

Milwaukee 10A

CS BUILD

2007 0709

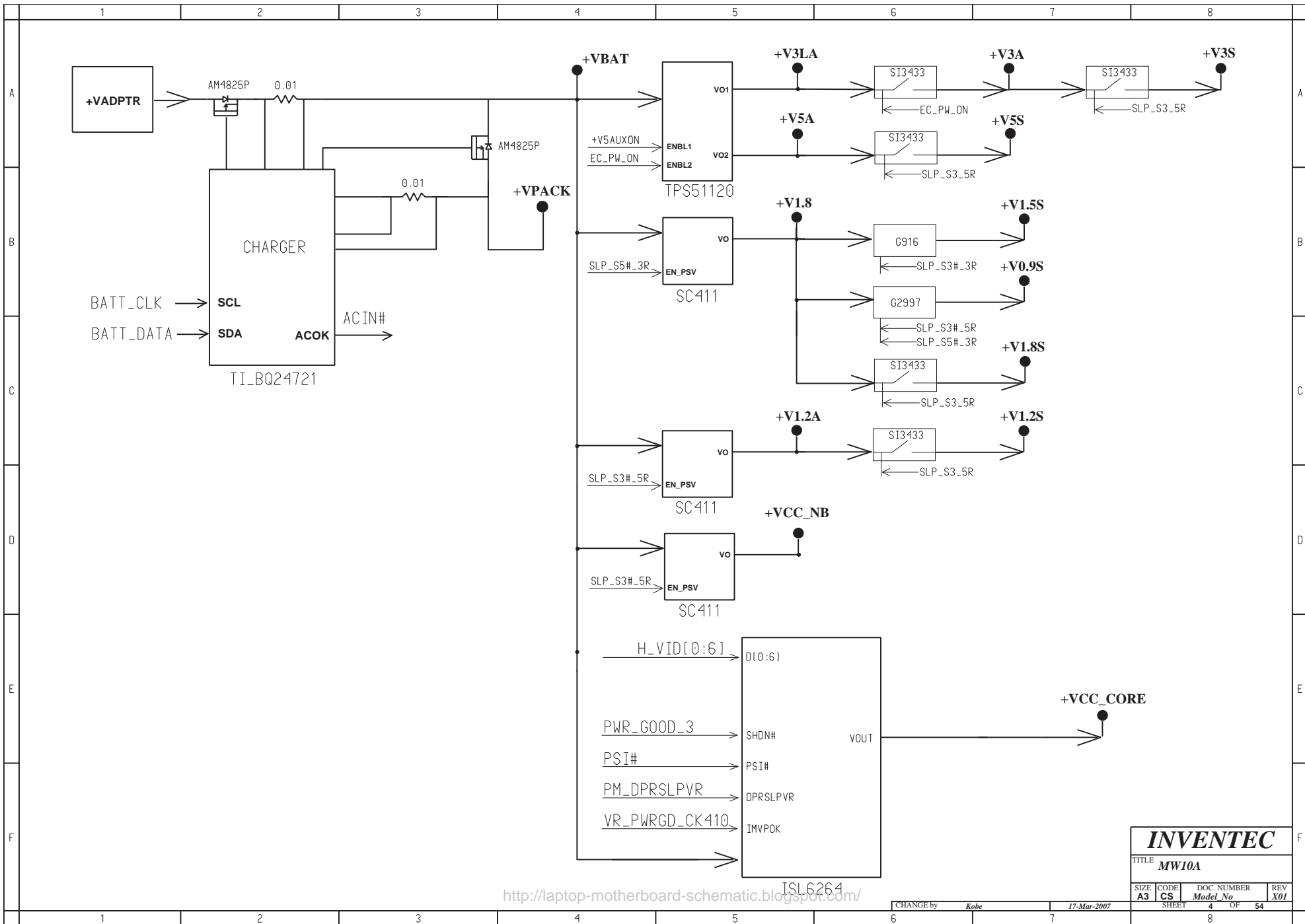
DATE	CHANGE NO.	REV

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

DRAWER	EE	DATE	POWER	DATE	INVENTEC			
DESIGN					TITLE MW10A			
CHECK					SIZE = 3			
RESPONSIBLE					CODE A3 CS DOC. NUMBER Model No REV X01			
					SHEET 1 OF 54			
					DATE: XXXX-XXXX-XX			
					P/N: XXXXXXXXXXXX			

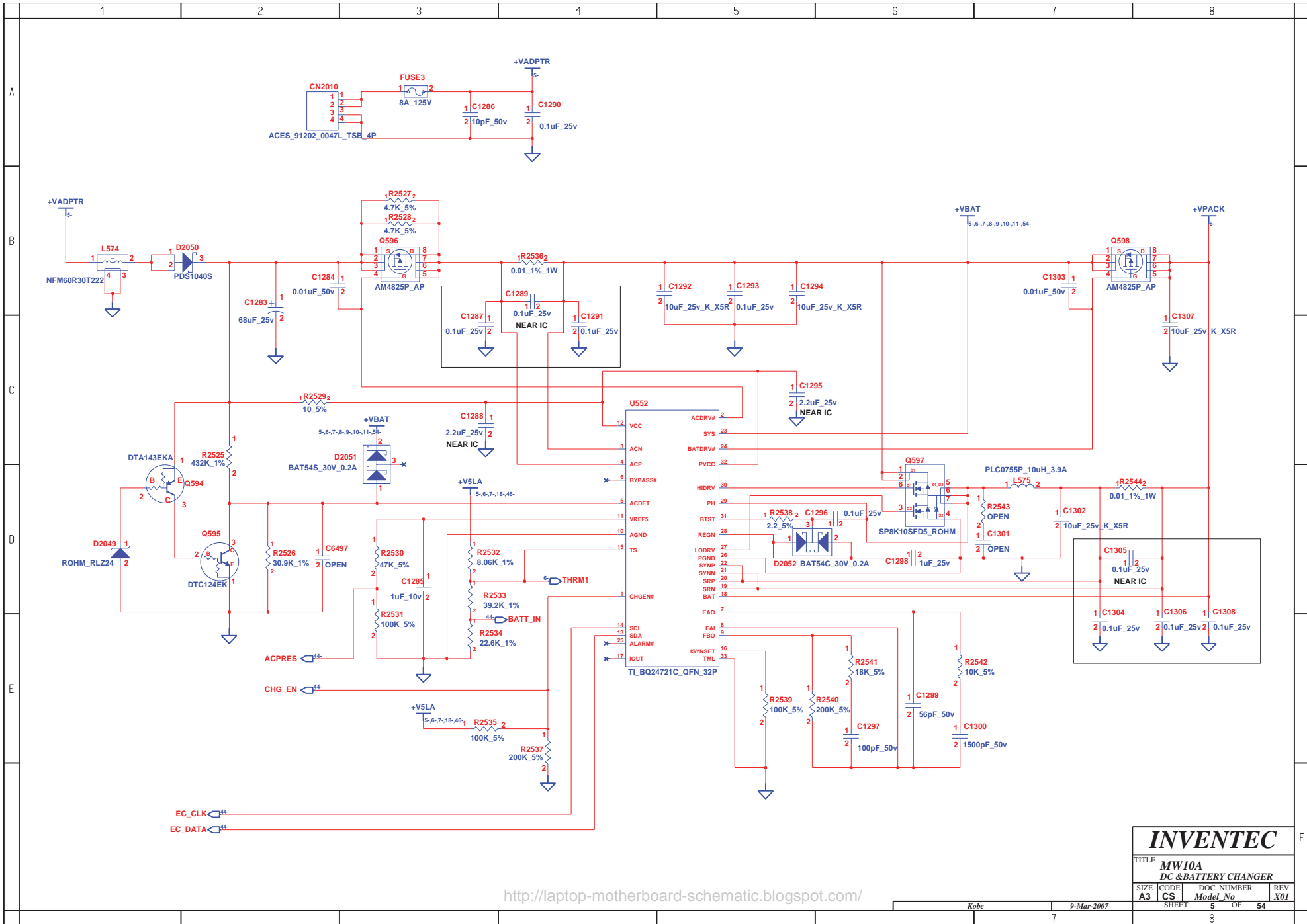
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INVENTEC			
TITLE MW10A			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
CHANGE by <i>Kobe</i>		17-Mar-2007	
SHEET 4		OF 54	



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INVENTEC

TITLE
MW10A
 DC & BATTERY CHANGER

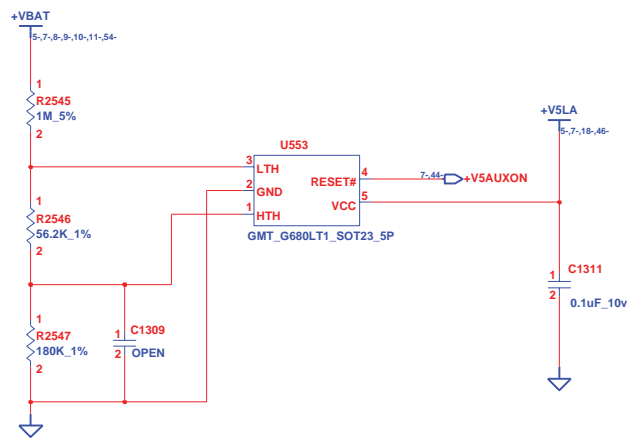
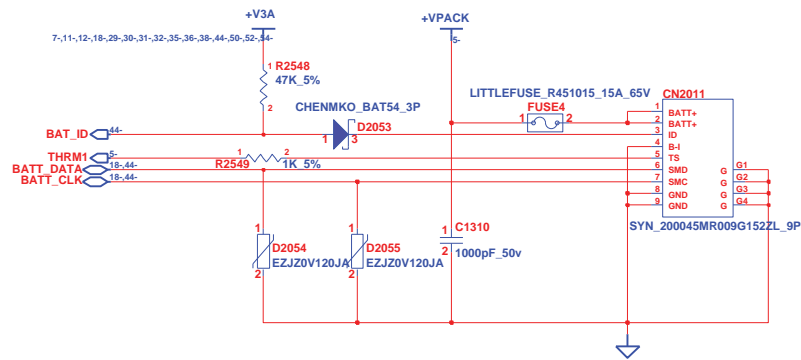
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

9-Mar-2007
 SHEET 5 OF 54

Kobe

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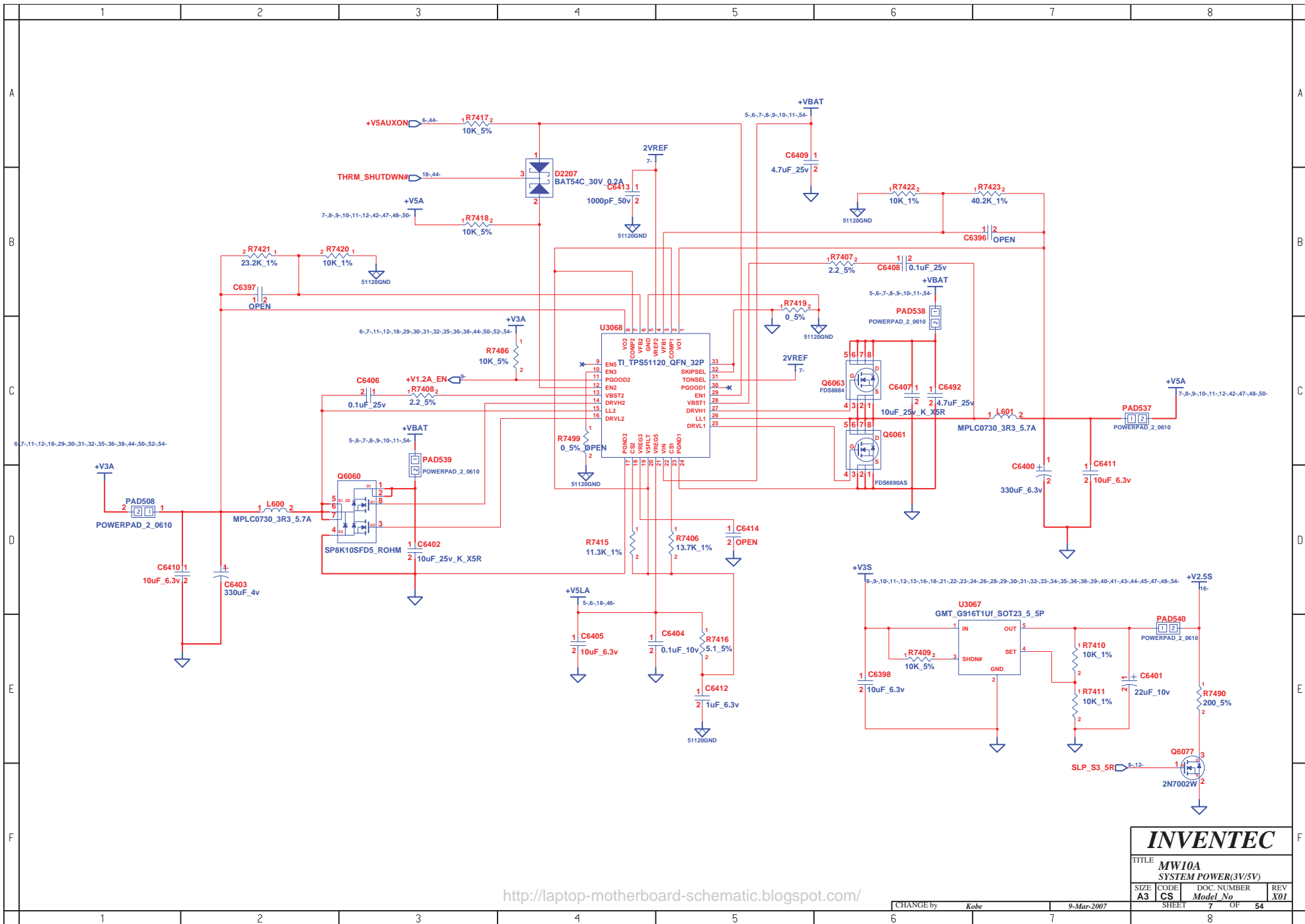
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INVENTEC

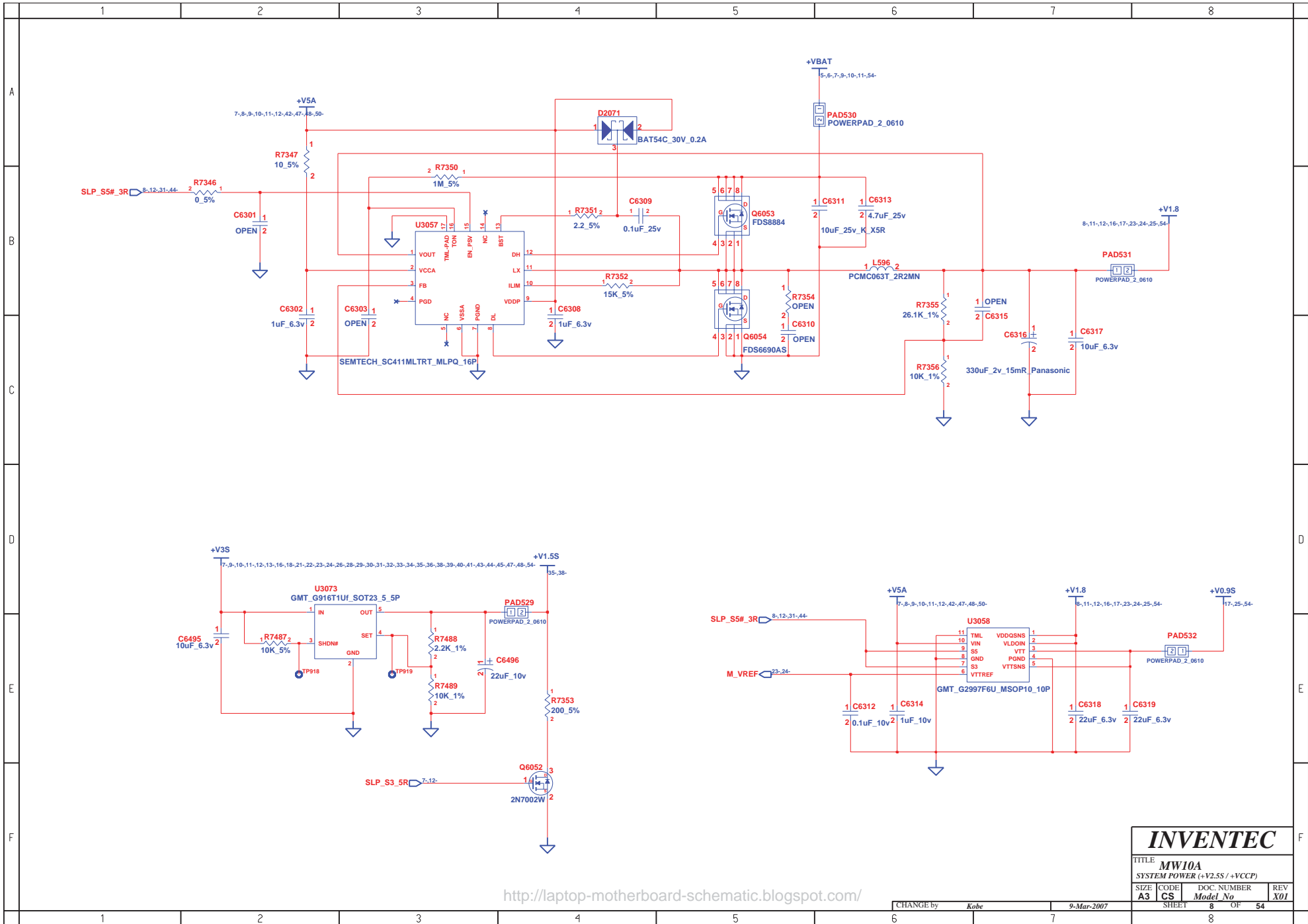
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MW10A			
BATTERY CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01



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

INVENTEC

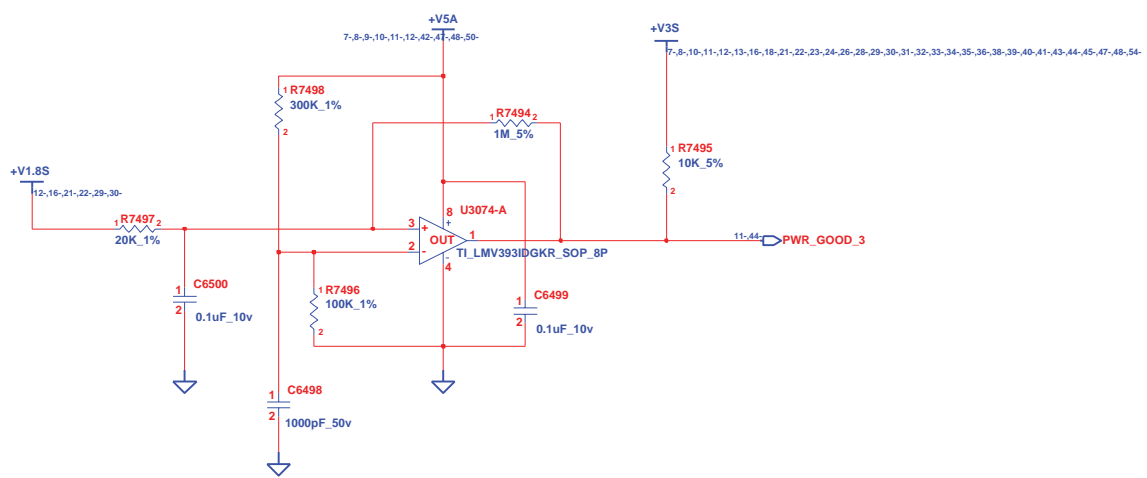
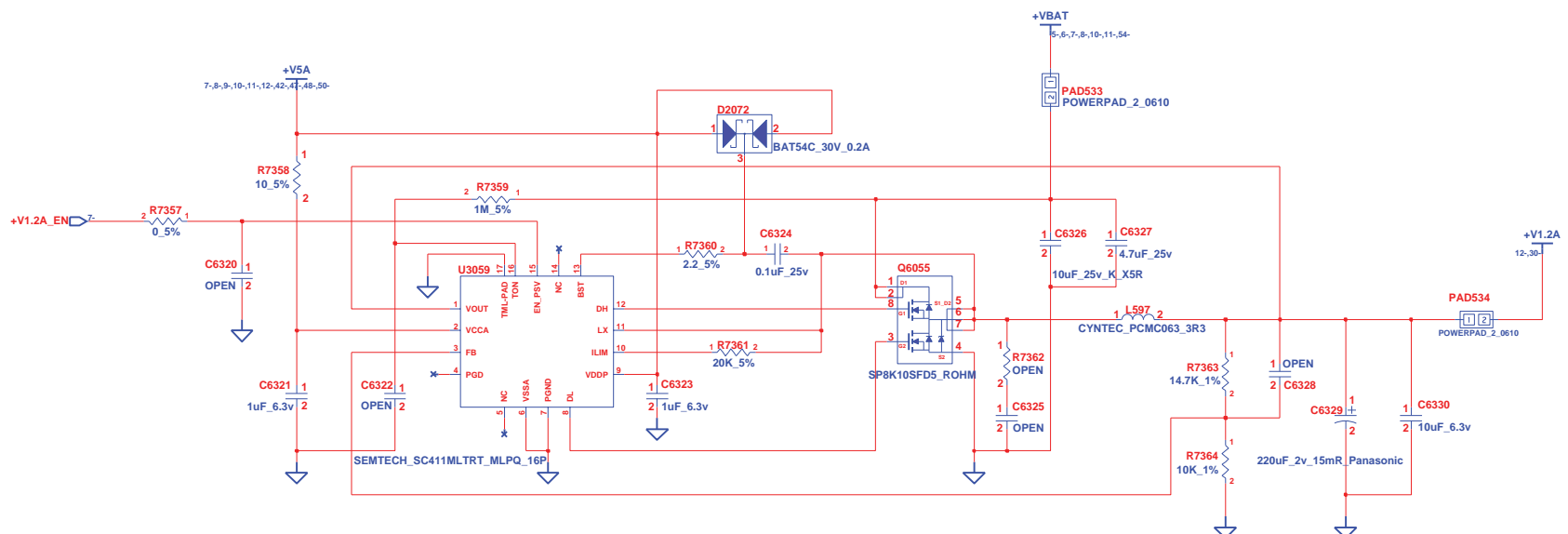
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MW10A SYSTEM POWER(3V/5V)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		9-Mar-2007	
Kobe		SHEET 7 OF 54	



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INVENTEC

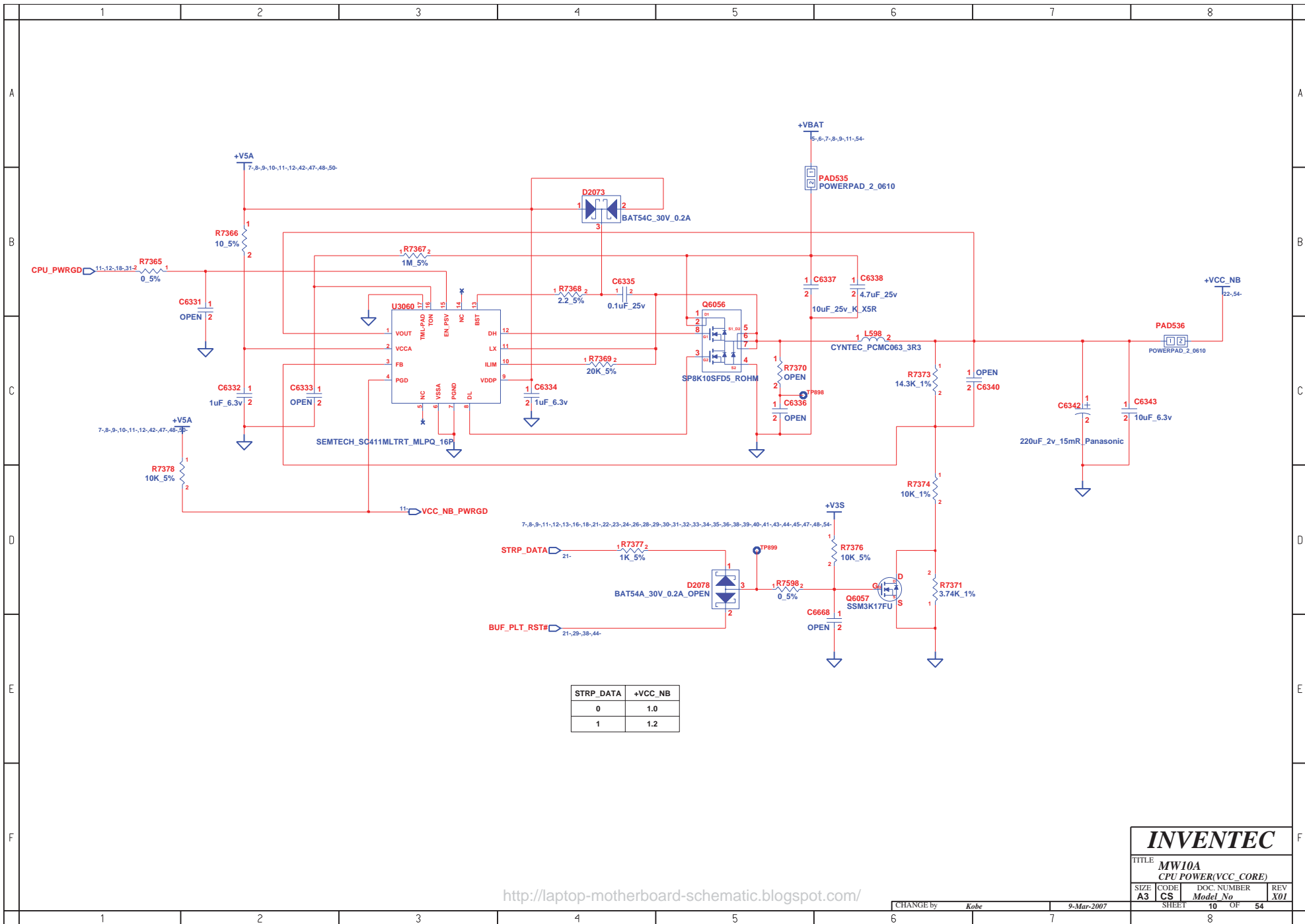
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MW10A			
SYSTEM POWER (+V2.5S / +VCCP)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by			SHEET
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INVENTEC

