

Berlin 10

Pre-MP BUILD

2010.06.18

DRAWER	EE	DATE	POWER	DATE	INVENTEC			
DESIGN					TITLE Berlin 10			
CHECK								
RESPONSIBLE								
SIZE = 3					SIZE	CODE	DOC. NUMBER	REV
FILE NAME: XXXX-XXXXXX-XX					A3	CS	ES	AXI
P/N XXXXXXXXXXXX					SHEET 1 OF 61			

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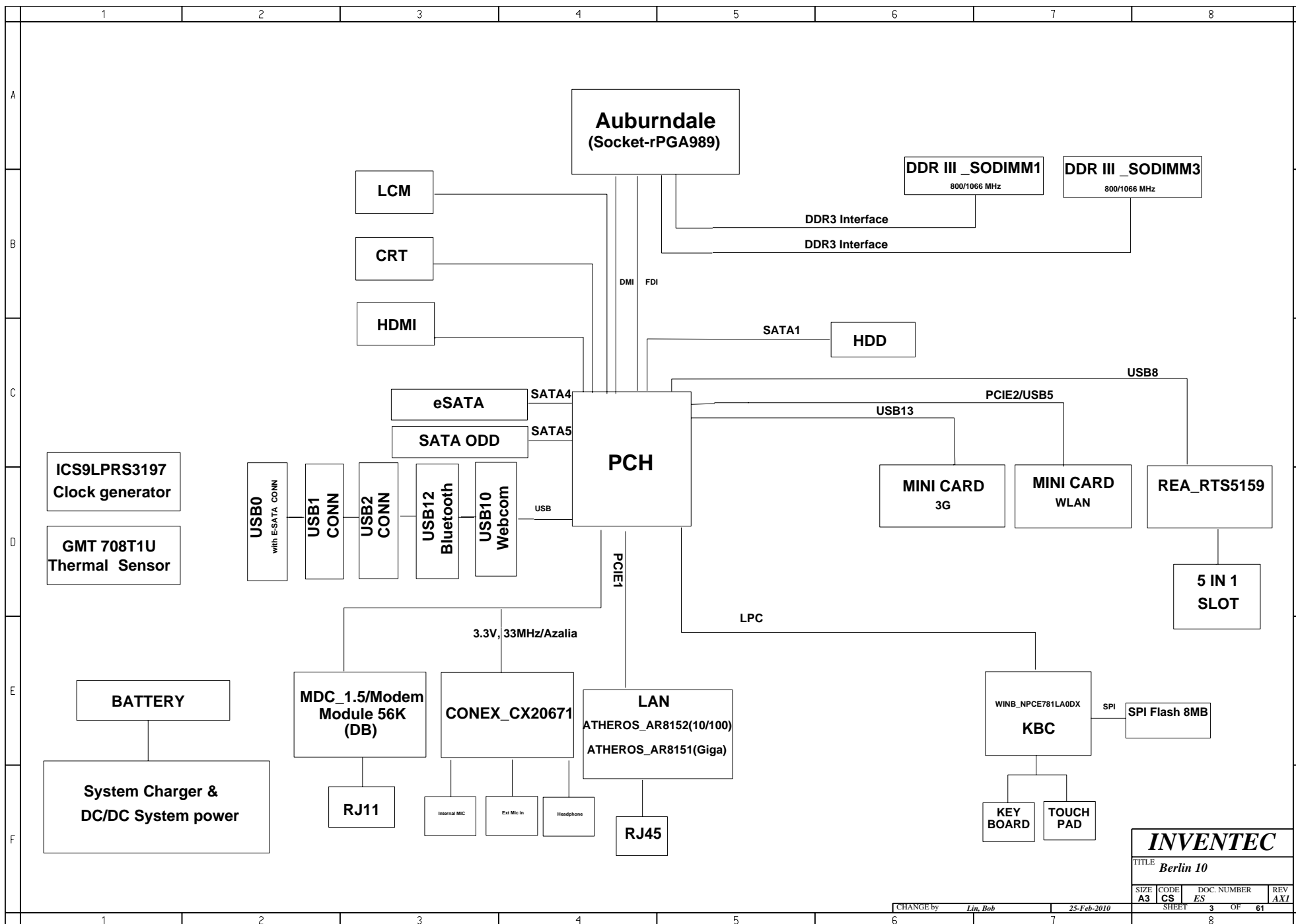
INVENTEC

TITLE **Berlin 10**

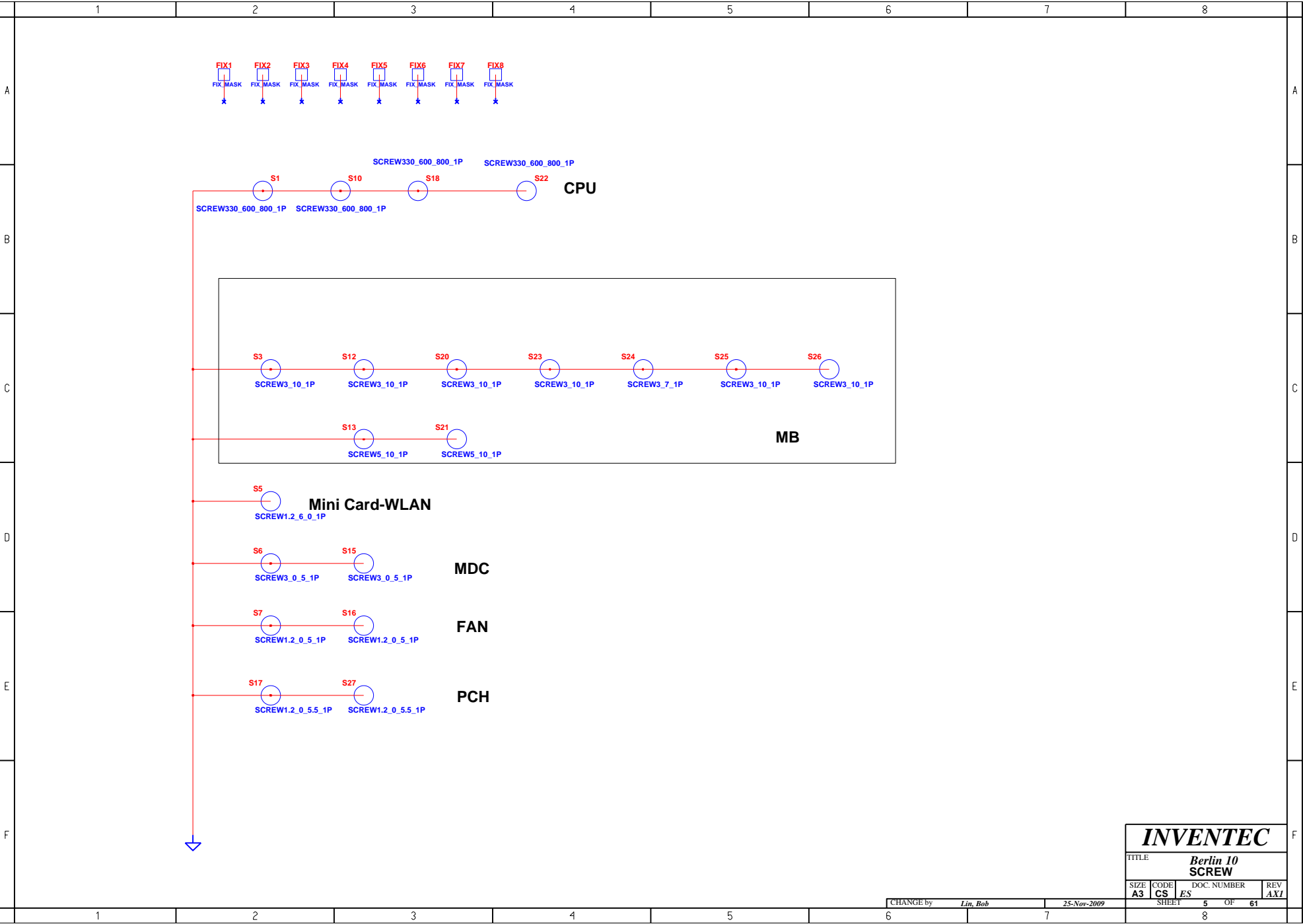
SIZE A3	CODE CS	DOC. NUMBER ES	REV AXI
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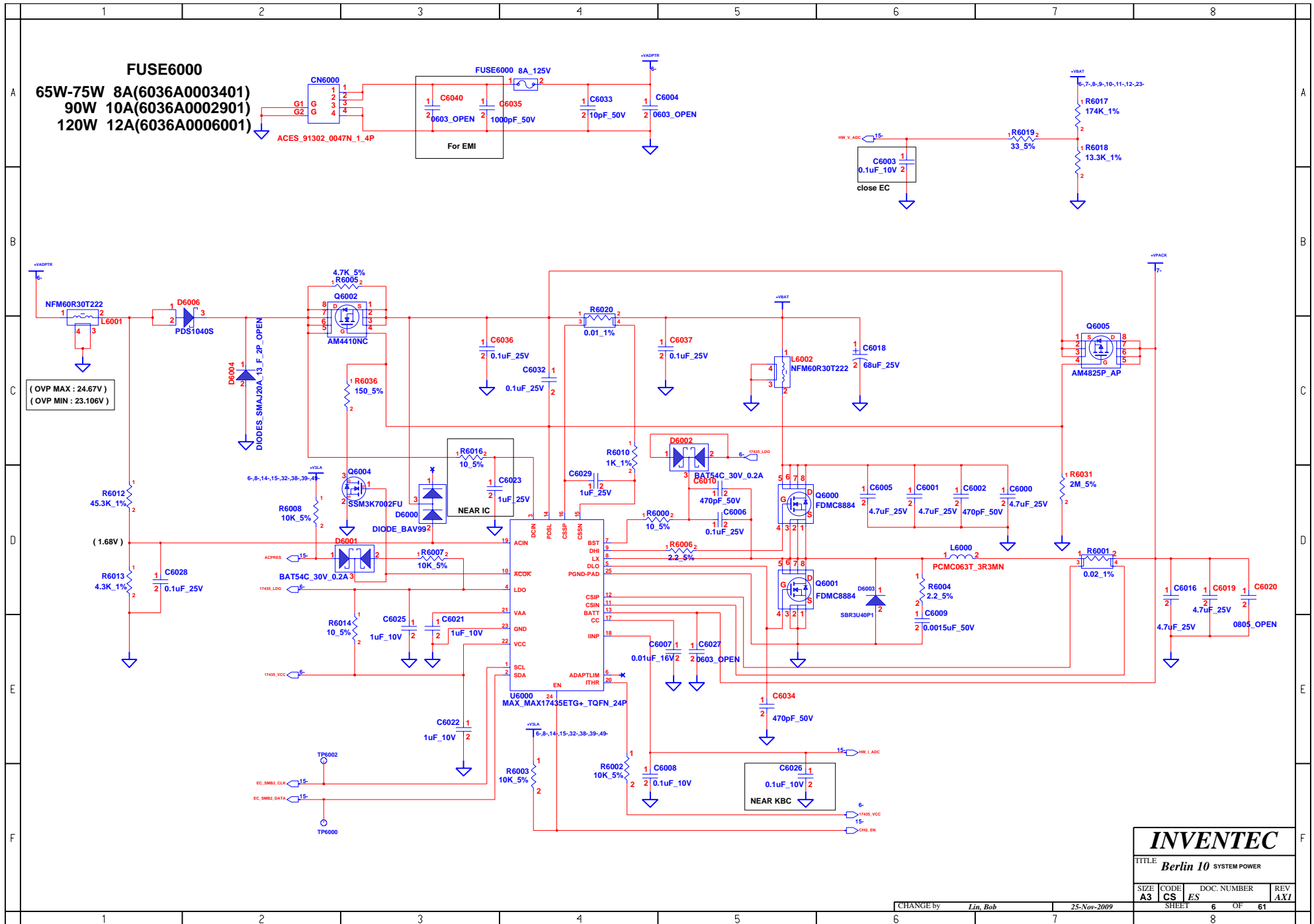
CHANGE by *Lin, Bob* 25-Nov-2009

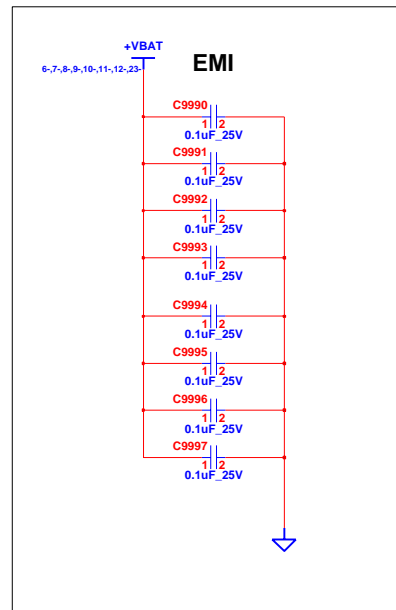
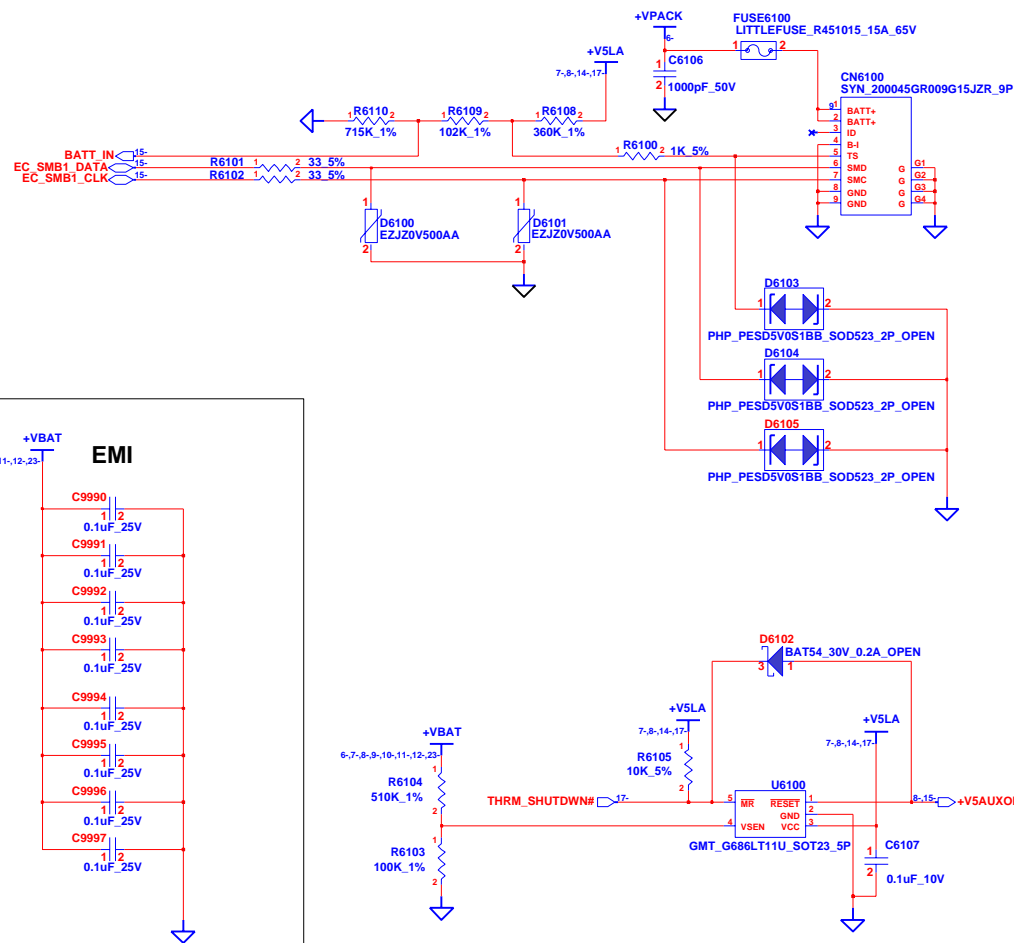
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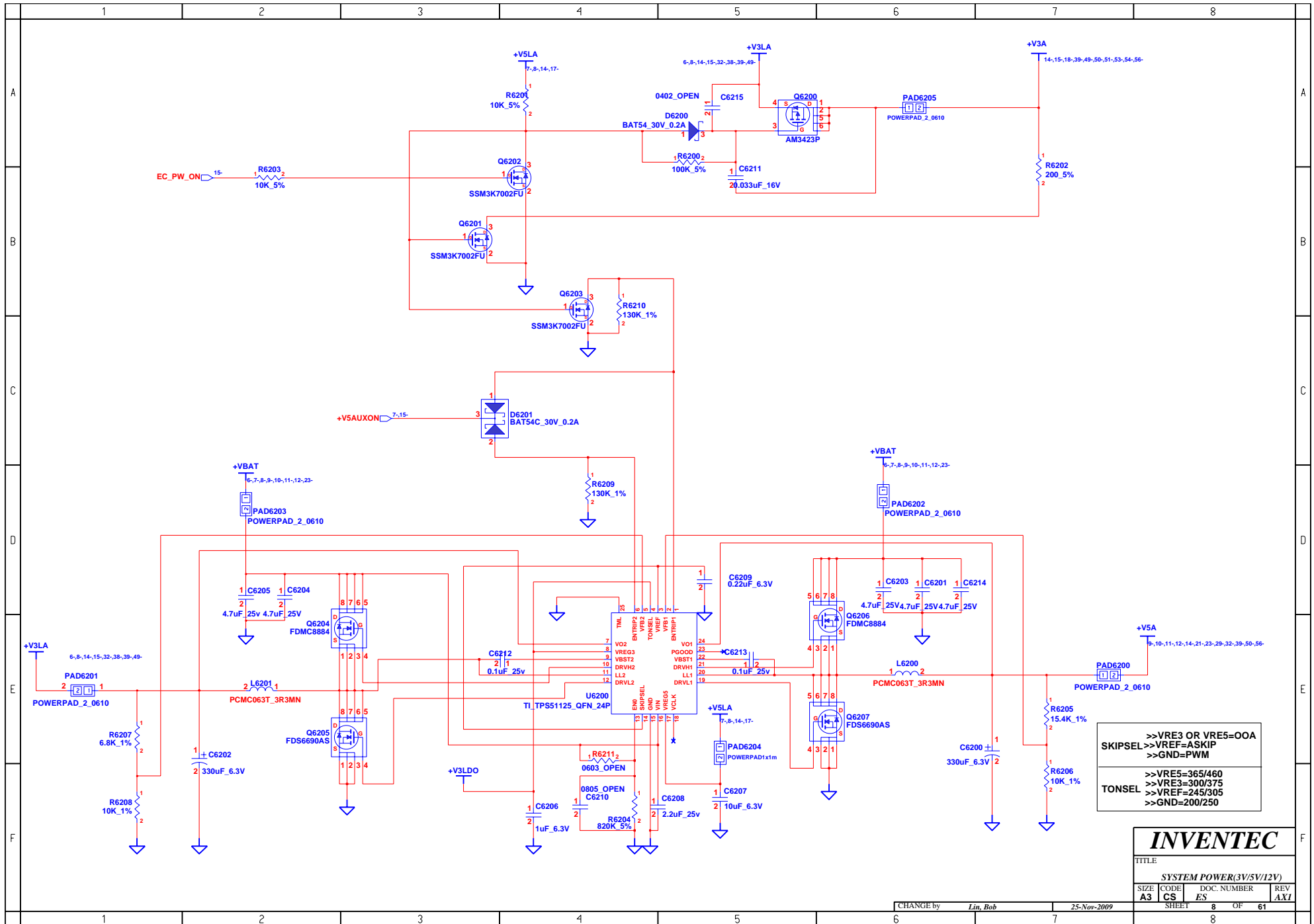
INVENTEC			
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SHEET 1		3 OF 61	

