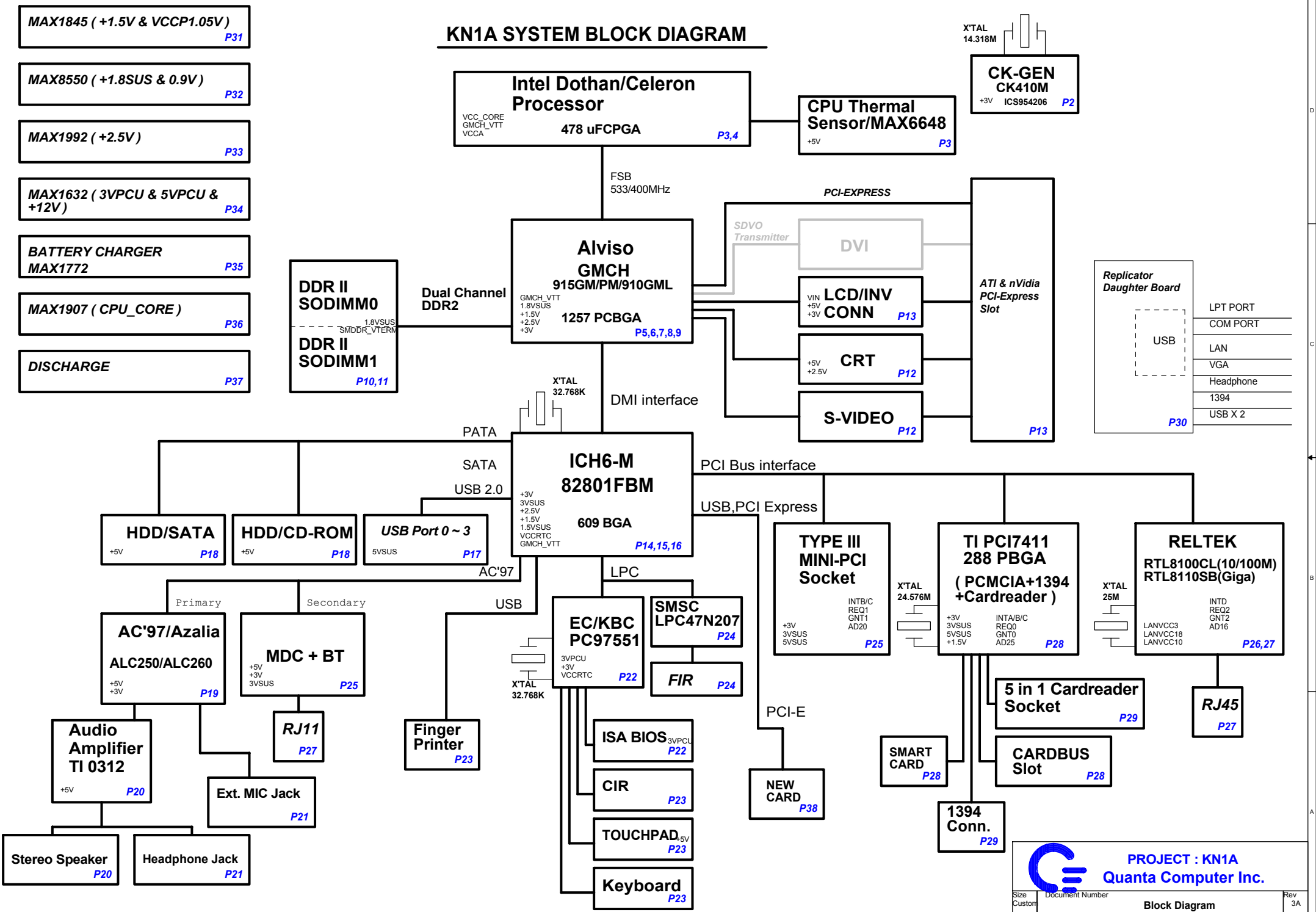
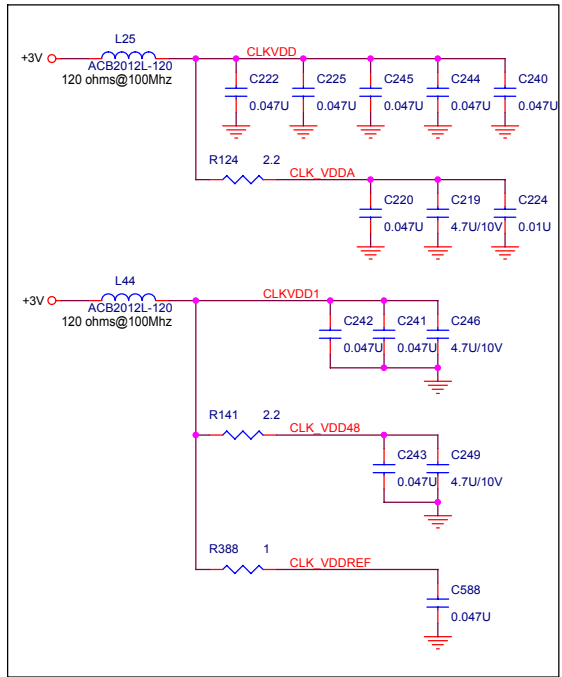


KN1A SYSTEM BLOCK DIAGRAM

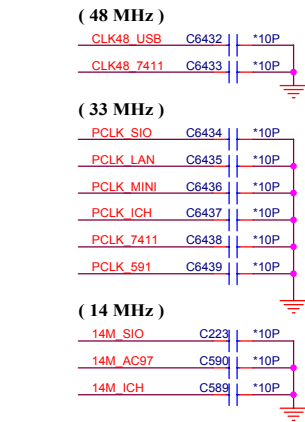
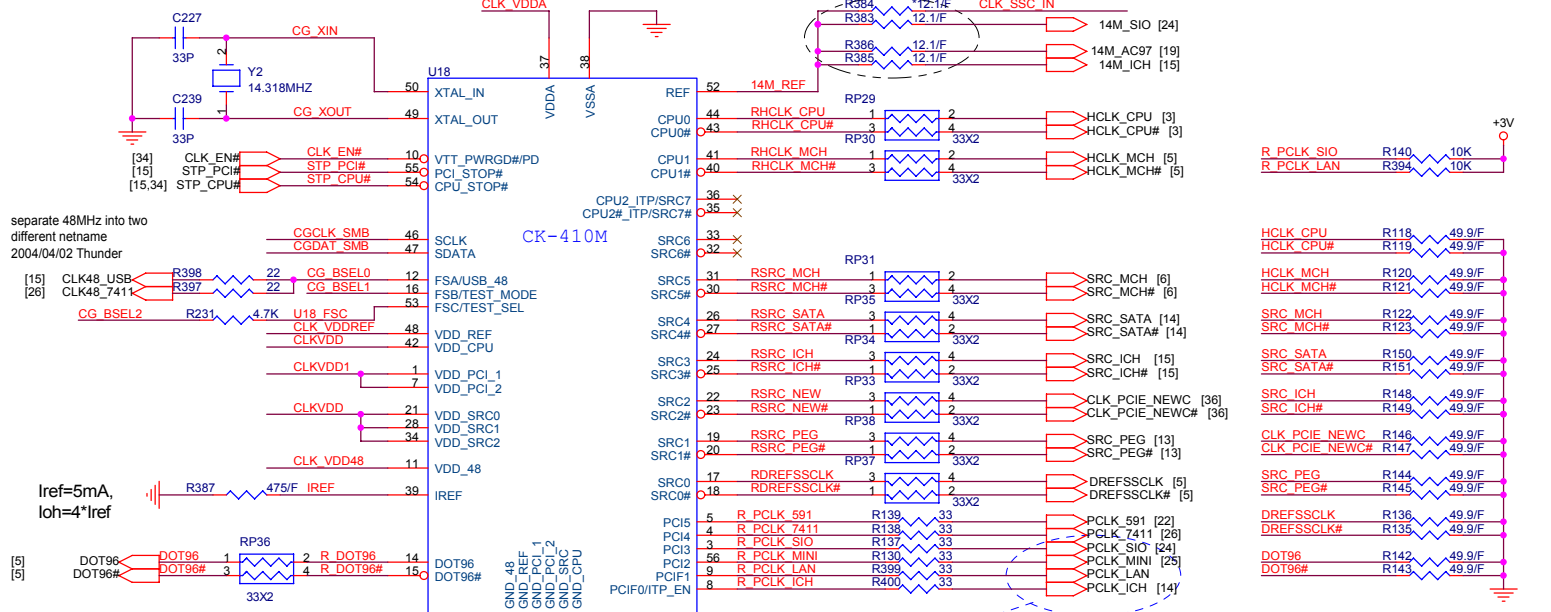




FSC	FSB	FSA	CPU	SRC	PCI
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	1	0	200	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	RESERVED		

* Frequency select by CPU auto sense.

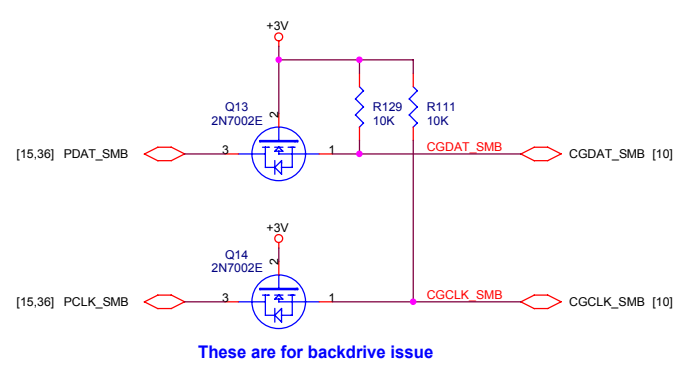
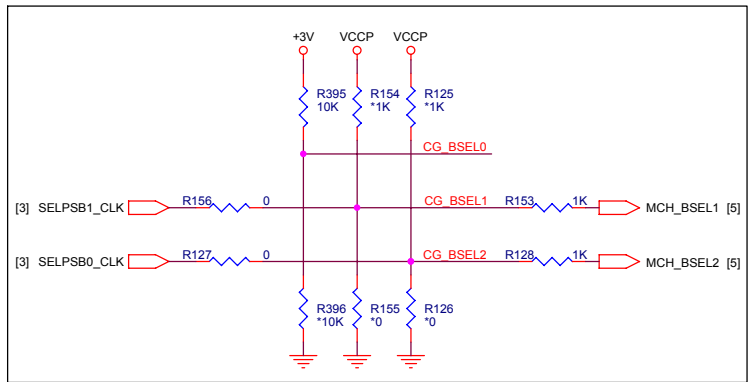
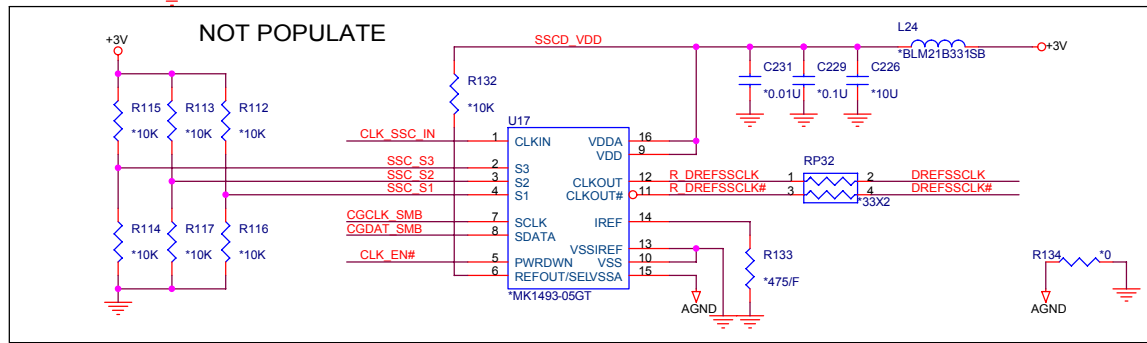
Place these termination to close CK410M.



- a). Add 14M_SIO to 47N207 SIO chip.
 - b). Change R386, R385 from 22.6 ohm 1% to 12.1 ohm 1%.
- 2004/05/05 T.H.LIAO

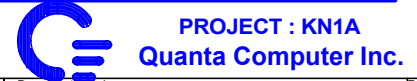
[3,8,10,12,13,14,15,16,18,19,22,23,24,25,27,28,32,34,35,36] +3V
[3,4,5,6,8,9,14,16,29,35] VCCP

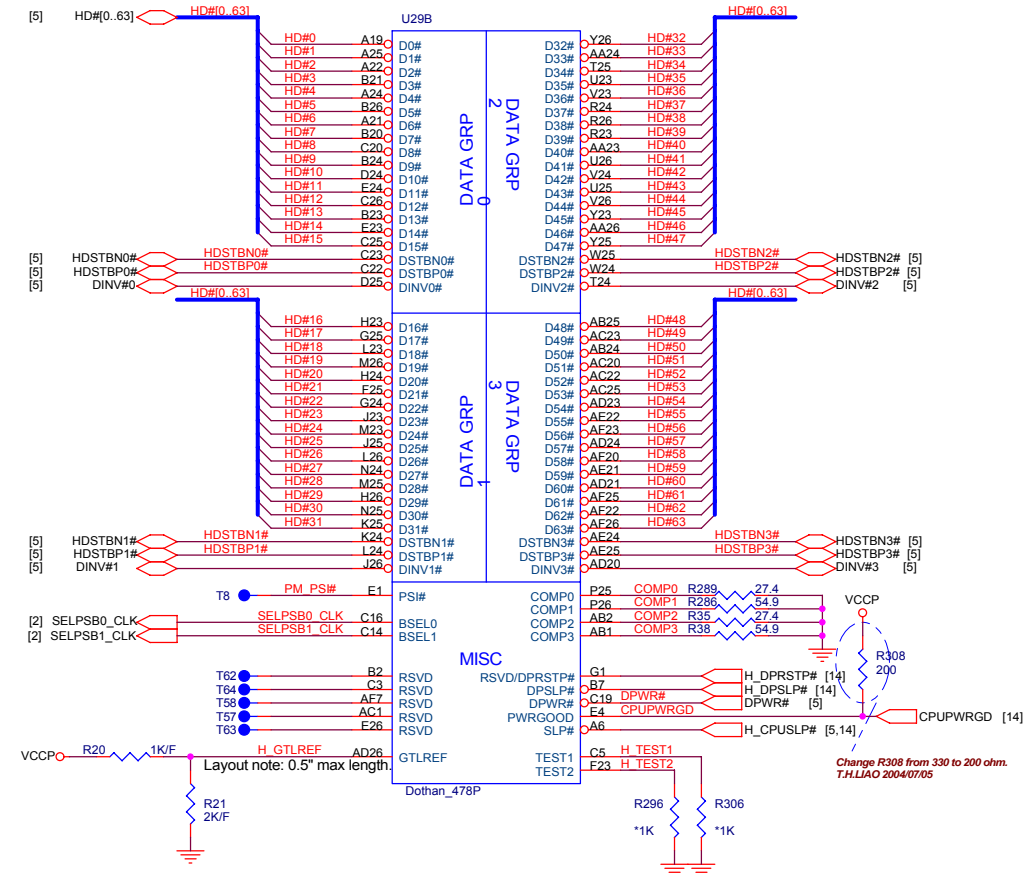
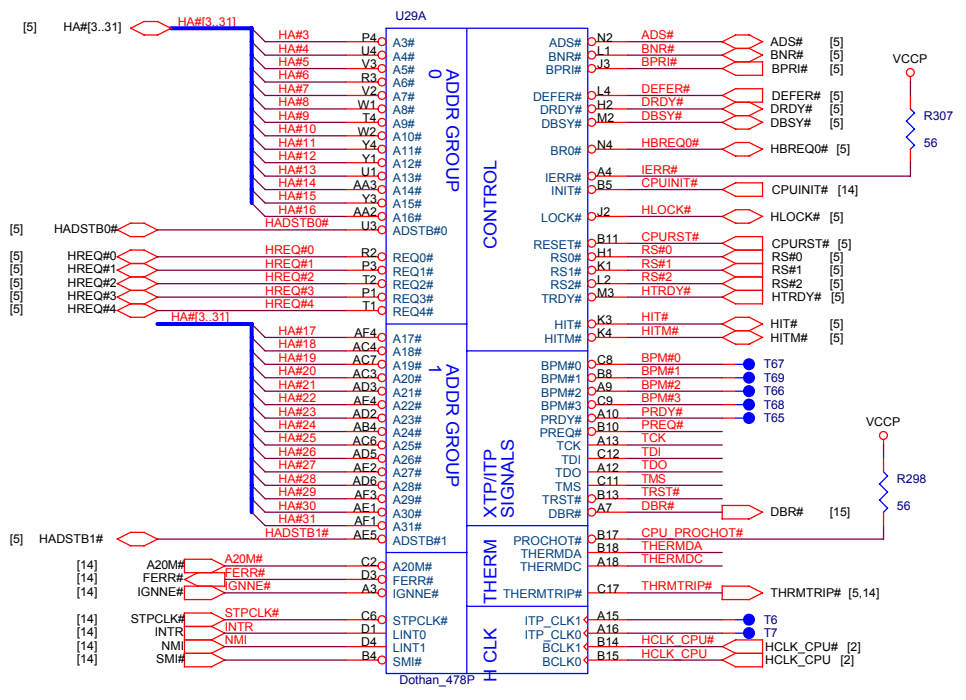
Place these termination to close CK410M.



These are for backdrive issue

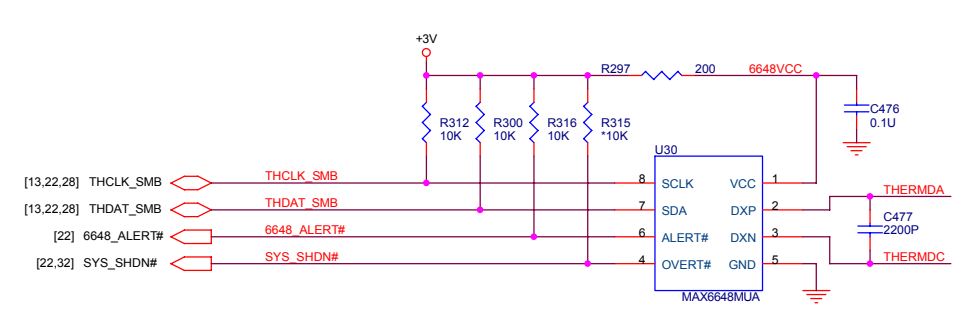
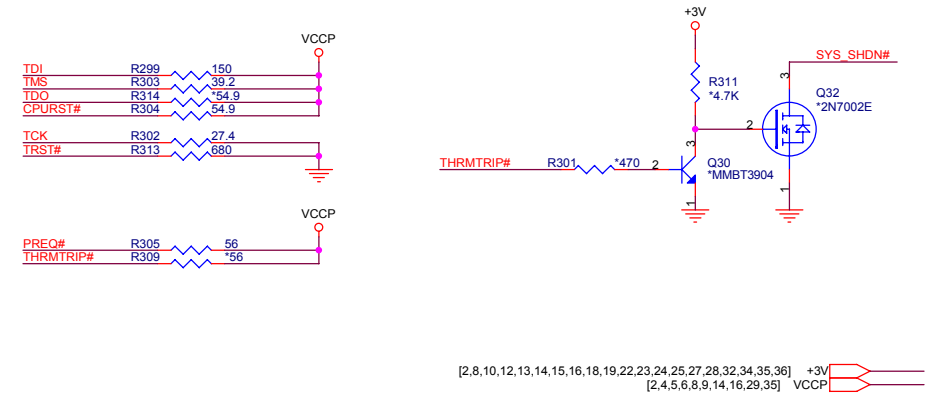
S3	S2	S1	S0	Spread %	Spread Type	Default
0	0	0	0	0.8	Down	Default
0	0	1	0	1.25	Down	
0	1	0	0	1.75	Down	
0	1	1	0	2.5	Down	
1	0	0	0	+/-0.3	Center	
1	0	1	0	+/-0.5	Center	
1	1	0	0	+/-0.8	Center	
1	1	1	0	+/-1.25	Center	





Change R308 from 330 to 200 ohm.
T.H.LIAO 2004/07/05

G1: NC for Dothan and
DPRSTP# for Yonah

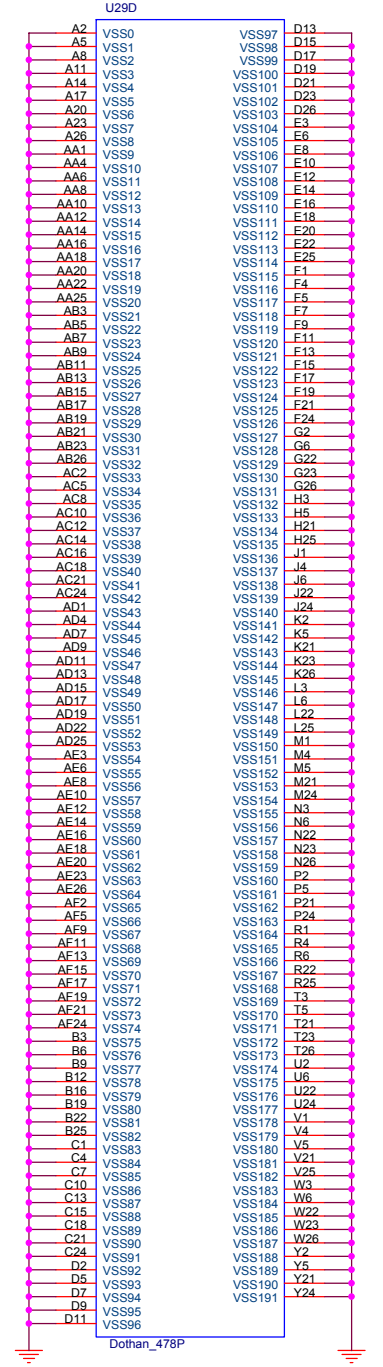
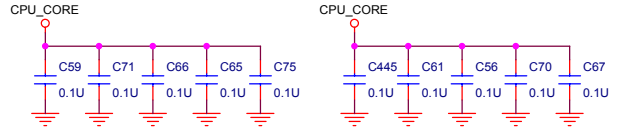
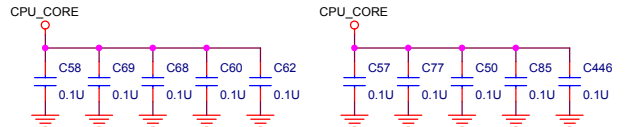
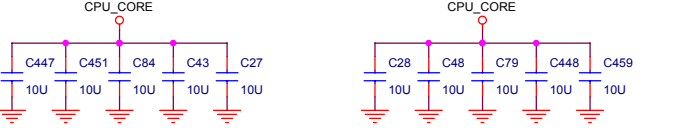
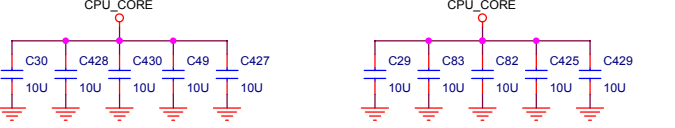
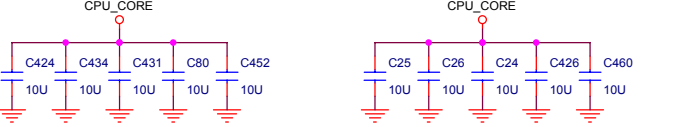
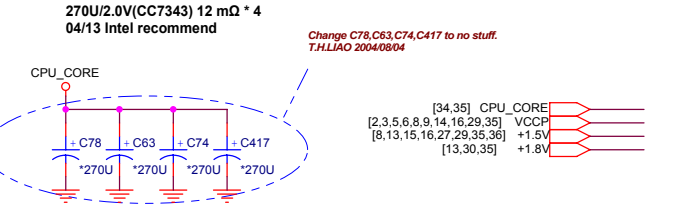
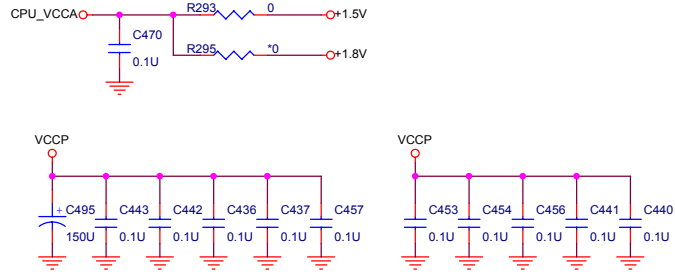
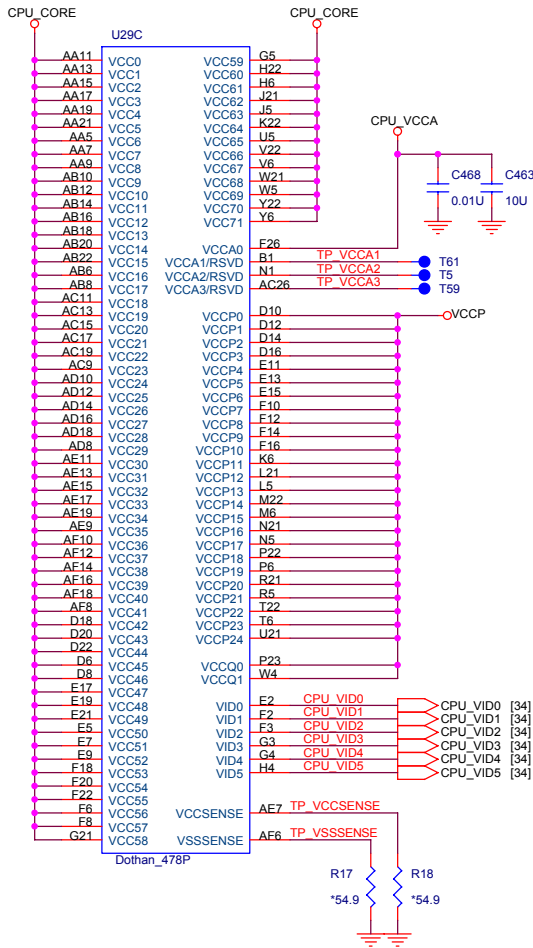


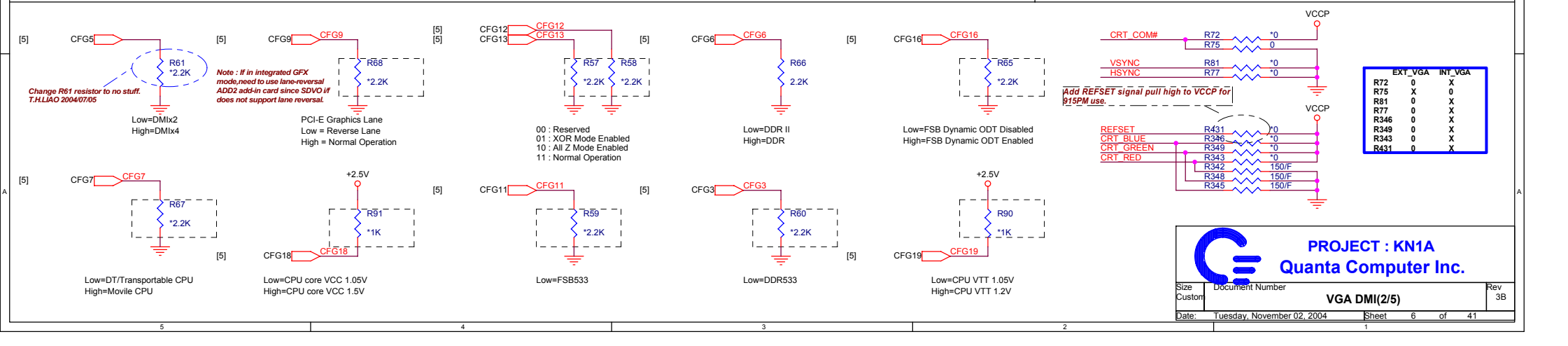
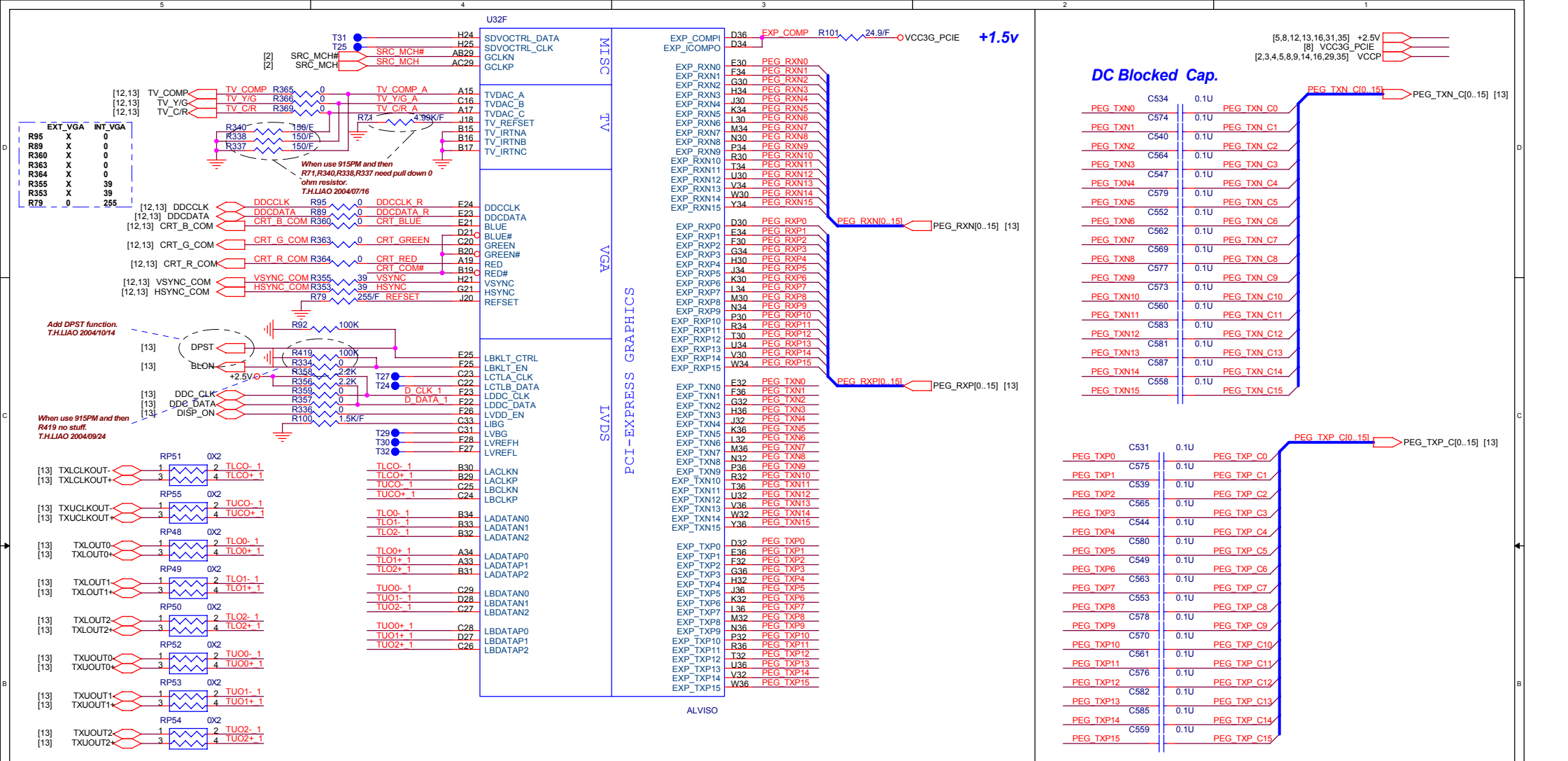
ADDRESS:
98H

PROJECT : KN1A
Quanta Computer Inc.