TITLE			
MW10A			
SYSTEM POWER(+V1.5S / +V1.8)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01



STRP_DATA	+VCC_NB
0	1.0
1	1.2

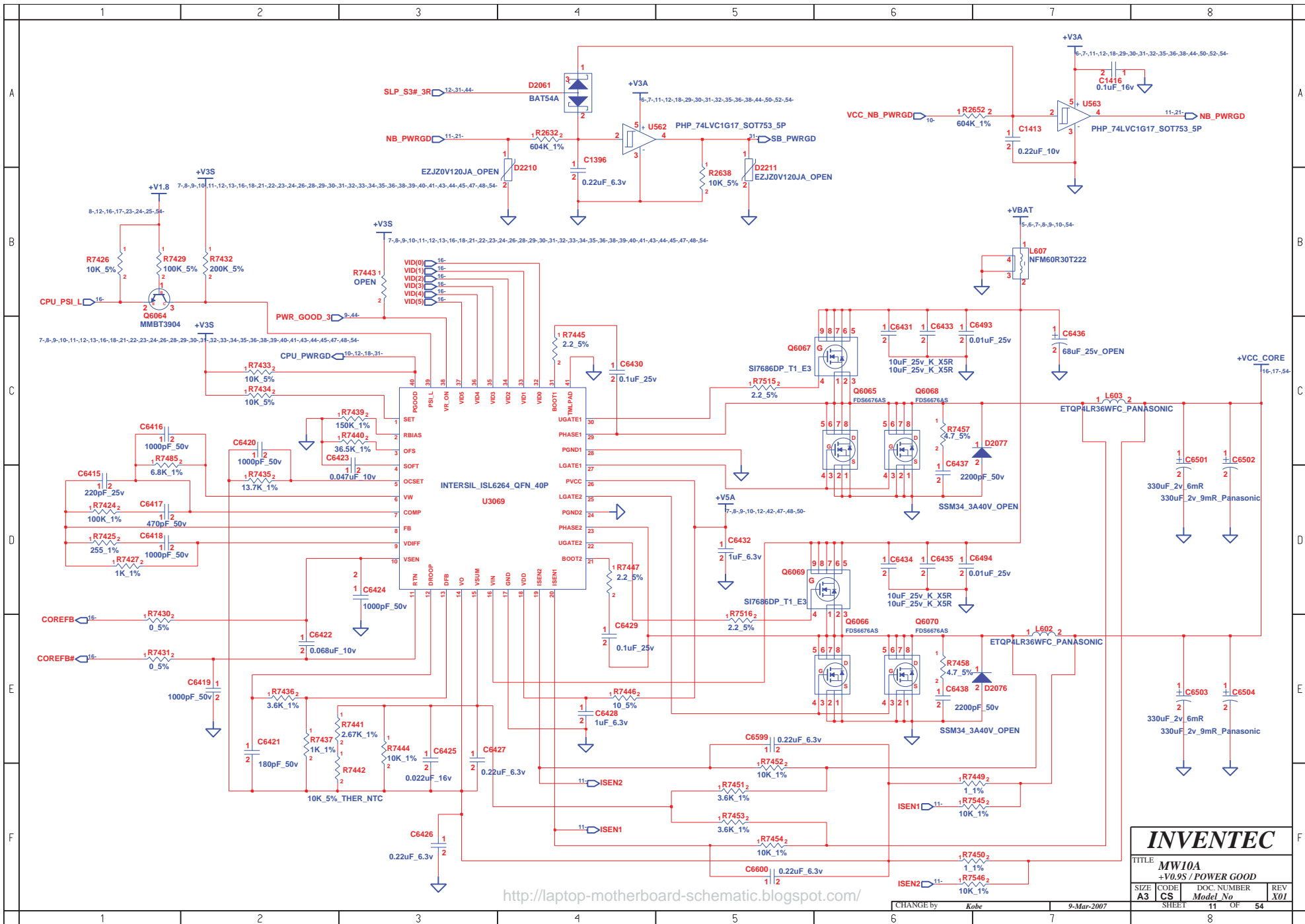
<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC

TITLE
MW10A
 CPU POWER(VCC_CORE)

SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
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CHANGE by *Kobe* 9-Mar-2007 SHEET 10 OF 54

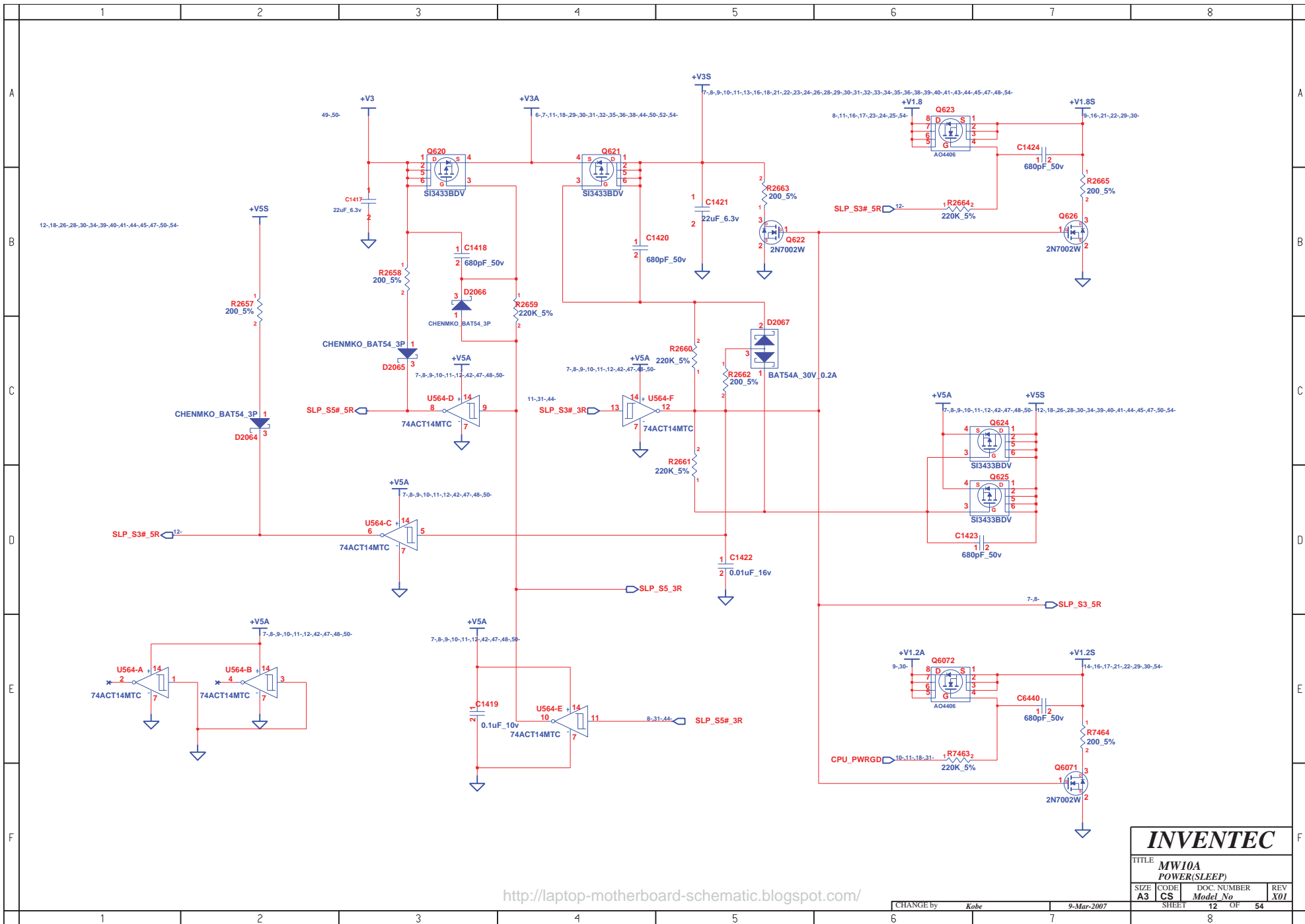


<http://laptop-motherboard-schematic.blogspot.com/>

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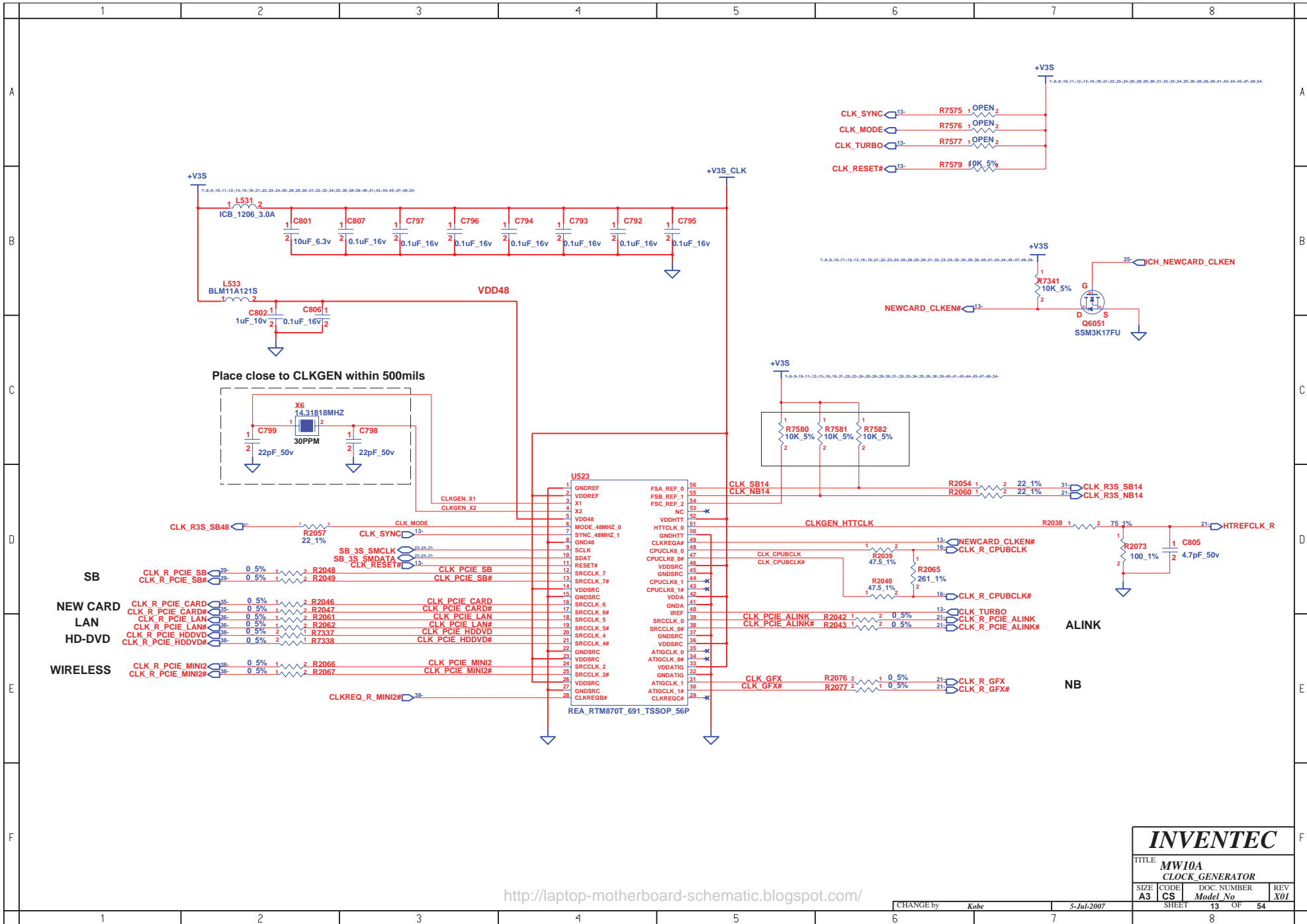
TITLE: MW10A
+V0.9S / POWER GOOD

SIZE A3	CODE CS	DOC NUMBER Model No	REV X01
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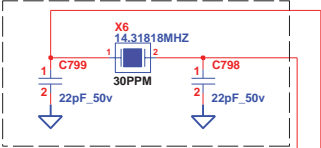


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INVENTEC			
TITLE MW10A POWER(SLEEP)			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
CHANGE by <i>Kobe</i>		9-Mar-2007	
SHEET 12 OF 54		8	



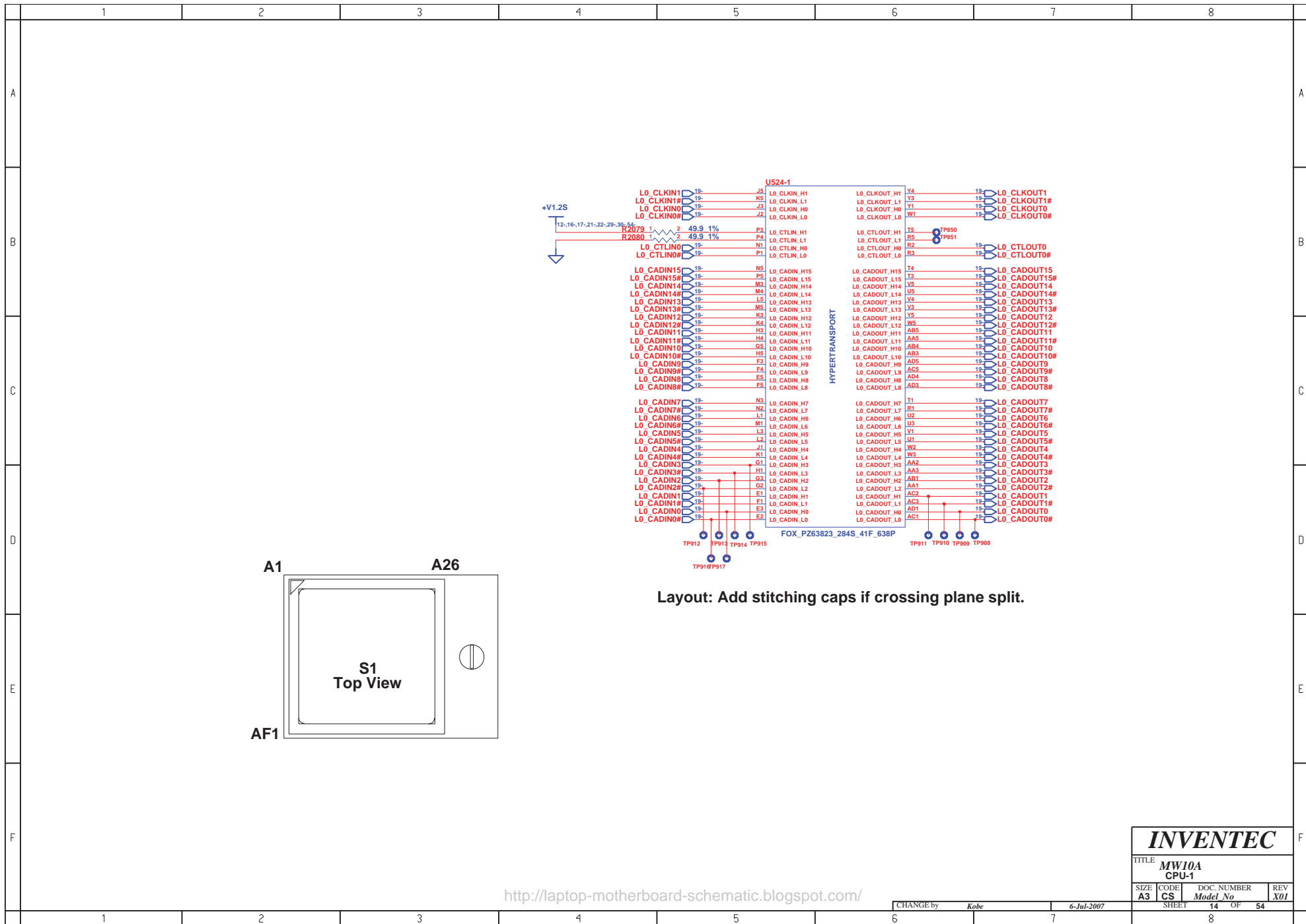
Place close to CLKGEN within 500mils



- SB
 - CLK_R_PCIE_SB 29: 0 5% 1 2 R2048
 - CLK_R_PCIE_SBR 29: 0 5% 1 2 R2049
- NEW CARD
 - CLK_R_PCIE_CARD 35: 0 5% 1 2 R2046
 - CLK_R_PCIE_CARD# 35: 0 5% 1 2 R2047
 - CLK_R_PCIE_LAN 36: 0 5% 1 2 R2061
 - CLK_R_PCIE_LAN# 36: 0 5% 1 2 R2062
 - CLK_R_PCIE_HDDVD 38: 0 5% 2 1 R2337
 - CLK_R_PCIE_HDDVD# 38: 0 5% 2 1 R2338
- LAN
 - CLK_R_PCIE_MINI2 38: 0 5% 1 2 R2066
 - CLK_R_PCIE_MINI2# 38: 0 5% 1 2 R2067
- HD-DVD
 - CLK_R_PCIE_MINI2# 38: 0 5% 1 2 R2066
 - CLK_R_PCIE_MINI2# 38: 0 5% 1 2 R2067
- WIRELESS
 - CLKREQ_R_MINI2# 38: 0 5% 1 2 R2066
 - CLKREQ_R_MINI2# 38: 0 5% 1 2 R2067

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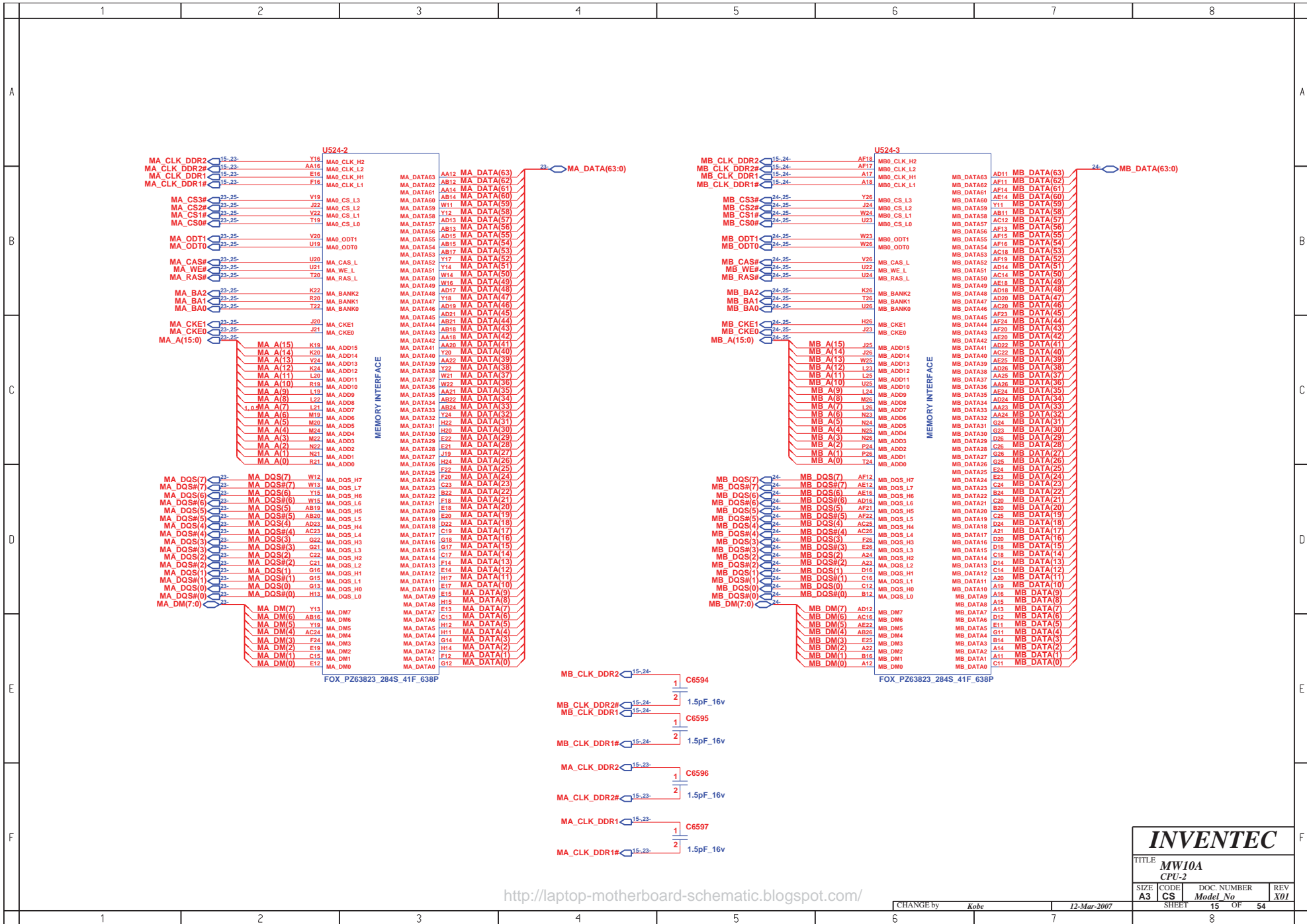
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TITLE MW10A CLOCK_GENERATOR			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		5-Jul-2007	
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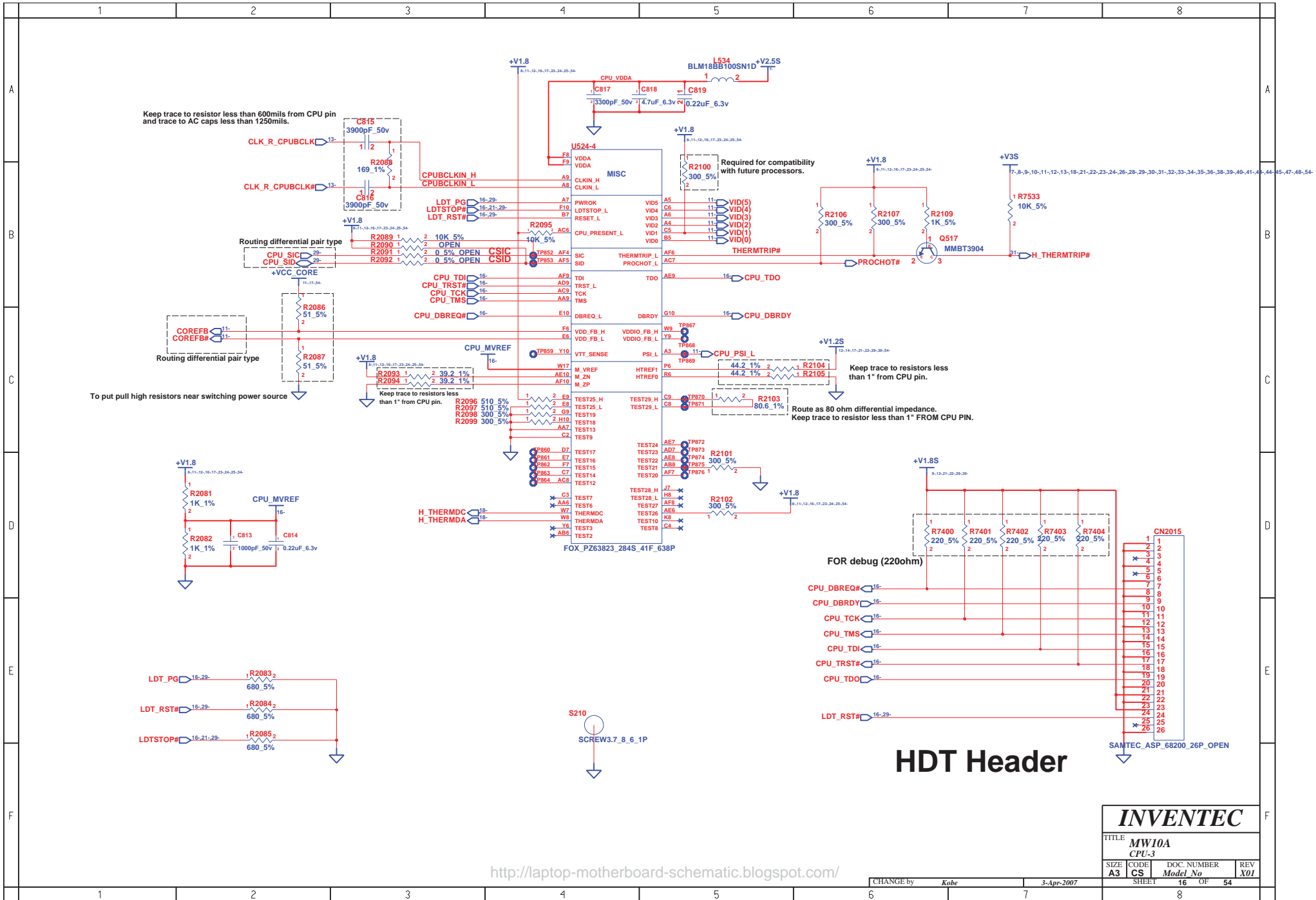
CHANGE by *Kobe* 6-Jul-2007

