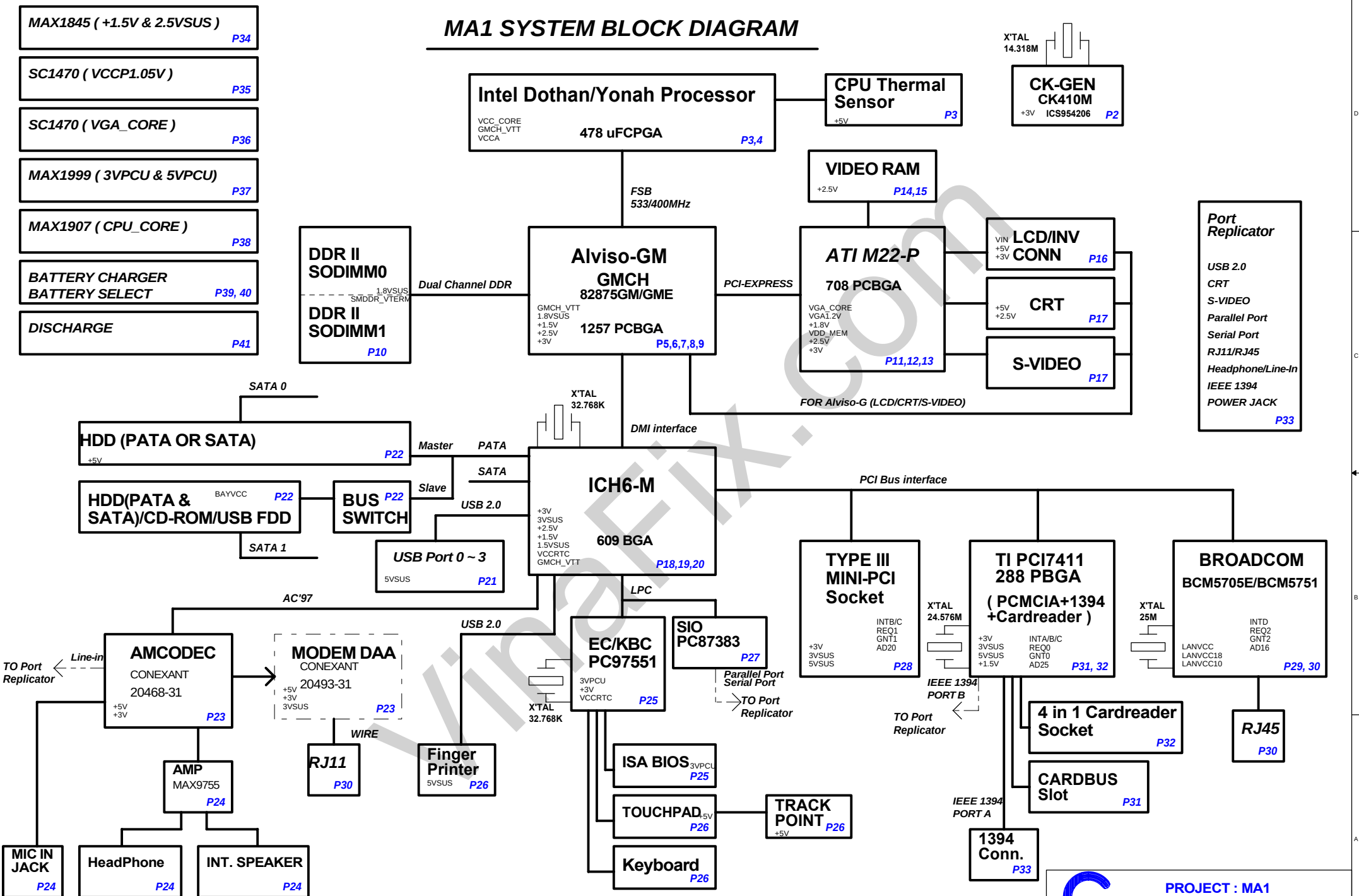
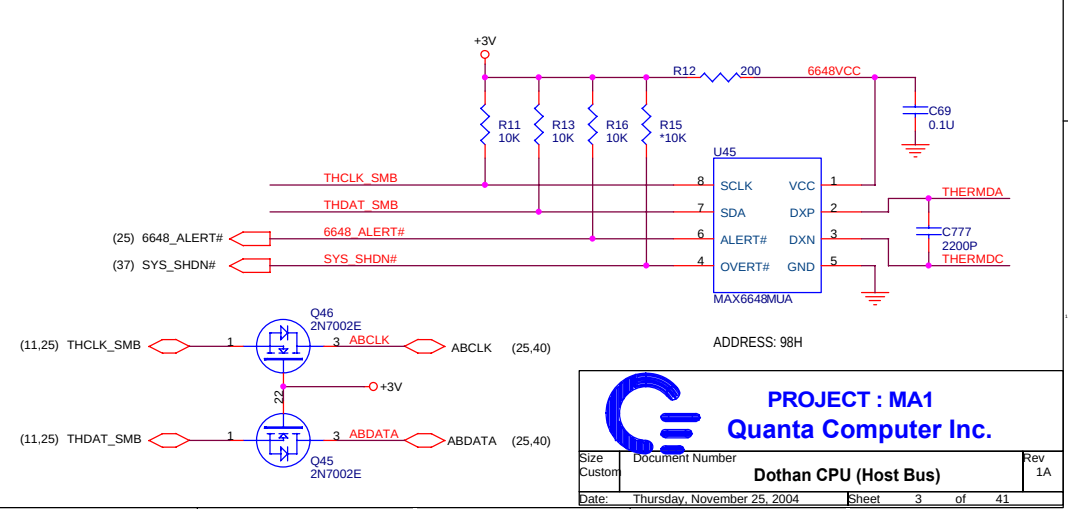
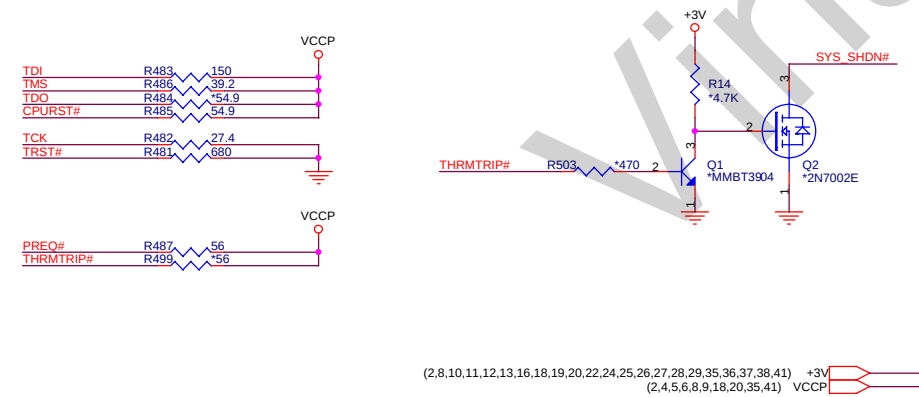
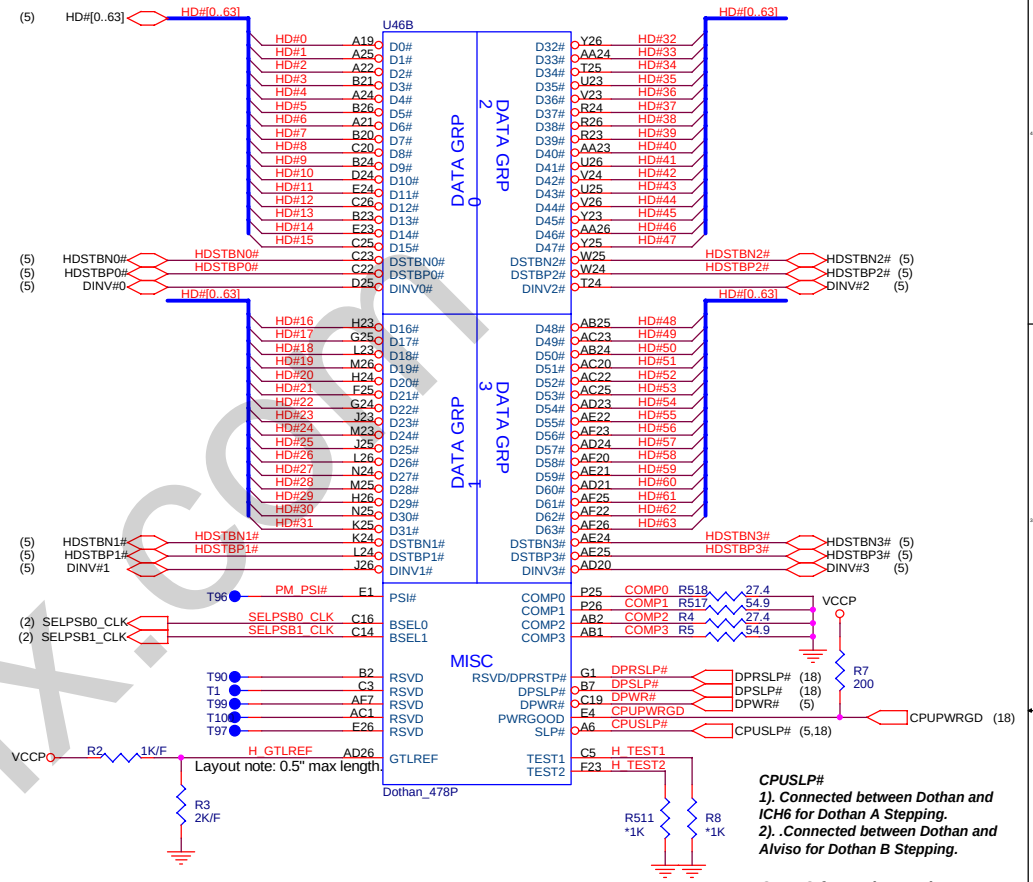
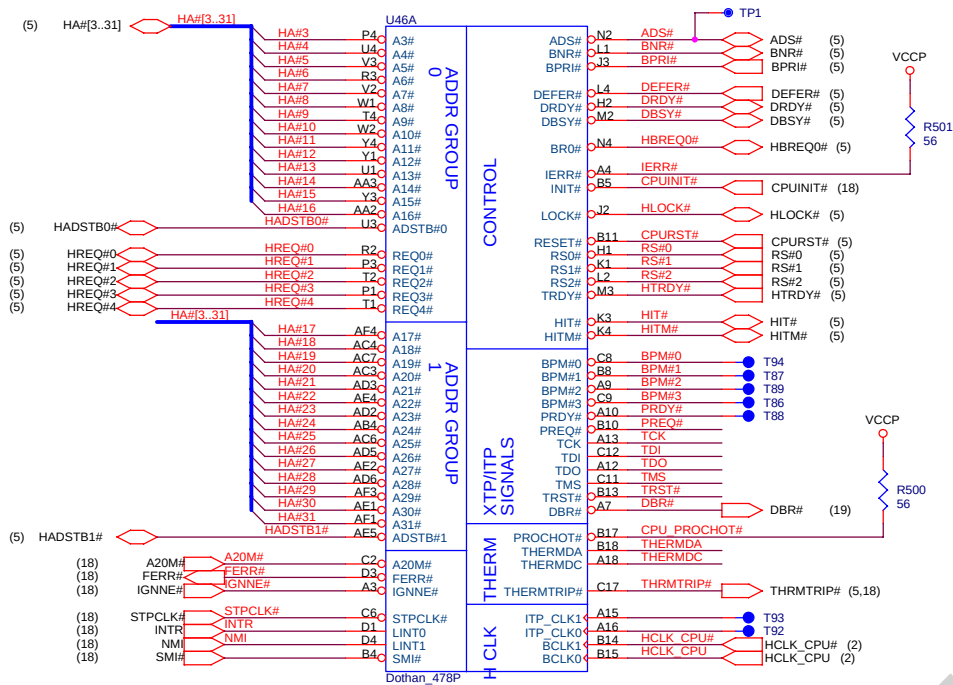
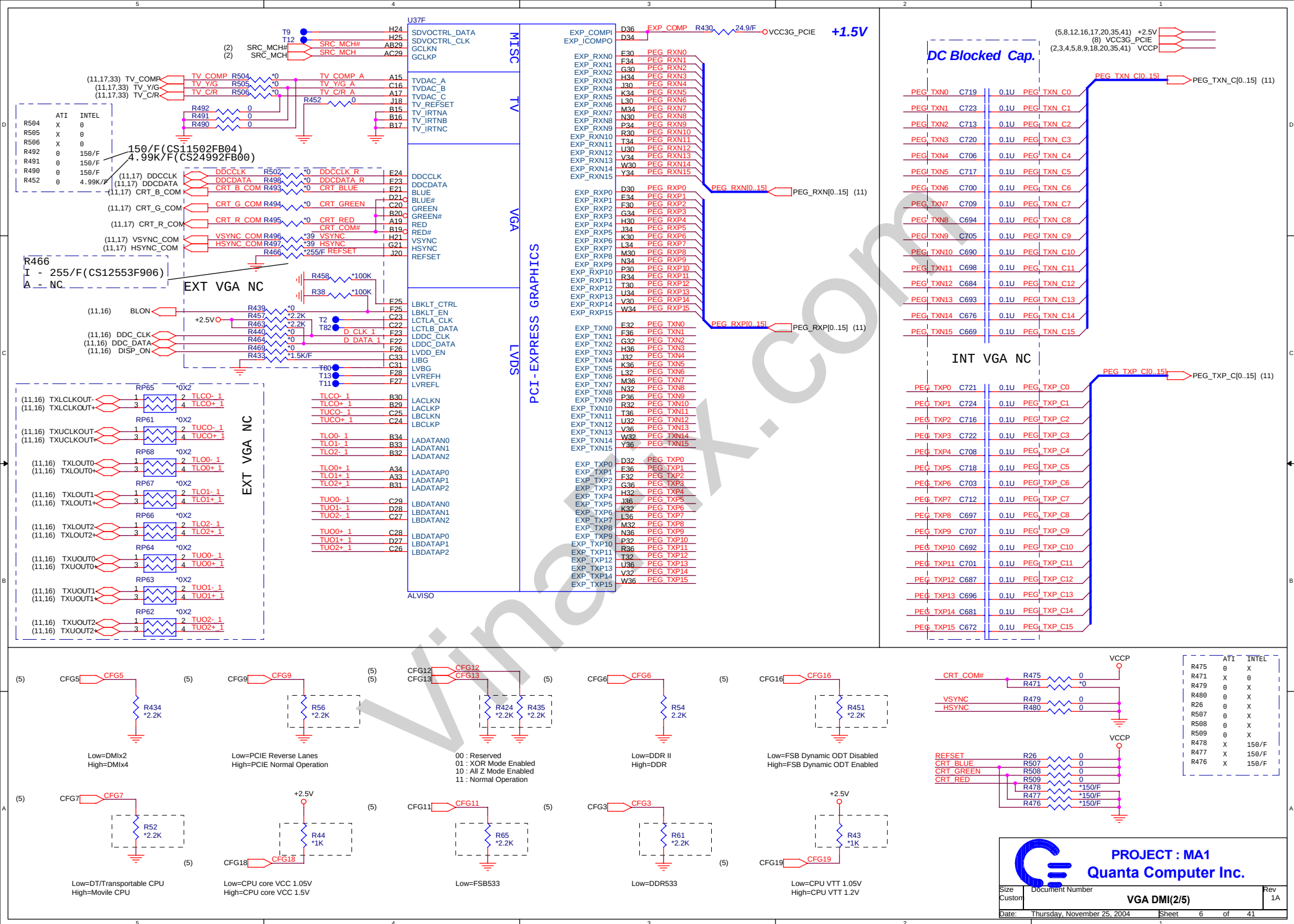


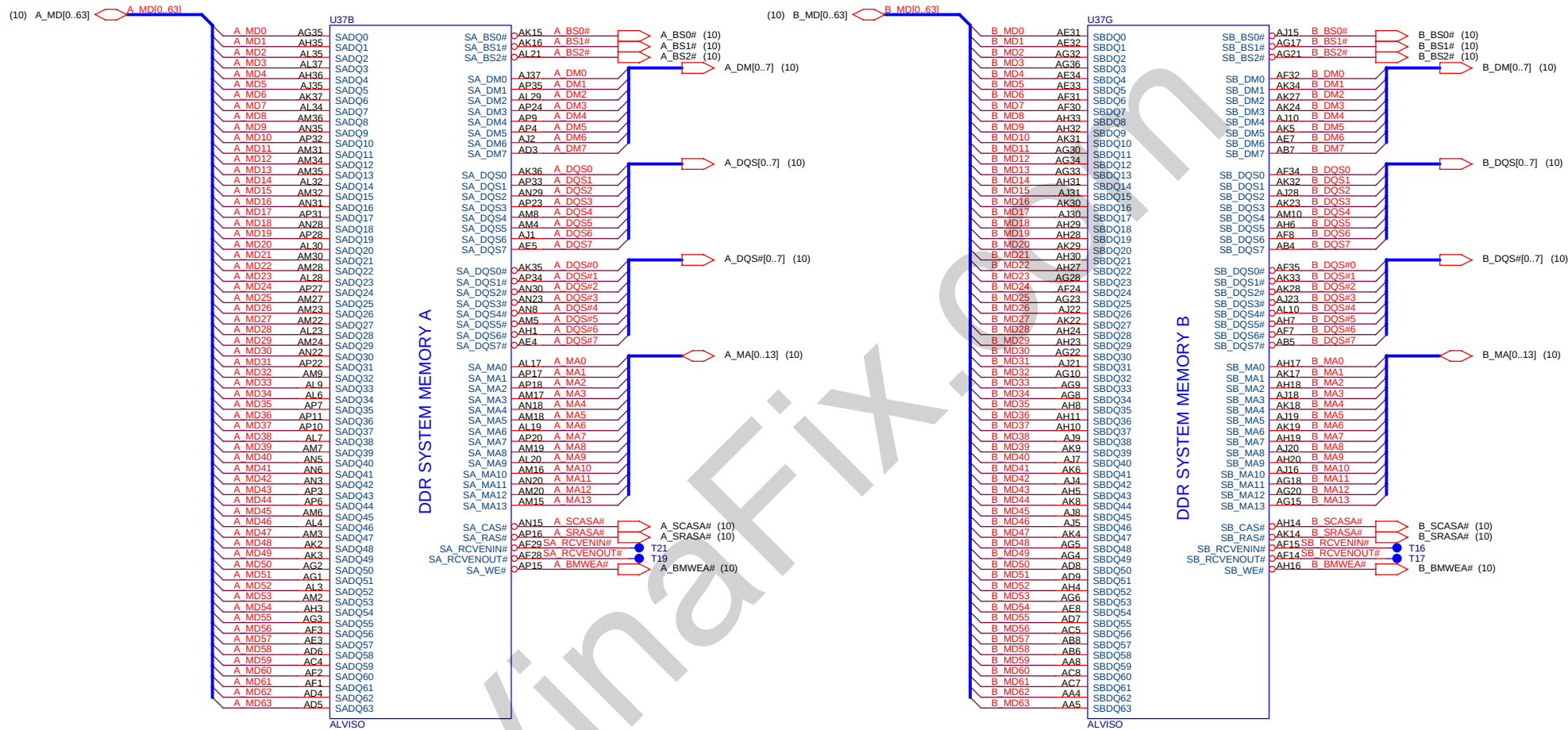
MA1 SYSTEM BLOCK DIAGRAM



PROJECT : MA1
Quanta Computer Inc.

