

ZK3 BLOCK DIAGRAM

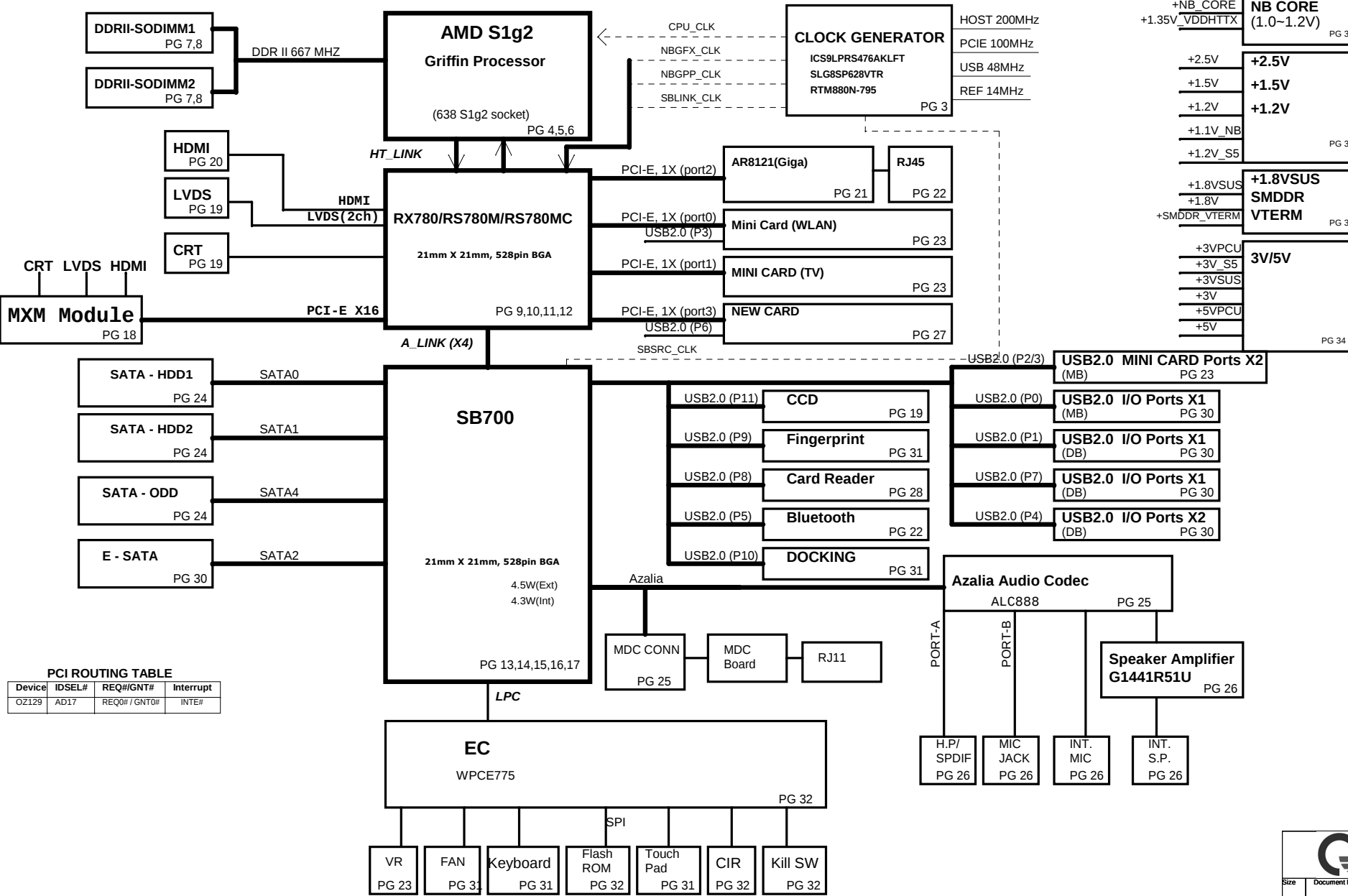
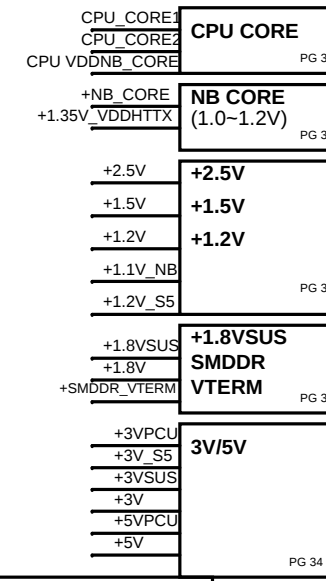
01

PCB STACK UP

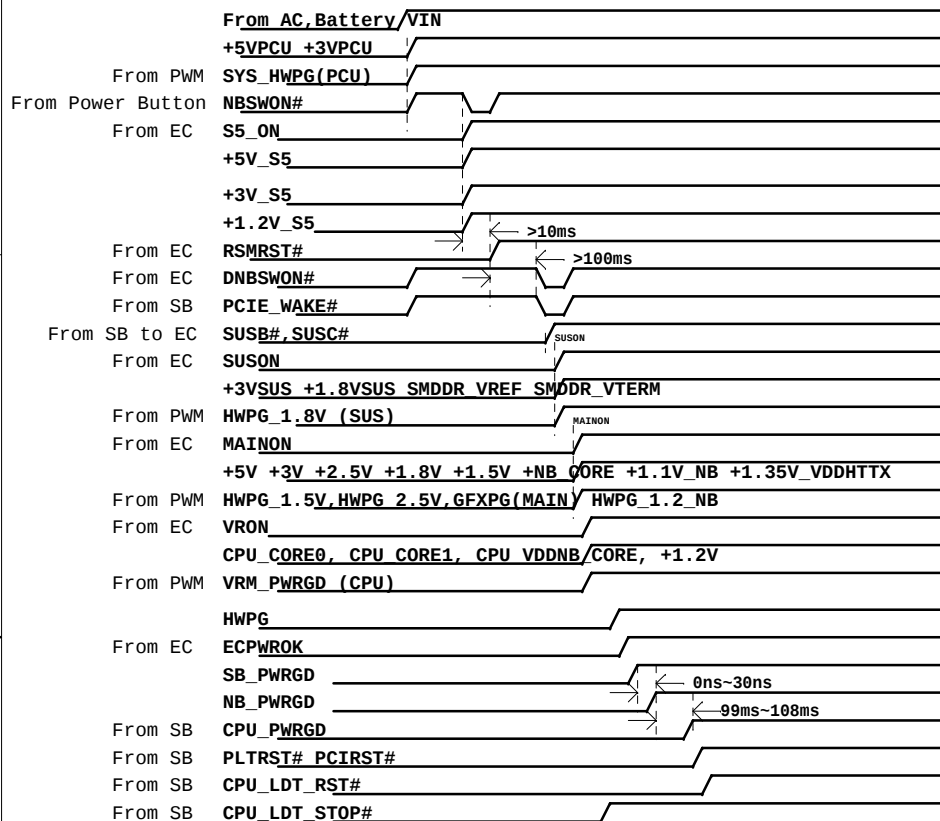
LAYER 1 : TOP
LAYER 2 : GND
LAYER 3 : IN1
LAYER 4 : IN2
LAYER 5 : VCC
LAYER 6 : BOT

Daughter Board

MMB Board
USB Board
Touch Pad board
Touch Pad board (with Fingerprint)



BD3G Power On Sequence



BOM naming rule

Items	Function	BTO	Name	Description
1	CIR	v	CIR@	
2	HDMI port	v	HDM@	
3	HDMI transmitter	v	SI@	Silicon image SiI 1392/1932
4	HDMI-CEC	v	CEC@	Renesas R8C/1B
5	Discrete VGA		EV@	External VGA stuff
6	UMA		IV@	Internal VGA stuff
7	New Card		NEW@	
8	RJ11	v	MD@	Modem
9	RJ45-10/100		40@	Marvell 8040T(10/100)
10	RJ45-1000		55@	Marvell 8055(Giga)
11	Option for RJ45-10/100 and RJ45-1000		40@55@	Option for 8040/8055
12	TV	v	TV@	
13	Cardbus		CB@	
14	FM transmitter	v	FM@	
15	Mainstream ID LED		MID@	
16	Low cost ID LED		LID@	
17	CCD	v	CCD@	
18	INT MIC	v	I_MIC@	
19	AMD Hyper Flash		HF@	Only for AMD platform
20	North bridge(690MC/RS780MC)		MC@	Only for AMD platform
21	North bridge(RX780)		RX@	Only for AMD platform
22	PowerXpress		PX@	Only for AMD platform
23	PowerXpress with UMA SKU		PX@IV@	Only for AMD platform
24	PowerXpress with Discrete VGA SKU		PX@EV@	Only for AMD platform
25	Power player/Power Shift		PP@	Only for AMD platform

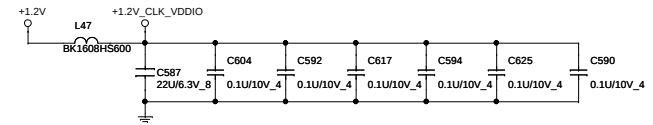
*Note: EC will sampling SUSB# & SUSC# every 5ms.

AMD SB700 SMBUS Table

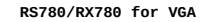
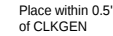
	CLK GEN	RAM	Mini Card (HD-Decoder)	Mini-card(WL)	New Card	HDMI
SB700 SDATA0/SCLK0(+3V)	V	V	V	V	V	
SB700 SDATA1/SCLK1(+3V_S5)						V
SB700 SDATA2/SCLK2(+3V_S5)						
Power	+3V	+3V	+3V	+3V (Atheros)	+3V	+3V_S5
Reserve MOS ckt	V	V	V	V	V	V

EC SMBUS Table

	Battery	CPU thermal Sensor	EC EEPROM	VGA thermal Sensor	Touch Sensor	HDMI CEC
EC775 SDATA1/SCLK1(+3VPCU)	V					
EC775 SDATA2/SCLK2(+3VPCU)		V	V			
EC775 SDATA3/SCLK3(+3VPCU)				V	V	V
EC775 SDATA4/SCLK4(+3VPCU)						
Power	+3VPCU	+3V	+3VPCU	+3V	+3VPCU	+5VPCU
Reserve MOS ckt	X	V	X	V	X	V



| Clock chip has internal serial terminations
 | for differential pairs, external resistors are
 | reserved for debug purpose.

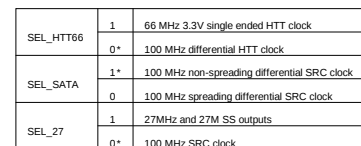


RX780 only

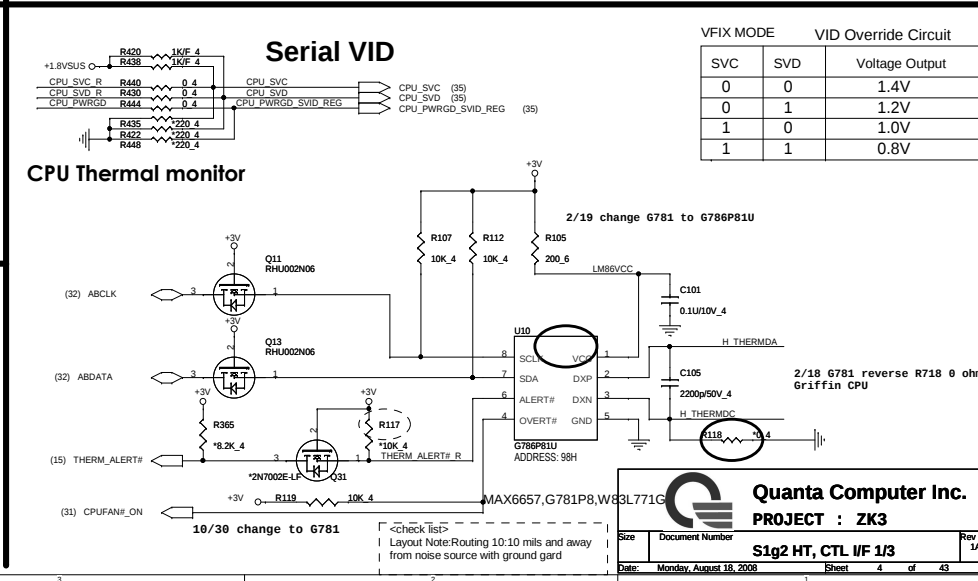
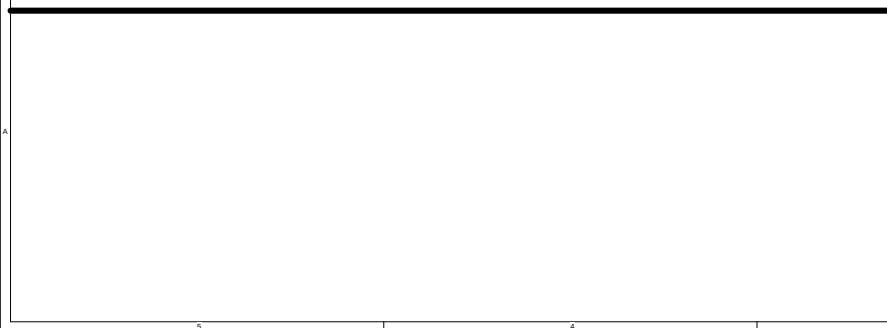
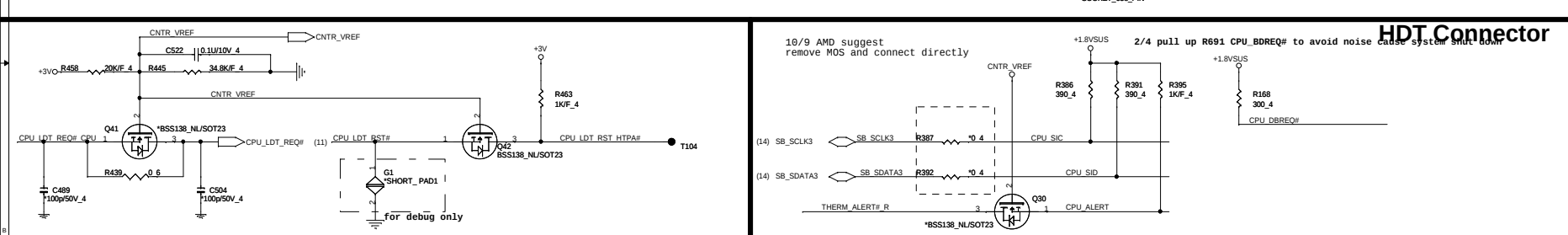


	RX780	RS780
	1.8V	1.1V
Ra	82.5R	158R
Rb	130R	90.9R

```
RES CHIP 130 1/16W +-1%(0402)L-F -->CS11302FB15
RES CHIP 158 1/16W +-1%(0402) -->CS11582FB00
RES CHIP 90.9 1/16W +-1%(0402) -->CS09092FB15
RES CHIP 82.5 1/16W +-1%(0402) -->CS08252FB11
```



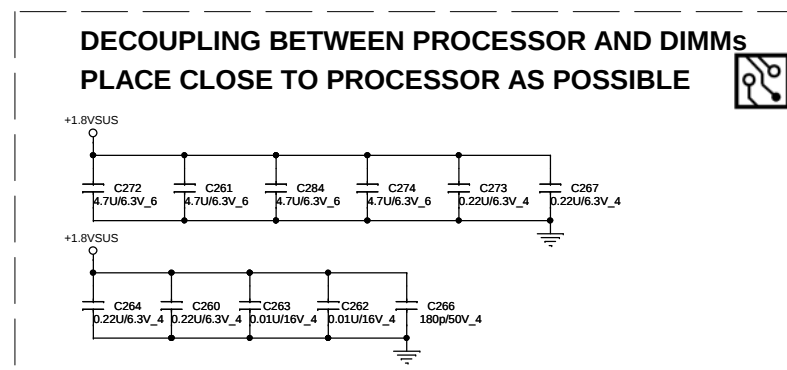
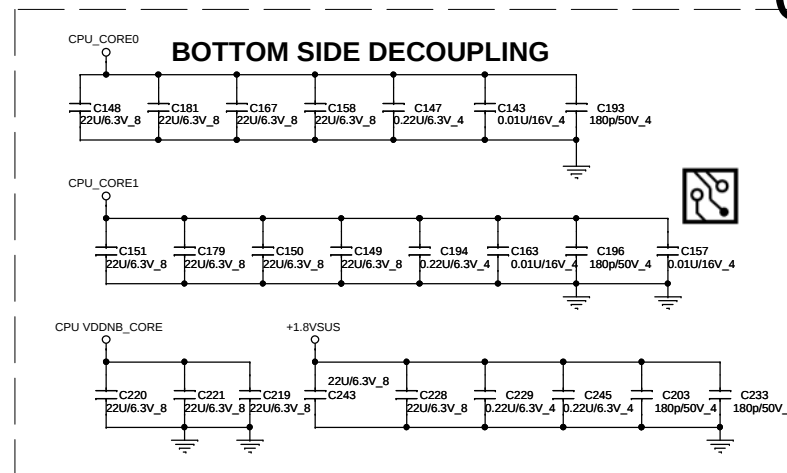
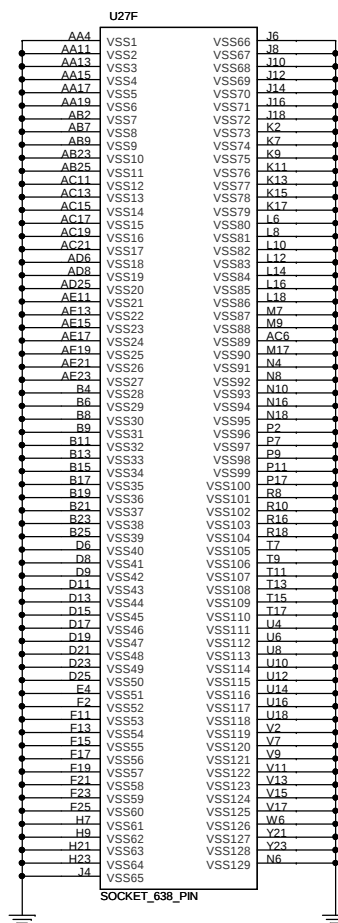
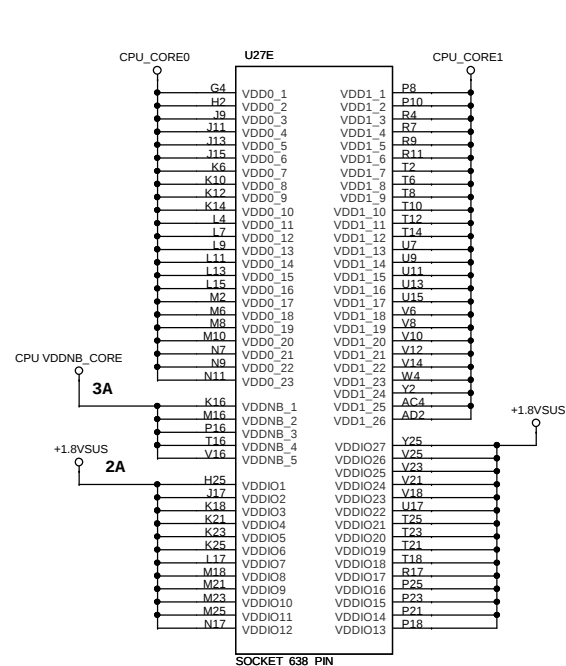
 Quanta Computer Inc. PROJECT : ZK3		
Size	Document Number	Rev
	CLOCK GENERATOR_SLG8SP628	1A
Date:	Monday, August 18, 2008	Sheet 3 of 43