INVENTEC			
TITLE MW10A CPU-1			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
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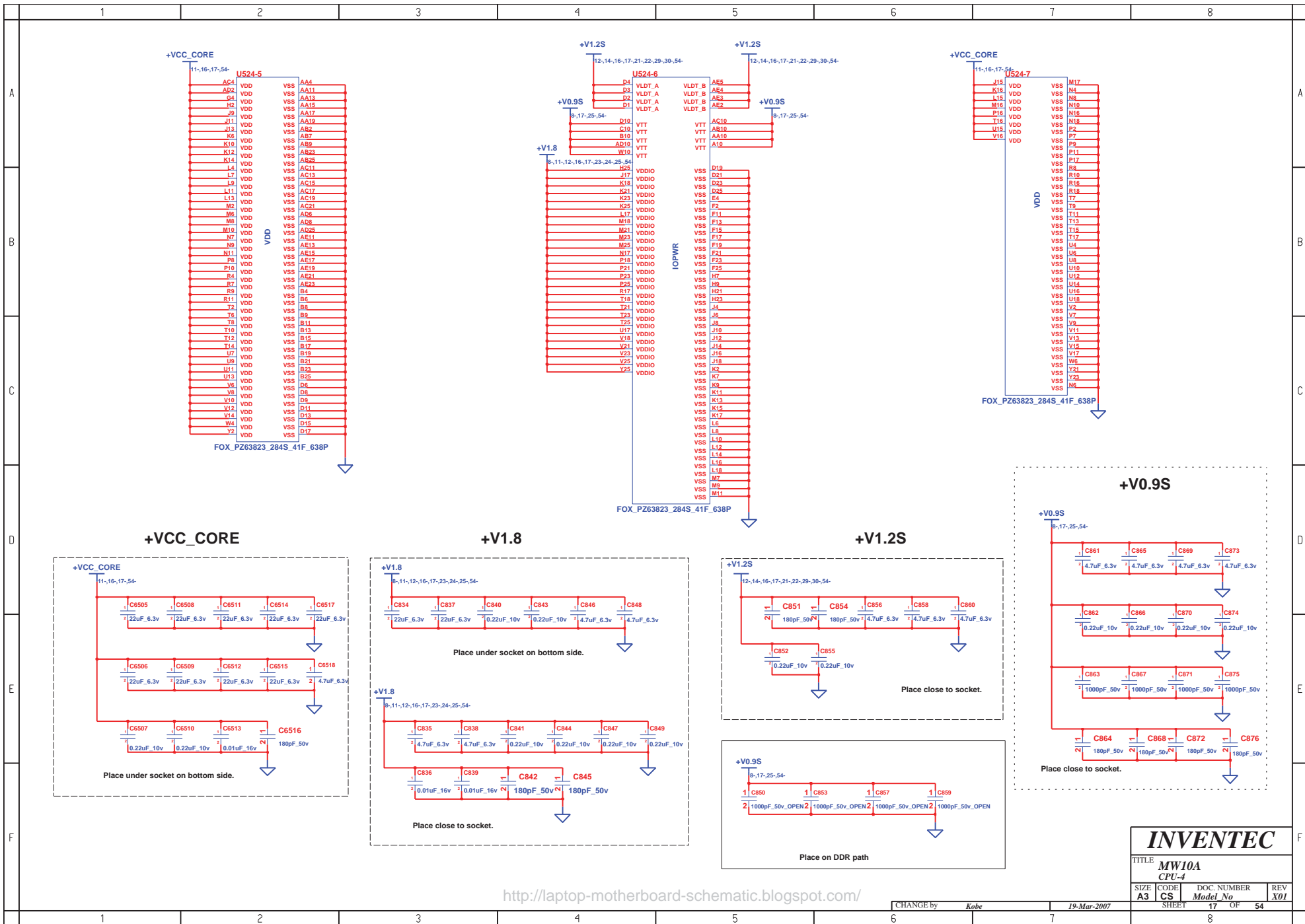


<http://laptop-motherboard-schematic.blogspot.com/>

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TITLE MW10A CPU-2			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		12-Mar-2007	
SHEET 15		OF 54	

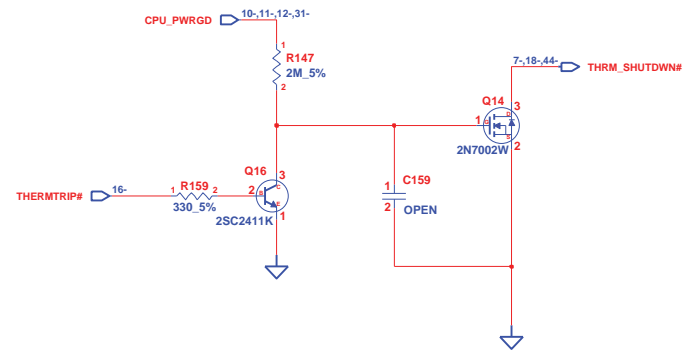
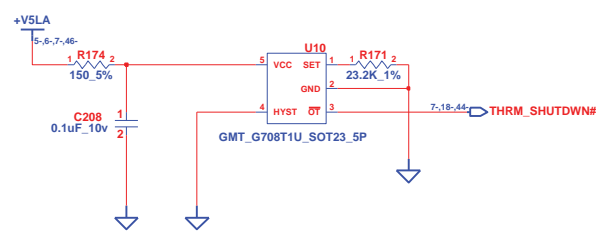
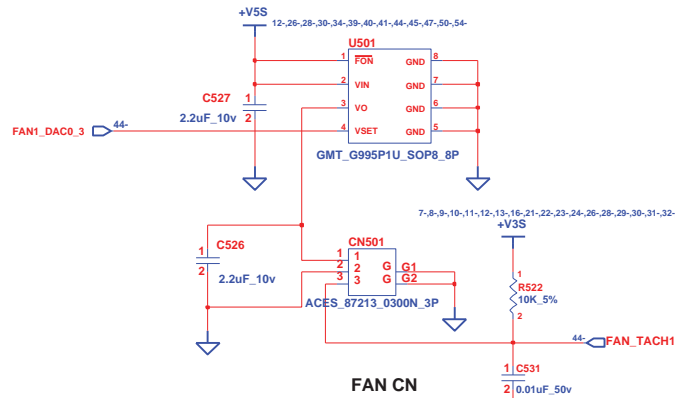


<http://laptop-motherboard-schematic.blogspot.com/>



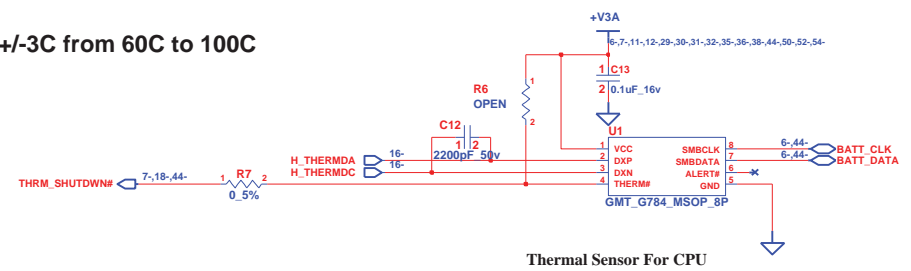
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TITLE MW10A CPU-4			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by Kobe		19-Mar-2007	
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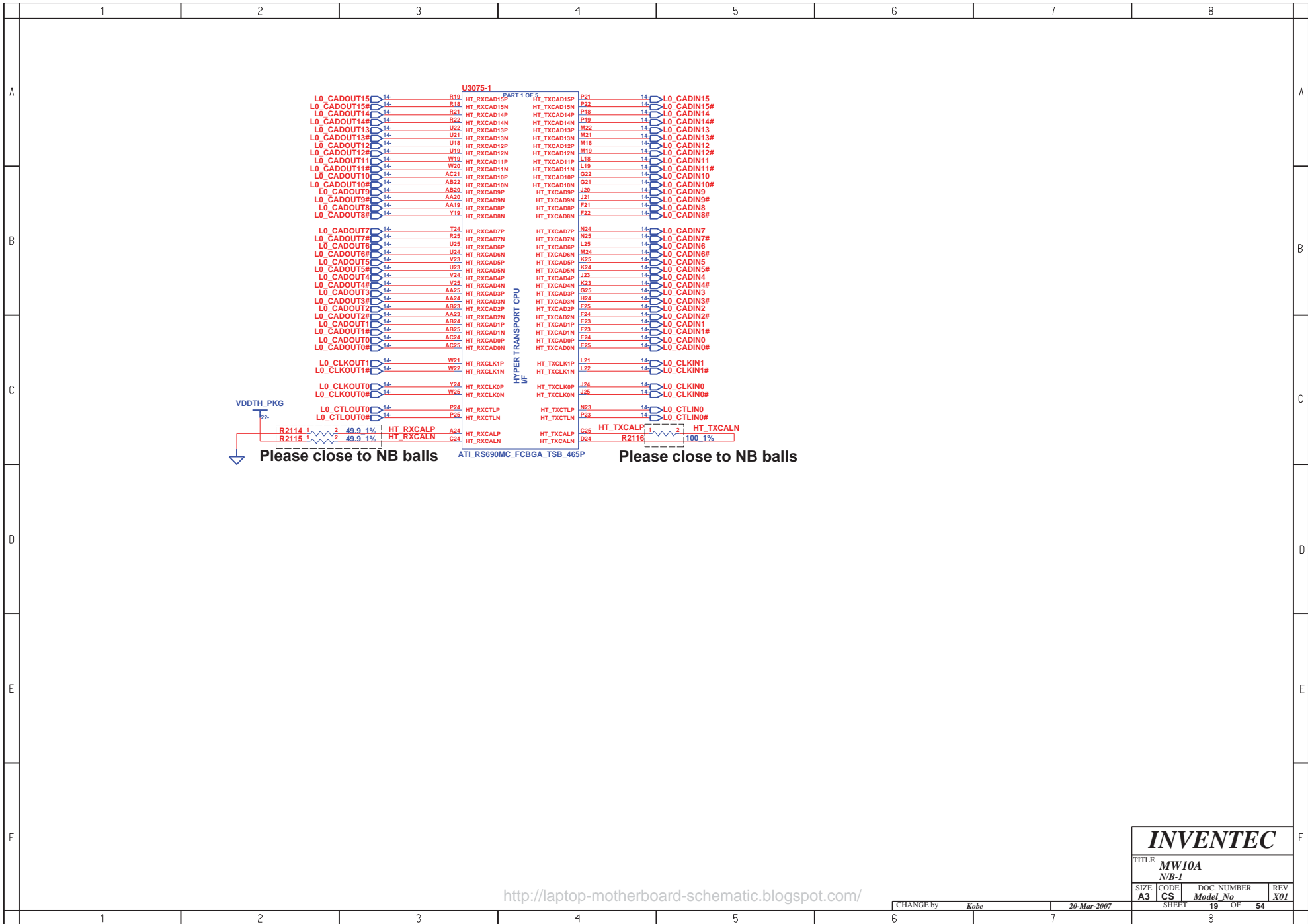
Thermal shoutdown at 86C +/-3C from 60C to 100C

Hysteresis is 30C



INVENTEC			
TITLE MW10A THERMAL&FAN CONTROLLER			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01

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

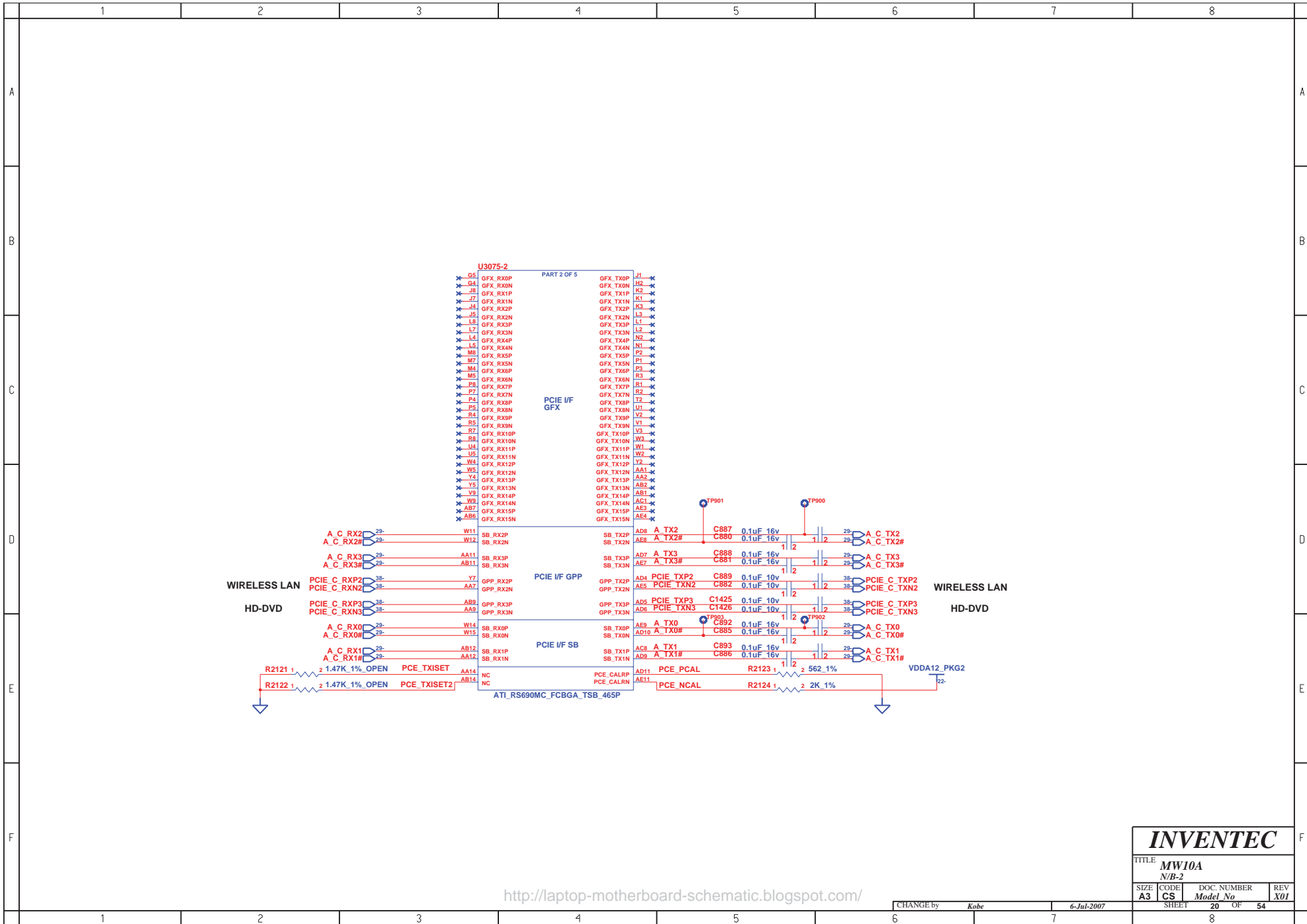


Please close to NB balls

Please close to NB balls

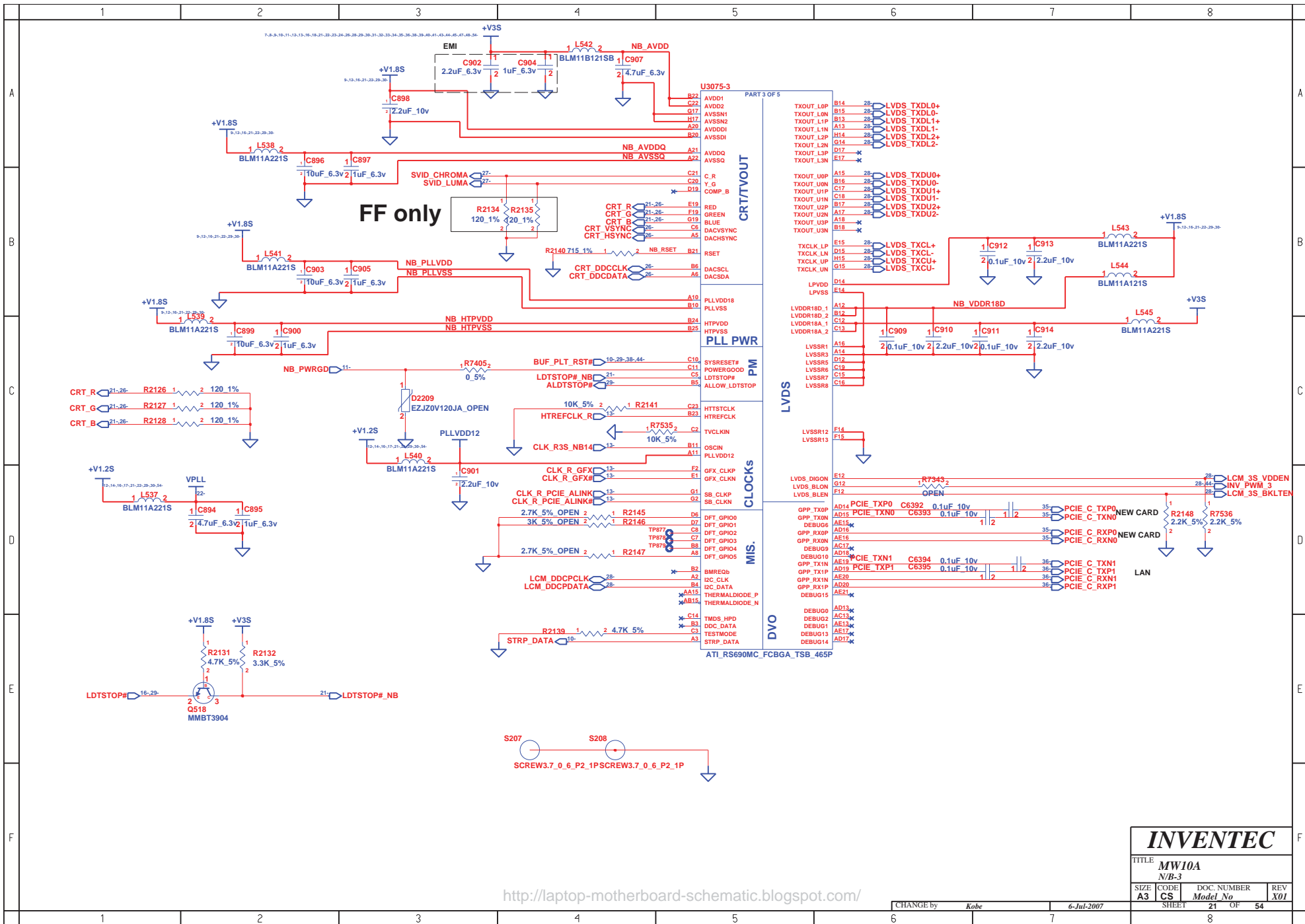
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TITLE MW10A N/B-1				
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CHANGE by <i>Kobe</i> 20-Mar-2007			SHEET 19	OF 54



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INVENTEC			
TITLE MW10A N/B-2			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by Kobe		6-Jul-2007	SHEET 20 OF 54

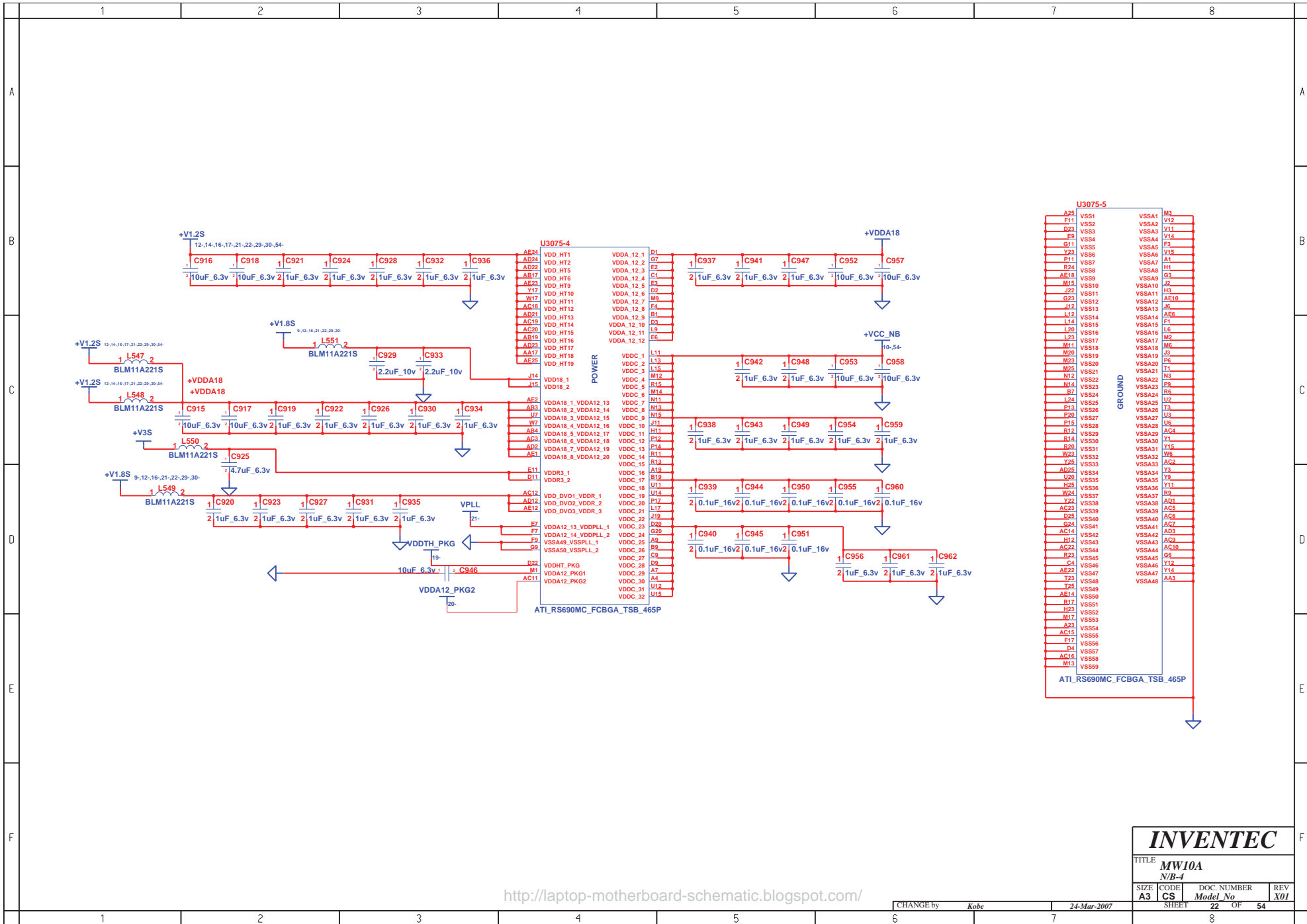


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INVENTEC

TITLE			
MW10A			
N/B-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		6-Jul-2007	
Kobe		SHEET 21 OF 54	

