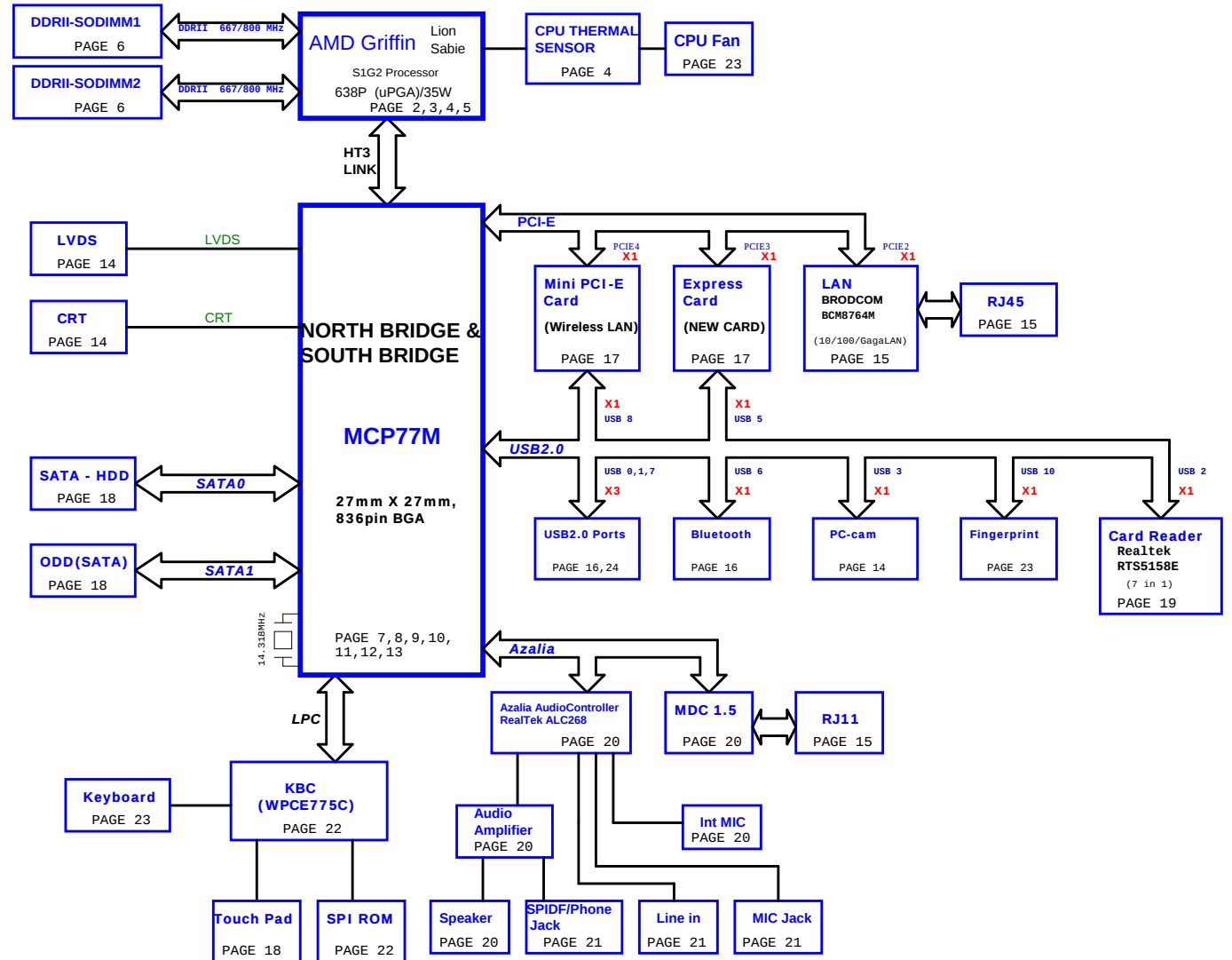


Z05 SYSTEM BLOCK DIAGRAM



CPU CORE / VDDNB (ISL6265A)	PAGE 26
NB_CORE +1.1V (RT8202)	PAGE 28
+1.1V_NB (RT8202)	PAGE 27
DDR II SMDDR_VTERM 1.8VSUS(TPSS116REGR)	PAGE 29
SYSTEM POWER (ISL6237)	PAGE 25
SYSTEM CHARGER (ISL6251A)	PAGE 24

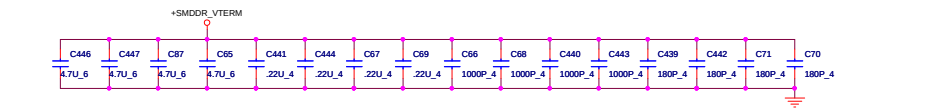
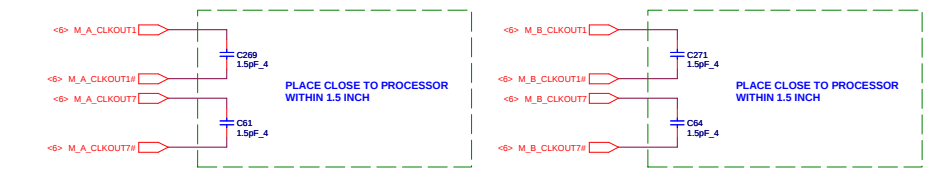
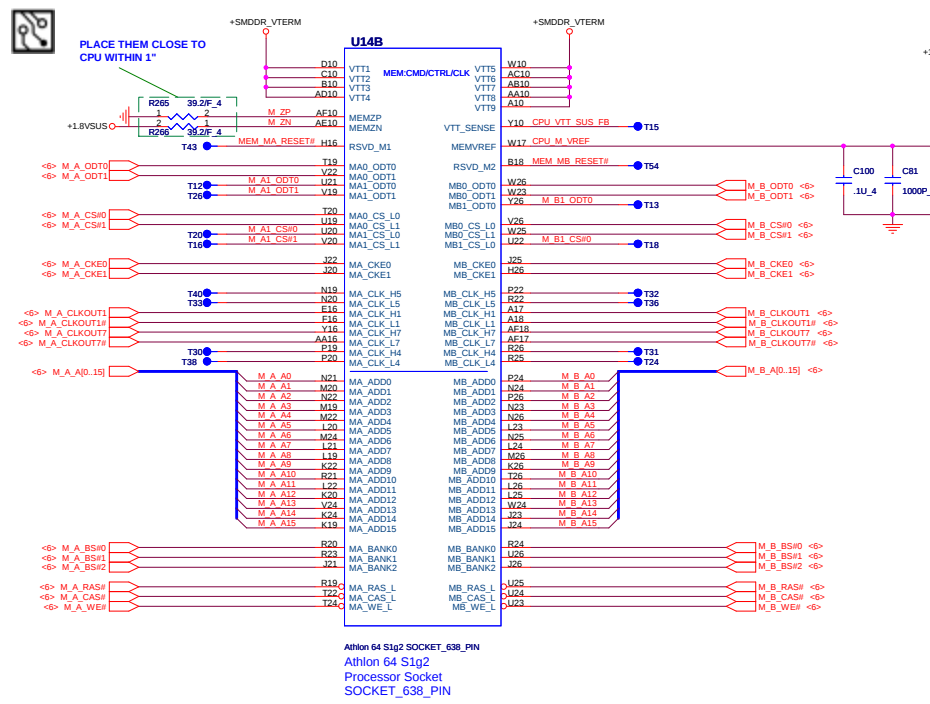


PCB STACK UP

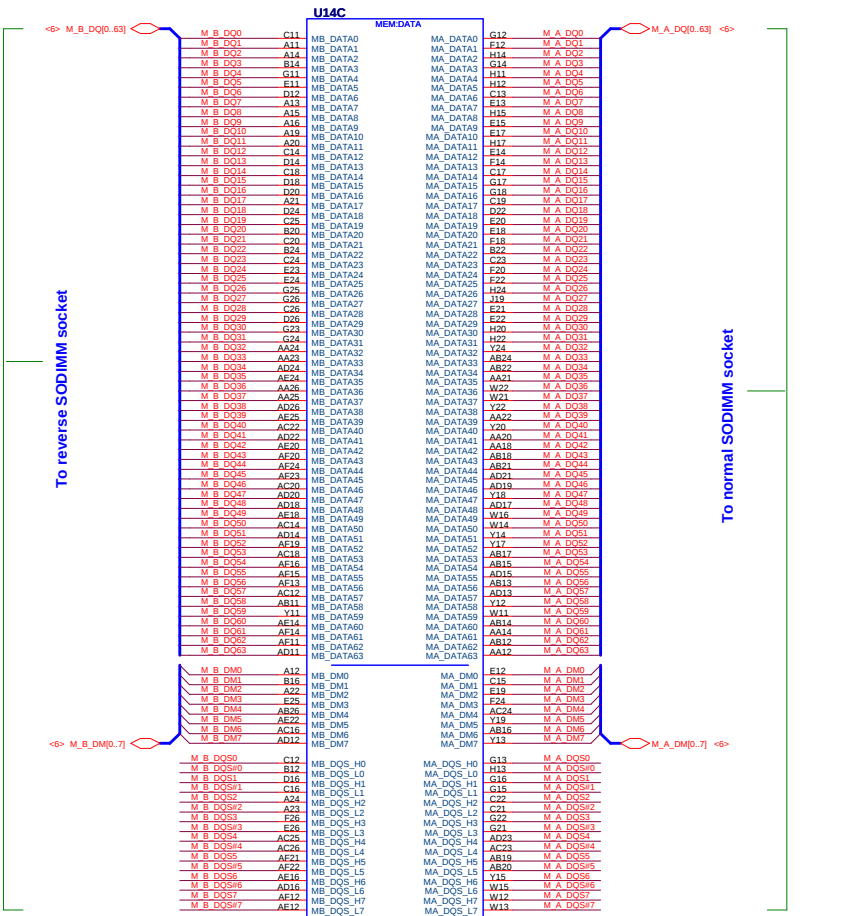
LAYER 1 : TOP
LAYER 2 : GND
LAYER 3 : IN1
LAYER 4 : IN2
LAYER 5 : VCC
LAYER 6 : BOT



