

	1	2	3	4	5	6	7	8																																																																		
A	<div>THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF INVENTEC CORPORATION AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION, INVENTEC CORPORATION 2009 ALL RIGHT RESERVED</div>								A																																																																	
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F	<table border="1"><thead><tr><th>DATE</th><th>CHANGE NO.</th><th>REV</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>		DATE	CHANGE NO.	REV																												<table border="1"><thead><tr><th>DRAWER</th><th>EE</th><th>DATE</th><th>POWER</th><th>DATE</th></tr></thead><tbody><tr><td>DESIGN</td><td></td><td></td><td></td><td></td></tr><tr><td>CHECK</td><td></td><td></td><td></td><td></td></tr><tr><td>RESPONSIBLE</td><td></td><td></td><td></td><td></td></tr><tr><td colspan="2">SIZE = 3</td><td colspan="2">VER :</td><td></td></tr><tr><td colspan="2">FILE NAME : XXXX-XXXXXX-XX</td><td colspan="2"></td><td></td></tr><tr><td>P/N</td><td colspan="4">XXXXXXXXXXXX</td></tr></tbody></table> <div>INVENTEC TITLE VV10AD2-Valima SIZE A3 CODE CS DOC. NUMBER 1310A23470-0-MTRAXI SHEET 1 OF 62</div>						DRAWER	EE	DATE	POWER	DATE	DESIGN					CHECK					RESPONSIBLE					SIZE = 3		VER :			FILE NAME : XXXX-XXXXXX-XX					P/N	XXXXXXXXXXXX				F
DATE	CHANGE NO.	REV																																																																								
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11- +V1.1A
12- +V1.5 & +V_MVREF (for DDR3) , +V1.8S
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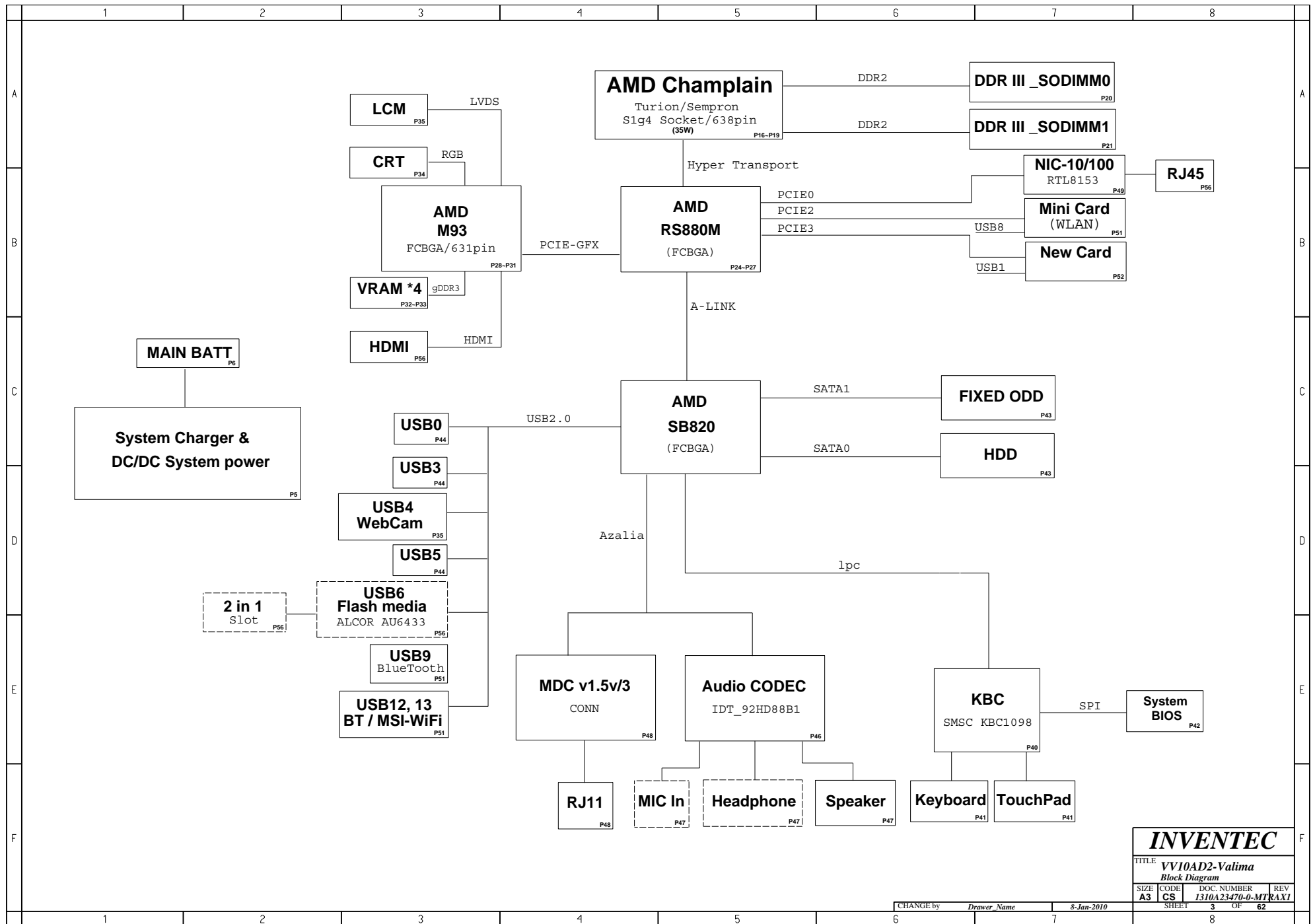
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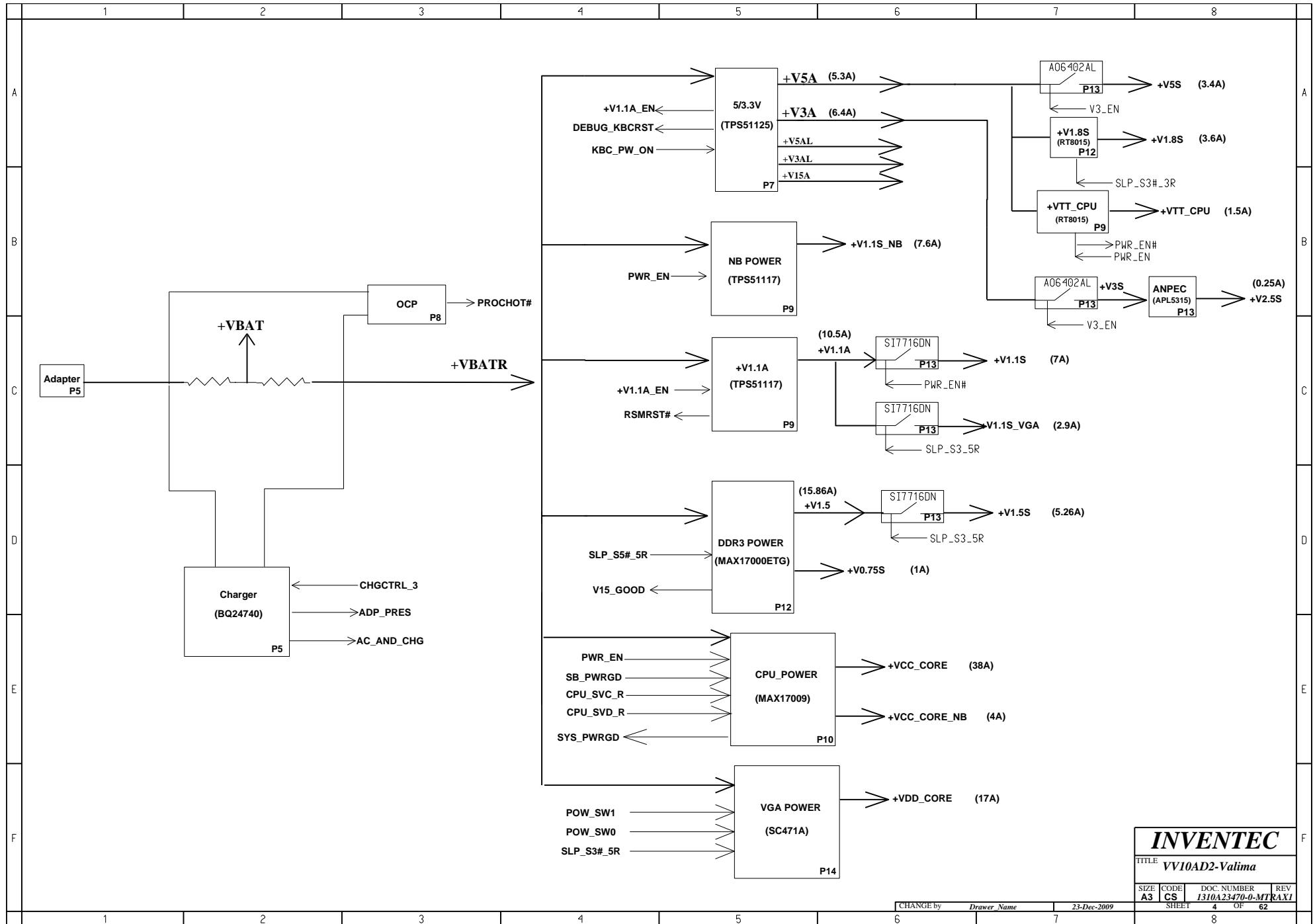
40- KBC & KBC debug CONN
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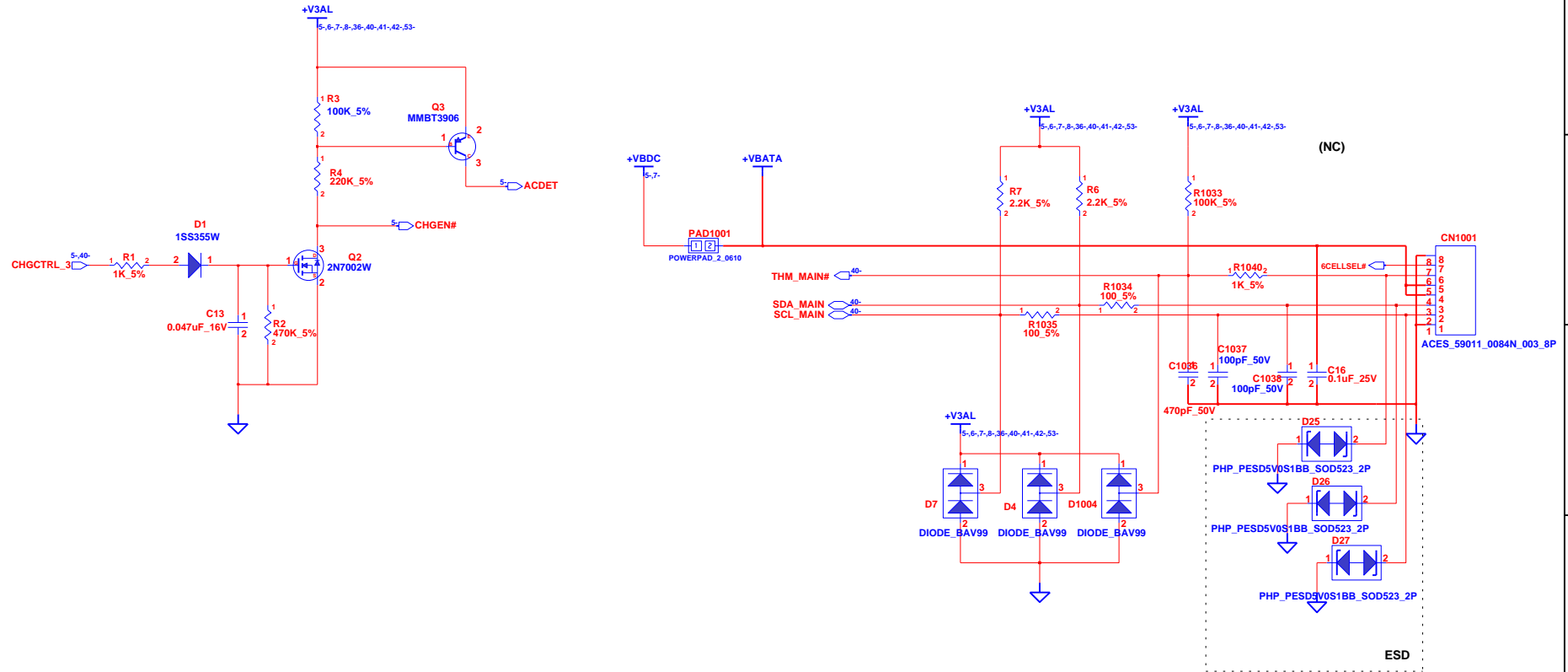
INVENTEC

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Table OF Content			
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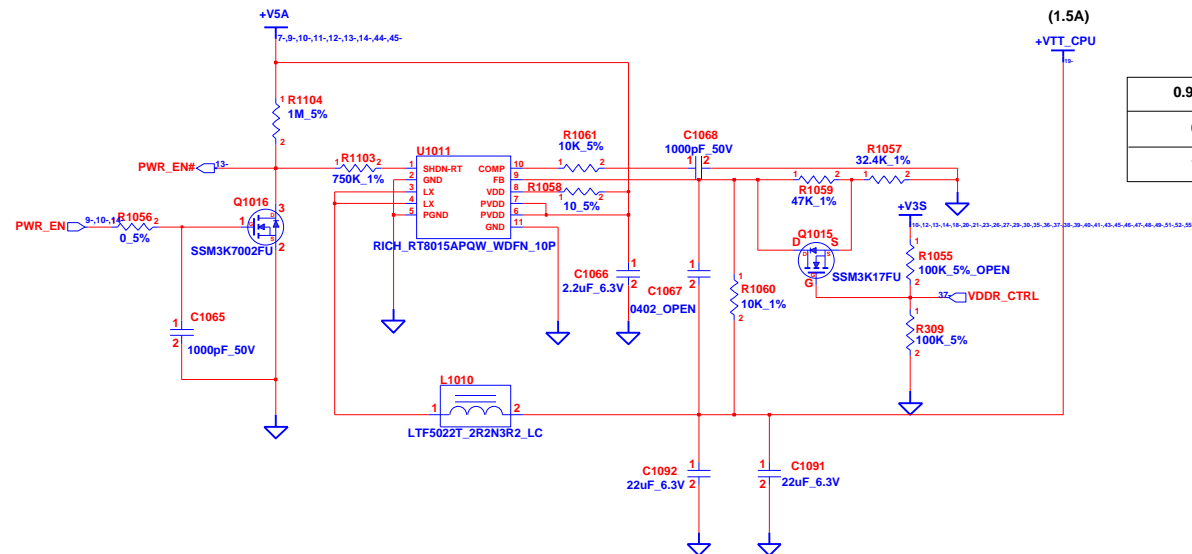
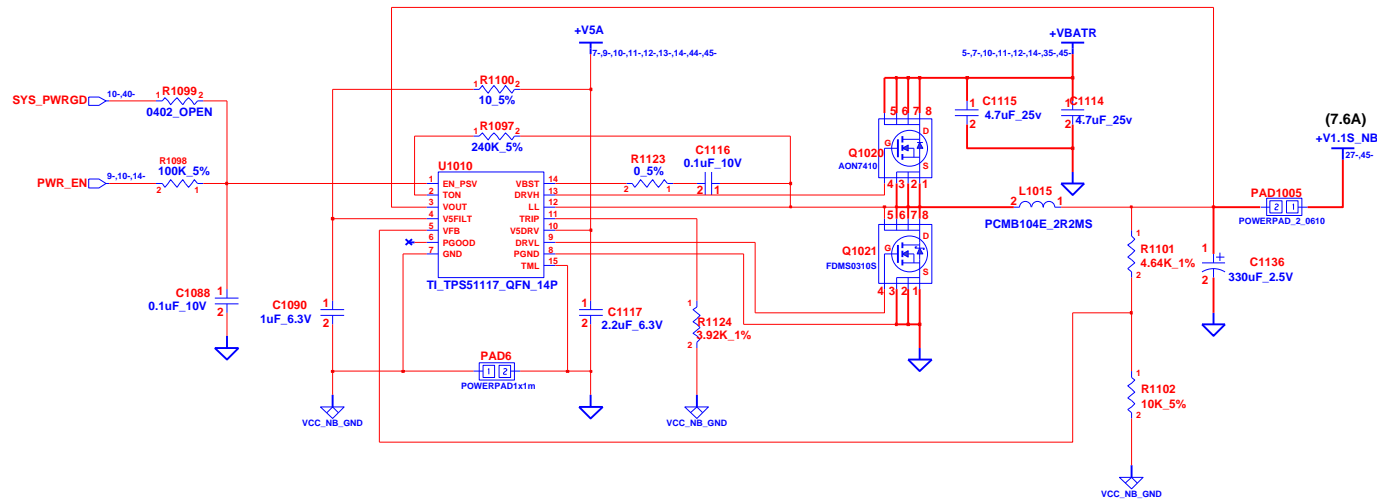
CHANGE by *Drawer Name* 19-Jan-2010







