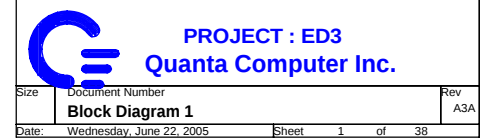
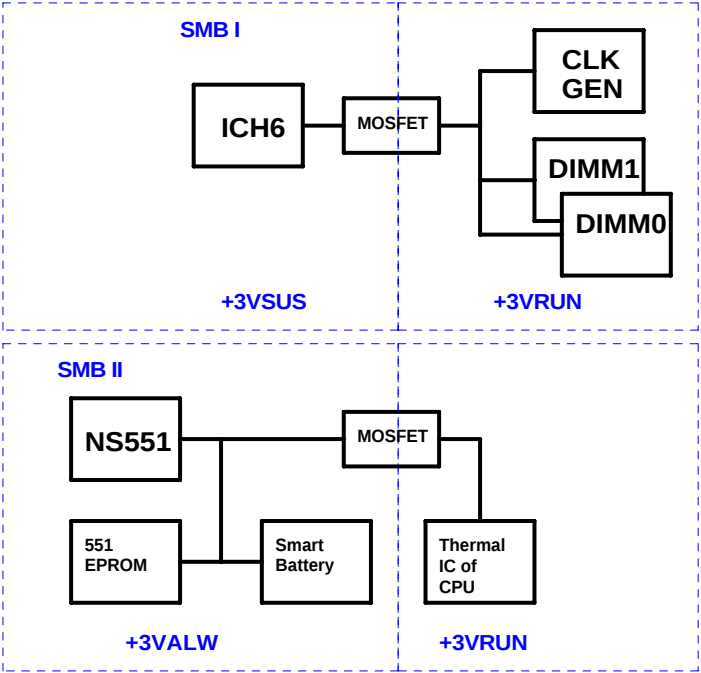


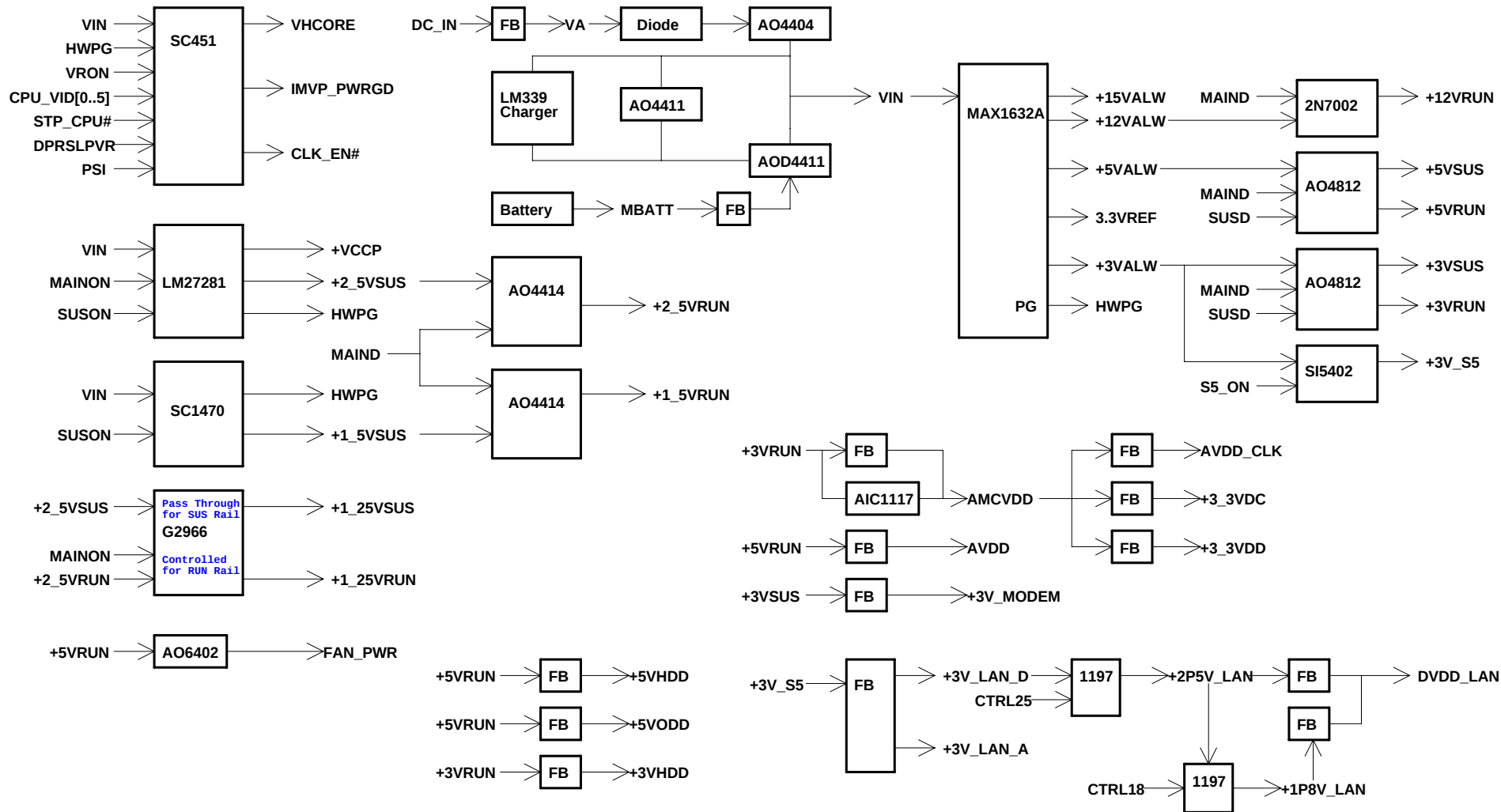
VER : B3B



PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
REQ0# / GNT0#	AD24	PIRQA#	RTL8110S
REQ2# / GNT2#	AD19	PIRQB# , PIRQD#	MINI-PCI
REQ1# / GNT1#	AD17	PIRQC#,PIRQD#,PIRQA#	TI 7411



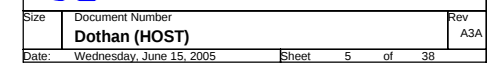
Power Rail Flow

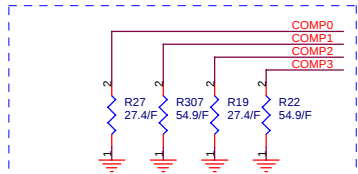


[illegible]

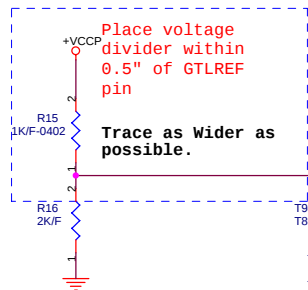
New Label	NOTE	Description	Control Signal or Source
VA		AC ADAPTER (20V)	
VIN		MAIN POWER (10-20V)	
MBATT		MAIN BATTERY + (10-17V)	
+15VALW		+15V ALWAYS	
+12VALW		+12V ALWAYS	
+12VRUN		+12V RUN	MAINON
+5VALW		+5V ALWAYS & KBC POWER	
+5V_S5	NO USE	THIS POWER WILL BE TUNED OFF IN S5 BATTERY MODE	S5_ON
+5VSUS		+5V S5 CONTROLLED POWER	SUSD
+5VRUN		+5V S3 CONTROLLED POWER	MAIND
+5VHDD	CONNECT TO +5VRUN DIRECTLY	+5V HDD POWER	+5VHDD_EN#
+5VODD	CONNECT TO +5VRUN DIRECTLY	+5V ODD POWER	+5VMOD_EN#
+5VFDD	NO USE	EXTERNAL FDD POWER (5V)	+5VFDD_EN#
FAN_PWR		FAN POWER (5V)	VFAN, MAX6657_OV#
VDDA		Amplifier Power 5V RUN Plane	+5VRUN
AMCVDD		AC97 Code DAC Power 3VRUN	+3VSUS
3V_MODEM		MODEM Power 3VSUS	+5VRUN or +3VRUN
+3VALW		8051 POWER (3V)	
+3V_S5		THIS POWER WILL BE TUNED OFF IN S5 BATTERY MODE	S5_ON
+3VSUS		SLP_S5# CTRLD POWER	SUSD
+3VRUN		SLP_S3# CTRLD POWER	MAIND
+3VHDD	CONNECT TO +3VRUN DIRECTLY	SATA HDD Power	+3VHDD_EN#
+3V_LAN_D		LAN Digital Power	+3V_S5
+3V_LAN_A		LAN Analog Power	+3V_S5
+2P5V_LAN		LAN Analog Power	+3V_LAN_D (+3V_S5)
DVDD_LAN		LAN Digital Power 1.8 or 2.5V	+2P5V_LAN(+3V_S5)
RTCVCC		RTC & PCL POWER	
REF3V			
+2_5VSUS			SUSON
+2_5VRUN			MAIND
+1_8VSUS	NO USE		
+1_8VRUN	NO USE		+2_5VRUN
+1_8V_M24	NO USE		+1_8VSUS or +1_8VRUN
+1_5V_S5		THIS POWER WILL BE TUNED OFF IN S5 BATTERY MODE	S5_ON
+1_5VSUS			SUSON
+1_5VRUN		AGP I/O POWER	MAIND
+1_25VSUS		SMDDR_VTERM	+2_5VSUS
+1_25VRUN			MAINON
VGA1_2V	NO USE	ATI VGA 1.2V	+2_5VRUN
VGACORE	NO USE	ATI VGA CORE 1.0/1.2V	MAINON, POW_SW
+VCCP		AGTL+ POWER (1.05V)	MAINON
VHCORE		CPU CORE POWER (1.25/1.15V)	VR_ON, HWPg
GND	ALL PAGES	DIGITAL GROUND	
AGND	Page 28,29	AUDIO GND	
GNDP	NO USE	CPU POWER GND	
CGNDP	NO USE	CHARGER GND	
DC_GND	DC Jack	DC/DC POWER GND	
LANGND	NO USE	COMBO CONN GND	

1 OF 3

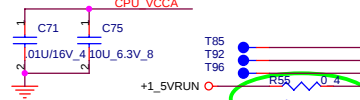




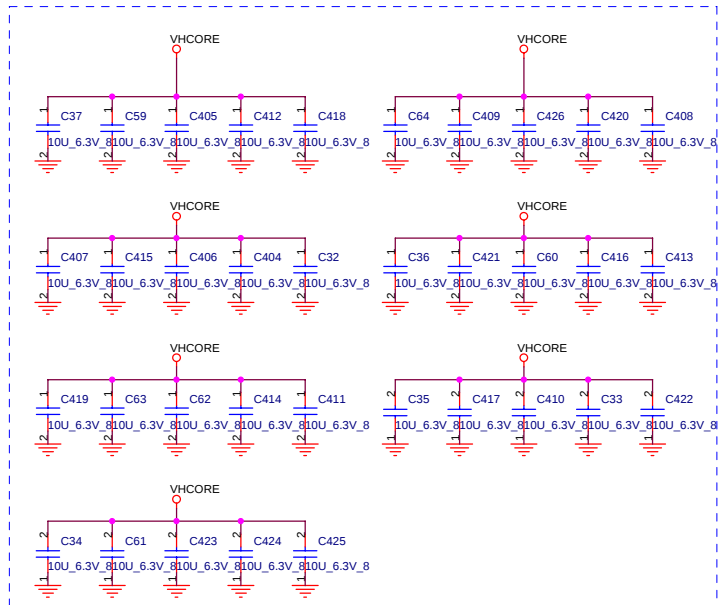
Place pulldown resistors within 0.5" of COMP pins
18mils Trace Width of COMP0,2
5mils Trace Width of COMP1,3



Place voltage divider within 0.5" of GTLREF pin
Trace as wider as possible.

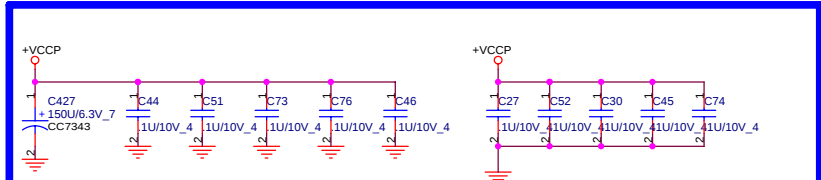


Removed +1.8VRUN

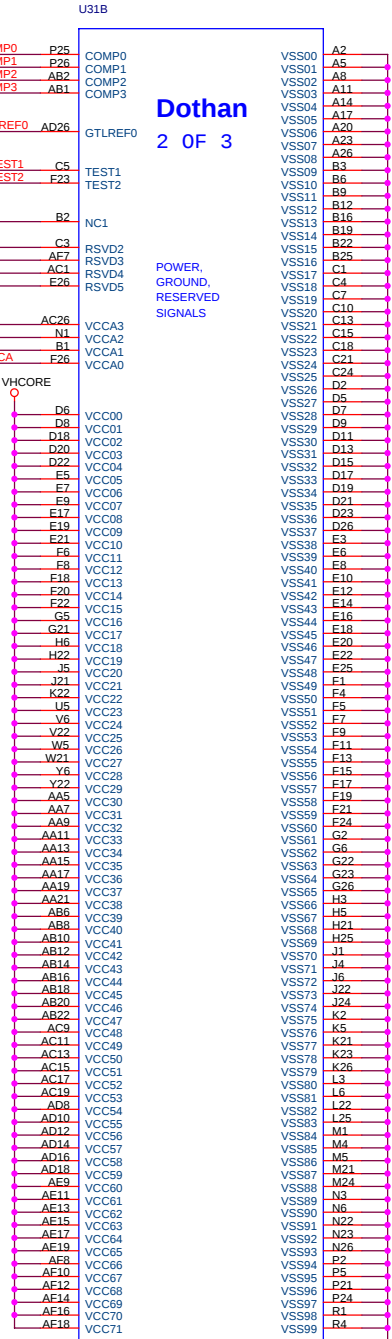


VHCORE

Total caps = 1670 uF > 1430 uF (Intel Recommendation)
ESR = 9m ohm/4 // 5m ohm/35 ----> = 0.1343m ohm

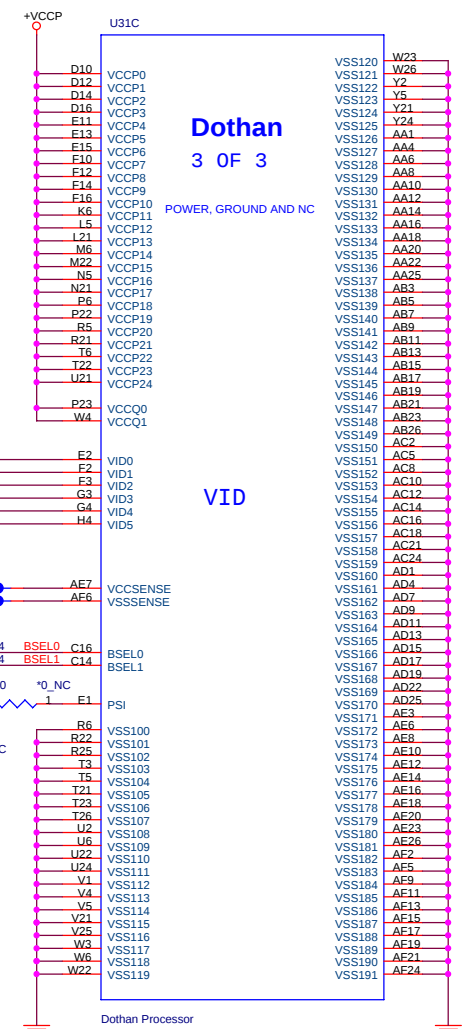


C, mF-----ESR, mW-----ESL, nH
1 x 150 mF-----42 mW (typ) / 2-----2.5 nH / 12
10 x 0.1 mF-----16 mW (typ) / 10-----0.6 nH / 10