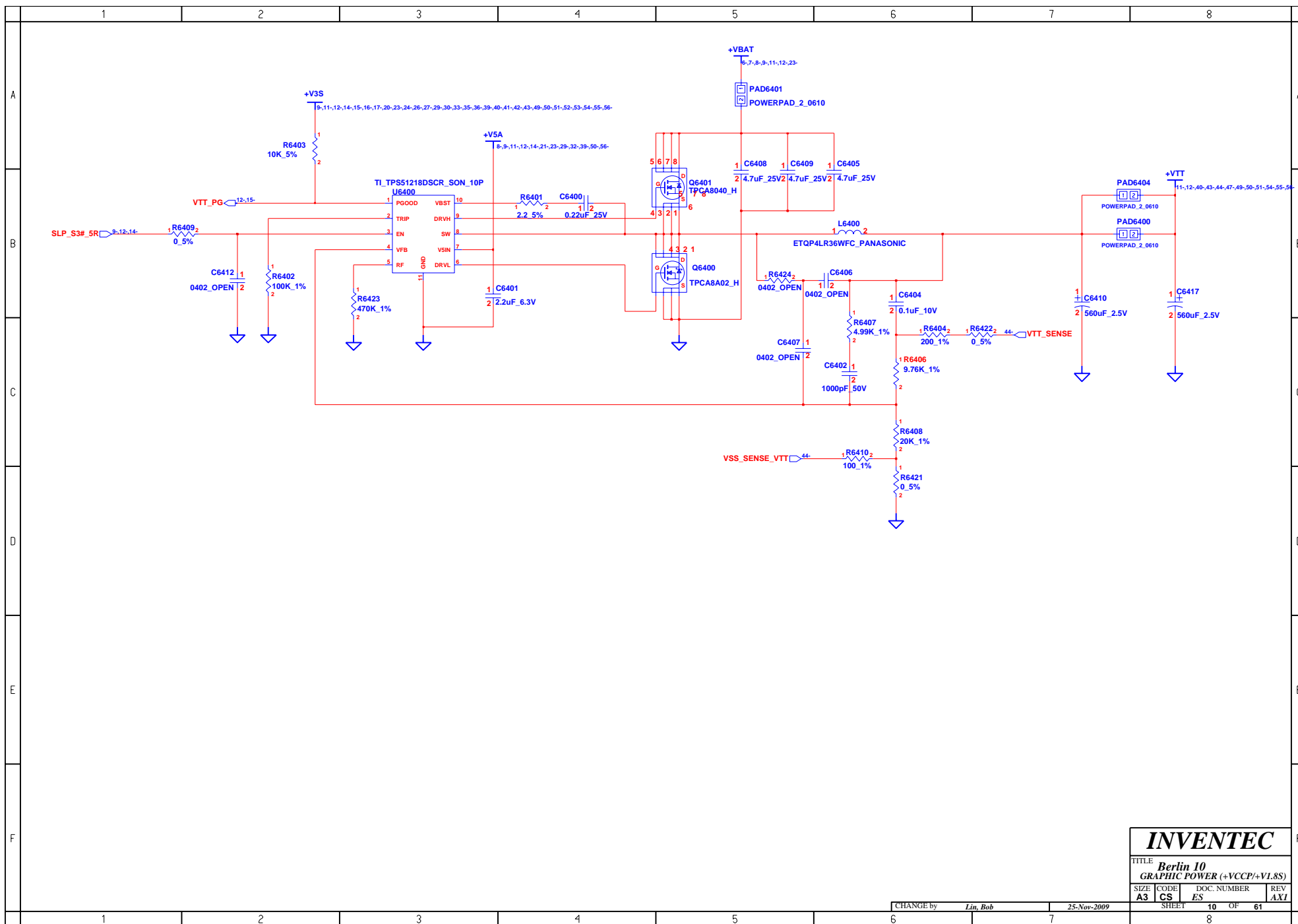




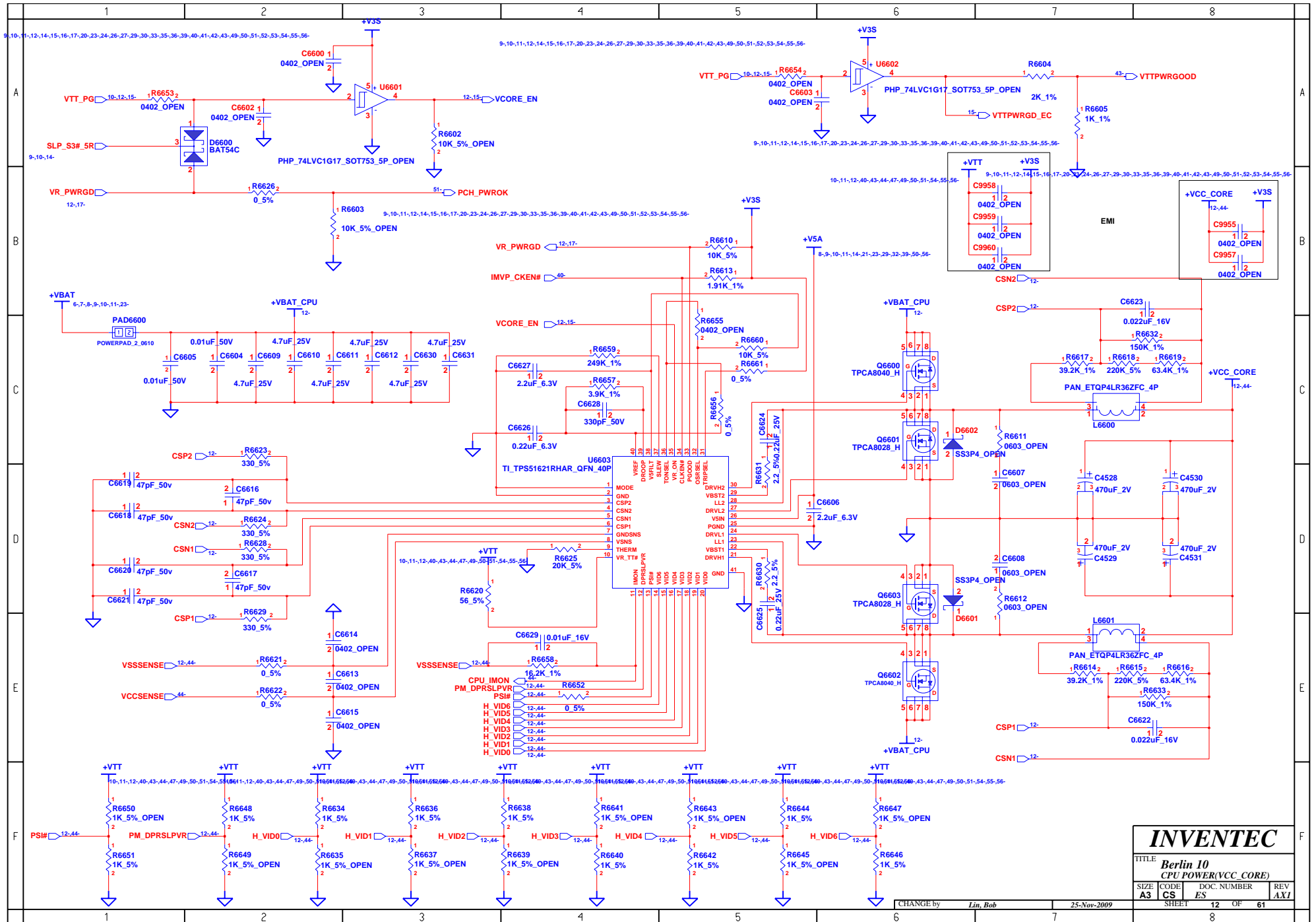


INVENTEC			
TITLE: Berlin 10 SELECT & BATTERY CONN			
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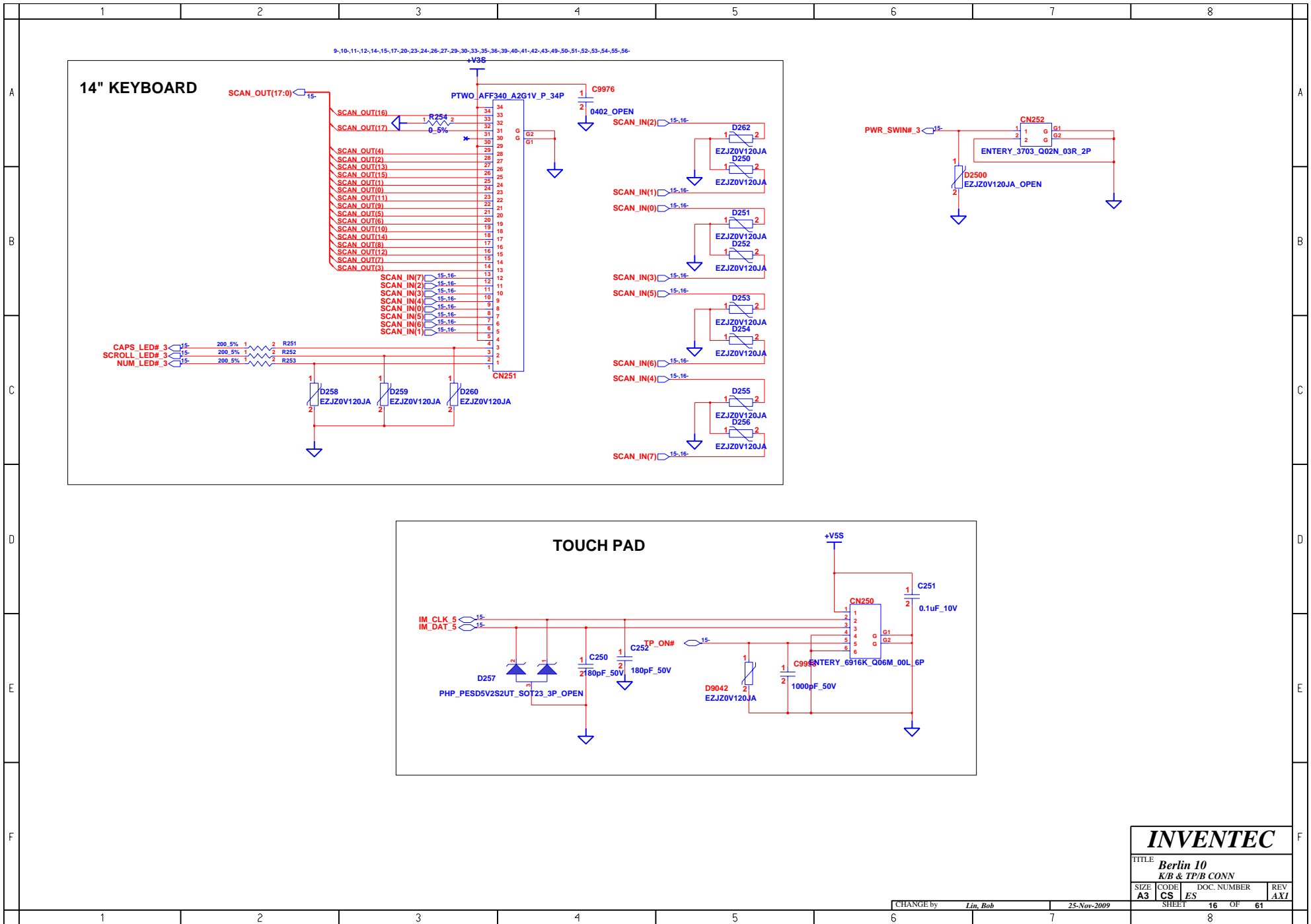
INVENTEC			
TITLE Berlin 10			
GRAPHIC POWER (+VCCP/+VL8S)			
SIZE A3	CODE CS	DOC. NUMBER ES	REV AXI
CHANGE by Lin, Bob		25-Nov-2009	
SHEET 10		OF 61	

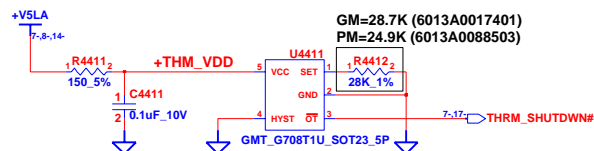
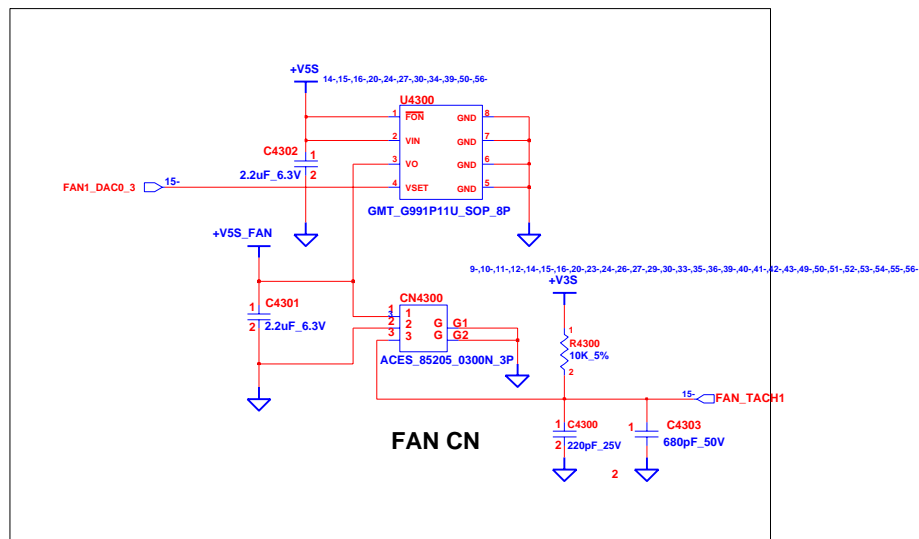