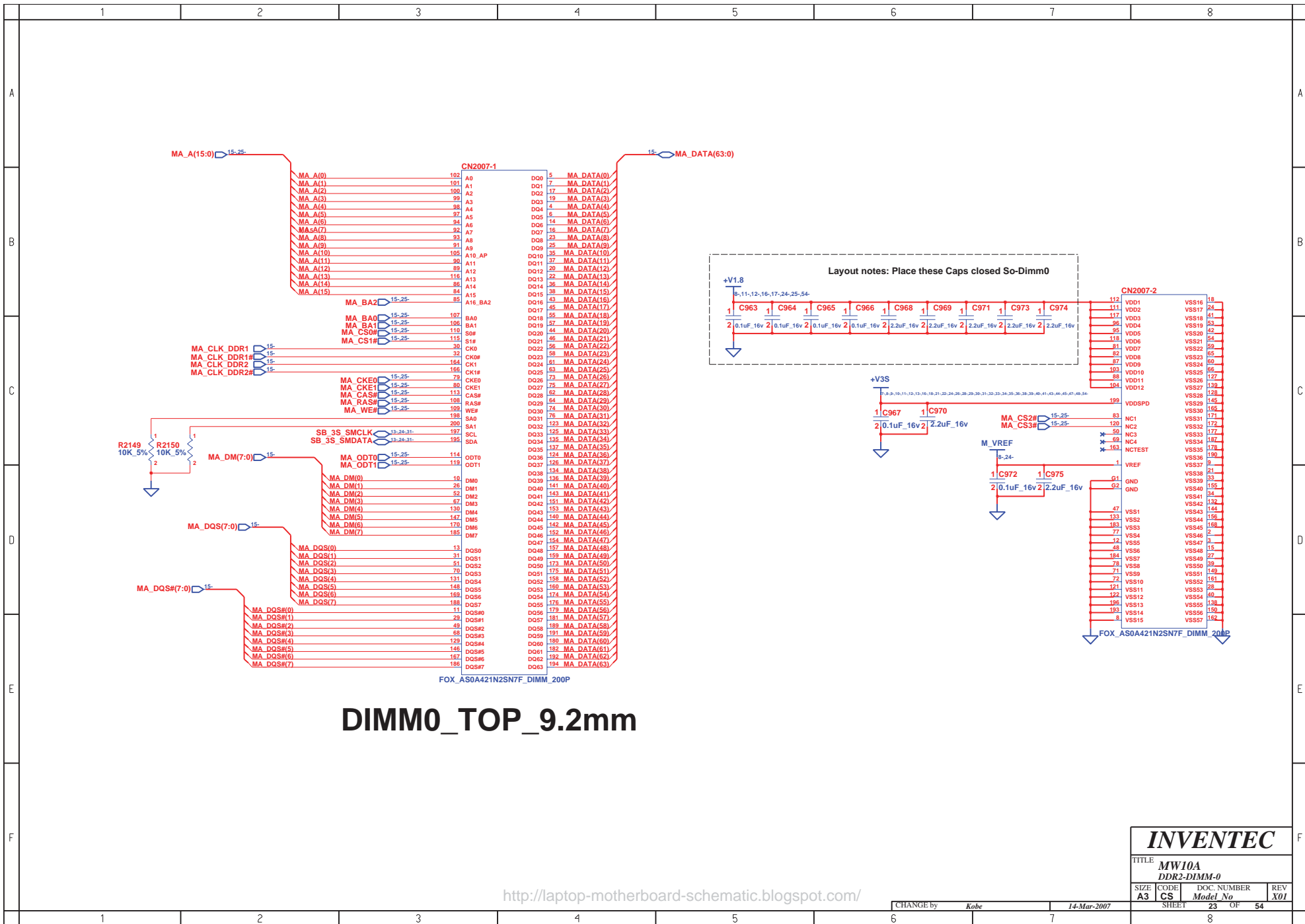
<http://laptop-motherboard-schematic.blogspot.com/>



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

INVENTEC

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MW10A			
N/B-4			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by			SHEET
Kobe			22 OF 54
24-Mar-2007			8

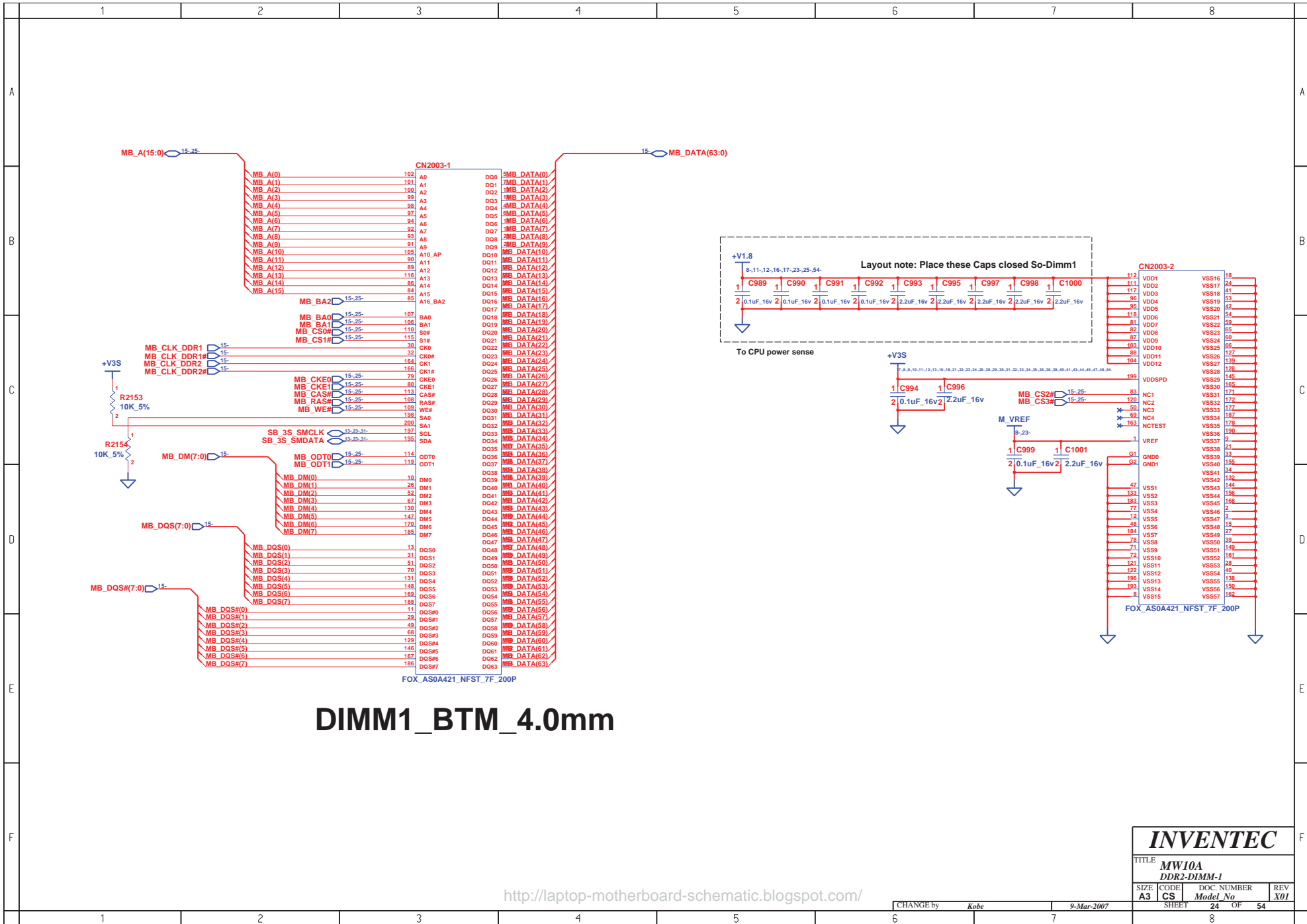


DIMM0_TOP_9.2mm

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

INVENTEC

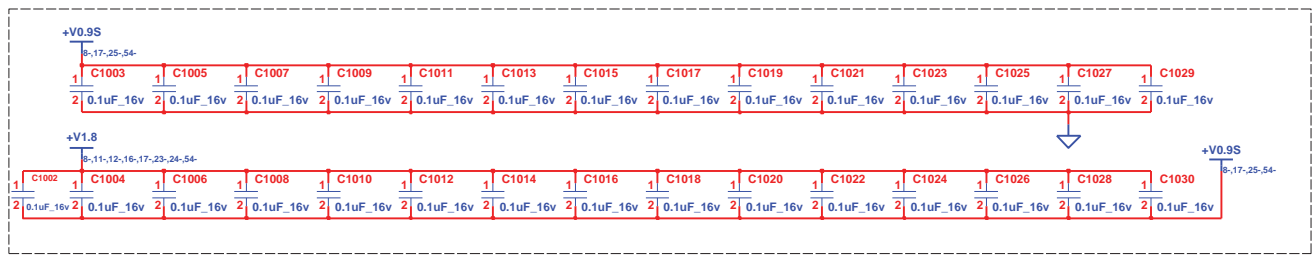
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MW10A			
DDR2-DIMM-0			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by			SHEET
Kobe			23 OF 54
14-Mar-2007			8



DIMM1_BTM_4.0mm

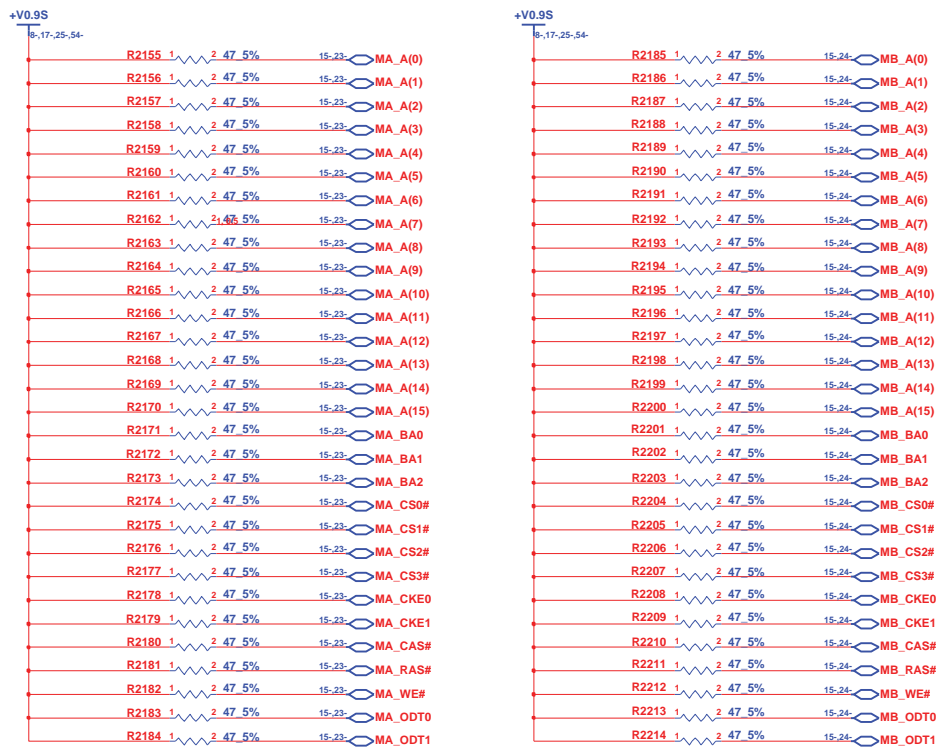
<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC			
TITLE MW10A DDR2-DIMM-1			
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CHANGE by Kobe		9-Mar-2007	
SHEET 24		OF 54	



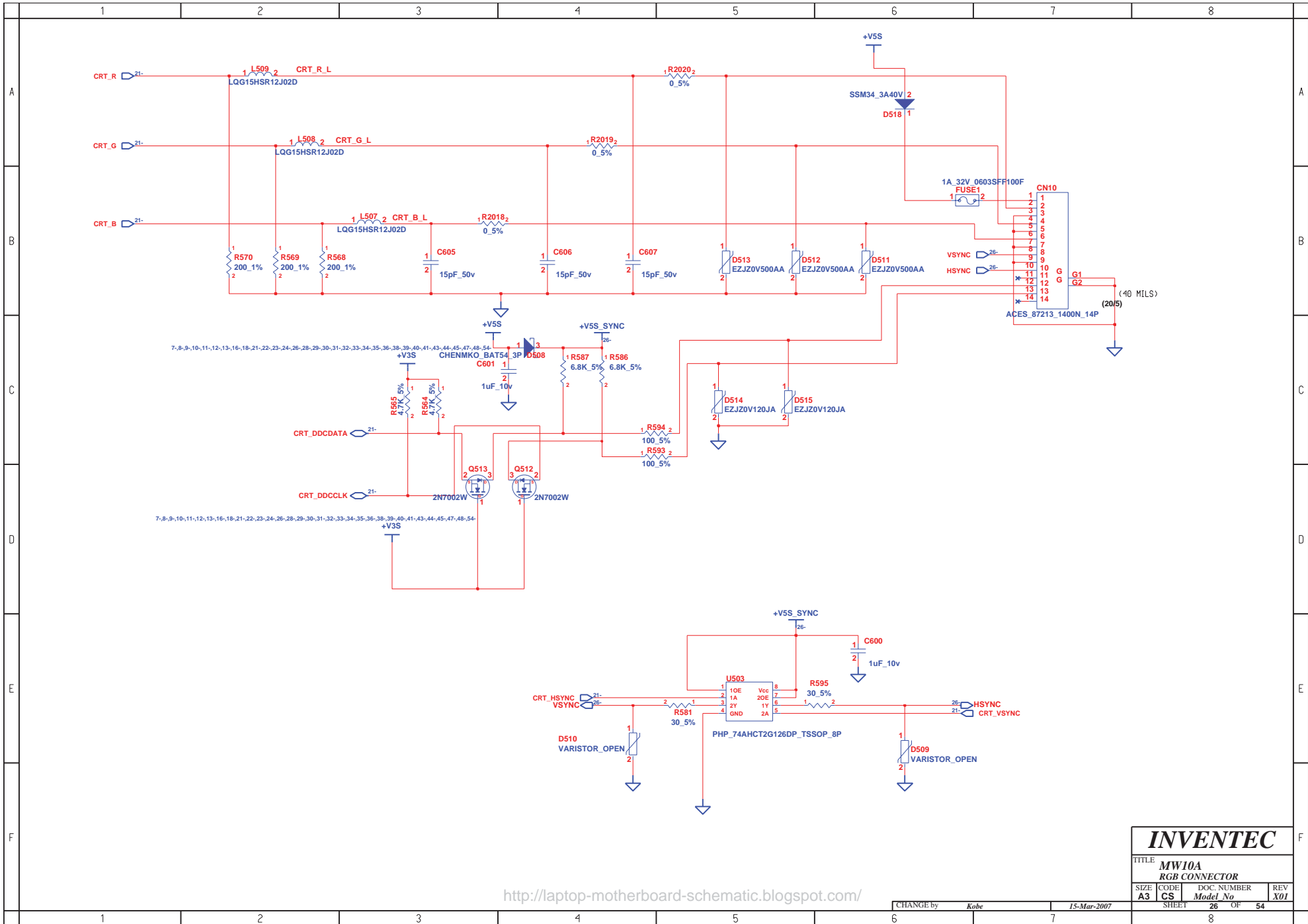
To CPU power sense

Place CAPs close to DIMM



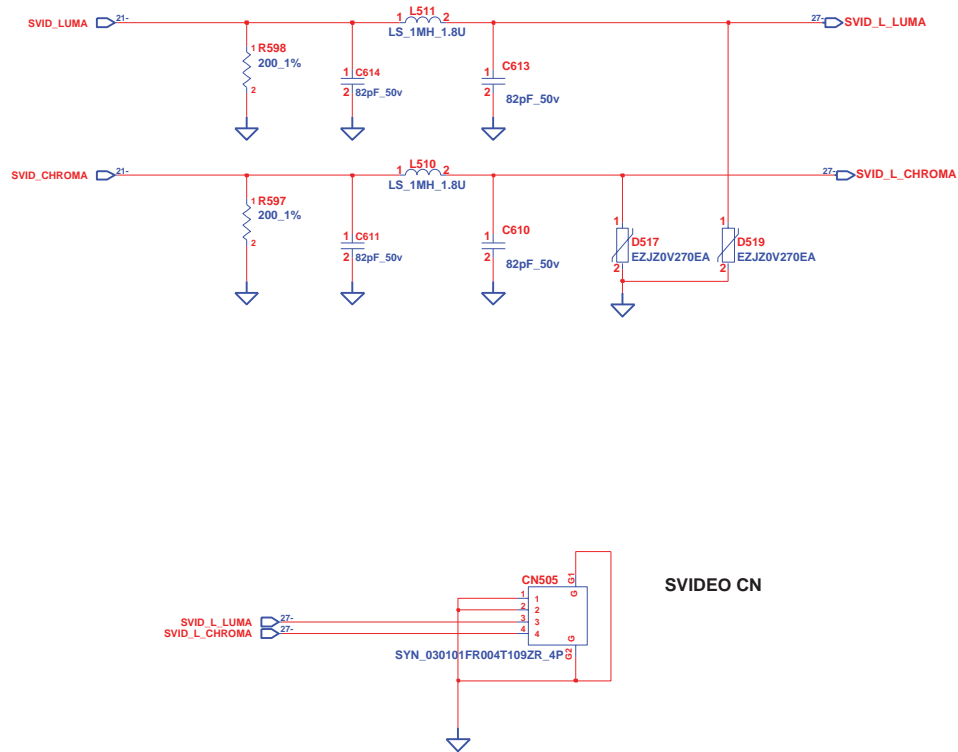
<http://laptop-motherboard-schematic.blogspot.com/>

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TITLE			
MW10A DDR2-DAMPING			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		9-Mar-2007	
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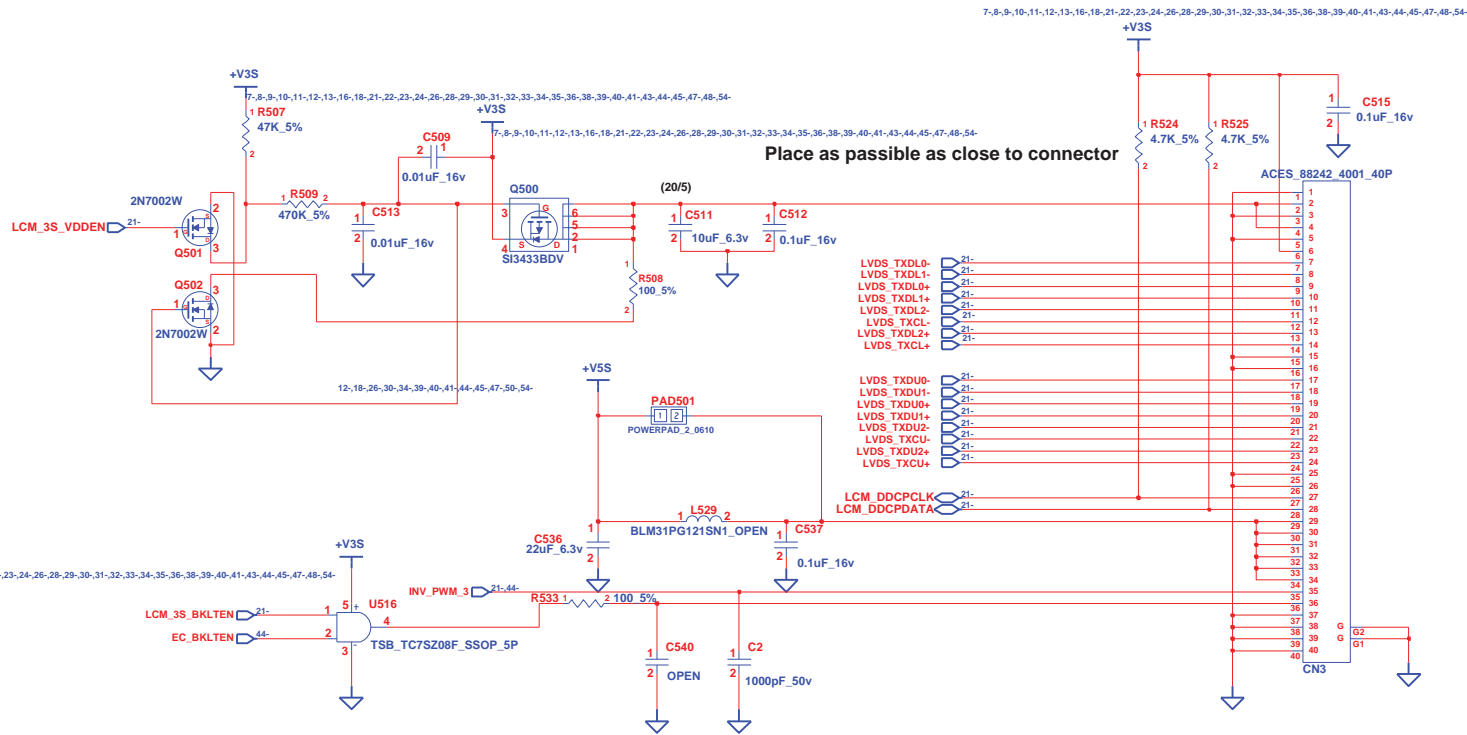
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SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		15-Mar-2007	SHEET 26 OF 54

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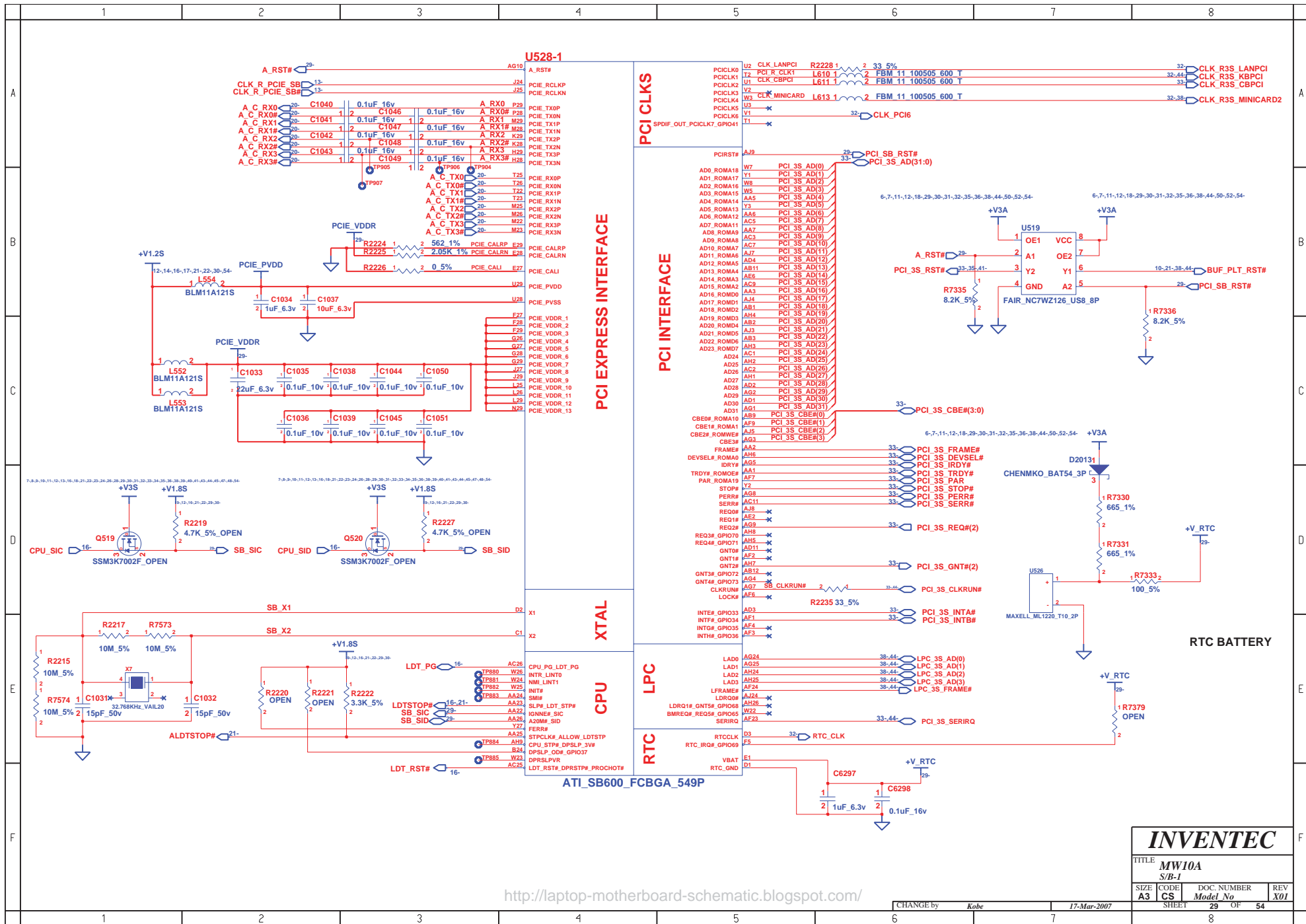
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SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		8-Mar-2007	SHEET 27 OF 54



