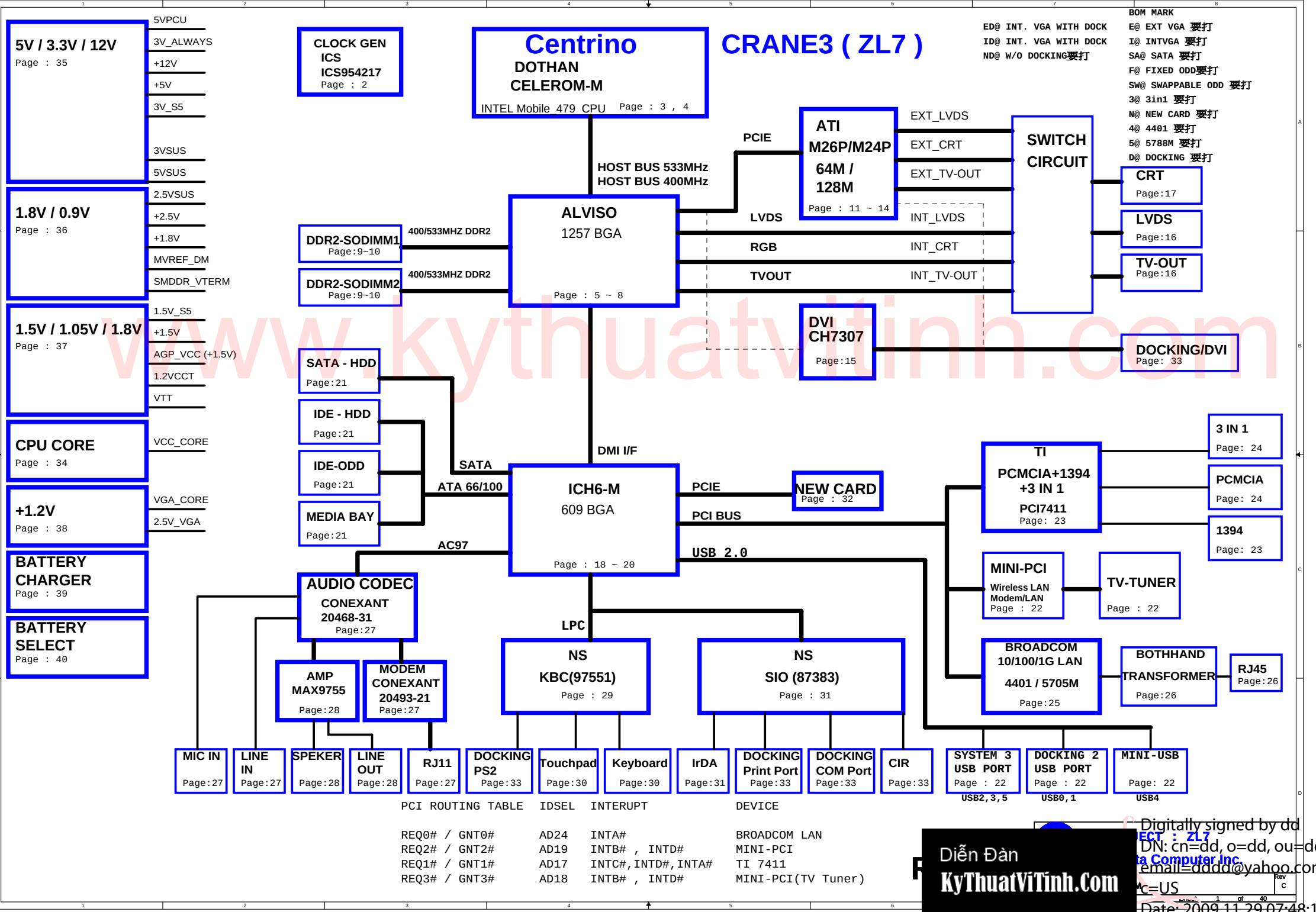
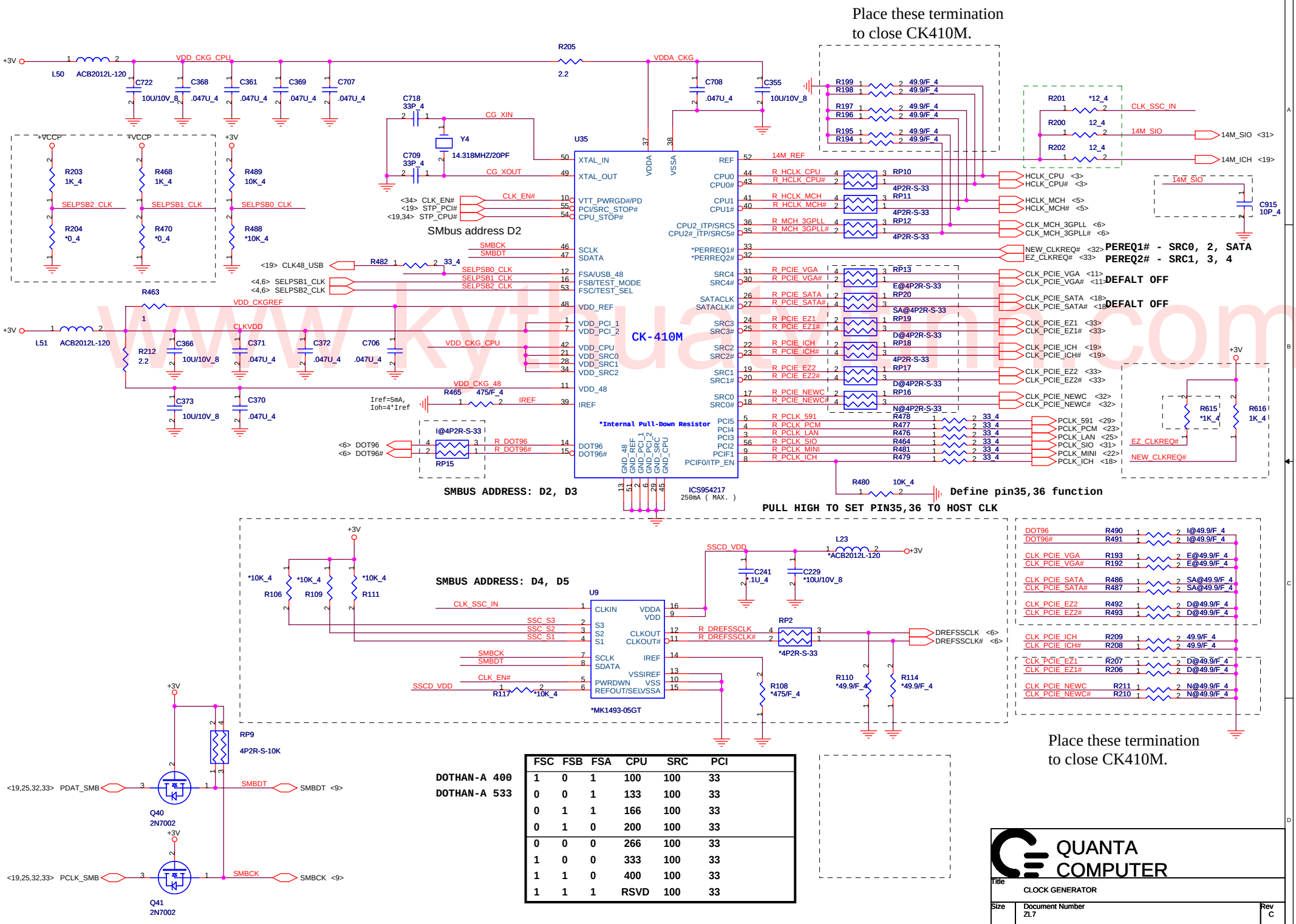
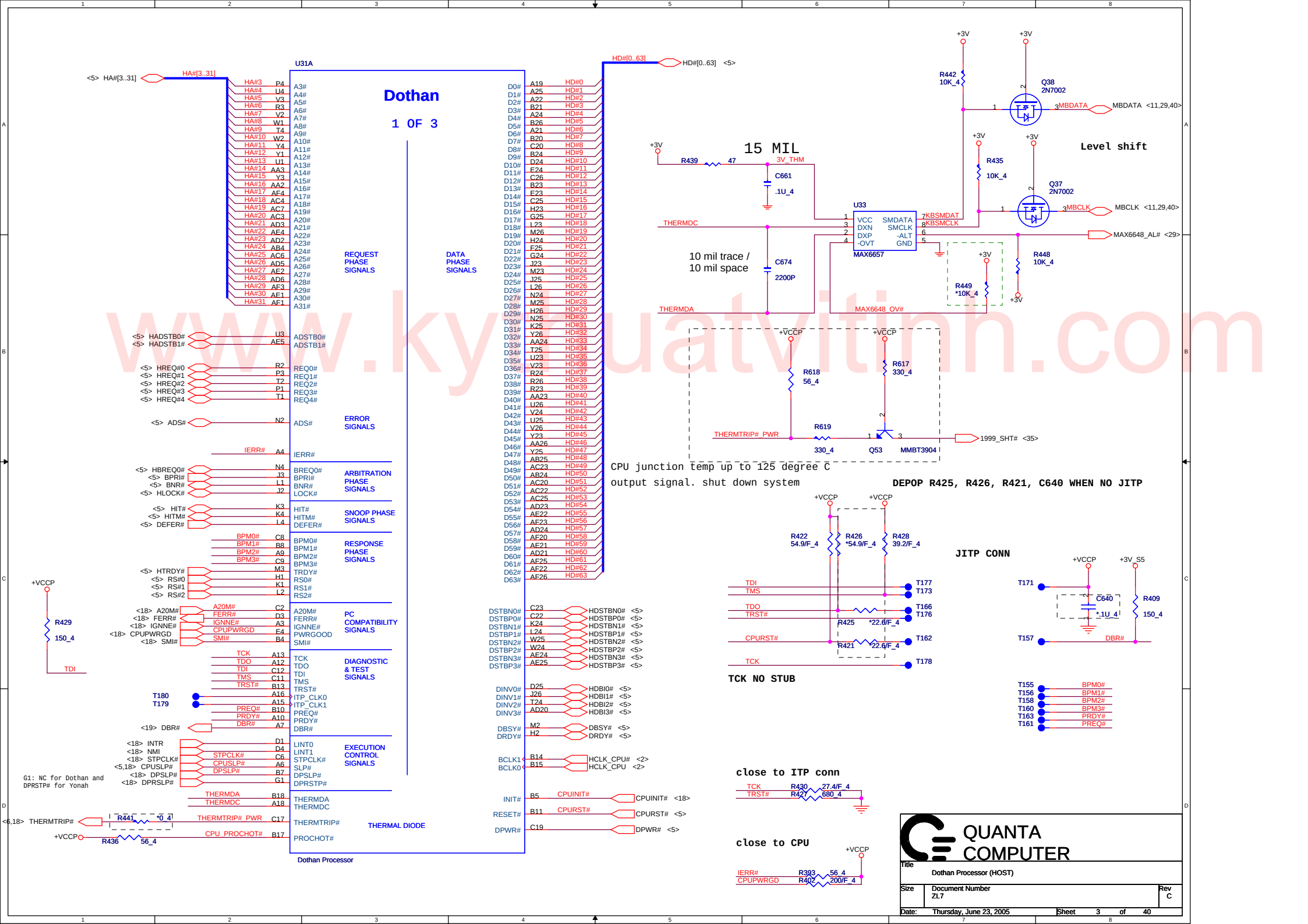


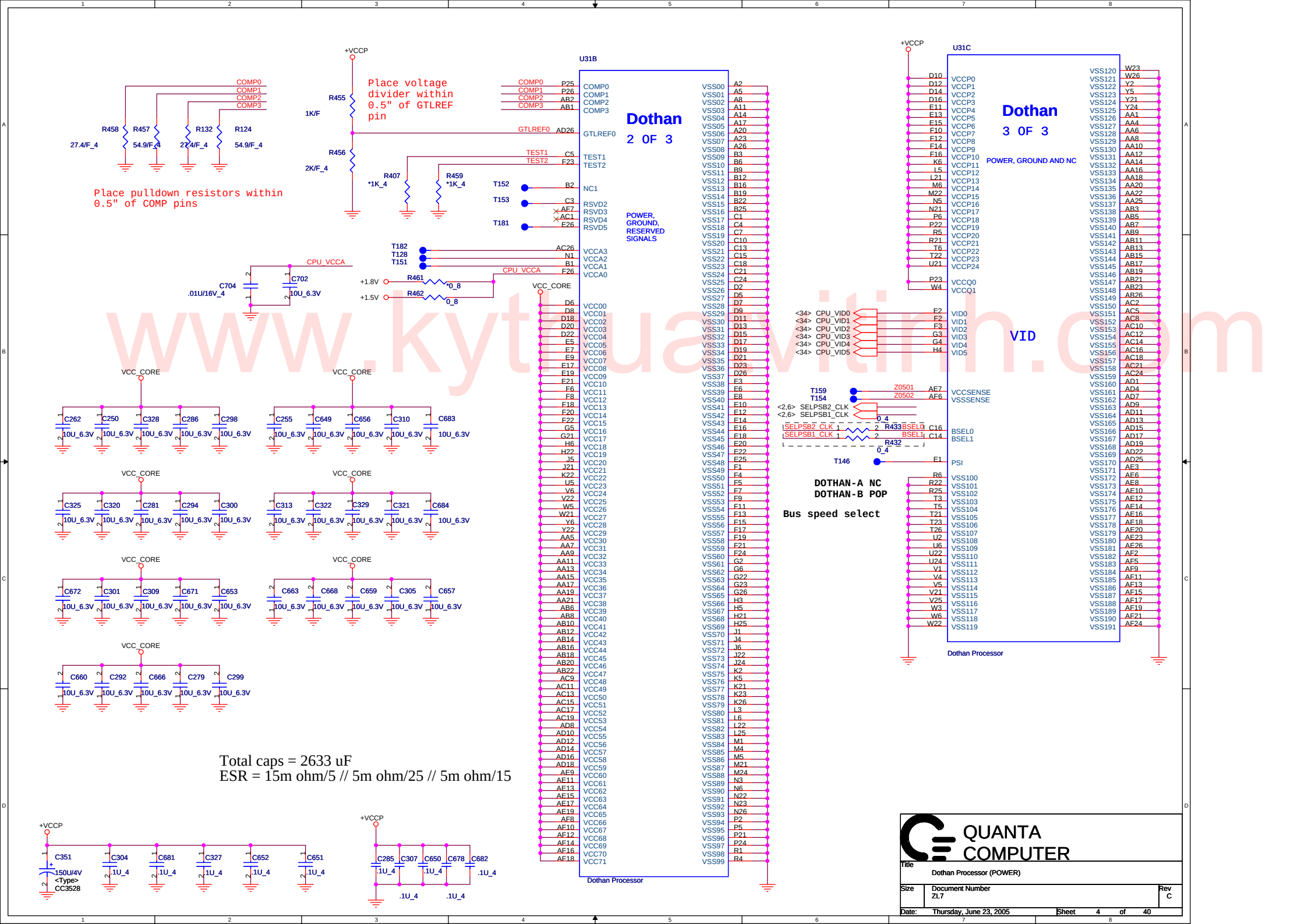
PCI ROUTING TABLE IDSEL INTERUPT DEVICE

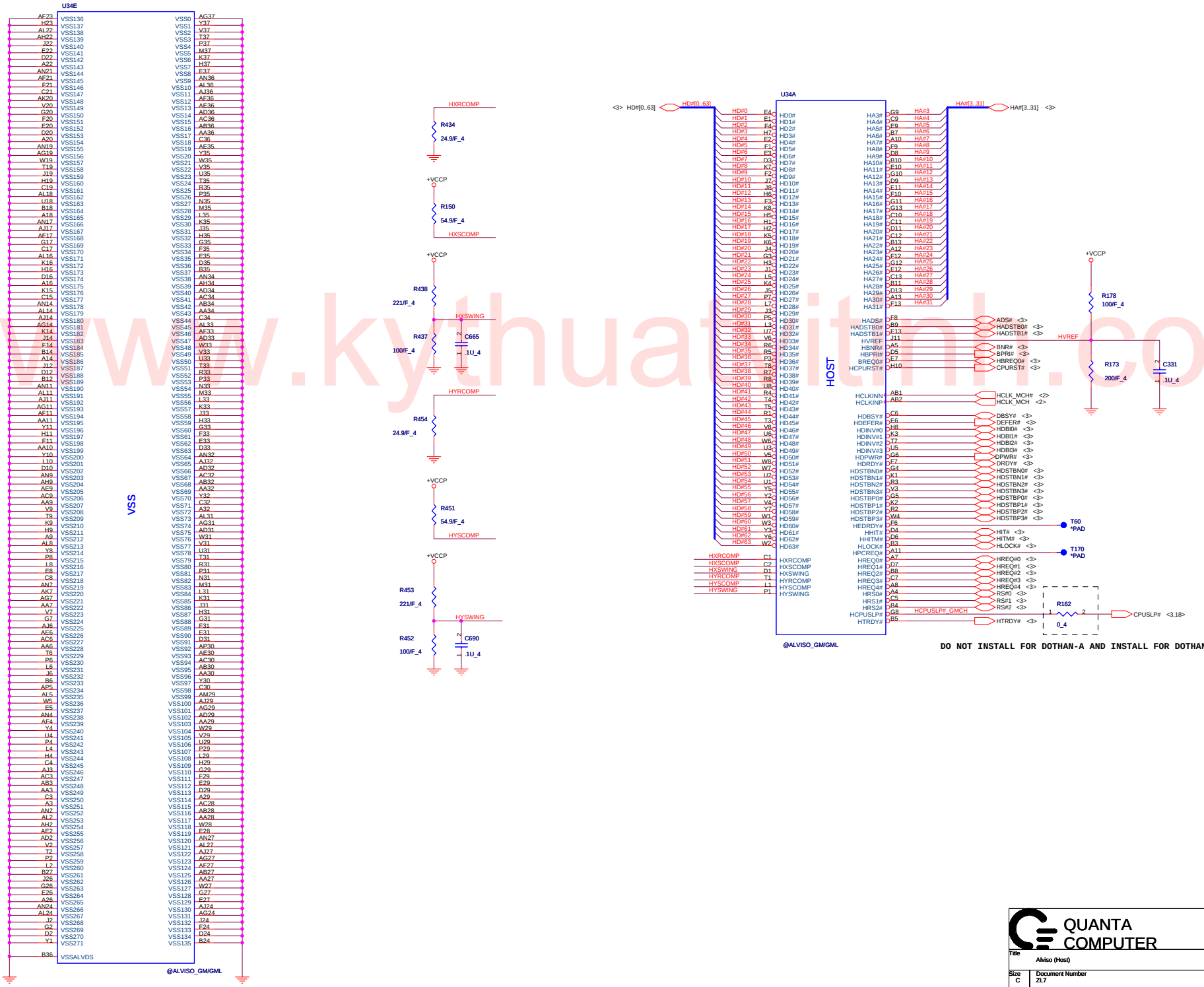
REQ0# / GNT0#	AD24	INTA#	BROADCOM LAN
REQ2# / GNT2#	AD19	INTB# , INTD#	MINI-PCI
REQ1# / GNT1#	AD17	INTC#,INTD#,INTA#	TI 7411
REQ3# / GNT3#	AD18	INTB# , INTD#	MINI-PCI(TV Tuner)



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	RSVD	100	33


U31A
Dothan
1 OF 3
REQUEST PHASE SIGNALS
DATA PHASE SIGNALS
ERROR SIGNALS
ARBITRATION PHASE SIGNALS
SNOOP PHASE SIGNALS
RESPONSE PHASE SIGNALS
PC COMPATIBILITY SIGNALS
DIAGNOSTIC & TEST SIGNALS
EXECUTION CONTROL SIGNALS
THERMAL DIODE
Dothan Processor
15 MIL
10 mil trace / 10 mil space
Level shift
MAX6657
CPU junction temp up to 125 degree C
output signal. shut down system
DEPOP R425, R426, R421, C640 WHEN NO JITP
JITP CONN
TCK NO STUB
close to ITP conn
close to CPU
G1: NC for Dothan and DPRSTP# for Yonah
QUANTA COMPUTER
Dothan Processor (HOST)
Thursday, June 23, 2005





QUANTA COMPUTER

Title	Alviso (Host)	
Size C	Document Number ZL7	Rev C
Date: Thursday, June 23, 2005	Sheet 5 of 40	

CFG[0:2]=100 FOR FSB 533
CFG[0:2]=101 FOR FSB 400

CFG3 R168 *1K_4 FOR DDR533

U34C

DMI
<19> DMI_TXN0 AA31 DMIRXN0
<19> DMI_TXN1 AB35 DMIRXN1
<19> DMI_TXN2 AC31 DMIRXN2
<19> DMI_TXN3 AD35 DMIRXN3
<19> DMI_TXP0 Y31 DMIRXP0
<19> DMI_TXP1 AA35 DMIRXP1
<19> DMI_TXP2 AB31 DMIRXP2
<19> DMI_TXP3 AC35 DMIRXP3
<19> DMI_RXN0 AA33 DMITXN0
<19> DMI_RXN1 AB37 DMITXN1
<19> DMI_RXN2 AC33 DMITXN2
<19> DMI_RXN3 AD37 DMITXN3
<19> DMI_RXP0 Y33 DMITXP0
<19> DMI_RXP1 AA37 DMITXP1
<19> DMI_RXP2 AB33 DMITXP2
<19> DMI_RXP3 AC37 DMITXP3

DDR MUXING
<9> CLK_SDRAM0 AM33 SM_CK0
<9> CLK_SDRAM1 AL1 SM_CK1
T79 CLK_SDRAM2 AE11 SM_CK2
<9> CLK_SDRAM3 AJ34 SM_CK3
<9> CLK_SDRAM4 AF6 SM_CK4
T74 CLK_SDRAM5 AC10 SM_CK5
<9> CLK_SDRAM0# AN33 SM_CK0#
<9> CLK_SDRAM1# AK1 SM_CK1#
T78 CLK_SDRAM2# AE10 SM_CK2#
<9> CLK_SDRAM3# AJ33 SM_CK3#
<9> CLK_SDRAM4# AF5 SM_CK4#
T73 CLK_SDRAM5# AD10 SM_CK5#
<9,10> CKE0 AP21 SM_CKE0
<9,10> CKE1 AM21 SM_CKE1
<9,10> CKE2 AH21 SM_CKE2
<9,10> CKE3 AK21 SM_CKE3
<9,10> SM_CS0# AN16 SM_CS0#
<9,10> SM_CS1# AM14 SM_CS1#
<9,10> SM_CS2# AH15 SM_CS2#
<9,10> SM_CS3# AG16 SM_CS3#
M_OCDCOMP0 AE22 SM_OCDCOMP0
M_OCDCOMP1 AF16 SM_OCDCOMP1
<9,10> M_ODT0 AP14 SM_ODT0
<9,10> M_ODT1 AL15 SM_ODT1
<9,10> M_ODT2 AM11 SM_ODT2
<9,10> M_ODT3 AN10 SM_ODT3
M_RCOMPN AK10 SMRCOMPN
M_RCOMPP AK11 SMRCOMPP
+0.9VSUS AF37 SMVREF0
AD1 SMVREF1
SMXSLEW AE27 SMXSLEWIN
AE28 SMXSLEWOUT
SMYSLEW AF9 SMYSLEWIN
AE10 SMYSLEWOUT

CFG/RSVD
G16 CFG0 R174 4.7K_4 +VCCP
H13 CFG1 R164 1K_4 SELPSB1_CLK <2,4>
G14 CFG2 R167 1K_4 SELPSB2_CLK <2,4>
F16 CFG3 T56
F15 CFG4
G15 CFG5 R166 *1K_4
E16 CFG6 R157 1K_4
D17 CFG7 T50
J16 CFG8 T70
D15 CFG9 R153 *1K_4
E15 CFG10 T58
D14 CFG11 R161 1K_4
E14 CFG12 T52
H12 CFG13 T63
C14 CFG14 T49
H15 CFG15 T72
J15 CFG16 T69
H14 CFG17 T67
G22 CFG18 T66
G23 CFG19 T59
D23 CFG20 T55
G25 T64
G24 T68
J17 T71
A31 T169
A30 T168
D26 T54
D25 T51
RSVD21
RSVD22
RSVD23
RSVD24
RSVD25
RSVD26
RSVD27

CFG5 Low=DMIx2
High=DMIx4
CFG6 Low=DDR2
High=DDR
CFG9 Low=REVERSE LANE
High=NORMAL
CFG11 FOR CPU533

CFG[17:3] have internal pullup resistors.
CFG[19:18] have internal pulldown resistors

PM
J23 PM_EXTTS#0 PM_BMBUSY# <19>
J21 PM_EXTTS#1
H22 BM_BUSY#
EXT_TS0#
EXT_TS1#
F5 THRMTRIP# R177 0_4 THERMTRIP# <3,18>
AD30 PWROK IMVP_PWRGD <19,34>
AE29 RSTIN# R46 100 PLTRST# <11,15,18,21,29,31,32,33>

LCK
A24 DREF_CLKN DOT96#
A23 DREF_CLKP DOT96
C37 DREF_SSCLKN DREFSSCLK#
D37 DREF_SSCLKP DREFSSCLK

NC
AP37 NC1 TP_NC1 T187
AN37 NC2 TP_NC2 T183
AP36 NC3 TP_NC3 T186
AP2 NC4 TP_NC4 T185
AP1 NC5 TP_NC5 T184
AN1 NC6 TP_NC6 T188
B1 NC7 TP_NC7 T175
A2 NC8 TP_NC8 T167
B37 NC9 TP_NC9 T172
A36 NC10
A37 NC11

@ALVISO_GM/GML

Route as short as possible.
Depop for SMVREF over current issue
It's point to point, 55ohm trace, keep as short as possible.

