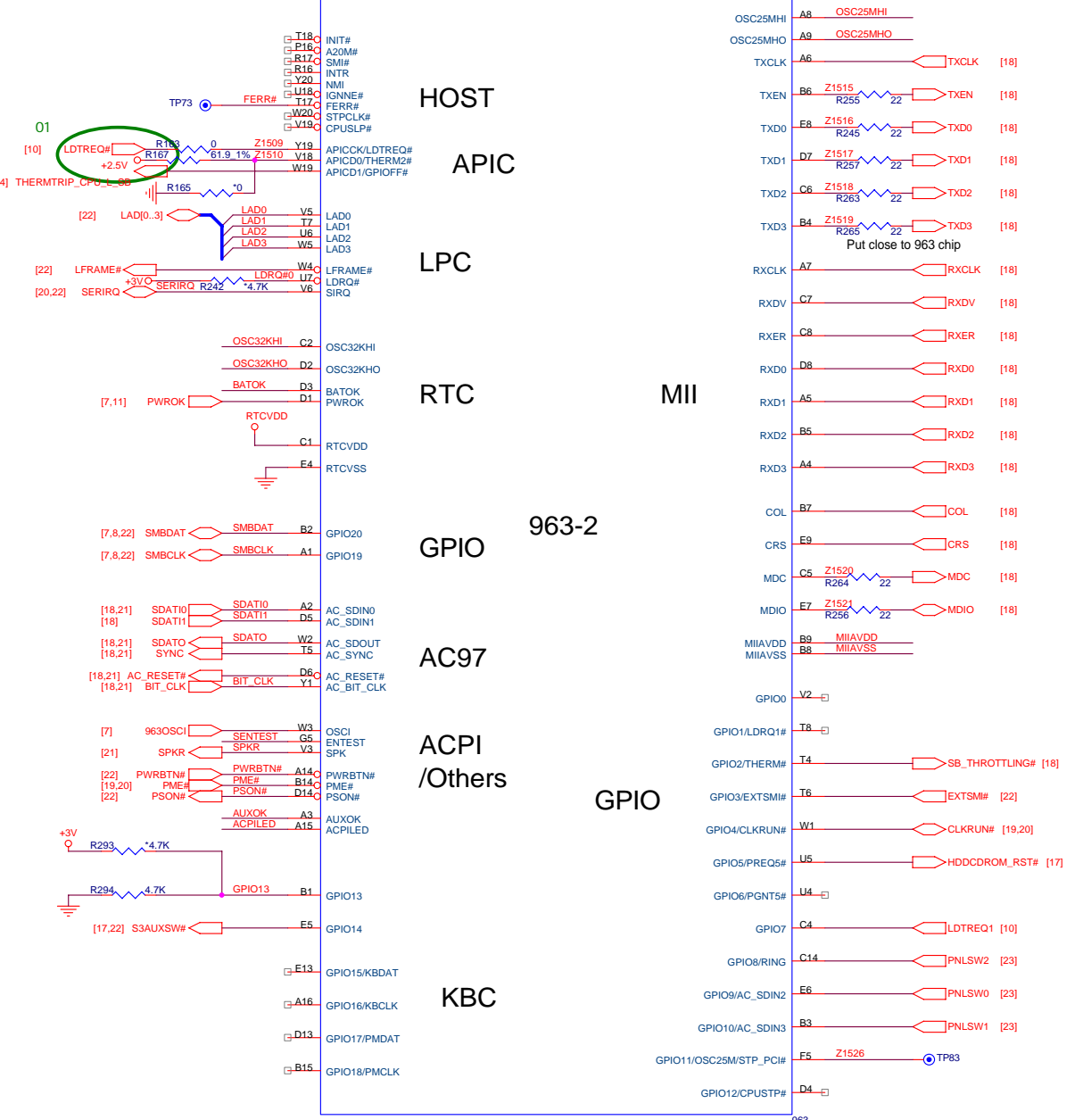


**SOUTH BRIDGE -1**

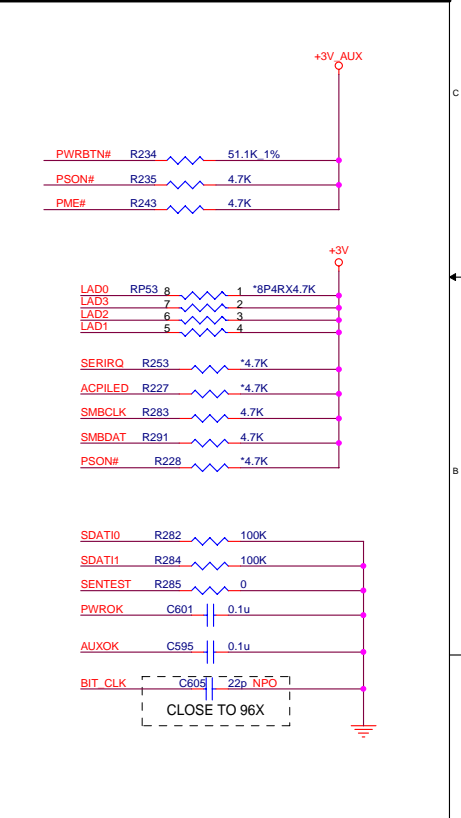
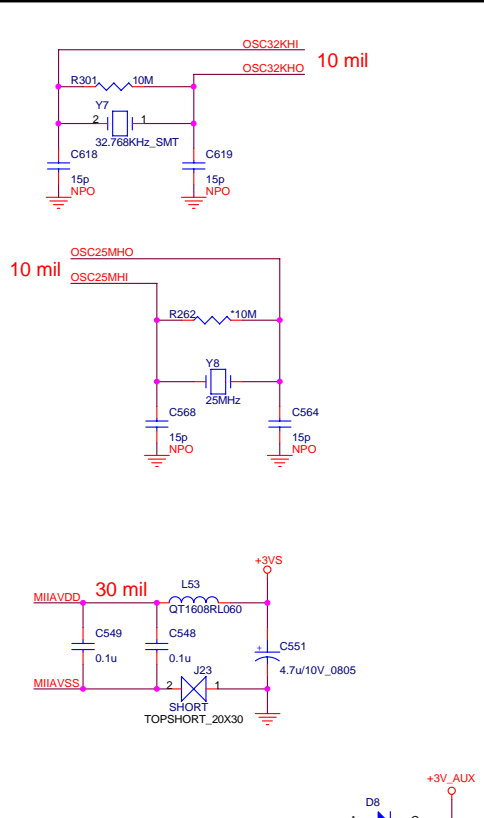
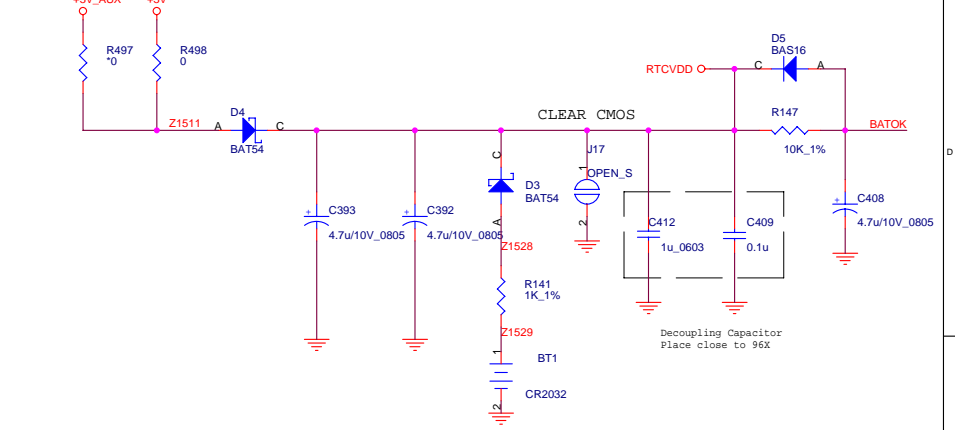


UNIWILL COMPUTER CORP.		
Title		
SIS963L(HYPERZIP & PCI & IDE)		
Size	Document Number	Rev
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**SOUTH BRIDGE -2**

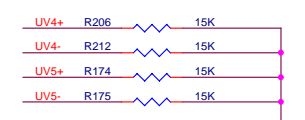
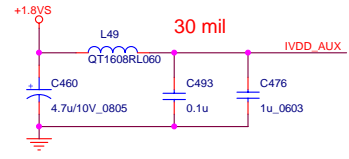
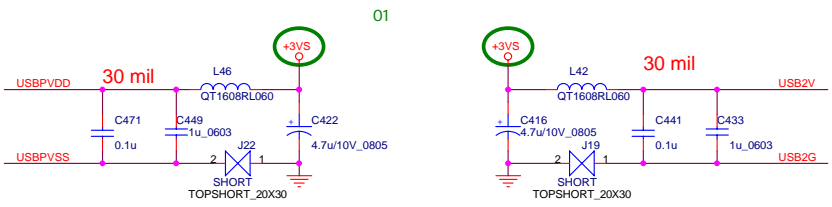
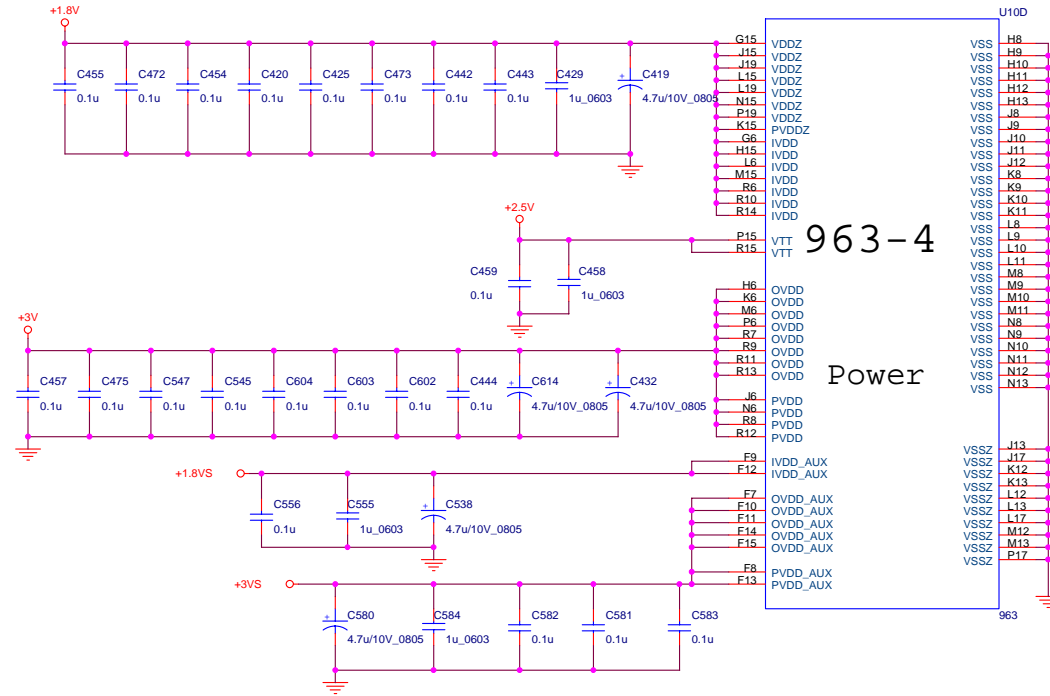
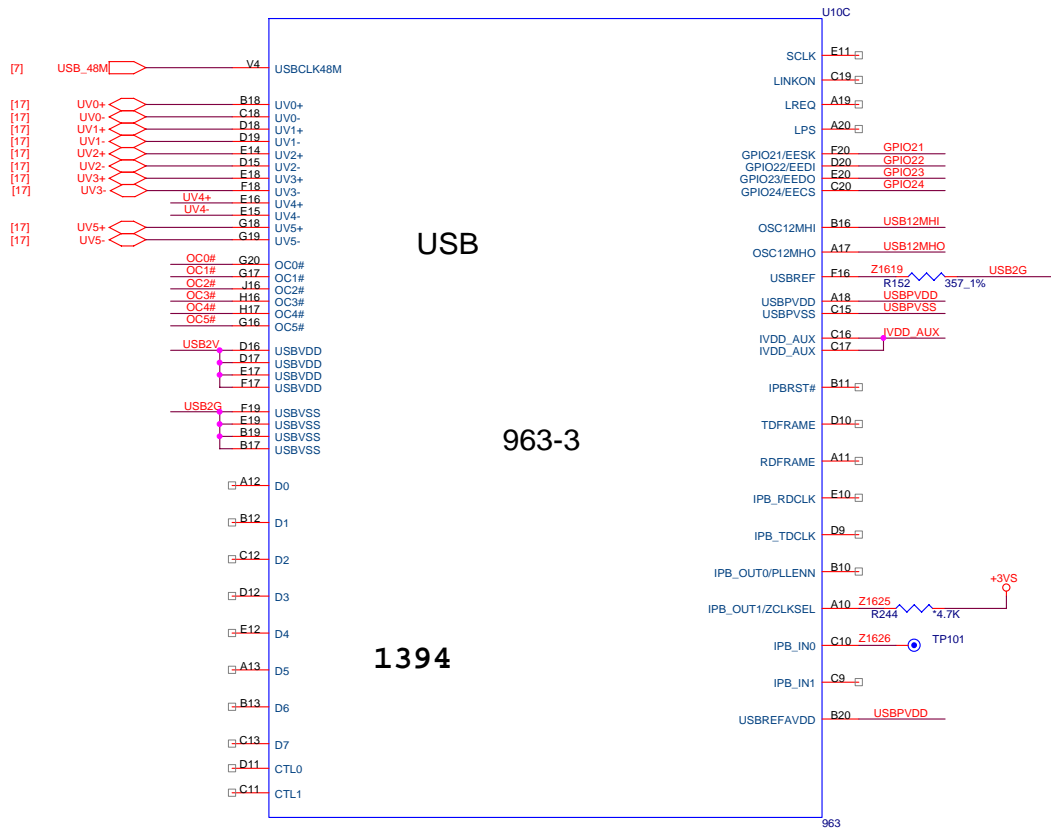