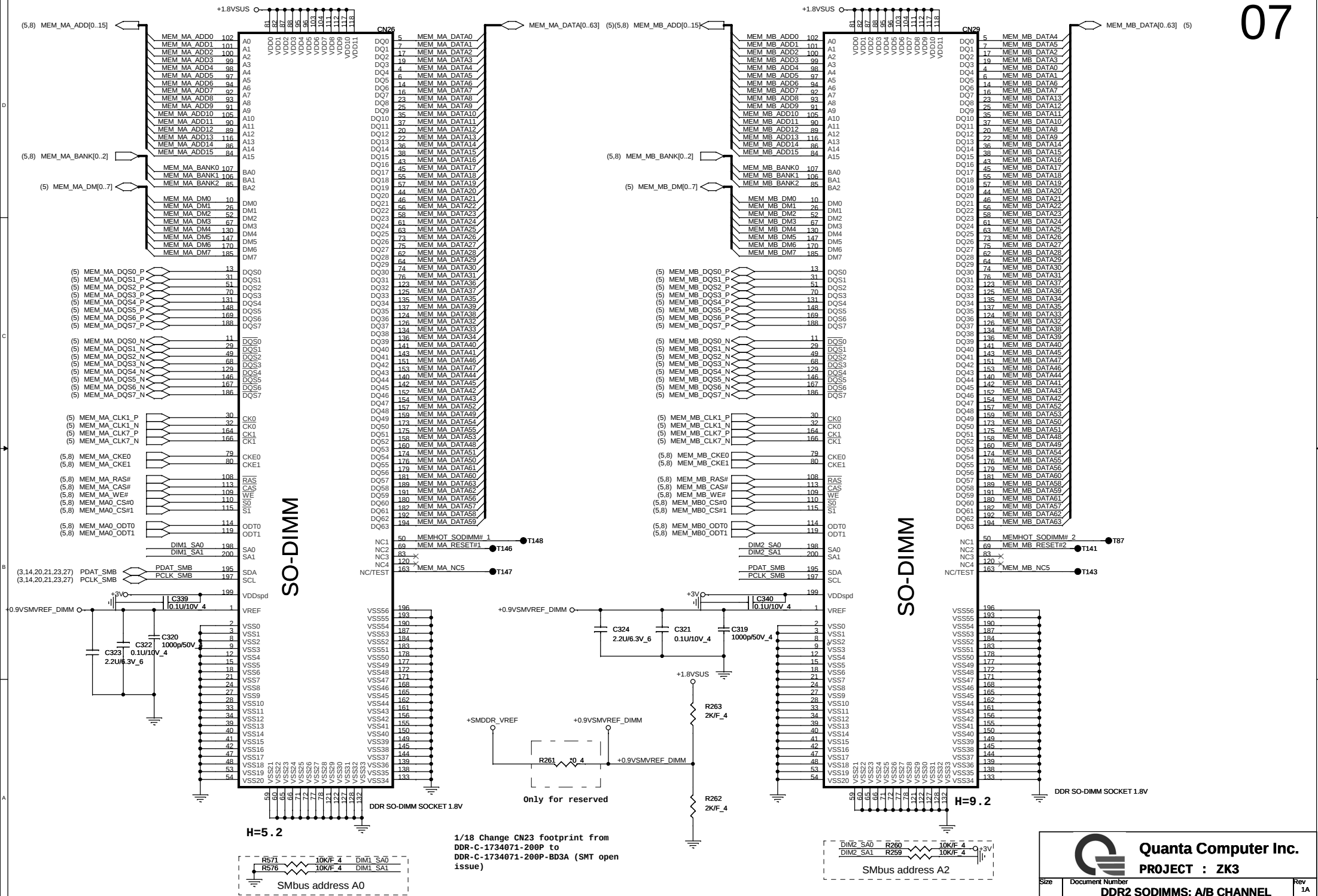


Quanta Computer Inc.
PROJECT : ZK3

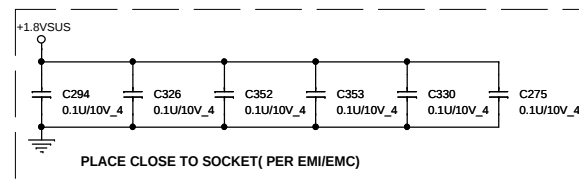
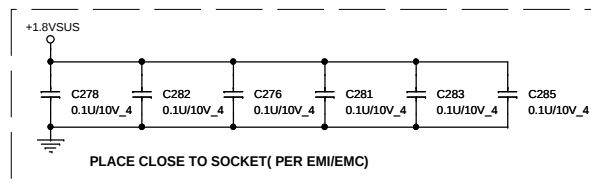
Size	Document Number	Rev
	S1G2 DDRII MEMORY I/F 2/3	1A
Date:	Monday, August 18, 2008	Sheet 5 of 43

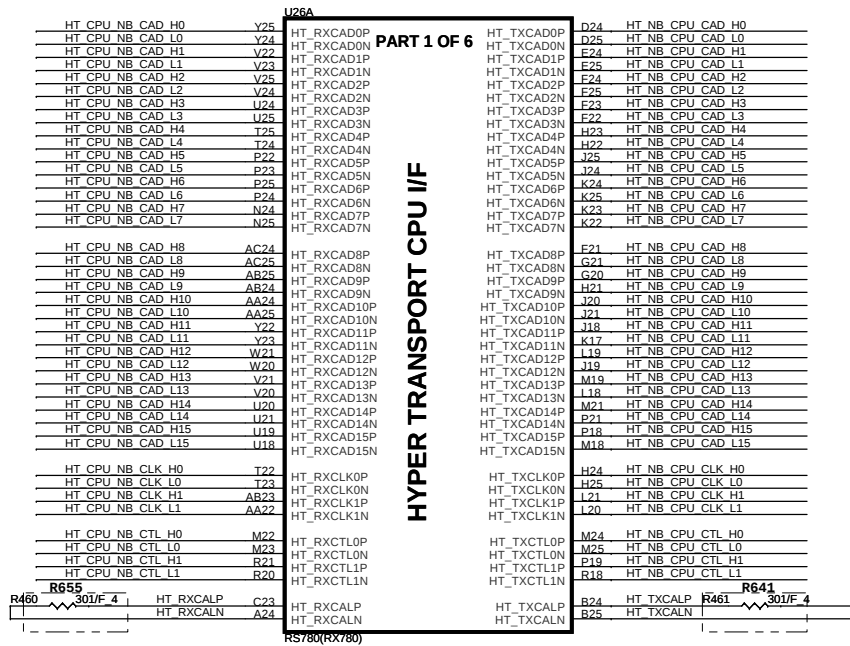


PROCESSOR POWER AND GROUND



Quanta Computer Inc.
PROJECT : ZK3





signals	RS780	RX780
HT_TXCALP	R641 300 ohm 1%	R641 1.21k ohm 1%
HT_TXCALN		
HT_RXCALP	R655 300 ohm 1%	R655 1.21k ohm 1%
HT_RXCALN		

11/4 modify

RES CHIP 1.21K 1/16W +-1%(0402)
P/N : CS21212FB18RES CHIP 300 1/16W +-1%(0402)
P/N : CS13002FB00

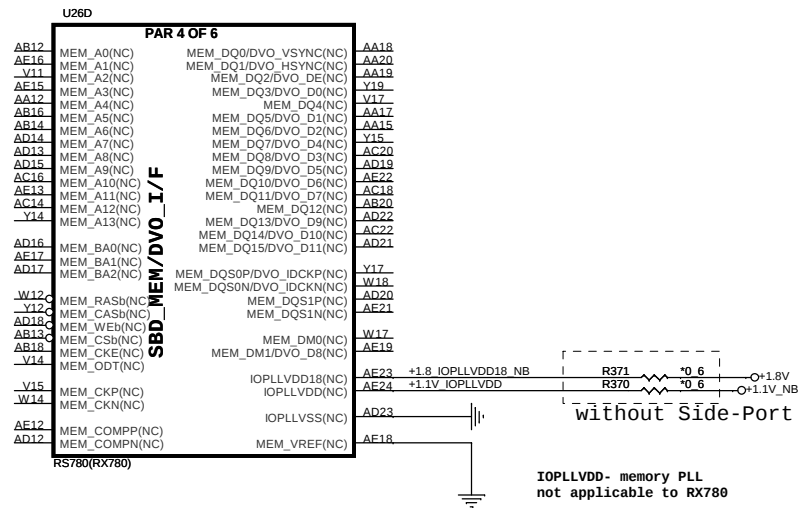
A12 version

RS780M AJ067400T05 100-CK2612(216-0674008-00)
 RS780MC AJ067400T06 100-CK2613(216-0674010-00)
 RX781 AJ067400T10 100-CK2642(215-0674024)
 SB700 AJA12F60T18 100-CK2614(218S7EALA12F6)

A13 version

RS780M AJ067400T18 100-CK2699(216-0674022)
 RS780MC AJ067400T20 100-CK2704(216-0674024)
 RX781 AJ067400T21 100-CK2706(215-0674034)
 A12 version
 SB700 AJA12F60T18

This block is for UMA RS780 only , RX780 can
 remove all component



2/1 R480,R479 no stuff when RS780M without
 side port / RX781



Quanta Computer Inc.
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PEG_RXP15	D4	GFX_RX0P
PEG_RXN15	C4	GFX_RX0N
PEG_RXP14	A3	GFX_RX1P
PEG_RXN14	B3	GFX_RX1N
PEG_RXP13	C2	GFX_RX2P
PEG_RXN13	C1	GFX_RX2N
PEG_RXP12	E5	GFX_RX3P
PEG_RXN12	F5	GFX_RX3N
PEG_RXP11	G5	GFX_RX4P
PEG_RXN11	H5	GFX_RX4N
PEG_RXP10	H6	GFX_RX5P
PEG_RXN10	H6	GFX_RX5N
PEG_RXP9	J6	GFX_RX6P
PEG_RXN9	J5	GFX_RX6N
PEG_RXP8	J7	GFX_RX7P
PEG_RXN8	J8	GFX_RX7N
PEG_RXP7	L5	GFX_RX8P
PEG_RXN7	L6	GFX_RX8N
PEG_RXP6	M8	GFX_RX9P
PEG_RXN6	L8	GFX_RX9N
PEG_RXP5	P7	GFX_RX10P
PEG_RXN5	M7	GFX_RX10N
PEG_RXP4	P5	GFX_RX11P
PEG_RXN4	M5	GFX_RX11N
PEG_RXP3	R8	GFX_RX12P
PEG_RXN3	P6	GFX_RX12N
PEG_RXP2	R5	GFX_RX13P
PEG_RXN2	R5	GFX_RX13N
PEG_RXP1	P4	GFX_RX14P
PEG_RXN1	P3	GFX_RX14N
PEG_RXP0	T4	GFX_RX15P
PEG_RXN0	T3	GFX_RX15N

PART 2 OF 6

PCIE I/F GFX

GFX_TX0P	A5	C PEG_TXP15 C565
GFX_TX0N	B5	C PEG_TXN15 C568
GFX_TX1P	A4	C PEG_TXP14 C561
GFX_TX1N	B4	C PEG_TXN14 C563
GFX_TX2P	C3	C PEG_TXP13 C556
GFX_TX2N	B2	C PEG_TXN13 C560
GFX_TX3P	D1	C PEG_TXP12 C543
GFX_TX3N	D2	C PEG_TXN12 C549
GFX_TX4P	E2	C PEG_TXP11 C538
GFX_TX4N	F1	C PEG_TXN11 C542
GFX_TX5P	F4	C PEG_TXP10 C535
GFX_TX5N	F3	C PEG_TXN10 C537
GFX_TX6P	F1	C PEG_TXP9 C525
GFX_TX6N	F2	C PEG_TXN9 C527
GFX_TX7P	H4	C PEG_TXP8 C518
GFX_TX7N	H3	C PEG_TXN8 C523
GFX_TX8P	H1	C PEG_TXP7 C512
GFX_TX8N	H2	C PEG_TXN7 C516
GFX_TX9P	J2	C PEG_TXP6 C506
GFX_TX9N	J1	C PEG_TXN6 C509
GFX_TX10P	K4	C PEG_TXP5 C496
GFX_TX10N	K3	C PEG_TXN5 C502
GFX_TX11P	K1	C PEG_TXP4 C492
GFX_TX11N	K2	C PEG_TXN4 C494
GFX_TX12P	M4	C PEG_TXP3 C480
GFX_TX12N	M3	C PEG_TXN3 C491
GFX_TX13P	M1	C PEG_TXP2 C486
GFX_TX13N	M2	C PEG_TXN2 C488
GFX_TX14P	N2	C PEG_TXP1 C483
GFX_TX14N	N1	C PEG_TXN1 C485
GFX_TX15P	P1	C PEG_TXP0 C476
GFX_TX15N	P2	C PEG_TXN0 C477

PCE_CALRP(PCE_BCALRP)
PCE_CALRN(PCE_BCALRN)

RS780(RX780)

(27) PCIE_RXP1	AE3	GPP_RX0P
(27) PCIE_RXN1	AD4	GPP_RX0N
(23) PCIE_RXP2	AE2	GPP_RX1P
(23) PCIE_RXN2	AD3	GPP_RX1N
(23) PCIE_RXP3	AD1	GPP_RX2P
(23) PCIE_RXN3	AD2	GPP_RX2N
(21) GLAN_RXP	V6	GPP_RX3P
(21) GLAN_RXN	W6	GPP_RX3N
	U5	GPP_RX4P
	U6	GPP_RX4N
	U8	GPP_RX5P
	U7	GPP_RX5N
(13) PCIE_SB_NB_RX0P	AA8	SB_RX0P
(13) PCIE_SB_NB_RX0N	Y8	SB_RX0N
(13) PCIE_SB_NB_RX1P	AA7	SB_RX1P
(13) PCIE_SB_NB_RX1N	Y7	SB_RX1N
(13) PCIE_SB_NB_RX2P	AA5	SB_RX2P
(13) PCIE_SB_NB_RX2N	AA6	SB_RX2N
(13) PCIE_SB_NB_RX3P	W5	SB_RX3P
(13) PCIE_SB_NB_RX3N	Y5	SB_RX3N

PCIE I/F GPP

PCIE I/F SB

GPP_TX0P	AC1	PCIE_TXP1 C C112
GPP_TX0N	AC2	PCIE_TXN1 C C115
GPP_TX1P	AB3	PCIE_TXP2 C C104
GPP_TX1N	AA2	PCIE_TXN2 C C100
GPP_TX2P	Y1	PCIE_TXP3 C C106
GPP_TX2N	Y2	PCIE_TXN3 C C107
GPP_TX3P	Y4	PCIE_TXP4 C C124
GPP_TX3N	Y3	PCIE_TXN4 C C120
GPP_TX4P	V1	
GPP_TX4N	V2	
GPP_TX5P	V2	
GPP_TX5N	V2	
SB_TX0P	AD7	A TX0P C C445
SB_TX0N	AE7	A TX0N C C446
SB_TX1P	AE6	A TX1P C C450
SB_TX1N	AD6	A TX1N C C449
SB_TX2P	AB6	A TX2P C C451
SB_TX2N	AC6	A TX2N C C452
SB_TX3P	AD5	A TX3P C C448
SB_TX3N	AE5	A TX3N C C447

PCIE_TXP1 (27)	0.1U/10V 4
PCIE_TXN1 (27)	0.1U/10V 4
PCIE_TXP2 (23)	0.1U/10V 4
PCIE_TXN2 (23)	0.1U/10V 4
PCIE_TXP3 (23)	0.1U/10V 4
PCIE_TXN3 (23)	0.1U/10V 4
GLAN_TXP (21)	0.1U/10V 4
GLAN_TXN (21)	0.1U/10V 4
PCIE_SB_NB_TX0P (13)	0.1U/10V 4
PCIE_SB_NB_TX0N (13)	0.1U/10V 4
PCIE_SB_NB_TX1P (13)	0.1U/10V 4
PCIE_SB_NB_TX1N (13)	0.1U/10V 4
PCIE_SB_NB_TX2P (13)	0.1U/10V 4
PCIE_SB_NB_TX2N (13)	0.1U/10V 4
PCIE_SB_NB_TX3P (13)	0.1U/10V 4
PCIE_SB_NB_TX3N (13)	0.1U/10V 4

TO EPRESS CARD
TO WLAN
TO MINI CARD
TO PCIE-LAN

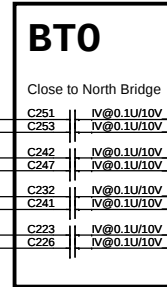


NOTE:
RS780MC no support Graphic / HDMI

(18) PEG_RXN[15:0] PEG_RXN[15:0]
(18) PEG_RXP[15:0] PEG_RXP[15:0]

PEG_TXN[15:0] PEG_TXN[15:0] (18)
PEG_TXP[15:0] PEG_TXP[15:0] (18)

Close to North Bridge



To HDMI CONN

11/4 modify RS780/RS740/RS780 difference table (PCIE LINK)

	RS740	RX780/RS780
NB_PCIECALRP	1.27K (GND)	1.27K (GND)
GPP4	NC	GPP4
GPP5	NC	GPP5

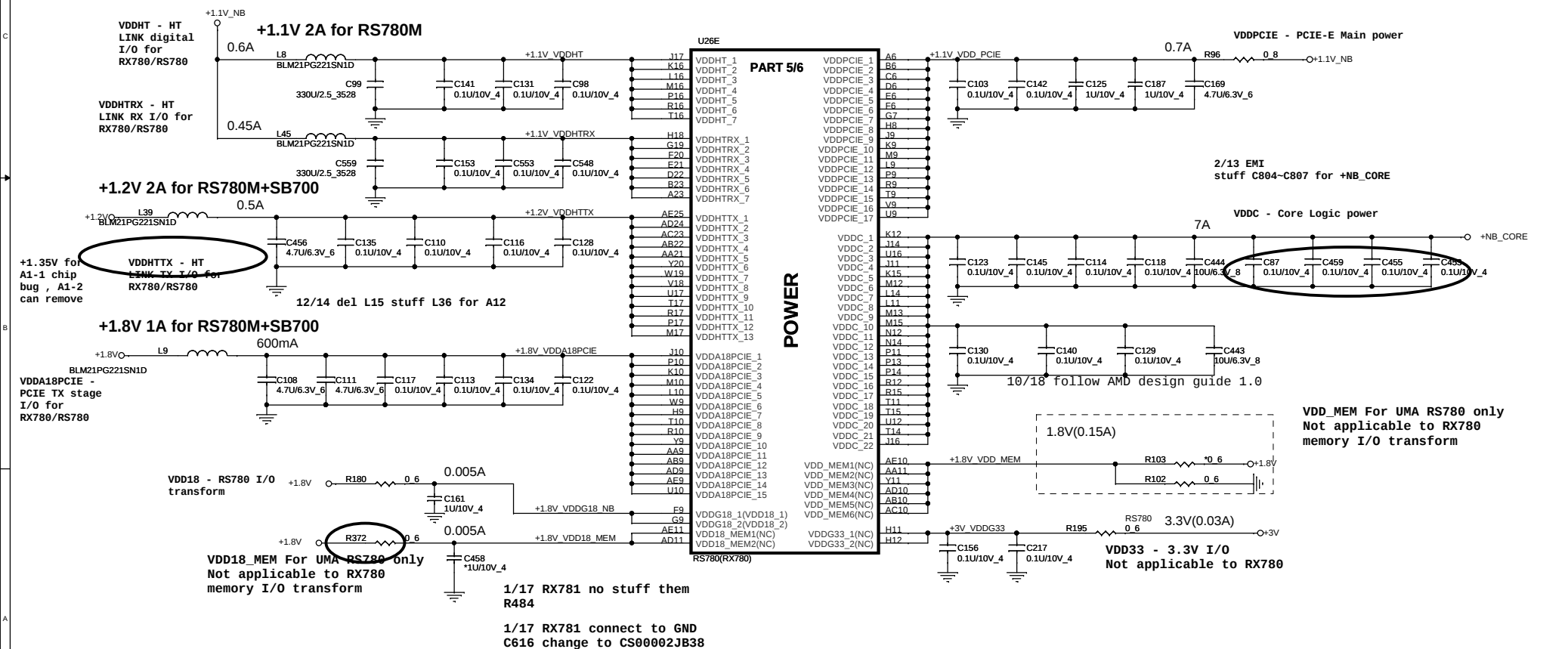
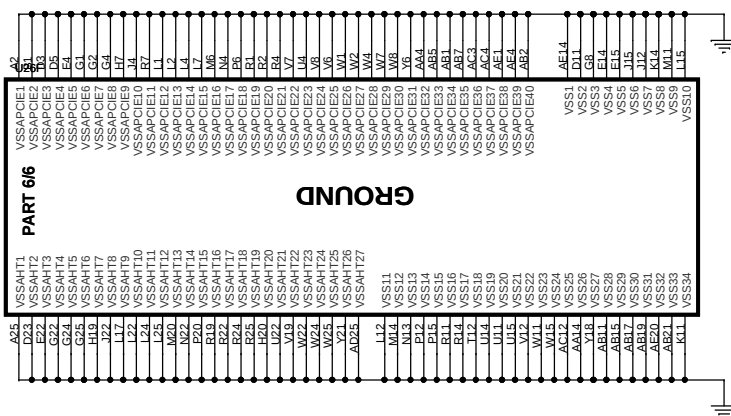
RS780 Display Port Support (muxed on GFX)

DP0	GFX_TX0,TX1,TX2 and TX3 AUX0 and HPD0
DP1	GFX_TX4,TX5,TX6 and TX7 AUX1 and HPD1

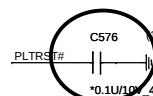


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PROJECT : ZK3

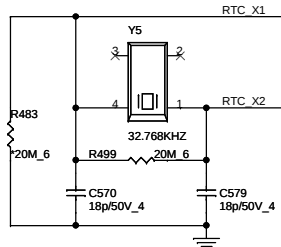
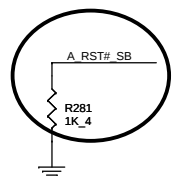
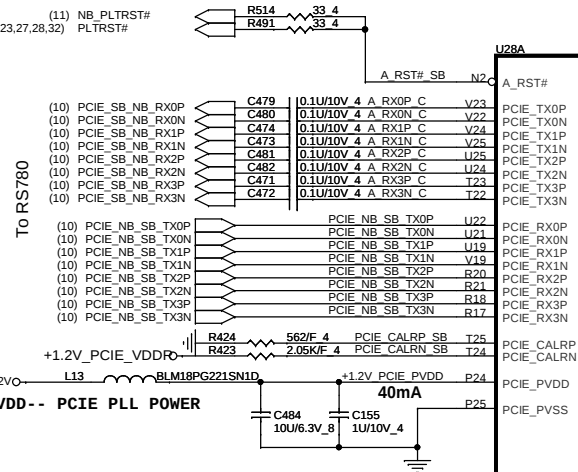
PIN NAME	RX780	RS780	PIN NAME	RX780	RS780
VDDHT	+1.1V	+1.1V	IOPLLVD	NC	+1.1V
VDDHTRX	+1.1V	+1.1V	AVDD	NC	+3.3V
VDDHTTX	+1.2V	+1.2V	AVDDDI	NC	+1.8V
VDDA18PCIE	+1.8V	+1.8V	AVDDQ	NC	+1.8V
VDDG18	+1.8V	+1.8V	PLLVD	NC	+1.1V
VDD18_MEM	NC	+1.8V	PLLVD18	NC	+1.8V
VDDPCIE	+1.1V	+1.1V	VDDA18PCIEPLL	+1.8V	+1.8V
VDDC	+1.1V	+1.1V	VDDA18HTPLL	+1.8V	+1.8V
VDD_MEM	NC	+1.8V/1.5V	VDDLT18	NC	+1.8V
VDDG33	NC	+3.3V	VDDLT33	NC	+1.8V
IOPLLVD18	NC	+1.8V	VDDLT33	NC	NC



