

Zenith UMA

Cycle 1 MV BUILD

2009.03.18

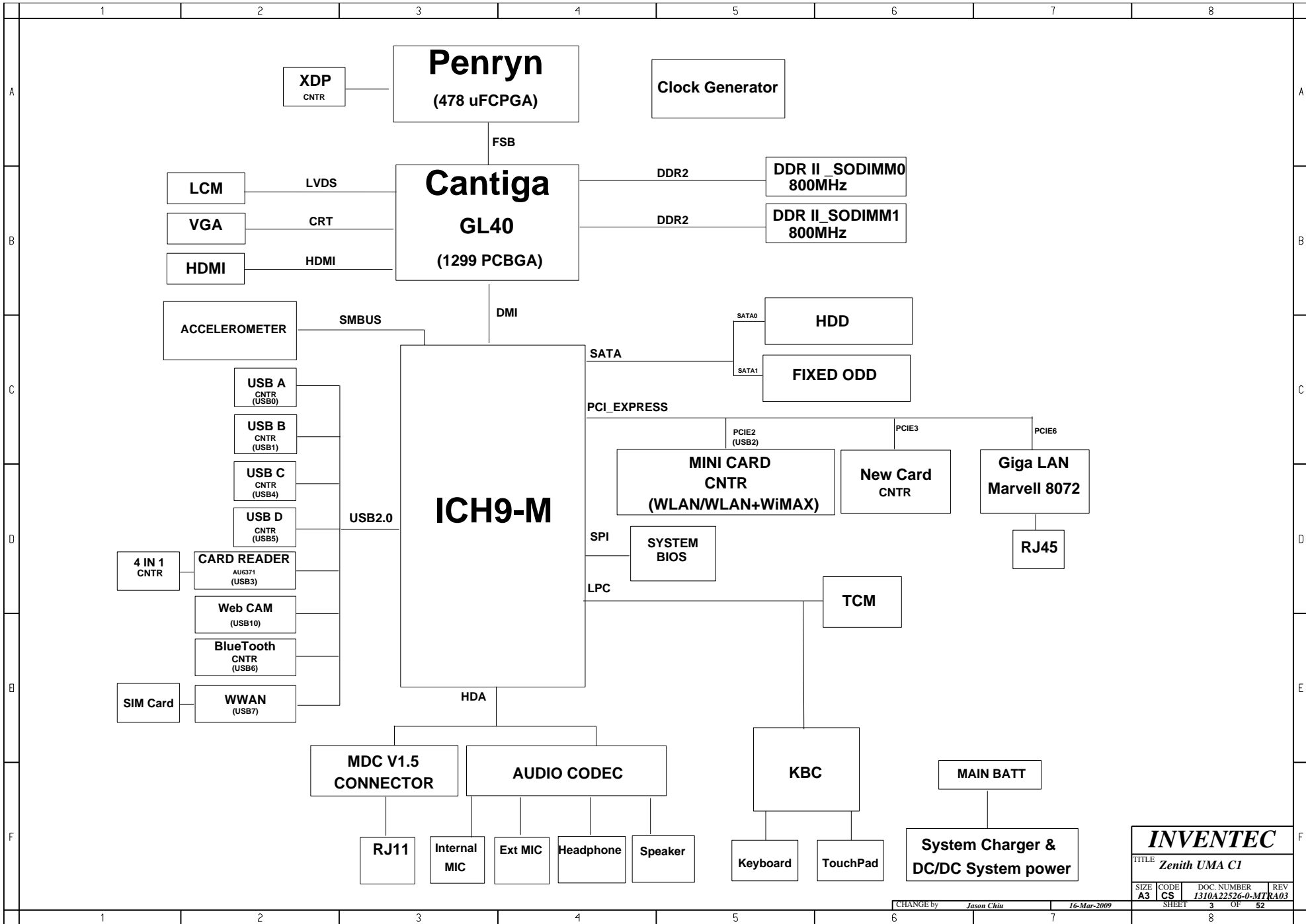
DATE	CHANGE NO.	REV

DRAWN	EE	DATE	POWER	DATE	INVENTEC TITLE <i>Zenith UMA C1</i>
DESIGN					
CHECK					
RESPONSIBLE					
SIZE =	3	VER :			SIZE CODE DOC NUMBER REV
FILE NAME :	XXXX-XXXXXX-XX				A3 CS 1310A22526-0-MTR A03
P/N	XXXXXXXXXXXX				SHEET 1 OF 52

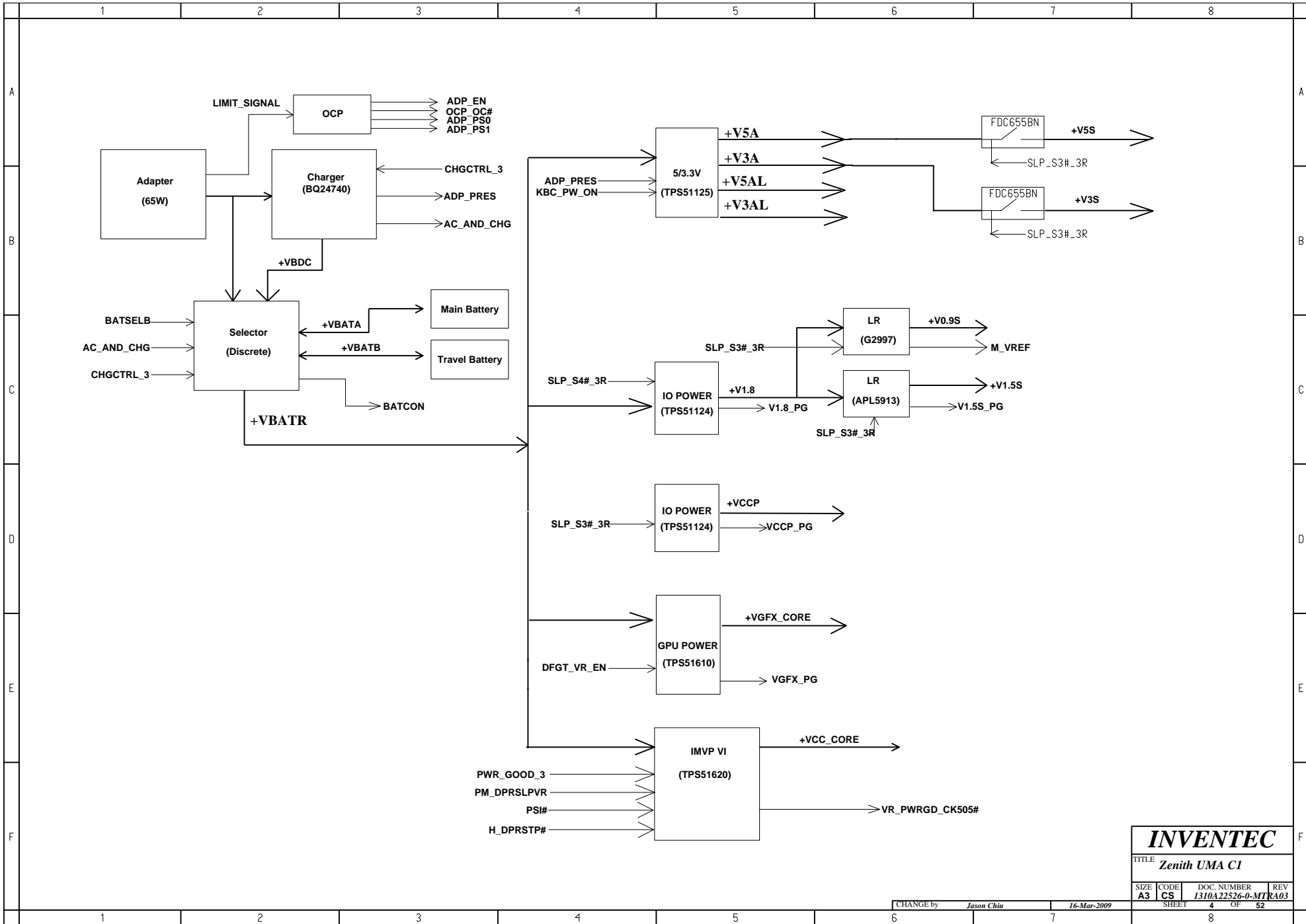
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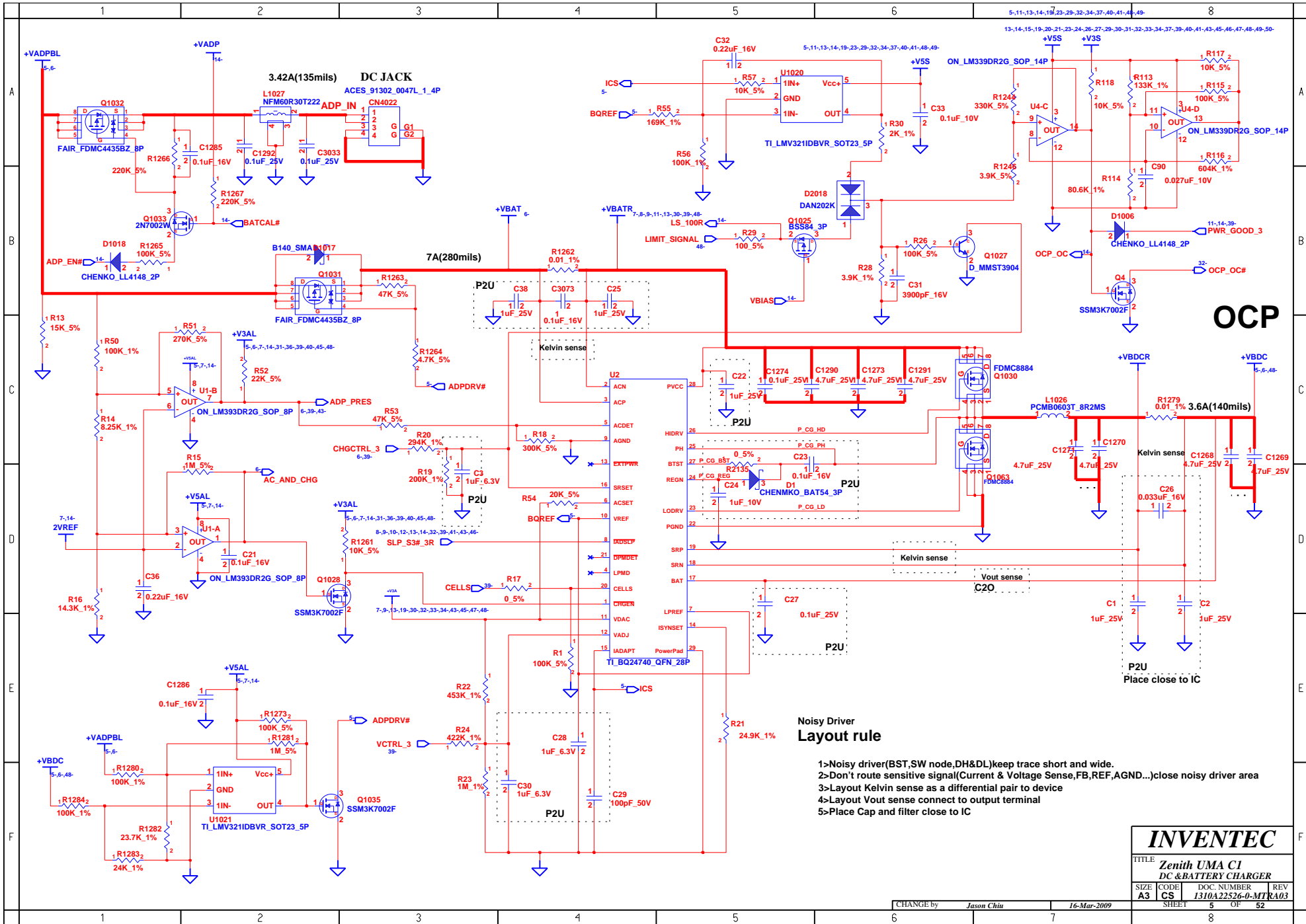
PAGE	PAGE	PAGE
5- DC& BATTERY CHARGER	15- CLOCK_GENERATOR	36- SYSTEM BIOS
6- SELECT & BATTERY CONN	16- PENRYN-1	37- HDD&ODD CNTR
7- SYSTEM POWER(3V/5V)	17- PENRYN-2	38- USB CNTR
8- SYSTEM POWER(+V1.8/+V1.25S)	18- PENRYN-3	39- KBC
9- SYSTEM POWER(+VGFX/+VCCP)	19- THERMAL&FAN CONTROLLER	40- KB&TP CNTR
10- SYSTEM POWER(+V1.5S)	20- CANTIGA-1	41- AUDIO CODEC
11- CPU POWER(VCC_CORE)	21- CANTIGA-2	42- AUDIO JACK
12- DDR TERMINATION VOLTAGE	22- CANTIGA-3	43- Giga LAN
13- POWER(SLEEP)	23- CANTIGA-4	44-RJ-45 CONN
14- POWER(SEQUENCE)	24- CANTIGA-5	45- MINICARD(WLAN/WLAN+WiMAX/WWAN) & SIM Card CNTR
	25- CANTIGA-6	46- Express card & 4 in 1
	26- DDR2-DIMM0	47- BT & MDC & TCM
	27- DDR2-DIMM1	48- SWB & Button & LEDs
	28- DDR2-DAMPING	49- HDMI CONN & LEVEL SHIFT
	29- VGA CNTR	50- SCREW HOLE
	30- LCM CNTR	51- Switch & LED Board
	31- ICH9-1	52- ODD Extend Board
	32- ICH9-2	
	33- ICH9-3	
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INVENTEC			
TITLE <i>Zenith UMA C1</i>			
SIZE A3	CODE CS	DOC. NUMBER <i>1310A22526-0-MTR</i>	REV A03
CHANGE by <i>Jason Chiu</i>		<i>16-Mar-2009</i>	
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INVENTEC			
TITLE Zenith UMA C1			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by Jason Chiu		16-Mar-2009	
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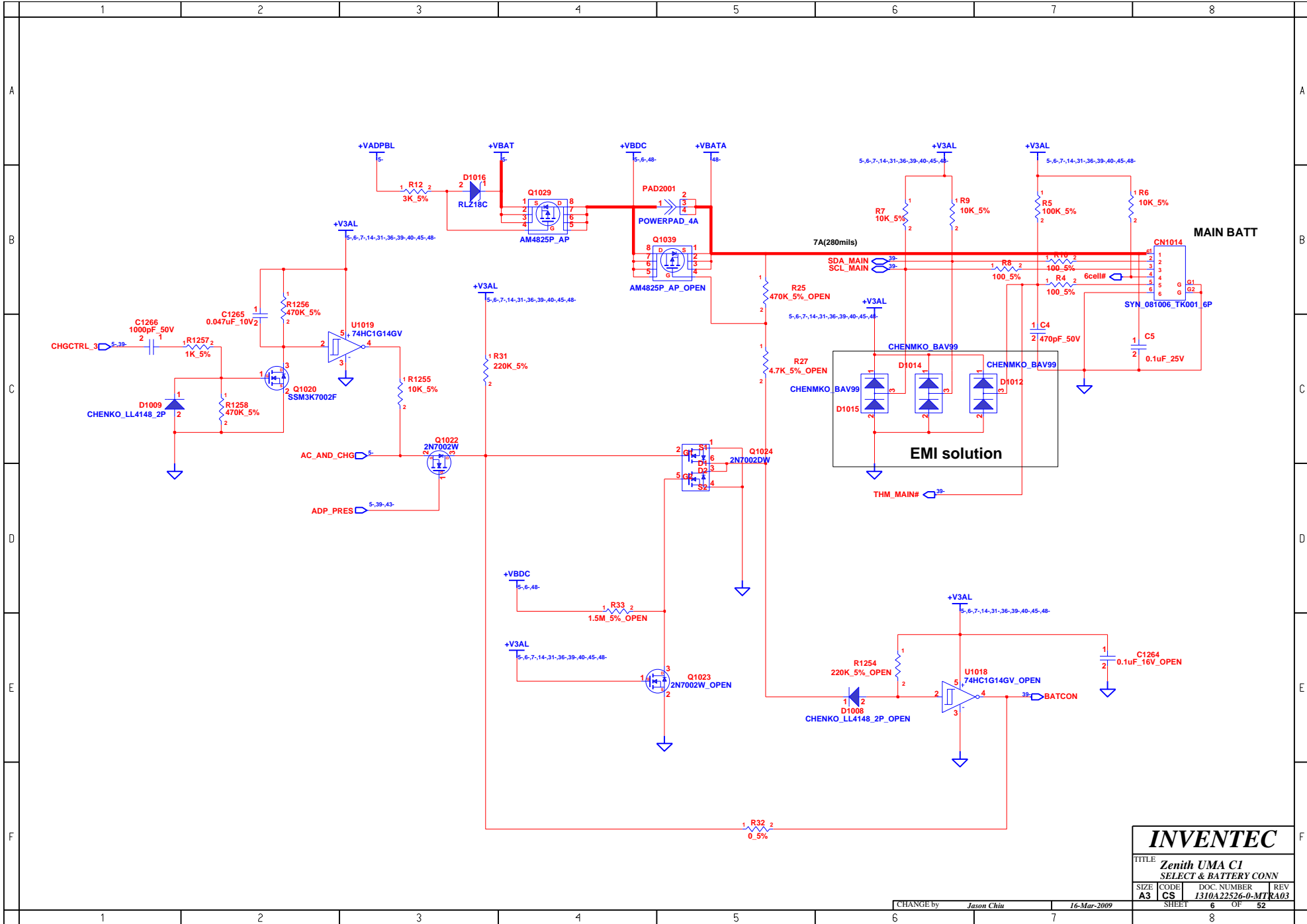


OCP

**Noisy Driver
Layout rule**

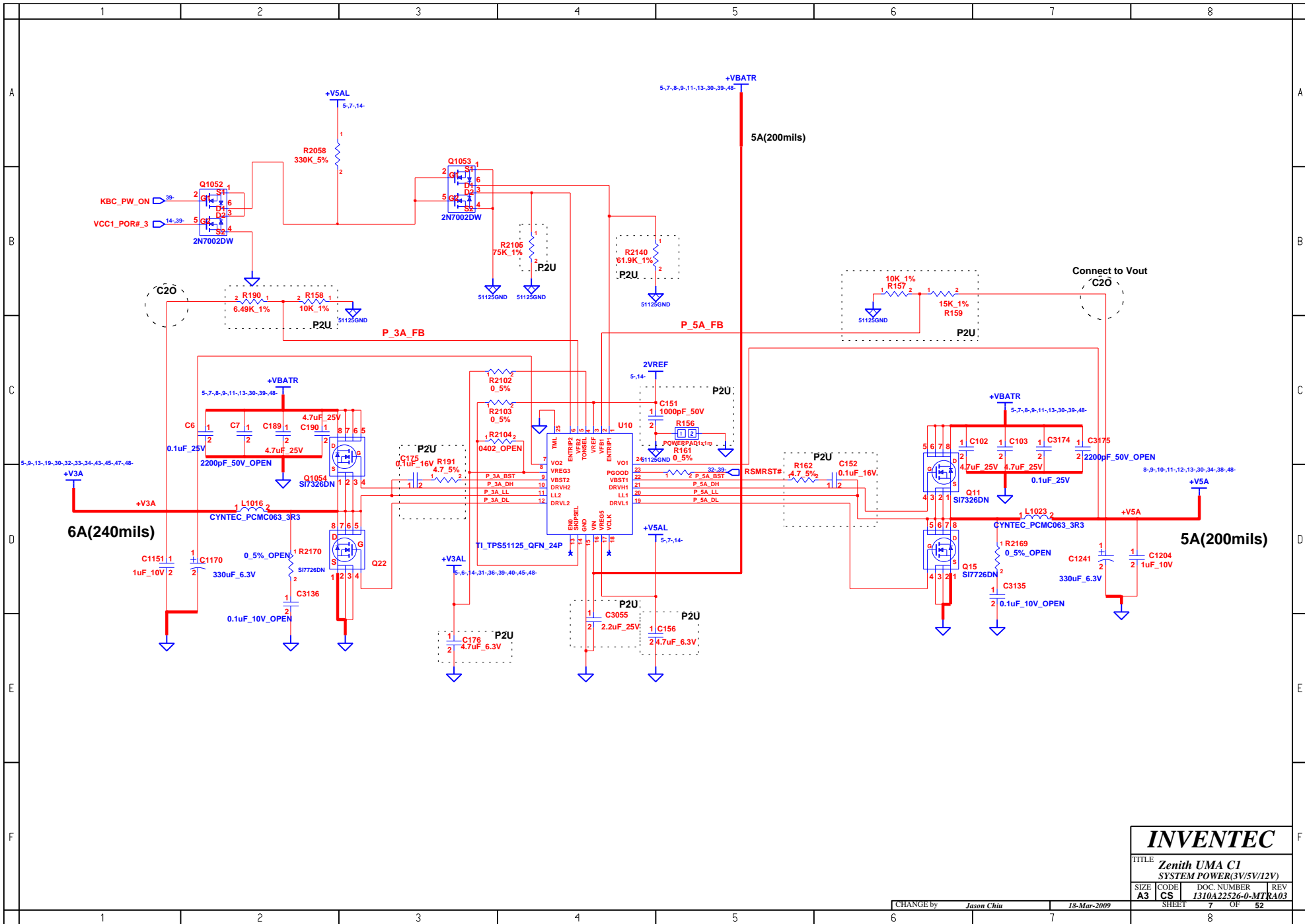
- 1>Noisy driver(BST,SW node,DH&DL)keep trace short and wide.
- 2>Don't route sensitive signal(Current & Voltage Sense,FB,REF,AGND...)close noisy driver area
- 3>Layout Kelvin sense as a differential pair to device
- 4>Layout Vout sense connect to output terminal
- 5>Place Cap and filter close to IC

