

1	COVER
2	BLOCK DIAGRAM
3	RESET MAP
4	CLOCK DIAGRAM
5	GPIO TABLE
6	PCI DEVICE TABLE / VID TABLE
7	AM2 940 K8CPU PART 1
8	AM2 940 K8CPU PART 2
9	AM2 940 K8CPU PART 3
10	AM2 940 K8CPU PART 4
11	AM2 940 K8CPU PART 5
12	CPU DECOUPLING
13	DDR ADD/CTL TERMINATION
14	DDR DIMM 0
15	DDR DIMM 1
16	DDR DIMM 2
17	DDR DIMM 3
18	MCP68 HT/CLKS
19	MCP68 PEX X16
20	MCP68 PEX X1/RGMII/HDMI/DAC
21	MCP68 PCI
22	MCP68 SATA / IDE
23	MCP68 AUDIO / USB / MISC
24	MCP68 PWR / GND
25	MCP68 DECOUPLING/SPI
26	PCI EXPRESS X16 CONNECTOR
27	PCI EXPRESS X1 CONNECTOR
28	PCI CONNECTOR 1-2
29	PCI TERMINATION/DECOUPLING
30	SIO-W83627DHG
31	Ti43AB22A-1394
32	GBIT LAN PHY 88E1116
33	AUDIO ALC888
34	PWM RT8801 & RT9605
35	W83303AG
36	C51/MCP51 CORE&DDRII
37	PWR CON/F-PNL/VBAT/SPKR
38	PWR SEQU & VID BUFFER
39	OVP/FAN/CPU CHANGE
40	ACPI VREG
41	RGB & HDMI PORT
42	USB+RJ45/1394 CONN
43	DAC & DVI
44	K/M+FLASH+FDC+FP-USB
45	MEM VDD/MEM VTT/LAN
46	IDE 1/2
47	MCP68 CORE-AUX-HT-VREGS
48	MOUNTING HOLES

abit

AN52

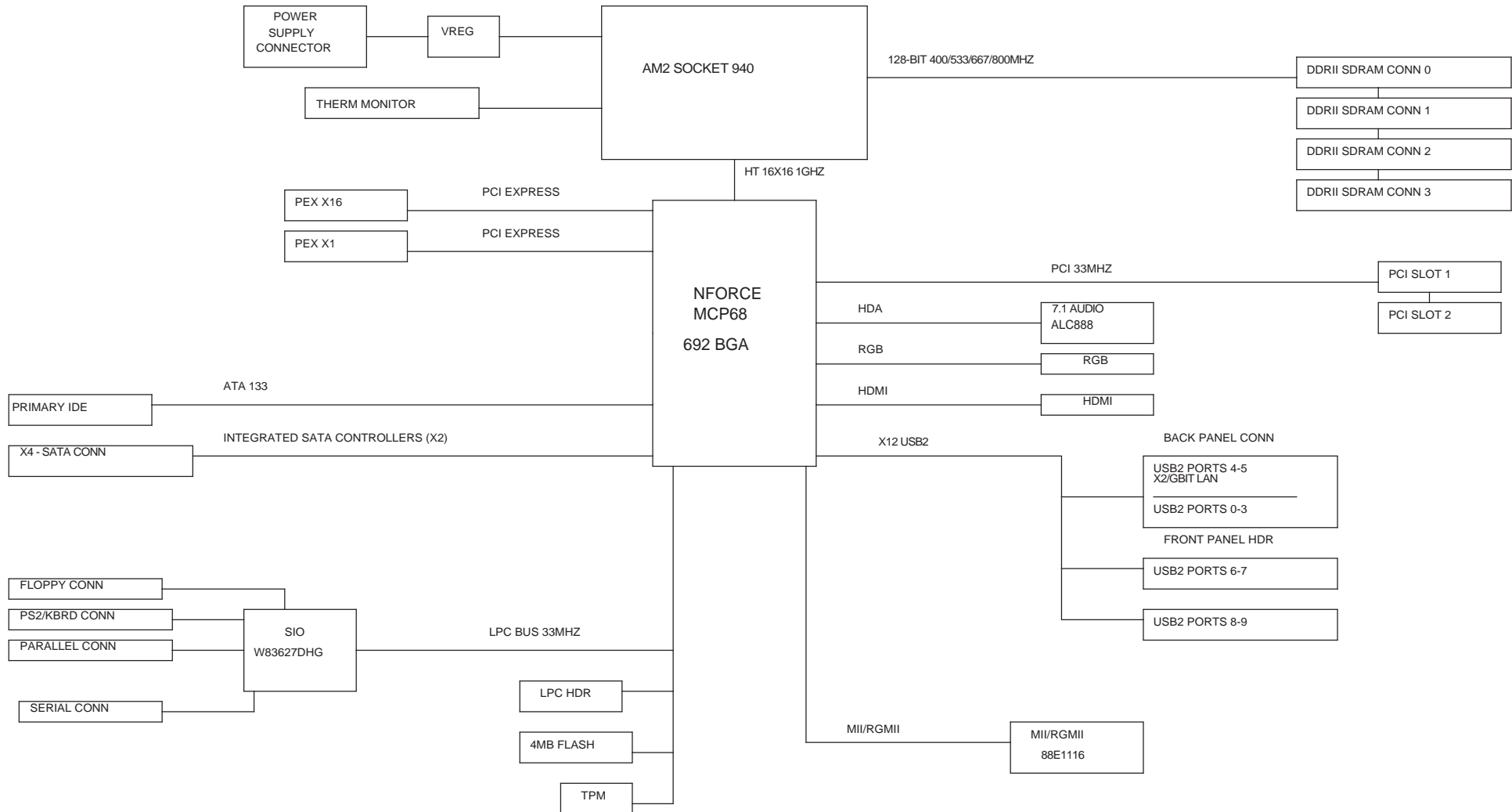
Project Code:M701

MCP65 CRB ATX


<http://laptop-motherboard-schematic.blogspot.com/>

abit UNIVERSAL ABIT			
COVER			
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BLOCK DIAGRAM



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BLOCK DIAGRAM		
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AM2 SOCKET 940

CPU PWRGD
CPU RST*

PEX0 X16
PEX1 X1

PE_RESET*
HT MCP RST*
HT MCP PWRGD
MCP68/65
PWR BUTTON
SLP S3*
PWRGD
PWRGD_SB
MIIRESET*
HDA_RESET*

HT_MCP_RST*
HT_MCP_PWRGD

RESET MAP

PWR SWITCH



SIO

PWR CONN

PS ON
PWR GOOD

PSIN* PSOUT*
PSON* SUSB*

PWRBTN*
SLP_S3*
POWER_GOOD

PWR BUTTON

SLP S3*

PWRGD

PWRGD_SB

MIIRESET*

LAN_PHY
RESET*

PCI RST0*
PCI RST1*
PCI RST2*
PCI RST3*
LPC_RST*

HDA_RESET*

PCIRST_SLOT1*
PCIRST_SLOT2*

PCIRST_IDE*
LPCRST_FLASH*
LPCRST_SIO*

SIO

FLASH

PRI IDE

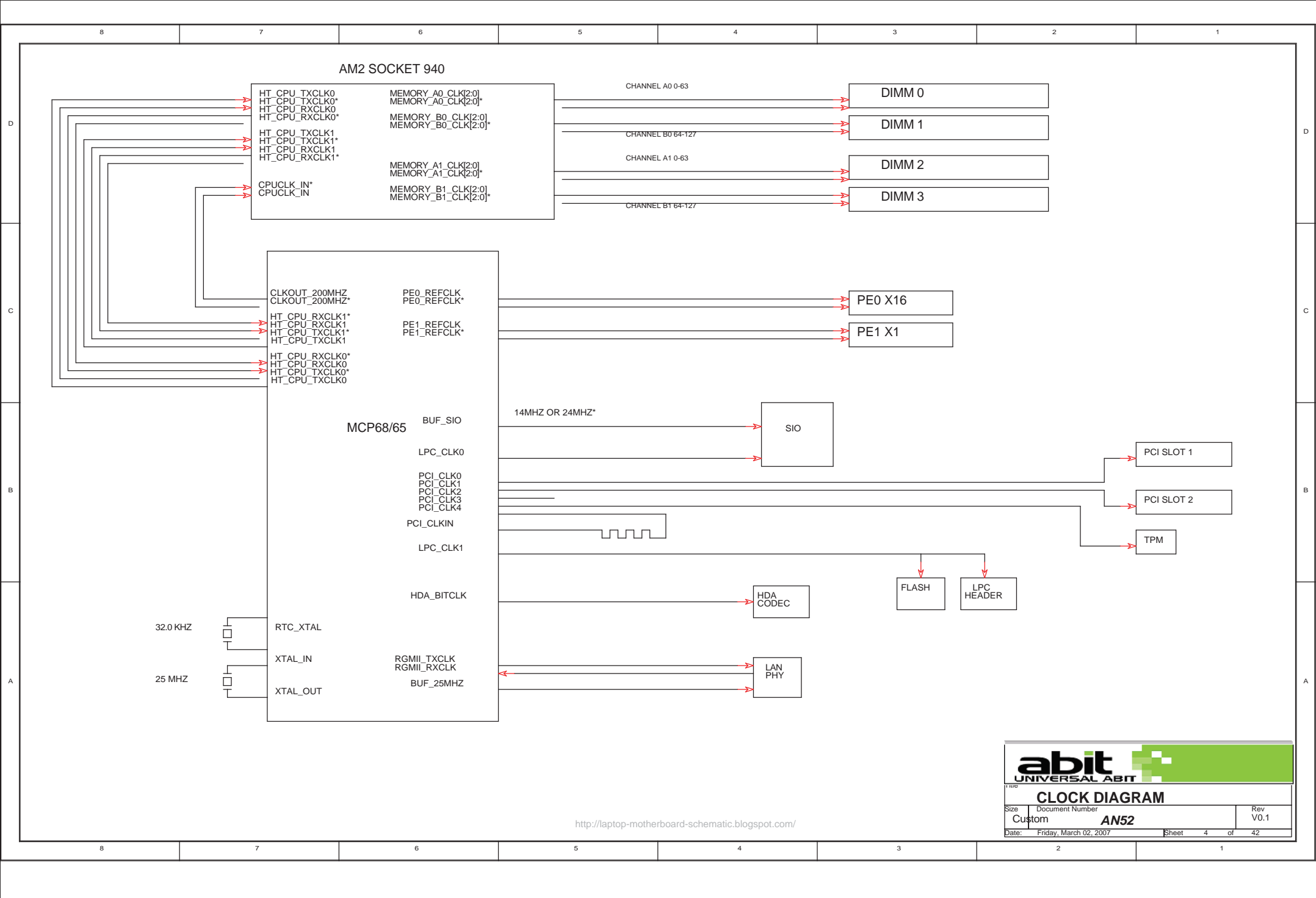
PCI SLOT 2

PCI SLOT 1



<http://laptop-motherboard-schematic.blogspot.com/>

RESET MAP

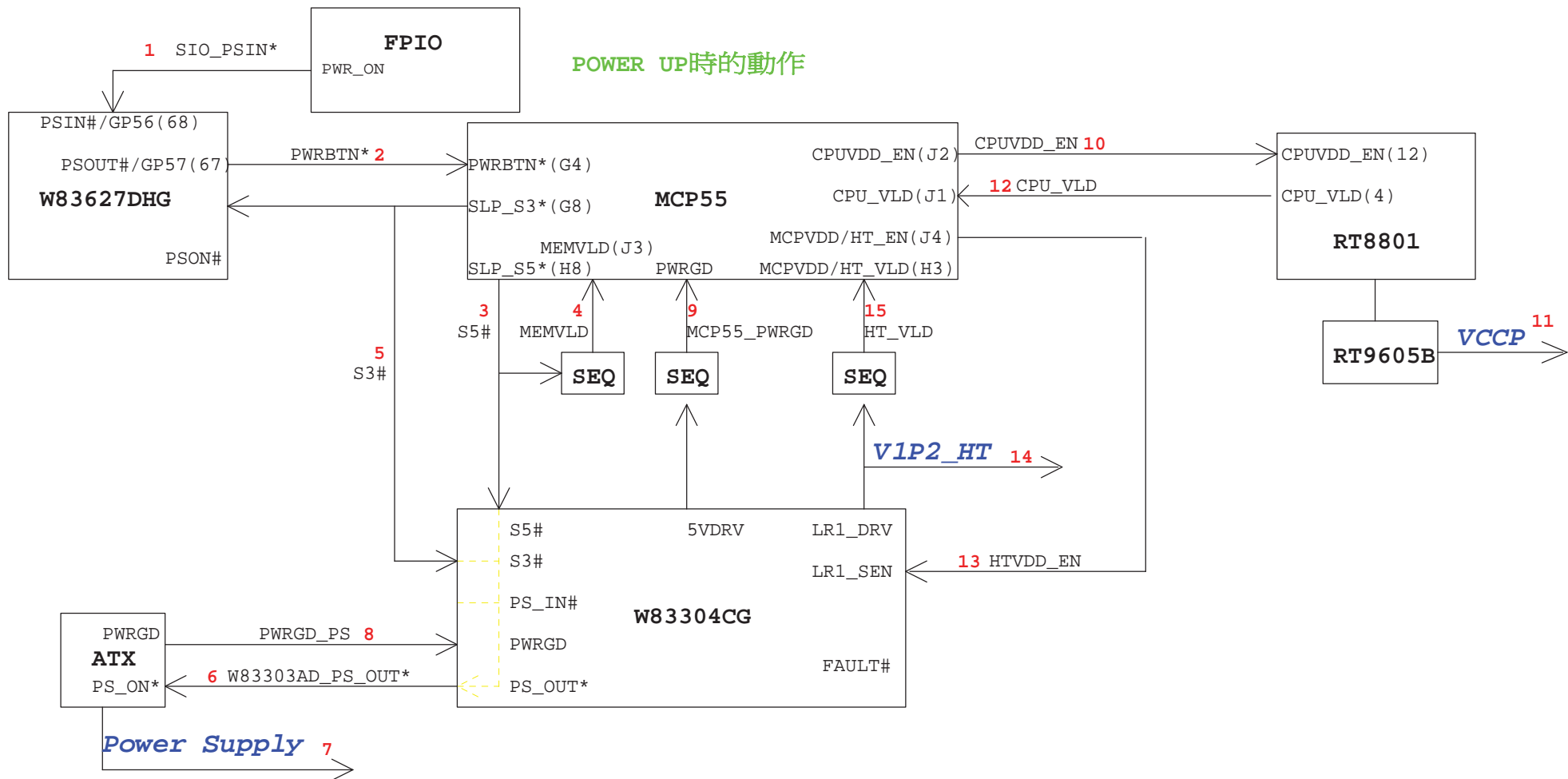
Size	Document Number	Rev
Custom	AN-M2	V0.1
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<http://laptop-motherboard-schematic.blogspot.com/>