Size Custom Document Number
Dothan CPU (Host Bus) Rev 3A

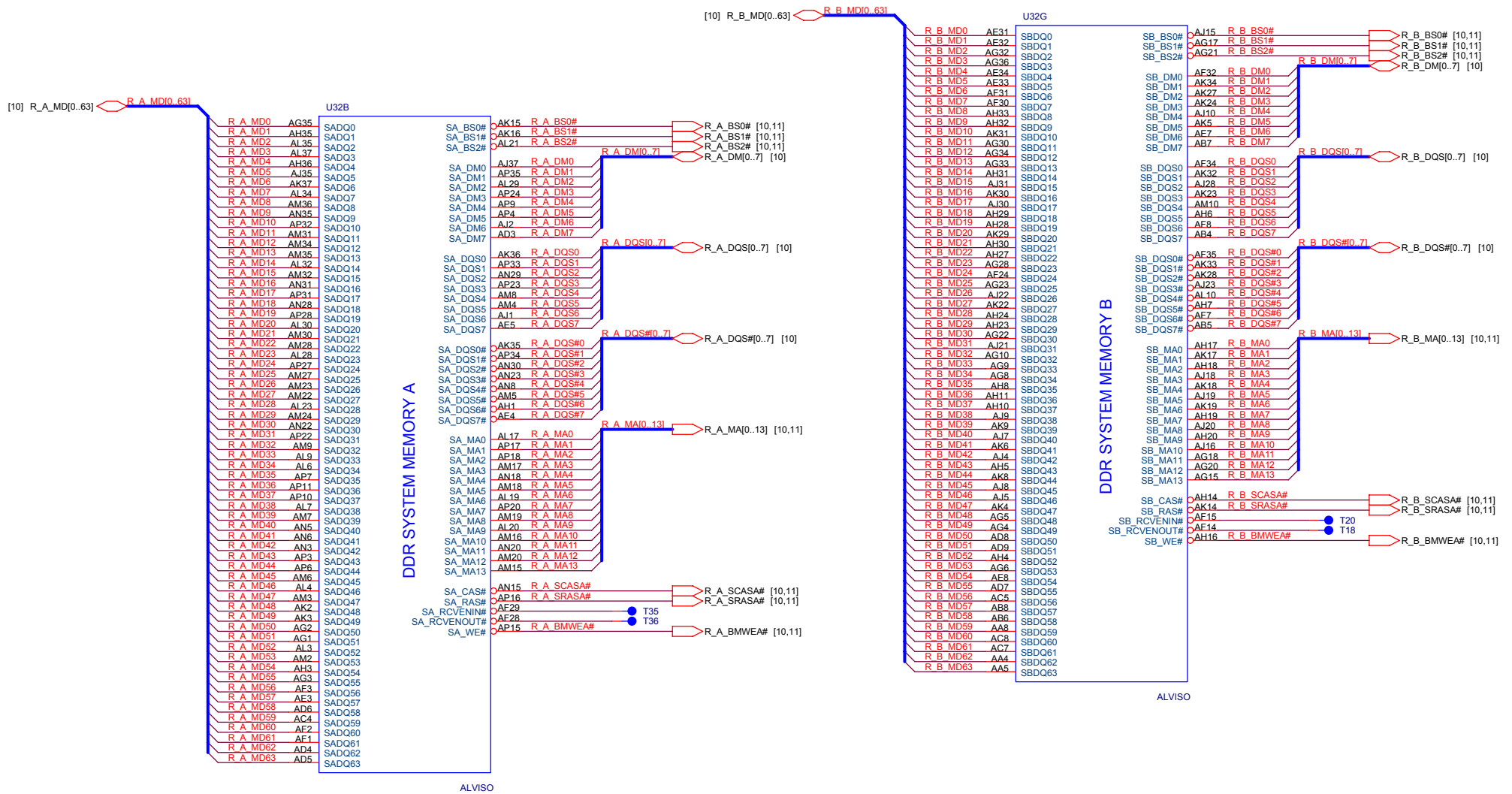

Date: Tuesday, November 02, 2004 Sheet 3 of 41





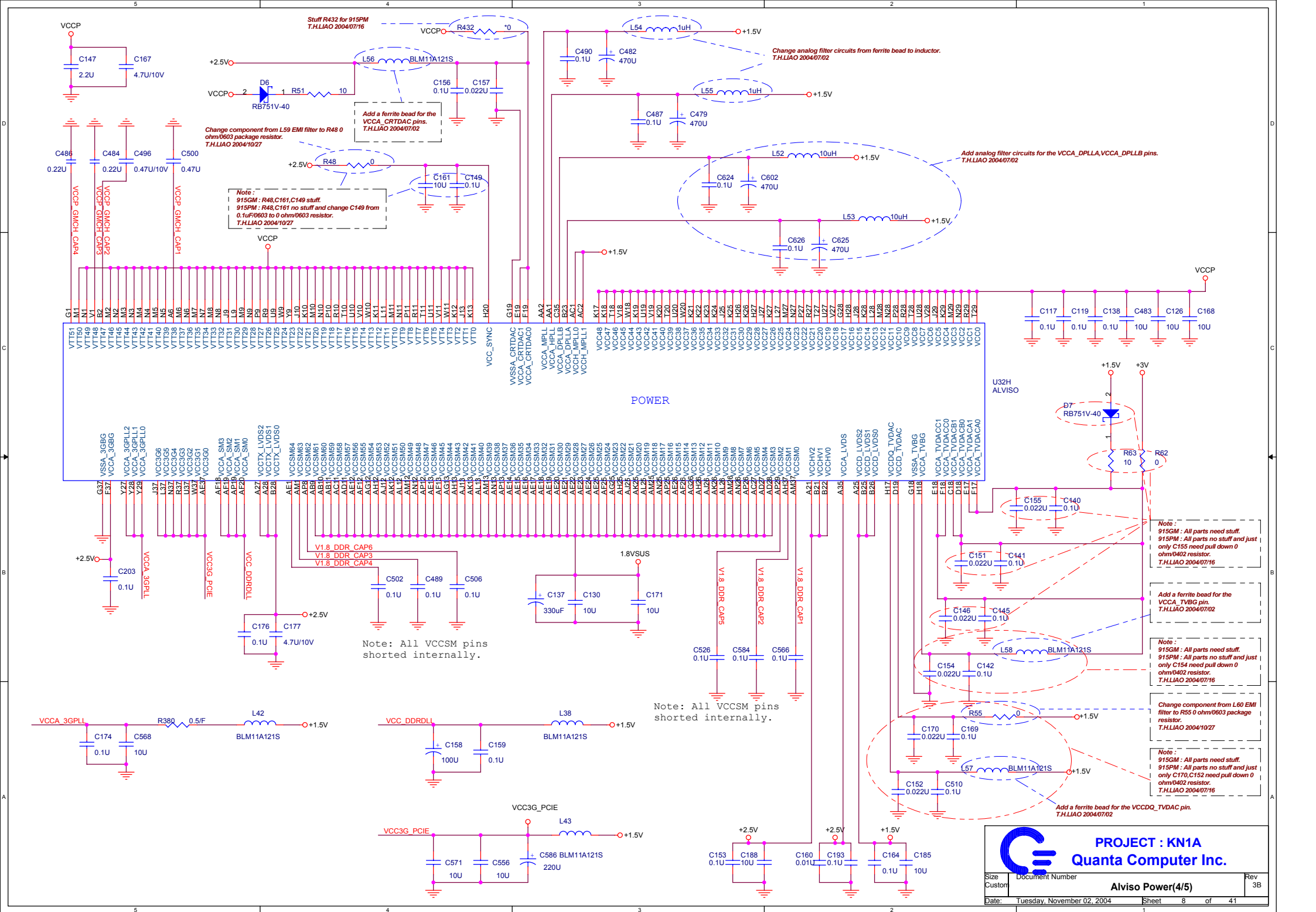
PROJECT : KN1A
Quanta Computer Inc.

Size	Document Number	Rev
Custom	VGA DMI(2/5)	3B
Date:	Tuesday, November 02, 2004	Sheet 6 of 41

PROJECT : KN1A
Quanta Computer Inc.

Size Custom	Document Number ALVISO DDR(3/5)	Rev 2A
Date: Tuesday, November 02, 2004	Sheet 7 of 41	



Change component from L59 EMI filter to R48 0 ohm/0603 package resistor. T.H.LIAO 2004/10/27

Add a ferrite bead for the VCCA_CRTDAC pins. T.H.LIAO 2004/07/02

Note :
 915GM : R48,C161,C149 stuff.
 915PM : R48,C161 no stuff and change C149 from 0.1uF/0603 to 0 ohm/0603 resistor.
 T.H.LIAO 2004/10/27

Change analog filter circuits from ferrite bead to inductor. T.H.LIAO 2004/07/02

Add analog filter circuits for the VCCA_DPLLA,VCCA_DPLLB pins. T.H.LIAO 2004/07/02

Note :
 915GM : All parts need stuff.
 915PM : All parts no stuff and just only C155 need pull down 0 ohm/0402 resistor.
 T.H.LIAO 2004/07/16

Add a ferrite bead for the VCCA_TVBG pin. T.H.LIAO 2004/07/02

Note :
 915GM : All parts need stuff.
 915PM : All parts no stuff and just only C154 need pull down 0 ohm/0402 resistor.
 T.H.LIAO 2004/07/16

Change component from L60 EMI filter to R55 0 ohm/0603 package resistor. T.H.LIAO 2004/10/27

Note :
 915GM : All parts need stuff.
 915PM : All parts no stuff and just only C170,C152 need pull down 0 ohm/0402 resistor.
 T.H.LIAO 2004/07/16

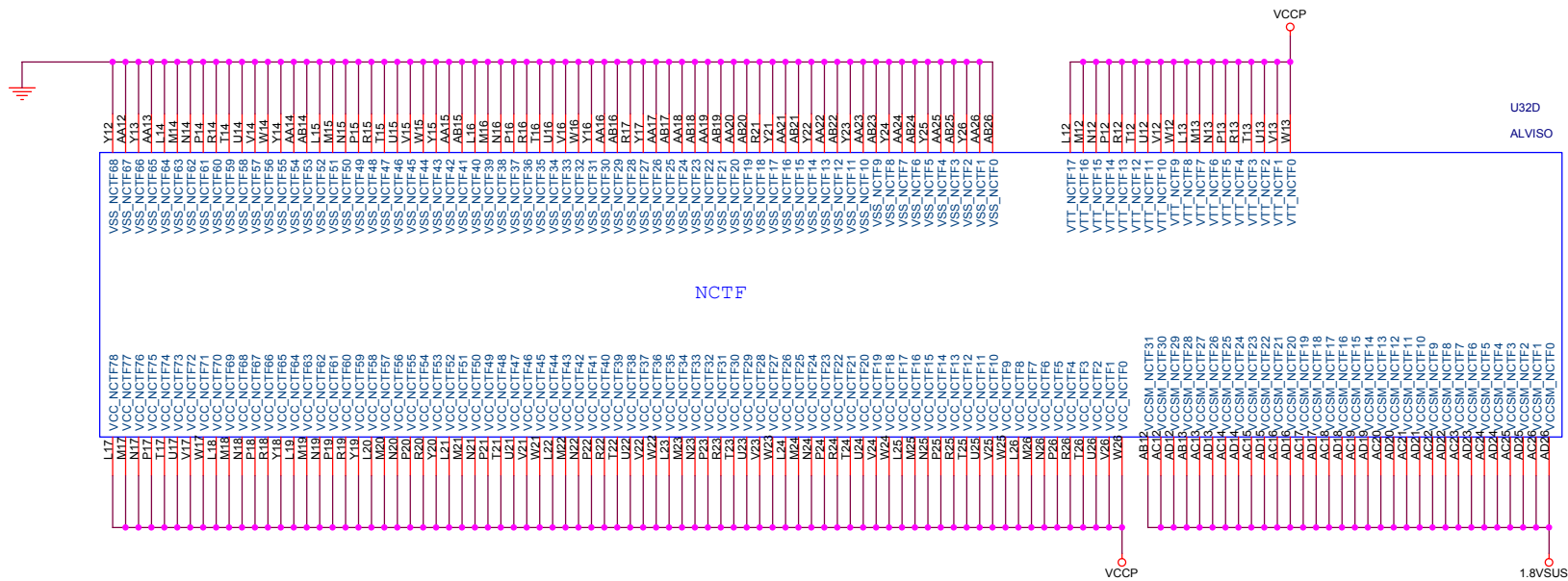
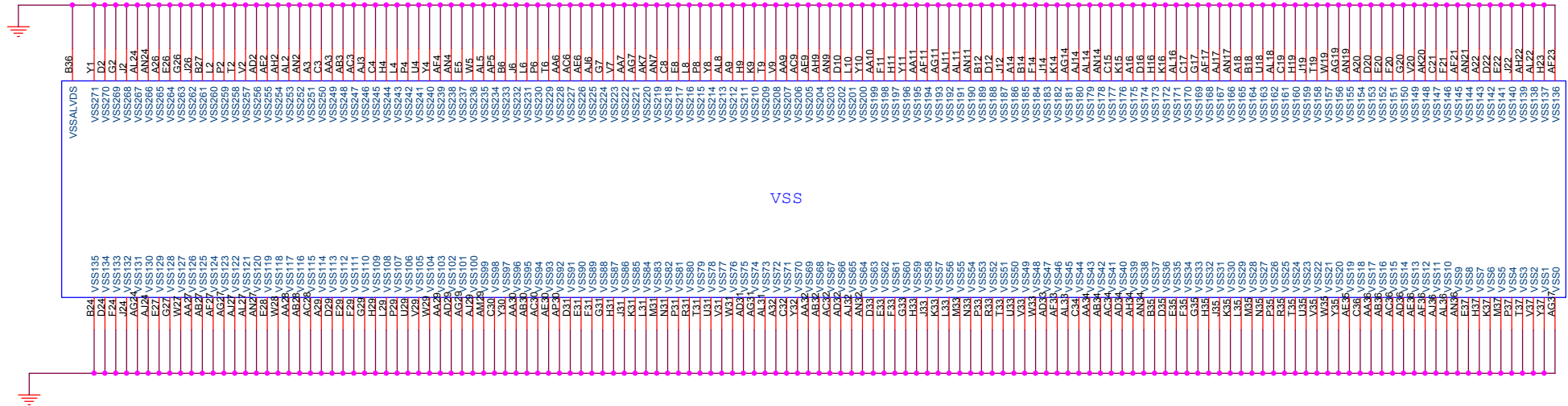
Add a ferrite bead for the VCCDD_TVDAC pin. T.H.LIAO 2004/07/02

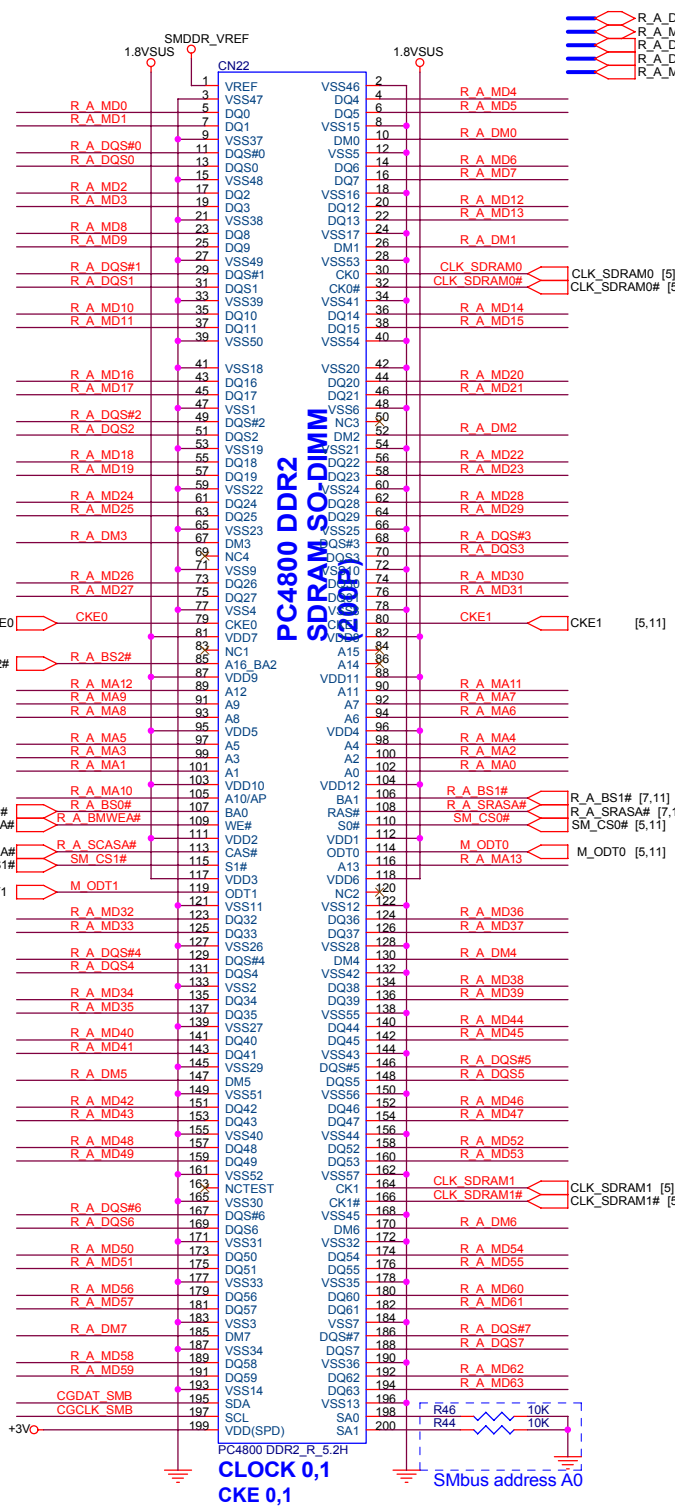
Note: All VCCSM pins shorted internally.

Note: All VCCSM pins shorted internally.

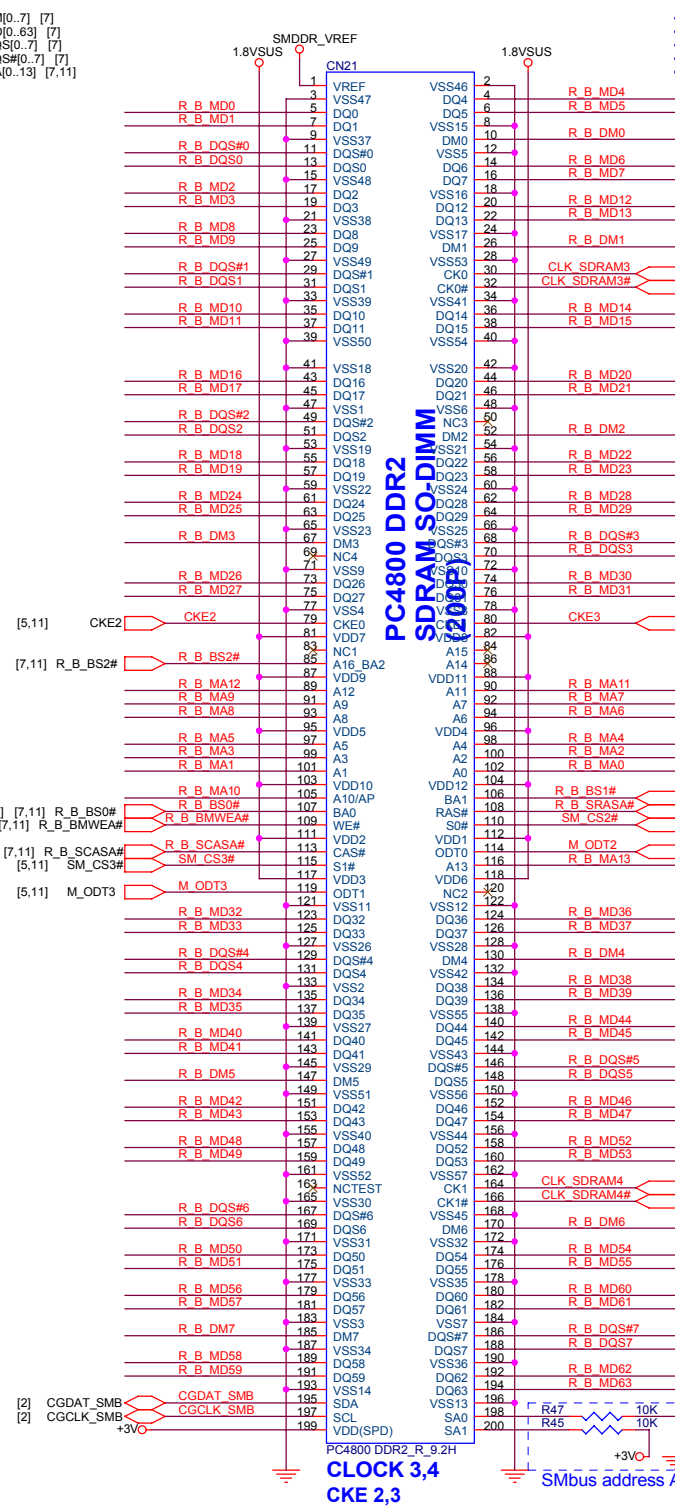
PROJECT : KN1A
Quanta Computer Inc.