INVENTEC			
TITLE Zenith UMA C1 DC & BATTERY CHARGER			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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INVENTEC			
TITLE Zenith UMA C1 SELECT & BATTERY CONN			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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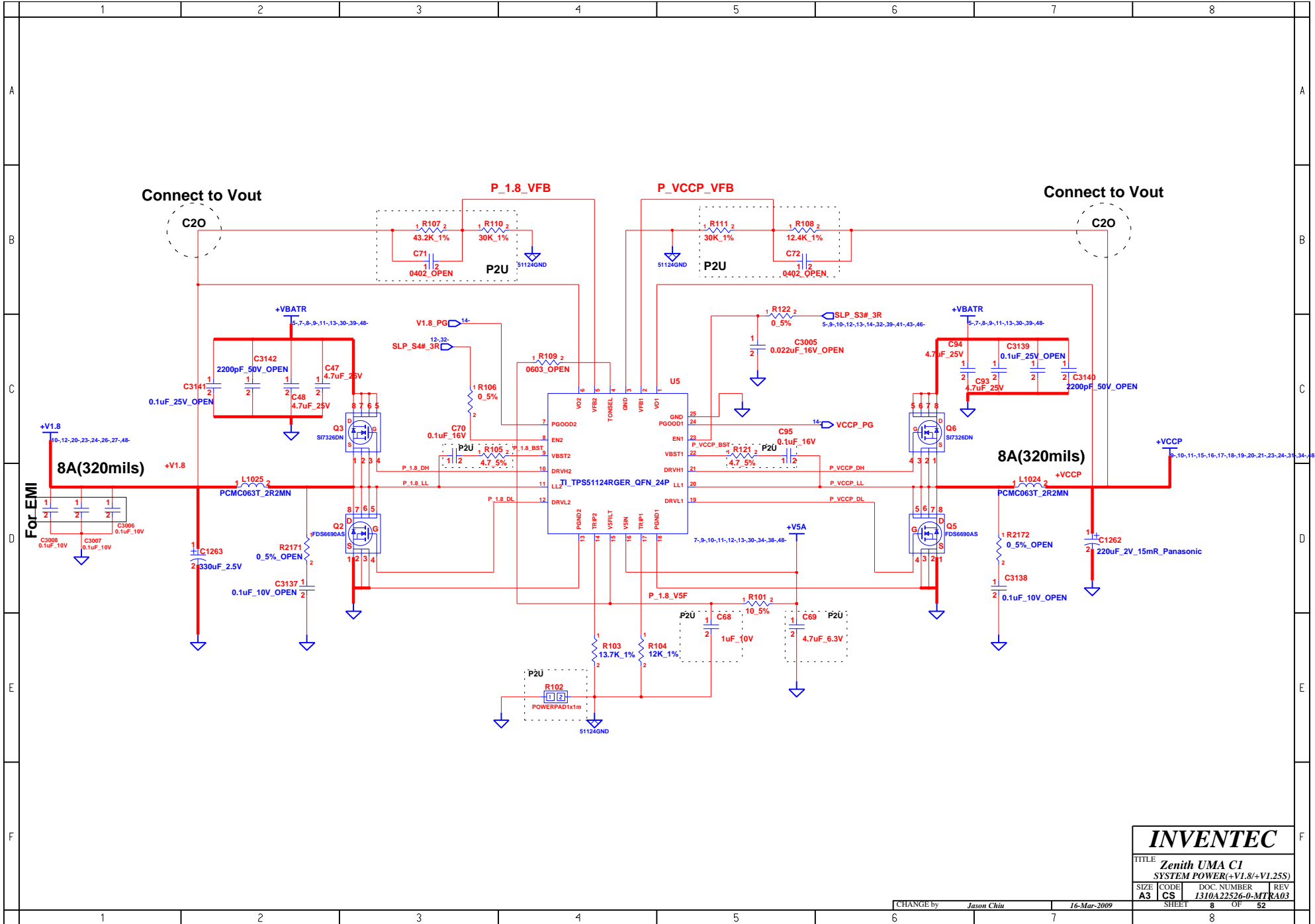


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INVENTEC

TITLE
**Zenith UMA C1
 SYSTEM POWER(3V/5V/12V)**

SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
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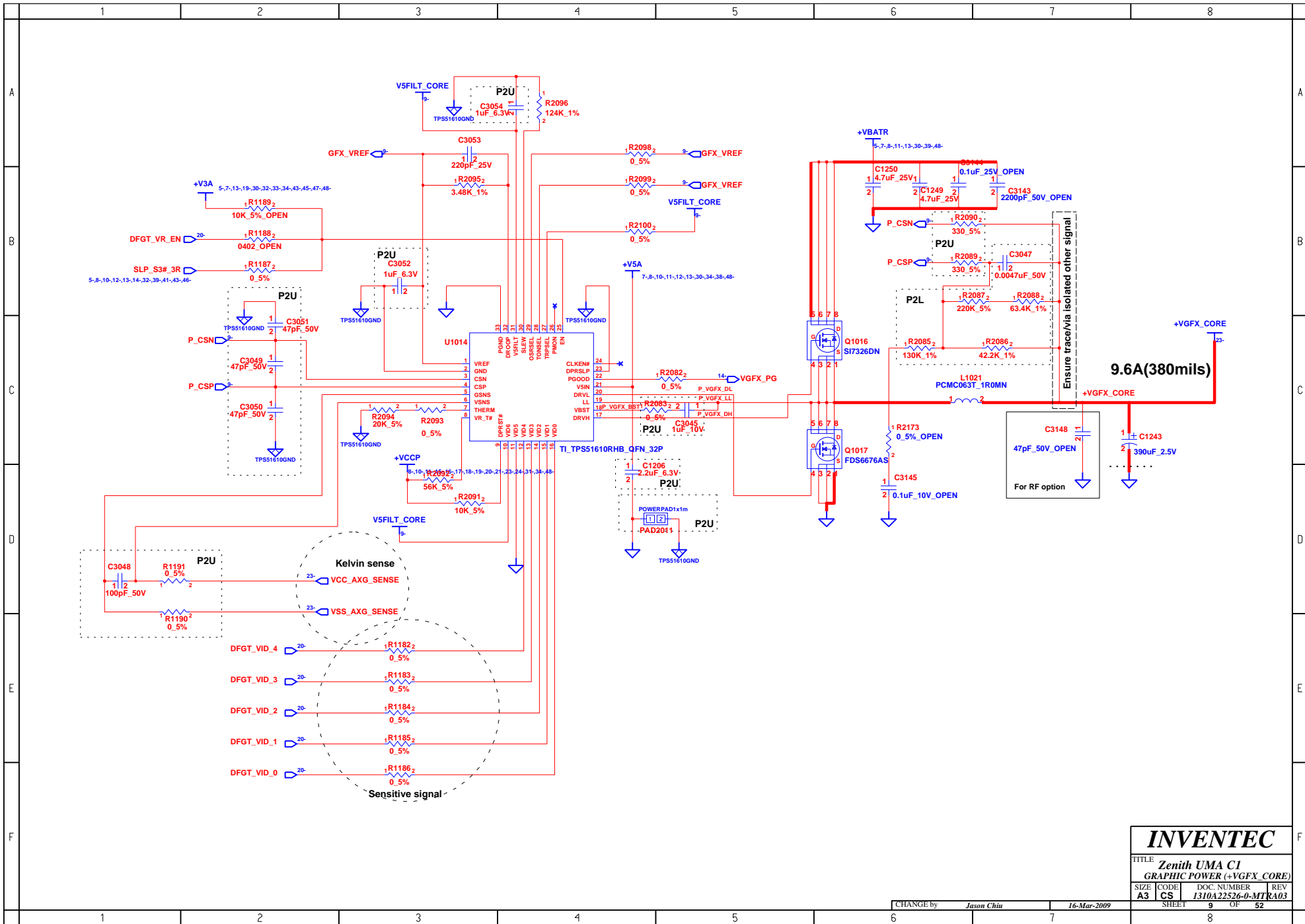
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INVENTEC

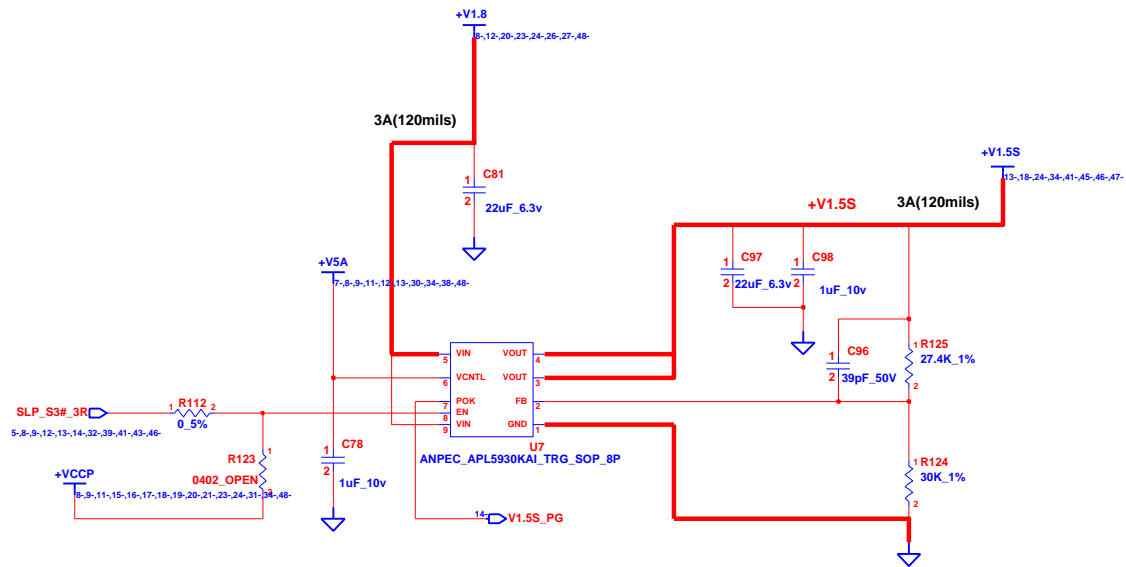
TITLE
Zenith UMA C1
 SYSTEM POWER(+V1.8/+V1.25S)

SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
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CHANGE by *Jason Chiu* 16-Mar-2009 SHEET 8 OF 52



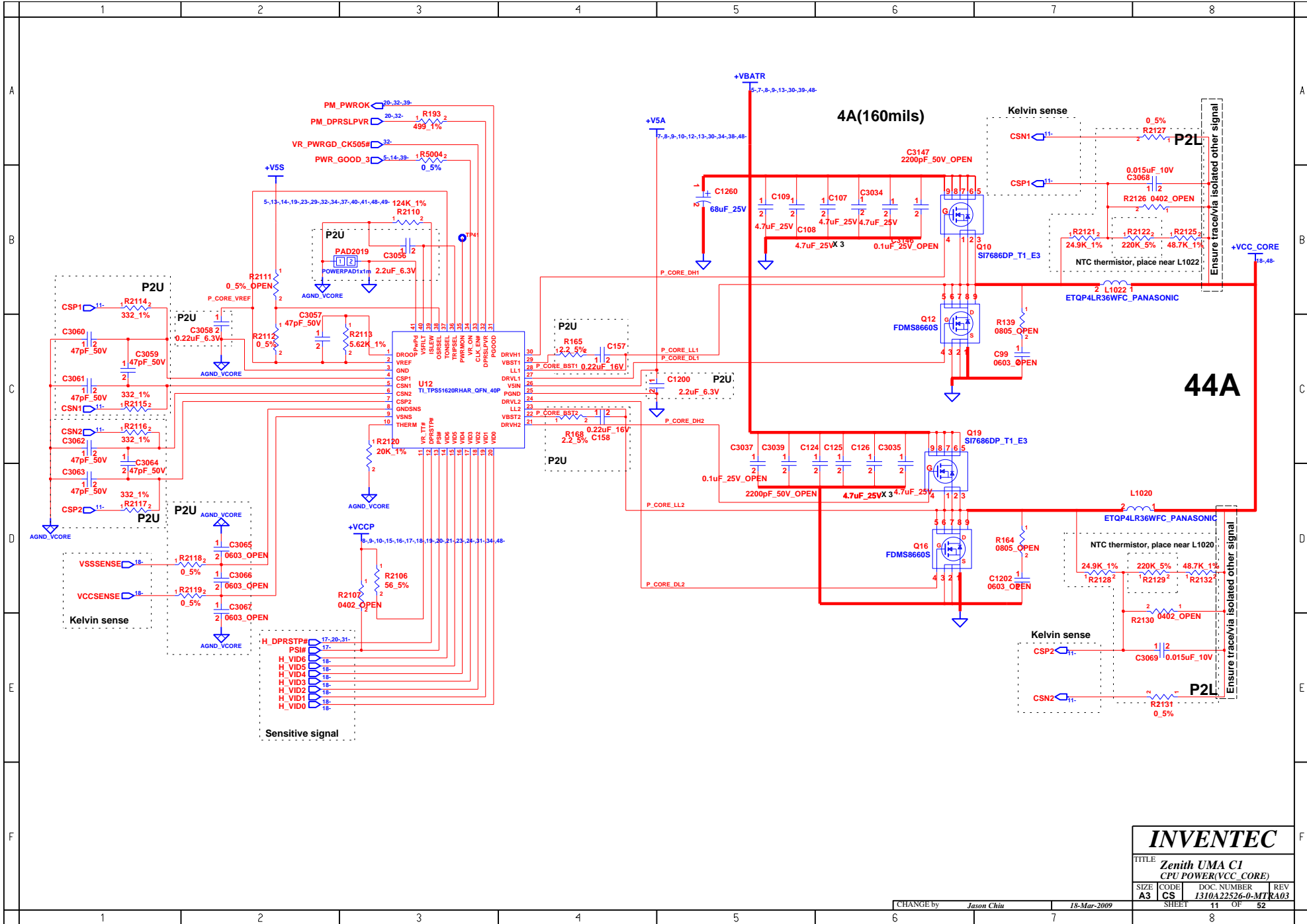
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TITLE Zenith UMA C1 GRAPHIC POWER (+VGFX_CORE)			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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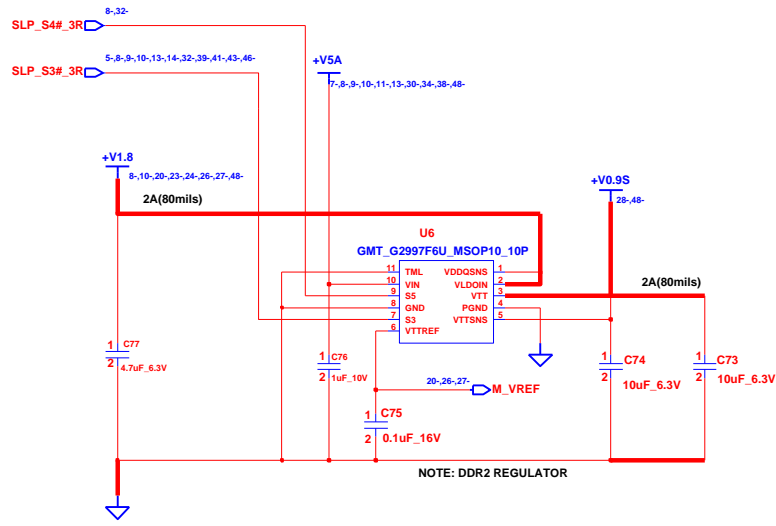
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Zenith UMA C1			
SYSTEM POWER(+VCCP/+V1.5S)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22526-0-MT	A03
CHANGE by		SHEET	
Jason Chiu		10 OF 52	

16-Mar-2009

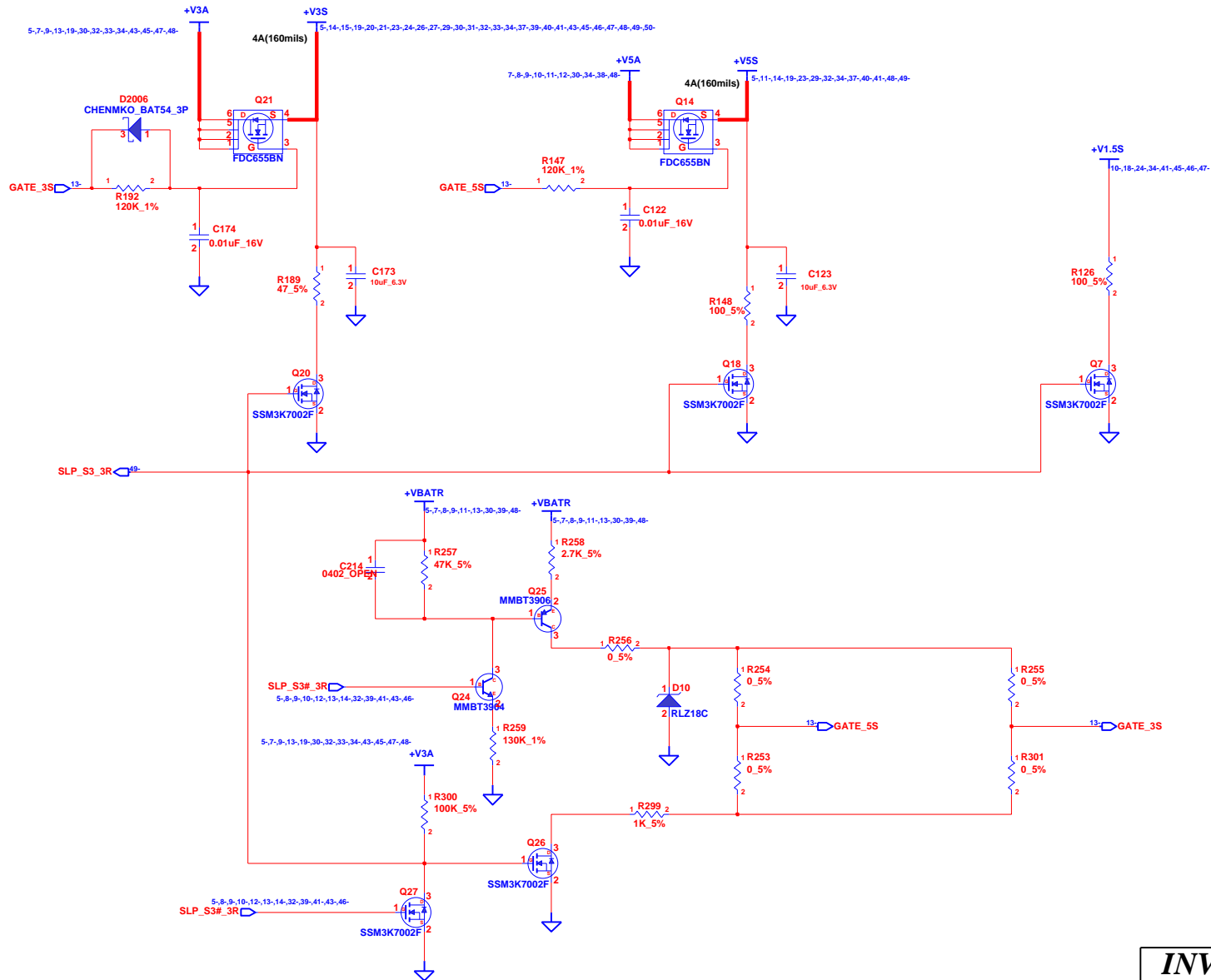


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SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV RA03
CHANGE by <i>Jason Chiu</i>		18-Mar-2009	
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INVENTEC			
TITLE Zenith UMA C1 DDR TERMINATION VOLTAGE			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
SHEET 12		OF 52	

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



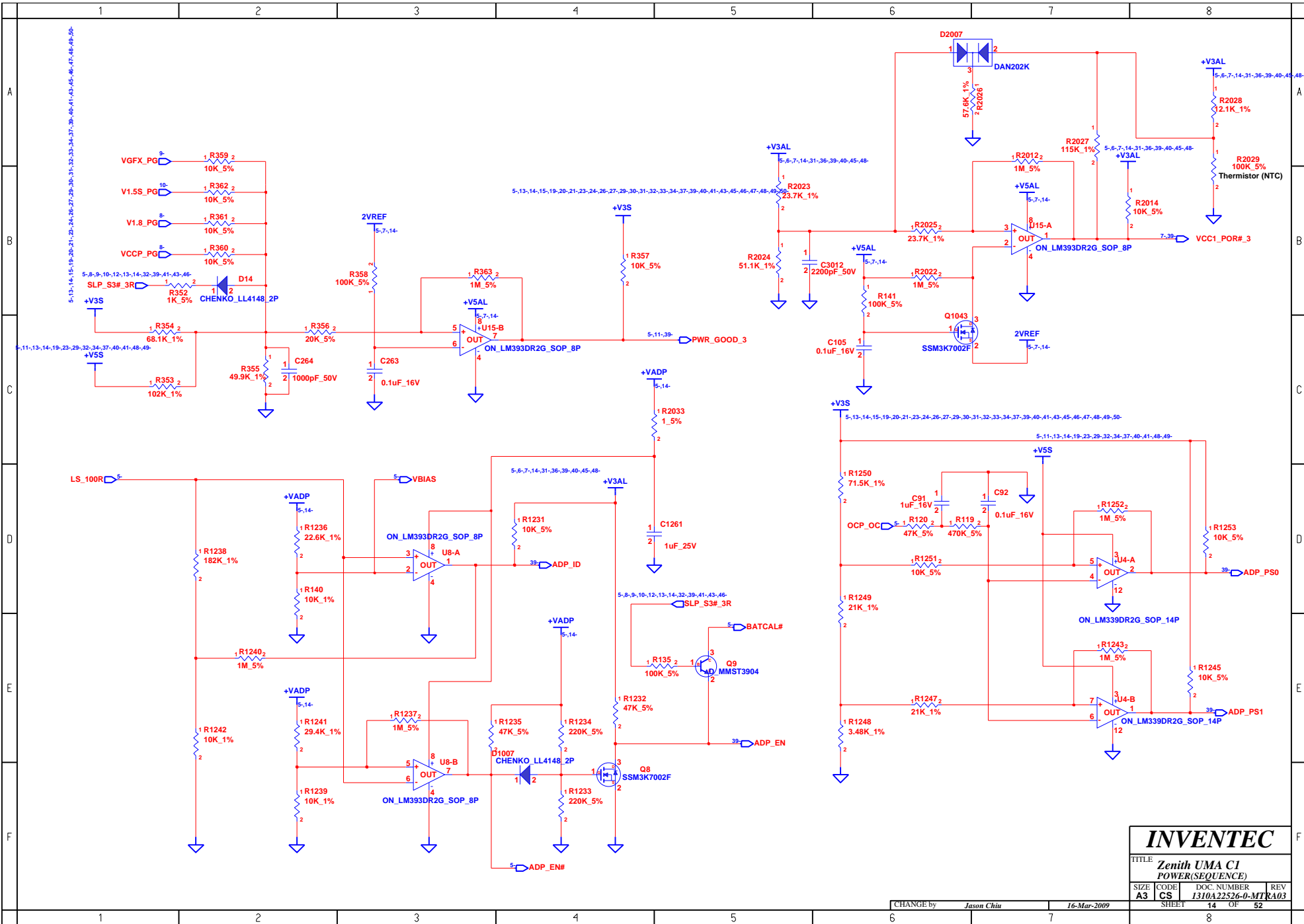
INVENTEC

TITLE
Zenith UMA C1
POWER(SLEEP)

SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
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CHANGE by Jason Chiu 16-Mar-2009