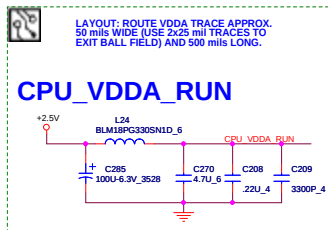
VDD, VTT, SUS, CPU IS CONNECTED TO THE VDD, VTT, SUS POWER SUPPLY THROUGH THE PACKAGE OR ON THE DIE. IT IS ONLY CONNECTED ON THE BOARD TO DECOUPLING NEAR THE CPU PACKAGE



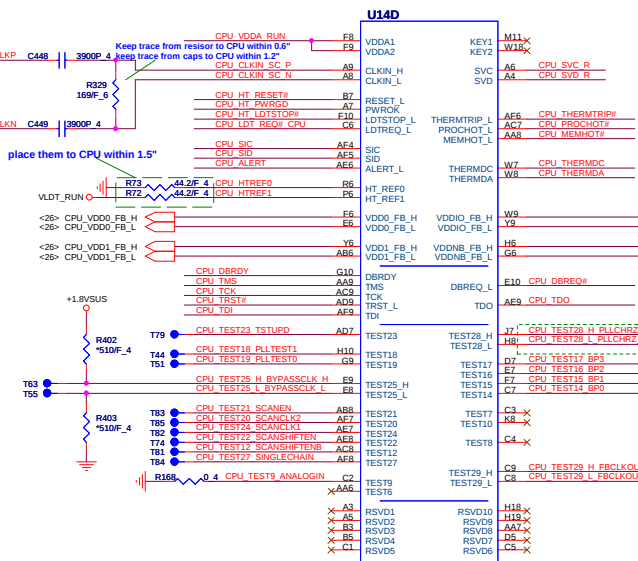
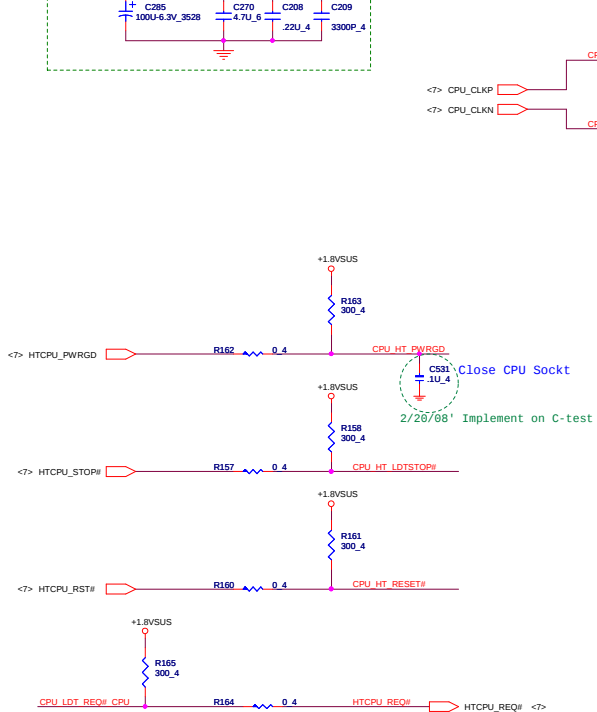
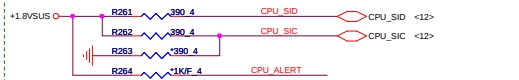
Processor DDR2 Memory Interface



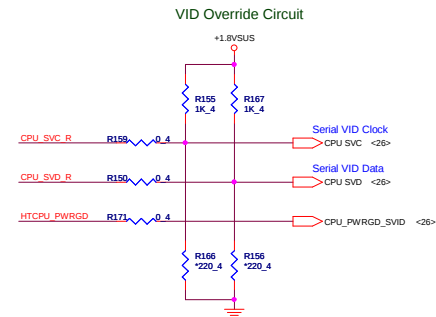
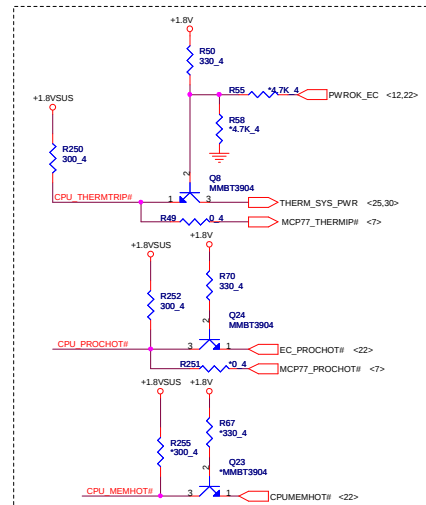
ATHLON Control and Debug



If AMD SI is not used, the SID pin can be left unconnected and should have a 390- ($\pm 5\%$) pulldown to VSS.

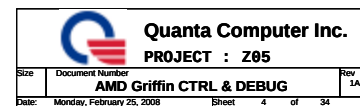
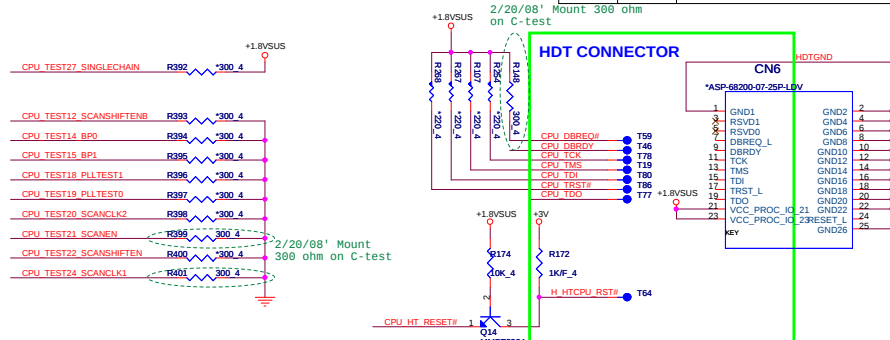
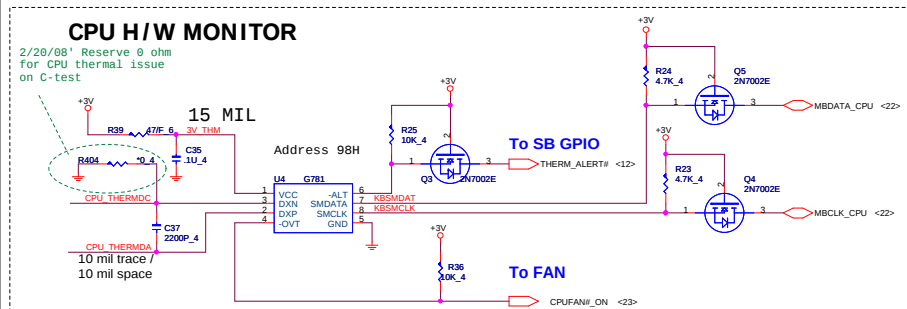


Athlon 64 S1g2
Processor Socket
SOCKET_638_PIN

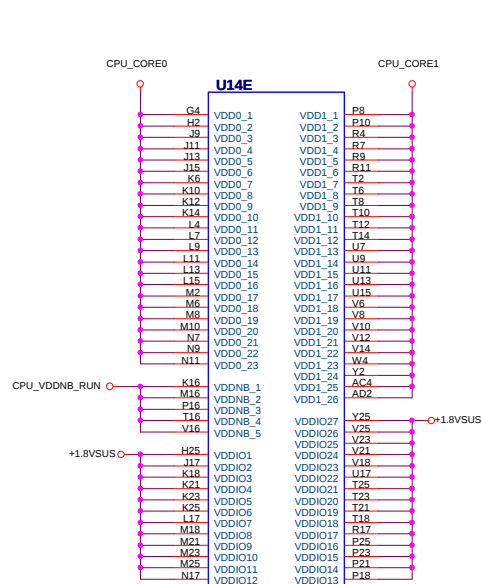


VID Override Circuit

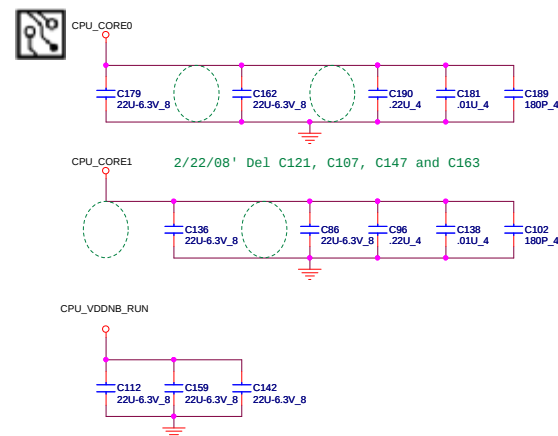
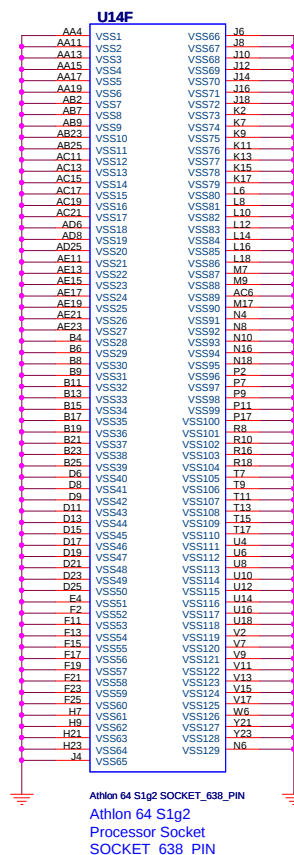
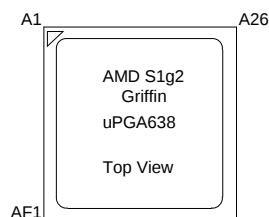
VFIX MODE		
SVC	SVD	Voltage Output(CPU Power)
0	0	1.4V
0	1	1.2V
1	0	1.0V
1	1	0.8V



