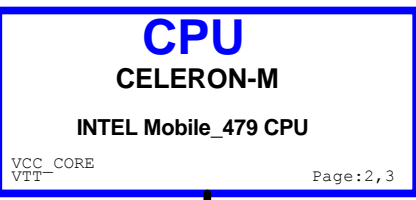


# ZL6

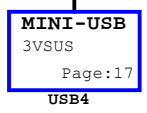
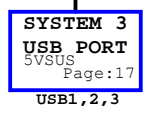
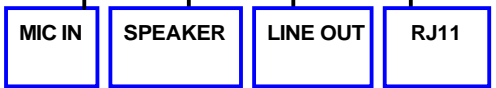
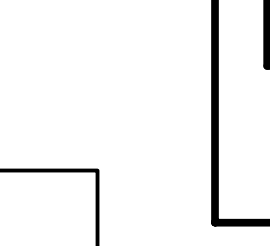
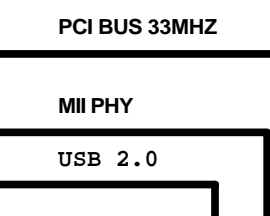
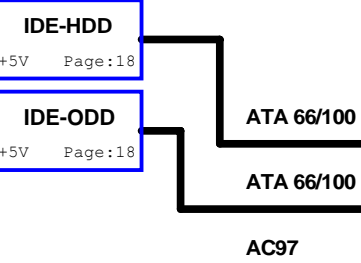
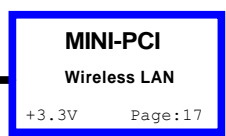
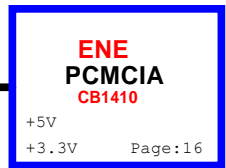
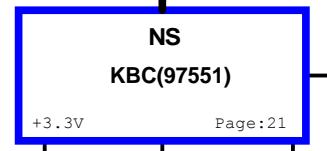
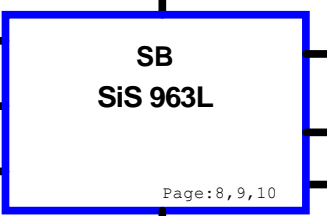
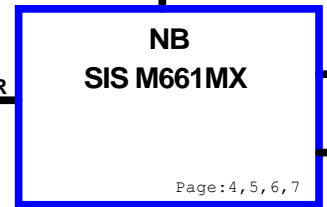
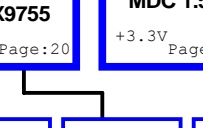
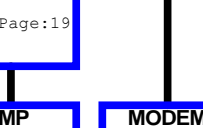
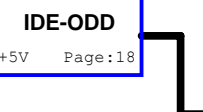
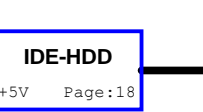
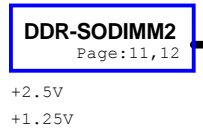
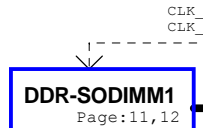
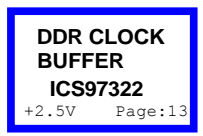
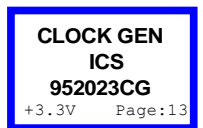
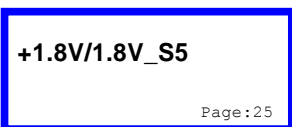
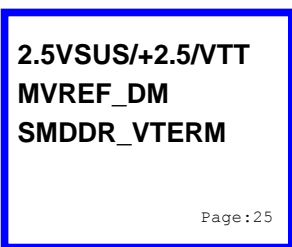
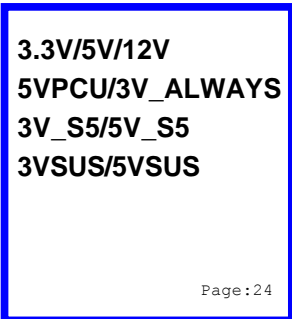
## CPU

### CELERON-M

INTEL Mobile\_479 CPU



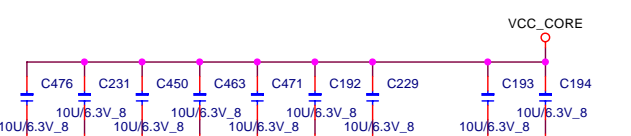
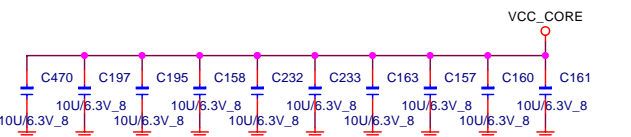
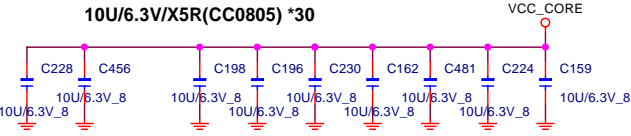
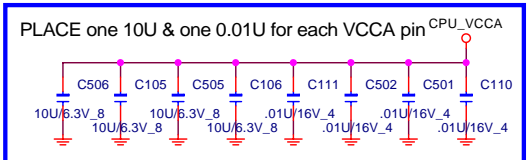
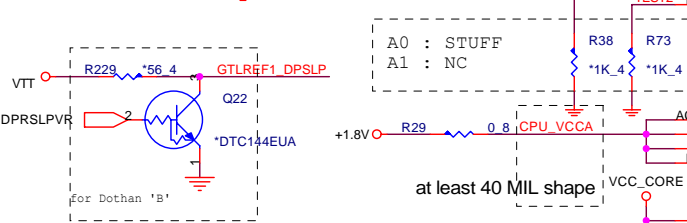
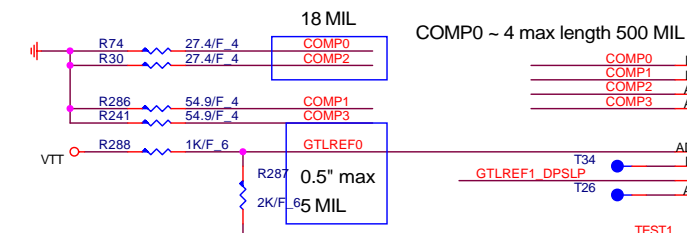
PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
REQ0# / GNT0#	AD22	INTB# , INTC#	MINI-PCI
REQ1# / GNT1#	AD17	INTD#	TI 1410A



**PROJECT : ZL6**  
Quanta Computer Inc.

Size	Document Number	Rev
<b>BLOCK DIAGRAM</b>		2A
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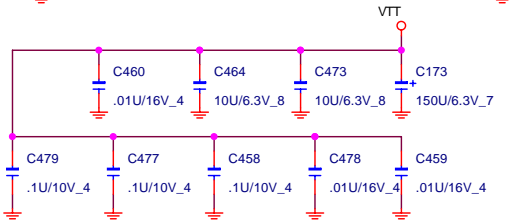
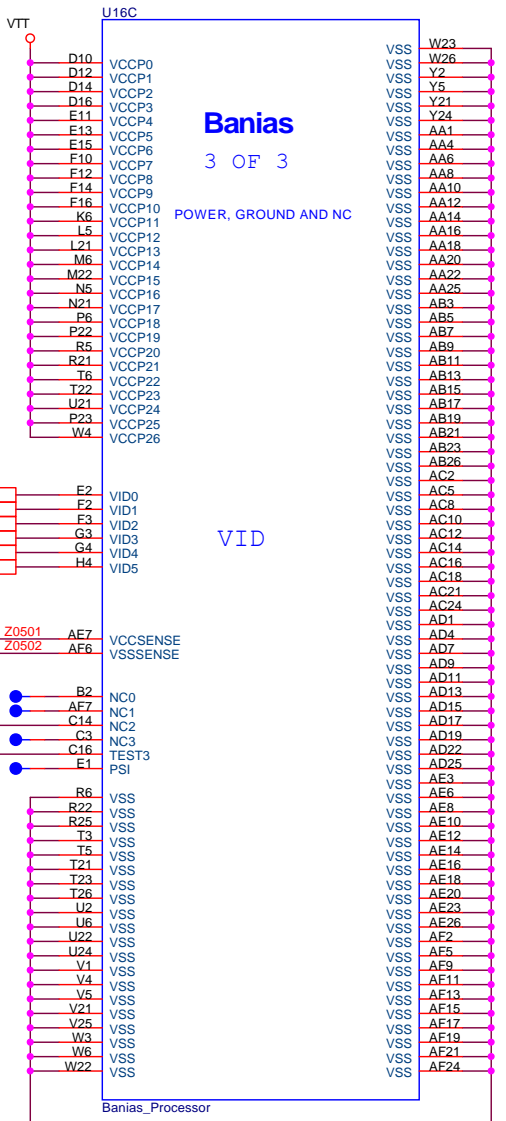


**Banias**  
2 OF 3

POWER, GROUND, RESERVED SIGNALS

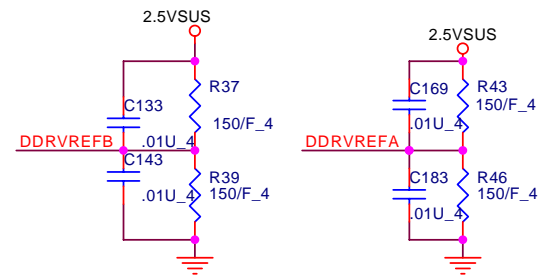
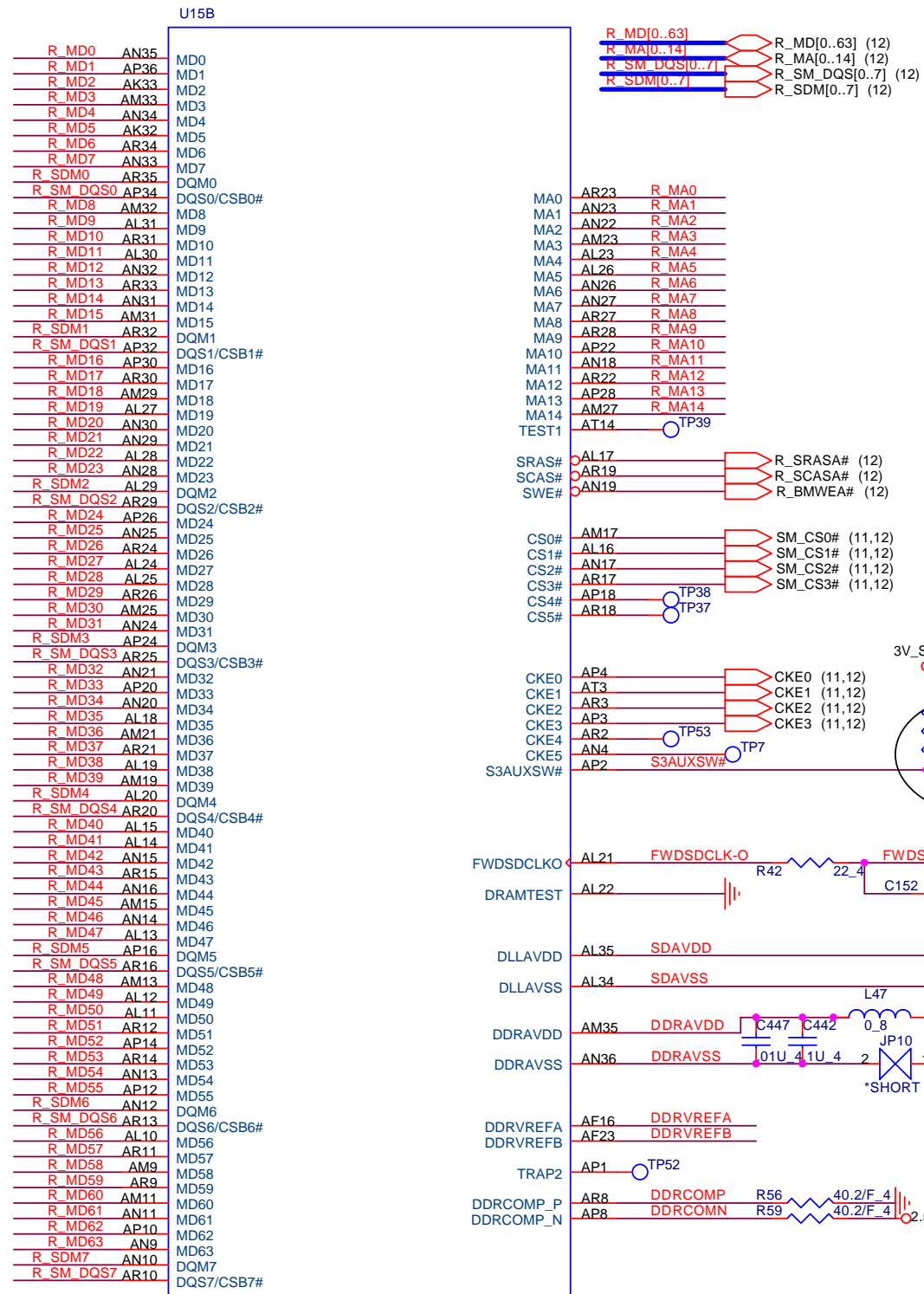
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COMP1	P26
COMP2	AB2
COMP3	AB1
GTLREF0	AD26
GTLREF1	E26
GTLREF2	G1
GTLREF3	AC1
TEST1	C5
TEST2	F23
VCCA3	AC26
VCCA2	N1
VCCA1	B1
VCCA0	F26
VCC00	D6
VCC01	D8
VCC02	D18
VCC03	D20
VCC04	D22
VCC05	E5
VCC06	E7
VCC07	E9
VCC08	E17
VCC09	E19
VCC10	E21
VCC11	F6
VCC12	F8
VCC13	F18
VCC14	F20
VCC15	F22
VCC16	G3
VCC17	G21
VCC18	H6
VCC19	H22
VCC20	J5
VCC21	J21
VCC22	K22
VCC23	U5
VCC24	V6
VCC25	V22
VCC26	W5
VCC27	Y6
VCC28	Y22
VCC29	AA5
VCC30	AA7
VCC31	AA9
VCC32	AA11
VCC33	AA13
VCC34	AA15
VCC35	AA17
VCC36	AA19
VCC37	AA21
VCC38	AB6
VCC39	AB8
VCC40	AB10
VCC41	AB12
VCC42	AB14
VCC43	AB16
VCC44	AB18
VCC45	AB20
VCC46	AB22
VCC47	AC3
VCC48	AC11
VCC49	AC13
VCC50	AC15
VCC51	AC17
VCC52	AC19
VCC53	AD8
VCC54	AD10
VCC55	AD12
VCC56	AD14
VCC57	AD16
VCC58	AD18
VCC59	AE9
VCC60	AE11
VCC61	AE13
VCC62	AE15
VCC63	AE17
VCC64	AE19
VCC65	AF8
VCC66	AF10
VCC67	AF12
VCC68	AF14
VCC69	AF16
VCC70	AF18
VCC71	

VSS	A2
VSS	A5
VSS	A8
VSS	A11
VSS	A14
VSS	A17
VSS	A20
VSS	A23
VSS	A26
VSS	B3
VSS	B6
VSS	B9
VSS	B12
VSS	B16
VSS	B19
VSS	B22
VSS	B25
VSS	C1
VSS	C4
VSS	C7
VSS	C10
VSS	C13
VSS	C15
VSS	C18
VSS	C21
VSS	C24
VSS	D2
VSS	D5
VSS	D7
VSS	D9
VSS	D11
VSS	D13
VSS	D15
VSS	D17
VSS	D19
VSS	D21
VSS	D23
VSS	D26
VSS	E3
VSS	E6
VSS	E8
VSS	E10
VSS	E12
VSS	E14
VSS	E16
VSS	E18
VSS	E20
VSS	E22
VSS	E25
VSS	F1
VSS	F4
VSS	F5
VSS	F7
VSS	F9
VSS	F11
VSS	F13
VSS	F15
VSS	F17
VSS	F19
VSS	F21
VSS	F24
VSS	G2
VSS	G6
VSS	G22
VSS	G23
VSS	G26
VSS	H3
VSS	H5
VSS	H21
VSS	H25
VSS	J1
VSS	J4
VSS	J6
VSS	J22
VSS	J24
VSS	K2
VSS	K5
VSS	K21
VSS	K23
VSS	K26
VSS	L3
VSS	L6
VSS	L22
VSS	L25
VSS	M1
VSS	M4
VSS	M5
VSS	M21
VSS	M24
VSS	N3
VSS	N6
VSS	N22
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VSS	P5
VSS	P21
VSS	P24
VSS	R1
VSS	R4

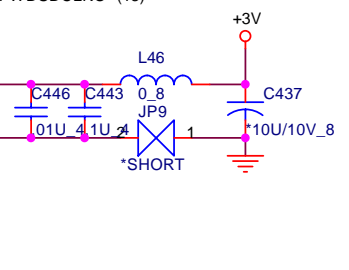
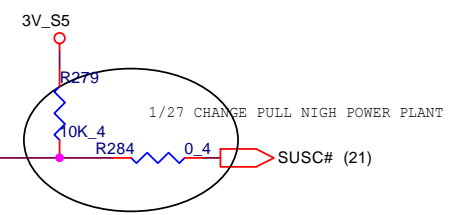


