

	1	2	3	4	5	6	7	8																																																																											
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B	<div>HSF Property : HF</div> <div><div>ZIDANE 2.0</div><div>www.aitech1.ru</div><div>DB Build</div><div>2010/08/06</div></div>								B																																																																										
C									C																																																																										
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F	<table><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>2010-06-14</td><td>2010-ECO-011519</td><td>B</td></tr><tr><td>DATE</td><td>CHANGE NO.</td><td>REV</td></tr></table>																			2010-06-14	2010-ECO-011519	B	DATE	CHANGE NO.	REV			<table><tr><td></td><td>EE</td><td>DATE</td><td>POWER</td><td>DATE</td></tr><tr><td>DRAWER</td><td>Chang, Sukigo</td><td>2010-06-14</td><td>Ho, Wen-Pin</td><td>2010-06-14</td></tr><tr><td>DESIGN</td><td>Chang, Sukigo</td><td>2010-06-14</td><td>Ho, Wen-Pin</td><td>2010-06-14</td></tr><tr><td>CHECK</td><td>Hu, Hook</td><td>2010-06-14</td><td>Ho, Wen-Pin</td><td>2010-06-14</td></tr><tr><td>RESPONSIBLE</td><td>Hu, Hook</td><td>2010-06-14</td><td>Ho, Wen-Pin</td><td>2010-06-14</td></tr><tr><td colspan="2">SIZE =</td><td>3</td><td colspan="2" rowspan="3">VER :</td></tr><tr><td colspan="2">FILE NAME :</td><td colspan="3">XXXX-XXXXXX-XX</td></tr><tr><td>P/N</td><td colspan="4">XXXXXXXXXXXX</td></tr></table>		EE	DATE	POWER	DATE	DRAWER	Chang, Sukigo	2010-06-14	Ho, Wen-Pin	2010-06-14	DESIGN	Chang, Sukigo	2010-06-14	Ho, Wen-Pin	2010-06-14	CHECK	Hu, Hook	2010-06-14	Ho, Wen-Pin	2010-06-14	RESPONSIBLE	Hu, Hook	2010-06-14	Ho, Wen-Pin	2010-06-14	SIZE =		3	VER :		FILE NAME :		XXXX-XXXXXX-XX			P/N	XXXXXXXXXXXX					<div>INVENTEC</div> <div>TITLEST133iD Project Name</div> <table><tr><td>SIZE</td><td>CODE</td><td>DOC. NUMBER</td><td>REV</td></tr><tr><td>A3</td><td>CS</td><td>I310A23179-0-MTR</td><td>B</td></tr><tr><td colspan="2">SHEET</td><td>1</td><td>OF 58</td></tr></table>	SIZE	CODE	DOC. NUMBER	REV	A3	CS	I310A23179-0-MTR	B	SHEET		1	OF 58	F
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- 10. +VCC_CORE
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Inventec Confidential

Sandy Bridge
(Socket-rPGA989)
37.5mm x 37.5mm

DDR3 SO-DIMM 1

DDR3 SO-DIMM 2

Discrete Graphic
ATI
Seymour

COUGAR POINT

www.aitech1.ru

USB 0
ESATA+USB

USB 1
Card Reader
ALCOR_AU6433

USB 2
WLAN+BT

USB 3
WWAN
minicard

USB 5
Webcam

USB 8
USB CONN01

USB 9
USB CONN02

USB 10
Bluetooth

USB 11
FingerPrint

IDT 92HD80
AudioCodec

ITE IT8518E
KBC

SPI ROM
EC FW 512KB
(BIOS)

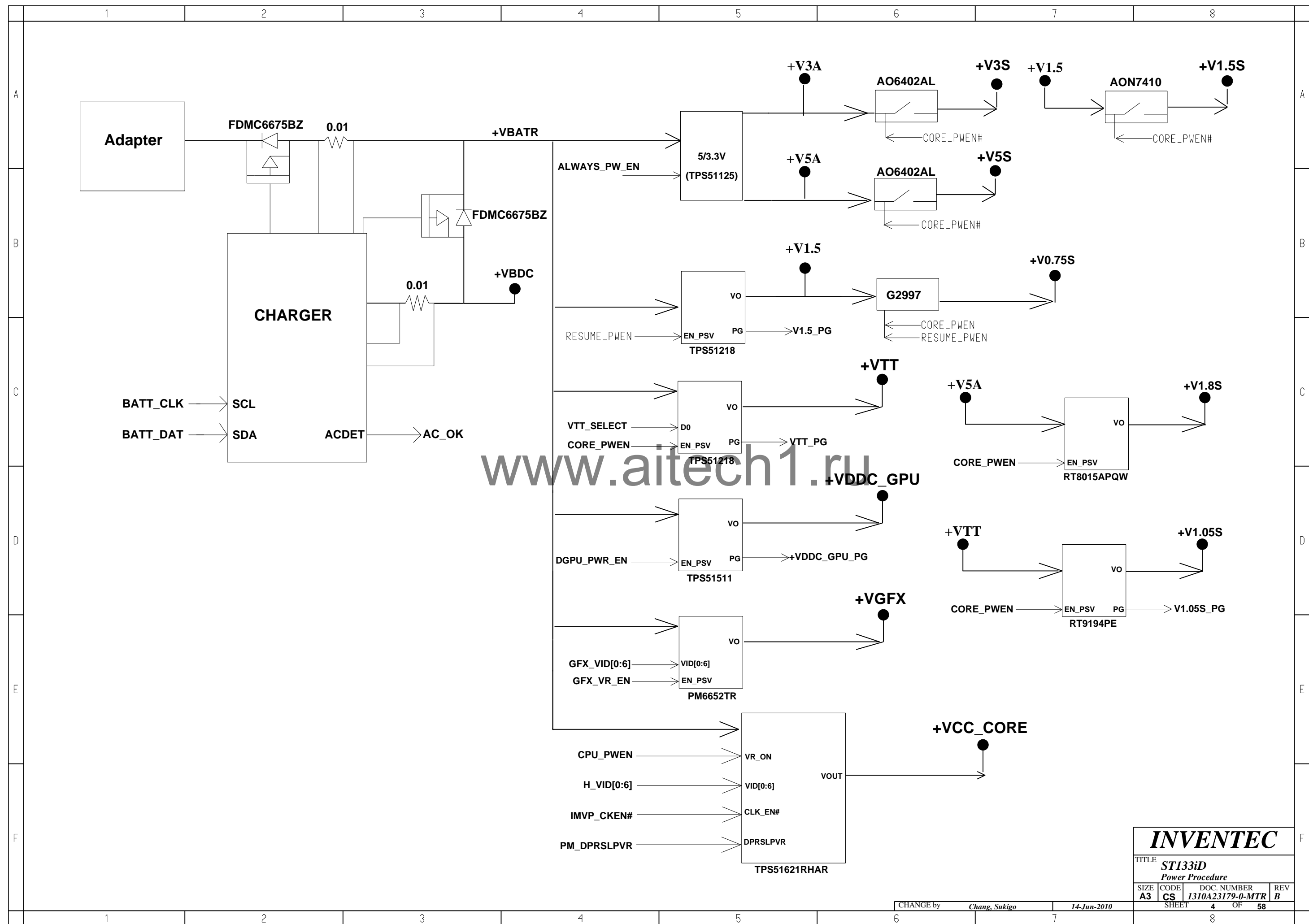
System Charger
DC / DC System Power

Thermal meter
TI TMP431A

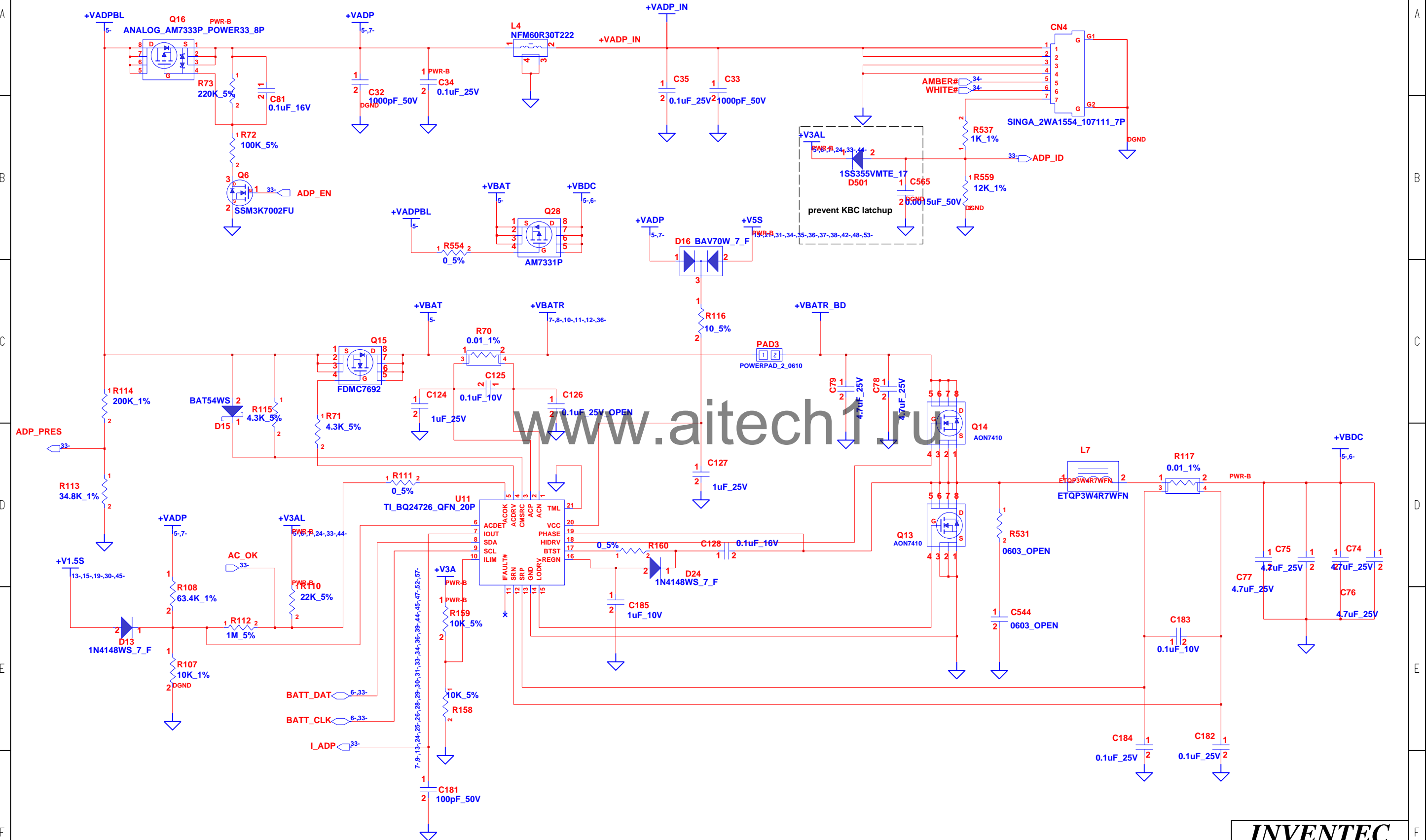
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TITLE			
ST133iD Block Diagram			
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A3	CS	1310A23179-0-MTR	B
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CHANGE by Chang, Sukigo 29-Jun-2010



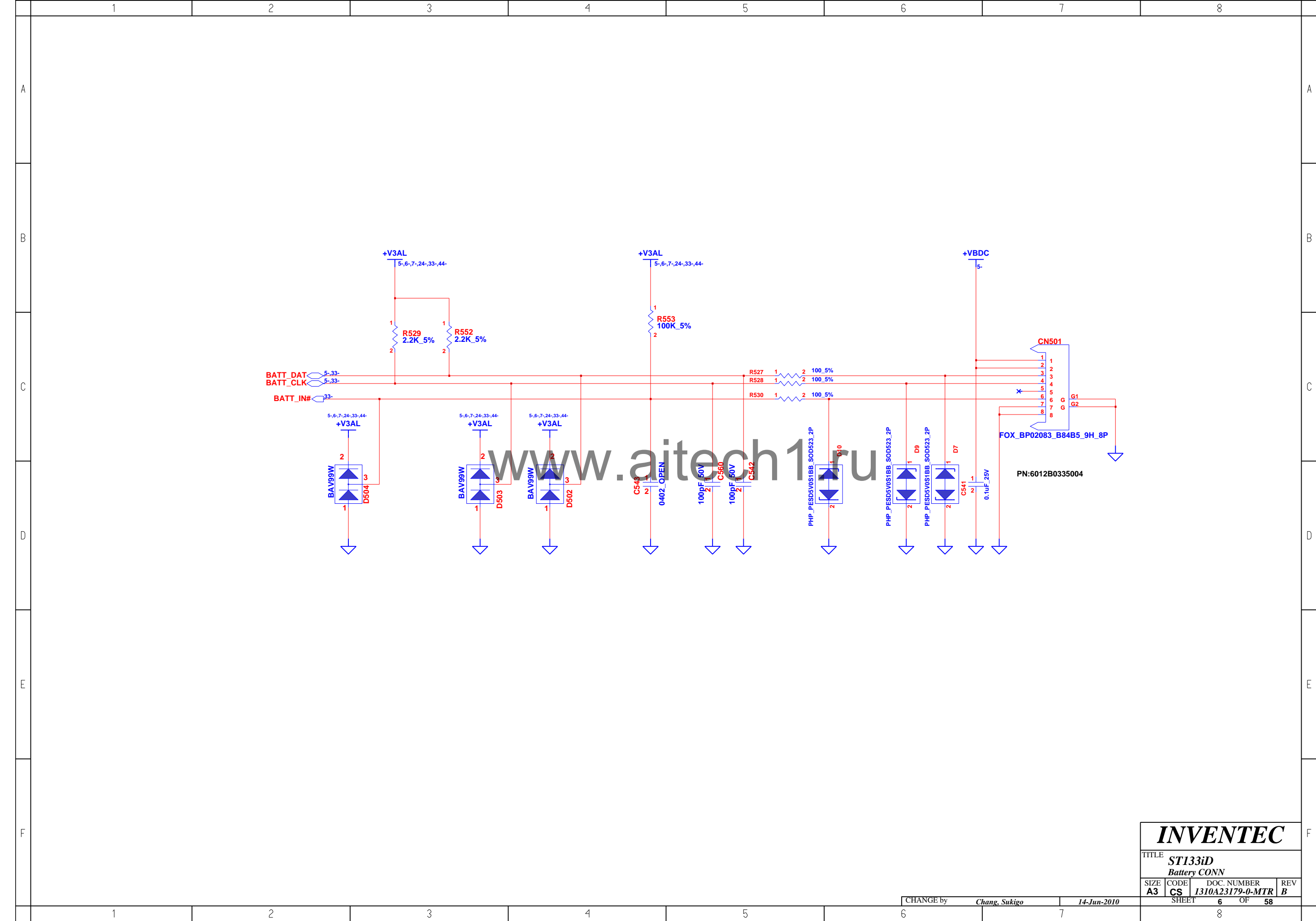
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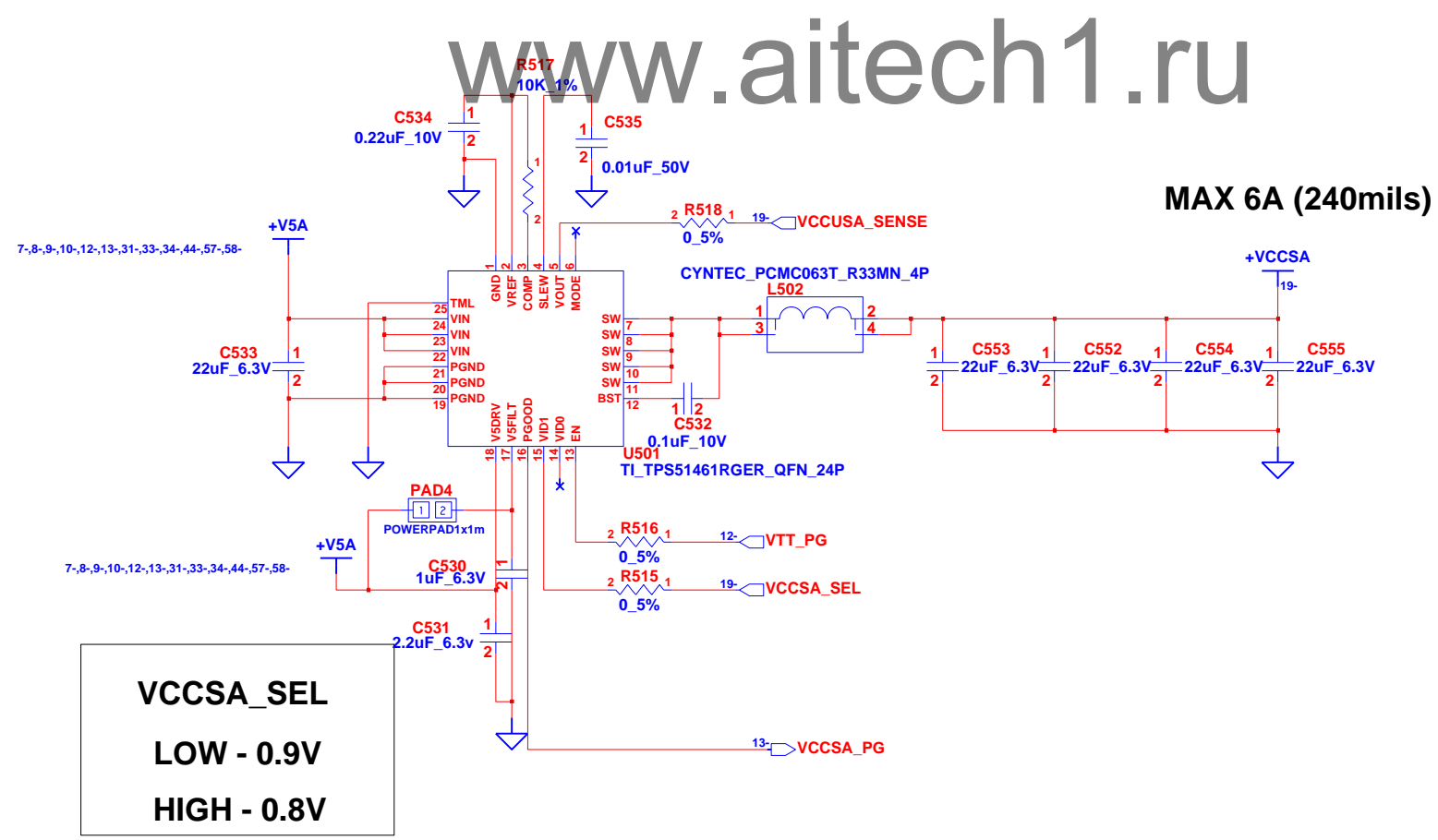
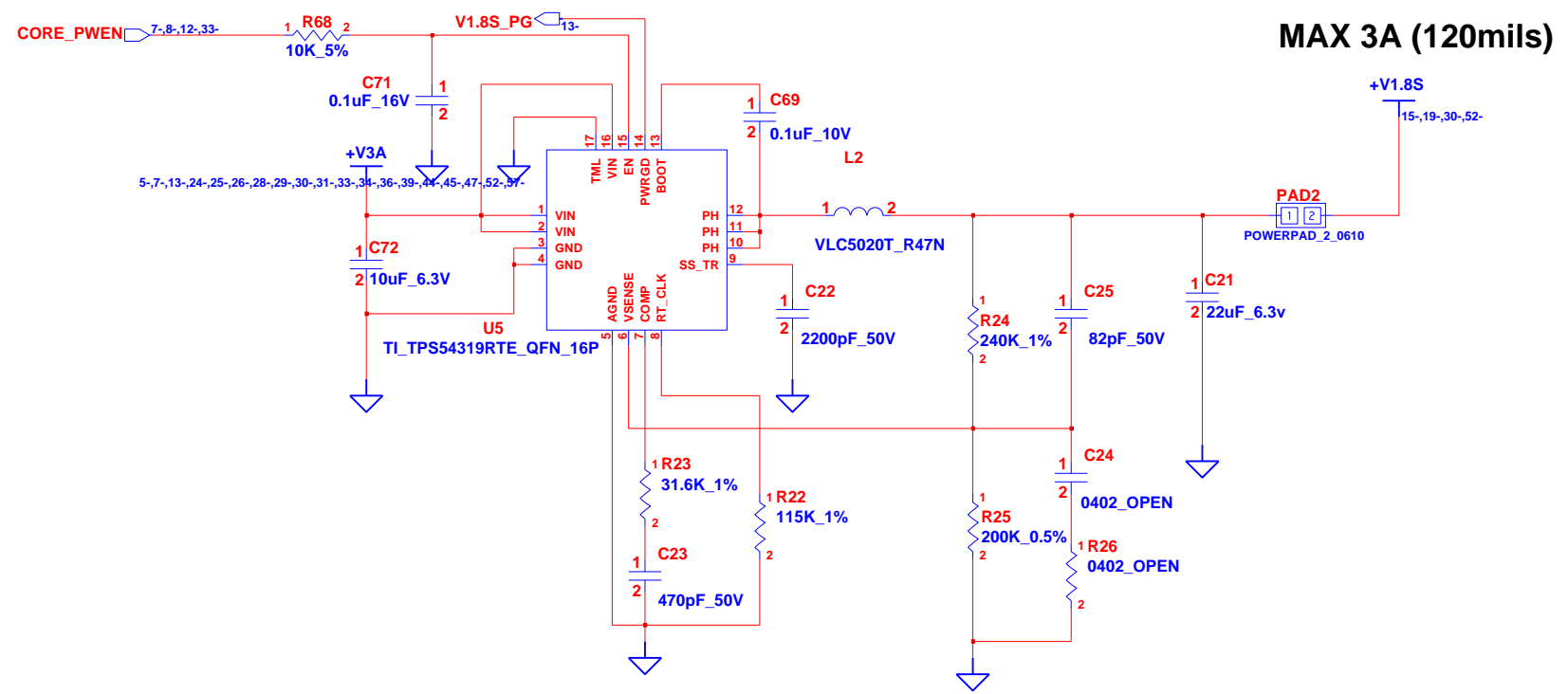


INVENTEC

TITLE ST133iD			
DC & Battery Charger			
SIZE A3	CODE CS	DOC. NUMBER 1310A23179-0-MTR	REV B
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CHANGE by *Chang, Sukigo* 14-Jun-2010



