

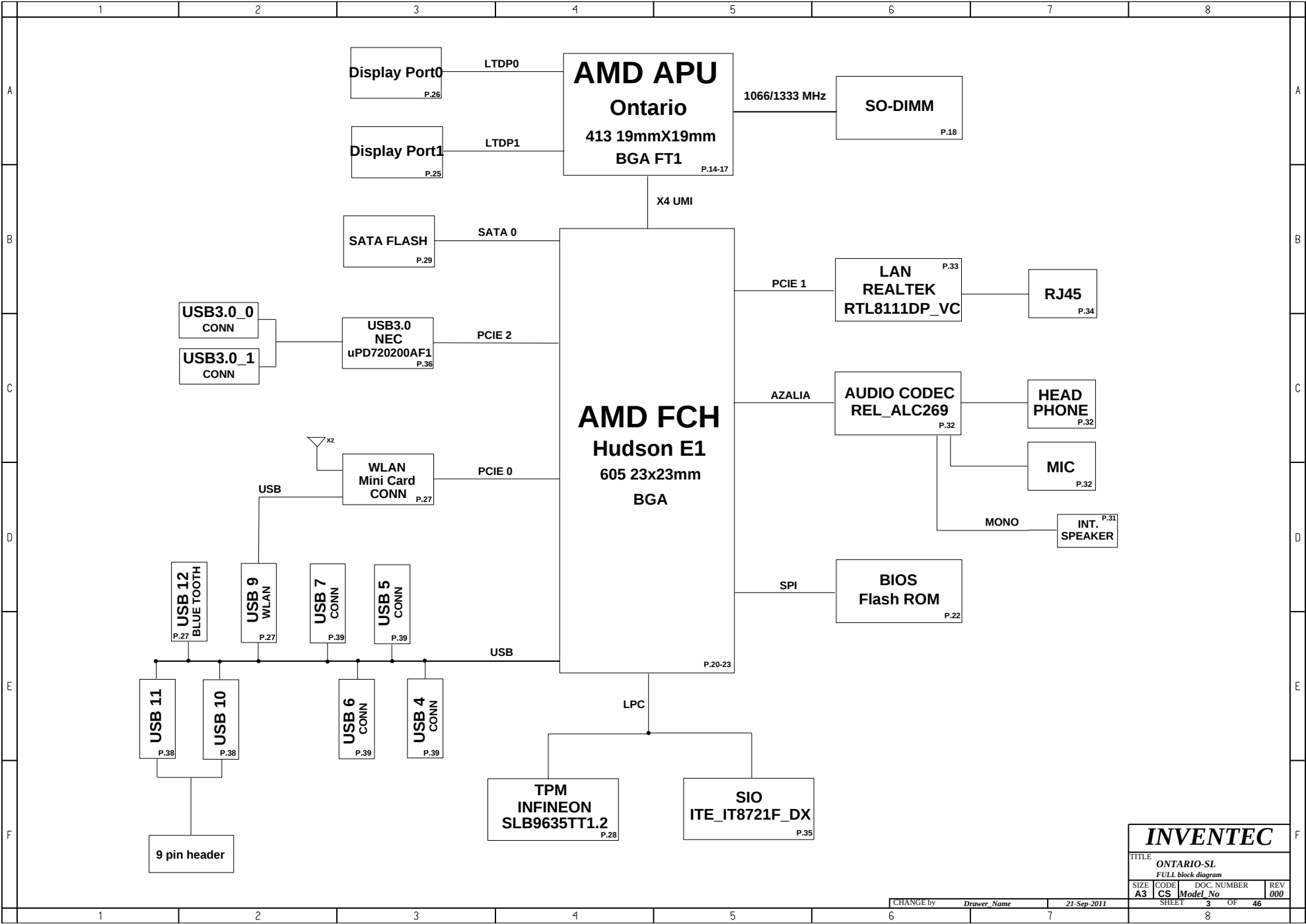
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INVENTEC

TITLE			
ONTARIO-SL			
index			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		2	OF 46

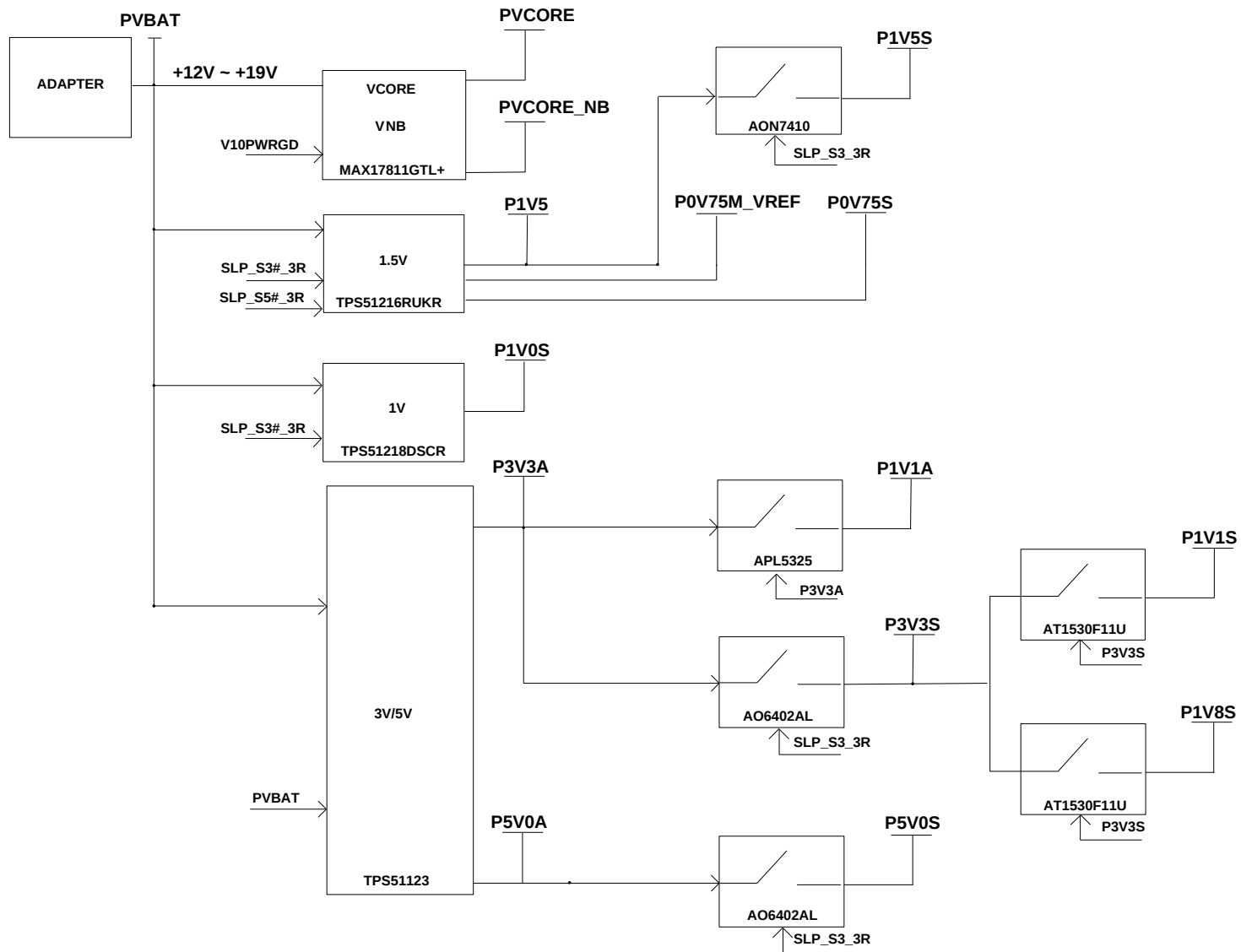
CHANGE by *Drawn Name* 19-Oct-2011



INVENTEC

TITLE			
ONTARIO-SL			
FULL block diagram			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		3	OF 46

Power Block Diagram



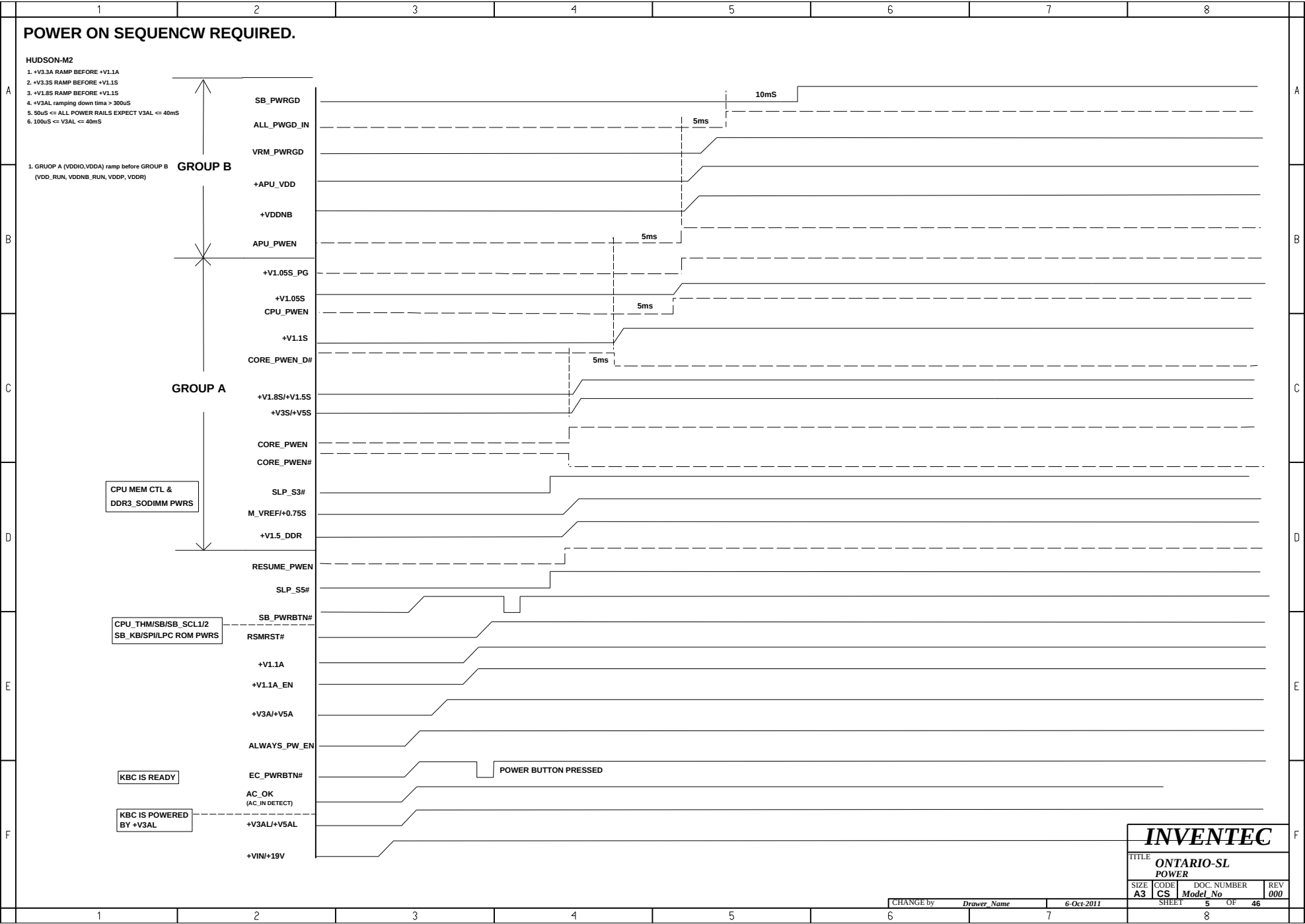
INVENTEC

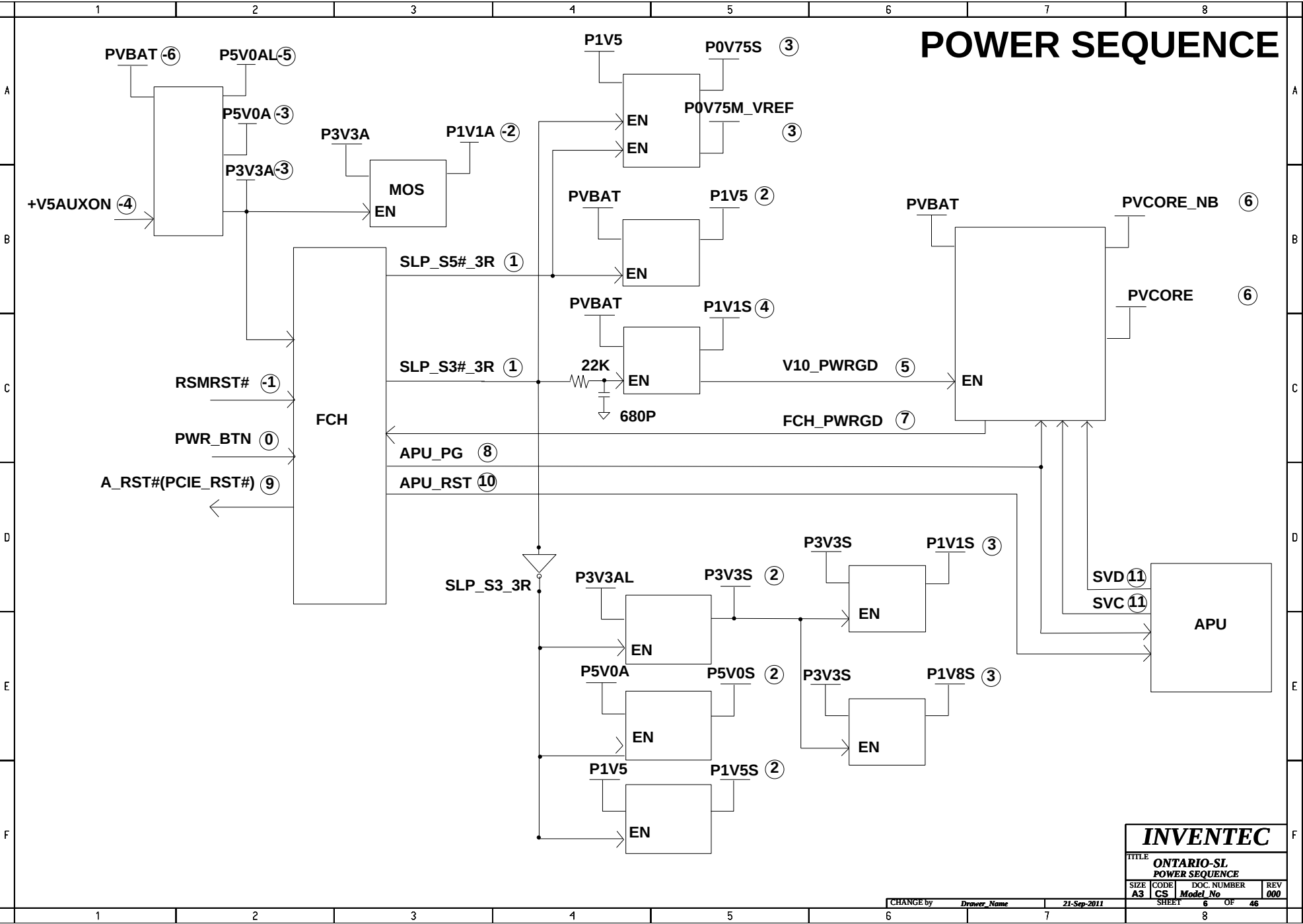
TITLE
**ONTARIO-SL
POWER ON SEQUENCE**

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV 000
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CHANGE by *Drawn Name* 21-Sep-2011

