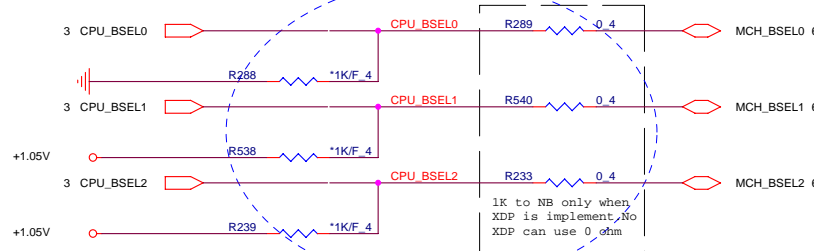
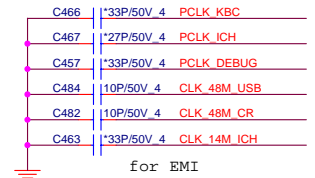
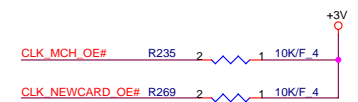


27M_SEL PIN13	PIN20	PIN21	PIN24	PIN25
0=UMA	DOT96T	DOT96C	SRCT1/LCDT_100	SRCT1/LCDT_100
1 = External VGA	SRCT0	SRCC0	27Mout-NSS	27Mout-SS

CPU Clock select

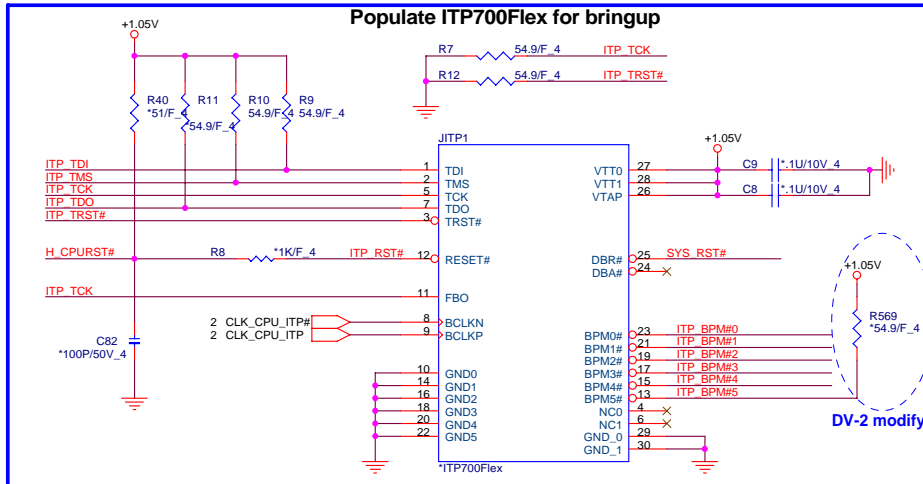
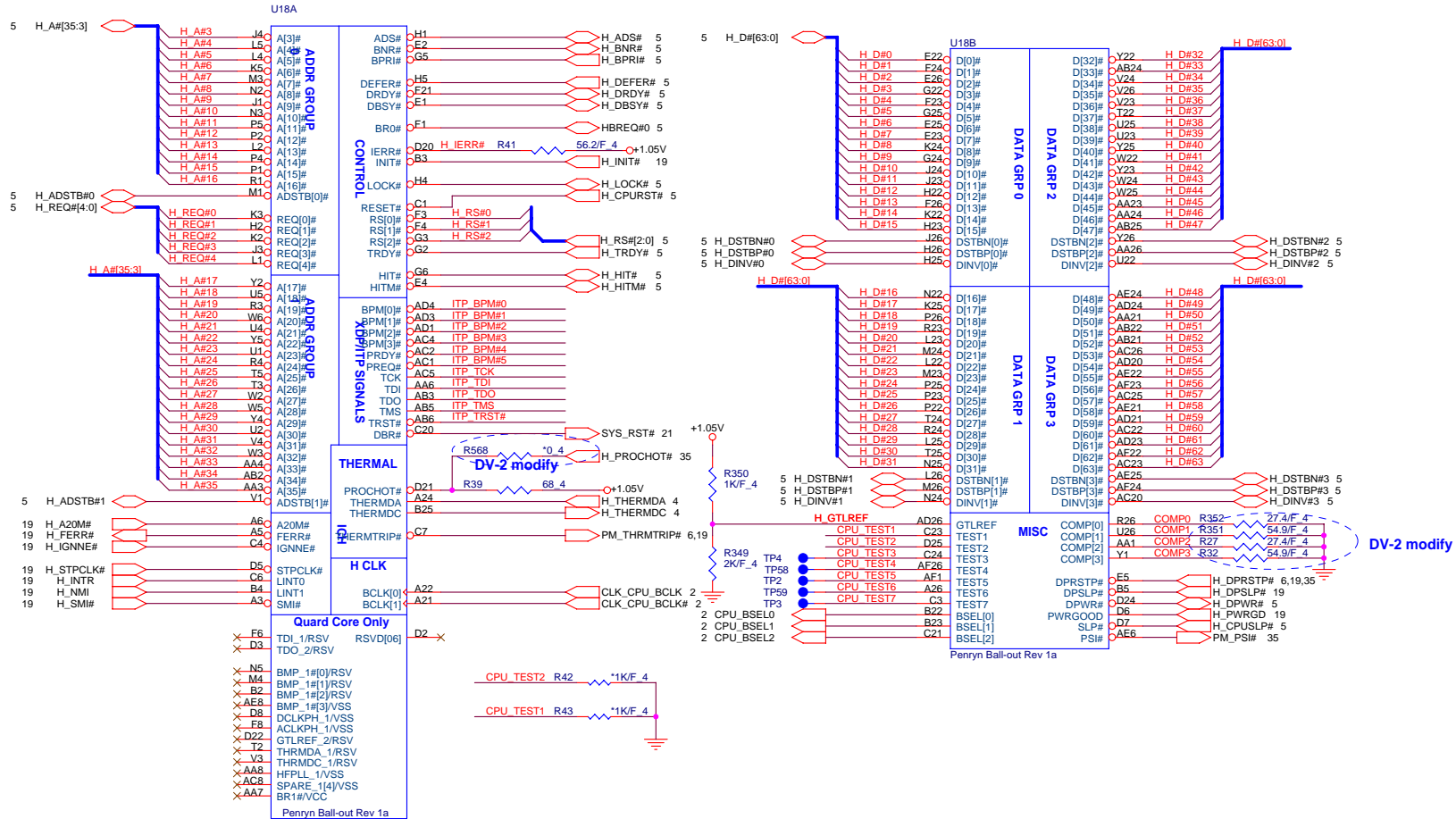


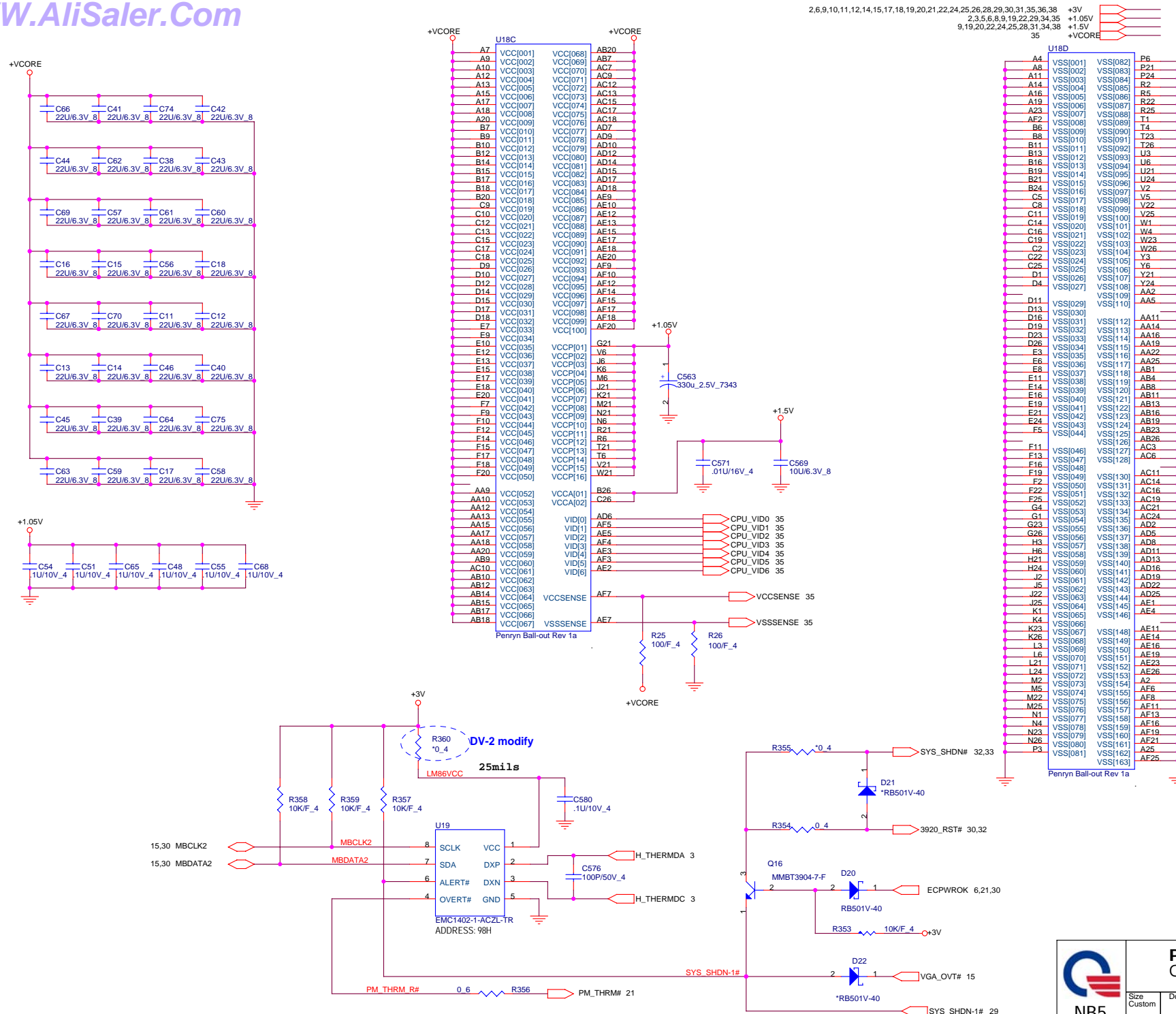
FSC	FSB	FSA	CPU	SRC	PCI
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	1	0	200	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	RSVD	100	33

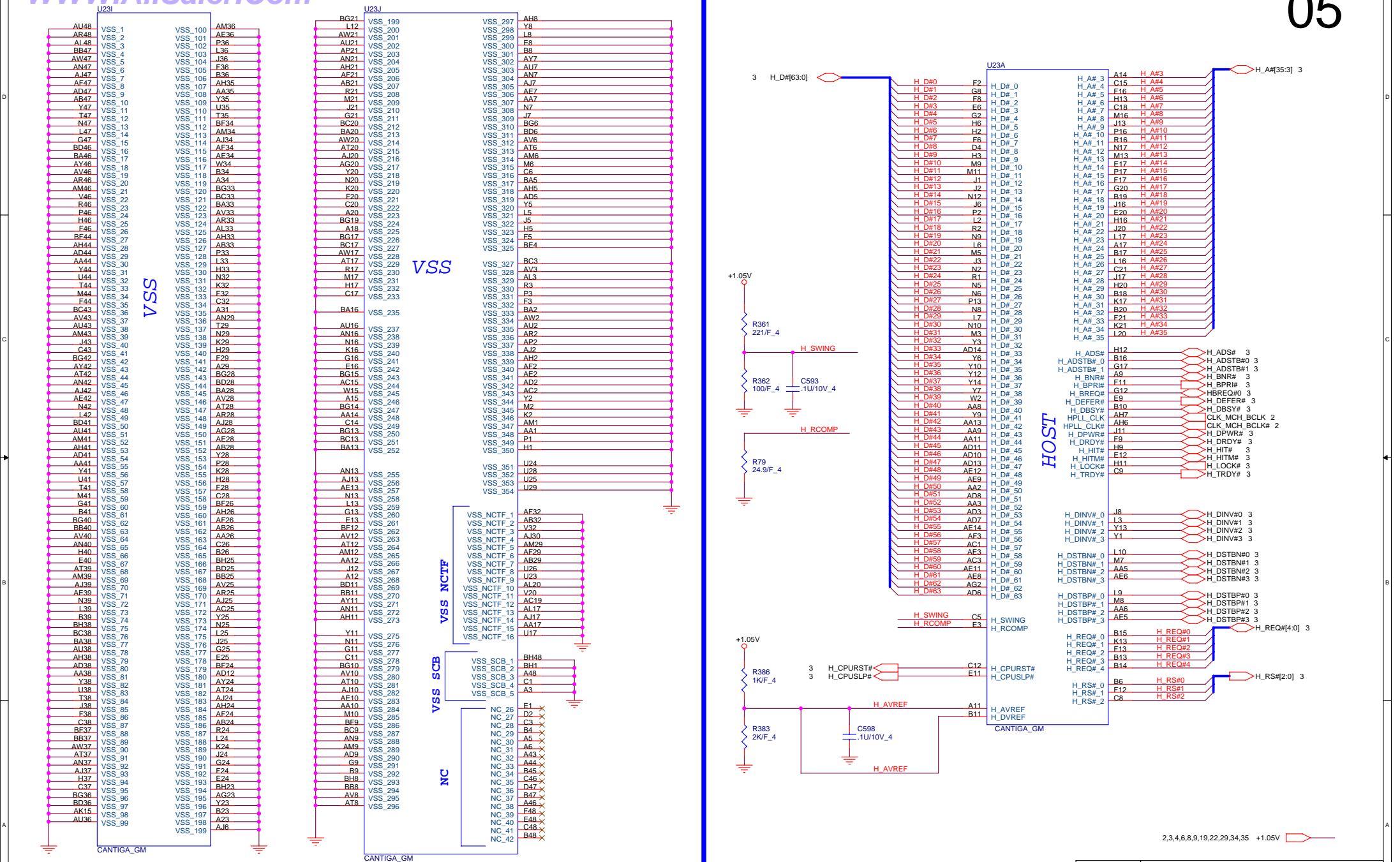


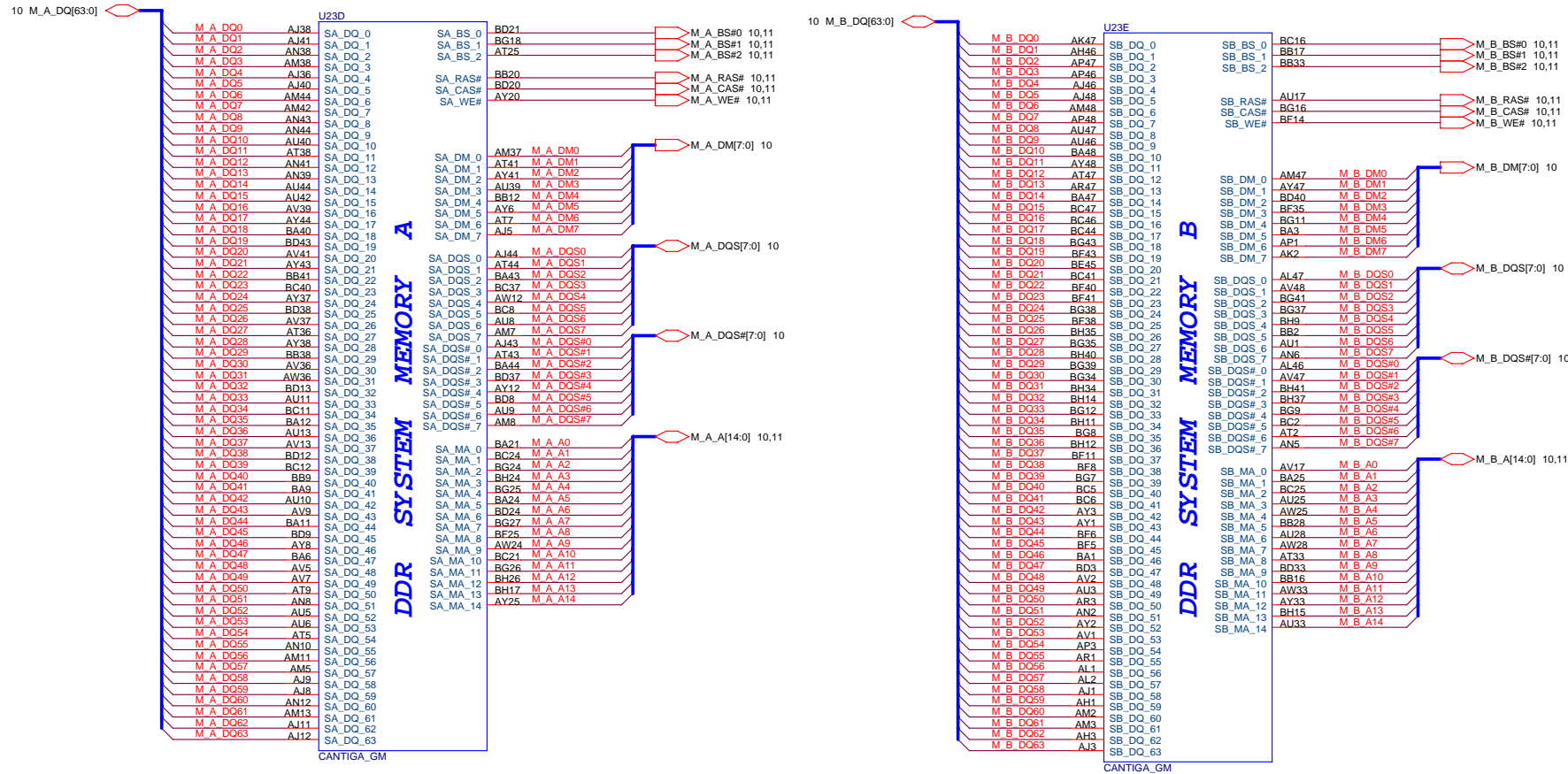
PROJECT : QL6
Quanta Computer Inc.

