

5V / 3.3V / 12V

Page : 35

1.8V / 0.9V

Page : 36

1.5V / 1.05V / 1.8V

Page : 37

CPU CORE

Page : 34

+1.2V

Page : 38

BATTERY CHARGER

Page : 39

BATTERY SELECT

Page : 40

5VPCU
3V_ALWAYS
+12V
+5V
3V_S5

3VSUS
5VSUS

2.5VSUS
+2.5V
+1.8V
MVREF_DM
SMDDR_VTERM

1.5V_S5
+1.5V
AGP_VCC (+1.5V)
1.2VCCT
VTT

VCC_CORE

VGA_CORE
2.5V_VGA

CLOCK GEN

ICS
ICS954217
Page : 2

Centrino

DOTHAN
CELEROM-M

INTEL Mobile 479 CPU Page : 3 , 4

CRANE3 (ZL7)

ED@ INT. VGA WITH DOCK
ID@ INT. VGA WITH DOCK
ND@ W/O DOCKING要打

BOM MARK
E@ EXT VGA 要打
I@ INTVGA 要打
SA@ SATA 要打
F@ FIXED ODD要打
SW@ SWAPPABLE ODD 要打
3@ 3in1 要打
N@ NEW CARD 要打
4@ 4401 要打
5@ 5788M 要打
D@ DOCKING 要打

DDR2-SODIMM1
Page:9~10

DDR2-SODIMM2
Page:9~10

400/533MHz DDR2

400/533MHz DDR2

ALVISO
1257 BGA
Page : 5 ~ 8

HOST BUS 533MHz
HOST BUS 400MHz

ATI
M26P/M24P
64M /
128M
Page : 11 ~ 14

EXT_LVDS

EXT_CRT

EXT_TV-OUT

LVDS

RGB

TVOUT

INT_LVDS

INT_CRT

INT_TV-OUT

SWITCH
CIRCUIT

CRT
Page:17

LVDS
Page:16

TV-OUT
Page:16

DVI
CH7307
Page:15

DOCKING/DVI
Page: 33

SATA - HDD
Page:21

IDE - HDD
Page:21

IDE-ODD
Page:21

MEDIA BAY
Page:21

SATA

ATA 66/100

AC97

DMI I/F

ICH6-M
609 BGA
Page : 18 ~ 20

PCIE

PCI BUS

USB 2.0

AUDIO CODEC
CONEXANT
20468-31
Page:27

AMP
MAX9755
Page:28

MODEM
CONEXANT
20493-21
Page:27

MIC IN
Page:27

LINE IN
Page:27

SPEKER
Page:28

LINE OUT
Page:28

RJ11
Page:27

DOCKING
PS2
Page:33

Touchpad
Page:30

Keyboard
Page:30

IrDA
Page:31

DOCKING
Print Port
Page:33

DOCKING
COM Port
Page:33

CIR
Page:33

SYSTEM 3
USB PORT
Page : 22

DOCKING 2
USB PORT
Page : 22

MINI-USB
Page: 22

PCI ROUTING TABLE

IDSEL

INTERUPT

DEVICE

REQ0# / GNT0#
REQ2# / GNT2#
REQ1# / GNT1#
REQ3# / GNT3#

AD24 INTA#
AD19 INTB# , INTD#
AD17 INTC#, INTD#, INTA#
AD18 INTB# , INTD#

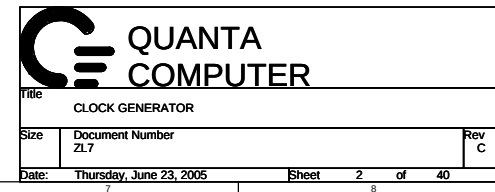
BROADCOM LAN
MINI-PCI
TI 7411
MINI-PCI(TV Tuner)

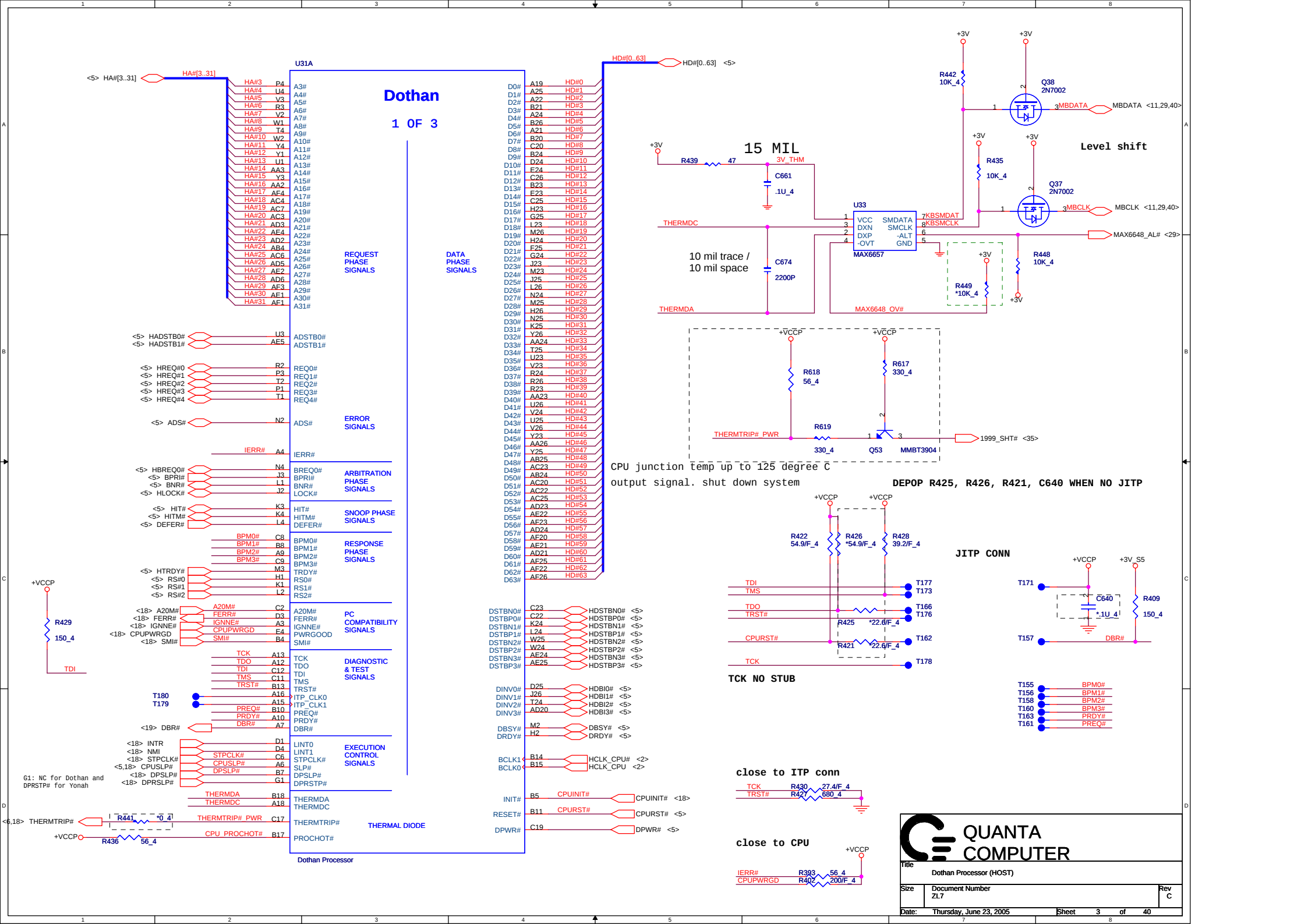
REV. C

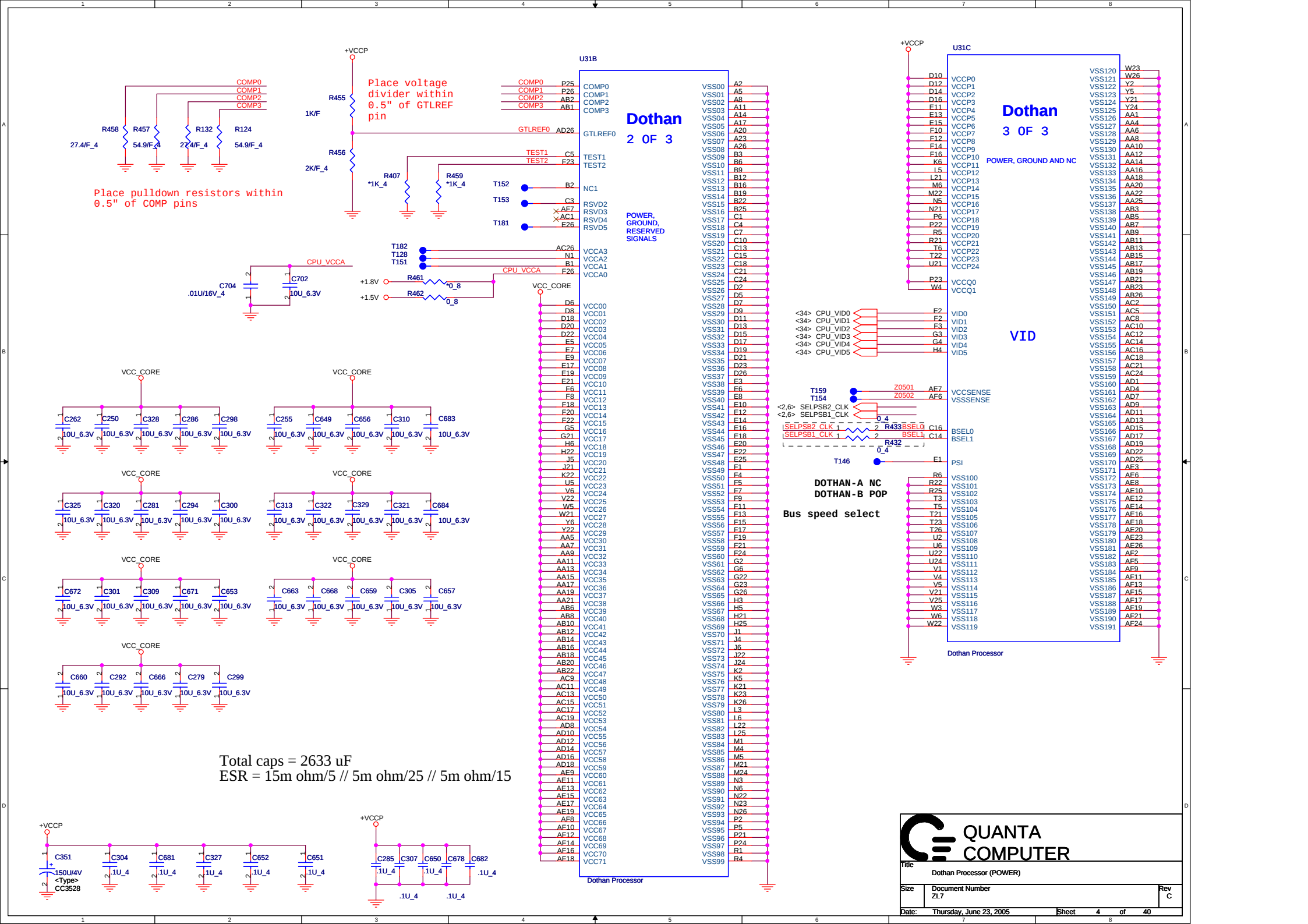


PROJECT : ZL7
Quanta Computer Inc.

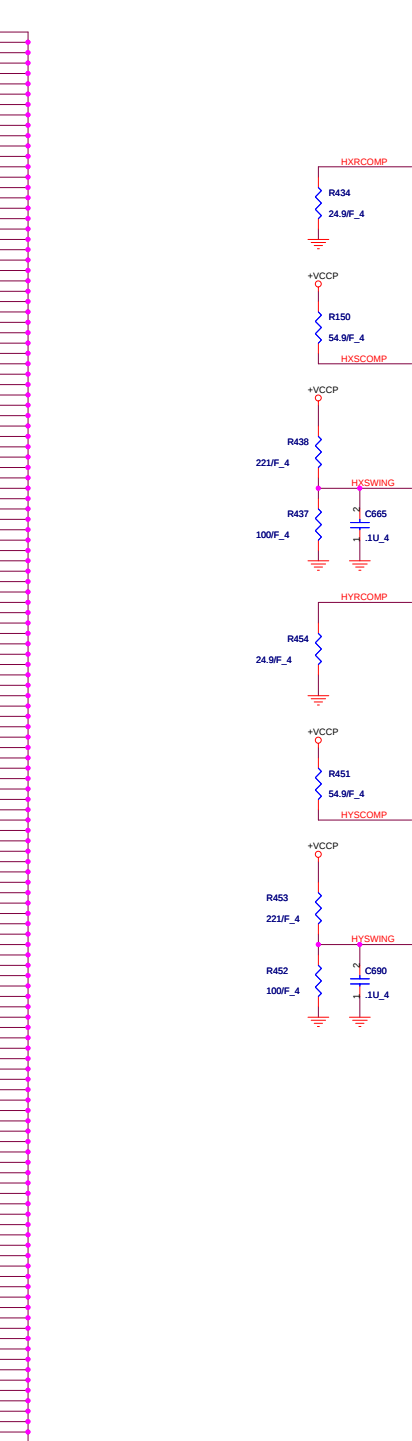
Size	Document Number	Rev
	BLOCK DIAGRAM	C
Date:	Thursday, June 23, 2005	Sheet 1 of 40