**PROJECT : ZL6**  
**Quanta Computer Inc.**

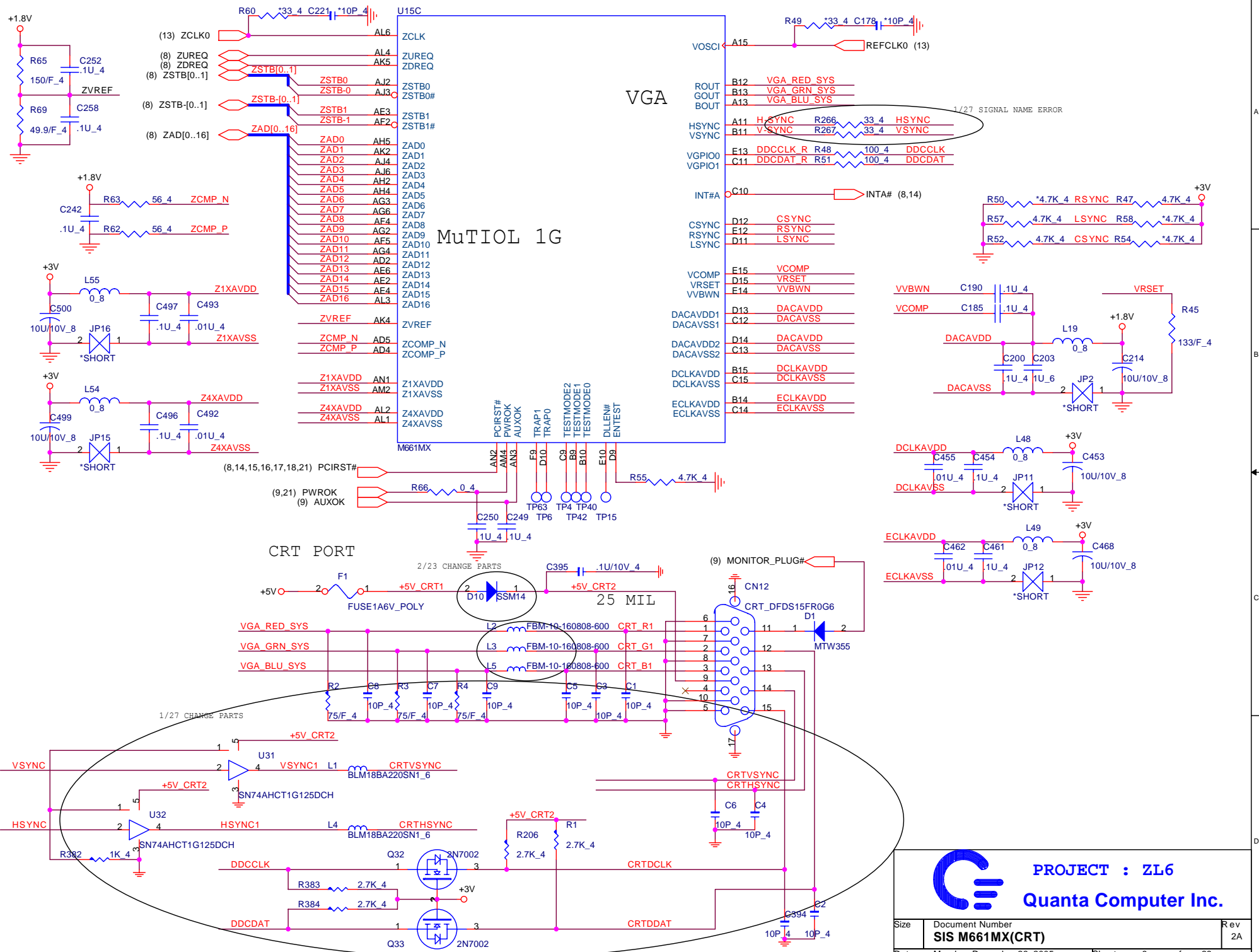




	S1	S3	S5
S3AUXSW#	1	0	1
PSON#	0	1	1
SLP_S3#	1	0	0
SLP_S5#	1	1	0



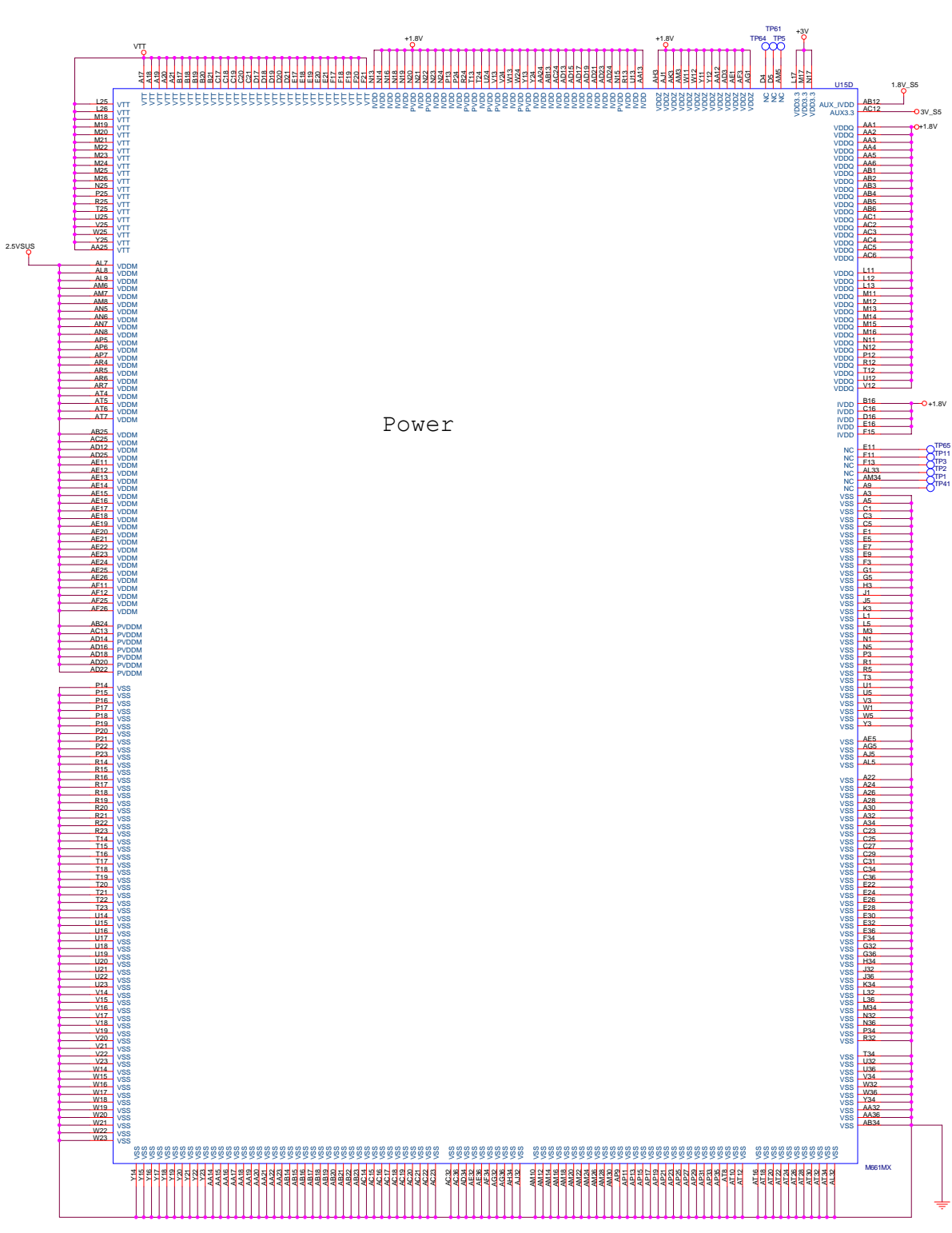
**PROJECT : ZL6**  
**Quanta Computer Inc.**



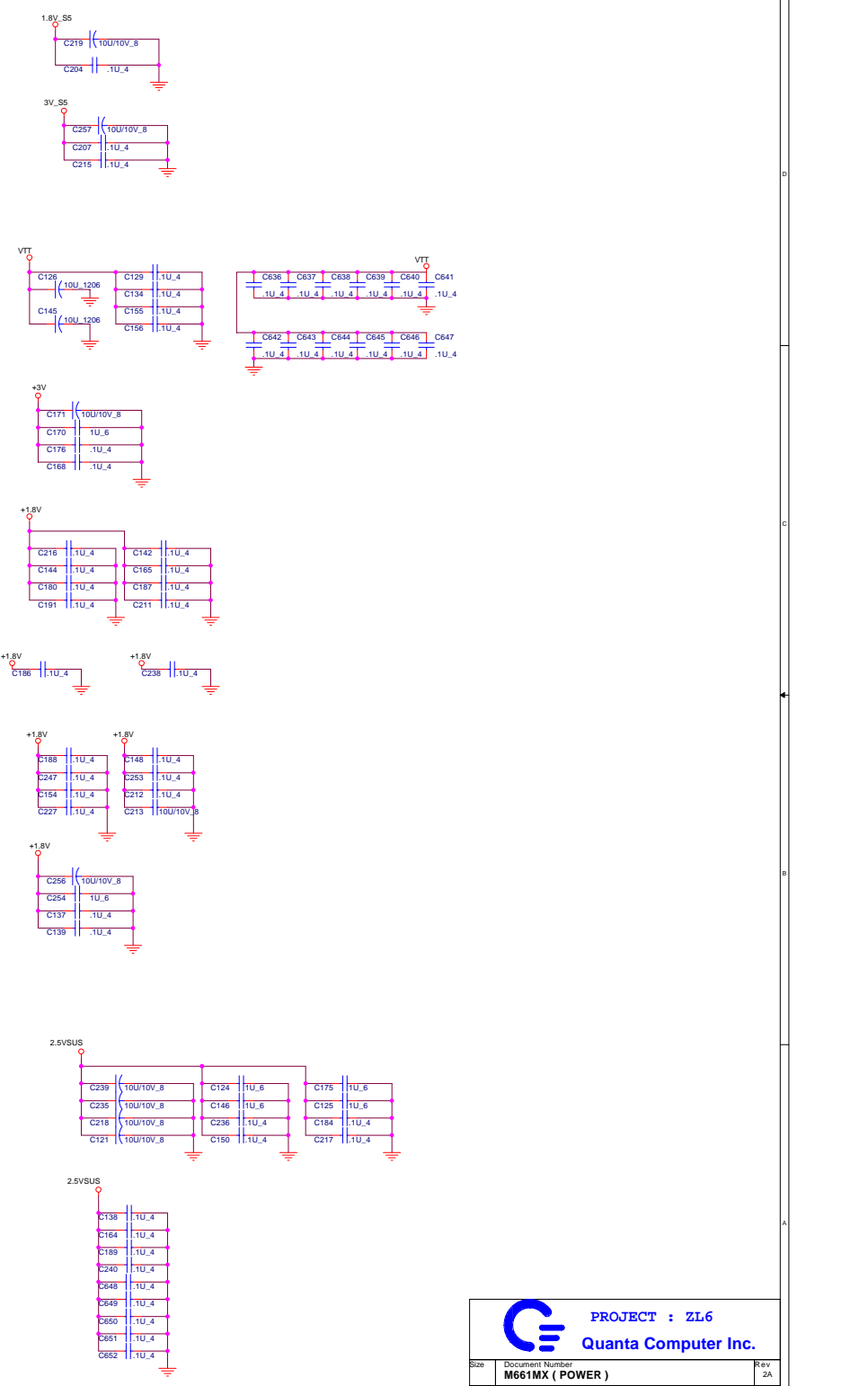
**PROJECT : ZL6**  
**Quanta Computer Inc.**

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	<b>SIS M661MX(CRT)</b>	2A
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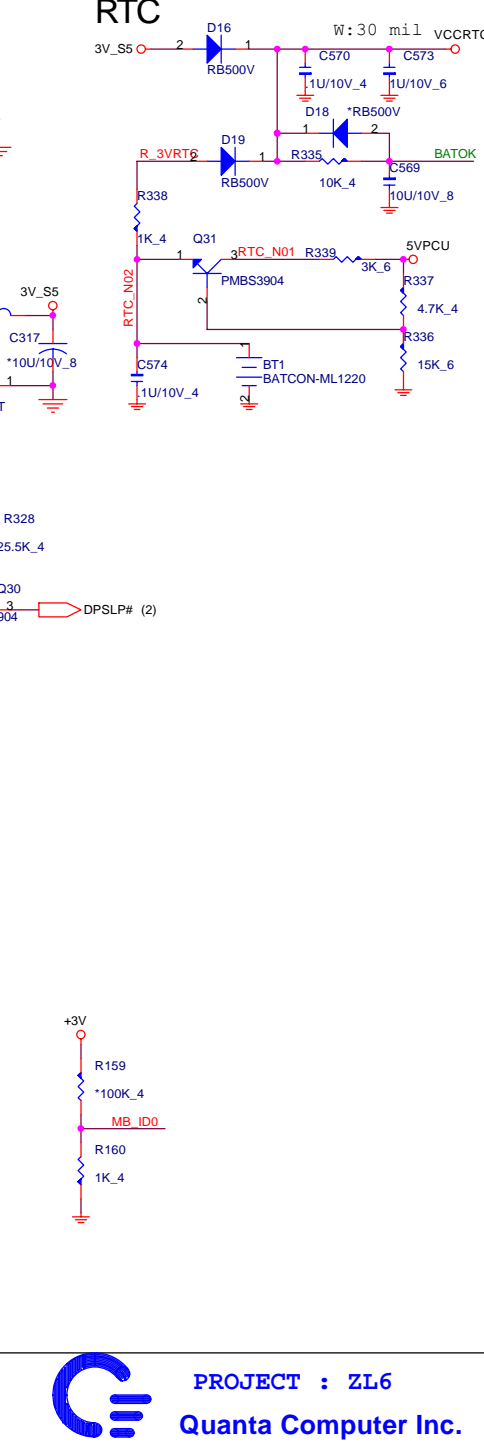
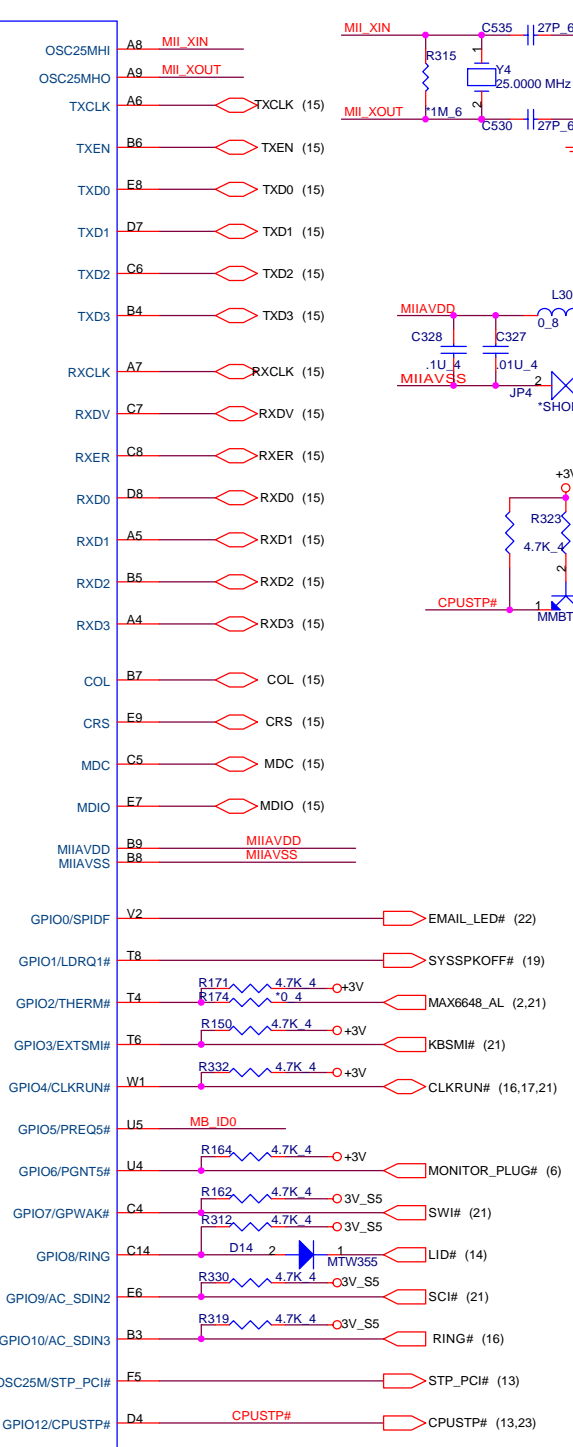
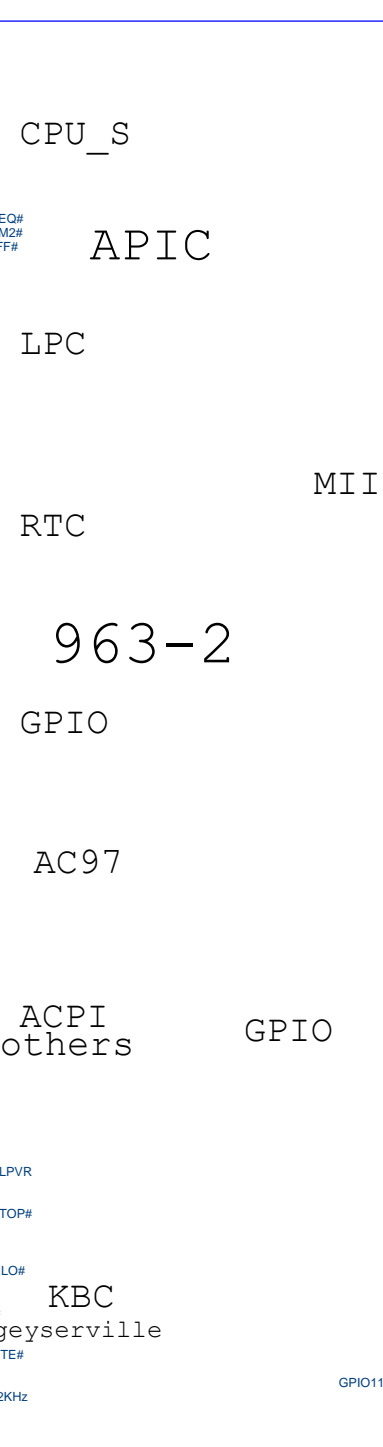
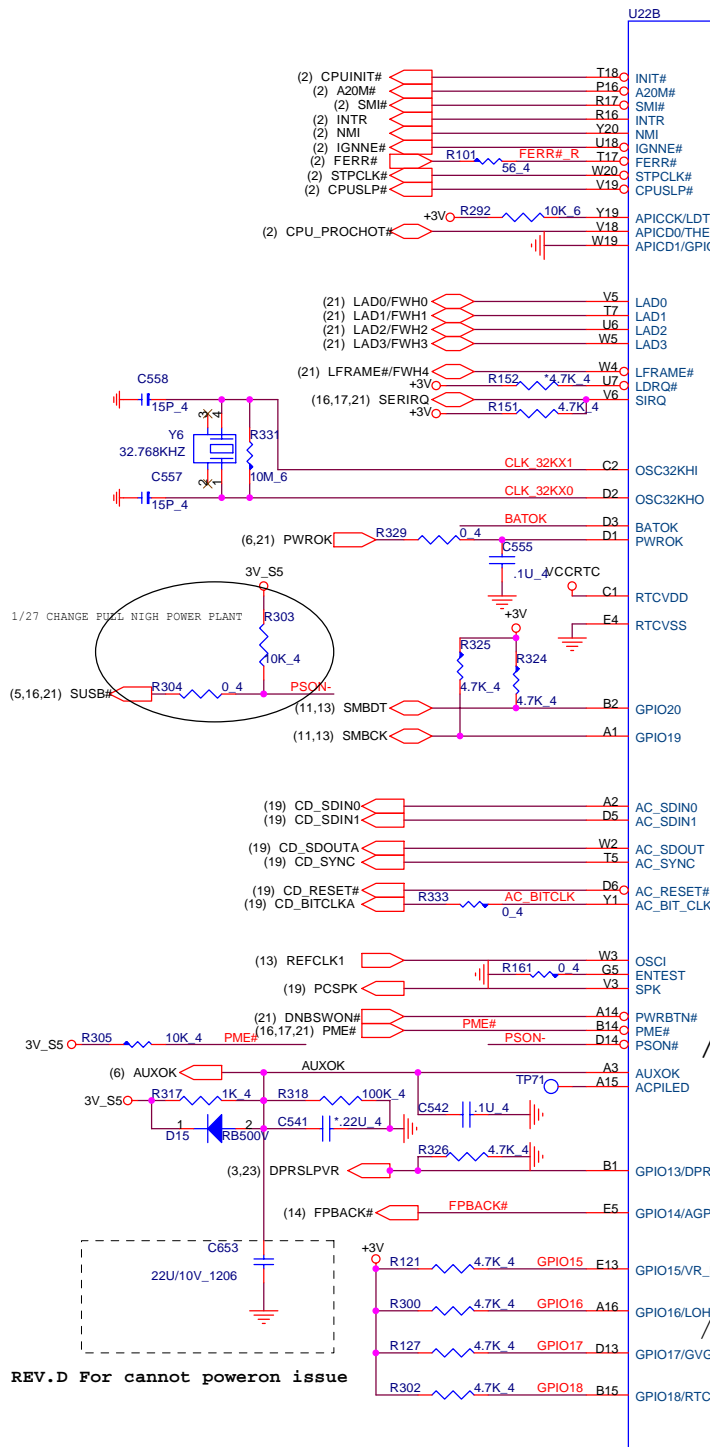