	1	2	3	4	5	6	7	8	
A	<div>skip</div>								A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

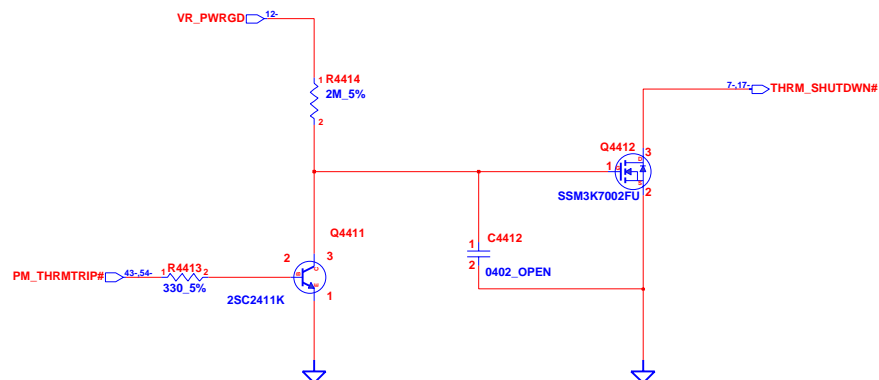
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TITLE Berlin 10 VGA POWER			
SIZE A3	CODE CS	DOC. NUMBER ES	REV AXI
CHANGE by Lin, Bob		25-Nov-2009	
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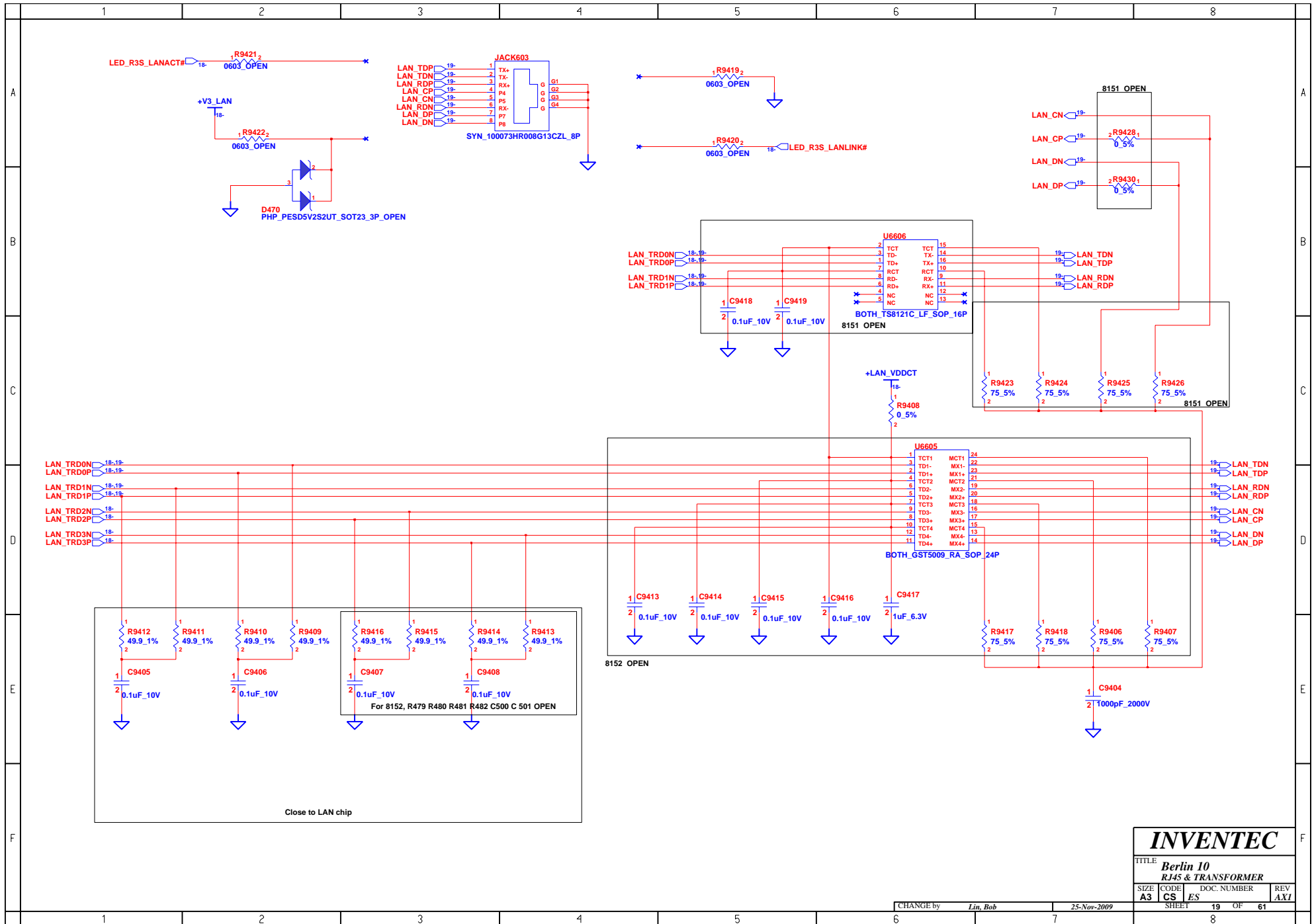
GM Thermal shutdown at 80.8°C +/-3°C from 60°C to 100°C
 PM Thermal shutdown at 86°C +/-3°C from 60°C to 100°C
 $RSET=0.0012 \cdot T^2 - 0.9308 \cdot T + 96.147$
 Hysteresis is 30C

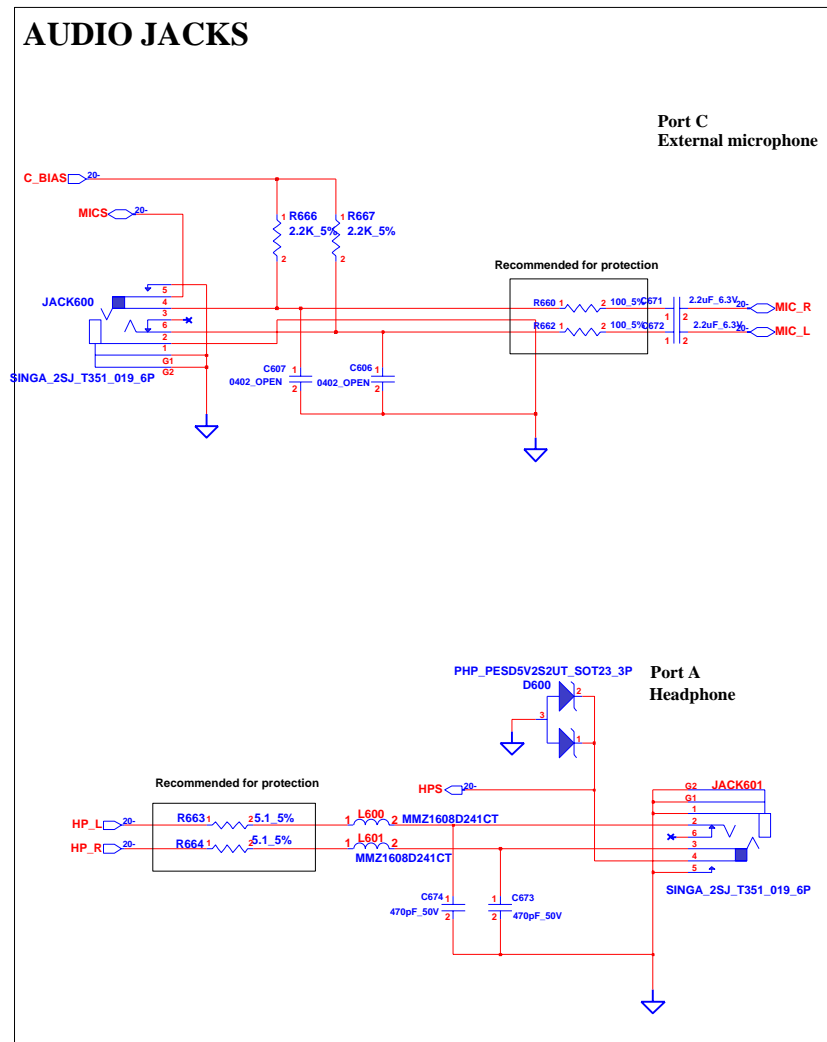


INVENTEC

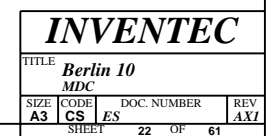
TITLE
Berlin 10
 FAN,Thermal controller
 SIZE CODE ES DOC. NUMBER REV
A3 CS 17 OF 61

CHANGE by Lin, Bob 25-Nov-2009





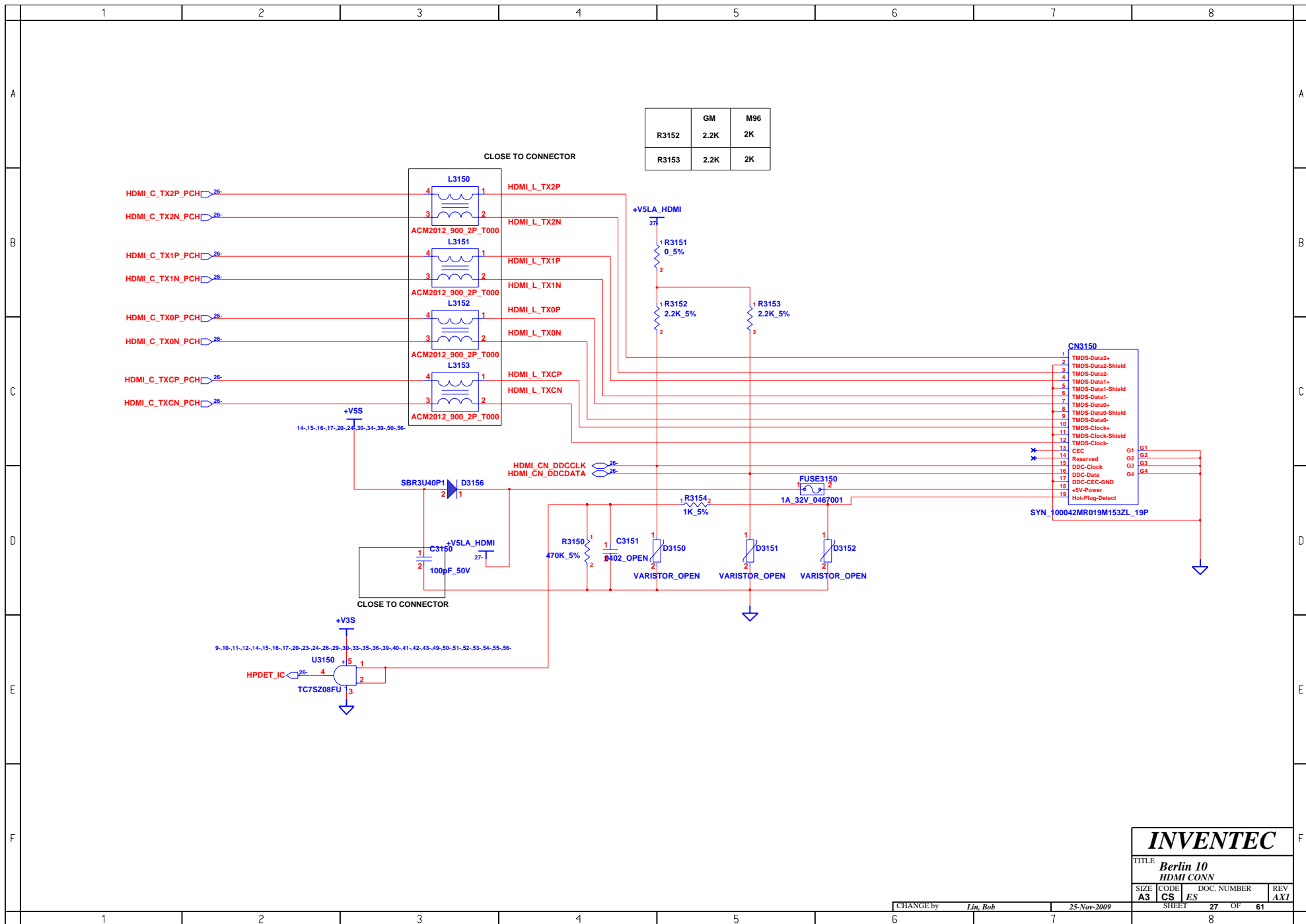
TITLE			
Berlin 10 AUDIO AMP&MIC&SPEAKER			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	ES	AXI



	1	2	3	4	5	6	7	8	
A									A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

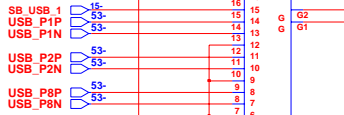
INVENTEC			
TITLE Berlin 10			
CEC			
SIZE A3	CODE CS	DOC. NUMBER <i>ES</i>	REV AXI
SHEET		25	OF 61

CHANGE by *Lin, Bob* 25-Nov-2009



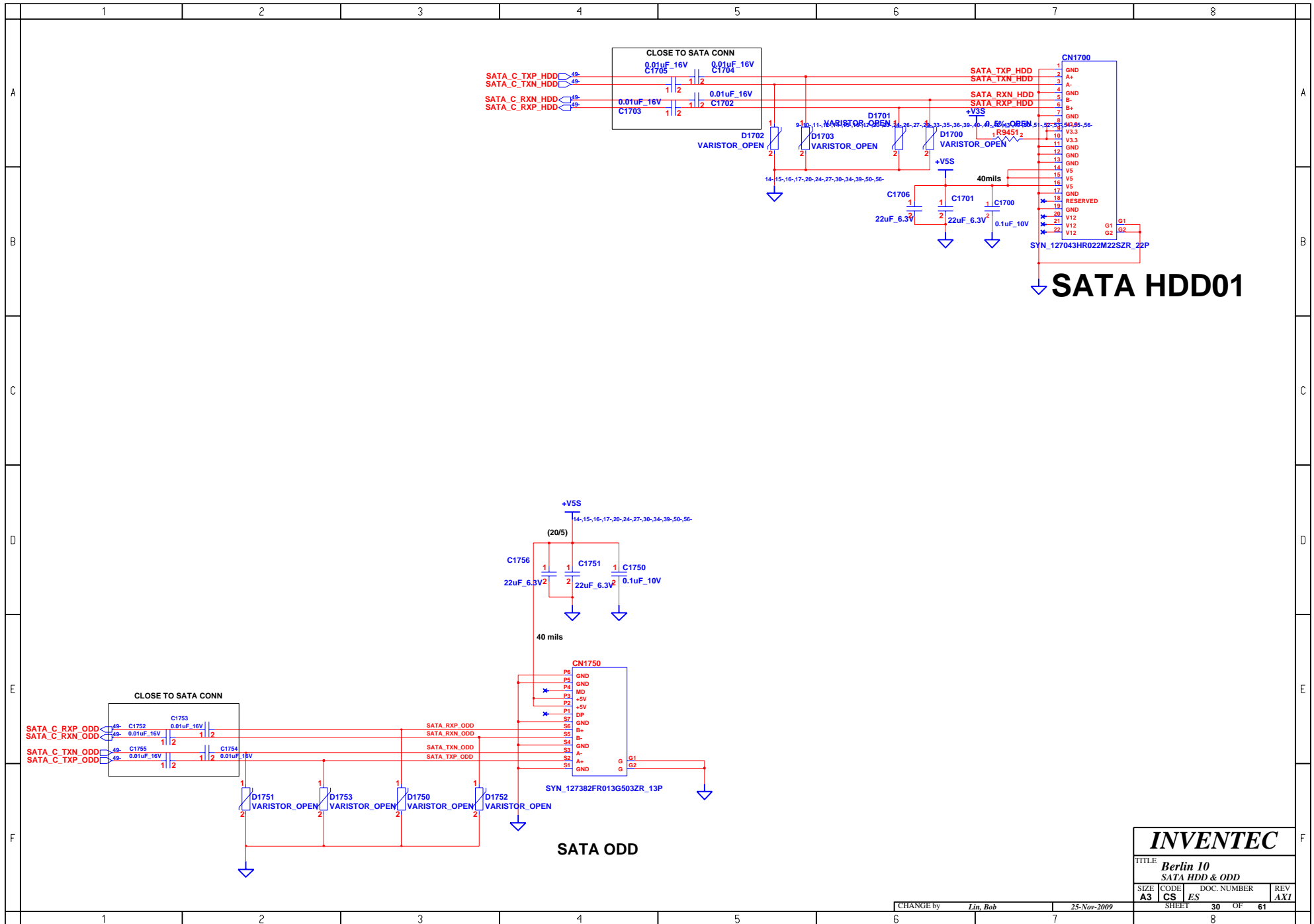
	1	2	3	4	5	6	7	8	
A	<div>Express Card</div>								A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