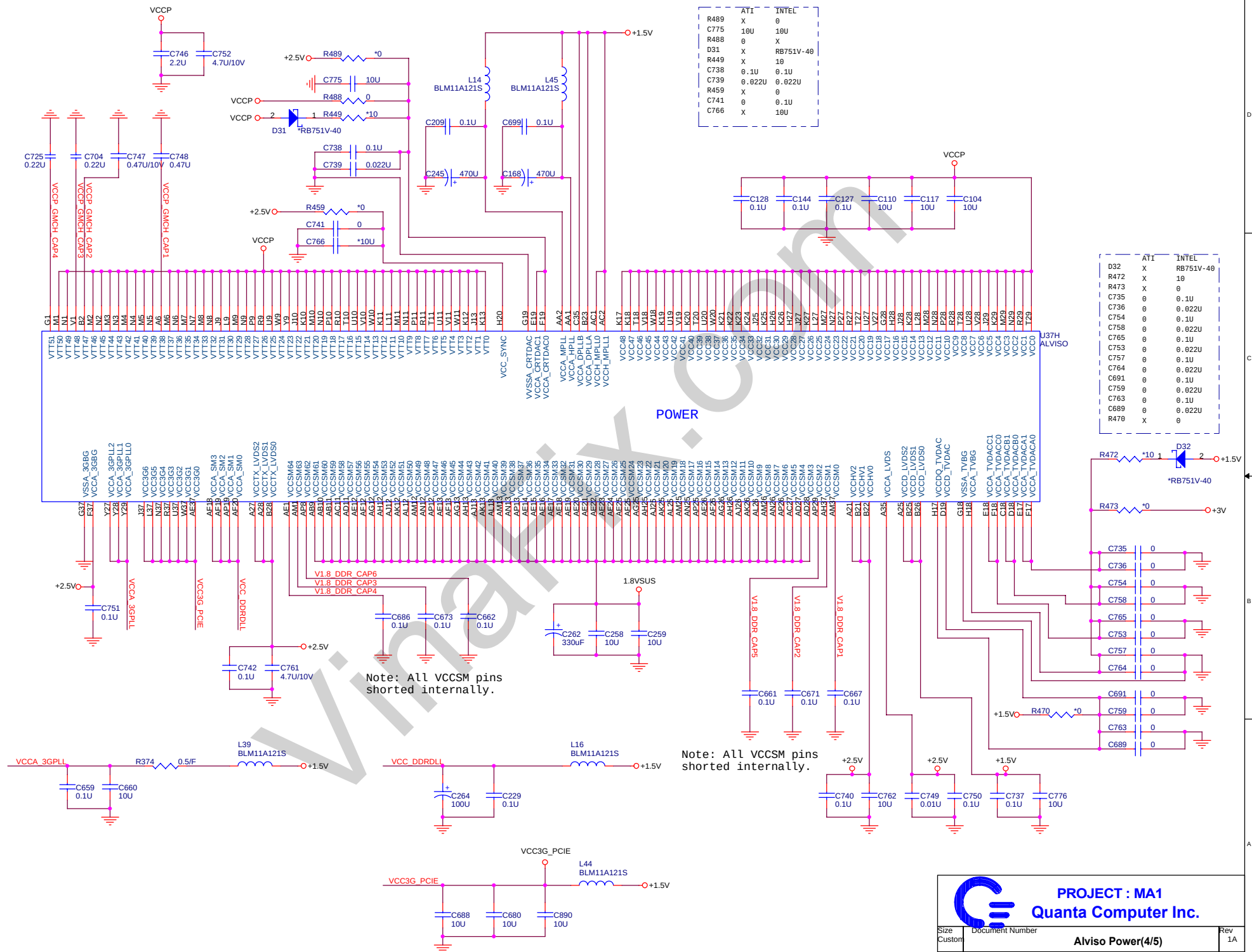


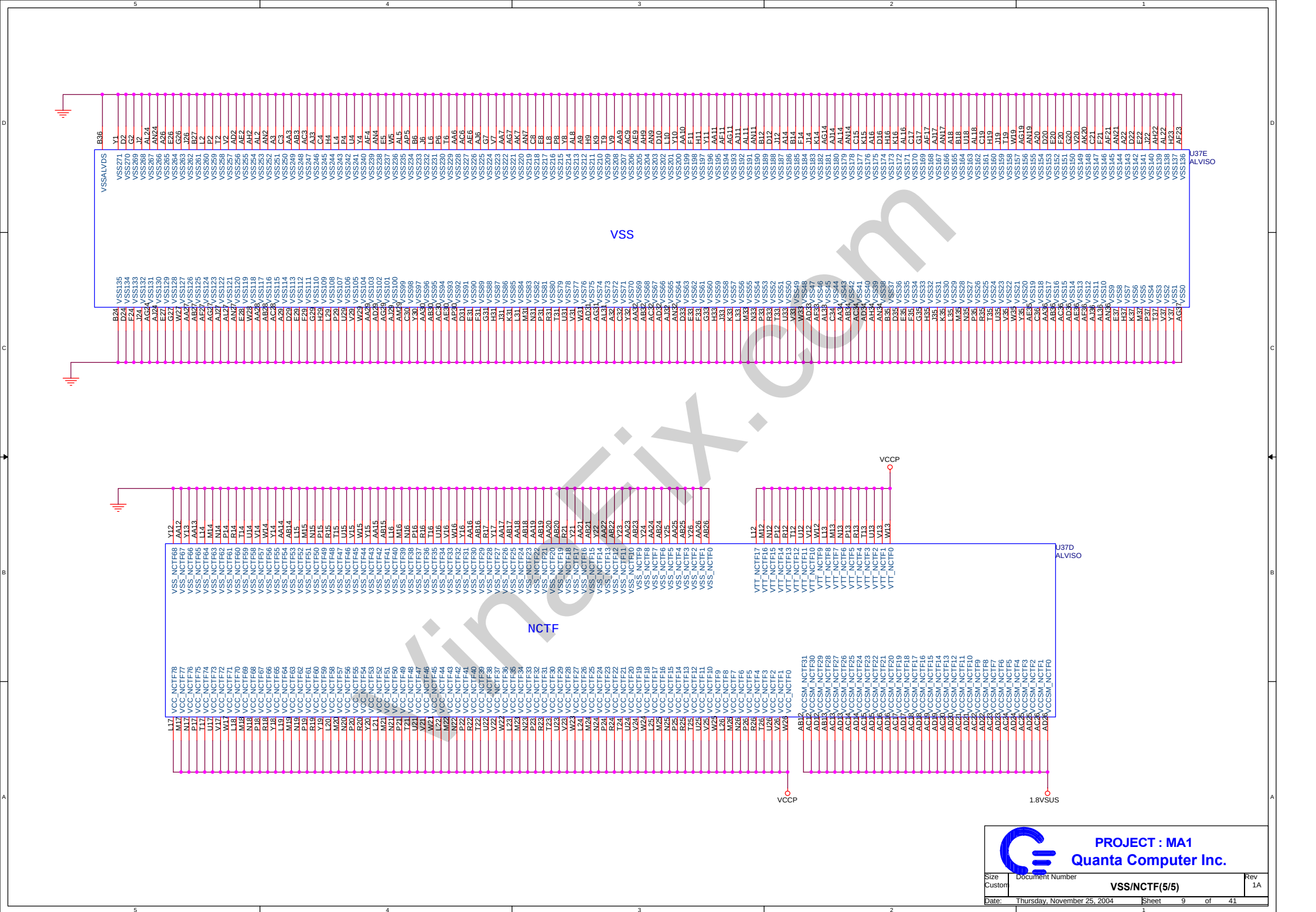


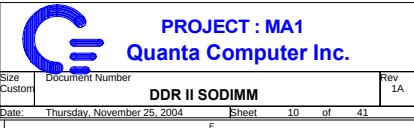


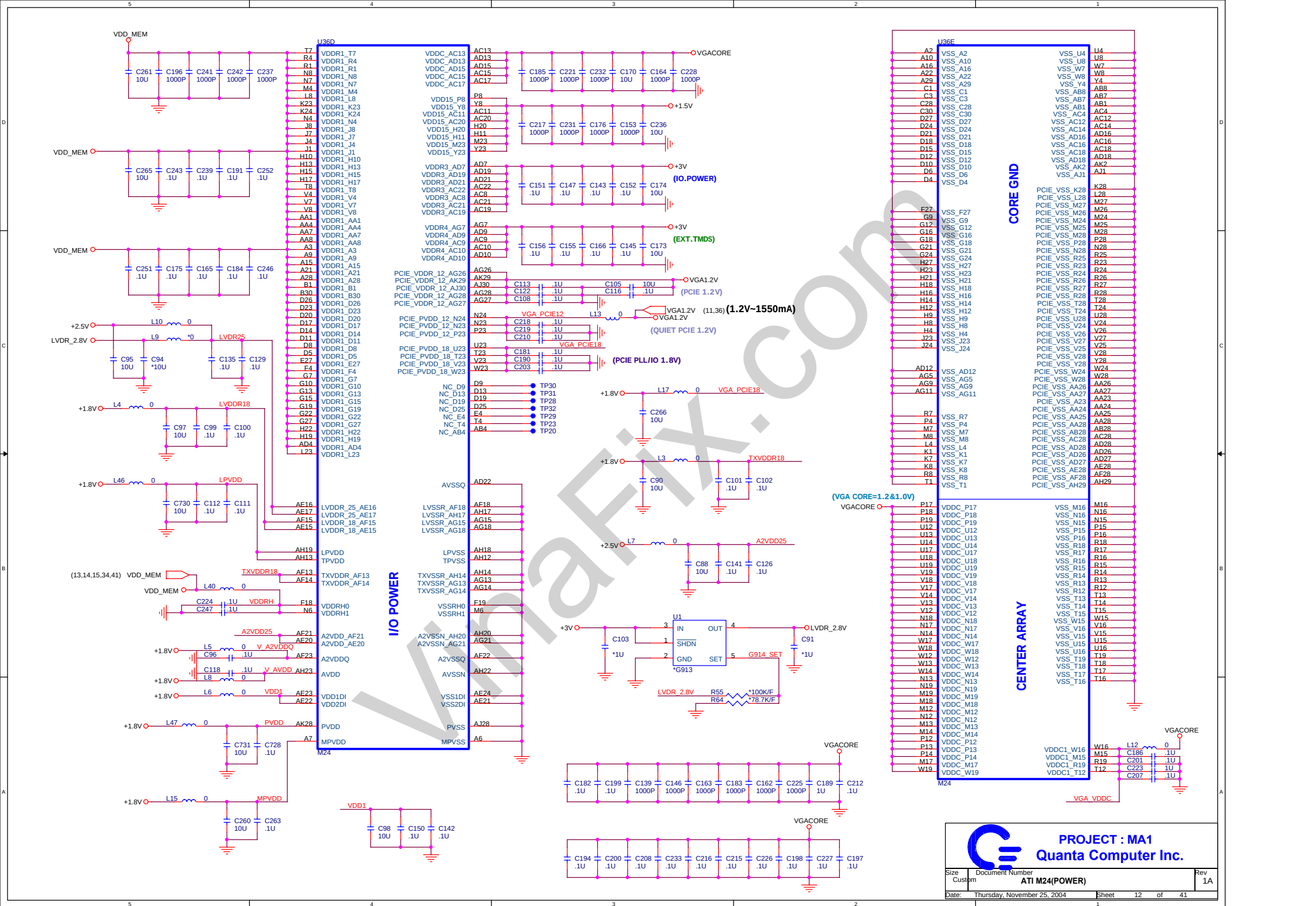
PROJECT : MA1
Quanta Computer Inc.

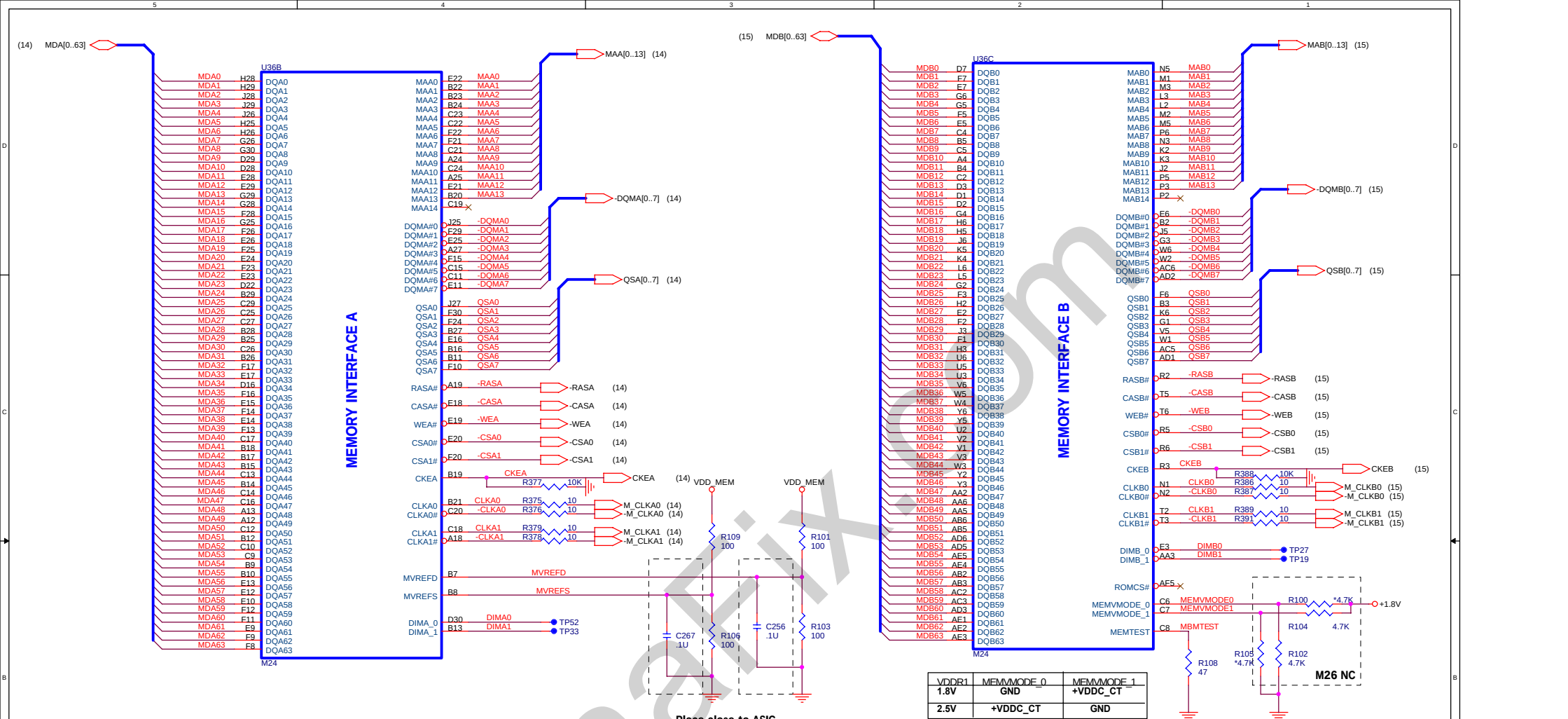
Size	Document Number	Rev
Custom	ALVISO DDR(3/5)	1A
Date:	Thursday, November 25, 2004	Sheet 7 of 41