**RTC**

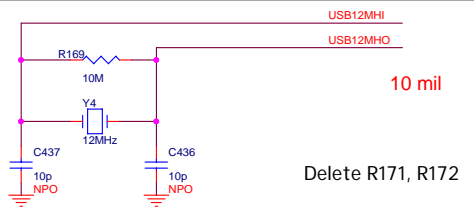
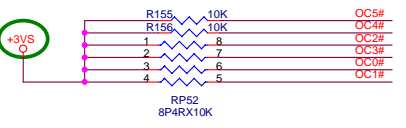
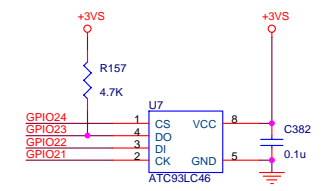


<b>UNIWILL COMPUTER CORP.</b>		
Title		
<b>SIS963L(GPIO &amp; HOST &amp; LPC &amp; APIC &amp; AC97 &amp; MII &amp; ACPI)</b>		
Size	Document Number	Rev
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# SOUTH BRIDGE -3/4



## LAN EEPROM



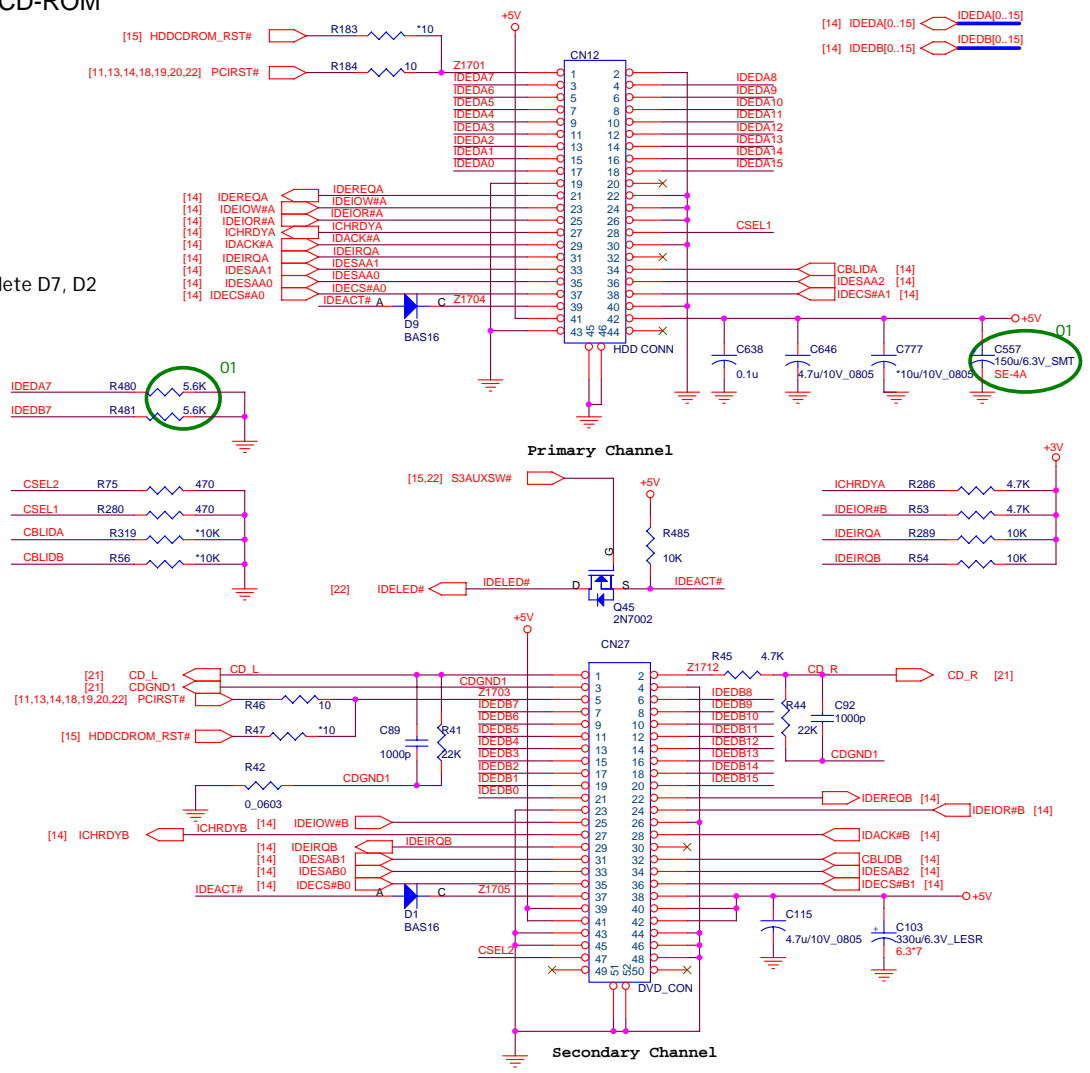
UNIWILL COMPUTER CORP.

Title: <b>SIS963L(POWER &amp; USB &amp; 1394)</b>		
Size: 2756	Document Number: <b>255KIX</b>	Rev: 01
Date: Tuesday, August 10, 2004	Sheet: 16	of 34

