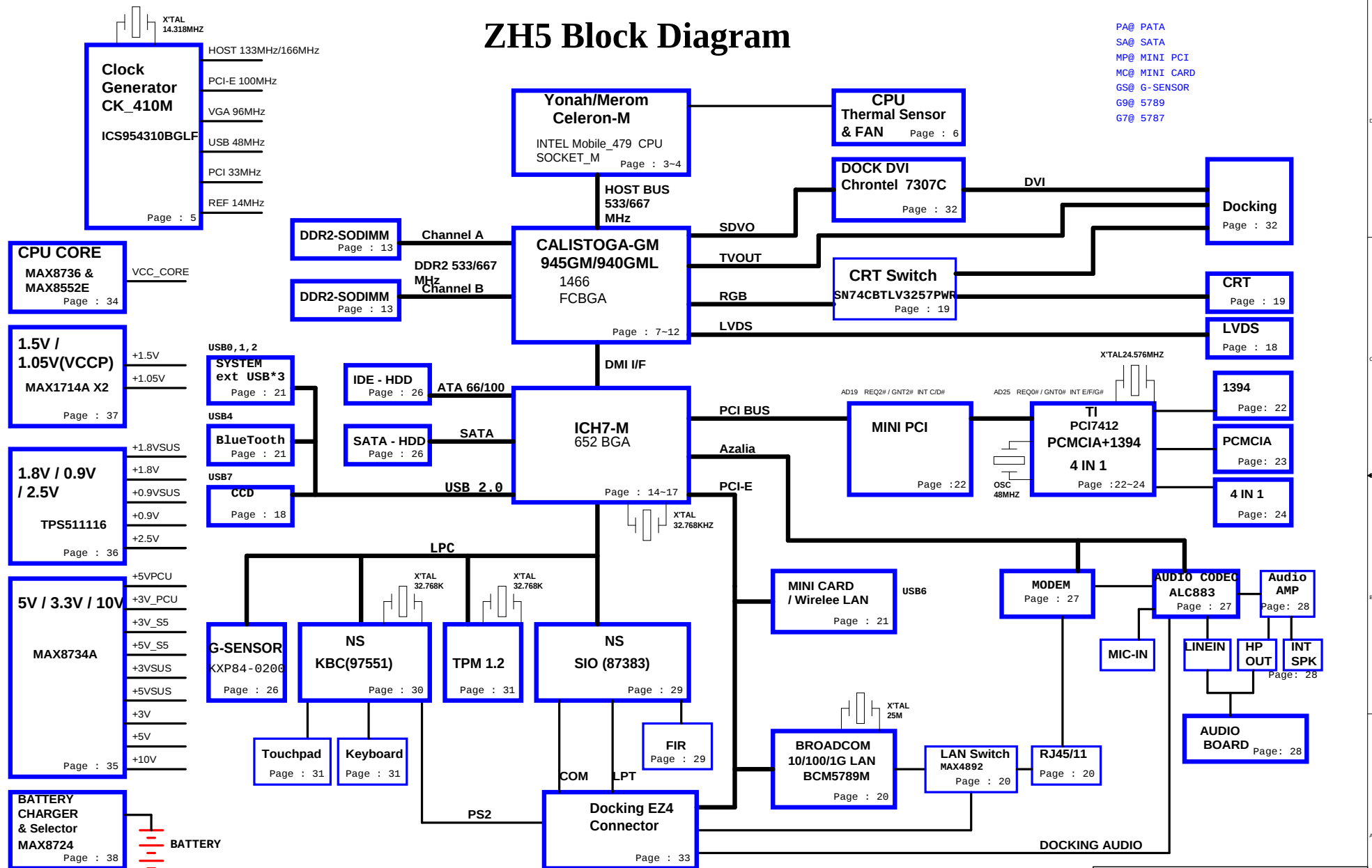


ZH5 Block Diagram

PA@ PATA
SA@ SATA
MP@ MINI PCI
MC@ MINI CARD
GS@ G-SENSOR
G9@ 5789
G7@ 5787



PCI DEVICE	IDSEL#	REQ# / GNT#	Interrupts
PCI7412	AD25	REQ0# / GNT0#	INT E/F/G#
MINI PCI	AD19	REQ2# / GNT2#	INT C/D#

PROJECT : ZH5
Quanta Computer Inc.

Size	Document Number	Rev
	BLOCK DIAGRAM	1A
Date:	Friday, September 06, 2006	Sheet 1 of 39