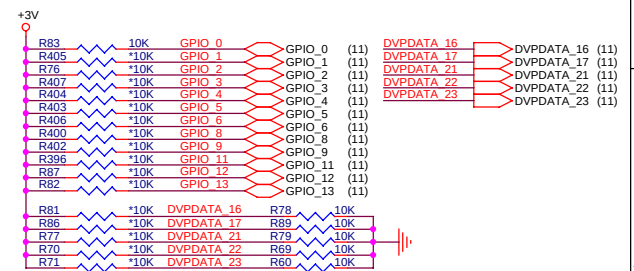


STRAPS PIN

GPIO_0	PCI-Express Current Calibration Bandgap Backup 0: use reference voltage from Bandgap 1: use reference voltage from resistor divider
GPIO_1	PCI-Express PLL Calibration force enable 0: Disable PLL force calibration 1: Enable PLL force calibration
GPIO_(3,2)	00: PCI Express 1.0 mode 01: RESERVED 10: PCI Express 1.0 mode 11: RESERVED
GPIO_4	Turn off PCI-Express impedance / strength calibration 0: enable 1: disable
GPIO_5	Bypass PCI-Express PLL
GPIO_6	PCI-Express transmitter current compensation 0: Normal 1: Inject extra current for output buffer switching

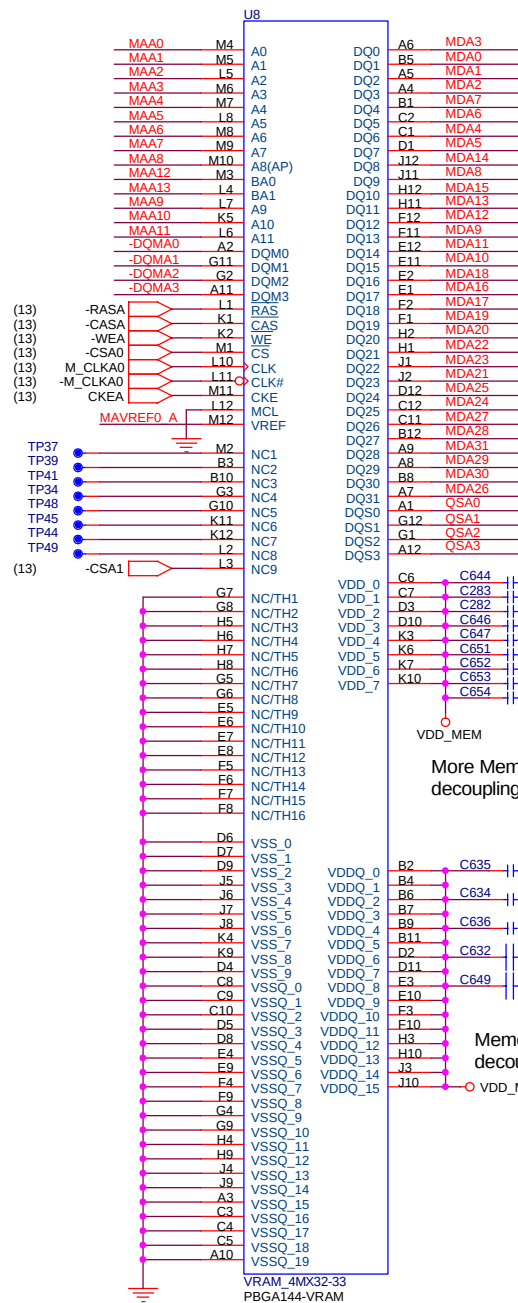
STRAPS PIN

GPIO_8	Strap to set the debug muxes to bring out DEBUG signals even if registers are inaccessible				
GPIO(9,13:11)	ROMIDCFG 0x0x: No ROM, CHG_ID=0 0x1x: No Rom, CHG_ID=1 1000: Parallel ROM, Chip ID's from ROM 1000: Parallel ROM, Chip ID's from ROM				
DVPDATA_21-23	DVPDATA_23	DVPDATA_22	DVPDATA_21	DVPDATA_21	
MEM TYPE	0	0	0	Samsung 8M x 32 (1.8V) - M24	
	0	0	1	Samsung 4M x 32 (1.8V) - M24	
	0	1	0	Hynix 8M x 32 (1.8V) - M24	
	0	1	1	Samsung 4M x 32 (1.8V) - M22	
	1	0	0	Hynix 4M x 32 (1.8V) - M24	
	1	0	1		
	1	1	0		
	1	1	1		



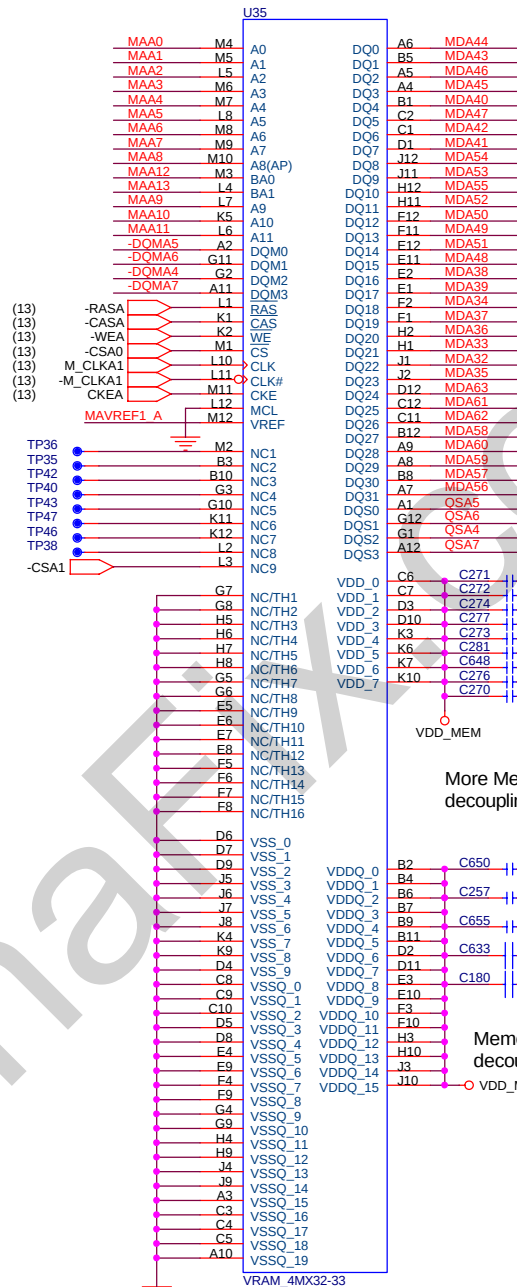
PROJECT : MA1
Quanta Computer Inc.

Size	Document Number	Rev
Custom	ATI M24 MEM/STRAPS PIN	1A
Date:	Thursday, November 25, 2004	Sheet 13 of 41



More Memory
decoupling

Memory
decoupling



More Memory
decoupling

Memory
decoupling

VGA DDR MEMORY A

@64/128MBytes DDR 128Mbit 1MX32X4 uBGA

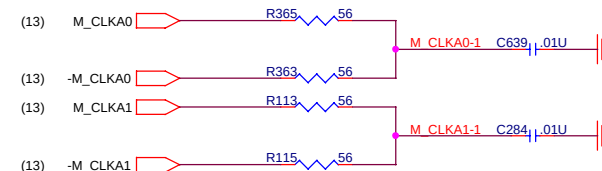
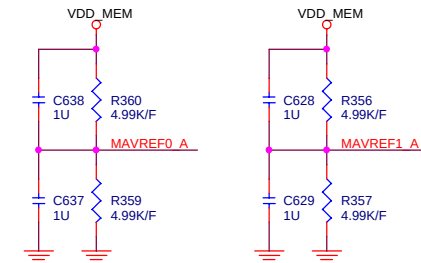
MAA[0..13] (13)

MDA[0..63] (13)

-DQMA[0..7] (13)

QSA[0..7] (13)

Place close to memory



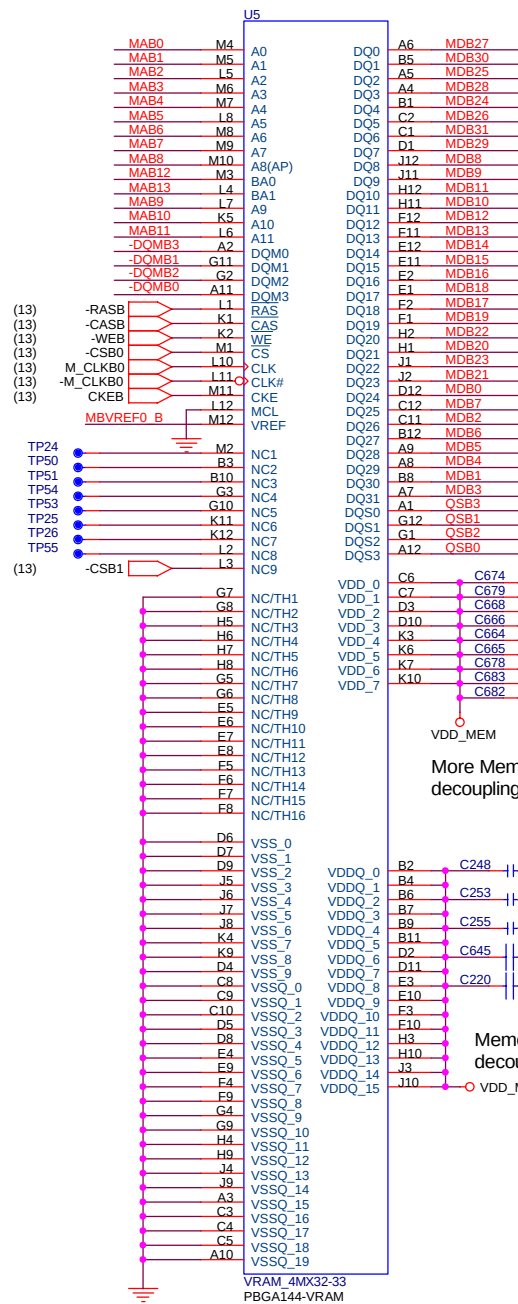
At least a 2.5:1 spacing between the pair

These resistors and caps must be placed to minimize any stubs. These must also be placed after the memory

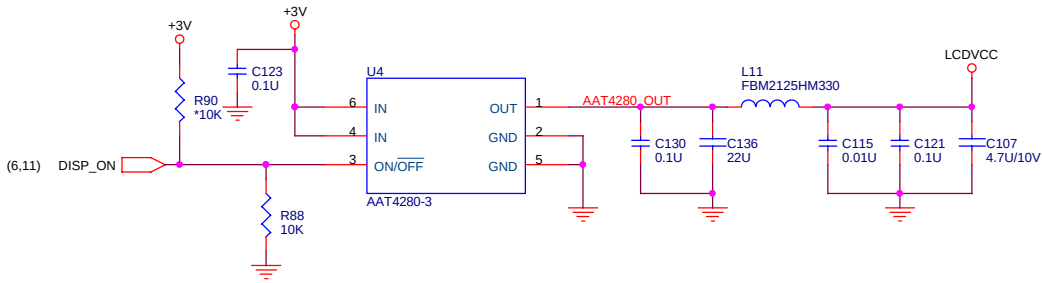


PROJECT : MA1
Quanta Computer Inc.

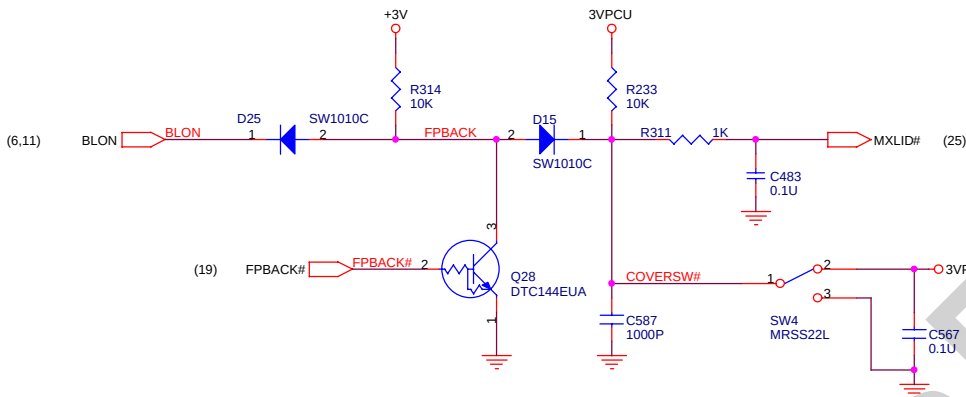
Size B	Document Number VGA DDR VRAM-A CANNEL	Rev 1A
Date: Thursday, November 25, 2004	Sheet 14	of 41



PANEL VCC CONTROL

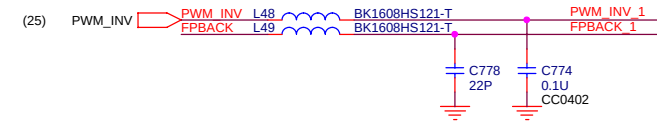
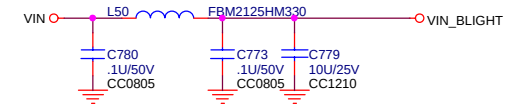
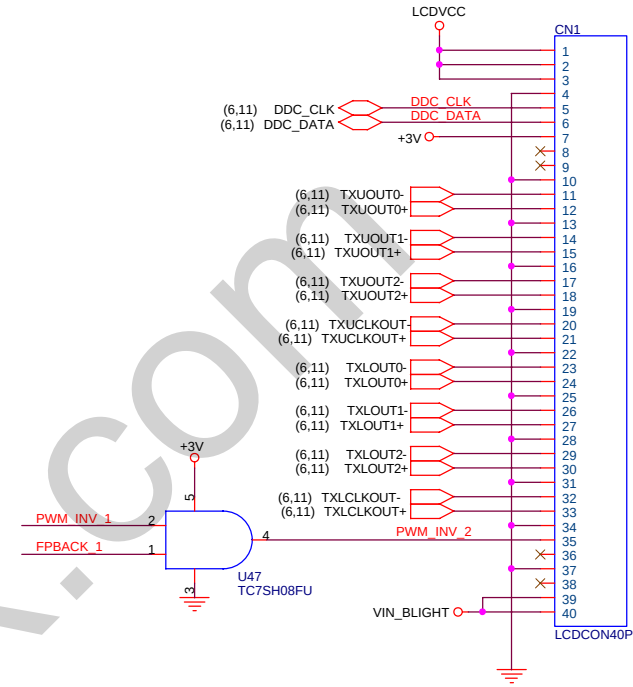


BACKLIGHT CONTROL



Del Q5, Q9, R27, R51, C159

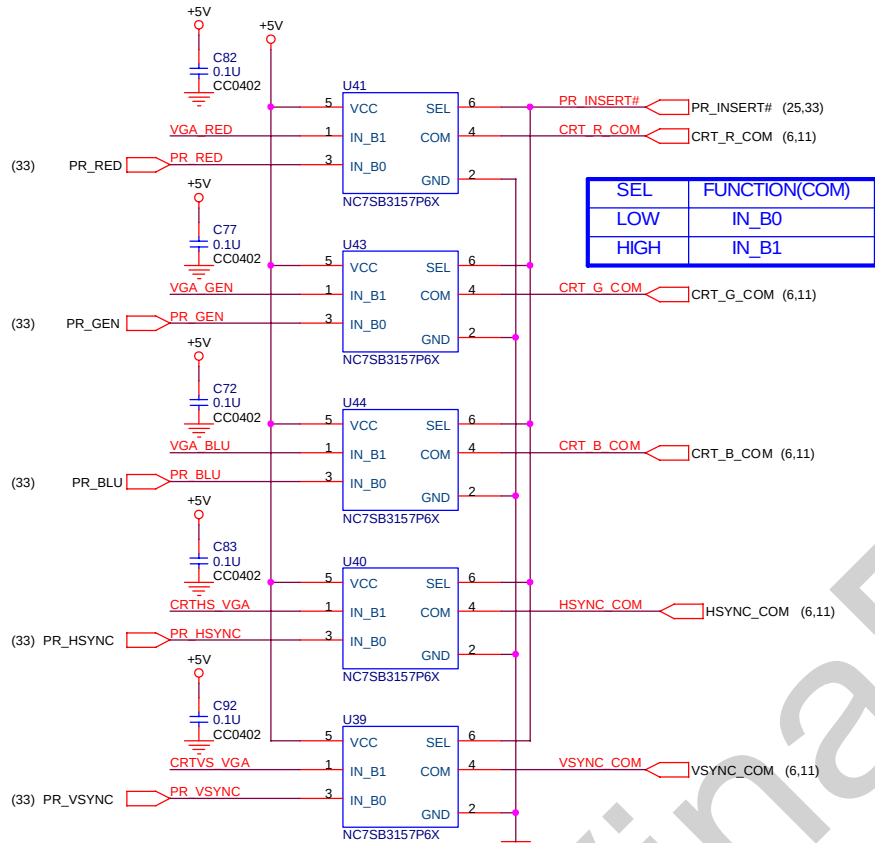
LCD CONNECTOR



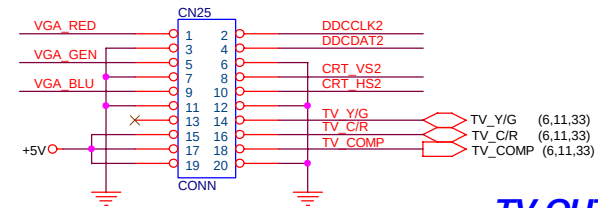
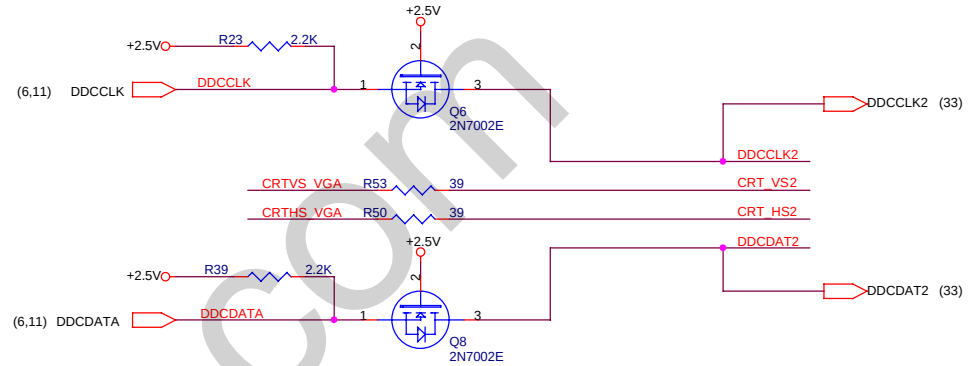
PROJECT : MA1
Quanta Computer Inc.