SHEET 4 OF 46

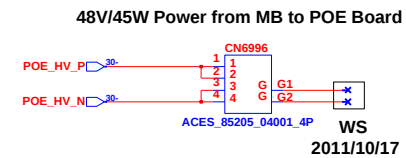
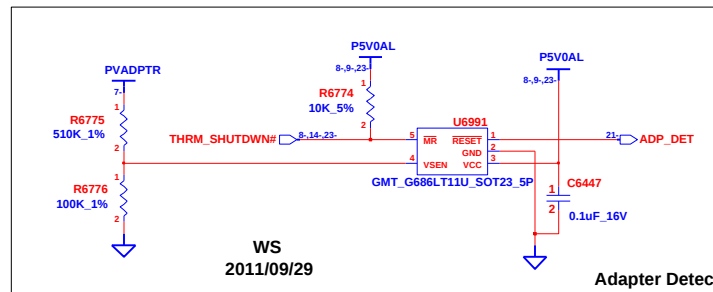
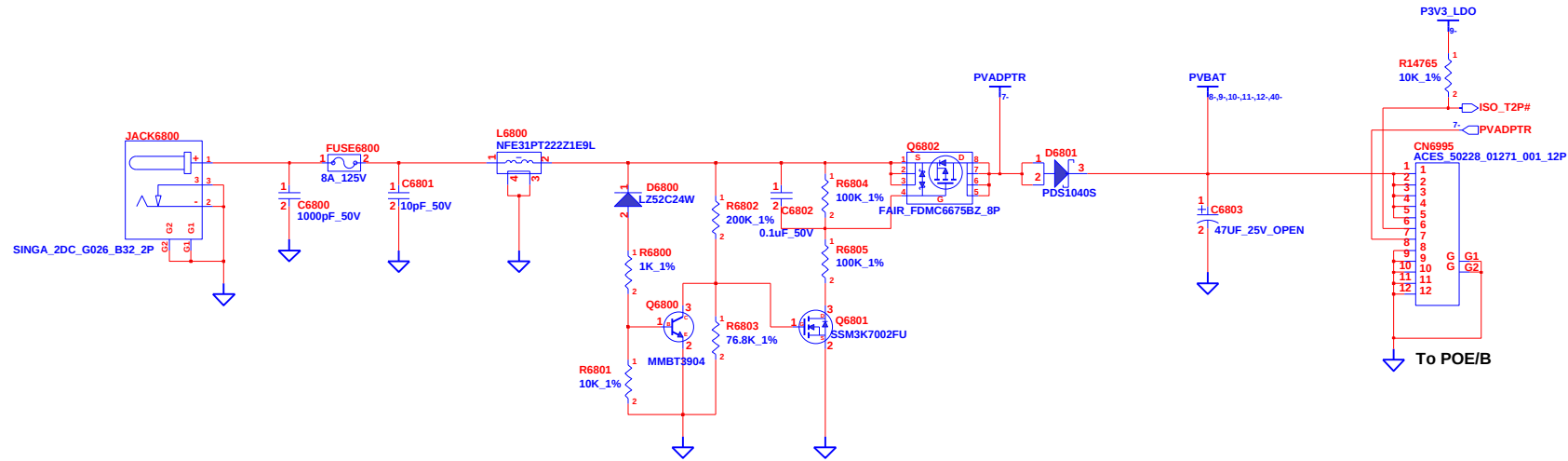




INVENTEC

TITLE			
ONTARIO-SL POWER SEQUENCE			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		6	OF 46

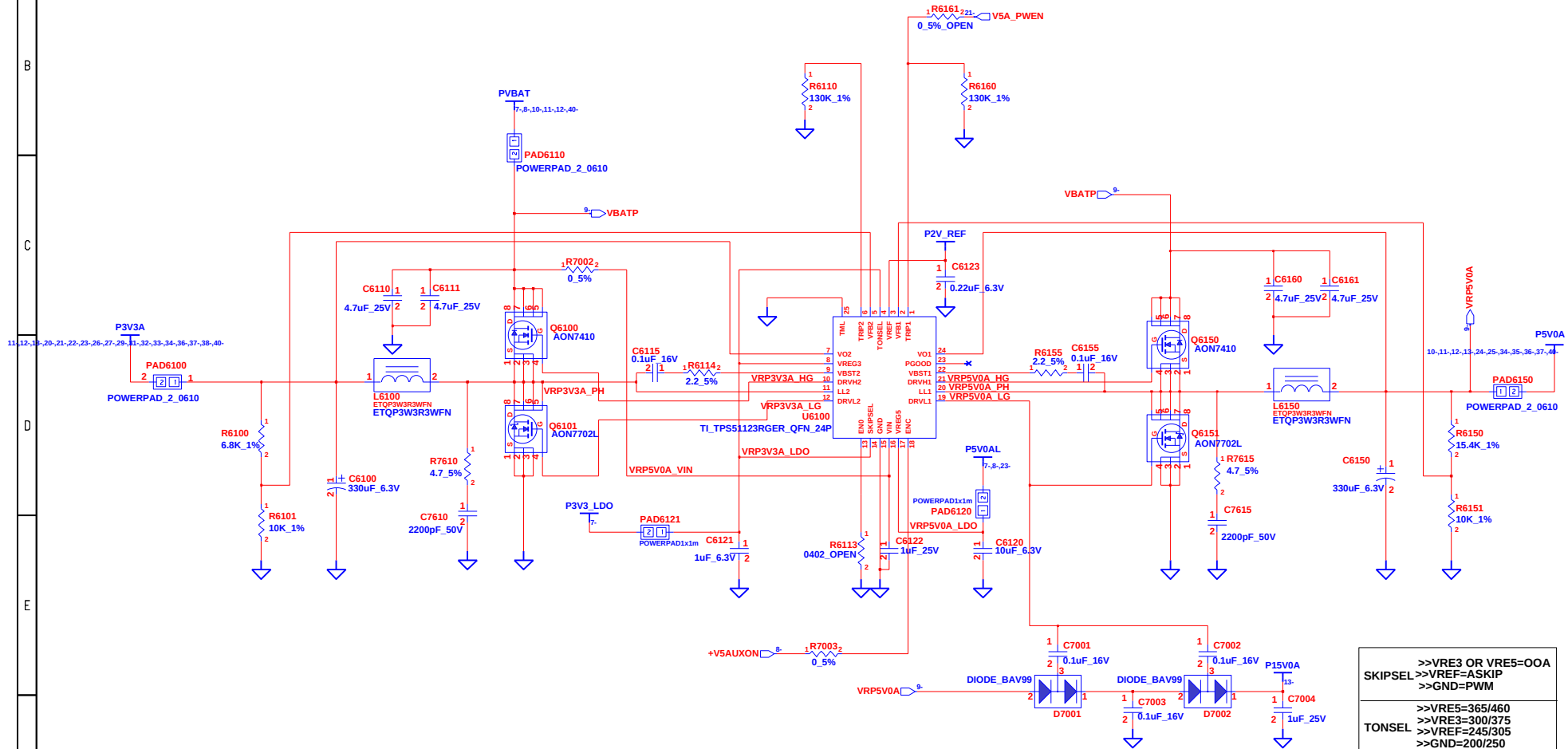
AC IN



INVENTEC			
TITLE			
ONTARIO-SL			
POWER AC IN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
CHANGE by		Drawn Name	21-Sep-2011
SHEET		7	OF 46

INVENTEC			
TITLE ONTARIO-SL			
POWER +V12S			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV 000
SHEET		8 OF	46

P3V3A P5V0A

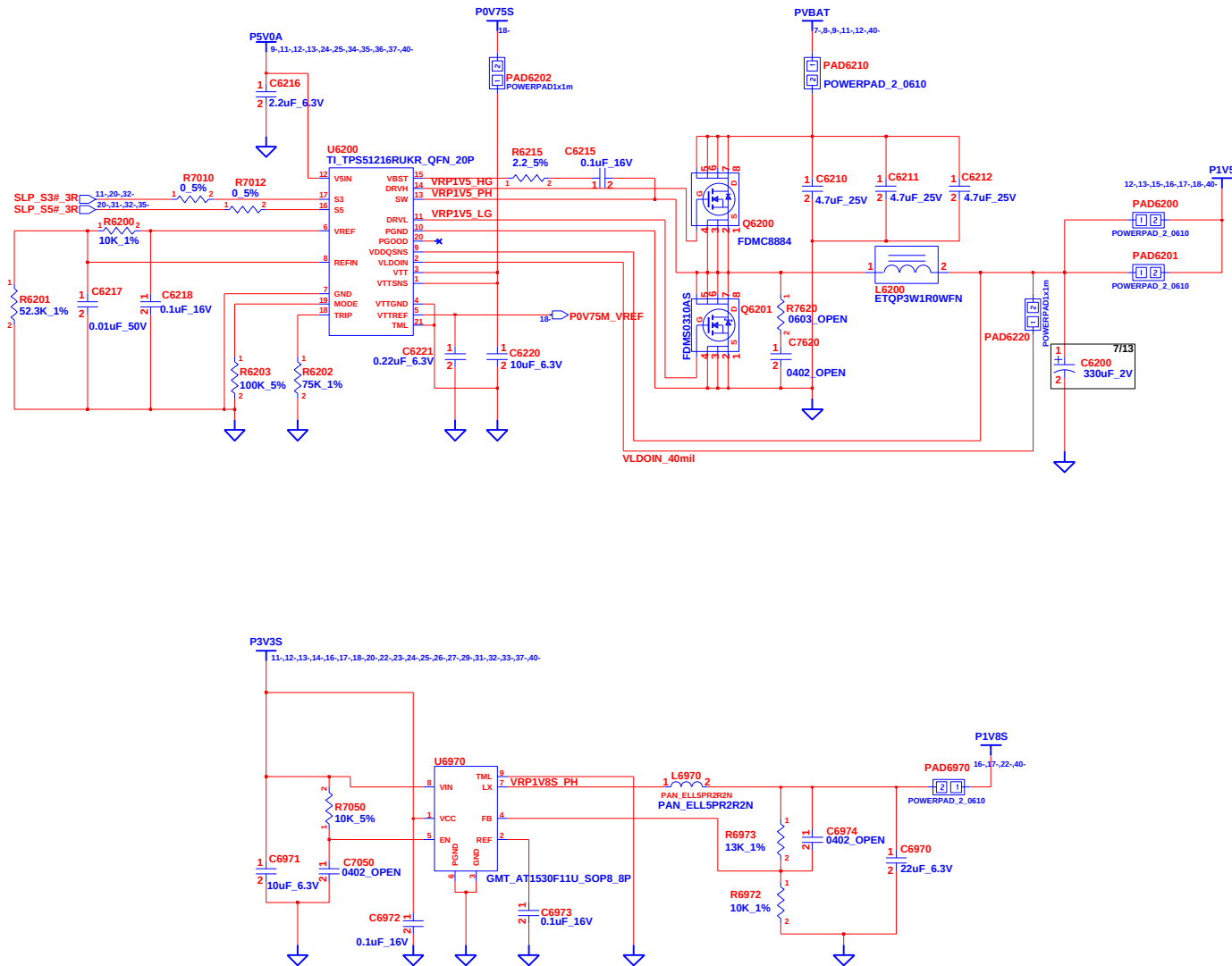


>>VRE3 OR VRE5=00A
 SKIPSEL >>VREF=ASKIP
 >>GND=PWM
 >>VRE5=365/460
 >>VRE3=300/375
 TONSEL >>VREF=245/305
 >>GND=200/250

INVENTEC			
TITLE			
ONTARIO-SL			
POWER +V3A/+V5A			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		9	OF 46

CHANGE by Drower Name 21-Sep-2011

P1V8S P0V75S P1V5



INVENTEC

TITLE			
ONTARIO-SL			
POWER +V1.8S/+V0.75S/+V1.5			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		10	OF 46

CHANGE by *Drawer Name* 21-Sep-2011

P1V1A P1V0S P1V1S

INVENTEC

ONTARIO-SL
POWER +V1.1A/+V1S/+V1.1S

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000

SHEET 11 OF 46

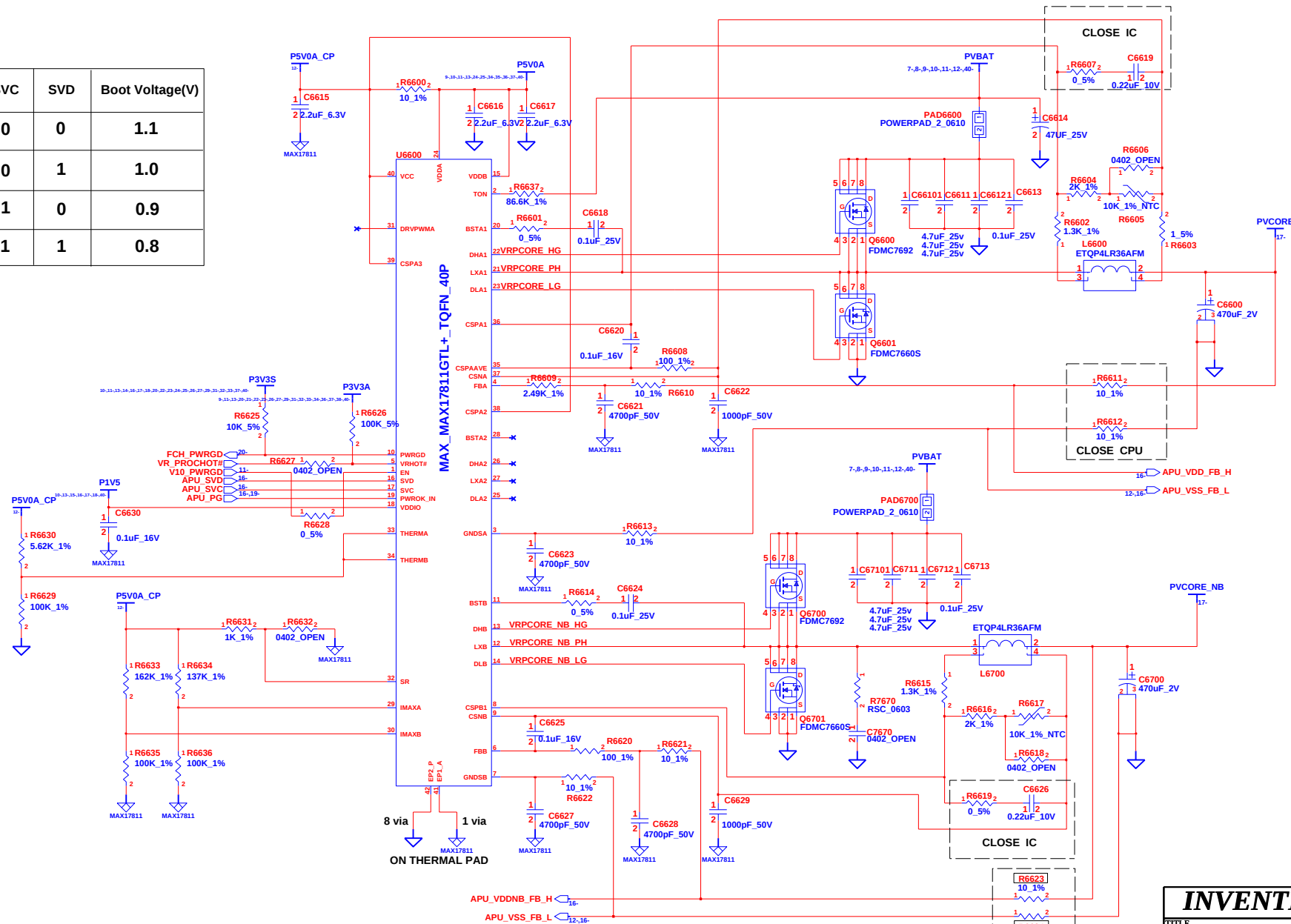
CHANGE by: *Drawer Name* 21-Sep-2011

TITLE			
ONTARIO-SL POWER +V1.1A/+V1S/+V1.1S			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		11	OF 46

CHANGE by	<i>Drawer_Name</i>	21-Sep-2011
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CS	Model No	000
SHEET	11	OF 46