Size Custom	Document Number Clock Generator	Rev 2A
Date: Tuesday, February 26, 2008	Sheet 2 of 40	



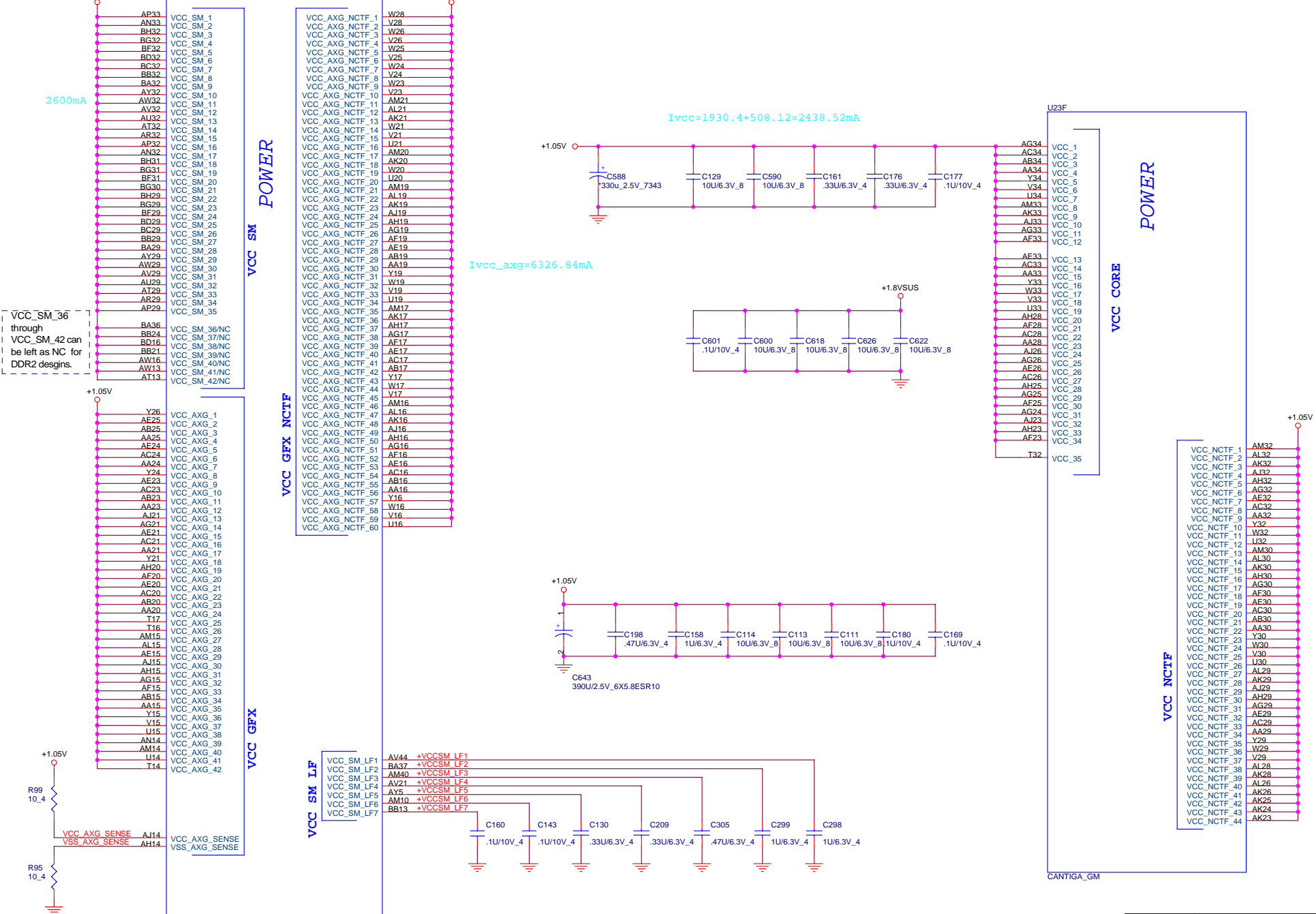






PROJECT : QL6
Quanta Computer Inc.

Size Custom	Document Number Cantiga DDR2 3/5	Rev 2A
Date: Tuesday, February 26, 2008	Sheet 7 of 40	



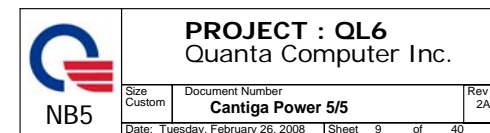
CANTIGA_GM

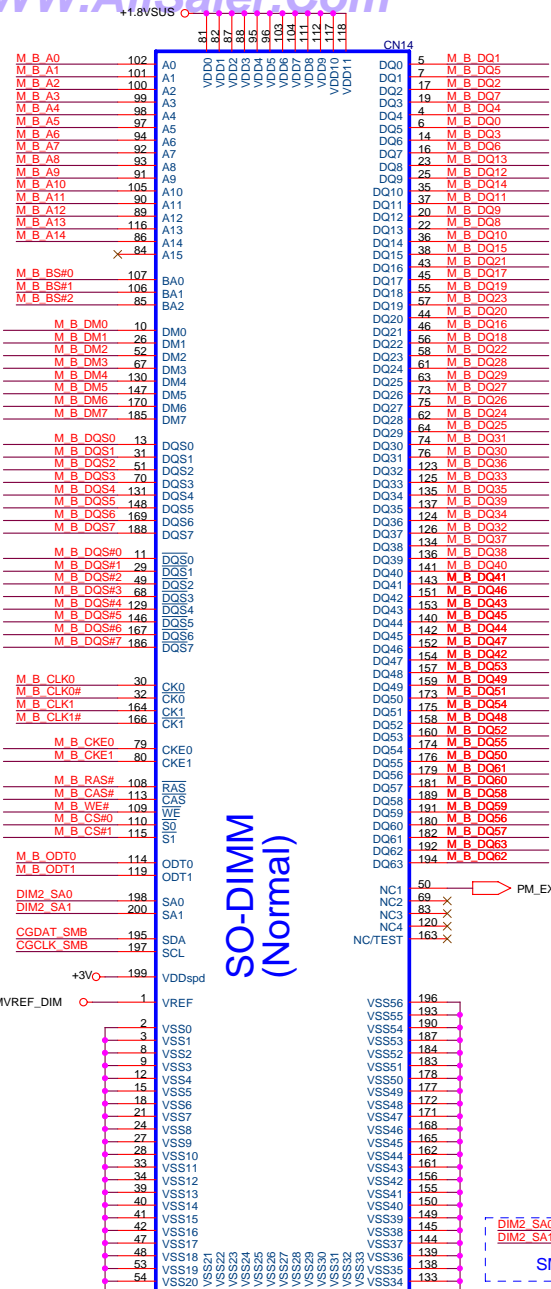
CANTIGA_GM

PROJECT : QL6
Quanta Computer Inc.

Size Custom	Document Number Cantiga Vcc 4/5	Rev 2A
Date: Tuesday, February 26, 2008 Sheet 8 of 40		

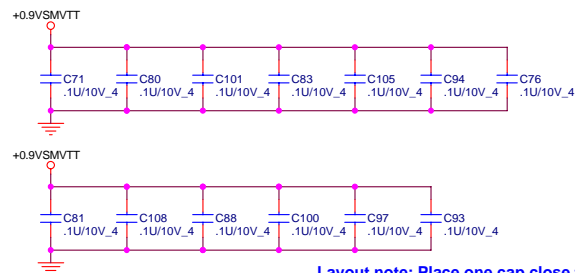
6,9,10,29,34,37 +1.8VSUS
2,3,4,5,6,9,19,22,29,34,35 +1.05V





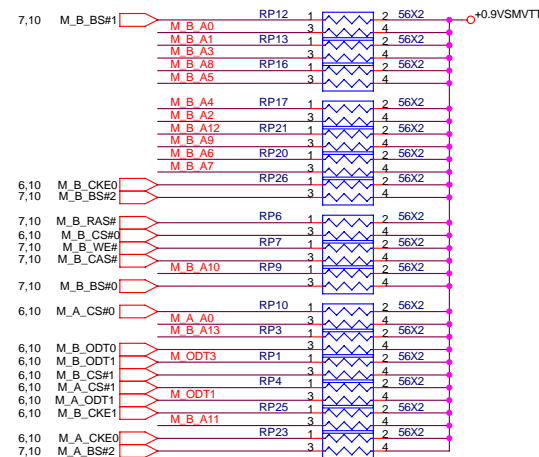
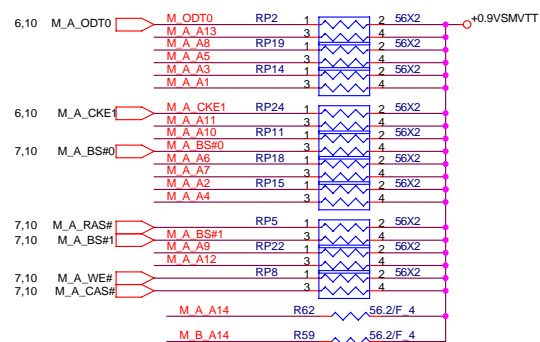
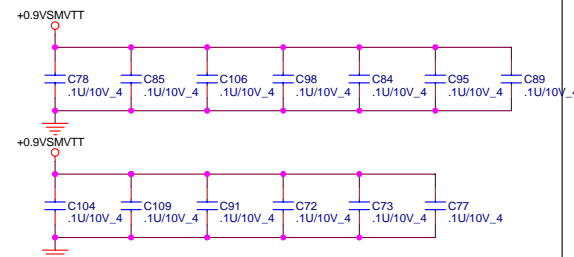
DDRII DUAL CHANNEL A,B.

DDRII A CHANNEL

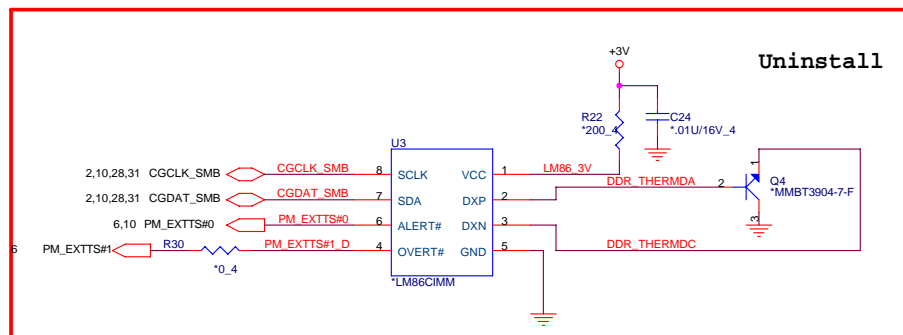


Layout note: Place one cap close to every 2 pullup resistors terminated to SMDR_VTERM