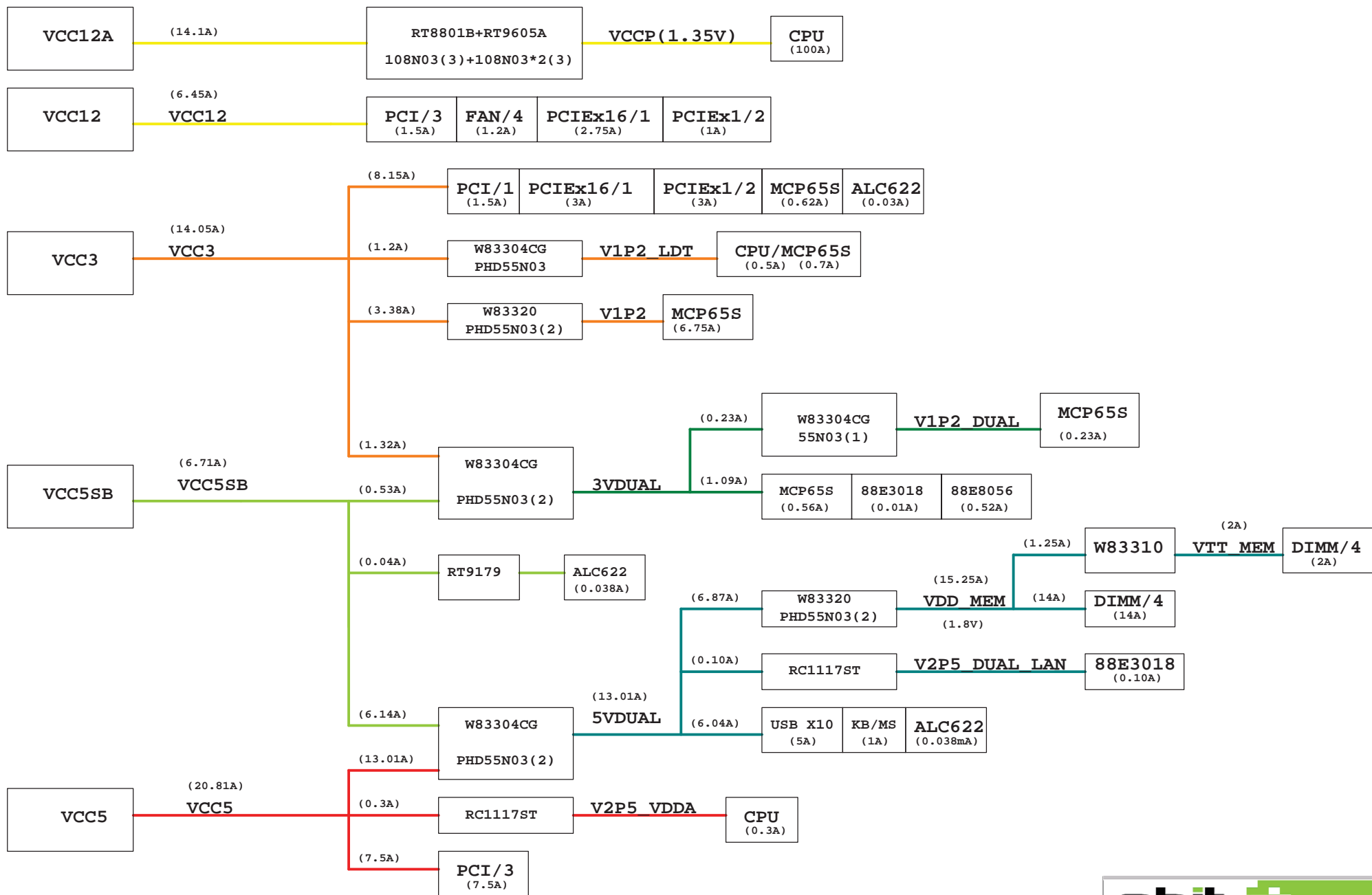


CLOCK DIAGRAM		
Size	Document Number	Rev
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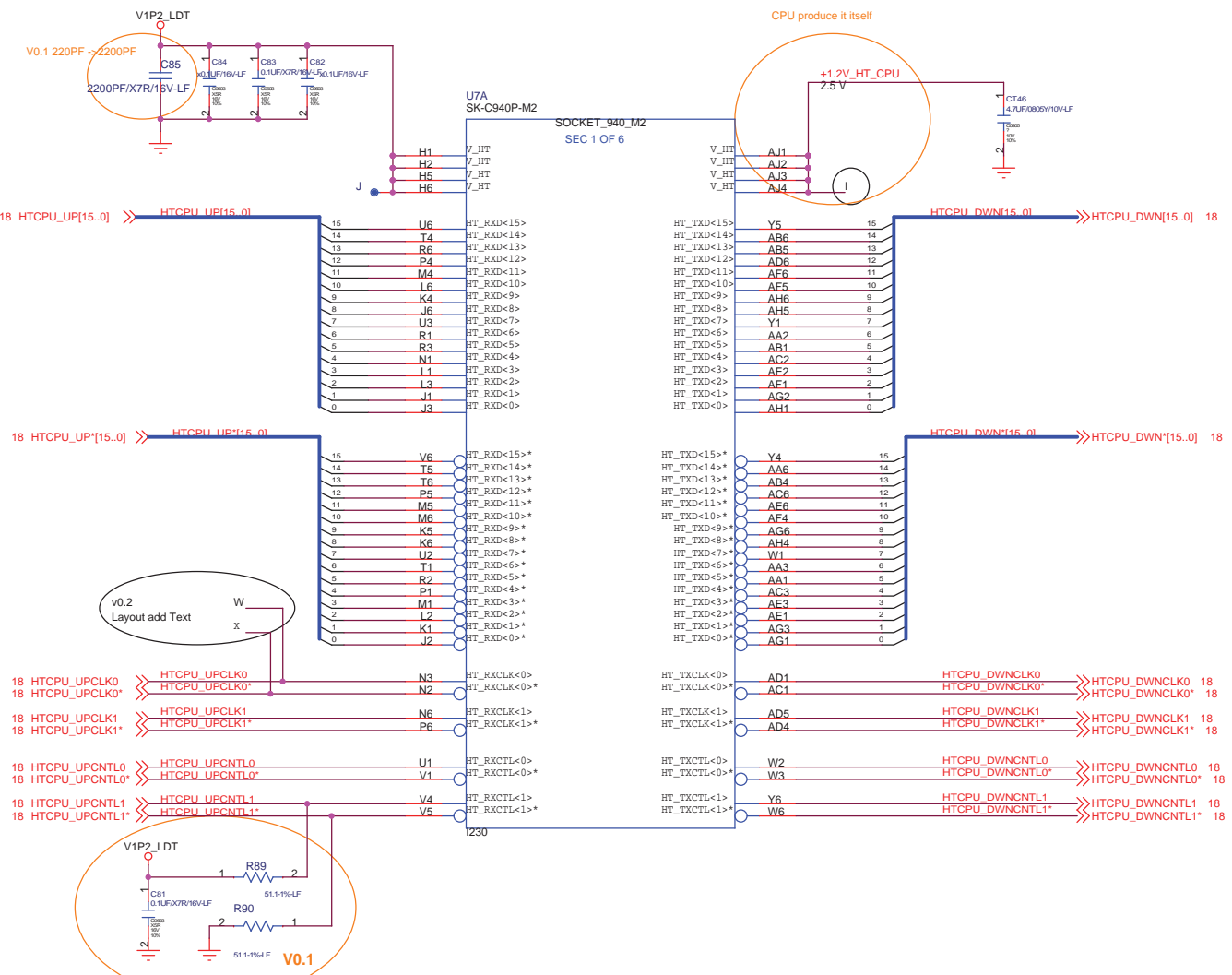


<http://laptop-motherboard-schematic.blogspot.com/>

abit UNIVERSAL ABIT		
POWER SEQ MAP		
Size	Document Number	Rev
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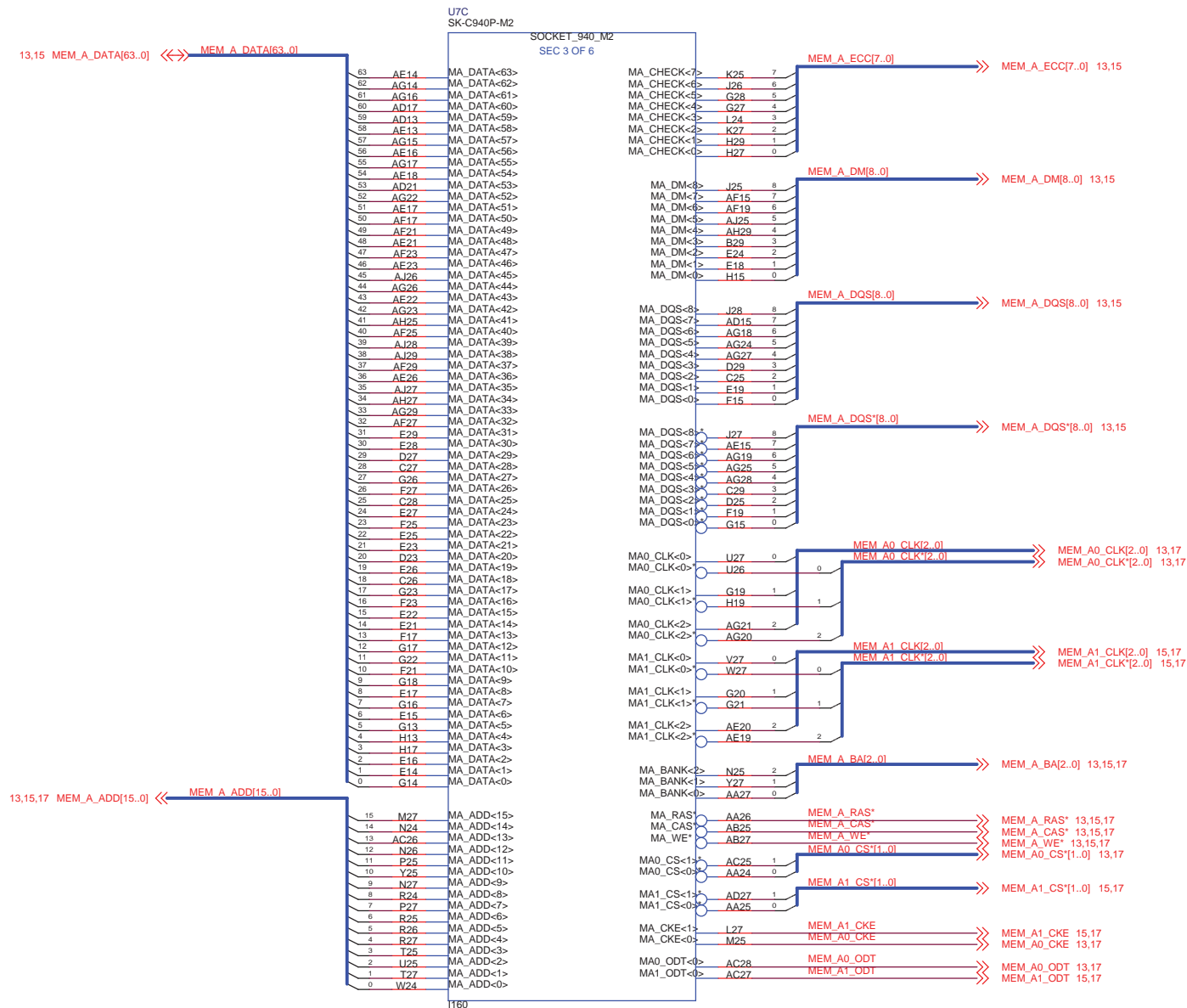
<http://laptop-motherboard-schematic.blogspot.com/>



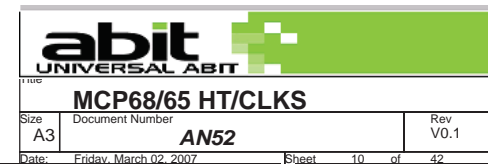
<http://laptop-motherboard-schematic.blogspot.com/>