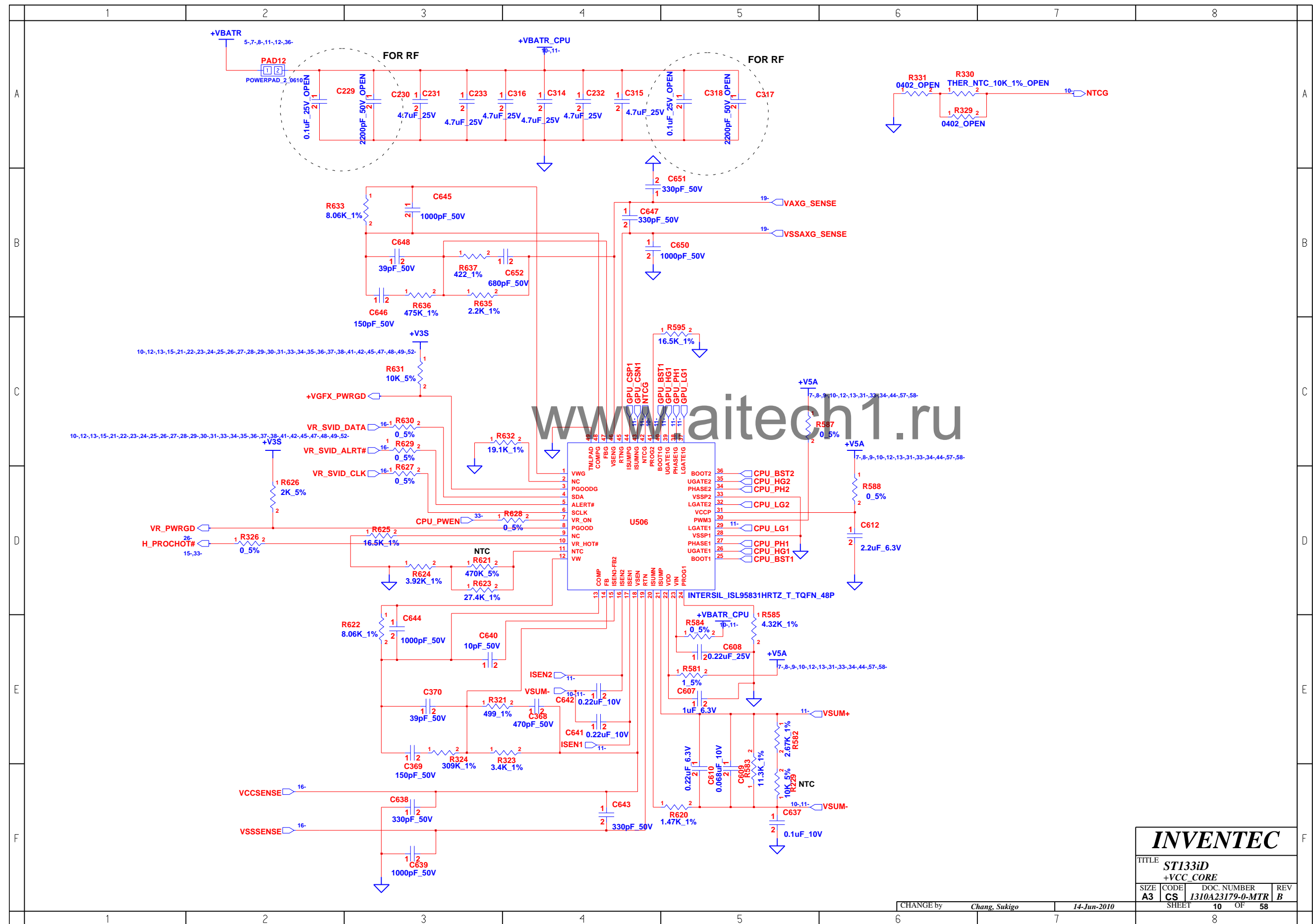


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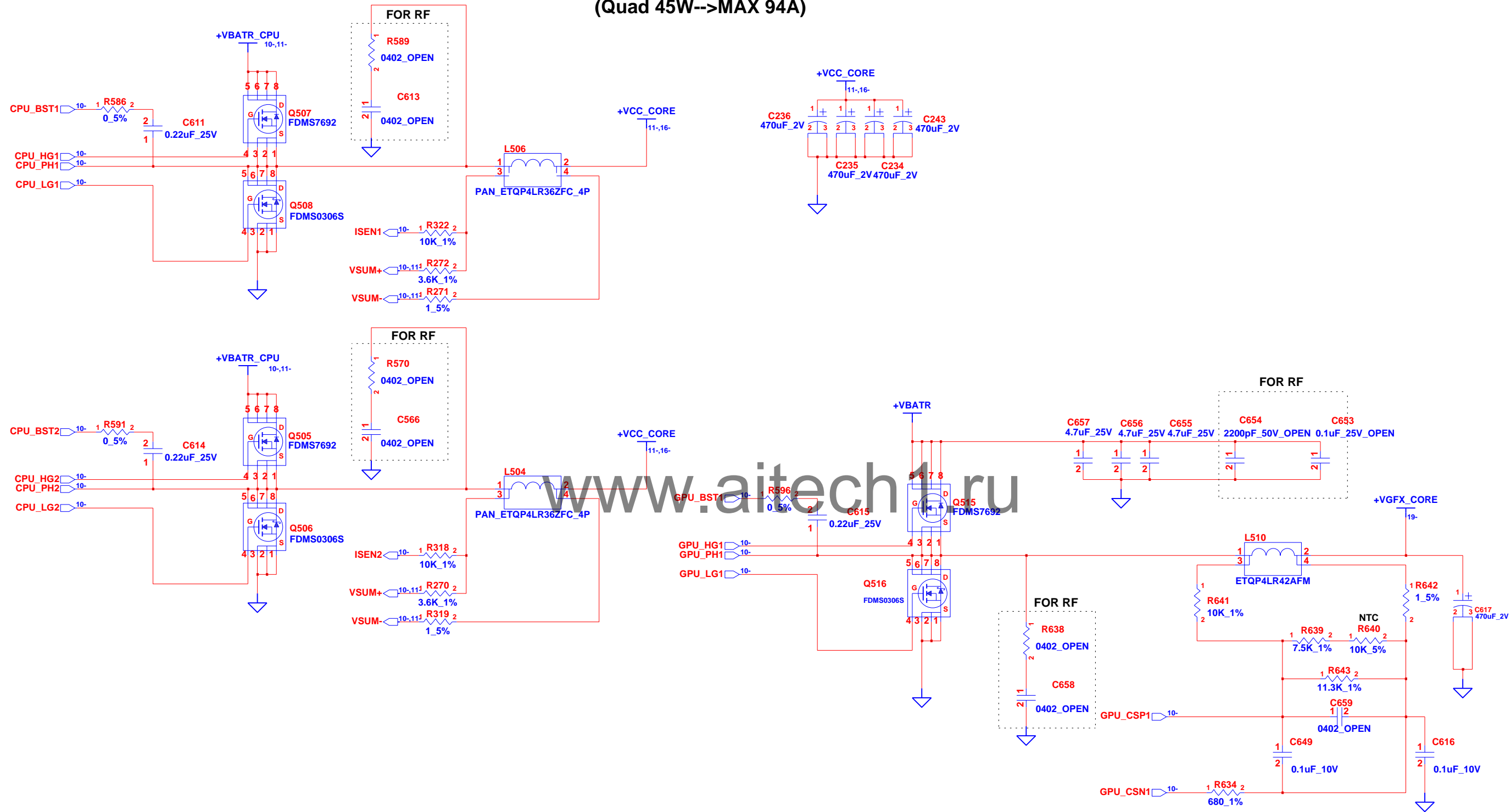
INVENTEC

TITLE ST133iD +V1.8S & +VCCSA			
SIZE A3	CODE CS	DOC. NUMBER 1310A23179-0-MTR	REV B
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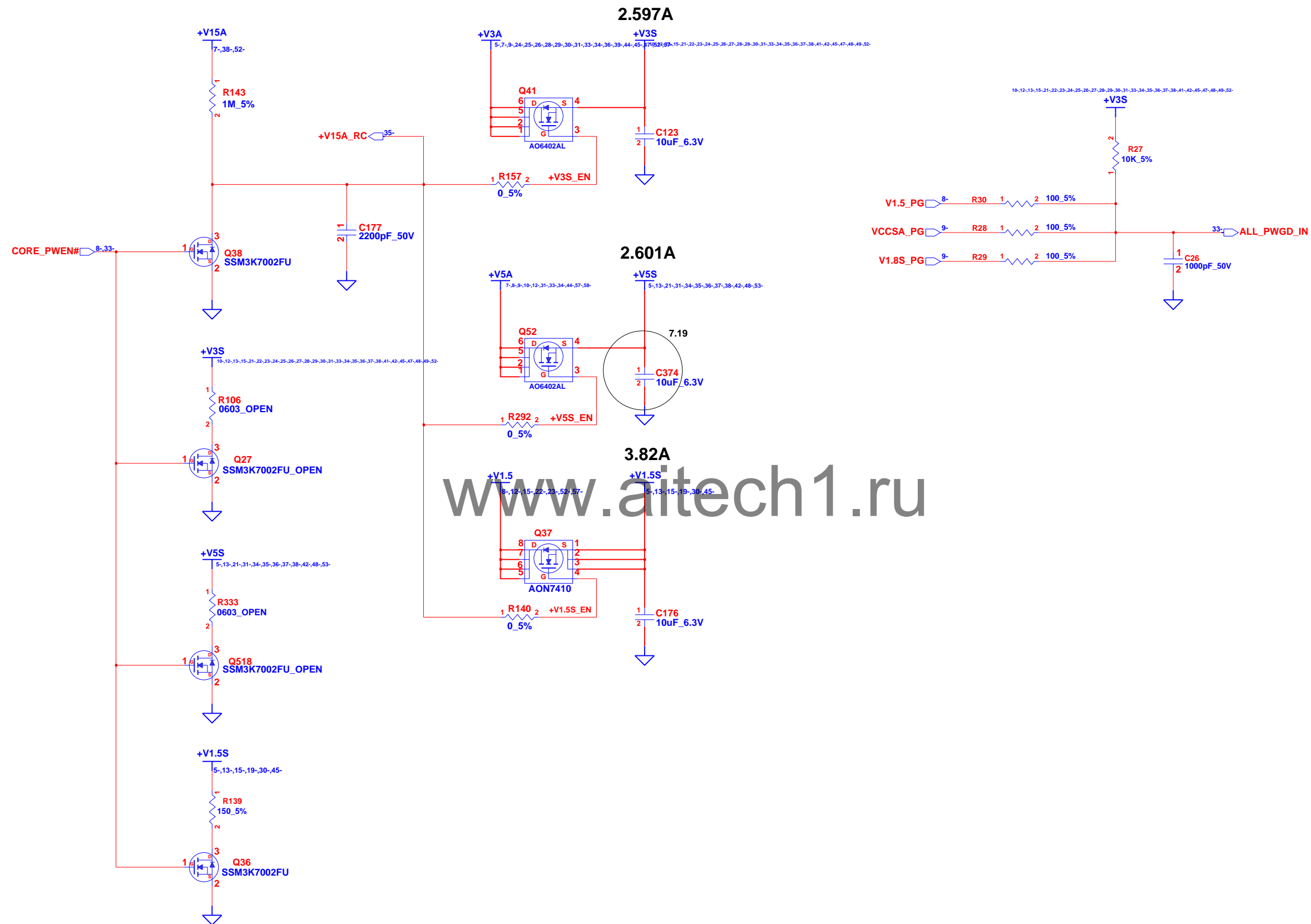
VCC_CORE (SV 35W-->MAX 53A)
(Quad 45W-->MAX 94A)



INVENTEC

TITLE			
ST133iD			
+VGFX_CORE			
SIZE	CODE	DOC. NUMBER	REV
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A3	CS	I310A23179-0-MTR	B
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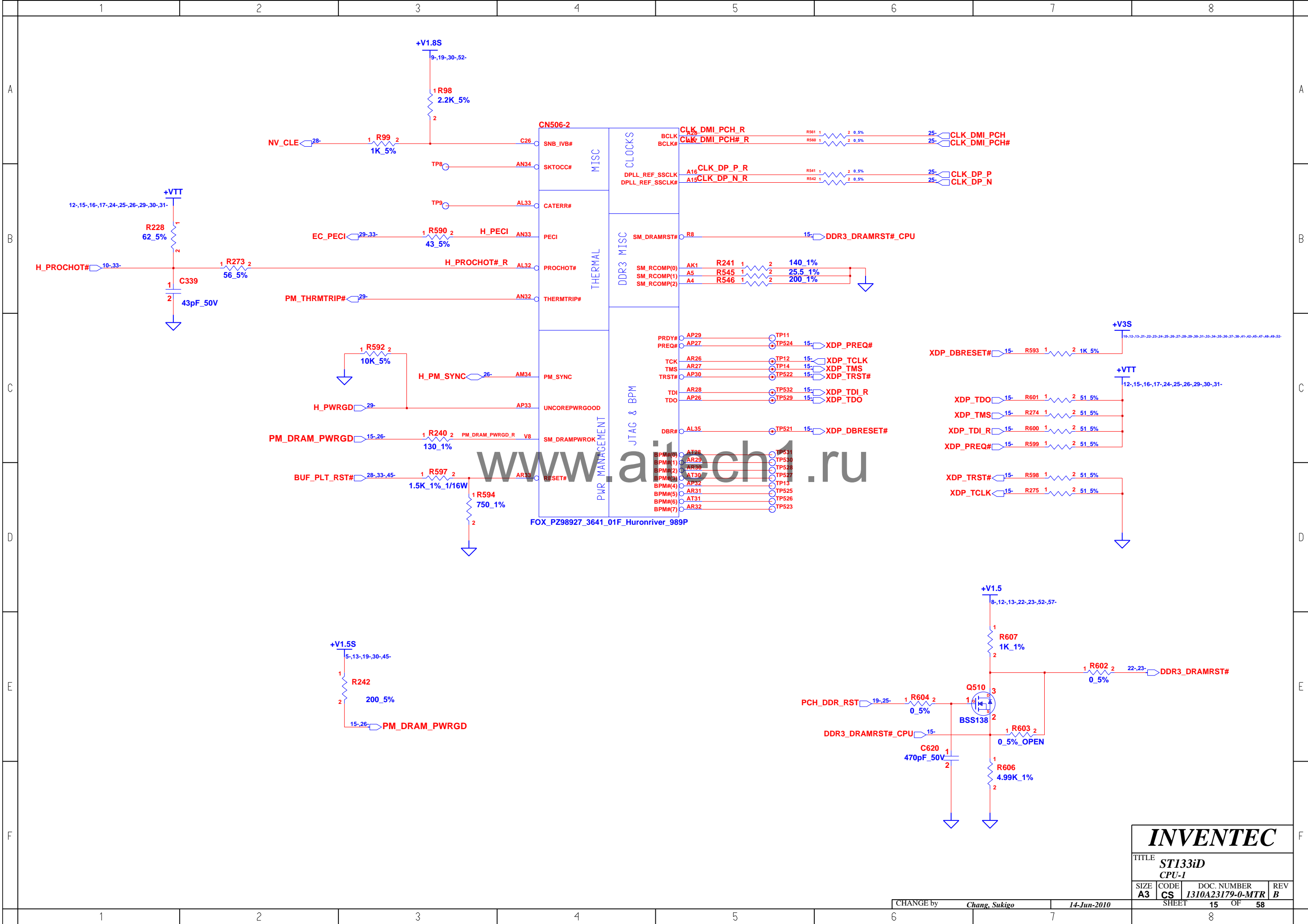
www.aitech.ru

INVENTEC

TITLE
ST133iD
CLK GEN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23179-0-MTR	B
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CHANGE by	Chang, Sukigo	21-Jun-2010
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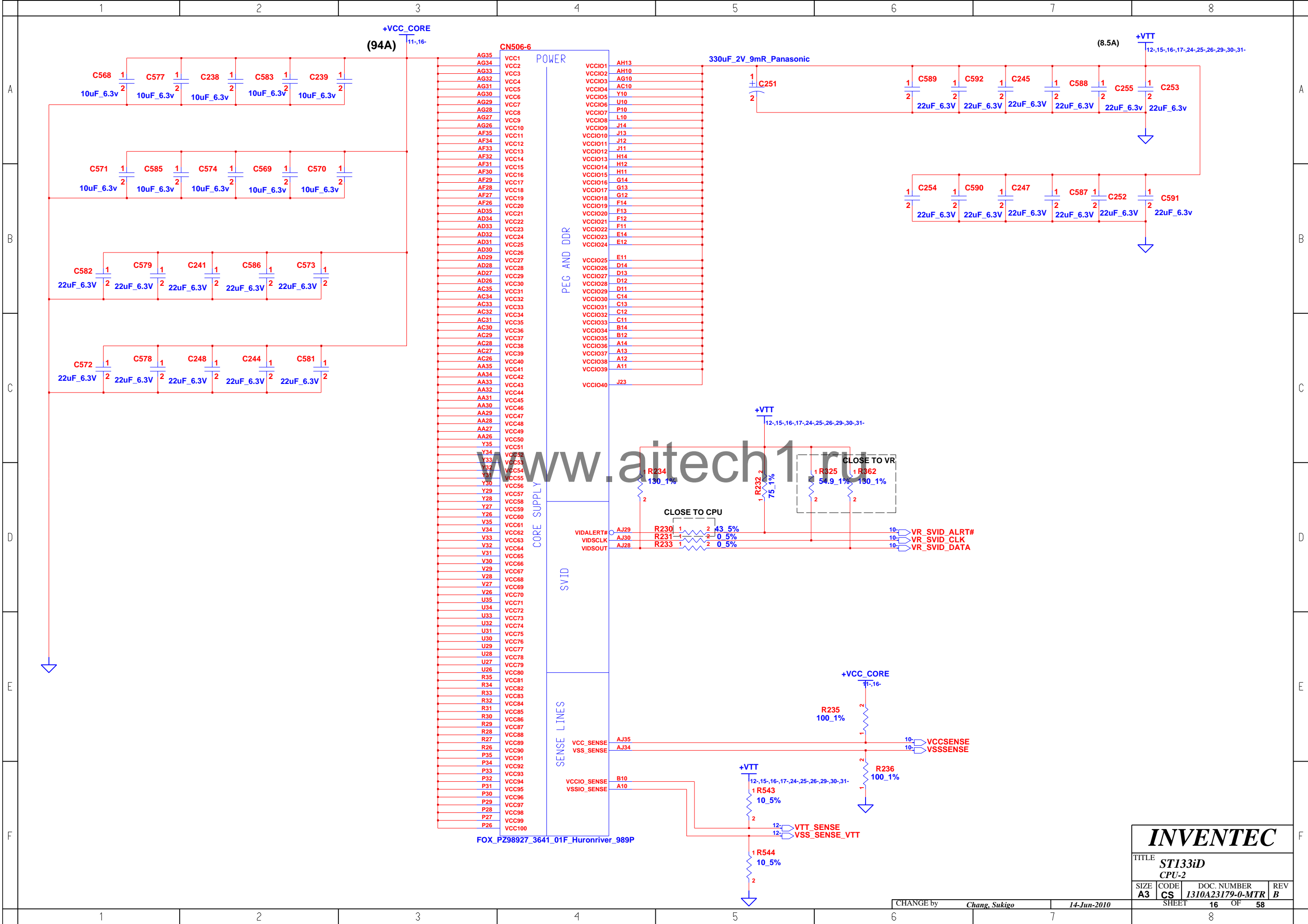
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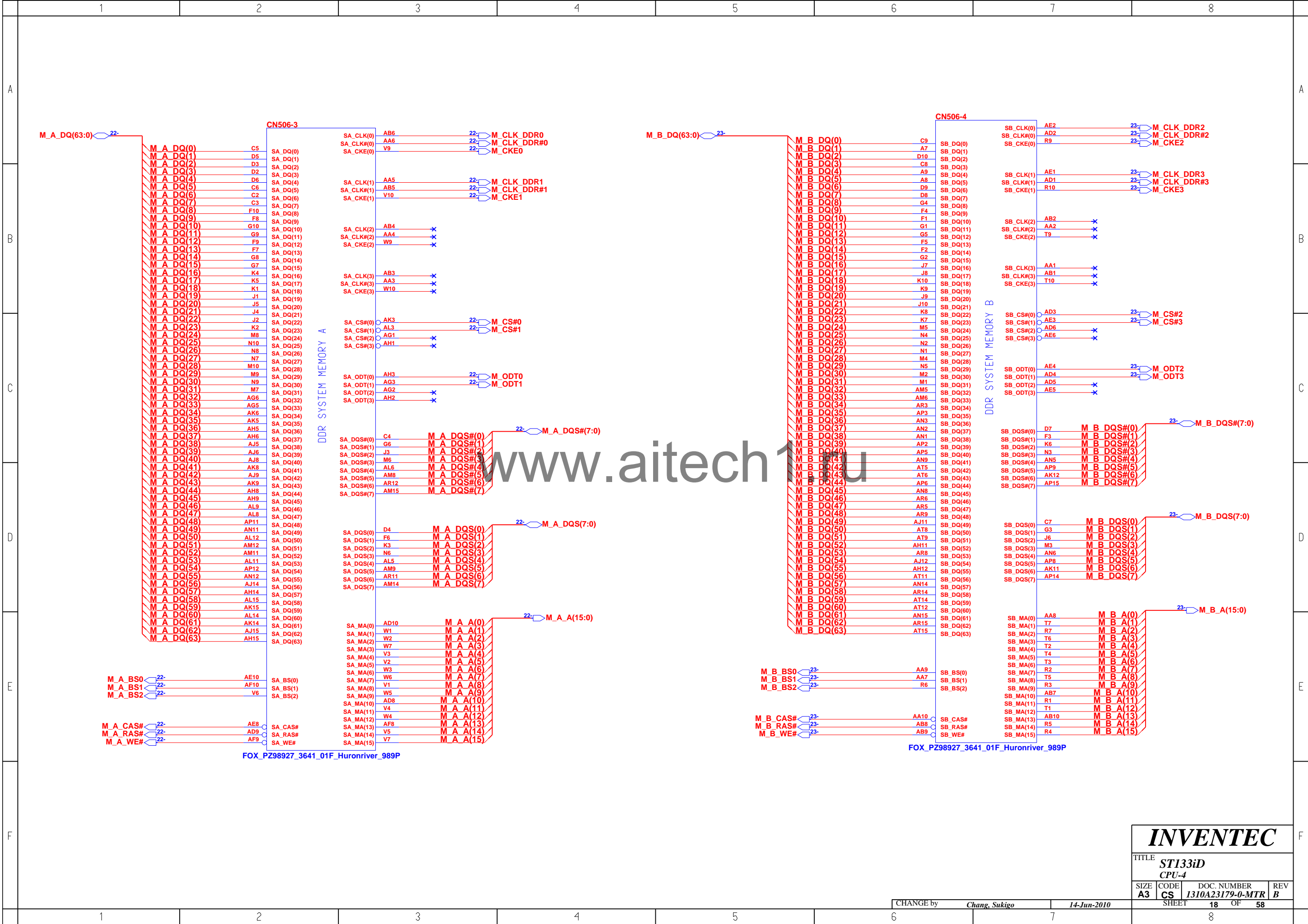
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**ST133iD
CPU-1**