Power





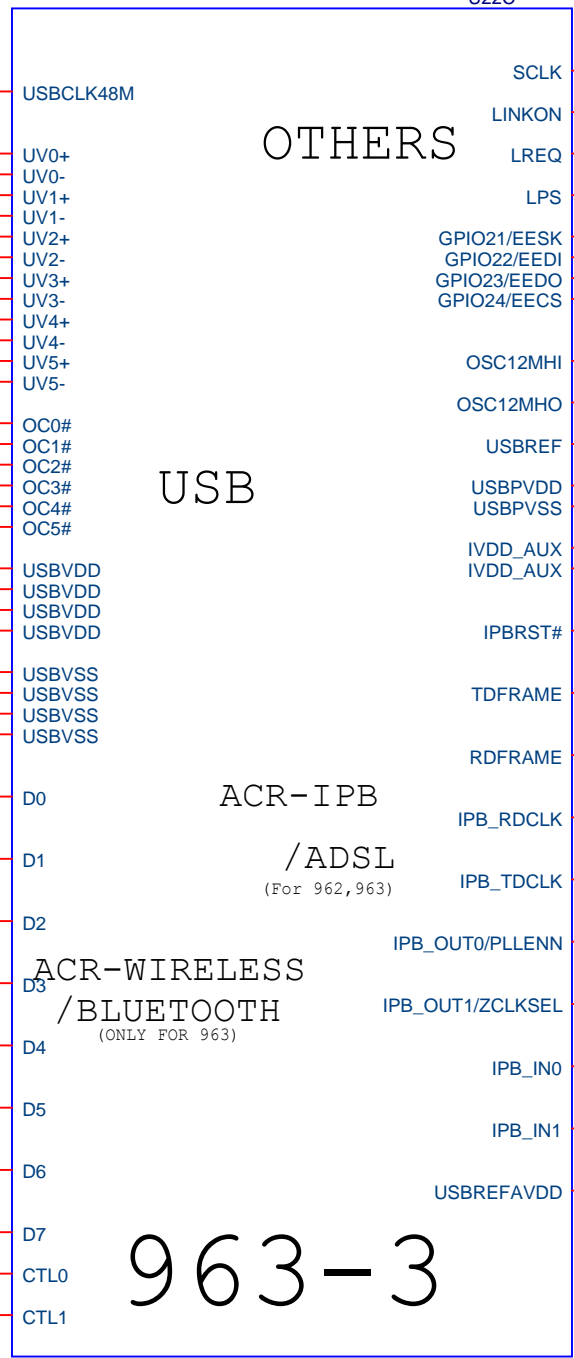
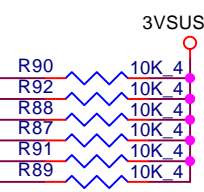
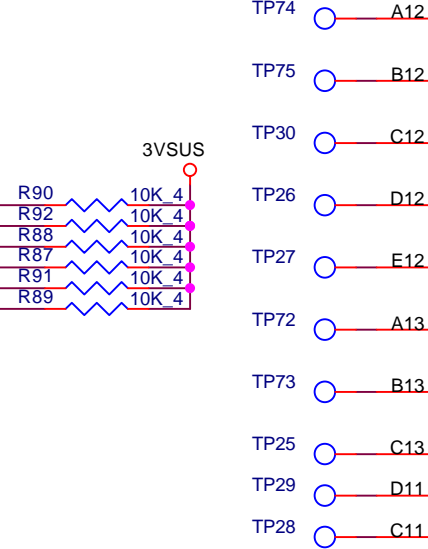
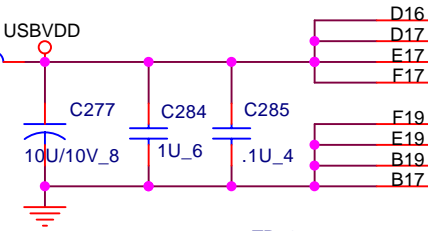
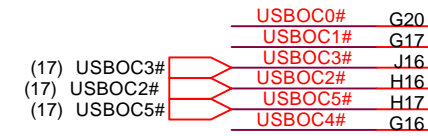
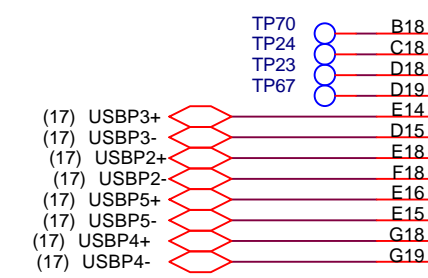
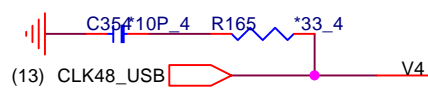




REV.D For cannot poweron issue

**PROJECT : ZL6**  
**Quanta Computer Inc.**

Size	Document Number	Rev
	<b>963L ( HOST,LPC,MII,GPIO,RTC )</b>	2A
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963L

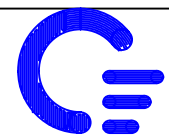
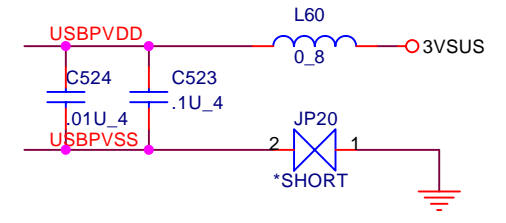
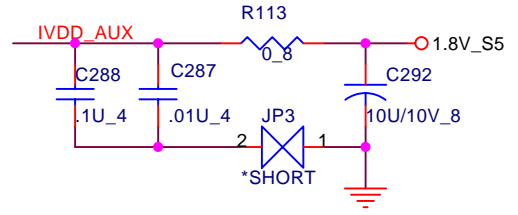
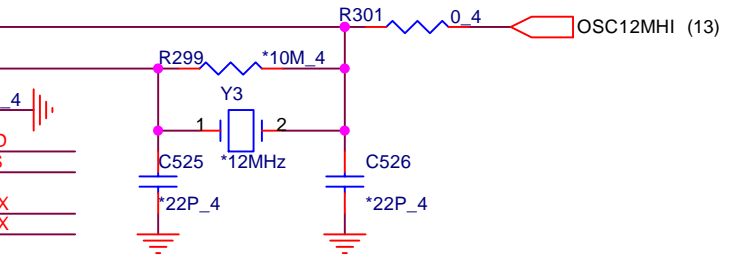
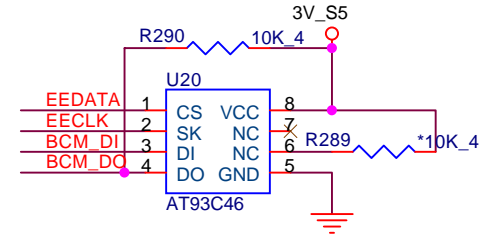
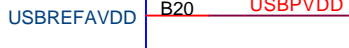
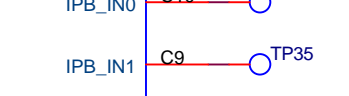
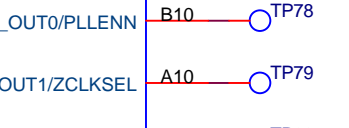
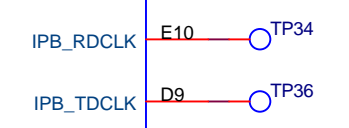
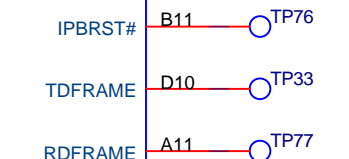
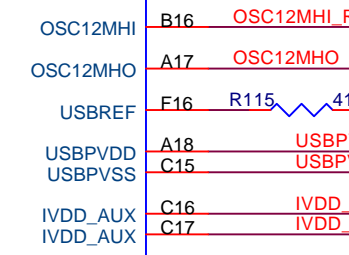
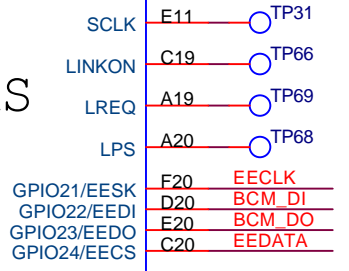
OTHERS

USB

ACR-IPB

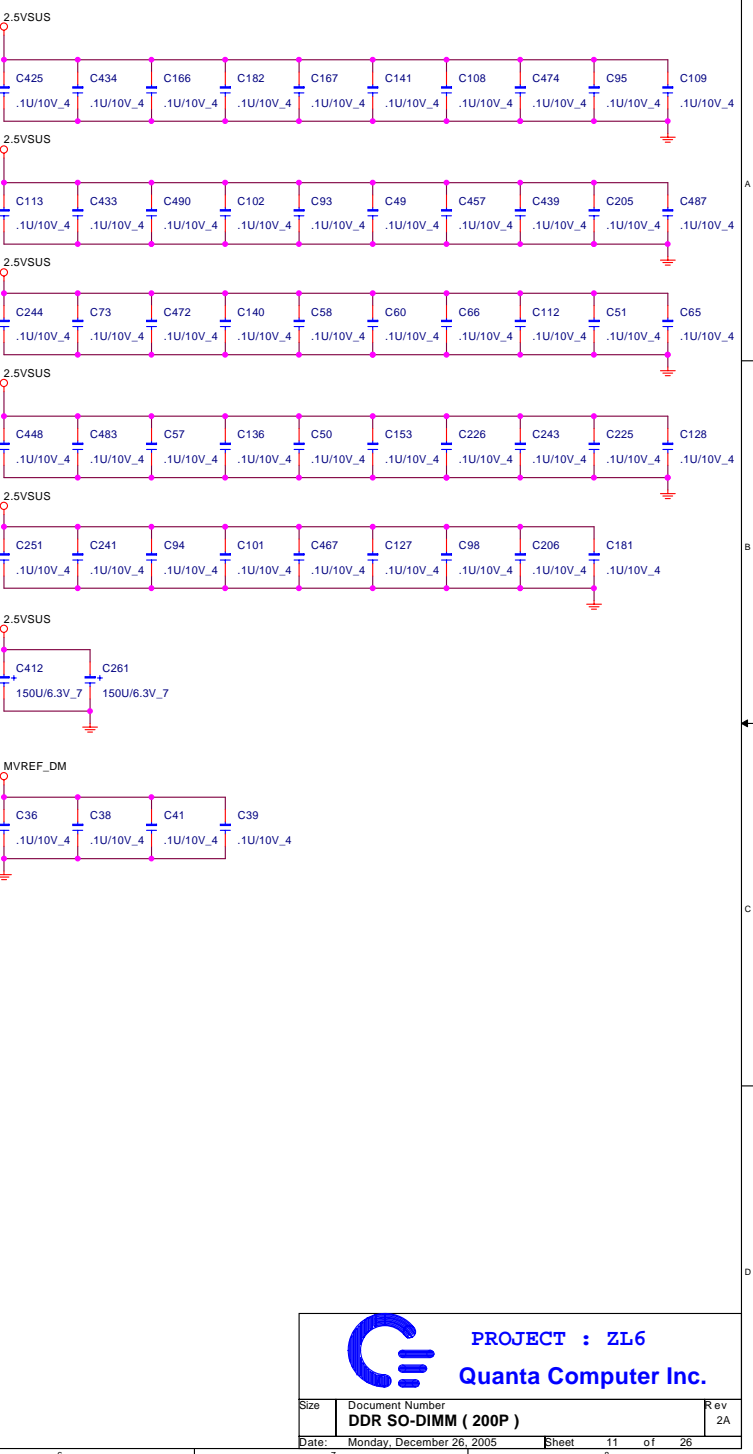
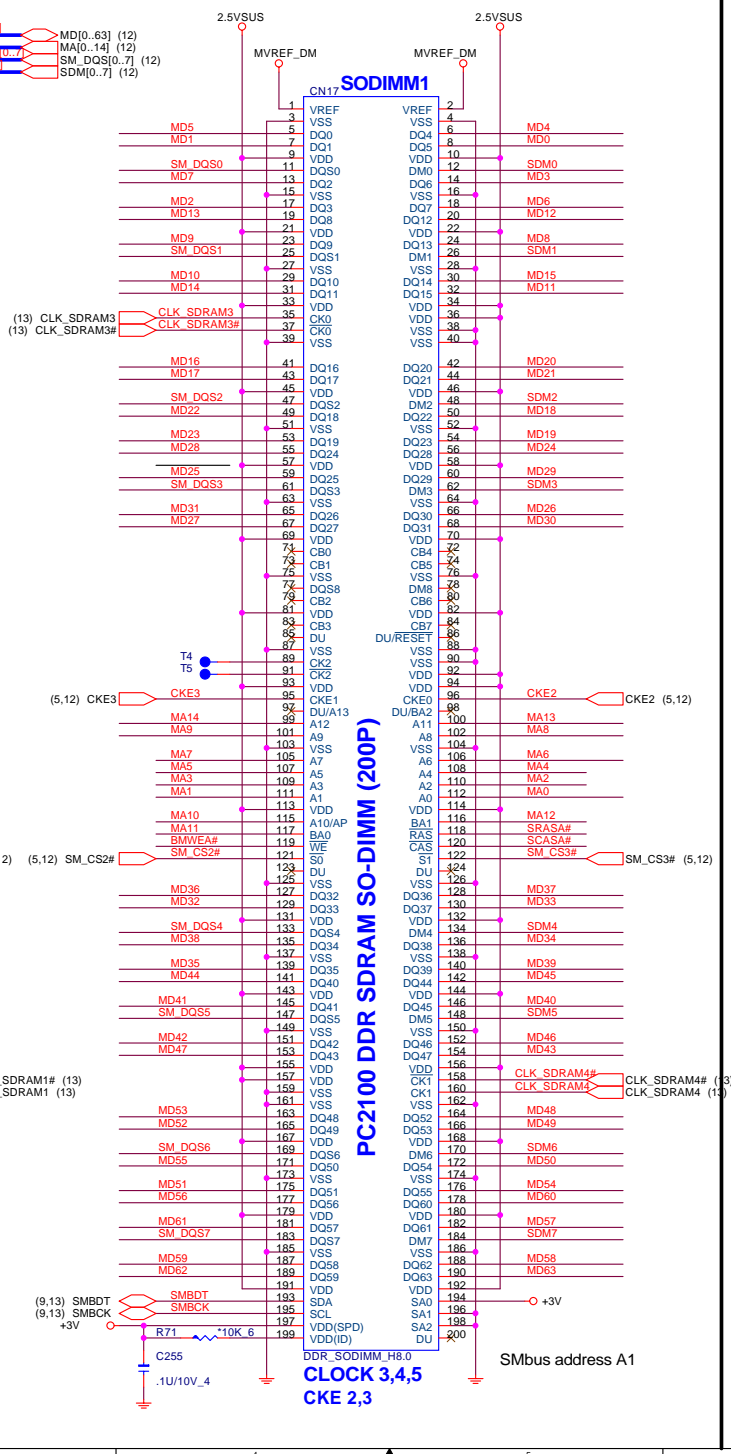
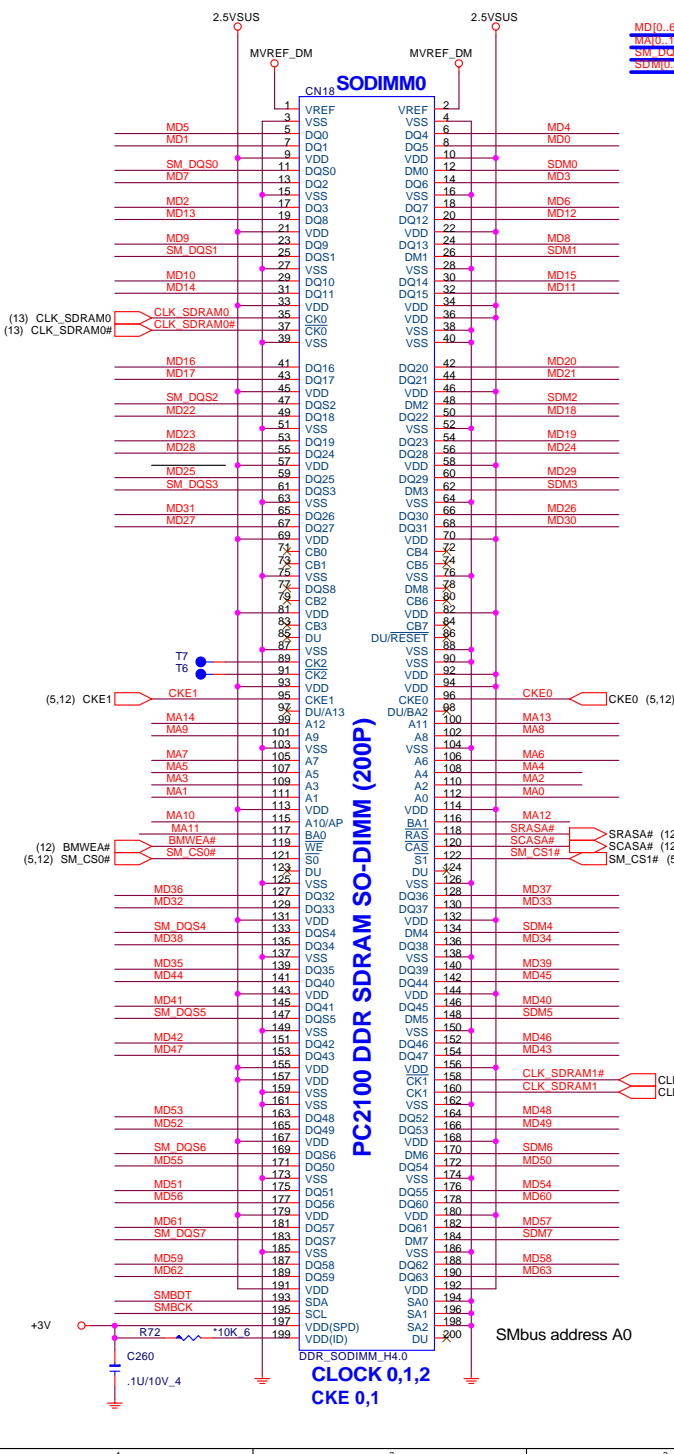
/ADSL  
(For 962,963)

ACR-WIRELESS  
/BLUETOOTH  
(ONLY FOR 963)



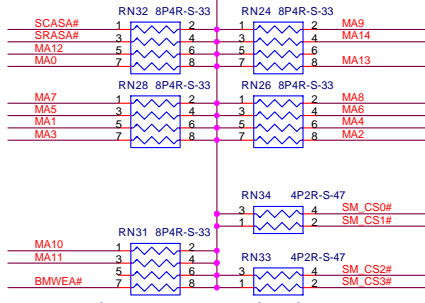
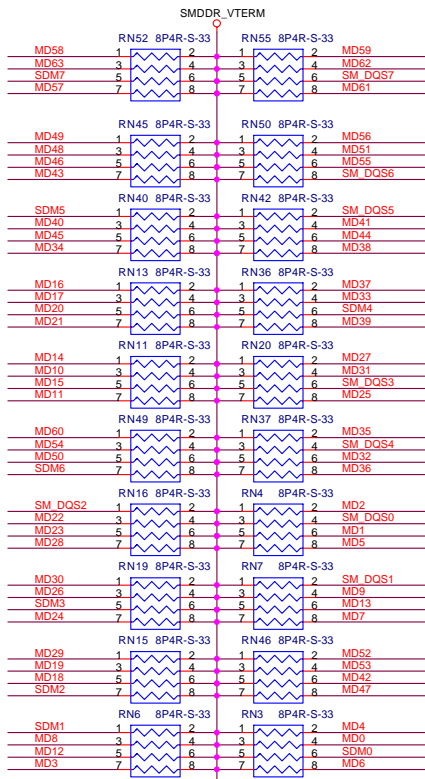
PROJECT : ZL6  
Quanta Computer Inc.