1

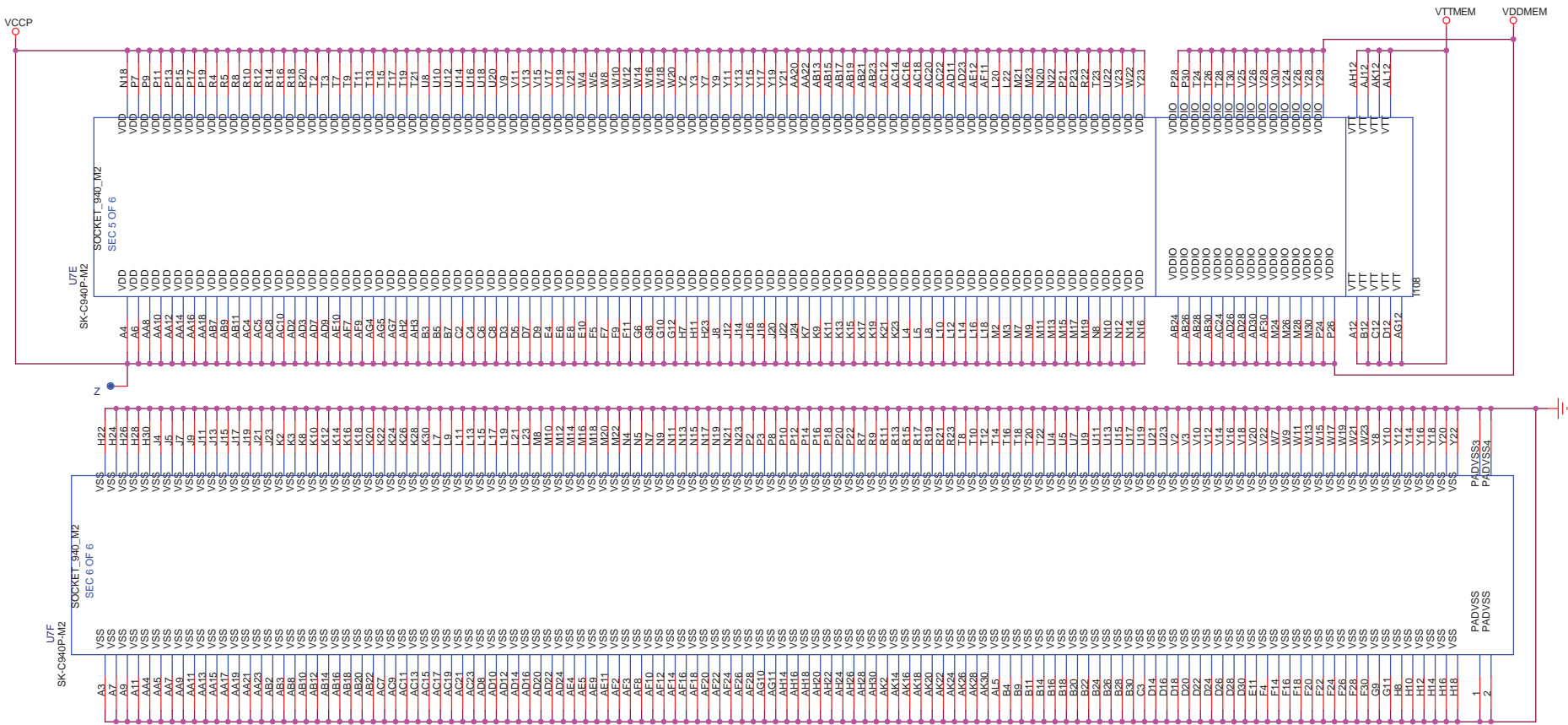


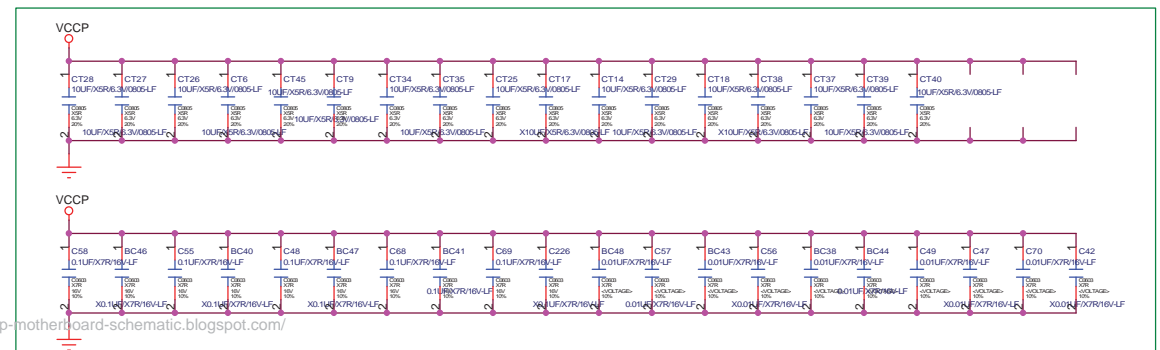
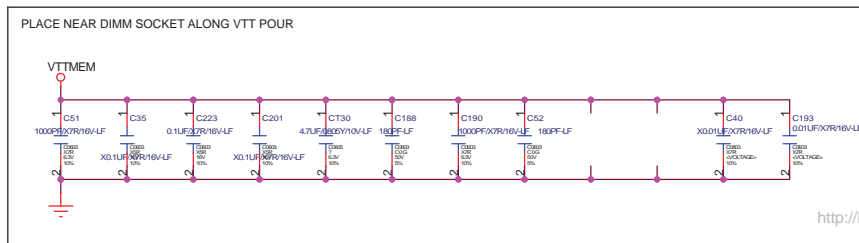
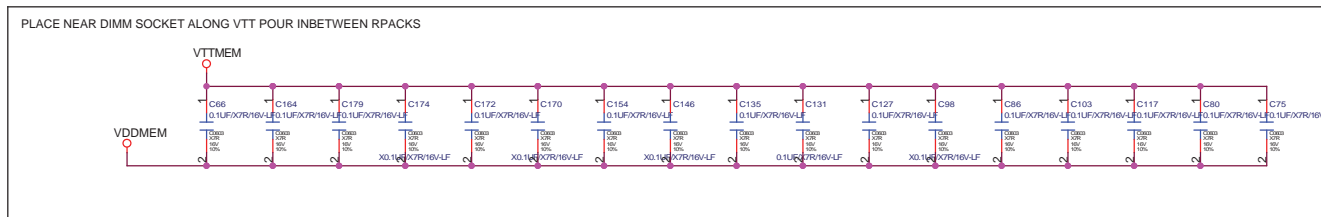
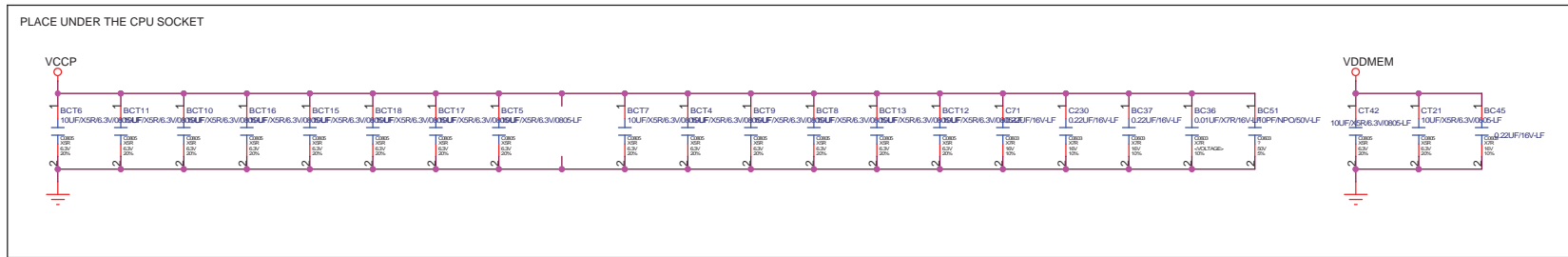
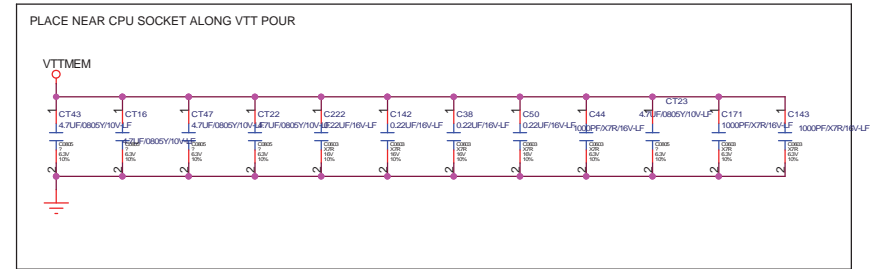
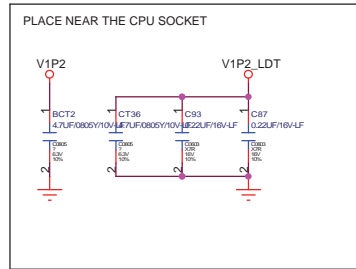
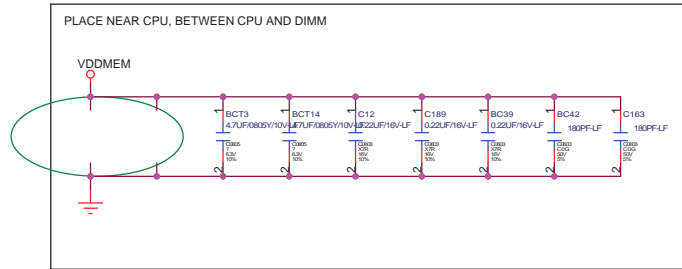


<http://laptop-motherboard-schematic.blogspot.com/>



<http://laptop-motherboard-schematic.blogspot.com/>



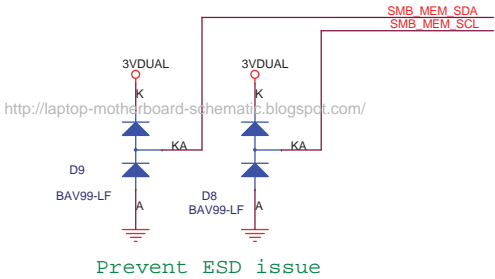
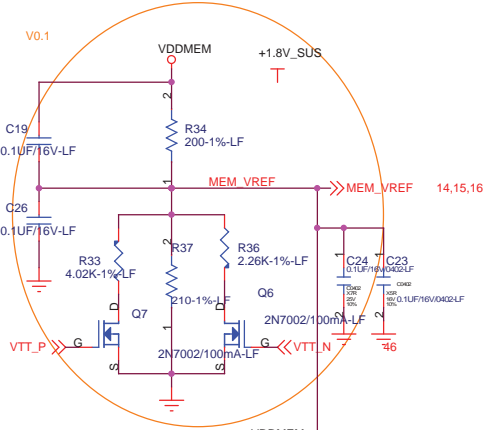
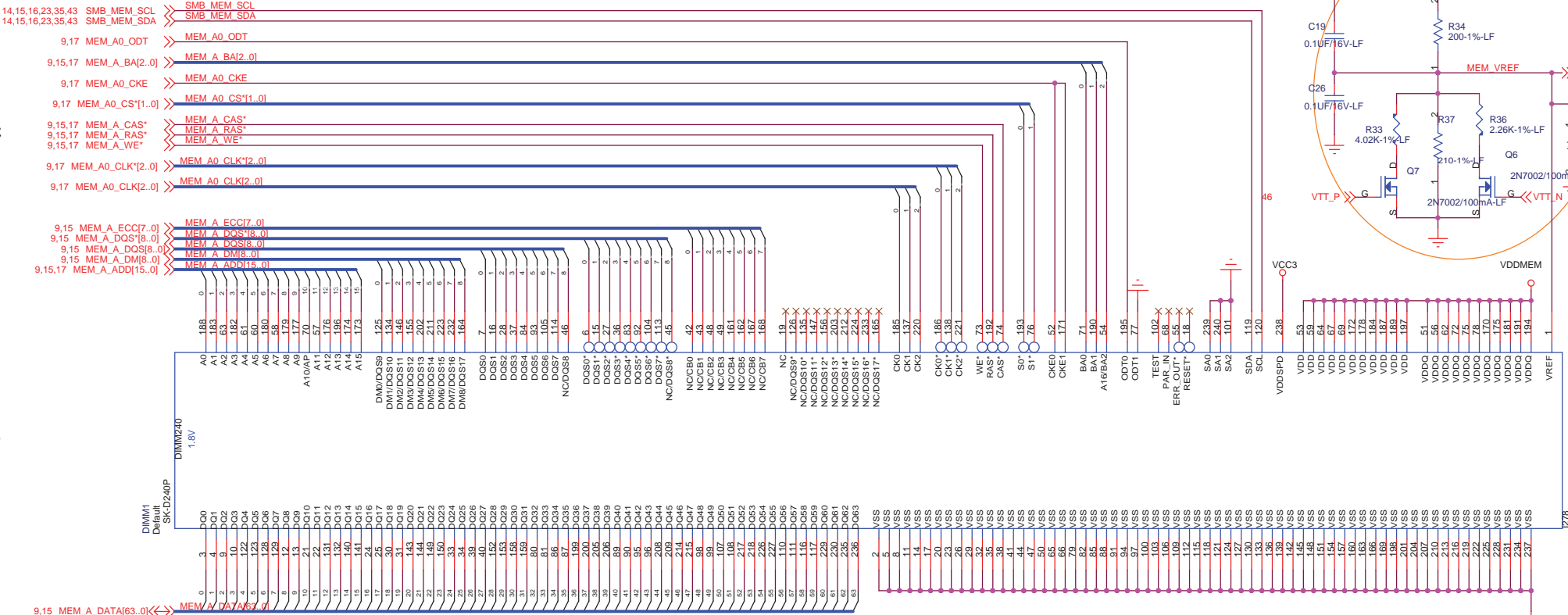




<http://laptop-motherboard-schematic.blogspot.com/>

VTT_P	VTT_N	VTT_VREF
0	0	(VDDR / 2)*102%_0.922
0	1	(VDDR / 2)*98%_0.882
1	0	(VDDR / 2)*100%_0.899 *
1	1	(VDDR / 2)*96%_0.856

DIMM 1

CLOSEST DIMM TO CPU
CHANNEL "A" LOWER 64 BITS



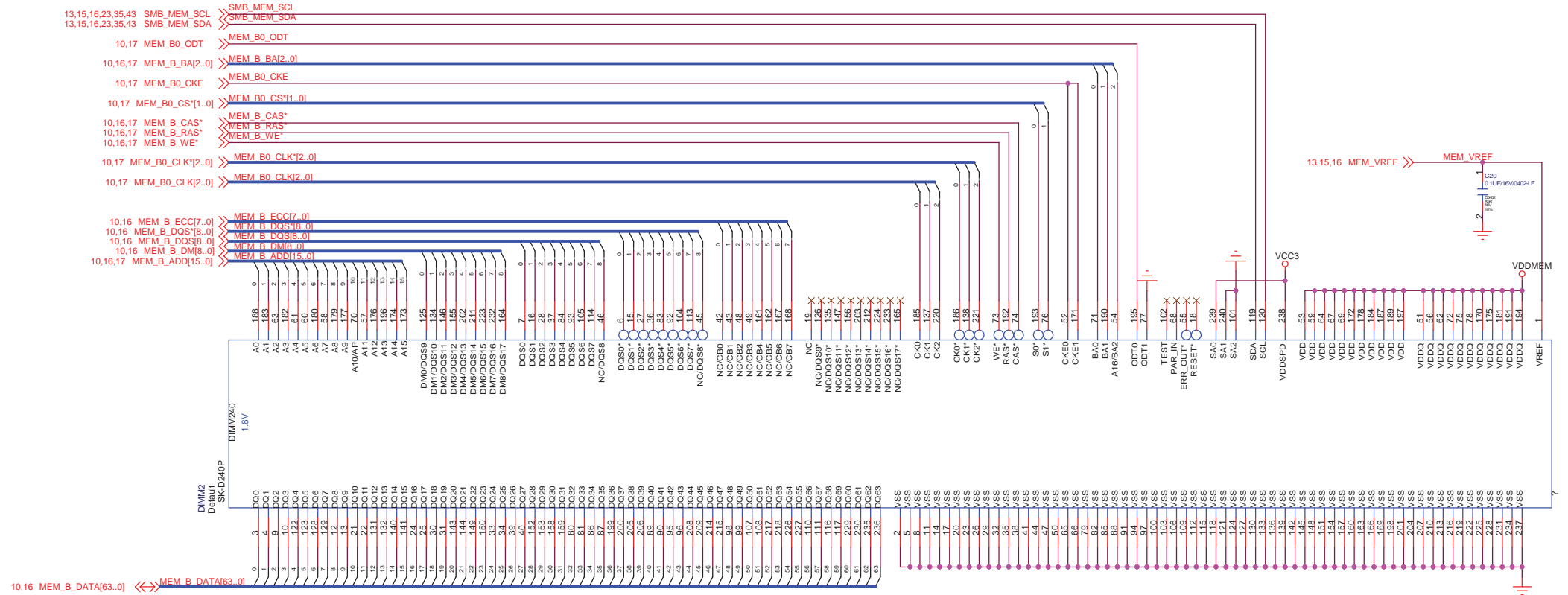


MCP68/65 HT/CLKS

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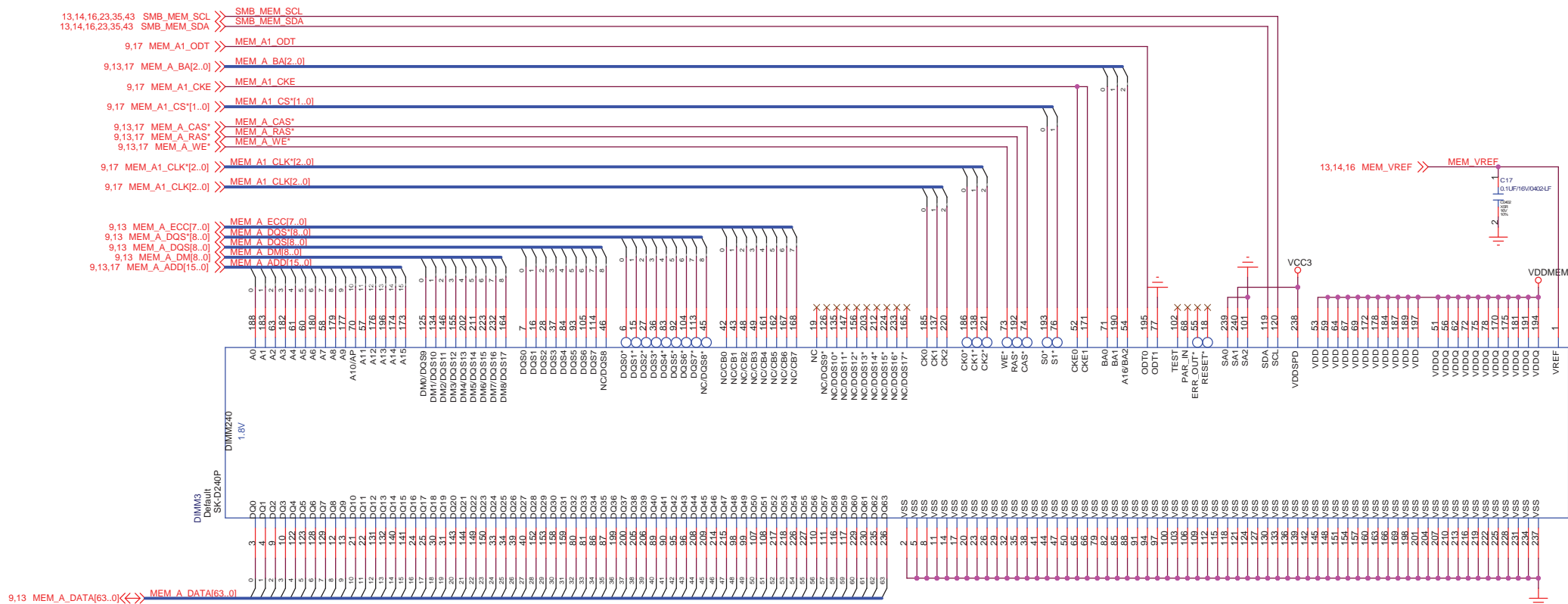
DIMM 2



