

Minneapolis 10

Pre-MP BUILD

2008.0826

INVENTEC

TITLE  
Minneapolis 10  
Cover

SIZE A3	CODE CS	DOC. NUMBER 1310A2218301	REV X01
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CHANGE by 26-Aug-2008

SHEET 1 OF 60

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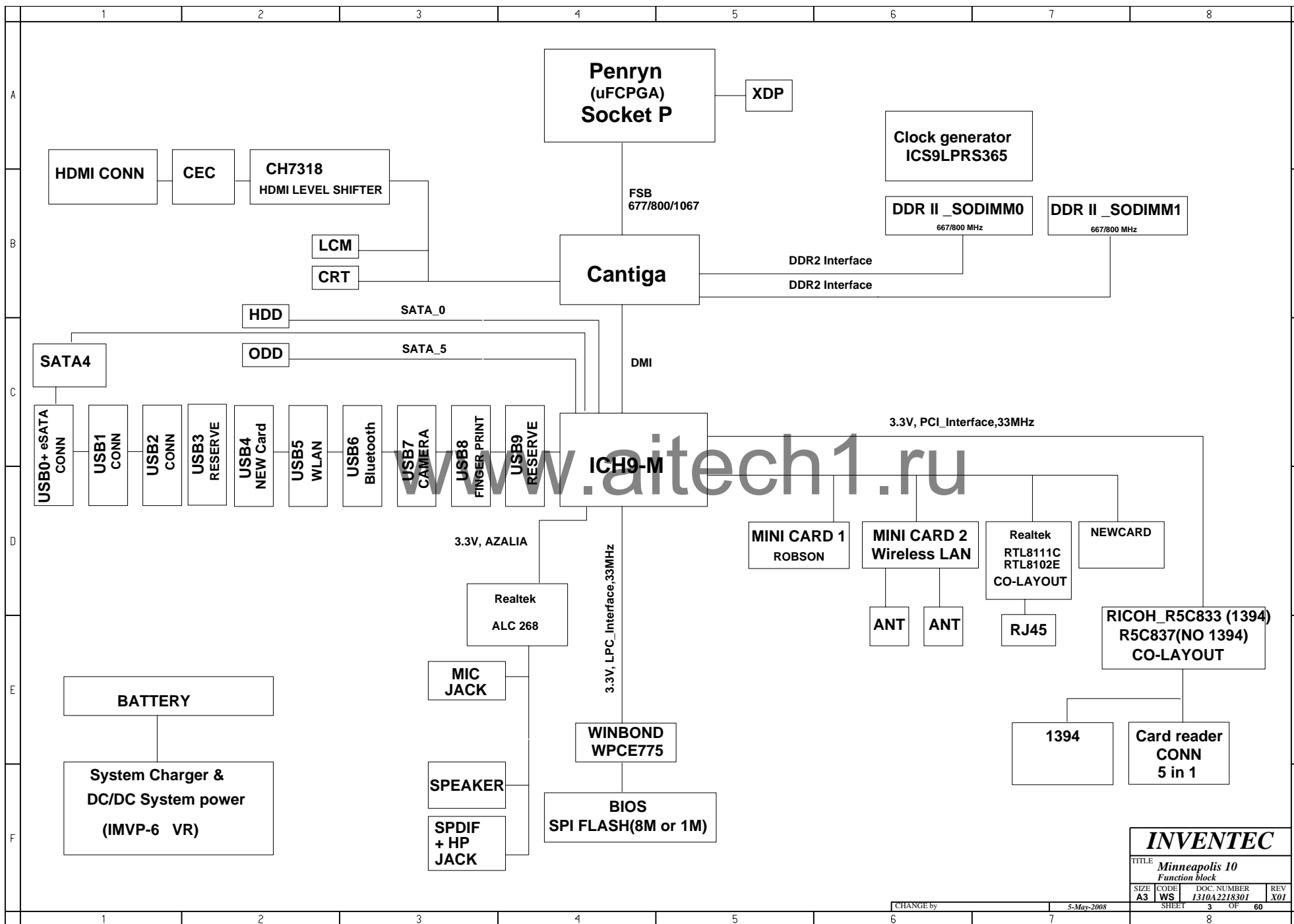
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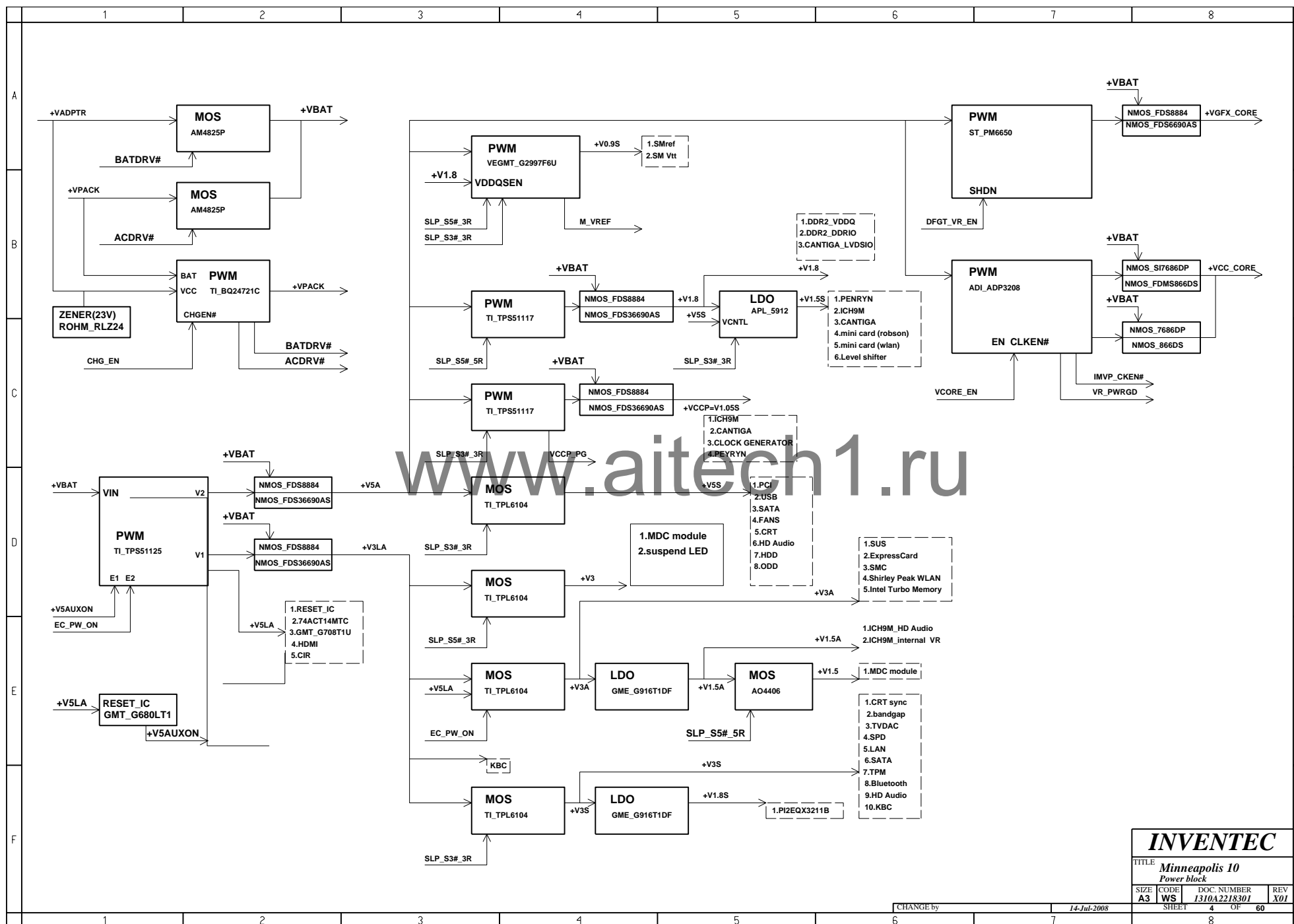
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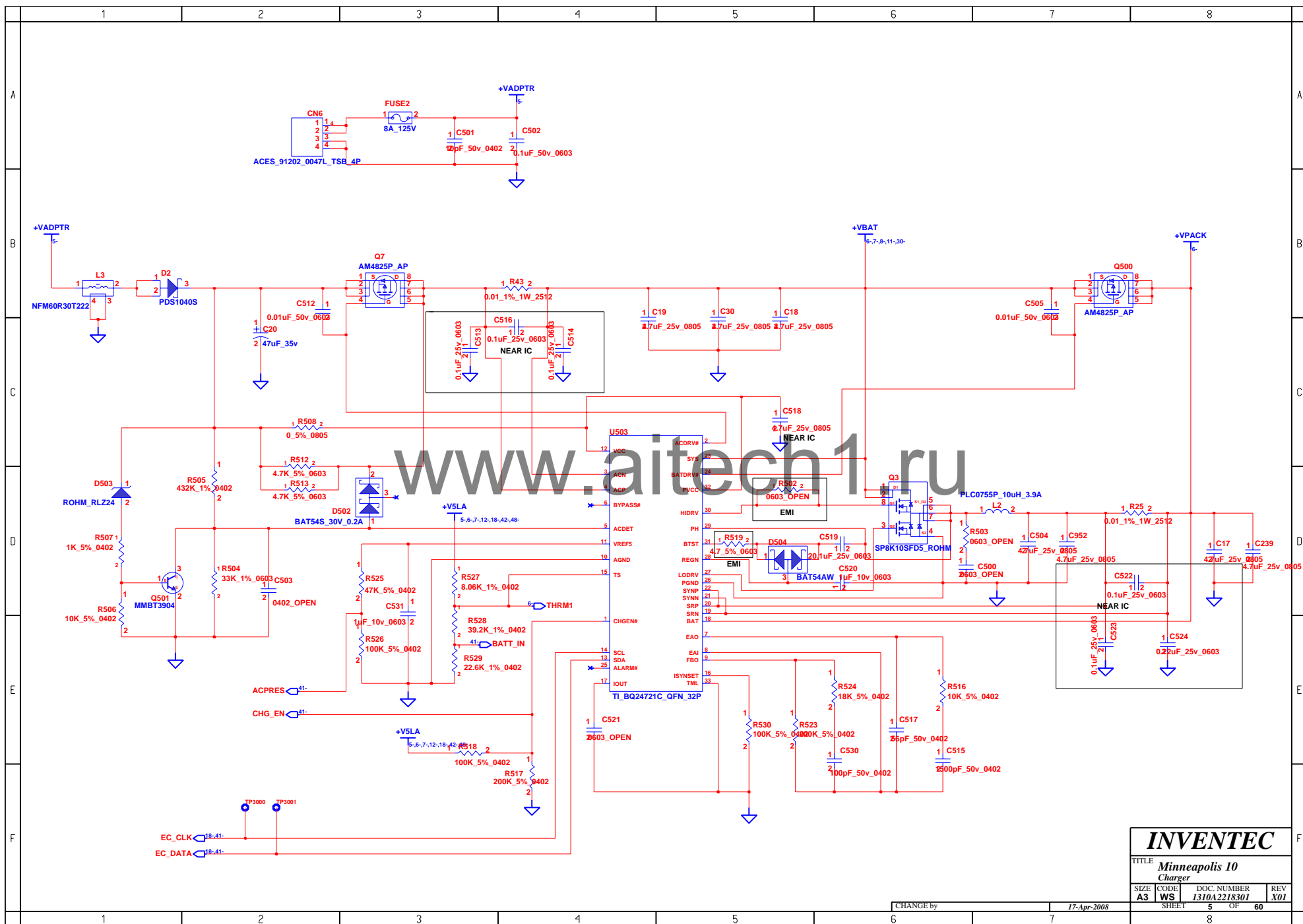
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SIZE <b>A3</b>	CODE <b>WS</b>	DOC. NUMBER <i>1310A2218301</i>	REV <b>X01</b>
SHEET <b>2</b>		OF <b>60</b>	

CHANGE by 17-Apr-2008

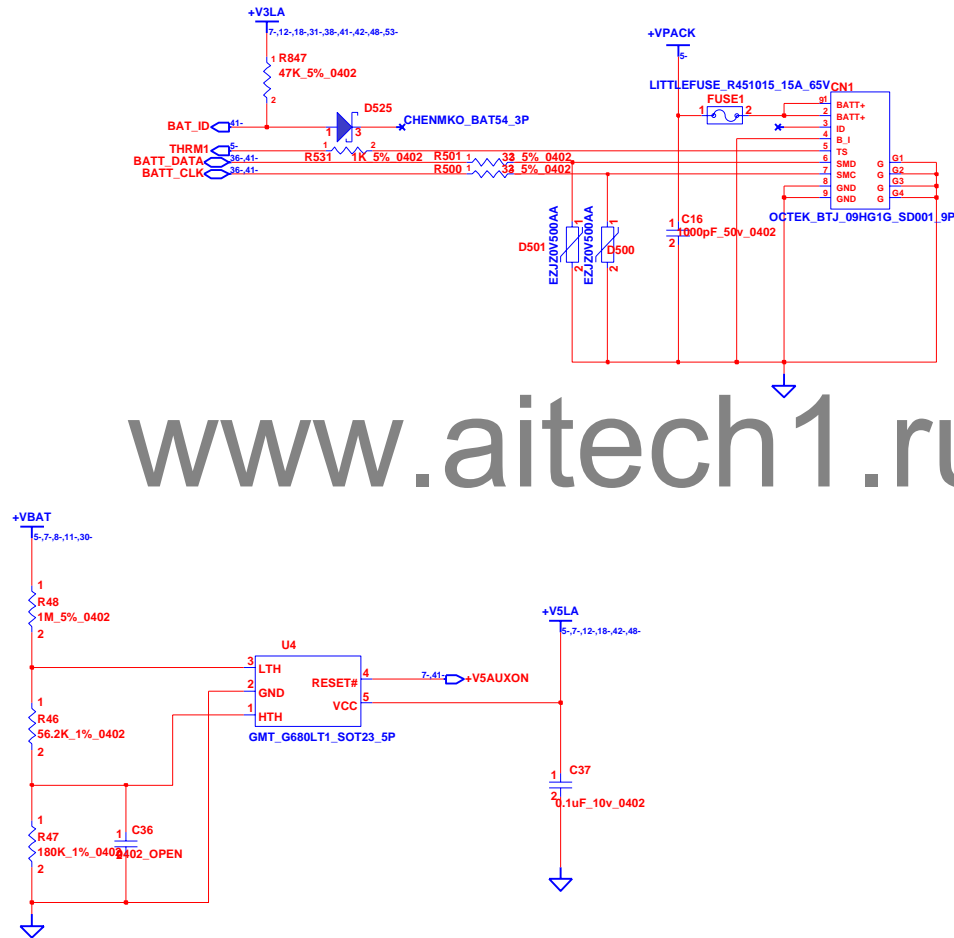


INVENTEC			
TITLE: <b>Minneapolis 10</b> Function block			
SIZE <b>A3</b>	CODE <b>WS</b>	DOC. NUMBER <b>1310A2218301</b>	REV <b>X01</b>
CHANGE by		5-May-2008	
SHEET		3	OF 60

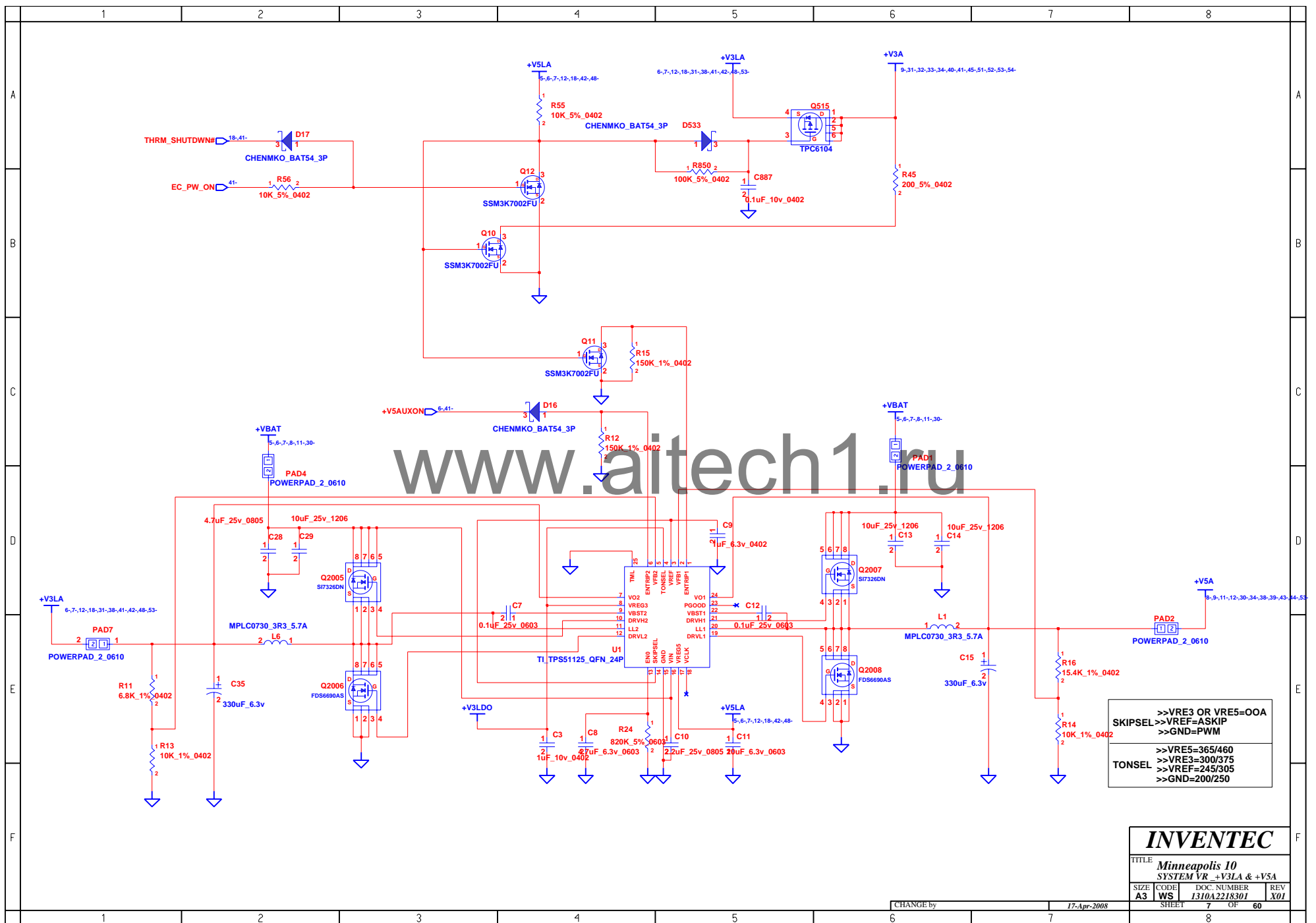




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INVENTEC			
TITLE: Minneapolis 10 BATTERY & RESET CIRCUIT			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A2218301	REV: X01
CHANGE by		17-Apr-2008	
SHEET: 6		OF: 60	



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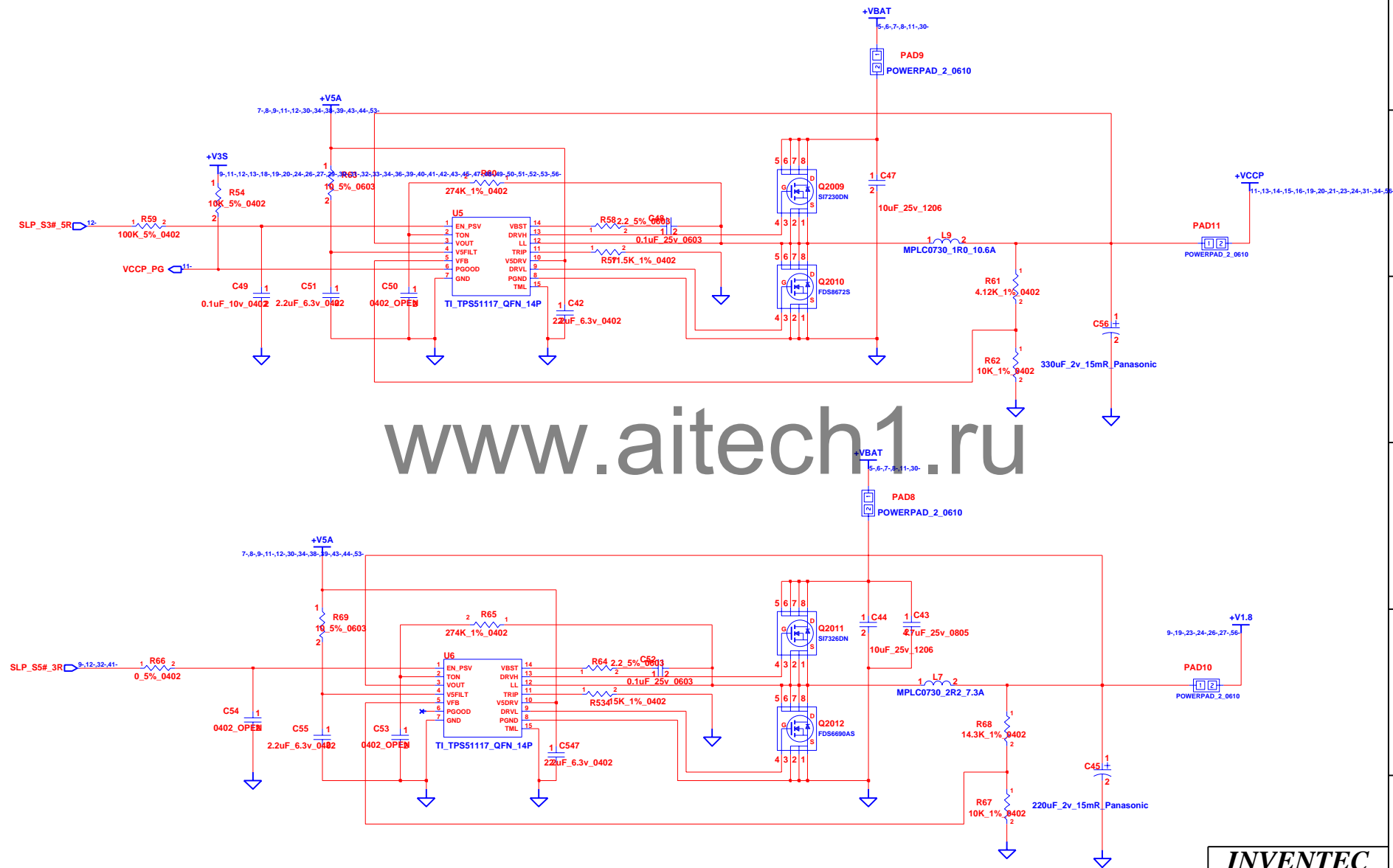
**INVENTEC**

TITLE  
**Minneapolis 10**  
VR(VCCP & +V1.8)

