BQ2L BLOCK DIAGRAM

01

CPU CORE MAX8771 POWER VCORE PG 32

SYSTEM MAX8734AEEI+ POWER(3/5V) PG 33

SYSTEM POWER MAX8743 (VCCP) PG 36

SYSTEM POWER APL5331 (+1.5V) PG 37

SYSTEM POWER MAX8632ETI+ (1.8VSUS/0.9V SMDDR_VREF) PG 34

BATT CHARGER MAX8724 PG 35

BATTERY CONNECTOE PG35

CPU Yonah/Merom
479 Pins (uPGA)
PG 4,5

CPU THERMAL SENSOR
GMT781
PG 31

FSB 533M/667M

CPUCLK, CPUCLK#
SBLINKCLK, SBLINKCLK#
NBSRCCLK, NBSRCCLK#
HTREFCLK
OSC14M

14.318MHz

CLOCK GEN
ICS9LPR600
56pins
PG 3

MEM CLK BUF
ICS9P935
PG 3

SiS M662MX
Integraded VGA Function
801 BGA (31X31)
PG 6,7,8,9

DDRII 533,667 MHz
DDRII 533,667 MHz

DDRII-SODIMM1
PG 16,17

DDRII-SODIMM2
PG 16,17

CRT port PG 18 — R.G,B

LCD Panel PG 23 — LVDS X1

S-VIDEO PG 18 — TV-OUT

SiS 307LV
PG 10

HDV I/F

DMI X4

32.768KHz

NBSRCCLK, NBSRCCLK#

USB6
New Card
PG 21

USB4
Mini PCIE / WLAN
PG 24

PCI-Express

PHY 10/100 RTL8201CL
PG 22

Magnetics
PG 25

RJ45 PG 25

MII I/F

SATA - HDD PG 26 — SATA 150MB

IDE - ODD PG 26 — ATA 66/100/133

SiS 966L
588 BGA (27X27)
PG 12,13,14,15

33MHZ, 3.3V PCI

Azalia

24.576MHz

CARDBUS R5C832
PG 19,20

IEEE 1394
PG 20

4 IN 1
PG 21

USB 2.0

USB PORT 1 PG 30
USB PORT 3 PG 30
USB PORT 5 PG 30
USB PORT 7 PG 30
USB PORT 0 PG 29
USB PORT 2 PG 29

Bluetooth PG 29
CIR PG 29

PWRCLKN DIB_DATAN
PWRCLKP DIB_DATAP

MDC
PG 29

Azalia
AUDIO CODEC
ALC262H PG27

AMP
MAX9755
PG28

LPC

32.768KHz

PC87541
TQFP 176pins
PG 31

WIRE

FAN PG24
Touch PAD PG29
Key Board PG30
FLASH ROM PG31

RJ11 PG25
LINE IN PG28
MIC PG 27
INT SPK PG28
HP PG28

QUANTA COMPUTER

Title: BLOCK DIAGRAM

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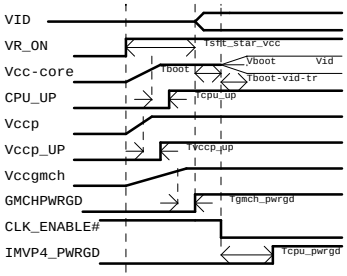
Board Stack up Description

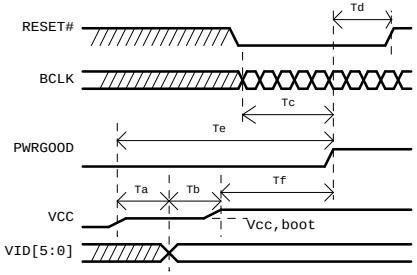
PCB Layers

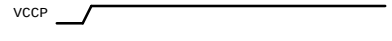
Layer 1		TOP(Component,Other)
Layer 2		Ground Plane
Layer 3		IN1
Layer 4		IN2
Layer 5		Power Plane
Layer 6		IN3
Layer 7		Ground Plane
Layer 8		BOTTOM

Power On Sequencing Timing Diagram



Dothan Power-up Timing Specifications



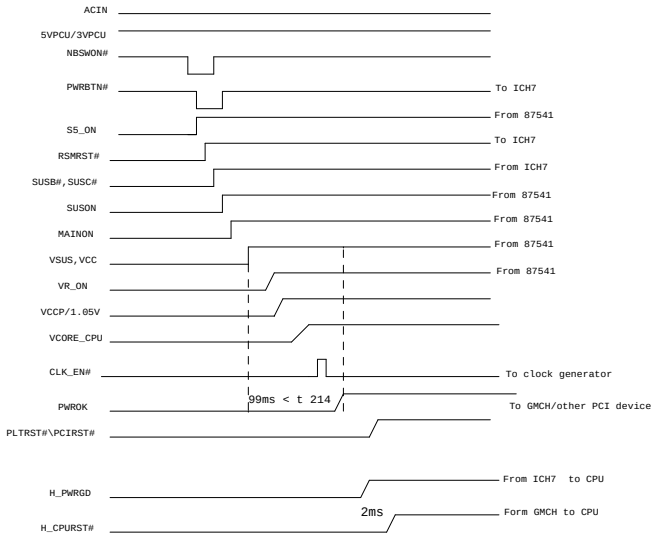


Ta=VCC and VCCP asseration to VID[5:0] vaild
Tb=VID[5:0] stable to VCC vaild
Tc=BCLK stable to PWRGOOD assertion
Td=PWRGOOD to RESET# de-assertion time
Te=Vcc,boot vaild to PWRGOOD assertion time

Voltage Rails

Voltage Rails		ON S0~S2	ON S3	ON S4	ON S5	Control signal
VCC_CORE	Core voltage for Processor	X				VR_ON 0.726V~0.94V
VCCP	Core voltage for CPU / NB	X				VR_ON
SMDDR_VTERM	0.9V for DDR2 Termination voltage	X				MAINON
RVCC1.5		X	X	X		RVCC_ON
RVCC3		X	X	X		RVCCD
VCC1.5		X				MAIND
VCC2.5		X				MAINON
VCC3		X				MAIND
VCC5		X				MAIND
1.8VSUS		X	X			SUSON
3VSUS		X	X			SUSD
5VSUS		X	X			SUSD
3VPCU		X	X	X	X	VL
5VPCU		X	X	X	X	VL
9VPCU		X	X	X	X	5VPCU

ACIN POWER ON TIMING



Voltage Rails		ON S0~S1	ON S3	ON S4	ON S5	Control signal
VCC_CORE	Core voltage for Processor	X				VRON
GMCH_VTT	Core voltage for GMCH 1.05V	X				MAINON
SMDDR_VTERM	0.9V for DDR II Termination voltage	X				MAINON
SMDDR_VREF	0.9V for DDR II Reference Voltage	X				MAINON
GMCH_1.5V		X				MAINON
1.8VSUS	1.8V for DDR II voltage	X	X			SUSON
+2.5V		X				MAINON
3VPCU		X	X	X	X	VL
3VSUS		X	X			SUSON
+3V		X				MAINON
5VPCU		X	X	X	X	VL
5VSUS		X	X			SUSON
+5V		X				MAINON
VIN	POWER SOURCE	X	X	X	X	

PCI DEVICE	IDSEL#	REQ# / GNT#	Interrupts
PCI7402	AD20	REQ2# / GNT2#	PIRQ C/D

QUANTA COMPUTER

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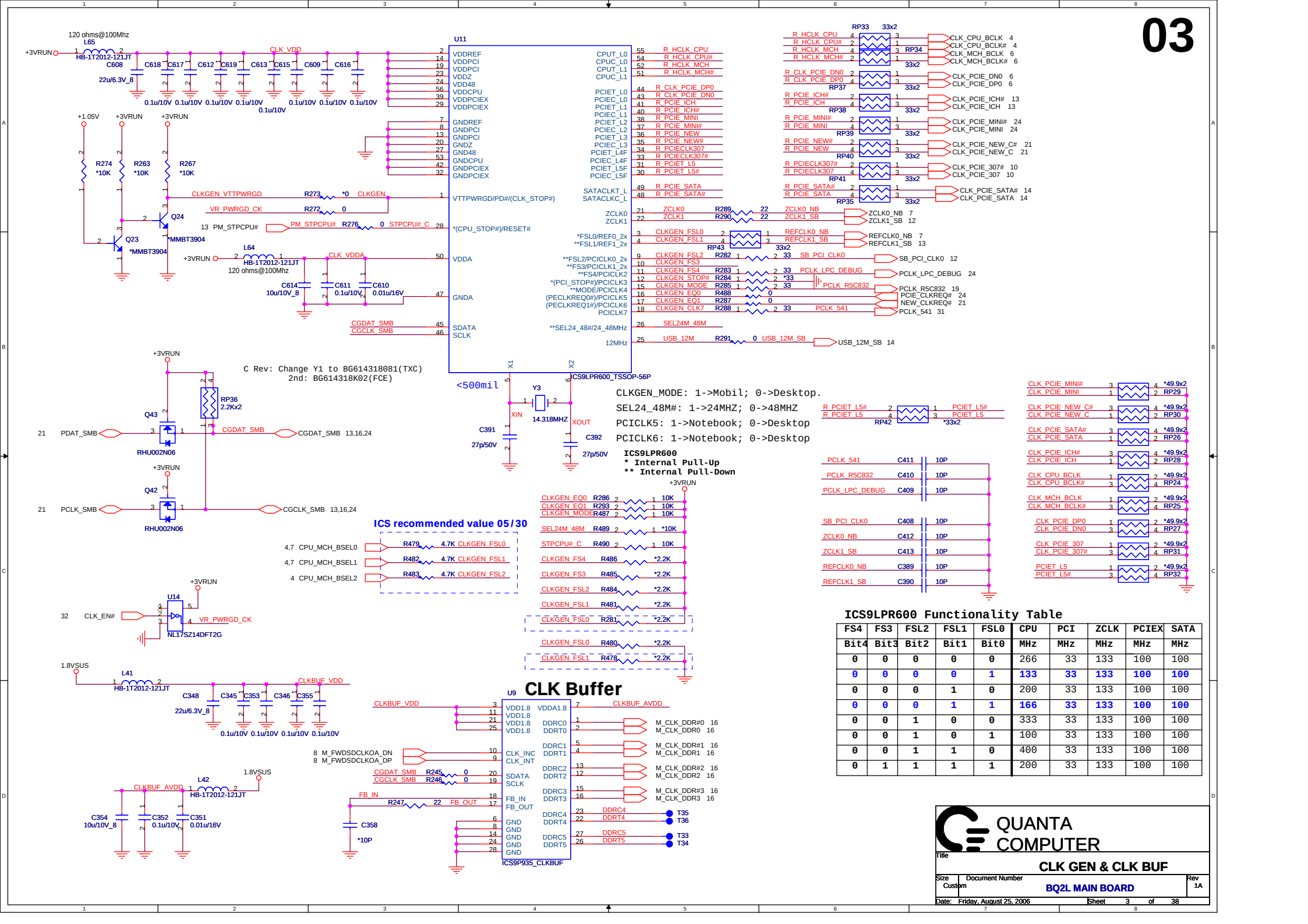
03
U11
ICS9LPR600_TSSOP-56P
C Rev: Change Y1 to BG614318081(TXC)
2nd: BG614318K02(FCE)
CLKGEN_MODE: 1->Mobil; 0->Desktop.
SEL24_48M#: 1->24MHZ; 0->48MHZ
PCICLK5: 1->Notebook; 0->Desktop
PCICLK6: 1->Notebook; 0->Desktop
ICS9LPR600
* Internal Pull-Up
** Internal Pull-Down
ICS recommended value 05/30
CLK Buffer
U9
ICS9P935_CLKBUF
ICS9LPR600 Functionality Table
FS4 FS3 FSL2 FSL1 FSL0 CPU PCI ZCLK PCIEX SATA
Bit4 Bit3 Bit2 Bit1 Bit0 MHz MHz MHz MHz MHz
0 0 0 0 0 266 33 133 100 100
0 0 0 0 1 133 33 133 100 100
0 0 0 1 0 200 33 133 100 100
0 0 0 1 1 166 33 133 100 100
0 0 1 0 0 333 33 133 100 100
0 0 1 0 1 100 33 133 100 100
0 0 1 1 0 400 33 133 100 100
0 1 1 1 1 200 33 133 100 100
QUANTA COMPUTER
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CLK GEN & CLK BUF
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U27A

ADDR GROUP 0 / CONTROL / XDP/ITP SIGNALS / THERM / H CLK / RESERVED

PZ47903-2741-01

U27B

DATA GRP 0 / DATA GRP 2 / DATA GRP 1 / DATA GRP 3 / MISC

PZ47903-2741-01

R403 56 — Close to NB <500mils

XDP PU_R < 0.2"

FOX: DGG^9000071
TYC: DGG^9000063

Rev.B Added

Rev.C Modify:
COMP0: 20mils
COMP2: 20mils

TO VRD

C Rev. Add U35 CPU state circuit

Title	Yonah/Merom (HOST BUS)
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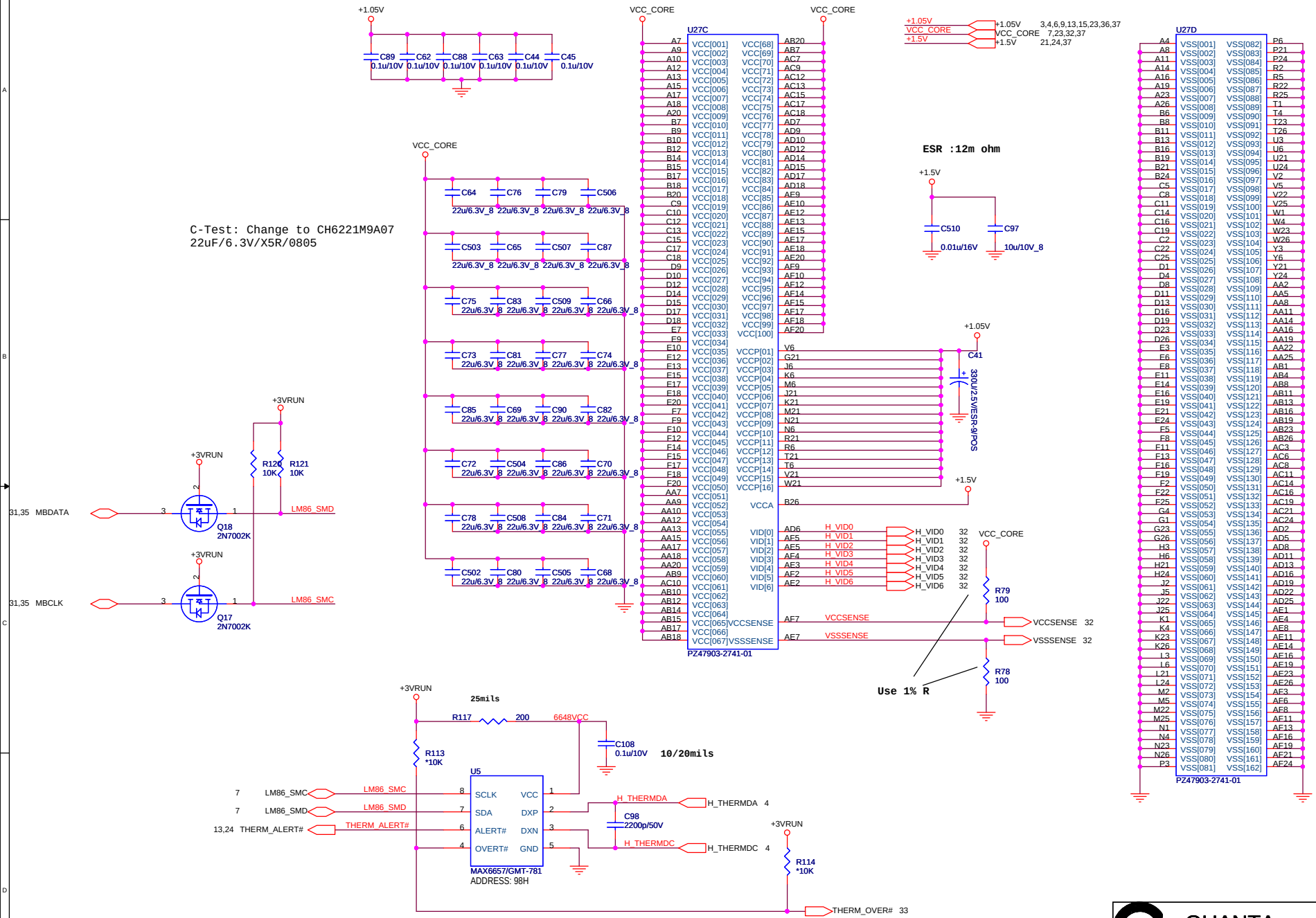

QUANTA COMPUTER

Title	Yonah/Merom (POWER/NC)	
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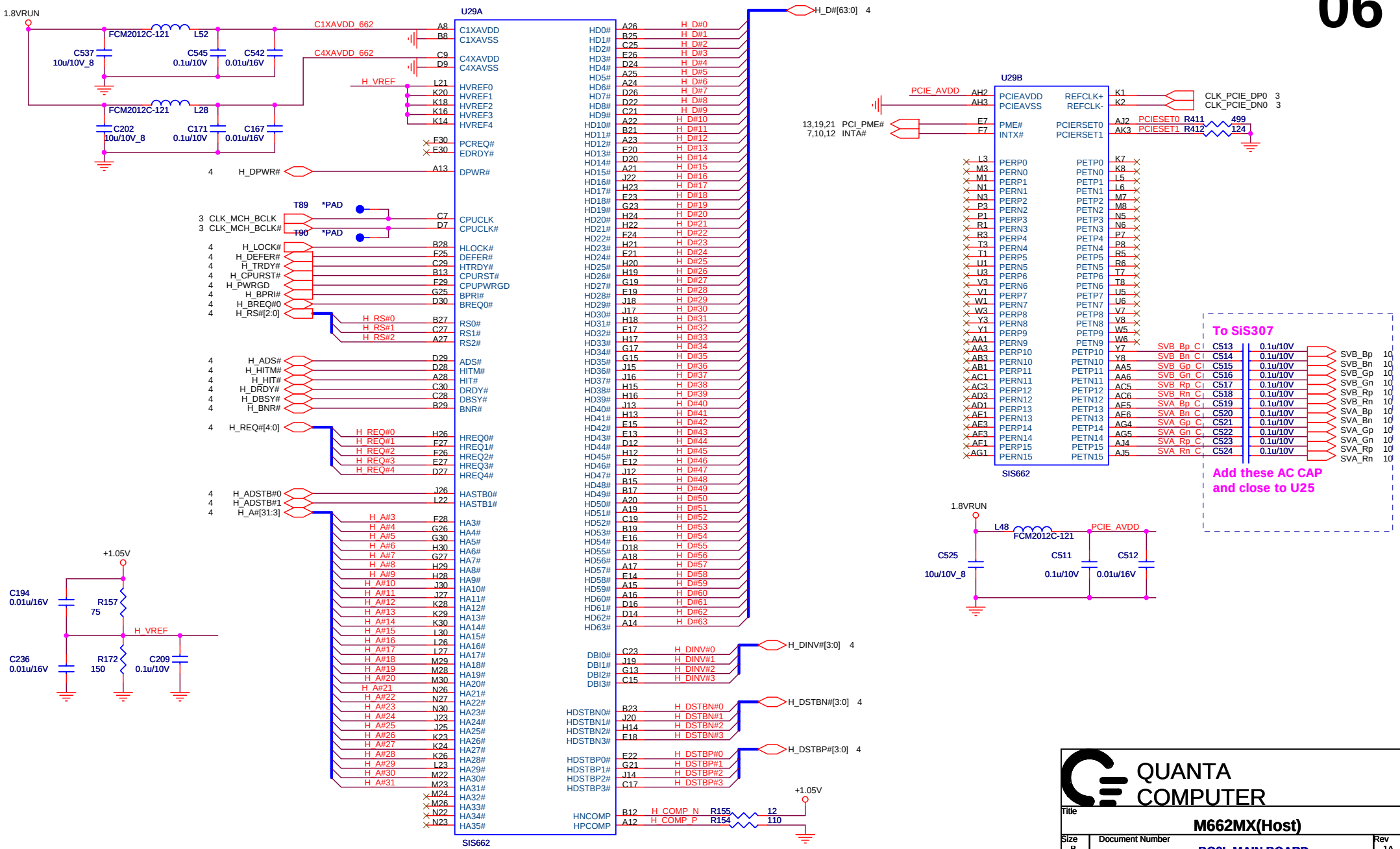
06
1.8VRUN
FCM2012C-121
L52
C537
10u/10V_8
C545
0.1u/10V
C542
0.01u/16V
C1XAVDD_662
C4XAVDD_662
FCM2012C-121
L28
C202
10u/10V_8
C171
0.1u/10V
C167
0.01u/16V
H_VREF
U29A
C1XAVDD
C1XAVSS
C4XAVDD
C4XAVSS
HVREF0
HVREF1
HVREF2
HVREF3
HVREF4
PCREQ#
EDRDY#
DPWR#
H_DPWR#
T89 *PAD
T90 *PAD
CLK_MCH_BCLK
CLK_MCH_BCLK#
CPUCLK
CPUCLK#
H_LOCK#
H_DEFER#
H_TRDY#
H_CPURST#
H_PWRGD
H_BPRI#
H_BREQ#0
H_RS#[2:0]
HLOCK#
DEFER#
HTRDY#
CPURST#
CPUPWRGD
BPRI#
BREQ0#
RS0#
RS1#
RS2#
H_ADS#
H_HITM#
H_HIT#
H_DRDY#
H_DBSY#
H_BNR#
ADS#
HITM#
HIT#
DRDY#
DBSY#
BNR#
H_REQ#[4:0]
HREQ0#
HREQ1#
HREQ2#
HREQ3#
HREQ4#
H_ADSTB#0
H_ADSTB#1
H_A#[31:3]
HASTB0#
HASTB1#
HA3#
HA4#
HA5#
HA6#
HA7#
HA8#
HA9#
HA10#
HA11#
HA12#
HA13#
HA14#
HA15#
HA16#
HA17#
HA18#
HA19#
HA20#
HA21#
HA22#
HA23#
HA24#
HA25#
HA26#
HA27#
HA28#
HA29#
HA30#
HA31#
HA32#
HA33#
HA34#
HA35#
SIS662
H_D#[63:0]
HD0#
HD1#
HD2#
HD3#
HD4#
HD5#
HD6#
HD7#
HD8#
HD9#
HD10#
HD11#
HD12#
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HD53#
HD54#
HD55#
HD56#
HD57#
HD58#
HD59#
HD60#
HD61#
HD62#
HD63#
H_DINV#[3:0]
DBI0#
DBI1#
DBI2#
DBI3#
H_DSTBN#[3:0]
HDSTBN0#
HDSTBN1#
HDSTBN2#
HDSTBN3#
H_DSTBP#[3:0]
HDSTBP0#
HDSTBP1#
HDSTBP2#
HDSTBP3#
HNCOMP
HPCOMP
H_COMP_N
H_COMP_P
R155
12
R154
110
+1.05V
U29B
PCIE_AVDD
PCIEAVDD
PCIEAVSS
REFCLK+
REFCLK-
CLK_PCIE_DP0
CLK_PCIE_DN0
PME#
INTX#
PCIERSET0
PCIERSET1
R411
499
R412
124
PERP0
PERN0
PERP1
PERN1
PERP2
PERN2
PERP3
PERN3
PERP4
PERN4
PERP5
PERN5
PERP6
PERN6
PERP7
PERN7
PERP8
PERN8
PERP9
PERN9
PERP10
PERN10
PERP11
PERN11
PERP12
PERN12
PERP13
PERN13
PERP14
PERN14
PERP15
PERN15
PETP0
PETN0
PETP1
PETN1
PETP2
PETN2
PETP3
PETN3
PETP4
PETN4
PETP5
PETN5
PETP6
PETN6
PETP7
PETN7
PETP8
PETN8
PETP9
PETN9
PETP10
PETN10
PETP11
PETN11
PETP12
PETN12
PETP13
PETN13
PETP14
PETN14
PETP15
PETN15
SIS662
To SiS307
SVB_Bp_C
SVB_Bn_C
SVB_Gp_C
SVB_Gn_C
SVB_Rp_C
SVB_Rn_C
SVA_Bp_C
SVA_Bn_C
SVA_Gp_C
SVA_Gn_C
SVA_Rp_C
SVA_Rn_C
C513
C514
C515
C516
C517
C518
C519
C520
C521
C522
C523
C524
0.1u/10V
SVB_Bp
SVB_Bn
SVB_Gp
SVB_Gn
SVB_Rp
SVB_Rn
SVA_Bp
SVA_Bn
SVA_Gp
SVA_Gn
SVA_Rp
SVA_Rn
Add these AC CAP
and close to U25
1.8VRUN
L48
FCM2012C-121
PCIE_AVDD
C525
10u/10V_8
C511
0.1u/10V
C512
0.01u/16V
+1.05V
C194
0.01u/16V
R157
75
H_VREF
C236
0.01u/16V
R172
150
C209
0.1u/10V
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M662MX(Host)
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12 ZAD[16:0]