R186 *40.2/F_4
R184 *40.2/F_4
+1.8VSUS
R190 80.6/F_4
M_RCOMPN
M_RCOMPP
R188 80.6/F_4
+2.5V
R171 10K_4 PM_EXTTS#0
R170 10K_4 PM_EXTTS#1

R147 150/F_4 INT_TV_C/R
R148 150/F_4 INT_TV_COMP
R151 150/F_4 INT_TV_Y/G
R143 150/F_4 INT_VGA_RED
R152 150/F_4 INT_VGA_GRN
R159 150/F_4 INT_VGA_BLU

<11,16> TXLCLKOUT- I@4P2R-S-0 RN110 INT_TXLCLKOUT-
<11,16> TXLCLKOUT+ I@4P2R-S-0 RN9 INT_TXLCLKOUT+
<11,16> TXUCLKOUT- INT_TXUCLKOUT-
<11,16> TXUCLKOUT+ INT_TXUCLKOUT+
<11,16> TXLOUT0- I@4P2R-S-0 RN107 INT_TXLOUT0-
<11,16> TXLOUT0+ INT_TXLOUT0+
<11,16> TXLOUT1- I@4P2R-S-0 RN108 INT_TXLOUT1-
<11,16> TXLOUT1+ INT_TXLOUT1+
<11,16> TXLOUT2- I@4P2R-S-0 RN109 INT_TXLOUT2-
<11,16> TXLOUT2+ INT_TXLOUT2+
<11,16> TXUOUT0- I@4P2R-S-0 RN12 INT_TXUOUT0-
<11,16> TXUOUT0+ INT_TXUOUT0+
<11,16> TXUOUT1- I@4P2R-S-0 RN11 INT_TXUOUT1-
<11,16> TXUOUT1+ INT_TXUOUT1+
<11,16> TXUOUT2- I@4P2R-S-0 RN10 INT_TXUOUT2-
<11,16> TXUOUT2+ INT_TXUOUT2+
<11,16> DISP_ON DISP_ON I@0_4 R134 INT_DISP_ON
<11,16> BLON BLON I@0_4 R139 INT_BLON

<11> GMCHEXP_TXP[0..15] GMCHEXP_TXP[0..15]
<11> GMCHEXP_TXN[0..15] GMCHEXP_TXN[0..15]
<11,15> GMCHEXP_RXP[0..15] GMCHEXP_RXP[0..15]
<11,15> GMCHEXP_RXN[0..15] GMCHEXP_RXN[0..15]

U34F

MISC
<15> SDVO_CTRLDATA H24 SDVOCTRL_DATA
<15> SDVO_CTRLCLK H25 SDVOCTRL_CLK
<2> CLK_MCH_3GPLL# AB29 GCLKN
<2> CLK_MCH_3GPLL AC29 GCLKP

TV
<16> INT_TV_COMP INT_TV_COMP A15 TVDAC_A
<16> INT_TV_Y/G INT_TV_Y/G C16 TVDAC_B
<16> INT_TV_C/R INT_TV_C/R A17 TVDAC_C
TV_REFSET J18 TV_REFSET
B15 TV_IRTNA
R169 4.99K/F B16 TV_IRTNB
B17 TV_IRTNC

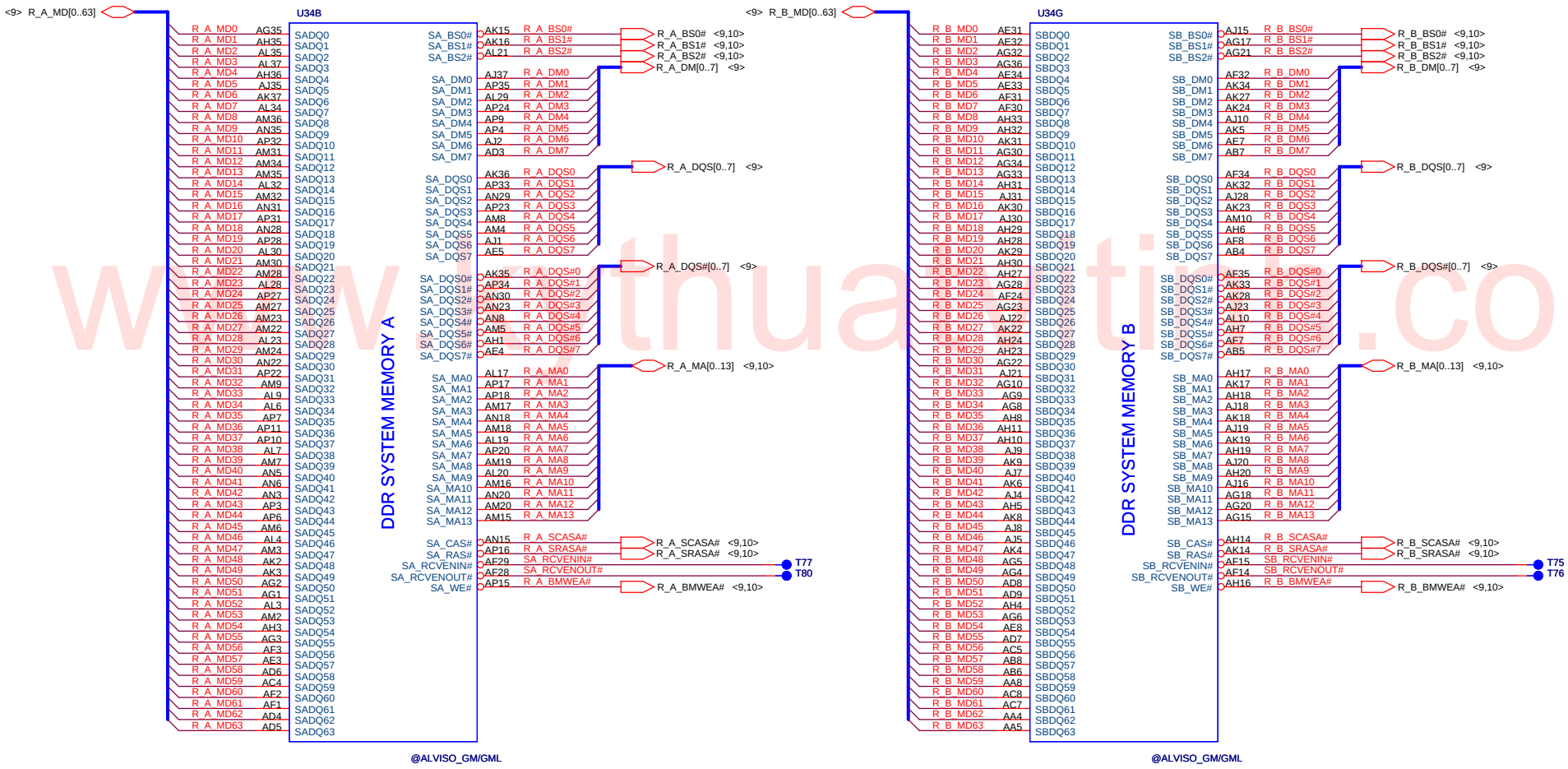
VGA
<17> INT_DDCCLK E24 DDCCLK
<17> INT_DDCDAT E23 DDCDATA
<17> INT_VGA_BLU E21 BLUE
D21 BLUE#
<17> INT_VGA_GRN C20 GREEN
B20 GREEN#
<17> INT_VGA_RED A19 RED
B19 RED#
<17> INT_VSYNC H21 VSYNC
<17> INT_HSYNC G21 HSYNC
REFSET J20 REFSET
R176 255/F_4

LVDS
T57
INT_BLON E25 LBKLT_CTRL
F25 LBKLT_EN
T47 C23 LCTLA_CLK
T48 C22 LCTLB_DATA
<16> I_EDIDCLK F23 LDDC_CLK
<16> I_EDIDDATA INT_DISP_ON F22 LDDC_DATA
F26 LVDD_EN
R156 1.5K/F C33 LIBG
T53 C31 LVBG
T62 F28 LVREFH
T61 F27 LVREFL
INT_TXLCLKOUT- B30 LACLKN
INT_TXLCLKOUT+ B29 LACLKP
INT_TXUCLKOUT- C25 LBCLKN
INT_TXUCLKOUT+ C24 LBCLKP
INT_TXLOUT0- B34 LADATAN0
INT_TXLOUT1- B33 LADATAN1
INT_TXLOUT2- B32 LADATAN2
INT_TXLOUT0+ A34 LADATAP0
INT_TXLOUT1+ A33 LADATAP1
INT_TXLOUT2+ B31 LADATAP2
INT_TXUOUT0- C29 LBDATAN0
INT_TXUOUT1- D28 LBDATAN1
INT_TXUOUT2- C27 LBDATAN2
INT_TXUOUT0+ C28 LBDATAP0
INT_TXUOUT1+ D27 LBDATAP1
INT_TXUOUT2+ C26 LBDATAP2

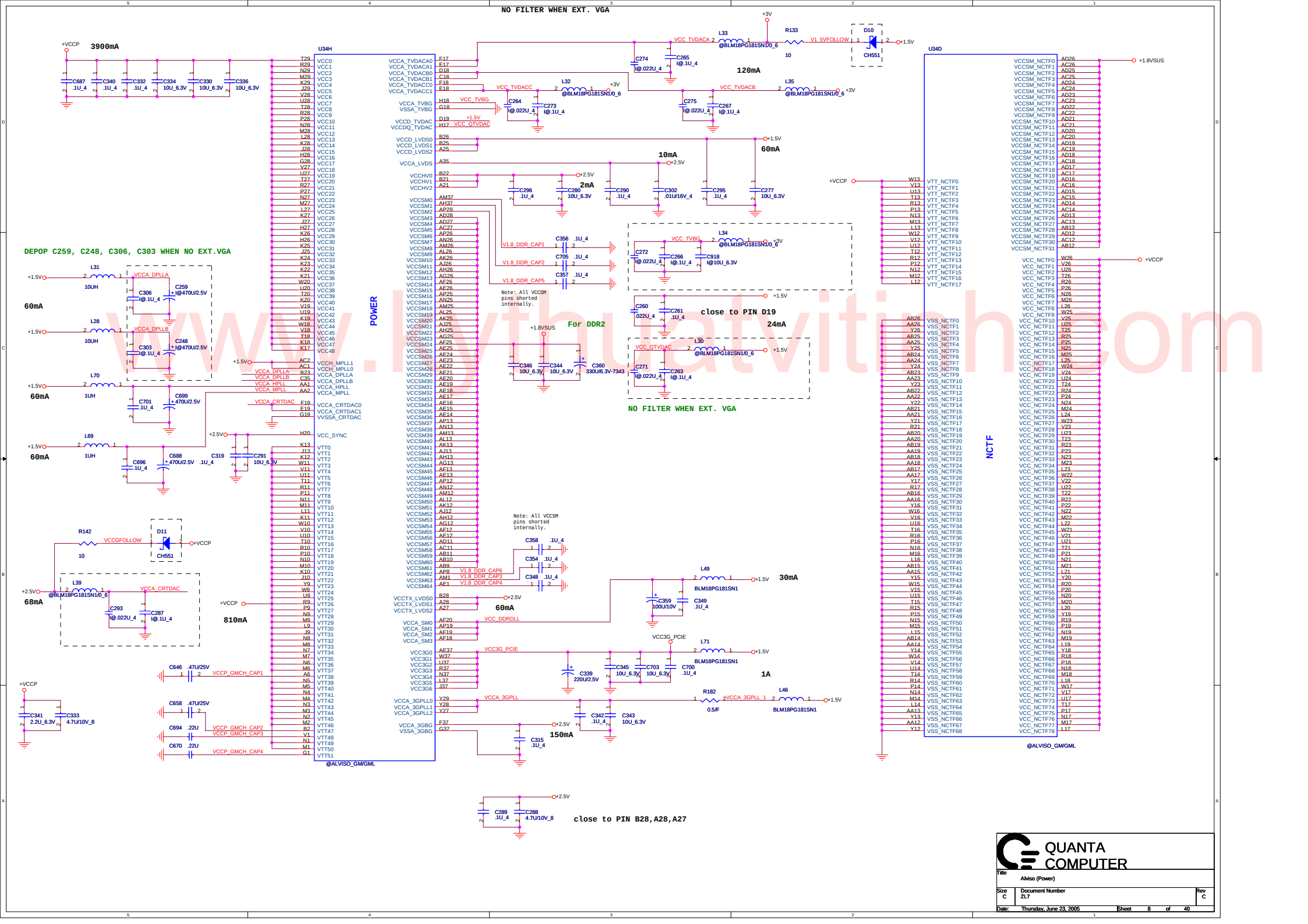
PCI-EXPRESS GRAPHICS
VCC3G_PCIE
R158 24.9/F_4
EXP_COMPI D36
EXP_ICOMPO D34
EXP_RXN0 E30 GMCHEXP_RXN0
EXP_RXN1 F34 GMCHEXP_RXN1
EXP_RXN2 G30 GMCHEXP_RXN2
EXP_RXN3 H34 GMCHEXP_RXN3
EXP_RXN4 J30 GMCHEXP_RXN4
EXP_RXN5 K34 GMCHEXP_RXN5
EXP_RXN6 L30 GMCHEXP_RXN6
EXP_RXN7 M34 GMCHEXP_RXN7
EXP_RXN8 N30 GMCHEXP_RXN8
EXP_RXN9 P34 GMCHEXP_RXN9
EXP_RXN10 R30 GMCHEXP_RXN10
EXP_RXN11 T34 GMCHEXP_RXN11
EXP_RXN12 U30 GMCHEXP_RXN12
EXP_RXN13 V34 GMCHEXP_RXN13
EXP_RXN14 W30 GMCHEXP_RXN14
EXP_RXN15 Y34 GMCHEXP_RXN15
EXP_RXP0 D30 GMCHEXP_RXP0
EXP_RXP1 E34 GMCHEXP_RXP1
EXP_RXP2 F30 GMCHEXP_RXP2
EXP_RXP3 G34 GMCHEXP_RXP3
EXP_RXP4 H30 GMCHEXP_RXP4
EXP_RXP5 J34 GMCHEXP_RXP5
EXP_RXP6 K30 GMCHEXP_RXP6
EXP_RXP7 L34 GMCHEXP_RXP7
EXP_RXP8 M30 GMCHEXP_RXP8
EXP_RXP9 N34 GMCHEXP_RXP9
EXP_RXP10 P30 GMCHEXP_RXP10
EXP_RXP11 R34 GMCHEXP_RXP11
EXP_RXP12 T30 GMCHEXP_RXP12
EXP_RXP13 U34 GMCHEXP_RXP13
EXP_RXP14 V30 GMCHEXP_RXP14
EXP_RXP15 W34 GMCHEXP_RXP15
EXP_TXN0 E32 CGMCHEXP_TXN0 E@.1U_4 C626 GMCHEXP_TXN0
EXP_TXN1 F36 CGMCHEXP_TXN1 E@.1U_4 C667 GMCHEXP_TXN1
EXP_TXN2 G32 CGMCHEXP_TXN2 E@.1U_4 C619 GMCHEXP_TXN2
EXP_TXN3 H36 CGMCHEXP_TXN3 E@.1U_4 C673 GMCHEXP_TXN3
EXP_TXN4 J32 CGMCHEXP_TXN4 E@.1U_4 C613 GMCHEXP_TXN4
EXP_TXN5 K36 CGMCHEXP_TXN5 E@.1U_4 C685 GMCHEXP_TXN5
EXP_TXN6 L32 CGMCHEXP_TXN6 E@.1U_4 C605 GMCHEXP_TXN6
EXP_TXN7 M36 CGMCHEXP_TXN7 E@.1U_4 C689 GMCHEXP_TXN7
EXP_TXN8 N32 CGMCHEXP_TXN8 E@.1U_4 C599 GMCHEXP_TXN8
EXP_TXN9 P36 CGMCHEXP_TXN9 E@.1U_4 C692 GMCHEXP_TXN9
EXP_TXN10 R32 CGMCHEXP_TXN10 E@.1U_4 C594 GMCHEXP_TXN10
EXP_TXN11 T36 CGMCHEXP_TXN11 E@.1U_4 C695 GMCHEXP_TXN11
EXP_TXN12 U32 CGMCHEXP_TXN12 E@.1U_4 C592 GMCHEXP_TXN12
EXP_TXN13 V36 CGMCHEXP_TXN13 E@.1U_4 C698 GMCHEXP_TXN13
EXP_TXN14 W32 CGMCHEXP_TXN14 E@.1U_4 C590 GMCHEXP_TXN14
EXP_TXN15 Y36 CGMCHEXP_TXN15 E@.1U_4 C587 GMCHEXP_TXN15
EXP_TXP0 D32 CGMCHEXP_TXP0 E@.1U_4 C628 GMCHEXP_TXP0
EXP_TXP1 E36 CGMCHEXP_TXP1 E@.1U_4 C664 GMCHEXP_TXP1
EXP_TXP2 F32 CGMCHEXP_TXP2 E@.1U_4 C624 GMCHEXP_TXP2
EXP_TXP3 G36 CGMCHEXP_TXP3 E@.1U_4 C669 GMCHEXP_TXP3
EXP_TXP4 H32 CGMCHEXP_TXP4 E@.1U_4 C616 GMCHEXP_TXP4
EXP_TXP5 J36 CGMCHEXP_TXP5 E@.1U_4 C679 GMCHEXP_TXP5
EXP_TXP6 K32 CGMCHEXP_TXP6 E@.1U_4 C608 GMCHEXP_TXP6
EXP_TXP7 L36 CGMCHEXP_TXP7 E@.1U_4 C686 GMCHEXP_TXP7
EXP_TXP8 M32 CGMCHEXP_TXP8 E@.1U_4 C601 GMCHEXP_TXP8
EXP_TXP9 N36 CGMCHEXP_TXP9 E@.1U_4 C691 GMCHEXP_TXP9
EXP_TXP10 P32 CGMCHEXP_TXP10 E@.1U_4 C595 GMCHEXP_TXP10
EXP_TXP11 R36 CGMCHEXP_TXP11 E@.1U_4 C693 GMCHEXP_TXP11
EXP_TXP12 T32 CGMCHEXP_TXP12 E@.1U_4 C593 GMCHEXP_TXP12
EXP_TXP13 U36 CGMCHEXP_TXP13 E@.1U_4 C697 GMCHEXP_TXP13
EXP_TXP14 V32 CGMCHEXP_TXP14 E@.1U_4 C591 GMCHEXP_TXP14
EXP_TXP15 W36 CGMCHEXP_TXP15 E@.1U_4 C588 GMCHEXP_TXP15

