

Zenith UMA

Cycle 1

MV BUILD

2009.03.18

DatasetLive

DATE	CHANGE NO.	REV

DRAWER	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 310A22526-0-MTR A03
P/N	XXXXXXXXXXXX				SHEET 1 OF 52

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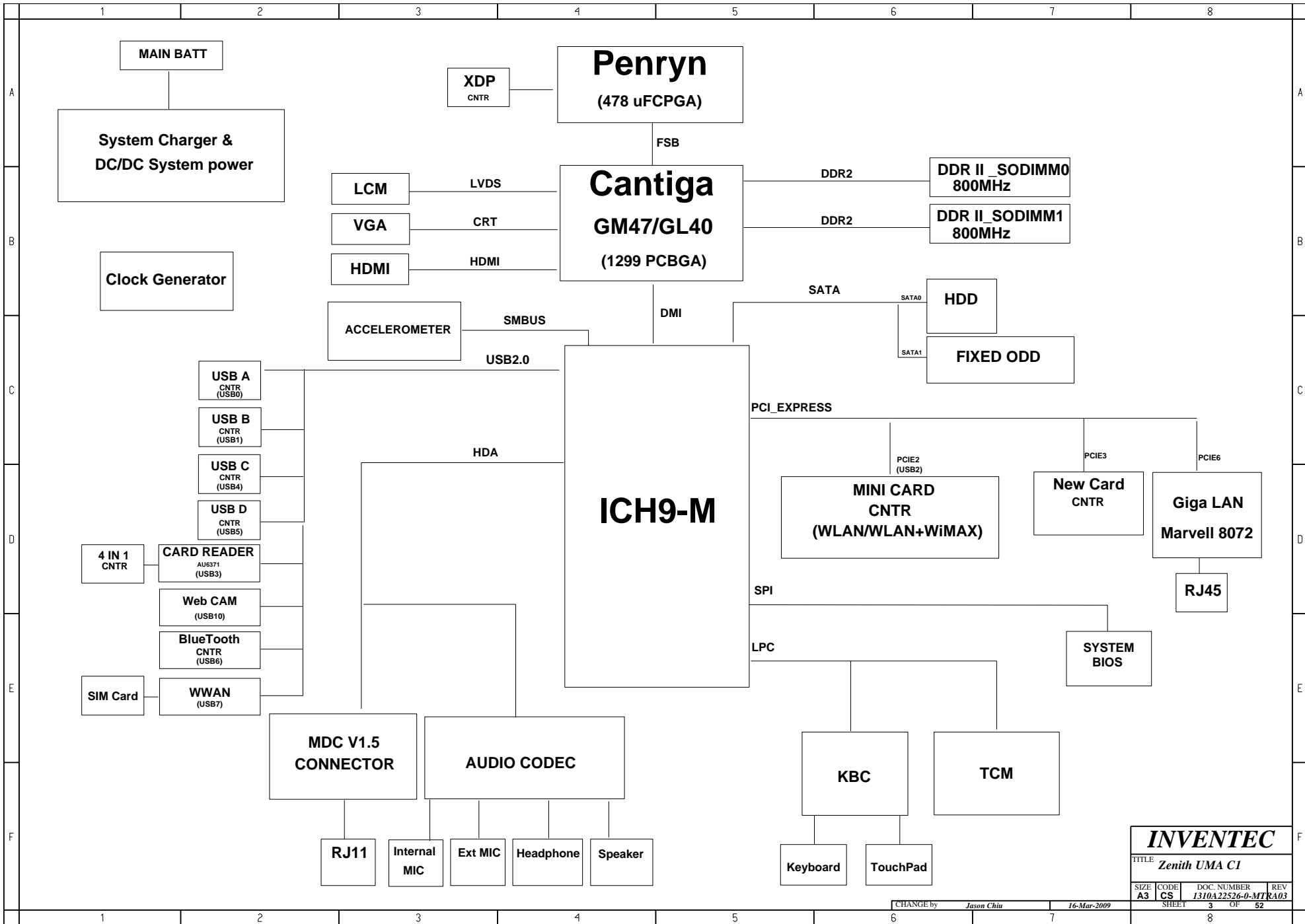
PAGE	PAGE	PAGE
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6- SELECT & BATTERY CONN	16- PENRYN-1	37- HDD&ODD CNTR
7- SYSTEM POWER(3V/5V)	17- PENRYN-2	38- USB CNTR
8- SYSTEM POWER(+V1.8/+V1.25S)	18- PENRYN-3	39- KBC
9- SYSTEM POWER(+VGFX/+VCCP)	19- THERMAL&FAN CONTROLLER	40- KB&TP CNTR
10- SYSTEM 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
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	32- ICH9-2	
	33- ICH9-3	
	34- ICH9-4	
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INVENTEC

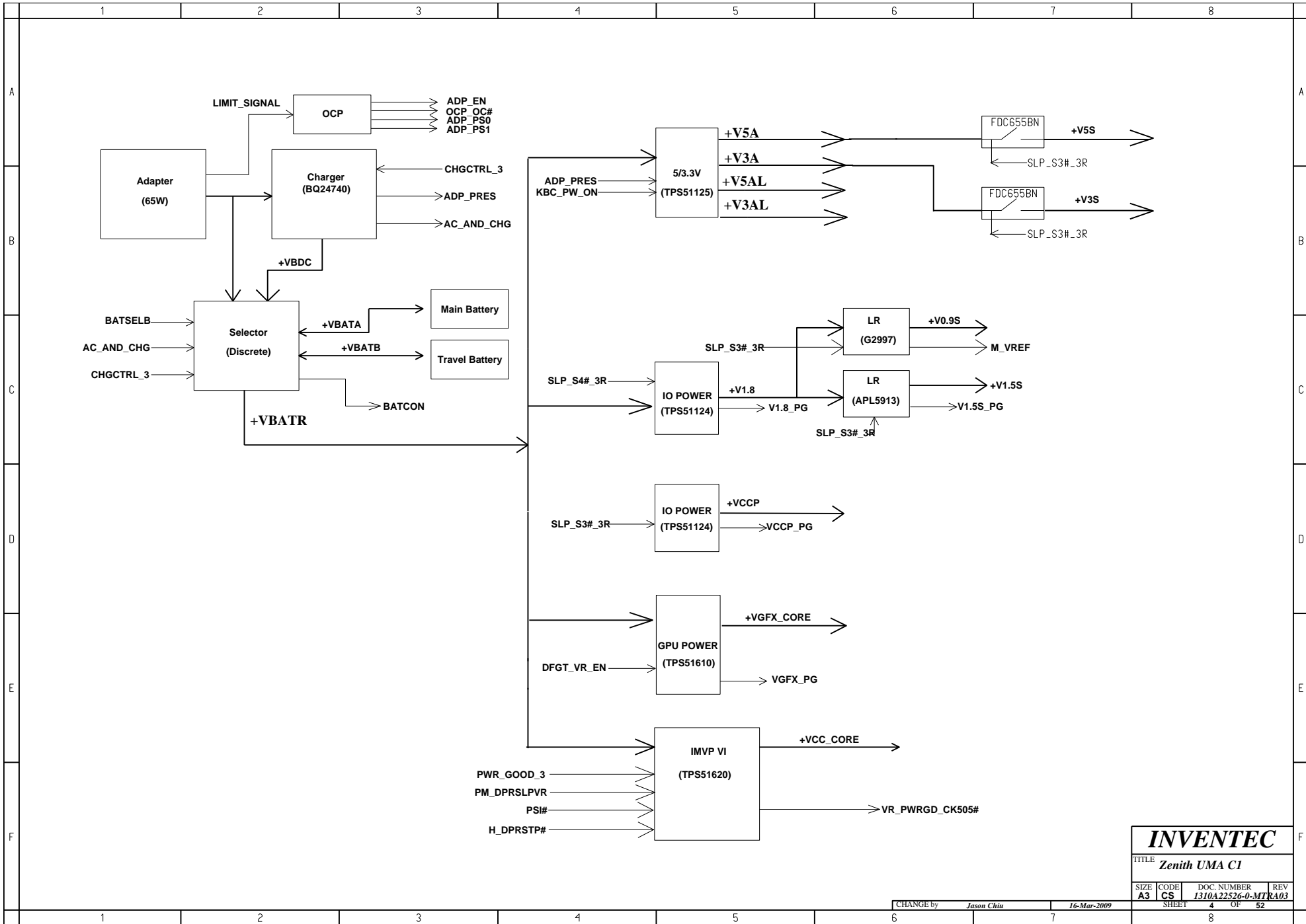
TITLE *Zenith UMA C1*

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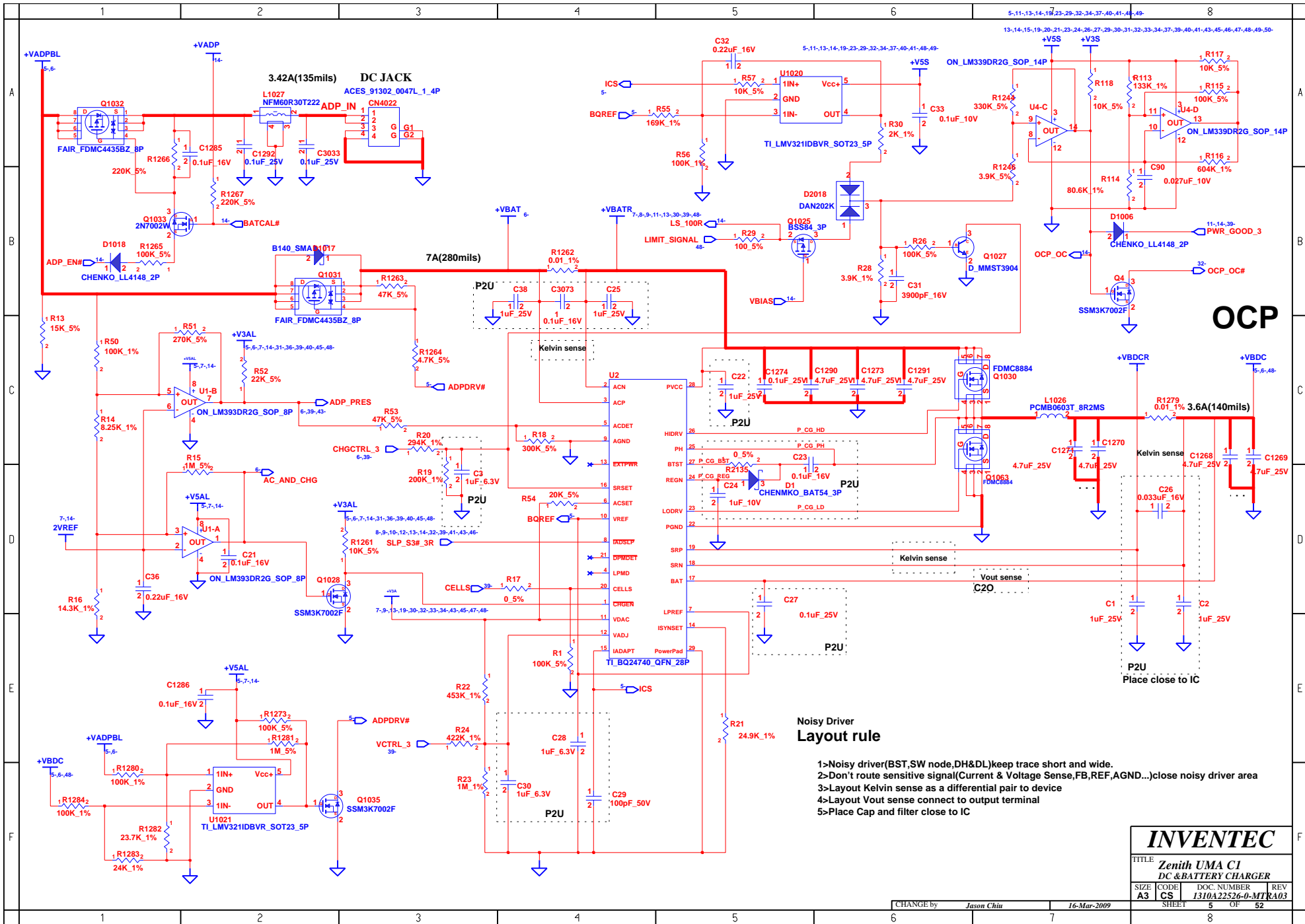
CHANGE by *Jason Chiu* 16-Mar-2009



INVENTEC			
TITLE <i>Zenith UMA C1</i>			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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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	SHEET 4 OF 52