2/4 reserve C800 PLTRST#

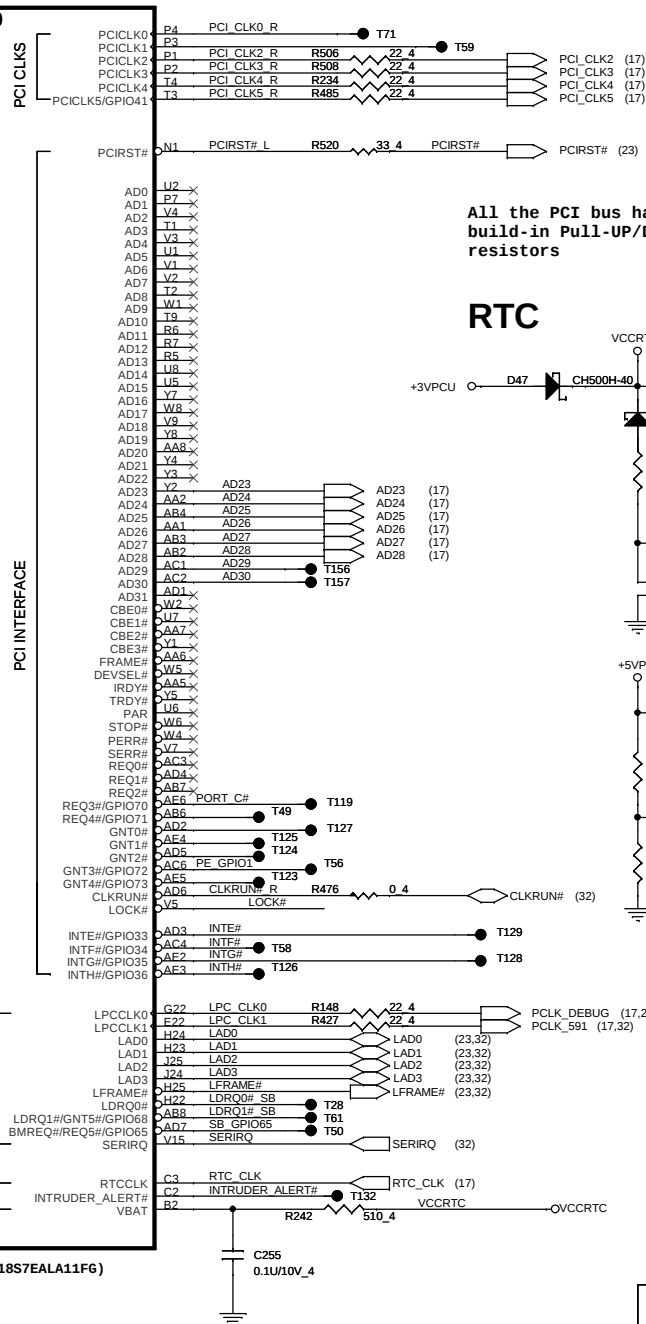


PLACE THESE
PCIE AC
COUPLING CAPS
CLOSE TO U600

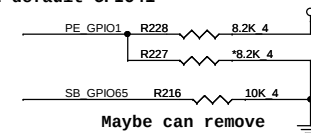


1/31 voltage leakage remove R349

SB700
IC CTRL(528P) SB700 A11(218S7EALA11FG)
P/N : AJALA110T00

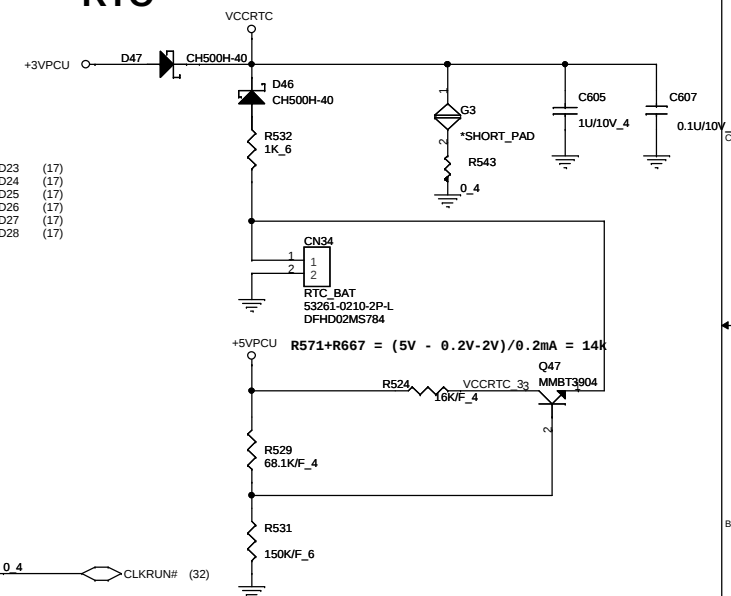


```
A11 default PCICLK5
A12 default GPIO41
```



All the PCI bus has
build-in Pull-UP/Down
resistors

RTC



4/14
R527, change from 2k to 0.
R524 change from 2K to 16K
R529, change from 6.8k to 68.1k
R531 change form 15k to 150k



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SB700-PCIE/PCI/CPU/LPC 1/4

Size	Document Number	Rev
	SB700-PCIE/PCI/CPU/LPC 1/4	1A
Date:	Monday, August 18, 2008	Sheet 13 of 43

11/01 chagne +3VSUS to +3V_S5

10/31 add newcard DET#

Clock gen
/DDR2 /MINI CARD/NEW CARDSCL1/SDATA1 is 3V/S5 tolerance
AMD datasheet define itSCL2/SDATA2 is 3V/S5 tolerance
AMD datasheet define it

3/19 Without Side-port NU

1/31 NEW_DET# change from GEVEN5# to GPM1#

To Azalia

12/7 add D57,D58 to avoid voltage leakage

10/26 modify it
11/06 check itHD audio
interface is
3.3V voltageAMD Suggestion 3/29 modify
From 20K change to 10K

U280

SB700

Part 4 of 5

ACPI/WAKE UP EVENTS

GPIO

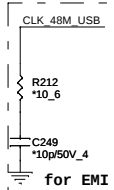
USB OC

HD AUDIO

INTEGRATED uC

INTEGRATED uC

SB700



To TV

To Finger Printer

To CARD READER

To New Card

DOCKING

To Bluetooth

To M/B USB

To M/B USB

To M/B USB/ESATA

To Camera

To WLAN

To M/B USB

10/18 USB swap for layout route

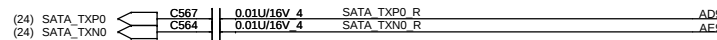


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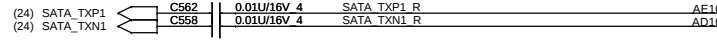
SATA PORT 0,1,2,3
can support AHCI
mode

PLACE SATA AC COUPLING
CAPS CLOSE TO SB700

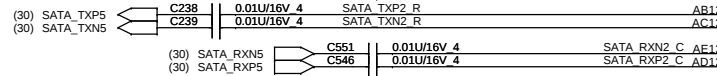
SATA1



SATA2

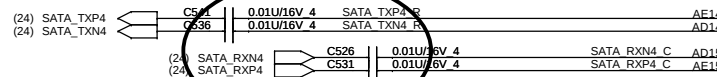


E-SATA



2/22 change SATA ODD from port3 to port4 (solve ODD
post detect fail)

ODD



SATA PORT 4,5 are
only support IDE
mode



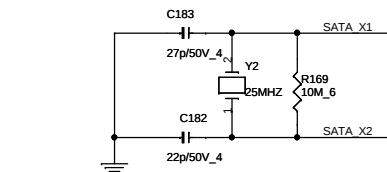
PLACE SATA_CAL
RES VERY CLOSE
TO BALL OF SB700

NOTE:

R361 IS 1K 1% FOR 25MHz
XTAL, 4.99K 1% FOR 100MHz
INTERNAL CLOCK

PLVDD_SATA--
SATA PLL
POWER

XTLVDD_SATA-- SATA
crystal power



U28B

SB700

Part 2 of 5

SERIAL ATA

SATA PWR

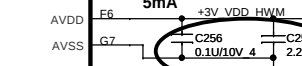
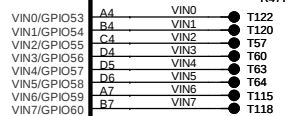
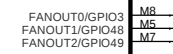
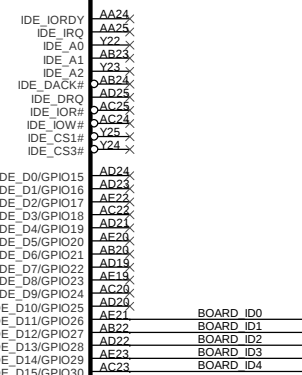
HW MONITOR

SB700

ATA 66/100/133

SPI ROM

HW MONITOR

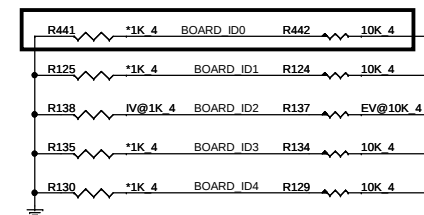


2/13 EMI
stuff C375, C366 for SB HW MONITOR

MB ID Selection Table

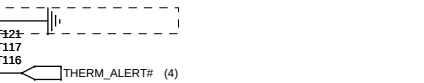
Board ID	ID4	ID3	ID2	ID1	ID0
NEW CARD CARD BUS					H L
CCFL Panel LED Panel				H L	
W/ MXM W/O MXM			H L		
W/ S-VIDEO W/O S-VIDEO		H L			
W/ HDMI W/O HDMI	H L				

MB ID

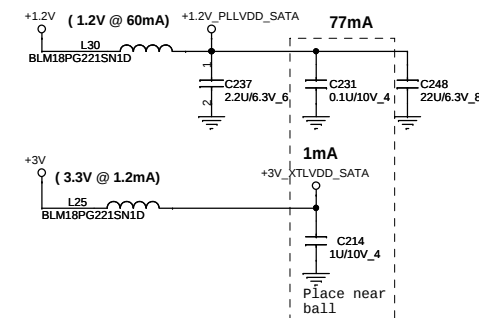


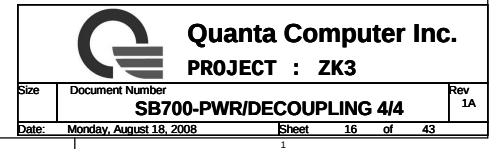
Mount R441 and Unmount R442 for non IR SKU

10/18 AMD suggest to connect to GND



AVDD--H/W monitor
Analog power

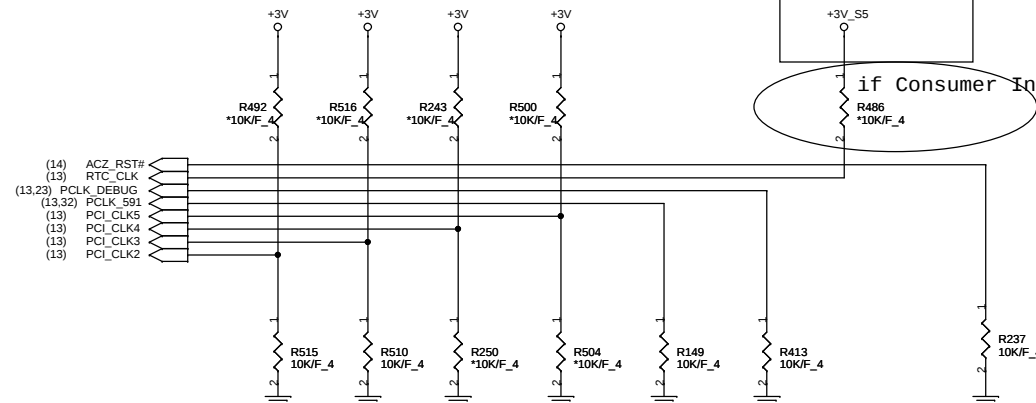






OVERLAP COMMON PADS WHERE
POSSIBLE FOR DUAL-OP RESISTORS.

17



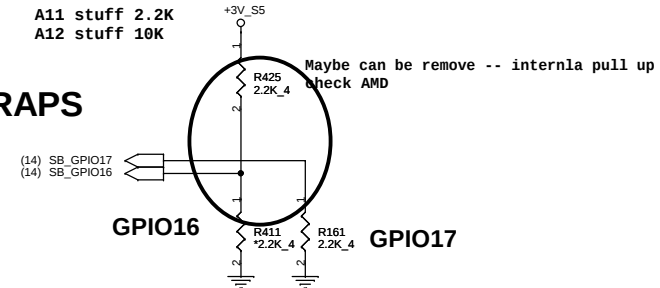
	PCI_CLK2	PCI_CLK3	PCI_CLK4	PCI_CLK5	LPC_CLK0	LPC_CLK1	RTC_CLK	AZ_RST#
PULL HIGH	BOOTFAIL TIMER ENABLED	USE DEBUG STRAPS	RESERVED	RESERVED	ENABLE PCI MEM BOOT	CLKGEN ENABLED	INTERNAL RTC DEFAULT	EC ENABLED
PULL LOW	BOOTFAIL TIMER DISABLED DEFAULT	IGNORE DEBUG STRAPS DEFAULT			DISABLE PCI MEM BOOT DEFAULT	CLKGEN DISABLED DEFAULT	EXT. RTC (PD on X1, apply 32KHz to RTC_CLK)	EC DISABLED DEFAULT

EC
ENABLED

ENABLE PCI
MEM BOOT

REQUIRED STRAPS

A11 stuff 2.2K
A12 stuff 10K



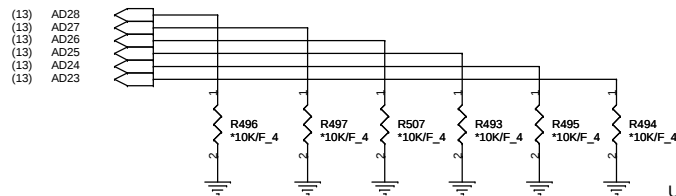
GPIO16 GPIO17

TYPE	GPIO16	GPIO17
FWH	L : 2.2K pull down	L : 2.2K pull down
LPC	NC	L : 2.2K pull down
SPI	L : 2.2K pull down	NC
RSVD	NC	NC

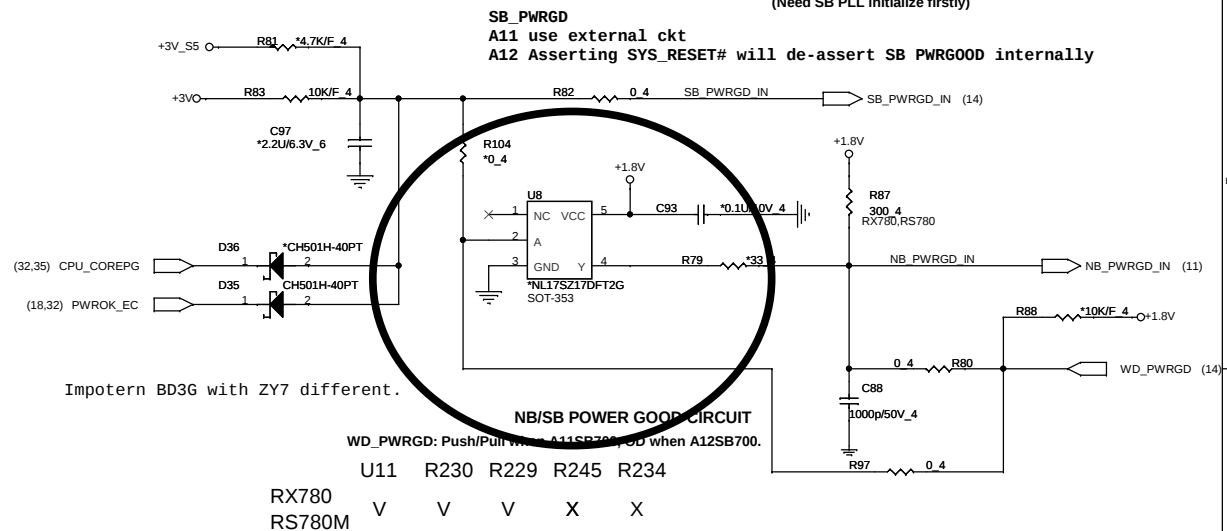
NB_PWRGD_IN:
RS780/RX780 = 1.8V; RS740 = 3.3V
Do NOT share it with SB_PWRGD when use Internal Clk Gen
(Need SB PLL initialize firstly)

DEBUG STRAPS

SB700 HAS 15K INTERNAL PU FOR PCI_AD[28:23]



	PCI_AD28	PCI_AD27	PCI_AD26	PCI_AD25	PCI_AD24	PCI_AD23
PULL HIGH	USE LONG RESET DEFAULT	USE PCI PLL DEFAULT	USE ACPI BCLK DEFAULT	USE IDE PLL DEFAULT	USE DEFAULT PCIE STRAPS DEFAULT	RESERVED
PULL LOW	USE SHORT RESET	BYPASS PCI PLL	BYPASS ACPI BCLK	BYPASS IDE PLL	USE EEPROM PCIE STRAPS	



SB_PWRGD

A11 use external ckt

A12 Asserting SYS_RESET# will de-assert SB PWRGOOD internally

NB/SB POWER GOOD CIRCUIT

WD_PWRGD: Push/Pull with A11SB700, PD when A12SB700.

U11 R230 R229 R245 R234

RX780 V V V X X
RS780M

AL17SZ17000 IC(5P) NL17SZ17DFT2G(SOT-353)

SOT-353

ALUC1G17000 IC OTHER(5P) SN74AUC1G17DBVR(SOT23-5)

SOT23-5



Quanta Computer Inc.
PROJECT : ZK3

Size Document Number SB700-STRAPS Rev 1A

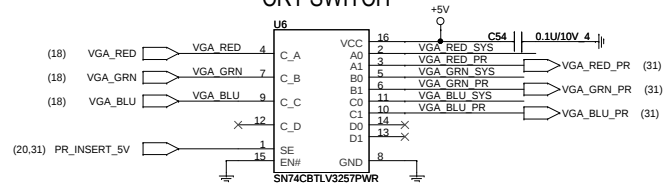
Date: Monday, August 18, 2008 Sheet 17 of 43



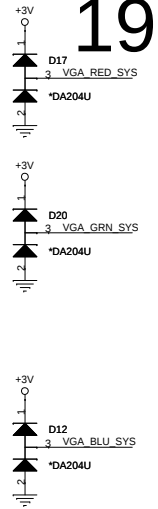
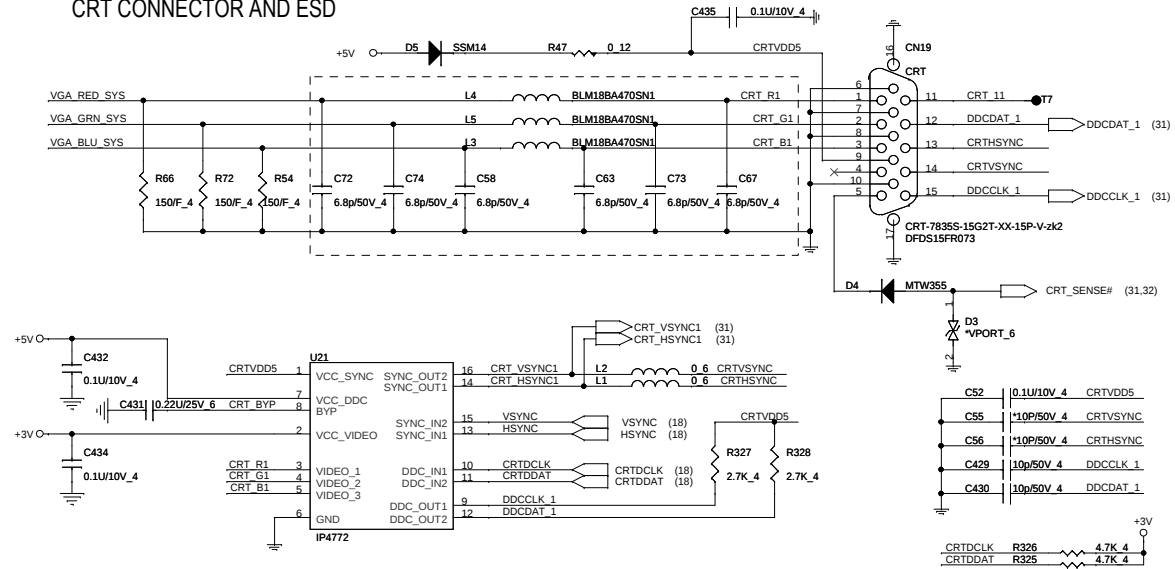
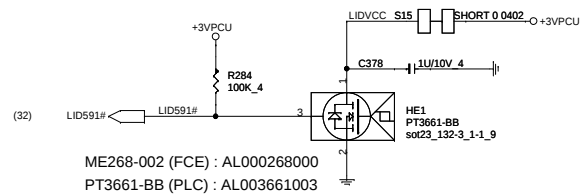
CRT

