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INVENTEC

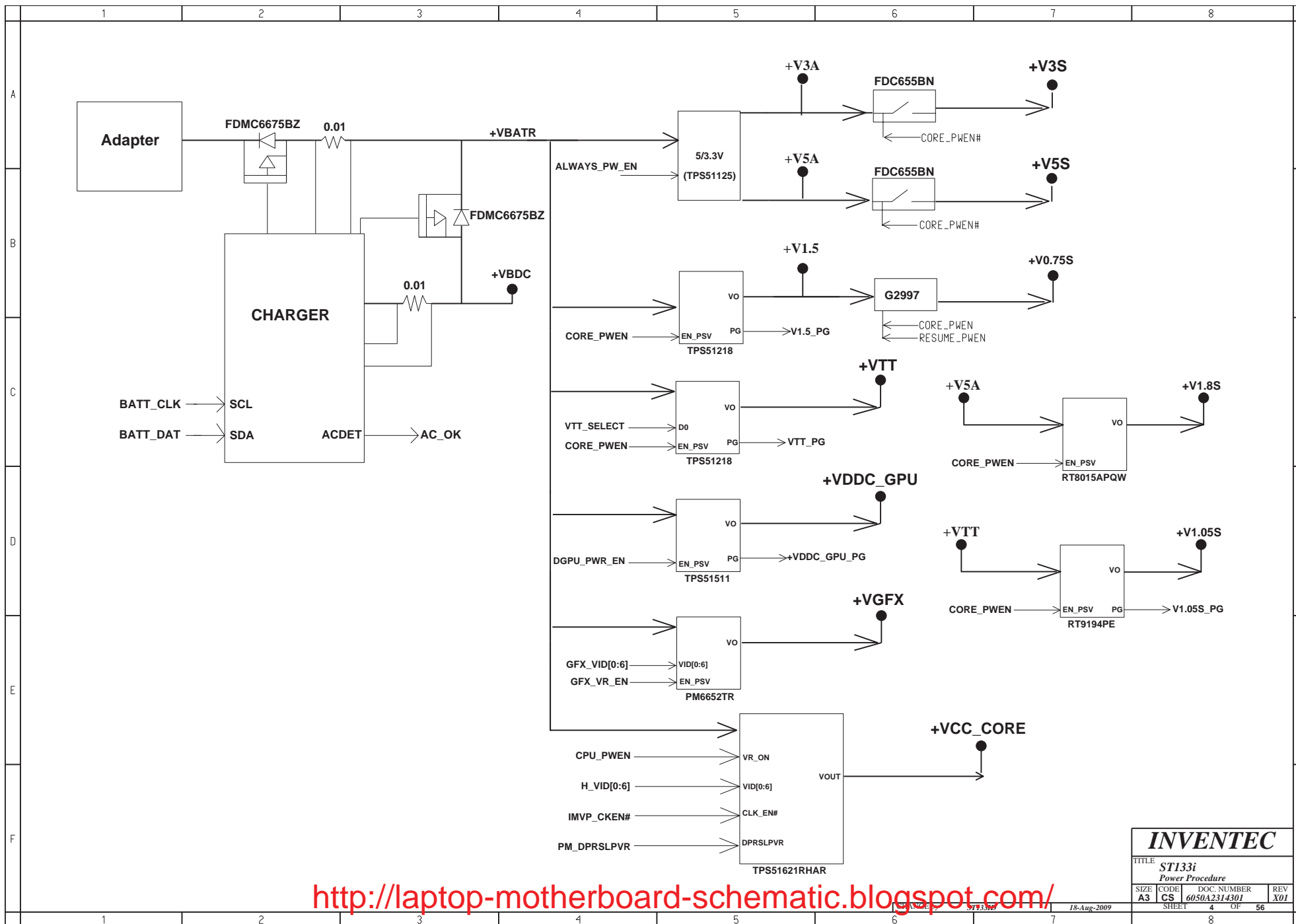
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ST133i			
Index			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		2	OF 56

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

Arrandale

(Socket-rPGA989)





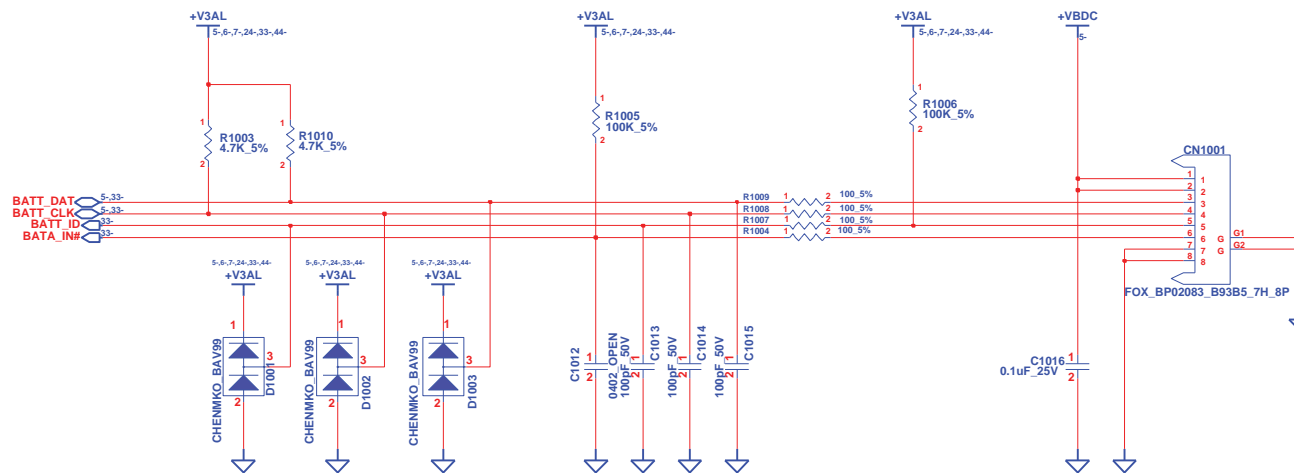
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INVENTEC

TITLE **ST133i**
Power Procedure

SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
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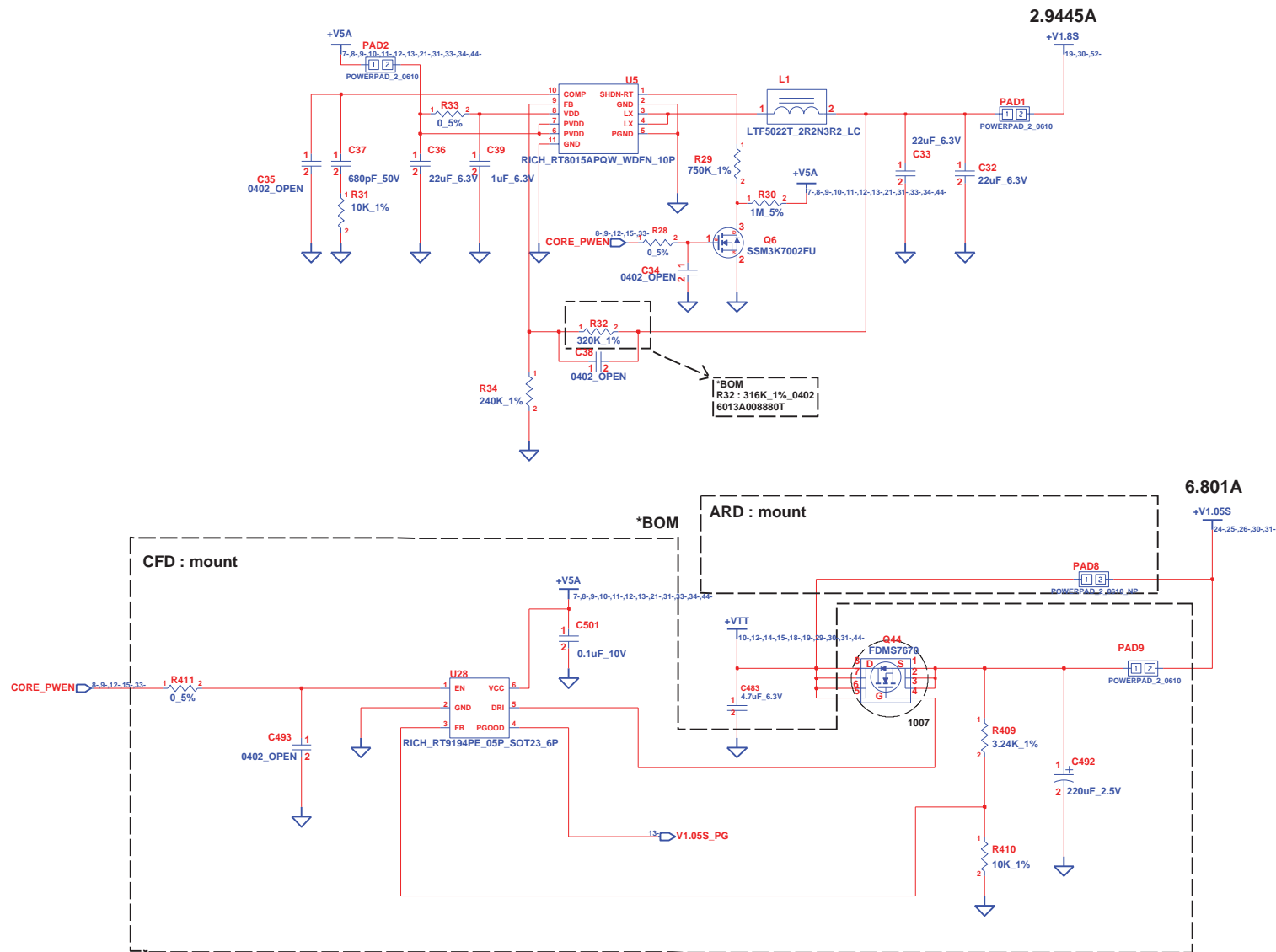
SHEET 4 OF 56	
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<http://laptop-motherboard-schematic.blogspot.com/>

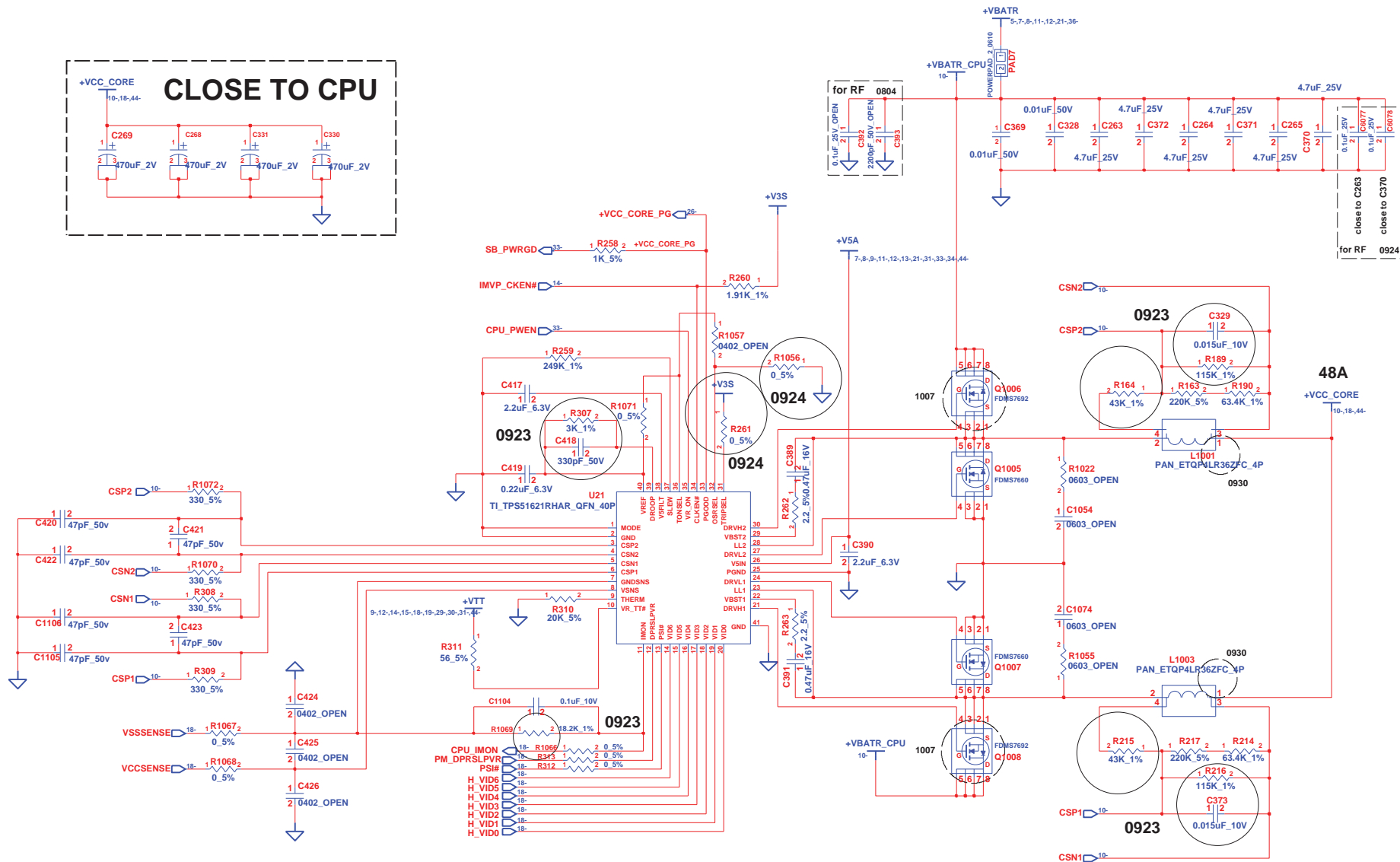
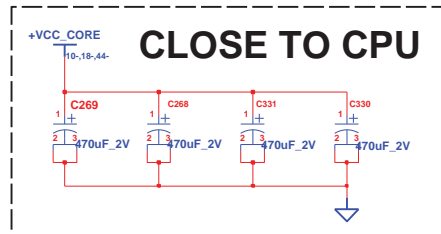
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SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
SHEET 6		OF 56	