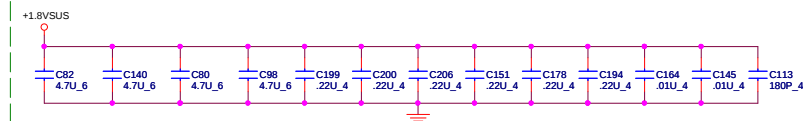
PROCESSOR POWER AND GROUND

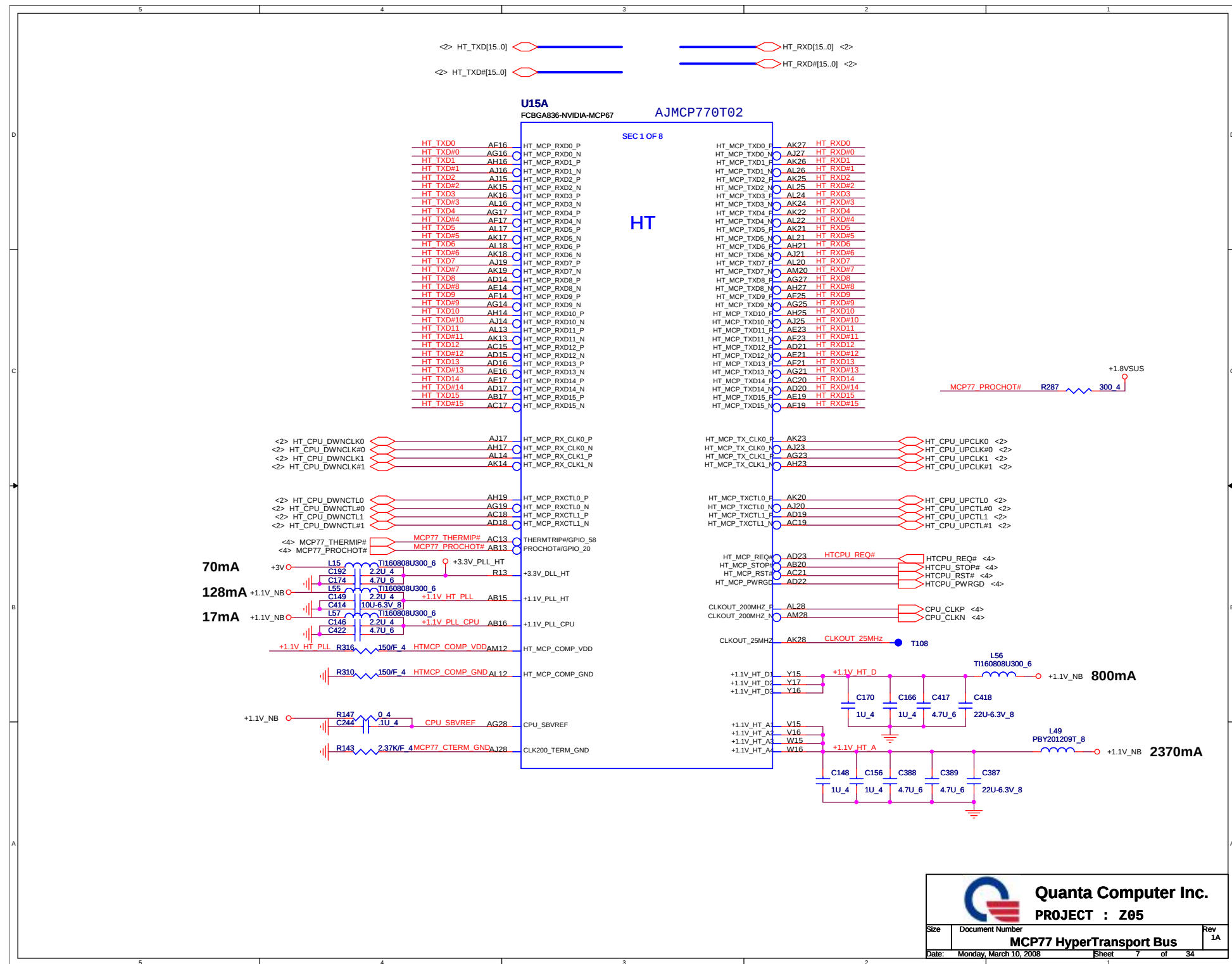


Athlon 64 S1g2 SOCKET_638_PIN
Athlon 64 S1g2
Processor Socket
SOCKET 638 PIN



DECOUPLING BETWEEN PROCESSOR AND DIMMs
PLACE CLOSE TO PROCESSOR AS POSSIBLE





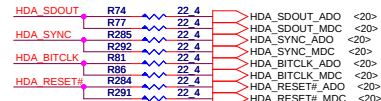
U15F

FCBGA836-NVIDIA-MCP67

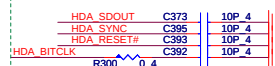
HDA

MISC

HDA

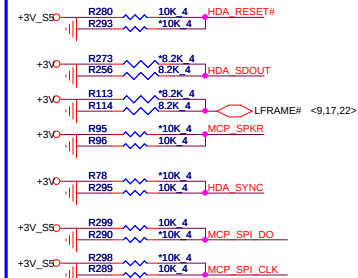


EMI Solution



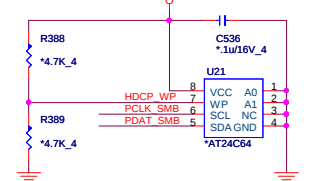
MCP77 STRAPPING

HDA_RESET# (LAN)	0	MI
HDA_SDOUT_B (LFRAM#) (BIOS)	0	1
HDA_SYNC_R (SIO CLOCK)	0	14.318MHz (DEFAULT)
SPI_DO SPI_CLK (SPI CLOCK)	0	31MHz
	0	42MHz
	0	25MHz
	0	1MHz