Size	Document Number	Rev
B	LCD LVDS CON	1A
Date:	Thursday, November 25, 2004	Sheet 16 of 41

CRT SWITCH



CRT PORT

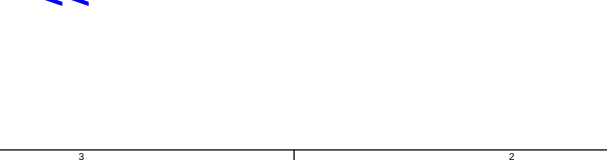
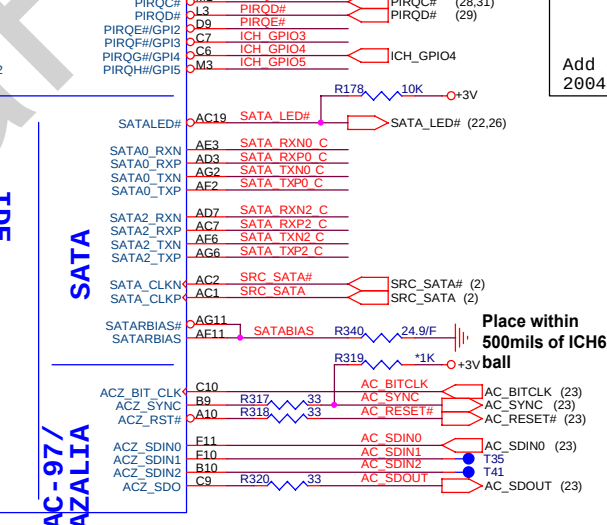
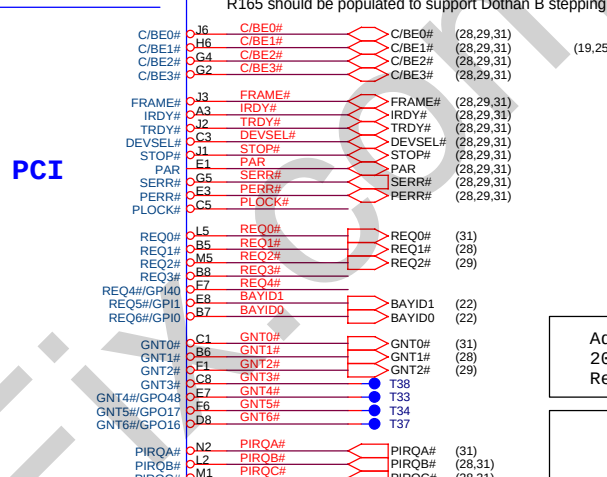
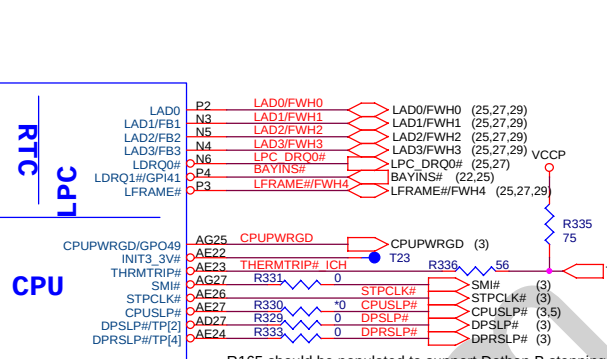
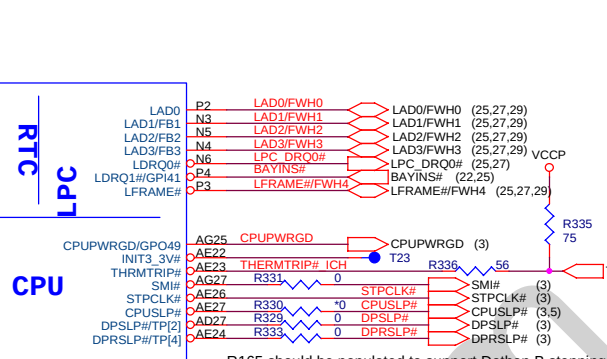
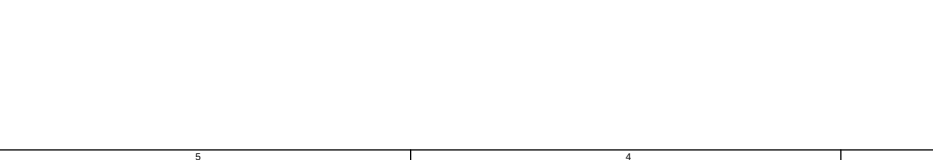
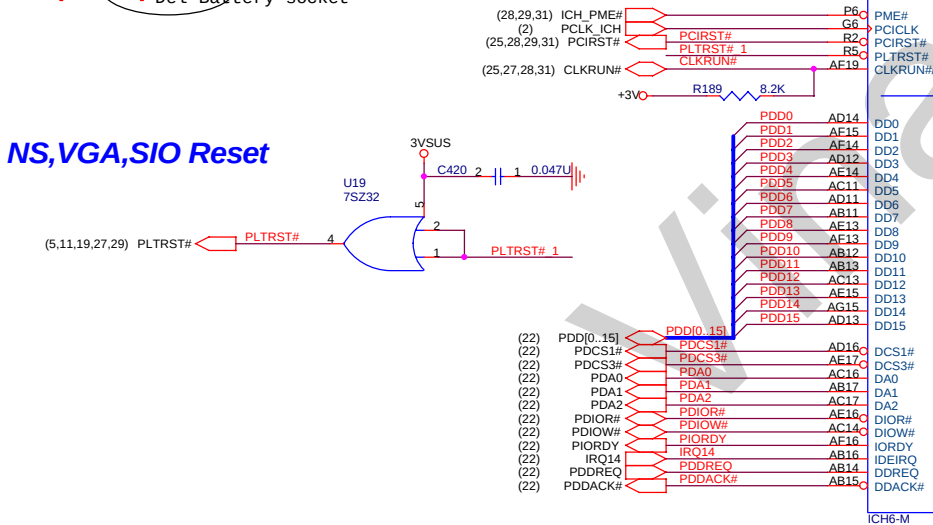
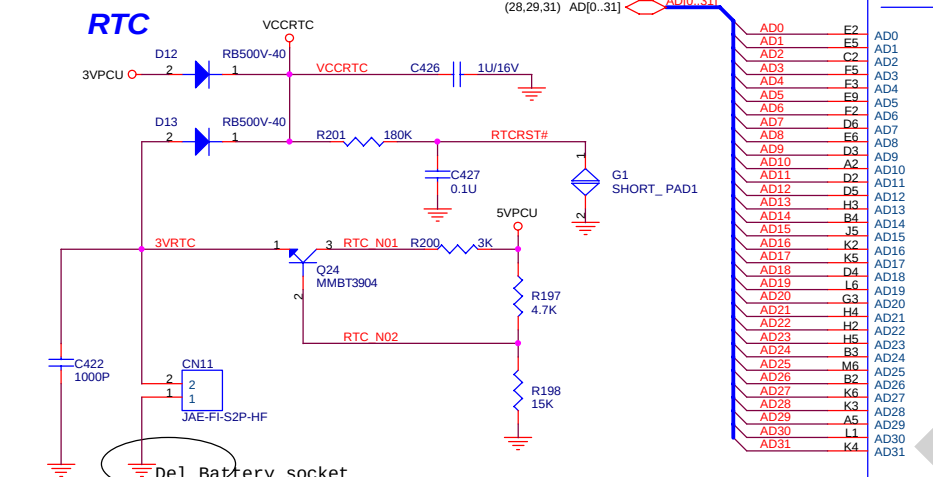
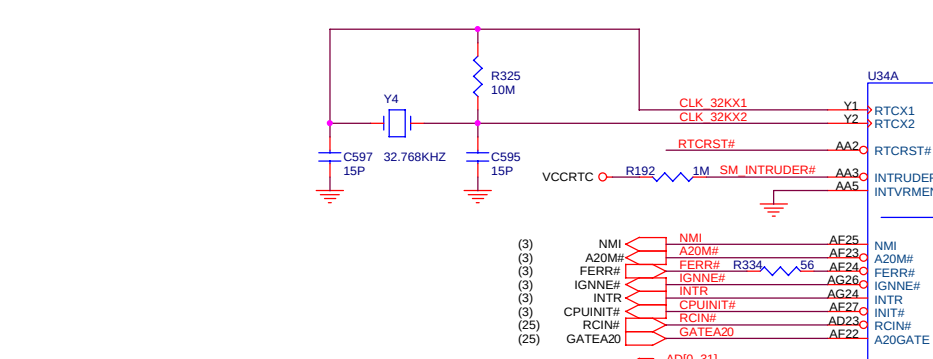


TV-OUT



PROJECT : MA1
Quanta Computer Inc.

Size B	Document Number SVIDEO/CRT/PANLE/HDTV	Rev 1A
Date: Thursday, November 25, 2004	Sheet 17 of 41	



PROJECT : MA1
Quanta Computer Inc.

Size	Document Number	Rev
Custom	ICH6(1/3)	1A
Date:	Thursday, November 25, 2004	Sheet 18 of 41

PCI Pullups

PIRQA# R175 56 VCCP
PIRQB# R174 56 VCCP
RCIN# R332 10K +3V
GATEA20 R337 10K +3V
PIORDY R188 4.7K +3V

PCI Pullups

PIRQA# R41 5 3V
PIRQB# R41 7 3V
PIRQC# R41 8 3V
REQ2# R41 9 3V
REQ0# R41 10 3V

PCI Pullups

REQ4# R42 6 3V
REQ3# R42 7 3V
SERIRQ R42 8 3V
REQ0# R42 9 3V
REQ1# R42 10 3V

PCI Pullups

IRDY# R48 6 3V
DEVSEL# R48 7 3V
REQ1# R48 8 3V
PLOCK# R48 9 3V
REQ0# R48 10 3V

PCI Pullups

ICH_GPIO5 R521 8.2K +3V
ICH_GPIO4 R522 8.2K +3V

Add HDD detect
2004.09.13 Rev.C
Main HDD
1: PATA
0: SATA

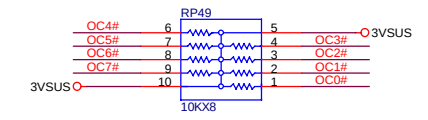
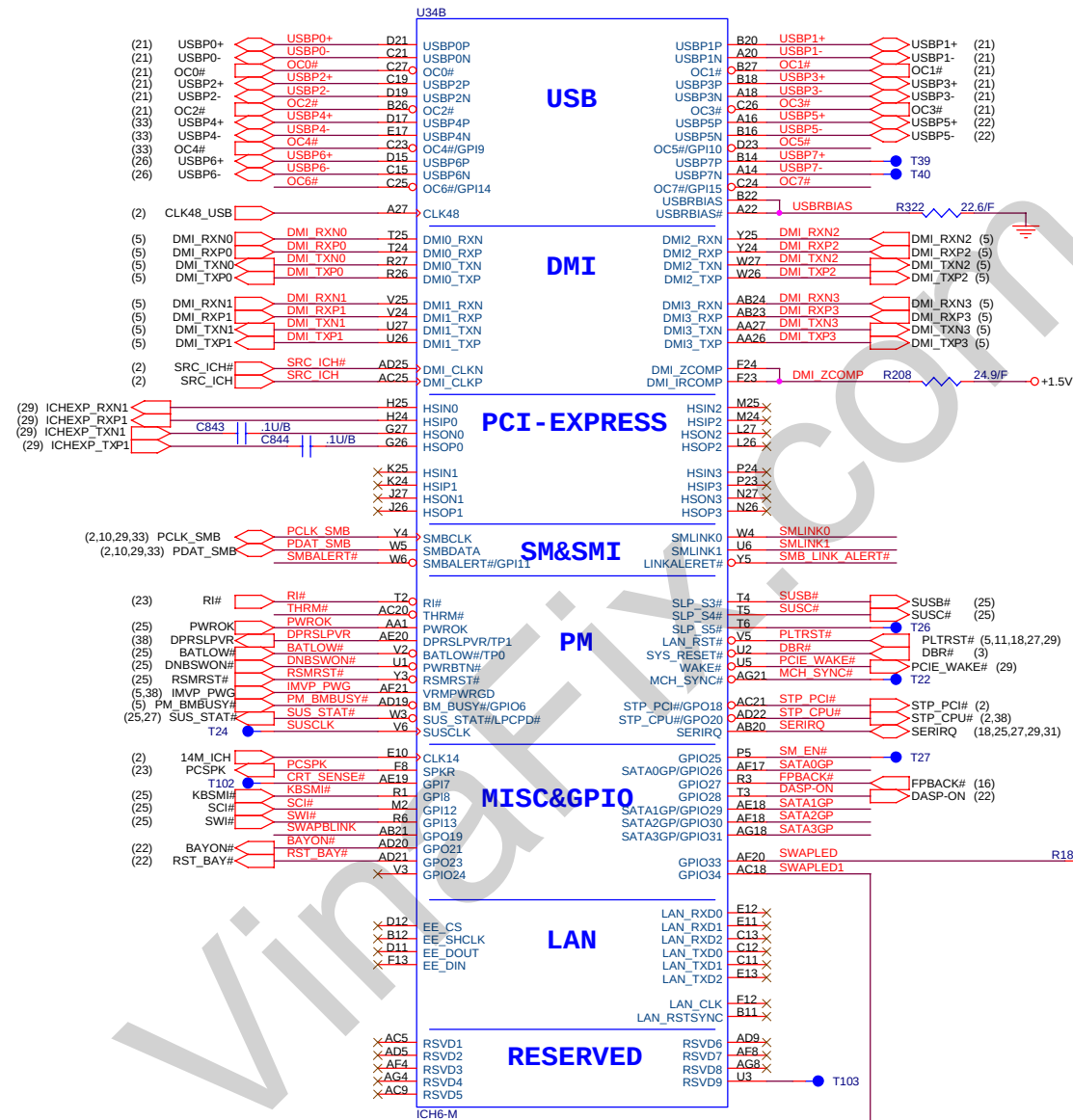
Crisis SW
2004.09.13 Rev.C
SW7
SHORT_PAD1

Distance between the ICH-6 M and cap on the "P" signal should be identical distance between the ICH-6 M and cap on the "N" signal for same pair.