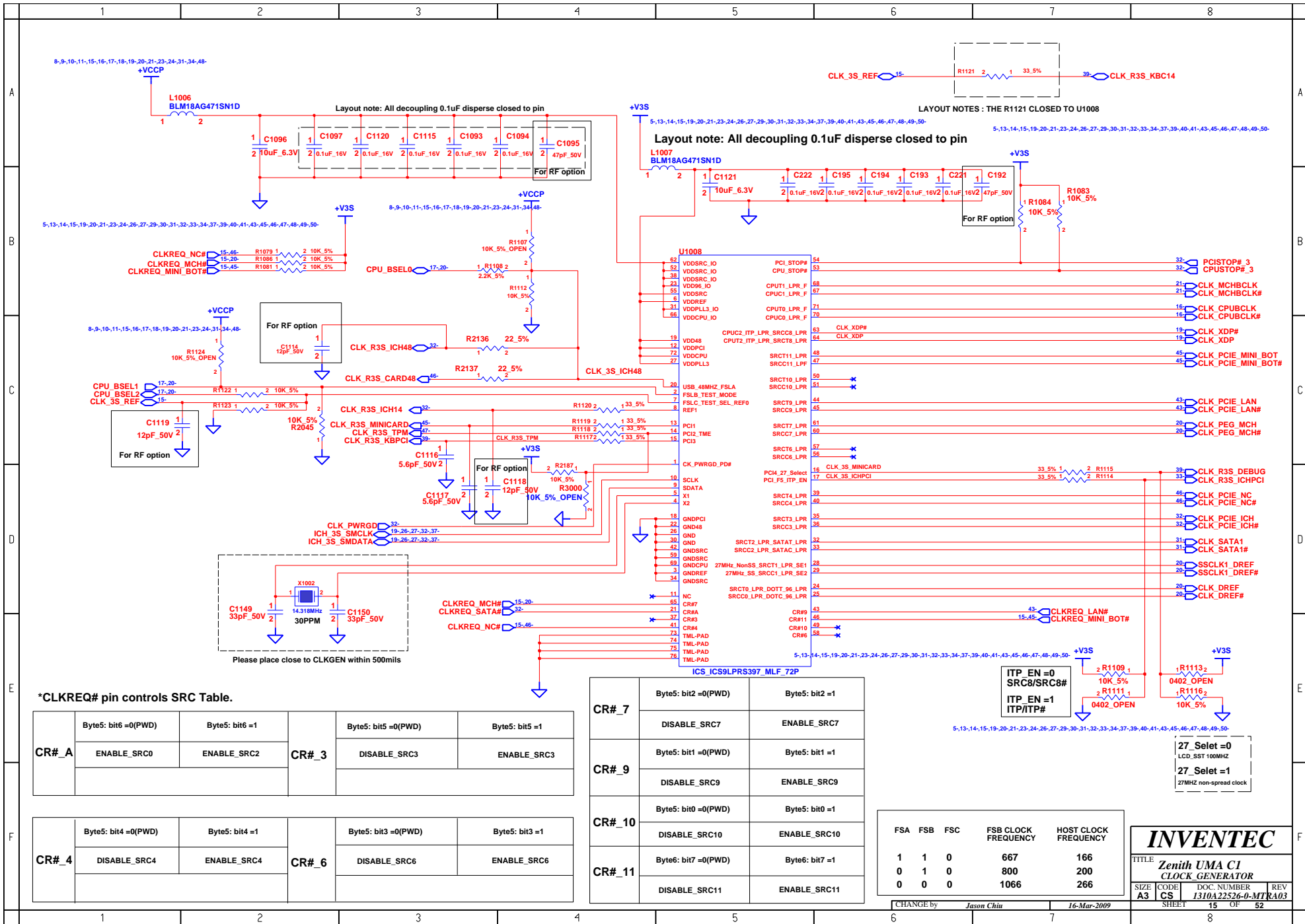
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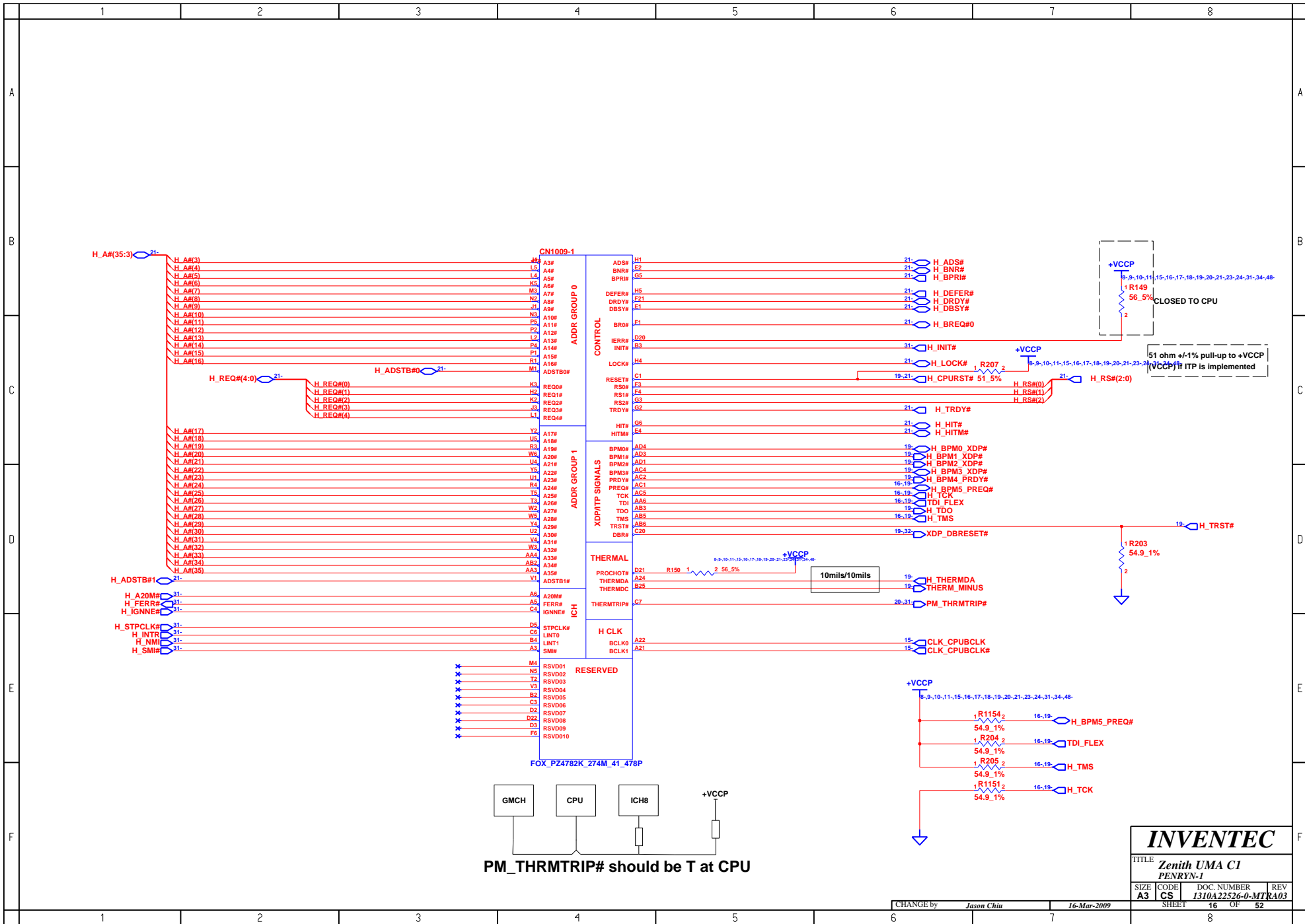


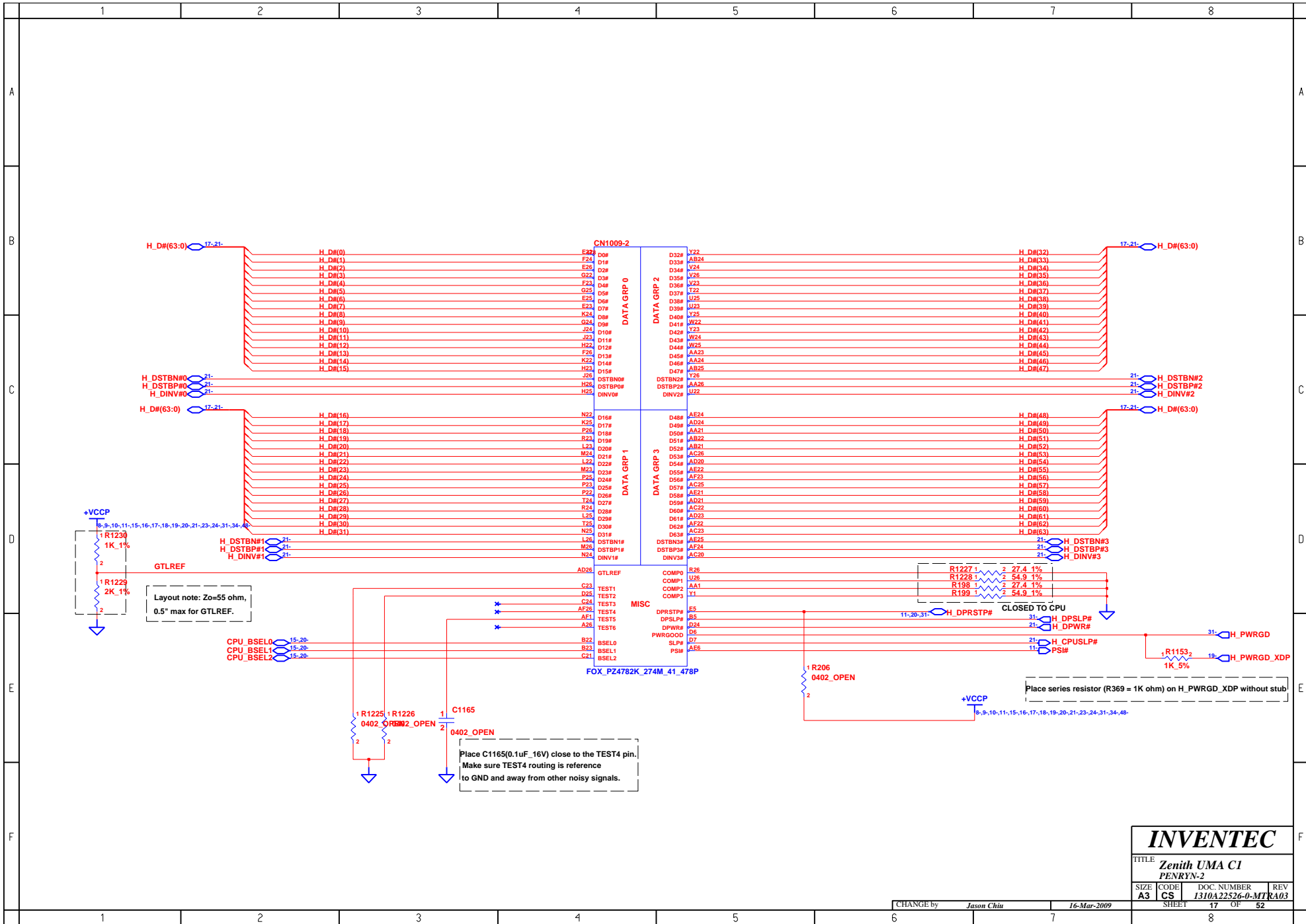
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TITLE
Zenith UMA C1
POWER(SEQUENCE)

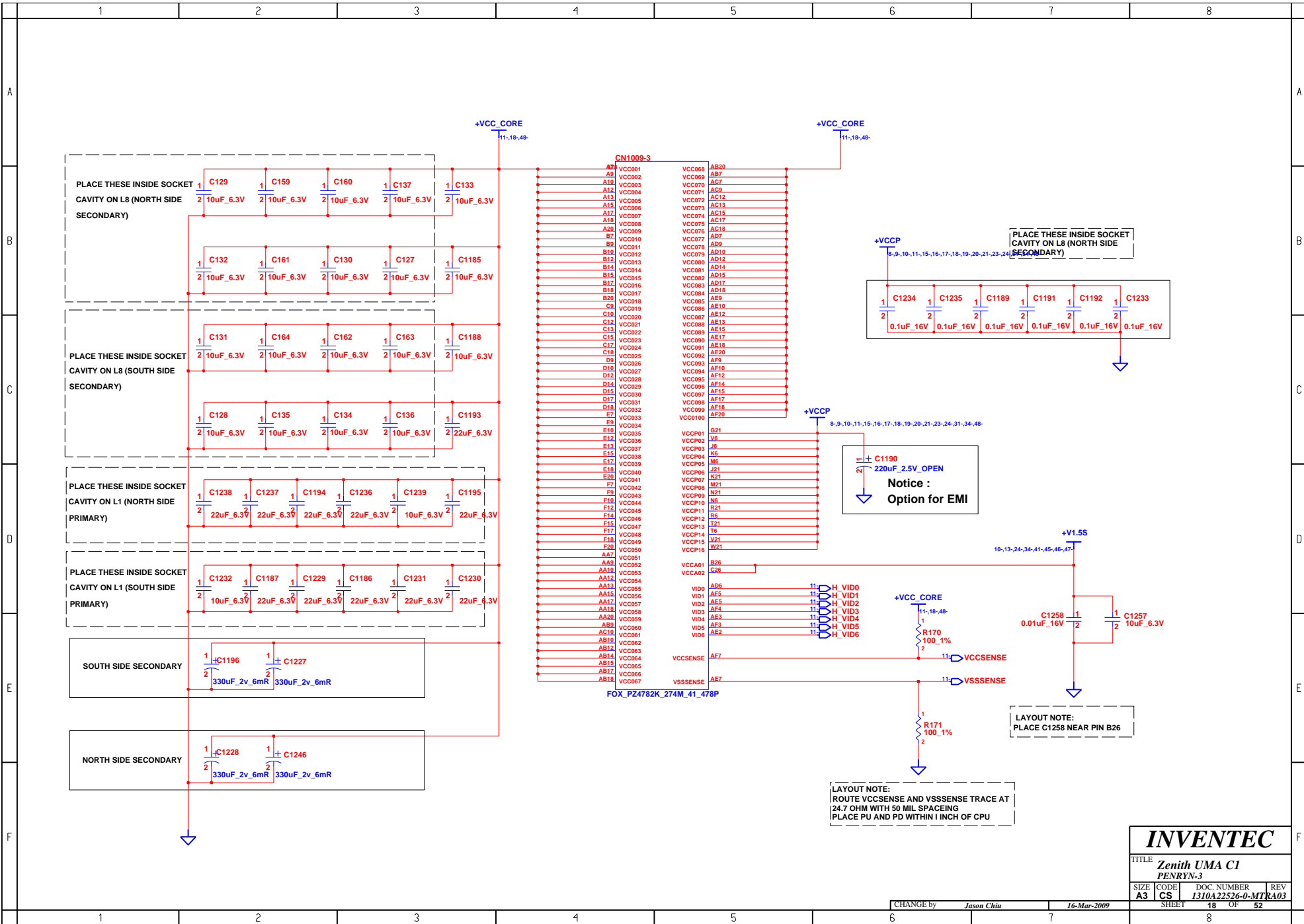
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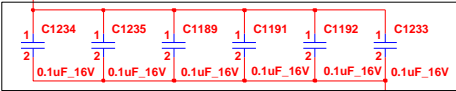




INVENTEC			
TITLE Zenith UMA C1 PENRYN-2			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by Jason Chiu		16-Mar-2009	
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PLACE THESE INSIDE SOCKET CAVITY ON L8 (NORTH SIDE SECONDARY)

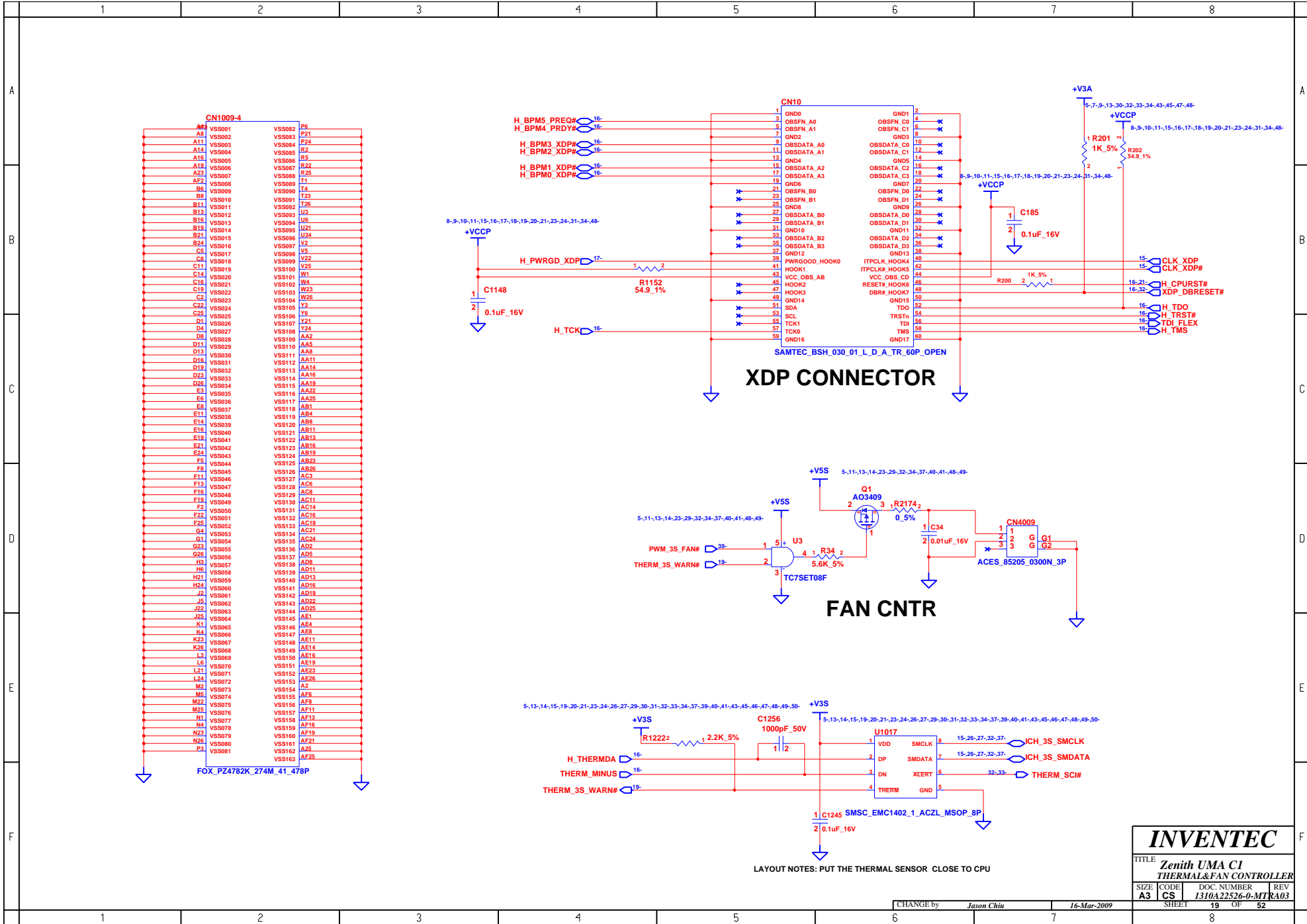


Notice :
Option for EMI

LAYOUT NOTE:
PLACE C1258 NEAR PIN B26

LAYOUT NOTE:
ROUTE VCCSENSE AND VSSSENSE TRACE AT 24.7 OHM WITH 50 MIL SPACING
PLACE PU AND PD WITHIN 1 INCH OF CPU

INVENTEC			
TITLE Zenith UMA C1 PENRYN-3			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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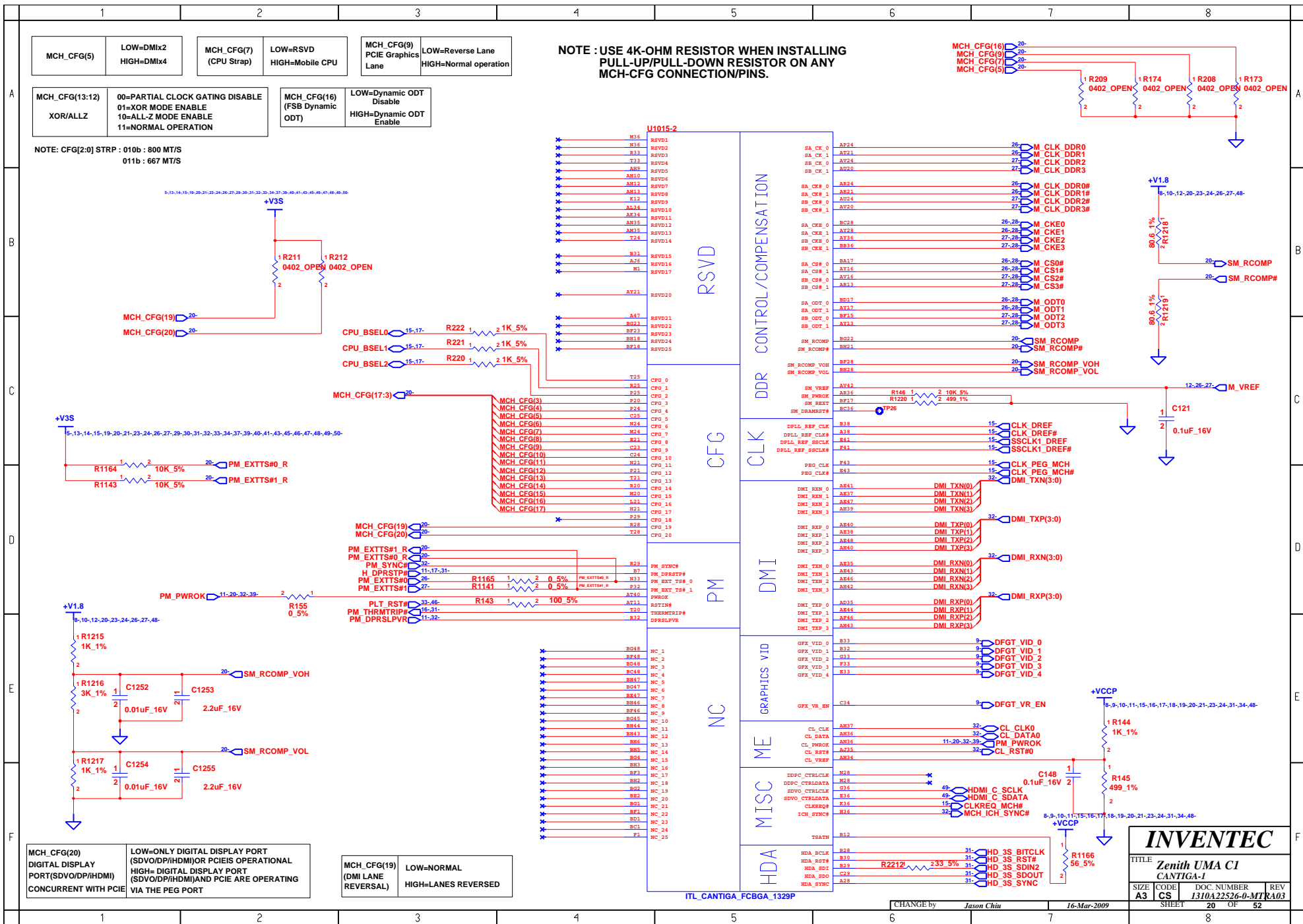


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INVENTEC			
TITLE: Zenith UMA C1 THERMAL&FAN CONTROLLER			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A22526-0-MT	REV: RA03
SHEET: 19		OF: 52	