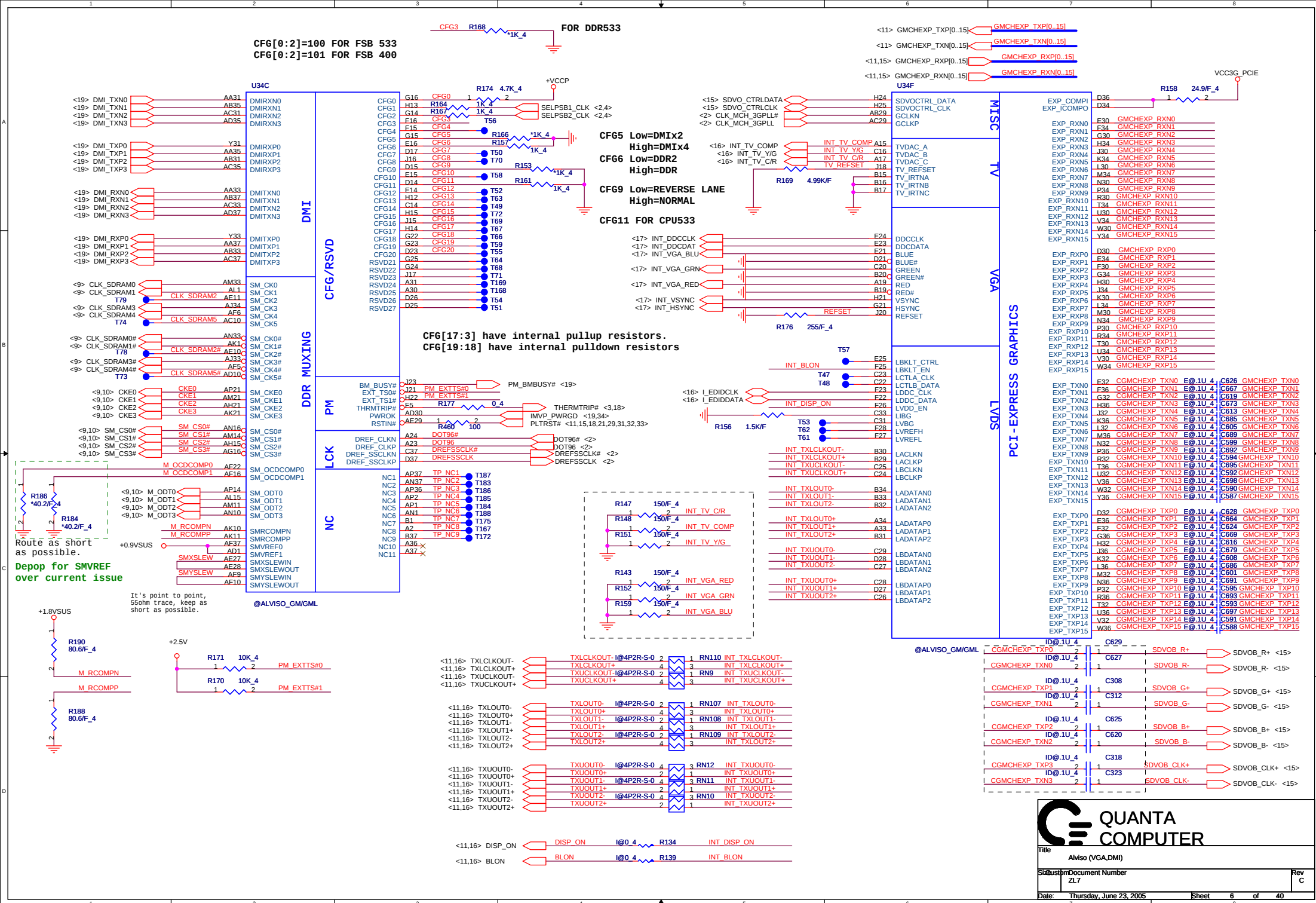






US4E		
AF23	VSS136	AC37
H23	VSS137	Y37
AL22	VSS138	V37
AM22	VSS139	T37
J22	VSS140	P37
D22	VSS141	M37
A22	VSS142	K37
AN21	VSS143	H37
AF21	VSS144	E37
F21	VSS145	AN36
AC20	VSS146	AL36
V20	VSS147	AJ36
G20	VSS148	AE36
F20	VSS149	AC36
E20	VSS150	AD36
D20	VSS151	AC36
A20	VSS152	AB36
AN19	VSS153	AA36
AG19	VSS154	C36
W19	VSS155	AE35
T19	VSS156	Y35
J19	VSS157	W35
H19	VSS158	U35
C19	VSS159	T35
AL18	VSS160	R35
U18	VSS161	P35
B18	VSS162	N35
A18	VSS163	M35
AN17	VSS164	L35
AJ17	VSS165	K35
G17	VSS166	J35
F17	VSS167	H35
D17	VSS168	G35
C17	VSS169	F35
K16	VSS170	E35
H16	VSS171	D35
D16	VSS172	C35
A16	VSS173	B35
K15	VSS174	AN34
C15	VSS175	AH34
AN14	VSS176	AD34
AL14	VSS177	AC34
J14	VSS178	AB34
B14	VSS179	AA34
A14	VSS180	CS4
D12	VSS181	AL33
B12	VSS182	AD33
AN11	VSS183	AC33
AL11	VSS184	AB33
Y11	VSS185	W33
H11	VSS186	U33
F11	VSS187	T33
AA10	VSS188	R33
Y10	VSS189	P33
L10	VSS190	N33
D10	VSS191	M33
AN9	VSS192	L33
AH9	VSS193	K33
AE9	VSS194	H33
AC9	VSS195	G33
AA9	VSS196	F33
Y9	VSS197	E33
T9	VSS198	D33
K9	VSS199	C33
A9	VSS200	B33
AL8	VSS201	AN32
Y8	VSS202	AJ32
PR8	VSS203	AD32
L8	VSS204	AC32
CR8	VSS205	AB32
AK7	VSS206	AA32
AG7	VSS207	C32
AA7	VSS208	Y32
V7	VSS209	W32
G7	VSS210	U32
AJ6	VSS211	T32
AE6	VSS212	R32
AC6	VSS213	P32
AA6	VSS214	N32
T6	VSS215	M32
PE6	VSS216	L32
L6	VSS217	K32
AF5	VSS218	J32
AL5	VSS219	H32
WS5	VSS220	G32
ES5	VSS221	F32
AN4	VSS222	E32
FE4	VSS223	D32
Y4	VSS224	C32
U4	VSS225	B32
P4	VSS226	AN31
L4	VSS227	AJ31
H4	VSS228	AD31
CA	VSS229	AC31
A13	VSS230	AB31
AC3	VSS231	AA31
AB3	VSS232	C31
AA3	VSS233	Y31
C3	VSS234	W31
AN2	VSS235	U31
AL2	VSS236	T31
AH2	VSS237	R31
AE2	VSS238	P31
AD2	VSS239	N31
V2	VSS240	M31
T2	VSS241	L31
P2	VSS242	K31
B27	VSS243	J31
J26	VSS244	H31
Q26	VSS245	G31
E26	VSS246	F31
A26	VSS247	E31
AN24	VSS248	D31
AL24	VSS249	C31
J2	VSS250	B31
G2	VSS251	AN30
D2	VSS252	AJ30
Y1	VSS253	AD30
B36	VSS254	AC30
	VSS255	AB30
	VSS256	AA30
	VSS257	C30
	VSS258	Y30
	VSS259	W30
	VSS260	U30
	VSS261	T30
	VSS262	R30
	VSS263	P30
	VSS264	N30
	VSS265	M30
	VSS266	L30
	VSS267	K30
	VSS268	J30
	VSS269	H30
	VSS270	G30
	VSS271	F30
	VSS272	E30
	VSS273	D30
	VSS274	C30
	VSS275	B30
	VSS276	AN29
	VSS277	AJ29
	VSS278	AD29
	VSS279	AC29
	VSS280	AB29
	VSS281	AA29
	VSS282	C29
	VSS283	Y29
	VSS284	W29
	VSS285	U29
	VSS286	T29
	VSS287	R29
	VSS288	P29
	VSS289	N29
	VSS290	M29
	VSS291	L29
	VSS292	K29
	VSS293	J29
	VSS294	H29
	VSS295	G29
	VSS296	F29
	VSS297	E29
	VSS298	D29
	VSS299	C29
	VSS300	B29
	VSS301	AN28
	VSS302	AJ28
	VSS303	AD28
	VSS304	AC28
	VSS305	AB28
	VSS306	AA28
	VSS307	C28
	VSS308	Y28
	VSS309	W28
	VSS310	U28
	VSS311	T28
	VSS312	R28
	VSS313	P28
	VSS314	N28
	VSS315	M28
	VSS316	L28
	VSS317	K28
	VSS318	J28
	VSS319	H28
	VSS320	G28
	VSS321	F28
	VSS322	E28
	VSS323	D28
	VSS324	C28
	VSS325	B28
	VSS326	AN27
	VSS327	AJ27
	VSS328	AD27
	VSS329	AC27
	VSS330	AB27
	VSS331	AA27
	VSS332	C27
	VSS333	Y27
	VSS334	W27
	VSS335	U27
	VSS336	T27
	VSS337	R27
	VSS338	P27
	VSS339	N27
	VSS340	M27
	VSS341	L27
	VSS342	K27
	VSS343	J27
	VSS344	H27
	VSS345	G27
	VSS346	F27
	VSS347	E27
	VSS348	D27
	VSS349	C27
	VSS350	B27
	VSS351	AN26
	VSS352	AJ26
	VSS353	AD26
	VSS354	AC26
	VSS355	AB26
	VSS356	AA26
	VSS357	C26
	VSS358	Y26
	VSS359	W26
	VSS360	U26
	VSS361	T26
	VSS362	R26
	VSS363	P26
	VSS364	N26
	VSS365	M26
	VSS366	L26
	VSS367	K26
	VSS368	J26
	VSS369	H26
	VSS370	G26
	VSS371	F26
	VSS372	E26
	VSS373	D26
	VSS374	C26
	VSS375	B26
	VSS376	AN25
	VSS377	AJ25
	VSS378	AD25
	VSS379	AC25
	VSS380	AB25
	VSS381	AA25
	VSS382	C25
	VSS383	Y25
	VSS384	W25
	VSS385	U25
	VSS386	T25
	VSS387	R25
	VSS388	P25
	VSS389	N25
	VSS390	M25
	VSS391	L25
	VSS392	K25
	VSS393	J25
	VSS394	H25
	VSS395	G25
	VSS396	F25
	VSS397	E25
	VSS398	D25
	VSS399	C25
	VSS400	B25
	VSS401	AN24
	VSS402	AJ24
	VSS403	AD24
	VSS404	AC24
	VSS405	AB24
	VSS406	AA24
	VSS407	C24
	VSS408	Y24
	VSS409	W24
	VSS410	U24
	VSS411	T24
	VSS412	R24
	VSS413	P24
	VSS414	N24
	VSS415	M24
	VSS416	L24
	VSS417	K24
	VSS418	J24
	VSS419	H24
	VSS420	G24
	VSS421	F24
	VSS422	E24
	VSS423	D24
	VSS424	C24
	VSS425	B24

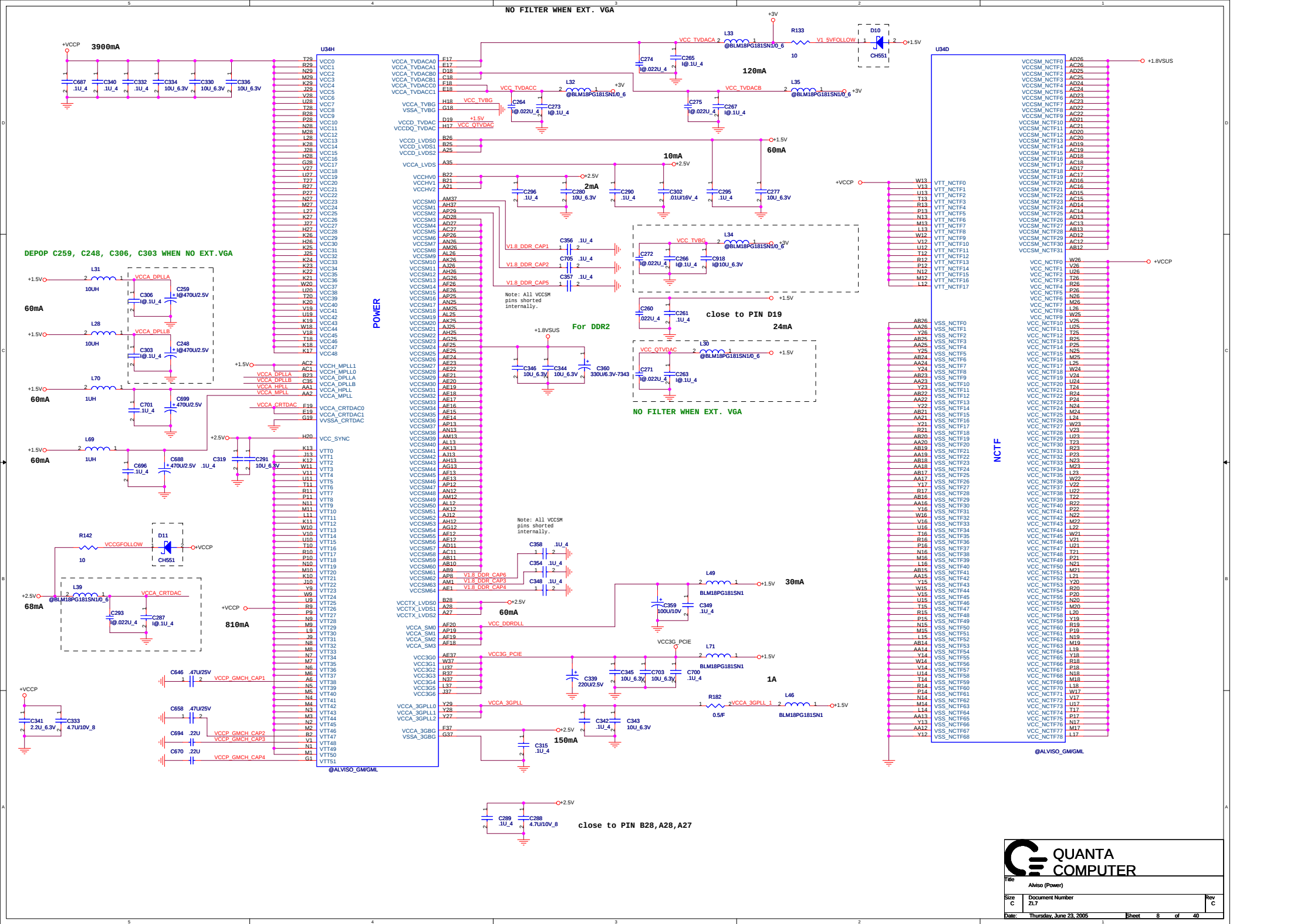


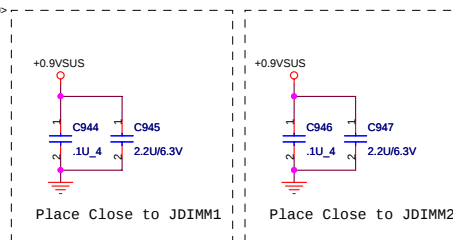
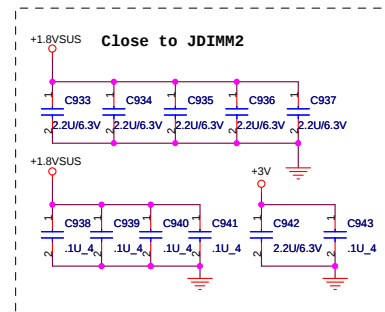
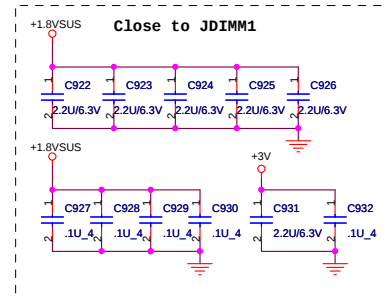
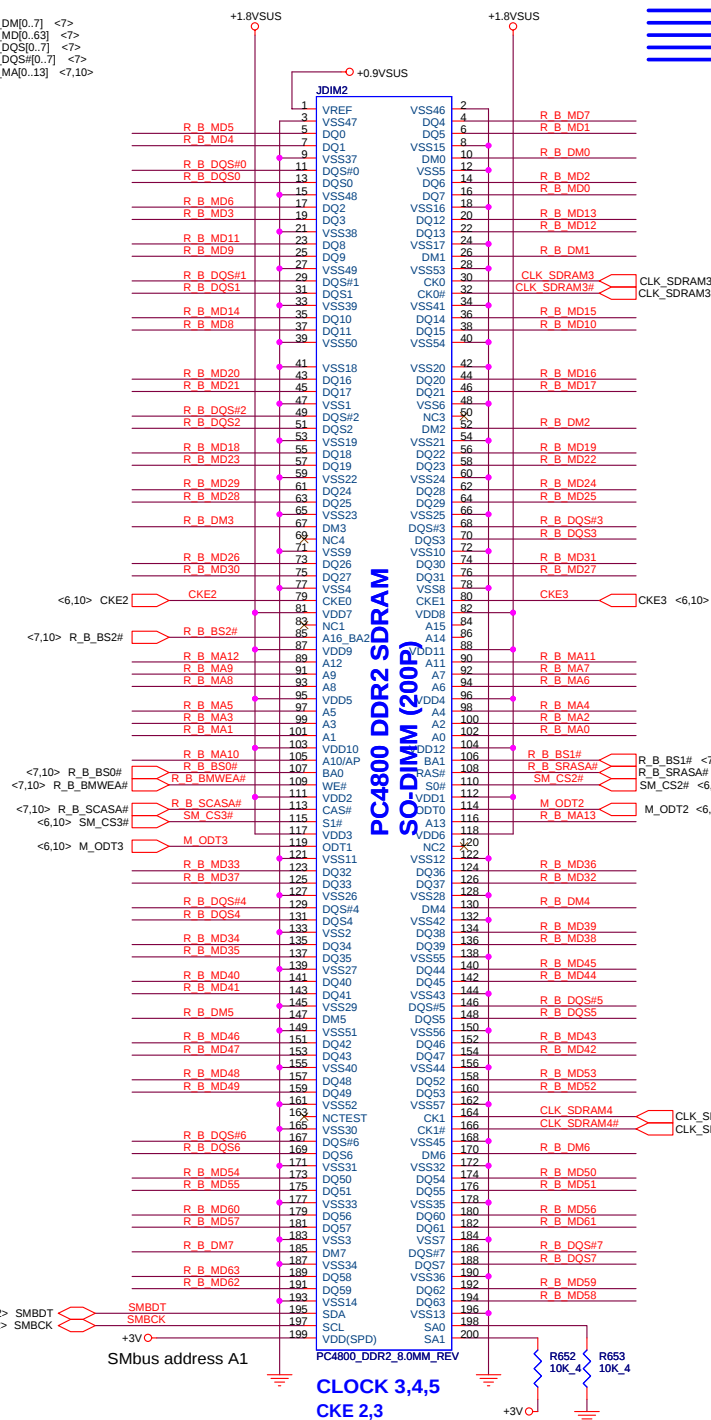
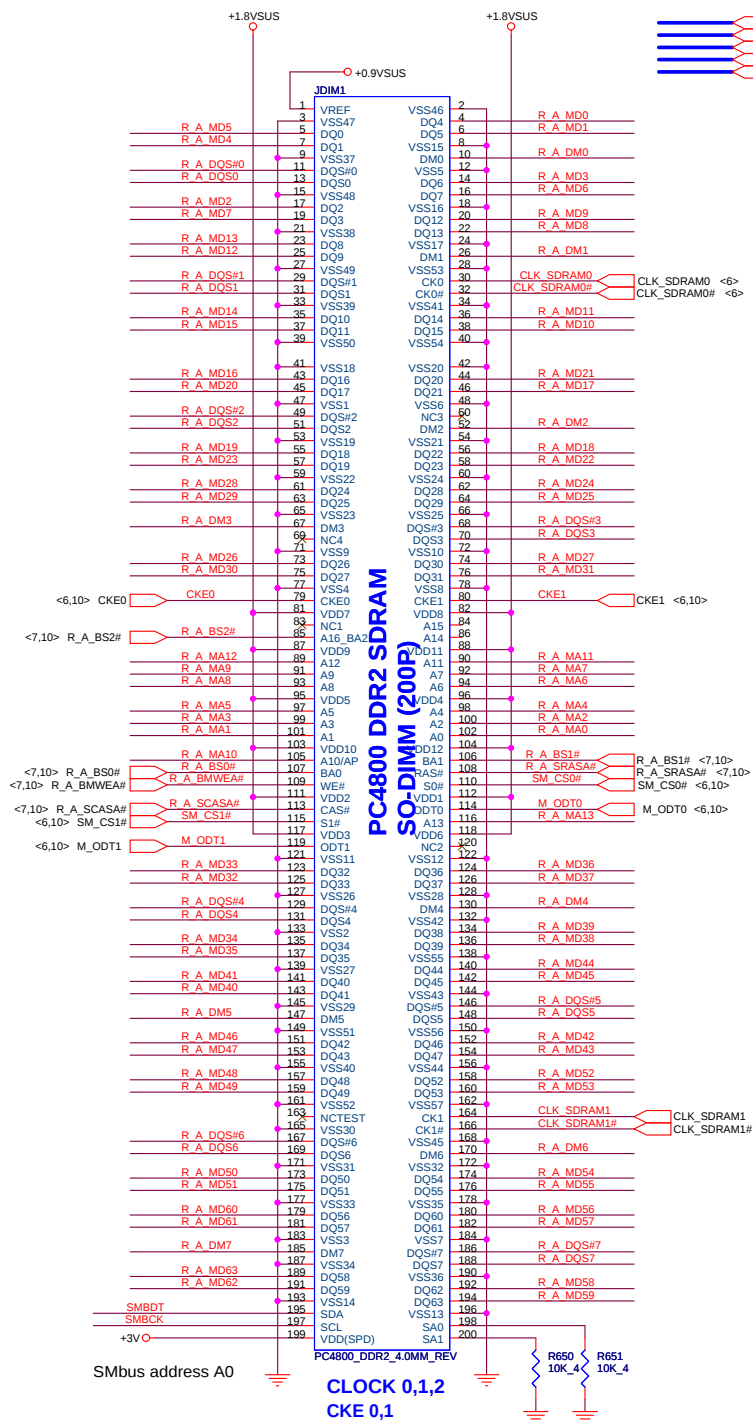
Title
Abuse (VGA BMI)

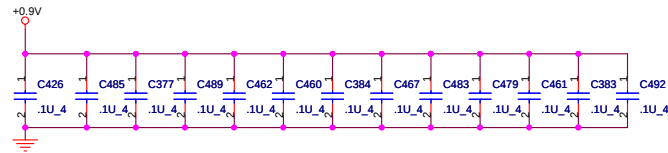
Size Custom Document Number

	Z17
Date:	Thursday, June 22, 2006

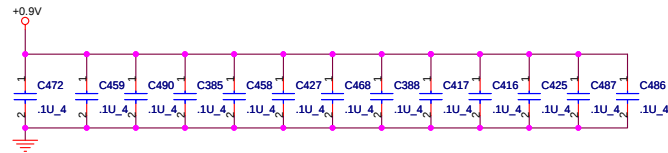
	Rev
--	-----



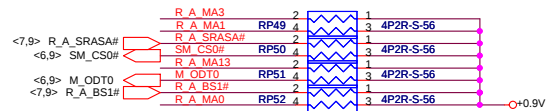
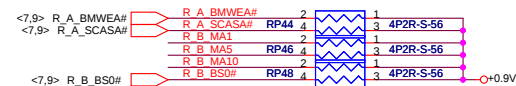
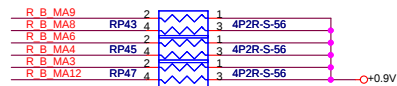
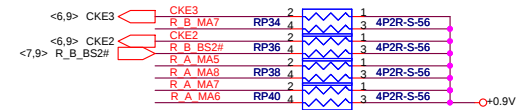
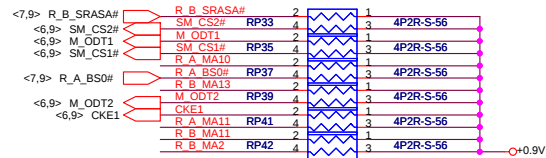
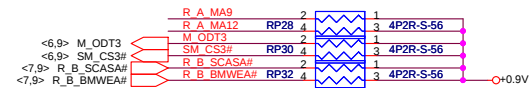
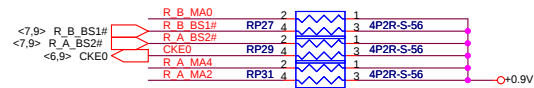