SATA RXN0 C602 *3900P SATA RXN0 SATA_RXN0 (22)
SATA RXP0 C603 *3900P SATA RXP0 SATA_RXP0 (22)
SATA TXN0 C336 *3900P SATA TXN0 SATA_TXN0 (22)
SATA TXP0 C337 *3900P SATA TXP0 SATA_TXP0 (22)
SATA RXN2 C601 3900P SATA RXN2 SATA_RXN2 (22)
SATA RXP2 C600 3900P SATA RXP2 SATA_RXP2 (22)
SATA TXN2 C771 3900P SATA TXN2 SATA_TXN2 (22)
SATA TXP2 C772 3900P SATA TXP2 SATA_TXP2 (22)

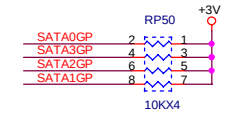
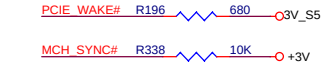
Place within 500mils of ICH6 ball

AC BITCLK (23)
AC_SYNC (23)
AC_RESET# (23)
AC_SDI0 (23)
AC_SDI1 (23)
AC_SDI2 (23)
AC_SDO (23)



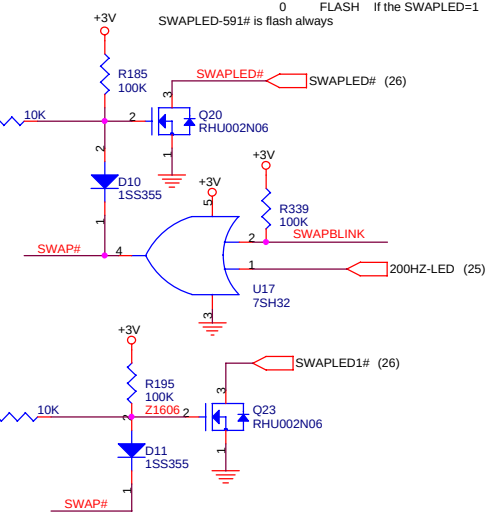
Place within 500mils of ICH-6

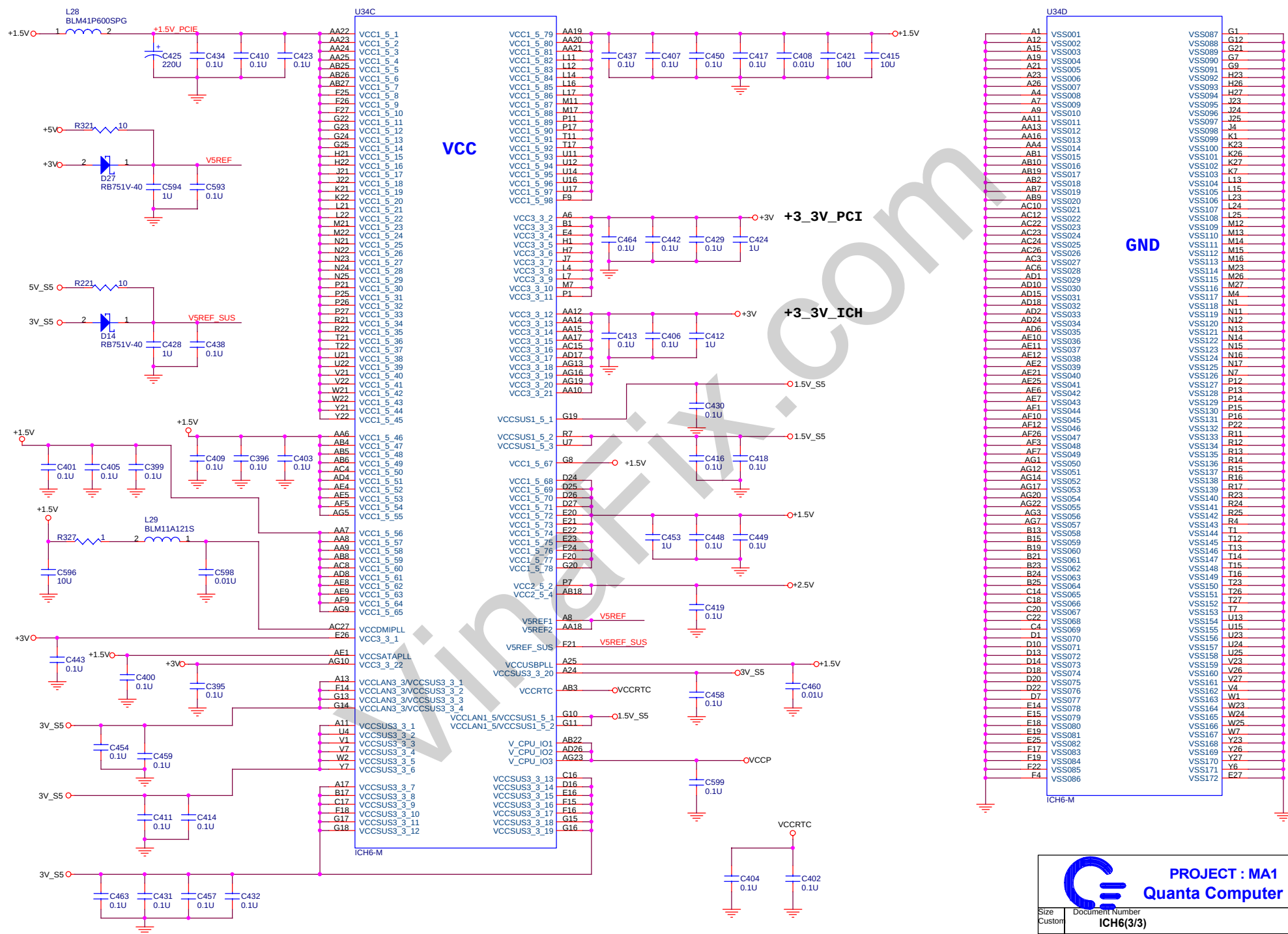
Place within 500mils of ICH-6



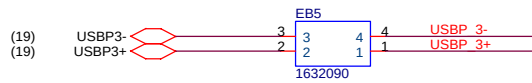
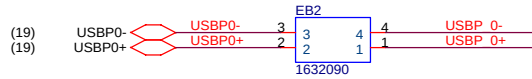
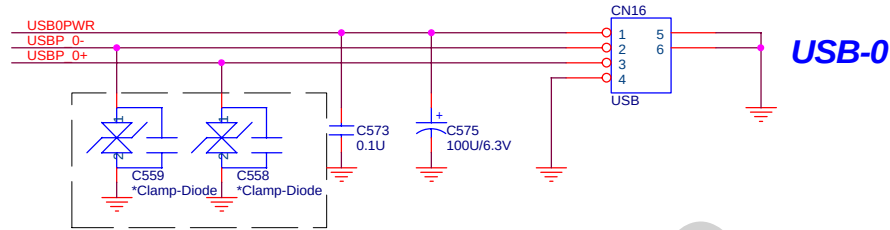
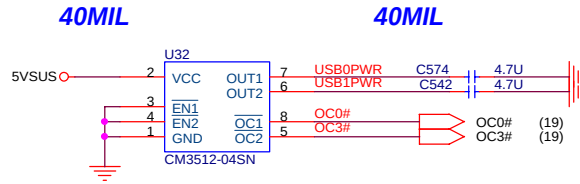
SWAPLED	1	0	1
SWAPLED#	0	1	0
SWAPLED#	0	1	0
SWAPLED#	0	1	0

SWAPLED# is flash always

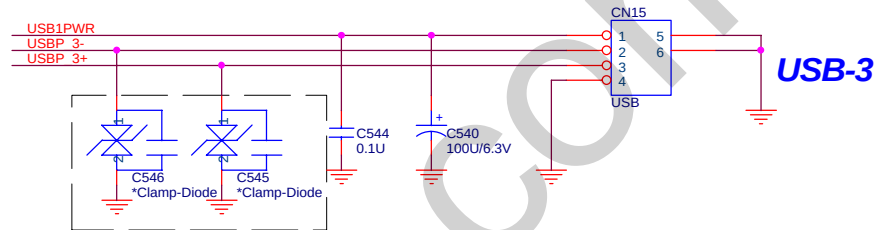




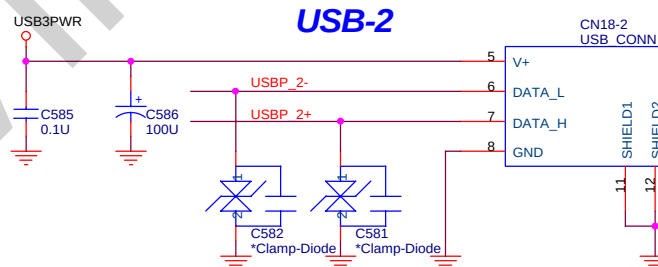
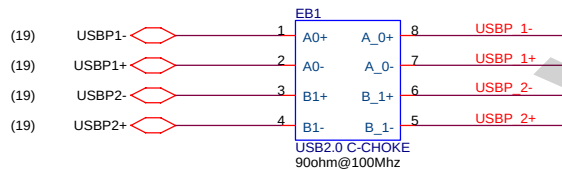
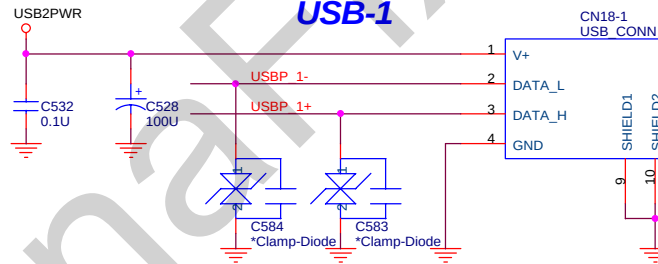
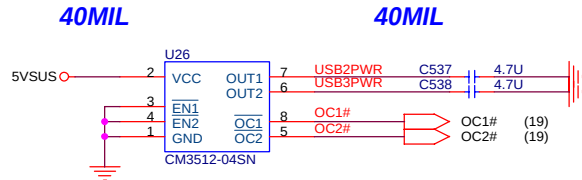
LEFT SIDE



LEFT SIDE



USB-1

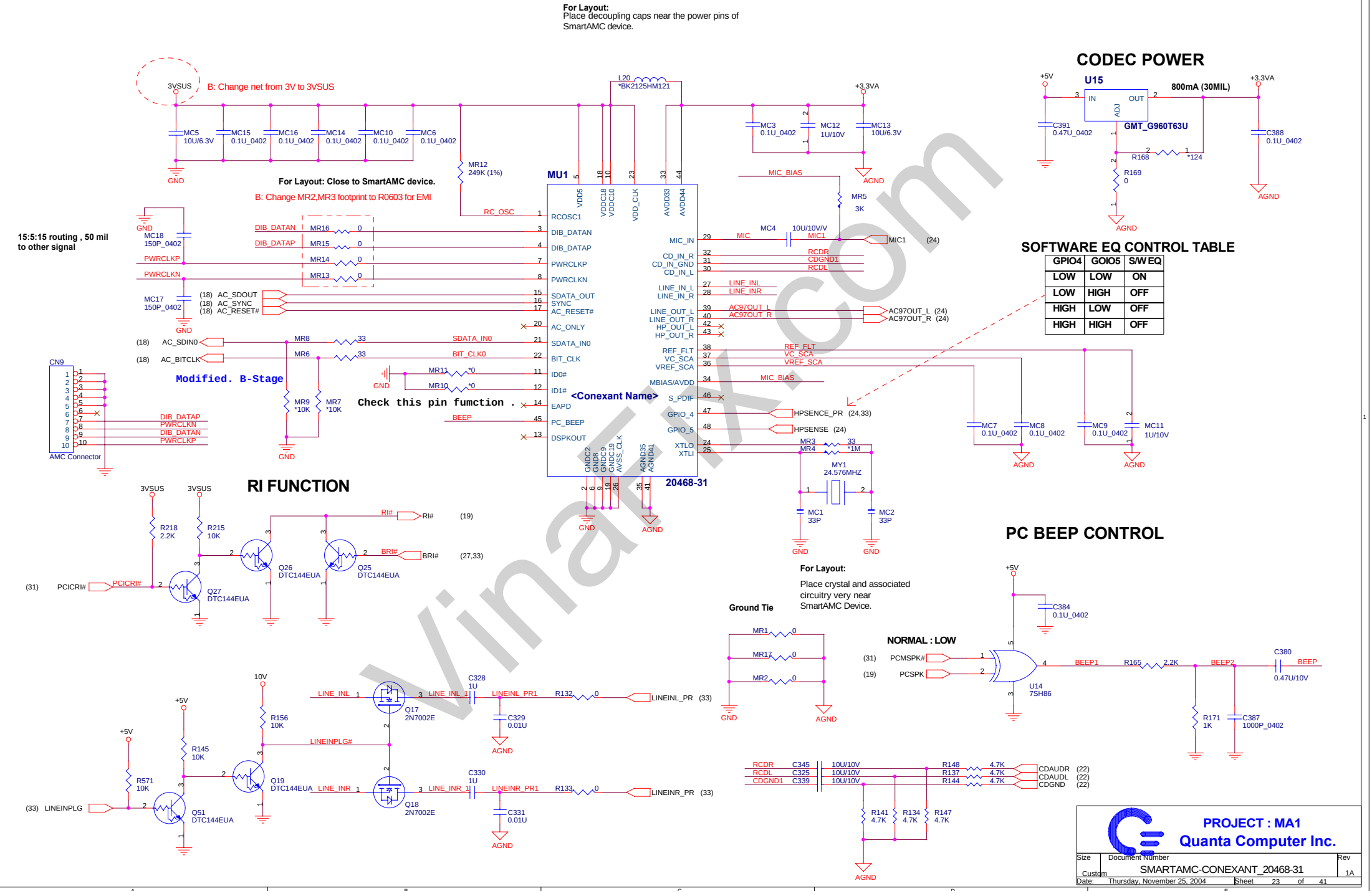


(26,28,31,33,35,37,38,41) 5VSUS

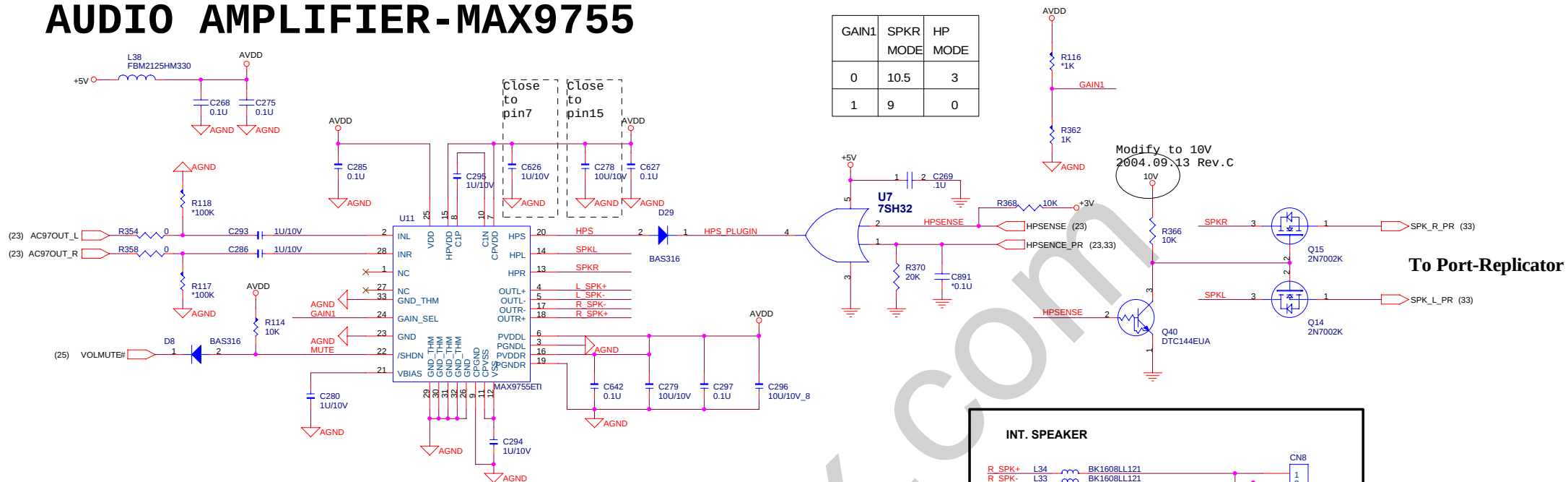


PROJECT : MA1
Quanta Computer Inc.

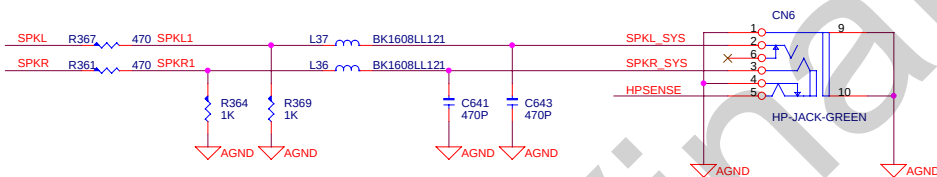
Size	Document Number	Rev
Custom	USB Ports	1A
Date:	Thursday, November 25, 2004	Sheet 21 of 41



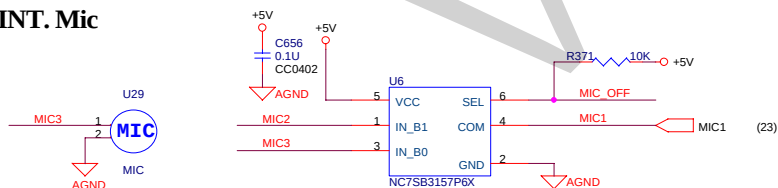
AUDIO AMPLIFIER-MAX9755



Headphone out

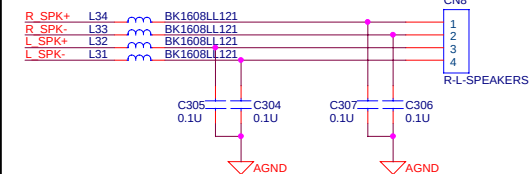


INT. Mic

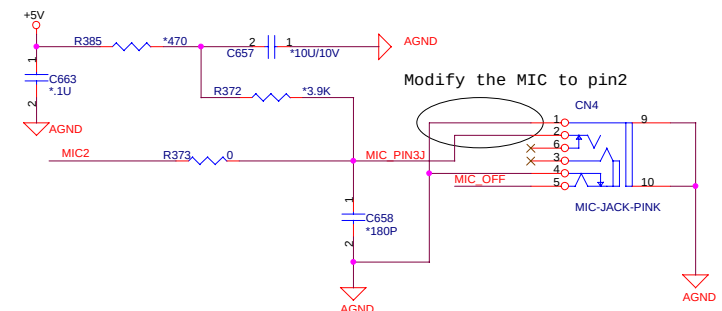


SEL	FUNCTION(COM)
LOW	IN_B0
HIGH	IN_B1

INT. SPEAKER



Mic in



PROJECT : MA1
Quanta Computer Inc.