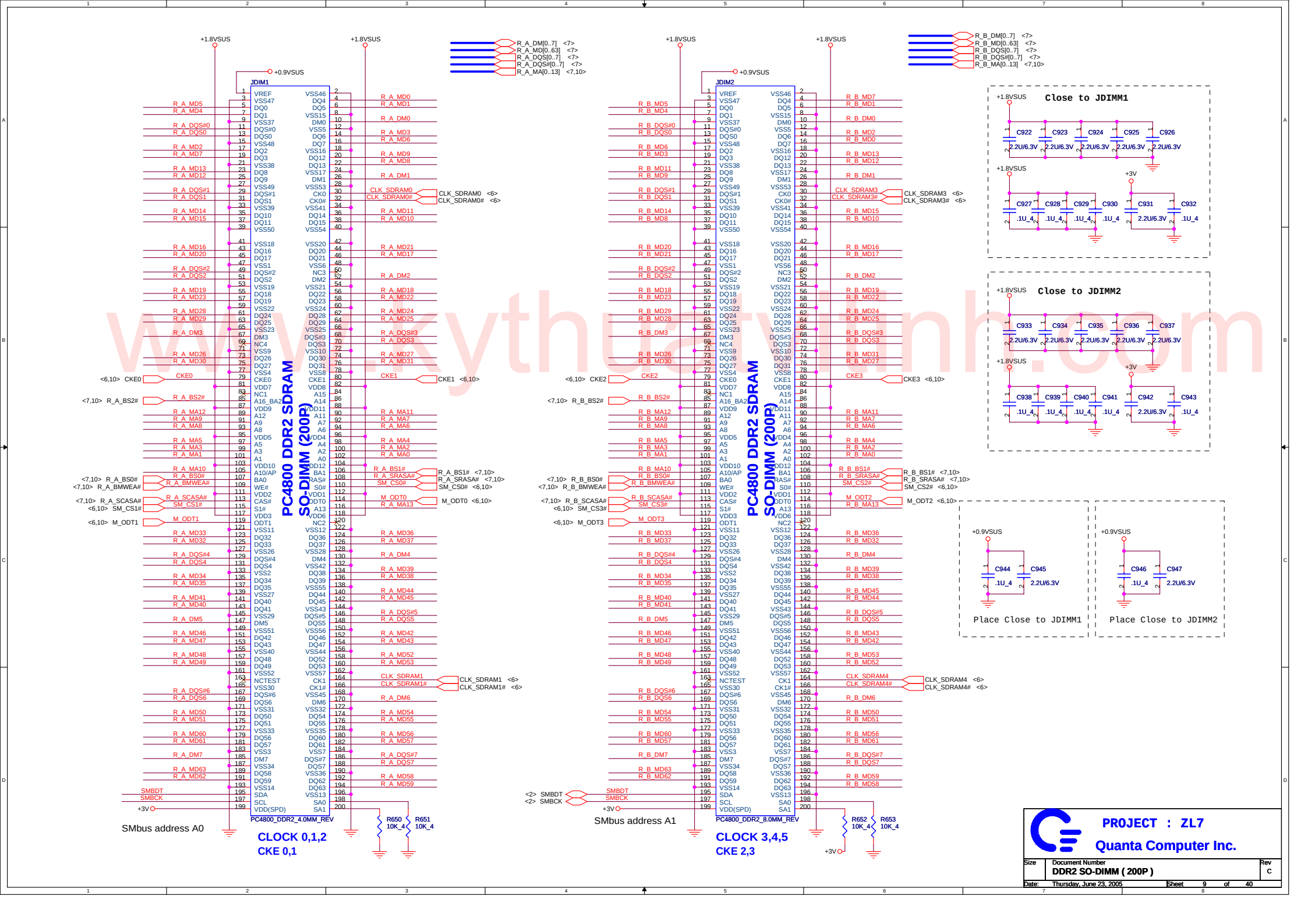
@ALVISO_GM/GML
C629 ID@.1U_4
CGMCHEXP_TXP0 SDVOB_R+ SDVOB_R+ <15>
C627 ID@.1U_4
CGMCHEXP_TXN0 SDVOB_R- SDVOB_R- <15>
C308 ID@.1U_4
CGMCHEXP_TXP1 SDVOB_G+ SDVOB_G+ <15>
C312 ID@.1U_4
CGMCHEXP_TXN1 SDVOB_G- SDVOB_G- <15>
C625 ID@.1U_4
CGMCHEXP_TXP2 SDVOB_B+ SDVOB_B+ <15>
C620 ID@.1U_4
CGMCHEXP_TXN2 SDVOB_B- SDVOB_B- <15>
C318 ID@.1U_4
CGMCHEXP_TXP3 SDVOB_CLK+ SDVOB_CLK+ <15>
C323 ID@.1U_4
CGMCHEXP_TXN3 SDVOB_CLK- SDVOB_CLK- <15>

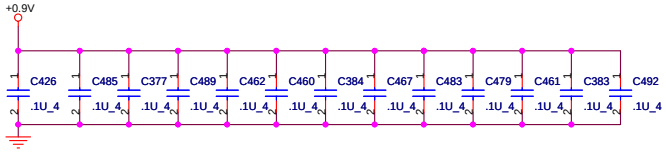
QUANTA COMPUTER
Title: Alviso (VGA,DMI)
Size: Custom Document Number: ZL7 Rev: C
Date: Thursday, June 23, 2005 Sheet 6 of 40



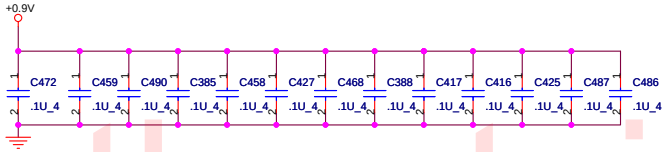
QUANTA COMPUTER		
Title: Alviso (DDR)		
Size: CustomZL7	Document Number	Rev: C
Date: Thursday, June 23, 2005	Sheet 7 of 40	


NO FILTER WHEN EXT. VGA
DEPOP C259, C248, C306, C303 WHEN NO EXT.VGA
For DDR2
NO FILTER WHEN EXT. VGA
close to PIN D19
close to PIN B28,A28,A27
POWER
NCTF
U34H
U34D
@ALVISO_GM/GML
3900mA
810mA
120mA
60mA
10mA
2mA
24mA
30mA
1A
150mA
68mA
VCC_TVDACA
VCC_TVDACC
VCC_TVDACB
VCC_TVBG
VCC_QTVDAC
VCC_DDRDLL
VCC3G_PCIE
VCCA_3GPLL
VCCA_CRTDAC
VCC_SYNC
VCCP_GMCH_CAP1
VCCP_GMCH_CAP2
VCCP_GMCH_CAP3
VCCP_GMCH_CAP4
V1_5VFOLLOW
VCCGFOLLOW
V1.8_DDR_CAP1
V1.8_DDR_CAP2
V1.8_DDR_CAP3
V1.8_DDR_CAP4
V1.8_DDR_CAP5
Note: All VCCSM pins shorted internally.
Note: All VCCSM pins shorted internally.
QUANTA COMPUTER
Title: Alviso (Power)
Size: C
Document Number: ZL7
Rev: C
Date: Thursday, June 23, 2005
Sheet 8 of 40


JDIM1
PC4800 DDR2 SDRAM SO-DIMM (200P)
PC4800_DDR2_4.0MM_REV
SMbus address A0
CLOCK 0,1,2
CKE 0,1
JDIM2
PC4800_DDR2_8.0MM_REV
SMbus address A1
CLOCK 3,4,5
CKE 2,3
Close to JDIMM1
Close to JDIMM2
Place Close to JDIMM1
Place Close to JDIMM2
PROJECT : ZL7
Quanta Computer Inc.
DDR2 SO-DIMM (200P)
Thursday, June 23, 2005



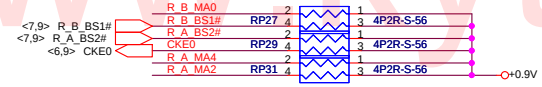
Layout note: Place one cap close to every 2 pullup resistors terminated to +0.9V

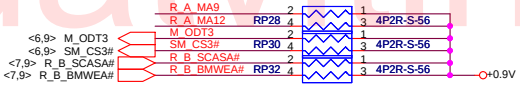


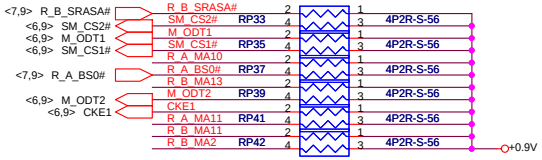
Layout note: Place one cap close to every 2 pullup resistors terminated to +0.9V

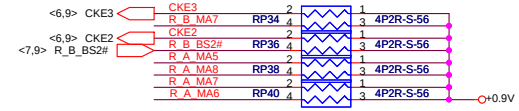
R_A_MA[0..13] <7,9>

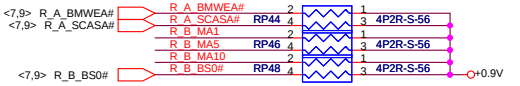
R_B_MA[0..13] <7,9>

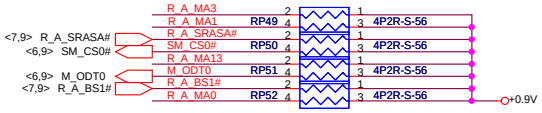












	PROJECT : ZL7 **Quanta Computer Inc.**	
Size	Document Number **DDR2 TERMINATION**	Rev C
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MEMORY CLOCK SPREAD SPECTRUM

SRS= 1 DOWN -2.5%
0 DOWN -1.8%
M DOWN -0.6%

Hi: 1.0V
Lo: 1.2V

Add buffer for PLTRST#

CHANGE TO CLK_OUT FOR M26

PLACE CLOSE TO ASIC

Change to 100ohm for ATI recommend

FOR EC CONTROL FAN

15 MIL

10 mil trace /
10 mil space

SLAVE ADDRESS: 9A

Close to pin ASIC

E@M24/M22/M26

PROJECT : ZL7
Quanta Computer Inc.

VGA HOST(ATI M26)

Size: Custom | Document Number | Rev: C

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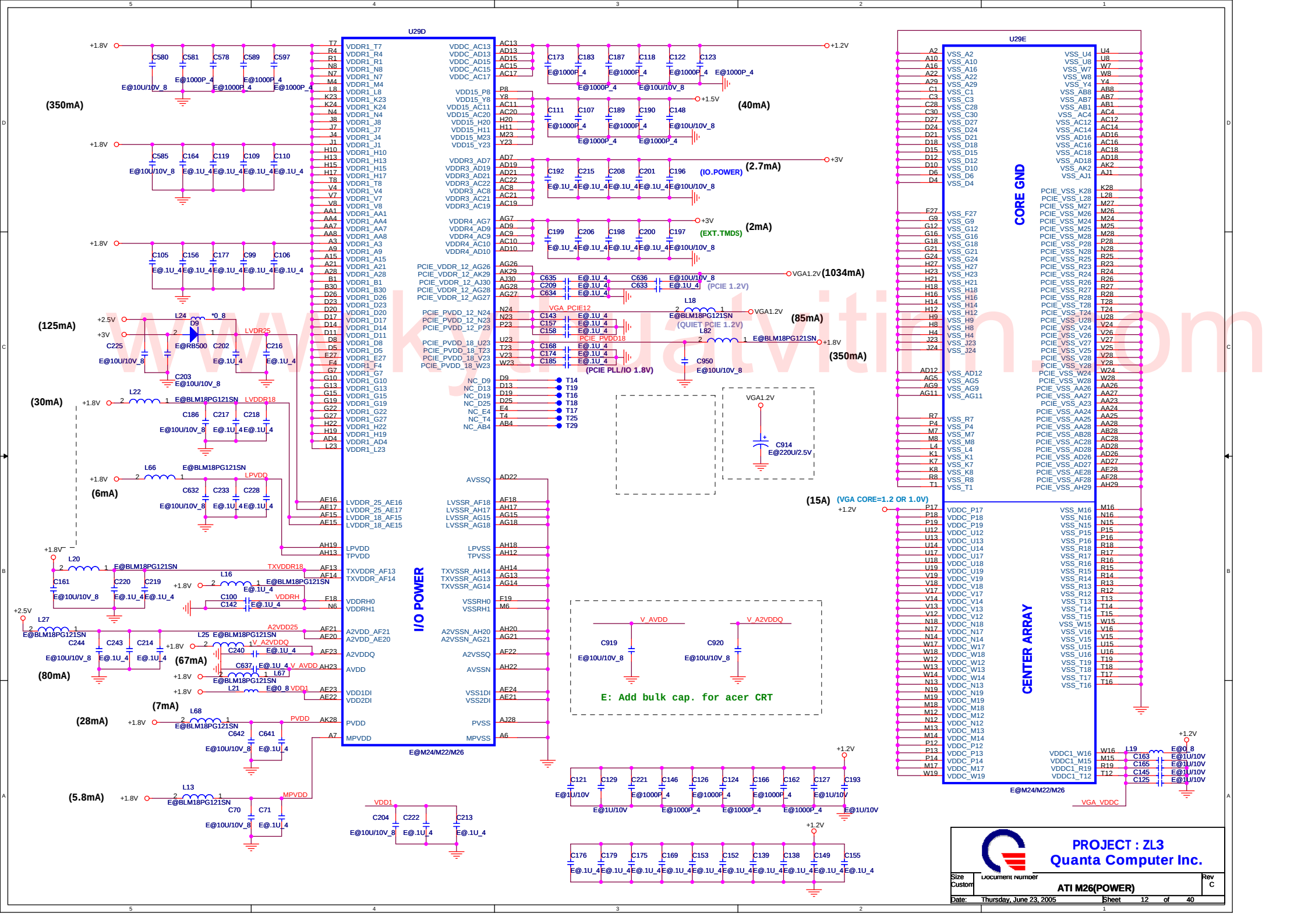
U29D
I/O POWER
E@M24/M22/M26
U29E
CORE GND
CENTER ARRAY
E@M24/M22/M26
(350mA)
(40mA)
(2.7mA)
(2mA)
(1034mA)
(85mA)
(350mA)
(125mA)
(30mA)
(6mA)
(15A) (VGA CORE=1.2 OR 1.0V)
(67mA)
(80mA)
(7mA)
(28mA)
(5.8mA)
(PCIE 1.2V)
(QUIET PCIE 1.2V)
(PCIE PLL/IO 1.8V)
(IO.POWER)
(EXT.TMDS)
E: Add bulk cap. for acer CRT
PROJECT : ZL3
Quanta Computer Inc.
ATI M26(POWER)
Size Custom
Document Number
Rev C
Date: Thursday, June 23, 2005
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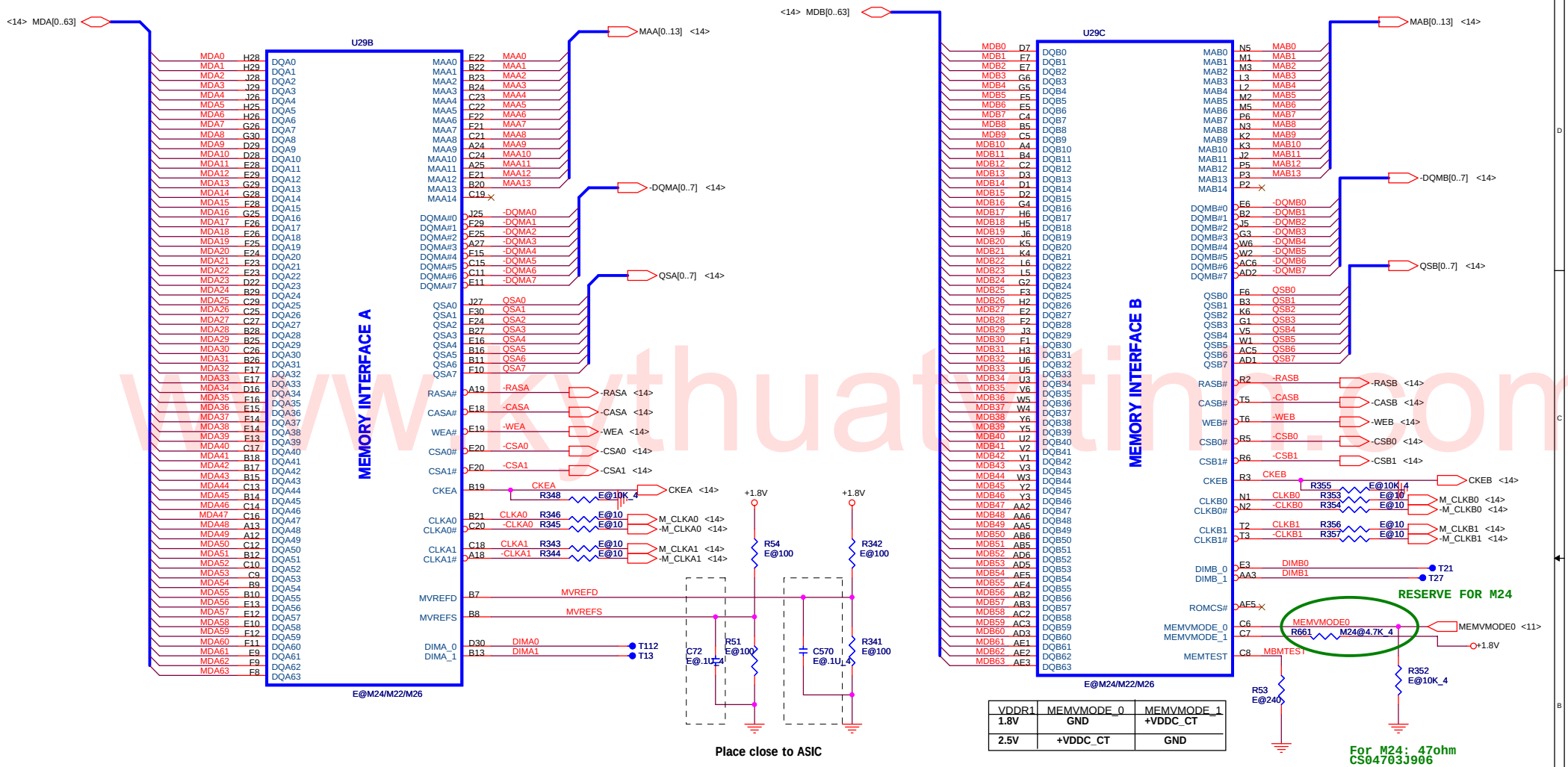
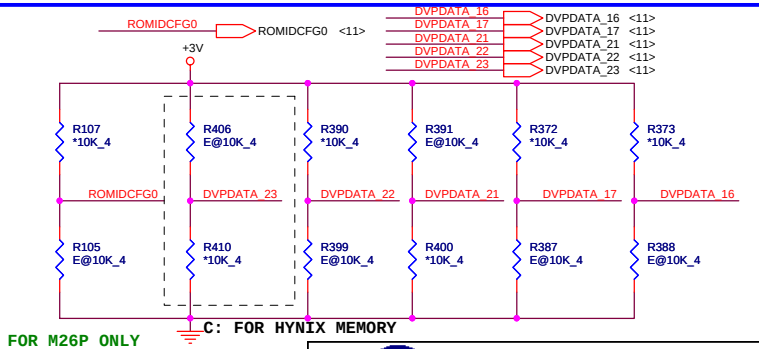


VDDR1	MEMVMODE_0	MEMVMODE_1
1.8V	GND	+VDDC_CT
2.5V	+VDDC_CT	GND

STRAPS PIN

GPIO_0	PCI-Express Current Calibration Bandgap Backup **0: use reference voltage from Bandgap** 1: use reference voltage from resistor divider
GPIO_1	PCI-Express PLL Calibration force enable **0: Disable PLL force calibration** 1: Enable PLL force calibration
GPIO_(3,2)	**00: PCI Express 1.0 mode** 01: RESERVED 10: PCI Express 1.0 mode 11: RESERVED
GPIO_4	Turn off PCI-Express impedance / strength calibration **0: enable** 1: disable
GPIO_5	Bypass PCI-Express PLL

GPIO_6	PCI-Express transmitter current compensation **0: Normal** 1: Inject extra current for output buffer switching
GPIO_8	Strap to set the debug muxes to bting out DEBUG signals even if registers are inaccessible
GPIO(9,13:11) INT P/D	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 MEM TYPE	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

PROJECT :ZL3
Quanta Computer Inc.