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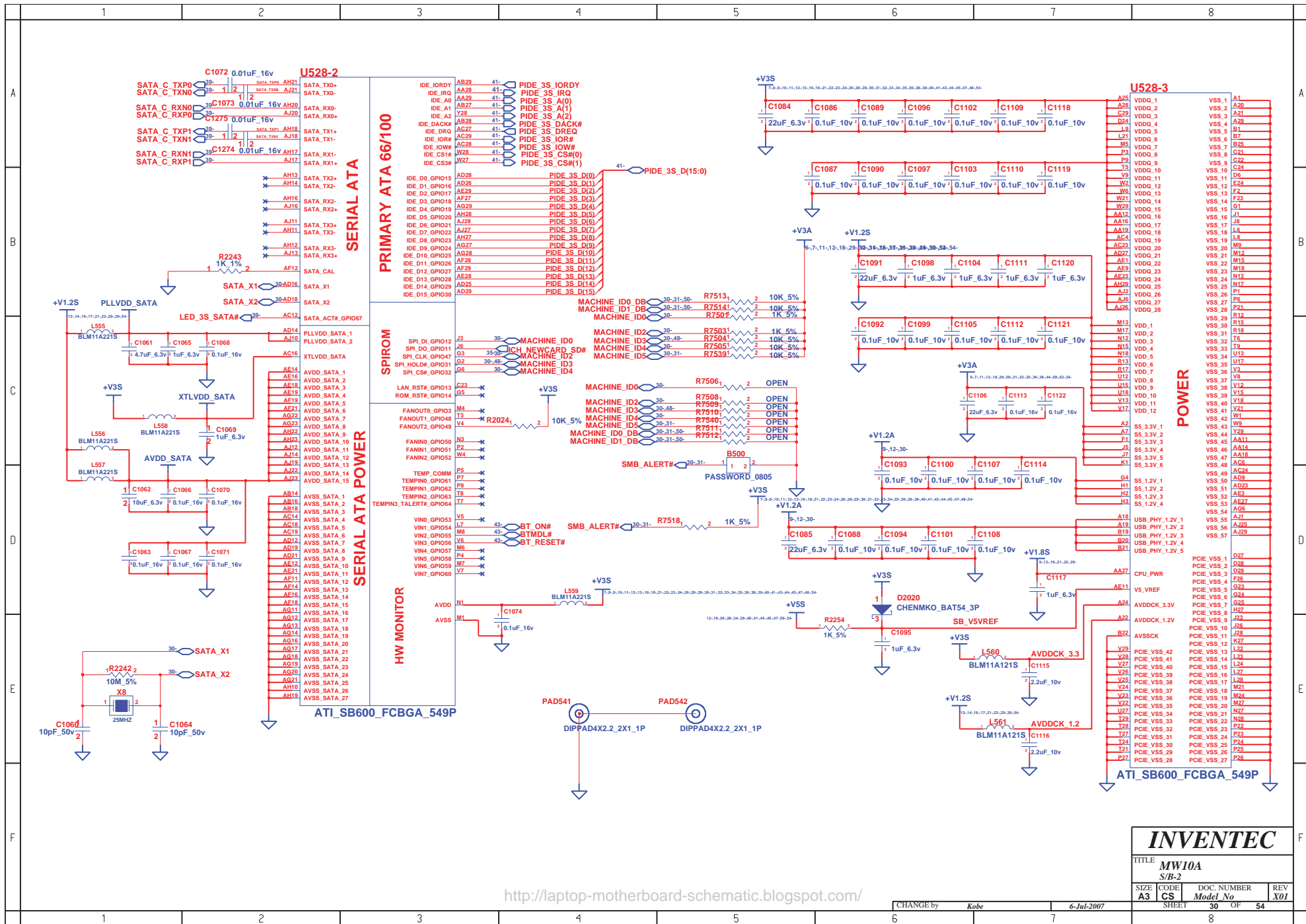
INVENTEC

TITLE			
MW10A			
LCM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01



INVENTEC			
TITLE MW10A			
S/B-1			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
CHANGE by <i>Kobe</i>		17-Mar-2007	
SHEET 29		OF 54	

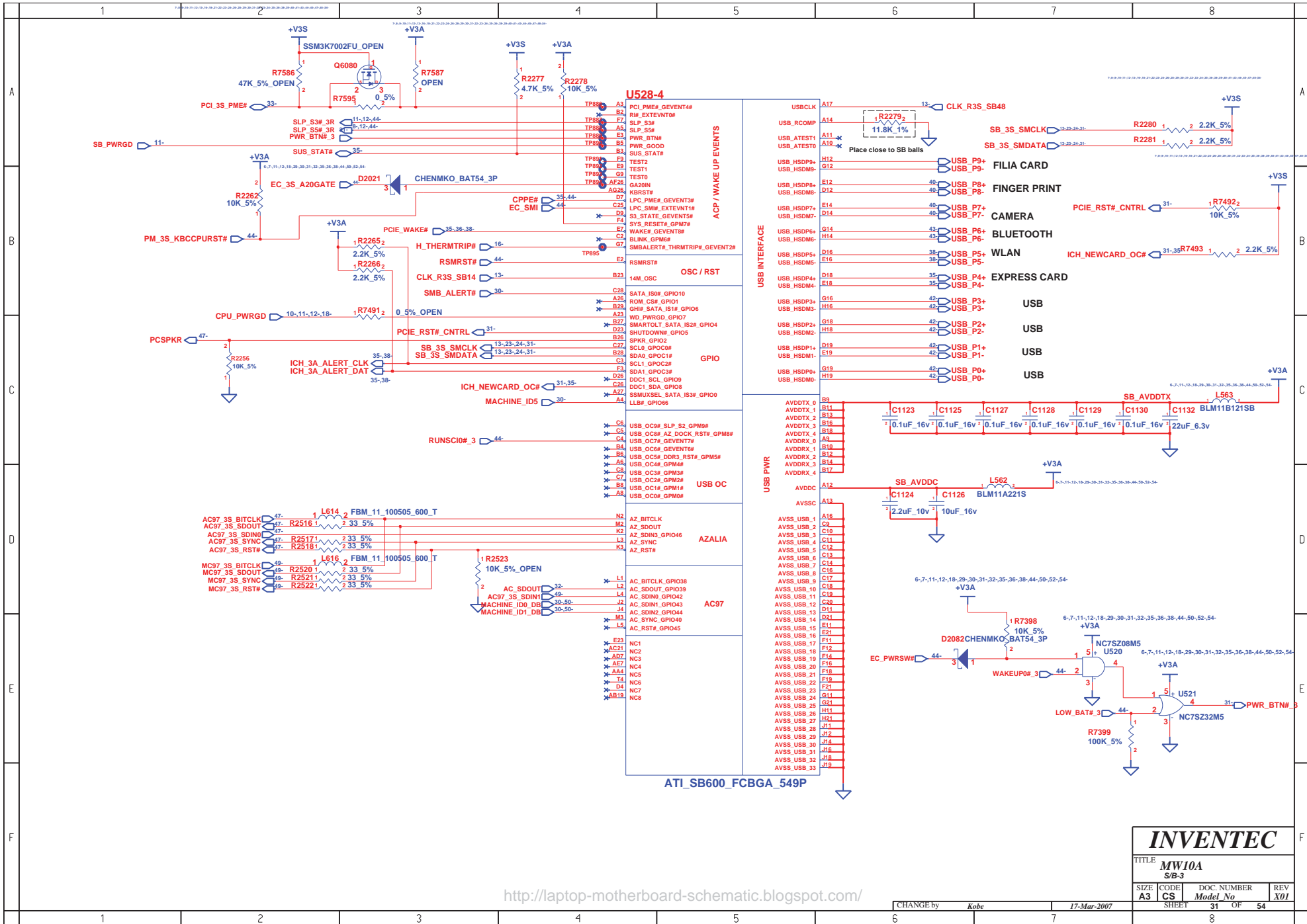
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INVENTEC

TITLE			
MW10A			
S/B-2			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		6-Jul-2007	
Kobe		6-Jul-2007	
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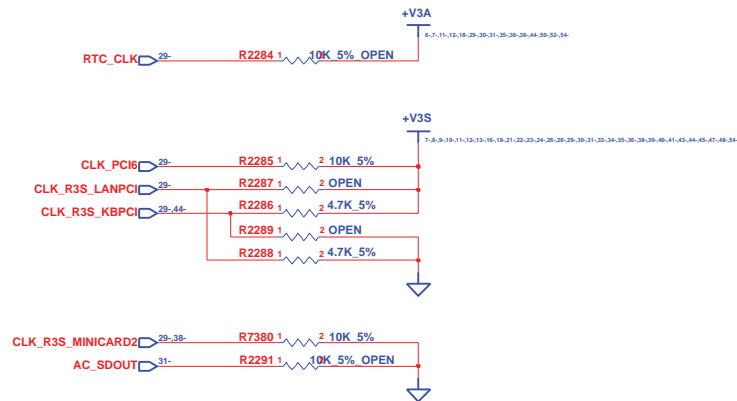


<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC			
TITLE MW10A S/B-3			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
CHANGE by <i>Kobe</i>		17-Mar-2007	
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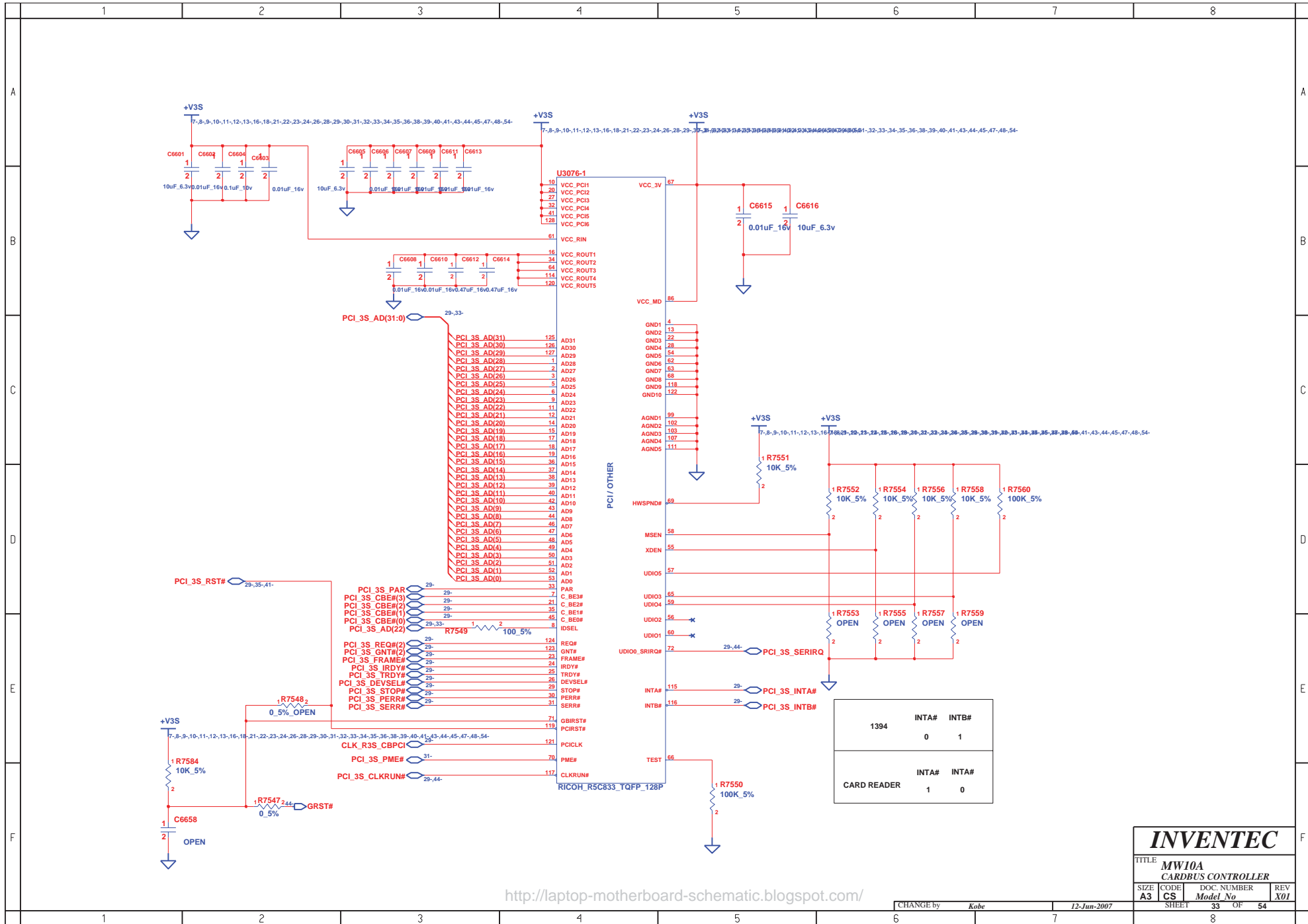
Required Straps:

	AC_SDOUT	RTC_CLK	CLK_R3S_MINICARD2	PCI_CLK6	PCI_CLK0 PCI_CLK1
PULL HIGH	USE DEBUG STRAPS	INTERNAL RTC	USE INT. PLL48	CPU K8	HH: PCI ROM HL: SPI ROM
PULL LOW	IGNORE DEBUG STRAPS	EXTERNAL RTC	USE EXT. 48M CLK	CPU P4	LH: LPC ROM LL: FWH ROM



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INVENTEC			
TITLE MW10A			
S/B-4			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		5-Jun-2007	
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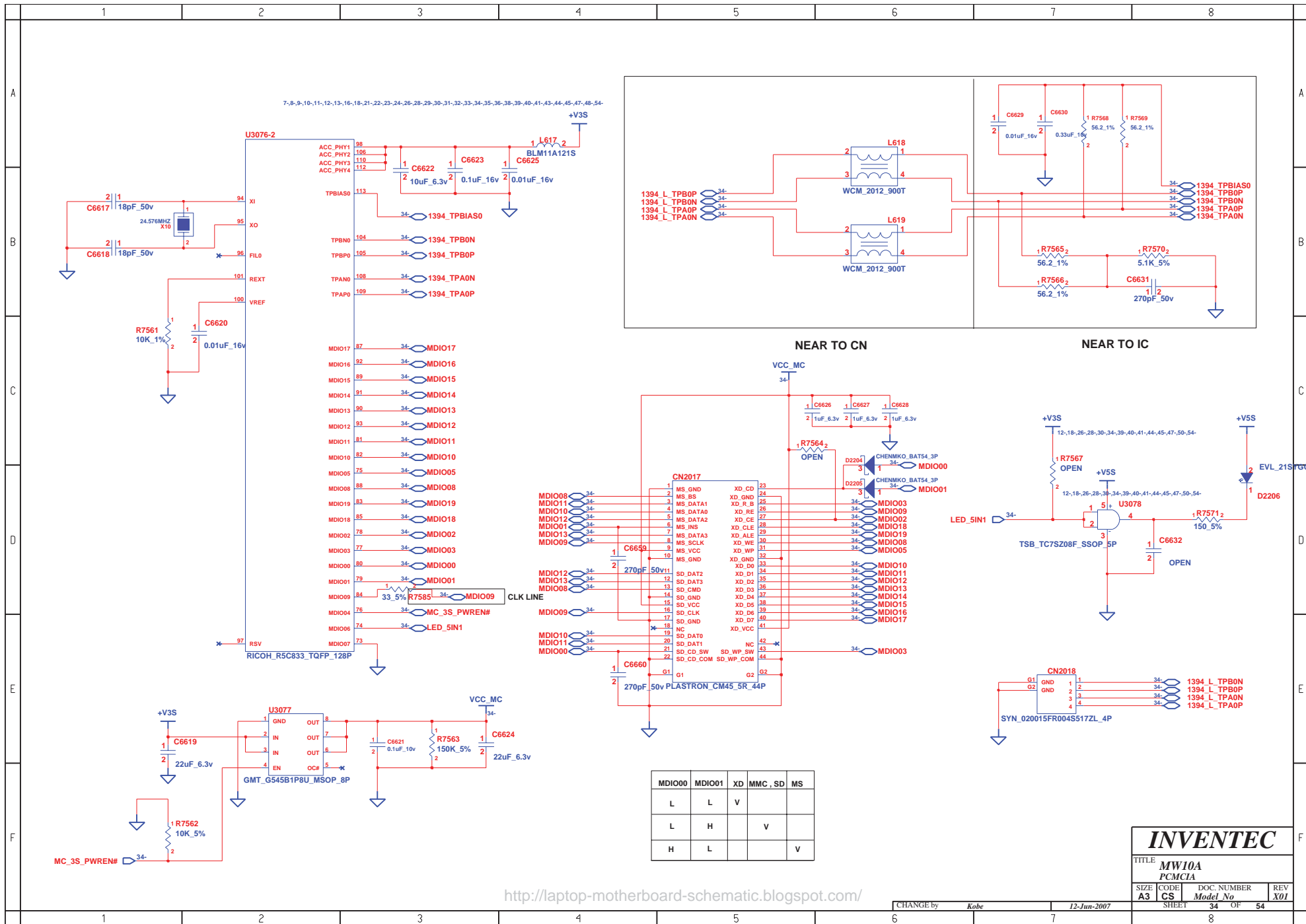


<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC

TITLE
**MW10A
 CARBUS CONTROLLER**

SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
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MDIO00	MDIO01	XD	MMC, SD	MS
L	L	V		
L	H	V		
H	L	V		

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

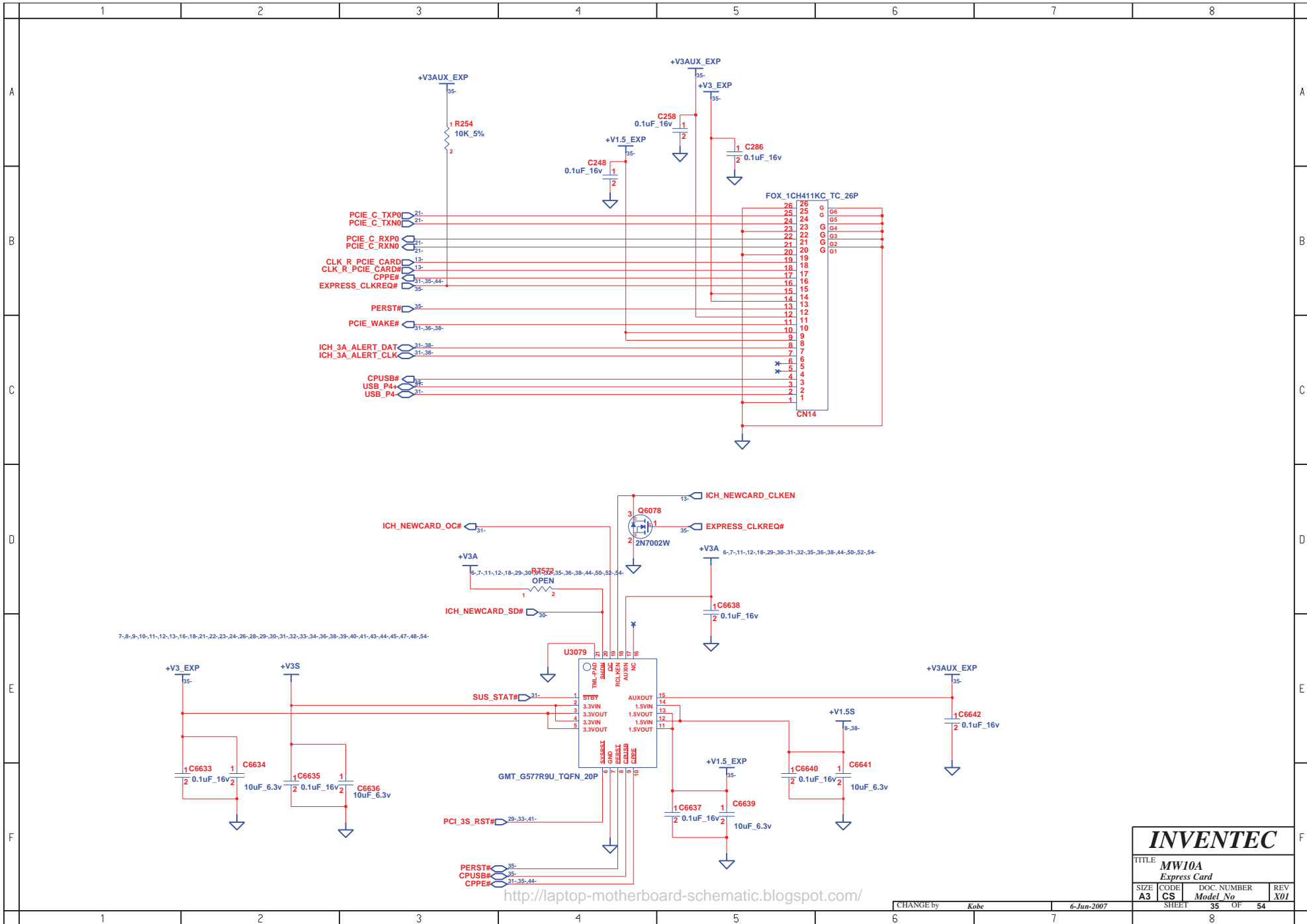
INVENTEC

TITLE: MW10A PCMCIA

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

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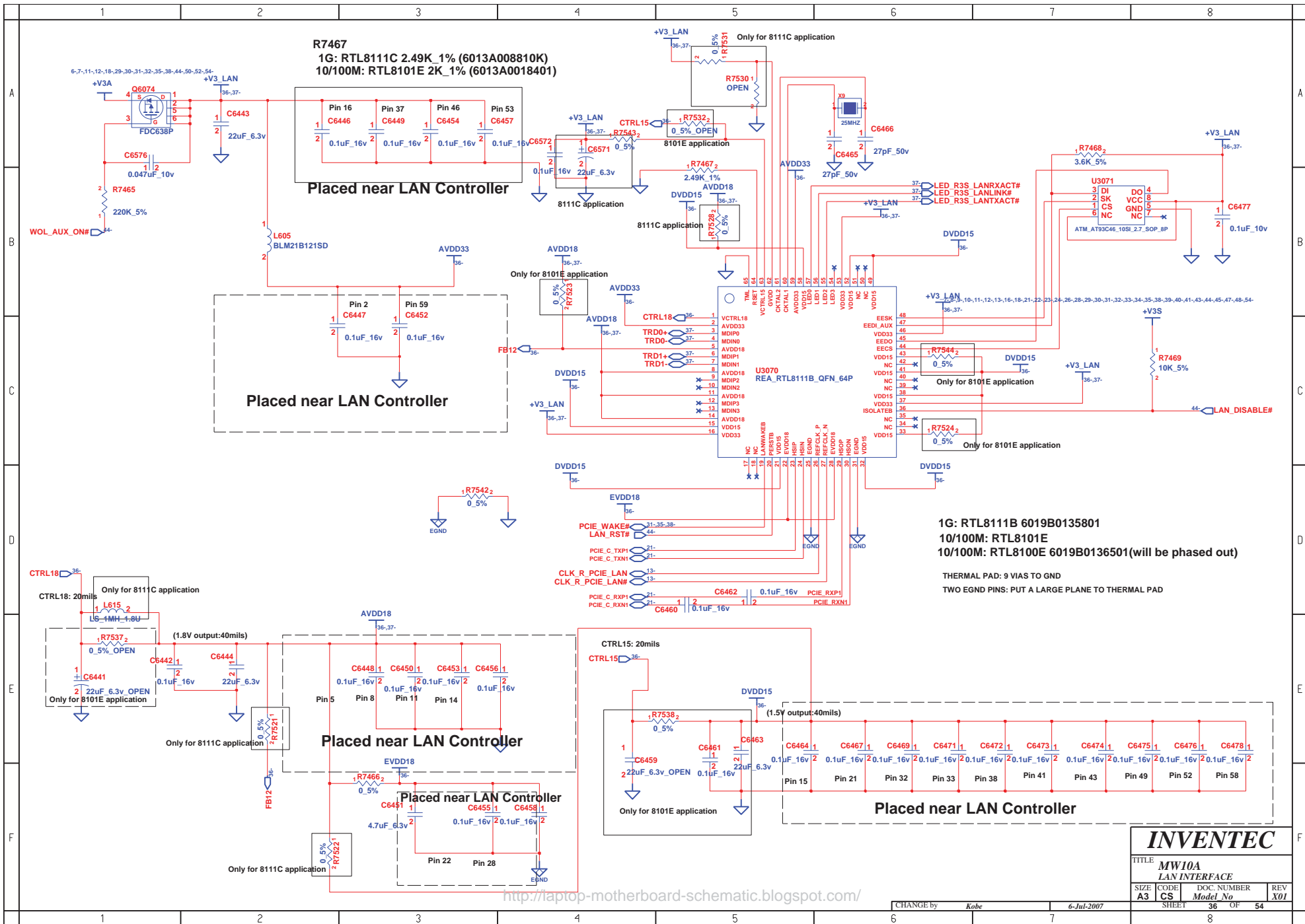
CHANGE by Kobe 12-Jun-2007