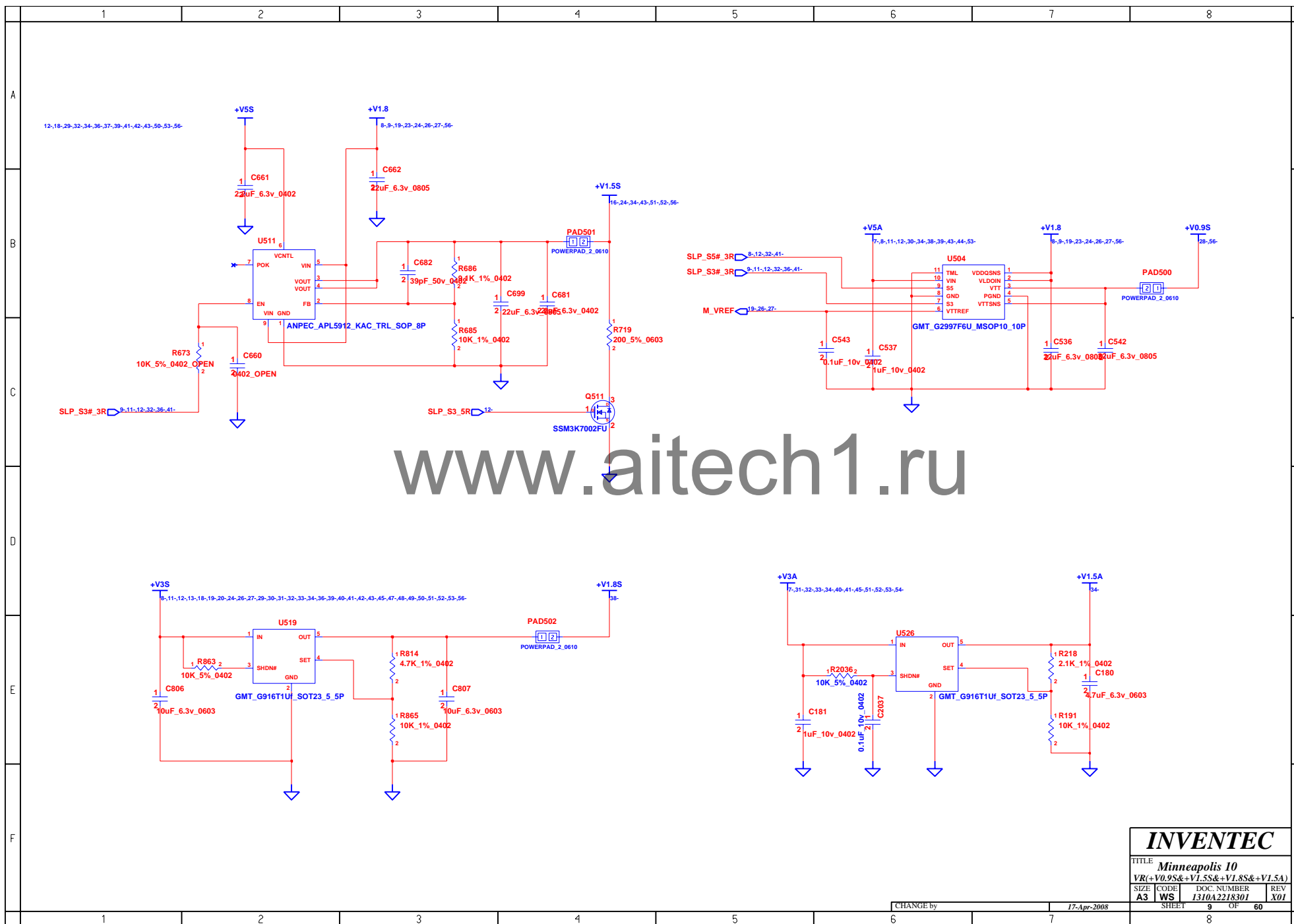
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CHANGE by 17-Apr-2008

SHEET 8 OF 60







**INVENTEC**

TITLE			
Minneapolis 10			
VR(+V0.9S&+V1.5S&+V1.8S&+V1.5A)			
SIZE	CODE	DOC. NUMBER	REV
A3	WS	1310A2218301	X01

CHANGE by 17-Apr-2008

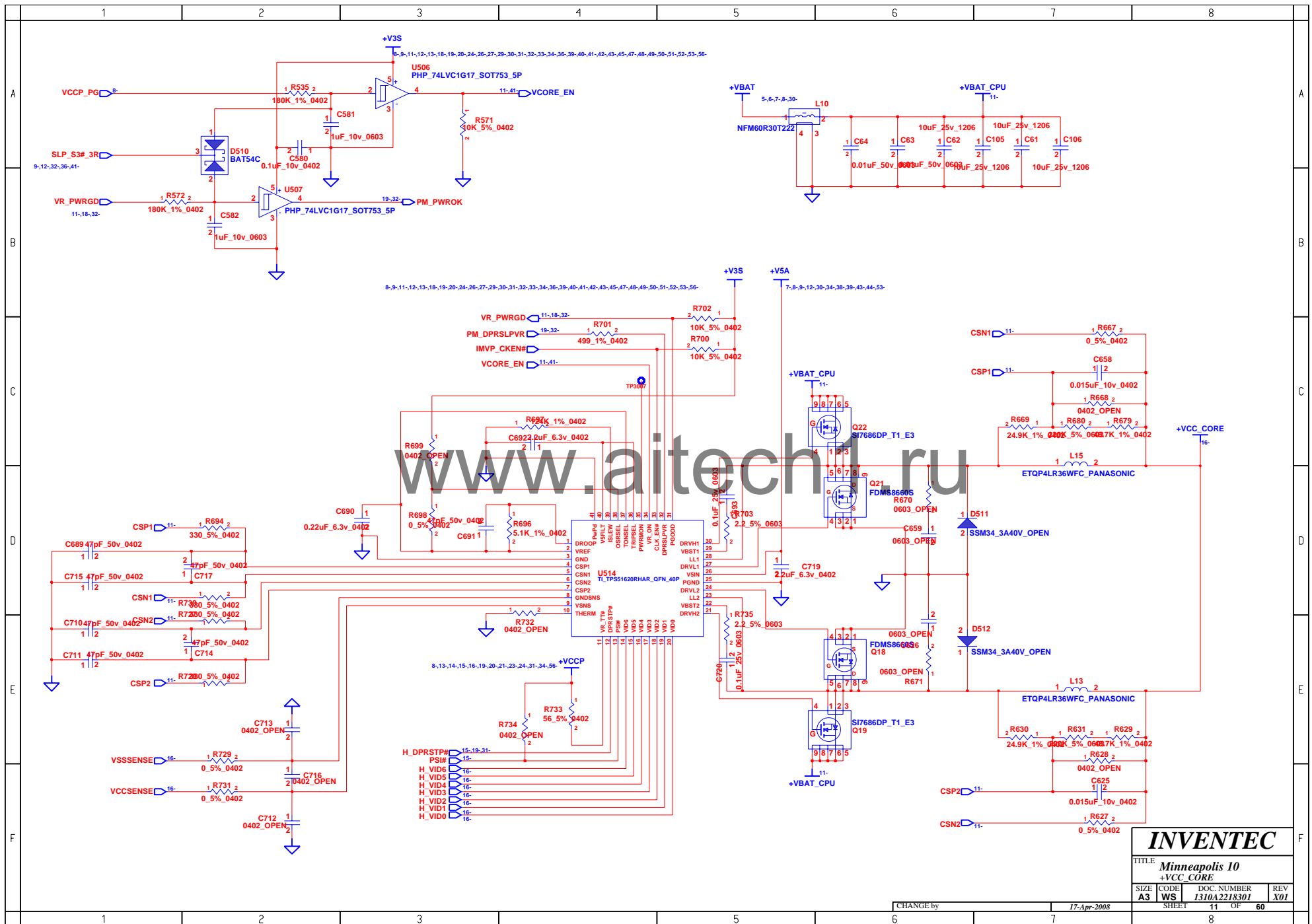
SHEET 9 OF 60

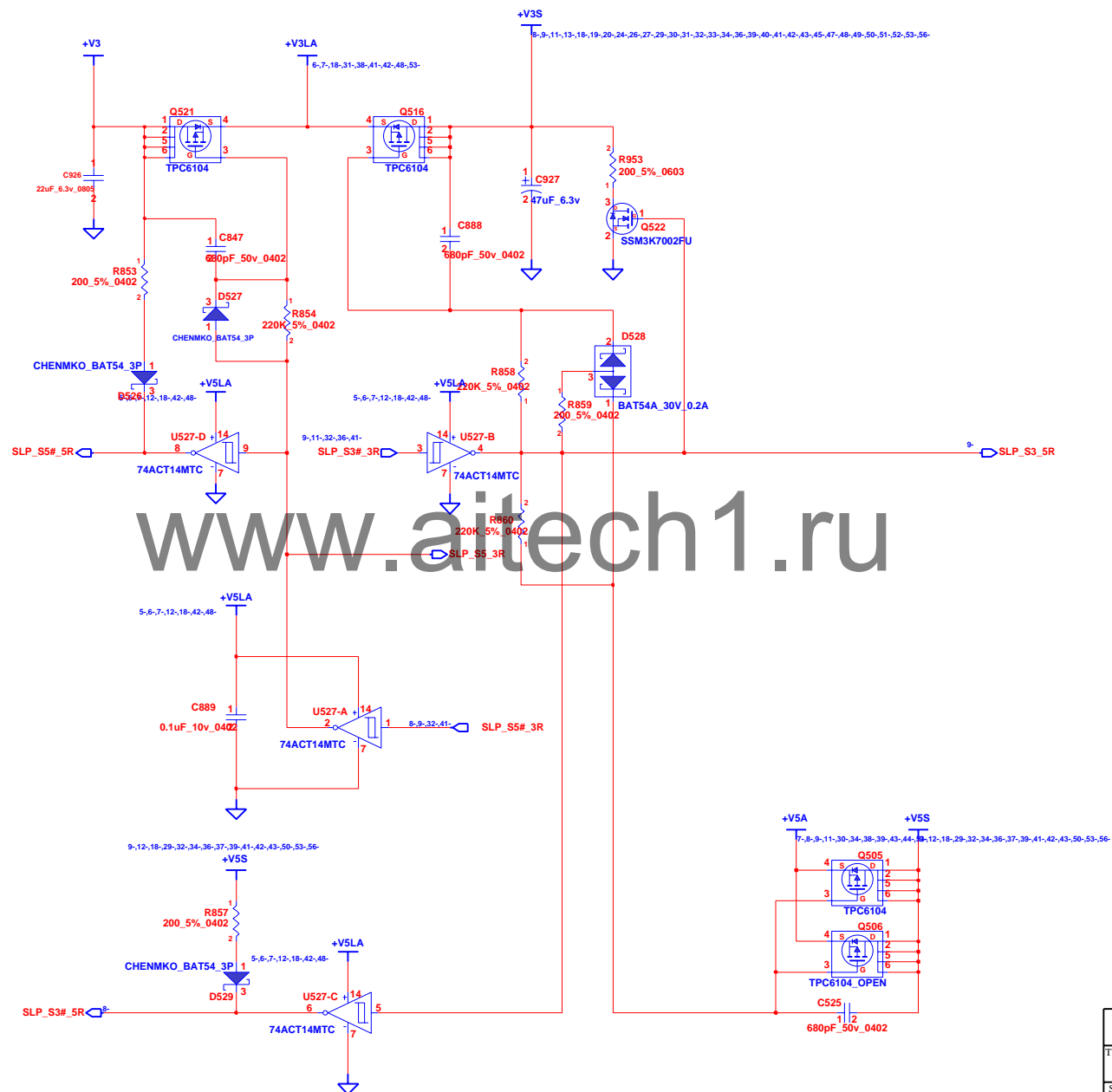
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A									A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

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<b>INVENTEC</b>			
TITLE <b>Minneapolis 10</b> <b>+VGFX_CORE</b>			
SIZE	CODE	DOC. NUMBER	REV
<b>A3</b>	<b>WS</b>	<b>1310A2218301</b>	<b>X01</b>
SHEET		10	OF 60

CHANGE by 10-Jun-2008





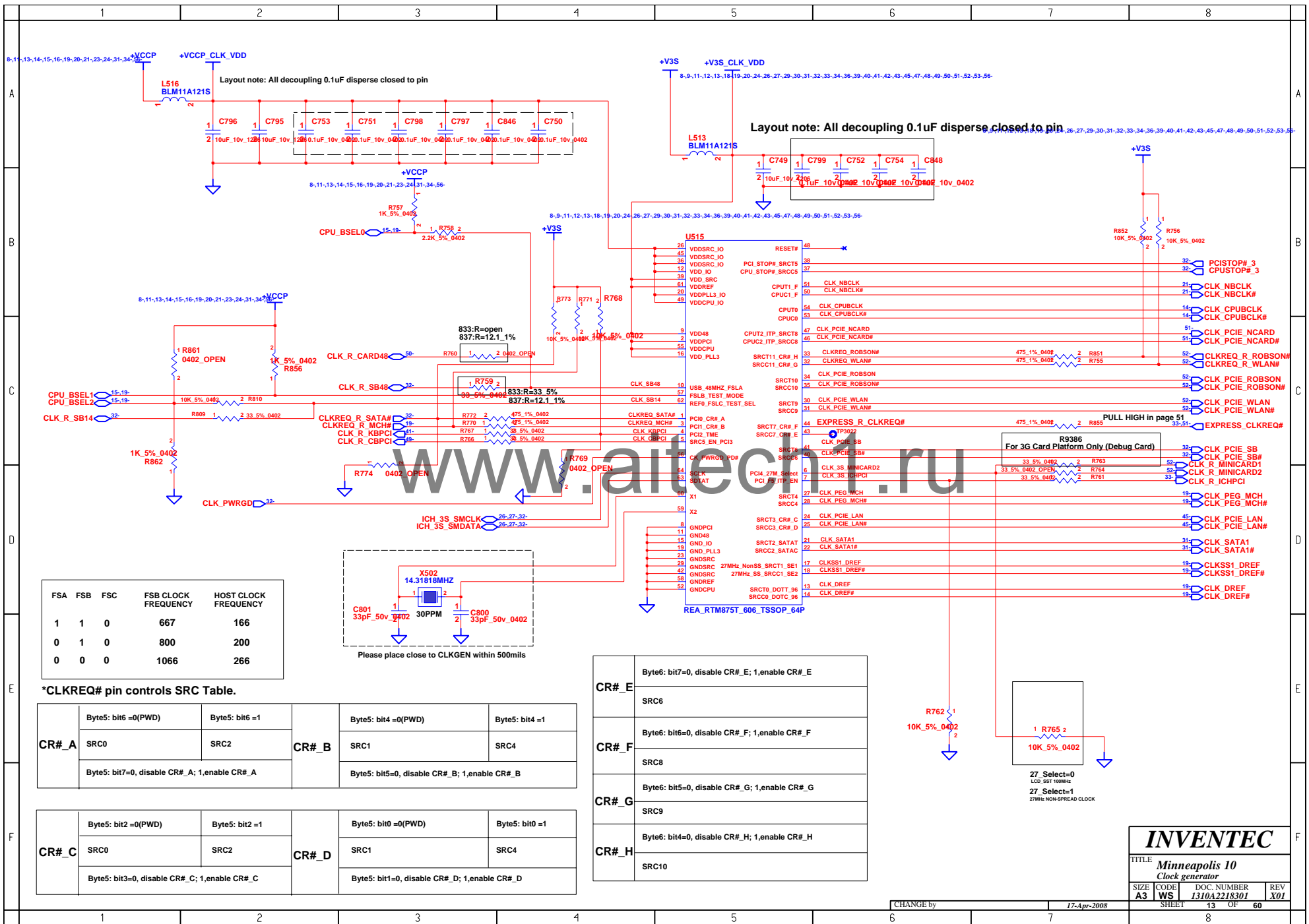
**INVENTEC**

TITLE  
**Minneapolis 10**  
Power control logic

SIZE <b>A3</b>	CODE <b>WS</b>	DOC. NUMBER <b>I310A2218301</b>	REV <b>X01</b>
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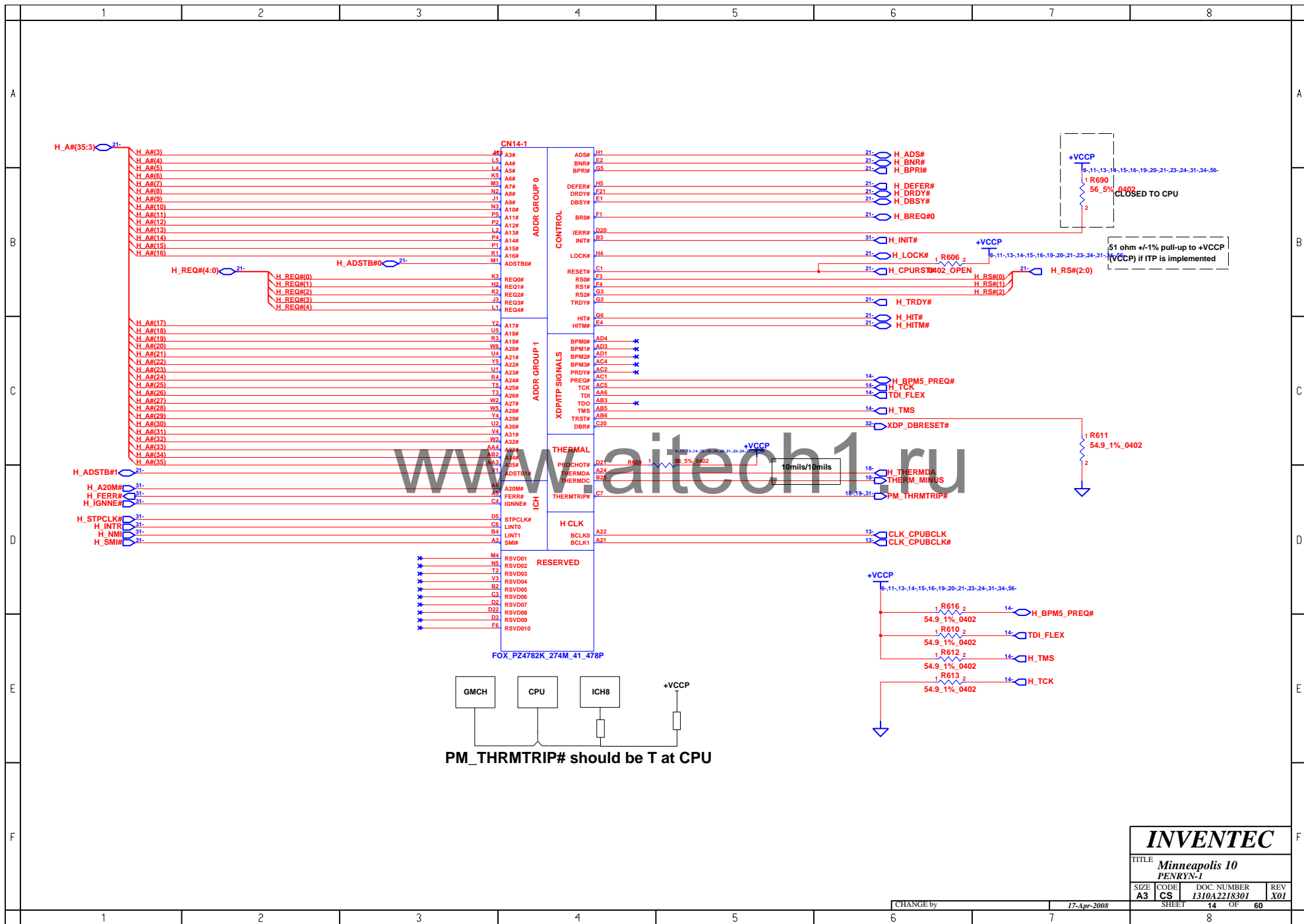
CHANGE by 17-Apr-2008

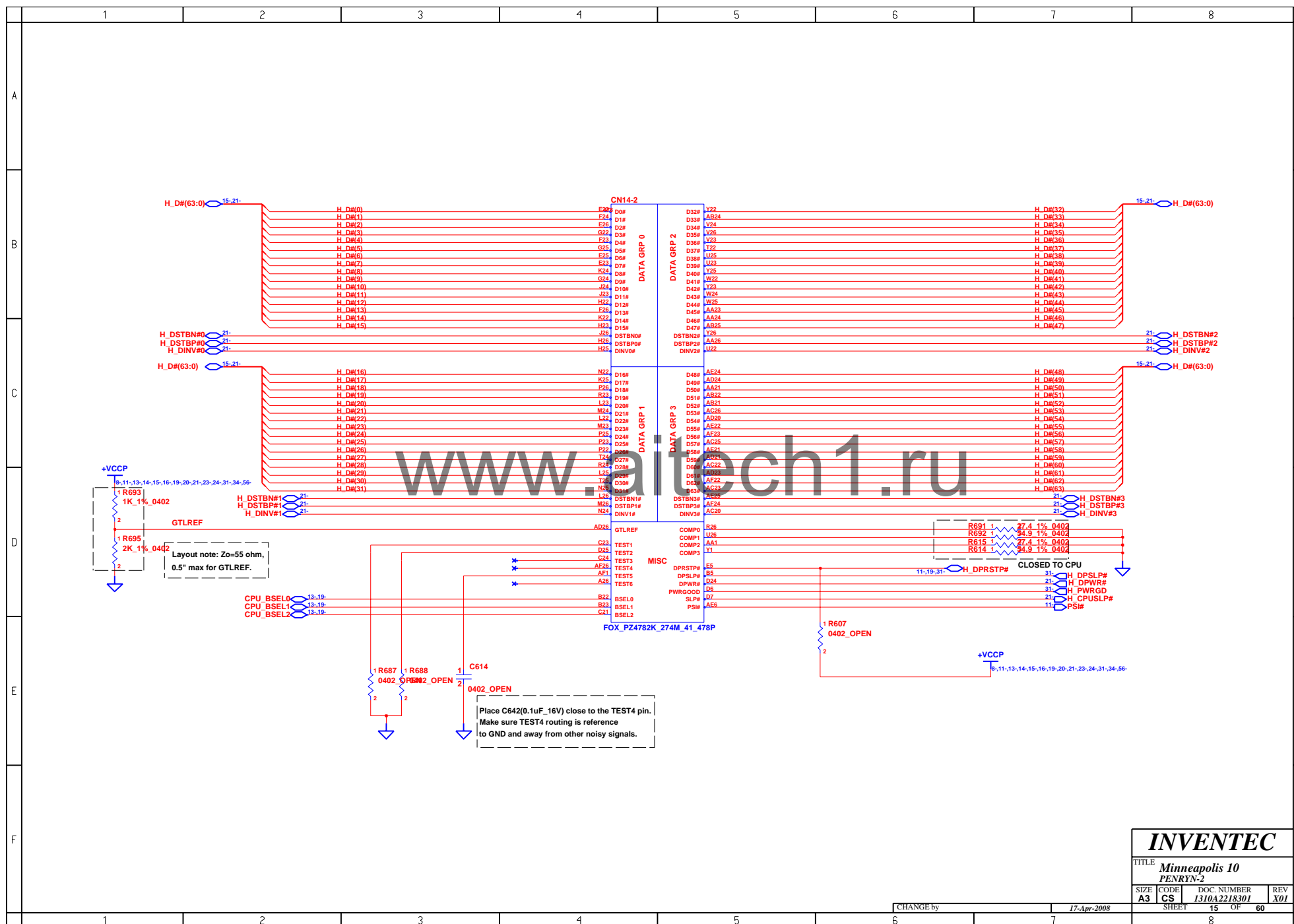
SHEET 12 OF 60

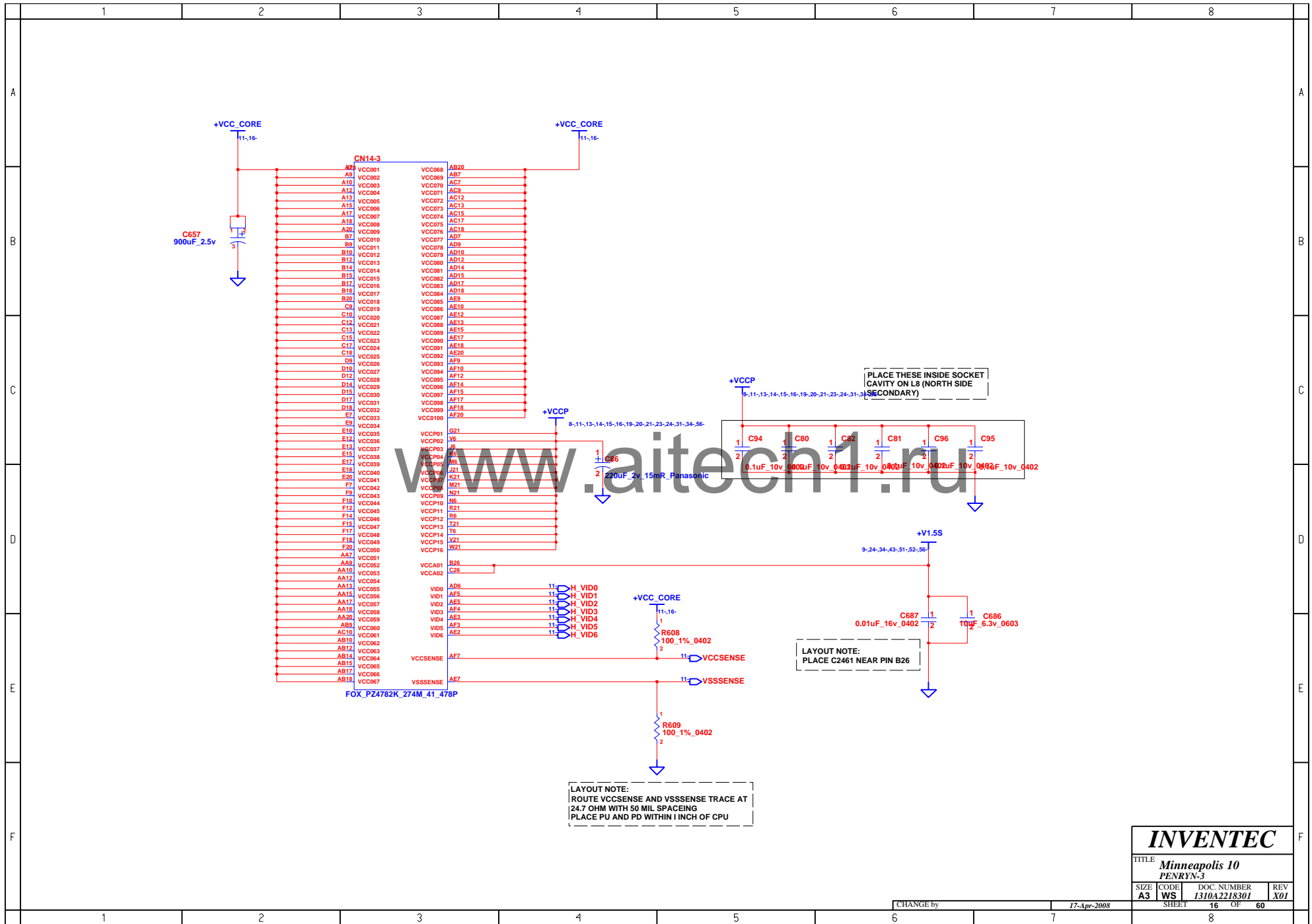


INVENTEC

TITLE Minneapolis 10 Clock generator			
SIZE A3	CODE WS	DOC. NUMBER 1310A2218301	REV X01
SHEET 13		OF 60	