Size	Document Number	Rev
Custom	ATI M26 MEM/STRAPS PIN	C
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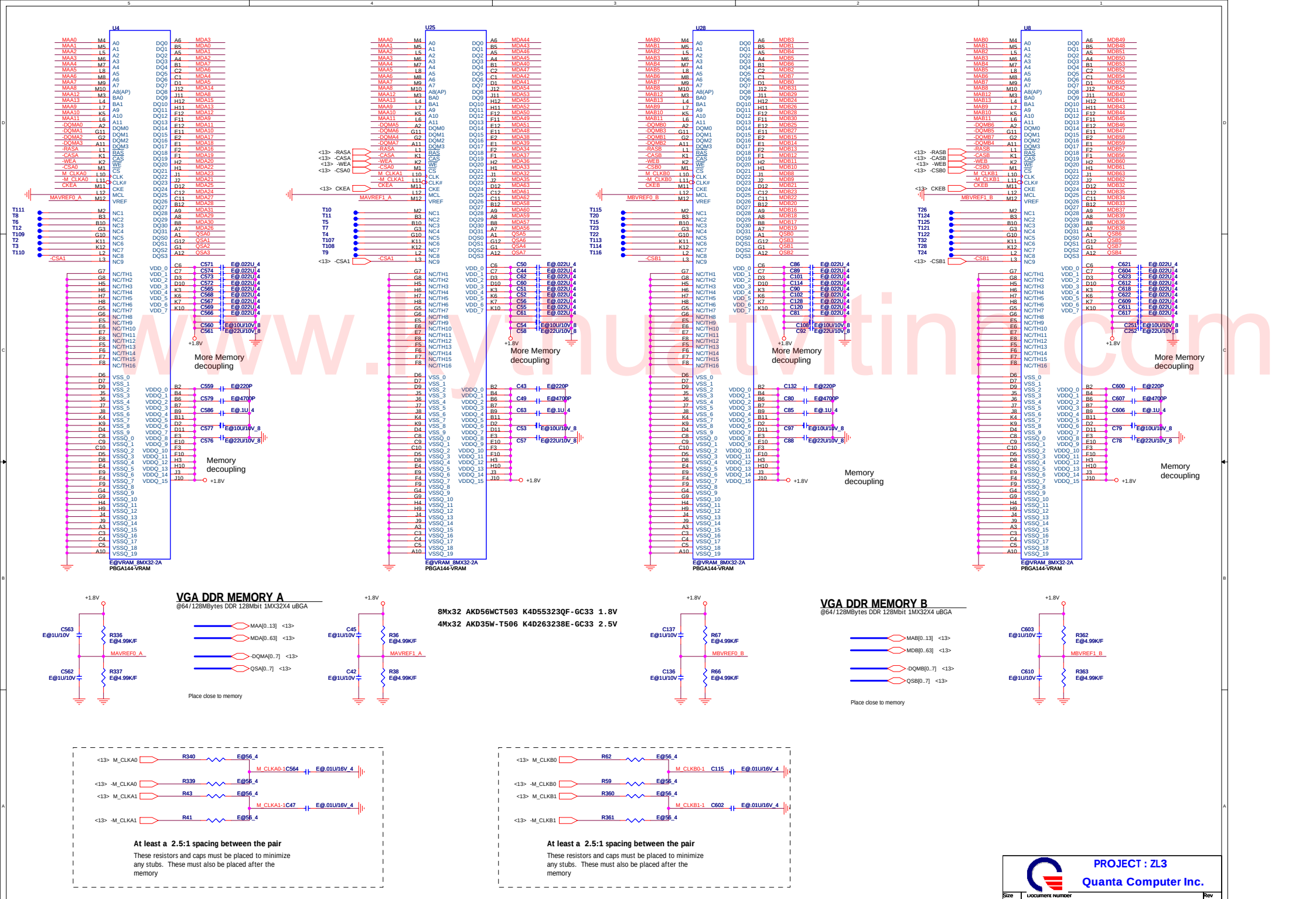
U4
U25
U28
U8
E@VRAM_8MX32-2A
PBGA144-VRAM
More Memory decoupling
Memory decoupling
+1.8V
VGA DDR MEMORY A
@64/128MBytes DDR 128Mbit 1MX32X4 uBGA
8Mx32 AKD56WCT503 K4D55323QF-GC33 1.8V
4Mx32 AKD35W-T506 K4D263238E-GC33 2.5V
VGA DDR MEMORY B
@64/128MBytes DDR 128Mbit 1MX32X4 uBGA
Place close to memory
At least a 2.5:1 spacing between the pair
These resistors and caps must be placed to minimize any stubs. These must also be placed after the memory
PROJECT : ZL3
Quanta Computer Inc.
VGA DDR VRAM-A CANNEL
Size C
Document Number
Rev C
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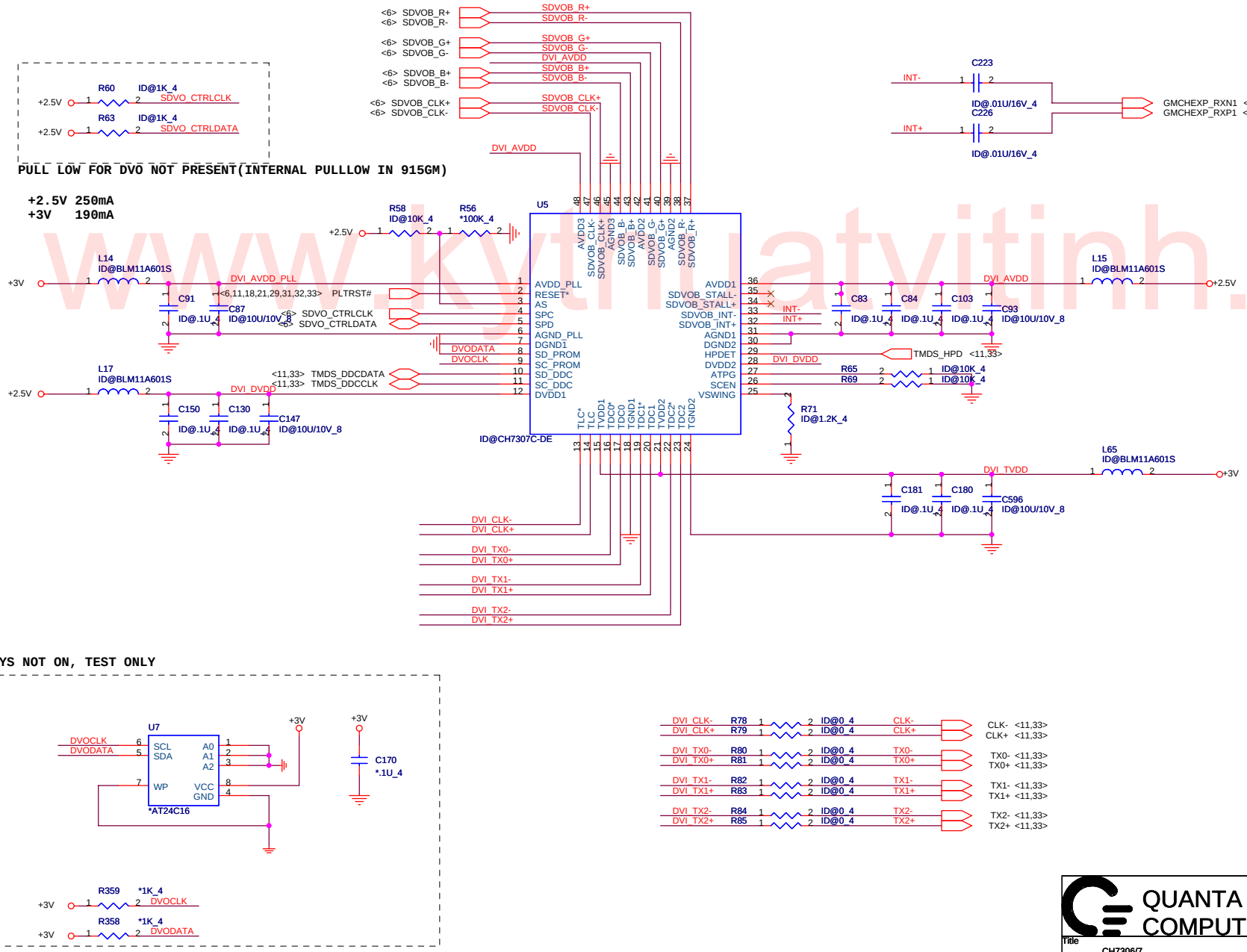
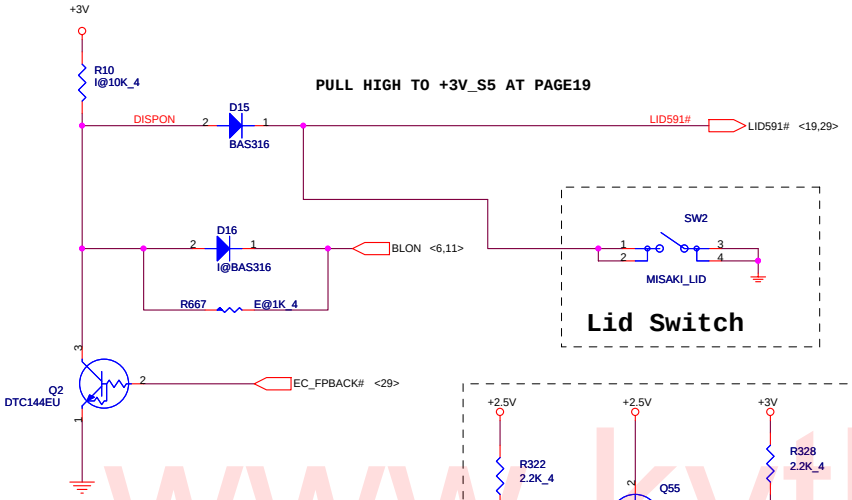
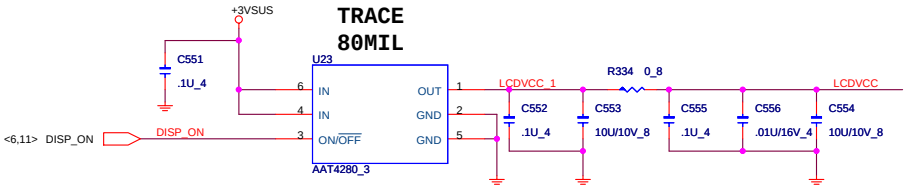
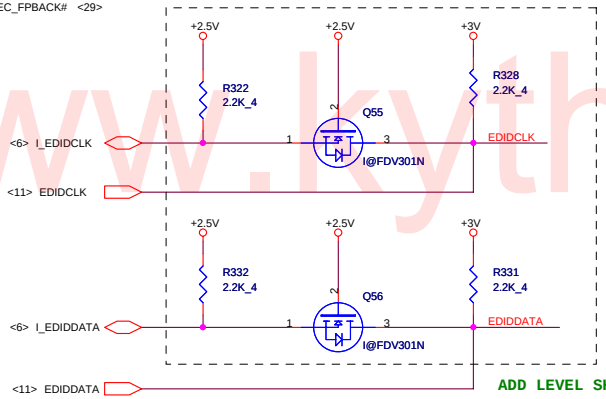
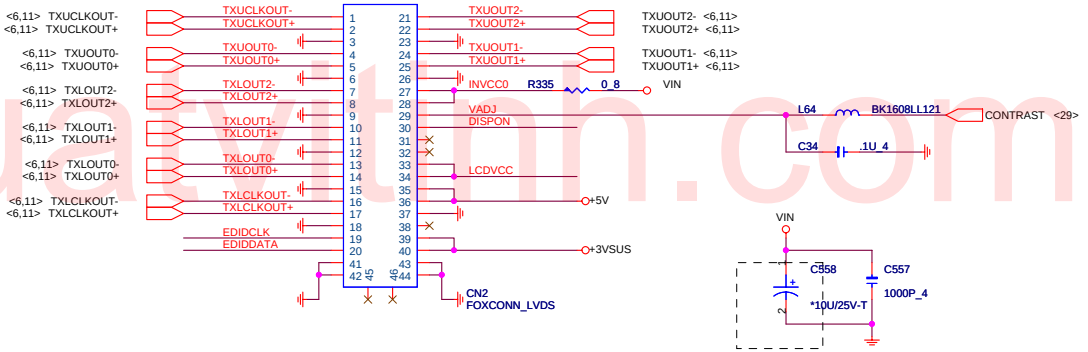


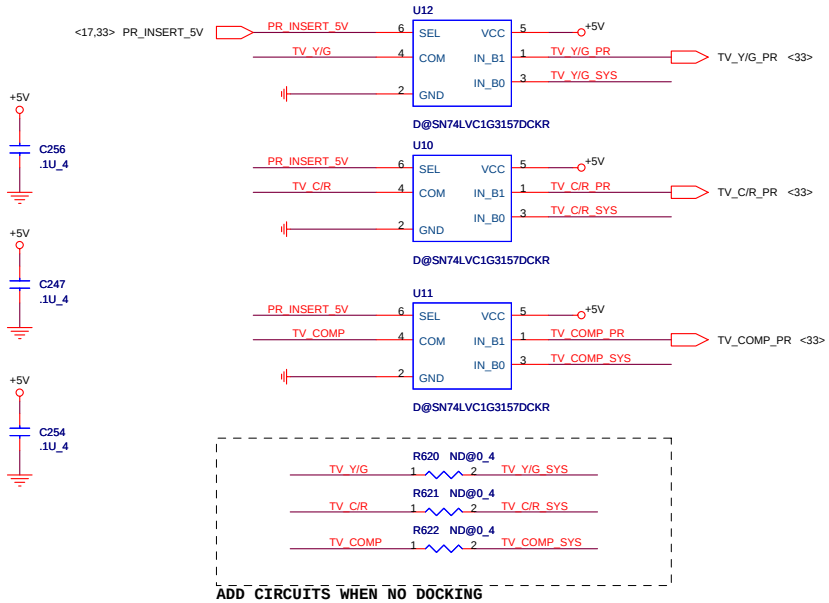




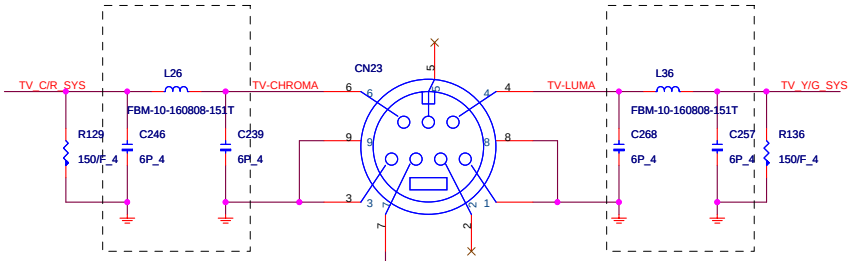


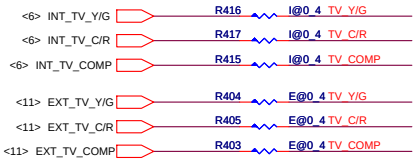
ADD LEVEL SHIFT FOR EDID
Change to FDV301 for Vgs issue





S-VIDEO





PROJECT : ZL7
Quanta Computer Inc.

Size	Document Number	Rev
	DVO CH7011A & RJ45-11 CON	C

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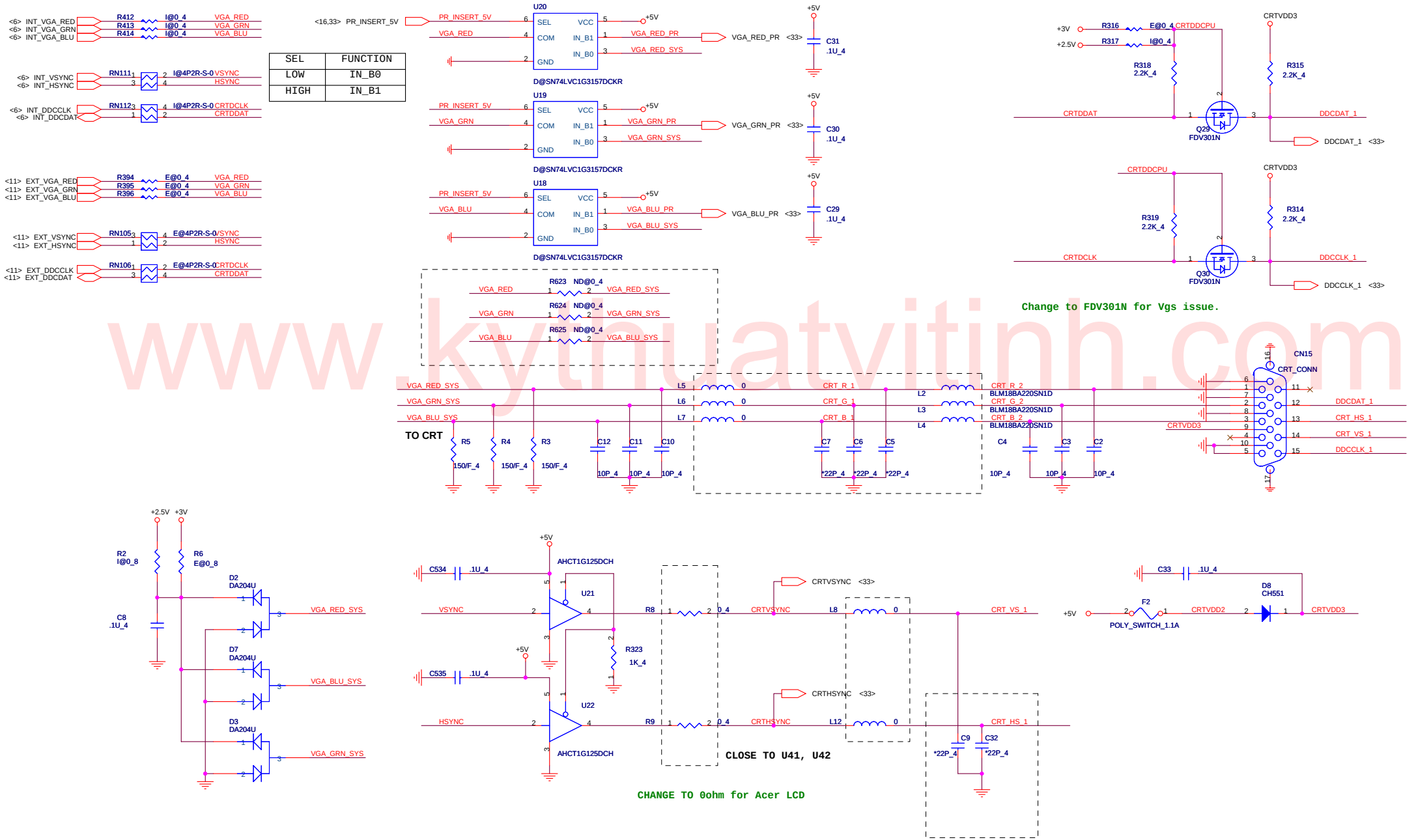

PROJECT : ZL7

Quanta Computer Inc.

Size	Document Number	Rev
	CRT & S-VIDEO	C

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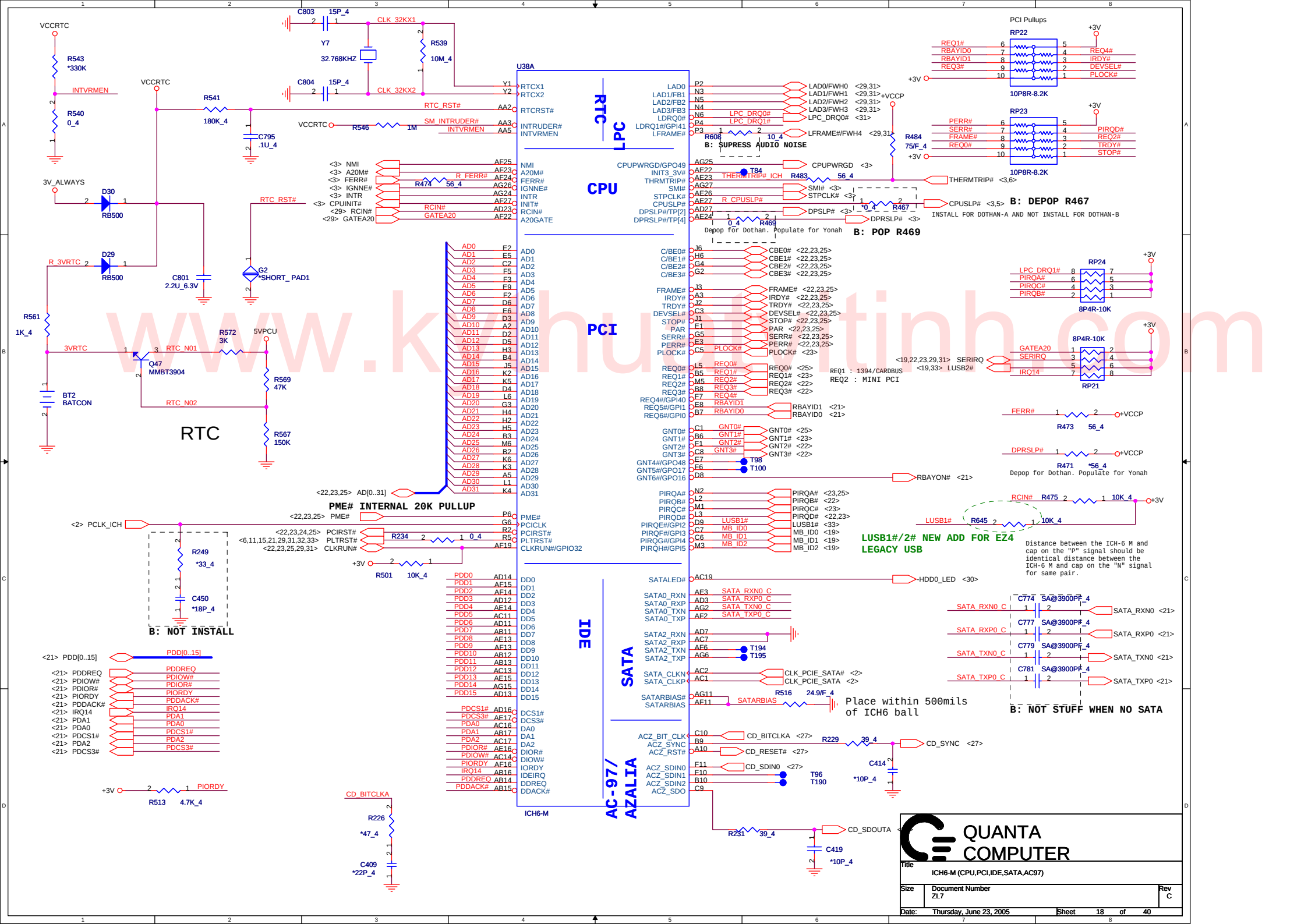
U38A
RTC
LPC
CPU
PCI
IDE
SATA
AC-97/ AZALIA
ICH6-M
RTC
PME# INTERNAL 20K PULLUP
B: NOT INSTALL
B: SUPRESS AUDIO NOISE
B: DEPOP R467
INSTALL FOR DOTHAN-A AND NOT INSTALL FOR DOTHAN-B
B: POP R469
Depop for Dothan. Populate for Yonah
PCI Pullups
LUSB1#/2# NEW ADD FOR EZ4
LEGACY USB
Distance between the ICH-6 M and cap on the "P" signal should be identical distance between the ICH-6 M and cap on the "N" signal for same pair.
Place within 500mils of ICH6 ball
B: NOT STUFF WHEN NO SATA
REQ1 : 1394/CARDBUS
REQ2 : MINI PCI
QUANTA COMPUTER
ICH6-M (CPU,PCI,IDE,SATA,AC97)
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ZL7
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C
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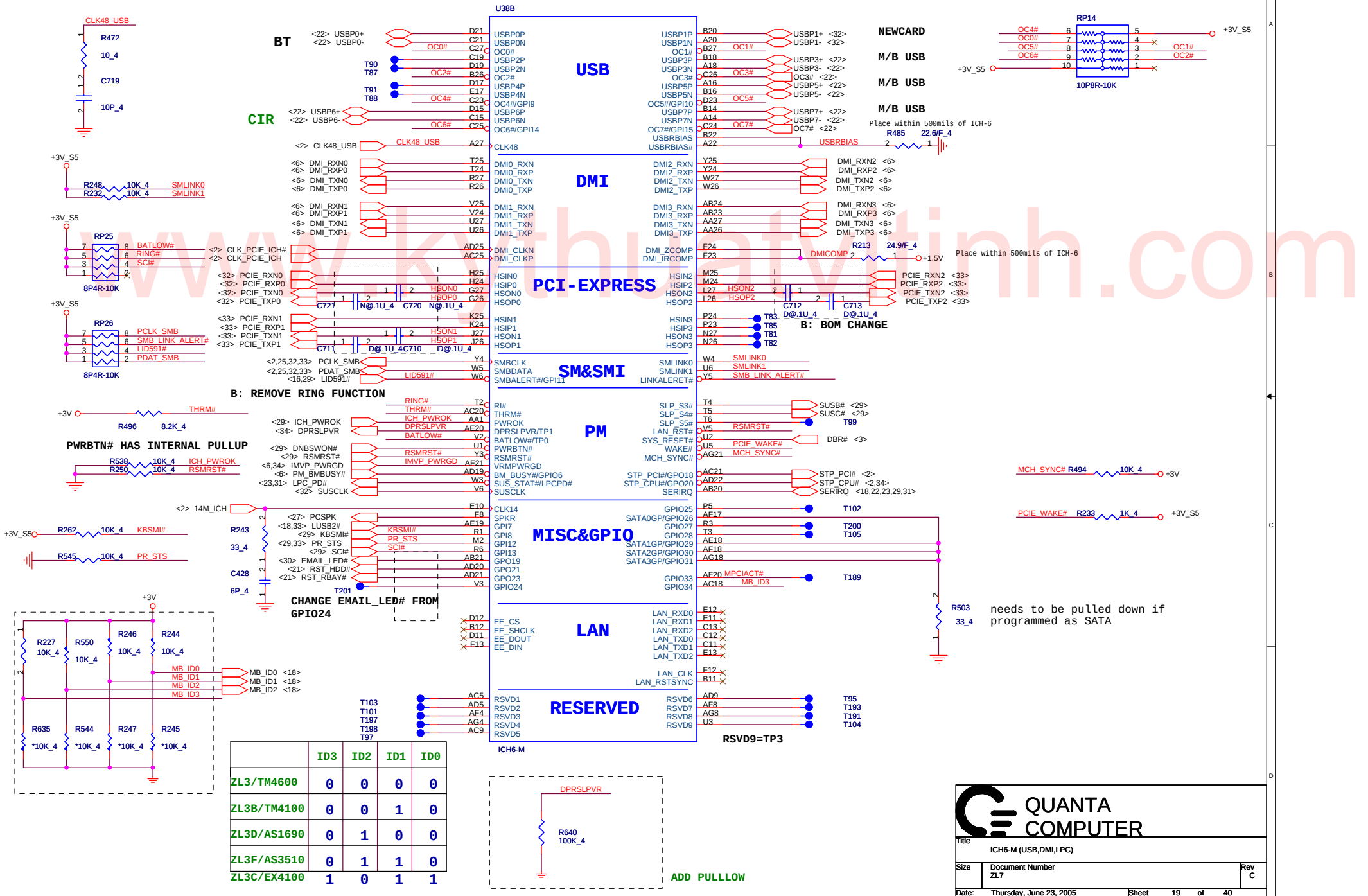
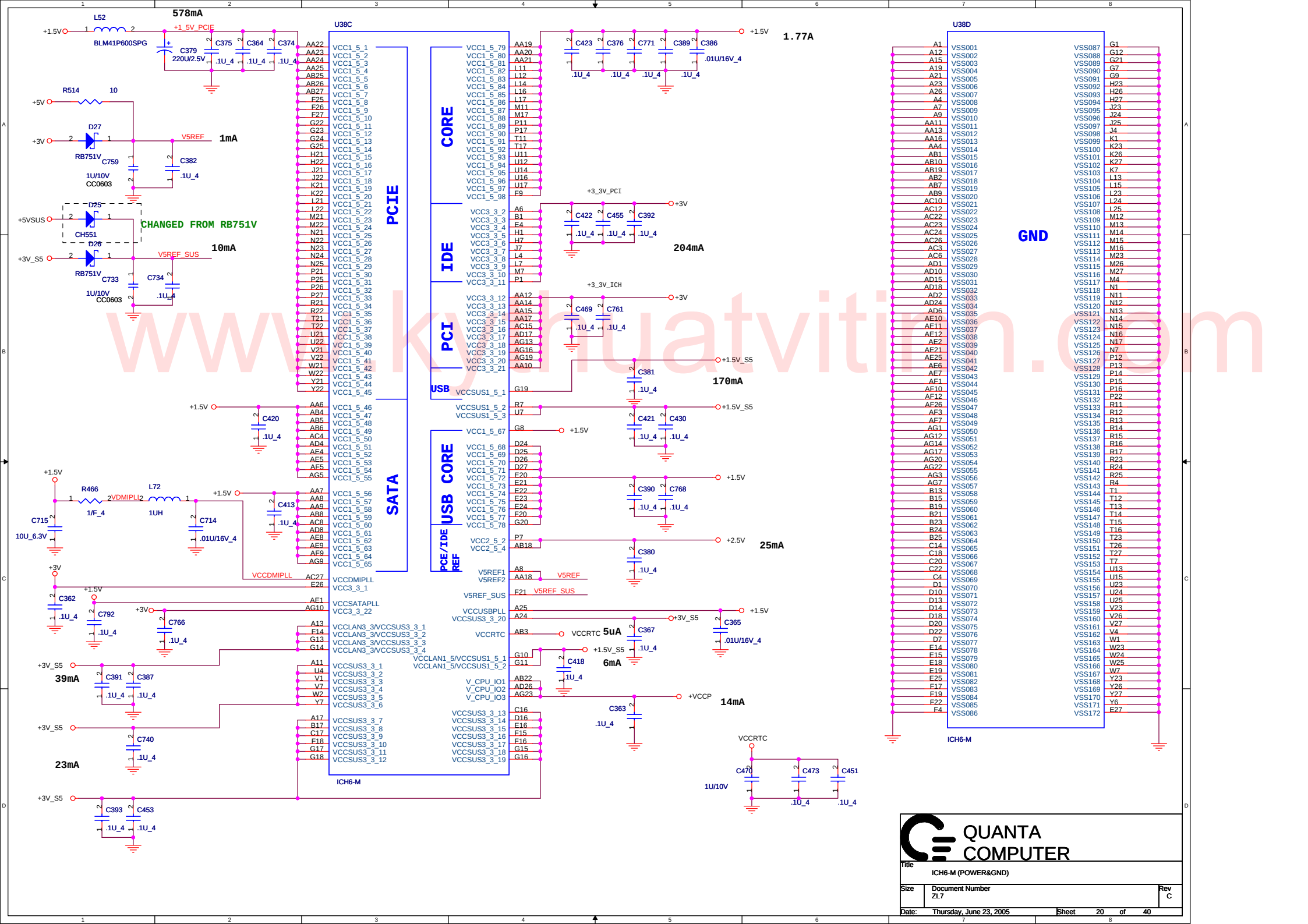