Size	Document Number	Rev
Custom		3B
Alviso Power(4/5)		
Date:	Tuesday, November 02, 2004	Sheet 8 of 41

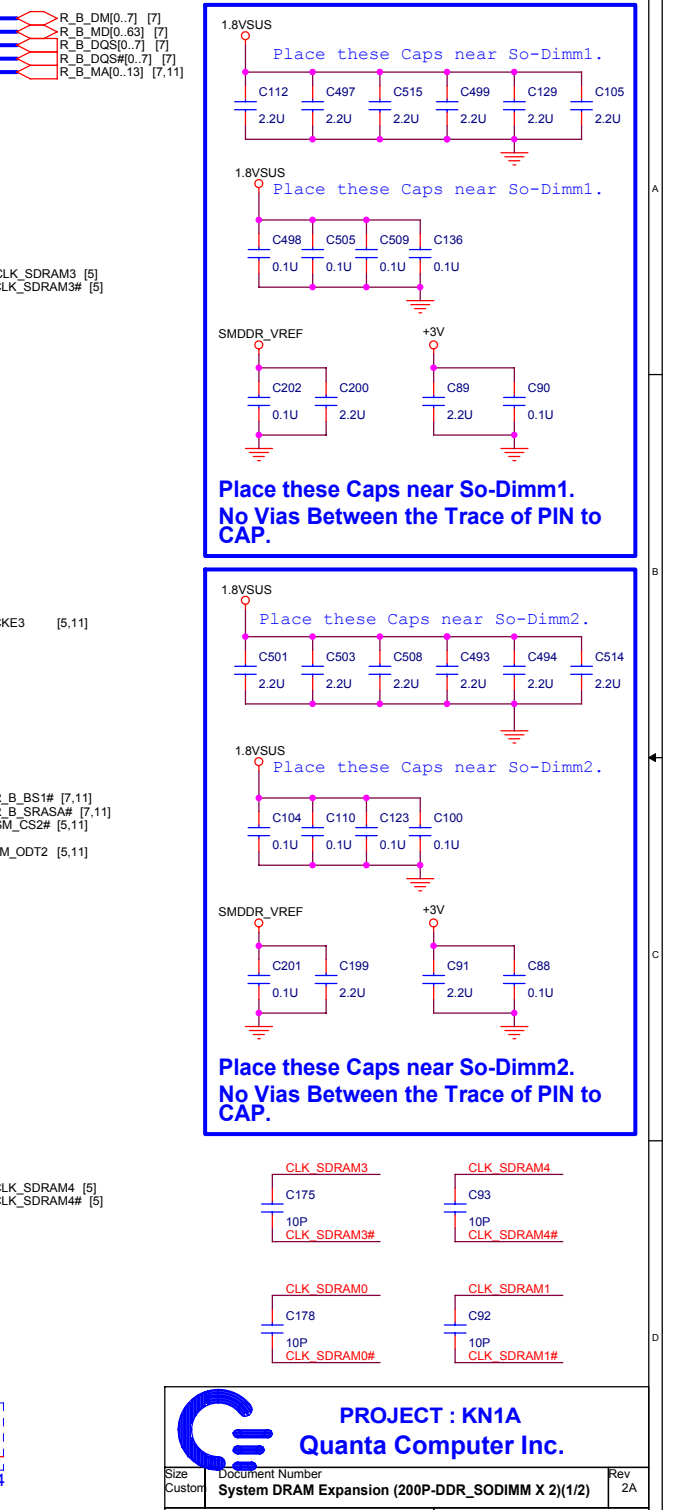




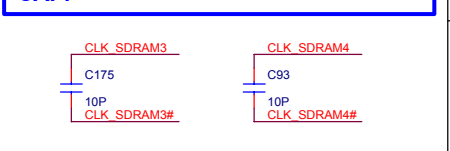
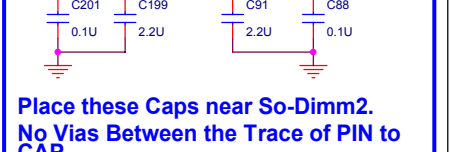
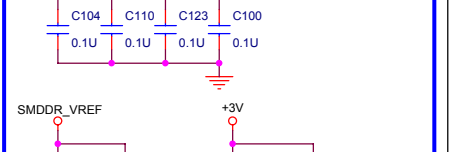
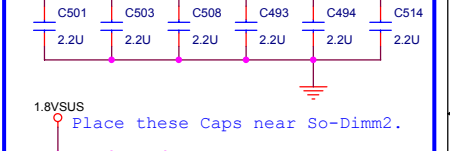
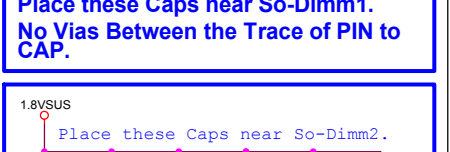
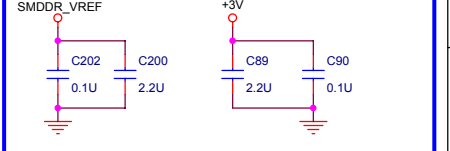
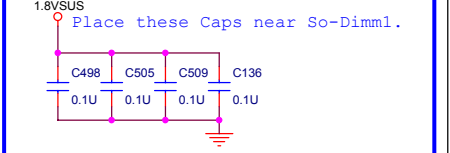
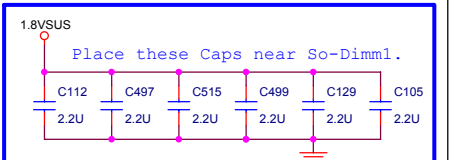
PC4800 DDR2 R_5.2H
CLOCK 0,1
CKE 0,1



PC4800 DDR2 R_9.2H
CLOCK 3,4
CKE 2,3

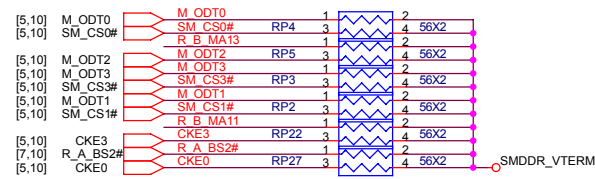
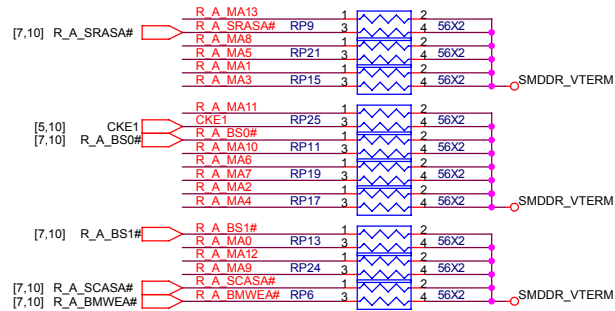
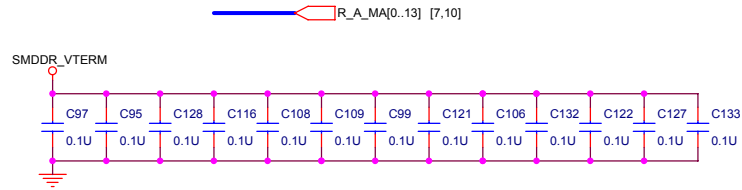


PC4800 DDR2 R_9.2H
CLOCK 3,4
CKE 2,3

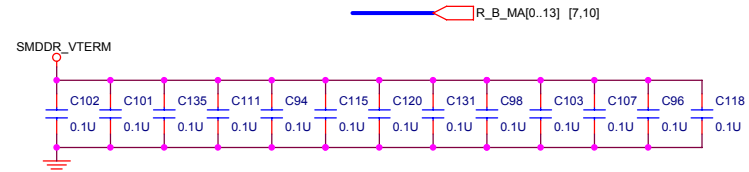


DDRII DUAL CHANNEL A, B.

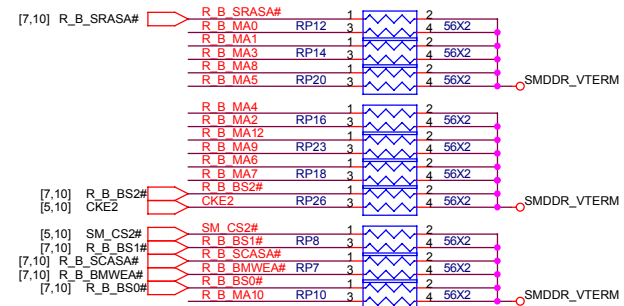
DDRII A CHANNEL



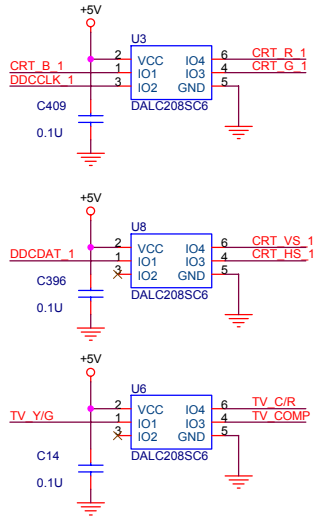
DDRII B CHANNEL



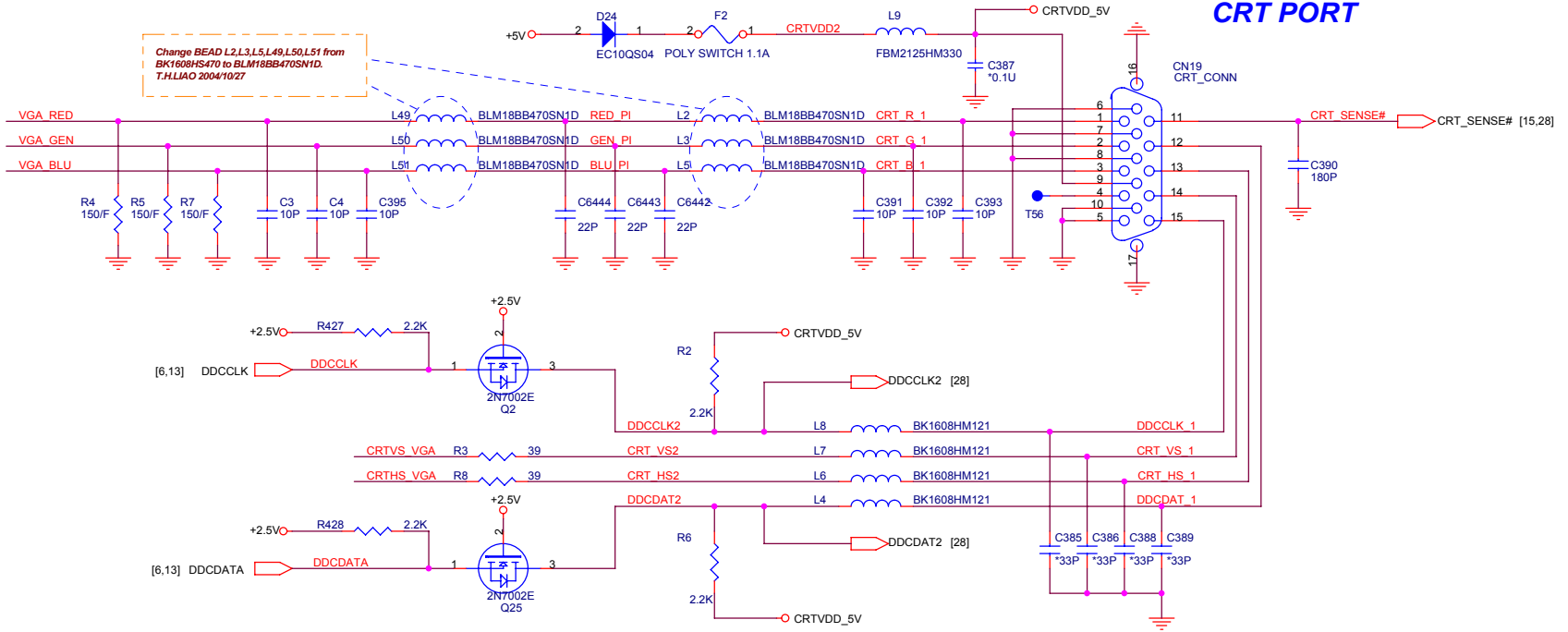
Layout note: Place one cap close to every 2 pullup resistors terminated to SMDDR_VTERM



ESD PORTECTION

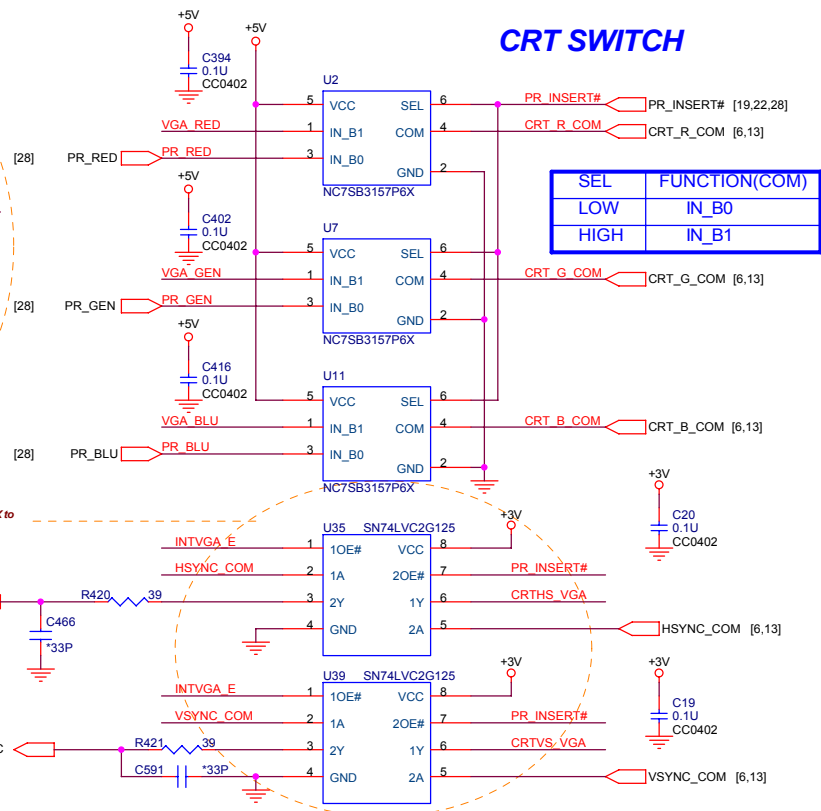
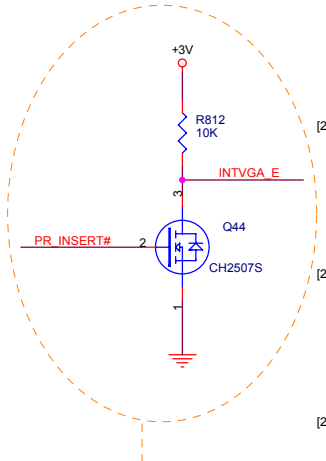


Change BEAD L2,L3,L5,L49,L50,L51 from BK1608HS470 to BLM18BB470SN1D. T.H.LIAO 2004/10/27



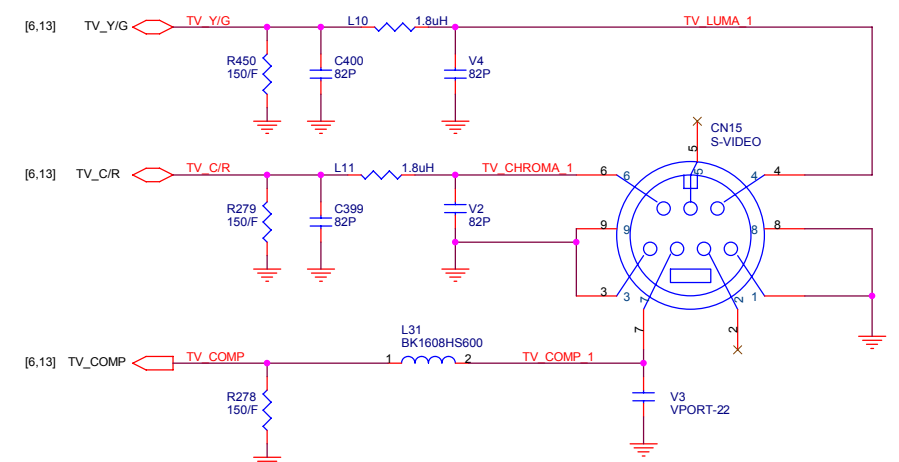
CRT PORT

CRT SWITCH



Change bus switch IC from NC7SB3157P6X to SN74LVC2G125. T.H.LIAO 2004/10/22

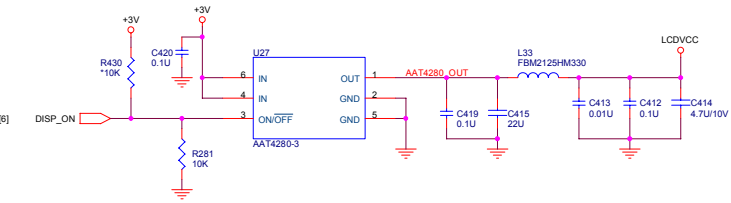
TV-OUT



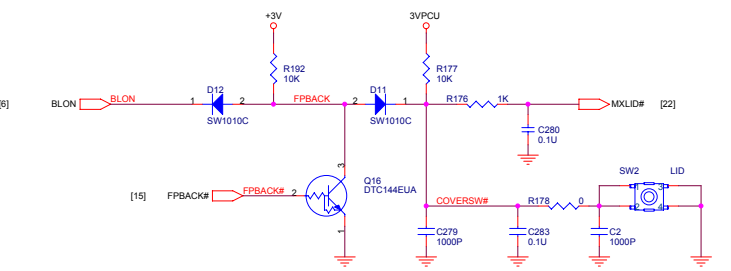
PROJECT : KN1A
Quanta Computer Inc.

Size Custom	Document Number SVIDEO/CRT/PANLE/HDTV	Rev 3B
Date: Tuesday, November 02, 2004	Sheet 12 of 41	

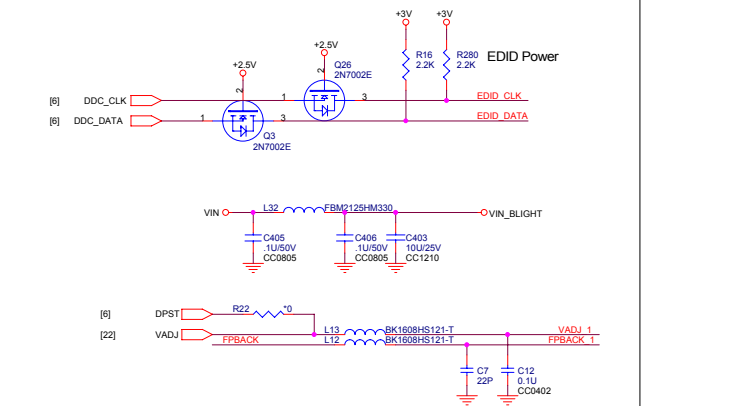
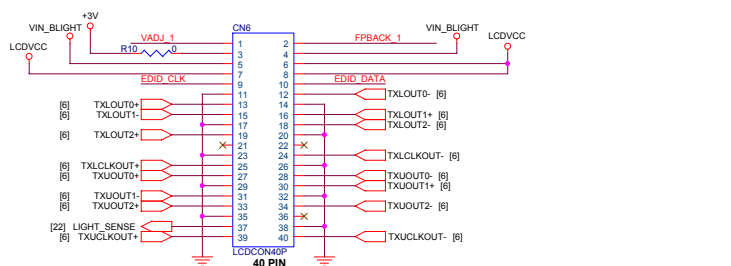
PANEL VCC CONTROL



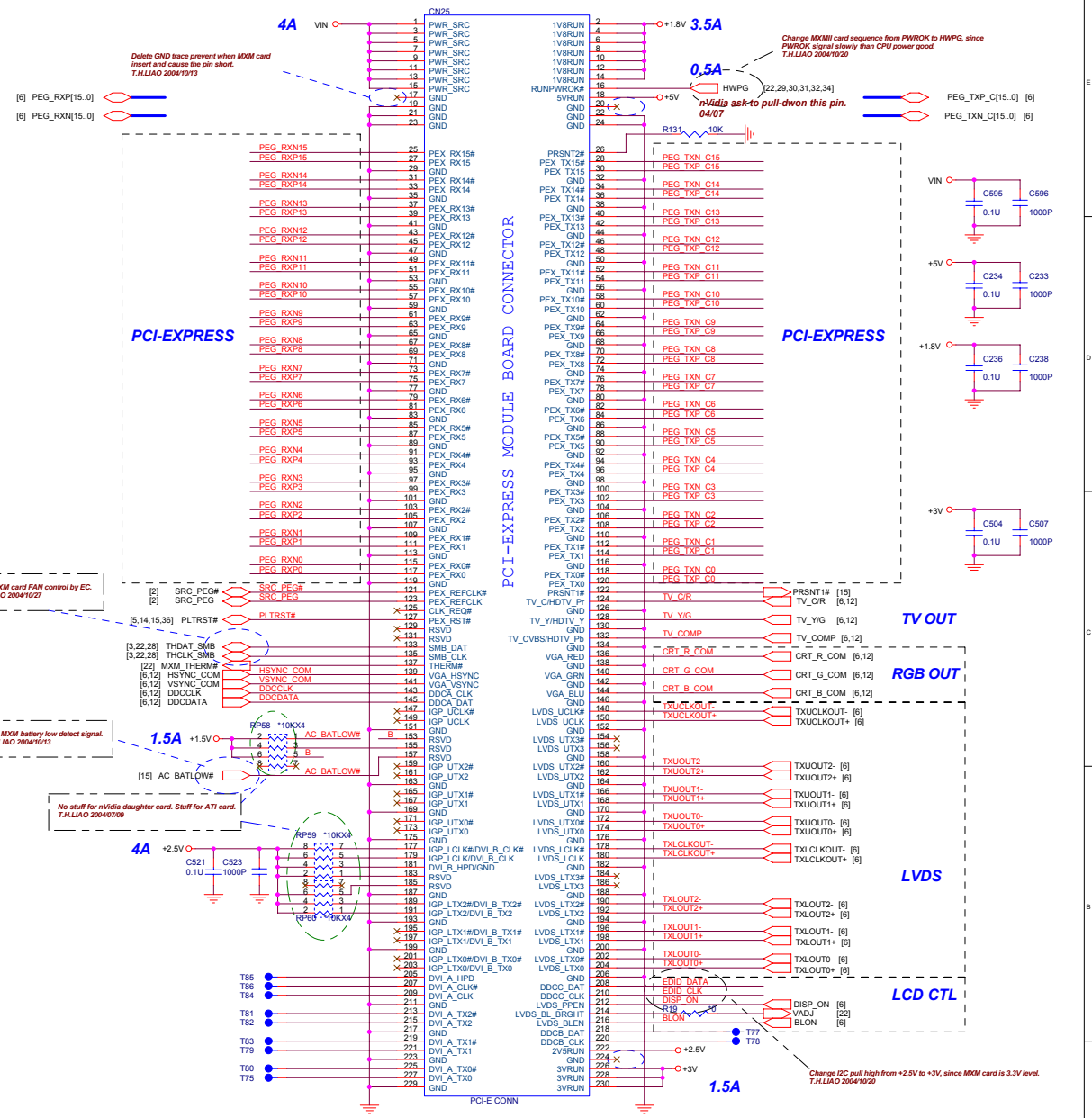
BACKLIGHT CONTROL



LCD CONNECTOR



PCI-Express Card slot



Add MXM card FAN control by EC.
T.H.LIAO 2004/10/27

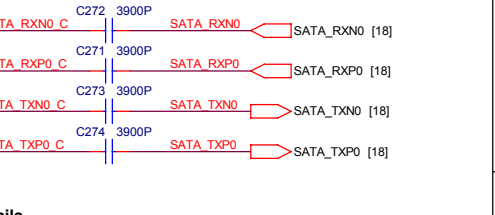
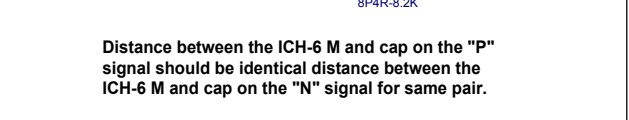
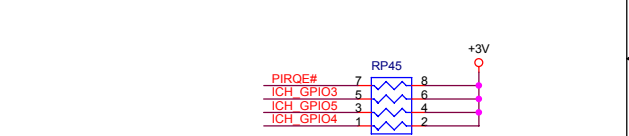
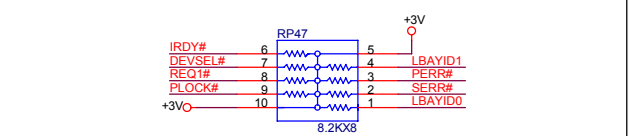
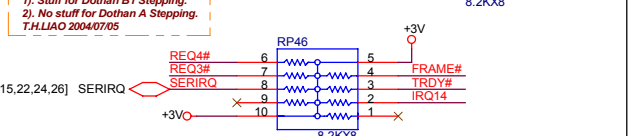
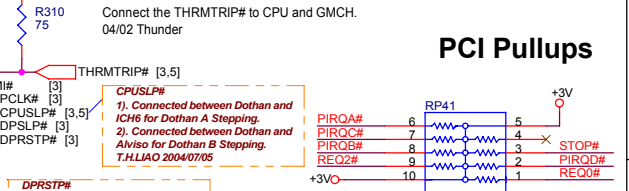
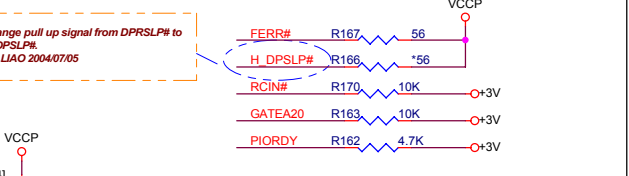
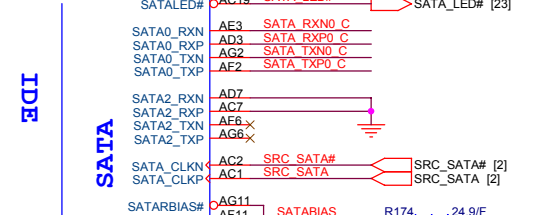
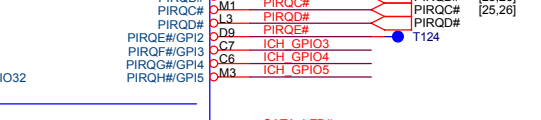
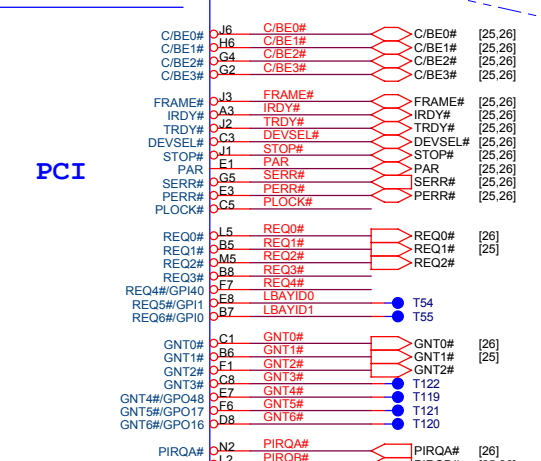
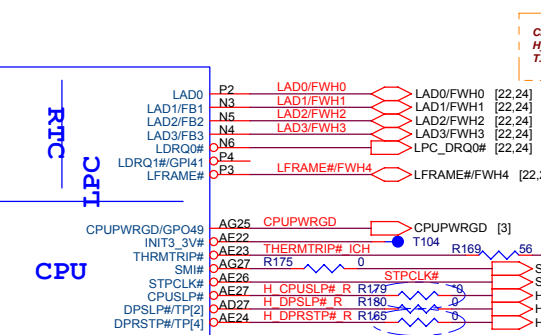
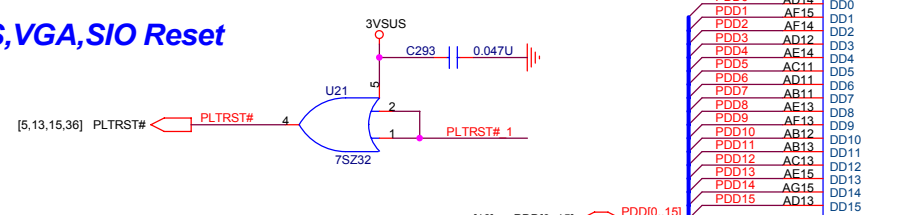
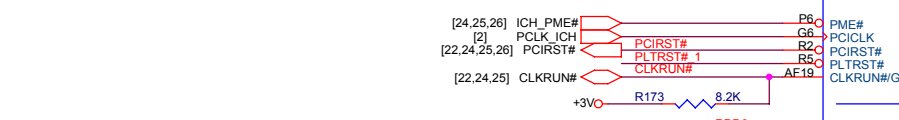
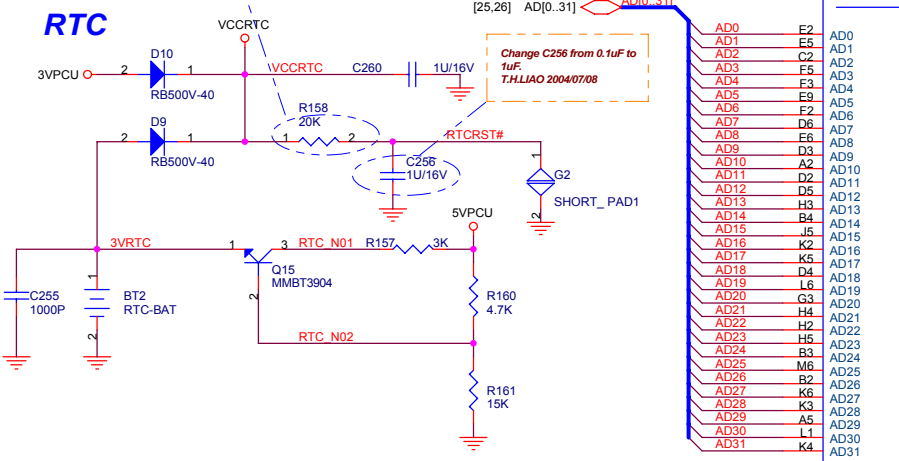
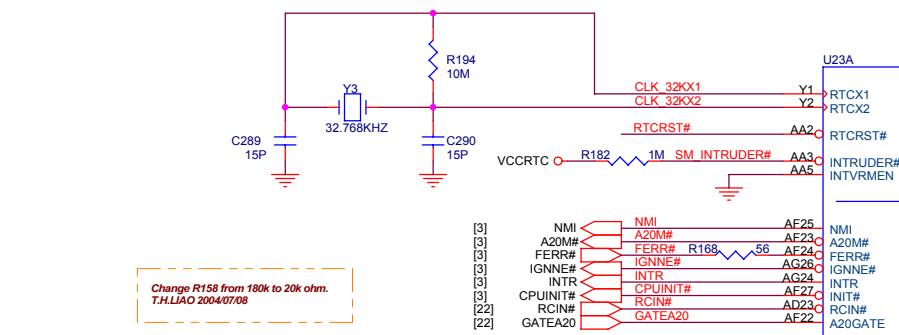
[5, 14, 15, 36] PLTRST#