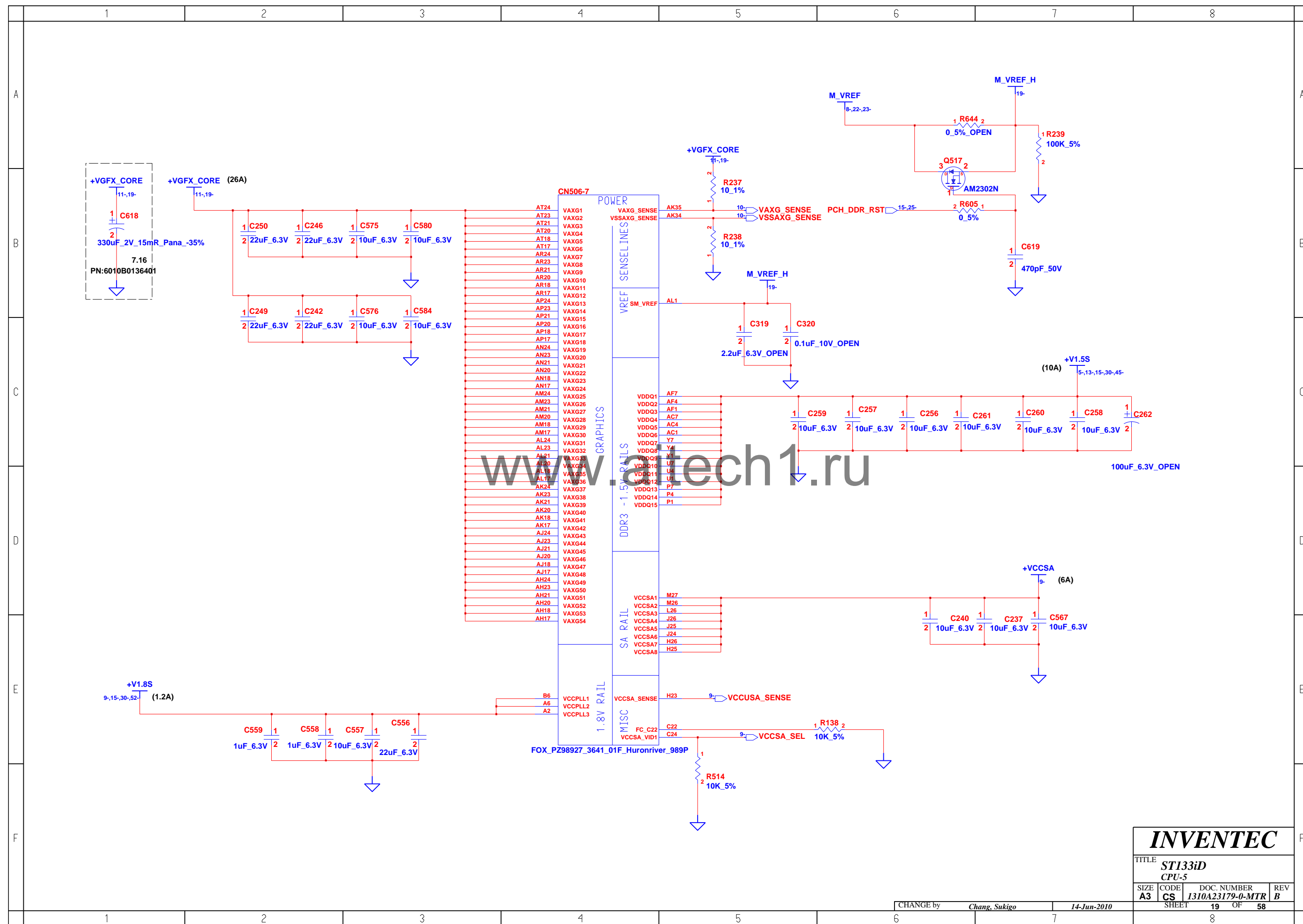
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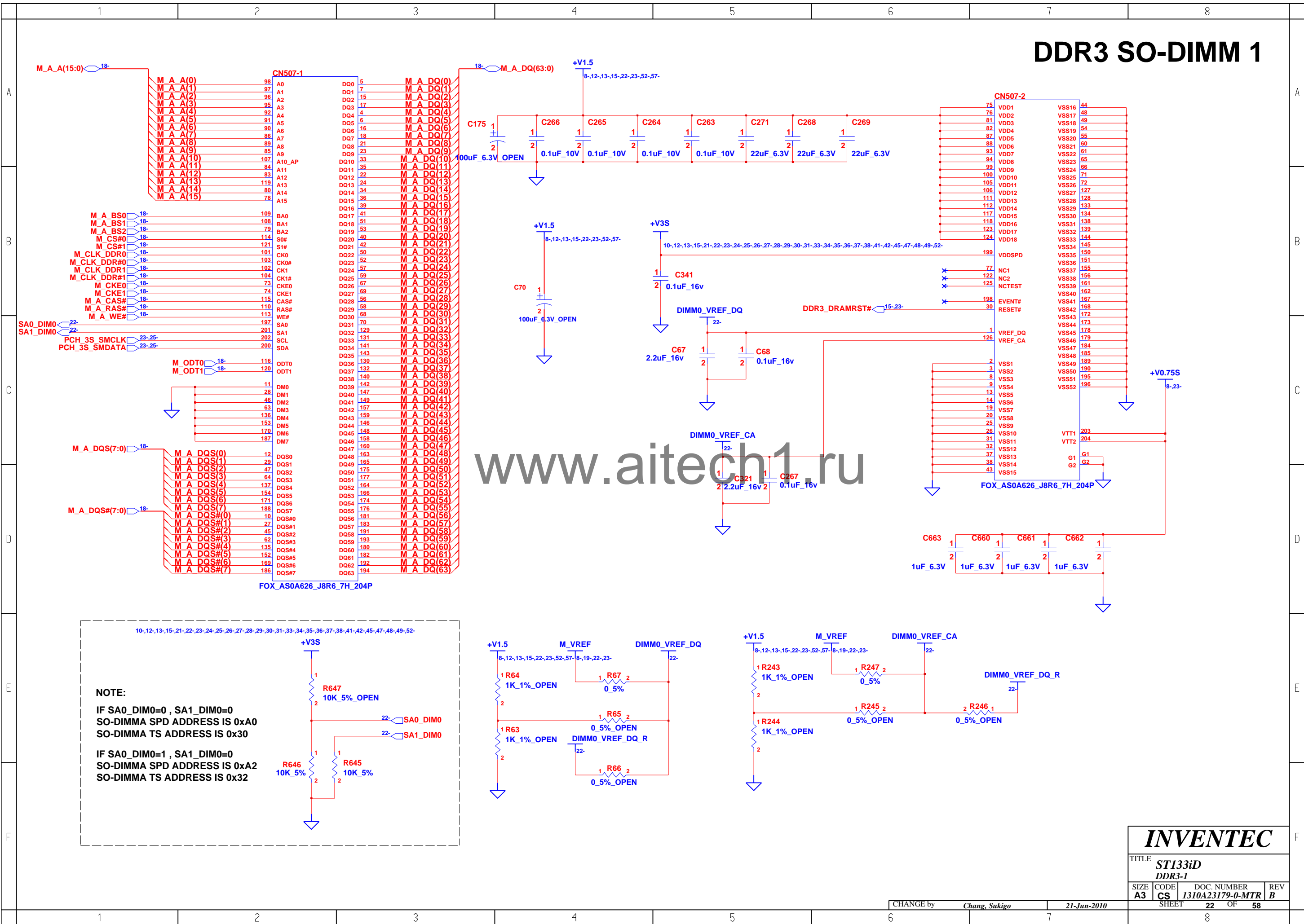
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TITLE ST133iD CPU-5			
SIZE A3	CODE CS	DOC. NUMBER 1310A23179-0-MTR	REV B
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DDR3 SO-DIMM 1



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NOTE:
IF SA0_DIM0=0 , SA1_DIM0=0
SO-DIMMA SPD ADDRESS IS 0xA0
SO-DIMMA TS ADDRESS IS 0x30

IF SA0_DIM0=1 , SA1_DIM0=0
SO-DIMMA SPD ADDRESS IS 0xA2
SO-DIMMA TS ADDRESS IS 0x32

INVENTEC

TITLE
ST133iD
DDR3-1

SIZE A3	CODE CS	DOC. NUMBER 1310A23179-0-MTR	REV B
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CHANGE by Chang, Sukigo 21-Jun-2010

DDR3 SO-DIMM 2

CN1005 (lower) : 6026B0121102
*BOM

Layout Note: Place
these Caps near
SO-DIMM1 power pin

Place these caps
close to VTT1 and
VTT2

Place these caps
close to VTT1 and
VTT2

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NOTE:

SO-DIMMB SPD ADDRESS IS 0xA4
SO-DIMMB TS ADDRESS IS 0x34

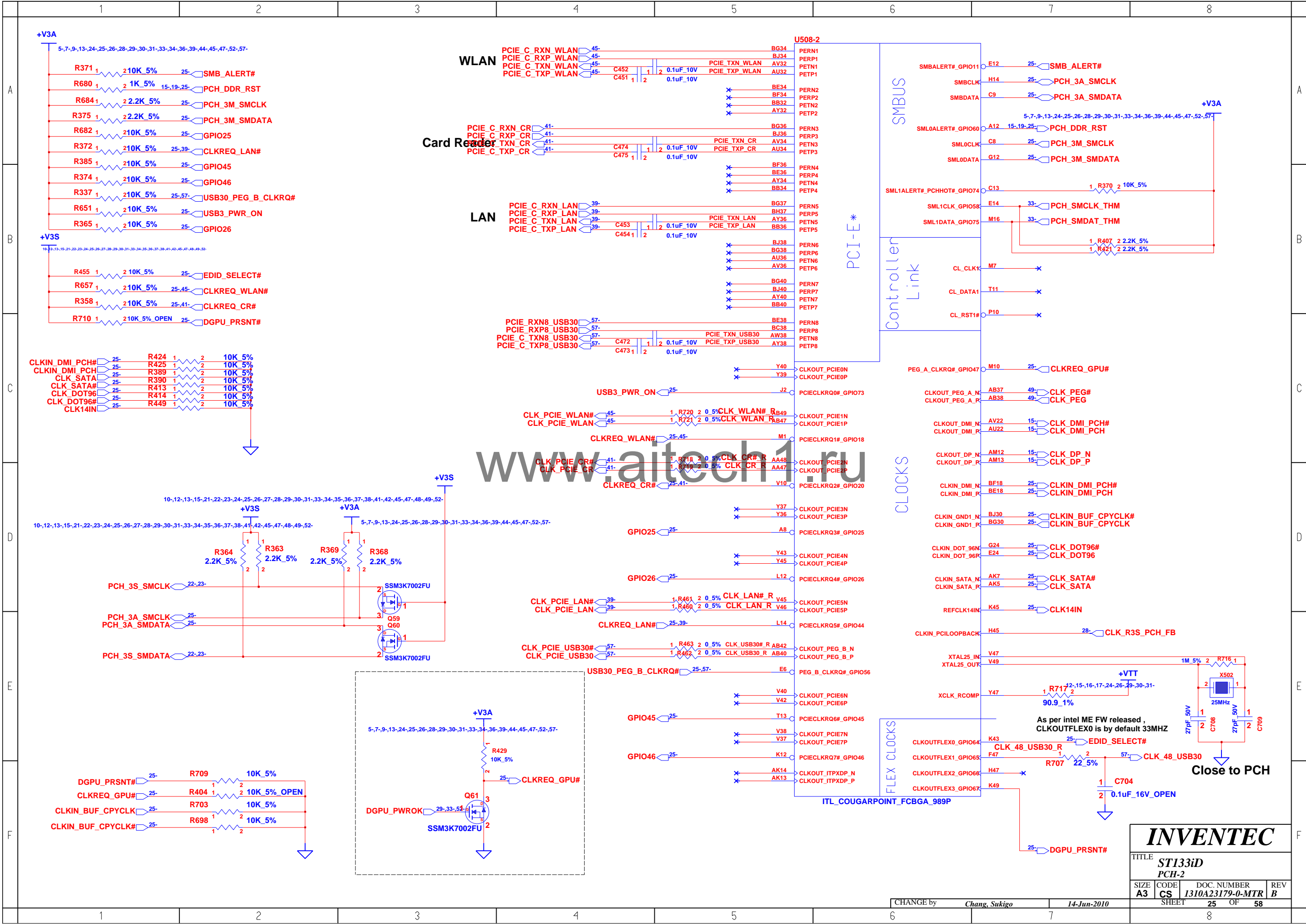
INVENTEC

TITLE
ST133iD
DDR3-2

SIZE	CODE	DOC. NUMBER	REV
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CHANGE by Chang, Sukigo 14-Jun-2010

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CHANGE by Chang, Sukigo 14-Jun-2010

A

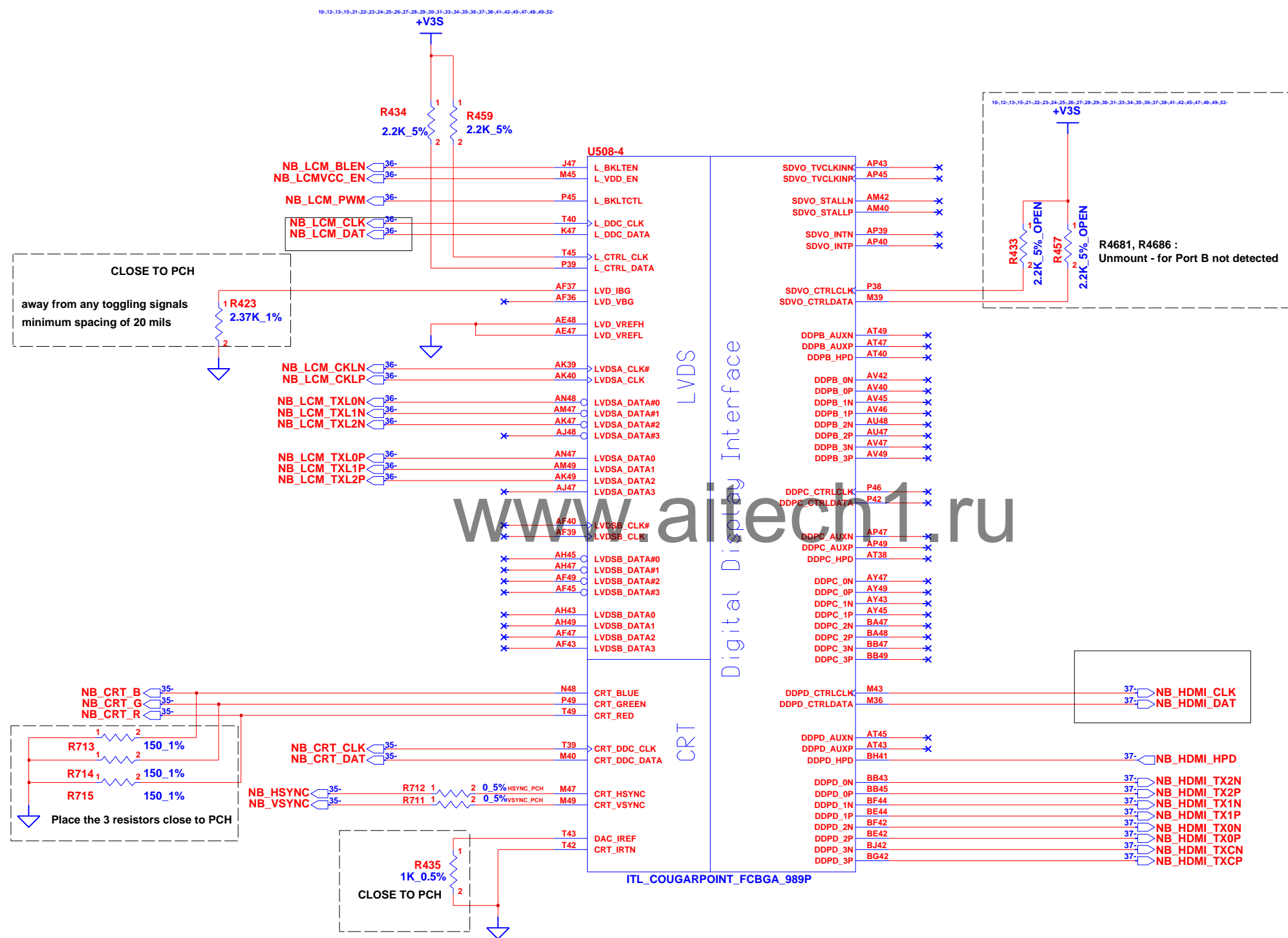


D

F

E

CHANGE by	<i>Chang, Sukioo</i>	<i>14-Jun-2010</i>
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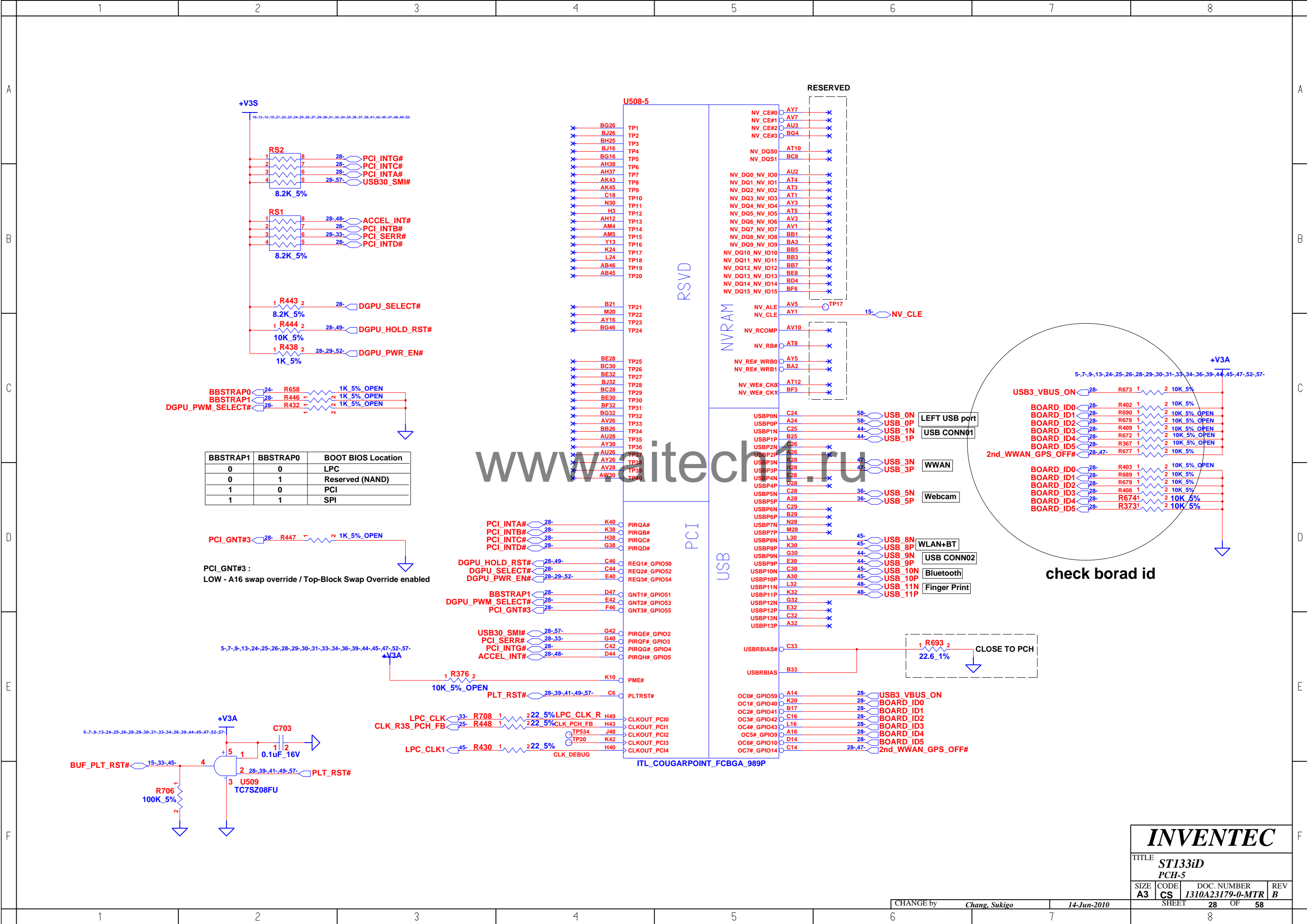
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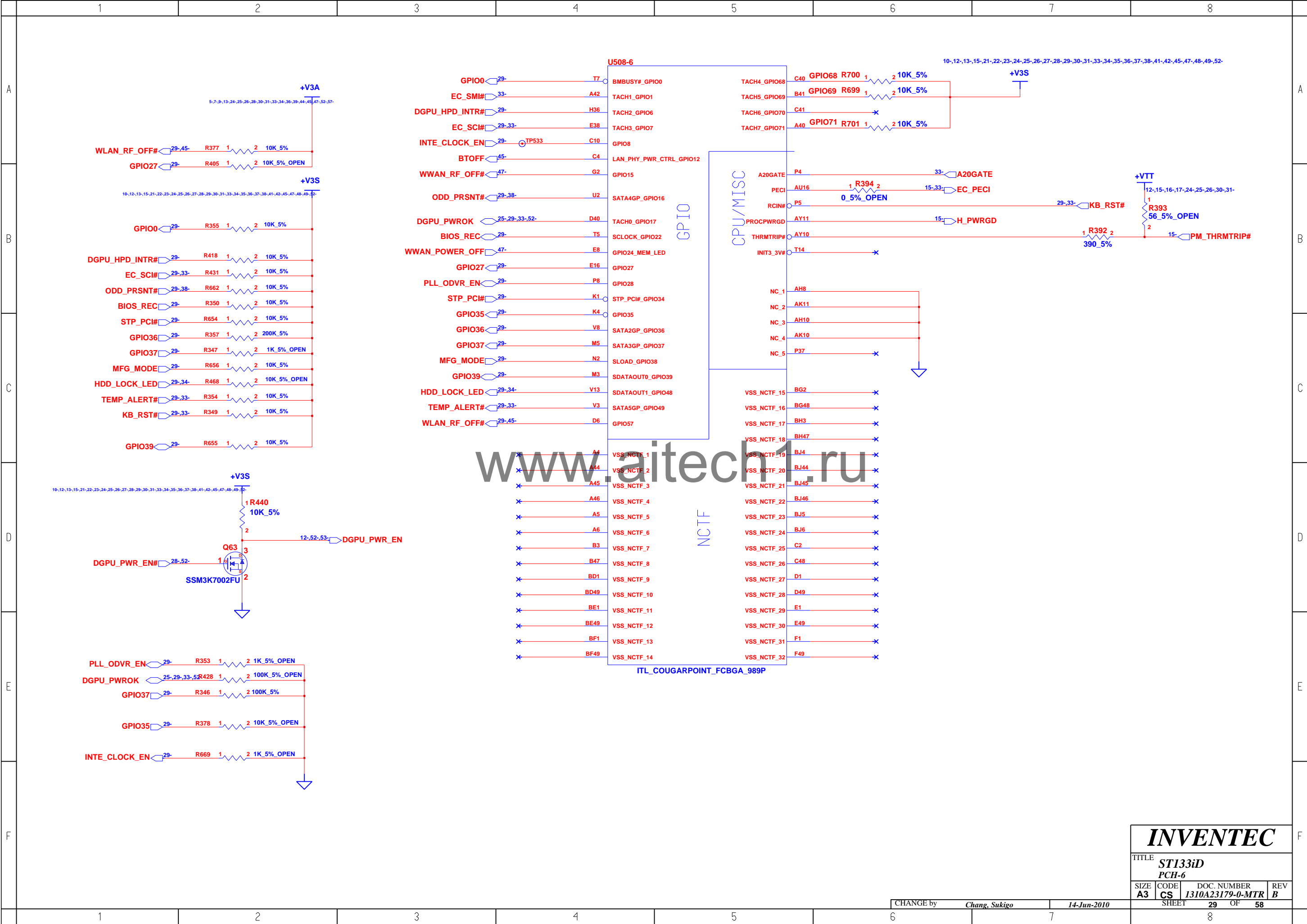
TITLE **ST133iD
PCH-4**

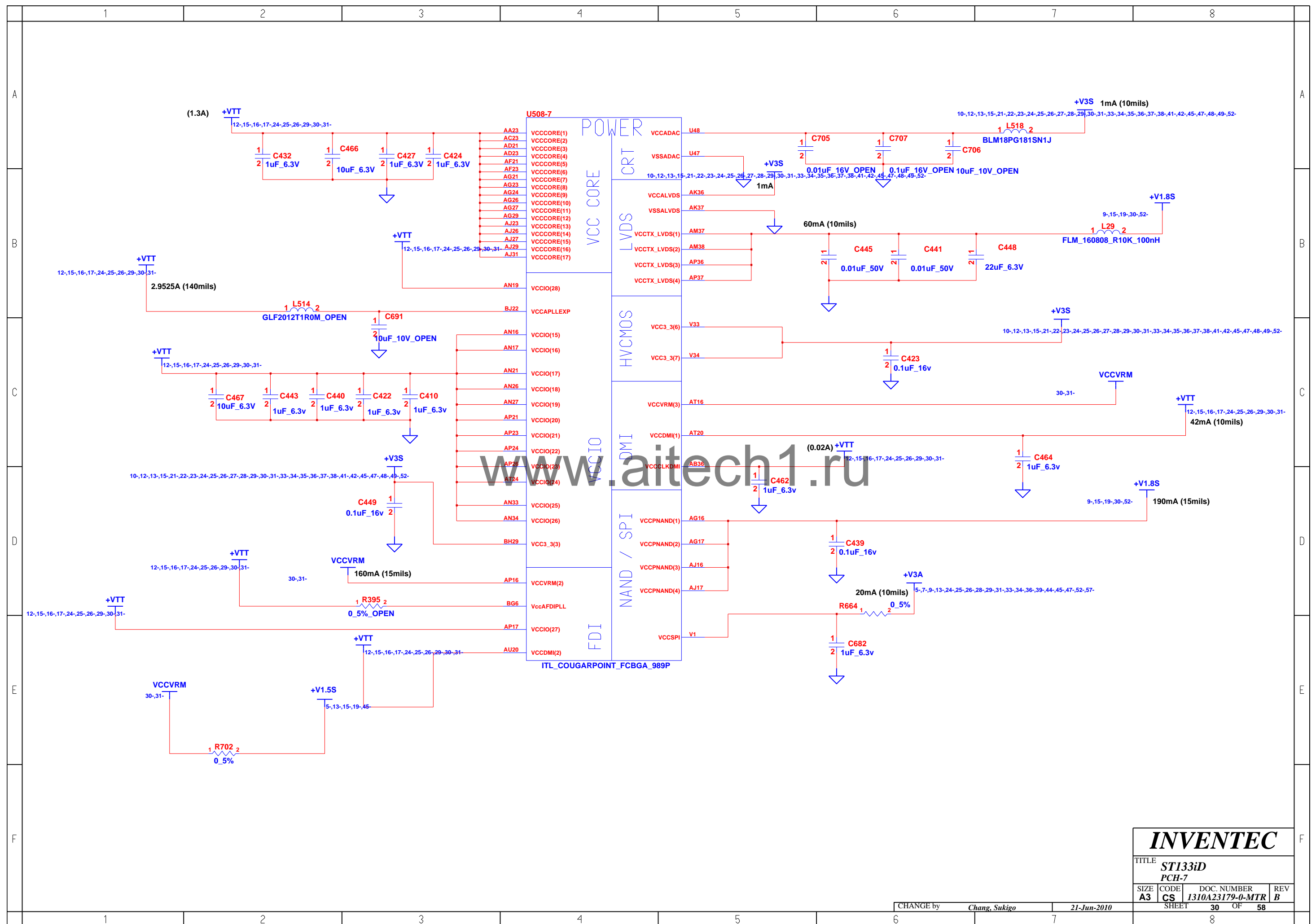
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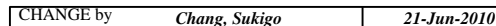
CHANGE by **Chang, Sukigo** **14-Jun-2010**