Reserved for EMI

CRT_R L49 0 CRT_RED 18
CRT_G L21 0 CRT_GREEN 18
CRT_B L51 0 CRT_BLUE 18
C526 150/F C115 150/F C531 150/F
C530 *10P C116 *10P C527 *10P
S.I recommended

U29D

3 ZCLK0_NB → AB12 ZCLK
12 ZDREQ → AF13 ZDREQ
12 ZUREQ → AF14 ZUREQ
12 ZSTB0 → AC13 ZSTB0
12 ZSTB0# → AB13 ZSTB0#
12 ZSTB1 → AK12 ZSTB1
12 ZSTB1# → AK11 ZSTB1#
ZAD0 AB15 ZAD0 … ZAD16 AG13 ZAD16
ZVREF AD14 ZVREF
ZCOMP AG15 ZCMP_P
ZCOMN AF15 ZCMP_N
Z1XAVDD AK14 Z1XAVDD
AK15 Z1XAVSS
Z4XAVDD AJ14 Z4XAVDD
AH14 Z4XAVSS
CRT_R B2 ROUT
CRT_G C3 GOUT
CRT_B A3 BOUT
18 VGAHSYNC R143 39 HSYNC1 A4 HSYNC
18 VGAVSYNC R147 39 VSYNC1 D5 VSYNC
18 DDCDATA A5 VGPIO1
18 DDCCLK D4 VGPIO0
DACAVDD C124 0.1u/10V VCOMP B4 VCOMP
C132 0.1u/10V VVBWN E5 VVBWN
R142 130 VRSET C5 VRSET
6,10,12 INTA# R148 0 662 INTA# G8 INTA#
3 REFCLK0_NB R136 0 VOSCI C1 VOSCI
DACAVDD E4 DACAVDD1
L66 0 F3 DACAVSS1
F3 DACAVDD2
D3 DACAVSS2
DCLKAVDD D1 DCLKAVDD
D2 DCLKAVSS
ECLKAVDD F1 ECLKAVDD
F2 ECLKAVSS

ENTEST G7 ENTEST R146 4.7K 1.8VRUN
TESTMODE0 H5 NB_TESTMODE0 R138 *4.7K
TESTMODE1 G5 NB_TESTMODE1 R135 *4.7K
TESTMODE2 G4 NB_TESTMODE2 R134 *4.7K
TRAP0 G6 NB_TRAP0 R139 *4.7K
TRAP1 H7 NB_TRAP1 R145 *4.7K
TRAP2 F5 NB_TRAP2 R137 *4.7K
TRAP3 P26
TRAP4 P24
TRAP5 P23
TRAP6 R22
TRAP7 R23
TRAP8 T22
TRAP9 T23
TRAP10 U22
+3V_S5 R151 4.7K
AUX_PWRGD NB_PWROK C149 0.1u/10V C140 *0.1u/10V
AUXOK E9 AUX_PWRGD
PWROK E6 NB_PWROK
PCIRST# E8 NB_RST# → NB_PWROK 13, NB_RST# 10,12
AGPBUSY# C6 AGPBUSY# R144 4.7K +3VRUN
AGPBUSY# 13
VBVSYNC H2 VBVSYNC 10
VBHSYNC J3 VBHSYNC 10
VBHCLK J5 VBHCLK 10
VBCLK H3 VBCLK 10
VBCAD J6 VBCAD 10
VACLK J4 VACLK 10
AGPSTOP# G3 AGPSTOP# 13
MCLKAVDD G1 MCLKAVDD
MCLKAVSS H1

SIS662

1.8VRUN
R159 150 C172 0.1u/10V
ZVREF
R156 49.9 C165 0.1u/10V
R158 56 ZCOMN
R161 56 ZCOMP

FCM2012C-121 L59 Z1XAVDD
C543 10u/10V_8 C561 0.1u/10V C564 0.01u/16V
FCM2012C-121 L53 Z4XAVDD
C580 10u/10V_8 C179 0.1u/10V C180 0.01u/16V
L20 0 DACAVDD
C109 10u/10V_8 C127 0.1u/10V C125 0.01u/16V
C2767 1000p/50V 8/22

+3VRUN
FCM2012C-121 L17 DCLKAVDD
C110 10u/10V_8 C119 0.1u/10V C118 0.01u/16V
FCM2012C-121 L18 ECLKAVDD
C111 10u/10V_8 C121 0.1u/10V C120 0.01u/16V

B-Add: sens NB thermal
U32: Changed to low cost IC
AL000751016-->GMT G751-2P8F
AL0000750H8--> MAM DS75U+T&R
AL0000750A1(LF)-->NS LM75CIMM3
U31 A0 A1 A2 SDA SCL +VS O.S GND GMT-G751-2P8F
C587 0.1u/10V
5 LM86_SMD
5 LM86_SMC
ADDRESS : 96H
Check TI part for replace : TMP75AIDR

+3VRUN
R131 10K R132 10K R133 *0 NB_TESTMODE0
3,4 CPU_MCH_BSEL1 R130 10K Q15 Q16 MMBT3904
VCC_CORE +3VRUN +3VRUN
R125 10K R126 10K R127 10K R128 *0 NB_TESTMODE2
Q13 Q14 MMBT3904
+3VRUN
R123 10K R124 *0 NB_TESTMODE1
3,4 CPU_MCH_BSEL0 R122 10K
3,4 CPU_MCH_BSEL1 R129 10K
Q11 Q12 MMBT3904

+3VRUN
L19 FCM2012C-121 MCLKAVDD
C112 10u/10V_8 C123 0.1u/10V C122 0.01u/16V

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16 M_A_DQ[63:0] | M_A_DM[7:0] 16 | M_A_DQS[7:0] 16 | M_A_DQS#[7:0] 16 | M_A_A[14:0] 16,17

U29C

M_A_DQ0	P28	MDA0	
M_A_DQ1	R30	MDA1	
M_A_DQ2	U27	MDA2	
M_A_DQ3	U30	MDA3	
M_A_DQ4	P30	MDA4	
M_A_DQ5	P29	MDA5	
M_A_DQ6	T29	MDA6	
M_A_DQ7	T30	MDA7	
M_A_DM0	T28	DQMA0	
M_A_DQS0	R27	DQSA0	
M_A_DQS#0	R26	DQSA0#	
M_A_DQ8	T26	MDA8	
M_A_DQ9	V26	MDA9	
M_A_DQ10	W23	MDA10	
M_A_DQ11	W22	MDA11	
M_A_DQ12	U23	MDA12	
M_A_DQ13	T24	MDA13	
M_A_DQ14	Y23	MDA14	
M_A_DQ15	Y22	MDA15	
M_A_DM1	V22	DQMA1	
M_A_DQS1	V23	DQSA1	
M_A_DQS#1	V24	DQSA1#	
M_A_DQ16	W30	MDA16	
M_A_DQ17	U26	MDA17	
M_A_DQ18	Y29	MDA18	
M_A_DQ19	Y30	MDA19	
M_A_DQ20	V30	MDA20	
M_A_DQ21	V29	MDA21	
M_A_DQ22	Y28	MDA22	
M_A_DQ23	AA30	MDA23	
M_A_DM2	V28	DQMA2	
M_A_DQS2	W27	DQSA2	
M_A_DQS#2	W26	DQSA2#	
M_A_DQ24	Y26	MDA24	
M_A_DQ25	AA23	MDA25	
M_A_DQ26	AB22	MDA26	
M_A_DQ27	AE26	MDA27	
M_A_DQ28	Y24	MDA28	
M_A_DQ29	AB26	MDA29	
M_A_DQ30	AD26	MDA30	
M_A_DQ31	AC26	MDA31	
M_A_DM3	AB24	DQMA3	
M_A_DQS3	AC23	DQSA3	
M_A_DQS#3	AB23	DQSA3#	
M_A_DQ32	AE25	MDA32	
M_A_DQ33	AC21	MDA33	
M_A_DQ34	AF20	MDA34	
M_A_DQ35	AG24	MDA35	
M_A_DQ36	AF26	MDA36	
M_A_DQ37	AF24	MDA37	
M_A_DQ38	AF22	MDA38	
M_A_DQ39	AD20	MDA39	
M_A_DM4	AC20	DQMA4	
M_A_DQS4	AC22	DQSA4	
M_A_DQS#4	AD22	DQSA4#	
M_A_DQ40	AK24	MDA40	
M_A_DQ41	AG21	MDA41	
M_A_DQ42	AK21	MDA42	
M_A_DQ43	AK20	MDA43	
M_A_DQ44	AF23	MDA44	
M_A_DQ45	AG23	MDA45	
M_A_DQ46	AK23	MDA46	
M_A_DQ47	AK22	MDA47	
M_A_DM5	AF21	DQMA5	
M_A_DQS5	AH22	DQSA5	
M_A_DQS#5	AJ22	DQSA5#	
M_A_DQ48	AB19	MDA48	
M_A_DQ49	AB20	MDA49	
M_A_DQ50	AE18	MDA50	
M_A_DQ51	AD16	MDA51	
M_A_DQ52	AD18	MDA52	
M_A_DQ53	AC19	MDA53	
M_A_DQ54	AB17	MDA54	
M_A_DQ55	AE16	MDA55	
M_A_DM6	AC17	DQMA6	
M_A_DQS6	AB18	DQSA6	
M_A_DQS#6	AC18	DQSA6#	
M_A_DQ56	AH20	MDA56	
M_A_DQ57	AJ20	MDA57	
M_A_DQ58	AG17	MDA58	
M_A_DQ59	AK17	MDA59	
M_A_DQ60	AF19	MDA60	
M_A_DQ61	AG19	MDA61	
M_A_DQ62	AH18	MDA62	
M_A_DQ63	AF17	MDA63	
M_A_DM7	AK19	DQMA7	
M_A_DQS7	AJ18	DQSA7	
M_A_DQS#7	AK18	DQSA7#	

SIS662

D1XAVDD A9, B9 — D1XAVDD — L58 FCM2012C-121 — 1.8VRUN
C548 0.01u/16V, C551 0.1u/10V, C568 10u/10V_8

D4XAVDD AH16, AJ16 — D4XAVDD — L60 FCM2012C-121
C190 0.01u/16V, C201 0.1u/10V, C571 10u/10V_8

MAA0	AH30	M_A_A0
MAA1	AG30	M_A_A1
MAA2	AG28	M_A_A2
MAA3	AF28	M_A_A3
MAA4	AF29	M_A_A4
MAA5	AF30	M_A_A5
MAA6	AE27	M_A_A6
MAA7	AE30	M_A_A7
MAA8	AE28	M_A_A8
MAA9	AD29	M_A_A9
MAA10	AH29	M_A_A10
MAA11	AH28	M_A_BS#0
MAA12	AJ29	M_A_BS#1
MAA13	AC27	M_A_BS#2
MAA14	AD28	M_A_A11
MAA15	AD30	M_A_A12
MAA16	AG25	M_A_A13
MAA17	AC28	M_A_A14

M_A_BS#0 16,17
M_A_BS#1 16,17
M_A_BS#2 16,17

Need to confirm with SiS whether the address I/F is correct or not.

RASA#	AJ28	M_A_RAS# 16,17
CASA#	AJ26	M_A_CAS# 16,17
WEA#	AK27	M_A_WE# 16,17

FWDSDCLKOA	AC16	M_FWDSDCLKOA_DP 3
FWDSDCLKOA#	AB16	M_FWDSDCLKOA_DN 3

CSA0#	AK28	M_CS#0 16,17
CSA1#	AH25	M_CS#1 16,17
CSA2#	AH27	M_CS#2 16,17
CSA3#	AK25	M_CS#3 16,17

ODTA0	AH26	M_ODT0 16,17
ODTA1	AH24	M_ODT1 16,17
ODTA2	AK26	M_ODT2 16,17
ODTA3	AJ24	M_ODT3 16,17

CKEA0	AB28	M_CKE0 16,17
CKEA1	AB29	M_CKE1 16,17
CKEA2	AC30	M_CKE2 16,17
CKEA3	AB30	M_CKE3 16,17

1.8VSUS
R171 1K, C205 0.1u/10V
DDRVREF0 AA17, DDRVREF1 R21 — DDRVREF — C206 1u/10V, C240 0.1u/10V, R176 1K

DDRCOMP AG26 M_COMP_P
DDRCOMN AF27 M_COMP_N
M_COMP_N R192 36 — 1.8VSUS
M_COMP_P R185 36

OCDVREFP AA27 M_OCDVREF_P
OCDVREFN AA26 M_OCDVREF_N

+3V_S5
R152 4.7K
S3AUXSW# F9 — S3AUXSW# — R149 0 — SUSB# 13,28,30,31

1.8VSUS
R190 40.2 — M_OCDVREF_P — R182 36
R191 36 — M_OCDVREF_N — R183 40.2

QUANTA COMPUTER

Title	M662MX(DDRII)		
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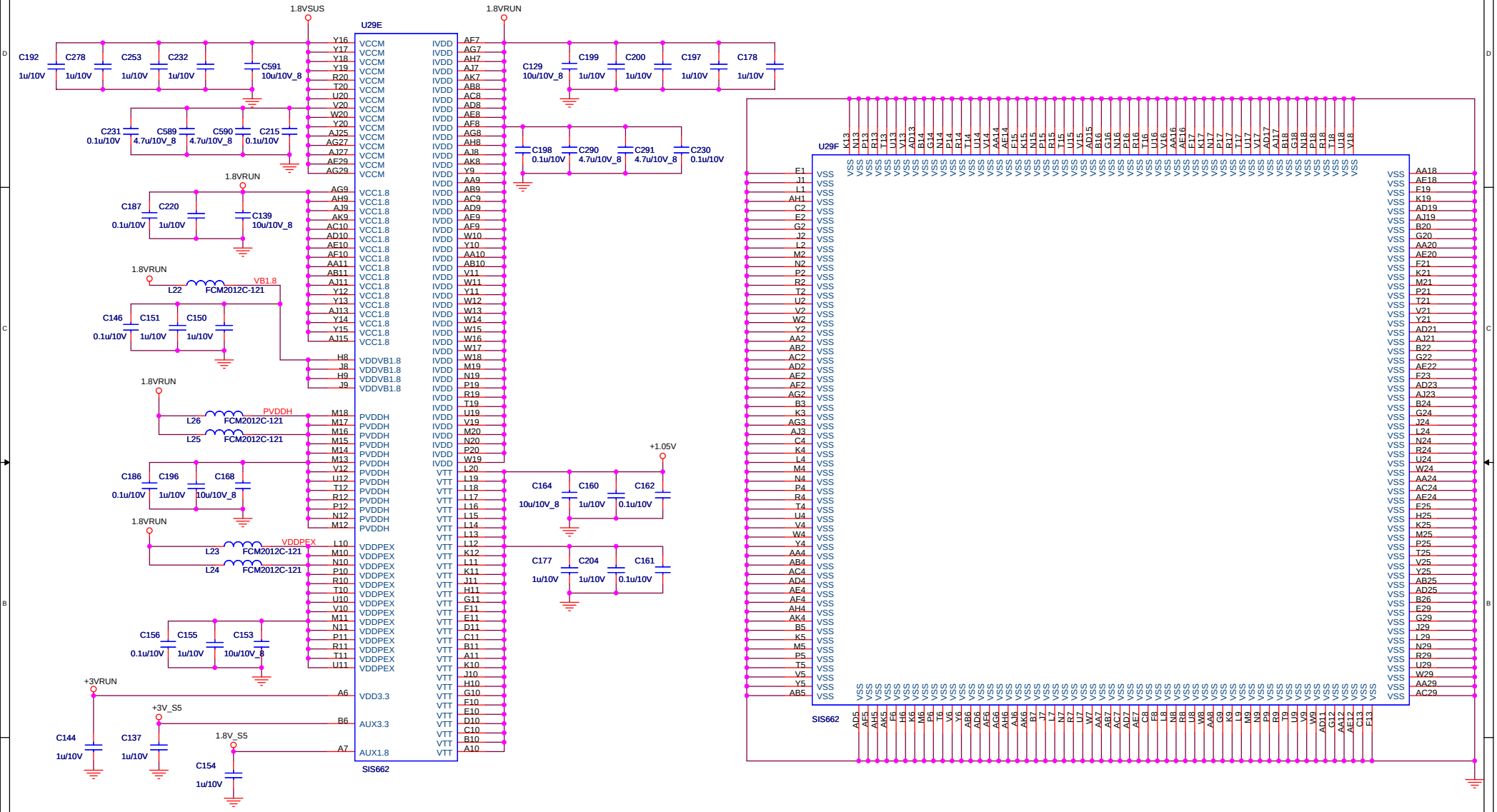