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TITLE: VV10AD2-Valima SELECT & BATTERY CONN			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A23470-0-MTRAX1	REV: 62
CHANGE by: Drawer Name		23-Dec-2009	
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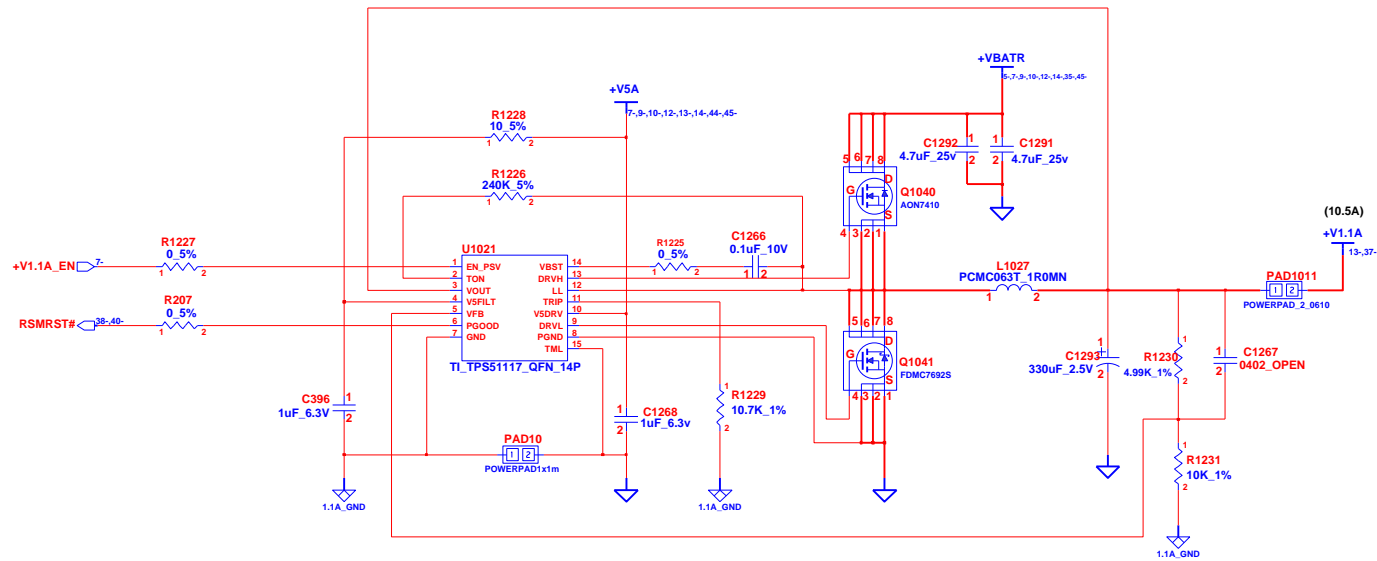
0.9EN	+VTT_CPU
0	0.9
1	1.05

INVENTEC

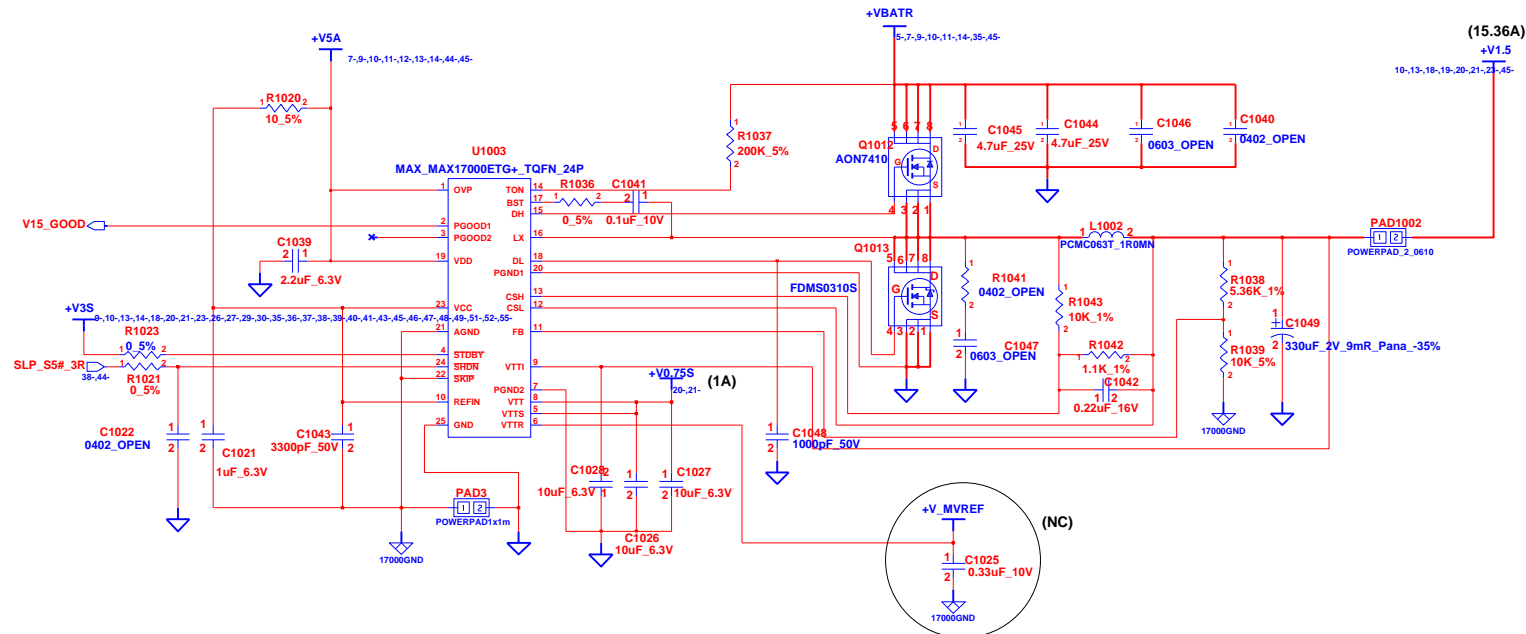
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SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MTRAXI	REV 62

CHANGE by: Drawer Name 23-Dec-2009

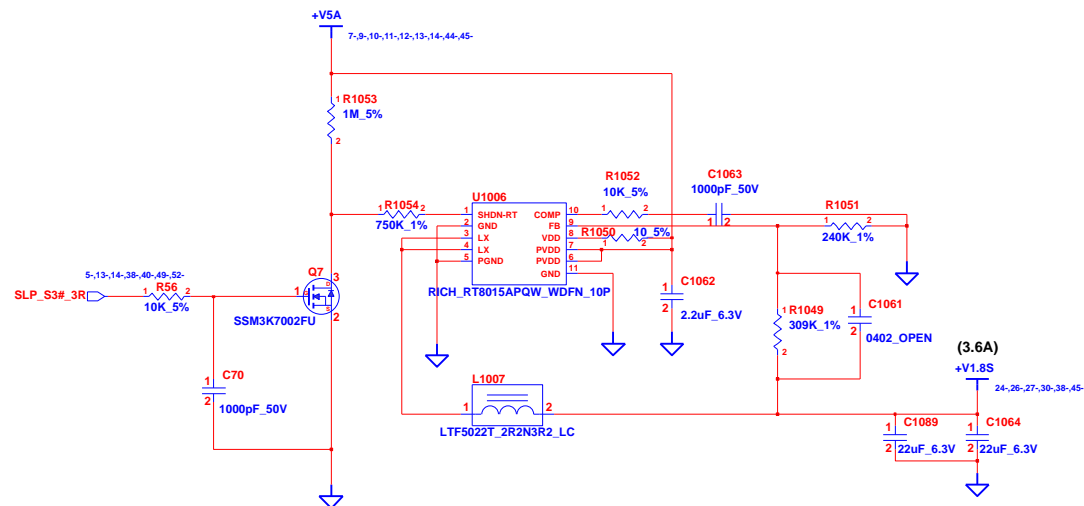
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+V1.1A			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A23470-0-MTRAXI	REV: 11
CHANGE by: Drawer Name		23-Dec-2009	SHEET 11 OF 62



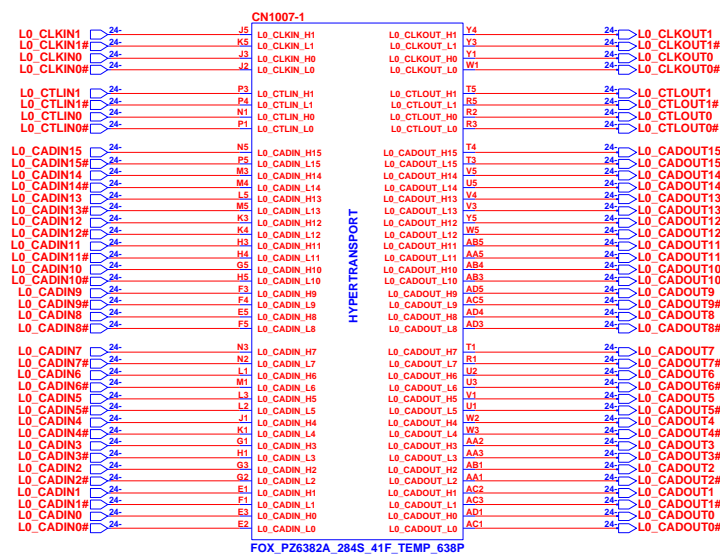
NOTE:DDR3 REGULAOR



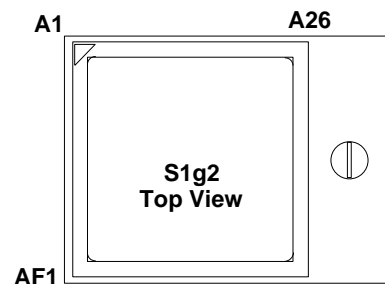
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TITLE VV10AD2-Valima			
+V1.5 & +V_MVREF (for DDR3)/+V1.8S			
SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MT	REV RAX1
CHANGE by		Drawer Name	23-Dec-2009
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	1	2	3	4	5	6	7	8	
A	<div>Blank</div>								A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

INVENTEC			
TITLE VV10AD2-Valima <i>Blank</i>			
SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MTRAXI	REV
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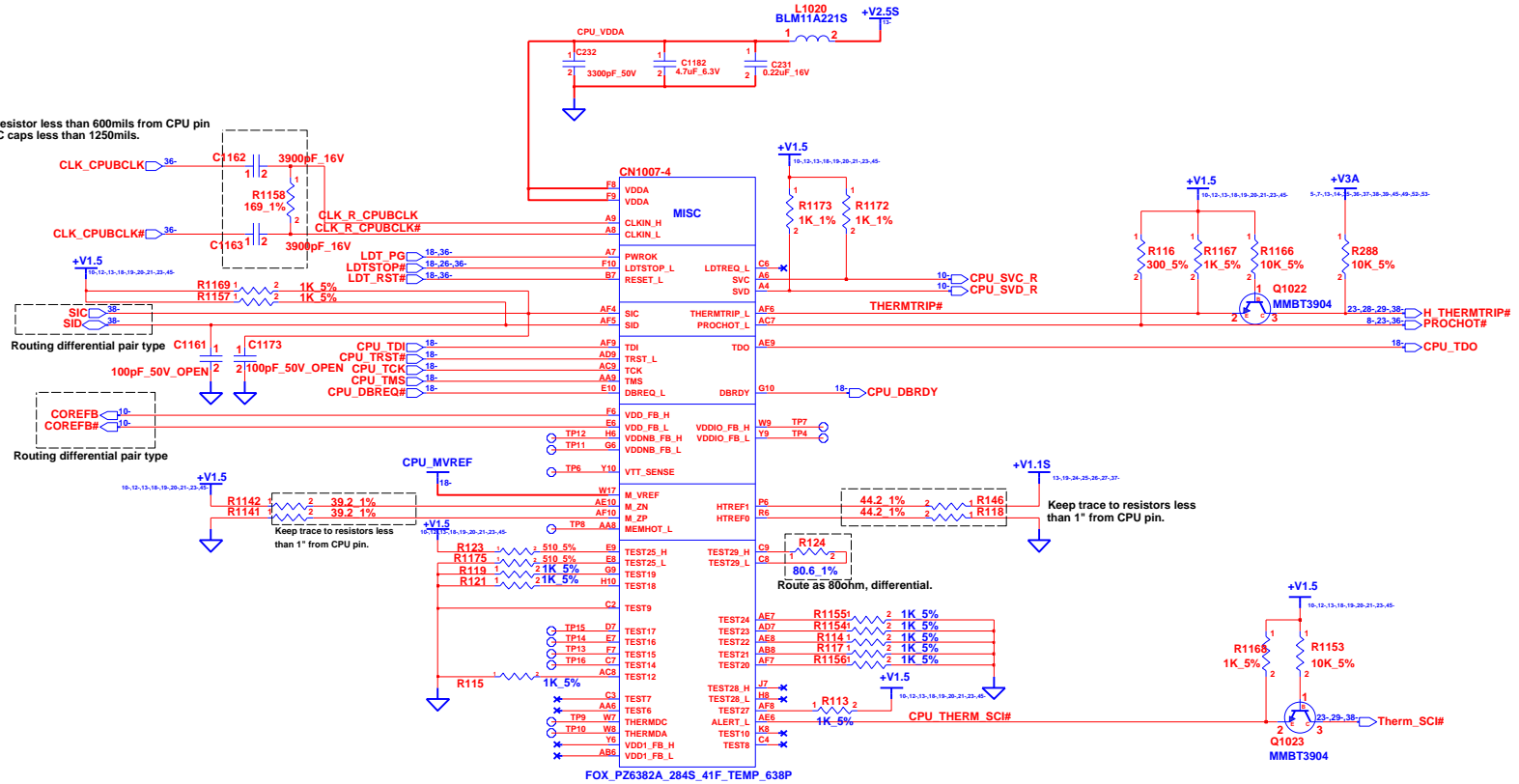


Layout: Add stitching caps if crossing plane split.

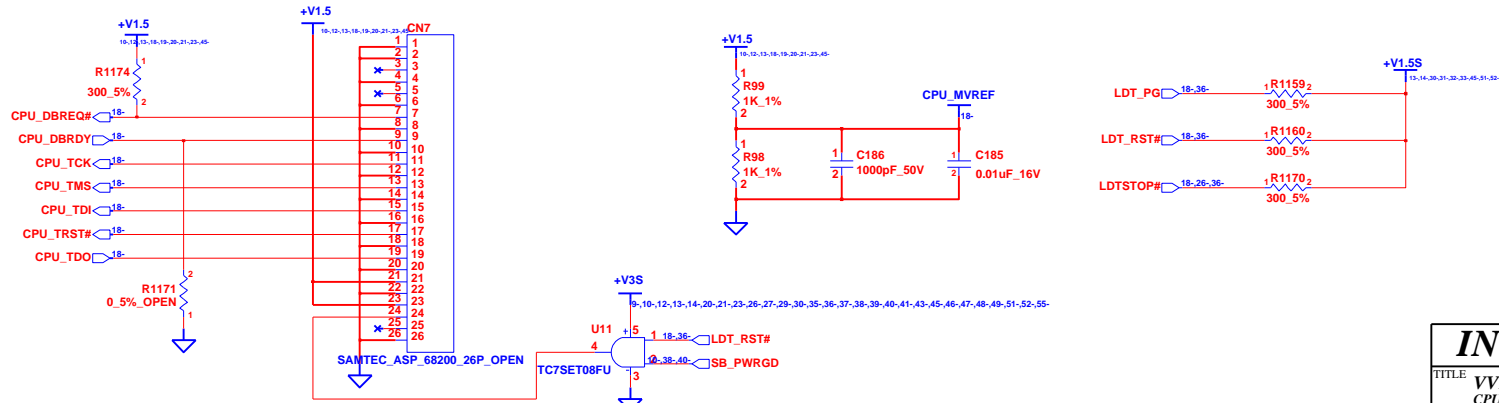


INVENTEC			
TITLE VV10AD2-Valima CPU-1 (S1g2)			
SIZE A3	CODE CS	DOC. NUMBER 1310A23470-0-MTRAXI	REV
CHANGE by		23-Dec-2009	
Drawer Name			
SHEET 16		OF 62	

Keep trace to resistor less than 600mils from CPU pin and trace to AC caps less than 1250mils.



HDT Header



INVENTEC

TITLE: VV10AD2-Valima
CPU-3 (SLR2)

SIZE: A3
CODE: CS
DOC. NUMBER: I310A23470-0-MT
REV: RAX1

CHANGE by: Drawer Name 23-Dec-2009

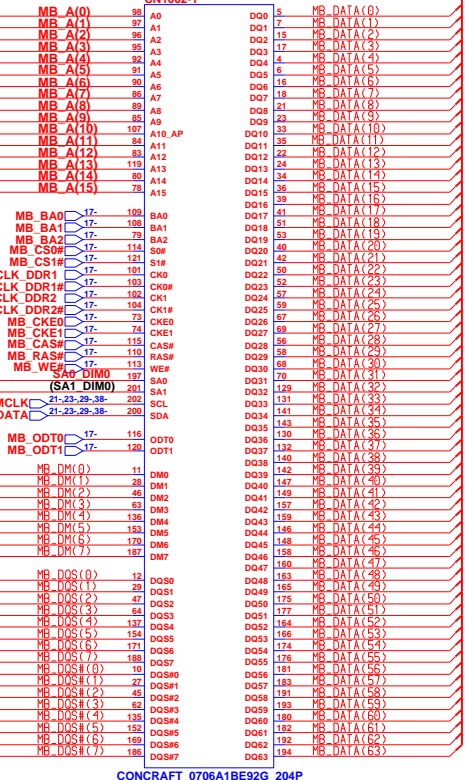
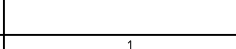
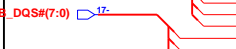
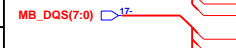
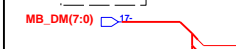
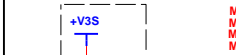
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SO-DIMM1

NOTE:

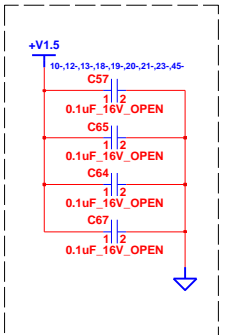
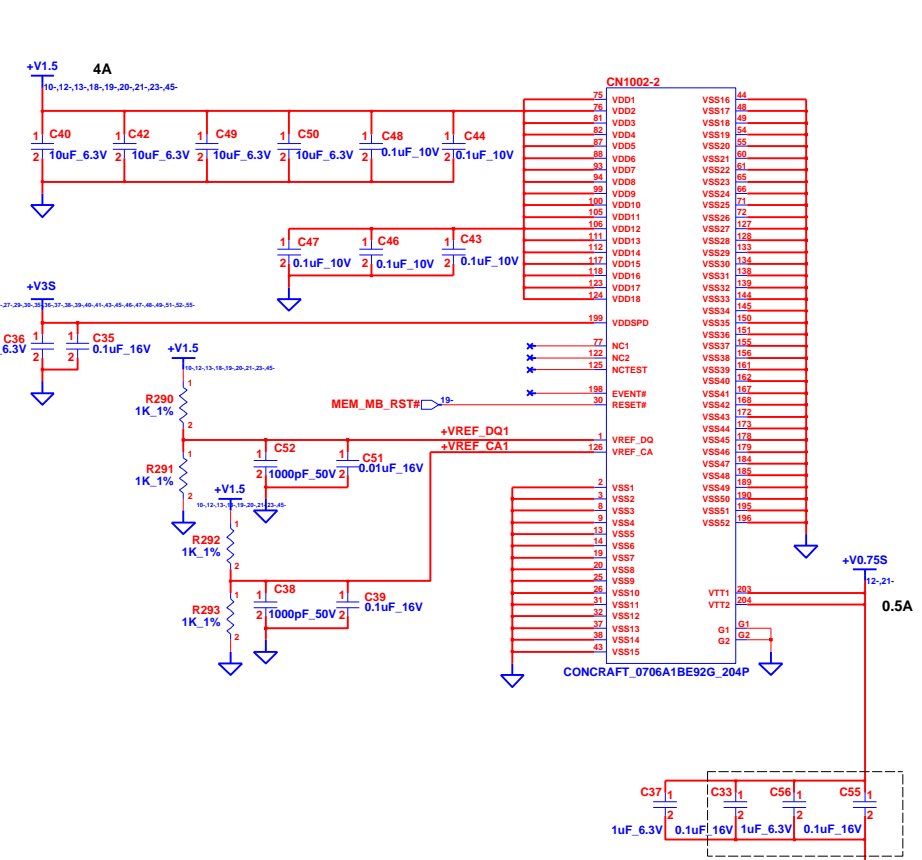
IF SA0_DIM0=0, SA1_DIM0=0
SO-DIMMA SPD ADDRESS IS 0xA0
SO-DIMMA TS ADDRESS IS 0xA30