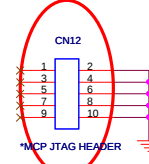


Acer Suggest Reserve HDCP EEPROM 2007/12/05

HDCP EEPROM



NO PN

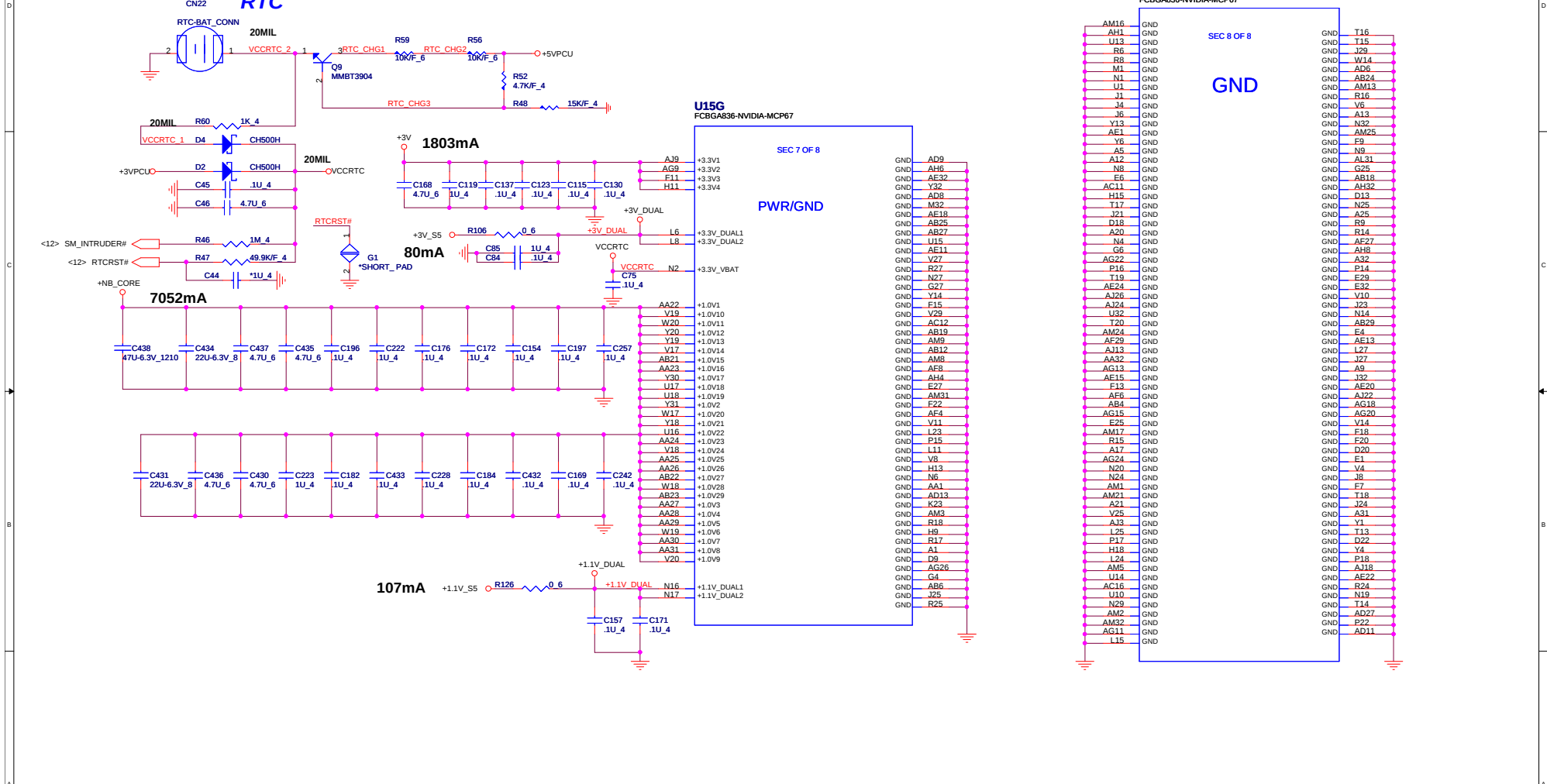


M/B ID for 14"/17"

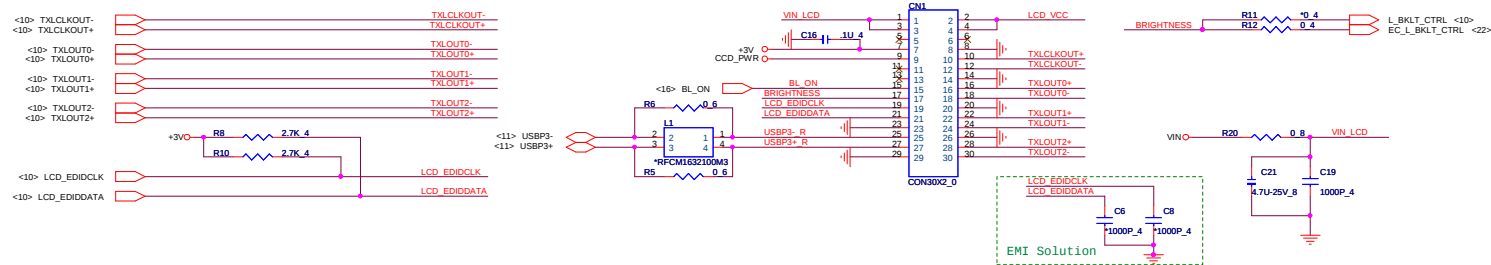
ID0	ID1	ID2	M/B
0	0	0	17" D
0	0	1	X
0	1	0	15" D
1	0	0	15" U
1	0	1	14" Dual Core CPU & MXM
1	1	0	14" Dual Core CPU & UMA
1	1	1	14" Single Core CPU & UMA

Delay 10ms
after S5 powerOK

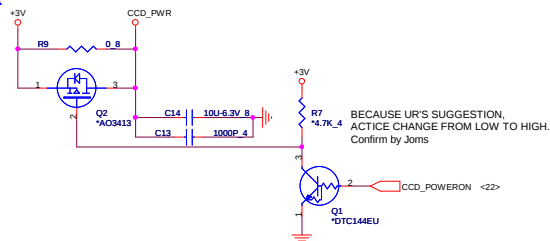
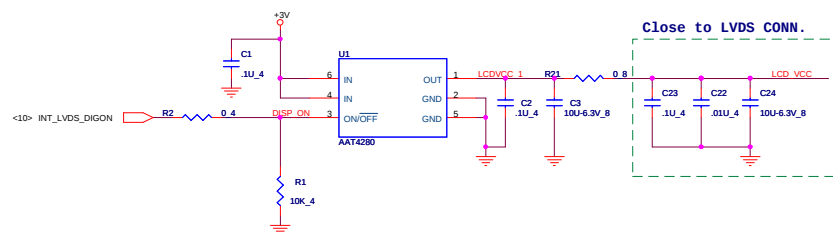
2007/11/28-Edison: Removethese part
R315, R317, R326, R324, C423, Q28, Q29



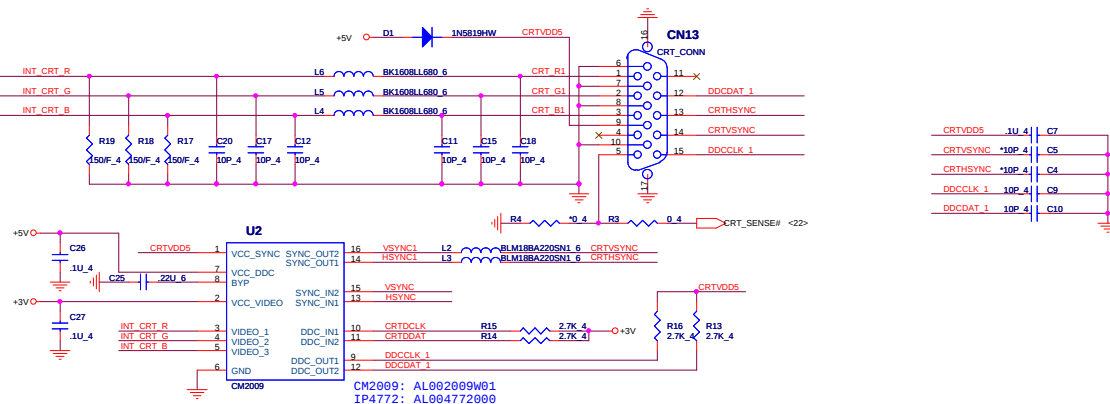
SINGLE CH



CAMERA MODULE POWER



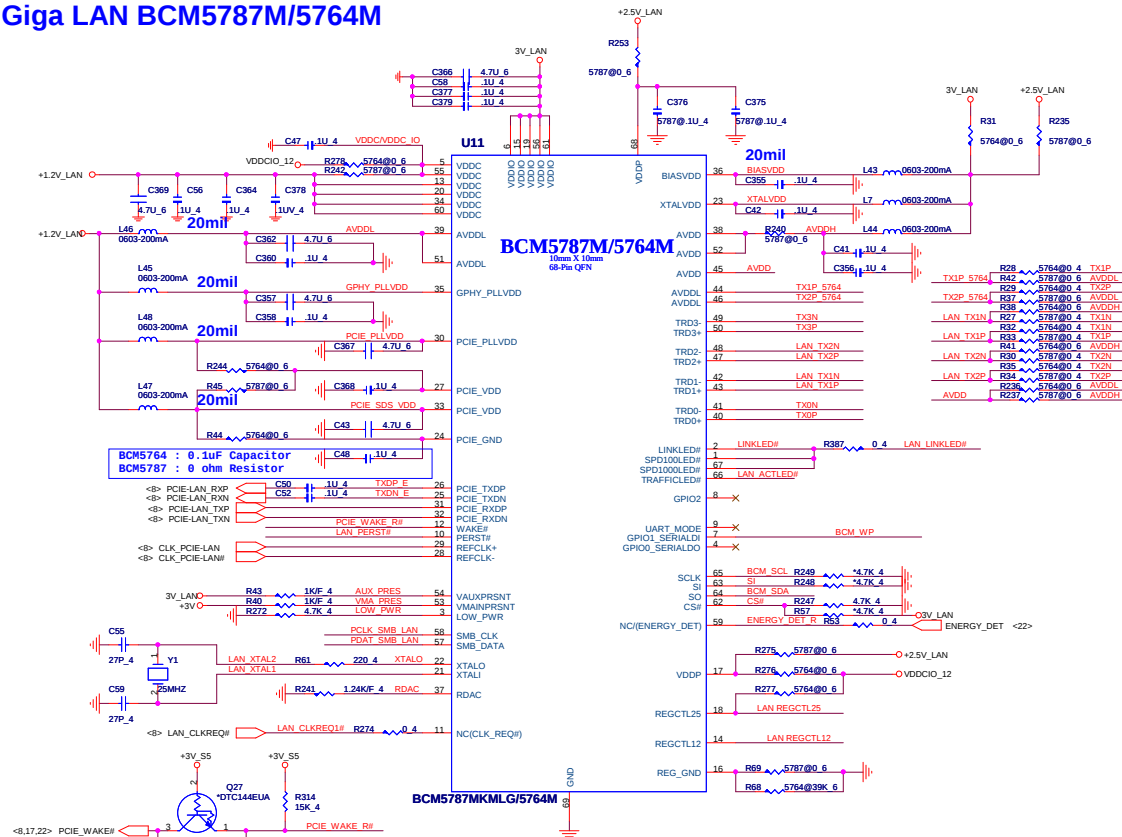
<10> INT_CRT_R	INT_CRT_R
<10> INT_CRT_G	INT_CRT_G
<10> INT_CRT_B	INT_CRT_B
<10> HSYNC	HSYNC
<10> VSYNC	VSYNC
<10> CRTCLK	CRTCLK
<10> CRTDAT	CRTDAT