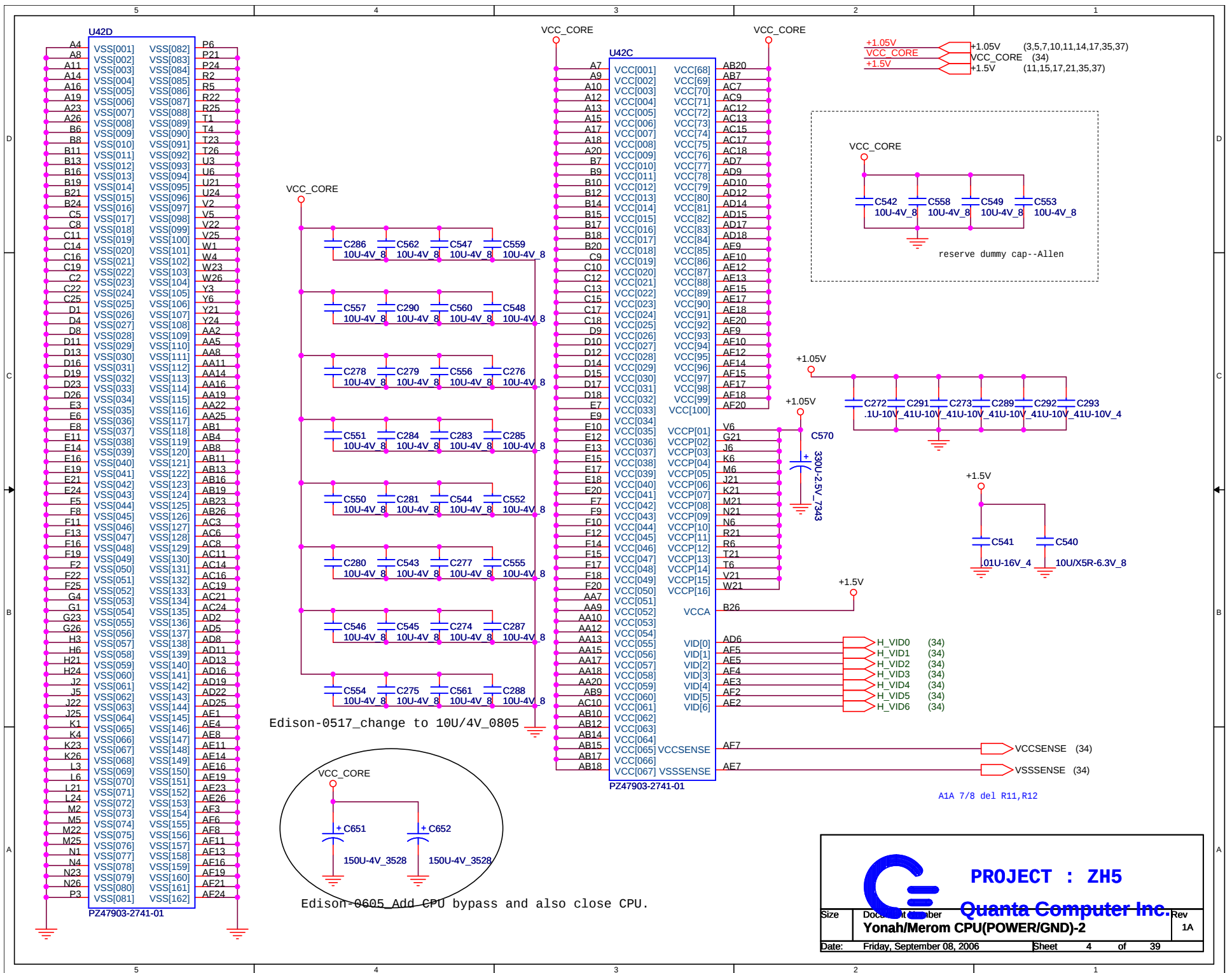
TABLE OF CONTENTS

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Page 02 :	TABLE OF CONTENTS
Page 03 :	Yonah/Merom CPU(HOST Bus)-1
Page 04 :	Yonah/Merom CPU(POWER/NC)-2
Page 05 :	CLOCK GENERATOR
Page 06 :	THERMAL SENSOR & FAN
Page 07 :	GMCH HOST Bus(1 of 6)
Page 08 :	GMCH DDRII MEMORY (2 of 6)
Page 09 :	GMCH DMI & VEDIO (3 of 6)
Page 10 :	GMCH POWER & STRAP(4 of 6)
Page 11 :	GMCH LVDS/DAC-PWR2 (5 of 6)
Page 12 :	GMCH GND (6 of 6)
Page 13 :	DDRII SO-DIMM & TERMINATOR
Page 14 :	ICH7-M RTC/SATA/IDE/AZALIA/CPU (1 OF 4)
Page 15 :	ICH7-M MDI/PCI E/PCI/USB (2 OF 4)
Page 16 :	ICH7-M GPIO/SMBus (3 of 4)
Page 17 :	ICH7-M POWER & GND (4 of 4)
Page 18 :	LVDS CONNECTOR & CCD
Page 19 :	CRT PORT
Page 20 :	GigaLAN BCM5787MKMLG & RJ45/RJ11
Page 21 :	PCMCIA /Mini Card /USB / Blue Tooth
Page 22 :	PCI7412-IEEE1394
Page 23 :	PCI7412-PCMCIA
Page 24 :	PCI7412-CARD READER
Page 25 :	HOLES
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Page 27 :	CODEC ALC883 & MDC
Page 28 :	AUDIO AMP & SPEAK/LIN OUT
Page 29 :	SIO (87383)
Page 30 :	EC Controller PC97551 & FLASH
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Page 33 :	DOCK EZ4 CONNECTOR
Page 34 :	CPU CORE (MAX8736ETL+)
Page 35 :	SYSTEM +5V/+3V(MAX8734A)
Page 36 :	DDRII POWER 1.8VSUS / 0.9VTERM
Page 37 :	CHIPSET POWER +1.5V / VCCP(+1.05V)
Page 38 :	BATTERY CHARGER & SELECTOR



PROJECT : ZH5
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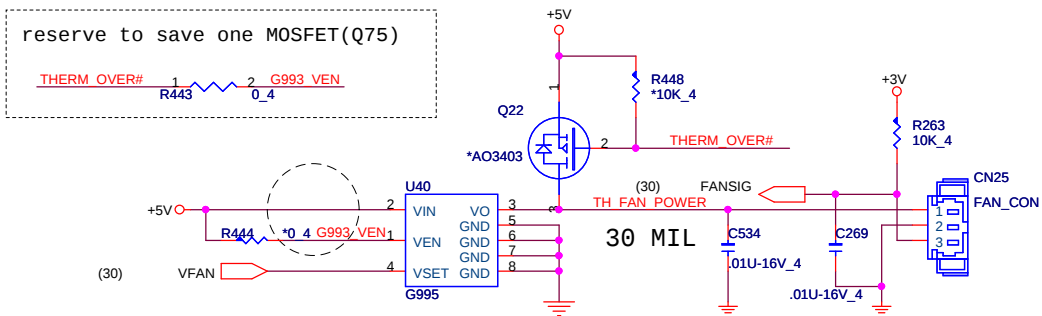
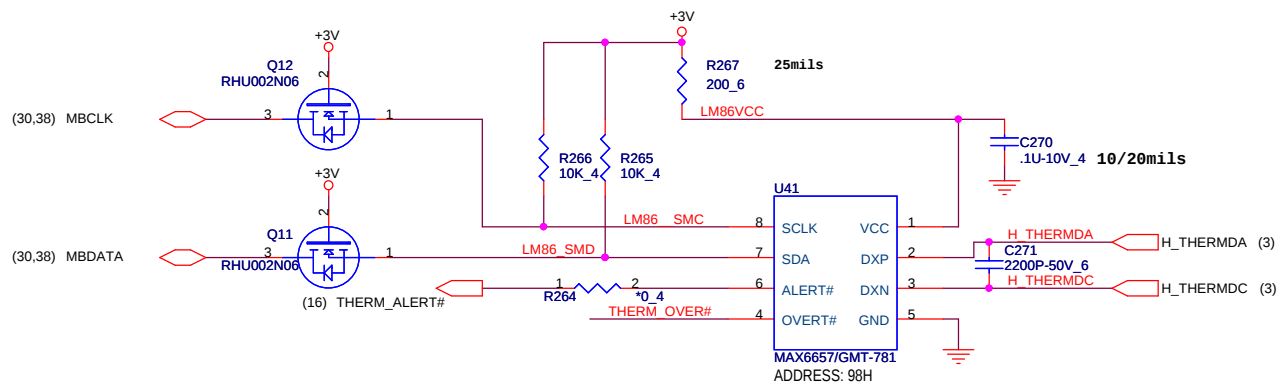
Size	Document Number	Rev
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Default



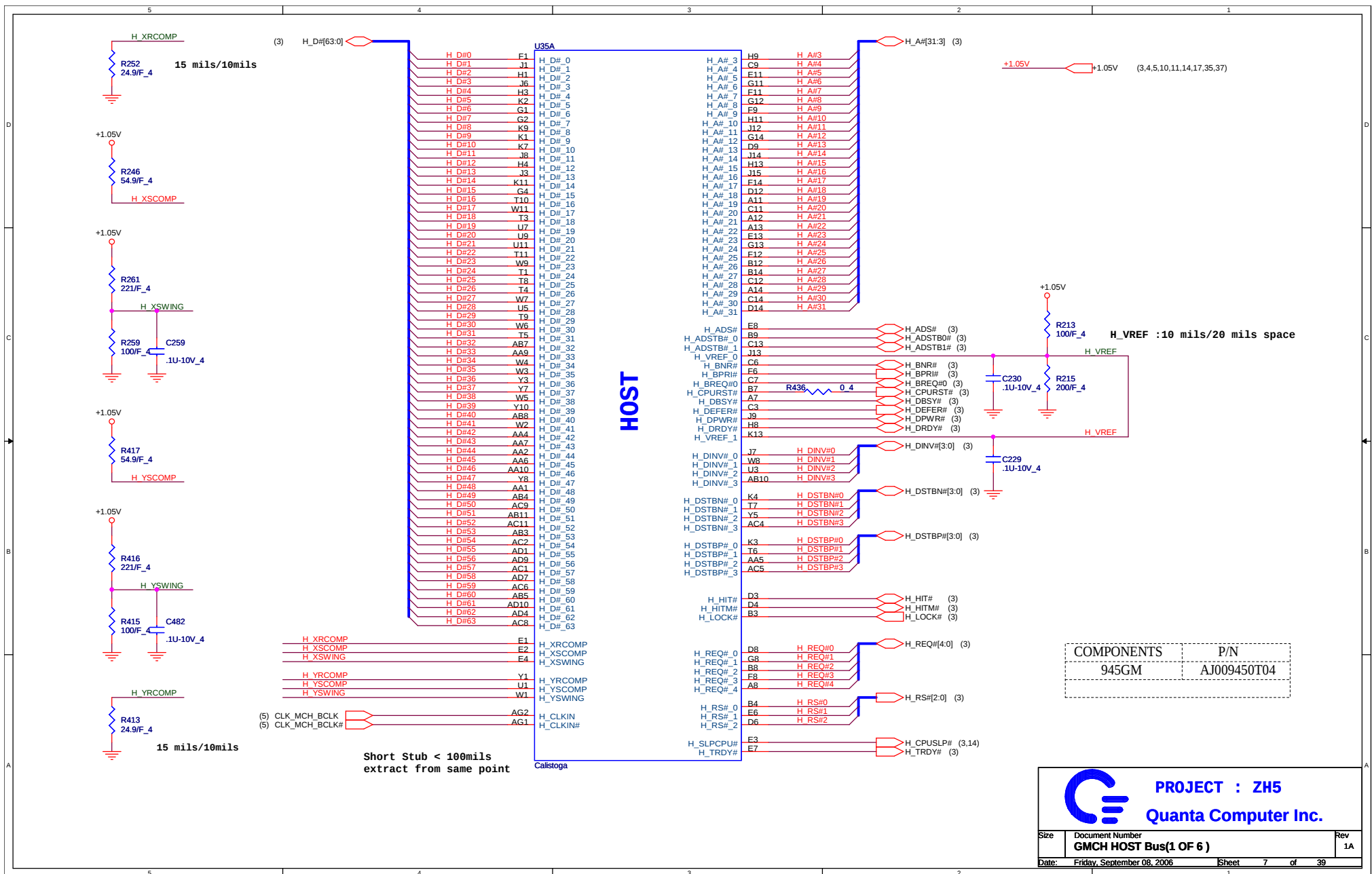
Size	Document Number CLOCK GENERATOR	Rev 1A
Date:	Tuesday, September 12, 2006	Sheet 5 of 39