IF SA0_DIM0=1, SA1_DIM0=0
SO-DIMMA SPD ADDRESS IS 0xA2
SO-DIMMA TS ADDRESS IS 0xA32



CONCRAFT_0706A1BE92G_204P

SODIMM
H = 9.2mm



For EMI Test

Place these caps
close to VTT1 and
VTT2

INVENTEC

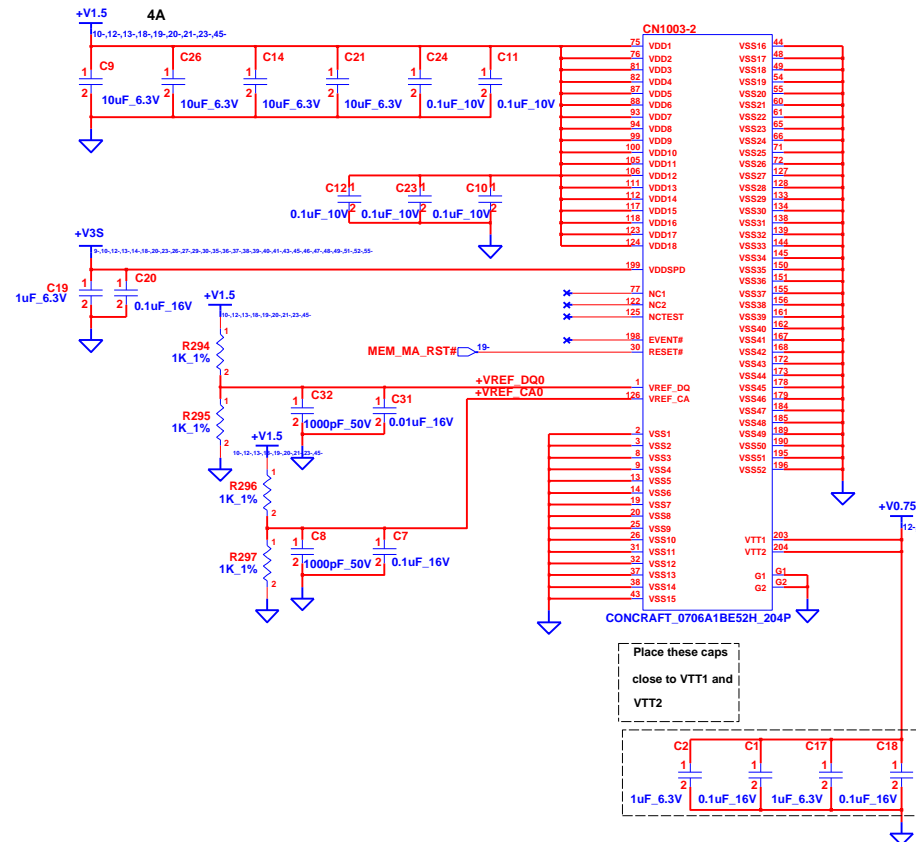
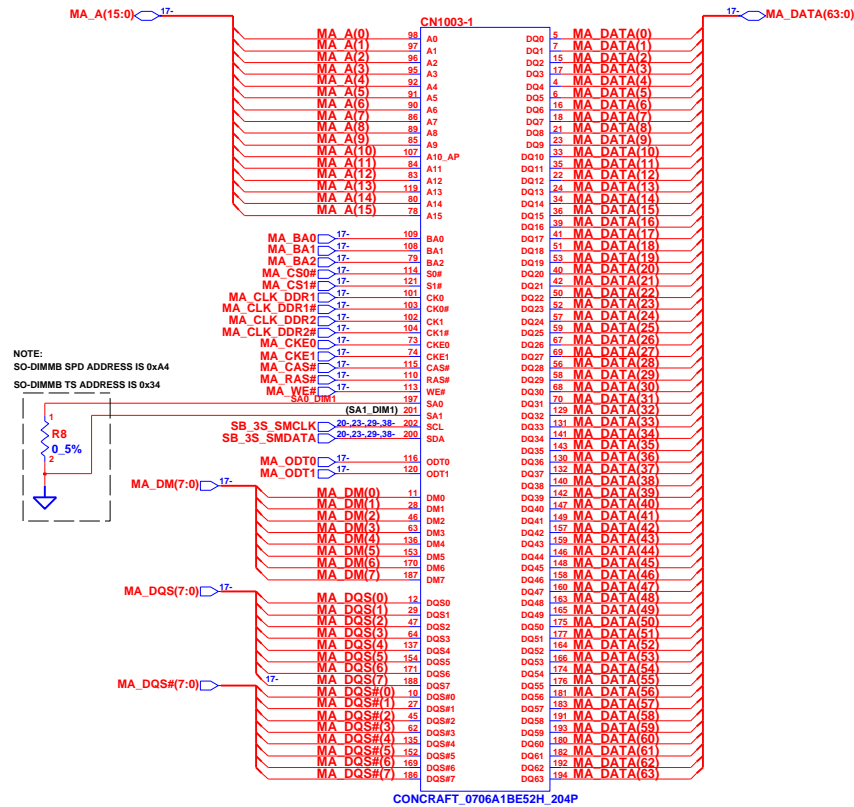
TITLE: VV10AD2-Valima
DDR3 DIMM-0

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23470-0-MT	RAX1

CHANGE by: Drawer Name 23-Dec-2009

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SO-DIMM0



SODIMM
H = 5.2mm

INVENTEC

TITLE
VV10AD2-Valima
DDR3 DIMM-1

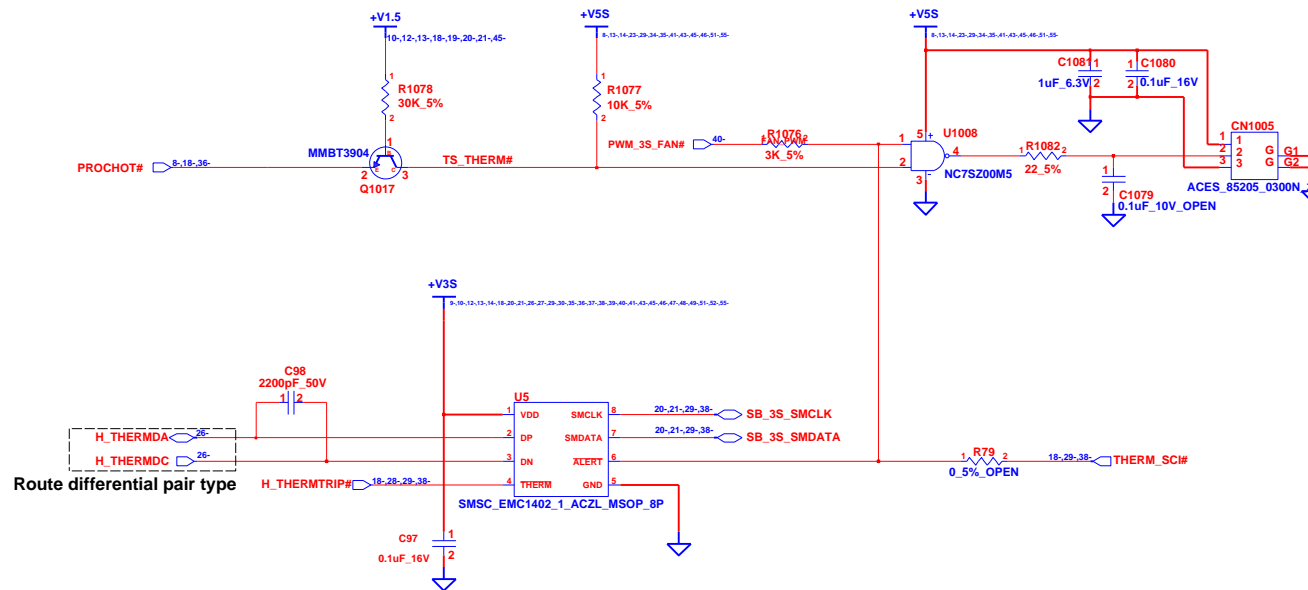
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A3	CS	I310A23470-0-MTRAXI	62

CHANGE by: Drawer Name 23-Dec-2009

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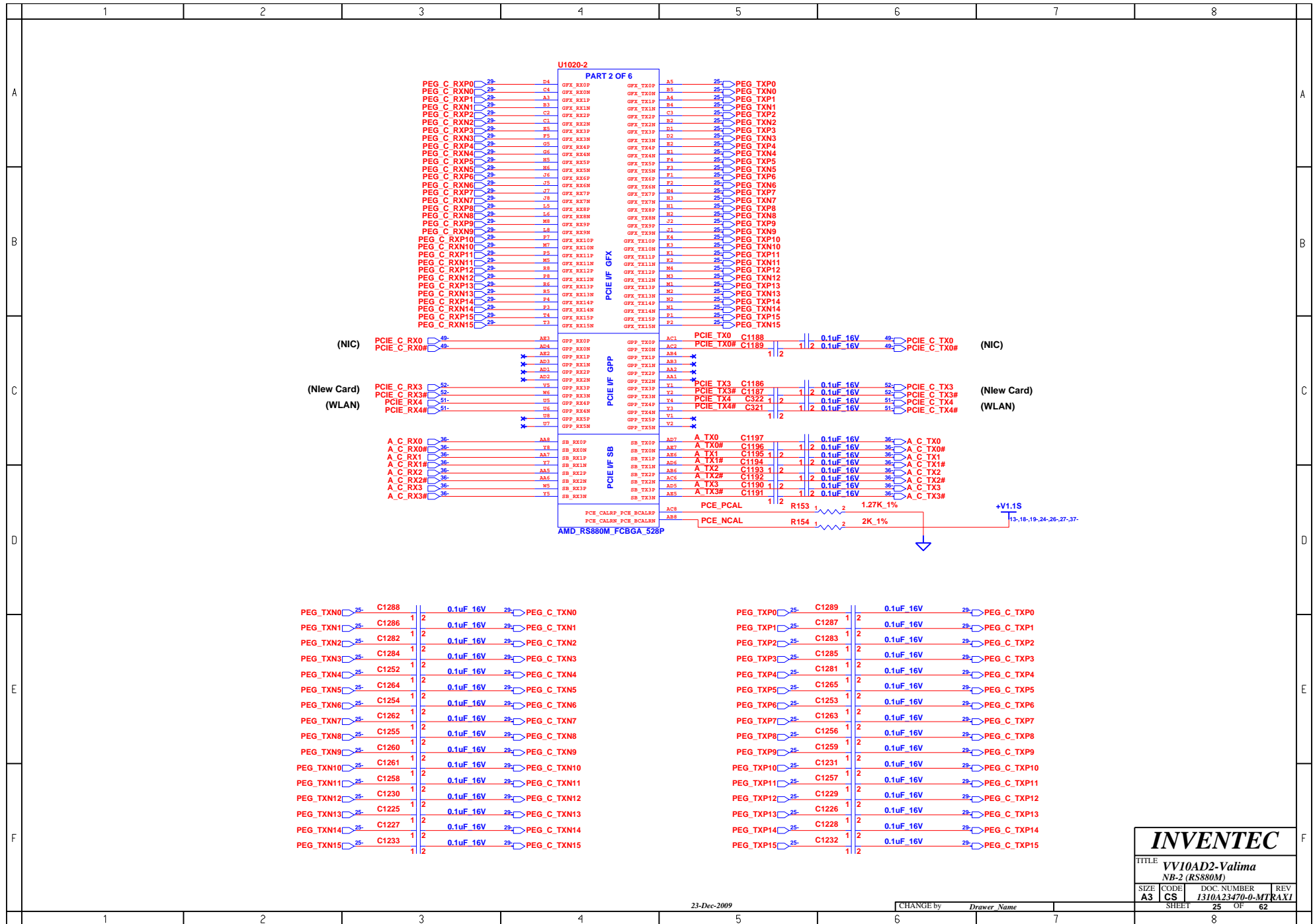
	1	2	3	4	5	6	7	8	
A	<div>Blank</div>								A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

INVENTEC			
TITLE VV10AD2-Valima Blank			
SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MTRAXI	REV
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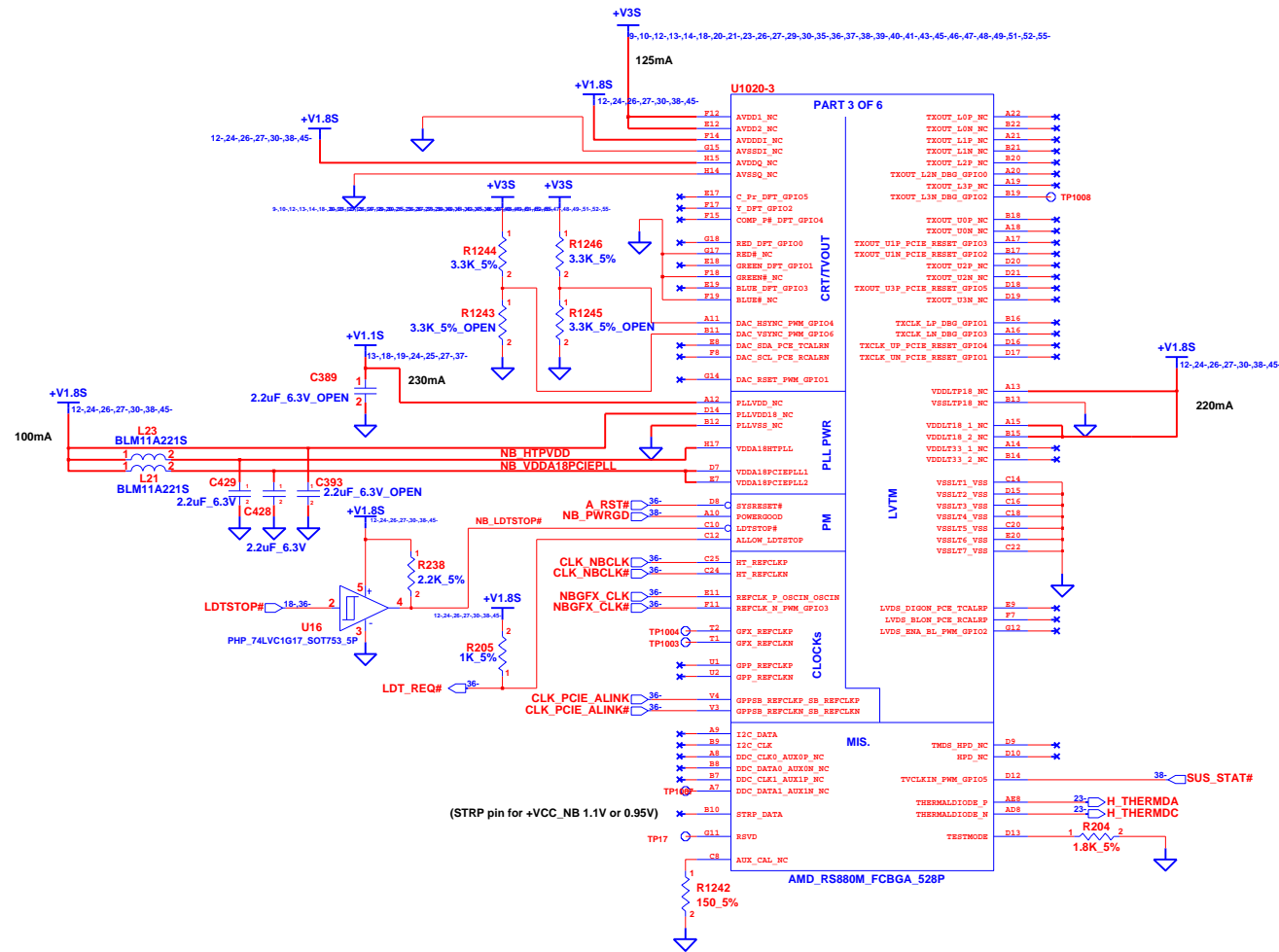
LAYOUT Note: Put the thermal sensor close to CPU.