Dothan 2 OF 3

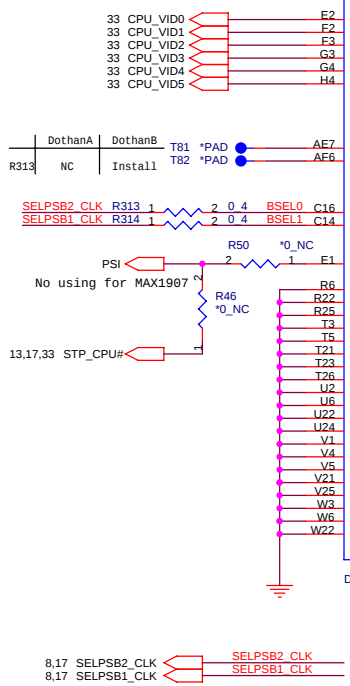
POWER, GROUND, RESERVED SIGNALS

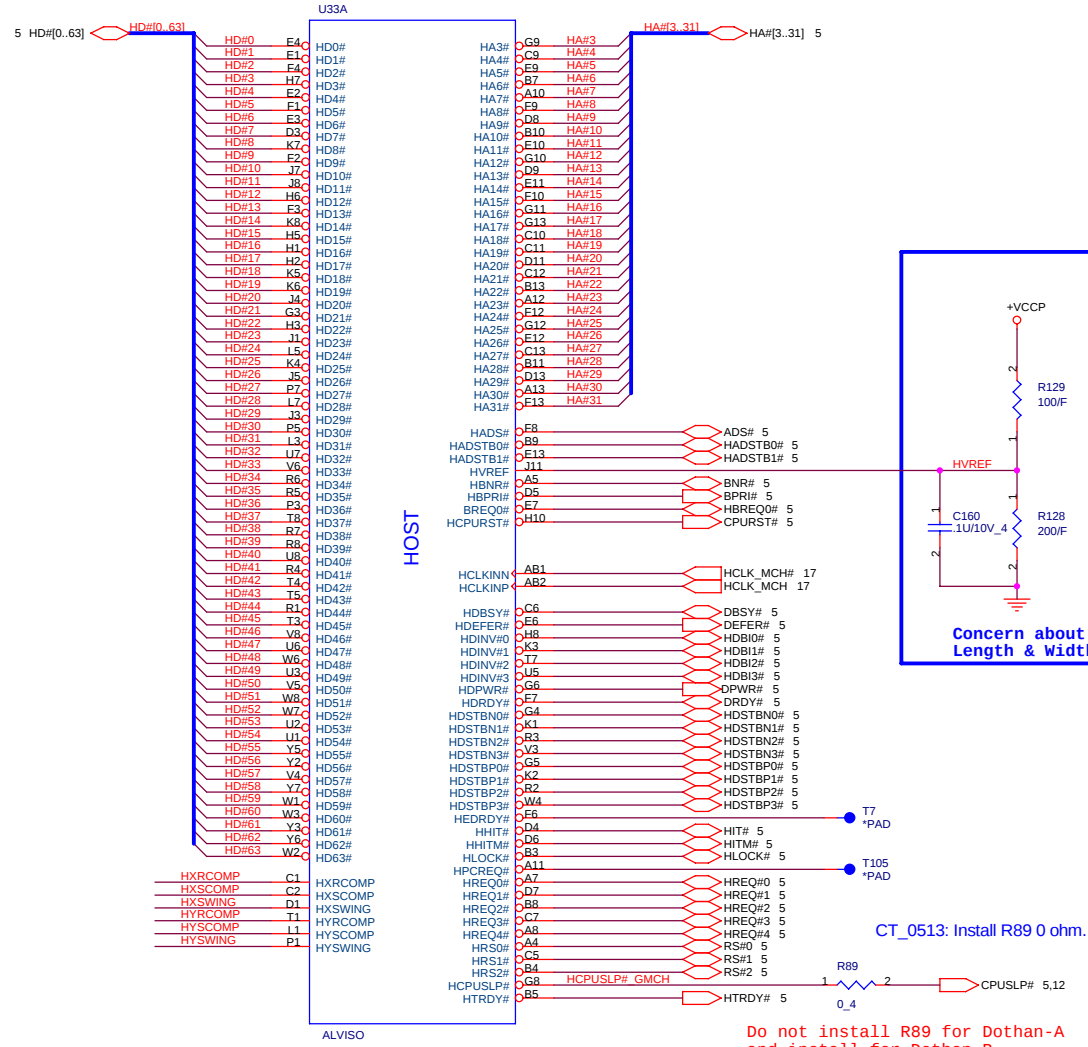
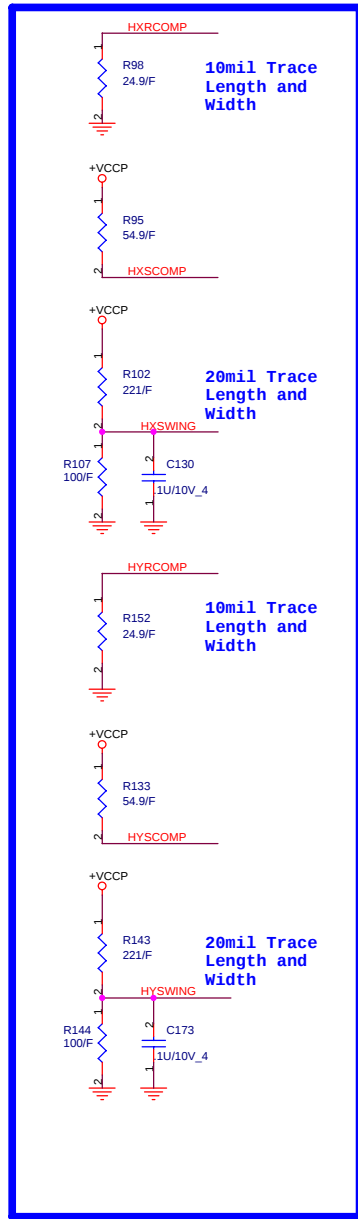


Dothan 3 OF 3

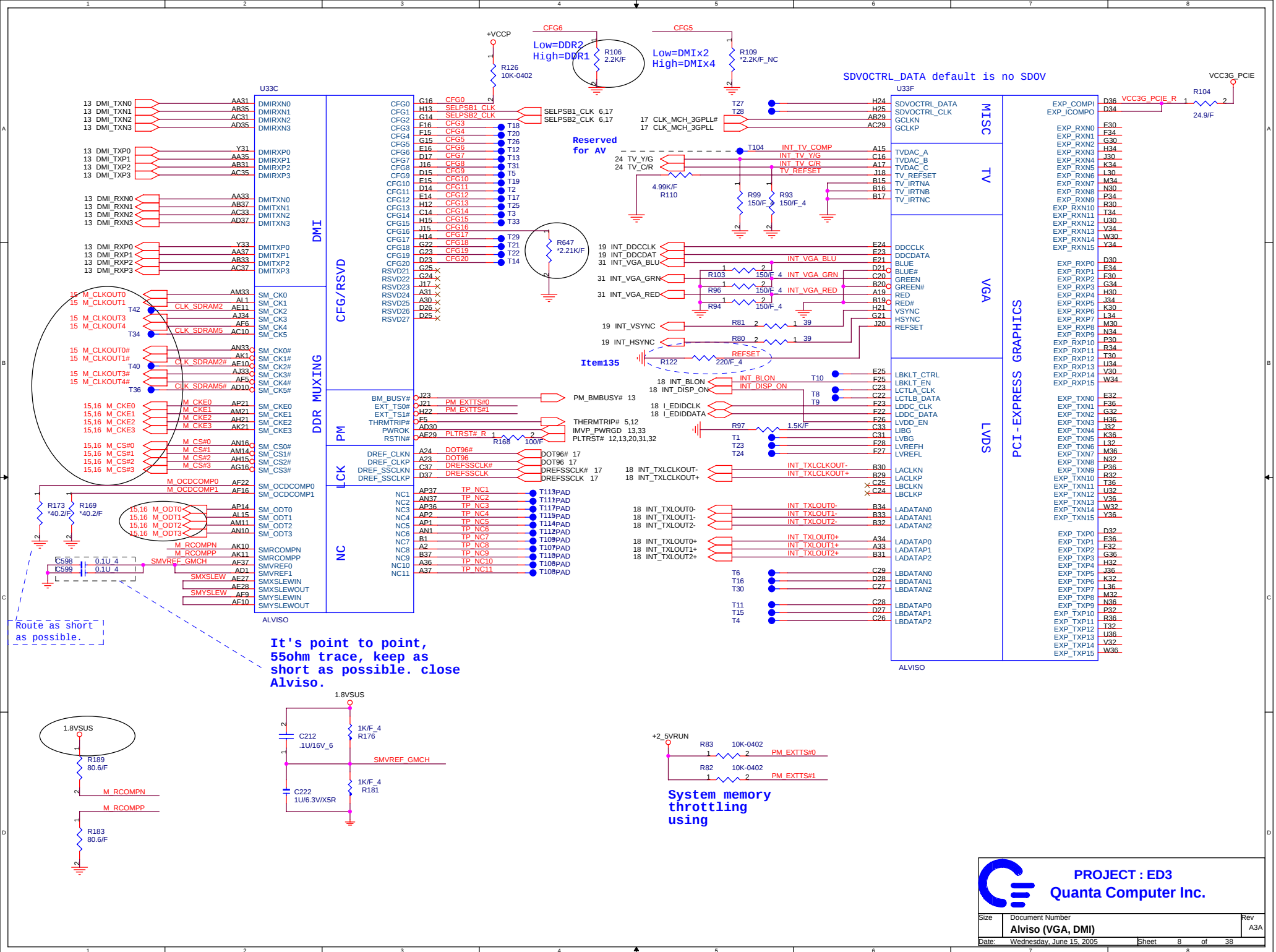
POWER, GROUND AND NC

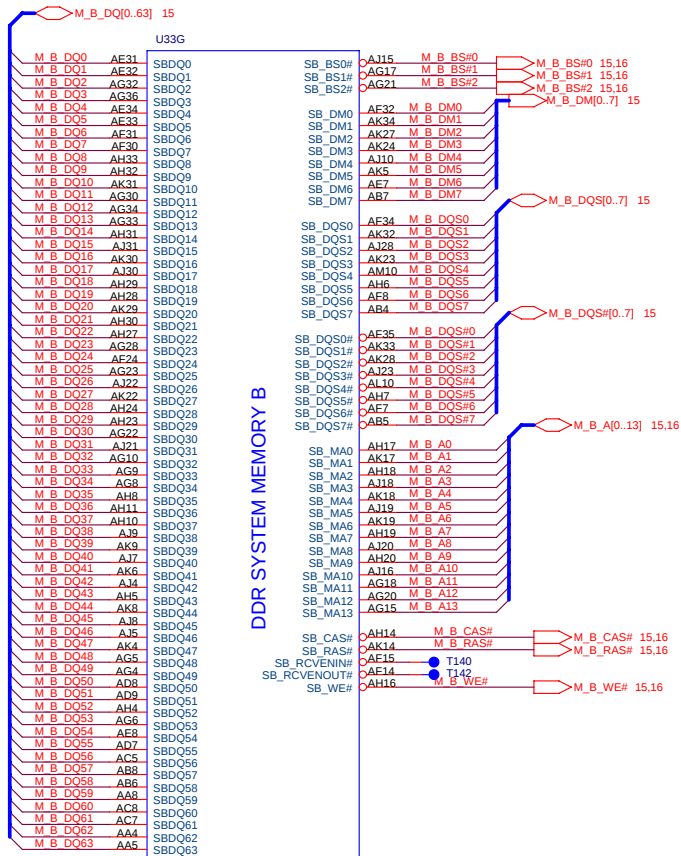
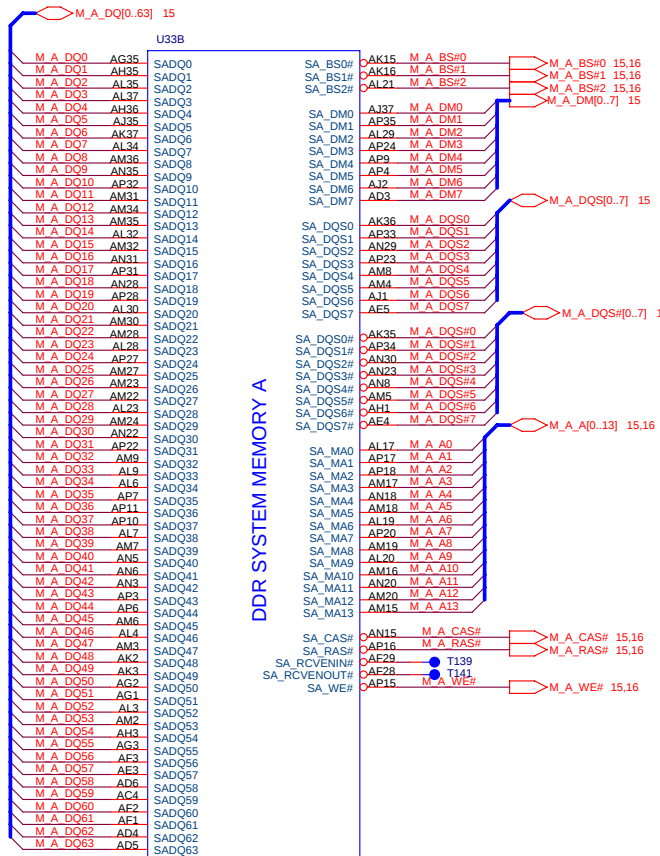
VID