DDRII B CHANNEL



M_B_A[14..0] M_B_A[14..0] 7,10
M_A_A[14..0] M_A_A[14..0] 7,10

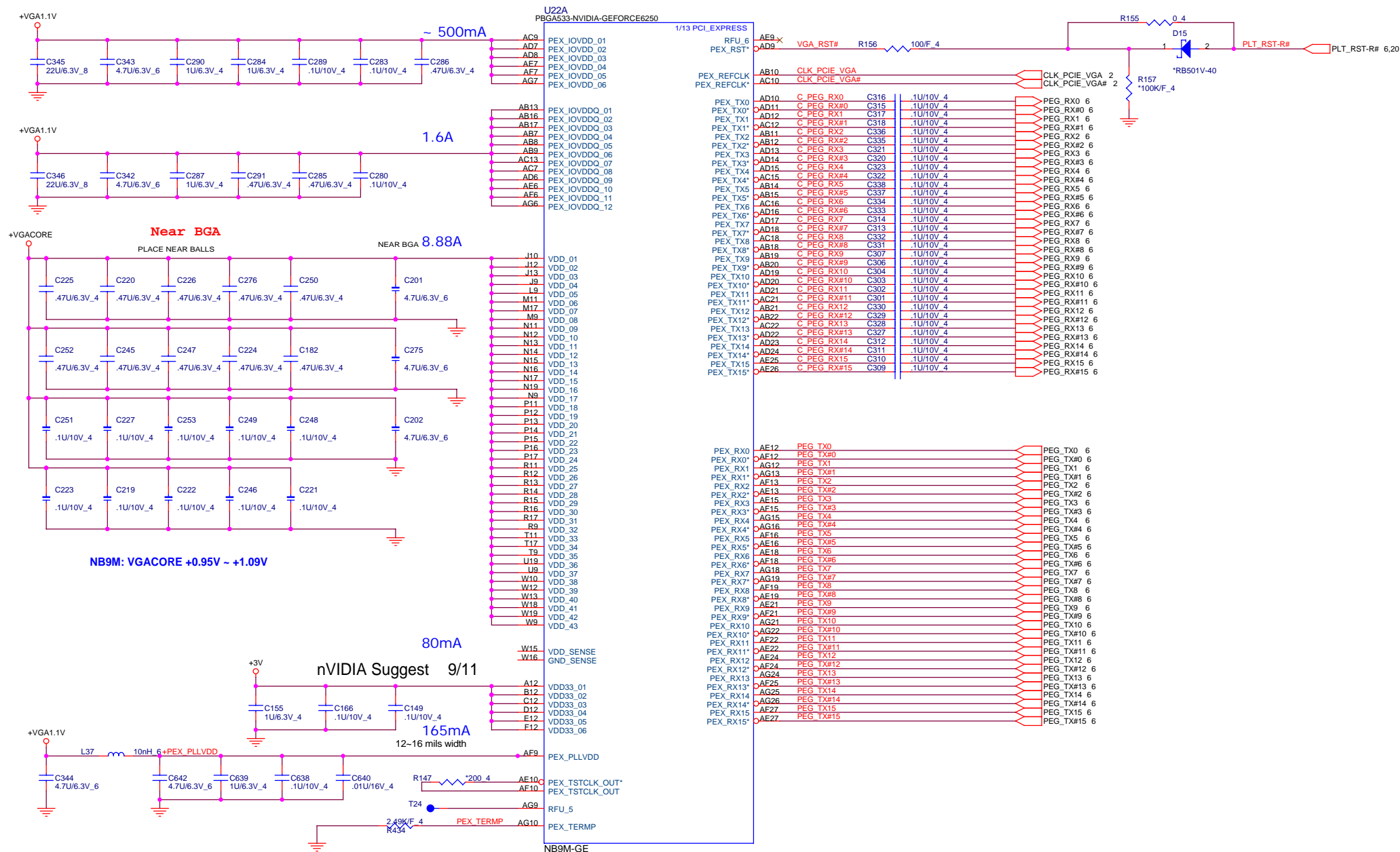


+0.9VSMVTT 37
+3V 2,4,6,9,10,12,14,15,17,18,19,20,21,22,24,25,26,28,29,30,31,35,36,38

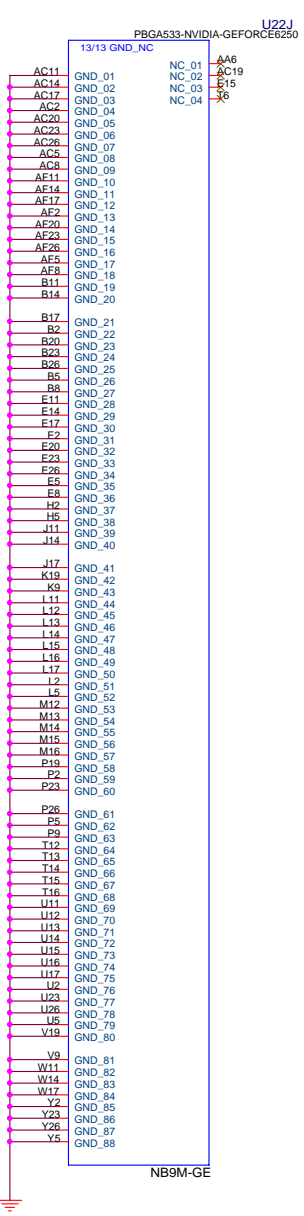
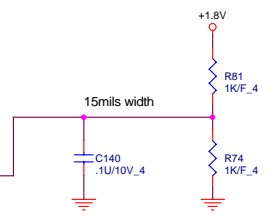
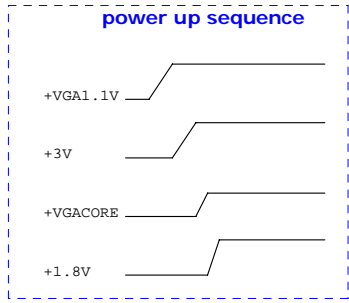
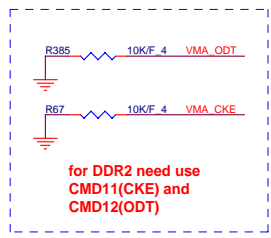
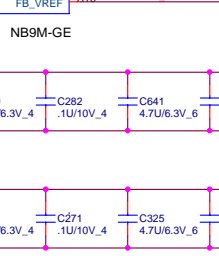
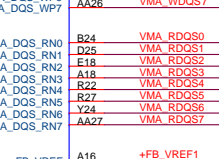
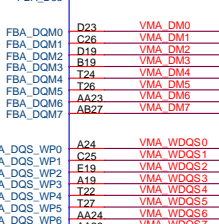
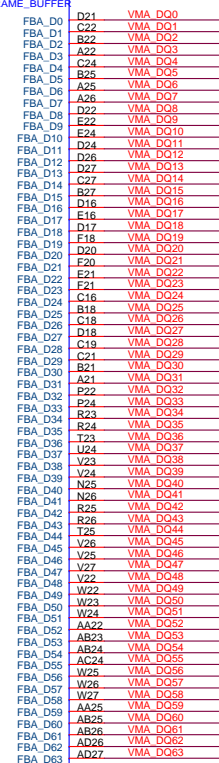
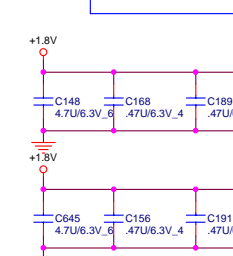
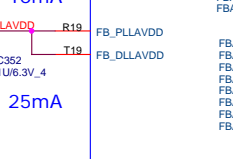
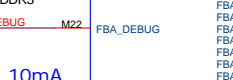
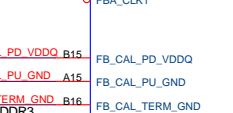
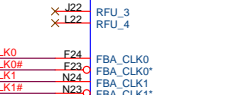
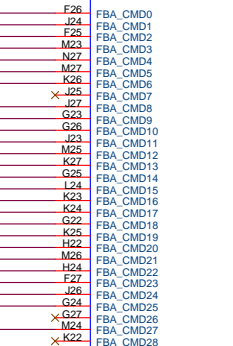
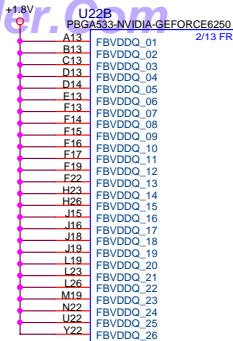


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Quanta Computer Inc.

Size Custom	Document Number DDR2 termination	Rev 2A
Date: Tuesday, February 26, 2008 Sheet 11 of 40		



1.63A

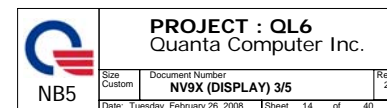
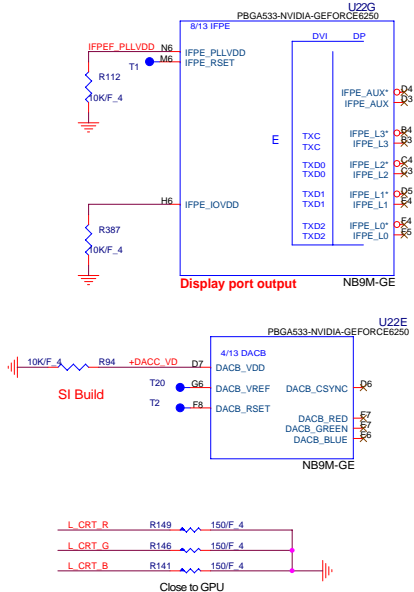


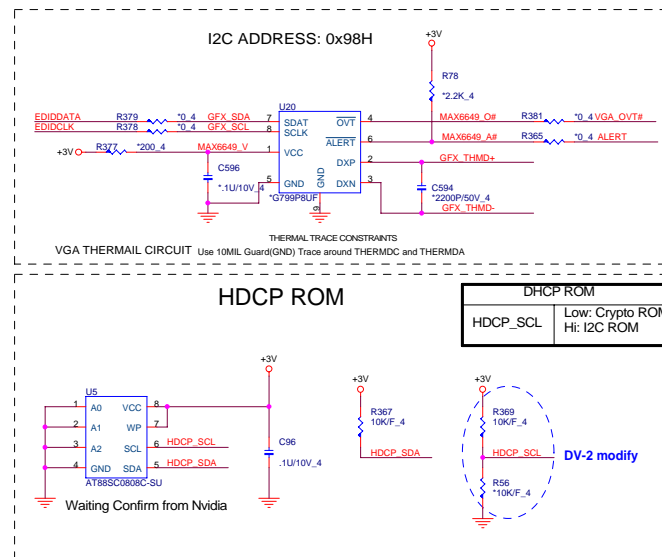
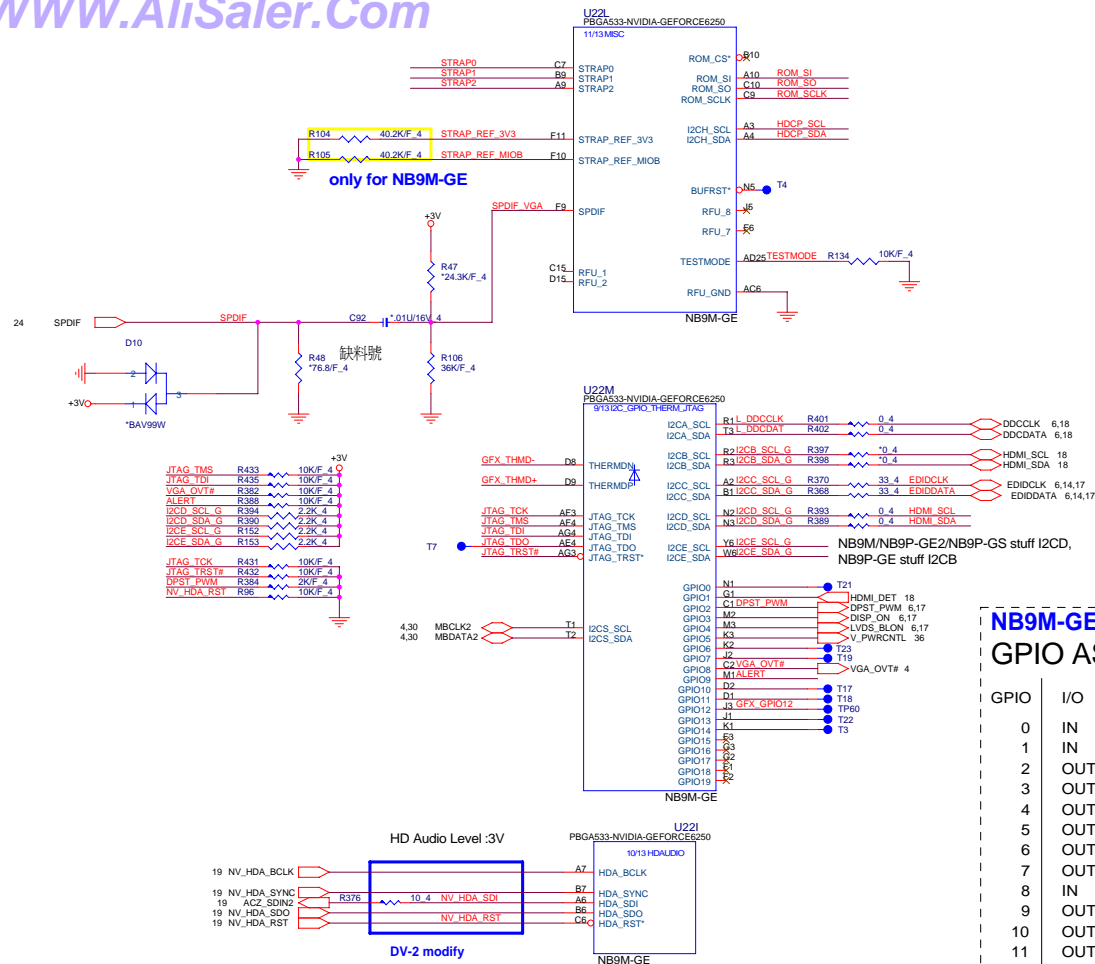
13



PROJECT : QL6
Quanta Computer Inc.

Size	Document Number	Rev
Custom	NV9X (MEMORY I/F) 2/5	2A
Date: Tuesday, February 26, 2008	Sheet 13 of 40	

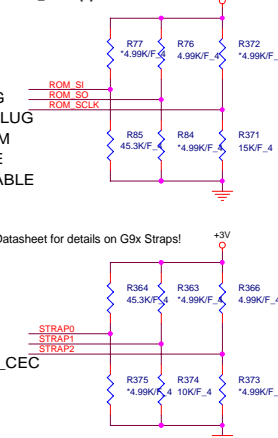




NB9M-GE (G98) Strraps GPIO ASSIGNMENTS

GPIO	I/O	ACTIVE	USAGE
0	IN	N/A	PRIMARY DVI HOTPLUG
1	IN	N/A	SECONDARY DVI HOTPLUG
2	OUT	HIGH	PANEL BACKLIGHT PWM
3	OUT	HIGH	PANEL POWER ENABLE
4	OUT	HIGH	PANEL BACKLIGHT ENABLE
5	OUT	N/A	NVVDD VID0
6	OUT	N/A	NVVDD VID1
7	OUT	N/A	FBVDD VID0
8	IN	LOW	THERMAL ALERT
9	OUT	LOW	FAN PWM
10	OUT	N/A	FBVREF SELECT
11	OUT	N/A	SLI SYNC0
12	IN	N/A	AC DETECT
13	OUT	LOW	PS CONTROL OR HDMI_CEC
14	OUT	HIGH	PS CONTROL

PCI_DEVID[4]/SUBVENDOR



VRAM ID		
ROM_SI	PD 30K: Samsung	
	PD 35K: Qimonda	
	PD 45K: Hynix	

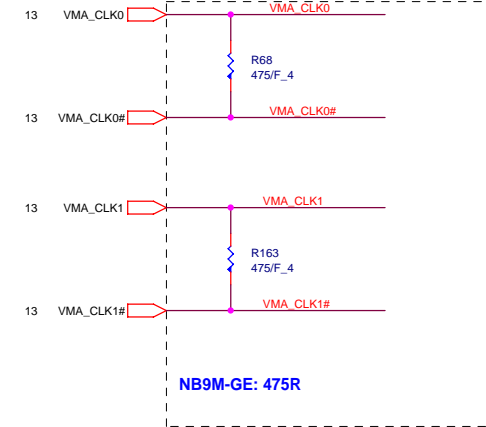
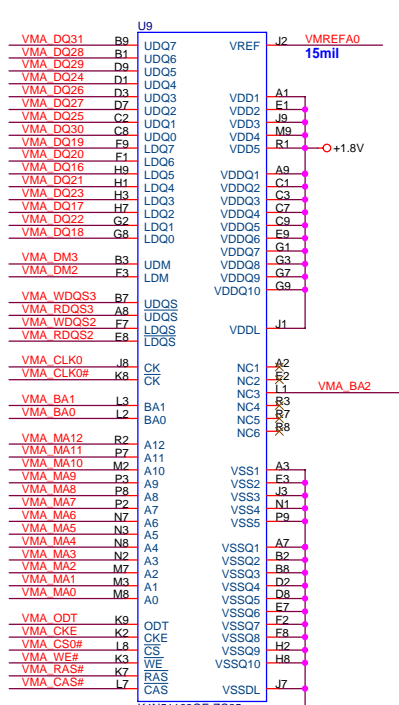
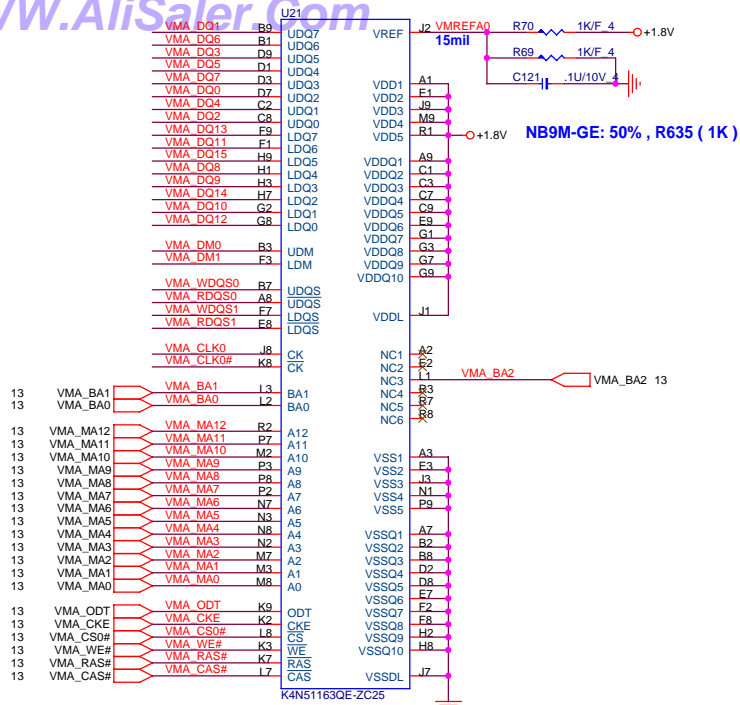
Logical Strap Bit Mapping

PU-VDD	PD
5K	1000
10K	1001
15K	1010
20K	1011
25K	1100
30K	1101
35K	1110
45K	1111



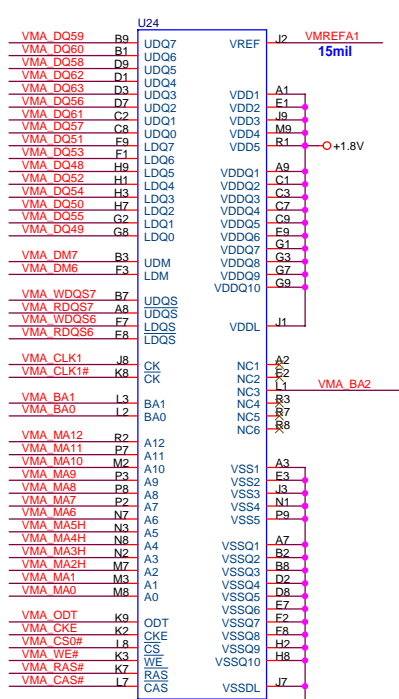
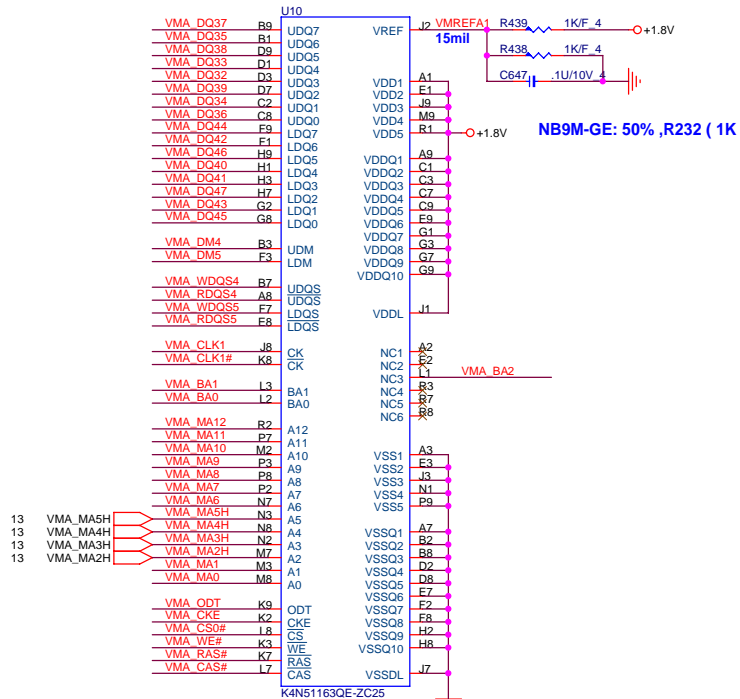
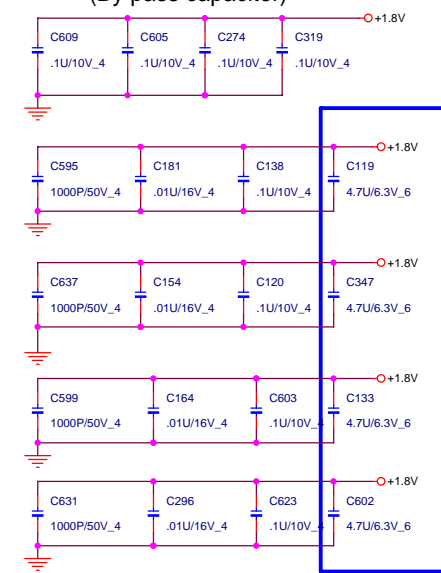
PROJECT : QL6
Quanta Computer Inc.