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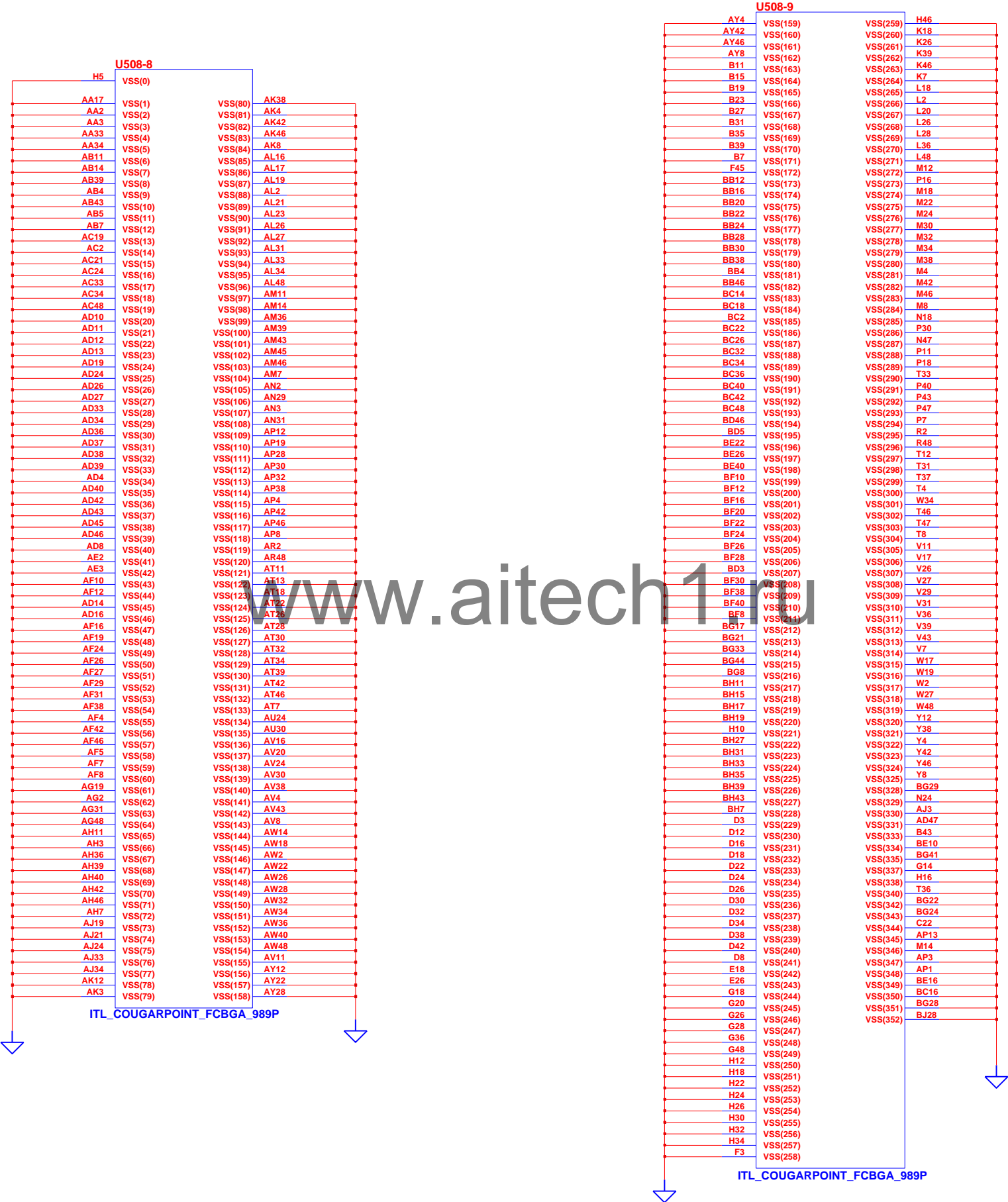






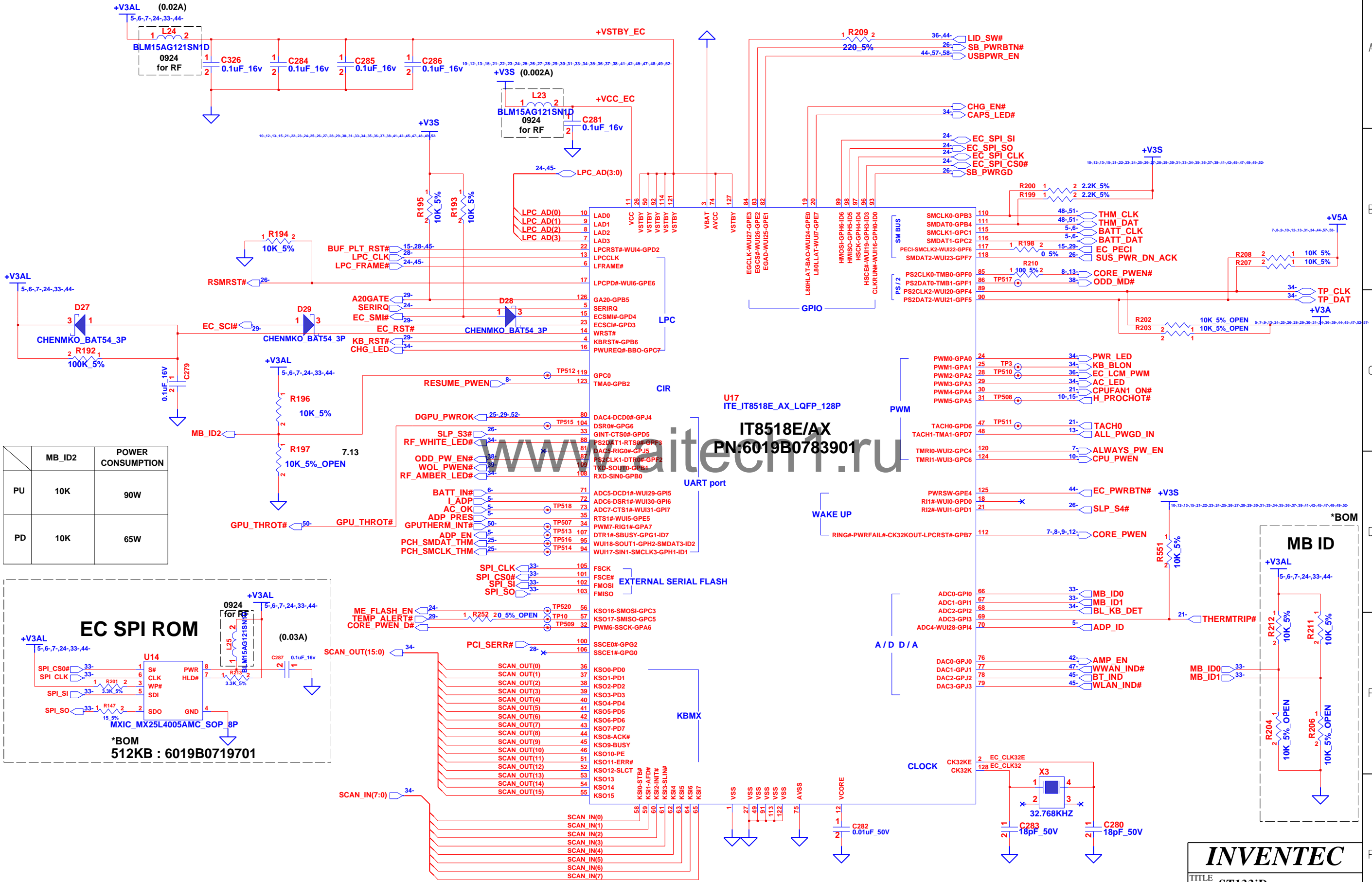


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A									A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	



INVENTEC			
TITLE ST133iD			
PCH-9			
SIZE A3	CODE CS	DOC. NUMBER 1310A23179-0-MTR	REV B
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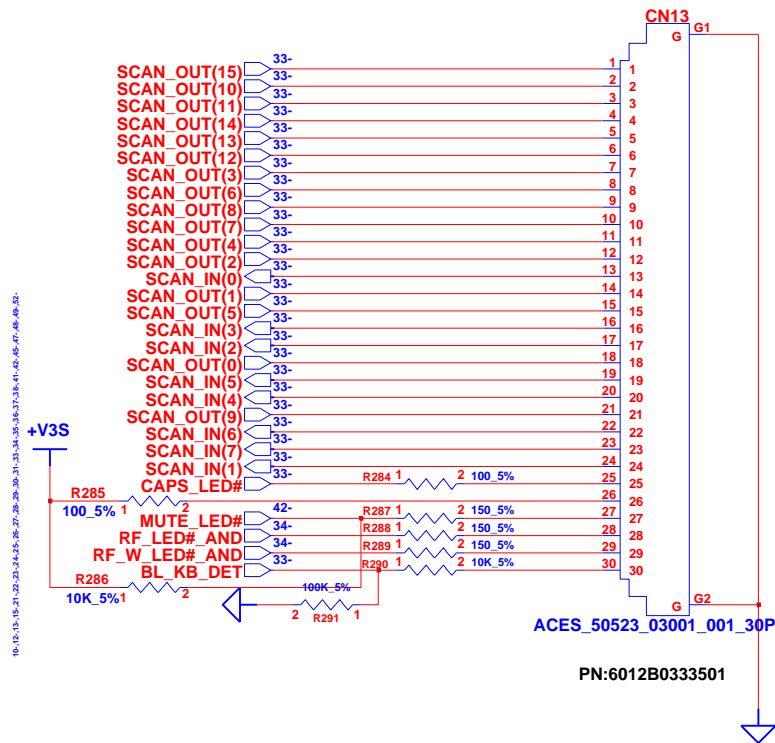


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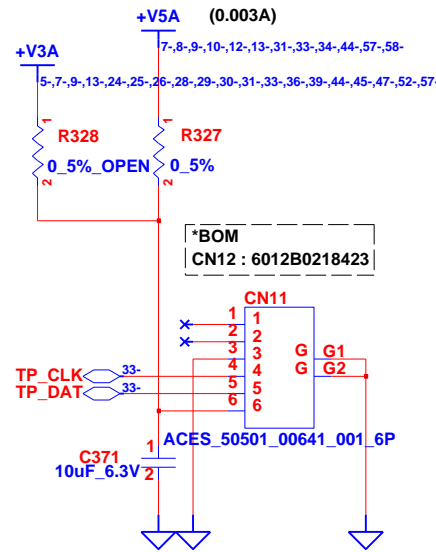
TITLE			
ST133iD			
KBC			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23179-0-MTR	B
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CHANGE by Chang, Sukigo 14-Jun-2010

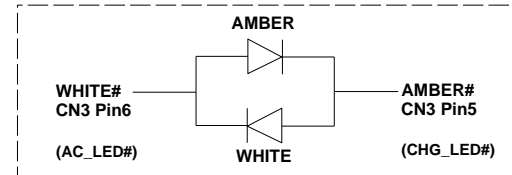
KeyBoard CONN (30 pin)



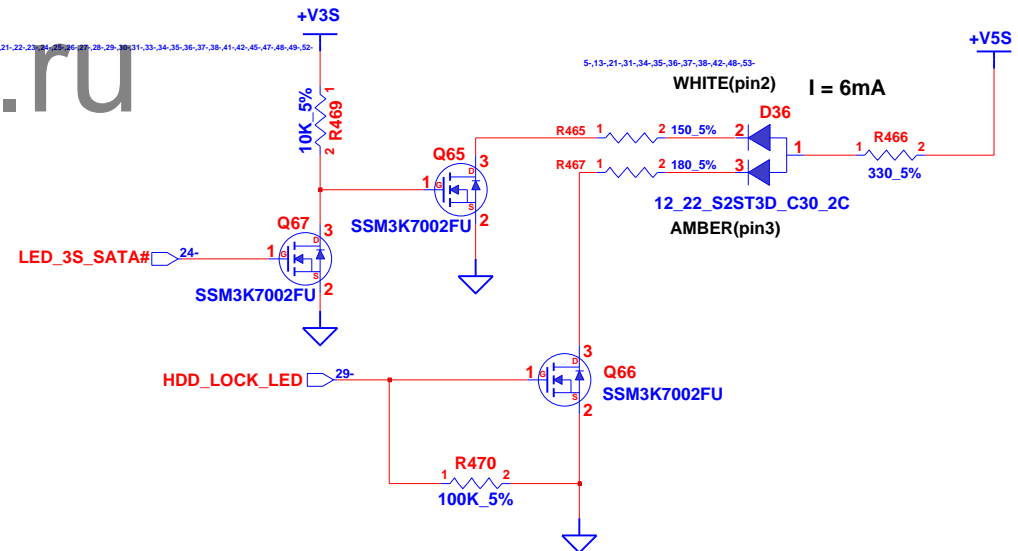
TouchPad Module CONN



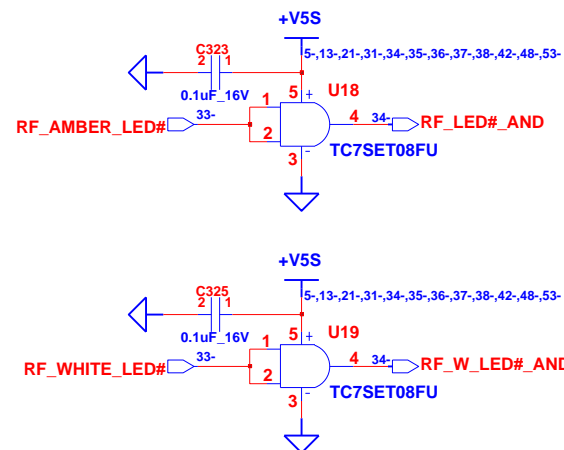
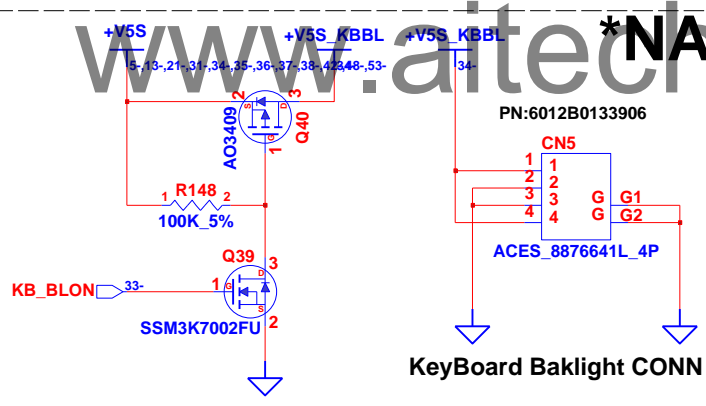
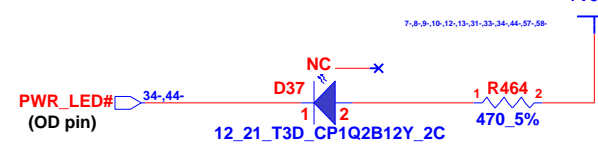
DC-JACK LED



SATA LED & HDD-HALTED LED



POWER LED



INVENTEC

TITLE			
ST133iD			
Keyboard & TouchPad			
SIZE	CODE	DOC. NUMBER	REV
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CHANGE by Chang, Sukigo 14-Jun-2010

A

B

C

D

E

F

A

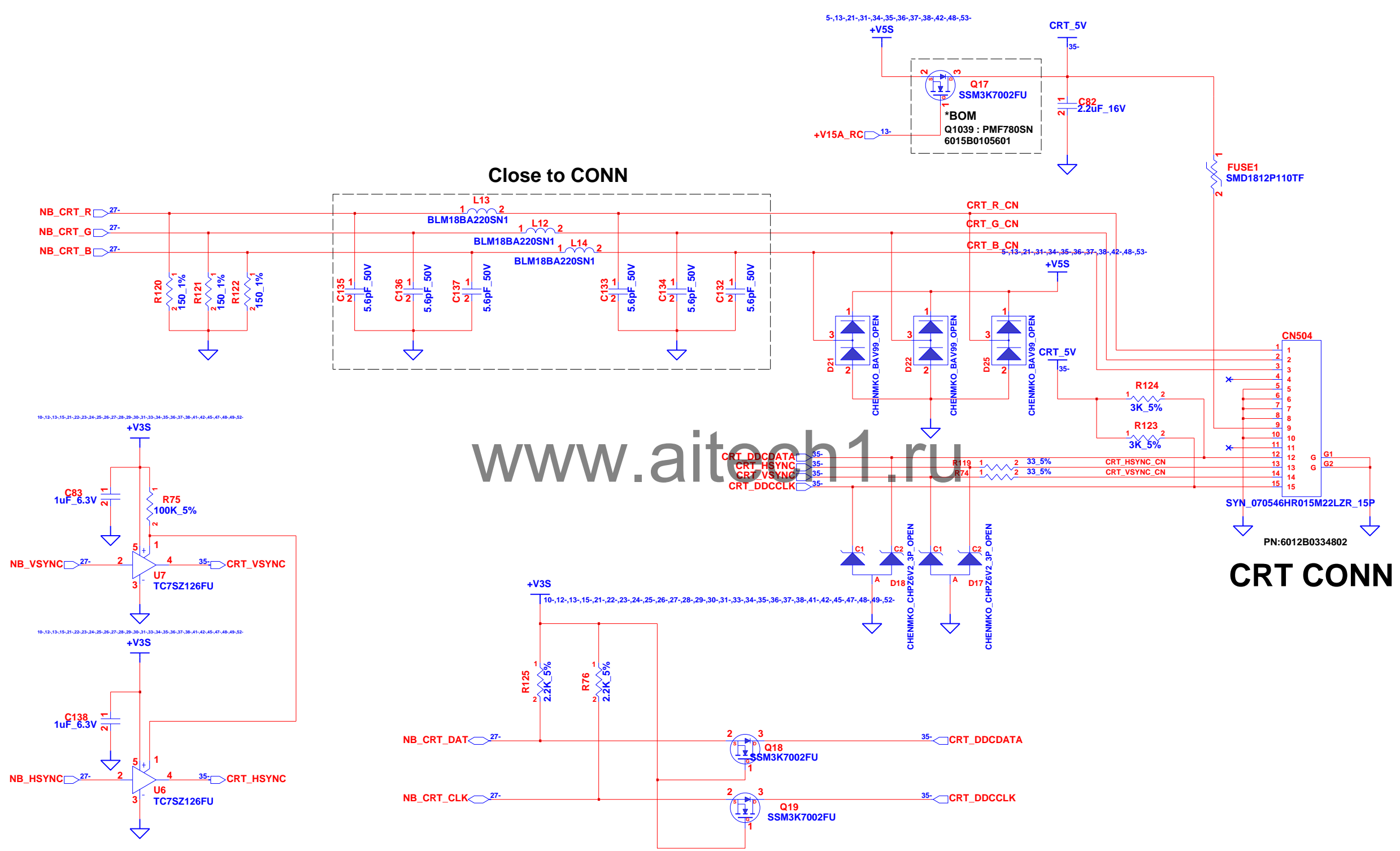
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C