QUANTA COMPUTER			
Title	M662MX POWER,GND		
Size: Custom	Document Number: BQ2L MAIN BOARD		Rev: 1A
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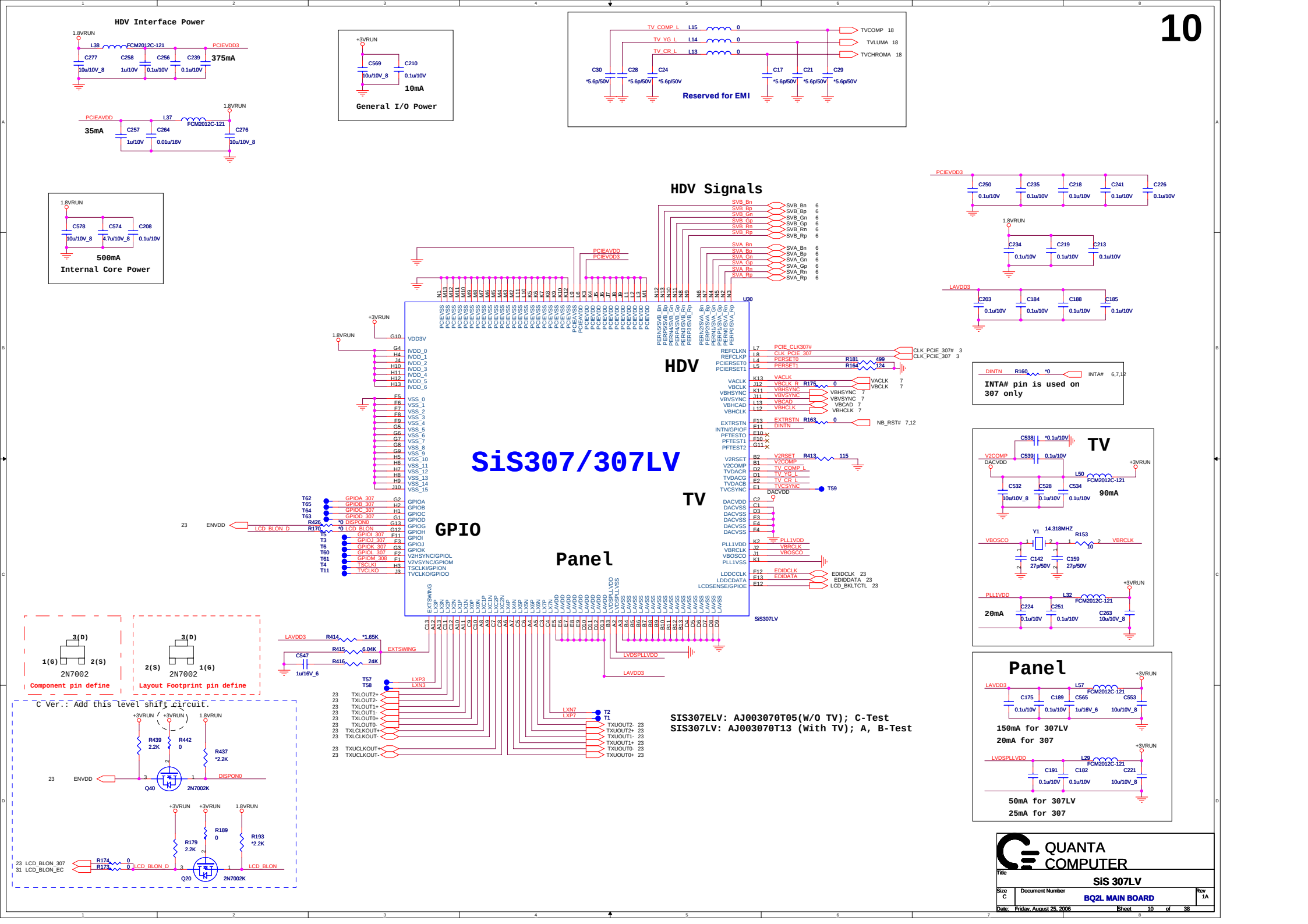
HDV Interface Power
1.8VRUN
L38 FCM2012C-121
PCIEVDD3
C277 10u/10V_8
C258 1u/10V
C256 0.1u/10V
C239 0.1u/10V
375mA
PCIEAVDD
35mA
L37 FCM2012C-121
C257 1u/10V
C264 0.01u/16V
C276 10u/10V_8
+3VRUN
C569 10u/10V_8
C210 0.1u/10V
10mA
General I/O Power
TV_COMP_L L15 0
TV_YG_L L14 0
TV_CR_L L13 0
TVCOMP 18
TVLUMA 18
TVCHROMA 18
C30 *5.6p/50V
C28 *5.6p/50V
C24 *5.6p/50V
C17 *5.6p/50V
C21 *5.6p/50V
C29 *5.6p/50V
Reserved for EMI
C578 10u/10V_8
C574 4.7u/10V_8
C208 0.1u/10V
500mA
Internal Core Power
HDV Signals
SVB_Bn SVB_Bp SVB_Gn SVB_Gp SVB_Rn SVB_Rp
SVA_Bn SVA_Bp SVA_Gn SVA_Gp SVA_Rn SVA_Rp
PCIEAVDD
PCIEVDD3
U30
SiS307/307LV
HDV
TV
GPIO
Panel
REFCLKN
REFCLKP
PCIE_CLK307#
CLK_PCIE_307
PERSET0 R181 499
PERSET1 R164 124
VACLK
VBCLK R175 0
VBHSYNC
VBVSYNC
VBCAD
VBHCLK
EXTRSTN R163 0
DINTN
NB_RST# 7,12
V2RSET R413 115
V2COMP
TV_COMP_L
TV_YG_L
TV_CR_L
TVCSYNC
DACVDD
T59
PLL1VDD
VBRCLK
VBOSCO
EDIDCLK
EDIDDATA
LCD_BKLTCTL 23
SiS307LV
DINTN R160 *0 INTA# 6,7,12
INTA# pin is used on 307 only
PCIEVDD3
C250 C235 C218 C241 C226 0.1u/10V
1.8VRUN
C234 C219 C213 0.1u/10V
LAVDD3
C203 C184 C188 C185 0.1u/10V
TV
C538 *0.1u/10V
C539 0.1u/10V
V2COMP
DACVDD
+3VRUN
L50 FCM2012C-121
C532 10u/10V_8
C528 0.1u/10V
C534 0.1u/10V
90mA
Y1 14.318MHZ
R153 10
VBOSCO
VBRCLK
C142 27p/50V
C159 27p/50V
PLL1VDD
L32 FCM2012C-121
C224 0.1u/10V
C251 0.1u/10V
C263 10u/10V_8
20mA
Panel
LAVDD3
L57 FCM2012C-121
C175 0.1u/10V
C189 0.1u/10V
C565 1u/16V_6
C553 10u/10V_8
150mA for 307LV
20mA for 307
LVDSPLLVDD
L29 FCM2012C-121
C191 0.1u/10V
C182 0.1u/10V
C221 10u/10V_8
50mA for 307LV
25mA for 307
3(D) 1(G) 2(S) 2N7002
Component pin define
3(D) 2(S) 1(G) 2N7002
Layout Footprint pin define
C Ver.: Add this level shift circuit.
R439 2.2K
R442 0
R437 *2.2K
ENVDD
DISPON0
Q40 2N7002K
R179 2.2K
R189 0
R193 *2.2K
R174 0
R173 0
LCD_BLON_D
LCD_BLON
Q20 2N7002K
R414 *1.65K
R415 6.04K
R416 24K
C547 1u/16V_6
EXTSWING
LXP3 LXN3 LXP7 LXN7
TXLCLKOUT+ TXLCLKOUT-
TXUCLKOUT+ TXUCLKOUT-
TXUOUT2+ TXUOUT2- TXUOUT1+ TXUOUT1- TXUOUT0+ TXUOUT0-
SIS307ELV: AJ003070T05(W/O TV); C-Test
SIS307LV: AJ003070T13 (With TV); A, B-Test
QUANTA COMPUTER
Title
SiS 307LV
Size C
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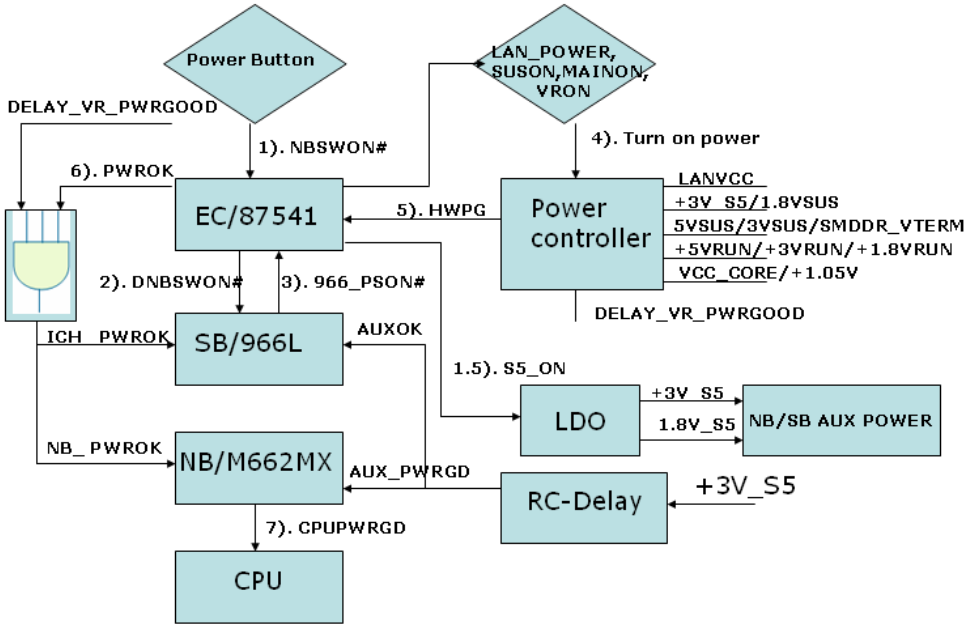
Power On sequence



QUANTA COMPUTER

Title	PWR Sequence	
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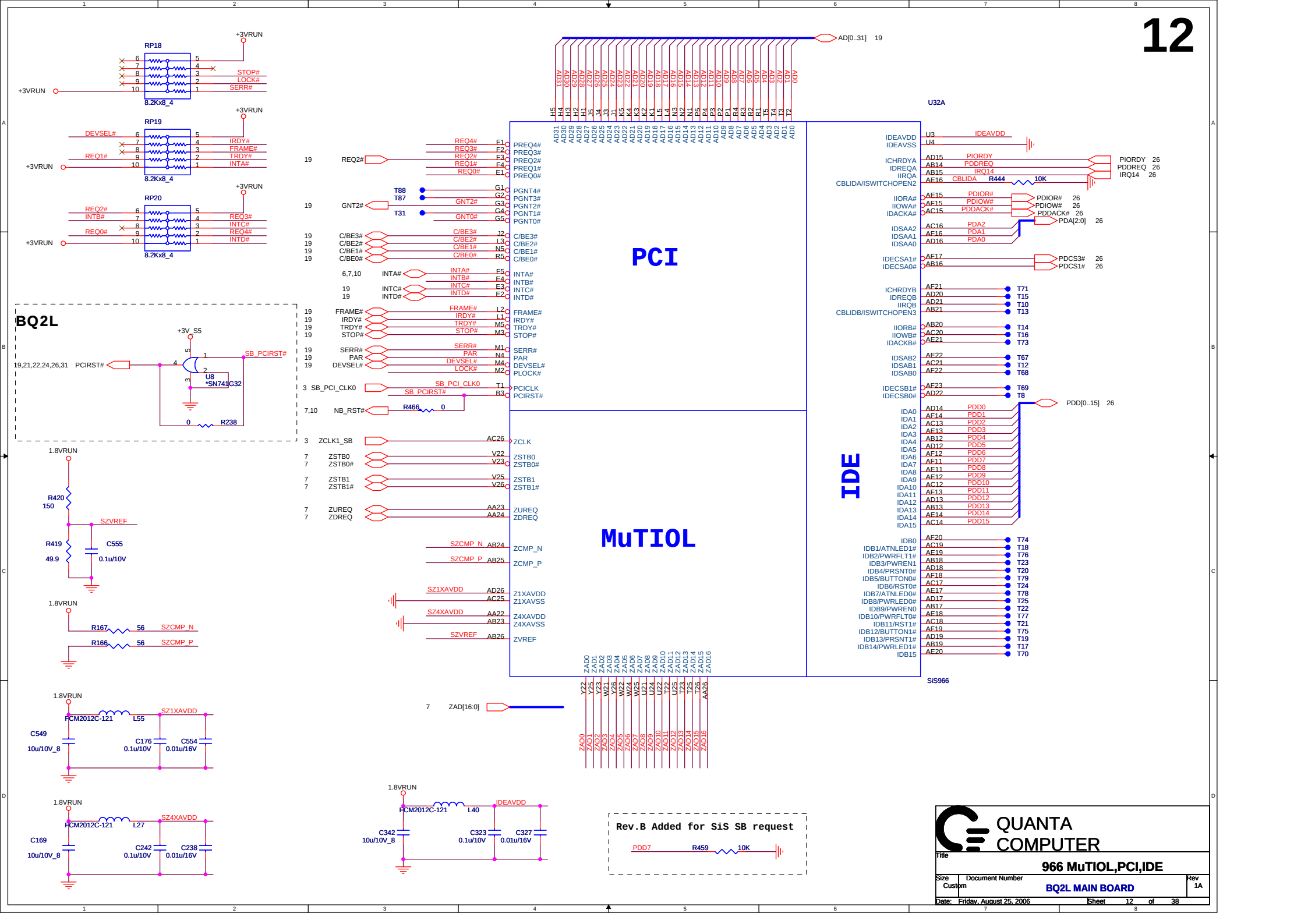

Title	966 MuTIOL,PCI,IDE
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CPU_S

APIC

MII/RGMII

LPC

RTC

SMBUS

PCI Express

AC'97/HD Audio

ACPI/Others

GPIO Keyboard /Mouse

RTC

+1.05V
R165 56
R417 56
H_FERR#
4 PM_THRMTRIP#
24.9
R418 H_THERMTRIP_R
H_FERR#

VCCRTC
3VPCU
D15 CH500H-40
D13 *CH500H-40
D14 CH500H-40
VCCRTC_2
VCCRTC
R241 10K
BATOK
R244 1K
C350 1u/10V
G1 *SHORT_PAD1
C339 10u/10V_8
CN2 DFHD02MS784

5VPCU
R239
VCCRTC_1
R240
VCCRTC_3
Q22 MMBT3904
1.2K
1K
R242 4.7K
R243 15K C Ver. modify: C613-->22P,R412-->39-OHM for EMI

C606 *10P ACZ_SDOUT
C605 *10P ACZ_SYNC
C604 22P ACZ_BIT_CLK

C Ver. modify: Add R500
3VPCU
R203 *4.7K 966_PSON#
C Ver. modify:R191 pull up to +3V_S5

+3V_S5
R456 4.7K PCI_PME#
R460 *4.7K ACPILED
R464 4.7K AUXOK
0.1u/10V C599

+3V_S5 +3VRUN
R461 4.7K SB_SPIO14_S3AUXSW#
R227 10K DNBSWON#

C REV.: Add U33, U34
+3V_S5
C447 0.047u/10V
U20
DPRSLPVR
PM_DPRSLPVR 32
TC7SH08FU
U19
NL17SZ14DFT2G
ICH_DPRSTP# 4

+3VSUS
+3VRUN
C341 0.047u/10V
R234 6.81K
32 DELAY_VR_PWRGOOD
23,31 PWROK
R237 100K
R230 0
U7 TC7SH08FU
ICH_PWROK
NB_PWROK 7
R233 10K

B Rev
31 SCI#
19 SB_HWSPND#
R208 0 GPIO15
R209 4.7K
R491 *0 GPIO16
R457 4.7K
GPIO17
R215 4.7K
R465 4.7K GPIO18
R223 *4.7K
+3V_S5
Rev.B Added
GPIO18--> PATA/SATA Mode Select
High: PATA Model (Stuff R189, Unstuff R495)
Low : SATA Model (Stuff R495, UnstuffR189)

4 H_INIT# AC23 INIT#
4 H_A20M# AE26 A20M#
4 H_SMI# 0 R431 H_SMI#_R AD23 SMI#
4 H_INTR AC22 INTR
4 H_NMI AE25 NMI
4 H_IGNNE# AF25 IGNNE#
H_FERR# AE24 FERR#
4 H_STPCLK# AE26 STPCLK#
4 H_CPUSLP# 0 R162 TP_H_CPUSLP# AD24 CPUSLP#
7 AGPBUSY# R168 10K AF24 APICCK/LDTREQ#/AGPBUSY#
+3VRUN *0 R169 PROCHOT# AD25 APICD0/THERM2#
4 H_PROCHOT# H_THERMTRIP_R AC24 APICD1/GPIOFF#

24,31 LAD0 LAD0 Y5 LAD0
24,31 LAD1 LAD1 Y4 LAD1
24,31 LAD2 LAD2 AA2 LAD2
24,31 LAD3 LAD3 AA3 LAD3
24,31 LFRAME# LFRAME# AA1 LFRAME#
31 LDRQ#0 LDRQ#0 AA4 LDRQ#
19,31 SERIRQ SERIRQ AA5 SIRQ
+3VRUN 8.2K R207

C600 18p/50V CLK_32KX1
Y6
R468 10M_6
32.768KHZ
C601 18p/50V CLK_32KX2
C1 OSC32KHO
C2 OSC32KHI

BATOK D4 BATOK
ICH_PWROK D2 PWROK
0.1u/10V C334
VCCRTC C3 RTCVDD
D3 RTCVSS

+3VRUN
R477 *1K
R476 *1K
3,16,24 CGDAT_SMB R474 0 966_SMDAT W5 GPIO20
3,16,24 CGCLK_SMB R475 0 966_SMCLK W4 GPIO19

27 ACZ_SDIN0 ACZ_SDIN0 E6 AC_SDIN0/AZ_SDI0
29 ACZ_SDIN1 ACZ_SDIN1 B4 AC_SDIN1/AZ_SDI1
29 ACZ_SDOUT 39 R469 ACZ_SDOUT0 W3 AC_SDOUT/AZ_SDO
29 ACZ_SYNC 39 R471 ACZ_SYNC0 W2 AC_SYNC/AZ_SYNC
29 ACZ_RST# 39 R462 ACZ_RST#0 B5 AC_RESET#/AZ_RST#
29 ACZ_BIT_CLK R470 39 ACZ_BCLK0 W1 AC_BIT_CLK/AZ_BCLK

3 REFCLK1_SB R235 0 OSCI Y2 OSCI
R228 0 D1 ENTEST
27 SPKR Y1 SPK

31 DNBSWON# DNBSWON# D5 PWRBTN#
6,19,21 PCI_PME# PCI_PME# A6 PME#
31 966_PSON# R206 0 PSON# E7 PSON#
AUXOK A3 AUXOK
ACPILED B6 ACPILED

DPRSLPVR B2 GPIO13/DPRSLPVR
SB_SPIO14_S3AUXSW# A5 GPIO14/AGPSTOP#/S3AUXSW#
GPIO15 C7 GPIO15/KBDAT/VR_HILO#
T83 GPIO16 B7 GPIO16/KBCLK/LOHI#
T29 GPIO17 D7 GPIO17/PMDAT/VGATEM#
T28 GPIO18 D6 GPIO18/PMCLK/RTC32KHZ

U32B
TXCLK B8 LAN_TXCLK
GTXCLK A10 LAN_GTXCLK T81
EXTCLK A13 LAN_EXTCLK T80
TXEN B10 LAN_TXCTL R448 22 LAN_TXCTL
TXER D11 LAN_TXER T26
TXD0 A8 LAN_TX0_C R452 22 LAN_TX0
TXD1 C8 LAN_TX1_C R202 22 LAN_TX1
TXD2 C9 LAN_TX2_C R198 22 LAN_TX2
TXD3 A9 LAN_TX3_C R451 22 LAN_TX3
LAN_TXCLK 22
LAN_TXCTL 22
LAN_TX0 22
LAN_TX1 22
LAN_TX2 22
LAN_TX3 22

RGMCMP_N A14 RGMCMP_N
RGMCMP_P B14 RGMCMP_P
RGMVREF C14 RGMVREF
RXCLK A11 LAN_RXCLK C588 *10P LAN_RXCLK 22
RXDV C11 LAN_RXCTL LAN_RXCTL 22
RXER E11 L_RXER R201 0 LAN_RXER 22
RXD0 C13 LAN_RX0 LAN_RX0 22
RXD1 C12 LAN_RX1 LAN_RX1 22
RXD2 A12 LAN_RX2 LAN_RX2 22
RXD3 B12 LAN_RX3 LAN_RX3 22
COL F11 LAN_COL LAN_COL 22
CRS F12 LAN_CRS LAN_CRS 22
MDC F13 MDCLK_C R196 22 MDCLK MDCLK 22
MDIO F14 MDIO 22