CRT CONNECTOR AND ESD

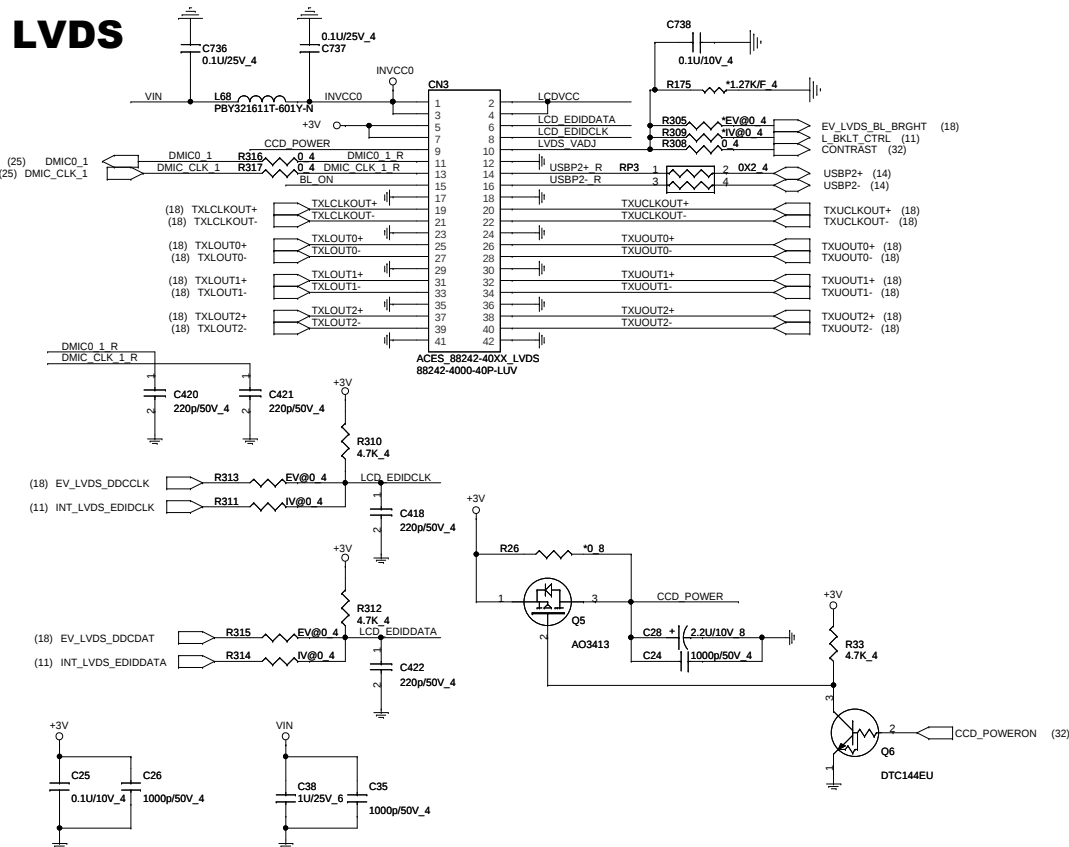
CRT SWITCH



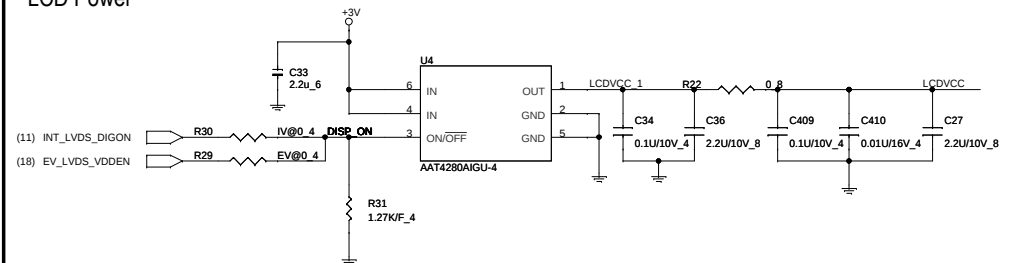
Lid Switch



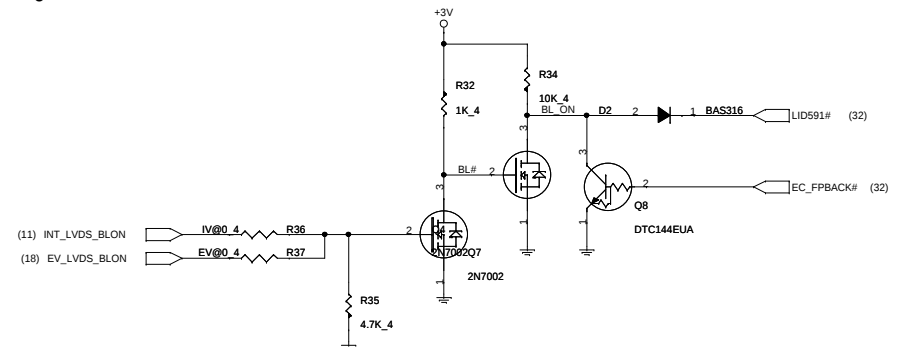
LVDS



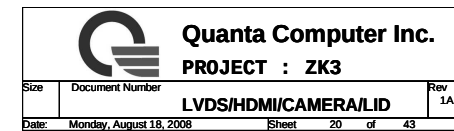
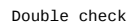
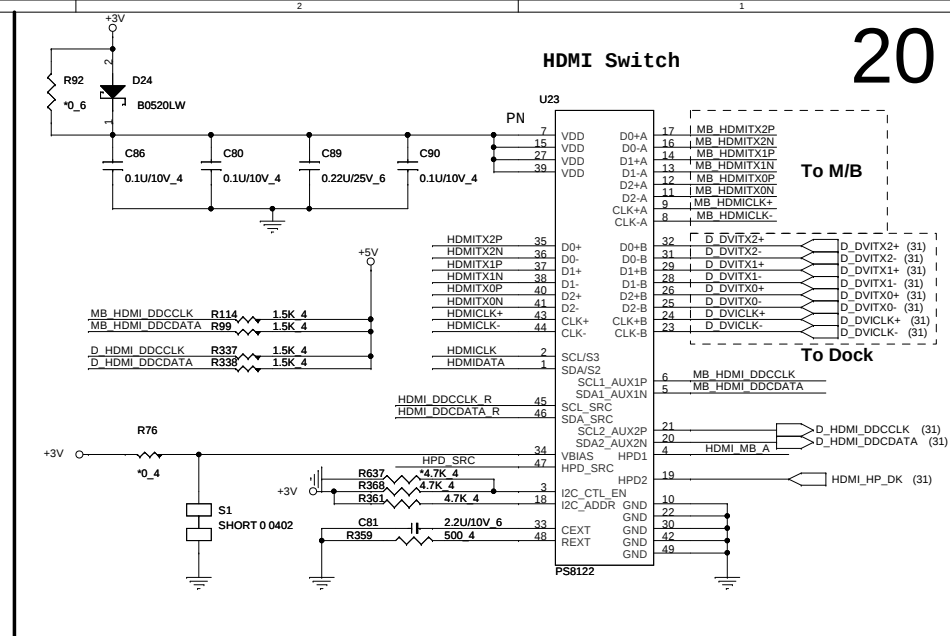
LCD Power



Backlight Control & LID

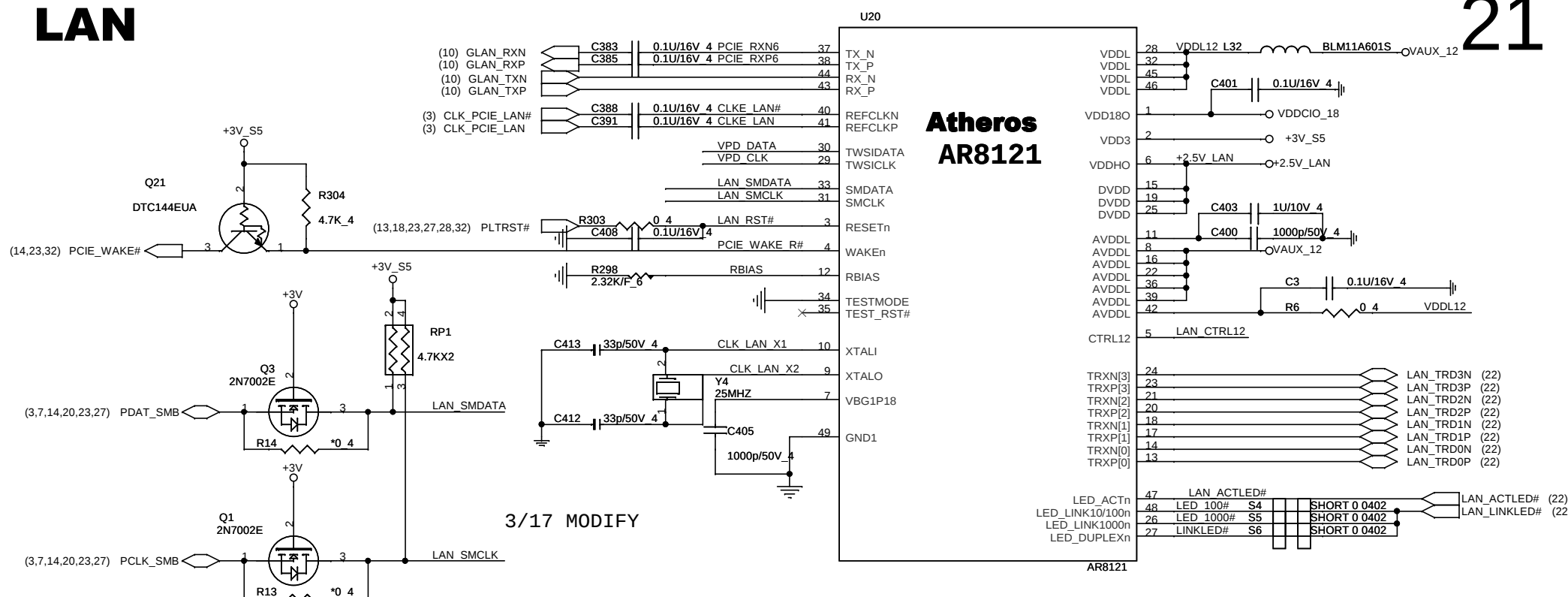


20

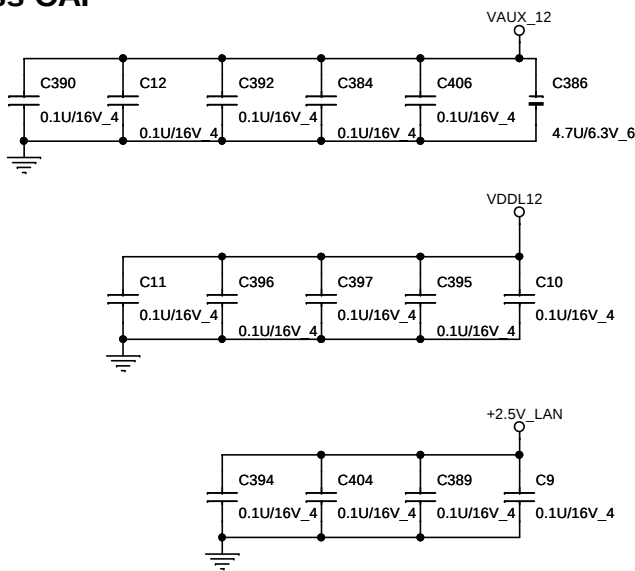


LAN

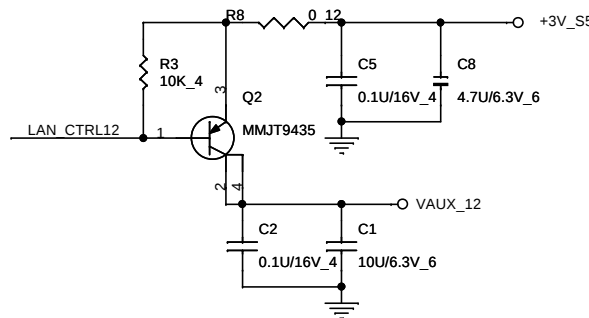
21



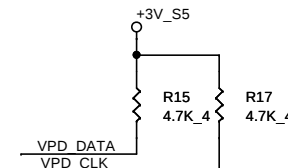
Bypass CAP



Regulator(1.2V)



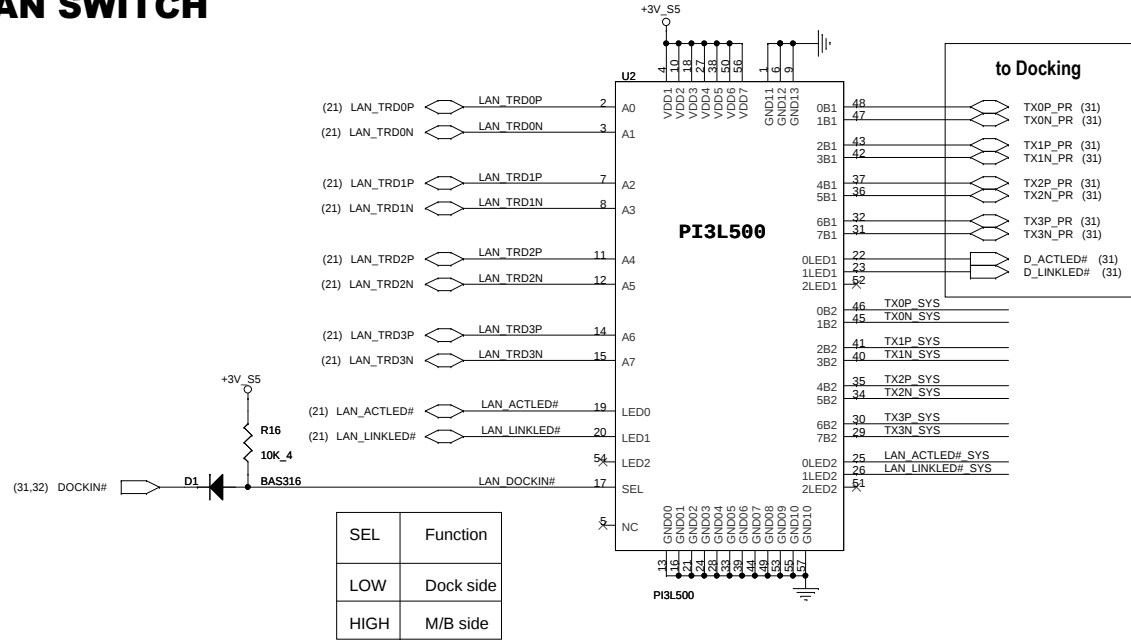
EEPROM



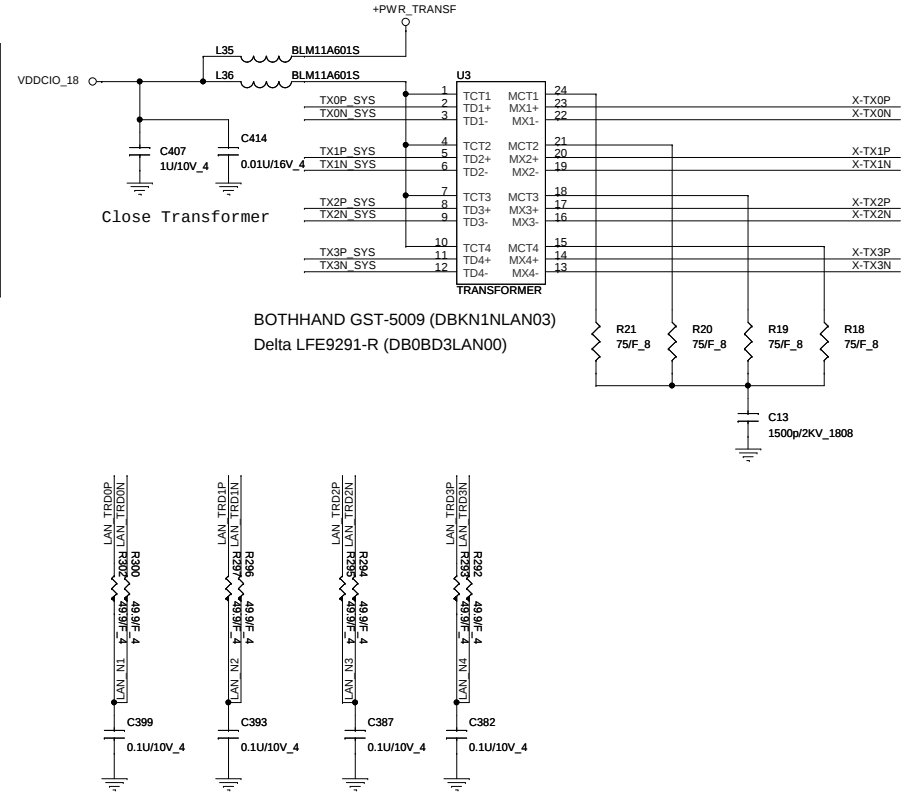
Quanta Computer Inc.
PROJECT : ZK3

Size	Document Number	Rev
	AR8121 LAN	1A
Date:	Monday, August 18, 2008	Sheet 21 of 43

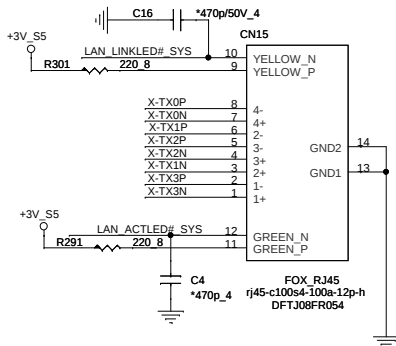
LAN SWITCH



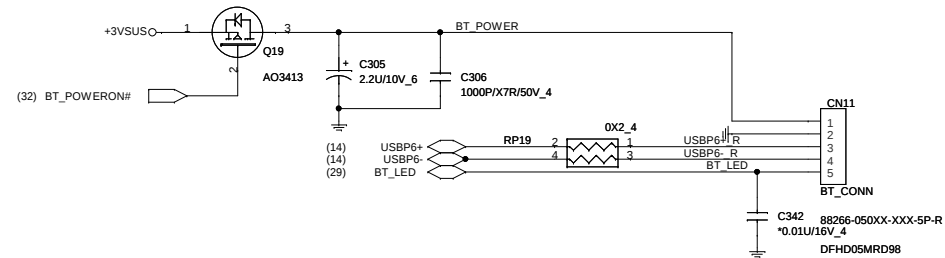
TRANSFORMER



RJ45



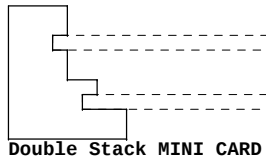
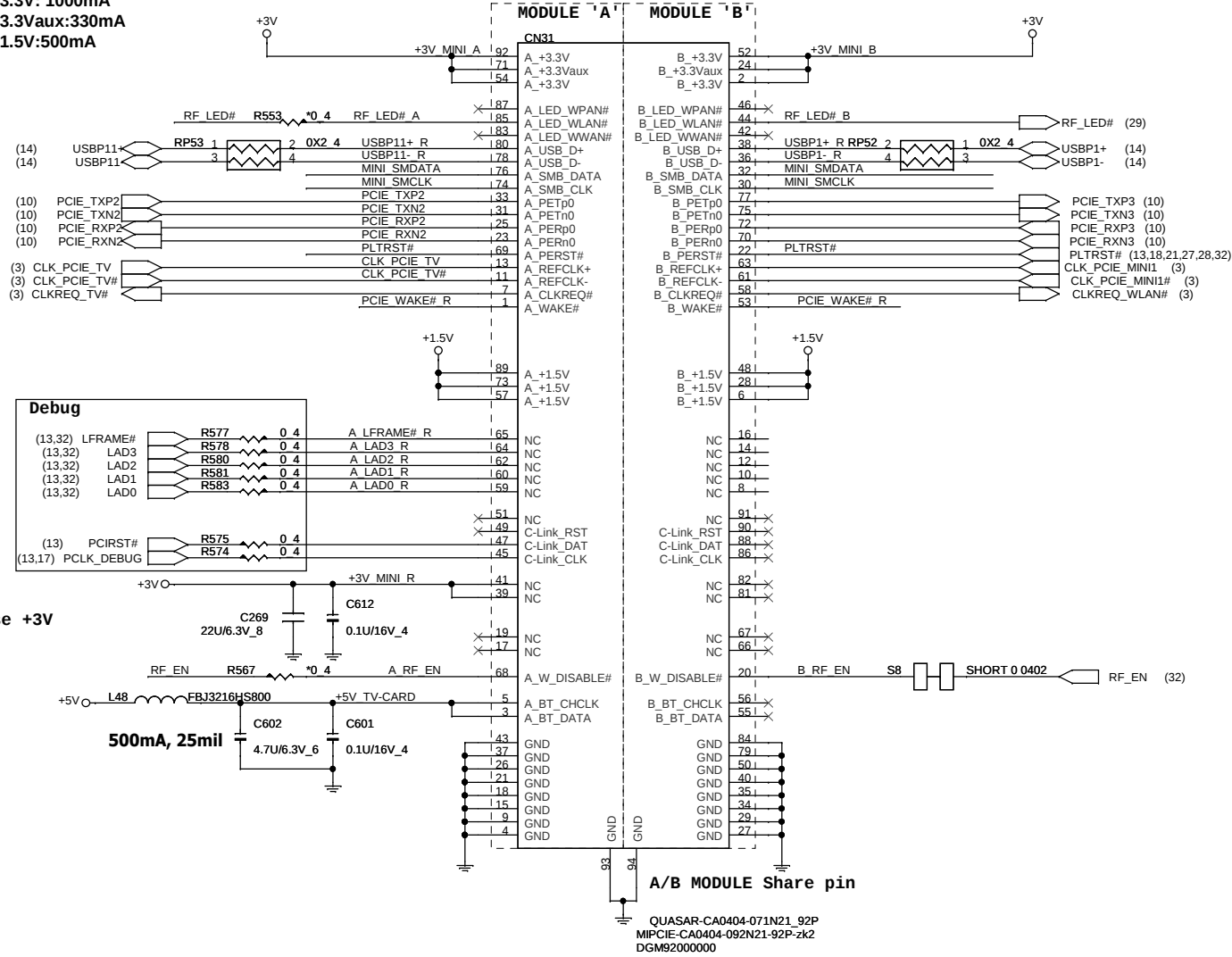
BLUETOOTH MODULE CONNECTOR