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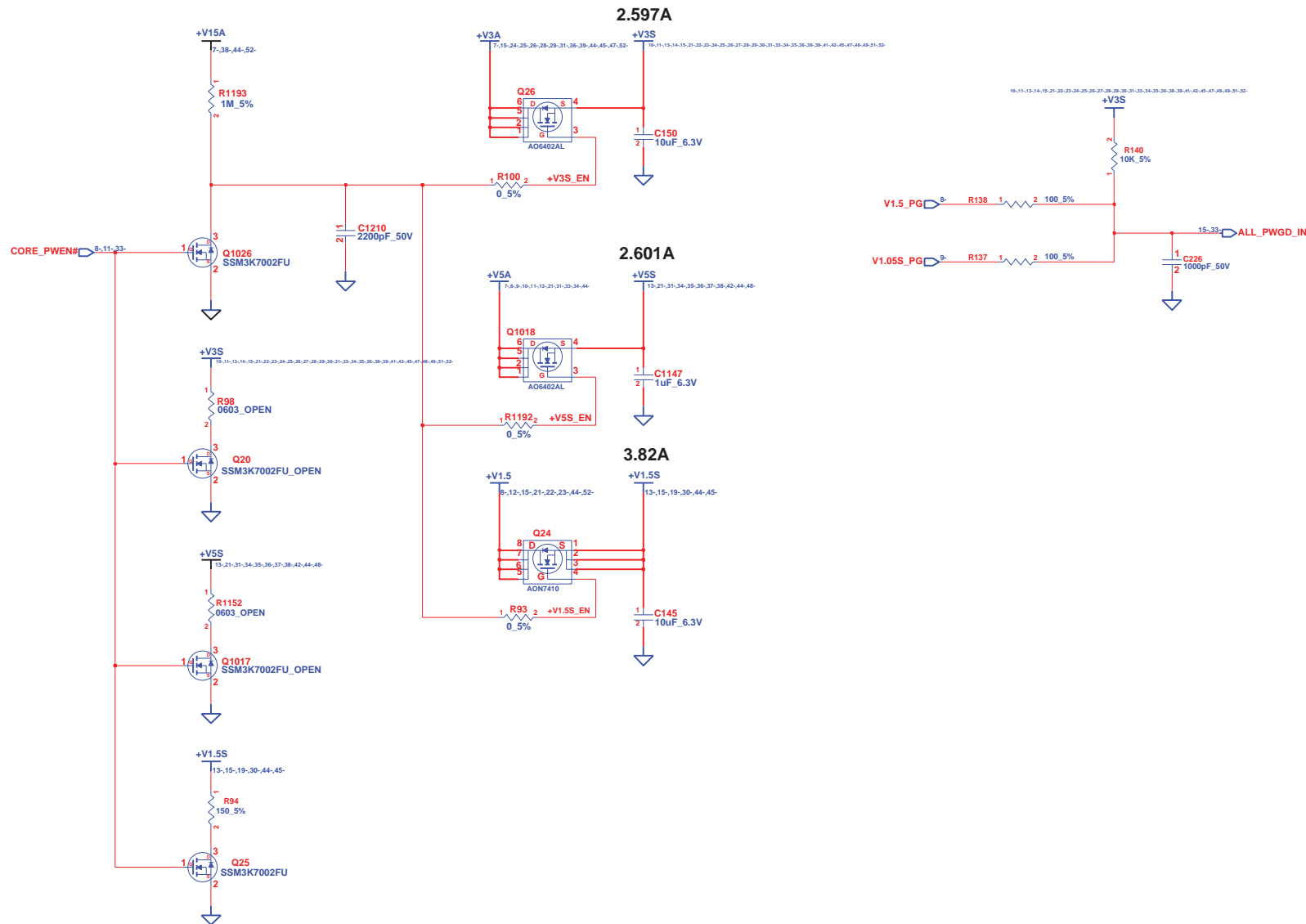
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TITLE			
ST133i			
+V1.8S & +V1.05S			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		9	OF 56
18-Aug-2009		8	



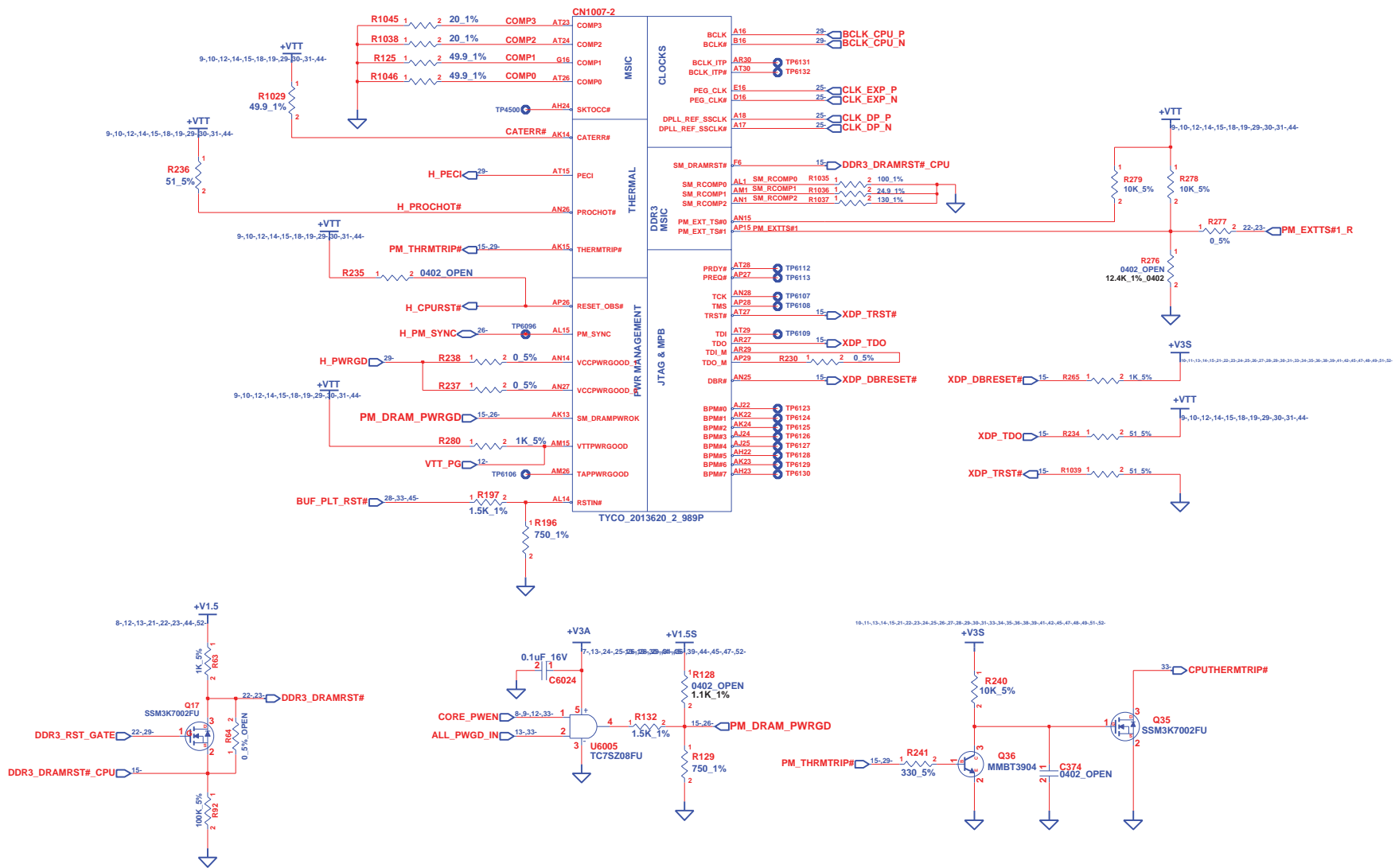
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<http://laptop-motherboard-schematic.blogspot.com/>

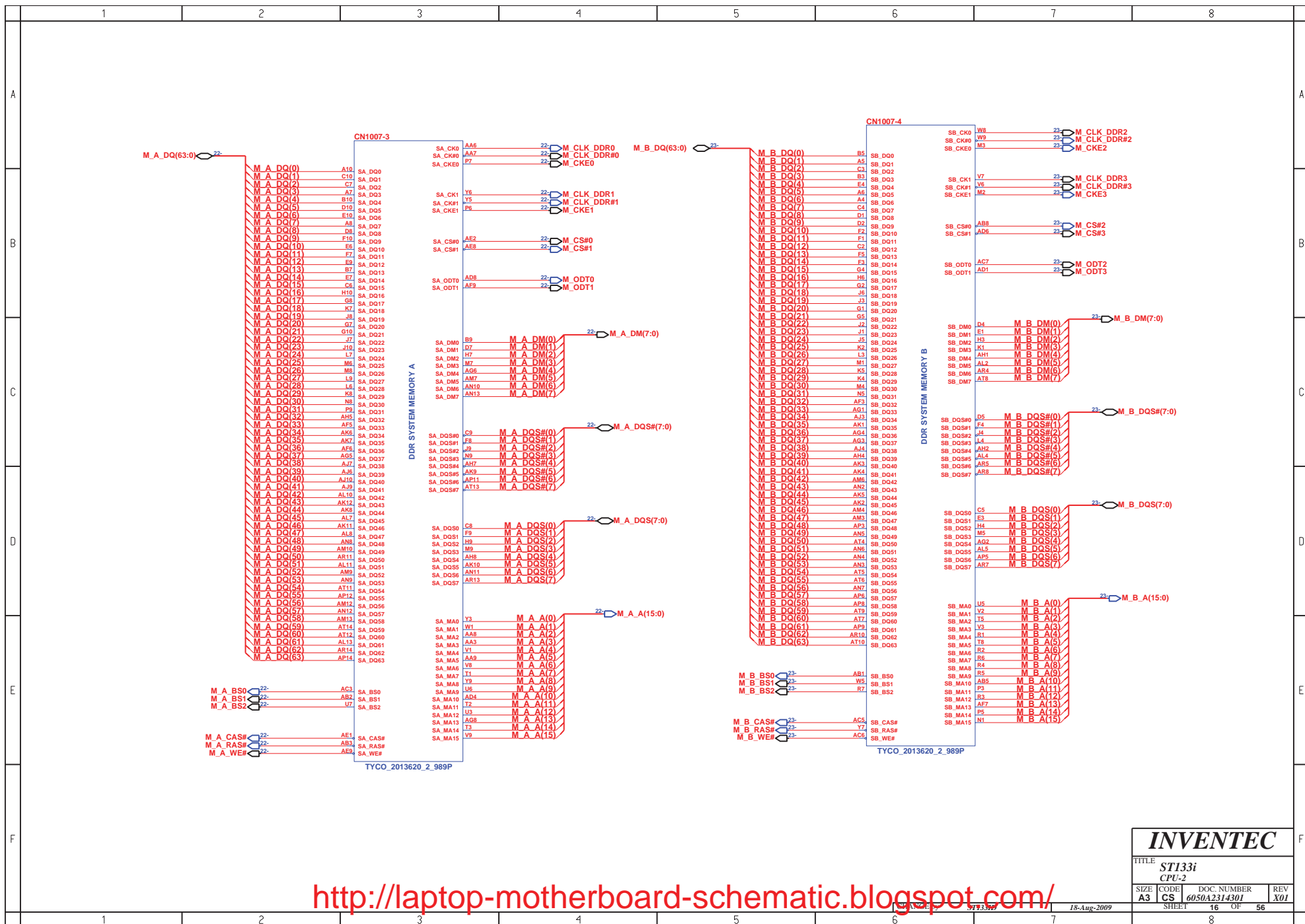
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ST133i			
+V5S & +V3S			
SIZE	CODE	DOC. NUMBER	REV
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SHEET		13	OF 56



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

INVENTEC

TITLE ST133i CPU-1			
SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
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<http://laptop-motherboard-schematic.blogspot.com/>

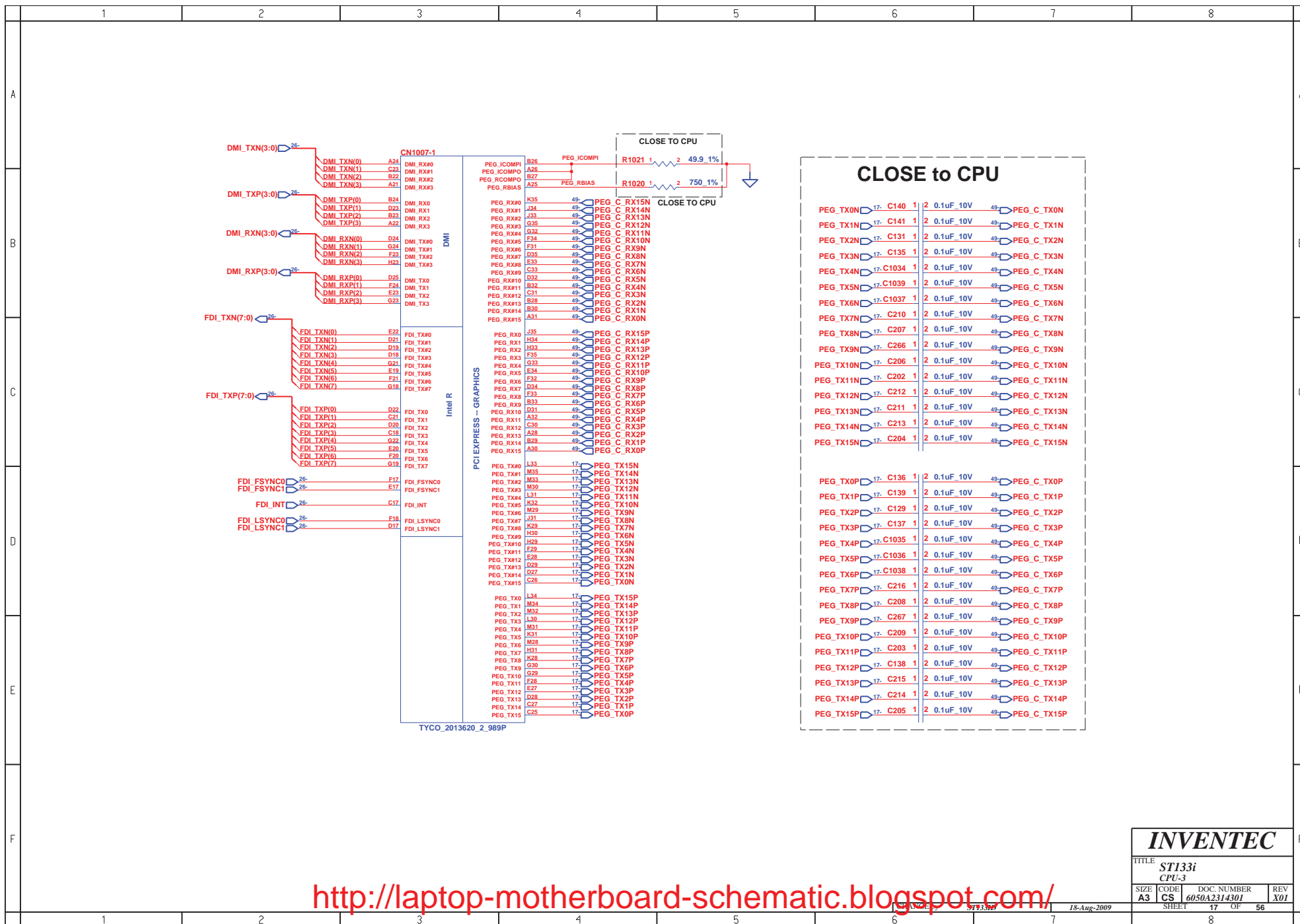
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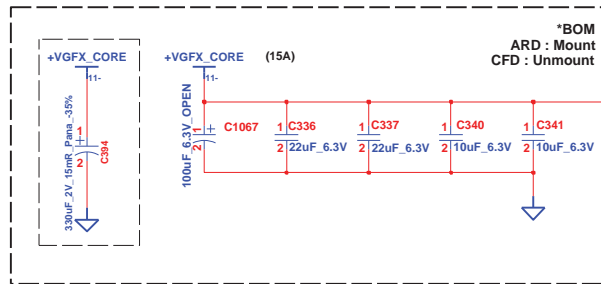
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CPU-2

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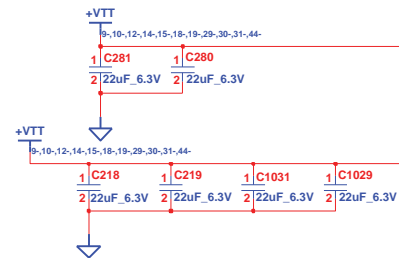
18-Aug-2009

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Please note that the VTT Rail Values are
Auburndale VTT=1.05V
Clarkfield VTT=1.1V



- CN1007-7**
- AT21 VAXG1
 - AT19 VAXG2
 - AT18 VAXG3
 - AT16 VAXG4
 - AT21 VAXG5
 - AT18 VAXG6
 - AT16 VAXG7
 - AT21 VAXG8
 - AT18 VAXG9
 - AT16 VAXG10
 - AT18 VAXG11
 - AT16 VAXG12
 - AN21 VAXG13
 - AN19 VAXG14
 - AN18 VAXG15
 - AM16 VAXG16
 - AM21 VAXG17
 - AM19 VAXG18
 - AM18 VAXG19
 - VAXG20
 - VAXG21
 - VAXG22
 - AL18 VAXG23
 - AK21 VAXG24
 - AK19 VAXG25
 - AK18 VAXG26
 - AK16 VAXG27
 - AK15 VAXG28
 - AJ21 VAXG29
 - AJ19 VAXG30
 - AJ18 VAXG31
 - AJ16 VAXG32
 - AH19 VAXG33
 - AH18 VAXG34
 - AH16 VAXG35
 - AH15 VAXG36