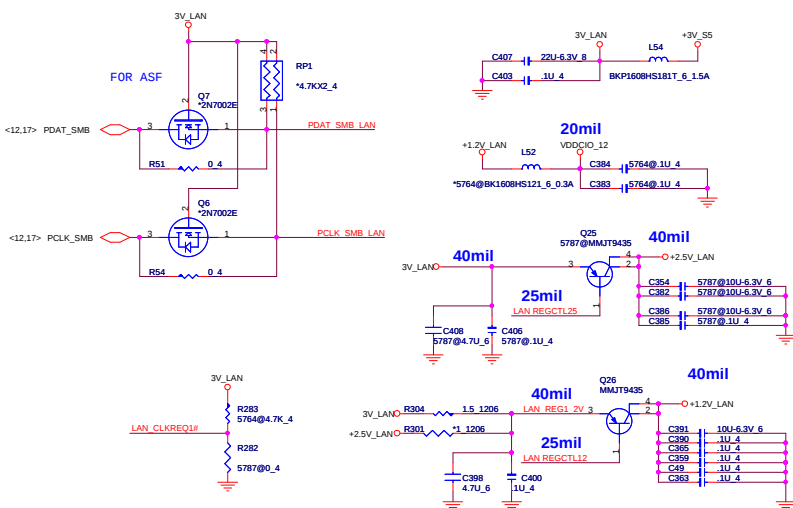
TV Out (SVHS) MiniDIN 7-pin

Delete TVOUT MiniDIN

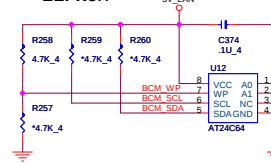
Giga LAN BCM5787M/5764M



LAN POWER



EEPROM



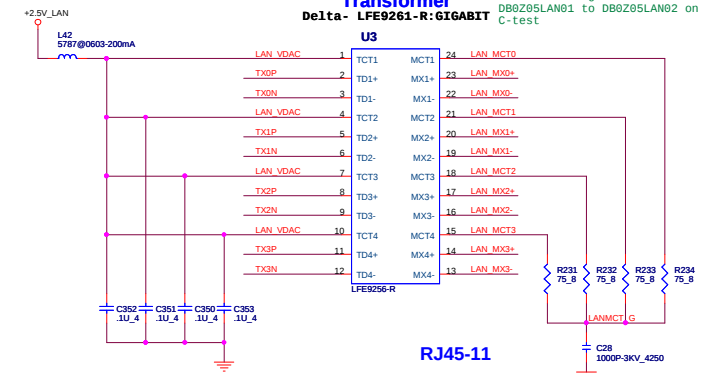
EEPROM Strapping

	S0	SI	CS#	SCLK
24c64	1	1	0	1

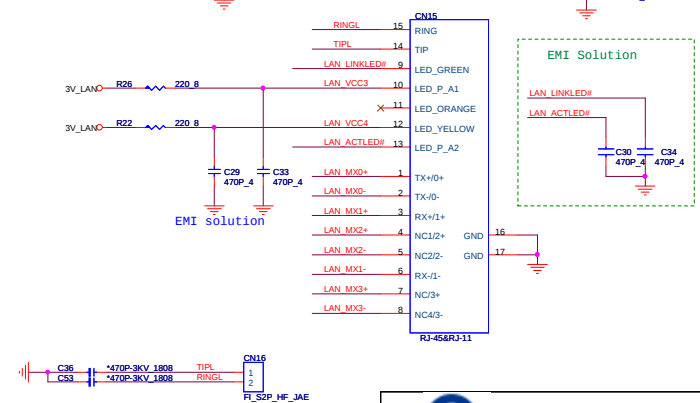
Delete LAN within DOCK Selector

Transformer
Delta- LFE9261-R:GIGABIT

2/20/08' Change PN form
DB0Z05LAN01 to DB0Z05LAN02 on
C-test



RJ45-11

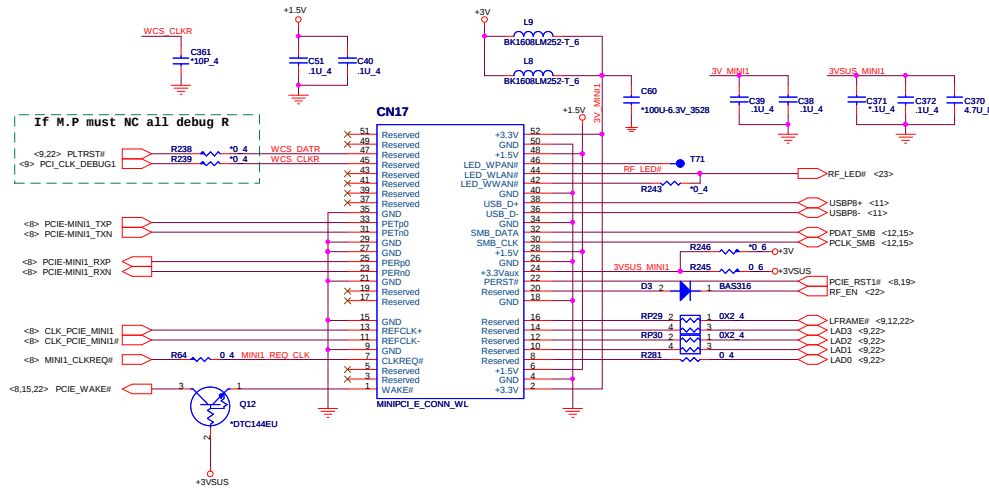


Quanta Computer Inc.
PROJECT : Z05

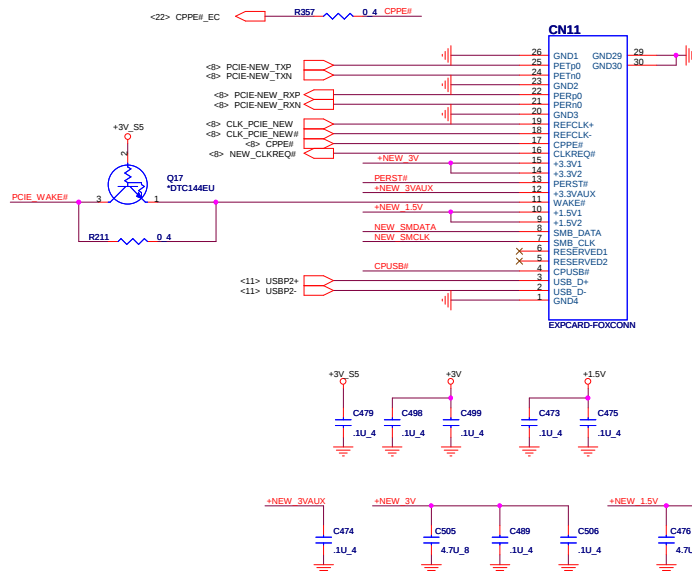
Size	Document Number	Rev
	GigaLAN BCM5787/RJ45 & RJ11	1A
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MINI-Card