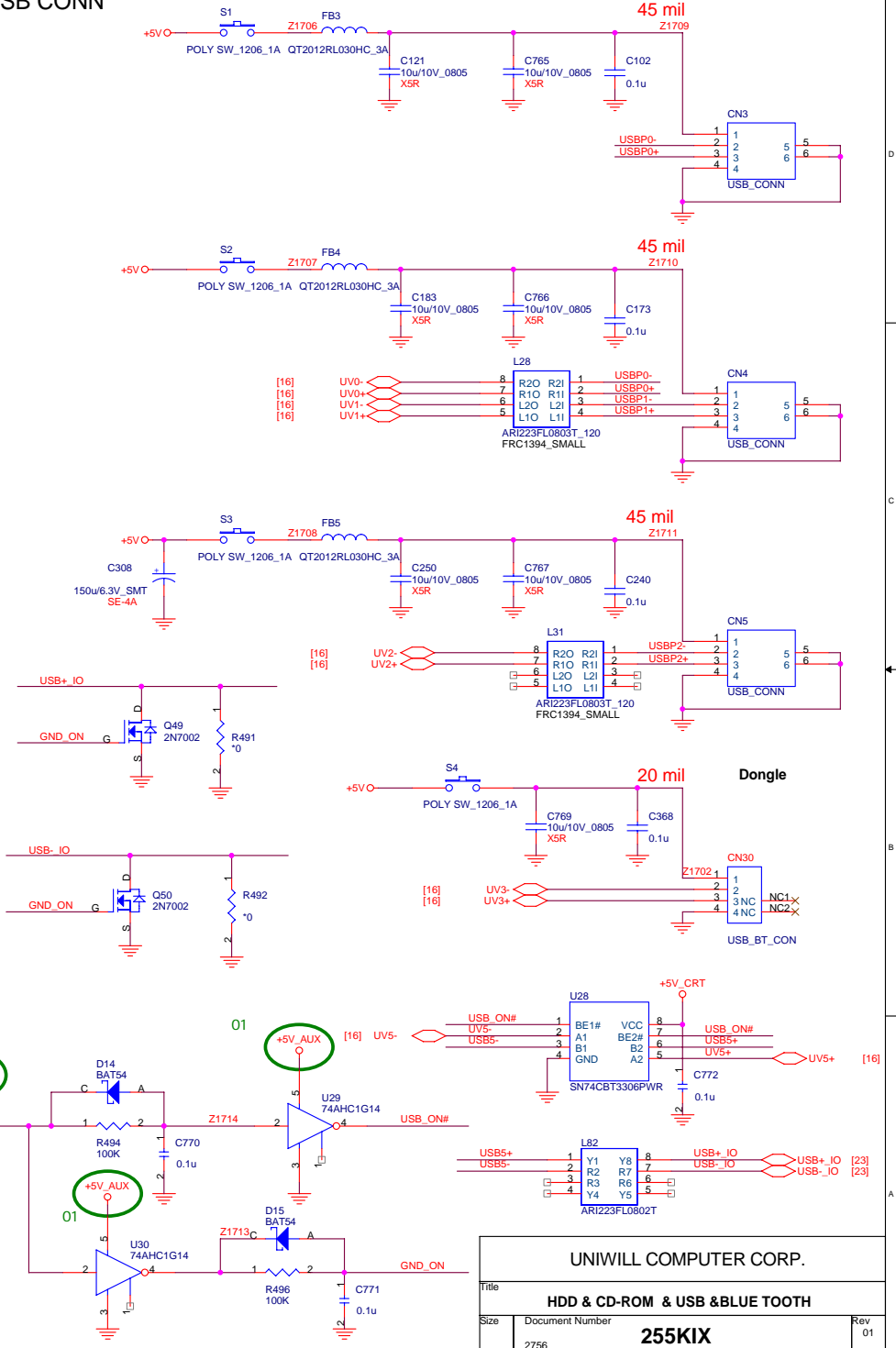


**HDD & CD-ROM**

Delete D7, D2

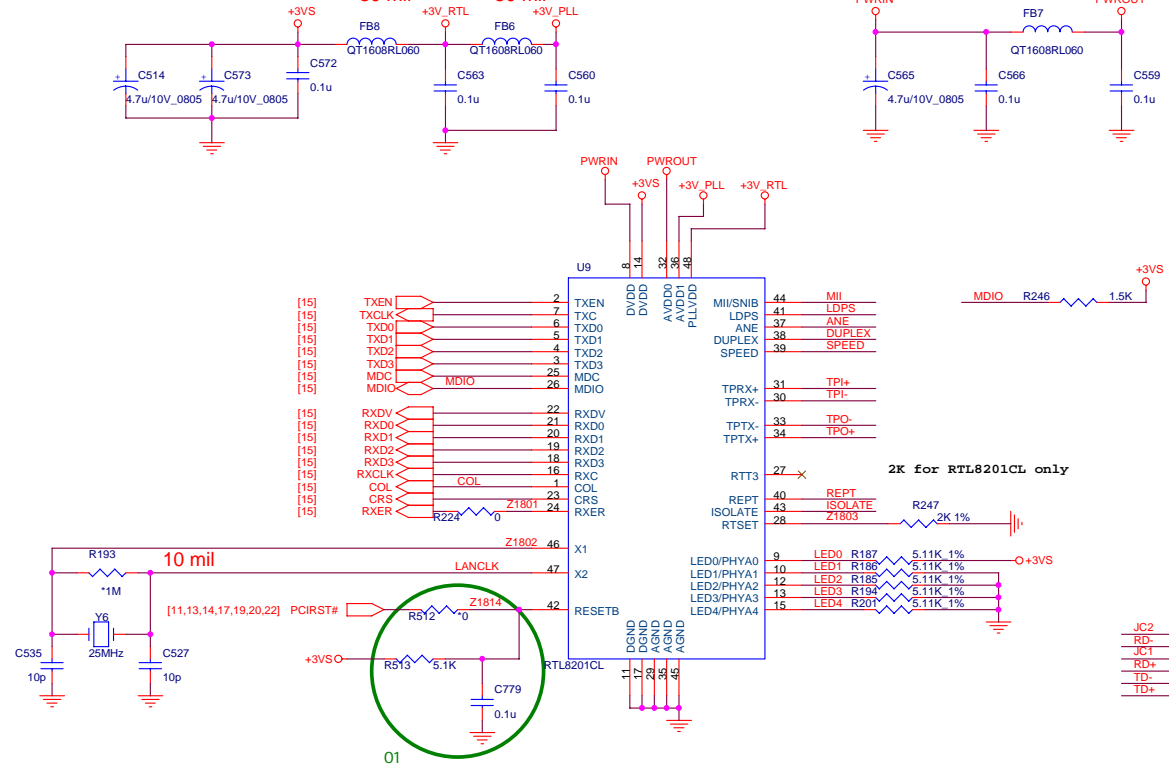


**USB CONN**

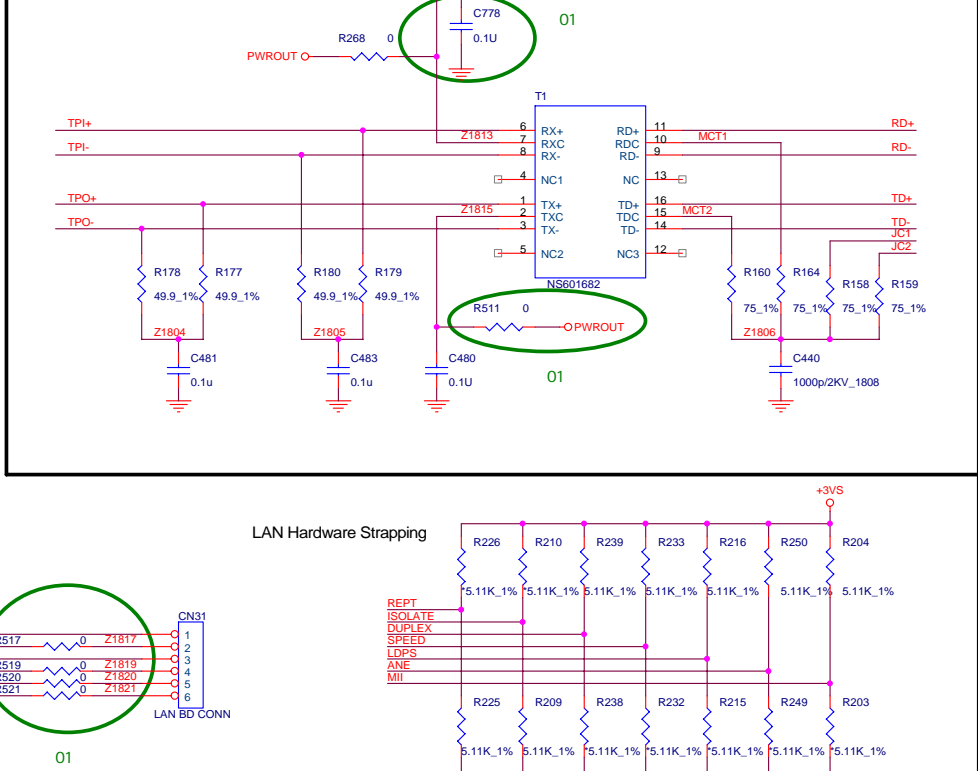


<b>UNIWILL COMPUTER CORP.</b>			
Title	<b>HDD &amp; CD-ROM &amp; USB &amp; BLUE TOOTH</b>		
Size	Document Number	<b>255KIX</b>	
	2756		Rev 01
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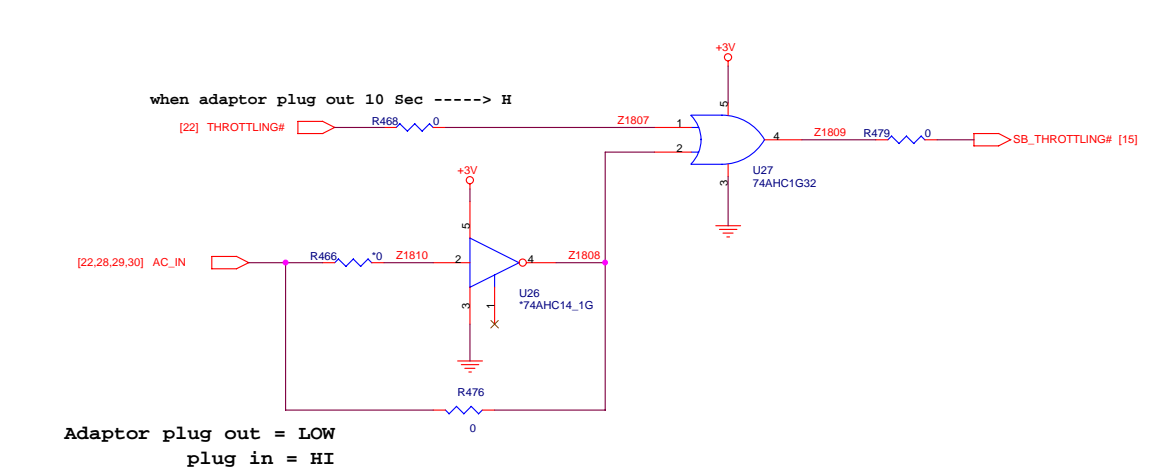
**LAN PHY**



**TRANSFORMER**

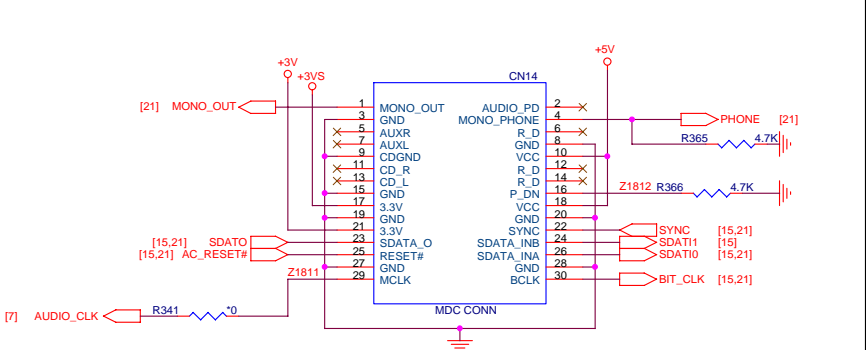


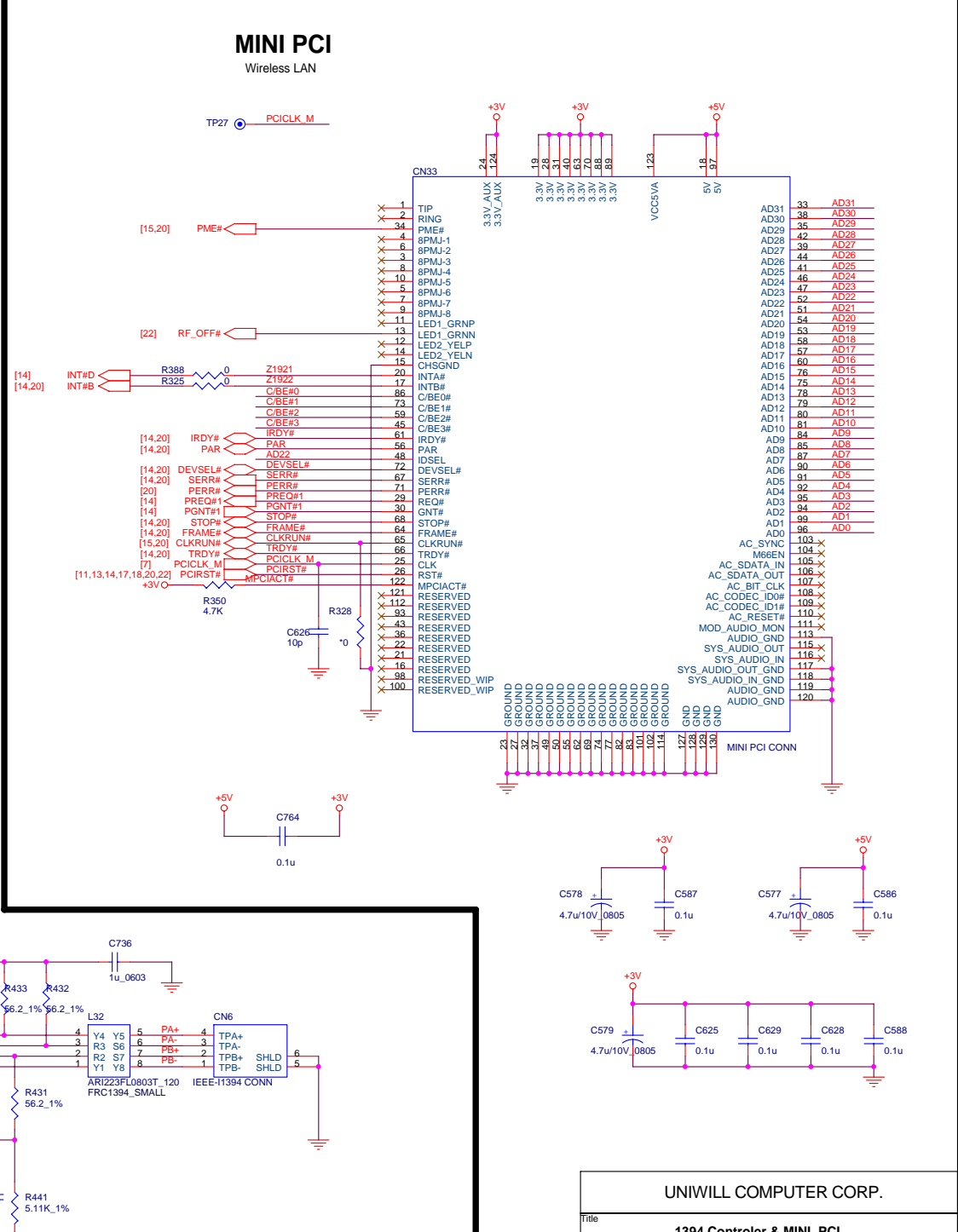
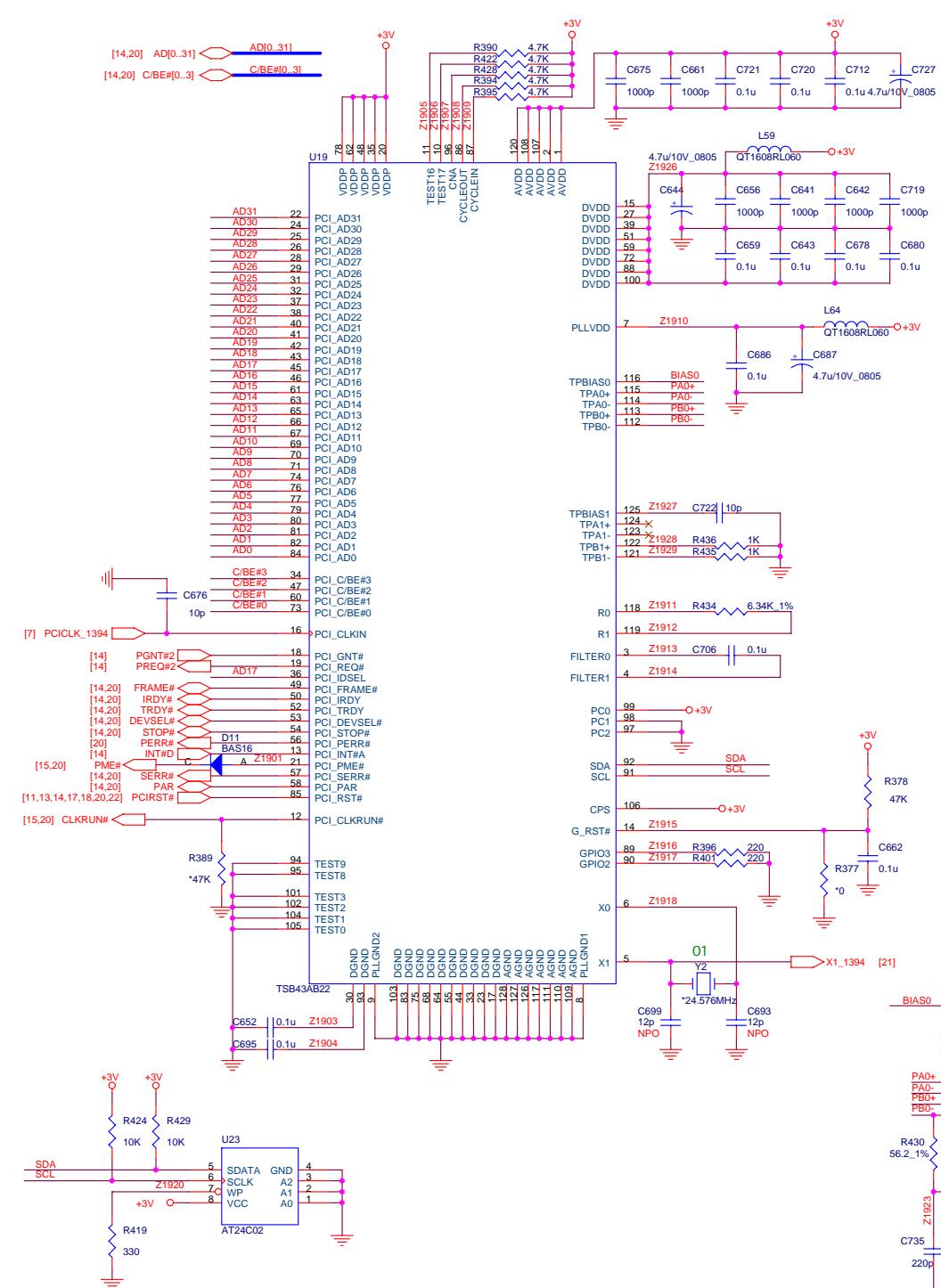
**AMD THROTTLING MODE CONTROL**



Adaptor plug out = LOW  
plug in = HI

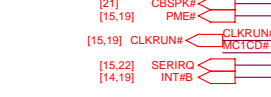
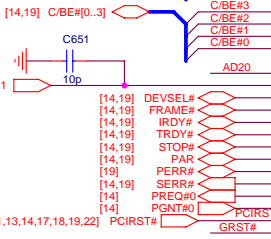
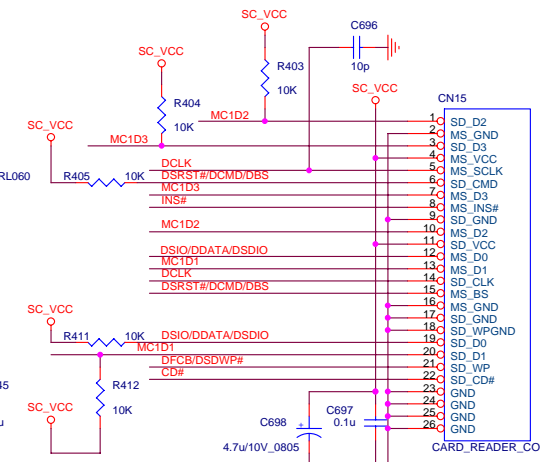
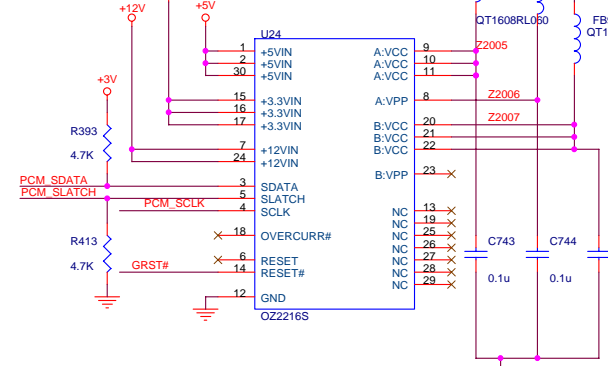
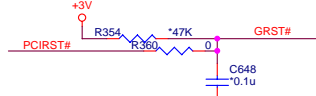
**MDC**