CHANGE by Jason Chiu 16-Mar-2009

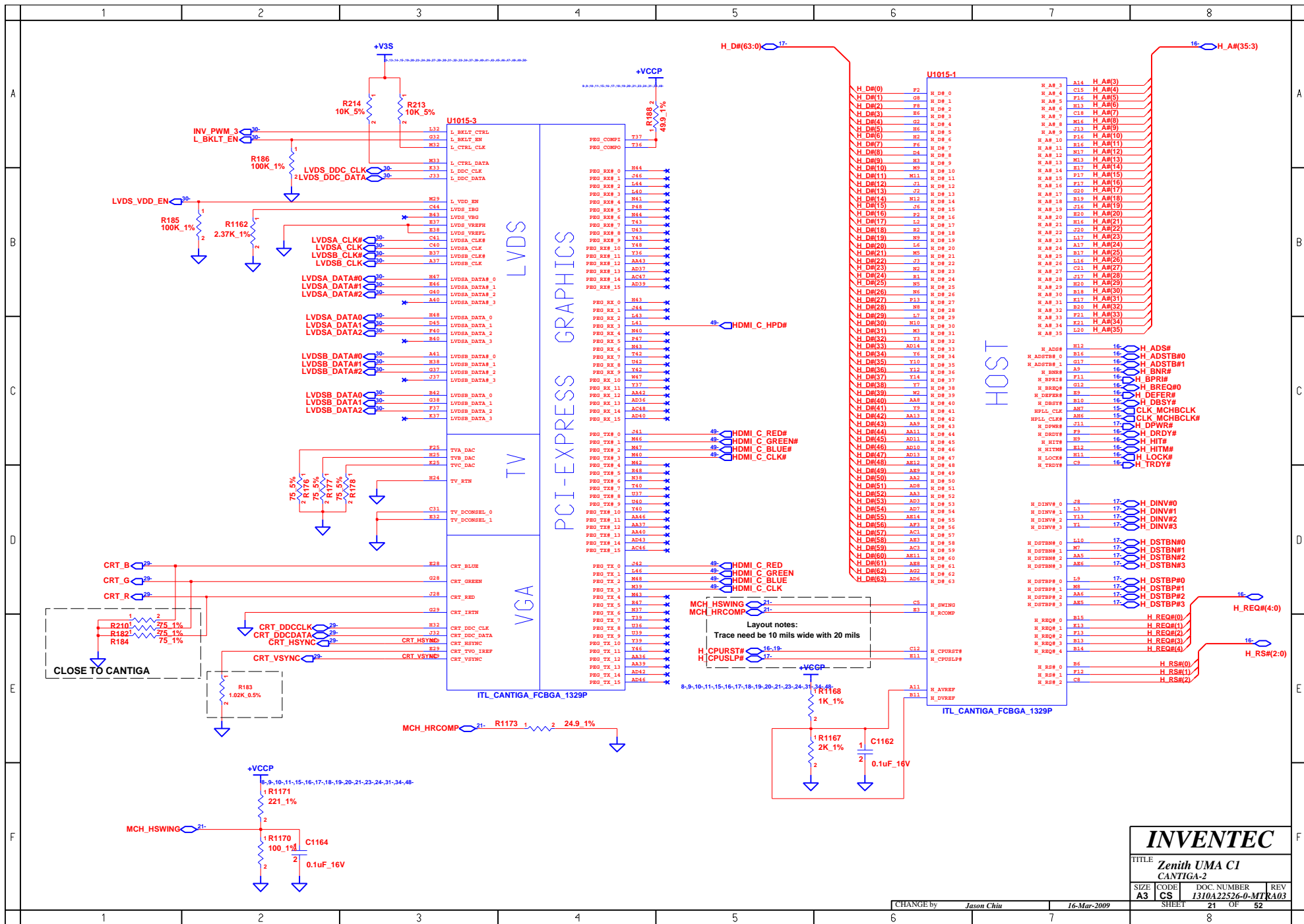
LAYOUT NOTES: PUT THE THERMAL SENSOR CLOSE TO CPU



INVENTEC

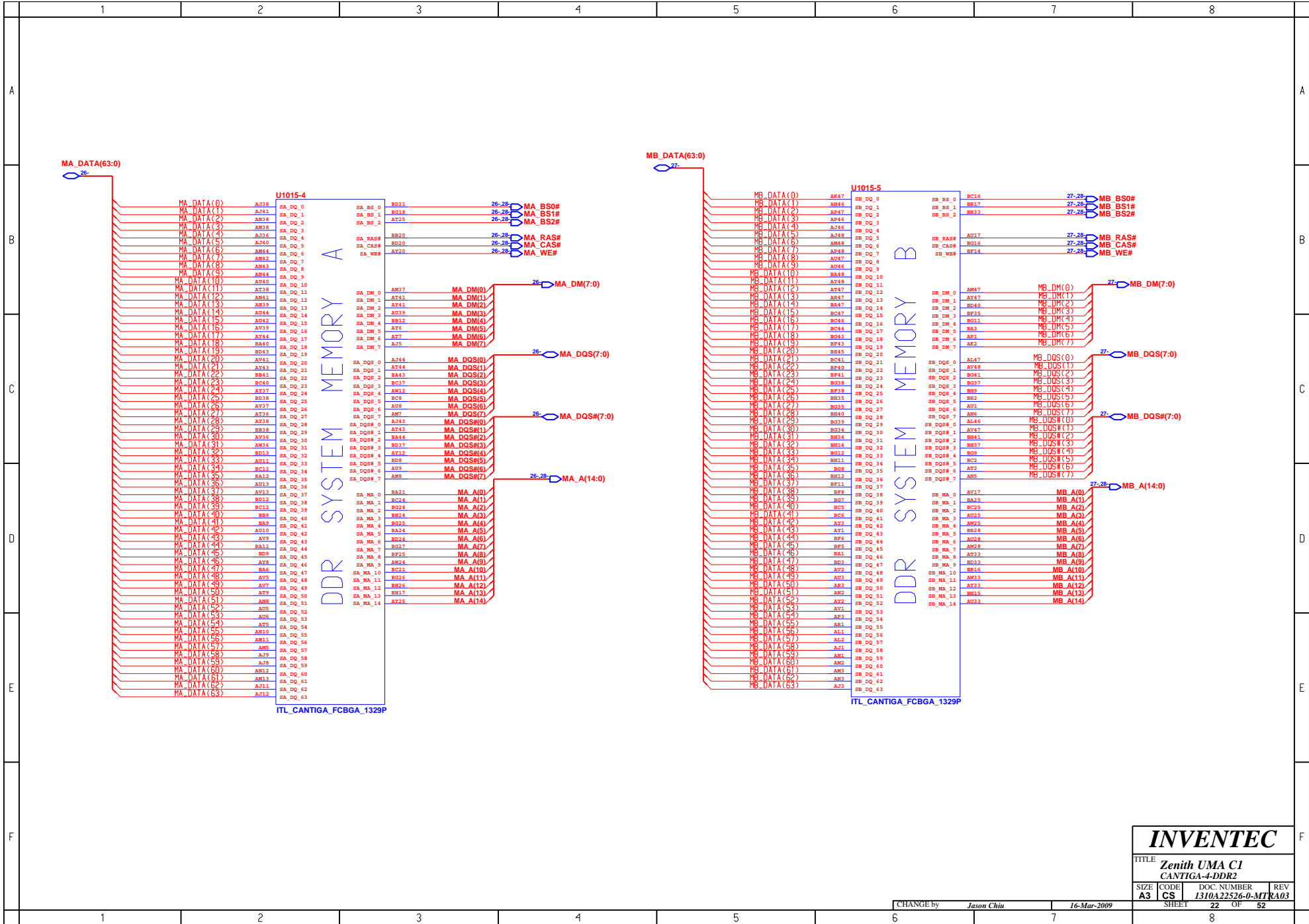
TITLE: Zenith UMA C1 CANTIGA-1

SIZE: A3	CODE: CS	DOC. NUMBER: I310A22526-0-MTR	REV: R403
SHEET: 20		OF: 52	

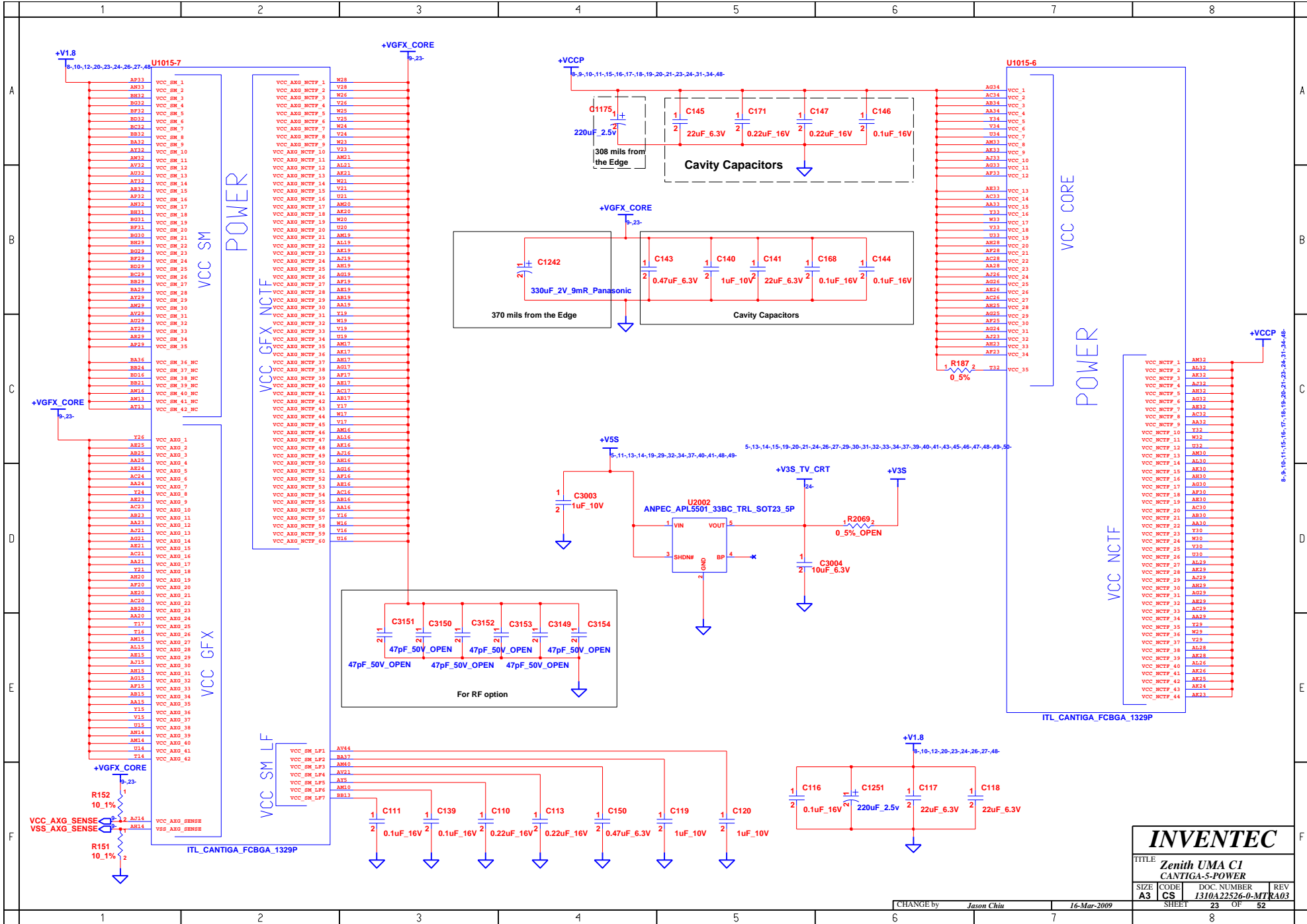


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INVENTEC			
TITLE Zenith UMA C1 CANTIGA-2			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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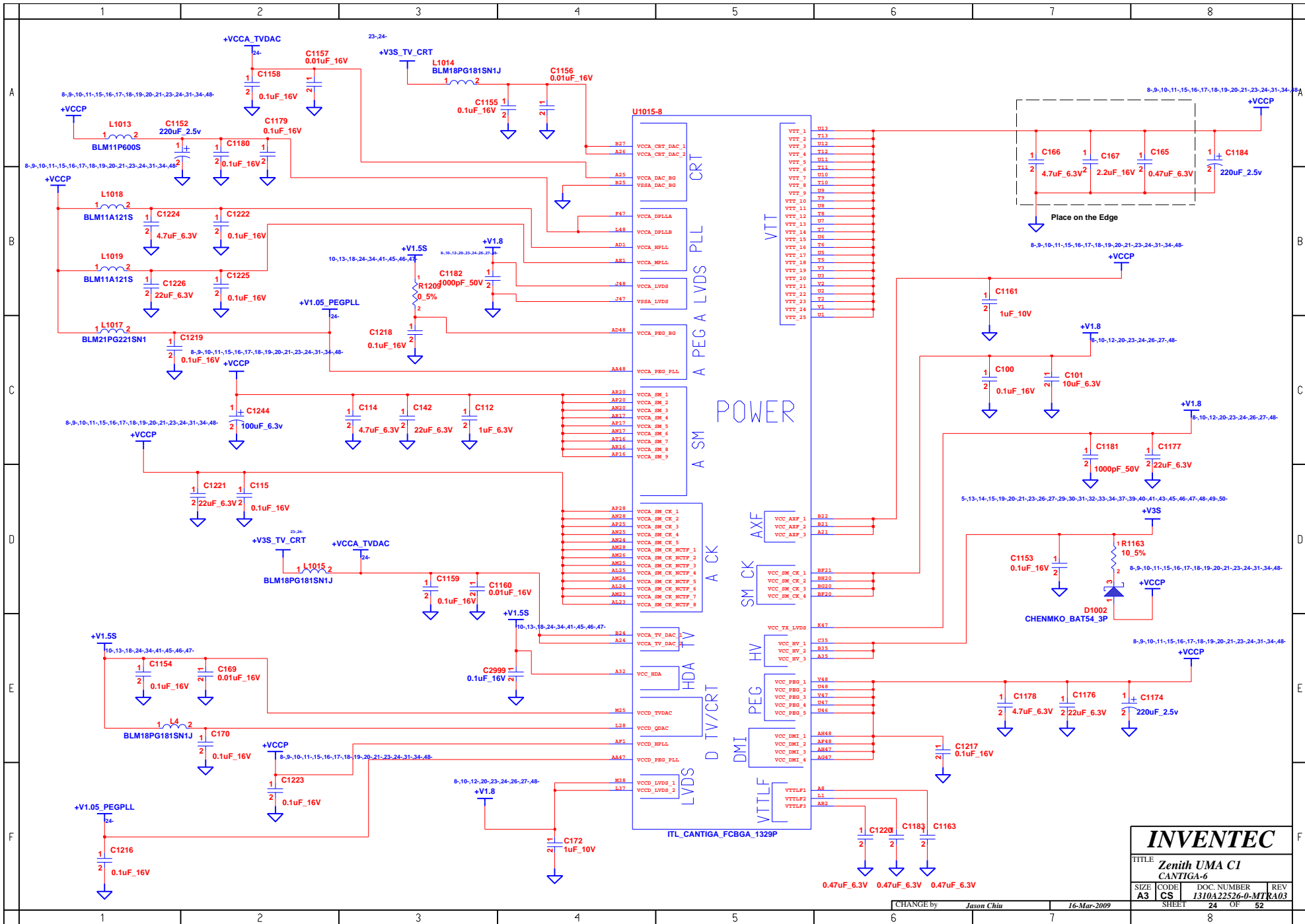


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TITLE Zenith UMA C1 CANTIGA-4-DDR2			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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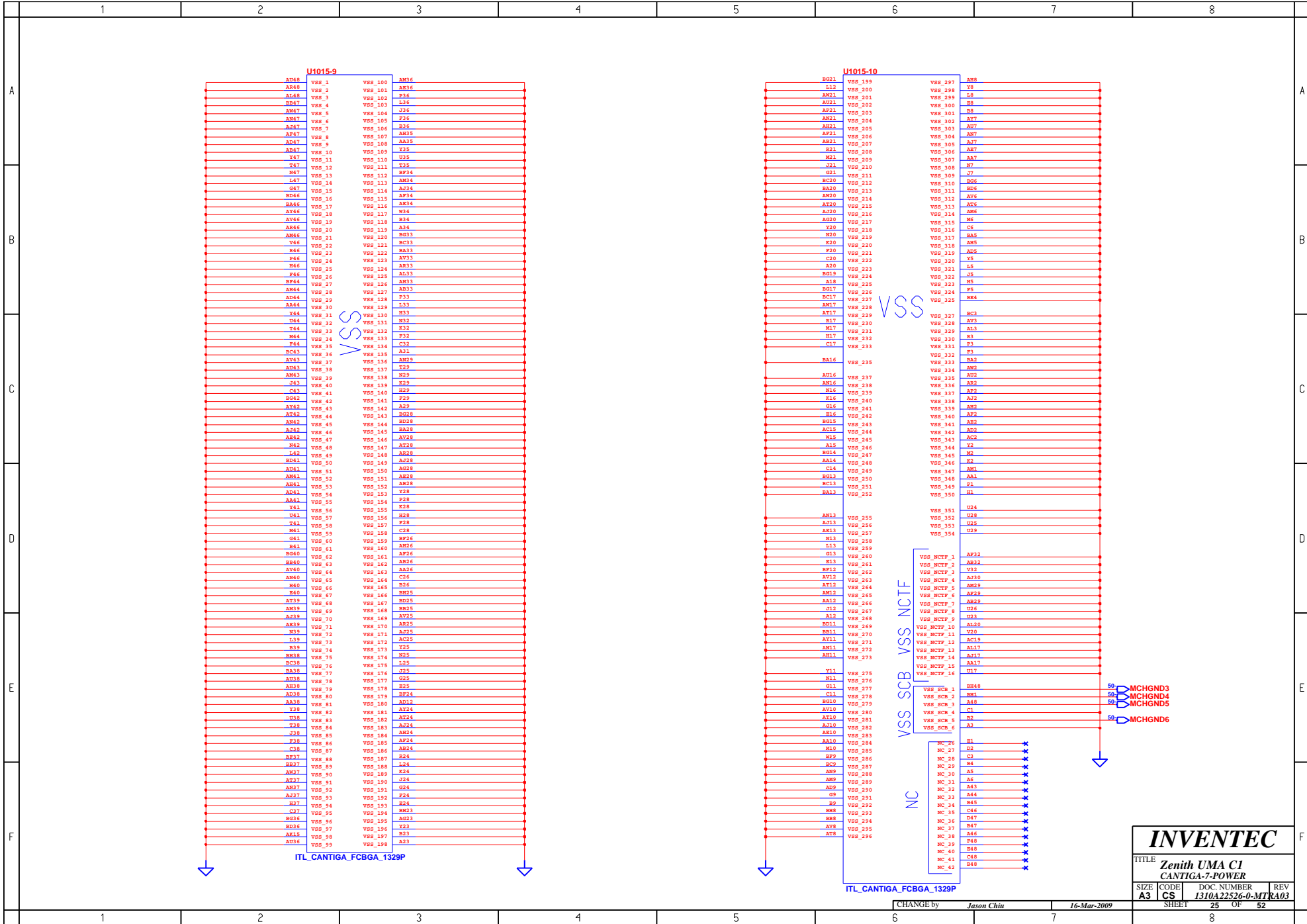
www.laptop-schematics.com

INVENTEC			
TITLE Zenith UMA C1 CANTIGA-5-POWER			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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POWER

INVENTEC			
TITLE Zenith UMA C1 CANTIGA-6			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by Jason Chiu		16-Mar-2009	
SHEET 24		OF 52	



U1015-9

U1015-10

VSS

VSS

VSS_NCTF

VSS_SCB

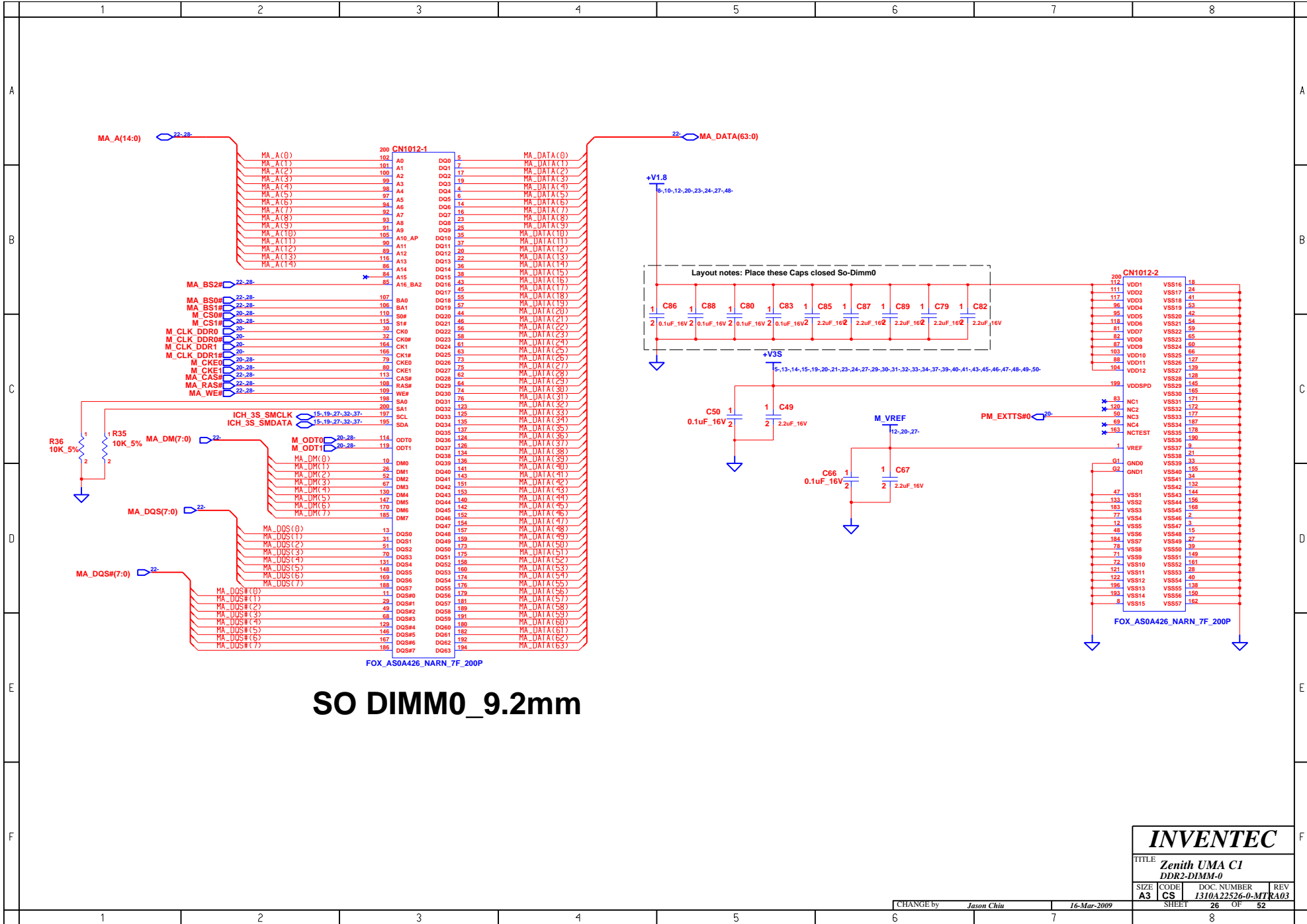
NC

ITL_CANTIGA_FCBGA_1329P

ITL_CANTIGA_FCBGA_1329P

INVENTEC			
TITLE Zenith UMA C1 CANTIGA-7-POWER			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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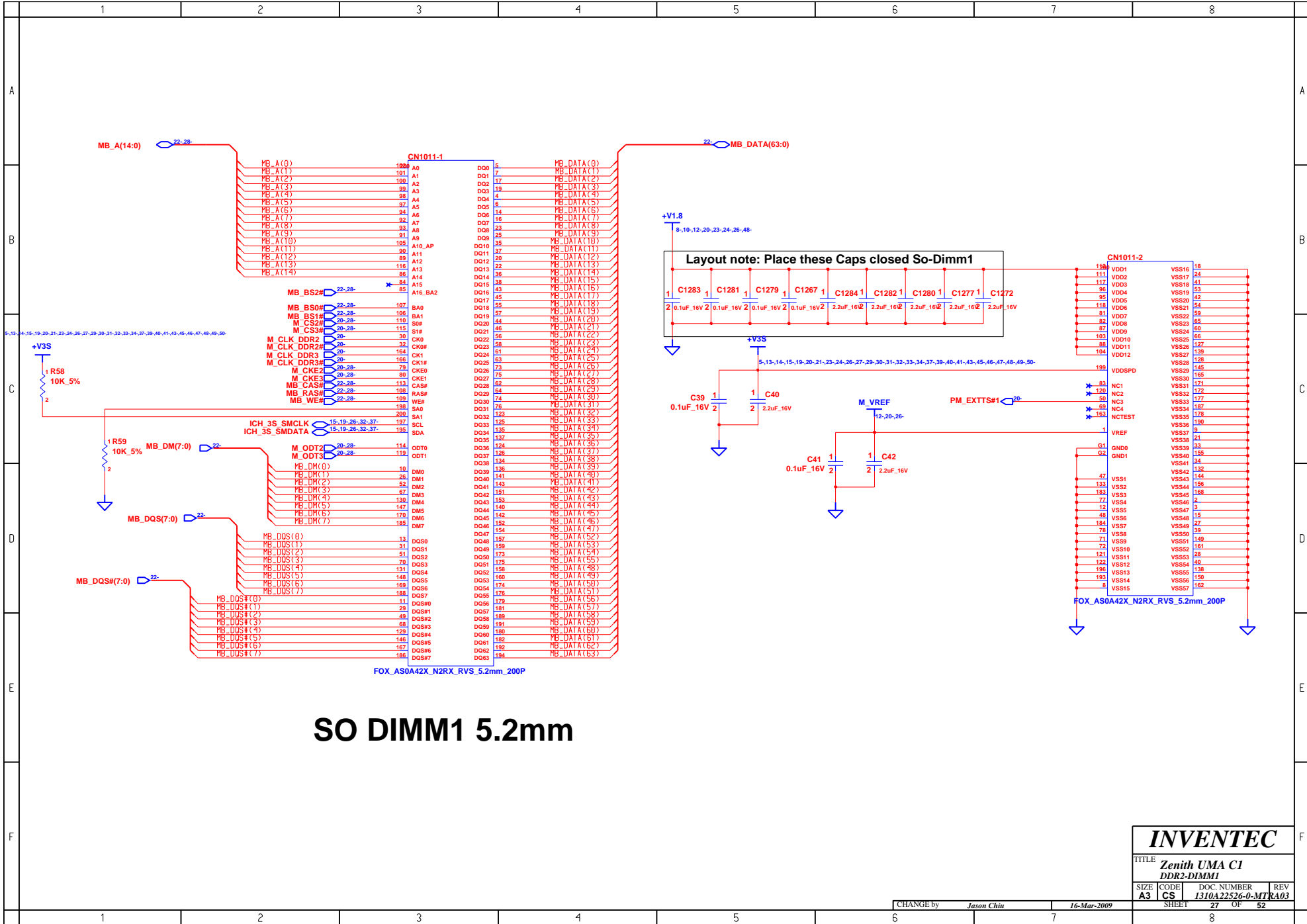