Add MXM battery low detect signal.
T.H.LIAO 2004/10/13

No stuff for nVidia daughter card. Stuff for ATI card.
T.H.LIAO 2004/10/20

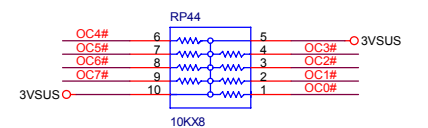
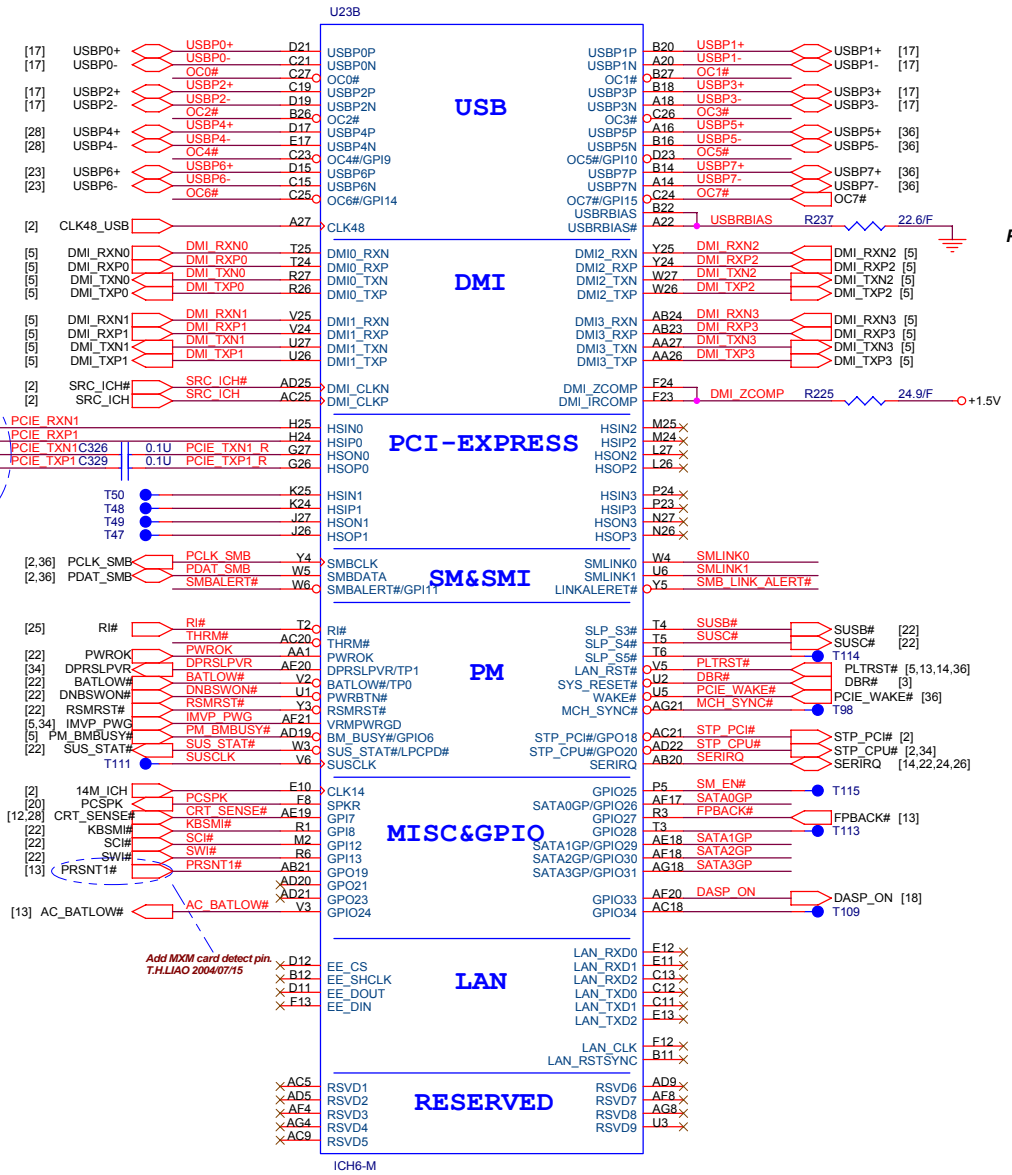
2004/03/31 Modify by T.H.Liao
1). Change connector library to add KEY pin.
2). Change pin define for PIN136, 138-149, 152, 156

When use 915PM and then R462 no stuff.
T.H.LIAO 2004/09/27



PROJECT : KN1A
Quanta Computer Inc.

Size	Document Number	Rev
Custom	ICH6(1/3)	3A
Date:	Tuesday, November 02, 2004	Sheet 14 of 41



Place within 500mils of ICH-6

Place within 500mils of ICH-6

Swap the PCI-E control host.
T.H.LIAO 2004/11/01

No stuff R172 by T.H.LIAO 2004/07/02

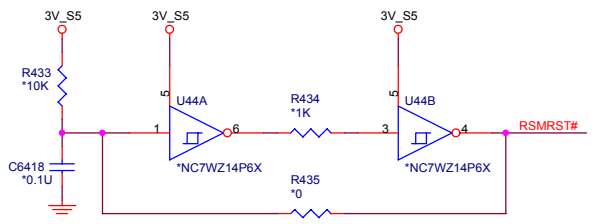
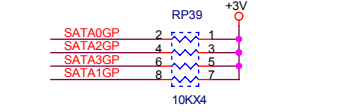
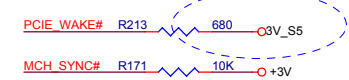
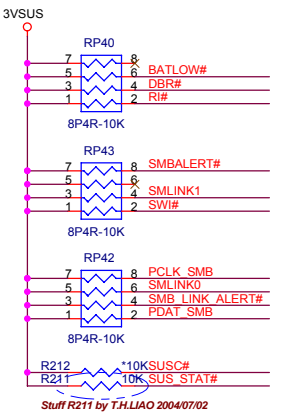
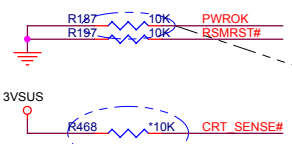
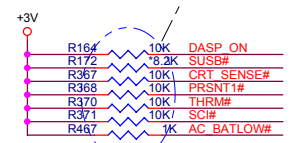
Change THR#M, SCI# signal pull high
from 3VSUS to +3V for power leakage.
T.H.LIAO 2004/10/05

Stuff R187 by T.H.LIAO 2004/07/02

Change R468 to no stuff for +3V power leakage.
T.H.LIAO 2004/10/05

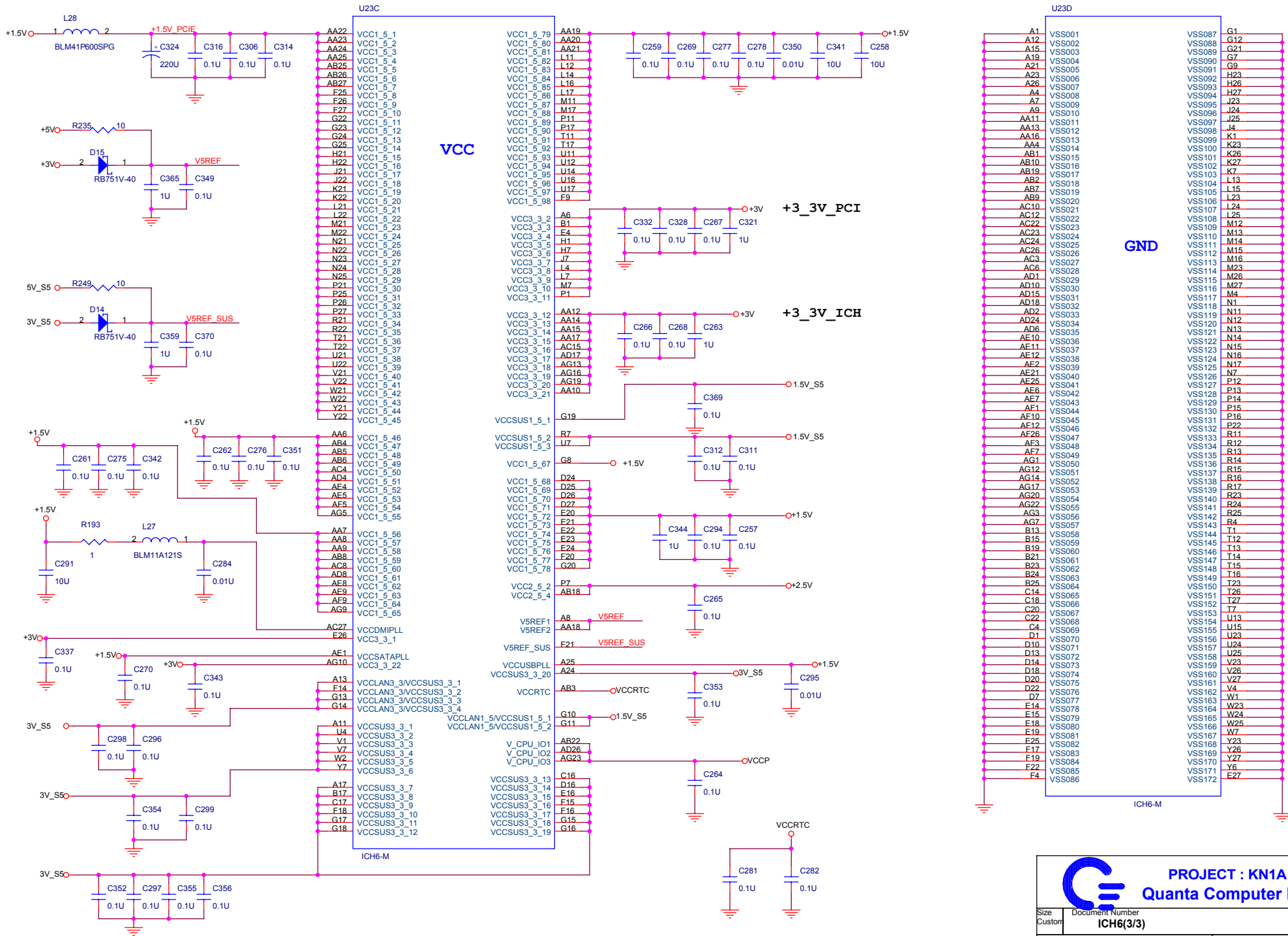
Add MXM card detect pin.
T.H.LIAO 2004/07/15

2004/05/24 Modify by
T.H.Liao

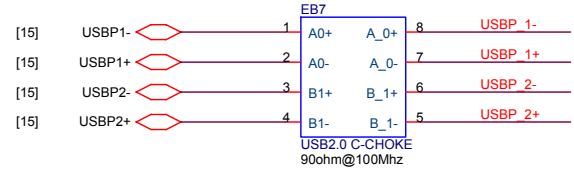
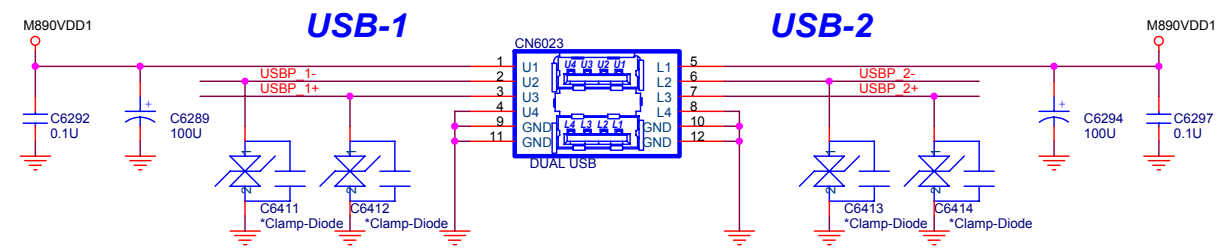
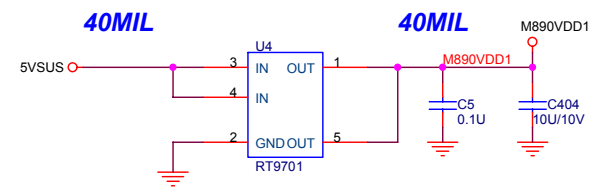
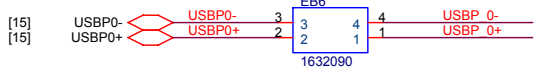
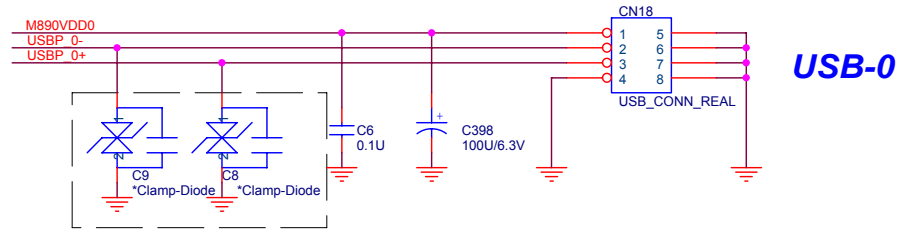
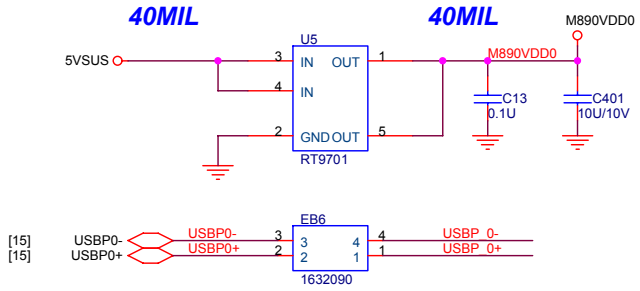


PROJECT : KN1A
Quanta Computer Inc.

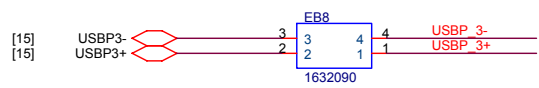
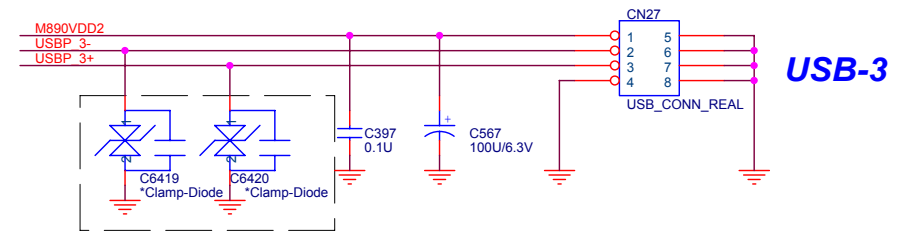
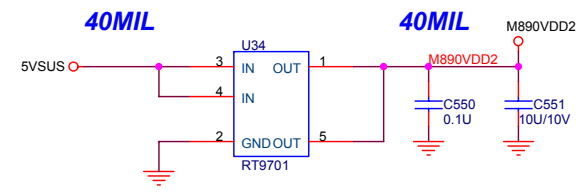
Size	Document Number	Rev
Custom	ICH6(2/3)	3B
Date:	Tuesday, November 02, 2004	Sheet 15 of 41




REAL SIDE



LEFT SIDE

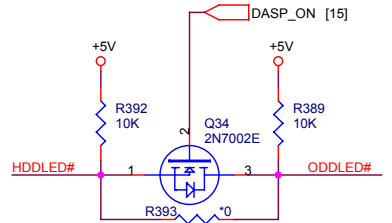
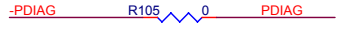
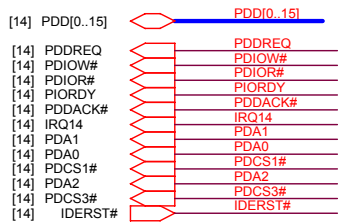


[23,25,26,28,32,34,35] 5VSUS



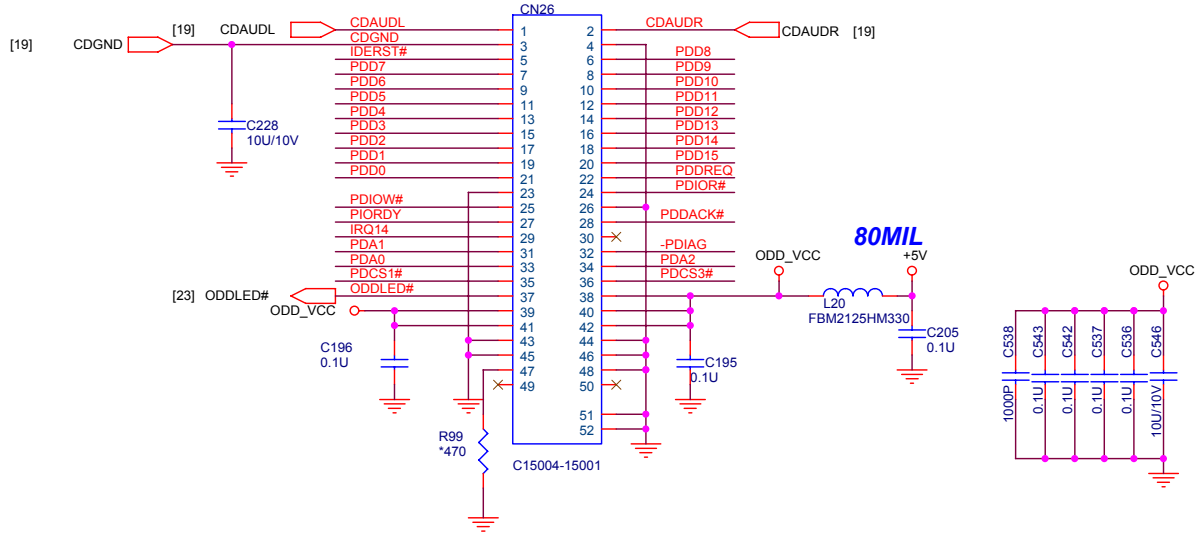
PROJECT : KN1A
Quanta Computer Inc.

Size	Document Number	Rev
Custom	USB Ports	2B
Date:	Tuesday, November 02, 2004	Sheet 17 of 41

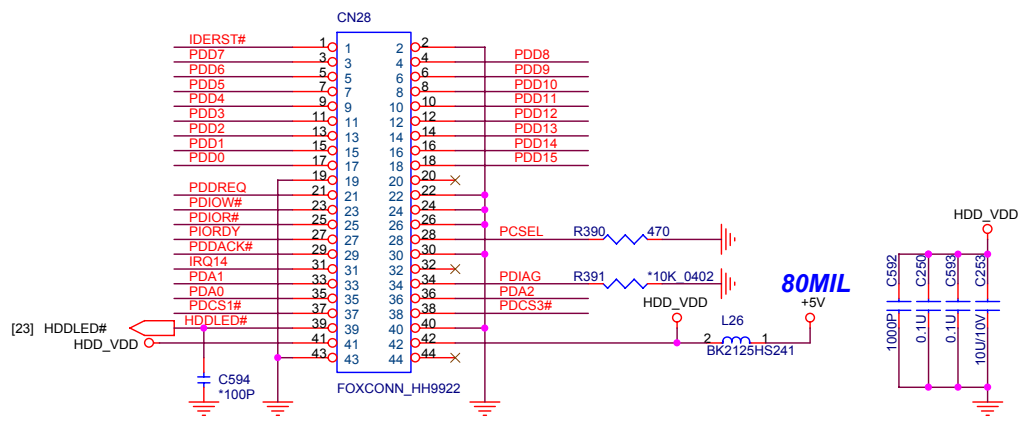


**ADD DASP_ON FOR IDE CABLE SELECT
Thunder 04/08**

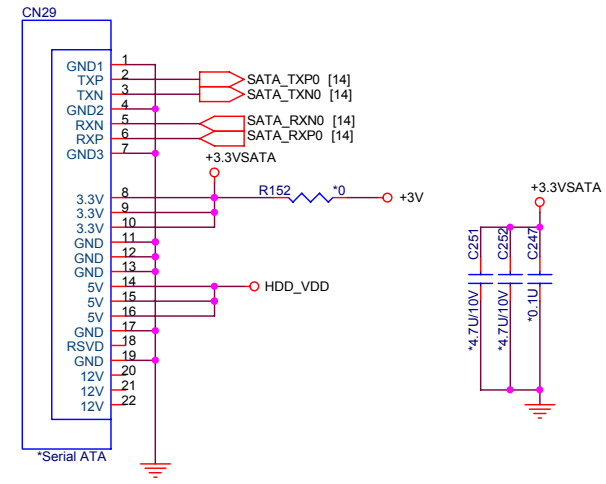
ODD CONNECTOR

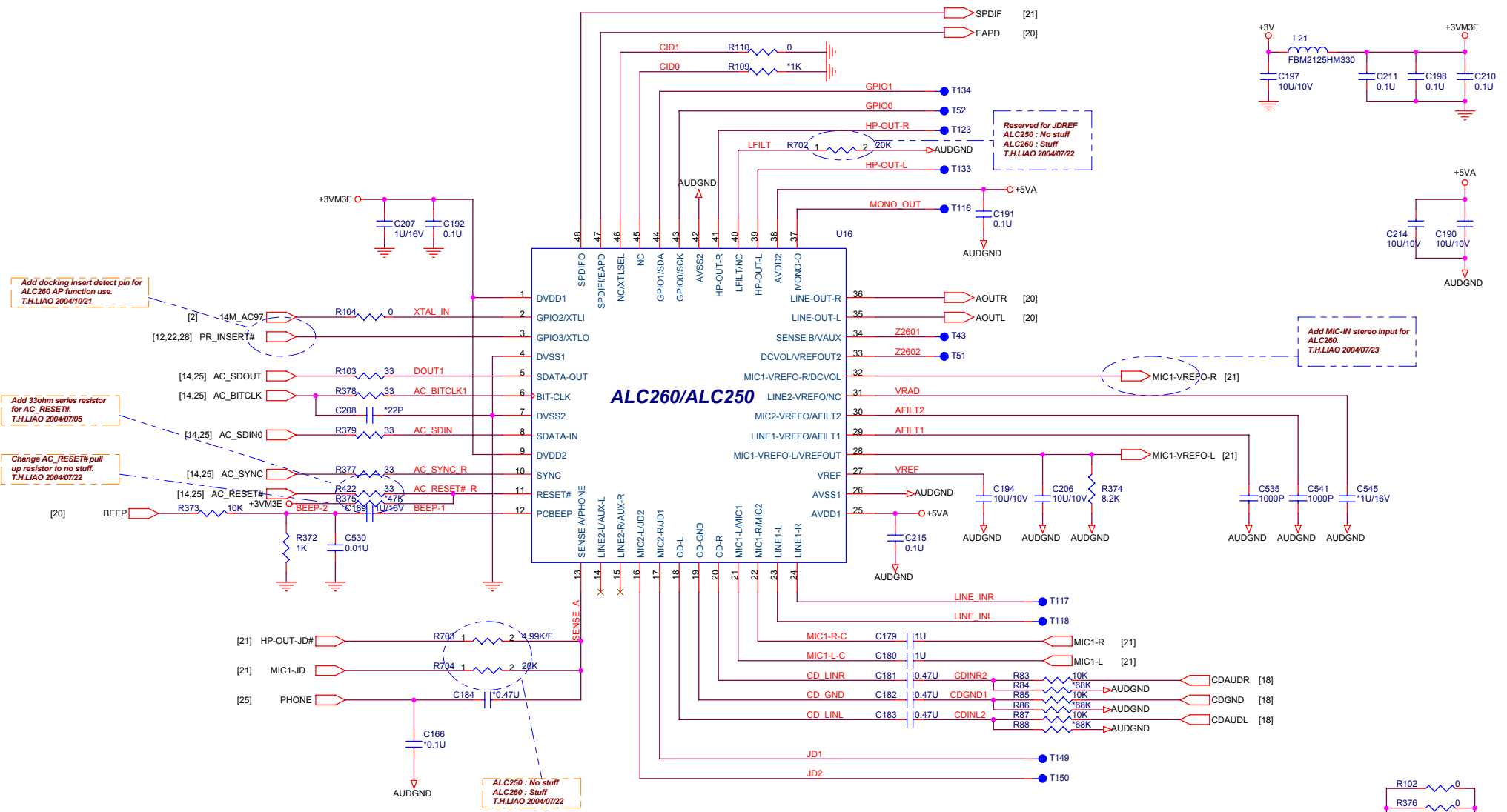


HDD CONNECTOR



SATA CONNECTOR





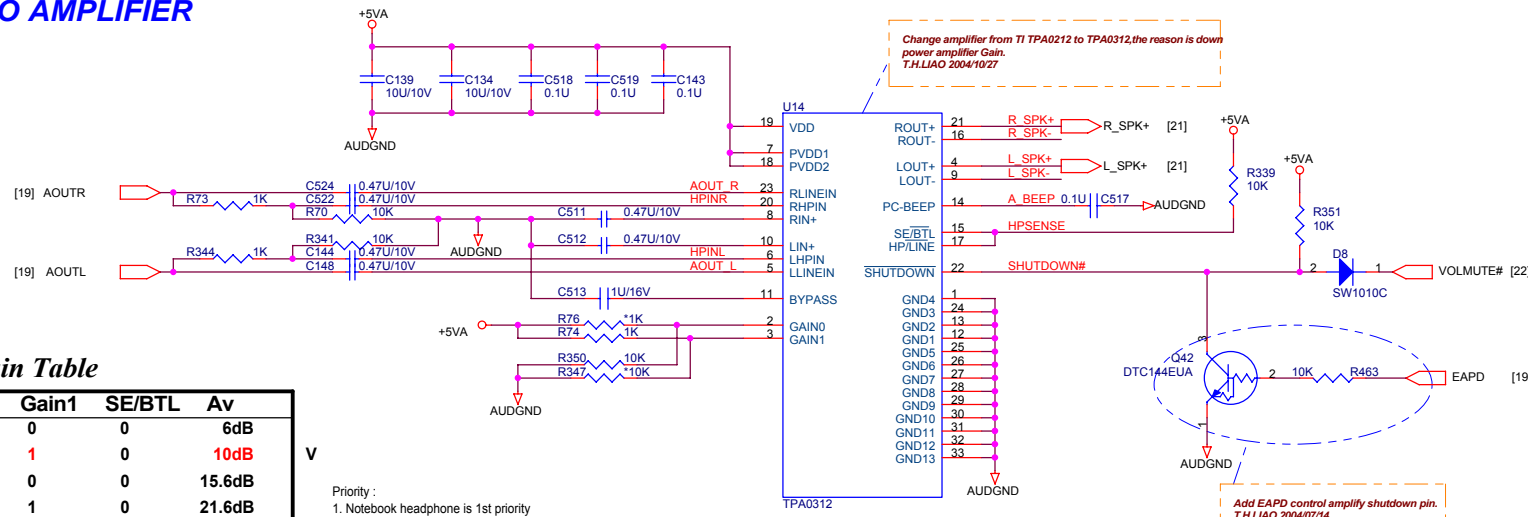
Codec Configuration:

Pin Assignment	ALC260	ALC250
LOUT (pin-35/36)	To 2W AMP	To 2W AMP
HP-OUT (pin-39/41)	HP-OUT Jack	HP-OUT Jack
LINE1 (pin-23/24)	LINE-IN Jack	LINE-IN Jack
MIC1 (pin-21/22)	MIC-IN Jack (Stereo)	MIC1-L: Mono MIC-IN Jack MIC1-R: Mono Internal MIC
MIC2 (pin-16/17)	Internal MIC-IN	X

PROJECT : KN1A
Quanta Computer Inc.