D

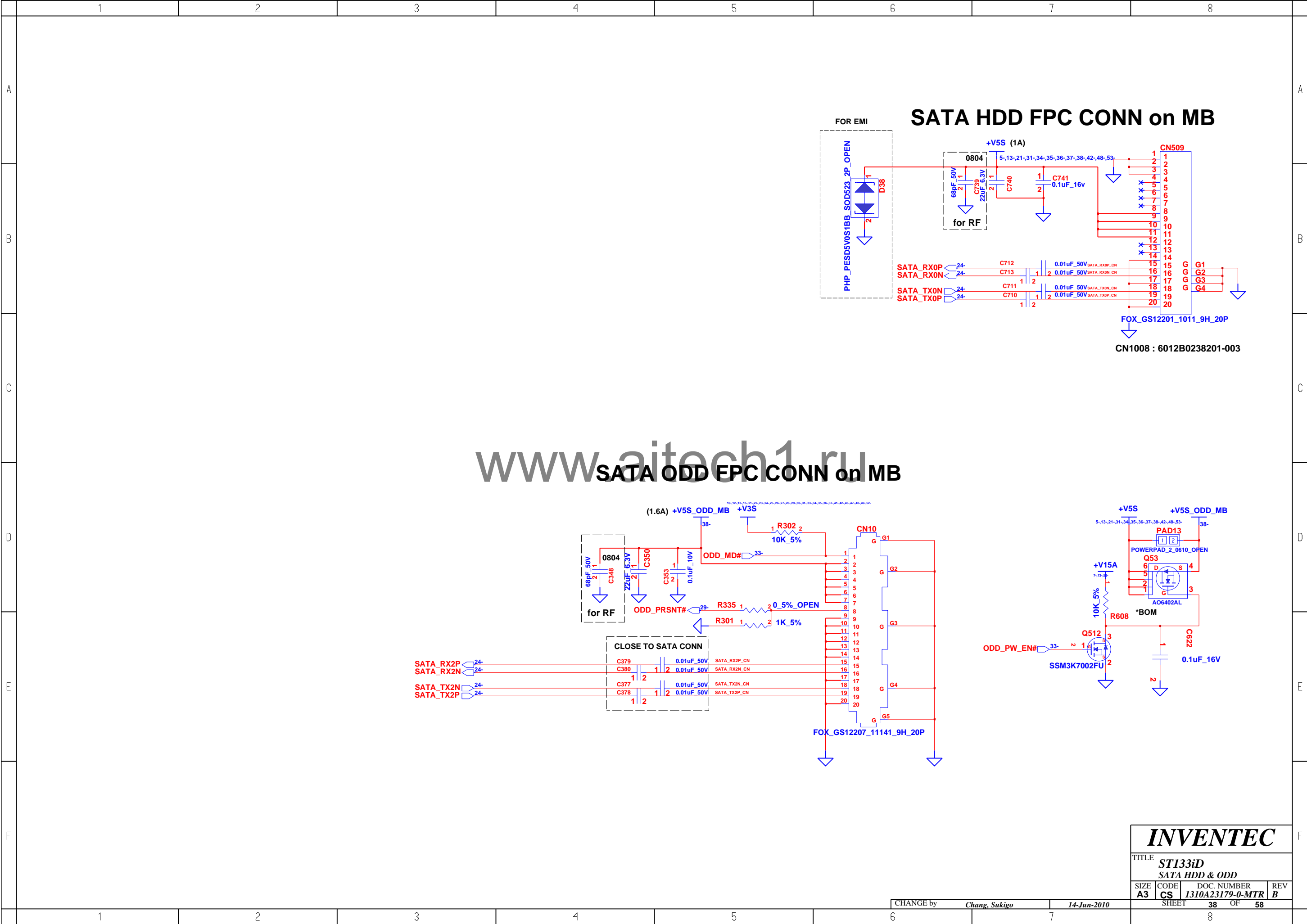
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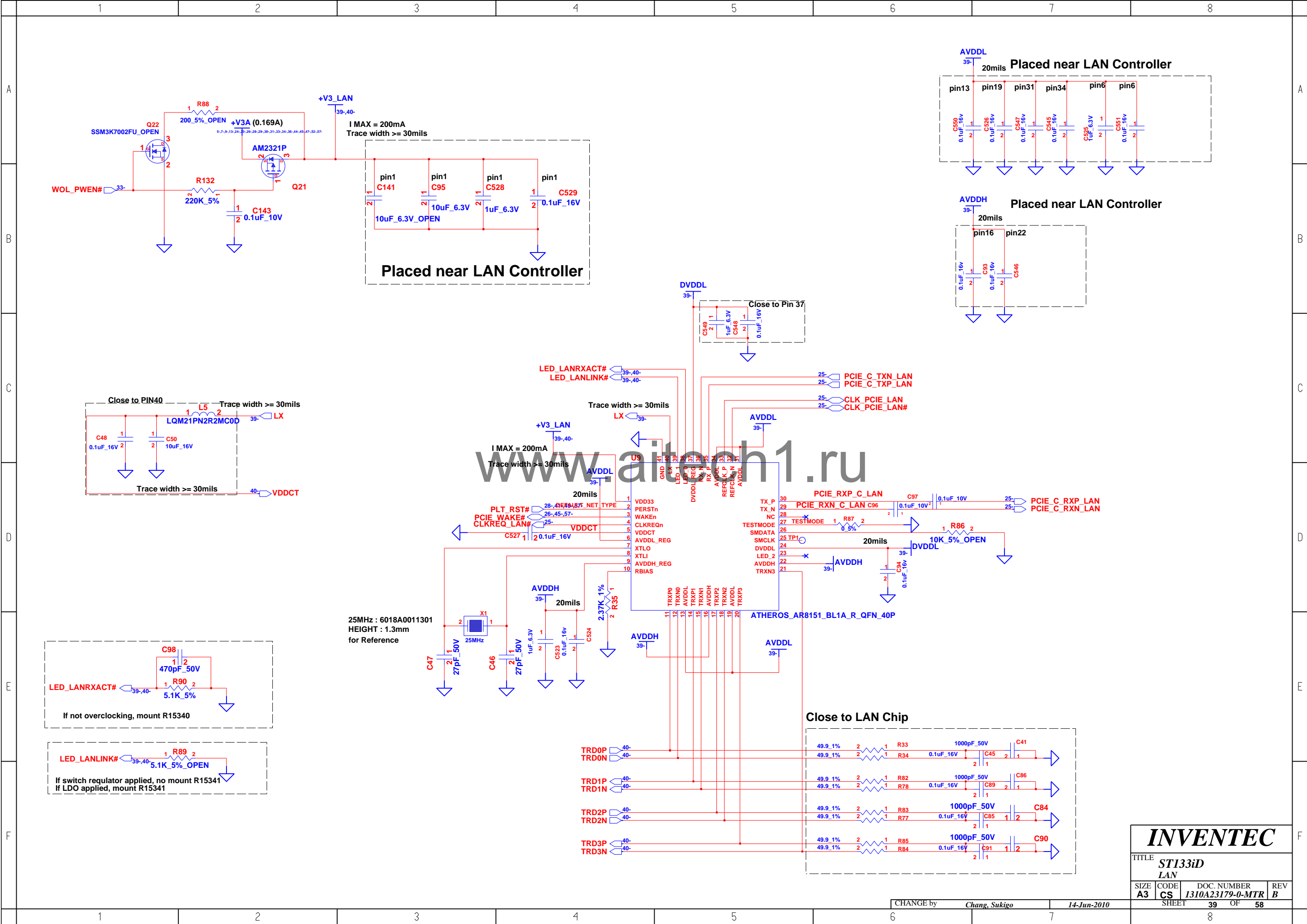
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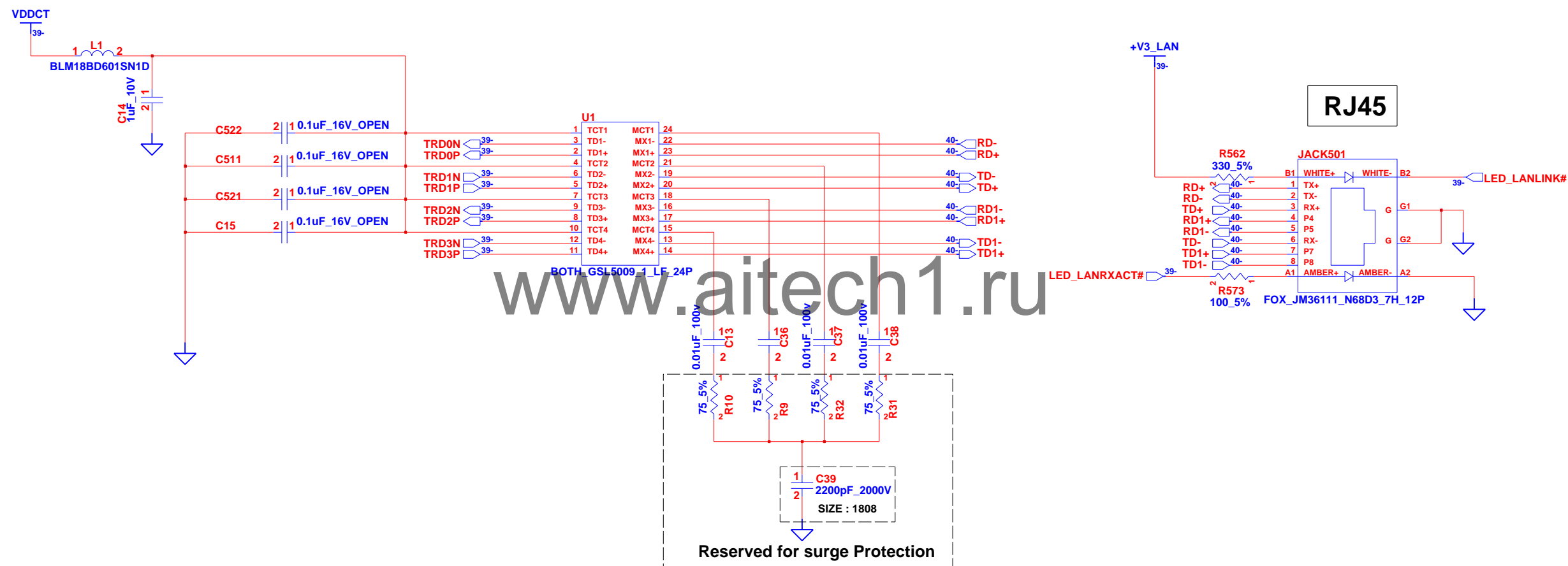


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TITLE ST133iD CRT			
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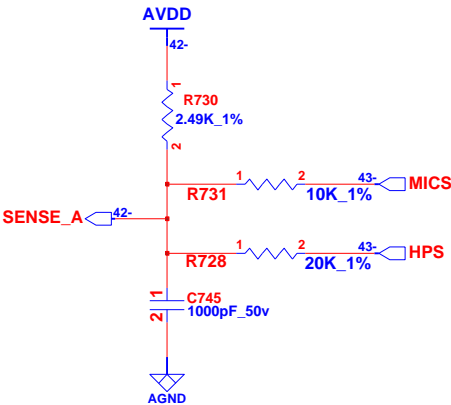
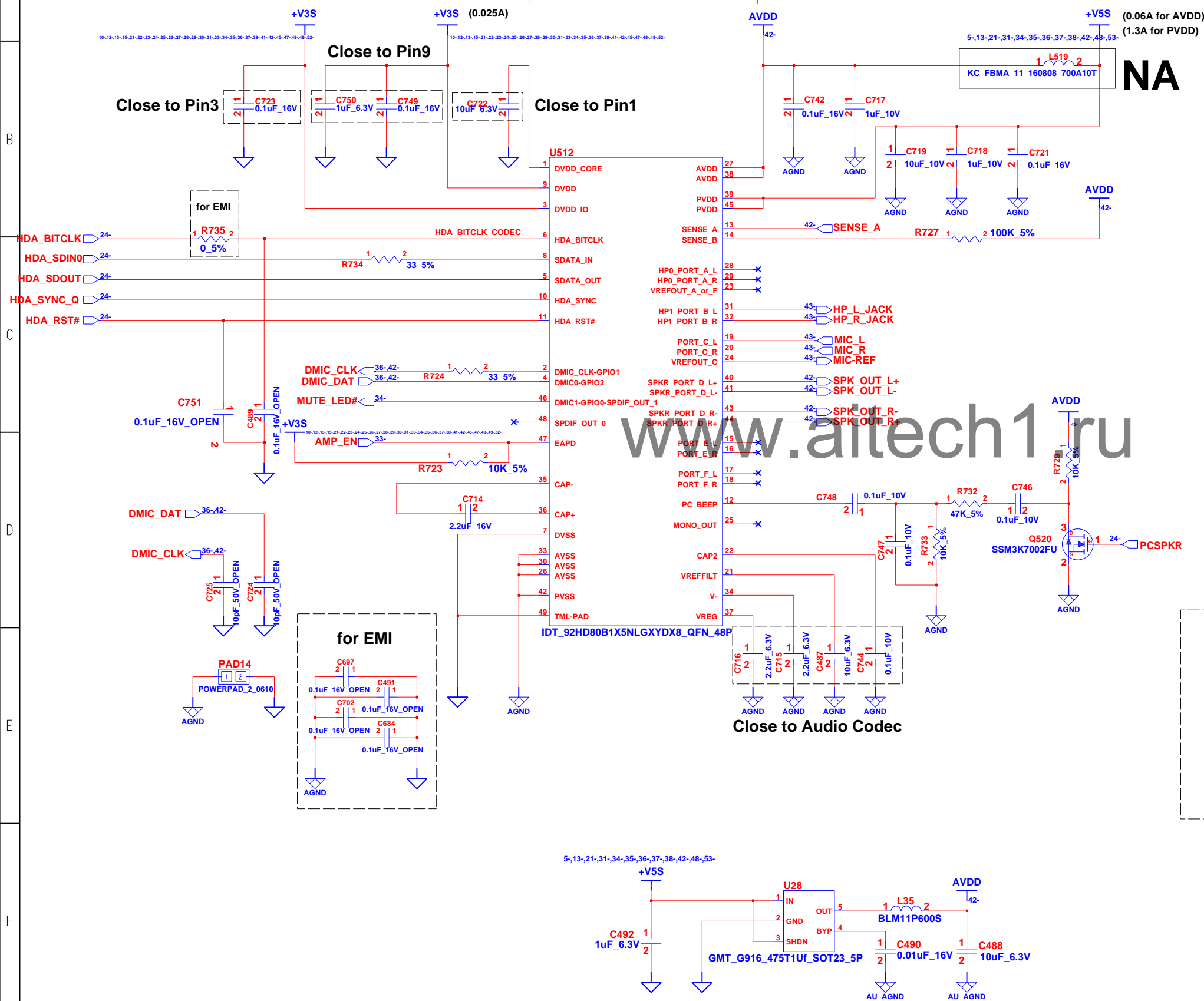
LAYOUT NOTE : Place termination resistors and caps as close to LAN controller as possible

INVENTEC

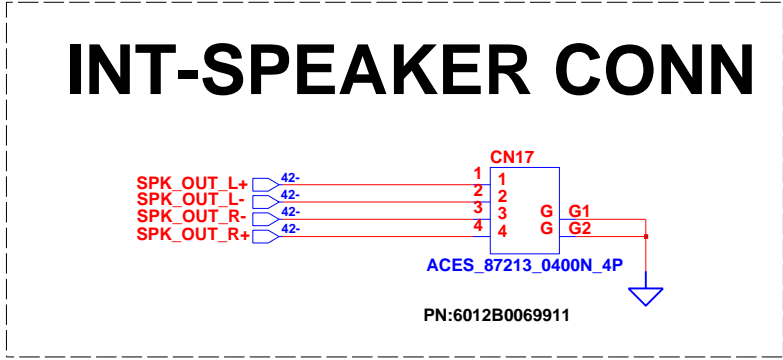
TITLE			
ST133iD			
RJ-45			
SIZE	CODE	DOC. NUMBER	REV
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***BOM**
6019B0784901

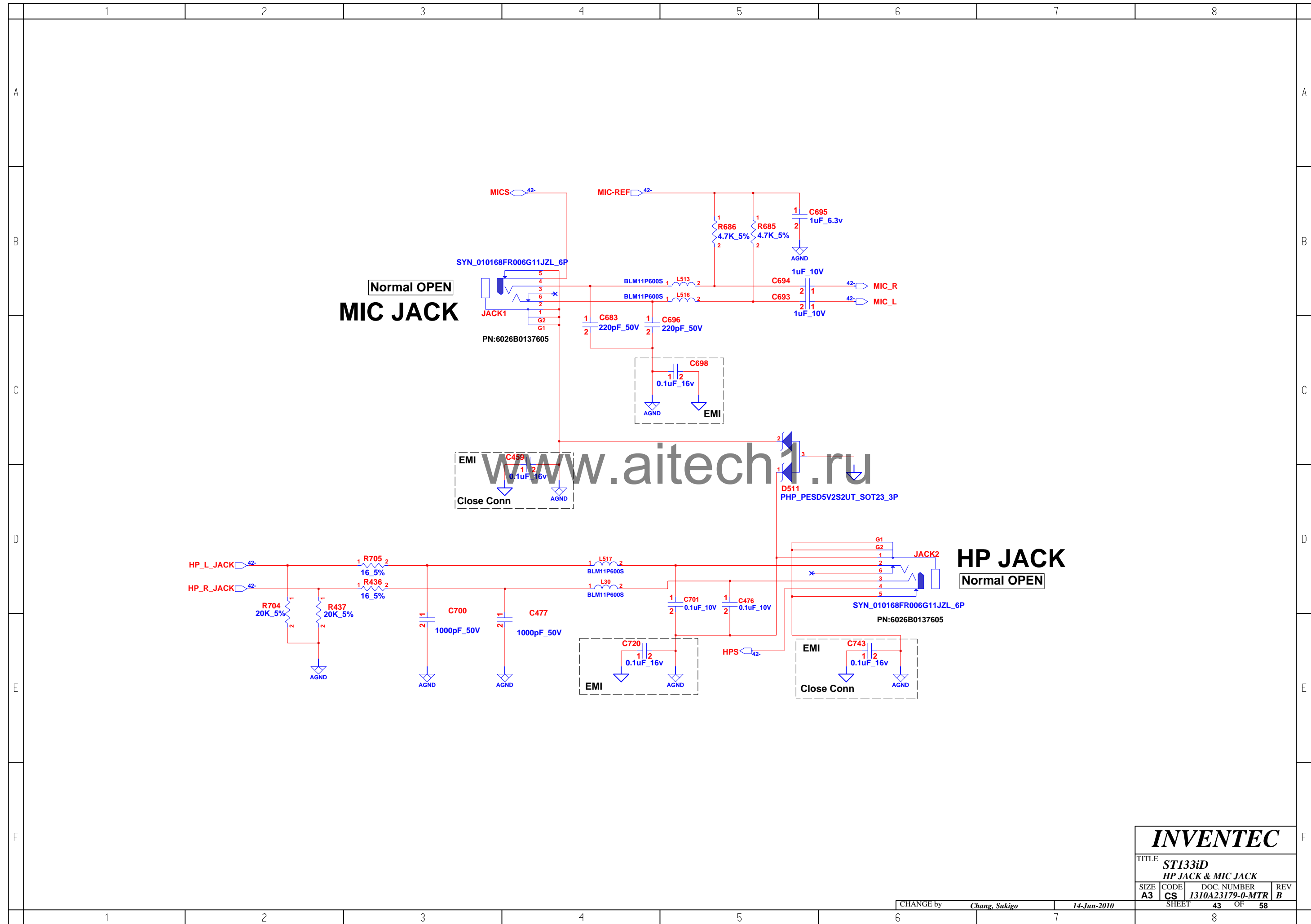


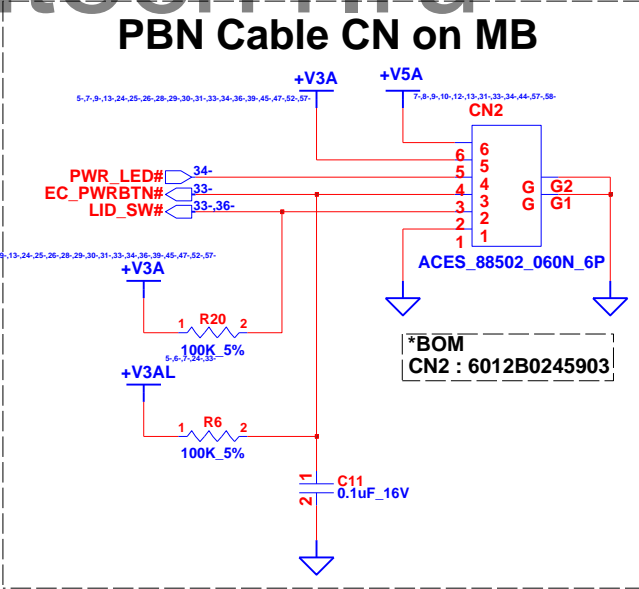
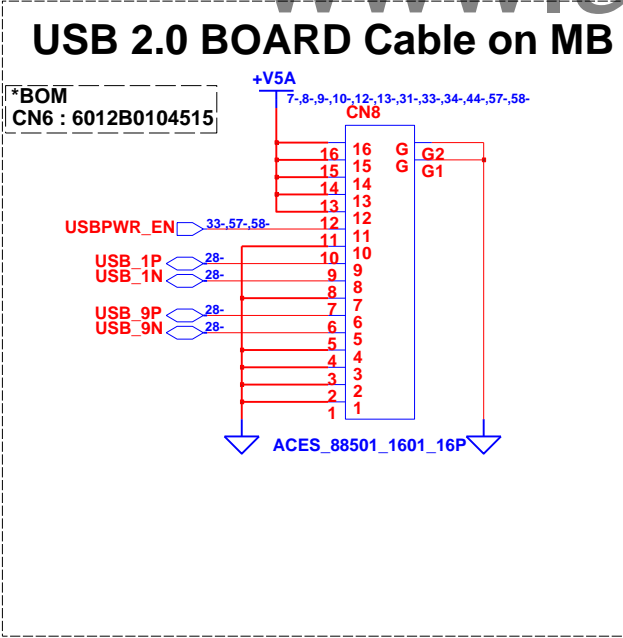
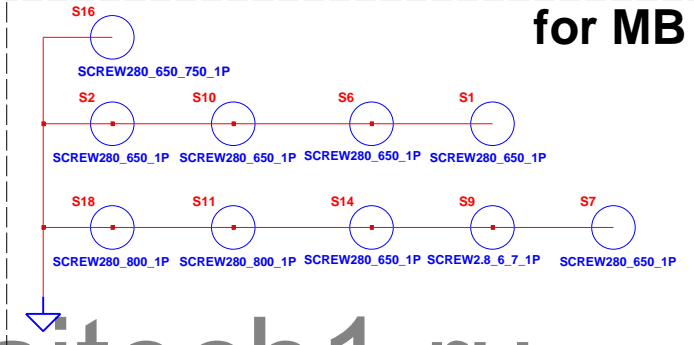
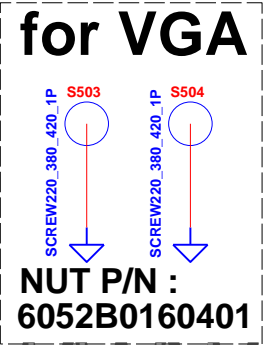
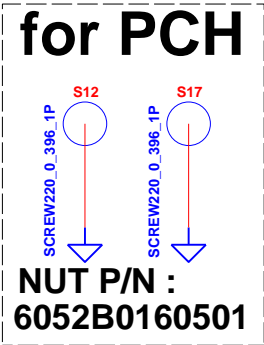
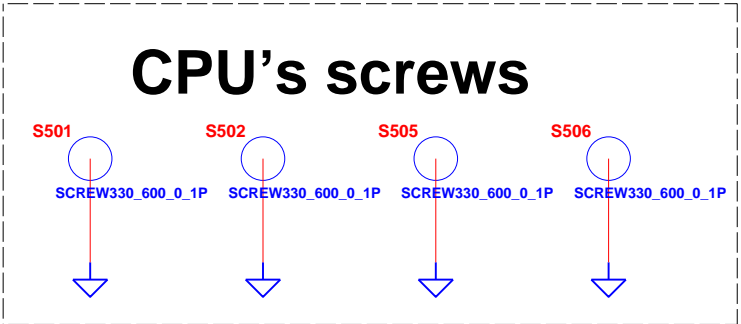
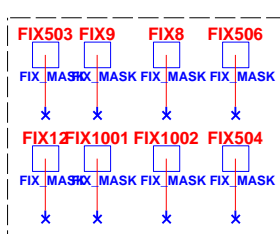
PORT	Discription	Sense
A	NO USE	
B	Headphone	HPS
C	Microphone	MICS
D	SPKR	
E	NO USE	
F	NO USE	



INVENTEC			
TITLE ST133iD Audio Codec			
SIZE A3	CODE CS	DOC. NUMBER 1310A23179-0-MTR	REV B
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INVENTEC

TITLE **ST133iD**
ESATA, SCREW & LID

SIZE	CODE	DOC. NUMBER	REV
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CHANGE by *Chang, Sukigo* 14-Jun-2010

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BLUETOOTH CONN

WLAN CONN (MINICARD)

***BOM**
CN1000 : 6026B0184301

INVENTEC			
TITLE			
ST133iD WLAN, BT & WebCAM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23179-0-MTR	B
SHEET		45	OF 58