GPIO21/EESK D8 EESK
GPIO22/EEDI F8 EEDI
GPIO23/EEDO E8 EEDO
GPIO24/EECS A7 EECS

LANVCC
R197 4.7K
U6 93LC46B_3.3V_SO8
EECS 1
EESK 2
EEDI 3
EEDO 4
CS VCC 8
SK NC 7
DI NC 6
DO GND 5
C288 0.1u/10V

RGMCMP_N R445 56
RGMCMP_P R446 56

LANVCC
R195 150
RGMVREF
C285 0.01u/16V
R194 150

PRX0+ M26 PCIE_RXP0 PCIE_RXP0 24
PRX0- M25 PCIE_RXN0 PCIE_RXN0 24
PTX0+ N24 PCIE_TXP0_C 0.1u/10V C557 PCIE_TXP0 24
PTX0- N23 PCIE_TXN0_C 0.1u/10V C556 PCIE_TXN0 24
PRX1+ K26 PCIE_RXP1 PCIE_RXP1 21
PRX1- K25 PCIE_RXN1 PCIE_RXN1 21
PTX1+ L24 PCIE_TXP1_C 0.1u/10V C559 PCIE_TXP1 21
PTX1- L23 PCIE_TXN1_C 0.1u/10V C558 PCIE_TXN1 21

MINI CARD PCI-E
EXPRESS CARD (NEW CARD)

NC11 F26
NC10 F25
NC9 G24
NC8 G23
NC7 H26
NC6 H25
NC5 J24
NC4 J23
EXTSMI# R218 0 KBSMI# 31

1.8VRUN
FCM2012C-121 L56 PEXTRXAVDD
C550 10u/10V_8
C211 0.1u/10V
C222 0.01u/16V

PCLK100P P26 CLK_PCIE_ICH 3
PCLK100N P25 CLK_PCIE_ICH# 3
PEXTRXAVDD R25 PEXTRXAVDD
PEXTRXAVSS R26
RSET0 P22 966RSET0 R177 499
RSET1 P21 966RSET1 R178 124

NC3 AE23
NC12 C10
NC13 E10
NC14 E12
NC15 D13
NC16 E13
NC17 E14
C625 10P
CPUSTP#_SB R27 4.7K
D8 1SS355
R22 1K 1000p/50V
C38
R21 499 1000p/50V
C36
+3VRUN
U2
2A 2Y H_DPSLP# 4
1A 1Y PM_STPCPU# 3
VCC GND
NC7WZ07

U5 GPIO0/SPDIF 966-GPIO0 T93
AA6 GPIO1/LDRQ1#/PCIE_HOTPLUG 966-GPIO1 T30
V5 GPIO2/THERM# THERM_ALERT#
V4 GPIO3/EXTSMI# EXTSMI# *0.1u/10V C324 THERM_ALERT# 5,24
V3 GPIO4/CLKRUN# CLKRUN#
V2 GPIO5/PREQ5#/PCIE_PME# 966-PREQ5# T85
V1 GPIO6/SATA_HOTPLUG/PGNT5# 966-PGNT5# T86
A4 GPIO7/GPWAK# PCIE_WAKE#
C6 GPIO8/RING GPIO8_SWI#
C5 GPIO9/AC_SDIN2/AZ_SDI2/SLP_S3# SLP_S3# R216 *0
C4 GPIO10/AC_SDIN3/AZ_SDI3/SLP_S5# SLP_S5# R221 *0
F6 GPIO11/STP_PCI#/AGPSTOP# AGPSTOP#
E5 GPIO12/CPUSTP# CPUSTP#_SB
CLKRUN# 19,31
PCIE_WAKE# 21,24
SUSB# 8,28,30,31
SUSC# 31
AGPSTOP# 7

+3V_S5
GPIO8_SWI# R220 10K
PCIE_WAKE# R463 4.7K

GPIO8_SWI# R219 *0 RI# 19
R224 0 SWI# 31

SiS966
+3VRUN
966-PREQ5# R473 *4.7K
966-PGNT5# R472 *4.7K
THERM_ALERT# R213 8.2K
EXTSMI# R214 4.7K
AGPSTOP# R231 4.7K
CLKRUN# R212 *4.7K
CPUSTP#_SB R229 4.7K

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Title	966 PCI E,LPC,MII,GPIO	
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U32C

USB

29	USBP0+	D26	UV0+
29	USBP0-	D25	UV0-
30	USBP1+	E24	UV1+
30	USBP1-	E23	UV1-
29	USBP2+	A20	UV2+
29	USBP2-	B20	UV2-
30	USBP3+	C19	UV3+
30	USBP3-	D19	UV3-
24	USBP4+	A18	UV4+
24	USBP4-	B18	UV4-
30	USBP5+	C17	UV5+
30	USBP5-	D17	UV5-
21	USBP6+	A16	UV6+
21	USBP6-	B16	UV6-
30	USBP7+	C15	UV7+
30	USBP7-	D15	UV7-

USBOC#0	A24	OC0#
USBOC#1	F21	OC1#
USBOC#2	A25	OC2#
USBOC#3	B24	OC3#
USBOC#4	C23	OC4#
USBOC#5	C24	OC5#
USBOC#6	A26	OC6#
USBOC#7	B23	OC7#

OSC12MHI	A22	USB_12M_SB 3
OSC12MHO	B22	OSC12MHZ T72 *PAD
USBREF	F20	USBREF R184 2 1 127
USBPVDD18	B26	USBPVDD18
USBPVSS18	B25	
USBCMPAVDD18	E21	USBCMPAVDD18
USBCMPAVSS18	E20	
USBCMPAVDD33	D21	USBCMPAVDD33
USBCMPAVSS33	C21	
UVDD33_0	F17	UVD33
UVDD33_1	F19	
UVDD33_2	F22	

1.8V_S5 — FCM2012C-121 L54 — USBPVDD18 — C223 0.1u/10V — C212 0.01u/16V

1.8V_S5 — FCM2012C-121 L31 — USBCMPAVDD18 — C244 0.1u/10V — C255 0.01u/16V

1.8V_S5 — FCM2012C-121 L34 — USBVDD18 — C265 0.1u/10V — C282 0.01u/16V

USBVDD18

E16	UVDD18_0
E18	UVDD18_1
F15	UVDD18_2
F16	UVDD18_3
J19	UVDD18_4
H18	UVDD18_5
H17	UVDD18_6
H16	UVDD18_7
H15	UVDD18_8
J15	UVDD18_9

TX1+	AD4	SATA_TXP0_C 3900p/25V C321 SATA_TXP0 26
TX1-	AC4	SATA_TXN0_C 3900p/25V C319 SATA_TXN0 26
RX1+	AF3	SATA_RXP0 SATA_RXP0 26
RX1-	AE3	SATA_RXN0 SATA_RXN0 26
TX2+	AD6	SATA_TXP2_C R210 2 1 10K 1.8VRUN
TX2-	AC6	SATA_TXN2_C R211 2 1 10K
RX2+	AE5	SATA_RXP2_C
RX2-	AE5	SATA_RXN2_C
TX3+	AD8	SATA_TXP3_C R204 2 1 10K 1.8VRUN
TX3-	AC8	SATA_TXN3_C R205 2 1 10K
RX3+	AE7	SATA_RXP3_C
RX3-	AE7	SATA_RXN3_C
TX4+	AD10	SATA_TXP4_C R199 2 1 10K 1.8VRUN
TX4-	AC10	SATA_TXN4_C R200 2 1 10K
RX4+	AE9	SATA_RXP4_C
RX4-	AE9	SATA_RXN4_C
HDACT	Y3	966_HDACT R232 0 R236 10K +3VRUN SATA_LED# 26
ISWITCHOPEN1	AB3	ISWITCHOPEN1 T32 *PAD
ISWITCHOPEN0	AB2	ISWITCHOPEN0 T84 *PAD

SiS recommended design 05/22

+3V_S5 — FCM2012C-121 L30 — USBCMPAVDD33 — C249 0.1u/10V — C245 0.01u/16V

SATA

SATAAVDD

AB5	AVDDSATA_0
AA7	AVDDSATA_1
AA8	AVDDSATA_2
AA9	AVDDSATA_3
AB9	AVDDSATA_4
AA10	AVDDSATA_5
AA11	AVDDSATA_6
AB11	AVDDSATA_7
W8	AVDDSATA_8
V9	AVDDSATA_9
W9	AVDDSATA_10
W10	AVDDSATA_11
W11	AVDDSATA_12

SATARXAVDD	AB1	SATARXAVDD
	AD1	SATARXAVSS
SATATXAVDD	U1	SATATXAVDD
	U2	SATATXAVSS
SATACMPAVDD	AD2	SATACMPAVDD
	AF1	SATACMPAVSS

+3V_S5 — FCM2012C-121 L35 — UVD33 — C275 0.1u/10V — C261 0.01u/16V

IPB_OUT0	D22	IPB_OUT0 T7 *PAD
IPB_OUT1	C22	IPB_OUT1 T9 *PAD
TRAP0	E22	966_TRAP0 R180 *8.2K +3V_S5
TRAP1	A23	966_TRAP1 T66 *PAD
ADDLL_TE	E9	ADDLL_TE T27 *PAD
ADDLL_SEL	D9	ADDLL_SEL T82 *PAD

REXT	AE1	R467 2 1 187 SATAREXT
CLK100P	AC1	CLK_PCIE_SATA
CLK100N	AC2	CLK_PCIE_SATA#

3 CLK_PCIE_SATA
3 CLK_PCIE_SATA#

SiS966

+5VSUS — R433 10K — R435 560K — C577 0.1u/10V — USBOC#4

+5VSUS — R424 10K — R422 560K — C562 0.1u/10V — USBOC#5

+5VSUS — R434 10K — R432 560K — C576 0.1u/10V — USBOC#0

+5VSUS — R421 10K — R423 560K — C566 0.1u/10V — USBOC#6

+5VSUS — R440 10K — R441 560K — C586 0.1u/10V — USBOC#1

+5VSUS — R438 10K — R436 560K — C582 0.1u/10V — USBOC#7

+5VSUS — R429 10K — R428 560K — C570 0.1u/10V — USBOC#2

+5VSUS — R425 10K — R430 560K — C573 0.1u/10V — USBOC#3

1.8VRUN — FCM2012C-121 L63 — SATATXAVDD — C603 0.1u/10V — C602 0.01u/16V

1.8VRUN — FCM2012C-121 L61 — SATACMPAVDD — C333 0.1u/10V — C336 0.01u/16V

1.8VRUN — FCM2012C-121 L39 — SATAAVDD — C306 0.1u/10V — C314 0.01u/16V

1.8VRUN — FCM2012C-121 L62 — SATARXAVDD — C338 0.1u/10V — C335 0.01u/16V

QUANTA COMPUTER

Title	966 USB,SATA	
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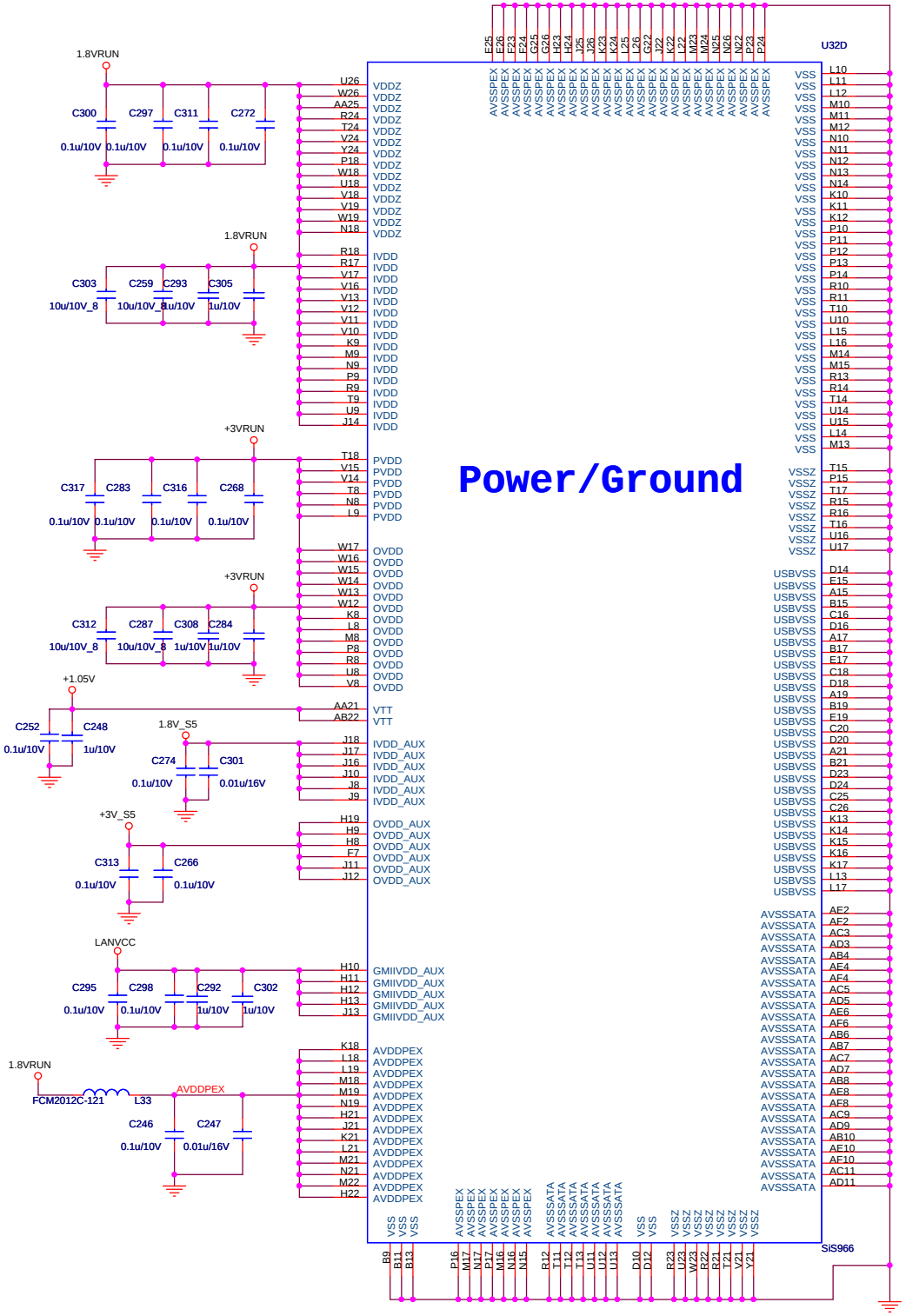
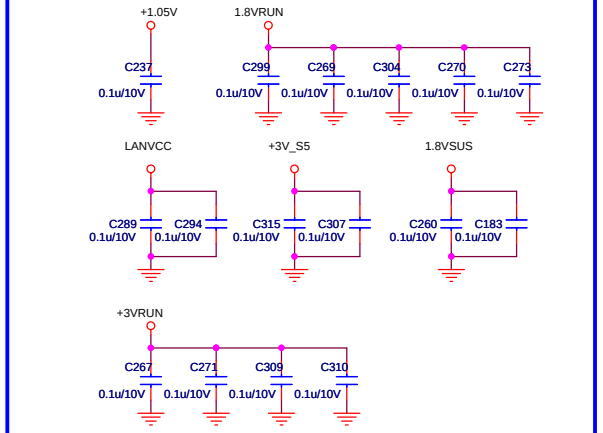
Power/Ground



Solder Side Bypass CAP.



Title	966 POWER,GND
Size: Custom	Document Number: BQ2L MAIN BOARD
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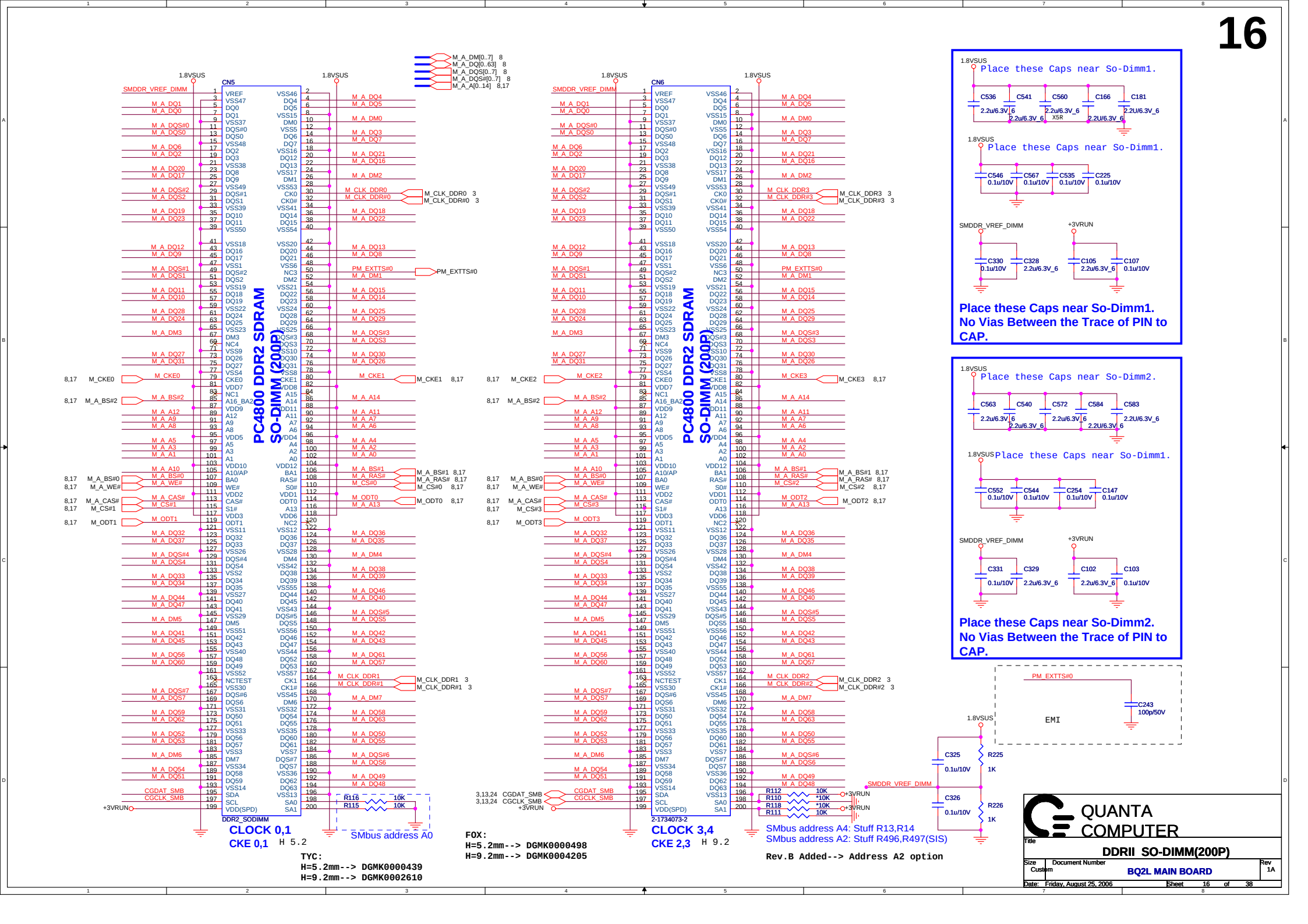
QUANTA COMPUTER


CN5
PC4800 DDR2 SDRAM SO-DIMM (200P)
DDR2_SODIMM
CLOCK 0,1
CKE 0,1 H 5.2
SMbus address A0
TYC:
H=5.2mm--> DGMK0000439
H=9.2mm--> DGMK0002610
CN6
PC4800 DDR2 SDRAM SO-DIMM (200P)
2-1734073-2
CLOCK 3,4
CKE 2,3 H 9.2
FOX:
H=5.2mm--> DGMK0000498
H=9.2mm--> DGMK0004205
SMbus address A4: Stuff R13,R14
SMbus address A2: Stuff R496,R497(SIS)
Rev.B Added--> Address A2 option
Place these Caps near So-Dimm1.
Place these Caps near So-Dimm1.
No Vias Between the Trace of PIN to CAP.
Place these Caps near So-Dimm2.
Place these Caps near So-Dimm2.
No Vias Between the Trace of PIN to CAP.
EMI
QUANTA COMPUTER
DDRII SO-DIMM(200P)
BQ2L MAIN BOARD
Friday, August 25, 2006

DDRII SINGLE CHANNEL.

