

INT@:UMA
EXT@:Discrete
V6@:64M VRAM
V12@:128M VRAM
G5@:LAN 5705E
G7@:LAN 5787
G9@:LAN 5709

ZE2

REV : A1A

AC/BATT
CONNECTOR Page 41

BATT
CHARGER Page 40

Yonah/Celeron-M

(479 Micro-FCPGA)
Page 4,5

DC/DC
NVDD/+1.2V
+3V/+5V
+1.05V/+1.8VSUS/+1.8V/+0.9V
+1.5V/+2.5V
Page 35,37,38,39

CPU VR
SC452
Page 36

CLOCKS Generator
ICS954310BGLF
Page 3

+0.9V
+0.9VSUS
+1.8VSUS

DDR-SODIMM1
Page 10,11
DDR2 533/667 MHz

DDR-SODIMM2
Page 10,11
DDR2 533/667 MHz

+1.05V
CALISTOGA-GM/PM
1466 FCBGA
+1.5V
+1.8VSUS
+2.5V
Page 6,7,8,9

HOST BUS 533/667 MHz

EXT. VGA
n-VIDIA NV72MV
Page 12,13,14,15

EXT_LVDS
EXT_TVOUT
EXT_VGA

SWITCH

LCD Connector
Page 28

DVI
CH7307
Page 16

CIRCUIT
Page 17

CRT
Page 17

DOCKING
Page 33

EZ4 DVI

Parallel-HDD
Page 32
ATA 66/100

Multi-Bay
Page 32
ATA 66/100
Azalia

DMI interface

+1.5V
+2.5V
+3V
+3VSUS
+1.5VSUS
ICH7-M
652 BGA
Page 18,19,20

PCIe

33MHz PCI

MINI card
Page 29

LAN (10M/100M/1G)
BCM5787M/5789M
Page 23

RJ45
Page 24

LAN (10M/100M/1G)
BCM 5705E
AD22 / REQ1# / GNT1# / INTA#
Page 23

CARDBUS/1394/3-IN-1
TI 7411
AD25 / REQ0# / GNT0# / INT E/F/G#
Page 21,22

1394 PORT
Page 21

ALC833
(Codec)
& 2 AMP
Page 30

MDC1.5
Page 30

RJ11
Page 24

Head phone
Page 31

INT SPK
Page 31

Internal-MIC
Page 31

MIC-IN
Page 31

LINE-IN
Page 31

SUPER I/O
PC87391
Page 26

COM A
Digitizer
Page 26

COM B
FIR
Page 26

3V_591
EC NSC97551
176 Pins LQFP
Page 27

+5V
JOGDIAL
Page 28

+5V
Keyboard
Page 27

+3VPCU
FLASH
Page 27

+5V
FAN 1
Page 25

USB

USB PORT X 3
Page 25

Mini-Bluetooth
(USB bus)
Page 25

Finger
Printer
Page 28

3 in 1
socket
MMC,SD,MS
Page 22

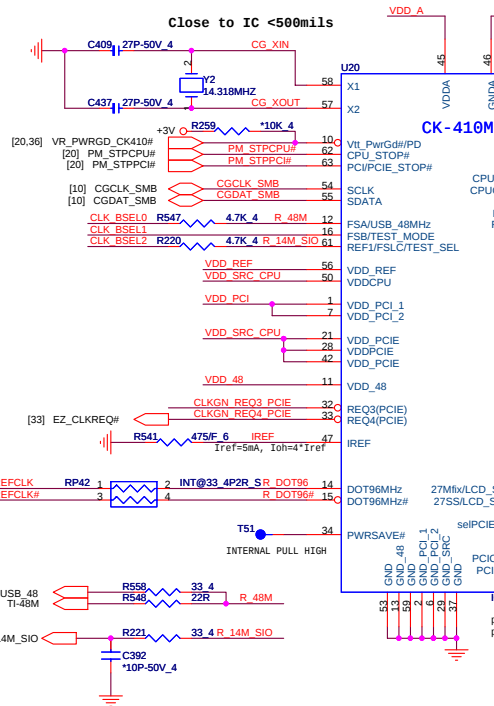
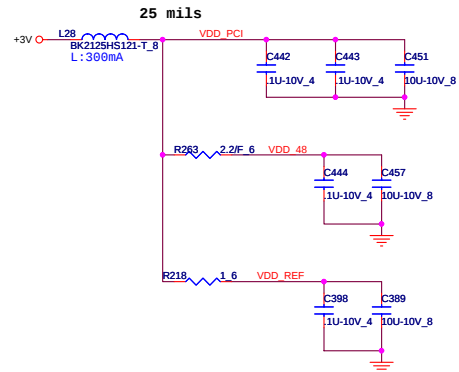
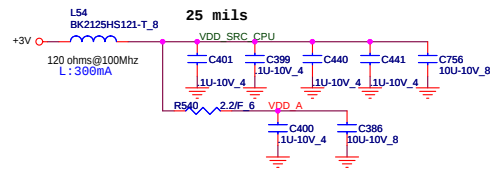
CARDBUS
CON.
Page 22



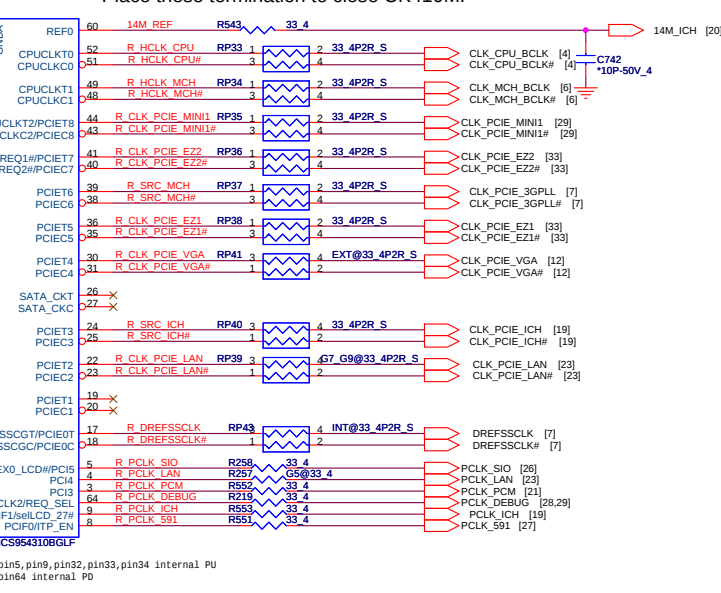
PROJECT : ZE2
Quanta Computer Inc.

5/5 page29 MINI CARD pin define changed for debug card
5/8 page31 Audio Jack GND connect to DGND
5/10 page09 modify GMCH power for G72MV(original some parts no stuff for descrete,modify to stuff)
5/10 page37,38 change PQ36,PQ37,PQ38,PQ40,PQ41,PQ45,PQ53 part number to BAM64020009 for EOL issue
5/10 page31 change D19,D20,D22 part number to BC1SS355Z05 for EOL issue
6/4 page26,27 change S_SERIRQ net name to SERIRQ for fix KB no function issue, and add a cap of SERIRQ if noise
6/4 page30 ,stuff U53 ,no stuff L60 for audio noise
6/4 page31 R633 change from 15K to 22K to fix speaker voice is too low issue
6/4 page31 tie SURR-L and SURR-R for fix no sound when volume bar adjust to right channel
6/4 page30 change R627,R629 from 0 ohm to 4.7K ohm for fix HP voice is too loud
6/4 page31 change R635,R640 change from 0 to 75 ohm for fix noise by ZC3 solution
6/4 page31 add cap on linein PR for fix audio noise from docking Line in
6/4 page28 LCD connector pin34 change to +3V for fix EDID LCD issue
6/4 page13 add LCDID to VGA for Toshiba LCD that is no EDID support issue
6/4 page19 change USB I/O port from port1 to port2 for Bluetooth detection issue
6/4 page13 stuff R496 for fix no CRT issue by VGA SKU
6/4 page27 change 1M BIOS ROM from B-stage
6/4 page35 change PR55,PR146 to 100K and PC44,PC141 to 0.1uF to meet Nvidia power sequence requirement
6/4 page32 add ODD RST PU resistor for S/W not ready
6/4 page38 PL22 chagne p/n to CV-33D5MZ04 for package and footprint are difference issue
6/4 page42 add modem hole for modem NUT issue
6/4 page31 R630 change to LF part
6/4 page36 change PC15,PC16,PR16,PR18 value for power requirement
6/4 page35 change PR150 from 20K to 24K value for power requirement
6/4 page36 Add snubber of 2.2 ohm/2200pf on CPU core
6/4 page35,38,39 del short PAD
6/4 page28 un stuff CN3 PCI debug card
6/4 page15 R452,R478 change from 1K to 1.3K,R453,R469 change from 1K to 510 ohm ,Vref change from 0.5VDDQ to 0.7VDDQ for VRAM CLK un-stable issue
6/4 page14 R462, change from 1K to 1.3K,R461 change from 1K to 510 ohm ,Vref change from 0.5VDDQ to 0.7VDDQ for VRAM CLK un-stable issue
6/4 page42 change DIM H26,H35,H37 for SMT A open issue
6/7 page19 stuff R340 for PCI LAN wake up
6/7 page20,add RBAYID0,RBAYID1 PU for Swap Bay
6/8 page31,reserve 0 ohm resistor for EMI request
6/8 page19,change USB port for BT detection issue
6/9 page31 C836 change to 0.1uf for background noise
6/9 page40 change PD19 p/n for EOL issue

SKU	MB ID	BOM Property	ASSY PN	Description	VRAM vender
A test SKU1		ZE2A	31ZE2MB0006	ZE2 M/B ASSY (GM/5705E)	
A test SKU2		ZE2B	31ZE2MB0014	ZE2 M/B ASSY (PM/G72MV/64M/5787)	Samsung 8M*32
A test SKU3		ZE2C	31ZE2MB0022	ZE2 M/B ASSY (PM/G72MV/128M/5789)	Samsung 16M*32
B test SKU3		ZE2D	31ZE2MB0031	ZE2 M/B ASSY (GM)	



Place these termination to close CK410M.



PCIE CLK enable/disable control

REQ3 Latched Select
"0" : CLK Enable
"1" : CLK Disable Control : PCIE 2,4

REQ4 Latched Select
"0" : CLK Enable
"1" : CLK Disable Control : PCIE 3,5,7

Starpping

R_PCLK_SIO R261 10K 4
Latched Select. (Pin 17,18)
"0" : LCD CLK
"1" : PCIE CLK

R_PCLK_S91 R556 10K 4
ITP/SRC7 SELECT
0: SRC7
1: ITP

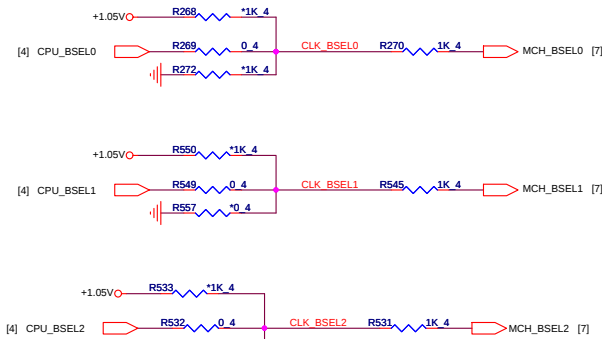
R_PCLK_ICH R554 10K 4 +3V
SELLCD_27# Select. (Pin 17,18)
"0" : 27MHz/SS/27MHz/SS# pair
"1" : LCD CLK pair

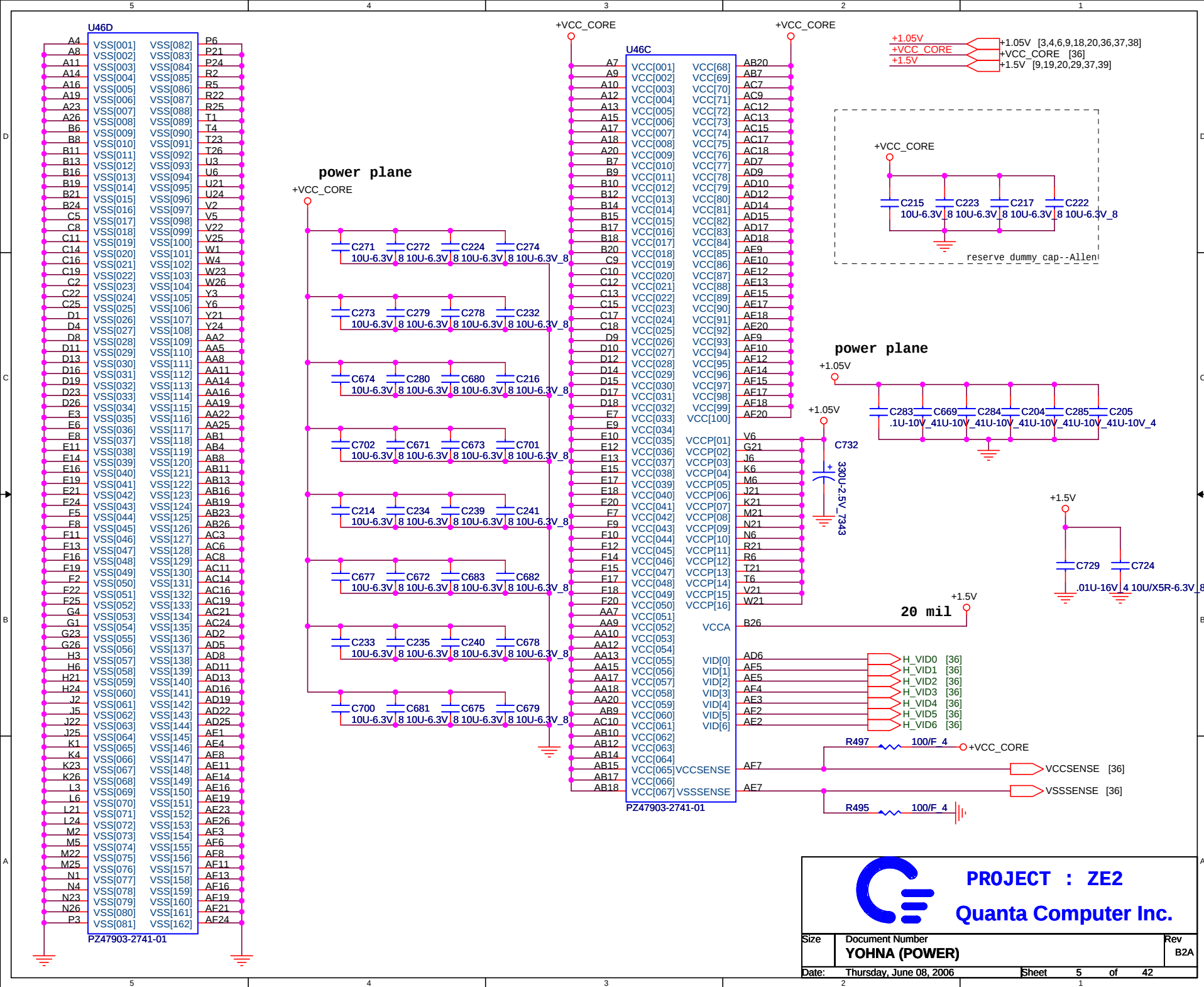
R_PCLK_DEBUG R262 10K 4 +3V
PCIE CLK/REQ select
"0" : PCIE CLK
"1" : REQ pin