INVENTEC			
TITLE Berlin 10 EXPRESS CARD			
SIZE A3	CODE CS	DOC. NUMBER ES	REV AXI
CHANGE by Ljn, Bob		25-Nov-2009	
SHEET		28	OF 61



INVENTEC

TITLE <i>Berlin 10</i>			
<i>Cardreader</i>			
SIZE A3	CODE CS	DOC. NUMBER <i>ES</i>	REV. AX

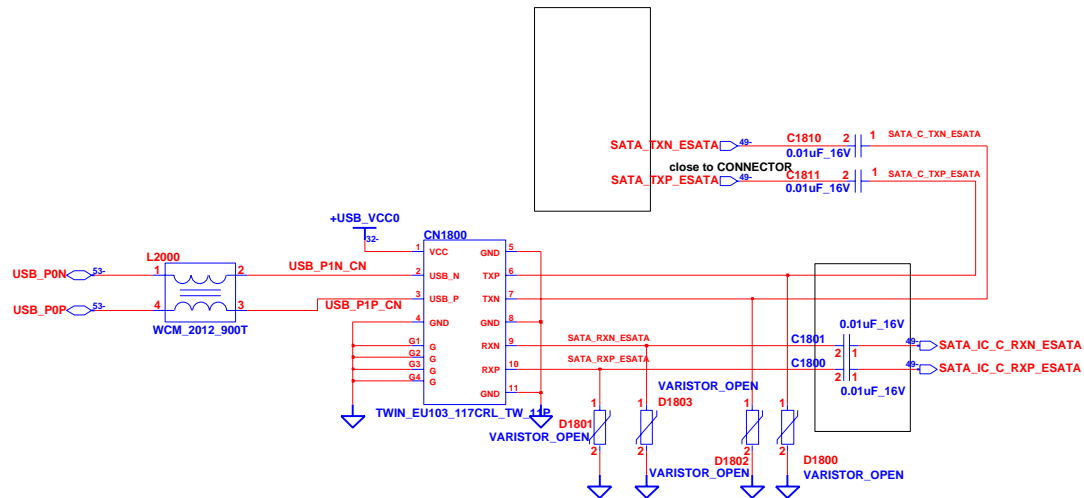


CLOSE TO IC PINS

E-SATA

EN	D0	D1	FUNCTION
0	X	X	STANDBY
1	0	0	DEFAULT
1	1	0	CH0->5DB
1	0	1	CH1->5DB
1	1	1	CH0,1->5DB

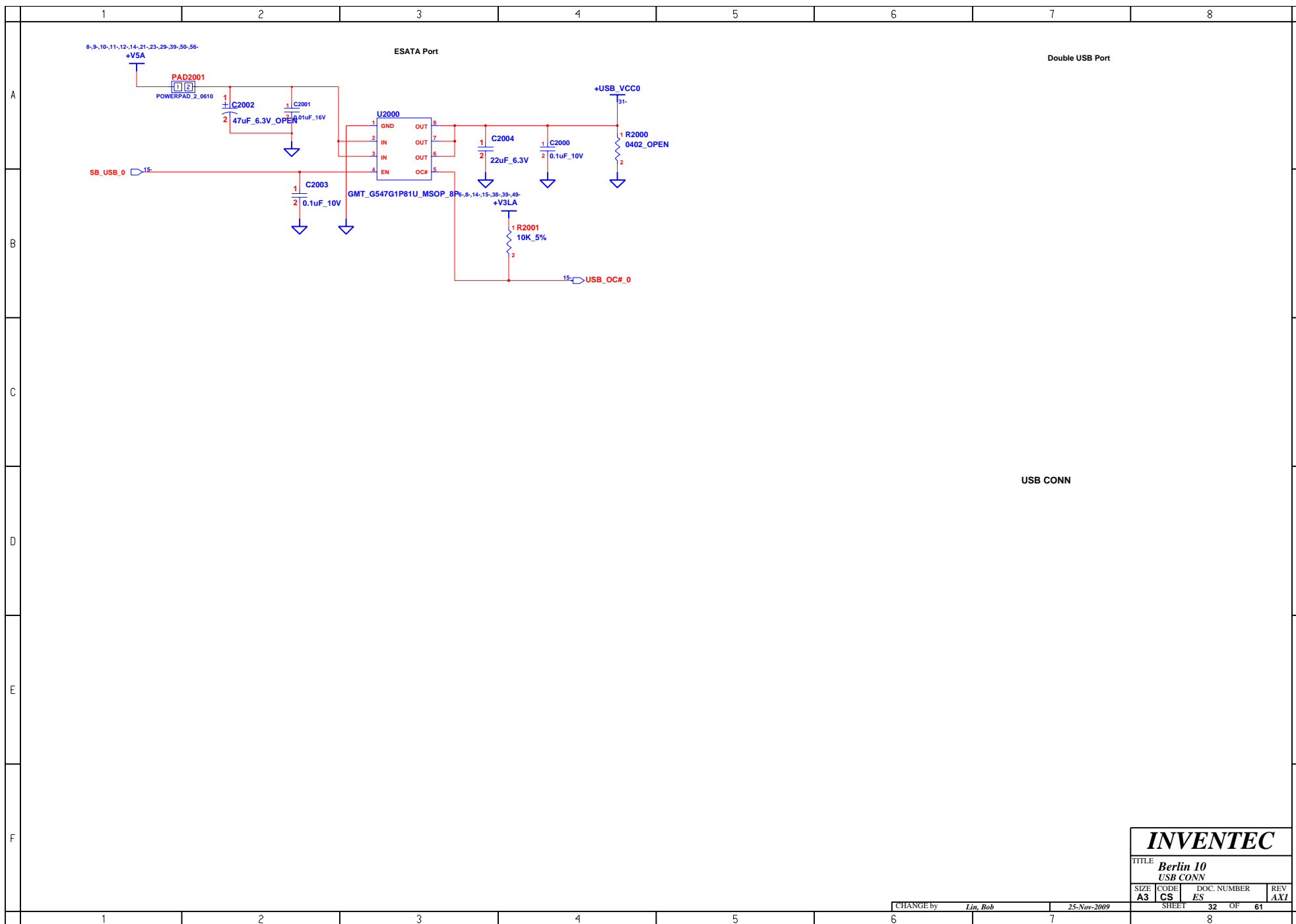
S	OE#	Function
X	H	Disconnect
L	L	D=1D
H	L	D=2D

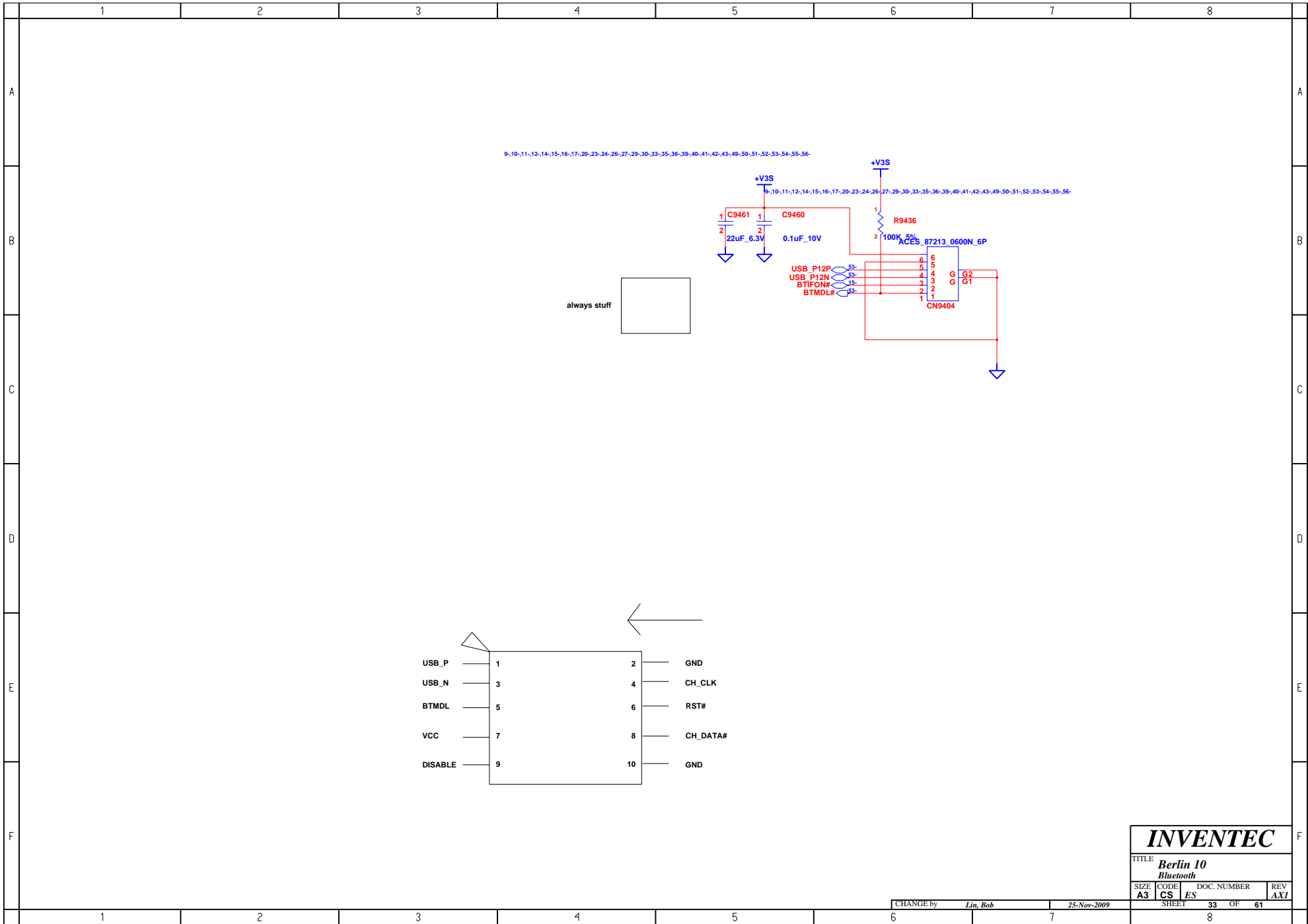


	1OE#	2OE#	3OE#	4OE#
Mode3	High	High	Low	Low
Mode4	Low	Low	High	High

INVENTEC			
TITLE Berlin 10 E-SATA			
SIZE A3	CODE CS	DOC. NUMBER ES	REV AXI
SHEET 31	OF 61		

CHANGE by Lin, Bob 25-Nov-2009

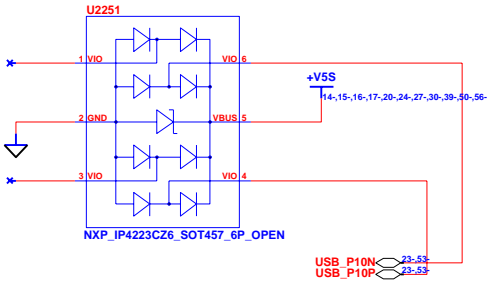




	1	2	3	4	5	6	7	8	
A									A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

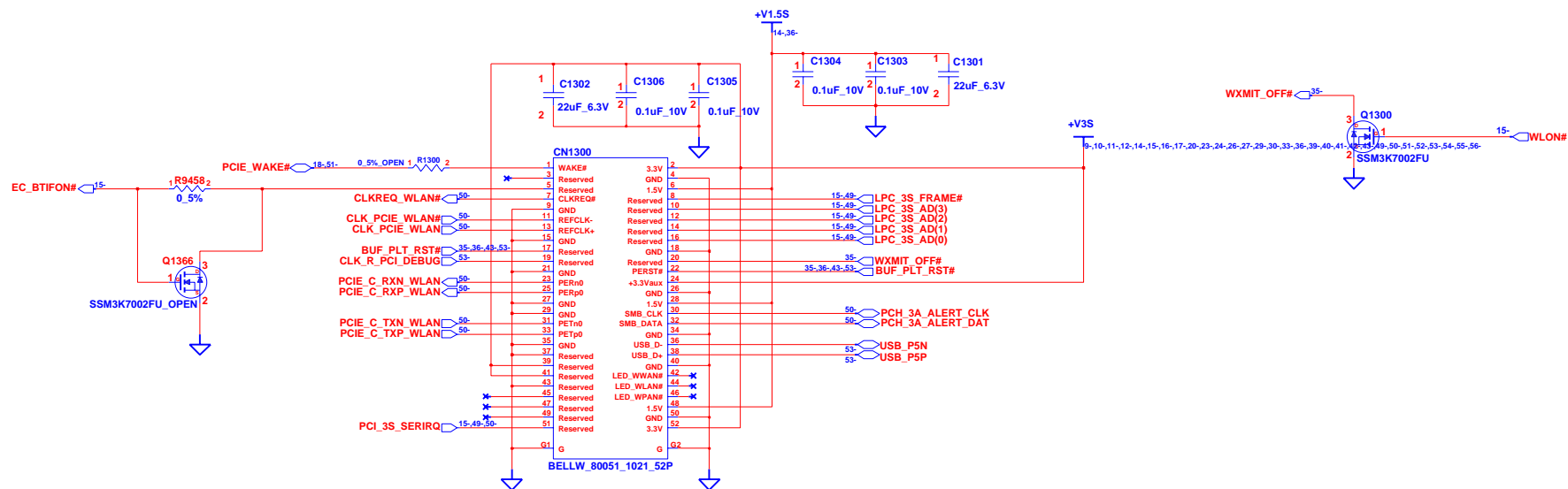
STUFF 21K_1%

STUFF 9.76K_1%



INVENTEC			
TITLE Berlin 10 Camera			
SIZE A3	CODE CS	DOC. NUMBER ES	REV AXI
CHANGE by <i>Lin, Bob</i>		25-Nov-2009	
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		8	

Wireless & Debug card



Note:

	Peak(max)mA	Normal(max)mA
3.3V	2,750mA	1,100mA
1.5V	500mA	375mA

MINI CARD 1

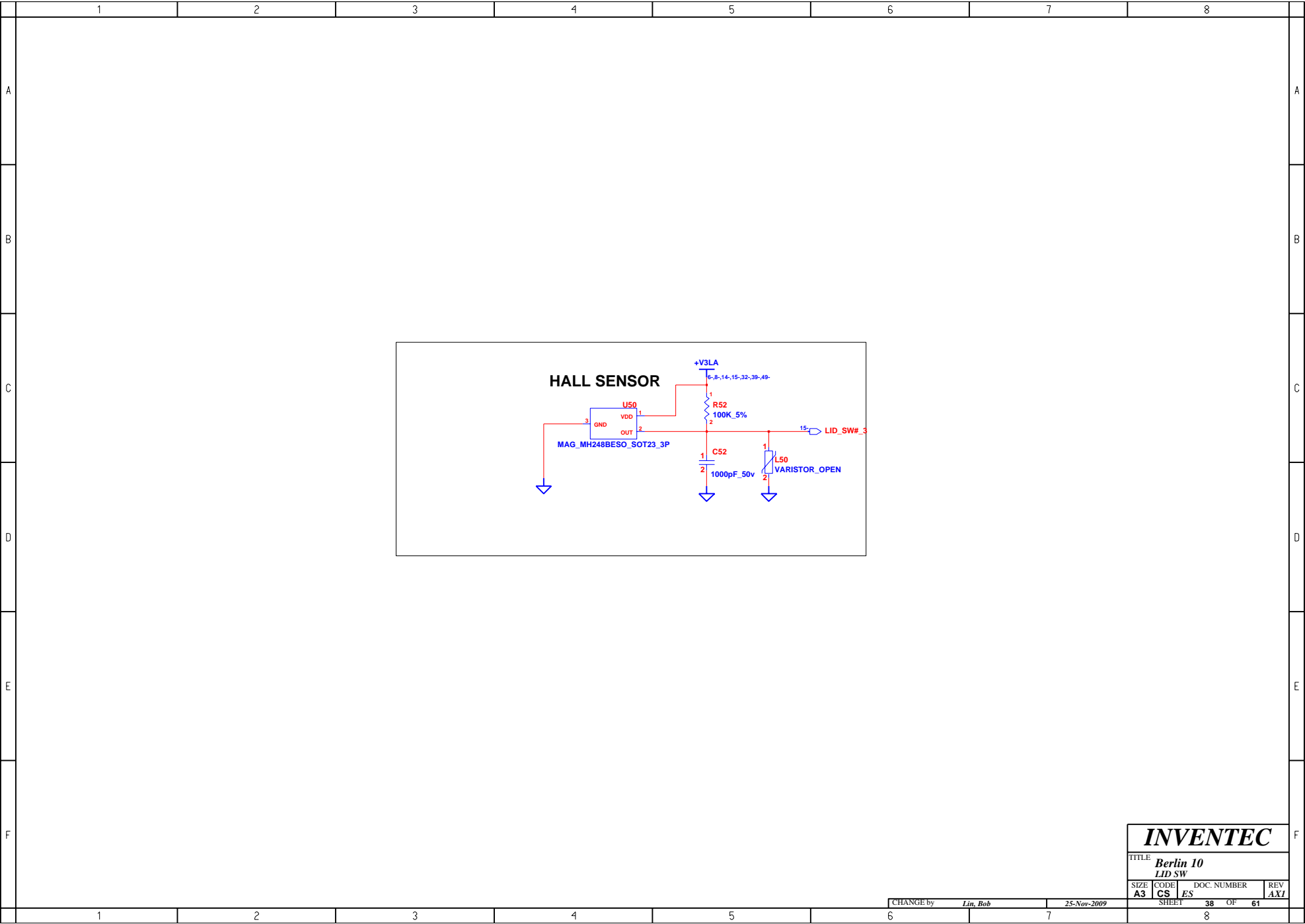
INVENTEC

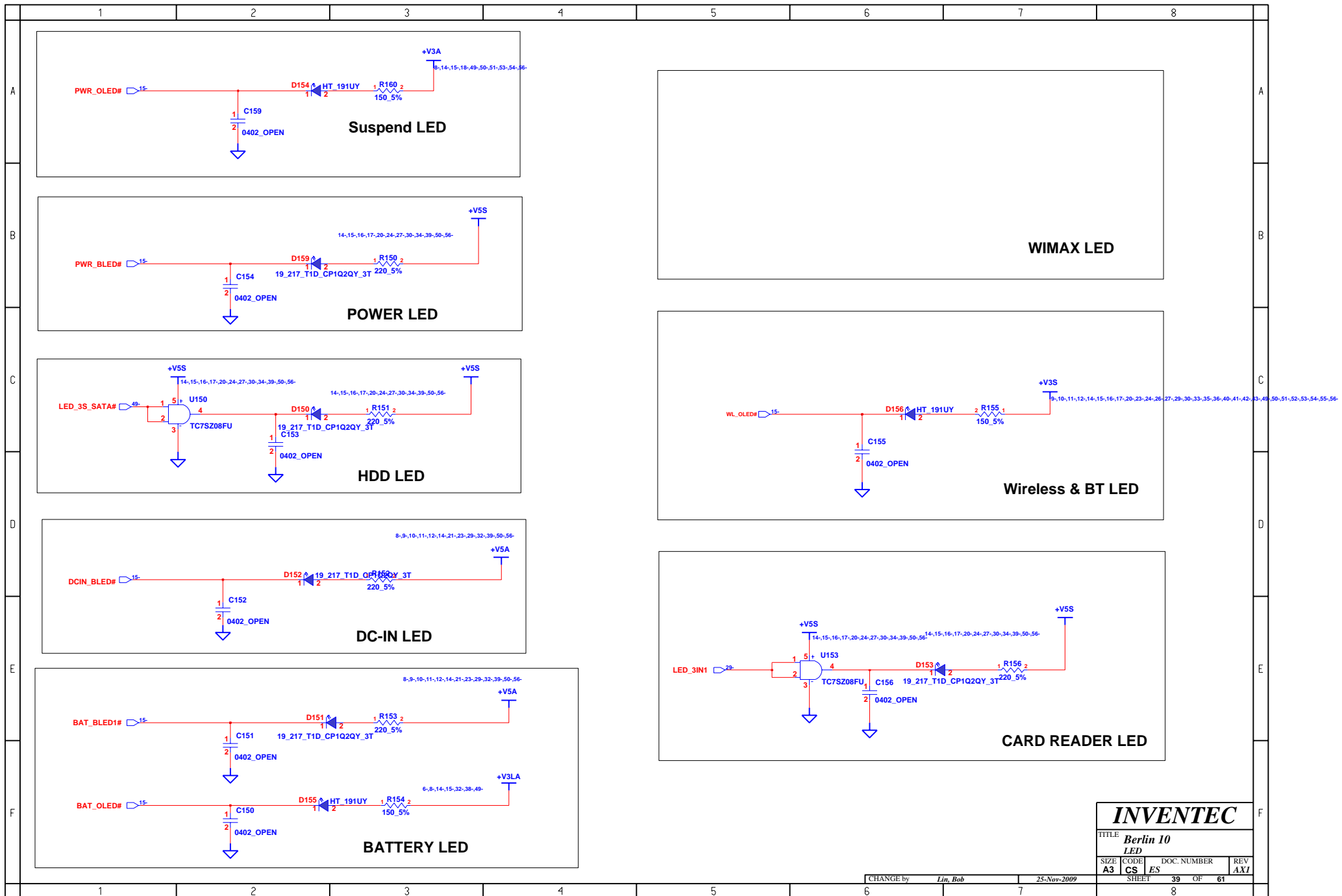
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SHEET		35 OF	61

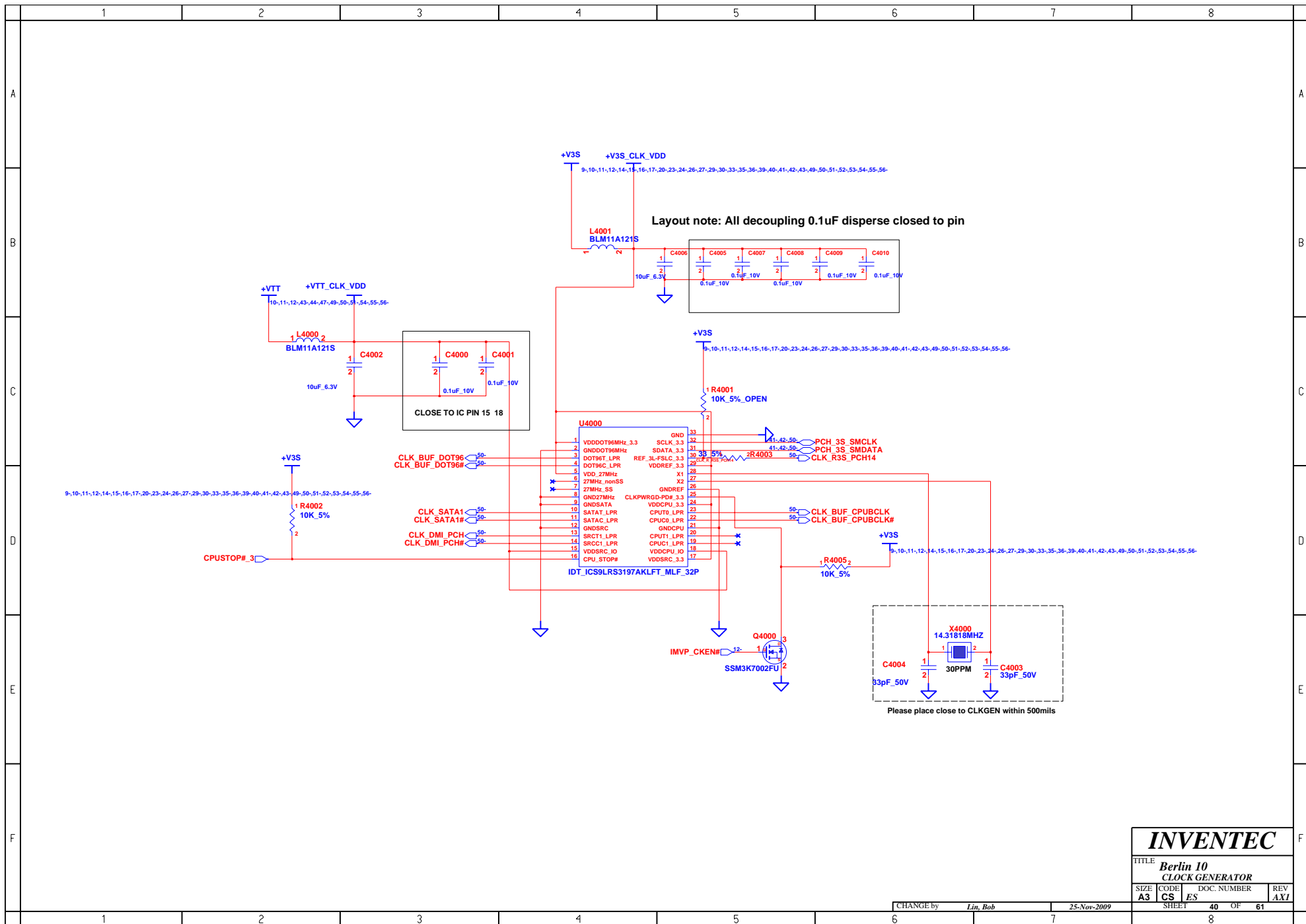
CHANGE by *Lin, Bob* 25-Nov-2009

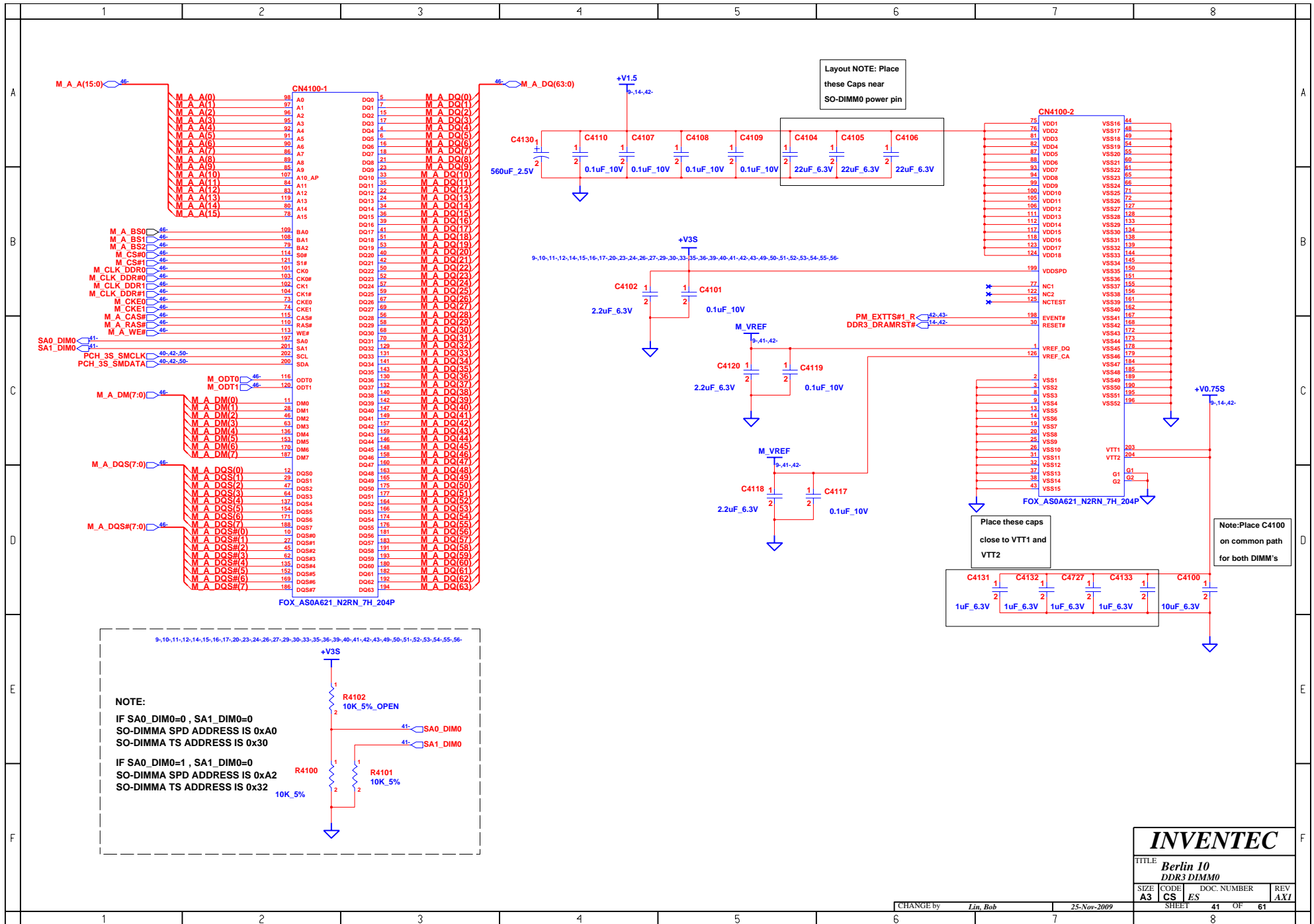
	1	2	3	4	5	6	7	8	
A	<div>KILL SWITCH</div> <div>WLAN ON:KILL_SWCH#->low</div> <div>WLAN OFF:KILL_SWCH#->high</div>								A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

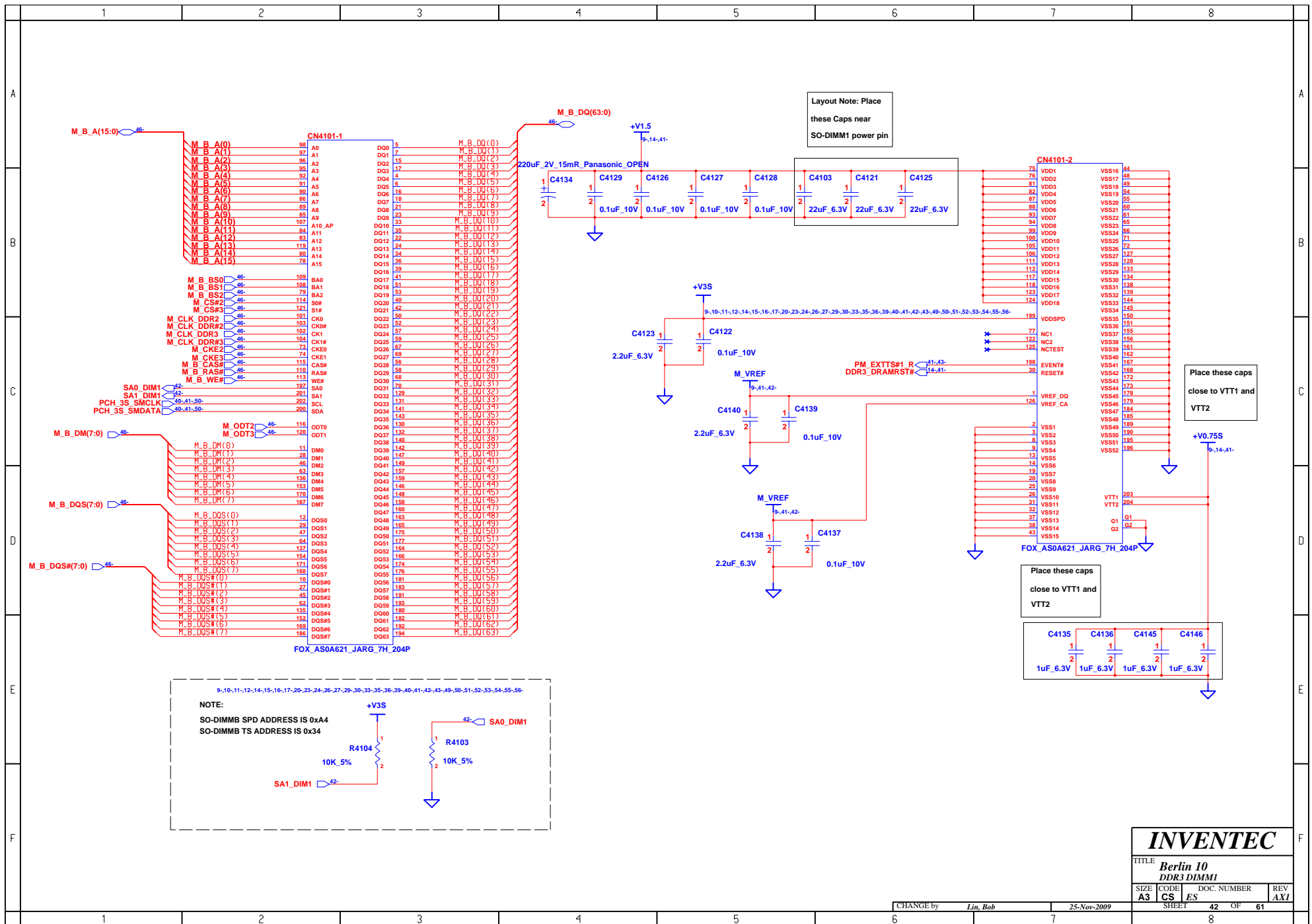
INVENTEC			
TITLE Berlin 10			
KILL_SW			
SIZE A3	CODE CS	DOC. NUMBER ES	REV AXI
CHANGE by <i>Lin, Bob</i>		25-Nov-2009	
SHEET		37	OF 61