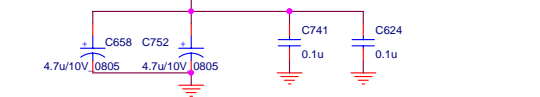
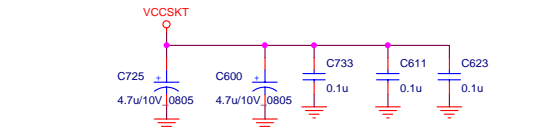
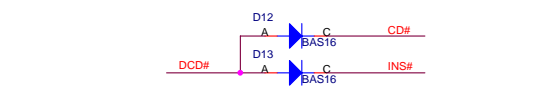
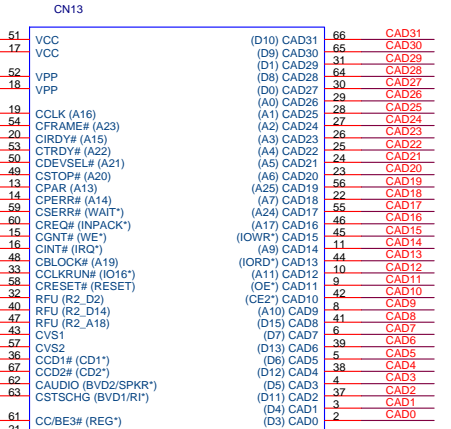
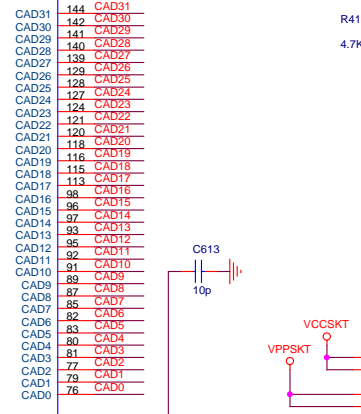


If an EEPROM is not implemented, then both the SDA and SCL pins should be connected GND with 220-ohm pull-down resistors

<b>UNIWILL COMPUTER CORP.</b>		
Title <b>1394 Controller &amp; MINI_PCI</b>		
Size	Document Number	Rev
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Date:	Tuesday, August 10, 2004	Sheet 19 of 34

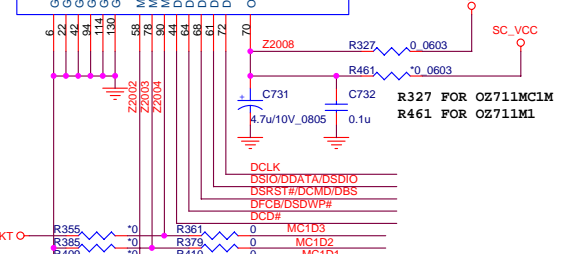


# O<sub>2</sub> MICRO OZ711MC1



**DEL R415 FOR OZ711M1  
DEL R408 FOR OZ711MC1**

CD#	R415	0
INS#	R408	0
DFCB/DSDWP#	R427	22K
CD#	R414	22K
DCD#	R406	22K
INS#	R407	22K
CLKRUN#	R426	22K
SERIRQ	R425	22K
CDEVSEL#	R300	22K
CSTOP#	R324	22K
CPERR#	R335	22K
CINT#	R298	22K
CBLOCK#	R334	22K



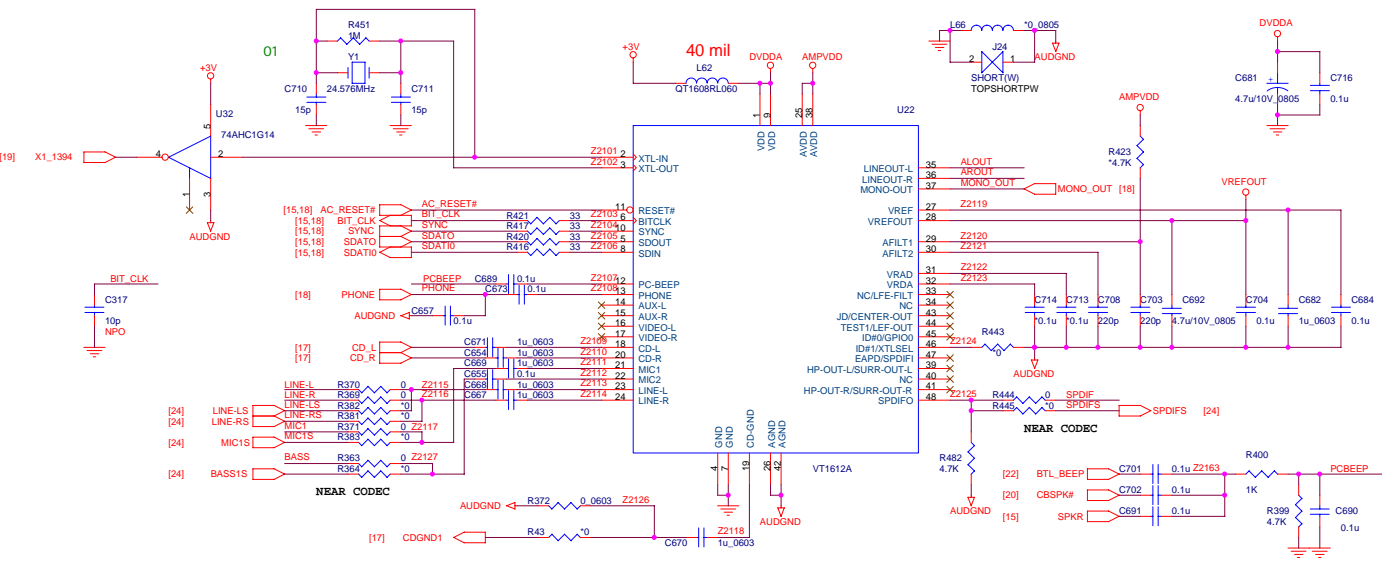
R361, R379, R410 FOR OZ711M1 (4bit Mode)  
R355, R385, R409 FOR OZ711M1 (1bit Mode)

**UNIWILL COMPUTER CORP.**

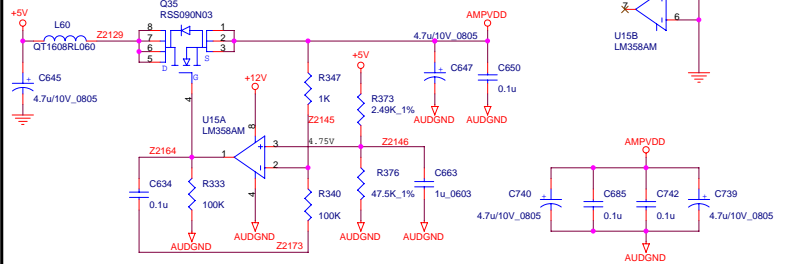
Title: **CARDBUS OZ711M1**

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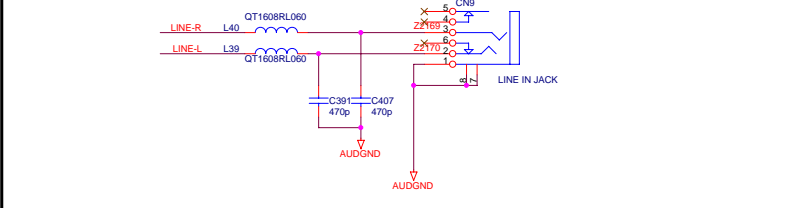
**AUDIO CODEC**