INVENTEC			
TITLE: VV10AD2-Valima			
THERMAL & FAN CONTROLLER			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A23470-0-MT	REV: RAXI
CHANGE by: Drawer Name		23-Dec-2009	
SHEET: 23		OF: 62	



INVENTEC

TITLE VV10AD2-Valima NB-2 (RS880M)			
SIZE A3	CODE CS	DOC NUMBER 1310A23470-0-MT	REV RAXI
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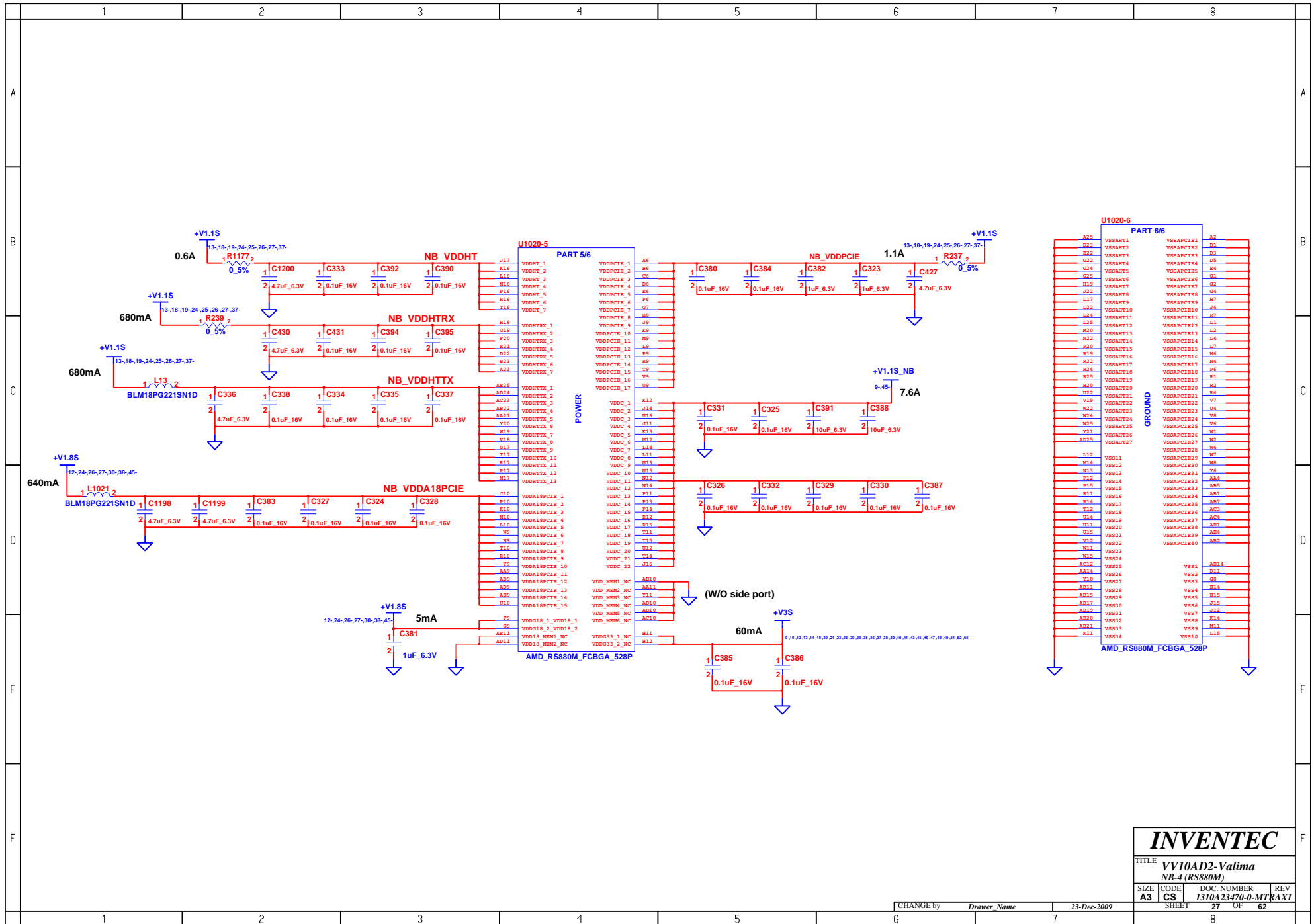
INVENTEC

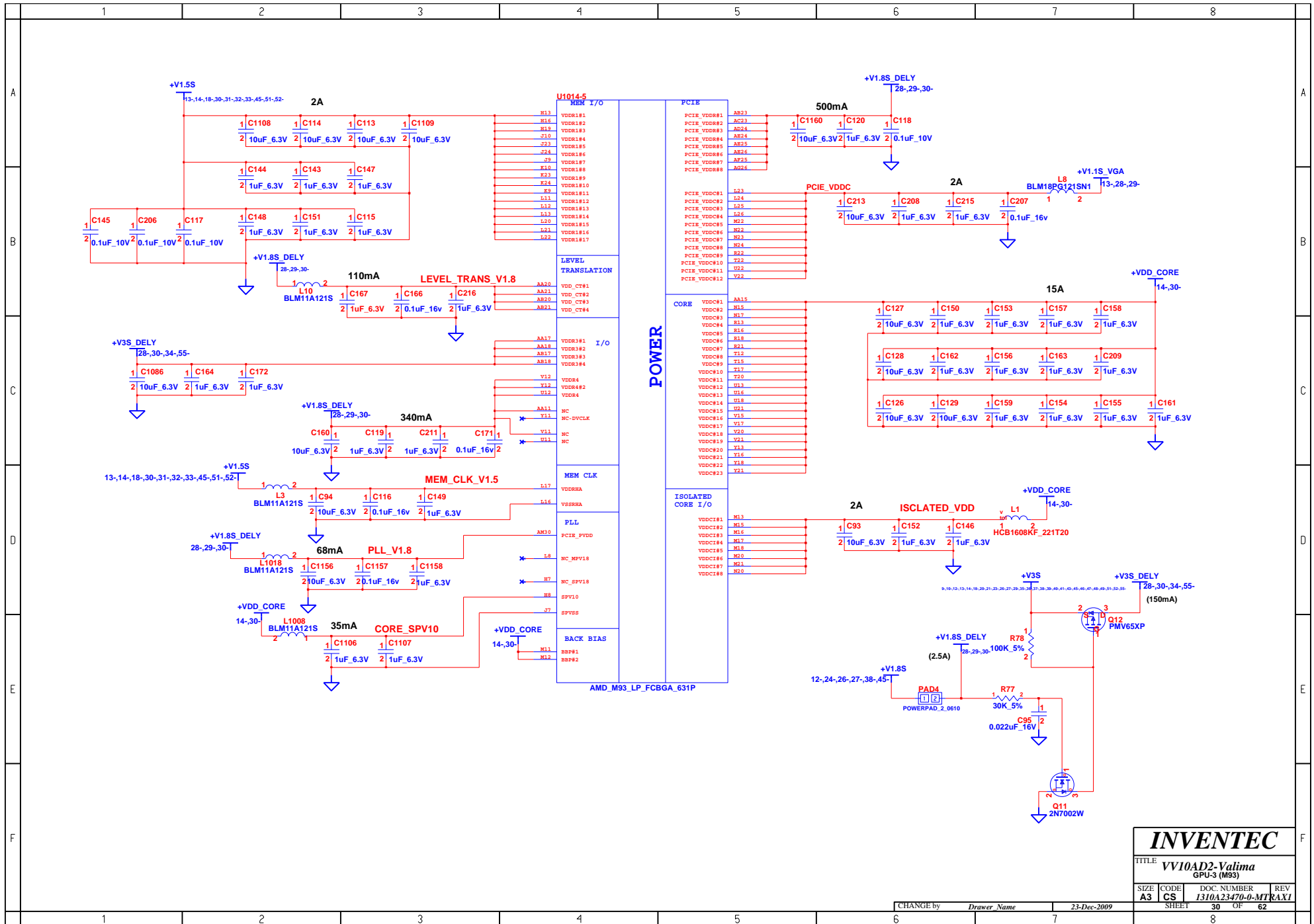
TITLE
VV10AD2-Valima
NB-3 (RS880M)

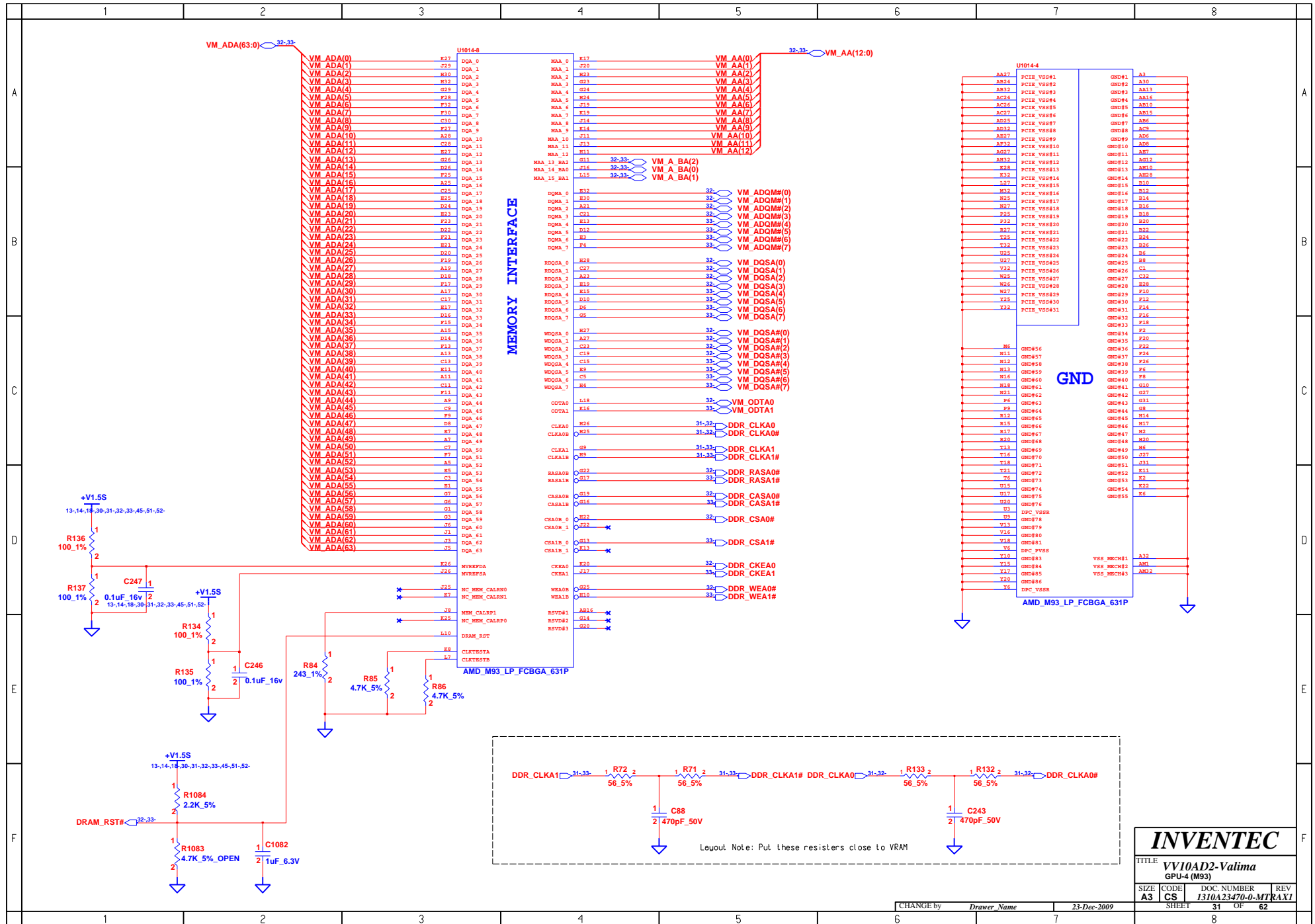
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23470-0-MT	RAX1

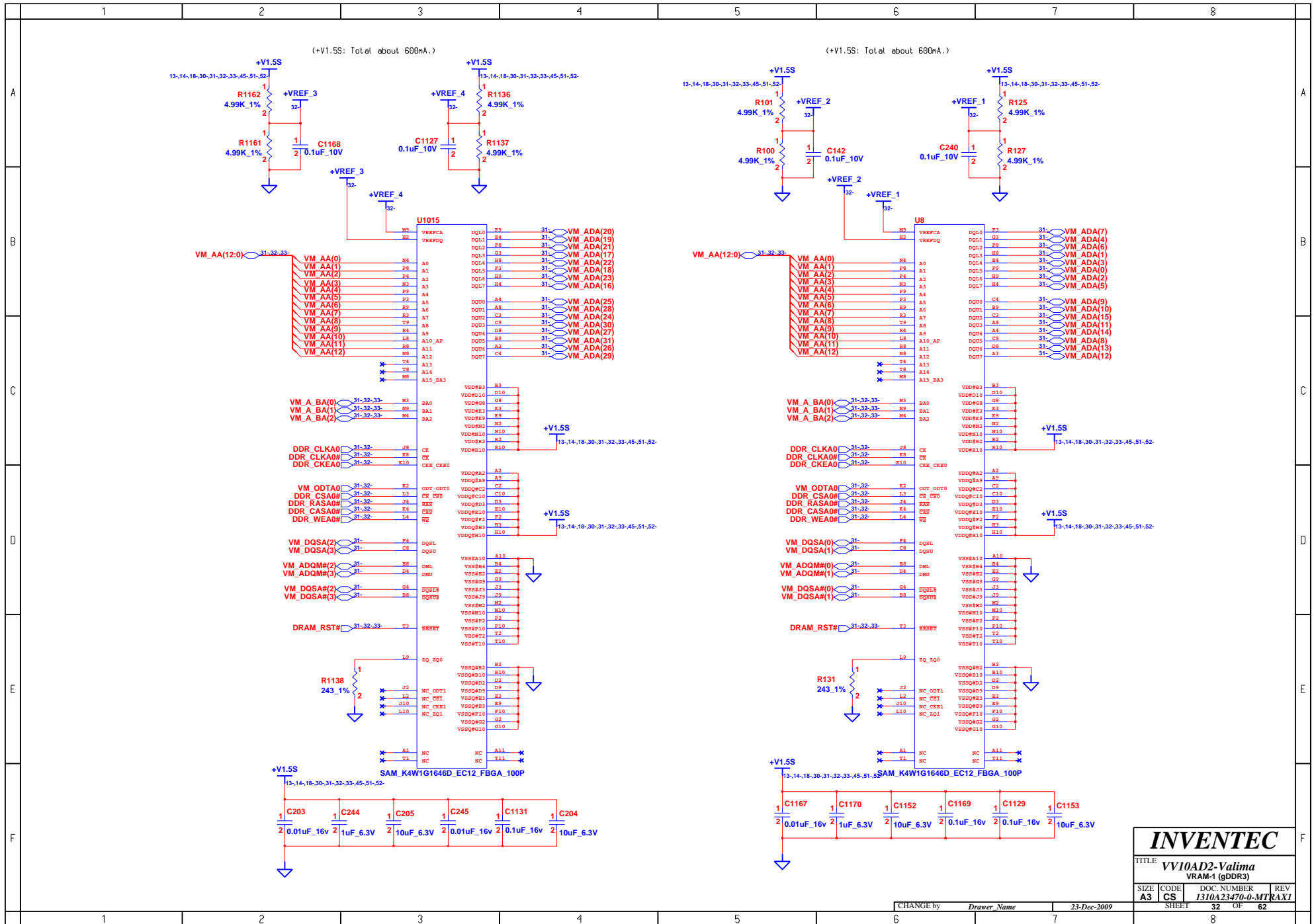
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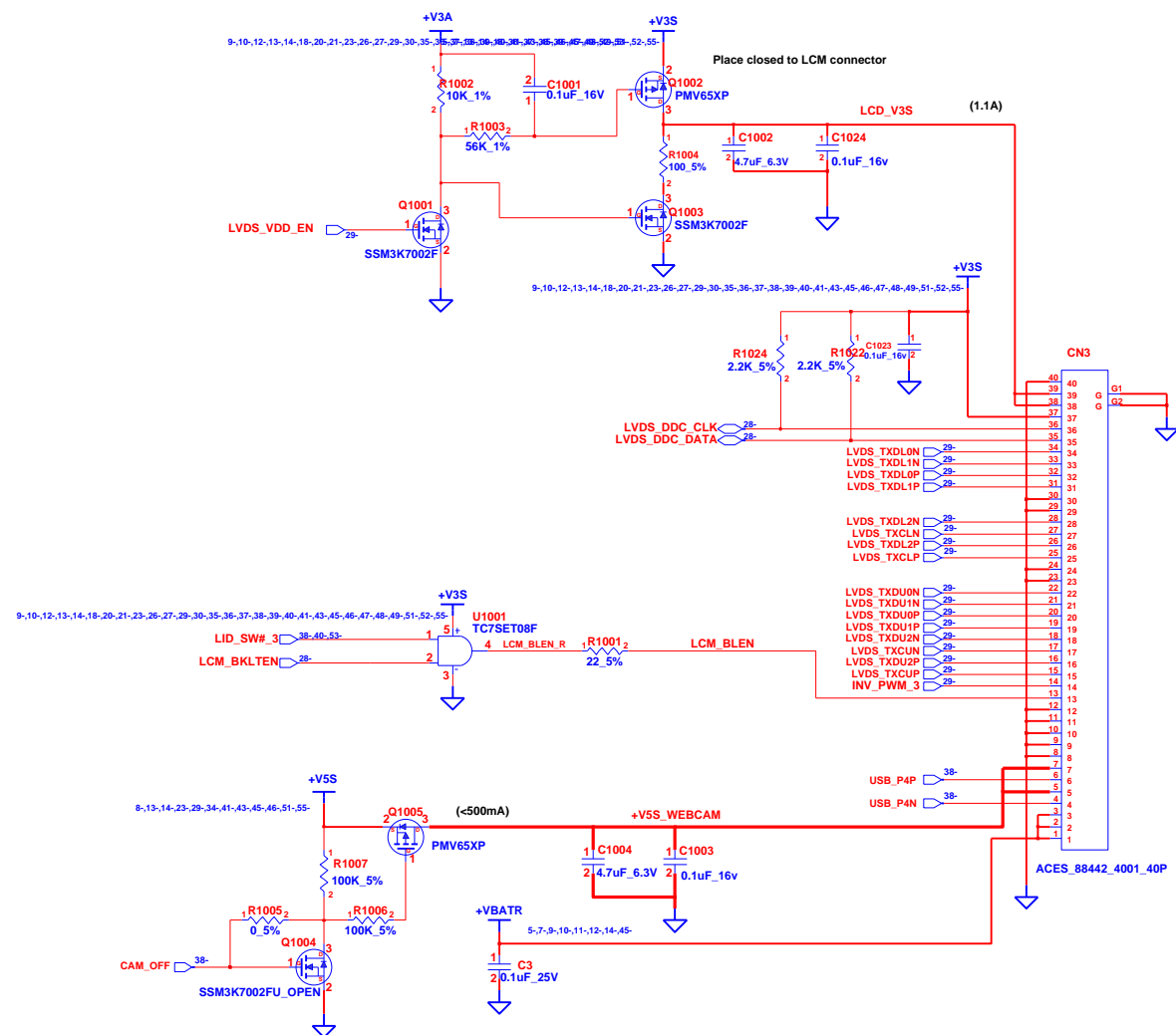
SHEET 26 OF 62