SVC	SVD	Boot Voltage(V)
0	0	1.1
0	1	1.0
1	0	0.9
1	1	0.8



INVENTEC

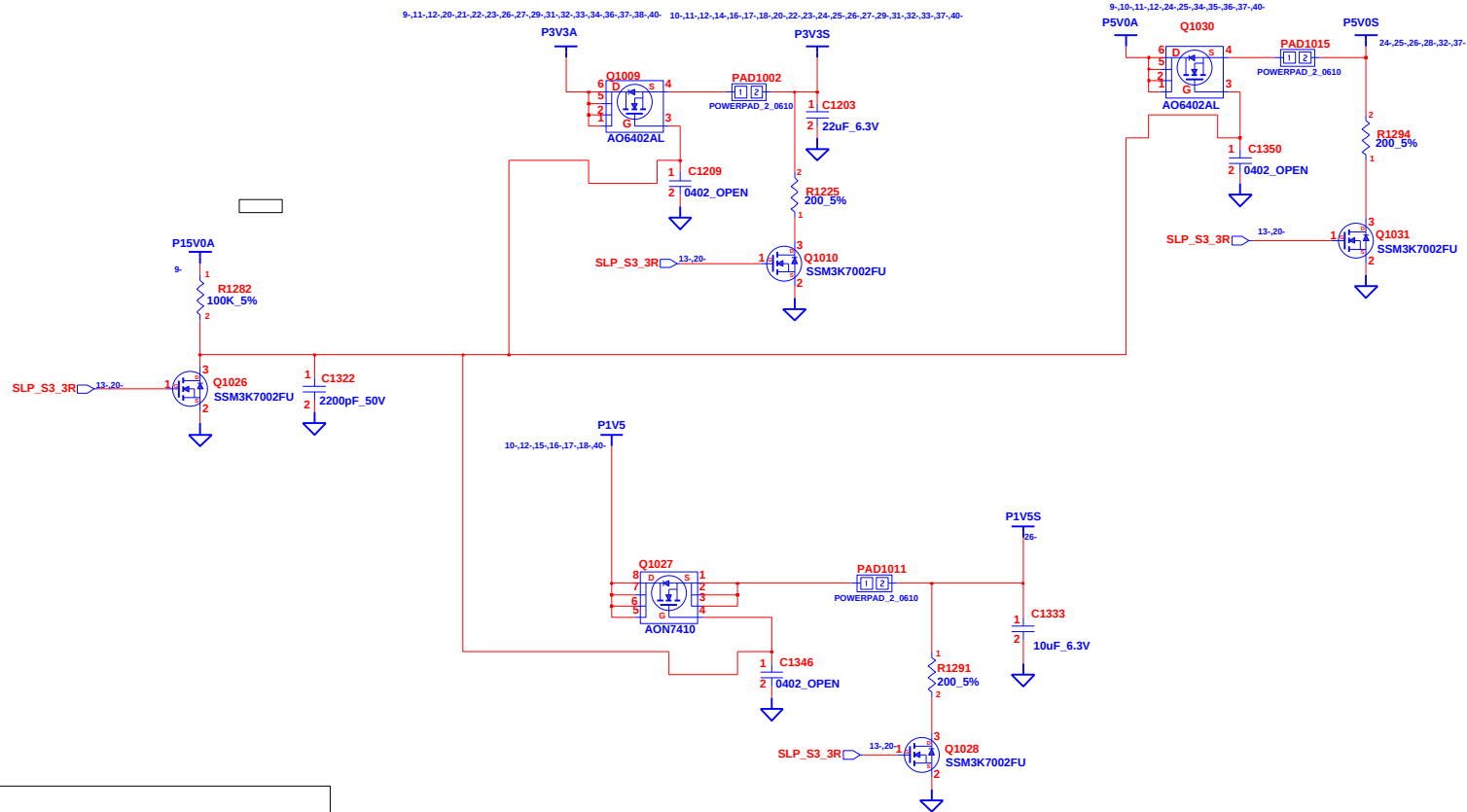
TITLE
**ONTARIO-SL
POWER VCORE/VCORE_NB**

SIZE CODE DOC. NUMBER
A3 CS Model No

SHEET 12 OF 46
REV 000

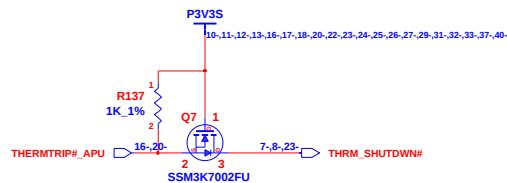
CHANGE by *Drawn Name* 21-Sep-2011

P5V0S P3V3S P1V5S

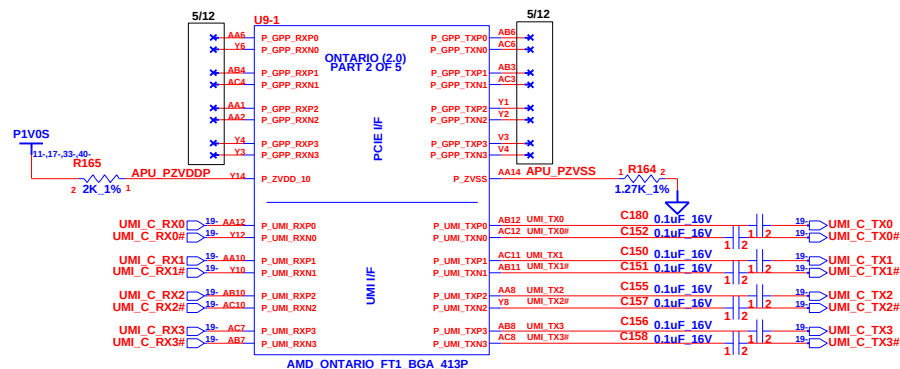


Del V1.05s 6/1

INVENTEC			
TITLE			
ONTARIO-SL			
POWER +VSS/+V3S/+V1.5S/+VAUDIO			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
CHANGE by		21-Sep-2011	
Drawer Name			
SHEET		13	OF 46

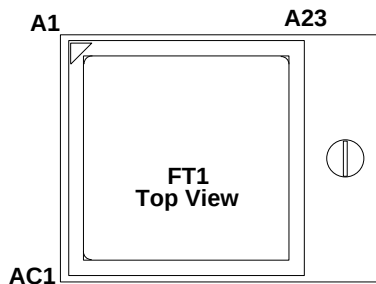


PEG & UMI BUS



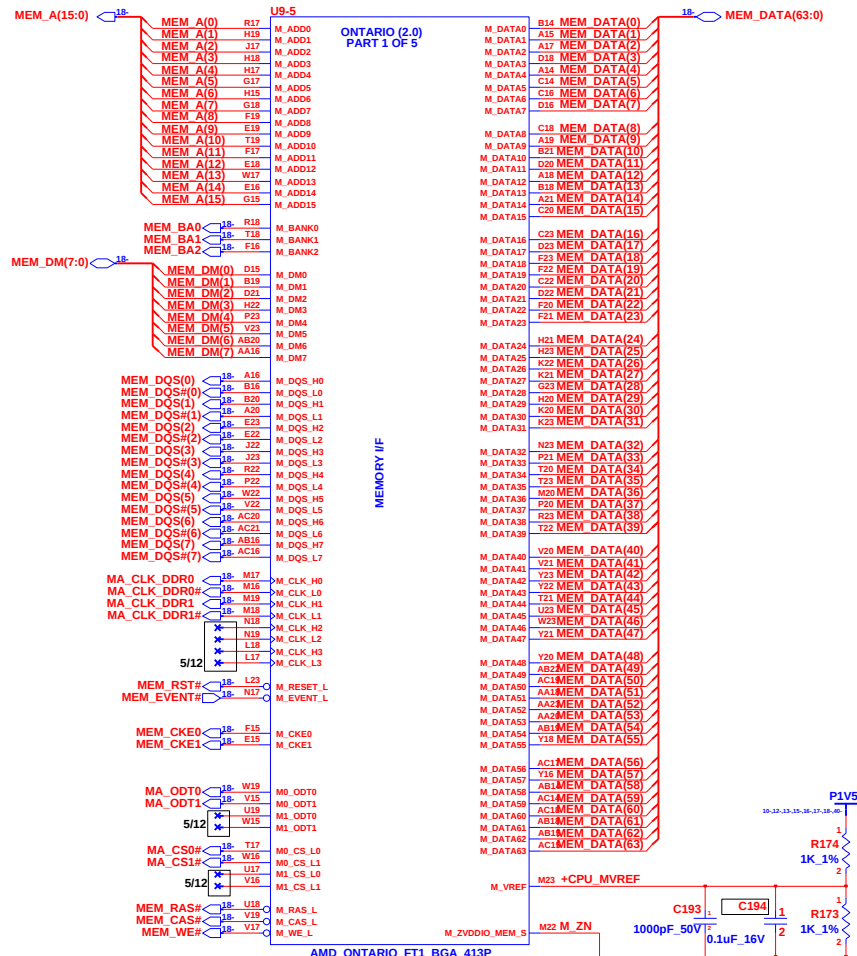
Route A-LINK DIFF PAIR @85 OHM+/- 10%

Layout: Add stitching caps if crossing plane split.



INVENTEC			
TITLE			
ONTARIO-SL			
APU-1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
CHANGE by		21-Sep-2011	
SHEET		14	OF 46

MEMORY



SO-DIMM Routing Rules for H = 0.1mm Stripline

Net Name	Target Impedance	Routing Dimensions	Spacing to Other	Self Spacing
CLK	72 ohm	0.2 / 0.1 / 0.2	0.5	0.5
ADD	40 ohm	0.2	0.2	0.3
DQS	90 ohm	0.1 / 0.1 / 0.1	0.4	0.4
Data/DM	40 ohm	0.2	0.3	0.3

R connection to +V1.5 should be directly to the plane without a long trace.

INVENTEC

TITLE
ONTARIO-SL
APU-2

SIZE CODE DOC. NUMBER REV
A3 CS Model No 15 OF 46 000

CHANGE by Drawn Name 21-Sep-2011

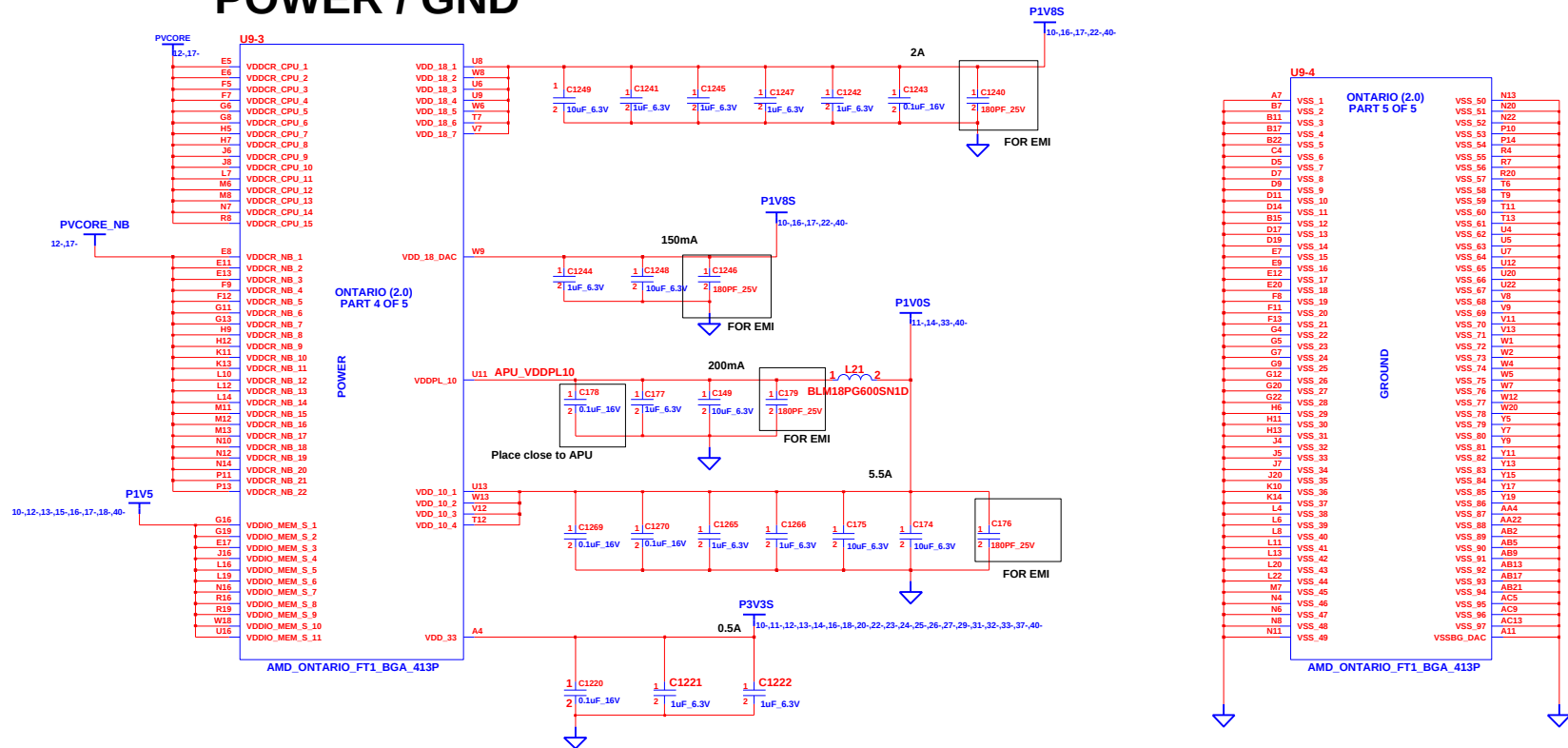
HDT Header+

INVENTEC

TITLE			
ONTARIO-SL			
APU-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET 16 OF 46			

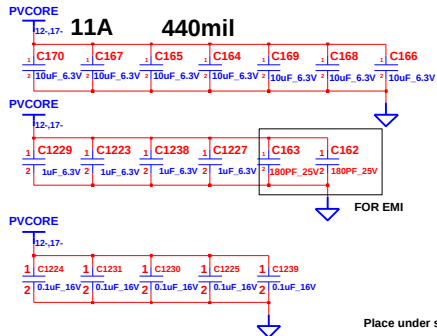
CHANGE by	<i>Drawer Name</i>	21-Sep-2011
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POWER / GND