<http://laptop-motherboard-schematic.blogspot.com/>

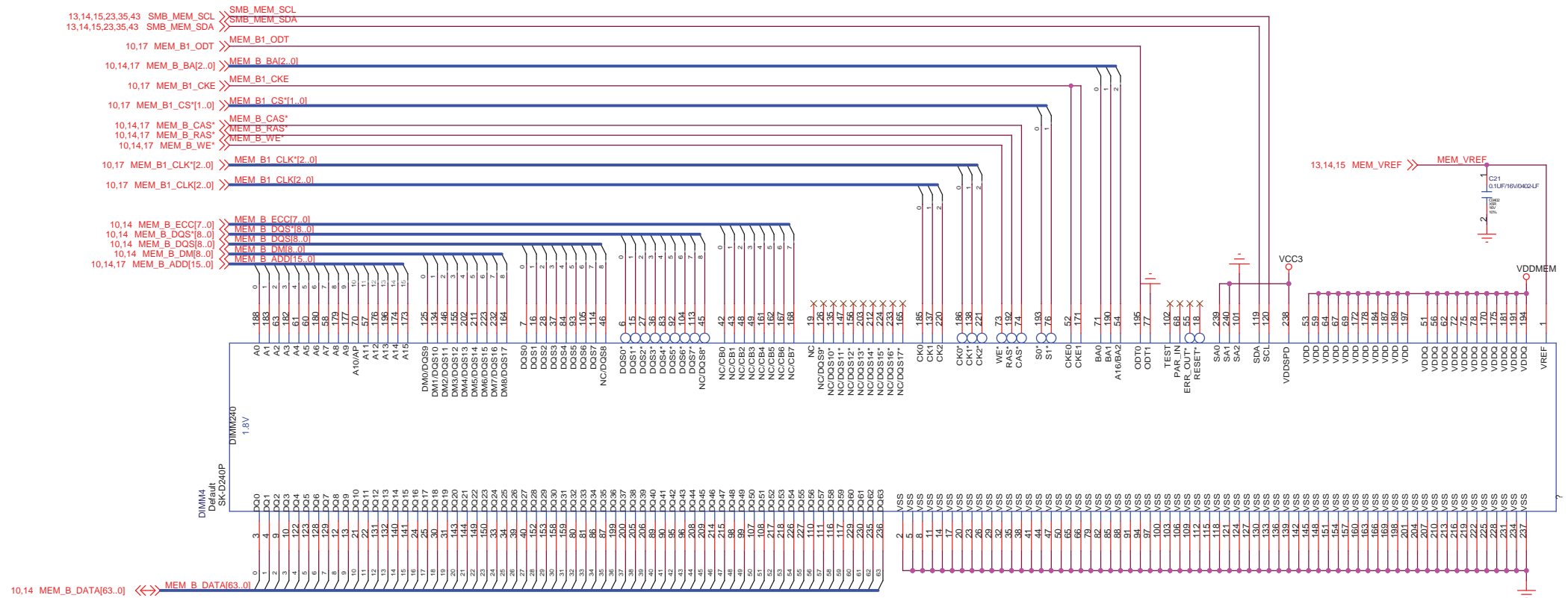
DIMM 3



CHANNEL "A" LOWER 64 BITS

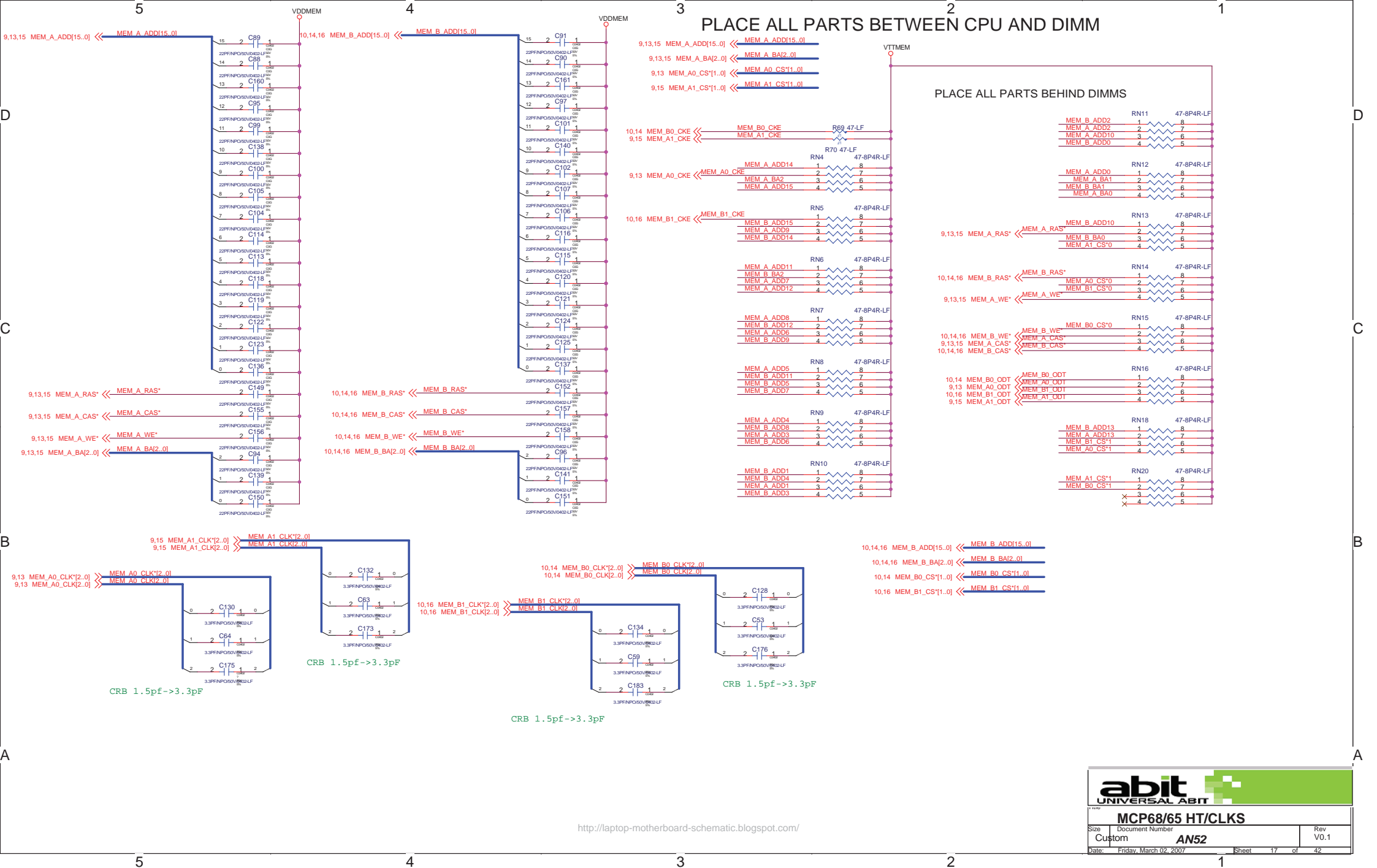


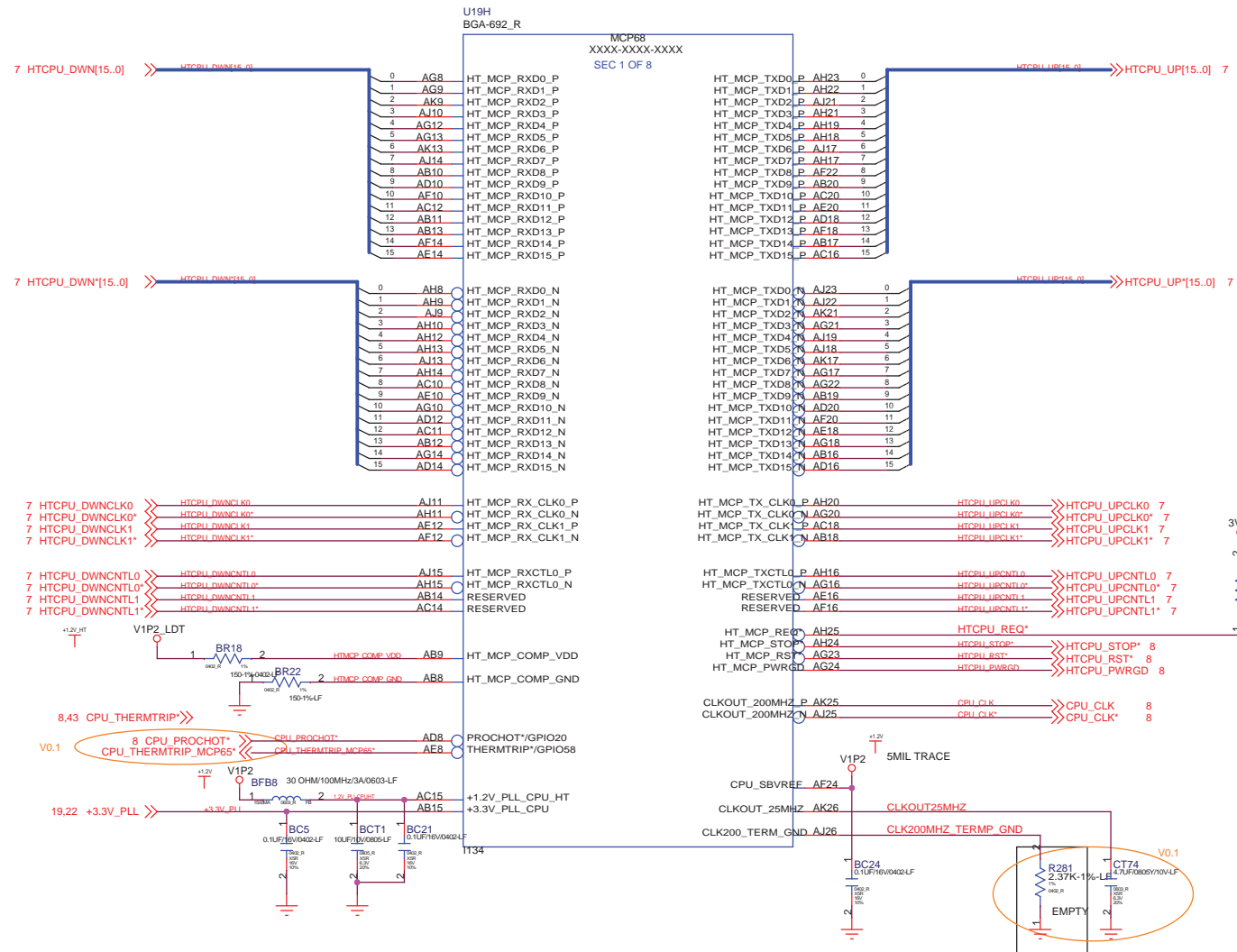
<http://laptop-motherboard-schematic.blogspot.com/>

CHANNEL "B" UPPER 64 BITS
FURTHEST DIMM TO CPU





 	
TITLE MCP68/65 HT/CLKS	
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CLK200MHZ_TERM_GND	
MCP61/65	STUFF 2.37K
MCP68	EMPTY



MCP68/65 HT/CLKS

Size: Custom

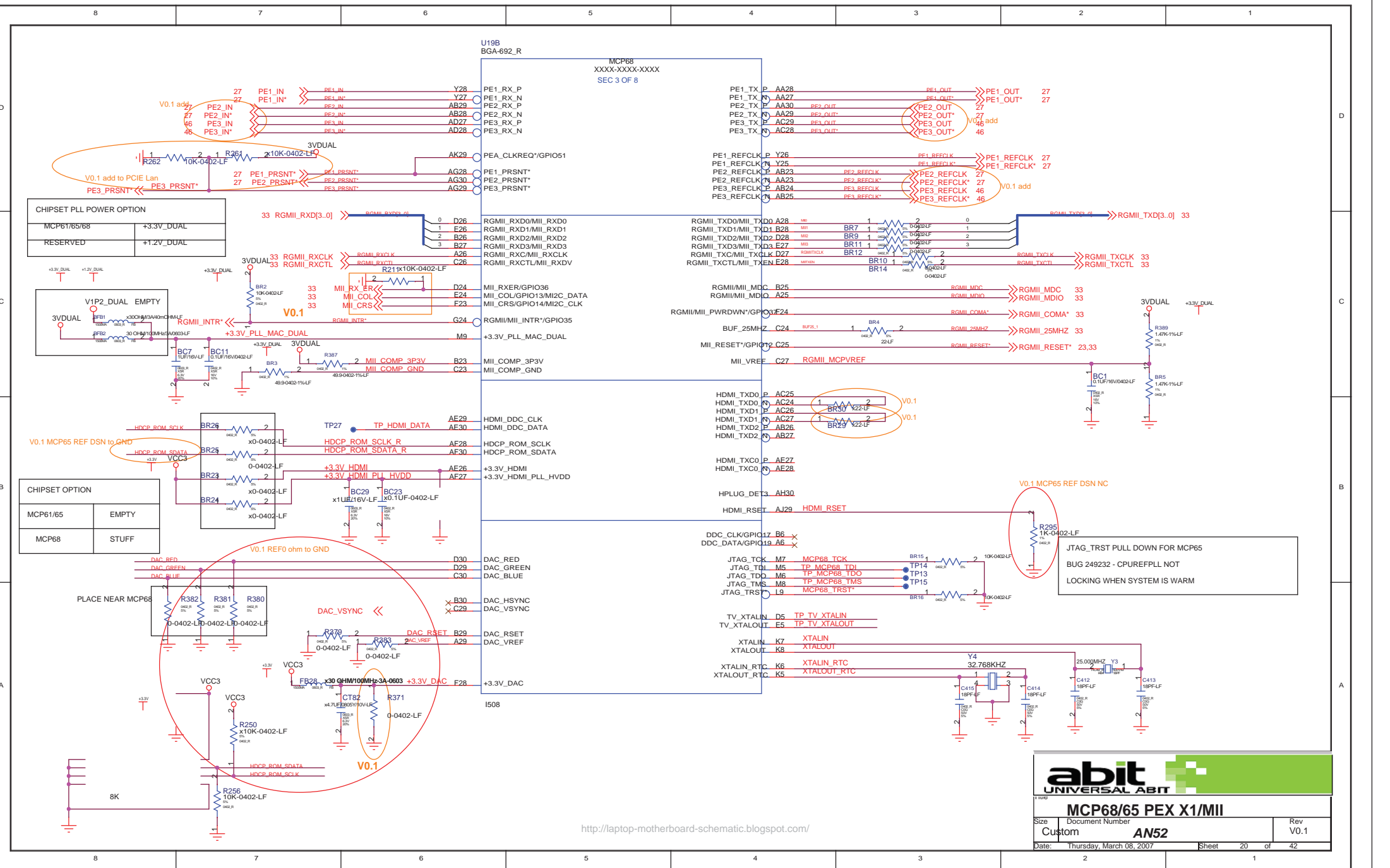
Document Number: AN52

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<http://laptop-motherboard-schematic.blogspot.com/>



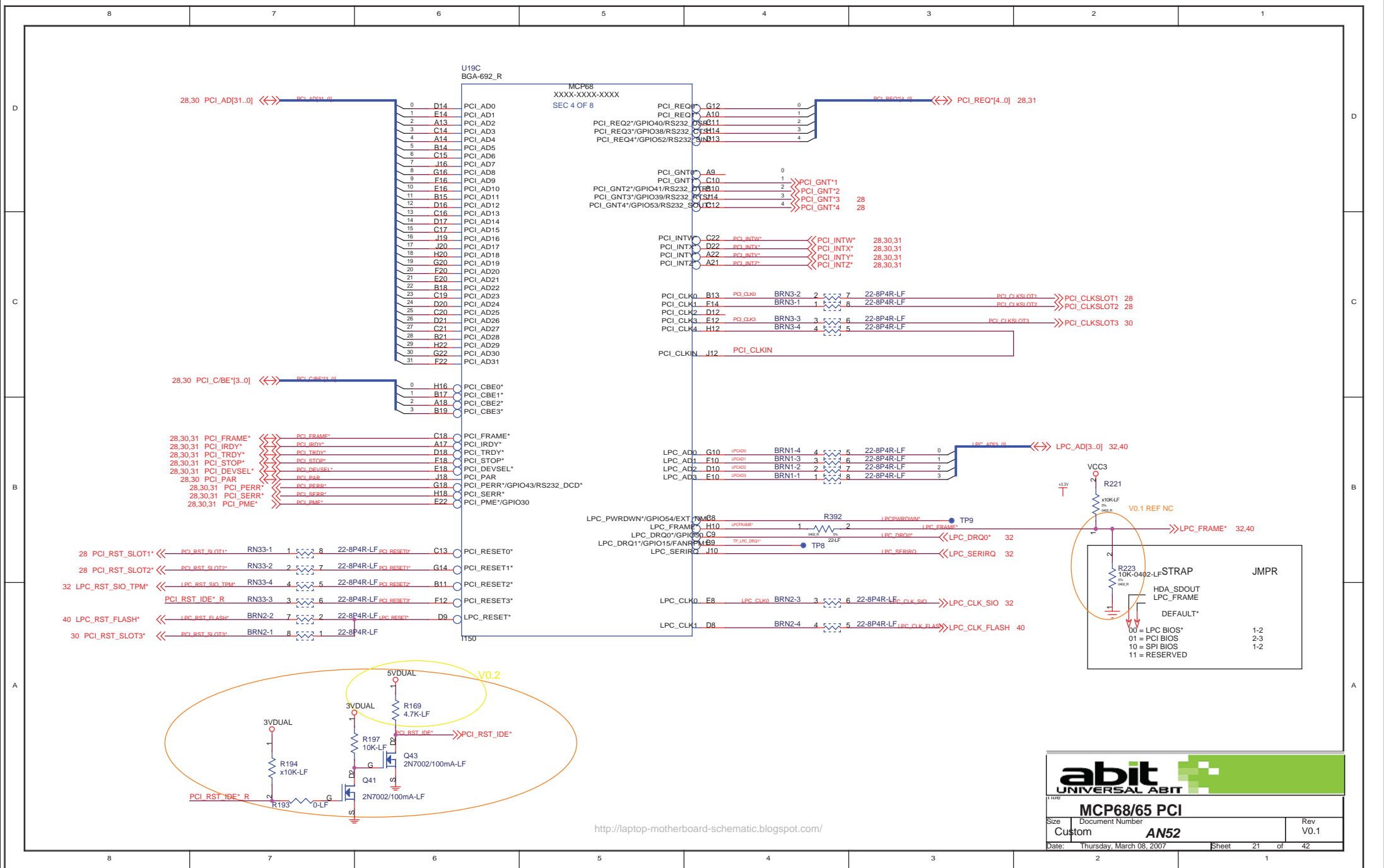
<http://laptop-motherboard-schematic.blogspot.com/>