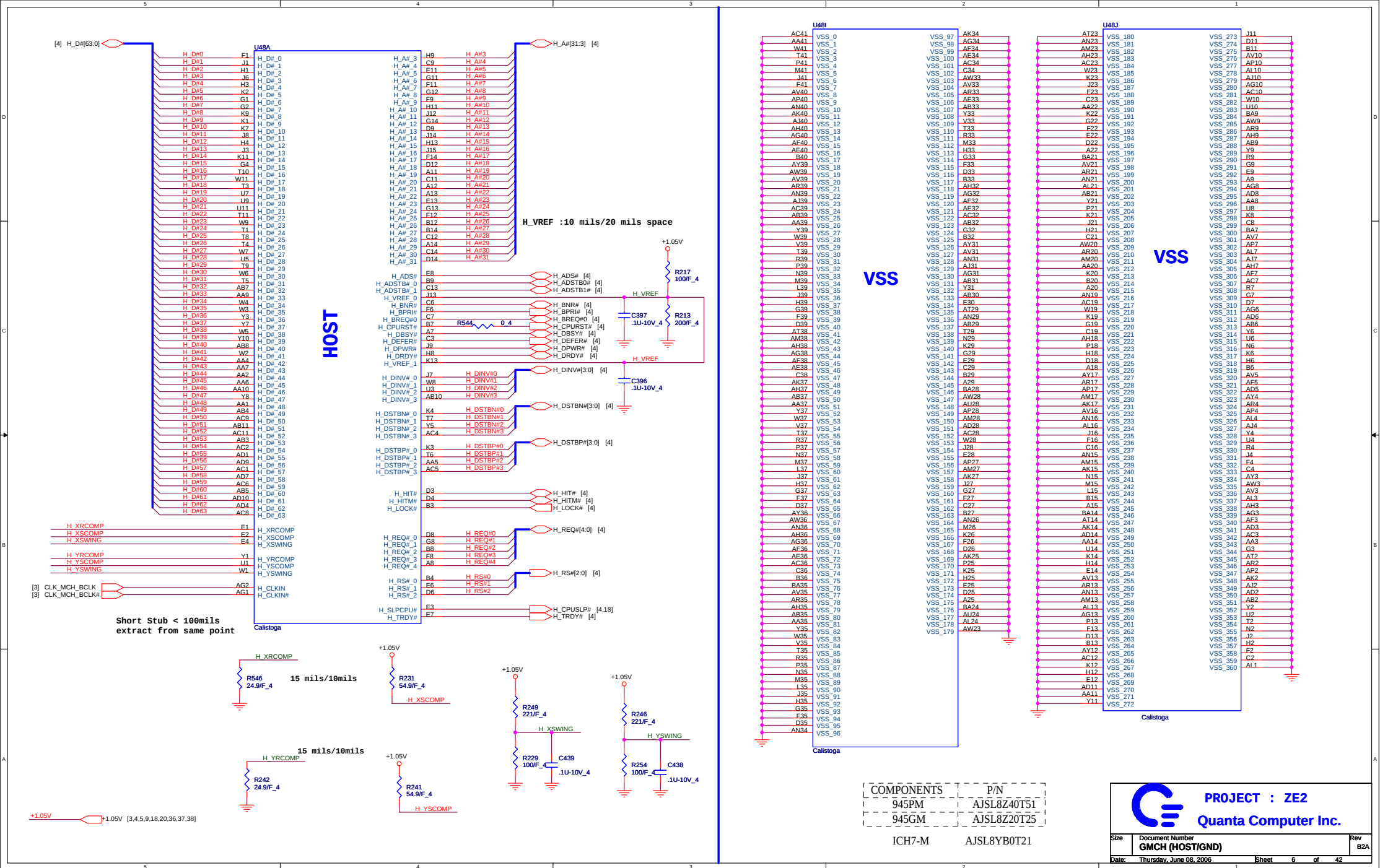
Frequency select

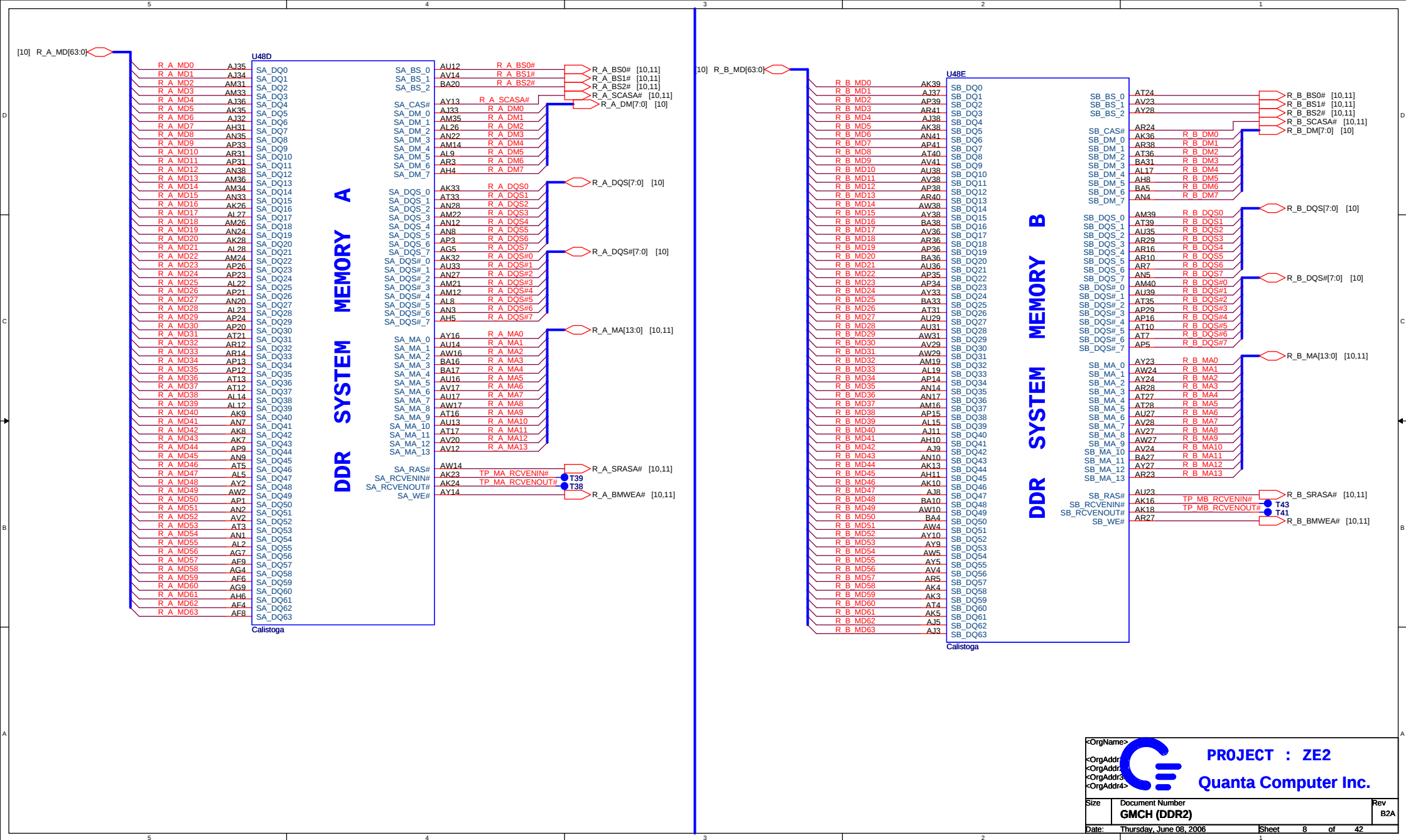
FSC	FSB	FSA	CPU	SRC	PCI
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	1	0	200	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	200	100	33

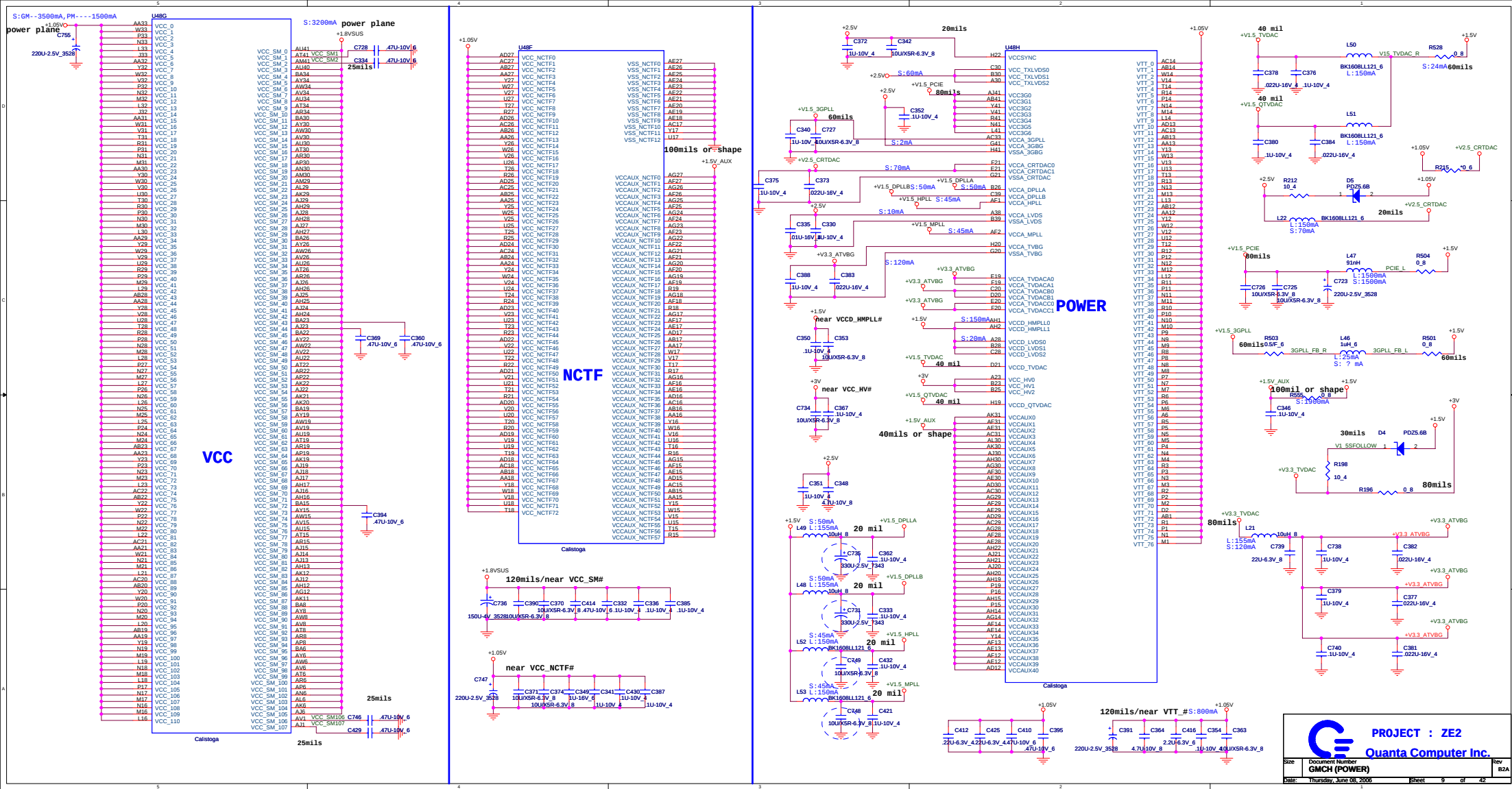
BSEL strappings need to be set for 533MHz Moby Dick (Intel?915GM - Calistoga Interposer) (if Calistoga is designed for 667MHz board).

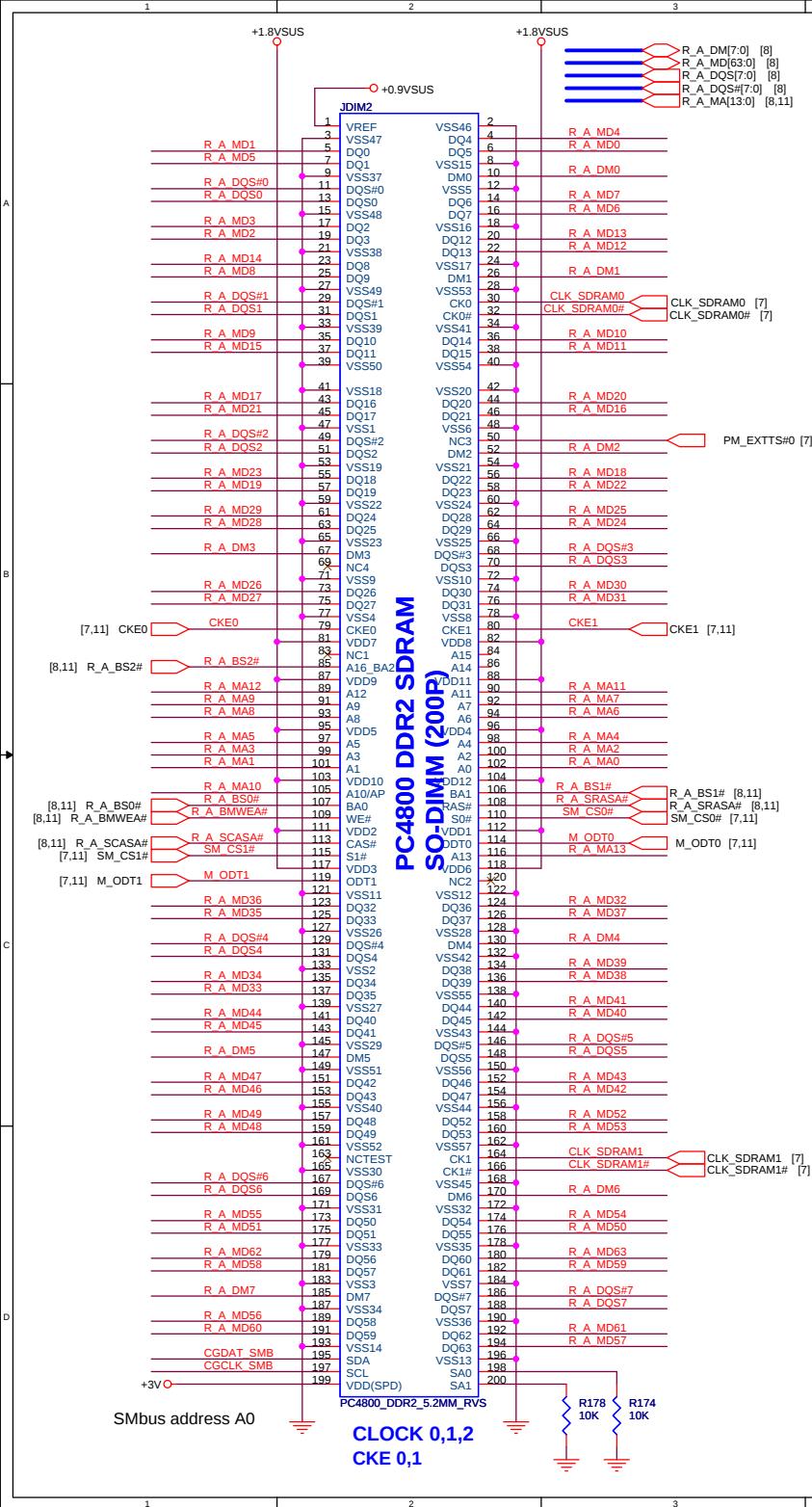


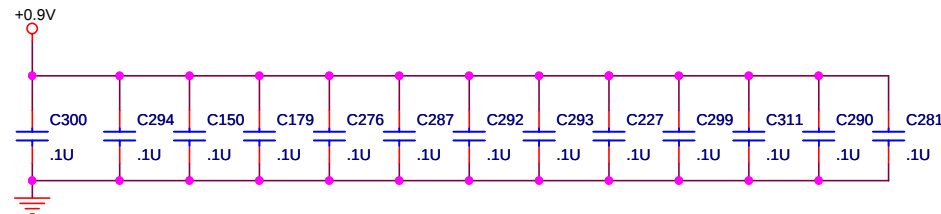




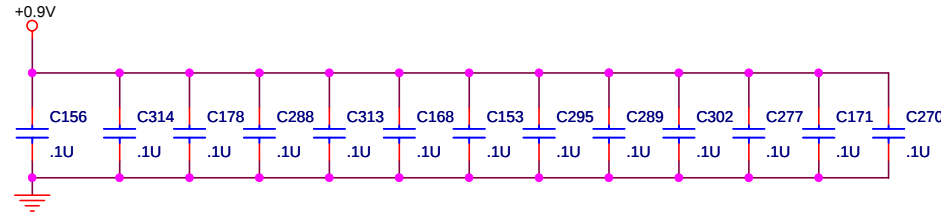








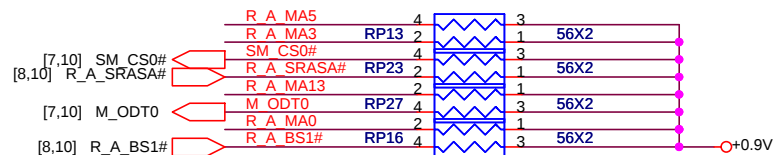
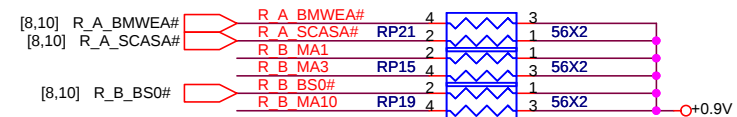
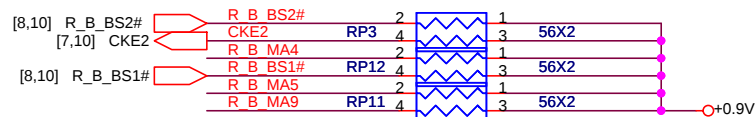
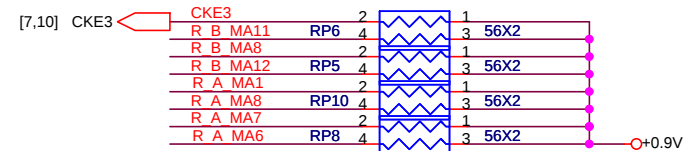
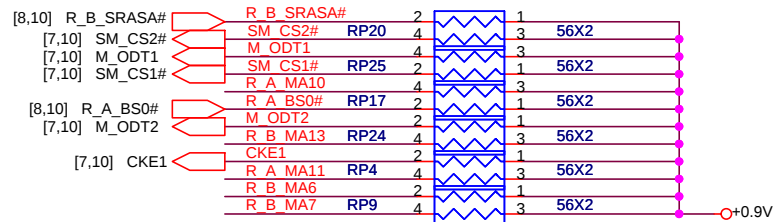
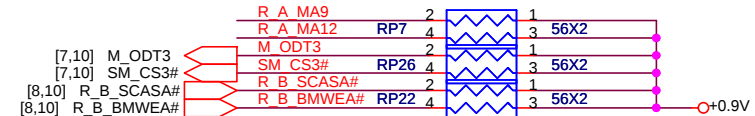
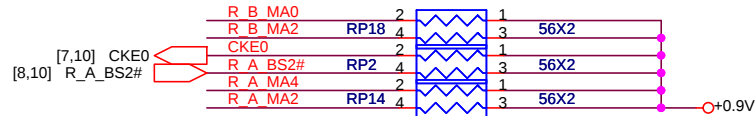
Layout note: Place one cap close to every 2 pullup resistors terminated to SMDRR_VTERM



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

R_A_MA[0..13] [8,10]

R_B_MA[0..13] [8,10]



[7] GMCEXP_TXP[0..15]
[7,16] GMCEXP_TXN[0..15]
[7,16] GMCEXP_RXP[0..15]
[7,16] GMCEXP_RXN[0..15]

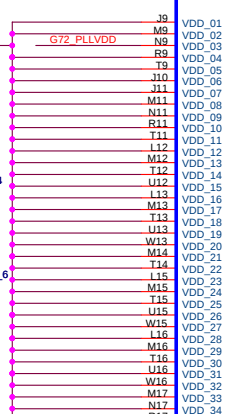
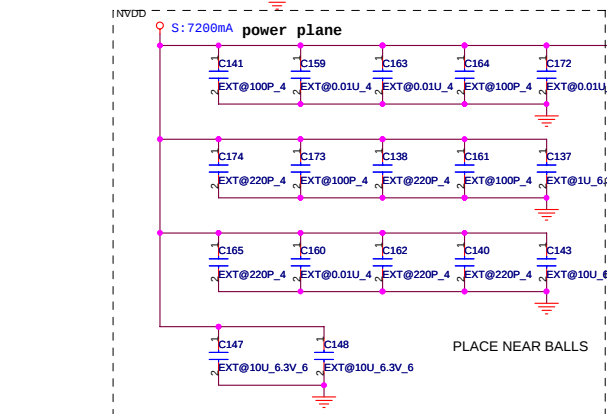
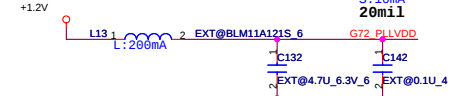
GMCEXP_TXP0 AF1
GMCEXP_TXN0 AG2
GMCEXP_TXP1 AG3
GMCEXP_TXN1 AG4
GMCEXP_TXP2 AF4
GMCEXP_TXN2 AF5
GMCEXP_TXP3 AG6
GMCEXP_TXN3 AG7
GMCEXP_TXP4 AF7
GMCEXP_TXN4 AF8
GMCEXP_TXP5 AG9
GMCEXP_TXN5 AG10
GMCEXP_TXP6 AF10
GMCEXP_TXN6 AF11
GMCEXP_TXP7 AG12
GMCEXP_TXN7 AG13
GMCEXP_TXP8 AG15
GMCEXP_TXN8 AG16
GMCEXP_TXP9 AF16
GMCEXP_TXN9 AF17
GMCEXP_TXP10 AG18
GMCEXP_TXN10 AG19
GMCEXP_TXP11 AF19
GMCEXP_TXN11 AF20
GMCEXP_TXP12 AG21
GMCEXP_TXN12 AG22
GMCEXP_TXP13 AF22
GMCEXP_TXN13 AF23
GMCEXP_TXP14 AG24
GMCEXP_TXN14 AG25
GMCEXP_TXP15 AG26
GMCEXP_TXN15 AF27