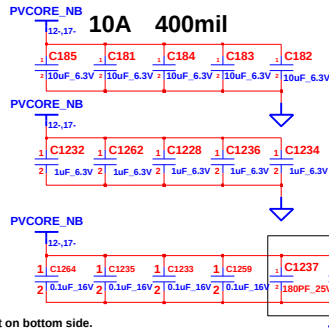
+VCC_CORE

10uF x 7 ; 1uF x 4 ; 0.1uF x 5 ; 180pF x 2



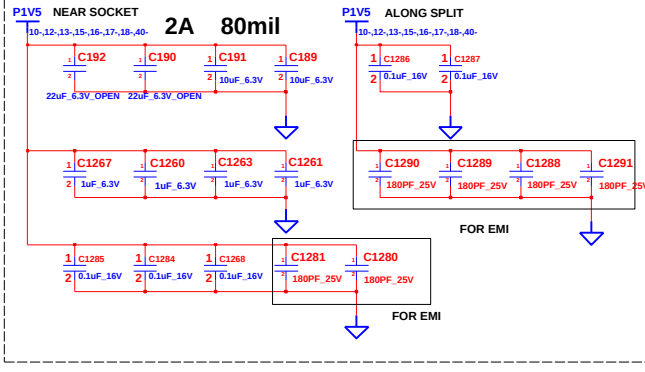
+VCC_CORE_NB

10uF x 5 ; 1uF x 5 ; 0.1uF x 4 ; 180pF x 2



+V1.5

22uF_OPEN X 2 ; 10uF x 2 ; 1uF x 4 ; 0.1uF x 5 ; 180pF x 6

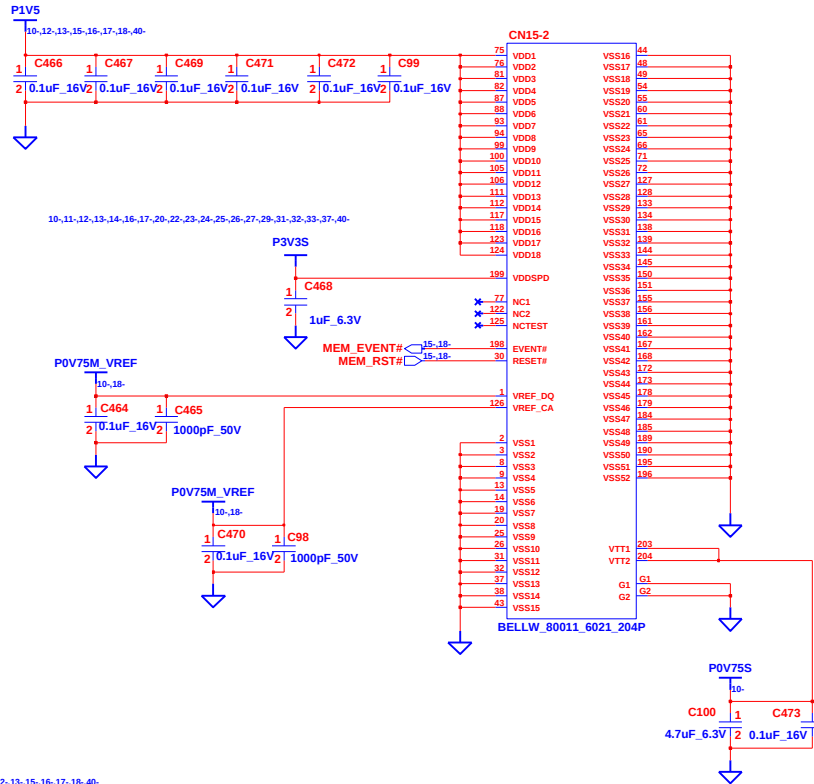
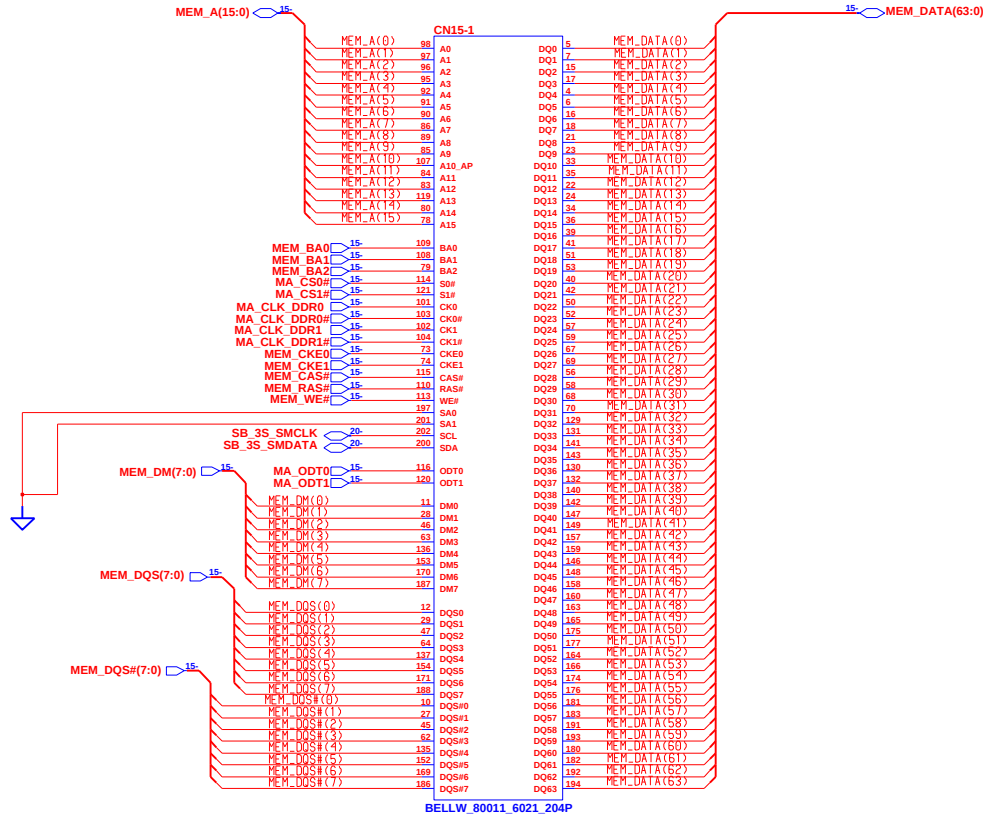


INVENTEC

TITLE ONTARIO-SL APU-4			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV 000
SHEET 17		OF 46	

CHANGE by *Drawn Name* 21-Sep-2011

DDR3



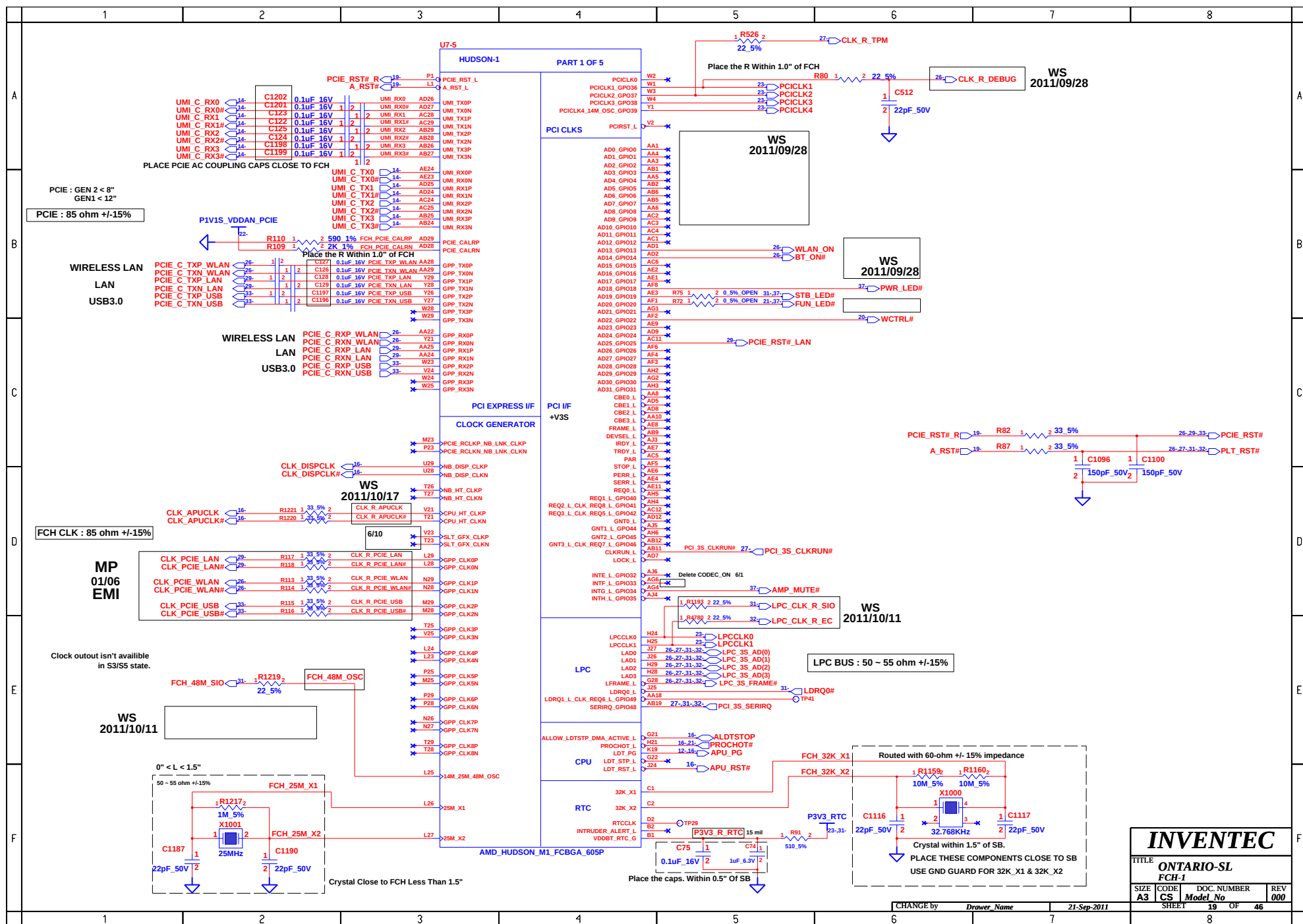
SO DIMM0
SLOT A(STANDARD)
P/N: 6026B0153003

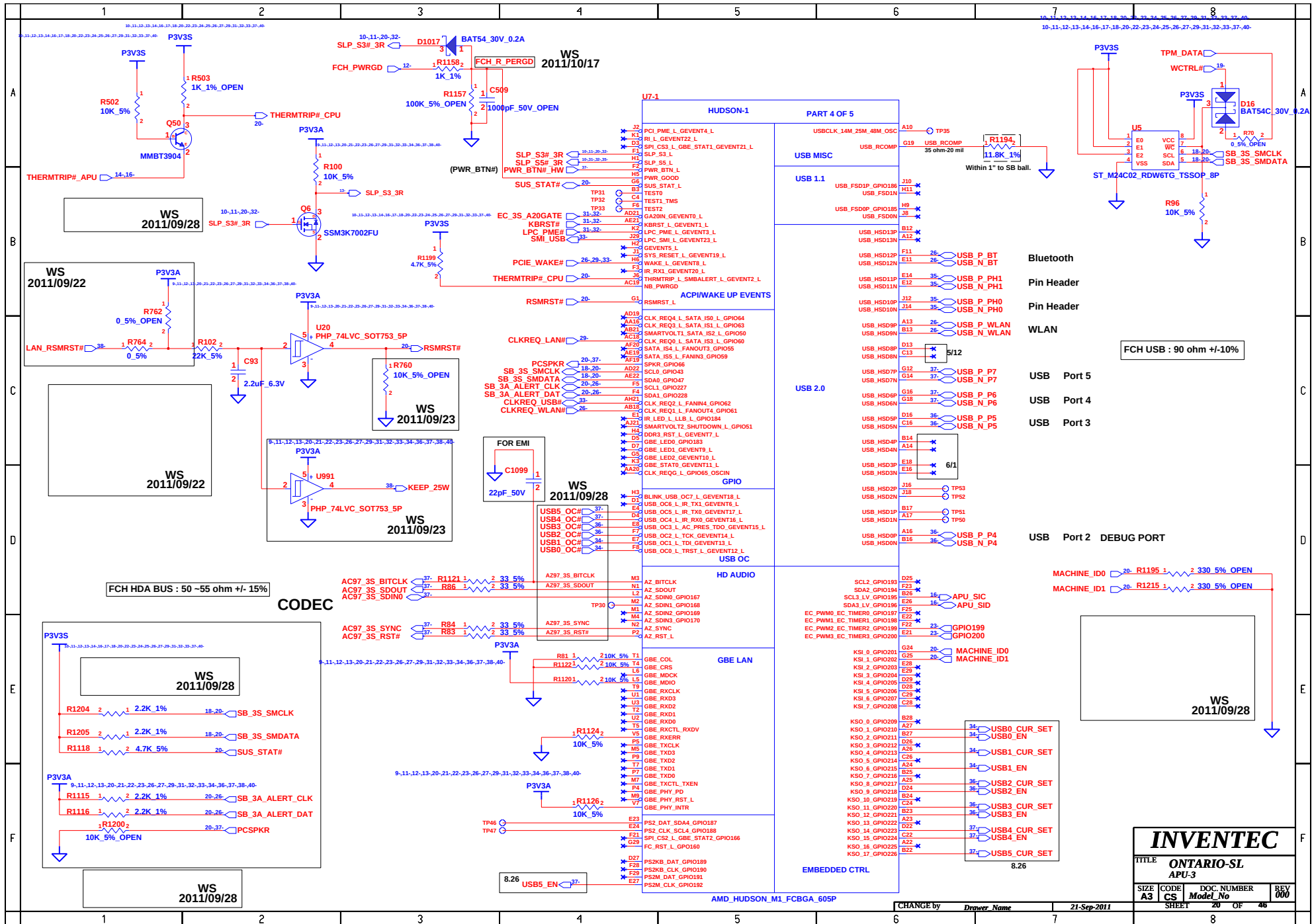
NOTE:
IF SA0=0, SA1=0
SO-DIMMA SPD ADDRESS IS 0xA0
SO-DIMMA TS ADDRESS IS 0x30

IF SA0=1, SA1=0
SO-DIMMA SPD ADDRESS IS 0xA2
SO-DIMMA TS ADDRESS IS 0x32

WS
2011/10/19

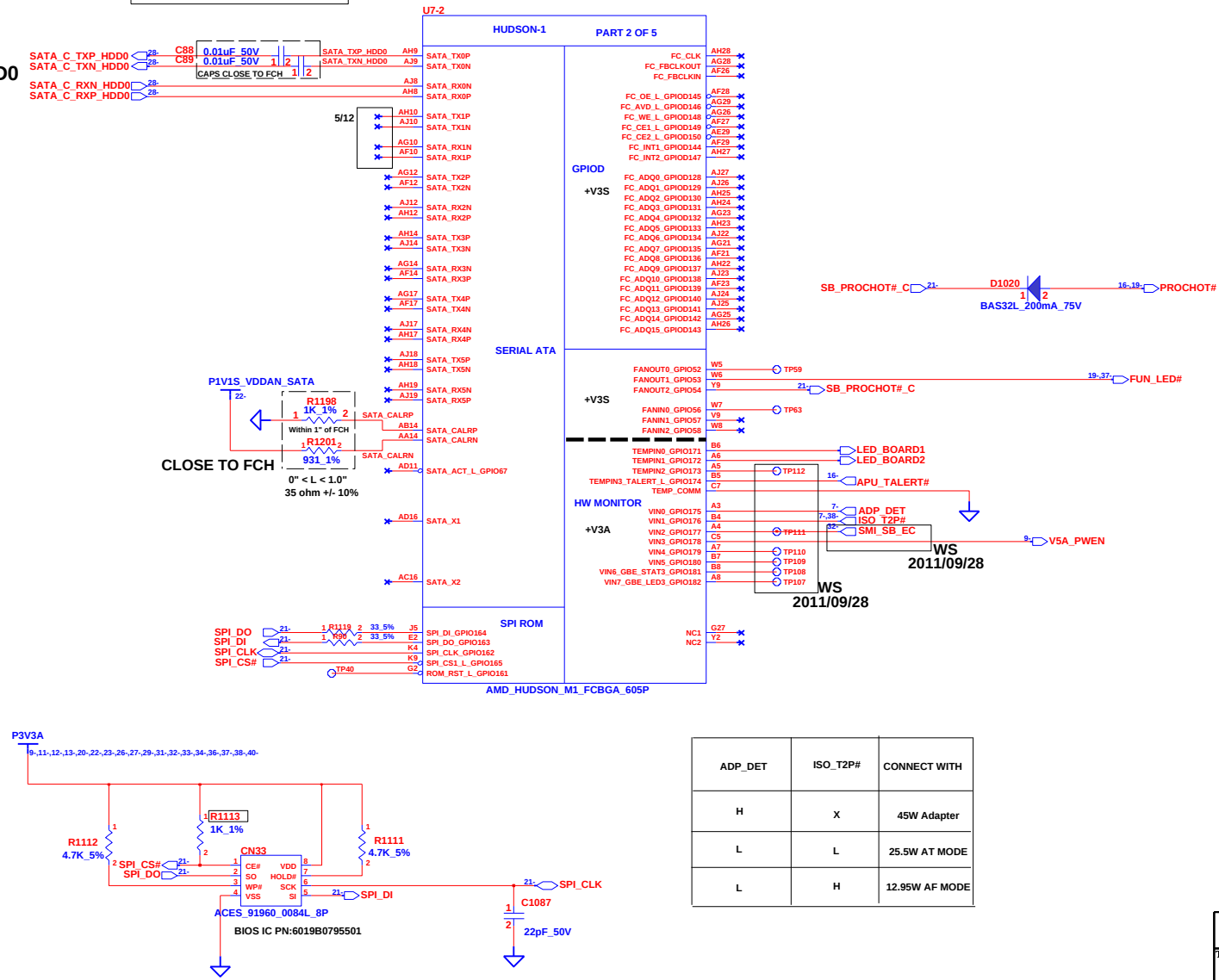
INVENTEC			
TITLE ONTARIO-SL DDR3-1			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV 000
CHANGE by		21-Sep-2011	
SHEET 18		OF 46	