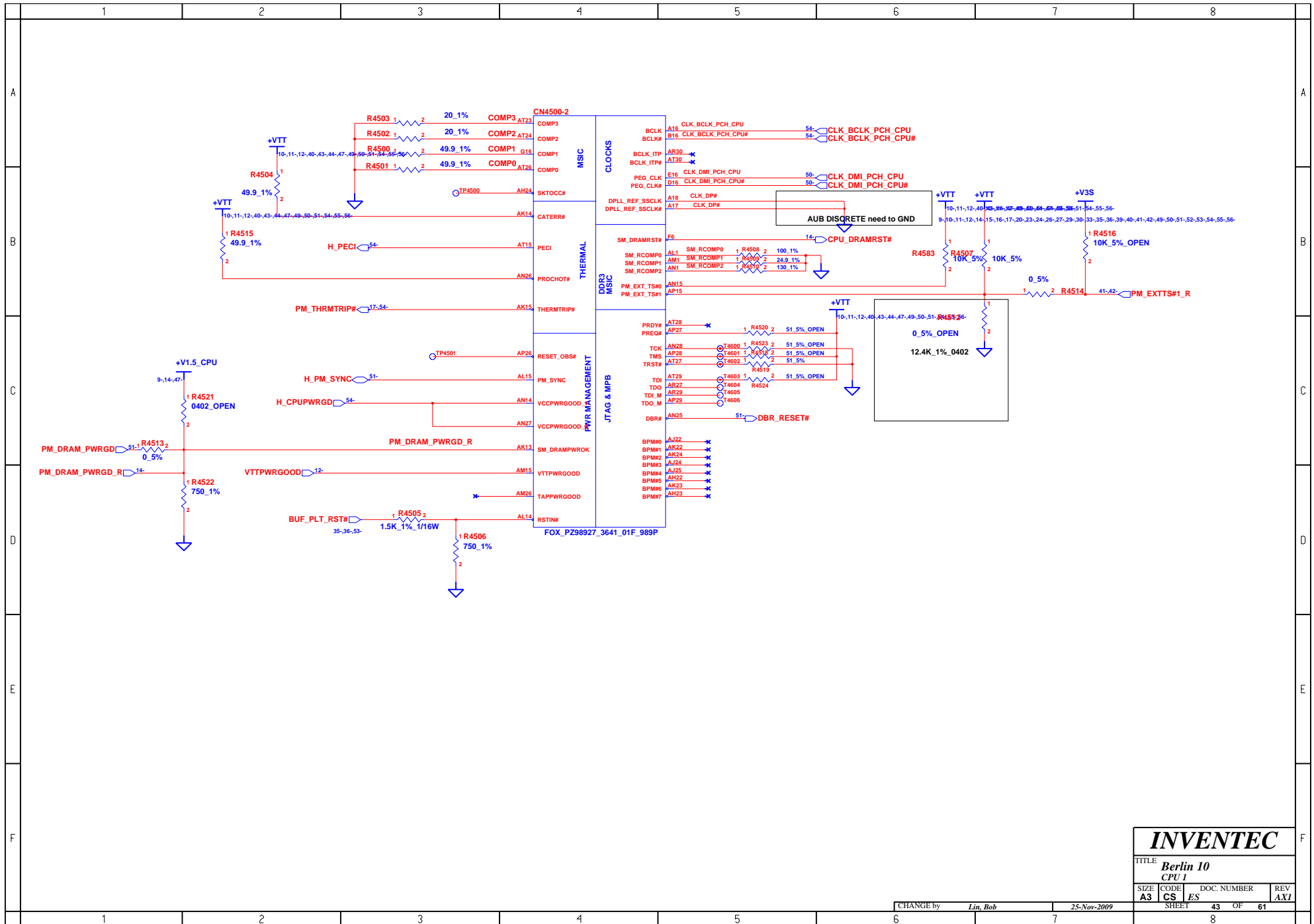








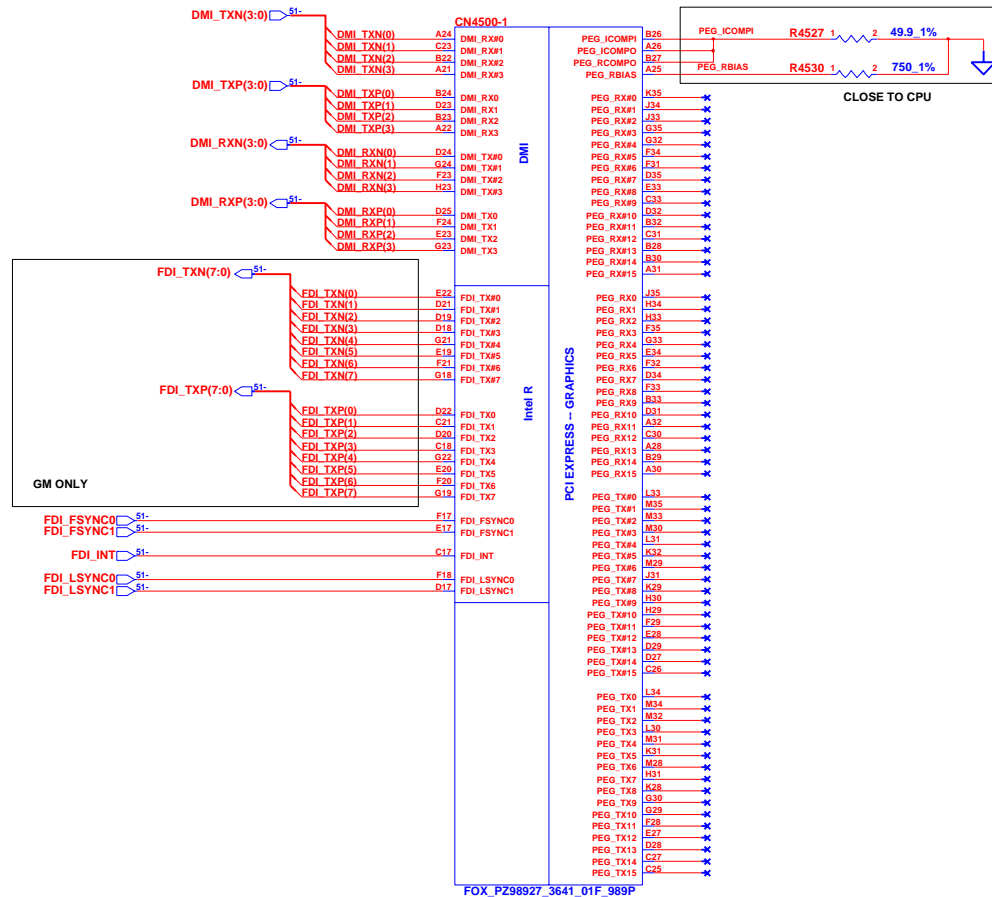




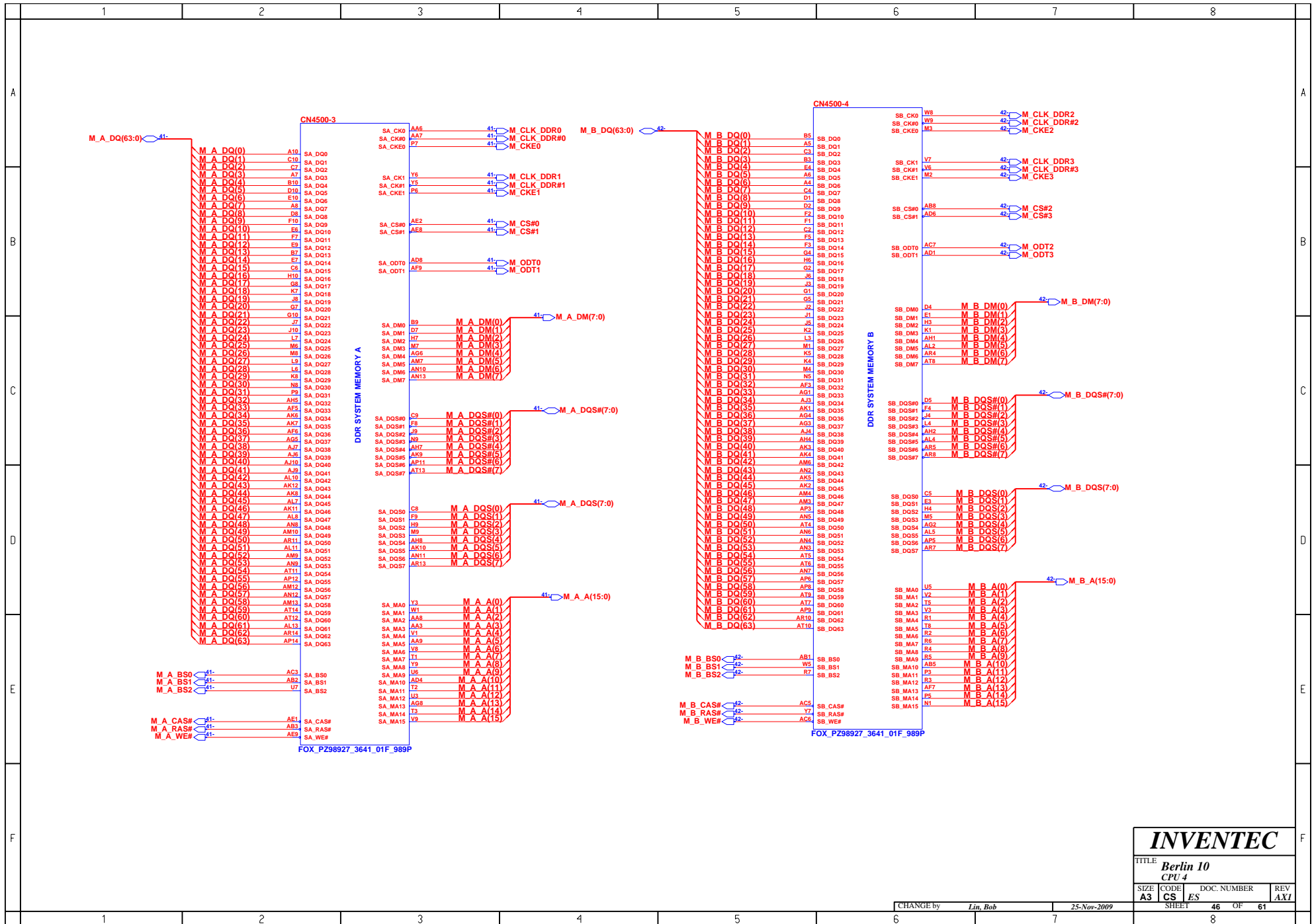
INVENTEC

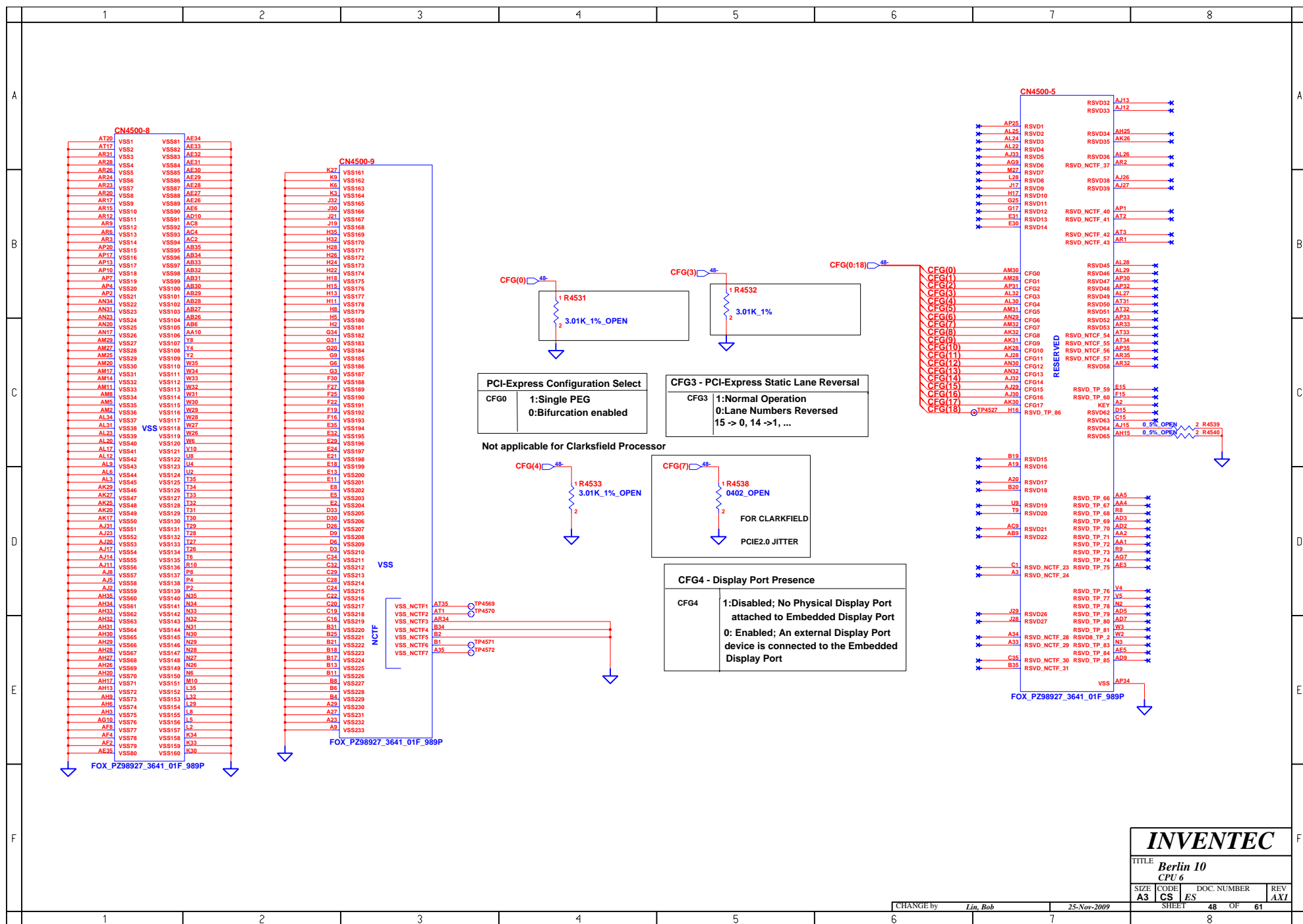
TITLE			
Berlin 10			
CPU 1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	ES	AXI
SHEET		43	OF 61