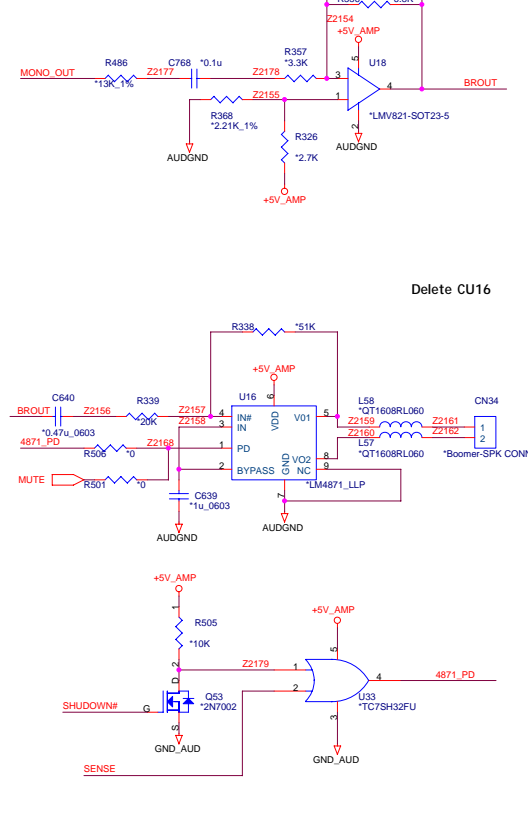
**AMP VDD**



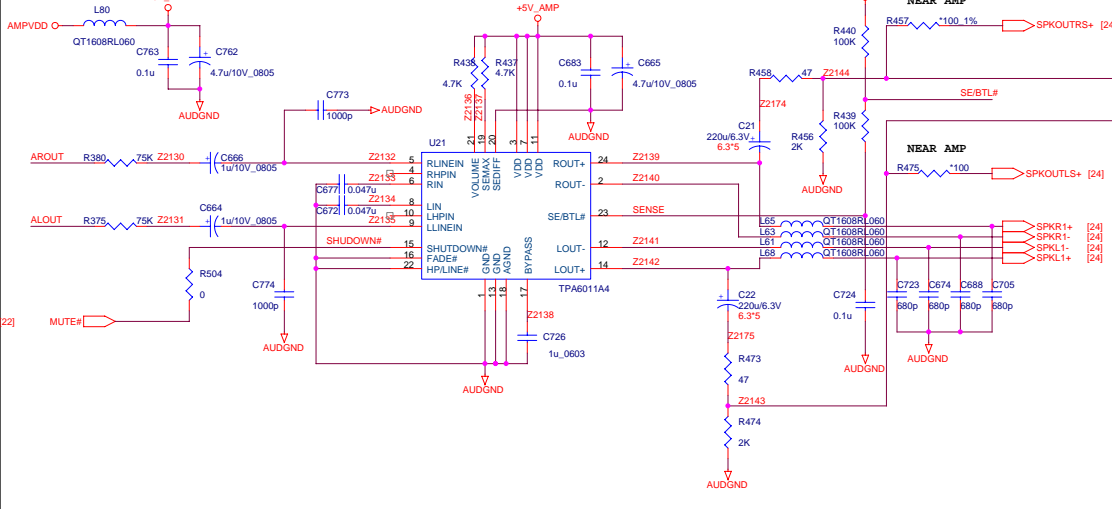
**LINE IN**



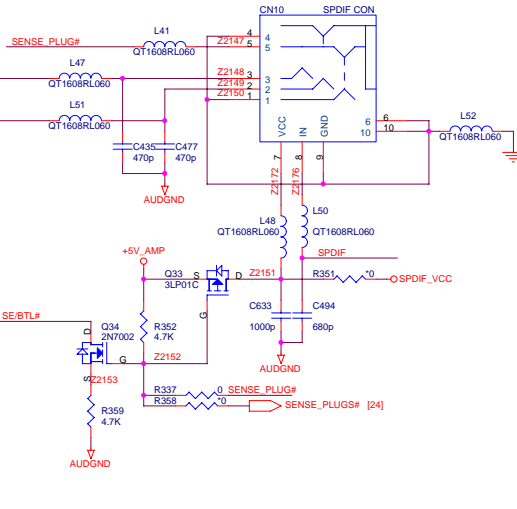
**Sub. Boonmer**



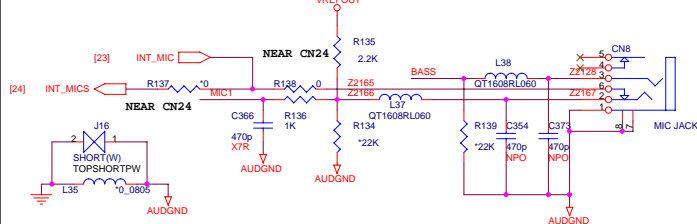
**AMP & SPEAKER**



**LINE OUT/SPDIF OUT**



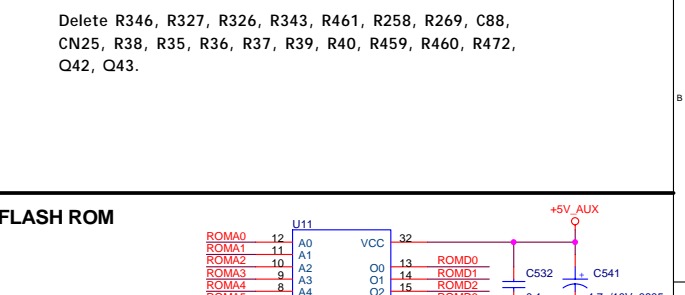
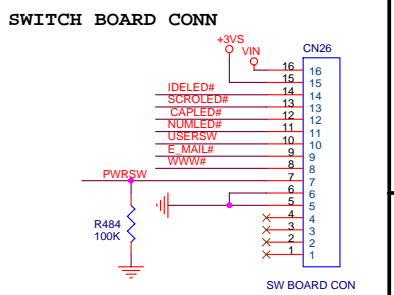
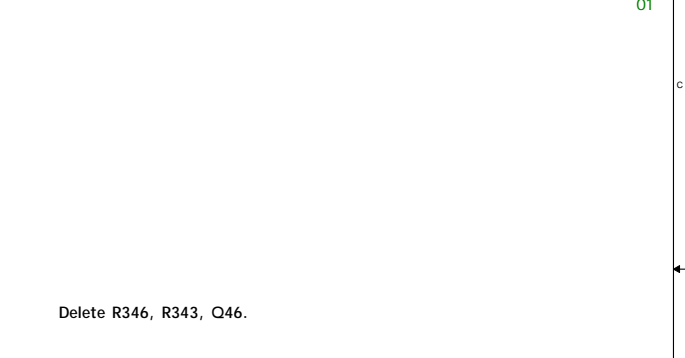
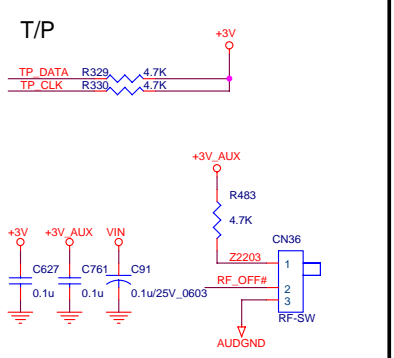
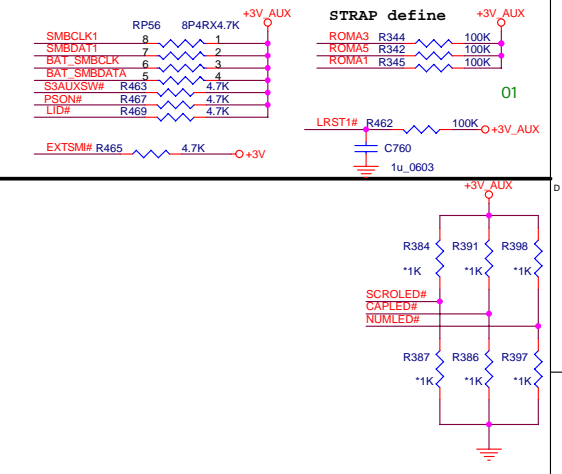
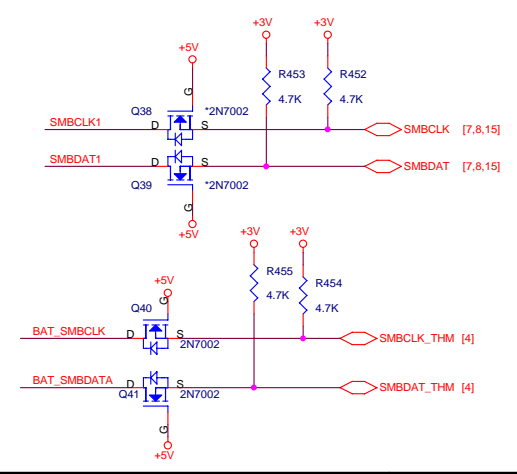
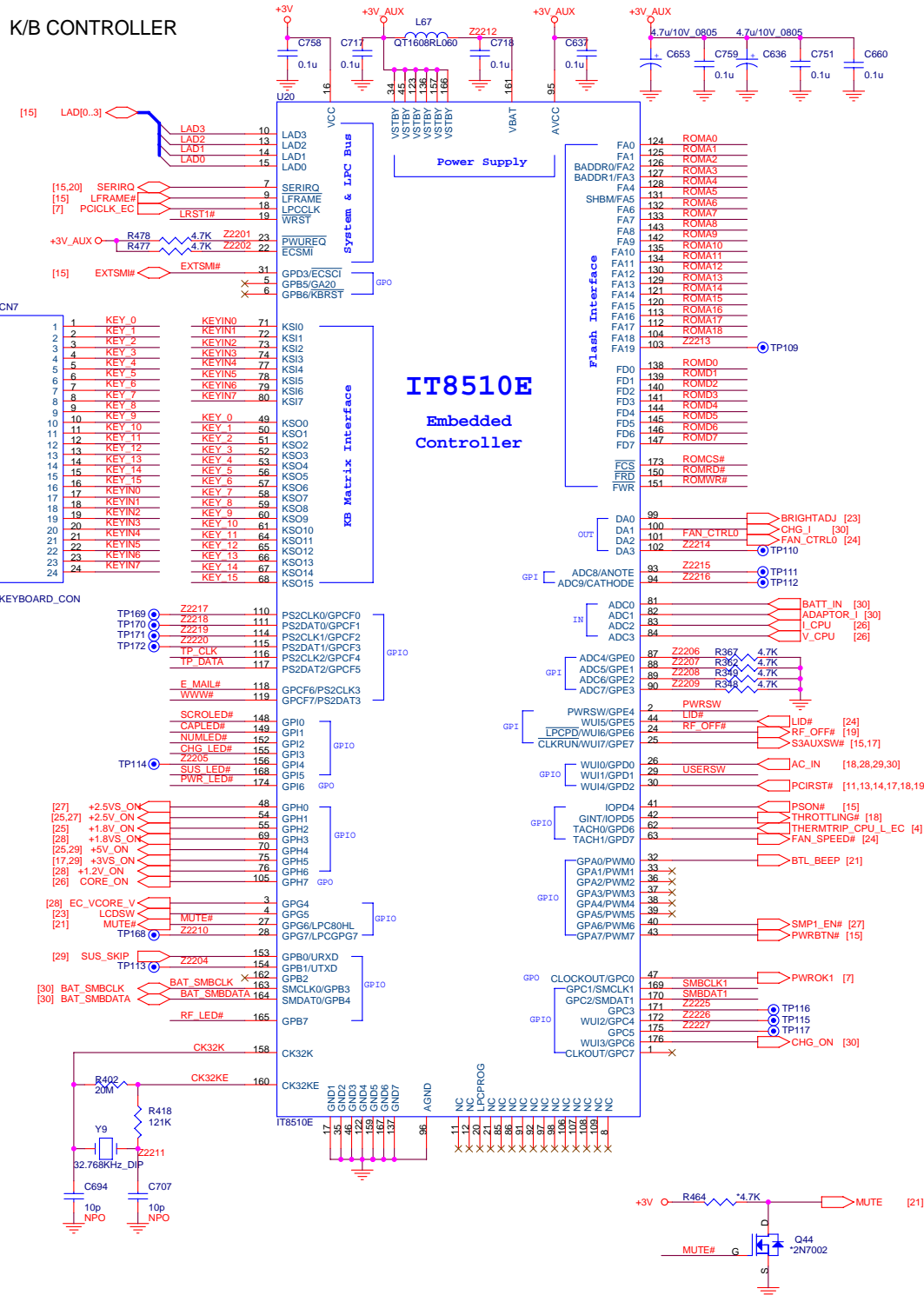
**MIC**



- 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.

<b>UNIWILL COMPUTER CORP.</b>		
<b>AUDIO &amp; AMP &amp; Boonmer</b>		
File	Document Number	Rev
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# K/B CONTROLLER



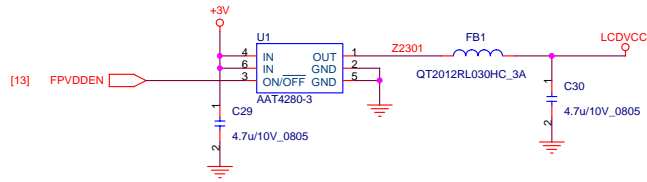
**UNIWILL COMPUTER CORP.**

Title: **IT8510E & BIOS & T/P & SW**

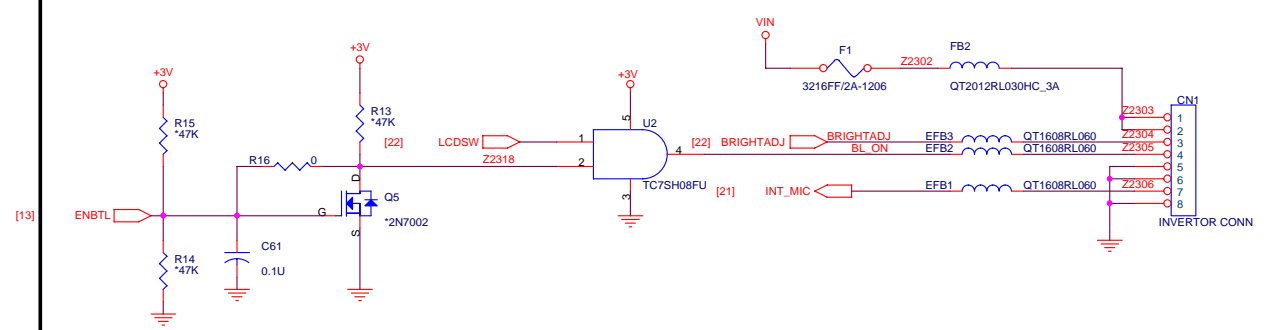
Size: Document Number 2756 **255KIX** Rev 01

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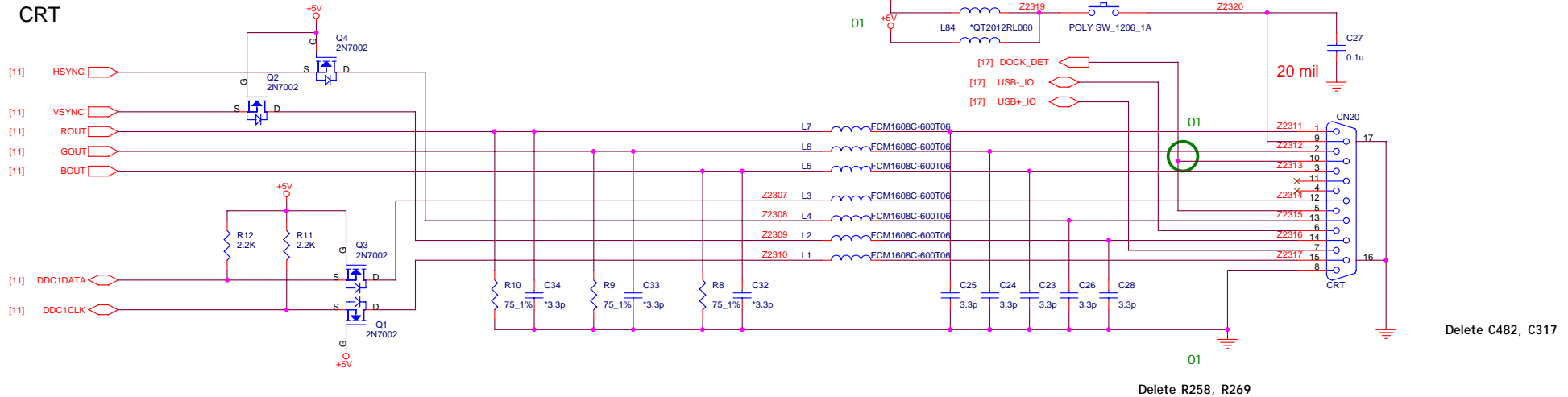
# LCDVCC



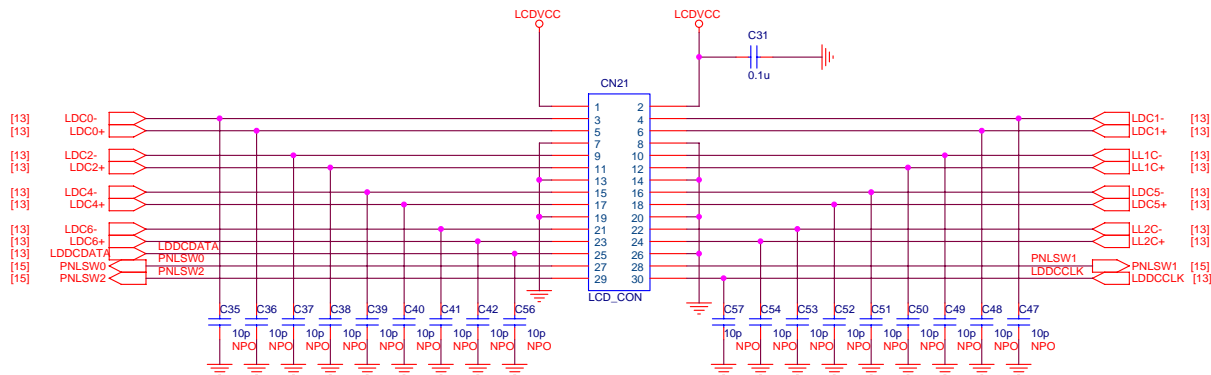
# INVERTER



# CRT

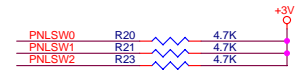


# LCD



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

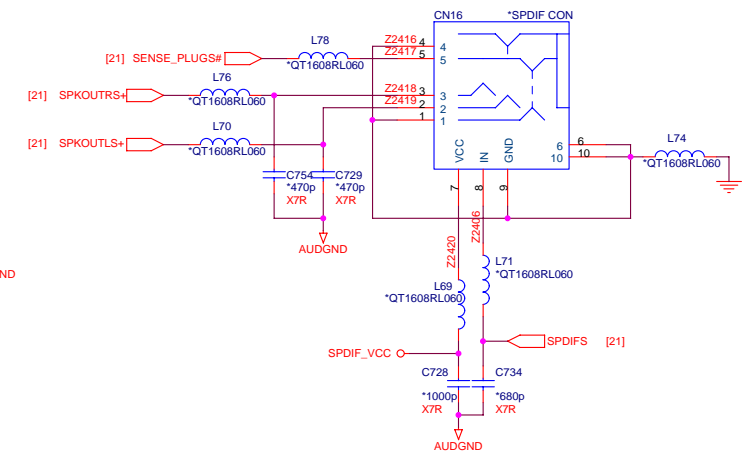
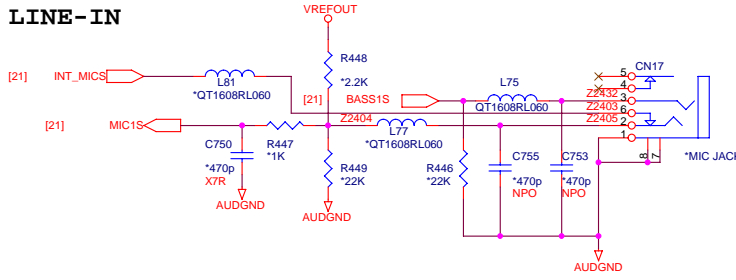
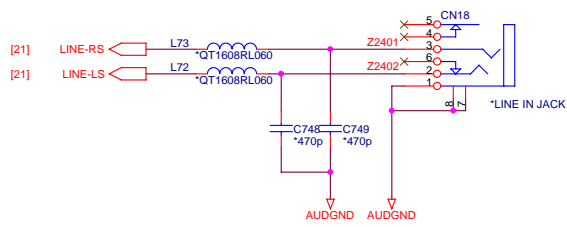
Size: Document Number 255KIX Rev 01