SATA HDD0

SATA TX : 95 ~100 ohm +/- 10%
SATA RX : 90 ohm +/- 10%



ADP_DET	ISO_T2P#	CONNECT WITH
H	X	45W Adapter
L	L	25.5W AT MODE
L	H	12.95W AF MODE

INVENTEC

TITLE

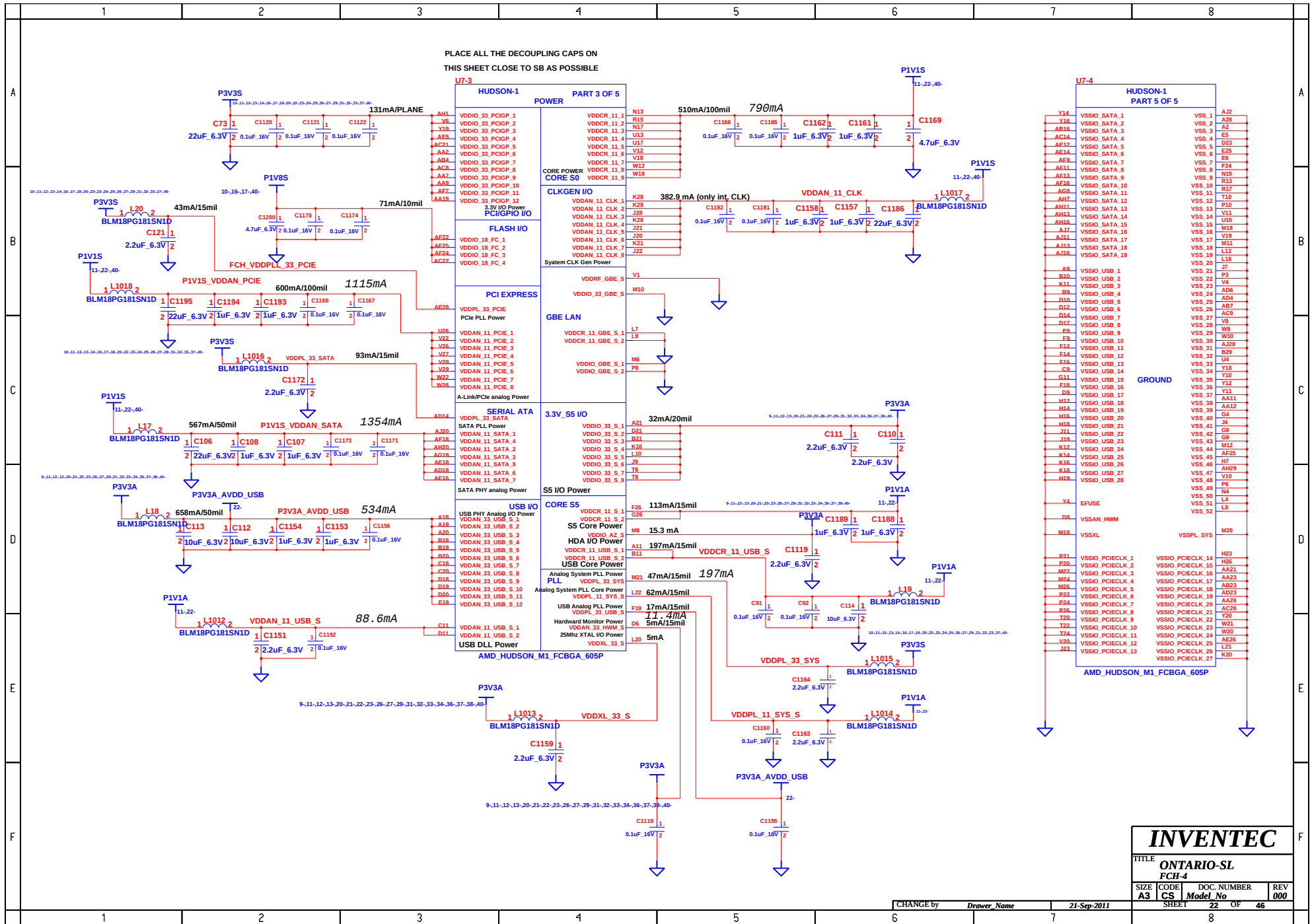
ONTARIO-SL

FCH-3

SIZE CODE DOC. NUMBER REV

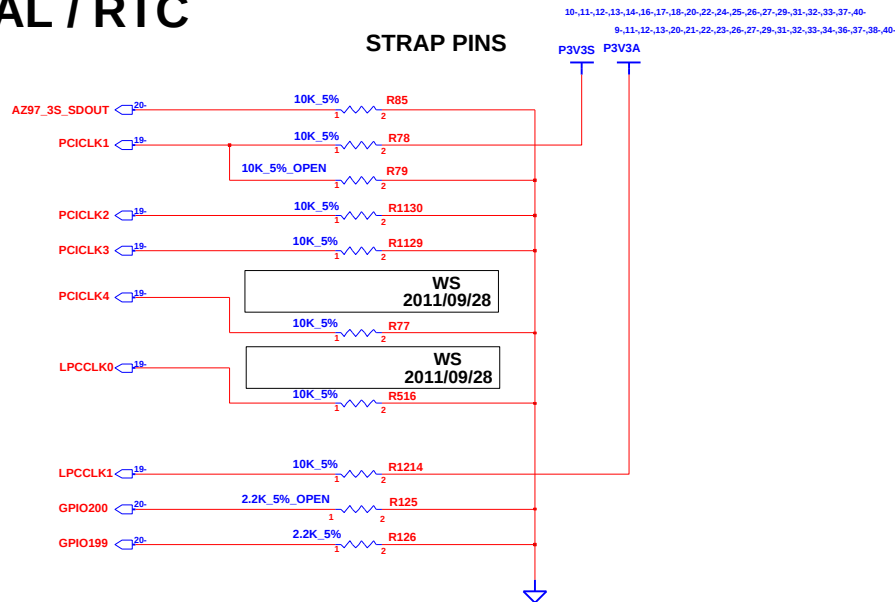
A3 CS Model No 21 OF 46 000

CHANGE by Drafter Name 21-Sep-2011



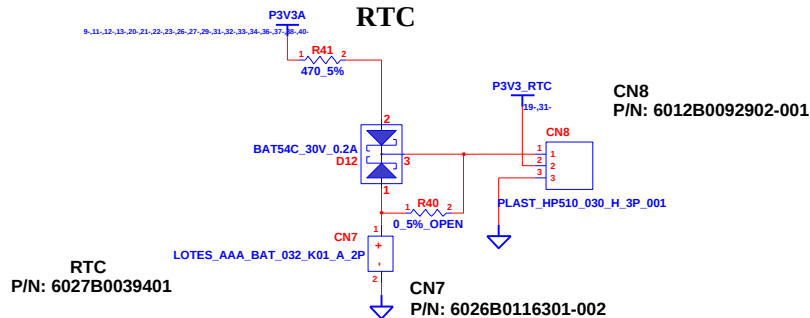
STRAP OPTION / THERMAL / RTC

STRAP PINS

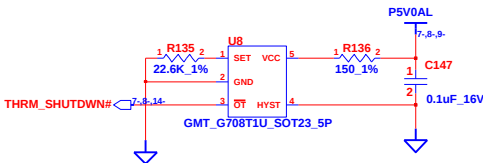


	AZ97_3S_SDOUT	PCI_CLK1	PCI_CLK2	PCI_CLK3	PCI_CLK4	LPCCLK0	LPCCLK1	GPIO200 EC_PWM3	GPIO199 EC_PWM2
PULL HIGH	Low Power Mode (Not Supported)	Allow PCIE Gen2 (Default)	Watchdog Timer Enabled (Not Supported)	Debug STRAP Enabled	Non-FUSION CLOCK Mode	Integrated Micro-Controller Enabled (Default)	Internal Clock Generator Enabled (Default)	H,H= Reserved H,L= SPI ROM (Default)	
PULL LOW	Performance Mode (Default)	Force PCIE Gen1	Watchdog Timer Disabled (Default)	Debug STRAP Disabled (Default)	FUSION CLOCK Mode (Default)	Integrated Micro-Controller Disabled	Internal Clock Generator Disabled	L,H= LPC ROM L,L= Reserved	

RTC



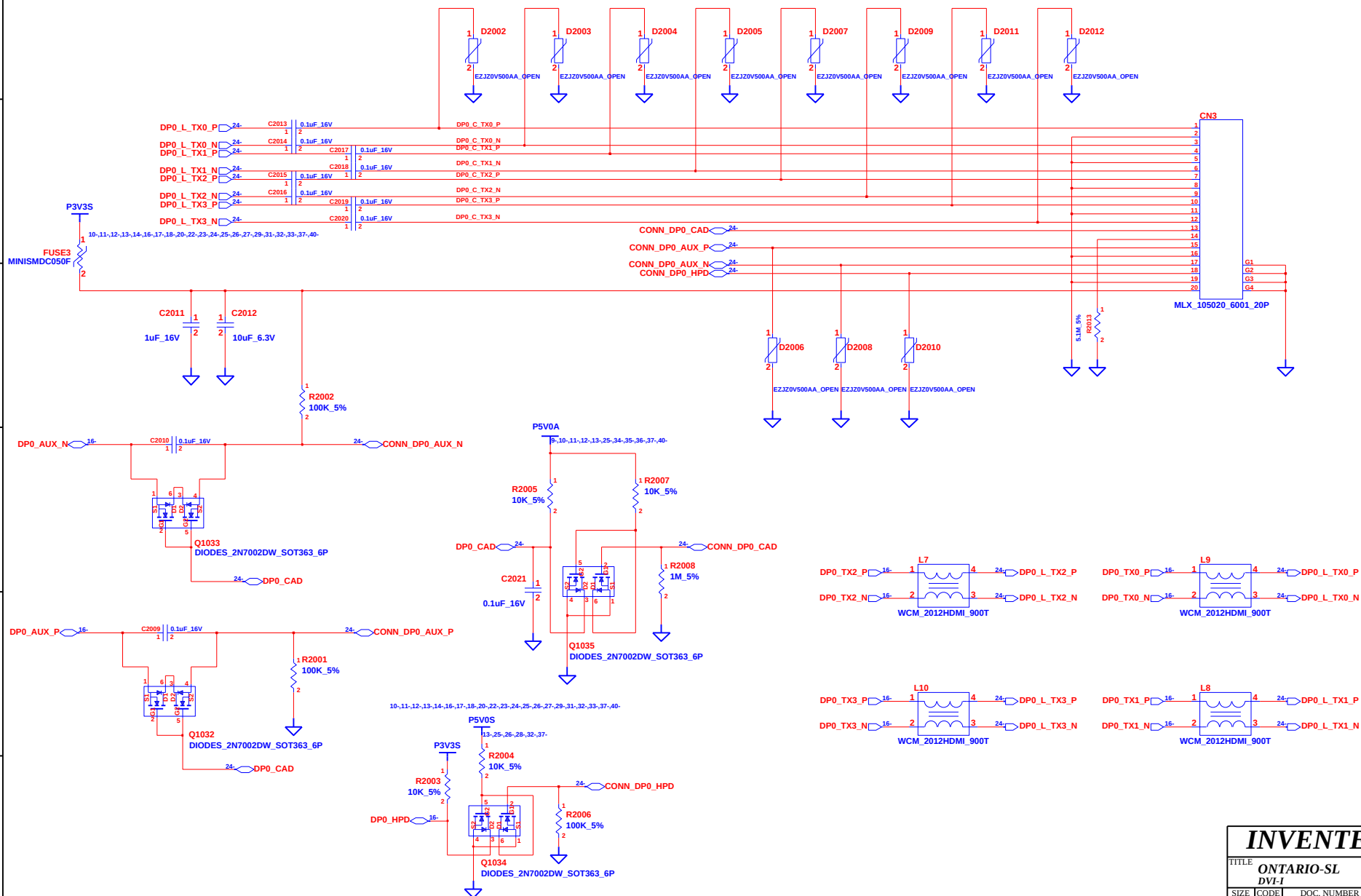
Thermal Sensor



INVENTEC

TITLE ONTARIO-SL STRAP OPTION / THERMAL / RTC			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV 000
CHANGE by		21-Sep-2011	
SHEET		23	OF 46

DP0



INVENTEC

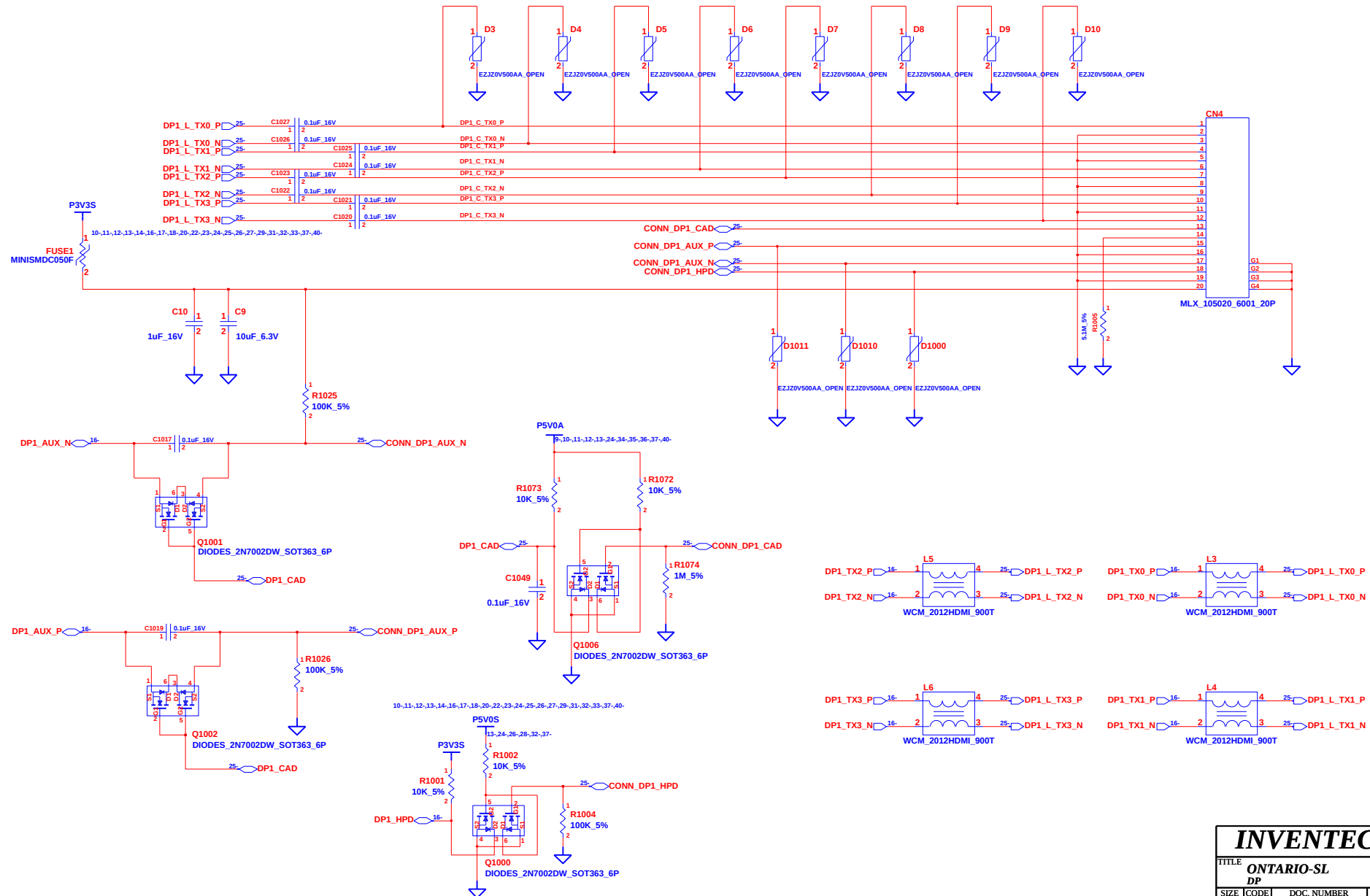
TITLE
ONTARIO-SL
DVI-I

SIZE A3	CODE CS	DOC. NUMBER Model No	REV 000
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CHANGE by *Drawer Name* 21-Sep-2011