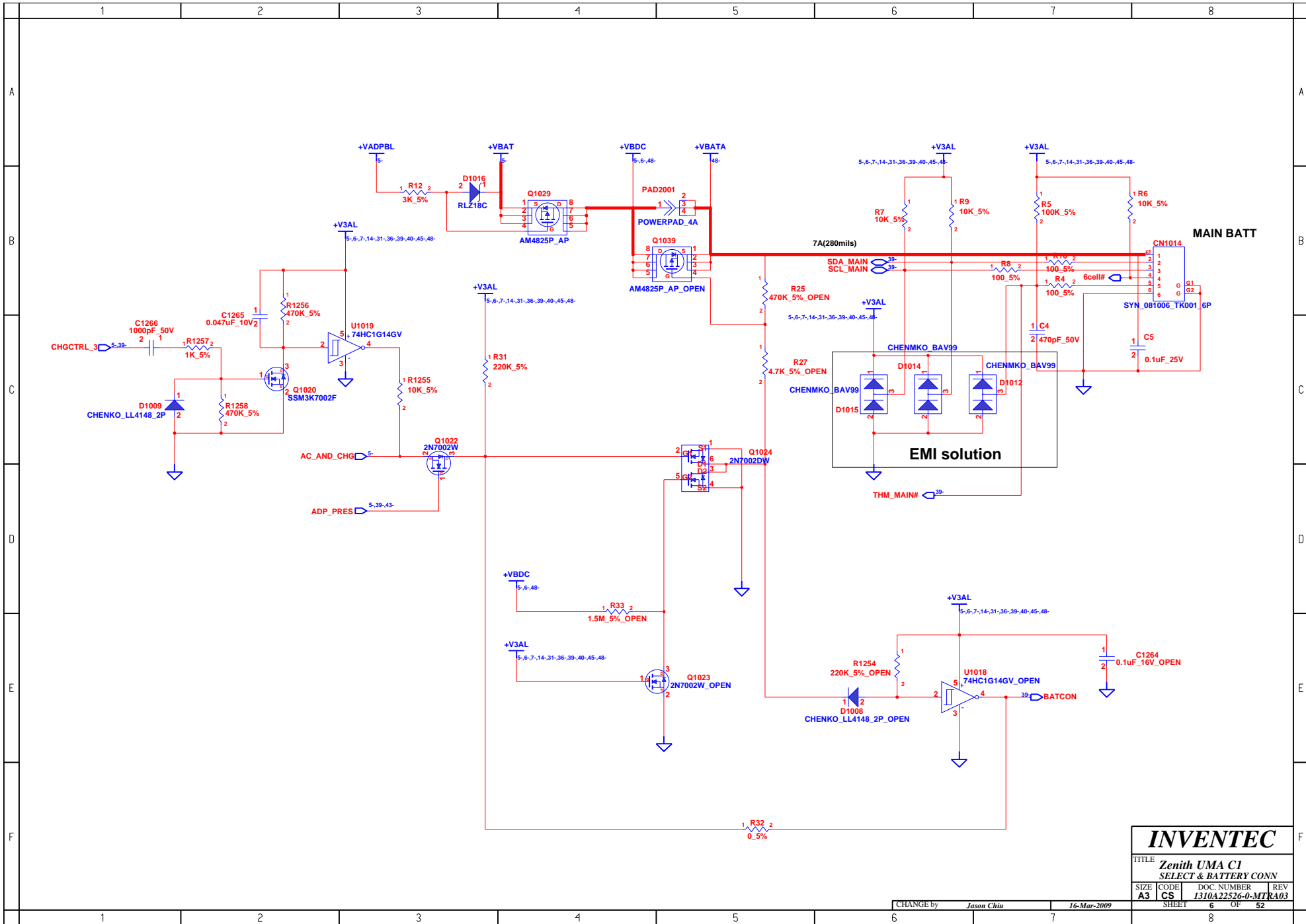


OCP

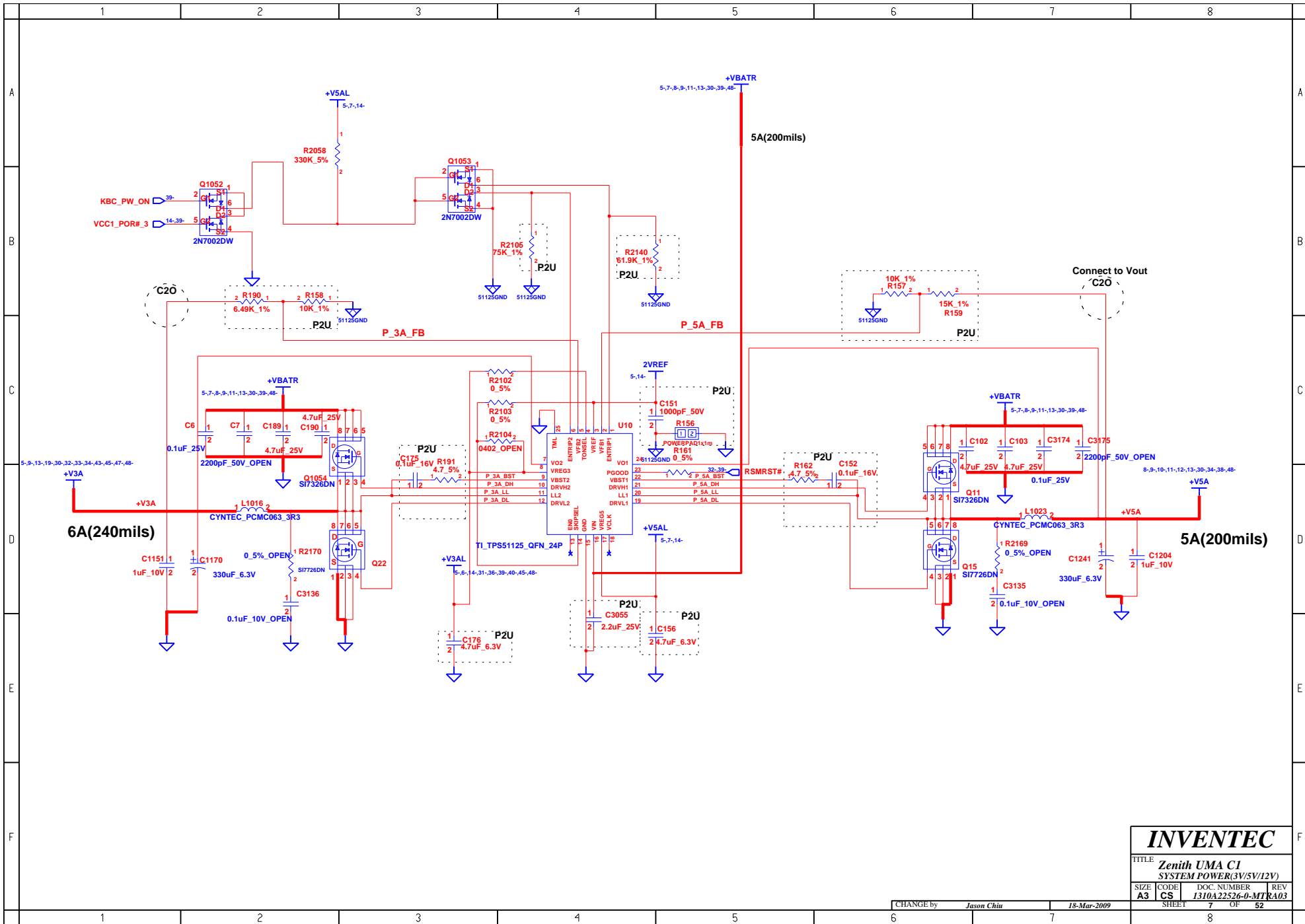
**Noisy Driver
Layout rule**

- 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 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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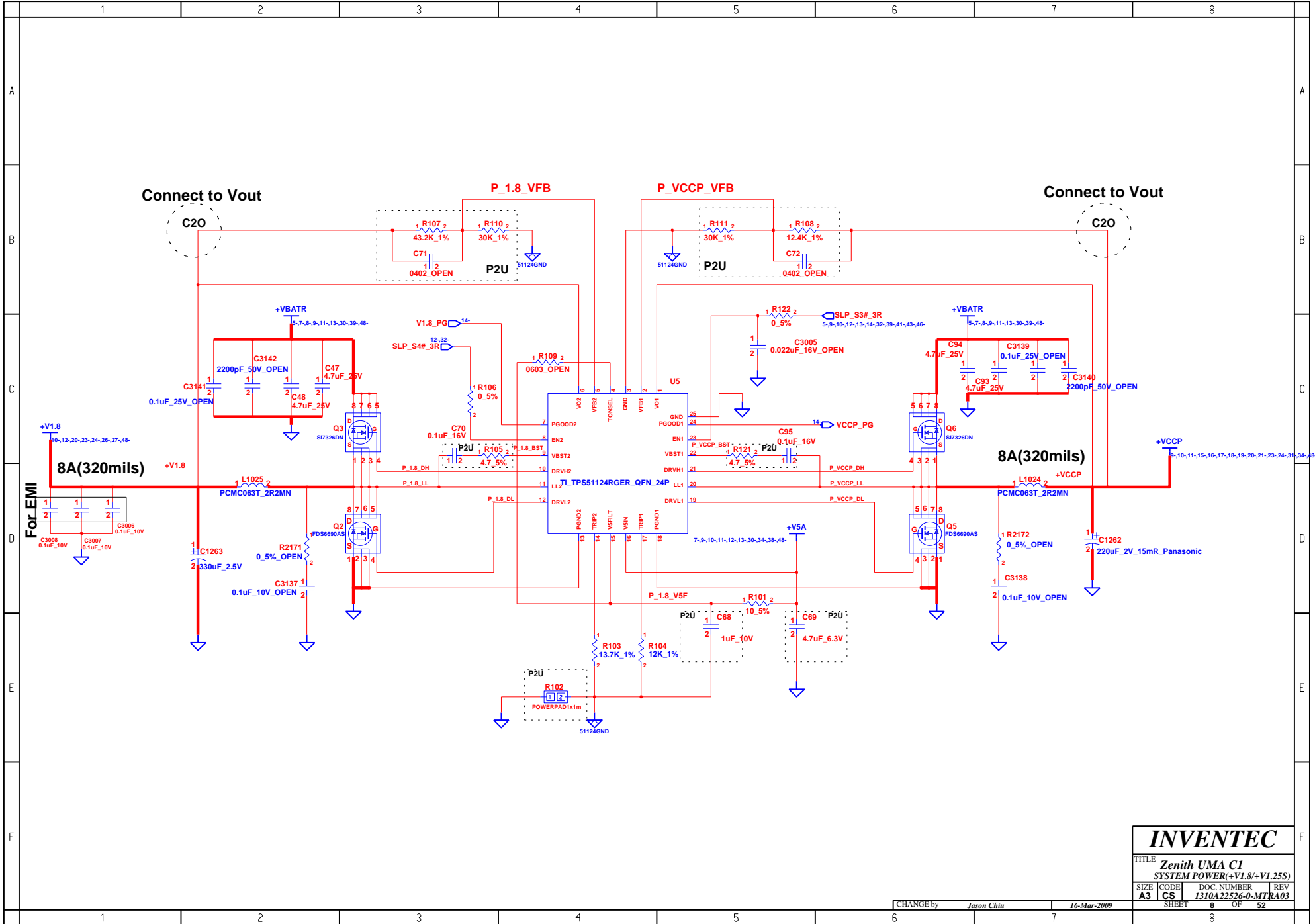
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SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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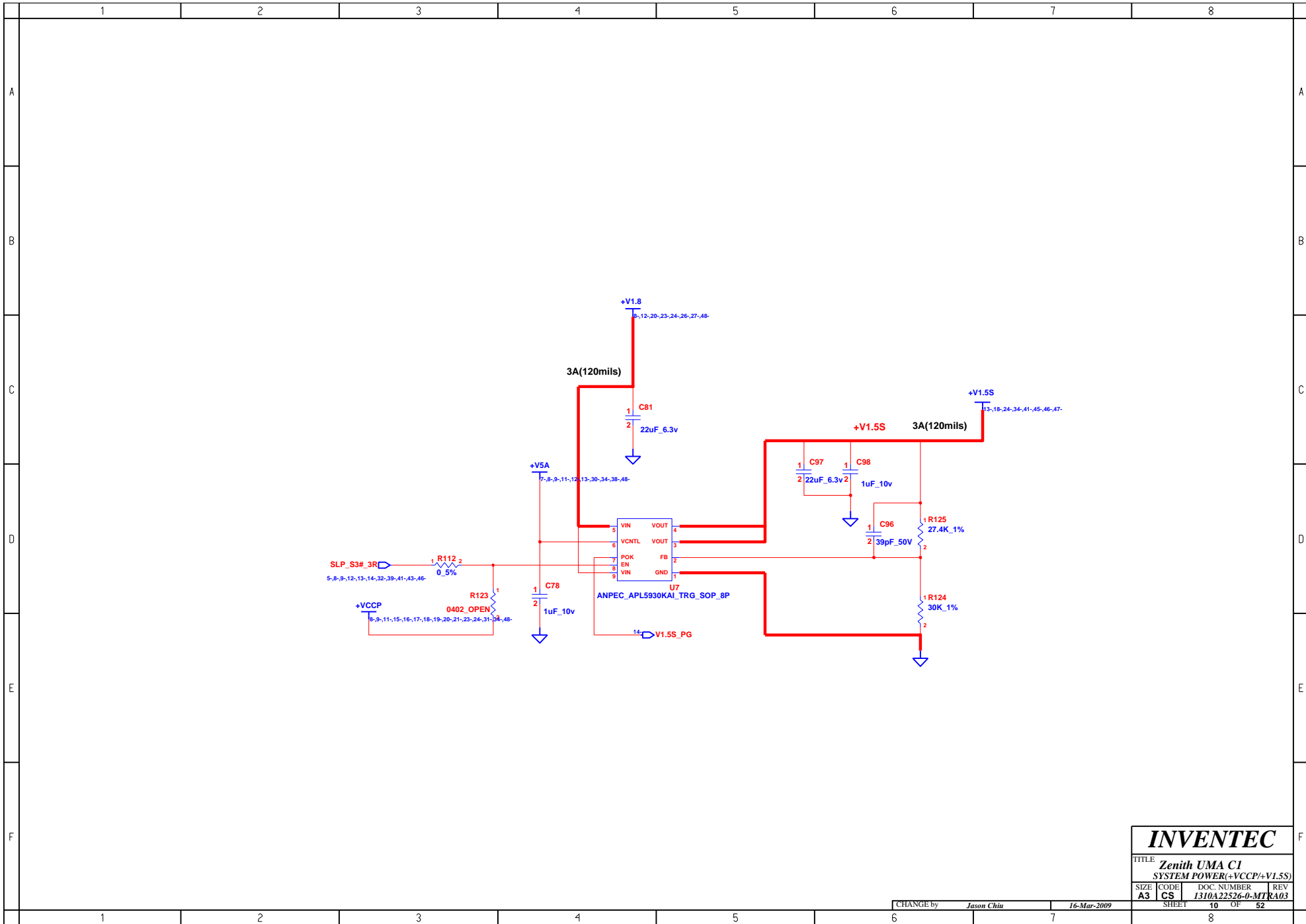
INVENTEC

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

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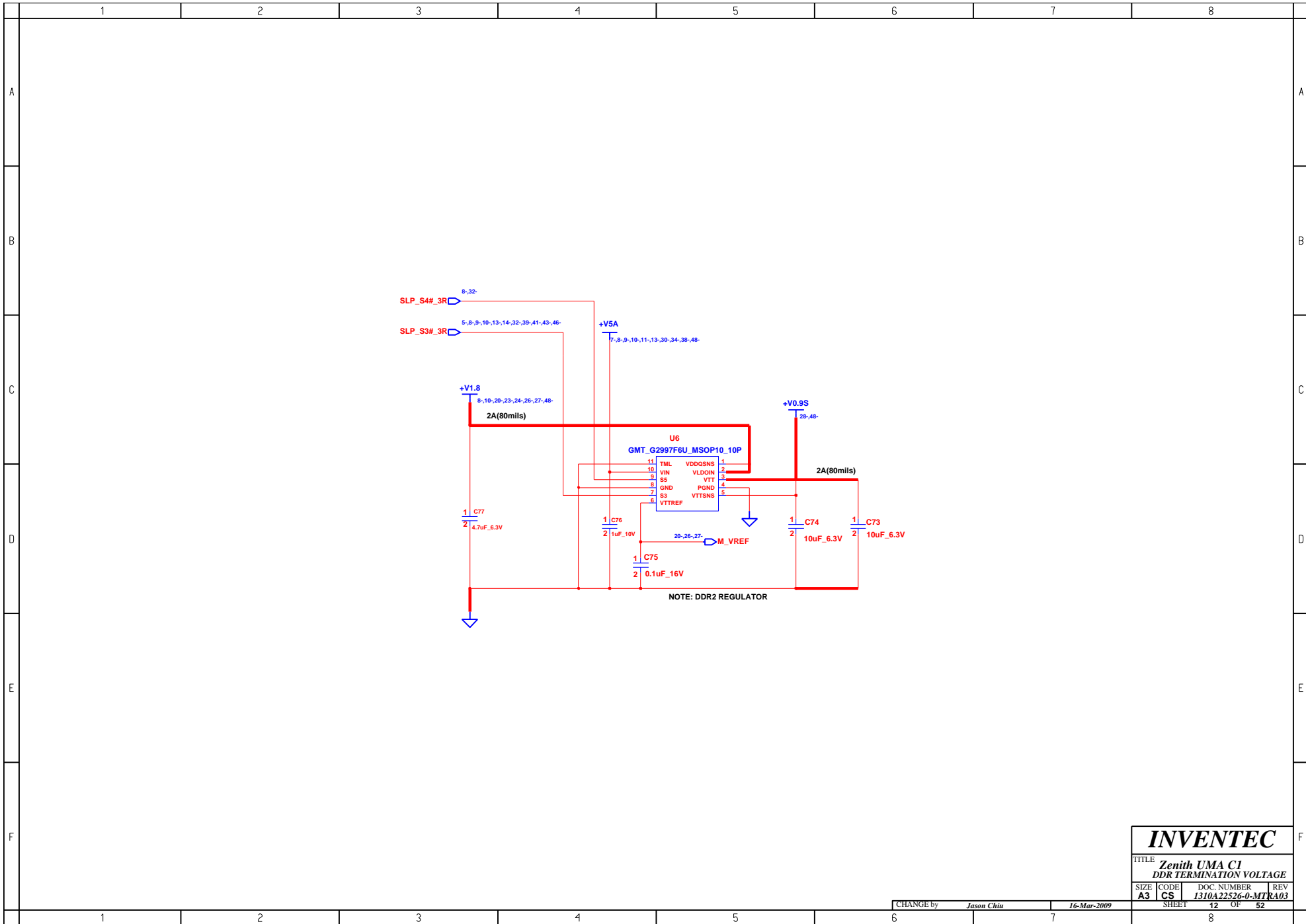
INVENTEC

TITLE **Zenith UMA C1**
SYSTEM POWER(+VCCP/+V1.5S)

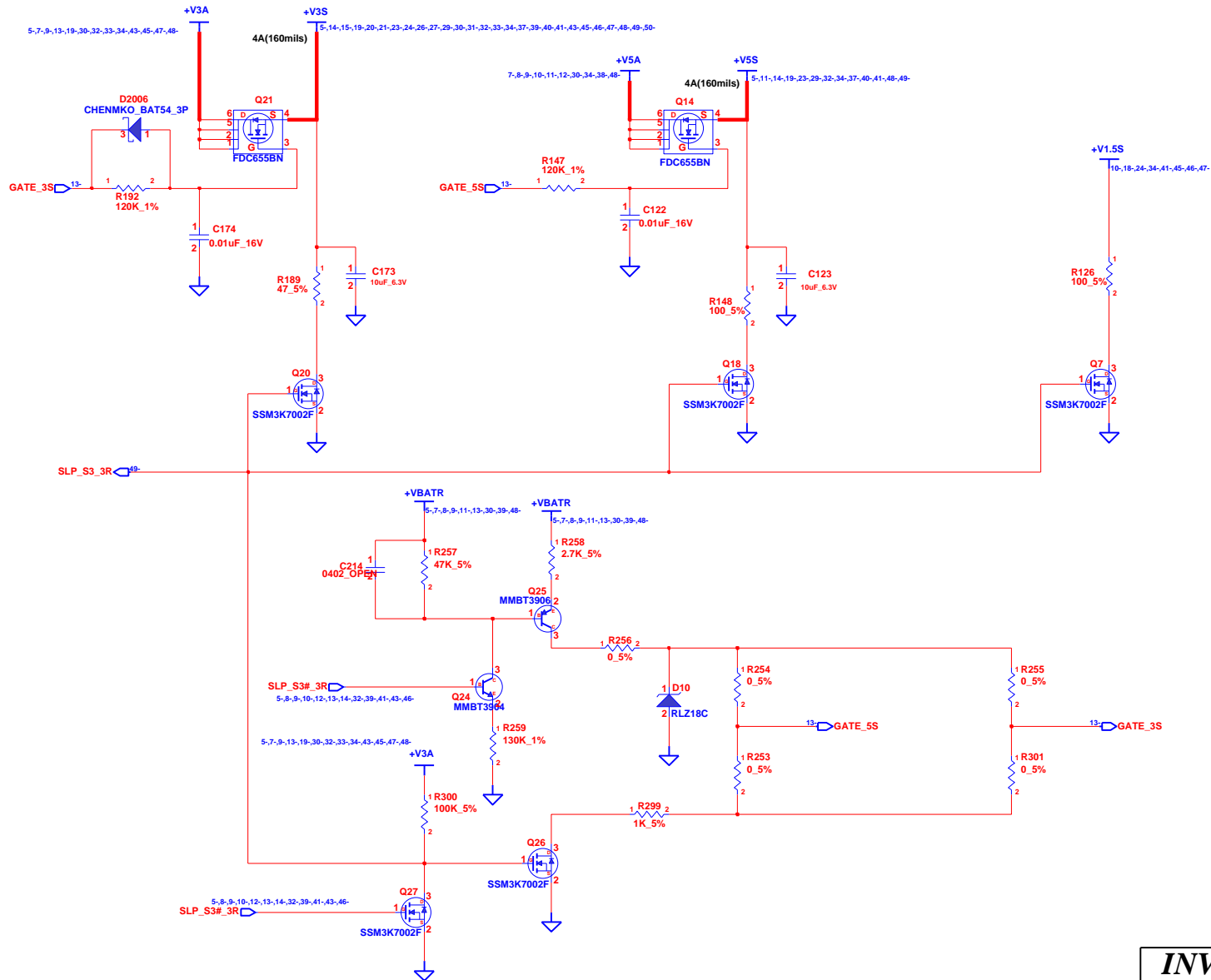
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CHANGE by *Jason Chiu* 16-Mar-2009

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INVENTEC			
TITLE Zenith UMA C1			
DDR TERMINATION VOLTAGE			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22526-0-MT	R03
CHANGE by		SHEET	OF
Jason Chiu		12	52
16-Mar-2009			