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	963L ( USB )	2A
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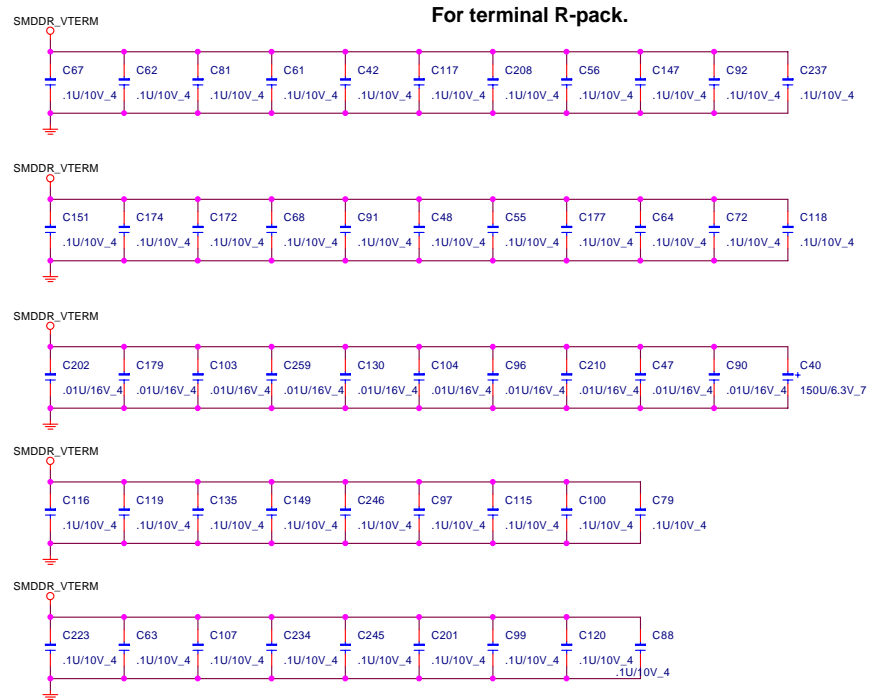
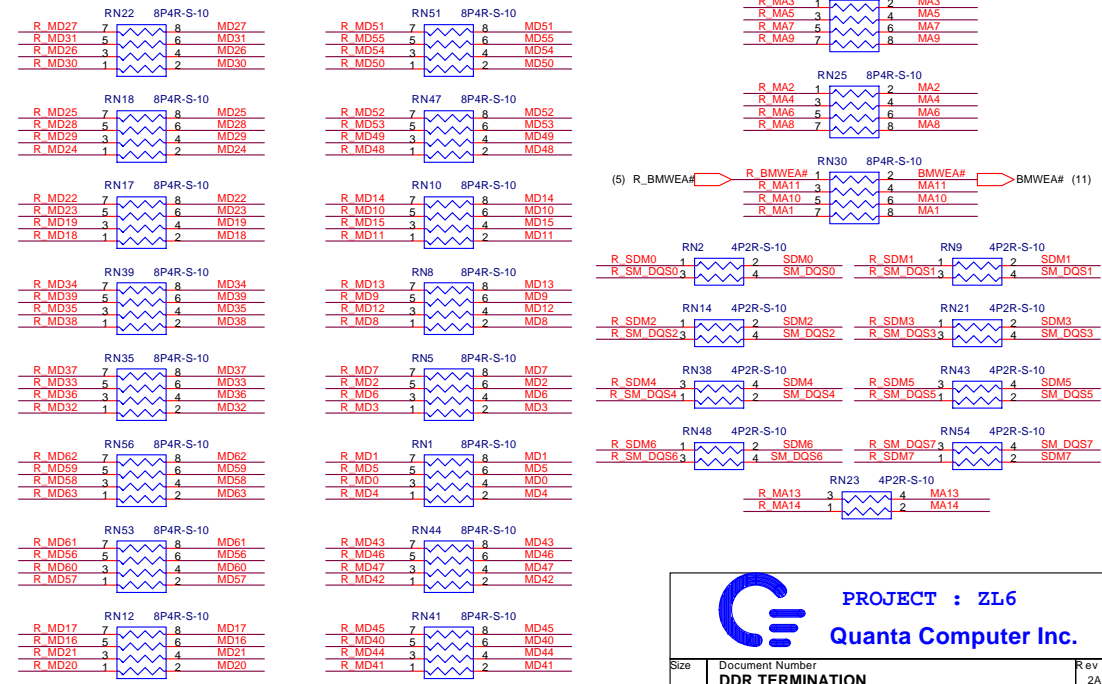
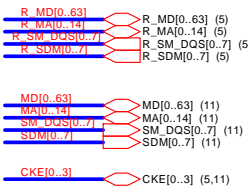


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	<b>DDR SO-DIMM ( 200P )</b>	2A
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Damping put BOT, termination put TOP



For terminal R-pack.

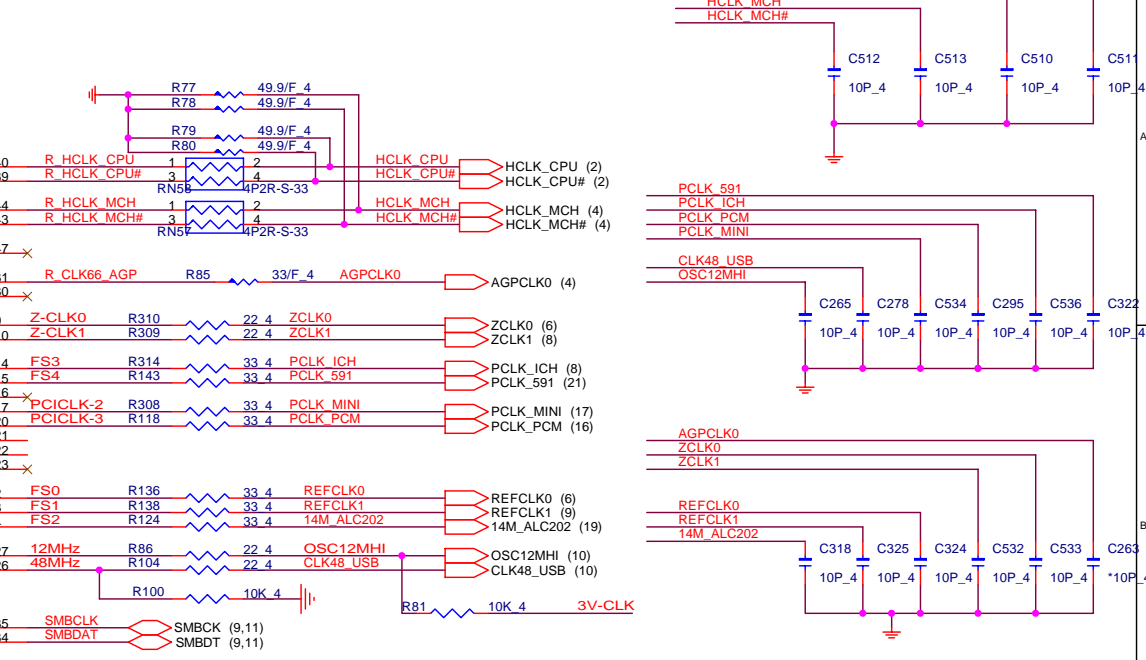
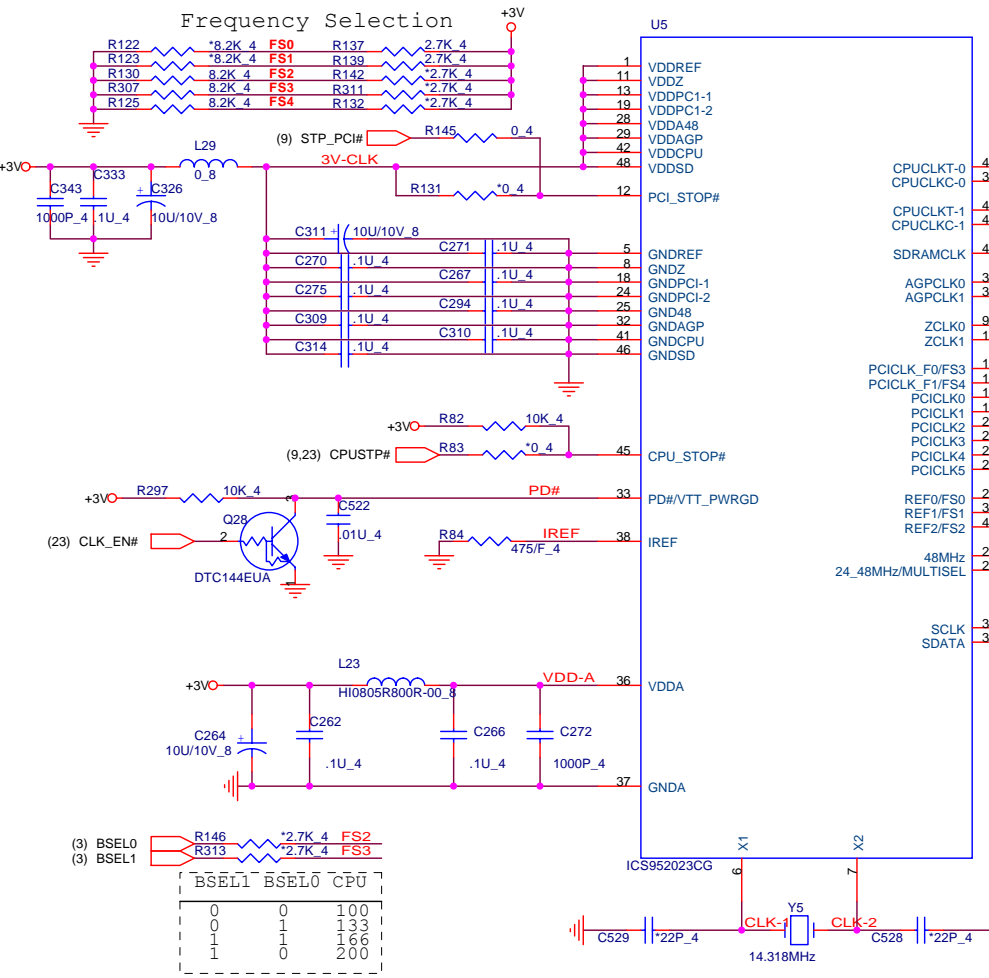
PROJECT : ZL6  
Quanta Computer Inc.

Size	Document Number	Rev
	DDR TERMINATION	2A
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# MAIN CLOCK GENERATOR

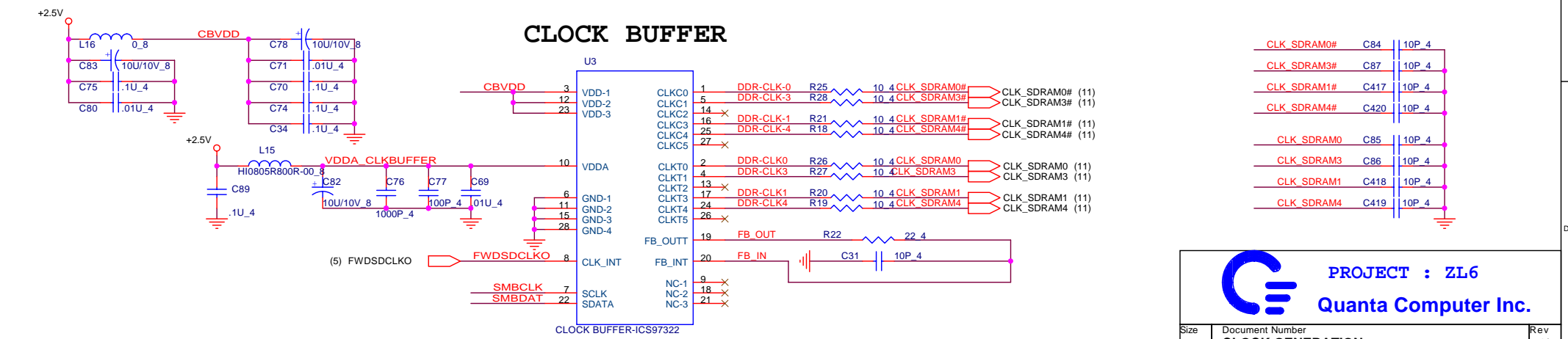
Default: FS4 0 FS3 0 FS2 0 FS1 1 FS0 1


## Frequency Selection



SIS648 CLOCK							SIS648 CLOCK										
FS4	FS3	FS2	FS1	FS0	CPU (MHz)	SDRAM (MHz)	ZCLK (MHz)	AGPCLK (MHz)	FS4	FS3	FS2	FS1	FS0	CPU (MHz)	SDRAM (MHz)	ZCLK (MHz)	AGPCLK (MHz)
0	0	0	0	0	100.00	100.00	133.33	66.66	1	0	0	0	0	100.00	100.00	66.66	66.66
0	0	0	0	1	100.00	133.33	133.33	66.66	1	0	0	0	1	100.00	133.33	66.66	66.66
0	0	0	1	0	100.00	200.00	133.33	66.66	1	0	0	1	0	100.00	200.00	66.66	66.66
0	0	0	1	1	100.00	160.00	133.33	66.66	1	0	0	1	1	100.00	166.66	66.66	66.66
0	0	1	0	0	133.33	100.00	133.33	66.66	1	0	1	0	0	133.33	100.00	66.66	66.66
0	0	1	0	1	133.33	133.33	133.33	66.66	1	0	1	0	1	133.33	133.33	66.66	66.66
0	0	1	1	0	133.33	200.00	133.33	66.66	1	0	1	1	0	133.33	200.00	66.66	66.66
0	0	1	1	1	133.33	166.66	133.33	66.66	1	0	1	1	1	133.33	166.66	66.66	66.66
0	1	0	0	0	200.00	100.00	133.33	66.66	1	1	0	0	0	100.99	100.99	67.33	67.33
0	1	0	0	1	200.00	133.33	133.33	66.66	1	1	0	0	1	100.99	134.65	67.33	67.33
0	1	0	1	0	200.00	200.00	133.33	66.66	1	1	0	1	0	100.99	201.98	67.33	67.33
0	1	0	1	1	200.00	160.00	133.33	66.66	1	1	0	1	1	100.99	168.31	67.33	67.33
0	1	1	0	0	160.00	100.00	133.33	66.66	1	1	1	0	0	134.65	100.99	67.33	67.33
0	1	1	0	1	166.66	133.33	133.33	66.66	1	1	1	0	1	134.65	134.65	67.33	67.33
0	1	1	1	0	160.00	200.00	133.33	66.66	1	1	1	1	0	134.65	201.98	67.33	67.33
0	1	1	1	1	166.66	166.66	133.33	66.66	1	1	1	1	1	134.65	168.31	67.33	67.33