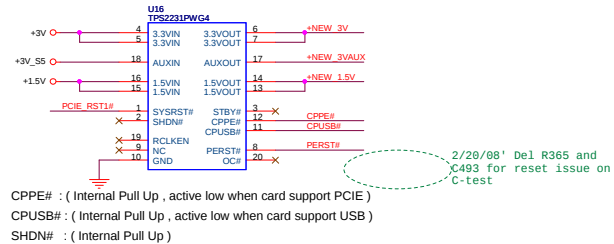
MINI-Card Port-1



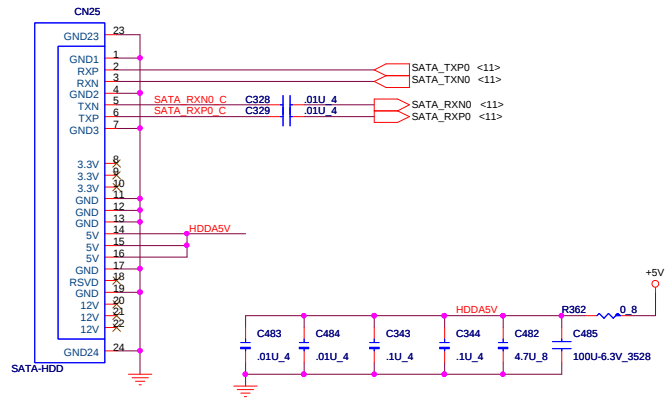
New card



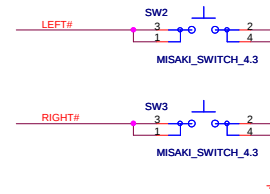
NEW CARD'S POWER SWITCH



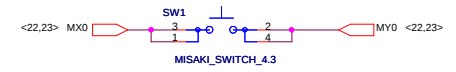
SATA HDD



TP SWITCH

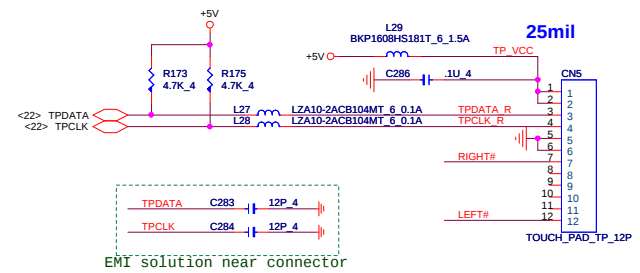


E-KEY

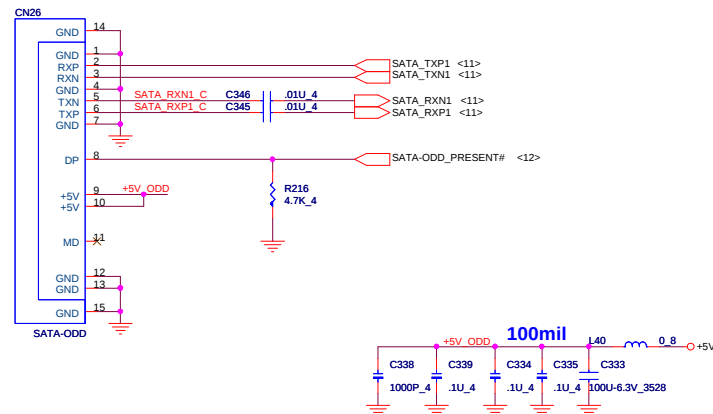


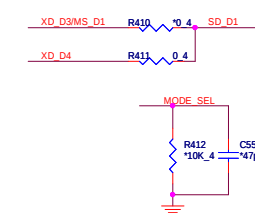
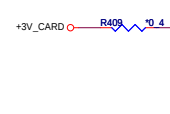
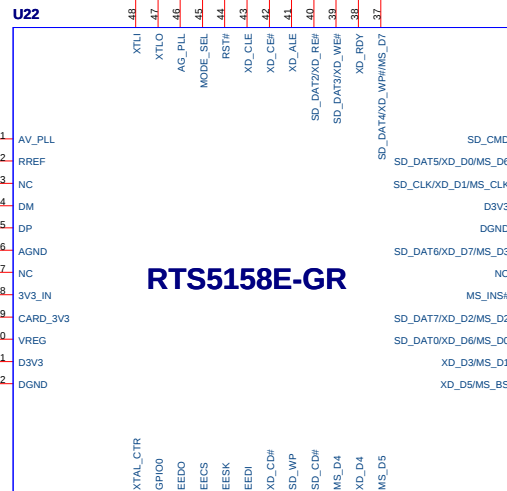
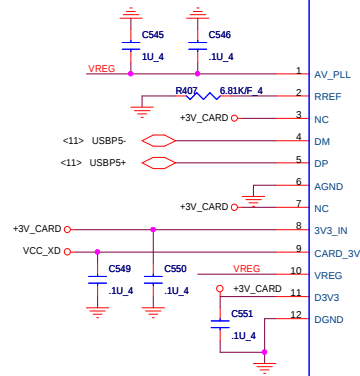
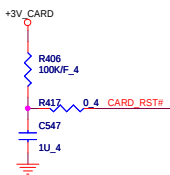
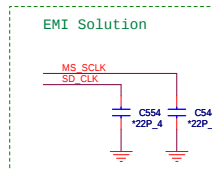
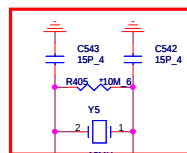
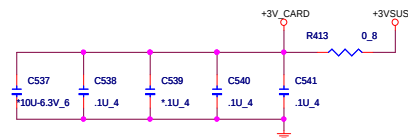
MX0 MY0:E-Key

TP CONN



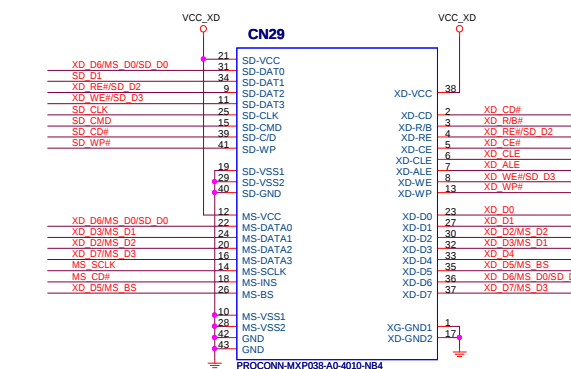
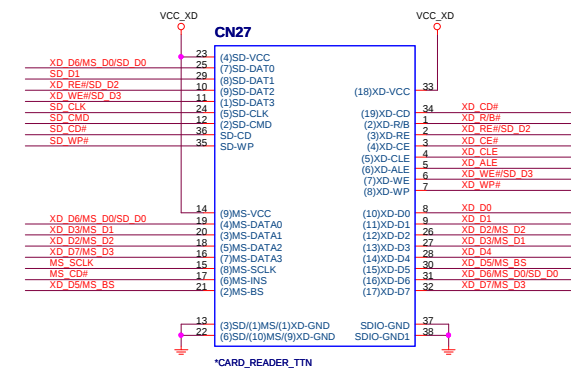
ODD (SATA)



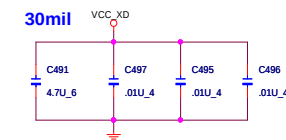


R412/C553 = 10K/47pF => R410 Reside
R412/C553 = NC / NC => R411 Reside

7 IN 1 CARD READER



CARDREADER POWER



$V_0 = 1.2 * (R_{371} + R_{372}) / R_{371} = 4.8V$

AGC Attack (4 pin)	Attack time
LOW	1 ms
Hi	2 ms

AGC ON/OFF selection

AGC ON/OFF (6 pin)	AGC ON/OFF
LOW	ON
Hi	OFF

AGC Recovery1 (10 pin)	AGC Recovery2 (11 pin)	Recovery Time
LOW	LOW	1.0 s
LOW	Hi	2.0 s
Hi	LOW	4.0 s
Hi	Hi	8.0 s

AGC Lv1 (2 pin)	AGC Lv2 (3 pin)	AGC ON Level	Output Po (RL=8 ohm)
LOW	LOW	9.8 dBV	1.2 W
LOW	Hi	9.0 dBV	1.0 W
Hi	LOW	8.1 dBV	0.8 W
Hi	Hi	6.0 dBV	0.5 W

[illegible]

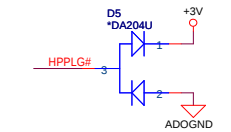
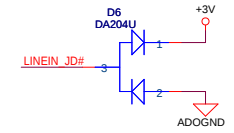
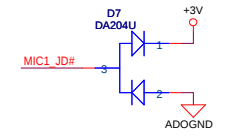
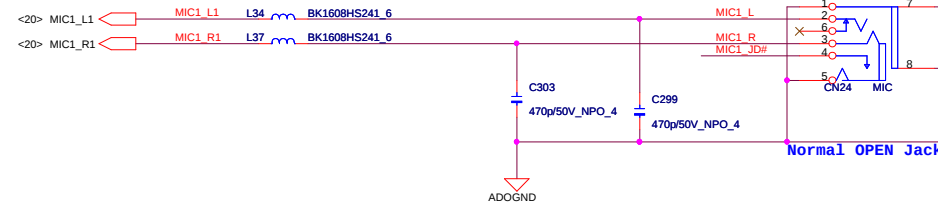
SP STBY1 (33 pin)	SP STBY2 (34 pin)	SP STBY ON/OFF
LOW	LOW	ON
LOW	Hi	OFF
Hi	LOW	OFF
Hi	Hi	OFF

HP STBY1 (35 pin)	HP STBY2 (36 pin)	HP STBY ON/OFF
LOW	LOW	ON
LOW	Hi	OFF
Hi	LOW	OFF
Hi	Hi	OFF

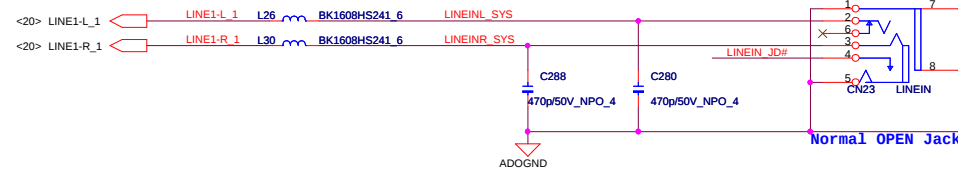
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PDF created with FinePrint pdfFactory Pro trial version <http://www.fineprint.com>

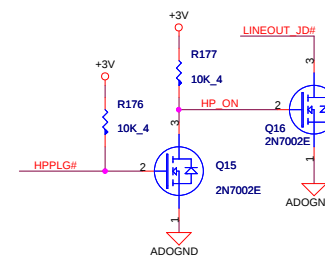
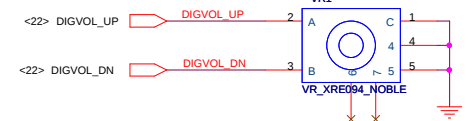
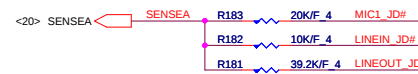
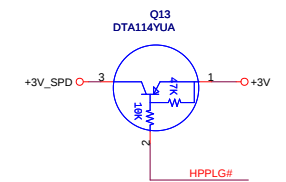
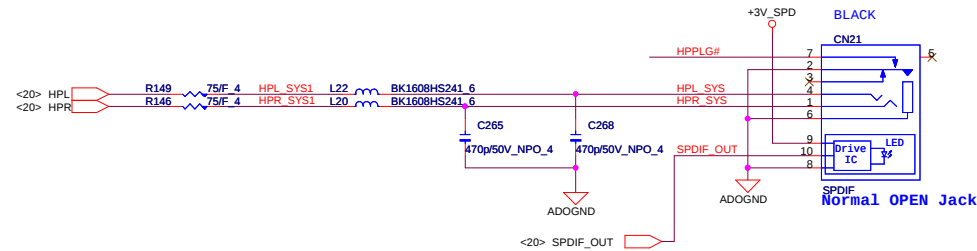
MIC