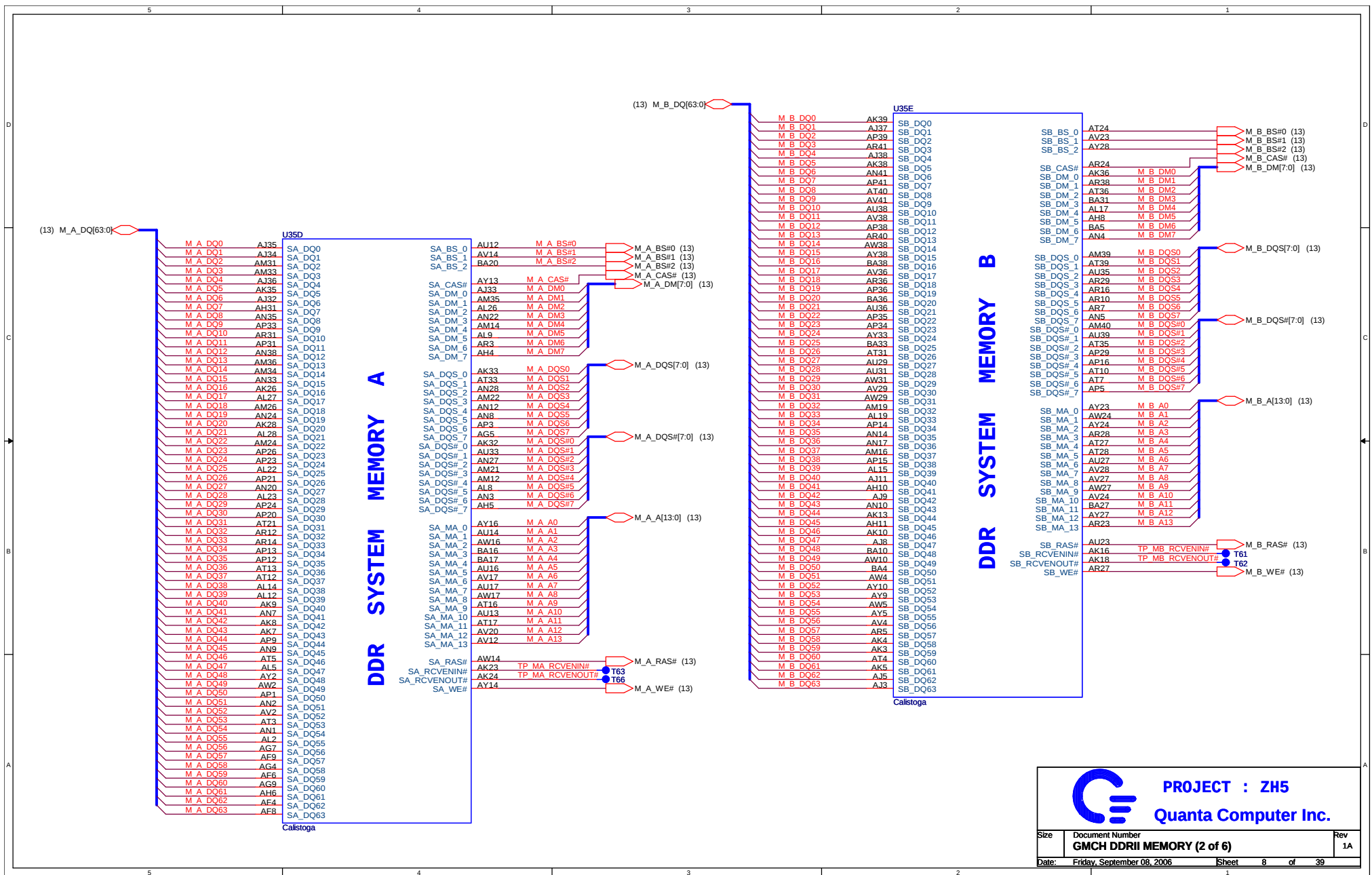


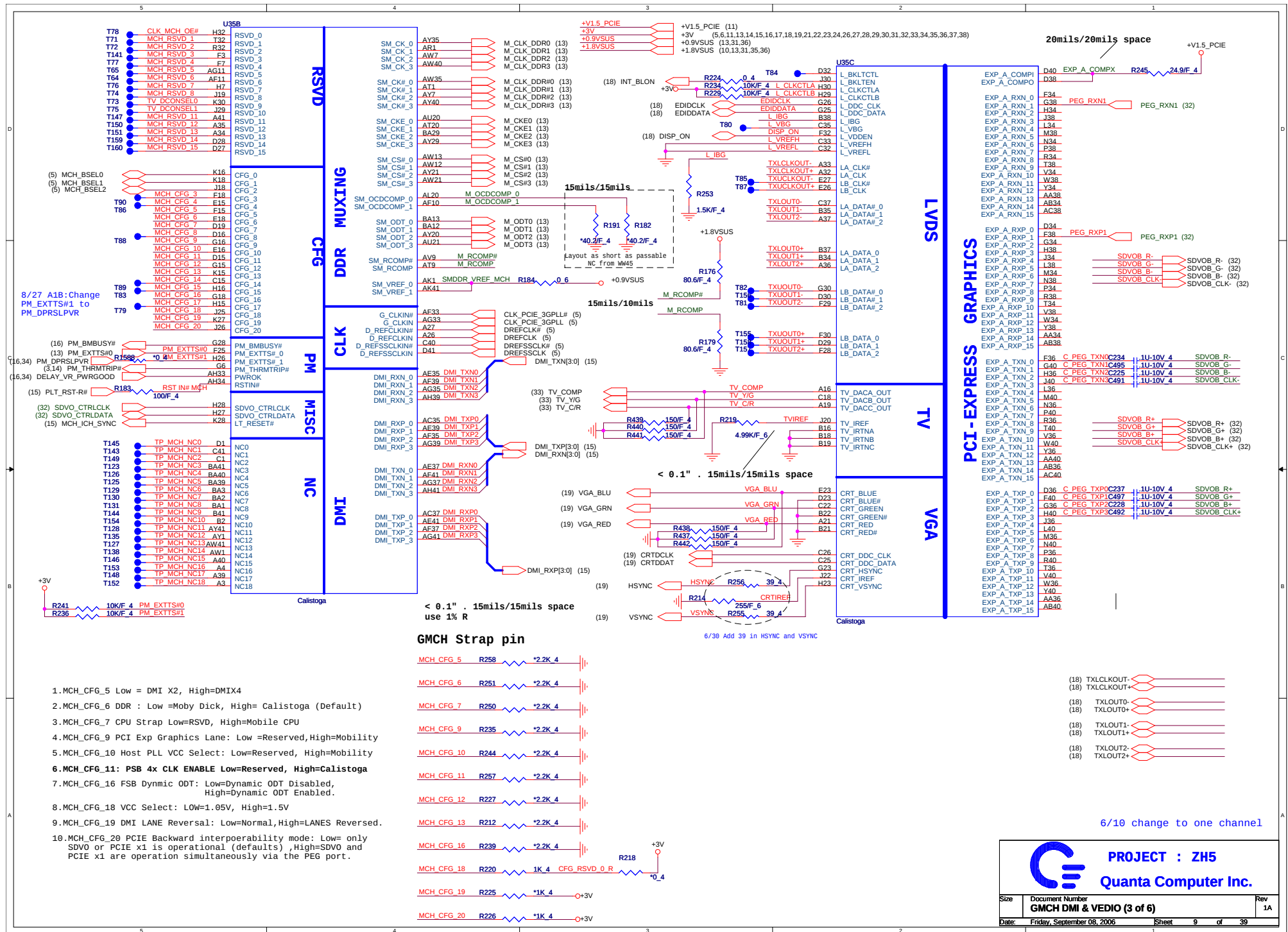
PROJECT : ZH5

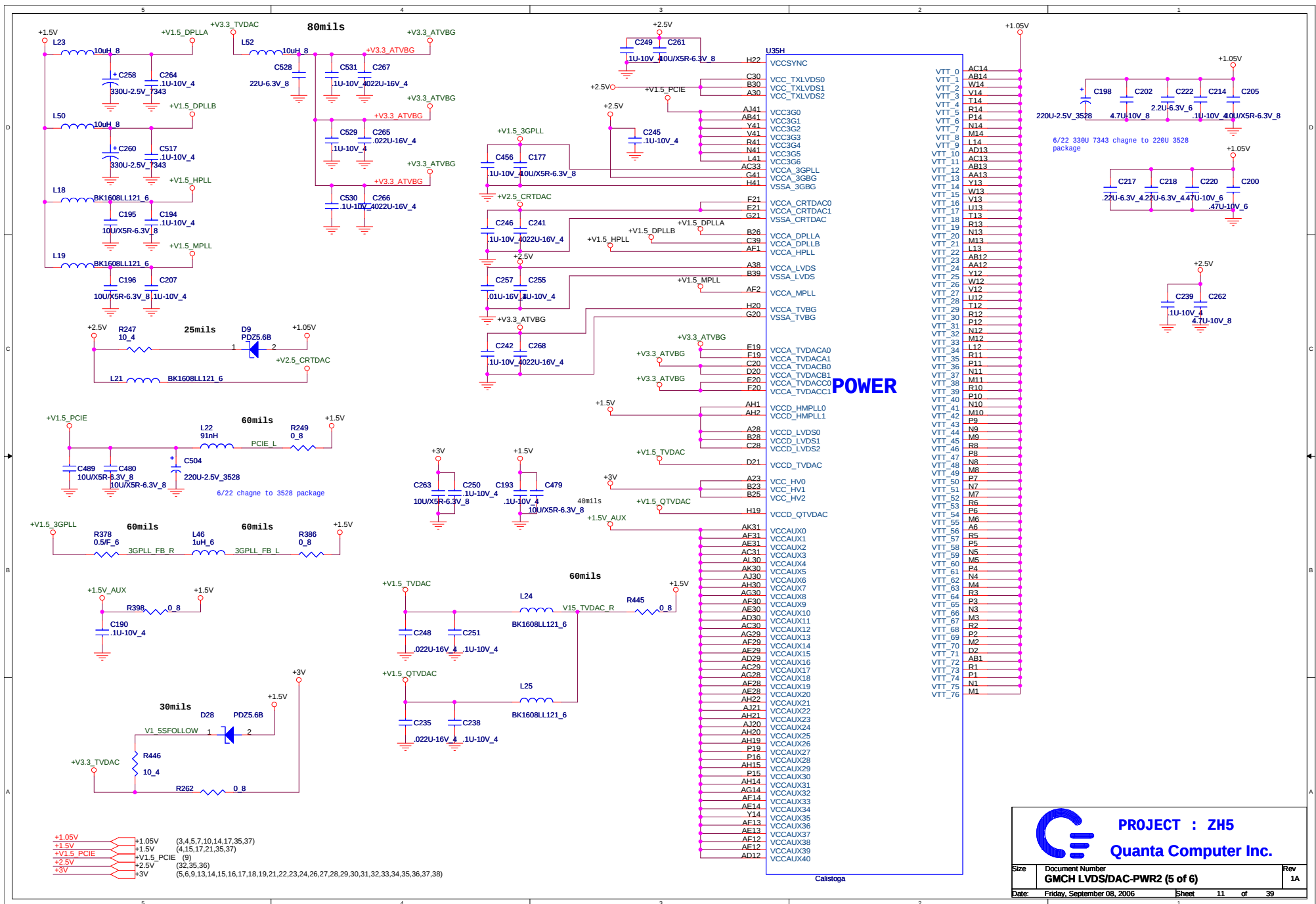
Quanta Computer Inc.

Size	Document Number	Rev
	CPU THERMAL SENSOR & FAN	1A
Date:	Friday, September 08, 2006	Sheet 6 of 39





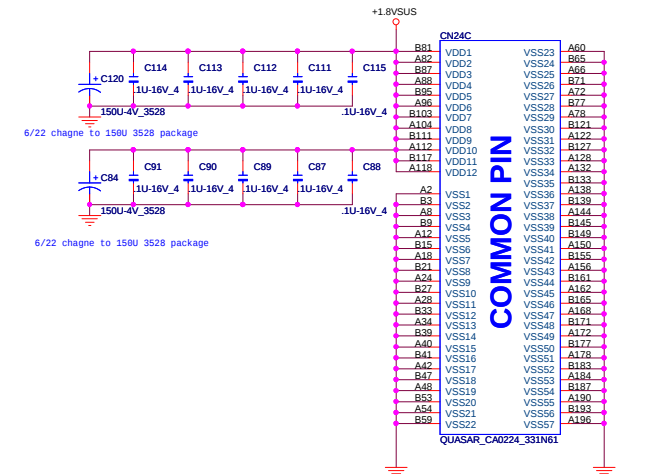