	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	



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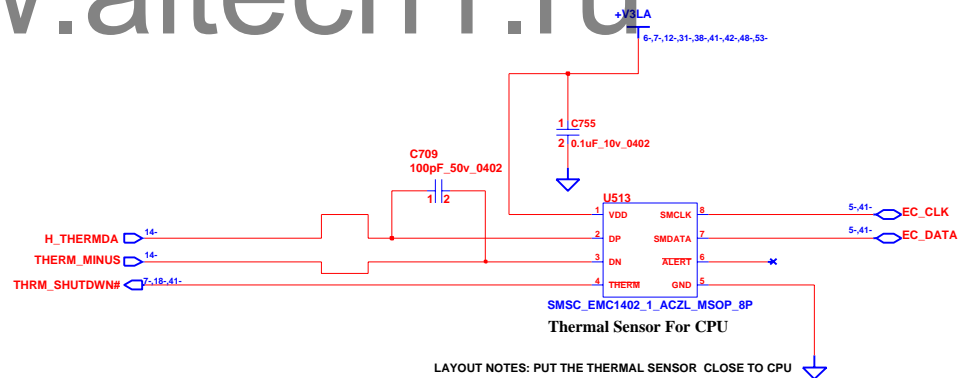
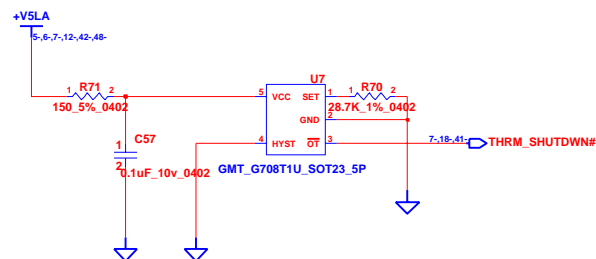
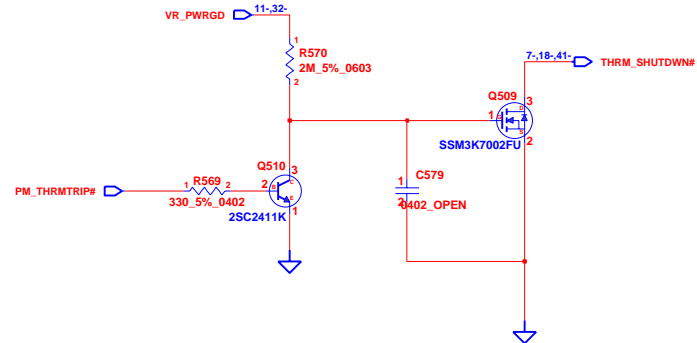
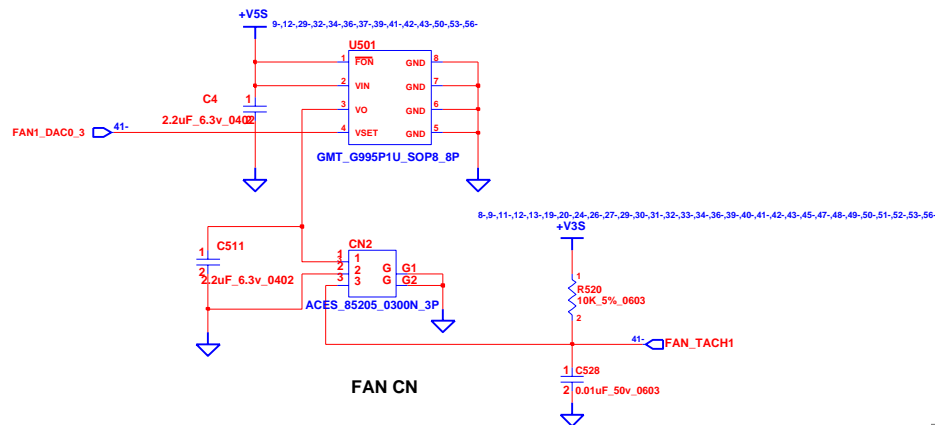
**INVENTEC**

TITLE  
**Minneapolis 10**  
**PENRYN-4**

SIZE <b>A3</b>	CODE <b>WS</b>	DOC. NUMBER <b>1310A2218301</b>	REV <b>X01</b>
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CHANGE by 17-Apr-2008

SHEET 17 OF 60



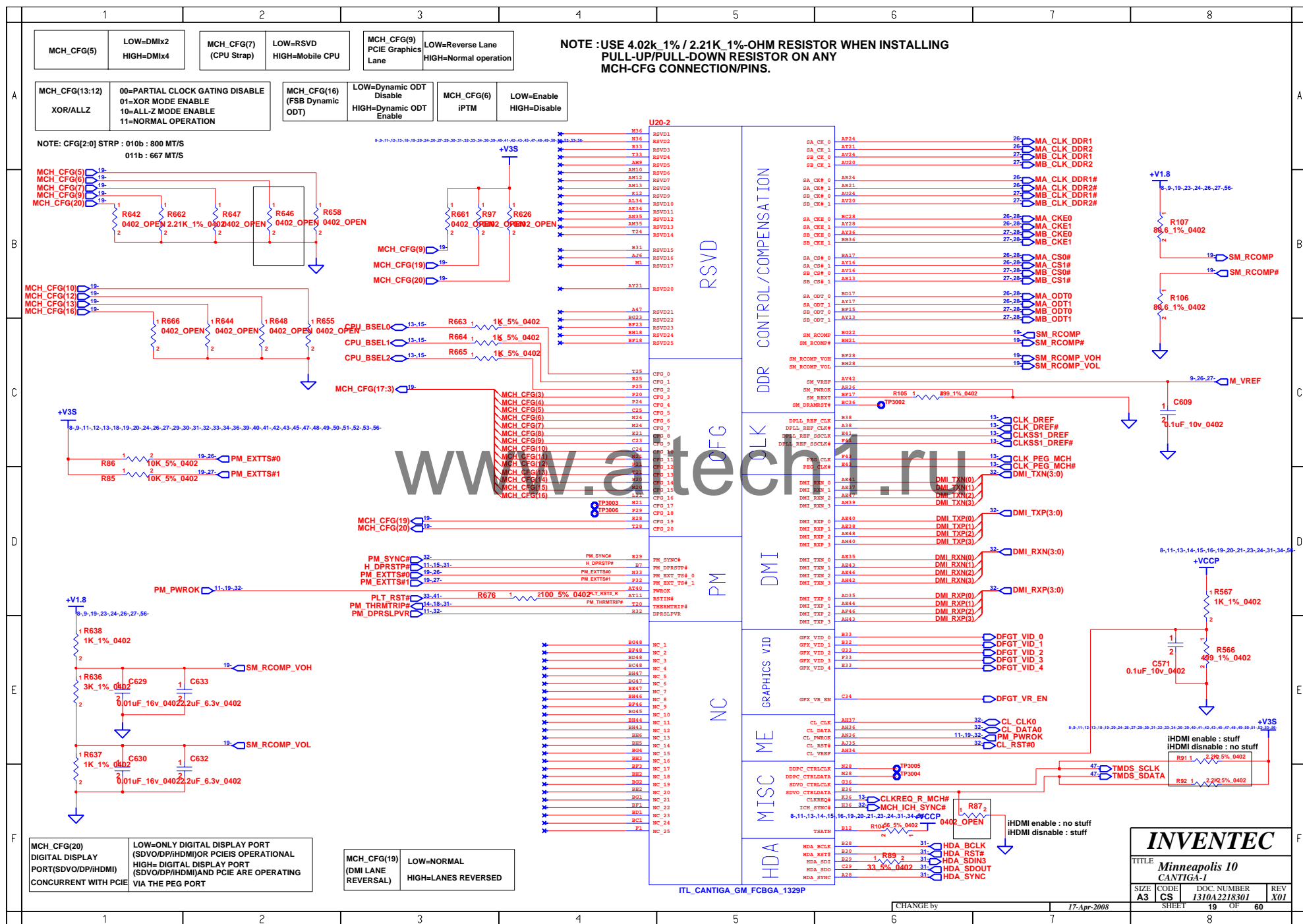
Thermal shutdown at 80.9C +/-3C from 60C to 100C

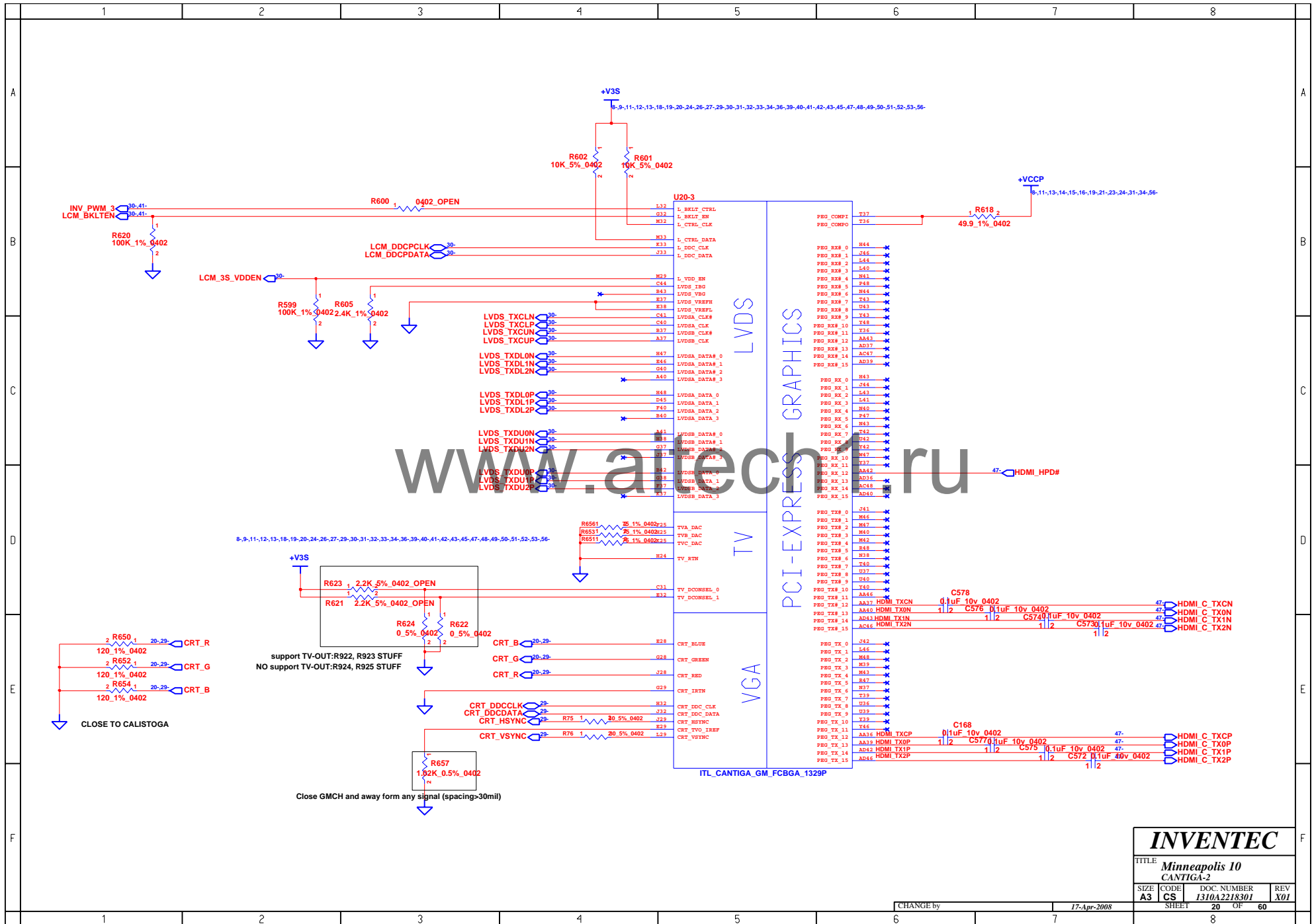
$$RSET=0.0012*T^2-0.9308*T+96.147$$

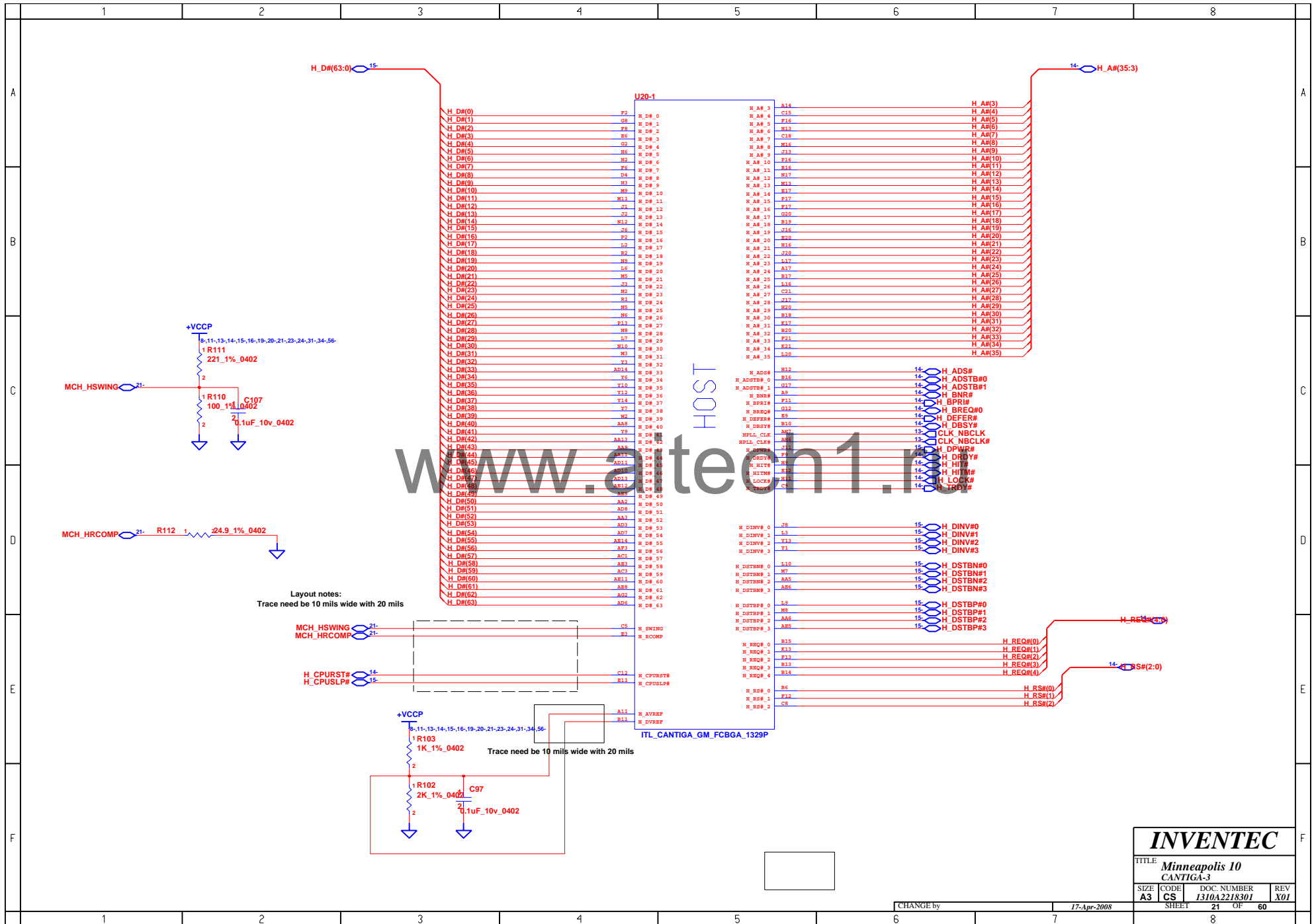
Hysteresis is 30C

LAYOUT NOTES: PUT THE THERMAL SENSOR CLOSE TO CPU

INVENTEC			
TITLE: Minneapolis 10 FAN & THERMAL			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A2218301	REV: X01
CHANGE by		17-Apr-2008	
SHEET		18	OF 60







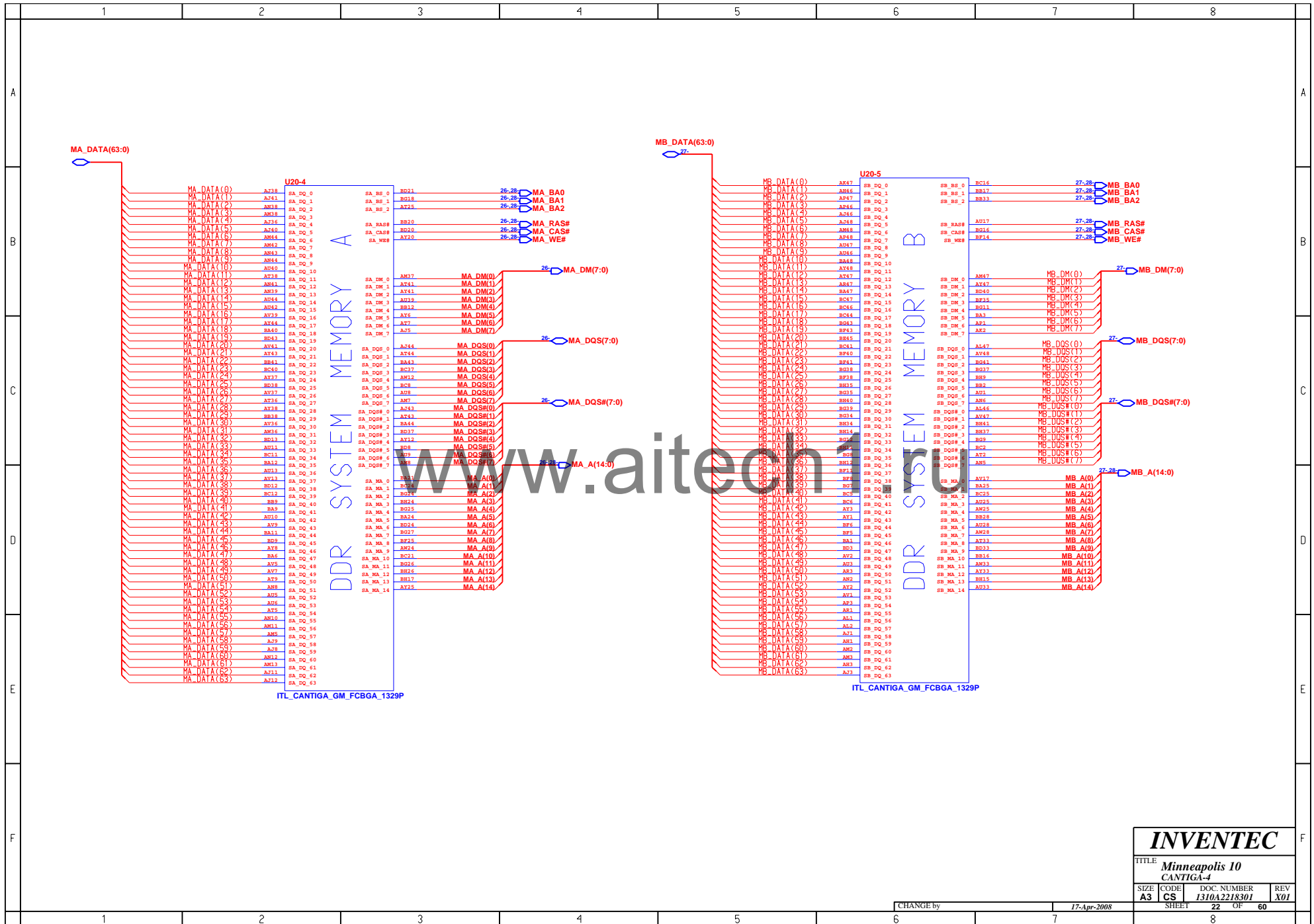
**INVENTEC**

TITLE  
**Minneapolis 10**  
**CANTIGA-3**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2218301	X01