P
C
I
-
E
X
P
R
E
S
S
I
N
T
E
R
F
A
C
E

PEX_TX0P
PEX_TX0N
PEX_TX1P
PEX_TX1N
PEX_TX2P
PEX_TX2N
PEX_TX3P
PEX_TX3N
PEX_TX4P
PEX_TX4N
PEX_TX5P
PEX_TX5N
PEX_TX6P
PEX_TX6N
PEX_TX7P
PEX_TX7N
PEX_TX8P
PEX_TX8N
PEX_TX9P
PEX_TX9N
PEX_TX10P
PEX_TX10N
PEX_TX11P
PEX_TX11N
PEX_TX12P
PEX_TX12N
PEX_TX13P
PEX_TX13N
PEX_TX14P
PEX_TX14N
PEX_TX15P
PEX_TX15N

AD5 V GMCEXP_RXP0EXT@1U
AD6 V GMCEXP_RXN0EXT@1U
AE6 V GMCEXP_RXP1EXT@1U
AE7 V GMCEXP_RXN1EXT@1U
AD7 V GMCEXP_RXP2EXT@1U
AC7 V GMCEXP_RXN2EXT@1U
AE9 V GMCEXP_RXP3EXT@1U
AE10 V GMCEXP_RXN3EXT@1U
AD10 V GMCEXP_RXP4EXT@1U
AC10 V GMCEXP_RXN4EXT@1U
AE12 V GMCEXP_RXP5EXT@1U
AE13 V GMCEXP_RXN5EXT@1U
AD13 V GMCEXP_RXP6EXT@1U
AC13 V GMCEXP_RXN6EXT@1U
AC15 V GMCEXP_RXP7EXT@1U
AD15 V GMCEXP_RXN7EXT@1U
AE15 V GMCEXP_RXP8EXT@1U
AE16 V GMCEXP_RXN8EXT@1U
AC18 V GMCEXP_RXP9EXT@1U
AD18 V GMCEXP_RXN9EXT@1U
AE19 V GMCEXP_RXP10EXT@1U
AE19 V GMCEXP_RXN10EXT@1U
AC21 V GMCEXP_RXP11EXT@1U
AD21 V GMCEXP_RXN11EXT@1U
AE21 V GMCEXP_RXP12EXT@1U
AE22 V GMCEXP_RXN12EXT@1U
AD22 V GMCEXP_RXP13EXT@1U
AD23 V GMCEXP_RXN13EXT@1U
AE25 V GMCEXP_RXP14EXT@1U
AE25 V GMCEXP_RXN14EXT@1U
AE24 V GMCEXP_RXP15EXT@1U
AD24 V GMCEXP_RXN15EXT@1U

C699 GMCEXP_RXP0
C698 GMCEXP_RXN0
C697 GMCEXP_RXP1
C696 GMCEXP_RXN1
C256 GMCEXP_RXP2
C257 GMCEXP_RXN2
C695 GMCEXP_RXP3
C694 GMCEXP_RXN3
C254 GMCEXP_RXP4
C255 GMCEXP_RXN4
C693 GMCEXP_RXP5
C692 GMCEXP_RXN5
C252 GMCEXP_RXP6
C253 GMCEXP_RXN6
C251 GMCEXP_RXP7
C250 GMCEXP_RXN7
C691 GMCEXP_RXP8
C690 GMCEXP_RXN8
C249 GMCEXP_RXP9
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C689 GMCEXP_RXP10
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C247 GMCEXP_RXP11
C246 GMCEXP_RXN11
C687 GMCEXP_RXP12
C686 GMCEXP_RXN12
C245 GMCEXP_RXP13
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C684 GMCEXP_RXN14
C243 GMCEXP_RXP15
C242 GMCEXP_RXN15



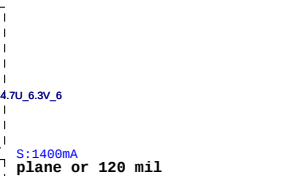
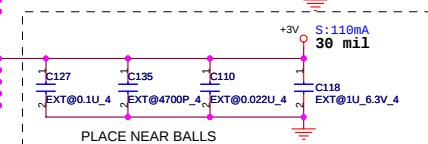
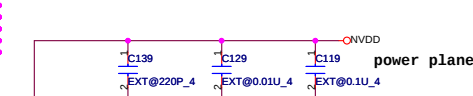
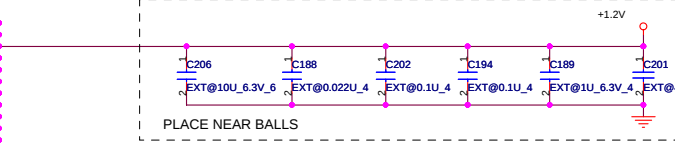
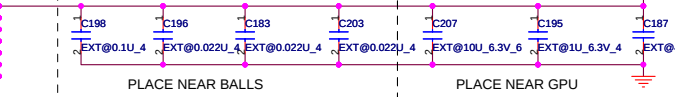
PEX_TSTCLK_OUT#
PEX_TSTCLK_OUT#
PEX_RST#

AE13 PEX_TSTCLK
AE14 PEX_TSTCLK#
AC6 R_PLTRST_DELAY#

PCIE Power

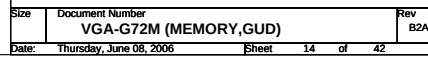
PEX_IOVDD_01
PEX_IOVDD_02
PEX_IOVDD_03
PEX_IOVDD_04
PEX_IOVDD_05
PEX_IOVDD_06
PEX_IOVDD_07
PEX_IOVDD_08
PEX_IOVDDQ_01
PEX_IOVDDQ_02
PEX_IOVDDQ_03
PEX_IOVDDQ_04
PEX_IOVDDQ_05
PEX_IOVDDQ_06
PEX_IOVDDQ_07
PEX_IOVDDQ_08
PEX_IOVDDQ_09
PEX_IOVDDQ_10
PEX_IOVDDQ_11
PEX_IOVDDQ_12
PEX_IOVDDQ_13
PEX_IOVDDQ_14
PEX_IOVDDQ_15
PEX_IOVDDQ_16
PEX_IOVDDQ_17
PEX_IOVDDQ_18
PEX_IOVDDQ_19
VDD_LP_01
VDD_LP_02
VDD_LP_03
VDD_LP_04
VDD33_01
VDD33_02
VDD33_03
VDD33_04
VDD33_05
VDD33_06
NC_01
NC_02
NC_03
NC_04

AB10
AB11
AB14
AB15
W17
W18
AB20
AB21
AA4
AB5
AB6
AB7
AB8
AB9
AC9
AB12
AB13
AB16
AC16
AB17
AC17
AB18
AB19
AC19
AC20
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E12
F12
C13

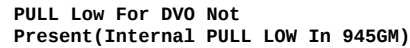


COMPONENTS	P/N
G72MV	AJ073000T14

PROJECT : ZE2	
Quanta Computer Inc.	
Size	Document Number
VGA-G72M (PCIe,POWER)	
Date	Thursday, June 08, 2006
Sheet	12 of 42
Rev	B2A

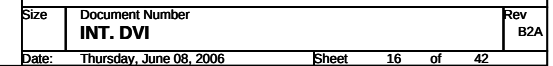


INT VGA Staff

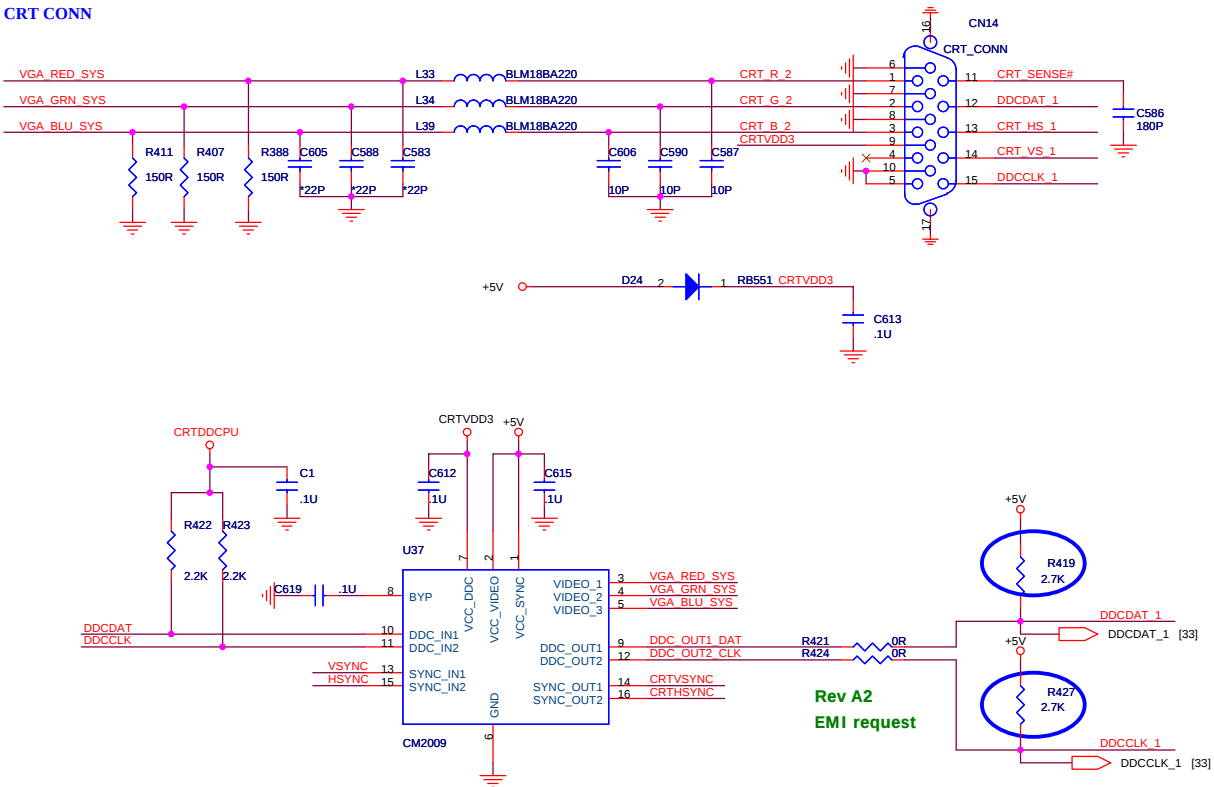


DVI Output select

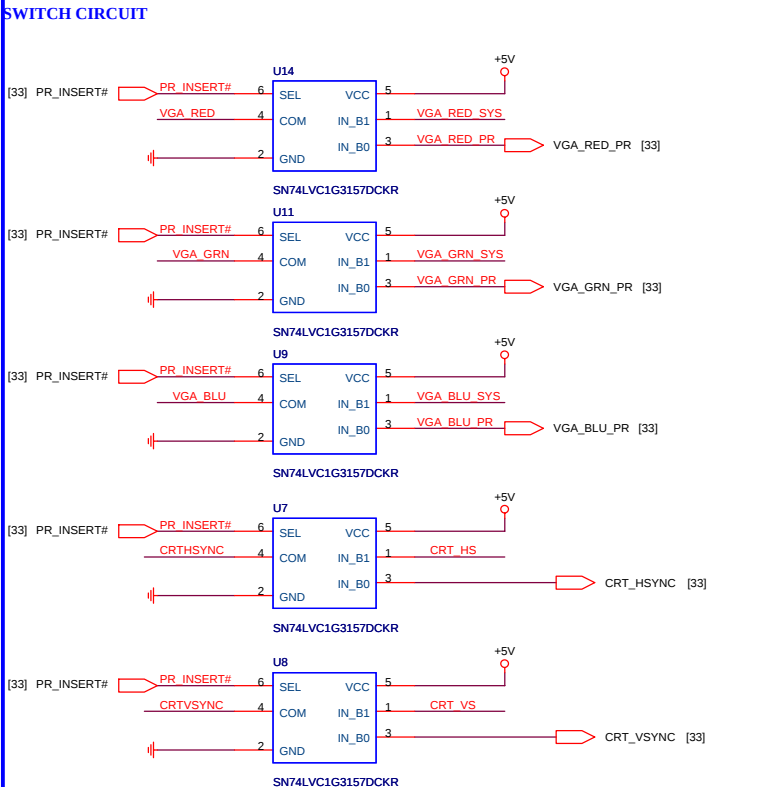
INT VGA Staff



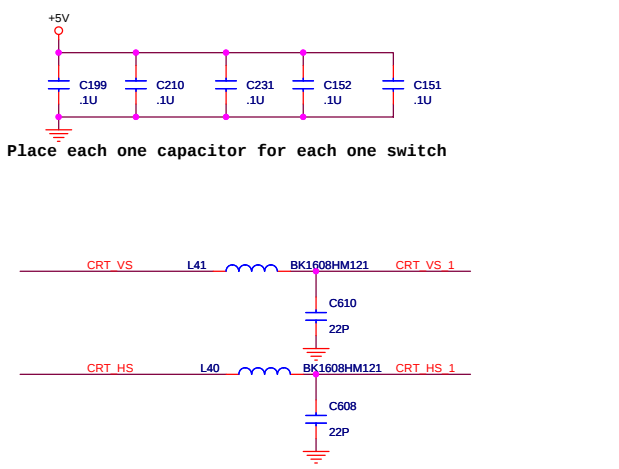
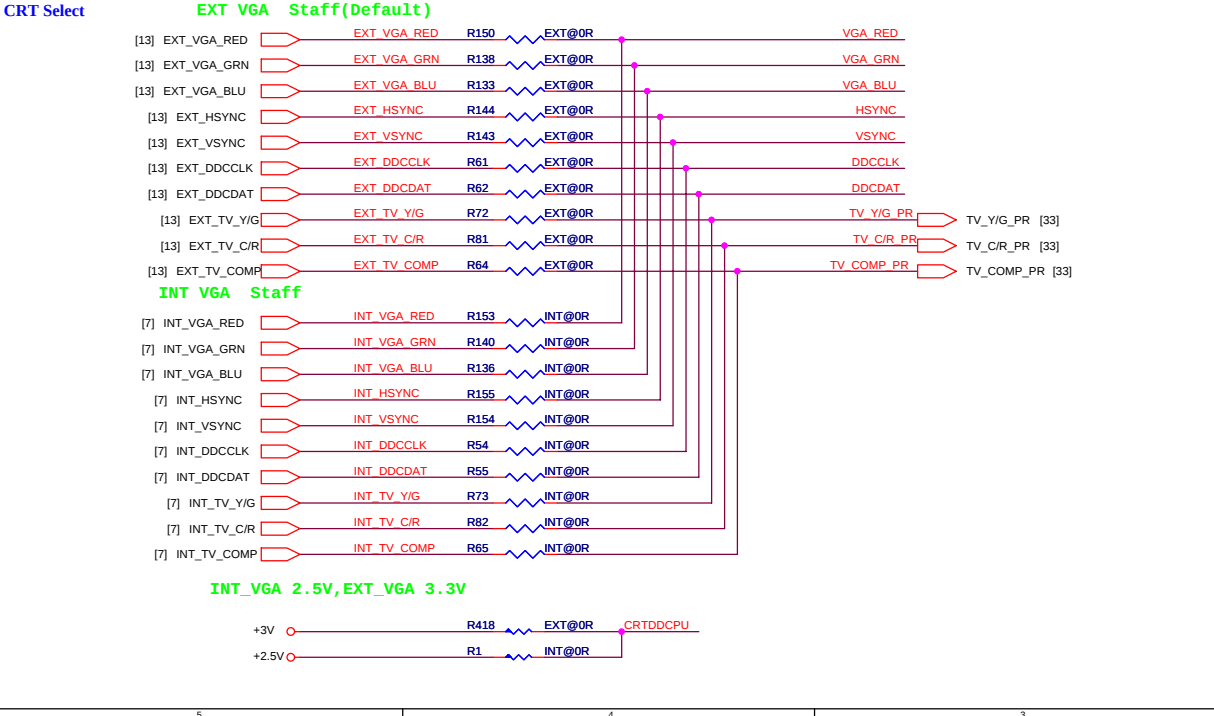
CRT CONN



SWITCH CIRCUIT



CRT Select





PROJECT : ZE2
Quanta Computer Inc.