Size	Document Number	Rev
C	NV9X (GPIO & STRAPS) 4/5	2A
Date:	Tuesday, February 26, 2008	Sheet 15 of 40



CS14752FB11 RES CHIP 475 1/16W +-1%(0402)

(By pass capacitor)



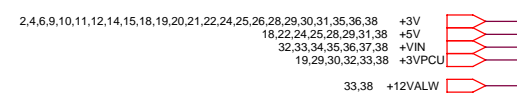
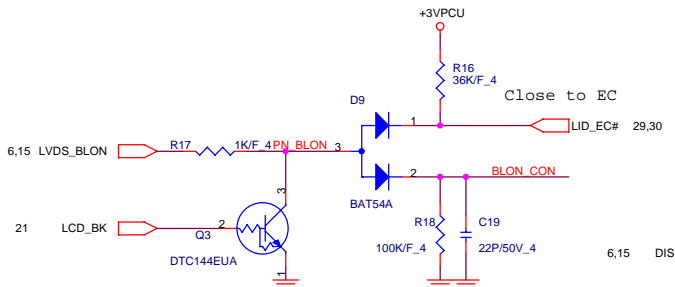
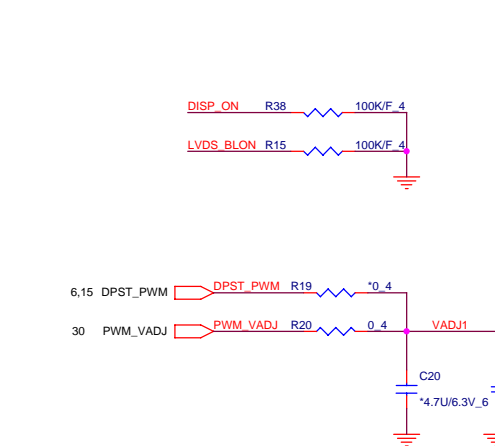
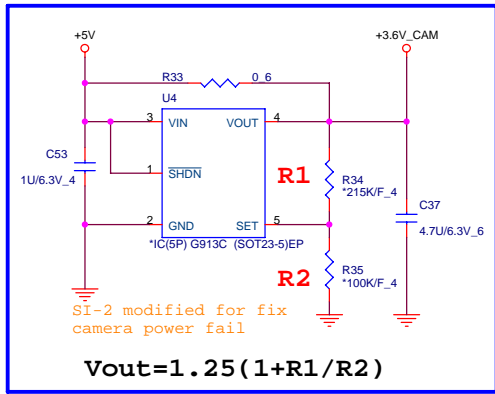
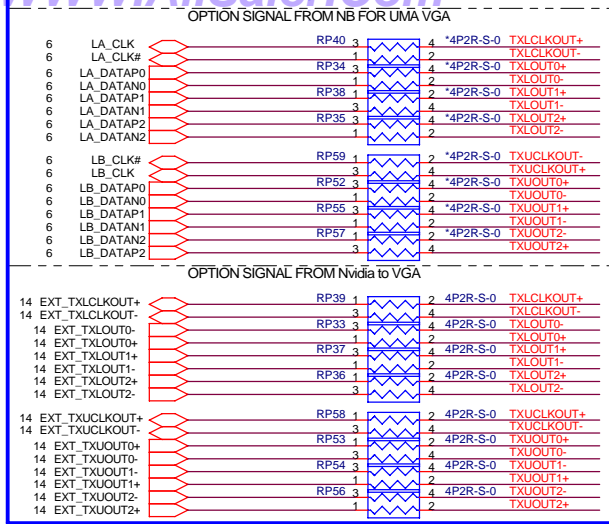
- 13 VMA_DQ[63..0]
- 13 VMA_DM[7..0]
- 13 VMA_WDQS[7..0]
- 13 VMA_RDQS[7..0]

NB9M : AKD5FG-TW31(Hynix,32M*16)
AKD5FG-T*03(Qimonda 32M*16)

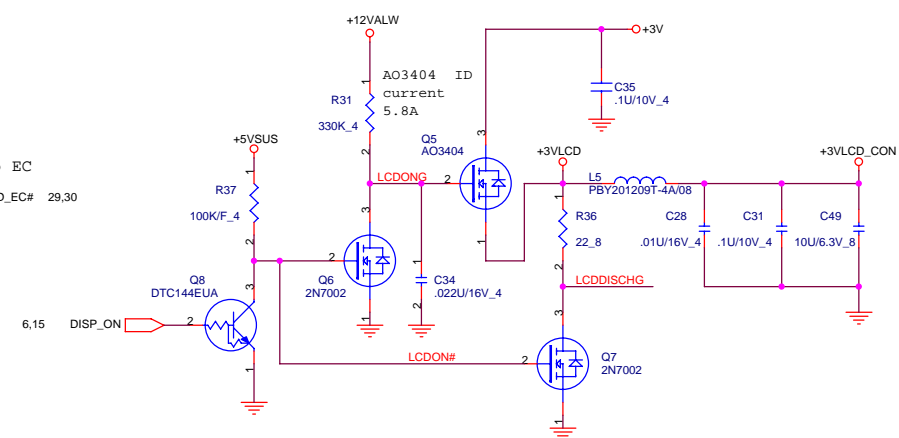
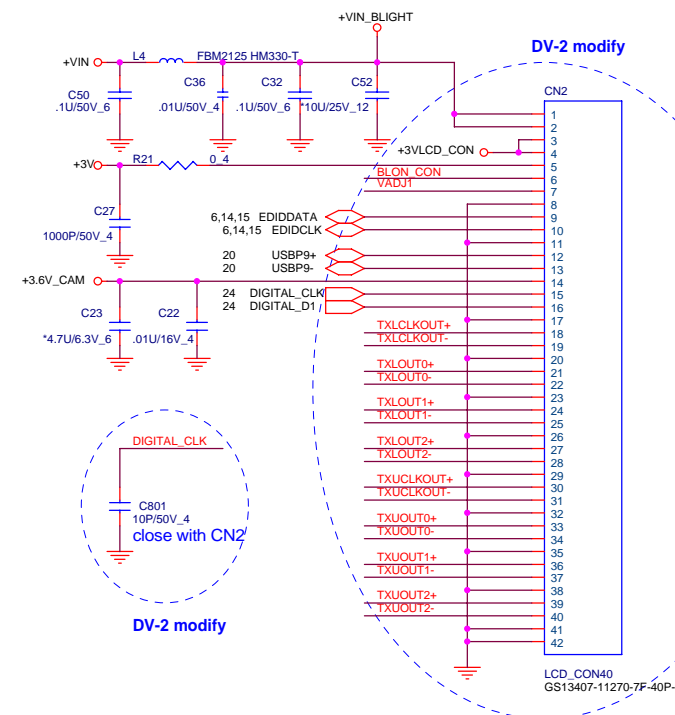
PROJECT : QL6
Quanta Computer Inc.

Size Custom	Document Number NV9X VRAM-1(GDDR2) 5/5	Rev 2A
Date: Tuesday, February 26, 2008	Sheet 16 of 40	

1. If LCD connector near GPU, then place these series Resistors near GPU
2. If LCD connector near N/B, then place these series Resistors near N/B

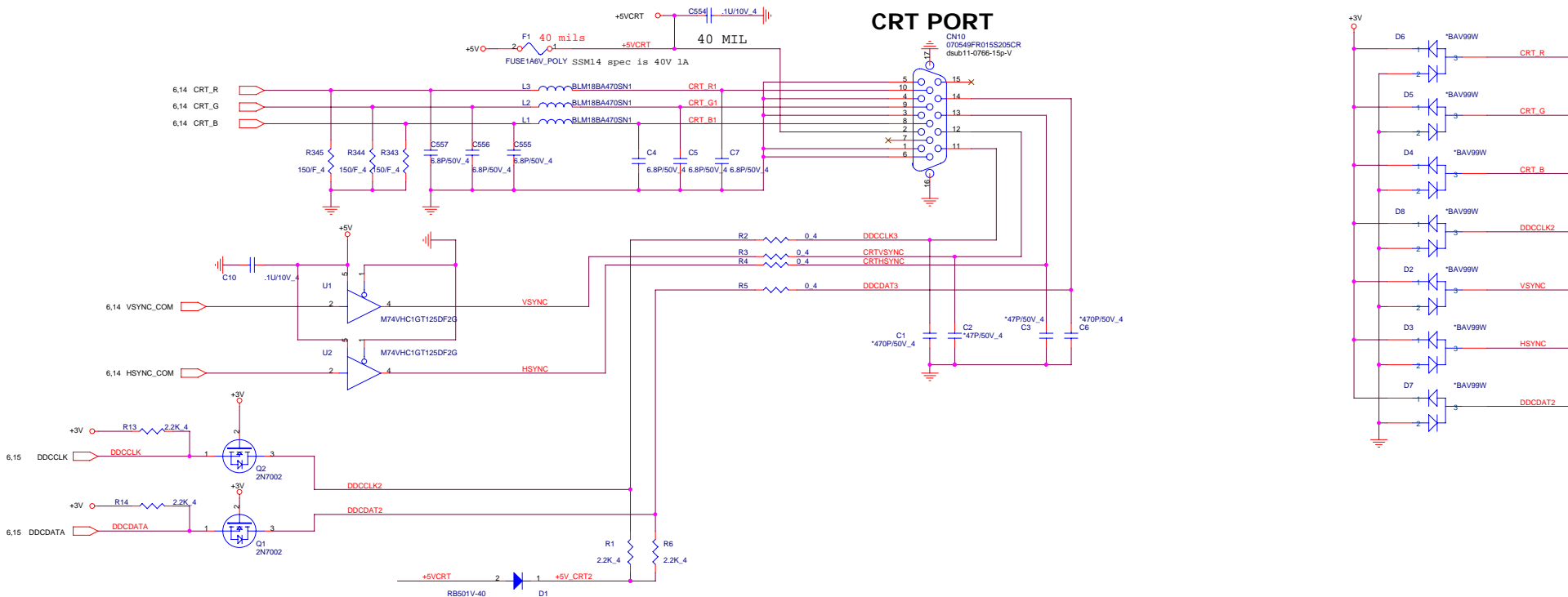


LCD / USB CAMERA / DIGITAL MIC CONNECTOR

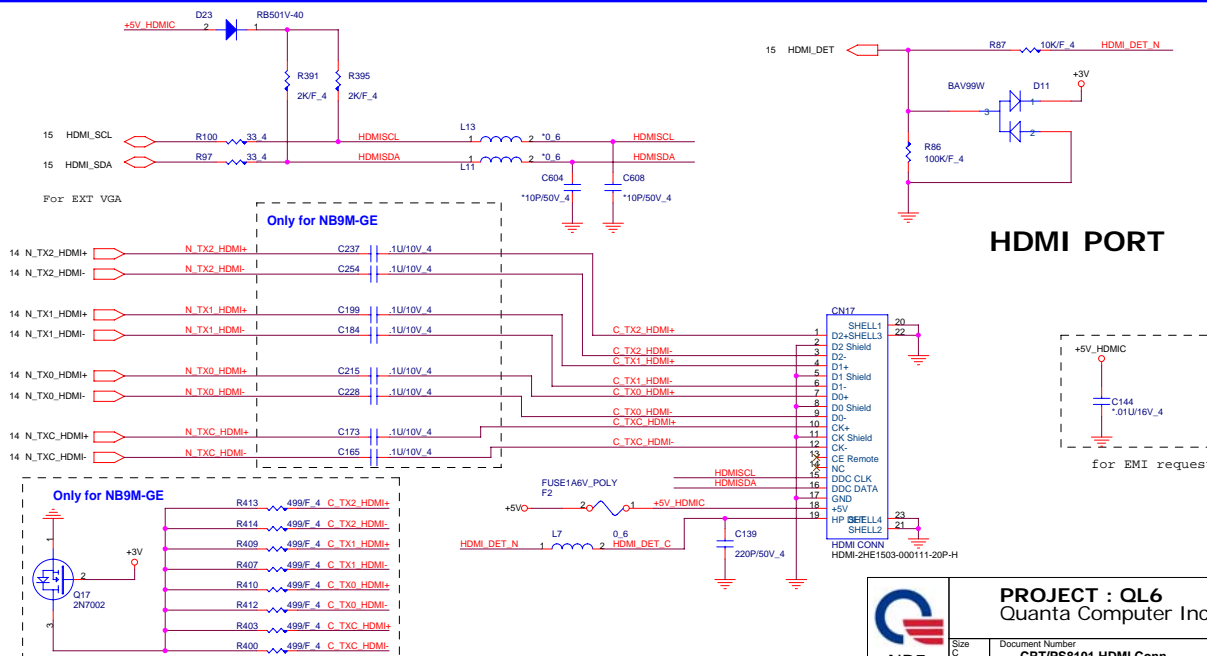
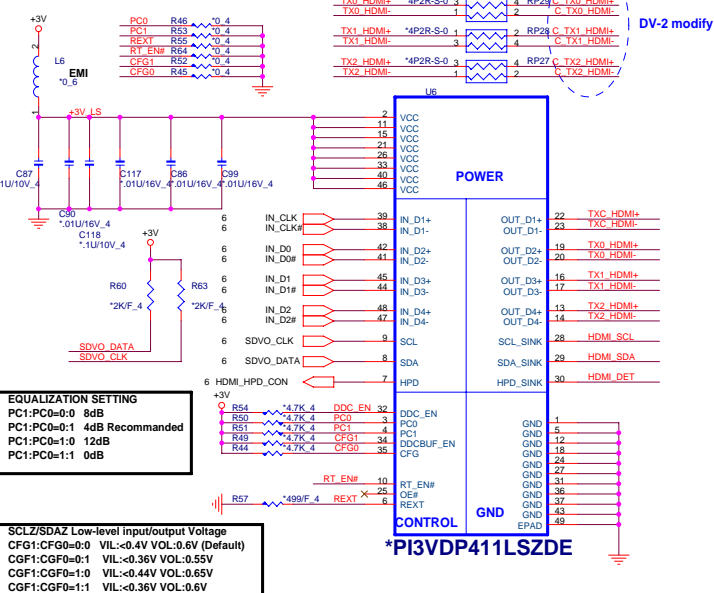


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Quanta Computer Inc.

Size Custom	Document Number LCD_CONN(WC/MIC)/LID	Rev 2A
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For UMA HDMI function



HDMI PORT

+5V_HDMIC

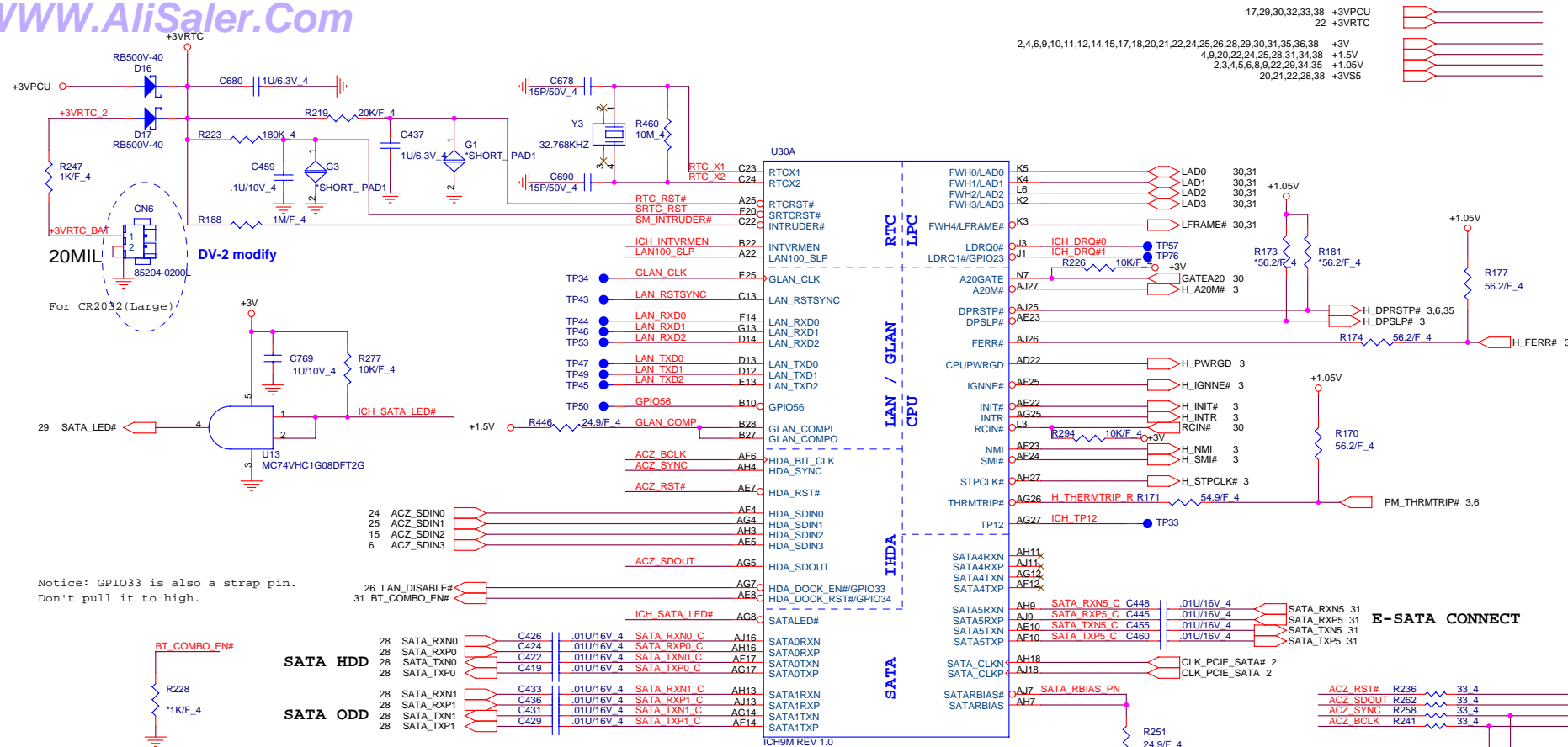
C144
*.01U/16V_4

for EMI requires

PROJECT : QL6
Quanta Computer Inc.