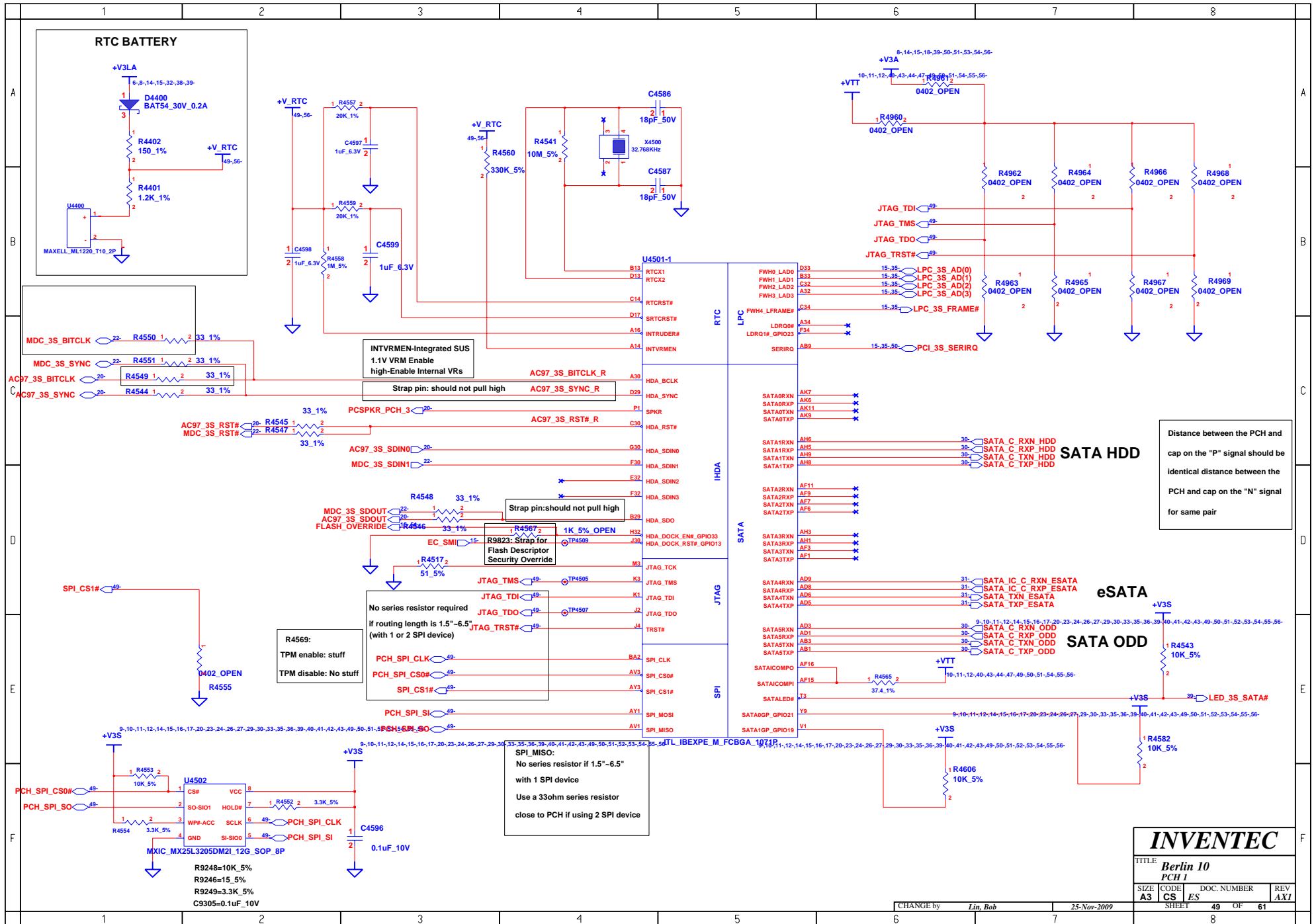
CHANGE by Lin, Bob 25-Nov-2009

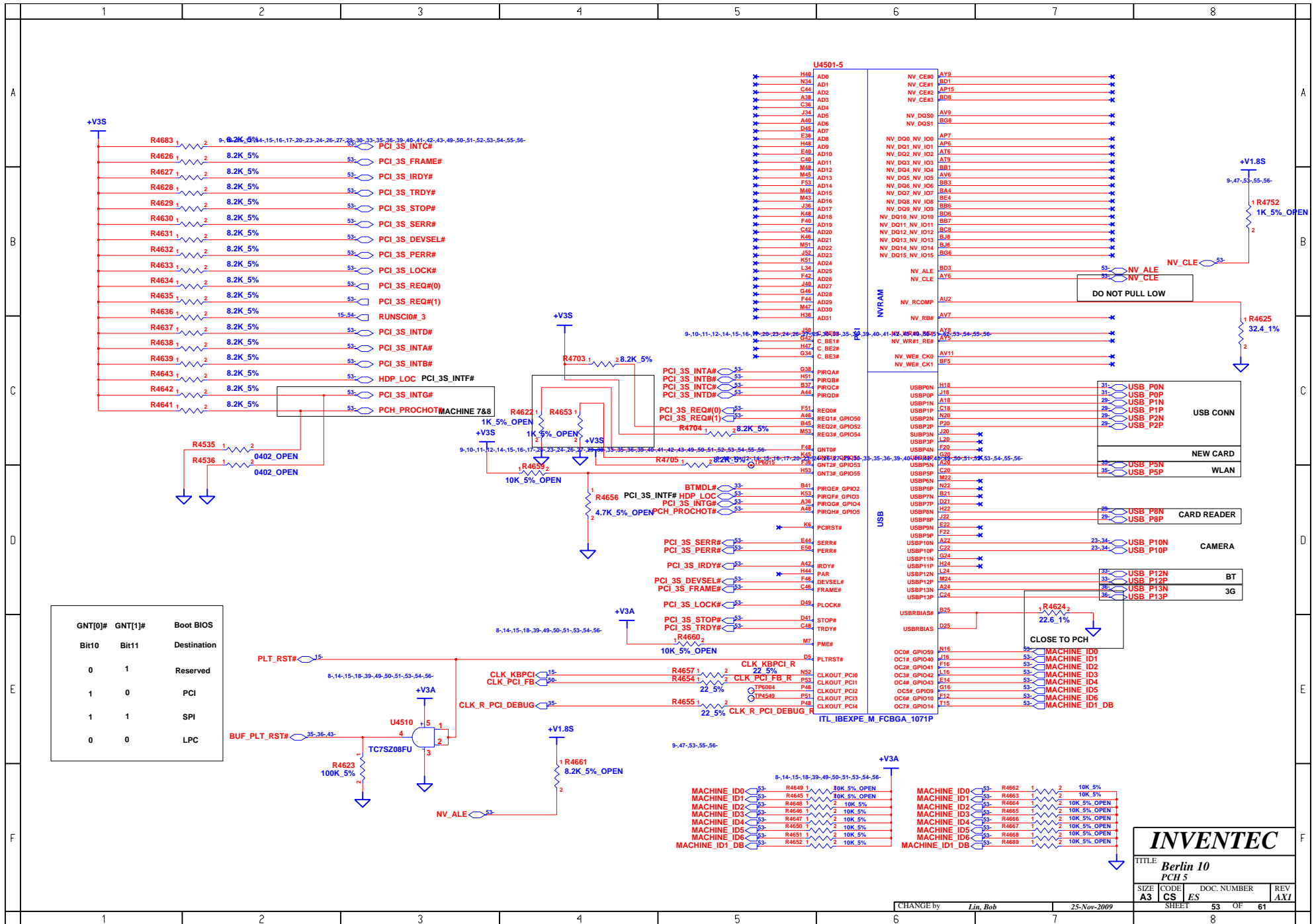


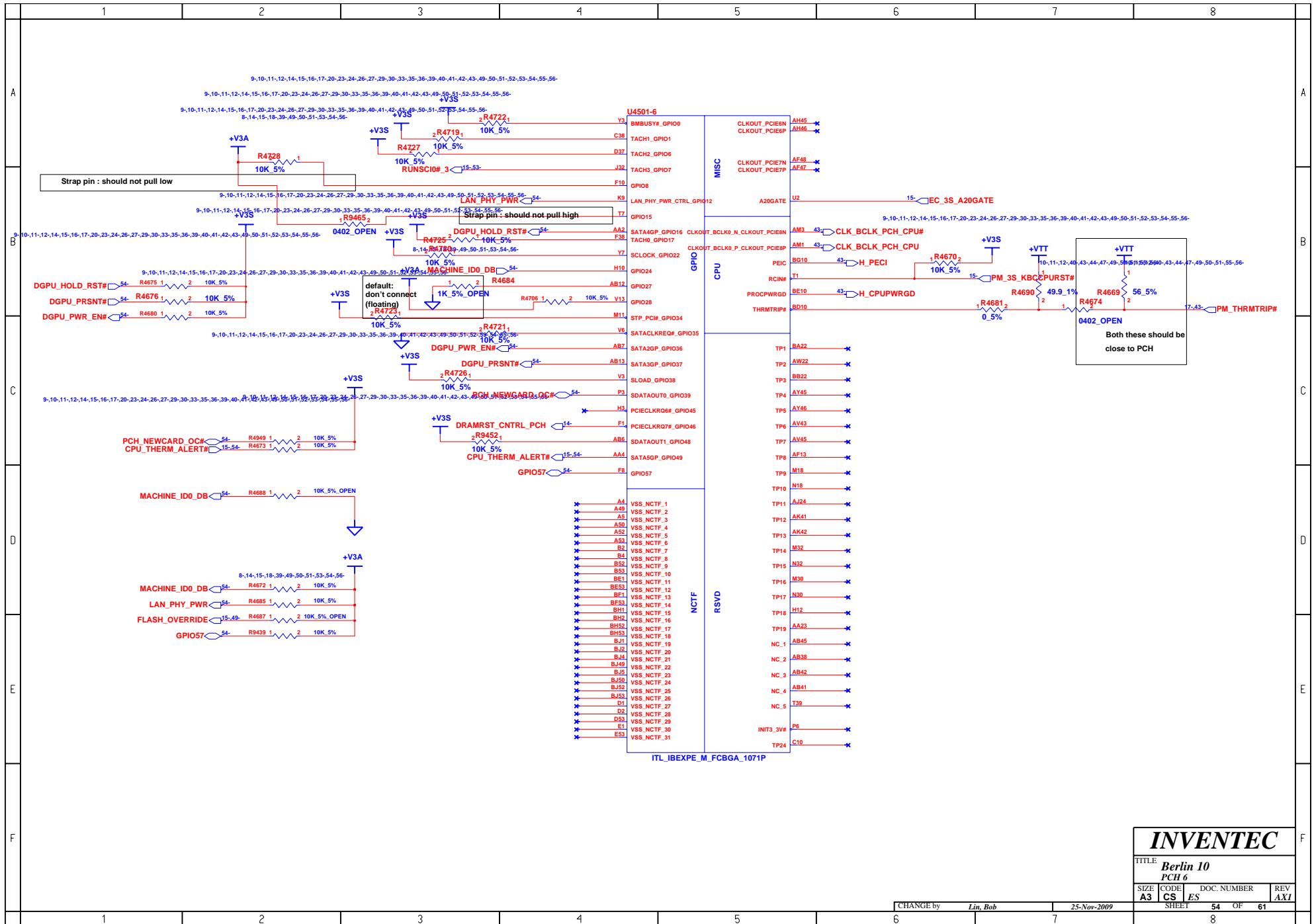
INVENTEC				
TITLE: Berlin 10 CPU 3				
SIZE: A3	CODE: CS	DOC. NUMBER: ES	REV: AXI	
SHEET		45	OF	61