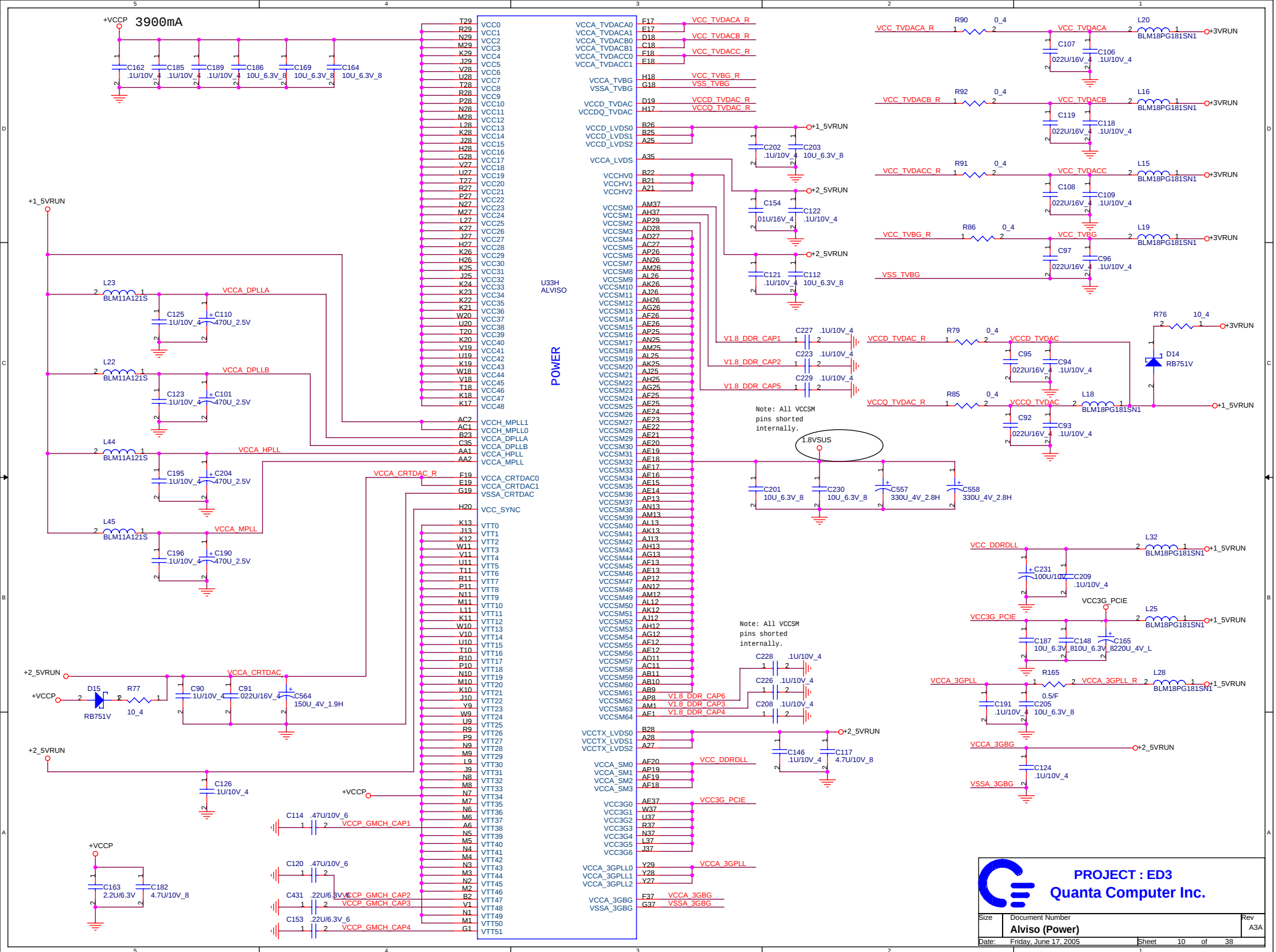


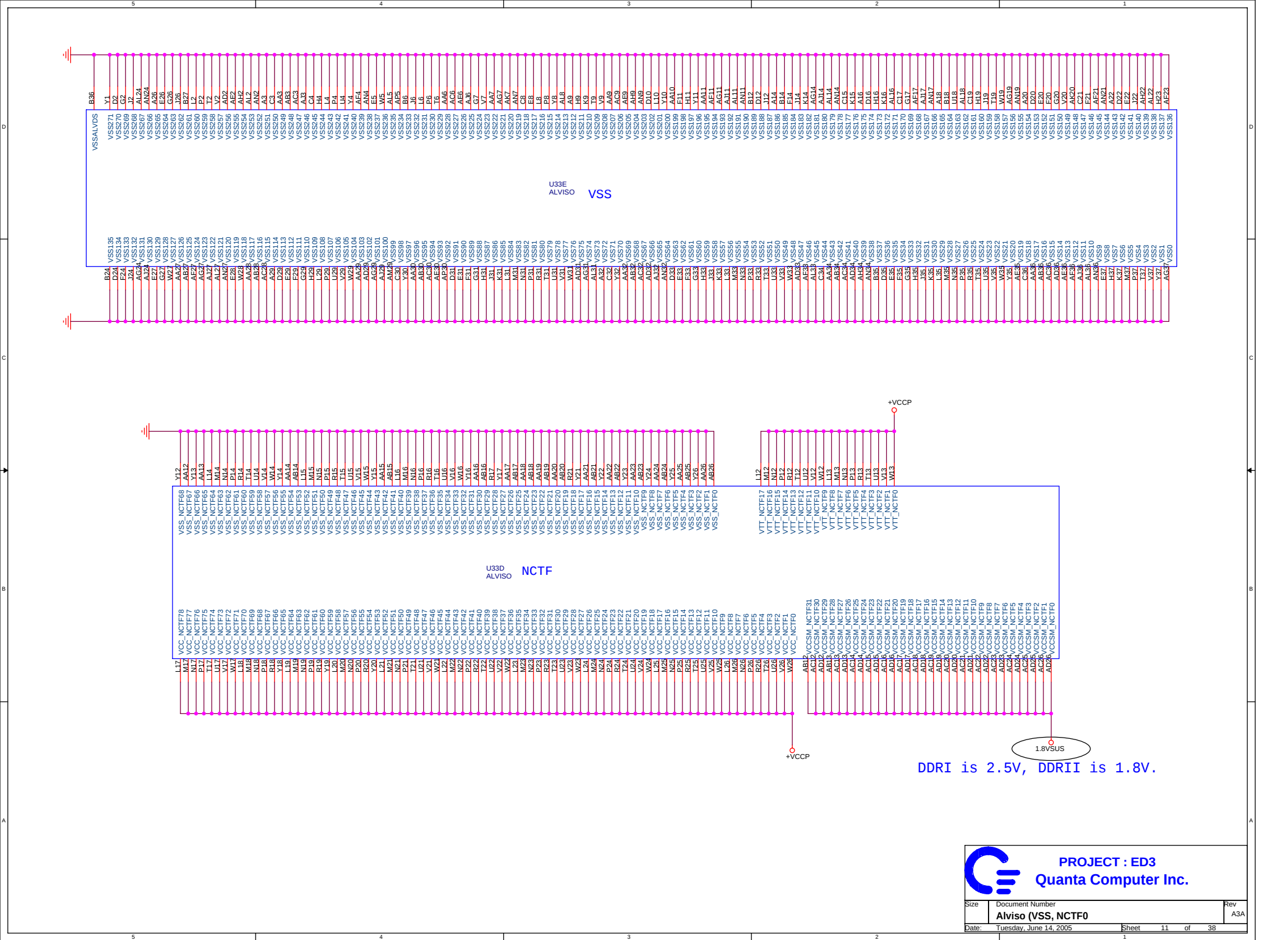


CT_0505: Change footprint to mbga1257-intel-alviso from MBGA-1257

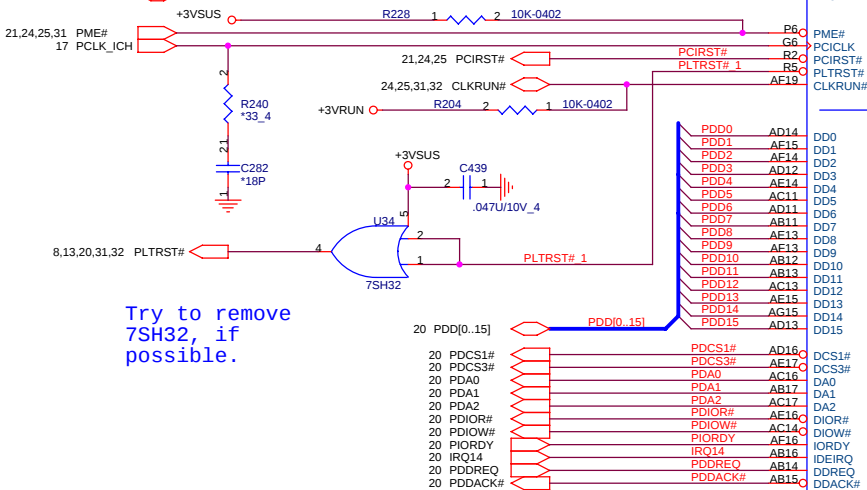
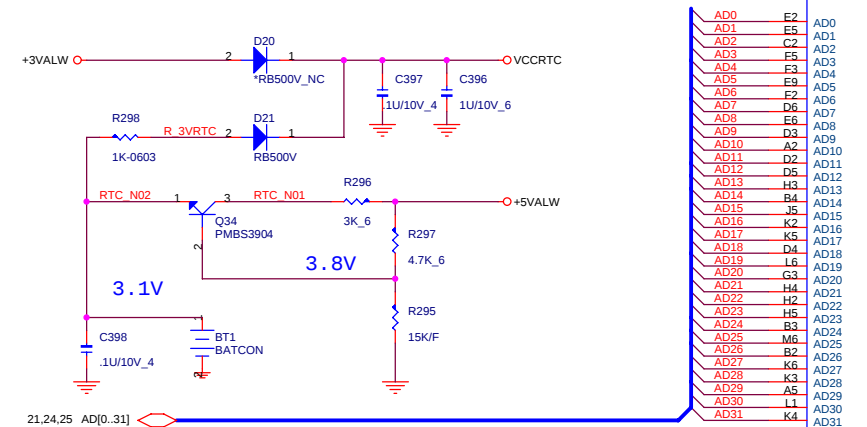
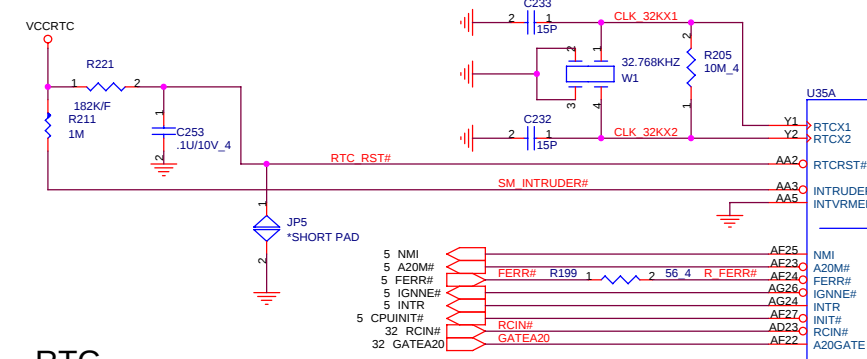




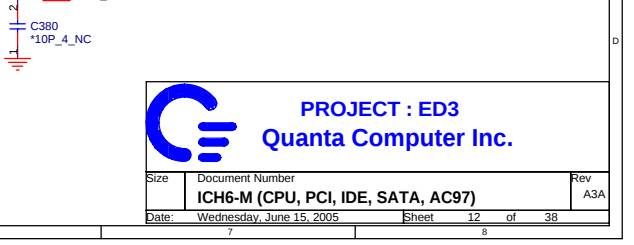
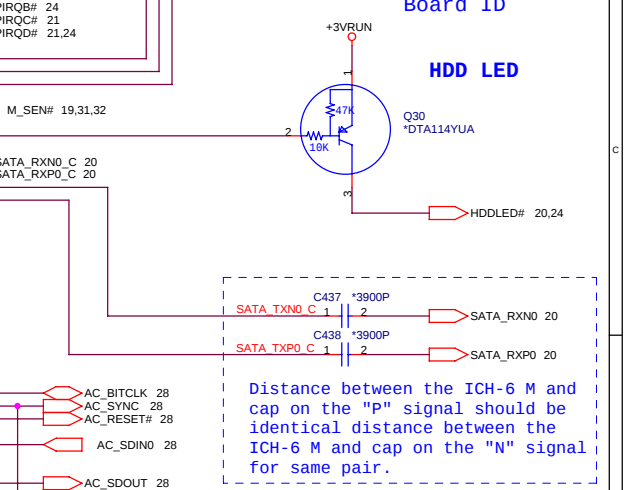
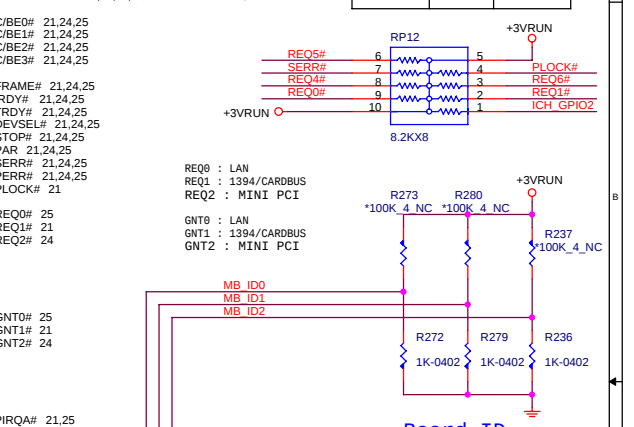
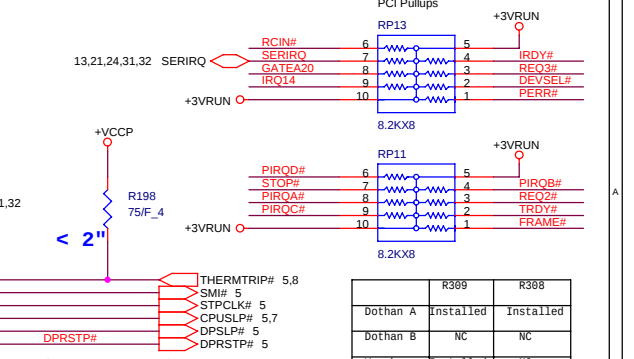
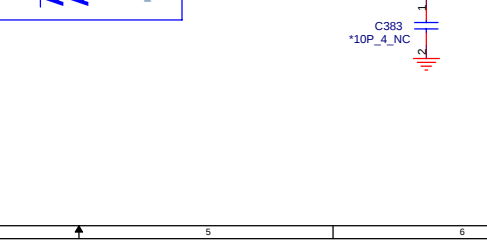
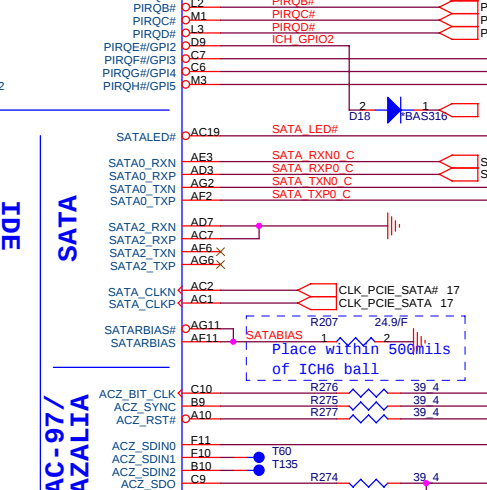
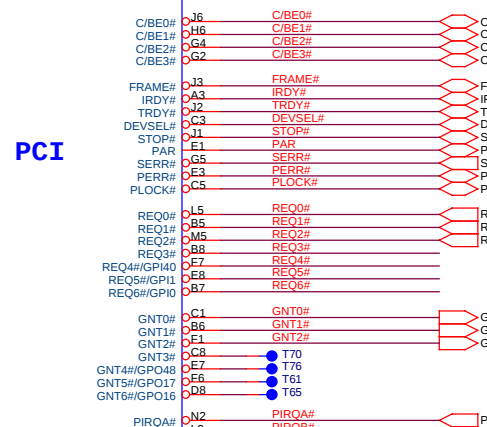
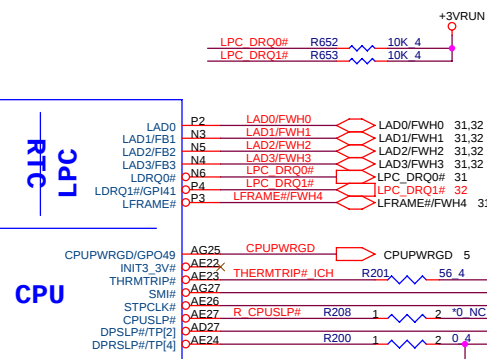