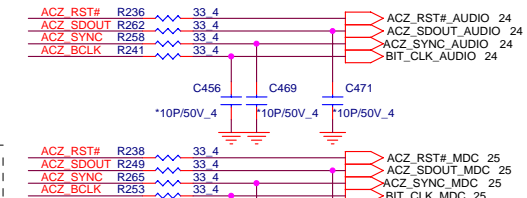
Document Number

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Notice: GPIO33 is also a strap pin.
Don't pull it to high.

E-SATA CONNECT

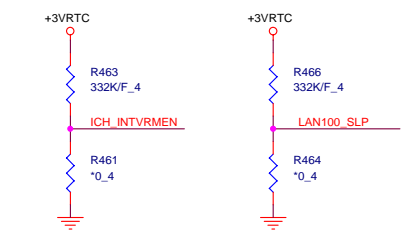


SB Strap

ICH9-M Internal VR Enable strap
(Internal VR for Vccsus1_05, Vccsus1_5 and VccCL1_5)

ICH9-M LAN100_SLP Strap
(Internal VR for VccLAN1_05 and VccCL1_05)

INTVRMEN	Low = Internal VR disable High = Internal VR enable(Default)
LAN100_SLP	Low = Internal VR disable High = Internal VR enable(Default)

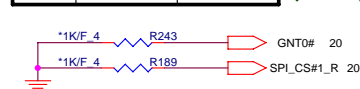


XOR Chain Entrance Strap

ICH_TP3	HDA_SDOUT	Description
0	0	RSVD
0	1	Enter XOR Chain
1	0	Normal operation(Default)
1	1	Set PCIE port config bit 1

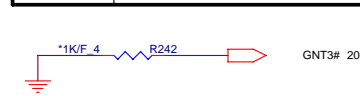
ICH9 Boot BIOS select

STRAP	PCI_GNT0#	SPI_CS#1
SPI	0	1
PCI	1	0
LPC	1	1

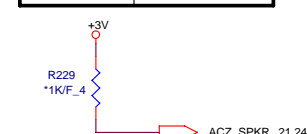


A16 swap override strap

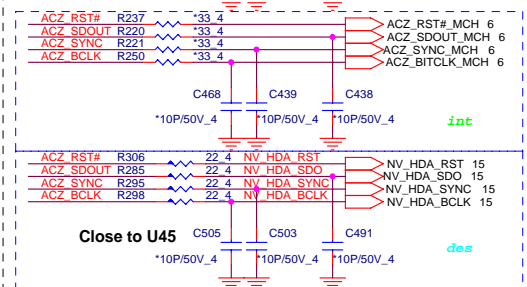
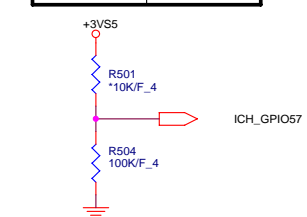
PCI_GNT#3	Low = A16 swap override enabled Hi = Default
-----------	---



No Reboot Strap
ACZ_SPKR
Low: Default Hi: No reboot

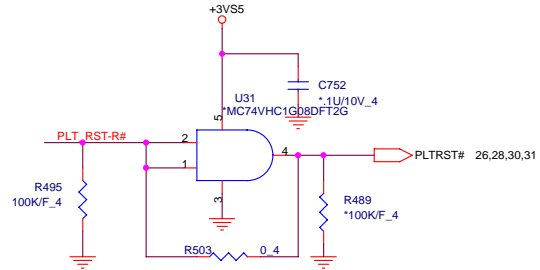
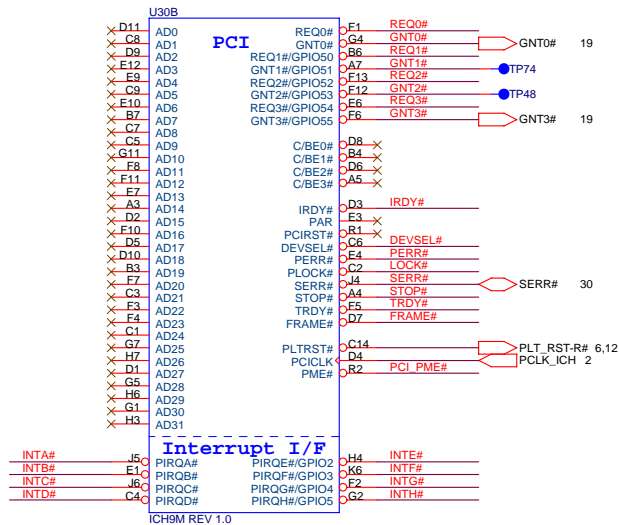
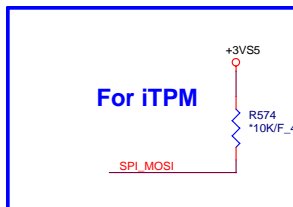
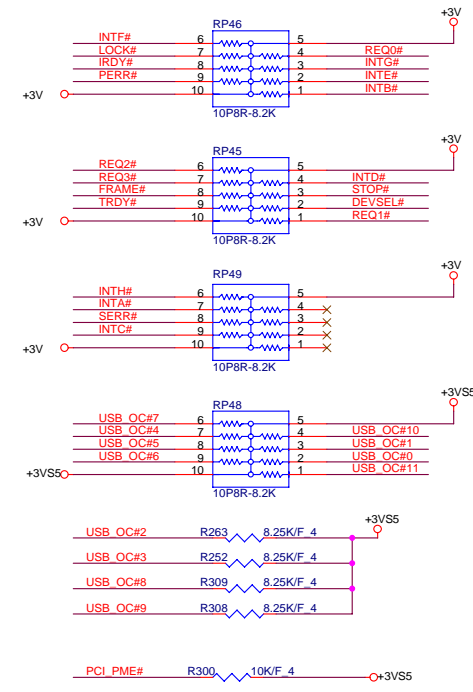



TPM physical presence
ICH_GPIO57
Low: Default



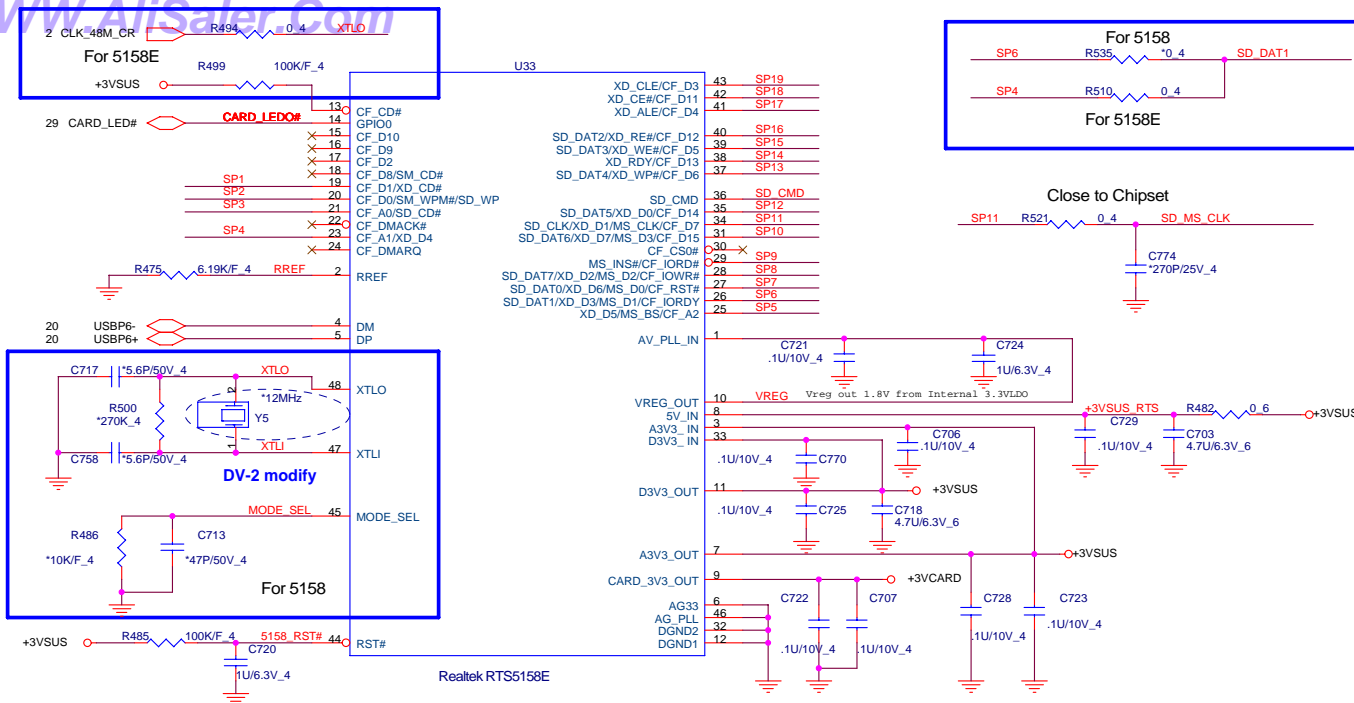
PROJECT : QL6
Quanta Computer Inc.

Size Custom	Document Number	Rev 2A
ICH9-M Host 1/4		
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 NB5	PROJECT : QL6 Quanta Computer Inc.		
	Size Custom	Document Number ICH9-M GPIO 3/4	Rev 2A
Date: Tuesday, February 26, 2008 Sheet 21 of 40			



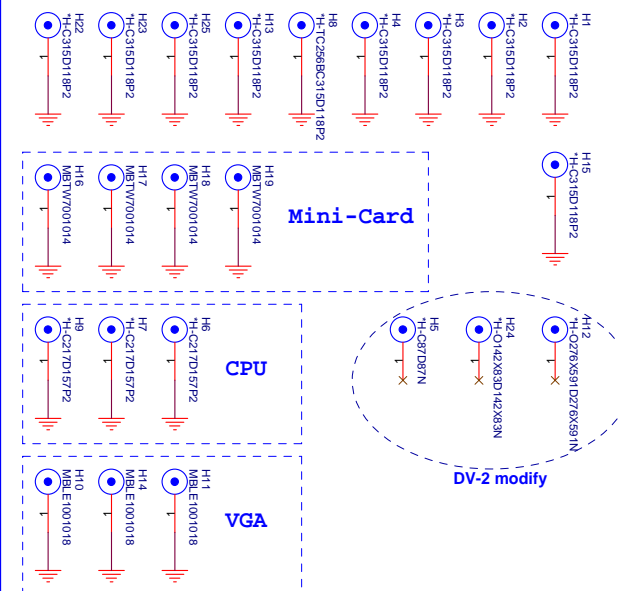
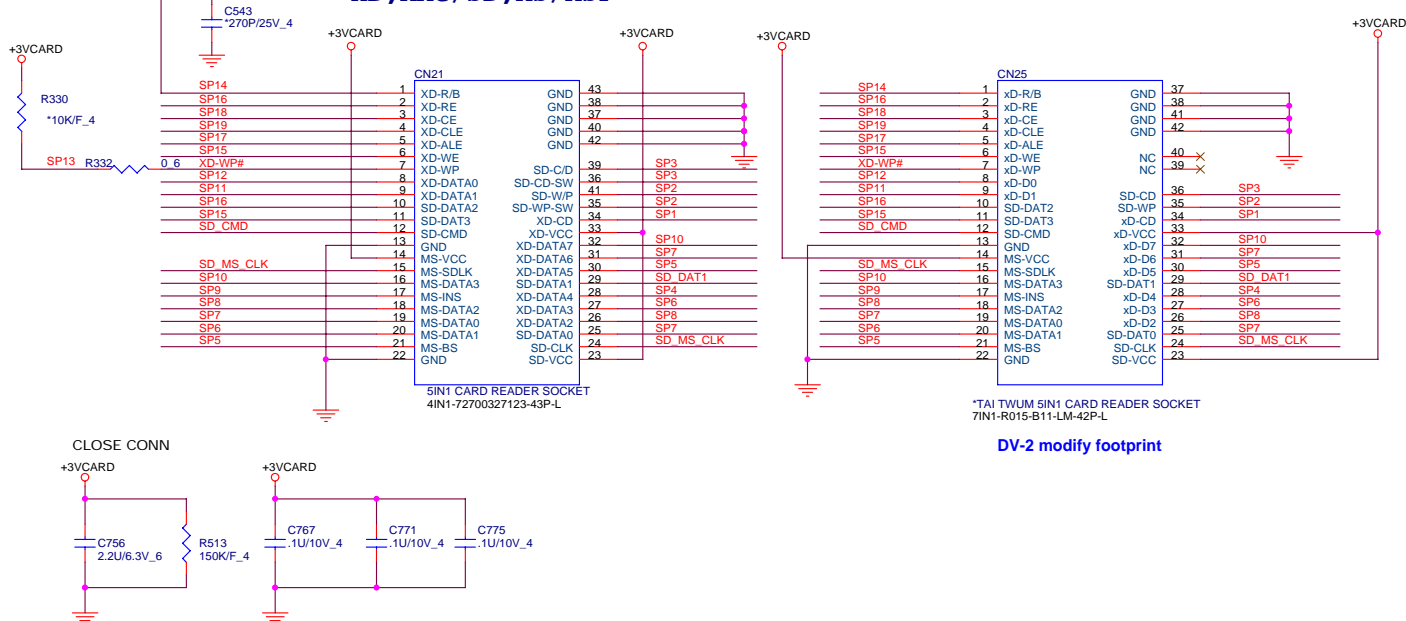


Note:

	SD/MMMC	MS	XD
SP0			XD U#
SP1			XD CD#
SP2	SD WP		
SP3	SD CD#		
SP4	SD DAT1		XD D4
SP5		MS BS	XD D5
SP6	SD DAT1	MS D1	XD D3
SP7	SD DAT0	MS D0	XD D6
SP8	SD DAT7	MS D2	XD D2
SP9	SD DAT6	MS D3	XD D7
SP10	SD CLK	MS SCLK	XD D1
SP11	SD DAT5		XD D0
SP12	SD DAT4		XD WP#
SP13			XD R/B#
SP14	SD DAT3		XD WE#
SP15	SD DAT2		XD RE#
SP16			XD LE
SP18			XD CE#
SP19			XD CLE