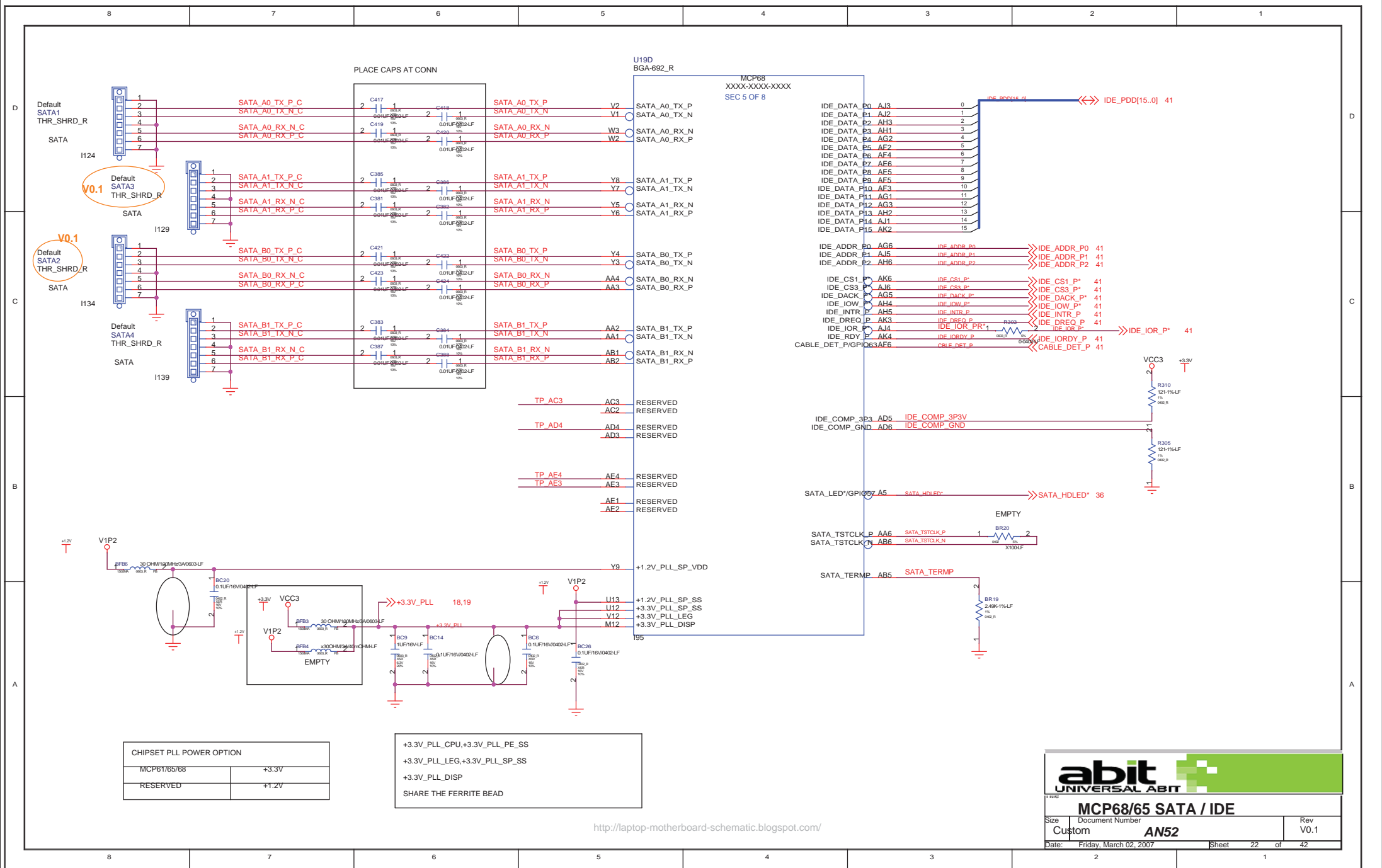
abit
UNIVERSAL ABIT

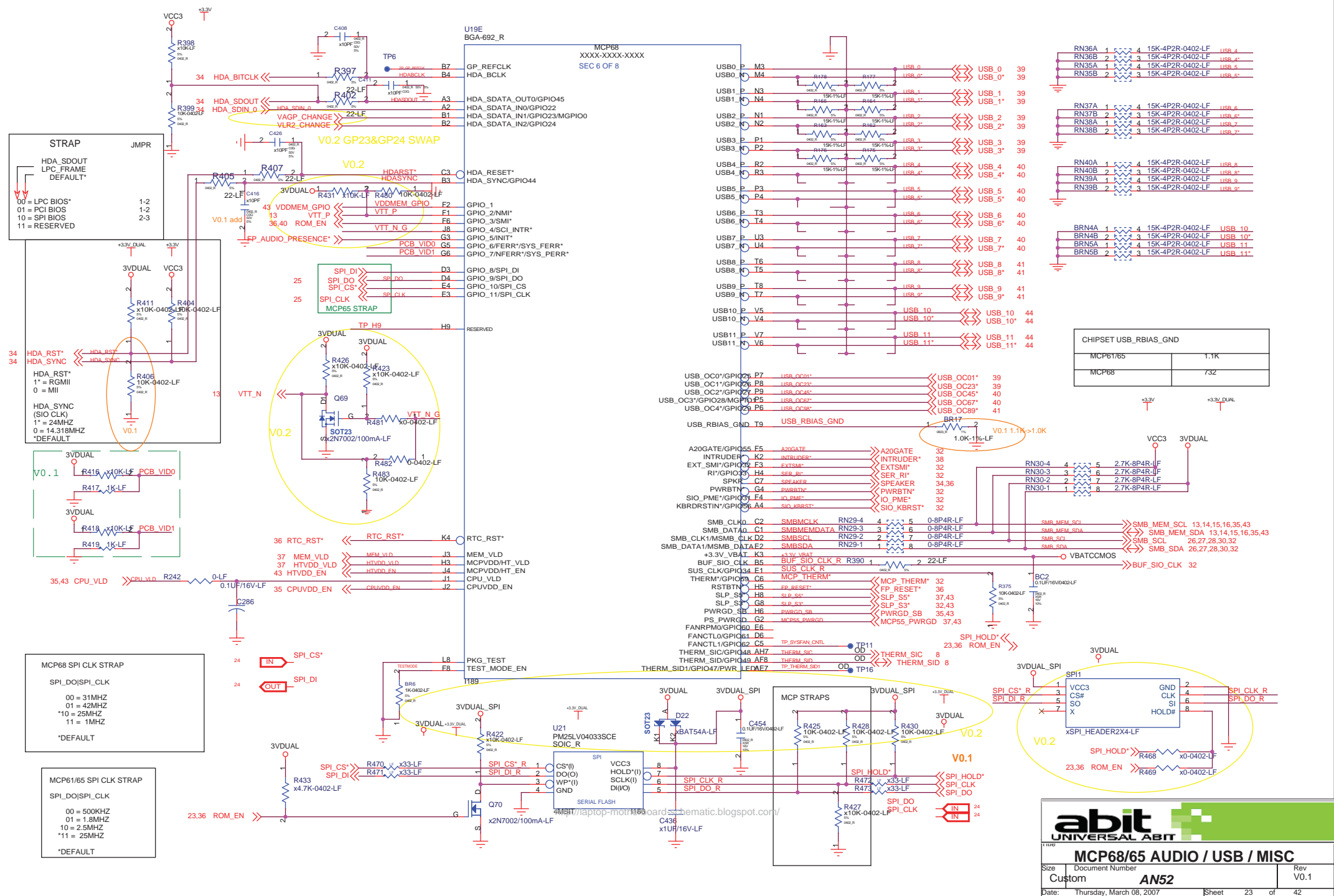
MCP68/65 PEX X1/MII

Size: Custom Document Number: AN52 Rev: V0.1

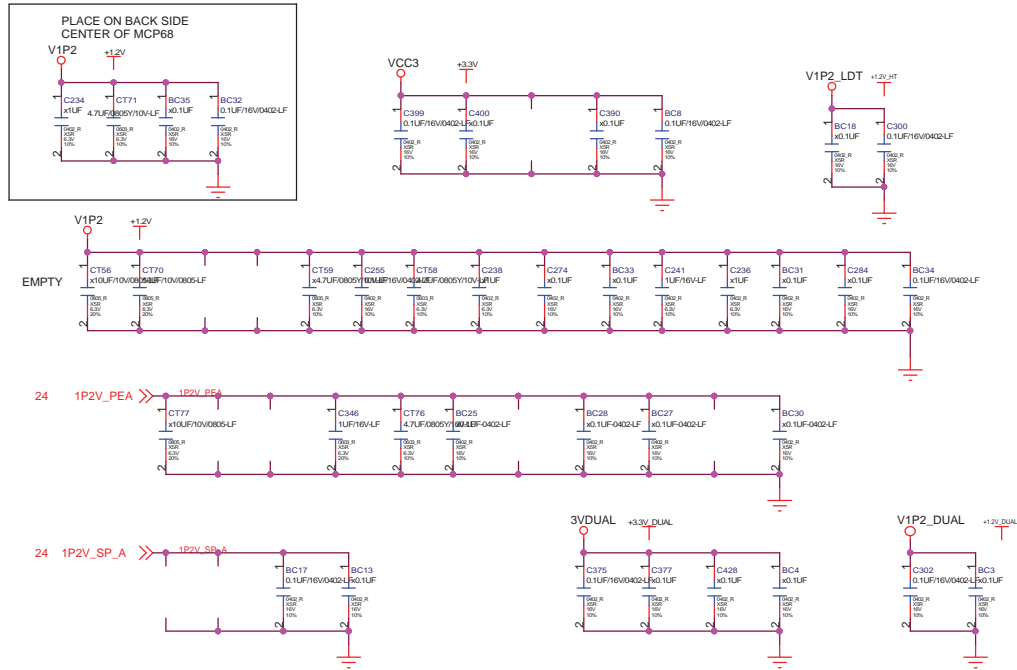
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MCP68 DECOUPLING



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MCP68/65 DECOUPLING/SPI

Size
Document Number

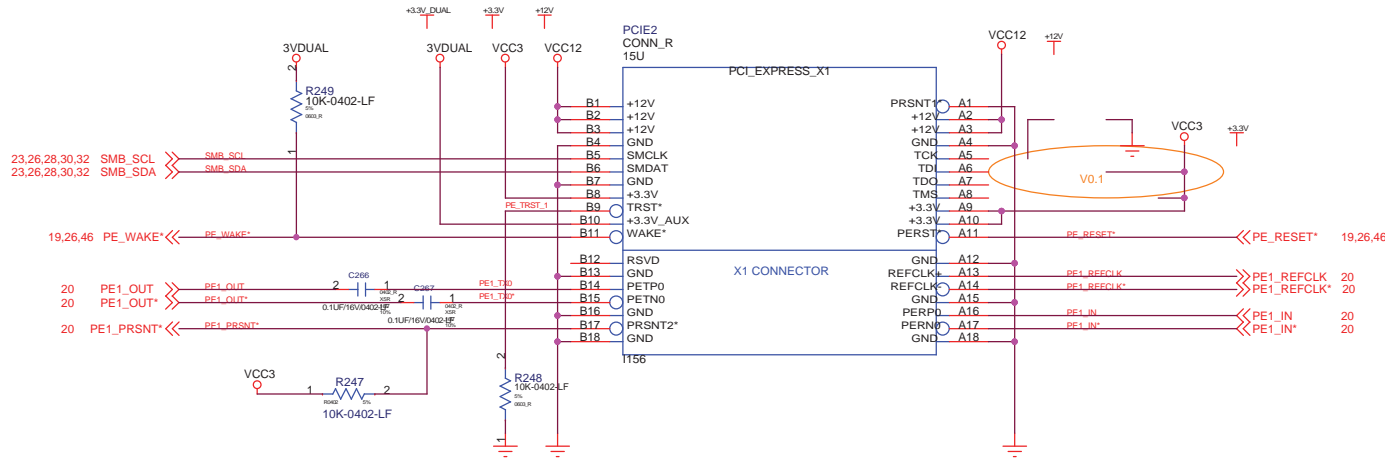
Custom
AN52

Date:
Friday, March 02, 2007

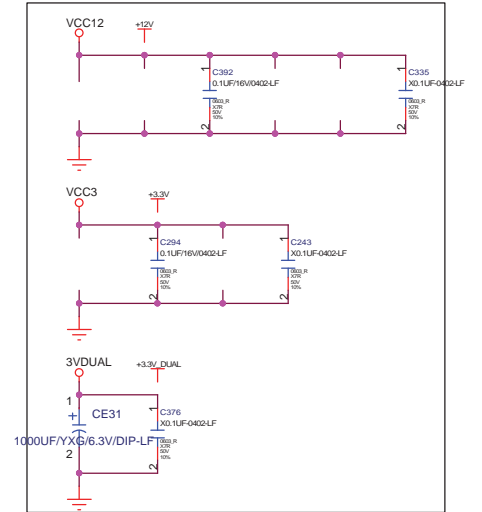
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25
of
42

