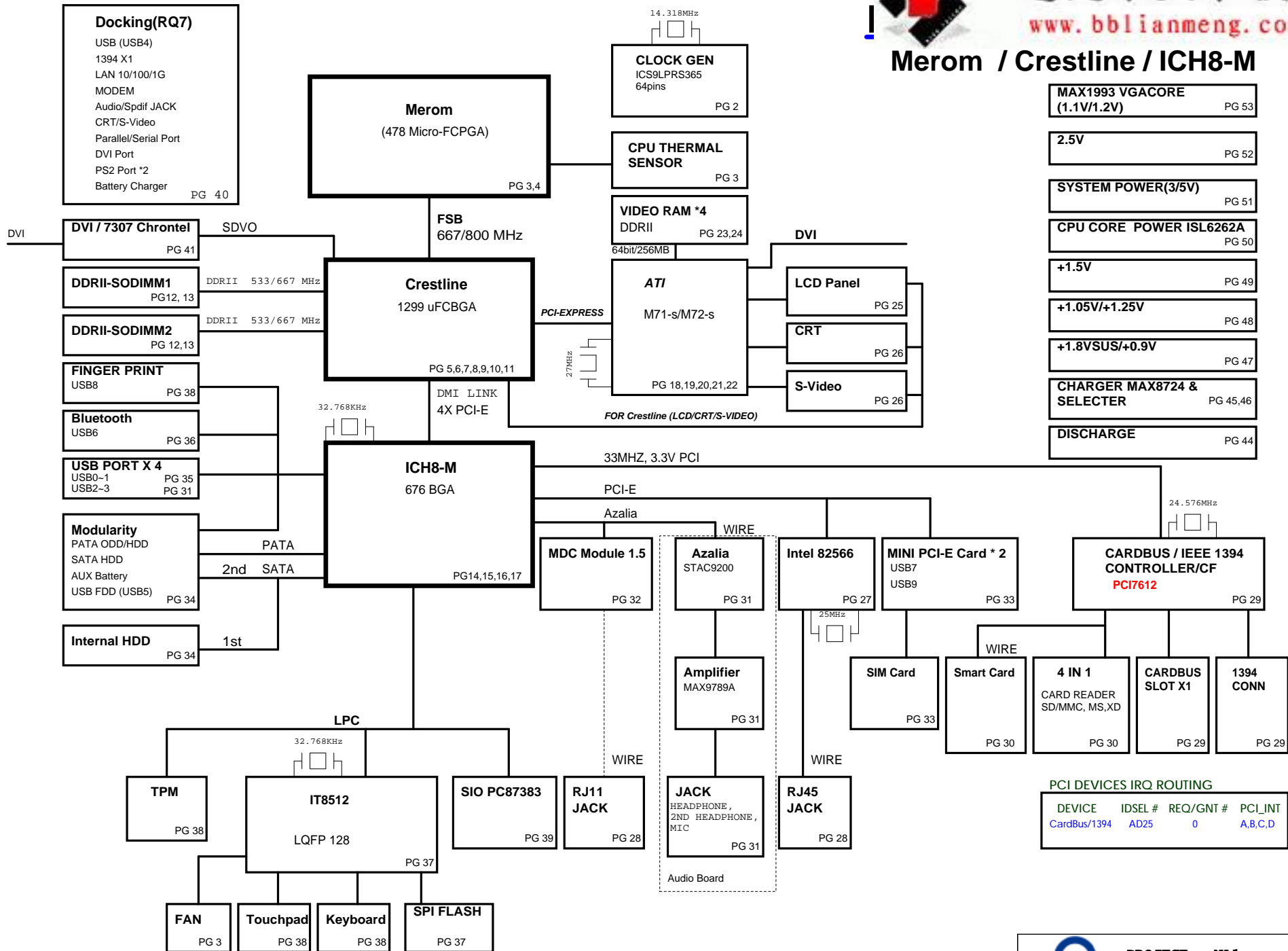
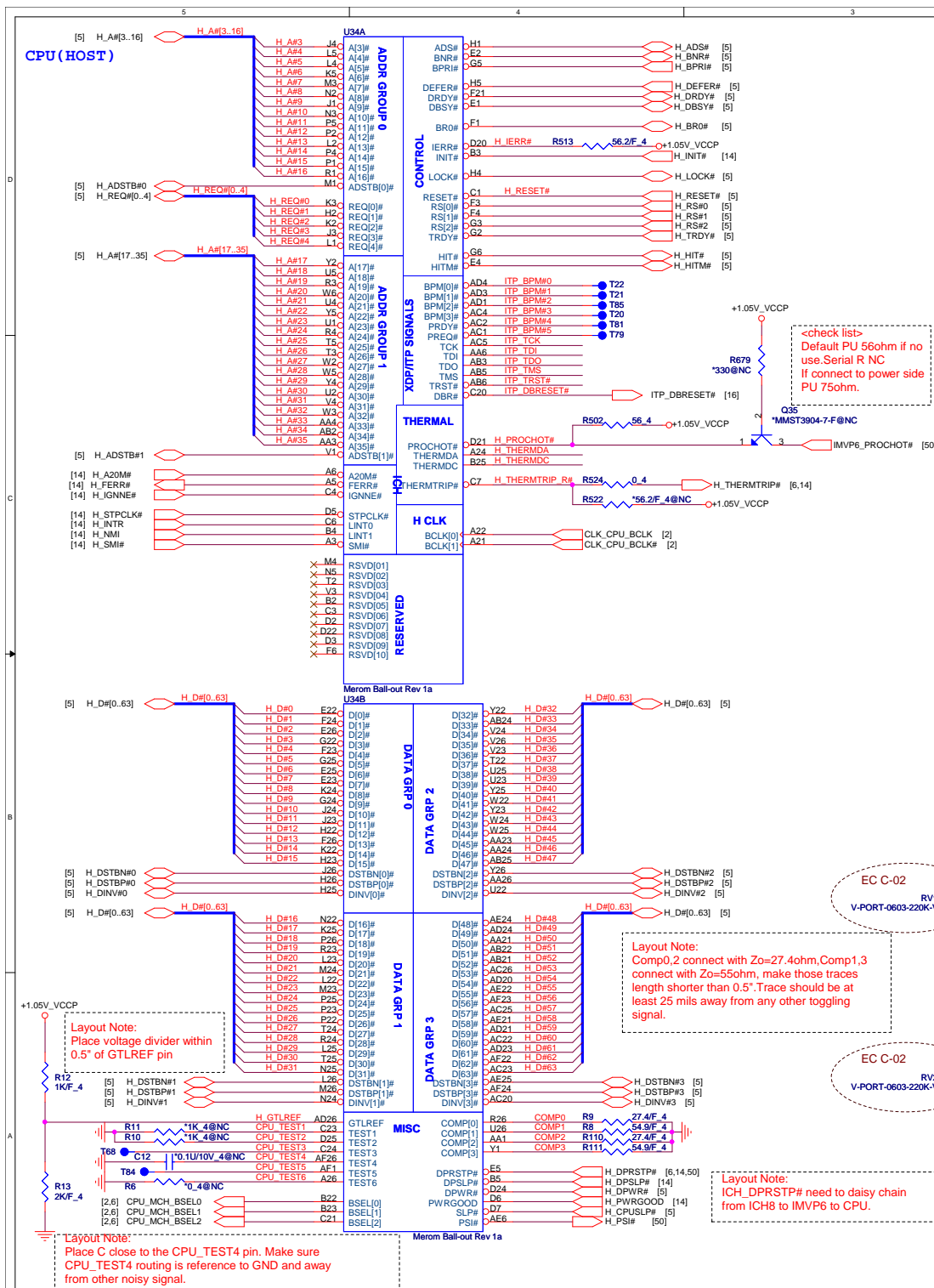


Merom / Crestline / ICH8-M

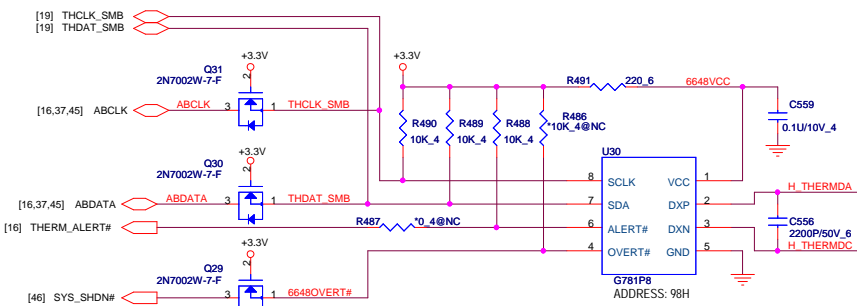


PCI DEVICES IRQ ROUTING

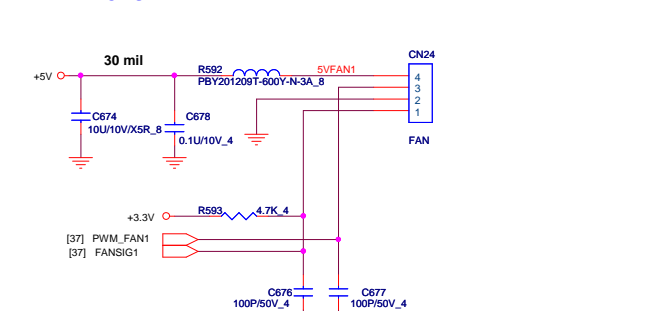
DEVICE	IDSEL #	REQ/GNT #	PCI_INT
CardBus/1394	AD25	0	A,B,C,D



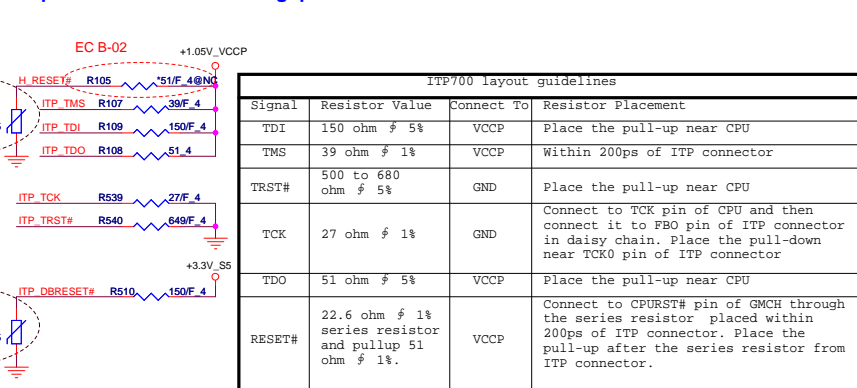
CPU Thermal monitor



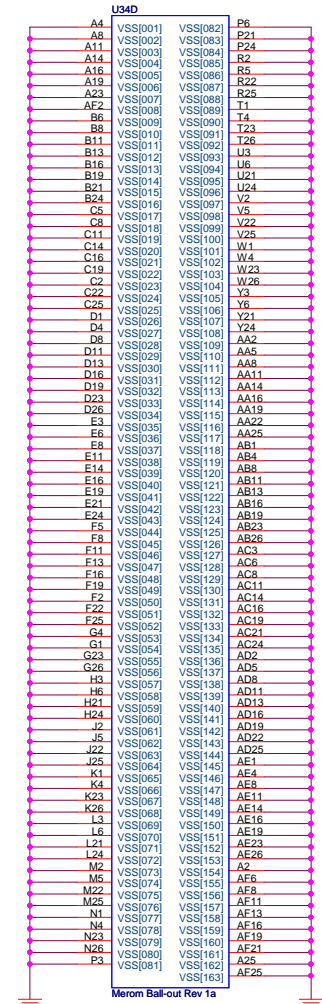
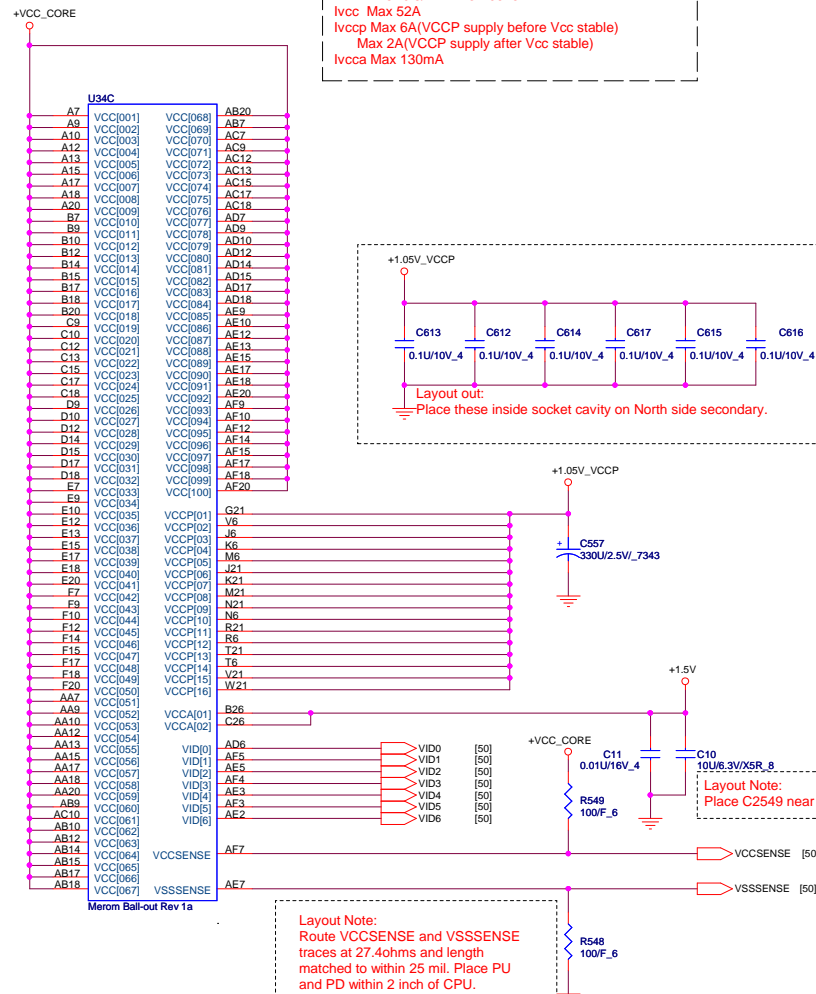
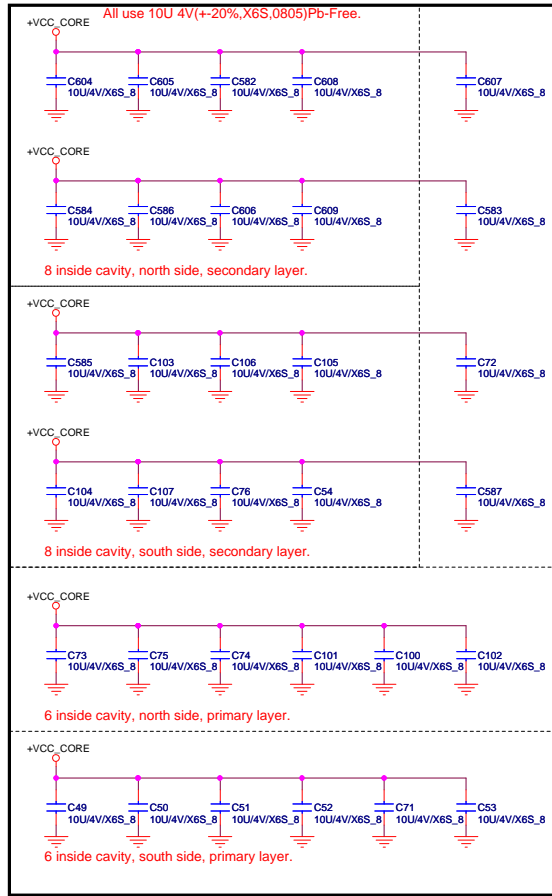
CPU FAN