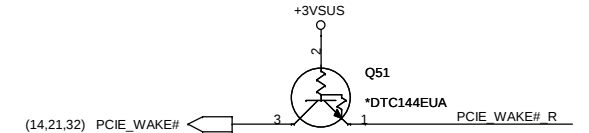
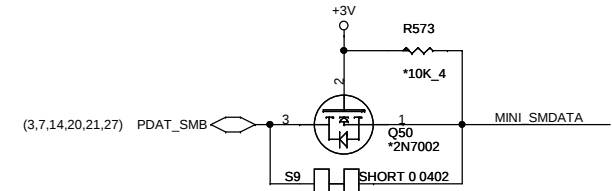
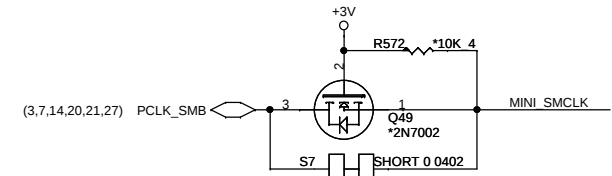
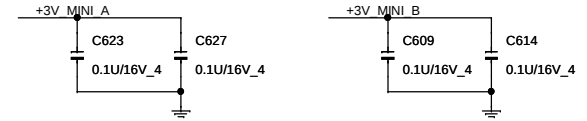
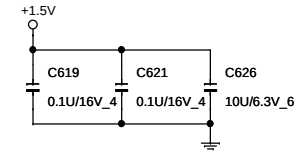
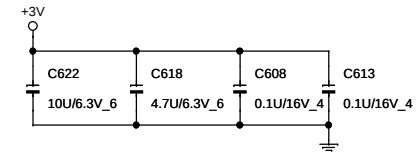
Quanta Computer Inc.
PROJECT : ZK3

MINI-CARD

+3.3V: 1000mA
+3.3Vaux: 330mA
+1.5V: 500mA



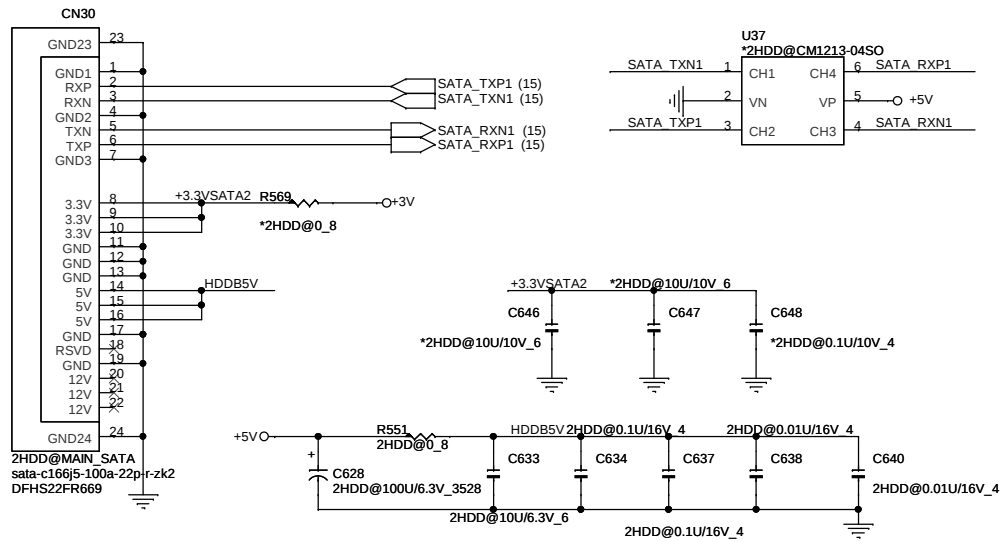
23



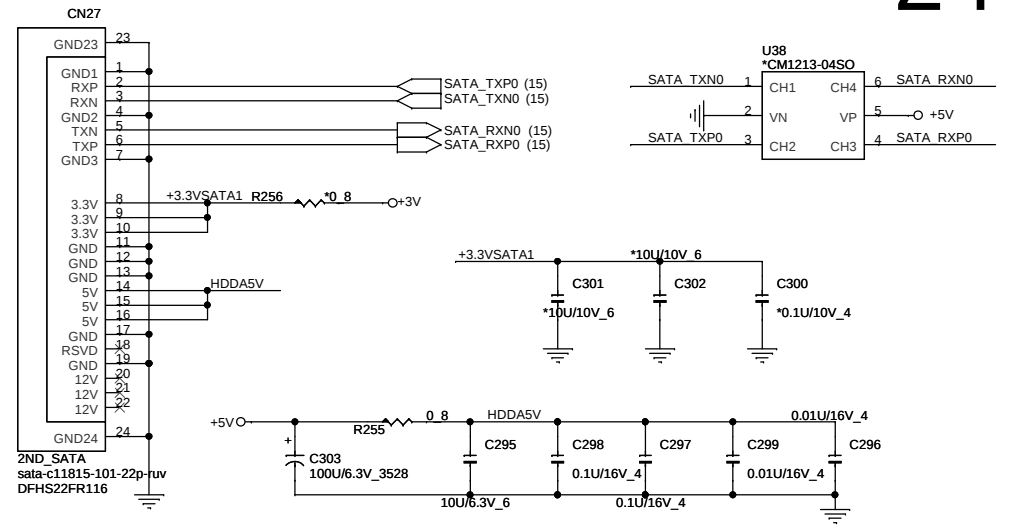
Quanta Computer Inc.
PROJECT : ZK3

Size	Document Number	Rev 1A
MINI PCI-E card/TV		
Date: Monday, August 18, 2008	Sheet 23	of 43

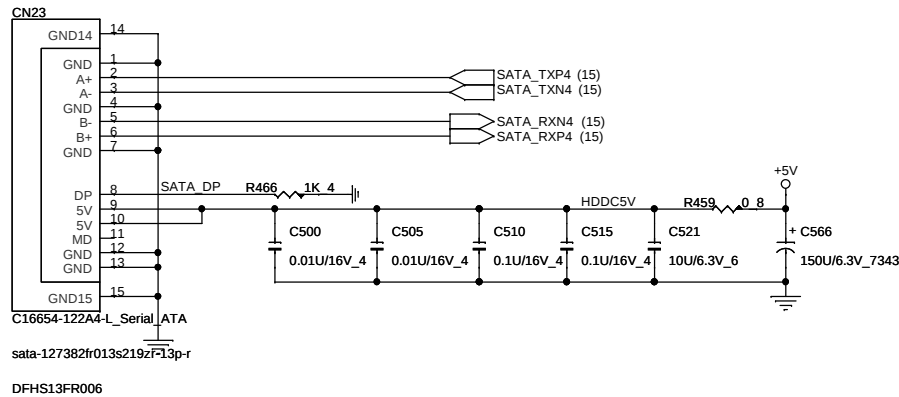
2ND SATA HDD



SATA HDD



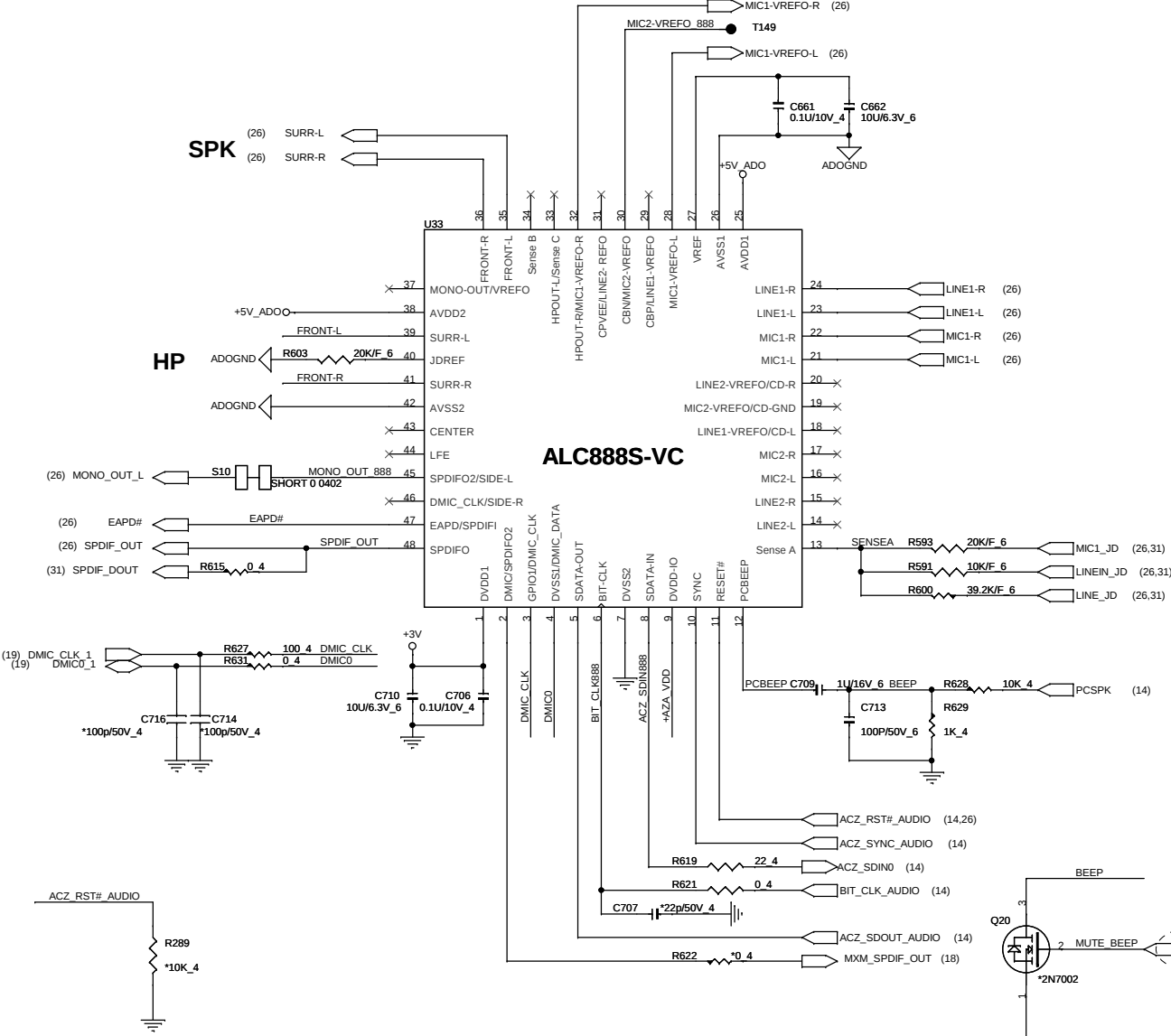
ODD (SATA)



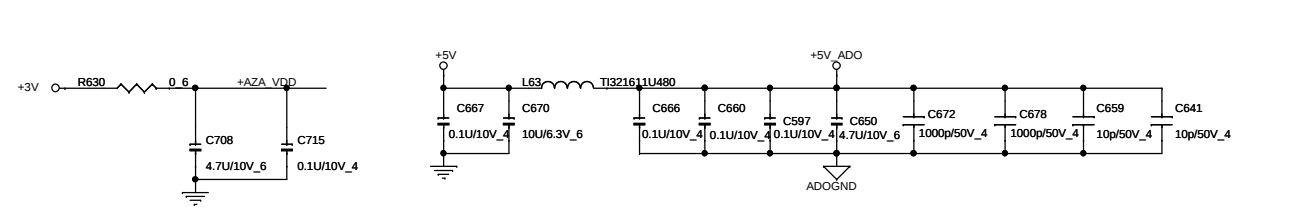
Quanta Computer Inc.
PROJECT : ZK3

Size	Document Number	Rev
	SATA-HDD/ODD/USB-ESATA	1A
Date:	Monday, August 18, 2008	Sheet 24 of 43

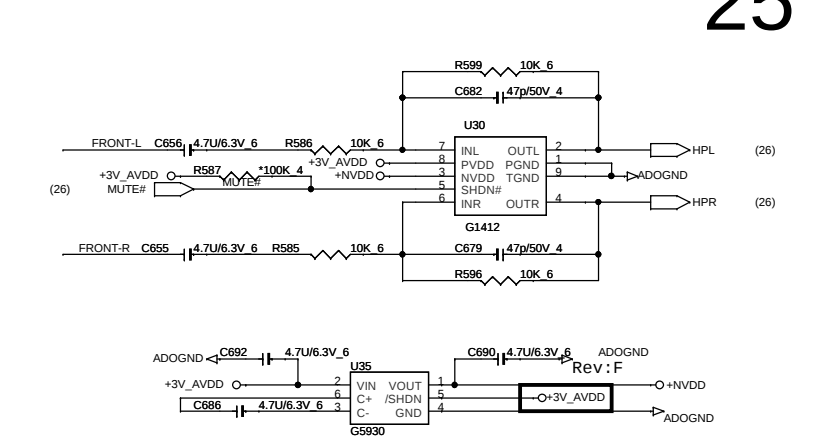
CODEC(ALC888S)



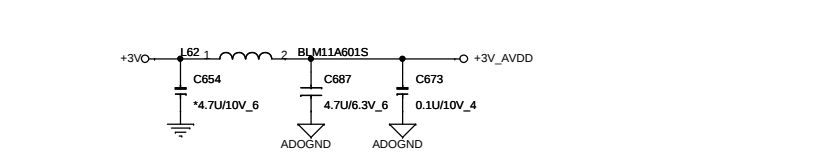
Codec Power



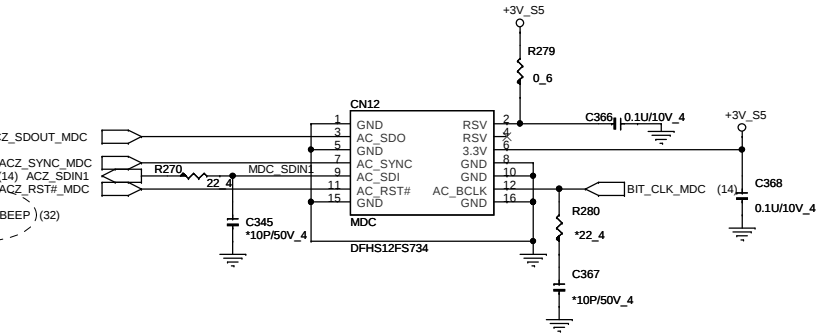
LINE-Out Amplifier



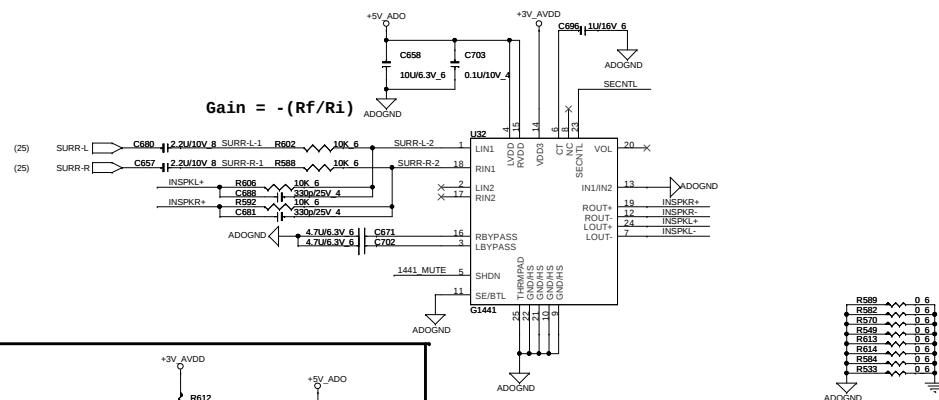
LINE-Out Amplifier Power



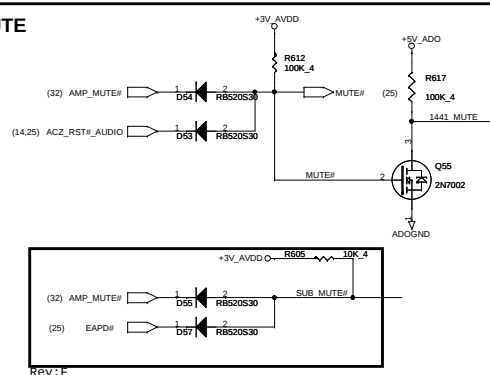
MDC



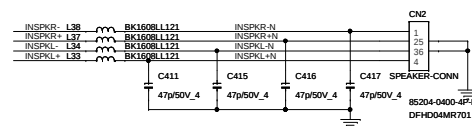
SPEAKER AMP.



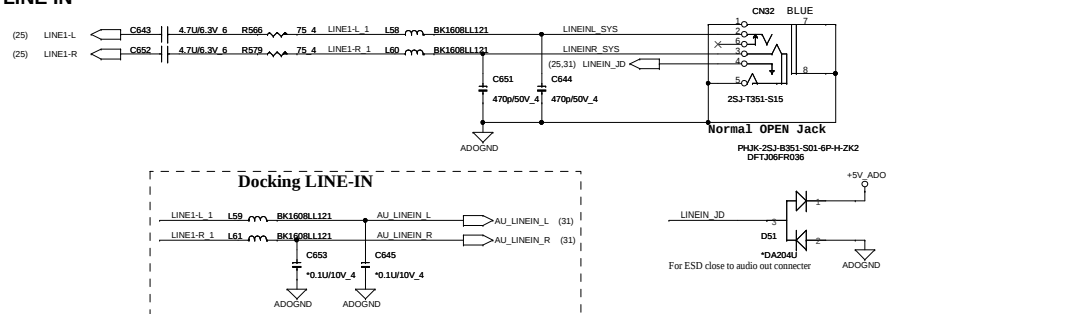
MUTE



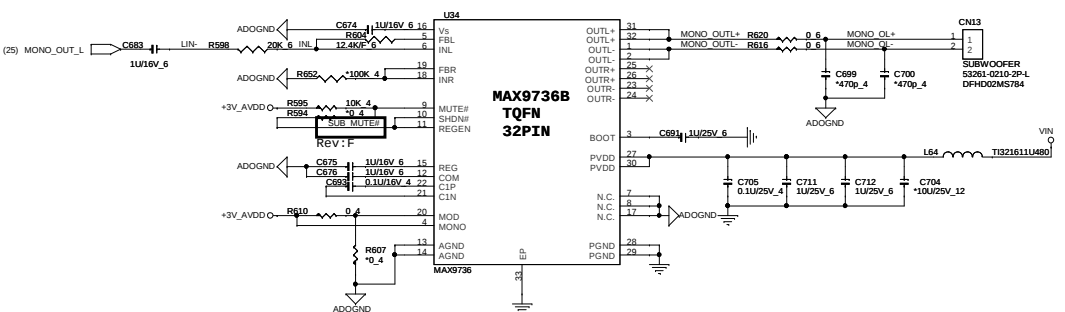
SPEAKER



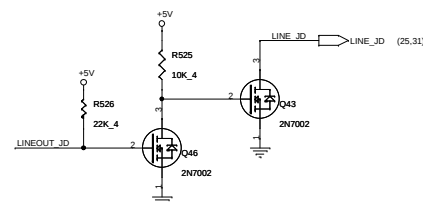
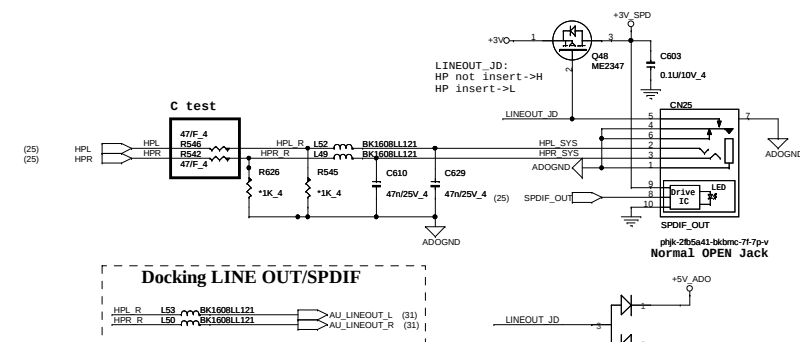
LINE IN