SHEET 24 OF 46

DP1

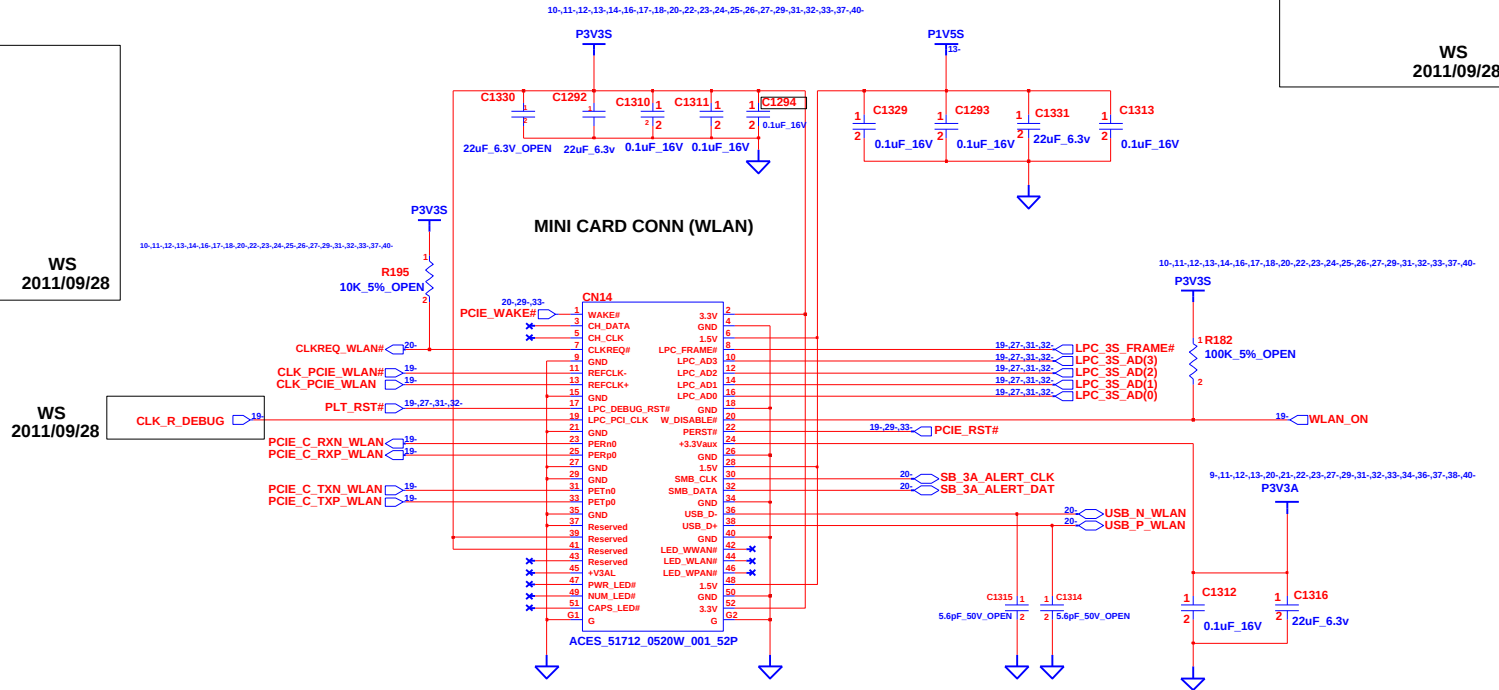


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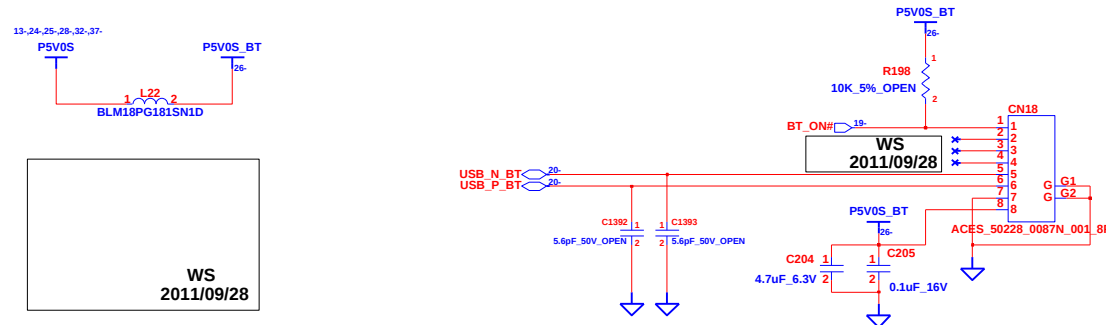
TITLE			
ONTARIO-SL			
DP			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		25	OF 46

CHANGE by *Drawn Name* 21-Sep-2011

WLAN



BT



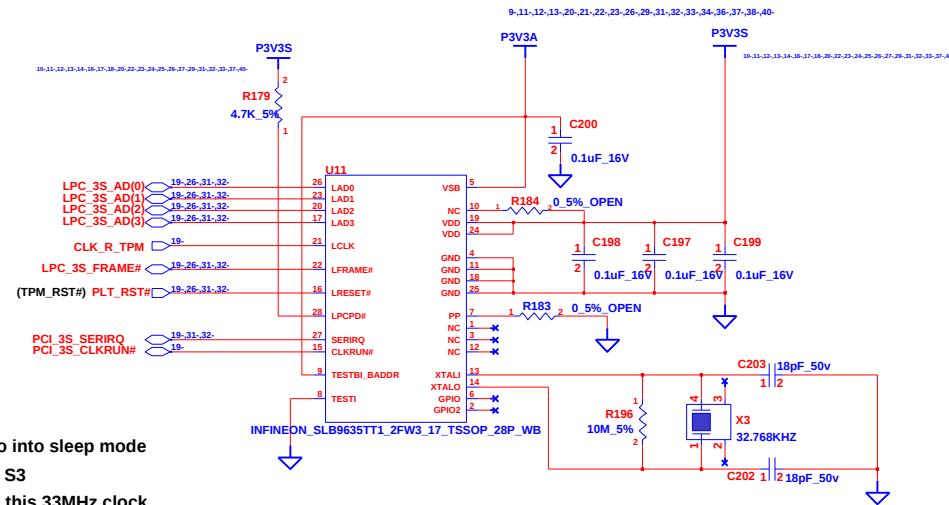
INVENTEC

TITLE			
ONTARIO-SL			
WLAN/BT			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		26	OF 46

CHANGE by *Drawn Name* 21-Sep-2011

TPM

WS
2011/09/28



LPC_PWRDWN_L is used to force LPC peripherals to go into sleep mode
Device may require that this be asserted before enteing S3
Device may require that this be asserted before stoping this 33MHz clock

INVENTEC

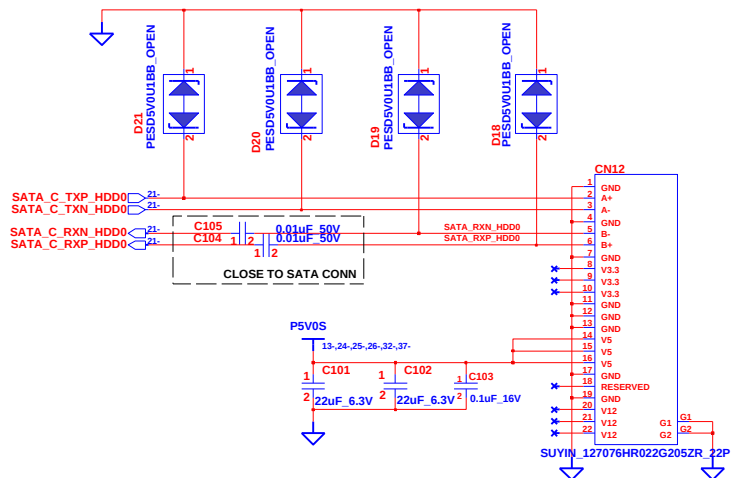
TITLE
ONTARIO-SL
TPM

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV 000
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CHANGE by *Drawn Name* 21-Sep-2011

SHEET 27 OF 46

SATA FLASH

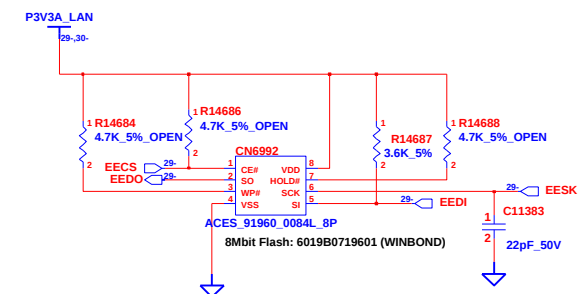
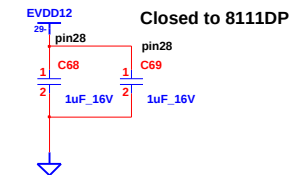
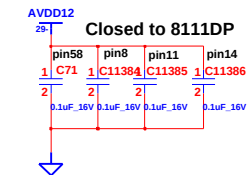
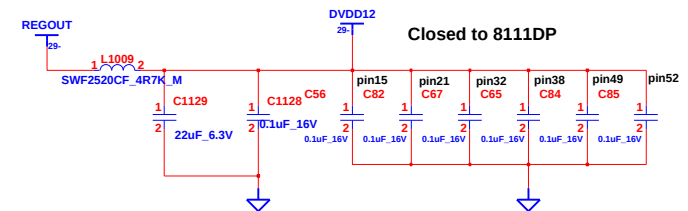
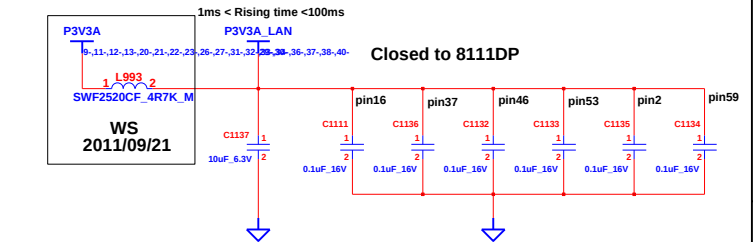
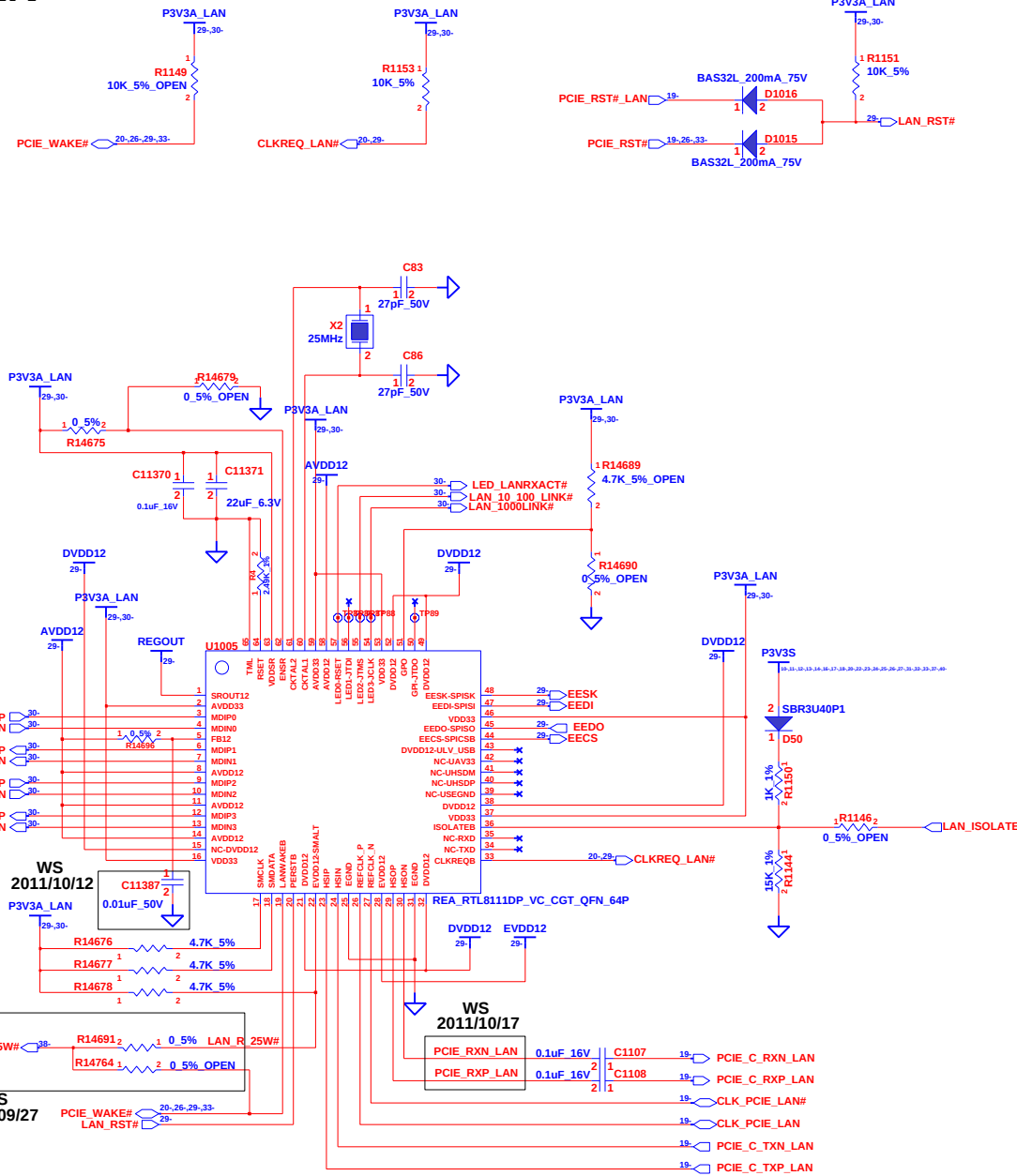


Del SSD/HDD 5/12

INVENTEC			
TITLE			
ONTARIO-SL			
SATA FLASH / SSD / HDD			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		28	OF 46

CHANGE by *Drawn Name* 21-Sep-2011

LAN

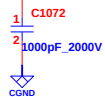
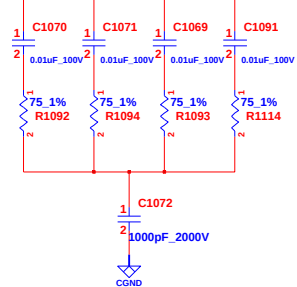
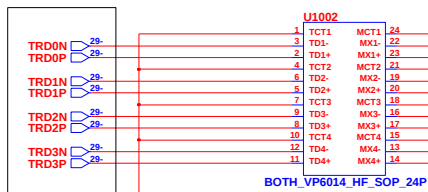


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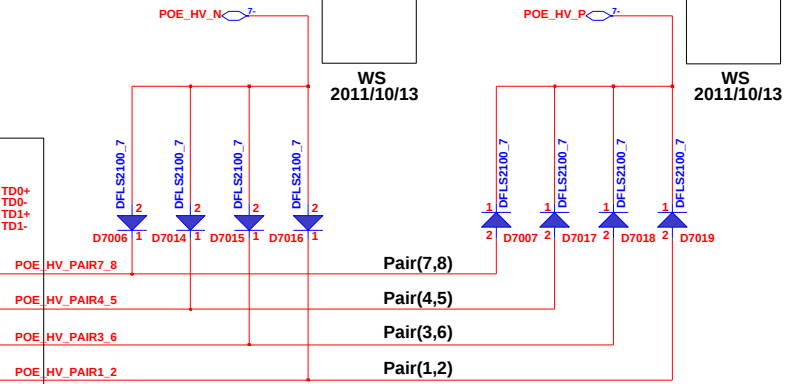
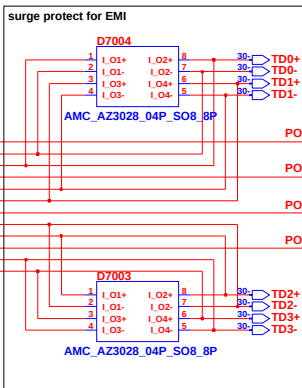
TITLE			
ONTARIO-SL LAN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		29	OF 46

RJ45

WS
2011/10/14



WS
2011/10/14



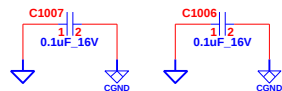
Pair(7,8)

Pair(4,5)

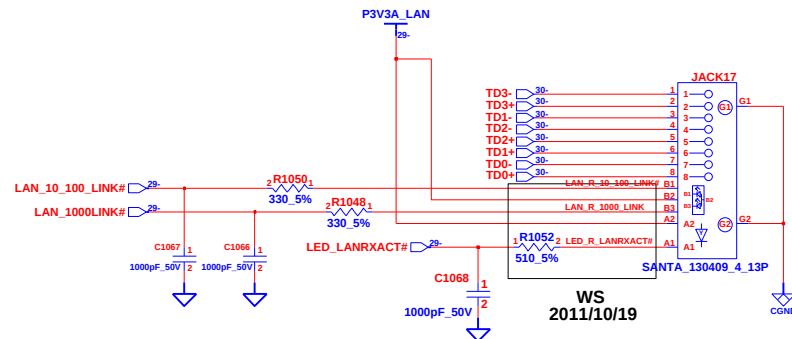
Pair(3,6)

Pair(1,2)