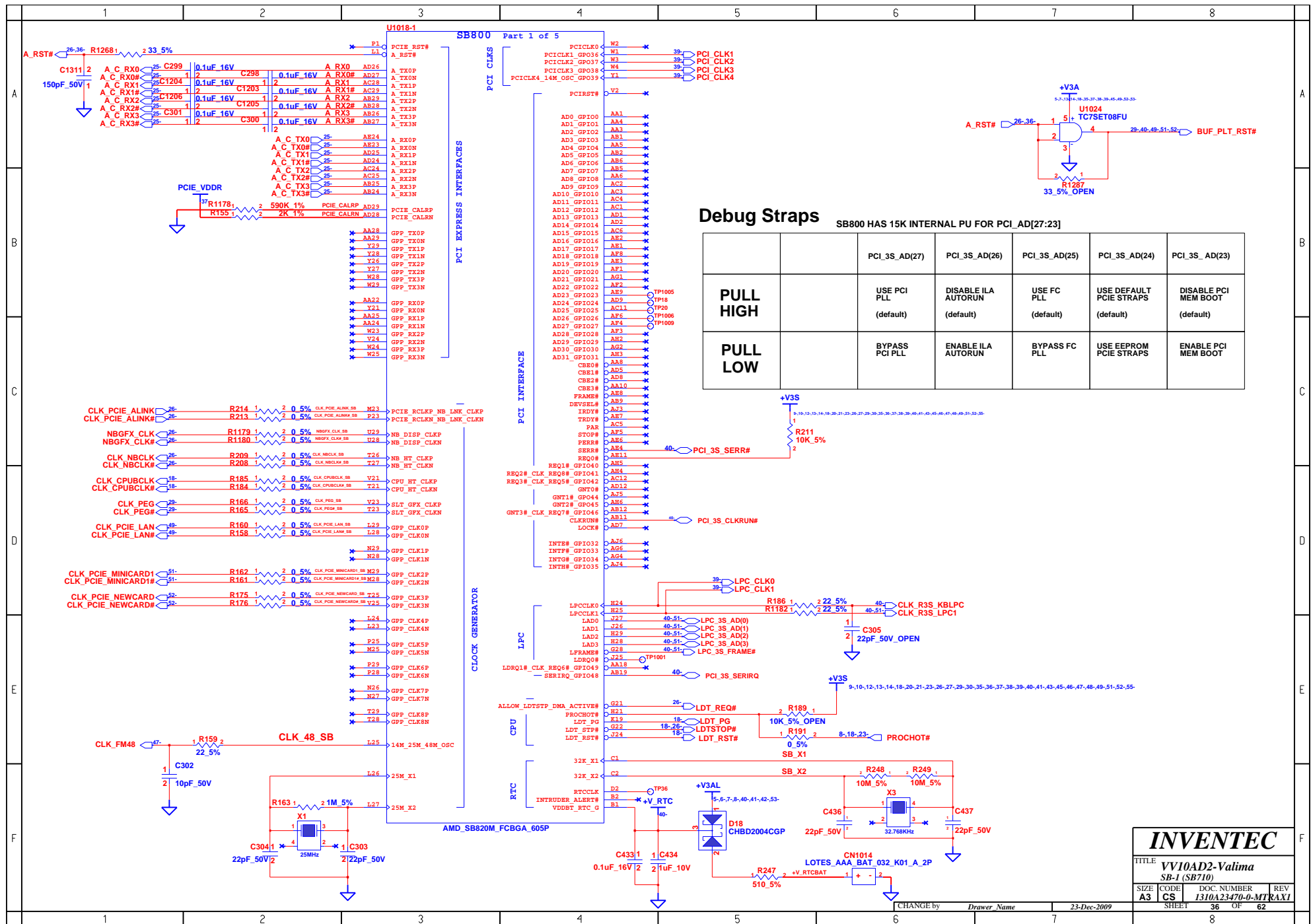


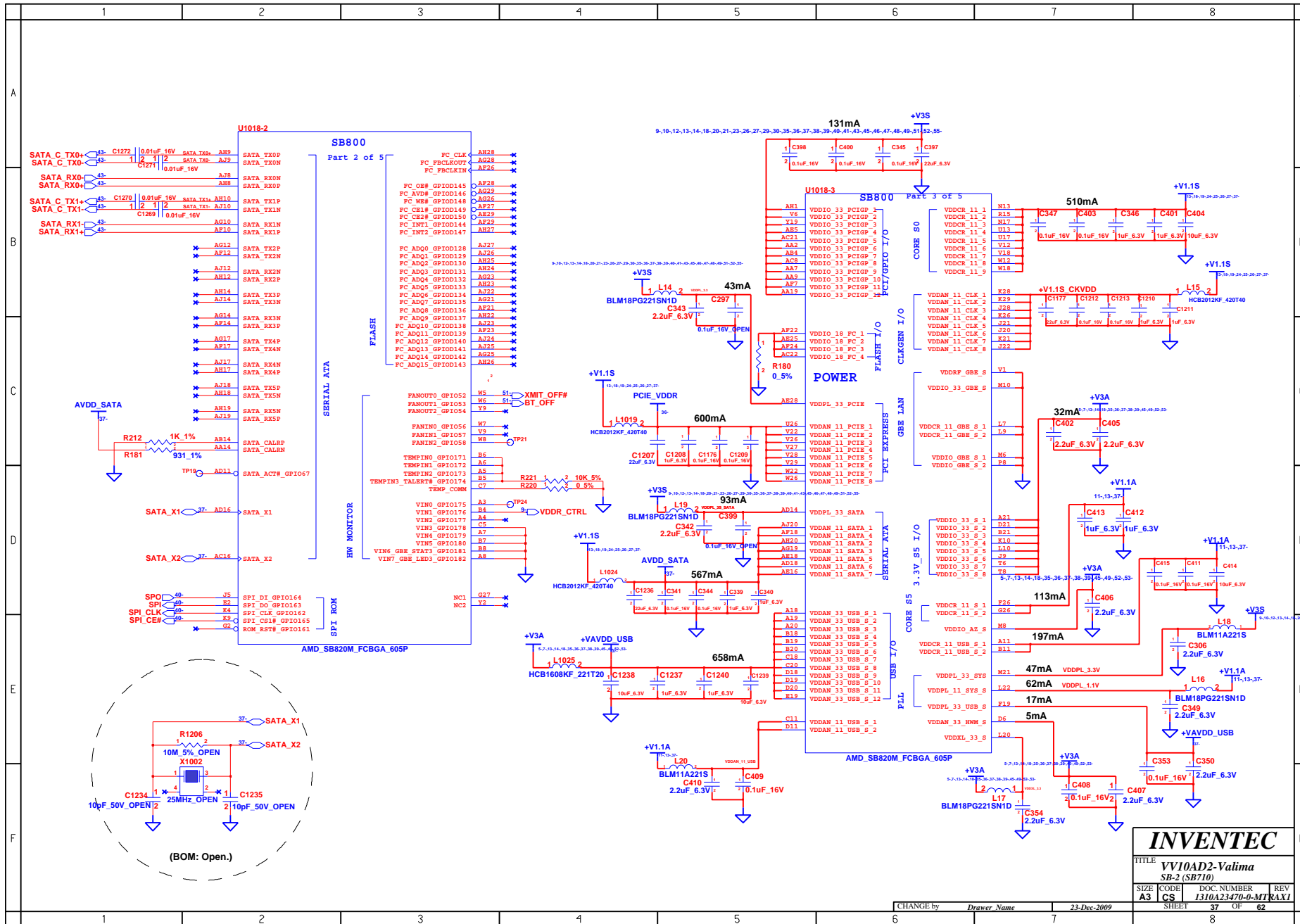
INVENTEC

TITLE **VV10AD2-Valima**
LED-LCD CONN & WebCAM CONN

SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MTRAXI	REV
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CHANGE by *Drawer Name* 23-Dec-2009

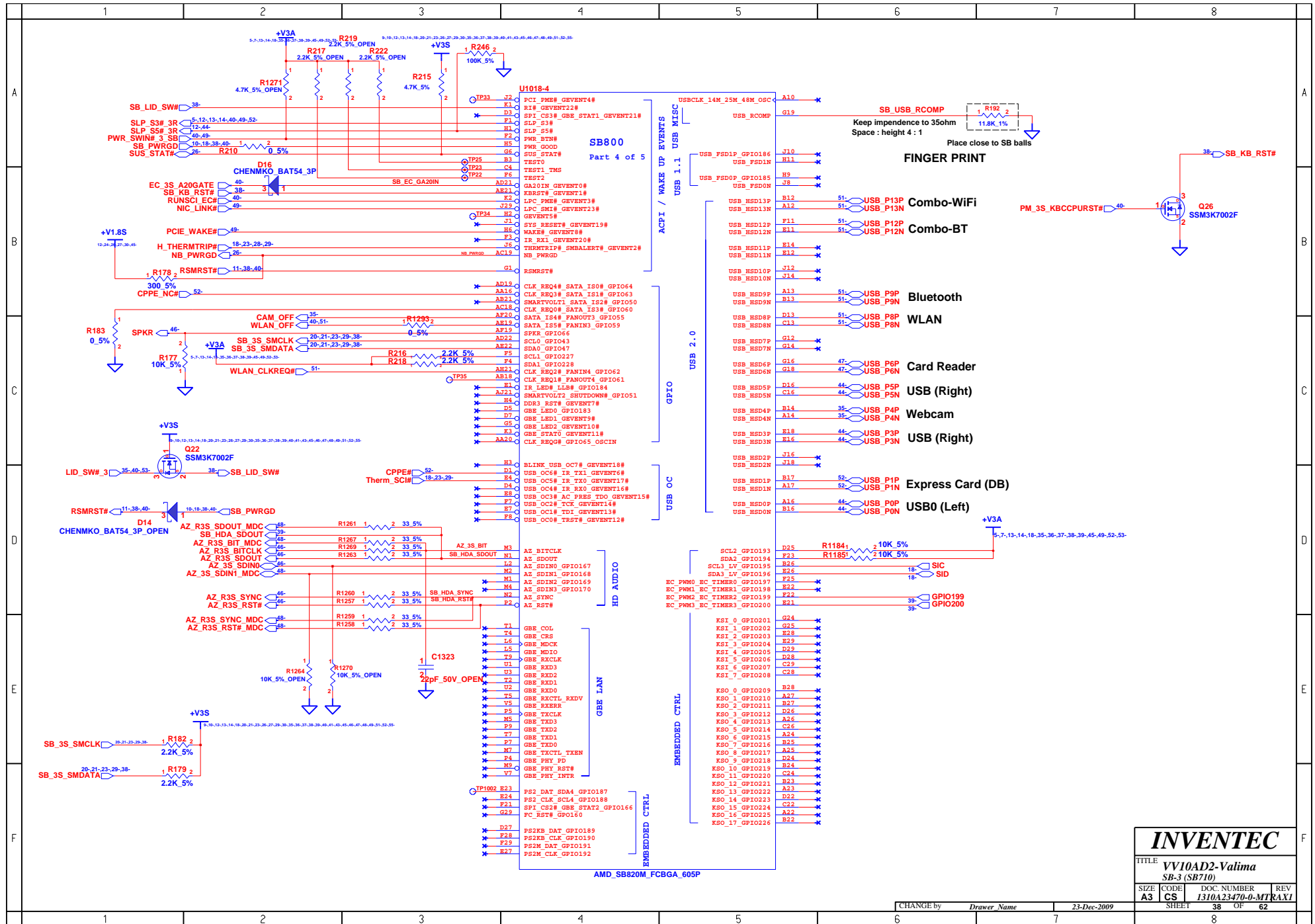


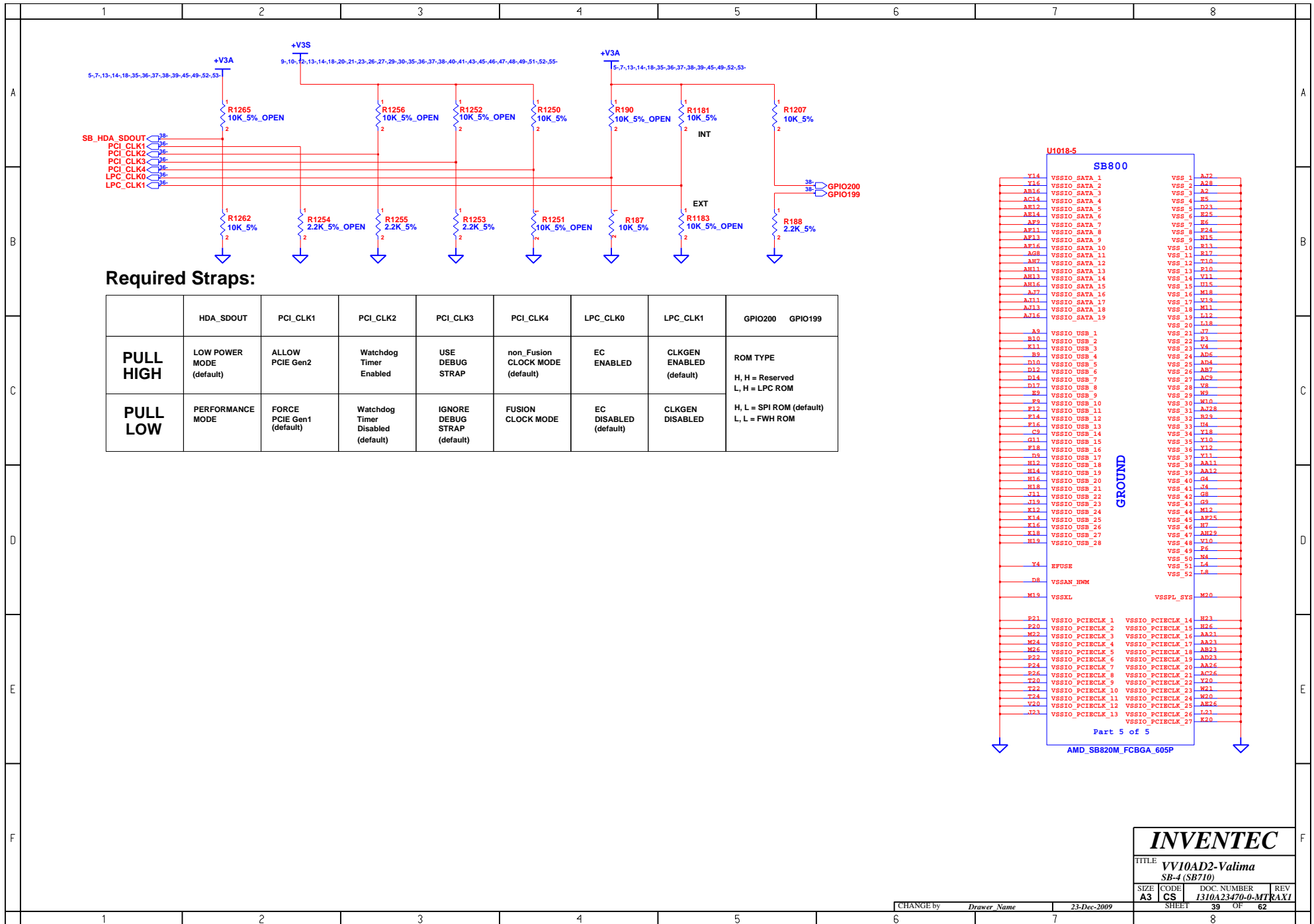


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TITLE: VV10AD2-Valima SB-2 (SB710)			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A23470-0-MTRAX1	REV: 8
SHEET: 37		OF: 62	

CHANGE by: *Drawer Name*

23-Dec-2009





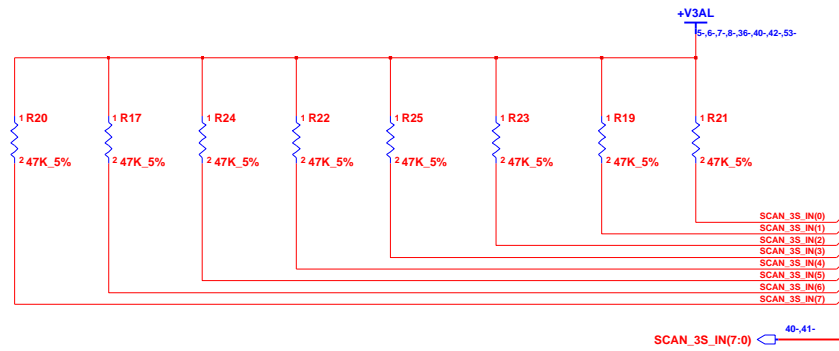
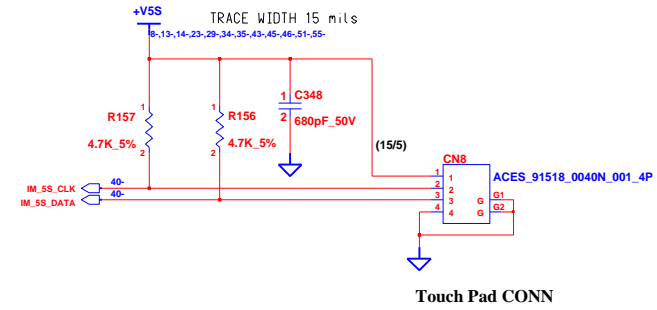
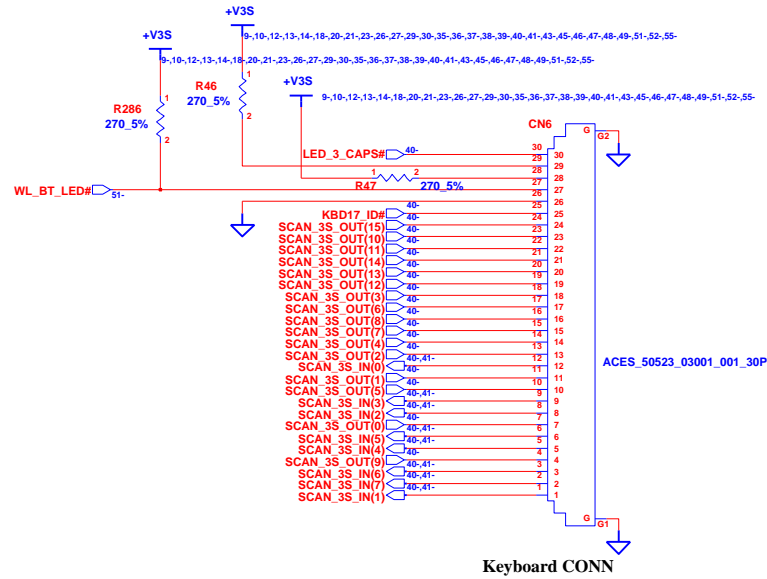
INVENTEC