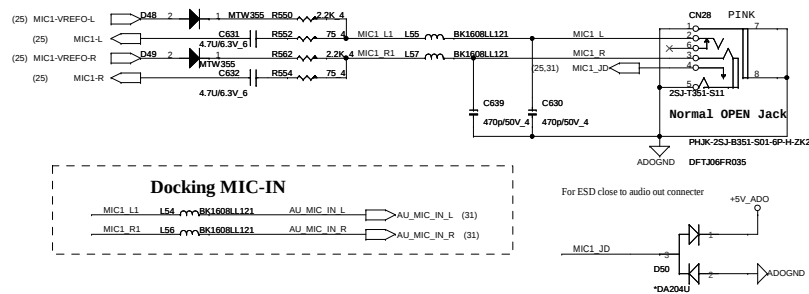
SUBWOOFER



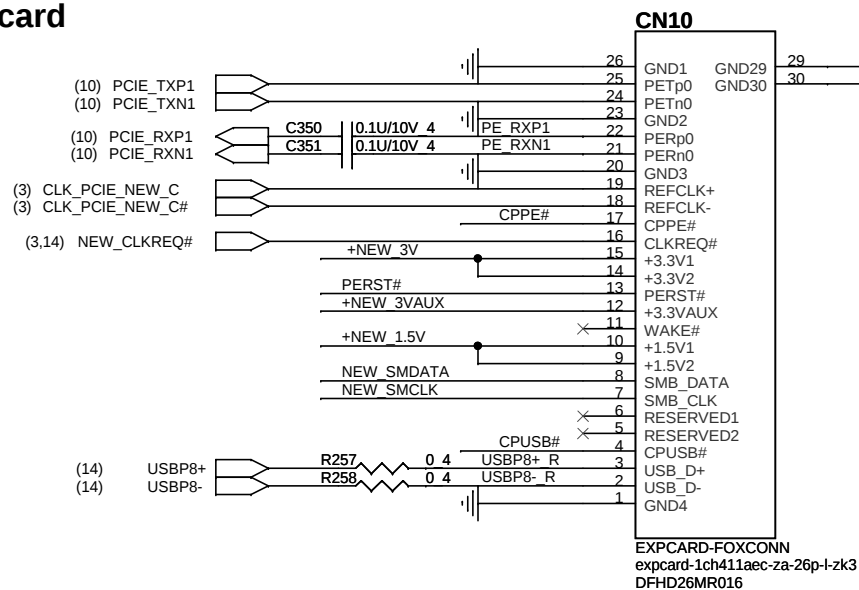
LINE-OUT/SPDIFO



MIC



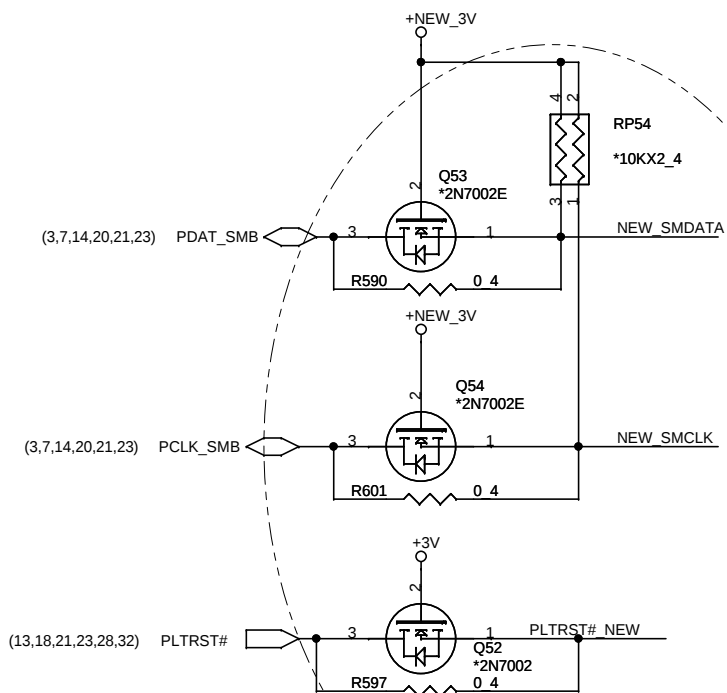
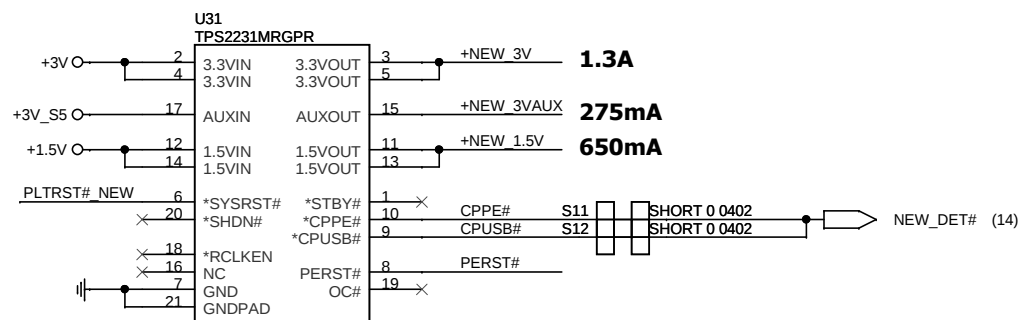
New card



NEW CARD'S POWER SWITCH

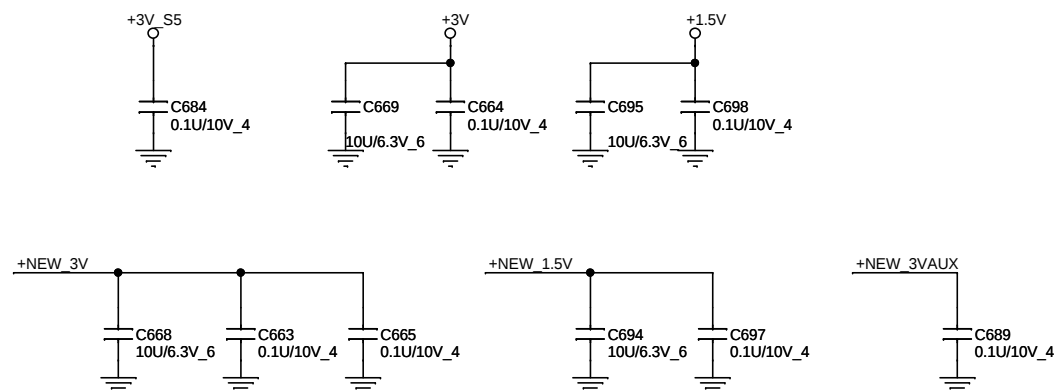
TI: AL002231000

GMT: AL000577002



3/17 MODIFY

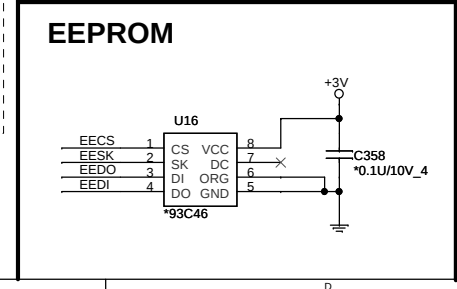
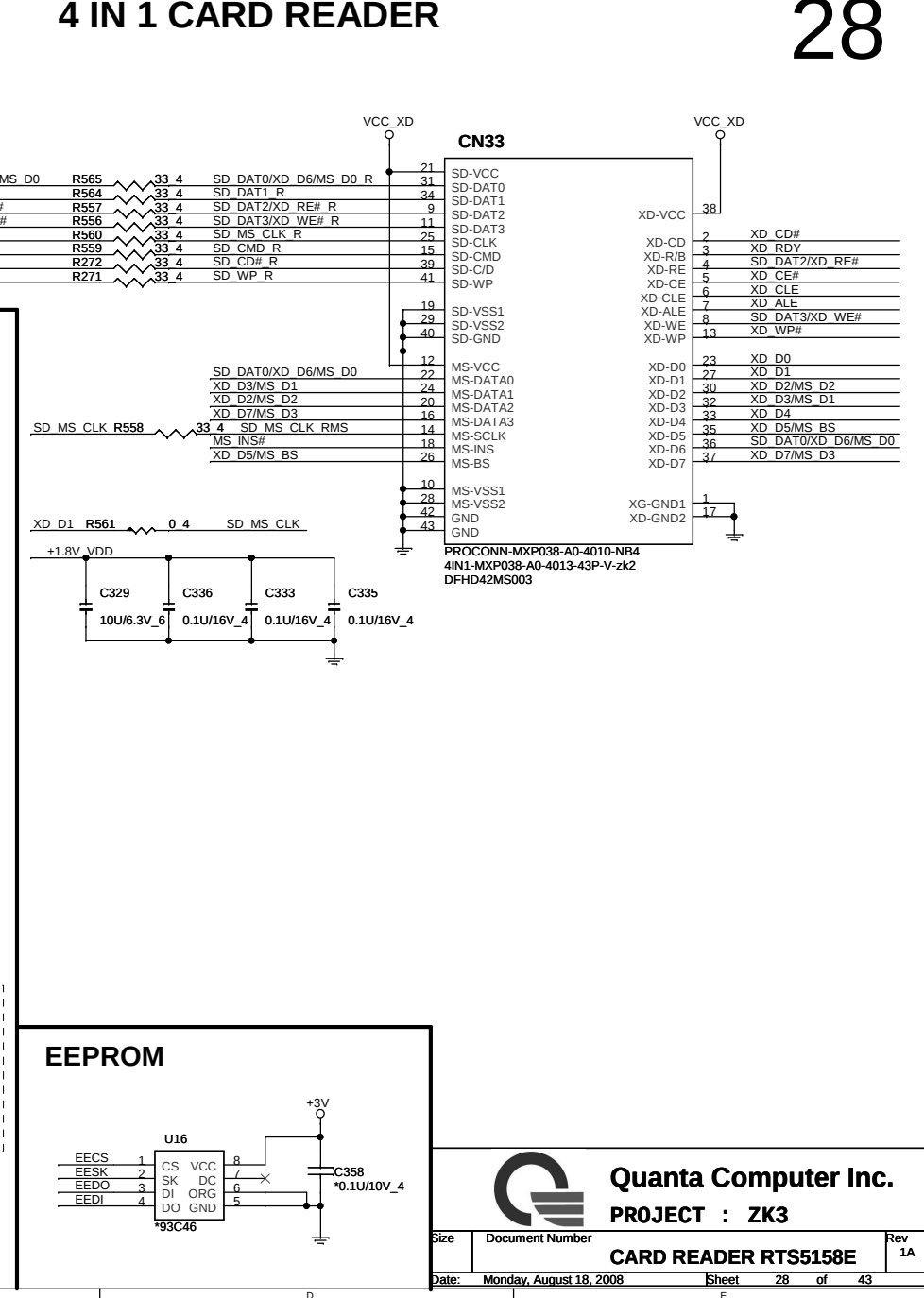
3/17 MODIFY



Quanta Computer Inc.

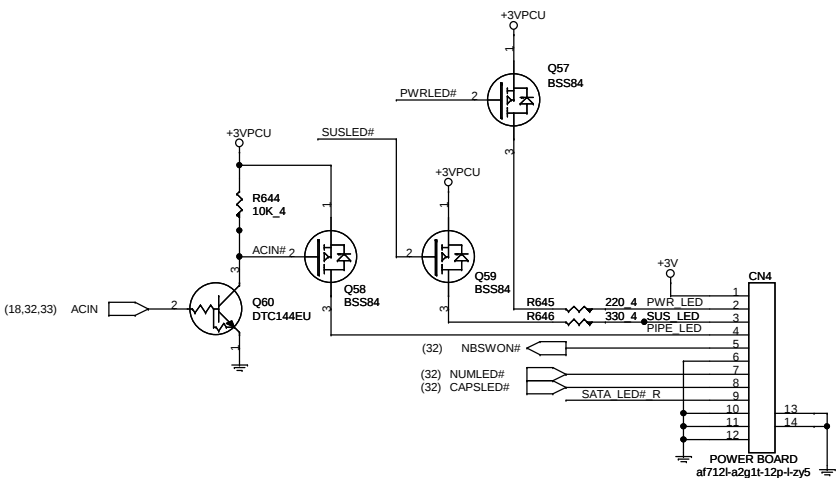
PROJECT : ZK3

Size	Document Number	Rev 1A
NEW CARD		
Date:	Monday, August 18, 2008	Sheet 27 of 43



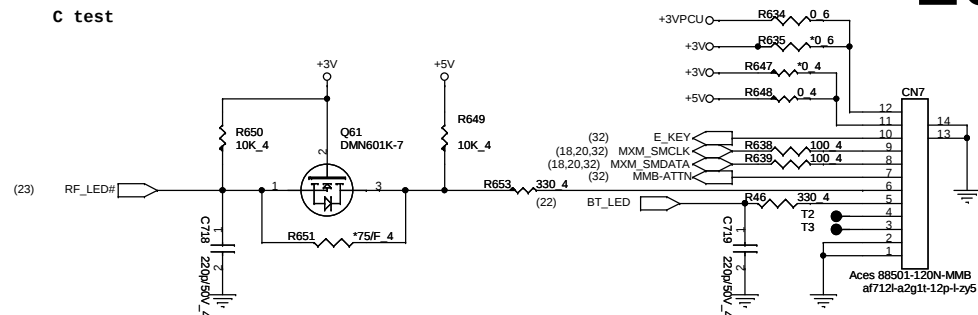
	Quanta Computer Inc. PROJECT : ZK3		
	Size Document Number	CARD READER RTS5158E	
Date: Monday, August 18, 2008	Sheet 28 of 43	Rev 1A	

POWER BOARD

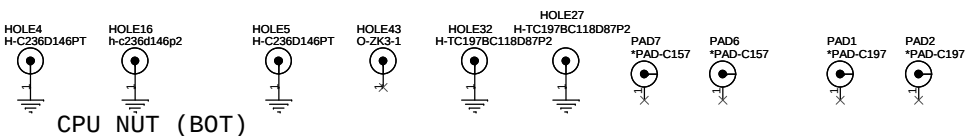


MMB

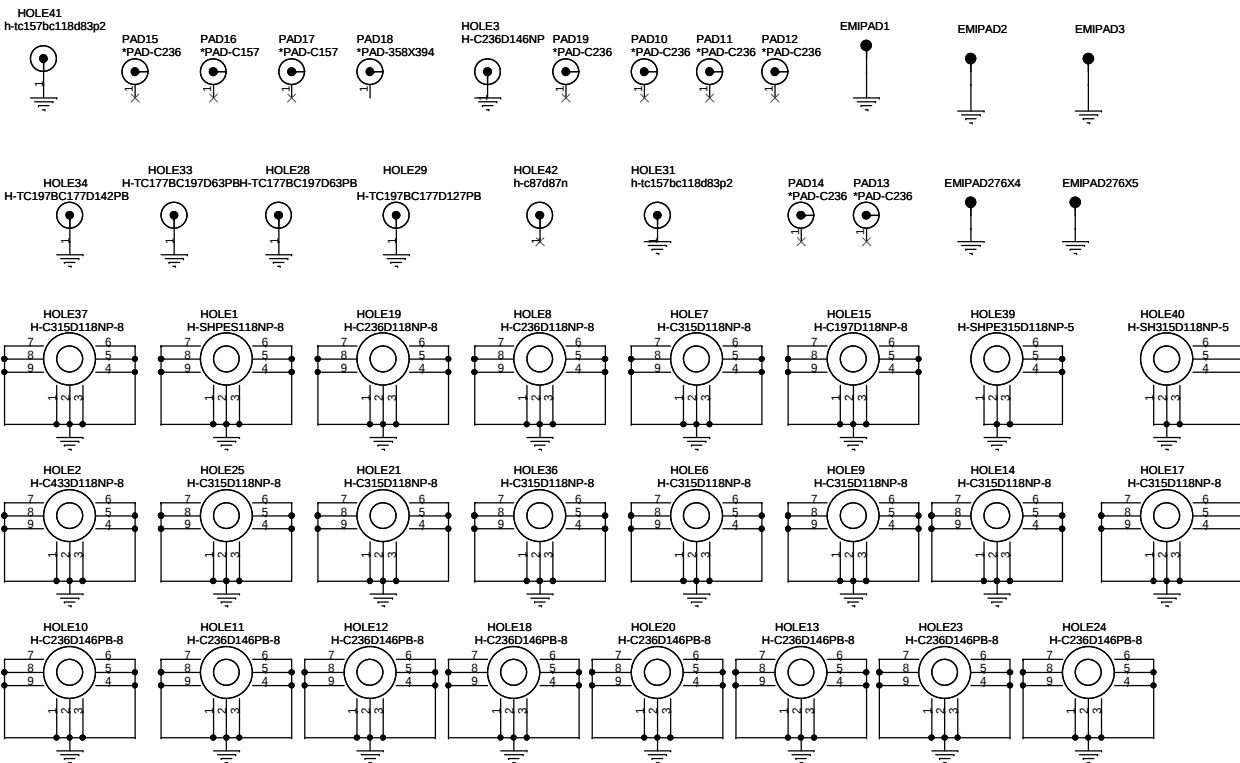
C test



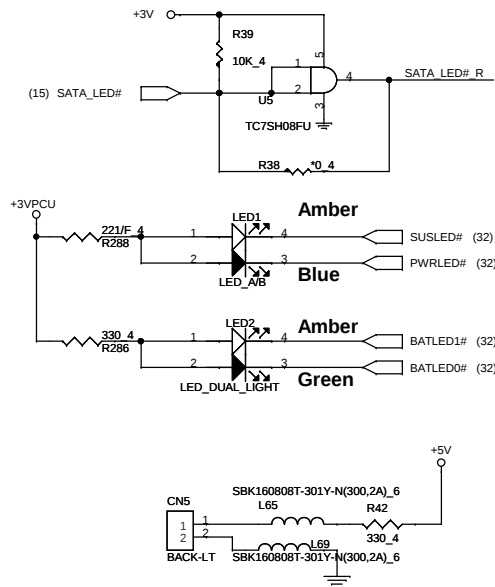
29



HOLES



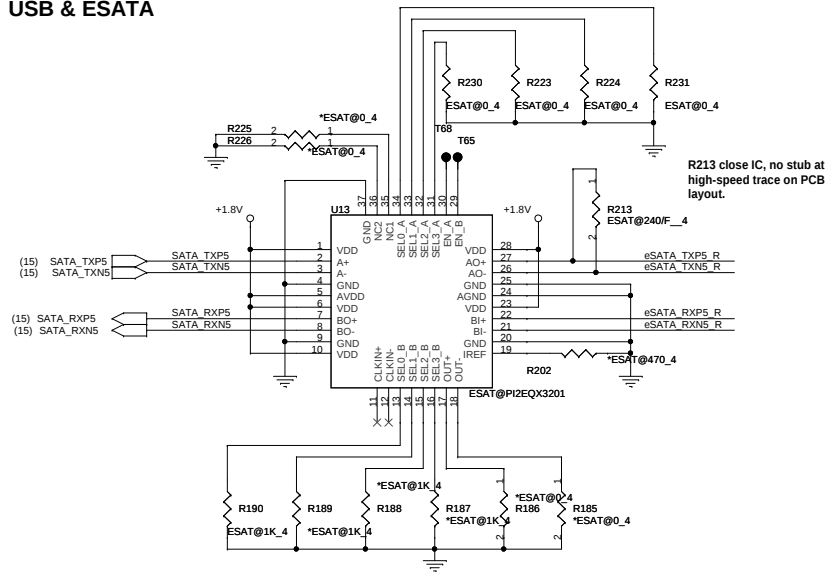
LED



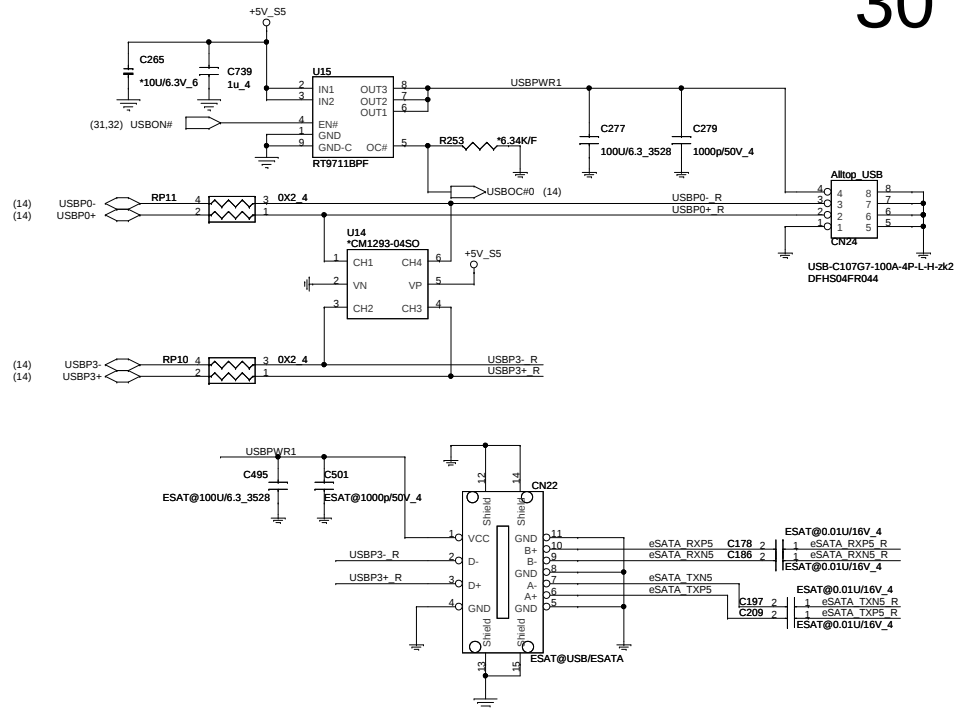
Quanta Computer Inc.
PROJECT : ZK3

Size	Document Number	Rev 1A
Date: Monday, August 18, 2008	POWER/MMB/LAUNCH/LED	
Sheet	29	of 43