WS
2011/10/14



FOR EMI



WS
2011/10/19

INVENTEC

TITLE
ONTARIO-SL

SIZE A3	CODE CS	DOC. NUMBER Model No	REV 000
SHEET 30		OF 46	

CHANGE by *Drawn Name* 21-Sep-2011

SIO

A

B

C

D

E

F

A

B

C

D

E

F

SIO

A

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C

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A

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C

D

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SIO

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F

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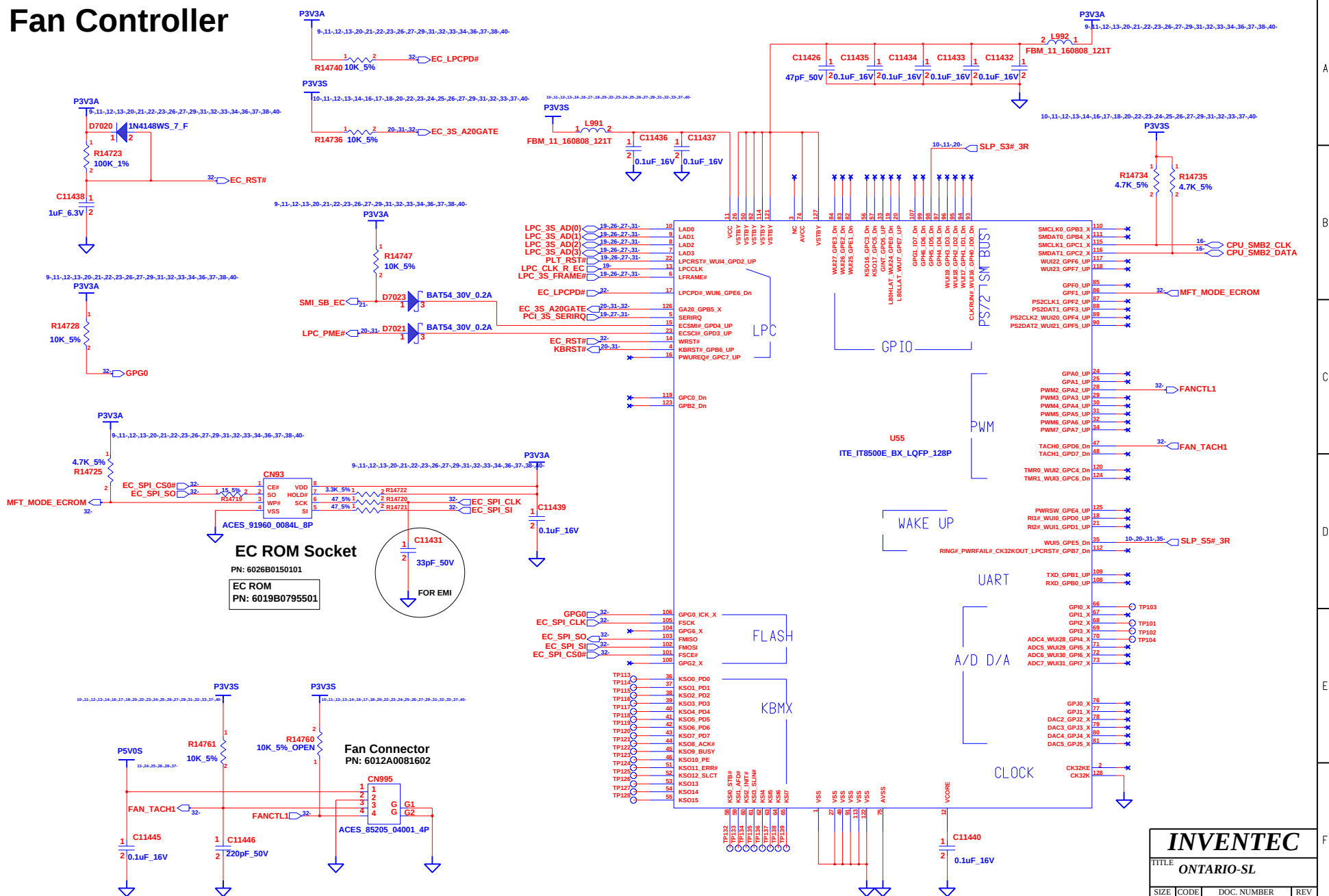
B

C

D

E

Fan Controller



INVENTEC

TITLE	ONTARIO-SL
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SIZE A3	CODE CS	DOC. NUMBER	REV
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	AS	CS	
	SHEET		32 OF 46
	8		

CHANGE by	ONTARIOS	21-Sep-2011
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[illegible]

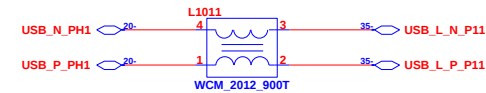
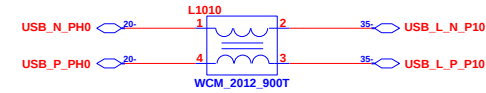
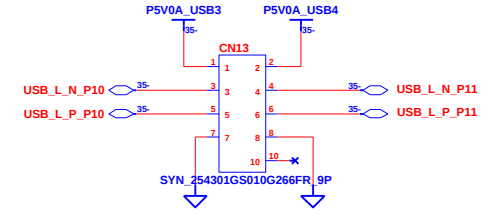
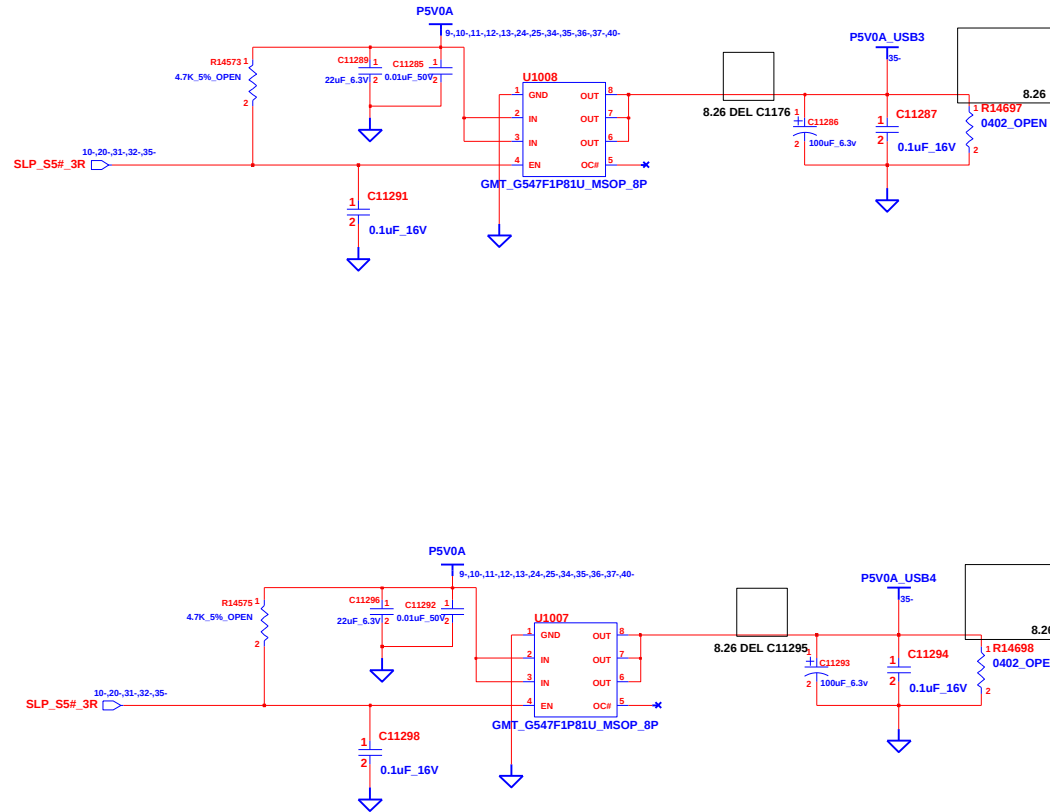
TITLE	ONTARIO-SL DUAL USB3.0 CONN.
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SIZE	CODE	DOC. NUMBER	R
A3	CS	Model No	0

CHANGE by	<i>Drawer Name</i>	21-Sep-2011
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USB HEADER



INVENTEC

TITLE
**ONTARIO-SL
USB HEADER**

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV 000
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CHANGE by *Drawer Name* 21-Sep-2011

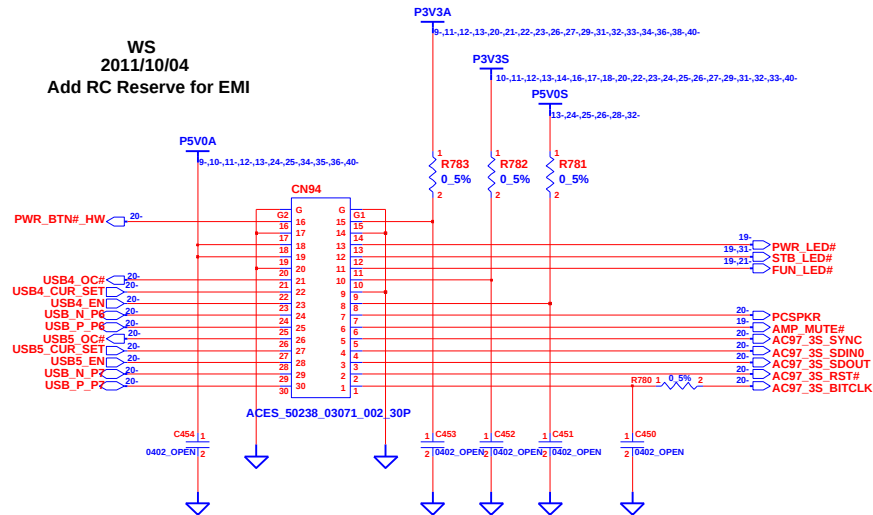
SHEET 35 OF 46

[illegible]

TITLE			
ONTARIO-SL USB CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	<i>Model No</i>	<i>000</i>
SHEET		36	OF 46

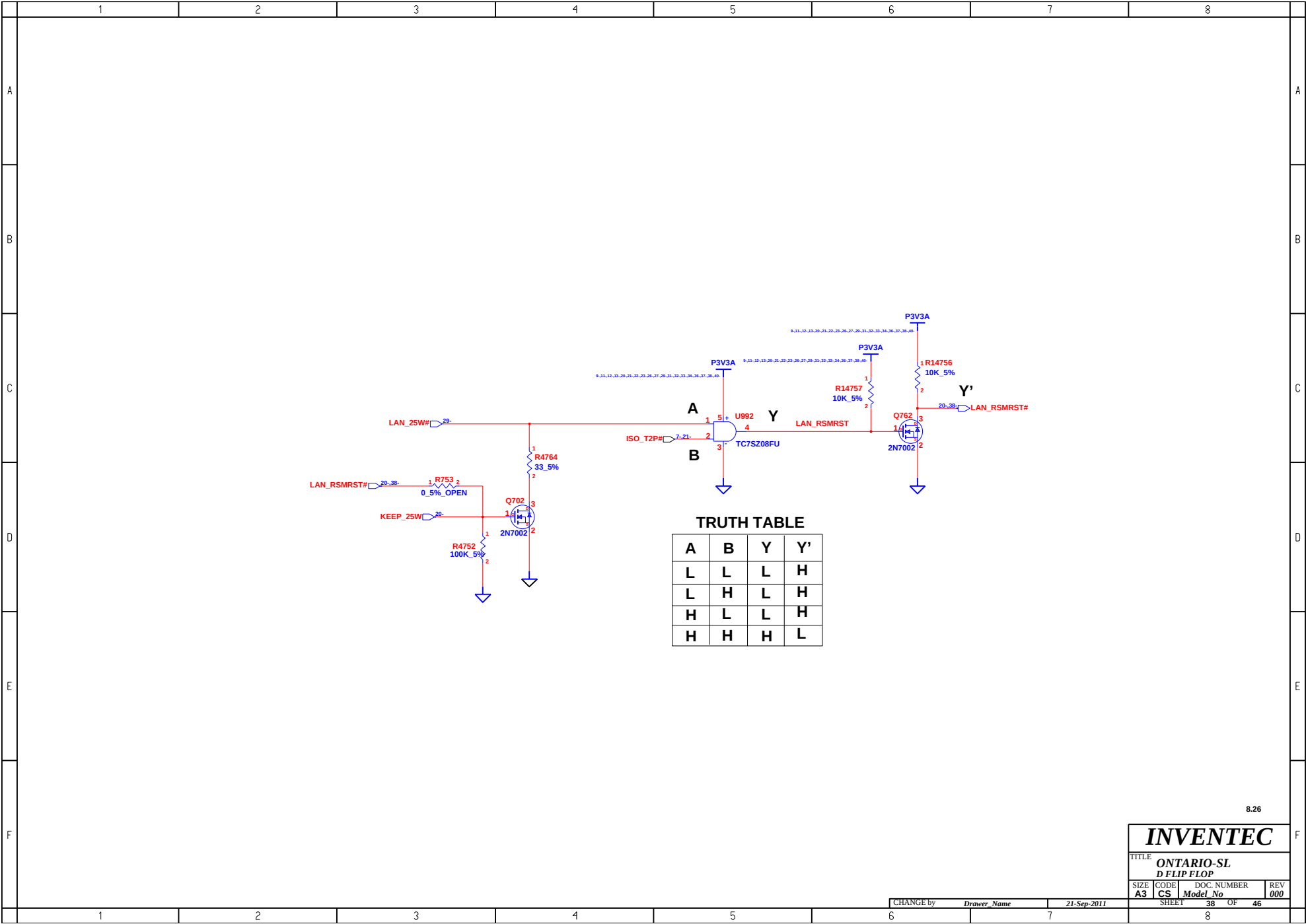
CS	Model No	000
SHEET	36	OF 46

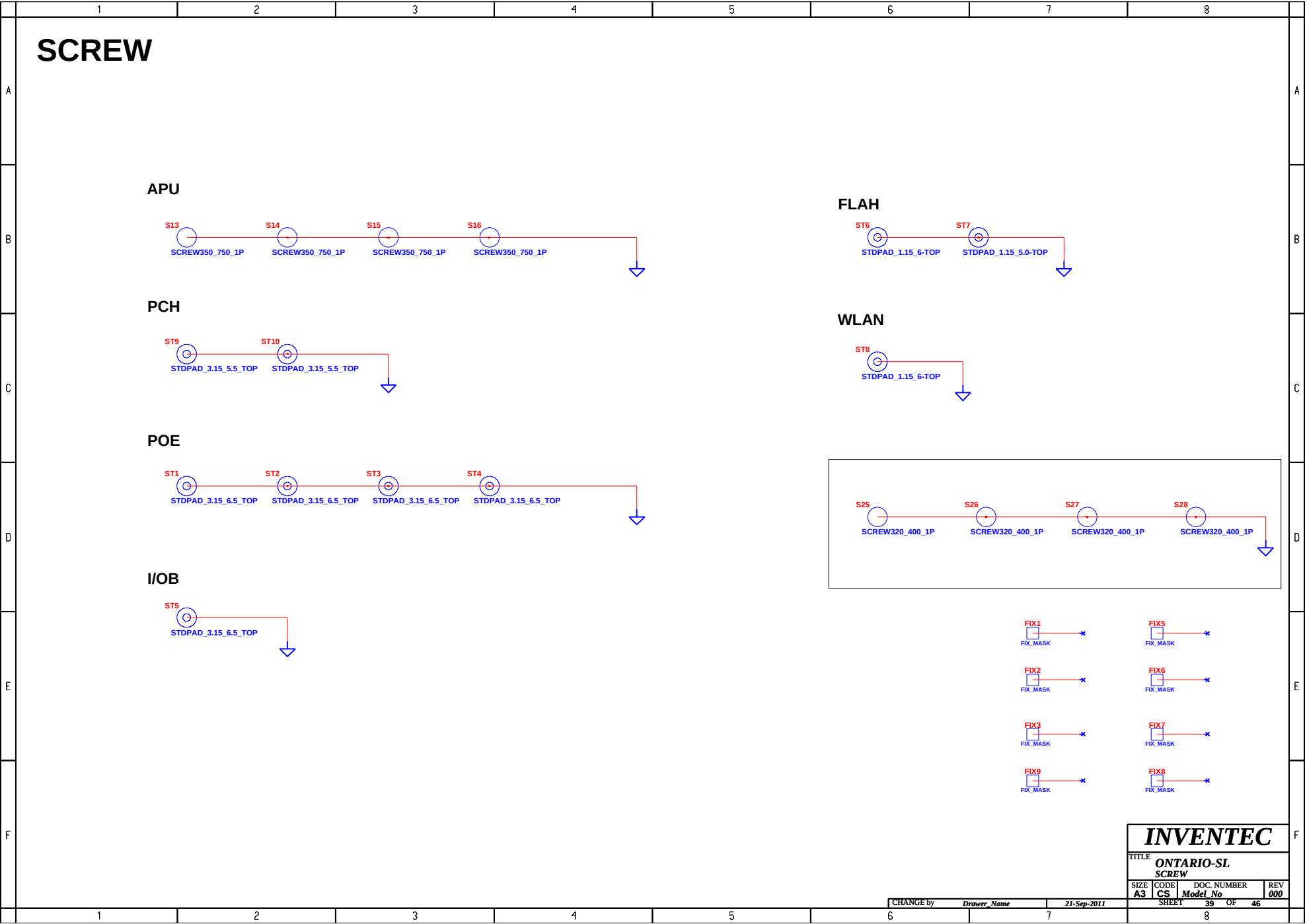
TO AUDIO BOARD CONN



INVENTEC			
TITLE			
ONTARIO-SL			
RJ45			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		37	OF 46