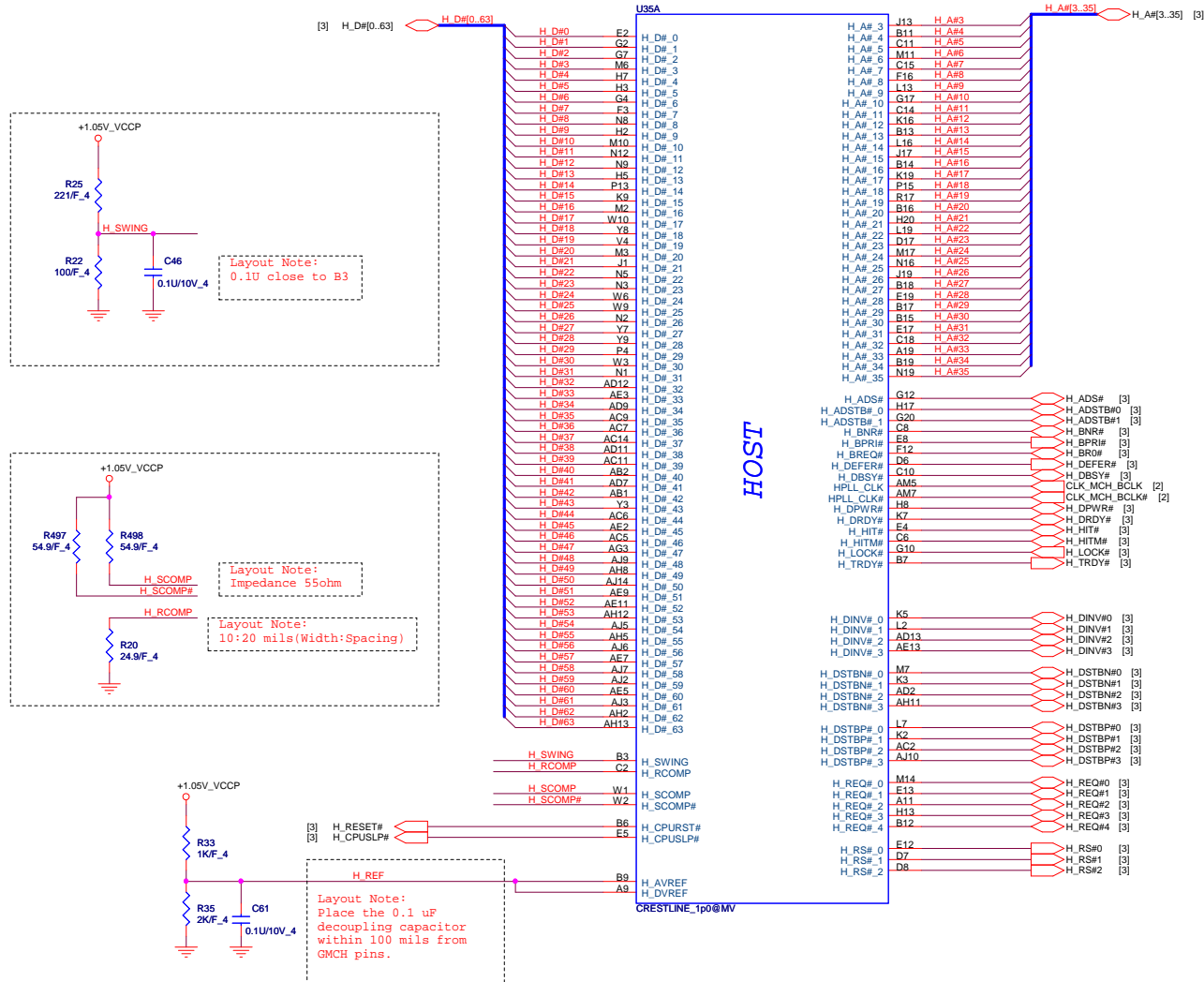
Populate ITP700Flex for bringup



CPU(Power)

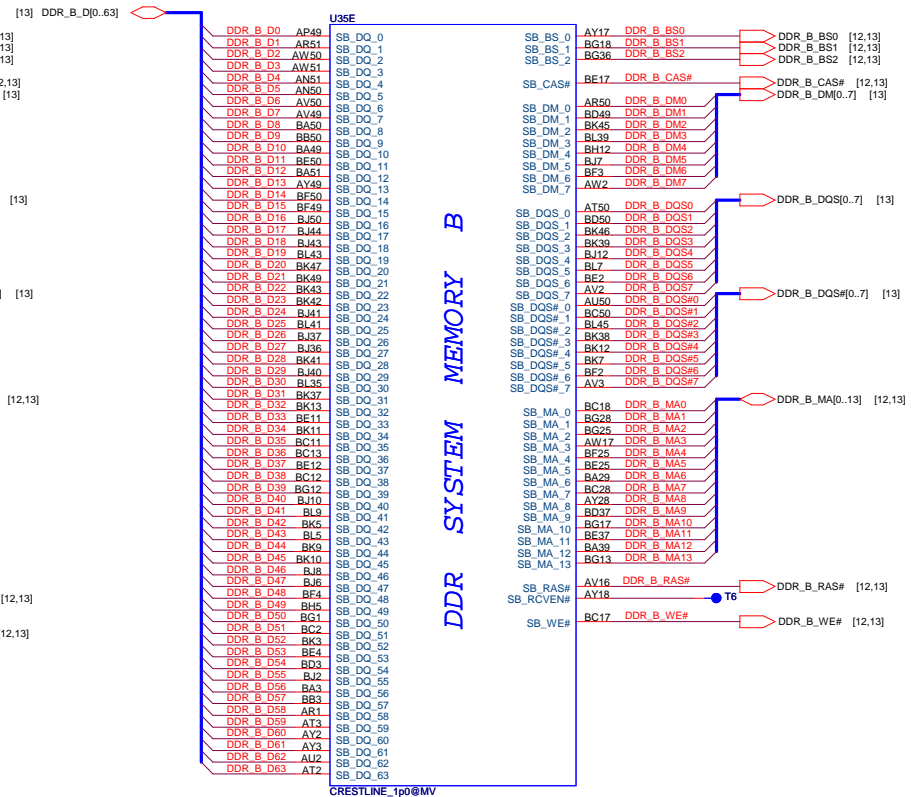
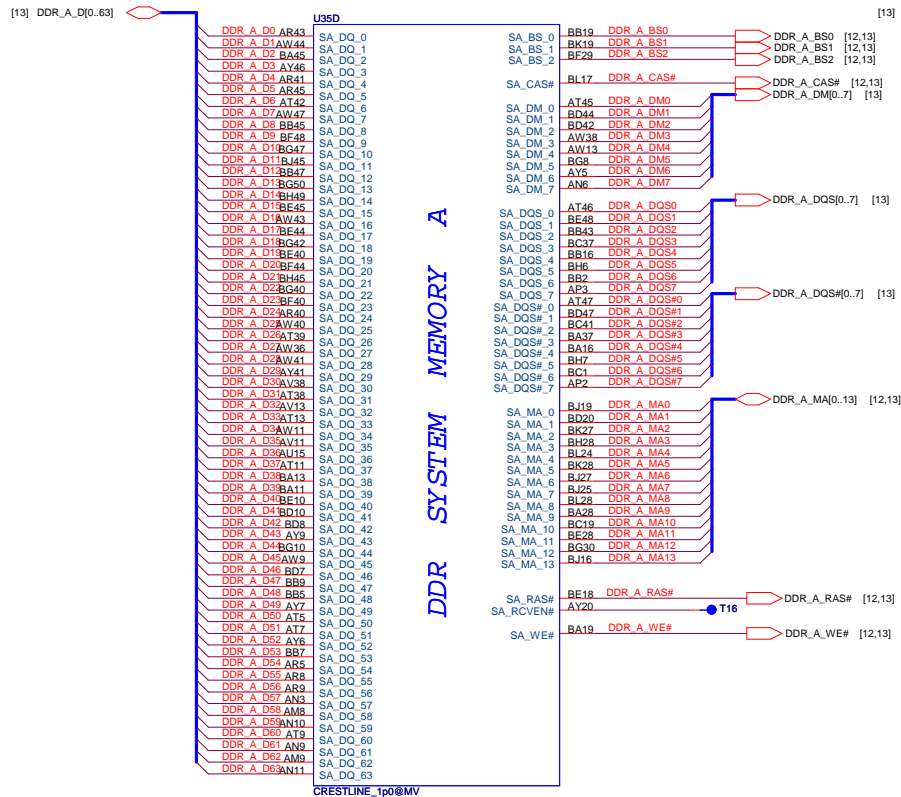


NB (HOST)