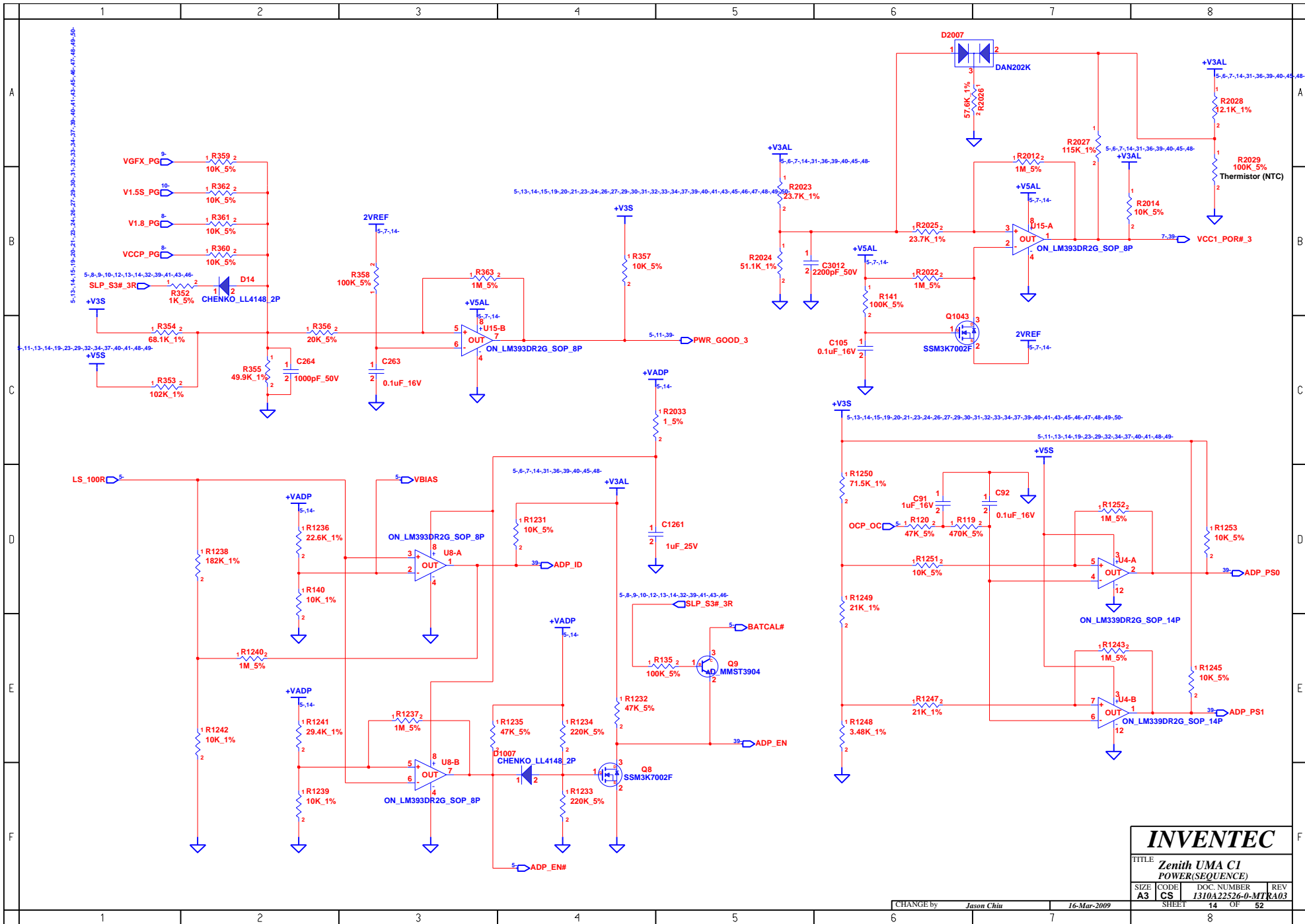
INVENTEC

TITLE
**Zenith UMA C1
 POWER(SLEEP)**

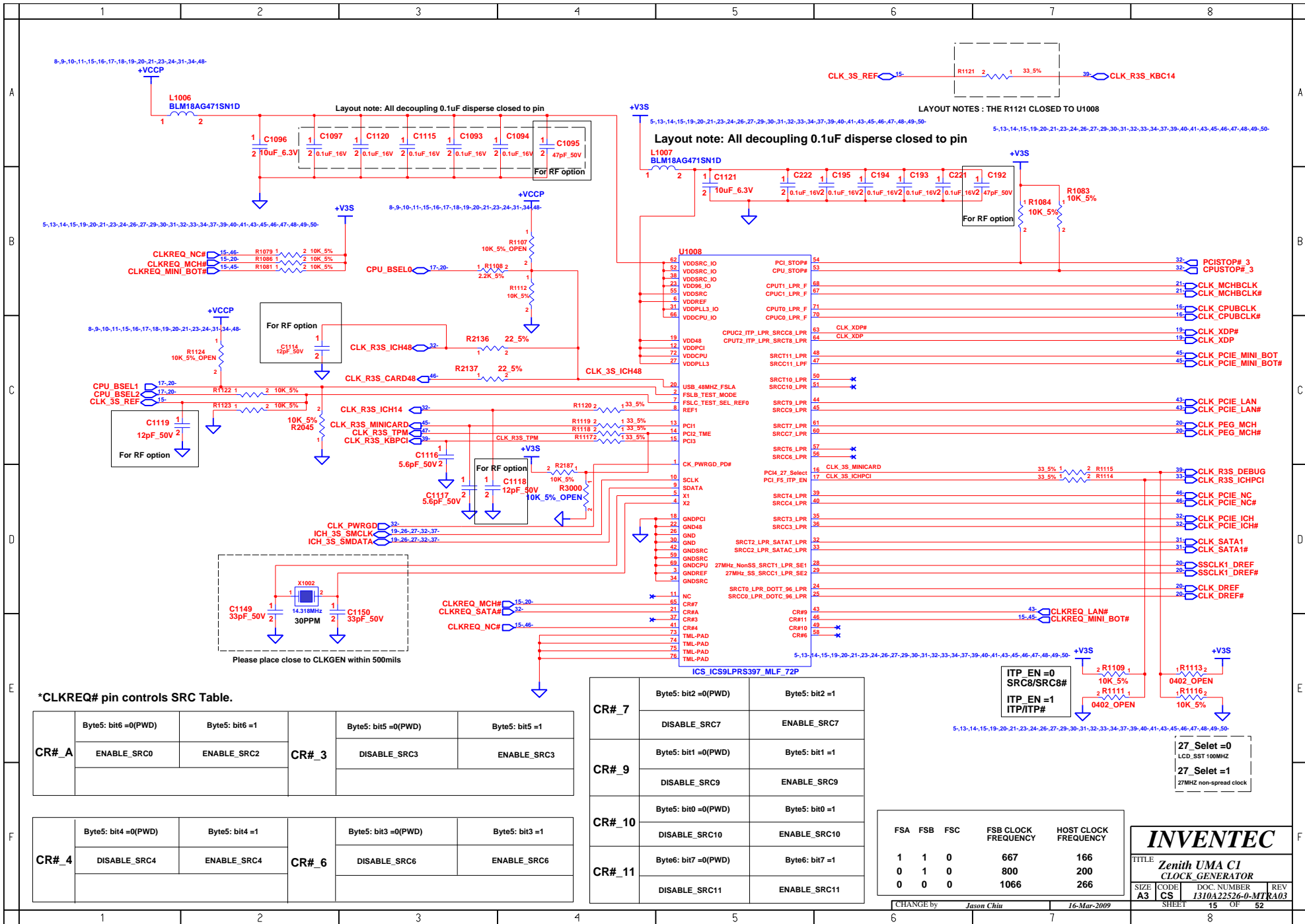
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
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CHANGE by *Jason Chiu* 16-Mar-2009

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INVENTEC			
TITLE Zenith UMA C1 POWER(SEQUENCE)			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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*CLKREQ# pin controls SRC Table.

CR#_A	Byte5: bit6 =0(PWD)	Byte5: bit6 =1	CR#_3	Byte5: bit5 =0(PWD)	Byte5: bit5 =1
	ENABLE_SRC0	ENABLE_SRC2		DISABLE_SRC3	ENABLE_SRC3

CR#_4	Byte5: bit4 =0(PWD)	Byte5: bit4 =1	CR#_6	Byte5: bit3 =0(PWD)	Byte5: bit3 =1
	DISABLE_SRC4	ENABLE_SRC4		DISABLE_SRC6	ENABLE_SRC6

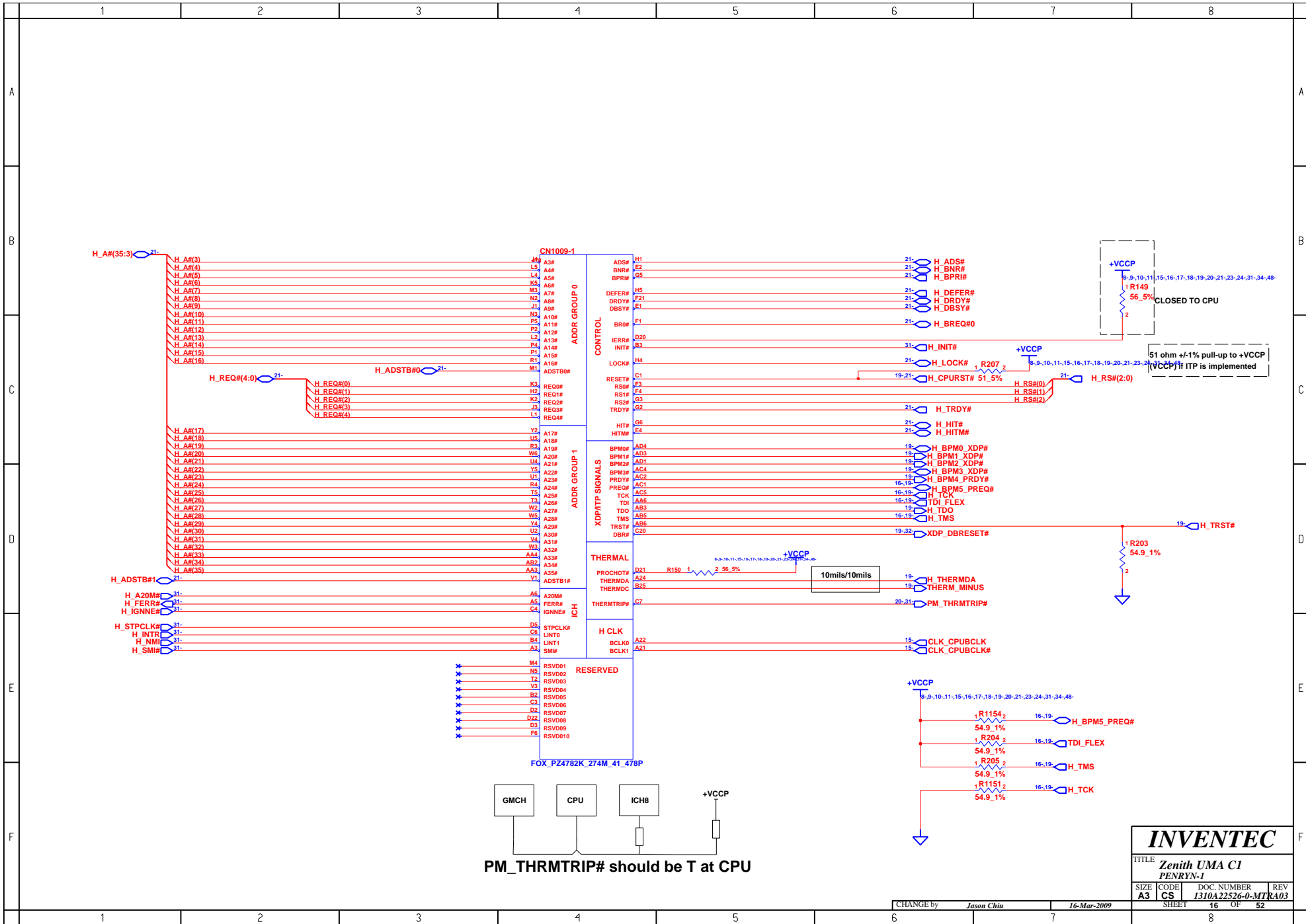
CR#_7	Byte5: bit2 =0(PWD)	Byte5: bit2 =1
	DISABLE_SRC7	ENABLE_SRC7
CR#_9	Byte5: bit1 =0(PWD)	Byte5: bit1 =1
	DISABLE_SRC9	ENABLE_SRC9
CR#_10	Byte5: bit0 =0(PWD)	Byte5: bit0 =1
	DISABLE_SRC10	ENABLE_SRC10
CR#_11	Byte6: bit7 =0(PWD)	Byte6: bit7 =1
	DISABLE_SRC11	ENABLE_SRC11

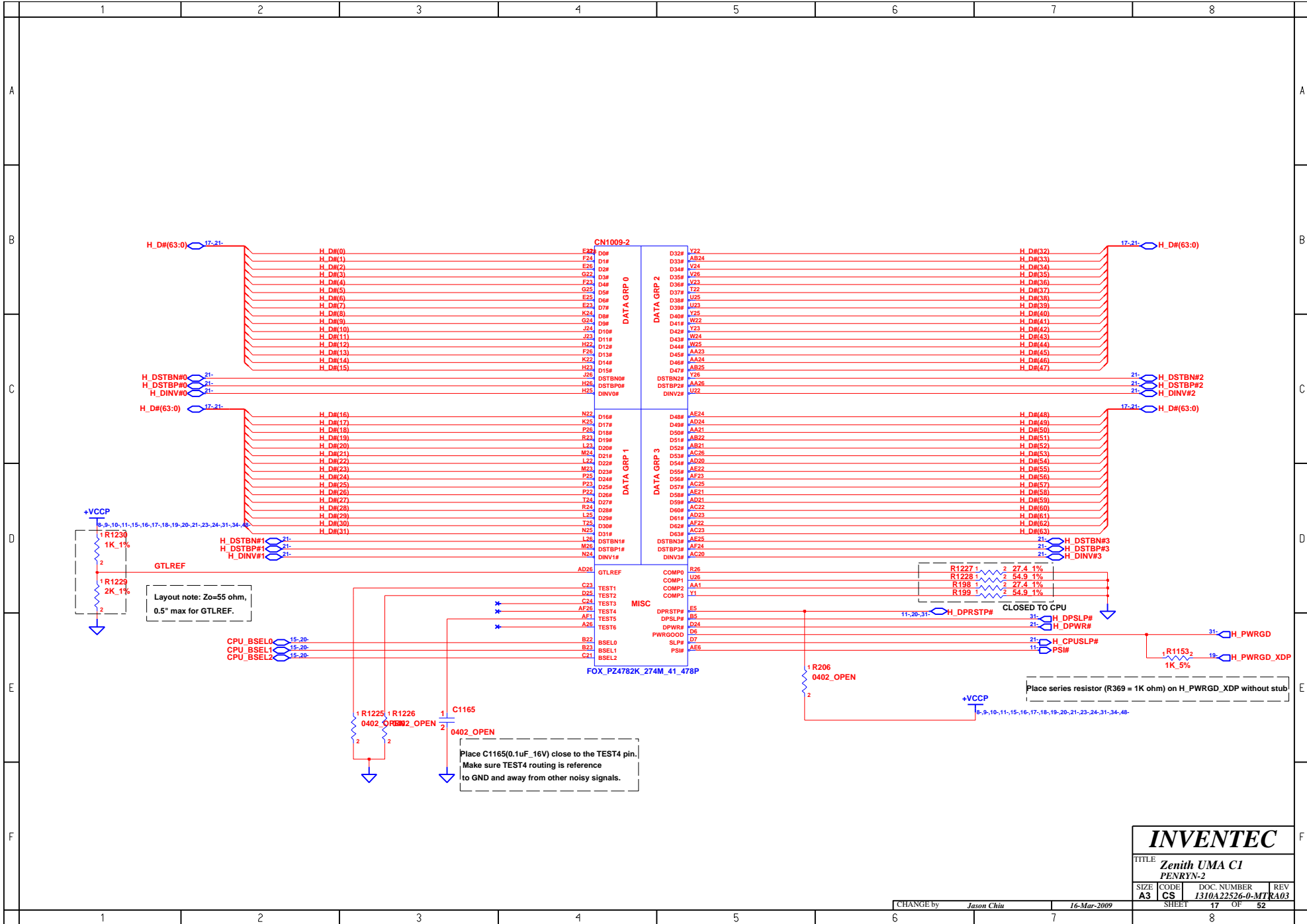
FSA	FSB	FSC	FSB CLOCK FREQUENCY	HOST CLOCK FREQUENCY
1	1	0	667	166
0	1	0	800	200
0	0	0	1066	266

INVENTEC

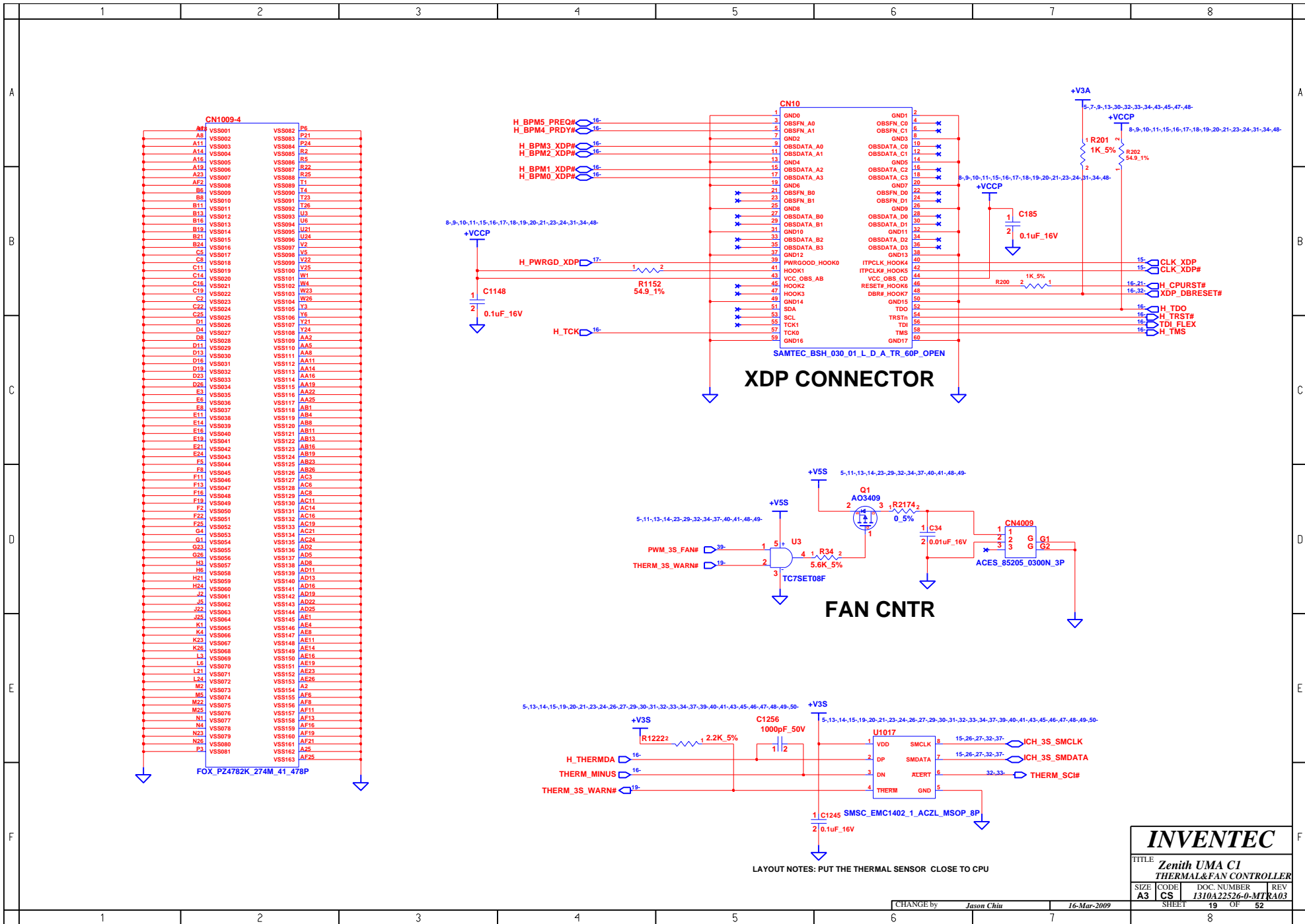
TITLE: **Zenith UMA C1**
CLOCK GENERATOR