DDRII DIMM 1

M_A_A[14..0]
SMDDR_VTERM

M_A_A[14..0] 8,16
SMDDR_VTERM 34,37

SMDDR_VTERM

SMDDR_VTERM

C228 C135 C233 C216 C134 C170 C148 C157 C158 C207 C195 C136 C141

0.1u/10V

0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V

8,16	M_ODT0	M_A_A13	RP4	1	2	56x2
		M_ODT0		3	4	
		M_A_A8	RP12	1	2	56x2
		M_A_A5		3	4	
		M_A_A3	RP9	1	2	56x2
		M_A_A1		3	4	
8,16	M_CKE1	M_A_A11	RP15	1	2	56x2
		M_CKE1		3	4	
8,16	M_A_BS#0	M_A_A10	RP8	1	2	56x2
		M_A_BS#0		3	4	
		M_A_A6	RP11	1	2	56x2
		M_A_A7		3	4	
		M_A_A2	RP10	1	2	56x2
		M_A_A4		3	4	
8,16	M_A_BS#1	M_A_BS#1	RP7	1	2	56x2
		M_A_A0		3	4	
		M_A_A12	RP13	1	2	56x2
		M_A_A9		3	4	
8,16	M_A_WE#	M_A_WE#	RP6	1	2	56x2
8,16	M_A_CAS#	M_A_CAS#		3	4	
8,16	M_CS#0	M_CS#0	RP5	1	2	56x2
8,16	M_A_RAS#	M_A_RAS#		3	4	
8,16	M_ODT2	M_ODT2	RP1	1	2	56x2
8,16	M_CS#2	M_CS#2		3	4	
8,16	M_CS#3	M_CS#3	RP2	1	2	56x2
8,16	M_ODT3	M_ODT3		3	4	
8,16	M_ODT1	M_ODT1	RP3	1	2	56x2
8,16	M_CS#1	M_CS#1		3	4	
			RP14	1	2	56x2
8,16	M_CKE3	M_CKE3		3	4	
8,16	M_CKE0	M_CKE0	RP16	1	2	56x2
8,16	M_A_BS#2	M_A_BS#2		3	4	
8,16	M_CKE2	M_A_A14	RP17	1	2	56x2
		M_CKE2		3	4	

SMDDR_VTERM

DDRII DIMM 2

SMDDR_VTERM

C163 C193 C214 C138 C152 C173 C217 C227 C229 C128 C130 C126 C131

0.1u/10V

0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V 0.1u/10V

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

QUANTA COMPUTER

Title: **DDRII TERMINATION**

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S-VIDEO

SiS recommended design 05/22
Close SiS 307LV

10 TVLUMA — R3 75/F — L11 CL201209T-1R8K-S — C476 3.3P — C481 3.3P — TV_LUMA_1

10 TVCHROMA — R1 75/F — L1 CL201209T-1R8K-S — C470 3.3P — C471 3.3P — TV_CRMA_1

10 TVCOMP — R6 75/F — L6 BK1608HS600 — C8 3.3P — C477 3.3P — TV_COMP_1

CON5

030001FR007T200FT
SV-030107FR007S112XR-RVS-7P

8/22

VGA_VCC_1 — D5 DA204U — D7 DA204U — D4 DA204U

1/23 for Qpresentation SW program on wide screen projector

D24 1SS355 — R387 0_4 — R382 10K — +3VRUN — CRT_PLUG# 31 — D23 1SS355

7 CRT_RED — L9 MLB-160808-0070B-N3 — CRT_R_1
7 CRT_GREEN — L8 MLB-160808-0070B-N3 — CRT_G_1
7 CRT_BLUE — L2 MLB-160808-0070B-N3 — CRT_B_1

R380 150/F — R379 150/F — R381 150/F
C478 12P — C472 12P — C473 12P
C12 15P — C13 15P — C4 15P

L46 FBM2125HM330 — VGA_VCC_1 — VGA_VCC — F5 POLY_SWITCH RC1206 DK200TFU101 — +5VRUN

CRT PORT

CON9

CRT-070546FR015SX02CR-H-BQ2L
DFDB15FR029

VGA_VCC_1 — D2 DA204U — D6 DA204U — D3 DA204U — D1 DA204U

SiS recommended design 05/22

+3VRUN — R383 *4.7K — R384 *4.7K
+5VRUN — R378 2.2K — R377 2.2K L5 BLM11A121S

7 DDCDATA — Q36 RHU002N06 — DDCDATA_L — L7 BLM11A121S — DDCDATA_L1
7 DDCCLK — Q35 RHU002N06 — DDCCLK_L — L3 BLM11A121S — DDCCLK_L1

+5VRUN — C480 0.1U/10V — U24 AHCT1G125DCH
7 VGAHSYNC — CRT_HSYNC_L — L4 BLM11A121S — CRT_HSYNC_L1
R7 1K
7 VGAVSYNC — U23 AHCT1G125DCH
CRT_VSYNC_L — CRT_VSYNC_L1

C474 *10P — C475 *10P — C7 10P — C11 10P — C5 10P — C6 10P — C469 *0.1U/10V

QUANTA COMPUTER

Title	CRT&S-VIDEO	
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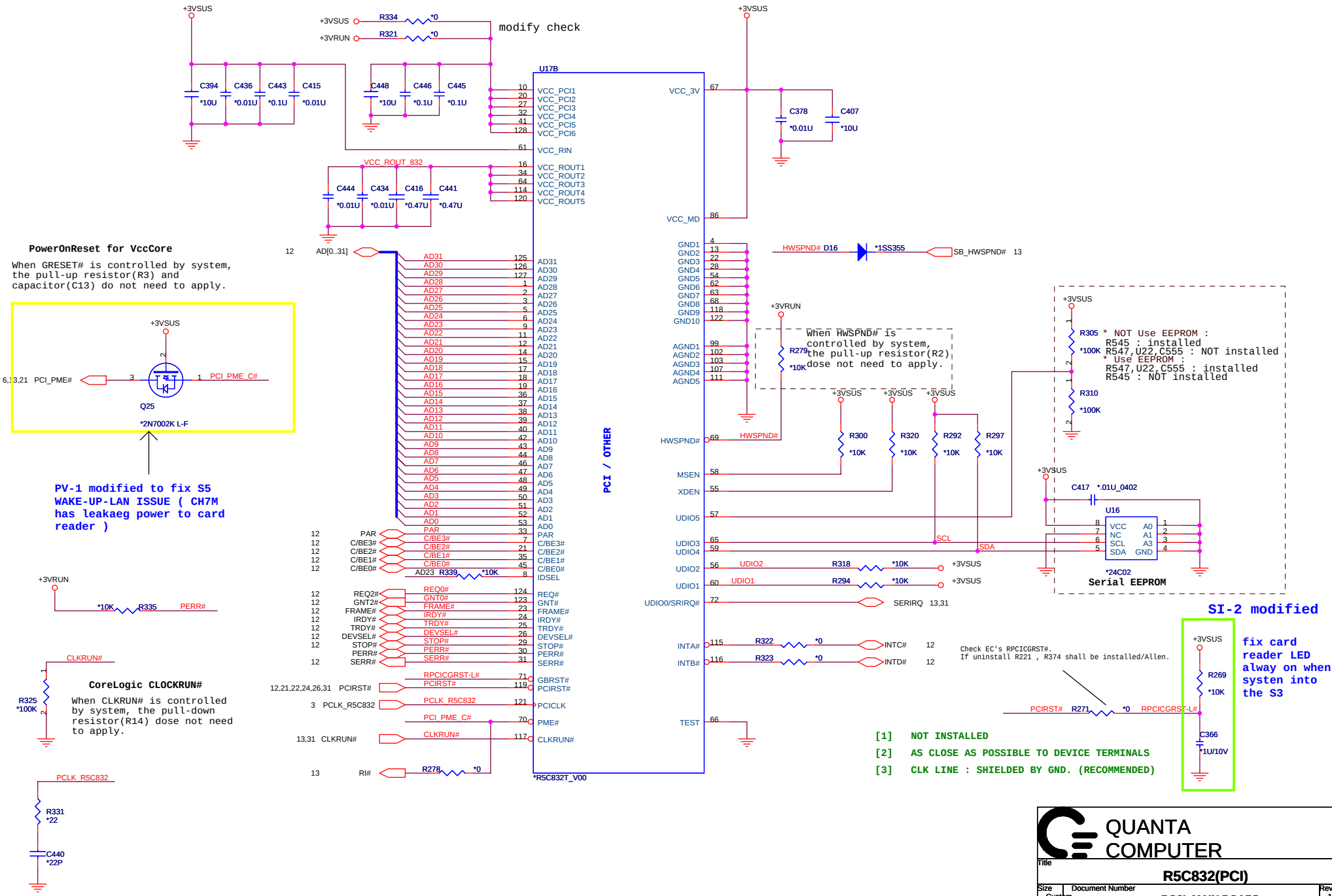
Reserved function



Title	R5C832(PCI)
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AS CLOSE AS POSSIBLE TO
1394 CONNECTOR.

+3VSUS
1394_AVDD
80 mils
L43
*FBM1608
C418 *10U
C425 *0.1U
C427 *0.01U
C430 *0.001U

U17A
IEEE1394/SD
AVCC_PHY1 98
AVCC_PHY2 106
AVCC_PHY3 110
AVCC_PHY4 112
TPBIAS0 113
C433 *0.33uF
R319 56.2/F
R307 56.2/F
C431 *0.01U
TPBN0 104
TPBP0 105
TPAN0 108
TPAP0 109
TPB0N
TPB0P
TPA0N
TPA0P
R303 56.2/F
R298 56.2/F
C422 *270P
R302 *5.11K/F
C380 *22P 1394_XOUT 94 XI
*24.576MHz 50ppm 10pF Y2
C379 *22P 1394_XIN 95 XO
C395 *0.01U FIL0_PWR 96 FIL0
R299 *10K/F REXT 101 REXT
C423 *0.01U VREF_PWR 100 VREF
97 RSV
*R5C832T_V00

MDIO17 87 MDIO17 MDIO17 21
MDIO16 92 MDIO16 MDIO16 21
MDIO15 89 MDIO15 MDIO15 21
MDIO14 91 MDIO14 MDIO14 21
MDIO13 90 MDIO13 MDIO13 21
MDIO12 93 MDIO12 MDIO12 21
MDIO11 81 MDIO11 MDIO11 21
MDIO10 82 MDIO10 MDIO10 21
MDIO05 75 MDIO05 MDIO05 21
MDIO08 88 MDIO08 MDIO08 21
MDIO19 83 MDIO19 MDIO19 21
MDIO18 85 MDIO18 MDIO18 21
MDIO02 78 MDIO02 MDIO02 21
MDIO03 77 MDIO03 MDIO03 21
MDIO00 80 MDIO00 MDIO00 21
MDIO01 79 MDIO01 MDIO01 21
MDIO09 84 MDIO09 MDIO09 21
MDIO04 76 MDIO04 MDIO04 21
MDIO06 74
MDIO07 73

SD_LED# 29
*DTC144EUA Q27
SD/MS_3V
*DTC144EUA Q28

CHOKE-WCM3216-4P
LP7 *COM-CHOKE-WCM3216-4P
TPA0P 4 3 L1394_TPA0+ 4
TPA0N 1 2 L1394_TPA0- 3
TPB0P 4 3 L1394_TPB0+ 2
TPB0N 1 2 L1394_TPB0- 1
LP8
*COM-CHOKE-WCM3216-4P
CHOKE-WCM3216-4P
CN8 *1394A
6
5
1394-020204FR004SX05ZX-4P-H

*TPA/TPA#,TPB/TPB# pair trace : As close as possible.
*TPA/TPA#,TPB/TPB# pair trace : Same length electrically.

*Termination resistor for TPA+/- TPB+/- : As close as possible to its cable driver (device pin out).

EMI
MDIO19
MDIO18
MDIO17
MDIO16
MDIO15
MDIO14
MDIO13
MDIO12
MDIO11
MDIO10
MDIO09
MDIO08
MDIO05
MDIO04
MDIO03
MDIO02
MDIO01
MDIO00
C376 *22P
C403 *22P
C383 *22P
C404 *22P
C384 *22P
C406 *22P
C377 *22P
C375 *22P
C374 *22P
C397 *22P
C401 *22P
C382 *22P
C402 *22P
C398 *22P
C381 *22P
C399 *22P
C400 *22P
C396 *22P

Reserved function

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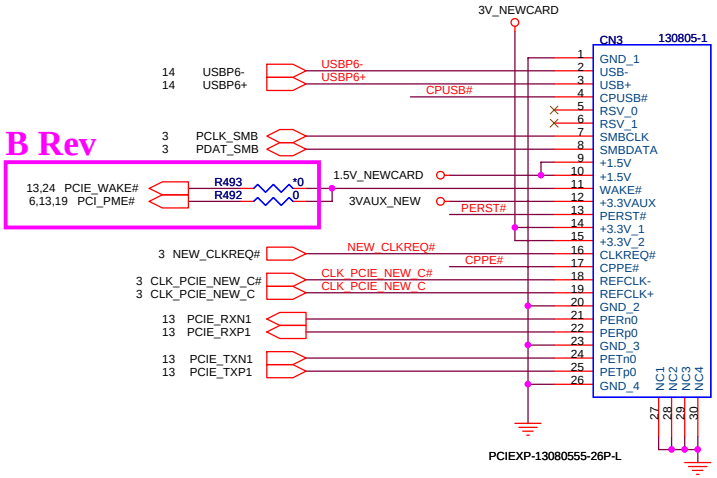
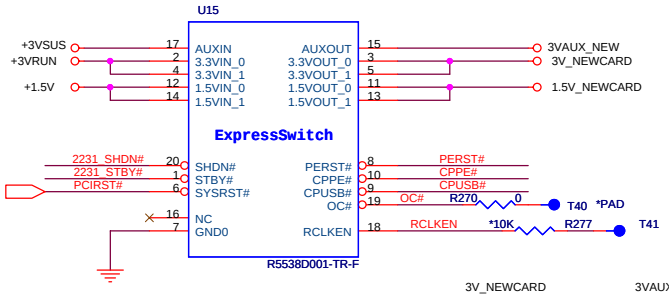
NEW CARD

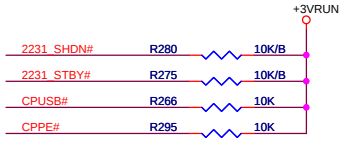
21

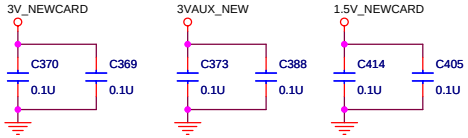
B Rev





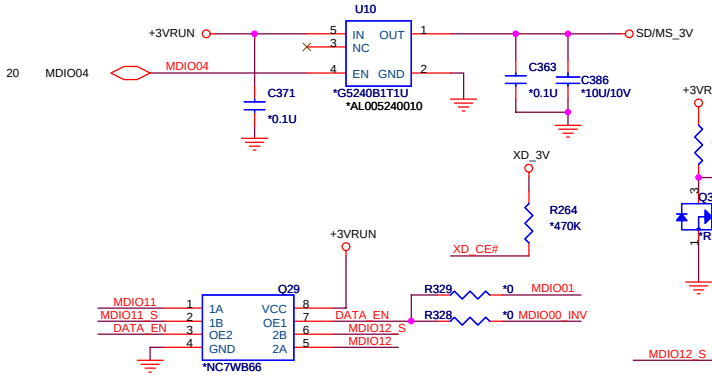
12,19,22,24,26,31 PCIRST#

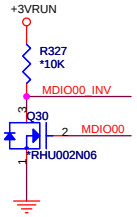


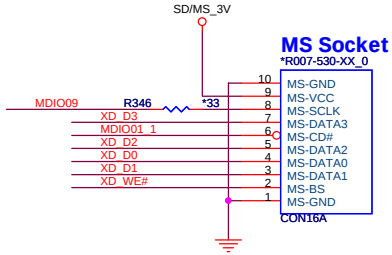


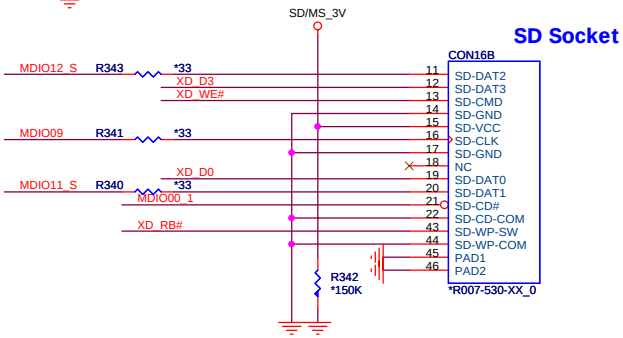
Reserved function

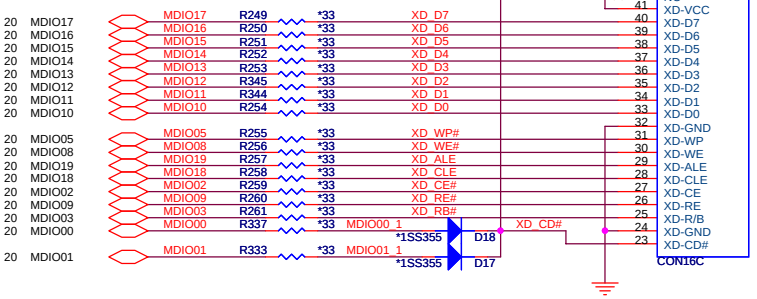
CARD READER

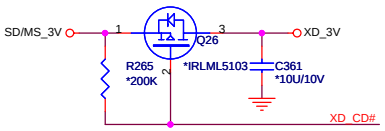












QUANTA COMPUTER

Title: R5C832(5 IN 1/NCARD)

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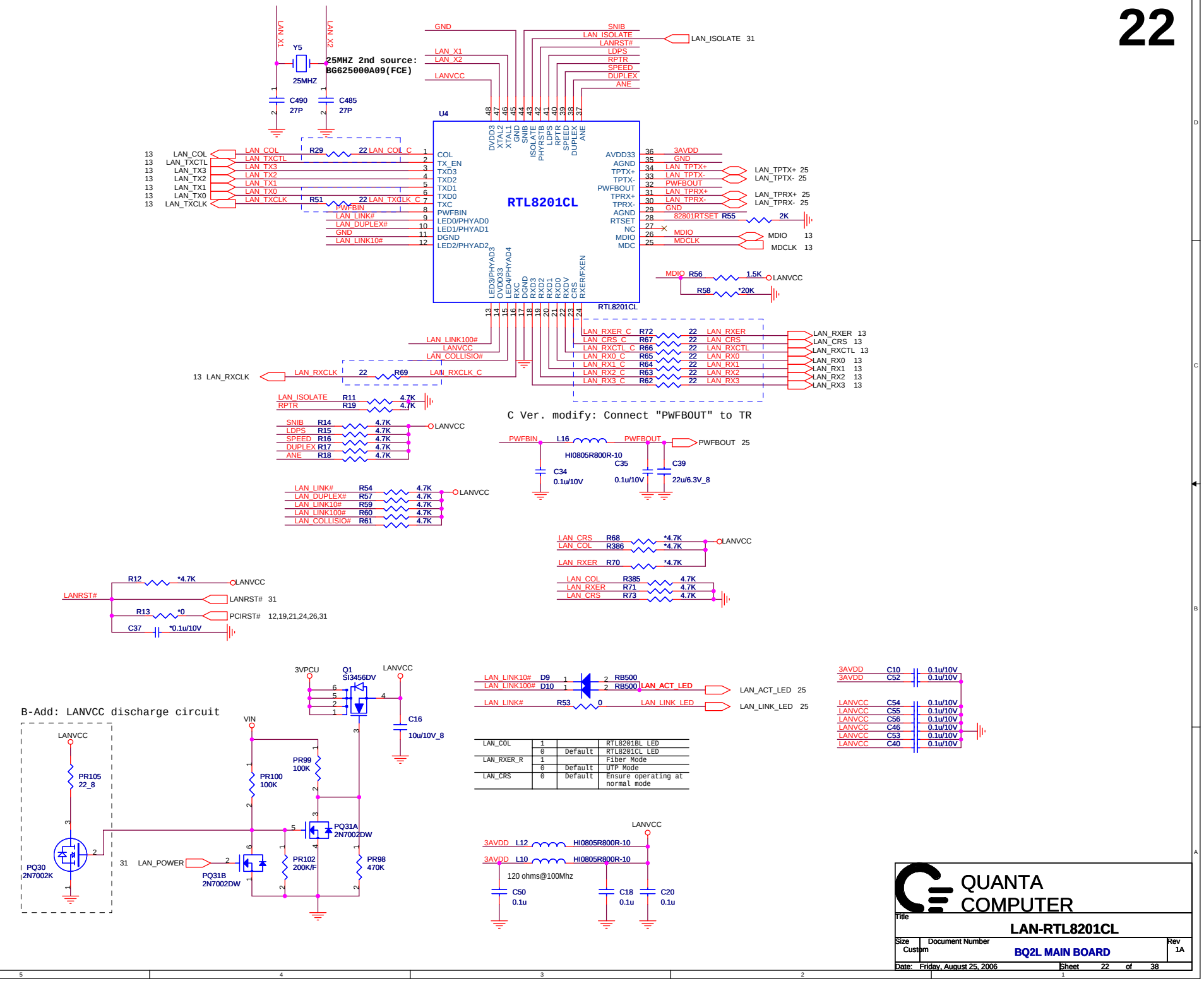

LAN_COL	1		RTL8201BL LED
	0	Default	RTL8201CL LED
LAN_RXER_R	1		Fiber Mode
	0	Default	UTP Mode
LAN_CRS	0	Default	Ensure operating at normal mode