RTC

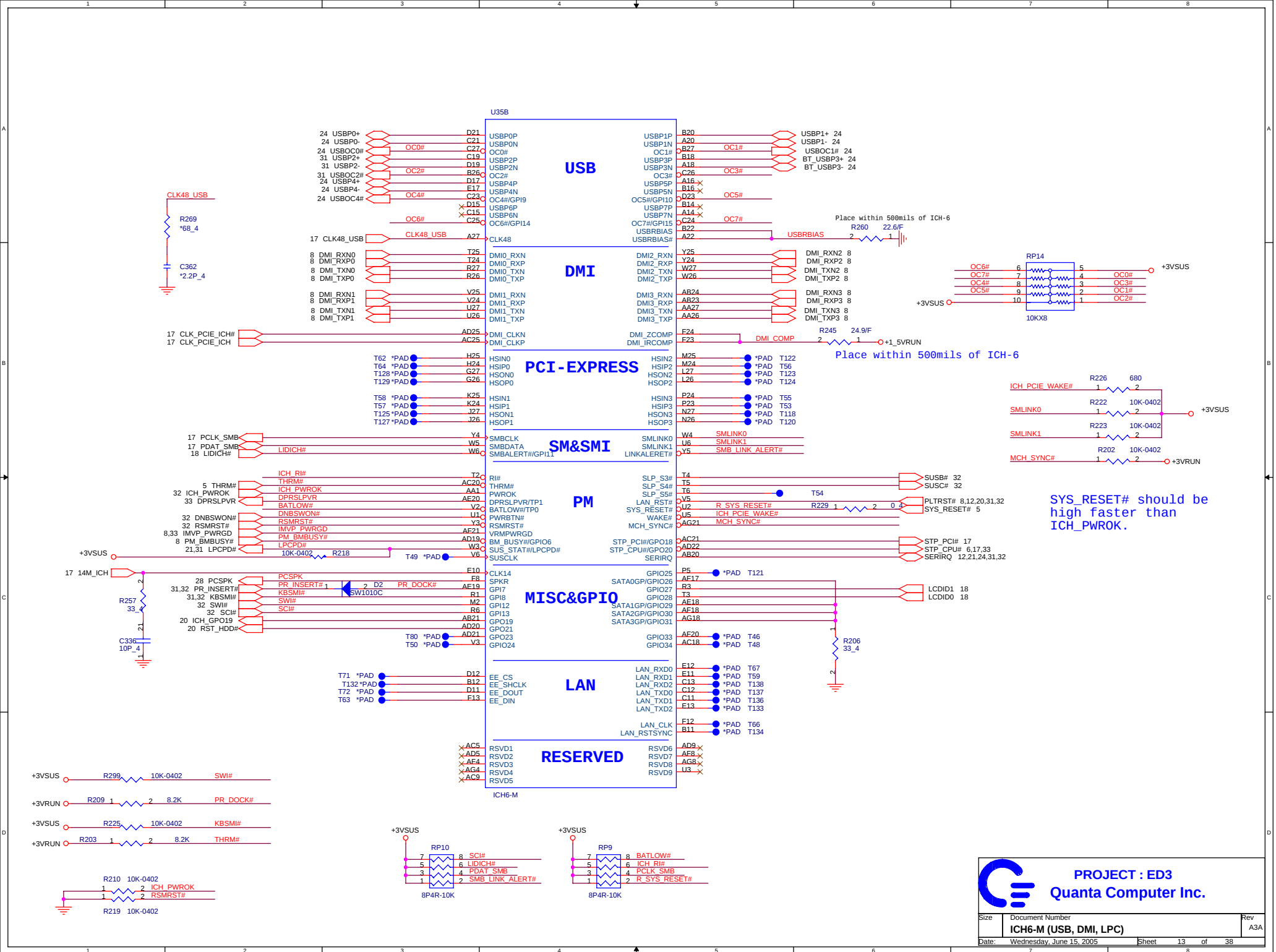


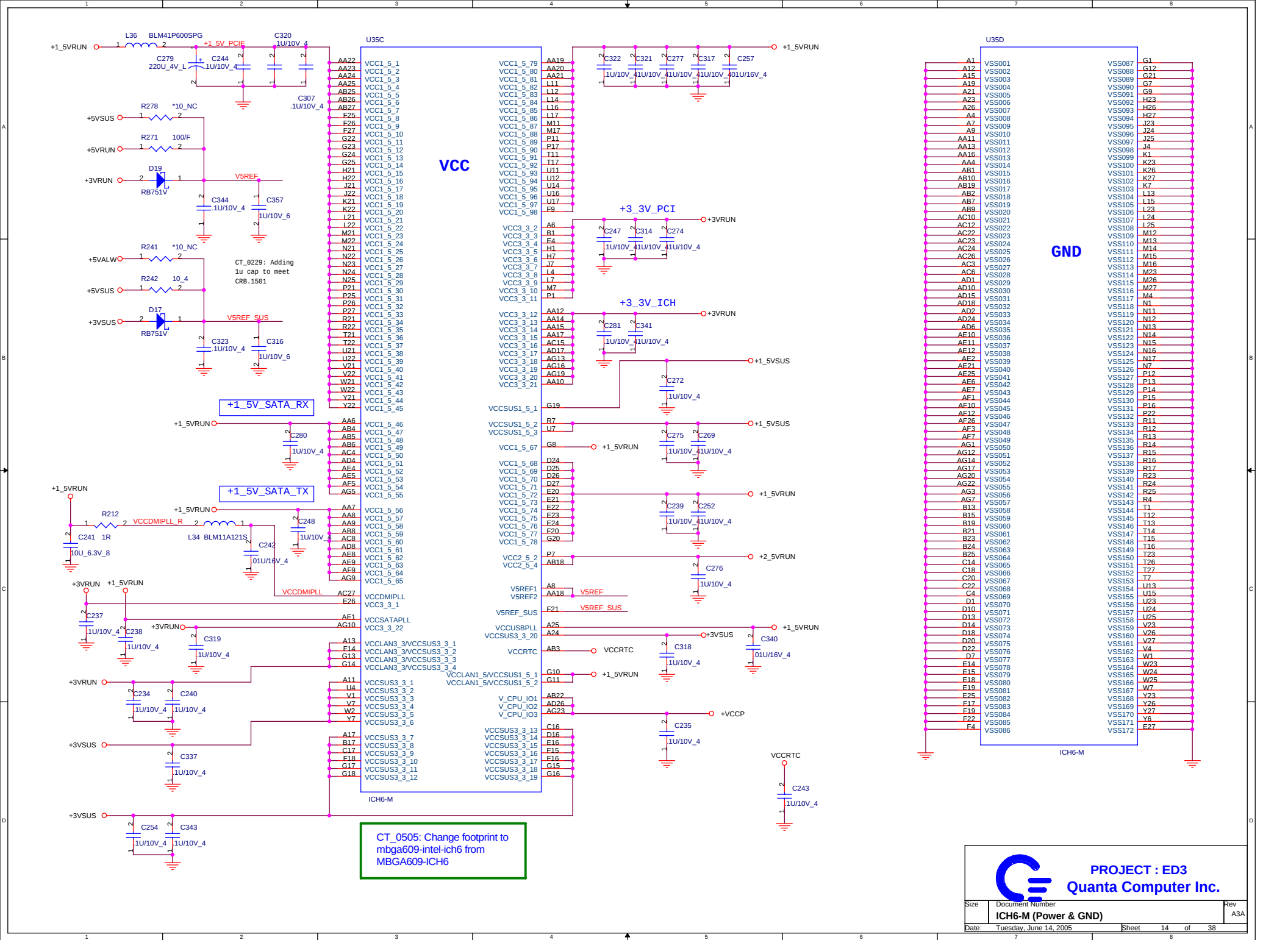
Try to remove 7SH32, if possible.



PROJECT : ED3
Quanta Computer Inc.

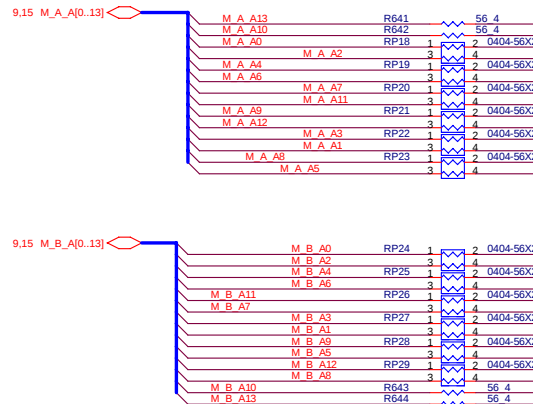
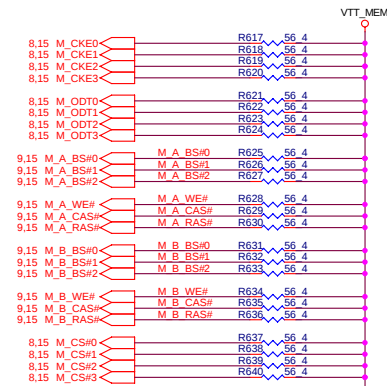
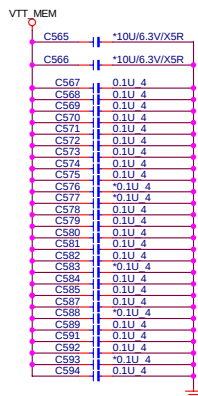
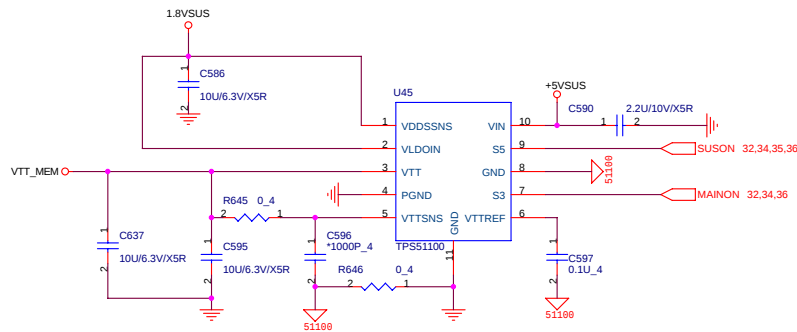
Size	Document Number	Rev
	ICH6-M (CPU, PCI, IDE, SATA, AC97)	A3A
Date:	Wednesday, June 15, 2005	Sheet 12 of 38

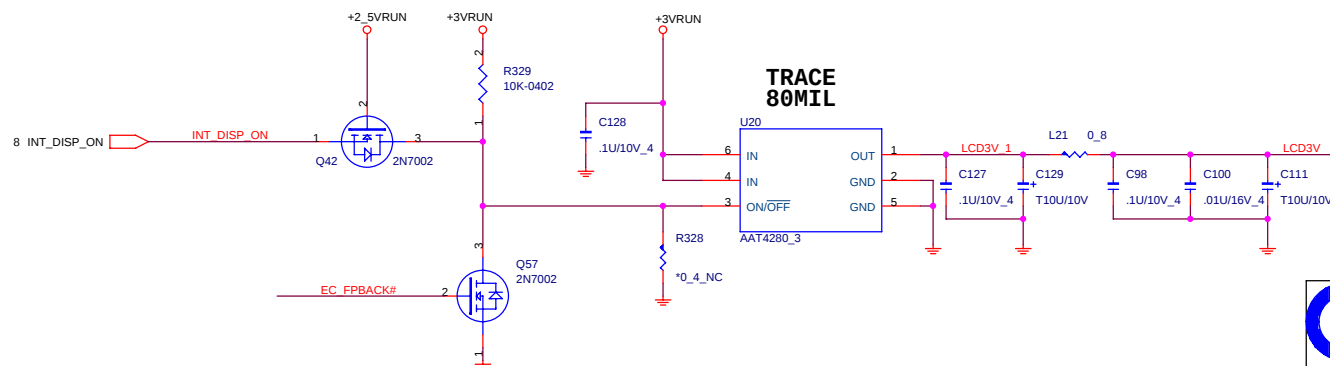
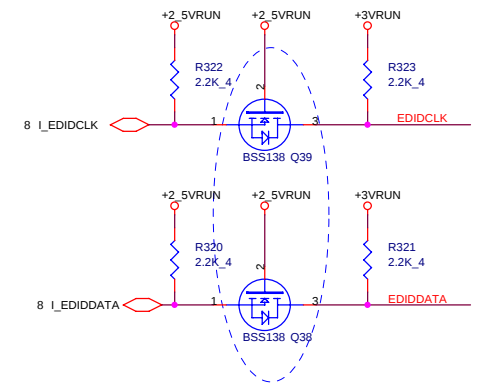
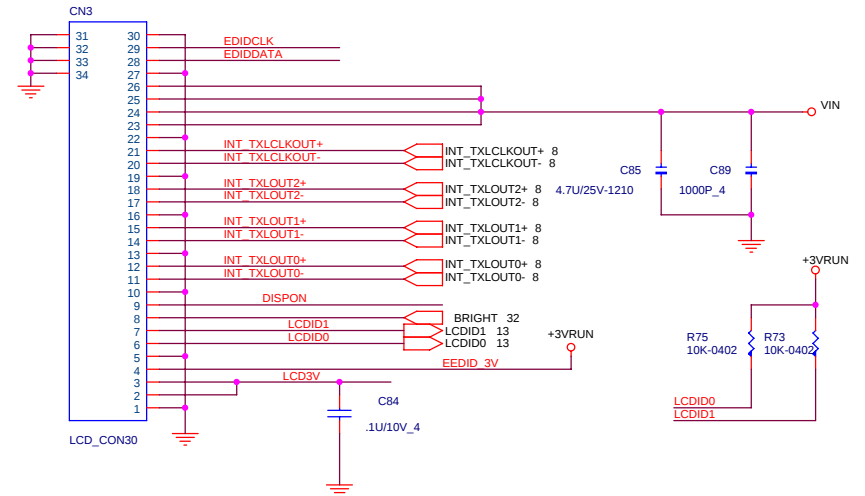
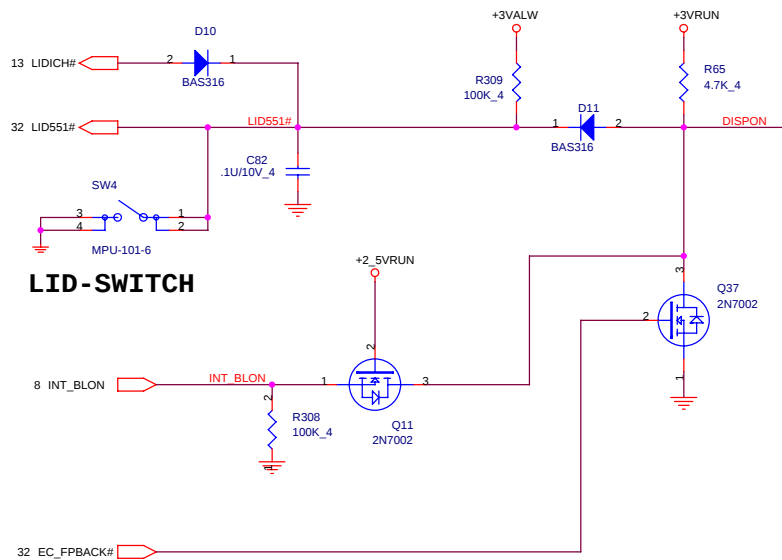


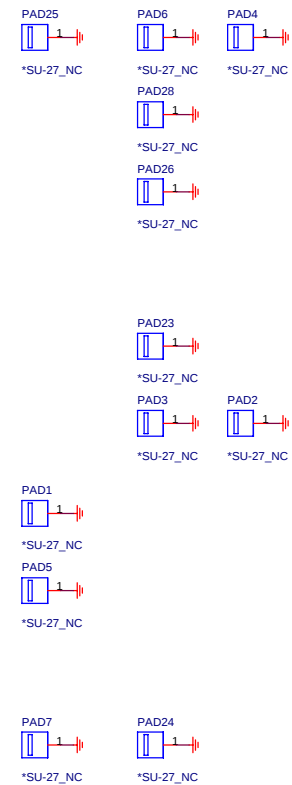
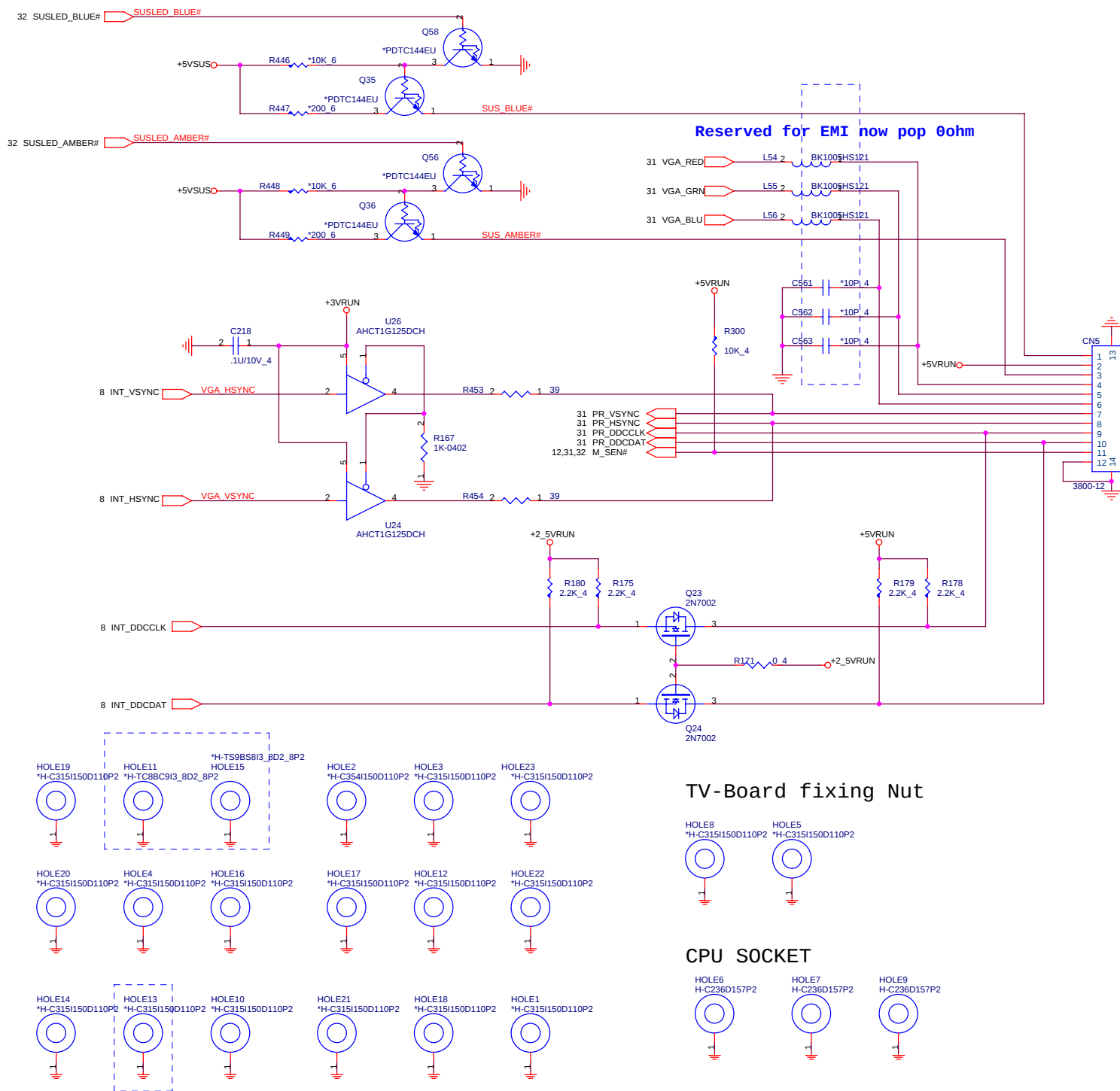


PROJECT : ED3
Quanta Computer Inc.