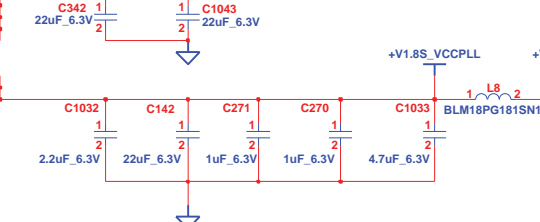
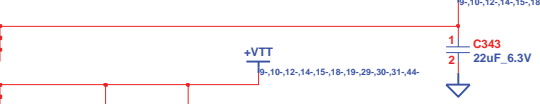
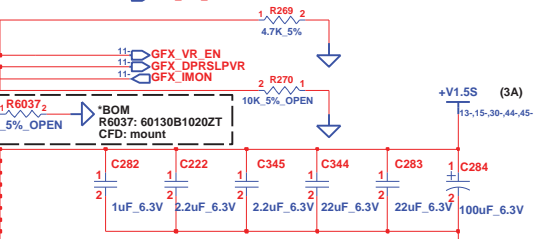
- SENSELINES**
- VAXG_SENSE
 - VSSAXG_SENSE
 - GFX_VR_EN
 - GFX_DPRSPLVR
 - GFX_IMON
 - GFX_VID_0
 - GFX_VID_1
 - GFX_VID_2
 - GFX_VID_3
 - GFX_VID_4
 - GFX_VID_5
 - GFX_VID_6
- GRAPHICS_VIDS**
- VDDQ1
 - VDDQ2
 - VDDQ3
 - VDDQ4
 - VDDQ5
 - VDDQ6
 - VDDQ7
 - VDDQ8
 - VDDQ9
 - VDDQ10
 - VDDQ11
 - VDDQ12
 - VDDQ13
 - VDDQ14
 - VDDQ15
 - VDDQ16
 - VDDQ17
 - VDDQ18
- POWER**
- VTT0_59
 - VTT0_60
 - VTT0_61
 - VTT0_62
 - VTT1_63
 - VTT1_64
 - VTT1_65
 - VTT1_66
 - VTT1_67
 - VTT1_68
- 1.1V**
- VTT1_63
 - VTT1_64
 - VTT1_65
 - VTT1_66
 - VTT1_67
 - VTT1_68
- 1.8V**
- VCCPLL1
 - VCCPLL2
 - VCCPLL3
- TYCO_2013620_2_989P

- AM22**
- AP22
 - AN22
 - AM23
 - AP24
 - AN24
- GFX_VID_0**
- GFX_VID_1**
- GFX_VID_2**
- GFX_VID_3**
- GFX_VID_4**
- GFX_VID_5**
- GFX_VID_6**

- AR25**
- AT25
 - AM24
- GFX_VR_EN**
- GFX_DPRSPLVR**
- GFX_IMON**

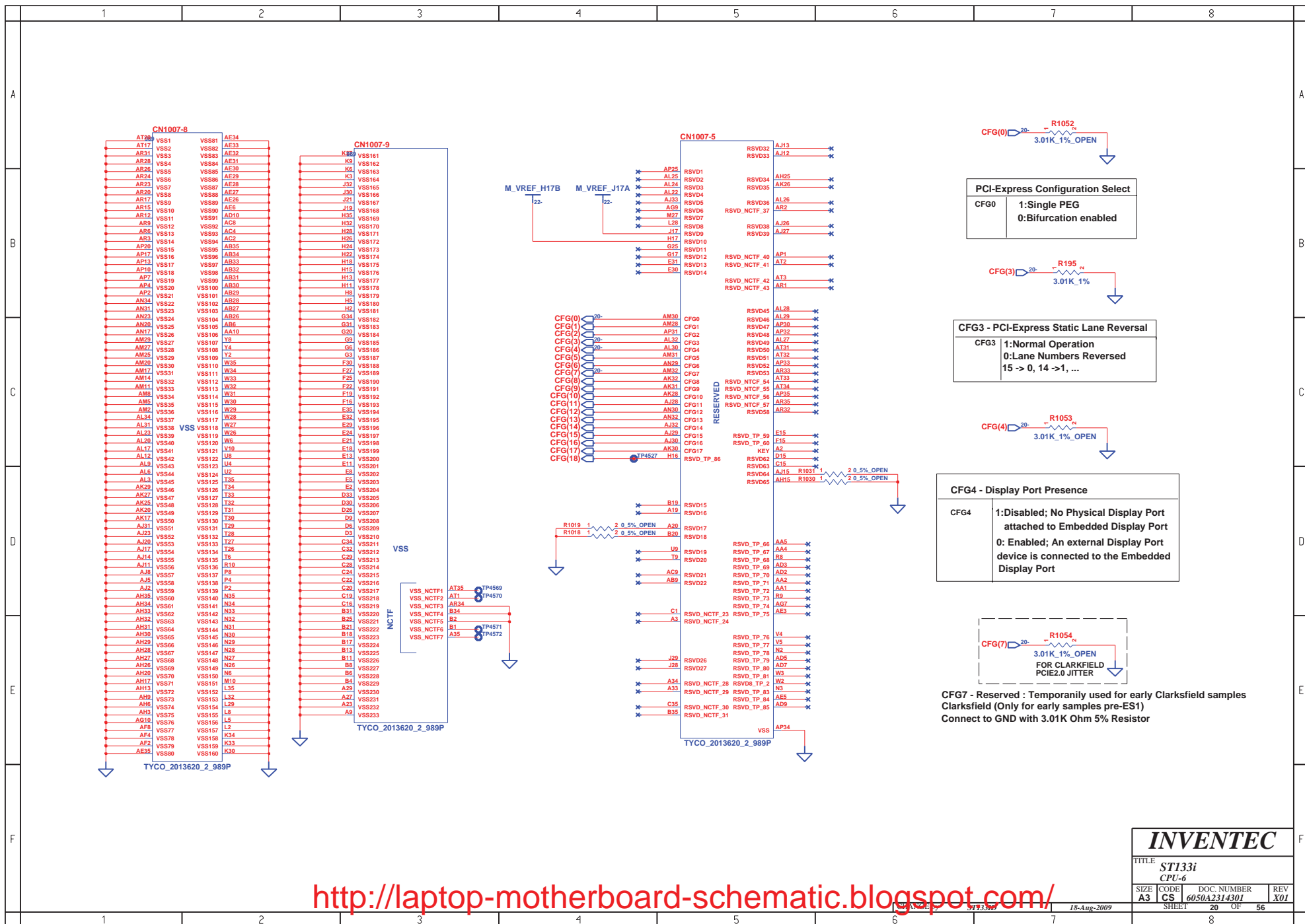
- *BOM**
R6037: 60130B1020ZT
CFD: mount
- 1K_5%_OPEN
- 10K_5%_OPEN
- 4.7K_5%

Route VCC_AXG_SENSE and
VSS_AXG_SENSE
differentially



INVENTEC			
TITLE ST133i CPU-5			
SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
SHEET 19		OF 56	

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INVENTEC

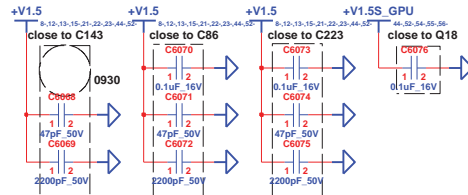
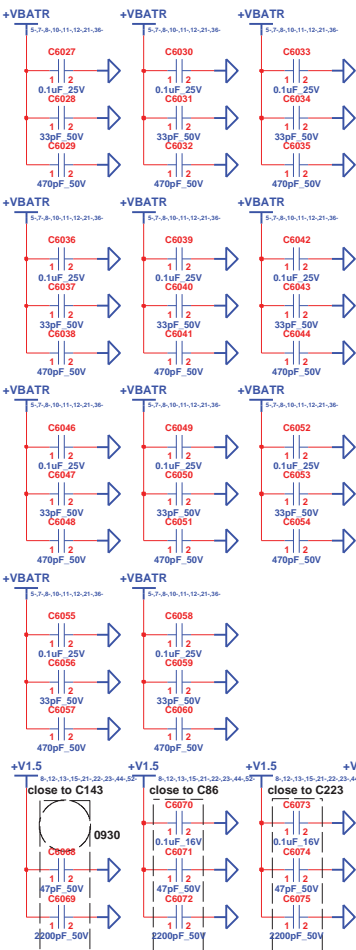
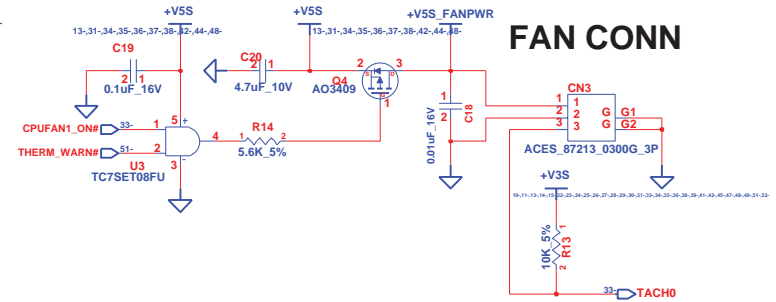
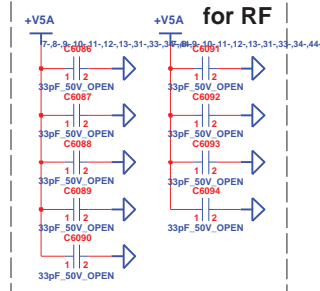
TITLE
ST133i
CPU-6