Rev
V0.1

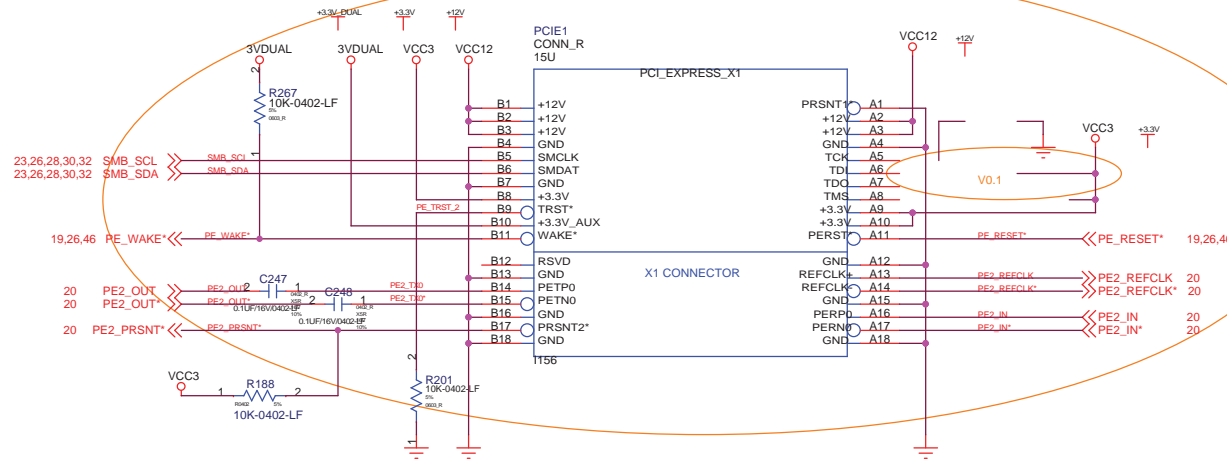
SLOT 6



PLACE CAPS NEAR PEX CONNECTORS



SLOT 7

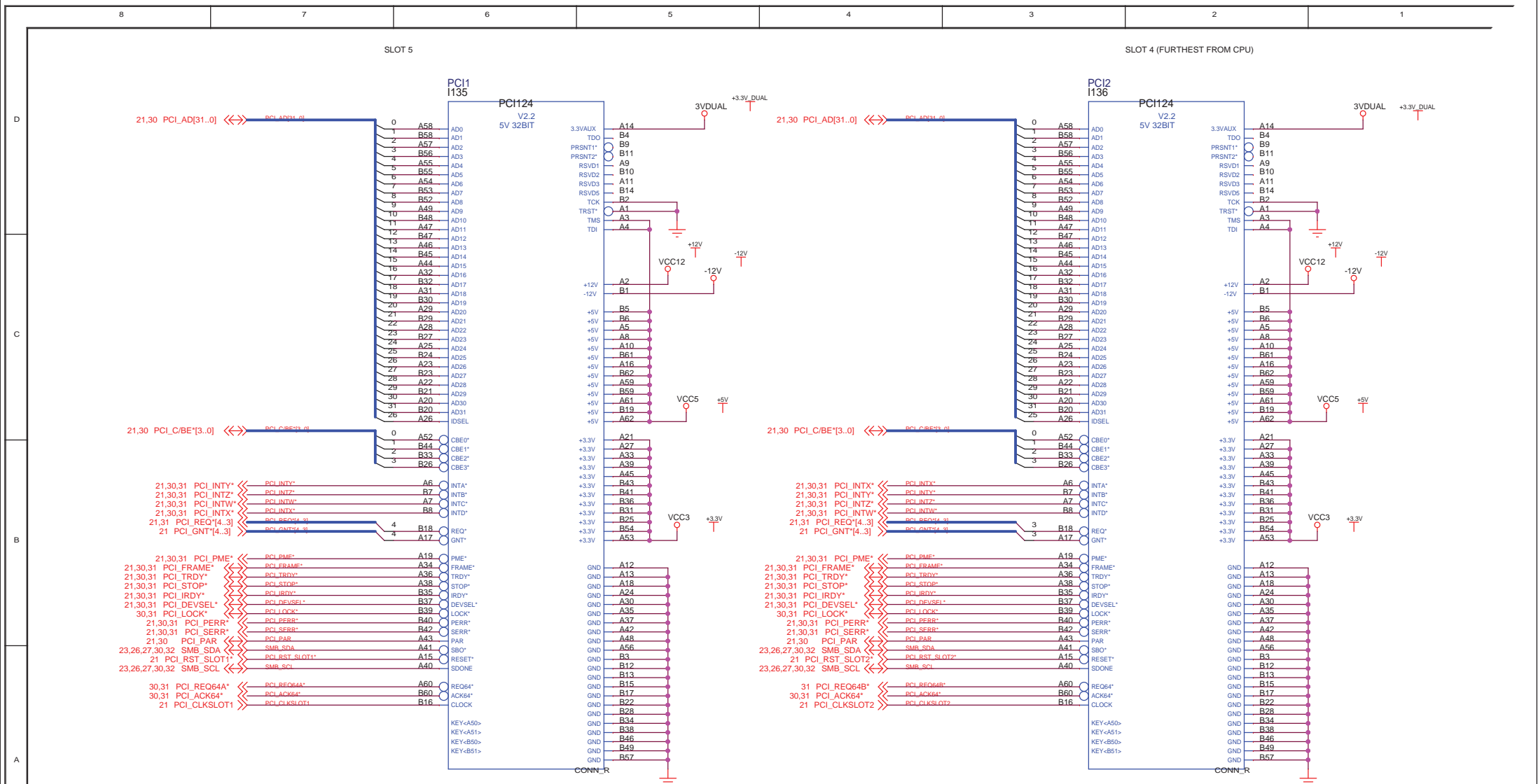


V0.1 add

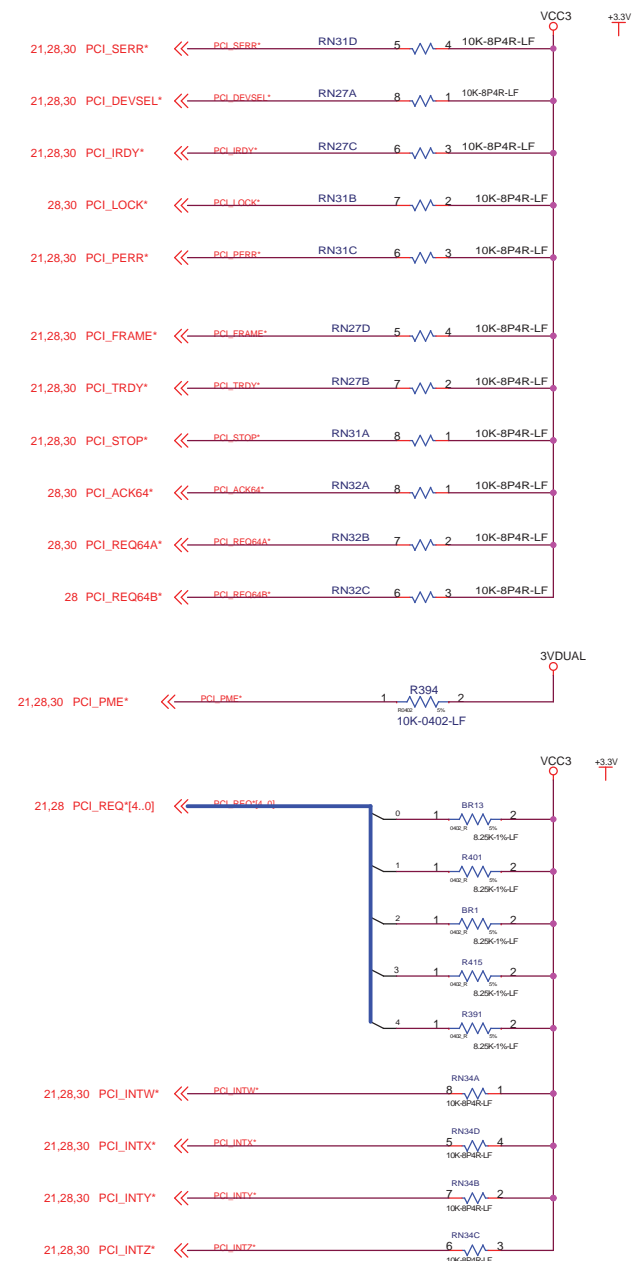
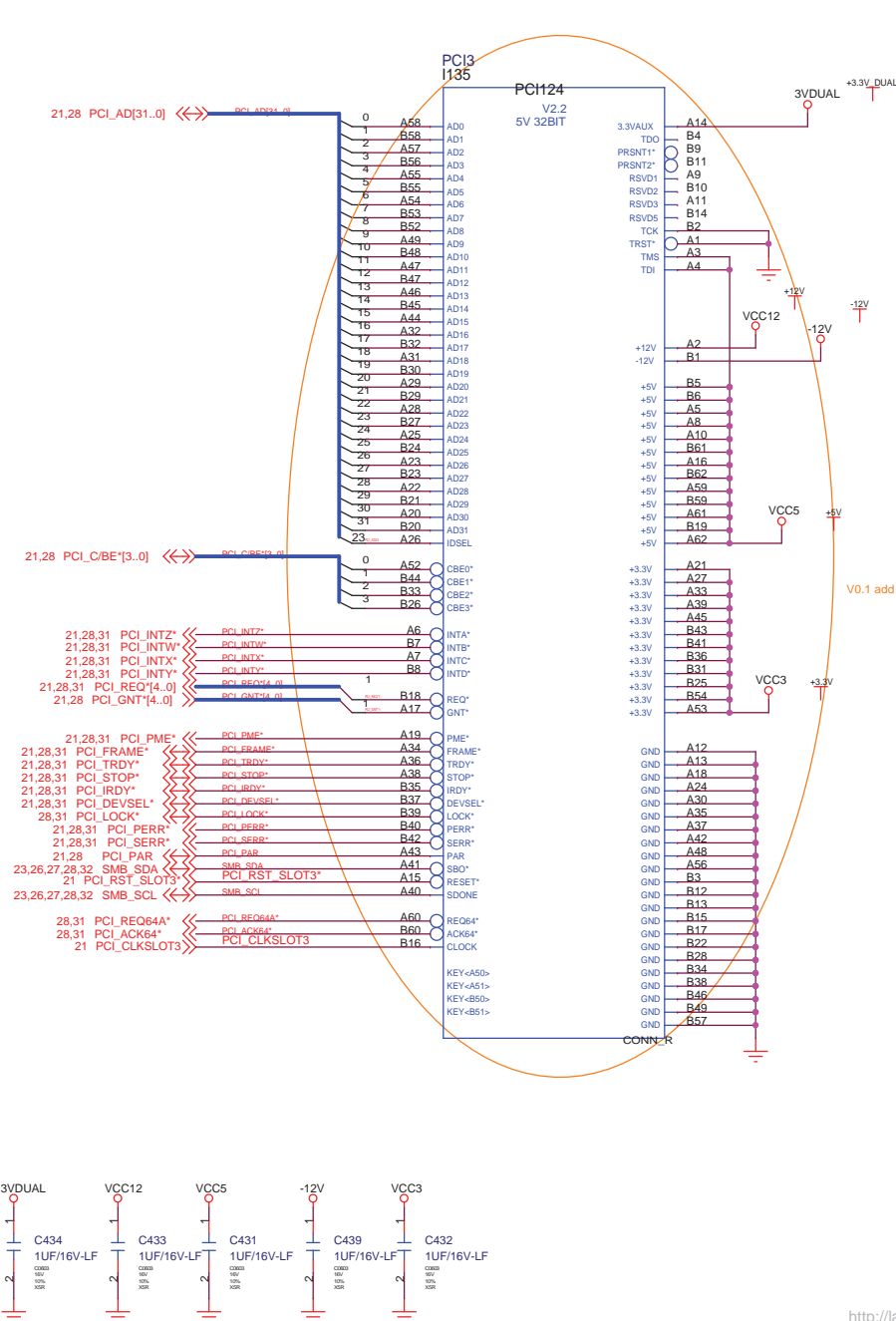
<http://laptop-motherboard-schematic.blogspot.com/>

PCI EXPRESS X1 CONNECTOR

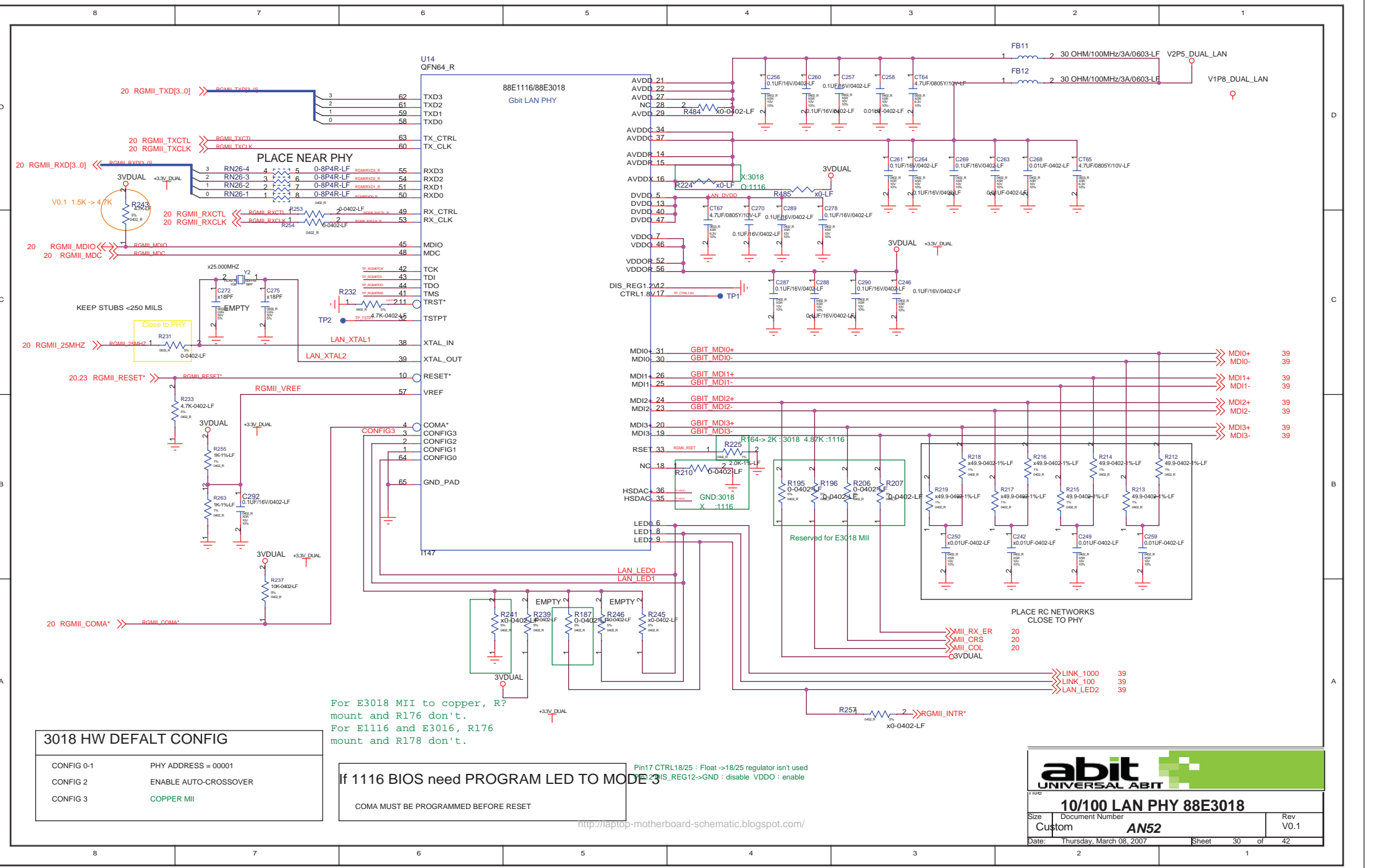
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<http://laptop-motherboard-schematic.blogspot.com/>





3018 HW DEFALT CONFIG	
CONFIG 0-1	PHY ADDRESS = 00001
CONFIG 2	ENABLE AUTO-CROSSOVER
CONFIG 3	COPPER MII

For E3018 MII to copper, R?
mount and R176 don't.
For E1116 and E3016, R176
mount and R178 don't.

If 1116 BIOS need PROGRAM LED TO MODE 3
COMA MUST BE PROGRAMMED BEFORE RESET

Pin17 CTRL18/25 : Float ->18/25 regulator isn't used
Pin23 DIS_REG12->GND : disable VDDO : enable

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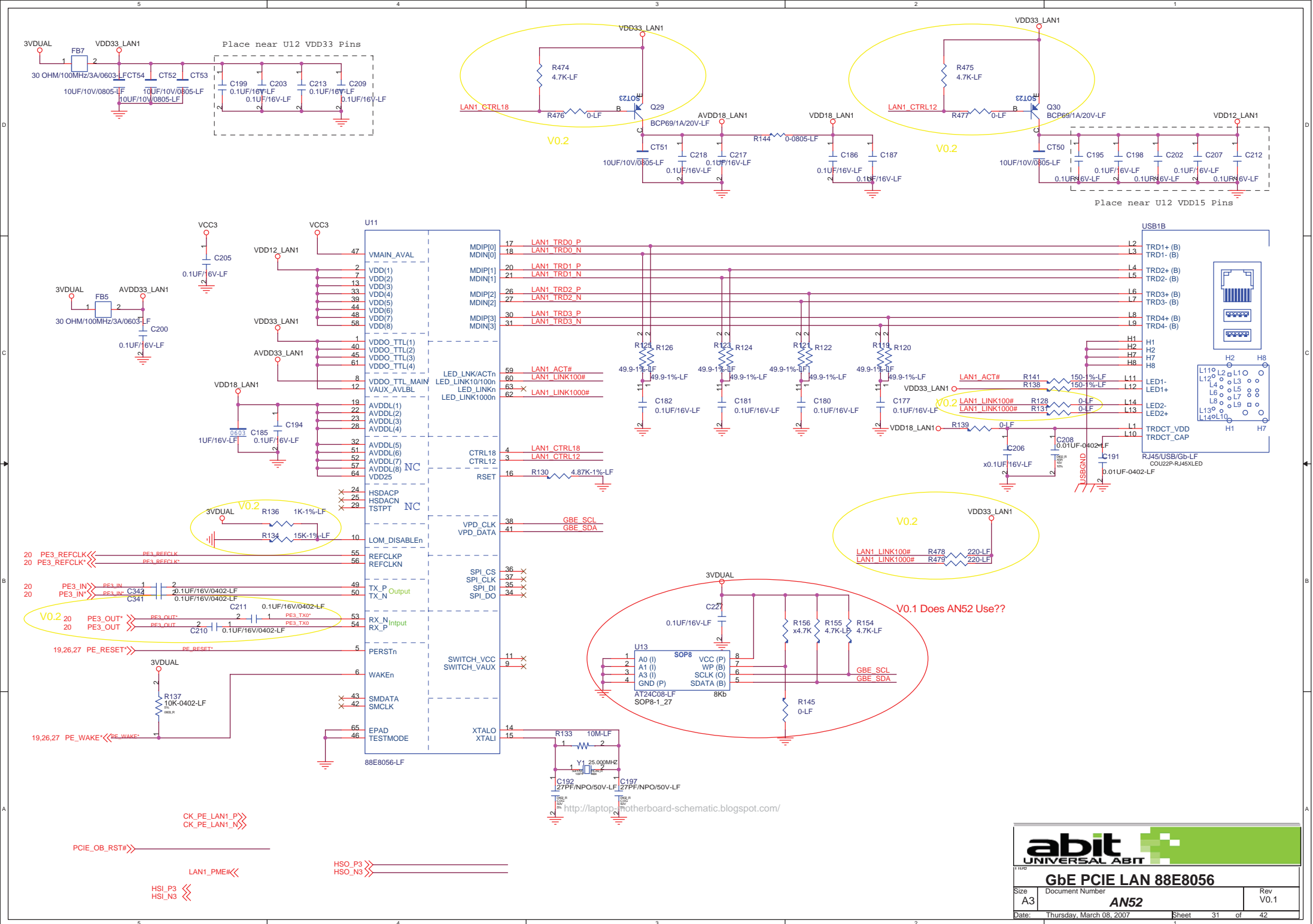