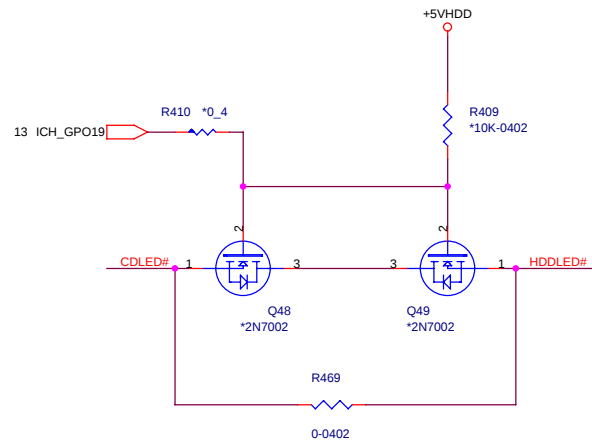
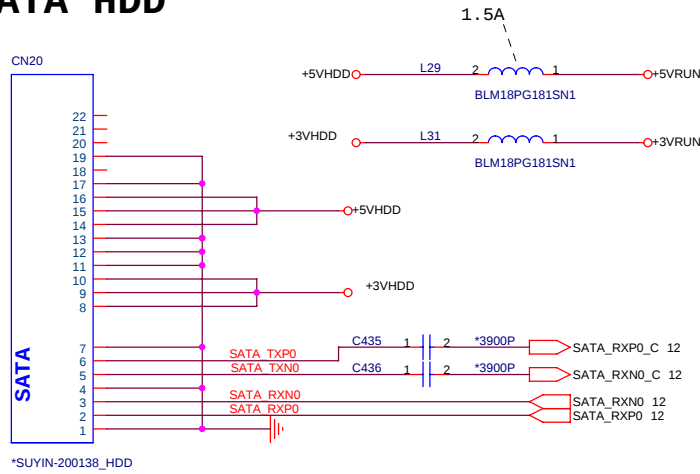
Date:	Document Number	Rev
Tuesday, June 14, 2005	ICH6-M (Power & GND)	A3A
Sheet	14 of 38	



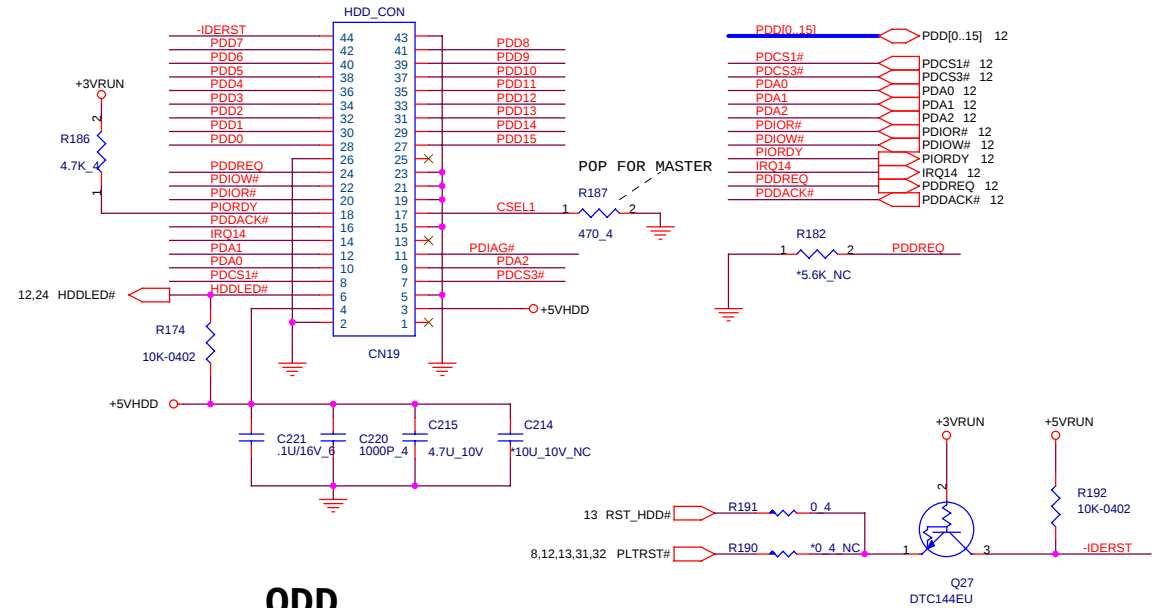




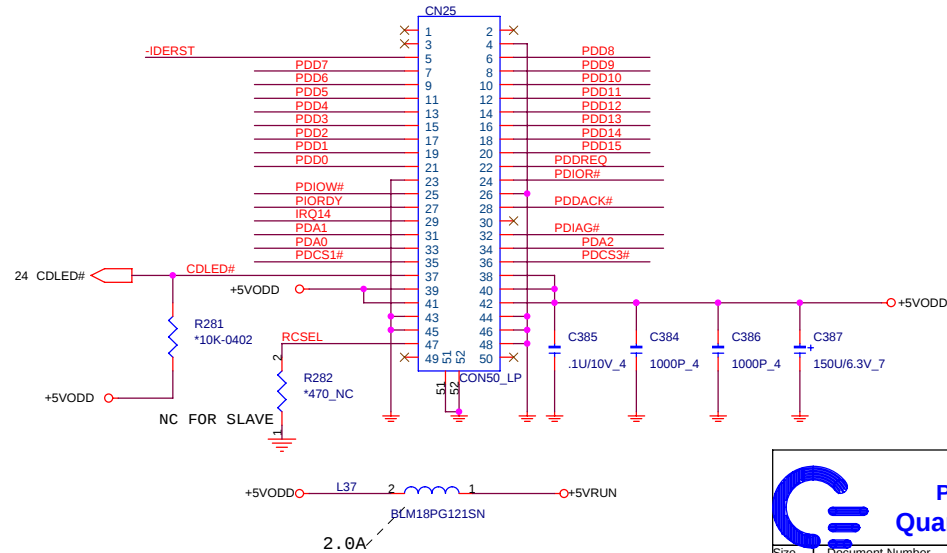
SATA HDD

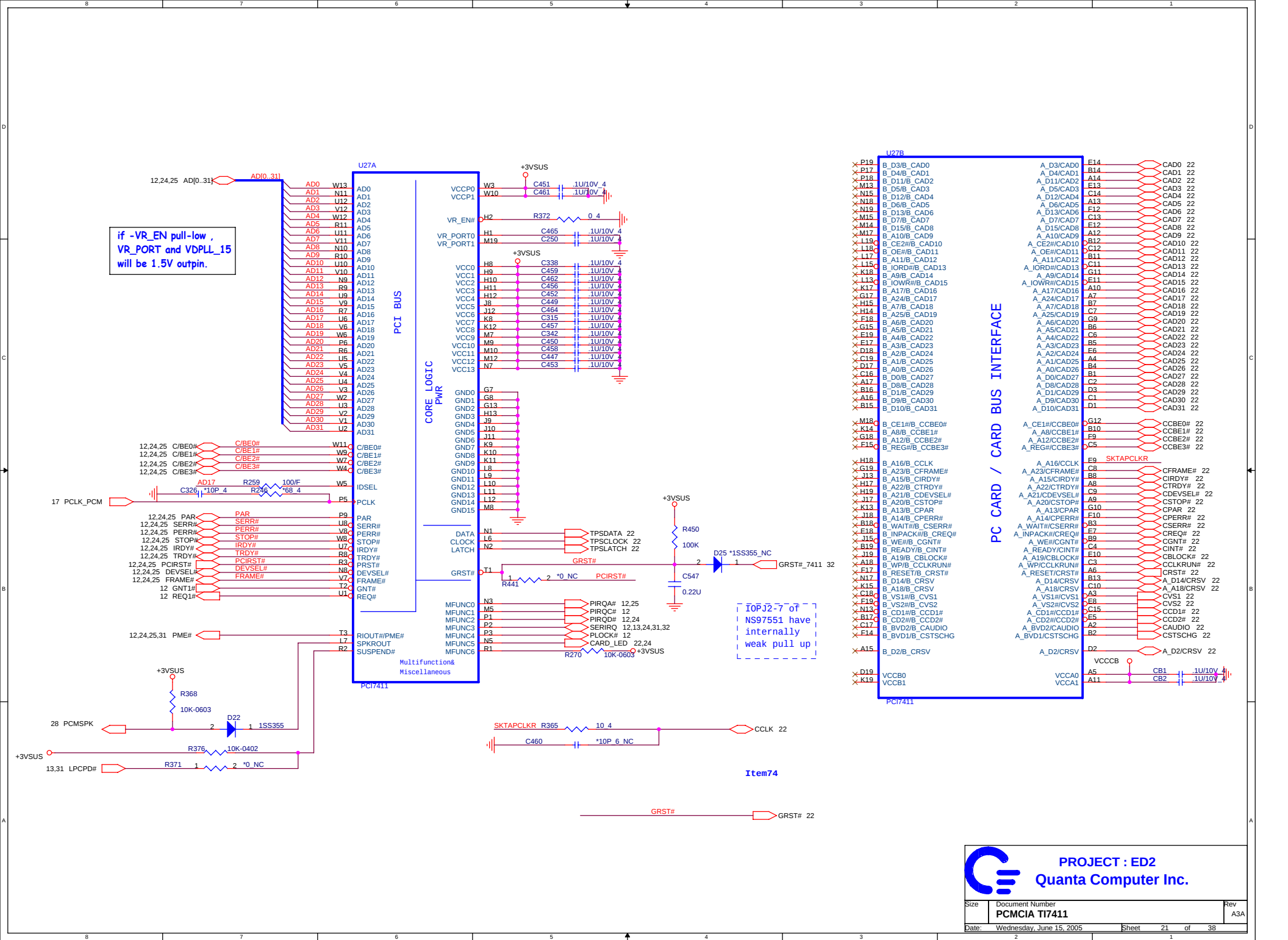


PATA HDD

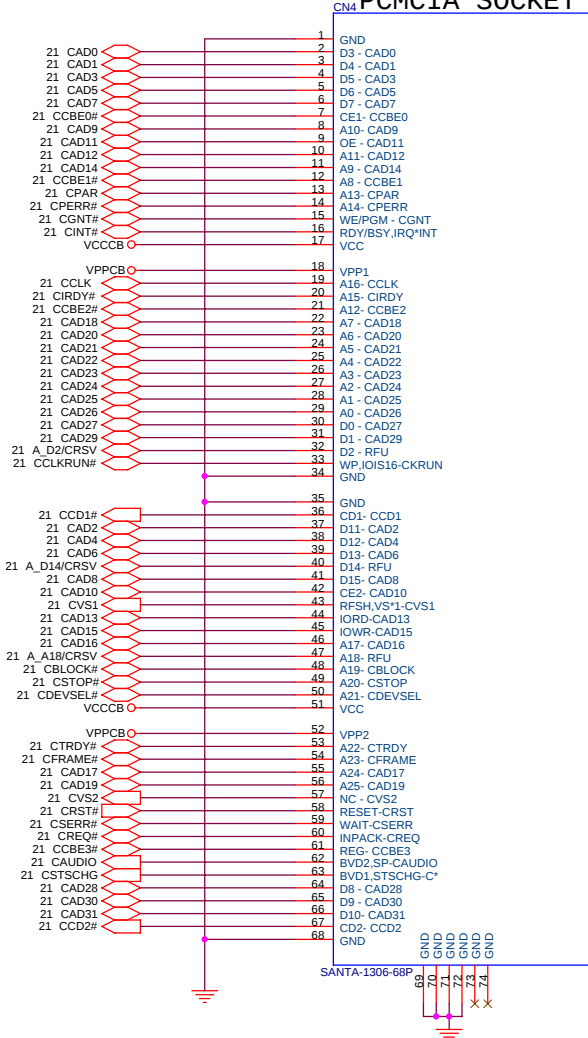


ODD





PCMCIA SOCKET

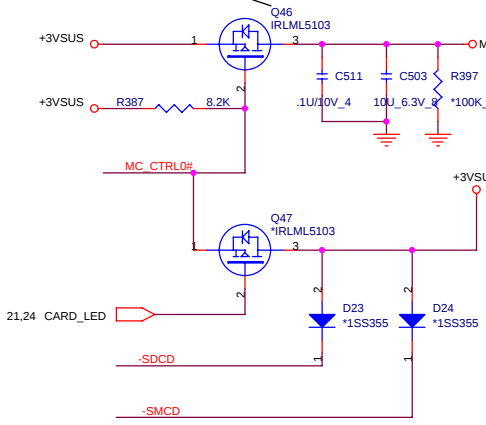


MC_PWR_CTL low active(default), or change register to high active

Flash Media Layout Guidelines:

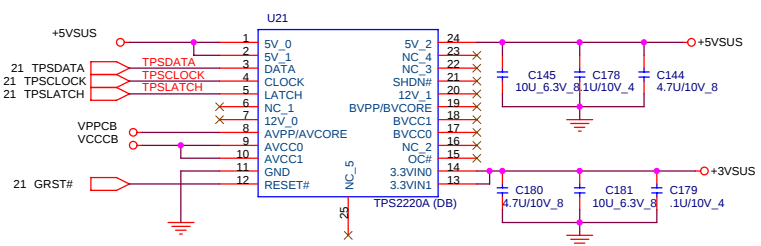
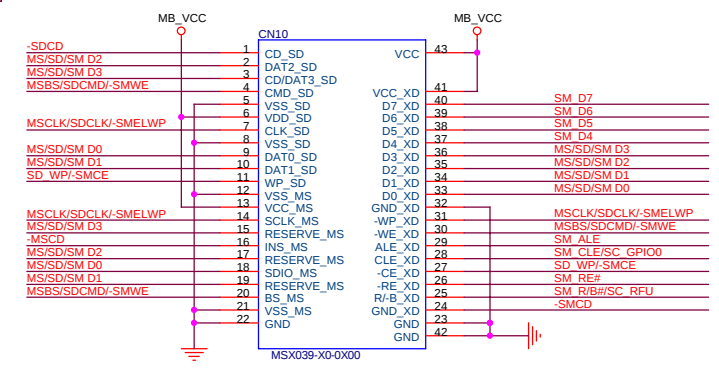
1. Signal traces should be 60 Ohm +/- 10%.
2. All signal traces should be routed with equal propagation delay, and with trace lengths as short as practical.
3. A 56 Ohm damping resistor for MS_CLK and SD_CLK should be placed near the PCI7411 source.