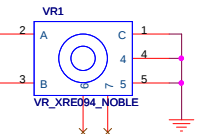
LINE IN



HeadPhone OUT/SPDIF



VR

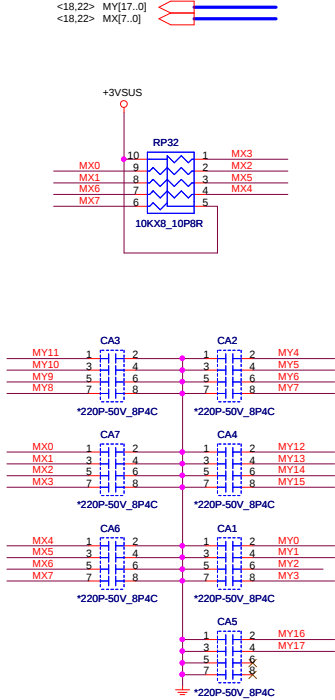


 Quanta Computer Inc. PROJECT : Z05			
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Audio Jack			
Date:	Monday, February 25, 2008	Sheet	21 of 34

INT K/B

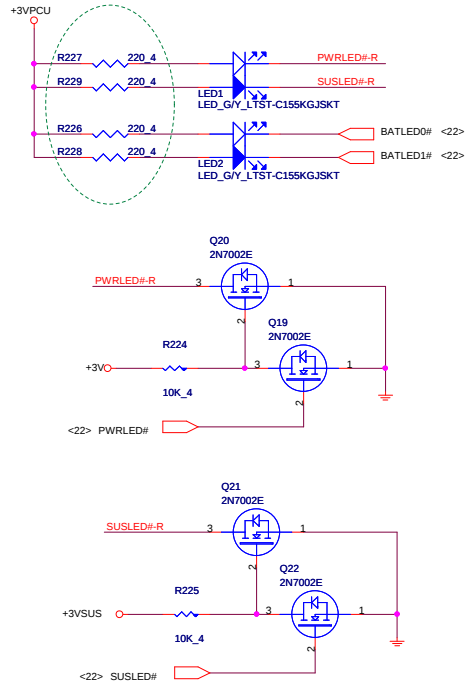
CN4	
1	MY0
2	MY1
3	MY2
4	MY3
5	MY4
6	MY5
7	MY6
8	MY7
9	MY8
10	MY9
11	MY10
12	MY11
13	MY12
14	MY13
15	MY14
16	MY15
17	MY16
18	MX7
19	MX6
20	MX5
21	MX4
22	MX3
23	MX2
24	MX1
25	MX0
26	

FFC_26P_KB

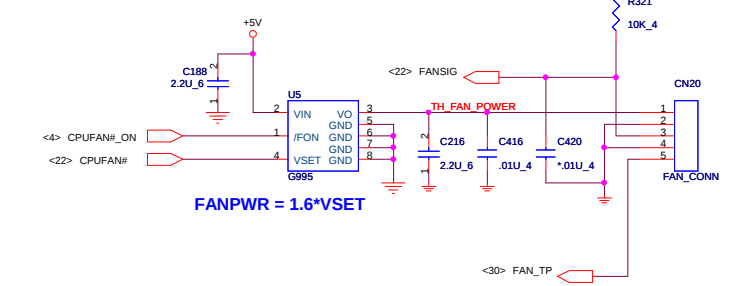


LED

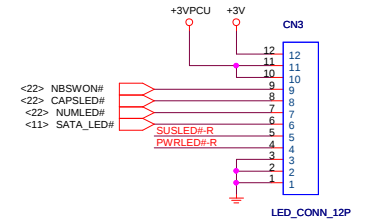
2/21/08' Change from 330ohm to 220ohm on C-test



CPU FAN



LED BOARD CONN.



Debug

Delete Debug Port(PCI & IDE)

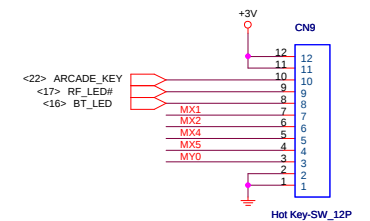
Fingerprint BOARD CONN.