CHANGE by 17-Apr-2008

SHEET 21 OF 60



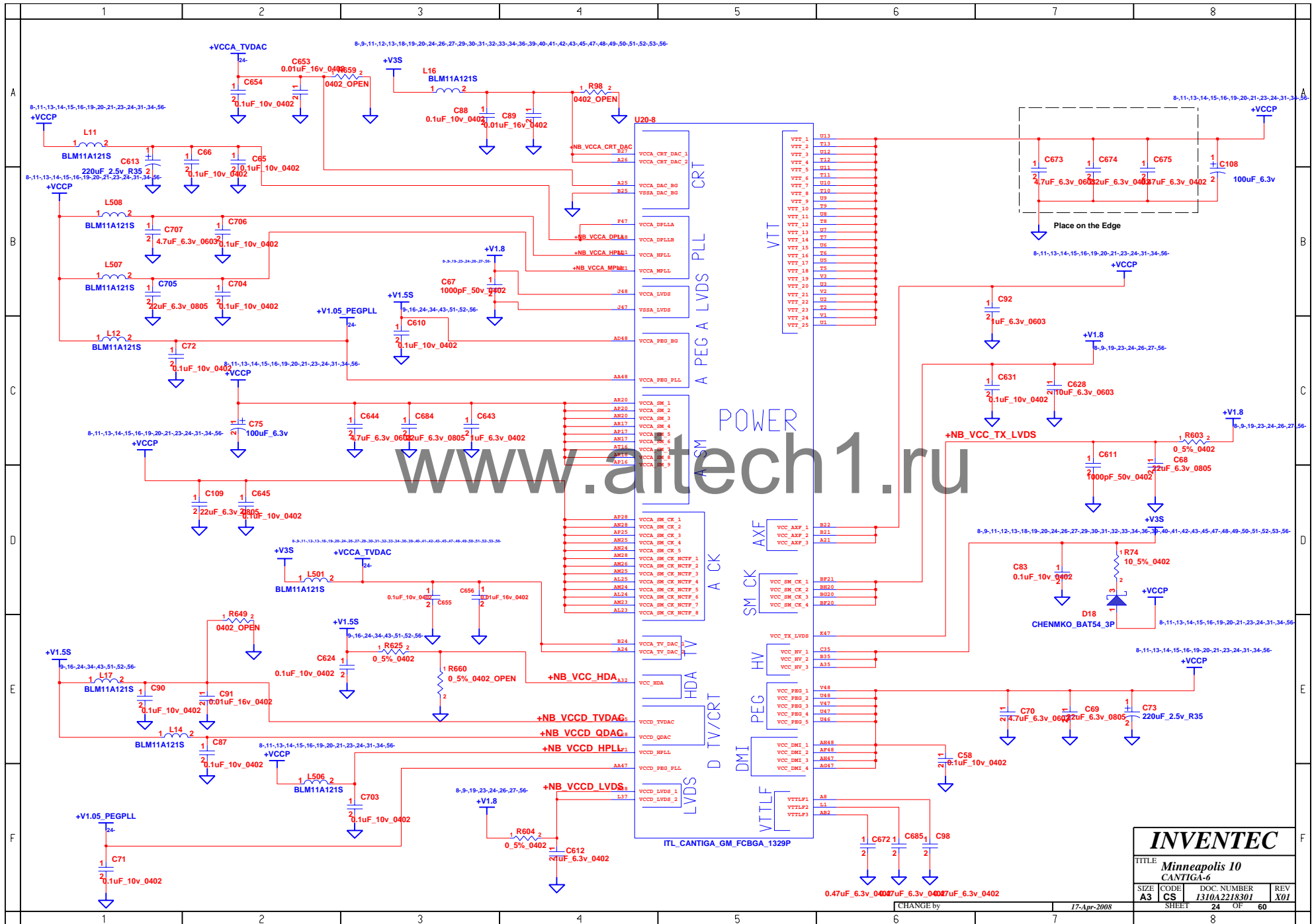
# INVENTEC

TITLE  
Minneapolis 10  
CANTIGA-4

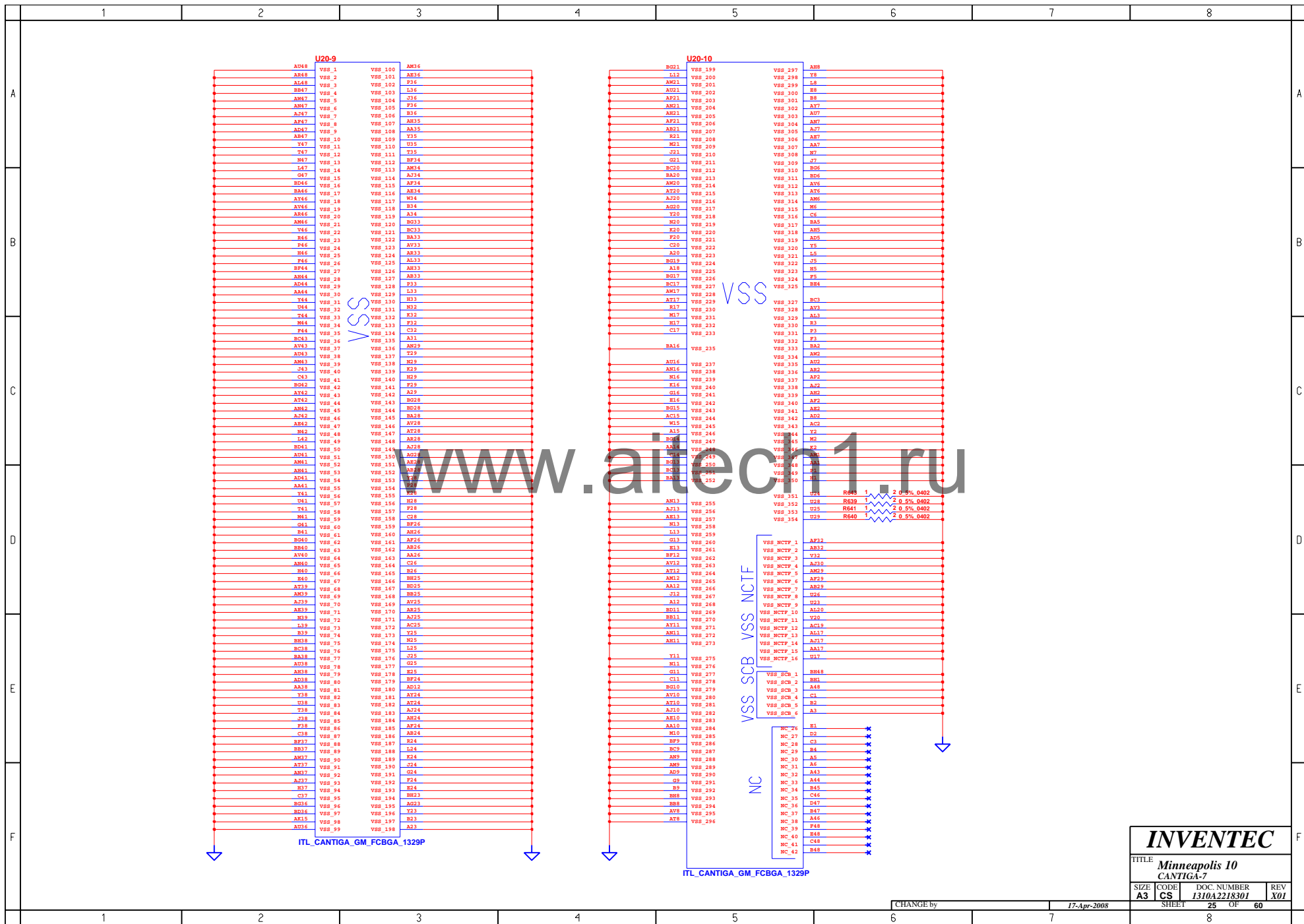
SIZE A3	CODE CS	DOC. NUMBER 1310A2218301	REV X01
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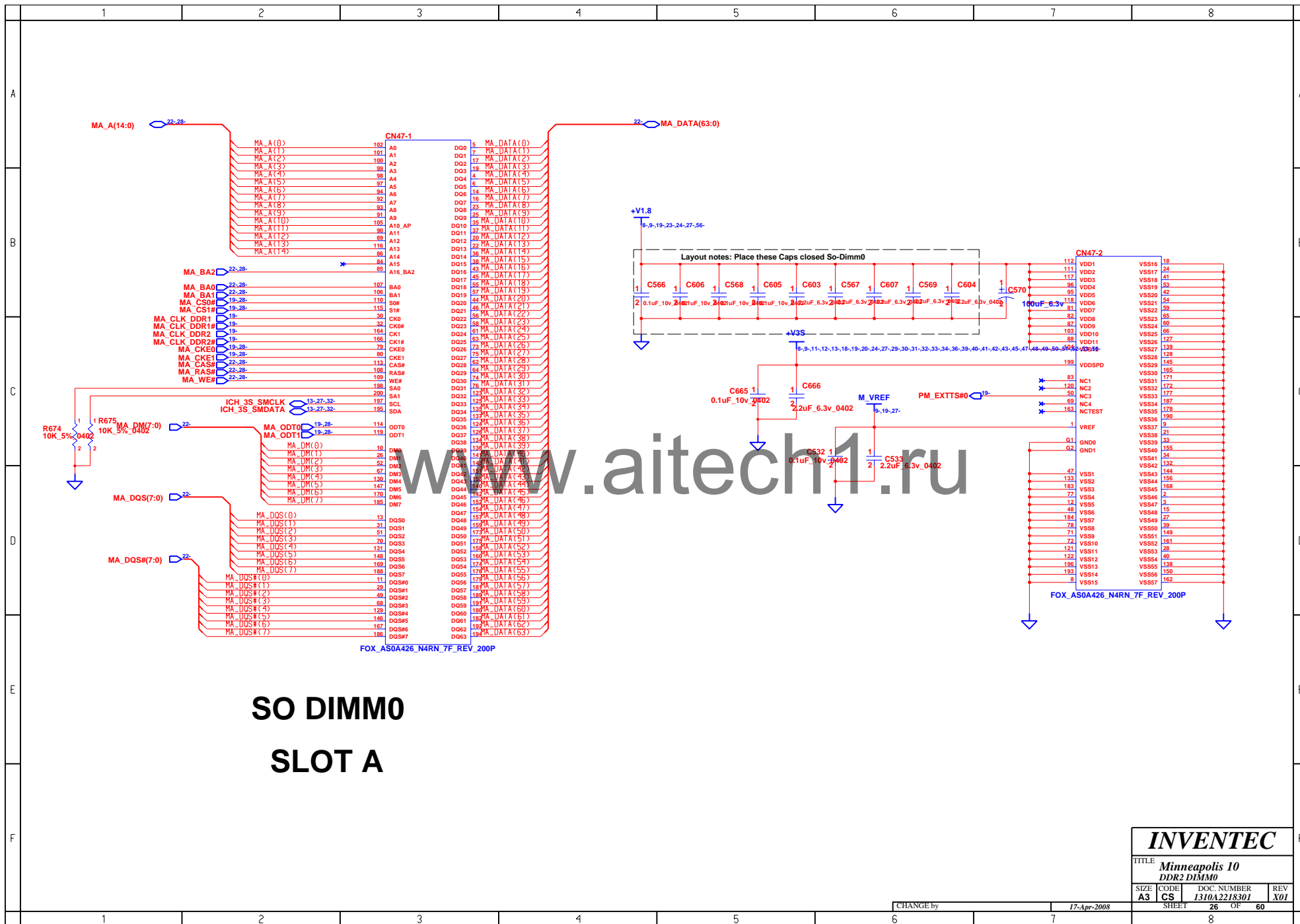
CHANGE by 17-Apr-2008 SHEET 22 OF 60

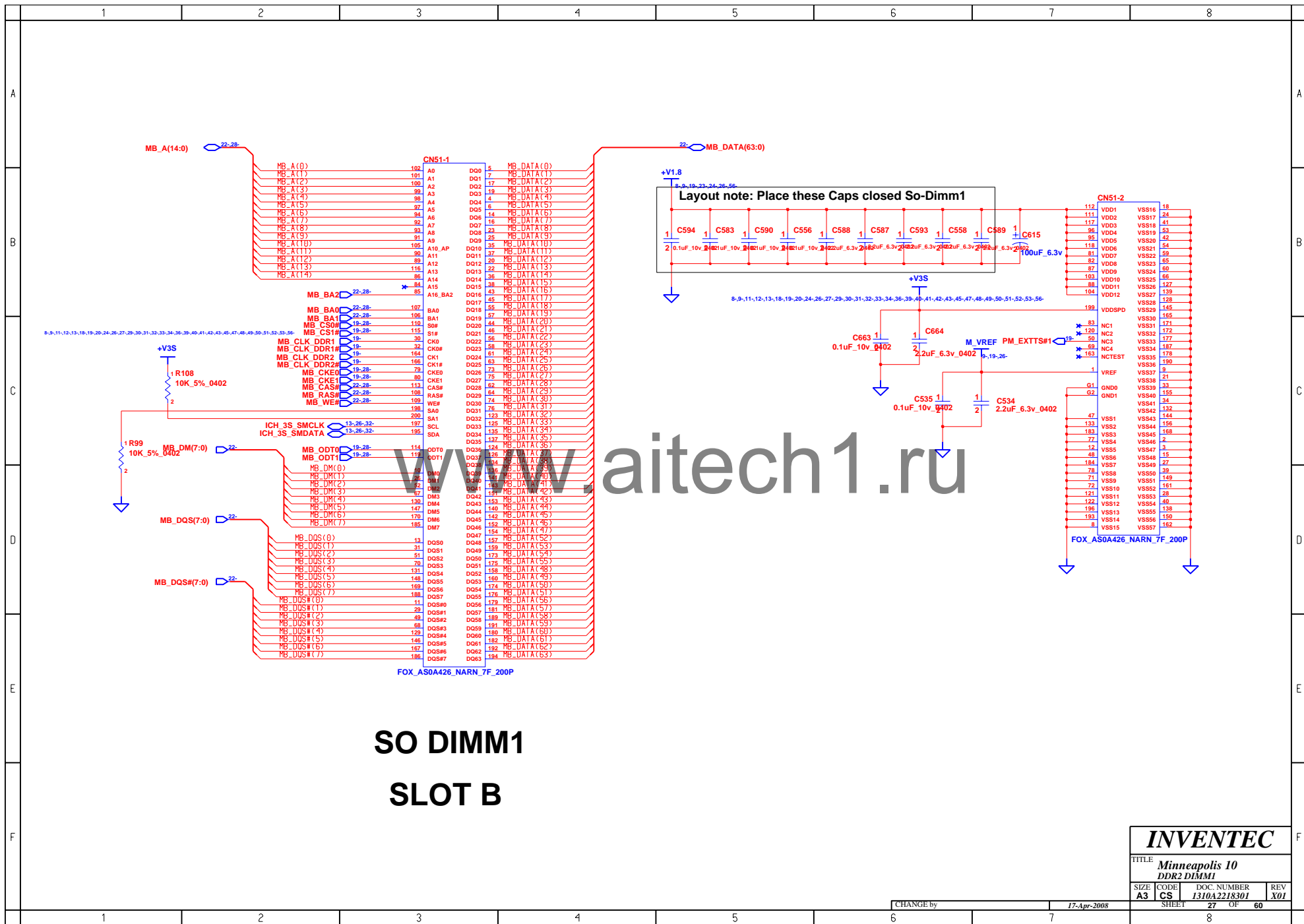








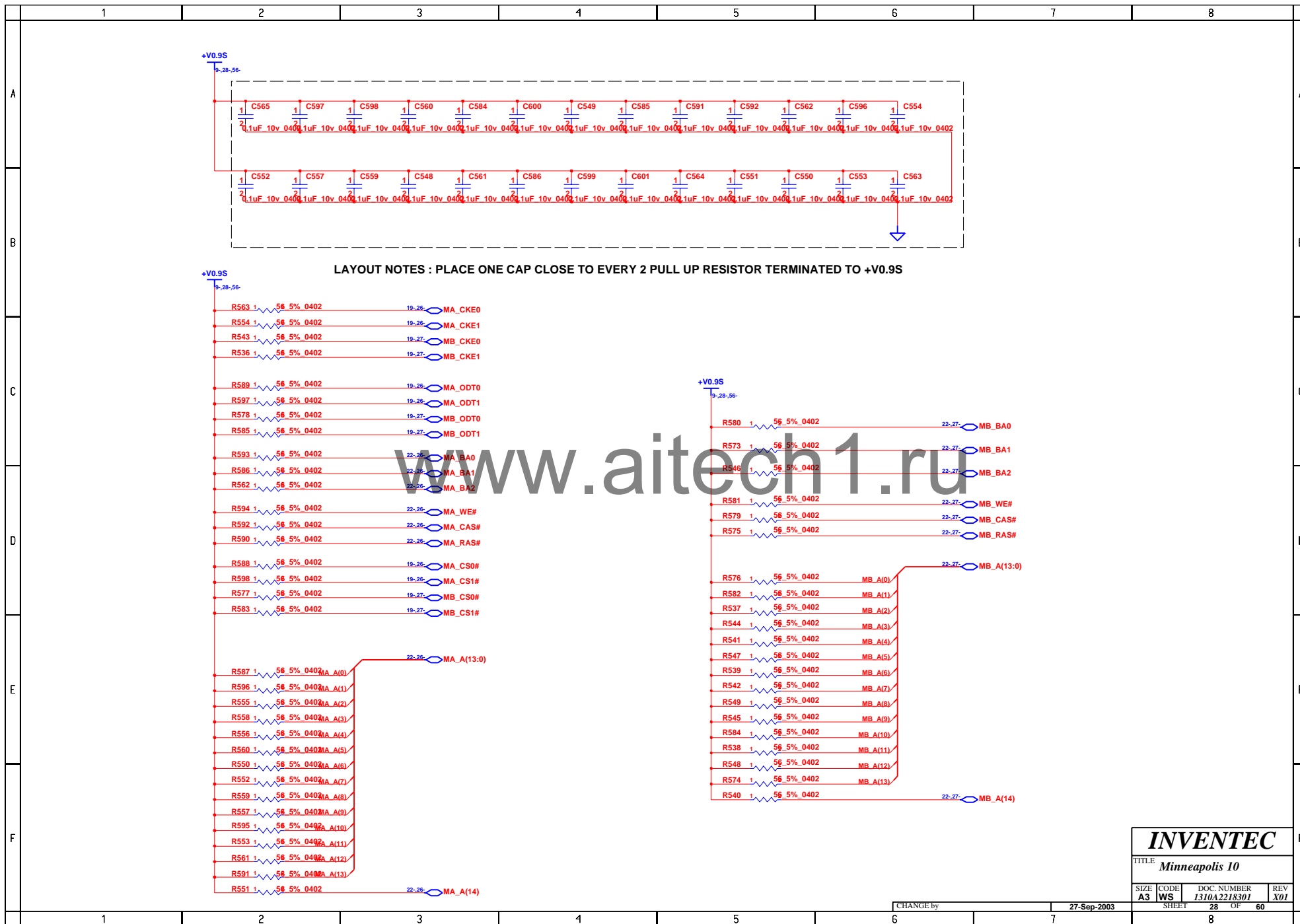




# INVENTEC

TITLE Minneapolis 10 DDR2 DIMM1			
SIZE A3	CODE CS	DOC. NUMBER 1310A2218301	REV X01
SHEET 27		OF 60	

CHANGE by 17-Apr-2008



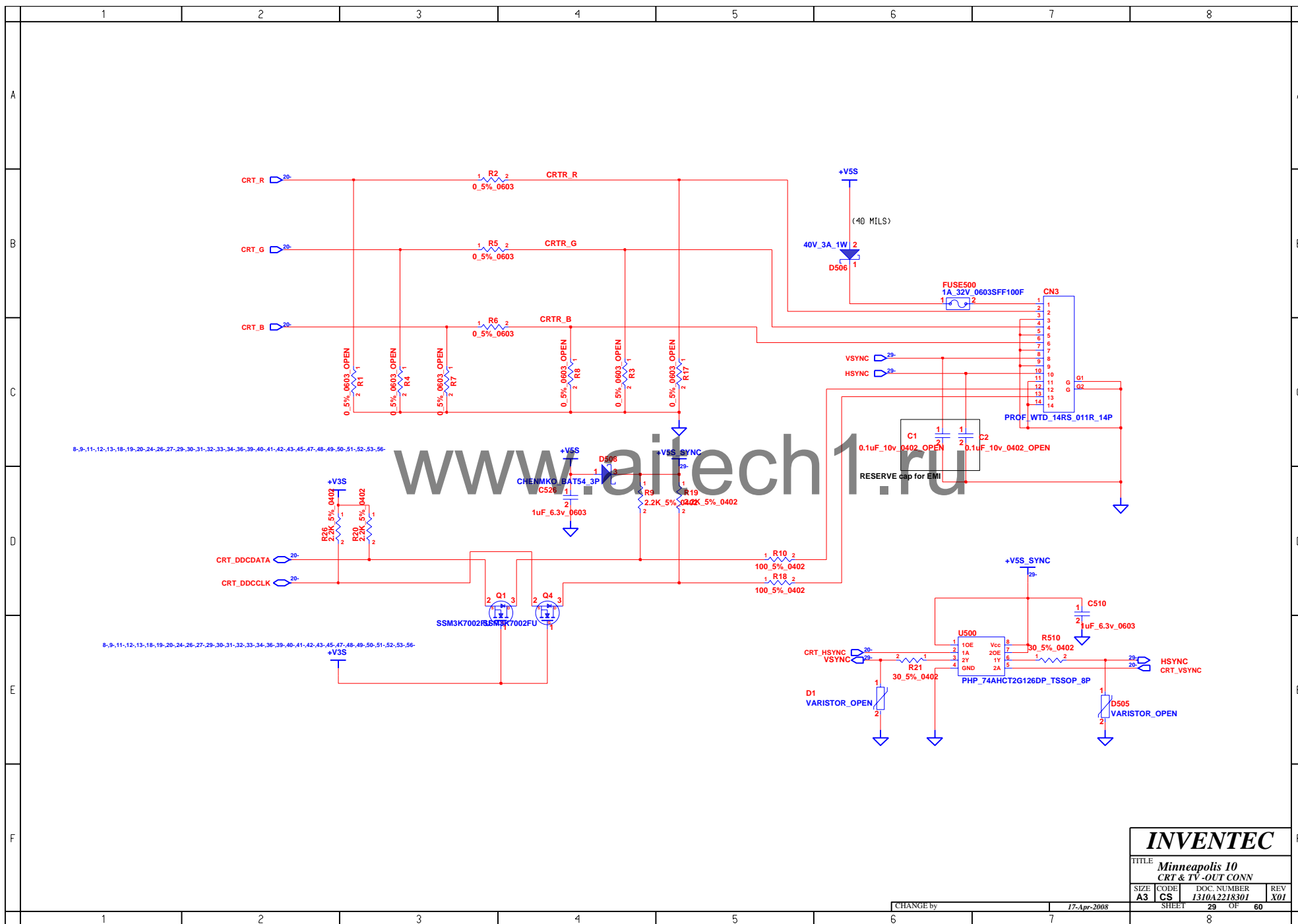
**INVENTEC**

TITLE  
**Minneapolis 10**

SIZE	CODE	DOC. NUMBER	REV
A3	WS	1310A2218301	X01

CHANGE by 27-Sep-2003

SHEET 28 OF 60



**INVENTEC**

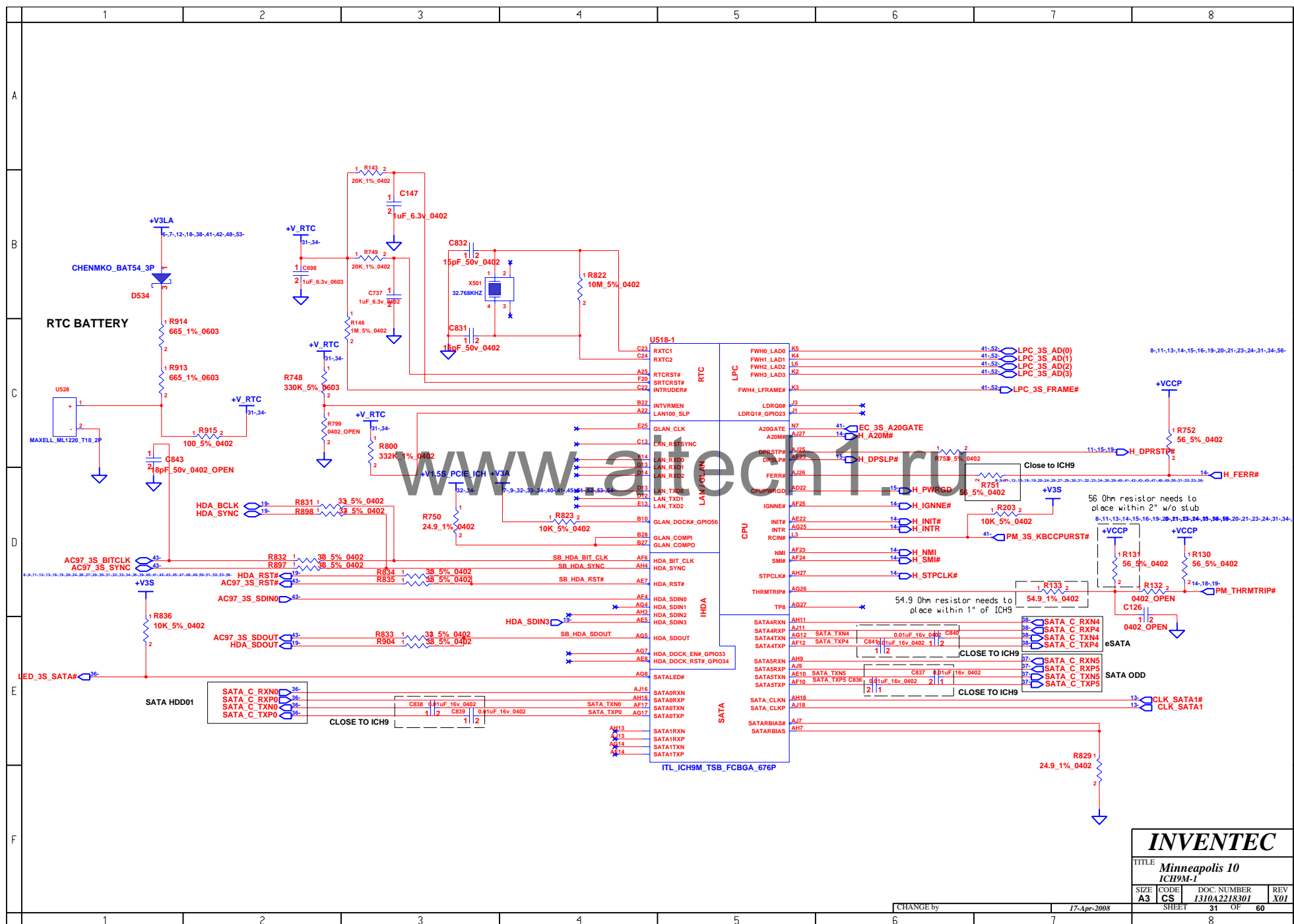
TITLE  
**Minneapolis 10  
CRT & TV -OUT CONN**