Size	Document Number	Rev
	CRT & SWITCH	B2A
Date:	Thursday, June 08, 2006	Sheet 17 of 42

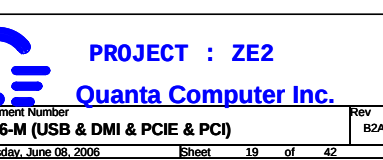
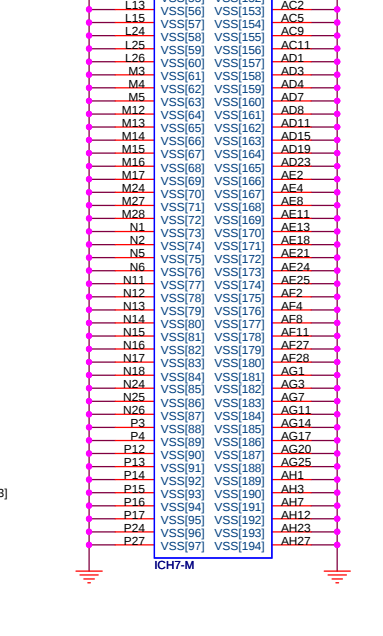
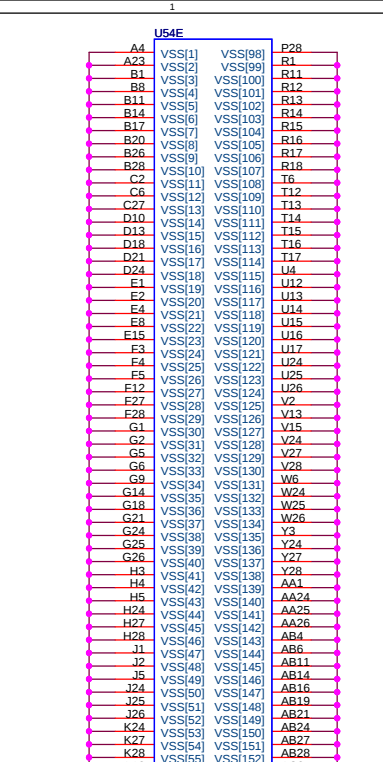
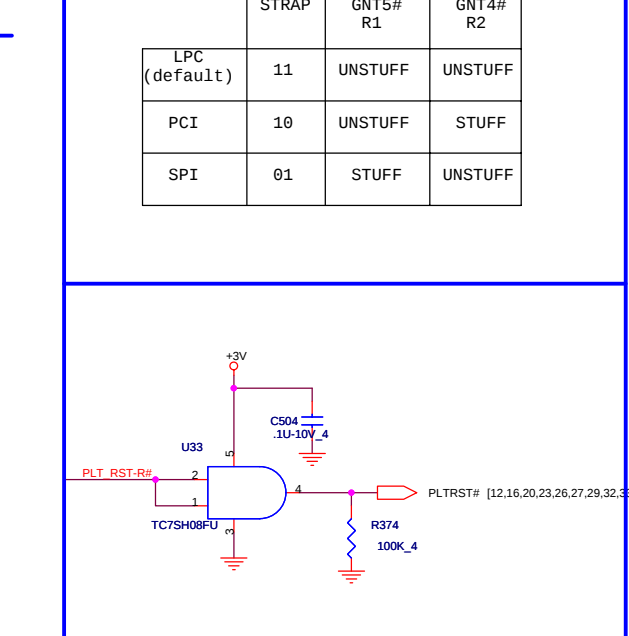
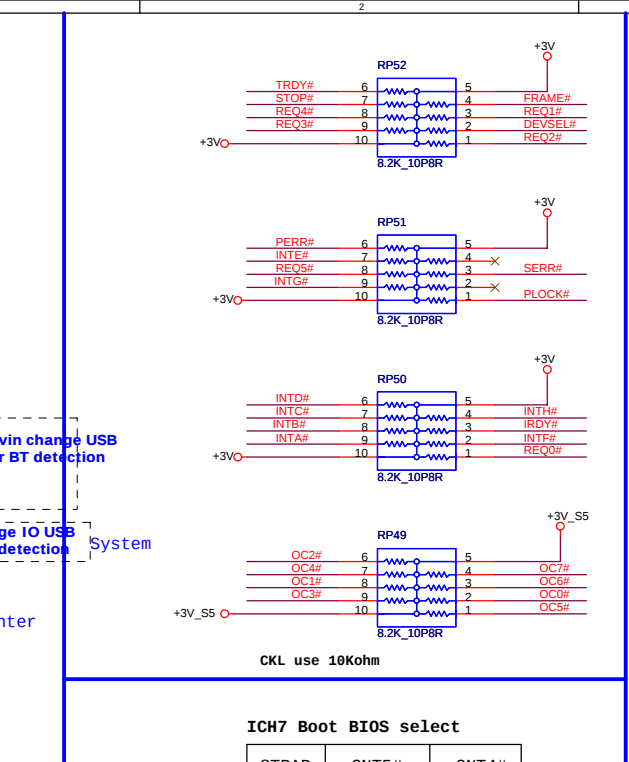
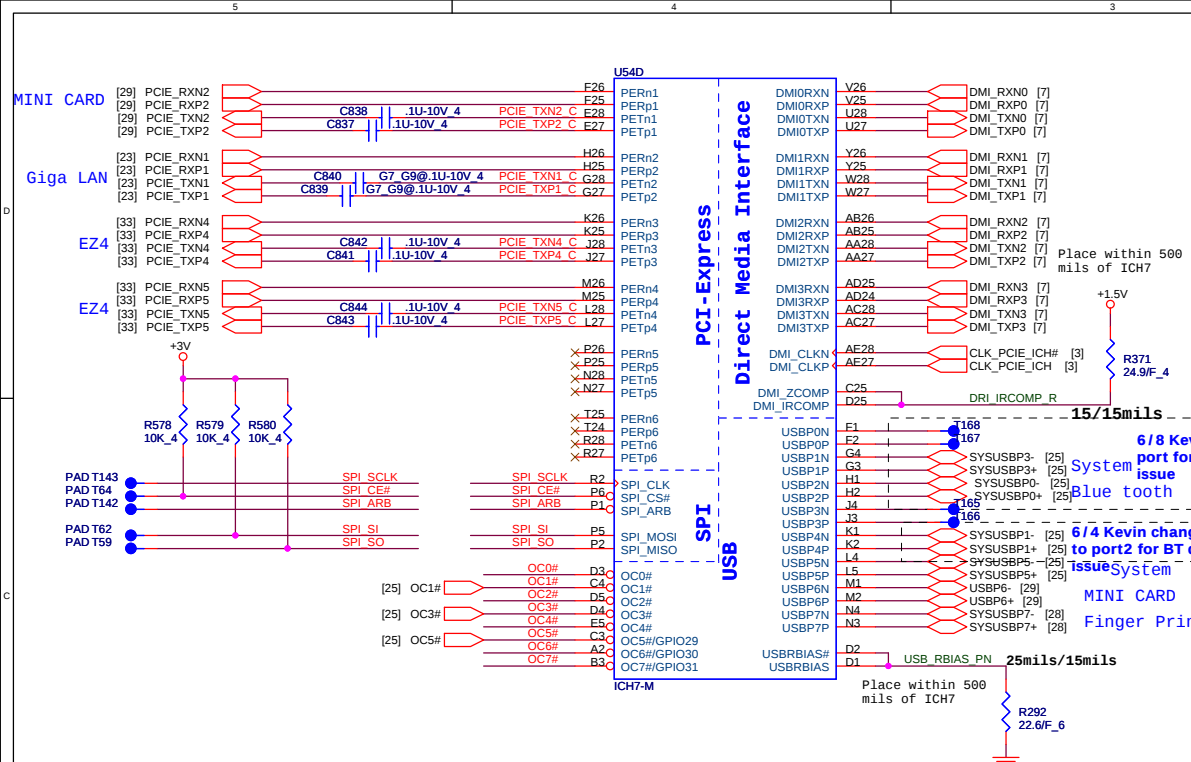


Table showing ICH7 Boot BIOS select options for STRAP, GNT5# R1, and GNT4# R2.

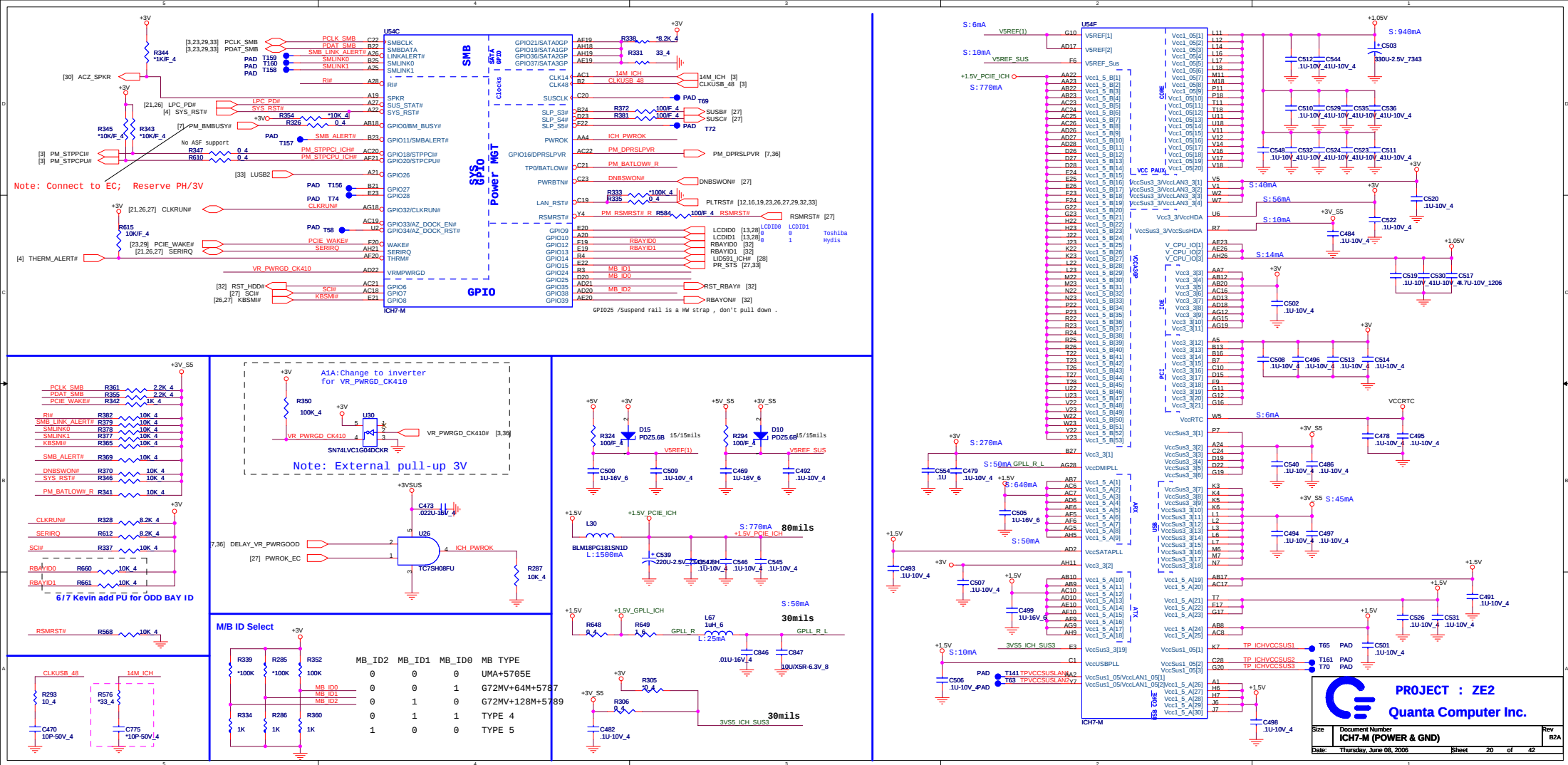
	STRAP	GNT5# R1	GNT4# R2
LPC (default)	11	UNSTUFF	UNSTUFF
PCI	10	UNSTUFF	STUFF
SPI	01	STUFF	UNSTUFF

PROJECT : ZE2

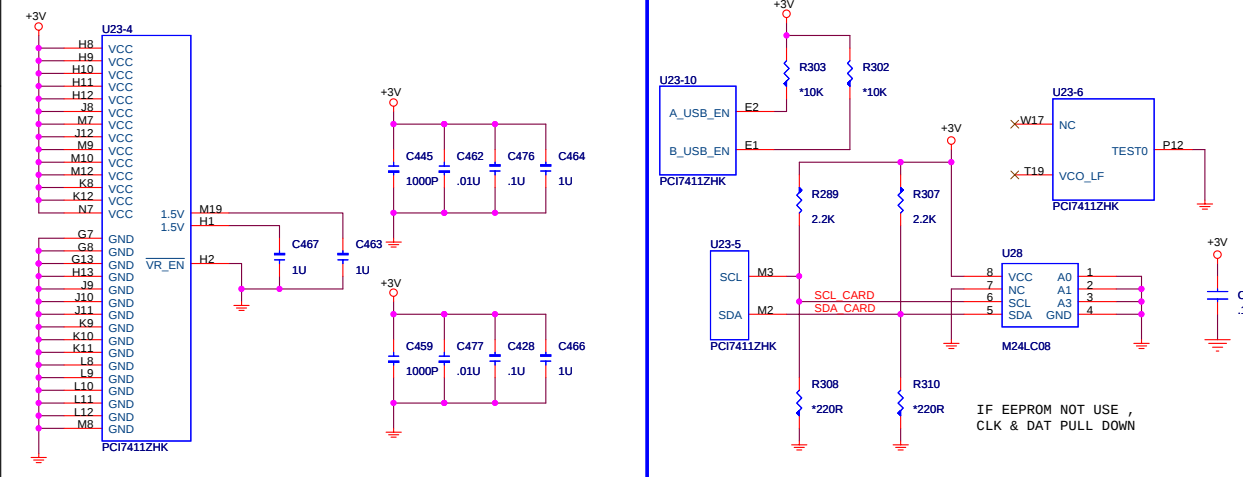
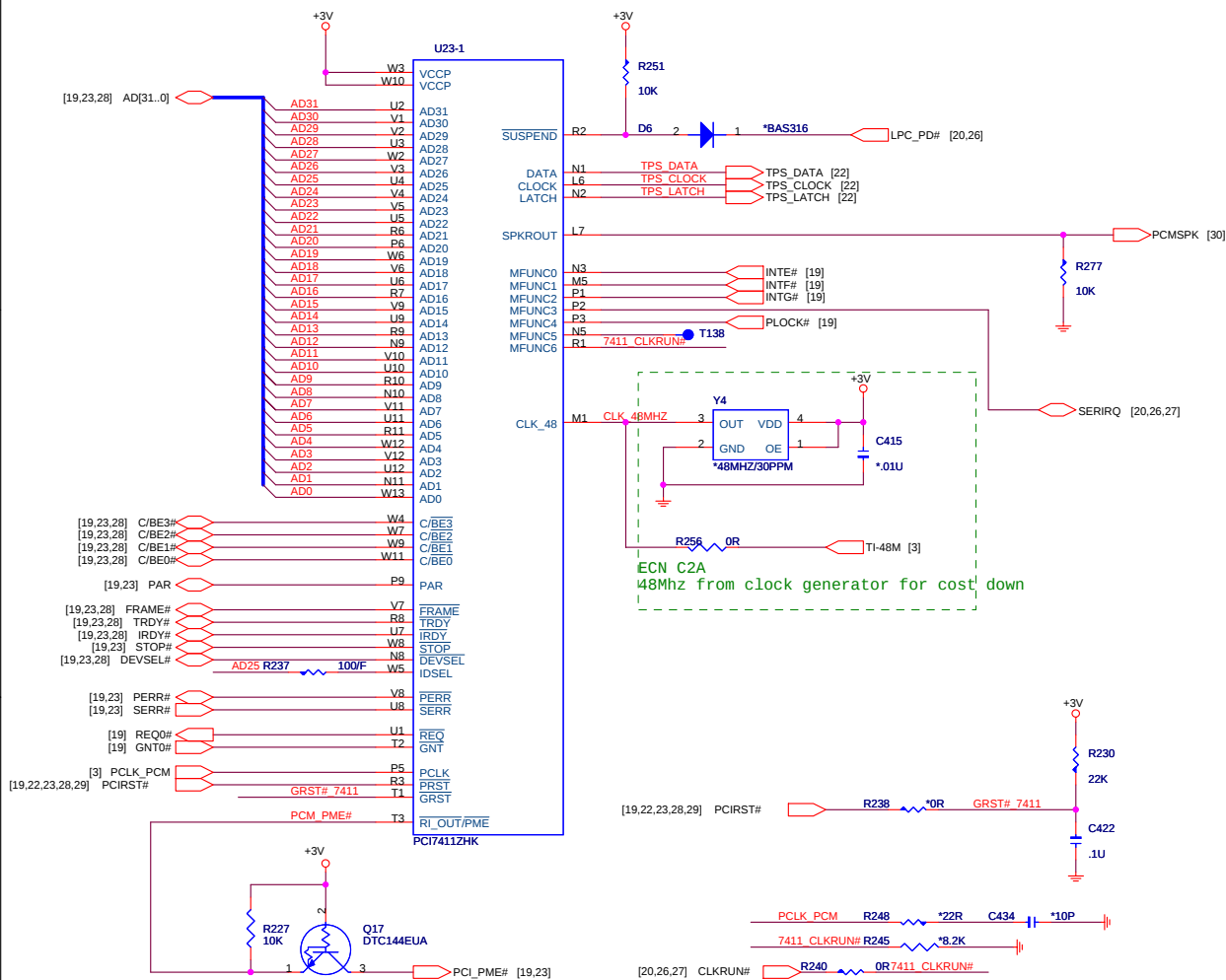
Quanta Computer Inc.