Size: Document number
 Custom: AC97 CODEC
 Date: Tuesday, November 02, 2004
 Sheet: 19 of 41
 Rev: 3A

AUDIO AMPLIFIER

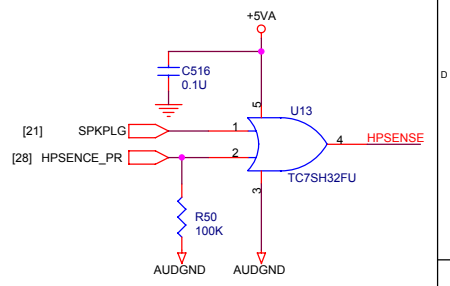


0312Gain Table

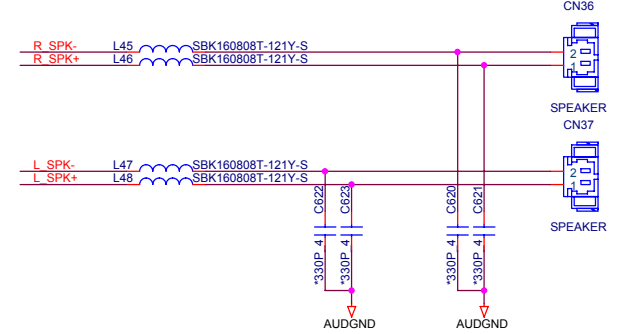
Gain0	Gain1	SE/BTL	Av
0	0	0	6dB
0	1	0	10dB
1	0	0	15.6dB
1	1	0	21.6dB
X	X	1	4.1dB

- Priority:
- Notebook headphone is 1st priority
 - Port-replicator headphone is 2nd priority
 - Notebook internal speaker is 3rd priority

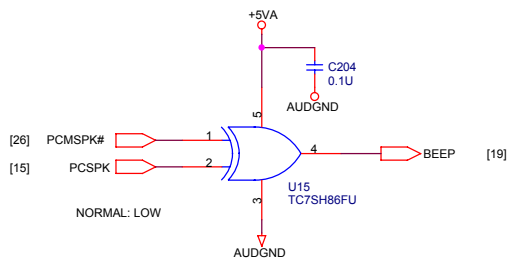
HEADPHONE SENSE



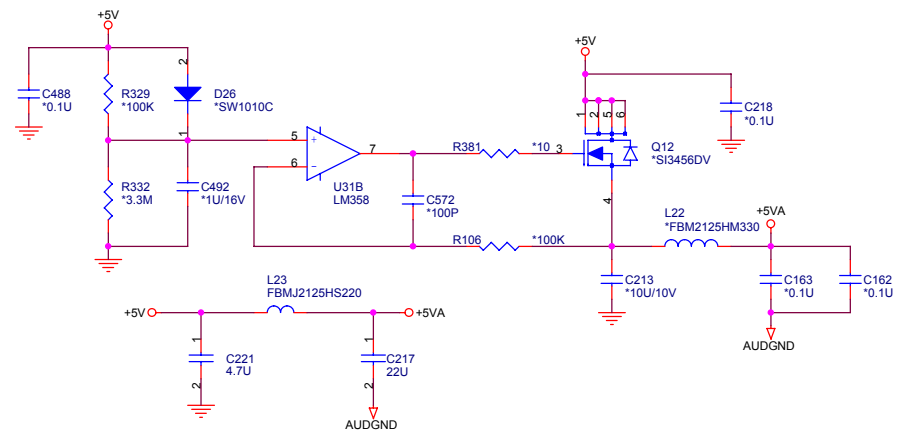
INT. SPEAKER

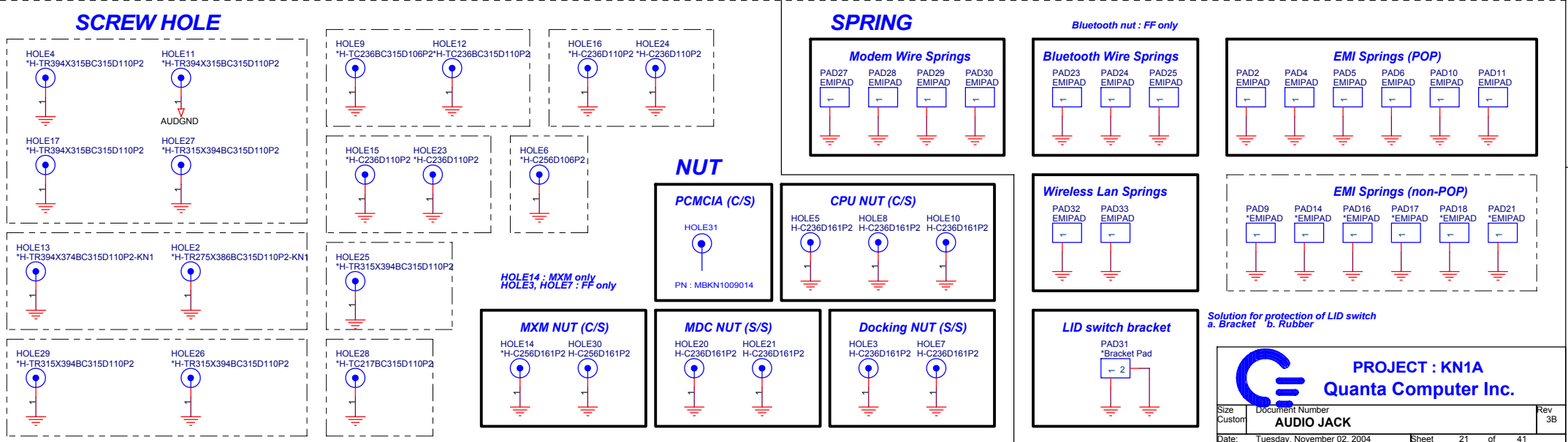
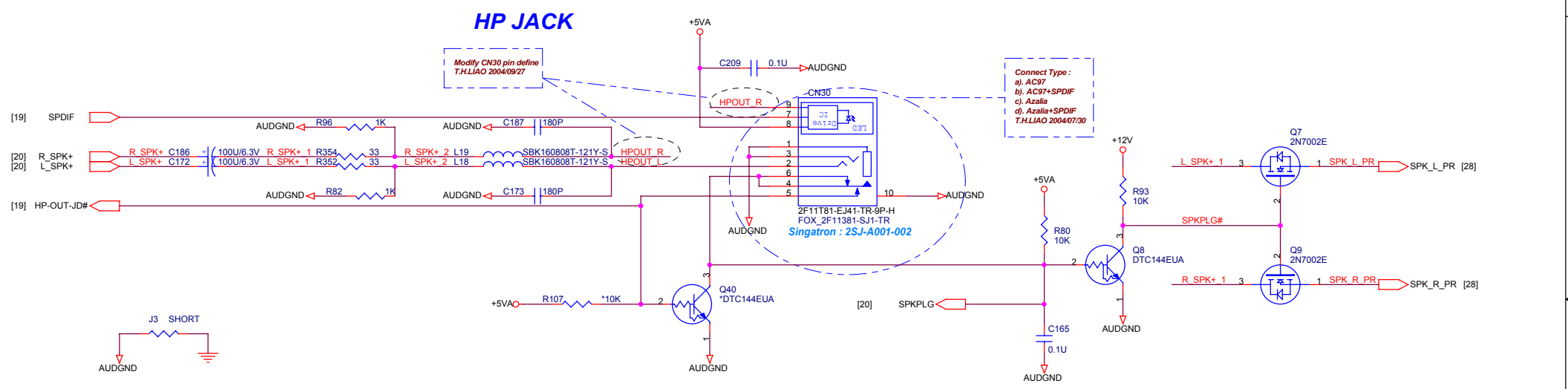
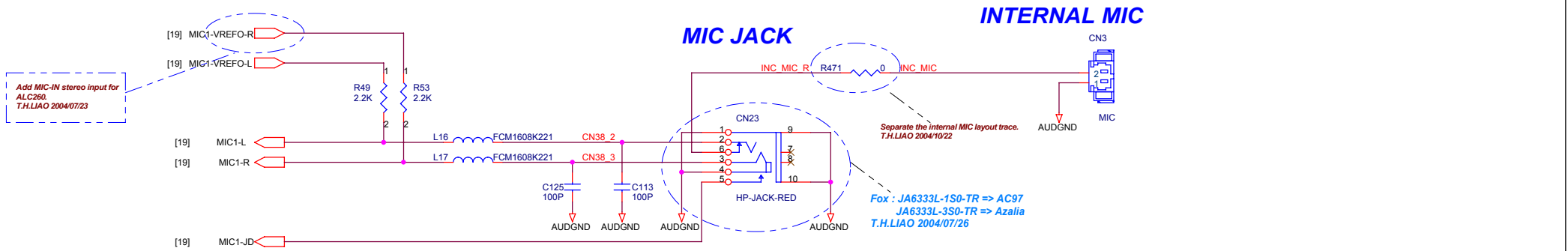


PC SPEAKER



AMP POWER



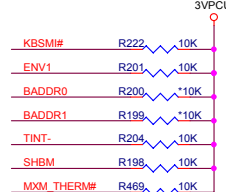
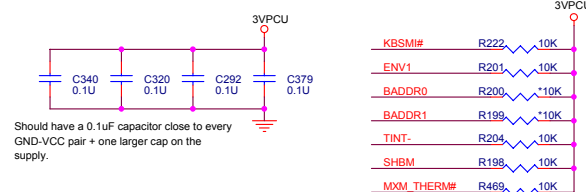
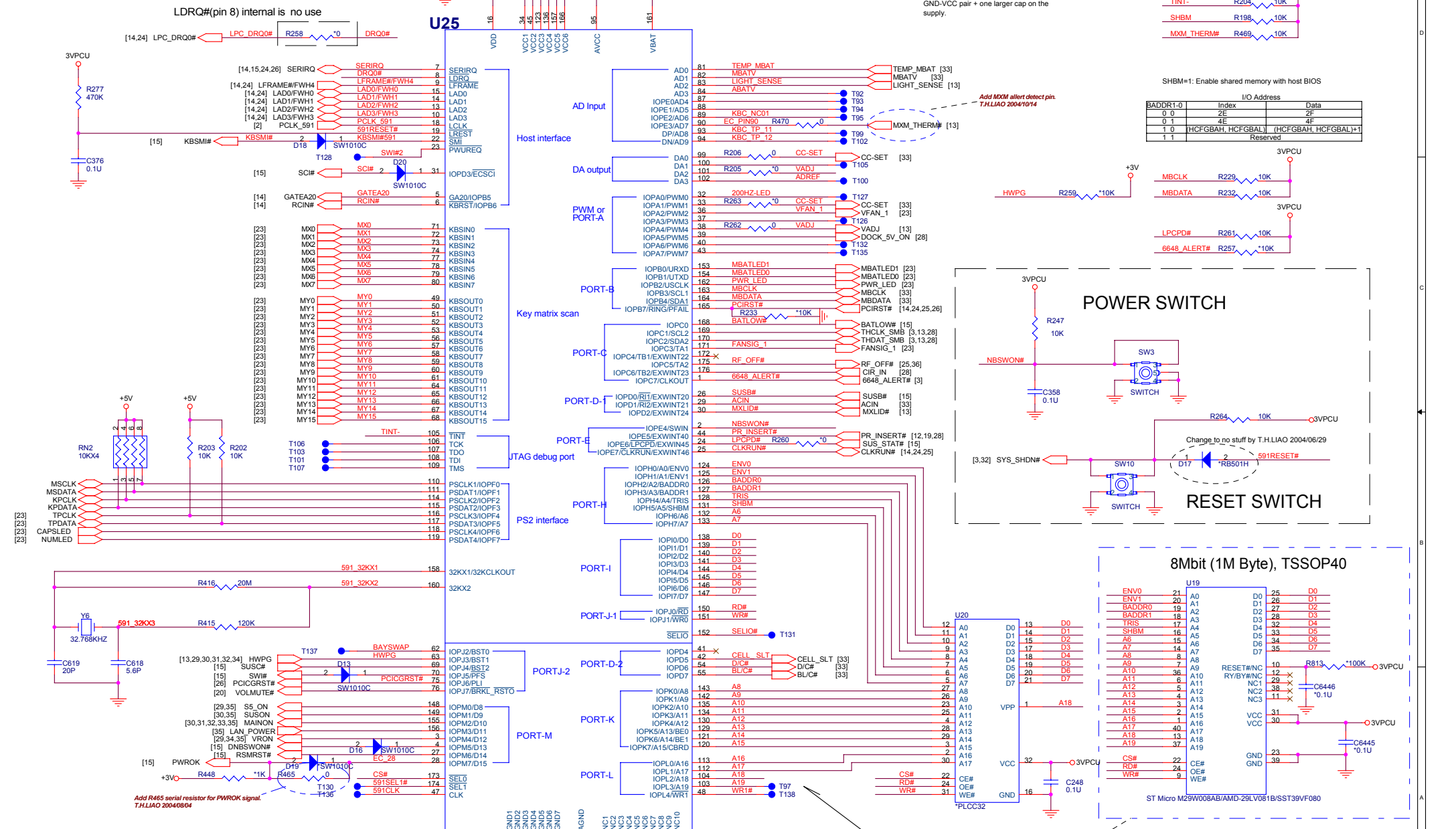


Solution for protection of LID switch
 a. Bracket b. Rubber

PROJECT : KN1A
Quanta Computer Inc.

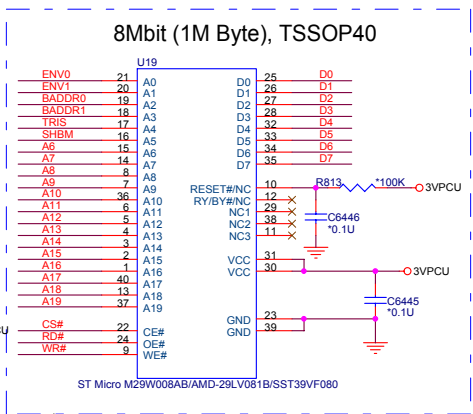
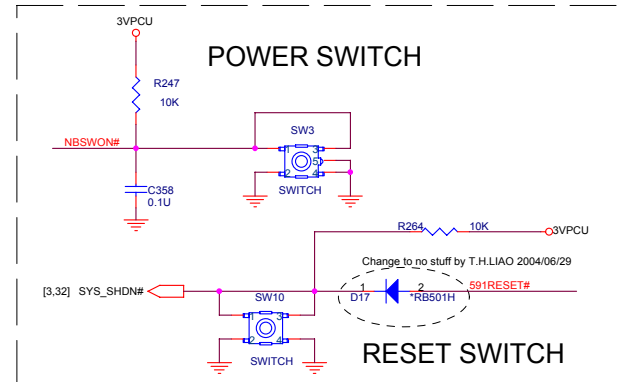
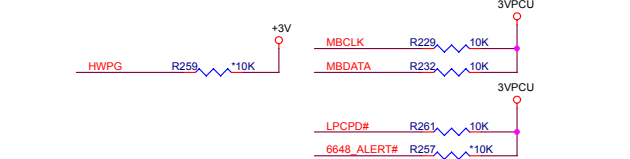
Size Custom
 Document Number **AUDIO JACK**
 Date: Tuesday, November 02, 2004 Sheet 21 of 41 Rev 3B

KBC-NS97551L



SHBM=1: Enable shared memory with host BIOS

BADDR1-0	Index	I/O Address	Data
0 0	2E	4E	2F
0 1	4E	4E	4F
1 0	HCFGBAH, HCFGBAL	(HCFGBAH, HCFGBAL)+1	Reserved
1 1			



PC9751VPC Pin 103 internal is "A19". Can't use to GPIO

Change Flash rom size from 512K bytes to 1M bytes. T.H.LIAO 2004/11/01

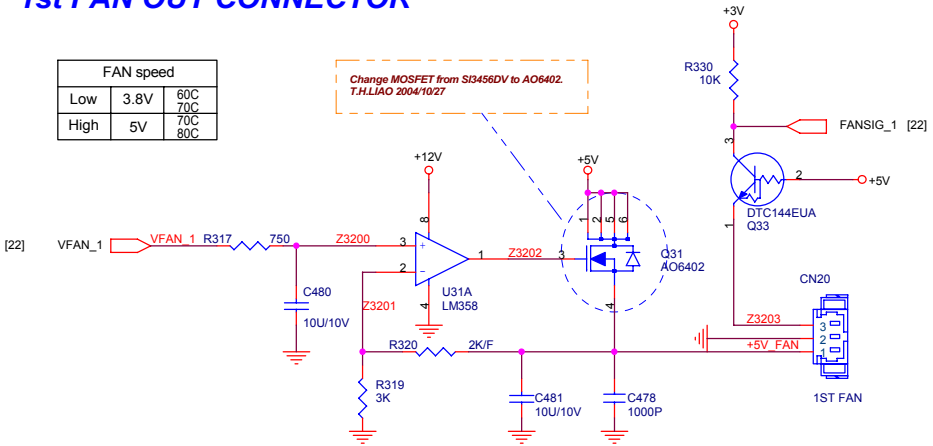
PROJECT : KN1A
Quanta Computer Inc.

Size	Document Number	Rev
Custom	KBC-PC87551VPC	3B
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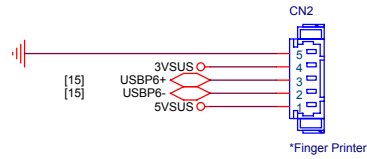
1st FAN OUT CONNECTOR

FAN speed		
Low	3.8V	60C 70C
High	5V	70C 80C

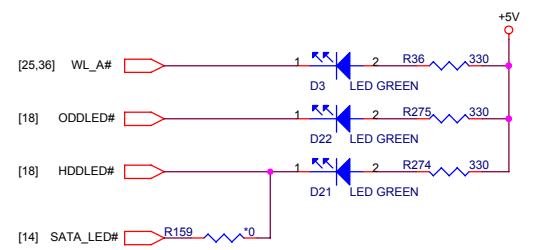
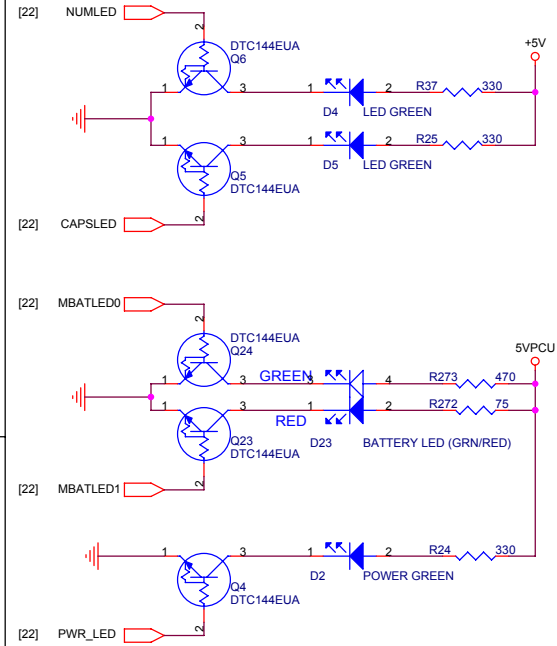
Change MOSFET from SI3456DV to AO6402.
T.H.LIAO 2004/10/27



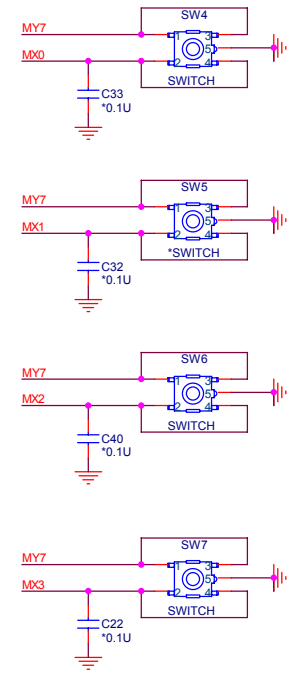
FINGER PRINT



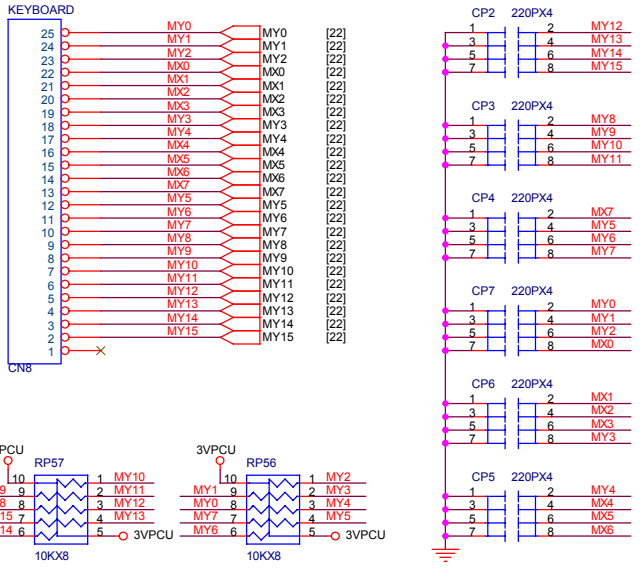
LED INDIACTOR



QUICK SWITCH

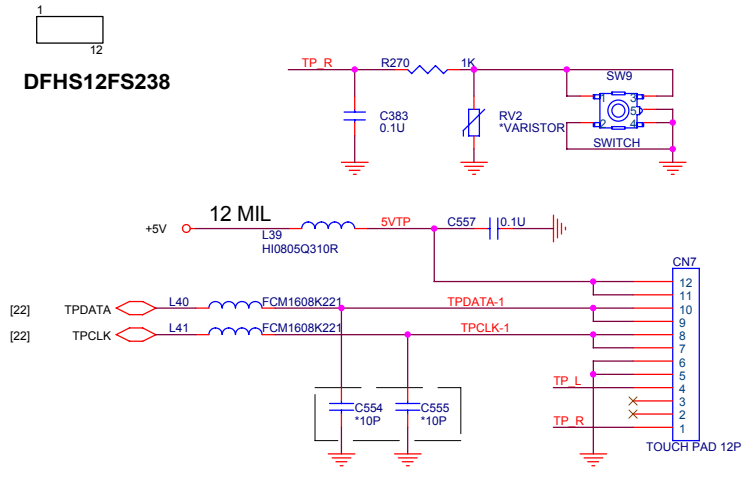


KEYBOARD



TOUCHPAD

DFHS12FS238



E: Change the PN and footprint from DFHS12FS203 to DFHS12FS238.

DMA Note :
LDRQ0# : The LPC Host used for encoded DMA/Bus Master request for this device.
LDRQ1# : The LPC Host used for encoded DMA/Bus Master request for docking LPC Super IO to the LPC Host.

Change DMA request from LDRQ1# to LDRQ0#.
 T.H.LIAO 2004/07/05

No stuff Q35,R439 for ICH_PME#.
 T.H.LIAO 2004/07/06

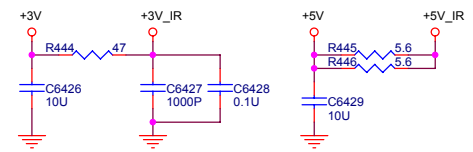
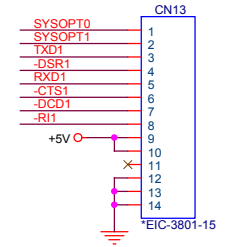
Change IRTX2 pull down resistor from 47.5k to 4.75k.
 T.H.LIAO 2004/07/05

IRRX2
TFDU6102-TR3 need to pull down 10k ohm.
TFDU6102F-TR3 need to pull high 100k ohm.



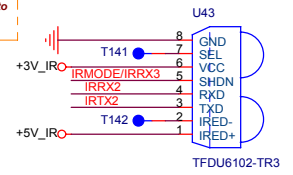
1. Disable serial port (UART1) in BIOS via setting CR02, bit3 to "0"
 (To disable the host address registers the logical device's base address must be set below 100h)
2. IO_SMI# function is unused.

COM PORT CONN FOR BIOS DEBUG

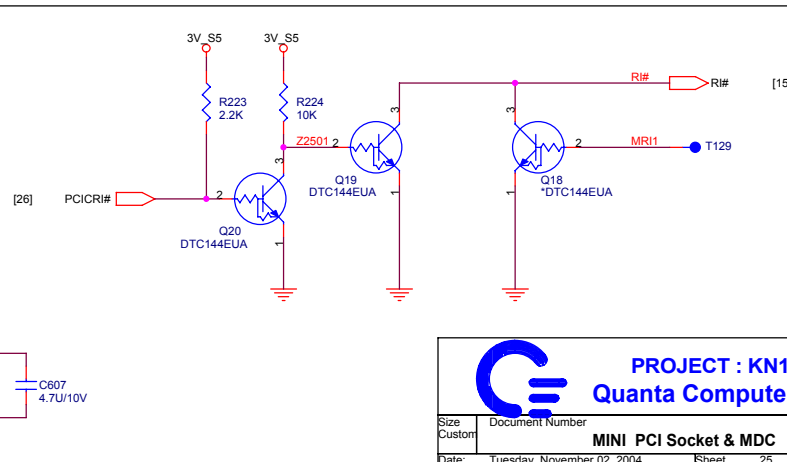
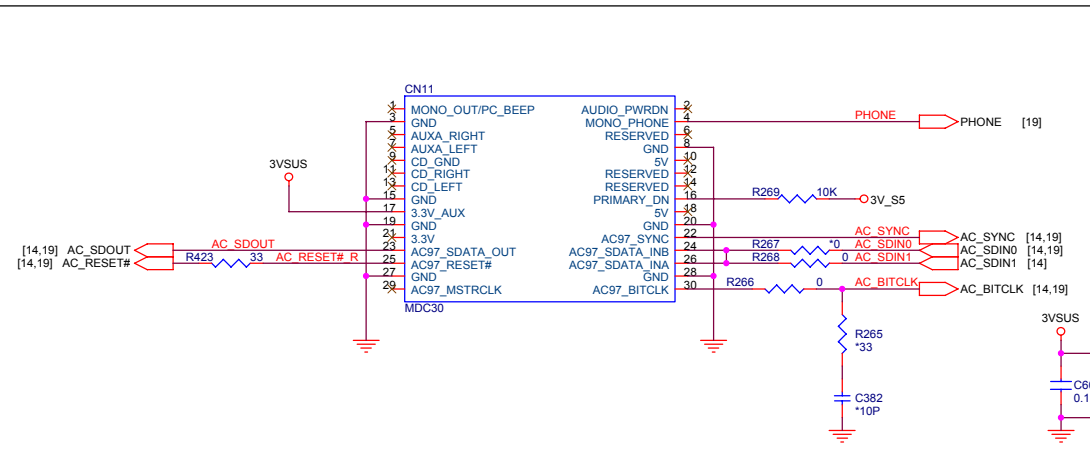
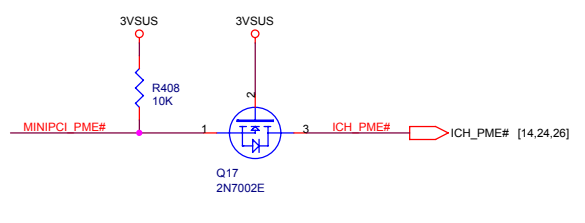
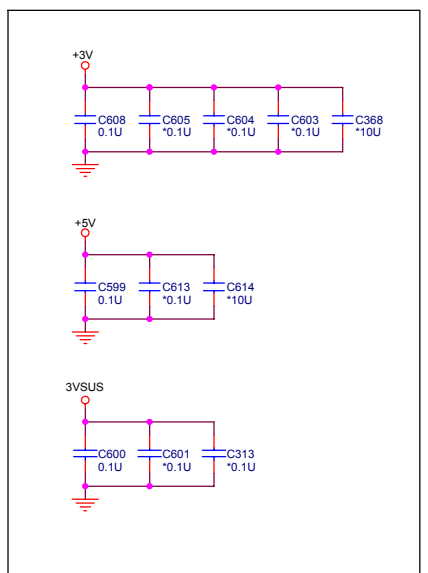
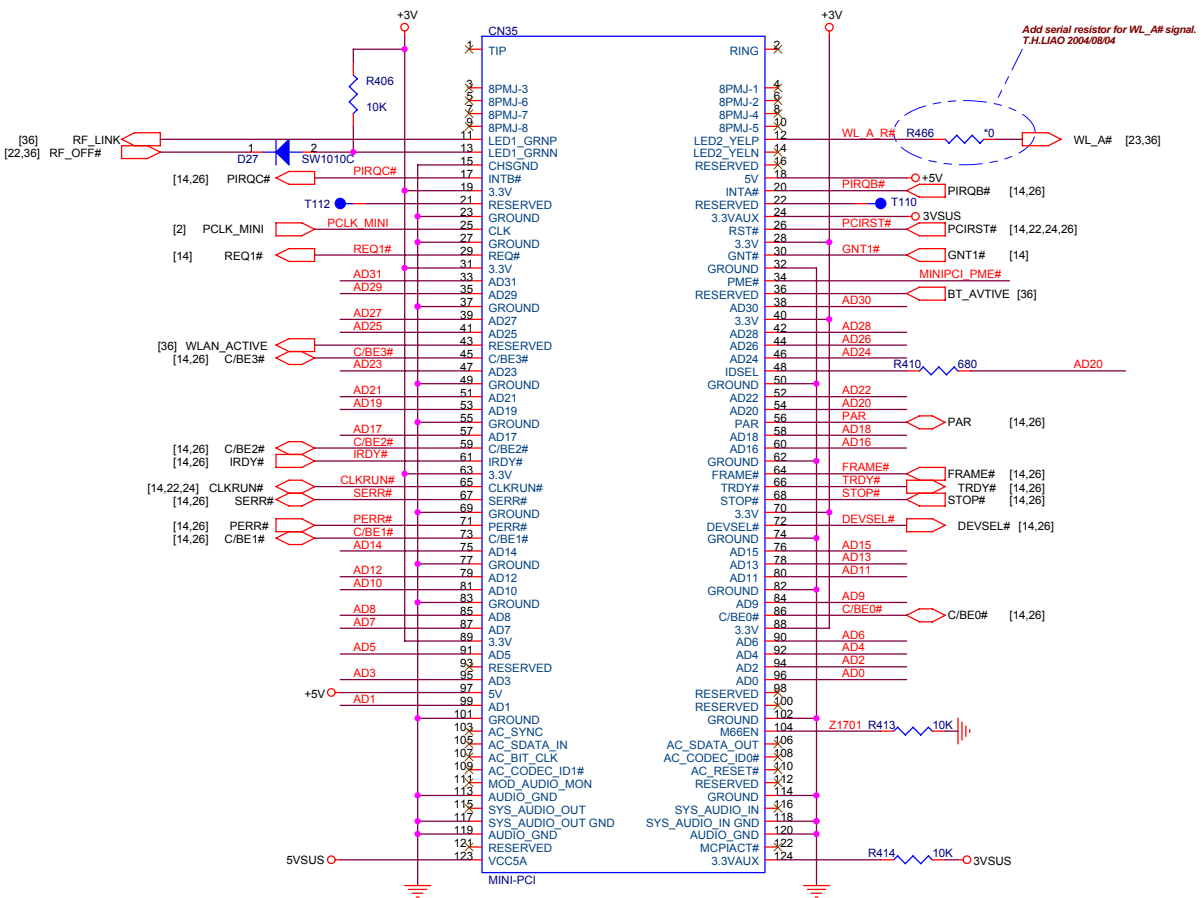