	ID3	ID2	ID1	ID0
ZL3/TM4600	0	0	0	0
ZL3B/TM4100	0	0	1	0
ZL3D/AS1690	0	1	0	0
ZL3F/AS3510	0	1	1	0
ZL3C/EX4100	1	0	1	1


578mA
L52
BLM41P600SPG
+1.5V
+1_5V_PCIE
C379
220U/2.5V
C375
C364
C374
.1U_4
U38C
PCIE
SATA
CORE
IDE
PCI
USB
USB CORE
PCE/IDE REF
ICH6-M
R514
10
+5V
D27
RB751V
+3V
V5REF
1mA
C759
1U/10V
CC0603
C382
D25
+5VSUS
CHANGED FROM RB751V
CH551
D26
+3V_S5
V5REF_SUS
10mA
C733
C734
R466
1/F_4
L72
VDMIPLL
1UH
C715
10U_6.3V
C714
.01U/16V_4
C413
C420
VCCDMIPLL
C362
C792
C766
+3V_S5
39mA
C391
C387
23mA
C740
C393
C453
1.77A
C423
C376
C771
C389
C386
+3_3V_PCI
C422
C455
C392
204mA
+3_3V_ICH
C469
C761
170mA
C381
C421
C430
C390
C768
C380
25mA
+2.5V
V5REF
V5REF_SUS
VCCRTC
5uA
C367
C365
C418
6mA
+VCCP
14mA
C363
C470
C473
C451
U38D
GND
ICH6-M
QUANTA COMPUTER
Title
ICH6-M (POWER&GND)
Size
Document Number
ZL7
Rev
C
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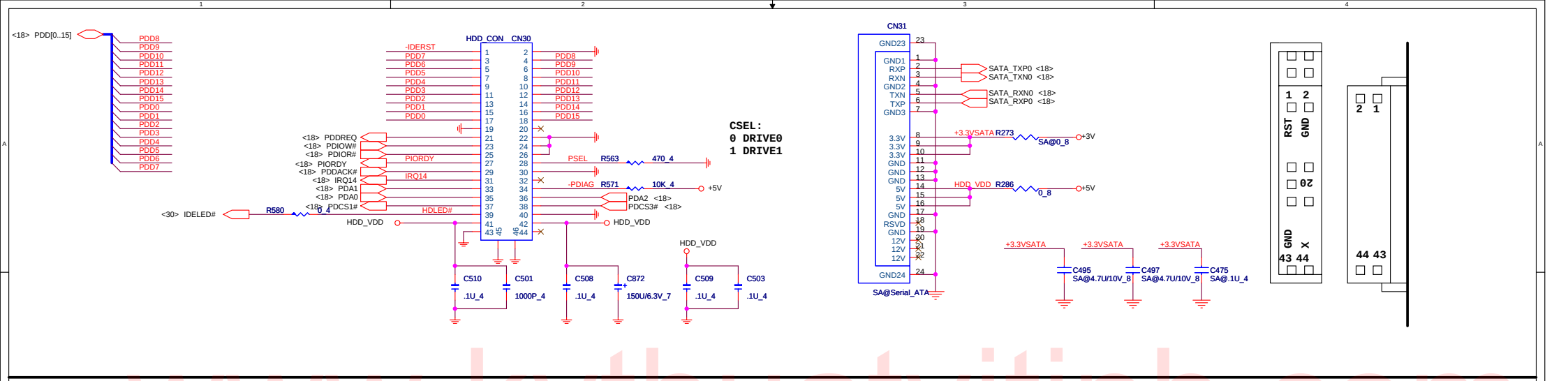

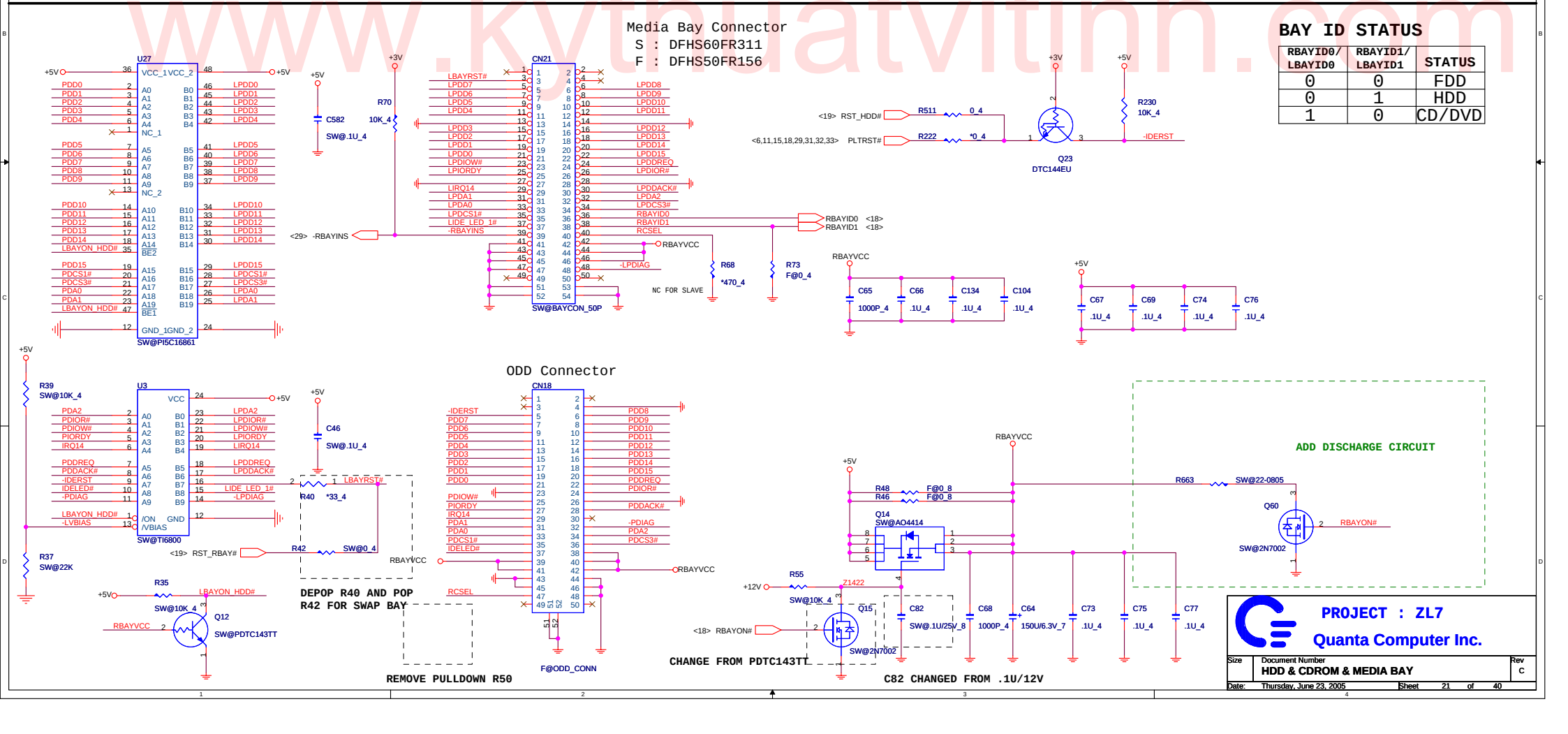

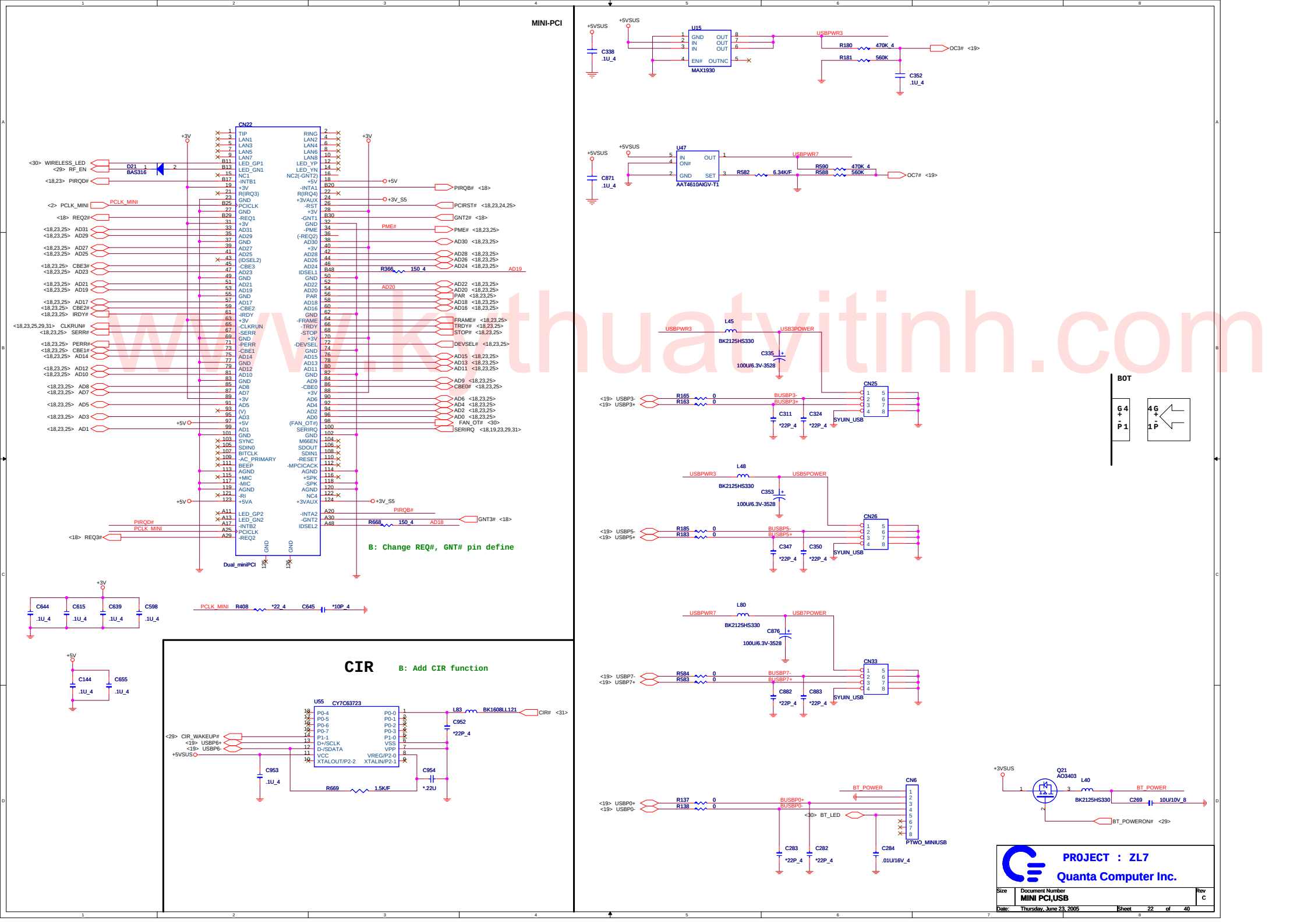

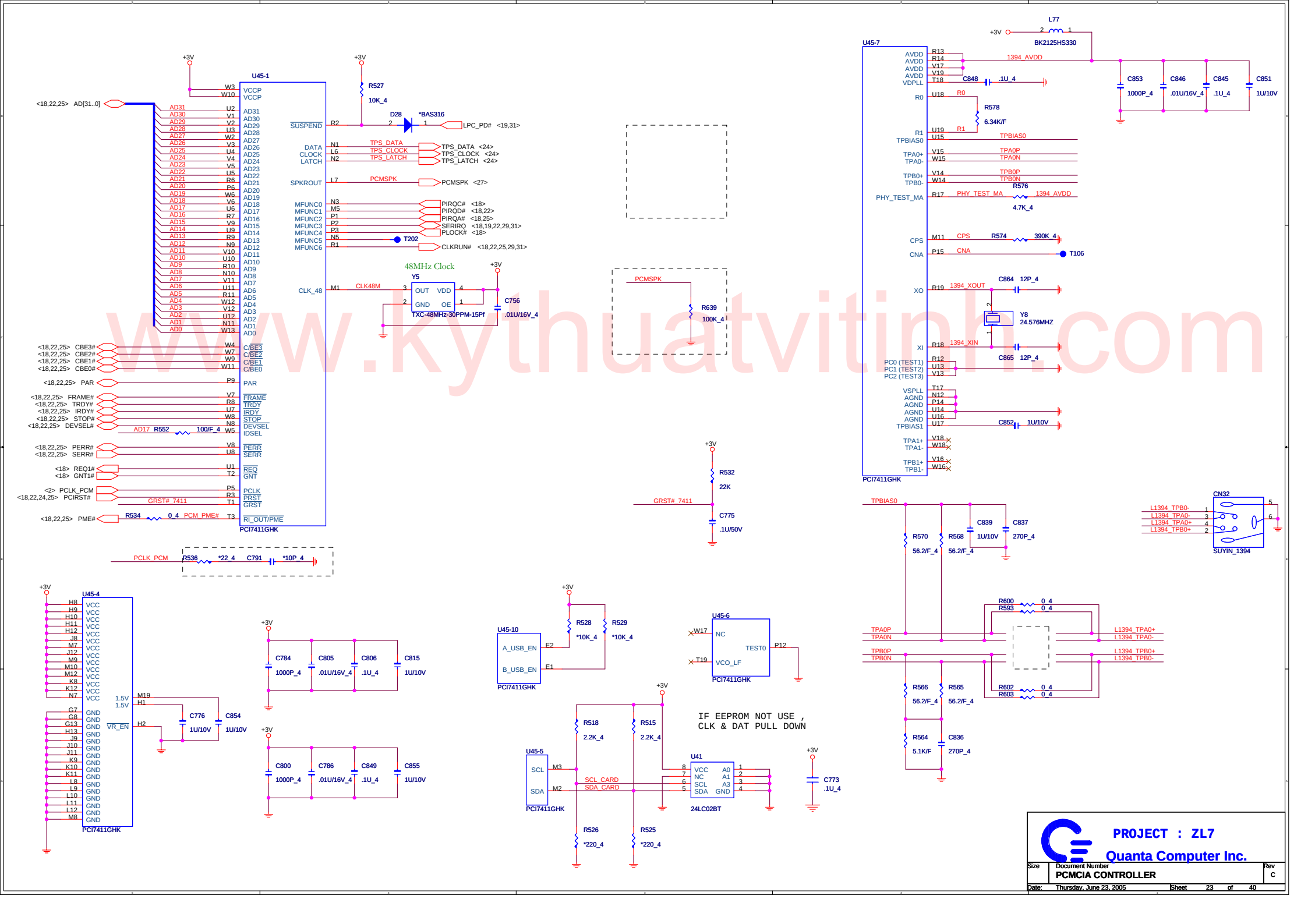

PROJECT : ZL7

Quanta Computer Inc.