SO DIMM0_9.2mm

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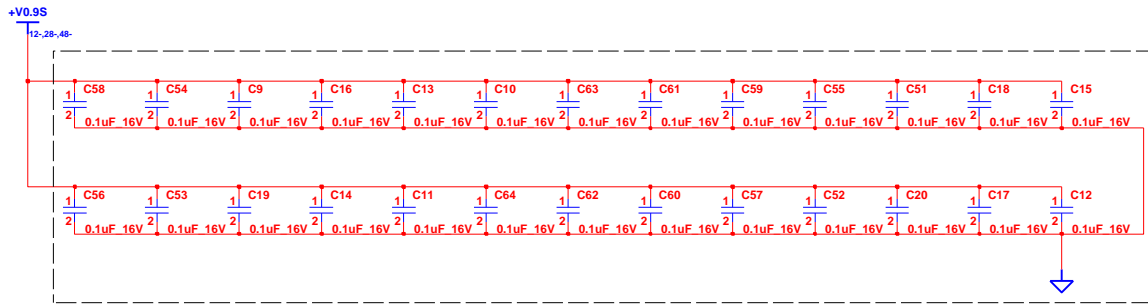
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TITLE Zenith UMA C1 DDR2-DIMM-0			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MT	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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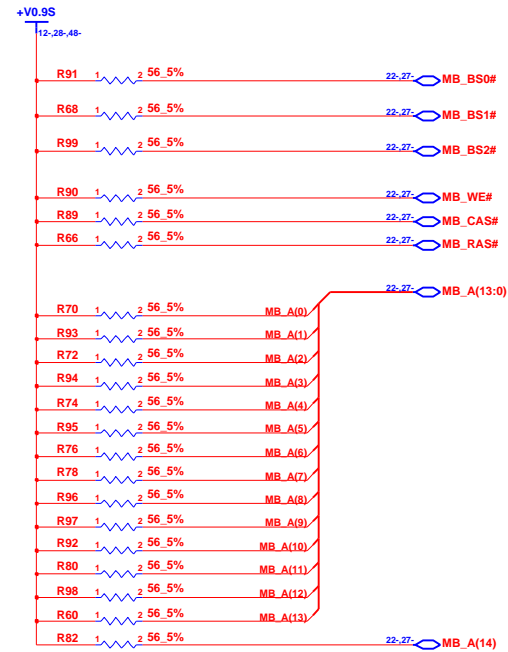
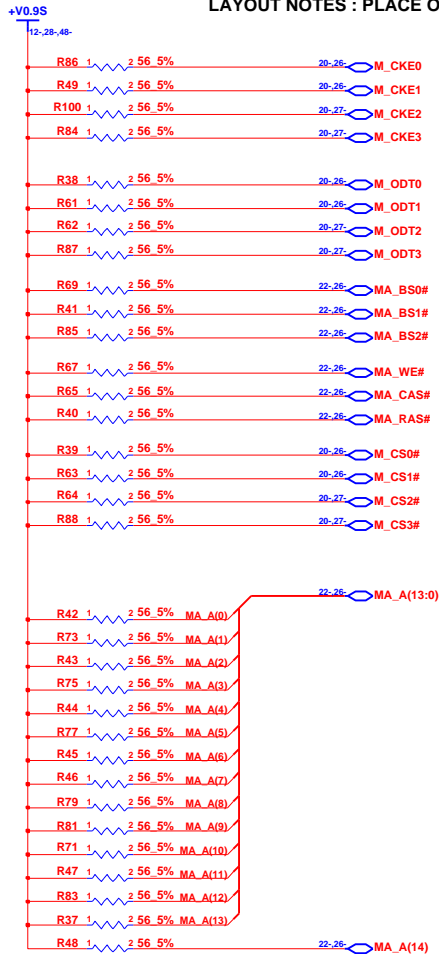


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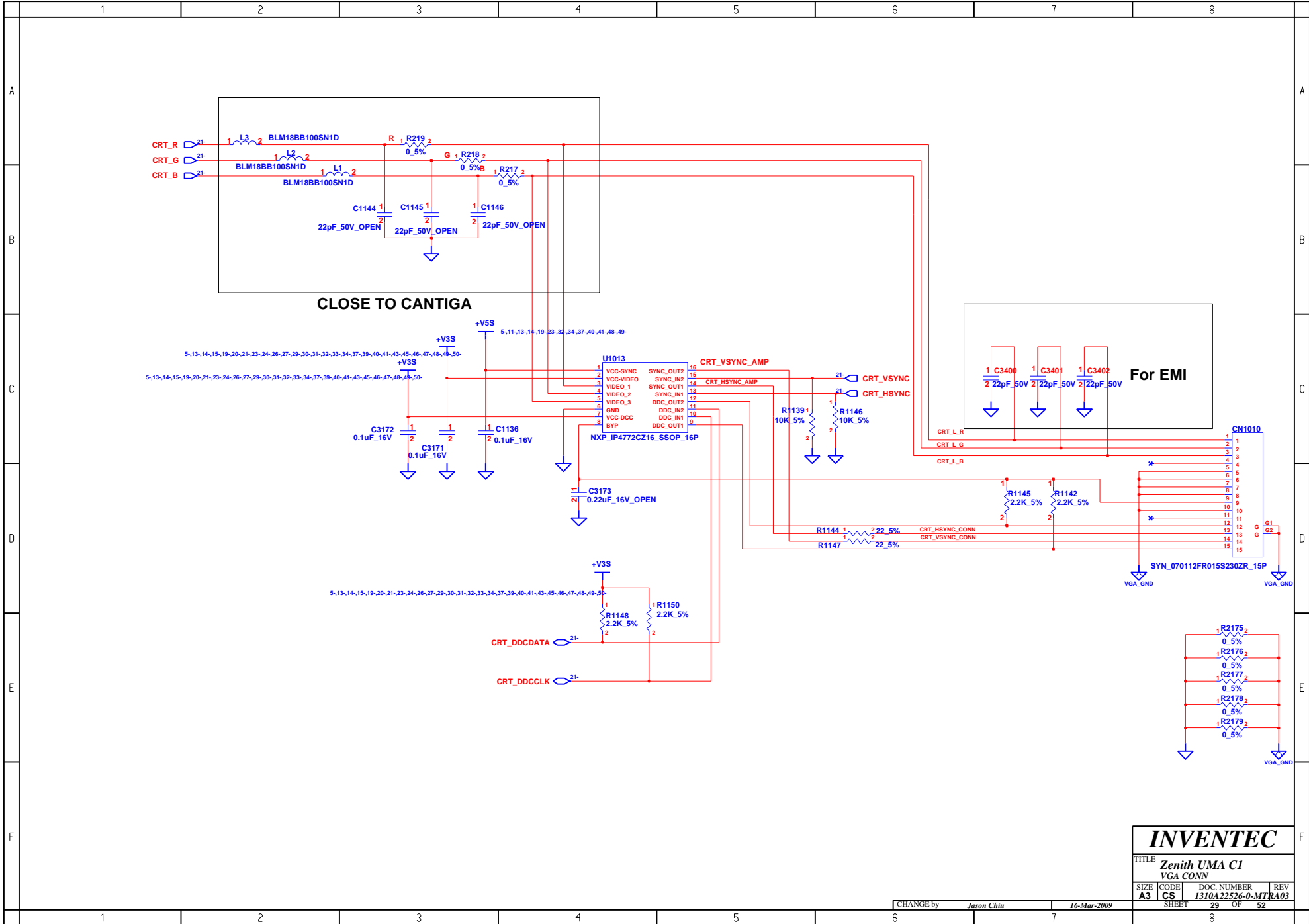
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SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by Jason Chiu		16-Mar-2009	
SHEET 27		OF 52	



LAYOUT NOTES : PLACE ONE CAP CLOSE TO EVERY 2 PULL UP RESISTOR TERMINATED TO +V0.9S



INVENTEC			
TITLE Zenith UMA C1 DDR2-DAMPING			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV RA03
CHANGE by <i>Jason Chiu</i>		27-Sep-2003	
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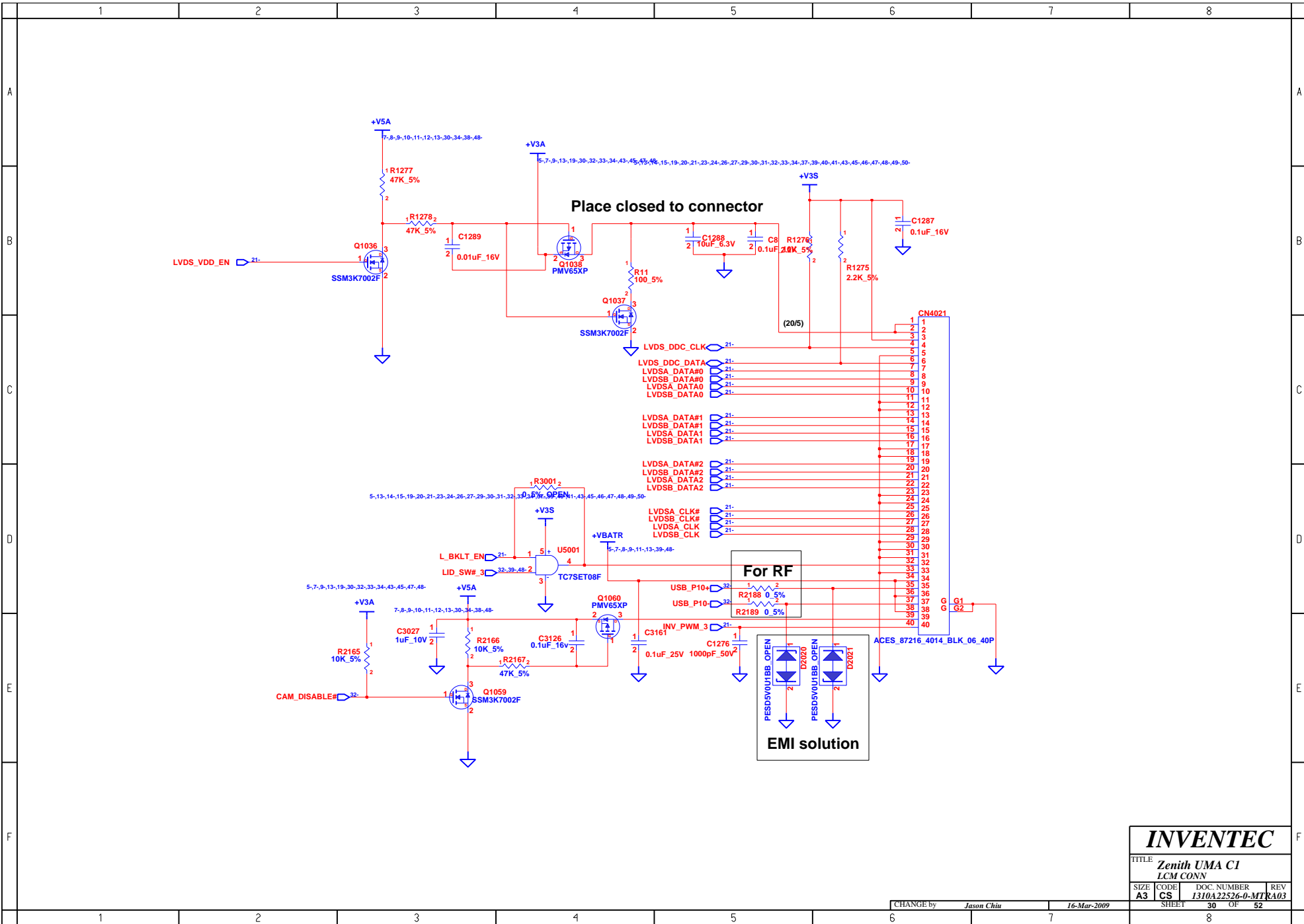
www.laptop-schematics.com

INVENTEC

TITLE
Zenith UMA C1
VGA CONN

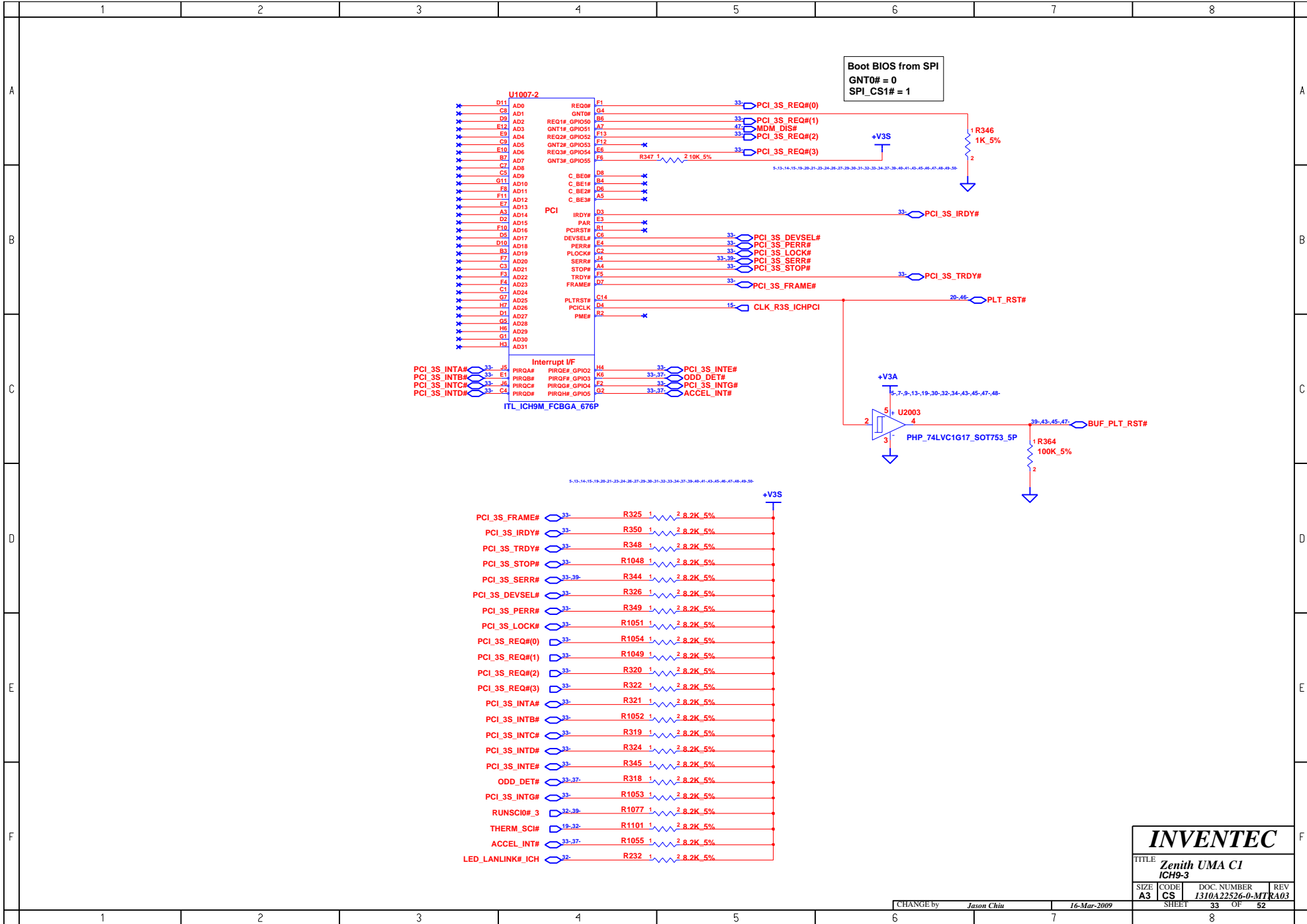
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
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CHANGE by Jason Chiu	16-Mar-2009	SHEET 29	OF 52
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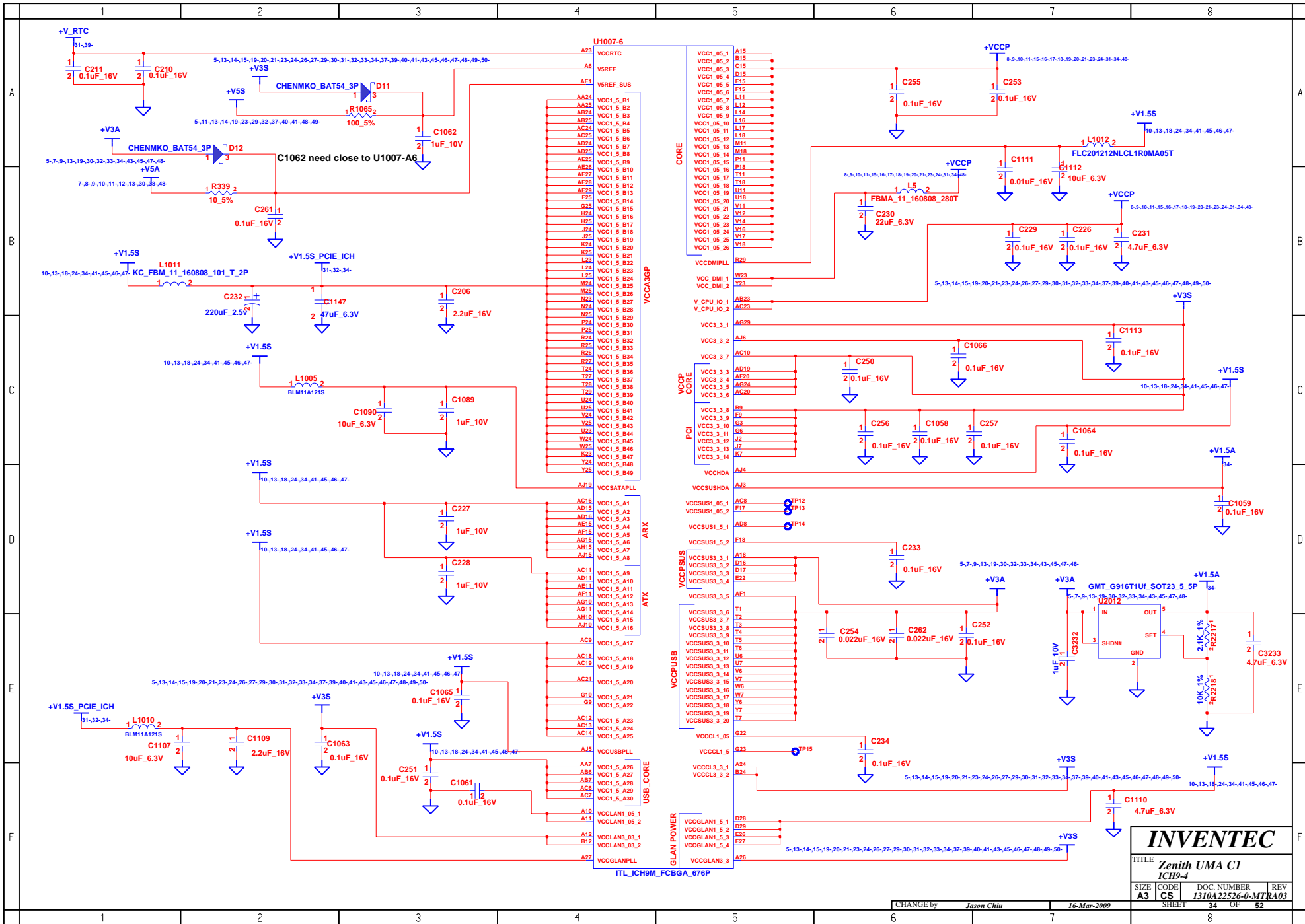