IRLML5103
Rds(on)=0.6

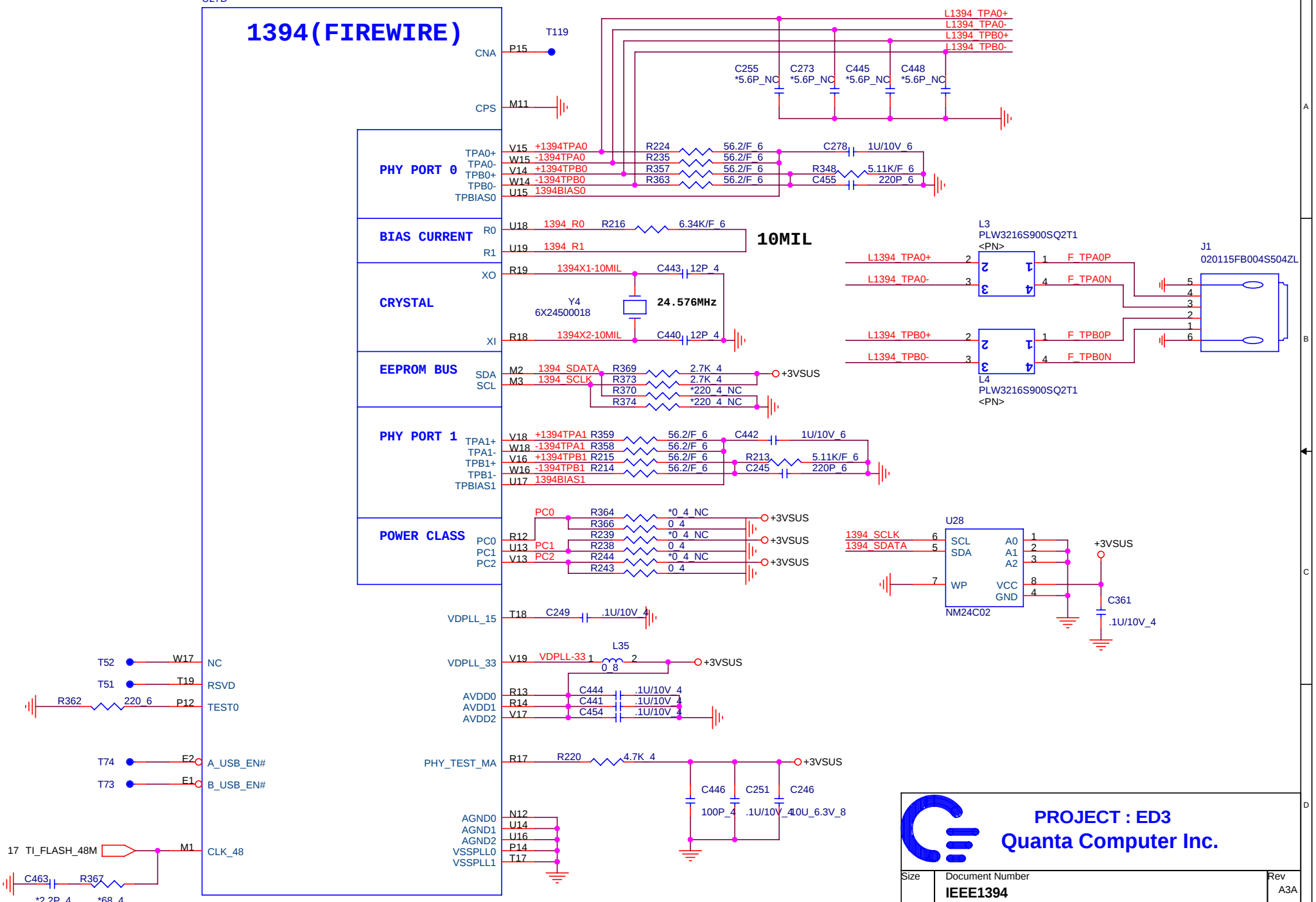


TI Erratum

4 IN1 CARD READER
(XD, MMC/SD, MS)



1394(FIREWIRE)

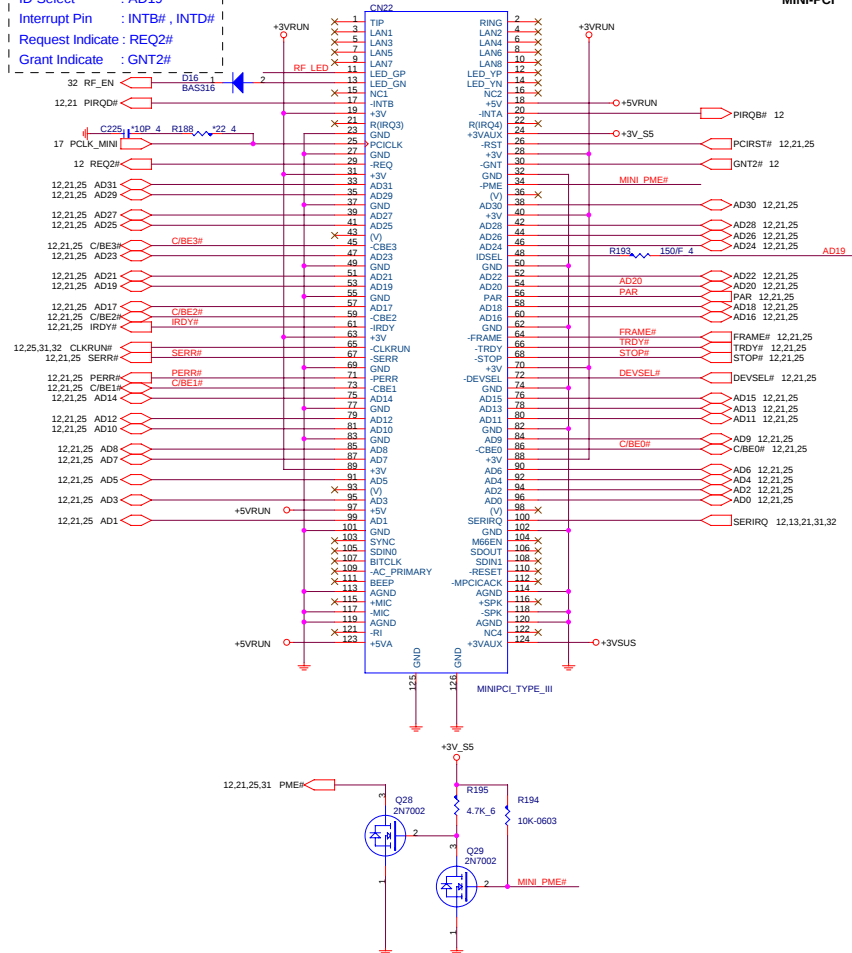


PROJECT : ED3

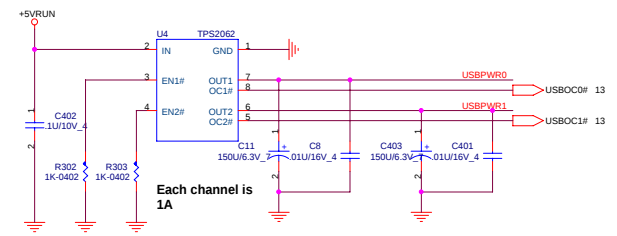
Quanta Computer Inc.

Size	Document Number	Rev
	IEEE1394	A3A
Date:	Wednesday, June 15, 2005	Sheet 23 of 38

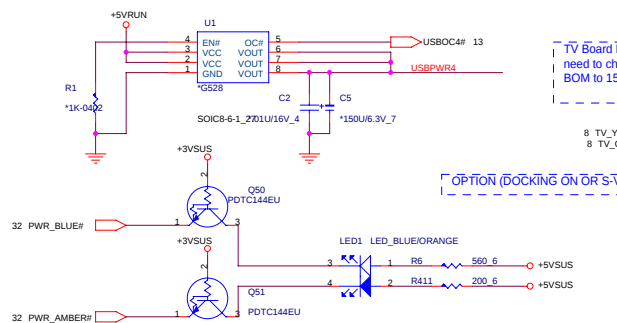
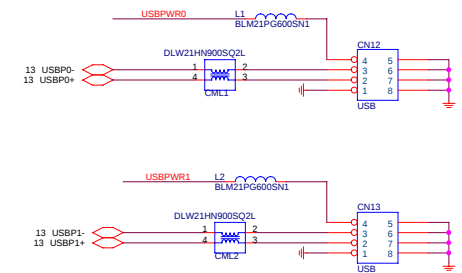
ID Select : AD19
 Interrupt Pin : INTB# , INTD#
 Request Indicate : REQ2#
 Grant Indicate : GNT2#



MINI-PCI

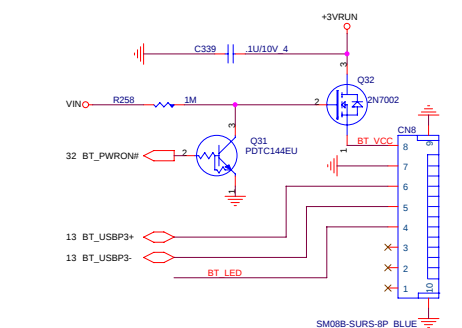
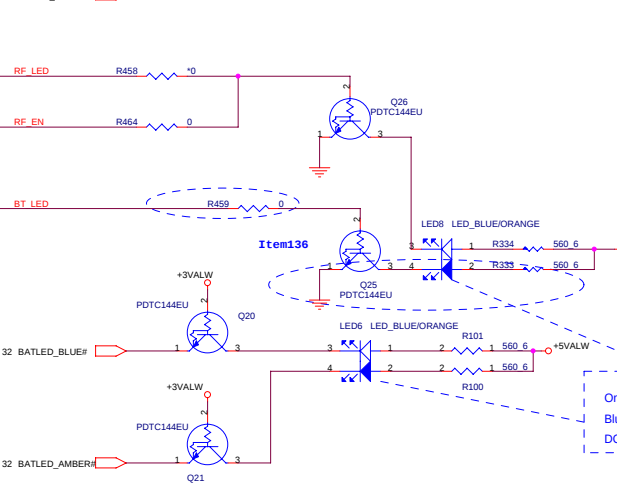


Each channel is 1A

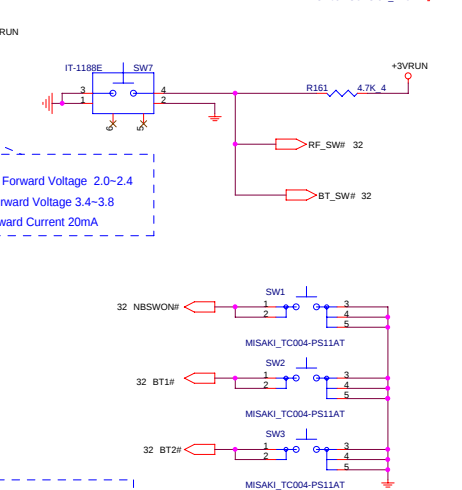
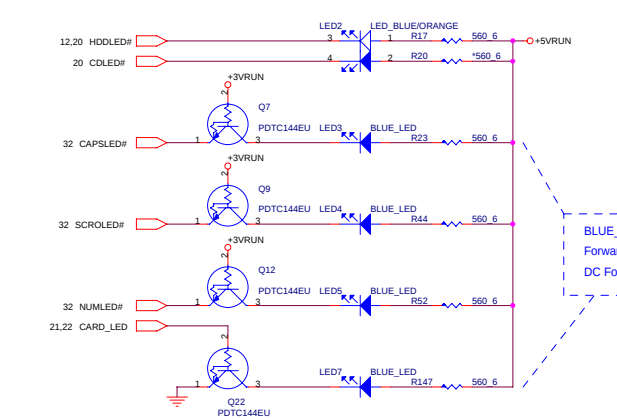


TV Board R3_R4 need to change BOM to 150ohm

OPTION (DOCKING OR S-VIDEO Board ON)



Orange Forward Voltage 2.0-2.4
 Blue Forward Voltage 3.4-3.8
 DC Forward Current 20mA



BLUE_LED
 Forward Voltage 2.8-3.05
 DC Forward Current 20mA

R117
RTL8110SBL(1G)--DEPOP
RTL8100L(10,100)--POP

R116
RTL8110SBL(1G)--POP
RTL8100L(10,100)--DEPOP

RTL81XX's power for Co-lay :

- AS RTL8110SBL(1Giga-Lan) AVDDL CONNECT +2.5V_A
- RTL8100L(10,100M-Lan) AVDDL CONNECT +3V_LAN_A
- AS RTL8110SBL(1Giga-Lan) HSDAC- CONNECT +3V_LAN_A
- RTL8100L(10,100M-Lan) HSDAC- CONNECT +2.5V_A
- AS RTL8110SBL(1Giga-Lan) DVDD CONNECT +1.8V_D
- RTL8100L(10,100M-Lan) DVDD CONNECT +2.5V_A

PCI RTL8110SBL/8100CL

Q52 Colayout with Q19
RTL8110SBL(1G)--POP
RTL8100L(10,100)--DEPOP

Q18,R124,C138,C157,C151
RTL8110SBL(1G)--POP
RTL8100L(10,100)--DEPOP

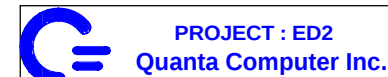
Item103

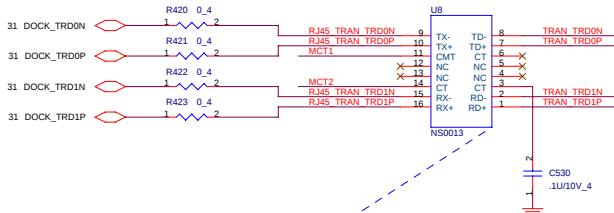
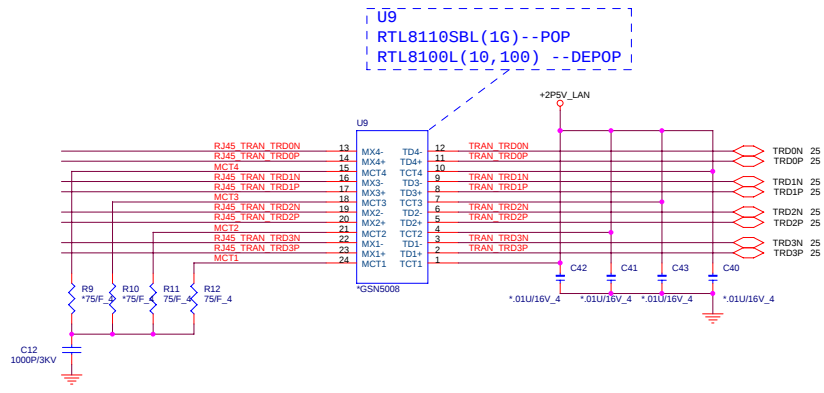
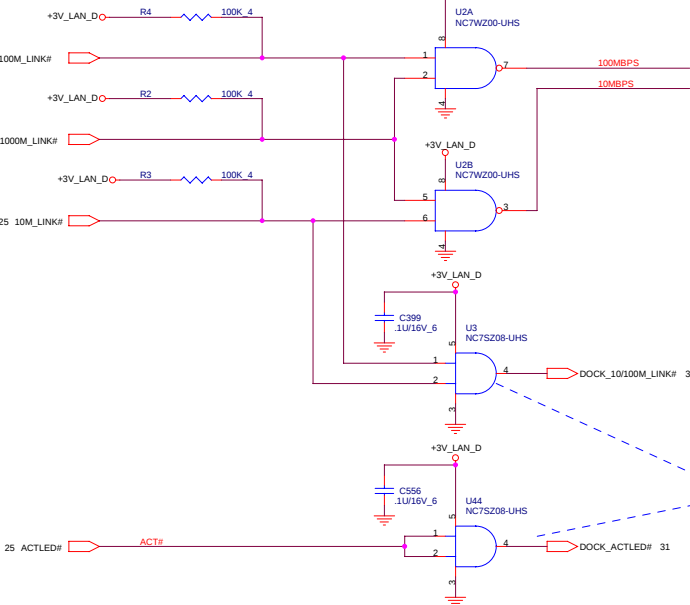
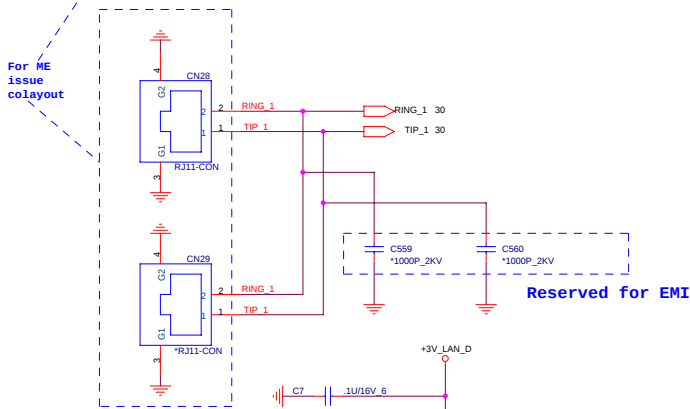
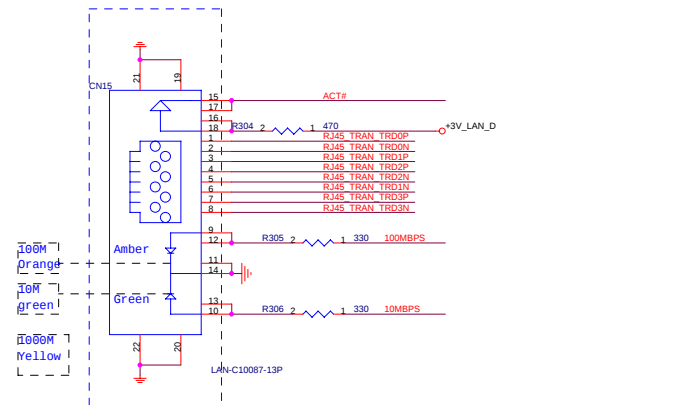
RTL8110SBL(1G)--POP 2.49K
RTL8100L(10,100M) POP 5.6K