TITLE
VV10AD2-Valima
SB-4 (SB710)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23470-0-MTRAX1	

CHANGE by *Drawer Name* 23-Dec-2009

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INVENTEC			
TITLE VV10AD2-Valima Keyboard & Touch Pad			
SIZE A3	CODE CS	DOC. NUMBER 1310A23470-0-MTRAXI	REV
CHANGE by	Drawer Name	23-Dec-2009	SHEET 41 OF 62

1 2 3 4 5 6 7 8

A

B

C

D

E

F

SPI Flash

U18

SST25VF016B_75_4I_S2AF_SOIC_8P

R268 10K_5%

R269 10K_5% OPEN

R271 0_5%

R245 3.3K_5%

R272 10K_5%

KBC_SPI_HOLD#

KBC_SPI_CLK

KBC_SPI

KBC_SPI_CE#

KBC_SPO

+V3AL

+V3AL

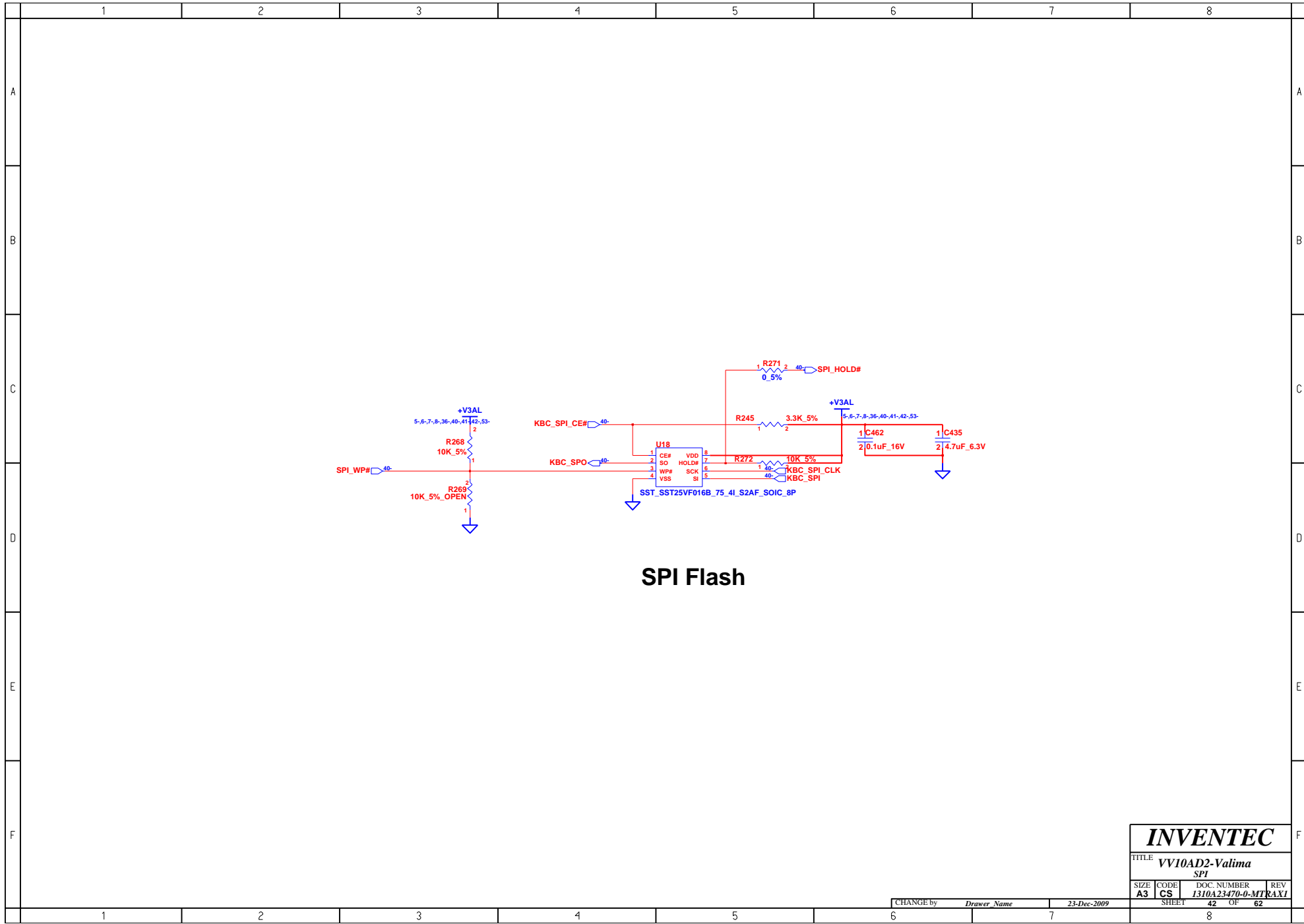
C462 0.1uF_16V

C435 4.7uF_6.3V

INVENTEC			
TITLE VV10AD2-Valima SPI			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23470-0-MTRAX1	42
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CHANGE by Drawer Name 23-Dec-2009

6 7 8



Schematic diagram of the SPI Flash circuit.

The circuit includes the following components:

- U18**: SST25VF016B_75_4I_S2AF_SOIC_8P (SPI Flash Memory)
- R268**: 10K_5% (Resistor)
- R269**: 10K_5%_OPEN (Resistor)
- R271**: 0_5% (Resistor)
- R272**: 10K_5% (Resistor)
- R245**: 3.3K_5% (Resistor)
- C462**: 0.1uF_16V (Capacitor)
- C435**: 4.7uF_6.3V (Capacitor)

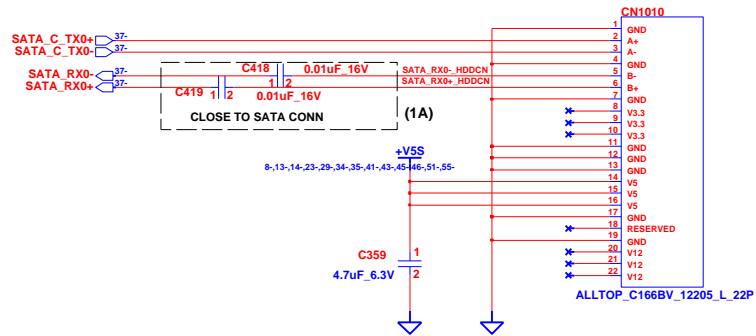
Connections and Labels:

- V3AL**: Power supply connection points.
- KBC_SPI_CE#**, **KBC_SPO**, **KBC_SPI_CLK**, **KBC_SPI**: Signal traces connecting the flash memory to the KBC.
- SPI_WP#**, **SPI_HOLD#**: Control signal pins.
- VDD**, **HOLD#**, **WP#**, **VSS**: Pin labels for U18.
- CE#**, **SO**, **SI**: Pin labels for U18.
- SST25VF016B_75_4I_S2AF_SOIC_8P**: Component label for U18.

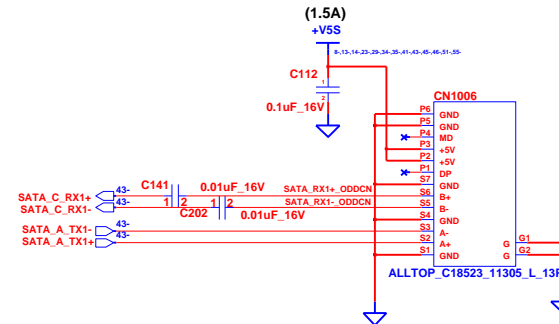
SPI Flash

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SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MTRAX1	REV SHEET 42 OF 62

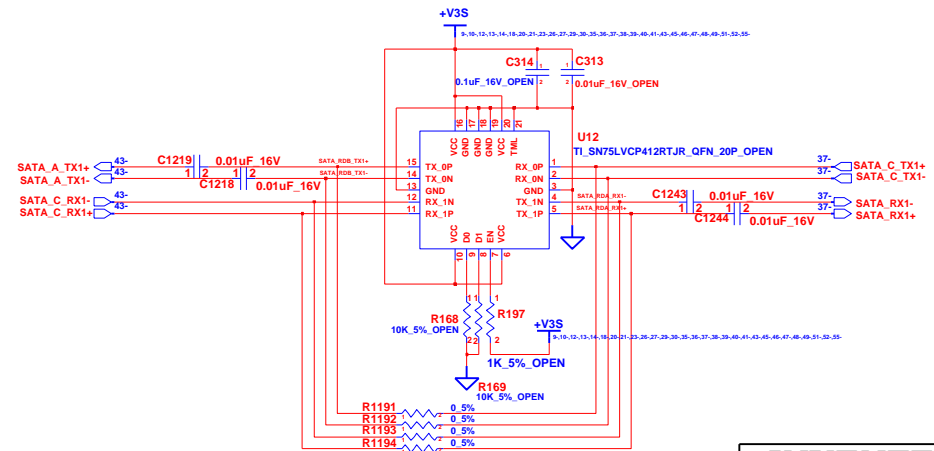
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HDD CONN

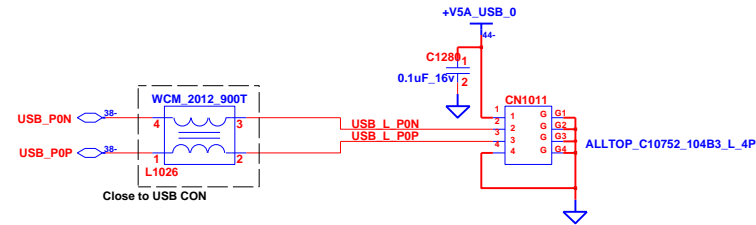
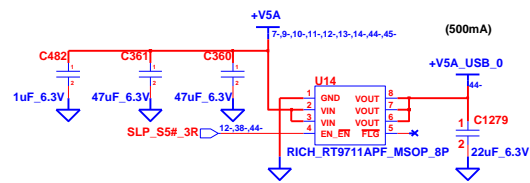


ODD CONN

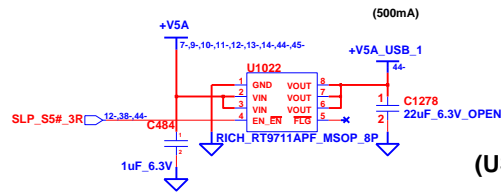
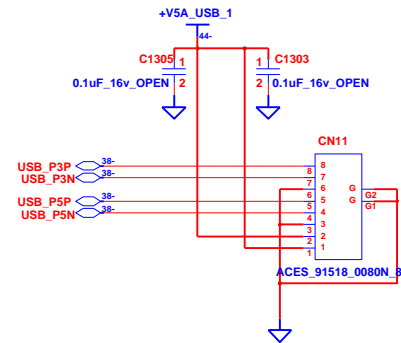
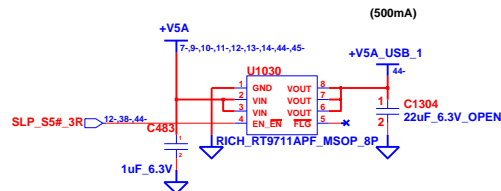


INVENTEC

TITLE VV10AD2-Valima HDD & ODD CONN			
SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MTRAX1	REV 43
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(USB left side)

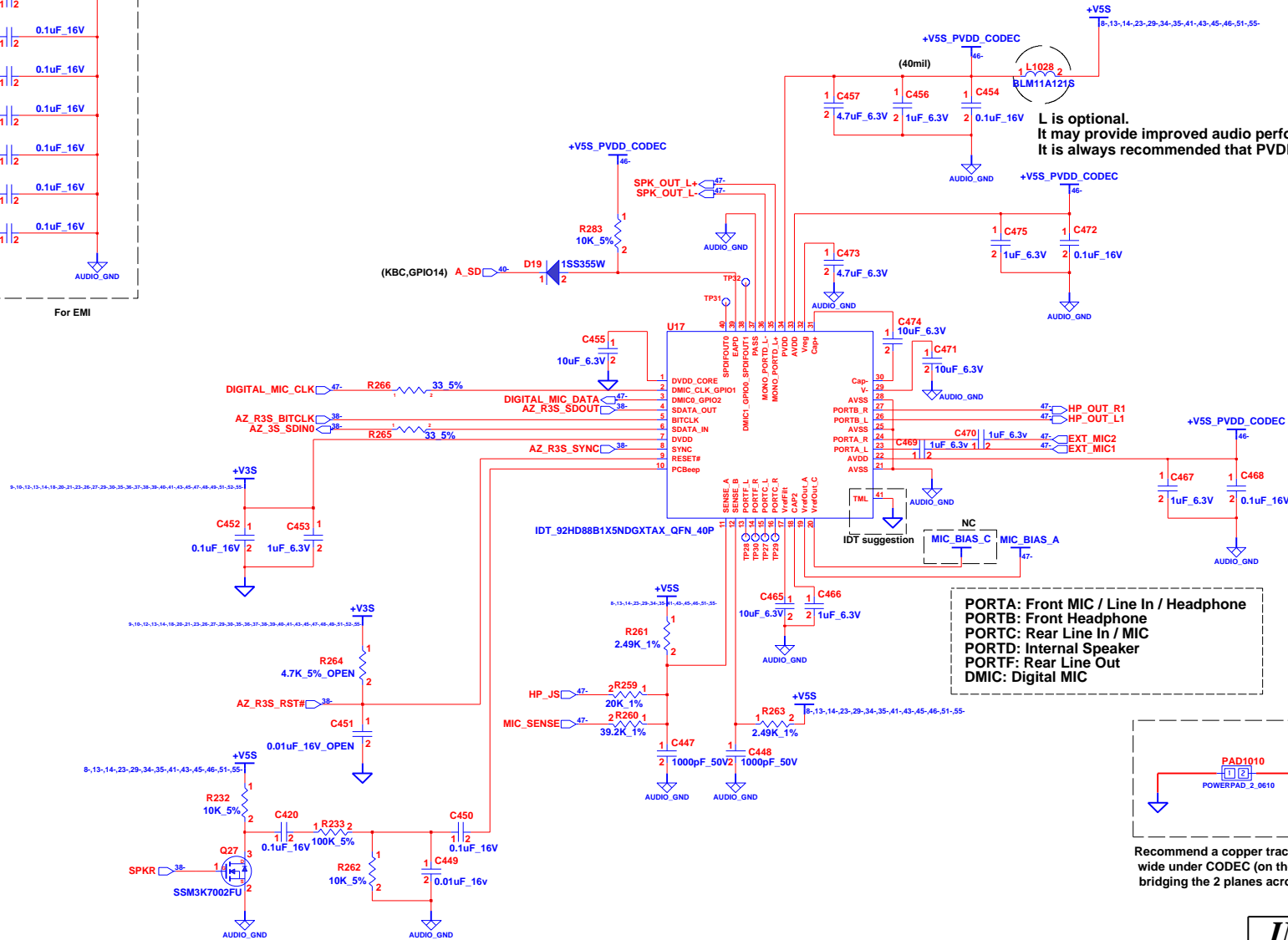
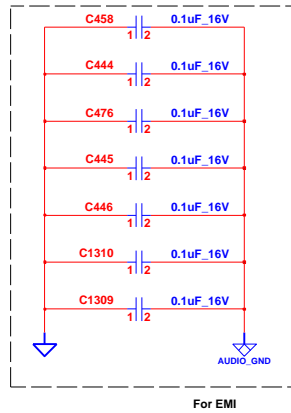


(USB right side)

INVENTEC			
TITLE: VV10AD2-Valima USB CONN			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A23470-0-MTRAXI	REV: 62
SHEET: 44		OF: 62	

CHANGE by: Drawer Name 23-Dec-2009

	1	2	3	4	5	6	7	8	
A									A
B									B
C	<div><div><div><div><div>+V1.5S</div><div>13,14,18,30,31,32,33,35,36,37,38,39,40,41,43,45,46,47,48,49,51,52,55</div><div>C96</div><div>0.1uF_16V_OPEN</div></div><div><div>+VBATR</div><div>5,7,9,10,11,12,14,35,40,42,13,18,19,20,21,23,45</div><div>C4</div><div>0.1uF_16V_OPEN</div></div><div><div>+V5A</div><div>7,9,10,11,12,13,14,44</div><div>C459</div><div>0.1uF_16V_OPEN</div></div><div><div>+V3S</div><div>9,10,12,13,14,18,20,21,23,26,27,29,30,35,36,37,38,39,40,41,43,45,46,47,48,49,51,52,55</div><div>C309</div><div>0.1uF_16V_OPEN</div></div><div><div>+V3S</div><div>9,10,12,13,14,18,20,21,23,26,27,29,30,35,36,37,38,39,40,41,43,45,46,47,48,49,51,52,55</div><div>C312</div><div>0.1uF_16V_OPEN</div></div><div><div>+V3S</div><div>9,10,12,13,14,18,20,21,23,26,27,29,30,35,36,37,38,39,40,41,43,45,46,47,48,49,51,52,55</div><div>C311</div><div>0.1uF_16V_OPEN</div></div><div><div>+V3A</div><div>7,9,10,11,12,13,14,44</div><div>C460</div><div>0.1uF_16V_OPEN</div></div><div><div>+V3S</div><div>9,10,12,13,14,18,20,21,23,26,27,29,30,35,36,37,38,39,40,41,43,45,46,47,48,49,51,52,55</div><div>C438</div><div>0.1uF_16V_OPEN</div></div><div><div>+VCC_CORE_NB</div><div>10,19,45</div><div>C1164</div><div>0.1uF_16V_OPEN</div></div><div><div>+VCC_CORE_NB</div><div>10,12,13,18,19,20,21,23,45</div><div>C80</div><div>0.1uF_16V_OPEN</div></div><div><div>+V1.5</div><div>10,12,13,18,19,20,21,23,45</div><div>C71</div><div>0.1uF_16V_OPEN</div></div><div><div>+V1.8S</div><div>10,12,13,18,19,20,21,23,45</div><div>C130</div><div>0.1uF_16V_OPEN</div></div><div><div>+V1.8S</div><div>12,24,26,27,30,38,45</div><div>C282</div><div>0.1uF_16V_OPEN</div></div></div></div></div>								C
D									D
E									E
F	<div><div><div><div><div>INVENTEC</div><div>TITLE</div><div>VV10AD2-Valima</div><div>EMI Solution</div><div>SIZE</div><div>A3</div><div>CODE</div><div>CS</div><div>DOC. NUMBER</div><div>I310A23470-0-MTRAXI</div><div>REV</div><div></div></div><div><div>CHANGE by</div><div>Drawer Name</div><div>23-Dec-2009</div><div>SHEET</div><div>45</div><div>OF</div><div>62</div></div></div></div></div>								F
	1	2	3	4	5	6	7	8	