SIZE: A3 CODE: CS DOC. NUMBER: 1310A22526-0-MTR A03 REV: 15 OF 52





INVENTEC			
TITLE Zenith UMA C1 PENRYN-2			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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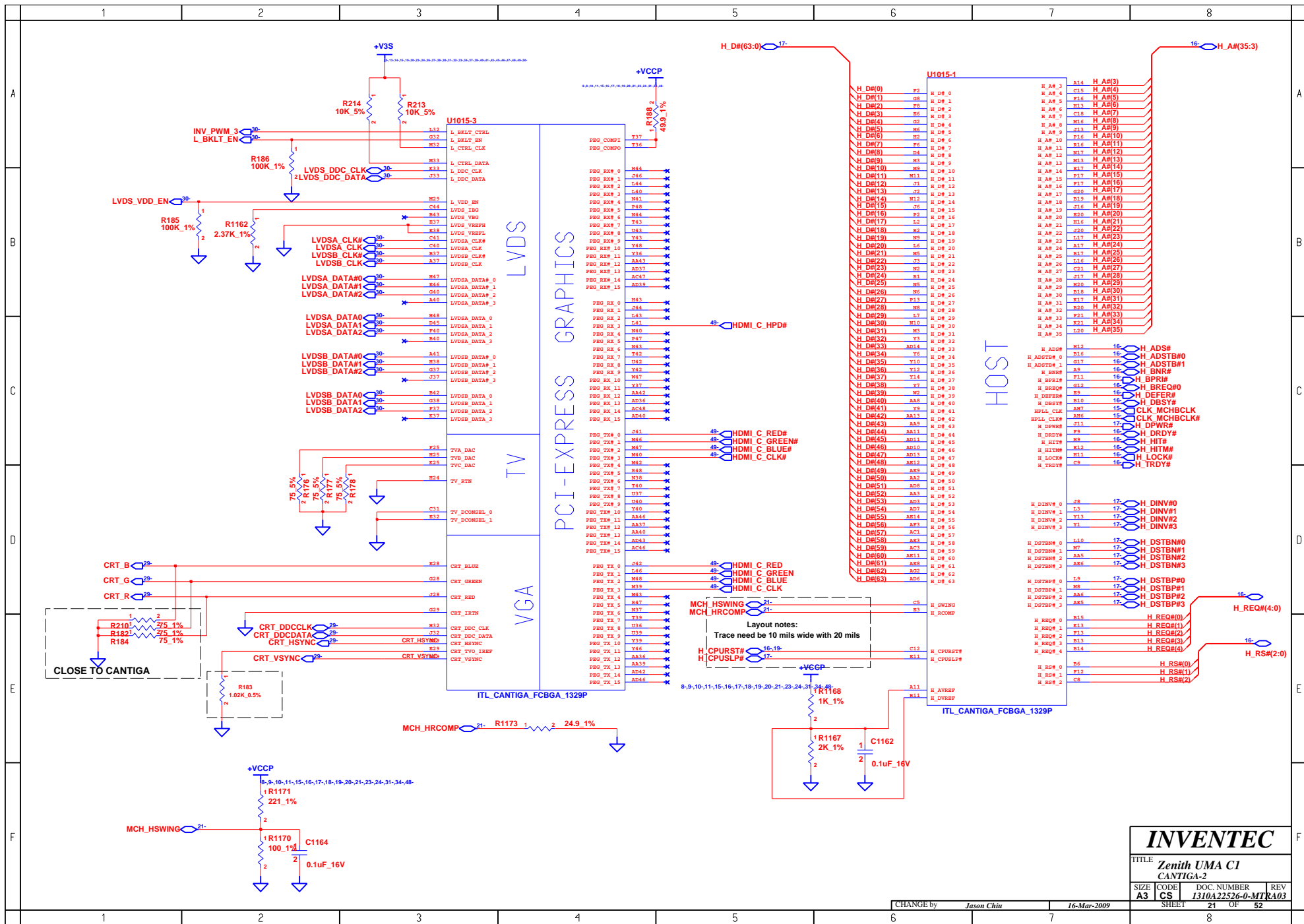


XDP CONNECTOR

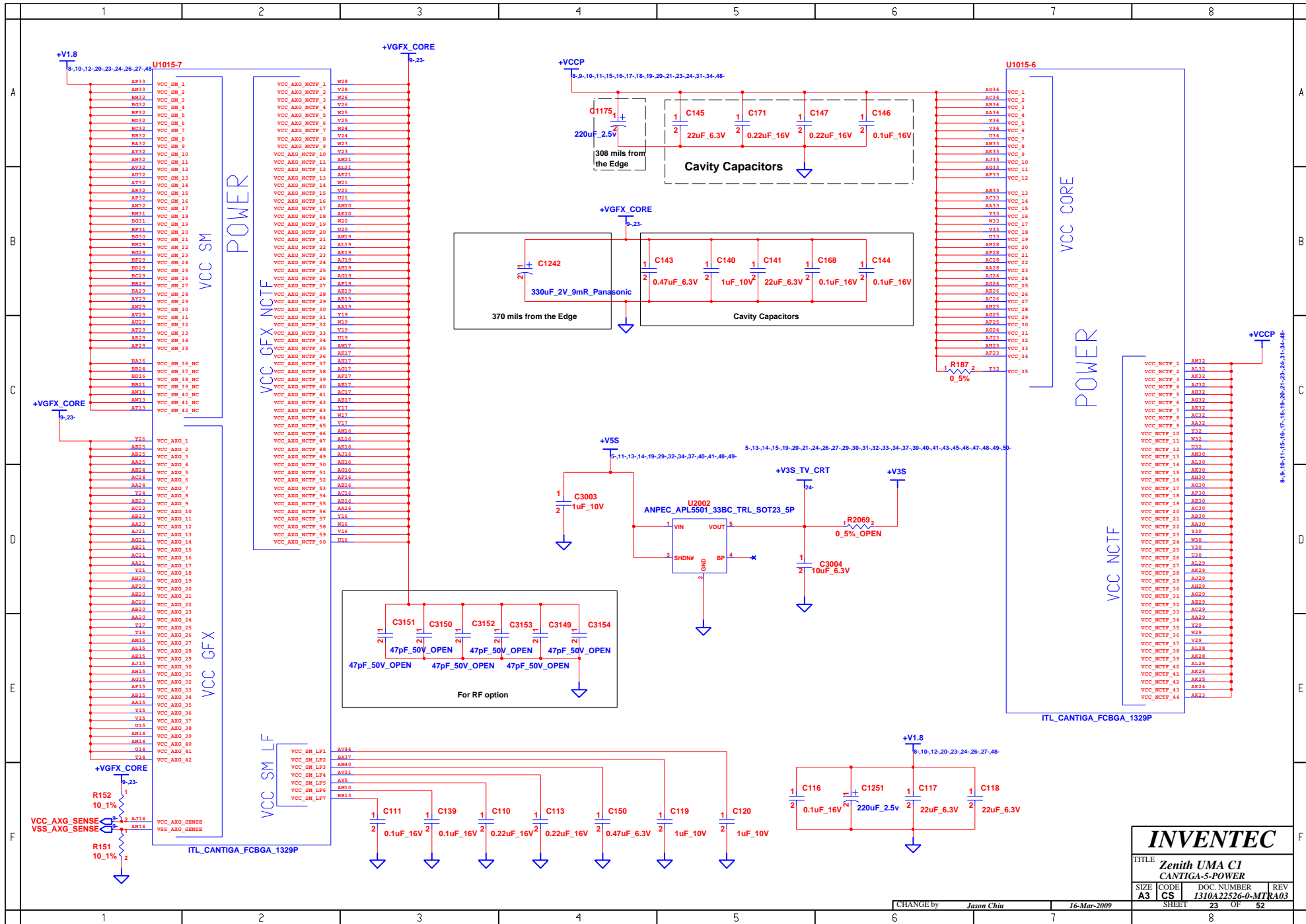
FAN CNTR

LAYOUT NOTES: PUT THE THERMAL SENSOR CLOSE TO CPU

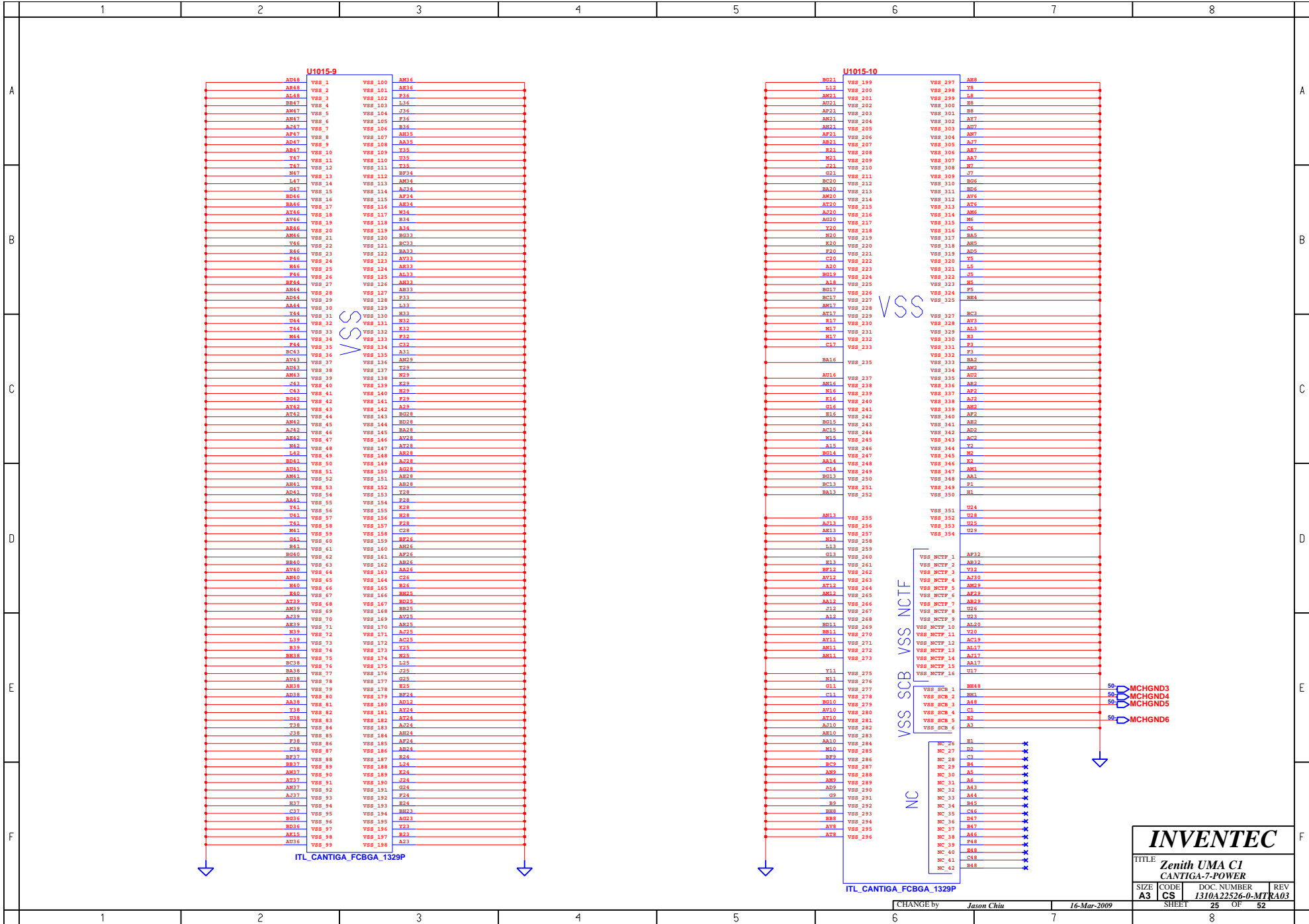
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TITLE Zenith UMA C1 THERMAL&FAN CONTROLLER			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MITRA03	REV 19
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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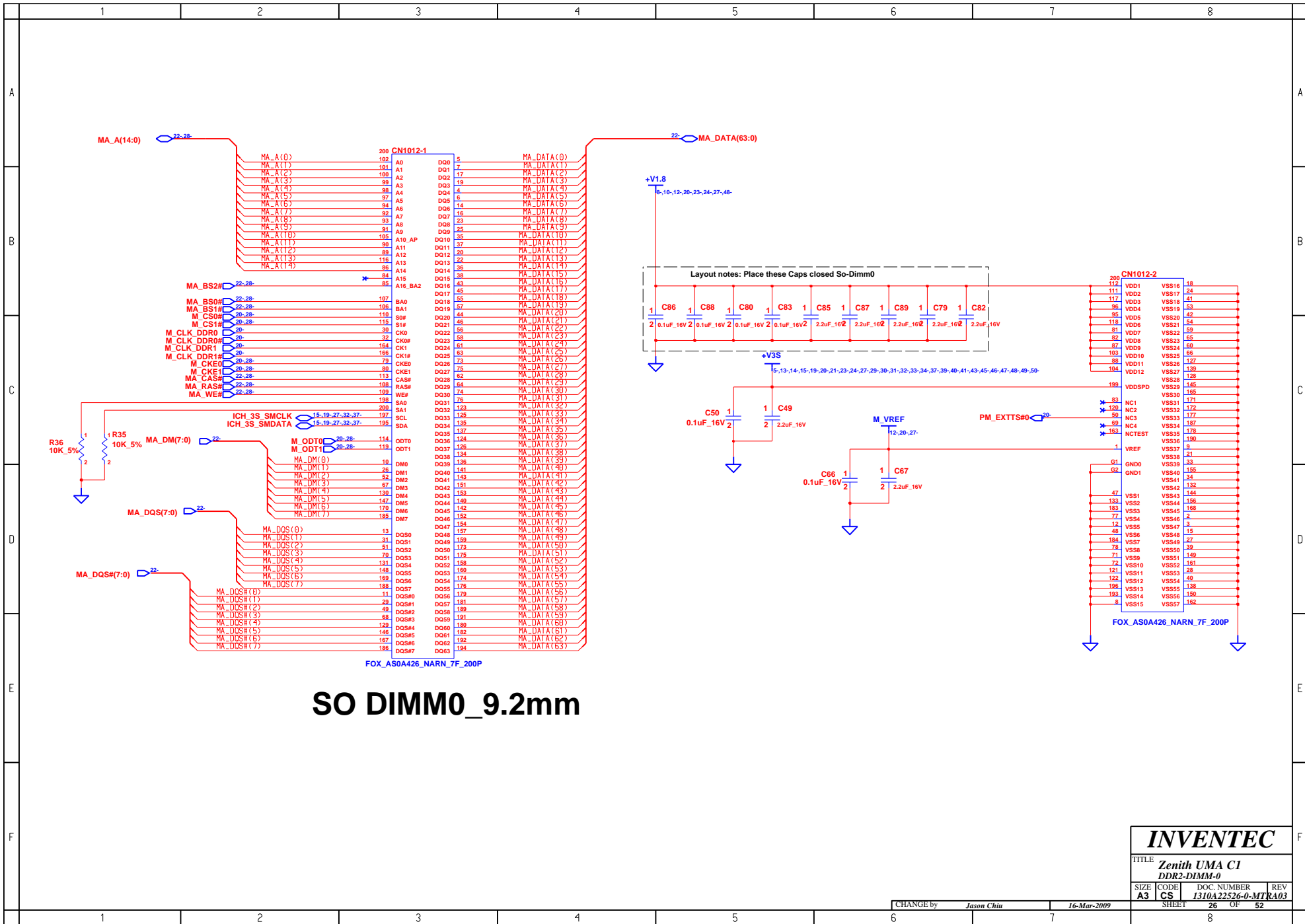