SIZE CODE DOC. NUMBER REV
A3 CS 6050A2314301 X01

SHEET 20 OF 56

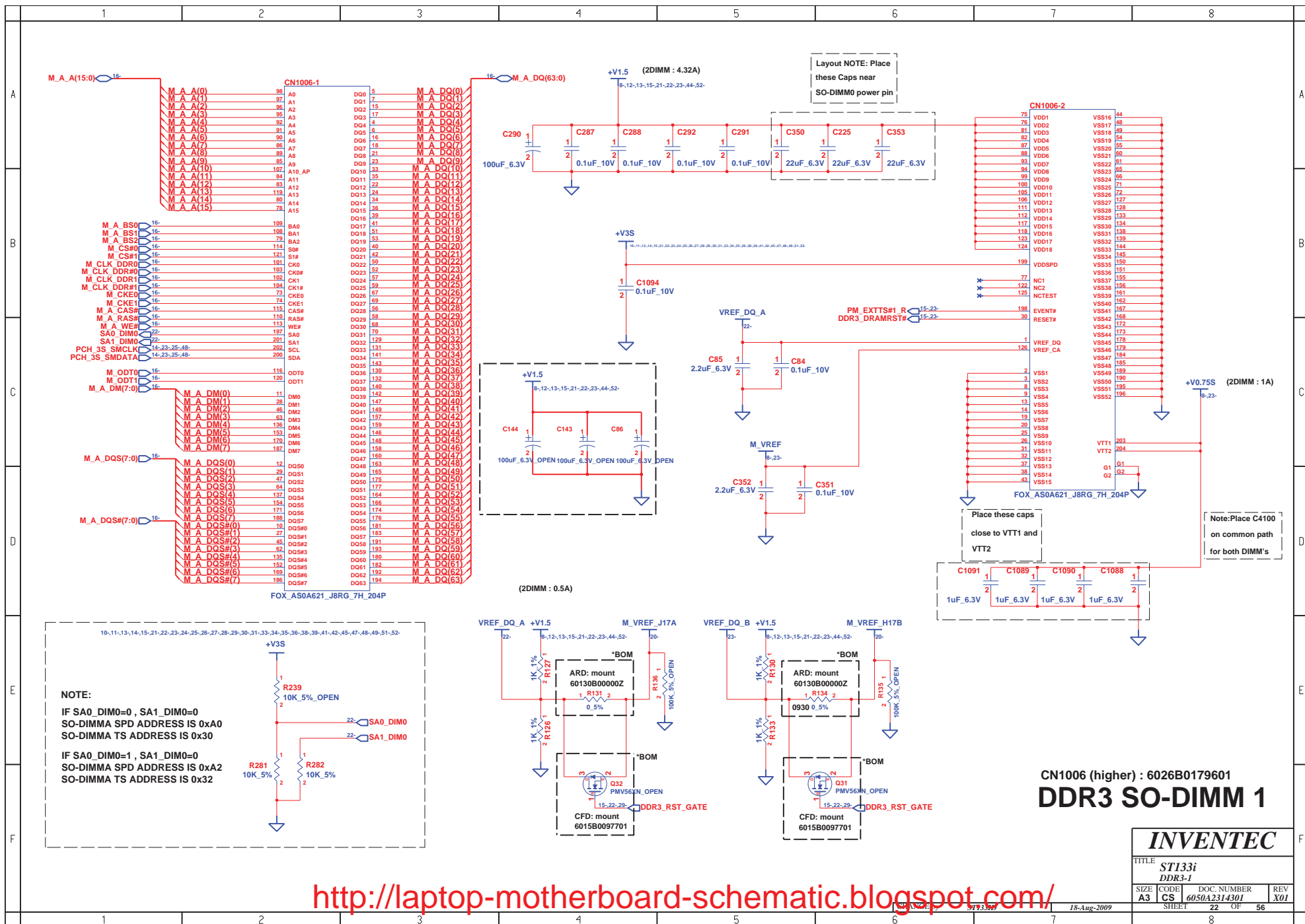
18-Aug-2009

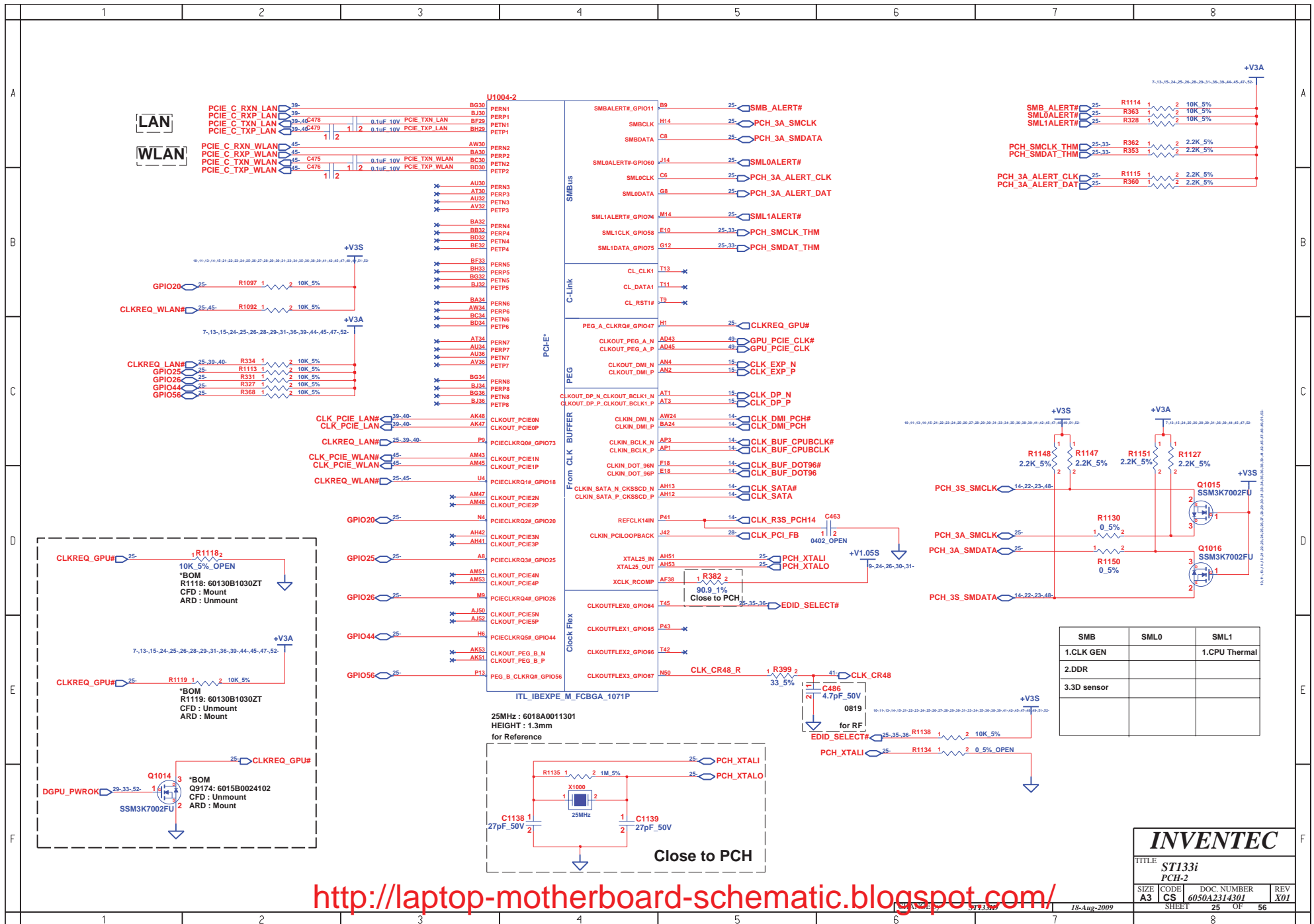
for RF



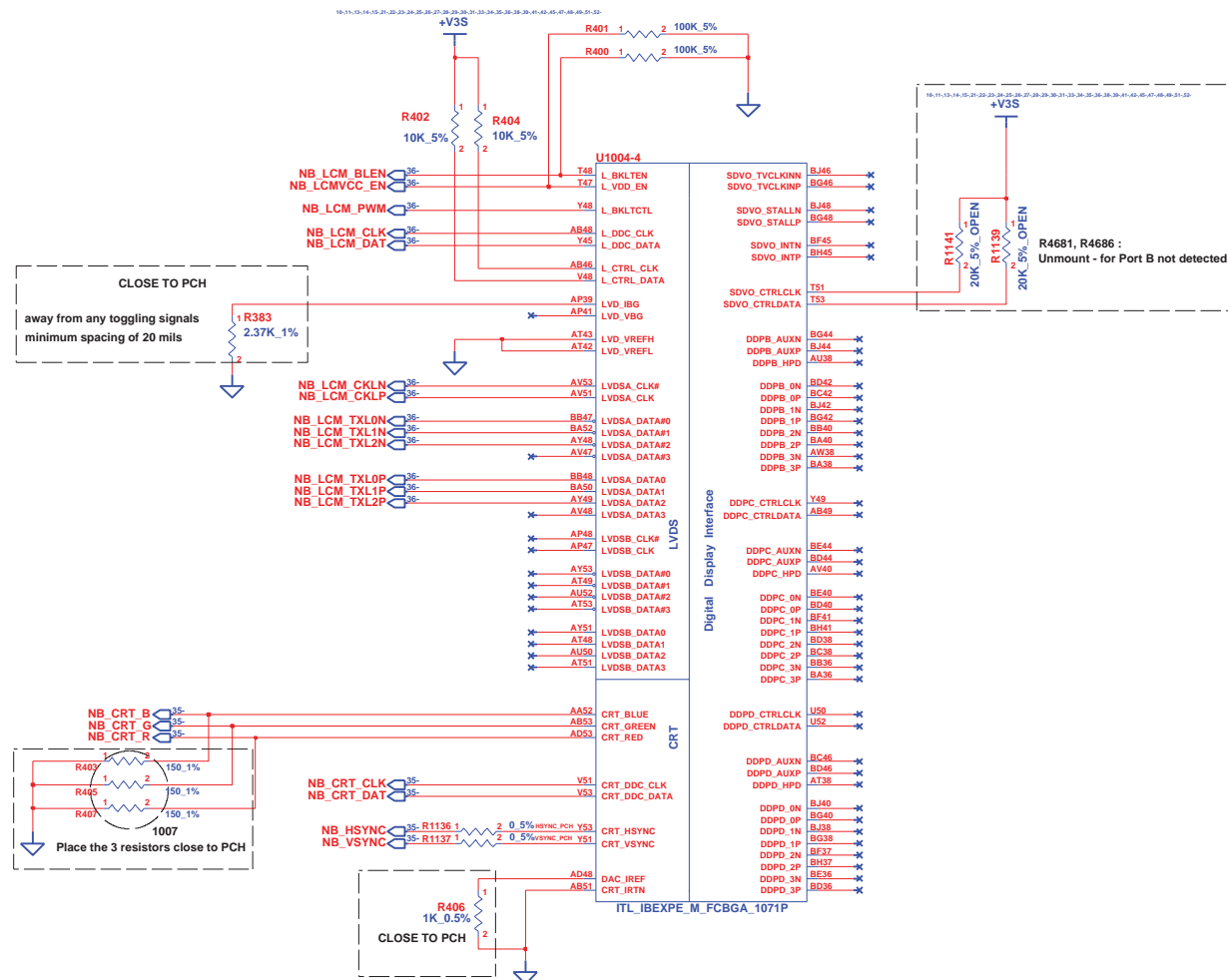
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TITLE			
ST133i			
Thermal, Fan & XDP			
SIZE	CODE	DOC. NUMBER	REV
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SHEET		21	OF 56





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

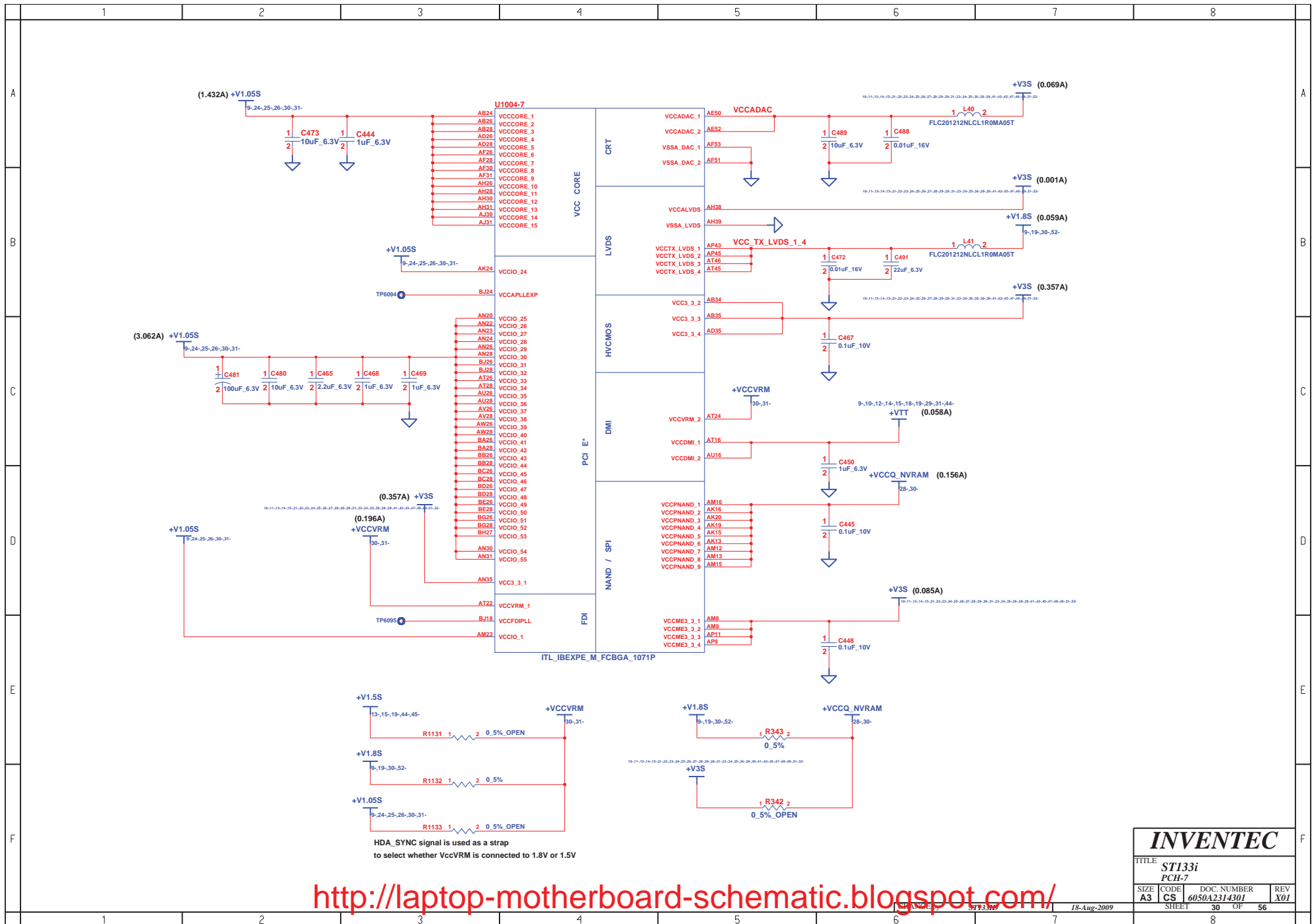


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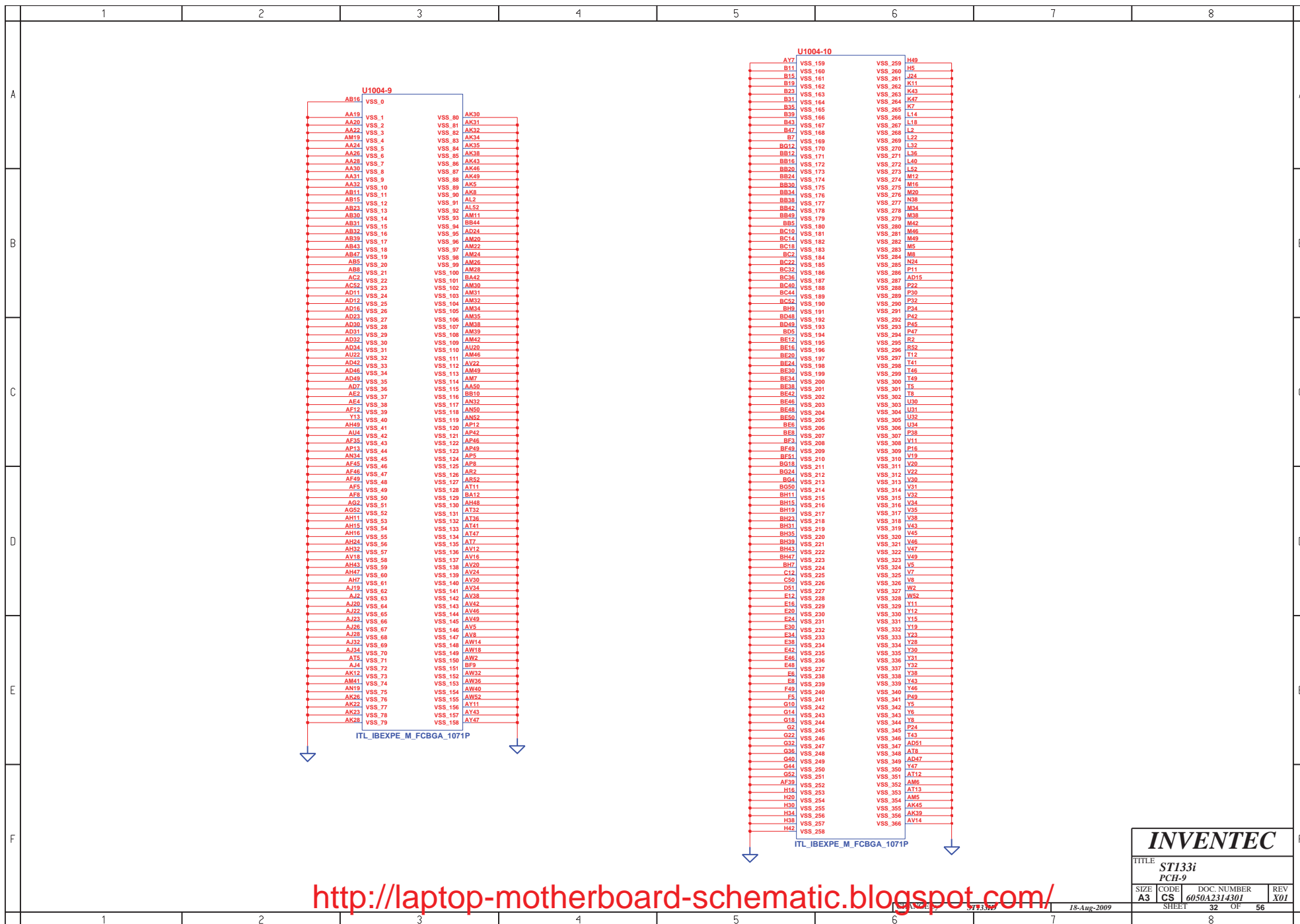
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ST133i			
PCH-4			
SIZE	CODE	DOC. NUMBER	REV
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SHEET		27	OF 56

18-Aug-2009



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

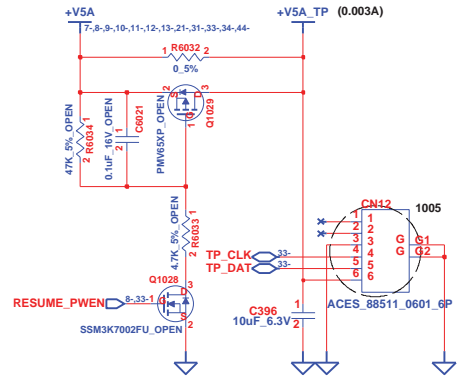
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SHEET: 30		OF: 56	



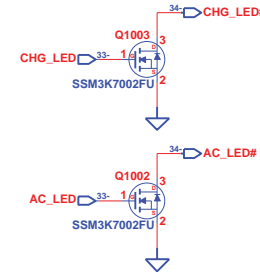
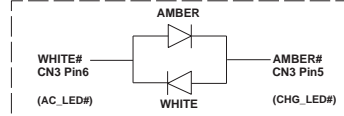
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TITLE			
ST133i			
PCH-9			
SIZE	CODE	DOC. NUMBER	REV
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SHEET		32	OF 56
18-Aug-2009			

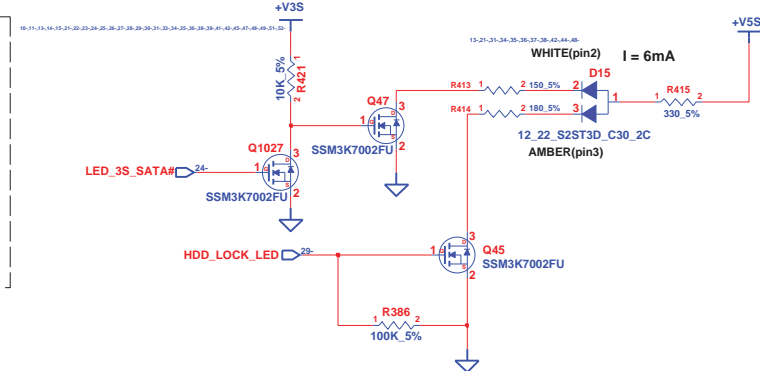
TouchPad Module CONN



DC-JACK LED



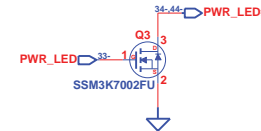
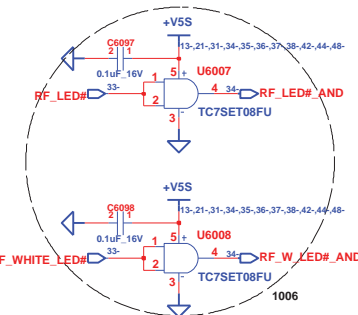
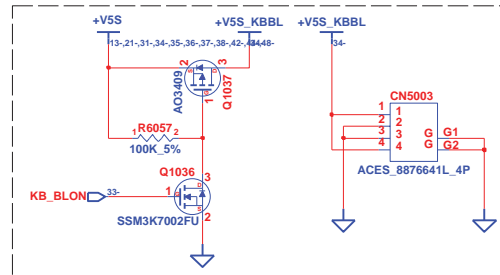
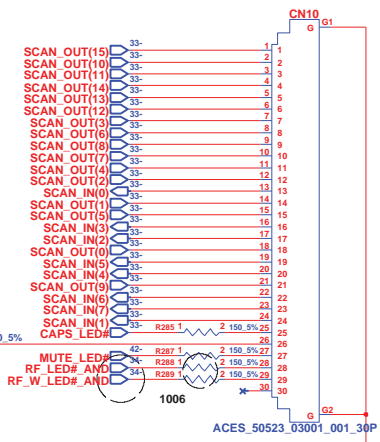
SATA LED & HDD-HALTED LED