USB & ESATA

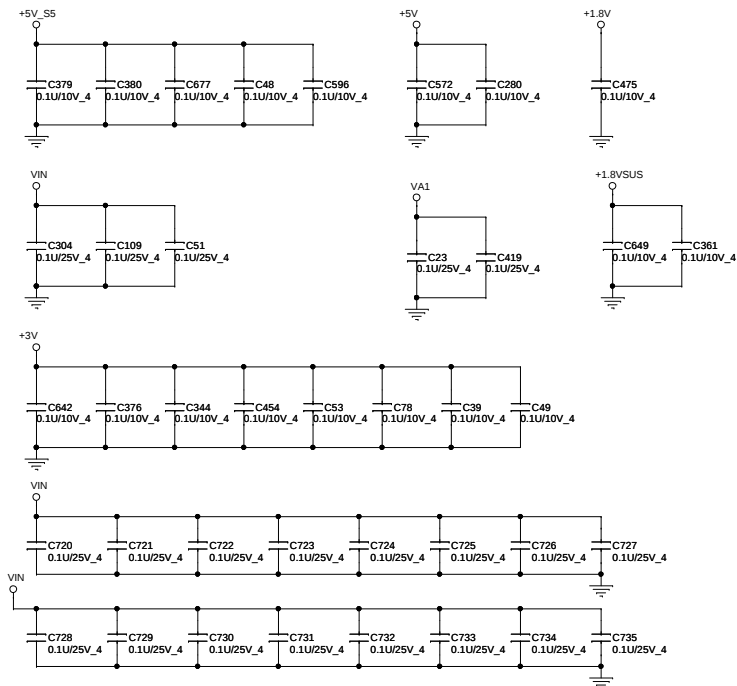


SEL0_X	SEL1_X	Eg	SEL2_X	Swing	SEL3_X	De-Emphasis
0	0	0dB	0	1.0X	0	0dB
0	1	2.5dB	1	1.2X	1	-3.5dB
1	0	4.5dB				
1	1	6.5dB				

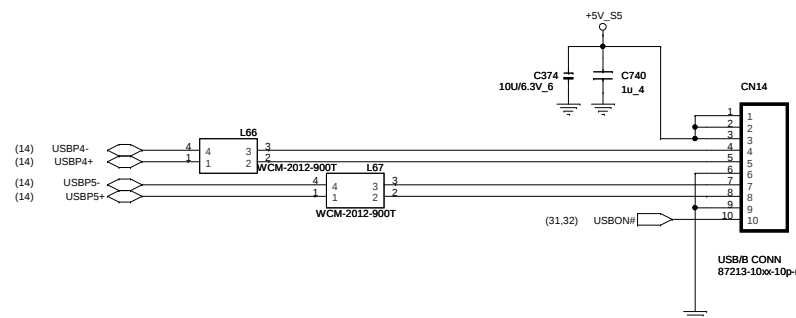


30

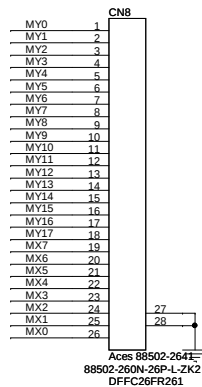
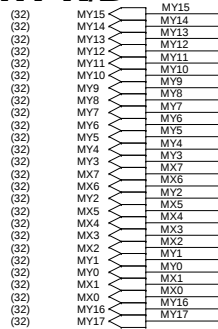
EMI cap



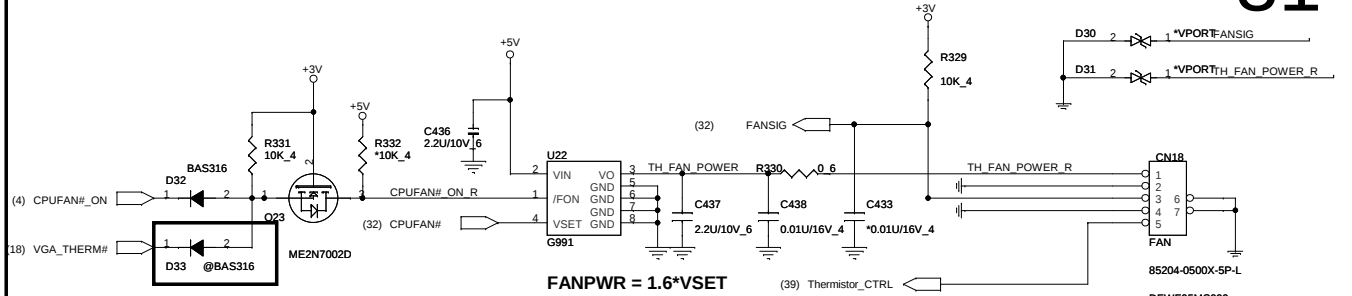
USB/B



INT K/B

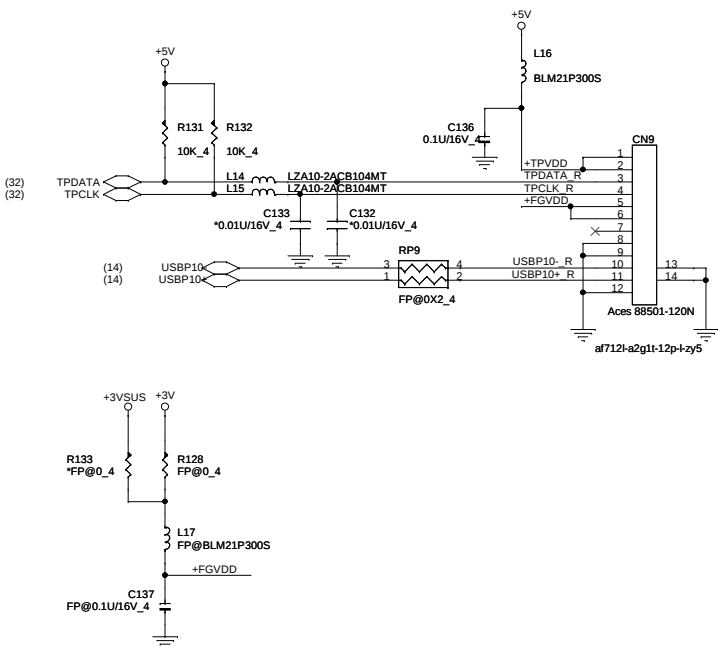


CPU FAN

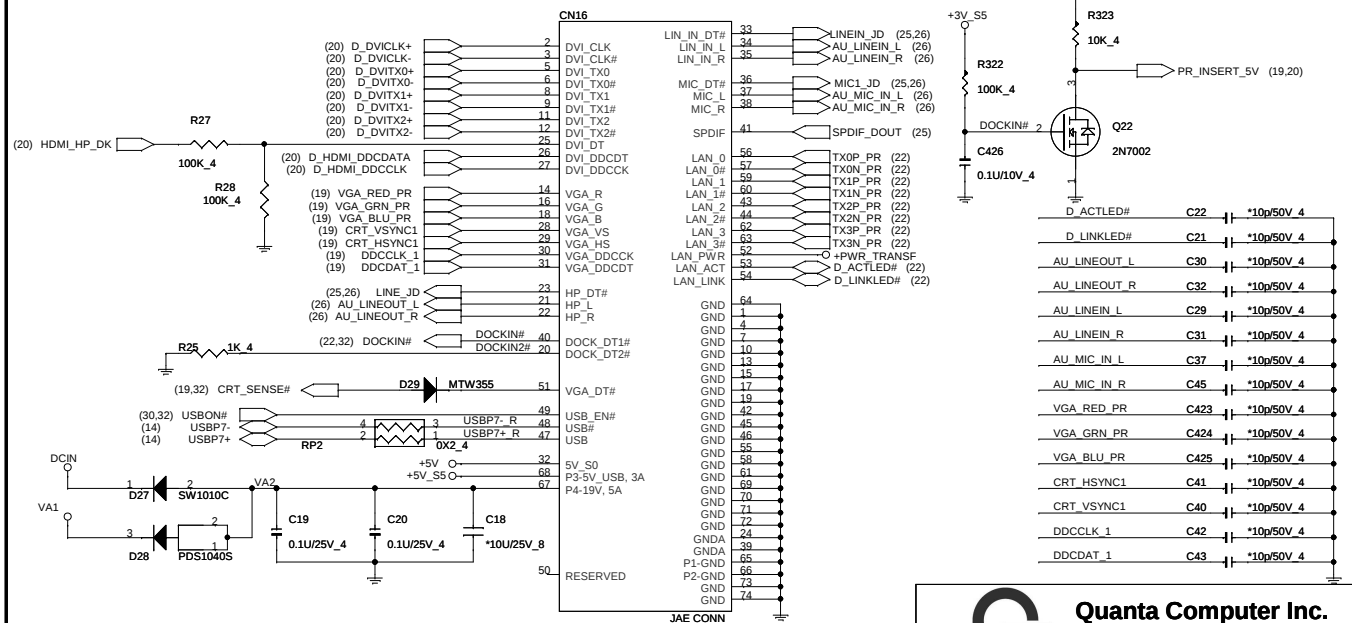


31

TOUCHPAD & Finger Printer CONN.



CABLE DOCK



DOCK-SP07-10207-19-64P-H-ZY5

DFHS68FR013



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PROJECT : ZK3

Size	Document Number	Rev
		1A

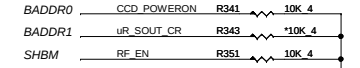
KB/FAN/TP+FP/DOCK

Date: Monday, August 18, 2008	Sheet 31 of 43
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I/O ADDRESS SETTING

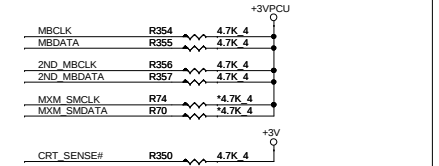
I/O Address		
BADDR1-0	Index	Data
0 0	XOR TREE TEST MODE	
0 1	CORE DEFINED	
1 0	2Fh	2Fh
1 1	164Eh	164Fh

SHBM=0: Enable shared memory with host BIOS

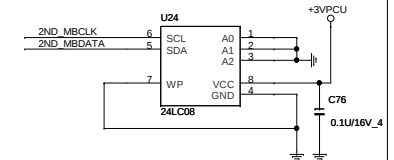


1/13 Confirm by vendor mail :
 Disabled (*1) if using FW-H device on LPC.
 Enabled (0) if using SPI flash for both system BIOS and EC firmware

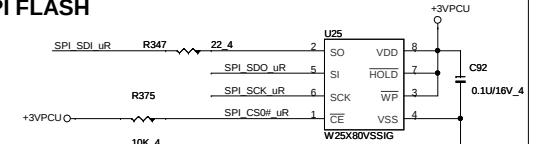
SM BUS PU



ACER ID

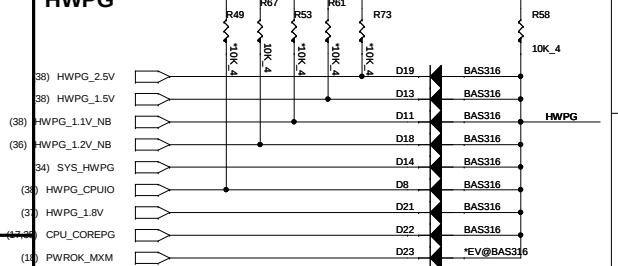


SPI FLASH

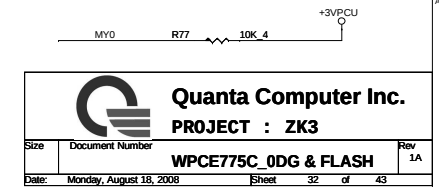


1/13 Confirm by vendor mail :
 If the Southbridge enables 'Long Wait Abort' by default, the flash device should be 50MHz (or faster)

HWPG

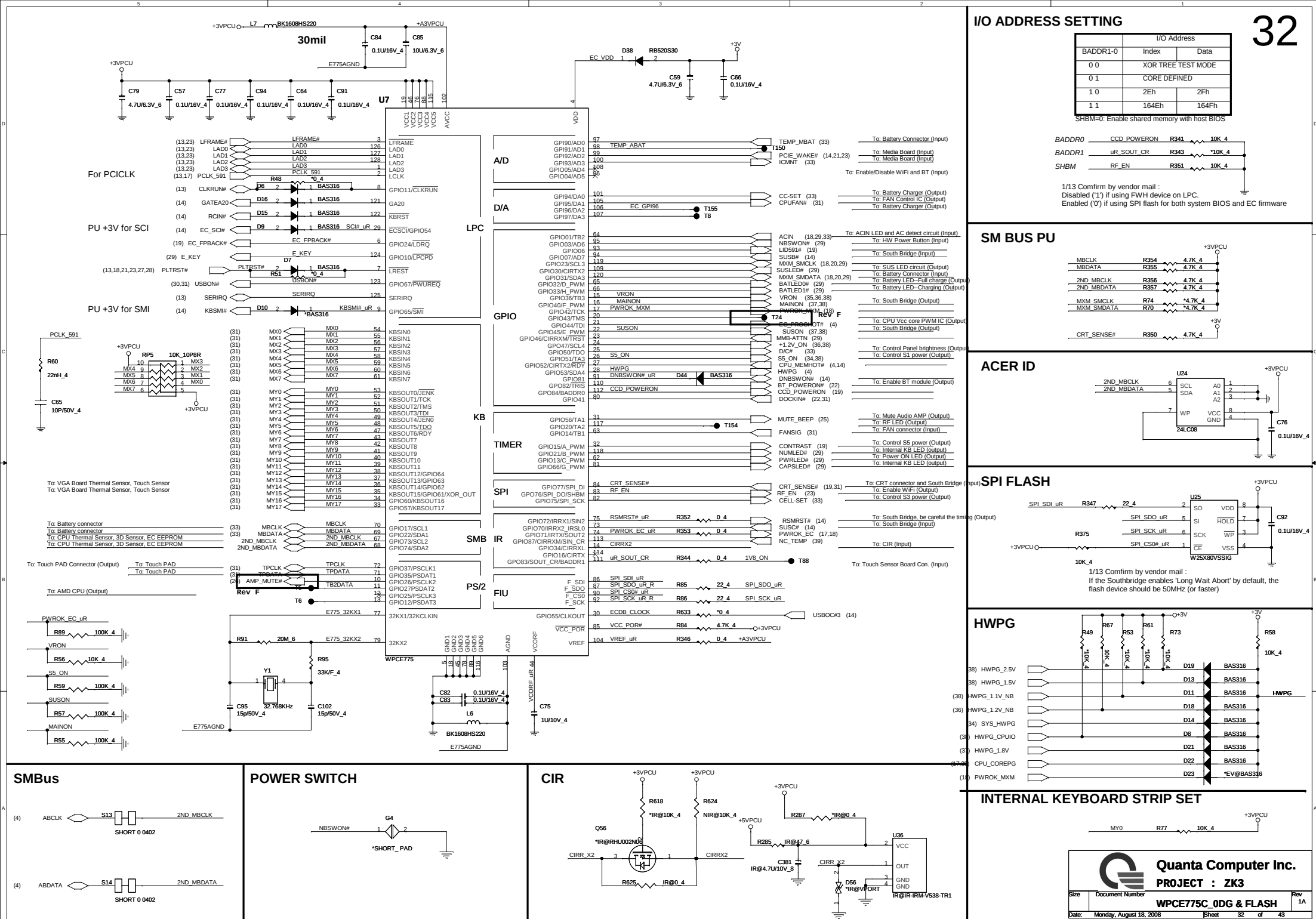


INTERNAL KEYBOARD STRIP SET



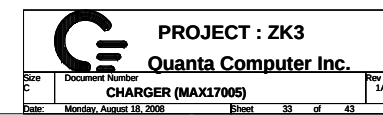
Quanta Computer Inc.
 PROJECT : ZK3

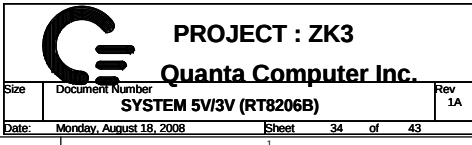
Size	Document Number	WPCET75C_0DG & FLASH	Rev
			1A
Date:	Monday, August 18, 2008	Sheet	32 of 43

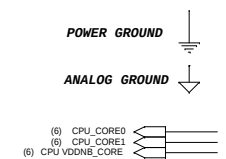


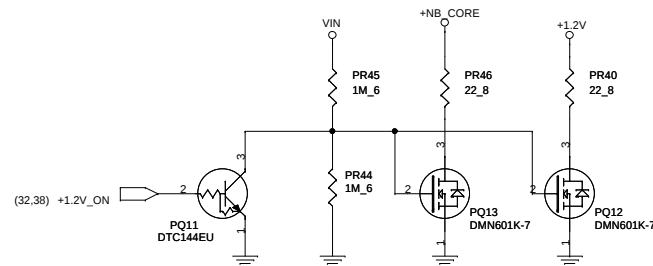
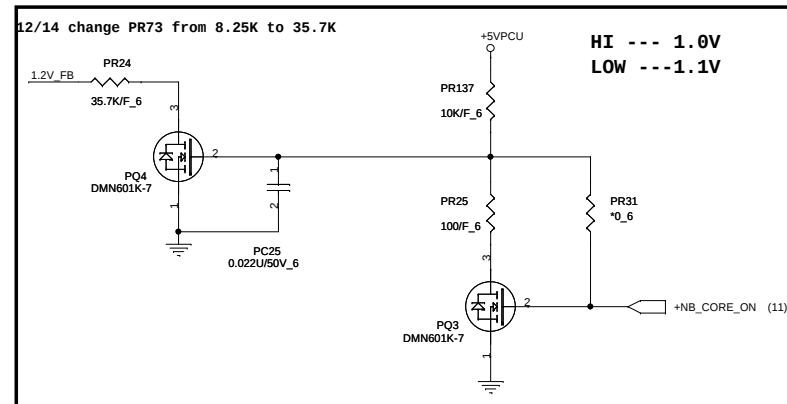
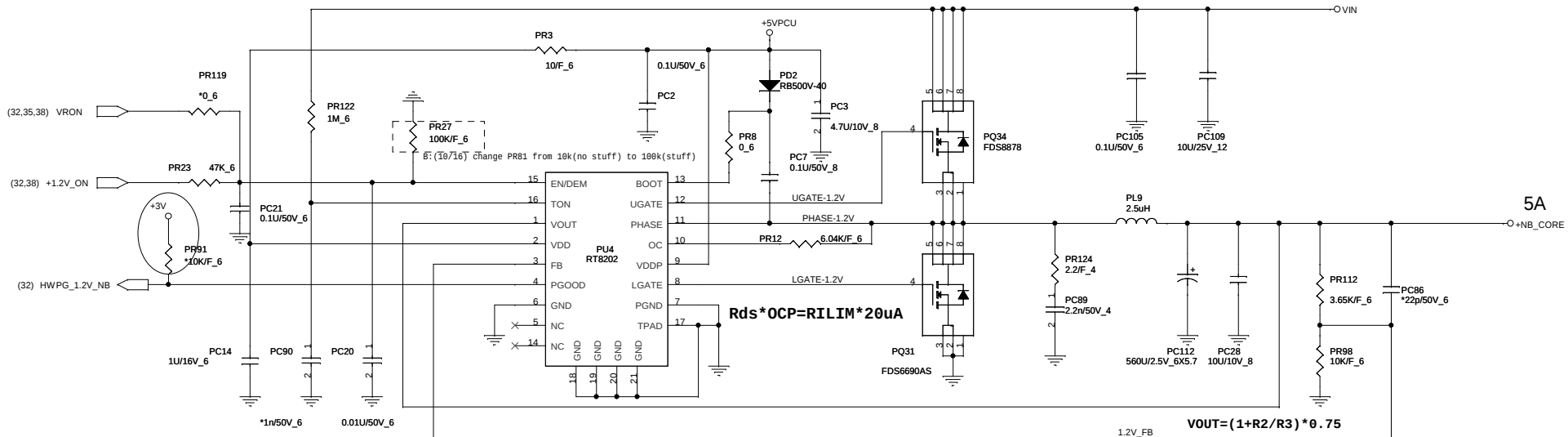
R1=0.02m ohm for 65W adapter-->current limit is 3A;
R1=0.015m ohm for 90W adapter-->current limit is 4A;

```
1) Battery Mode or Learning Discharge Mode:
D/C#=High Level --> PQ27=turn on, PQ28=turn
off, PQ1=turn on;
2) Adapter Mode or Learning Charge Mode:
D/C#=Low Level --> PQ28=turn on, PQ27=turn
off, PQ1=turn off;
```