INVENTEC			
TITLE Zenith UMA C1 CANTIGA-2			
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CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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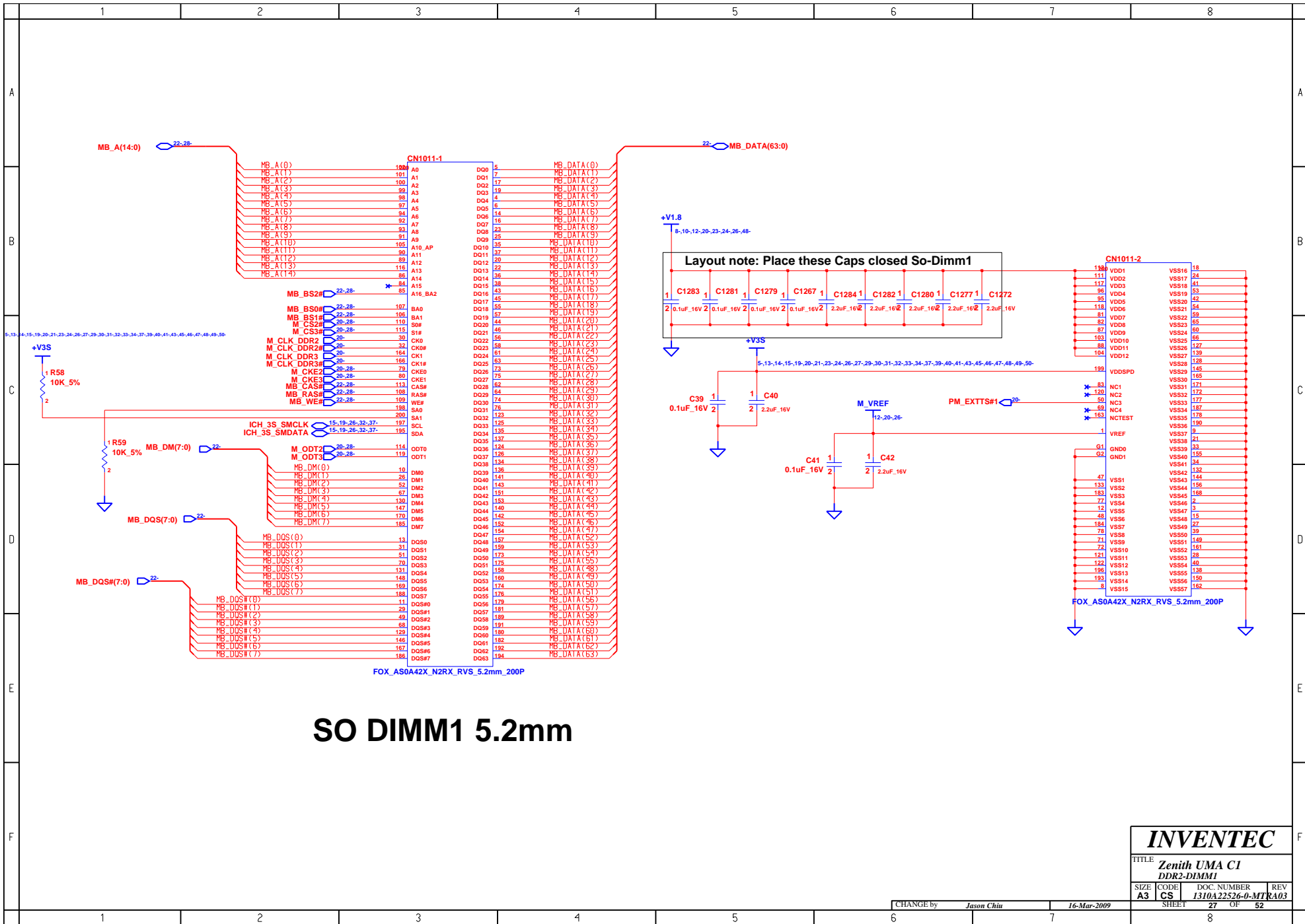
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TITLE Zenith UMA C1 CANTIGA-5-POWER			
SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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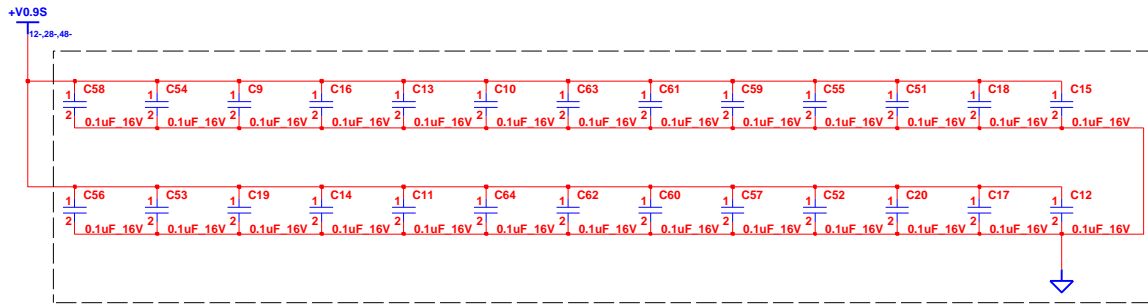




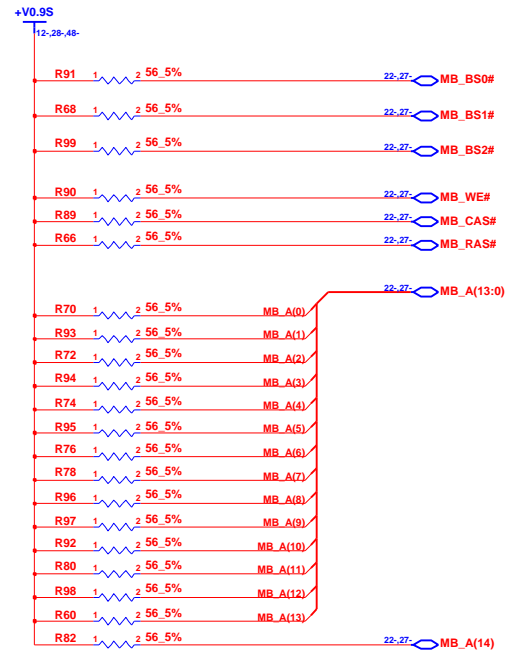
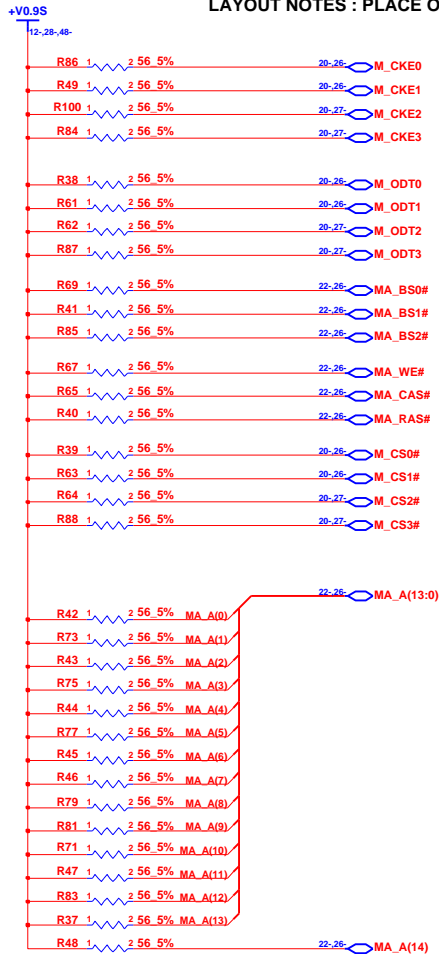
SO DIMM_9.2mm

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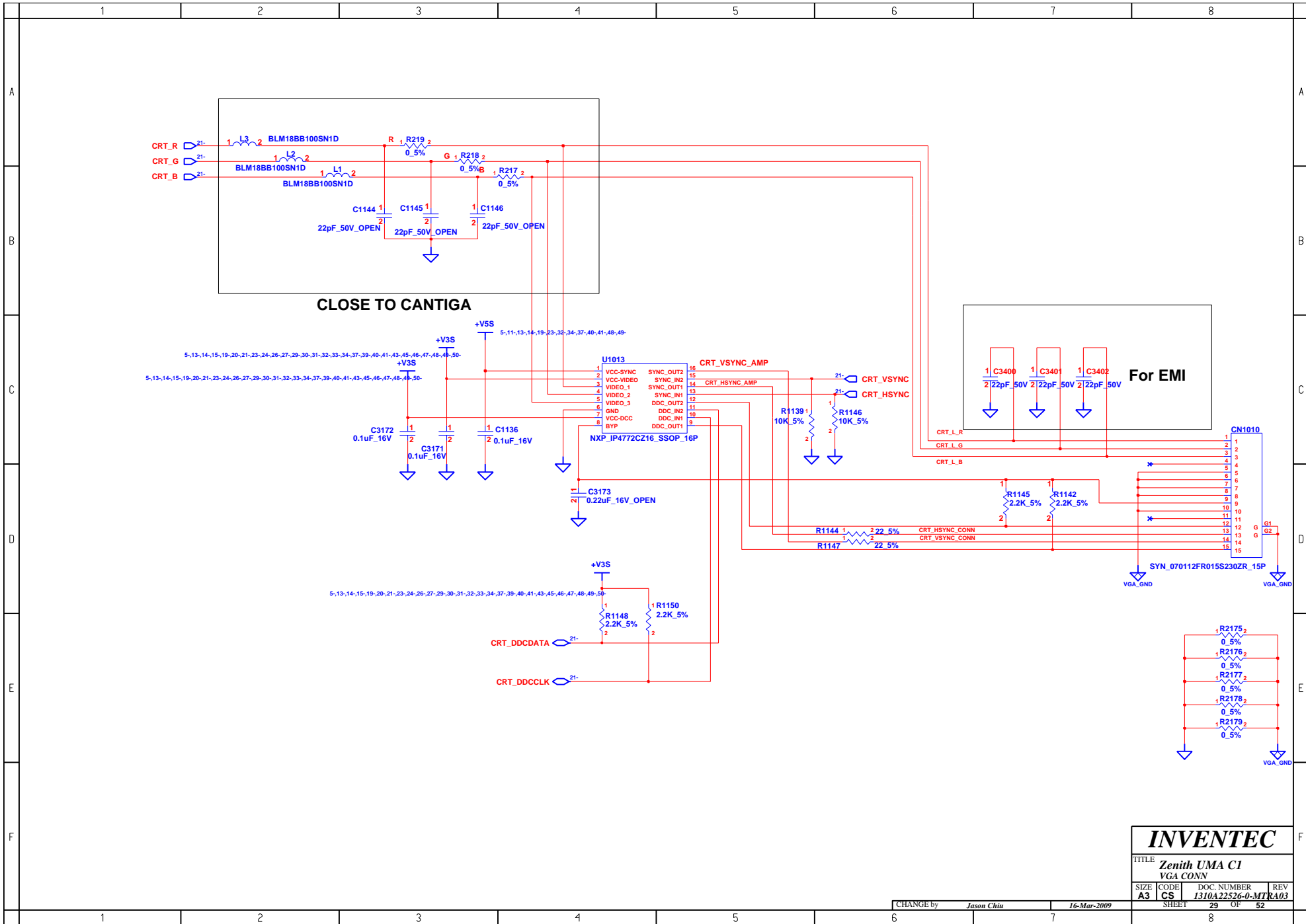
LAYOUT NOTES : PLACE ONE CAP CLOSE TO EVERY 2 PULL UP RESISTOR TERMINATED TO +V0.9S



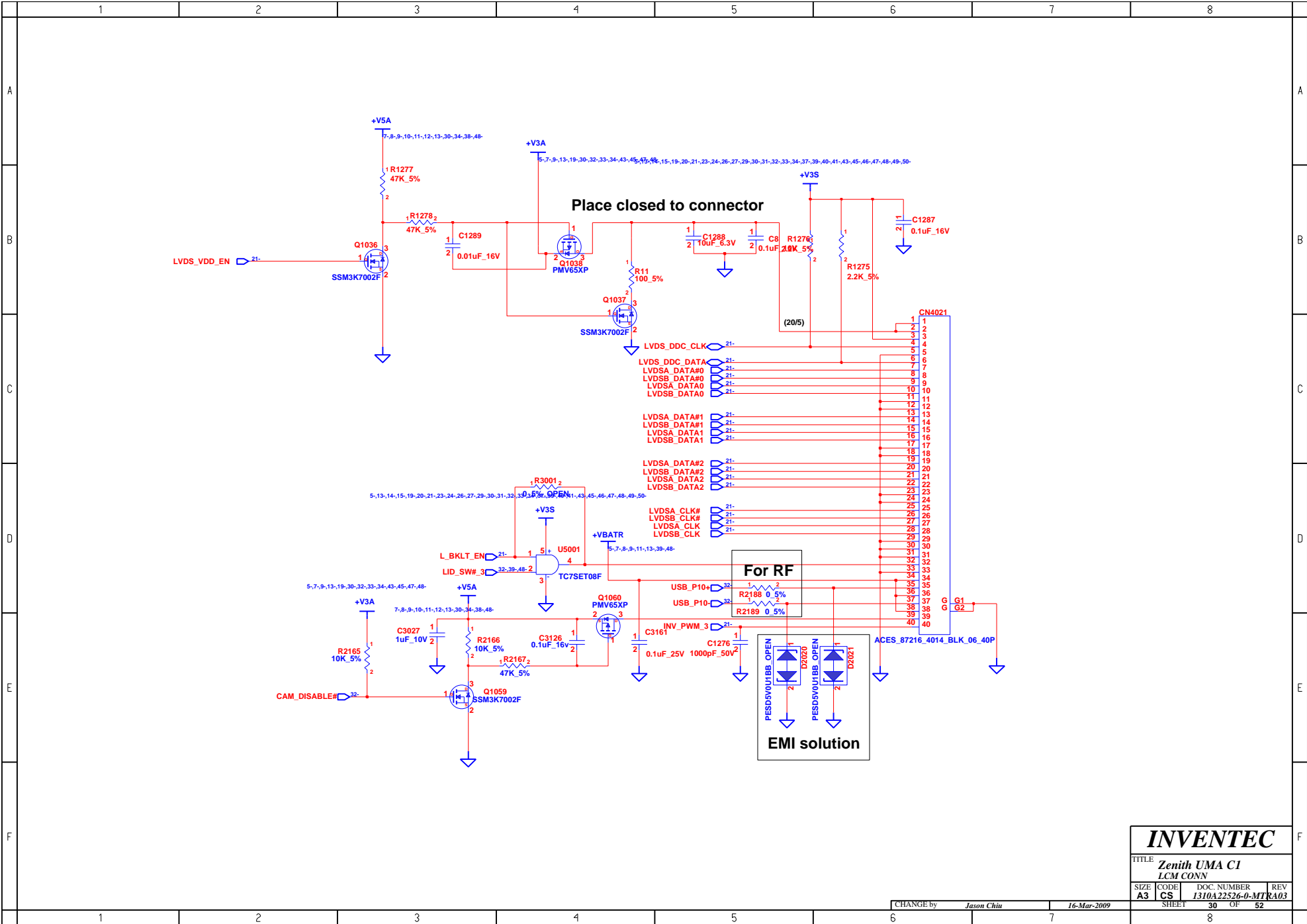
INVENTEC

TITLE			
Zenith UMA C1			
DDR2-DAMPING			
SIZE	CODE	DOC NUMBER	REV
A3	CS	I310A22526-0-MTR	RA03
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28		52	

CHANGE by Jason Chiu 27-Sep-2003



INVENTEC			
TITLE Zenith UMA C1 VGA 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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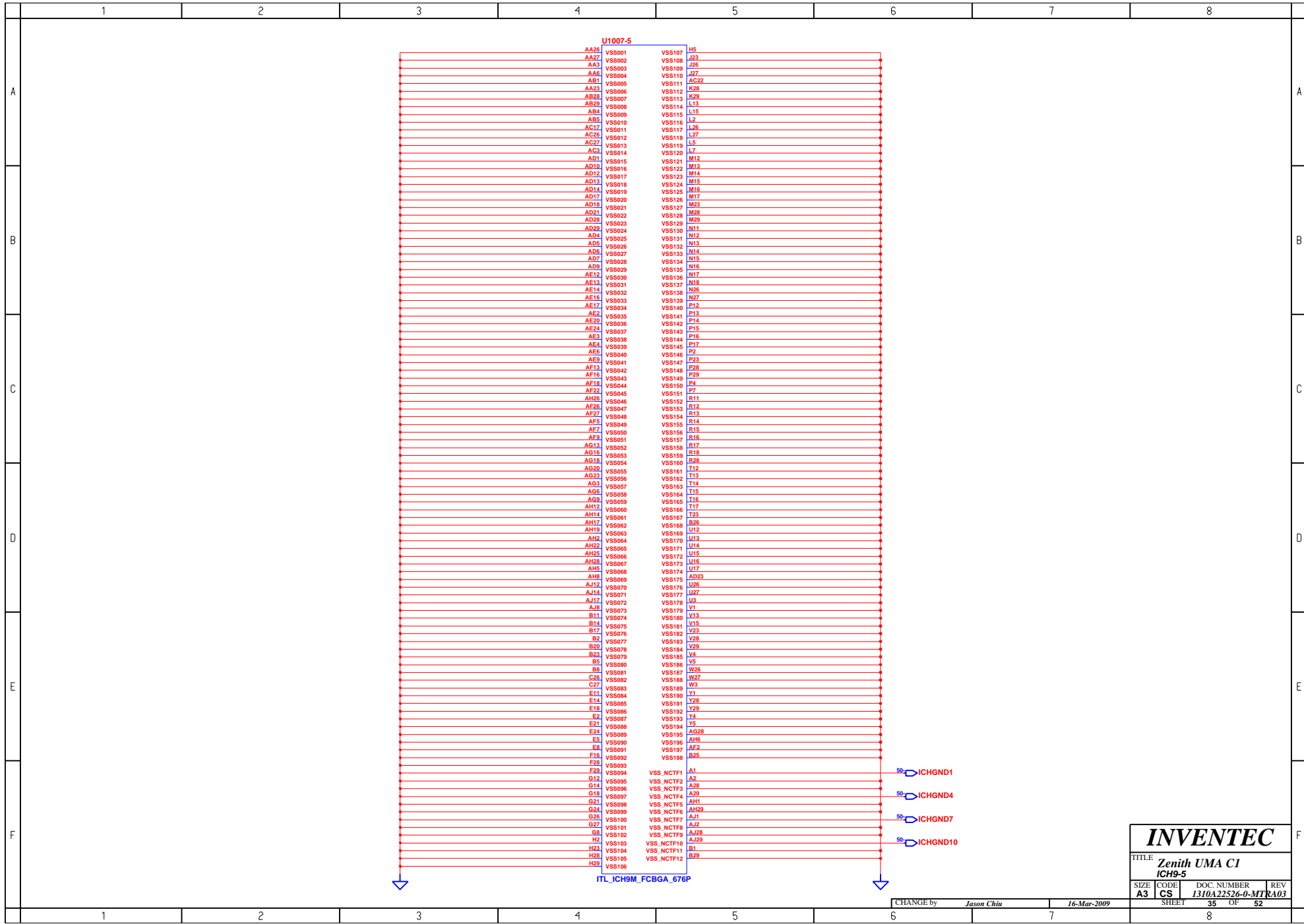
INVENTEC

TITLE
Zenith UMA C1
 LCM CONN

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

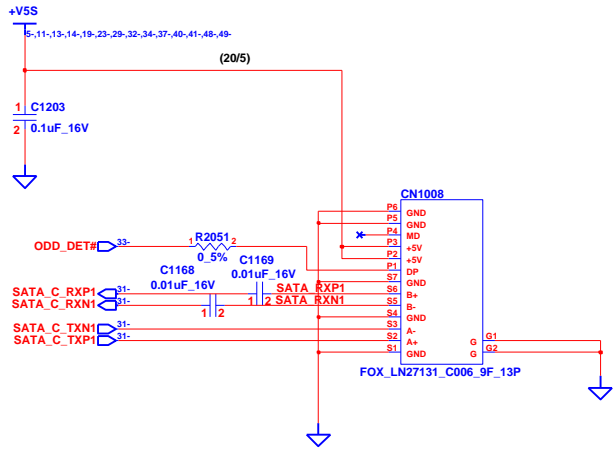
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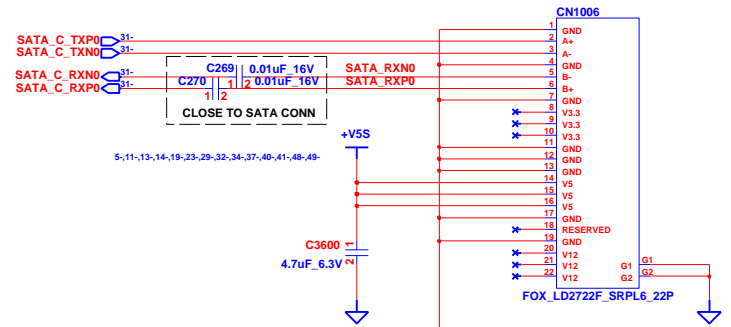
U1007-5