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INVENTEC			
TITLE Zenith UMA C1 LCM CONN			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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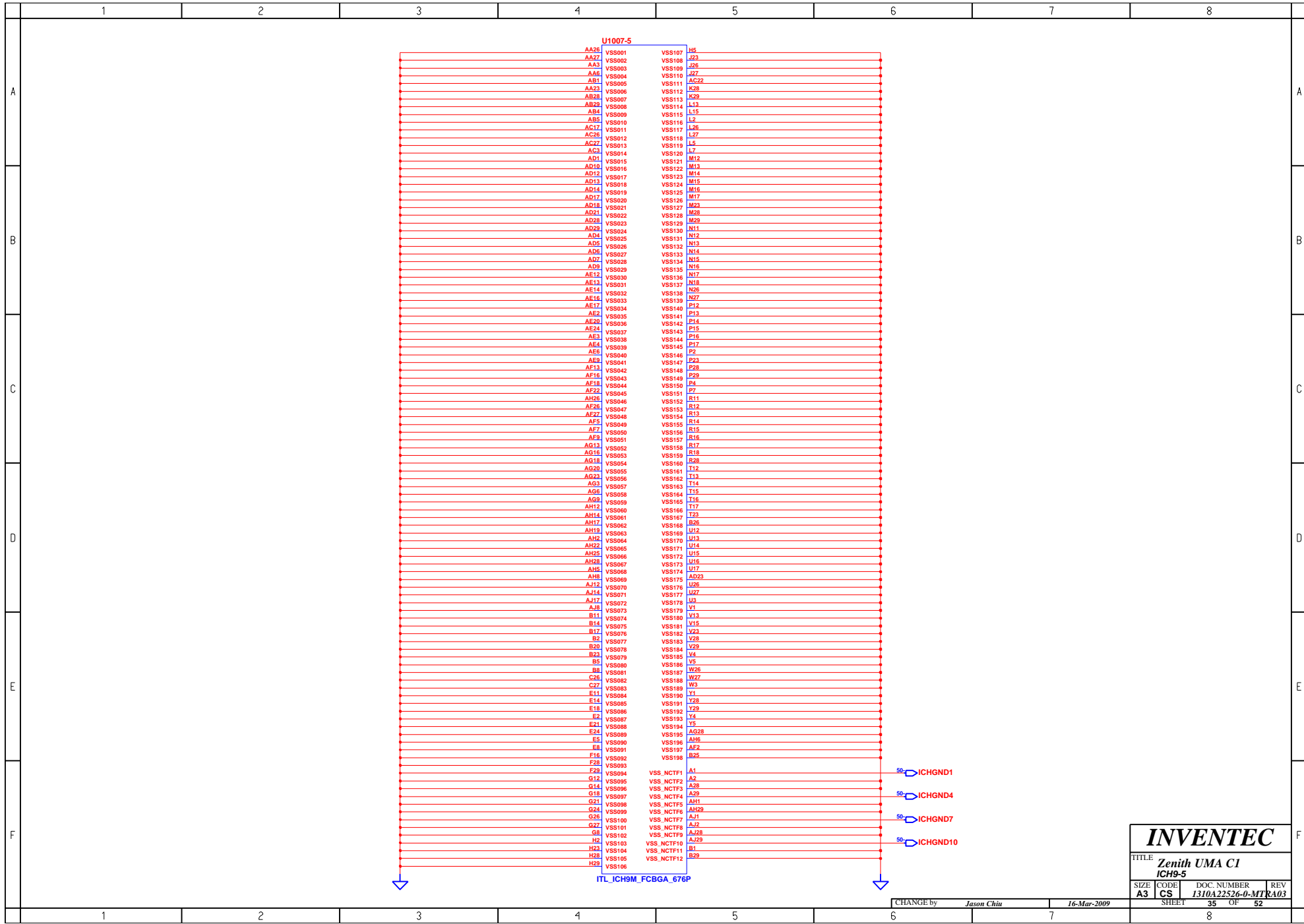


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TITLE Zenith UMA C1 ICH9-3			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR03	REV
CHANGE by Jason Chiu		16-Mar-2009	SHEET 33 OF 52



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INVENTEC			
TITLE Zenith UMA C1 ICH9-4			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		DATE 16-Mar-2009	
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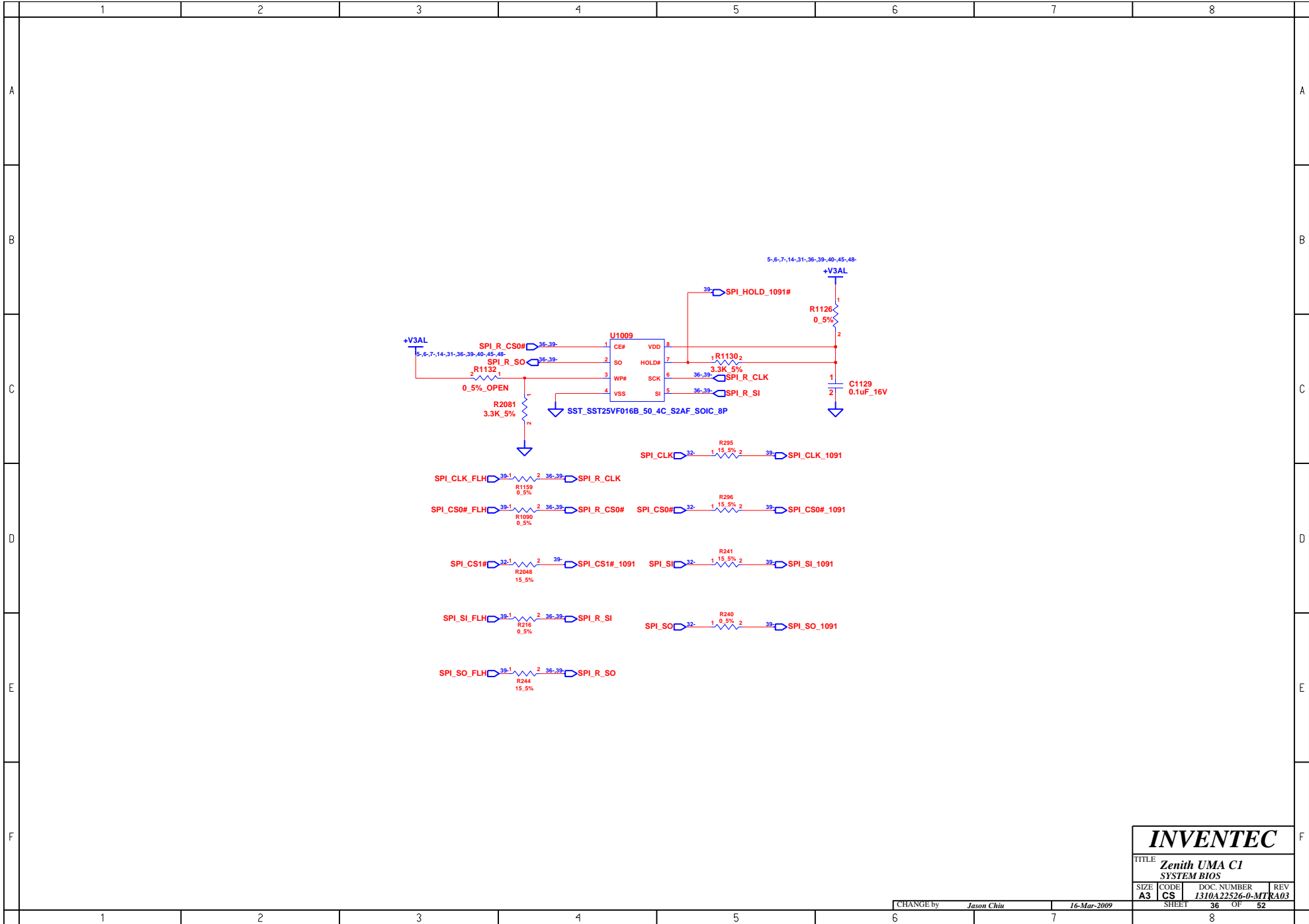
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ITL_ICH9M_FCBGA_676P

- 50 ICH9ND1
- 50 ICH9ND4
- 50 ICH9ND7
- 50 ICH9ND10

INVENTEC			
TITLE Zenith UMA C1 ICH9-5			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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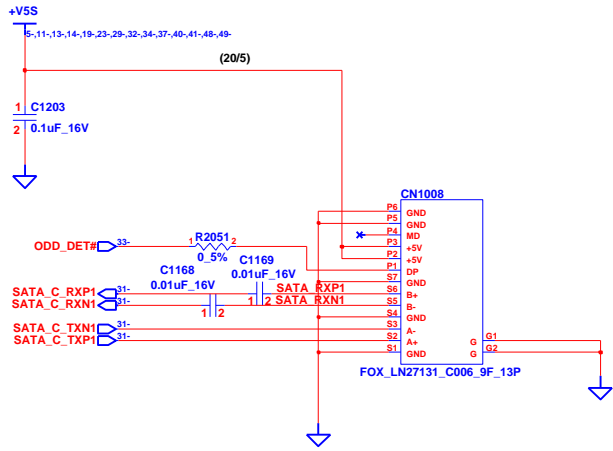
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TITLE
**Zenith UMA C1
 SYSTEM BIOS**

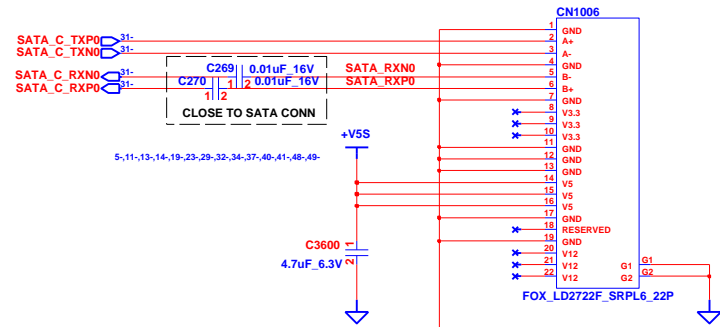
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CHANGE by *Jason Chiu* 16-Mar-2009

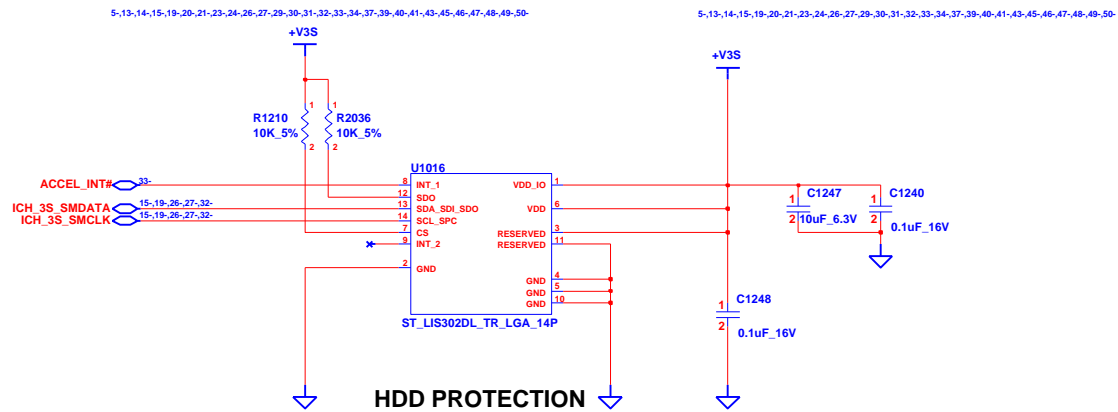
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SATA ODD CNTR

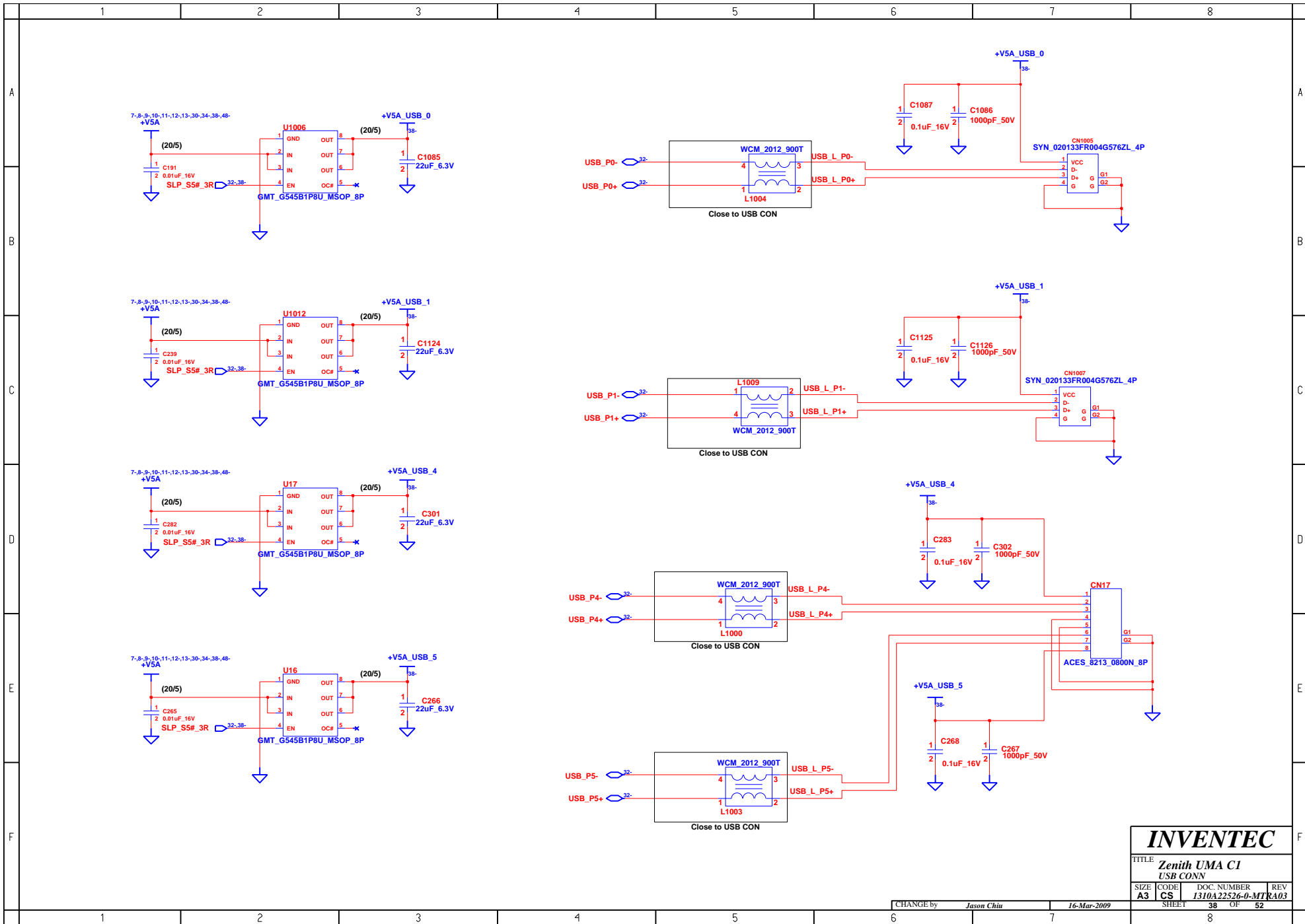


SATA HDD CNTR



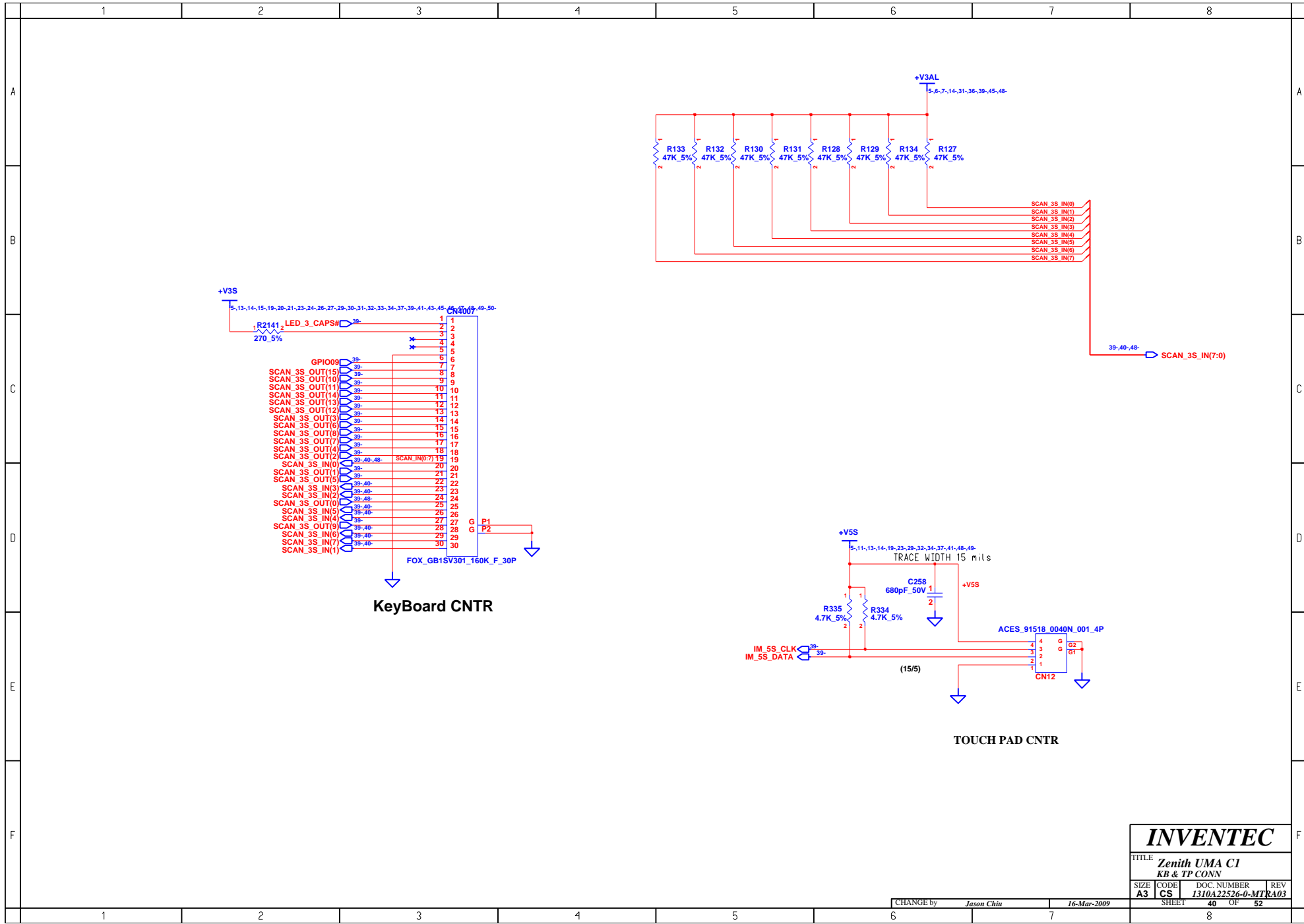
HDD PROTECTION

INVENTEC			
TITLE Zenith UMA C1 HDD & ODD CONN & HD Protec			
SIZE A3	CODE CS	DOC NUMBER 1310A22526-0-MT	REV RA03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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INVENTEC			
TITLE Zenith UMA C1 USB CONN			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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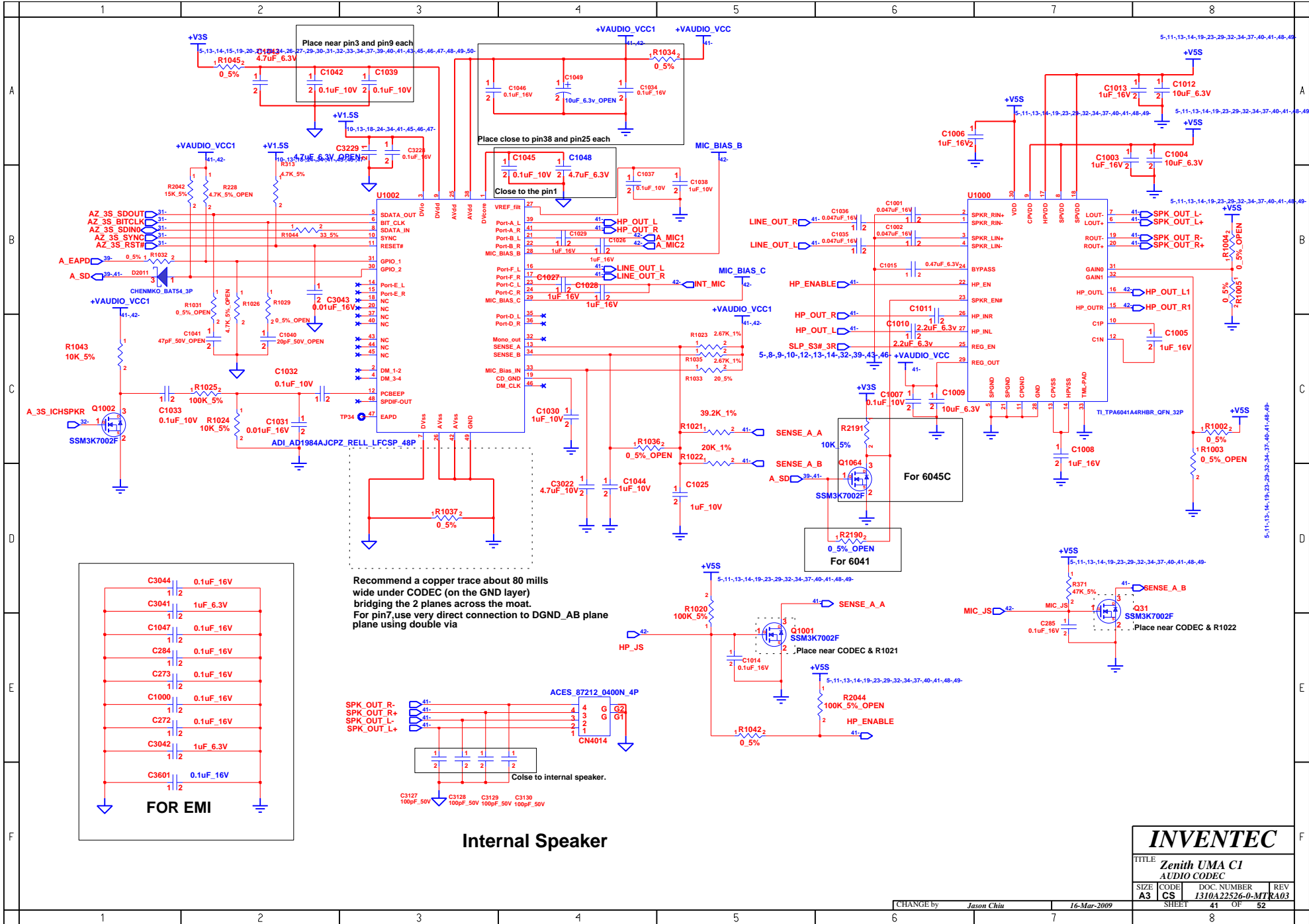