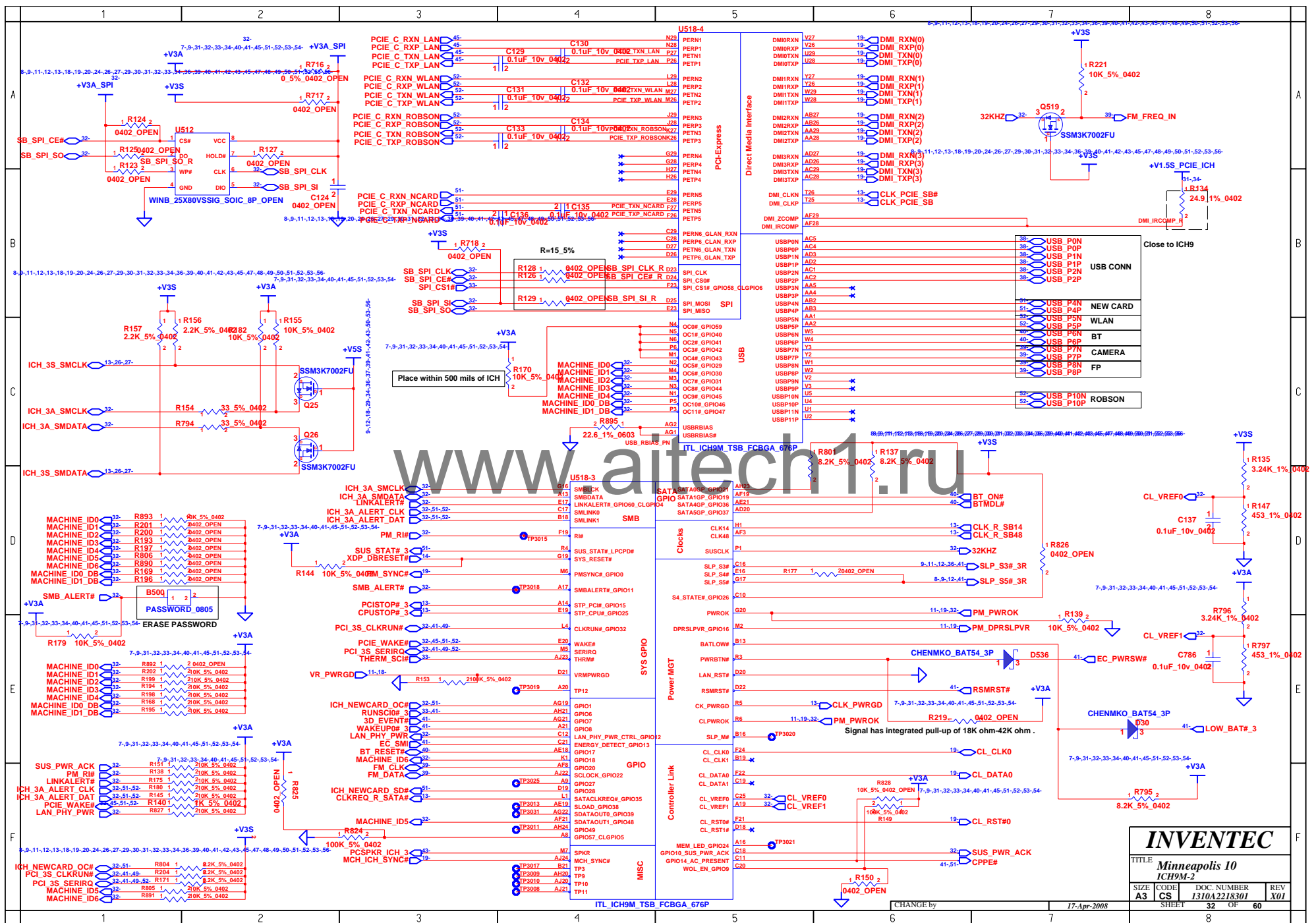
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A2218301</b>	REV <b>X01</b>
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CHANGE by 17-Apr-2008

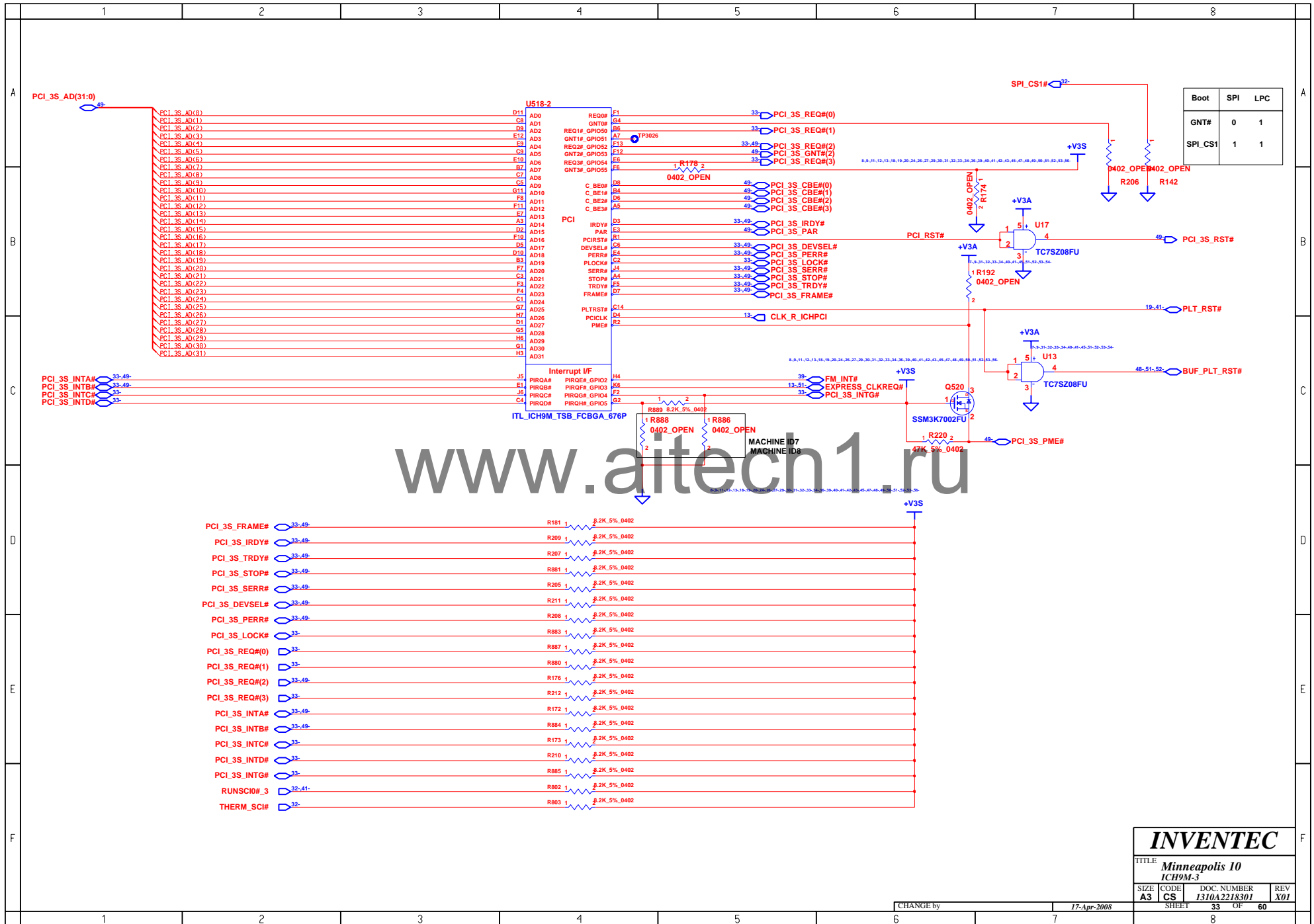
SHEET 29 OF 60

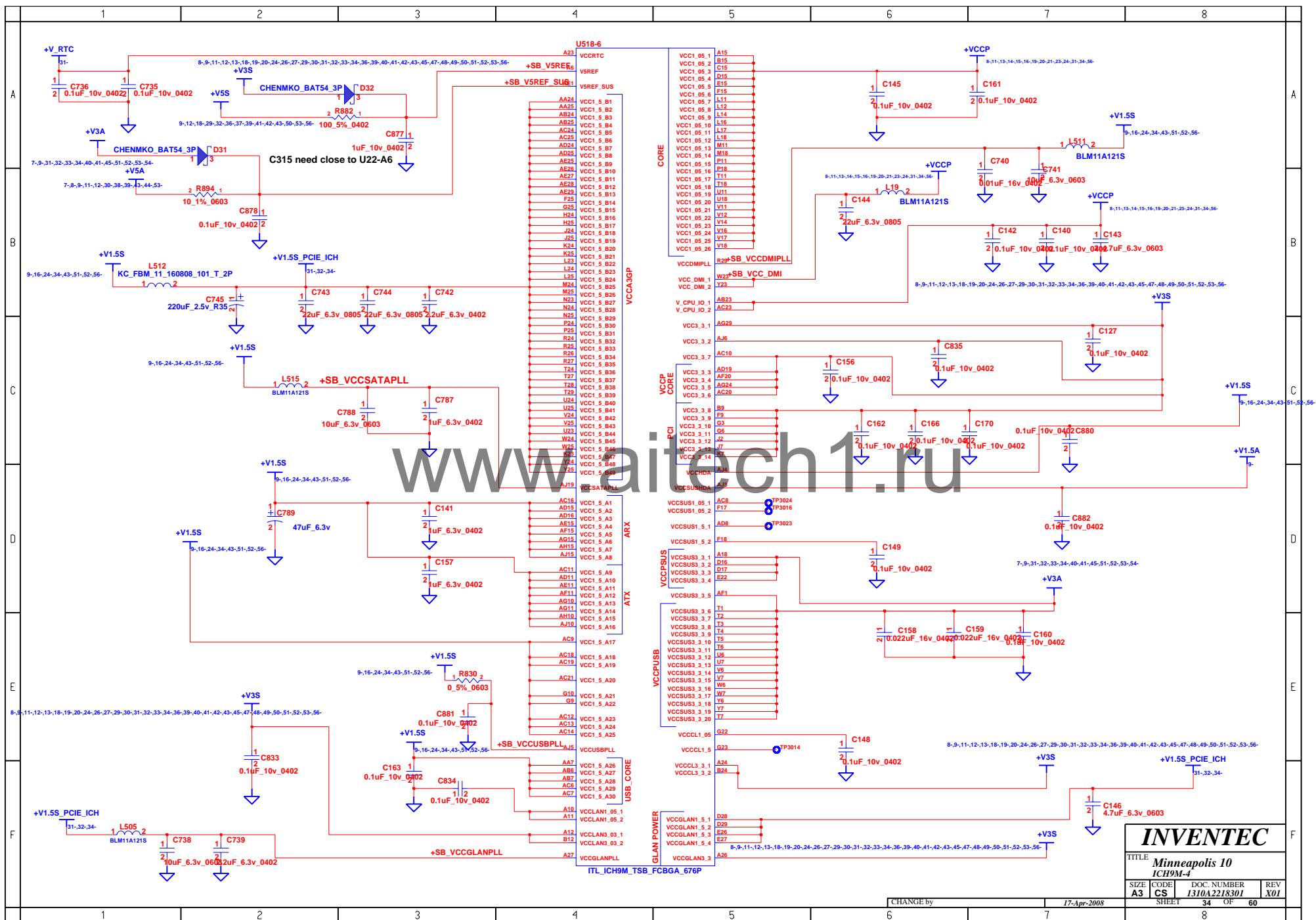




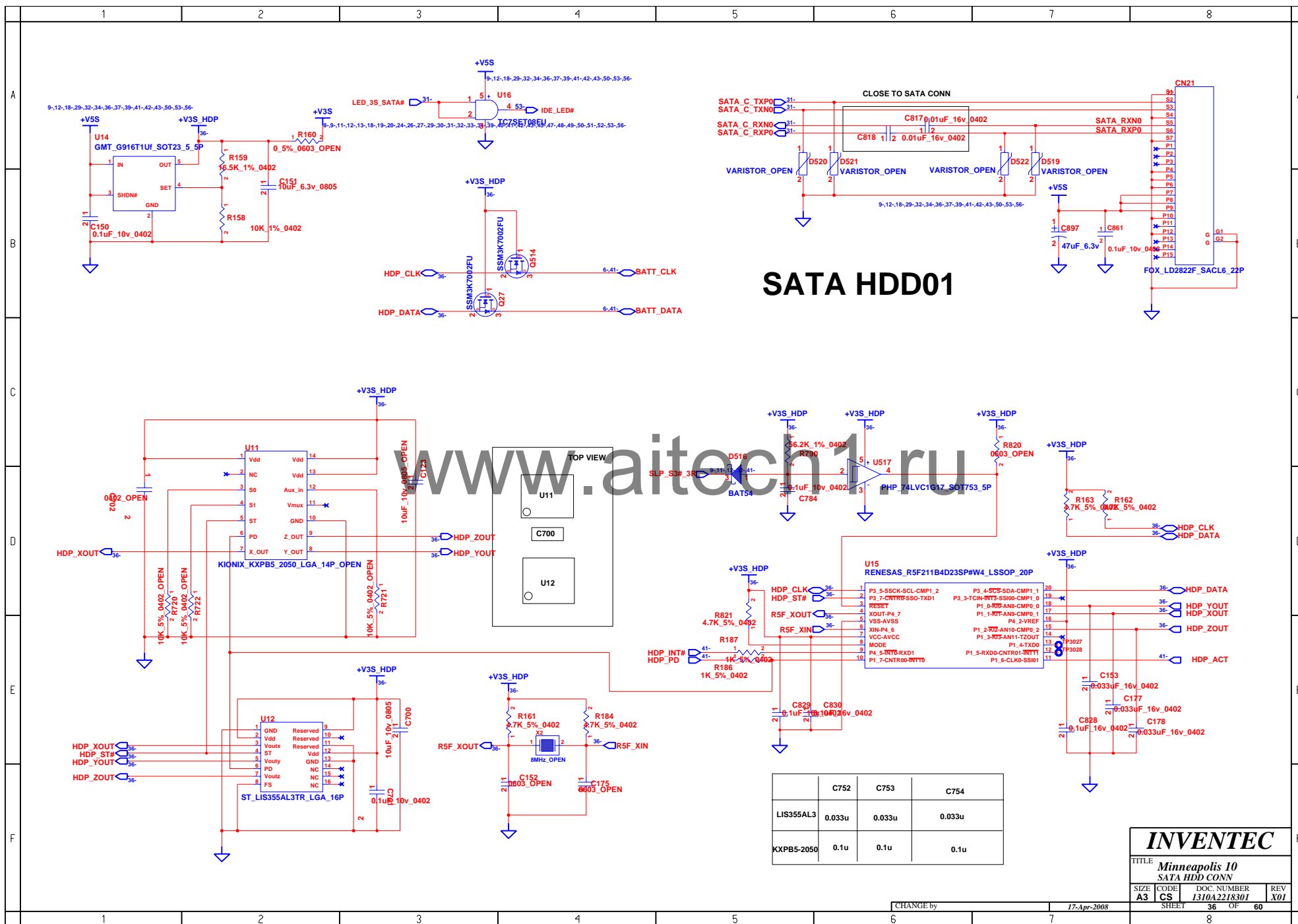


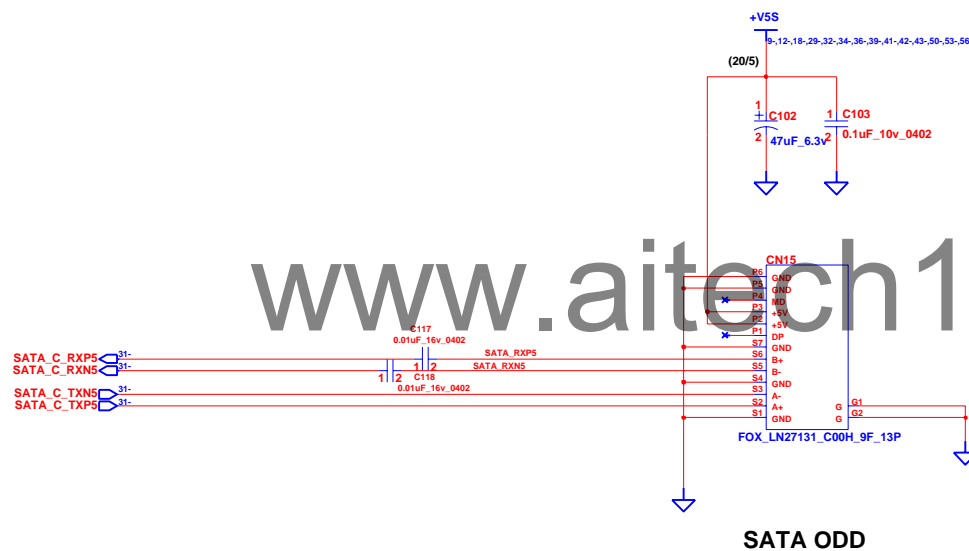




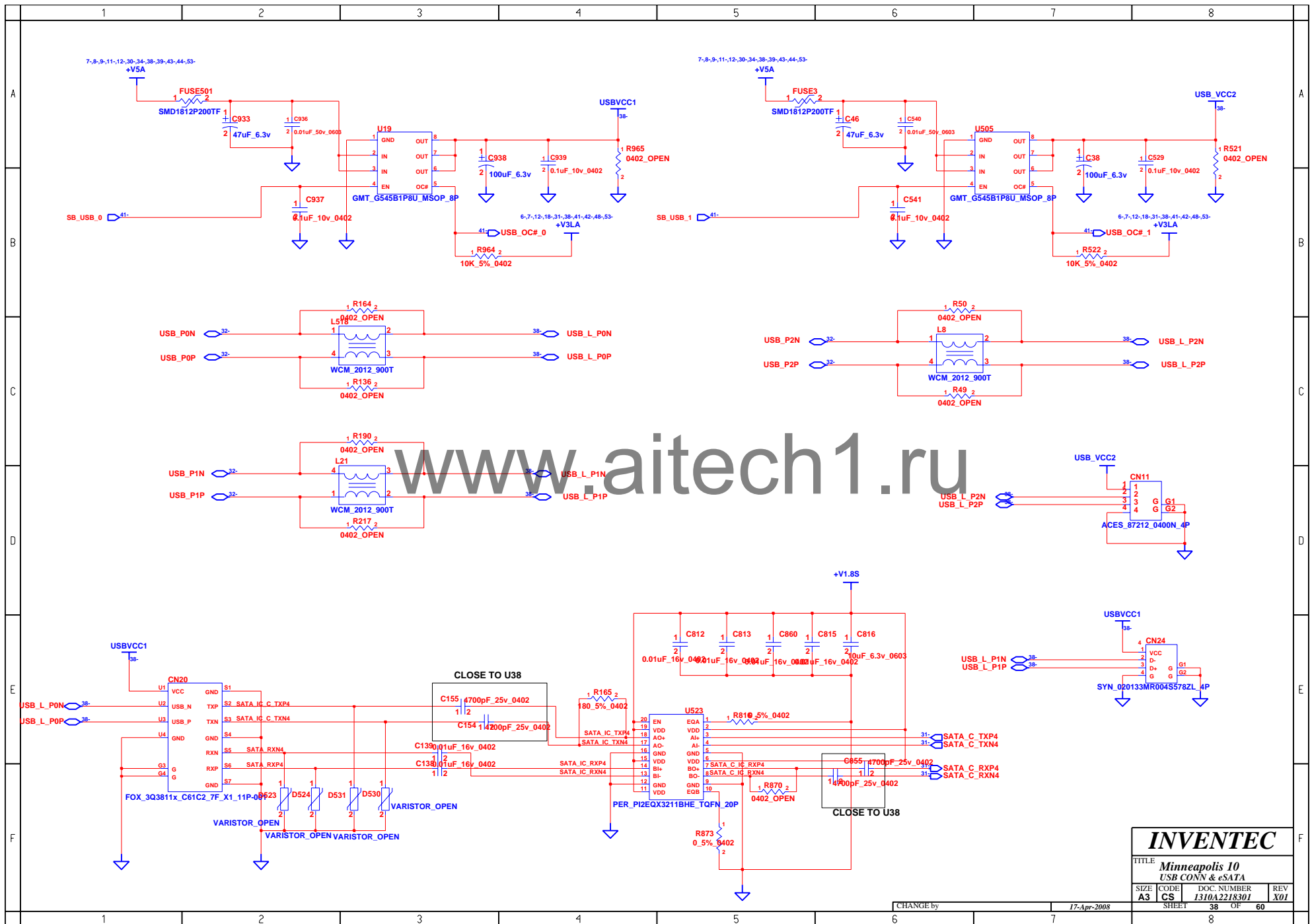








INVENTEC			
TITLE: Minneapolis 10 ODD CONN			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A2218301	REV: X01
CHANGE by		17-Apr-2008	
SHEET		37	OF 60