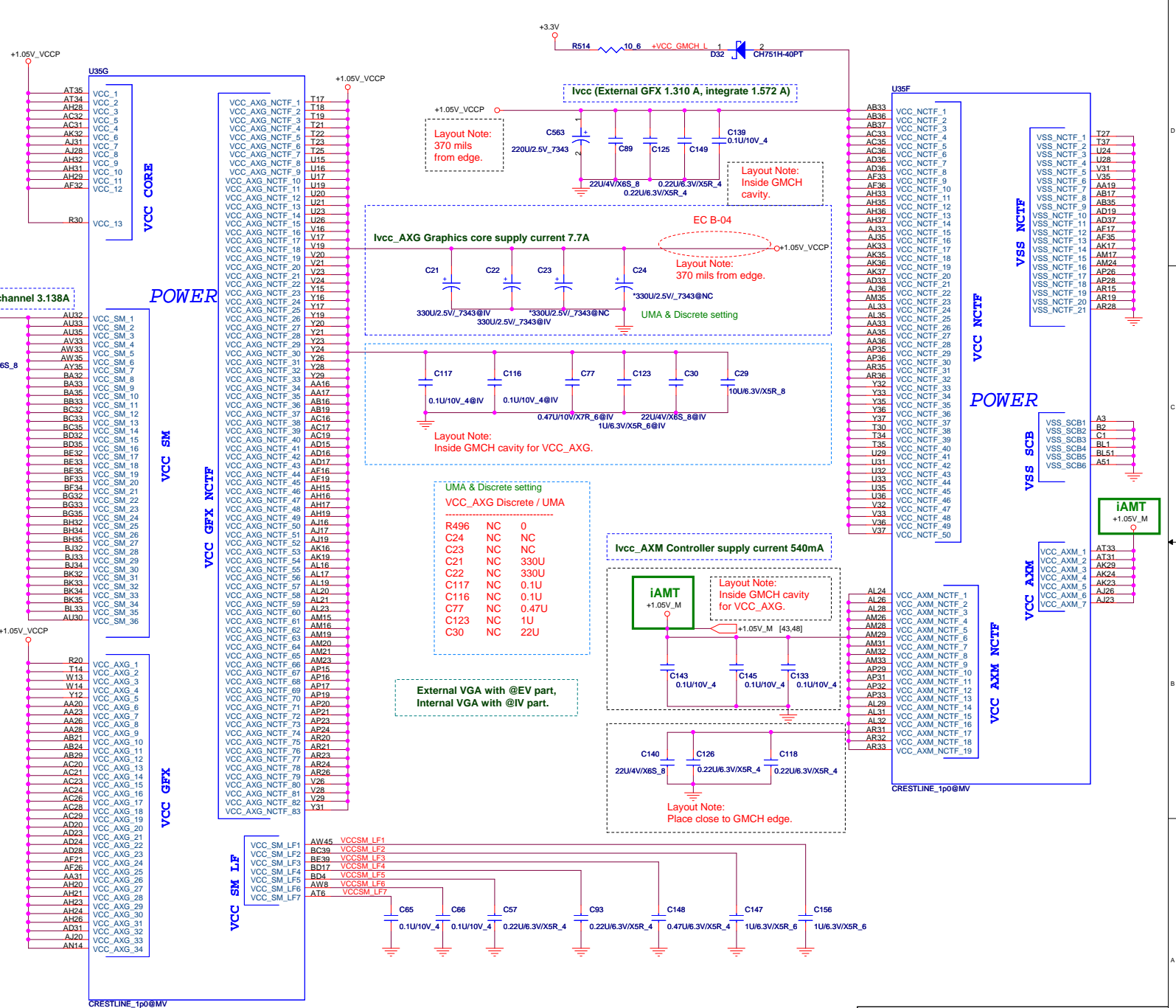




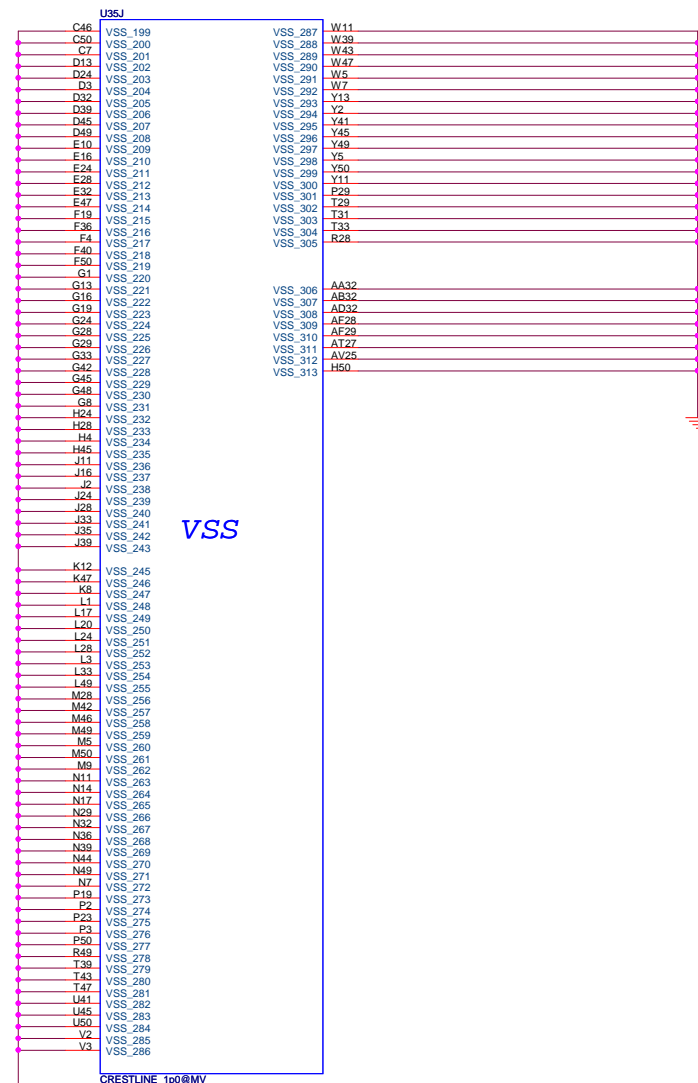
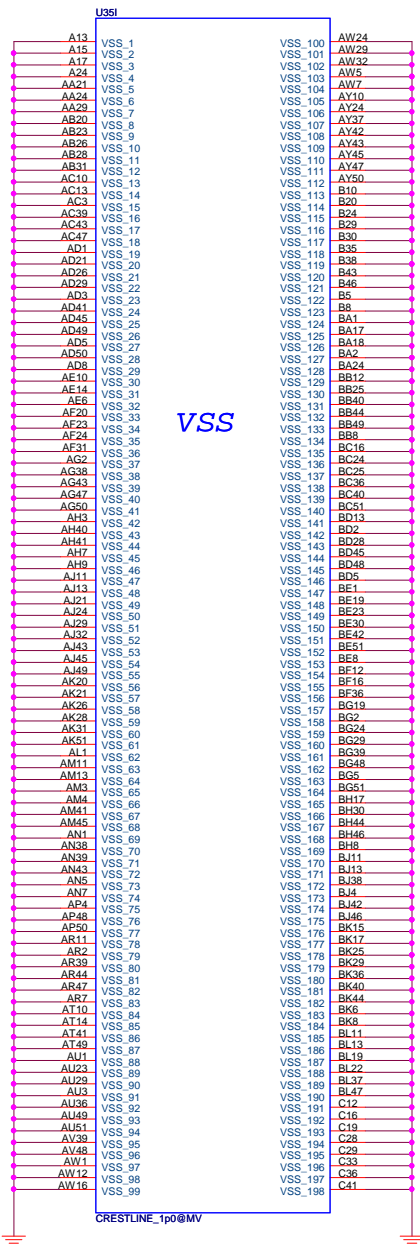
NB(Memory controller)



A horizontal bar divided into four segments labeled 4, 3, 2, and 1 from left to right.



NB (Power-3)



Strap table

All strap are sampled with respect to the leading edge of the GMCH Power OK(PWROK) Signal

CFG[17:3] Have internal Pull-up

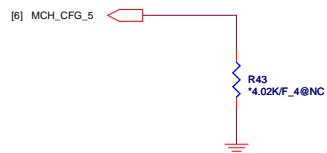
CFG[18:19] Have internal Pull-down

Any CFG signal strapping option not list below should be left NC Pin

Pin Name	Strap description	Configuration
CFG[2:0]	FSB Frequency Select	010 = FSB 800MHz 011 = FSB 667MHz
CFG[4:3]	Reserved	
CFG5	DMI X2 Select	0 = DMI X2 1 = DMI X4(Default)
CFG6	Reserved	
CFG7	CPU Strap	0 = Reserved 1 = Mobile CPU(Default)
CFG8	Low power PCI Express	0 = Normal mode 1 = Low Power mode
CFG9	PCI Express Graphics Lane Reversal	0 = Reverse Lanes 1 = Normal operation(Default)
CFG[11:10]	Reserved	
CFG[13:12]	XOR/ALLZ	00 = Reserved 01 = XOR Mode Enable 10 = All-Z Mode Enabled 11 = Normal operation(Default)
CFG[15:14]	Reserved	
CFG16	FSB Dynamic ODT	0 = Dynamic ODT disable 1 = Dynamic ODT Enable(Default)
CFG[18:17]	Reserved	
SDVO_CTRLDATA	SDVO Present	0 = No SDVO Card present(Default) 1 = SDVO Card Present
CFG19	DMI Lane Reversal	0 = Normal operation(Default) 1 = Reverse Lanes
CFG20	SDVO/PCIE concurrent	0 = Only SDVO or PCIE x1 is operation(Default) 1 = SDVO and PCIE x1 are operating simultaneously via the PEG port

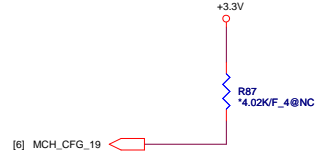
DMI X2 Select

MCH_CFG_5	Low = DMI X2 High = IDMI X4(Default)
-----------	---



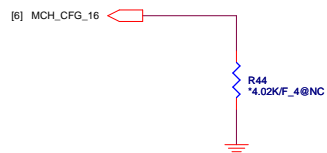
DMI Lane Reversal

MCH_CFG_19	Low = Normal operation(Default) High = Reverse Lane
------------	--



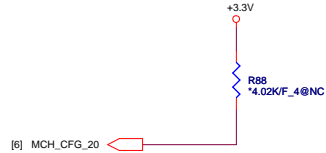
FSB Dynamic ODT

MCH_CFG_16	Low = ODT Disable High = ODT Enable(Default)
------------	---



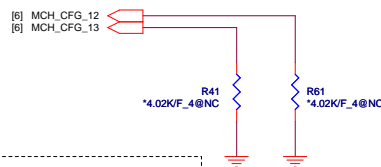
SDVO/PCIE Concurrent operation

MCH_CFG_20	Low = Only SDVO or PCIE X1 is operational(Default) High = SDVO and PCIE X1 are operating simultaneously via the PEG port
------------	---



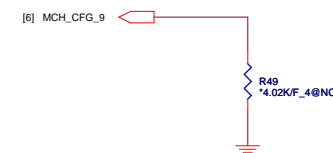
XOR /ALLz /Clock Un-gating

MCH_CFG_12	MCH_CFG_13	Configuration
0	0	Clock gating disable
0	1	XOR Mode Enable
1	0	ALL-z Mode Enable
1	1	Normal operation(Default)



PCI Express Graphics

MCH_CFG_9	Low = Reverse Lane High = Normal operation(Default)
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SDVO Present

Strap define at External DVI control page

Layout Note:
Location of all MCH_CFG strap resistors
needs to be close to minimize stub.

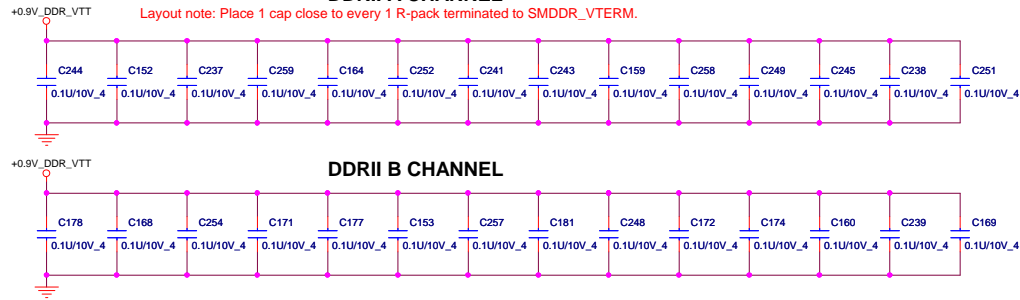
PROJECT : NA1
Quanta Computer Inc.

Size	Document Number	Rev
	GMCH Strap Table	1A
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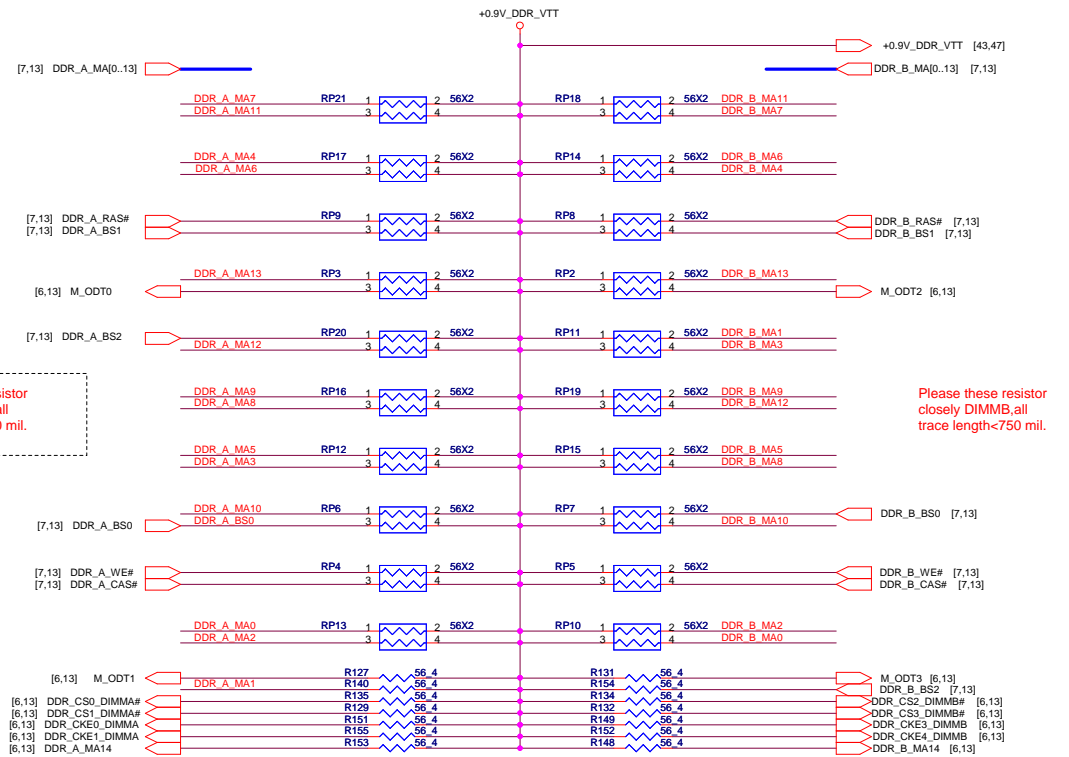
DDR2 Dual channel A/B PU

DDRII A CHANNEL

Layout note: Place 1 cap close to every 1 R-pack terminated to SMDDR_VTERM.