R113,R114
RTL8110SBL(1G)--POP
RTL8100L(10,100)--DEPOP

R108,R115,Q19
RTL8110SBL(1G)--DEPOP
RTL8100L(10,100)--POP

R412,R414,R416,R418,C531,C533
RTL8110SBL(1G)--POP
RTL8100L(10,100)--DEPOP



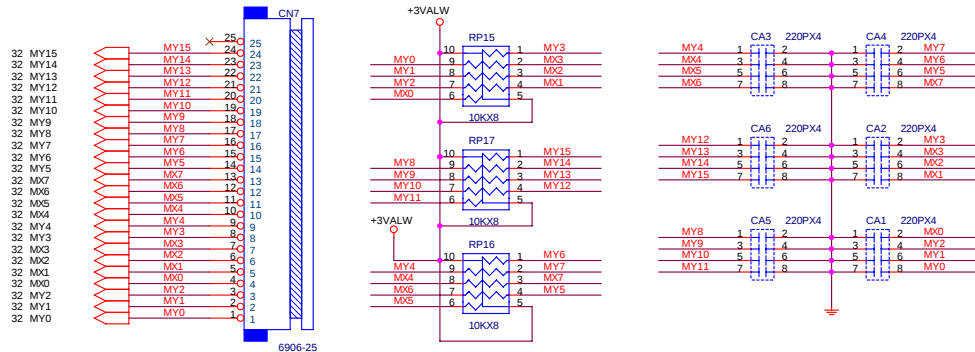
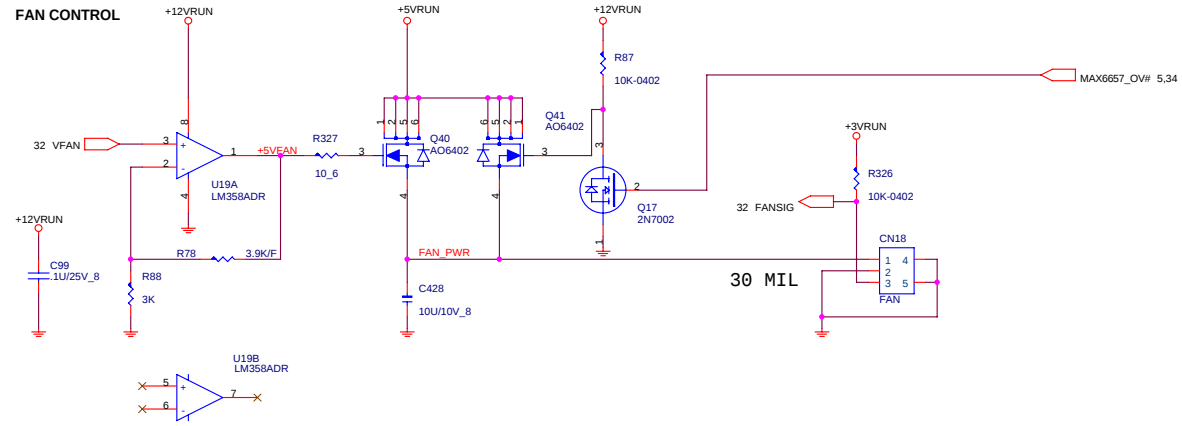


U36
RTL8110SBL(1G)--DEPOP
RTL8100L(10,100) --POP

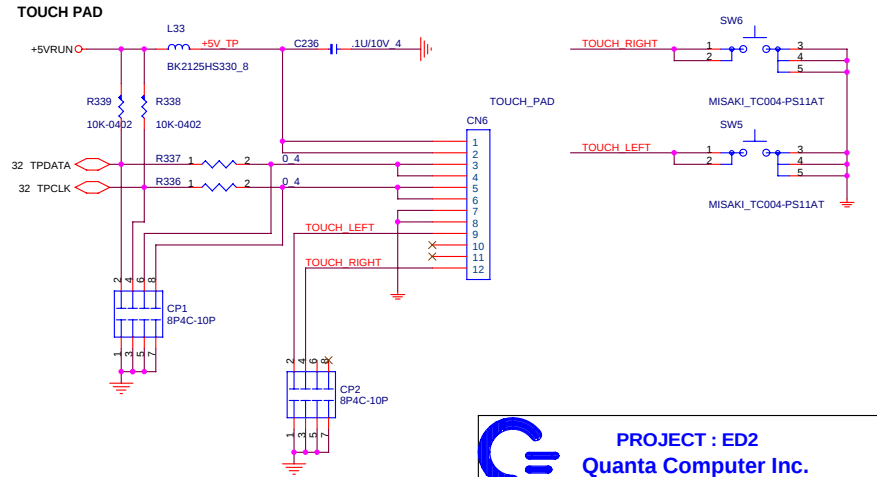
	For RTL8100C	For RTL8105B
R116	UN-POP	POP
R117	POP	UN-POP
R139	UN-POP	POP
R127	POP	UN-POP
R113	UN-POP	POP
R114	UN-POP	POP
R115	POP	UN-POP
R108	POP	UN-POP
R124	UN-POP	POP
C151	UN-POP	POP
C138	UN-POP	POP
C157	UN-POP	POP
Q52	UN-POP	POP
Q18	UN-POP	POP
Q19	POP	UN-POP
R412	UN-POP	POP
R414	UN-POP	POP
R416	UN-POP	POP
R418	UN-POP	POP
C531	UN-POP	POP
C533	UN-POP	POP
C40	UN-POP	POP
C41	UN-POP	POP
C42	UN-POP	POP
C43	UN-POP	POP
R9	UN-POP	POP
R10	UN-POP	POP
R420	POP	UN-POP
R421	POP	UN-POP
R422	POP	UN-POP
R423	POP	UN-POP
C530	POP	UN-POP
U8	POP	UN-POP
U9	UN-POP	POP
U44	POP	UN-POP
C556	POP	UN-POP
U3	POP	UN-POP
C399	POP	UN-POP

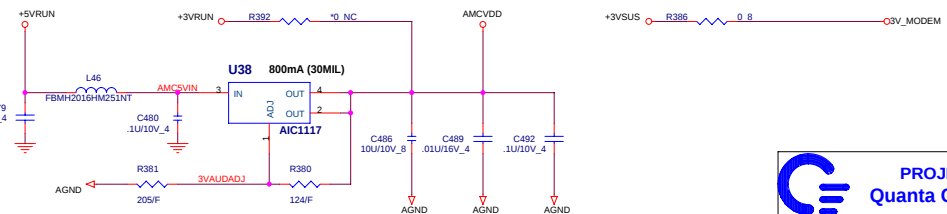
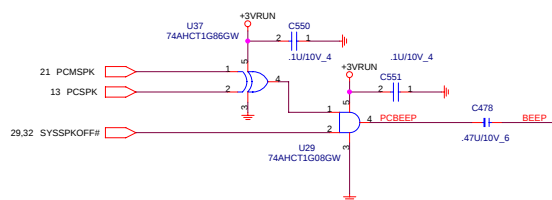
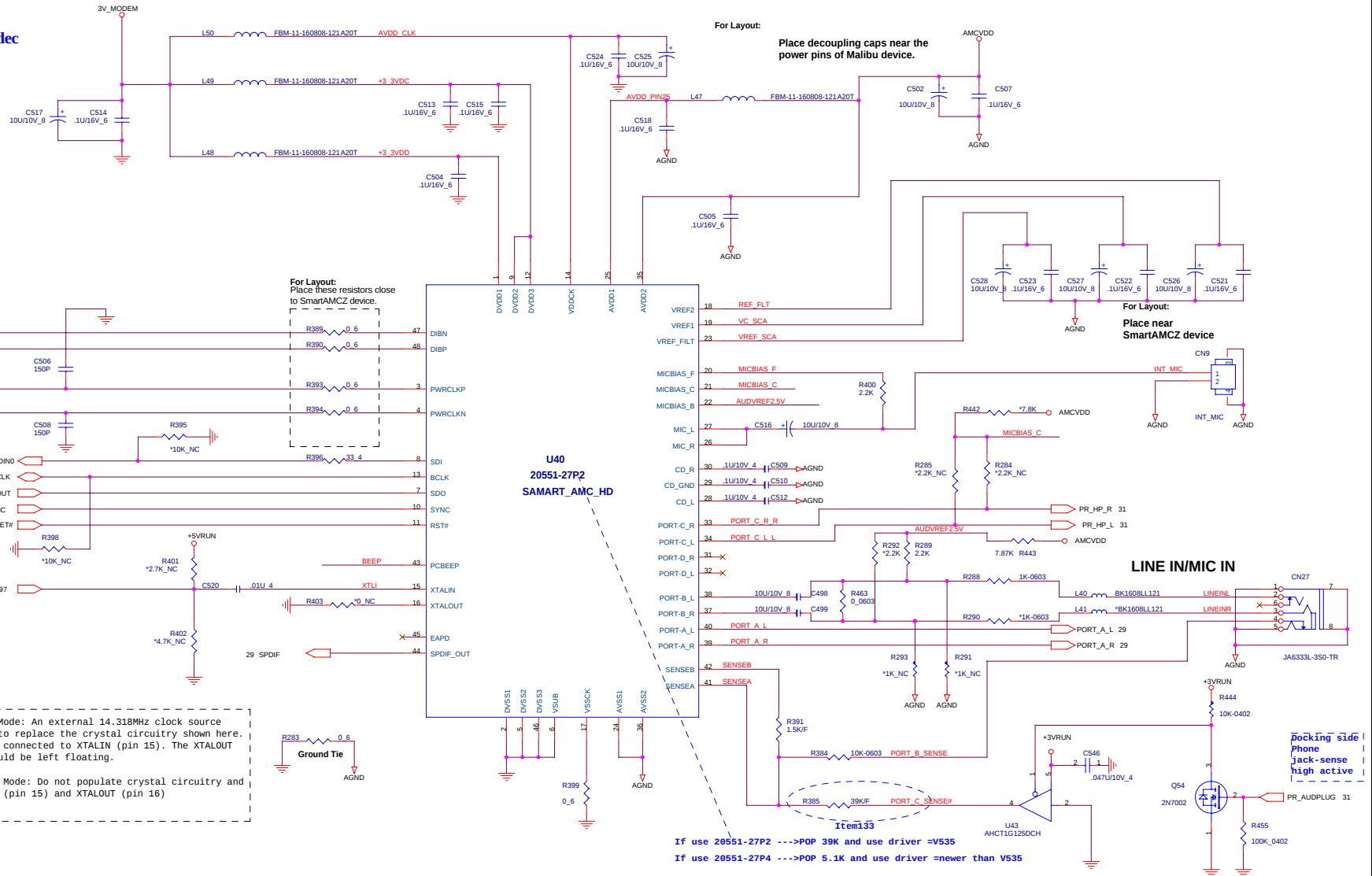
U44,U3,C399,C556
RTL8110SBL(1G)--DEPOP
RTL8100L(10,100) --POP