Size	Document Number	Rev
	PCMCIA CONTROLLER	C

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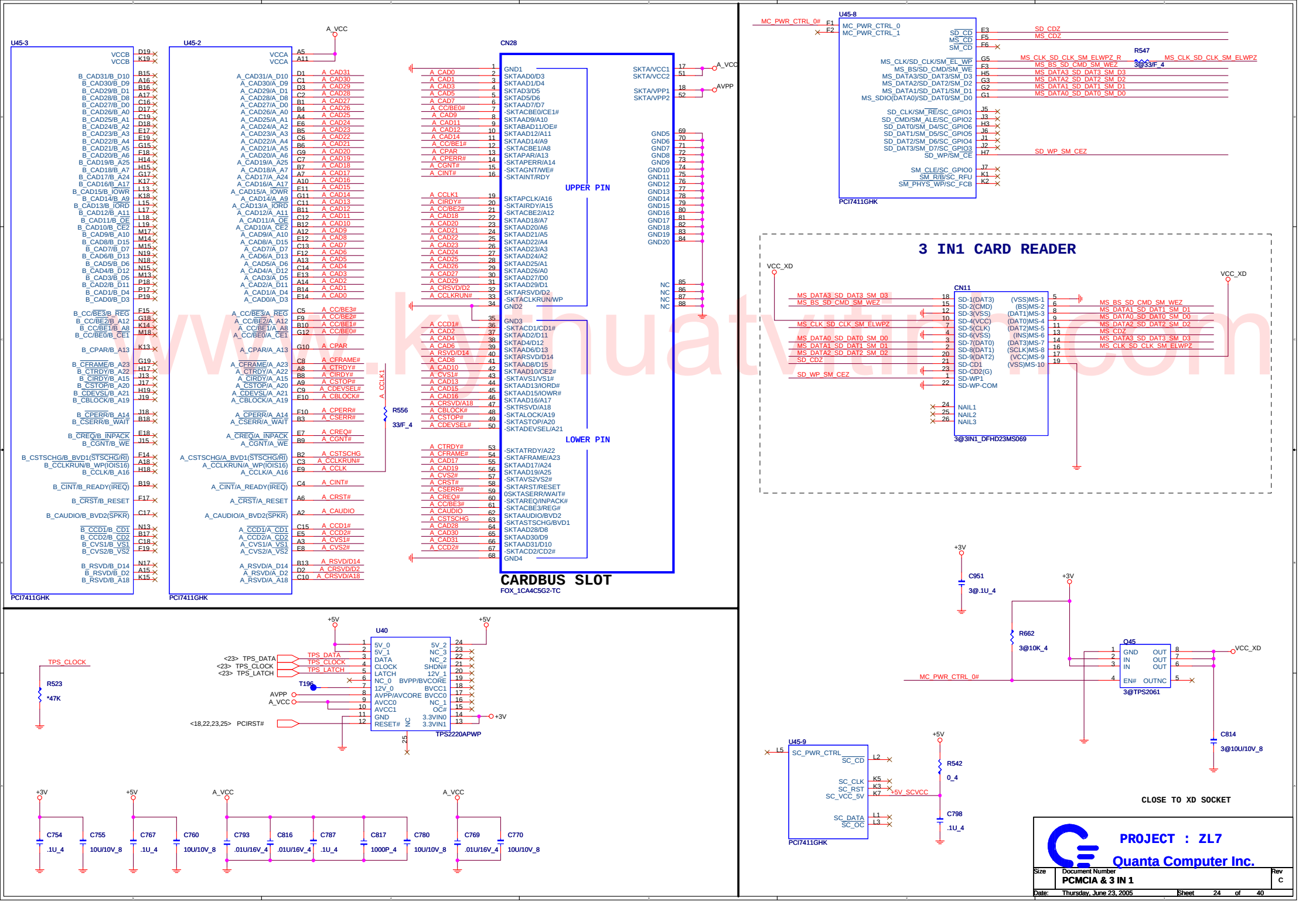
U45-3
U45-2
PCI7411GHK
A_VCC
CN28
UPPER PIN
LOWER PIN
CARDBUS SLOT
FOX_1CA4C5G2-TC
R556
33/F_4
A_CCLK1
U45-8
MC_PWR_CTRL_0#
R547
3@33/F_4
3 IN1 CARD READER
VCC_XD
CN11
3@3IN1_DFHD23MS069
U40
TPS_CLOCK
R523
*47K
TPS2220APWP
T196
U45-9
R542
0_4
C798
.1U_4
Q45
3@TPS2061
R662
3@10K_4
C951
3@.1U_4
C814
3@10U/10V_8
CLOSE TO XD SOCKET
C754
C755
C767
C760
C793
C816
C787
C817
C780
C769
C770
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Quanta Computer Inc.
PCMCIA & 3 IN 1
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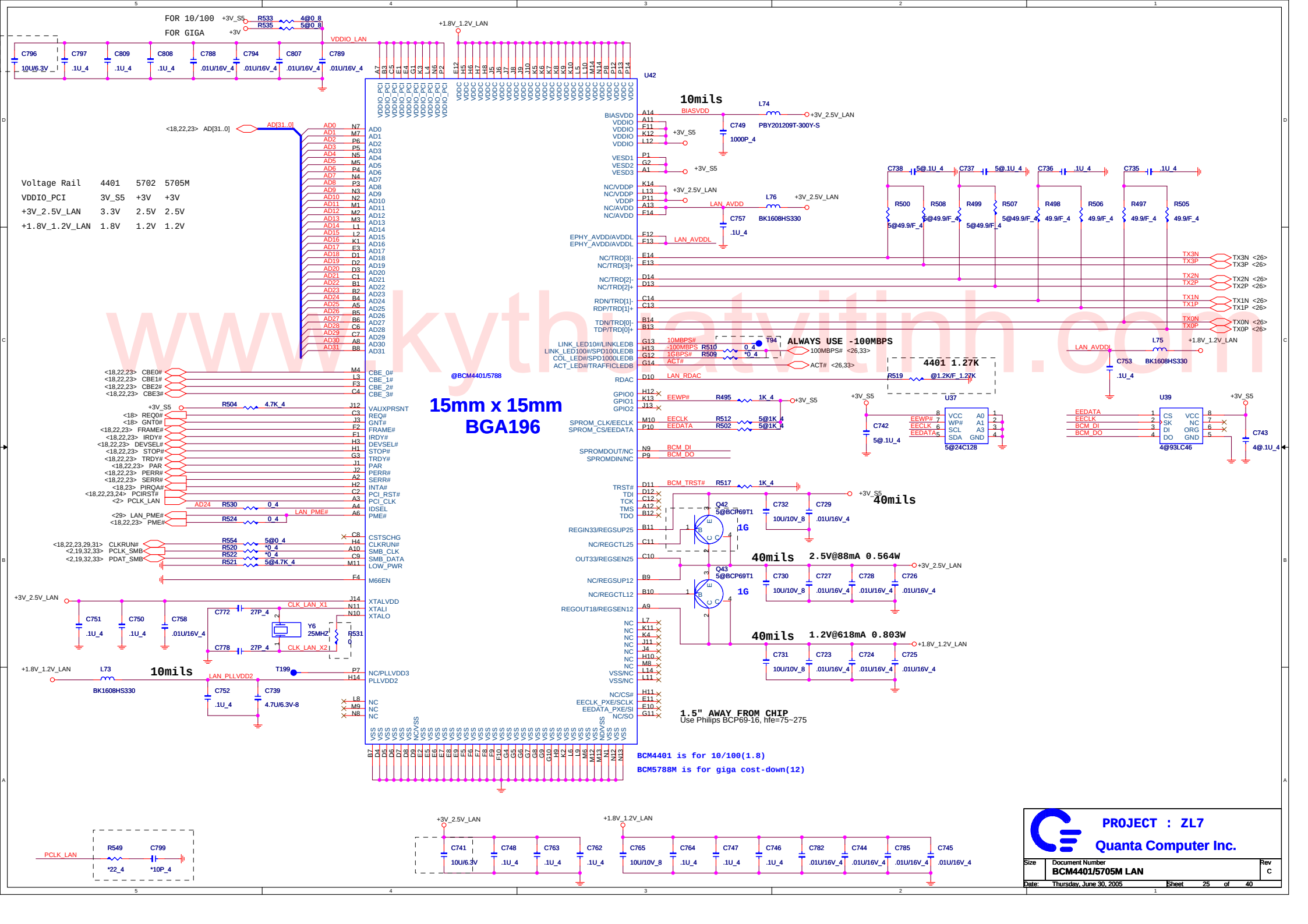
FOR 10/100
FOR GIGA
+3V_S5
+3V
R533 4@0_8
R535 5@0_8
VDDIO_LAN
C796 10U/6.3V
C797 .1U_4
C809 .1U_4
C808 .1U_4
C788 .01U/16V_4
C794 .01U/16V_4
C807 .01U/16V_4
C789 .01U/16V_4
+1.8V_1.2V_LAN
U42
10mils
BIASVDD
L74
+3V_2.5V_LAN
C749 1000P_4
PBY201209T-300Y-S
+3V_S5
LAN_AVDDL
L76
BK1608HS330
C757 .1U_4
LAN_AVDDL
C738 5@.1U_4
C737 5@.1U_4
C736 .1U_4
C735 .1U_4
R500 5@49.9/F_4
R508 5@49.9/F_4
R499 5@49.9/F_4
R507 5@49.9/F_4
R498 49.9/F_4
R506 49.9/F_4
R497 49.9/F_4
R505 49.9/F_4
TX3N <26>
TX3P <26>
TX2N <26>
TX2P <26>
TX1N <26>
TX1P <26>
TX0N <26>
TX0P <26>
Voltage Rail 4401 5702 5705M
VDDIO_PCI 3V_S5 +3V +3V
+3V_2.5V_LAN 3.3V 2.5V 2.5V
+1.8V_1.2V_LAN 1.8V 1.2V 1.2V
<18,22,23> AD[31..0]
AD[31..0]
@BCM4401/5788
15mm x 15mm
BGA196
ALWAYS USE -100MBPS
T94
10MBPS#
100MBPS
1GBPS#
ACT#
R510 0_4
R509 *0_4
100MBPS# <26,33>
ACT# <26,33>
4401 1.27K
R519 @1.2K/F_1.27K
LAN_RDAC
L75
+1.8V_1.2V_LAN
C753 .1U_4
BK1608HS330
U37
5@24C128
EEWP#
EECLK
EEDATA
C742 5@.1U_4
U39
4@93LC46
EEDATA
EECLK
BCM_DI
BCM_DO
C743 4@.1U_4
<18,22,23> CBE0#
<18,22,23> CBE1#
<18,22,23> CBE2#
<18,22,23> CBE3#
+3V_S5
R504 4.7K_4
<18> REQ0#
<18> GNT0#
<18,22,23> FRAME#
<18,22,23> IRDY#
<18,22,23> DEVSEL#
<18,22,23> STOP#
<18,22,23> TRDY#
<18,22,23> PAR
<18,22,23> PERR#
<18,22,23> SERR#
<18,23> PIRQA#
<18,22,23,24> PCIRST#
<2> PCLK_LAN
AD24 R530 0_4
<29> LAN_PME#
<18,22,23> PME#
R524 0_4
LAN_PME#
<18,22,23,29,31> CLKRUN#
<2,19,32,33> PCLK_SMB
<2,19,32,33> PDAT_SMB
R554 5@0_4
R520 *0_4
R522 *0_4
R521 5@4.7K_4
+3V_2.5V_LAN
C751 .1U_4
C750 .1U_4
C758 .01U/16V_4
C772 27P_4
C778 27P_4
CLK_LAN_X1
CLK_LAN_X2
Y6 25MHZ
R531 0
+1.8V_1.2V_LAN
L73
BK1608HS330
10mils
T199
LAN_PLLVDD2
C752 .1U_4
C739 4.7U/6.3V-8
TRST#
TDI
TCK
TMS
TDO
BCM_TRST#
R517 1K_4
Q42 5@BCP69T1
Q43 5@BCP69T1
C732 10U/10V_8
C729 .01U/16V_4
40mils
2.5V@88mA 0.564W
C730 10U/10V_8
C727 .01U/16V_4
C728 .01U/16V_4
C726 .01U/16V_4
1.2V@618mA 0.803W
C731 10U/10V_8
C723 .01U/16V_4
C724 .01U/16V_4
C725 .01U/16V_4
REGIN33/REGSUP25
NC/REGCTL25
OUT33/REGSEN25
NC/REGSUP12
NC/REGCTL12
REGOUT18/REGSEN12
1.5" AWAY FROM CHIP
Use Philips BCP69-16, hfe=75~275
BCM4401 is for 10/100(1.8)
BCM5788M is for giga cost-down(12)
PCLK_LAN
R549 *22_4
C799 *10P_4
C741 10U/6.3V
C748 .1U_4
C763 .1U_4
C762 .1U_4
C765 10U/10V_8
C764 .1U_4
C747 .1U_4
C746 .1U_4
C782 .01U/16V_4
C744 .01U/16V_4
C785 .01U/16V_4
C745 .01U/16V_4
PROJECT : ZL7
Quanta Computer Inc.
Size
Document Number
BCM4401/5705M LAN
Rev
C
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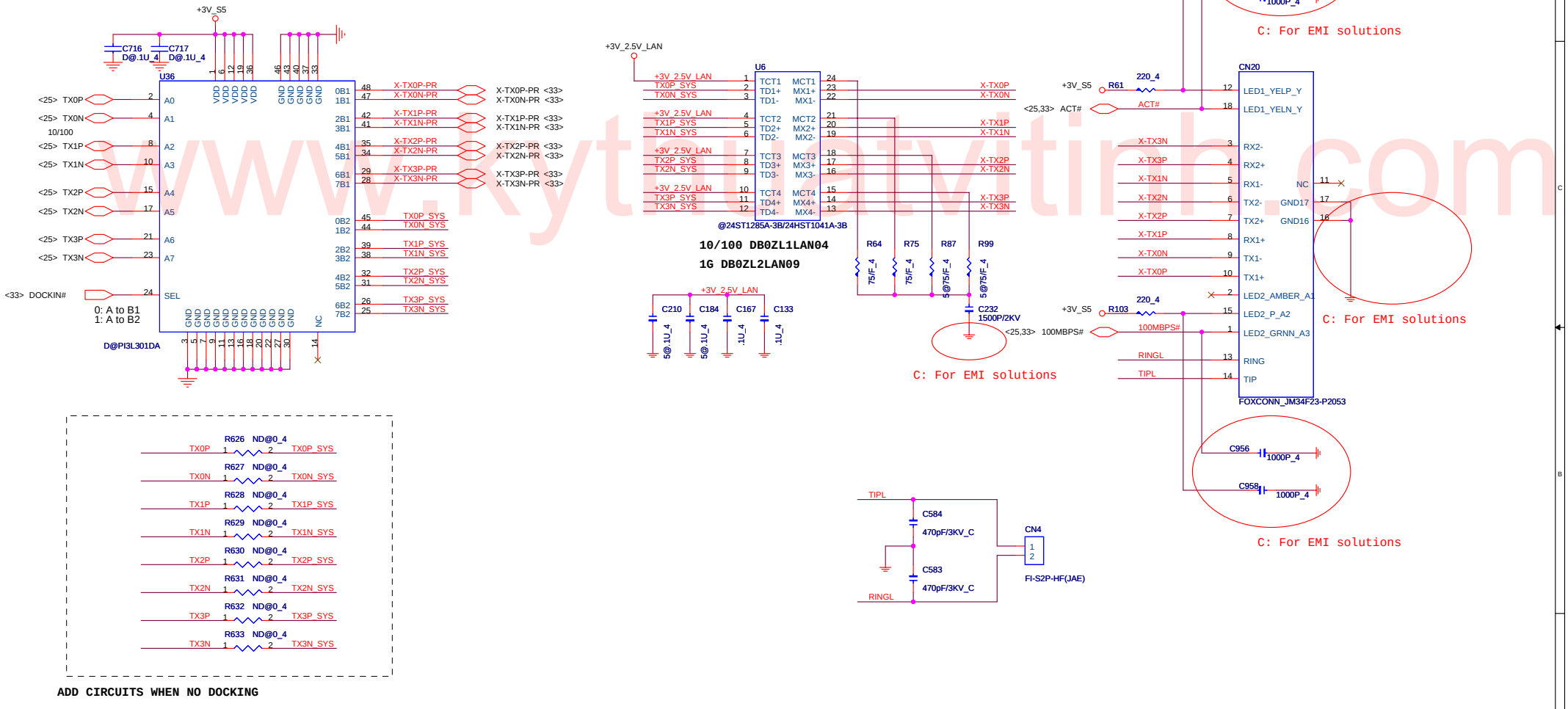

PROJECT : ZL7		
Quanta Computer Inc.		
Size	Document Number: DVO CH7011A & RJ45-11 CON	Rev: C
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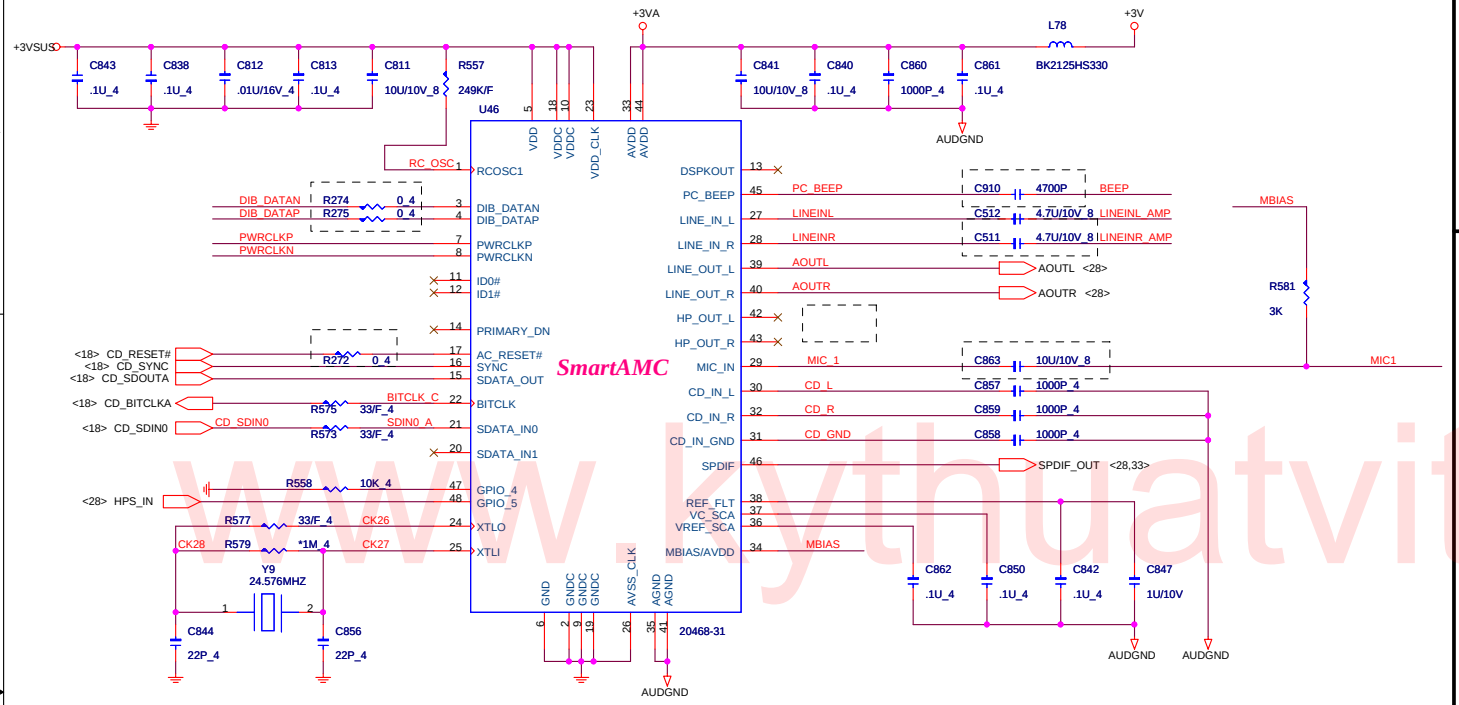
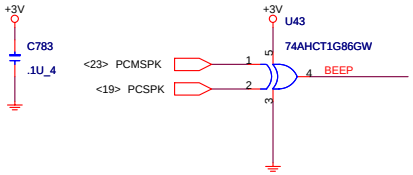
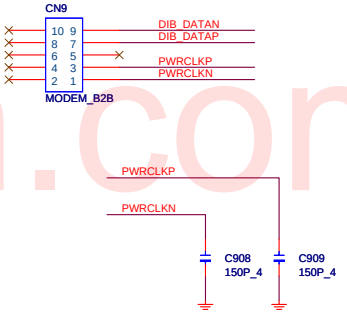
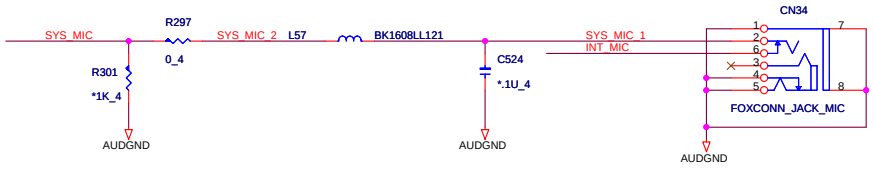
The AMC20463-004 modem is used for mother board family MBAMC20463-004.

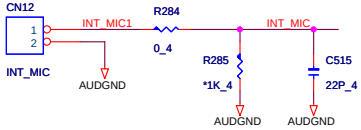


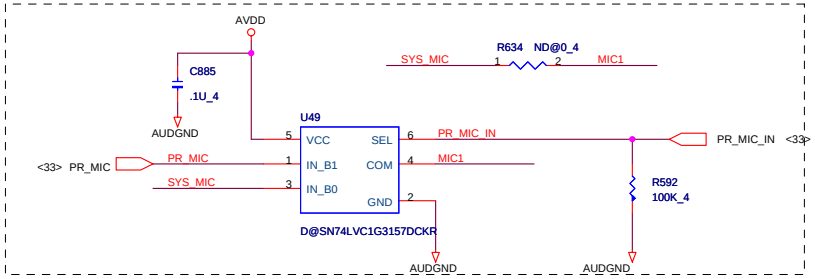




MIC

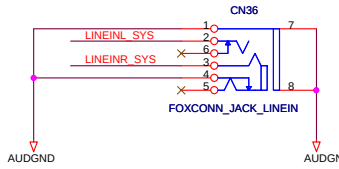


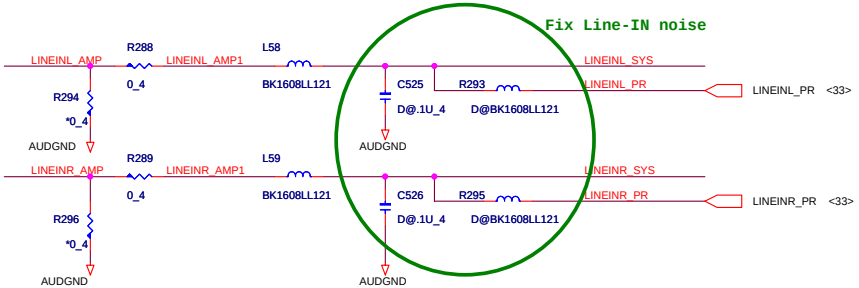




SEL	FUNCTION
LOW	IN_B0
HIGH	IN_B1

LINE IN





PROJECT : ZL7

Quanta Computer Inc.

Size	Document Number	Rev
	AUDIO	C

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GAIN1	SPKR MODE	HP MODE
0	10.5	3
1	9	0

AVDD
R587
*1K_4
GAIN1
R589
1K_4
AUDGND

AMP POWER

+5V
R279
*100K
D14
*BAS316
R276
*3.3M
C505
*1U/10V
+12V
U17A
*LM358ADR
R277
*10_4
C504
*100P_4
U17B
*LM358ADR
R278
*100K
+5V
Q27
*AO4414
C513
.1U/16V_4
C517
10U/10V_8
C514
.1U/16V_4
C518
10U/10V_8
C516
10U/10V_8
R292
0_8
R302
0_8
TO AUDIO
AVDD
AUDGND

C519 .01U/16V_4
C529 1000P_4
C520 .01U/16V_4
C528 1000P_4
C530 100P_4
C527 100P_4
AUDGND

R290 0
R291 0
R287 0
AUDGND

PAD34 PAD35 PAD36 PAD37
EMIPAD142X91 EMIPAD142X91 *EMIPAD142X91 EMIPAD142X91

AVDD
AUDGND
C875 .1U_4
C874 1U/10V
C866 .1U_4
R282 100K
R283 1K_4
<27> AOUTL
C867 1U/10V
<27> AOUTR
C873 1U/10V
R281 1K_4
R280 100K
U48
INL
INR
NC
NC
GAIN_SEL
GND
/SHDN
VBIAS
VDD
HPVDD
C1P
C1N
CPVDD
CPGND
CPVSS
VSS
HPS
HPL
HPR
OUTL+
OUTL-
OUTR-
OUTR+
PVDDL
PGNDL
PVDDR
PGNDR
MAX9755AETI
R591 10K_4
GAIN1
MUTE
<29> AMP_MUTE#
D32
BAS316
Q28
*2N7002
HPSENCE_PR
C888 1U/10V
C877 1U/10V
D33
BAS316
HPS_PLUGIN
HPS
SPKL
SPKR
INSPKL+
INSPKL-
INSPKR-
INSPKR+
R601 100K
R594 100K
SPKPLG
HPSENCE_PR <33>
U50
SN74AHC1G32DCKR
C886 .1U_4
C884 10U/10V_8
C868 .1U_4
C869 10U/10V_8
C890 .1U_4

SPEAKER CON.

R312 0
R313 0
R311 0
AUDGND

INSPKR+ L56 BK1608LL121 INSPKR+N
INSPKR- L55 BK1608LL121 INSPKR-N
C878 *.1U_4
C879 *.1U_4
CN13
R_L_SPEAKERS
REV:B MODIFY FOR EMI
R586 0
R585 0
C887 .1U_4
C870 1000P_4
INSPKL+ L54 BK1608LL121 INSPKL+N
INSPKL- L53 BK1608LL121 INSPKL-N
C881 *.1U_4
C880 *.1U_4

SPKL R303 470_4
SPKL1 L61 BK1608LL121 SPKL_SYS
SPKL_SYS <33>
R299 1K_4
C522 470P_4
SPKR R300 470_4
SPKR1 L60 BK1608LL121 SPKR_SYS
SPKR_SYS <33>
R298 1K_4
C523 470P_4

LINE OUT&SPDIF

CN35
SPKPLG-
SPKL_SYS
SPKR_SYS
Drive IC
LED
FOX=2F11381-TJ1-TR
C916 .1U_4
+3V
R646 10K_4
+5V
R647 1K_4
<27,33> SPDIF_OUT
Q59 MMBT3904
C917 *.1U_4
Q58 2N7002
Change to 2N7002
SPKPLG
R637 1K/F
Q54 2N7002
SPKPLG-
D34 DA204U
NEW ADD FOR ESD
CLOSE TO CN35
R555 100K
D31
<27> HPS_IN
HPS_IN
HPS_PLUGIN
BAS316

PROJECT : ZL7
Quanta Computer Inc.

Size	Document Number	Rev
	AUDIO AMP	C
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LDRQ#(pin 8) internal is no use

Should have a 0.1uF capacitor close to every GND-VCC pair + one larger cap on the supply.

C:cotrol 2ND FAN for PE requestion

REV:C MODIFY

If Pin 24 is not pull-high, System will not able to boot.