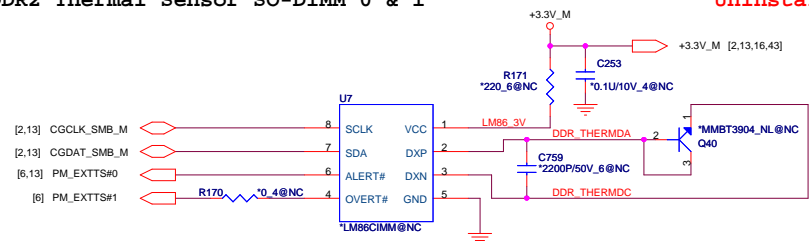


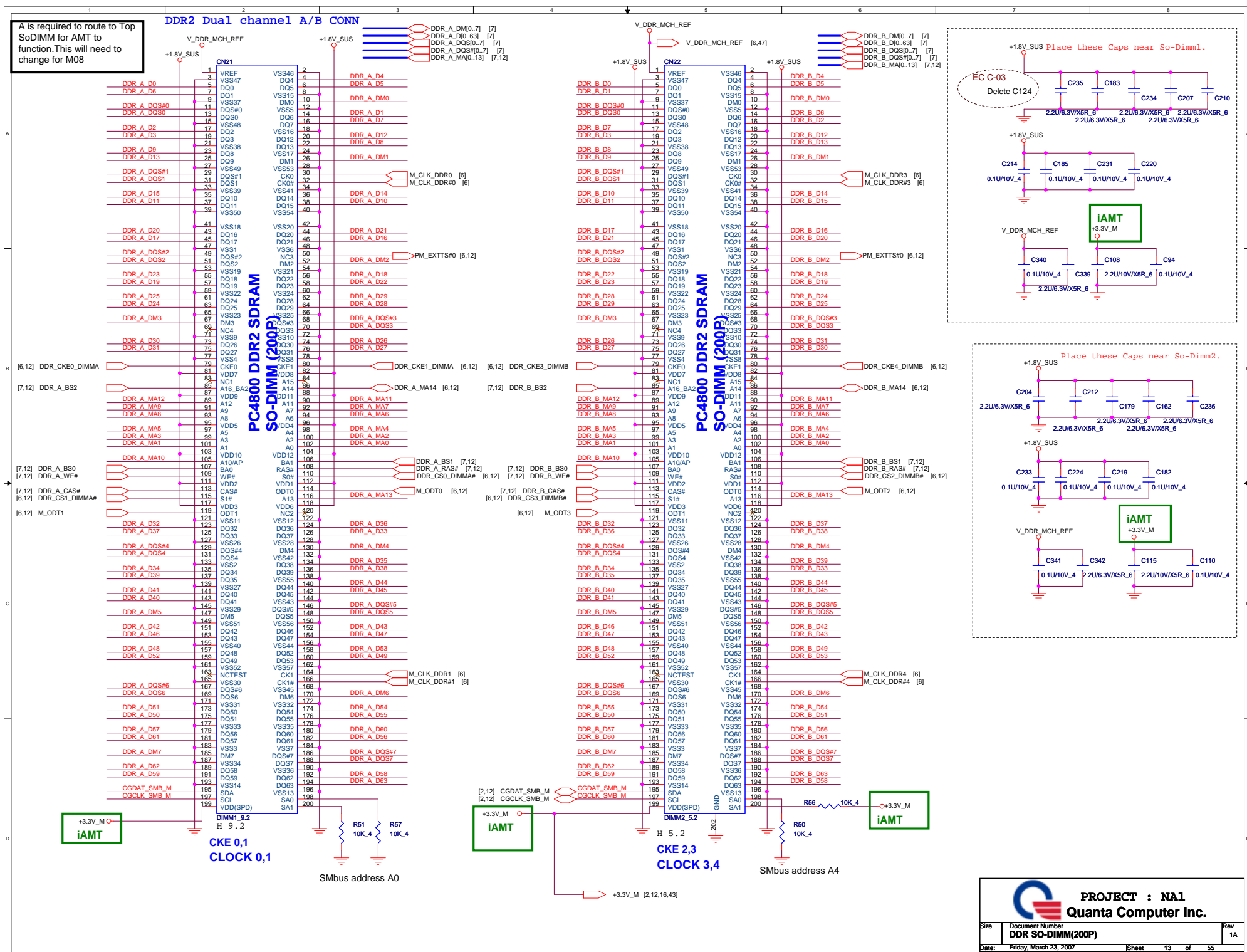
DDRII B CHANNEL

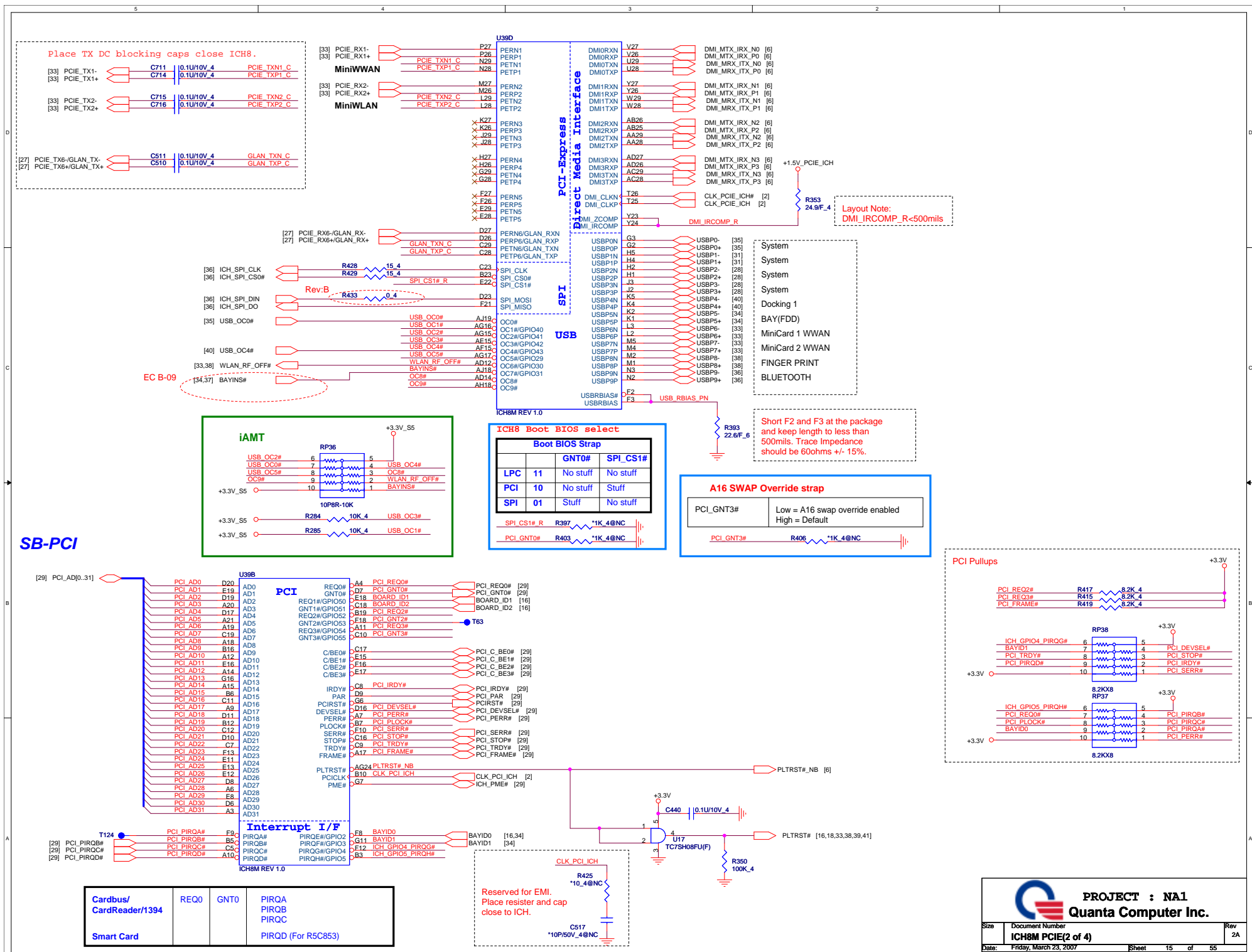


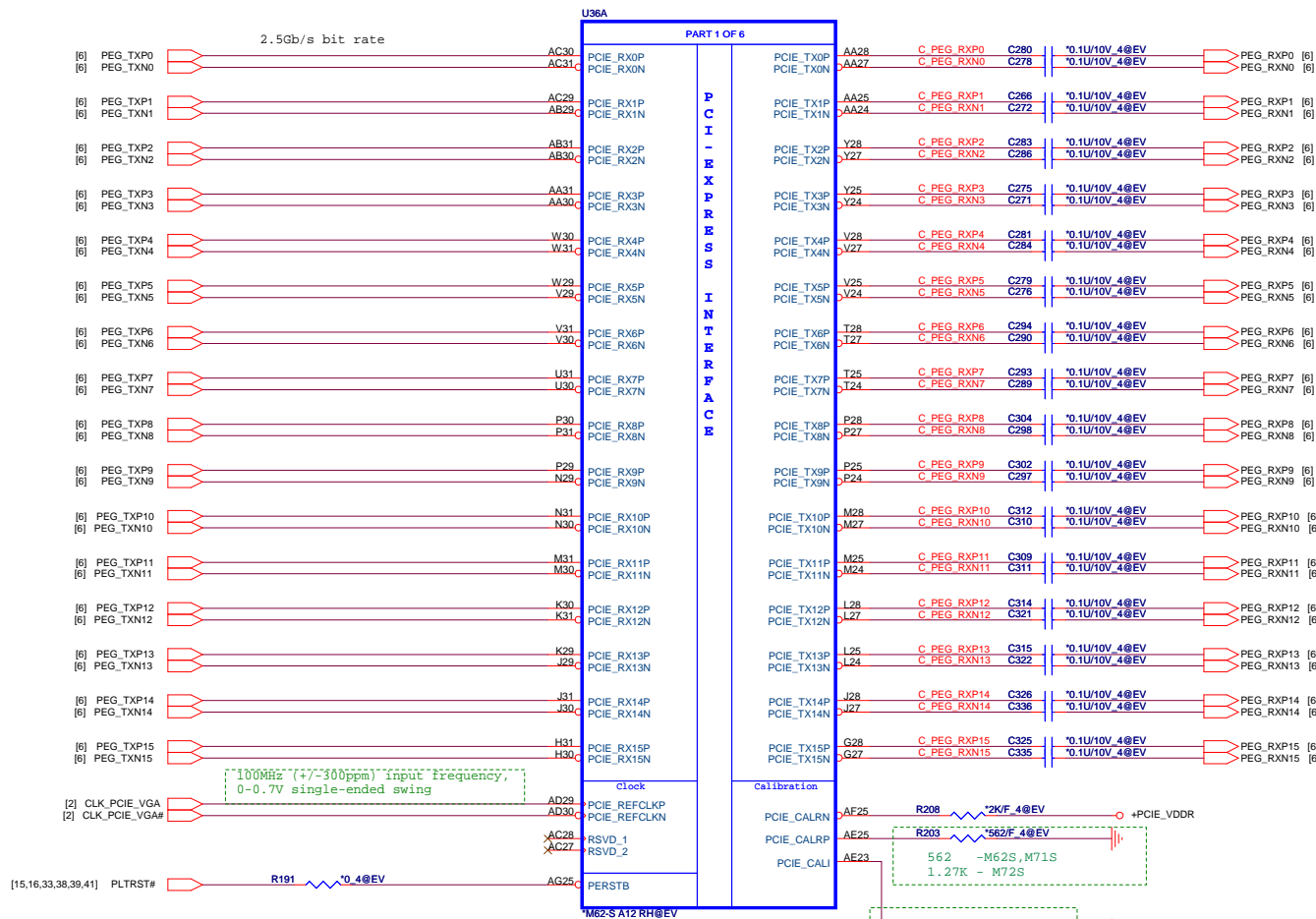
DDR2 Thermal Sensor SO-DIMM 0 & 1

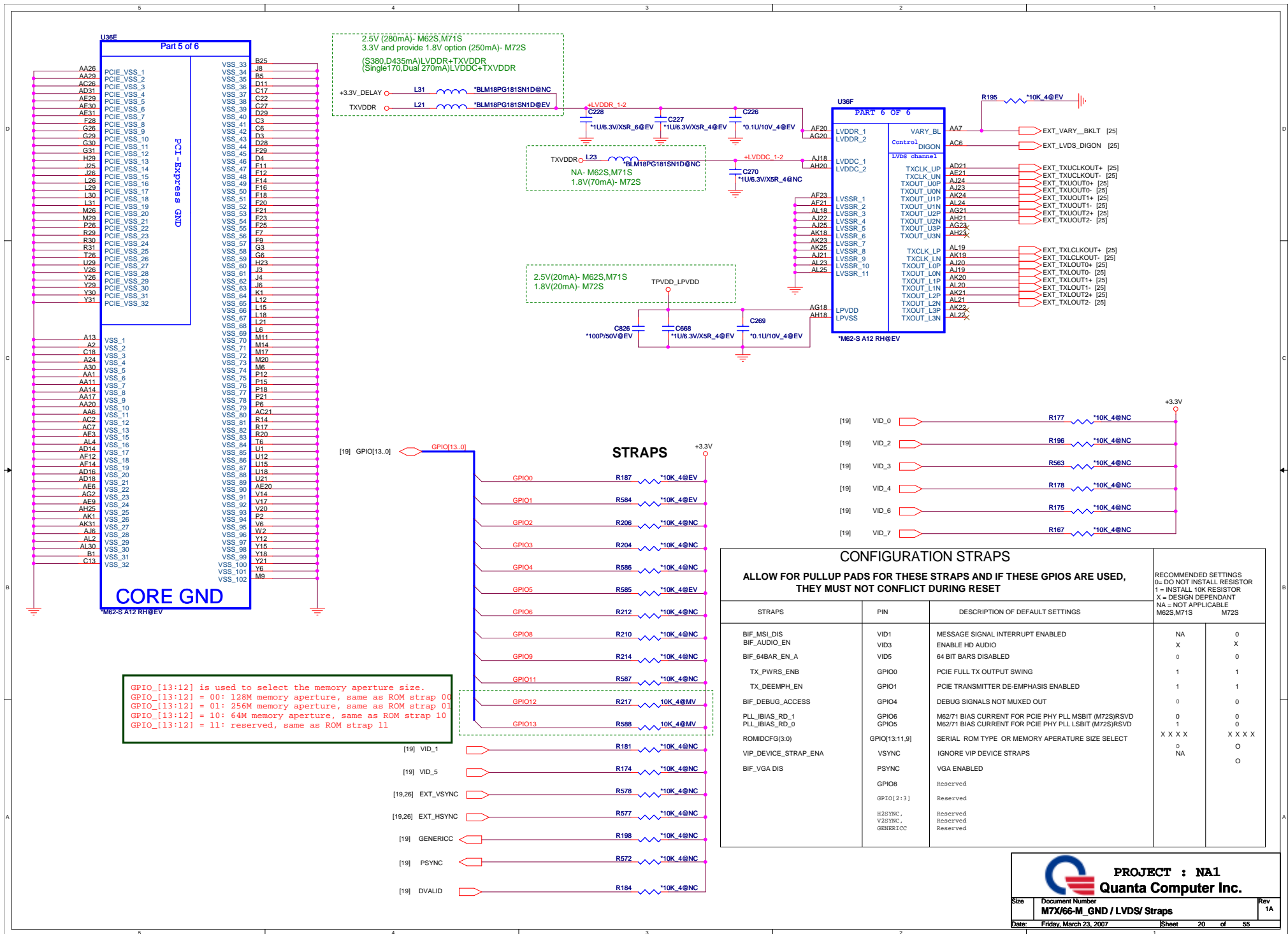
Uninstall

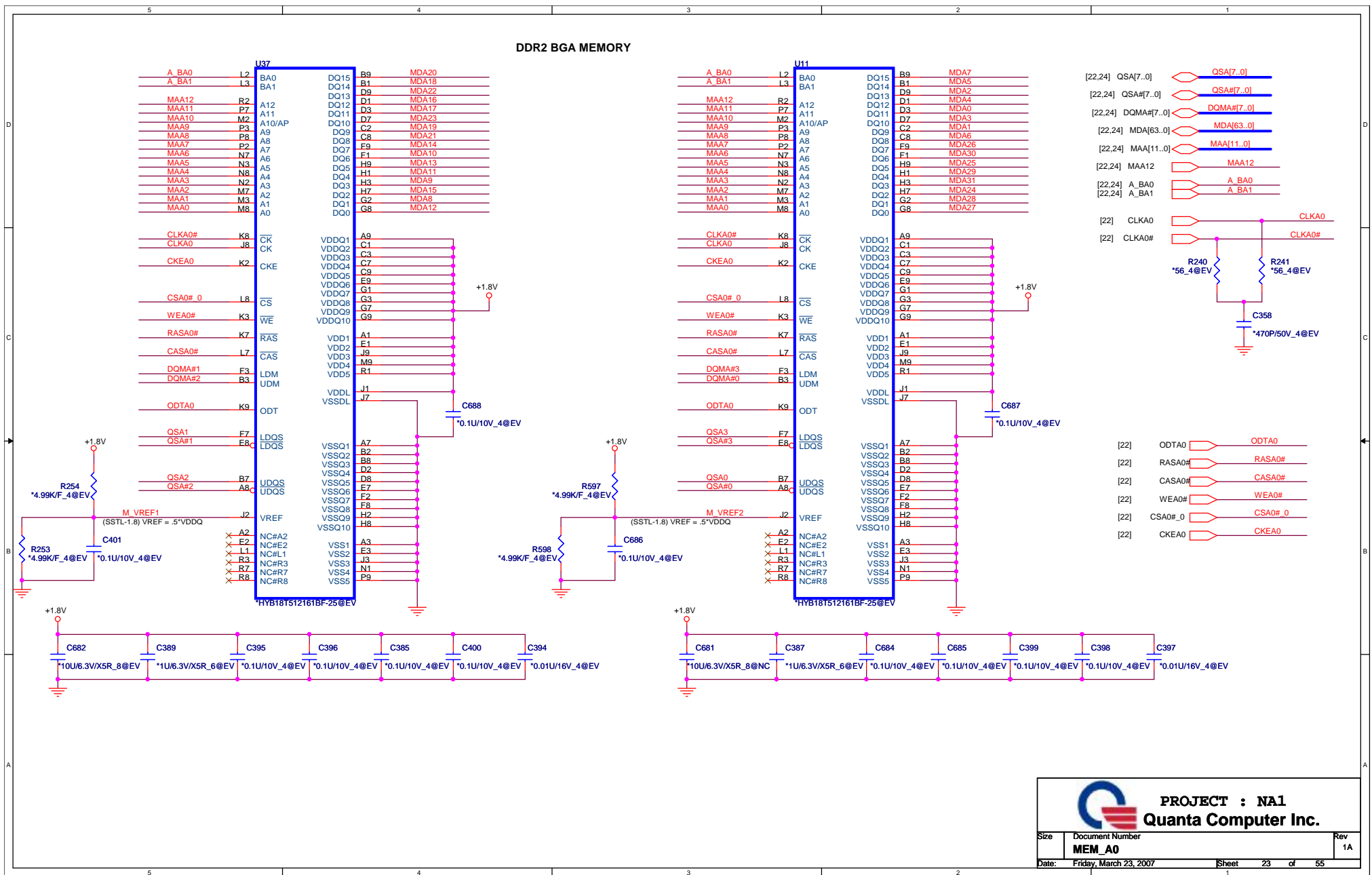









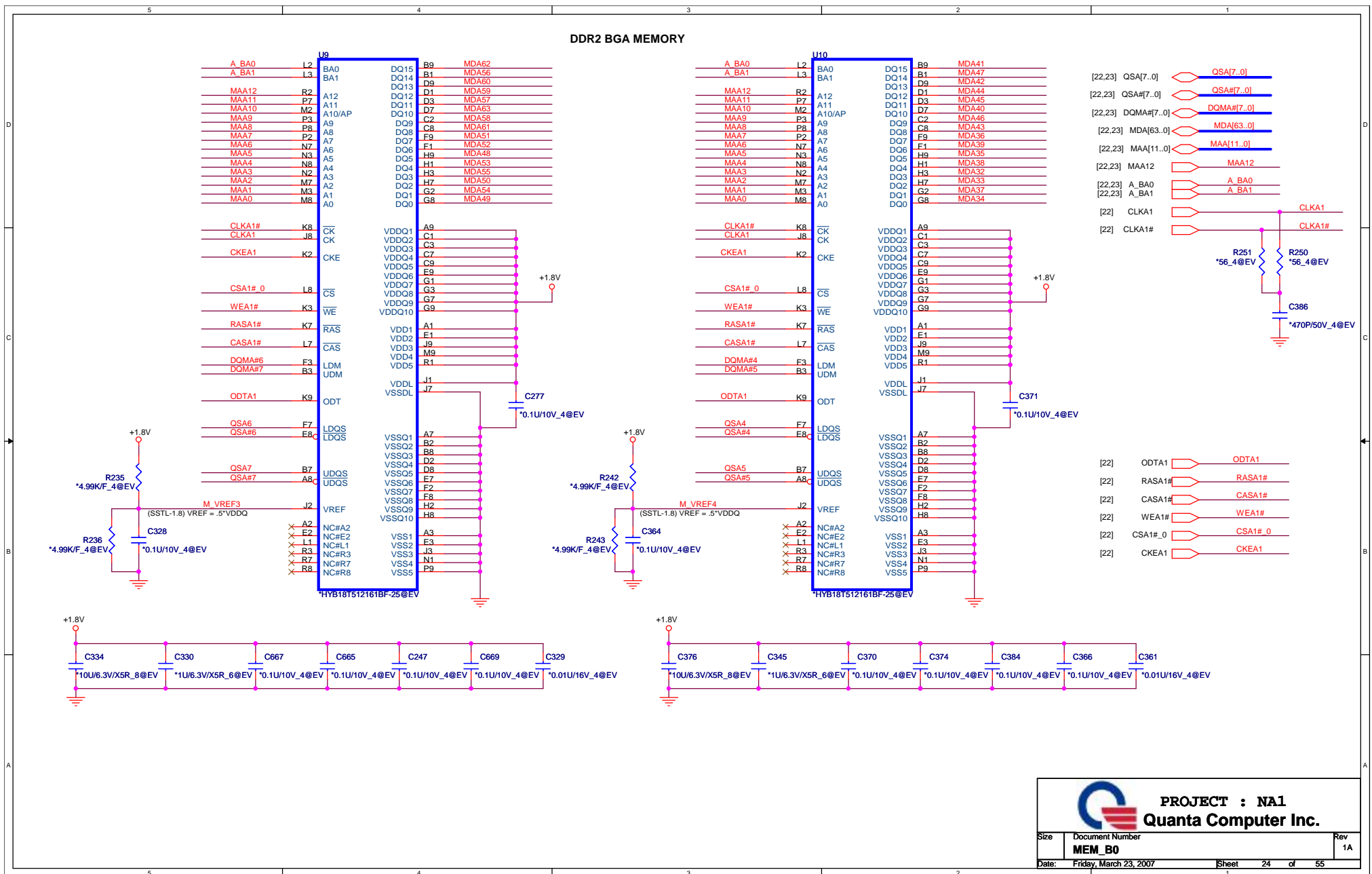




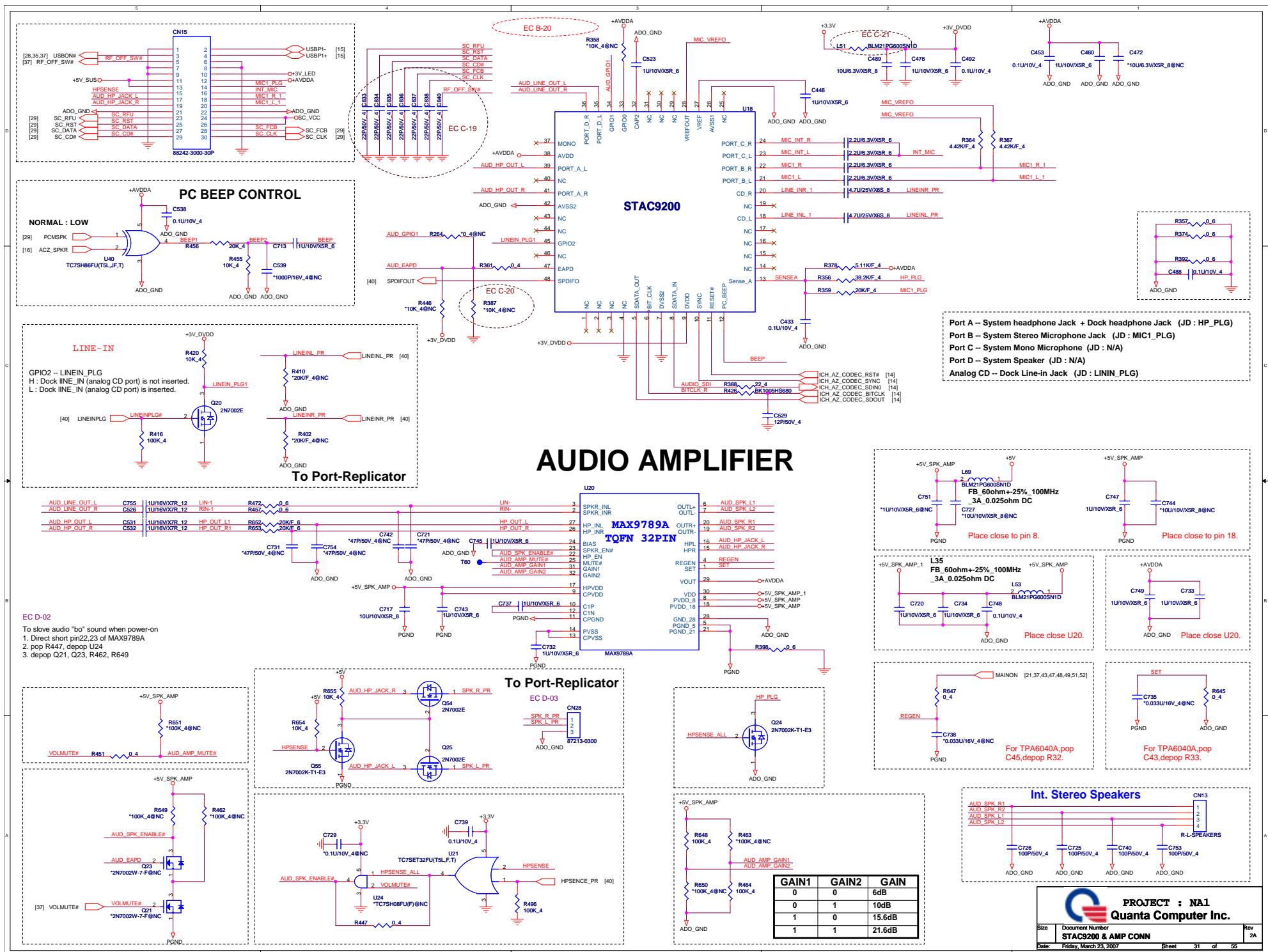


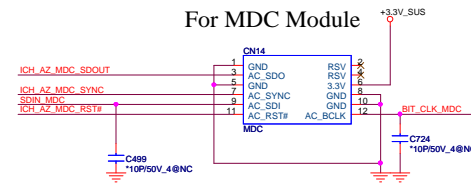
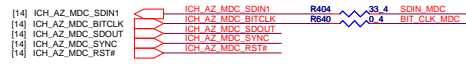
PROJECT : NA1
Quanta Computer Inc.

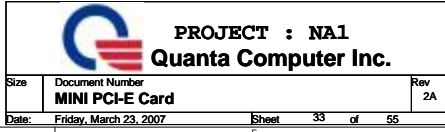
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	MEM_A0	1A
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LEFT BAY(CD-ROM, HDD-PATA/SATA, FDD,)

The schematic shows the electrical connections for the left bay. Key components include:

- IDE Connectors:** IDE_DD[0..15], IDE_DREQ, IDE_DIOW#, IDE_DIOR#, IDE_DACK#, IDE_IRQ, IDE_DA1, IDE_DAO, IDE_DCS1#, IDE_DA2, IDE_DCS3#.