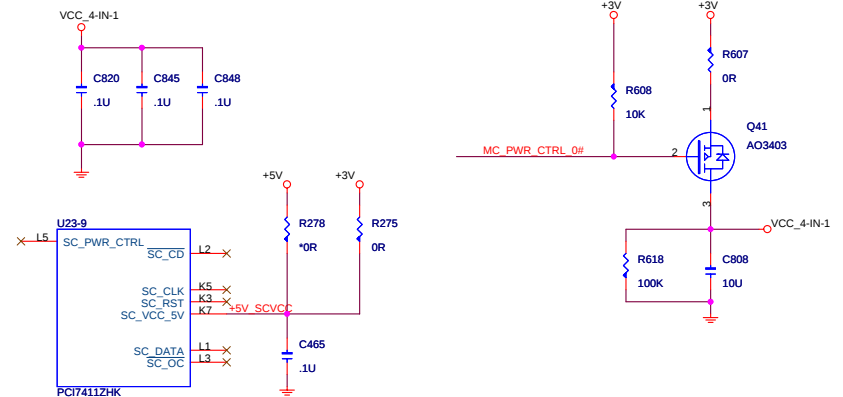
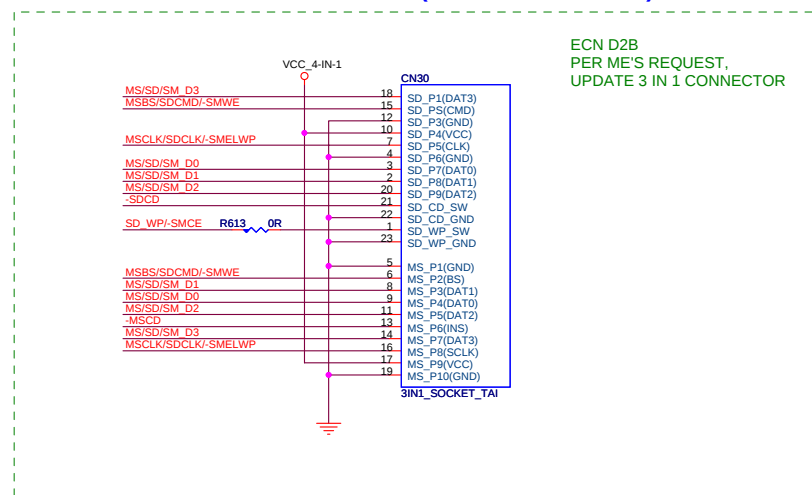
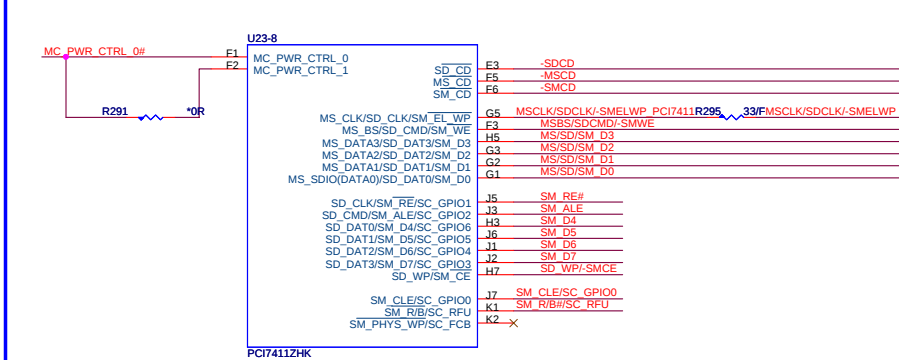
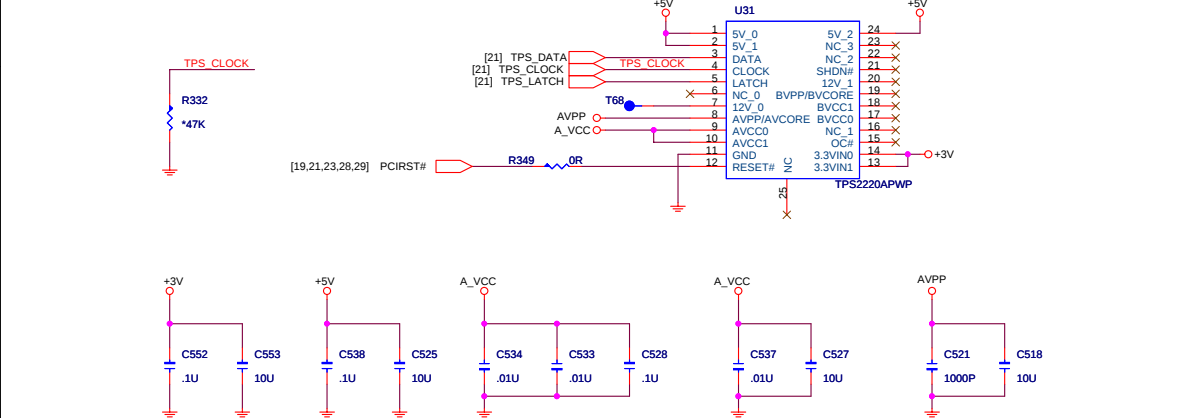
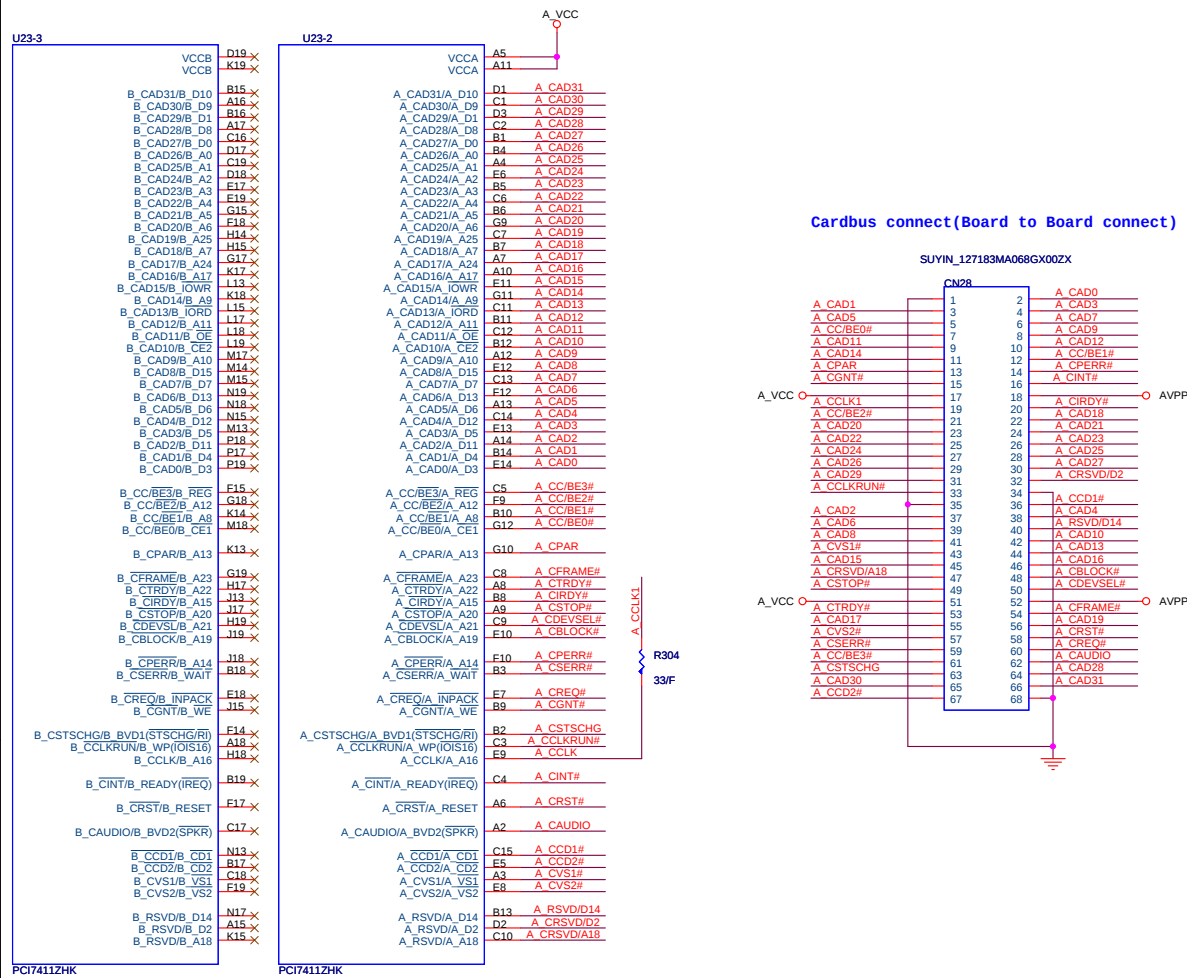
Size Document Number ICH6-M (USB & DMI & PCIE & PCI) Rev 82A

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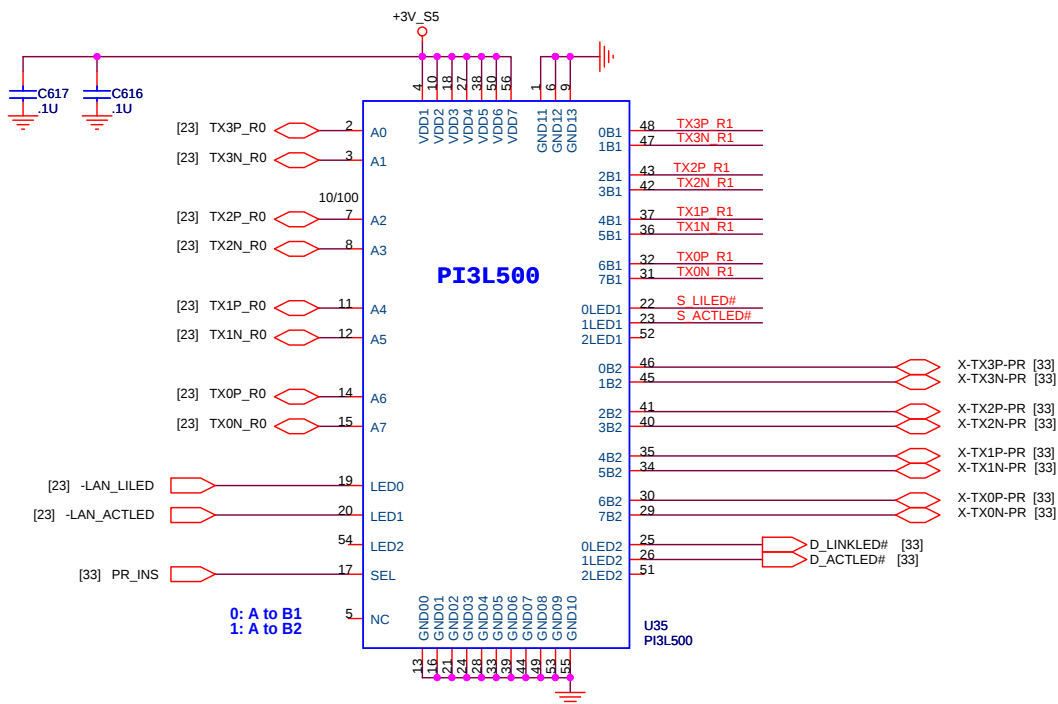
PCI routing REQ0#/GNT0#/AD25/INTE#,INTF#,INTG#



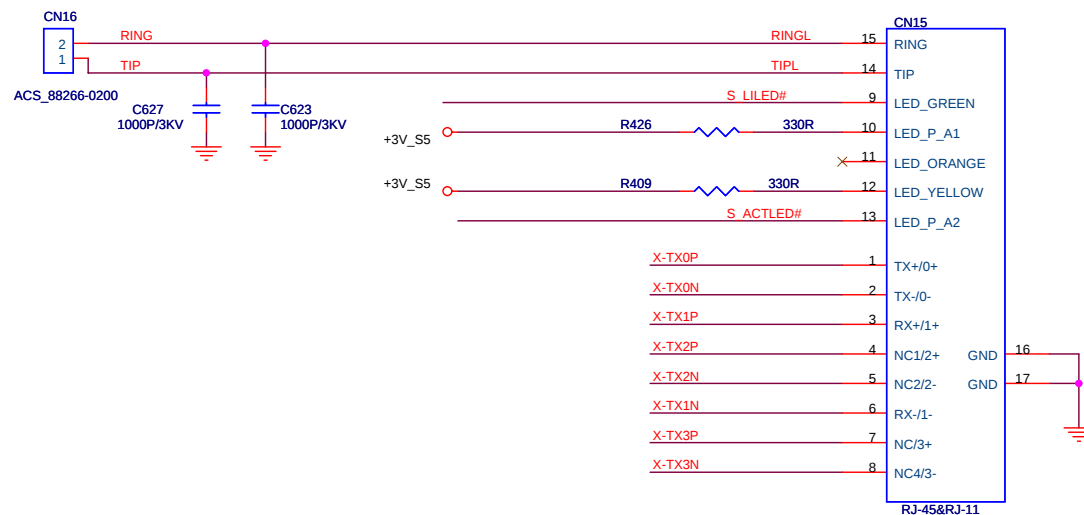


PROJECT : ZE2
Quanta Computer Inc.

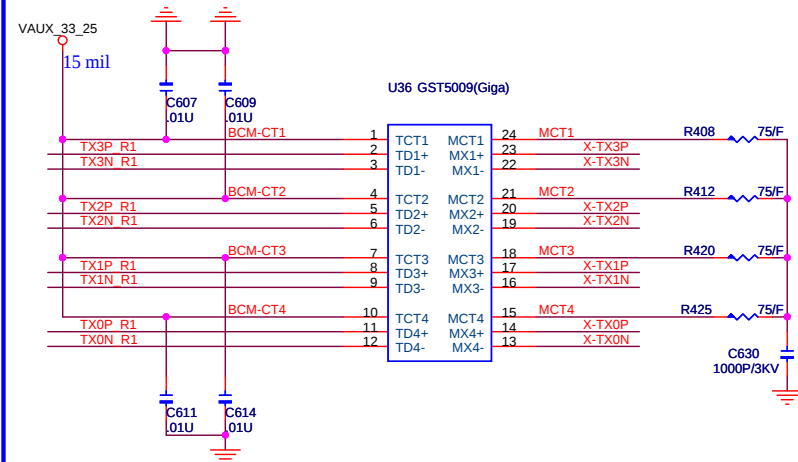
LAN Switch



Modem conn and LAN connect



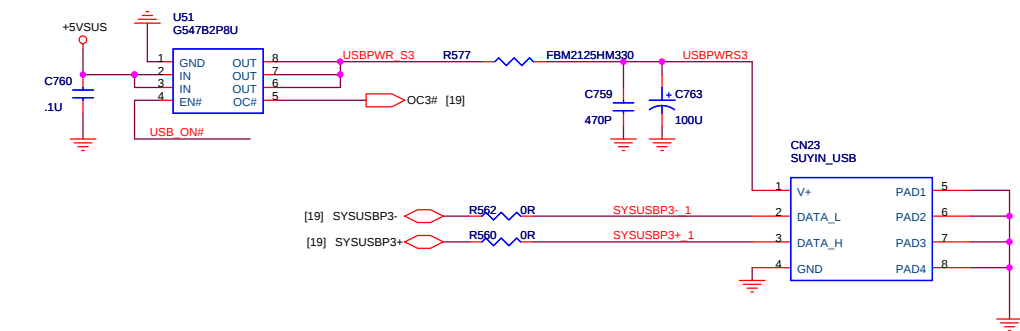
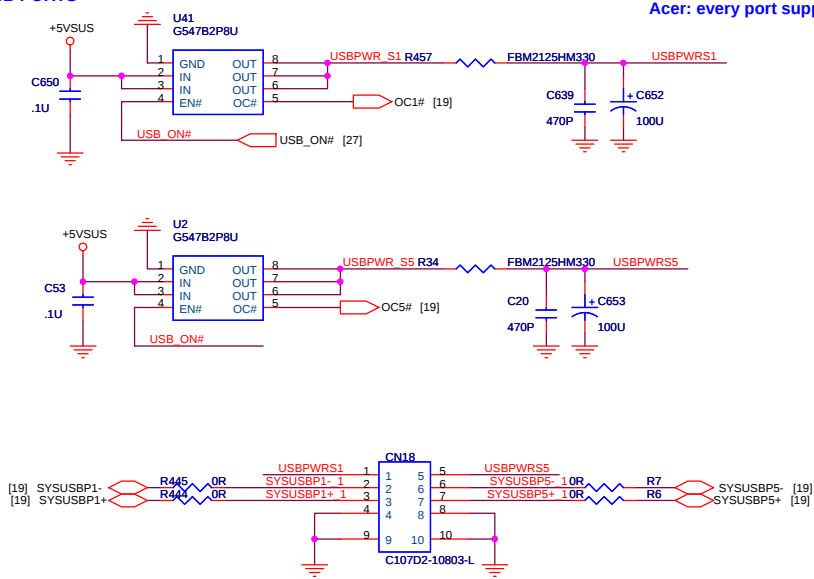
LAN transformer



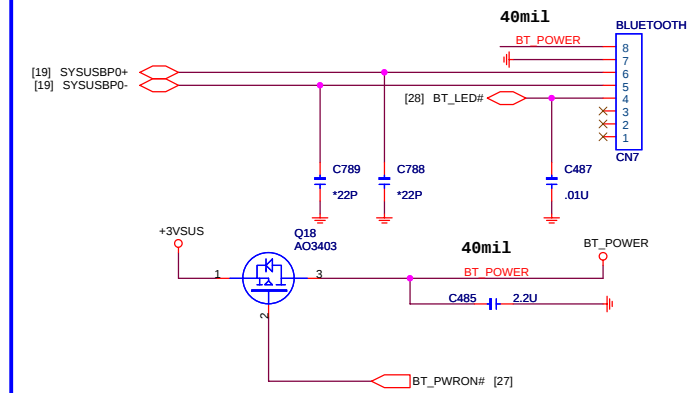
PROJECT : ZE2
Quanta Computer Inc.

USB PORTS

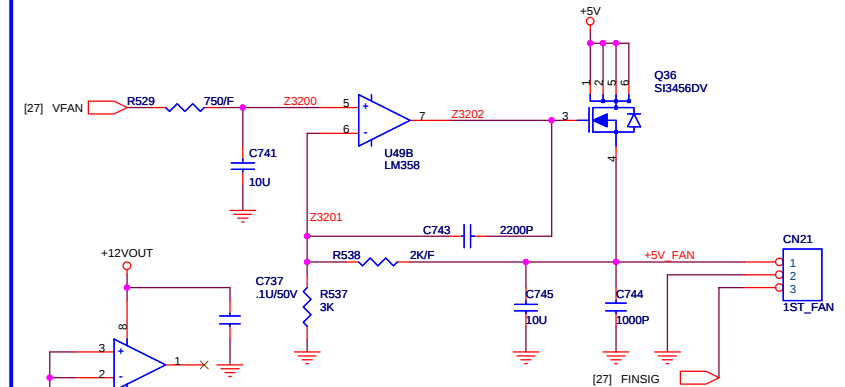
Acer: every port support 1.5A current



Bluetooth



FAN





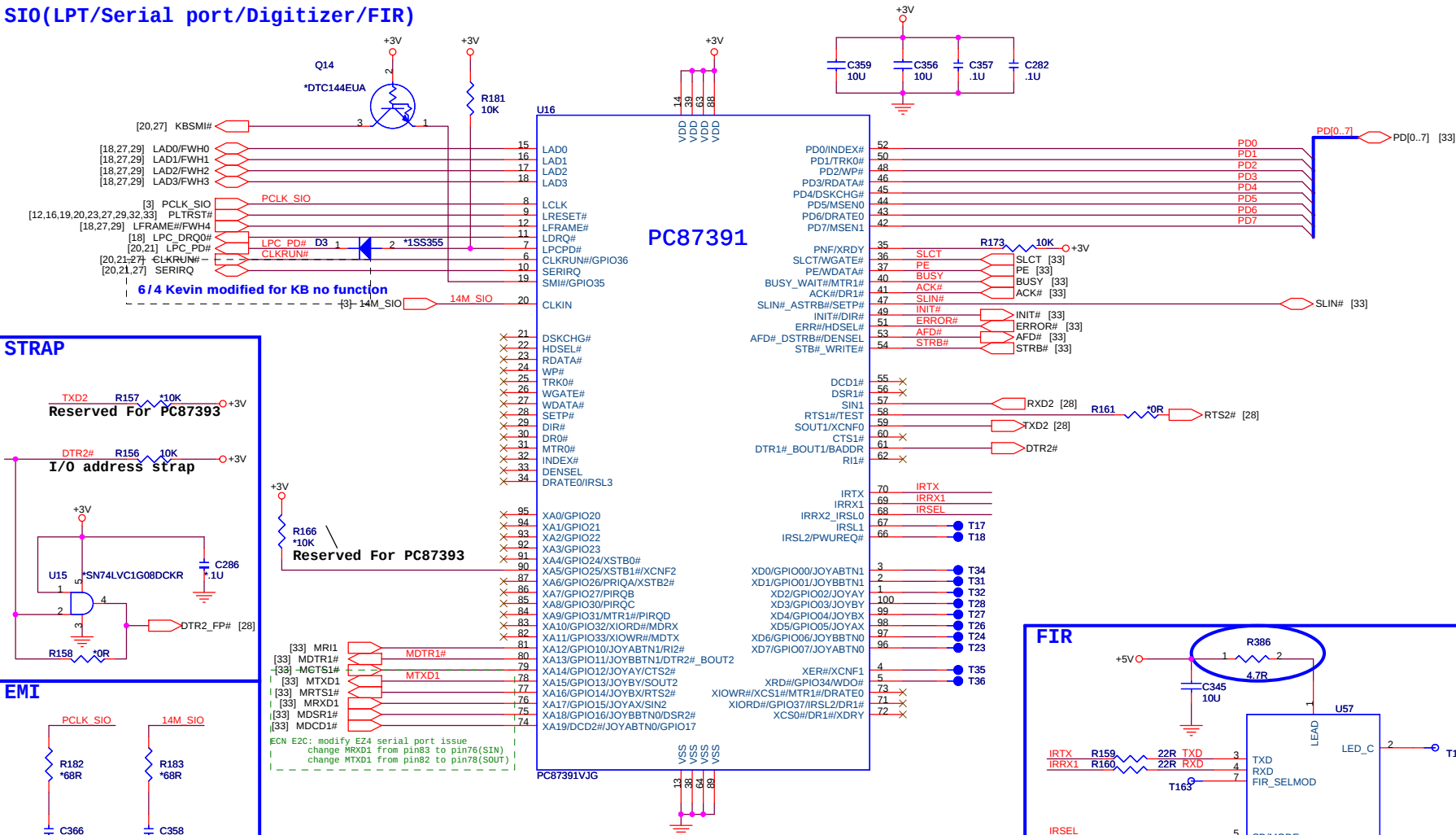
PROJECT : ZE2
Quanta Computer Inc.