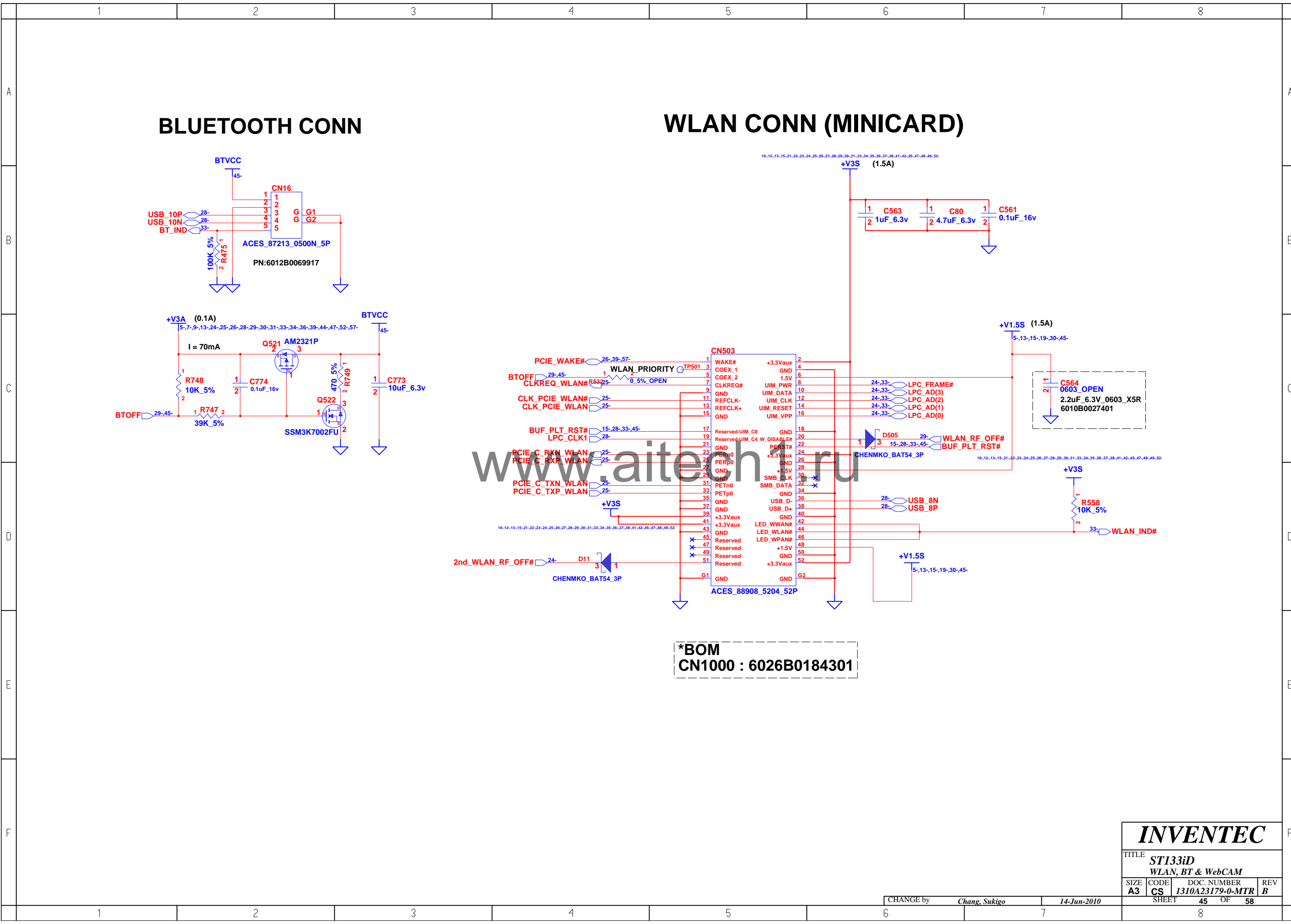
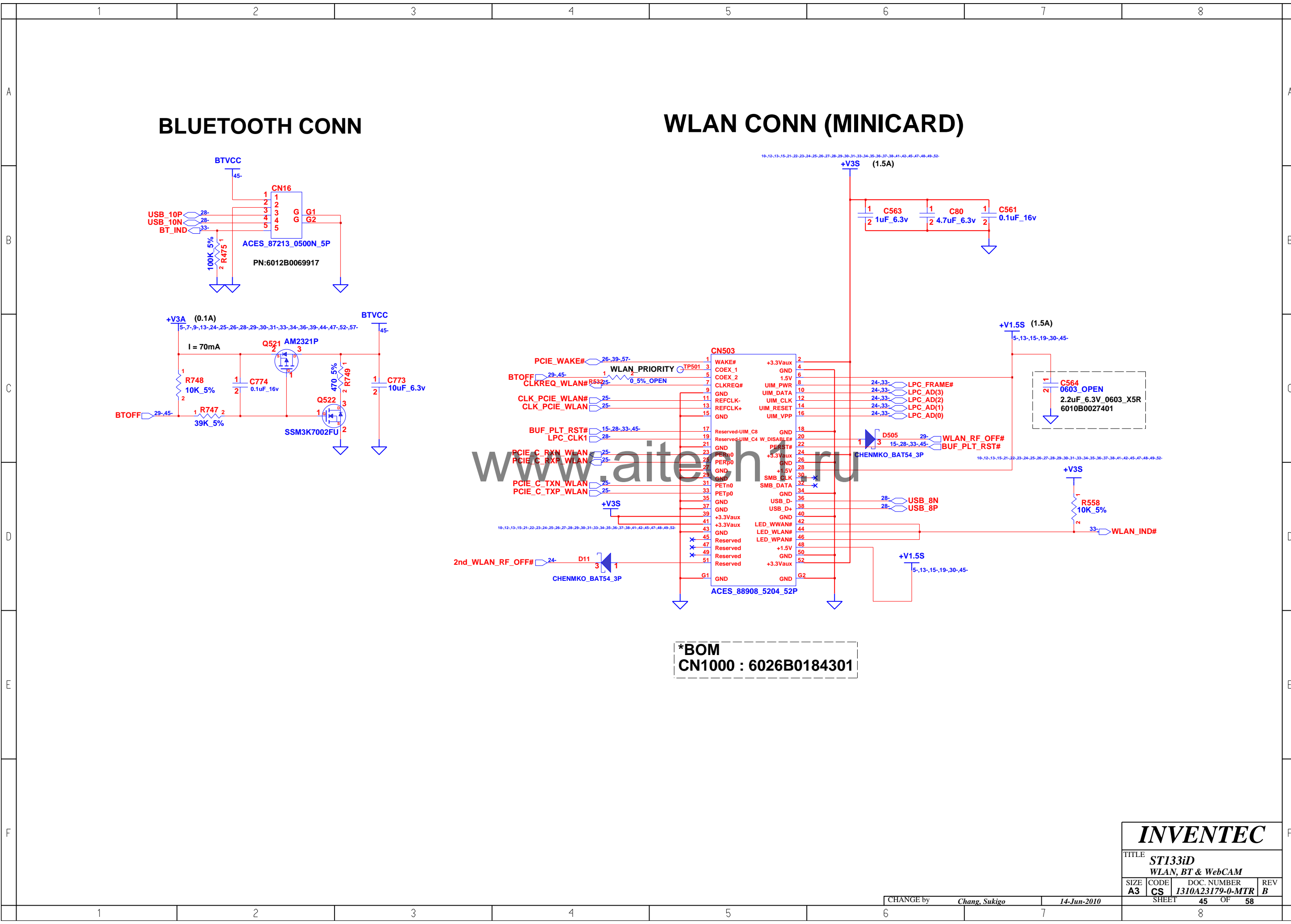
CHANGE by Chang, Sukigo 14-Jun-2010

BLUETOOTH CONN

WLAN CONN (MINICARD)

***BOM**
CN1000 : 6026B0184301

CHANGE by				14-Jun-2010	
SIZE	CODE	DOC. NUMBER	REV		
A3	CS	1310A23179-0-MTR	B		
SHEET		45	OF	58	



BLUETOOTH CONN

WLAN CONN (MINICARD)

***BOM**
CN1000 : 6026B0184301

INVENTEC			
TITLE			
ST133iD WLAN, BT & WebCAM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23179-0-MTR	B
CHANGE by		SHEET	
Chang, Sukigo		45 OF 58	

BLUETOOTH CONN

WLAN CONN (MINICARD)

***BOM**
CN1000 : 6026B0184301

INVENTEC			
TITLE			
ST133iD WLAN, BT & WebCAM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23179-0-MTR	B
CHANGE by		Chang, Sukigo	14-Jun-2010
SHEET		45	OF 58

BLUETOOTH CONN

WLAN CONN (MINICARD)

***BOM**
CN1000 : 6026B0184301

TITLE			
ST133iD WLAN, BT & WebCAM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23179-0-MTR	B
CHANGE by		SHEET	OF
Chang, Sukigo		45	58

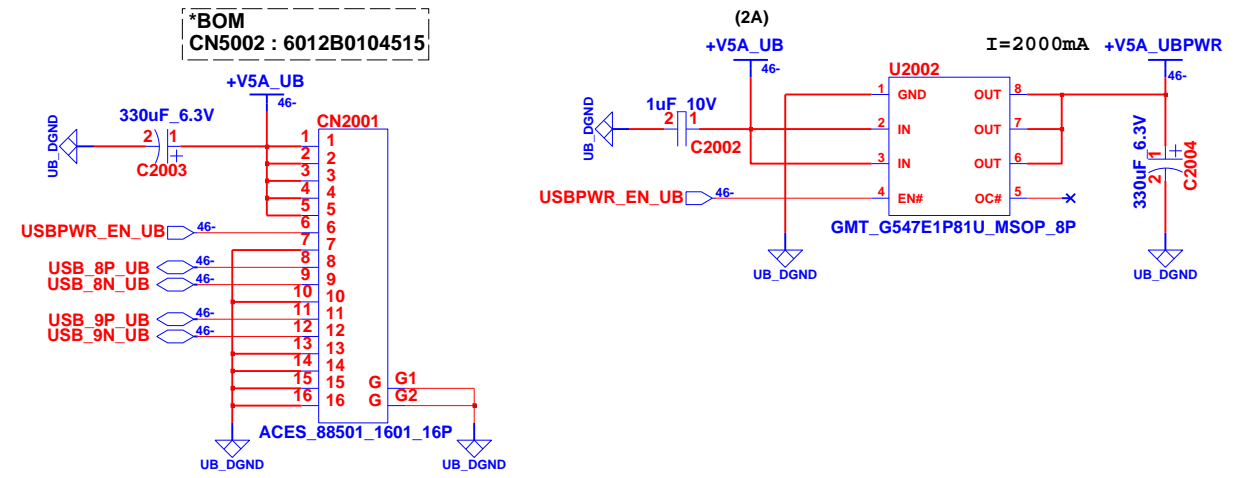
BLUETOOTH CONN

WLAN CONN (MINICARD)

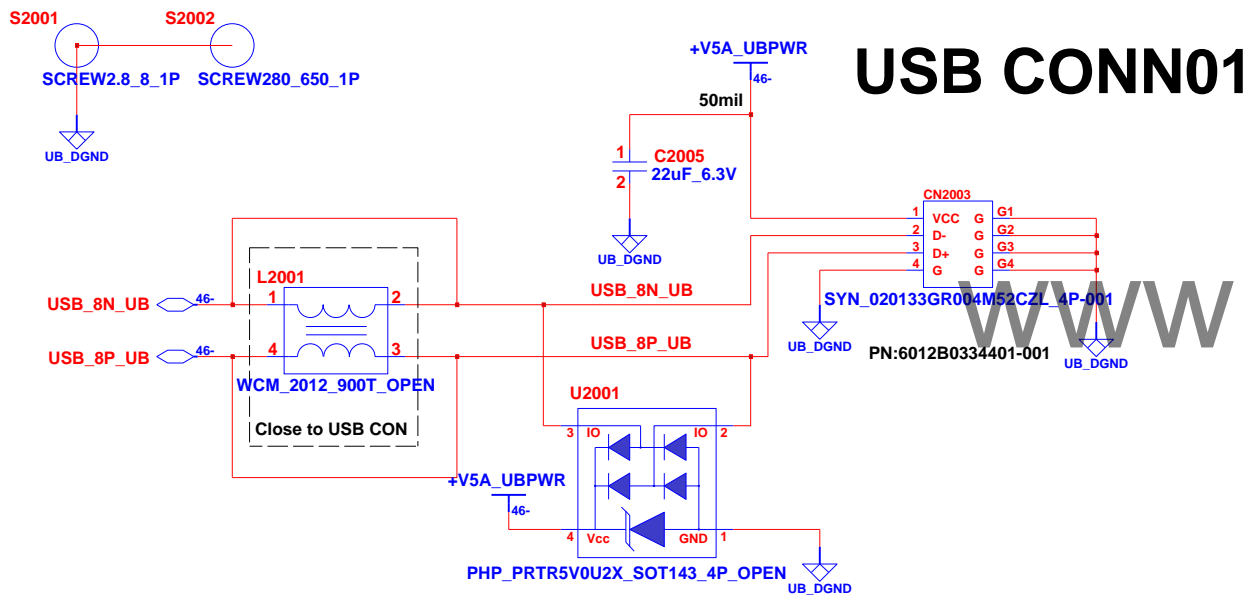
***BOM**
CN1000 : 6026B0184301

INVENTEC			
TITLE			
ST133iD WLAN, BT & WebCAM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23179-0-MTR	B
CHANGE by		Chang, Sukigo	14-Jun-2010
SHEET		45	OF 58

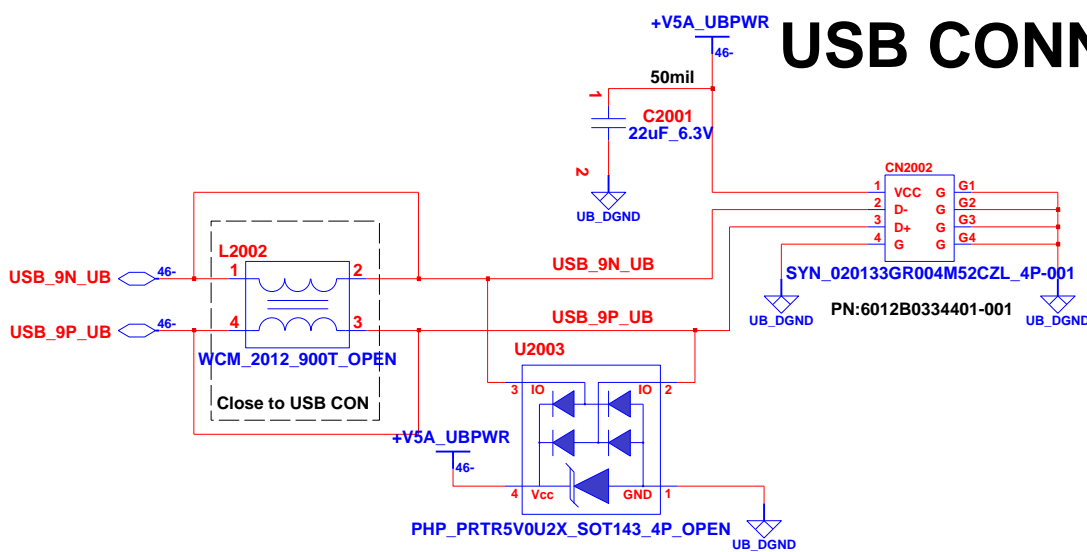
USB BOARD



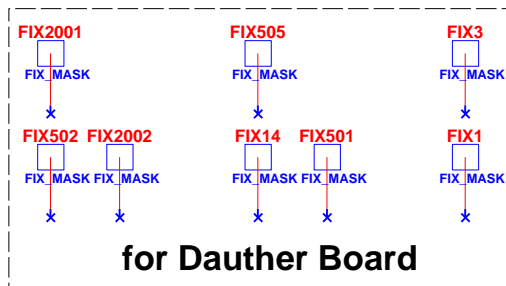
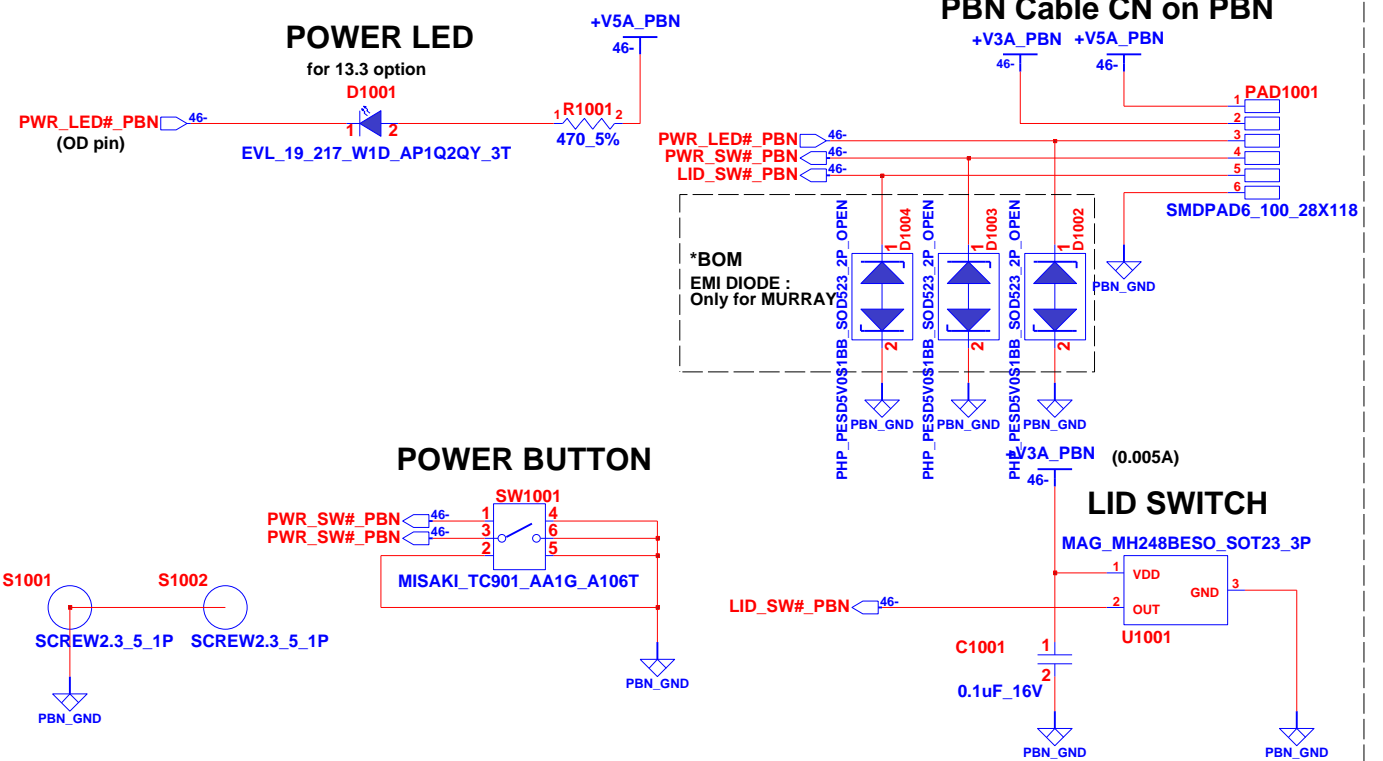
USB CONN01



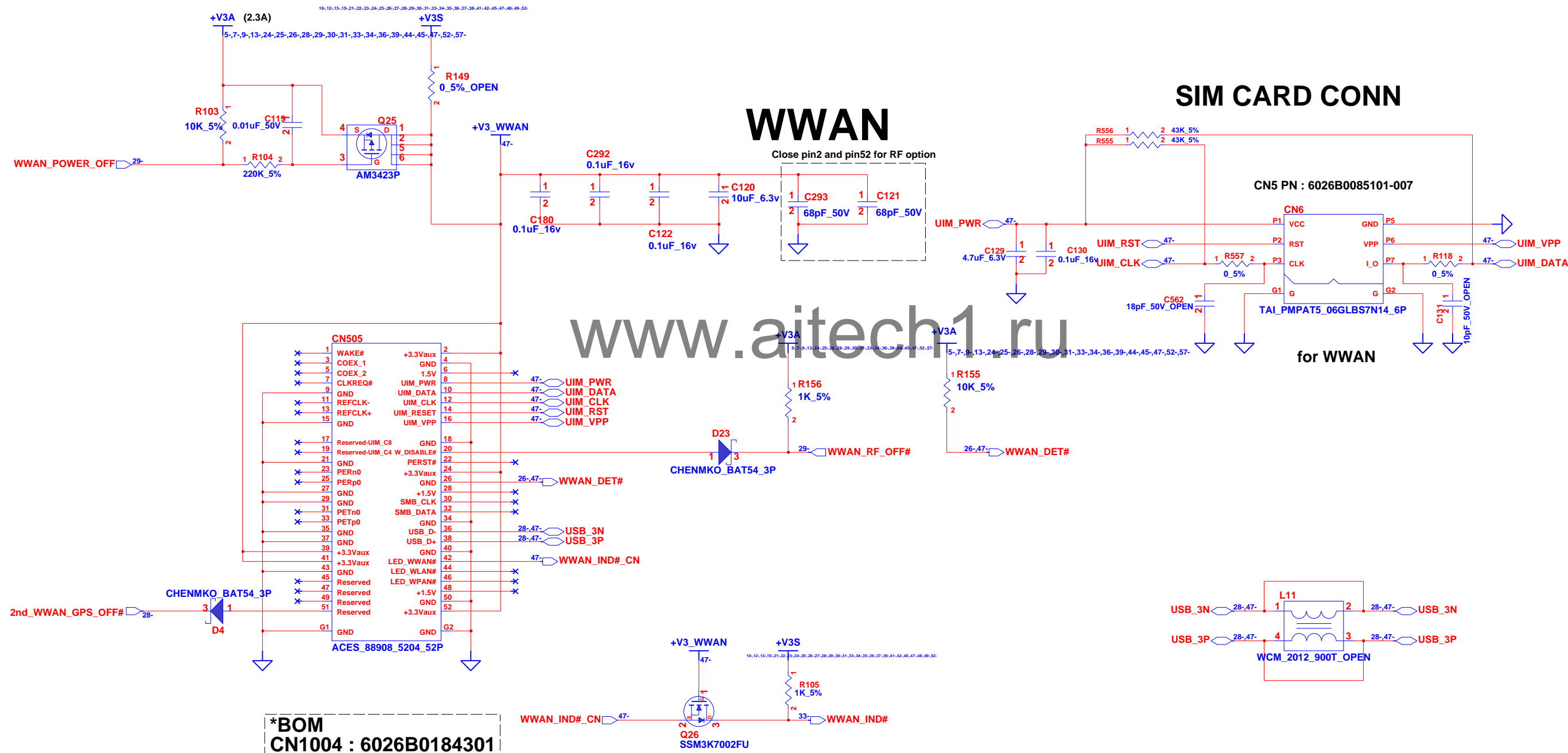
USB CONN02



Power Button Board



OPTION PART



*BOM
CN1004 : 6026B0184301

INVENTEC

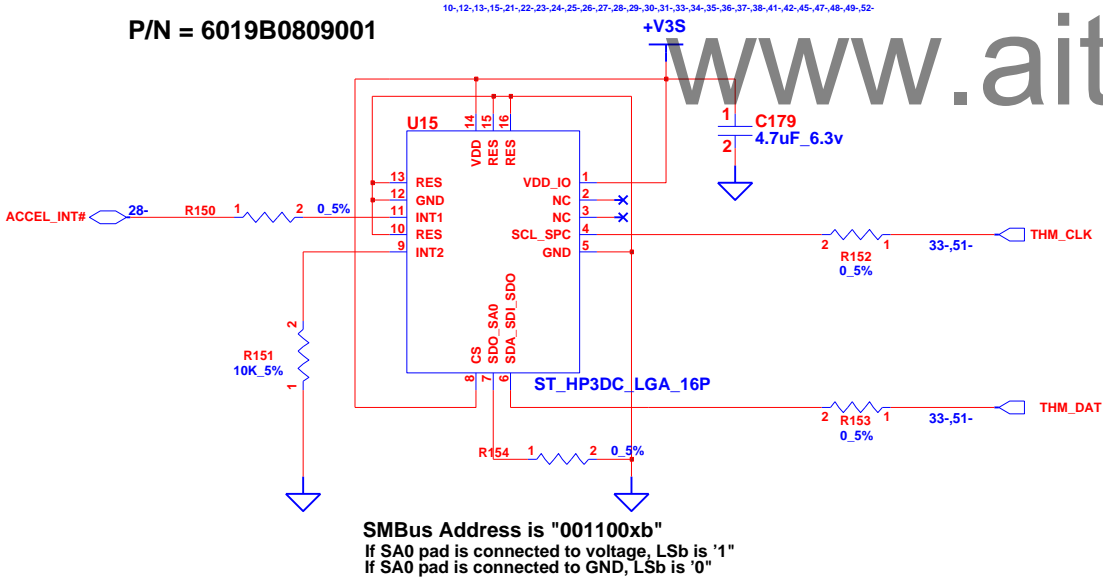
TITLE			
<i>ST133iD</i> <i>WWAN(Option)</i>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	<i>1310A23179-0-MTR</i>	<i>B</i>
SHEET		47	OF 58

CHANGE by	<i>Chang, Sukigo</i>	<i>14-Jun-2010</i>
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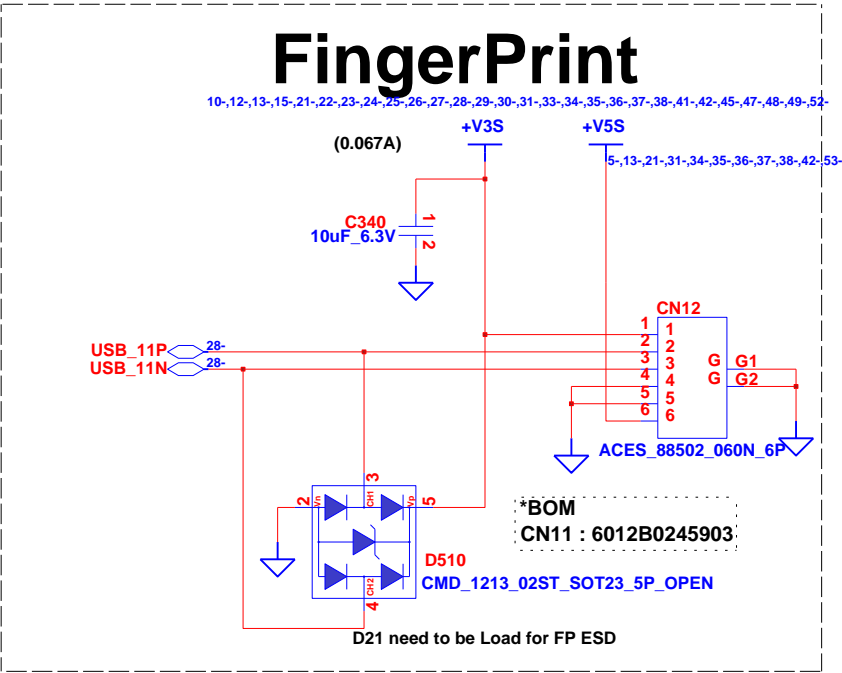
OPTION PART