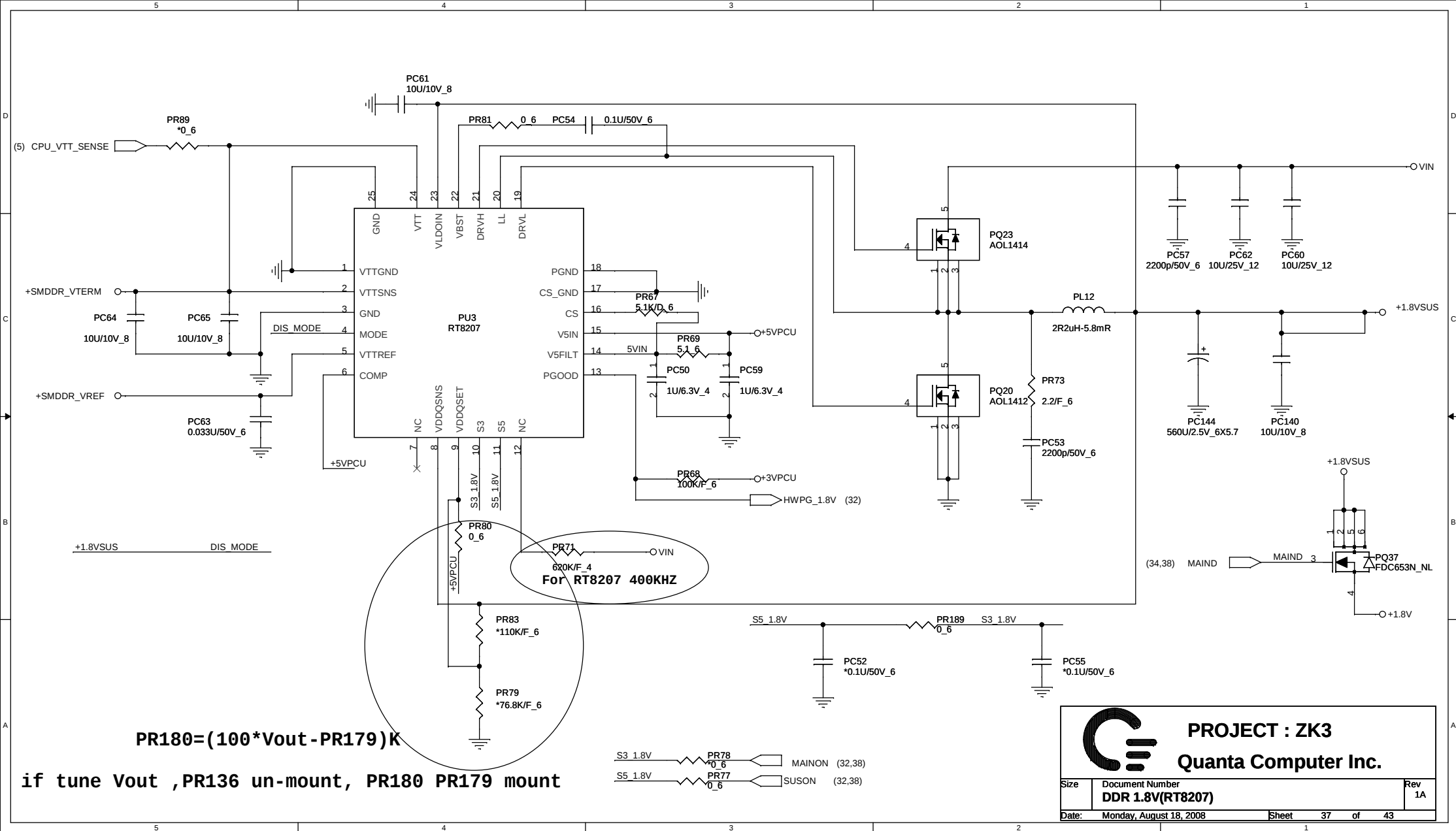


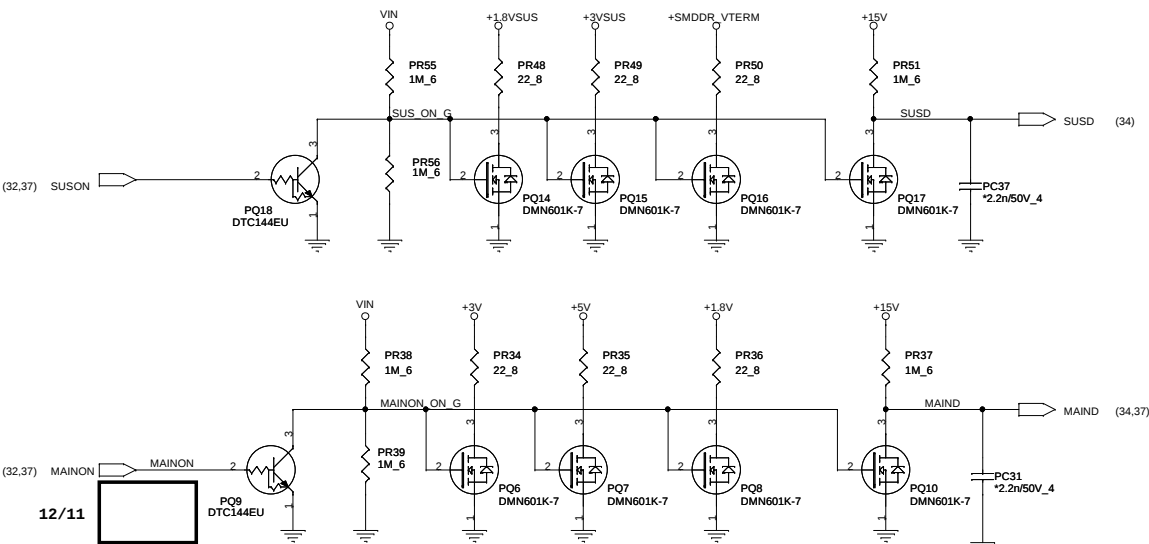
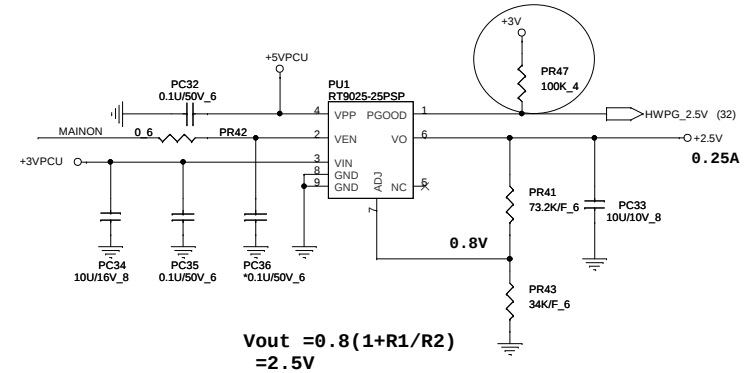
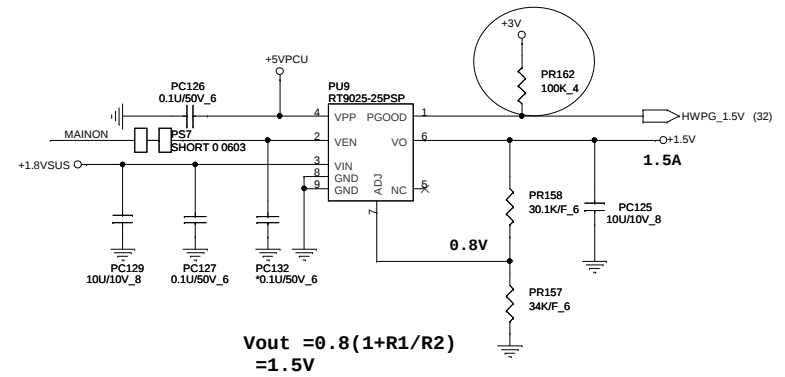
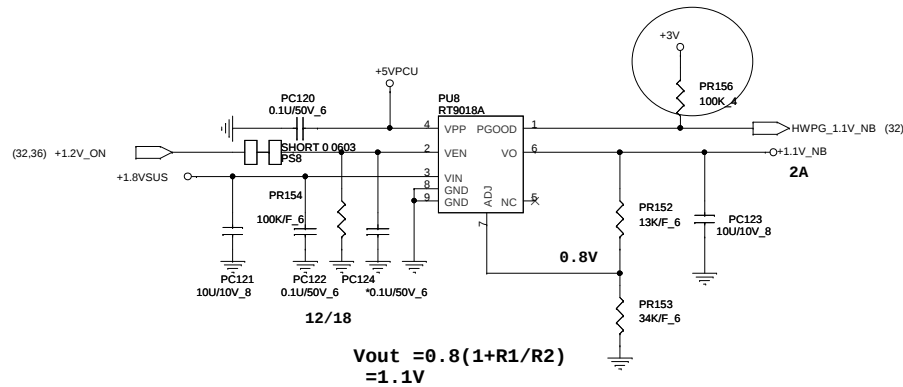
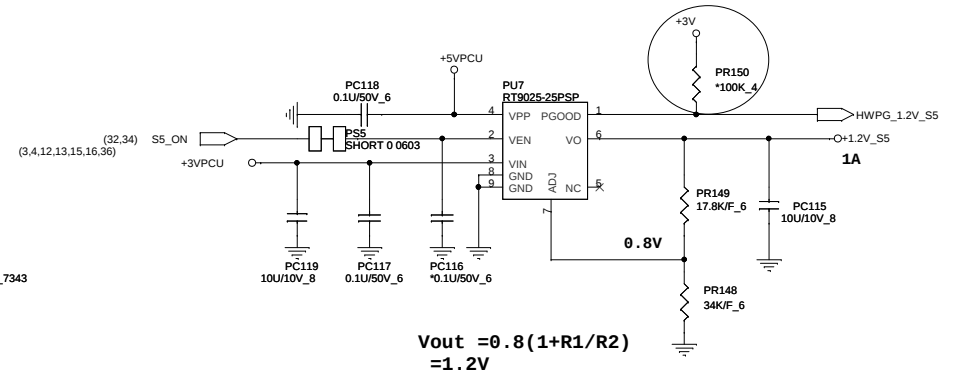
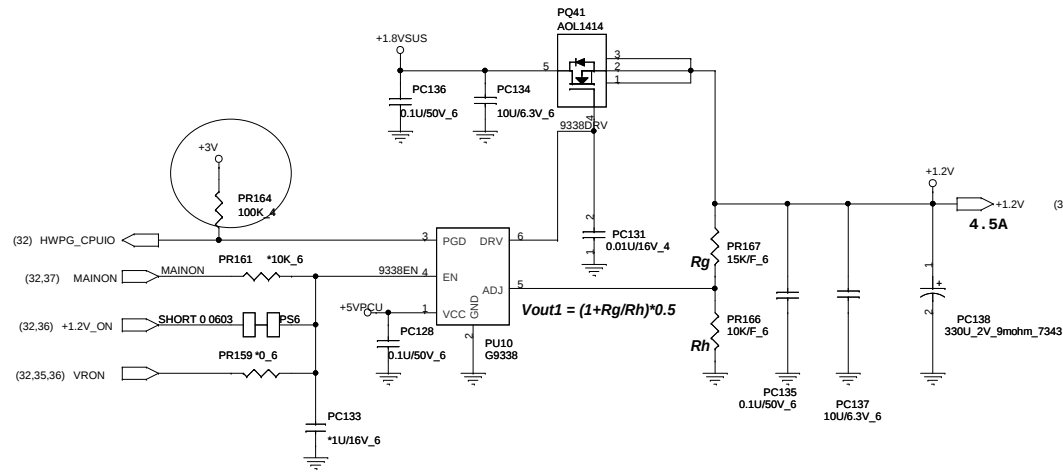




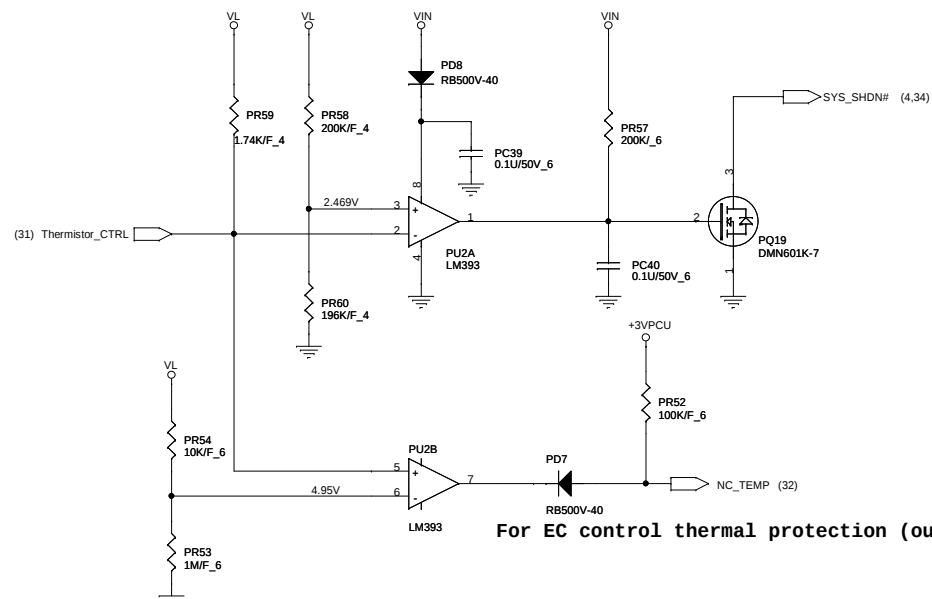


PROJECT : ZK3
Quanta Computer Inc.

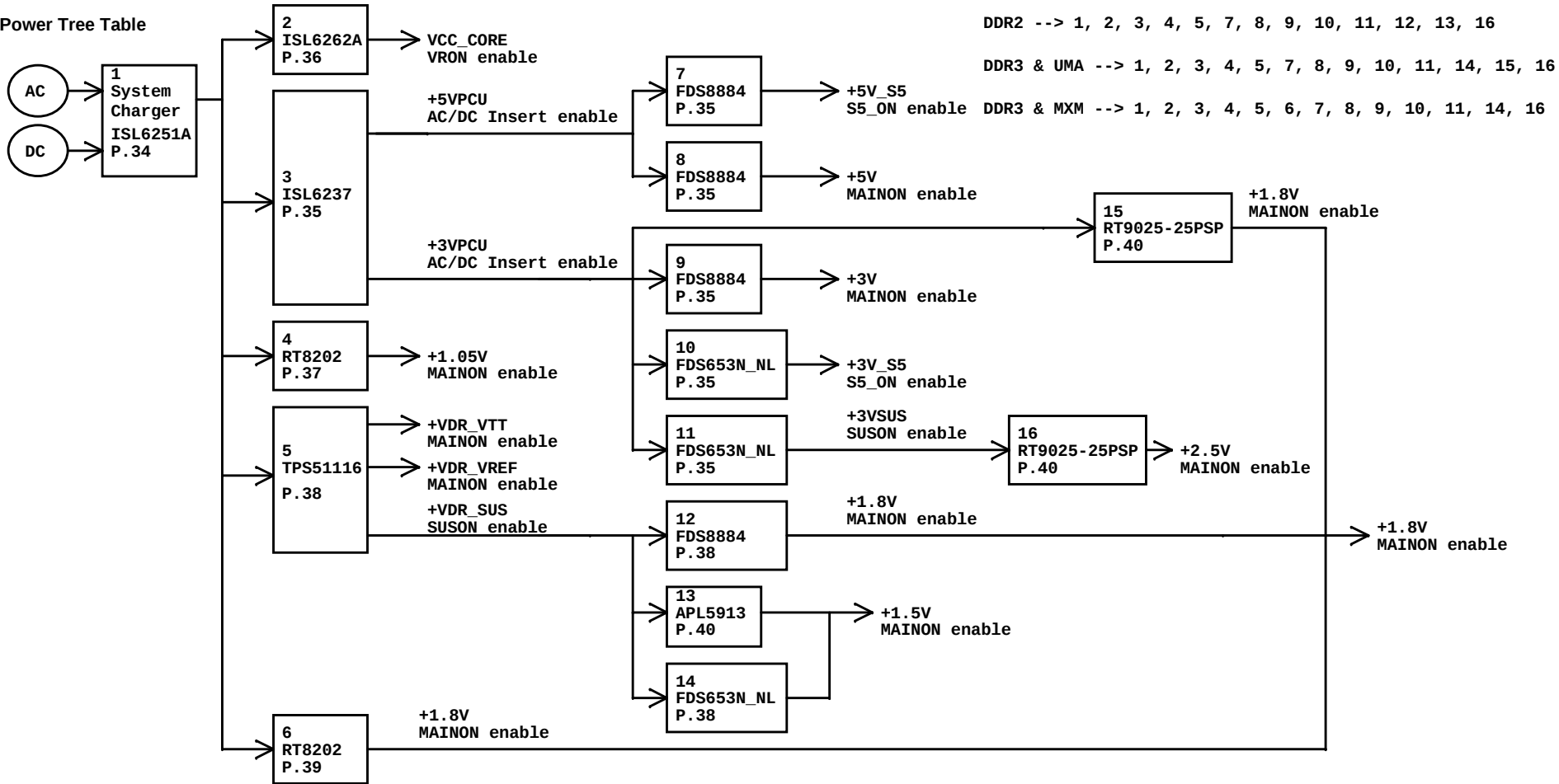




thermal protection --0928



Power Tree Table



Power Distribution List

Power	Distribution
VCC_CORE	CPU
+5VPCU	ICH8M, RJ45/USB /B, USB/eSATA, Satellite LED, CIR
+3VPCU	RTC, HALL SENSOR, KB, TP/FP/LED /B, Power /B, Kill SW, EC, ID, SPI Flash, CIR
+1.5V	CPU, GMCH, ICH9M, Mini Card, New Card
+VDR_SUS	GMCH, DDR
+VDR_VREF	GMCH, DDR
+VDR_VTT	DDR
+1.05V	CPU, CLK, Thermal Trip, GMCH, ICH8M
+5V_S5	ICH8M, G-SENSOR, Felica, USB/eSATA
+5V	CPU, ICH8M, VGA, Camera, CRT, HDMI, SATA HDD, PATA ODD, PCMCIA, TP/FP/LED /B, EC, Speaker, Headphone
+3V	CLK, CPU Thermal Monitor, FAN, GMCH, DDR, ICH8M, VGA, LCD/LED Panel, HALL SENSOR, CRT, HDMI, SATA HDD, PATA ODD, PCMCIA, Cardreader (0Z129T) Mini Card, KB, TP/FP/LED /B, RJ45/USB /B, Bluetooth, MMB, New Card, PC BEEP, EC, Codec (CX20561), VR, Headphone, MDC
+3V_S5	ICH8M, Mini Card, RJ45/USB /B, New Card
+3VSUS	ICH8M, FP
+1.8V	Cardreader
+2.5V	MXM

Model		REV	CHANGE LIST	MODEL	ZK3	
					FROM	To
					X	1A
					X	1A
ZK3 MB	A1A	FIRST RELEASED: E200804-2783 (PCB:)				
	A1A	SMT inner document 1.Add RTC BATT (AHL03001401). 2.De1 CRT BKT (FBZK1002010) (Material shortage) 3.De1 CPU BKT (FBZK2010010) (Material shortage) 4.Page 38 : Change PC34,PC119,PC121,PC129 from CH6100KMEE3 to CH6103K9A00 5.Page 26 : Change C711,C712 from CH5103Z3905 to CH5104K9906 Change C675,C676 from CH41002KB93 to CH5103Z390 Change C683 from CH5222K9A09 to CH5103K9901 Change R612 from CS31002JB28 to CS41002JB20 6.Page 25 : Change C713 from CH11006J901 to CH11006K907 Change C650 from CH54702ZA38 to CH5472M9901 7.Page 21 : Change C405 from CH4103K1B08 to CH21006JB10. Change C386,C8 from CH54702ZA38 to CH5471K9E07 Change R298 from CS21203F910(2.37K/F_6) to CS22372FB11(2.37K/F_4) Change R8 from CS-1506J217 to CS00006J248 Change R3 from CS24702JB38 to CS31002JB28 8.Page 31 : Change C436,C437 from CH52202MA91 to CH5222K990 9.Page 20 : Change R374 from CS00006J248(0_12) to CS00002JB38(0_4) 10.Page 32 : Change U25 from AKE38ZP0N00 to AKE3GFP0N0 Change C95,C102 from CH01806JB07 to CH0156K0B06 De1 R48,R51 (CS00002JB38) De1 R73,R61,R53,R49 (CS31002JB28) Change C75 from CH5102M9B07 to CH5102K9B06 11.Page 35 : Change PR99, PR109, PR111, PR118 from CS41002FB28 to CS11002FB22 Change PR138 from CS31003J941 to CS41003F932. Change PC88,PC24 from CH1336K1911 to CH13306K911. (Material shortage) Change PR107 from CS34322FB16 to CS34302FB17. (Material shortage) 12.Page 09 : Change U26 from AJ067400T18 to AJ067400T2. (Material shortage) 13.Page 30 : Change C419,C23 from from CH41002KB93 to CH4104K9B03 14.Page 22 : Change R291,R301 from CS12204JA44(220_8) to CS12203J947(220_6) 15.Page 34 : Add PR171 (CS31003J941) 16.Page 33 : Change PQ28 from BAM88780011 to BAM62T00000. (Material shortage) 17.Page 29 : Change HOLE13,HOLE23,HOLE24 from MBZA1001012 to MBZK3001010 18.Page 28 : Change C365 from CH41003ZB35 to CH5102K9B06 19.Page 36 : Change PR3 from CS01003J953 to CS01003F93 20.Page 20 : R93 from CS00002JB38 to CS21002JB34 21.Page 19 : Change R47 from CS00006J248(0_12) to CS00002JB38(0_4) Change L1,L2 from CX8BA220007 to CS00003J951 Add R35 (CS41002JB20) Change C378 from CH5102M9B07 to CH5102K9B06 ----- Below item for UMA sku only 22.Page 25 : De1 R281 (CS00003J951) Add R79 (CS41002JB20) 23.Add CN3 (DFWF40MS000) Add CN1,CN5,CN6 (DFHD02MR311) Add CN4,CN7,CN9 (DFFC12FR234) Add CN11 (DFHD05MRD98) Add CN2 (DFWF04MS079) Add CN12 (DFHS12FS734) Add CN10 (DFHS26FR001) Add CN13 (DFHD02MS784) Add CN8 (DFFC26FR261)				
		Modify items for B test				
		1.Update PCB footrptin : Page 27 : New Card CN10 change to Z05 Page 20 : HDMI CN20 change to TE1M Page 30 : ESATA CN22 change to TE1M Page 28 : CardReader CN33 change to Z05 2.Page 24 : Update HDD connector PN (CN30) form DFHS22FR072 to DFHS22FR101 3.Page 07 : Update DDR connector PN : CN26 form DGMK0005791 to DGMK0005856, CN29 from DGMK0005627 to DGMK0000028 2008/0422 4.Page 29 : De1 3 EMIPAD. (EMIPAD197x134*2pcs, EMIPAD217x157*1pcs)				