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

INVENTEC

TITLE			
MW10A			
Express Card			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

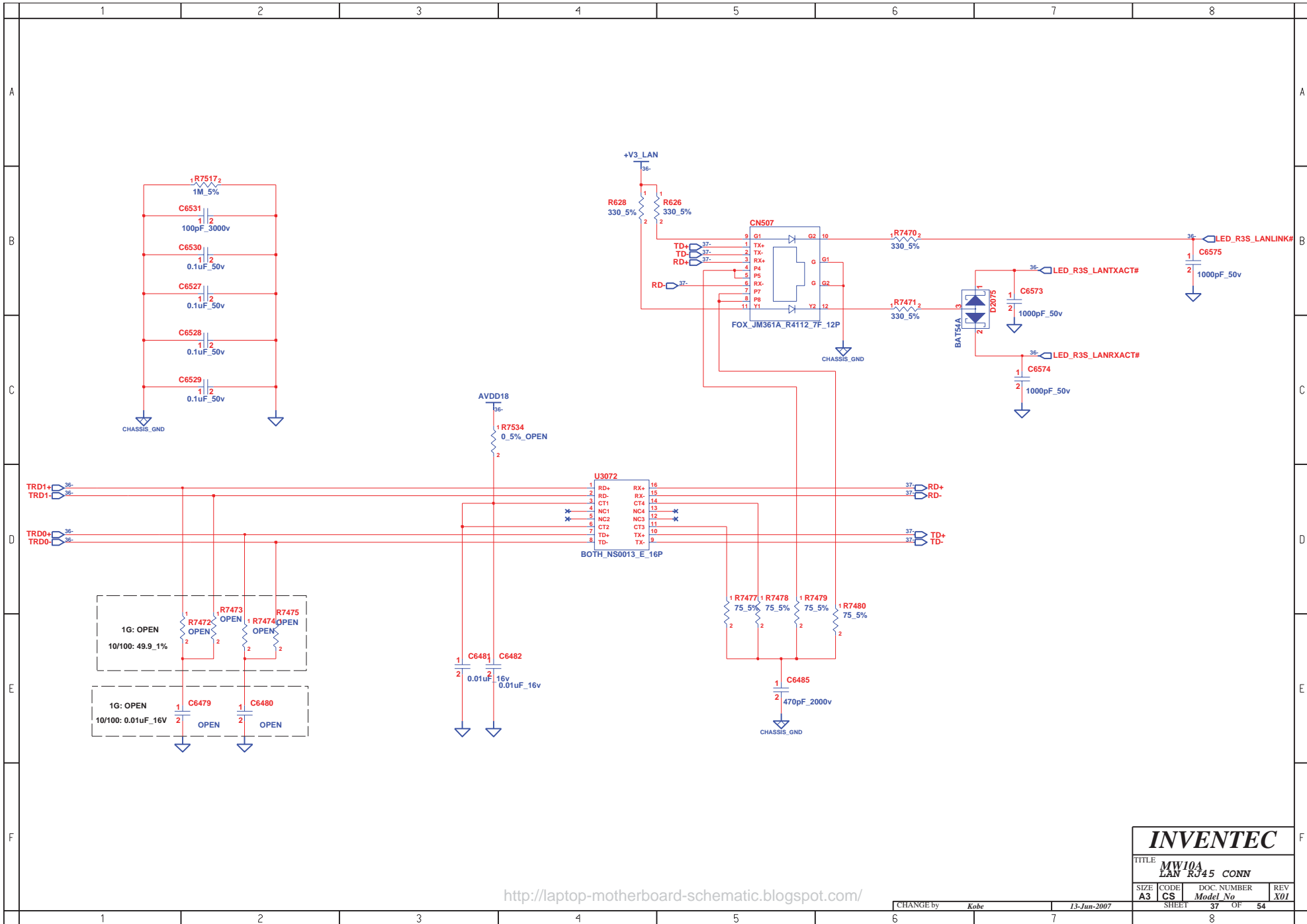


<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC

TITLE			
MW10A LAN INTERFACE			
SIZE	CODE	DOC NUMBER	REV
A3	CS	Model No	X01
SHEET		OF	
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CHANGE by Kobe 6-Jul-2007



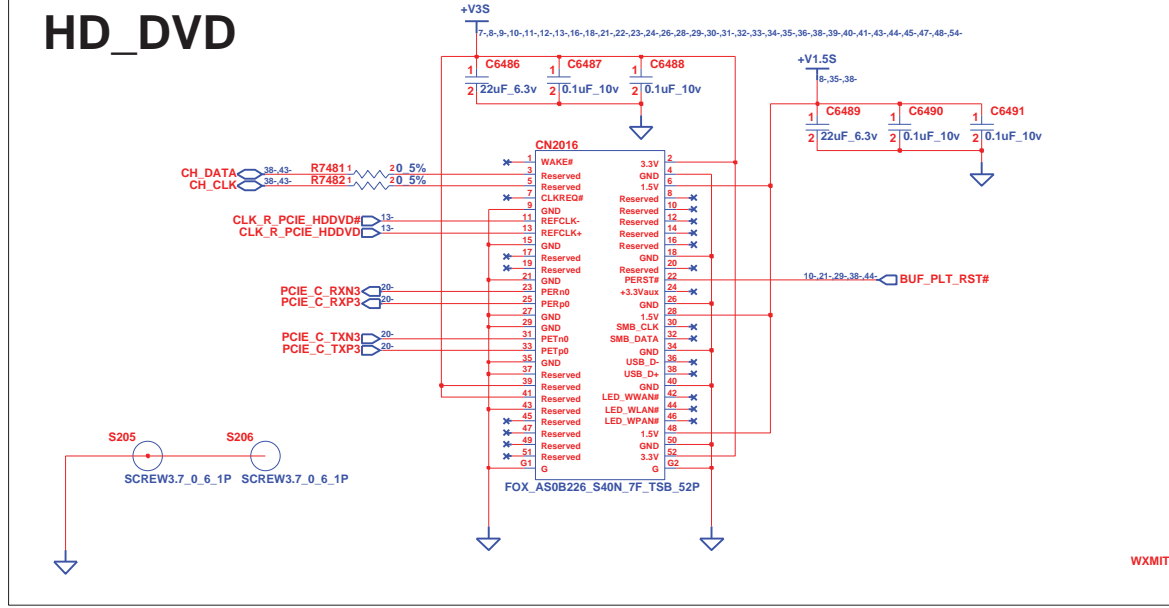
<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC

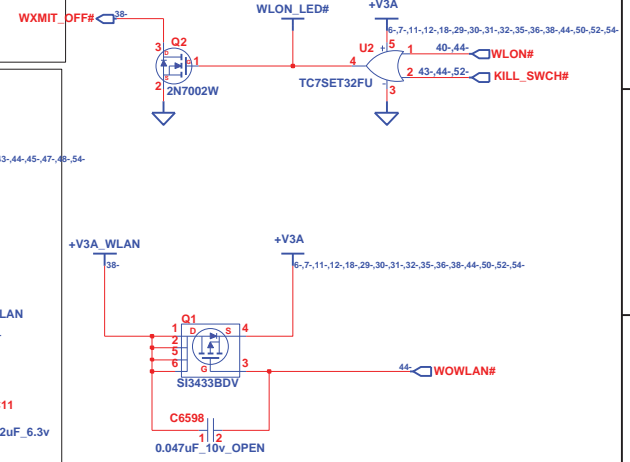
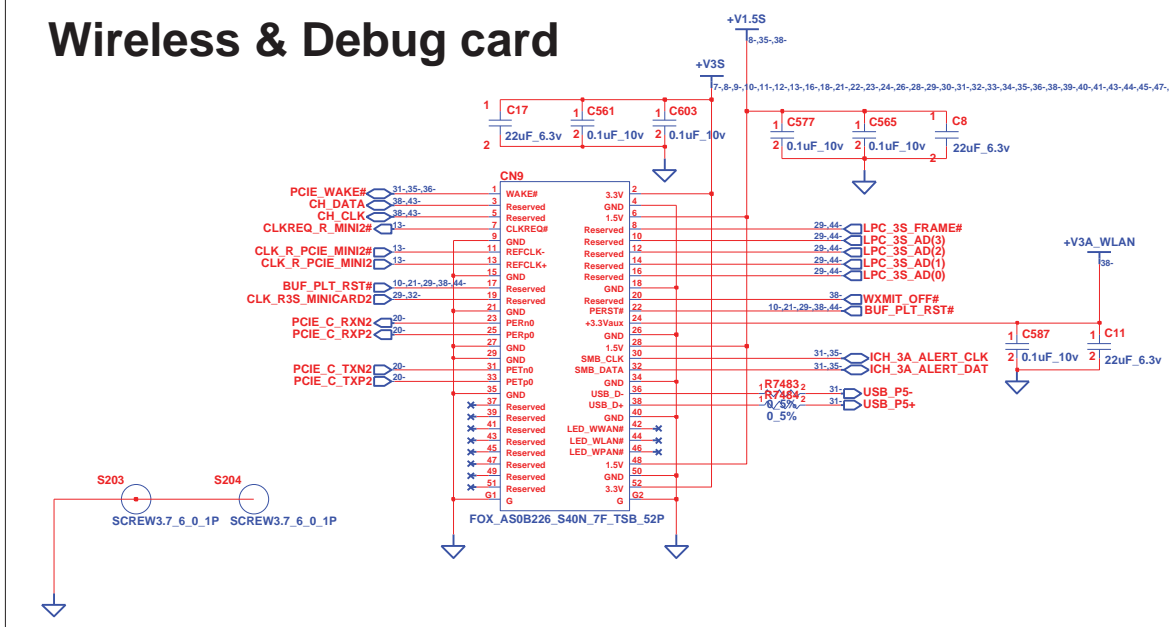
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MW10A LAN RJ45 CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by	Kobe	13-Jun-2007	SHEET	37	OF	54
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HD_DVD

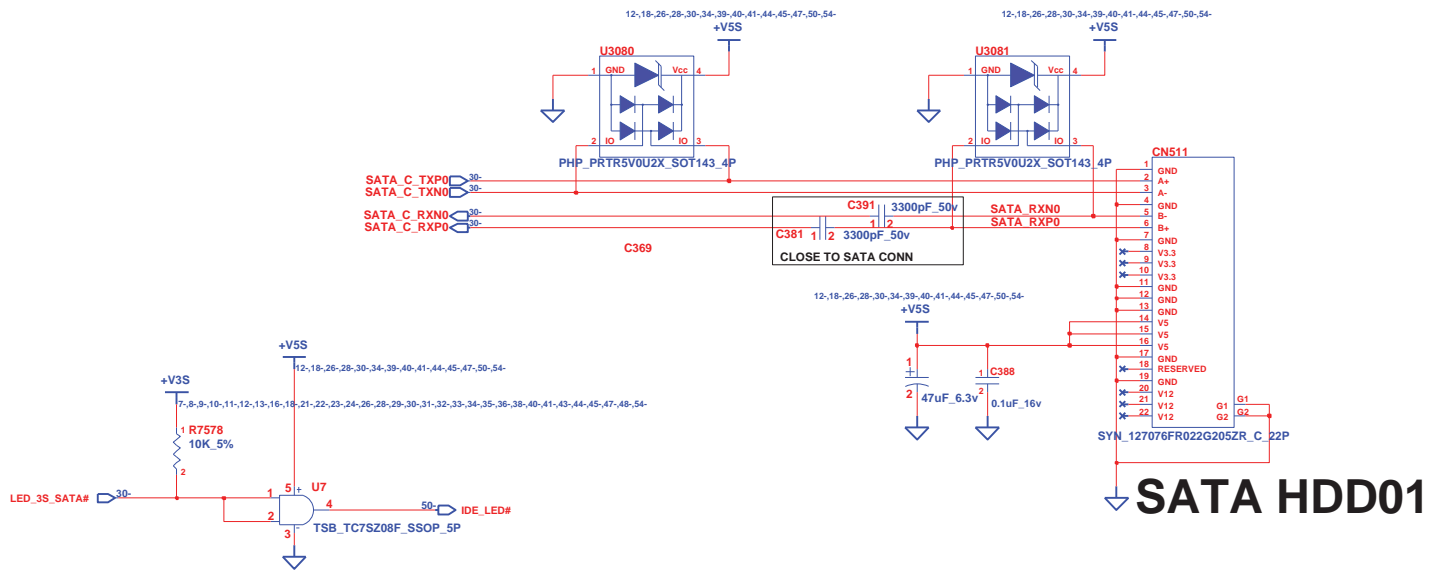


Wireless & Debug card

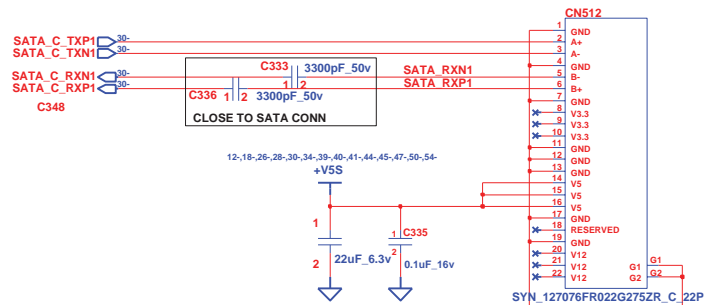


<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC			
TITLE MW10A Robson & WLAN			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		9-Mar-2007	
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SATA HDD01



SATA HDD02

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

INVENTEC

TITLE			
MW10A			
SATA HDD CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		6-Jul-2007	
Kobe		SHEET 39 OF 54	

1 2 3 4 5 6 7 8

A

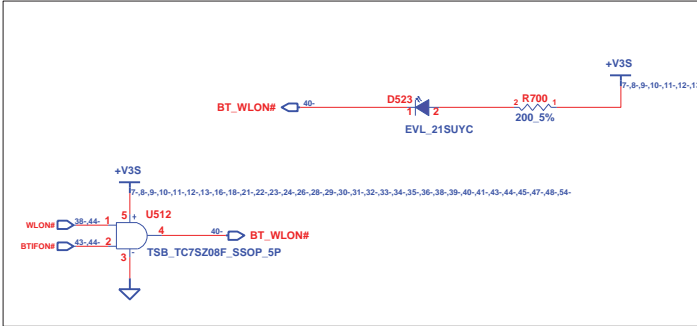
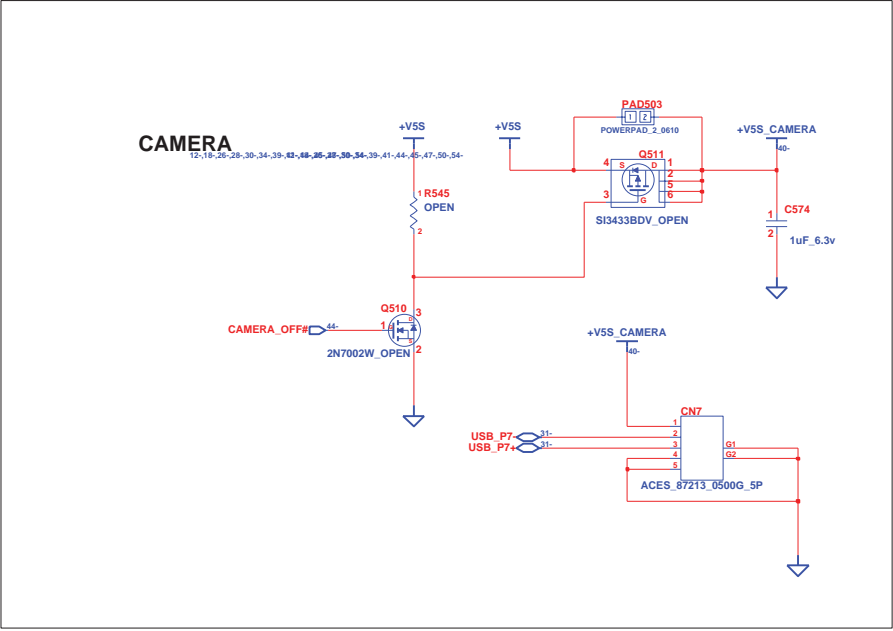
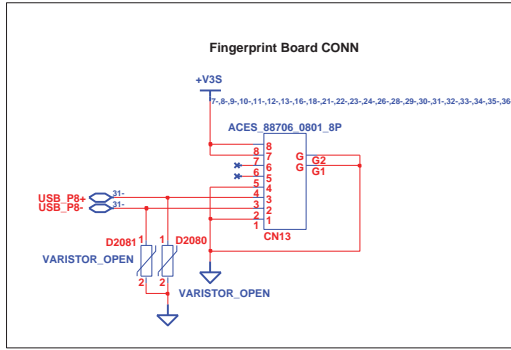
B

C

D

E

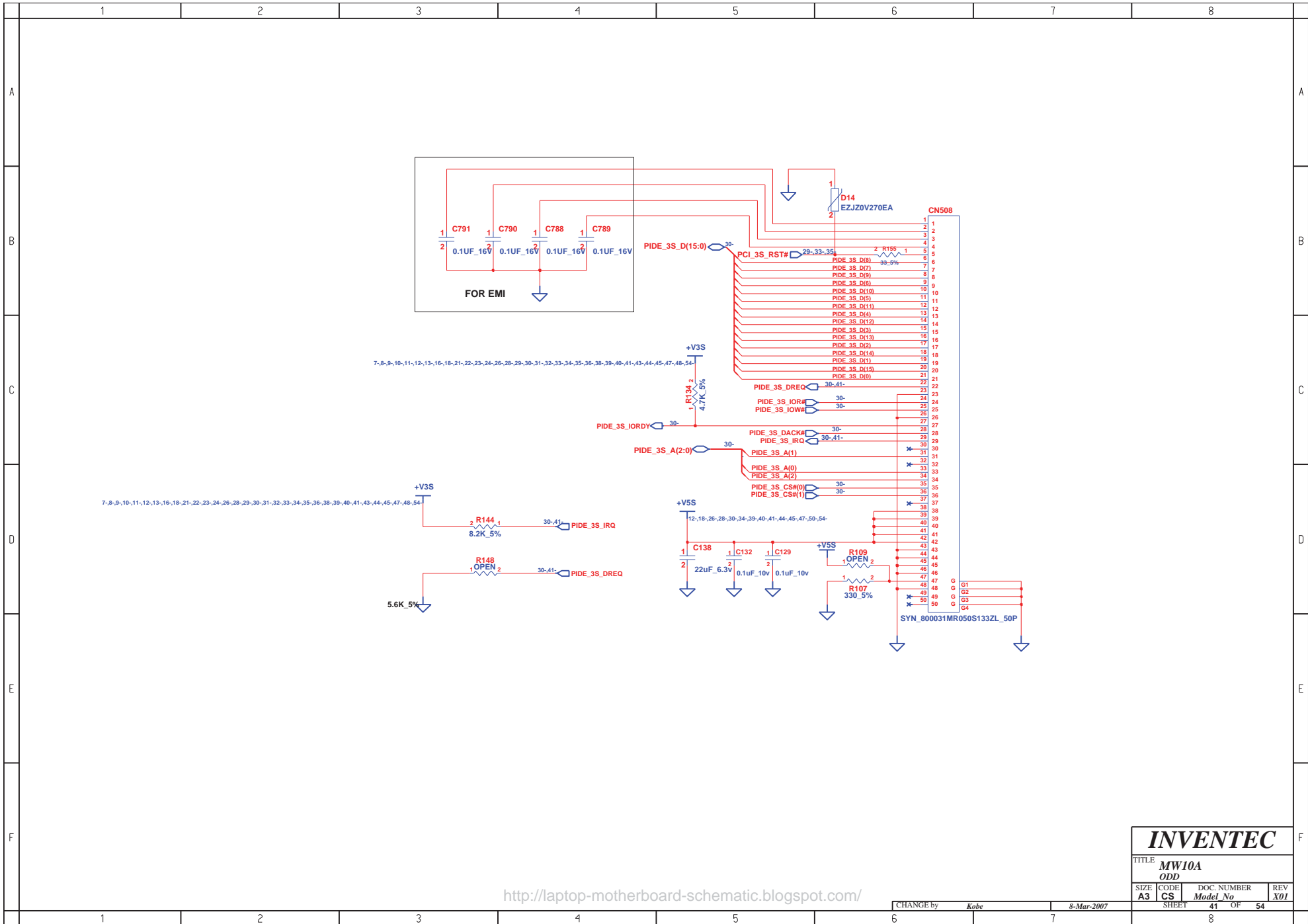
F



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INVENTEC			
TITLE MW10A			
Filica & Finger Printer & Camera			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by <i>Kobe</i>		22-Mar-2007	SHEET 40 OF 54
		7	8