- SATA Connectors:** Sata_TX2-, Sata_TX2+, Sata_RX2-, Sata_RX2+.
- Power and Grounding:** +3.3V, R255, R252, R332, C679, C675, C680, C695, C690, C683, C689.
- Control Signals:** RST_BAY#, OODLED#, BAYINS#, BAYSWAP#.
- Master/Slave Indicators:** MASTER, PDIAG.
- USB Connections:** USBP5+, USBP5-.

BAY ID STATUS

LEFT BAYID1	LEFT BAYID0	STATUS
0	0	HDD (PATA)
0	1	ODD
1	0	HDD (SATA)
1	1	Reserve

BAY POWER CONTROL


The power control section includes transistors Q41 (Si4800BDY-T1-E3) and Q17 (2N7002W-7-F), resistors R596, R594, and capacitors C689, C690, C683, C679, C675, C680.

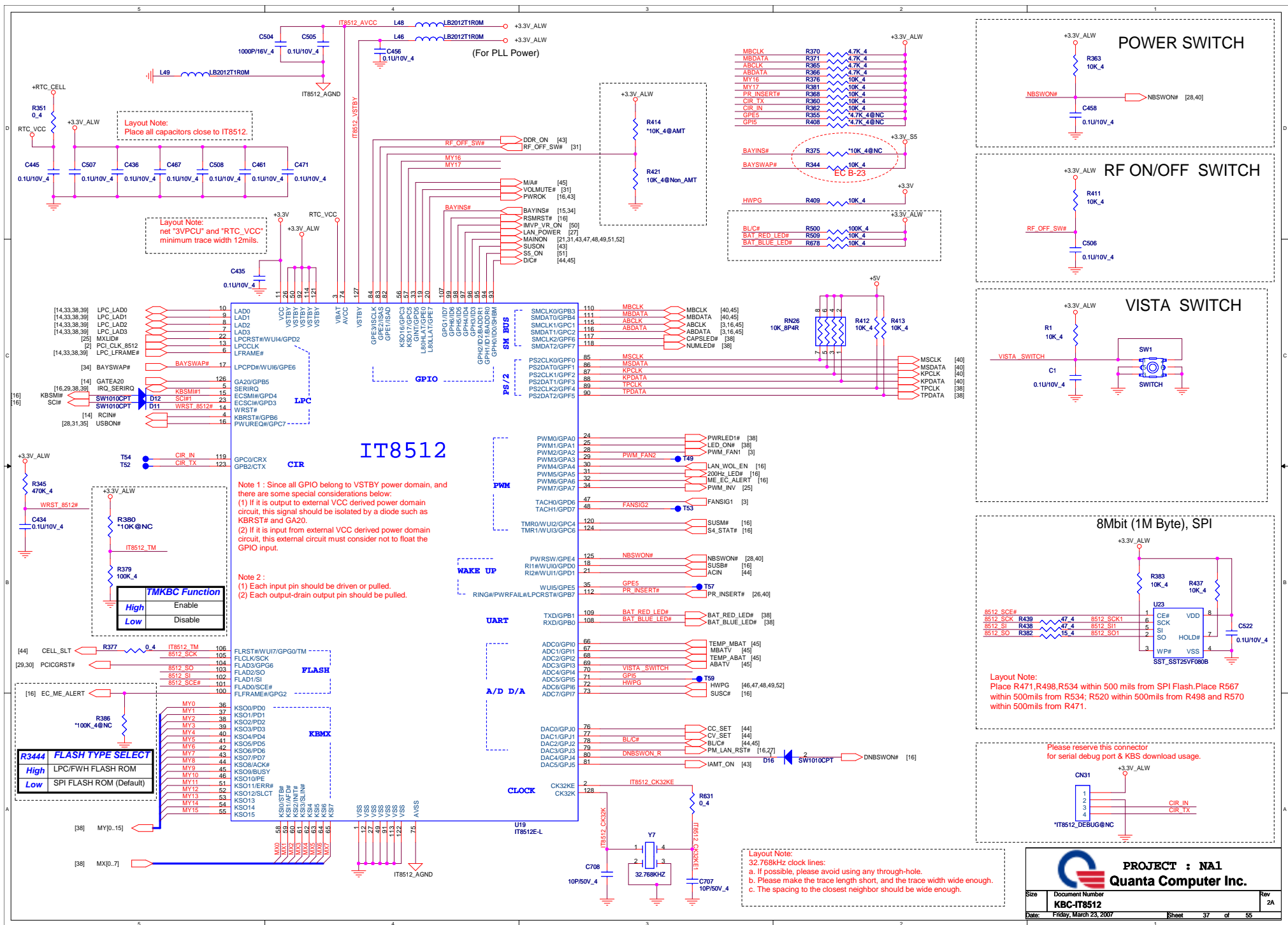
[illegible]

[illegible]

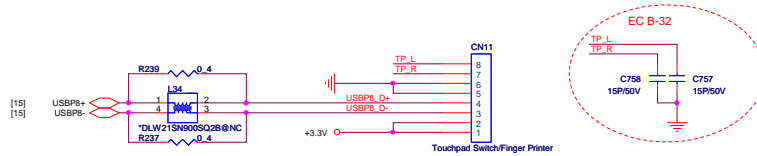
Layout Note:
Place R471,R498,R534 within 500 mils from SPI
Flash.Place R567 within 500mils from R534;
R520 within 500mils from R498 and R570 within
500mils from R471.