Keyboard CNTR

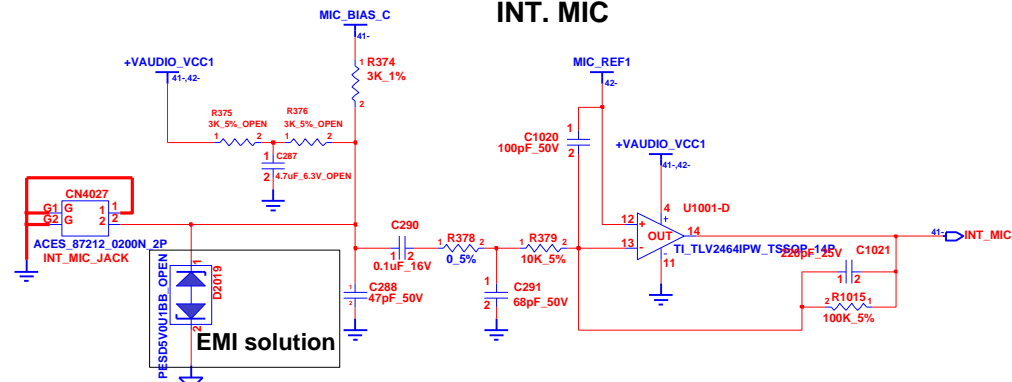
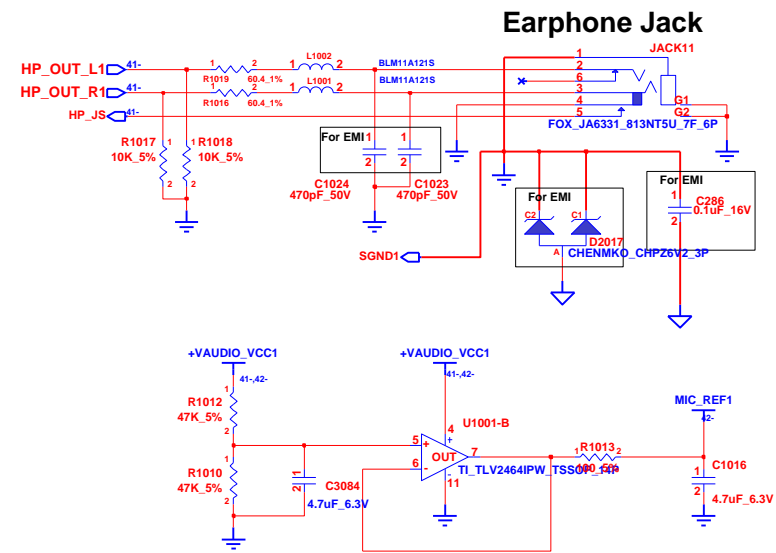
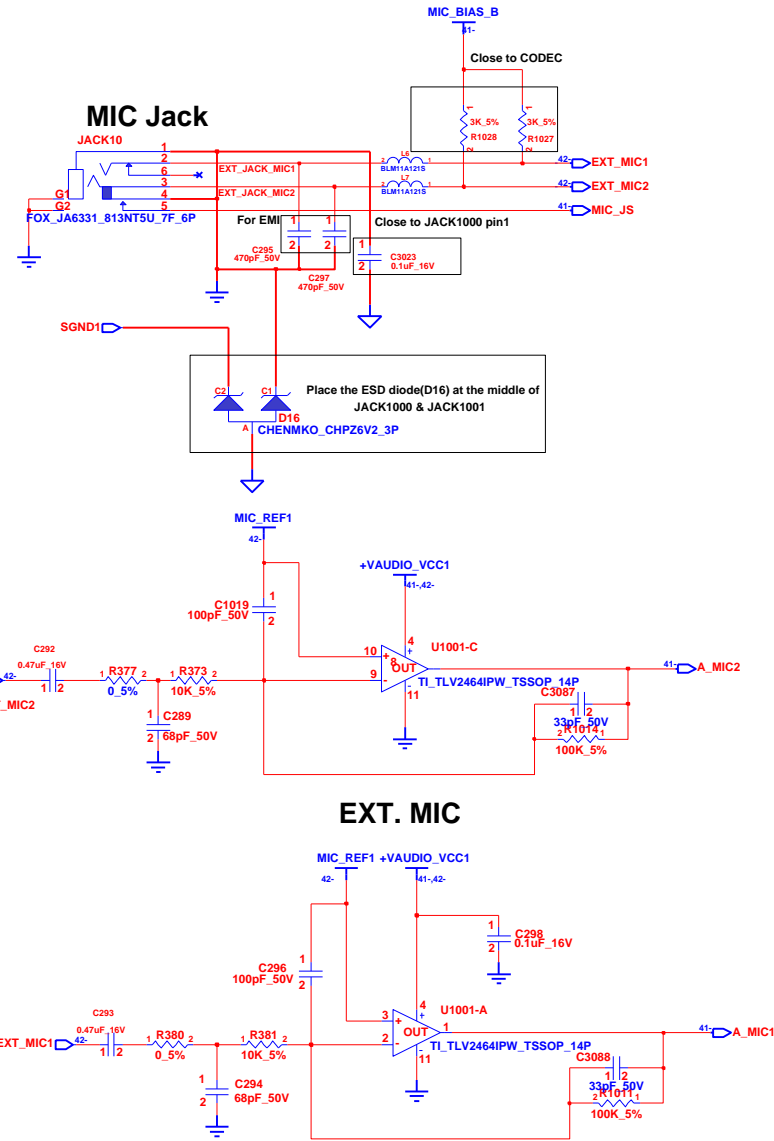
TOUCH PAD CNTR

INVENTEC			
TITLE Zenith UMA C1 KB & TP CONN			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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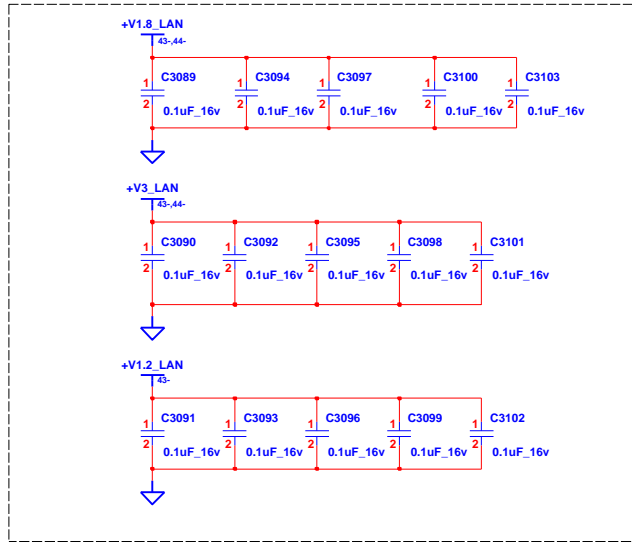
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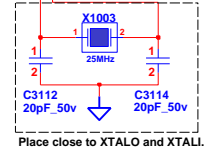
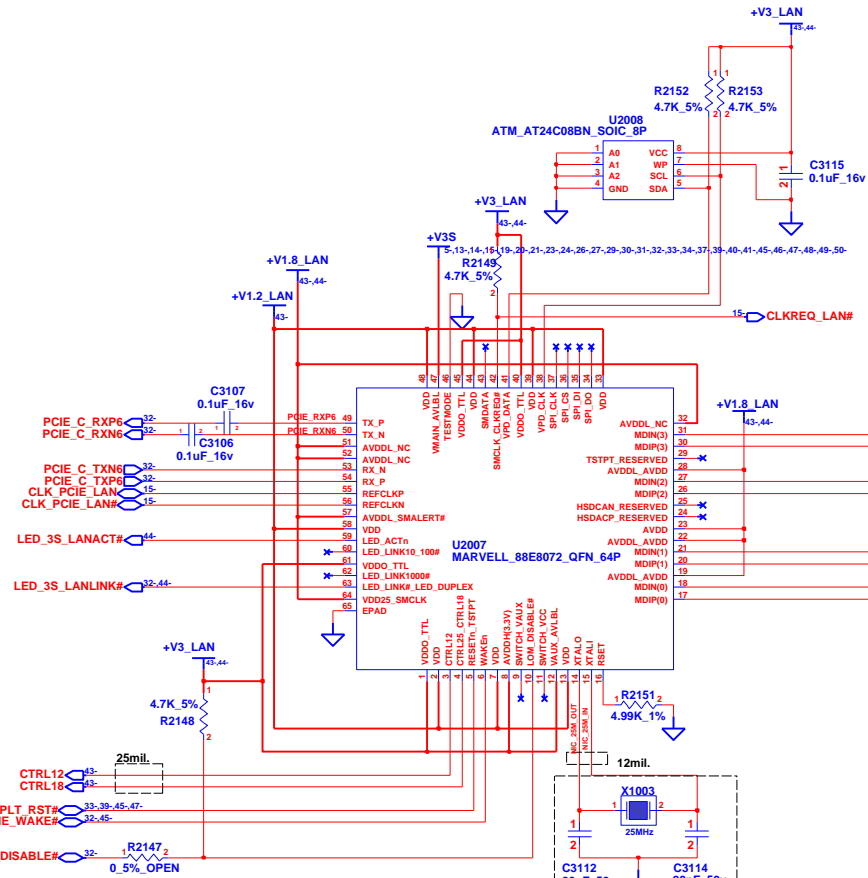
INVENTEC			
TITLE Zenith UMA C1 AUDIO CODEC			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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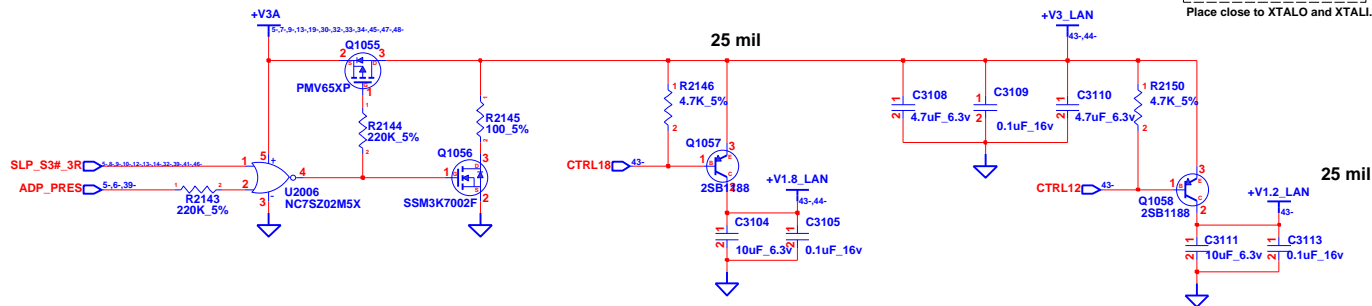
INVENTEC			
TITLE Zenith UMA C1 AUDIO JACK			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
SHEET 42		OF 52	



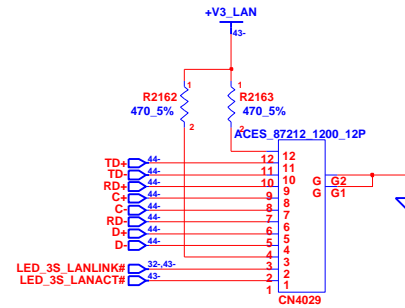
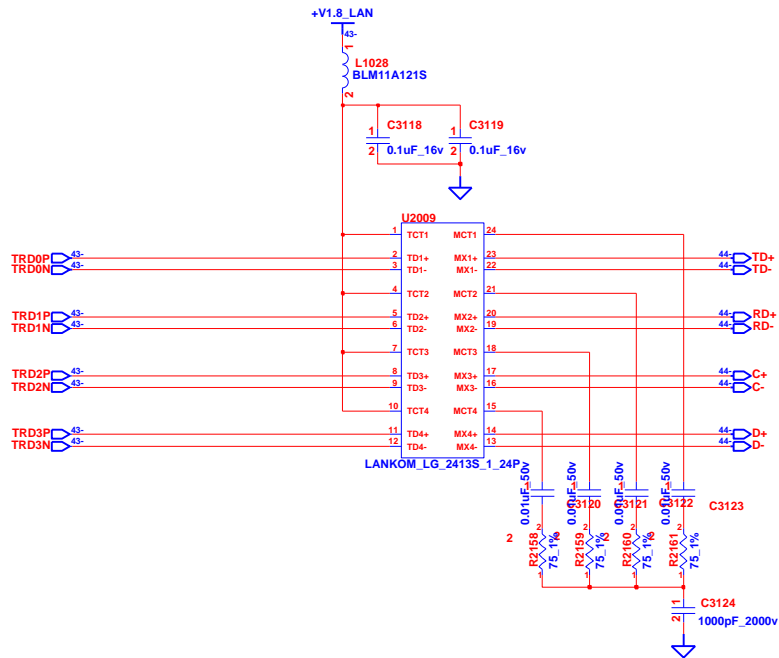
Place bypass cap as close as possible with every power pin.



Place close to XTALO and XTALI.



INVENTEC			
TITLE Zenith UMA C1 Giga LAN			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
SHEET 43		OF 52	

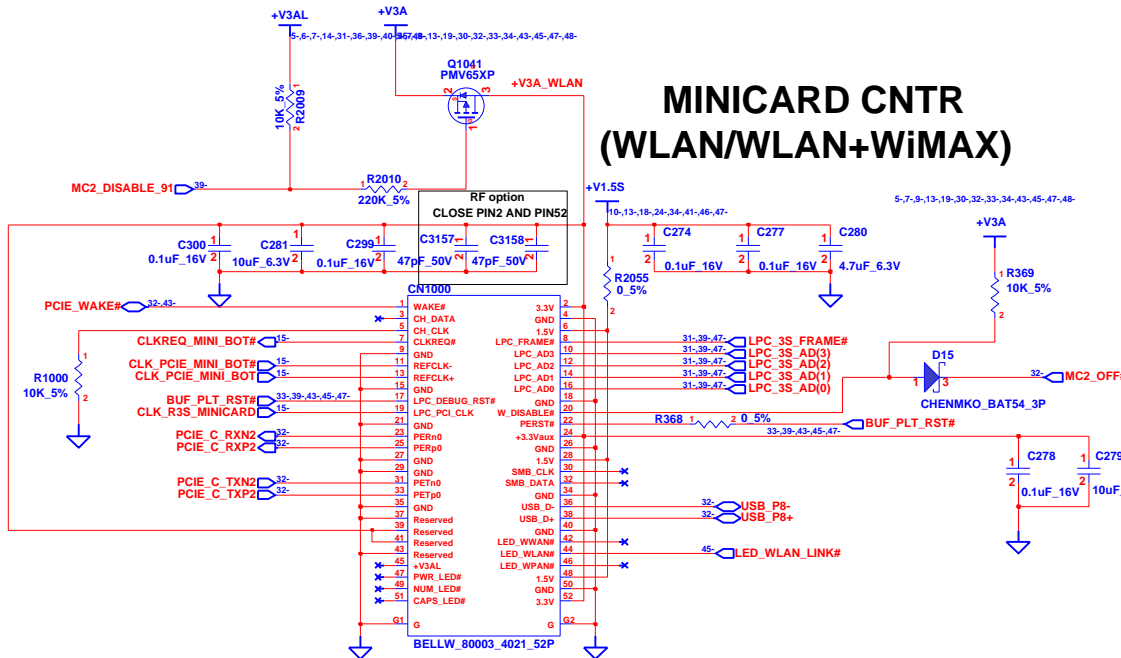


INVENTEC

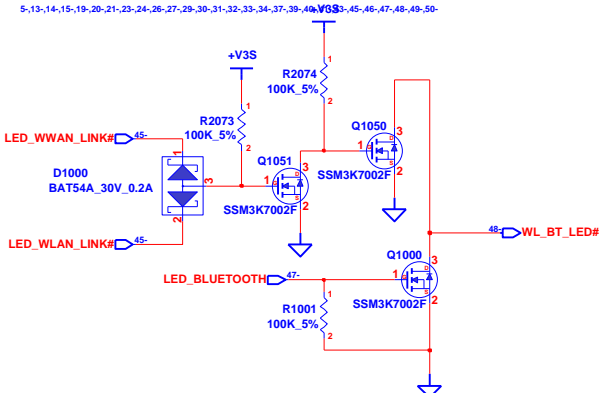
TITLE			
Zenith UMA C1			
RJ-45 CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22526-0-MT	A03
SHEET		OF	
44		52	

CHANGE by Jason Chiu 16-Mar-2009

MINICARD CNTR (WLAN/WLAN+WiMAX)

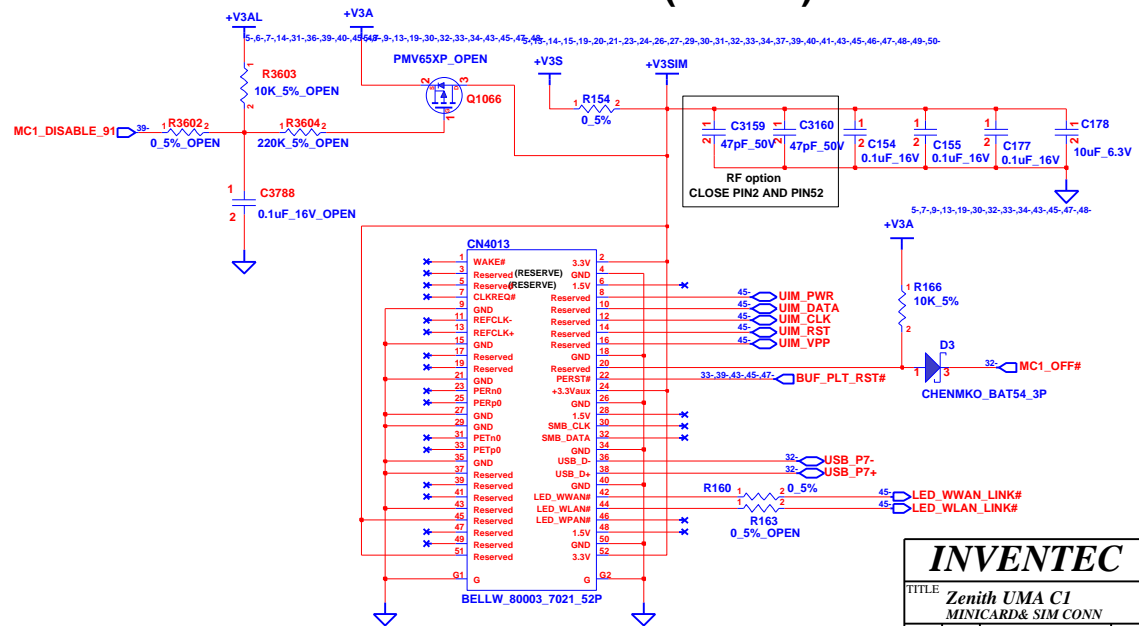


5-13-14-15-19-20-21-23-24-26-27-29-30-31-32-33-34-37-39-40-41-43-45-46-47-48-49-50

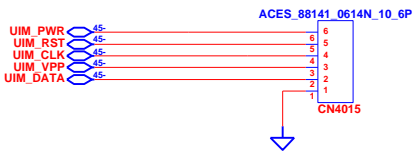


WLAN Bluetooth LED

MINICARD CNTR (WWAN)

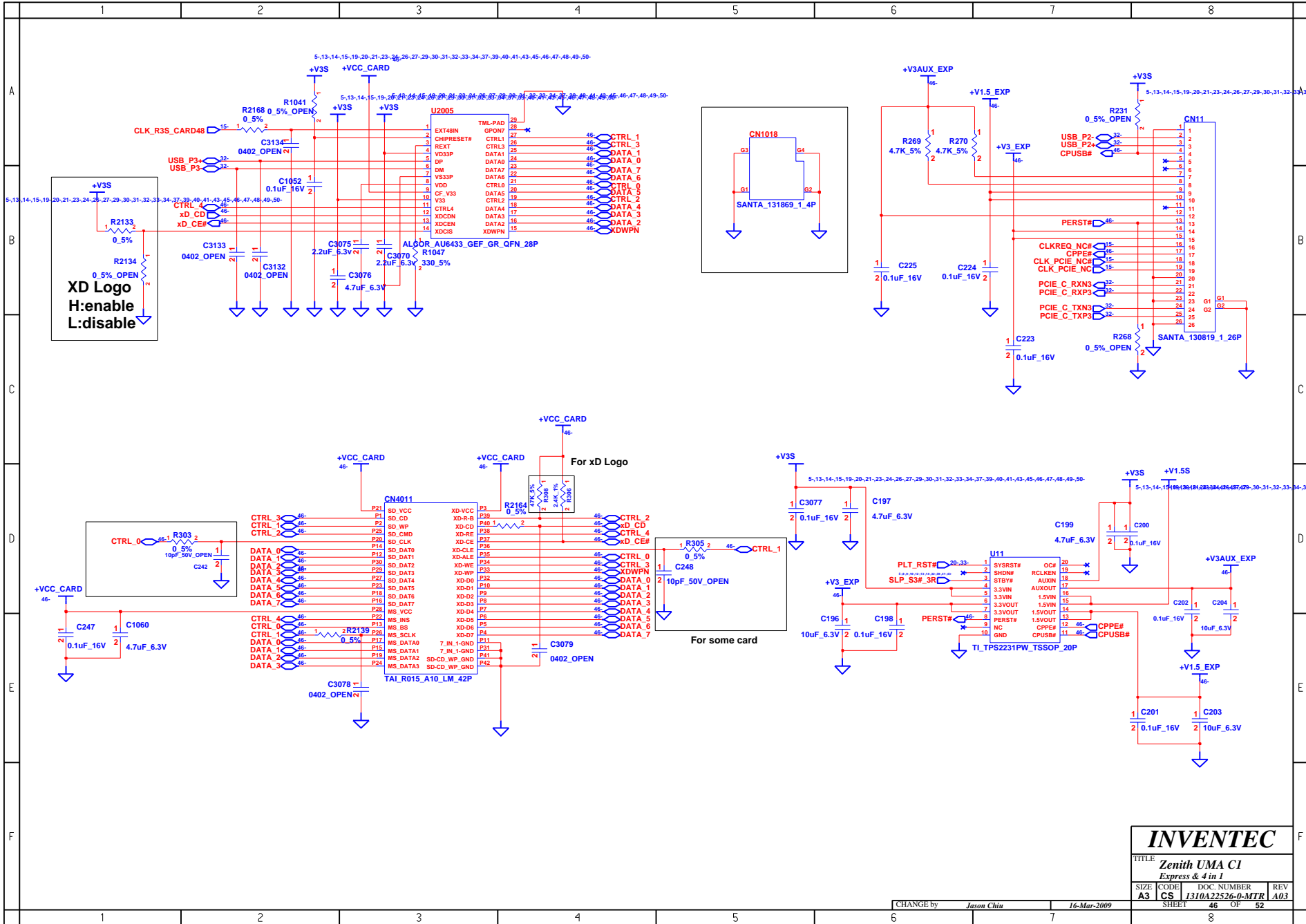


INVENTEC			
TITLE Zenith UMA C1 MINICARD & SIM CONN			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
		SHEET	45 OF 52



SIMCARD CNTR

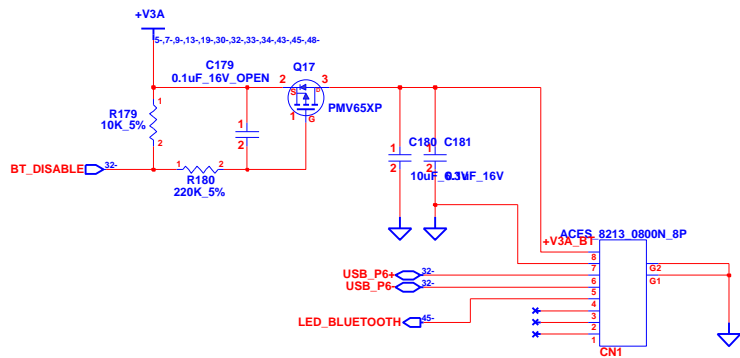
www.laptop-schematics.com



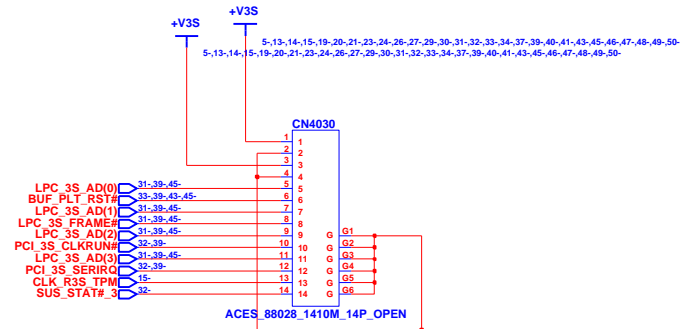
XD Logo
 H:enable
 L:disable

For some card

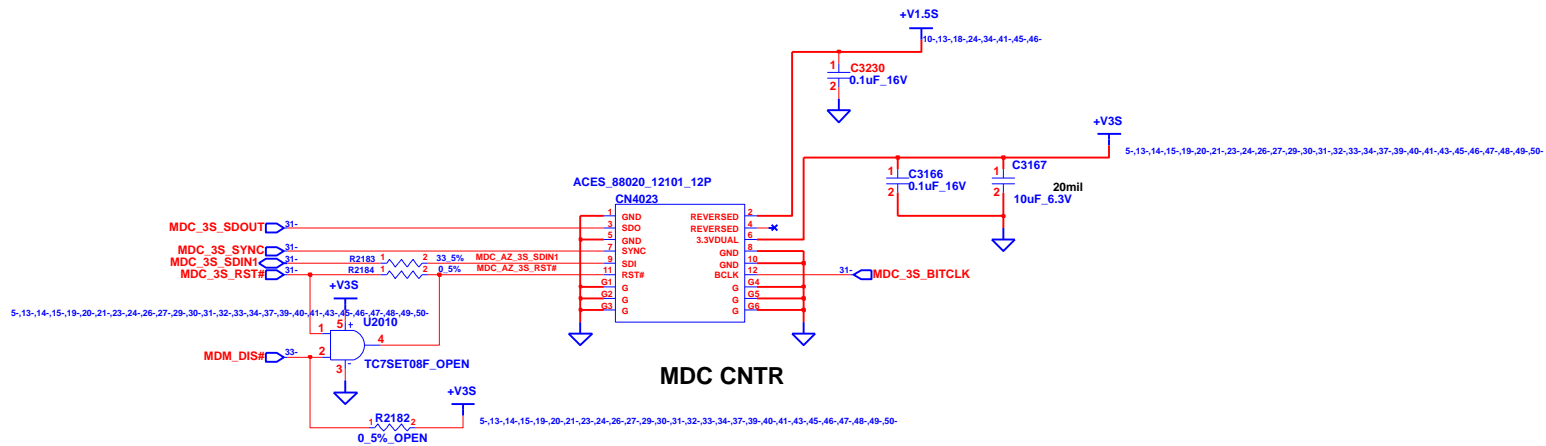
INVENTEC			
TITLE Zenith UMA C1			
Express & 4 in 1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A22526-0-MTR	A03
CHANGE by		Jason Chiu	16-Mar-2009
SHEET		46	OF 52