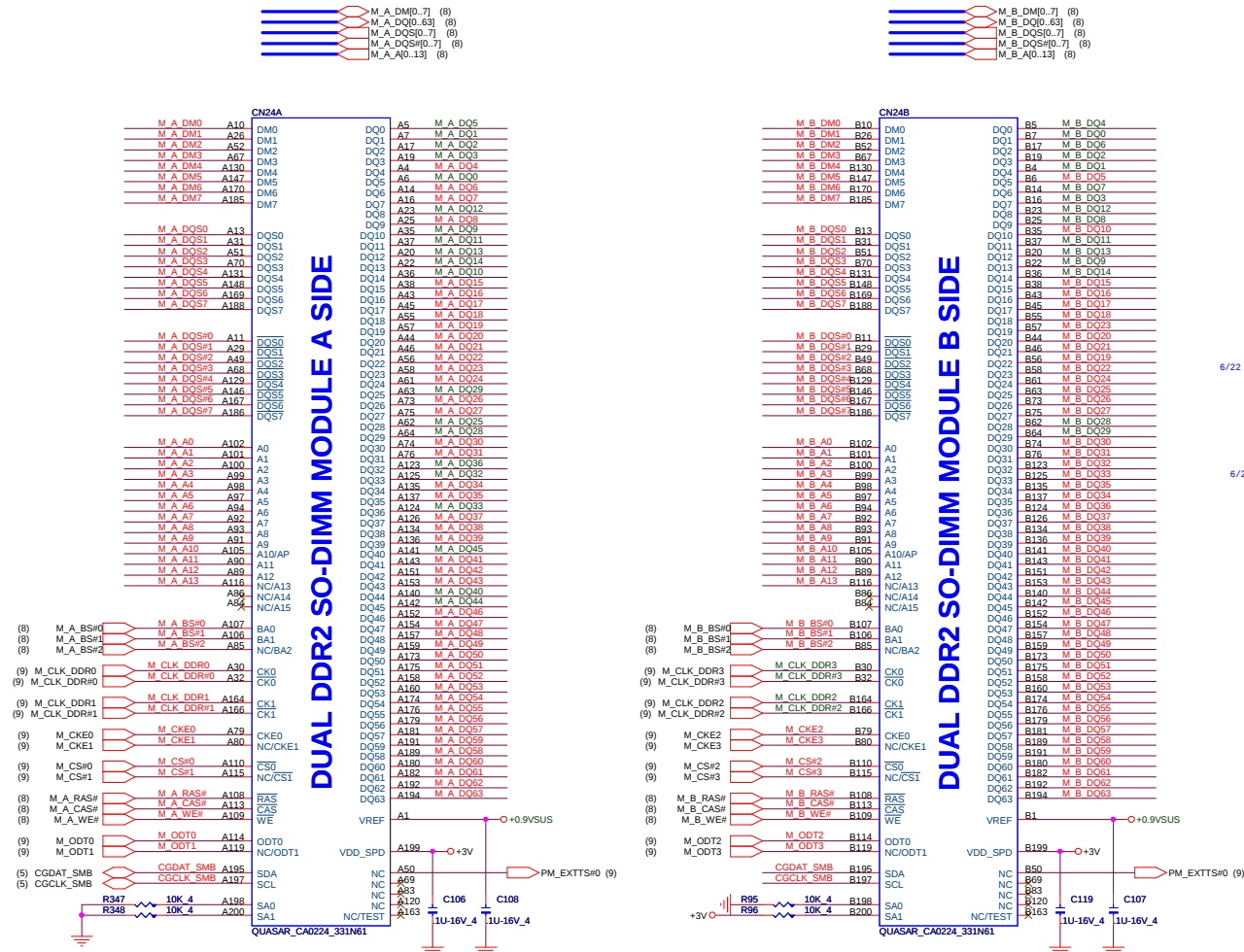




The top diagram shows a series of 150uH inductors (C116 to C135) and 4.7uF capacitors (C117 to C136) connected in a chain. The bottom diagram shows a similar chain of 150uH inductors (C434 to C453) and 4.7uF capacitors (C435 to C454). Both diagrams are powered by +0.9V and ground.