POWER LED



KeyBoard CONN (30 pin)



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INVENTEC

TITLE ST133i Keyboard & TouchPad			
SIZE A3	CODE CS	DOC NUMBER 6050A2314301	REV X01
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A

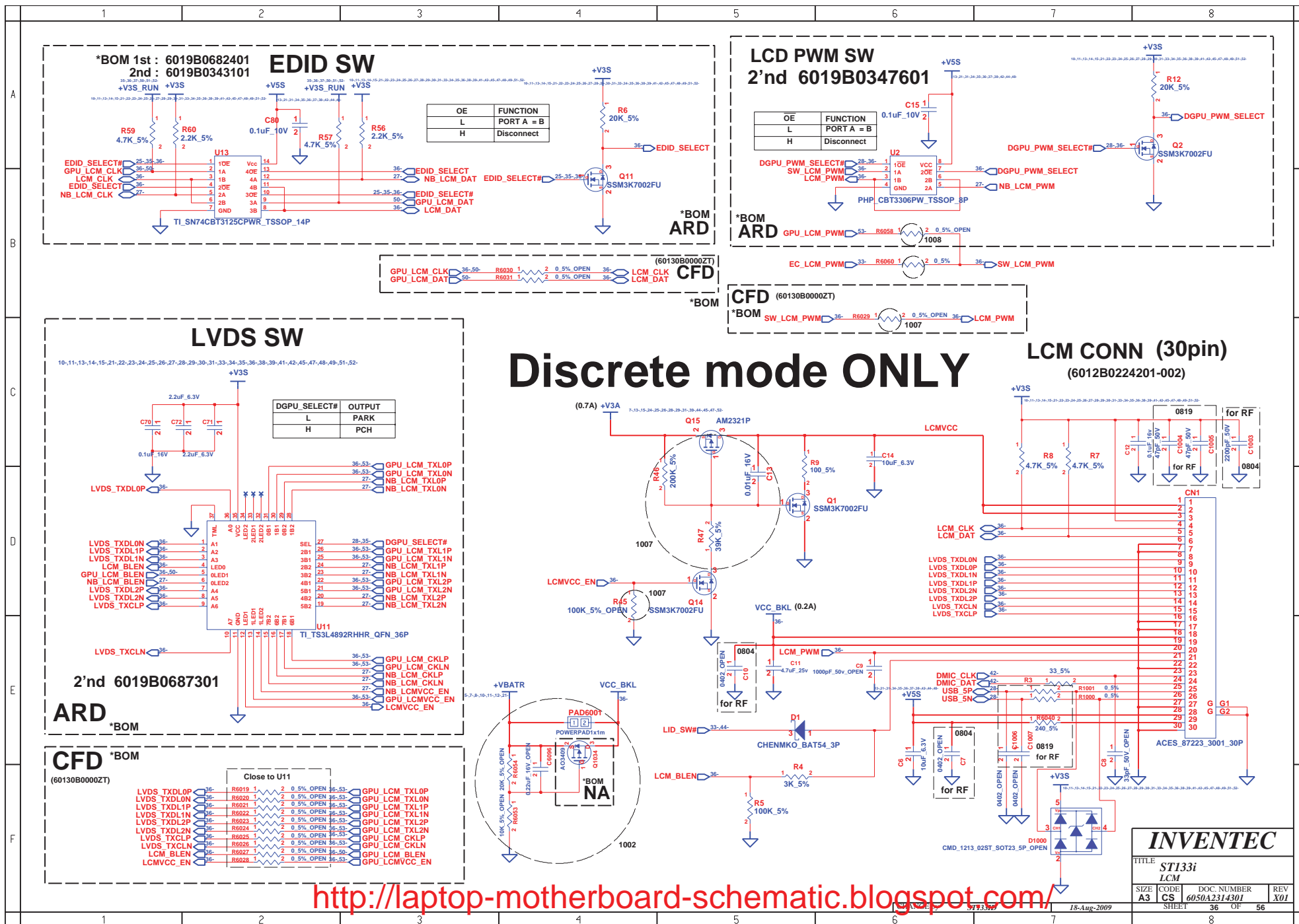
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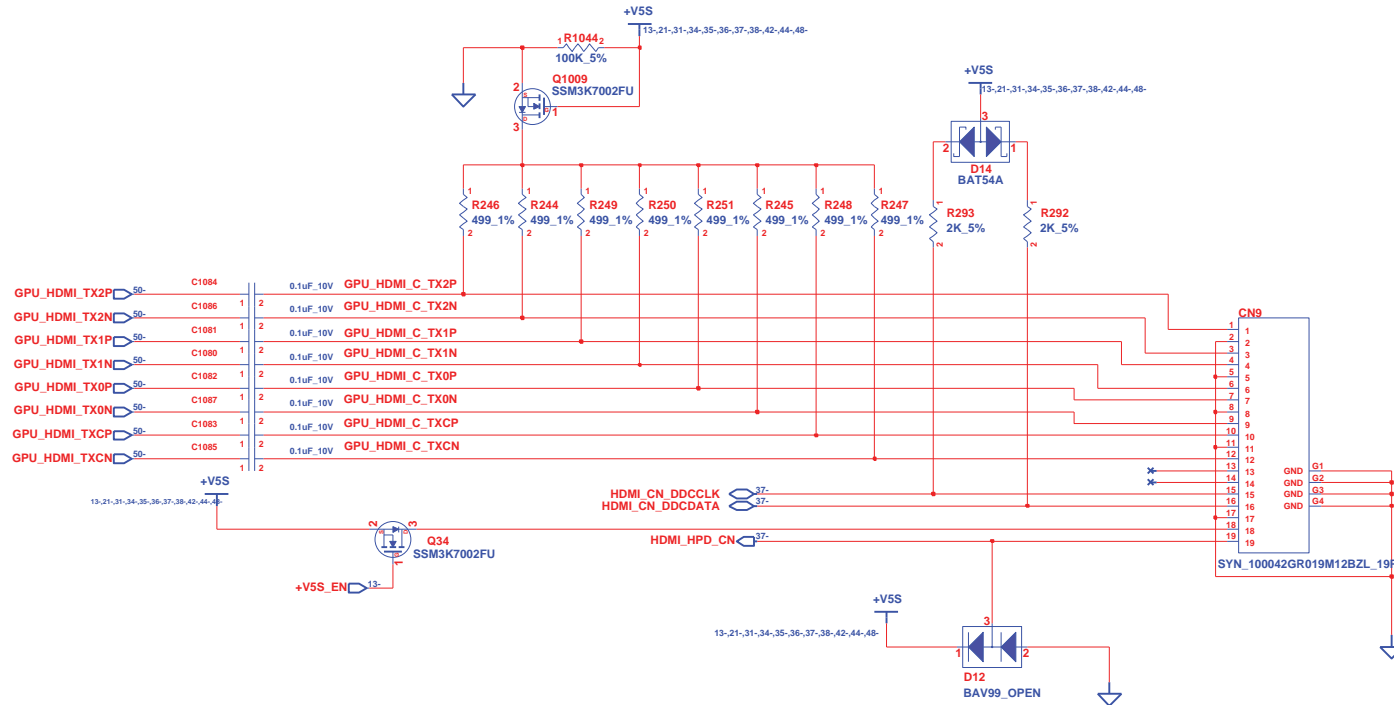
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1	2	3	4	5	6	7	8
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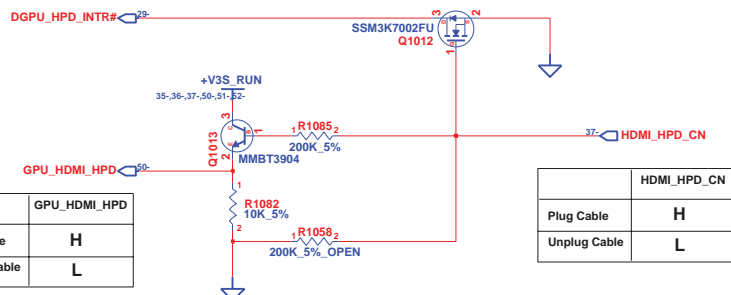


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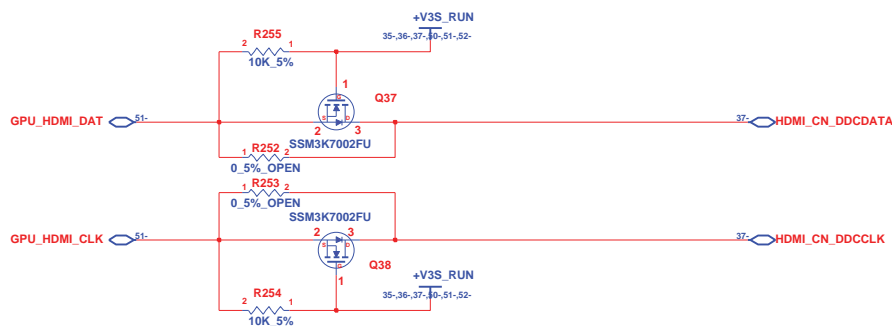
HDMI CONN

	DGPU_HPD_INTR#
Plug Cable	L
Unplug Cable	H



	GPU_HDMI_HPD
Plug Cable	H
Unplug Cable	L

	HDMI_HPD_CN
Plug Cable	H
Unplug Cable	L



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INVENTEC			
TITLE ST133i HDMI Level-Shift			
SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
SHEET 37		OF 56	

F



F



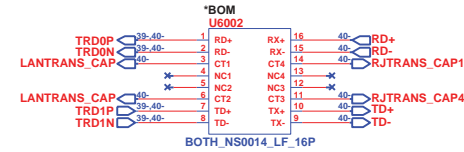
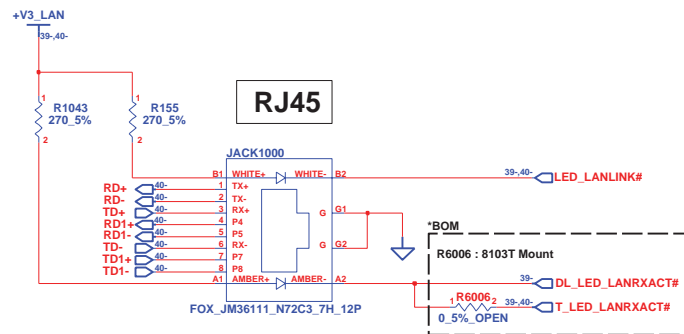
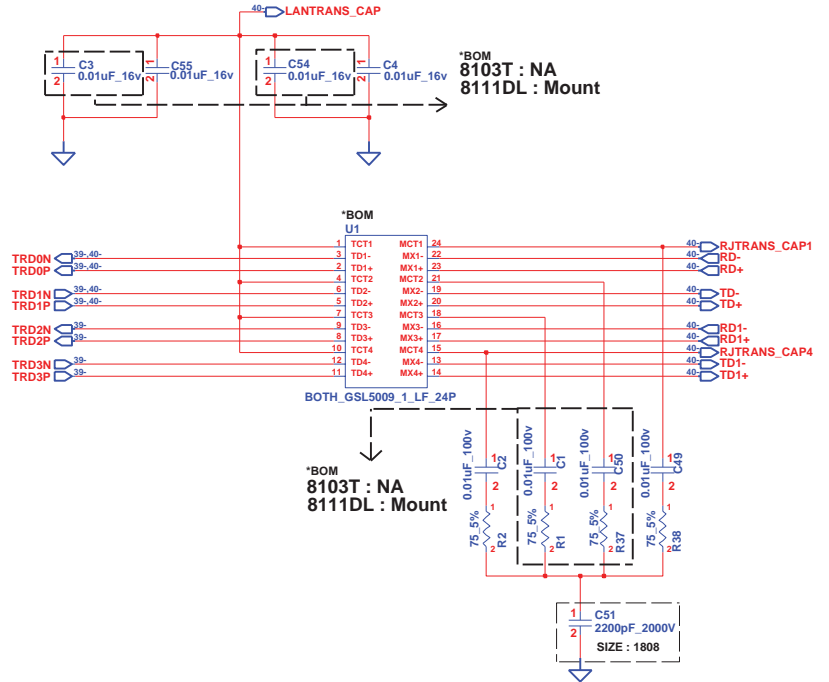
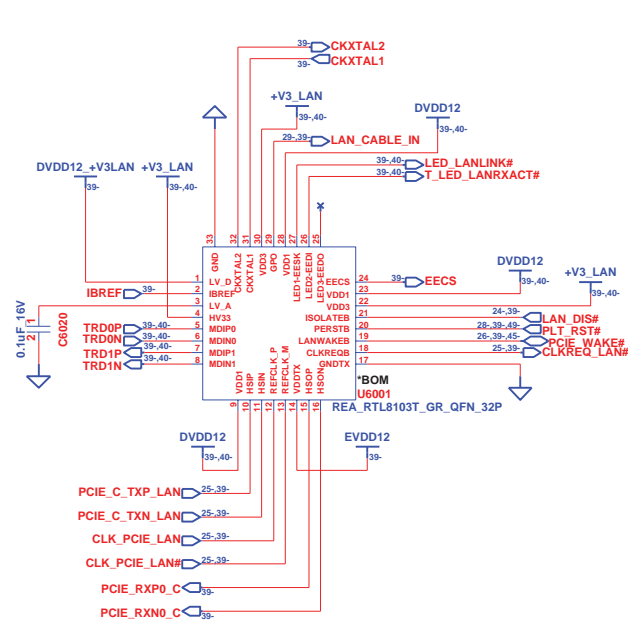
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CHANGE BY JT133M

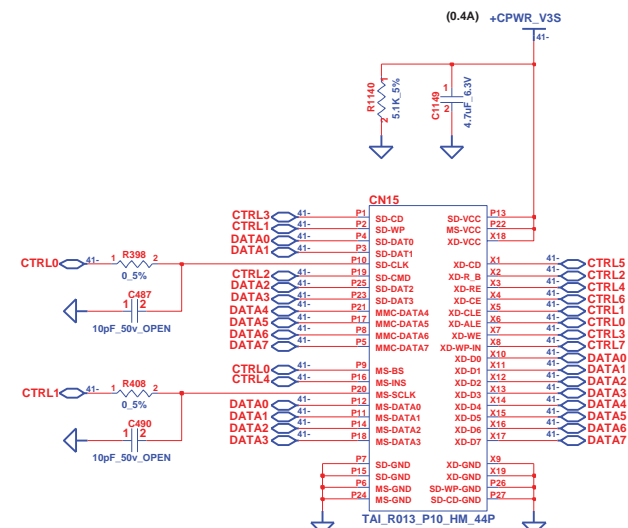
A

LAYOUT NOTE : Place termination resistors and caps as close to LAN controller as possible