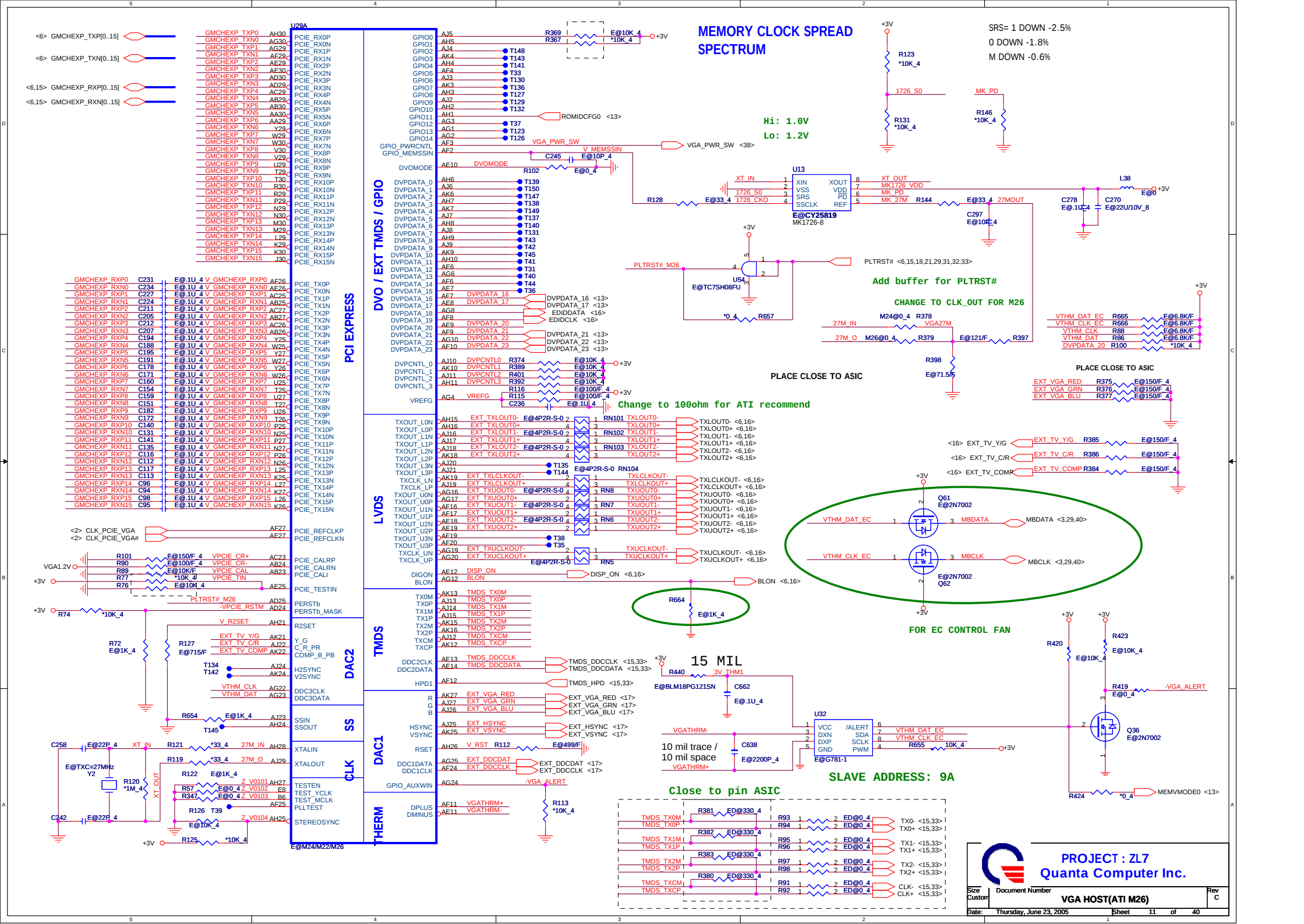


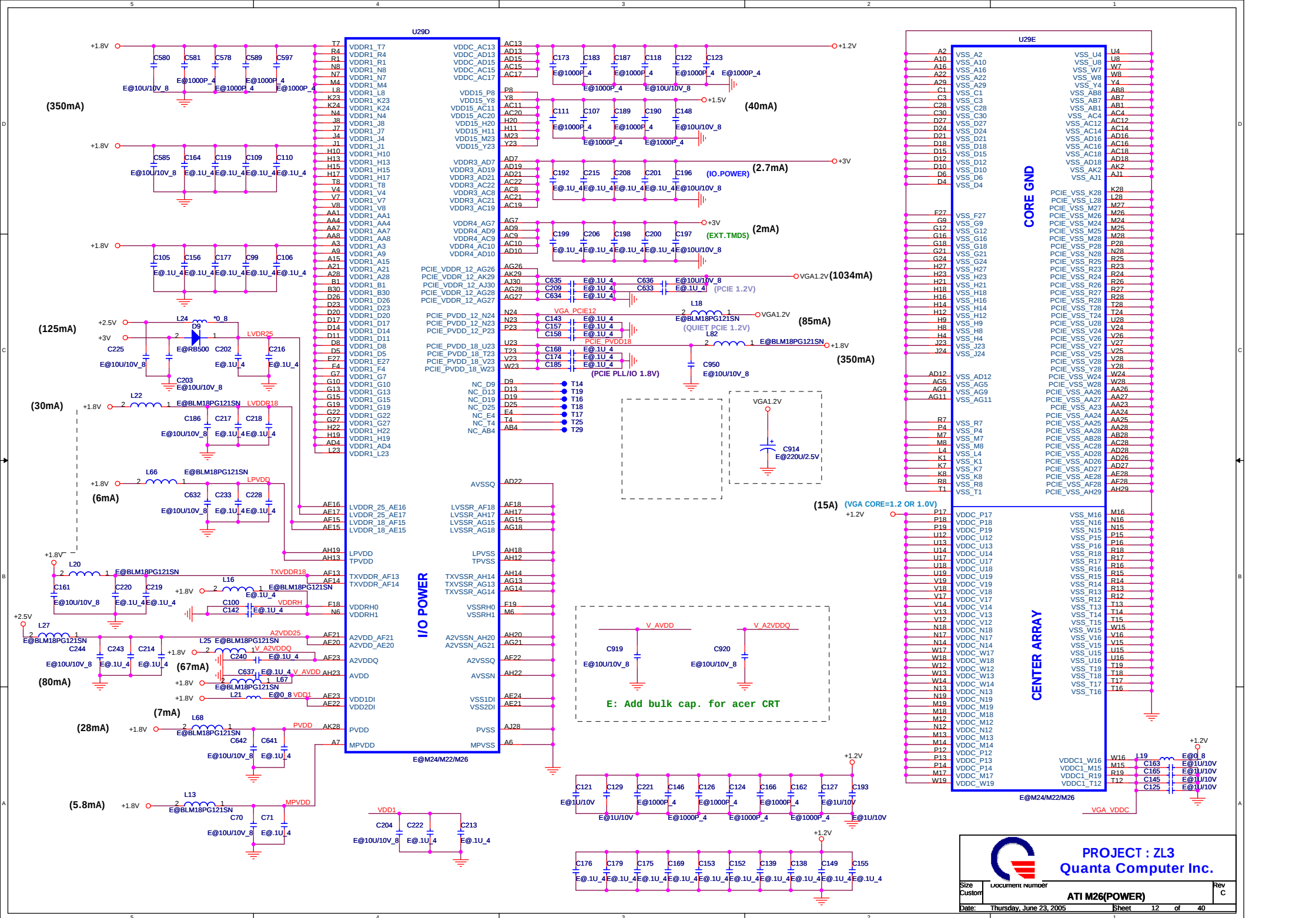
Layout note: Place one cap close to every 2 pullup resistors terminated to +0.9V

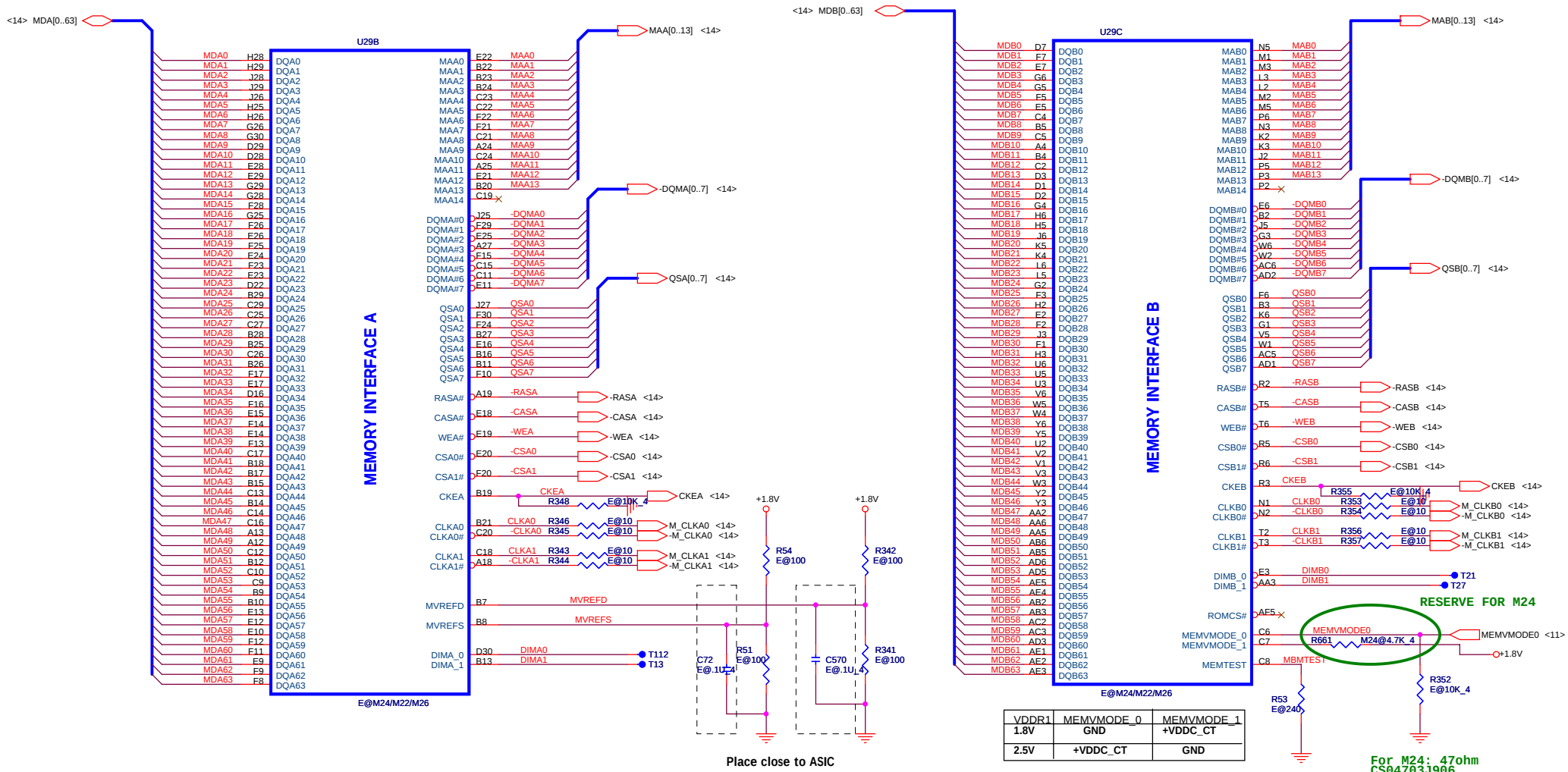


Layout note: Place one cap close to every 2 pullup resistors terminated to +0.9V









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
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
GPIO_8	
Strap to set the debug muxes to bring out DEBUG signals even if registers are inaccessible	
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_21: 0=4Mx32 1=8Mx32 DVPDATA_22: 0=128M 1=64M DVPDATA_23: 0=Hynix 1=Samsung	

FOR M26P ONLY
0: 128M
1: 256M

Add MEM_ID:
100 for 256M

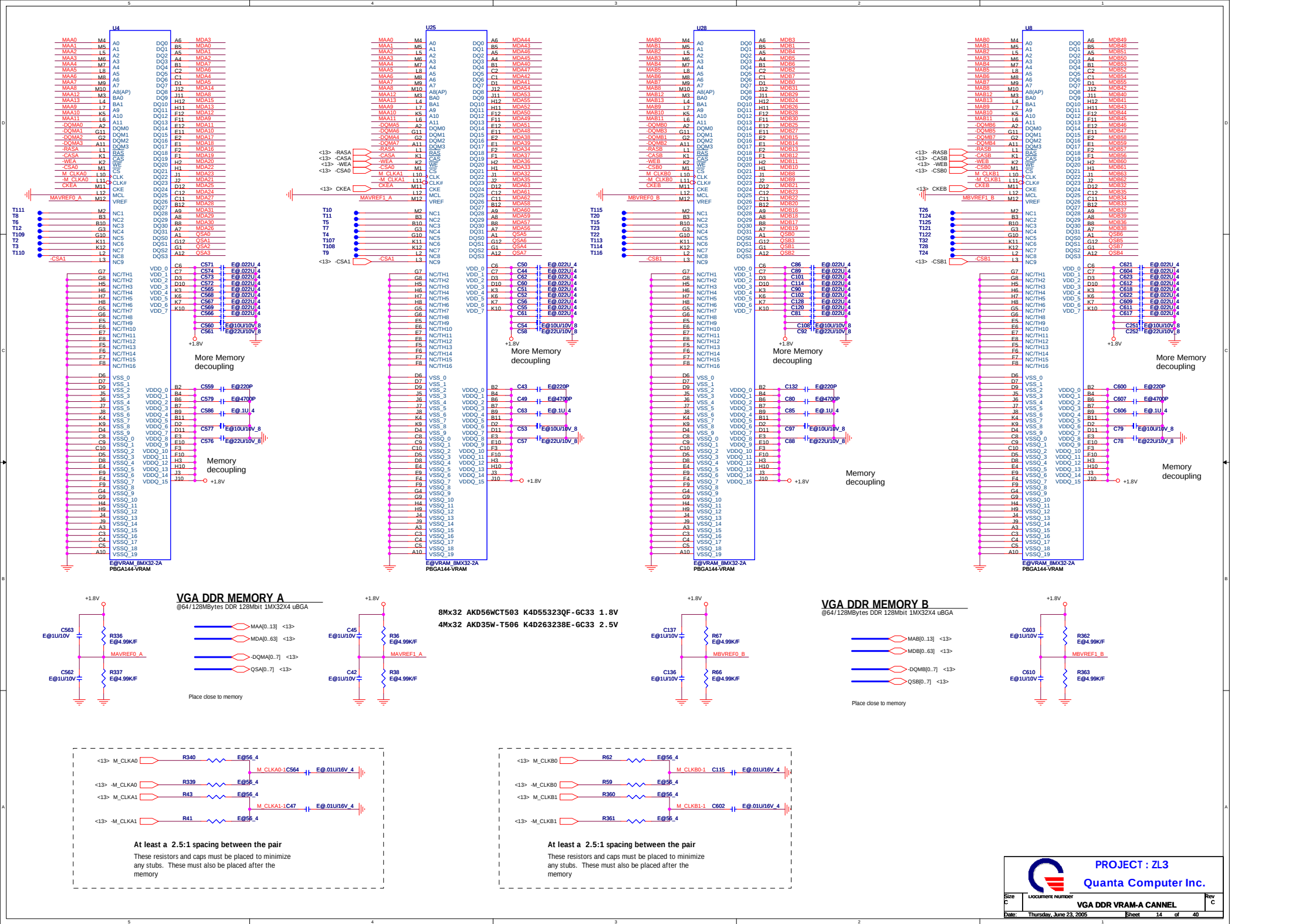
C: FOR HYNIX MEMORY

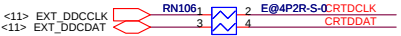
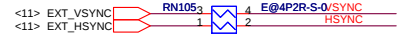
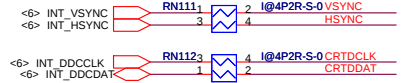
PROJECT :ZL3
Quanta Computer Inc.

ATI M26 MEM/STRAPS PIN

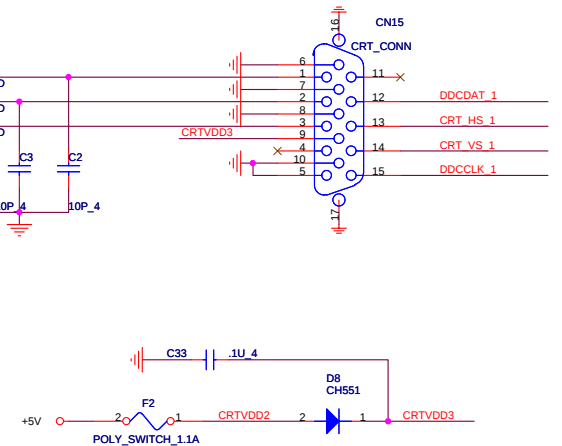
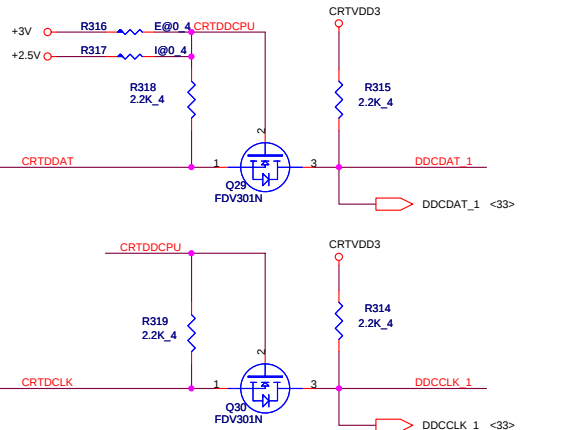
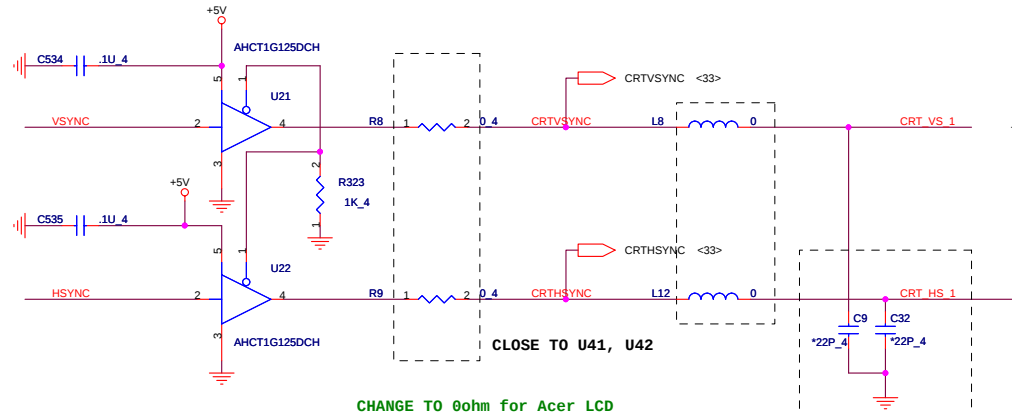
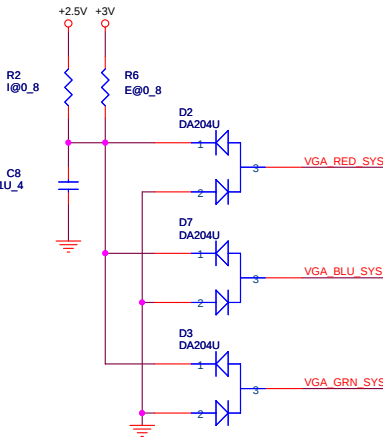
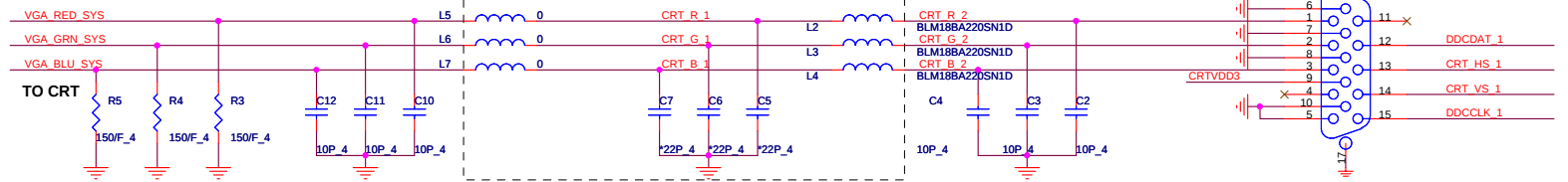
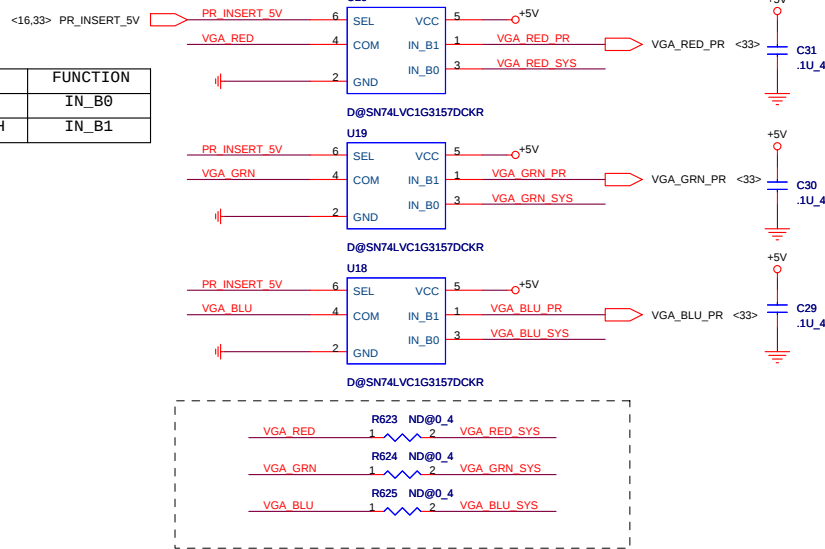
Size Custom Document number