Size	Document Number	Rev
		D2B

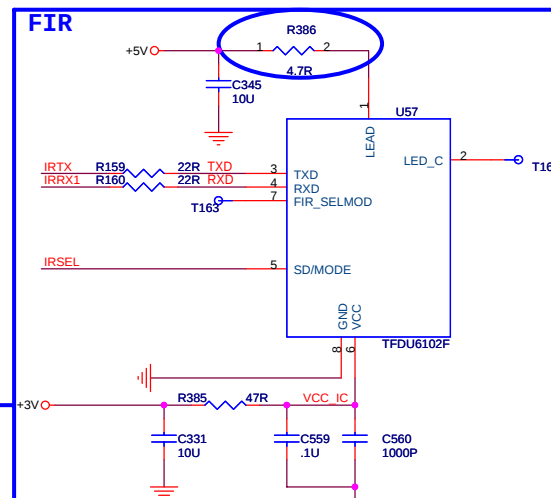
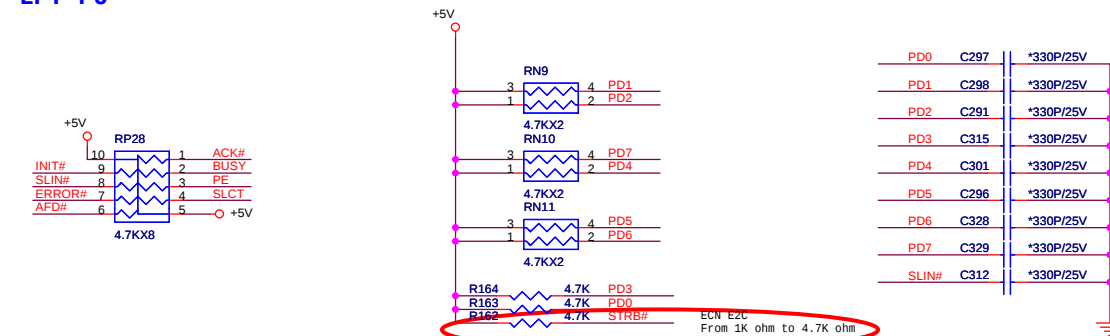
USB PORTS & BLUETOOTH & FAN

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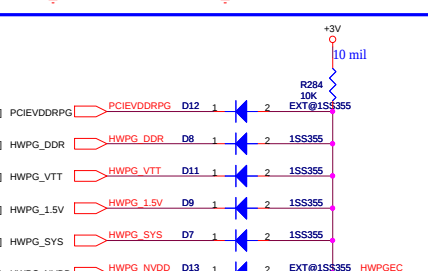
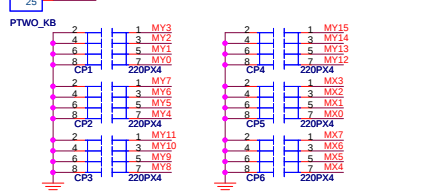
SI0(LPT/Serial port/Digitizer/FIR)



LPT PU



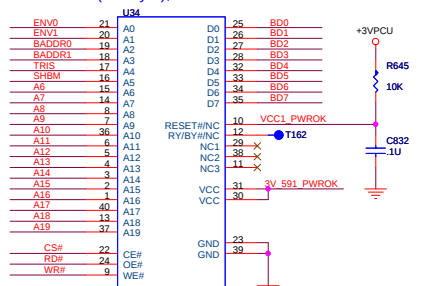
PROJECT : ZE2
Quanta Computer Inc.

[illegible]

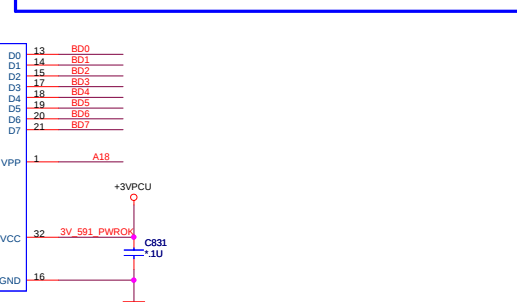
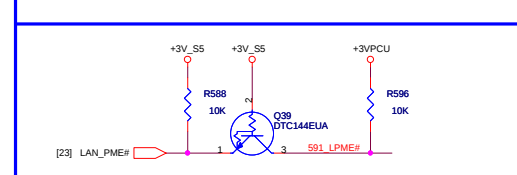
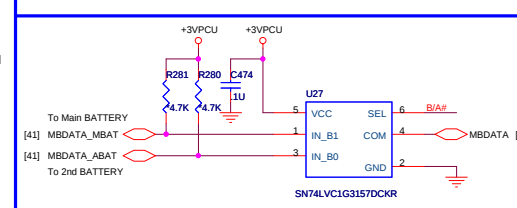
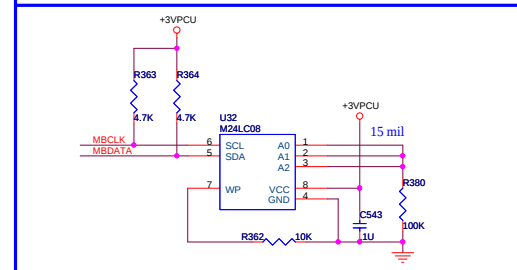
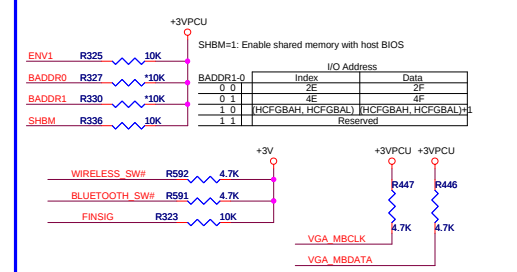
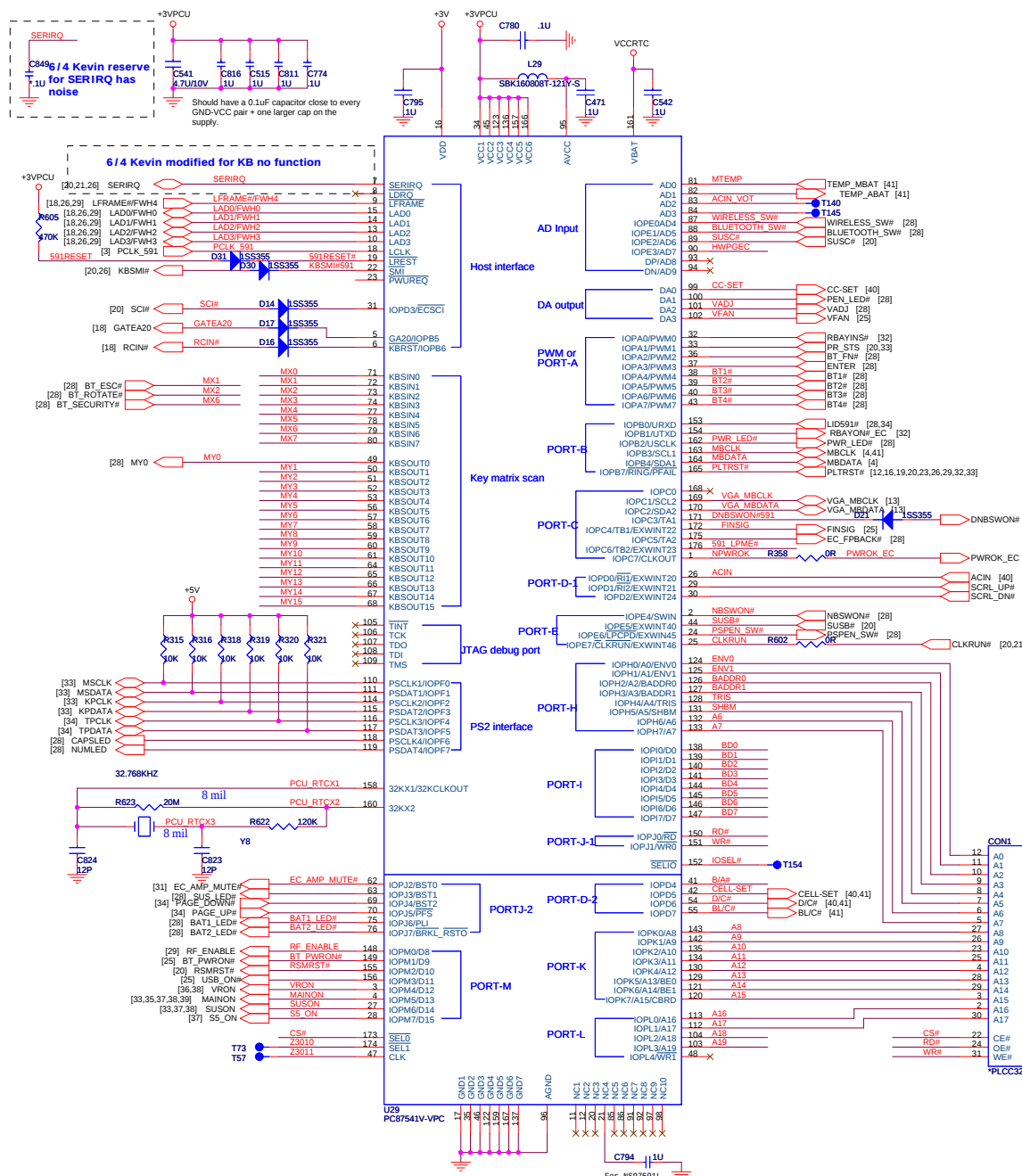
SST provide:
QCI P/N: AKE35ZAKK17
Description: IC EEPROM (40P) SST39VF080-70(8M, TSOP) LF

AMD :Pin 10 is RESET# ; Pin12 is RY/BY#
SST :Pin10,12 are NC

8Mbit (1M Byte),NO PLCC TYPE

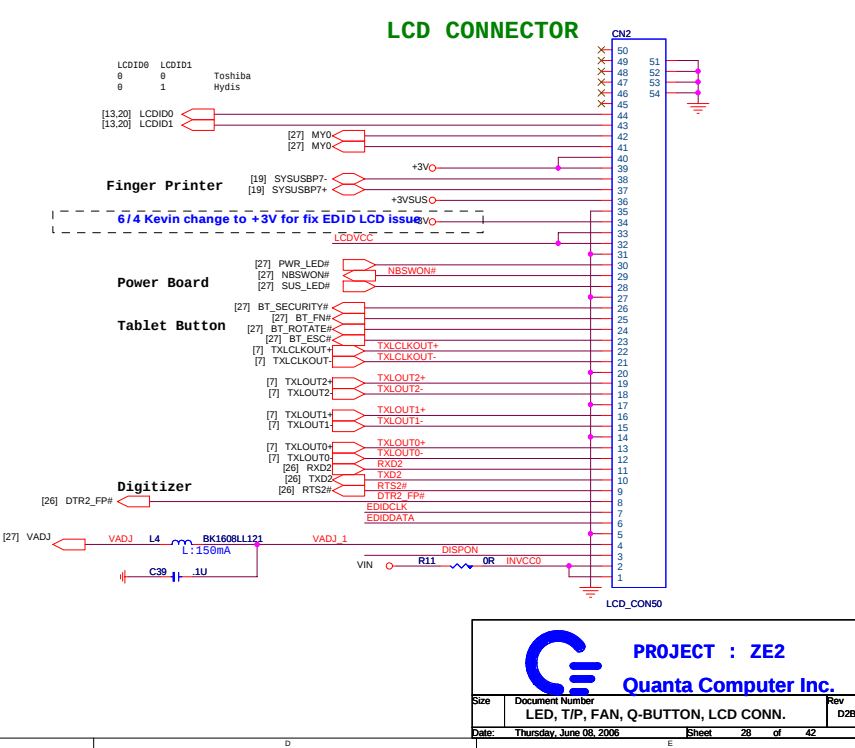
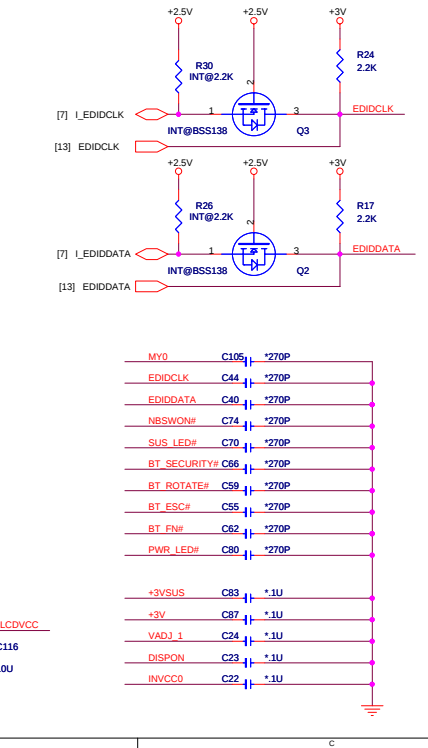
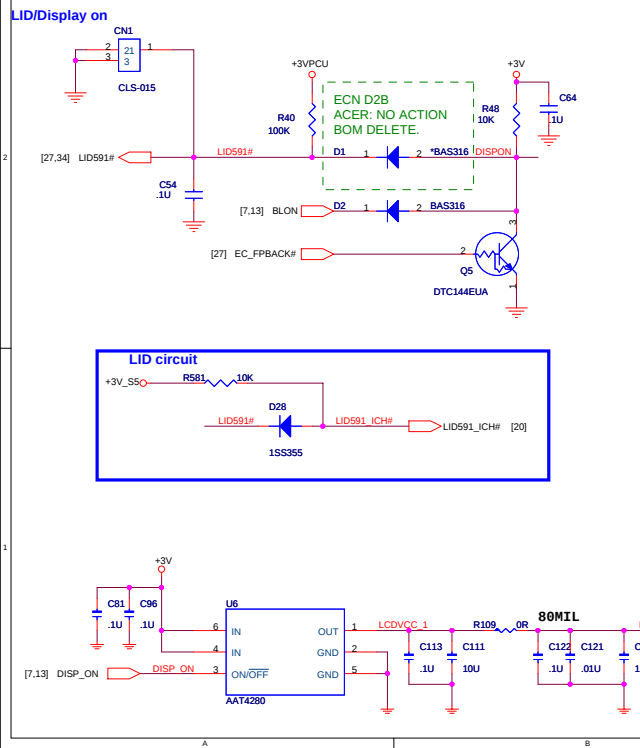
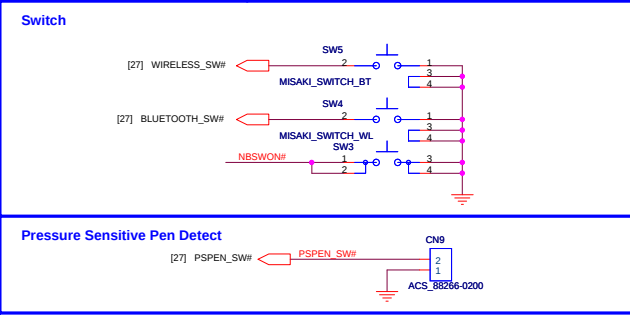
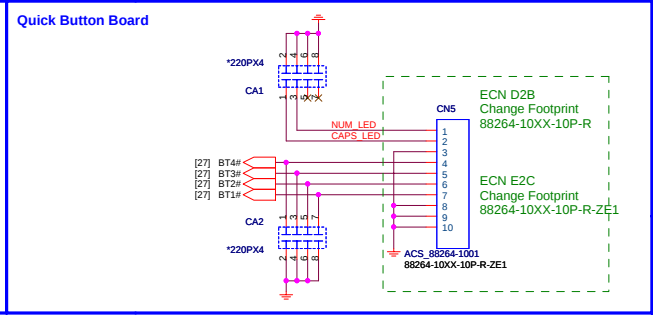
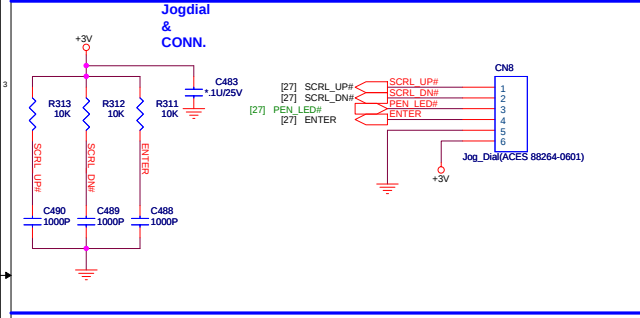
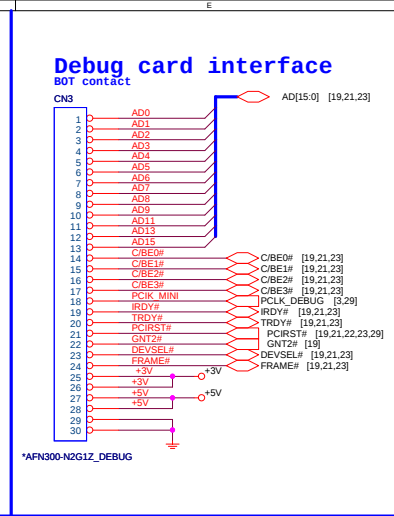
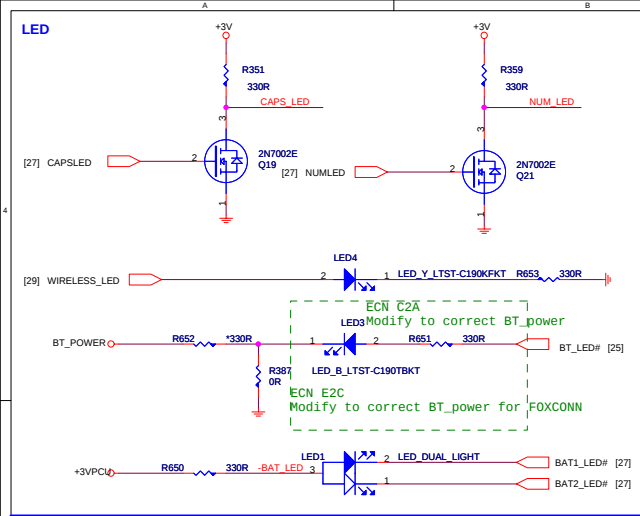