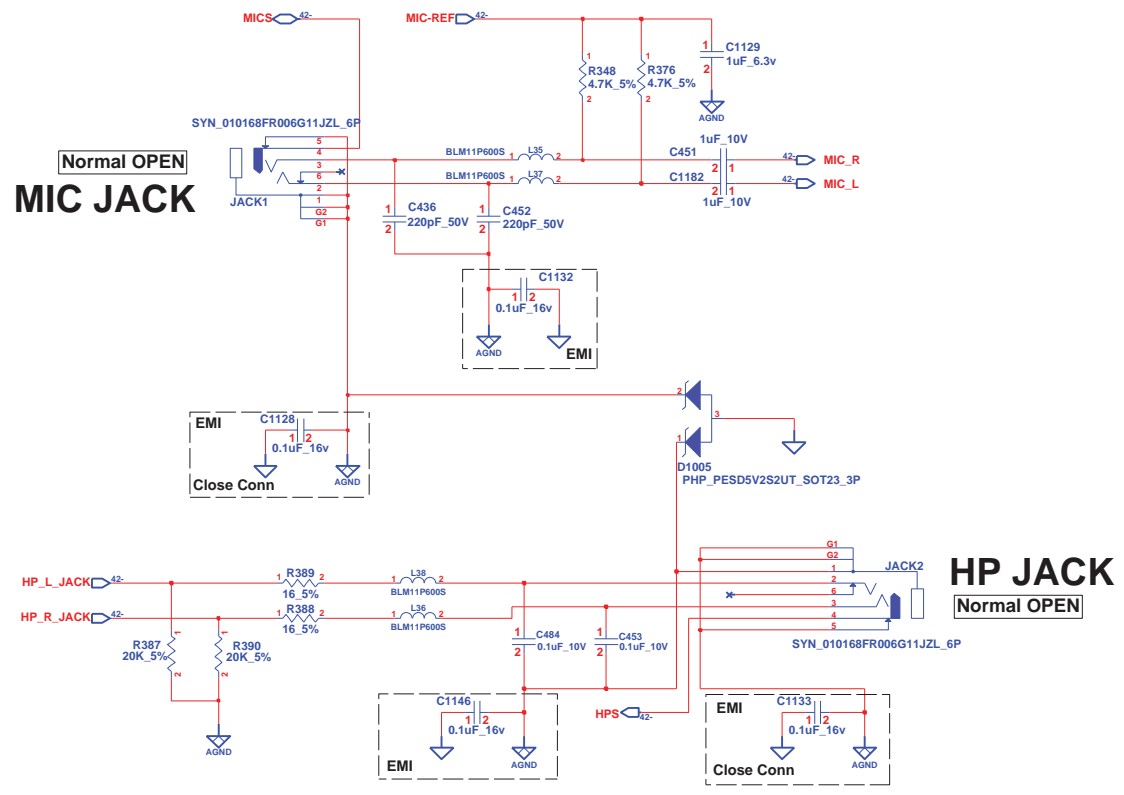


<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC			
TITLE			
ST133i			
RJ-45			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		40	OF 56



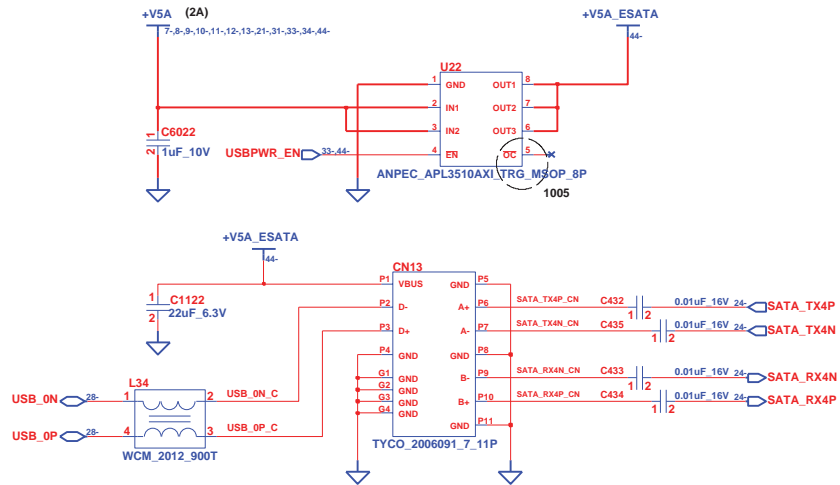
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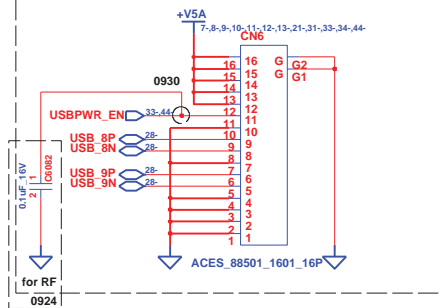
<http://laptop-motherboard-schematic.blogspot.com/>

INVENTEC			
TITLE			
ST133i			
HP JACK & MIC JACK			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		43	OF 56

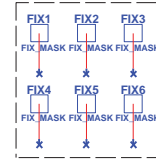
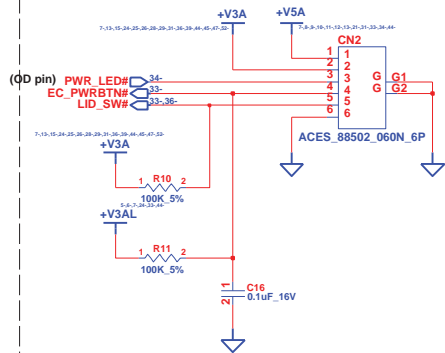
ESATA CONN (without Re-Driver chip)



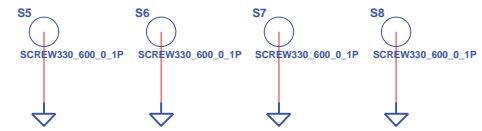
USB BOARD Cable on MB



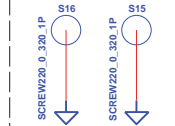
PBN Cable CN on MB



CPU's screws



for PCH



NUT P/N :
6052B0160501

*BOM

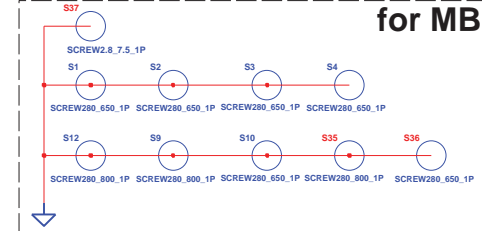
for VGA



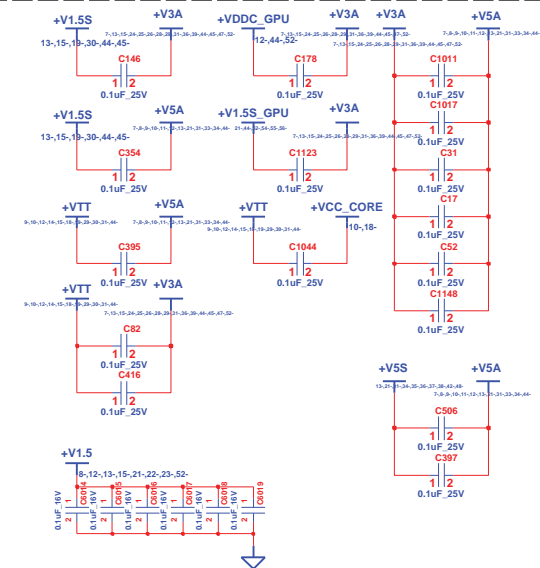
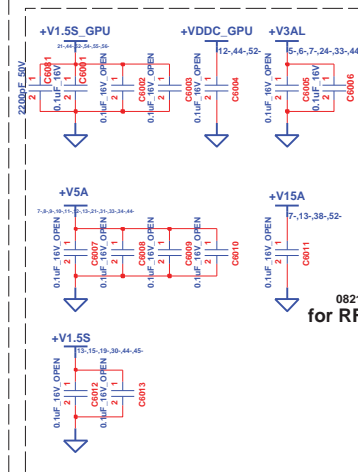
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***BOM**

for MB



EMI CAPS



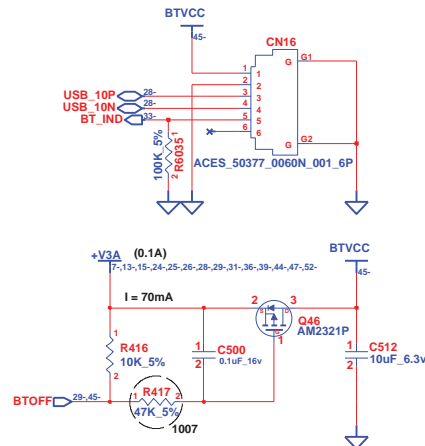
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TITLE	<i>ST133i</i> <i>ESATA, SCREW & LID</i>
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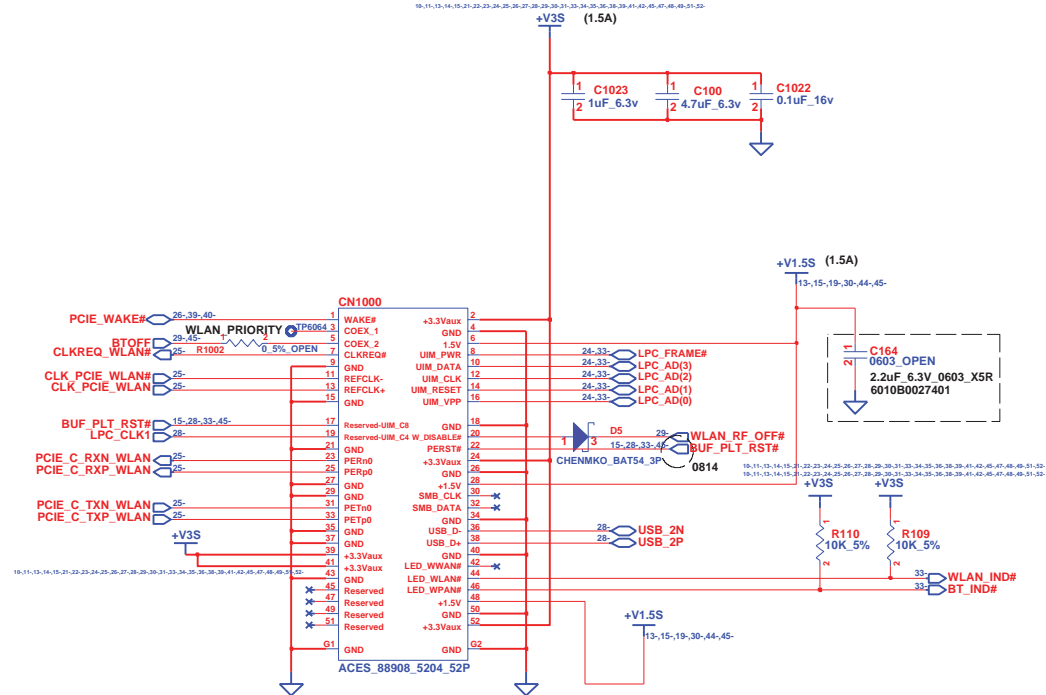
SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
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SHEET 44 OF 56

BLUETOOTH CONN



WLAN CONN (MINICARD)



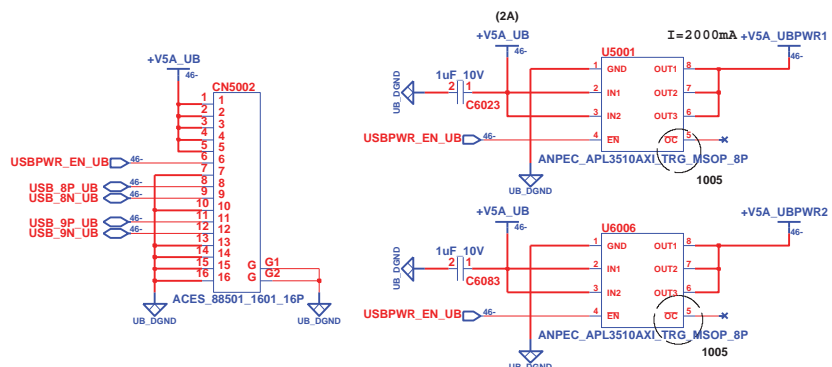
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CN1000 : 6026B0184301

INVENTEC

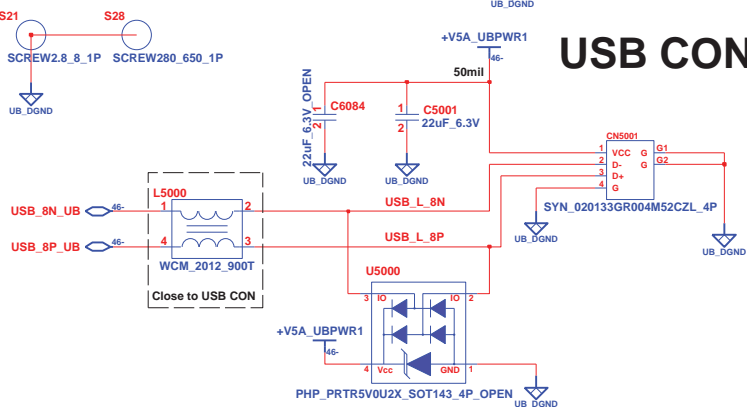
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SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
SHEET 45		OF 56	

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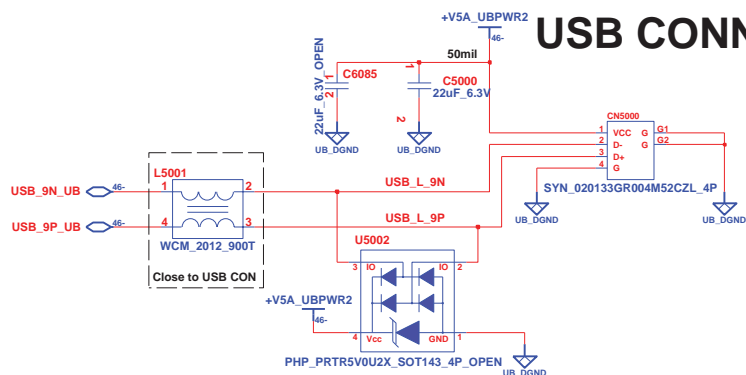
USB BOARD Cable ON UB



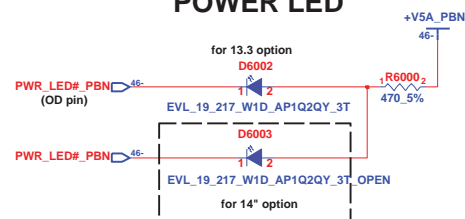
USB CONN01



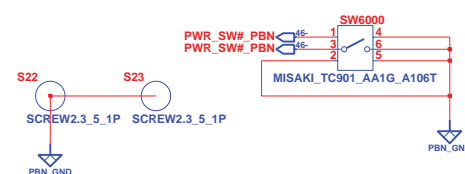
USB CONN02



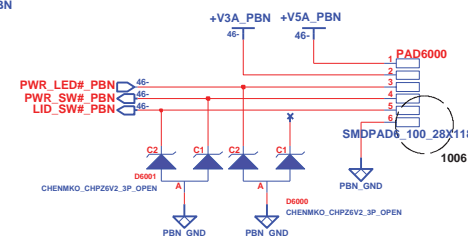
POWER LED



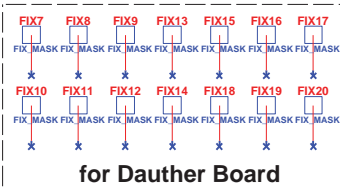
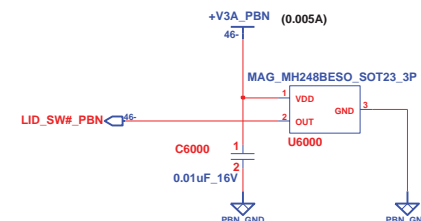
POWER BUTTON