Date: Thursday, June 23, 2005 Sheet 13 of 40

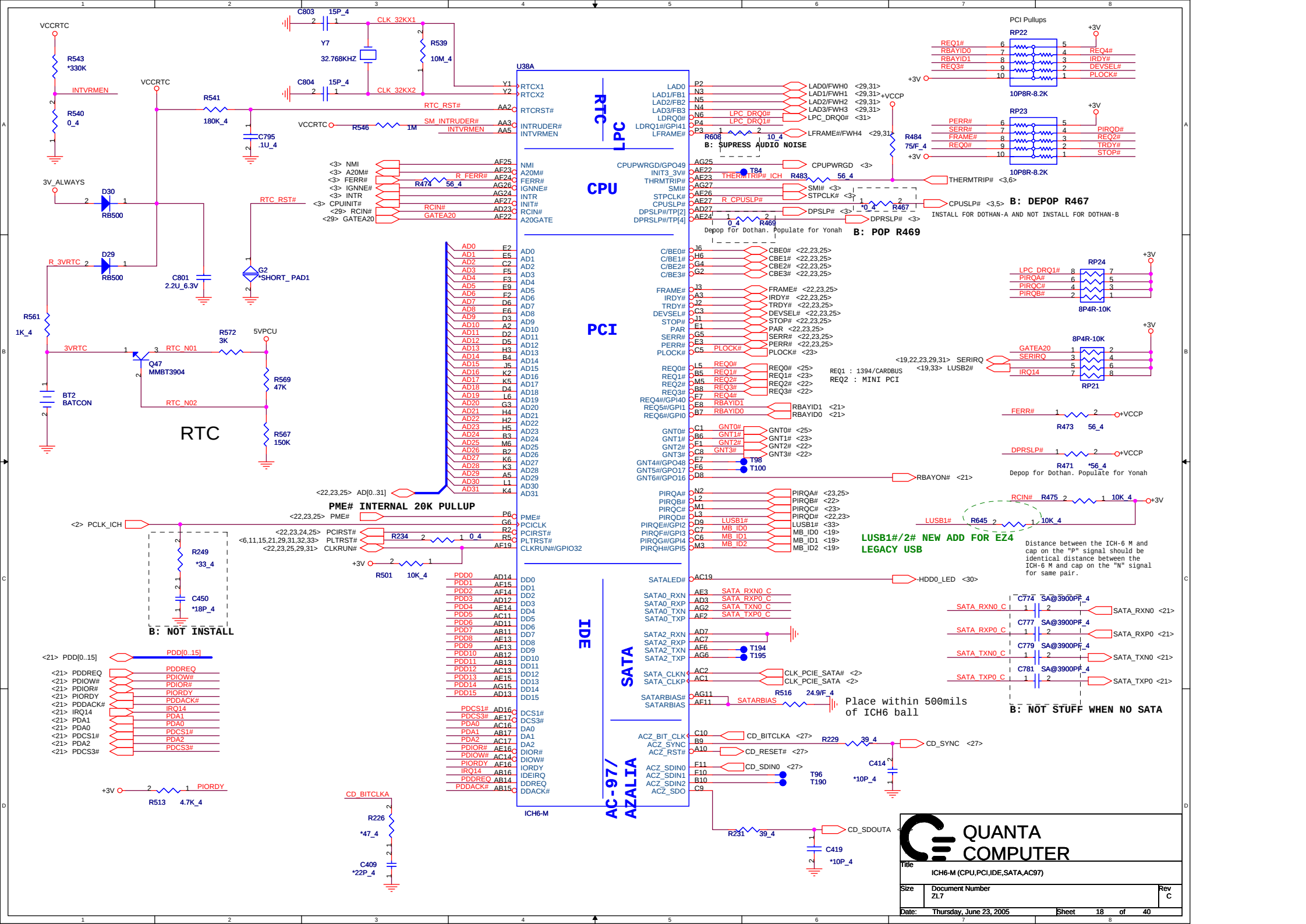


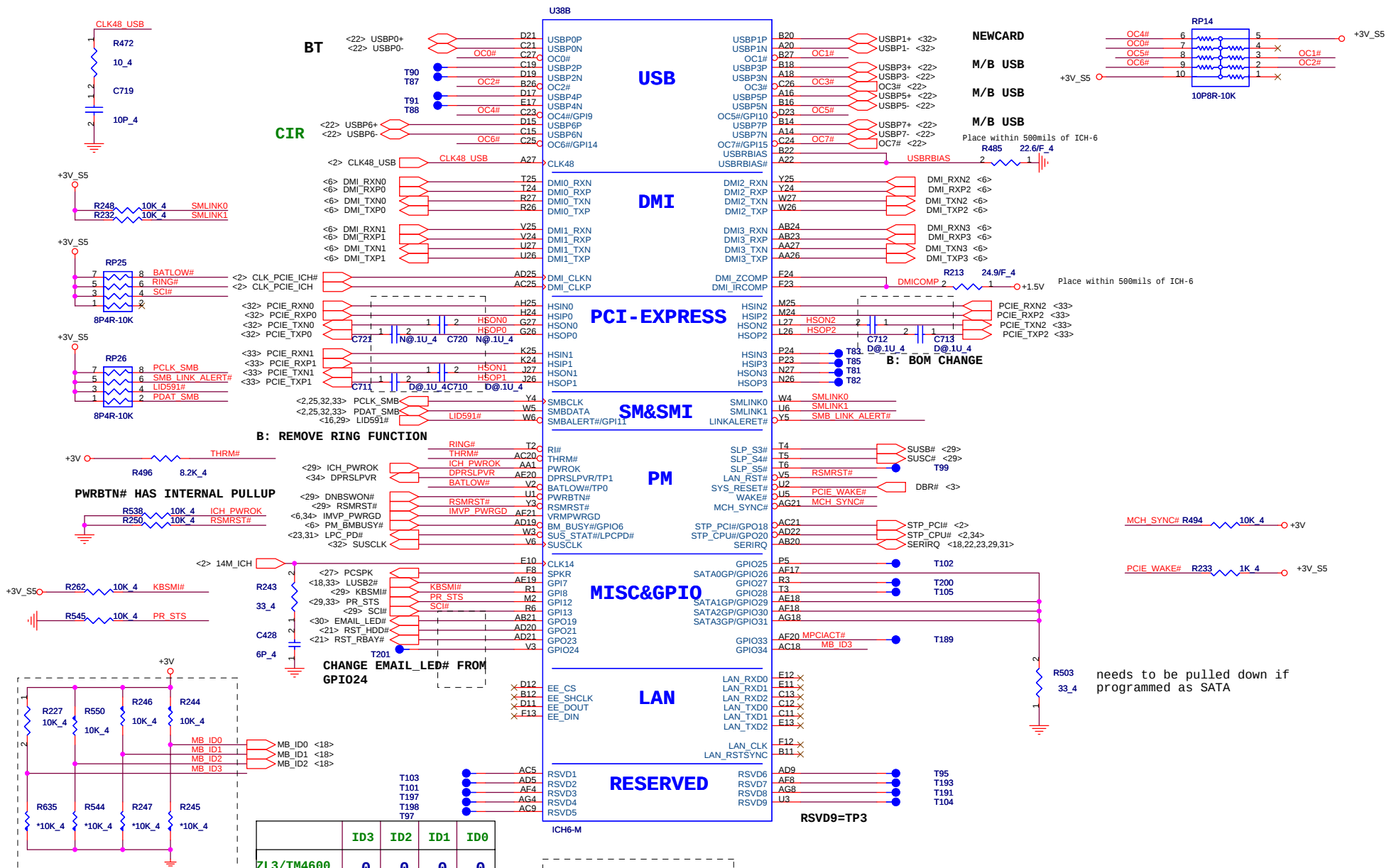


SEL	FUNCTION
LOW	IN_B0
HIGH	IN_B1

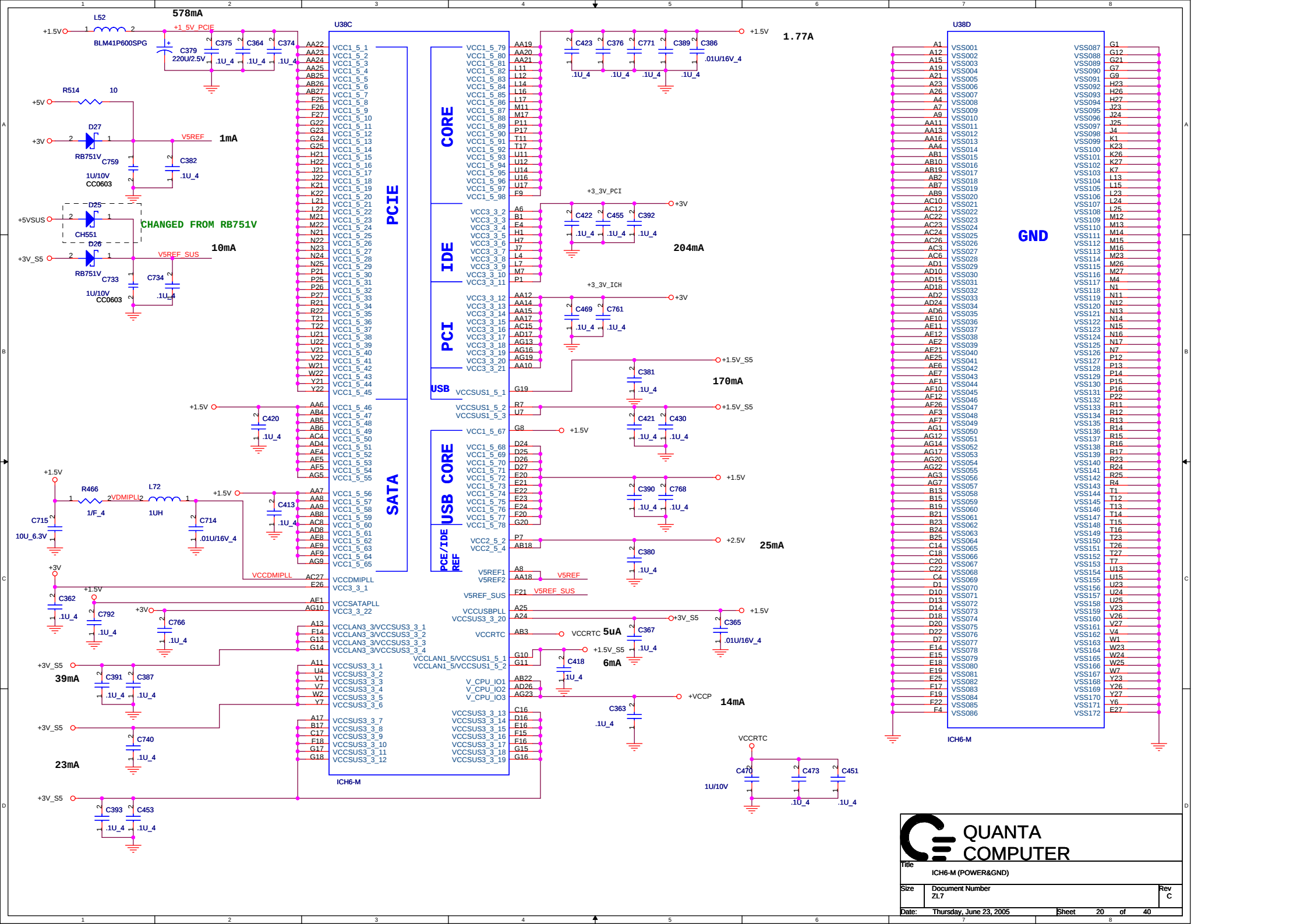


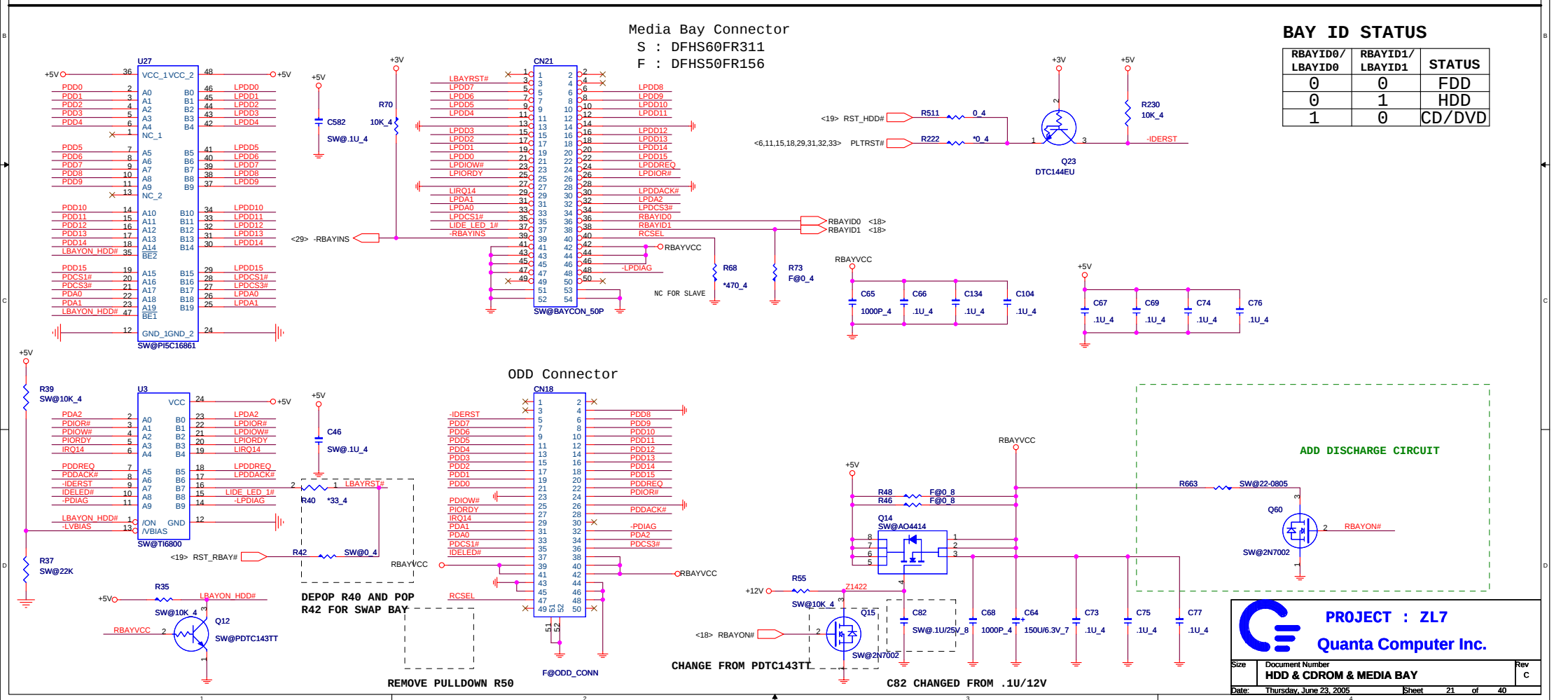
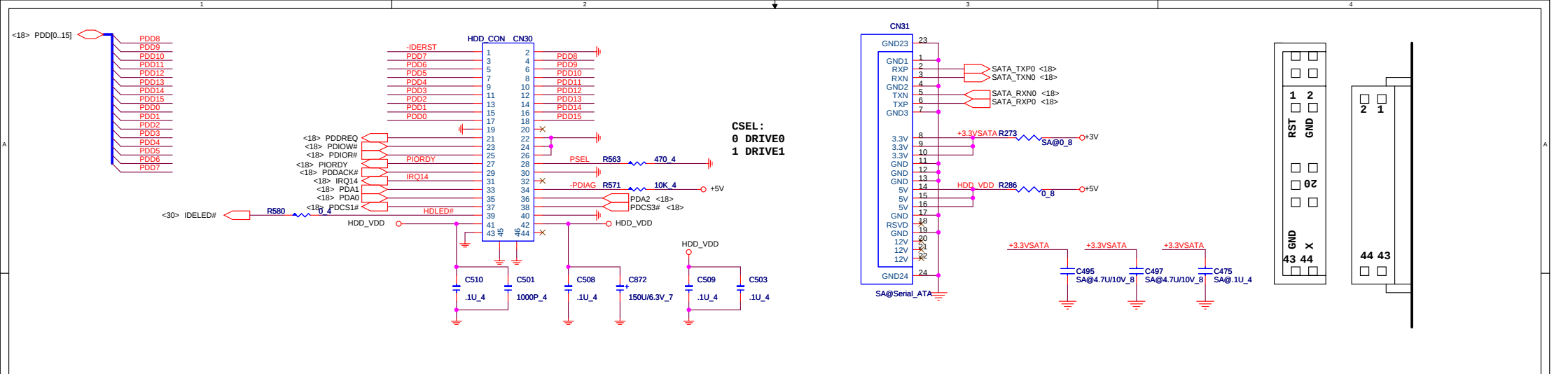
CHANGE TO 0ohm for Acer LCD