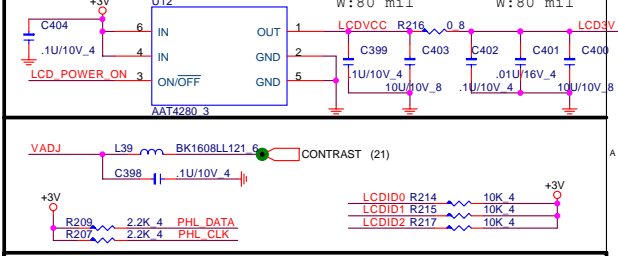
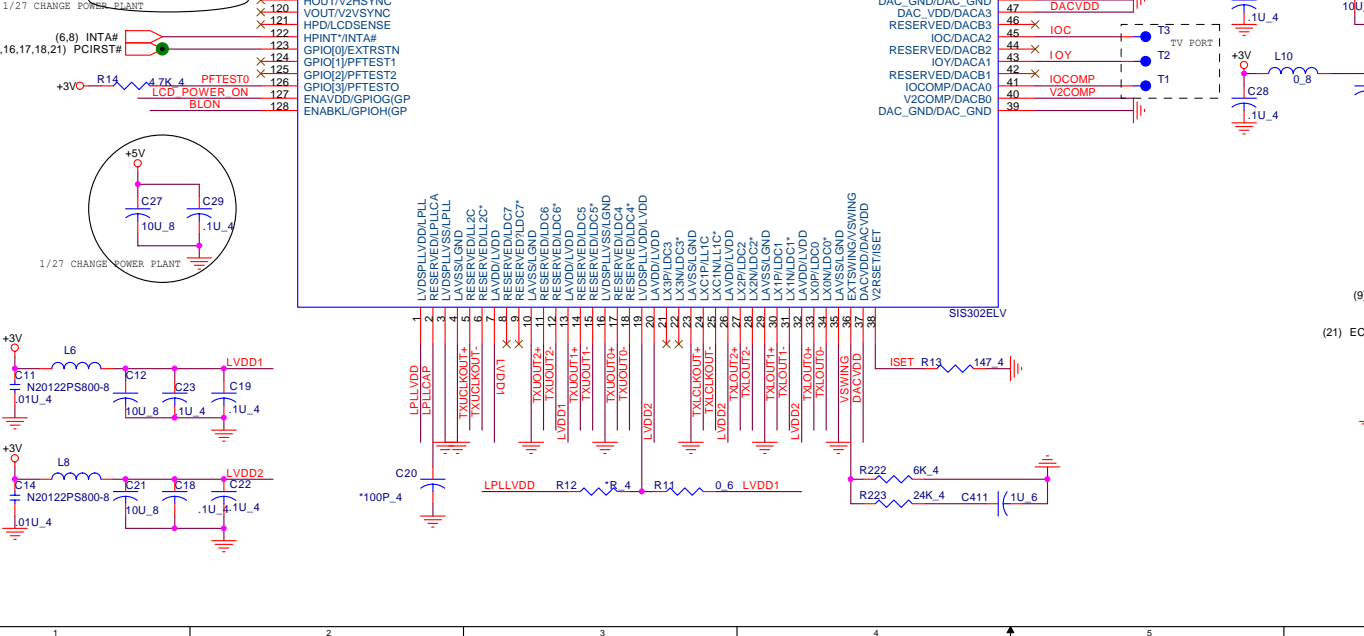
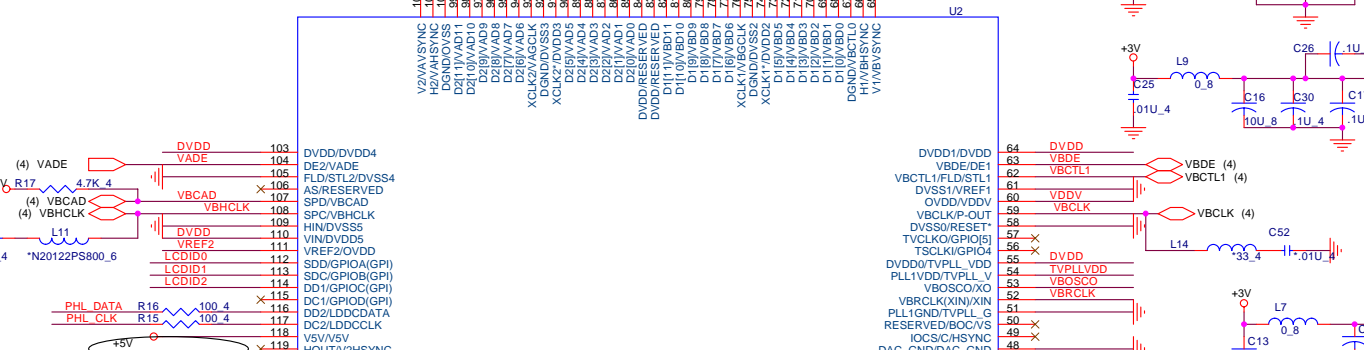
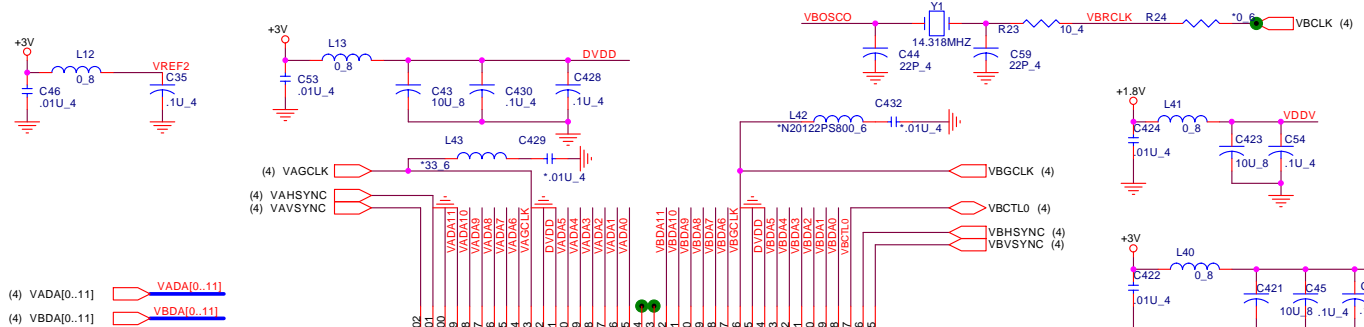
## CLOCK BUFFER



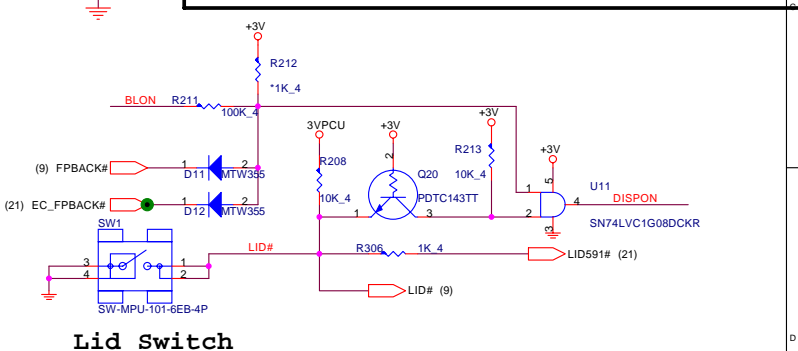
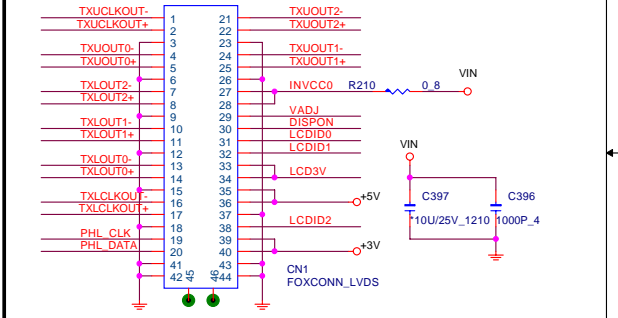


**PROJECT : ZL6**  
**Quanta Computer Inc.**

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	<b>CLOCK GENERATION</b>	2A
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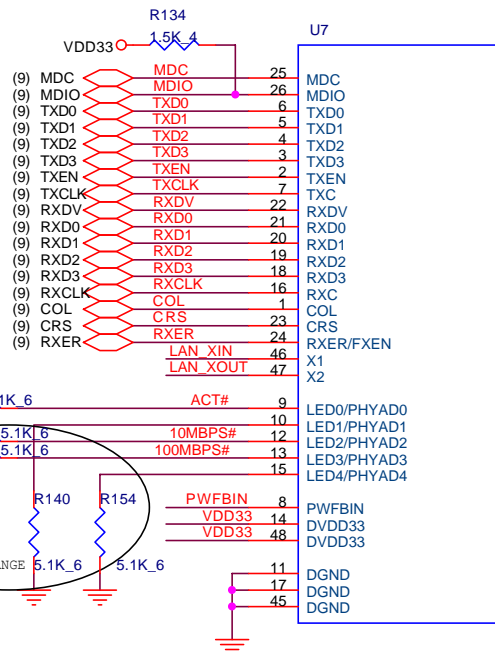
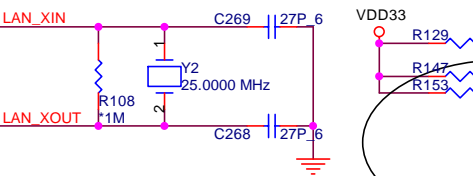
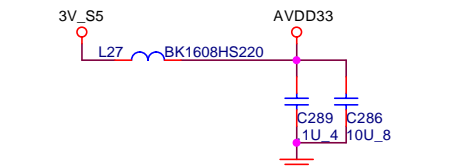
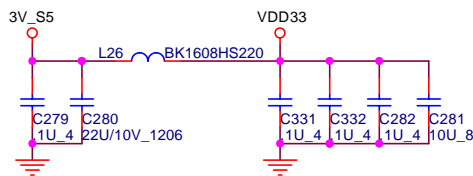
LCDID2	LCDID1	LCDID0	LCD TYPE	LCD CABLE P/N
0	0	0		
0	0	1		
0	1	0		
0	1	1	14" XGA	DDOZL1LC000
1	0	0	15" XGA	DDOZL1LC107
1	0	1	15" SXGA+	DDOZL1LC204
1	1	0	15.4" WXGA	DDOZL1LC301
1	1	1	15.4" WSXGA+	DDOZL1LC409



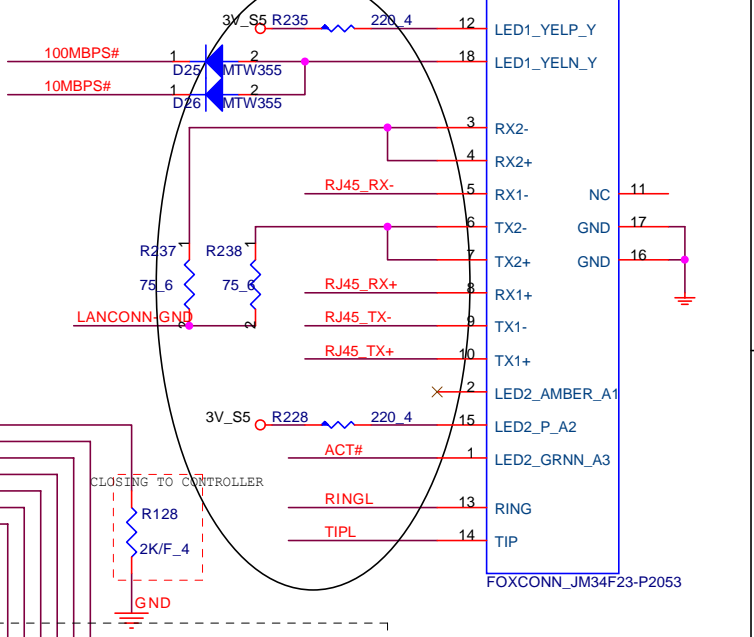
**PROJECT : ZL6**  
**Quanta Computer Inc.**

Size	Document Number	Rev
	<b>SIS 302ELV &amp; LVDS</b>	2A
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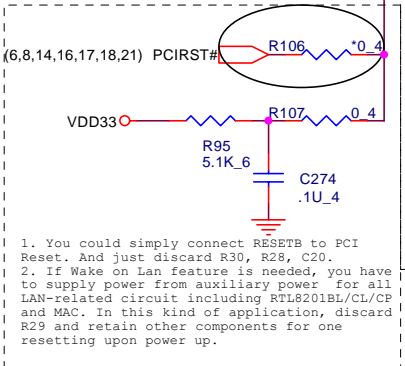
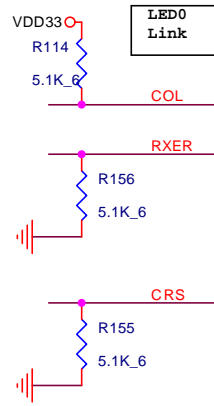
1/27 FOLLOWING CUSTOMER SPEC CHANGE



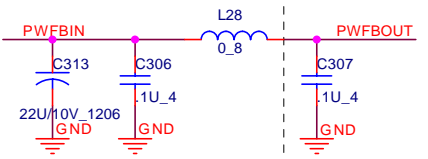
R27 is reserved for 8201CL/CP LED Mode Change to compatible with BL

R34 is reserved for ensuring 8201BL/CL/CP latch to UTP Mode.

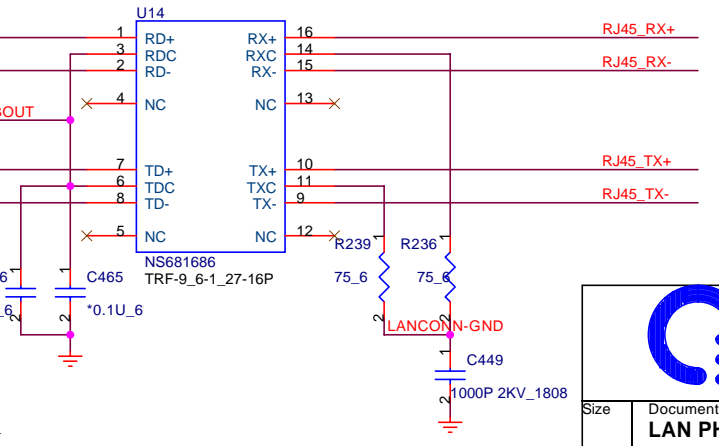
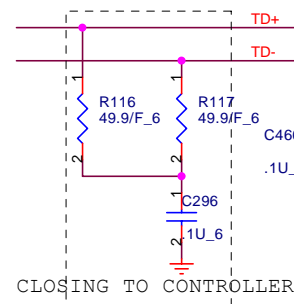
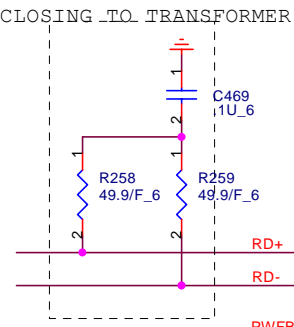
R35 is reserved for ensuring 8201CL/CP latch to normal operation mode.



1. You could simply connect RESETB to PCI Reset. And just discard R30, R28, C20.
2. If Wake on Lan feature is needed, you have to supply power from auxiliary power for all LAN-related circuit including RTL8201BL/CL/CP and MAC. In this kind of application, discard R29 and retain other components for one resetting upon power up.

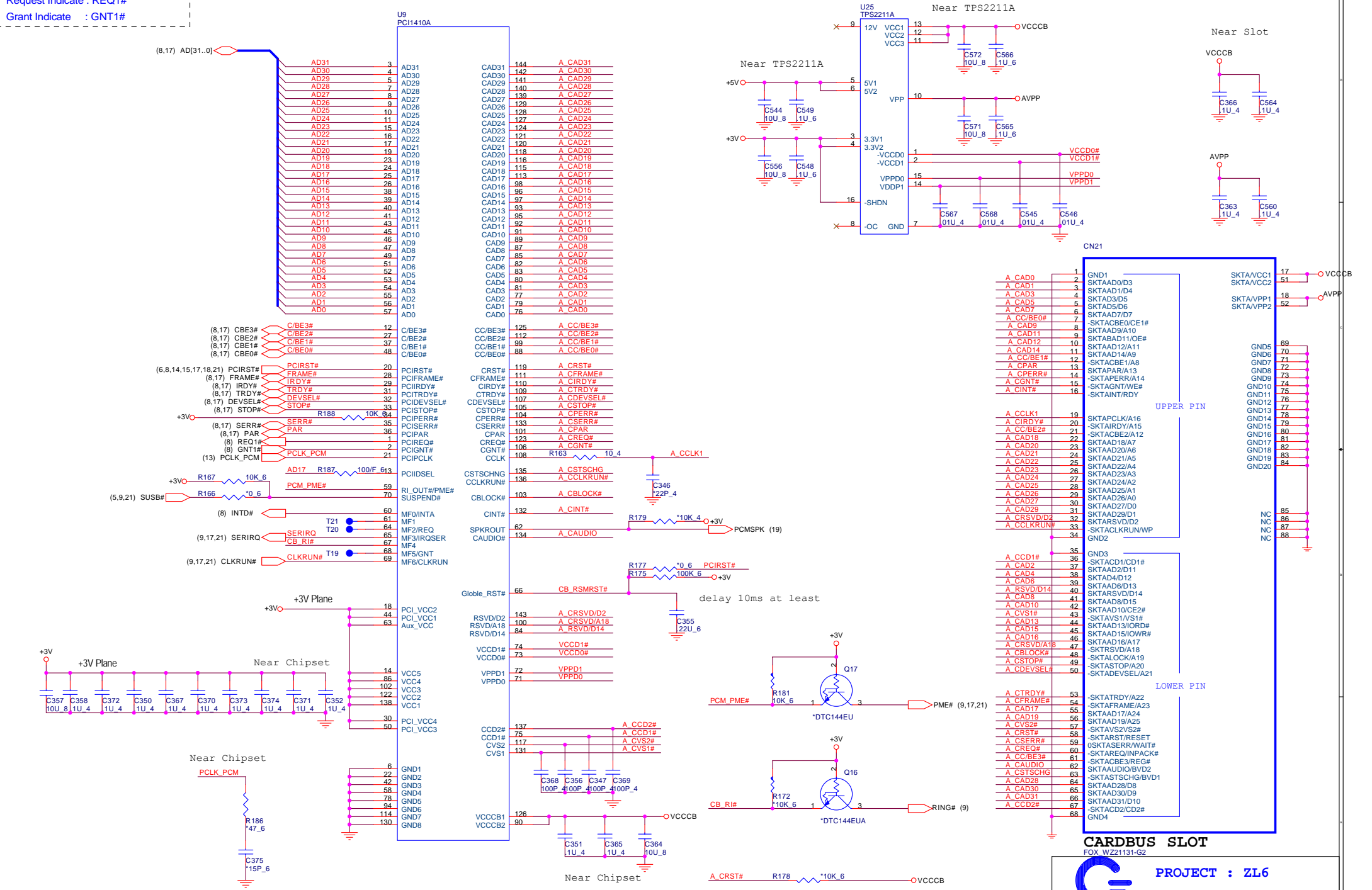


Place C14, C15, L1 close to PWFBOUT and place C16 close to PWFBIN.



PROJECT : ZL6  
Quanta Computer Inc.