INVENTEC

TITLE: VV10AD2-Valima AZALIA CODEC			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A23470-0-MTRAXI	REV: 1
CHANGE by: Drawer Name		23-Dec-2009	
SHEET: 46		OF: 62	

Internal MIC (digital)

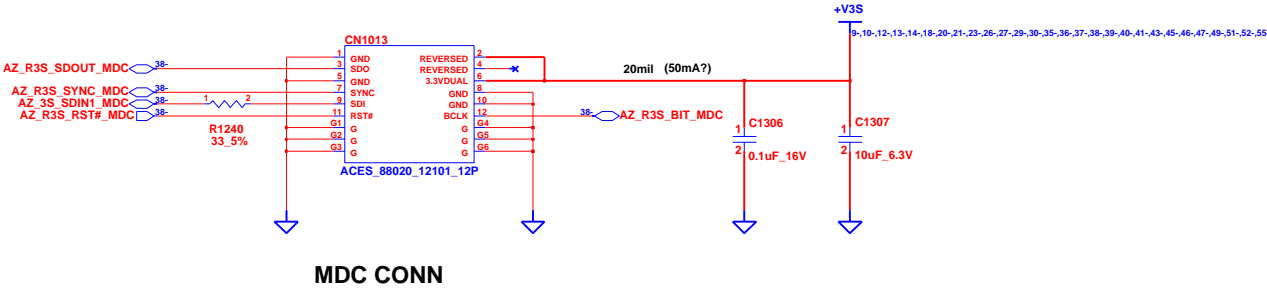
Internal Speaker

Internal MIC (digital)

TITLE			
<i>VV10AD2-Valima</i>			
<i>Internal Speaker & MIC & Audio B2B CONN</i>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	<i>1310A23470-0-MTRAXI</i>	
SHEET		47	OF 62

CHANGE by	<i>Drawer Name</i>	23-Dec-2009
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CS 1310A23470-0-M1R
SHEET 47 OF 62



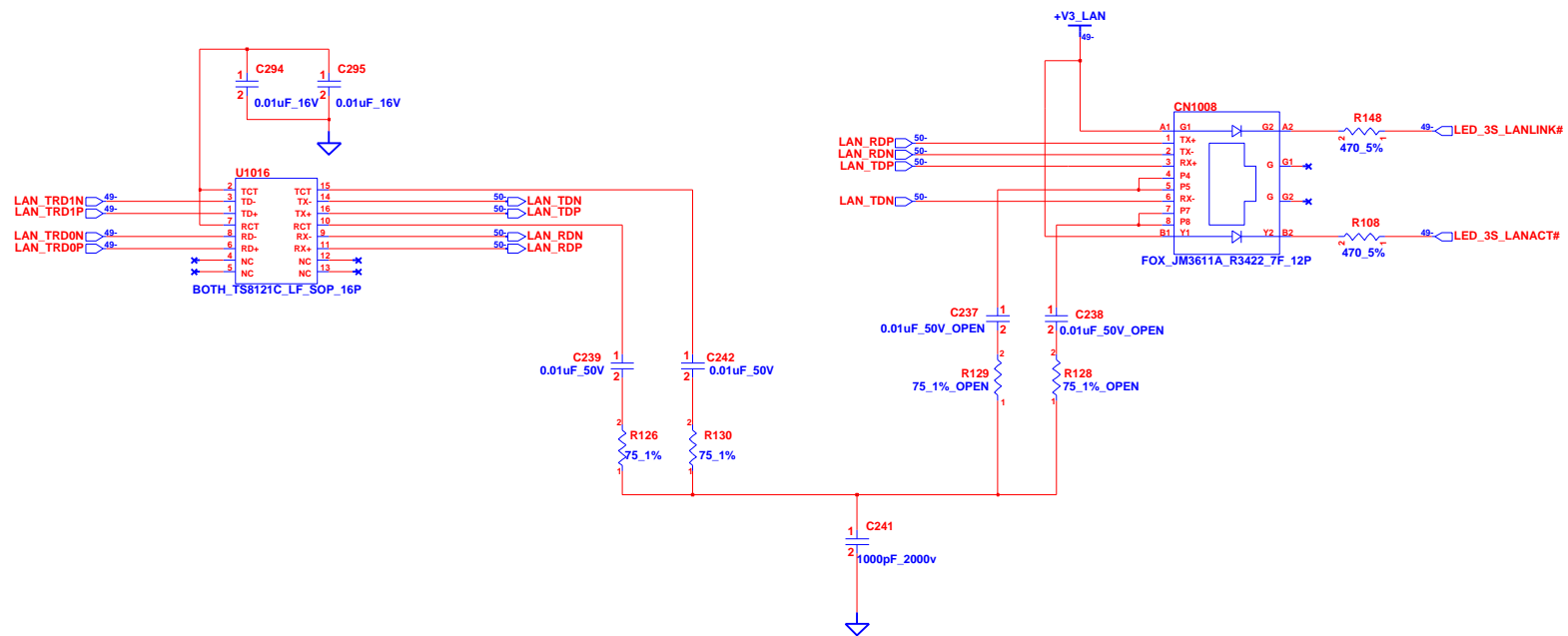
INVENTEC

TITLE **VV10AD2-Valima**
MDC CNTR/E-SATA

SIZE **A3** CODE **CS** DOC. NUMBER **1310A23470-0-MTRAXI** REV **1**

CHANGE by *Drawer Name* 23-Dec-2009

SHEET 48 OF 62



INVENTEC			
TITLE: VV10AD2-Valima NIC 10/100M RJ45 CONN			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A23470-0-MTRAX1	REV: 1
CHANGE by: Drawer Name		23-Dec-2009	SHEET 50 OF 62

WLAN CONN

MSI WiFi / BT CONN

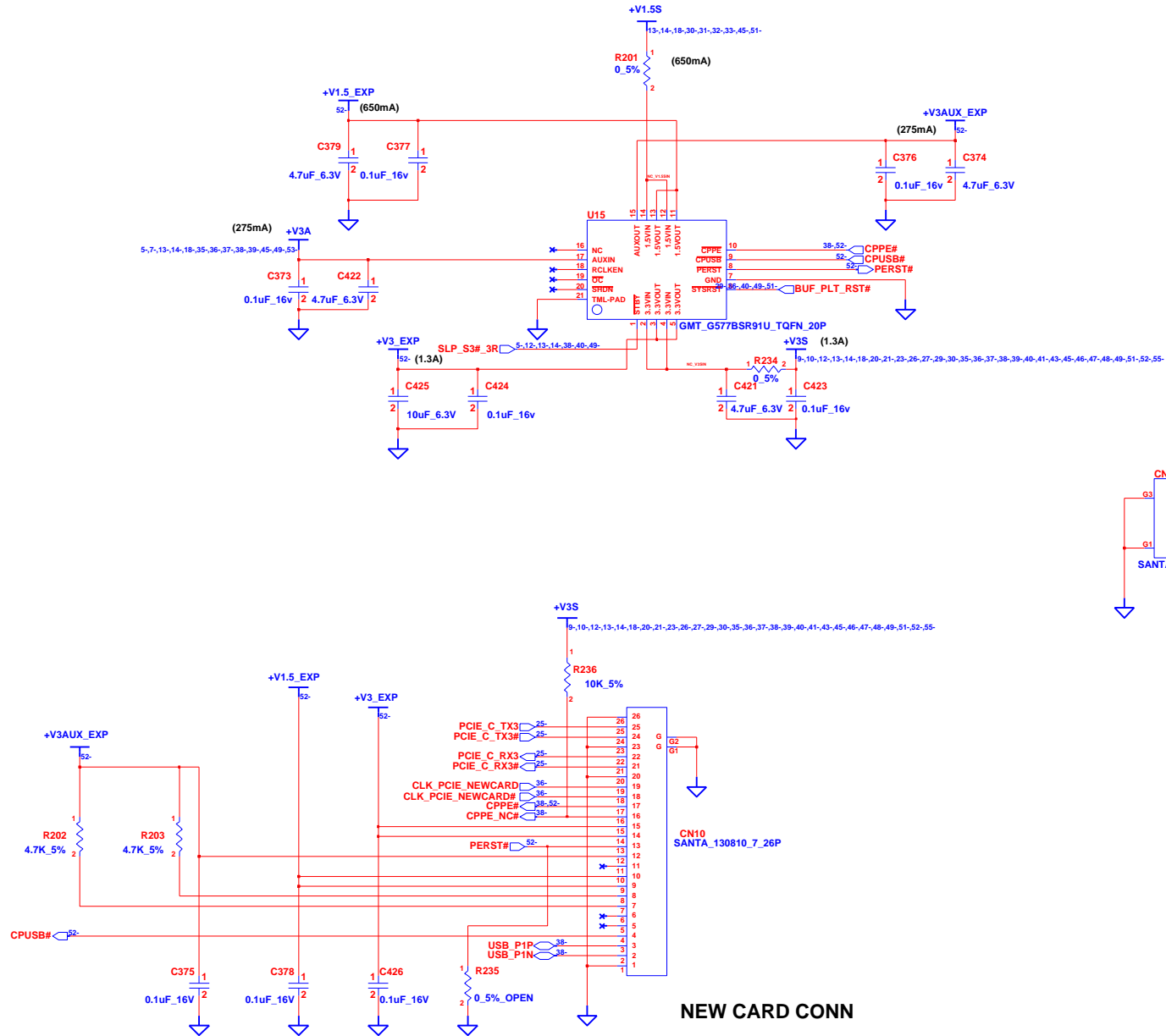
Bluetooth CONN

INVENTEC

TITLE	VV10AD2-Valima Mini Card & BT CONN
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CHANGE by	<i>Drawer Name</i>	23-Dec-2009
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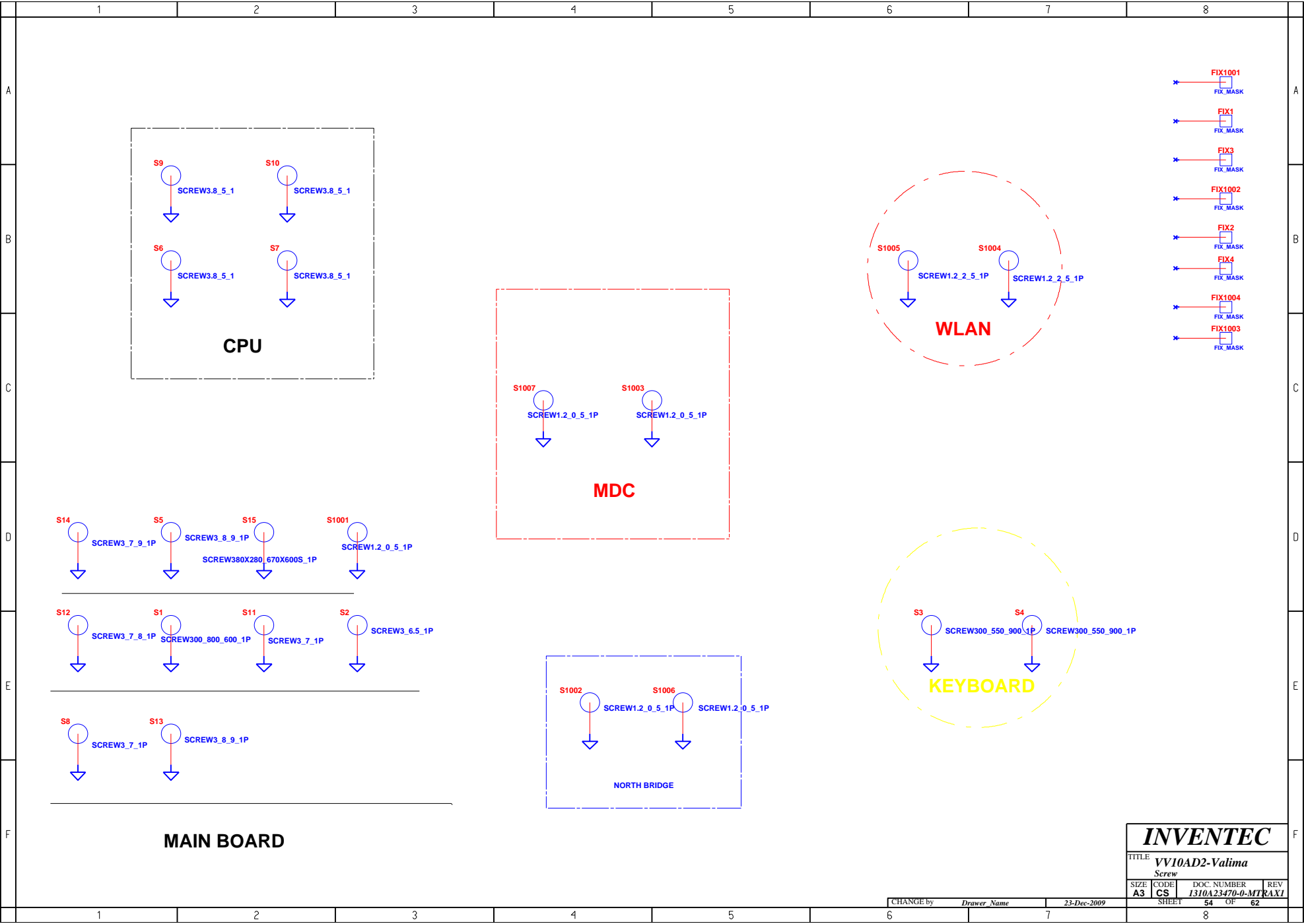
CS 1310A23470-0-M1K
SHEET 51 OF 62