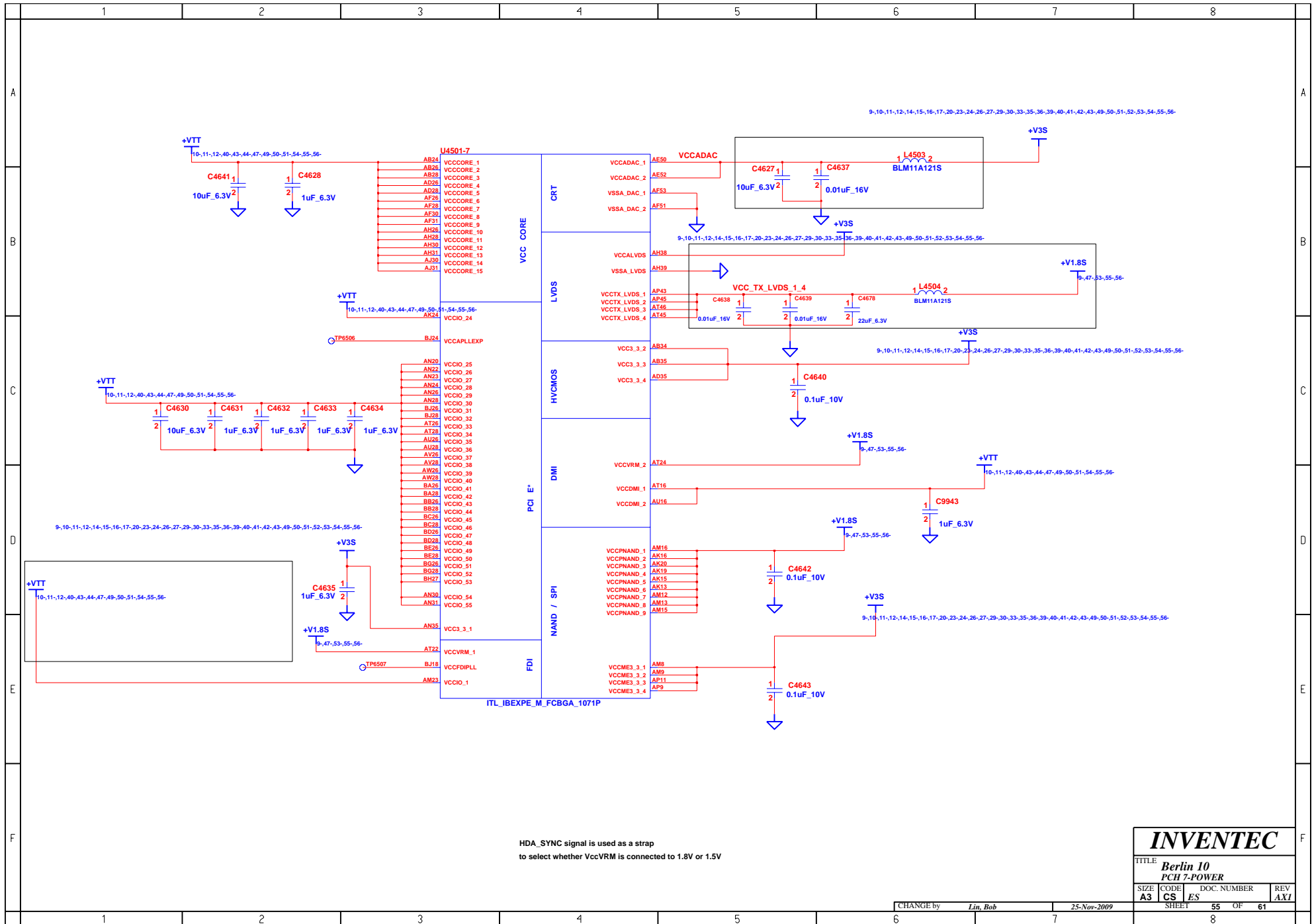


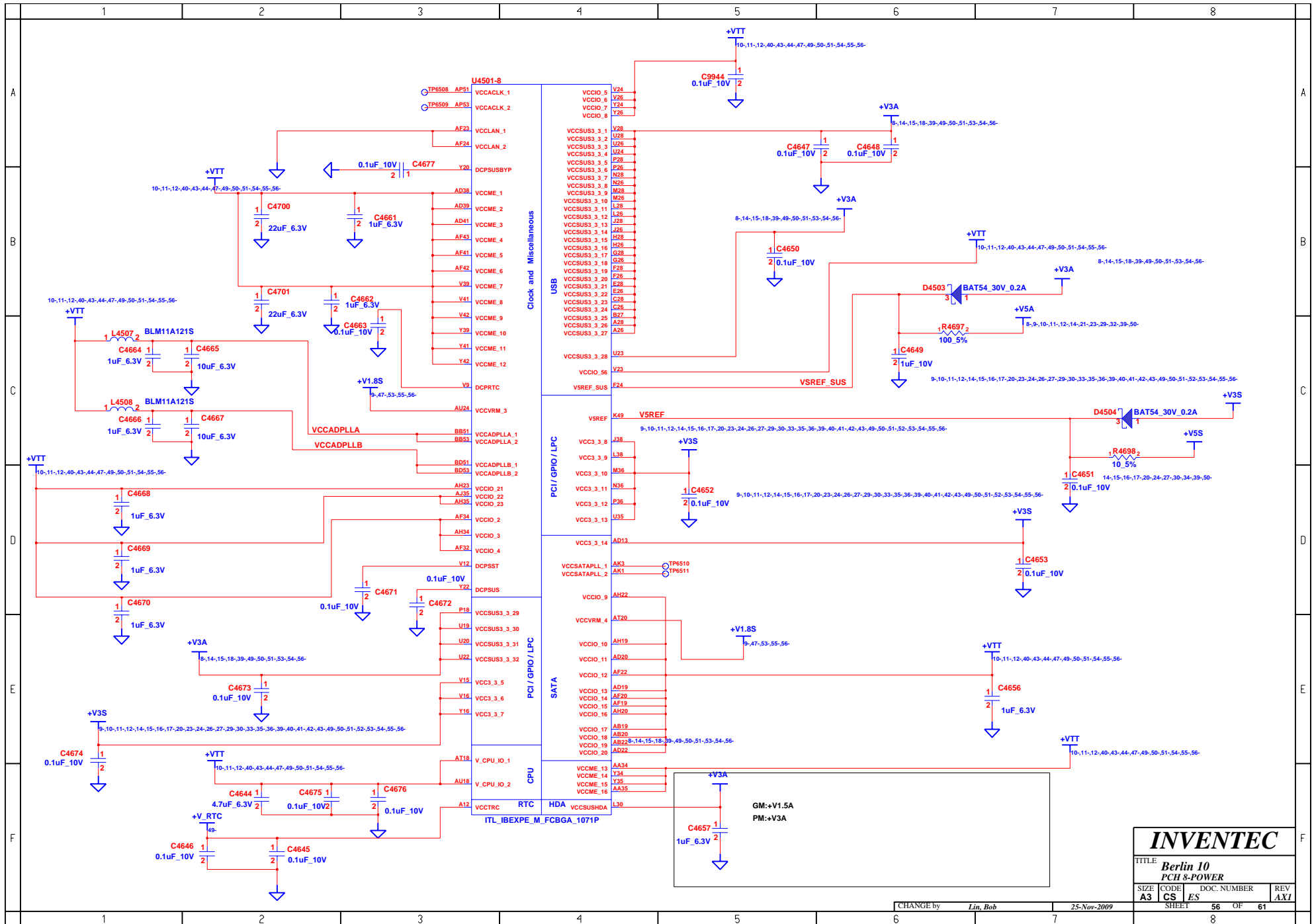












U4501-9

U4501-10

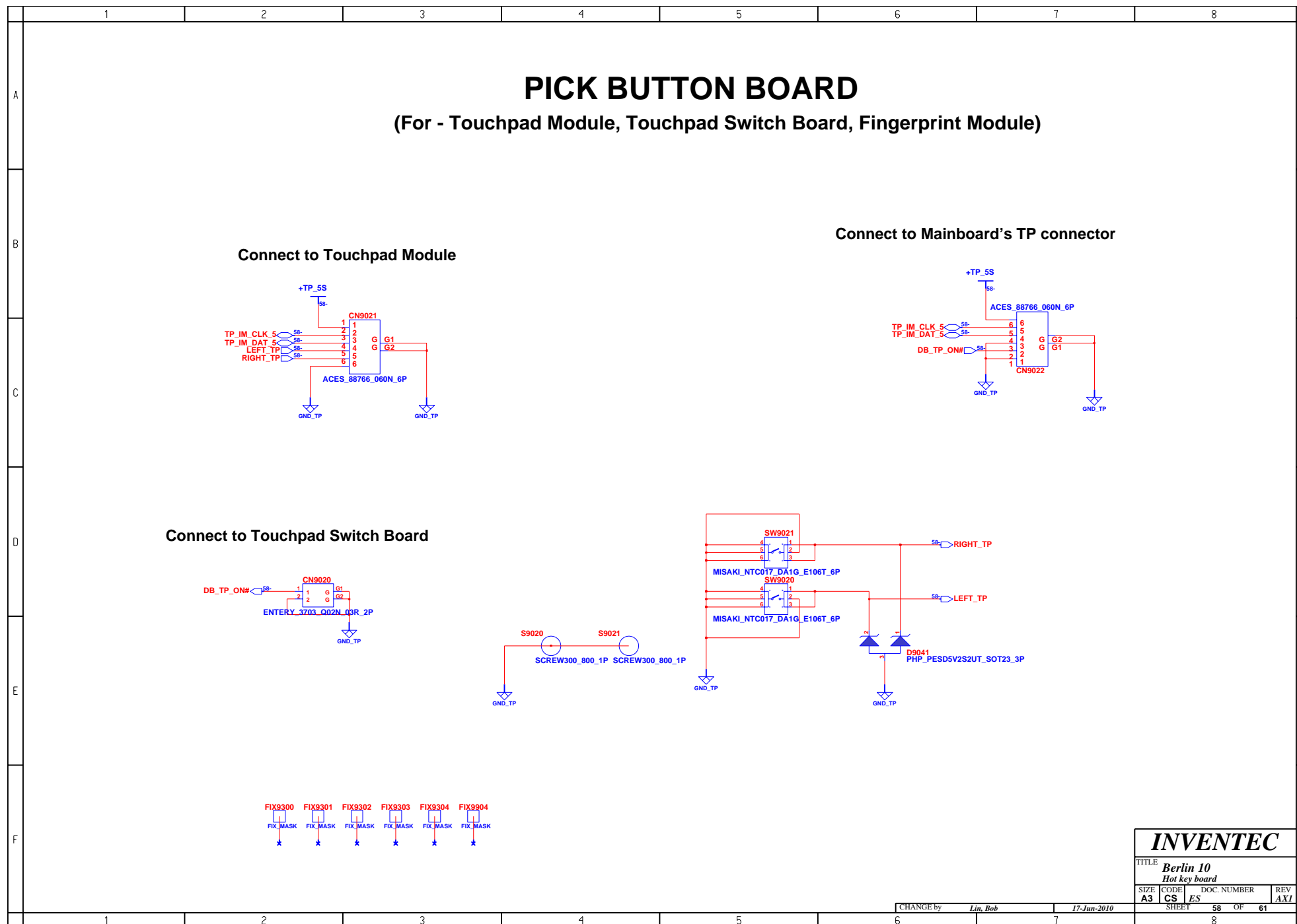
ITL_IBEXPE_M_FCBGA_1071P

ITL_IBEXPE_M_FCBGA_1071P

SIZE	CODE	ES	DOC. NUMBER	REV
A3	CS	ES	25-Nov-2009	AXI

CHANGE by Lin, Bob

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TOUCHPAD SWITCH BOARD

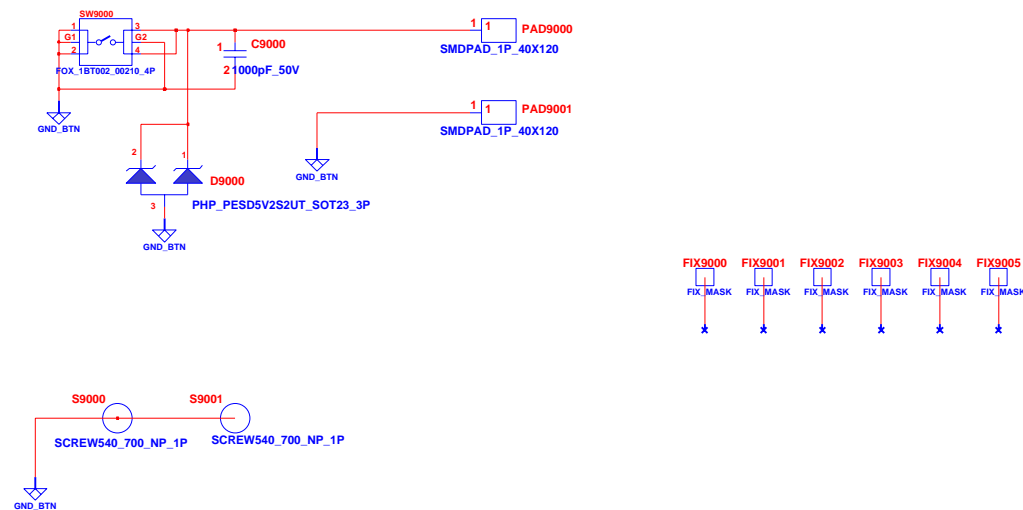
The schematic diagram illustrates the electrical connections for a Touchpad Switch Board. Key components and their connections are as follows:

- SW9040**: A MOSFET switch controlled by **MISAKI_NTC017_DA1G_E106T_6P**. Its drain is connected to the coil of **D9040** (a relay) through resistor **R9040_1** (33.5%).
- D9040**: A relay whose one terminal is connected to the touchpad **PAD9041** and the other to the screw terminal **S9041**.
- PAD9041**: A touchpad component connected to **S9041** and a capacitor **C9040** (0.01uF_16V), which is grounded to **GND_PB**.
- S9041**: A screw terminal connected to the touchpad and the relay.
- S9040**: A screw terminal connected to **GND_PB**.
- PHP_PESD5V2S2UT_SOT23_3P_OPEN**: A 5V source connected to the gate of **SW9040** and the coil of **D9040**.
- FIX9040, FIX9041, FIX9042, FIX9043**: Four fix mask points connected to **GND_PB**.

INVENTEC			
TITLE			
Berlin 10			
Touch pad			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	ES	AX1
CHANGE by		SHEET	
Lin, Bob		59 OF 61	
17-Jun-2010		8	

TITLE <i>Berlin 10</i> <i>Touch pad</i>			
SIZE A3	CODE CS	DOC. NUMBER ES	REV. AX
SHEET 59 OF 61			

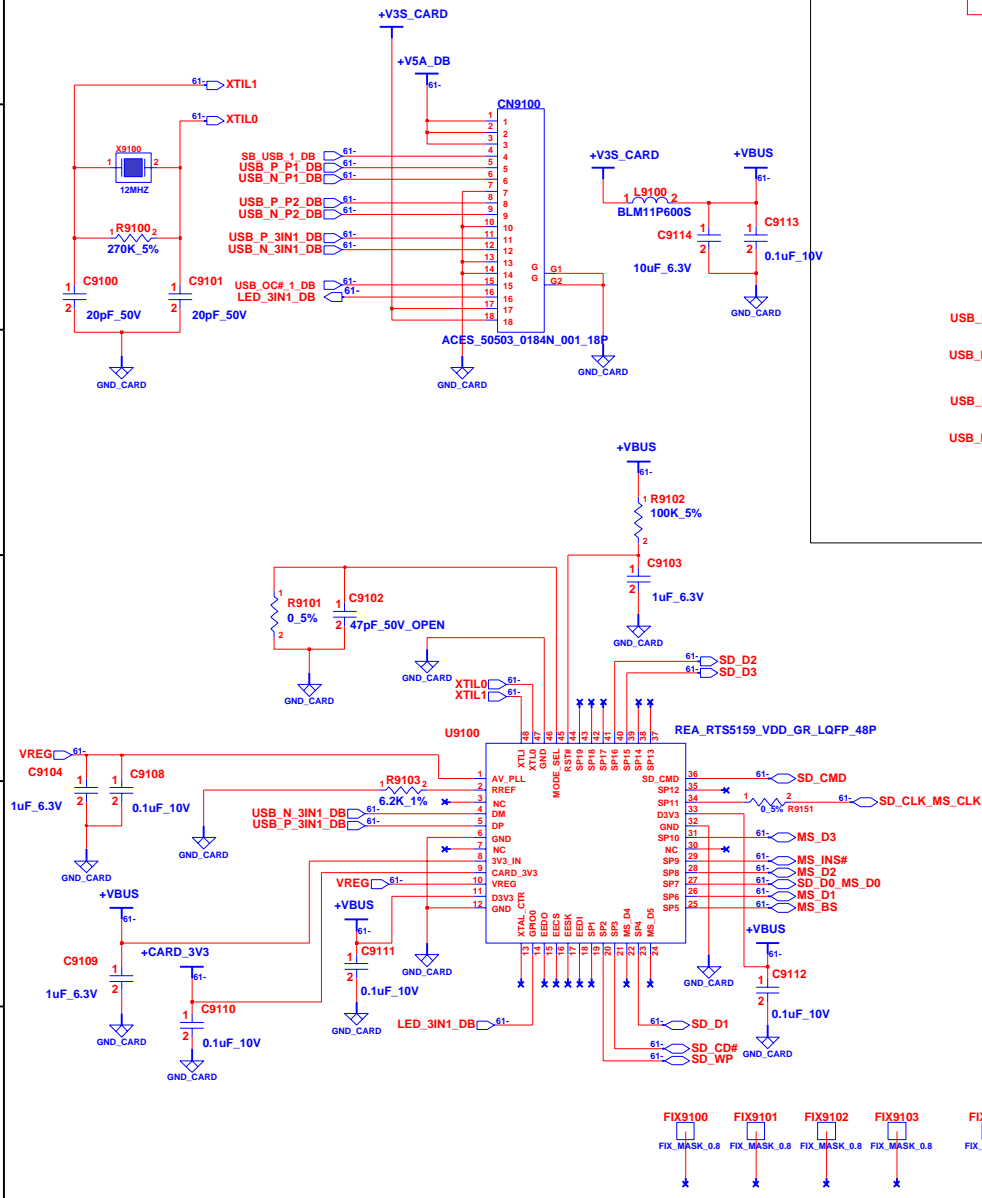
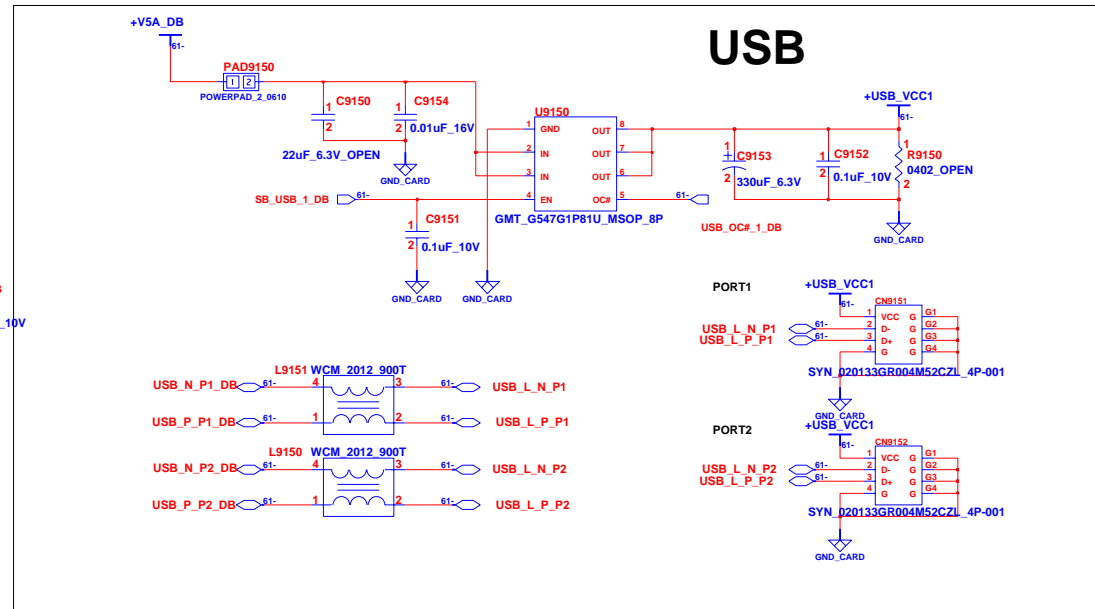
POWER BUTTON



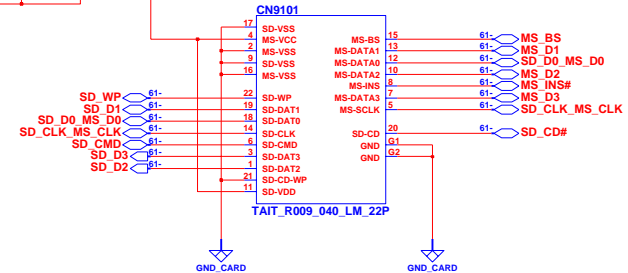
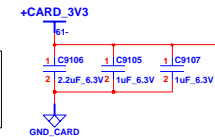
EMI

INVENTEC			
TITLE: Berlin 10 EMI			
SIZE: A3	CODE: CS	DOC. NUMBER: ES	REV: AXI
SHEET: 60		OF: 61	

CARD READER & USB BOARD



Close to CN



INVENTEC

TITLE
Berlin 10

SIZE	CODE	ES	DOC. NUMBER	REV
A3	CS	ES		AXI

CHANGE by Lin, Bob 25-Nov-2009

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