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**SECOND ID MIC**

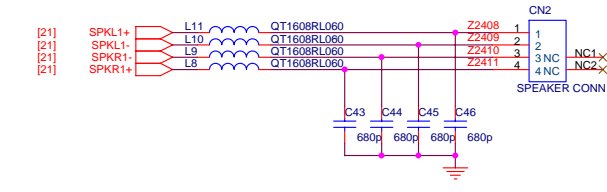
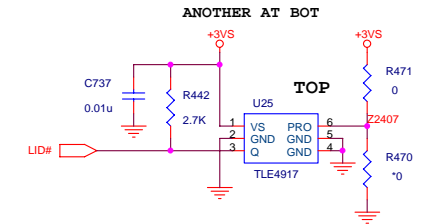
**SECOND ID LINE-IN**

**SECOND ID  
LINE/SPDIF OUT**



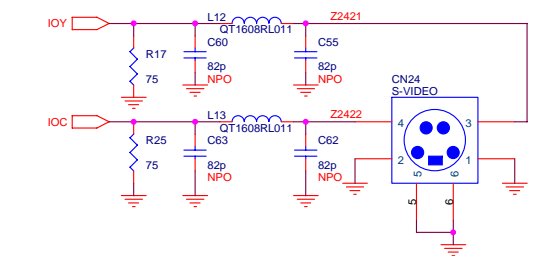
**HALL SENSOR**

**SPEAKER**

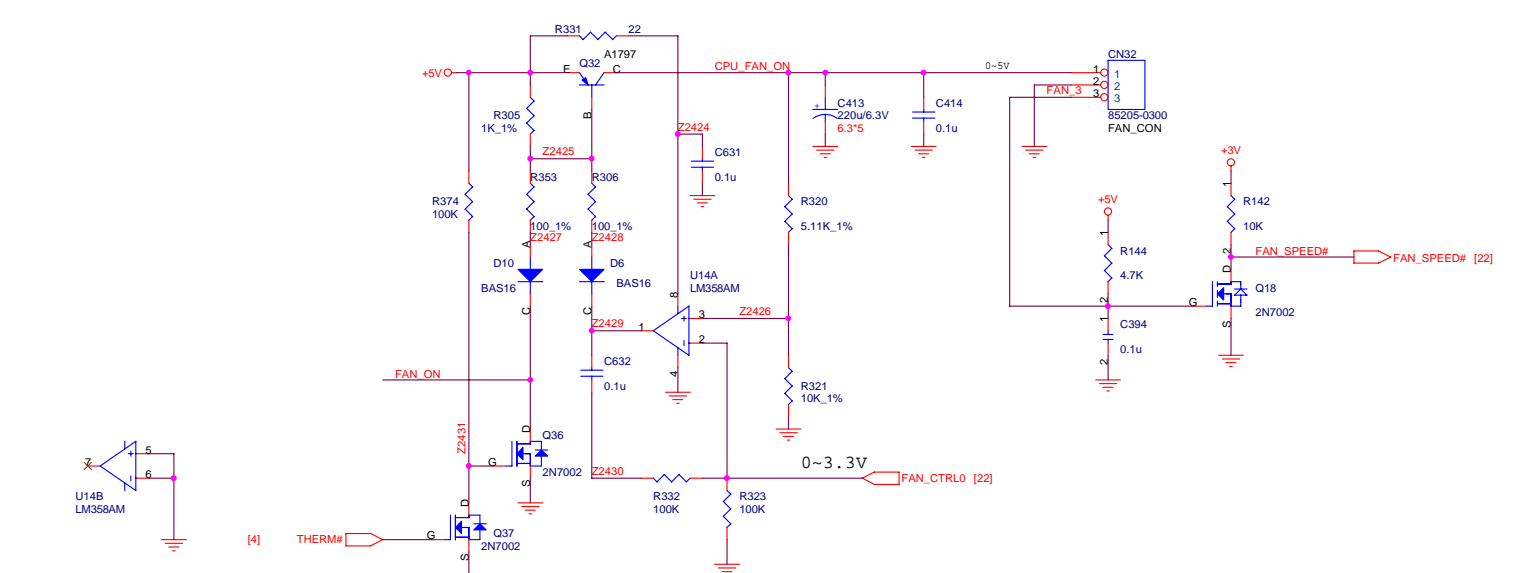
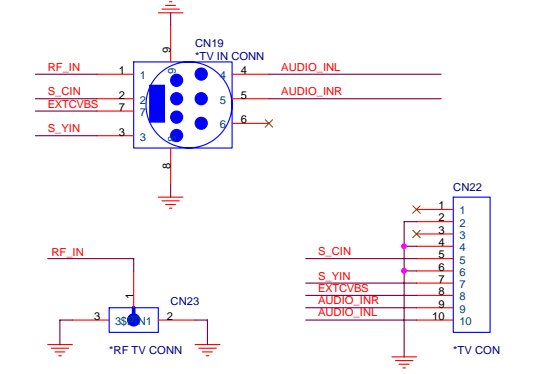


**TV OUT**

**CPU FAN**

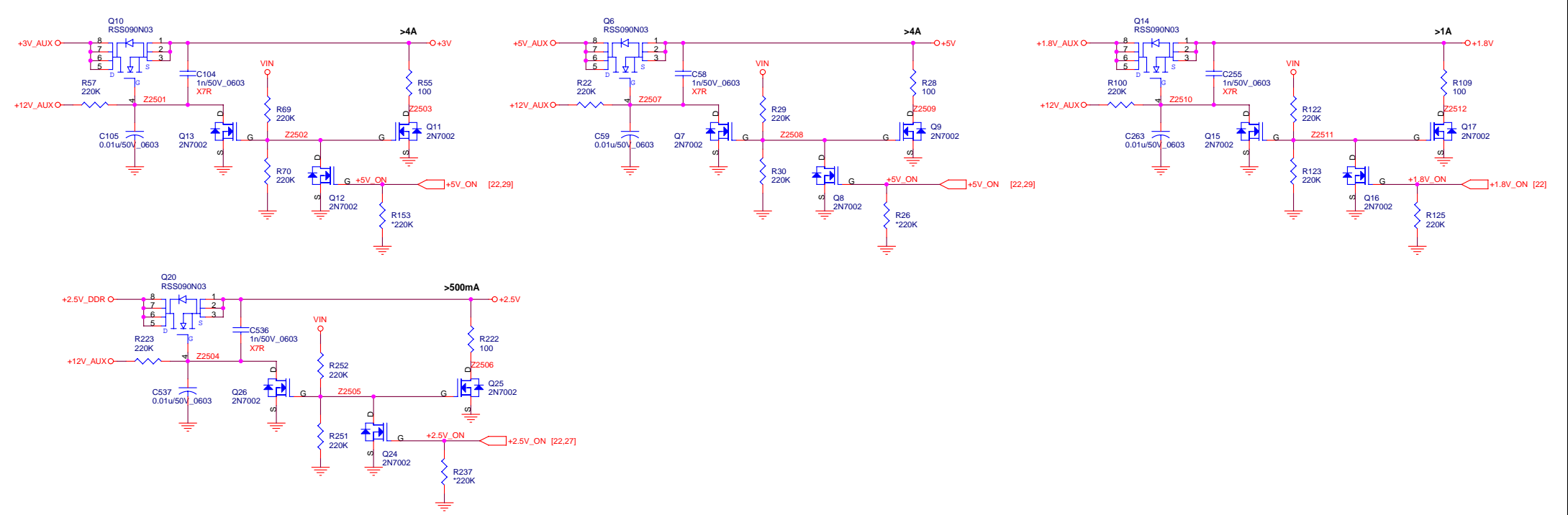


**TV IN**



UNIWILL COMPUTER CORP.		
Title <b>FAN &amp; TV &amp; 2nd AUDIO &amp; HALL</b>		
Size	Document Number	Rev
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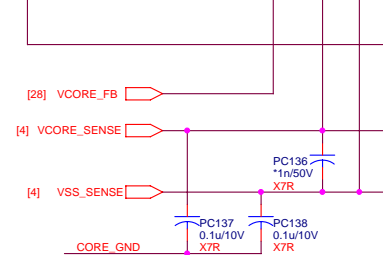
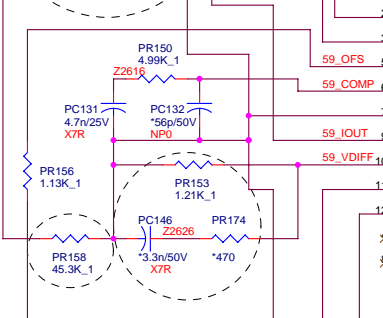
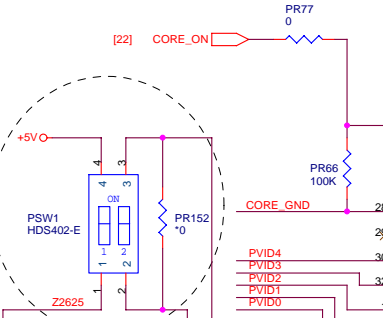
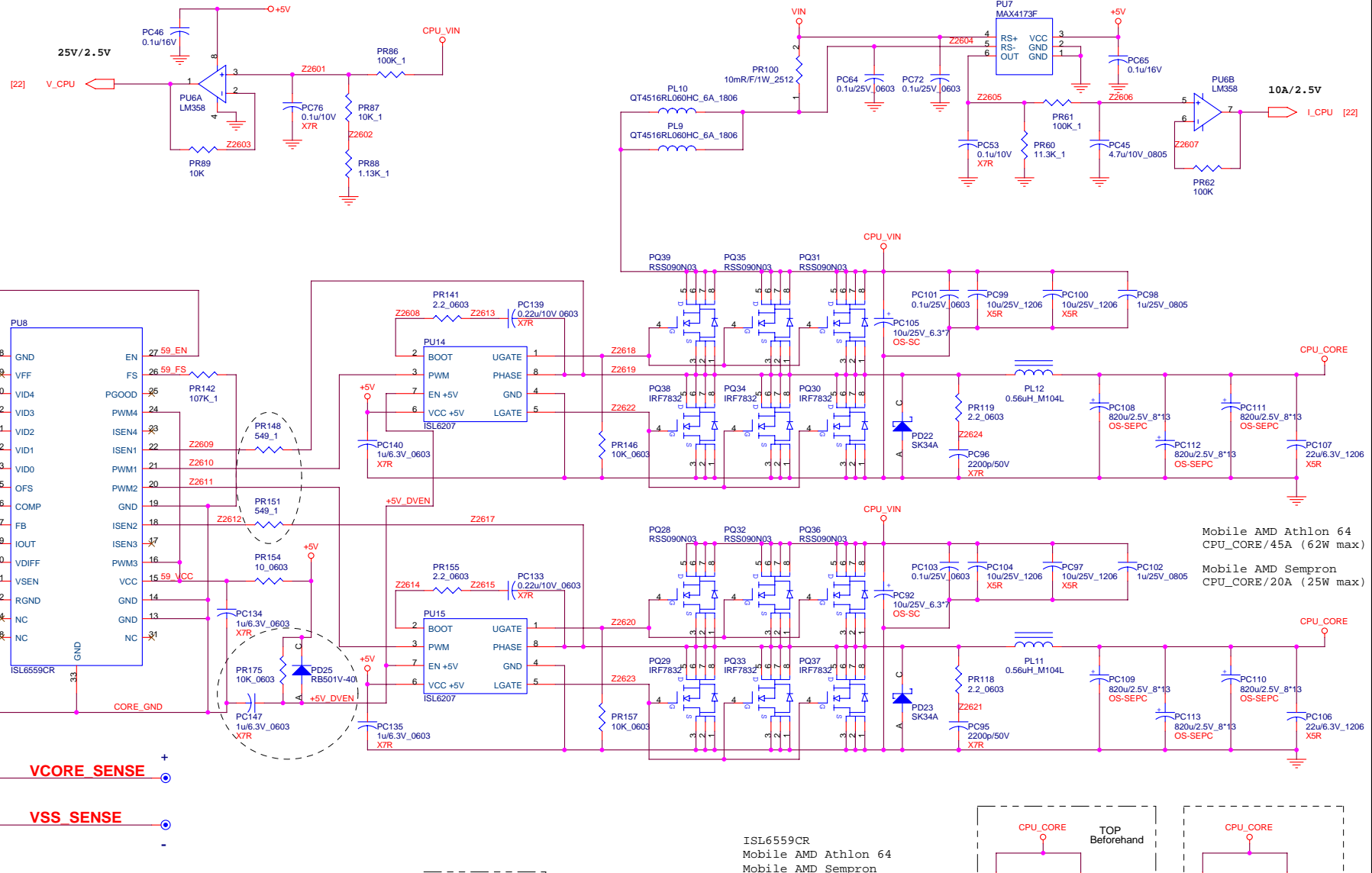


UNIWILL COMPUTER CORP.		
Title		
<b>VCC MOSFET SWITCH</b>		
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PSW1 Switch Table