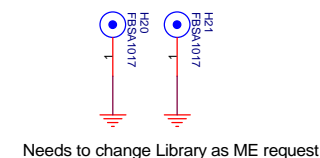
23

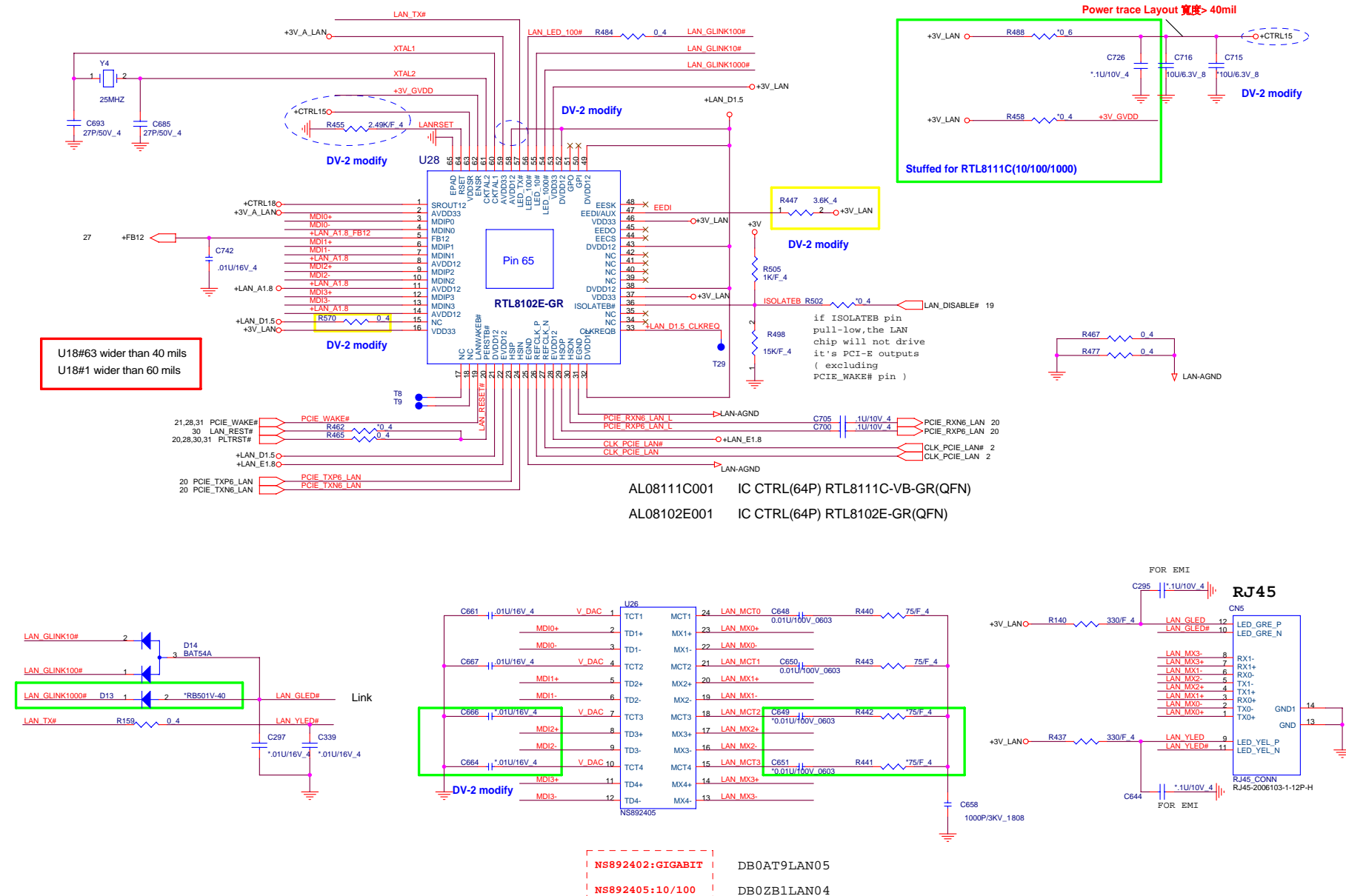
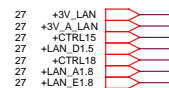
5 IN1 CARD READER
XD,MMC/SD,MS/MSP



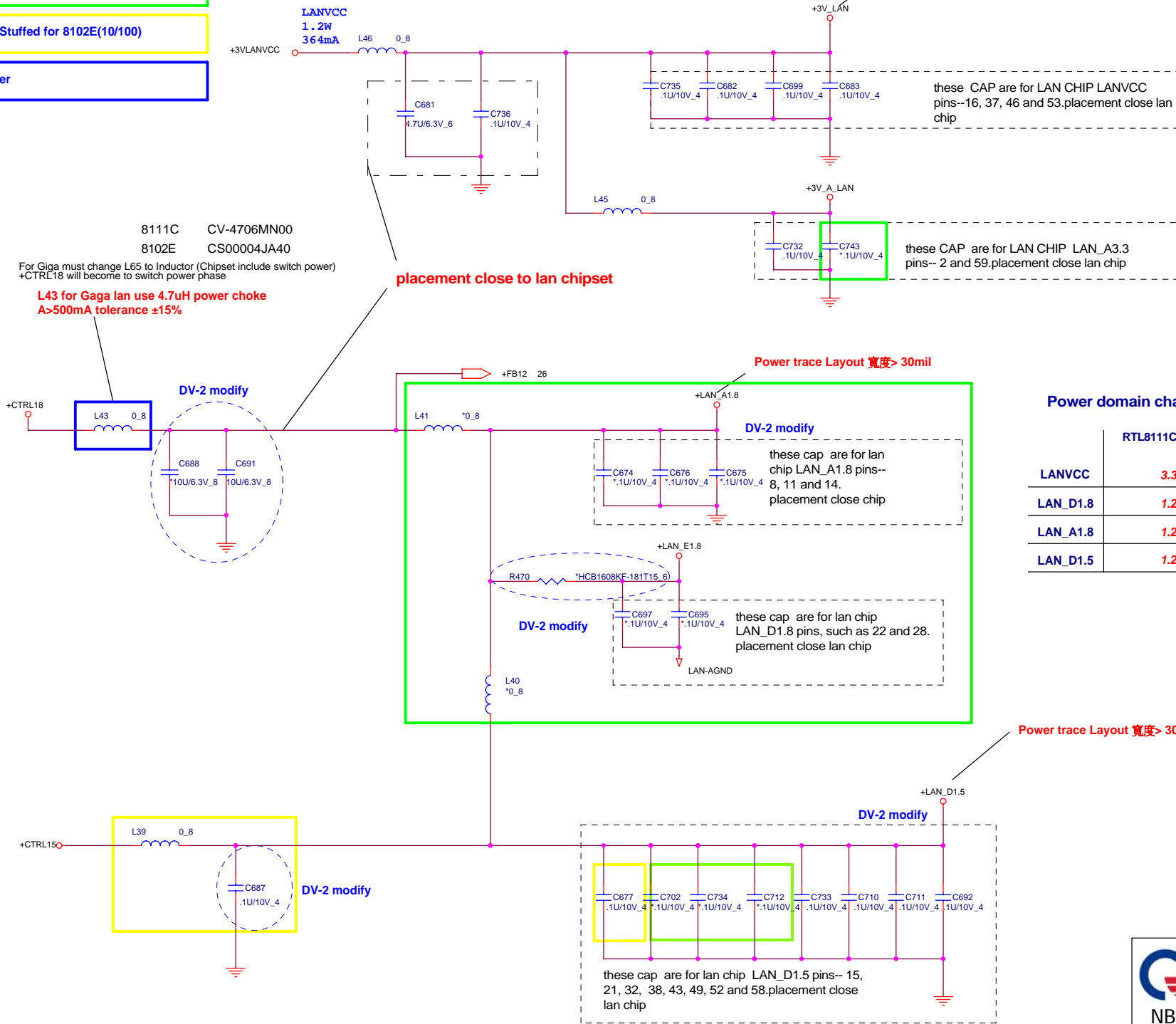
PROJECT : QL6
Quanta Computer Inc.

Size Custom	Document Number RTS5158 & CR SOCKET & HOLE	R
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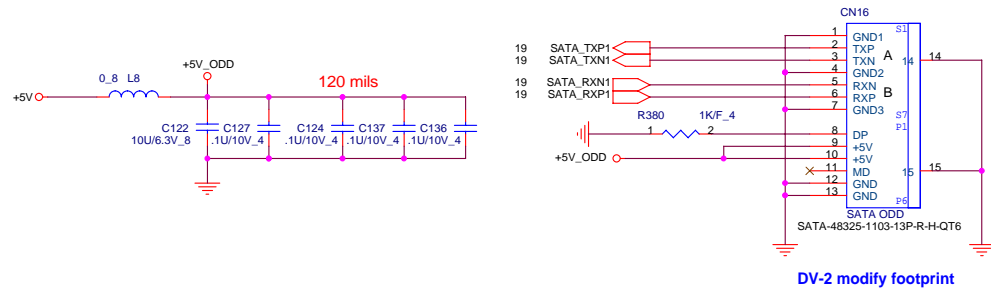




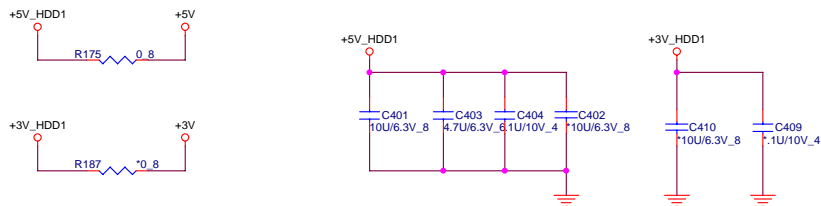
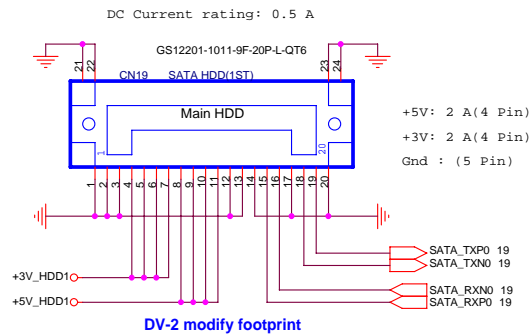
- T : Stuffed for RTL8111C(10/100/1000)
- E : Stuffed for 8102E(10/100)
- other



SATA ODD CONECTOR

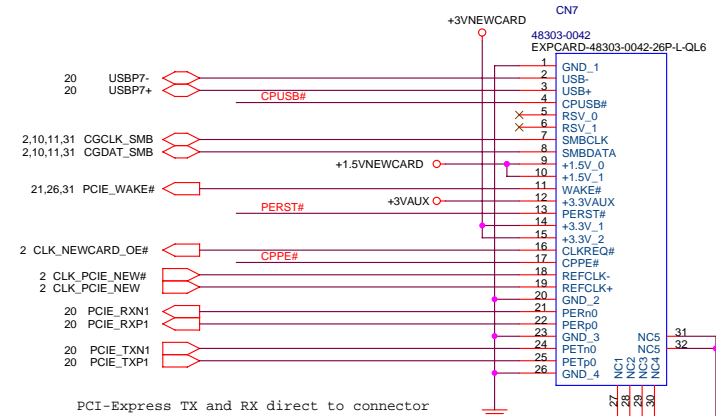


SATA HDD CONNECTOR

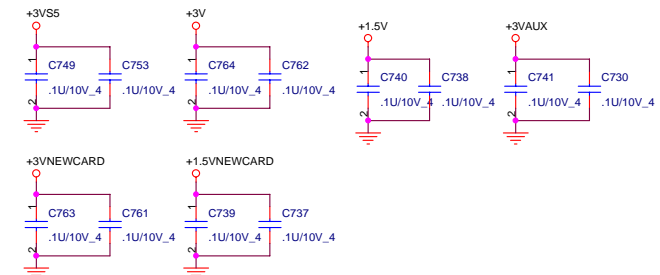
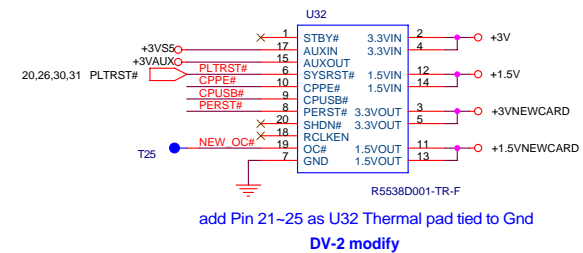


NEWCARD

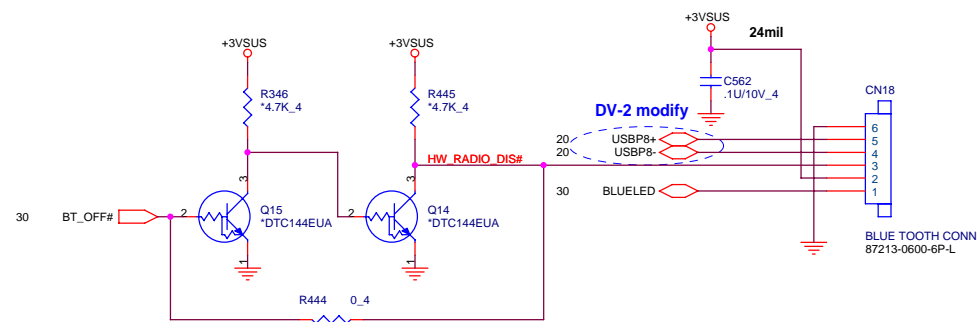
28



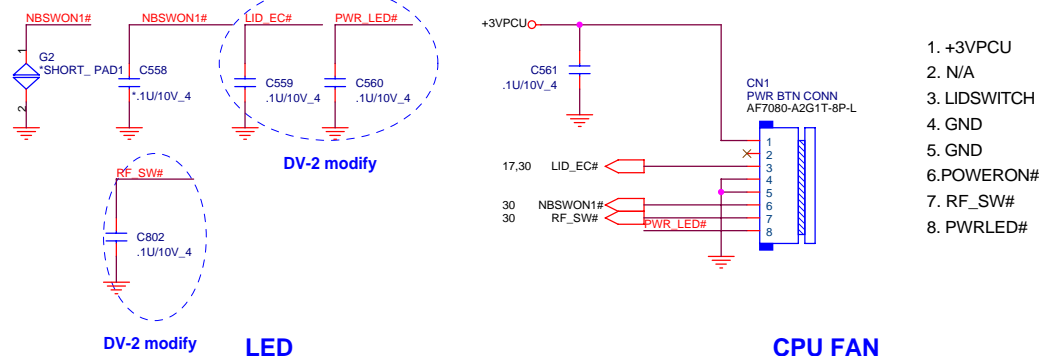
EXPCARD-48303-0042-26P-L-QT6 as ME modify Pad size(pin31,32) **DV-2 modify**



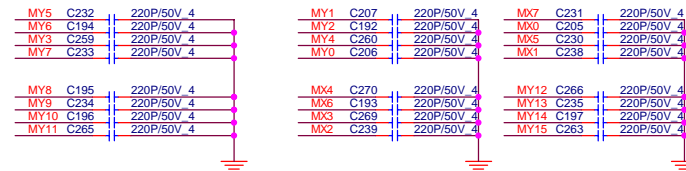
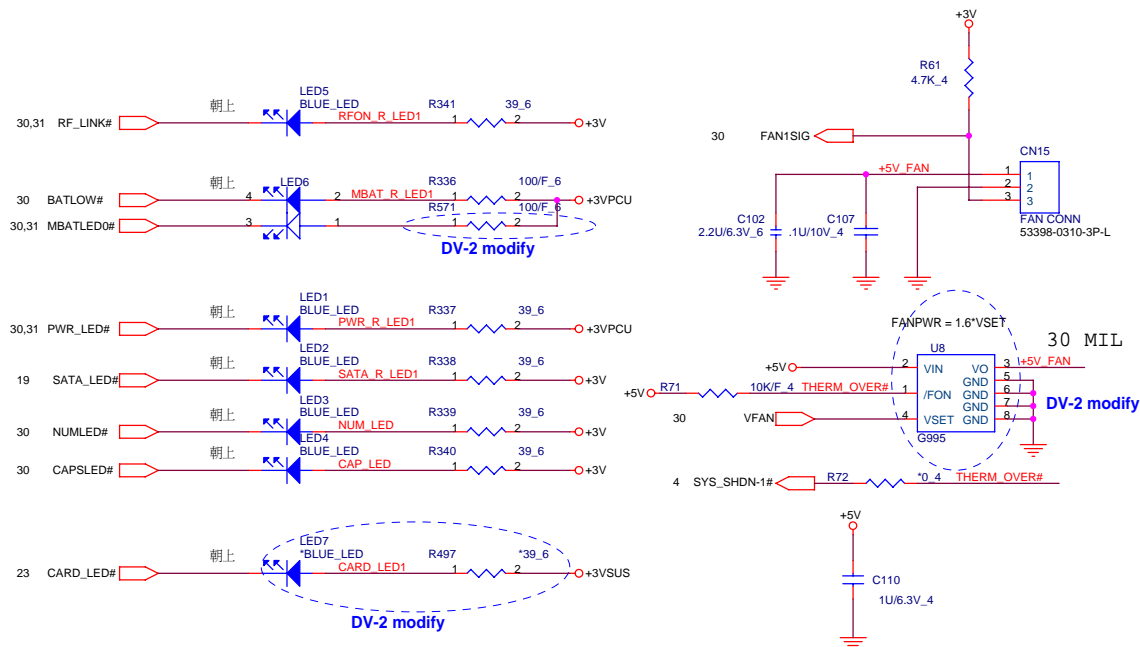
	PROJECT : QL6 Quanta Computer Inc.		
	Size Custom Document Number ODD/HDD/NEW CARD	Date: Tuesday, February 26, 2008 Sheet 28 of 40	Rev 2A