+0.9V				+0.9V								
M_CKE0	R128	56 4	M_A A2	RN12	1	2	56 4P2R 2	M_B BS#0	RN16	1	2	56 4P2R 2
M_CKE1	R341	56 4	M_A A0		3	4		M_B A10		3	4	
M_CKE2	R363	56 4	M_A A8	RN7	1	2	56 4P2R 2	M_B A0	RN5	1	2	56 4P2R 2
M_CKE3	R89	56 4	M_A A3		3	4		M_B A2		3	4	
			M_A A13	R346			56 4	M_B A1	RN15	1	2	56 4P2R 2
			M_A BS#1	R342			56 4	M_B A3		3	4	
M_CS#0	R344	56 4	M_A A6	RN11	1	2	56 4P2R 2	M_B A4	RN4	1	2	56 4P2R 2
M_CS#1	R132	56 4	M_A A4		3	4		M_B A7		3	4	
M_CS#2	R82	56 4	M_A A5	RN8	1	2	56 4P2R 2	M_B A5	RN14	1	2	56 4P2R 2
M_CS#3	R367	56 4	M_A A5		3	4		M_B A8		3	4	
			M_A A1	RN9	3	4	56 4P2R 2	M_B A6	RN3	3	4	56 4P2R 2
			M_A A10		3	4		M_B A11		3	4	
			M_A BS#0		3	4		M_B A9	RN13	1	2	56 4P2R 2
			M_A A12	RN6	1	2	56 4P2R 2	M_B A12		3	4	
			M_A A9		3	4		M_B BS#1	R90			56 4
			M_A A11	RN10	1	2	56 4P2R 2	M_B A13	R94			56 4
			M_A A7		3	4		M_B BS#2	R364			56 4
M_ODT0	R345	56 4	M_A BS#2	R129			56 4	M_B BS#3	R91			56 4
M_ODT1	R133	56 4	M_A BS#3	R343			56 4	M_B CAS#	R365			56 4
M_ODT2	R93	56 4	M_A CAS#	R131			56 4	M_B WE#	R366			56 4
M_ODT3	R368	56 4	M_A WE#	R130			56 4					

DDR2 SO-DIMM SOCKET



PROJECT : ZH5
Quanta Computer Inc.

Size	Document Number	Rev
	DDRII SO-DIMM & TERMINATOR	1A
Date:	Friday, September 08, 2006	Sheet 13 of 39

modify C

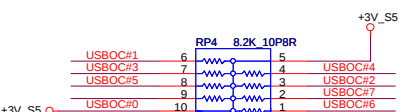
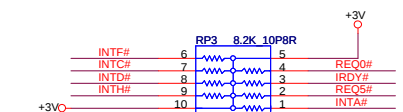
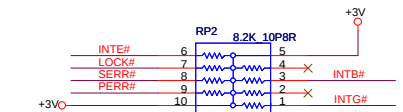
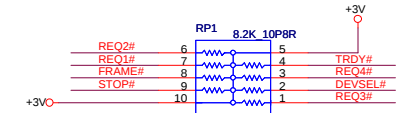
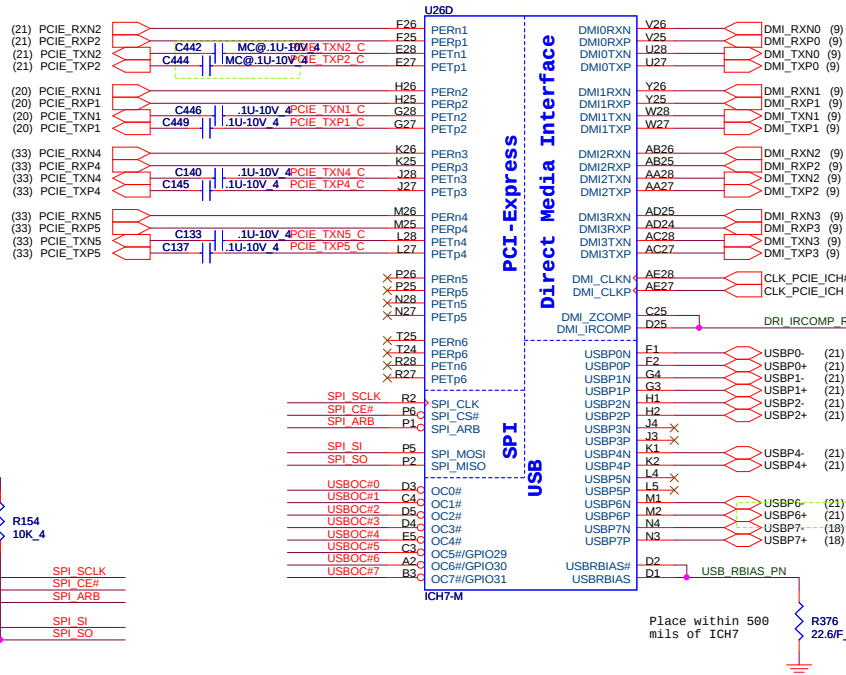
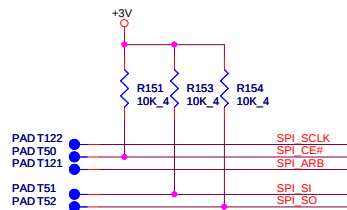
MINI CARD PCI-E

5789M

EZ4

EZ4

A1A 8/1 chagne PCI-E signal for different SB use



CKL use 10Kohm

ICH7 Boot BIOS select

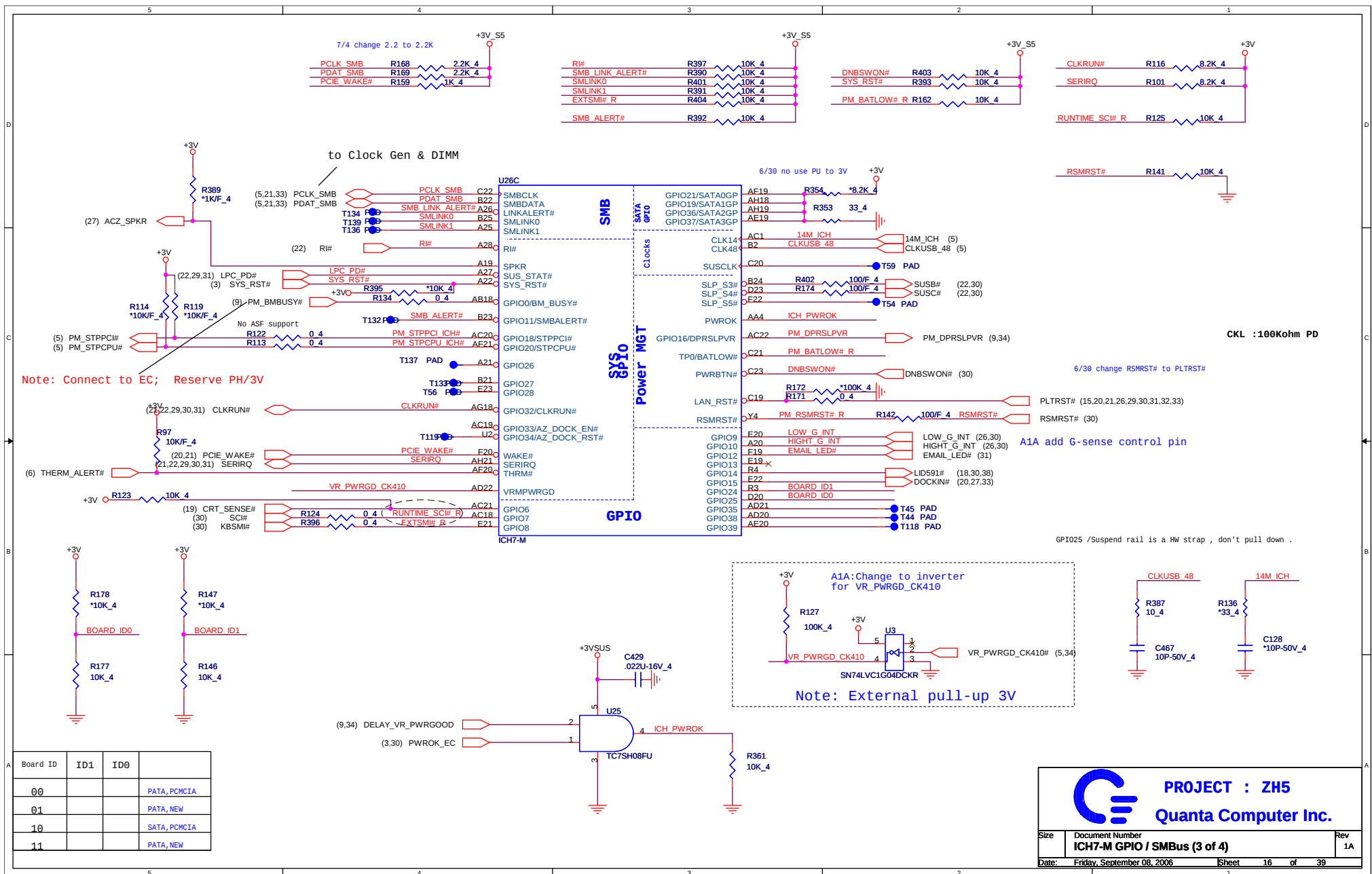
	STRAP	GNT5# R1	GNT4# R2
LPC (default)	11	UNSTUFF	UNSTUFF
PCI	10	UNSTUFF	STUFF
SPI	01	STUFF	UNSTUFF