QUANTA COMPUTER

Title: LAN-RTL8201CL

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SCREW PADS

H20 *BQ2L-H1 — h-c354d126p2
H6 *BQ2L-H2 — h-c354d126p2
H18 *BQ2L-H3 — h-c276d126p2
H21 *BQ2L-H4 — h-c276d126p2
H23 *BQ2L-H5 — h-c276d126p2
H26 *BQ2L-H6 — h-c126d126n
H2 *BQ2L-H7 — h-c276d126p2
H25 *BQ2L-H8 — h-c276d126p2
H3 *BQ2L-H11 — H-C236D150P2
H10 *BQ2L-H12 — h-tc315bc276d150p2
H5 *BQ2L-H13 — h-tc315bc276d150p2
H9 *BQ2L-H14 — h-tc315bc276d150p2
H4 *BQ2L-H15 — h-tc315bc276d150p2
H11 *BQ2L-H16 — H-TC236BC276D150P2
H1 *BQ2L-H17 — h-spec1d126p2
H22 *BQ2L-H9 — h-c126d126n
H16 *BQ2L-H21 — H-TC6I4_8BC7D3_8P2
H19 *BQ2L-H22 — H-TC6I4_8BC7D3_8P2
H14 *BQ2L-H23 — H-C236D150P2
H13 *BQ2L-H24 — H-C236D150P2
H7 *BQ2L-H25 — H-C236D150P2
H15 *BQ2L-H26 — H-C236D150P2
H27 *BQ2L-H6 — h-c126d126n
H12 *BQ2L-H10 — h-c354d126p2
PAD1 EMIPAD158x87
PAD2 EMIPAD158x87
PAD3 EMIPAD158x87
PAD4 EMIPAD158x87
H24 *BQ2L-H18 — H-TB276X295bc276D126P2
H8 *BQ2L-H19 — H-TC236BC276D150P2
H17 *BQ2L-H20 — H-TB354X374bc354D126P2

EMI

PAD5 EMIPAD158x87
PAD6 EMIPAD158x87

+3VRUN: C468 *0.1UF, C456 *0.1UF, C360 *0.1UF, C607 *0.1UF, C451 *0.1UF, C359 *0.1UF, C420 *0.1UF
+3VSUS: C347 *0.1UF, C393 *0.1UF, C464 *0.1UF, C462 *0.1UF, C421 *0.1UF, C356 *0.1UF, C419 *0.1UF
VCC_CORE: C67 *0.1UF
1.8VRUN: C349 *0.1UF, C174 *0.1UF, C357 *0.1UF, C343 *0.1UF
1.8VSUS: C104 *0.1UF, C91 *0.1UF, C320 *0.1UF, C340 *0.1UF, C114 *0.1UF
VIN: C623 10U/25V/X5R, C624 10U/25V/X5R
8/22
+1.05V: C113 *0.1UF, C49 *0.1UF
VIN: C484 0.1UF, C1 *0.1UF, C495 *0.1UF, C33 *0.1UF, C61 *0.1UF, C95 *0.1UF, C106 *0.1UF, C133 *0.1UF, C322 *0.1UF, C442 *0.1UF, C362 *0.1UF
+5VRUN: C14 *0.1UF, C496 *0.1UF, C19 *0.1UF, C27 *0.1UF, C337 *0.1UF, C117 *0.1UF, C96 *0.1UF
+5VSUS: C344 *0.1UF, C372 *0.1UF, C145 *0.1UF

LCD CONNECTOR

L47 ACB2012L-120
C498 10U/25V/X5R
C500 .1U CC0603
C51 .1U CC0603
C48 10U/25V/X5R
VIN
LCDVCC
C43 0.1U
87222-40XX_LVDS
LVDS_DAT
LVDS_CLK
VADJ-1
DISPON
+3VRUN
C22 0.1U
10 TXLOUT0- / 10 TXLOUT0+
10 TXLOUT2- / 10 TXLOUT2+
10 TXUOUT0- / 10 TXUOUT0+
10 TXUOUT2- / 10 TXUOUT2+
TXLOUT1- 10 / TXLOUT1+ 10
TXLCLKOUT- 10 / TXLCLKOUT+ 10
TXUOUT1- 10 / TXUOUT1+ 10
TXUCLKOUT- 10 / TXUCLKOUT+ 10
CON11
87222-4000-40P-LDV
C499 *560P
C501 *560P

31 VADJ — R5 0 — L45 0 — VADJ-1
10 LCD_BKLTCTL — R4 *0
C483 *0.1U

10 EDIDCLK — Q37 2N7002K — LVDS_CLK
R394 2.2K
R399 0 — +3VRUN
R398 *0 — +5VRUN
R395 2.2K
10 EDIDDATA — Q38 2N7002K — LVDS_DAT
SiS recommended design 05/22
SIS recommend pull to 5V

BACKLIGHT CONTROL

13,31 PWROK — D25 1SS355
LID# — D26 1SS355
10 LCD_BLON_307
+3VRUN
R396 10K
C497 0.1U
U25 TC7SH08FU
DISPON
R397 100K
QCIPN:AL07WZ08002

PANEL VCC CONTROL

+3VRUN
C23 0.1U
U1 G5241T1U
IN / IN / OUT / ON/OFF / GND
LCDVCC
C42 .1U
10 ENVDD
G5241T1U:AL005241008

LID

+3VRUN
C482 0.1U
CON1 85205-0200
LID# — C94 0.1U — LID# 31

QUANTA COMPUTER

Title: LVDS/LID/SCREW/EMI
Size: Custom
Document Number: BQ2L MAIN BOARD
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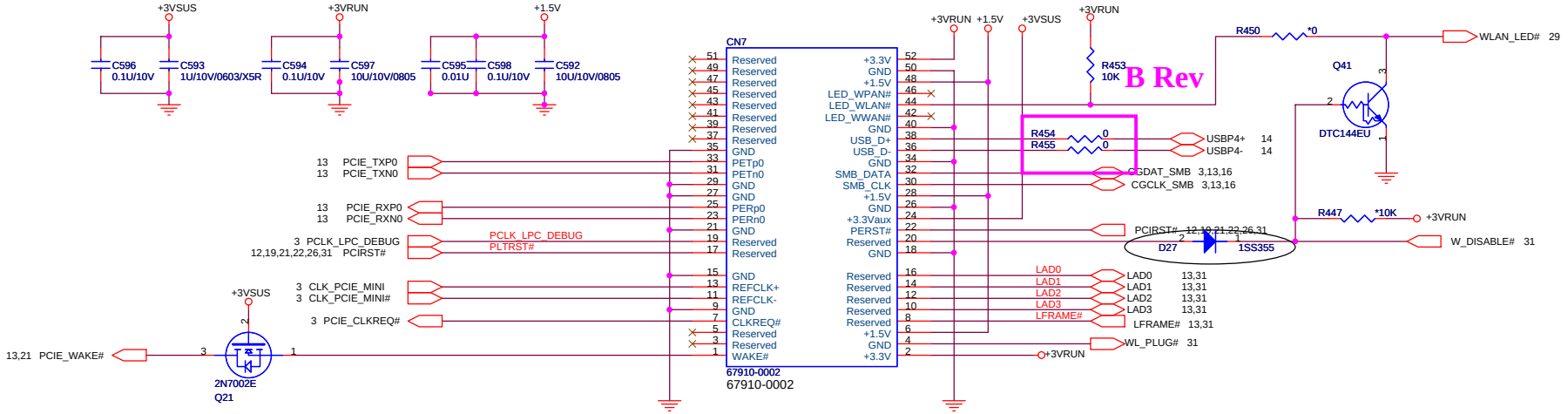
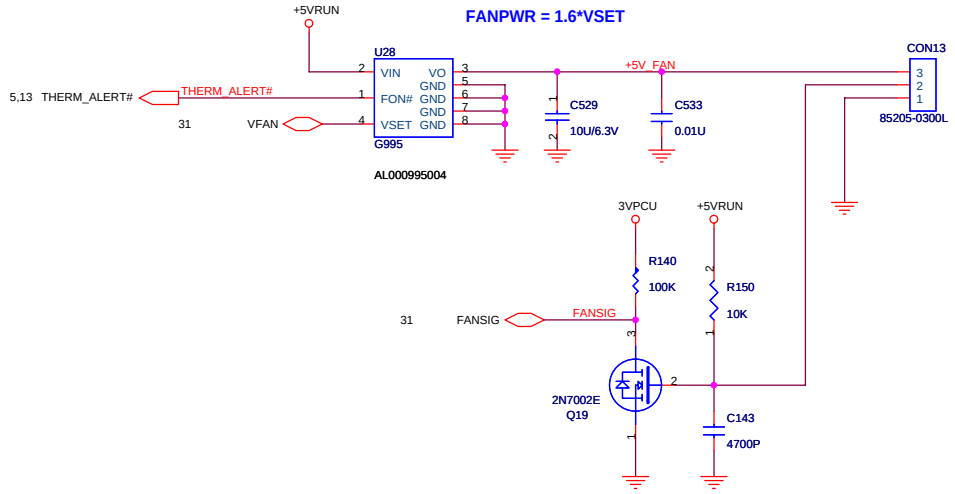
MINI PCI-E CARD



FAN CONN



QUANTA COMPUTER		
Title: MINI PCIE/FAN		
Size: Custom	Document Number: BQ2L MAIN BOARD	Rev: 1A
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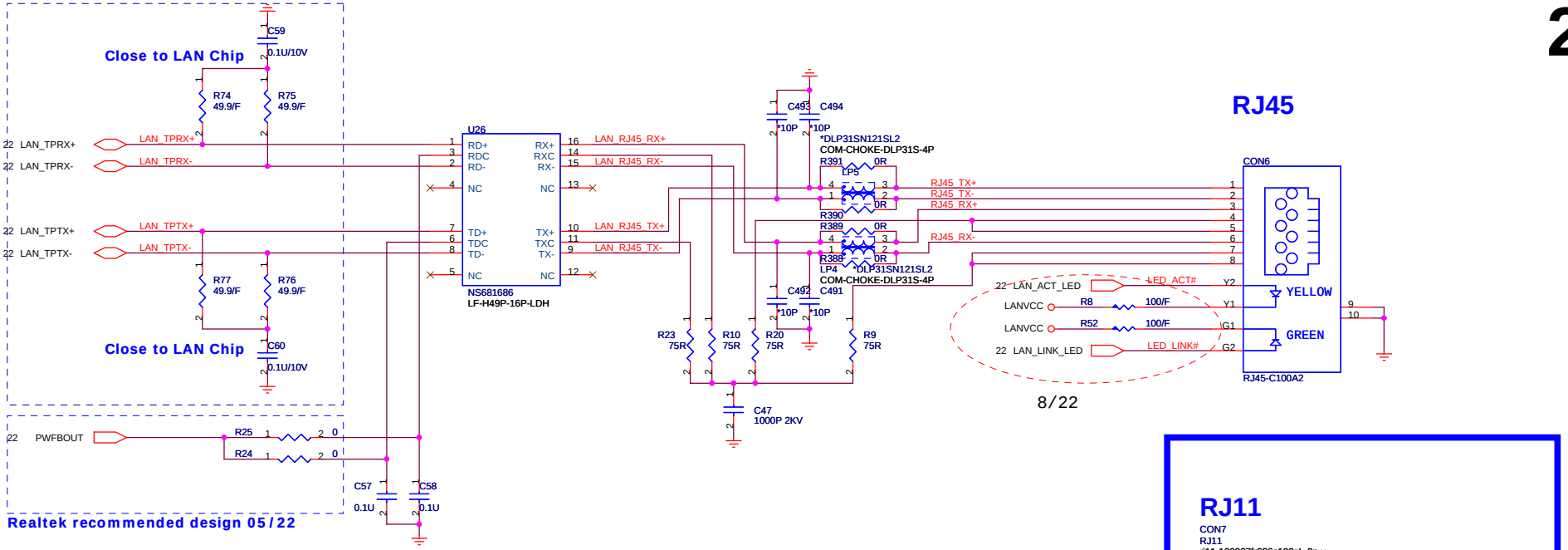

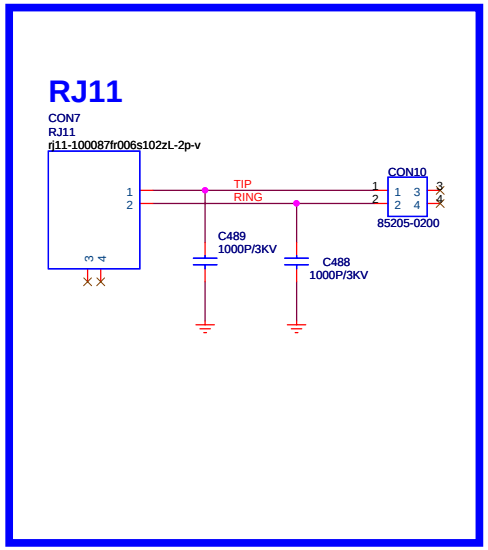

QUANTA COMPUTER

Title	RJ45/RJ11	
Size: Custom	Document Number: BQ2L MAIN BOARD	Rev: 1A
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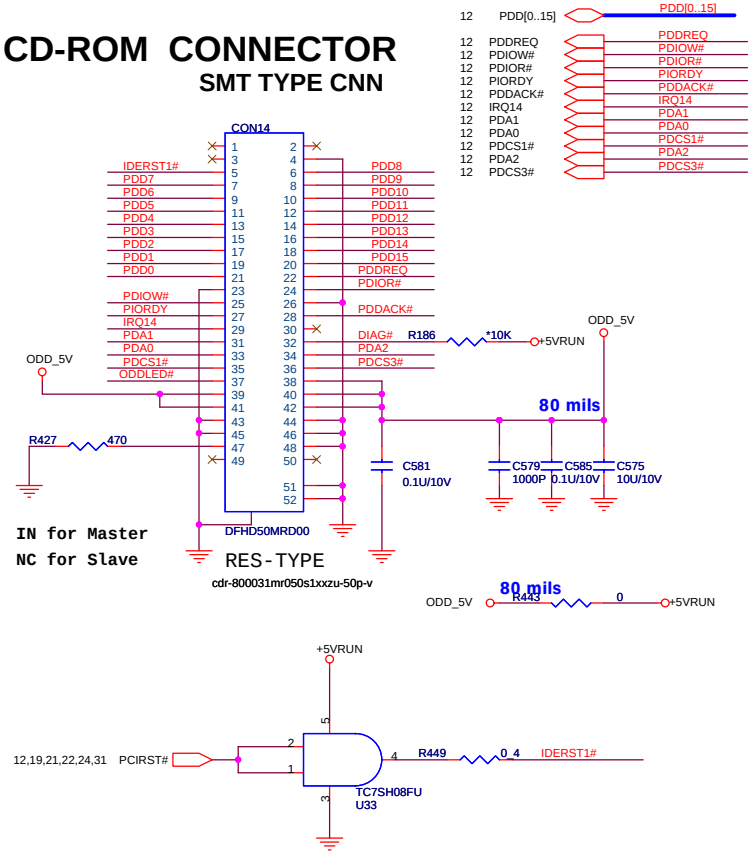
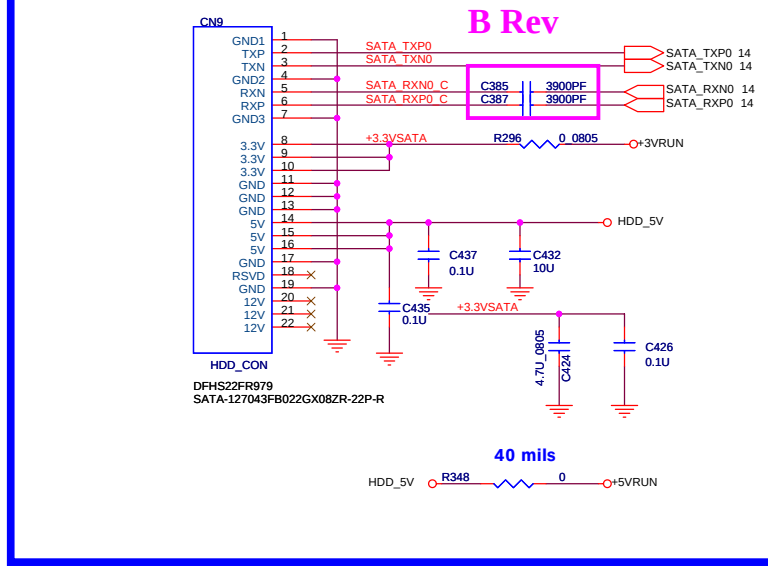
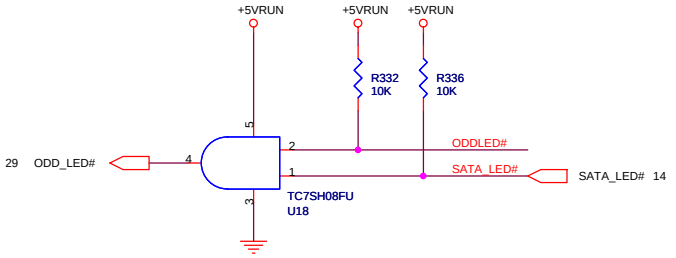
CD-ROM CONNECTOR

SMT TYPE CNN



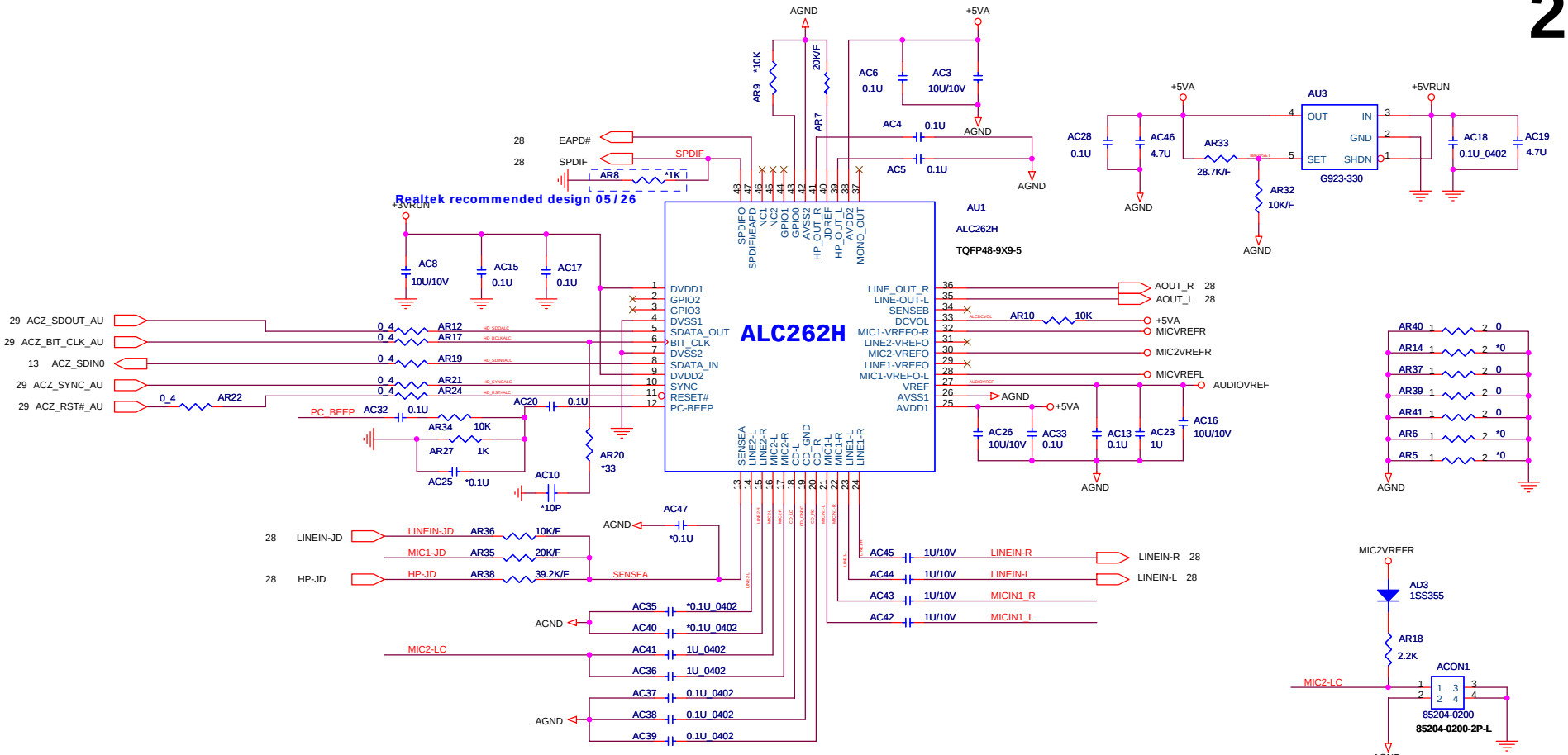
SATA HDD CONNECTOR





QUANTA COMPUTER

Title	SATA HDD/ ODD	
Size: Custom	Document Number: BQ2L MAIN BOARD	Rev: 1A
Date: Friday, August 25, 2006	Sheet 26 of 38	