HARDDRIVE PROTECTION

P/N = 6019B0809001



FingerPrint

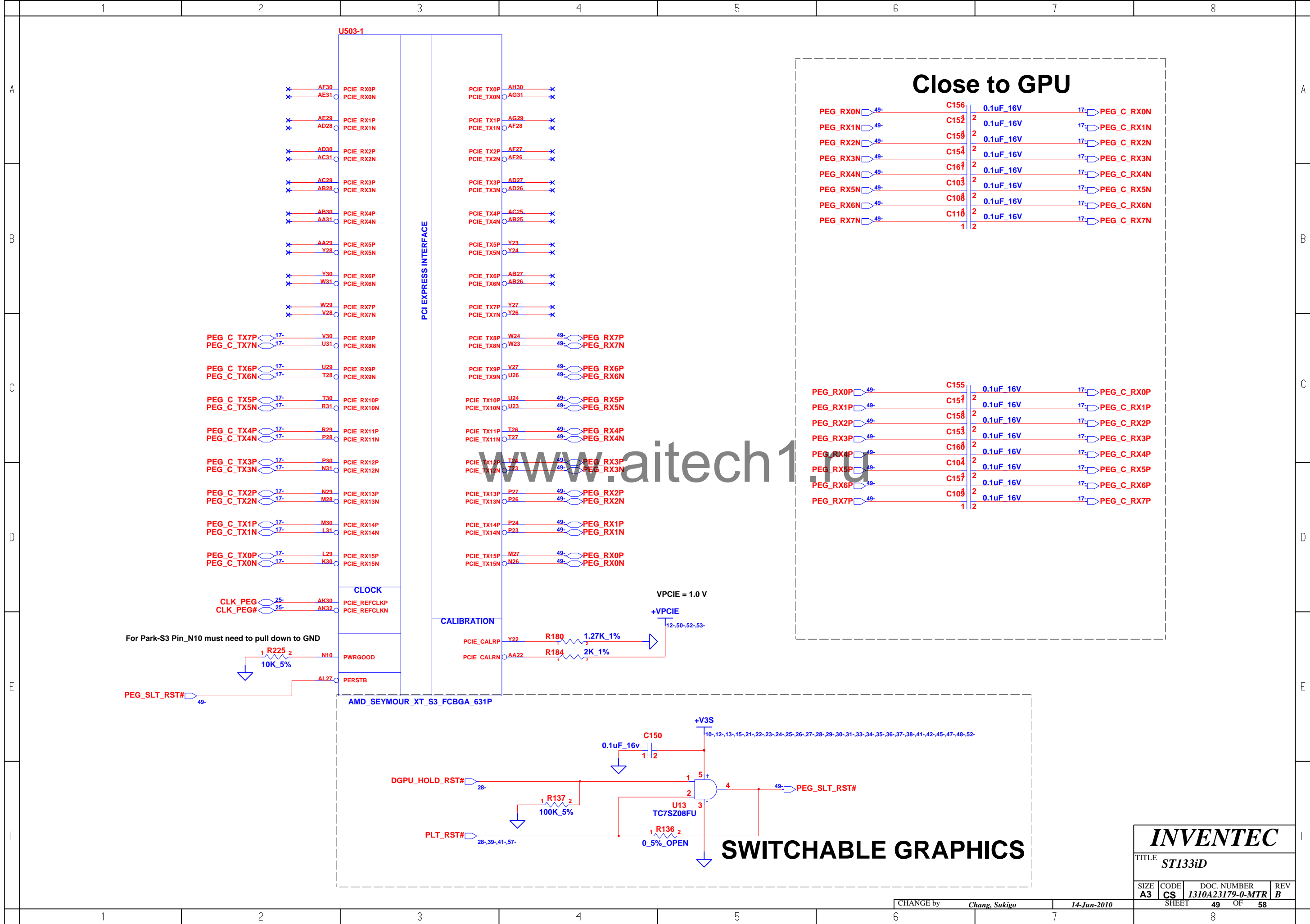


INVENTEC

TITLE
ST133iD
Touchscreen, FP & HD LOCK(Option)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23179-0-MTR	B
SHEET		48	OF 58

CHANGE by Chang, Sukigo 14-Jun-2010



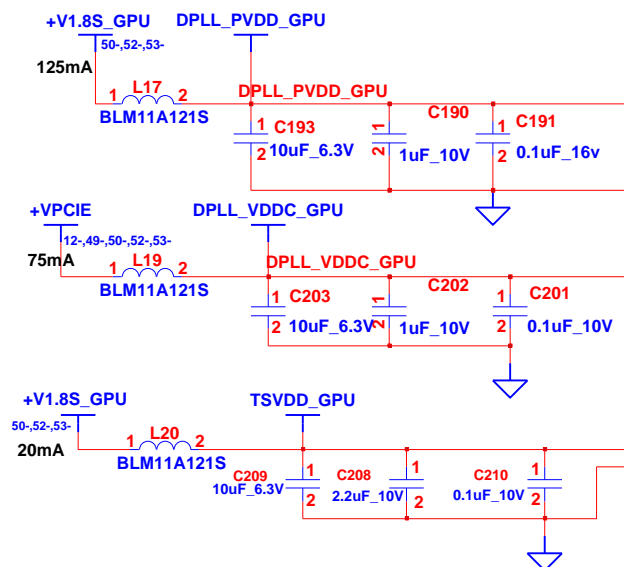
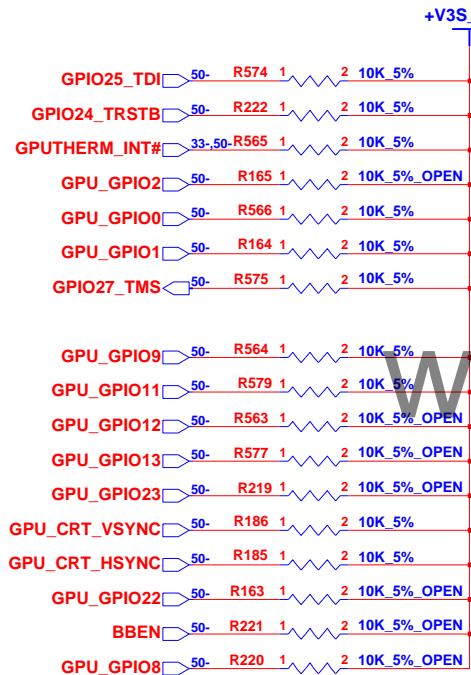
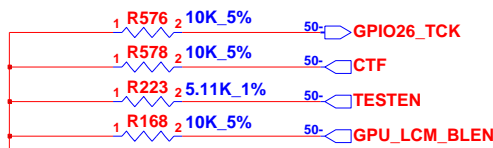
MEM_ID3 R15454	MEM_ID2 R15453	MEM_ID1 R15452	MEM_ID0 R15451	vendor
0	0	0	1	Samsung(512MB)
0	0	1	1	hynix (512MB)
0	0	0	0	Samsung(1G)
0	0	1	0	hynix (1G)
0	1	1	0	Samsung(1G) C-die

(Default)

STRAPS	PIN	Description of default settings
TX_PWRS_ENB	GPIO0	PCIE full TX output swing.
TX_DEEMPH_EN	GPIO1	PCIE transmitter de-emphasis enabled.
BIF_GEN2_EN_A	GPIO2	PCIE GEN2 enabled
BIF_DEBUG_ACCESS	GPIO4	Debug signals muxed out.
	GPIO7_BLON	Control Backlight On / Off
BIF_VGA_DIS	GPIO9	VGA ENABLED
ROMIDCFG(2:0)	GPIO[13:11]	Memory aperture size select.

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

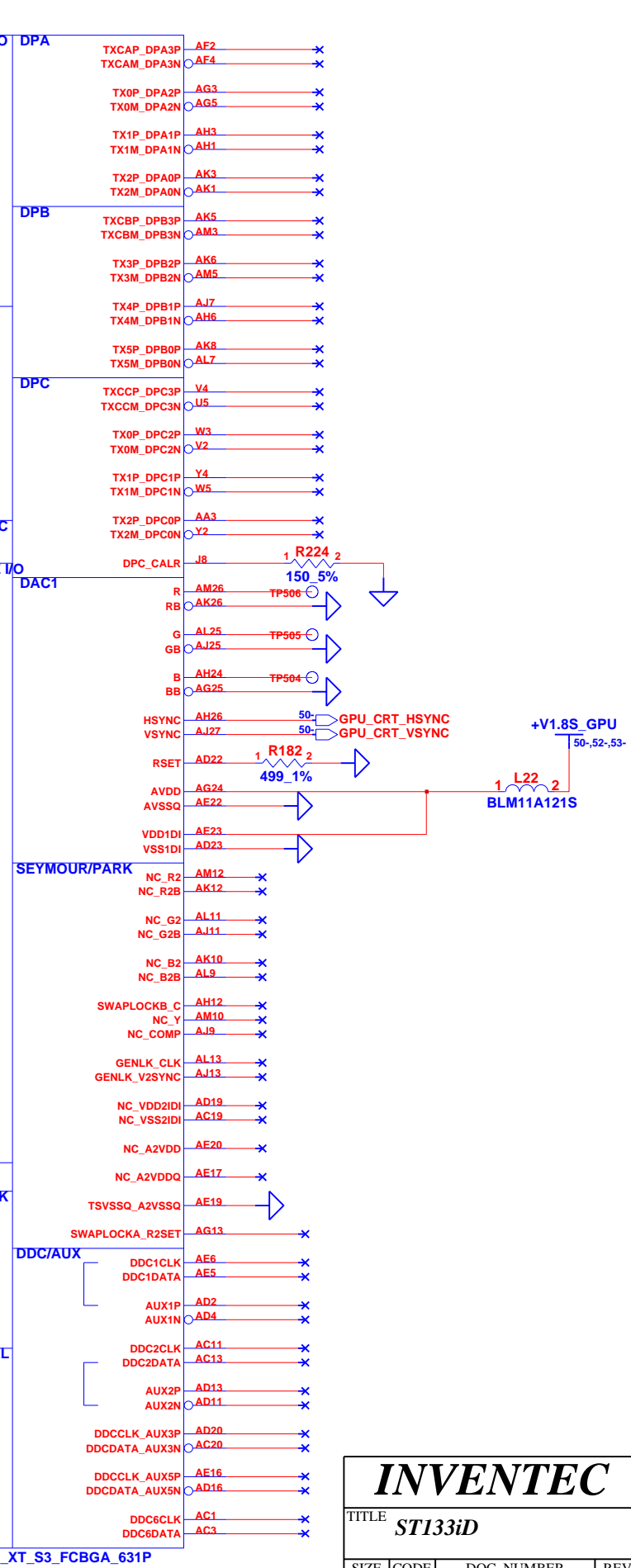
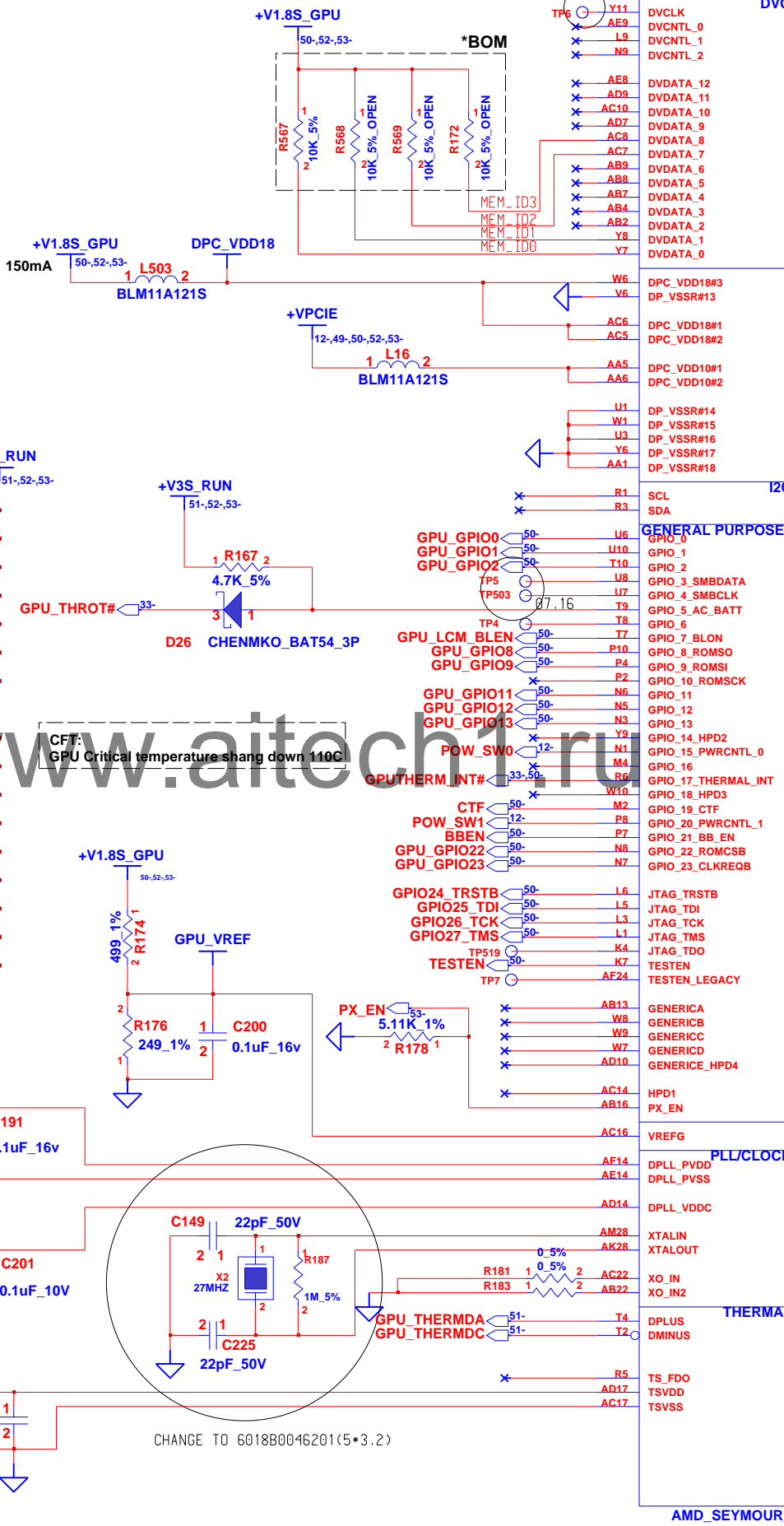
110mA



POW_SW1	POW_SW0	+VDDC_GPU
0	0	1.1V
0	1	1V
1	0	0.95V
1	1	0.9V

CFT: GPU Critical temperature shang down 110C

CHANGE TO 6018B0046201(5*3.2)



INVENTEC

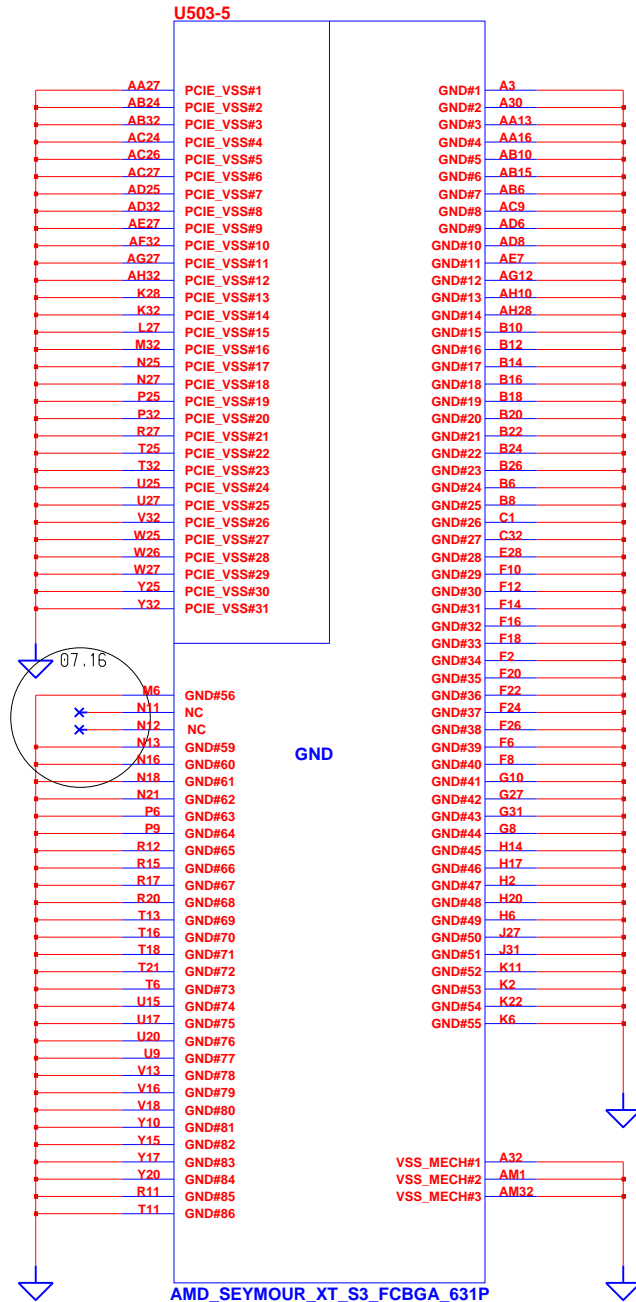
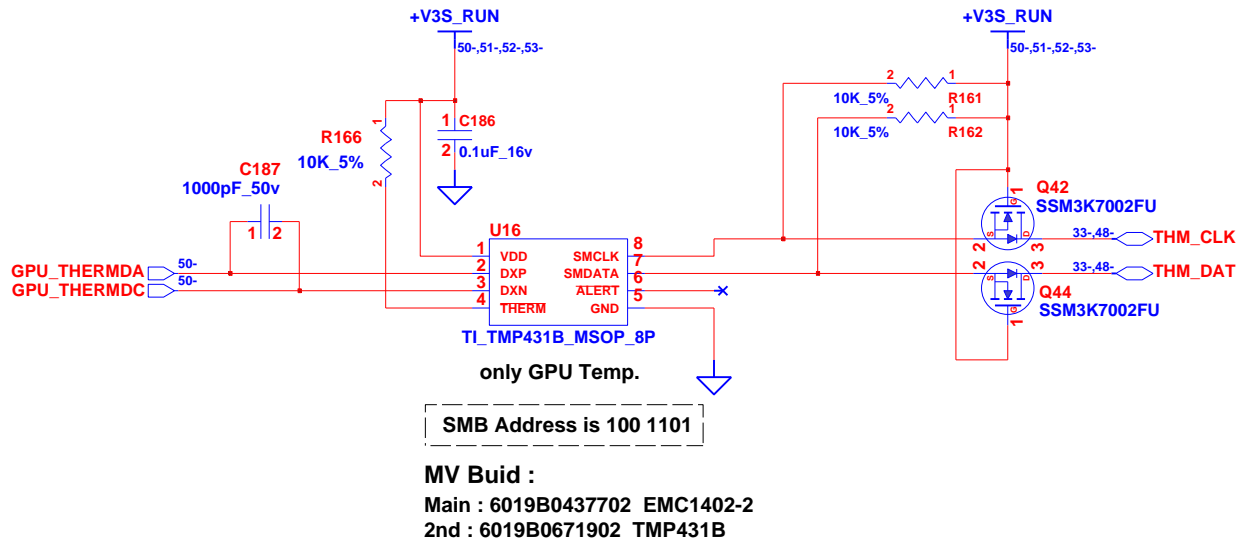
TITLE ST133iD