ID Select : AD17  
 Interrupt Pin : INTD#  
 Request Indicate : REQ1#  
 Grant Indicate : GNT1#



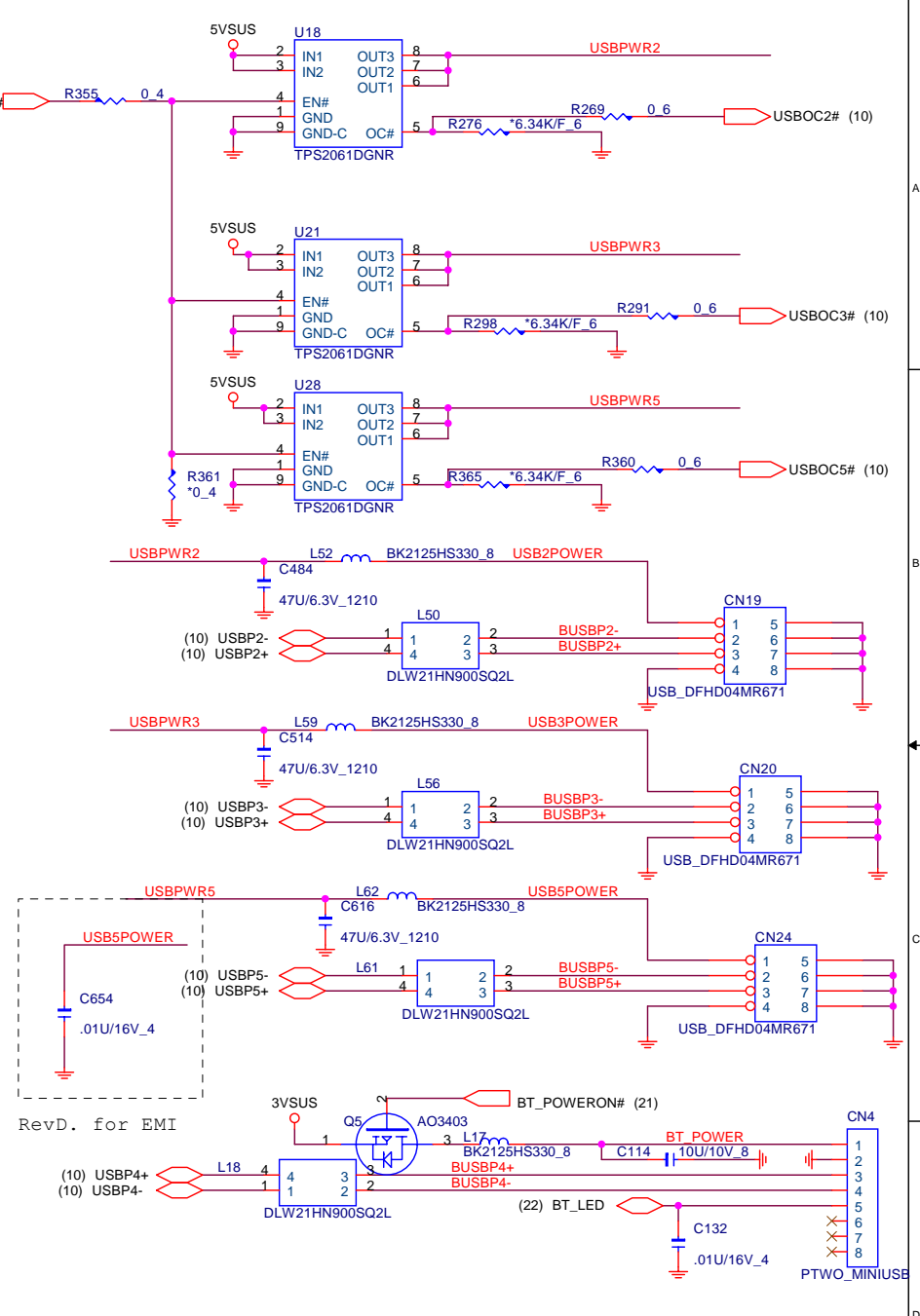
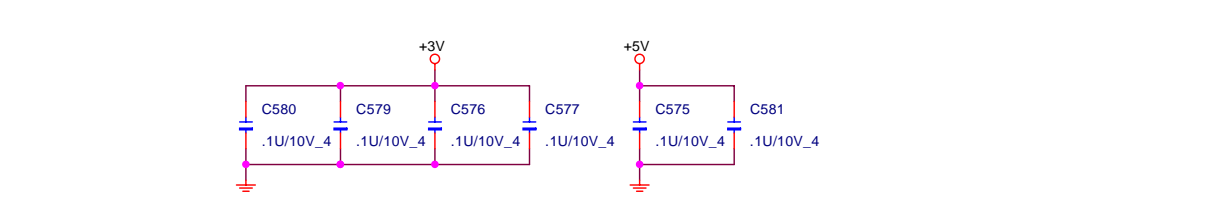
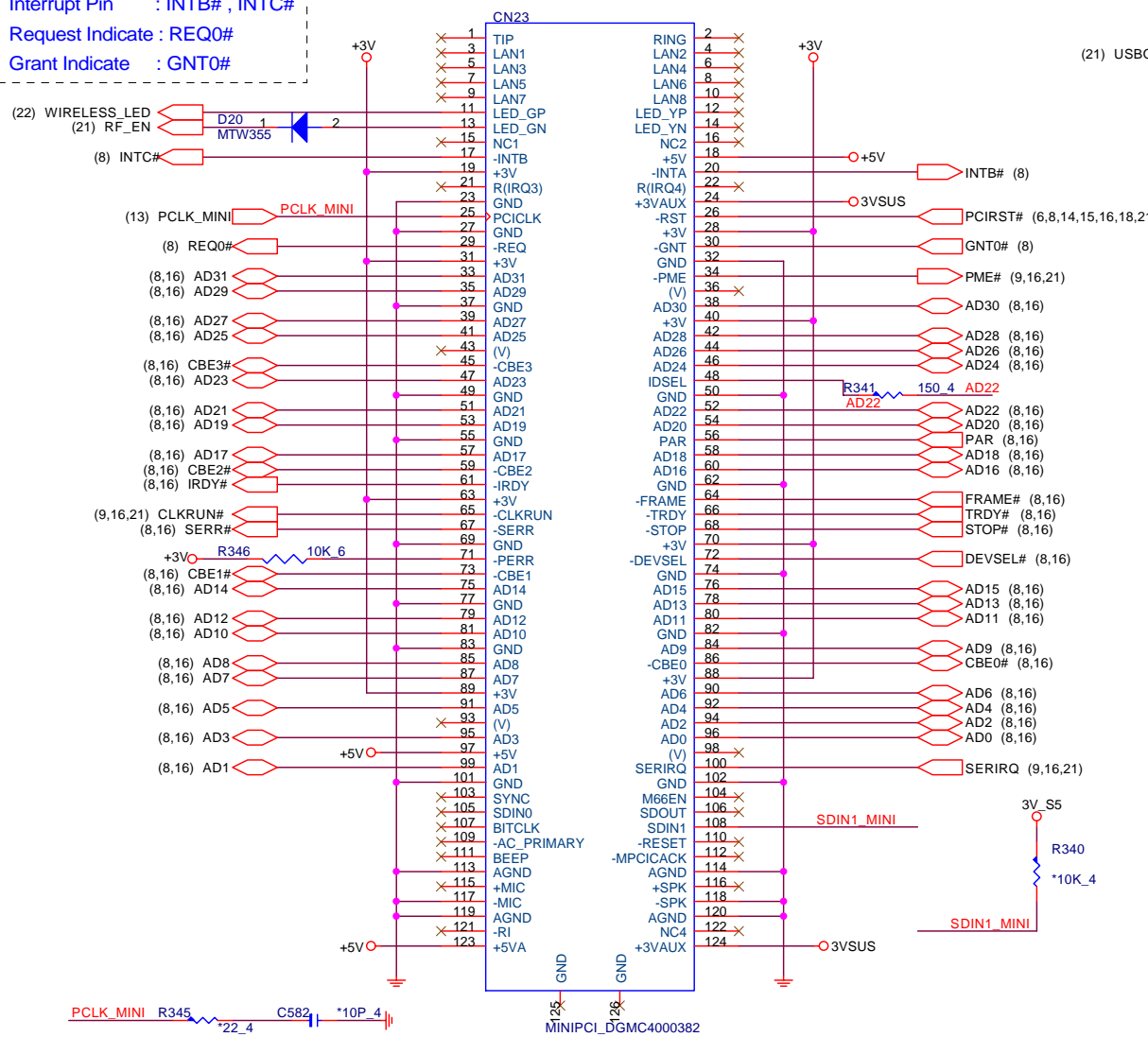
**CARDBUS SLOT**  
 FOX W221131-G2

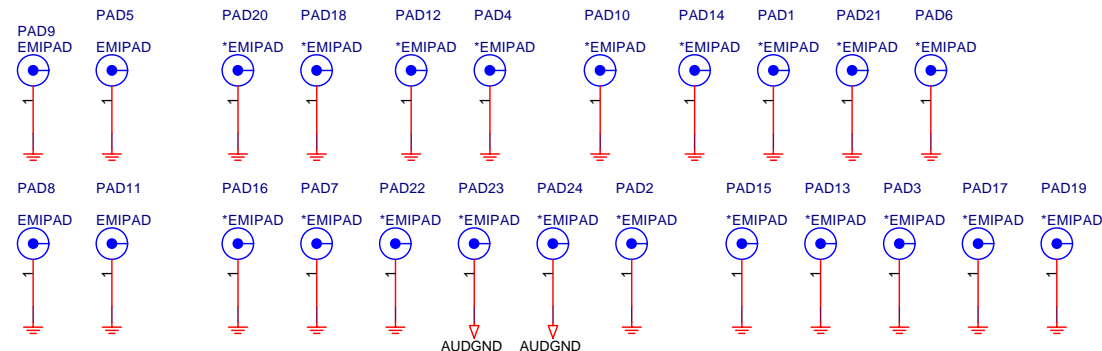
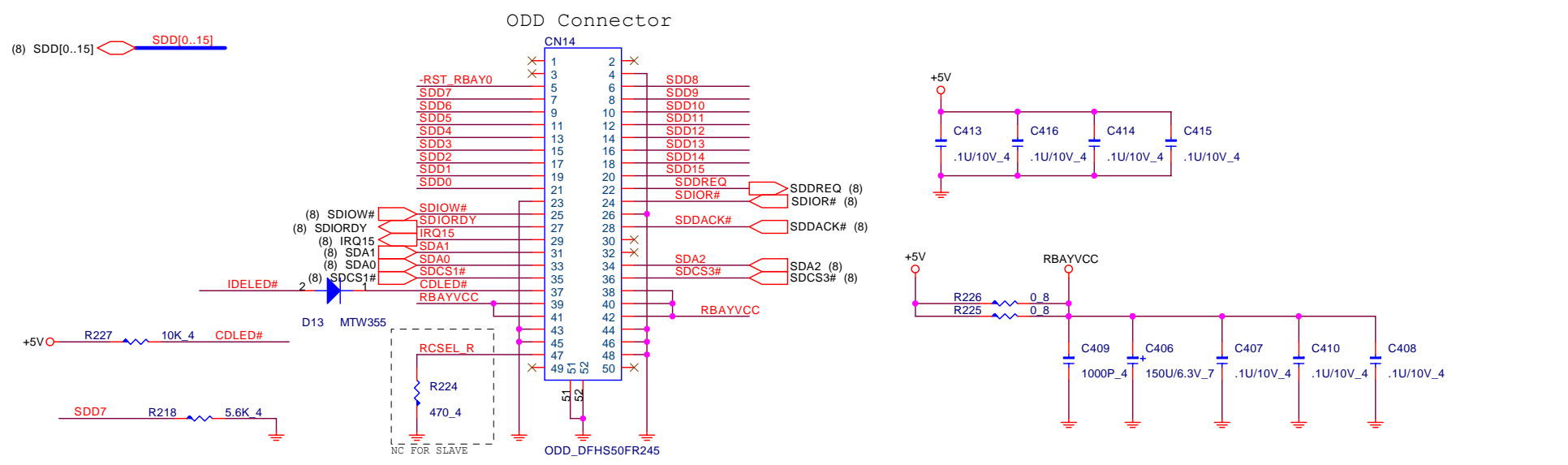
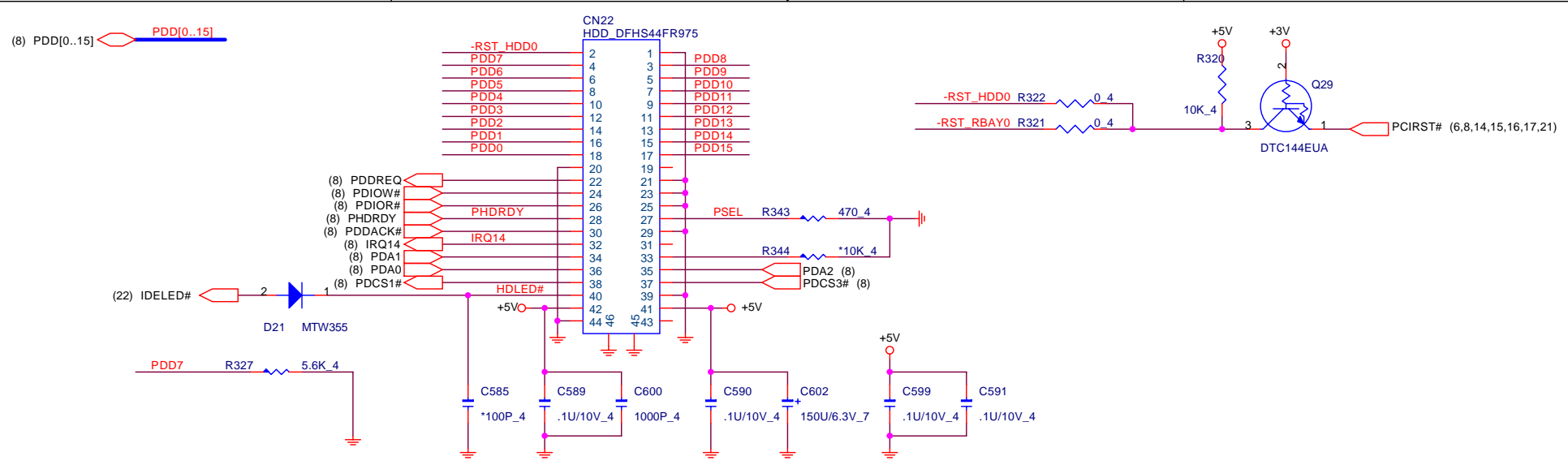
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**Quanta Computer Inc.**

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	PCMCIA(PCI1410)	2A
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ID Select : AD22  
 Interrupt Pin : INTB# , INTC#  
 Request Indicate : REQ0#  
 Grant Indicate : GNT0#

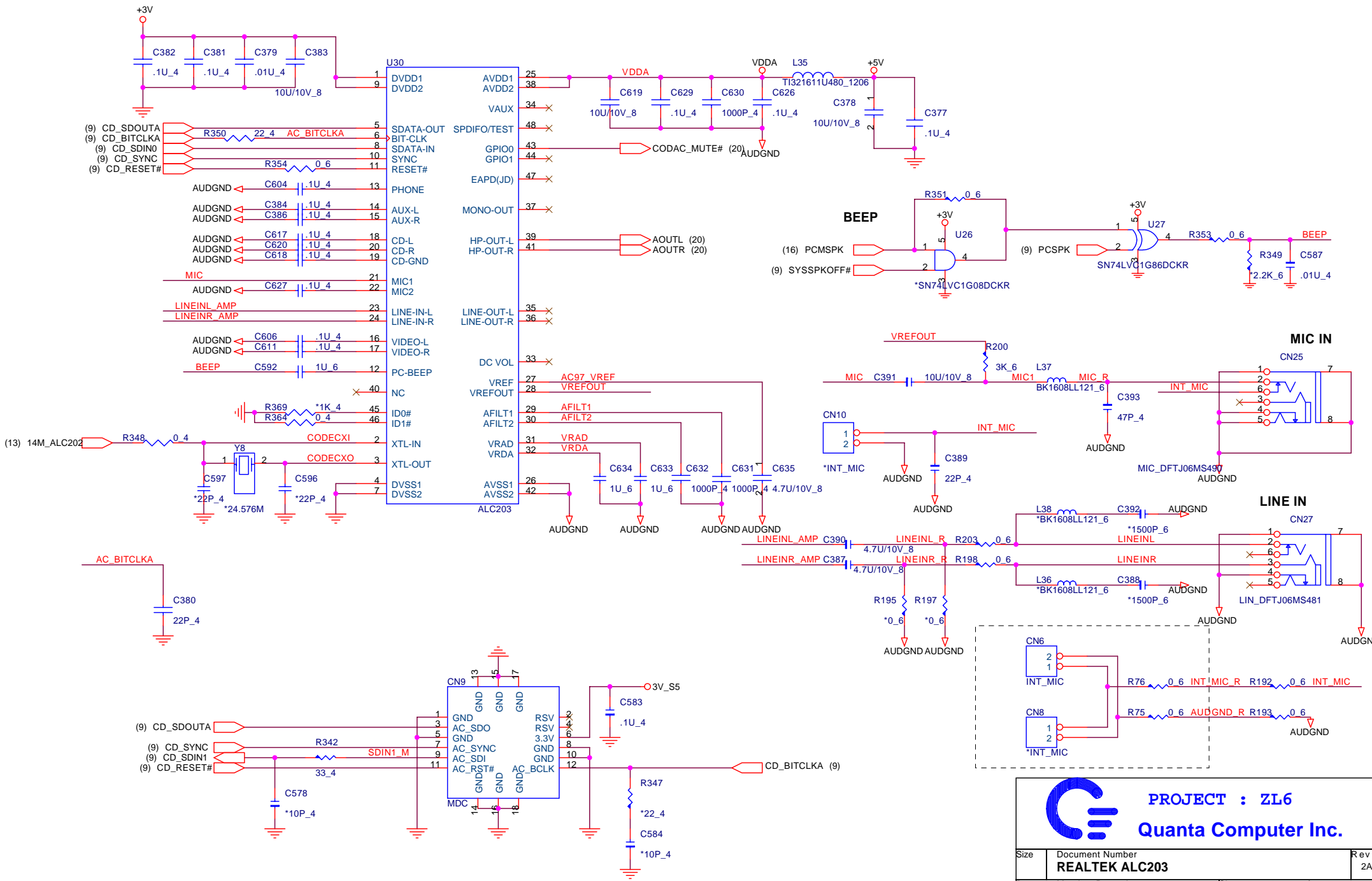
**MINI-PCI**






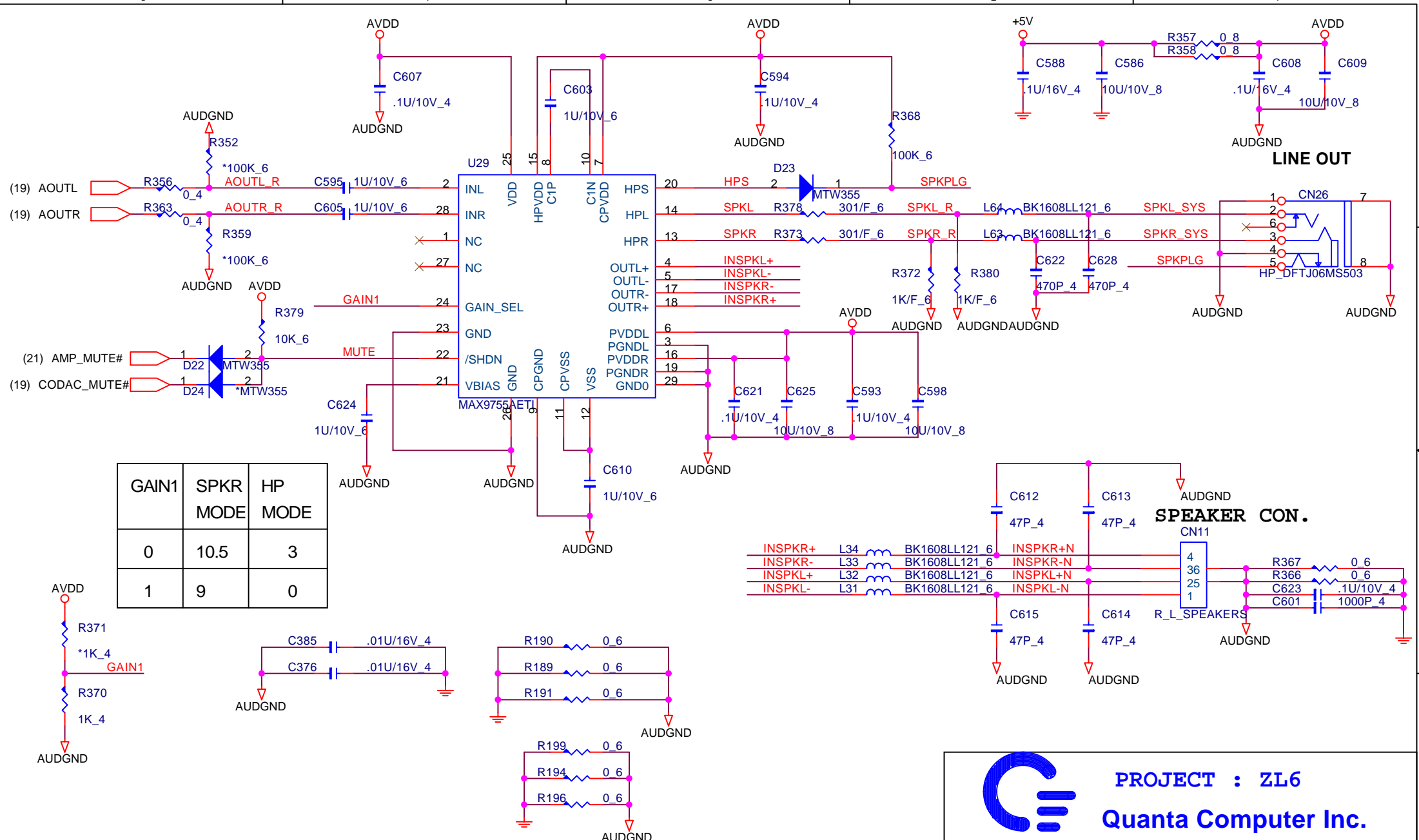
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**Quanta Computer Inc.**