I/O Address

SYSOPT1-0	Index	Port Address
0 0		0x002E
0 1		0x004E
1 0		0x162E
1 1		0x164E

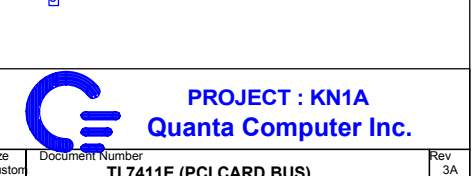
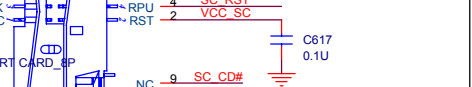
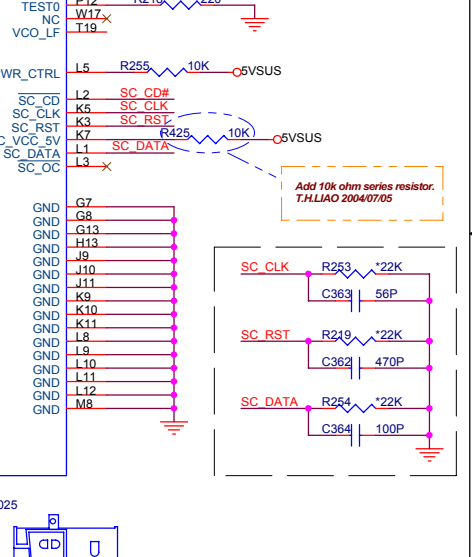
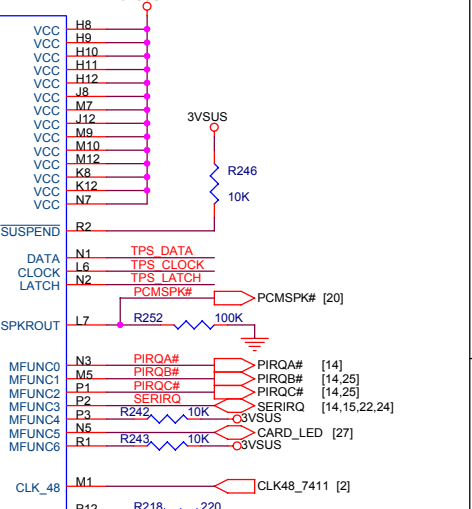
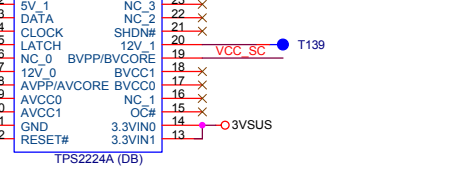
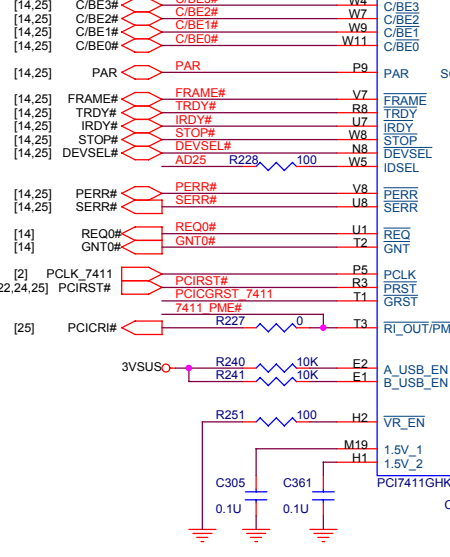
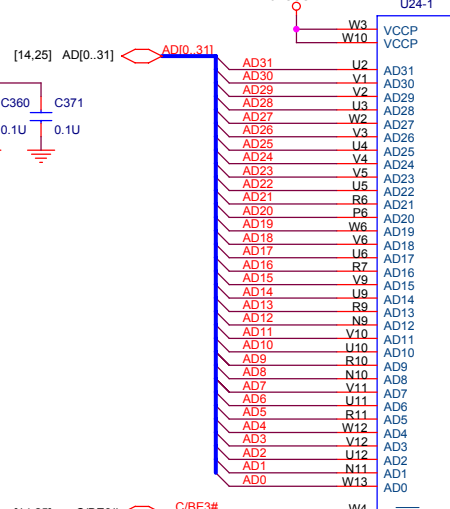
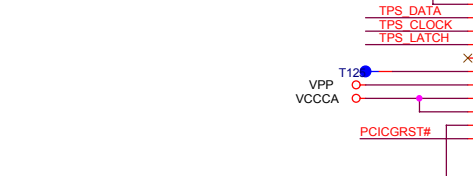
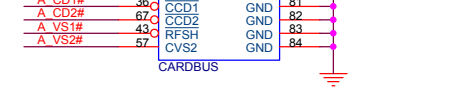
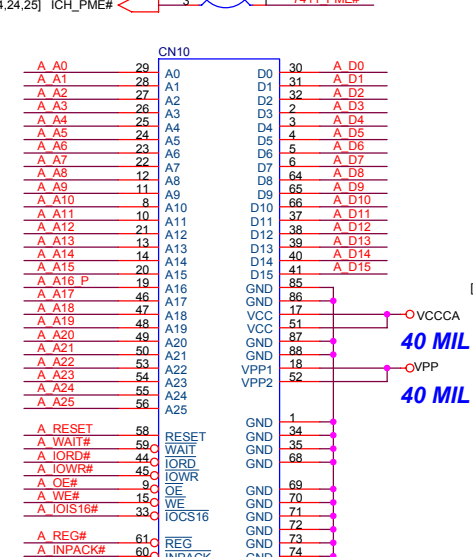
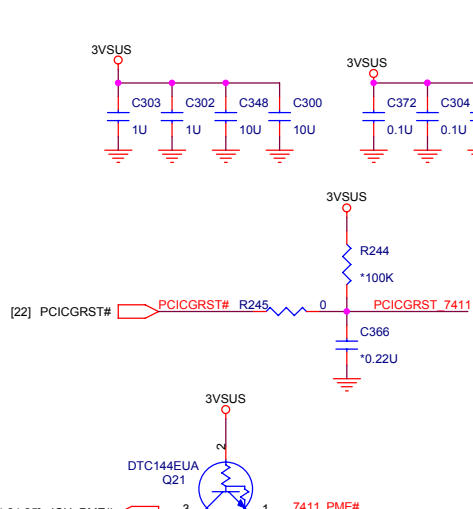
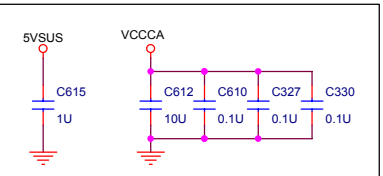
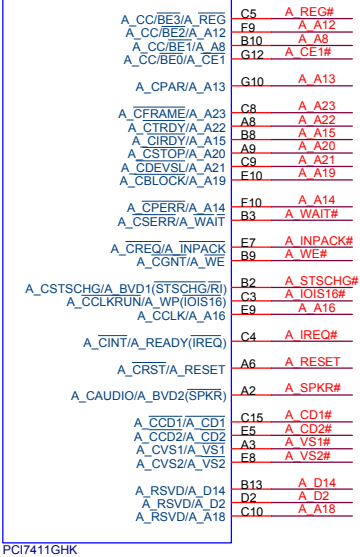
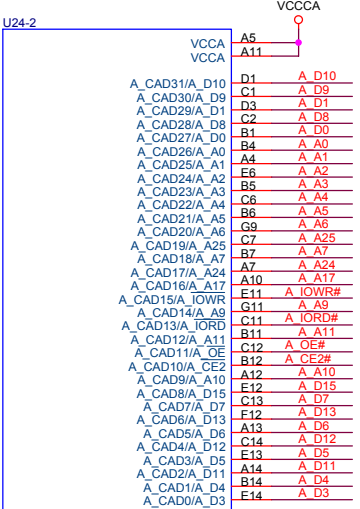
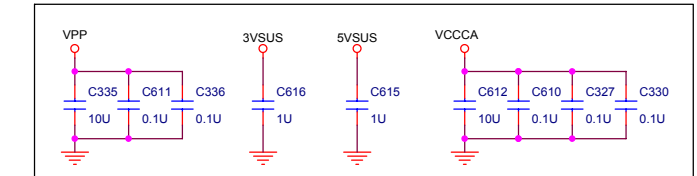
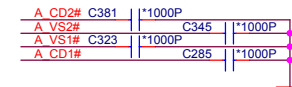
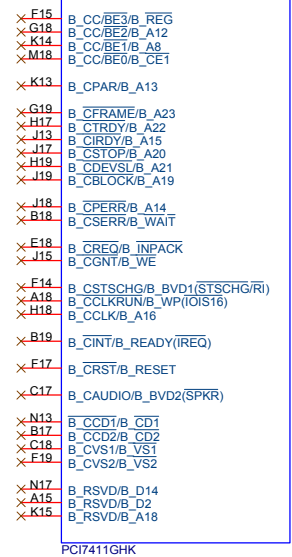
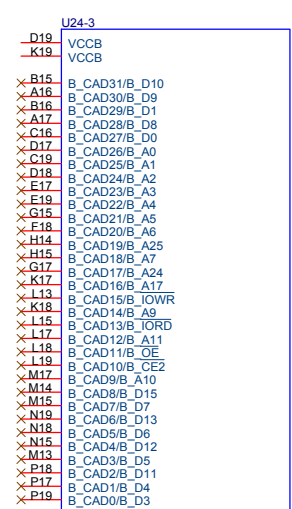


TYPE III MINI PCI SOCKET



PROJECT : KN1A
Quanta Computer Inc.

Size	Document Number	Rev
Custom	MINI PCI Socket & MDC	3A
Date:	Tuesday, November 02, 2004	Sheet 25 of 41



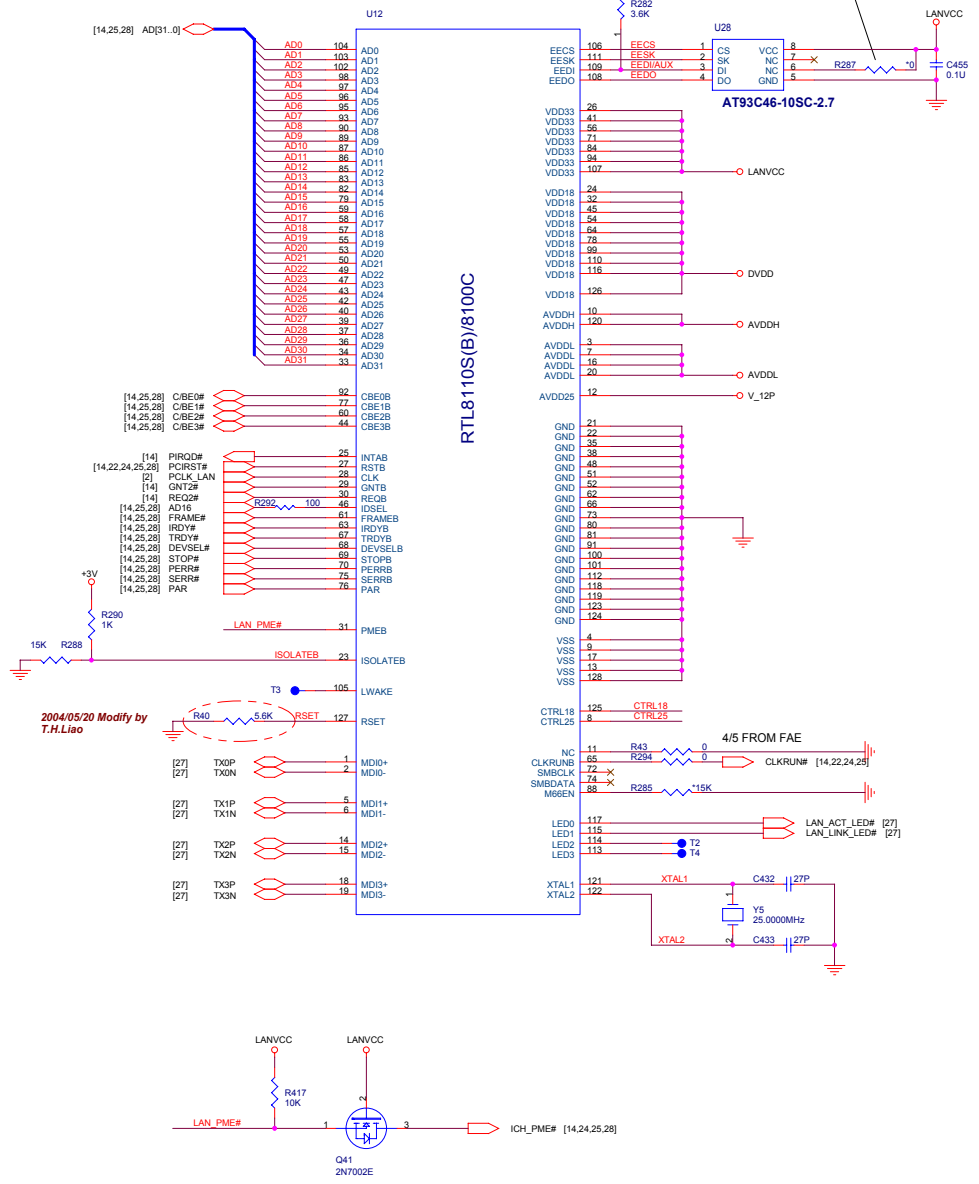
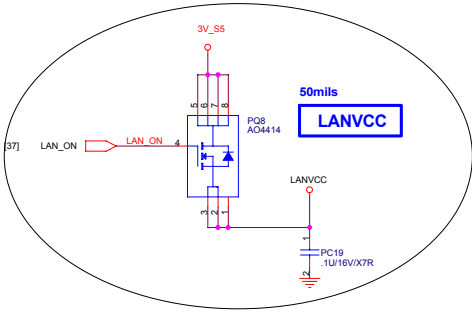
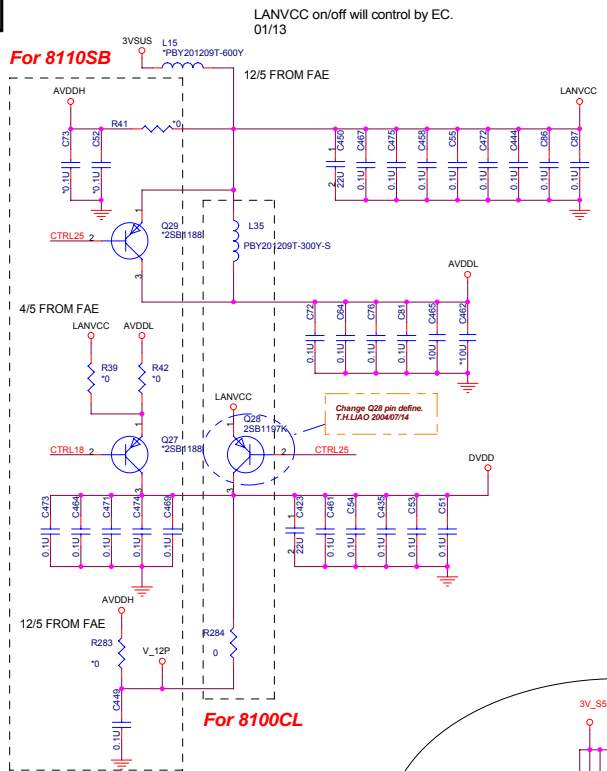
PROJECT : KN1A
Quanta Computer Inc.

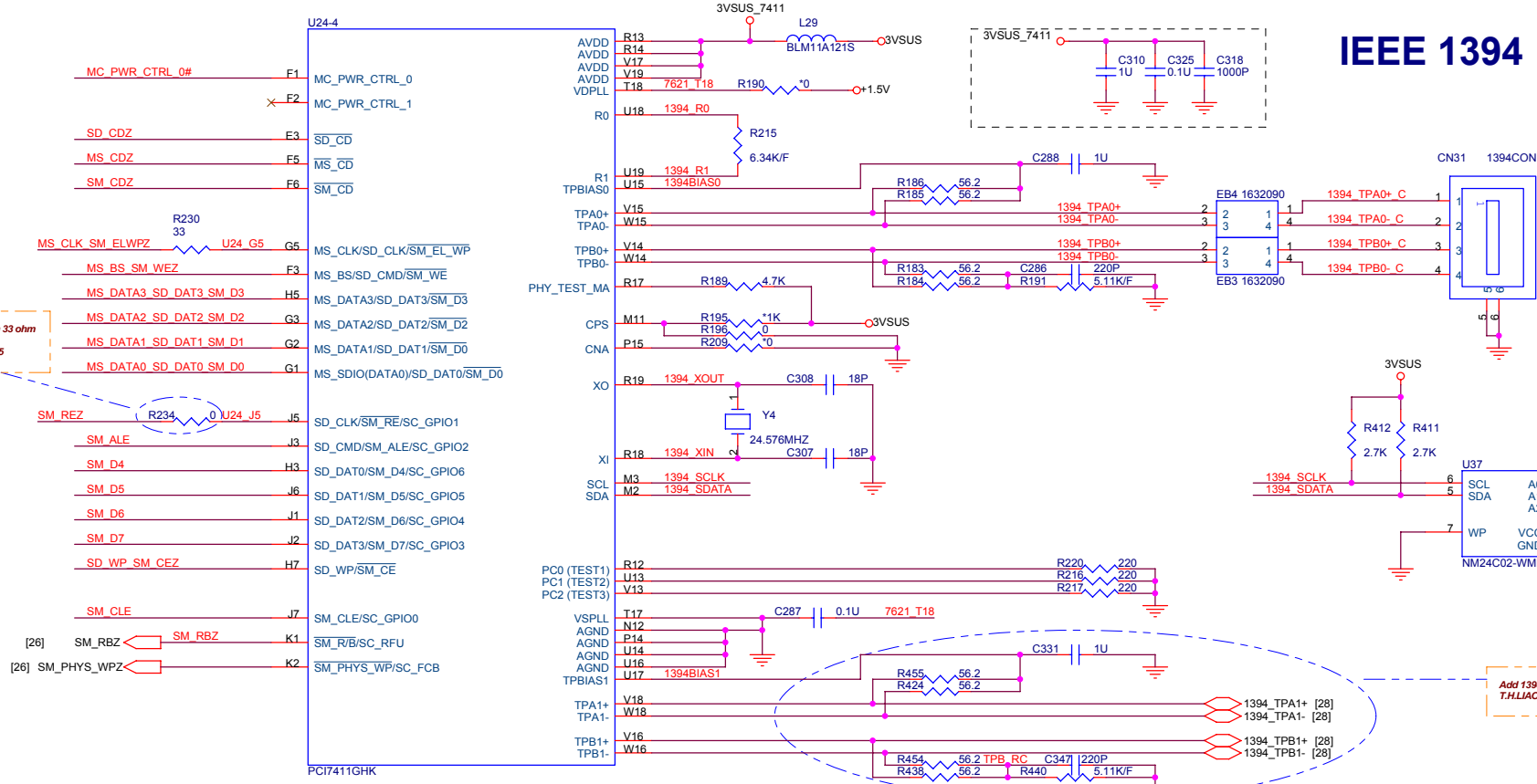
Size: Custom Document Number: **TI 7411E (PCI,CARD BUS)** Rev: 3A

Date: Tuesday, November 02, 2004 Sheet: 26 of 41



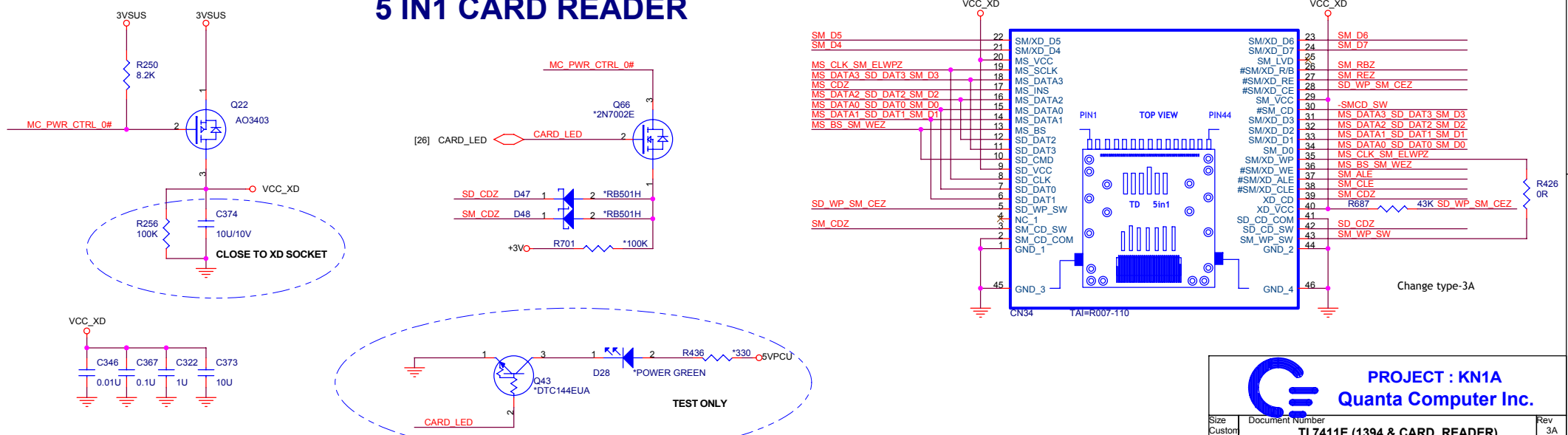
	RTL8100C(L)_10/100M	RTL8110SB(L)_1G
VDD33	3.3VD 26,41,56,71,84,94,107	3.3VD 26,41,56,71,84,94,107
AVDDL	3.3VA 3,7,16,20	2.5VA 3,7,16,20
DVDD	2.5VD 32,54,78,99	1.2VD 24,32,45,54,64,78,99,110,116,126
AVDD25	2.5VA 12	3.3VA 12
AVDDH	NC	3.3VA 10,120
Pin 127	5.6k (1%) pull-low	2.49k (1%) pull-low





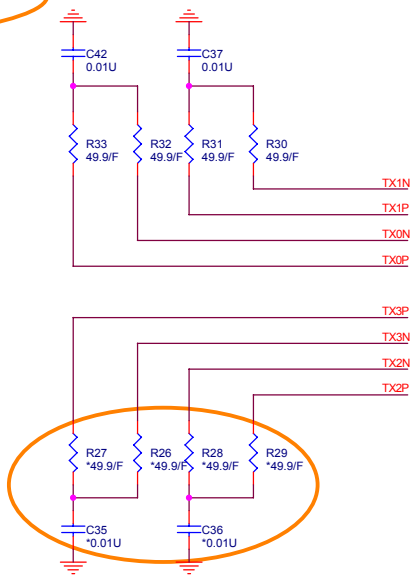
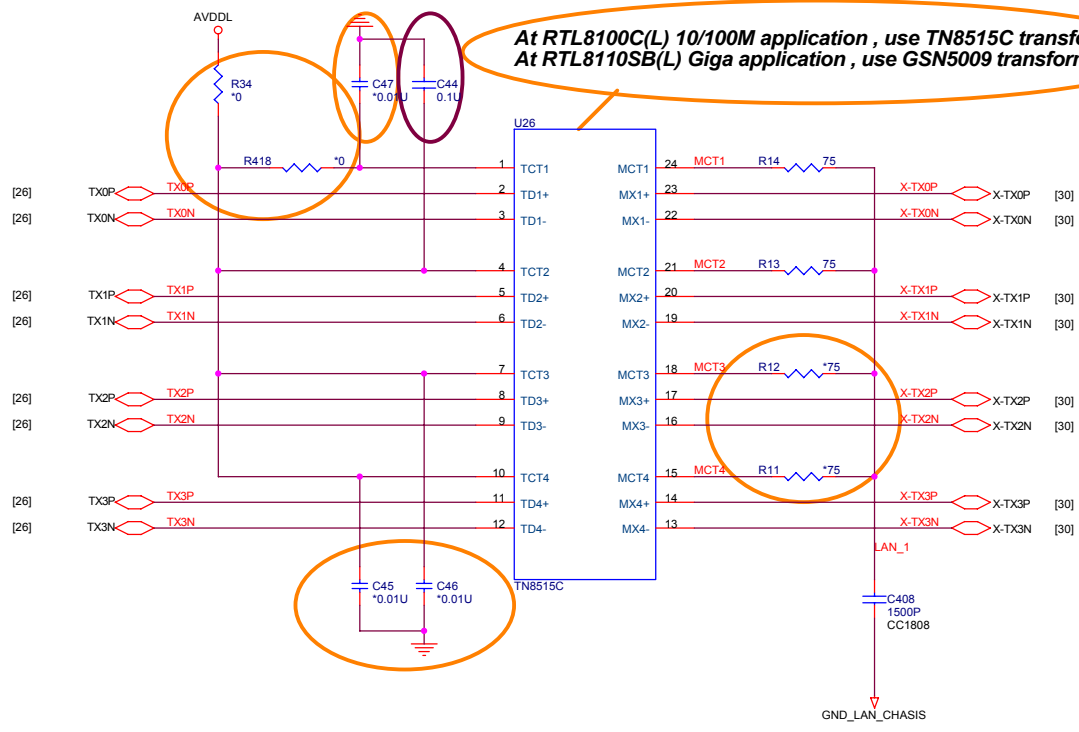
IEEE 1394

5 IN 1 CARD READER



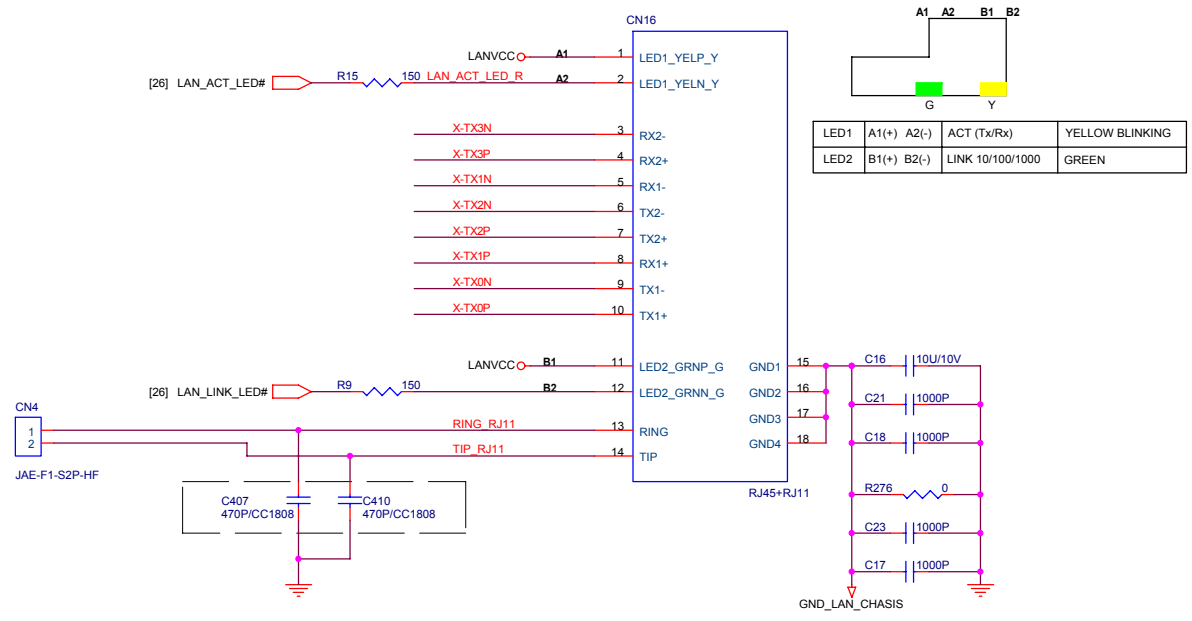
PROJECT : KN1A
Quanta Computer Inc.