PBN Cable CN on PBN



LID SWITCH



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INVENTEC

TITLE ST133i			
USB, PowerButton (DB)			
SIZE A3	CODE CS	DOC NUMBER 6050A2314301	REV X01
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A



C

D

E

F

SIM CARD CONN

	PCH	SB800/820
WWAN_RF_OFF#	GPIO27	GPIO11
WWAN_POWER_OFF	GPIO24	GPIO175
WWAN_DET#	GPIO22	GPIO13

1

1

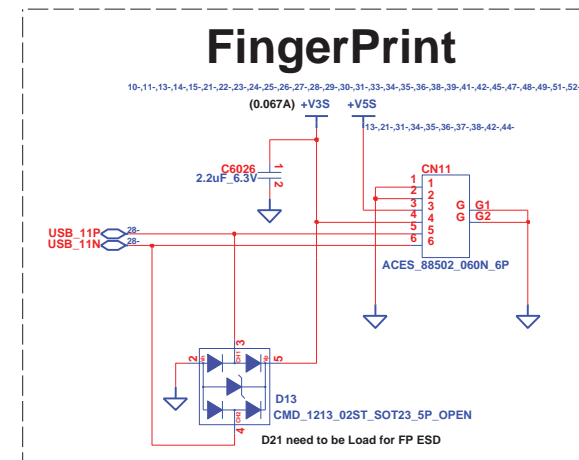
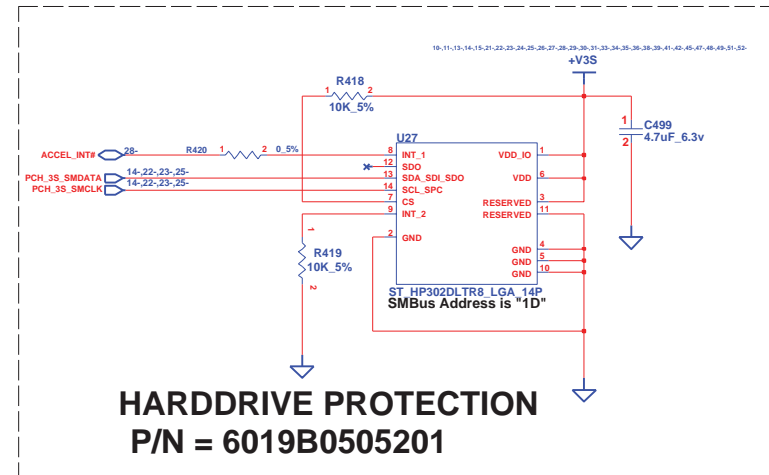
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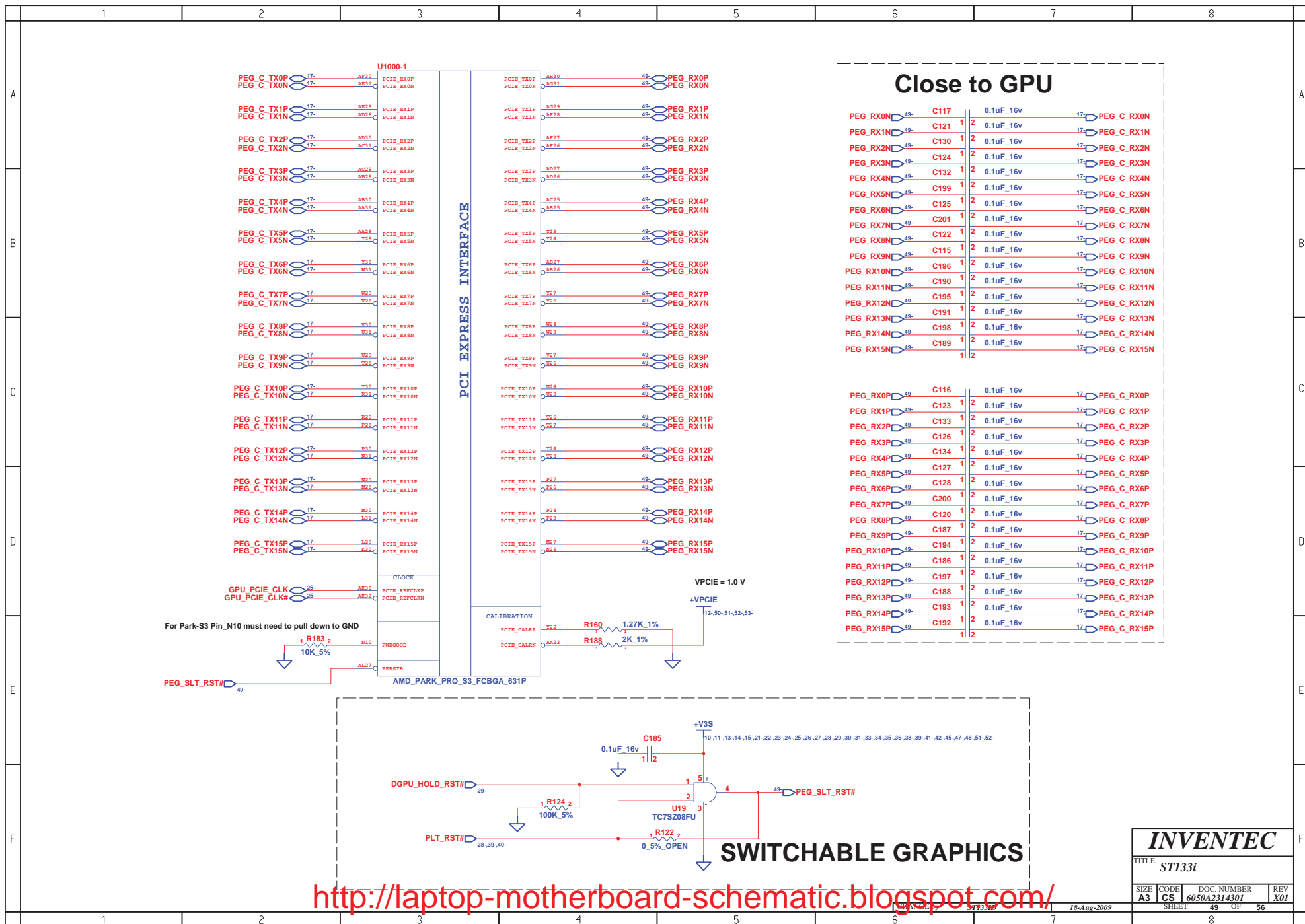
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OPTION PART

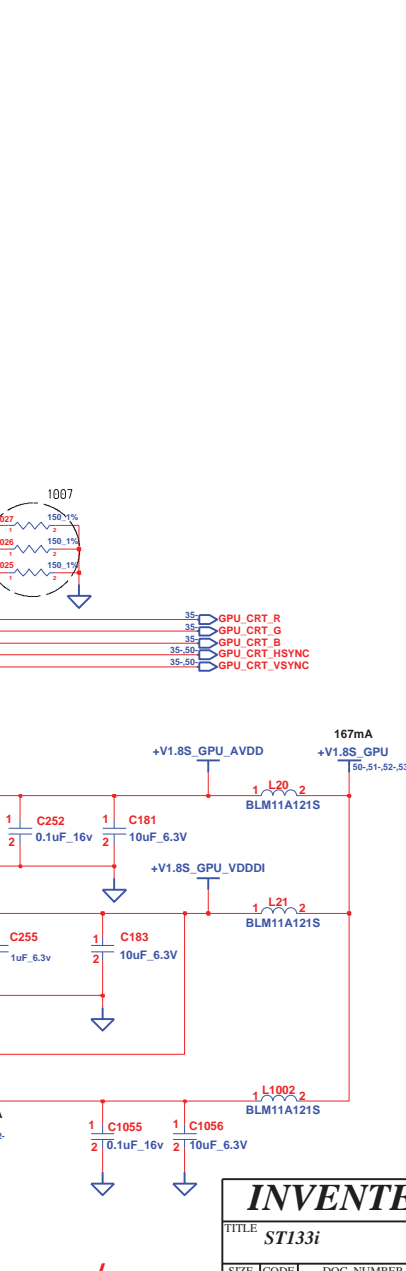
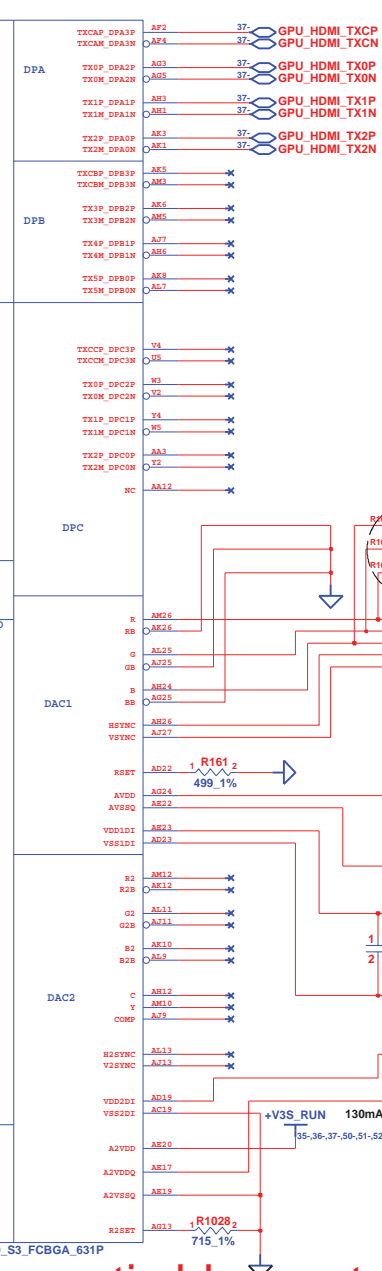
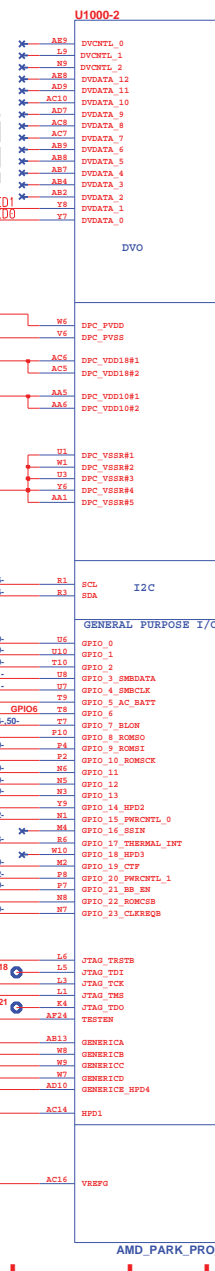
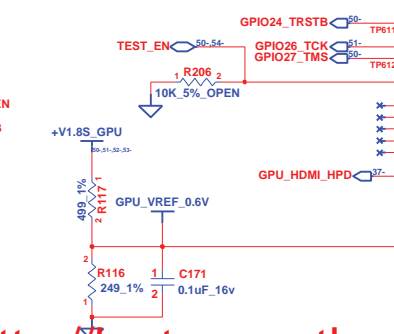
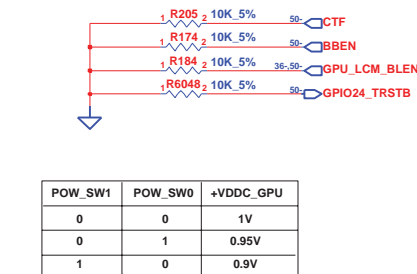


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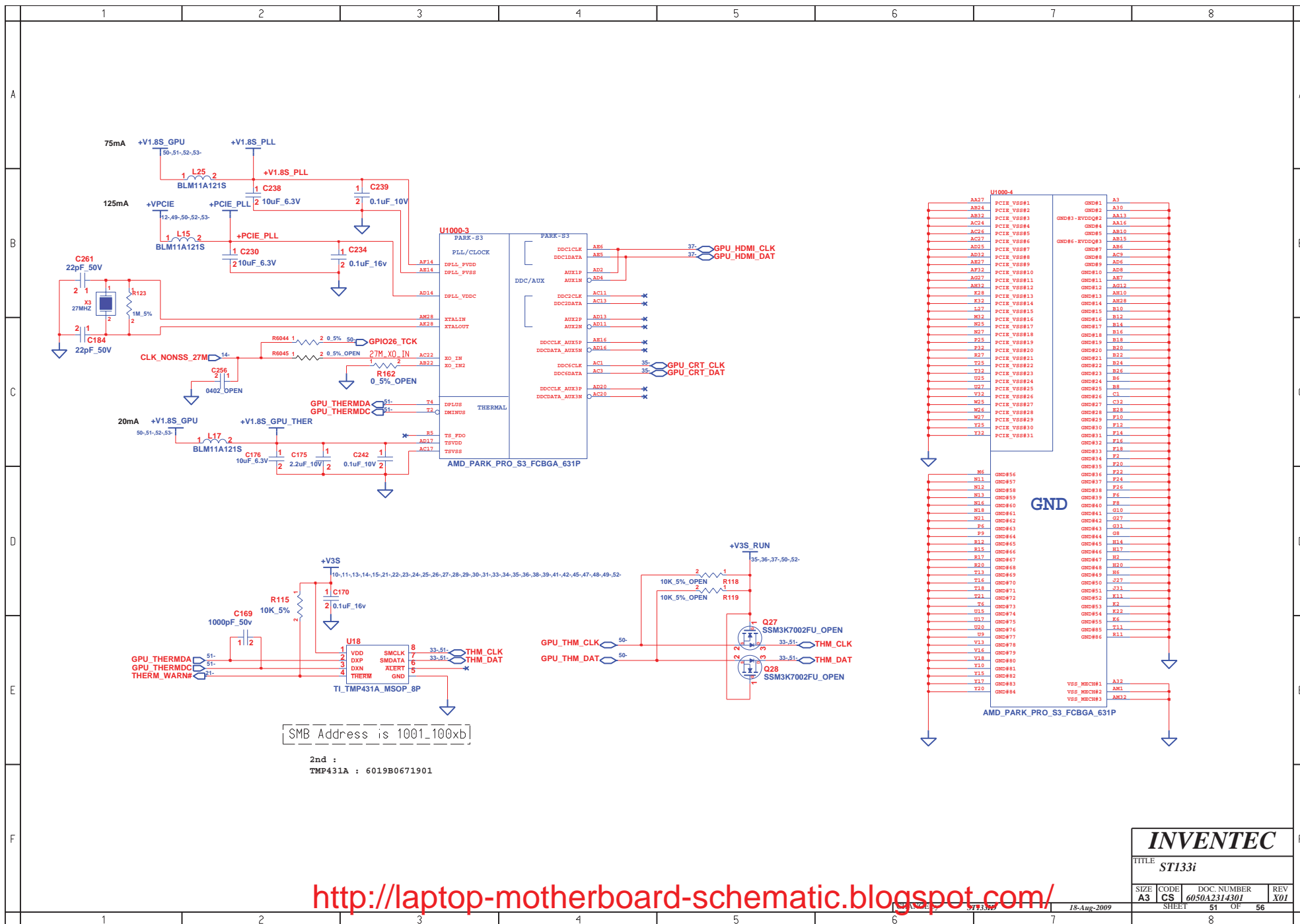
INVENTEC			
TITLE: ST133i			
Touchscreen, FP & HD LOCK(Option)			
SIZE: A3	CODE: CS	DOC. NUMBER: 6050A2314301	REV: X01
SHEET: 48		OF: 56	



If GPIO_22_EN = 0 , then GPIO[13:11] defines the primary memory aperture size.			
GPIO_13	GPIO_12	GPIO_11	Memory aperture size
0	0	1	512MB / 256MB (Default)
1	1	0	reserved