CHANGE by *Drawn Name* 21-Sep-2011

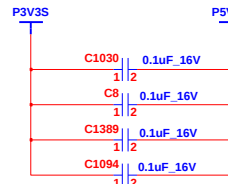




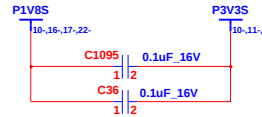
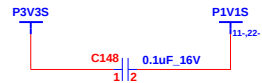
INVENTEC			
TITLE ONTARIO-SL SCREW			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV 000
CHANGE by Drawer Name		21-Sep-2011	
SHEET 39		OF 46	

EMI

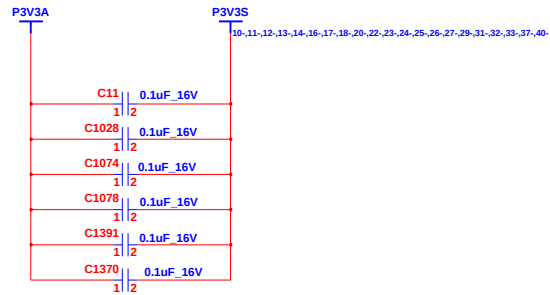
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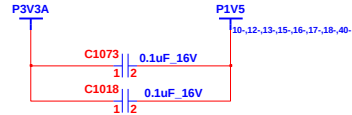
10,11,12,13,14,16,17,18,20,22,23,24,25,26,27,29,31,32,33,37,40



9,11,12,13,20,21,22,23,26,27,29,31,32,33,34,36,37,38,40

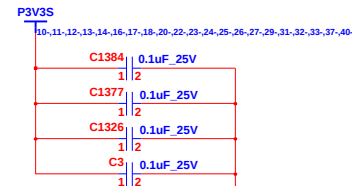
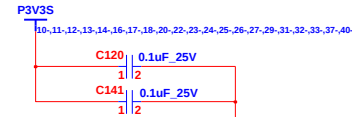
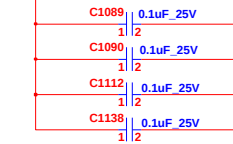


9,11,12,13,20,21,22,23,26,27,29,31,32,33,34,36,37,38,40



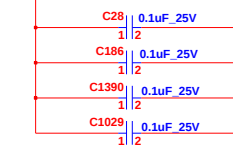
P5V0A

9,10,11,12,13,24,25,34,35,36,37,40



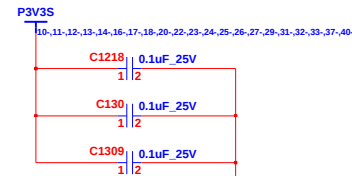
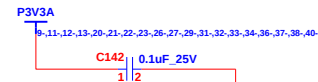
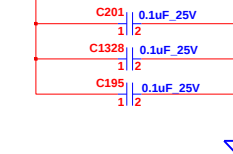
P5V0A

9,10,11,12,13,24,25,34,35,36,37,40



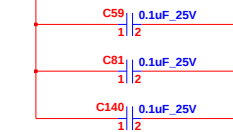
P1V5

10,12,13,15,16,17,18,40



PVBAT

7,8,9,10,11,12



INVENTEC

TITLE **ONTARIO-SL**
EMI

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV 000
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CHANGE by *Drawer Name* 21-Sep-2011

SHEET 40 OF 46

[illegible]

[illegible]

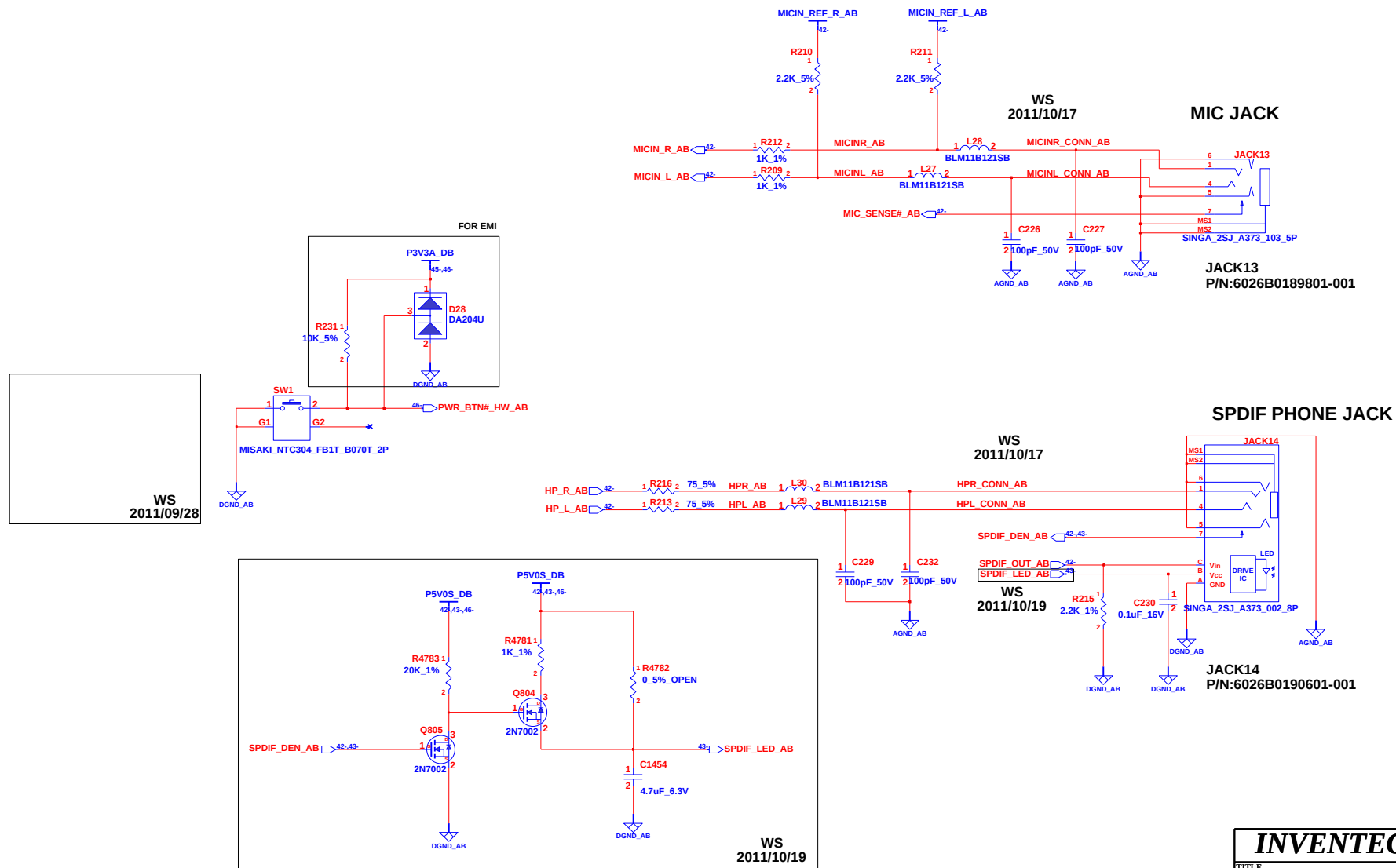
TITLE	ONTARIO-SL
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SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV 000
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CHANGE by	<i>Drawer Name</i>	21-Sep-2011
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42	41	40
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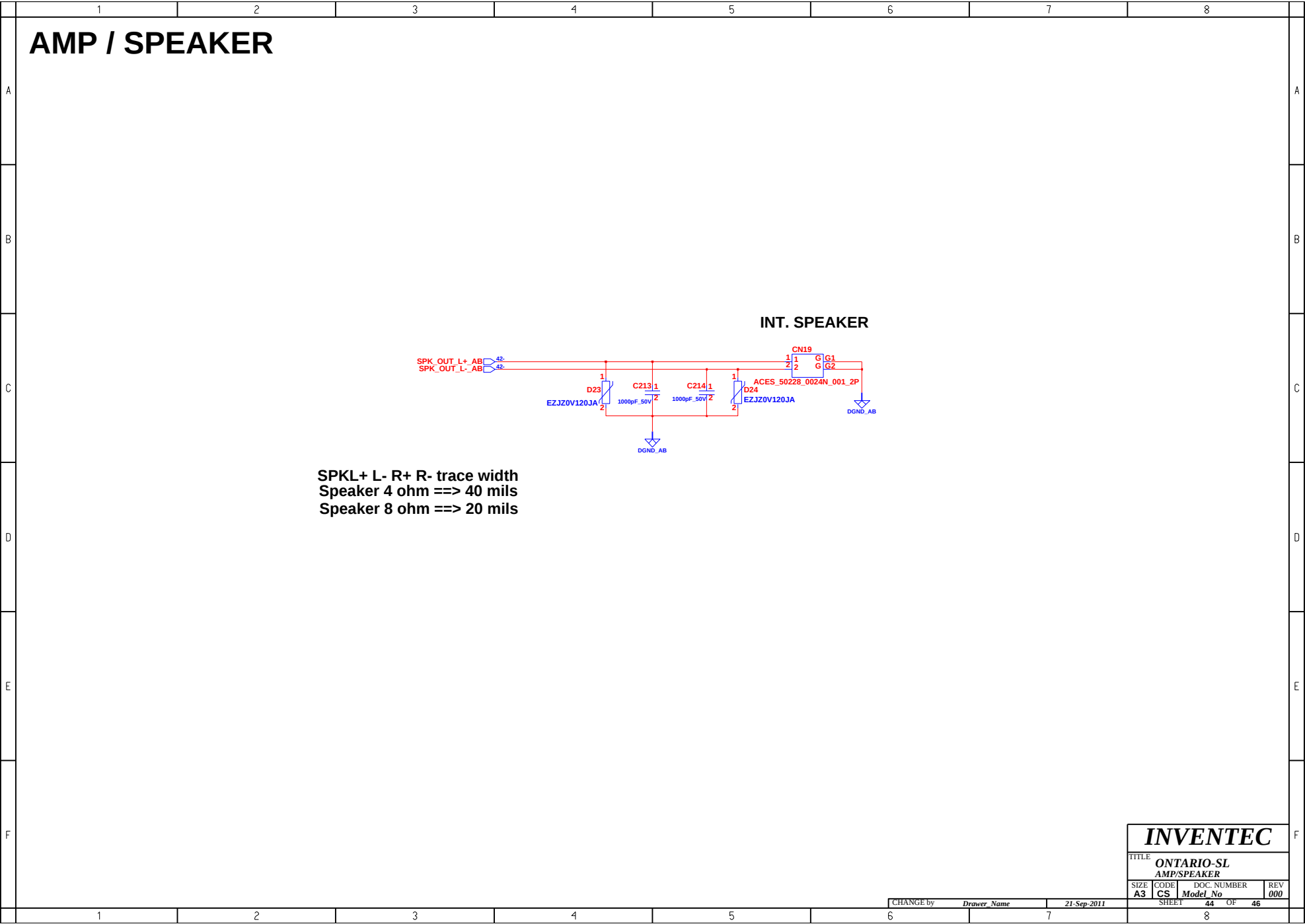
AUDIO JACK / POWER SW



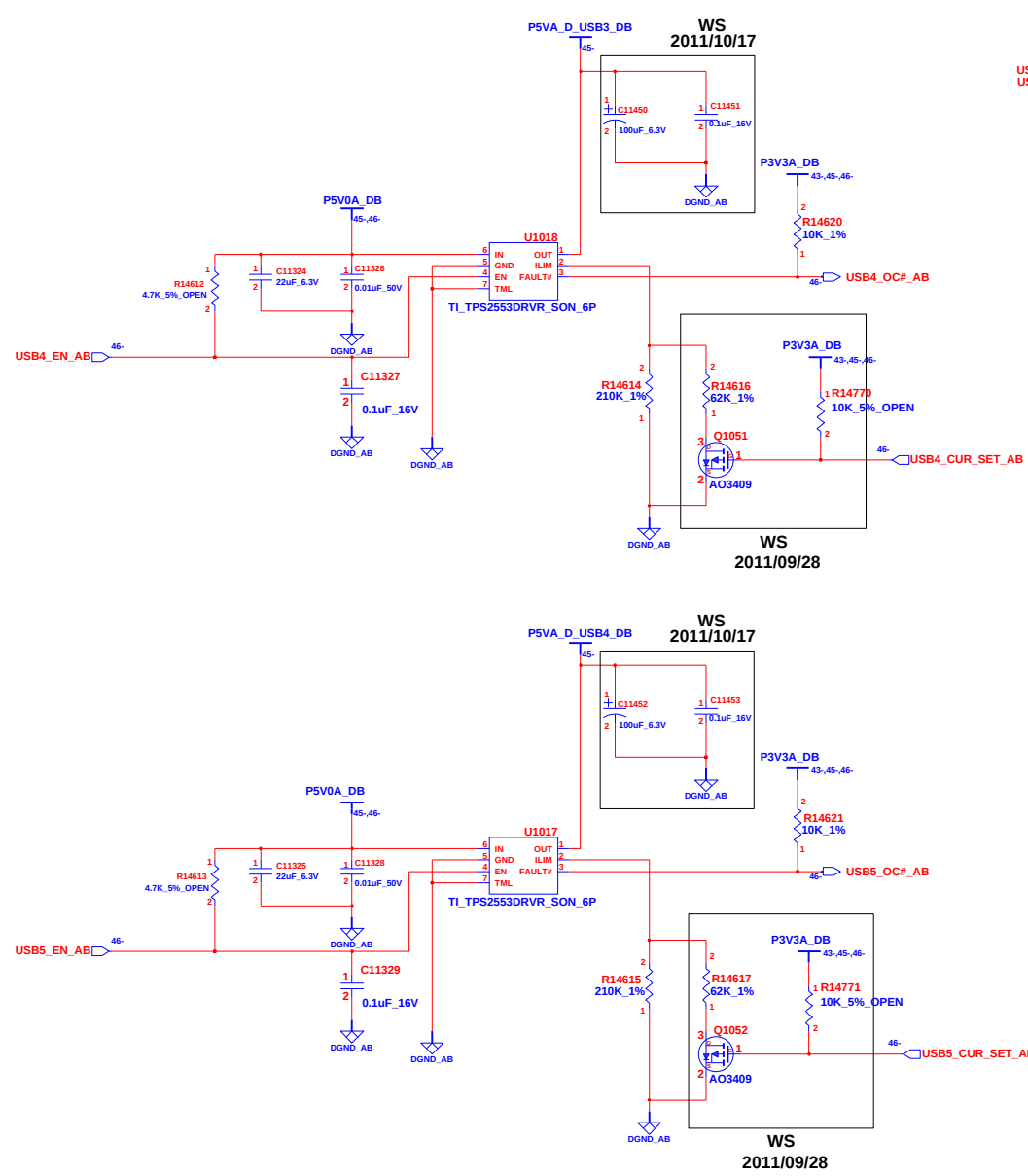
INVENTEC

TITLE			
ONTARIO-SL			
AUDIO JACK / POWER SW			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000
SHEET		43	OF 46

CHANGE by *Drawer Name* 21-Sep-2011



USB CONN



INVENTEC

TITLE **ONTARIO-SL**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	000

CHANGE by *Drawer Name* 21-Sep-2011

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