6/4 Kevin change 1M BIOS ROM from B-stage

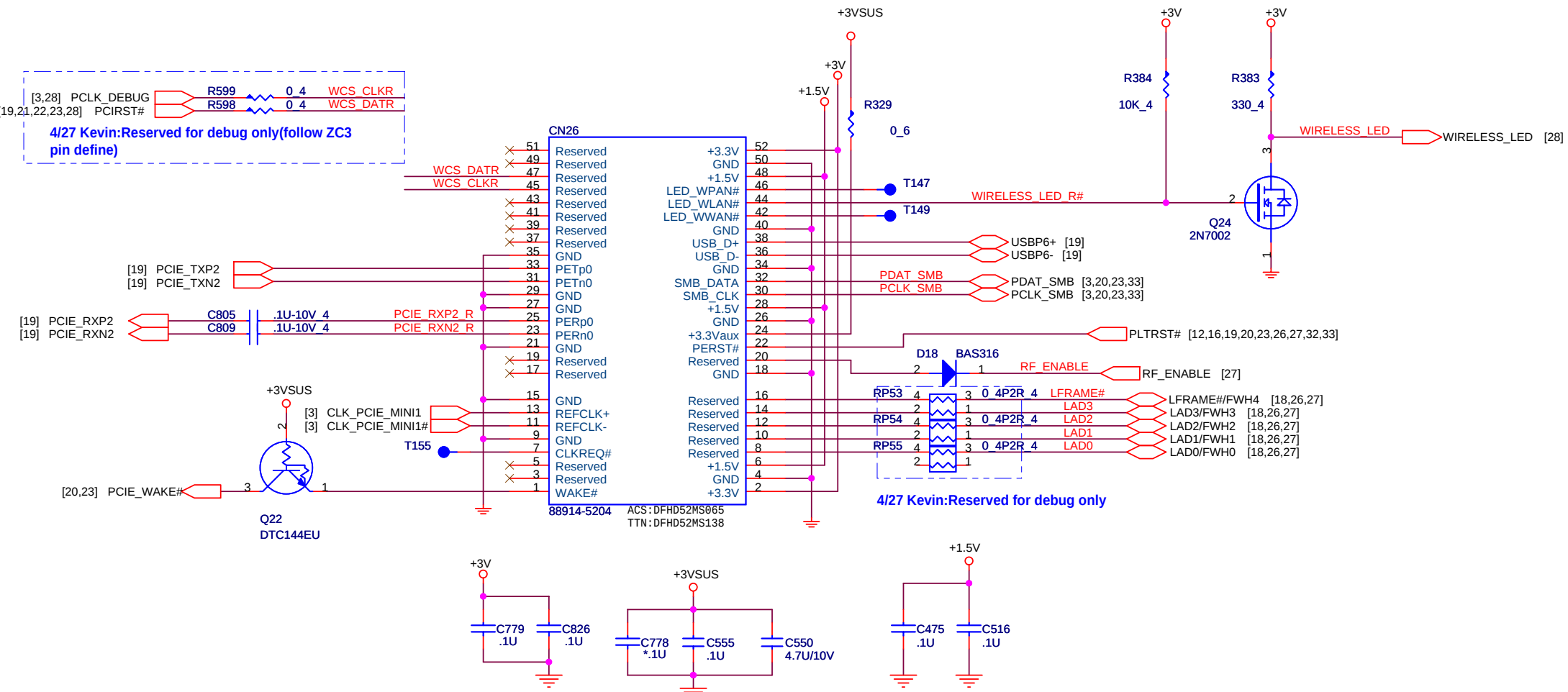


PROJECT : ZE2
Quanta Computer Inc.

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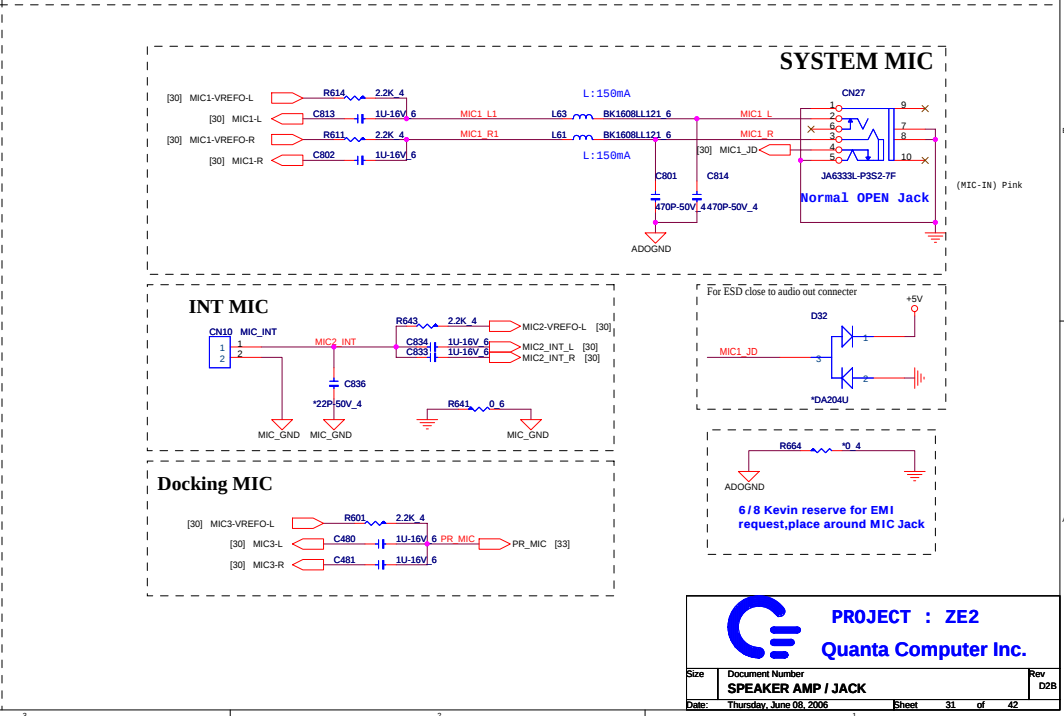
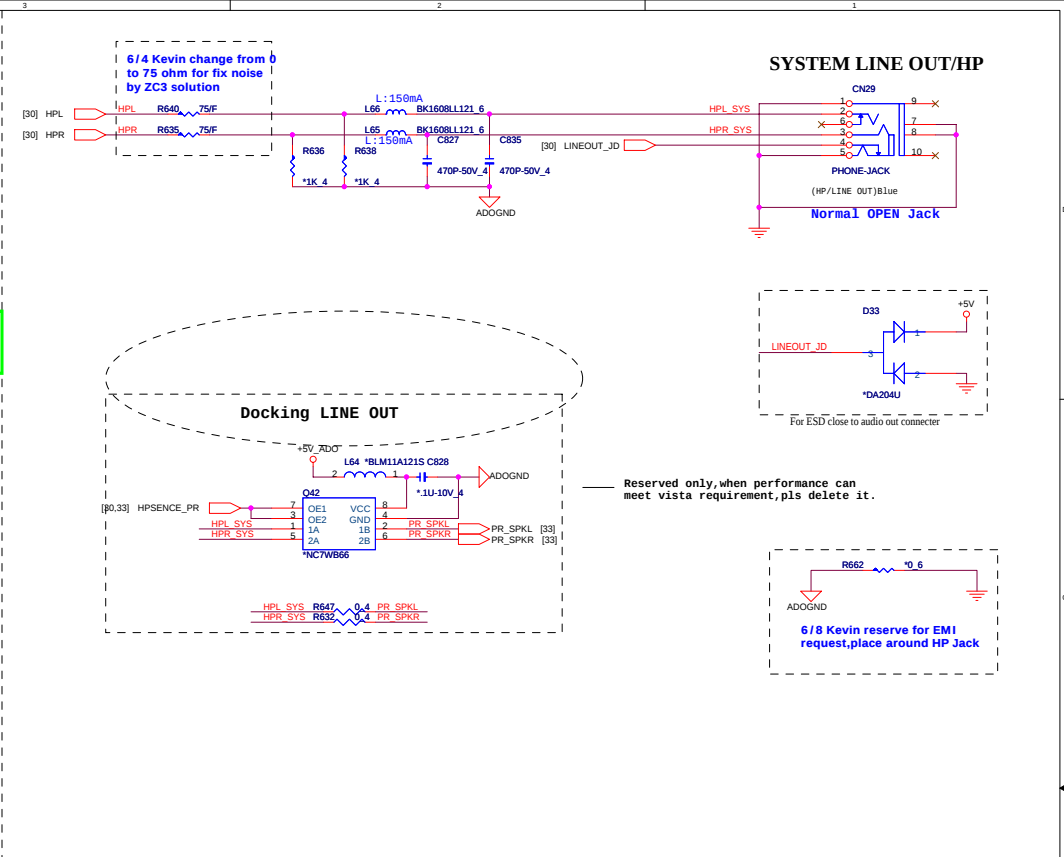
MINI CARD



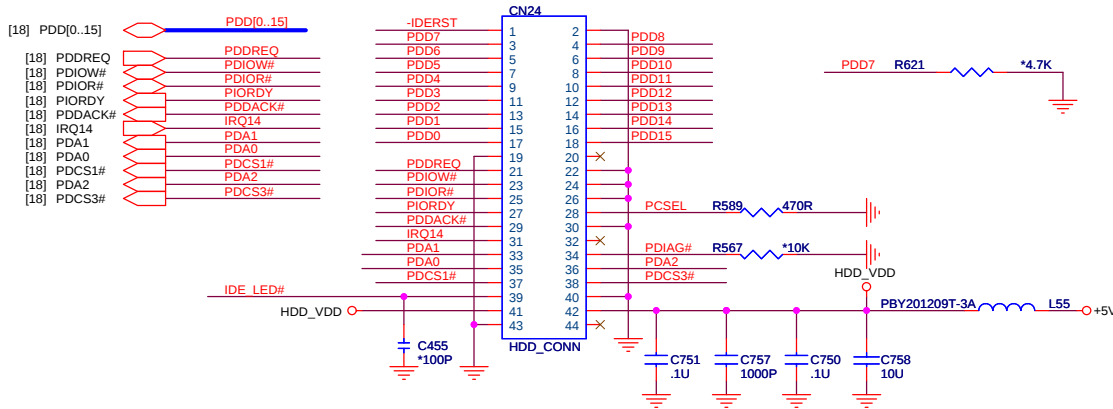
PROJECT : ZE2
Quanta Computer Inc.

Size	Document Number	Rev
	MINI CARD	B2A

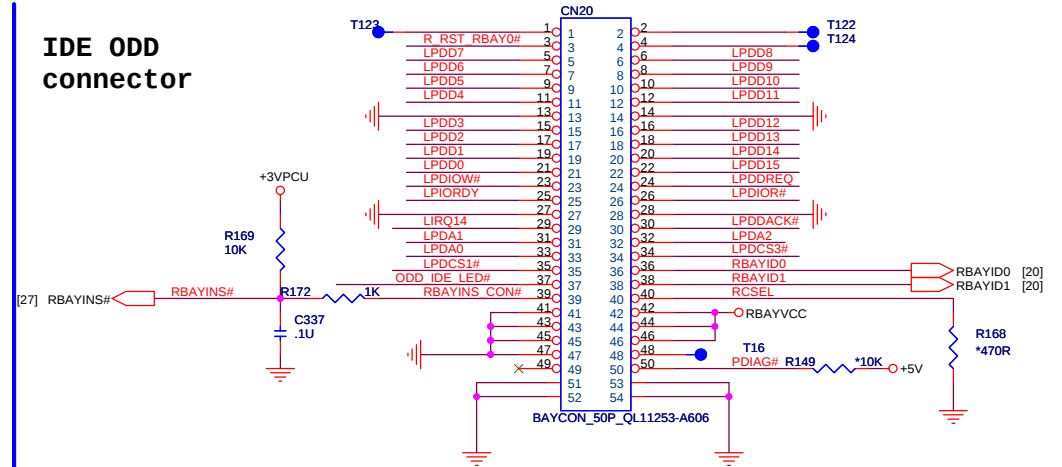
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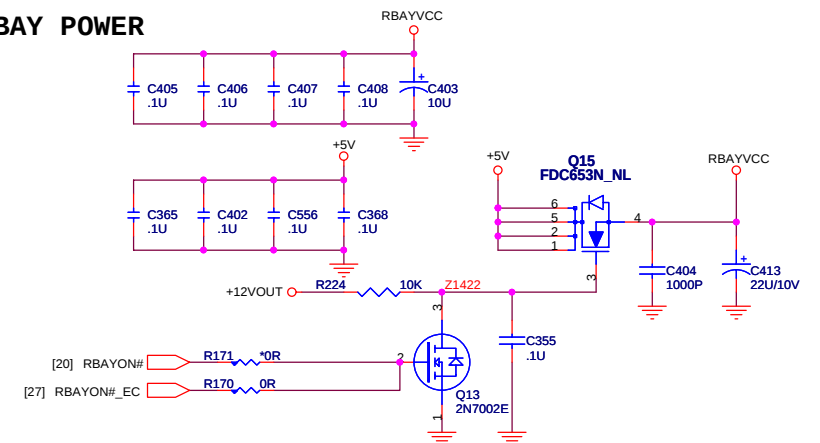
PATA HDD connector