Size Custom	Document Number TI 7411E (1394 & CARD_READER)	Rev 3A
Date: Tuesday, November 02, 2004	Sheet 27 of 41	

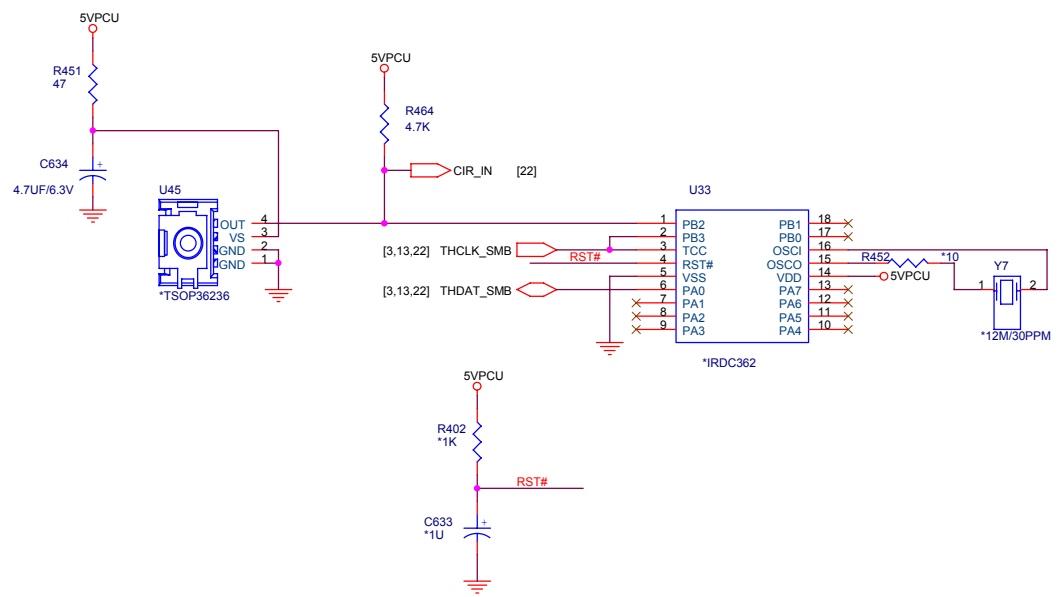
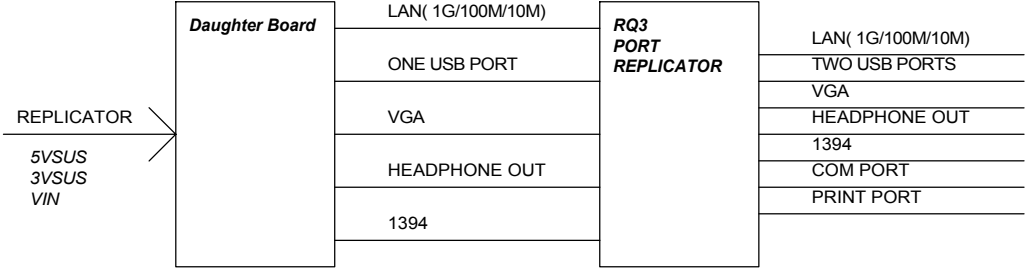
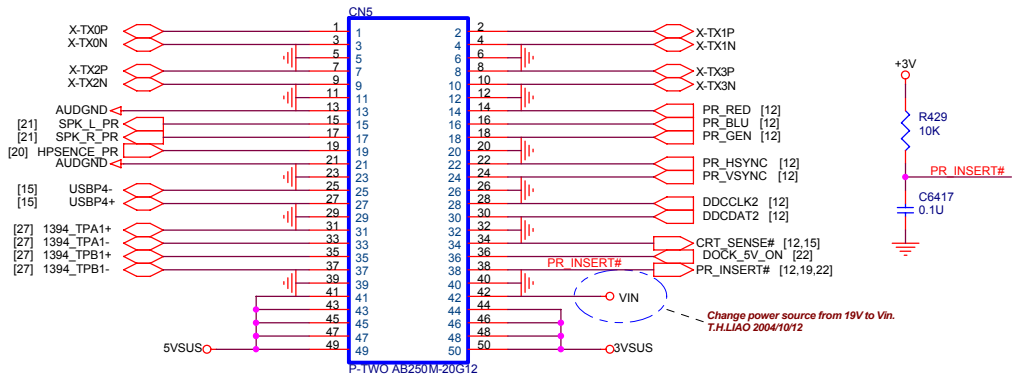


At RTL8100C(L) 10/100M application, remove R26, R27, R28, R29, C35, C36, C45, C46, C47, R34, R418, R12, R11 and change C44 value from 0.01uF to 0.1uF.

RJ45 and RJ11 CONNECTOR



DOCKING BOARD CONNECT

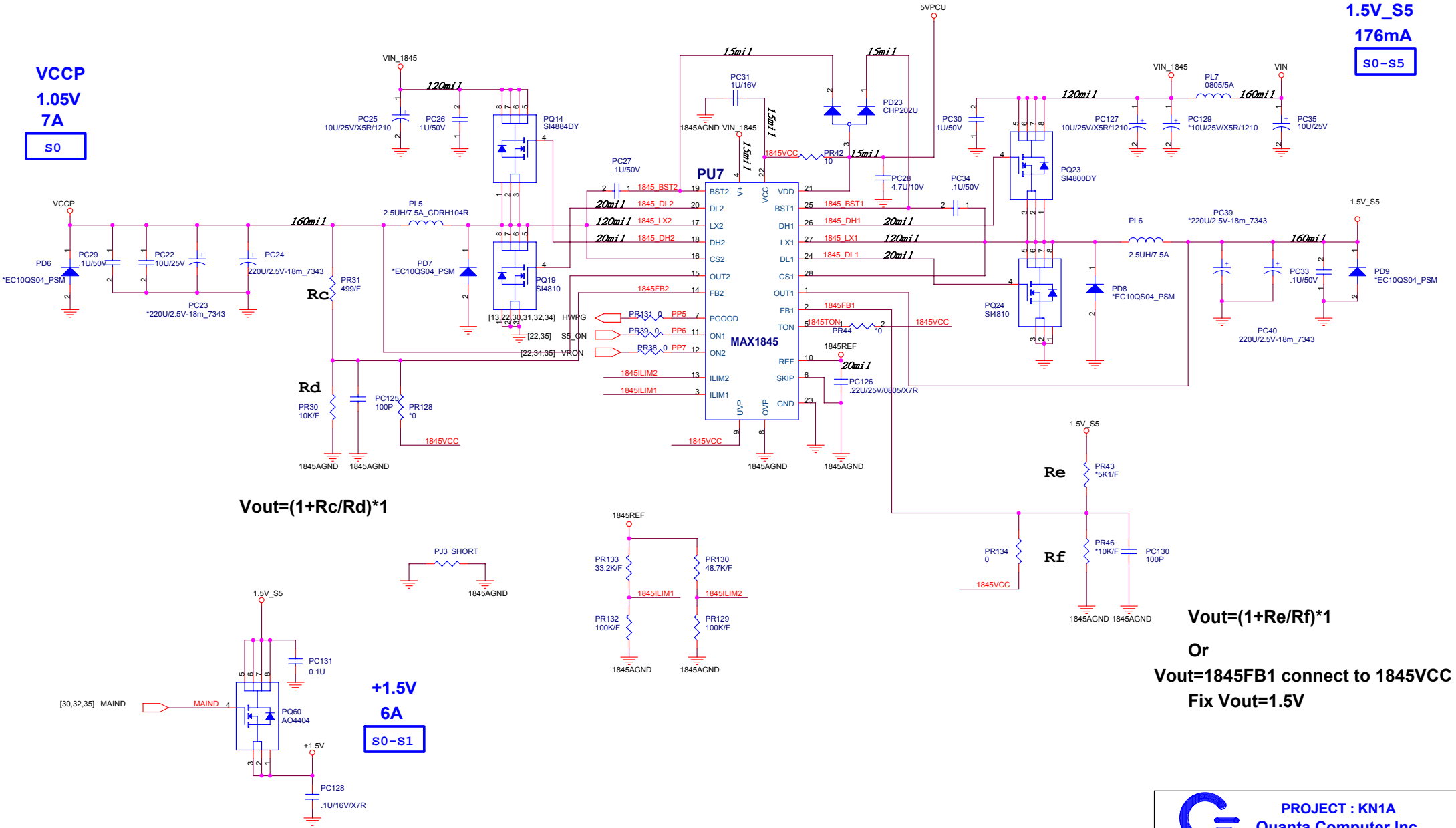


VCCP
1.05V
7A

S0

1.5V_S5
176mA

S0-S5



$V_{out} = (1 + R_c/R_d) * 1$

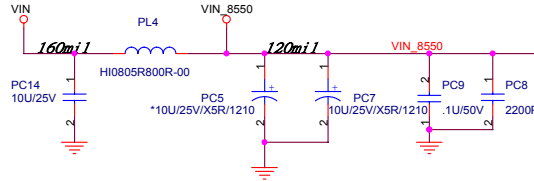
$V_{out} = (1 + R_e/R_f) * 1$

Or
 $V_{out} = 1845FB1$ connect to 1845VCC
Fix $V_{out} = 1.5V$

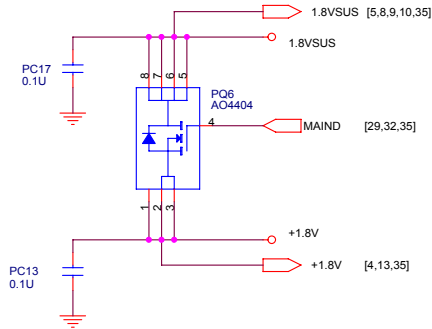
+1.5V
6A
S0-S1

**1.8VSUS
8A**

S0-S3

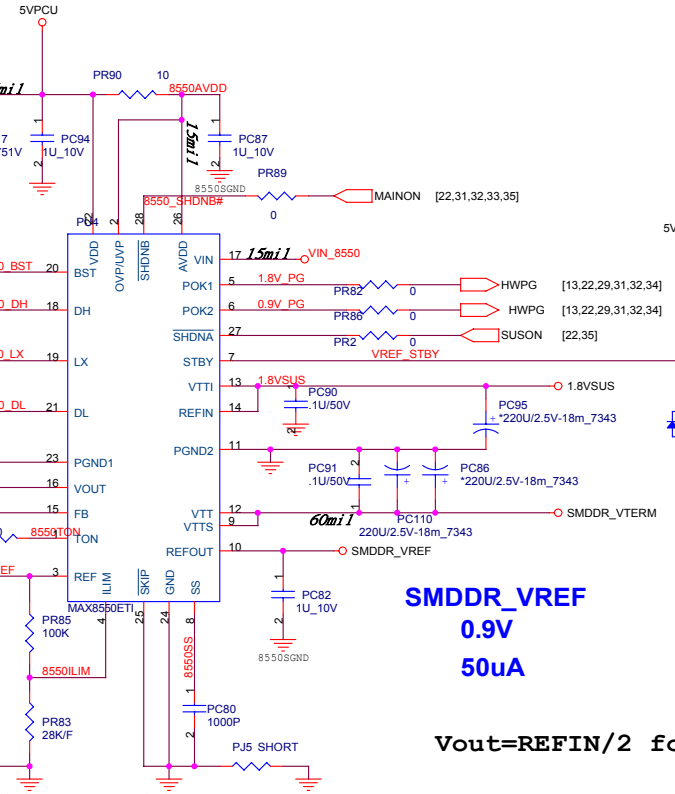


**Vout=8550FB connect to 8550AVDD
Fix Vout=1.8V**



**+1.8V
5.1A**

S0-S1



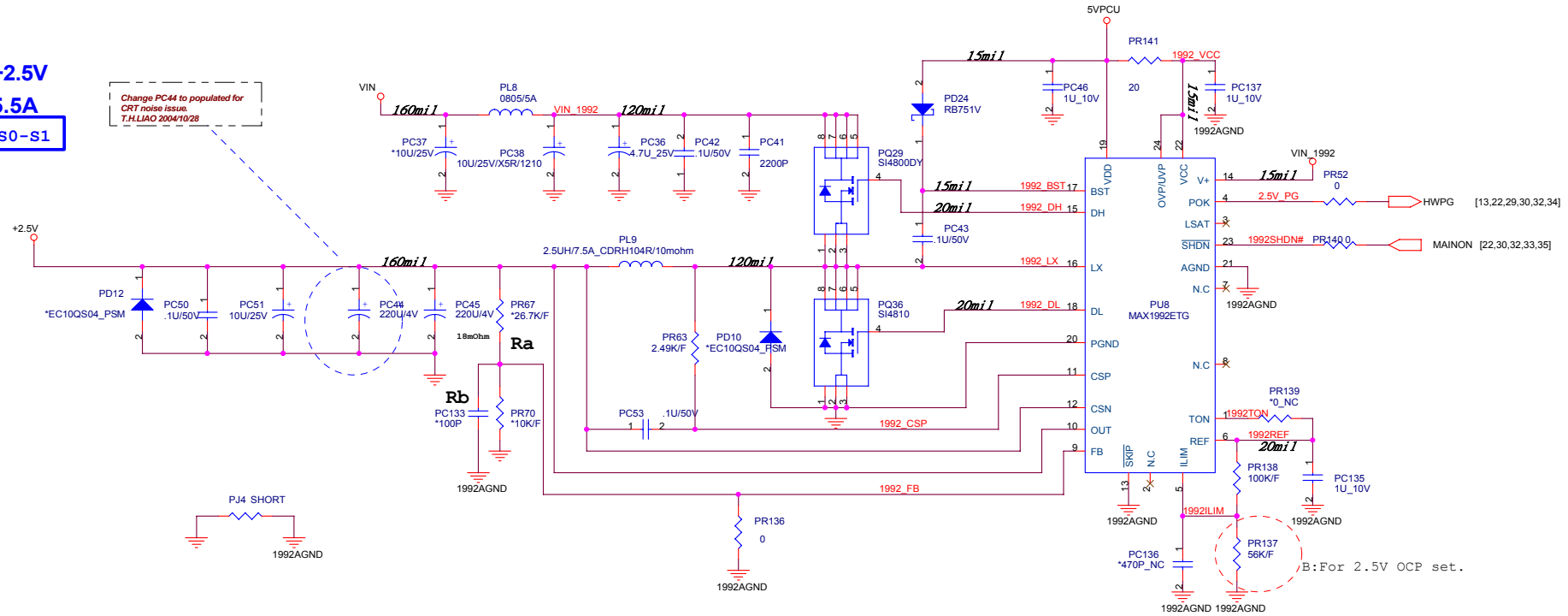
**SMDDR_VREF
0.9V
50uA**

**SMDDR_VTERM
0.9V
4A
S0-S1**

Vout=REFIN/2 for VTT & VTR(REFOUT)

+2.5V
5.5A
S0-S1

Change PC44 to populated for CRT noise issue.
T.H.LIAO 2004/10/28



$$V_{out} = V_{FB} (1 + R_a / R_b)$$

$$\#V_{FB} = 0.7V$$

Or

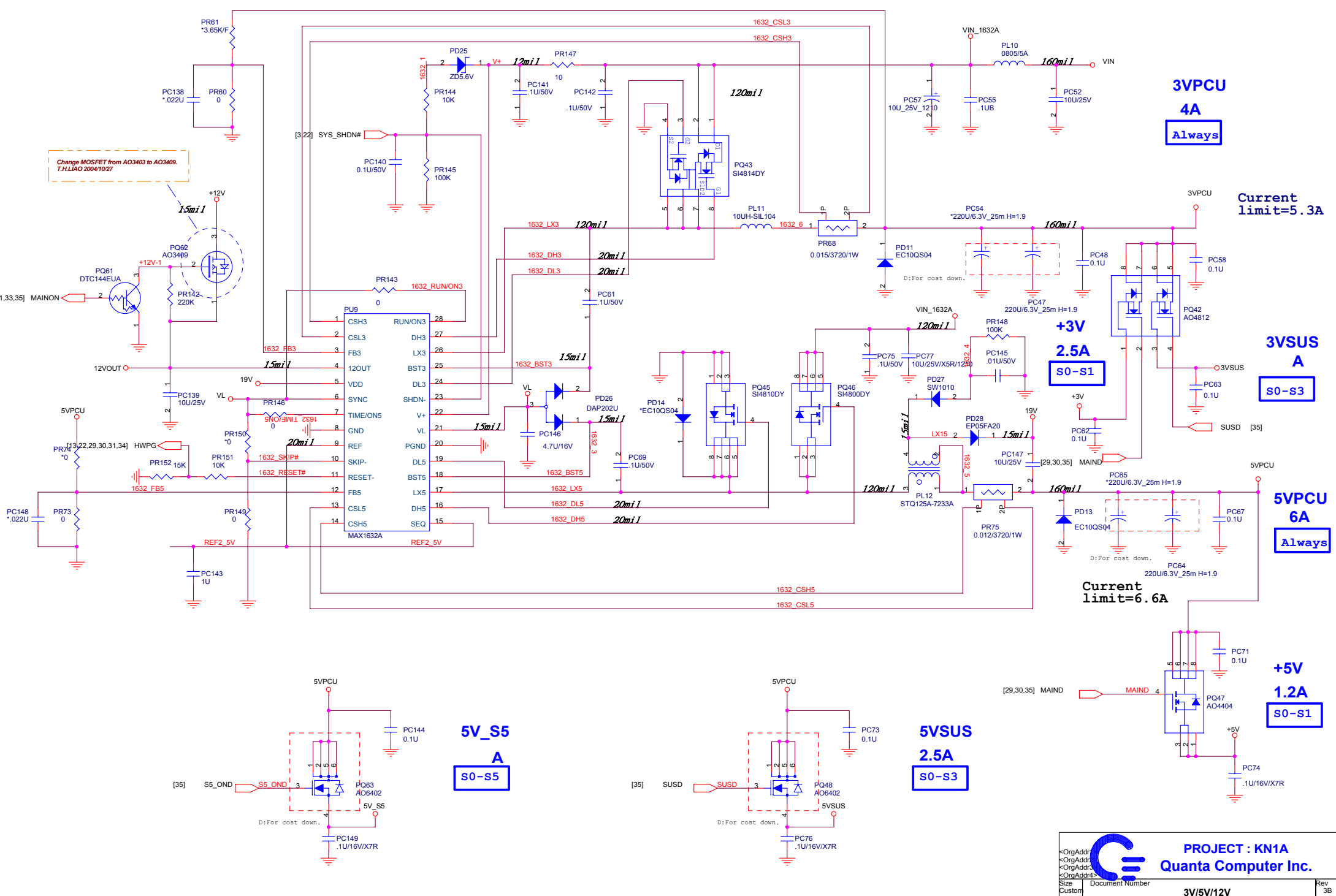
$V_{out} = 1992_FB$ connect to AGND

Fix $V_{out} = 2.5V$



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3VPCU
4A
Always

Current limit=5.3A

3VSUS
1A
S0-S3

+3V
2.5A
S0-S1

5VPCU
6A
Always

Current limit=6.6A

+5V
1.2A
S0-S1

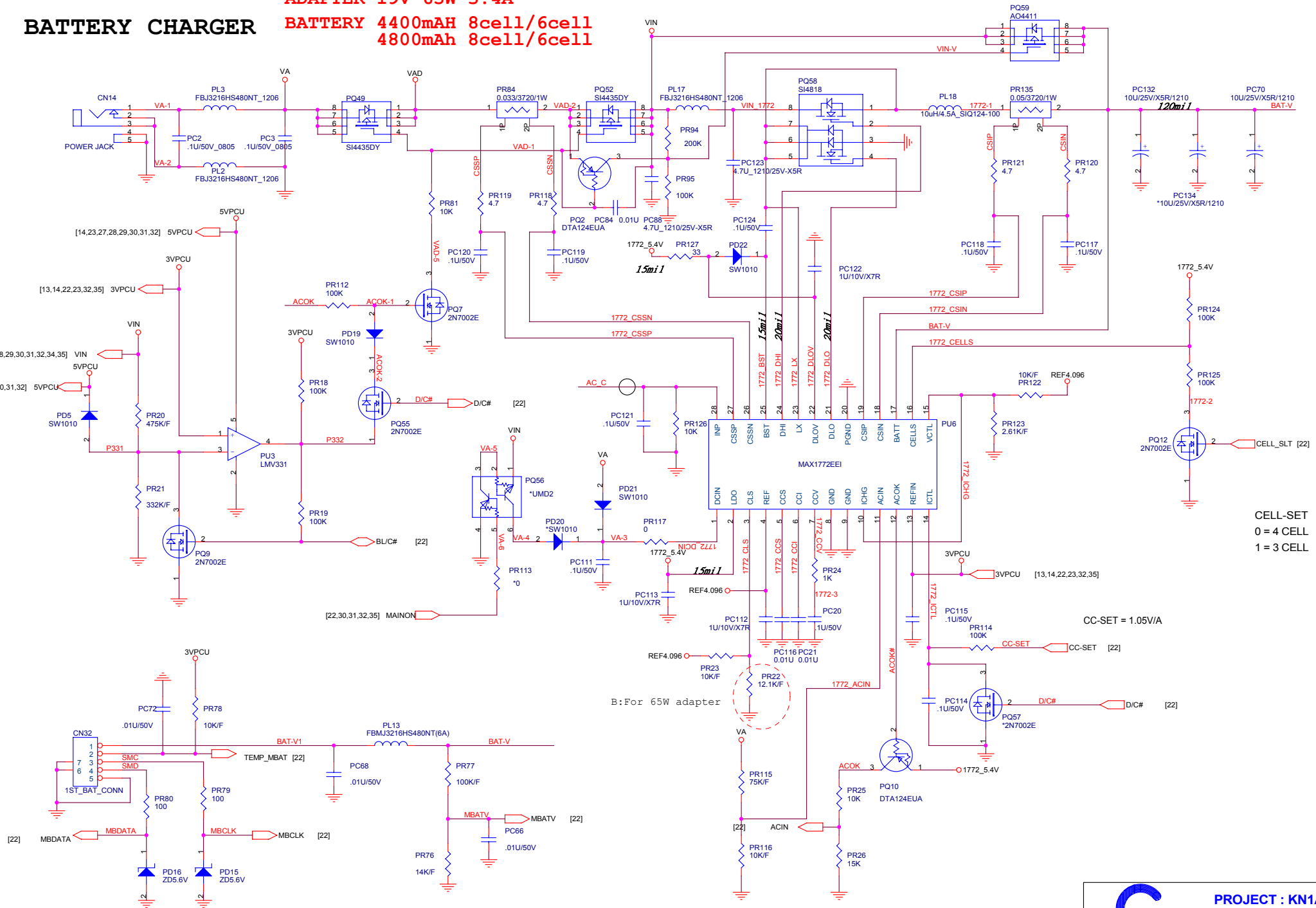
5V_S5
1A
S0-S5

5VSUS
2.5A
S0-S3

BATTERY CHARGER

ADAPTER 19V 65W 3.4A

**BATTERY 4400MAH 8cell/6cell
4800mAh 8cell/6cell**



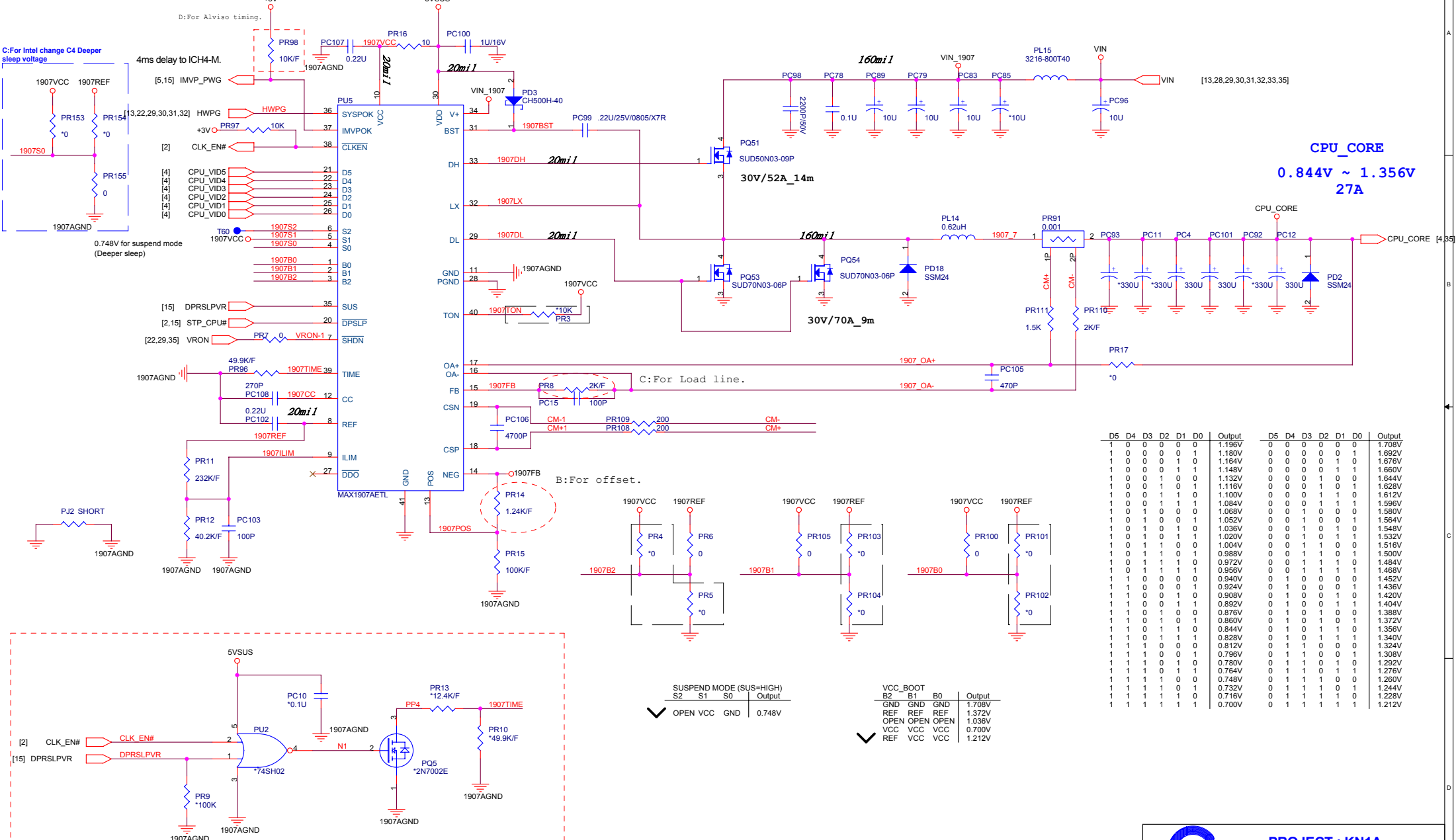
CELL-SET
0 = 4 CELL
1 = 3 CELL

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[17,23,25,26,28,32,35] 5VSUS
 [13,14,22,23,32,33,35] 3VPCU
 [2,3,8,10,12,13,14,15,16,18,19,22,23,24,25,27,28,32,35,36] +3V