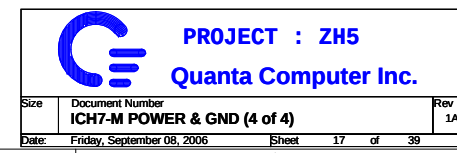
PCI DEVICE	IDSEL#	REQ# / GNT#	Interrupts
PCI7411	AD25	REQ0# / GNT0#	INT E/F/G#

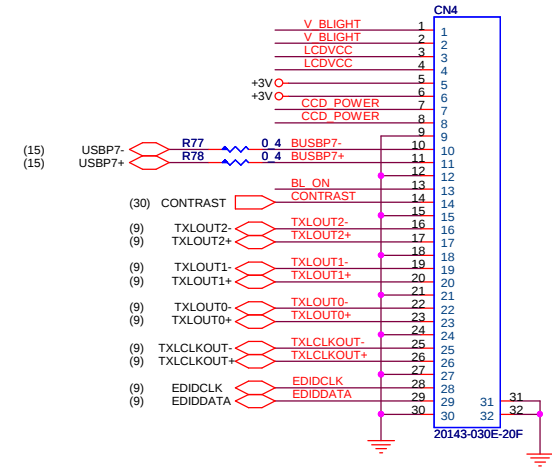
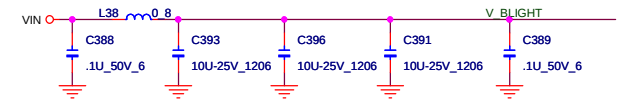
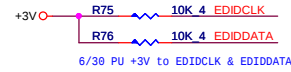
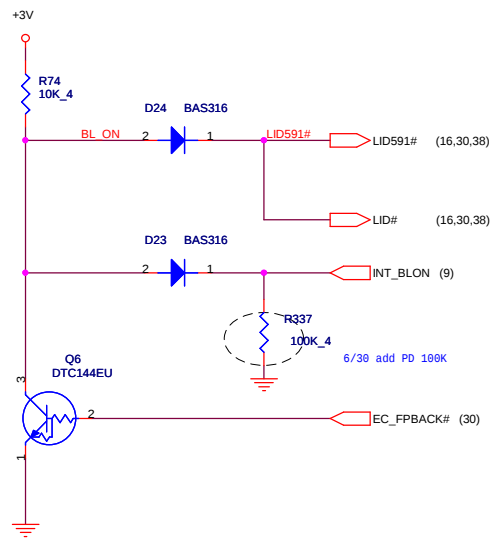
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Quanta Computer Inc.

Size	Document Number	Rev
	ICH7-M MD/PCI-E/PCI/USB (2 OF 4)	1A
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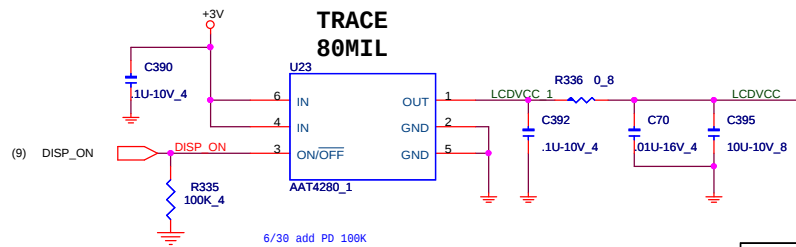
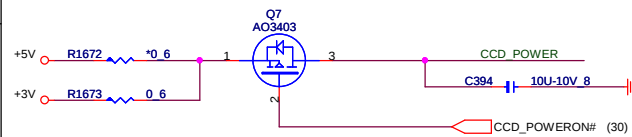
Don't connect to PCI device / Express card







CAMERA MODULE CONNECTOR





PROJECT : ZH5
Quanta Computer Inc.

Size	Document Number	Rev
	LVDS CONNECTOR & CCD	1A
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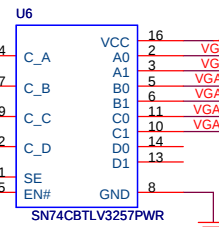
(9) VGA_RED
(9) VGA_GRN
(9) VGA_BLU

(9) VSYNC
(9) HSYNC

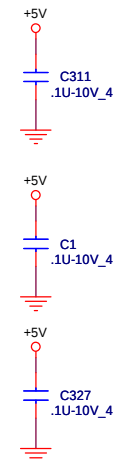
(9) CRTDCLK
(9) CRTDDAT

VGA RED
VGA GRN
VGA BLU

(33) PR_INSERT_5V PR_INSERT_5V



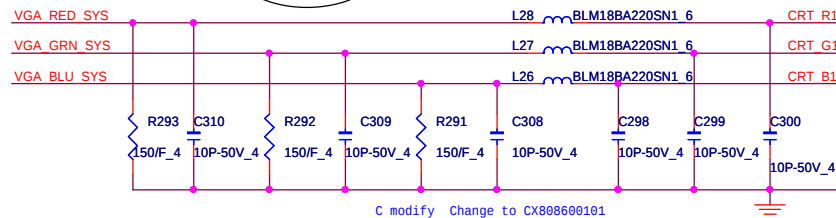
SEL	FUNCTION
LOW	IN_B0
HIGH	IN_B1



6/30 PU +3V to CRTDCLK & CRTDDATA

Edison 0523 Delete F2.

25 MIL

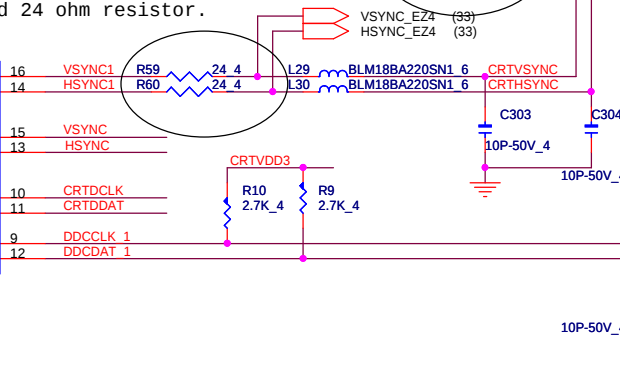
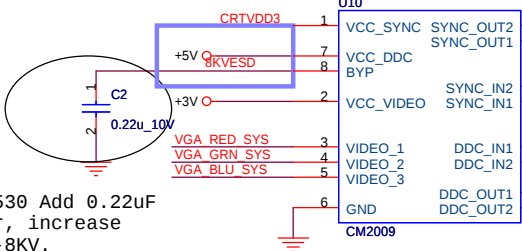


C modify Change to CX808600101

(30) DETECT_CRT

Edison 0530 Add 24 ohm resistor.