Title	AUDIO(ALC262,MIC,HP)
Size	Custom
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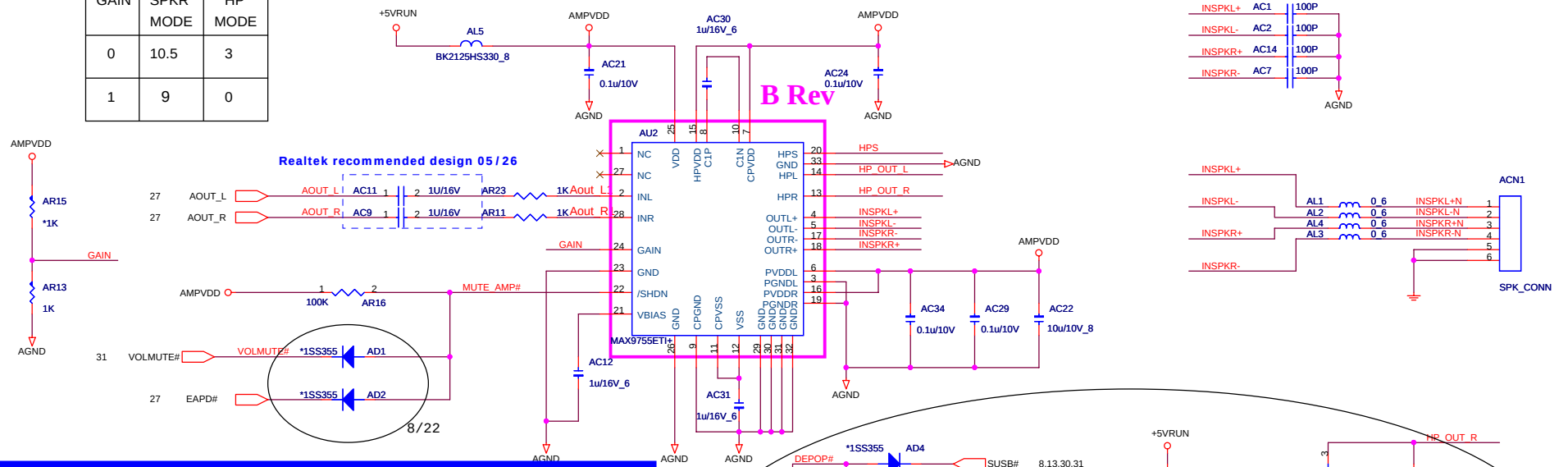
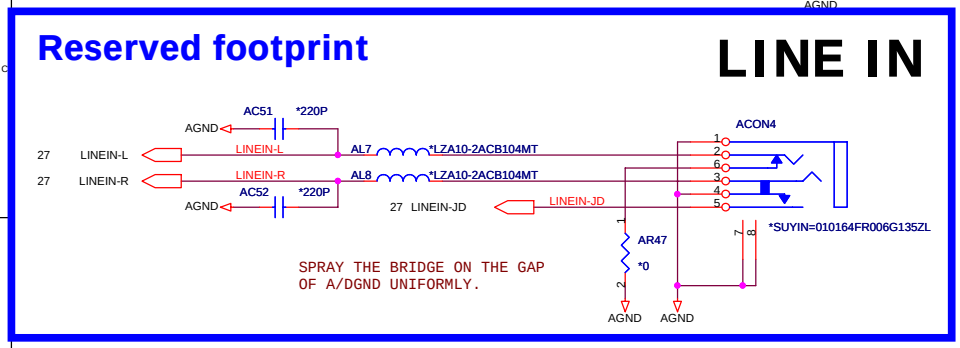
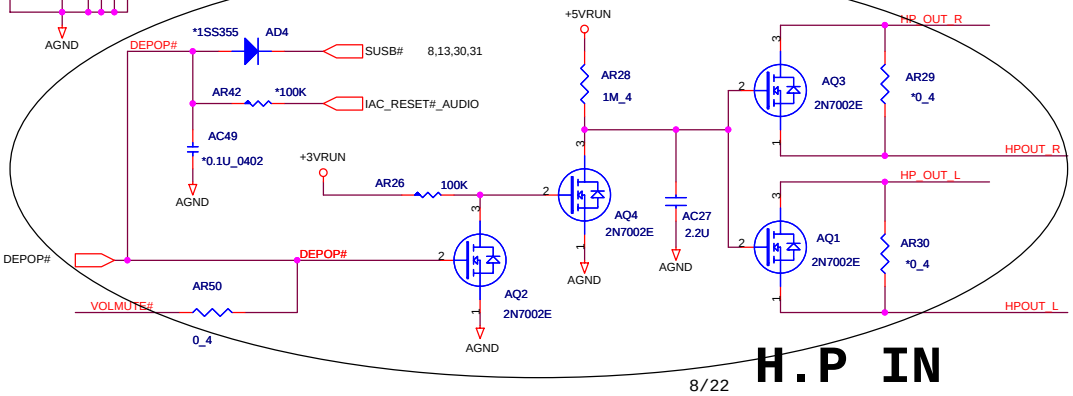
QUANTA COMPUTER

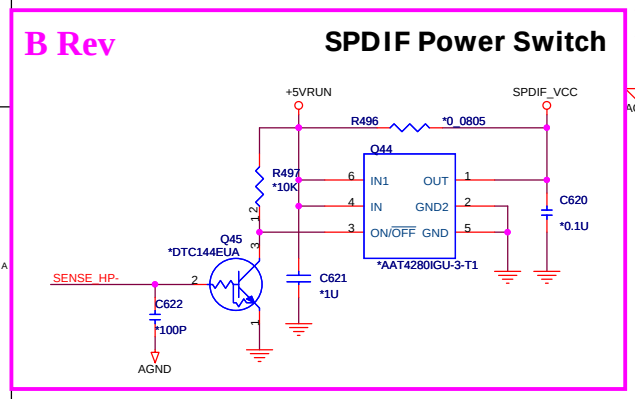
Audio AMP.

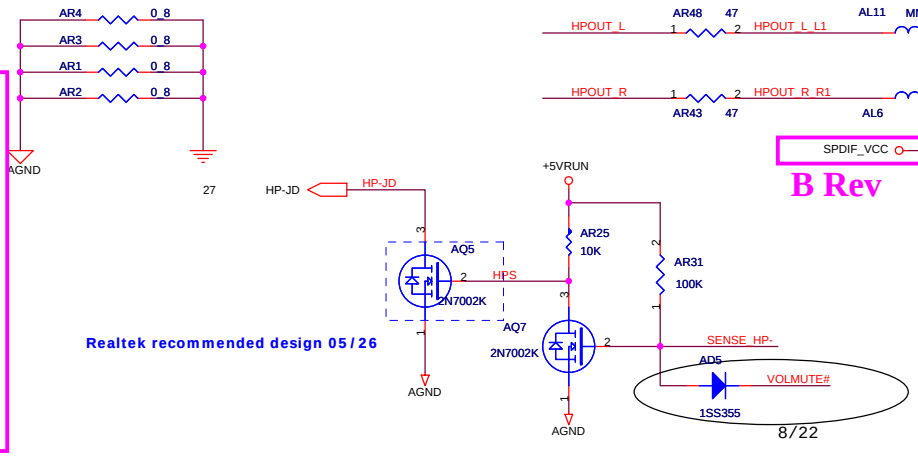
GAIN	SPKR MODE	HP MODE
0	10.5	3
1	9	0

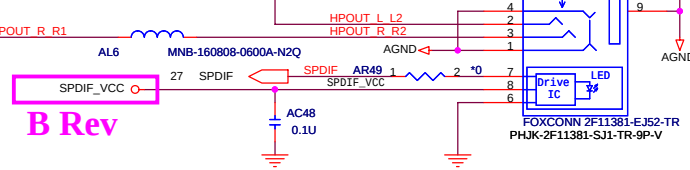












QUANTA COMPUTER

Title: AUDIO (AMP)

Size: Custom | Document Number: BQ2L MAIN BOARD | Rev: 1A

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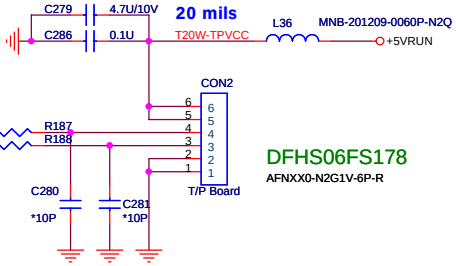
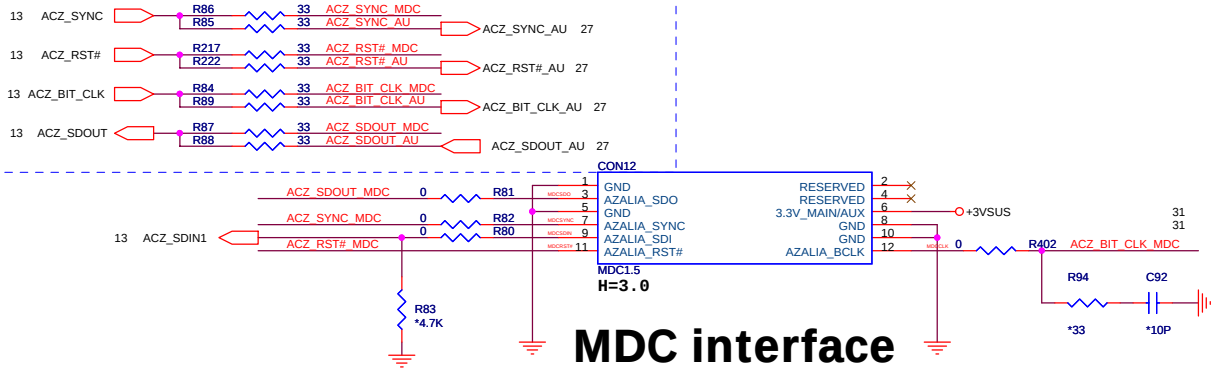
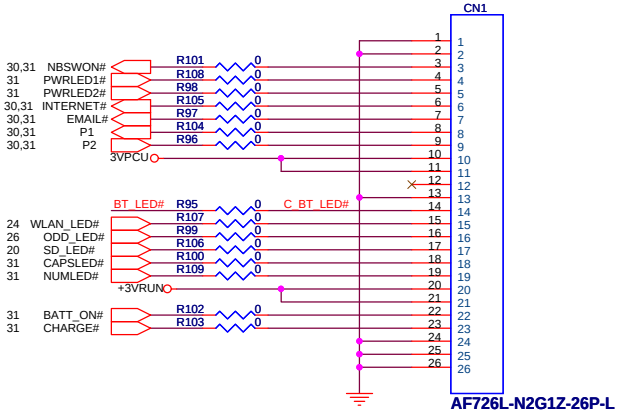
TOUCH PAD

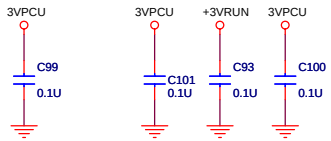


MDC interface

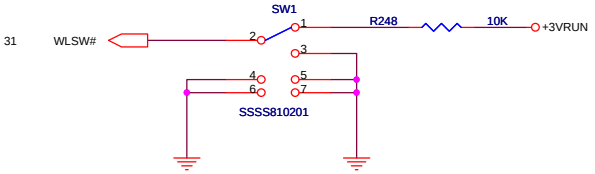


SWITCH/LED BOARD

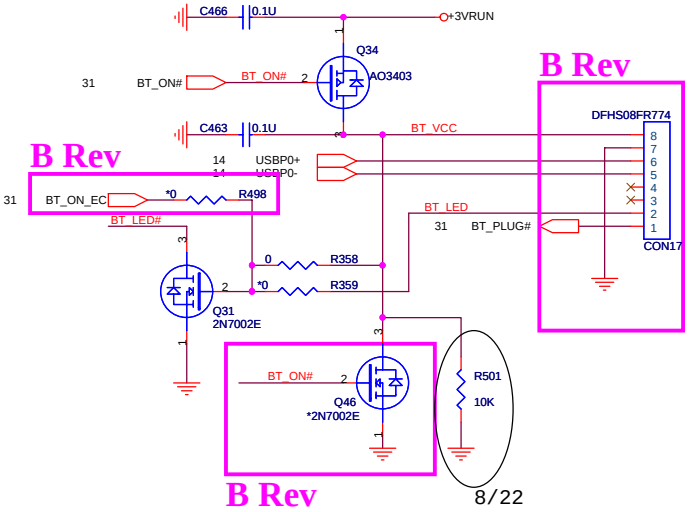




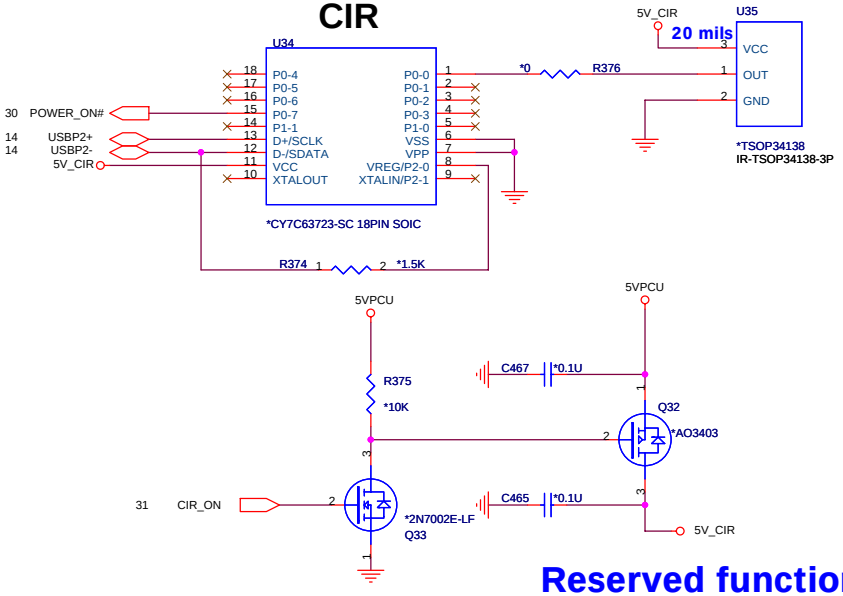
RF SWITCH



BT CONNECTOR



CIR



Reserved function

QUANTA COMPUTER

Title: MDC/BT/CIR/RF/TP

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40 mils
+5VSUS F3 POLY_SWITCH RC1206 DKZ00TFU101 USBVCC1

40 mils
+5VSUS F4 POLY_SWITCH RC1206 DKZ00TFU101 USBVCC5

80 mils
+5VSUS F2 POLY_SWITCH RC1206 DKZ00TFU101 USBVCC3
F1 POLY_SWITCH RC1206 DKZ00TFU101 USBVCC7
C9 0.1U
C479 0.1U
C15 150U/6.3V
CH71511MJ86

LP2 *PLW3216S
14 USBP1- 14 USBP1+
USBVCC1 LUSBP1- LUSBP1+
C332 *47P *CH41002KB93
C318 *47P *CH41002KB93
CON15 USB
USB-020173MR004GX32ZX-4P-R-V

LP3 *MCI-3216-261
14 USBP5- 14 USBP5+
USBVCC5 LUSBP5- LUSBP5+
C25 *47P
C26 *47P
*CH41002KB93 *CH41002KB93
CON8 USB
USB-020173MR004GX32ZX-4P-R-H

USBVCC1
C296 0.1U
C262 150U/6.3V
CH71511MJ86

USBVCC5
C3 0.1U
C2 150U/6.3V
CH71511MJ86

LP6 *MCI-3216-261
14 USBP3- 14 USBP3+
USBVCC3 LUSBP3- LUSBP3+
C486 *47P *CH41002KB93
C487 *47P *CH41002KB93
020122MR008SX90ZX CN4

LP1 *MCI-3216-261
14 USBP7- 14 USBP7+
USBVCC7 LUSBP7- LUSBP7+
C31 *47P *CH41002KB93
C32 *47P *CH41002KB93

INT K/B

CON3 AFN260-N2G1V-26P-R
31 MX7 31 MX6 31 MX5 31 MX4 31 MX3 31 MX2 31 MX1 31 MX0
31 MY15 31 MY14 31 MY13 31 MY12 31 MY11 31 MY10 31 MY9 31 MY8 31 MY7 31 MY6 31 MY5 31 MY4 31 MY3 31 MY2 31 MY1 31 MY0

220Px4 CP1: MX4 MX5 MX6 MX7
220Px4 CP2: MX0 MX1 MX2 MX3
220Px4 CP6: MY0 MY1 MY2 MY3
220Px4 CP4: MY8 MY9 MY10 MY11
220Px4 CP5: MY4 MY5 MY6 MY7
220Px4 CP3: MY12 MY13 MY14 MY15

3VPCU
RP23 10KX8: MY15 MY14 MY13 MY12 / MY8 MY9 MY10 MY11
RP21 10KX8: MY7 MY6 MY5 MY4 / MY0 MY1 MY2 MY3
RP22 10KX8: MX7 MX6 MX5 MX4 / MX0 MX1 MX2 MX3

29 POWER_ON#
29,31 INTERNET#
29,31 EMAIL#
29,31 P1
29,31 P2

29,31 NBSWON# NBSWON#
Q7 DTA124EU
Q5 DTA124EU
Q6 DTA124EU
Q8 DTA124EU
Q3 DTA124EU
Q4 DTA124EU
31,35 ACIN
D11 1SS355
8,13,28,31 SUSB#
D12 *1SS355
-PCUHOLD
R119 100K
31 -PCUHOLD

QUANTA COMPUTER

Title	K/B,USB	
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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.

B Rev

B Rev

MODEL ID

Power LED controll

Reserved function

FLASH 8Mbit (1M Byte),NO PLCC TYPE

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

FLASH:
MXI: AKE358AKZ87
SST: AKE35ZAKK17

1.AMD-29LV081B require MAX 500nS Tready for it's hardware reset.And MAX6326_UR29 has >100mS reset timing.So we can tie it's reset# pin to +3VALW directly.
2.SIO has internal 20 mS delay of VCC1_PWROK

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

QUANTA COMPUTER

Title: PC87541V & FLASH

Size: Custom | Document Number: BQ2L MAIN BOARD | Rev: 1A

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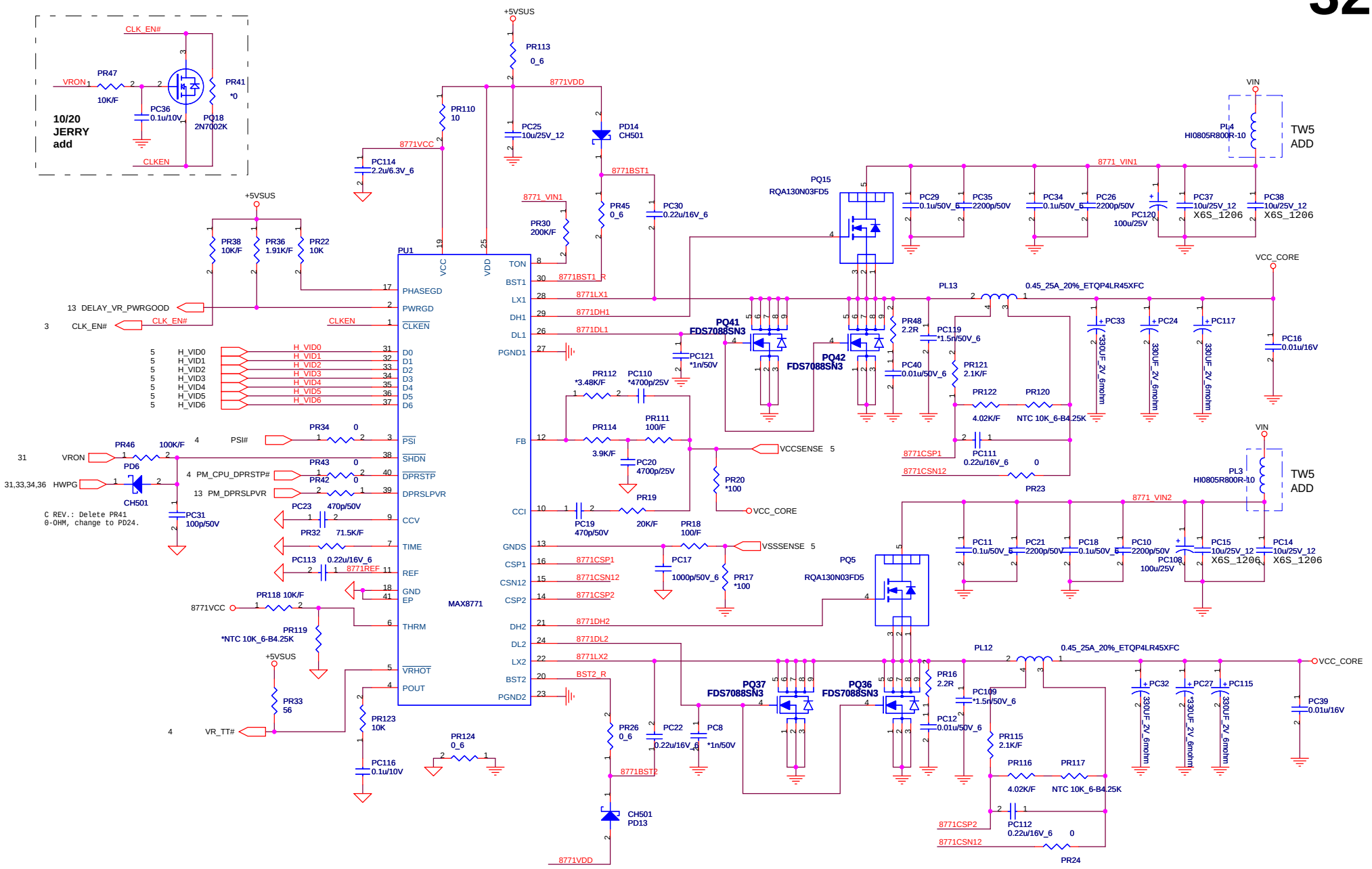