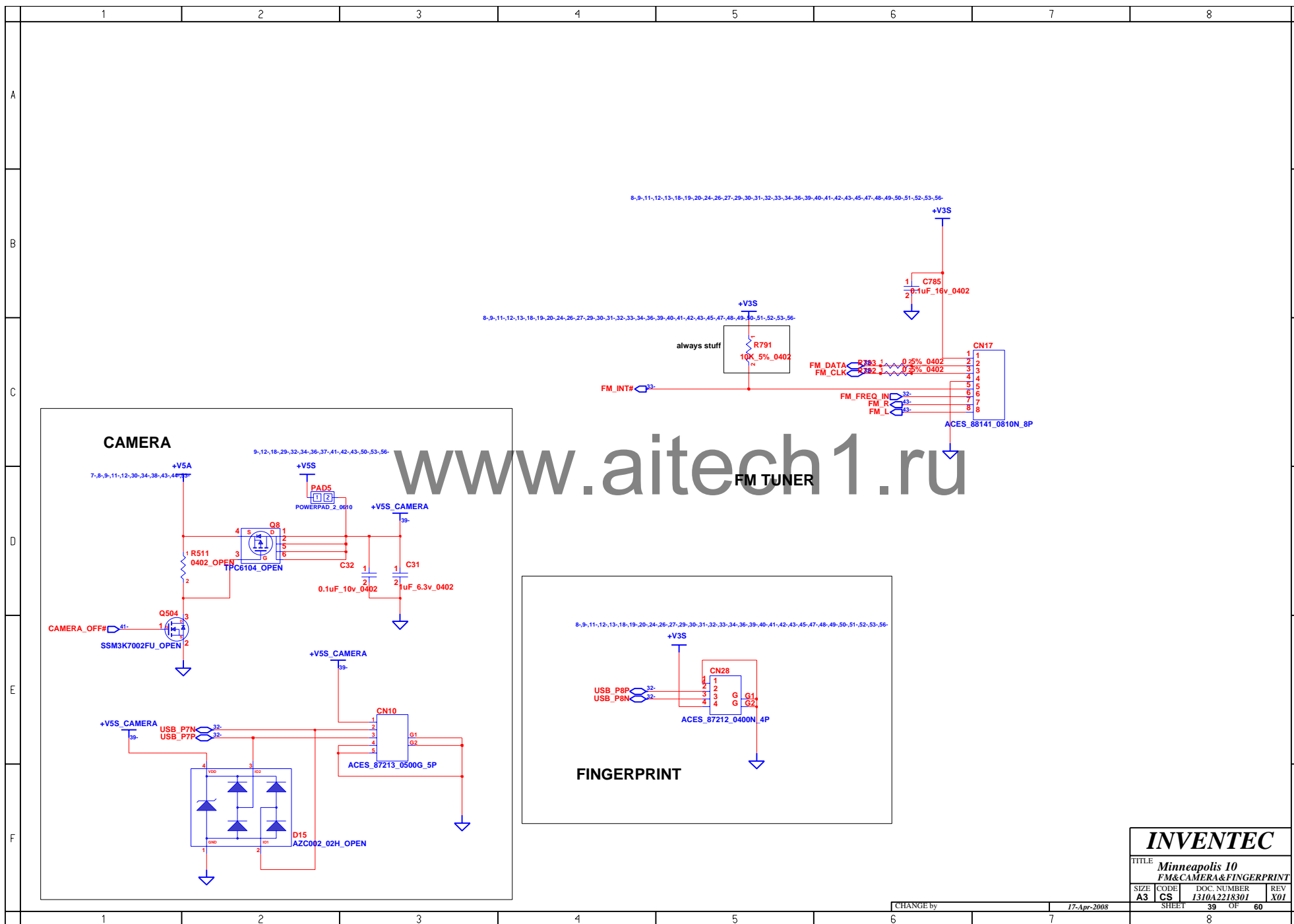
**INVENTEC**

TITLE  
**Minneapolis 10**  
**USB CONN & eSATA**

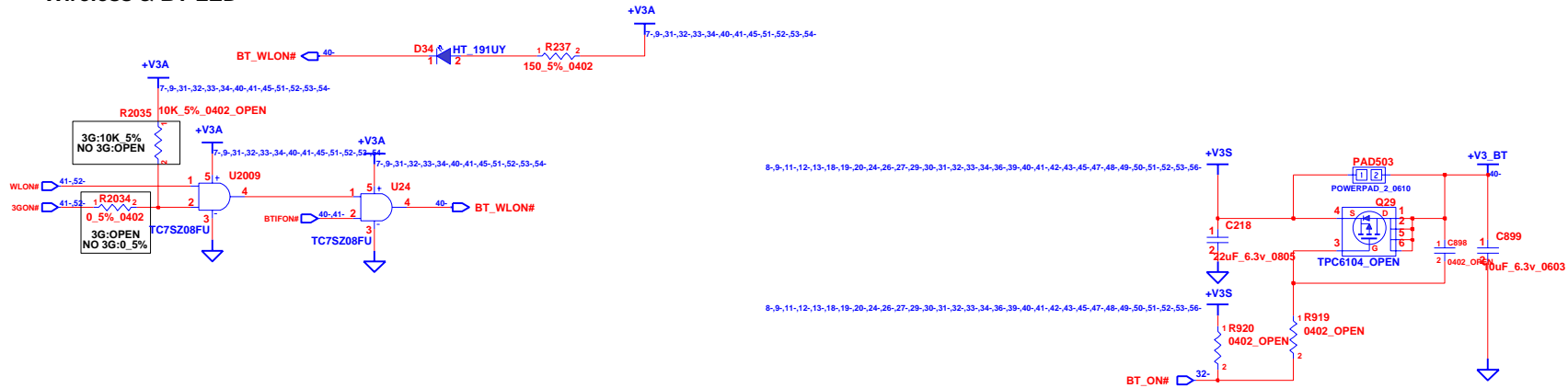
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>I310A2218301</b>	REV <b>X01</b>
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CHANGE by 17-Apr-2008

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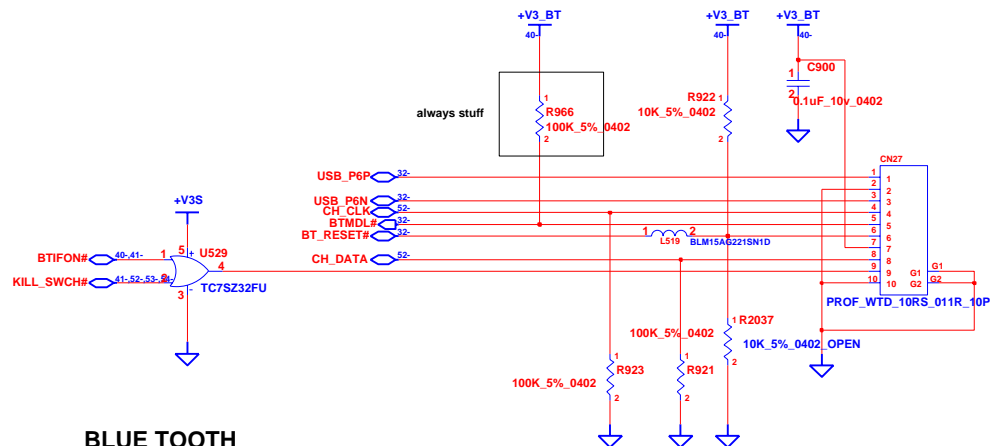


## Wireless & BT LED



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## BLUE TOOTH



**INVENTEC**

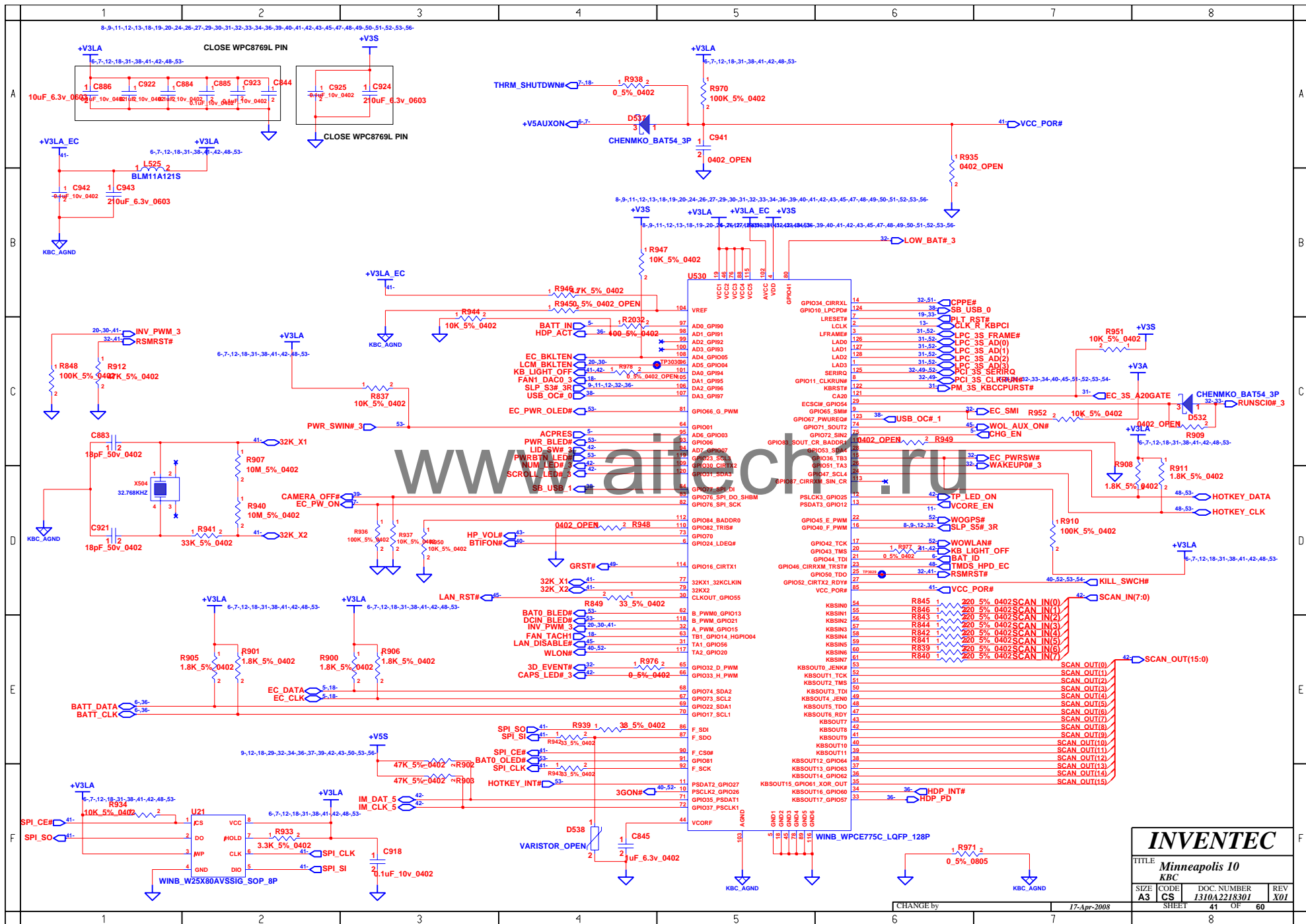
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**Minneapolis 10  
BLUE TOOTH CONN**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2218301	X01

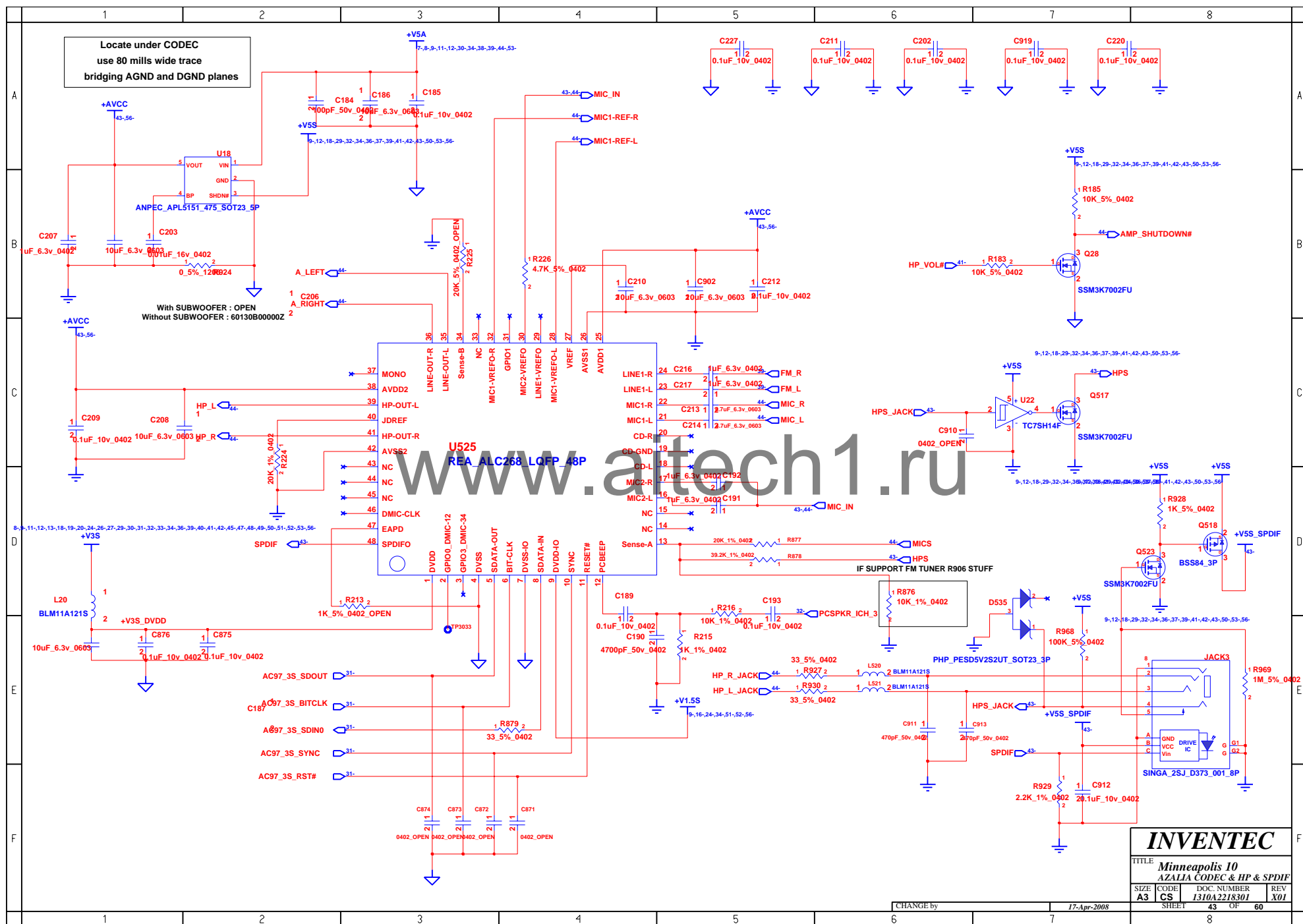
CHANGE by 17-Apr-2008

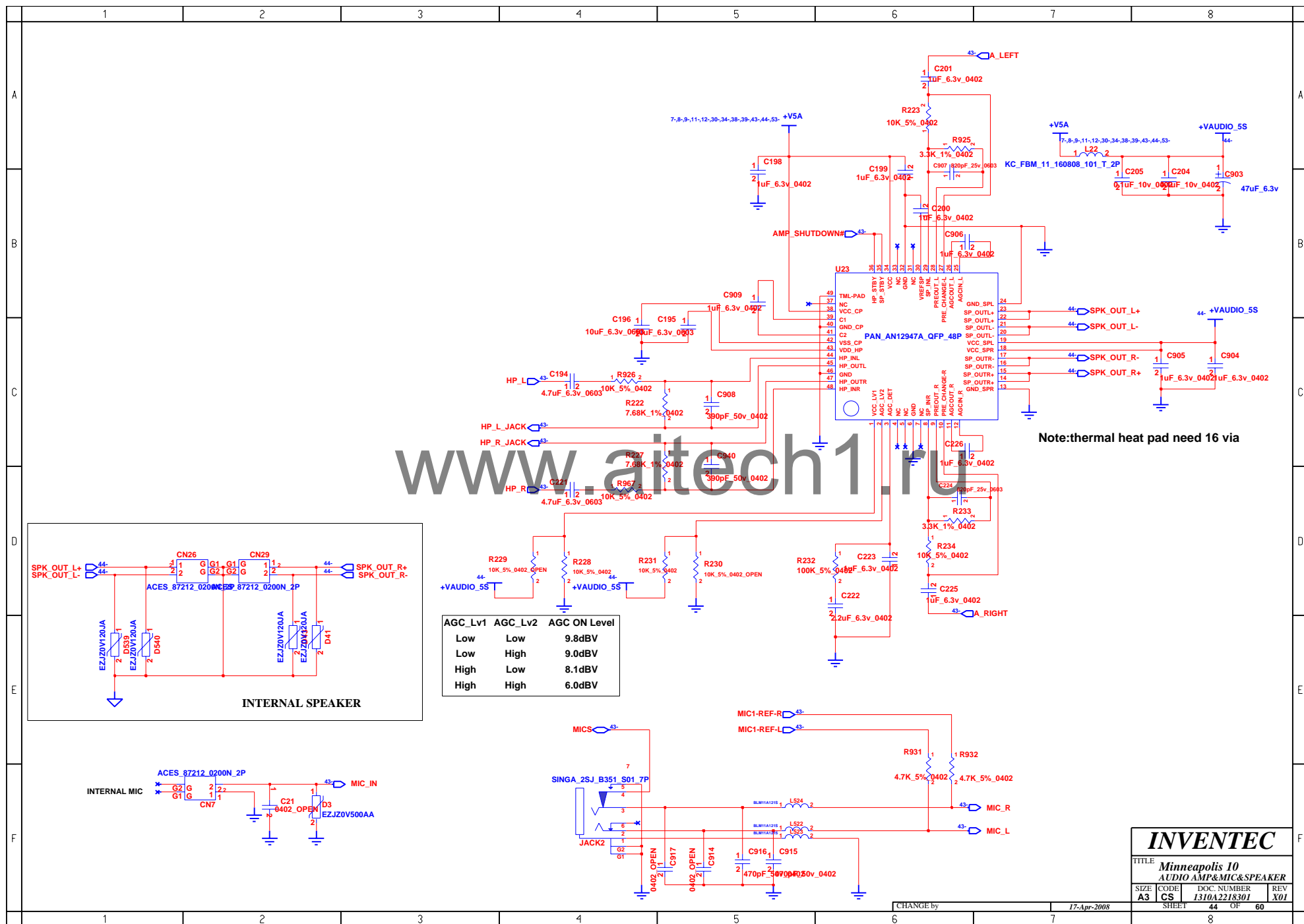
SHEET 40 OF 60

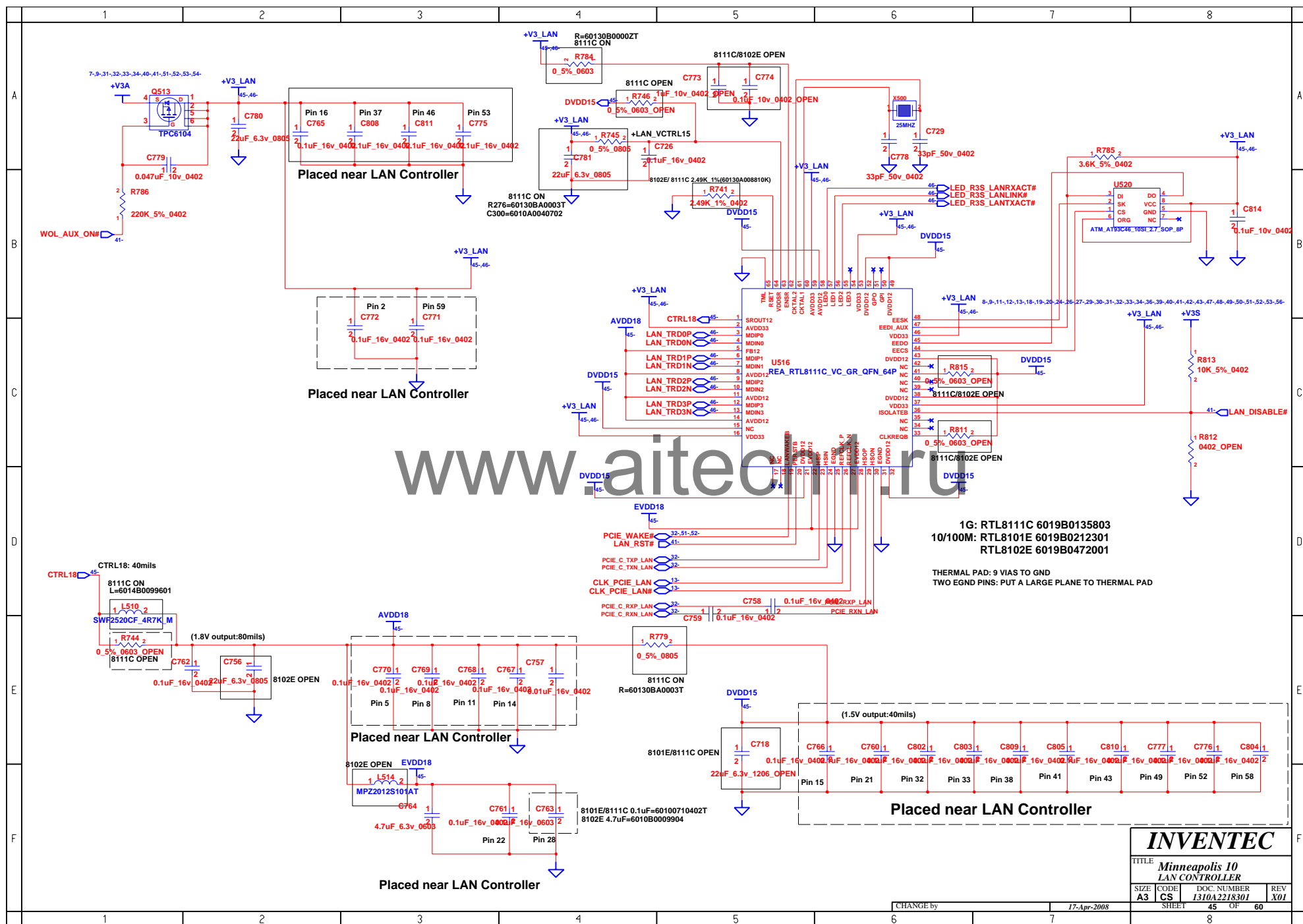


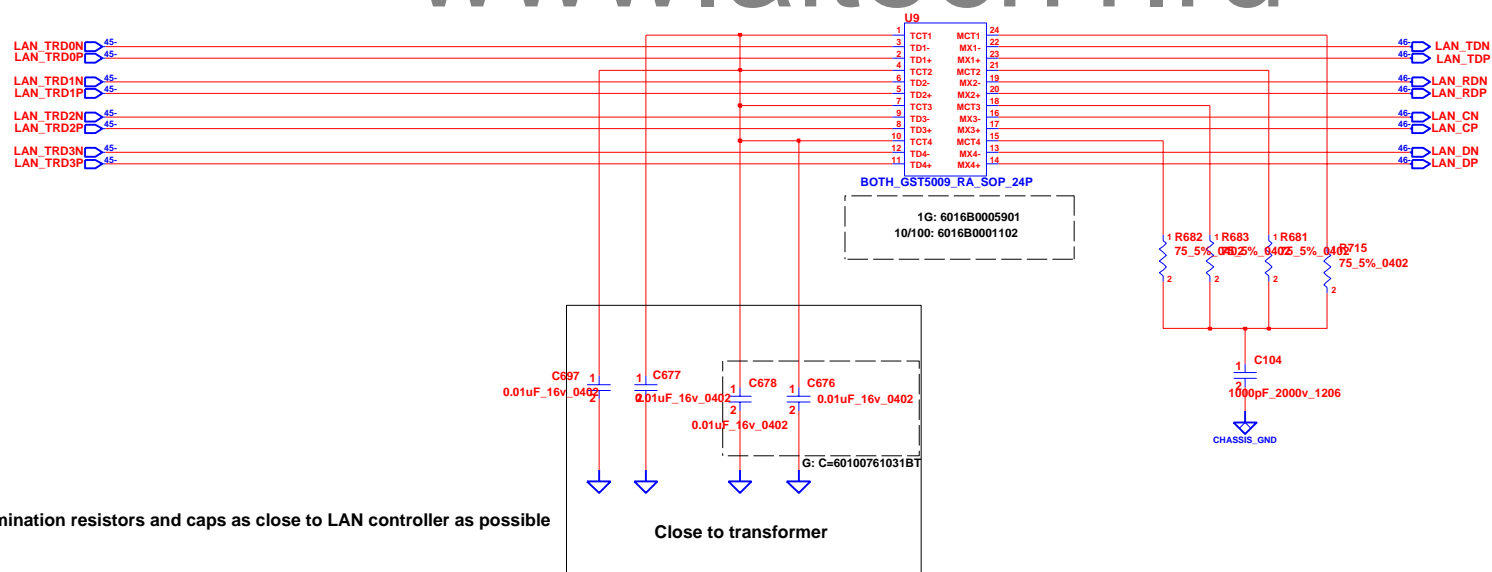
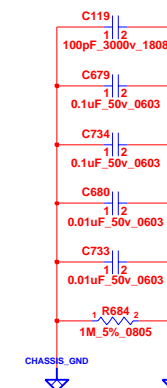