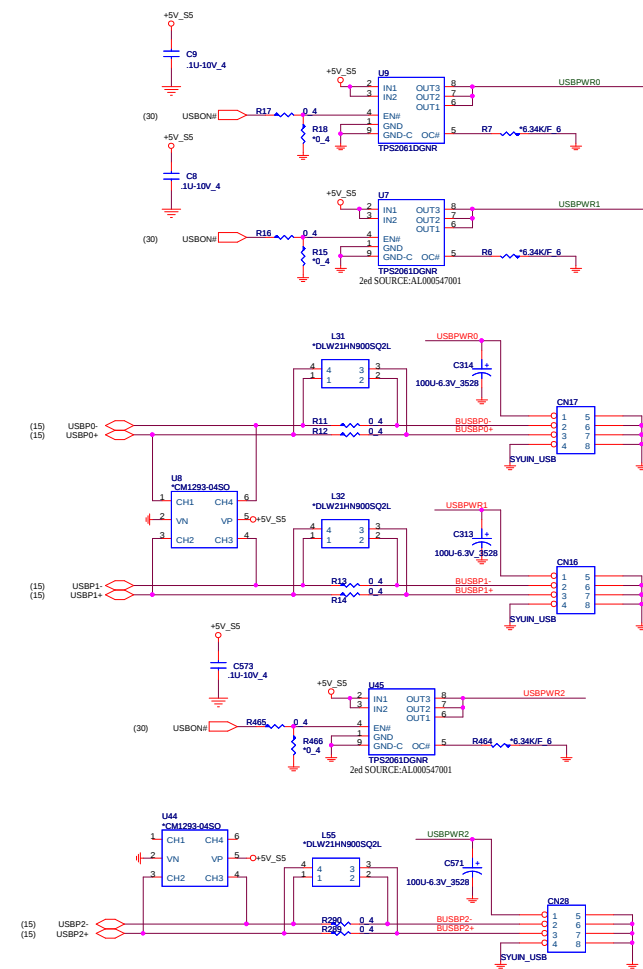
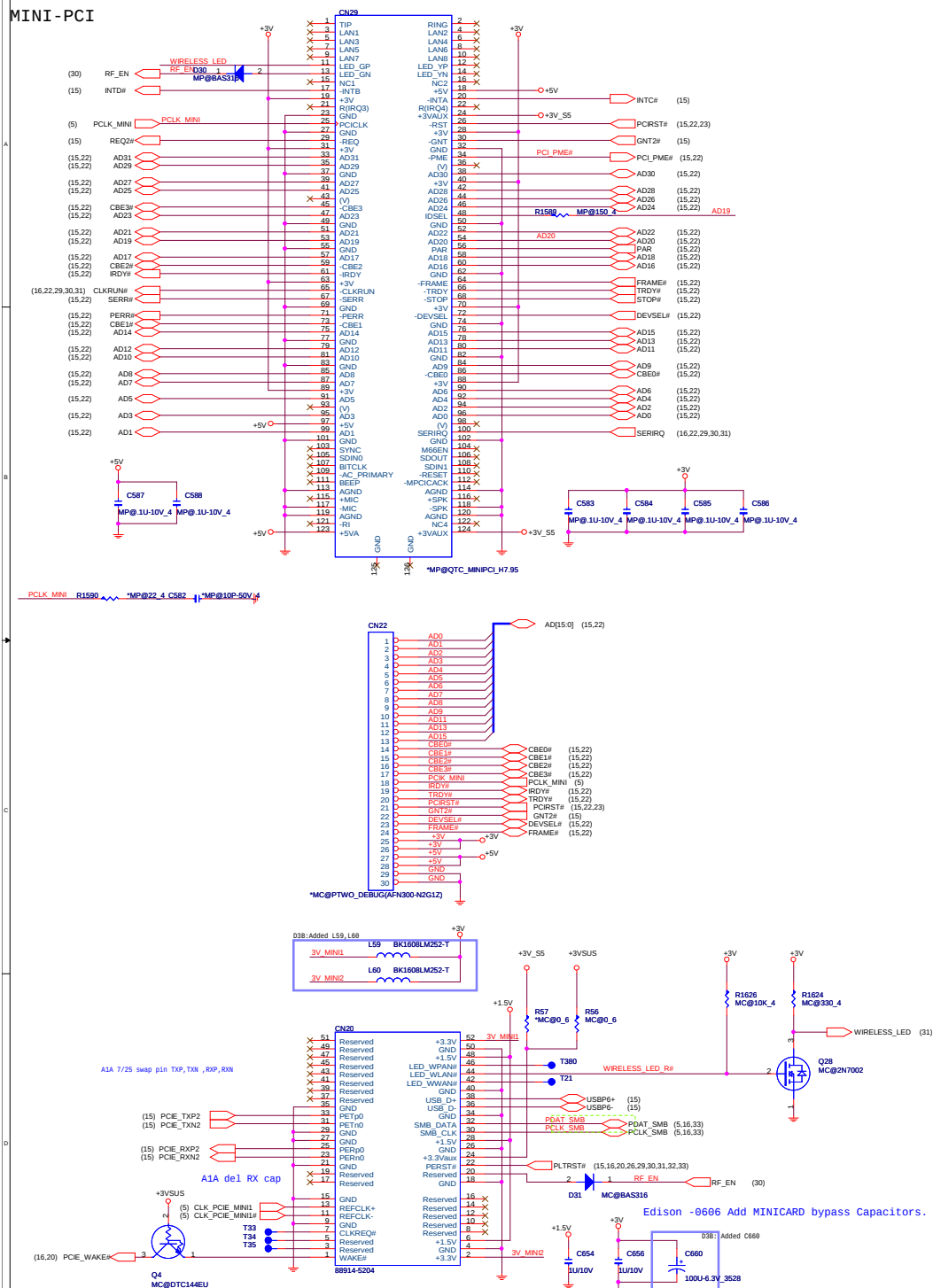
Edison 0530 Add 0.22uF capacitor, increase ESD to +-8KV.



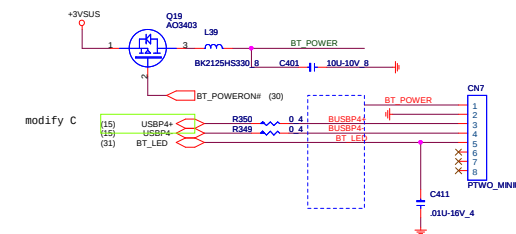
PROJECT : ZH5
Quanta Computer Inc.

Size	Document Number	Rev
	CRT-PORT	1A
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MINI-PCI