FAN CONTROL

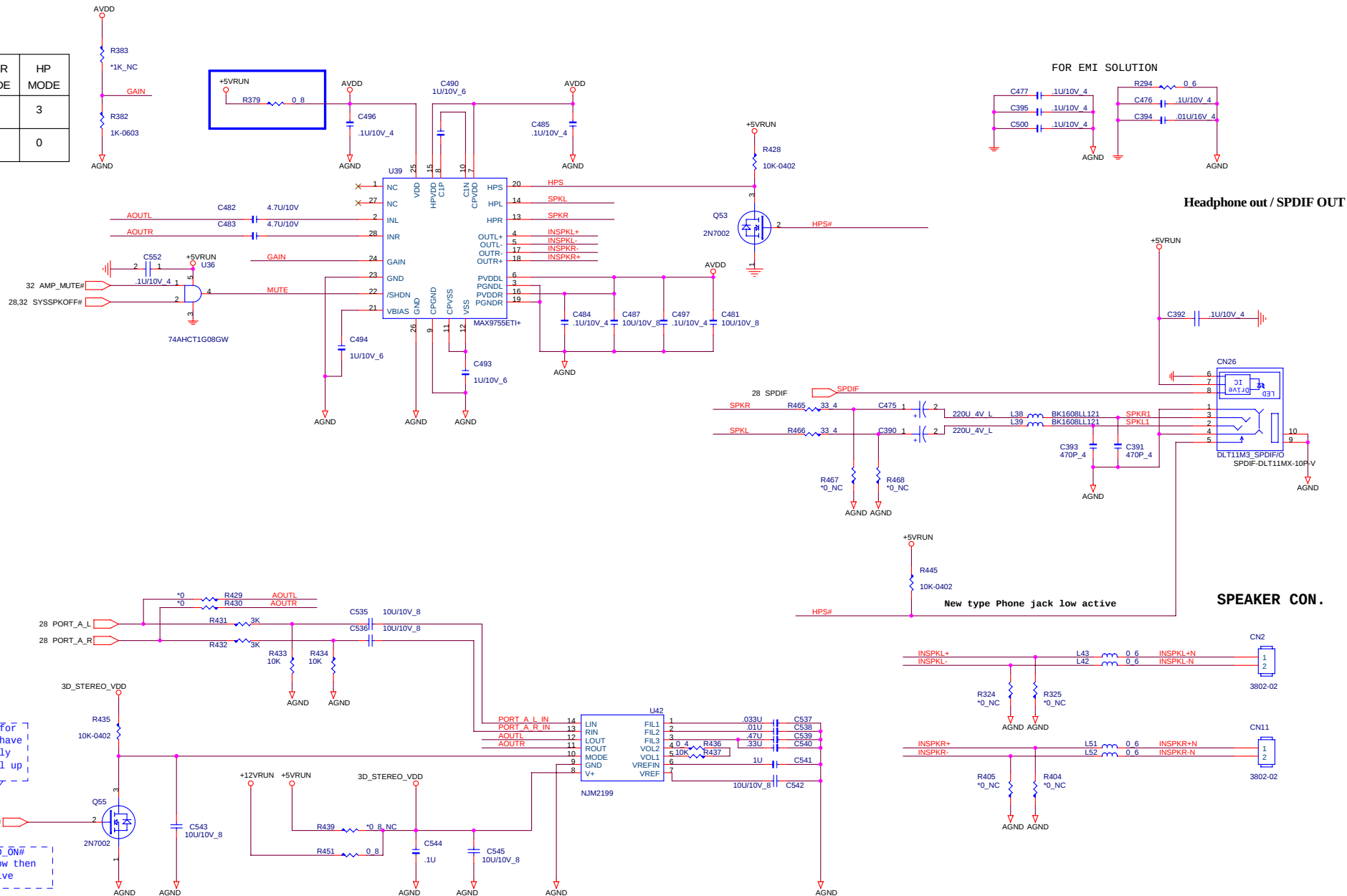


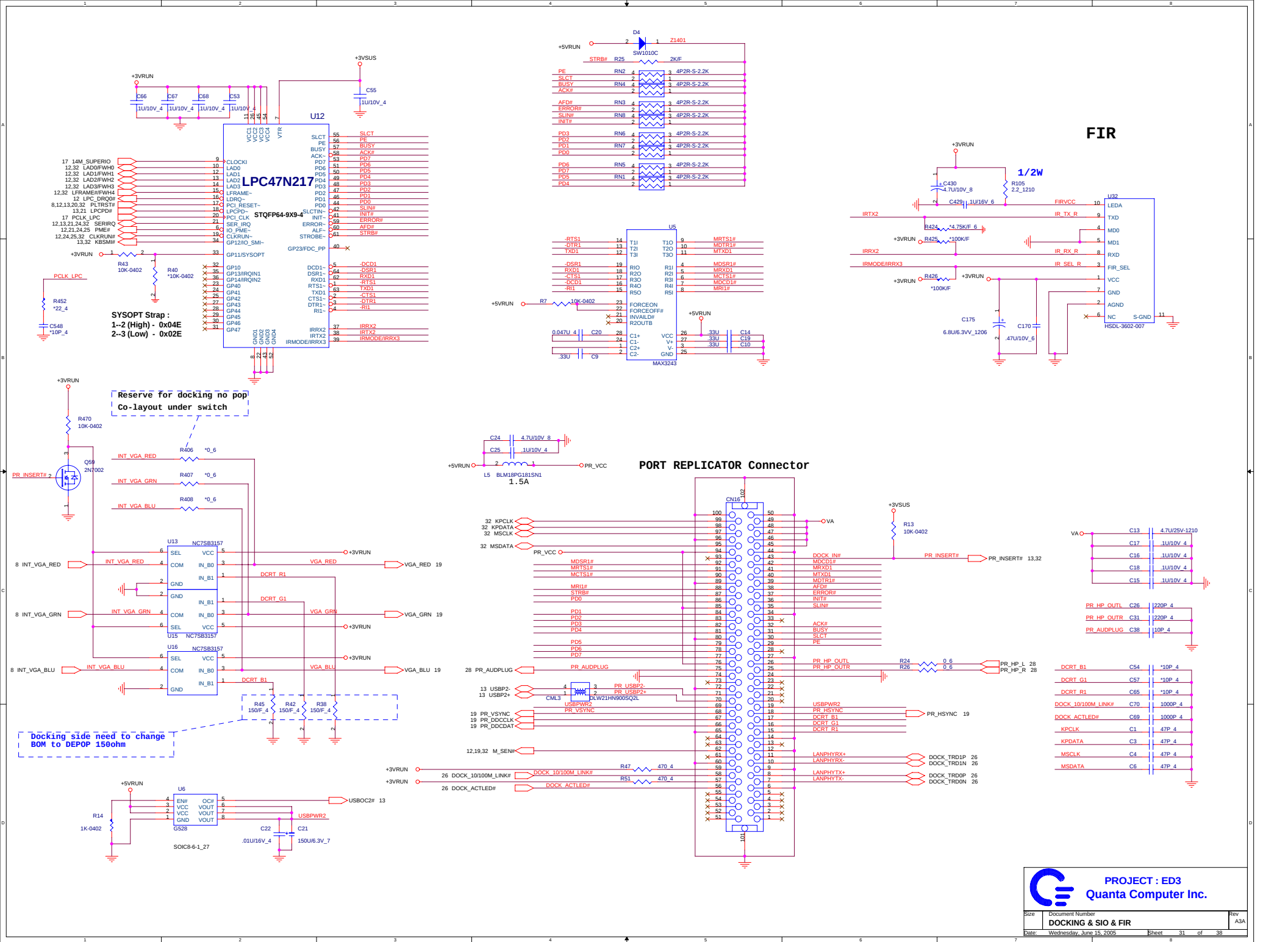
TOUCH PAD

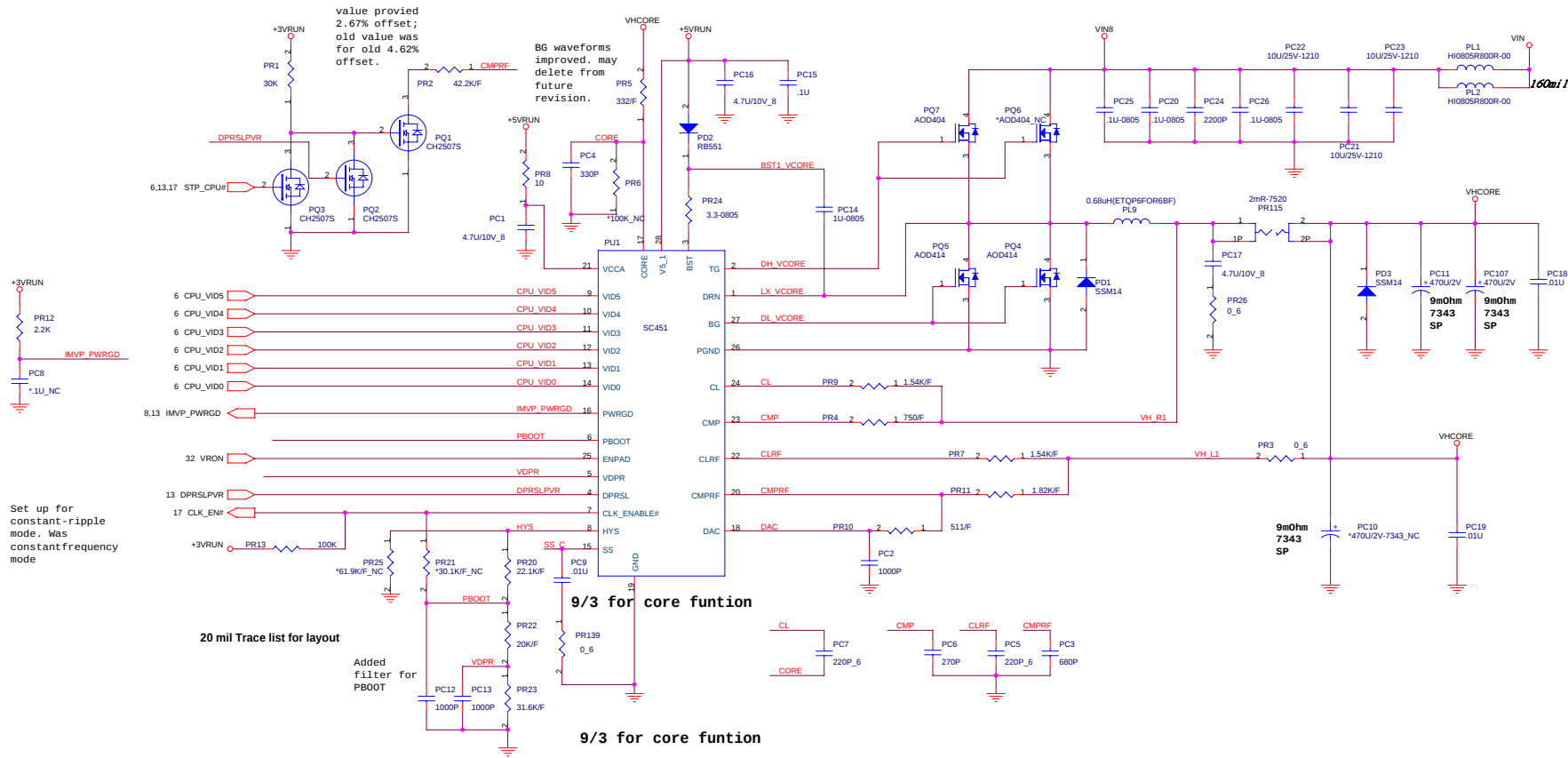




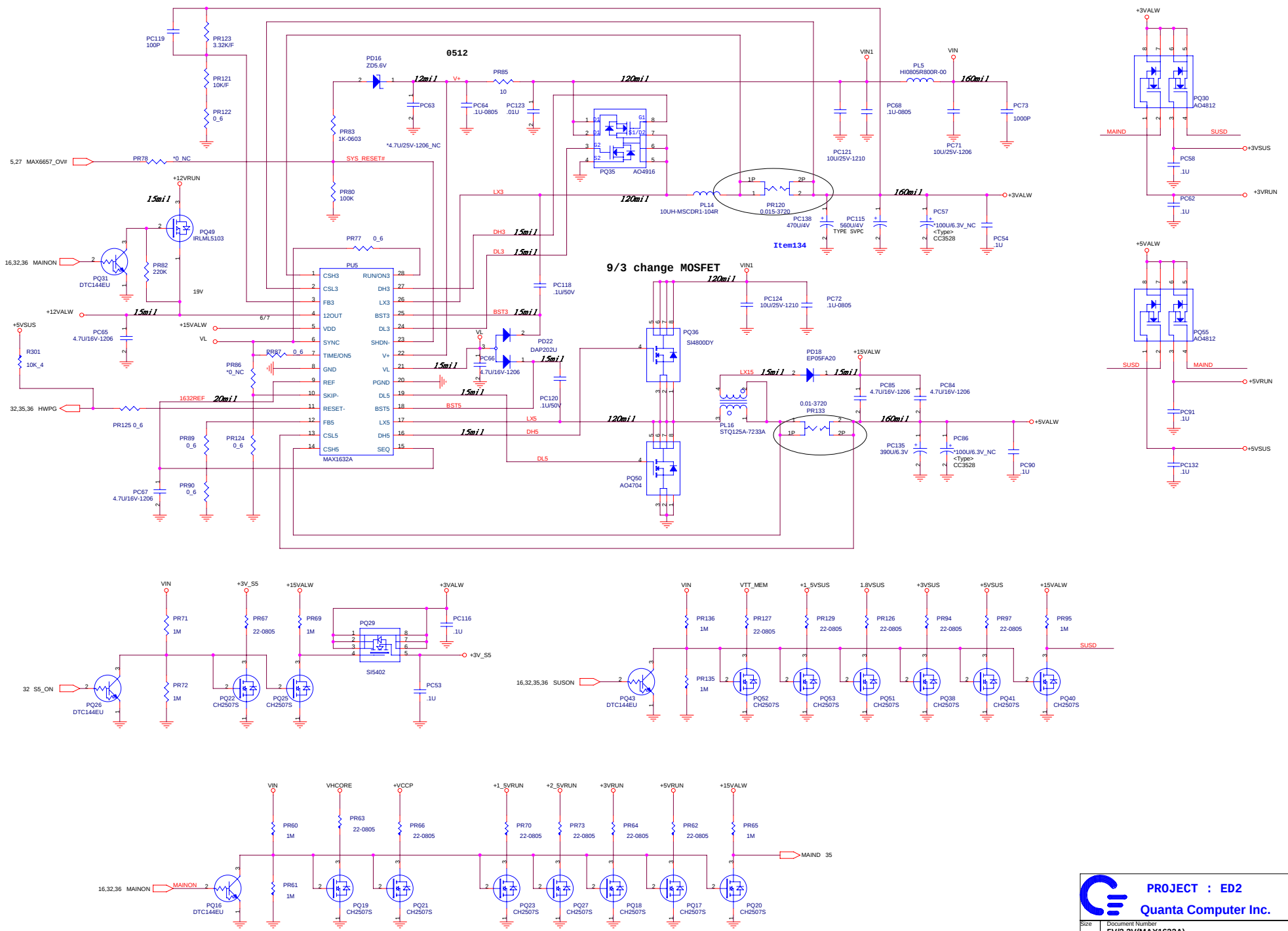
GAIN	SPKR MODE	HP MODE
0	10.5	3
1	9	0

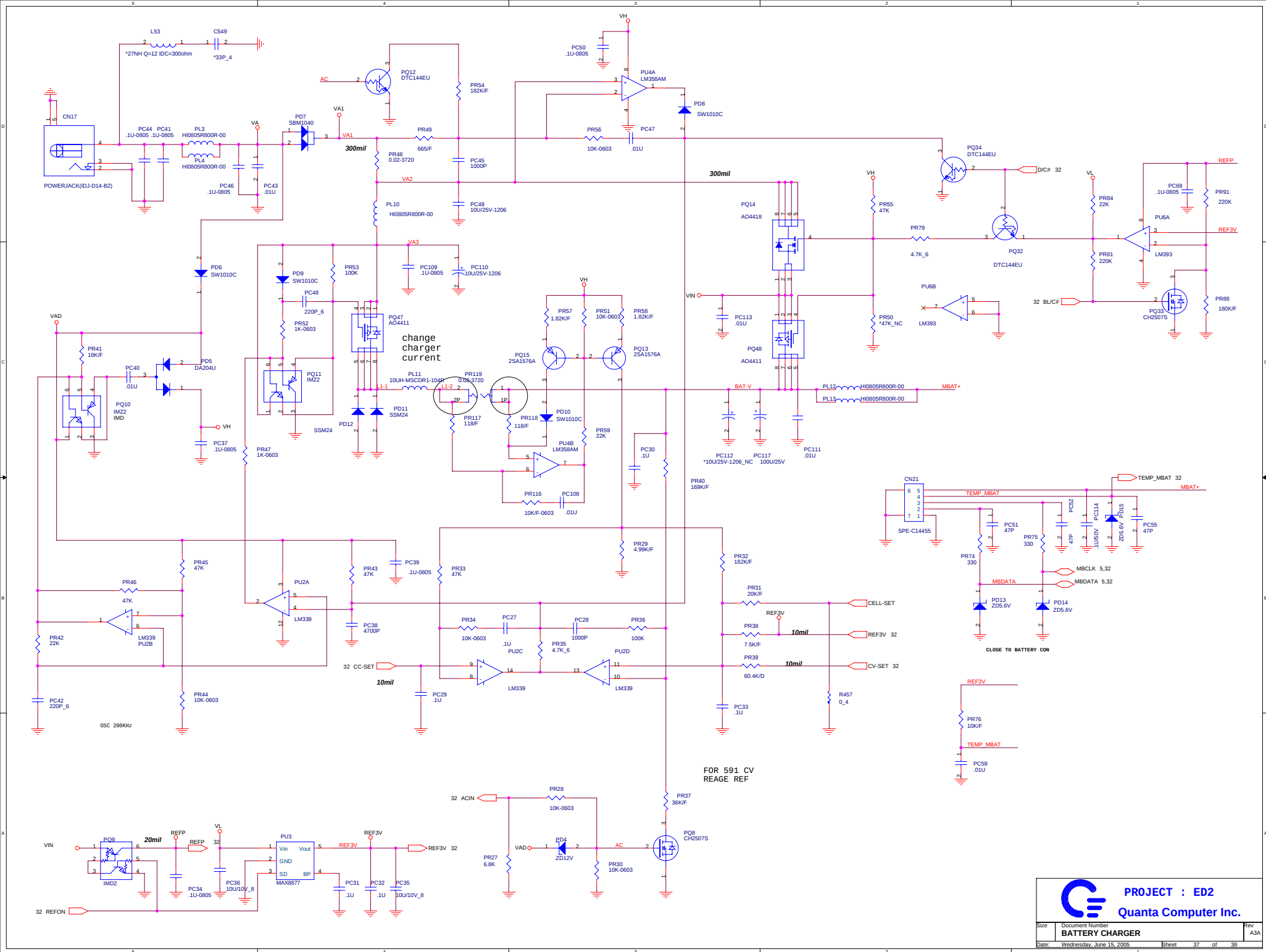






V I D							Vcore
VID 5	VID 4	VID 3	VID 2	VID 1	VID 0	V	
0	1	0	1	1	1	1.340	
0	1	1	0	0	0	1.324	
0	1	1	0	1	0	1.292	
0	1	1	1	1	0	1.260	
0	1	1	1	1	1	1.244	
0	1	1	1	1	1	1.212	
1	0	0	0	0	1	1.180	
1	0	0	0	1	1	1.148	
1	0	0	1	1	0	1.100	
1	0	1	0	0	1	1.052	
1	0	1	0	1	1	1.020	
1	0	1	1	1	0	0.972	
1	1	0	0	0	0	0.940	





MODEL	REV	CHANGE LIST	Model	JM2	MB
			Page	FM	TO
	1A	Preliminary Release	1	1A	
			2		
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QUANTA COMPUTER		PROJECT : DM3B	DOC. NO. ???	REV: 1A	ASSY:
		APPROVED BY :	CHECKED BY:	DRAWN BY :	DATE :