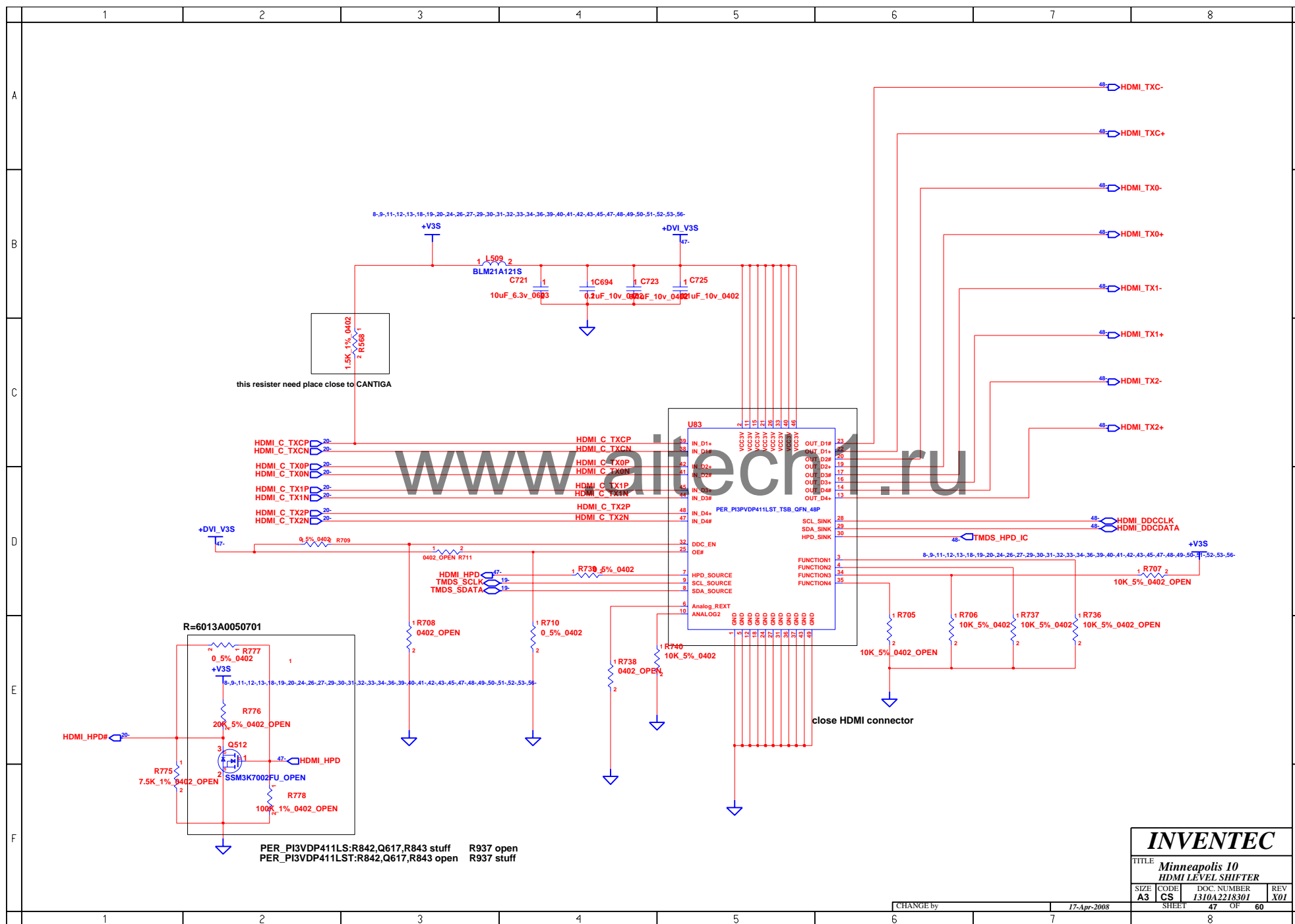


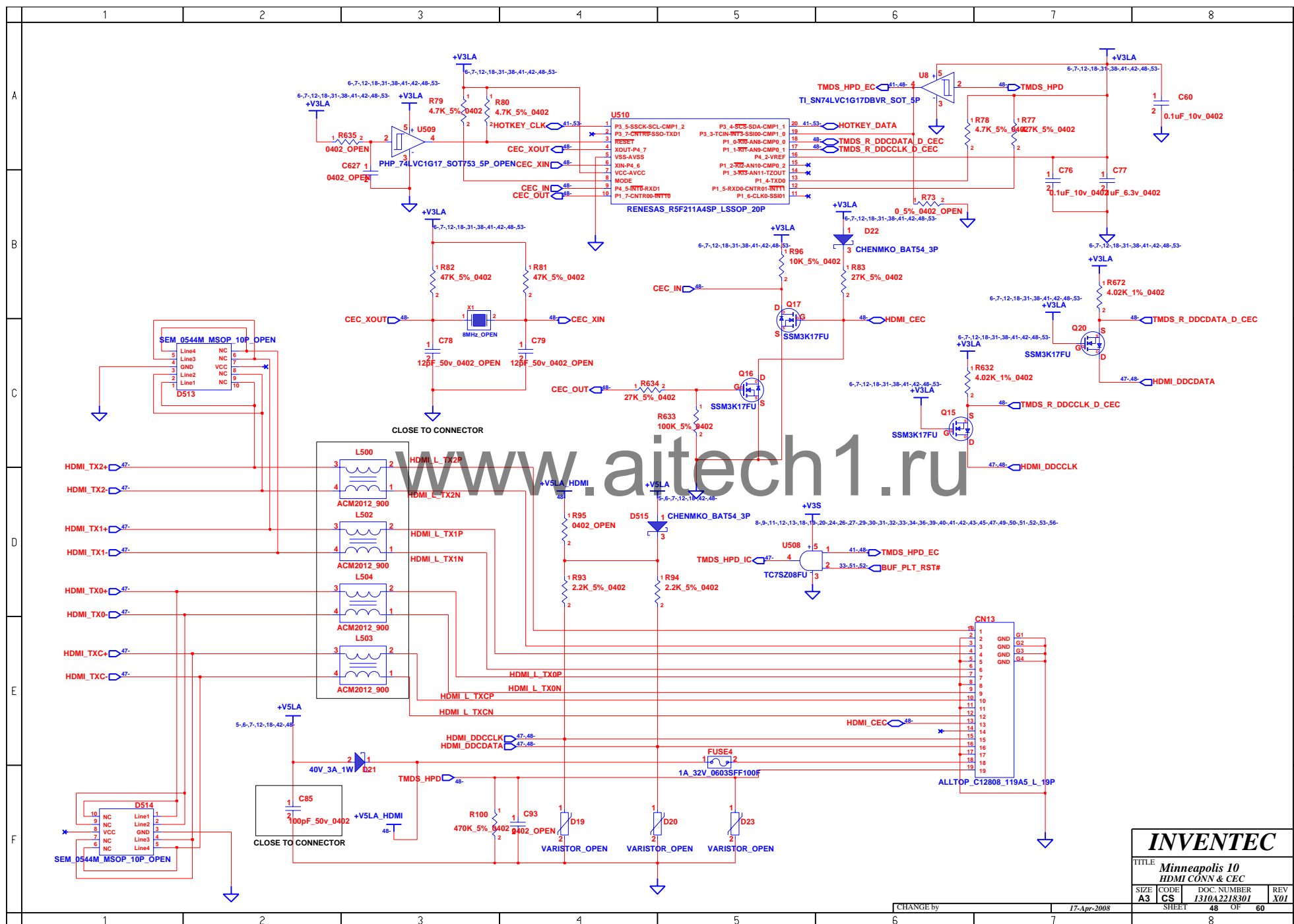




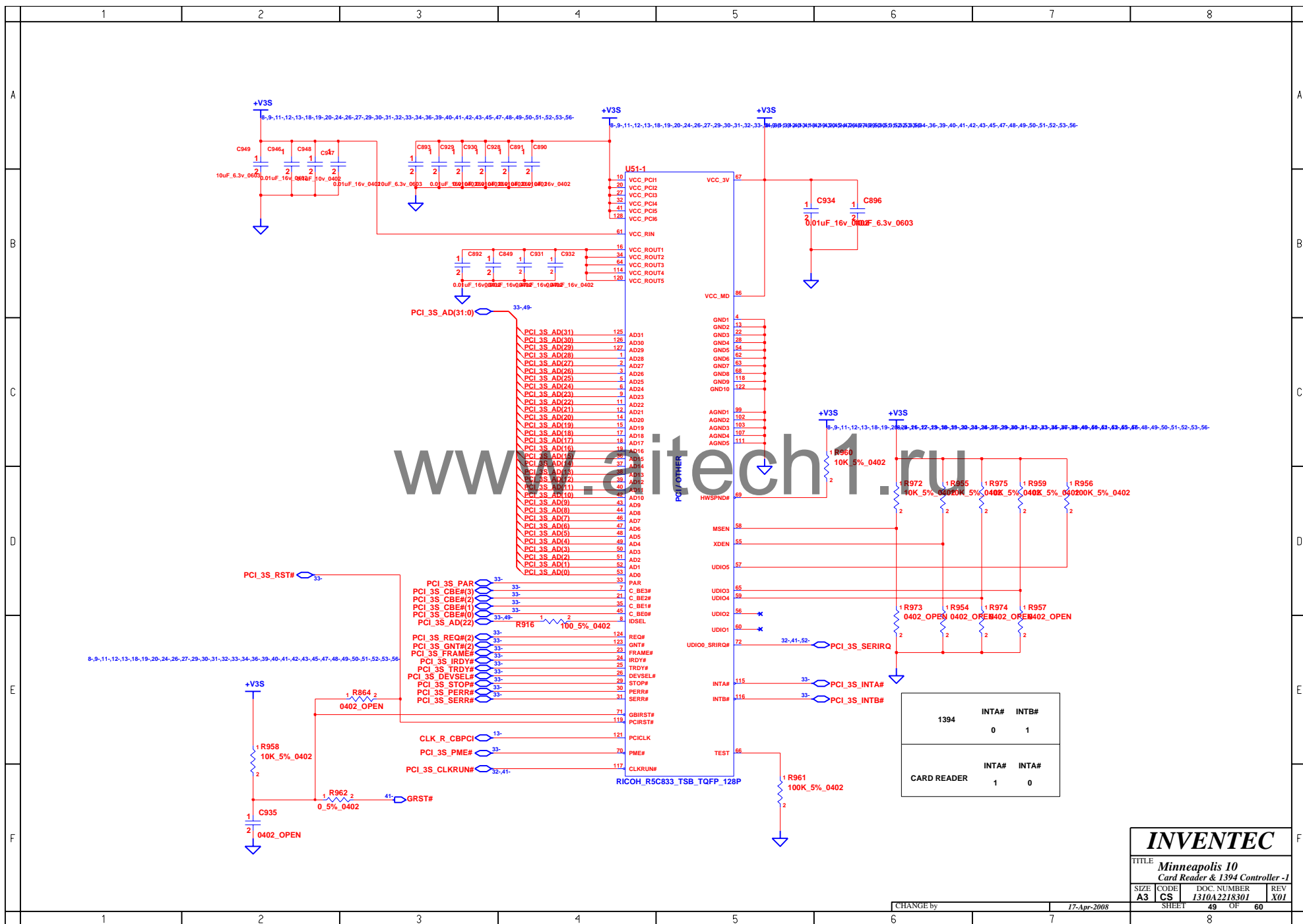
**Close to transformer**

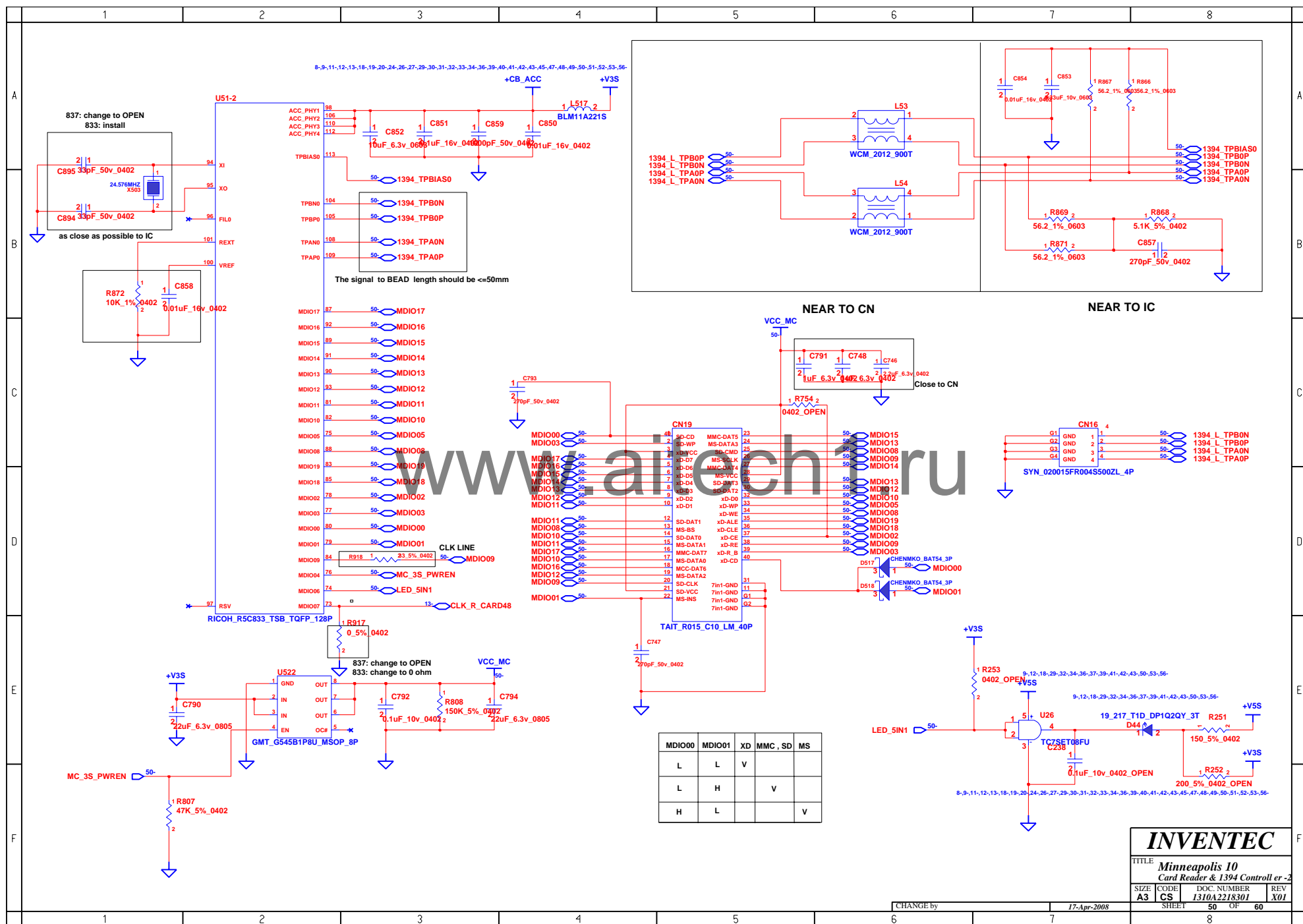
CS 1310A2218301  
SHEET 46 OF 60



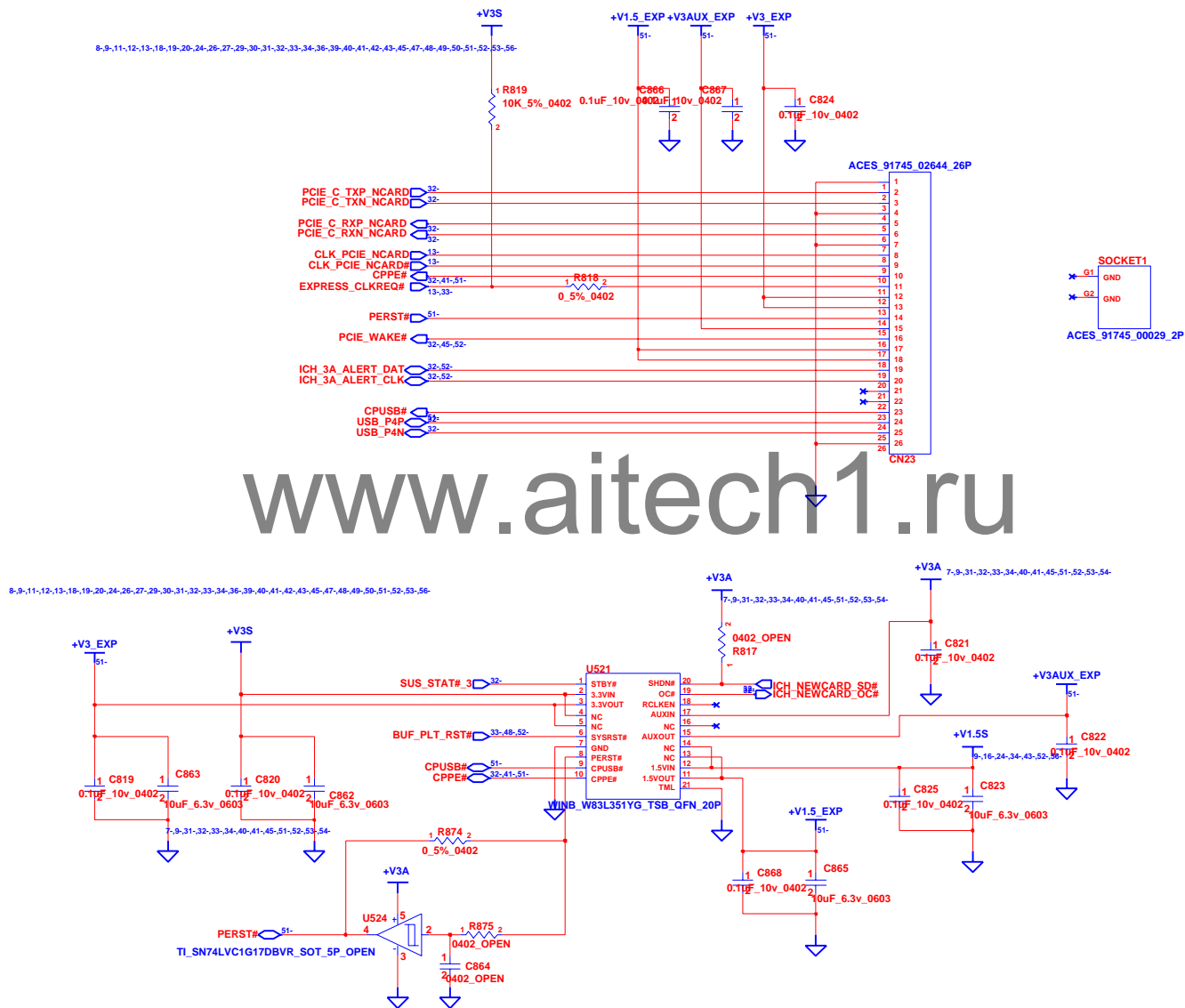






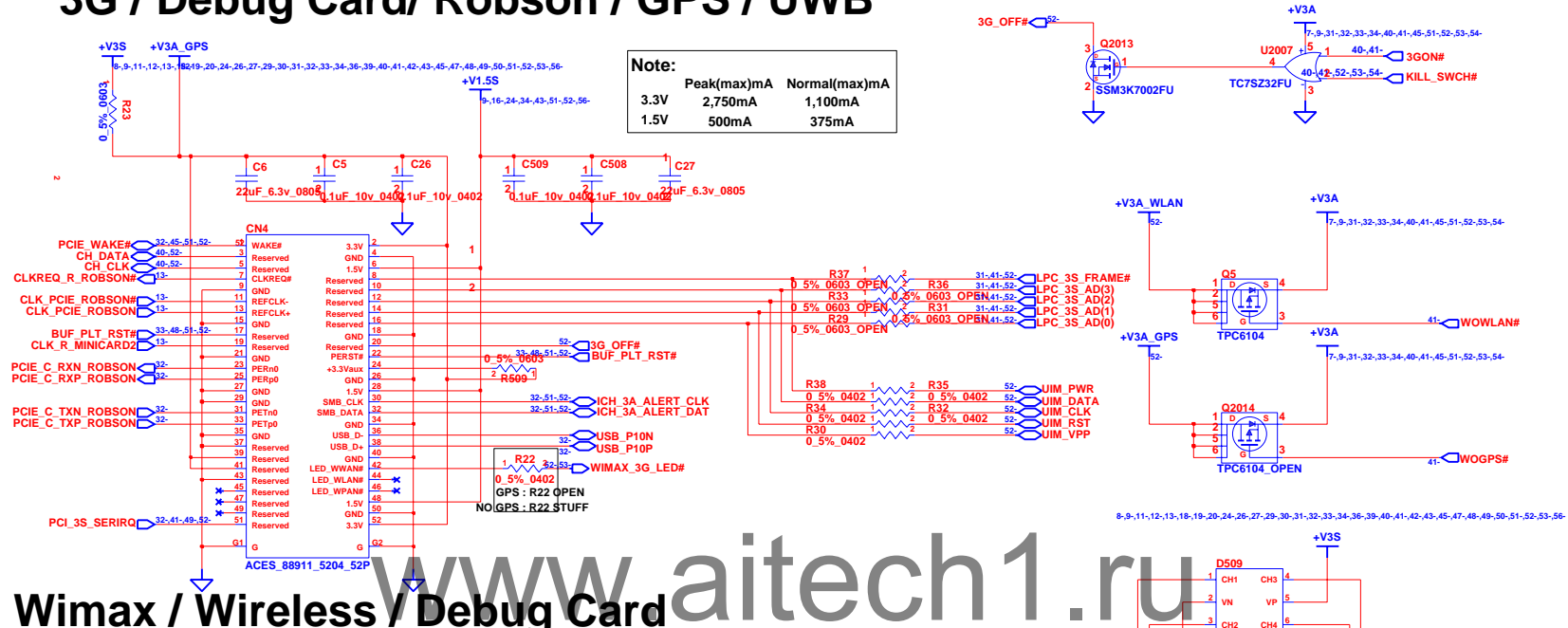


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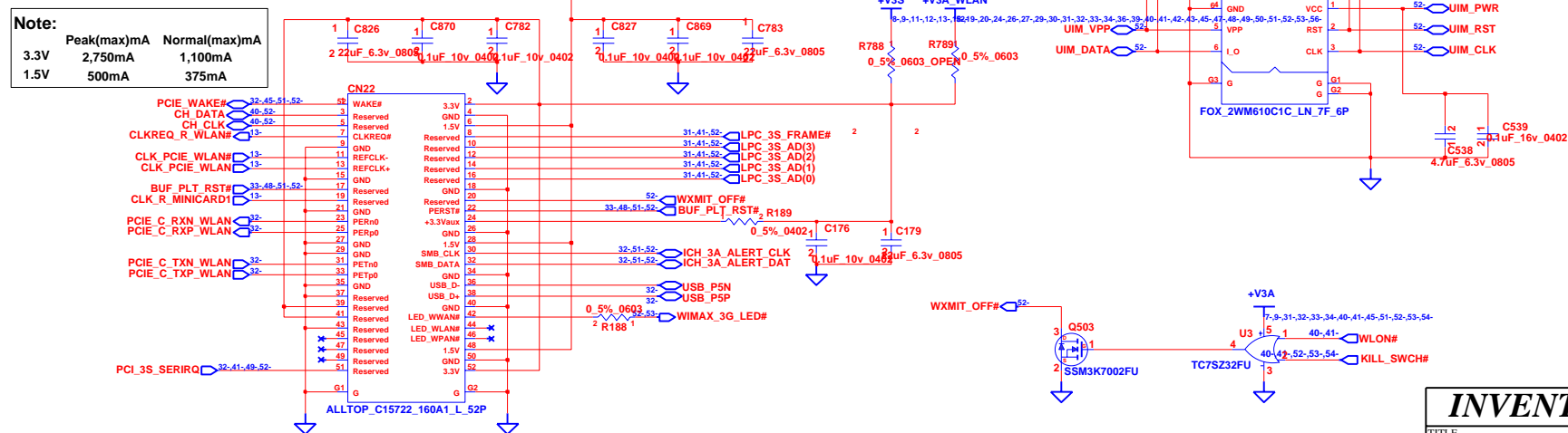