BLUETOOTH MODULE CONNECTOR



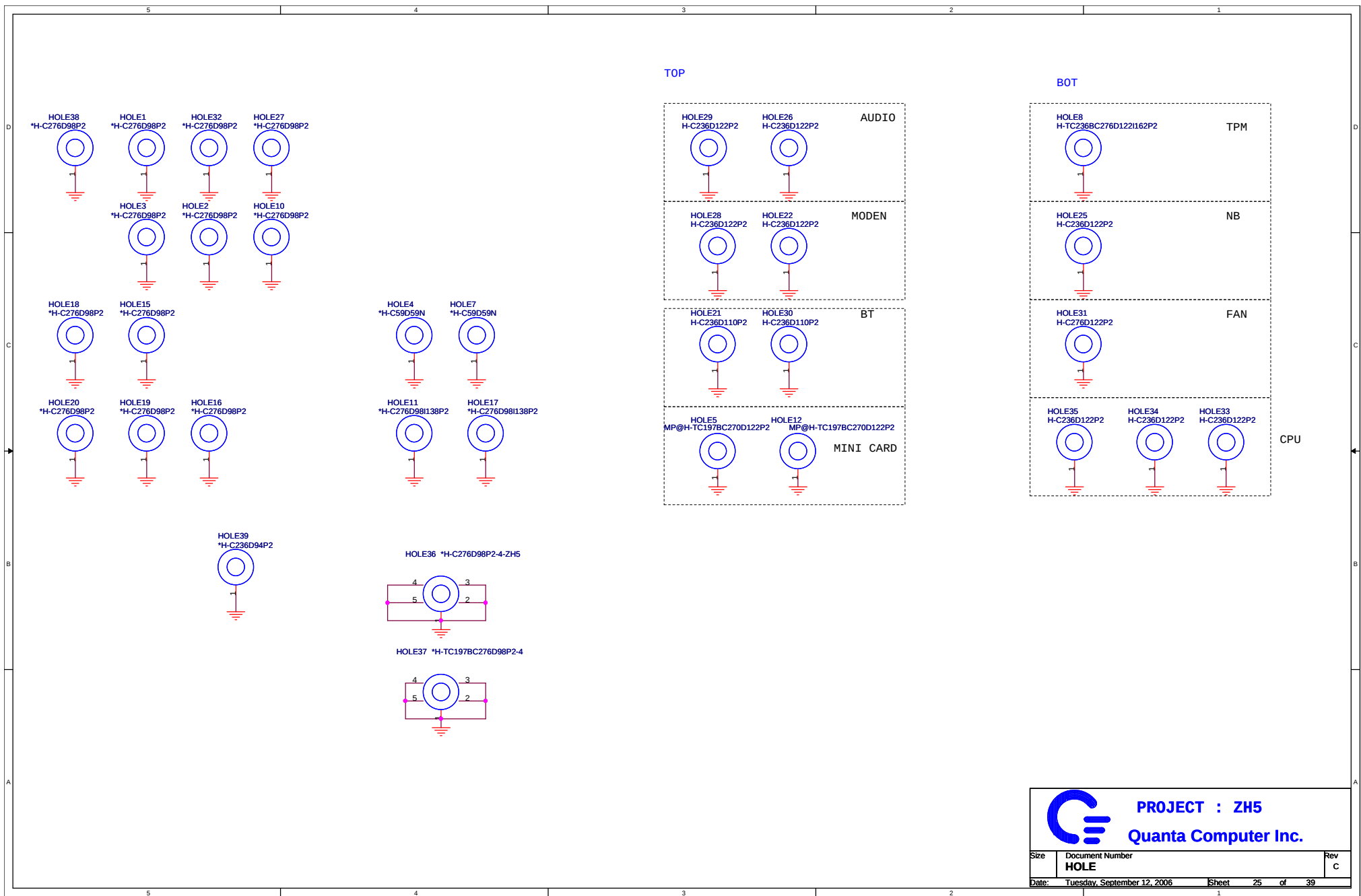
modify C

Edison -0606 Add MINICARD bypass Capacitors.



PROJECT : ZH5
Quanta Computer Inc.

Size	Document Number	Rev
	PCMCIA /Mini Card /USB / Blue Tooth	1.0
Date:	Tuesday, September 12, 2006	Sheet 21 of 30



		PROJECT : ZH5	
		Quanta Computer Inc.	
Size	Document Number	Rev	
	HOLE	C	
Date:	Tuesday, September 12, 2006	Sheet	25 of 39



Package 0805 for THD+N performance for Vista Logo requirements.

Speaker & Hear-Phone Amplifier

U30 MAX9789A For Speaker

MAX9789A TQFN 32PIN

Layout Note:
The C521 close pin9,
The C451 close pin17.

Layout Note:
The C525 close pin18,
The C524 close pin8.

Add A-LDO option resistor
---Edison_0628

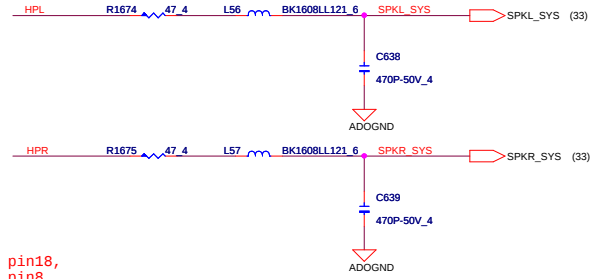
B2A: Unmount R563, Mount R565

GAIN1	GAIN2	GAIN
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB

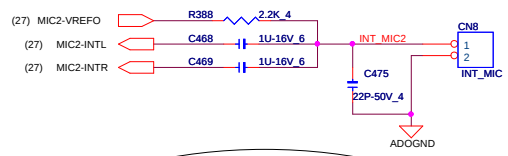
AUDIO BOARD

SPEAKER CONNECTOR

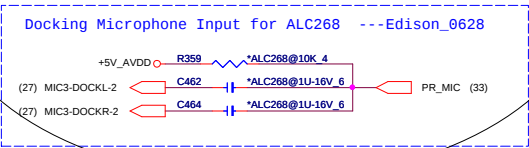
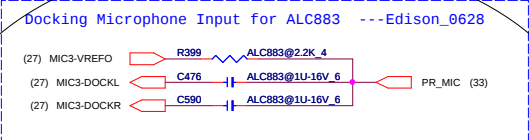
DOCK HEADPHONE



MIC



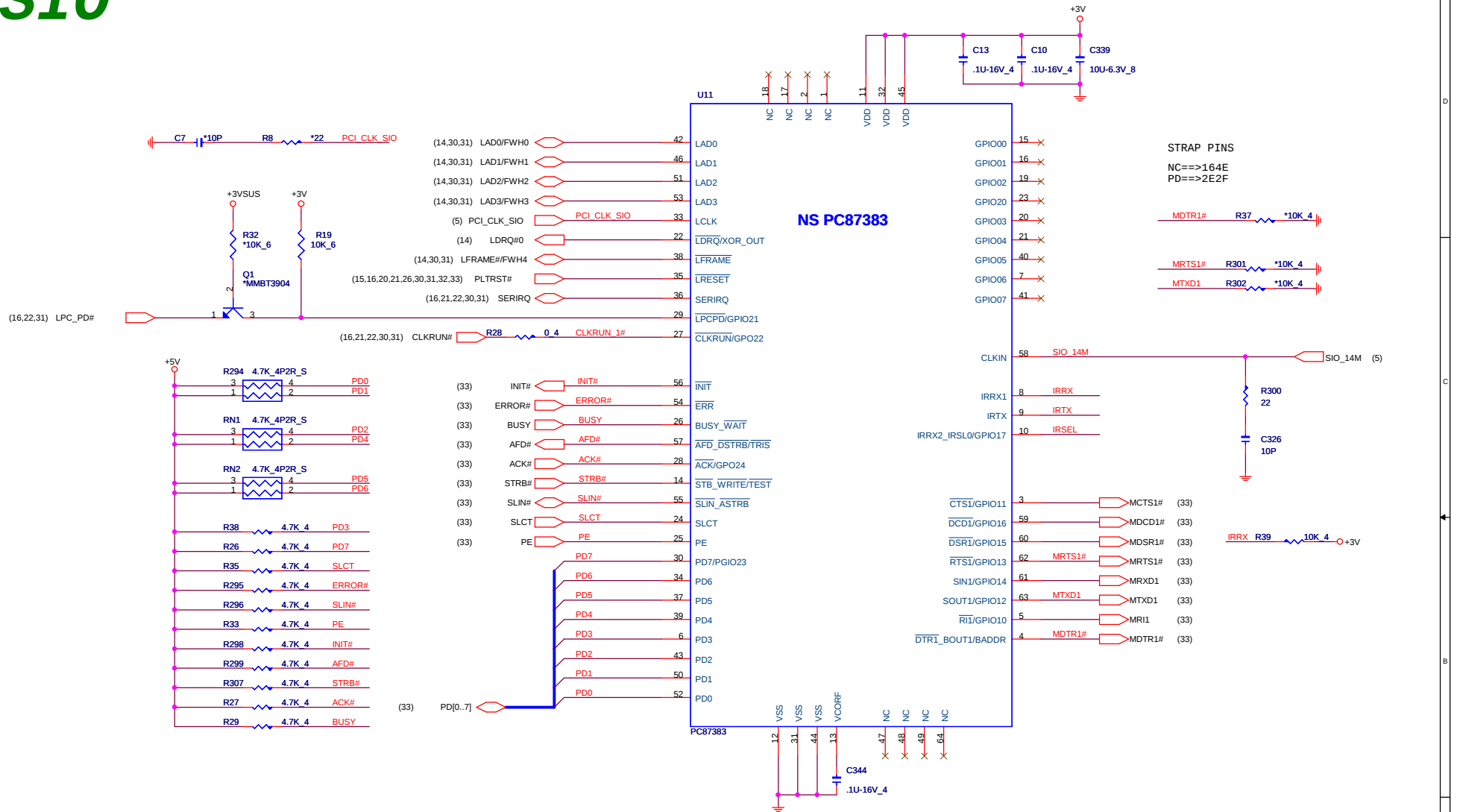
The Placement close to U27(ALC883/ALC268)



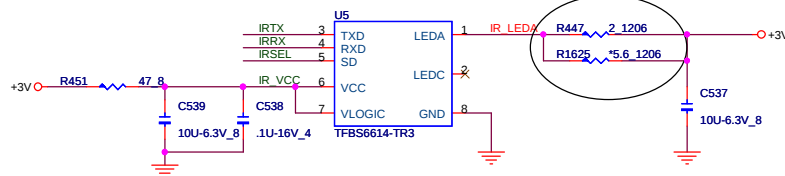
PROJECT : ZH5
Quanta Computer Inc.

Size	Document Number	Rev
	AUDIO AMP & SPEAK/LIN OUT	1A
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SIO



8/29 change trace to 30 mil



 PROJECT : ZH5 Quanta Computer Inc.		Size	Document Number	Rev
		Custom	SIO (87383)	1A
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