Size	Document Number	Rev
	<b>HDD &amp; CDROM</b>	2A
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**Quanta Computer Inc.**

Size	Document Number	Rev
	<b>REALTEK ALC203</b>	2A
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GAIN1	SPKR MODE	HP MODE
0	10.5	3
1	9	0

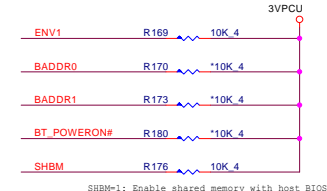
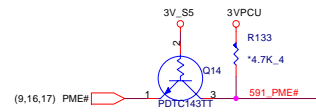
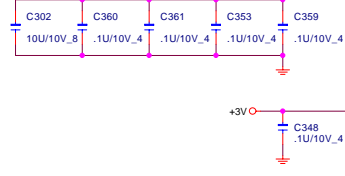
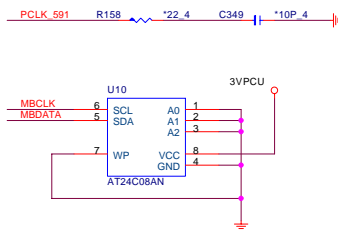


**PROJECT : ZL6**  
**Quanta Computer Inc.**

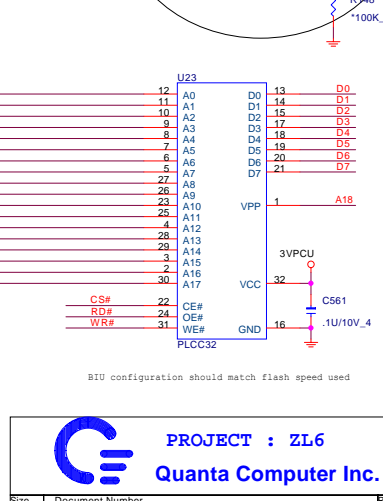
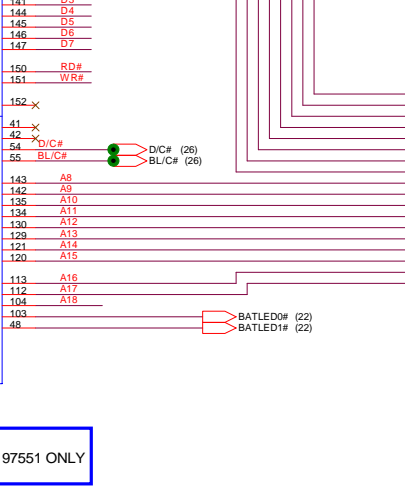
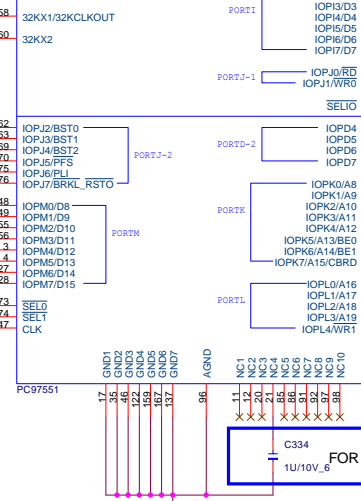
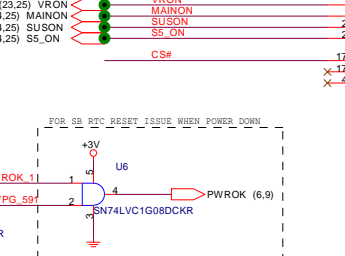
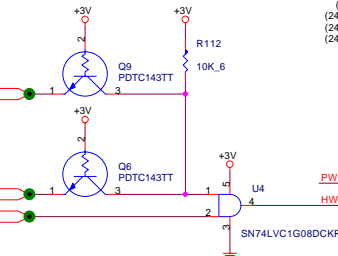
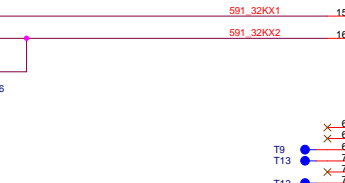
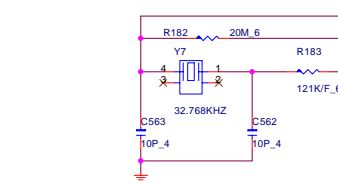
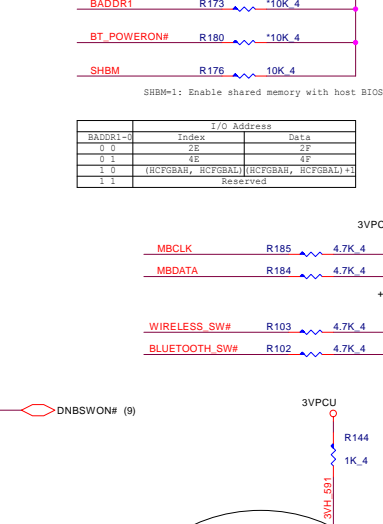
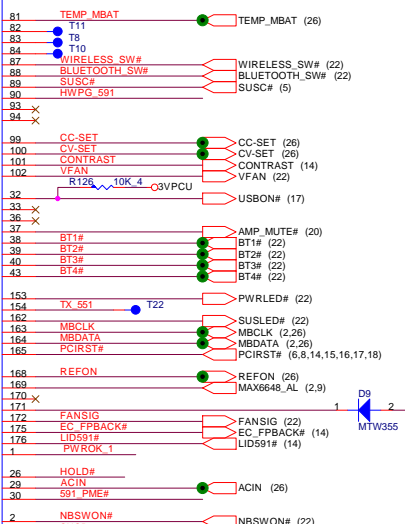
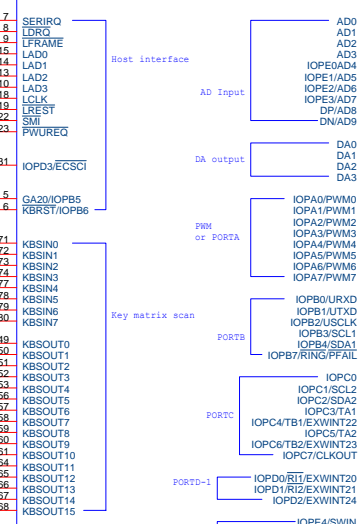
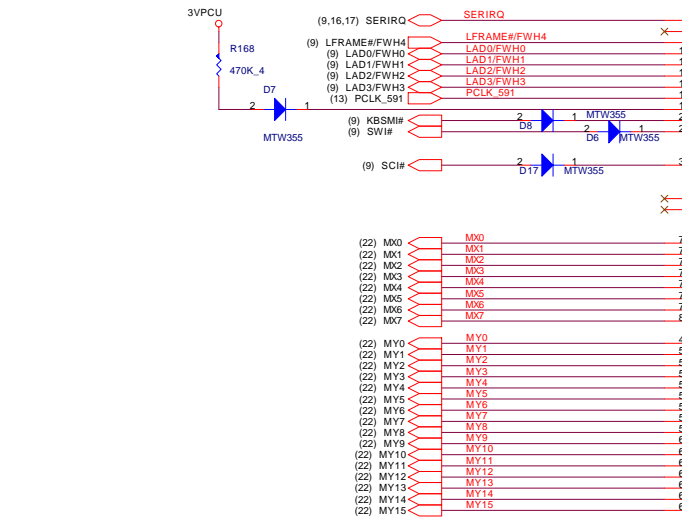
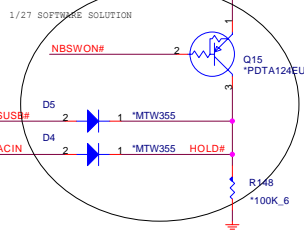
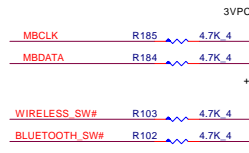
Size	Document Number	Rev
	<b>AUDIO AMP(MAX 9755)</b>	2A
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LDRQ#(pin 8) internal is no use

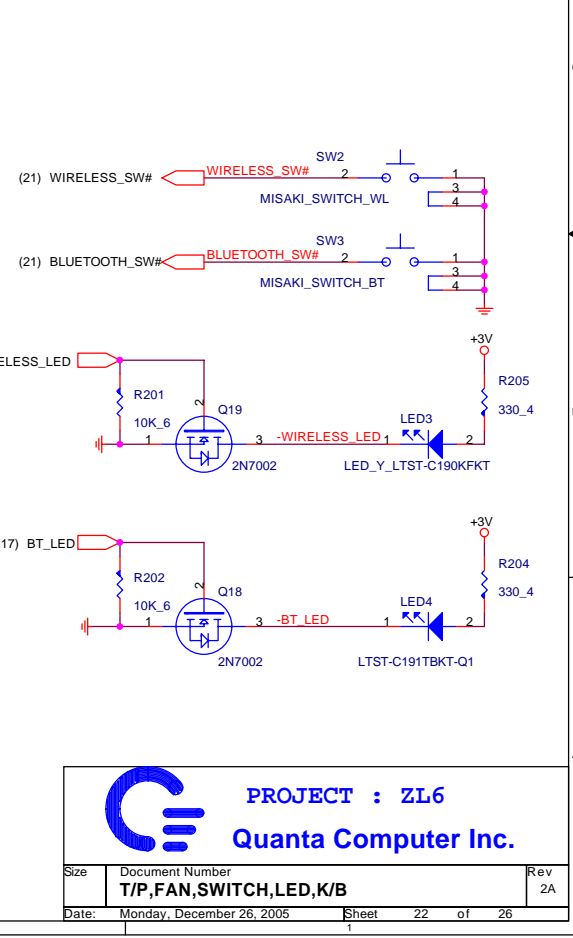
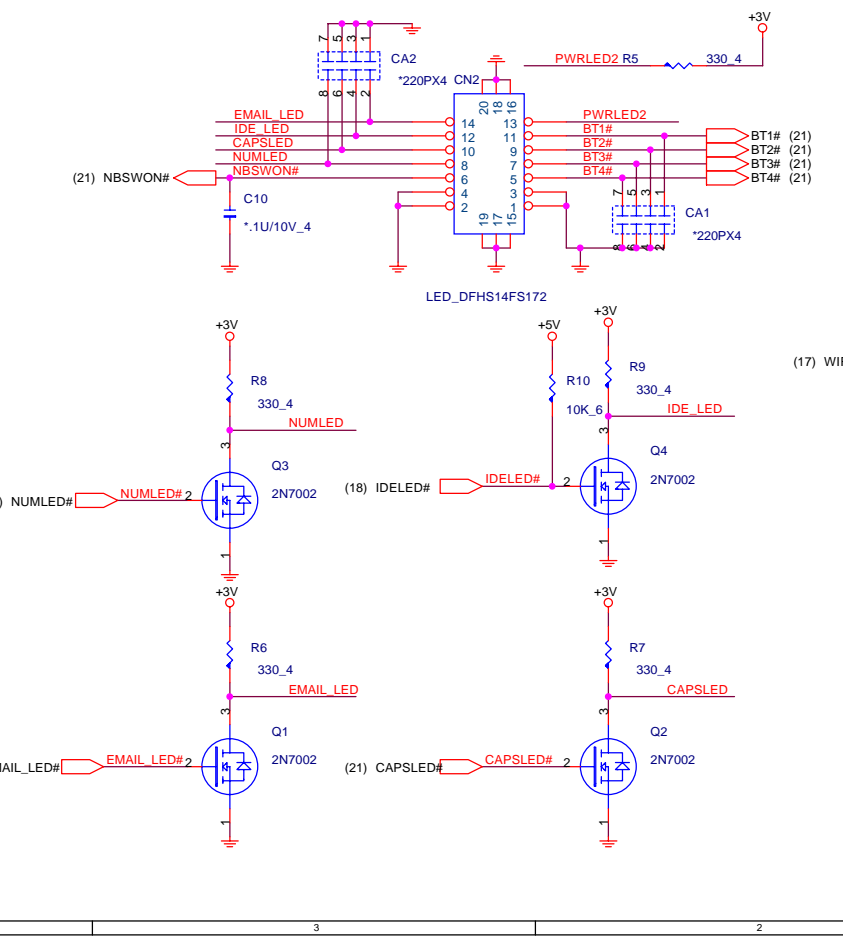
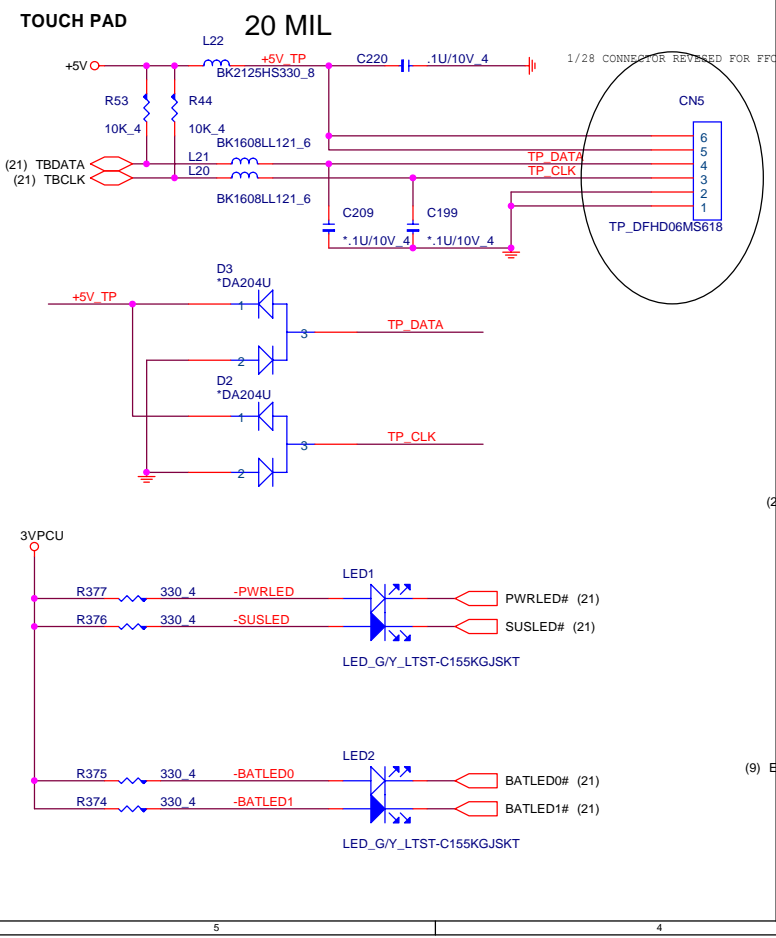
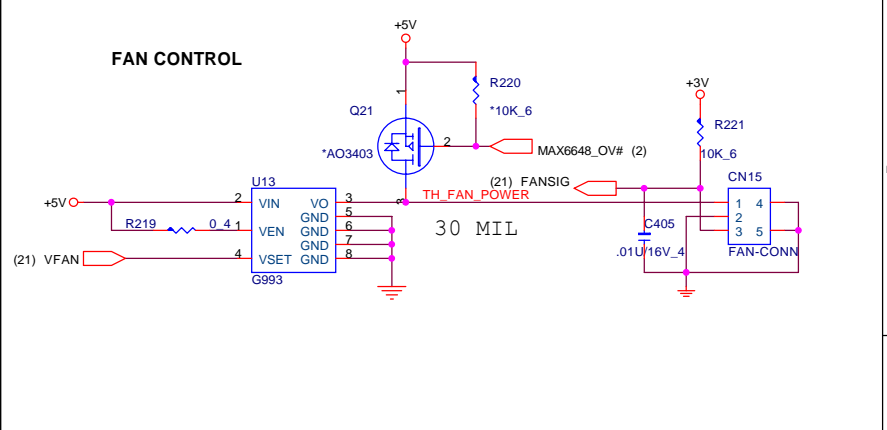
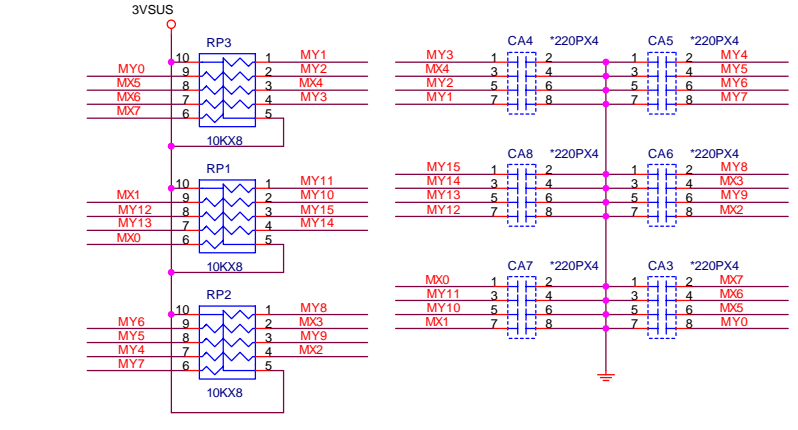
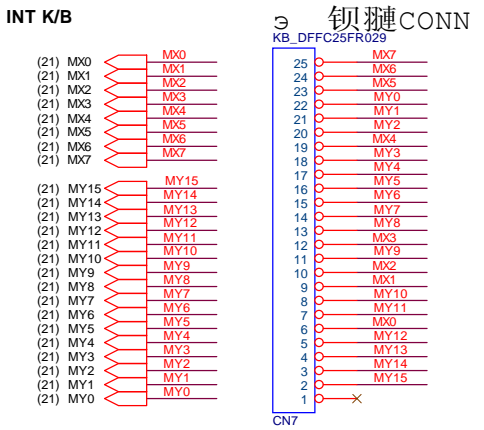


I/O Address table with columns for ADDR1-C, Index, and Data. It lists addresses 0-11 and their corresponding data values.