INVENTEC			
TITLE <i>ST133i</i>			
SIZE A3	CODE CS	DOC. NUMBER <i>6050A2314301</i>	REVISION X0
SHEET		50 OF	56



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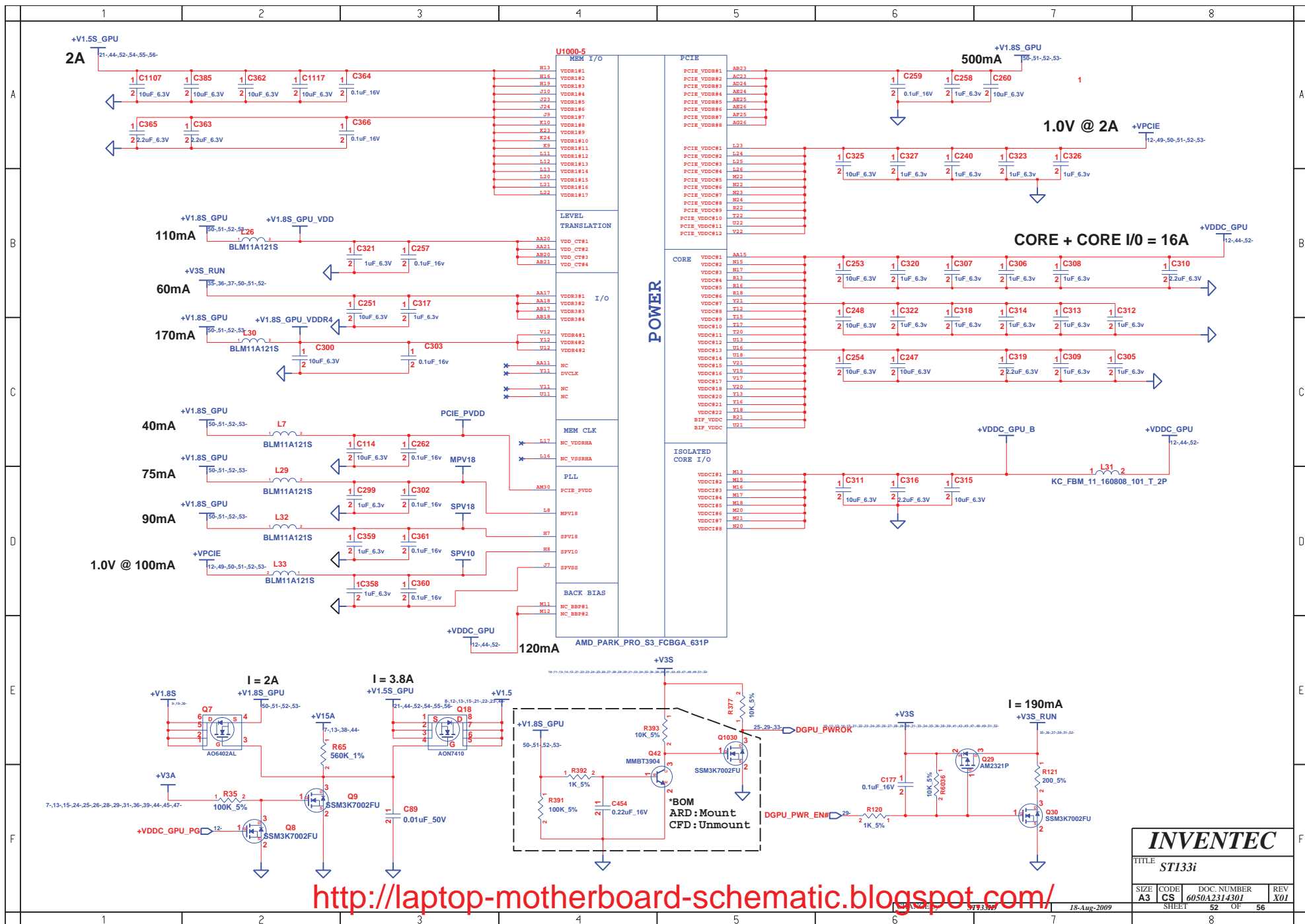
INVENTEC

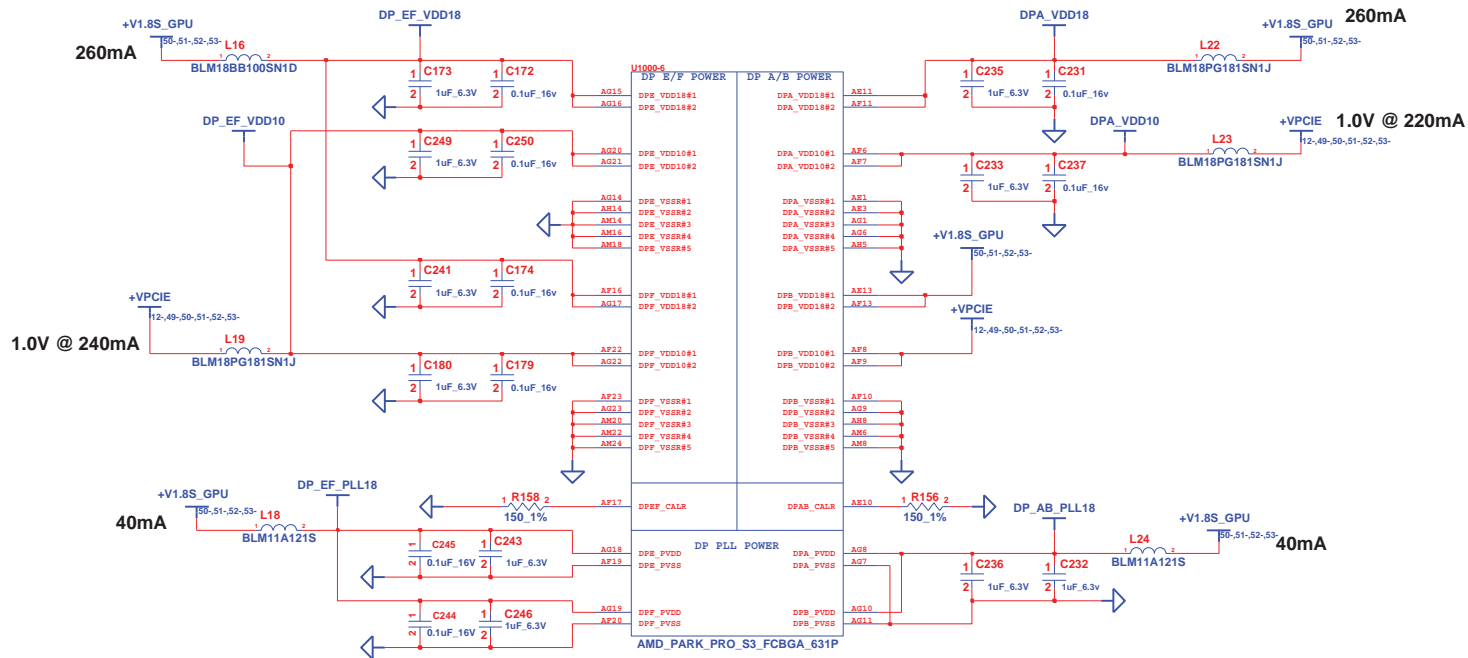
TITLE
ST133i

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01

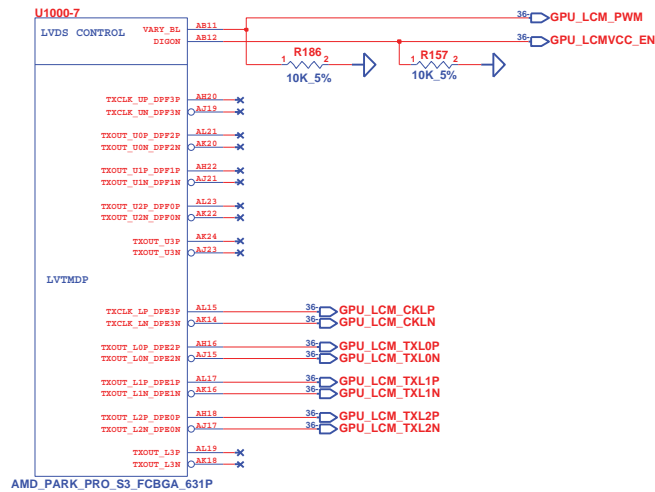
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LVDS Interface



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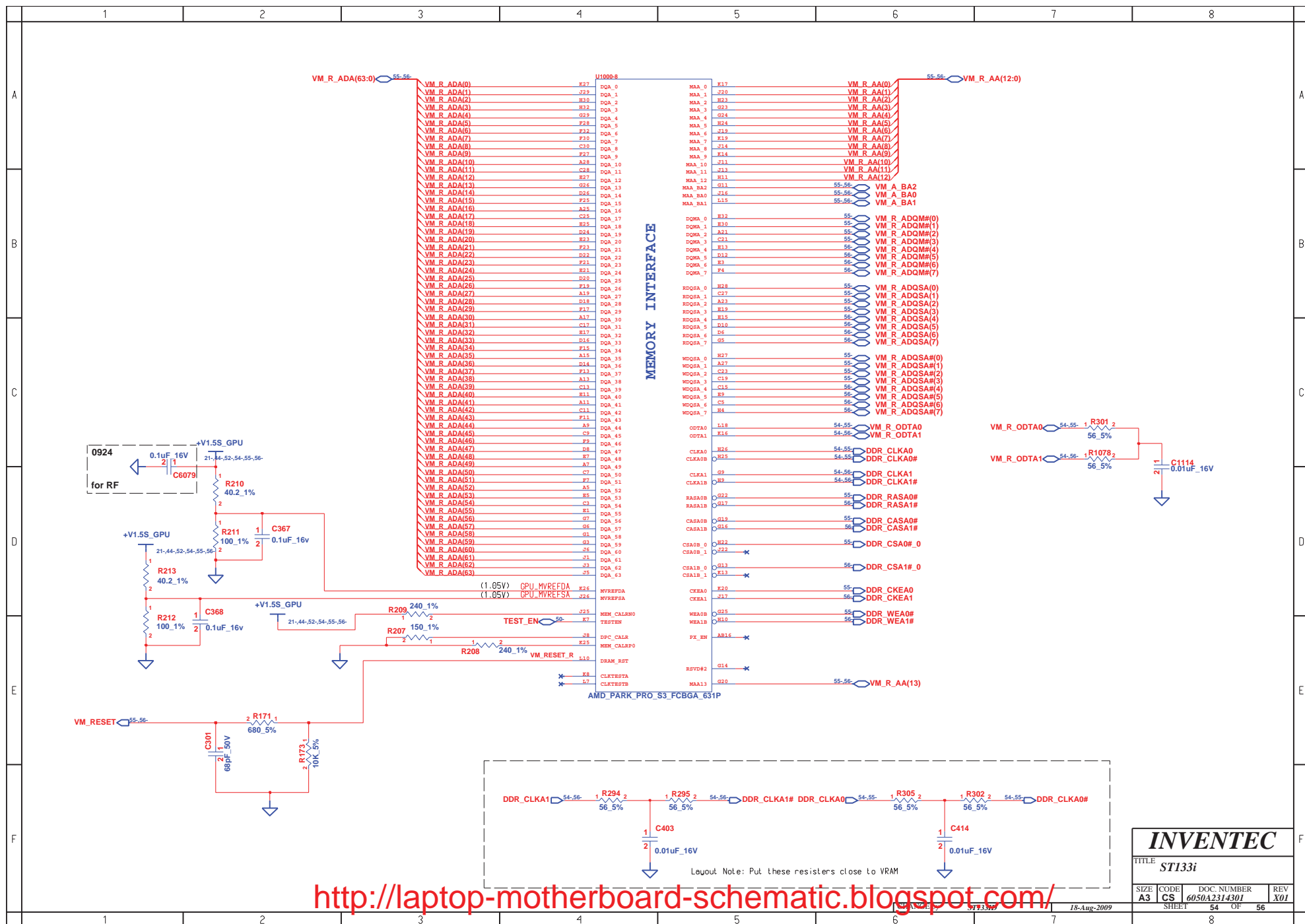
INVENTEC

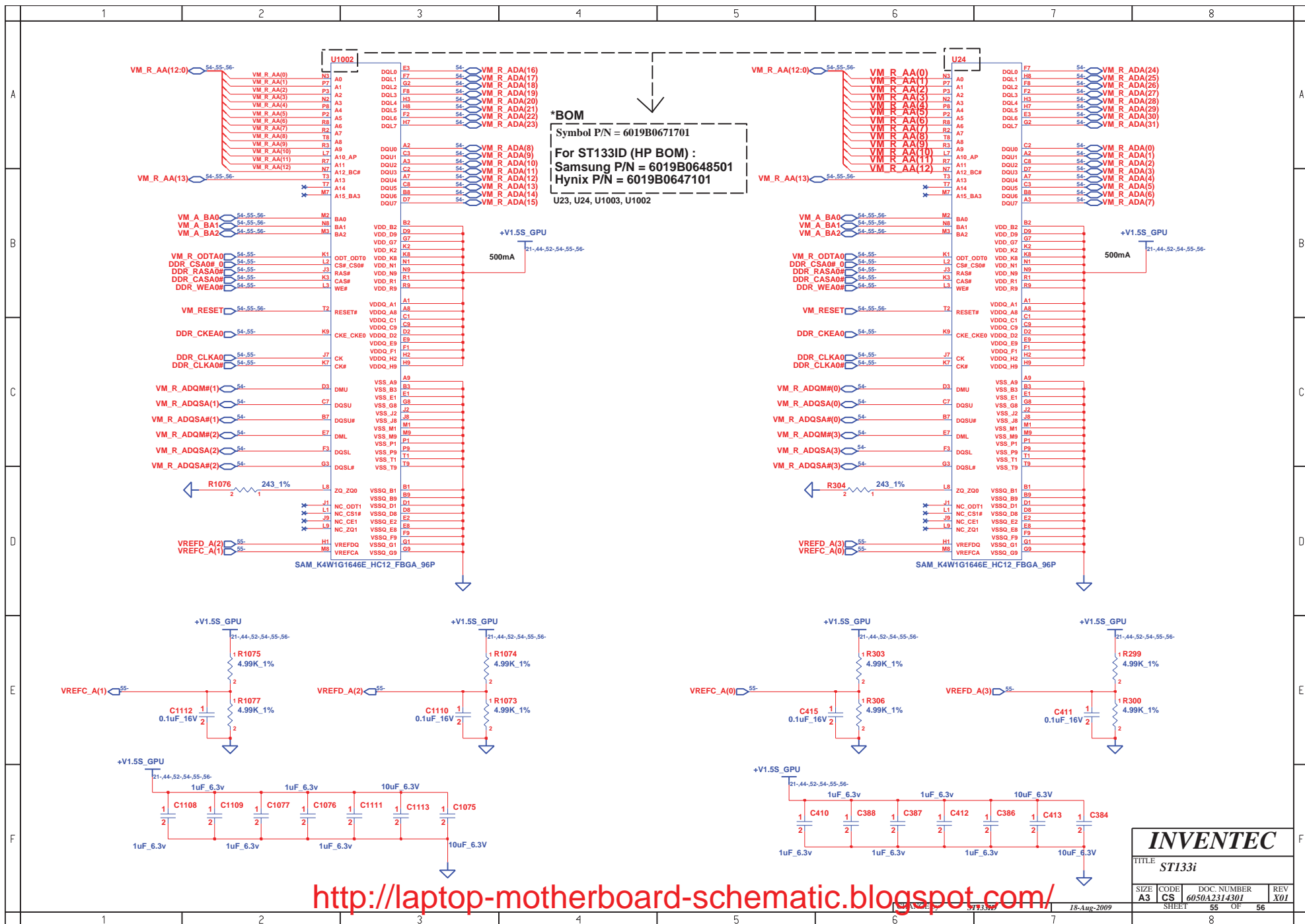
TITLE
ST133i

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01

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INVENTEC

TITLE
ST133i

SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
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