FOR 97551 ONLY

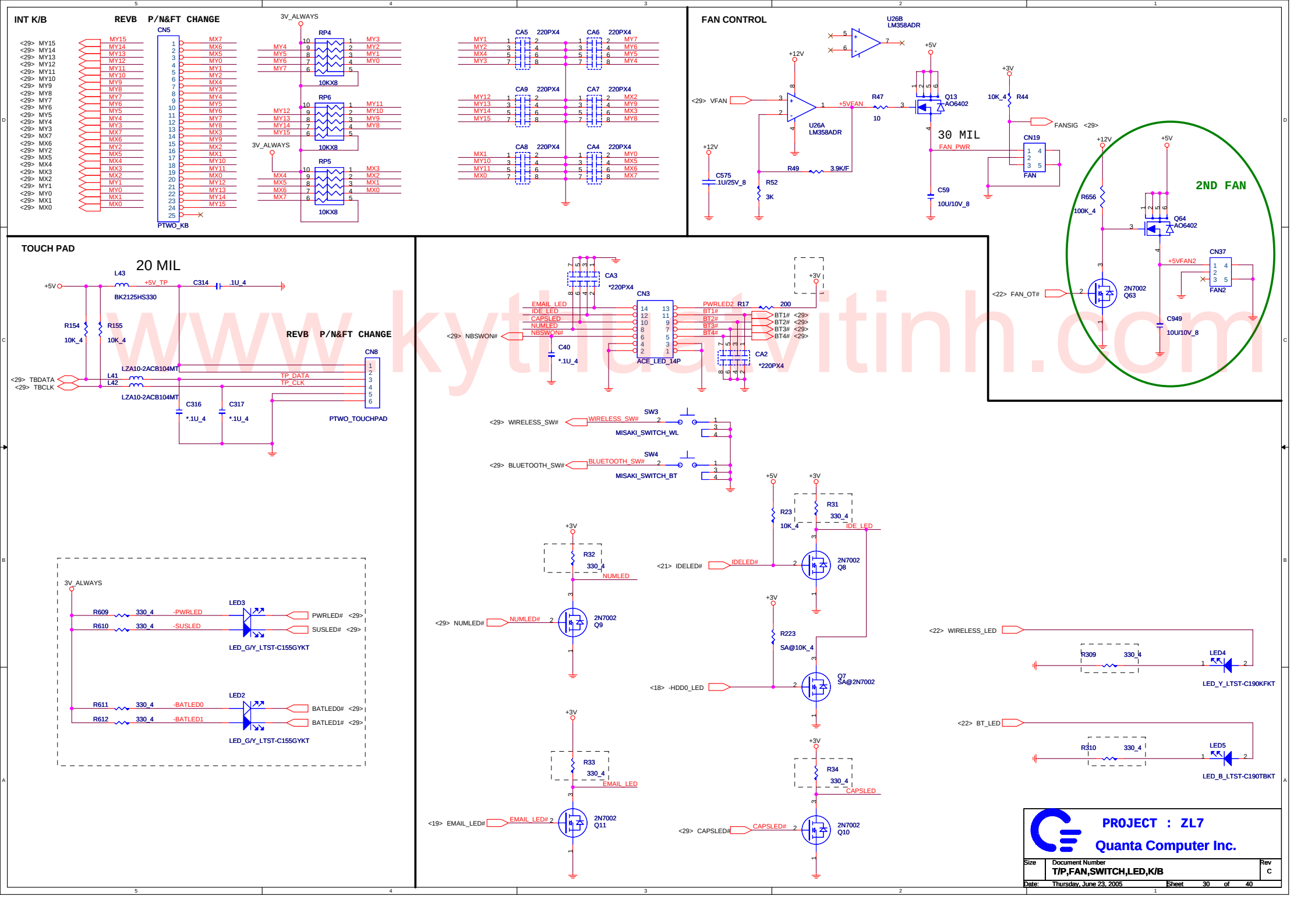
INTERNAL PULLUP IN SB

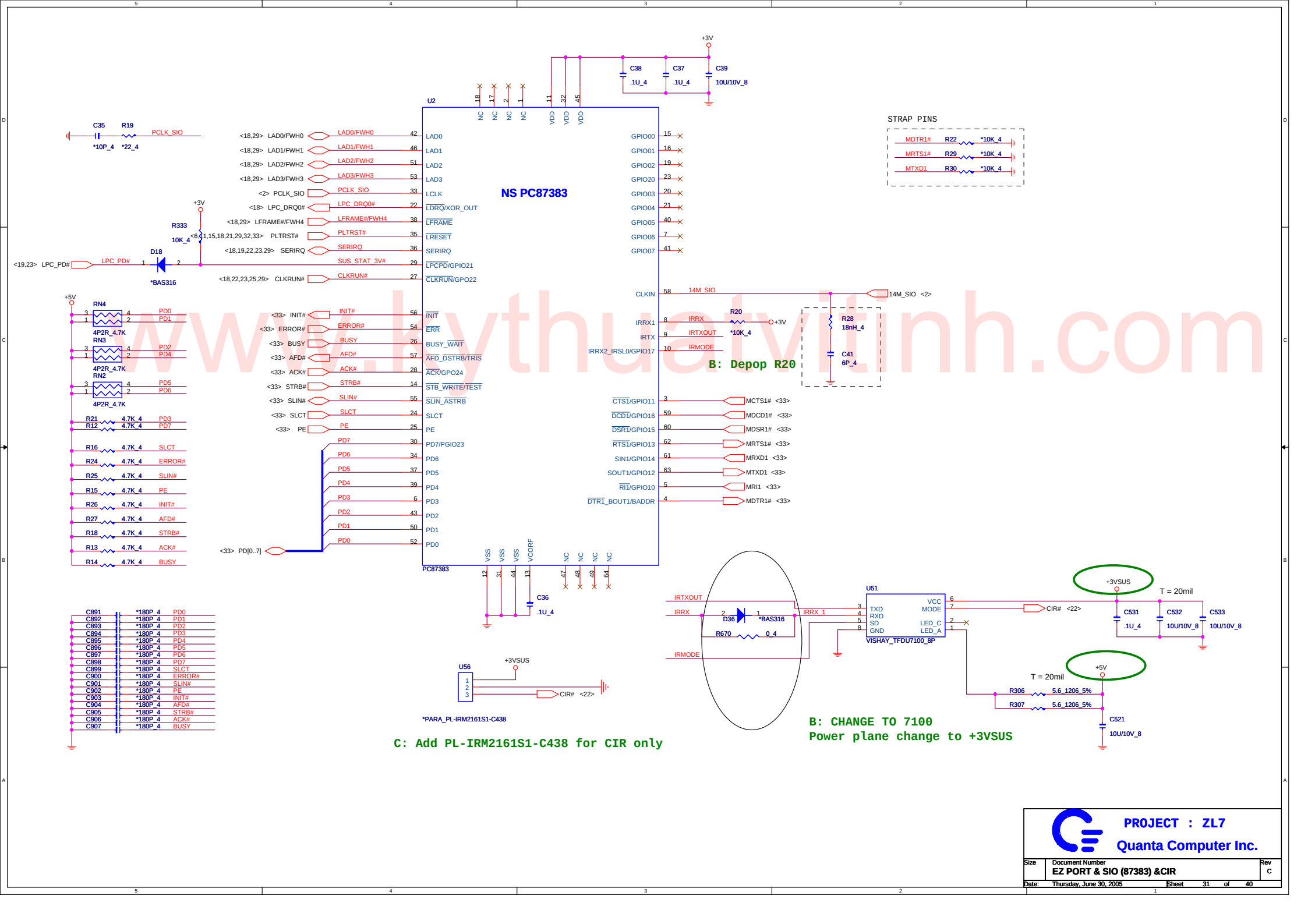
BIU configuration should match flash speed used

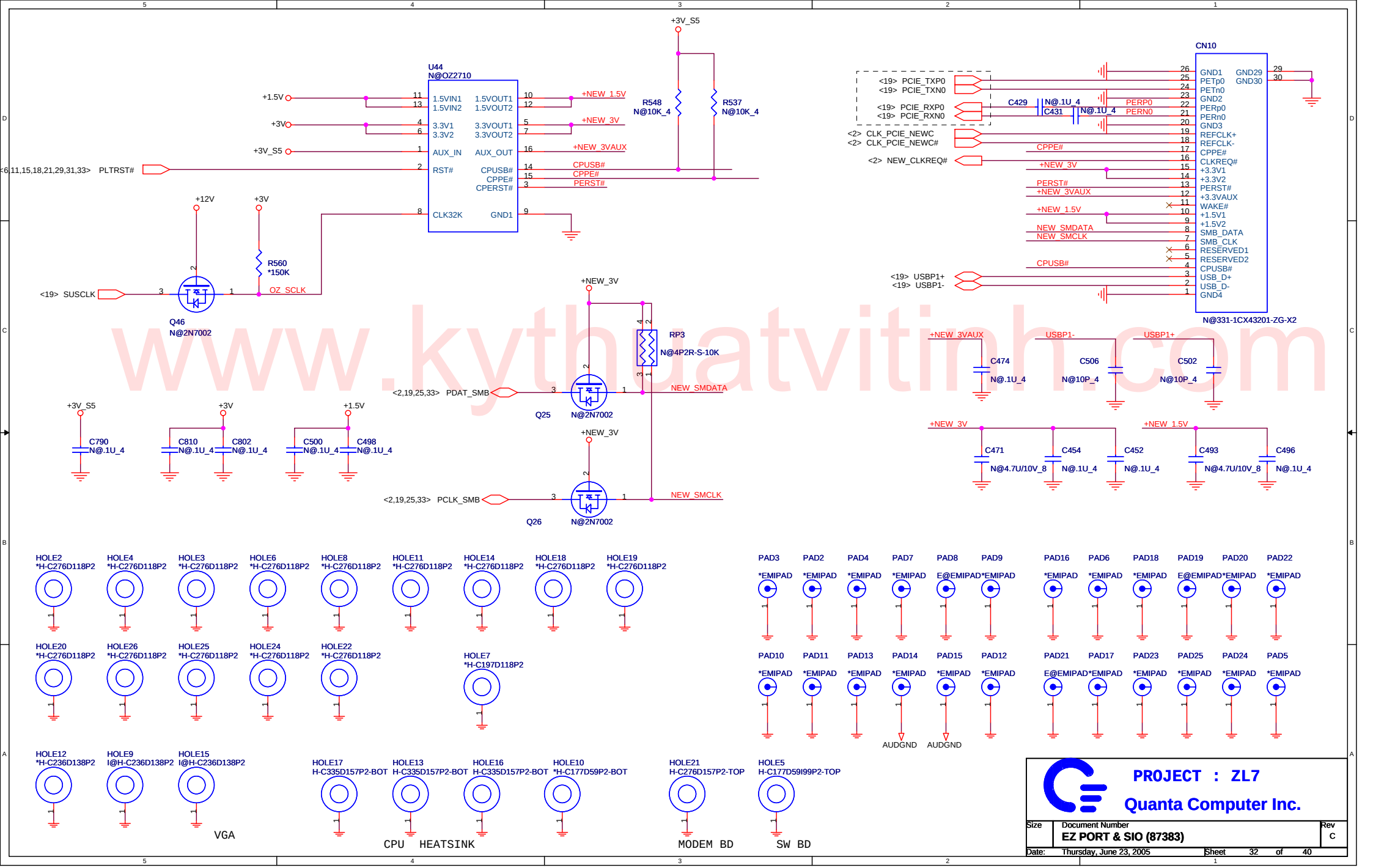
SHBM=1: Enable shared memory with host BIOS

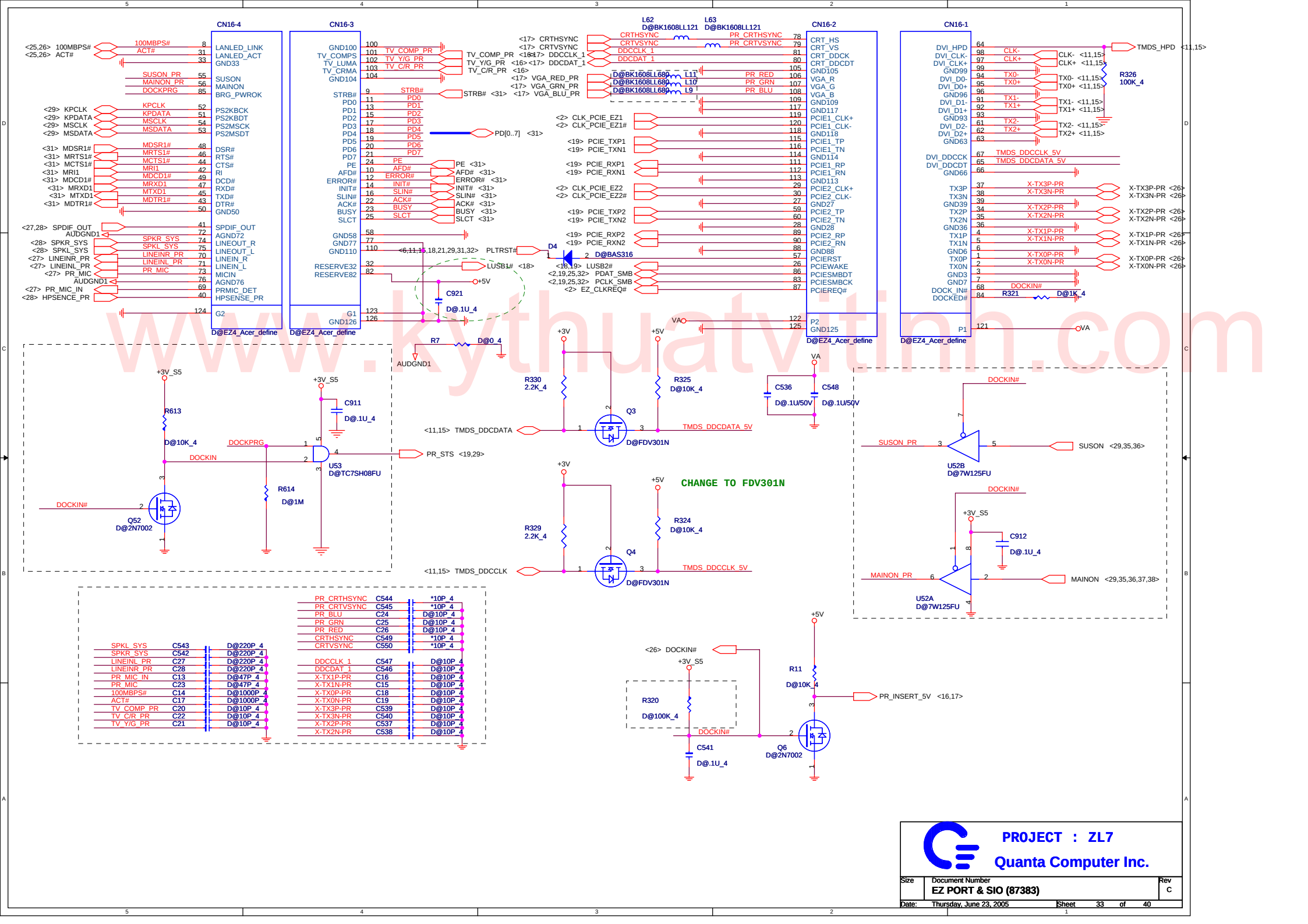
BADDR1-0	I/O Address	
	Index	Data
0 0	2E	2F
0 1	4E	4F
1 0	(HCFGBAH, HCFGBAL)	(HCFGBAH, HCFGBAL)+1
1 1	Reserved	

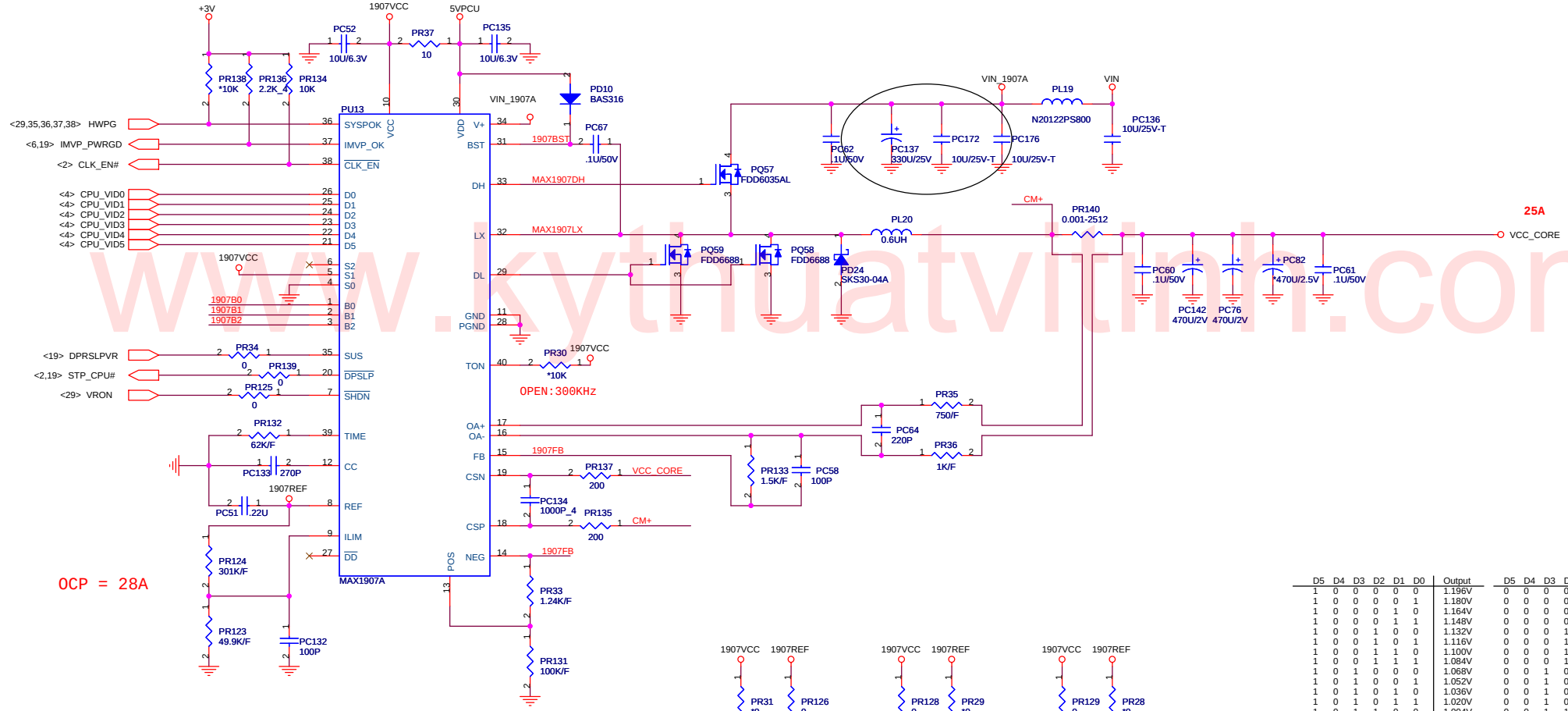
PROJECT : ZL7
Quanta Computer Inc.
Size: Document Number: 97551 & FLASH — Rev: C
Date: Thursday, June 23, 2005 — Sheet 29 of 40











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	0	1	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

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

PROJECT : ZL7

Quanta Computer Inc.