C334 1U/10V\_6 FOR 97551 ONLY

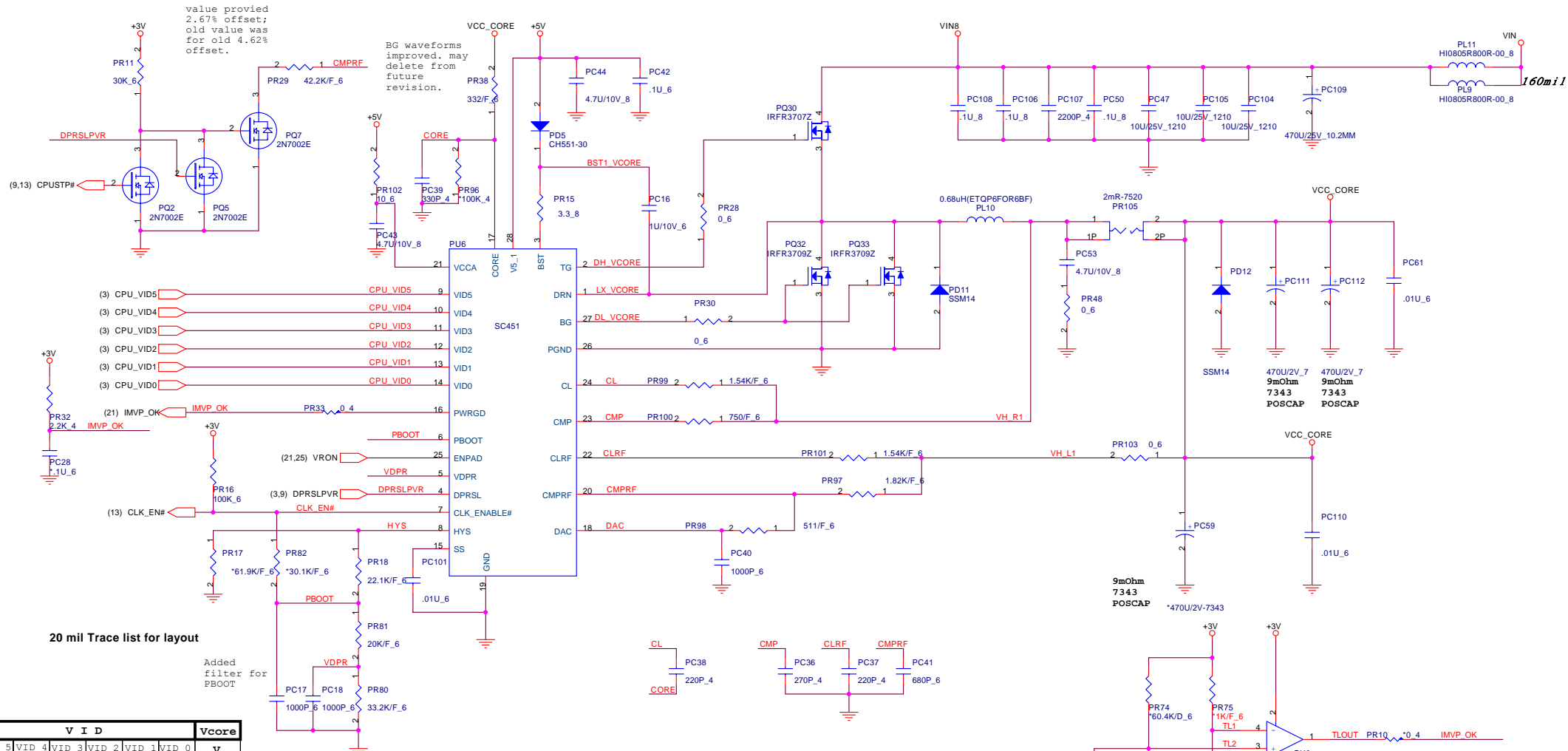
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Quanta Computer Inc.  
Size: Document Number 97551 & FLASH, Sheet 21 of 26, Rev 2A  
Date: Friday, December 30, 2005



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**Quanta Computer Inc.**

Size	Document Number	Rev
T/P,FAN,SWITCH,LED,K/B		2A
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value provided  
2.67% offset;  
old value was  
for old 4.62%  
offset.



**20 mil Trace list for layout**

Added filter for PBOOT

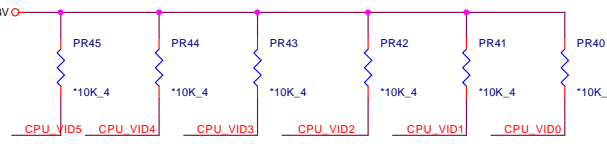
V I D							Vcore
VID 5	VID 4	VID 3	VID 2	VID 1	VID 0	V	
0	1	0	1	1	1	1.340	
0	1	1	0	0	0	1.324	
0	1	1	0	1	0	1.292	
0	1	1	1	0	0	1.260	
0	1	1	1	0	1	1.244	
0	1	1	1	1	1	1.212	
1	0	0	0	0	1	1.180	
1	0	0	1	1	1	1.148	
1	0	0	1	1	0	1.100	
1	0	1	0	0	1	1.052	
1	0	1	0	1	1	1.020	
1	0	1	1	1	0	0.972	
1	1	0	0	0	0	0.940	

**100 mil Trace list for layout**

- DH\_VCORE
- LX\_VCORE
- DL\_VCORE
- DH\_VCORE2
- LX\_VCORE2
- DL\_VCORE2

**10 mil Trace list for layout**

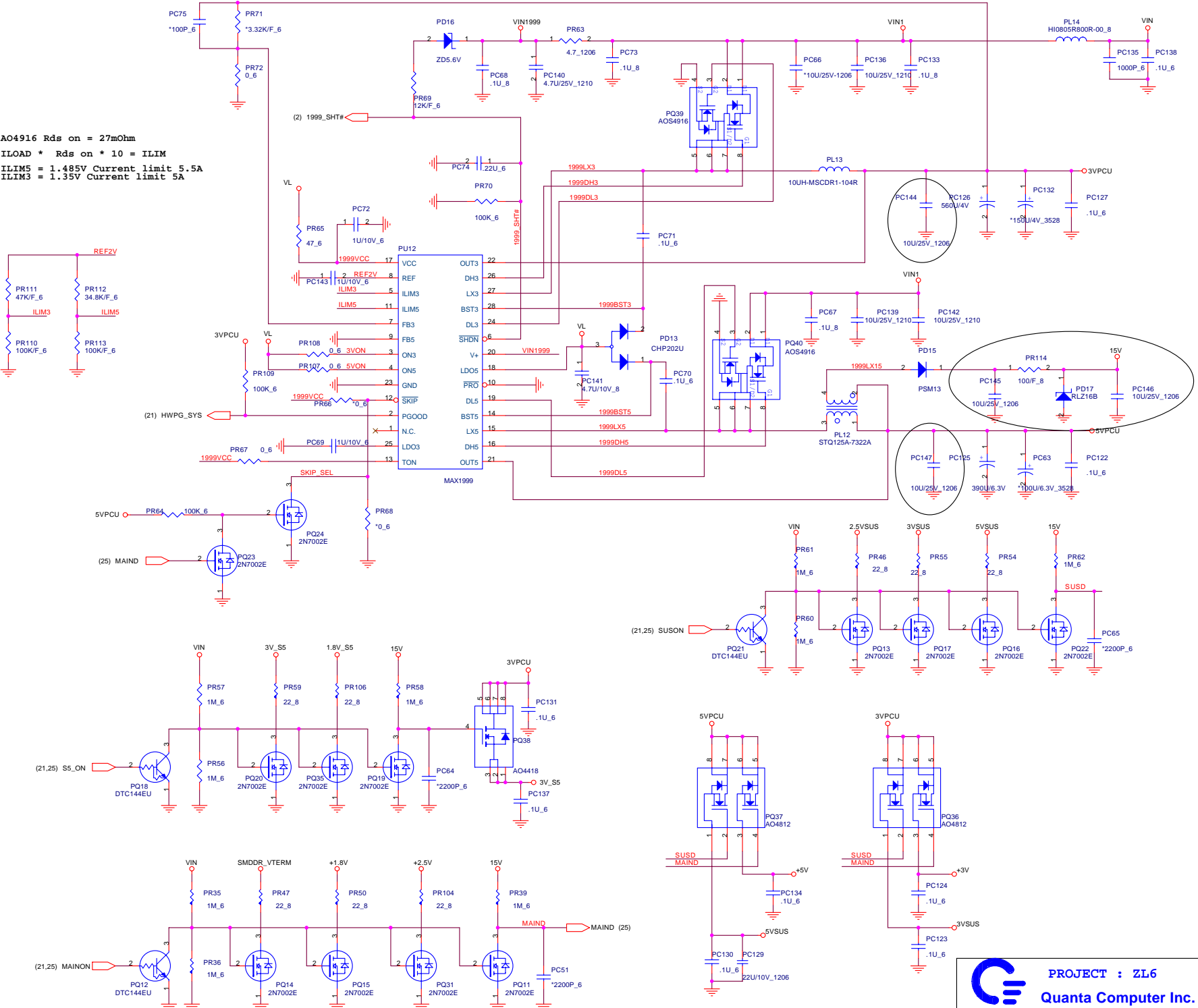
- SC1476 pin 4 pin
- 5 pin 7
- pin 25
- pin 30



**PROJECT : ZL6**  
**Quanta Computer Inc.**

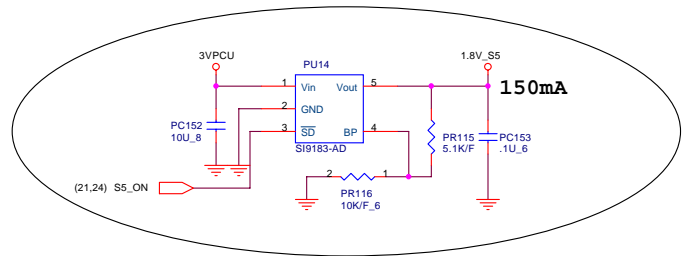
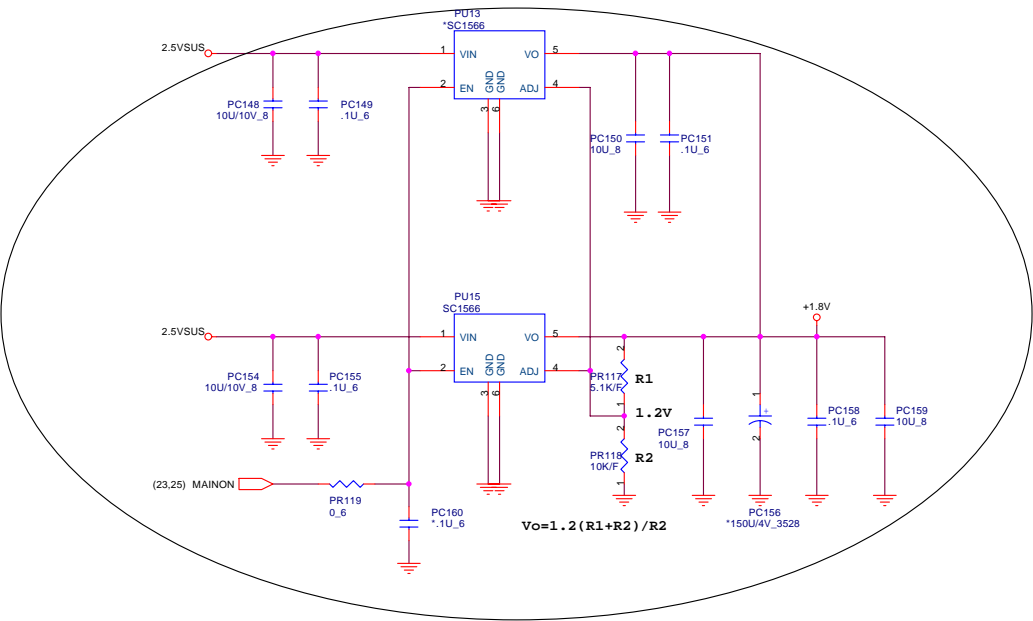
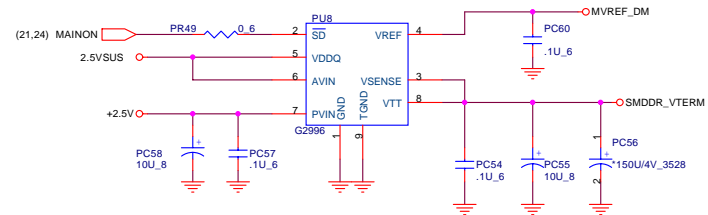
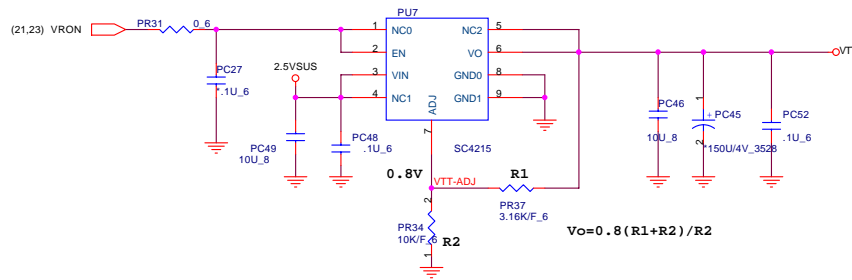
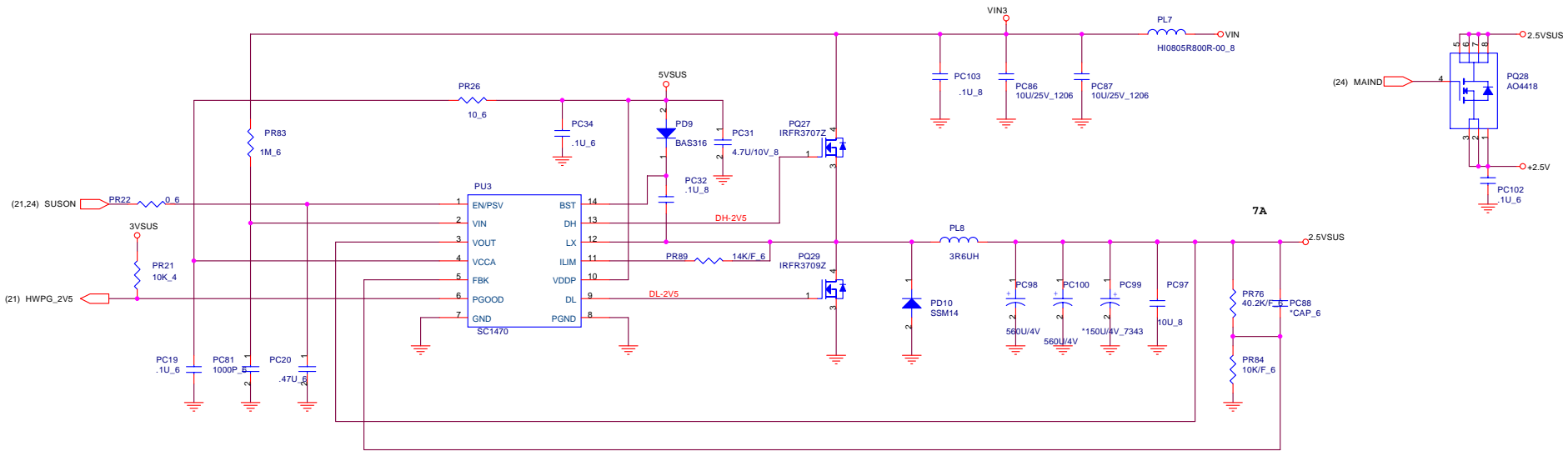
Size	Document Number	Rev
	<b>CPU CORE (SC451)</b>	2A
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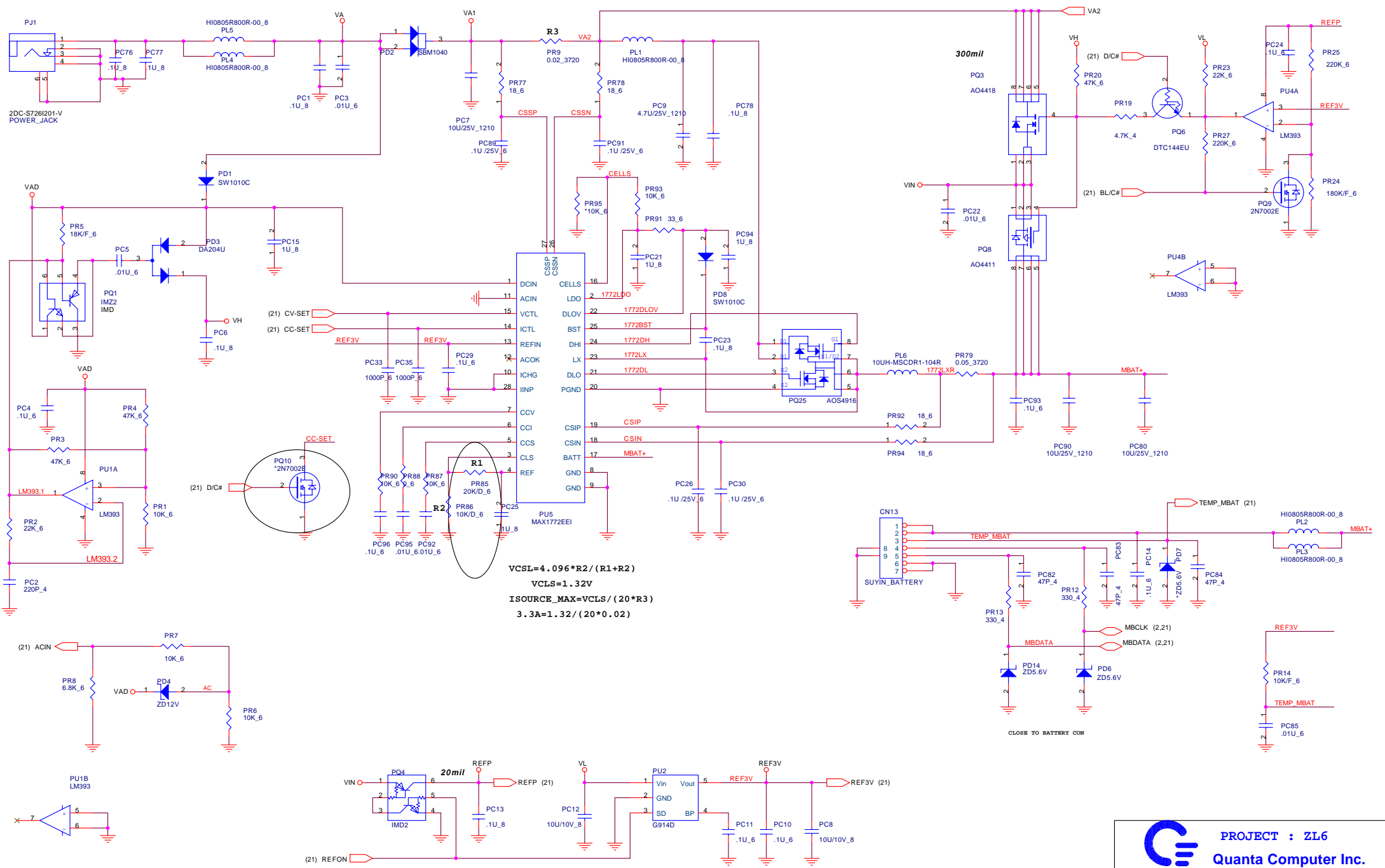
AO4916 Rds on = 27mOhm  
 ILOAD \* Rds on \* 10 = ILIM  
 ILIM5 = 1.485V Current limit 5.5A  
 ILIM3 = 1.35V Current limit 5A



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	<b>5V/3.3V (MAX1999)</b>	2A
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$$VCSL = 4.096 * R2 / (R1 + R2)$$

$$VCLS = 1.32V$$

$$ISOURCE\_MAX = VCLS / (20 * R3)$$

$$3.3A = 1.32 / (20 * 0.02)$$