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23179-0-MTR	B

CHANGE by Chang, Sukigo 14-Jun-2010

SHEET 50 OF 58

www.aitech1.ru

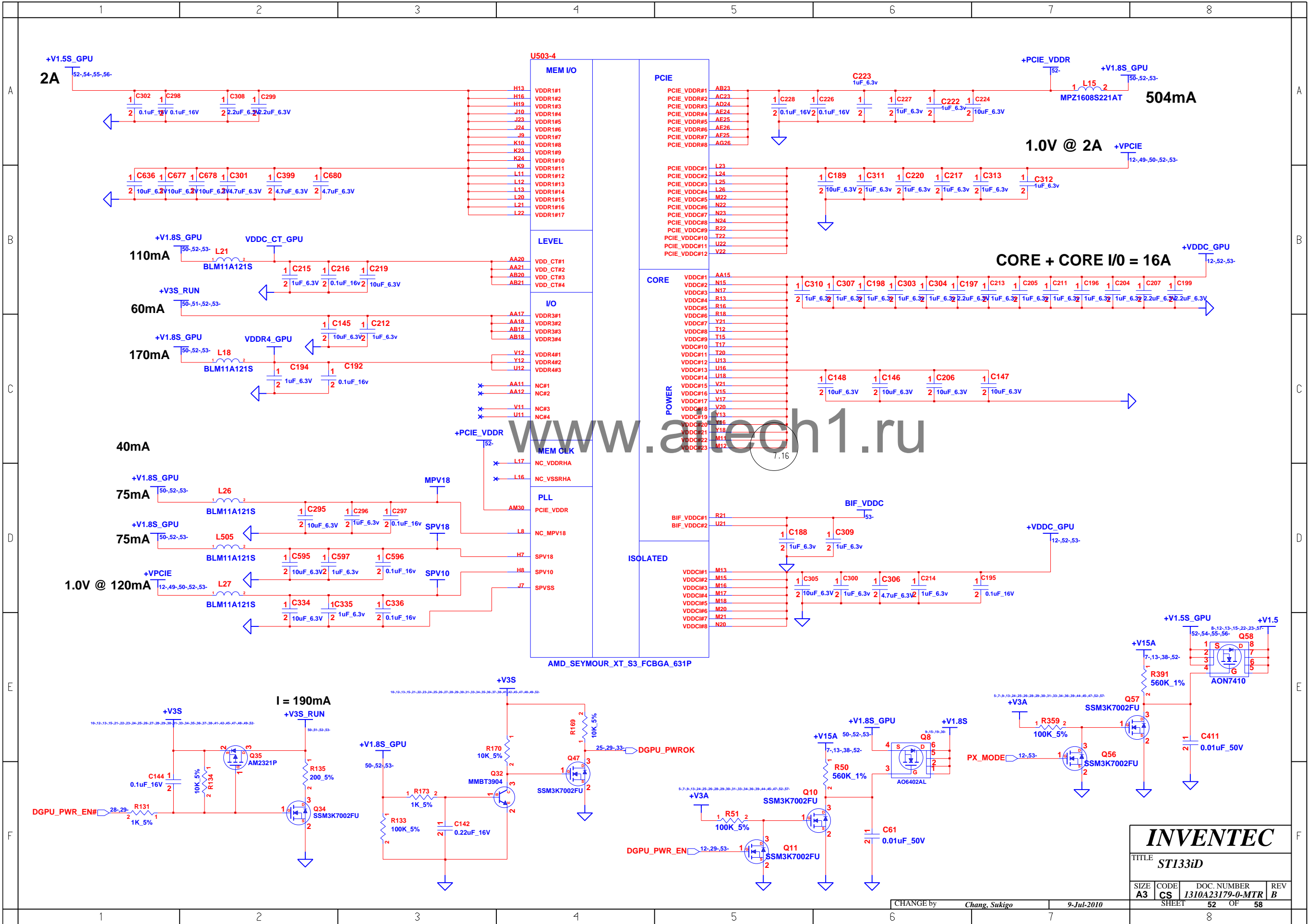


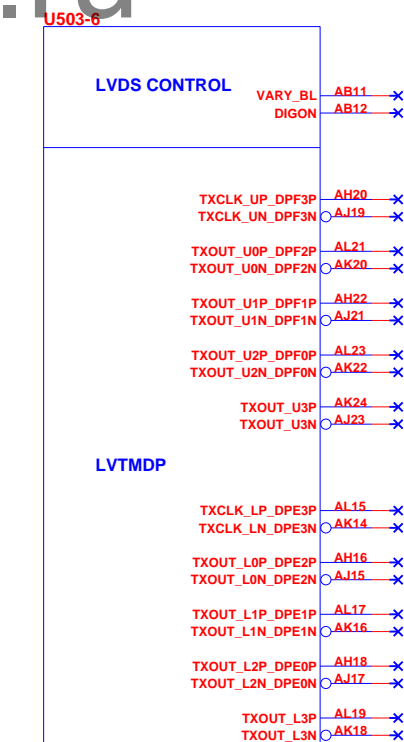
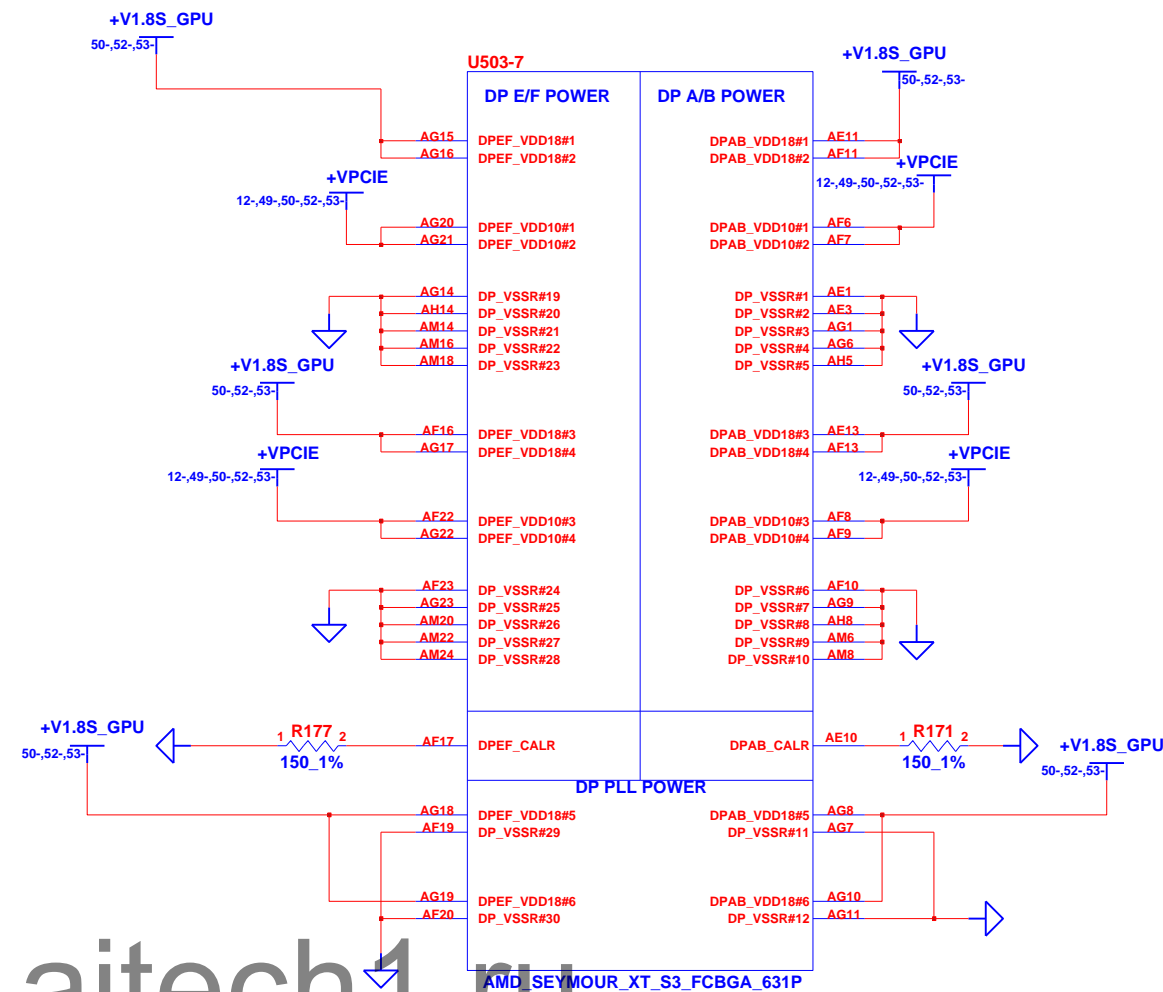
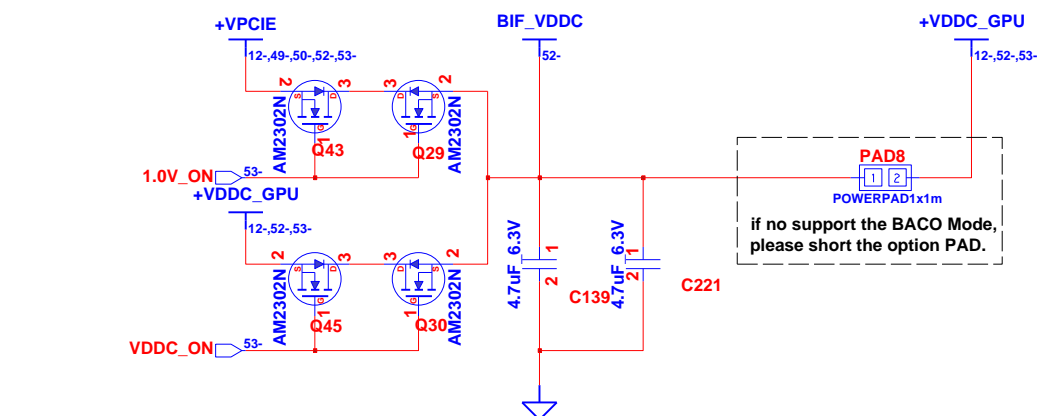
INVENTEC

TITLE	<i>ST133iD</i>
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SIZE A3	CODE CS	DOC. NUMBER 1310A23179-0-MTR	REV B
SHEET		51	OF 58

CHANGE by	<i>Chang, Sukigo</i>	<i>14-Jun-2010</i>
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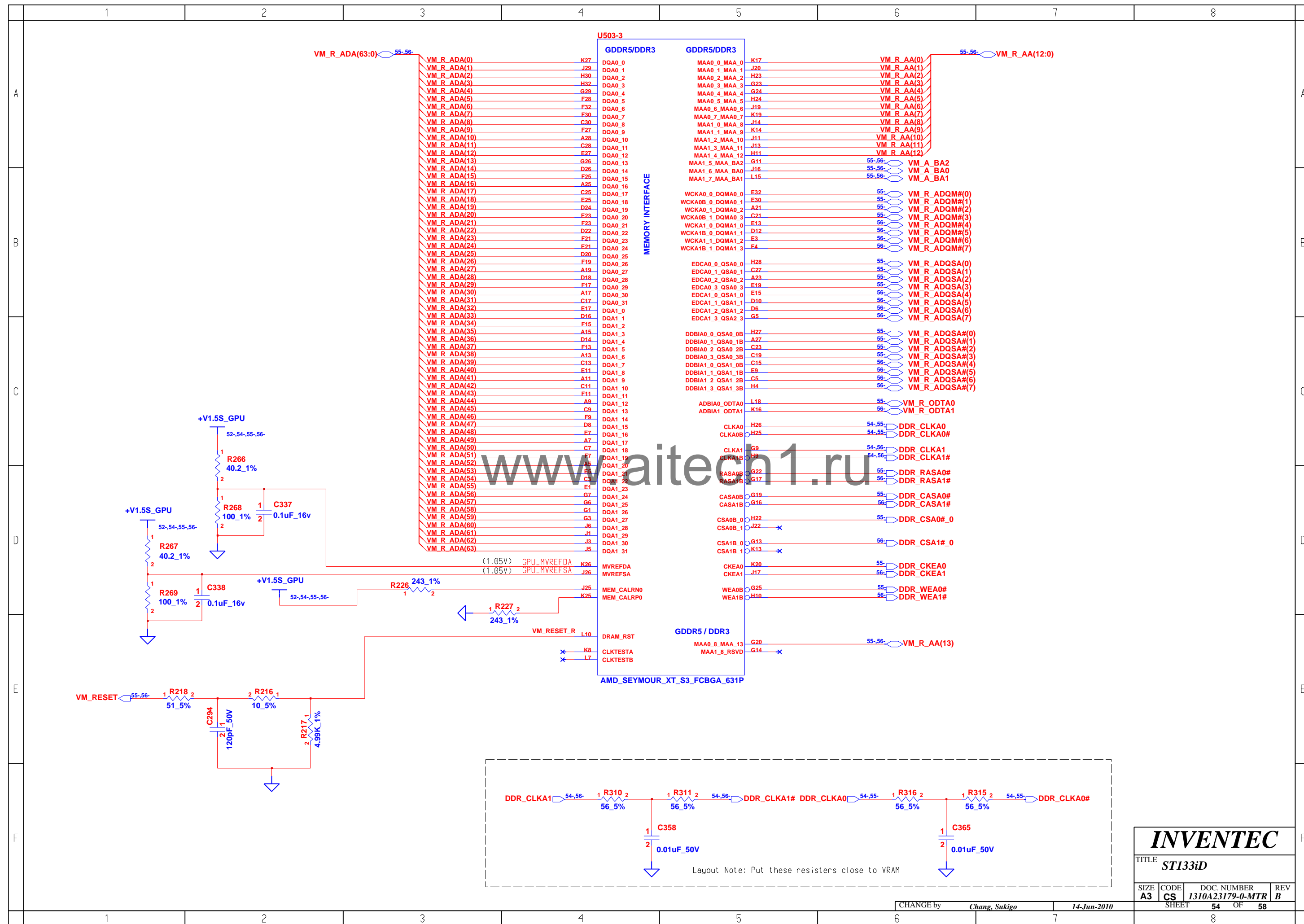
www.aitech1.ru

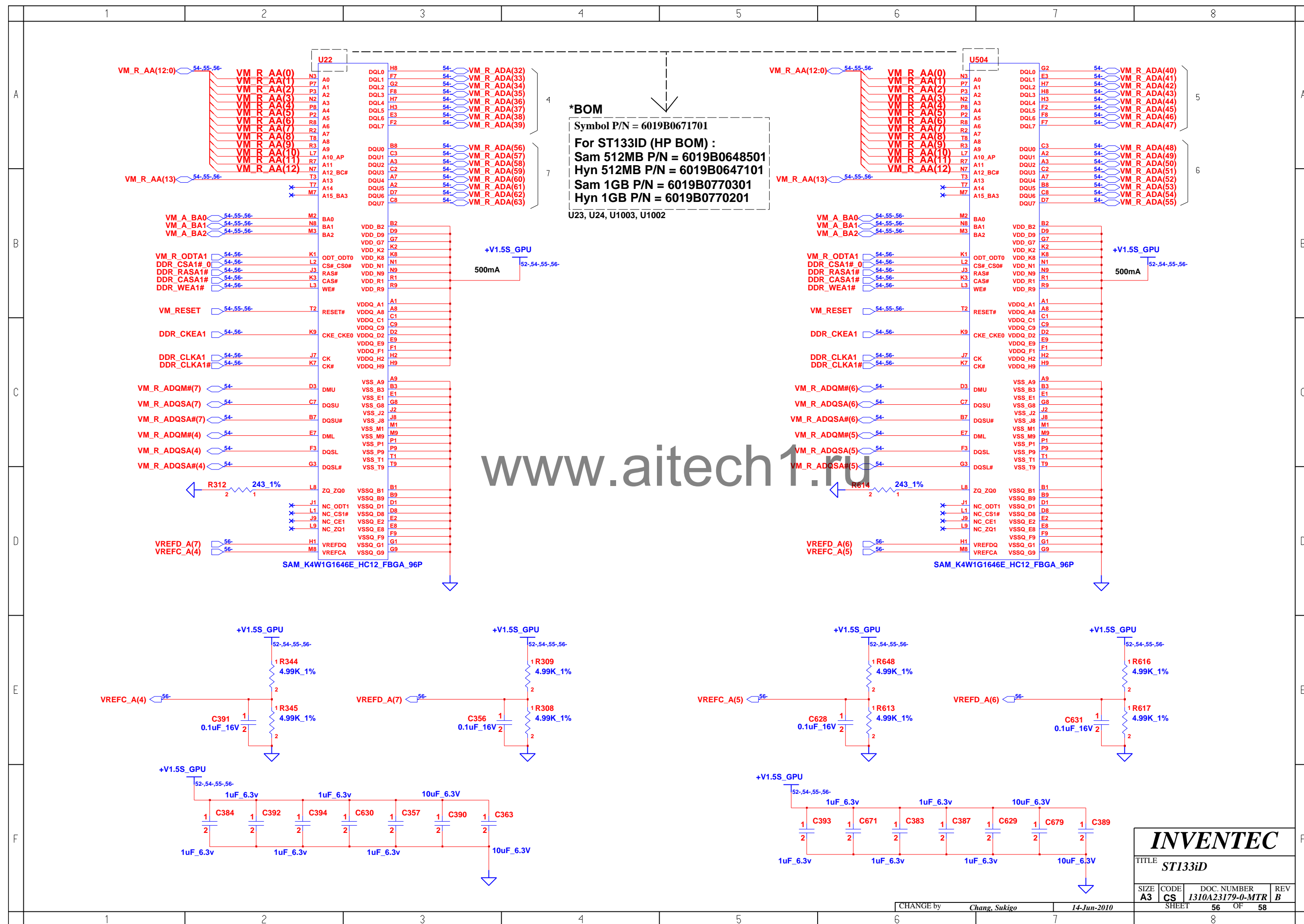
INVENTEC

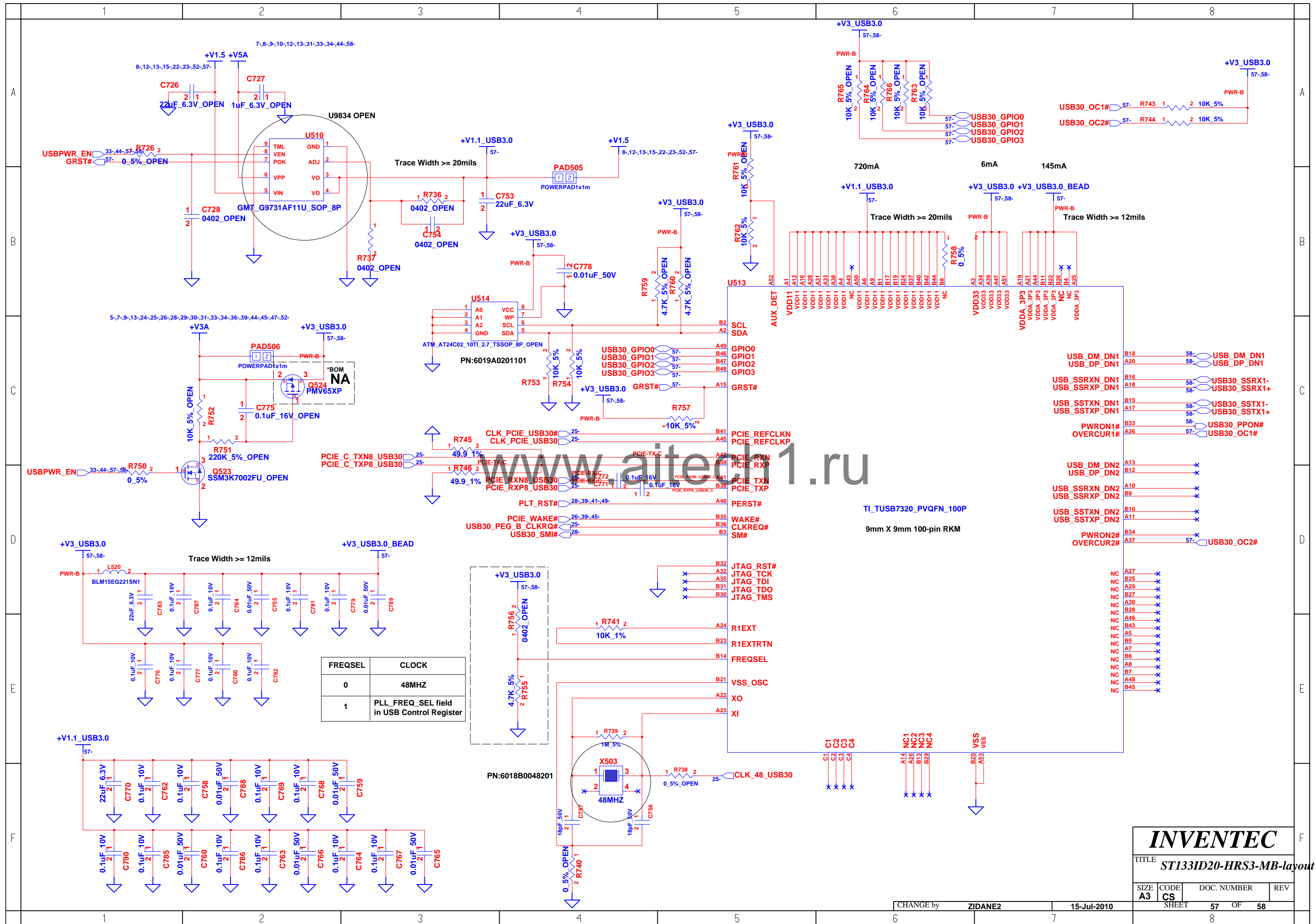
TITLE	<i>ST133iD</i>
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SIZE A3	CODE CS	DOC. NUMBER 1310A23179-0-MTR	REV B
SHEET 53 OF 58			

CHANGE by	<i>Chang, Sukigo</i>	<i>14-Jun-2010</i>
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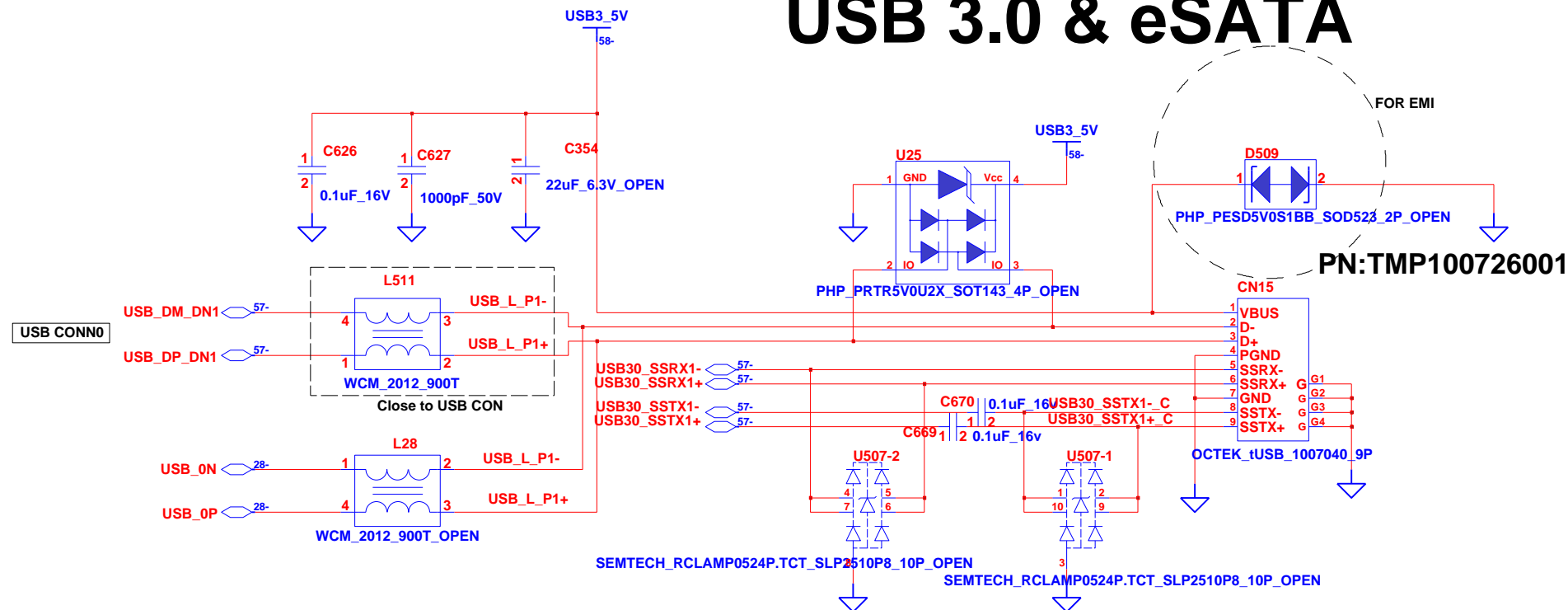
INVENTEC

TITLE **ST133ID20-HRS3-MB-layout**

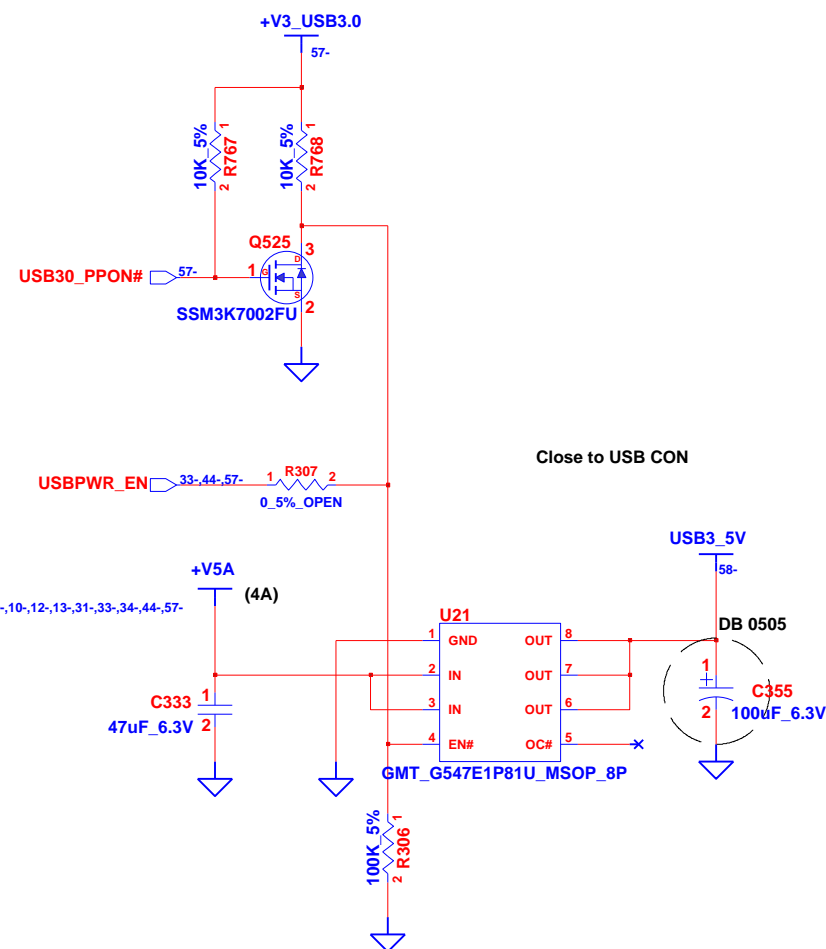
SIZE **A3** CODE **CS** DOC. NUMBER **57** OF **58**

CHANGE by **ZIDANE2** 15-Jul-2010

USB 3.0 & eSATA



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INVENTEC
TITLE ST133ID20-HRS3-MB-layout

SIZE A3	CODE CS	DOC. NUMBER 58 OF 58	REV
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CHANGE by ZIDANE2 8-Jul-2010