Size	Document Number	Rev
Custom	AUDIO AMP & JACK	1A
Date	Thursday, November 25, 2004	Sheet 24 of 41

KBC-NS97551L

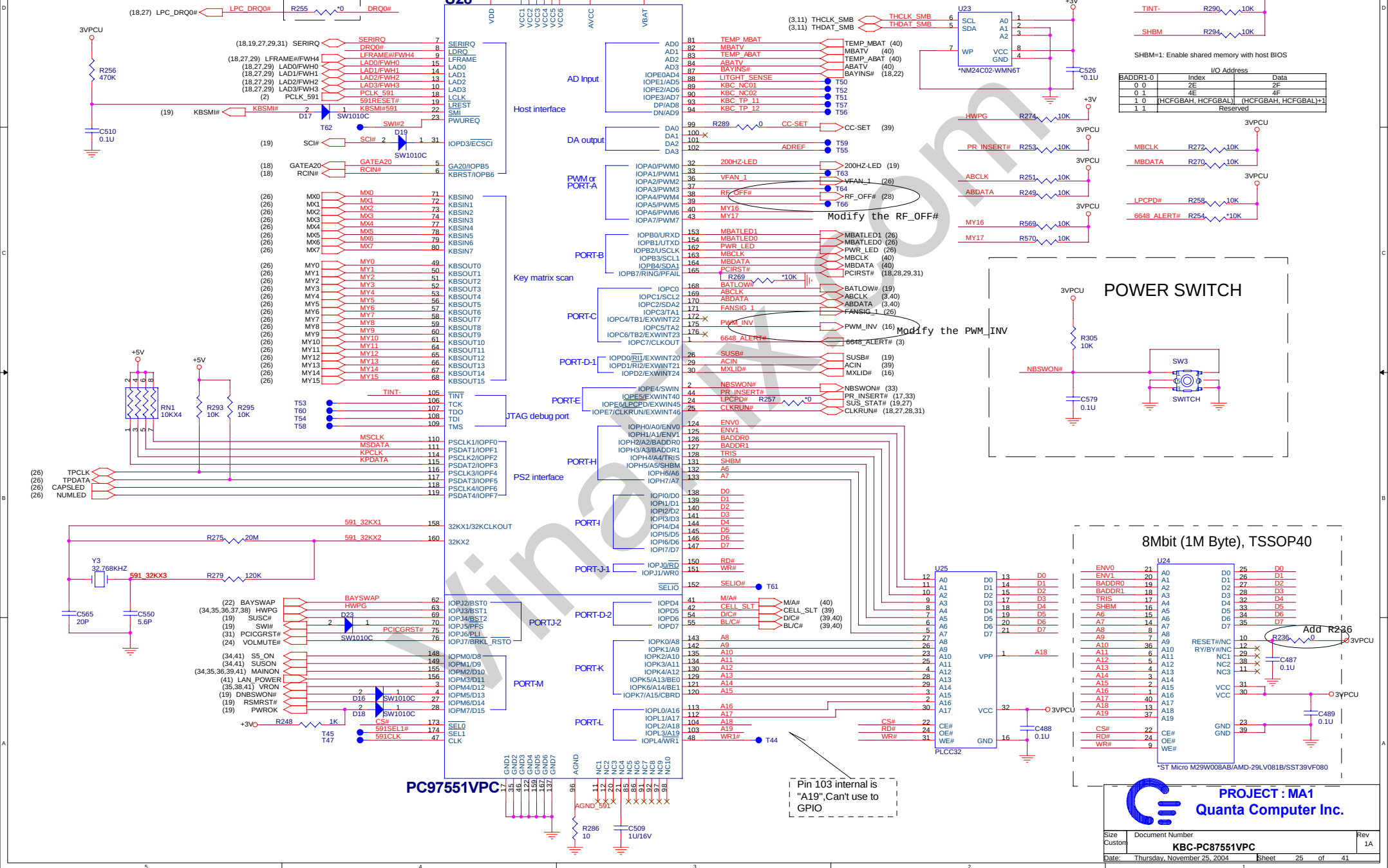
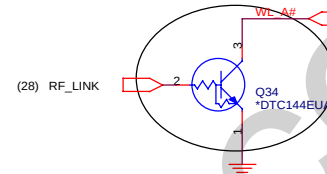
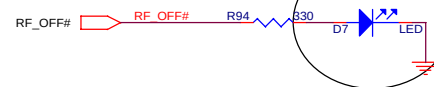


Diagram of the USB connector pinout for the Finger Printer. The connector is labeled CN13. The pins are numbered 1 through 5. The connections are: 3VSUS to Pin 5, USBP+ to Pin 4, USBP- to Pin 3, and 5VSUS to Pin 2. Pin 1 is not connected. The label "Finger Printer" is at the bottom right.

[illegible]

Changed the footprint
2004.09.13 Rev.C



1

12

DFHS12FS238

TP L

R6

1K

C54
0.1U

RV1
*VARISTOR

SW1

SWITCH

TP R

R85

1K

C131
0.1U

RV2
*VARISTOR

SW2

SWITCH

+5V

12 MIL

L41
HI0805Q310R

5VTP

C670
0.1U

TPDATA

L42

FCMI1608K221

TPDATA-1

TPCLK

L43

FCMI1608K221

TPCLK-1

C675
*10P

C685
*10P

TP L

TS DAT

TS CLK

TP R

CN2

12

11

10

9

8

7

6

5

4

3

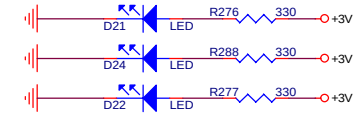
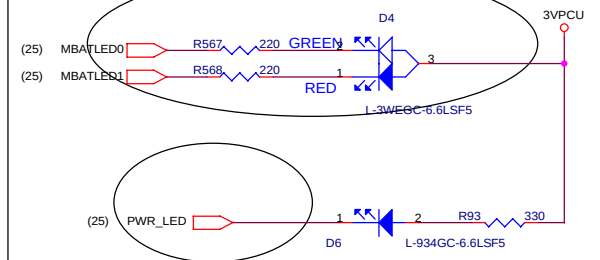
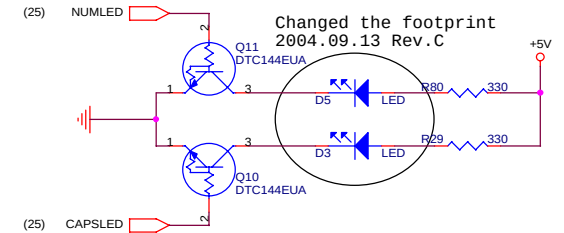
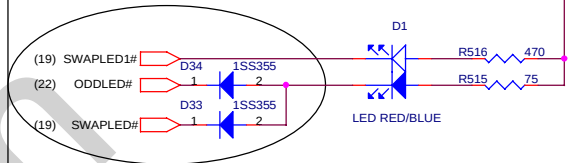
2

1

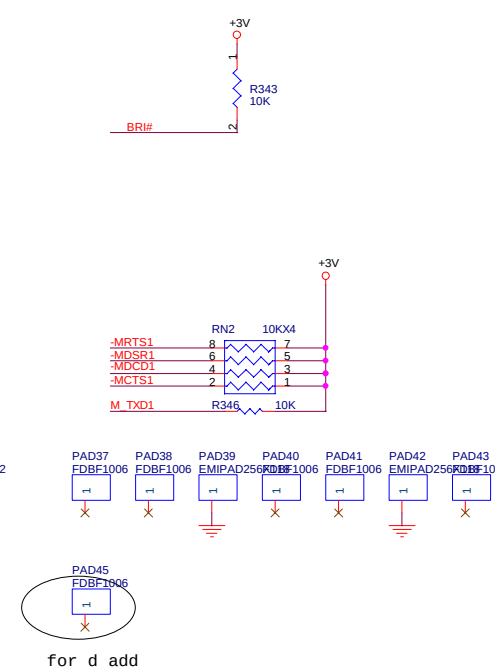
TOUCH PAD 12F

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

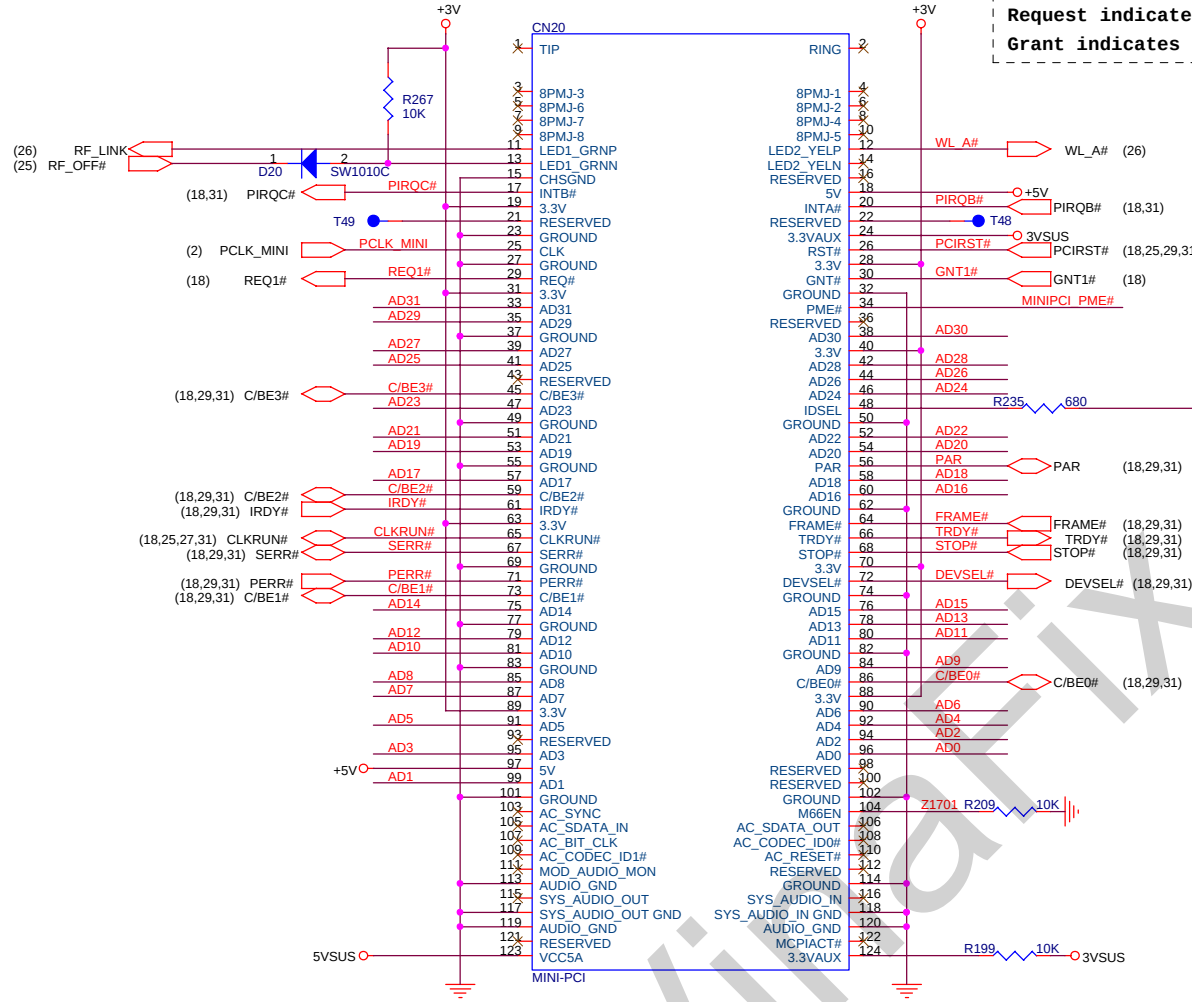
Changed the footprint
2004.09.13 Rev.C



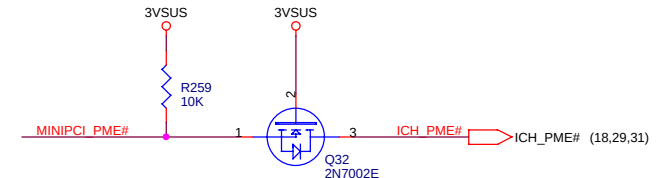
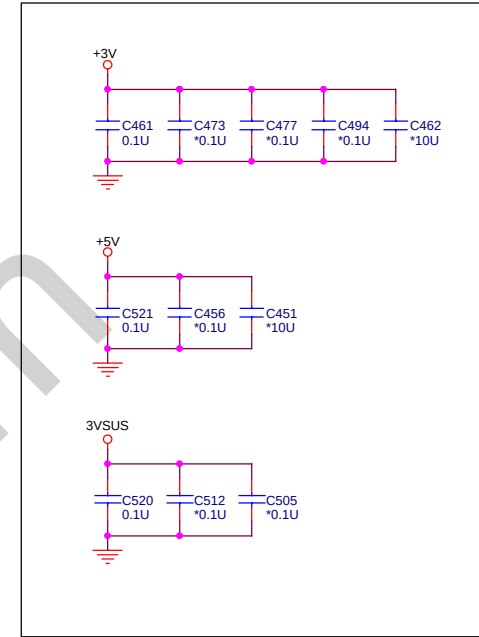
32



TYPE III MINI PCI SOCKET

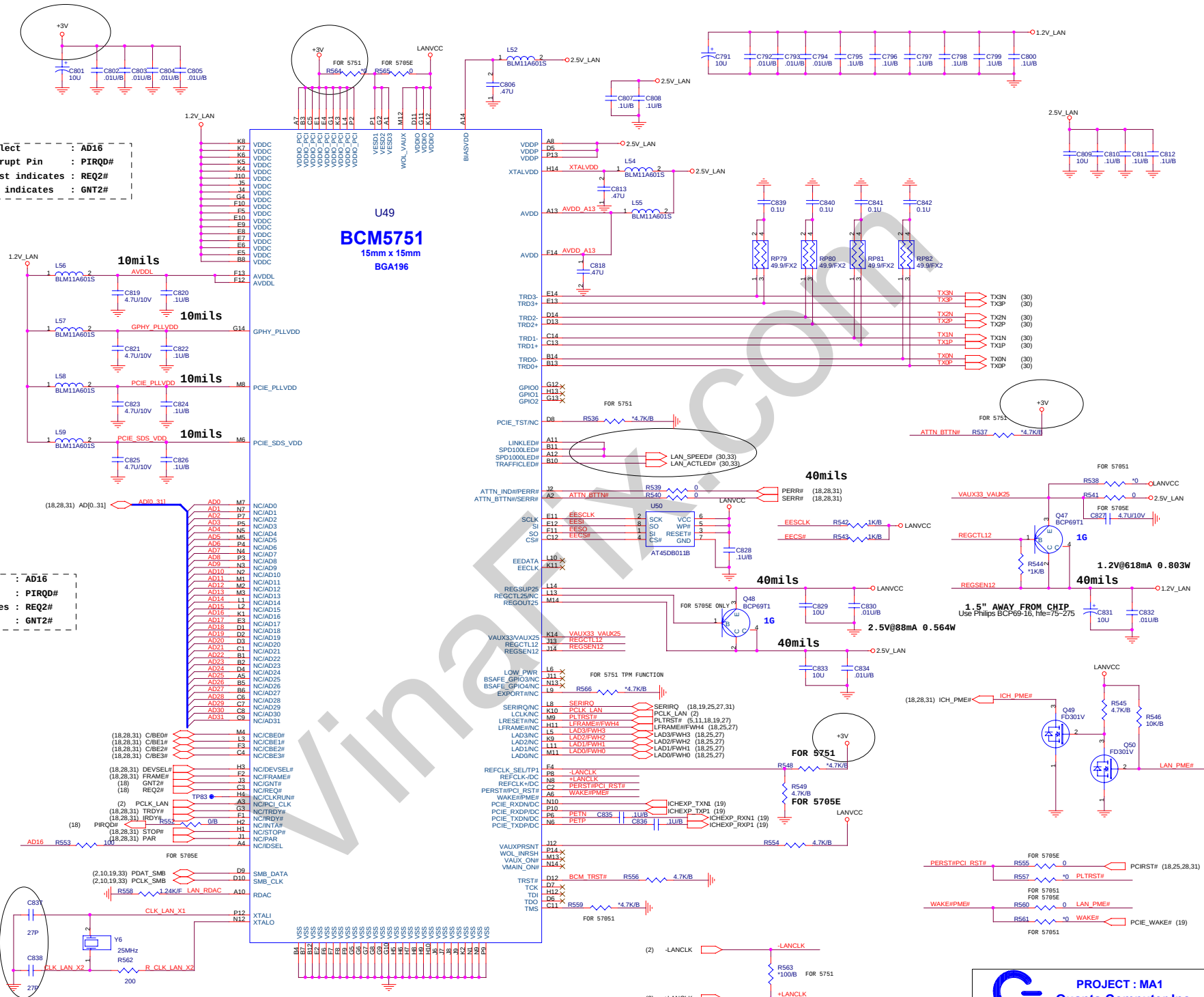


ID Select : AD20
 Interrupt Pin : PIRQB# , PIRQC#
 Request indicates : REQ1#
 Grant indicates : GNT1#