CPU VCC CORE (MAX1907)



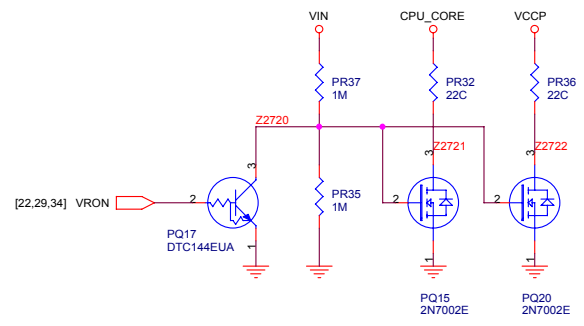
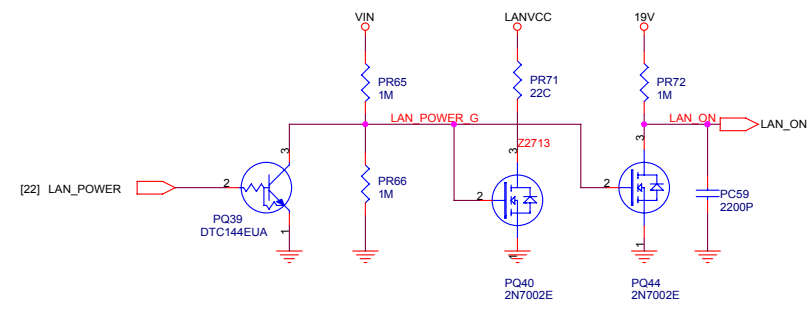
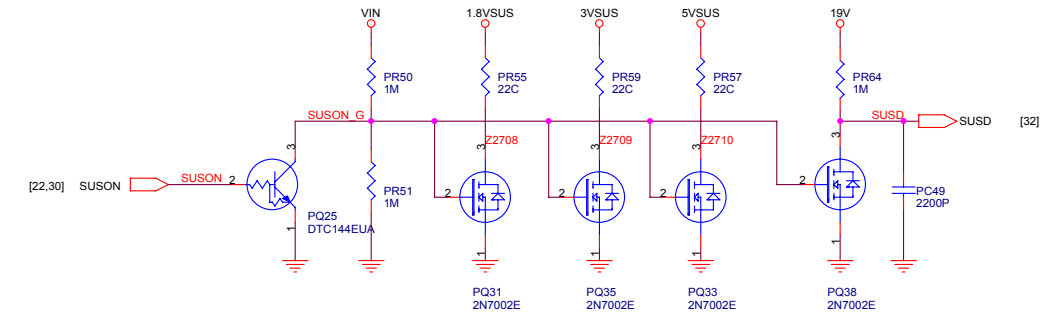
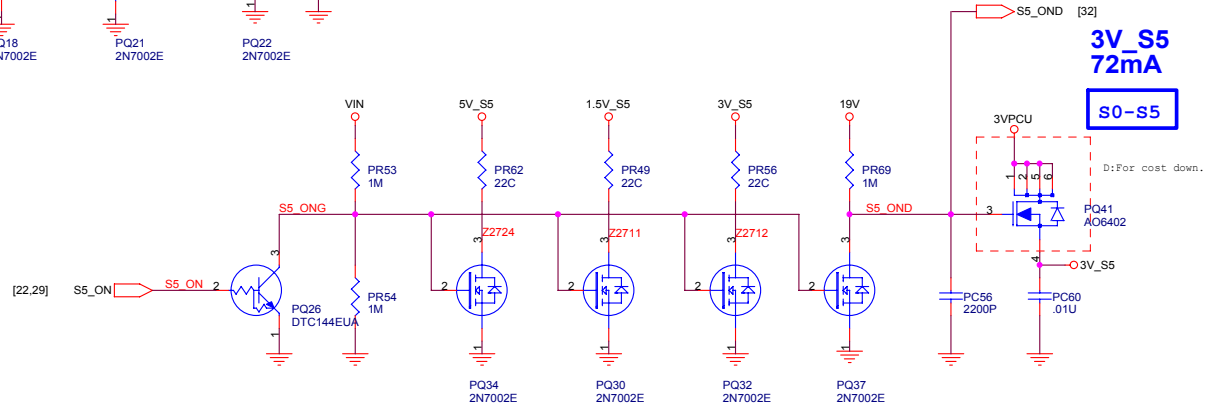
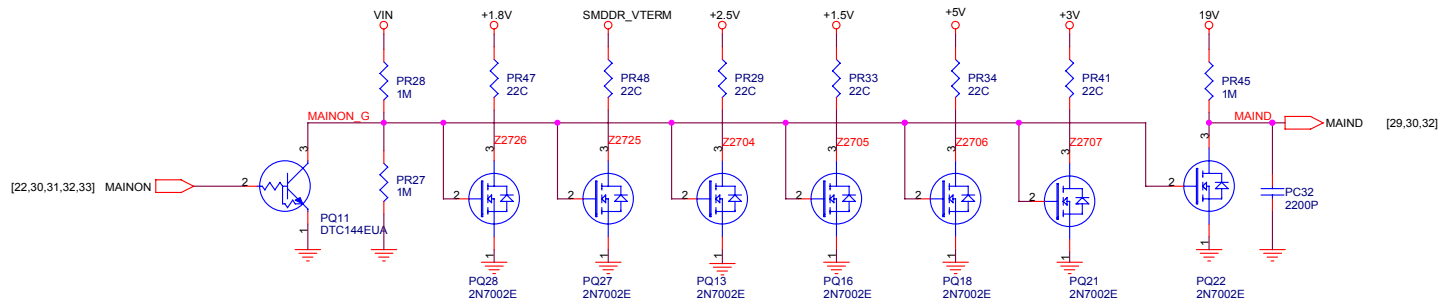
SUSPEND MODE (SUS=HIGH)				Output
S2	S1	S0		
✓	OPEN	VCC	GND	0.748V

VCC_BOOT				Output
B2	B1	B0		
✓	GND	GND	GND	1.708V
	REF	REF	REF	1.372V
	OPEN	OPEN	OPEN	1.036V
	VCC	VCC	VCC	0.700V
	REF	VCC	VCC	1.212V

For Yonah

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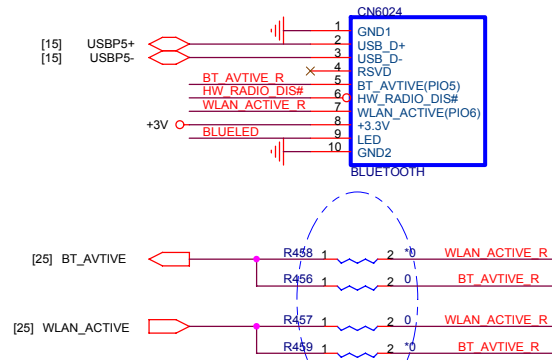


**3V_S5
72mA**
S0-S5

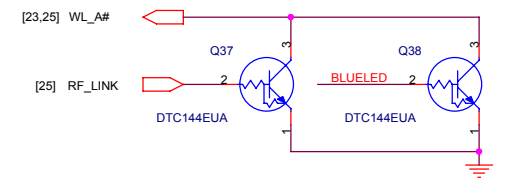
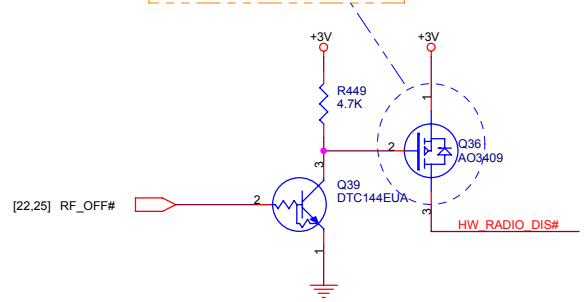
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BLUETOOTH CONNECTOR

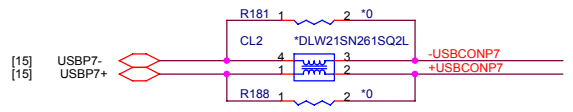


Change MOSFET from IRLML5103 to AO3409.
T.H.LIAO 2004/10/27



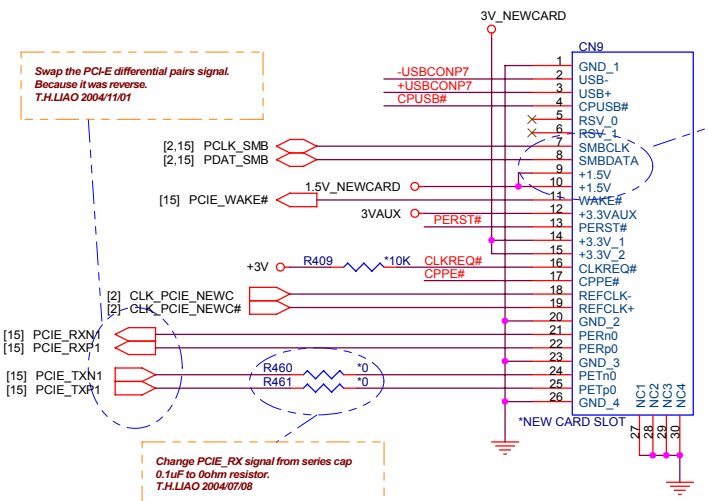
For bluetooth V1.2 spec option and combine intel wireless lan module use, BC2-xt also provide the co-existence solution.
T.H.LIAO 2004/07/06

NEWCARD (PCIEXPRESS*1 + USB*1)

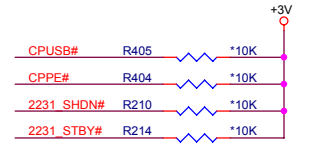
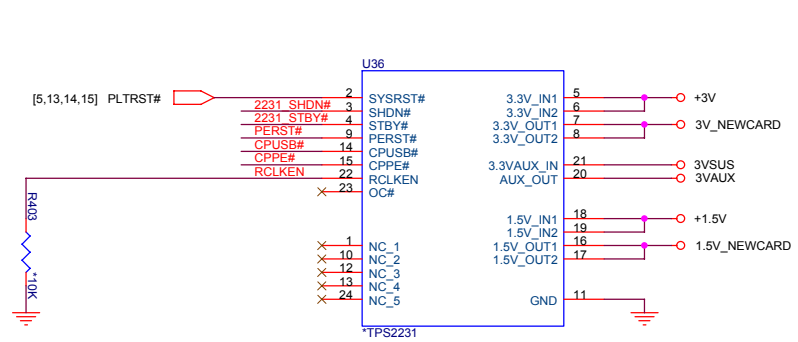


Swap the PCIe differential pairs signal. Because it was reverse.
T.H.LIAO 2004/11/01


Modify NEW CARD pin7,8,9 define.
T.H.LIAO 2004/07/09



Change PCIe_RX signal from series cap 0.1uF to 0ohm resistor.
T.H.LIAO 2004/07/06



MODEL	REV	CHANGE LIST	Model	KN1A M/B BOARD	
			Page	From	To
KN1A M/B	2A	FIRST RELEASE (2004-04-29 Release B1 version gerber)	1	2A	2B
	2B	<p>PAGE02 : a). Add 14M_SIO to 47N207 SIO chip. b). Change R386,R385 from 22.6 ohm 1% to 12.1 ohm 1%. c). Change R397,R398 from 33 ohm to 22 ohm.</p> <p>PAGE03 : Change R315 to no-stuff.</p> <p>PAGE05 : Delete RP28 and connect direct from clock generator to Alviso chip.</p> <p>PAGE06 : a). Modify VGA function text note. b). Change R340,R338,R337 to 150ohm +/- 1% and stuff it another change R342,R348,R345 to stuff. c). Add VSYNC,HSYNC NO-STUFF 33 pF cap to GND for slew rate control.</p> <p>PAGE08 : Change R62 to stuff for LCD can not display issue.</p> <p>PAGE12 : a). Add 2.2k ohm pull high to +2.5v for DDCCLK,DDCDATA signal. b). Change R4,R5,R7,R227,R279,R278 from 75ohm to 150ohm +/- 1%.</p> <p>PAGE13 : a). Add a pull high resistor on DISP_ON signal for nVidia NV4XM card use. b). Add 0ohm resistor between +1.5V and CN25,add 0ohm resistor between +2.5V and CN25 connect. c). Change R367,R368 to no stuff.</p> <p>PAGE14 : a). Add LPC_DRQ1# to 47N207 DMA Request pin. b). Modify DPRSLP signal text note.</p> <p>PAGE15 : a). Add RSMRST# delay circuit and connect to EC control. b). Delete R231,R236 and move C347,C357 to page2 as close as clock gen. c). Add USB5 differential pair to bluetooth. d). Swap SCI#,SWI# signal for ICH6. e). Change PCIE_WAKE# pull up power from 3VSUS to 3V_S5.</p> <p>PAGE17 : Modify USB connect stack for increase FIR mechanical issue.</p> <p>PAGE21 : Add microphone switch circuit for docking.</p> <p>PAGE22 : a). Add RSMRST# signal of EC pin 27 to ICH6. b). Add pull up 1k ohm for PWROK signal. c). Modify RESET switch circuit. d). Change U20 flash rom pin define. e). Add DOCK_5V_ON signal of EC pin39. f). Change CC-SET from PWM pin to DA pin output. g). Add KBSMI# pull up 10k ohm to 3VPCU.</p> <p>PAGE23 : a). Reverse the CN8 keyboard connector pin. b). Change QUICK switch key matrix from MY9 to MY7.</p> <p>PAGE24 : Add SMSC LPC47N207 chip for FIR function.</p> <p>PAGE25 : a). Add Bluetooth and Wireless Co-existence of mini pci pin36,43. b). Add RF_LINK signal of pin11. c). Delete R407 and move C602 to page2 as close as clock gen.</p> <p>PAGE26 : Delete R291 and move C466 to page2 as close as clock gen.</p> <p>PAGE27 : Modify CN16 connect library.</p> <p>PAGE28 : a). Delete R222 and move C331 to page2 as close as clock gen. b). Change CN33 smart card pin define.</p> <p>PAGE29 : Change CN34 4 in 1 card reader vendor type.</p> <p>PAGE30 : a). Add DOCK_5V_ON signal for cable docking use. b). Add MICSENCE and MIC_PR signal for docking. c). Add PR_INSERT# pull up 10k ohm to +3v.</p> <p>PAGE31 : Change PQ14 part number.</p> <p>PAGE32 : Change PC97,PU4 parts number.</p> <p>PAGE33 : a). Change PC136 part number. b). PR137 change to 56K/F 0402 (CS35602FB02).</p>	2	2A	2B
			3	2A	2B
			4	2A	
			5	2A	2B
			6	2A	2B
			7	2A	
			8	2A	2B
			9	2A	
			10	2A	
			11	2A	
			12	2A	2B
			13	2A	2B
			14	2A	2B
			15	2A	2B
			16	2A	
			17	2A	2B
			18	2A	
			19	2A	
			20	2A	
			21	2A	2B
			22	2A	2B
			23	2A	2B
			24	2A	2B
			25	2A	2B
			26	2A	2B
			27	2A	2B
			28	2A	2B
			29	2A	2B
			30	2A	2B
			31	2A	2B
			32	2A	2B
			33	2A	2B
			34	2A	2B
			35	2A	2B
			36	2A	2B
			37	2A	2B
			38	2A	2B
			39	2A	2B
			40	2A	2B
	41	2A	2B		



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Quanta Computer Inc.

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MODEL

REV

CHANGE LIST

Model KN1A M/B BOARD

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5	2A	2B
6	2A	2B
7	2A	
8	2A	2B
9	2A	
10	2A	
11	2A	
12	2A	2B
13	2A	2B
14	2A	2B
15	2A	2B
16	2A	
17	2A	2B
18	2A	
19	2A	
20	2A	
21	2A	2B
22	2A	2B
23	2A	2B
24	2A	2B
25	2A	2B
26	2A	2B
27	2A	2B
28	2A	2B
29	2A	2B
30	2A	2B
31	2A	2B
32	2A	2B
33	2A	2B
34	2A	2B
35	2A	2B
36	2A	2B
37	2A	2B
38	2A	2B
39	2A	2B
40	2A	2B
41	2A	2B

KN1A M/B

2B

PAGE34 : a). Change PC140,PR61 parts number.
 b). Change PD27 footprint.(DSM).


PAGE35 : a). Change PQ2,PQ10,PR113 parts number.
 b). Change PR22 32.4 Kohm to 12.1KOhm.(CS31213F908).
 c). Update PQ2,PQ10 part number.DTA124EUA (BA124EUAZ09).

PAGE36 : a). Change PQ51,PQ53,PQ54,PR10,PR13 parts number.
 b). Change PR14 from 2.74 kOhm to 1.24 kOhm(CS21242FB03).

PAGE37 : PR47 not NC.

PAGE38 : a). Add bluetooth circuit.
 b). Add PR_INSERT net pull high 10k ohm for prevent signal floating.

[SECOND RELEASE \(2004-05-24 Release B2 version gerber\)](#)




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MODEL	REV	CHANGE LIST	Model	KN1A M/B BOARD	
			Page	From	To
KN1A M/B	3A	<p>PAGE02 : a). Change R155,R126 to no stuff. b). Add a serial resistor between clock gen pin53 and SELPSB0_CLK signal. c). Modify spread spectrum text note.</p> <p>PAGE03 : Change R308 from 330 to 200 ohm.</p> <p>PAGE04 : Change C78,C63,C74,C417 to no stuff.</p> <p>PAGE05 : a). Change pull up from +2.5V to VCCP power plane. b). Delete RSVD23 C150 pull down 0.1uF cap.</p> <p>PAGE06 : a). LBKLT_EN add a pull down 100k ohm resistor. b). Add REFSET signal pull high to VCCP for 915PM use. c). When use 915PM and then R71,R340,R338,R337 need pull down 0 ohm resistor.</p> <p>PAGE08 : a). Change analog filter circuits from ferrite bead to inductor. b). Add analog filter circuits for the VCCA_DPLLA,VCCA_DPLLB pins. c). Add a ferrite bead for the VCCA_CRTDAC pins. d). Add a ferrite bead for the VCCDQ_TVDAC pin. e). Add a ferrite bead for the VCCA_TVBG pin. f). Add VCC_SYNC,VCCA_CRTDAC minimize power/leakage for 915PM solution .</p> <p>PAGE12 : a). Add a 39 ohm series resistor for external VGA card VSYNC,HSYNC use. b). Add one RGB pole PI filter circuit for VGA.</p> <p>PAGE13 : Change GPU SMBUS power source from +2.5V to +3V.</p> <p>PAGE14 : a). Change R179 to no stuff for Dothan B1 stepping. b). Change pull up signal from DPRSLP# to H_DPSLP#. c). Change R165 to no stuff for Dothan B stepping. d). Add 47 ohm series resistor for IDERST#. e). Change R158 from 180k to 20k ohm and change C256 from 0.1uF to 1uF.</p> <p>PAGE15 : a). Change R211 to stuff 10k ohm resistor. b). Change R187 pull down 10k ohm resistor. c). Swap THRM# and SUSB# pull high resistor and change R172 to no stuff. d). Add MXM card detect pin and change CRT_SENSE# pull high from +3V to 3VSUS.</p> <p>PAGE19 : a). ACZ_RST# needs 33ohm series resistor. b). Modify codec circuit for ALC260 Azalia codec solution.</p> <p>PAGE20 : Add EAPD control amplify shutdown pin.</p> <p>PAGE21 : a). No stuff component for MIC switch circuit. b). Change AC97 connect ro Azalia+SPDIF connect.</p> <p>PAGE22 : a). Change D17 to no stuff. b). Add R465 serial resistor for PWROK signal.</p> <p>PAGE24 : a). Change I/O address from 162E to 004E. b). Change R441,R442,,R443 to no stuff. c). Change DMA request from LDRQ1# to LDRQ0. d). Change IRTX2 pull down resistor from 47.5k to 4.75k. e). No stuff Q35,R439 for ICH_PME# of SIO47N207.</p> <p>PAGE25 : a). Add 33ohm series resistor for AC_RESET#. b). Add serial resistor for WL_A# signal.</p> <p>PAGE26 : Change Q28 pin define.</p> <p>PAGE28 : a). Delete R222 and move C331 to page2 as close as clock gen. b). Change CN33 smart card pin define.</p> <p>PAGE29 : a). Add 10k ohm series resistor. b). Change cardread vendor. c). Add 1394 signal for port replicator used.</p> <p>PAGE30 : a). Modify board to board pin define. b). Add CIR function.</p>	1	2B	3A
			2	2B	3A
			3	2B	3A
			4	2A	2B
			5	2B	3A
			6	2B	3A
			7	2A	
			8	2B	3A
			9	2A	
			10	2A	
			11	2A	
			12	2B	3A
			13	2B	3A
			14	2B	3A
			15	2B	3A
			16	2A	
			17	2A	2B
			18	2A	
			19	2A	2B
			20	2A	2B
			21	2B	3A
			22	2B	3A
			23	2A	2B
			24	2B	3A
			25	2B	3A
			26	2B	3A
			27	2A	2B
			28	2B	3A
			29	2B	3A
			30	2B	3A
			31	2B	3A
			32	2B	3A
			33	2B	3A
			34	2B	3A
			35	2B	3A
			36	2B	3A
			37	2B	3A
			38	2B	3A
			39	3A	
			40	3A	
			41	3A	



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Quanta Computer Inc.

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MODEL

REV

CHANGE LIST

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6	2B	3A
7	2A	
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9	2A	
10	2A	
11	2A	
12	2B	3A
13	2B	3A
14	2B	3A
15	2B	3A
16	2A	
17	2A	2B
18	2A	
19	2A	2B
20	2A	2B
21	2B	3A
22	2B	3A
23	2A	2B
24	2B	3A
25	2B	3A
26	2B	3A
27	2A	2B
28	2B	3A
29	2B	3A
30	2B	3A
31	2B	3A
32	2B	3A
33	2B	3A
34	2B	3A
35	2B	3A
36	2B	3A
37	2B	3A
38	2B	3A
39	3A	
40	3A	
41	3A	

KN1A M/B

3A

PAGE31 : a). Delete JP2,JP3,PR40,JP8,JP9 for layout & cost down.
 b). Delete +1.05V,+1.5V_OUT,1845VDD for layout.
 c). NC PC24,PC39 for cost down.
 d). Change PQ60 => AO4404 (BAM44040012)

PAGE32 : a). Delete JP5,JP6,PR92,JP7 for layout & cost down.
 b). Delete 8550OUT,8550VDD,8550_VTERM for layout.
 c). NC PC7,PC86,PC95,PC104 for cost down.
 d). Change PQ6 => AO4404 (BAM44040012)

PAGE33 : a).Delete JP4,PR58 for layout & cost down.
 b).Delete 1992_OUT,1992_VDD for layout.
 c).NC PC45 for cost down.

PAGE34 : a). NC PC54,PC65 for cost down.
 b). PQ62 => AO3403 (BAM34030Z02)
 c). PQ42 => AO4812 (BAM48120002)
 d). PQ47 => AO4404 (BAM44040012)
 e). PQ48 => CEH2325 (BAM23250000)
 f). PQ63 => CEH2325 (BAM23250000)


PAGE35 : NC PC134 for cost down.

PAGE36 : a). Delete PR99 for cost down.
 b). NC PC85,PC12,PC92,PC101 for cost down.
 c). Add PR153,PR154,PR155 for Intel change C4 Deeper sleep voltage.
 d). Change PR8 to 2K/F (CS22002FB19),for load line set.
 e). NC PC11,PC92,PC93.

PAGE37 : Change PQ41 => CEH2325 (BAM23250000)

PAGE38 : a). Add BC2-ext co-existence solution .
 b). Change PCIE_RX signal from series cap 0.1uF to 0ohm resistor.
 c). Modify NEW_CARD pin7,8,9 define.

[THIRD RELEASE \(2004-08-10 Release Pre C version gerber\)](#)

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Quanta Computer Inc.

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MODEL

REV

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5	2B	3A
6	3A	3B
7	2A	
8	3A	3B
9	2A	
10	2A	
11	2A	
12	3A	3B
13	3A	3B
14	2B	3A
15	3A	3B
16	2A	
17	2A	2B
18	2A	
19	2B	3A
20	2B	3A
21	3A	3B
22	3A	3B
23	2B	3A
24	2B	3A
25	2B	3A
26	2B	3A
27	2A	2B
28	2B	3A
29	2B	3A
30	3A	3B
31	2B	3A
32	2B	3A
33	3A	3B
34	3A	3B
35	2B	3A
36	3A	3B
37	3A	3B
38	3A	3B
39	3A	
40	3A	
41	3A	
42	3B	
43	3B	


KN1A M/B

3B

PAGE02 : Change PCLK_ICH signal to free fun function pin.
PAGE06 : Add DPST function.
PAGE08 : a). Change component from L59 EMI filter to R48 0 ohm/0603 package resistor.
b). Change component from L60 EMI filter to R55 0 ohm/0603 package resistor.
PAGE12 : a). Change bus switch IC from NC7SB3157P6X to SN74LVC2G125.
b). Change BEAD L2,L3,L5,L49,L50,L51 from BK1608HS470 to BLM18BB470SN1D.
PAGE13 : a). Add MXM battery low detect signal.
b). Delete GND trace prevent when MXM card insert and cause the pin short.
c). Delete C527,C528 cap for MXM 5VPCU power plane use.
d). Delete MXM card FAN control from MBCLK/MBDATA change to THCLK_SMB/THDAT/SMB by EC.
e). Change MXMII card sequence from PWROK to HWPG, since PWROK signal slowly than CPU power good.
PAGE15 : a). Change CRT_SENSE# pull high from 3VSUS to +3V, the purpose is prevent +3V power leakage.
b). Change THRM#,SCI# signal pull high from 3VSUS to +3V for power leakage.
c). Swap the PCI-E control host.
PAGE19 : Add docking insert detect (PR_INSERT#) pin for ALC260 AP function use.
PAGE20 : Change amplifier from TI TPA0212 to TPA0312,the reason is down power amplifier Gain.
PAGE21 : a). Modify CN30 connect pin define.
b). Separate the internal MIC layout trace.
PAGE22 : a). Add MXM allert detect pin.
b). Change Flash rom size from 512K bytes to 1M bytes.
PAGE23 : Change MOSFET from SI3456DV to AO6402.
PAGE30 : Change power source from 19V to Vin.
PAGE33 : Change PC44 to populated for CRT noise issue.
PAGE34 : a). Change part number PC54,PC47,PC65,PC64 (220uF/6.3V_25m H=1.9/CH7221M8854) for cost down.
b). Change PQ63,PQ48 from CEH2325 to AO6402.
c). Change MOSFET from AO3403 to AO3409.
PAGE36 : a). Change PR9,PU2,PC10,PQ5 to no stuff.
b). Change PR98 from 100K ohm to 10K for Alviso timing.
PAGE37 : Change PQ41 from CEH2325 to AO6402.
PAGE38 : a). Change MOSFET from IRLML5103 to AO3409.
b). Swap the PCI-E differential pairs signal. Because it was reverse.

FOURTH RELEASE (2004-11-03 Release C version gerber)

Notices : ICT test coverage target 98.7%



PROJECT : KN1A
Quanta Computer Inc.

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