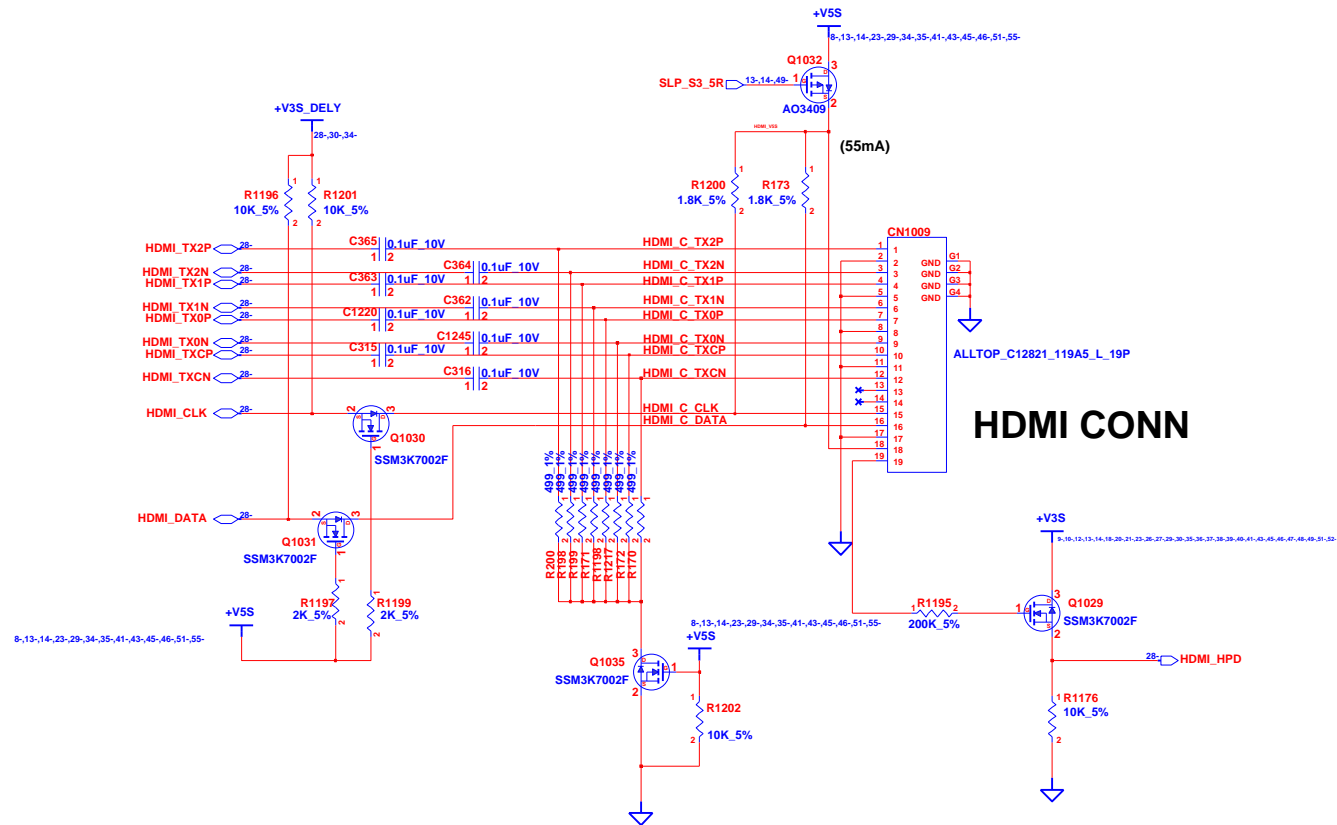


NEW CARD CONN

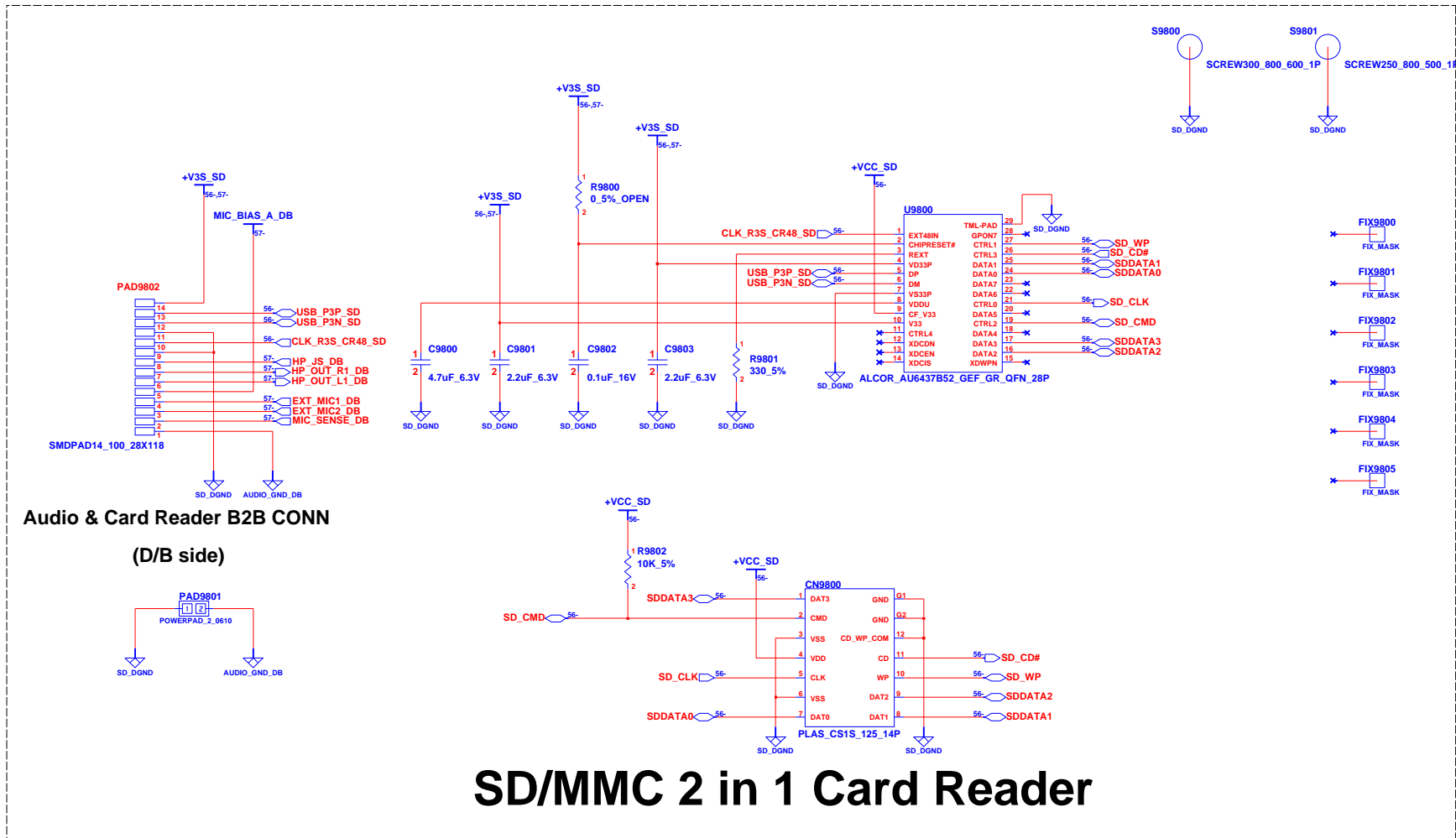
INVENTEC			
TITLE: VV10AD2-Valima New Card			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A23470-0-MTRAXI	REV: 52 OF 62

CHANGE by: Drawer Name 23-Dec-2009



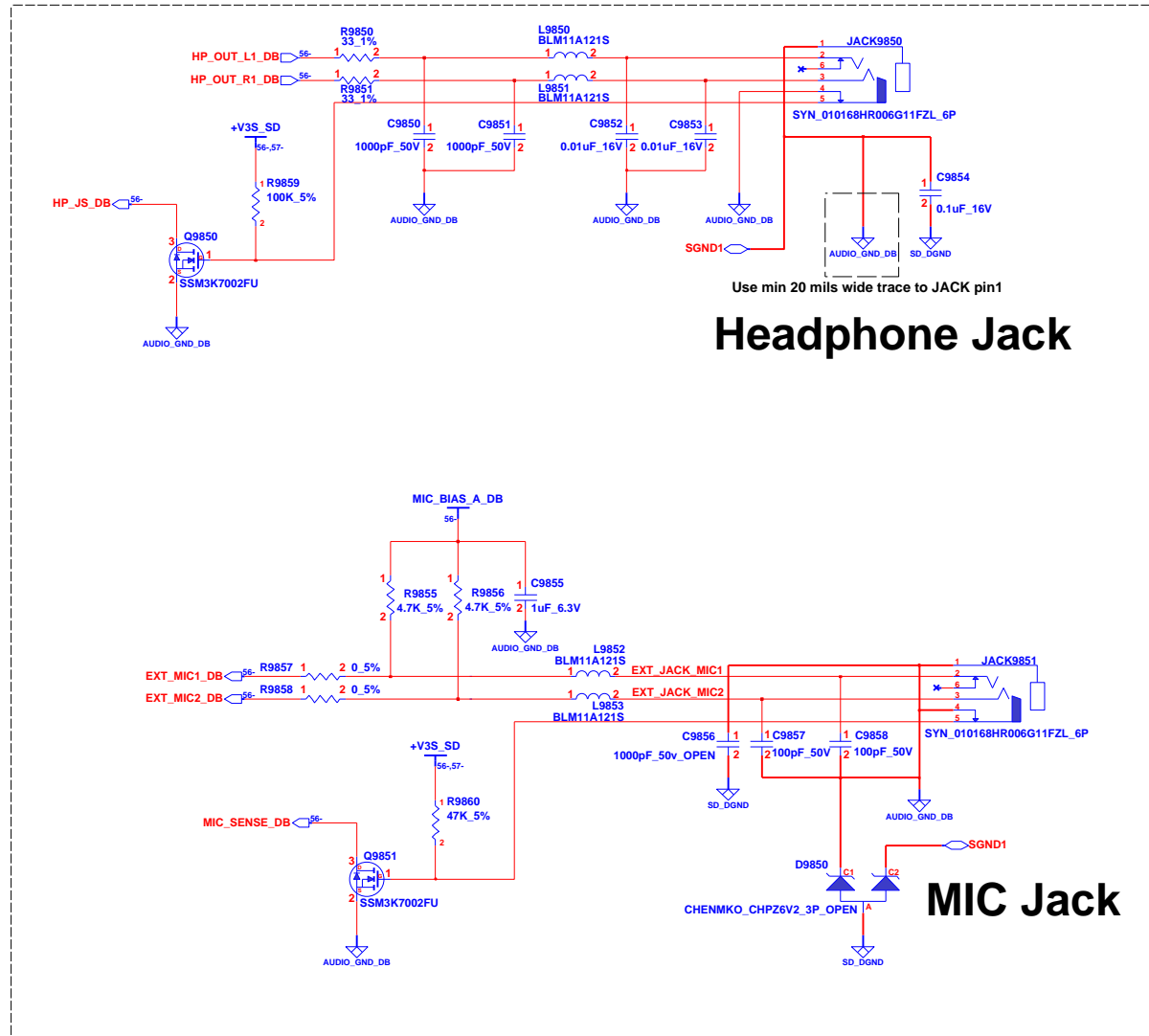


INVENTEC			
TITLE VV10AD2-Valima			
HDMI			
SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MTRAXI	REV
CHANGE by		23-Dec-2009	
SHEET		55	OF 62



Audio & Card Reader board-1

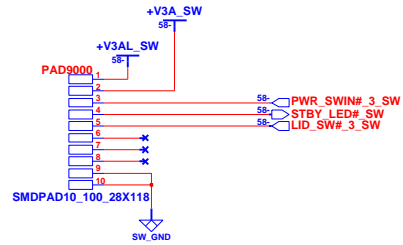
INVENTEC			
TITLE: VV10AD2-Valima Audio & Card Reader Board-1 (2 in 1 Card Reader)			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A23470-0-MTRAX1	REV: 56
CHANGE by: Drawer Name		9-Mar-2010	SHEET 56 OF 62



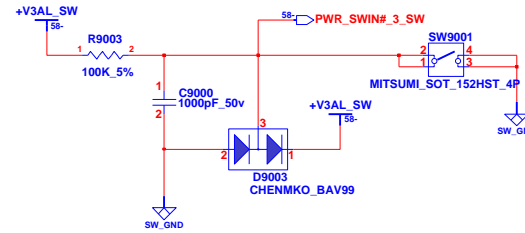
Audio & Card Reader board-2

INVENTEC			
TITLE VV10AD2-Valima Audio & Card Reader Board-2 (HP & MIC JACKS)			
SIZE A3	CODE CS	DOC. NUMBER I310A23470-0-MTRAXI	REV 62
SHEET		57	OF
		8	

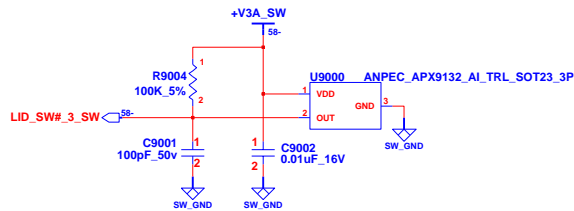
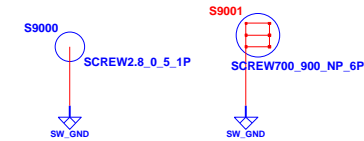
CHANGE by *Drawer Name* 13-Jan-2010



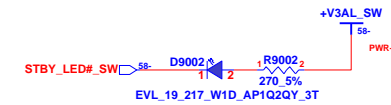
PWR SW B/B CONN



Power Button



LID Switch

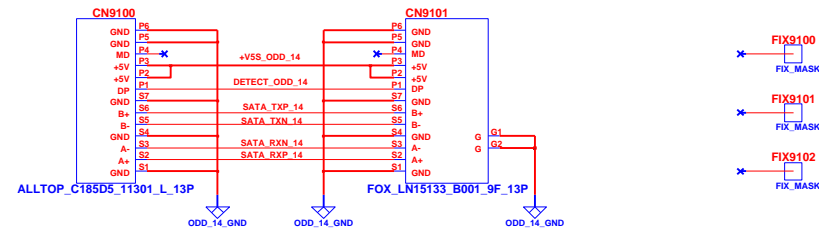


Power / Standby LED

Power Button & LID Switch Board

INVENTEC			
TITLE VV10AD2-Valima Power & LID board			
SIZE A3	CODE CS	DOC NUMBER 1310A23470-0-MTR	REV AX1
SHEET 58		OF 62	

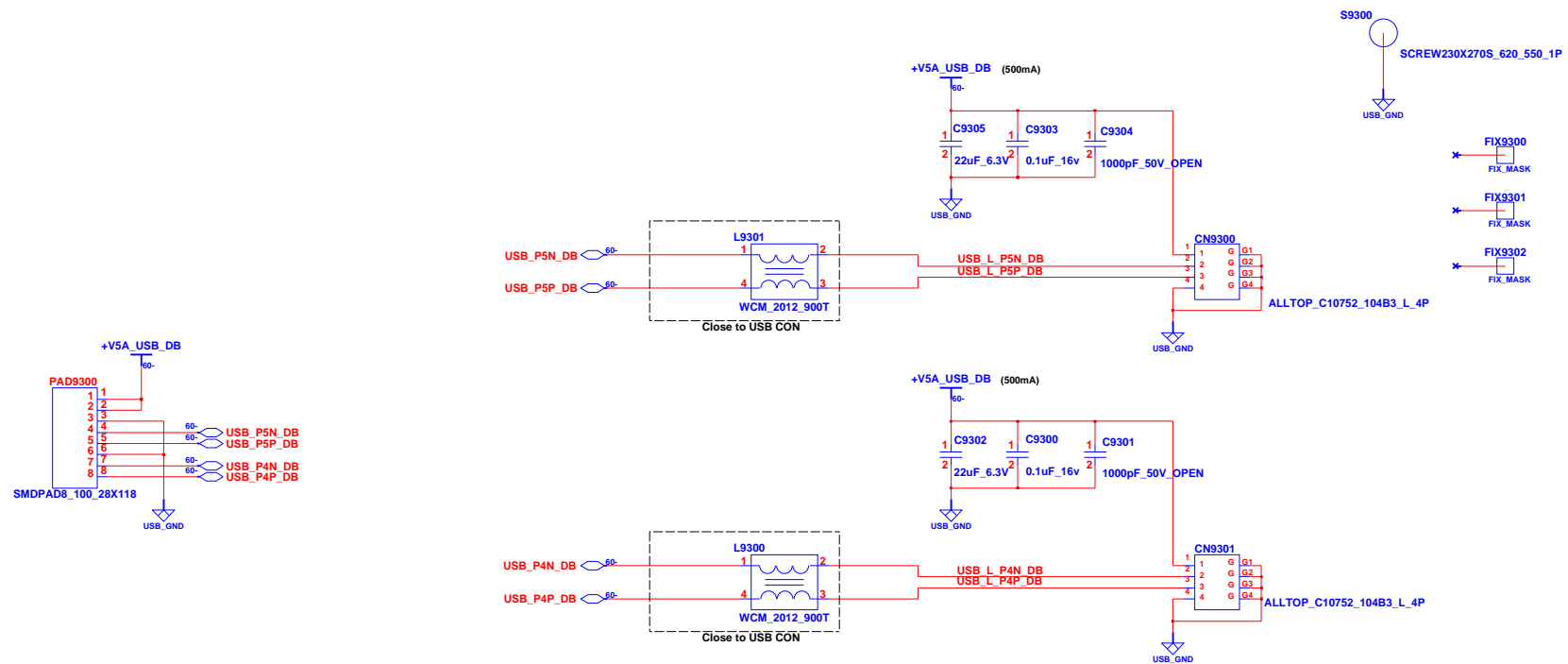
CHANGE by Drawer Name 23-Dec-2009



14''ODD Extend Board

INVENTEC			
TITLE: VV10AD2-Valima 15'' ODD Extend board			
SIZE A3	CODE CS	DOC. NUMBER 1310A23470-0-MTR	REV AX1
SHEET		59	OF 62

CHANGE by: *Drawer Name* 5-Mar-2010

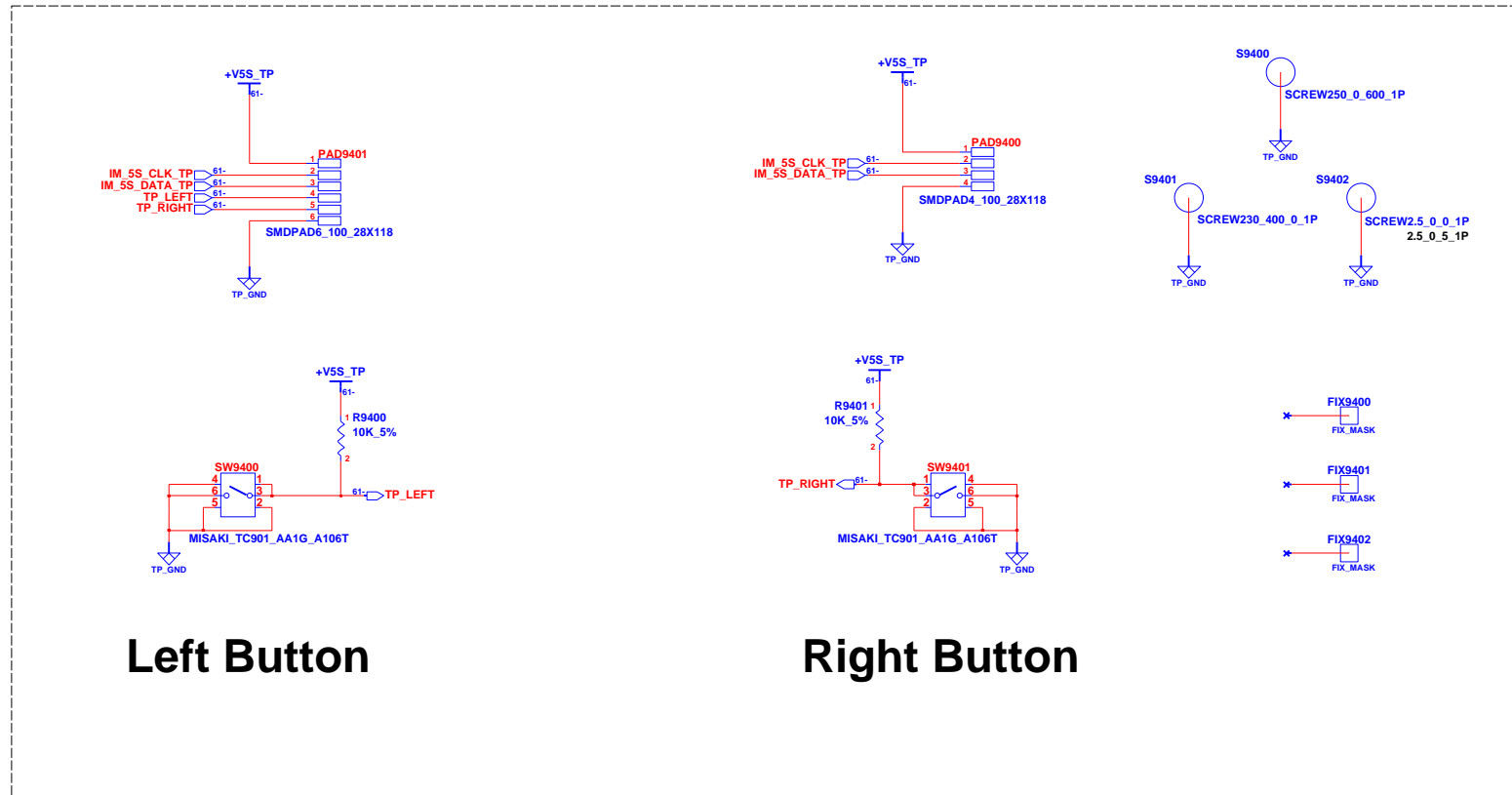


USB Right Side Board

INVENTEC

TITLE			
VV10AD2-Valima			
USB Right side board			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23470-0-MTR	AXI
SHEET		60	OF 62

CHANGE by *Drawer Name* 19-Jan-2010



Left Button

Right Button

PICK Button Board

INVENTEC			
TITLE: VV10AD2-Valima Pick Button board			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A23470-0-MTR	REV: AX1
CHANGE by: Drawer Name		13-Jan-2010	
SHEET: 61		OF: 62	

	1	2	3	4	5	6	7	8	
A	<div>BLANK</div> <div>15" SATA HDD Extend Board</div>								A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

INVENTEC			
TITLE VV10AD2-Valima 15" HDD/B			
SIZE A3	CODE CS	DOC. NUMBER 15" HDD Extend/B	REV AX1
CHANGE by VV10A2		5-Mar-2010	
SHEET		62	OF 62