INVENTEC			
TITLE Minneapolis 10 New Card			
SIZE A3	CODE CS	DOC. NUMBER 1310A2218301	REV X01
CHANGE by		17-Apr-2008	
SHEET		51	OF 60

## 3G / Debug Card/ Robson / GPS / UWB



# Wimax / Wireless / Debug Card

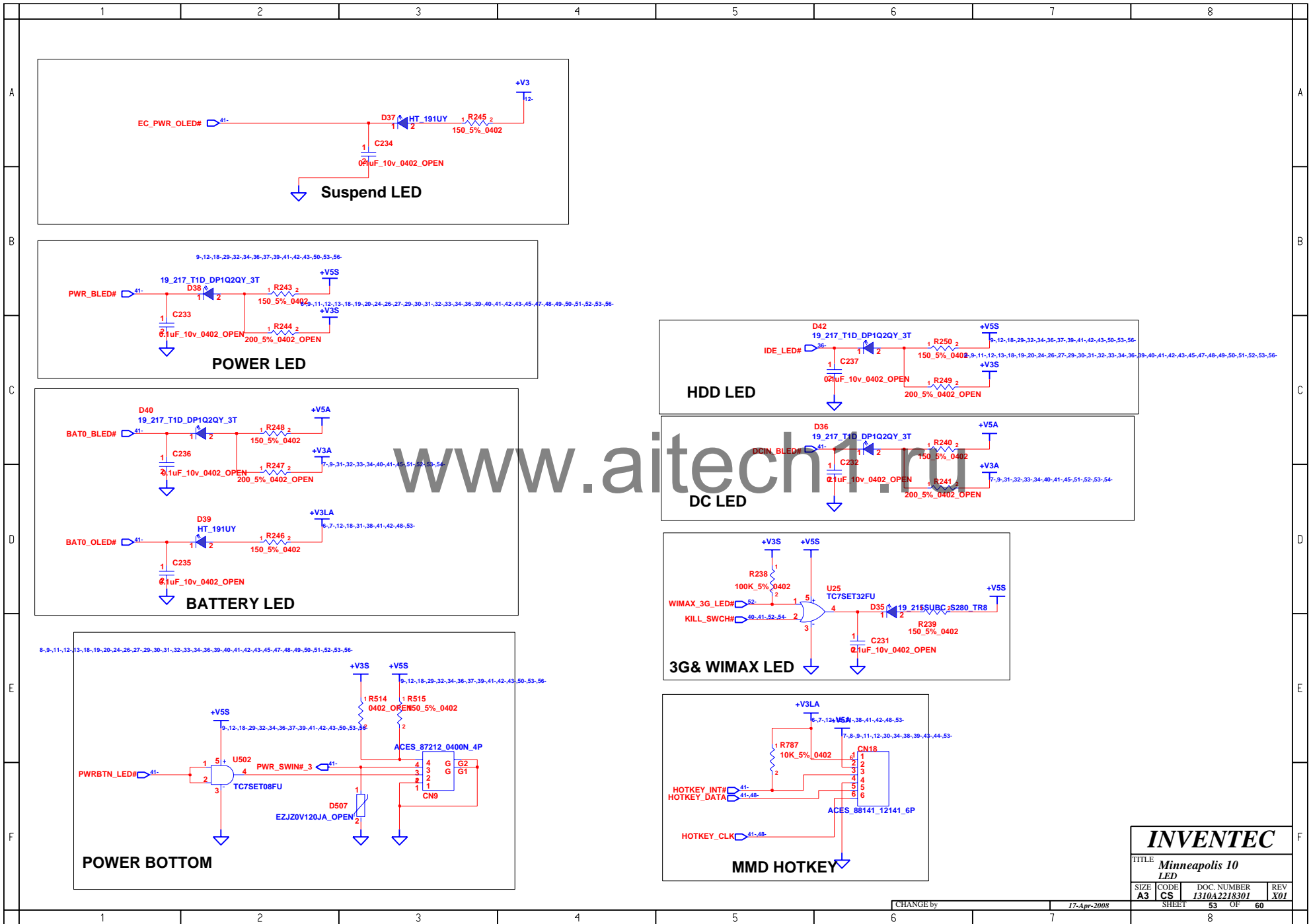
**INVENTEC**

TITLE	<b>Minneapolis 10</b> <i>Robson &amp; 3G &amp; WLAN &amp; Debug Cards</i>
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SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <i>1310A2218301</i>	REV <i>X01</i>
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CHANGE by	17-Apr-2008
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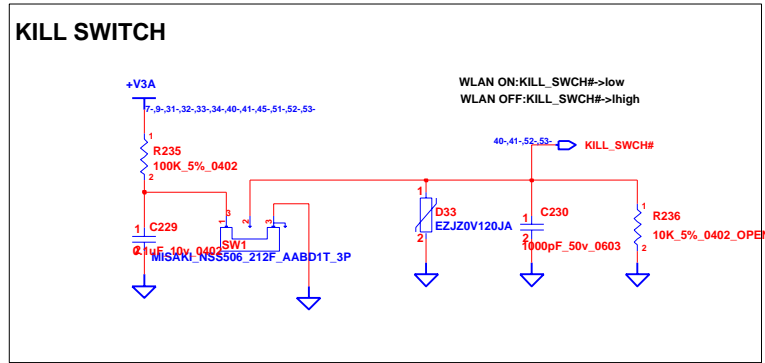
8



**INVENTEC**

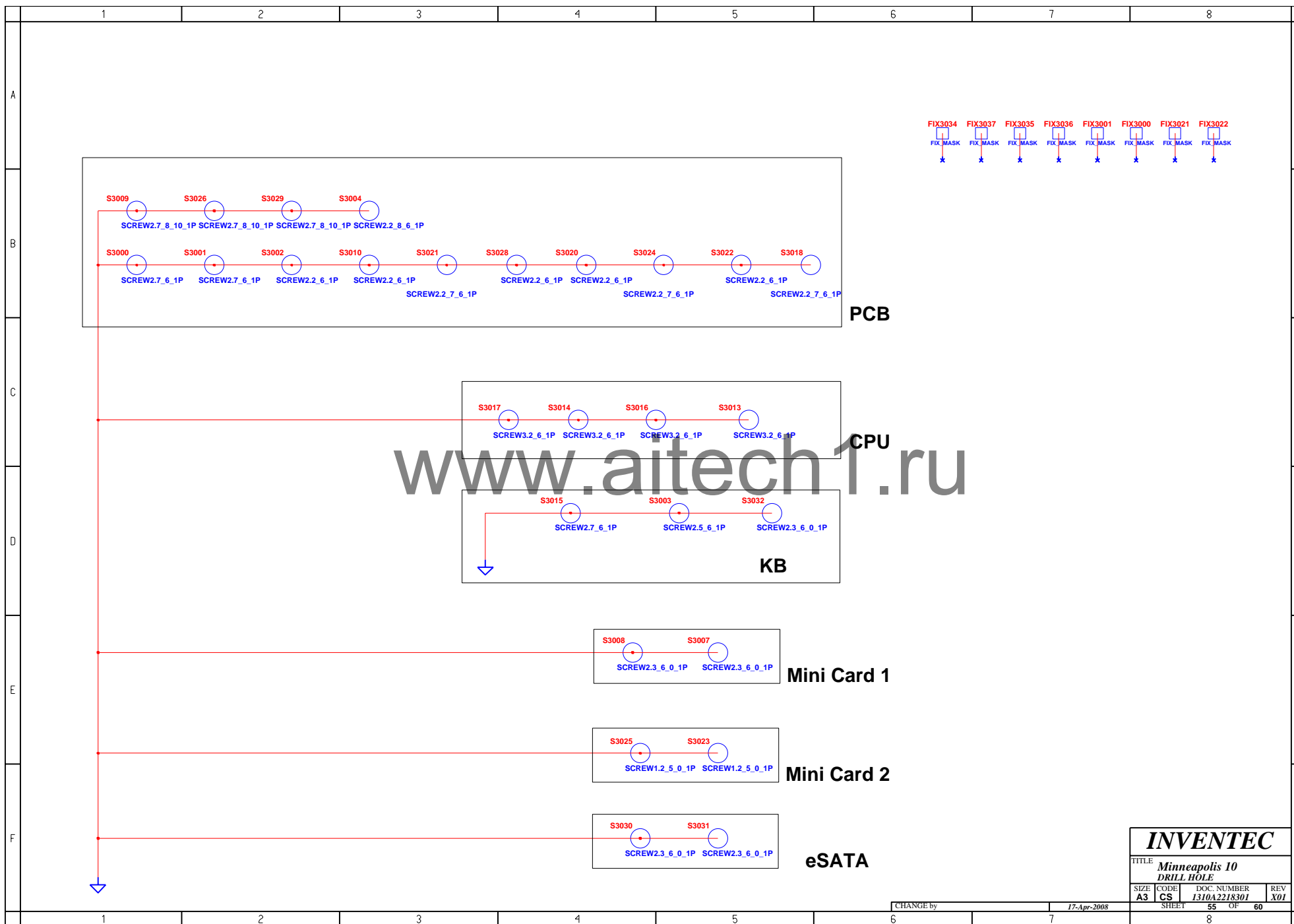
TITLE Minneapolis 10 LED			
SIZE A3	CODE CS	DOC. NUMBER 1310A2218301	REV X01
SHEET		53	OF 60

CHANGE by 17-Apr-2008



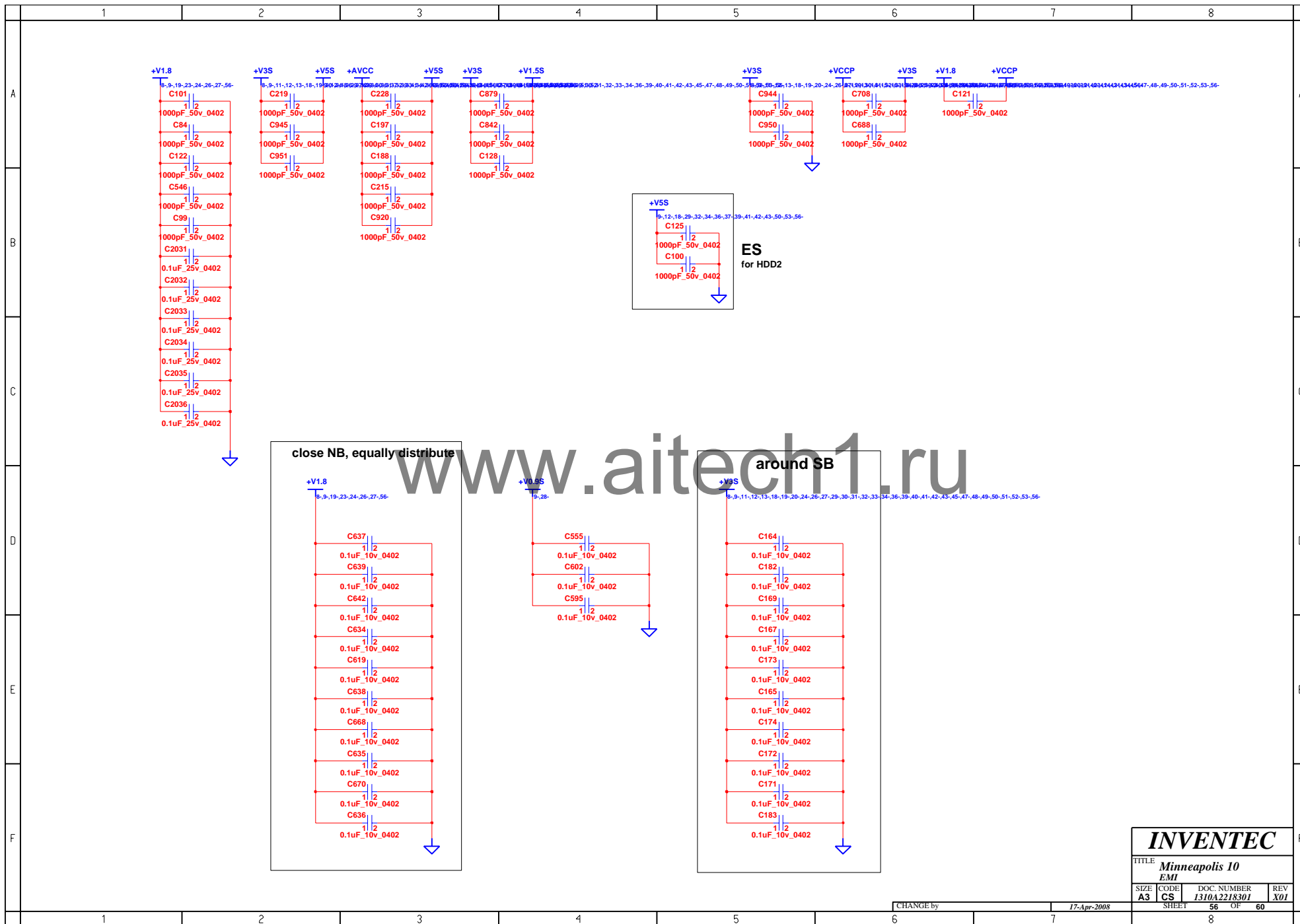
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INVENTEC			
TITLE Minneapolis 10 KILL SWITCH			
SIZE A3	CODE CS	DOC. NUMBER 1310A2218301	REV X01
CHANGE by		17-Apr-2008	
SHEET		54	OF 60



INVENTEC			
TITLE: <i>Minneapolis 10</i>			
DRILL HOLE			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2218301	X01
SHEET		55	OF 60

CHANGE by 17-Apr-2008



**INVENTEC**

TITLE  
**Minneapolis 10**  
**EMI**

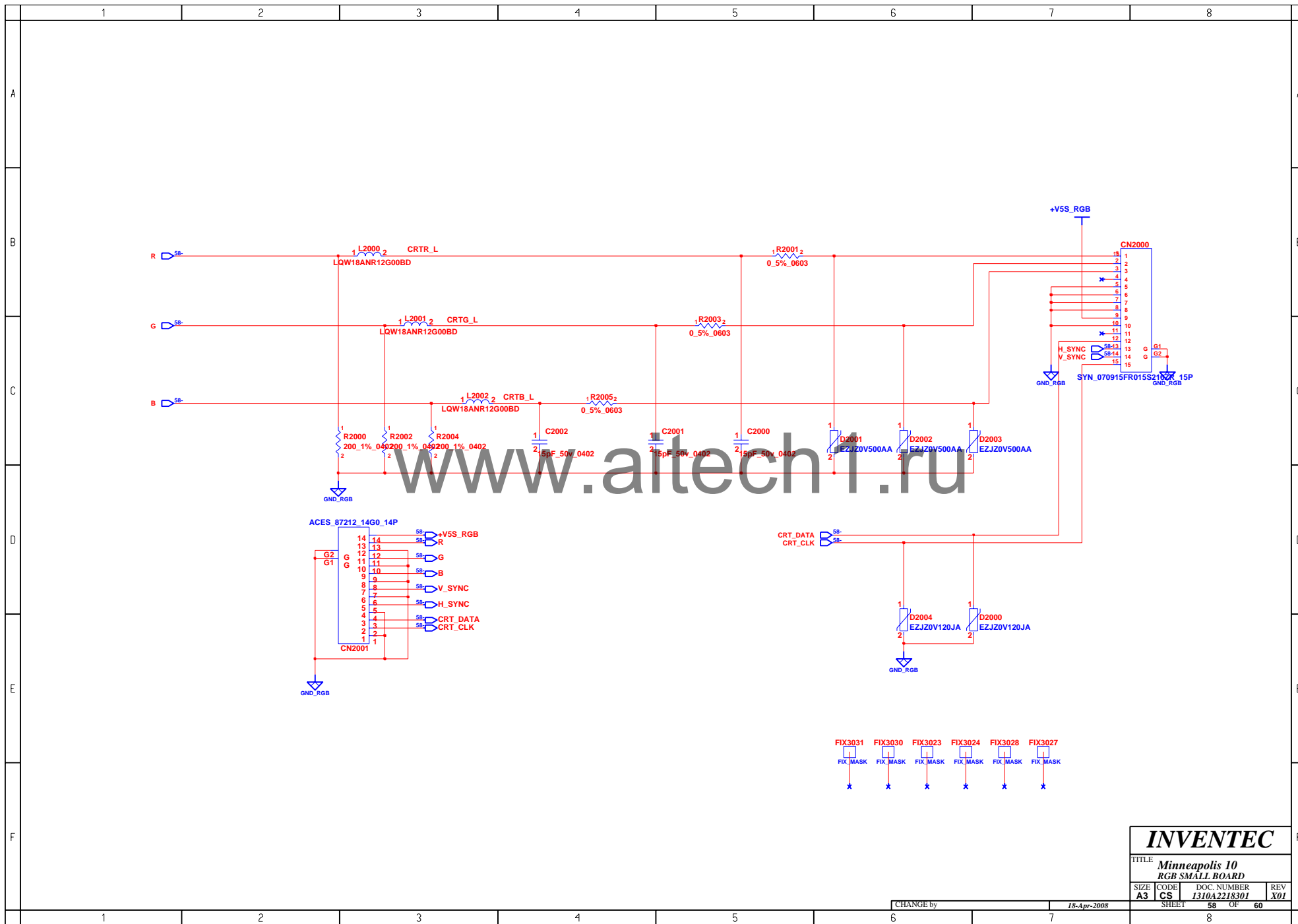
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2218301	X01

CHANGE by 17-Apr-2008

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**INVENTEC**

TITLE  
**Minneapolis 10  
RGB SMALL BOARD**

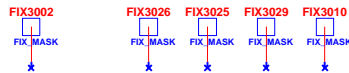
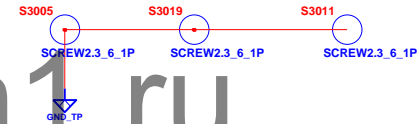
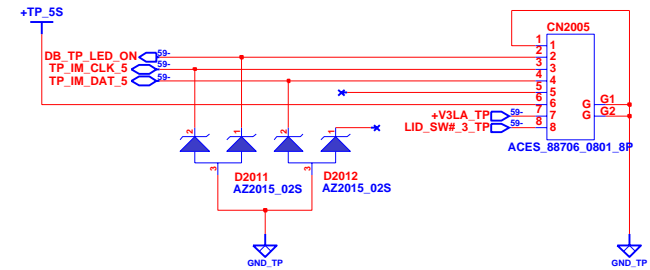
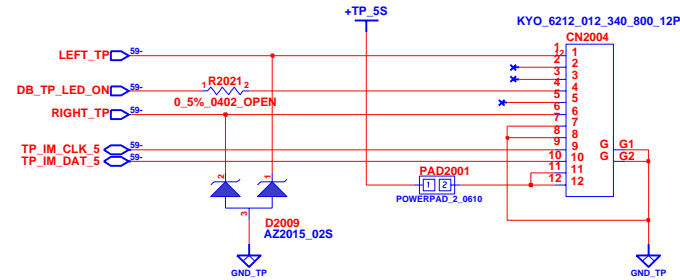
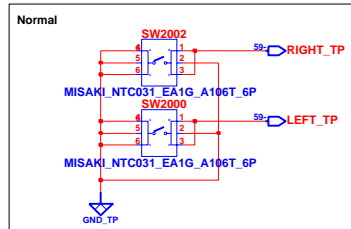
SIZE CODE DOC. NUMBER REV  
**A3 CS 1310A2218301 X01**

CHANGE by 18-Apr-2008

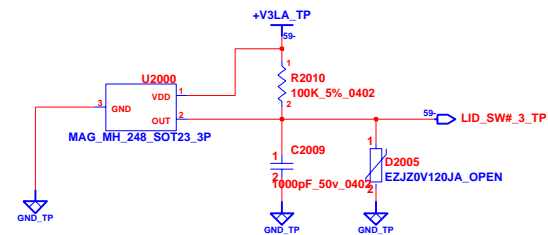
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# TOUCH PAD BOARD

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## LID SWITCH



**INVENTEC**

TITLE  
**Minneapolis 10**  
**TOUCH PAD SMALL BOARD**

SIZE CODE CS DOC. NUMBER 1310A2218301 REV X01

CHANGE by 18-Apr-2008

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