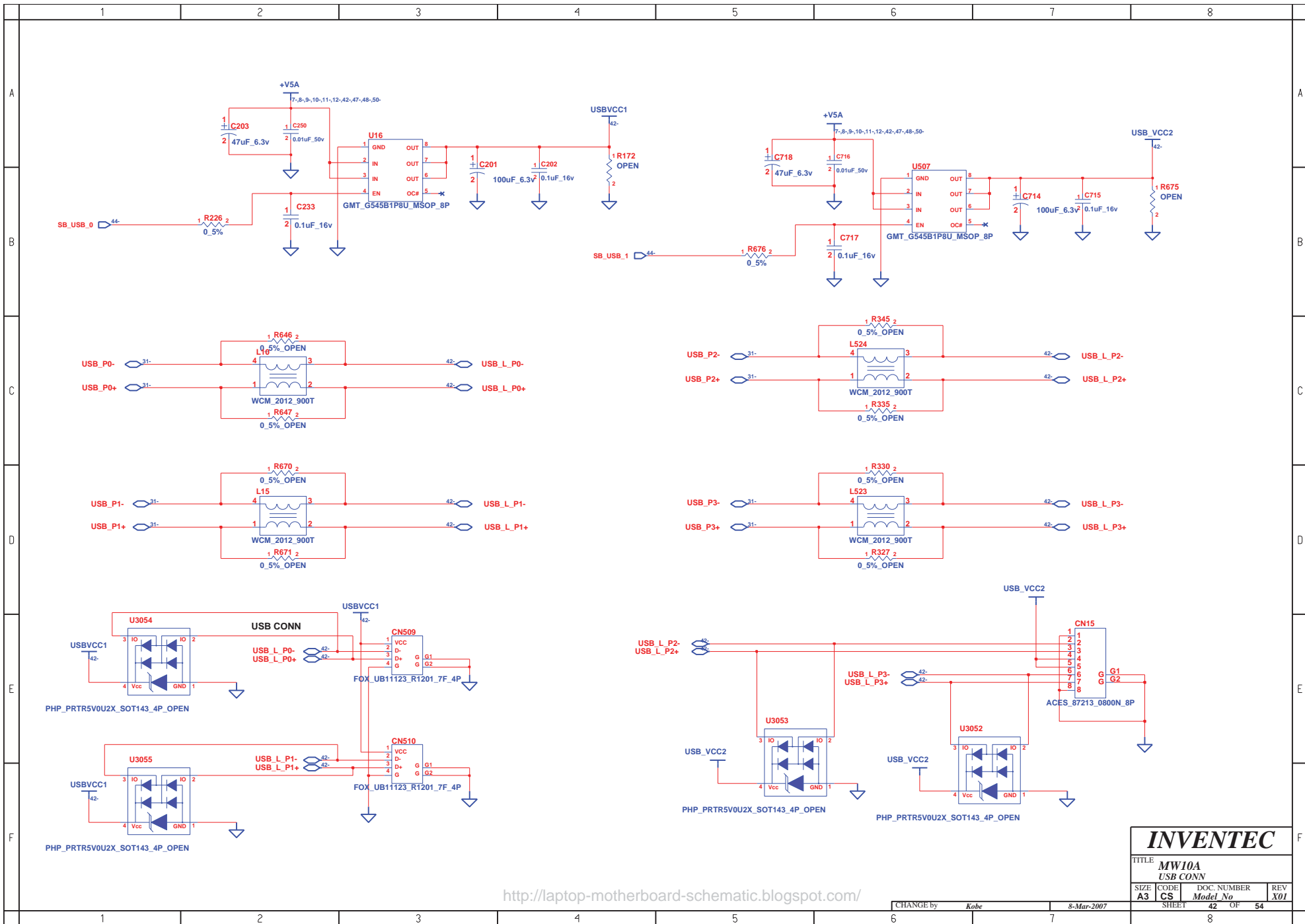
1 2 3 4 5 6 7 8



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

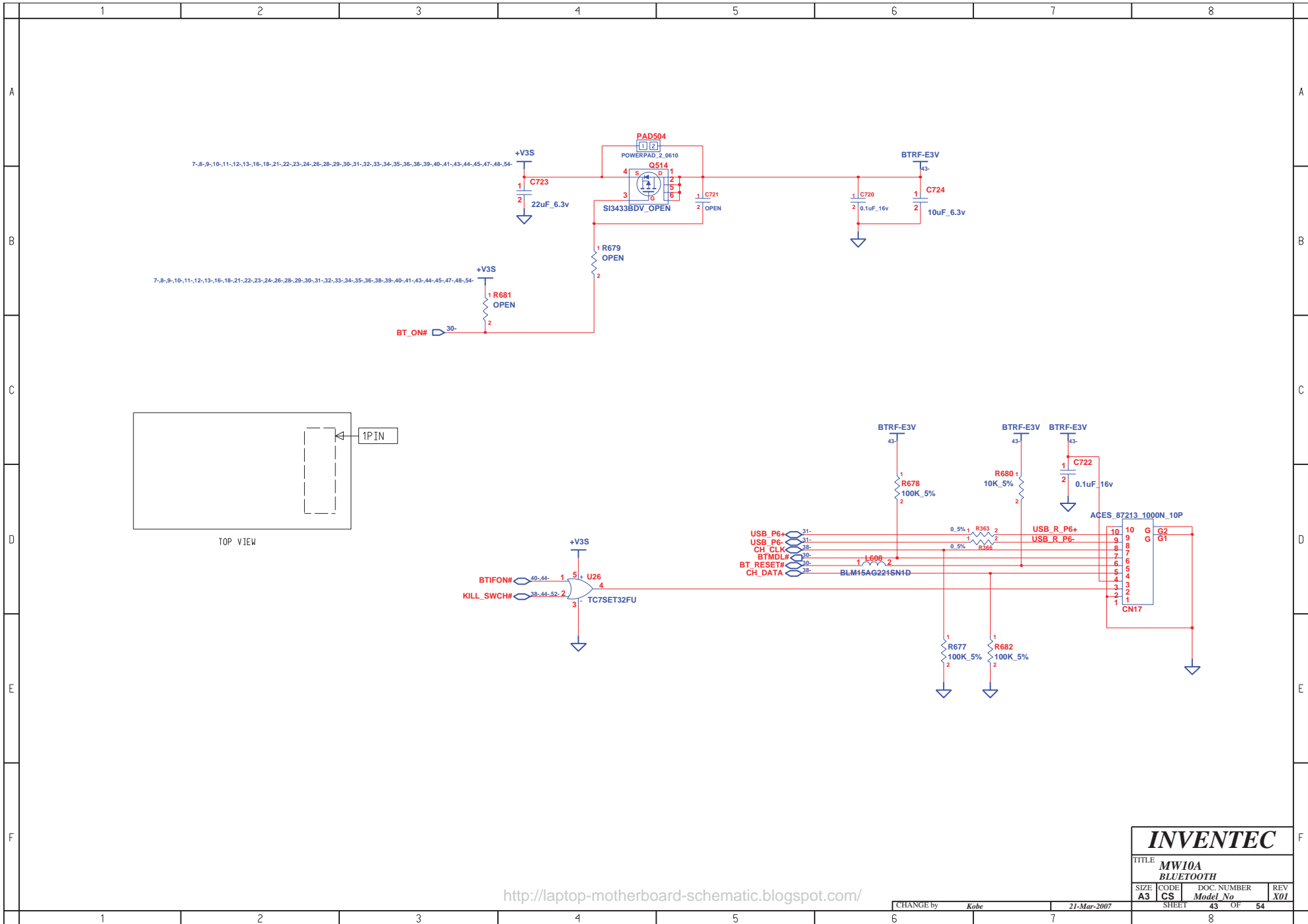
INVENTEC

TITLE			
MW10A			
ODD			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01



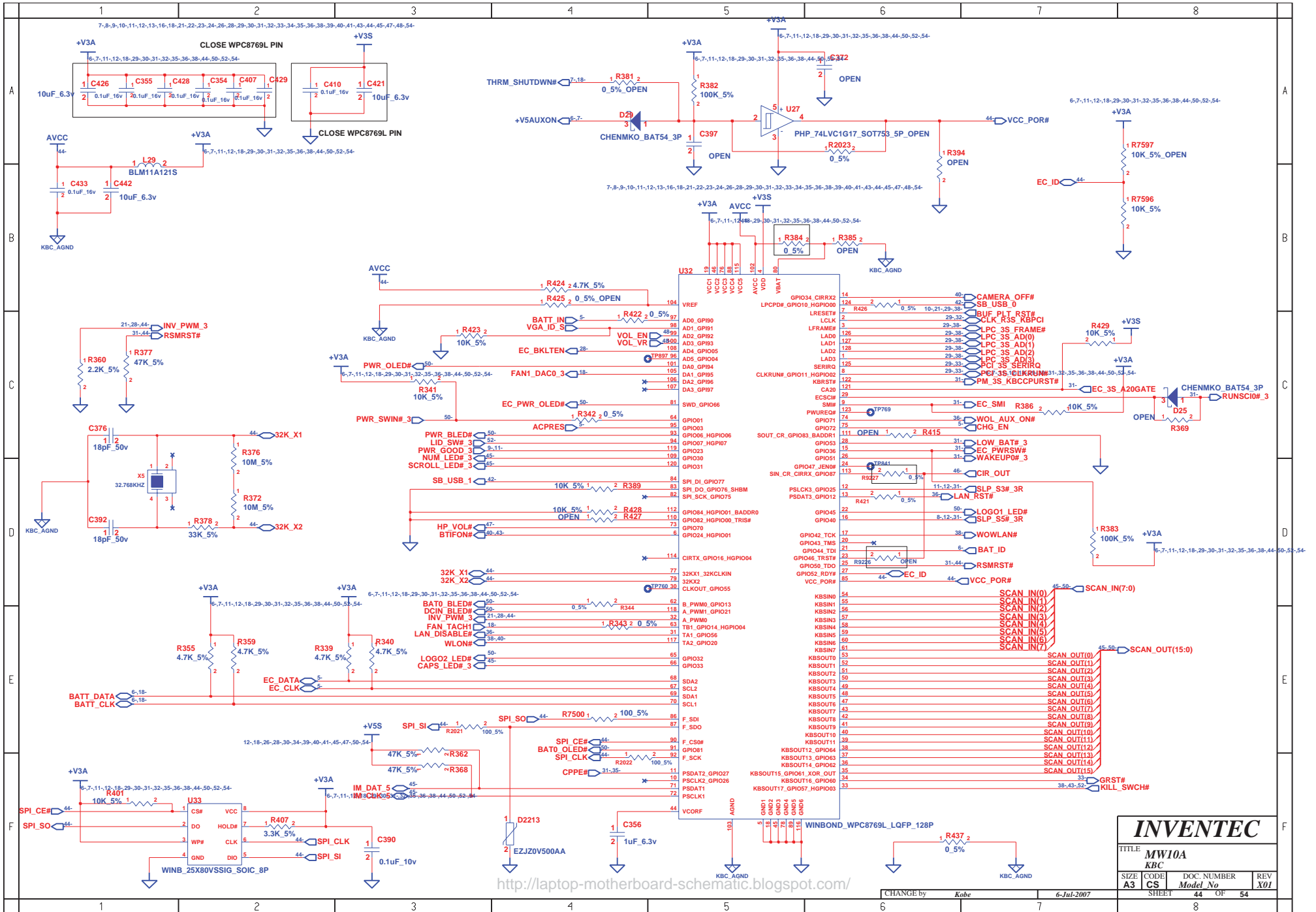
<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC			
TITLE MW10A USB CONN			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
CHANGE by <i>Kobe</i>		8-Mar-2007	
SHEET 42 OF 54		8	



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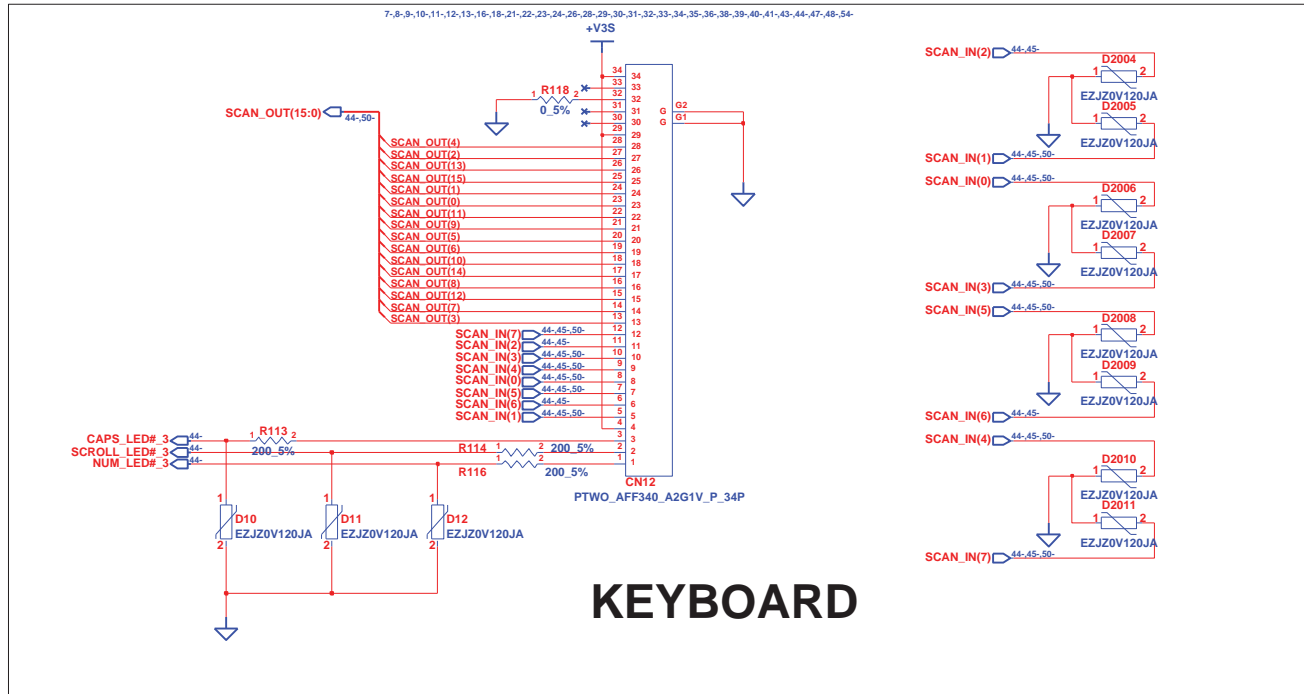
INVENTEC			
TITLE MW10A BLUETOOTH			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
SHEET 43 OF 54		8	



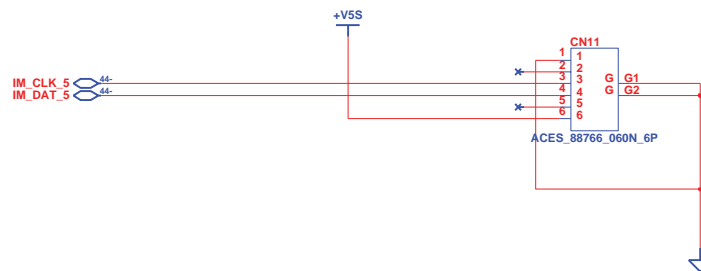
INVENTEC			
TITLE: MW10A KBC			
SIZE: A3	CODE: CS	DOC. NUMBER: Model No	REV: X01
SHEET: 44		OF 54	

CHANGE by Kobe 6-Jul-2007

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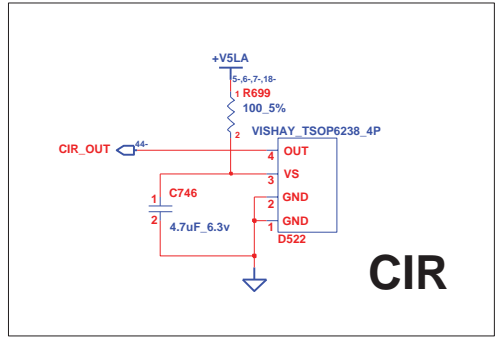


KEYBOARD



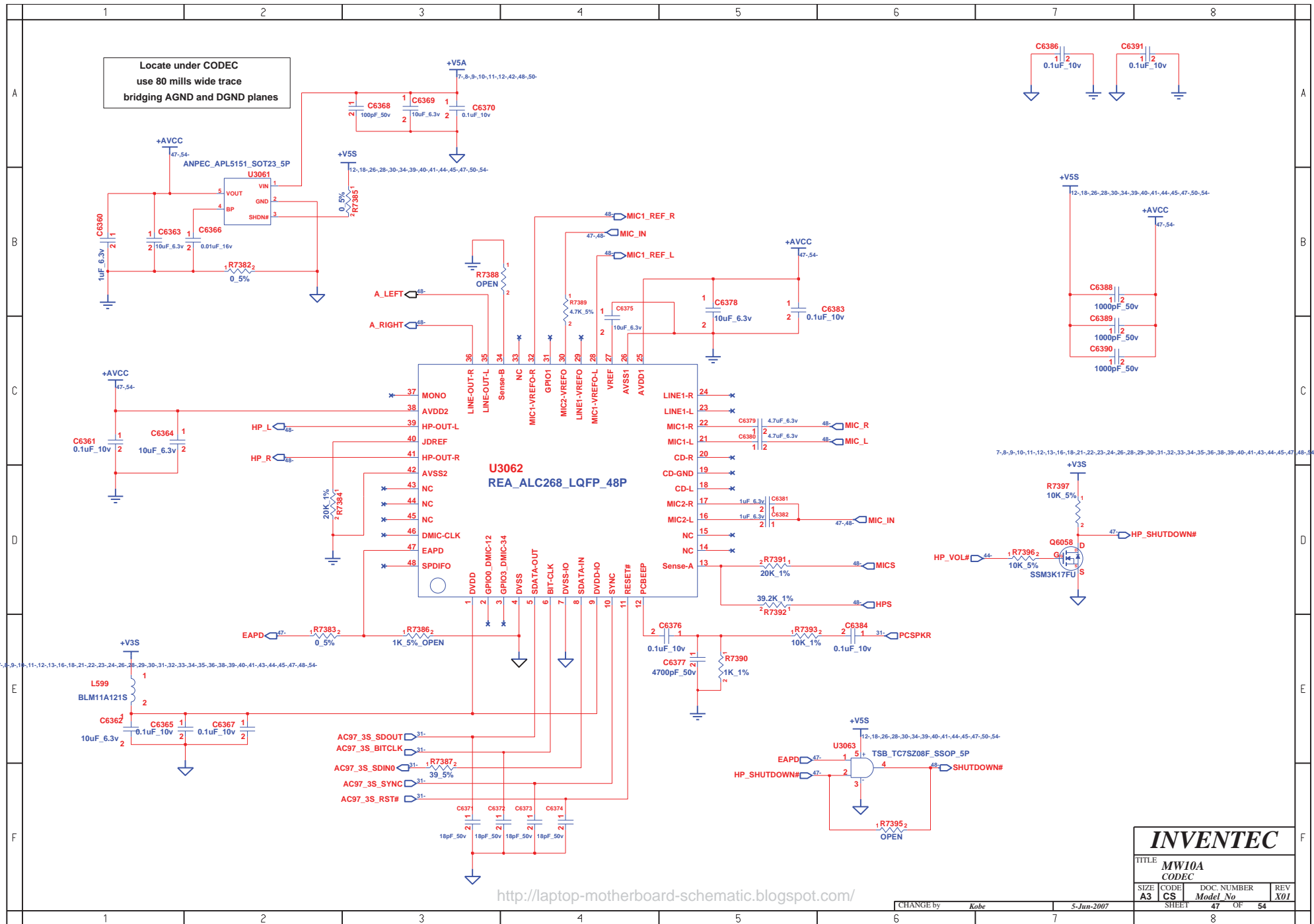
<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC			
TITLE MW10A INT.KBC/POINT DEVICES			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		16-Mar-2007	SHEET 45 OF 54



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

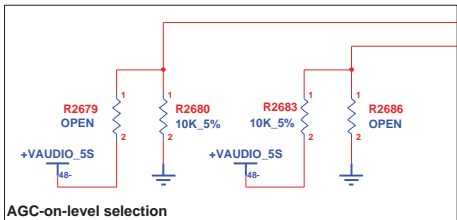
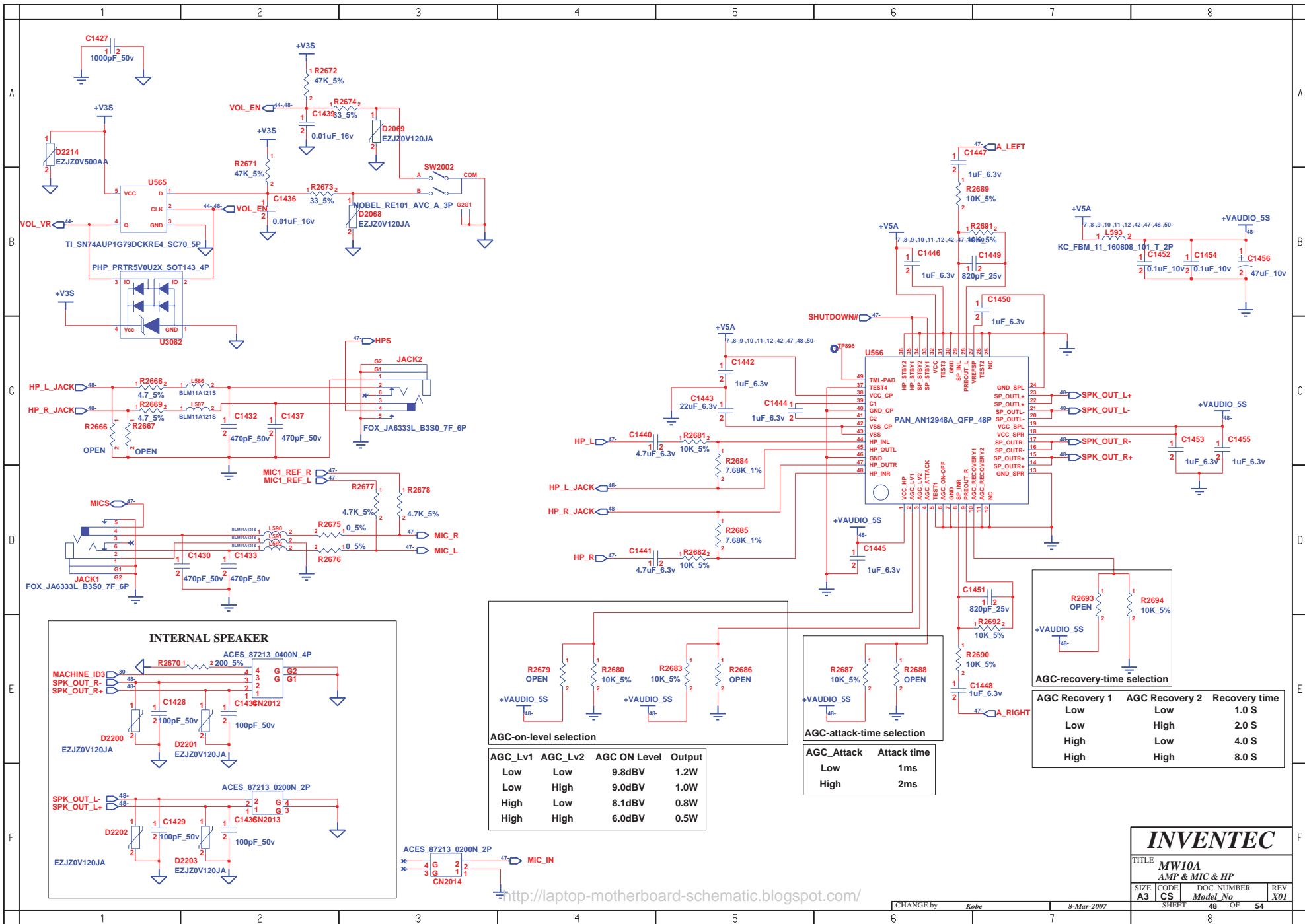
INVENTEC			
TITLE			
MW10A			
CIR & HDMI CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		8-Mar-2007	SHEET 46 OF 54
		Kobe	8



Locate under CODEC
use 80 mills wide trace
bridging AGND and DGND planes

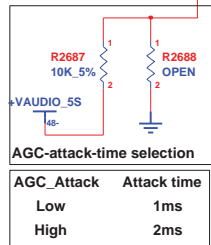
<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC			
TITLE MW10A CODEC			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		5-Jun-2007	SHEET 47 OF 54



AGC-on-level selection

AGC_Lv1	AGC_Lv2	AGC ON Level	Output
Low	Low	9.8dBV	1.2W
Low	High	9.0dBV	1.0W
High	Low	8.1dBV	0.8W
High	High	6.0dBV	0.5W



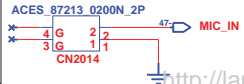
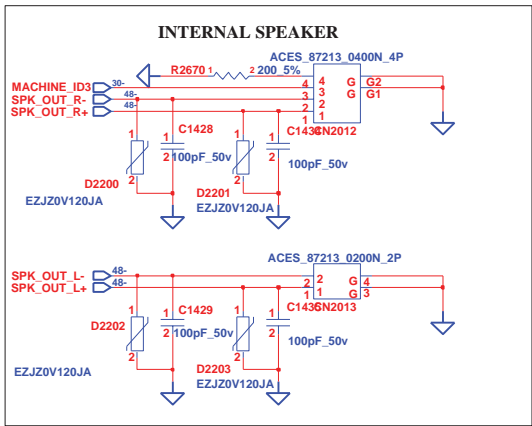
AGC-attack-time selection