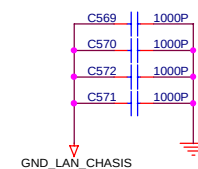
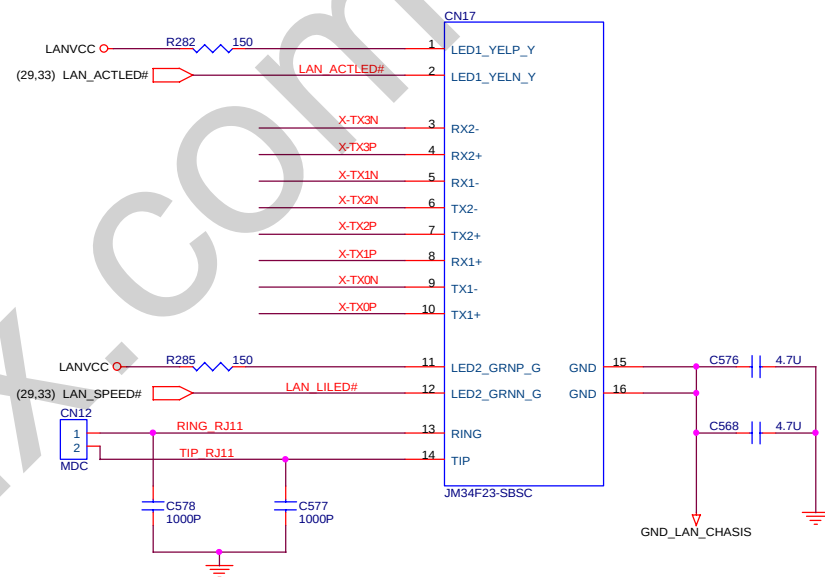
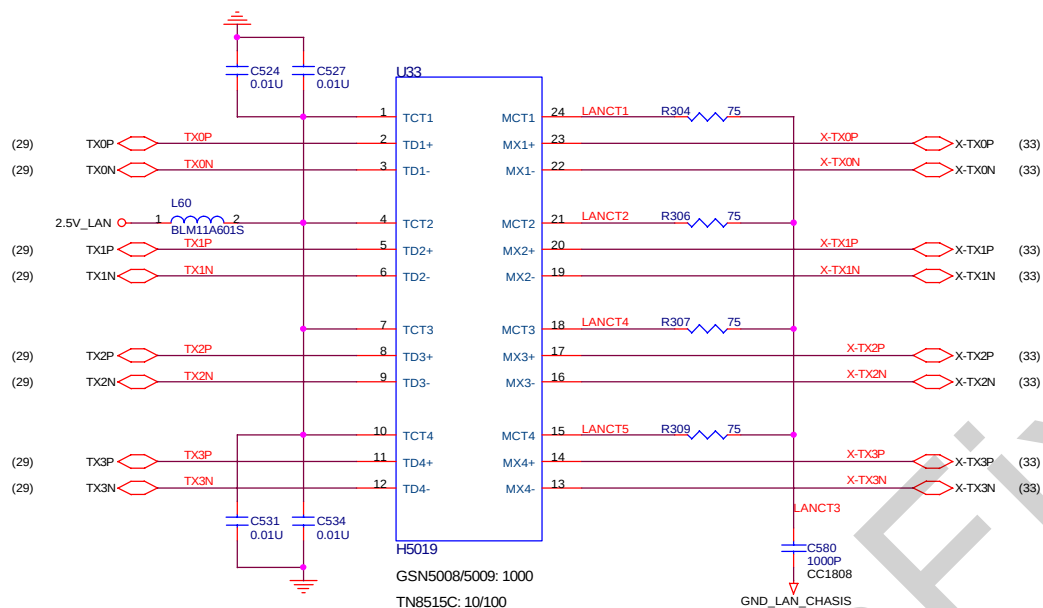


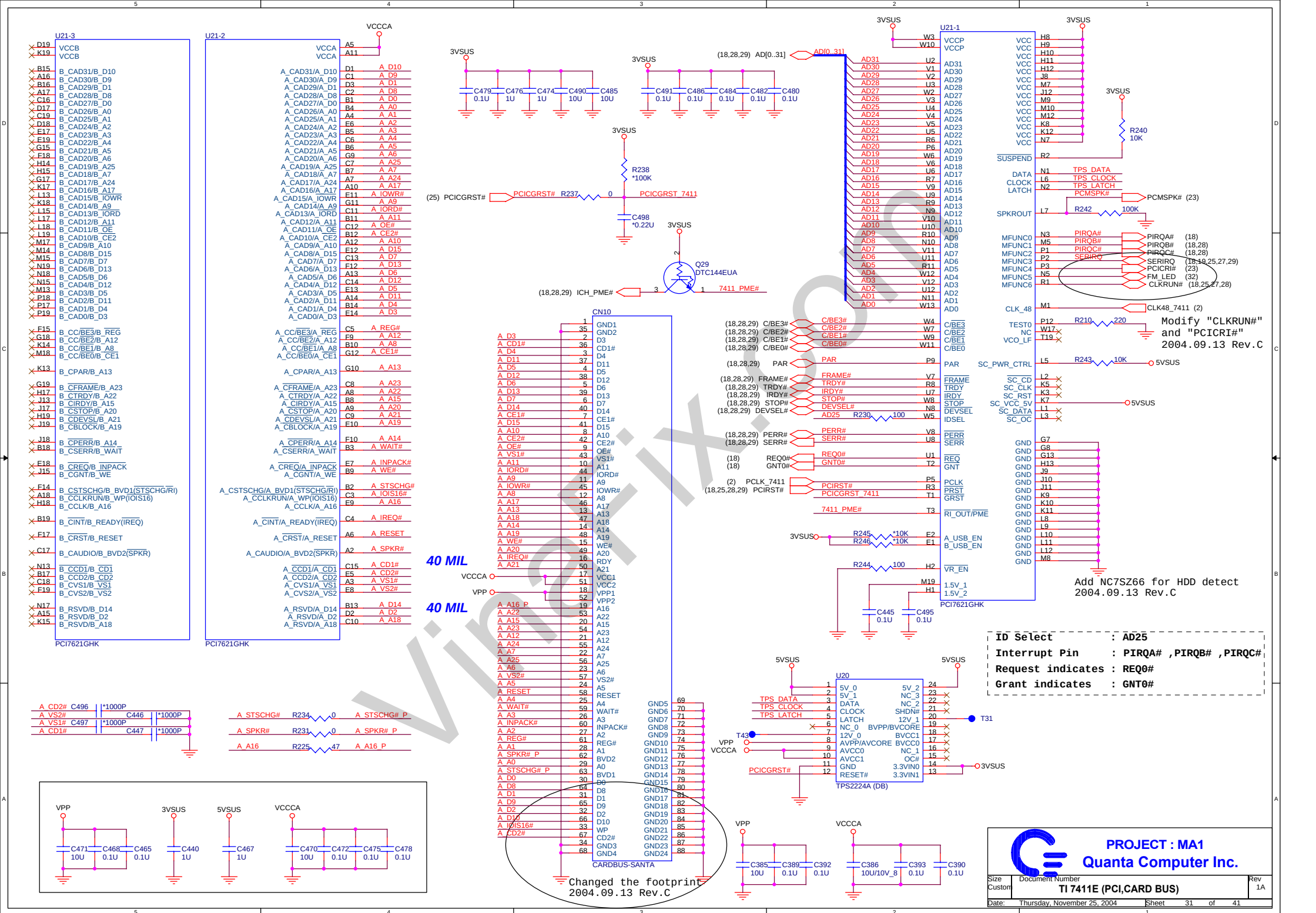
PROJECT : MA1
 Quanta Computer Inc.

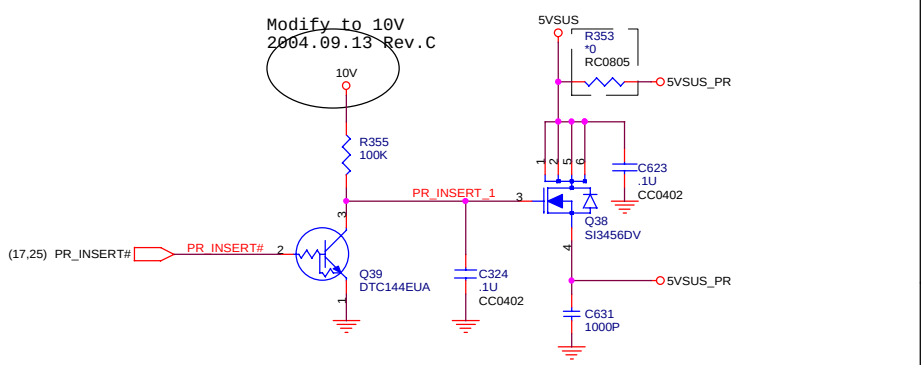
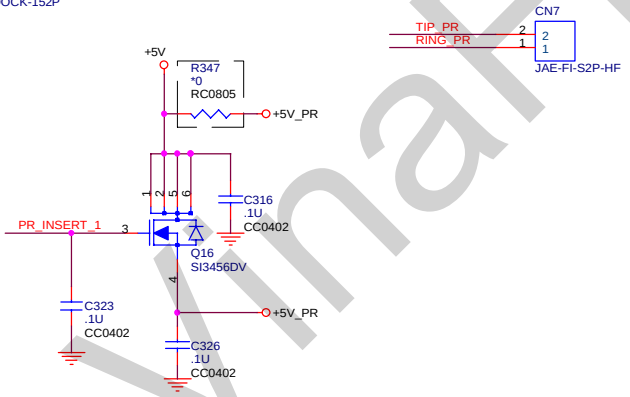
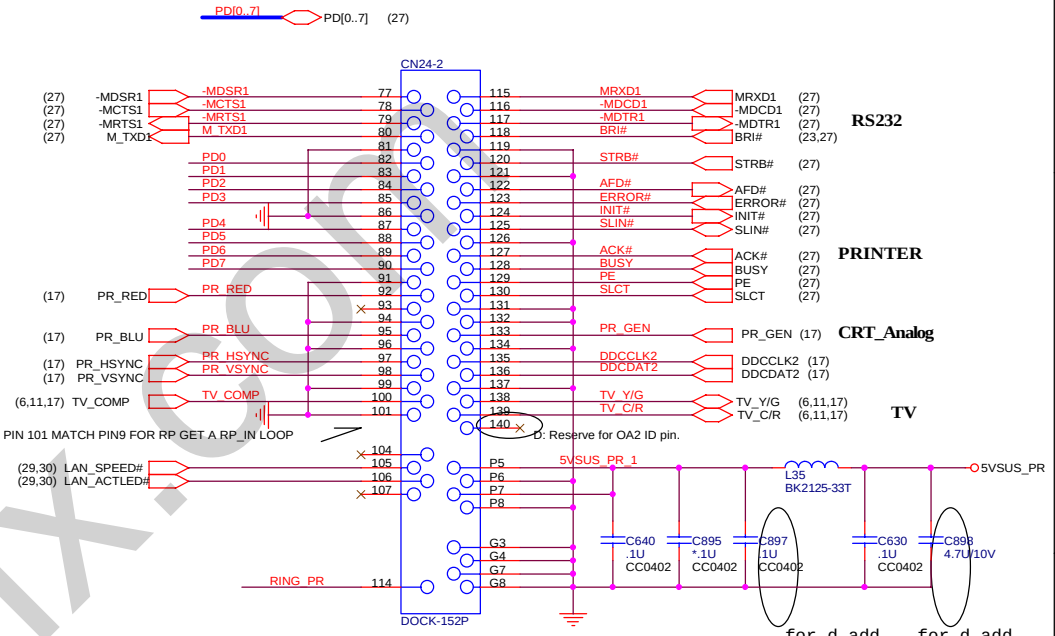
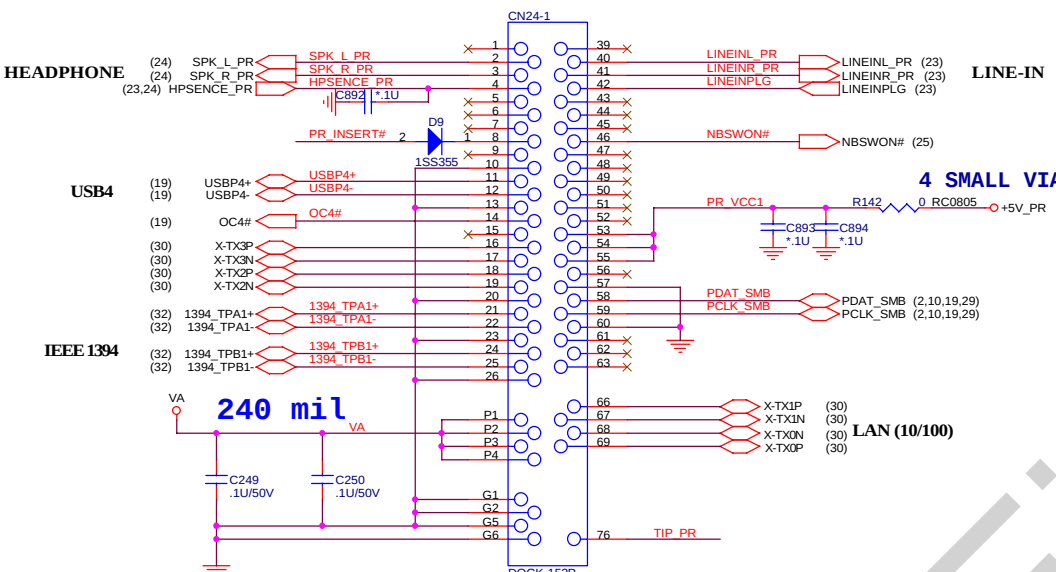
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MINI PCI Socket & MDC		
Date: Thursday, November 25, 2004	Sheet 28 of 41	

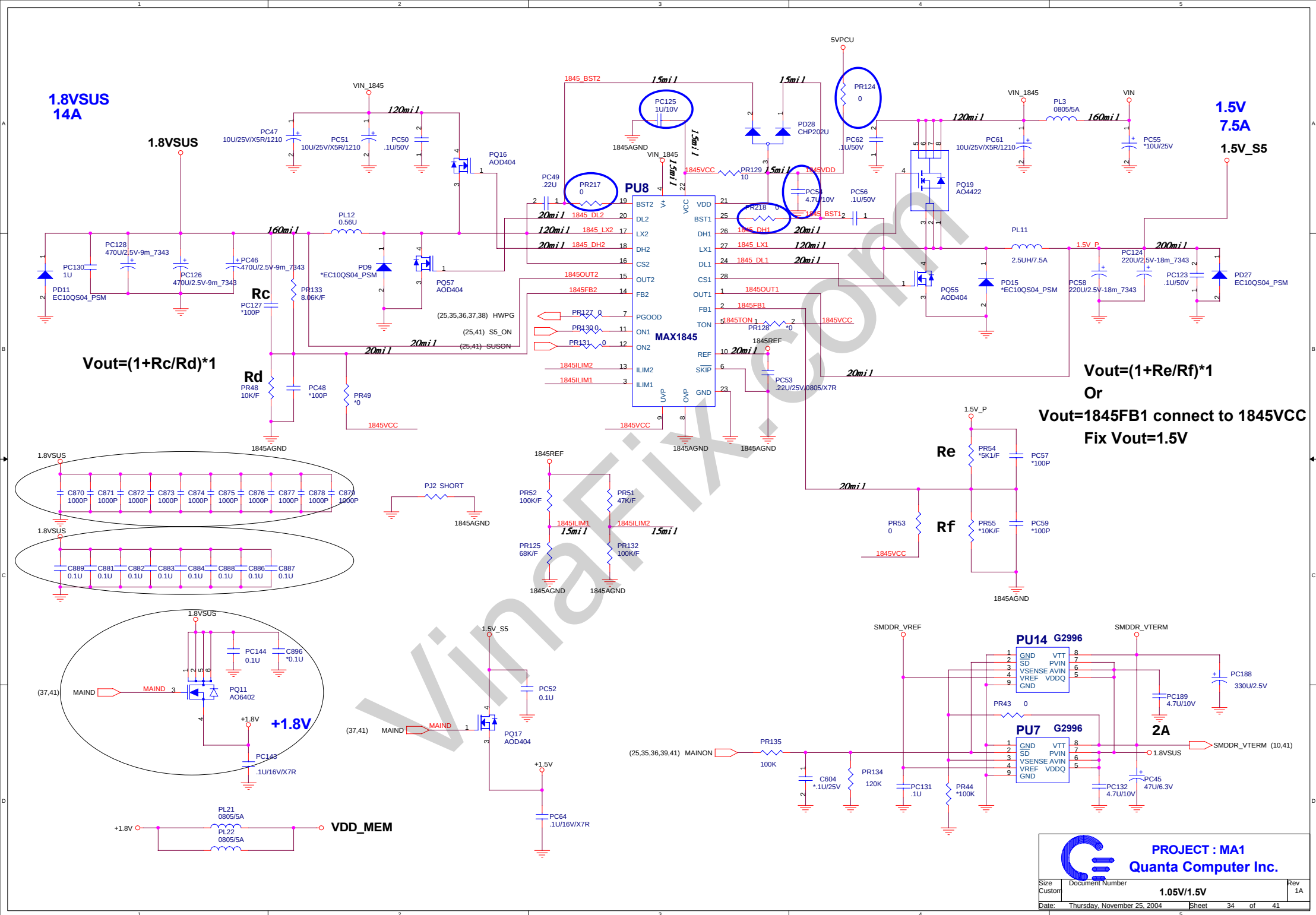


 PROJECT : MA1 Quanta Computer Inc.		
Size C	Document Number BCM5705E/5751 LAN	Rev 1A
Date:	Thursday, November 25, 2004	Sheet 29 of 41