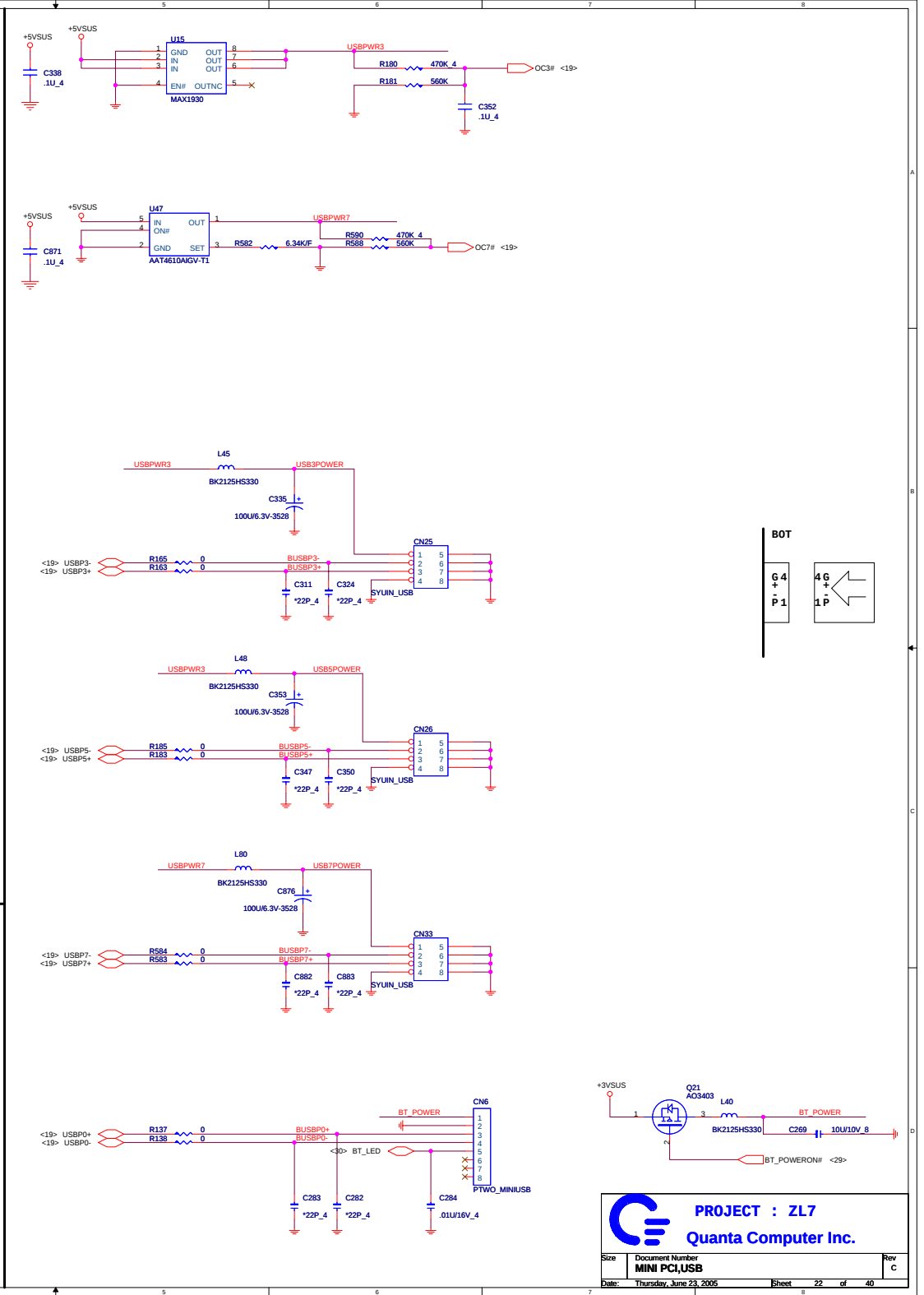
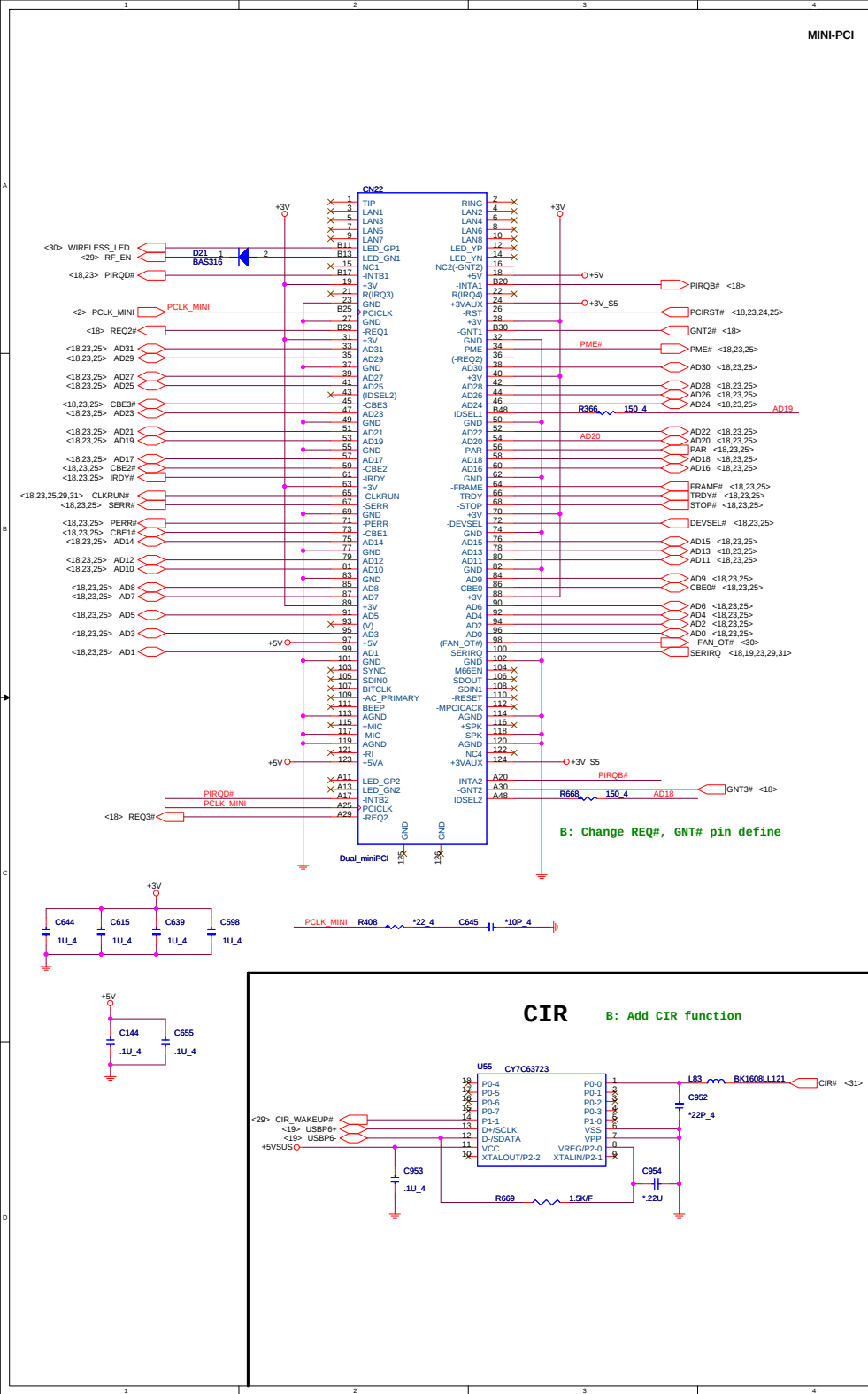


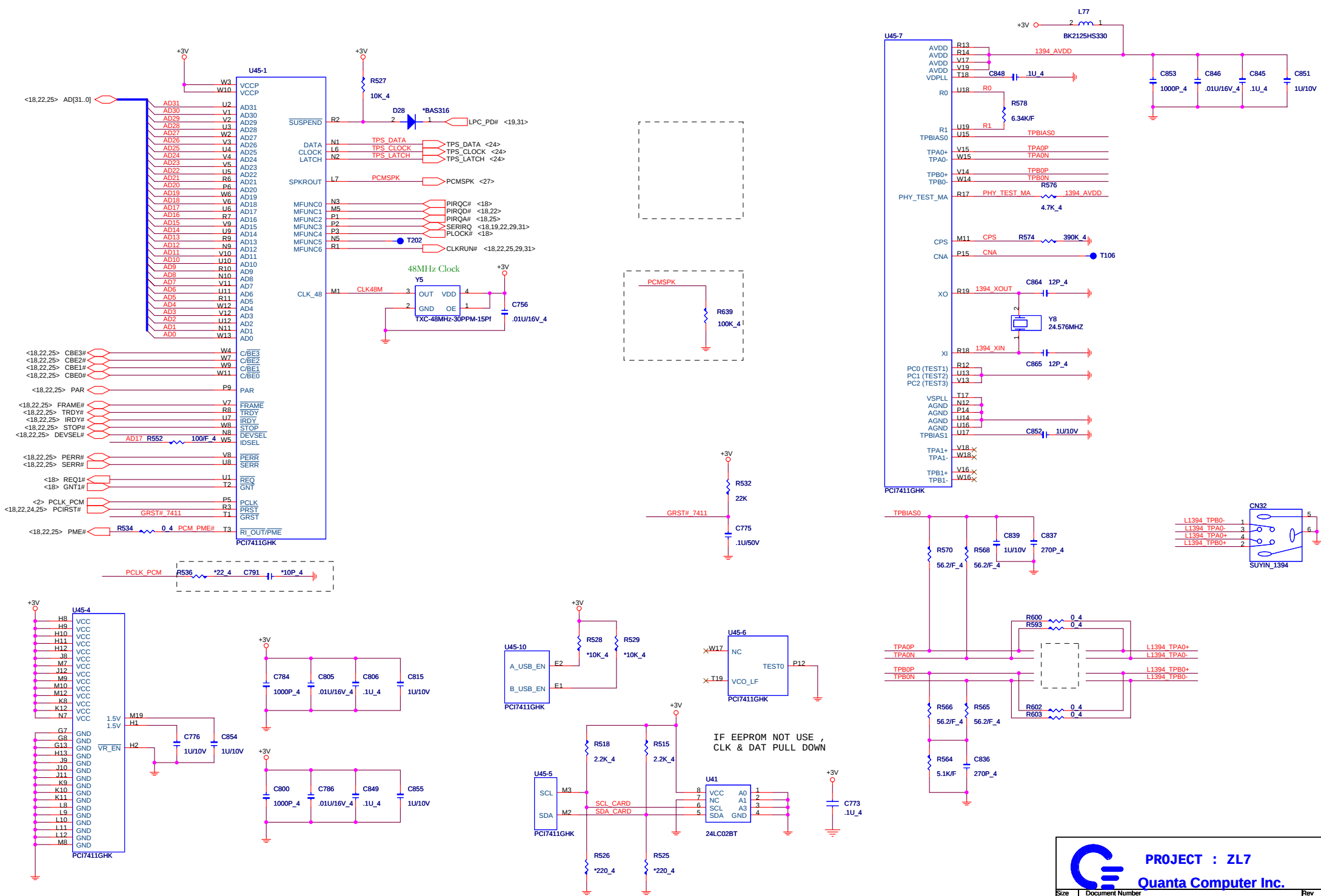


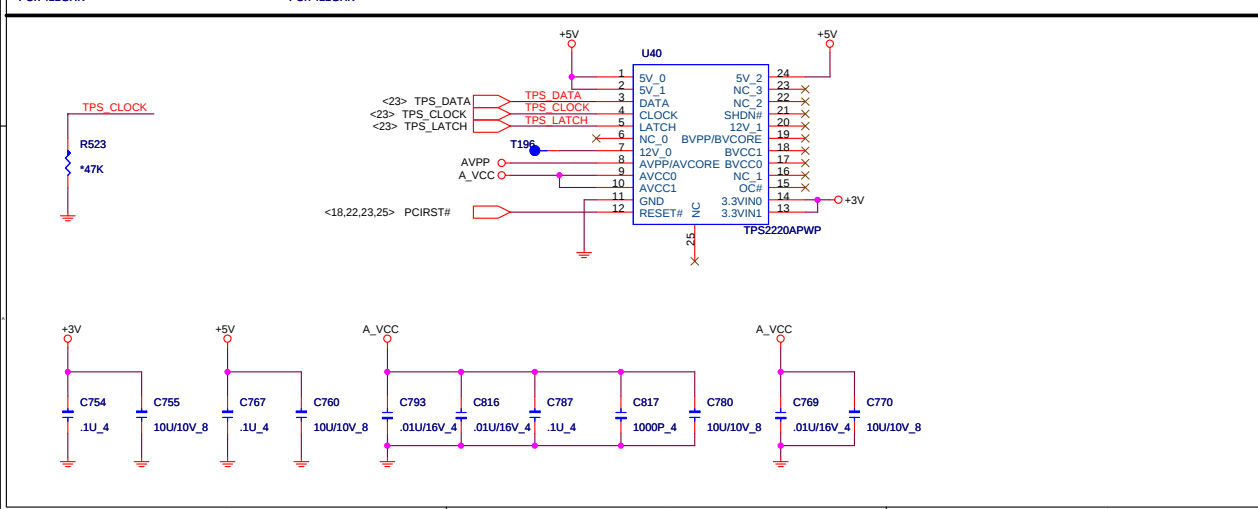
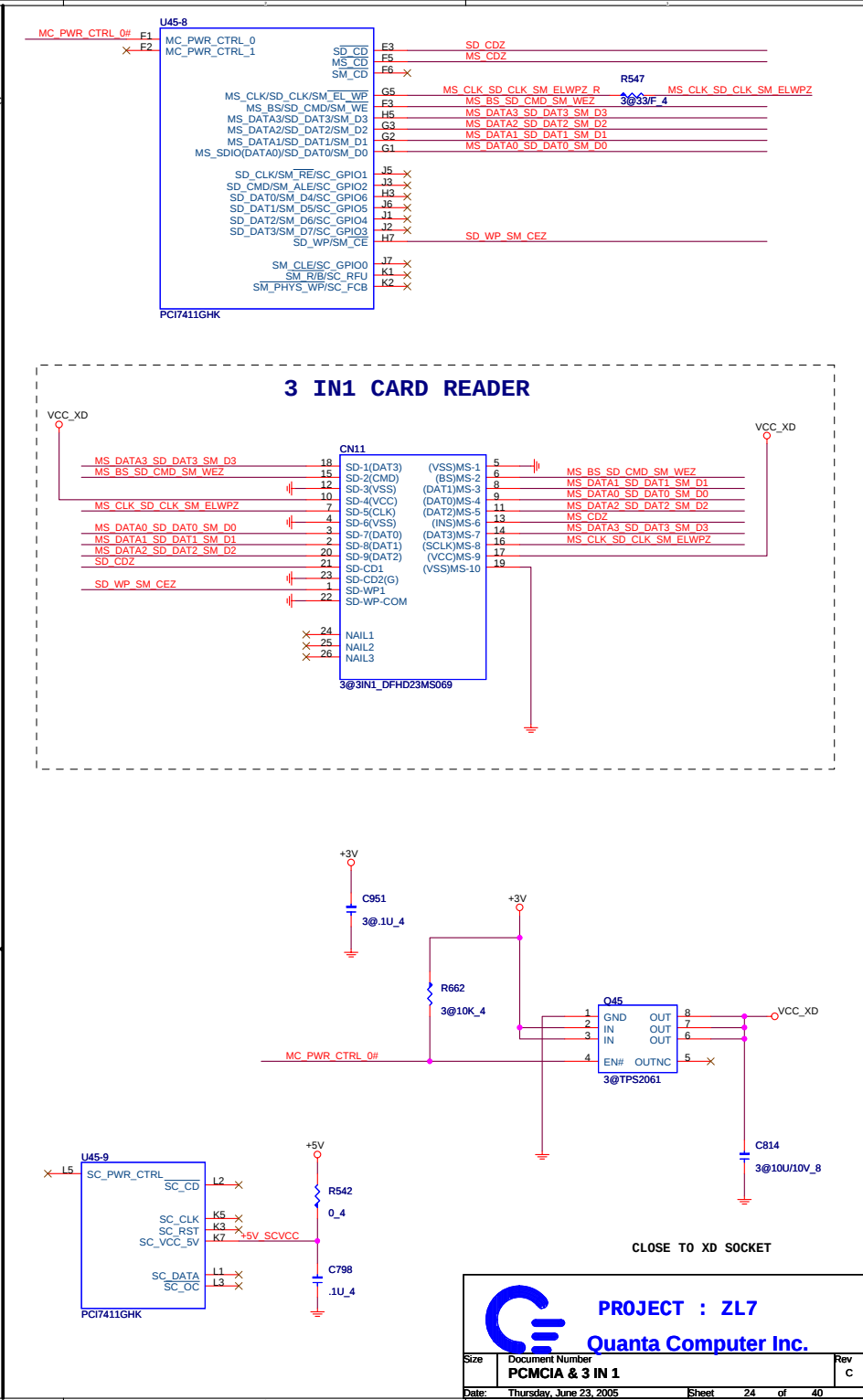
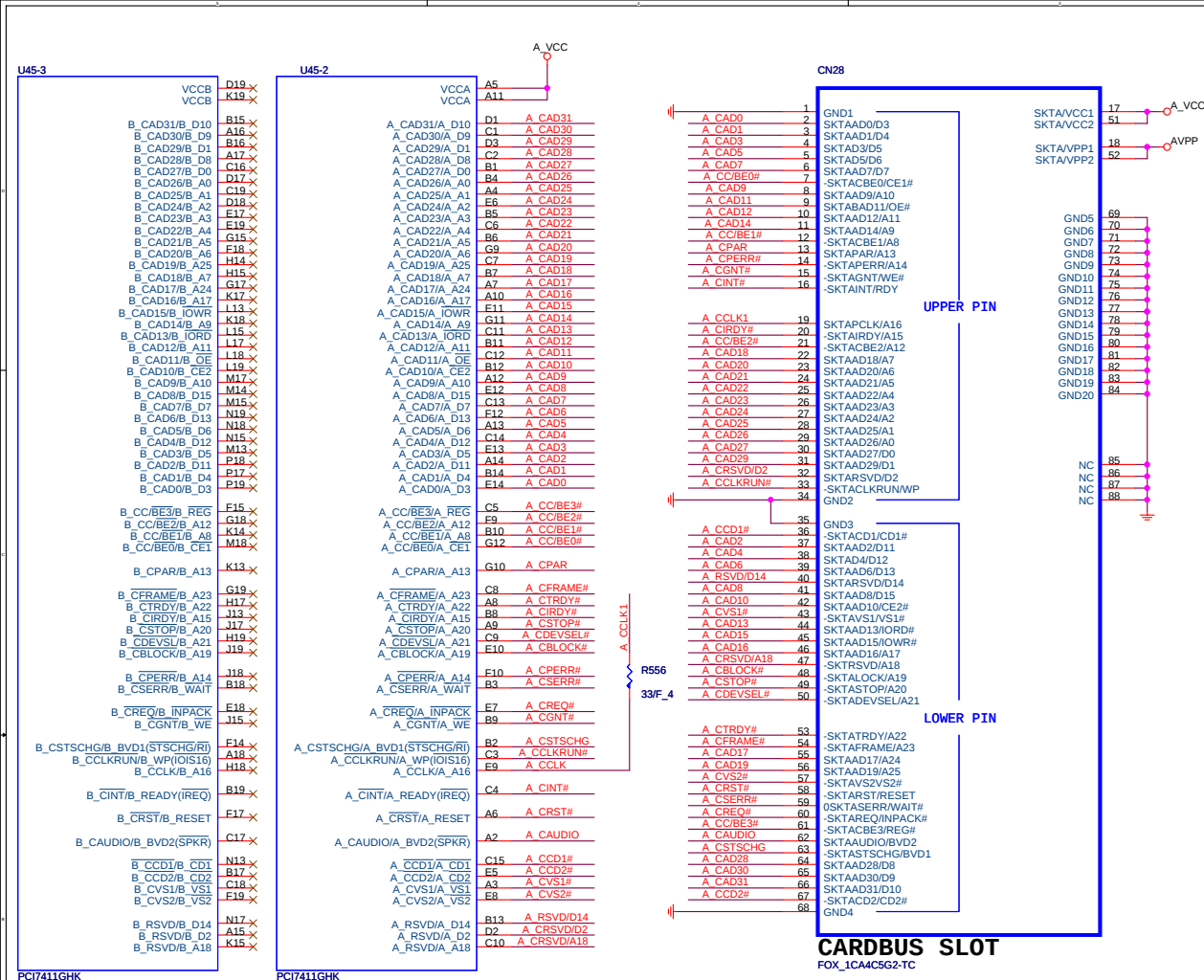
	ID3	ID2	ID1	ID0
ZL3/TM4600	0	0	0	0
ZL3B/TM4100	0	0	1	0
ZL3D/AS1690	0	1	0	0
ZL3F/AS3510	0	1	1	0
ZL3C/EX4100	1	0	1	1