[illegible]

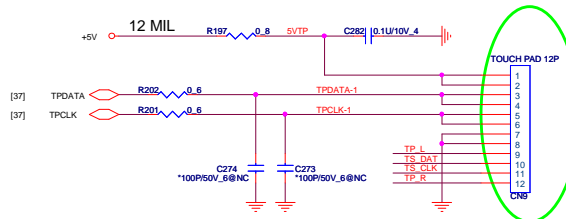
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Size	Document Number		Rev
	BLUETOOTH & iAMT flash		1A
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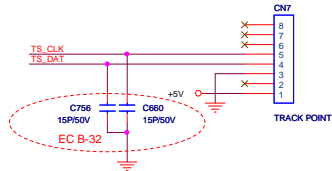
TOUCHPAD Switch / FINGER PRINT CONN



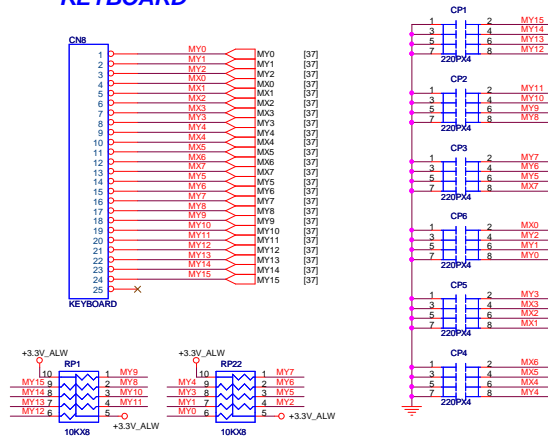
TOUCHPAD CONN



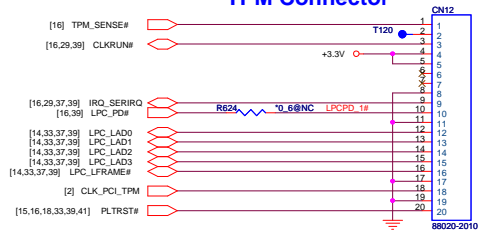
TRACK POINT



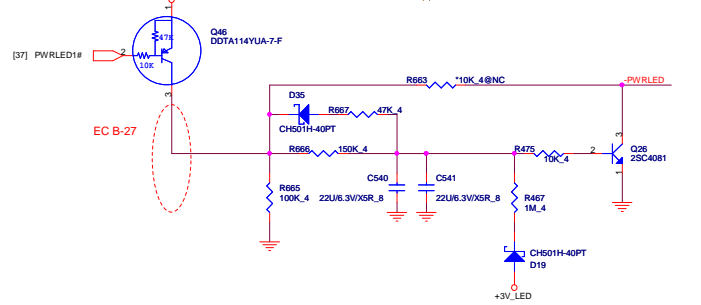
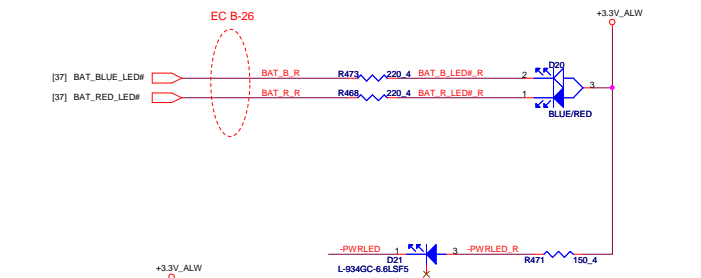
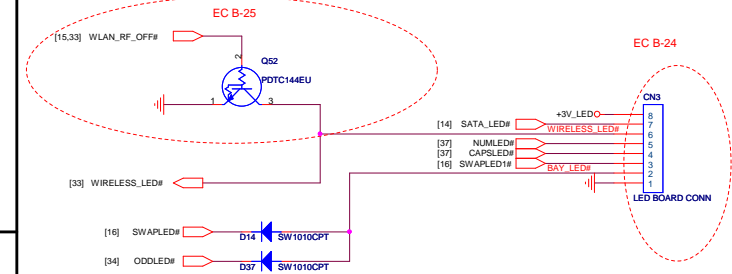
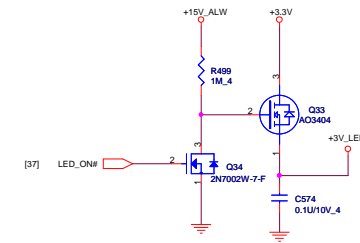
KEYBOARD



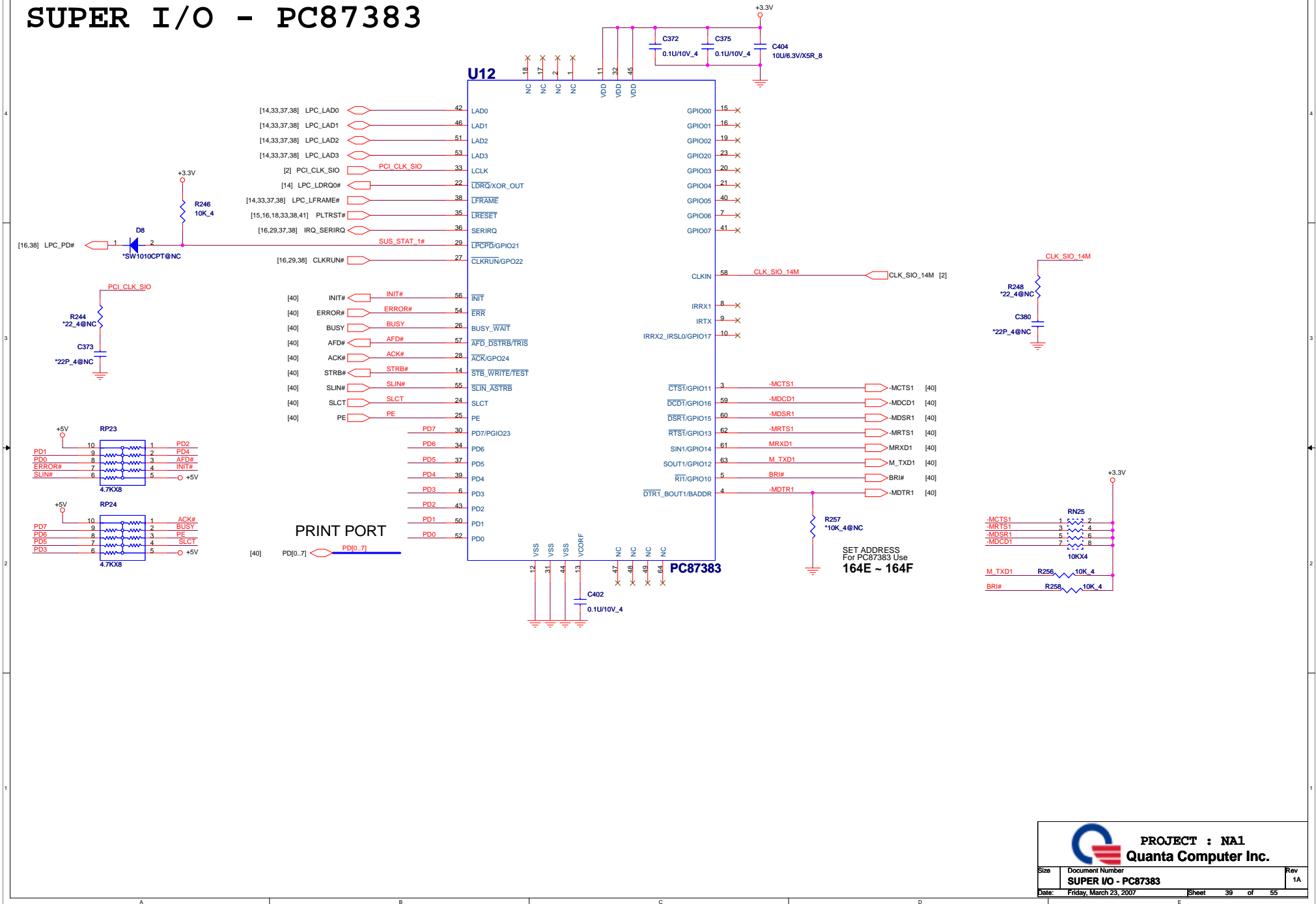
TPM Connector



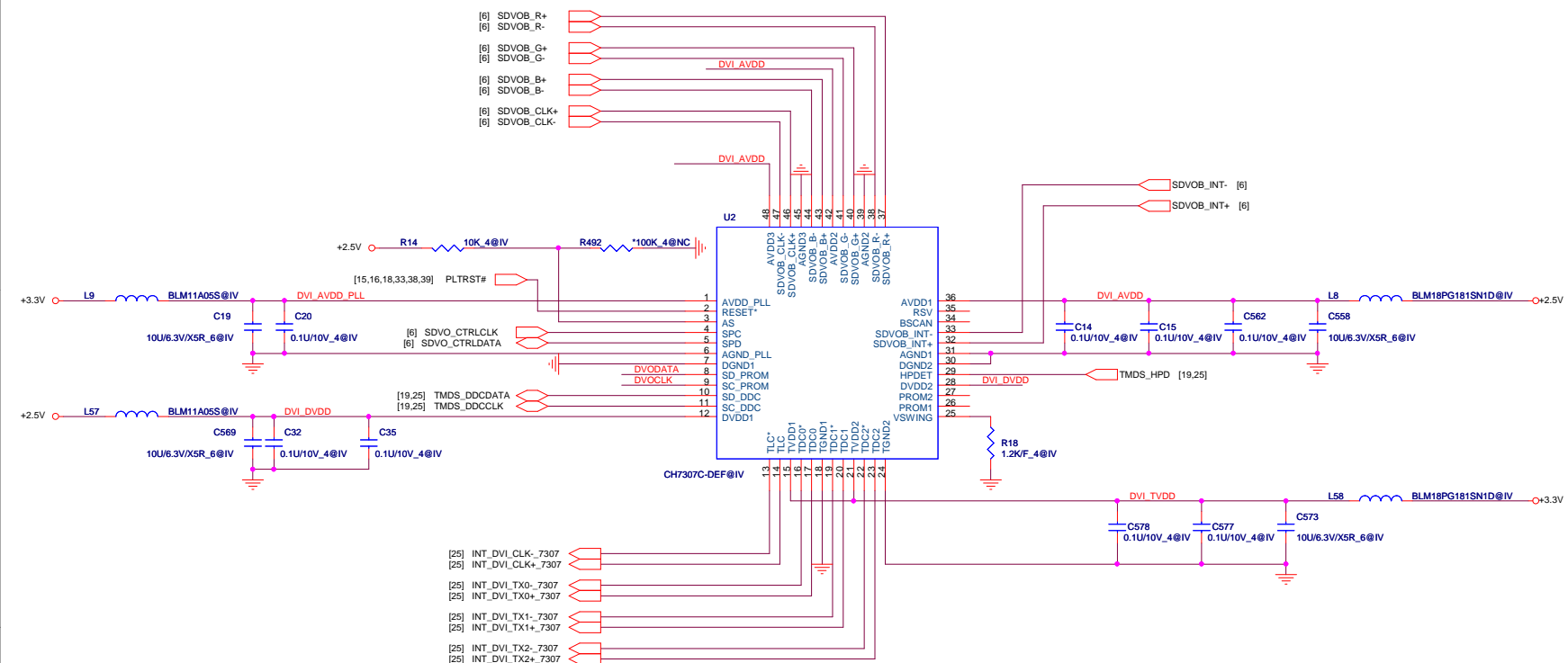
LED INDIATOR



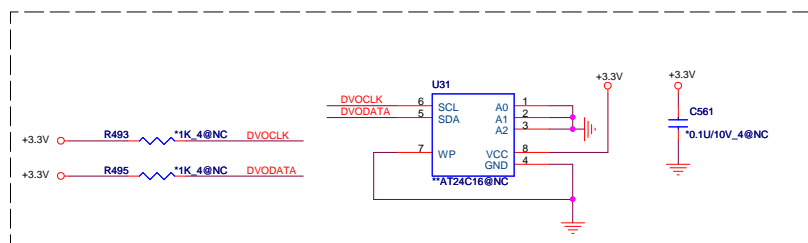
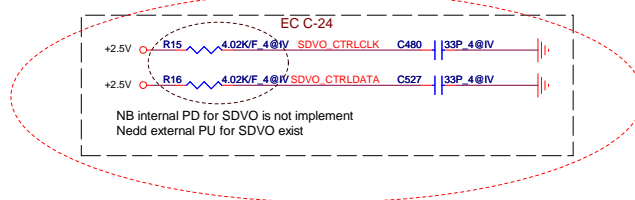
SUPER I/O - PC87383