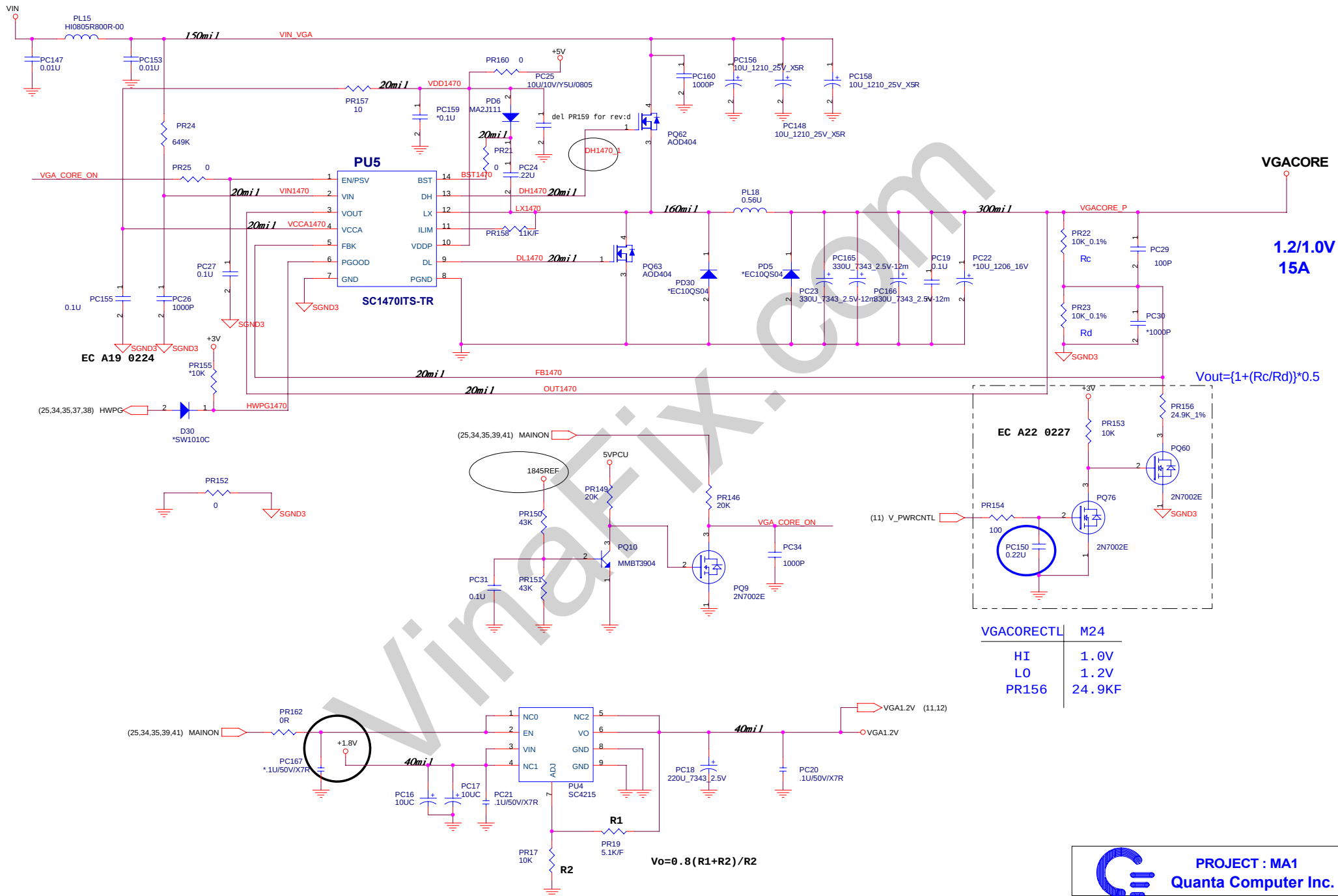




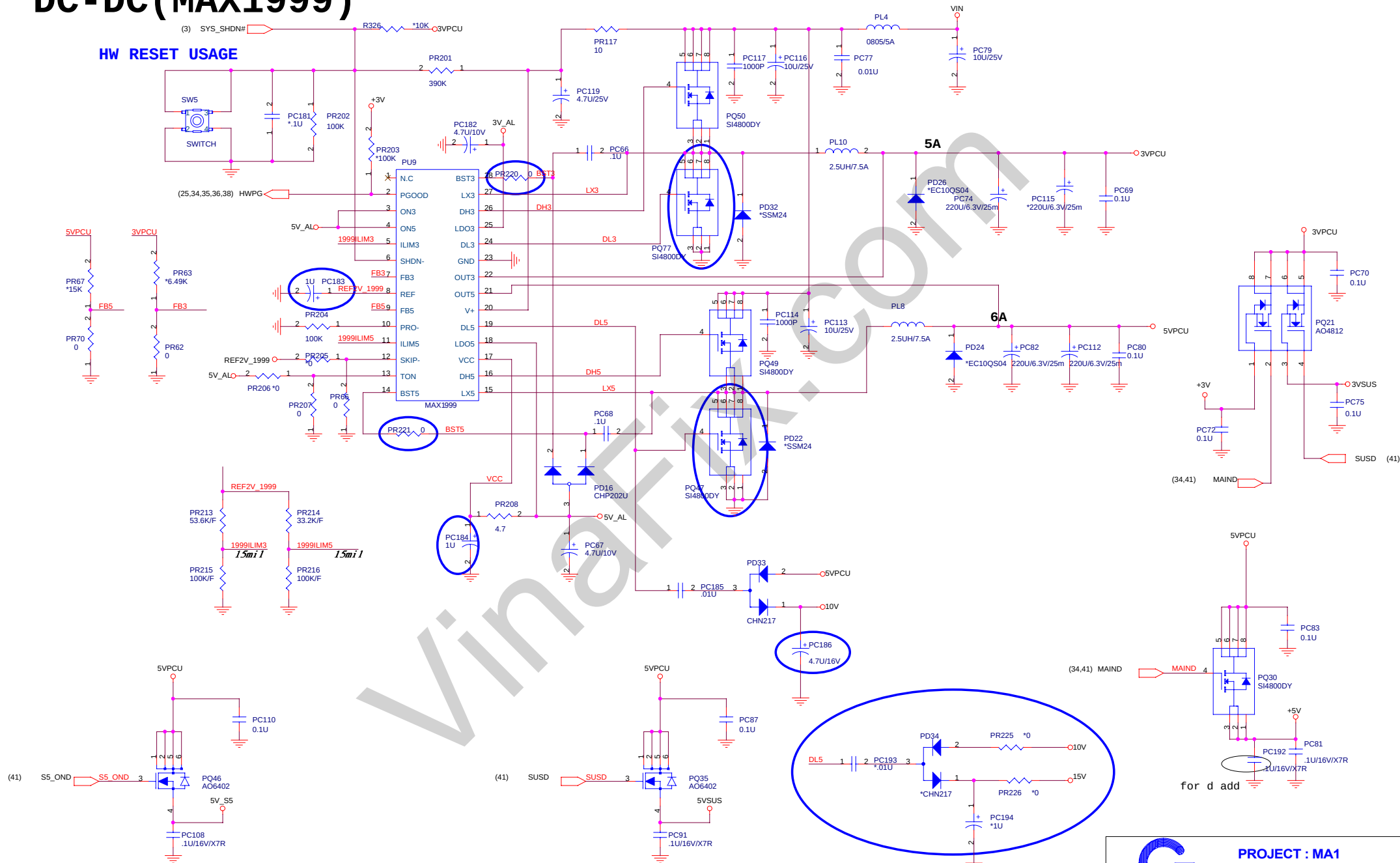


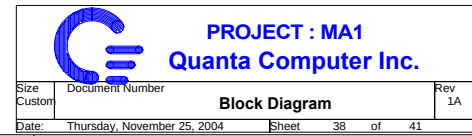


VGA POWER



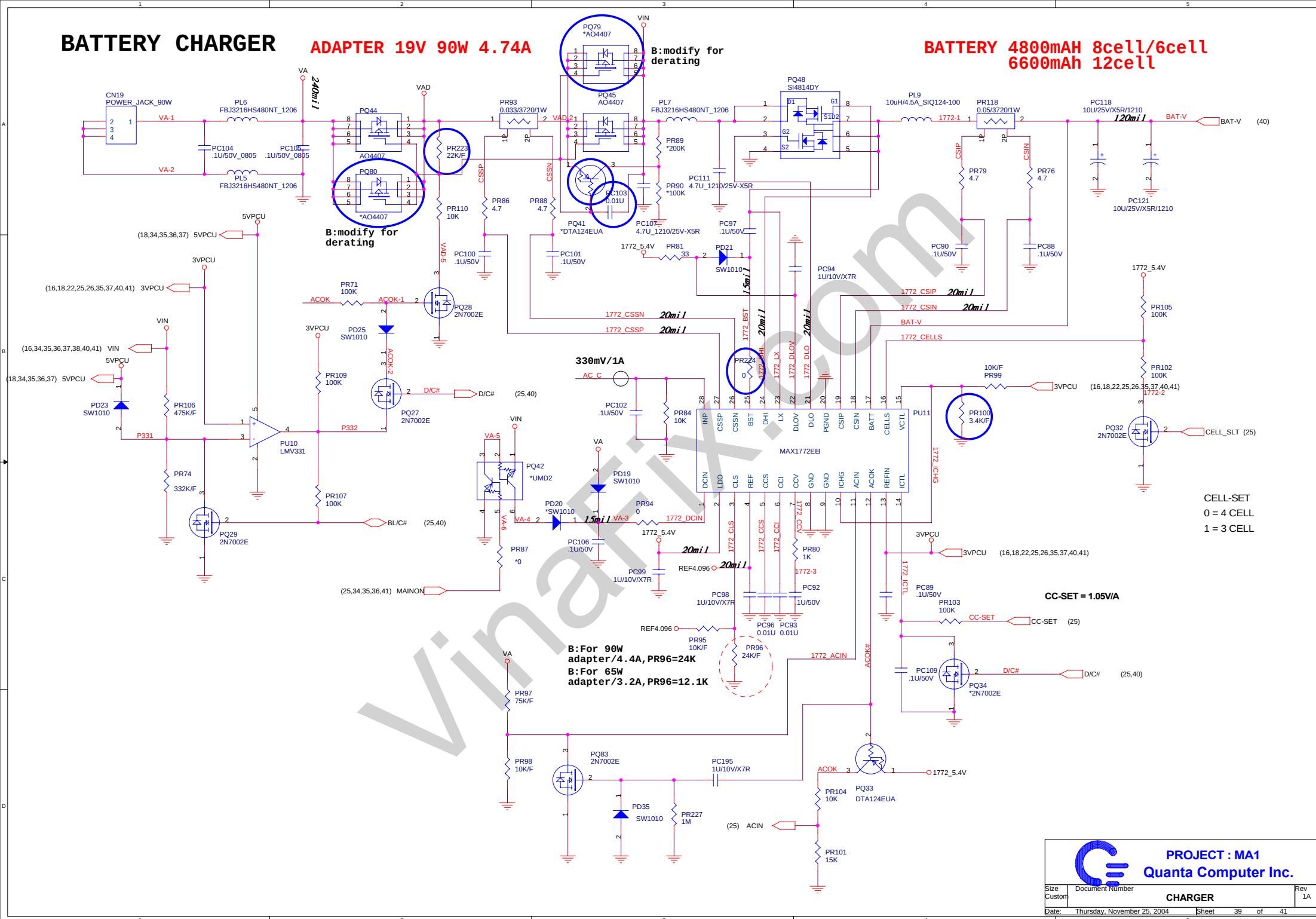
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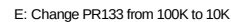




ADAPTER 19V 90W 4.74A

**BATTERY 4800mAh 8cell/6cell
6600mAh 12cell**



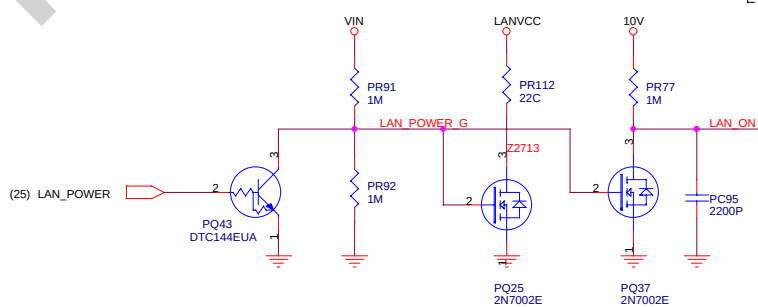
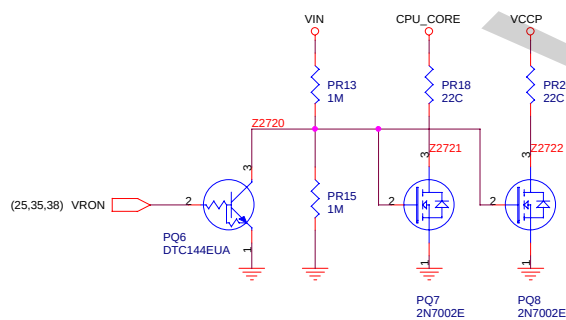
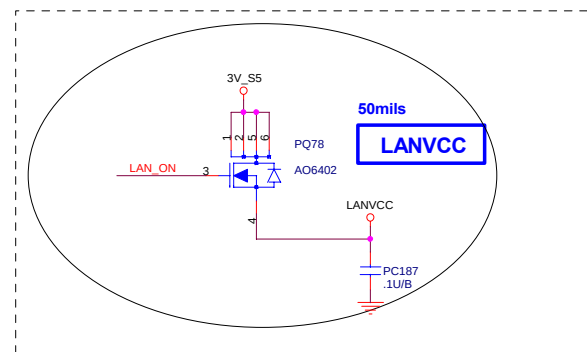
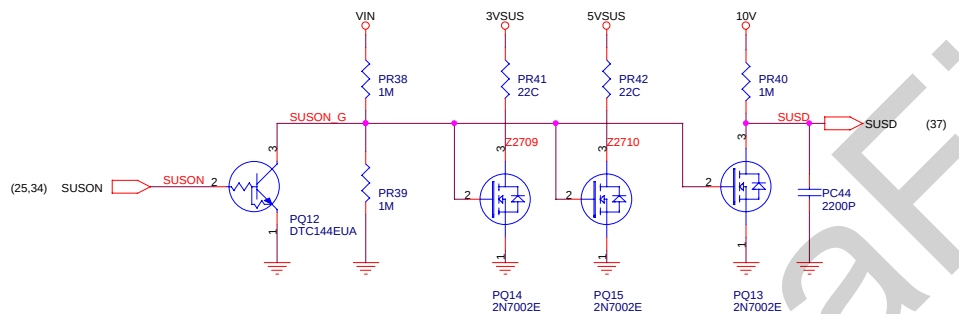
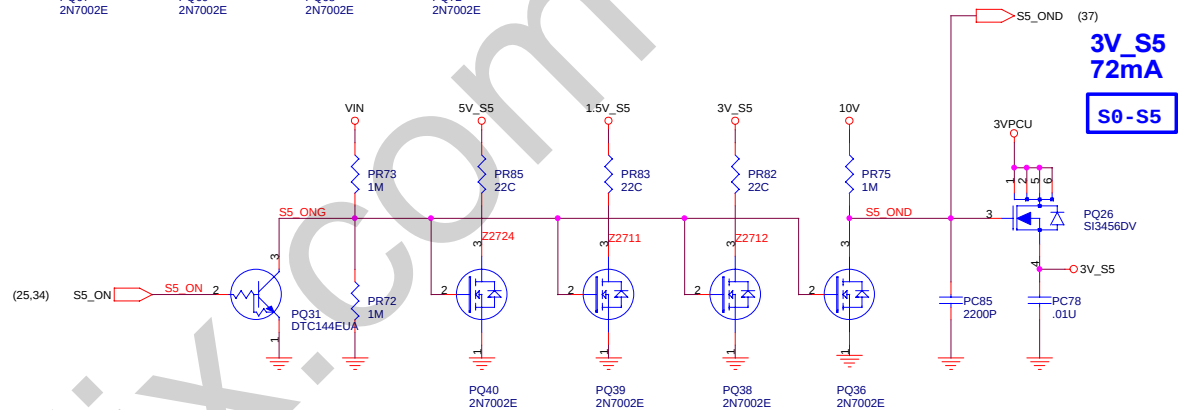
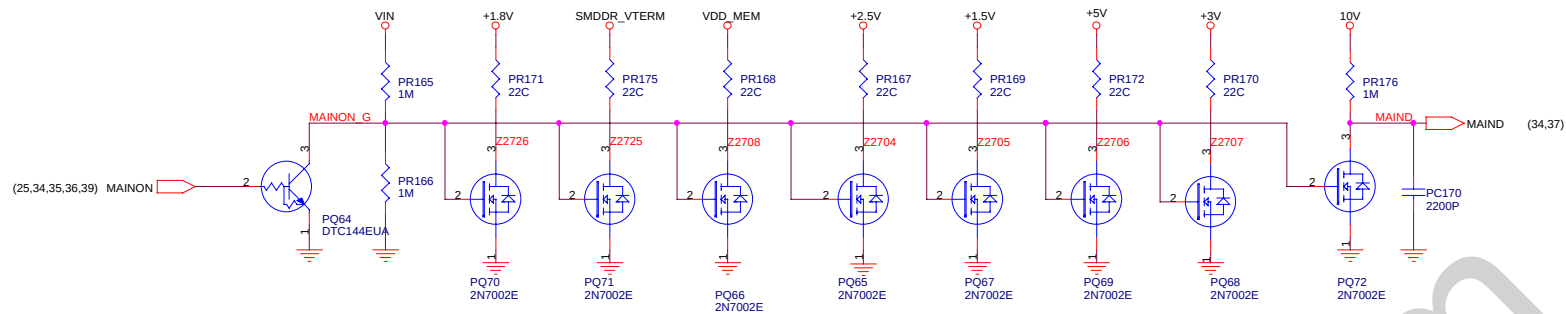


PROJECT : MA1
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BATT SELECTER

Size Custom	Document Number	Rev 1A
BATT SELECTER		
Date:	Thursday, November 25, 2004	Sheet 40 of 41

Date: Thursday, November 25, 2004 Sheet 40 of 41



PROJECT : MA1
Quanta Computer Inc.

Size Custom	Document Number	Rev 1A
DISCHARGE		
Date:	Thursday, November 25, 2004	Sheet 41 of 41