AGC_Attack	Attack time
Low	1ms
High	2ms



AGC-recovery-time selection

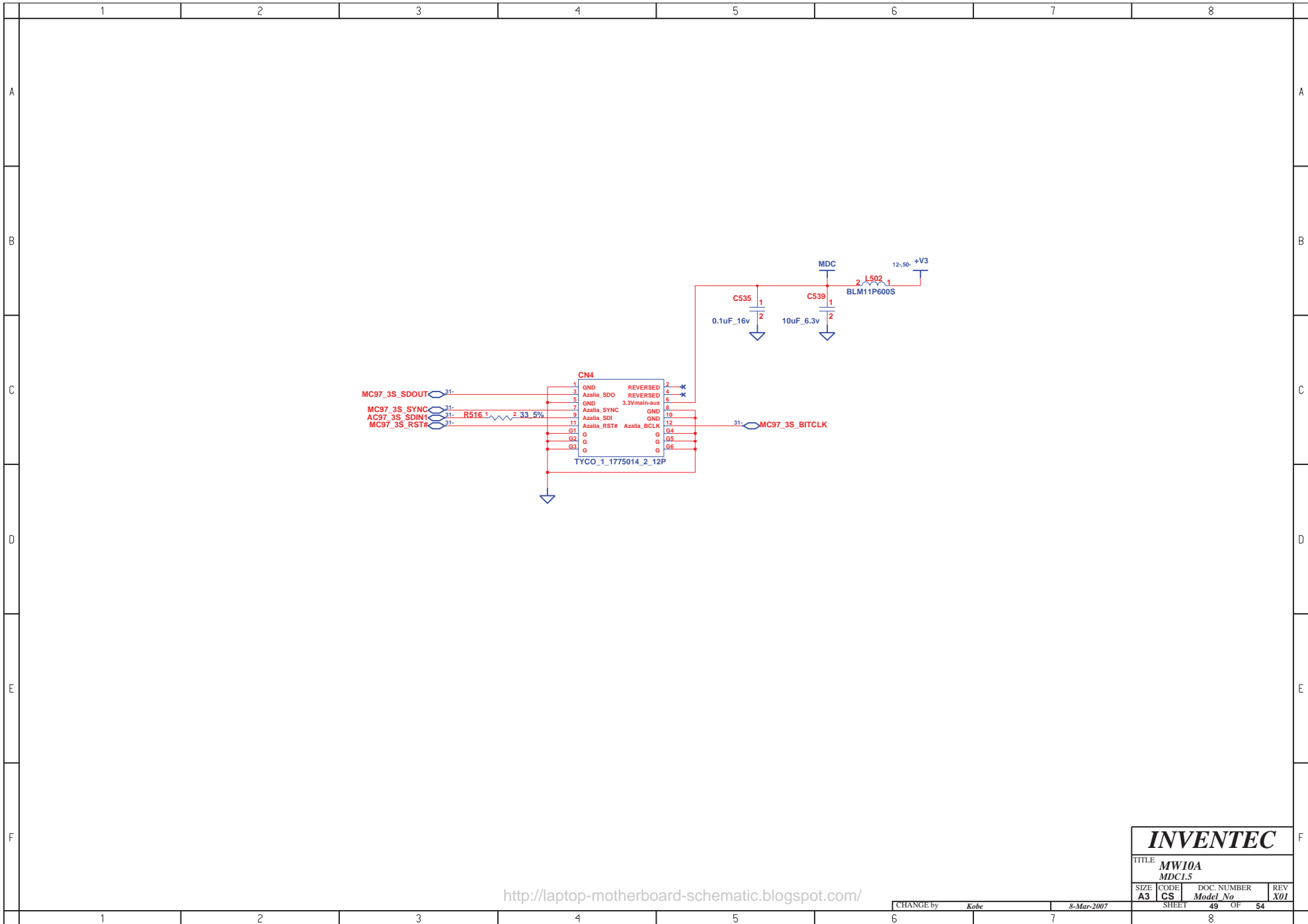
AGC Recovery 1	AGC Recovery 2	Recovery time
Low	Low	1.0 S
Low	High	2.0 S
High	Low	4.0 S
High	High	8.0 S



INVENTEC

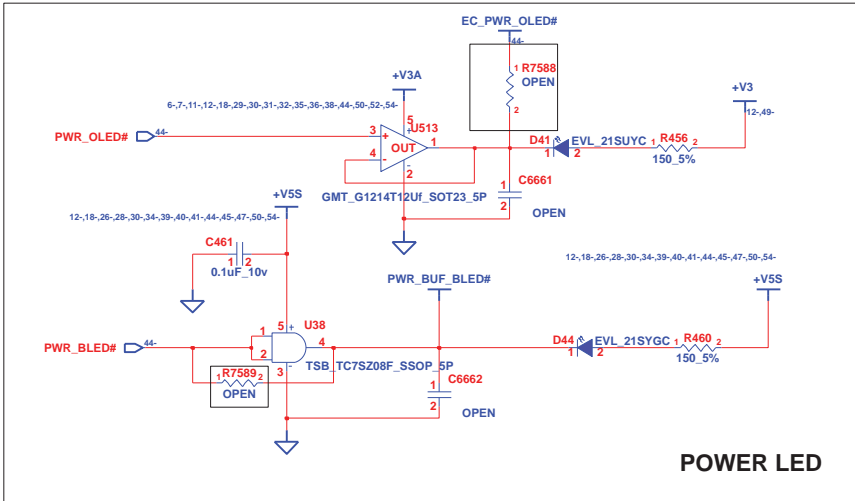
TITLE MW10A AMP & MIC & HP			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Kobe</i>		8-Mar-2007	
SHEET 48		OF 54	

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

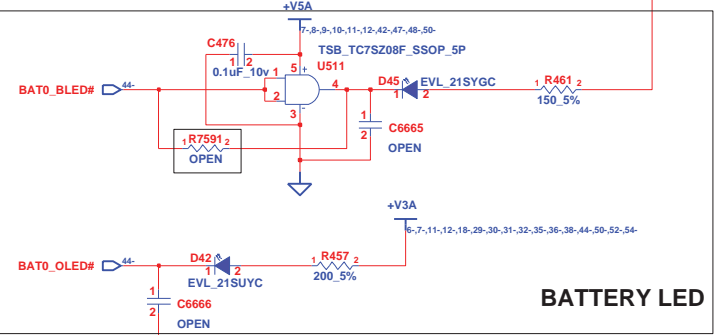
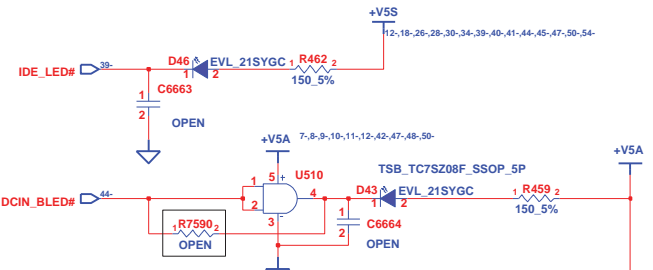
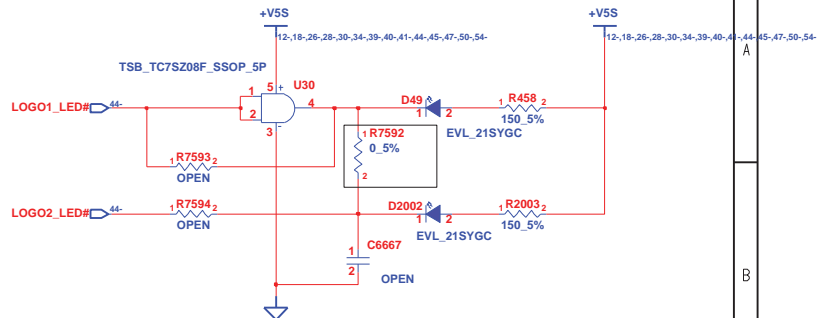


<http://laptop-motherboard-schematic.blogspot.com/>

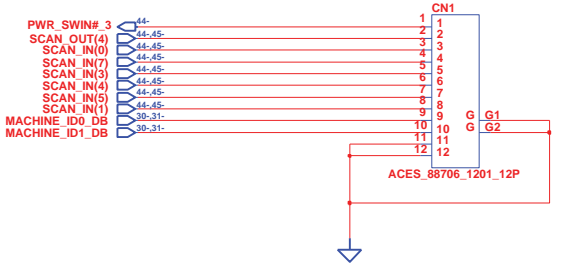
INVENTEC			
TITLE			
MW10A			
MDCL5			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	<i>Model No</i>	X01
CHANGE by <i>Kobe</i>		8-Mar-2007	SHEET 49 OF 54
1	2	3	8



POWER LED



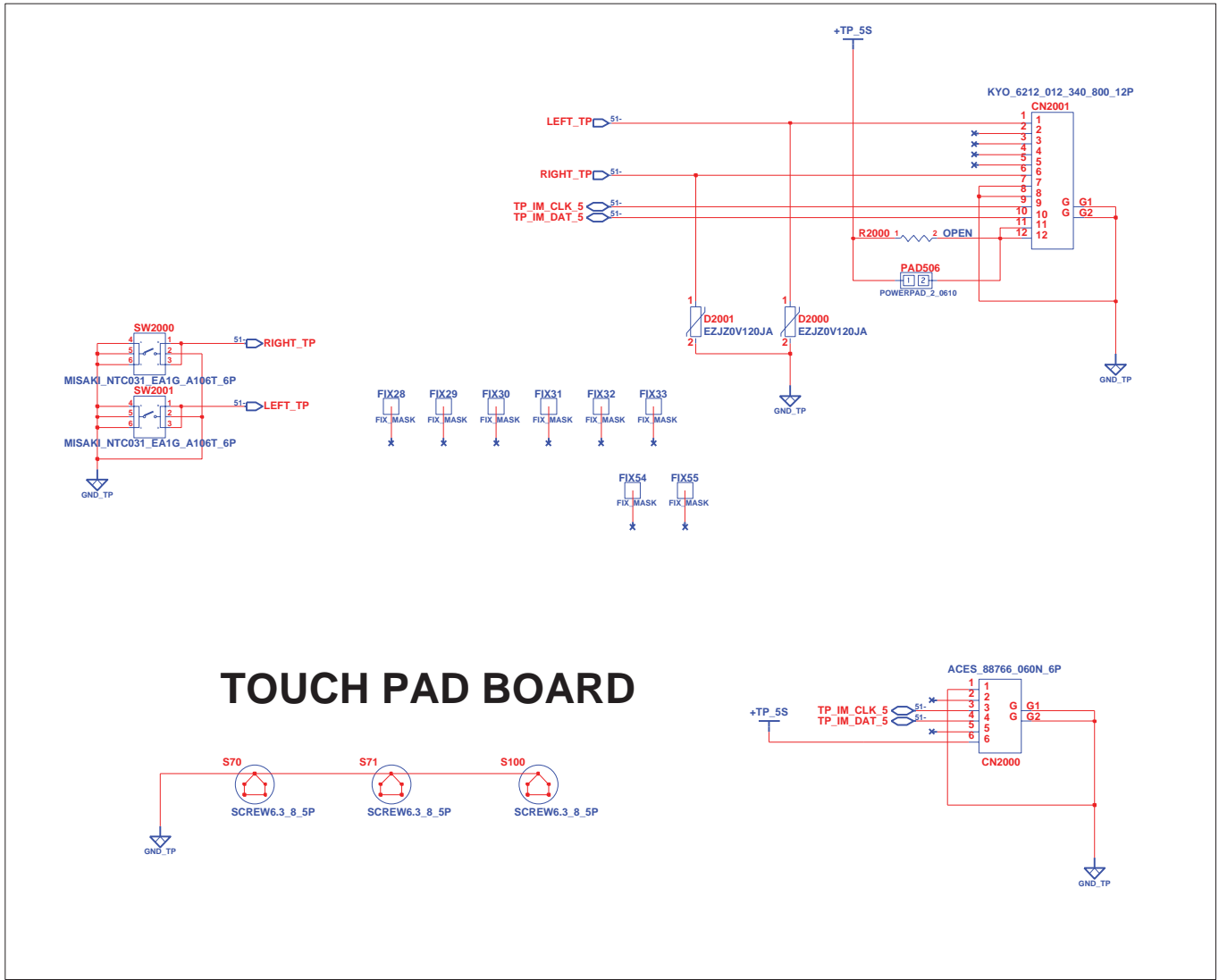
BATTERY LED



INVENTEC

TITLE			
MW10A			
LED			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

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

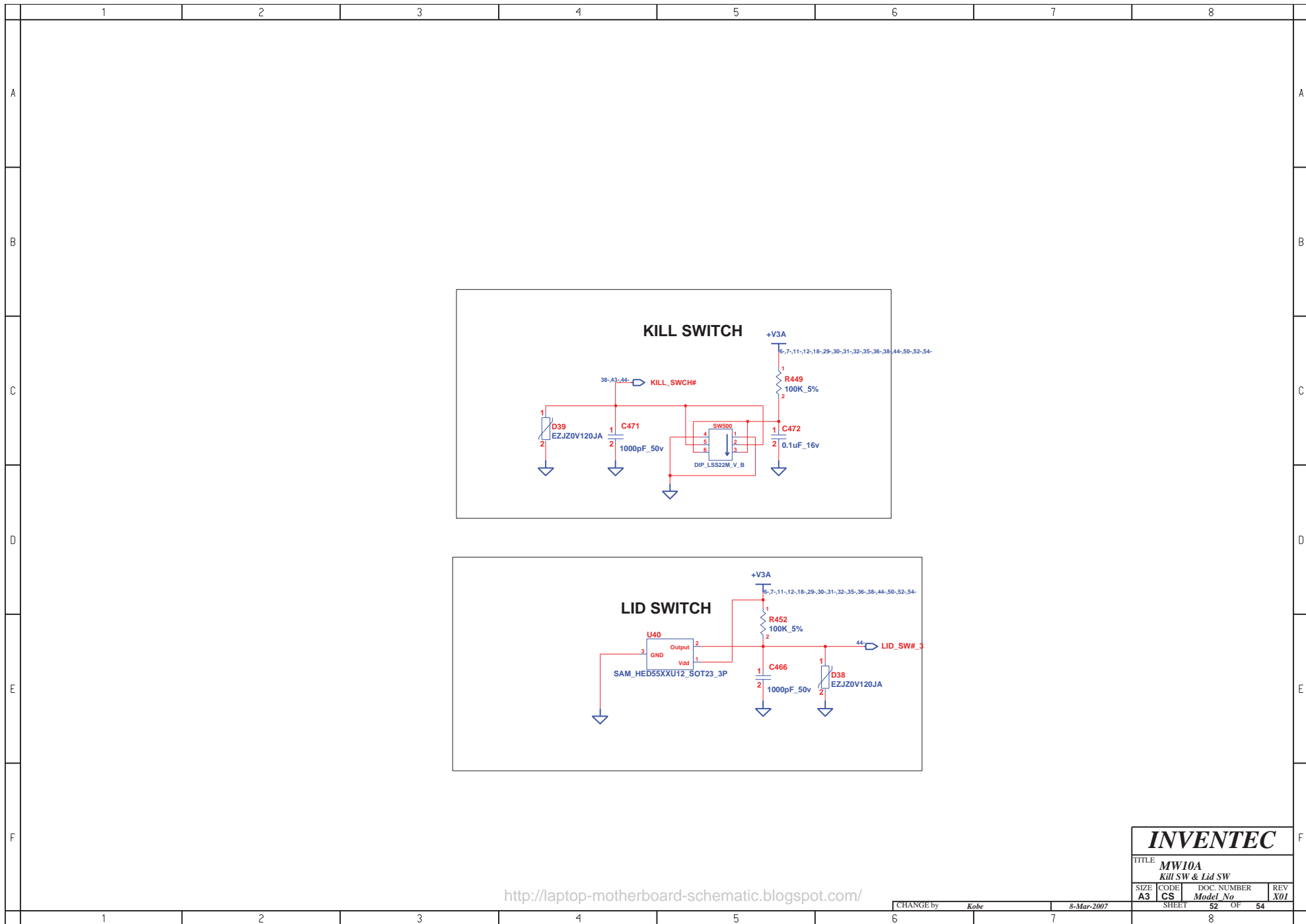


TOUCH PAD BOARD

INVENTEC

TITLE			
MW10A			
Touch Pad Board			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		8-Mar-2007	SHEET 51 OF 54

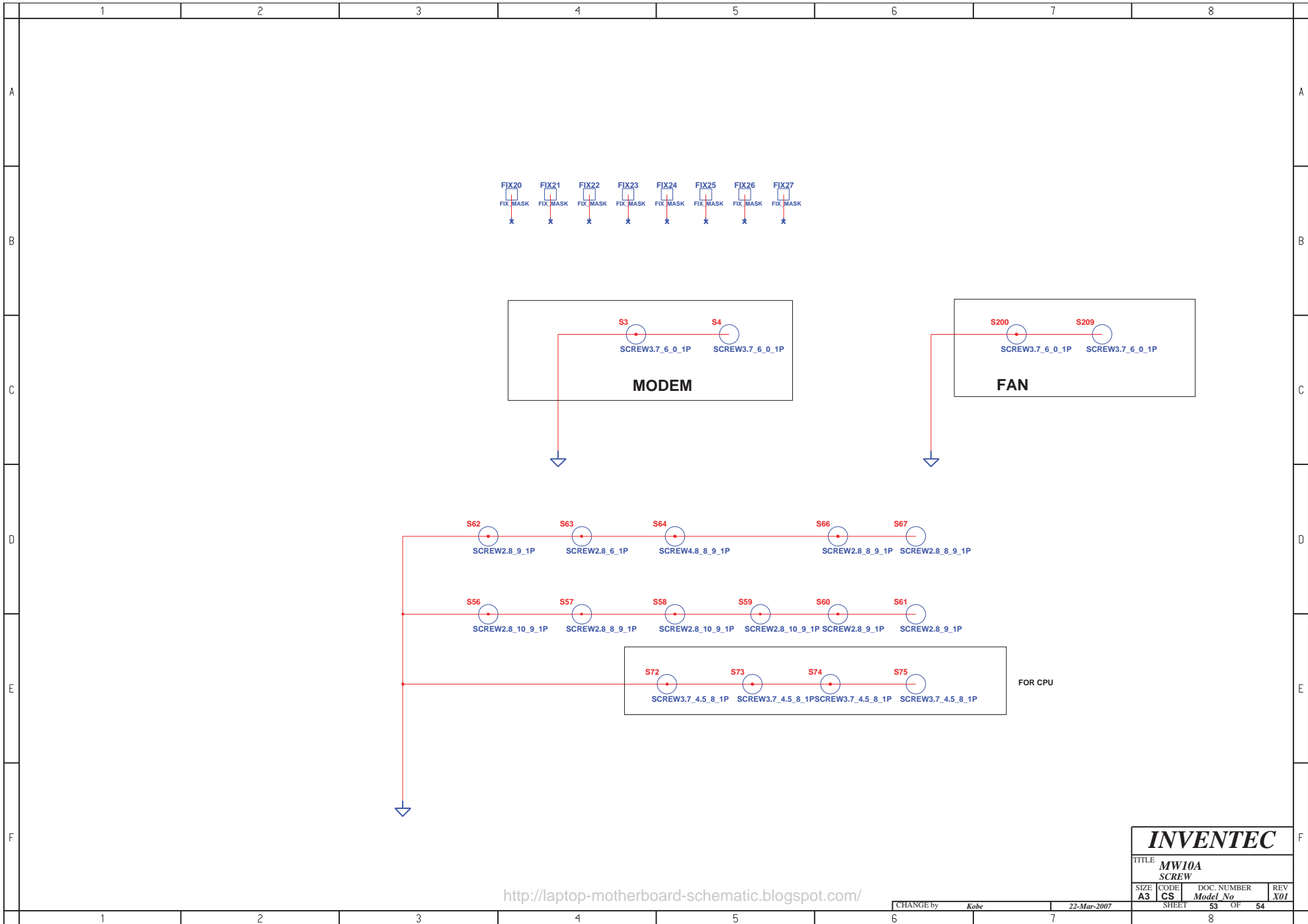
<http://laptop-motherboard-schematic.blogspot.com/>



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

CHANGE by *Kobe* 8-Mar-2007

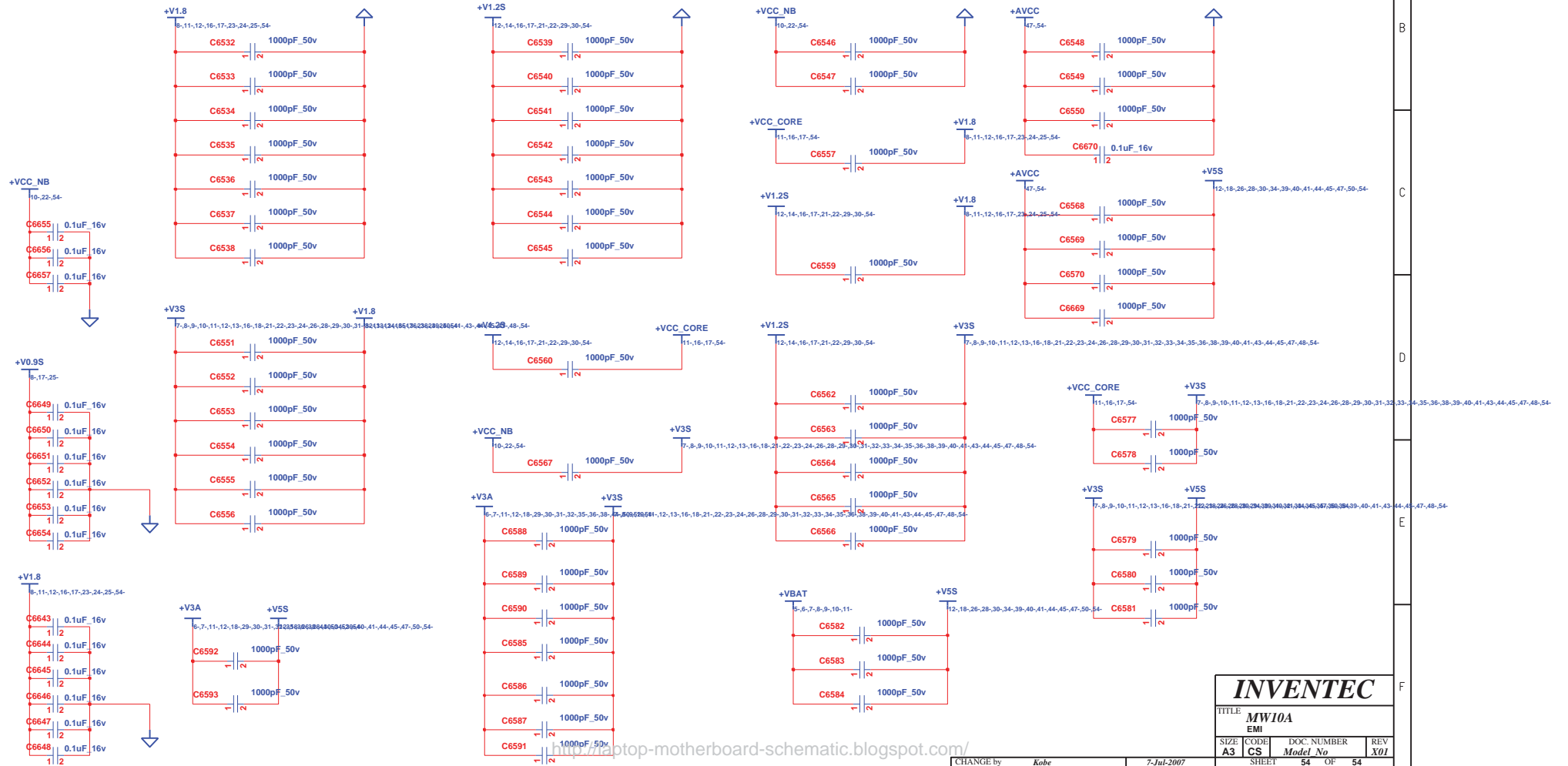
INVENTEC			
TITLE			
<i>MW10A</i>			
<i>Kill SW & Lid SW</i>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
SHEET		52	OF 54
		8	



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

INVENTEC			
TITLE MW10A SCREW			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
CHANGE by <i>Kobe</i>		22-Mar-2007	SHEET 53 OF 54

FOR EMI



INVENTEC

TITLE: MW10A			
EMI			
SIZE: A3	CODE: CS	DOC. NUMBER: Model No	REV: X01

CHANGE by Kobe 7-Jul-2007

SHEET 54 OF 54

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