ITL_ICH9M_FCBGA 676P

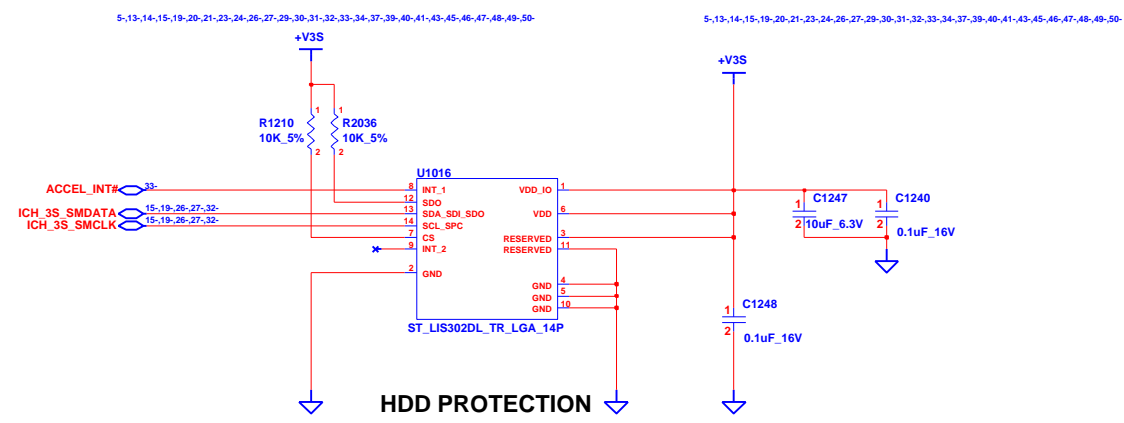
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SIZE A3	CODE CS	DOC. NUMBER 1310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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SATA ODD CNTR



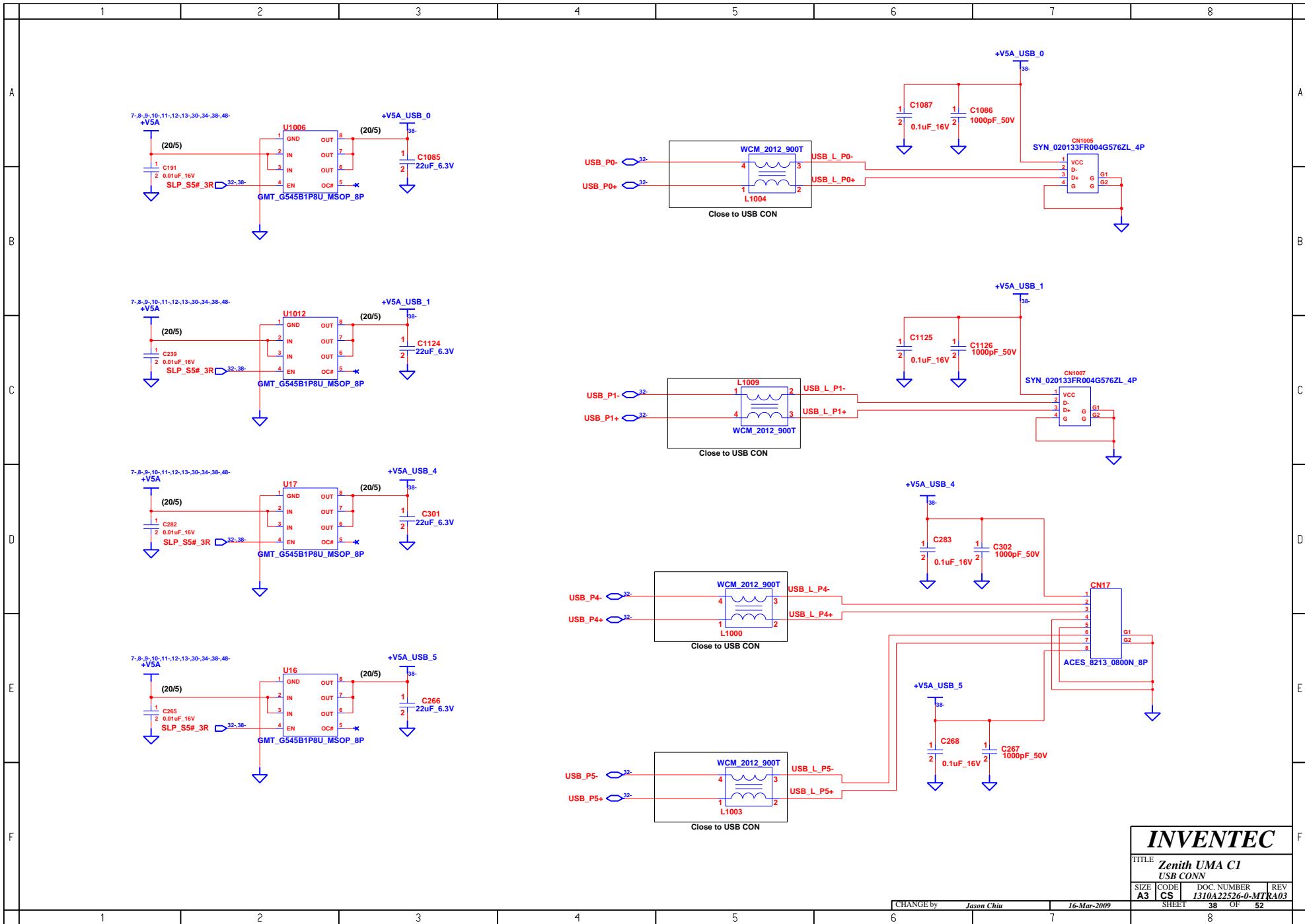
SATA HDD CNTR



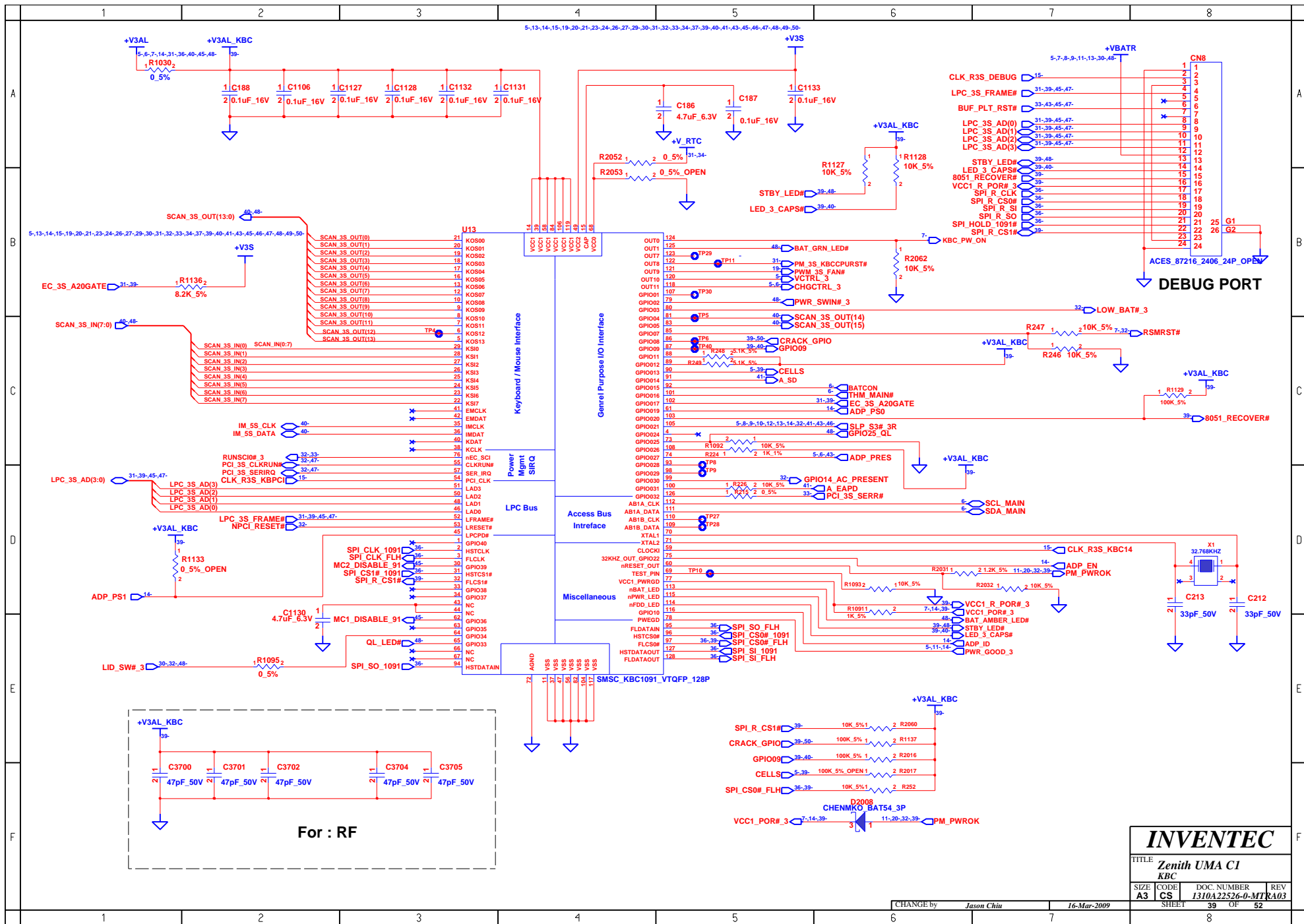
HDD PROTECTION

INVENTEC			
TITLE Zenith UMA C1 HDD & ODD CONN & HD Protec			
SIZE A3	CODE CS	DOC NUMBER 1310A22526-0-MT	REV R03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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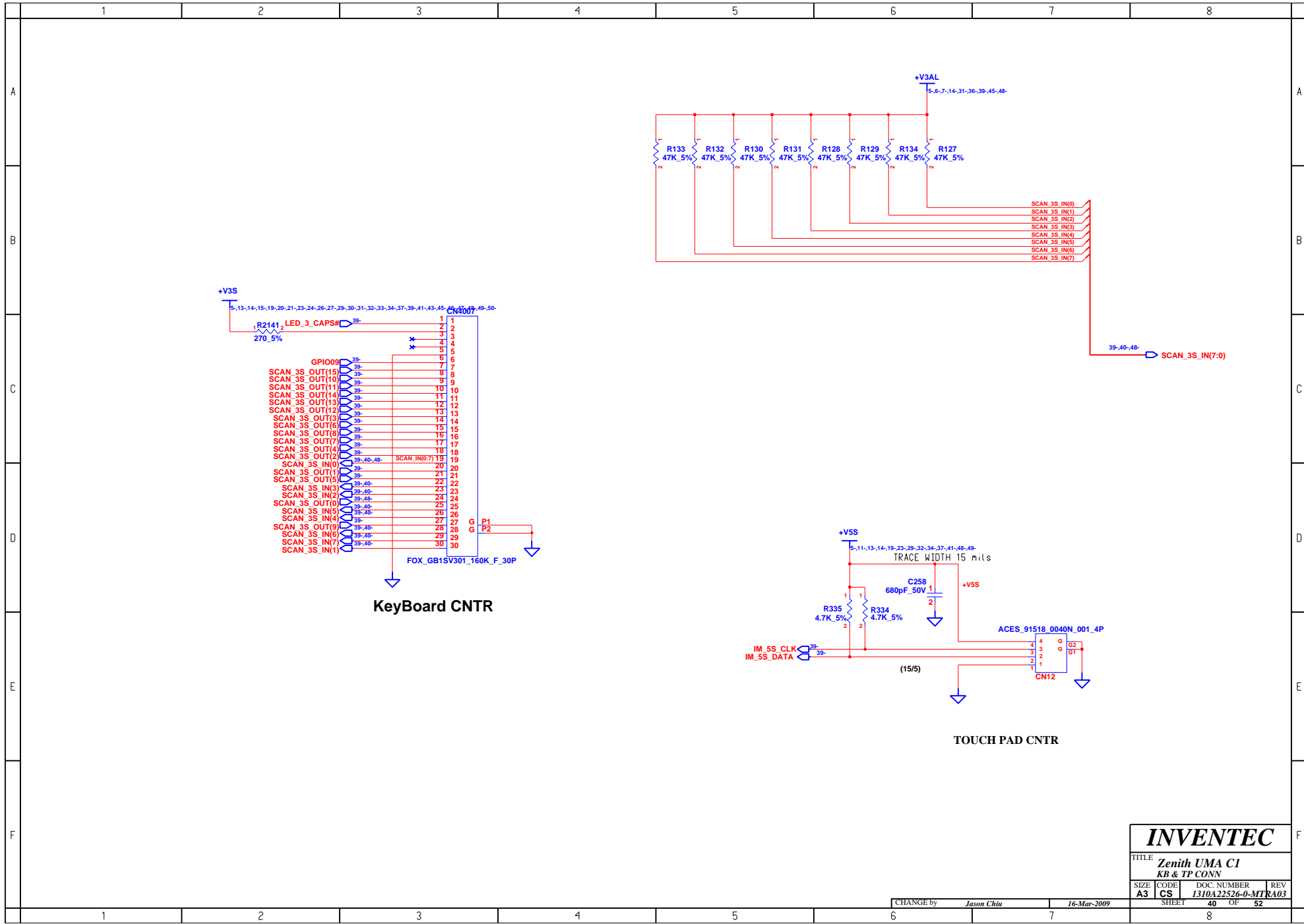
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A							A
B							B
C							C
D							D
E							E
F							F
1	2	3	4	5	6	7	8



INVENTEC			
TITLE 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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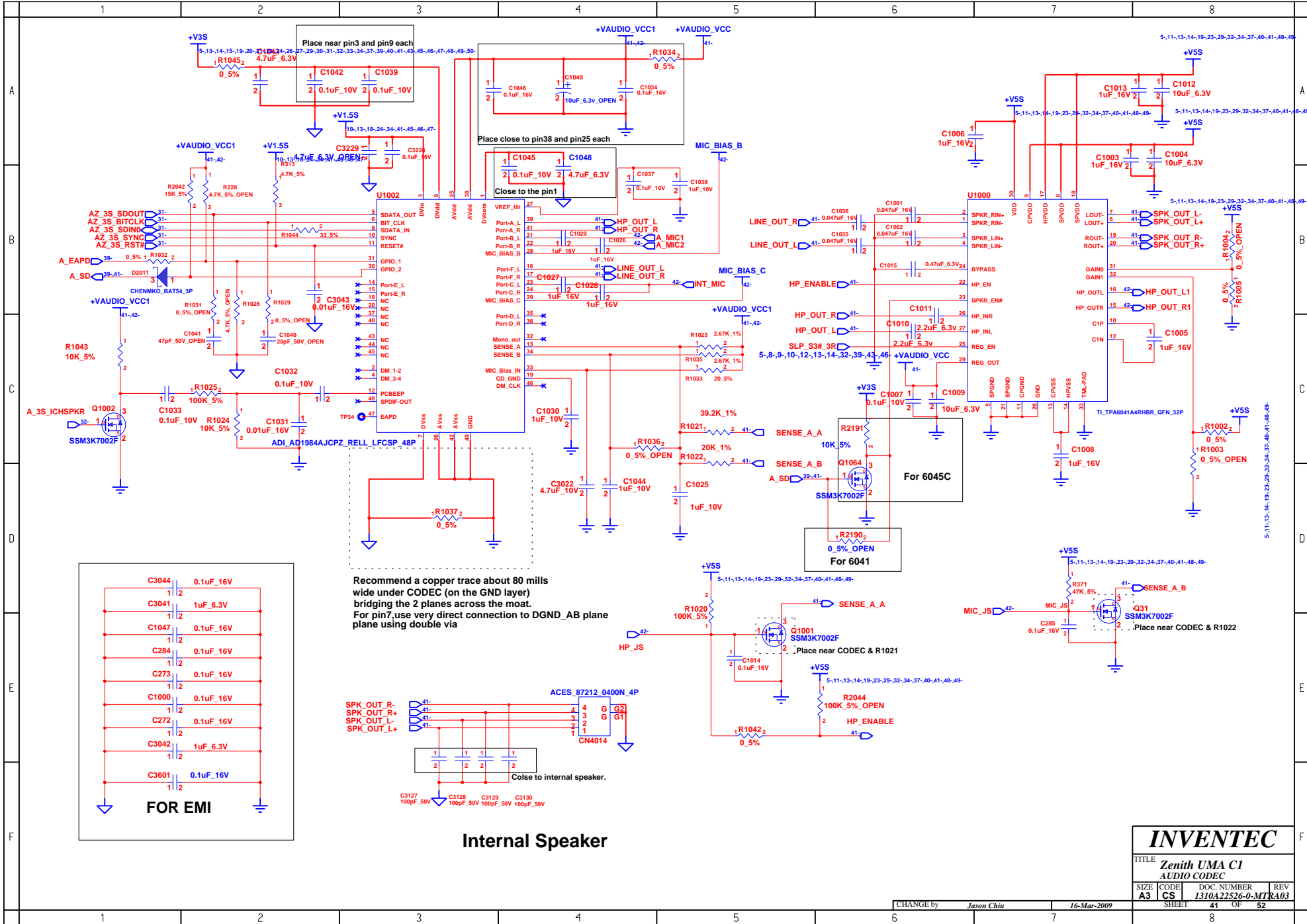
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SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		DATE 16-Mar-2009	
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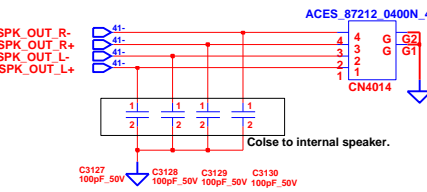
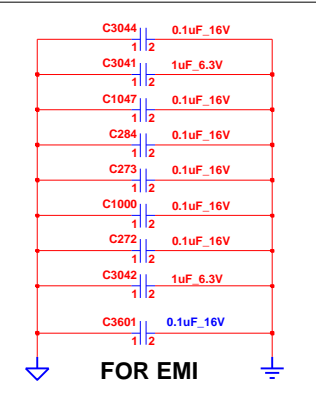
Keyboard CNTR

TOUCH PAD CNTR

INVENTEC			
TITLE Zenith UMA C1 KB & TP CONN			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
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Recommend a copper trace about 80 mils wide under CODEC (on the GND layer) bridging the 2 planes across the moat. For pin7, use very direct connection to DGND_AB plane using double via