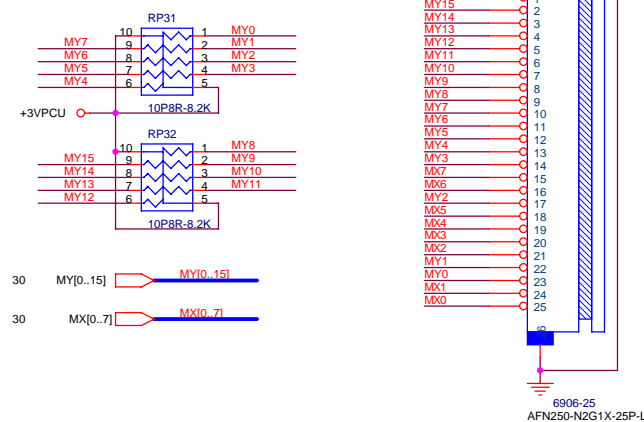
POWER BUTTON CONNECT



CPU FAN

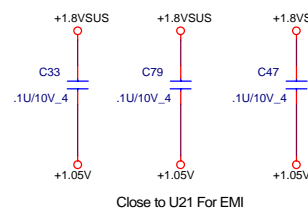


KEYBOARD PULL-UP



25	129		33	113	59	46	36	91		118	119		12	102	124
	App		D	F2	F9	C	H	num 7		F7	F8		-	num 6	Prt
24	17	104	115	112	99	48	22	122	106	117	120		108	123	126
	Q	num Del	F4	F1	num 0	C	Y	F11	num +	F6	F9		num Ent	Scr	Pause
21	1		31	110	93	6	7	121		42			127	11	76
	~		A	Esc	num 1	%	~	F10		F5			L Win	0	+
20	19		3	98	9	5	8	10		9	45	58	26	15	80
	E		# 3	num 2	\$ 4	P	U	(9		*	8	L Ctrl	P	BS	Home
19	16		2	18	83	20	23	25	57	24	92		27	28	96
	Tab		1	W	+	R	J	O	R Shift	K	num 4		L	I	PgDn
18	30		114	32	103	34	37	39	44	38	79		40		85
	Caps		F3	S	num 3	F	J	L	L Shift	J			:		PgUp
16	96	62	35	47	84	49	52	54		53	101		55	41	81
	num 8	R Alt	G	V	L	V	M	>		<	num 9		num -	num =	End
15	56	60	97	21	90	50	51	95		100	89		105	43	61
	num 9	L Alt	num 5	T	num Lk	B	N	num /		num *	+		num -	Ent	Space
23	22	17	14	13	12	11	10	9	8	7	6	5	4	3	2

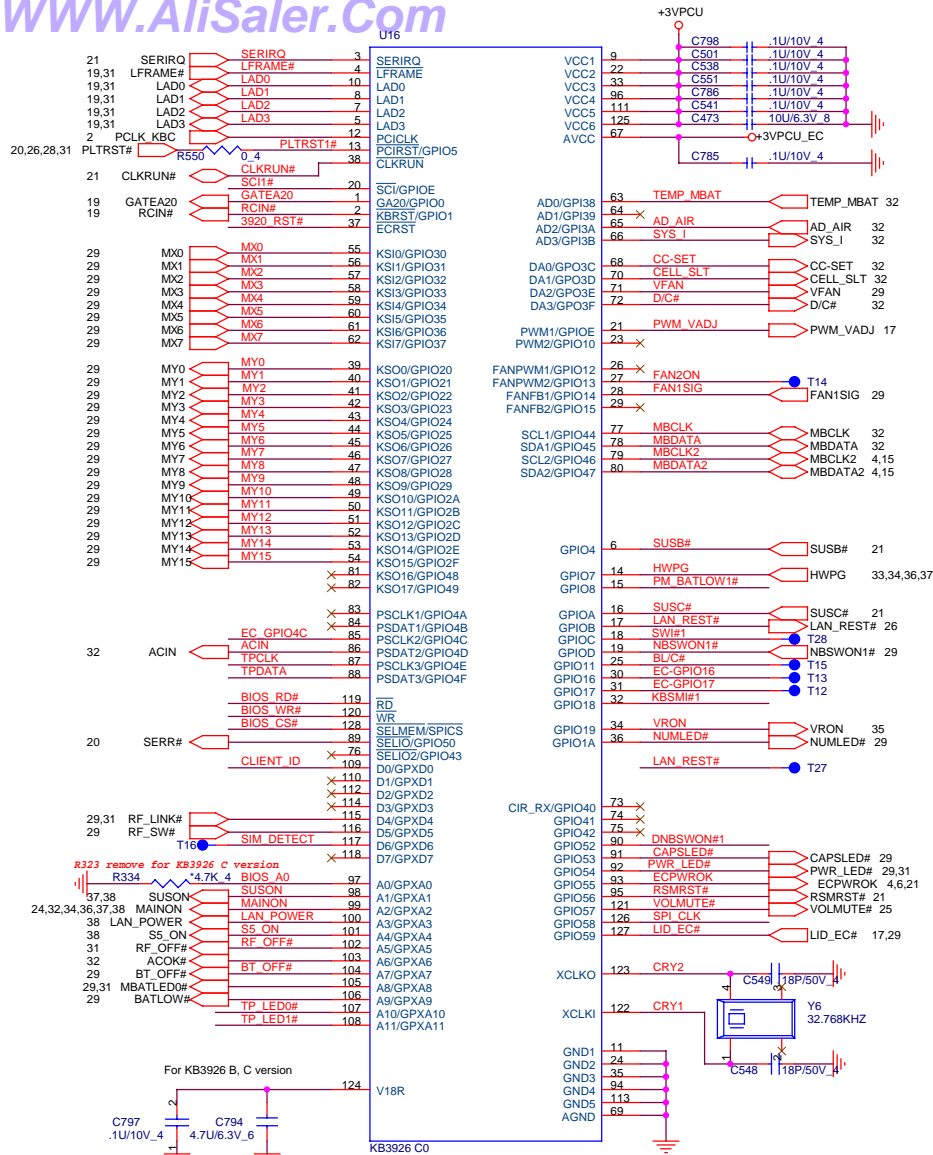
1&17 pin short circuit



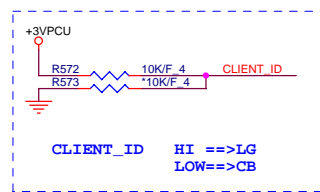
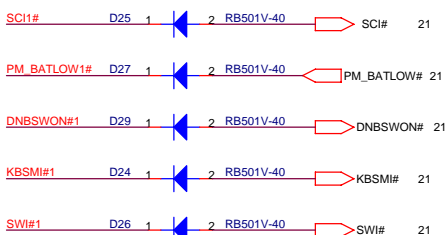
PROJECT : QL6
Quanta Computer Inc.

Size Custom Document Number **KB/FAN/POWER CONN/LED** Rev 2A

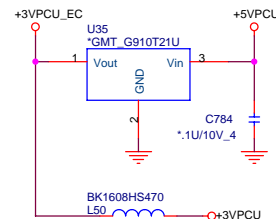
Date: Tuesday, February 26, 2008 Sheet 29 of 40



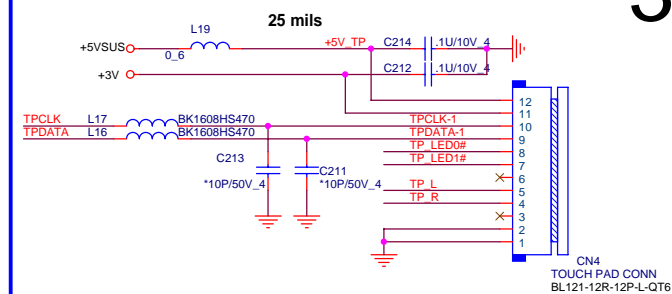
DV-2 modify footprint



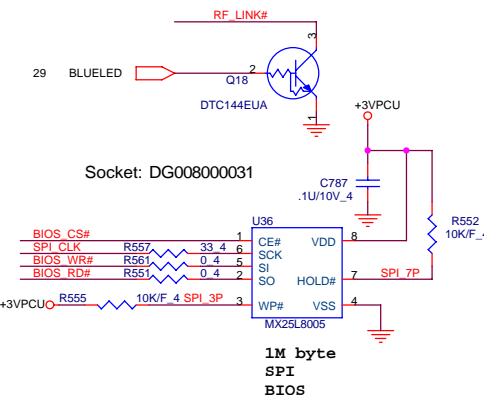
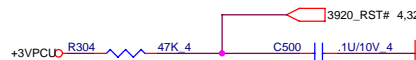
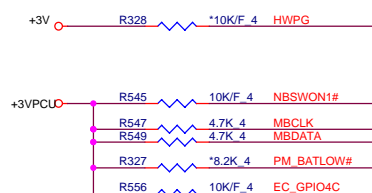
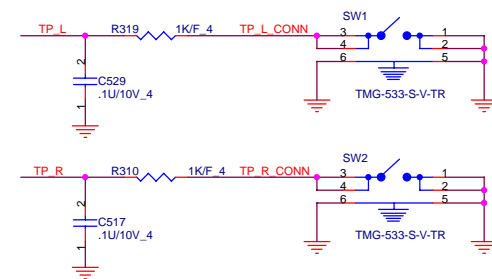
DV-2 modify



TOUCH PAD CONNECTOR



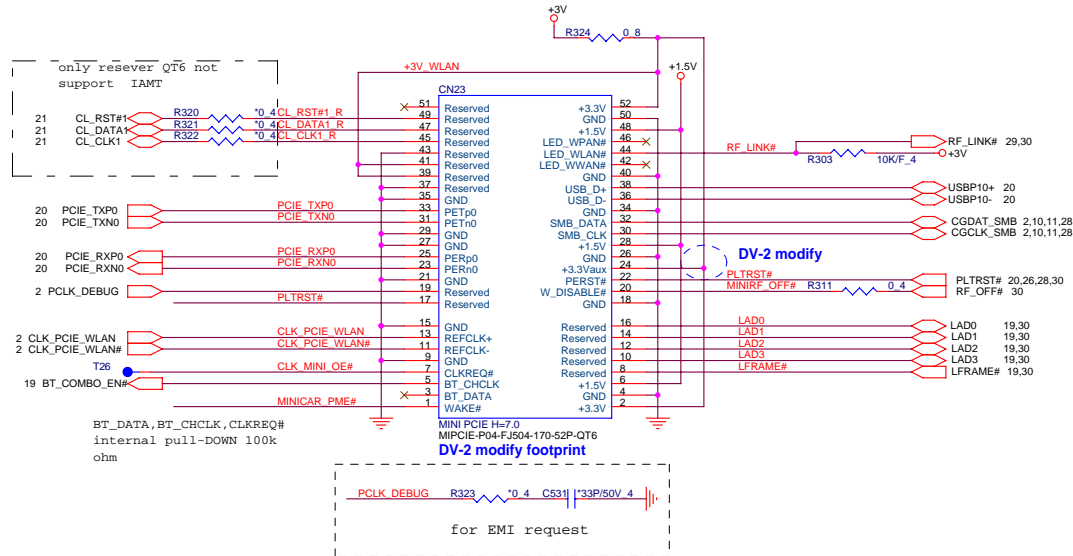
TOUCH PAD L/R



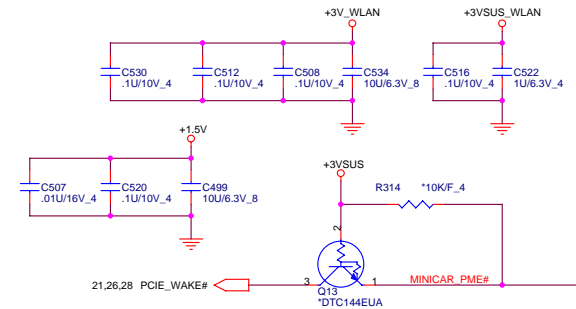
PROJECT : QL6
Quanta Computer Inc.

Size Custom Document Number **KB3926/ROM/TP** Rev 2A

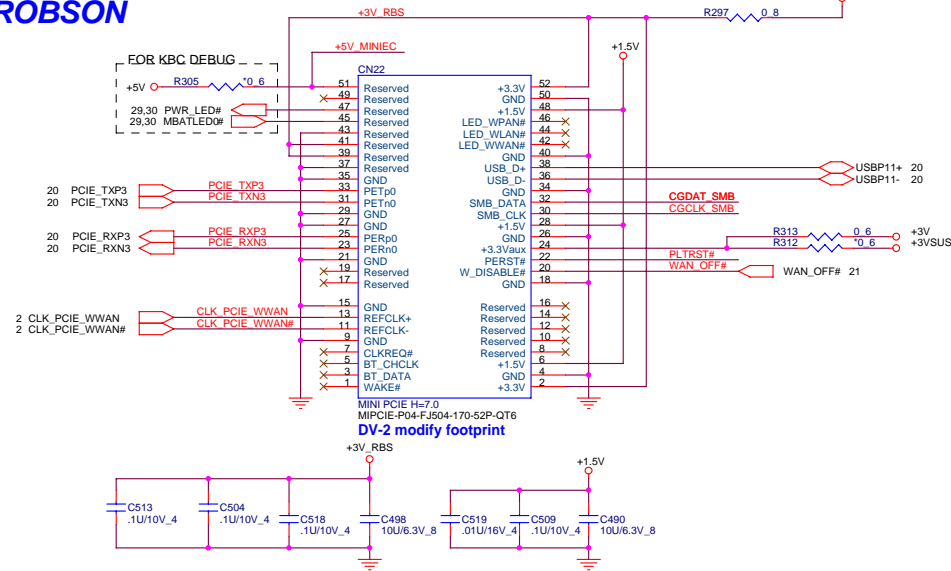
Date: Tuesday, February 26, 2008 Sheet 30 of 40



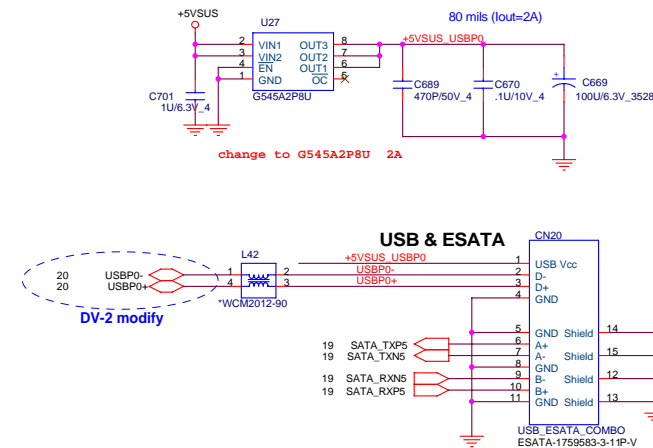
INTEL WLAN
CARD PIN 20
W_DISABLE#
have
internal
pull-up 110k
ohm



Mini PCI-E Card 2 ROBSON



E-SATA/USB COMBO

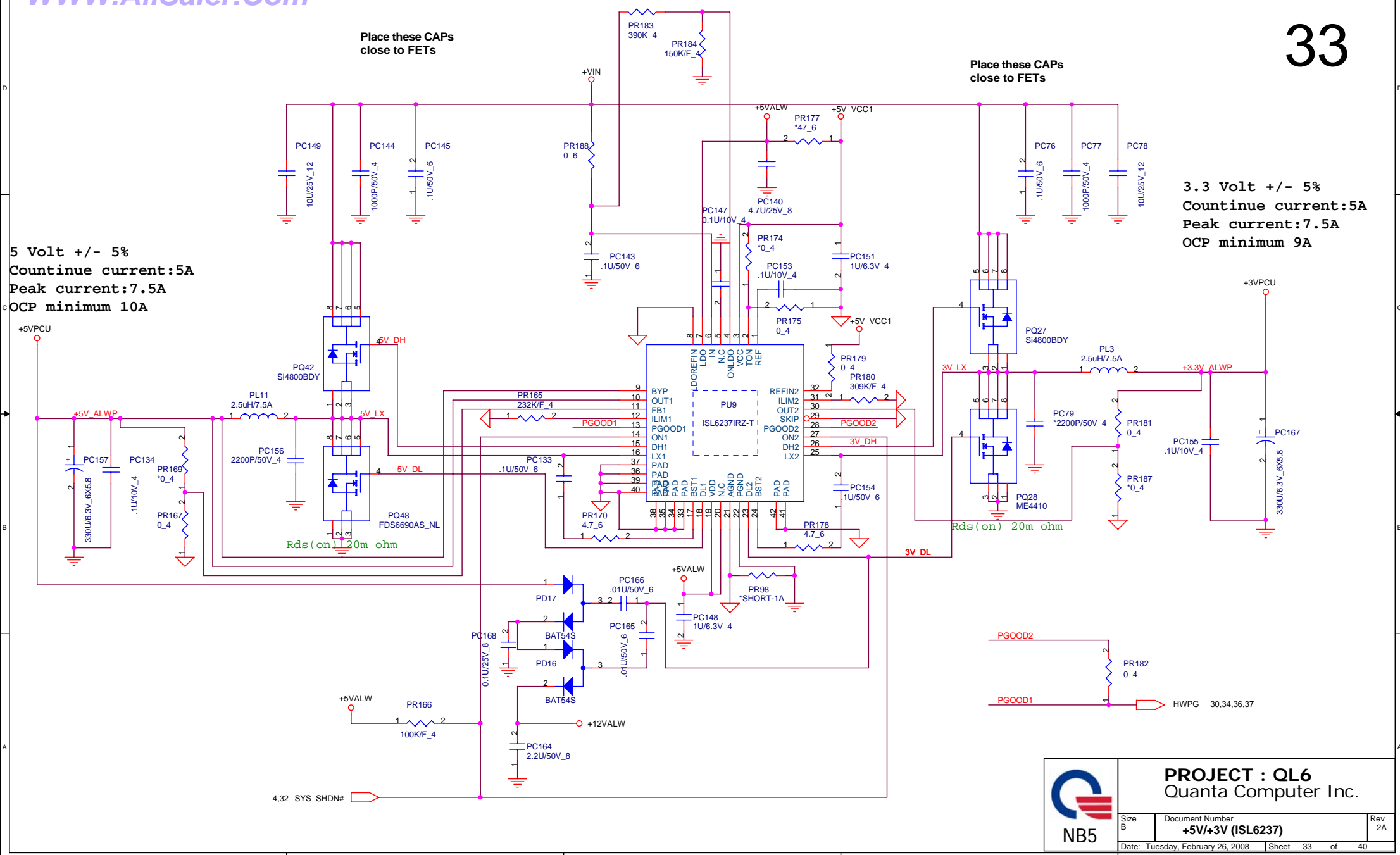



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Size	Document Number	Rev
Custom	MINI PCIE CONN X2/E-SATA	2A
Date: Tuesday, February 26, 2008	Sheet 31 of 40	