AMD K8	62W	35W	25W
PSW1_1	OFF	ON	ON
PSW1_2	OFF	ON	ON

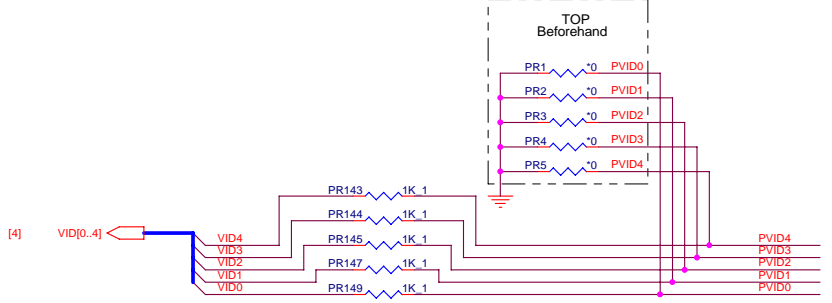
Low-Power Mode  
Load-Line



**Mobile AMD Sempron (Low power mobile) 25W**  
100mV negative OFFSET (VID=1.25V)

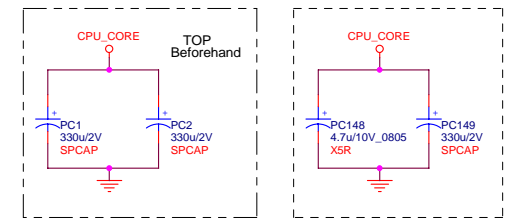
$R_{os} = R_{fb} \cdot (5V - VID) / 100mV$   
 $R_{ds(on)} \cdot I_{out} = R_{fb} \cdot 72 - 108\mu A$

$R_{ofs} = V_{ofs} \cdot 10 / 100\mu A$   
 $R_{fs} = PR142 = 107K_1 \sim 250KHz$



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

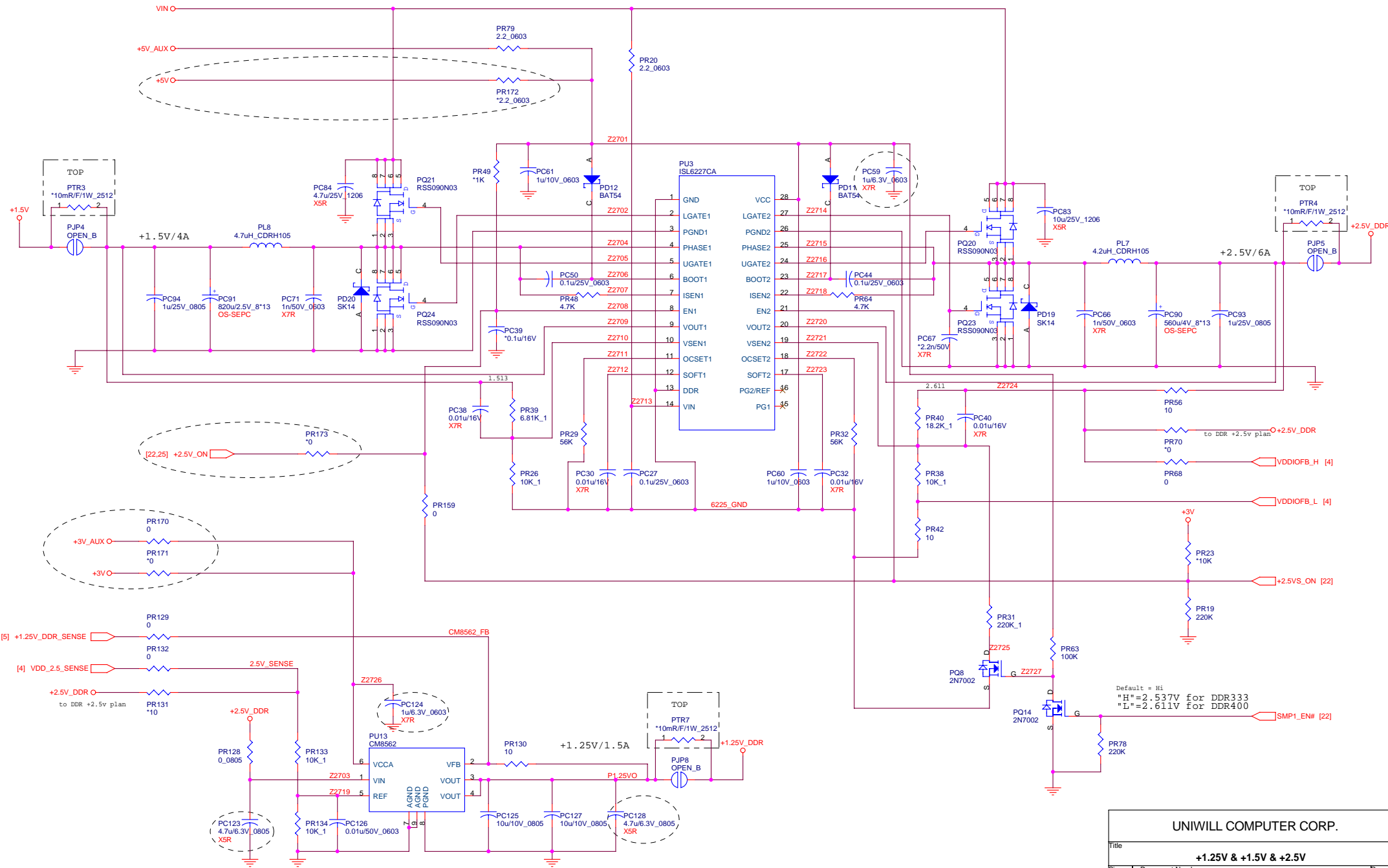


**UNIWILL COMPUTER CORP.**

Title: **CPUCORE\_ISL6559**

Size: 2756 Document Number: **255KIX** Rev: 01

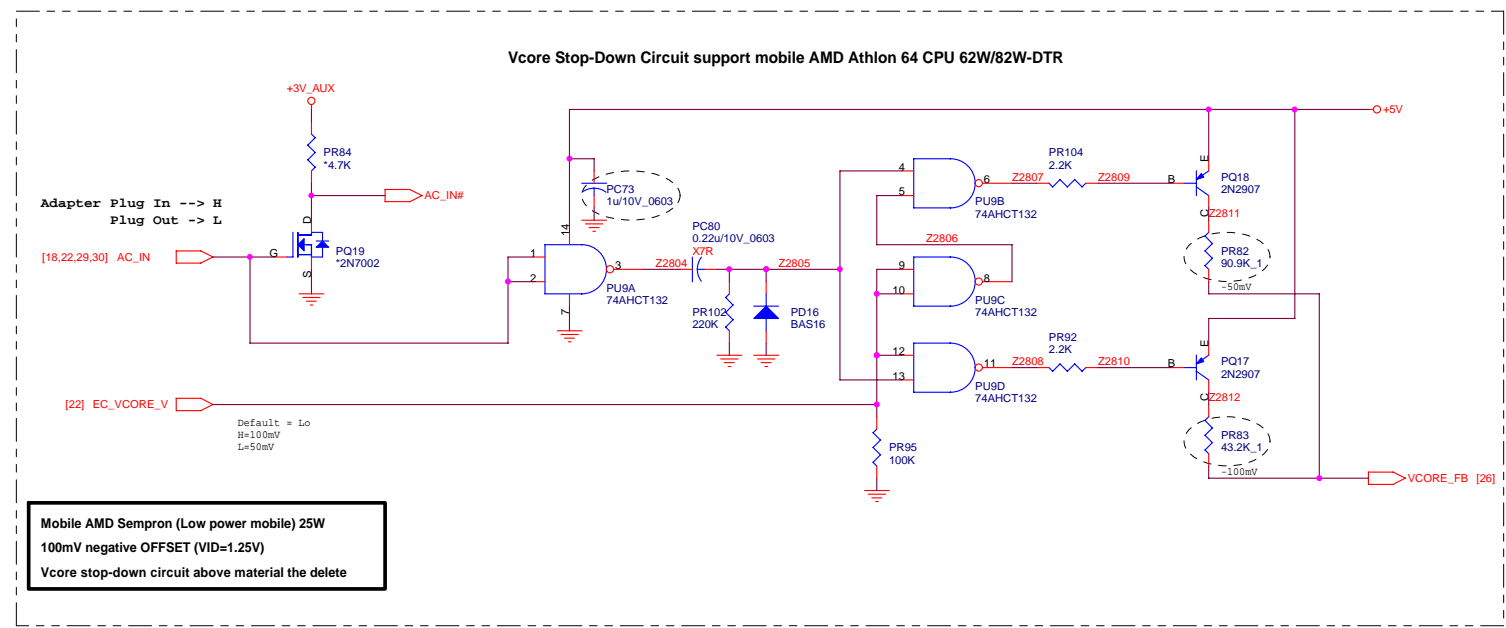
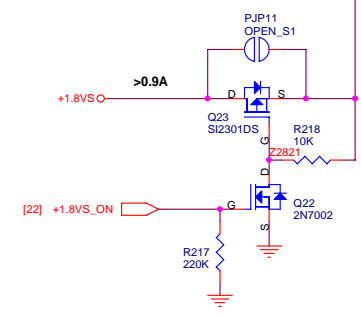
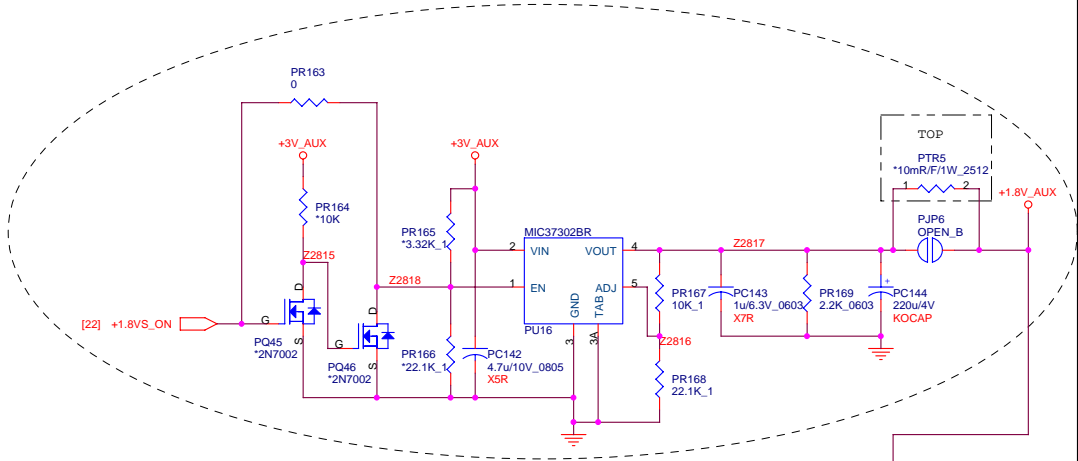
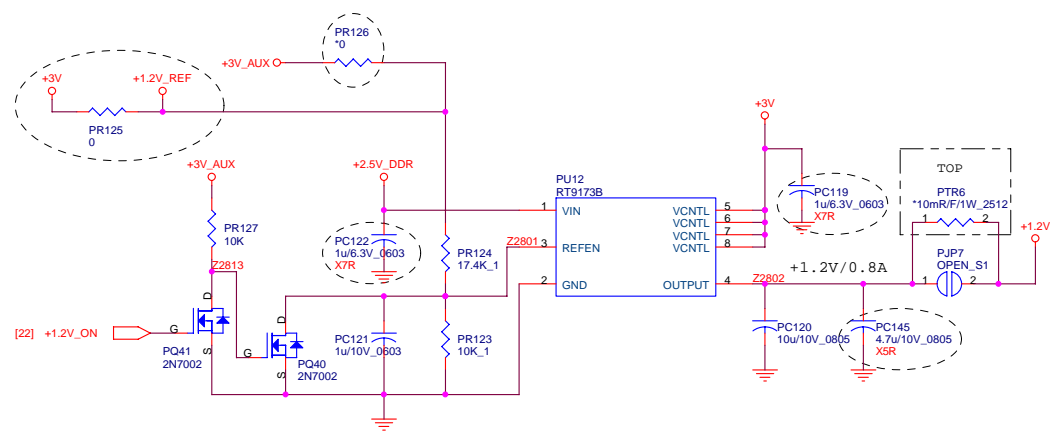
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Default = Hi  
 "H" = 2.537V for DDR333  
 "L" = 2.611V for DDR400