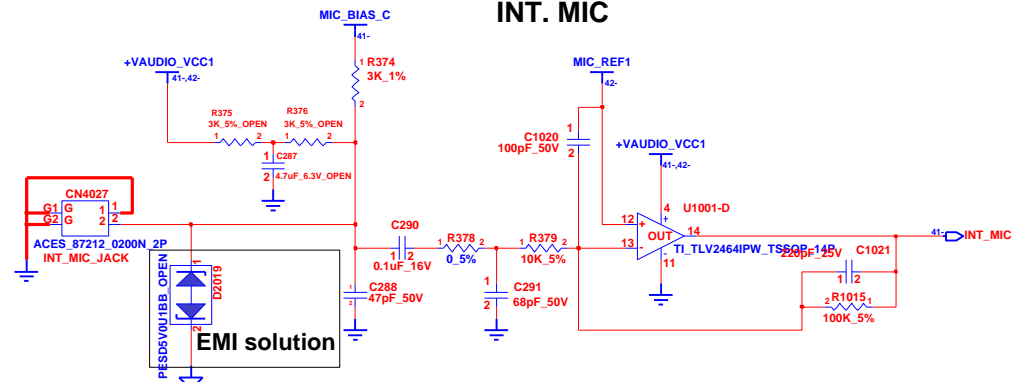
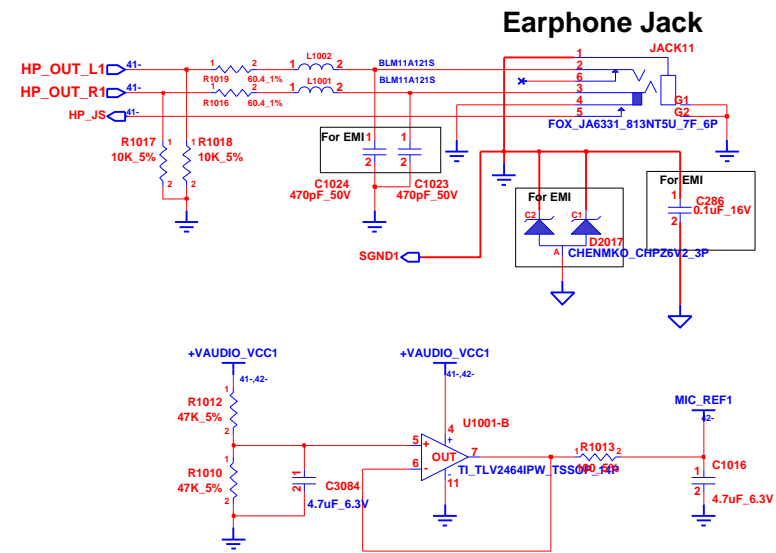
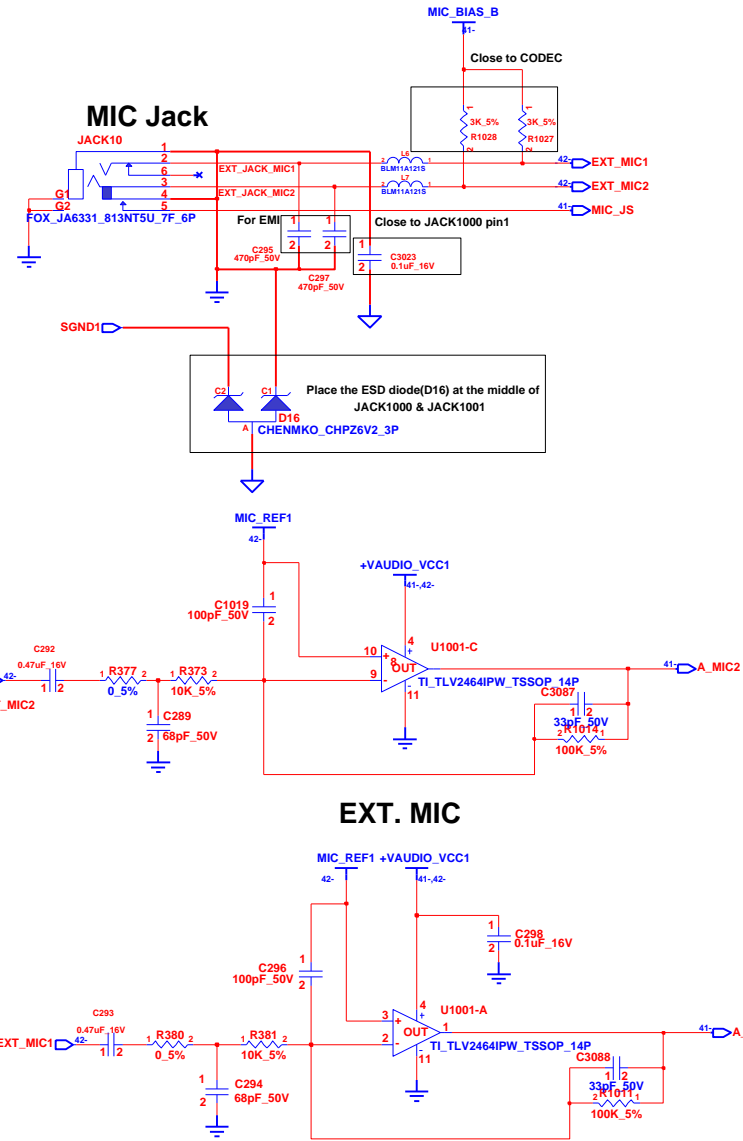


Internal Speaker

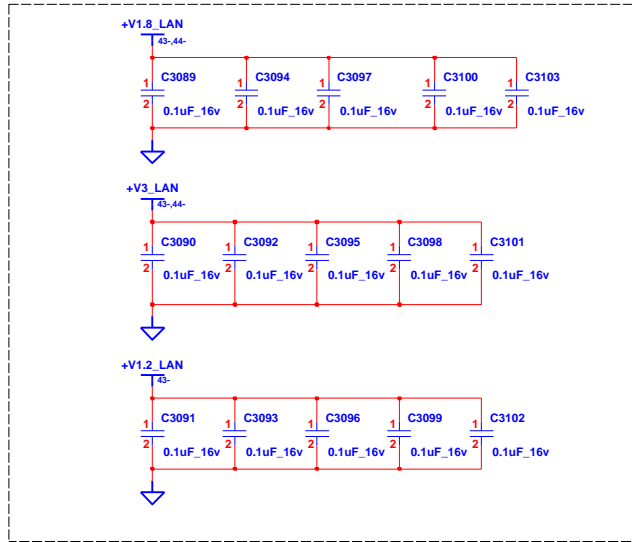
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TITLE Zenith UMA C1 AUDIO CODEC			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
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A
B
C
D
E
F

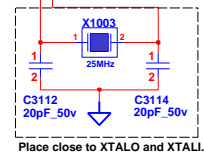
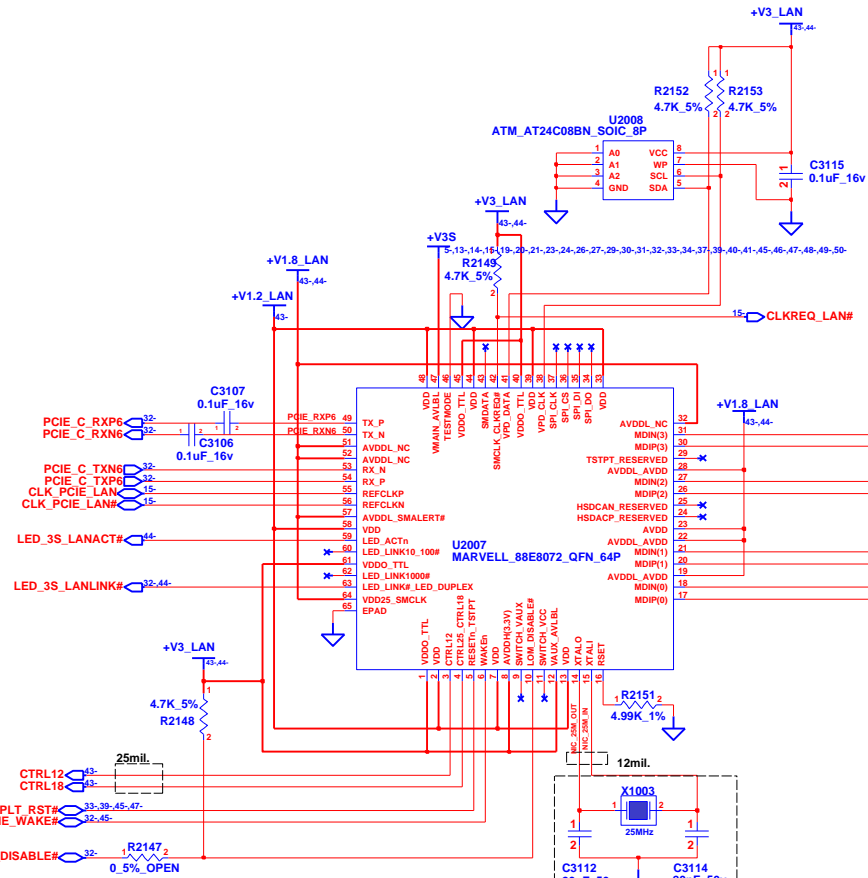
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E
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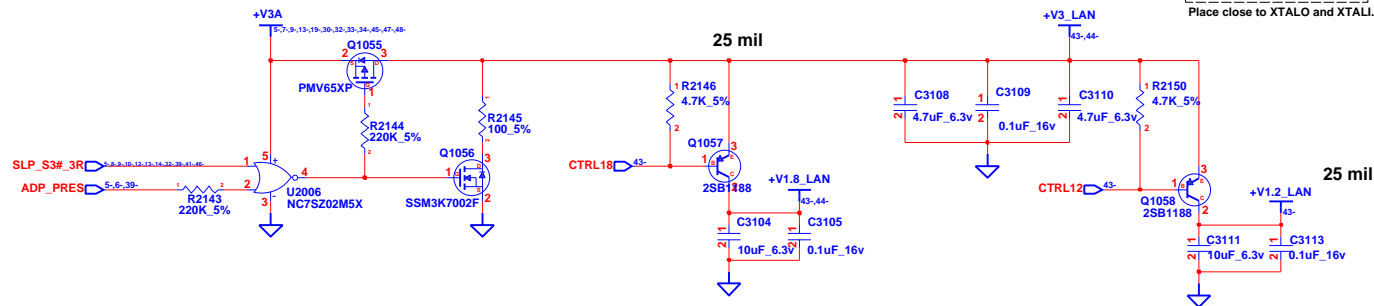
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TITLE <i>Zenith UMA C1</i> AUDIO JACK			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
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Place bypass cap as close as possible with every power pin.



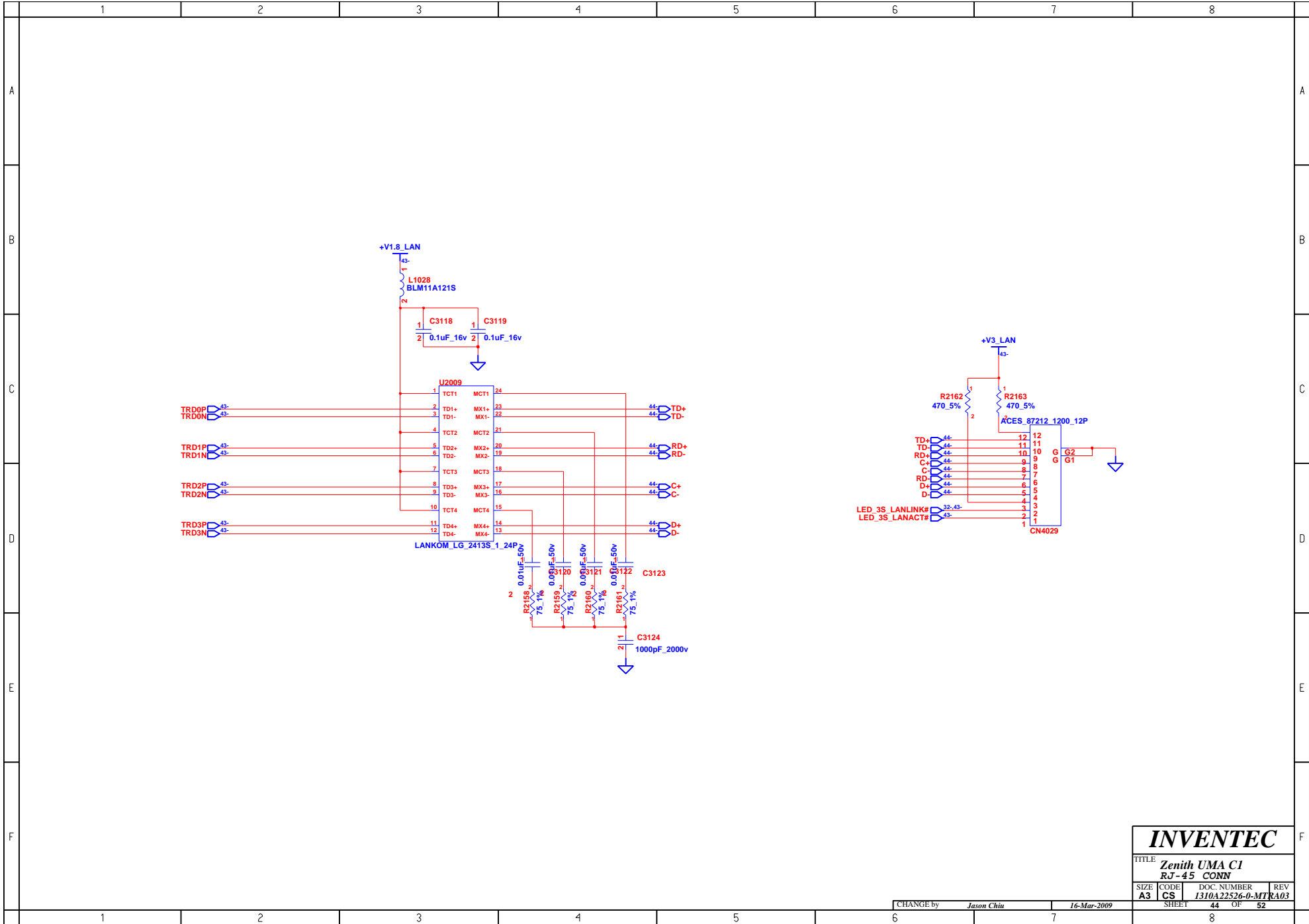
Place close to XTALO and XTALI.



INVENTEC

TITLE			
Zenith UMA C1			
Giga LAN			
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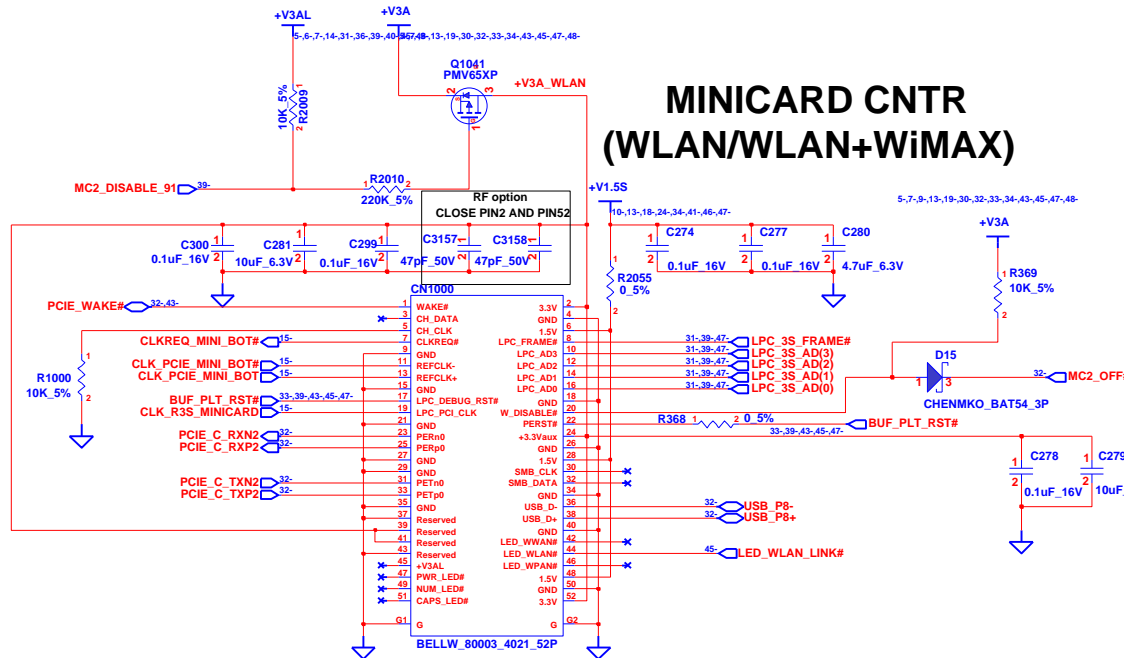
TITLE
**Zenith UMA C1
 RJ-45 CONN**

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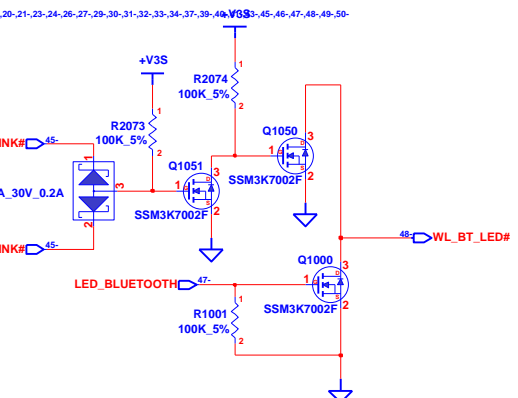
CHANGE by *Jason Chiu* 16-Mar-2009

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MINICARD CNTR (WLAN/WLAN+WiMAX)