Title	CPU Power MAX8771
Size	Custom
Document Number	BQ2L MAIN BOARD
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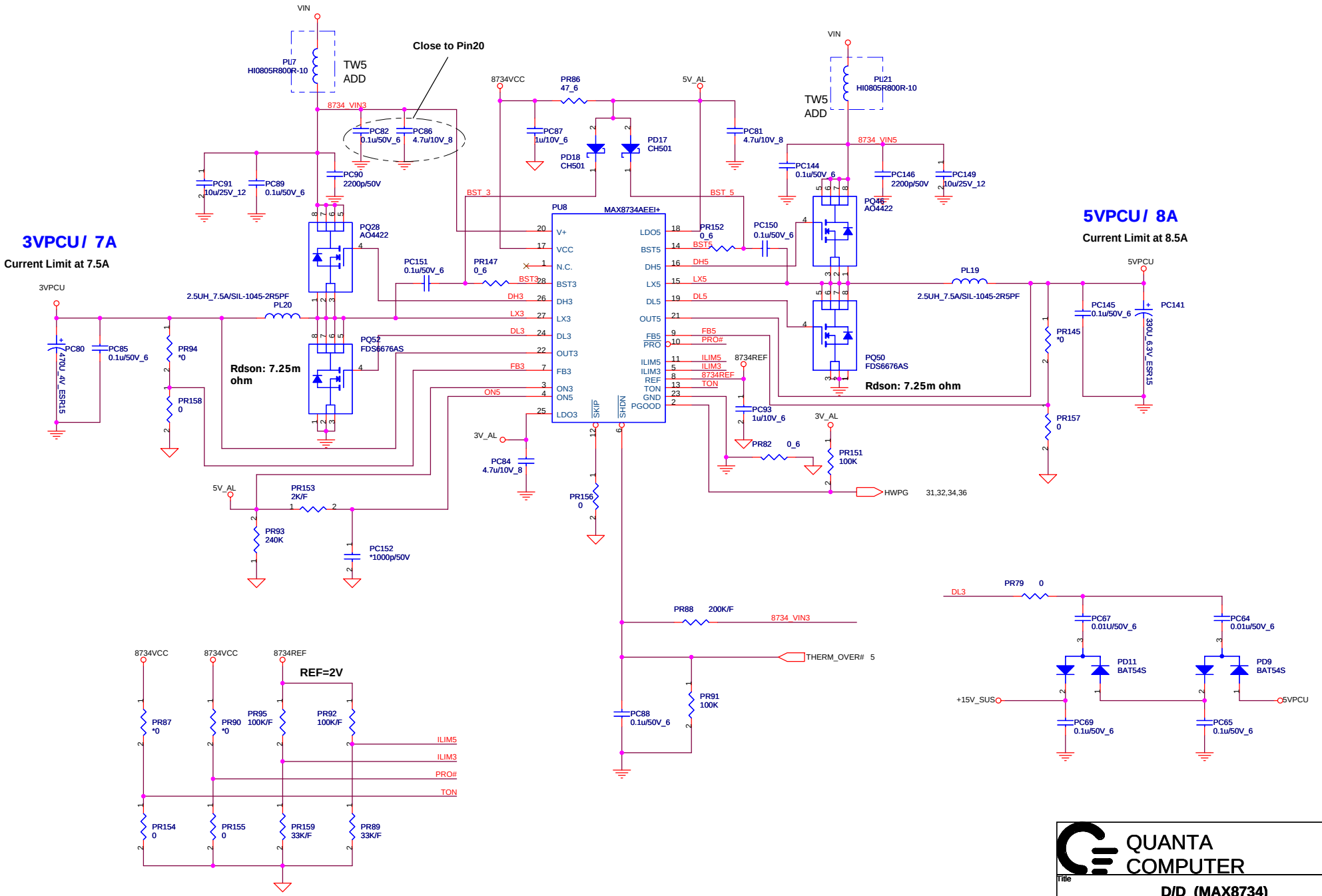

QUANTA COMPUTER

Title: D/D (MAX8734)

Size: Custom | Document Number: BQ2L MAIN BOARD | Rev: 1A

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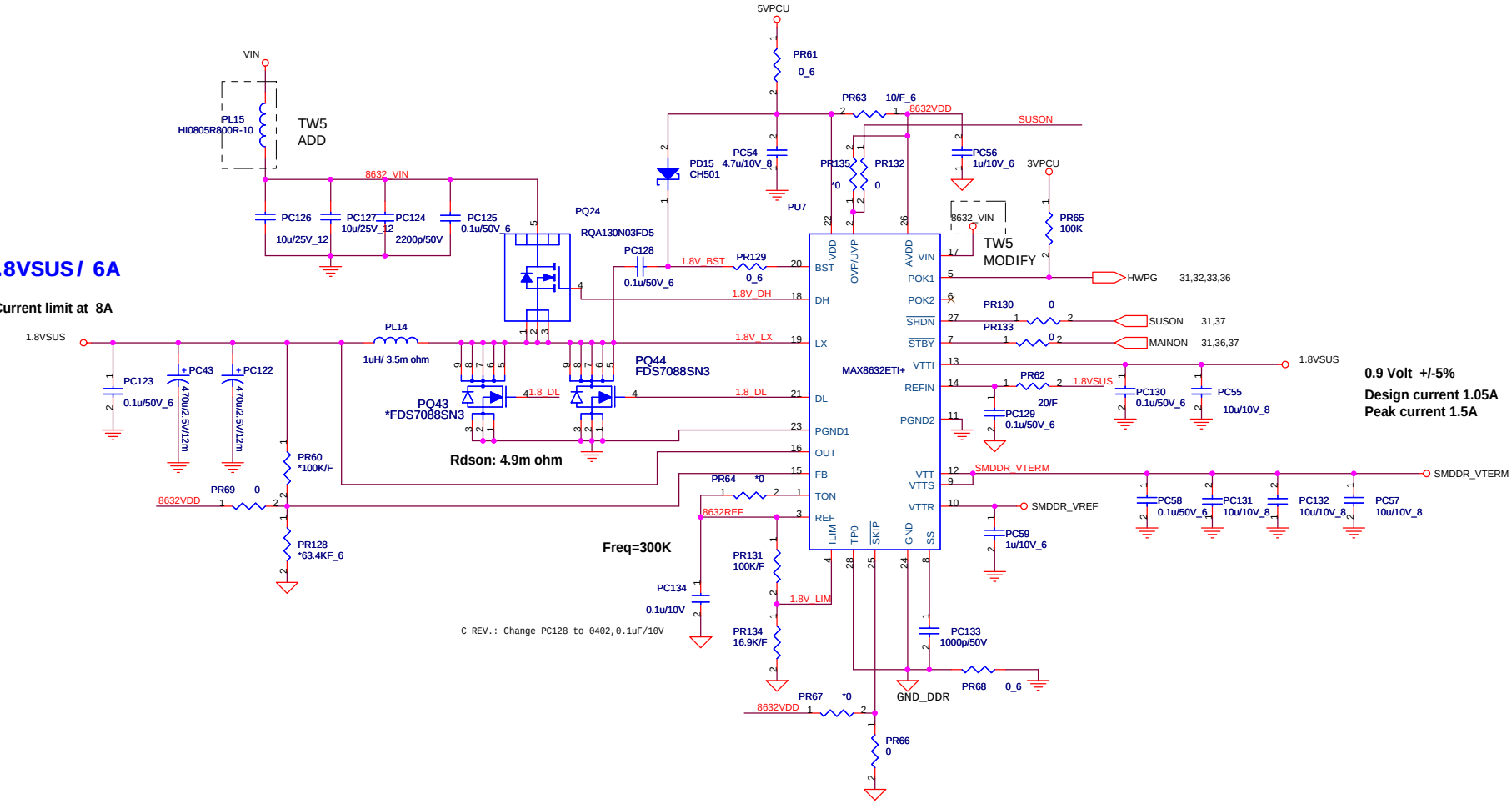
1.8VSUS / 6A

Current limit at 8A



QUANTA COMPUTER		
Title: DDR2 (MAX8632)		
Size: Custom	Document Number: BQ2L MAIN BOARD	Rev: 1A
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REV. C: Change PD13,PD14 to BC0SSM34Z49

Iinput =(V CLS / V REF)*(0.075/ RS1)

DCJK-2DC-G026b201-3P-v

PJ1 POWER_JACK

PL10 FBJ3216HS480NT_1206

PL8 FBJ3216HS480NT_1206

PC96 0.1u/50V_6

PC95 1000p/50V_6

PC97 0.1u/50V_8

PD2 SSM24PT

PD3 SSM24PT

PC1 10u/25V_12

PR9 RL3720WT-R010-GN(CYNTEC)

PL18 FBJ3216HS480NT_1206

PC138 10u/25V_12

PC63 0.1u/50V_6

PD12 UDZS15B-7-F

PR140 *0_6

PD16 RB500

PR84 1.33K/F_6

PR85 825/F_6

PR5 4.7K

PR1 4.7K

PR149 0_6

PR78 100K/F_6

PR150 100K/F_6

PR141 33_6

PC72 1u/10V_6

PD10 SW1010C

PC140 1u/10V_6

PQ51 2N7002K

PR77 332K/F_6

PC68 1u/25V_8

PR148 *0_6

PR83 1K

PR75 0_6

PC66 0.1u/50V_6

PC83 1000p/50V

PC78 1000p/50V

PC79 0.1u/50V_6

PR80 100K/F_6

PR144 1K/F

PR146 *0_6

PR81 20K/F

PC76 0.1u/50V_6

PC75 0.01u/50V_6

PC73 0.01u/50V_6

PR143 20K/F

PR142 15K/F

PC148 1u/10V_6

PU4 MAX8724

PQ26 AO4916

PL6 10uH 30% 4.4A(SIL104R-100PF)L-F

PR74 0.015_3720

PC136 0.1u/50V_6

PC62 10u/25V_12

PC137 10u/25V_12

PQ33 DTA124EU

PQ32 PDTC144EU

PR11 200K/F

PC100 0.1u/50V_8

PR108 200K/F

PQ3 AO4407

PR72 33K_6

PR136 10K/F_6

PR139 10K/F_6

PQ25 AO4407

PQ45 2N7002K

PC60 0.1u/50V_6

CELL-SET

0 = 4 CELL

1 = 3 CELL

ICHG =(V ICTL / V REFIN)*(0.075/ RS2)

D/C# table	Insert	Power on
Adapter only	Lo	Lo
Battery only	Lo	Hi
Adapter + Battery mode	Lo	Lo

CC_SET	Stop Charge	Start Charge
Voltage	0V	2.15V

DFHD05MRC74

JP1

BAT-200275MR005G198ZL-5P-L-H

BAT-200275MR005G198ZL-5P-L-H

PR70 330_6

PR71 330_6

PR73 10K/F_6

PC61 0.1u/10V

PD7 ZD5.6V

PD8 ZD5.6V

PL17 HI0805R800R-10

PL16 HI0805R800R-10

PF1 TR2/6125FA10A

PR138 100K/F_6

PR137 14K/F_6

PC135 0.1u/50V_6

QUANTA COMPUTER

Title: Charger--MAX8724

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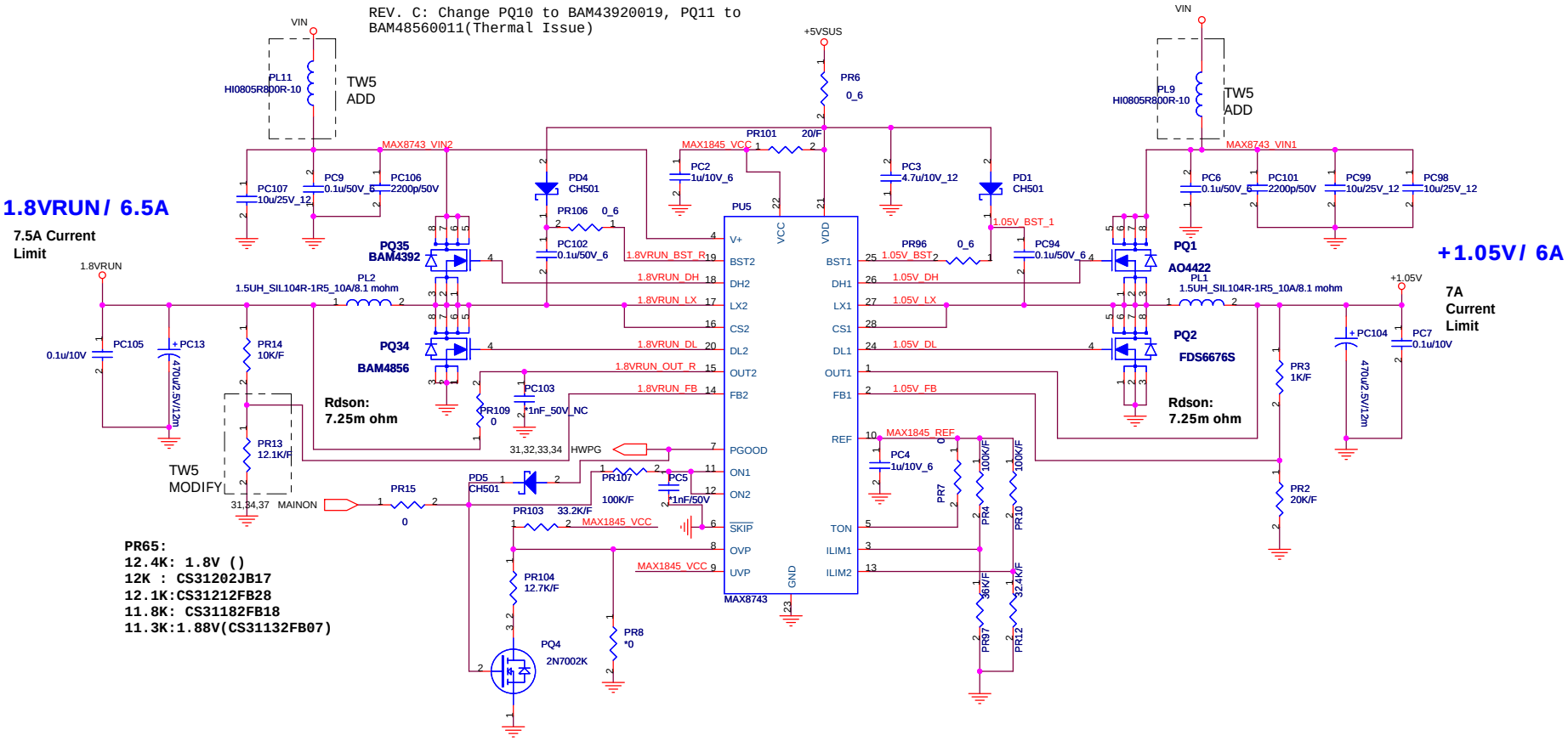
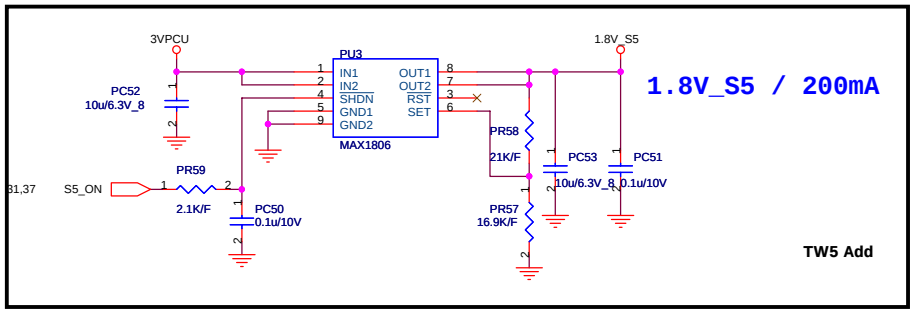
REV. C: Change PQ10 to BAM43920019, PQ11 to BAM48560011(Thermal Issue)

1.8VRUN/ 6.5A

7.5A Current Limit



PR65:
12.4K: 1.8V ()
12K : CS31202JB17
12.1K:CS31212FB28
11.8K: CS31182FB18
11.3K:1.88V(CS31132FB07)



QUANTA COMPUTER		
Title: VCCP(MAX8743)		
Size: Custom	Document Number: BQ2L MAIN BOARD	Rev: 1A
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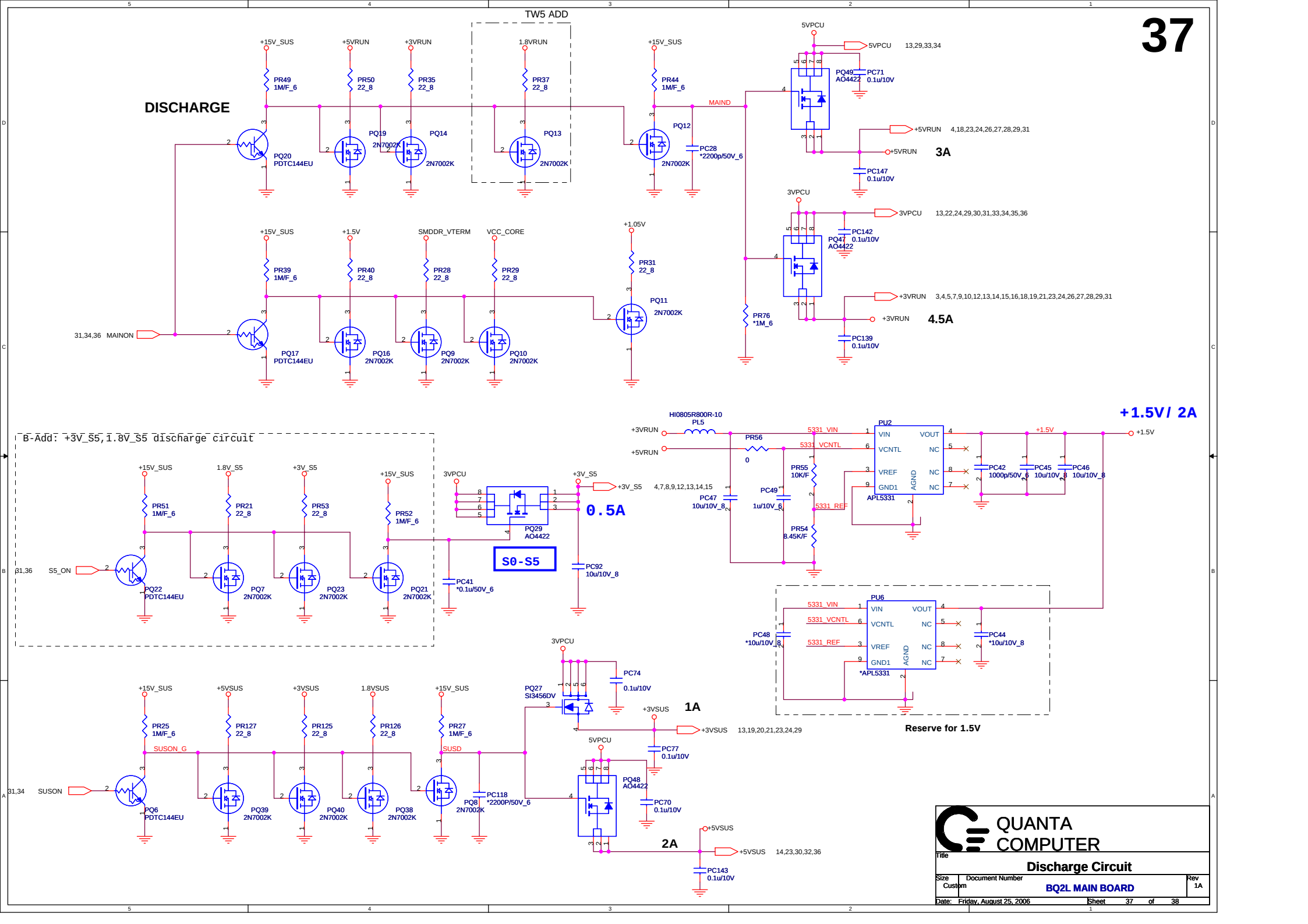

Title	Discharge Circuit
Size	Custom
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QUANTA COMPUTER

B Rev

PAGE-13:SB_HWSPND# change GPIO6 from GPIO0 for reserved function.

PAGE-21:To support newcard hot-plug function.The newcard WAKE# pin must connected to 966L PME# pin.

PAGE-24:Add R454,R455 to support SiS PCIE wireless card.

PAGE-25:Add the connection between GND and LAN_GND

PAGE-26:C385,C387 change 3900PF from 0.01UF

PAGE-28:<1>AU2 change footprint from QFN28-5*5-5 to QFN28-5*5-5-29P

<2>Add SPDIF Power switch design

PAGE-29:<1>B/T interface change PIN definition.

<2>Add Q46 for BT_VCC discharge function.To fix B/T LED abnormal display

<3>Reserved R498 component.EC can control B/T LED.

PAGE-31:Delete PIN175 of signal nets.