Size	Document Number	Rev
	CPU CORE (MAX1907)	C
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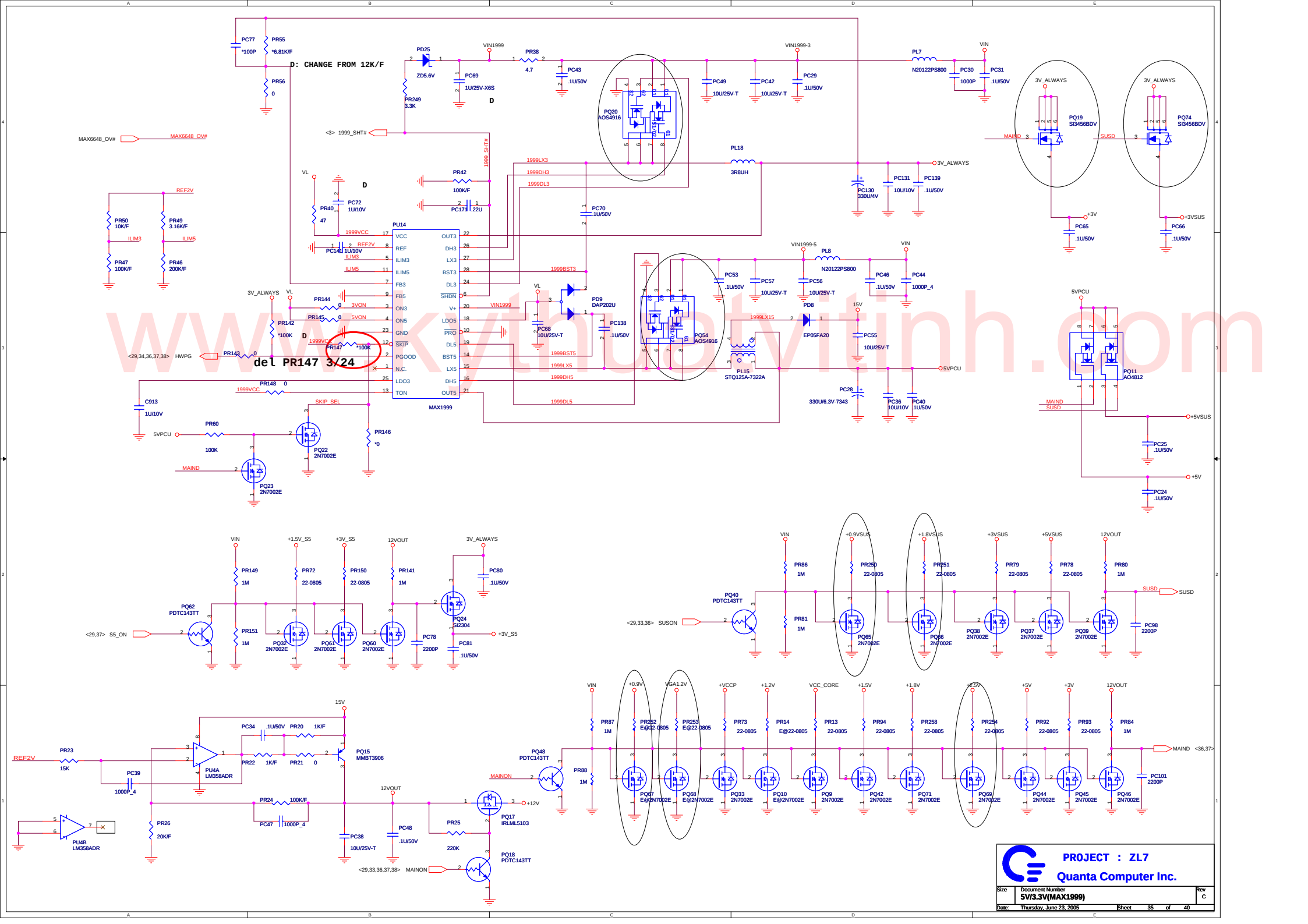
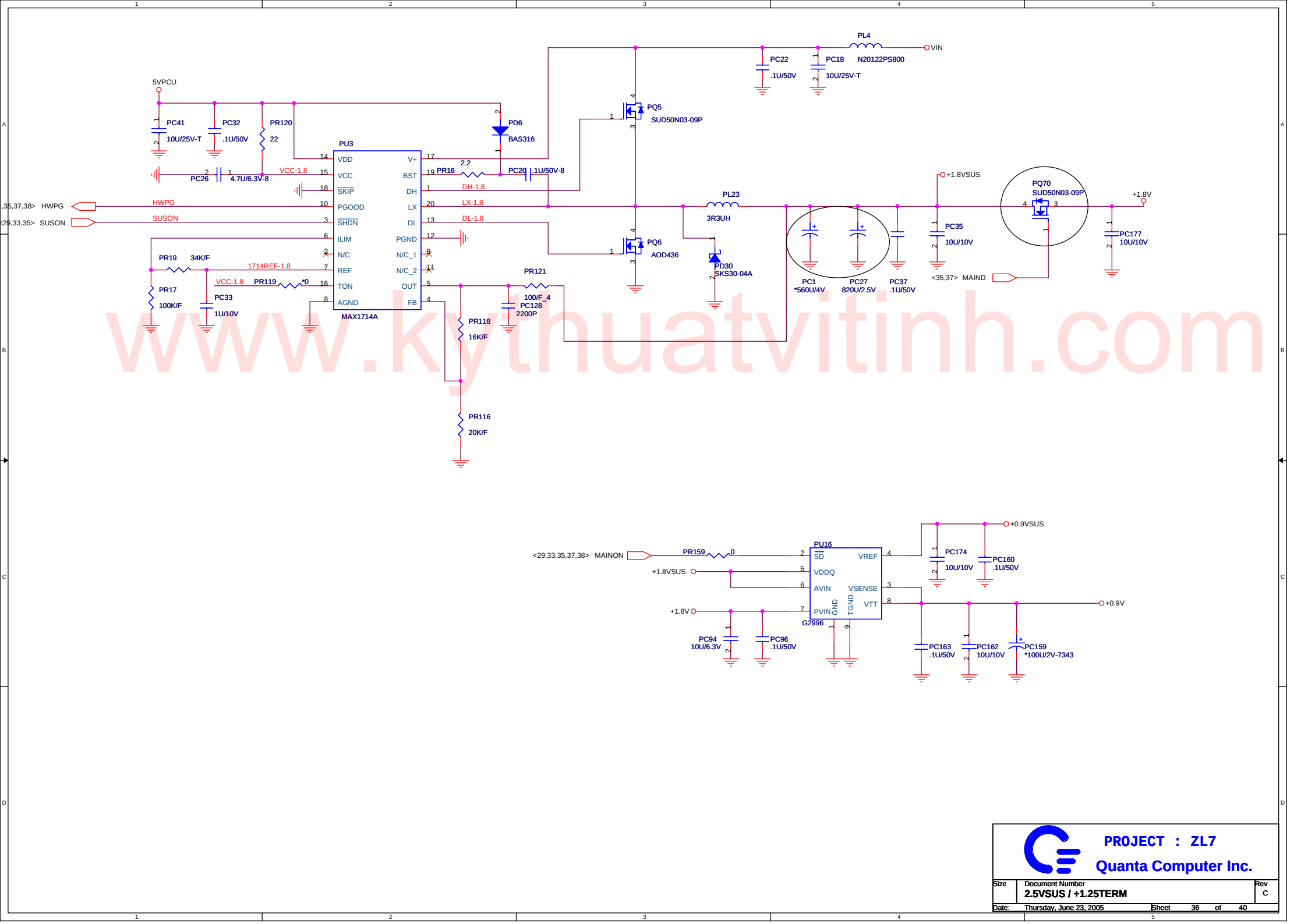


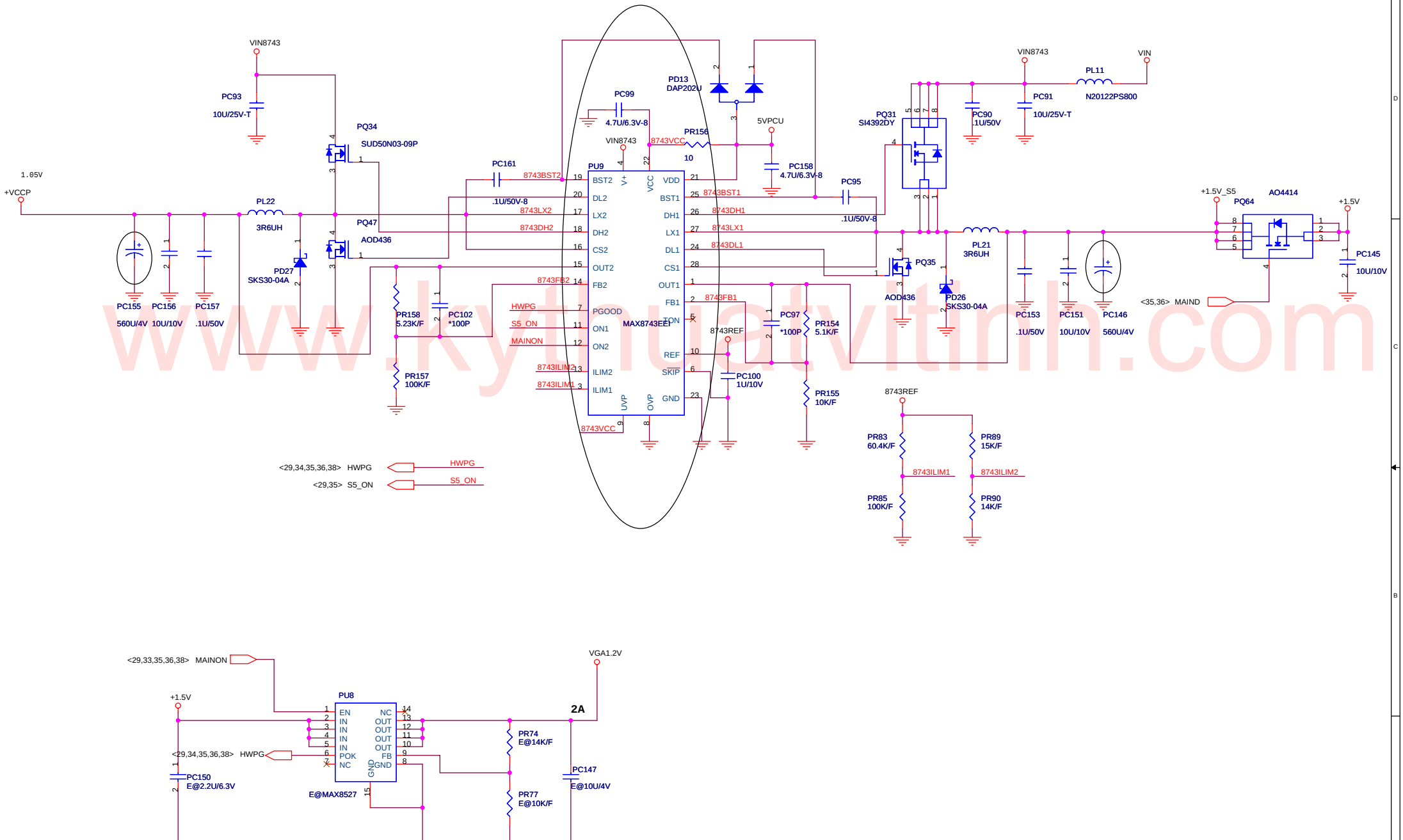
PROJECT : ZL7		
Quanta Computer Inc.		
Size	Document Number: 5V/3.3V(MAX1999)	Rev: C
Date: Thursday, June 23, 2005	Sheet 35 of 40	



PROJECT : ZL7

Quanta Computer Inc.

Size	Document Number	Rev
	2.5VSUS / +1.25TERM	C
Date: Thursday, June 23, 2005	Sheet 36 of 40	



PROJECT : ZL7

Quanta Computer Inc.

Size	Document Number	Rev
	+1.5 / CPUIO	C
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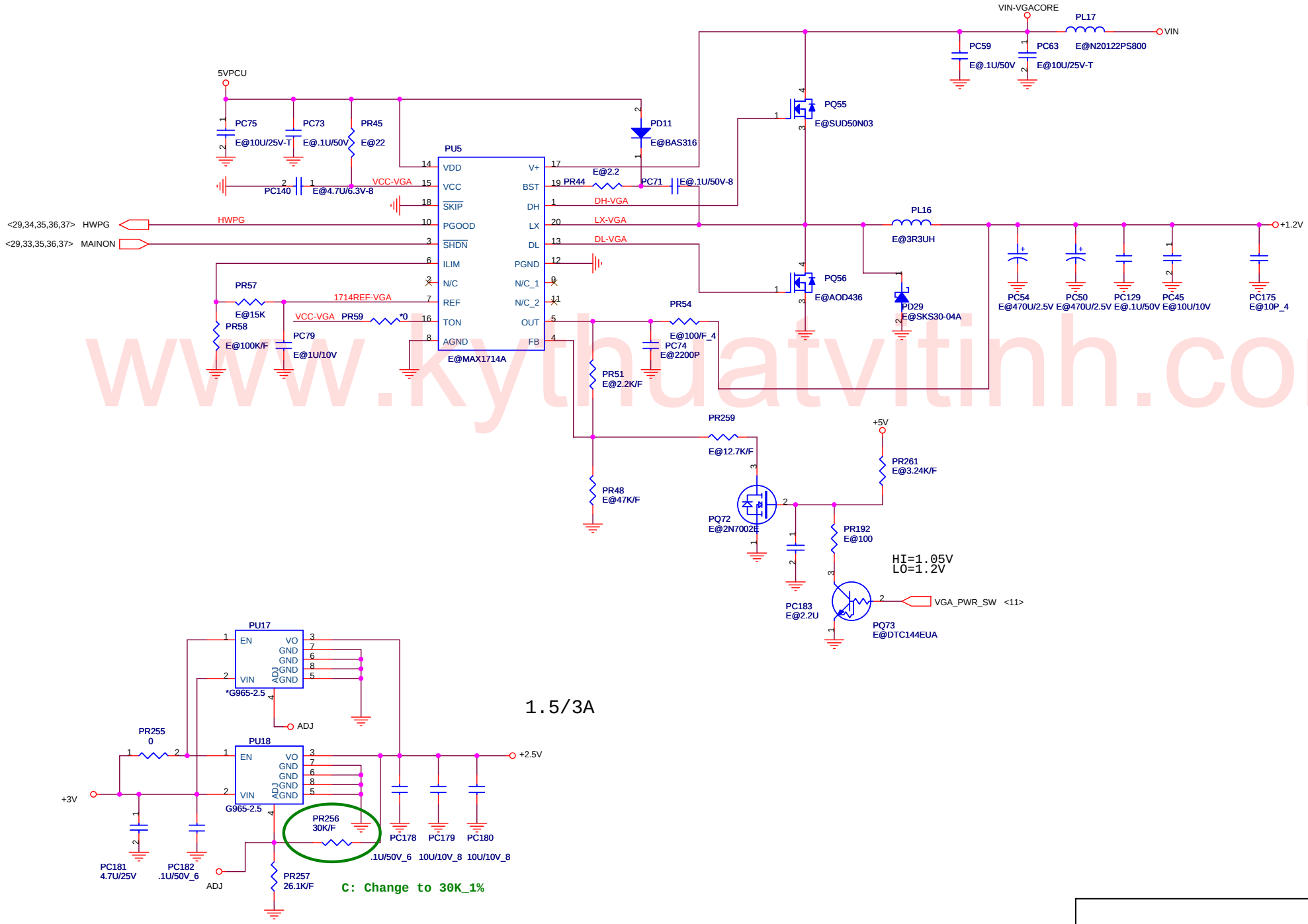

Size	Document Number	Rev
	+1.2V/+1.8V	C
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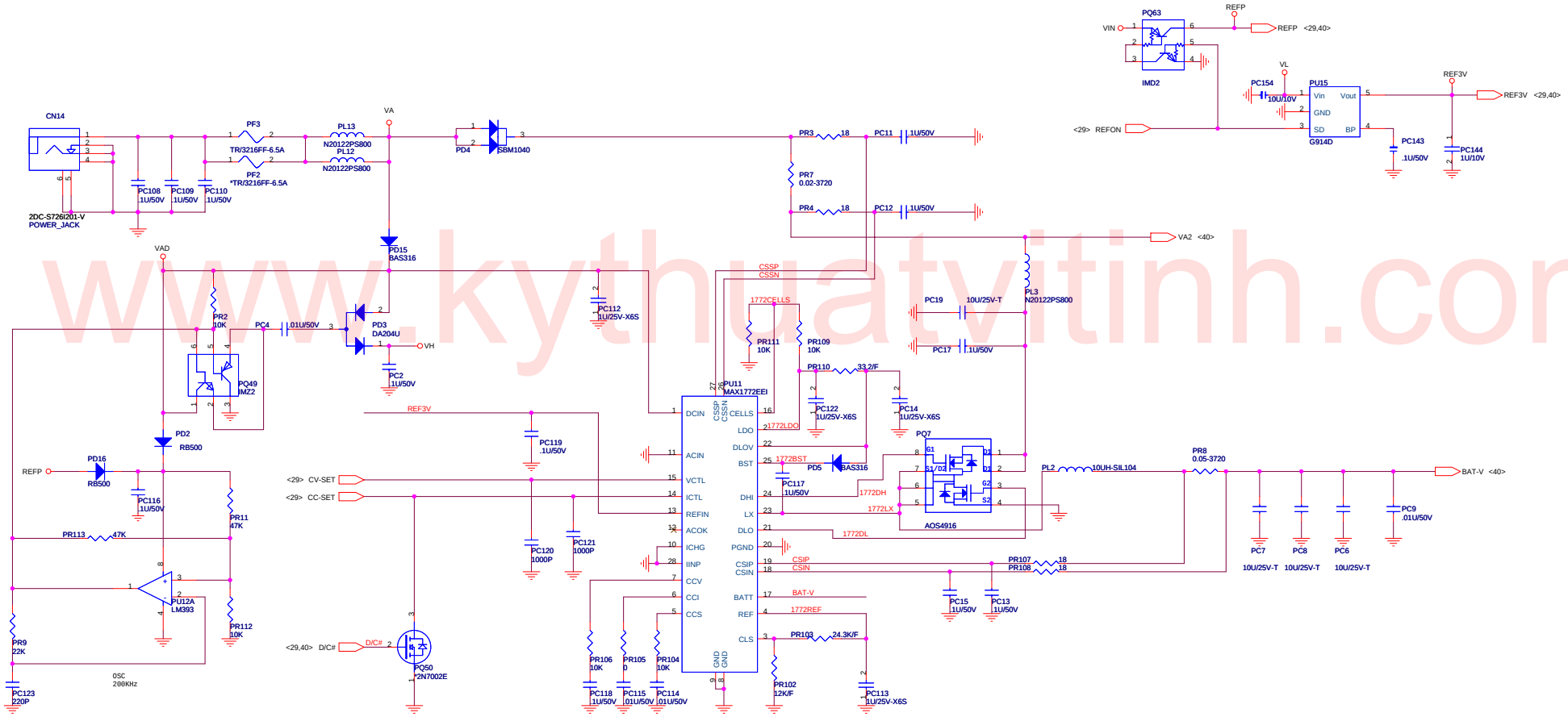
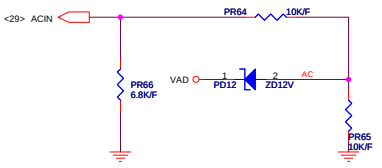
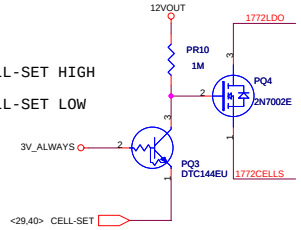


FOR 120W 6.2A

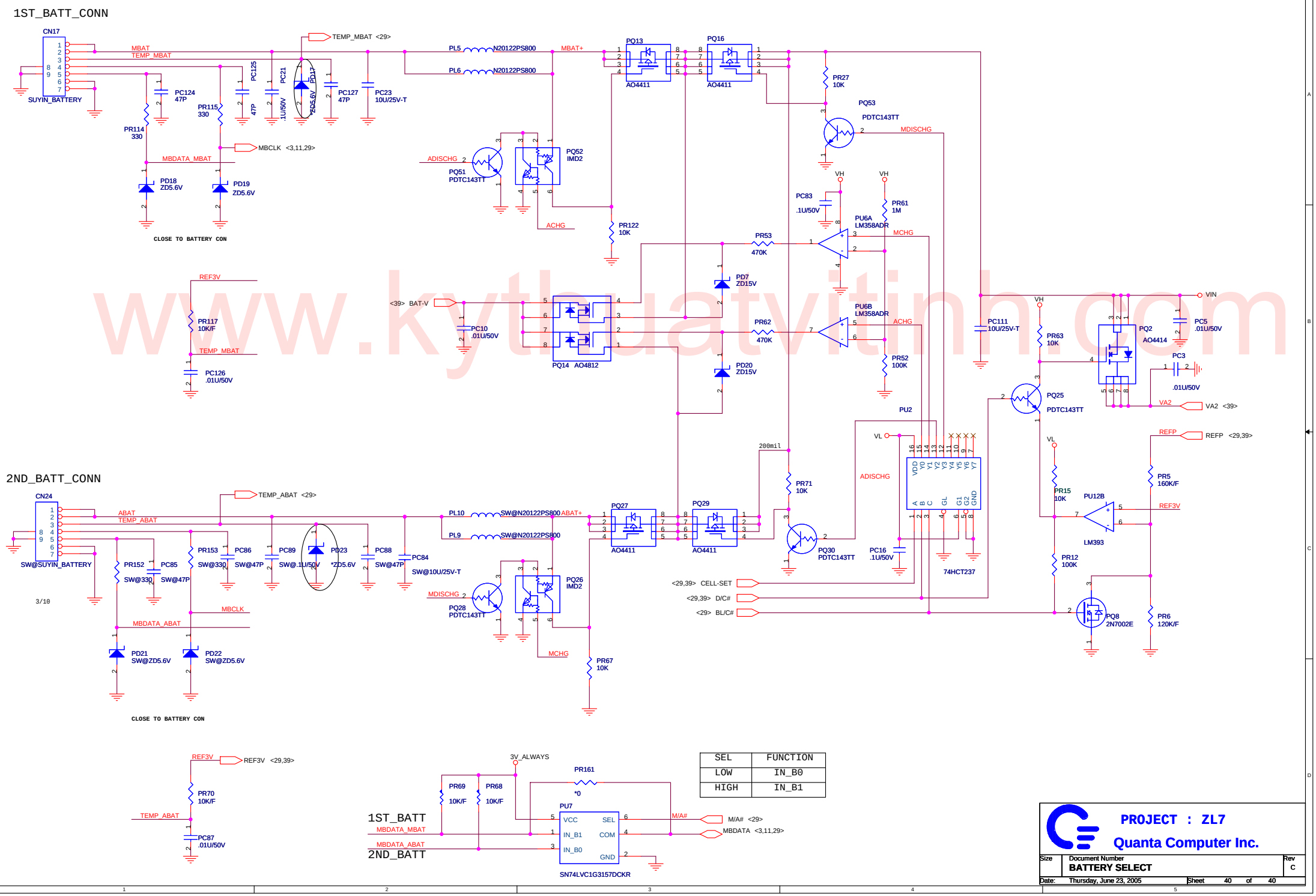


FOR 4S3P CELL-SET HIGH

FOR 3S3P CELL-SET LOW



PROJECT : ZL7		
Quanta Computer Inc.		
Size	Document Number: BATTERY CHARGER	Rev: C
Date: Thursday, June 23, 2005	Sheet 39 of 40	


1ST_BATT_CONN
CN17
SUYIN_BATTERY
MBAT
TEMP_MBAT
TEMP_MBAT <29>
PC124 47P
PR115 330
PR114 330
PC125 47P
PC21 .1U/50V
PD17 *ZD5.6V
PC127 47P
PC23 10U/25V-T
MBCLK <3,11,29>
MBDATA_MBAT
PD18 ZD5.6V
PD19 ZD5.6V
CLOSE TO BATTERY CON
PL5 N20122PS800
PL6 N20122PS800
MBAT+
PQ13 AO4411
PQ16 AO4411
PR27 10K
PQ53 PDTC143TT
MDISCHG
ADISCHG
PQ51 PDTC143TT
PQ52 IMD2
ACHG
PR122 10K
VH
PC83 .1U/50V
PR61 1M
PU6A LM358ADR
MCHG
PR53 470K
REF3V
PR117 10K/F
TEMP_MBAT
PC126 .01U/50V
<39> BAT-V
PC10 .01U/50V
PD7 ZD15V
PQ14 AO4812
PR62 470K
PU6B LM358ADR
PD20 ZD15V
PR52 100K
PC111 10U/25V-T
PR63 10K
PQ25 PDTC143TT
PQ2 AO4414
PC5 .01U/50V
PC3 .01U/50V
VIN
VA2
VA2 <39>
PU2
VL
200mil
PR71 10K
ADISCHG
PQ30 PDTC143TT
PC16 .1U/50V
74HCT237
REFP
REFP <29,39>
PR5 160K/F
REF3V
PR15 10K
PU12B
LM393
PR12 100K
PQ8 2N7002E
PR6 120K/F
2ND_BATT_CONN
CN24
SW@SUYIN_BATTERY
ABAT
TEMP_ABAT
TEMP_ABAT <29>
PR152 SW@330
PC85 SW@47P
PR153 SW@330
PC86 SW@47P
PC89 SW@.1U/50V
PD23 *ZD5.6V
PC88 SW@47P
PC84 SW@10U/25V-T
3/10
MBCLK
MBDATA_ABAT
PD21 SW@ZD5.6V
PD22 SW@ZD5.6V
CLOSE TO BATTERY CON
PL10 SW@N20122PS800
PL9 SW@N20122PS800
ABAT+
PQ27 AO4411
PQ29 AO4411
MDISCHG
PQ28 PDTC143TT
PQ26 IMD2
MCHG
PR67 10K
<29,39> CELL-SET
<29,39> D/C#
<29> BL/C#
REF3V
REF3V <29,39>
PR70 10K/F
TEMP_ABAT
PC87 .01U/50V
3V_ALWAYS
PR161 *0
PR69 10K/F
PR68 10K/F
PU7
1ST_BATT
MBDATA_MBAT
MBDATA_ABAT
2ND_BATT
VCC
IN_B1
IN_B0
SEL
COM
GND
M/A#
M/A# <29>
MBDATA <3,11,29>
SN74LVC1G3157DCKR
SEL FUNCTION
LOW IN_B0
HIGH IN_B1
PROJECT : ZL7
Quanta Computer Inc.
Size
Document Number
BATTERY SELECT
Rev C
Date: Thursday, June 23, 2005
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