BLUETOOTH CNTR



TCM CONN

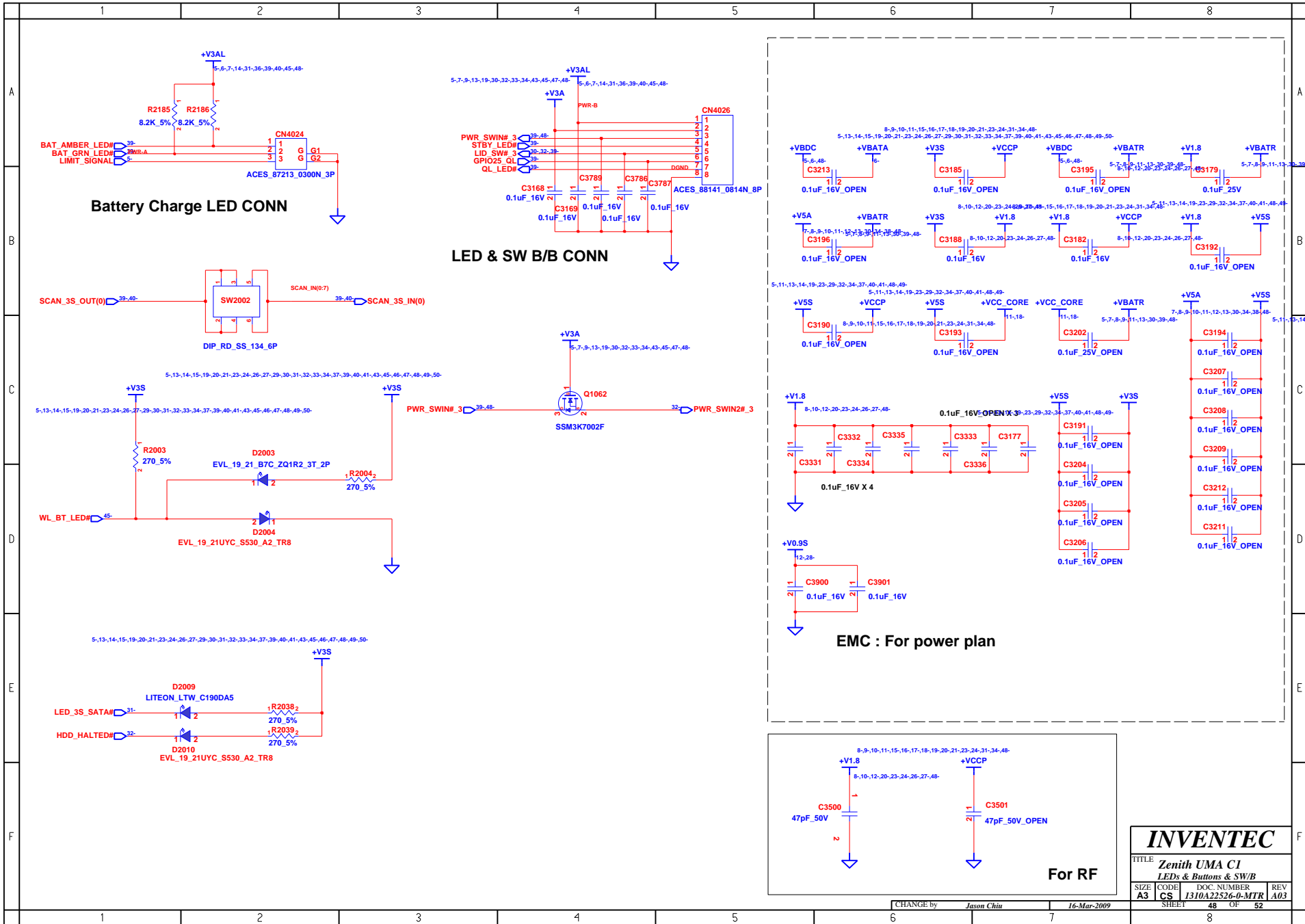


MDC CNTR

INVENTEC

TITLE			
Zenith UMA C1			
BT & MDC & TCM			
SIZE	CODE	DOC NUMBER	REV
A3	CS	I310A22526-0-MTR	A03
CHANGE by		SHEET	
Jason Chiu		47 OF 52	

16-Mar-2009



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INVENTEC

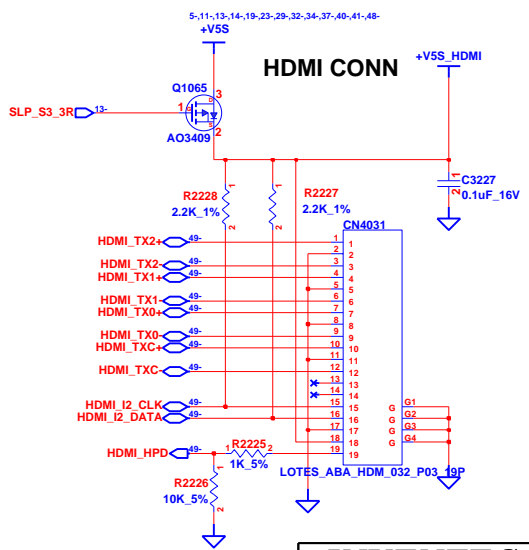
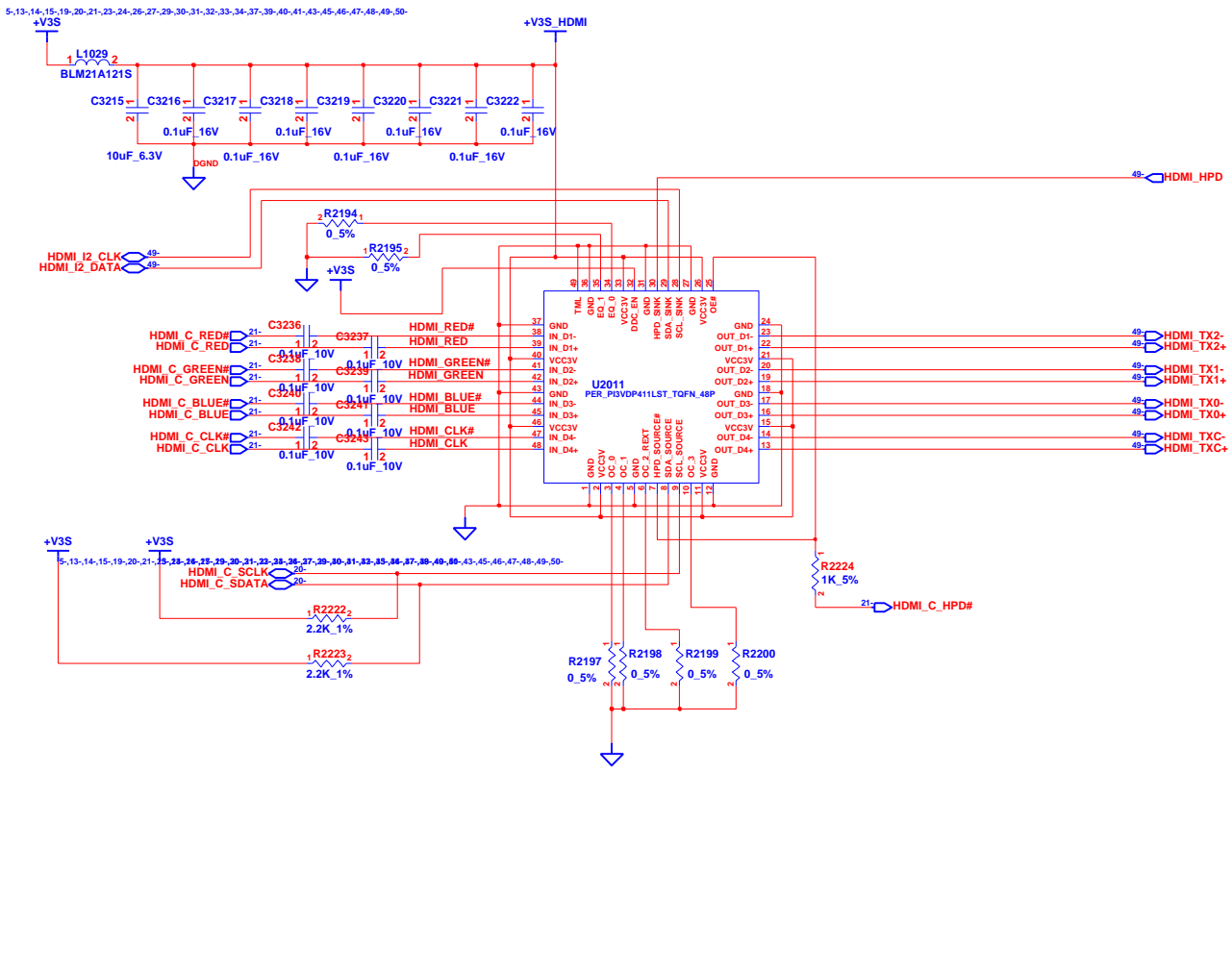
TITLE **Zenith UMA C1**
LEDs & Buttons & SW/B

SIZE	CODE	DOC NUMBER	REV
A3	CS	I310A22526-0-MTR	A03

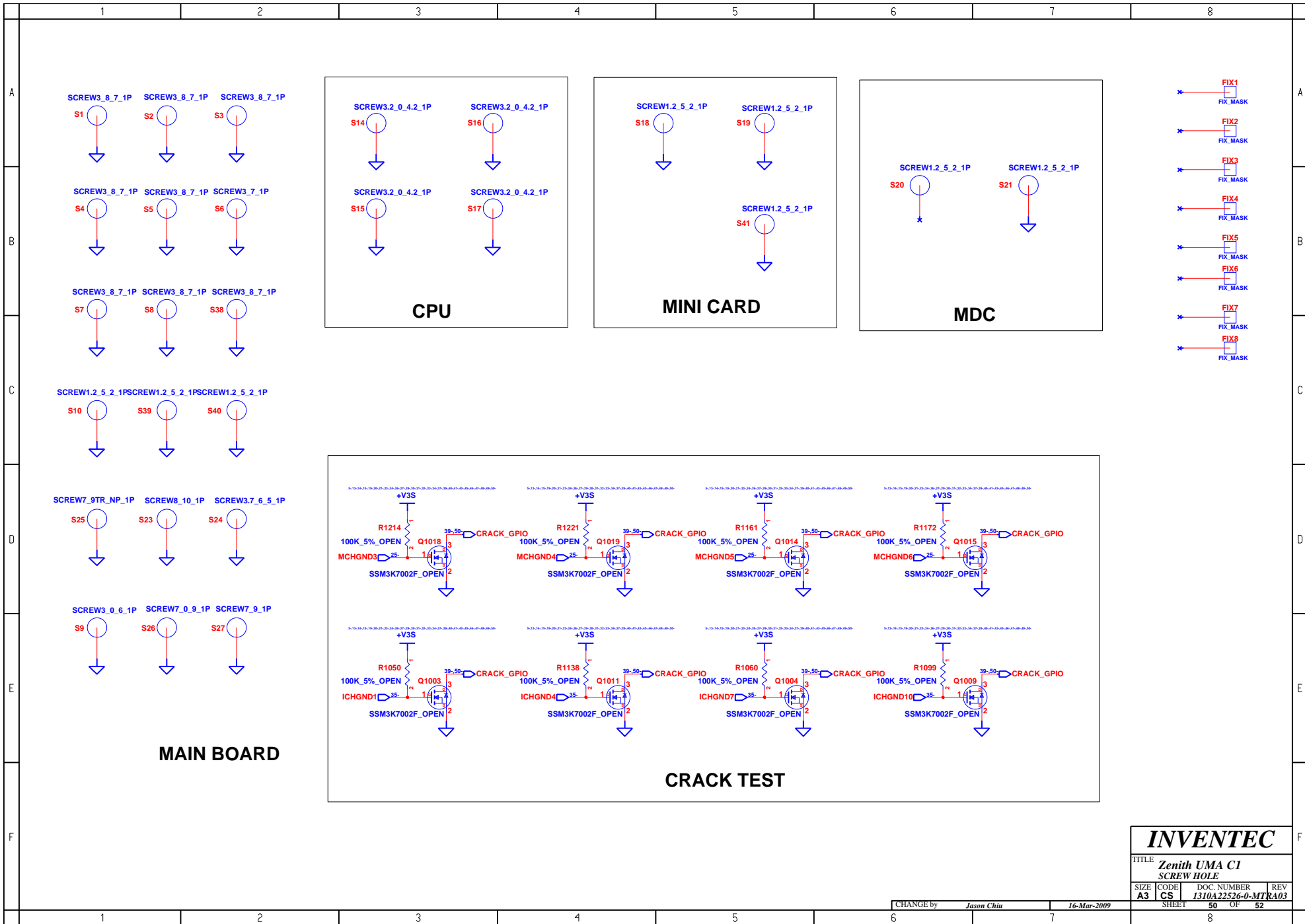
SHEET 48 OF 52

CHANGE by Jason Chiu 16-Mar-2009

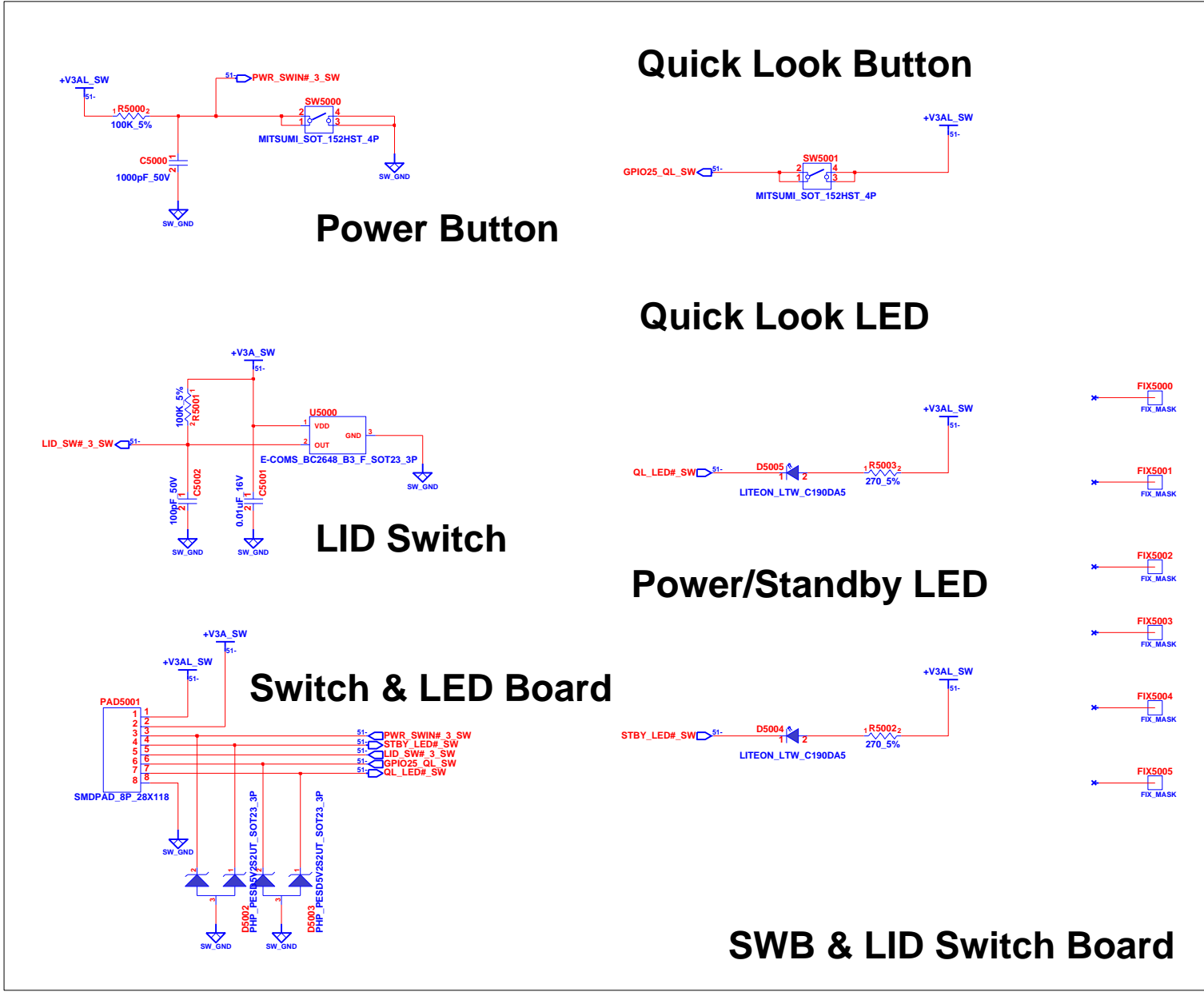
For RF



INVENTEC			
TITLE Zenith UMA C1			
HDMI CONN & LEVEL SHIFT			
SIZE A3	CODE CS	DOC NUMBER 1310A2326-0-MTR	REV A03
CHANGE by Jason Chiu		16-Mar-2009	
SHEET 49		OF 52	

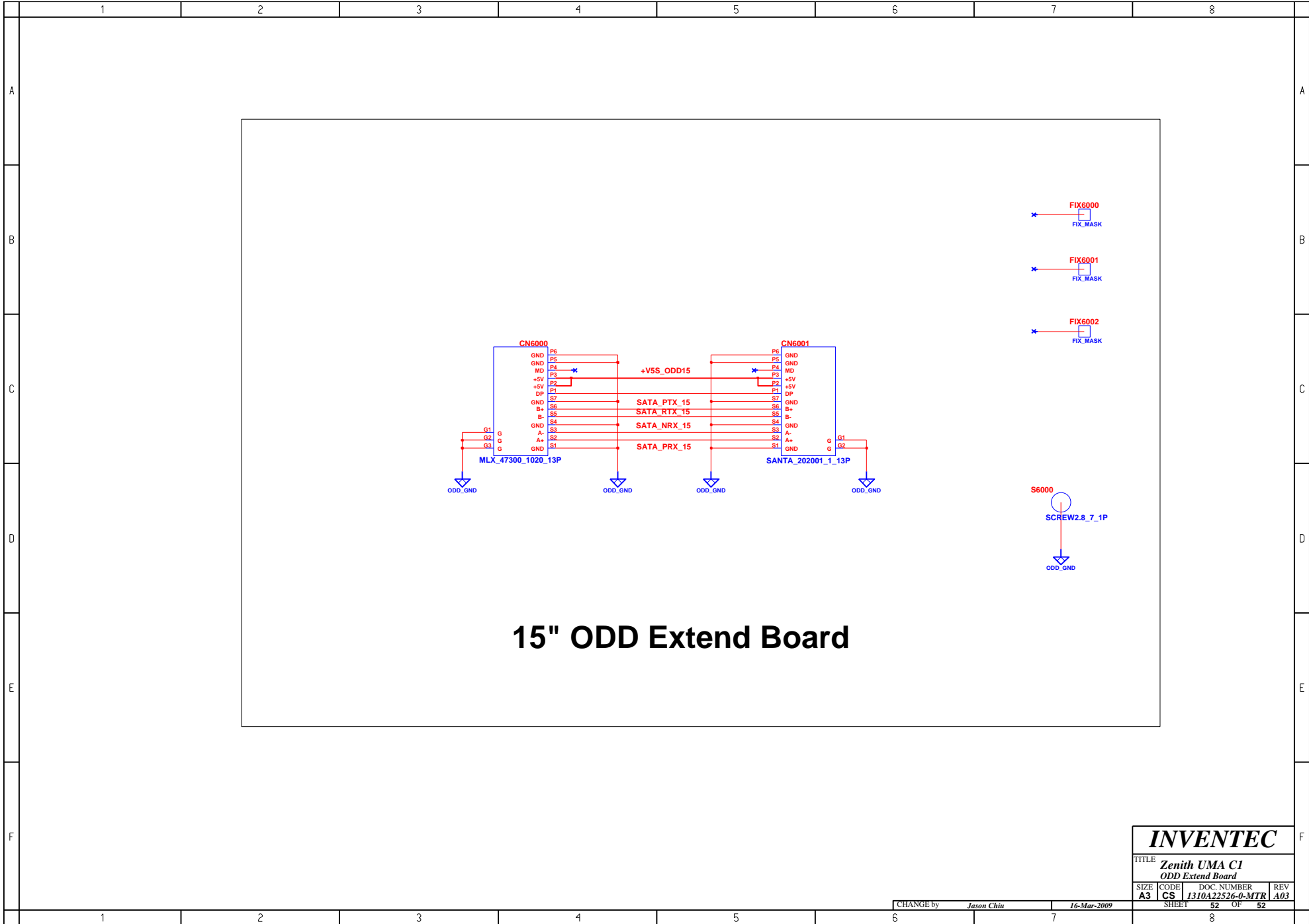


INVENTEC			
TITLE Zenith UMA C1 SCREW HOLE			
SIZE A3	CODE CS	DOC. NUMBER I310A2526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
SHEET 50		OF 52	



- ★ FIX5000
FIX_MASK
- ★ FIX5001
FIX_MASK
- ★ FIX5002
FIX_MASK
- ★ FIX5003
FIX_MASK
- ★ FIX5004
FIX_MASK
- ★ FIX5005
FIX_MASK

INVENTEC			
TITLE Zenith UMA C1 SWB & LID Switch			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
SHEET 51		OF 52	



15" ODD Extend Board

INVENTEC

TITLE *Zenith UMA C1
ODD Extend Board*

SIZE A3	CODE CS	DOC NUMBER <i>1310A22526-0-MTR</i>	REV A03
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CHANGE by *Jason Chiu* 16-Mar-2009

SHEET 52 OF 52