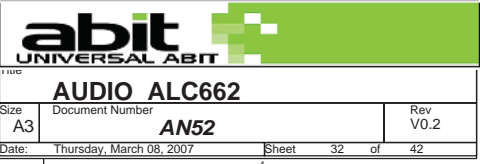
10/100 LAN PHY 88E3018

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Custom AN52

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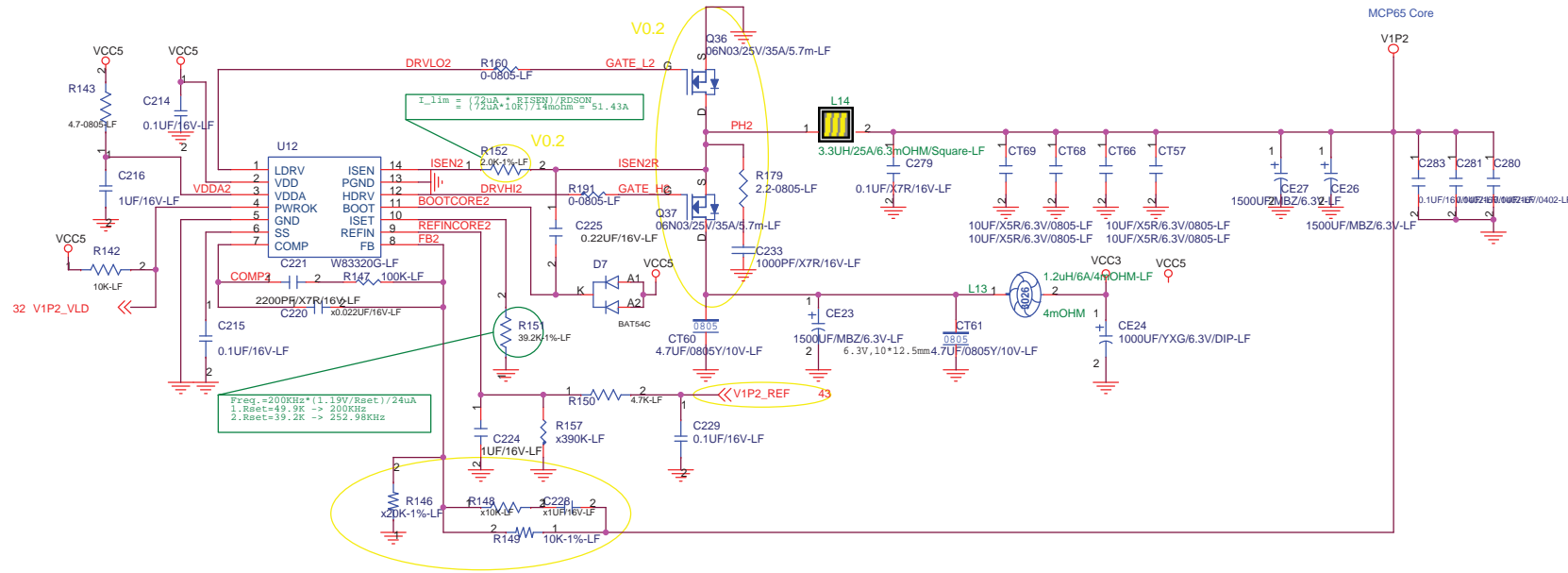




<http://laptop-motherboard-schematic.blogspot.com/>

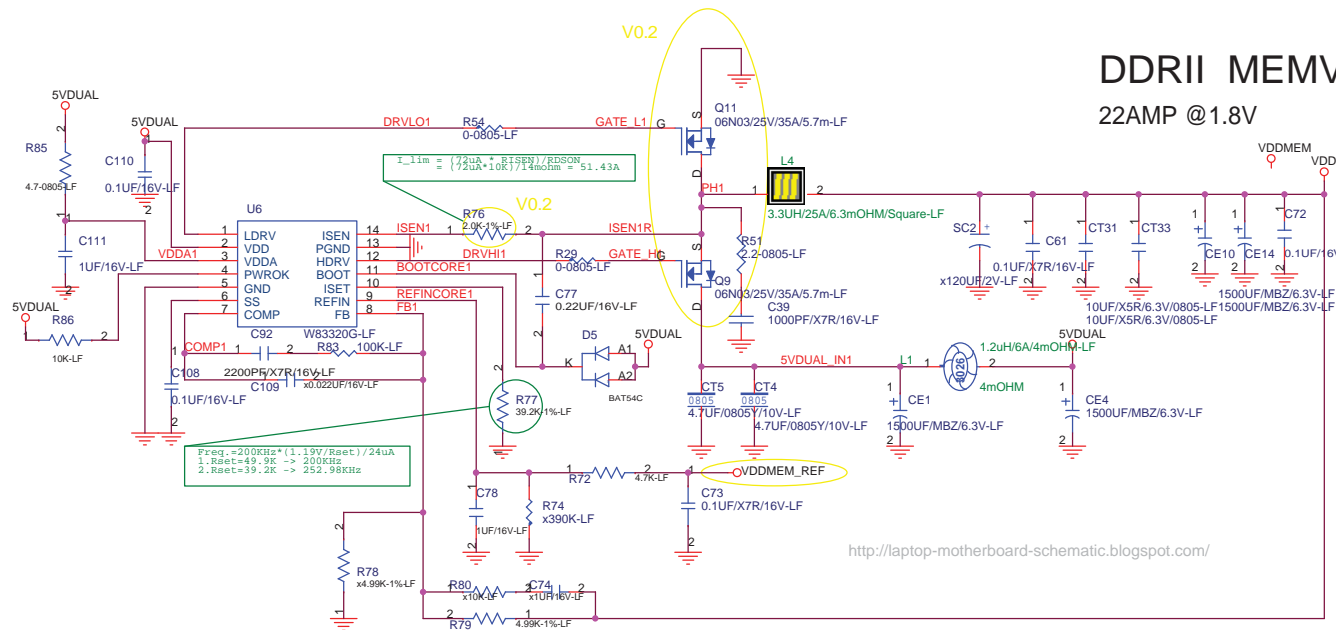
MCP65 V1P2 CORE

1.2V@ 10AMP (1.2V- 1.6V)



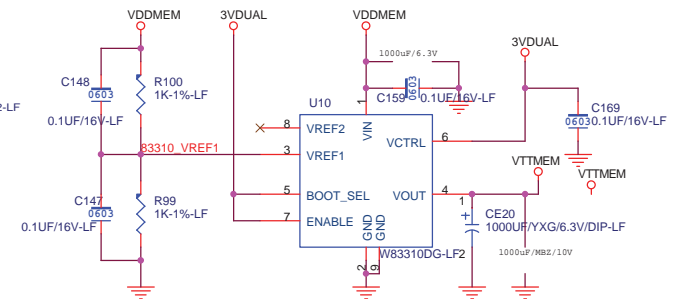
DDRII MEMVDD

22AMP @ 1.8V



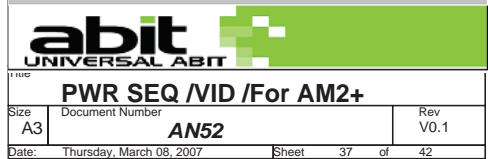
DDRII VTT

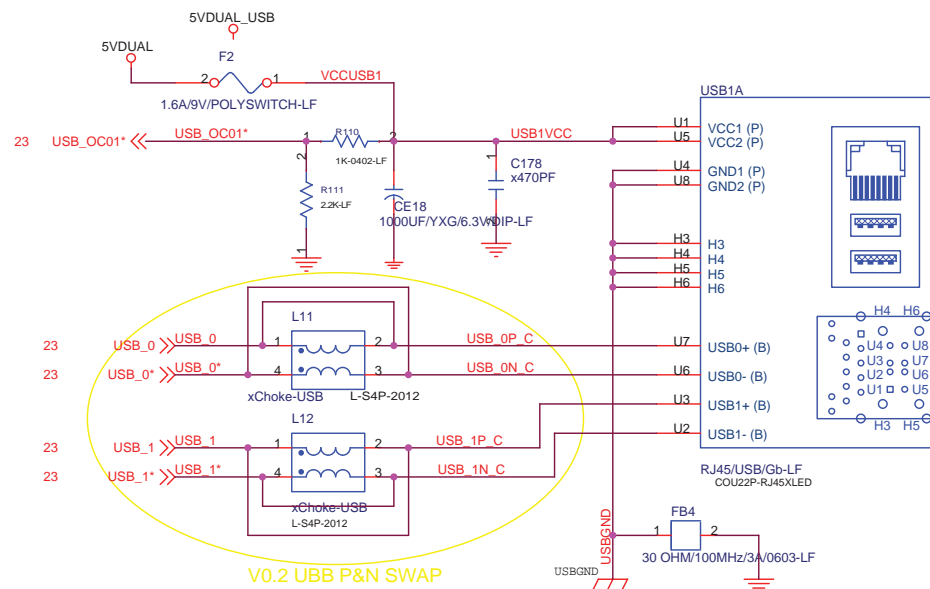
7AMP @ 1/2MEMVDD



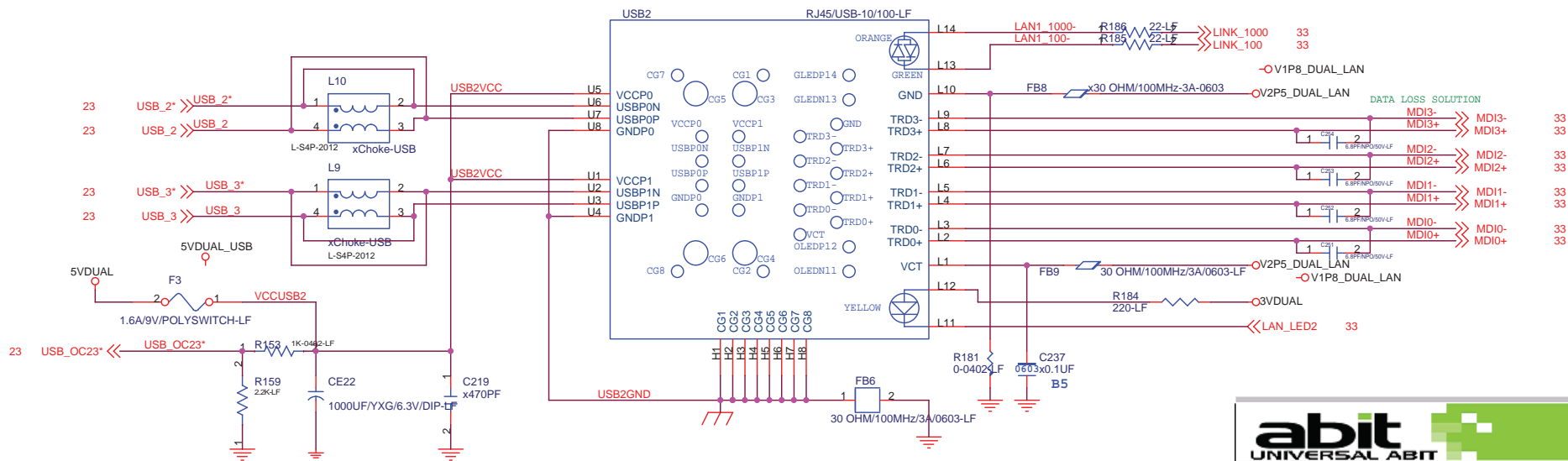
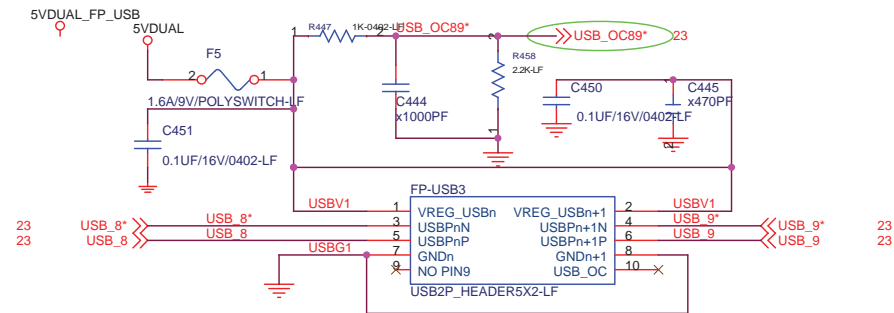
MEM VTT Power module 8*11

<http://laptop-motherboard-schematic.blogspot.com/>





FP-USB Header



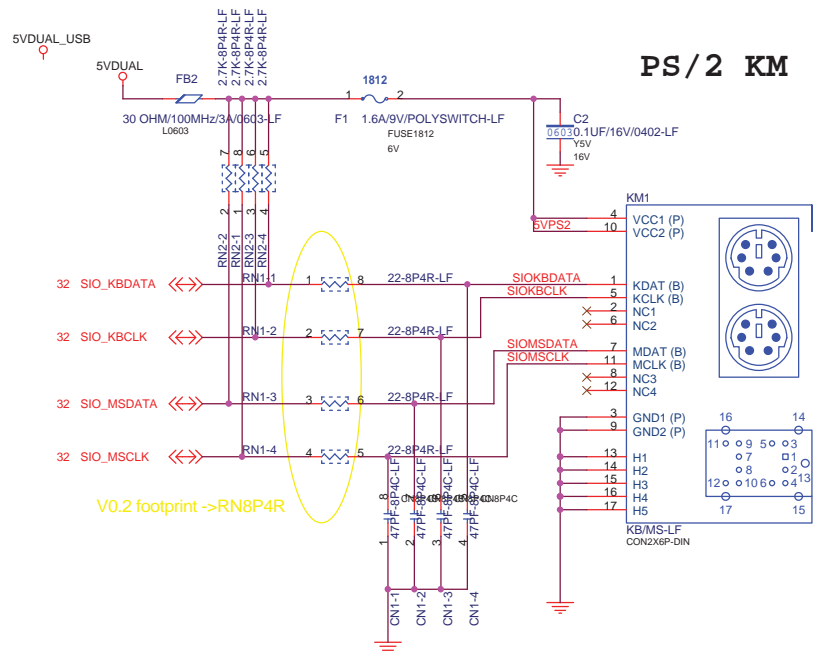
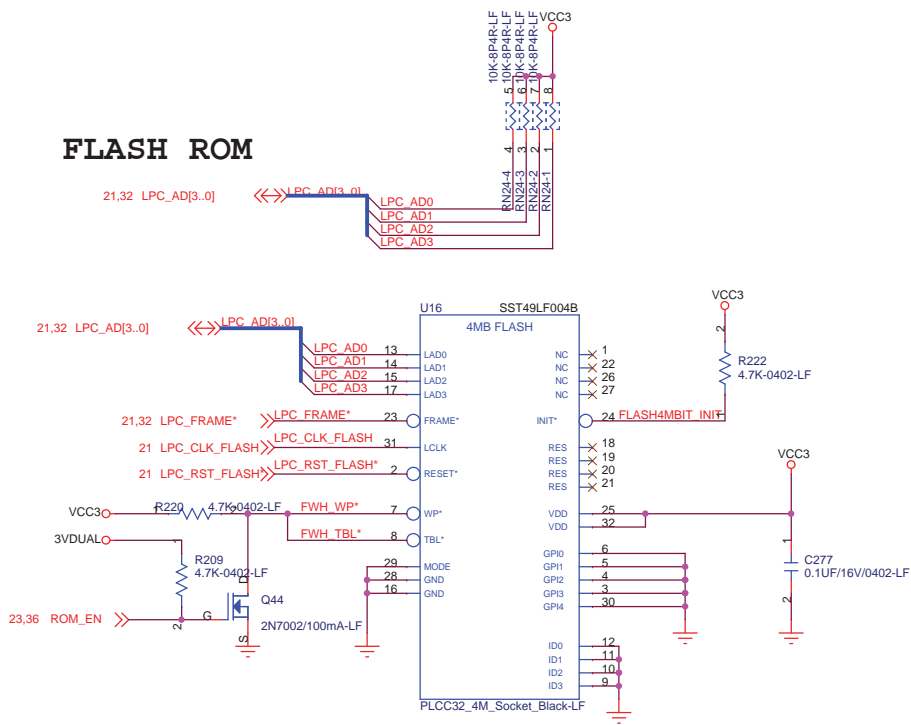
LAN trace : 50:5:7:5:50