5 Volt +/- 5%
Countinue current:5A
Peak current:7.5A
OCP minimum 10A

3.3 Volt +/- 5%
Countinue current:5A
Peak current:7.5A
OCP minimum 9A

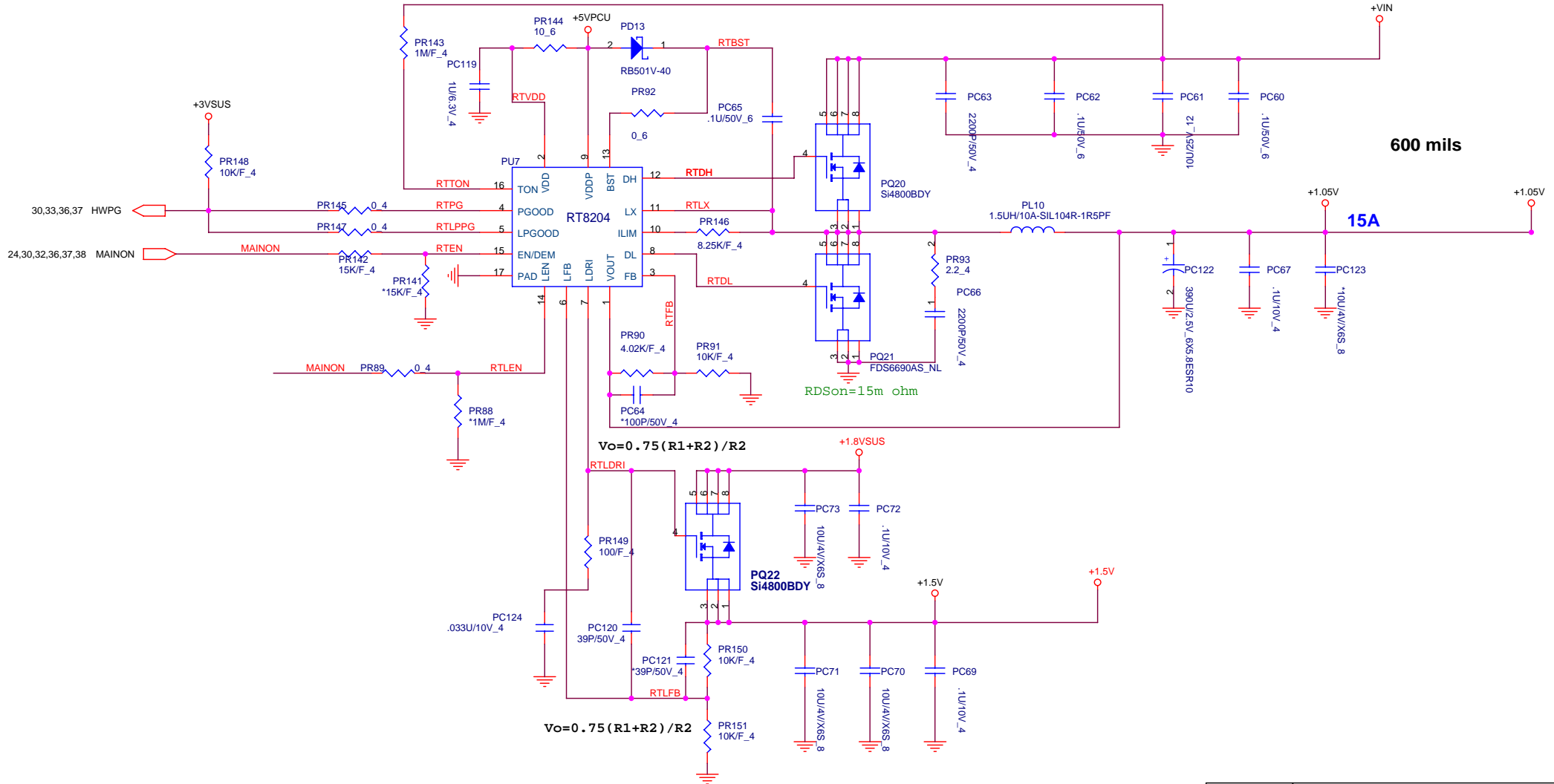


			PROJECT : QL6 Quanta Computer Inc.		
Size B	Document Number				Rev 2A
		+5V/+3V (ISL6237)			
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WWW.AliSaler.Com
VCCP1.05V & +1.5V

+1.05Volt +/- 5%
Countinue current:7.5A
Peak current:10A
OCP minimum 15A

34



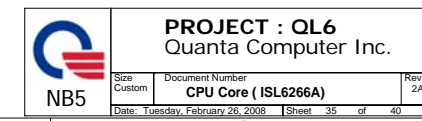
600 mils

15A

$$Vo = 0.75 (R1 + R2) / R2$$

$$Vo = 0.75 (R1 + R2) / R2$$

NB5	PROJECT : QL6 Quanta Computer Inc.		
	Size B	Document Number +1.05V/+1.5V (RT8204)	Rev 2A
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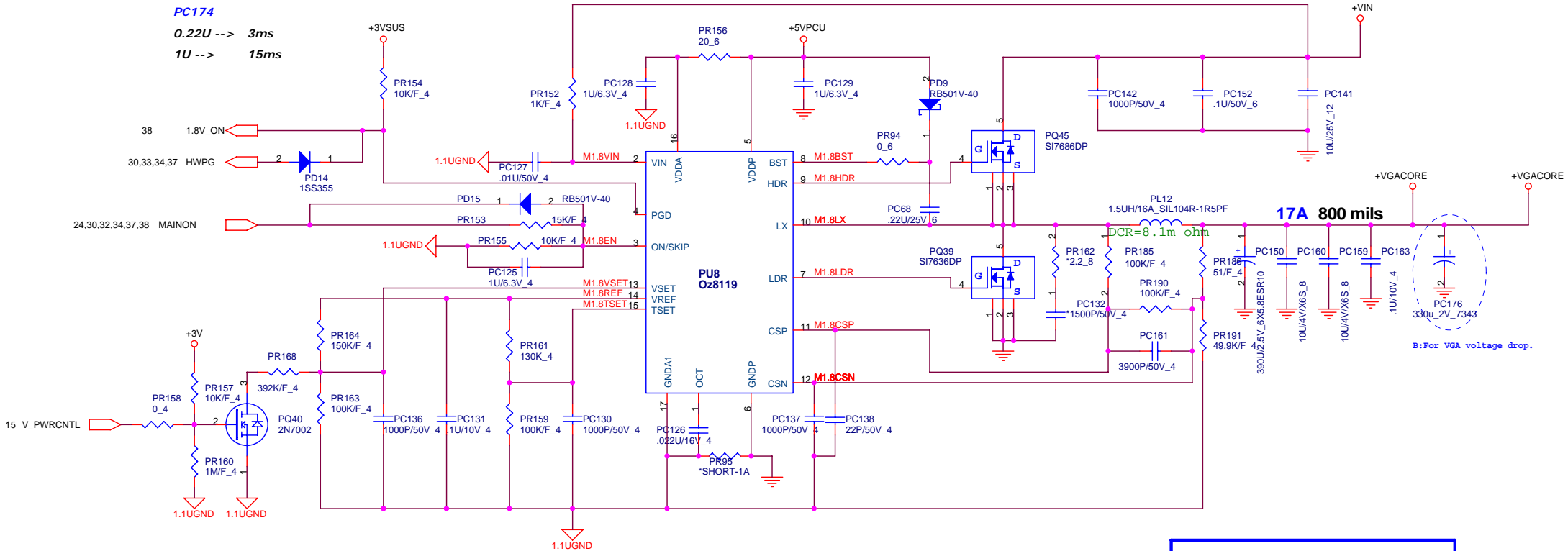
VGA Core & VCC1.1

+1.1Volt +/- 5%
Countinue current:15A
Peak current:17A
OCP minimum 22A

36

PC174

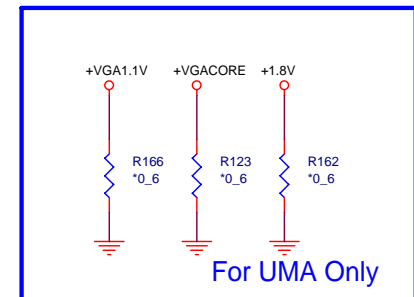
0.22U --> 3ms
1U --> 15ms



V_PWRCNTL	NVIDIA NB9M	Resistor Value
HI	0.90V	PR67_392K_CS43922FB17
LO	1.09V	PR55_150K_CS41502FB18

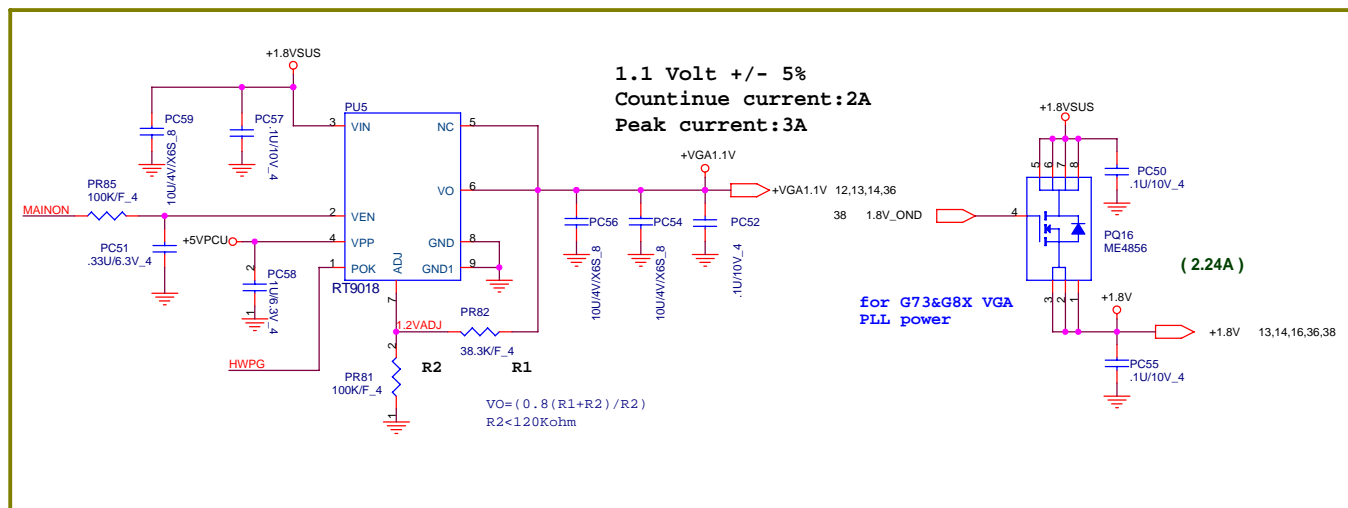
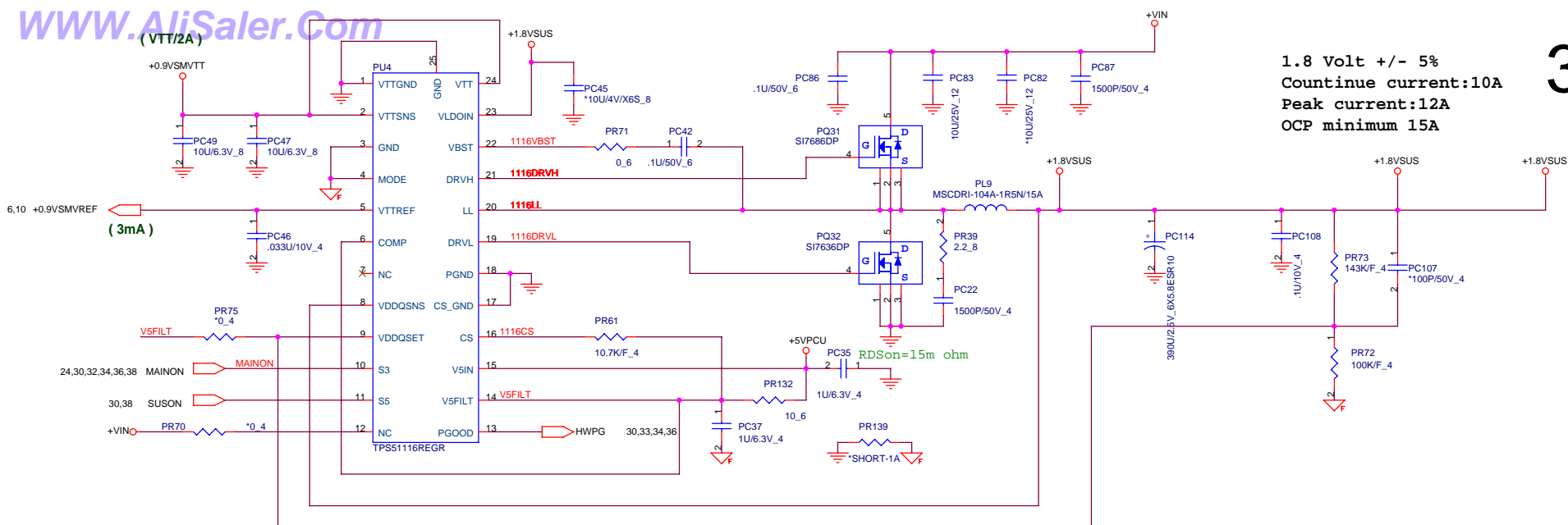
V_PWRCNTL	nVIA NB9P-GE2	Resistor Value
HI	1.15V	PR67_143M_CS51432FB10
LO	1.2V	PR55_130K_CS41302FB00

V_PWRCNTL	NVIDIA NB9M-GE	Resistor Value
HI	0.95V	PR67_402K_CS44022FB25
LO	1.09V	PR55_150K_CS41502FB18



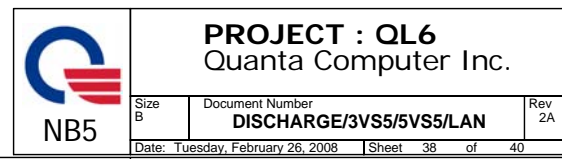
PROJECT : QL6
Quanta Computer Inc.

Size B	Document Number VGA CORE OZ8118	Rev 2A
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 Quanta Computer Inc.

Size Custom	Document Number 1.8V/DDR_VTER/+1.8v/+1.1V	Rev 2A
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	Voltage level	AC MODE				DC MODE			
		S0	S3	S4	S5	S0	S3	S4	S5
+3VPCU	3.3V +/- 5%	V	V	V	V	V	V	V	V
+5VPCU	5V +/- 5%	V	V	V	V	V	V	V	V
+3VRTC	3.3V +/- 5%	V	V	V	V	V	V	V	V
+3VS5	3.3V +/- 5%	V	V	V	V	V	V		
+5VS5	5V +/- 5%	V	V	V	V	V	V		
+3VSUS	3.3V +/- 5%	V	V			V	V		
+5VSUS	5V +/- 5%	V	V			V	V		
+1.8VSUS	1.8V +/- 5%	V	V			V	V		
+0.9VSMVTT	0.9V +/- 5%	V	V			V	V		
+1.5V	1.5V +/- 5%	V				V			
+1.05V	1.05V +/- 5%	V				V			
+VCORE	0.9~1.15V	V				V			
+VGA_CORE	0.9~1.2V	V				V			
+VGA1.1V	1.1V +/- 5%	V				V			
+1.8V	1.8V +/- 5%	V				V			
+3VLAVCC	3.3V +/- 5%	V				V			



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Quanta Computer Inc.

Size Custom	Document Number Voltage status	Rev 2A
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