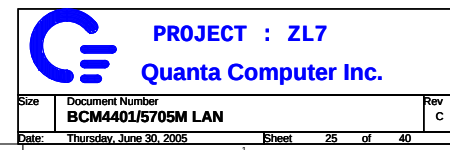


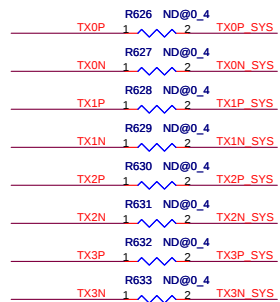
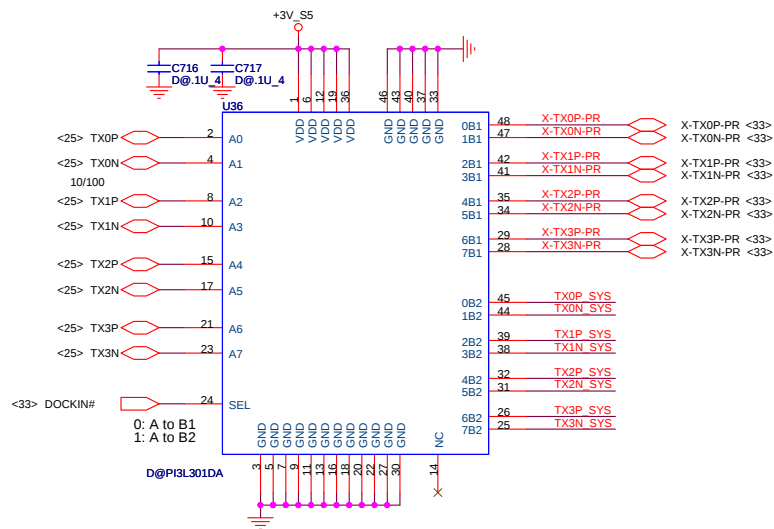




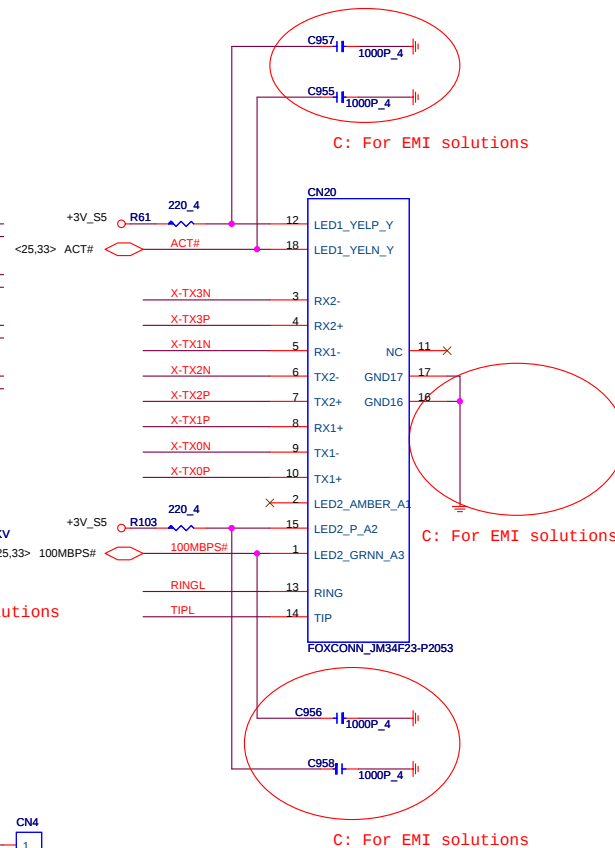
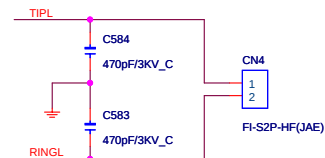
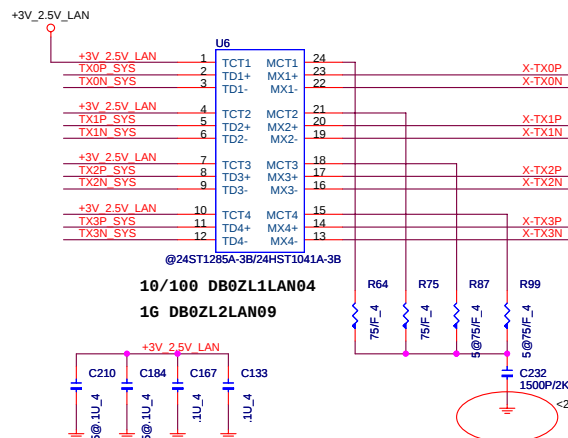




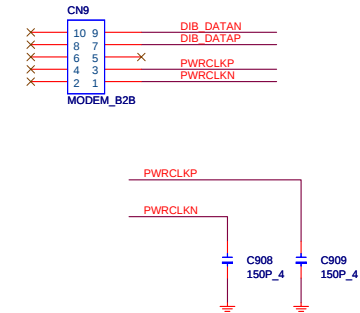
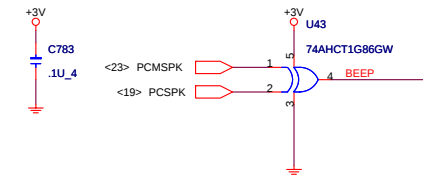
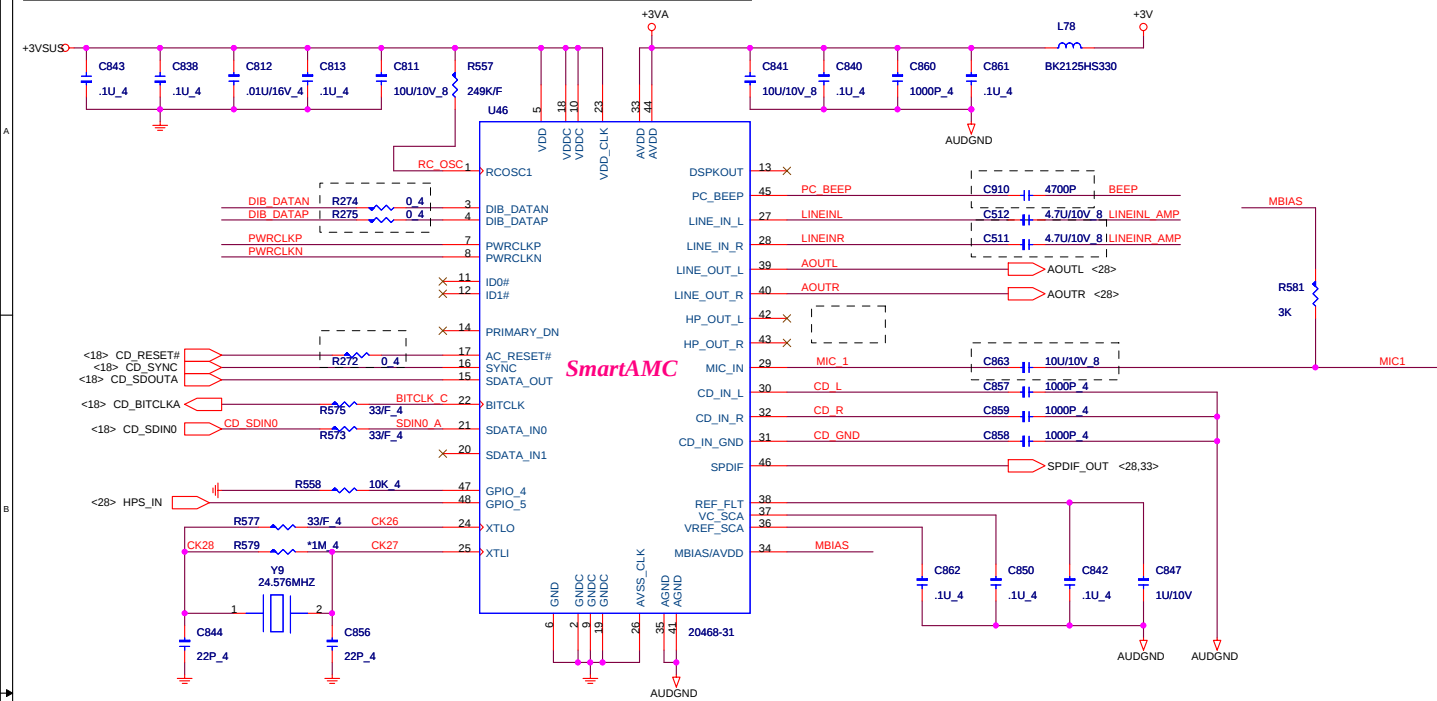




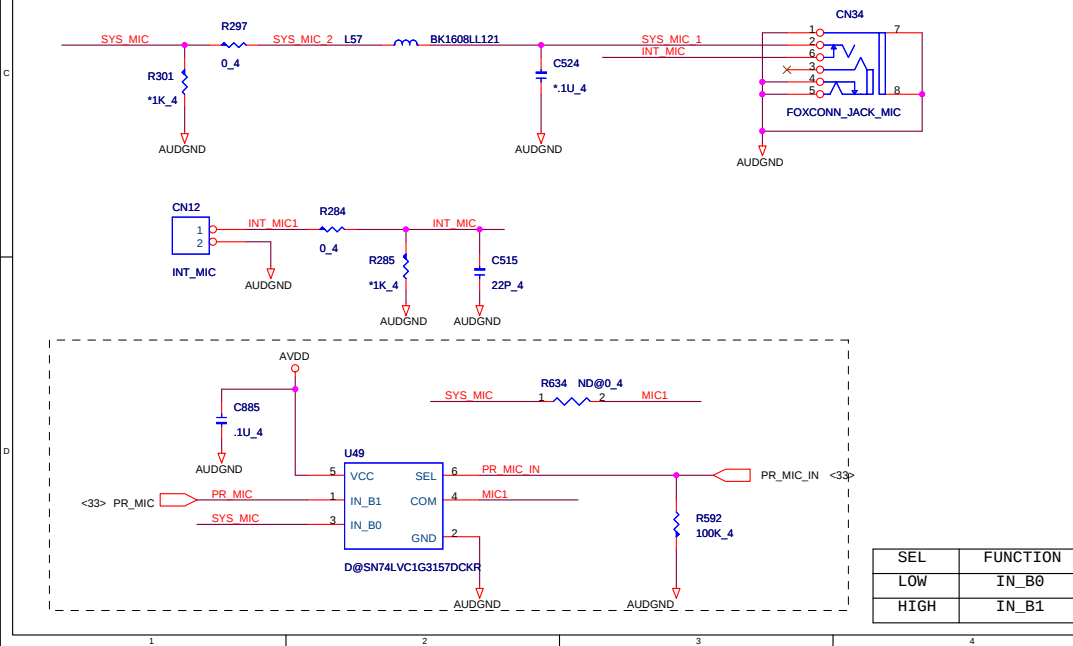
ADD CIRCUITS WHEN NO DOCKING



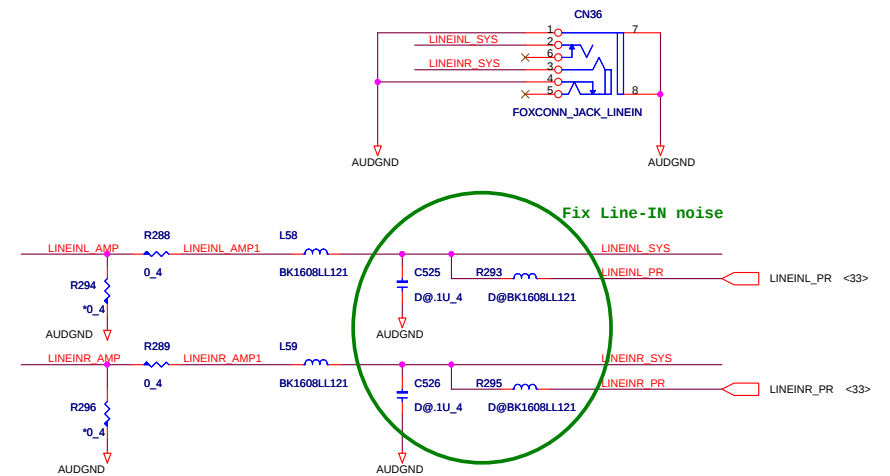
The AMC20463-004 modem is used for mother board family MBAMC20463-004.



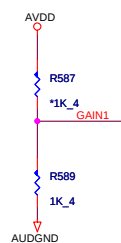
MIC



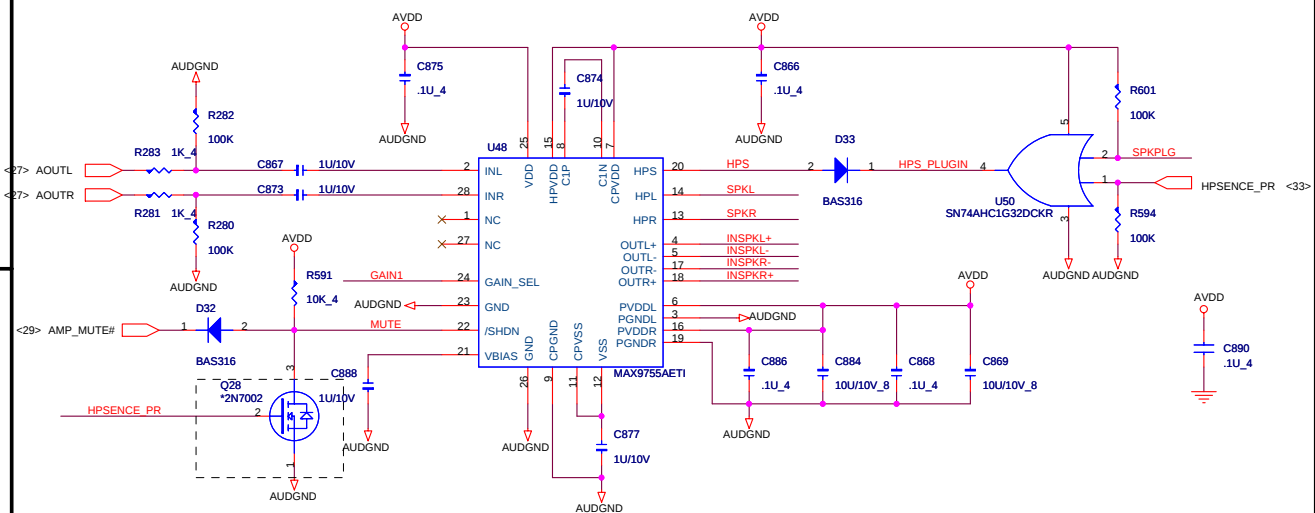
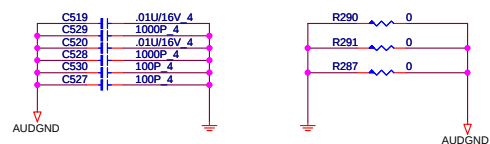
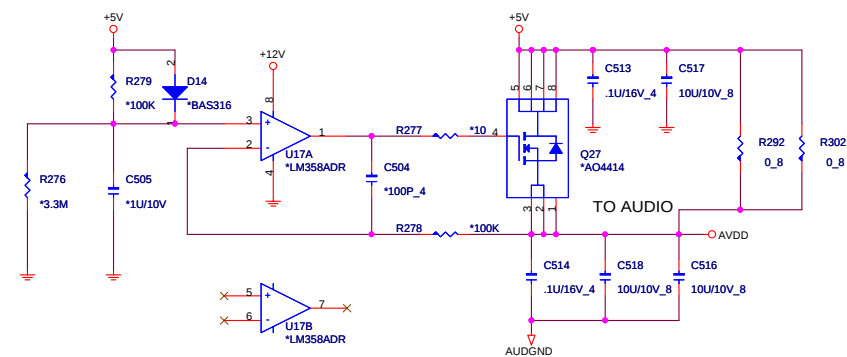
LINE IN



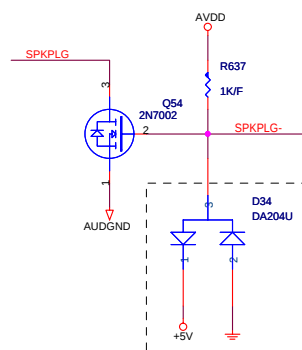
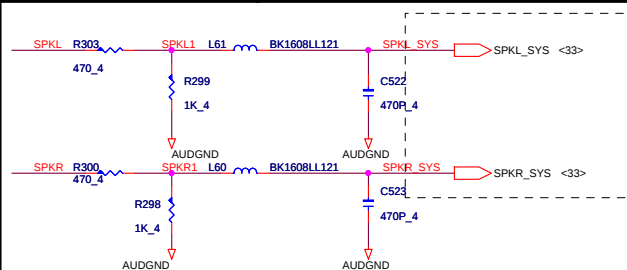
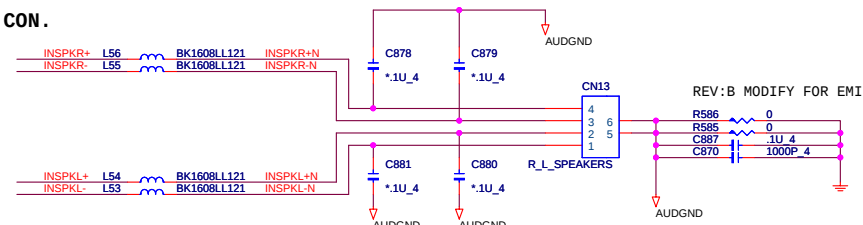
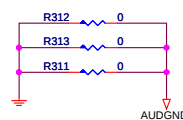
GAIN1	SPKR MODE	HP MODE
0	10.5	3
1	9	0



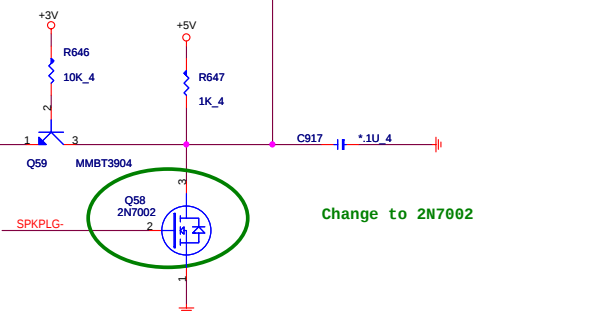
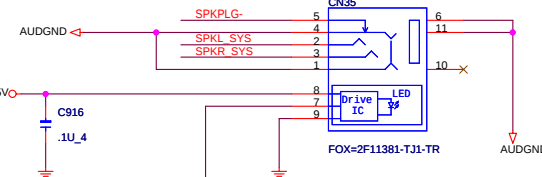
AMP POWER



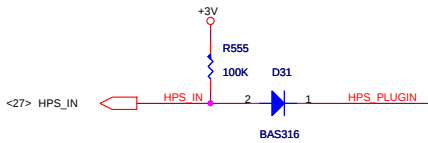
SPEAKER CON.