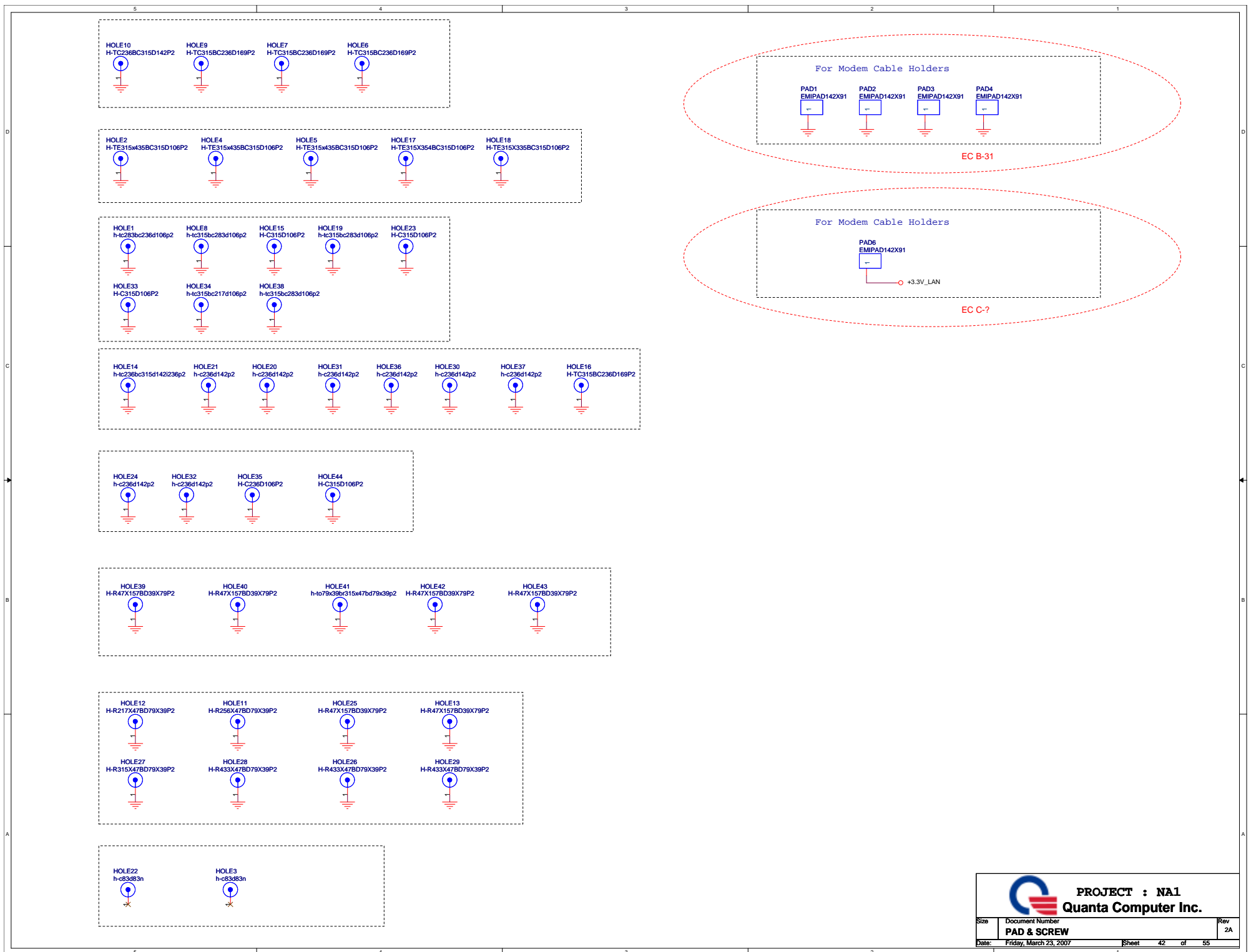
SDVO-DVI

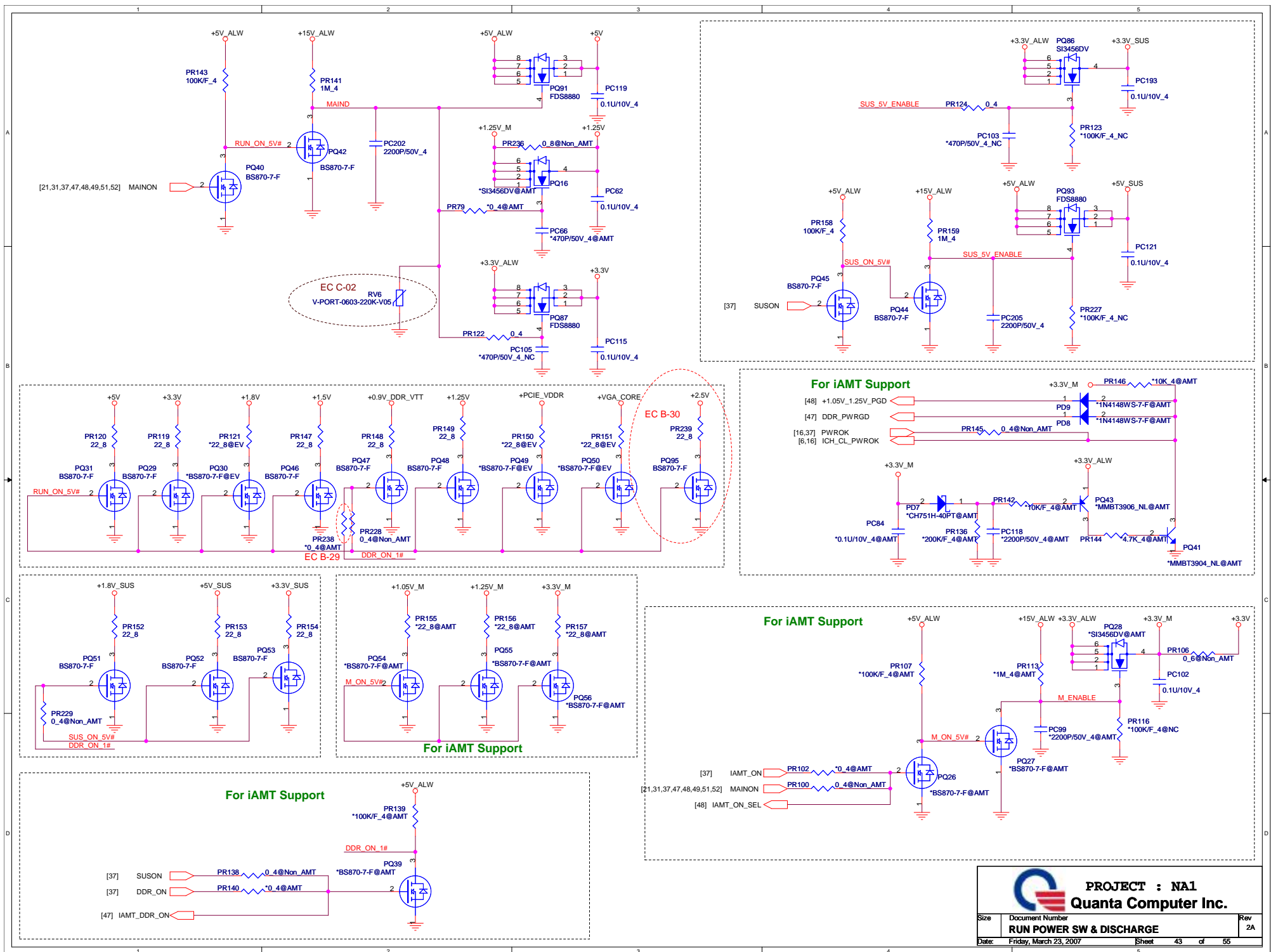


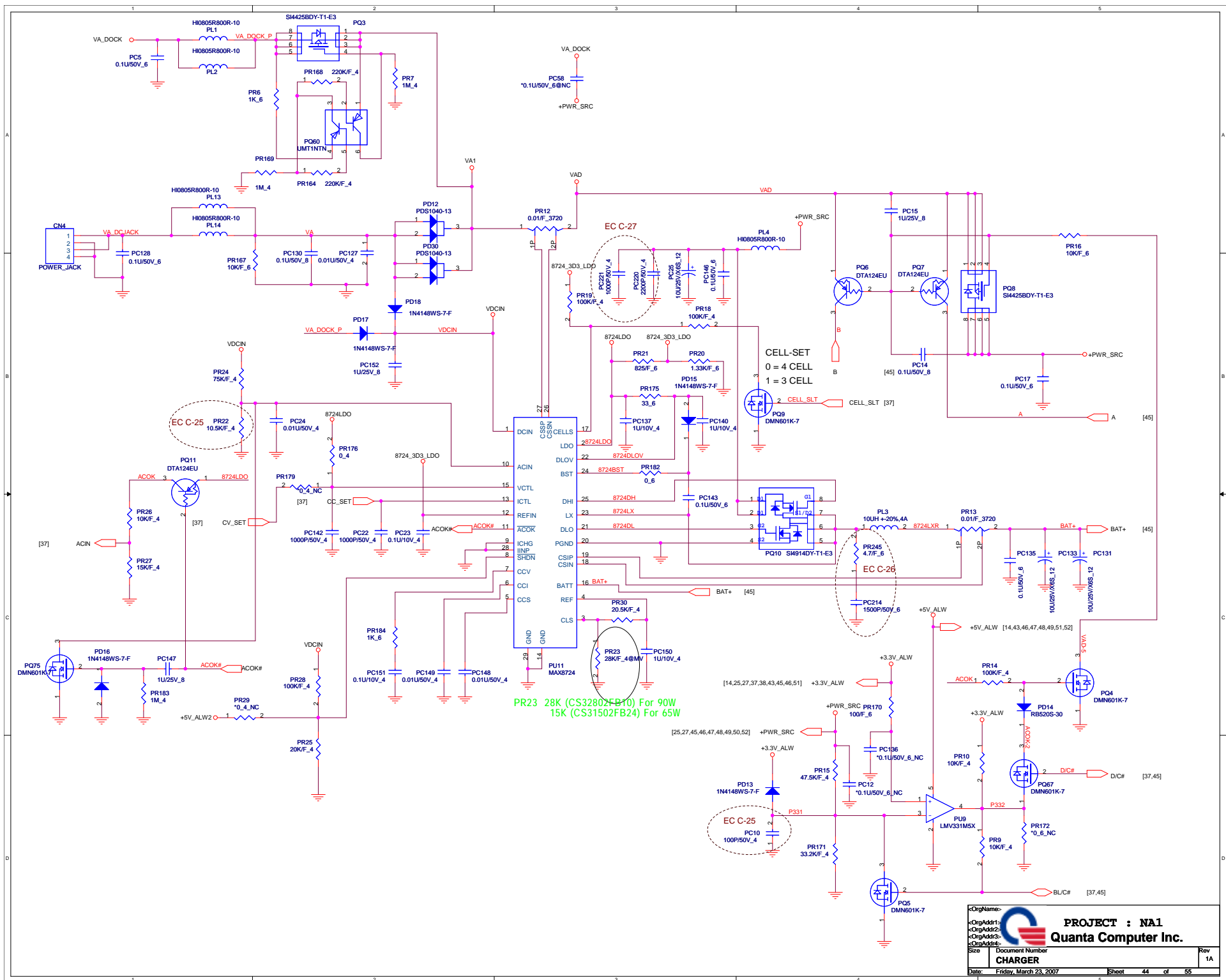
EC B-28

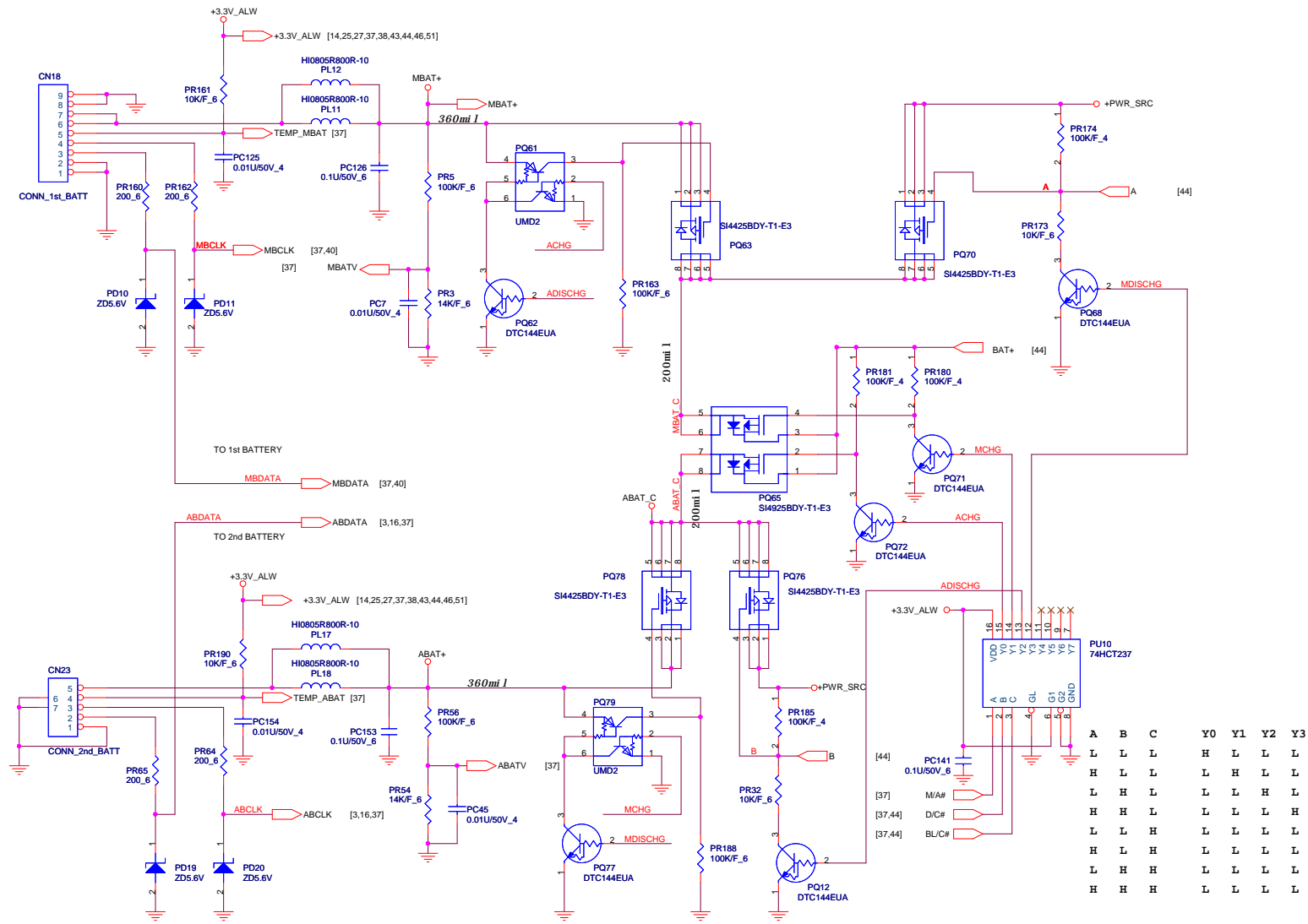


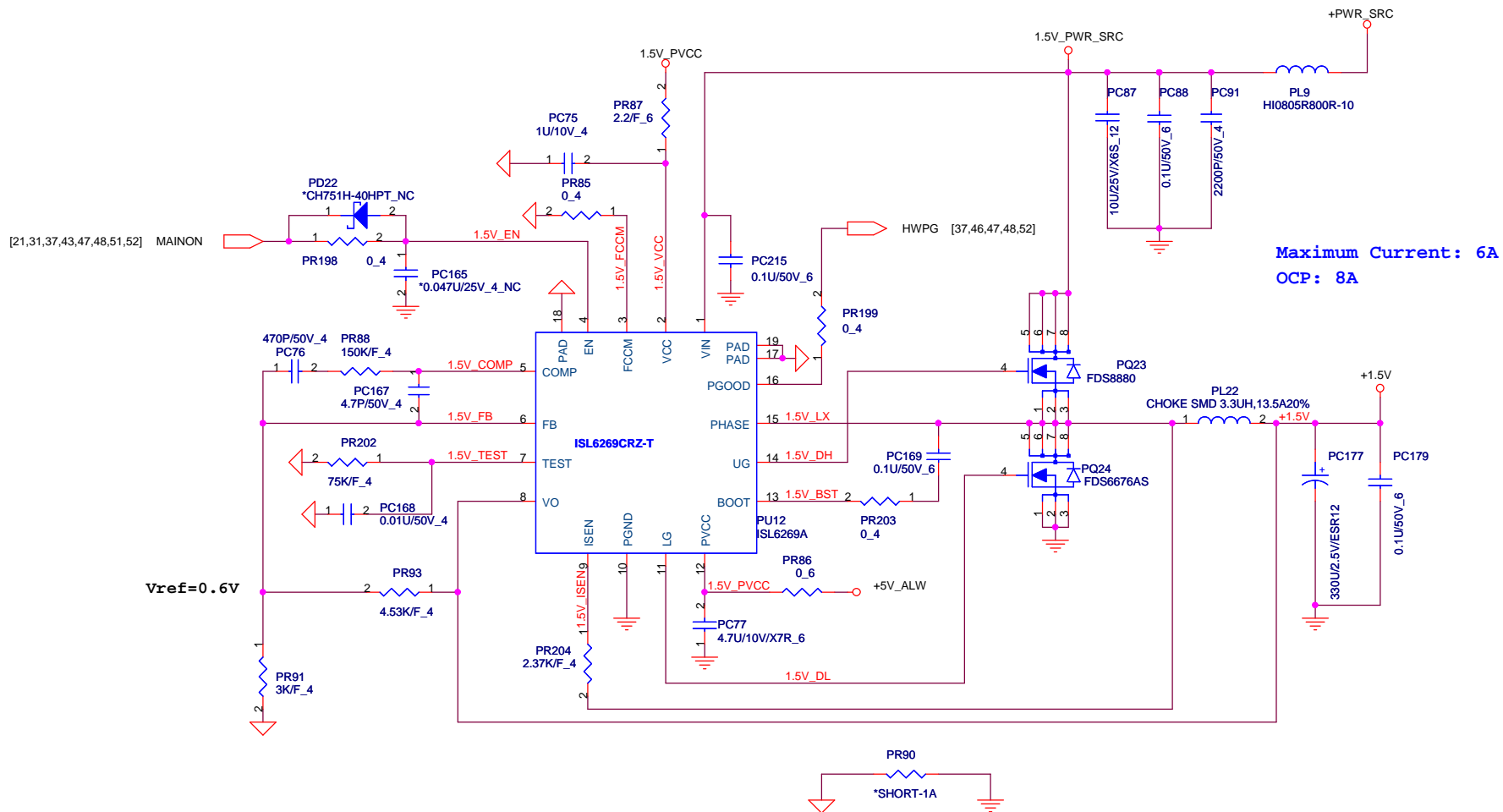
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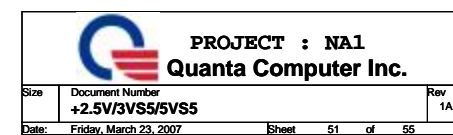


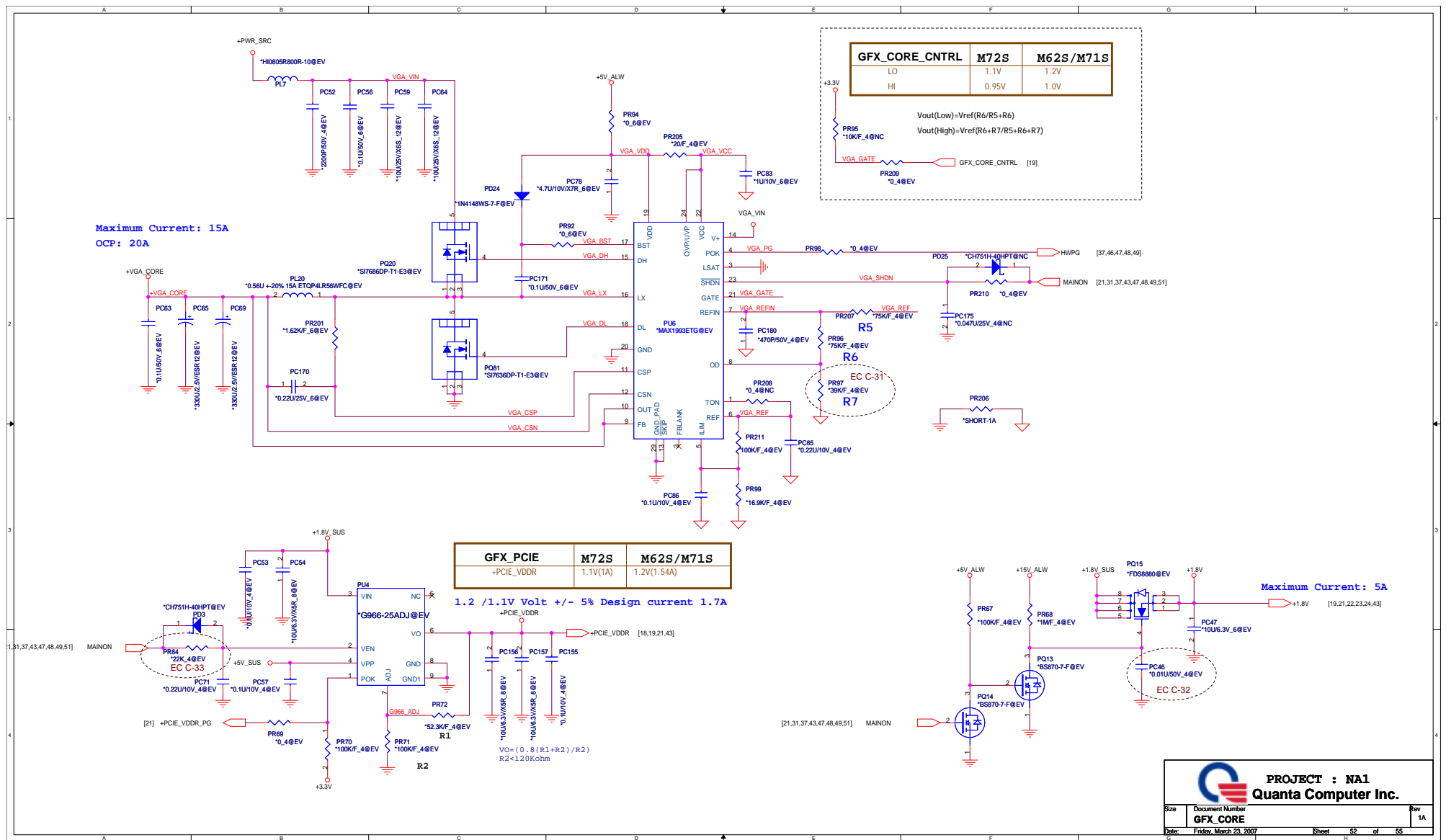




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Quanta Computer Inc.

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NA1/QA1 Schematic EC Tracking Record B (for A --> B) Nov. 22, 2006

EC #/Page/Description/Part Affected

EC B-01 /02/ Add C528,C530,C534,C830 33pF for EMI issue.
EC B-02 /03/ No_stuff R105_51 on H_RESET# signal for Intel platform request(ITP port unused).
EC B-03 /06/ Change R106,R116 connect From GND to +1.05V_VCCP for Intel design guide Rev_1.3 recommend.
EC B-04 /08/ Delete R496 for PCB layout issue.
EC B-05 /09/ Delete R17,R245 for PCB layout issue.
EC B-06 /09/ Change L60 to 100 and add C481/0.1uF for TV/CRT power VCCD_QDAC ripple issue.
EC B-07 /09/ No_stuff D3,R136 for Double stuff the between +1.05V_VCCP and +3.3V.
EC B-08 /14/ Add R642_0 of reserve for IAMT function request.
EC B-09 /15/ Change BAYINS# signal from GPIO12 to GPIO31pin for IAMT function request.
EC B-10 /16/ Add pull up resistor R434,R440_10K of reserve on STP_PCl# & CPU_PCl# signals for IAMT function request.
EC B-11 /16/ Add signal "LAN_PHYPC" on GPIO12 pin for IAMT function request.
EC B-12 /16/ Stuff R607_0 for SATA HDD Modularity.
EC B-13 /19/ Add R245_10K for ATI request.
EC B-14 /25/ Change R157 & R560 from 10K to 8.2K for ATI request.
EC B-15 /26/ Modify CN16 footprint for correct layout.
EC B-16 /27/ Add Q53 for IAMT function request.
EC B-17 /27/ No_Stuff R27 for correct LAN LED indicator.
EC B-18 /28/ Change R511 from 3.92K to 1.4K for Intel platform LAN energy detect circuit request.
EC B-19 /29,30/ Change cardbus controller from Ricoh-R5C853 to TI-PCI7612.
EC B-20 /31/ Move Audio codec & amplifier circuit from Audio board to M/B for EMI issue.
EC B-21 /33/ Add R394 MiniCard WLAN_AUX power connection to +3.3V_S5 for IAMT function request.
EC B-22 /35/ Add EMI filter L12 for EMI issue.
EC B-23 /37/ Change BAYSWAP# signal connection from +3.3V to +3.3V_S5 for Modularity Bay detect.
EC B-24 /38/ Change CN3 Pin definitions for cable assembly issue.
EC B-25 /01/ Add Q52 for correct WLAN LED indicator.
EC B-26 /38/ Delete Q24,Q25 for correct battery LED indicator.
EC B-27 /01/ Delete R664 for correct power LED indicator.
EC B-28 /41/ Add C480 & C527_33pF for EMI request.
EC B-29 /43/ Add PR238_0 for IAMT function request.
EC B-30 /43/ Add PR239 & PQ95 for +2.5V discharger.
EC B-31 /42/ Add PAD1~PAD5 for modem cable holders.
EC B-32 /38/ Add C660,C756~C758 for EMI request.




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	EC list	2A
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NA1/QA1 Schematic EC Tracking Record C (for B --> C) Jan. 17, 2007