### UNIWILL COMPUTER CORP.

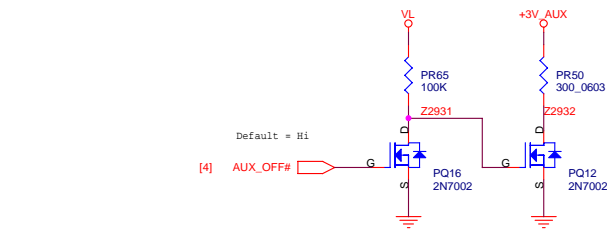
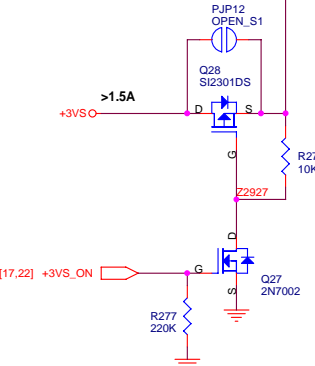
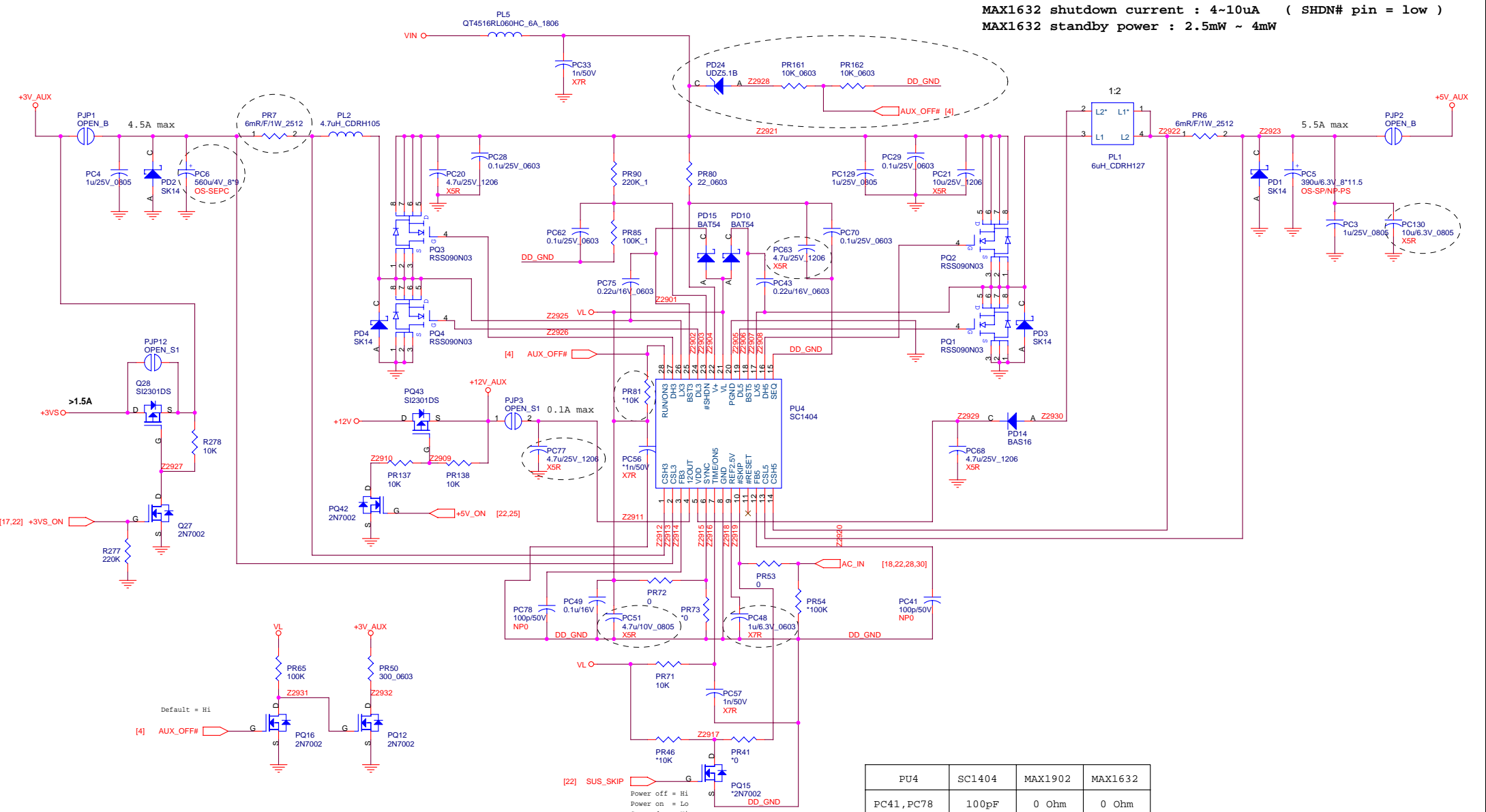
Title			+1.25V & +1.5V & +2.5V		
Size	Document Number				Rev
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Mobile AMD Sempron (Low power mobile) 25W  
100mV negative OFFSET (VID=1.25V)  
Vcore stop-down circuit above material the delete

<b>Unwill International Corp.</b>		
Title <b>+1.2V/+1.8V &amp; VCORE STOP-DOWN</b>		
Size	Document Number <b>255KIX</b>	Rev 01
Date:	Tuesday, August 10, 2004	Sheet 28 of 34

MAX1632 shutdown current : 4~10uA ( SHDN# pin = low )  
 MAX1632 standby power : 2.5mW ~ 4mW



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

[22] SUS\_SKIP  
 Power off = Hi  
 Power on = Lo  
 Suspend = Hi

	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 <sub>300K</sub>	N.C <sub>500K</sub>	0 Ohm <sub>300K</sub>
PR73 SYNC LC		N.C <sub>200K</sub>	0 Ohm <sub>300K</sub>	N.C <sub>200K</sub>

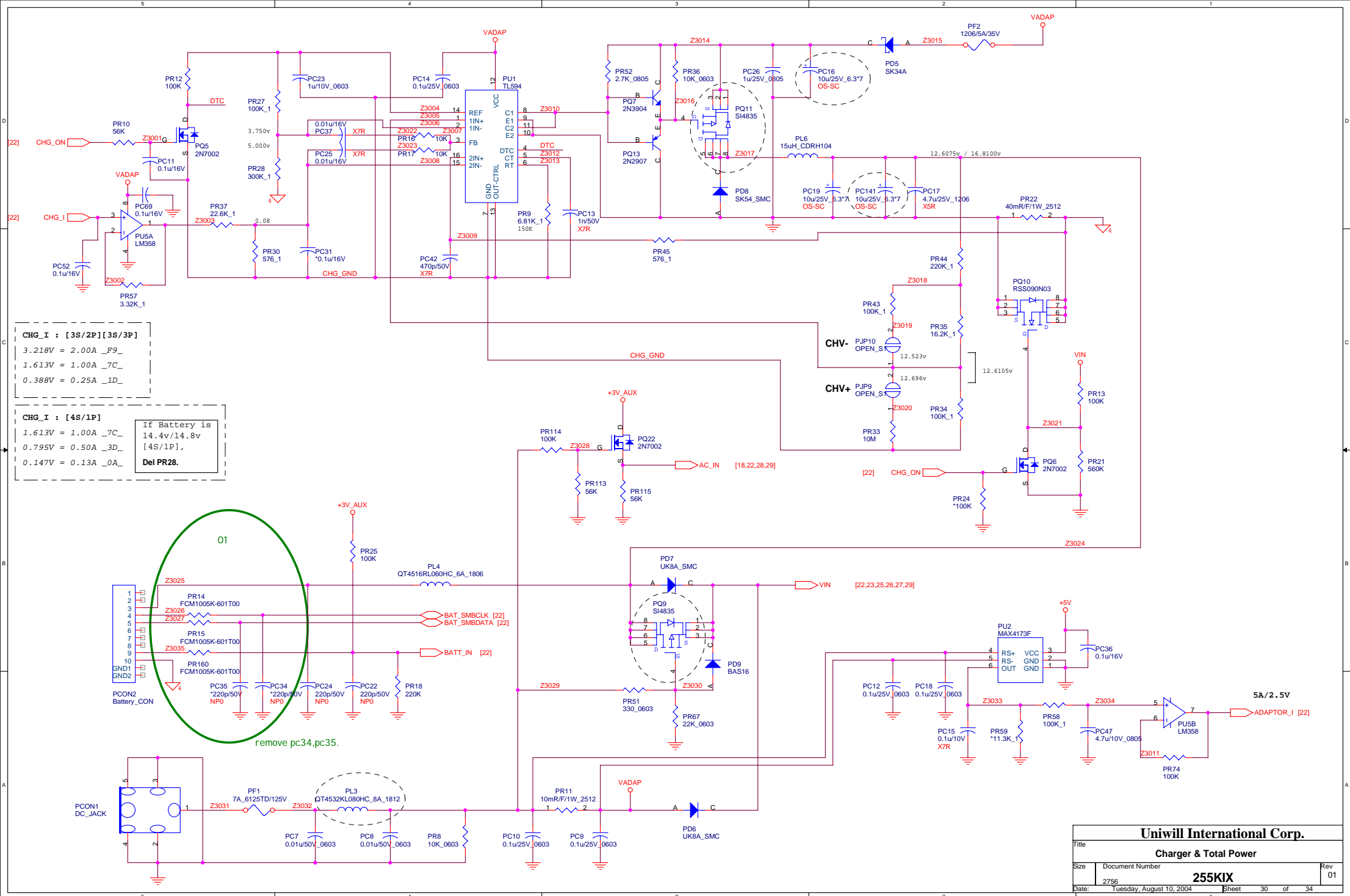
**UNIWILL COMPUTER CORP.**

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

Size	Document Number	Rev
	2756	01

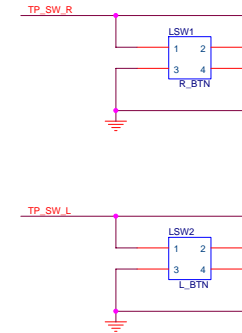
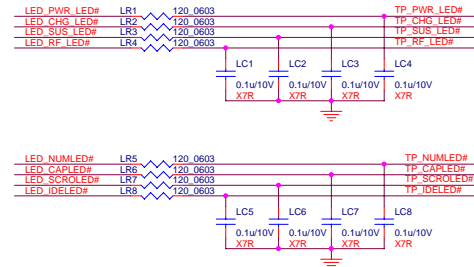
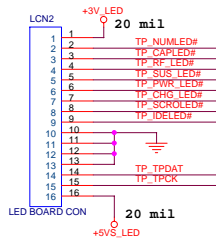
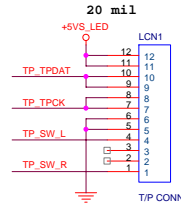
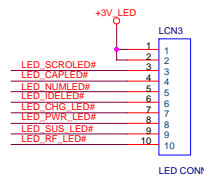
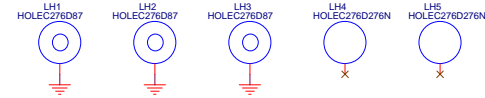
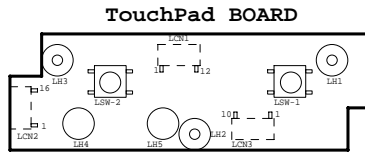
**255KIX**

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

LAYER : 6  
LAYER1 : TOP  
LAYER2 : GND  
LAYER3 : IN1  
LAYER4 : IN2  
LAYER5 : VCC  
LAYER6 : BOT



255/259XX1 LAN/B VER: C

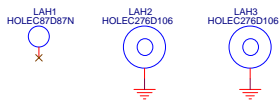
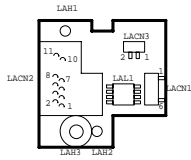
P/N: 35-UG5030-00C

MADE IN TAIWAN

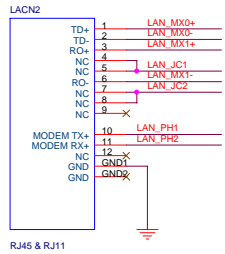
LAYER : 6

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

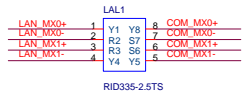
### LAN/MODEM BOARD



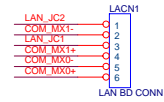
8 mil



RJ45 & RJ11

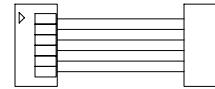


RID335-2.5TS

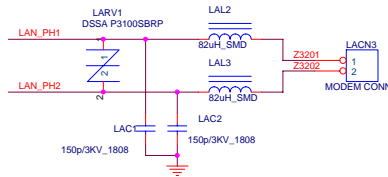


LAN BD CONN

### CABLE



### MODEM ESD



UNIWILL COMPUTER CORP.

Title		
LAN&MODEM CONN		
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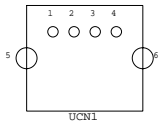
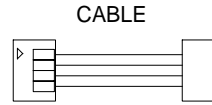
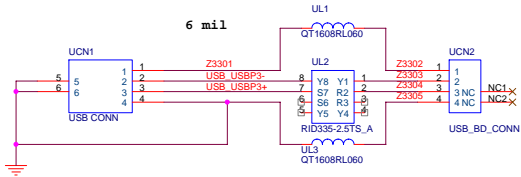
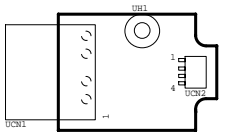
255/259XX1 USB/B VER: A

P/N: 35-UG5020-00A

MADE IN TAIWAN

LAYER : 6

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



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**From Version: B change to Version: 01**

- 93 / 07 / 12**
- 01. Page23: CN20 pin 10 from GND change to DOCK\_DET.
- 02. Page18: Add R512, R513, C779, R511, C778.
- 93 / 07 / 15**
- 03. Page04: U6 pin AF24, AE24 connect test point TP174, TP173.
- 93 / 07 / 21**
- 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.
- 93 / 07 / 22**
- 06. Page23: DEL R258, R269 .
- 07. Page23: S5, L83 SWAP, L83 change to +5v\_aux
- 08. Page30: remove pc34, pc35.
- 09. Page7: remove R240.
- 93 / 07 / 23**
- 10. Page16: L42, L46 change to +3VS.
- 11. Page17: R480, R481 ADD 5.6K.
- 12. Page16: DEL R154.
- 93 / 07 / 28**
- 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.
- 93 / 07 / 29**
- 17. Page15: R167 change to +2.5V.
- 93 / 07 / 30**
- 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.
- 93 / 08 / 04**
- 23. Page18: ADD R516~R521.
- 24. Page22: remove R387, R391, R397.
- 25. Page17: R500 change to 220K.
- 93 / 08 / 06**
- 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, PO9, PO11.
- 31. Page31: Change PC59, PC123, PC124, PC128.
- 32. Page32: Remove PR152.  
Add PD25, PC147, PC148, PC149, PR158, PR175, PSW1.  
Change PR148, PR151, PR153.

UNIWILL COMPUTER CORP.		
Title		
<b>Change Notes B to 01</b>		
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