LINE OUT&SPDIF

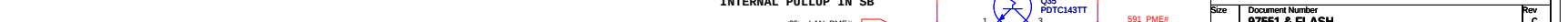


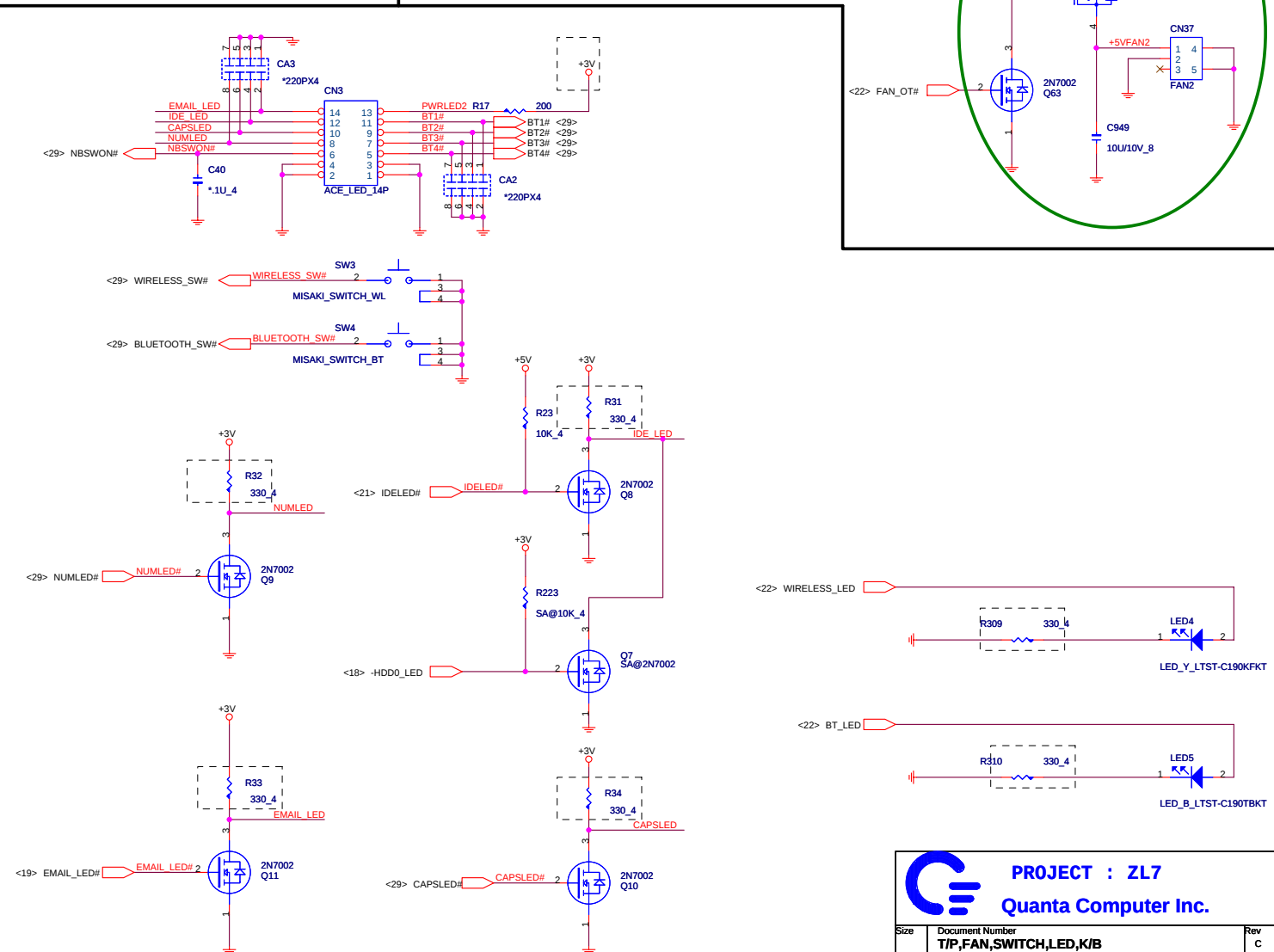
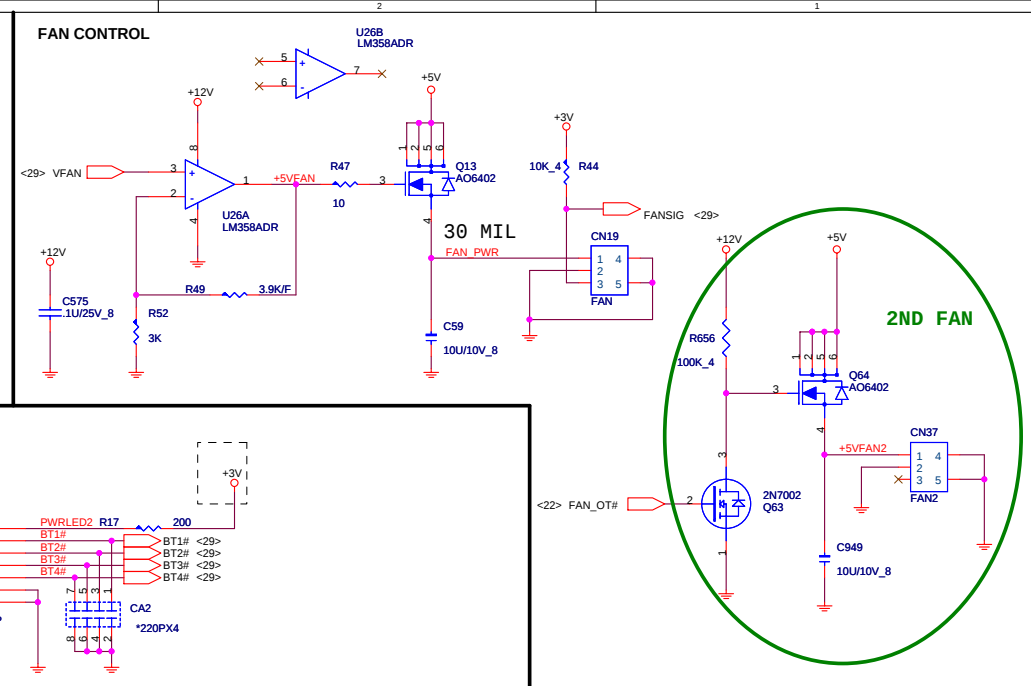
NEW ADD FOR ESD
CLOSE TO CN35

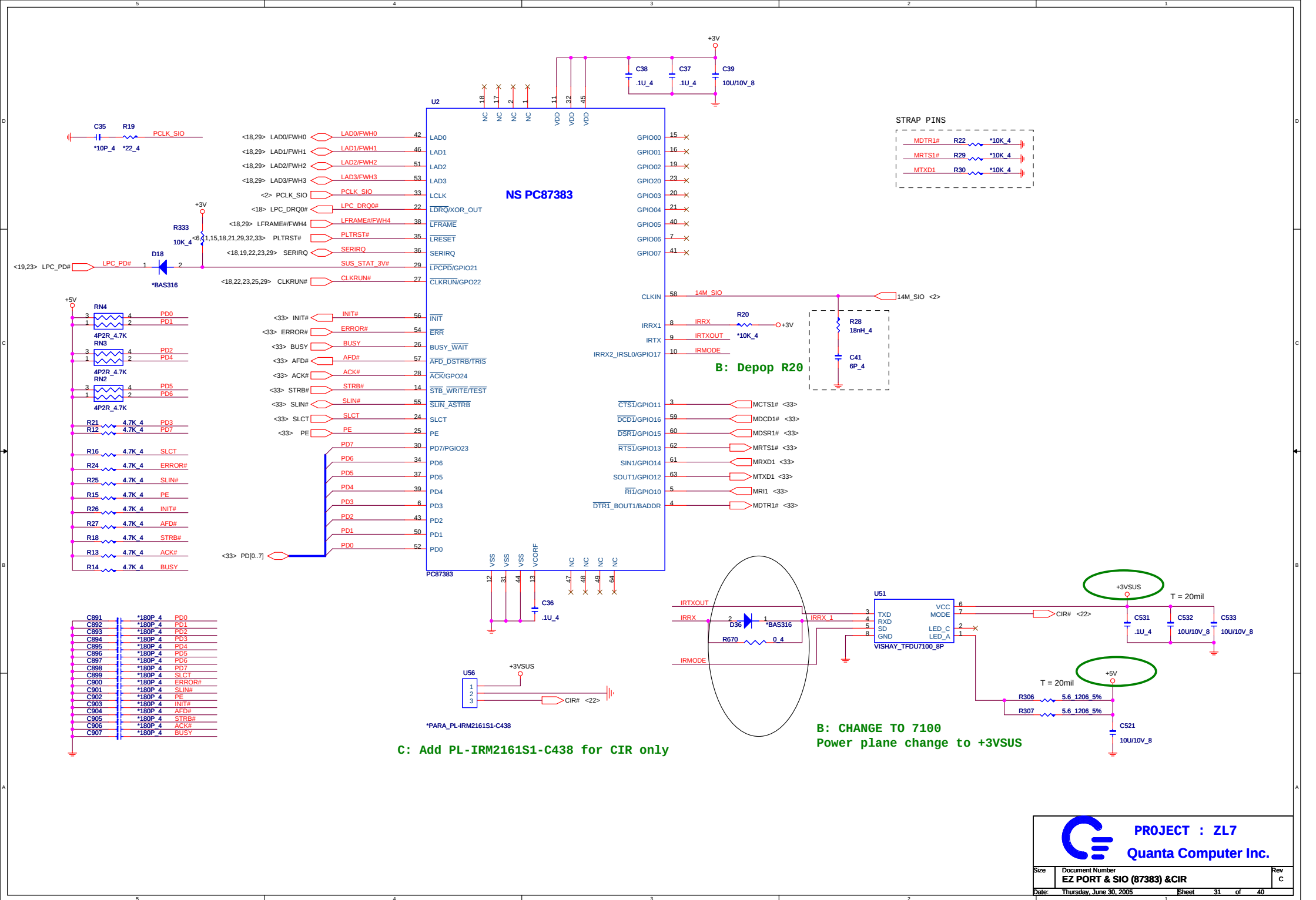


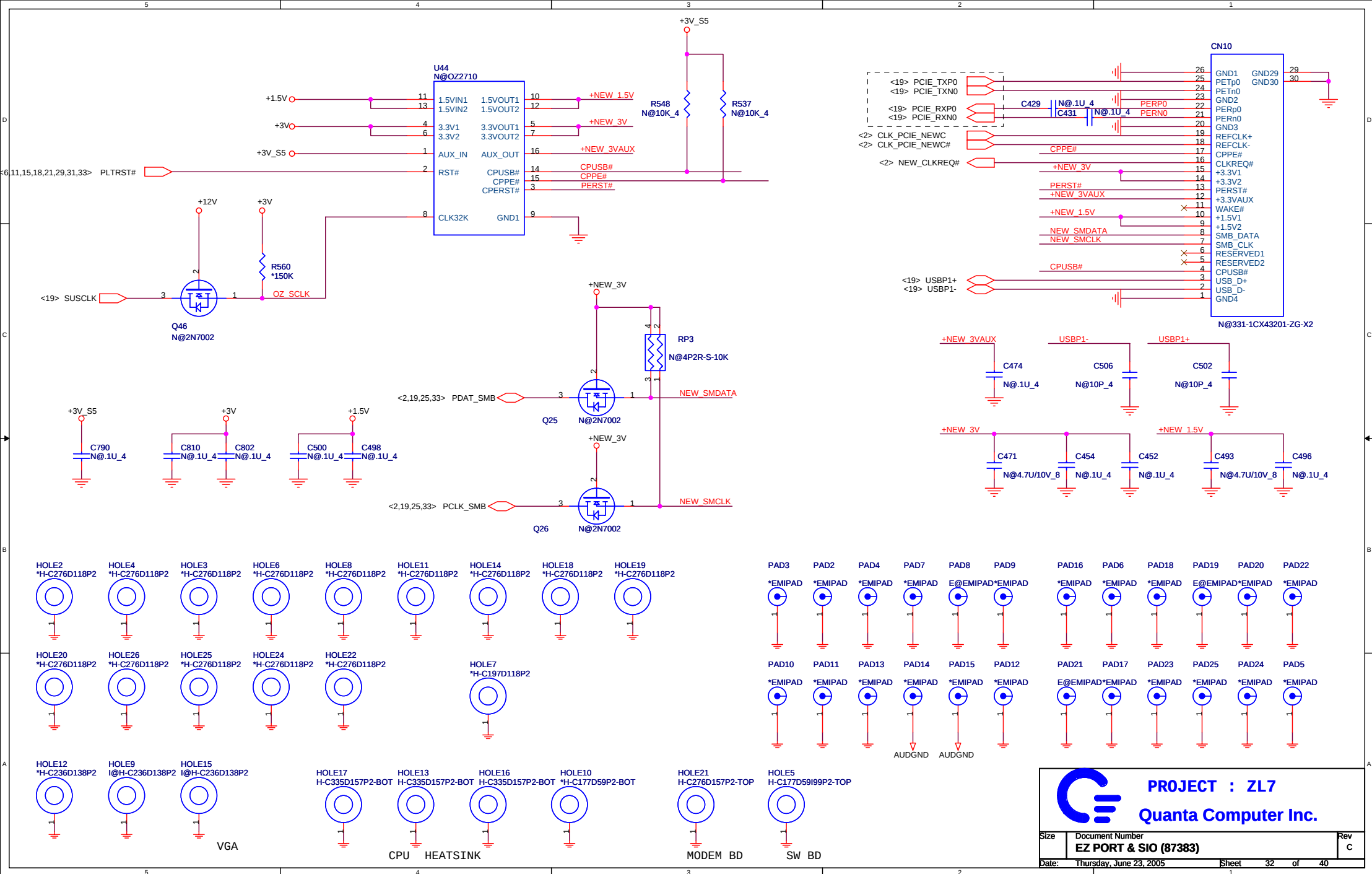
PROJECT : ZL7
Quanta Computer Inc.

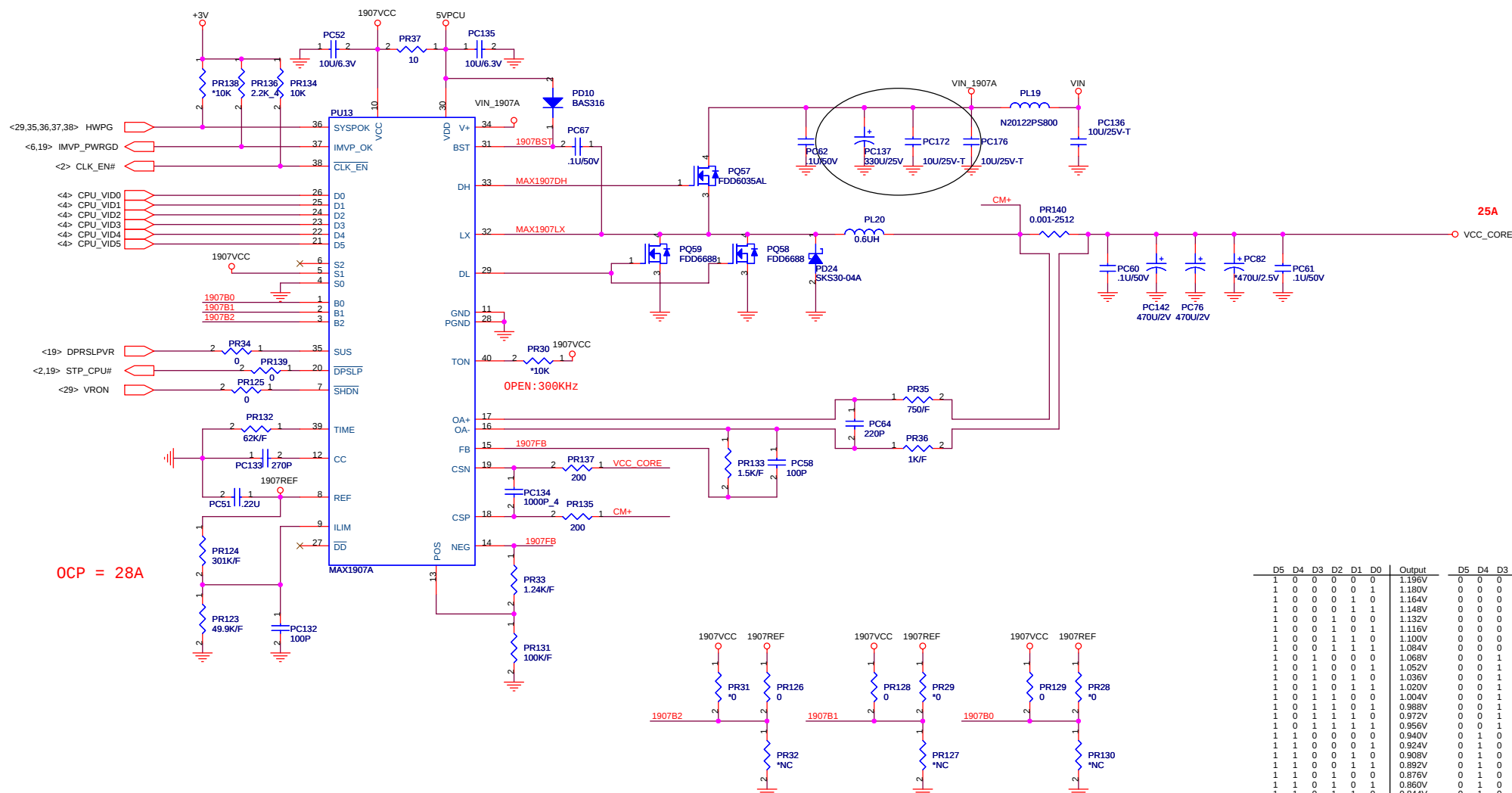
Size	Document Number AUDIO AMP	Rev C
Date:	Thursday, June 23, 2005	Sheet 28 of 40











OCP = 28A

OPEN: 300KHZ

25A

SUSPEND MODE (SUS=HIGH)

S2	S1	S0	Output
✓ OPEN	VCC	GND	0.748V

VCC_BOOT

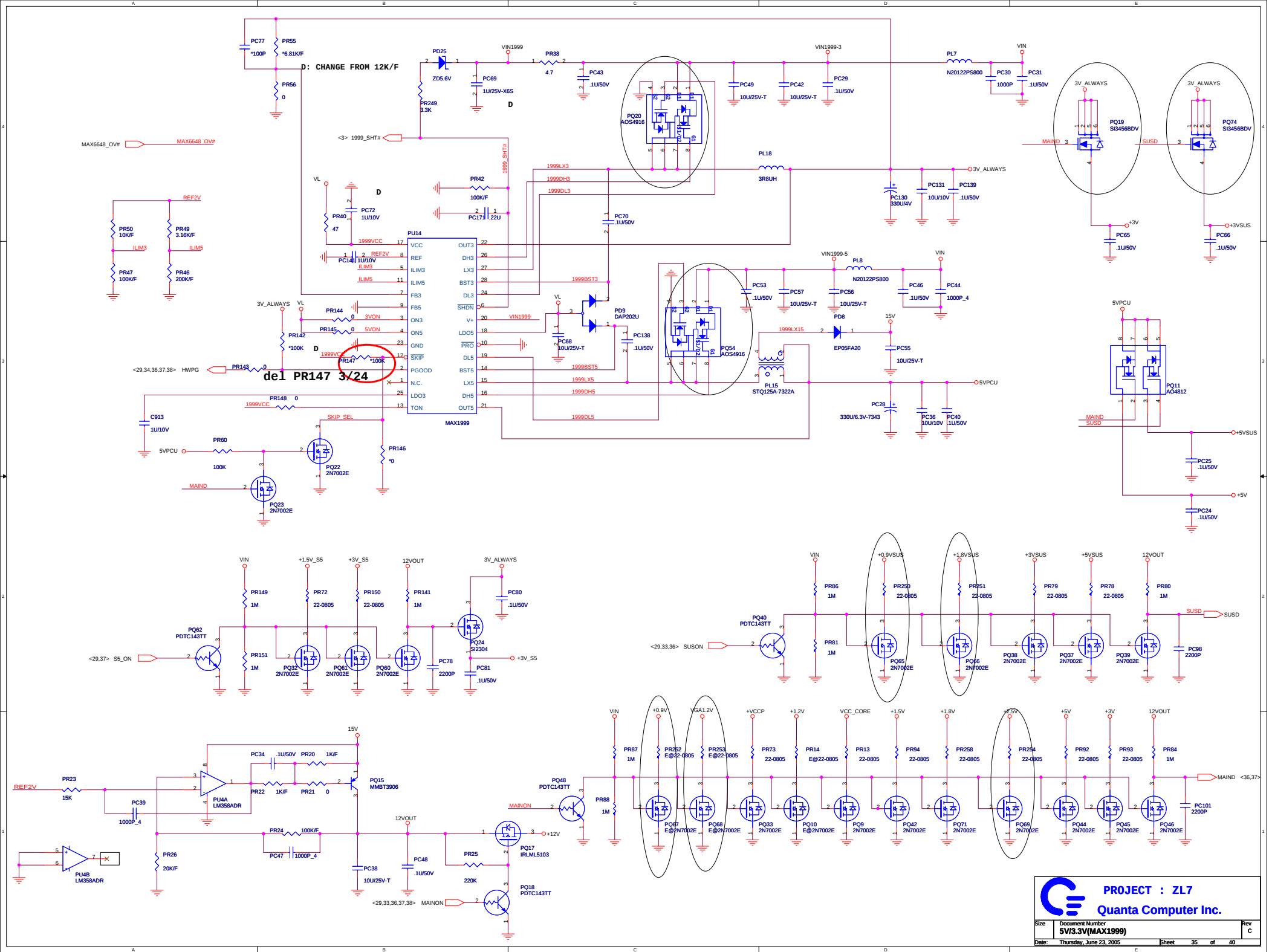
B2	B1	B0	Output
GND	GND	GND	1.708V
REF	REF	REF	1.372V
OPEN	OPEN	OPEN	1.036V
VCC	VCC	VCC	0.700V
REF	VCC	VCC	1.212V