EC #/Page/Description/Part Affected

EC C-01 /02/ Re-arrange PCICLK fanout according to Intel design guide recommend.
 EC C-02 /03,06,14,25,43/ Add Varistors for ESD.
 EC C-03 /13/ Delete C124 due to layout space is tight.
 EC C-04 /16/ Add new serial 10K resistor.
 EC C-05 /16/ Change pull up from 10K to 1K.
 EC C-06 /25/ Q38 from 2N7002W-7-f to PDT C144EU.
 EC C-07 /26/ Change D1,D28,D26,D29 to +5V.
 EC C-08 /26/ Correct the ESD diode D22,D23,D24 connection.
 EC C-09 /26/ L5, L6, L7 change to BK1608LL680.
 EC C-10 /21/ L5, L6, L7 Change value and add part for M71-S power sequence.
 EC C-11 /26/ S-video connector change to black surface.
 EC C-12 /28/ Add C810, C811, C831, C832 1000pF for EMI.
 EC C-13 /29/ R694 change to connect +3.3V_SUS.
 EC C-14 /29/ Delete CN28 because it will no longer be used.
 EC C-15 /29/ Add pull-up R736.
 EC C-16 /29/ R706 from 2.2K to 10K.
 EC C-17 /29/ U45 change from MOSFET to power switch.
 EC C-18 /29/ Use 33ohm damping for SD/MMC interface.
 EC C-19 /31/ Add 22pF C833~C840 for EMI.
 EC C-20 /31/ R387 from 10K to No_stuff to fix DOS mode no sound issue.
 EC C-21 /31/ L51 change to BLM21PG600SN1D for EMI.
 EC C-22 /35/ L12 USB common mode choke change footprint.
 EC C-23 /40/ Q32 From PDT C144EU to 2N7002W-7-F to fix S5 DC-mode leakage.
 EC C-24 /41/ R15, R16 4.7K to 4.02K for Intel Design Guide WW48.
 EC C-25 /44/ PR22 change from 10K ohm to 10.5K ohm , PC10 change from N.C. to 100pF. Fix shutdown issue when high loading.
 EC C-26 /44/ Add snubber PR245, PC214 on charger for EMI.
 EC C-27 /44/ Add PC220, PC221 for EMI.
 EC C-28 /48/ PU14 Pin3 connect to +1.05V_1.25V_PGD.
 EC C-29 /50/ Add snubber PR246, PC218, PR247, PC219 on CPUCORE phase1&2 for EMI.
 EC C-30 /51/ PR101 from 27K to 33K , PC186 from 0.1 F to 0.22 F for M71-S power sequence.
 EC C-31 /52/ PR97 Please from 16.9K to 39K to set +VGA_CORE=1.2V.
 EC C-32 /52/ PC46 from 2200pF to 0.01 F for M71-S power sequence.
 EC C-33 /52/ PR84 from 36K to 22K for M71-S power sequence.

 PROJECT : NA1 Quanta Computer Inc.		Rev
		2A
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NA1/QA1 Schematic EC Tracking Record D (for C --> D) Mar. 20, 2007

EC #/Page/Description/Part Affected

EC D-01 /27/ Follow Intel LAN errata to add a serial 30 ohm resister to the crystal.

EC D-02 /31/ To fix "bo" noise, direct short pin22,23 of MAX9789A, pop R447, depop U24, Q21, Q23, R462, R649.

EC D-03 /31/40 Using cable to connect line-out function instead of route on PCB.

EC D-04 /26 Remove L1, L2, L3 because it's easily crack. EMI confirm it's ok.

EC D-05 /40 Add EMI solution for Docking LAN port.

EC D-06 /33 Directly connect the ICH_SMBus to MINIPC1-e.

EC D-07 /36 Delete U27 releated circuit for layout space issue.

EC D-08 /09 VCCA_DAC_BG follow intel circuit to fix CRT waving issue.



PROJECT : NA1
Quanta Computer Inc.

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