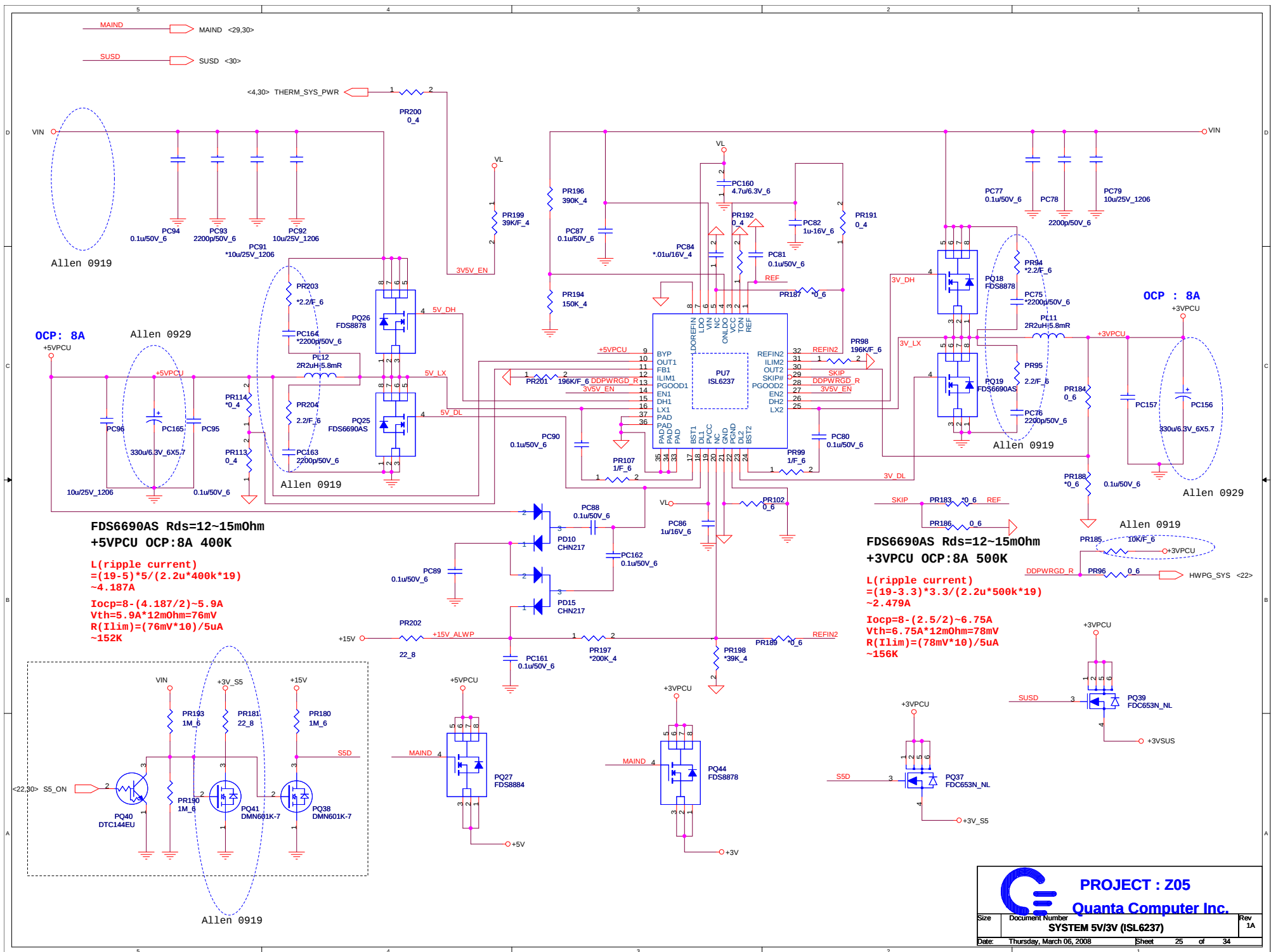


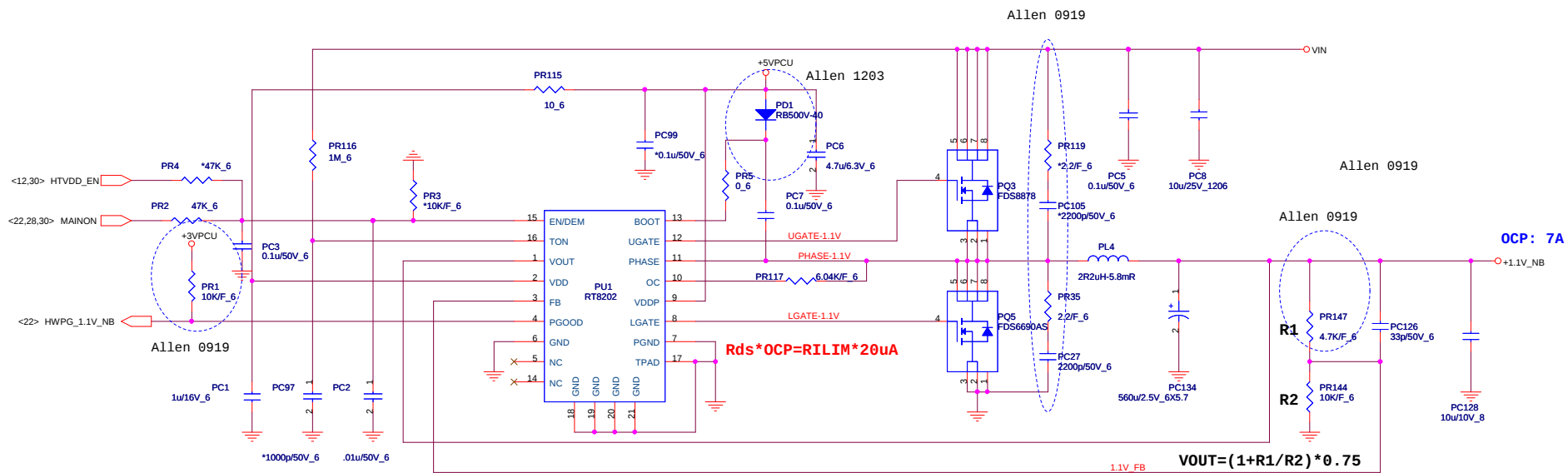
Button BOARD CONN.

BUTTON MATRIX

	MY0
MX1	MAIL
MX2	WWW
MX4	WIRELESS
MX5	BLUETOOTH







$$TON = 3.85p * RTON * Vout / (Vin - 0.5)$$

$$Frequency = Vout / (Vin * TON)$$

$$TON = 3.85p * 1M * 1 / (Vin - 0.5)$$

$$Frequency = 1 / (0.0036767) = 272K$$

$$FDS6690AS \text{ } R_{ds} = 12 \sim 15m\Omega$$

$$OCP = 7 - 0.8A$$

$$L(\text{ripple current}) = (19 - 1) * 1 / (2.2u * 272k * 19) \sim 1.58A$$

$$12m * 6 = RILIM * 20uA$$

$$RILIM = 3.6K (2.5 \sim 8K)$$

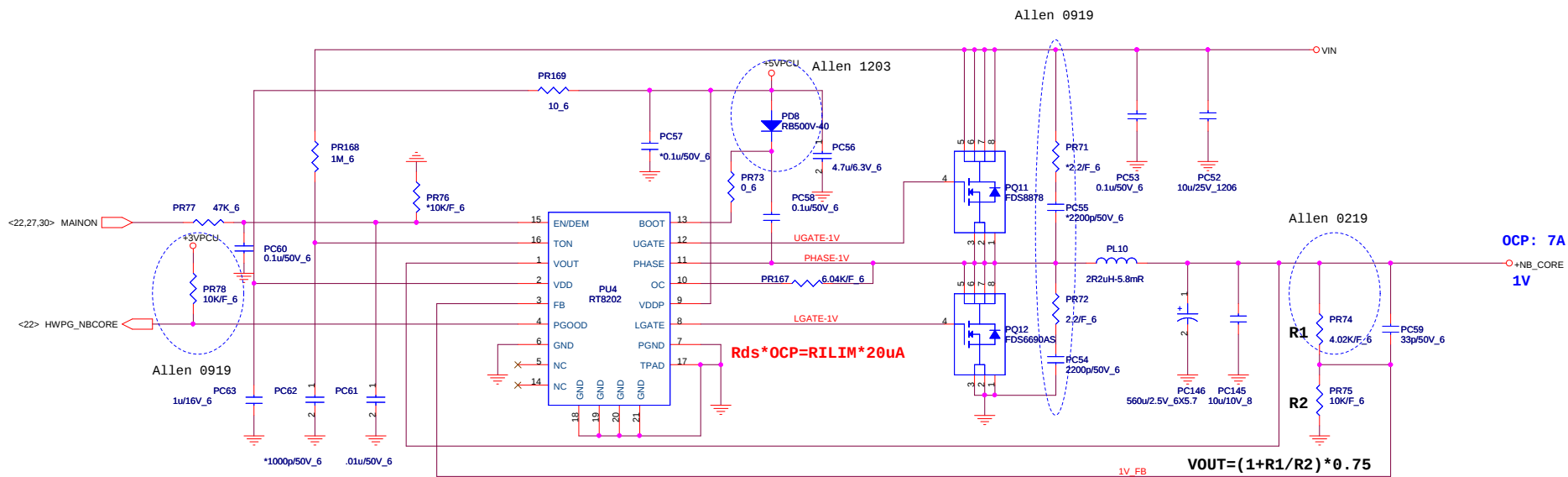
$$R_{ds} * OCP = RILIM * 20uA$$

$$VOUT = (1 + R1/R2) * 0.75$$



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$$TON = 3.85p * RTON * Vout / (Vin - 0.5)$$

$$Frequency = Vout / (Vin * TON)$$

$$TON = 3.85p * 1M * 1 / (Vin - 0.5)$$

$$Frequency = 1 / (0.0036767) = 272K$$

FDS6690AS $R_{ds} = 12 \sim 15m\Omega$

OCP = 7 - 0.8A

$$L(ripple\ current) = (19 - 1) * 1 / (2.2u * 272k * 19) \sim 1.58A$$

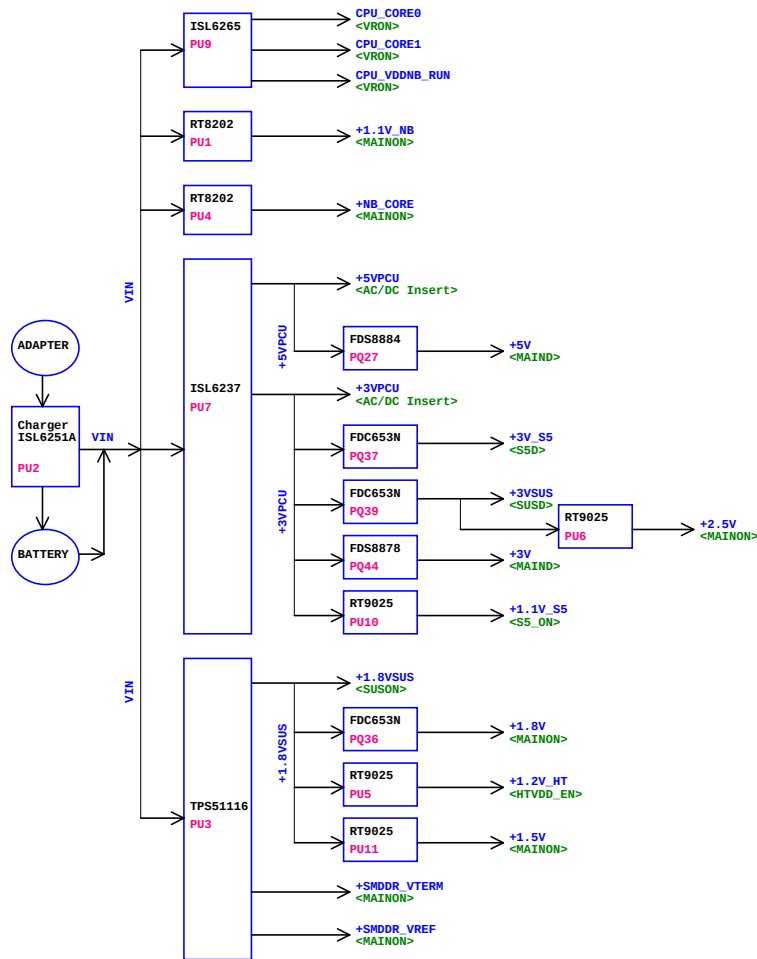
$$12m * 6 = RILIM * 20\mu A$$

$$RILIM = 3.6K (2.5 \sim 8K)$$



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1. +1.1V_S5MCP77M Power(+1.1V_DUAL)
2. +5VPCUPower IC VCC, USB PORT POWER(S3 control)
3. +5VAudio, FAN, Touch pad, SATA HDD, ODD, CRT
4. +3V_S5MCP77M, New Card, LAN Power
5. +3VPCUKBC WPCE755C, SPI ROM, LED, LID Switch, Fingerprint Module
6. +3VSUSBluetooth, Mini Card, MDC
7. +3VCPU Thermal Sense, MCP77M, System Memory, LCD Panel, PC Camera, Mini card, New Card, Audio, Codec, Card Reader, KBC WPCE775C, LED
8. +2.5VPCU VDDA
9. +3V_LANLAN Power(BCM5764M)
10. +1.2V_LANLAN Power(BCM5764M)
11. +2.5V_LANLAN Power(BCM5787M)
12. +1.5VMini Card, New Card
13. +1.8VSUSCPU VDD I/O, System Memory
14. SMDDR_VTEMCPU Memory Interface , SYSTEM DDR DIMM Memory Termination
15. +1.8VMCP77M LCD Interface
16. +1.1V_NBMCP77M (HT Interface, PCI-E Interface, I/O Power, SATA Interface)
17. +NB_COREMCP77M Core Power
18. +1.2V_HTCPU HT Power
19. CPU_CORE0 CPU Power
20. CPU_CORE1 CPU Power
21. CPU_VDDNB_RUNCPU NB Power
- 22.

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