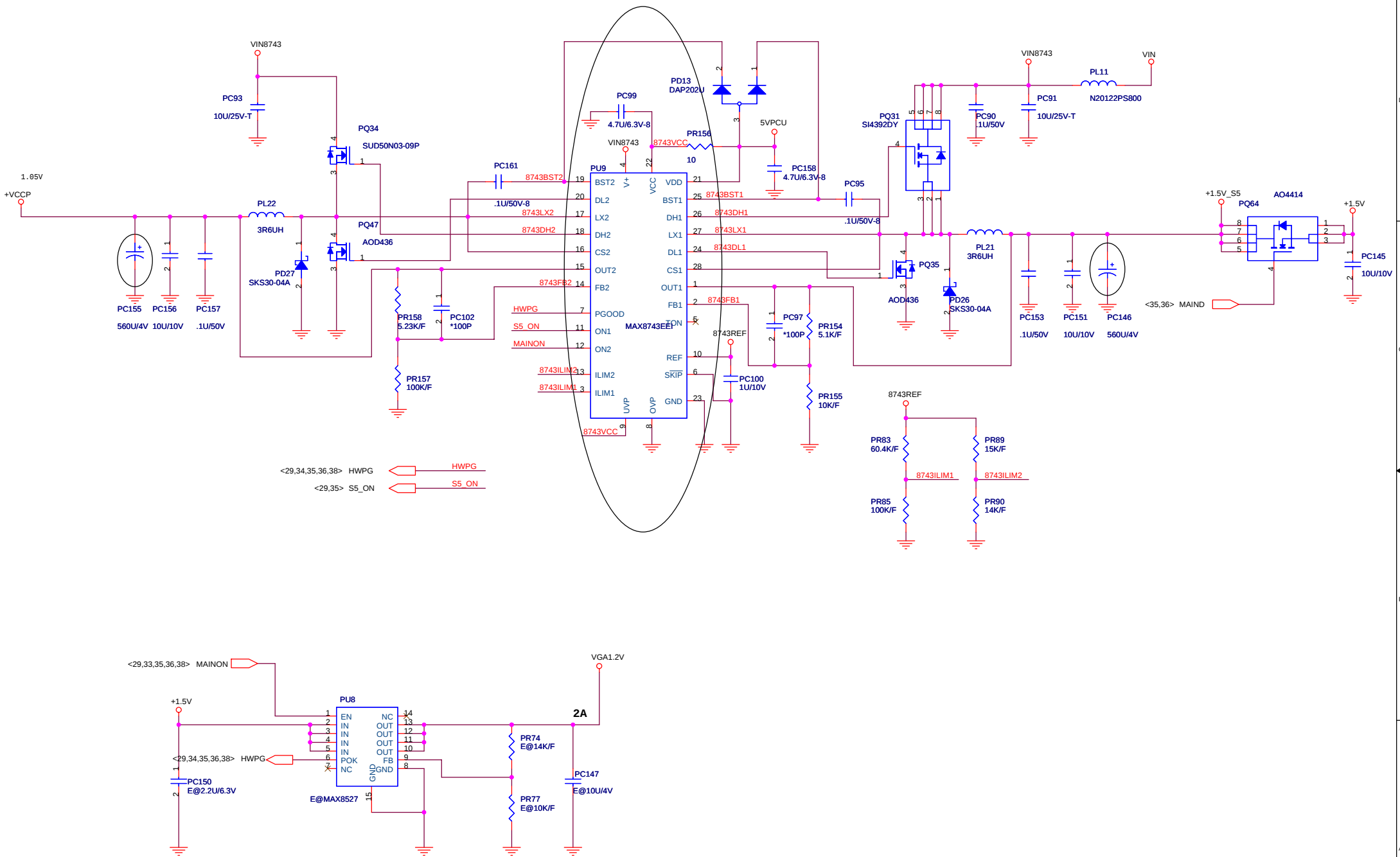
D5	D4	D3	D2	D1	D0	Output	D5	D4	D3	D2	D1	D0	Output
1	0	0	0	0	0	1.196V	0	0	0	0	0	0	1.708V
1	0	0	0	0	1	1.180V	0	0	0	0	0	1	1.692V
1	0	0	0	1	0	1.164V	0	0	0	0	1	0	1.676V
1	0	0	0	1	1	1.148V	0	0	0	0	1	1	1.660V
1	0	0	1	0	0	1.132V	0	0	0	1	0	0	1.644V
1	0	0	1	0	1	1.116V	0	0	0	1	0	1	1.628V
1	0	0	1	1	0	1.100V	0	0	0	1	1	0	1.612V
1	0	0	1	1	1	1.084V	0	0	0	1	1	1	1.596V
1	0	1	0	0	0	1.068V	0	0	1	0	0	0	1.580V
1	0	1	0	0	1	1.052V	0	0	1	0	0	1	1.564V
1	0	1	0	1	0	1.036V	0	0	1	0	1	0	1.548V
1	0	1	0	1	1	1.020V	0	0	1	0	1	1	1.532V
1	0	1	1	0	0	1.004V	0	0	1	1	0	0	1.516V
1	0	1	1	0	1	0.988V	0	0	1	1	0	1	1.500V
1	0	1	1	1	0	0.972V	0	0	1	1	1	0	1.484V
1	0	1	1	1	1	0.956V	0	0	1	1	1	1	1.468V
1	1	0	0	0	0	0.940V	0	1	0	0	0	0	1.452V
1	1	0	0	0	1	0.924V	0	1	0	0	1	0	1.436V
1	1	0	0	1	0	0.908V	0	1	0	0	1	0	1.420V
1	1	0	0	1	1	0.892V	0	1	0	0	1	1	1.404V
1	1	0	1	0	0	0.876V	0	1	0	1	0	0	1.388V
1	1	0	1	0	1	0.860V	0	1	0	1	0	1	1.372V
1	1	0	1	1	0	0.844V	0	1	0	1	1	0	1.356V
1	1	0	1	1	1	0.828V	0	1	0	1	1	1	1.340V
1	1	1	0	0	0	0.812V	0	1	1	0	0	0	1.324V
1	1	1	0	0	1	0.796V	0	1	1	0	0	1	1.308V
1	1	1	0	1	0	0.780V	0	1	1	0	1	0	1.292V
1	1	1	0	1	1	0.764V	0	1	1	0	1	1	1.276V
1	1	1	1	0	0	0.748V	0	1	1	1	0	0	1.260V
1	1	1	1	0	1	0.732V	0	1	1	1	0	1	1.244V
1	1	1	1	1	0	0.716V	0	1	1	1	1	0	1.228V
1	1	1	1	1	1	0.700V	0	1	1	1	1	1	1.212V

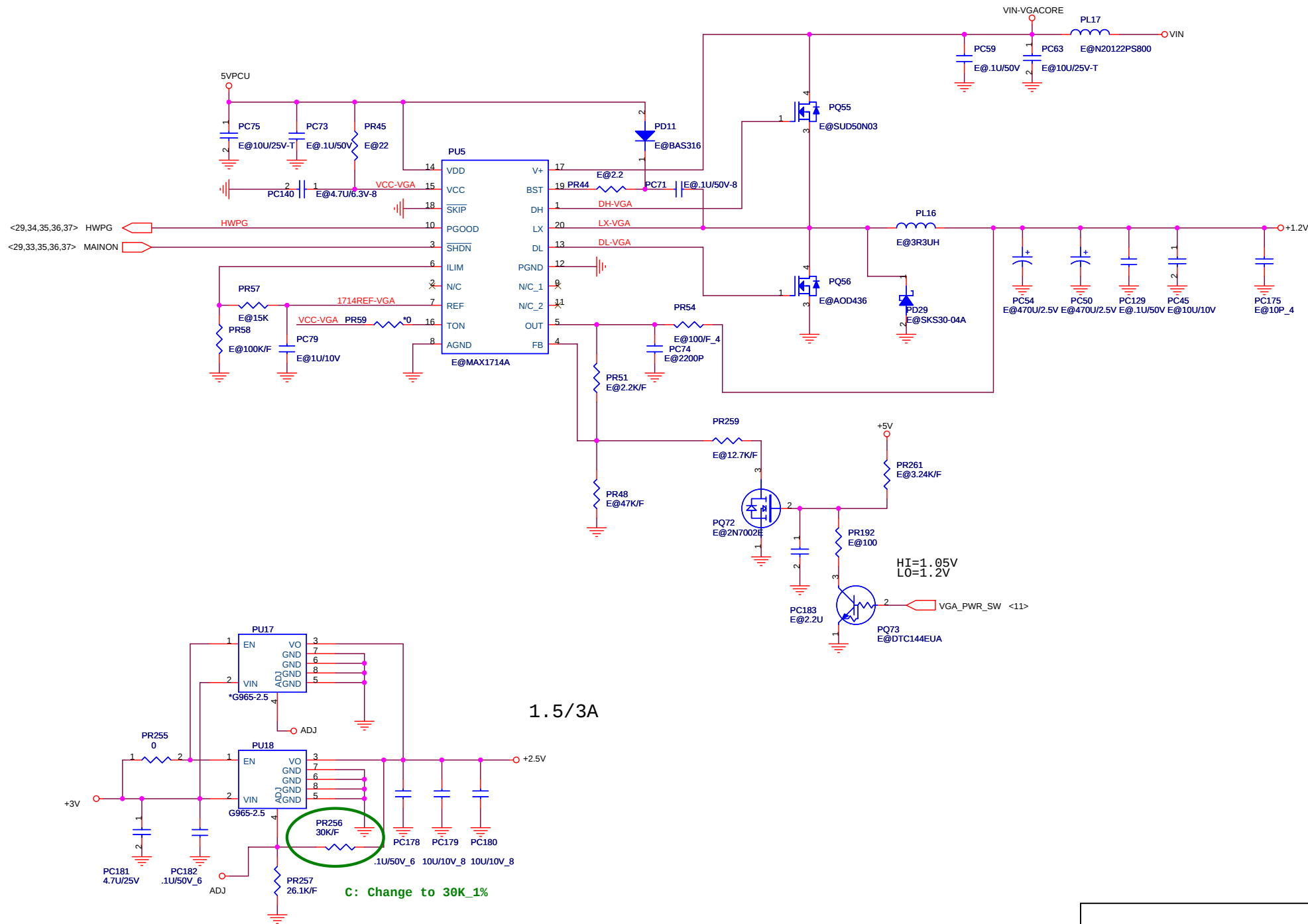


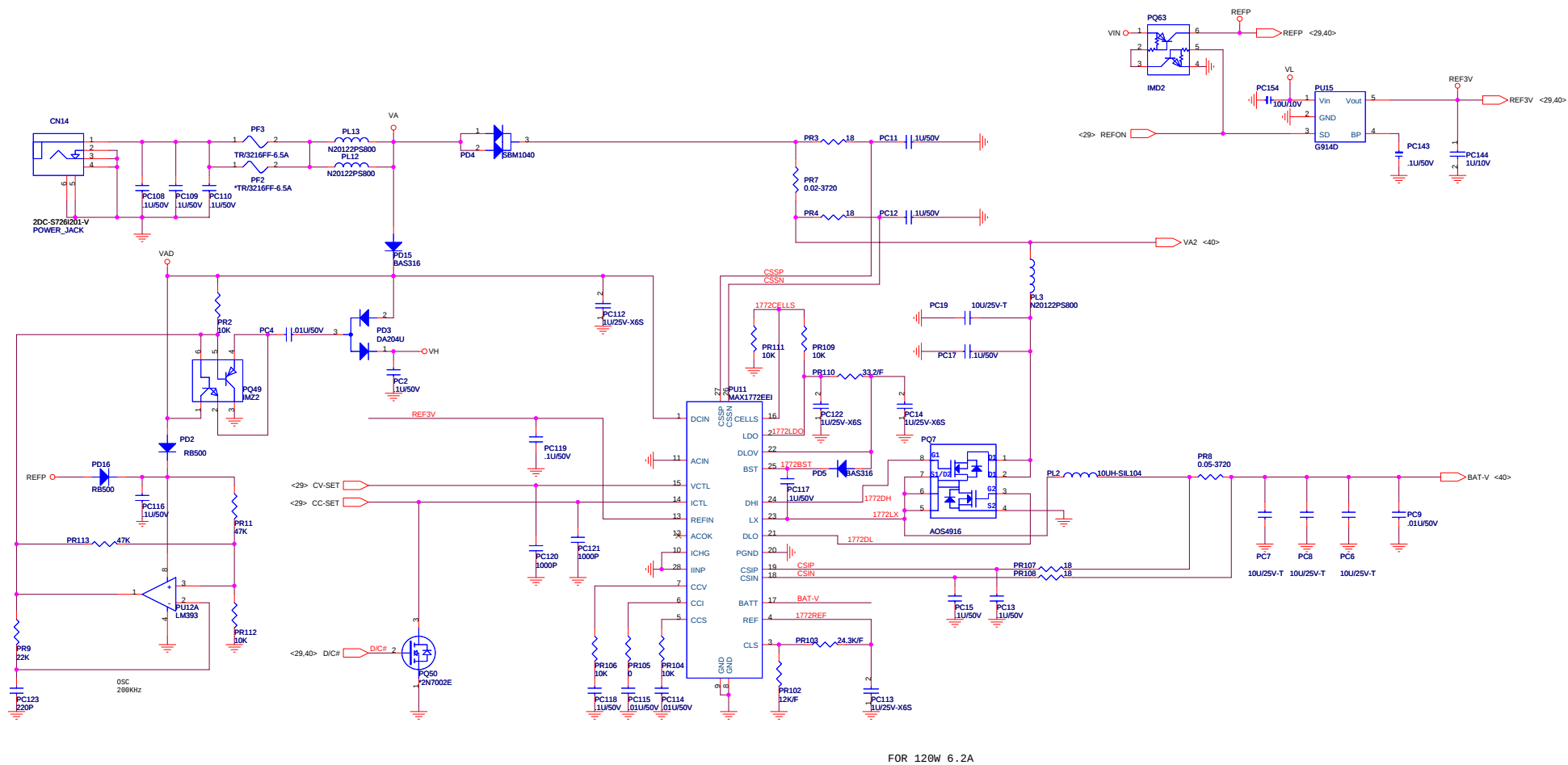
PROJECT : ZL7
Quanta Computer Inc.

Size	Document Number	Rev
	CPU CORE (MAX1907)	C
Date:	Thursday, June 23, 2005	Sheet 34 of 40

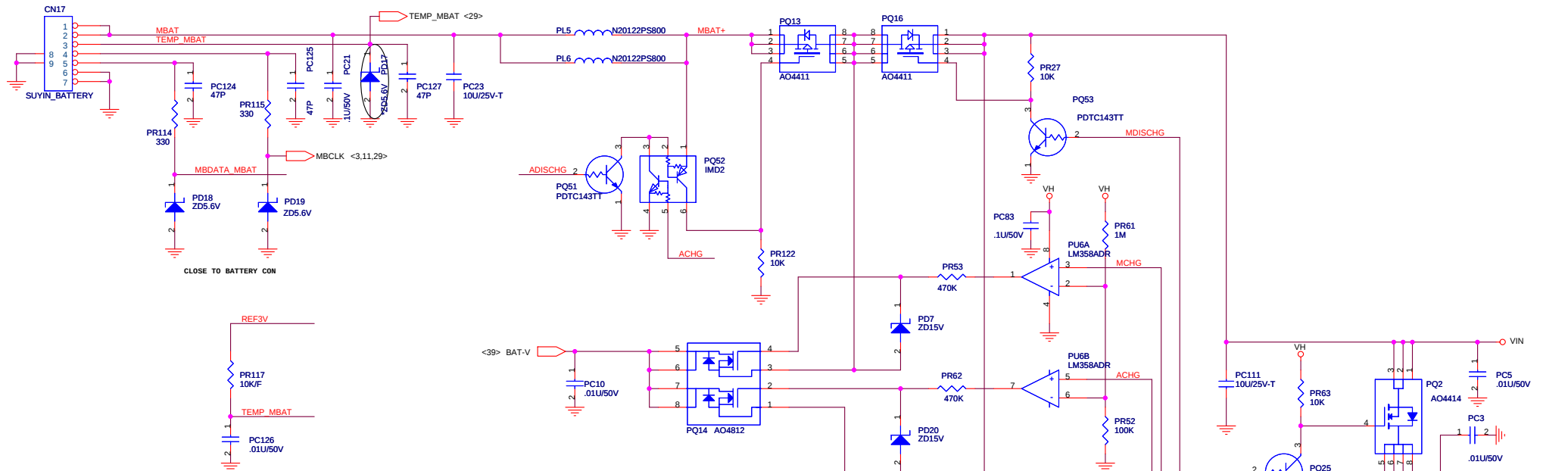




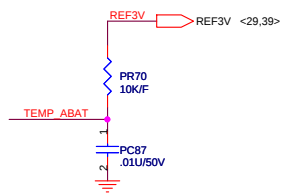
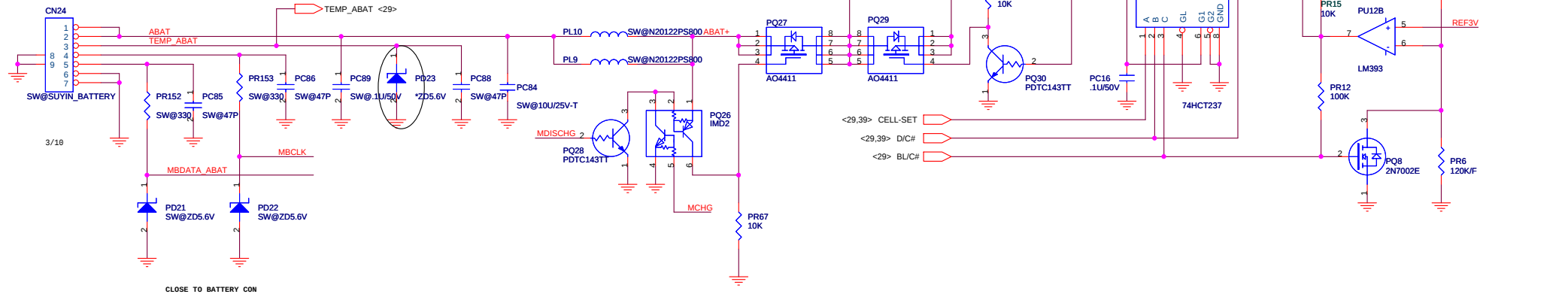




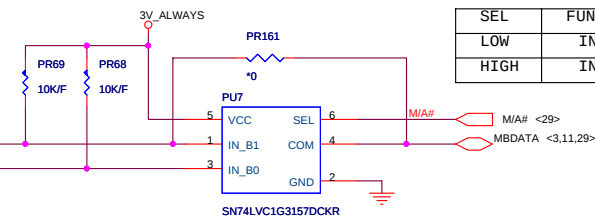
1ST_BATT_CONN



2ND_BATT_CONN



1ST_BATT
MBDATA_MBAT
2ND_BATT



SEL	FUNCTION
LOW	IN_B0
HIGH	IN_B1