<http://laptop-motherboard-schematic.blogspot.com/>

Dual LAN + USB CONN

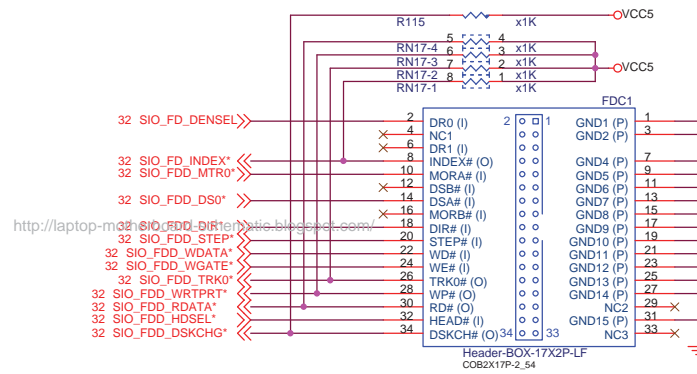
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FLASH ROM

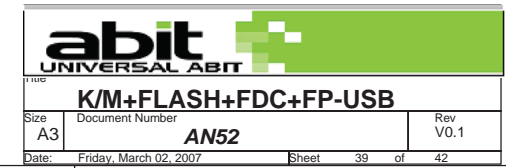
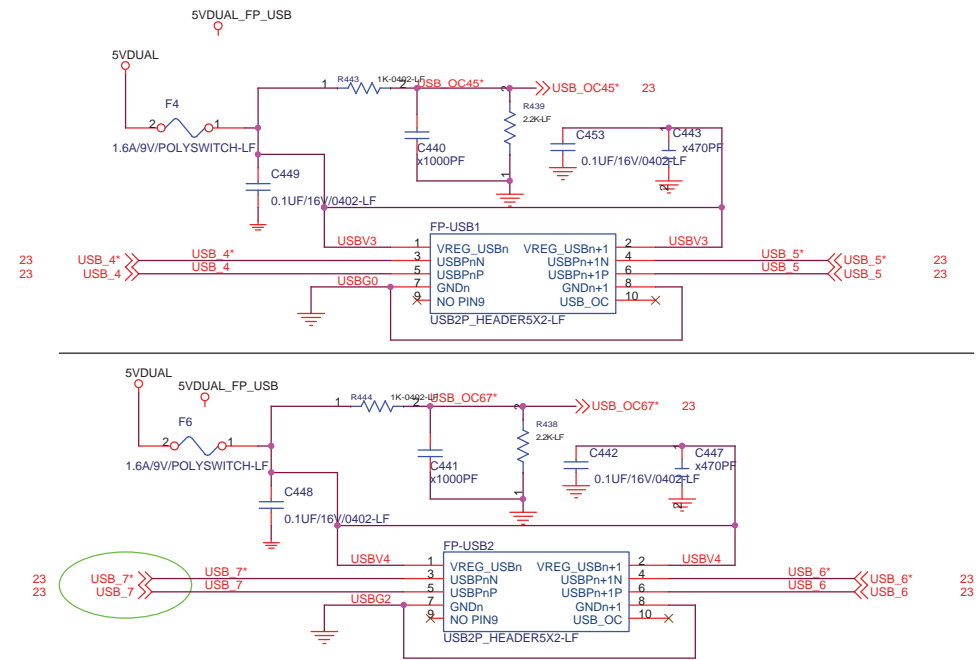


PS/2 KM

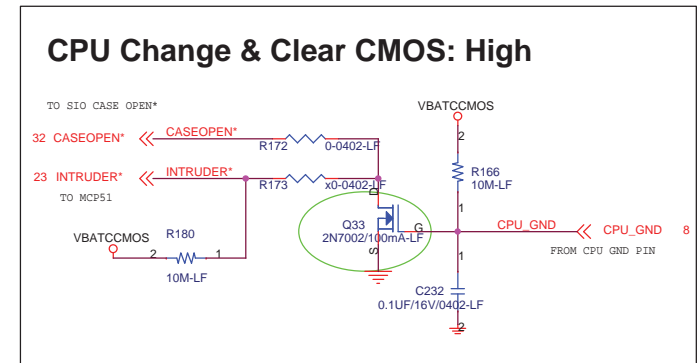
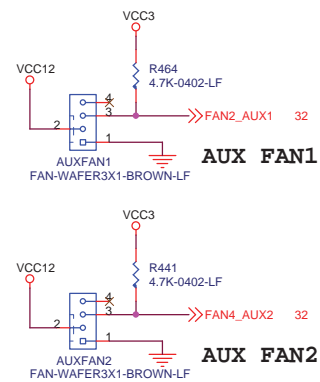
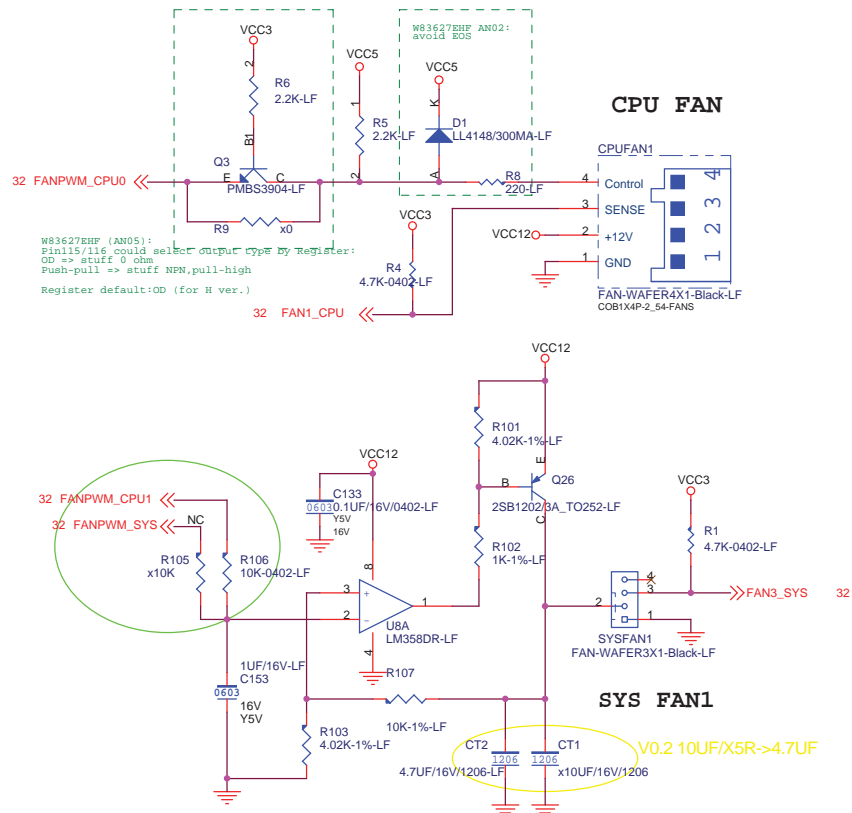
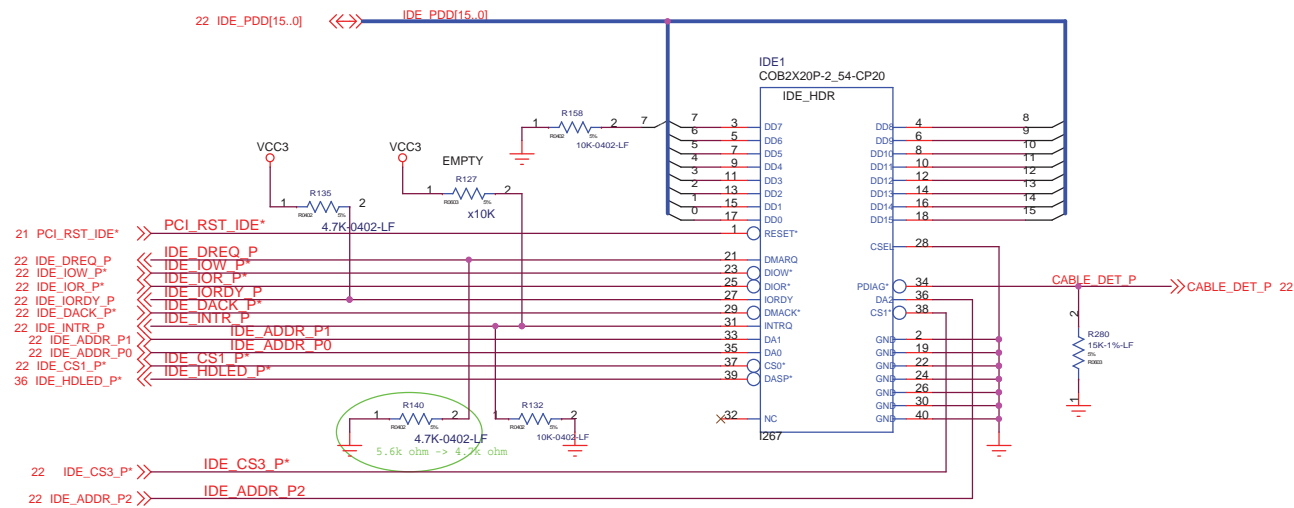
FLOPPY CONNECTOR



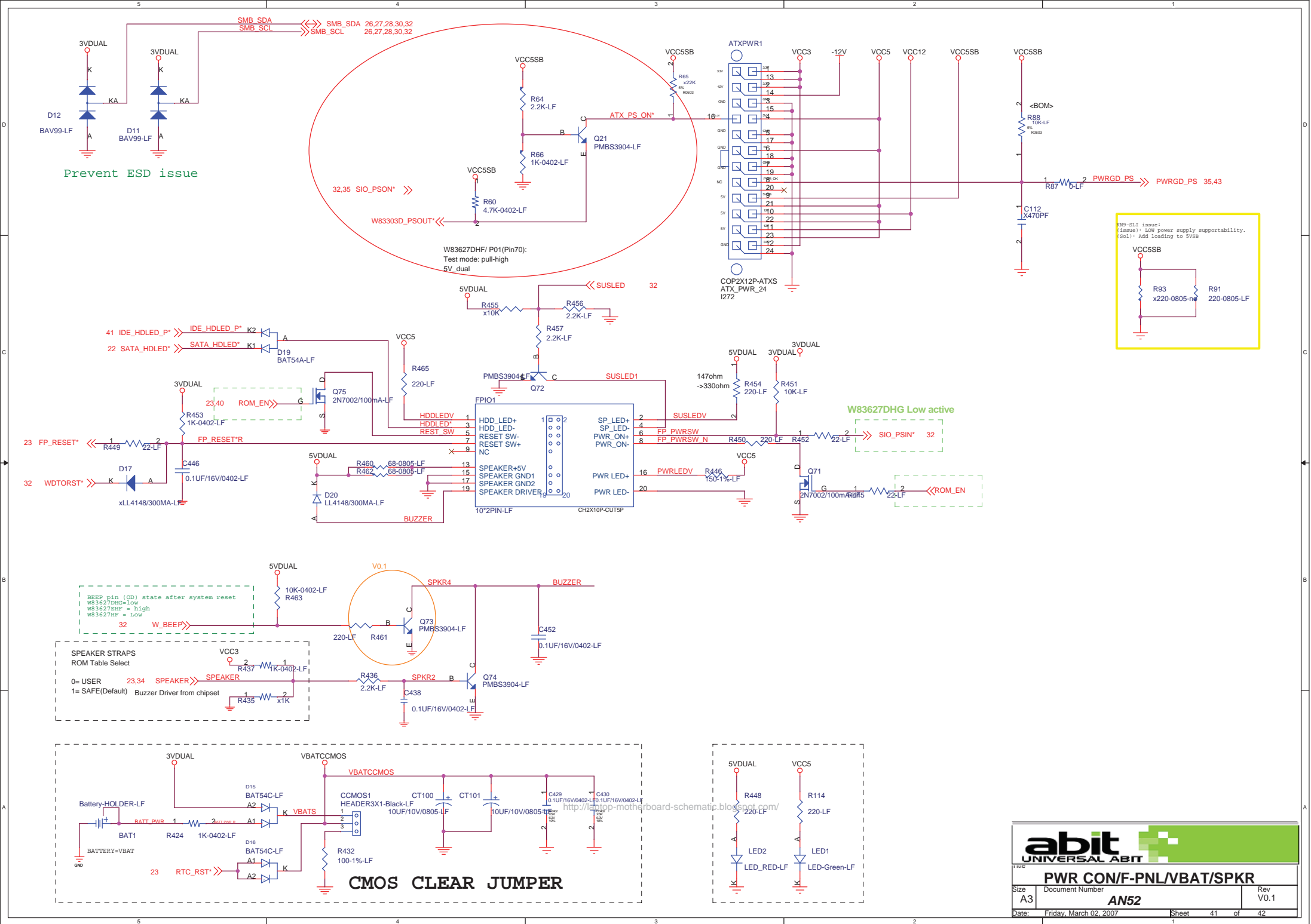
FP-USB Header



IDE1



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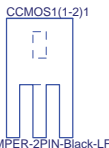
Other BOM (NO Foot-Print)

USB-PWR/FP-PWR JUMPER

PS2-PWR JUMPER

CCMOS JUMPER

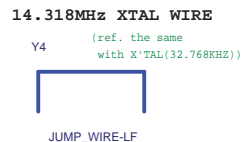
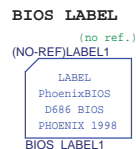
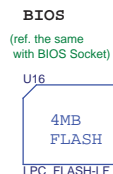
FP-PWR3(2-3)



FP-AUDIO JUMPER
(for AC97 only)

FP-AUDIO1(5-6)

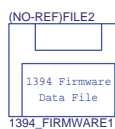
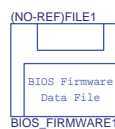
FP-AUDIO1(9-10)



FIRMWARE

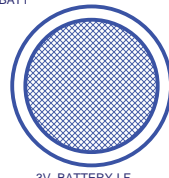
(no ref.)

(no ref.)



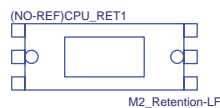
AC2005 FIRMWARE1

BAT1



CPU RETENTION

(no ref.)

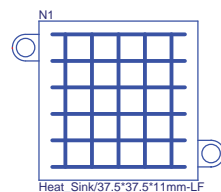


PWM Heat-Sink

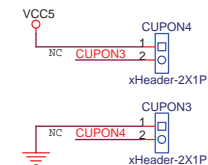


v0.2 BOM

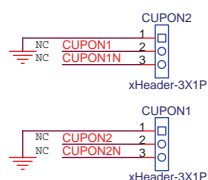
SB Heat-Sink



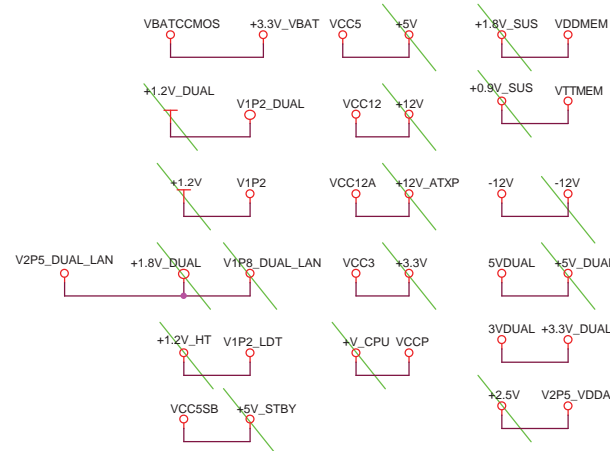
CUPON
(single)



CUPON
(differential)



PSU & Derivatives CPU, DDR, NB, SB Platform



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MOUNTING HOLES

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