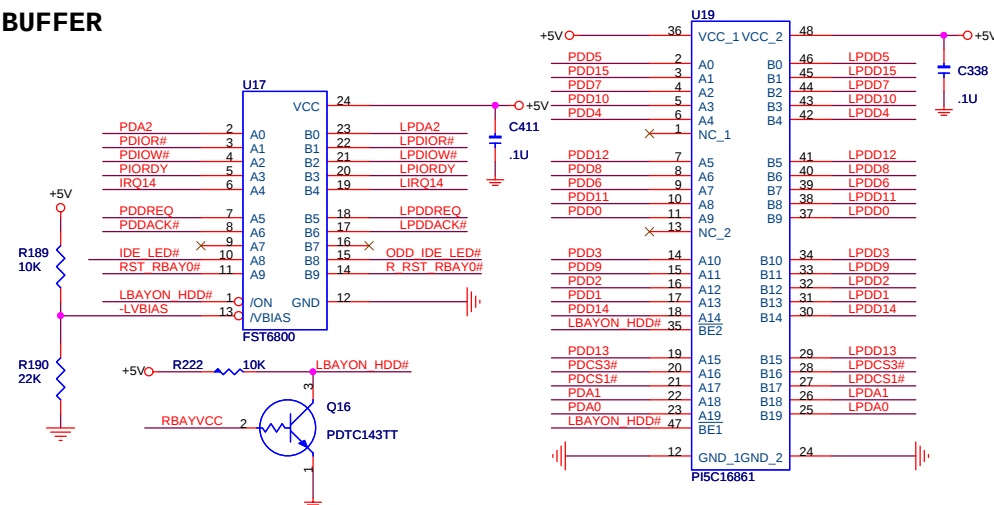
IDE ODD connector



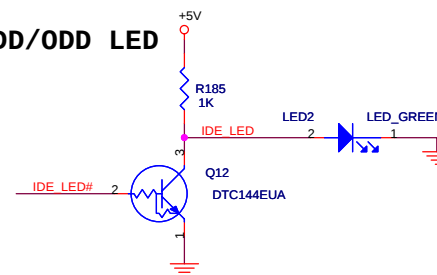
ODD MULTI BAY POWER



IDE BUFFER



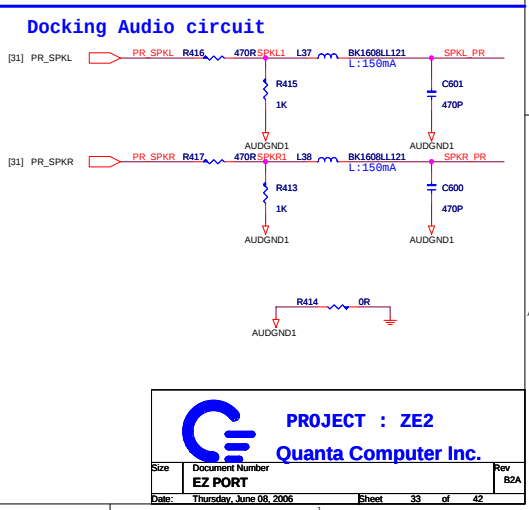
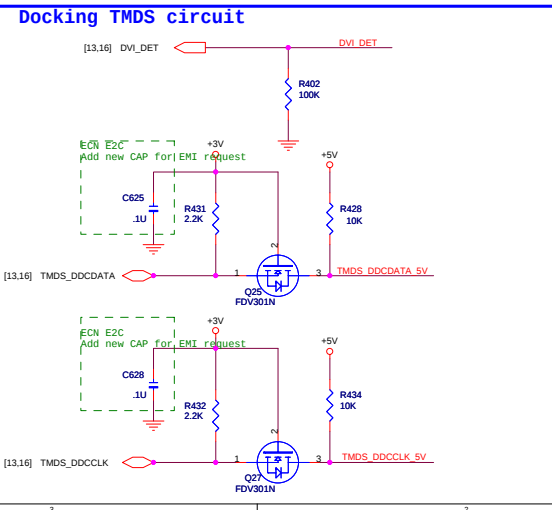
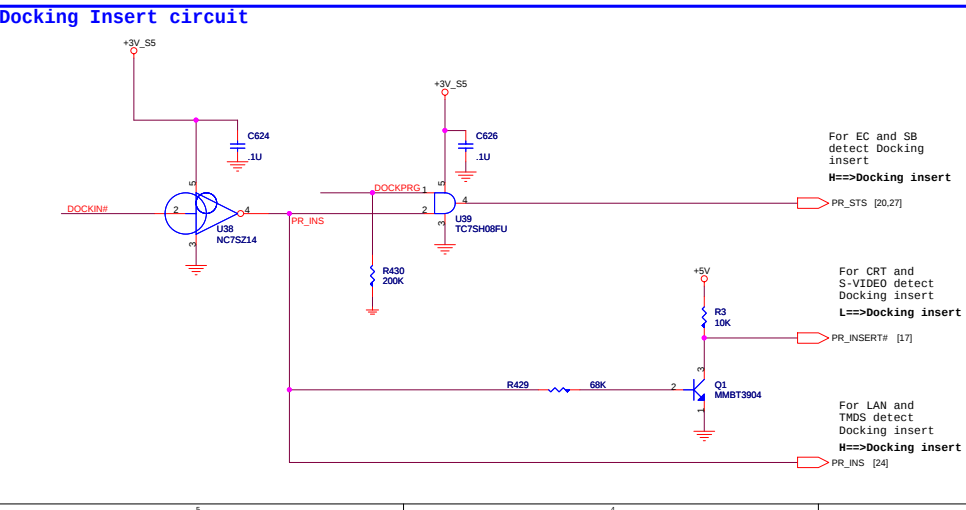
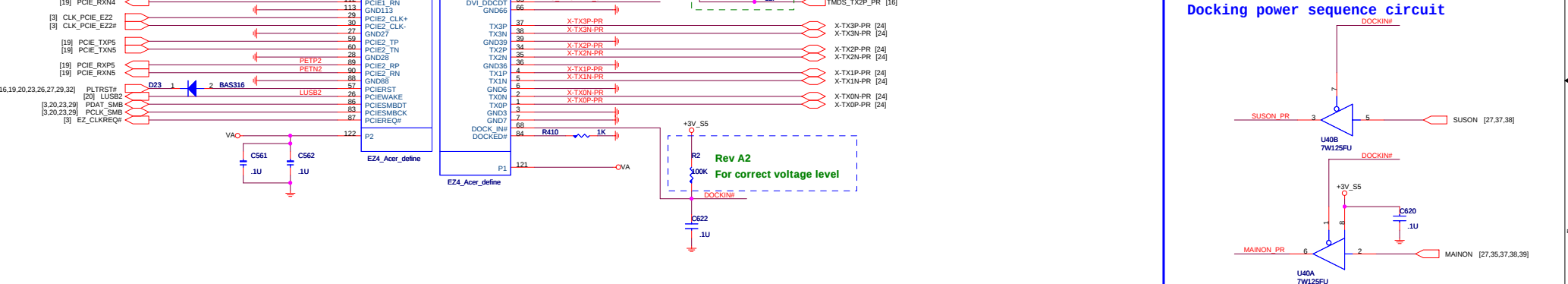
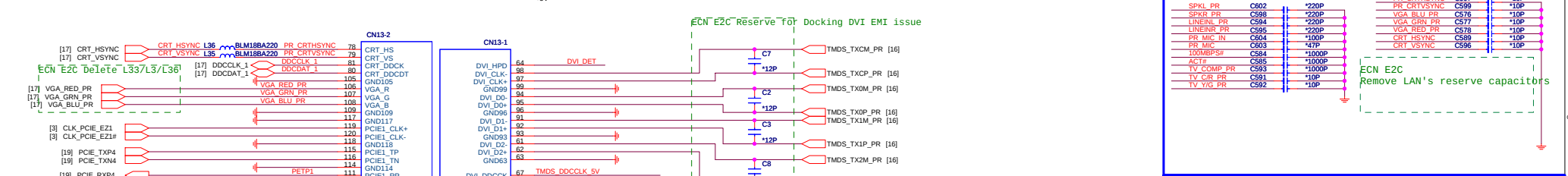
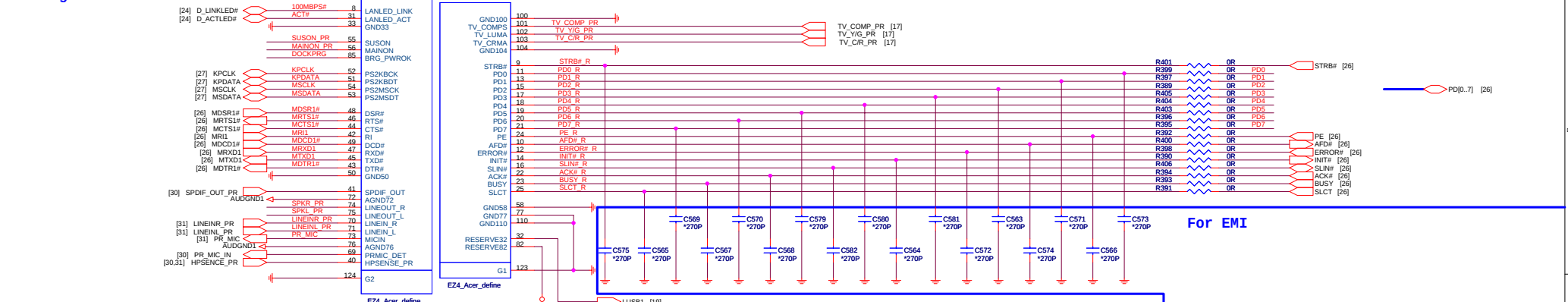
HDD/ODD LED



PROJECT : ZE2
Quanta Computer Inc.

Size	Document Number	Rev
	IDE HDD(PATA)	B2A
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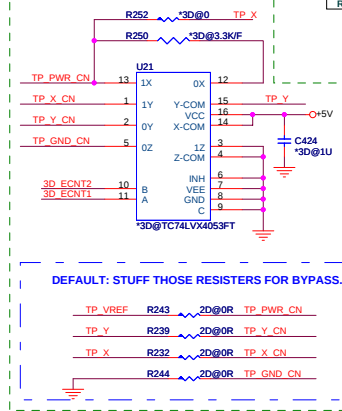
Docking Interface



ALPS SOLUTION

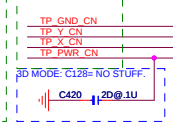
Track point circuit and CONN

ECN C2A RESERVE FOR 3D FUNCTION

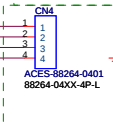


	2D MODE	3D MODE
C131	2200 pF	100 pF
C132	2200 pF	470 pF
R107	470 Kohm	1.8 Mohm
R109	470 Kohm	470 Kohm

ECN C2A Change GND & PWR connect

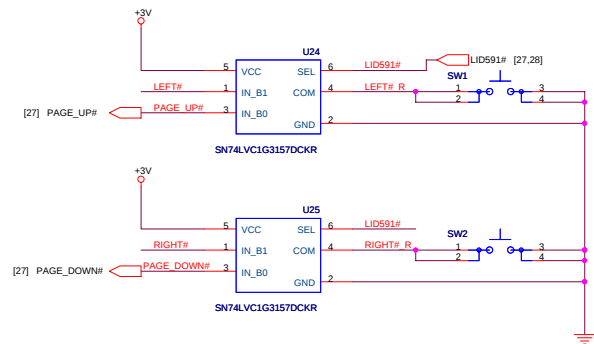


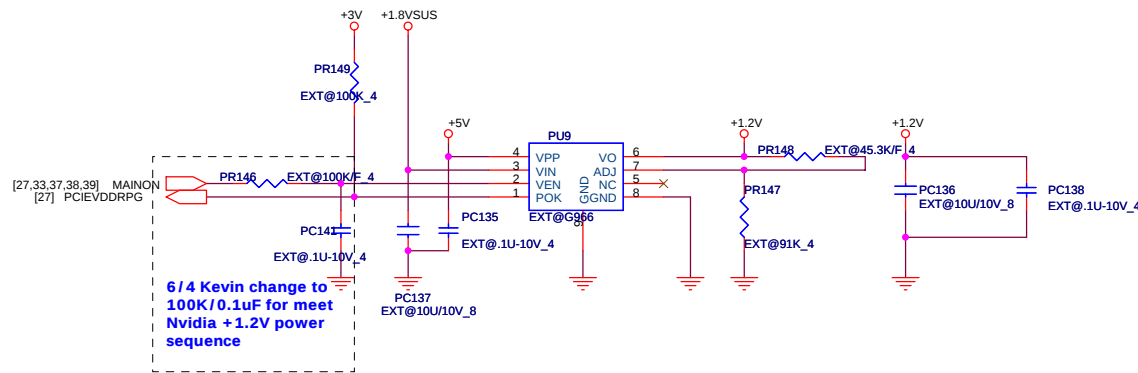
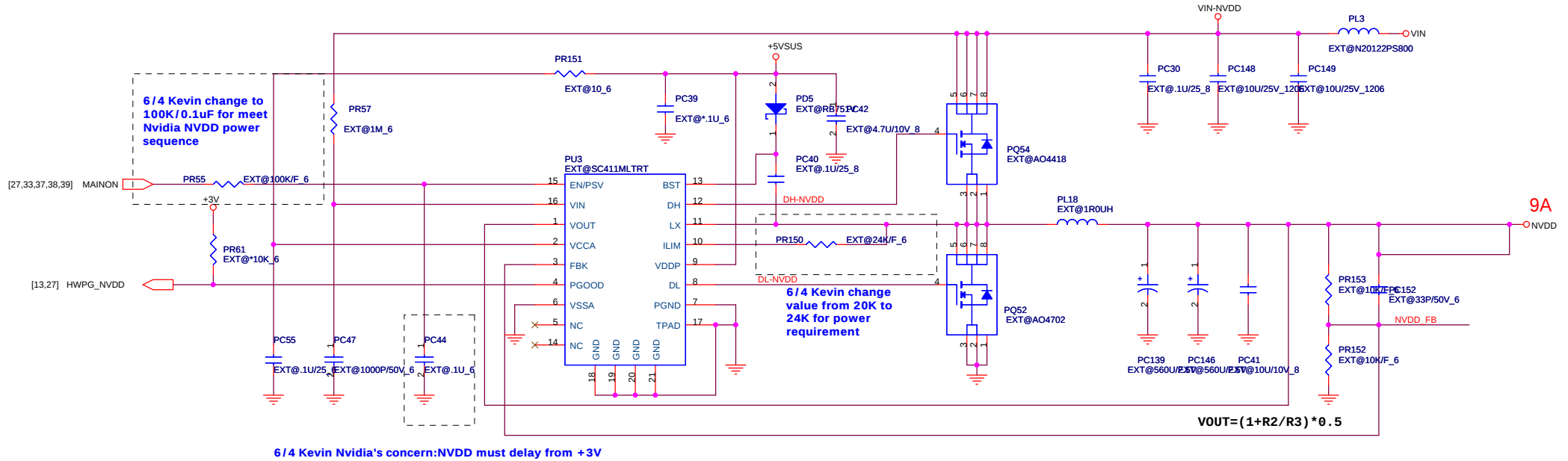
ECN C2A ALPS: NEW ADD



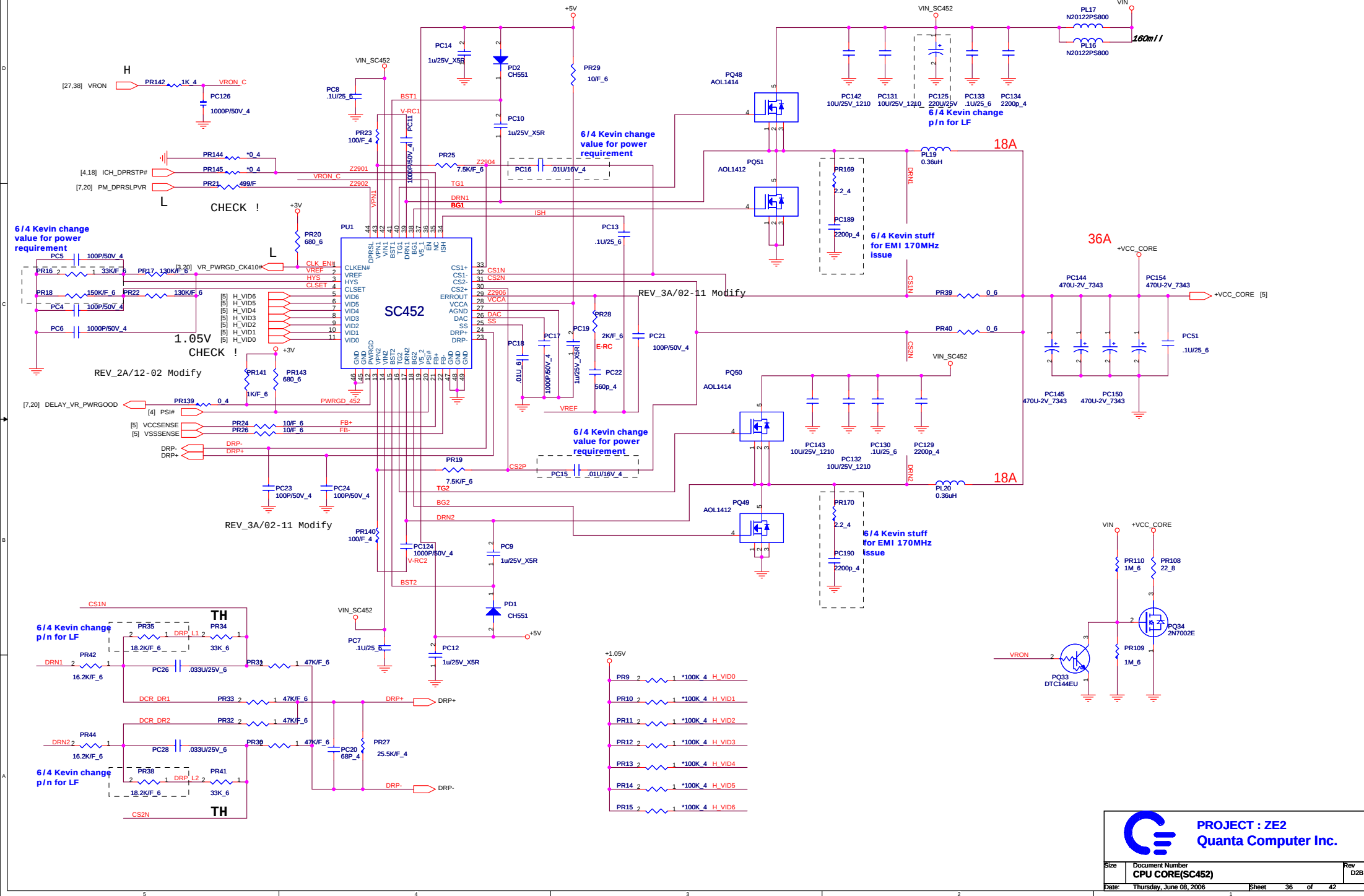
ECN D2B Change Footprint

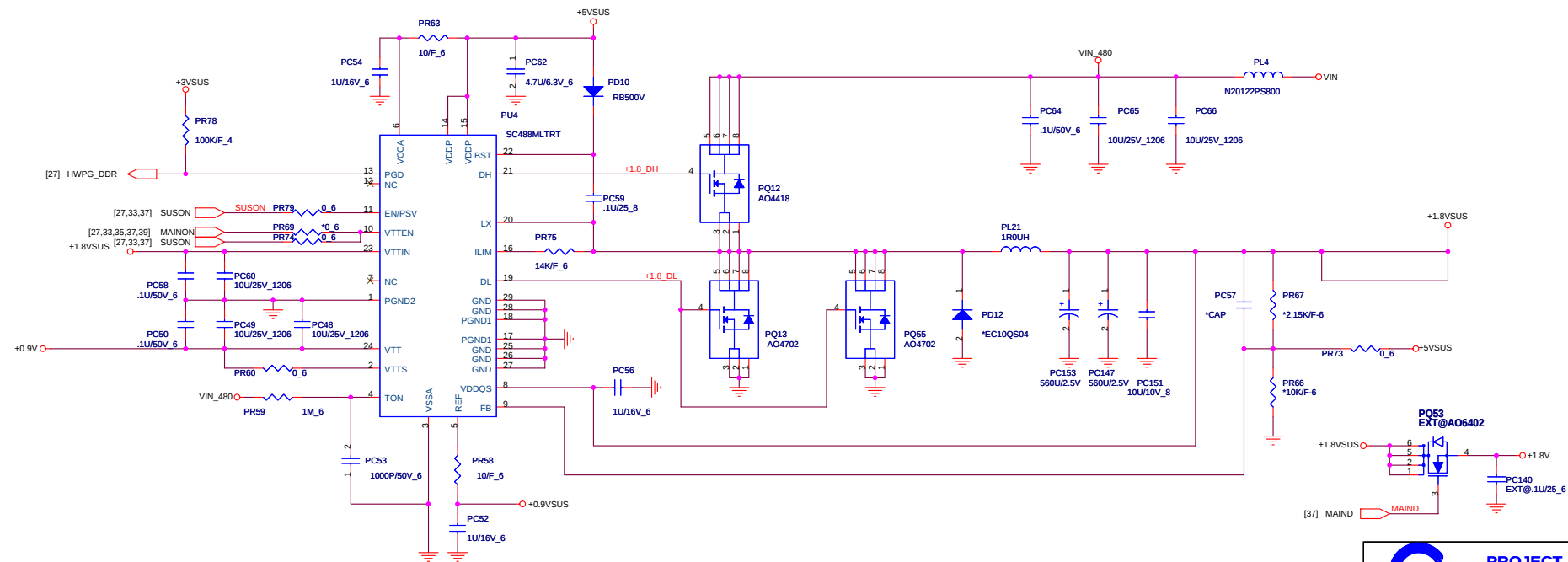
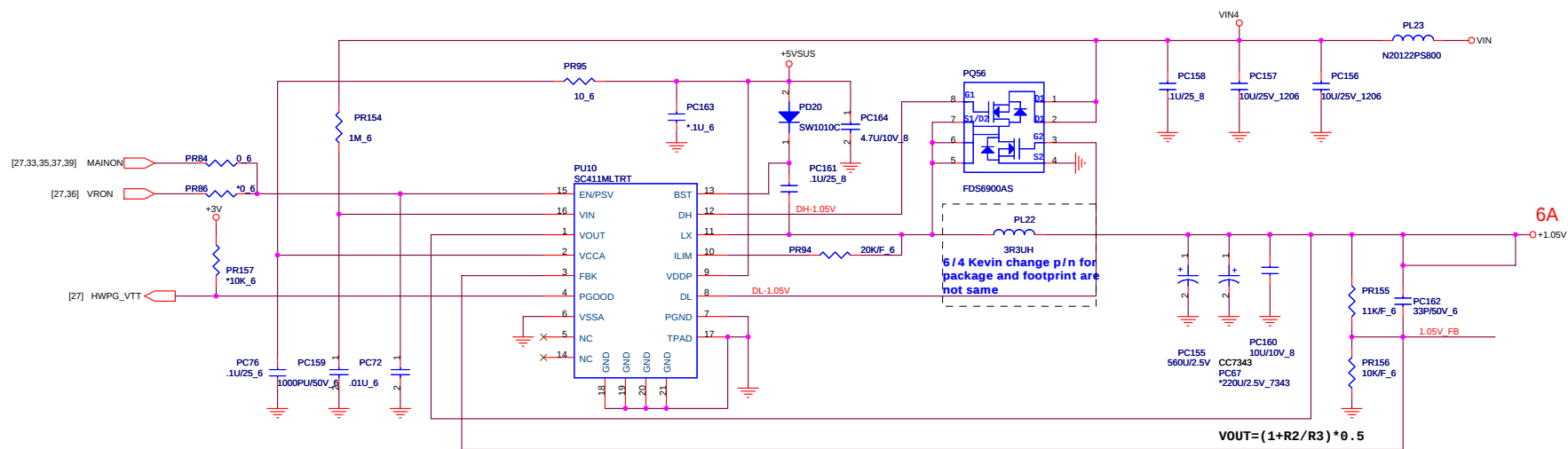
88264-04XX-4P-L





CPU





2ND_BATT_CONN