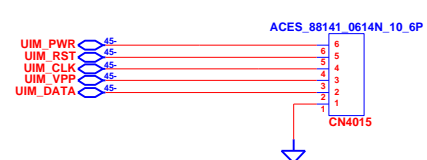
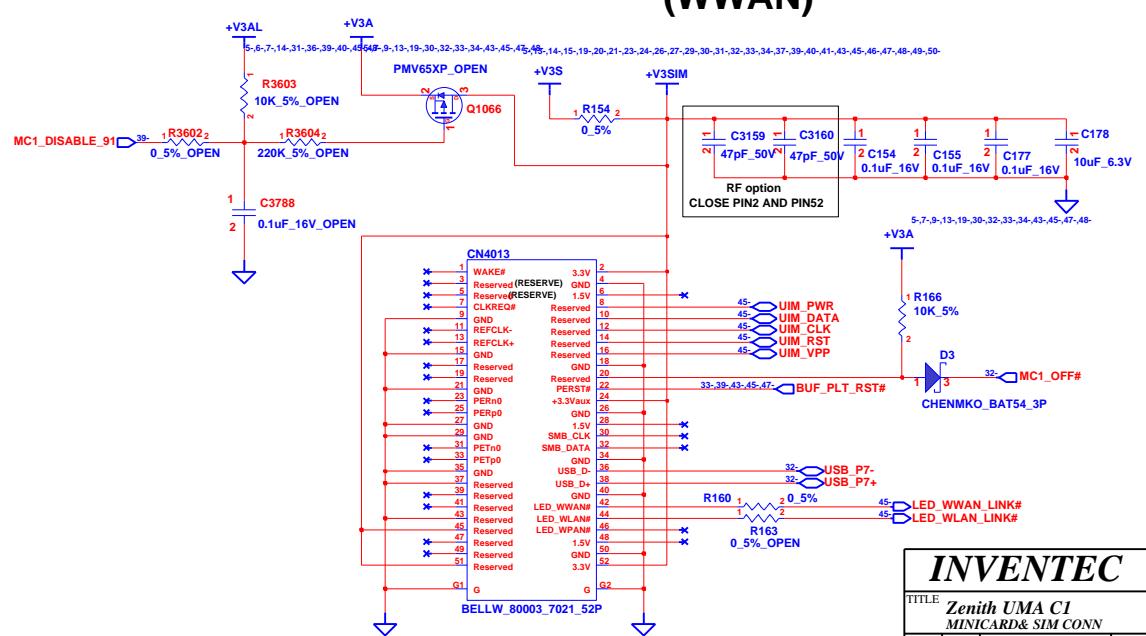


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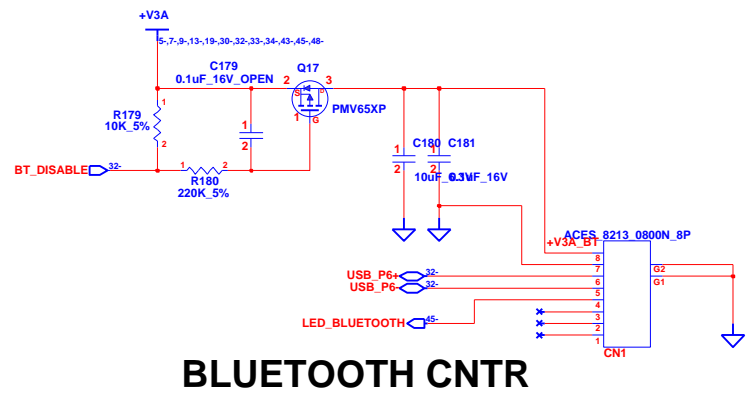
WLAN Bluetooth LED

MINICARD CNTR (WWAN)

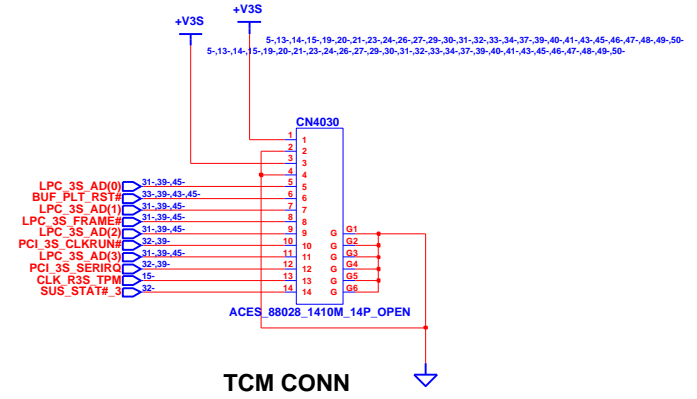


SIMCARD CNTR

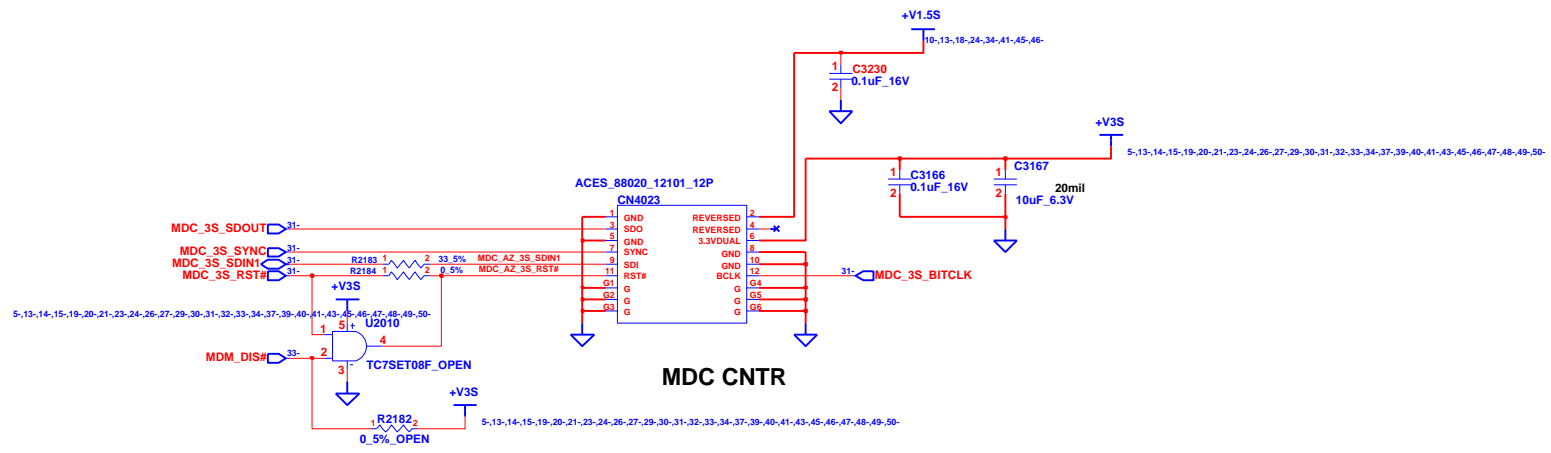
INVENTEC			
TITLE Zenith UMA C1 MINICARD & SIM CONN			
SIZE A3	CODE CS	DOC. NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
SHEET 45		OF 52	



BLUETOOTH CNTR



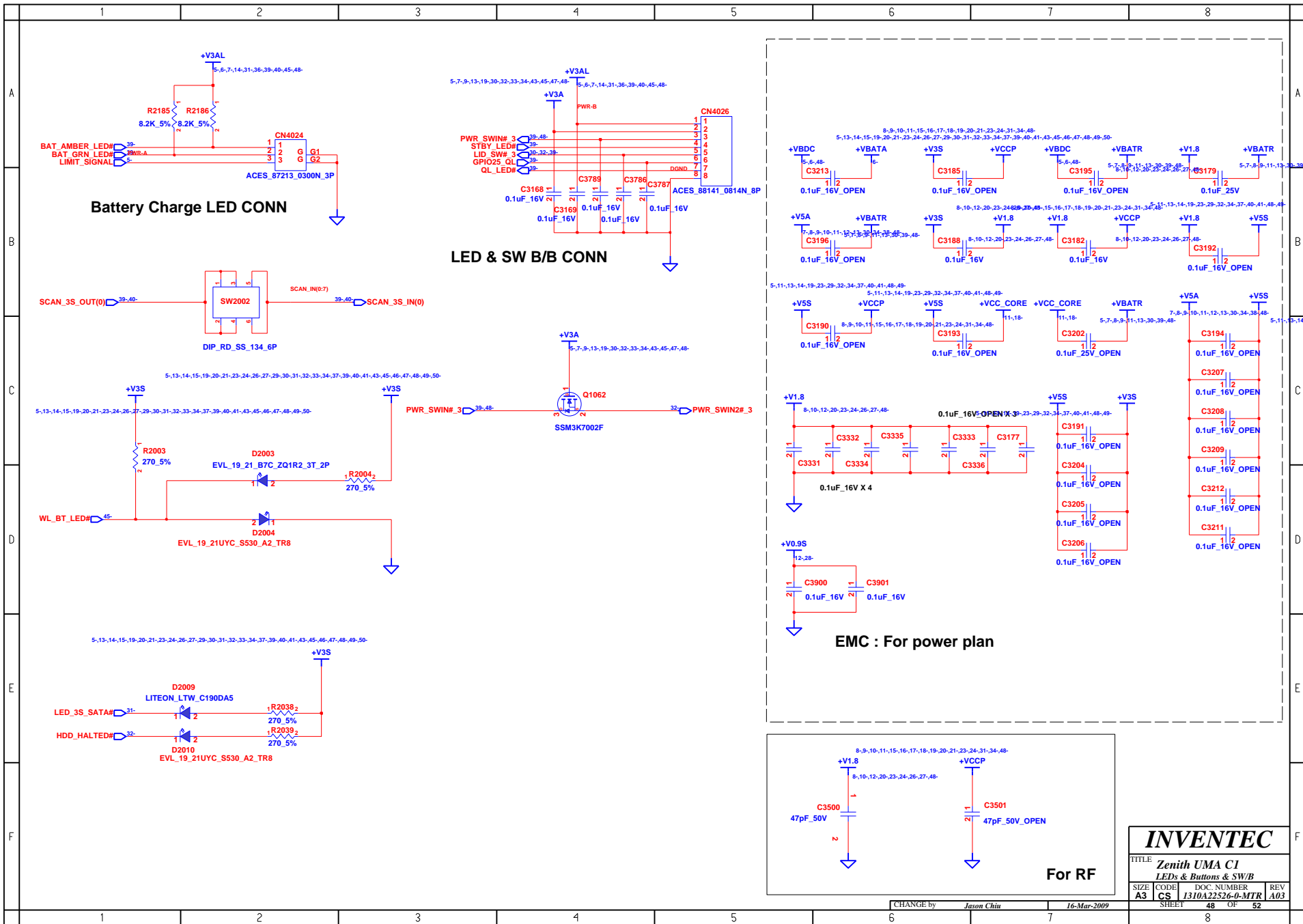
TCM CONN



MDC CNTR

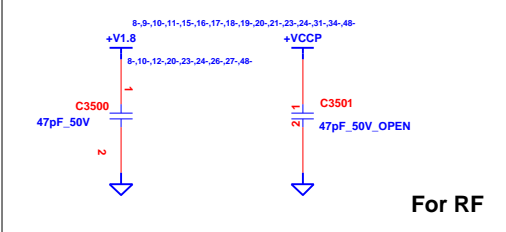
INVENTEC			
TITLE Zenith UMA C1 BT & MDC & TCM			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		16-Mar-2009	
		SHEET 47	OF 52

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



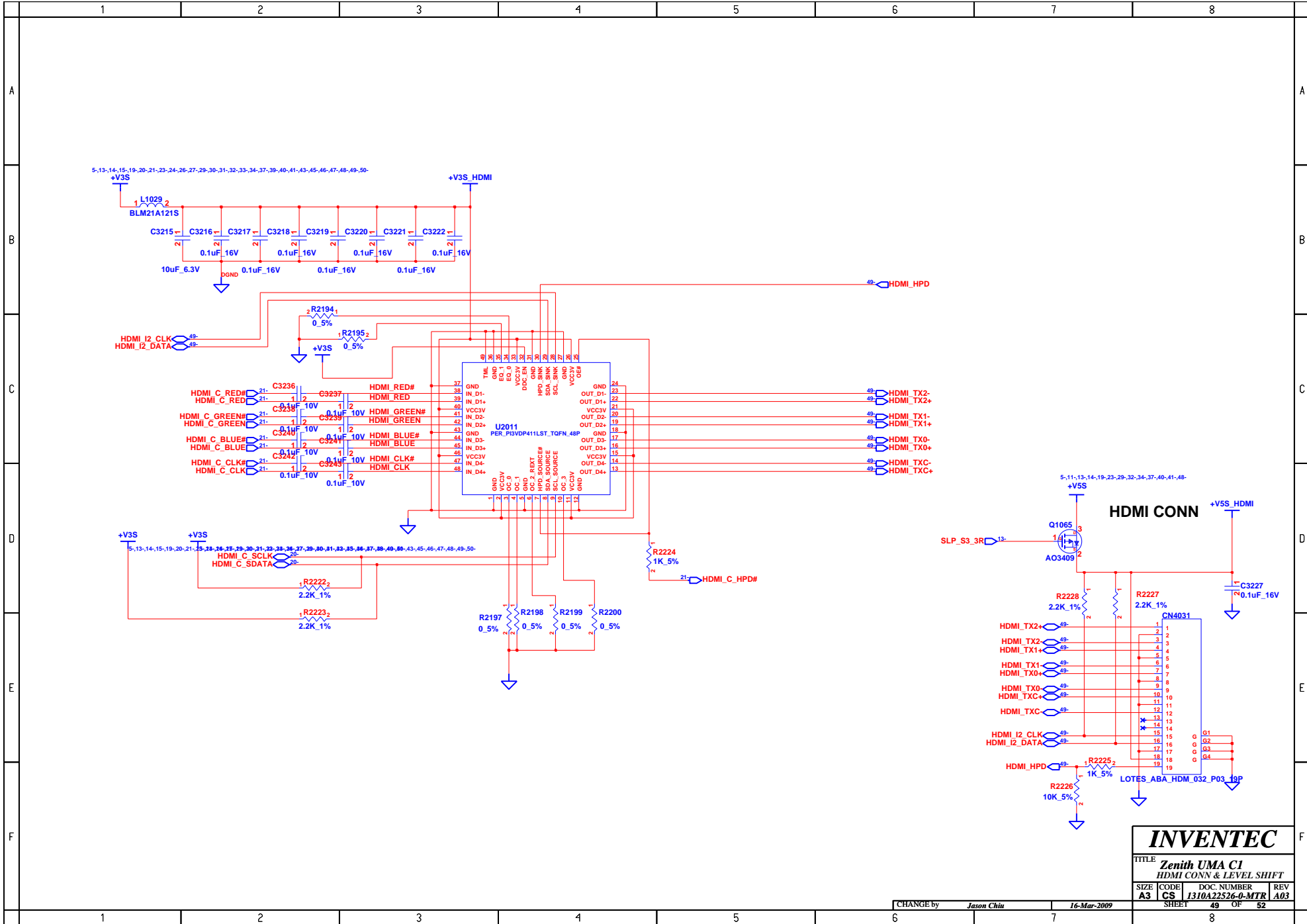
INVENTEC

TITLE Zenith UMA C1			
LEDs & Buttons & SW/B			
SIZE A3	CODE CS	DOC NUMBER I310A22526-0-MTR	REV A03
SHEET 48		OF 52	

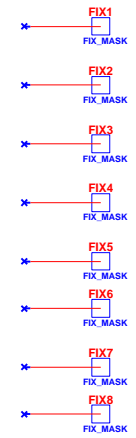
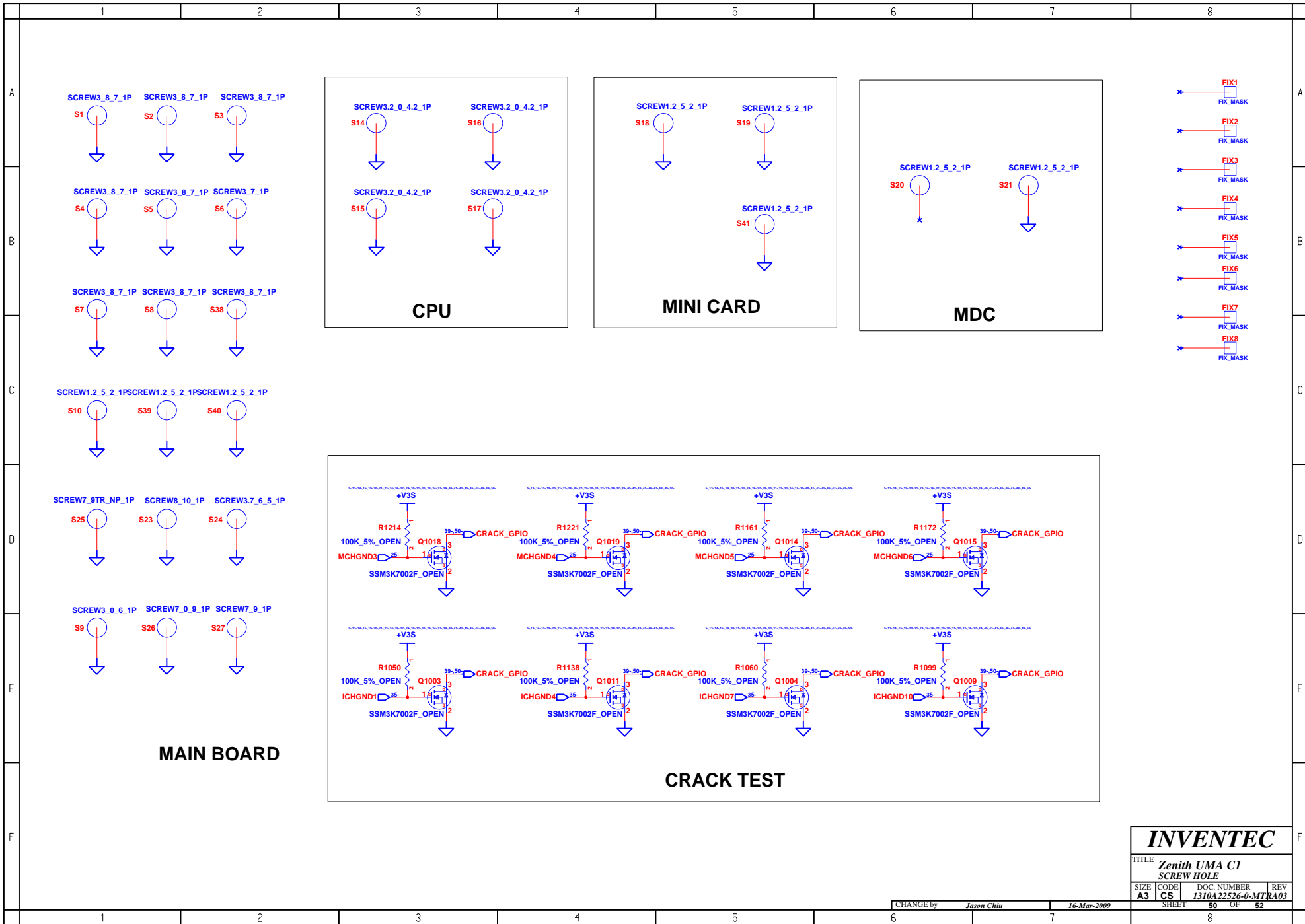


For RF

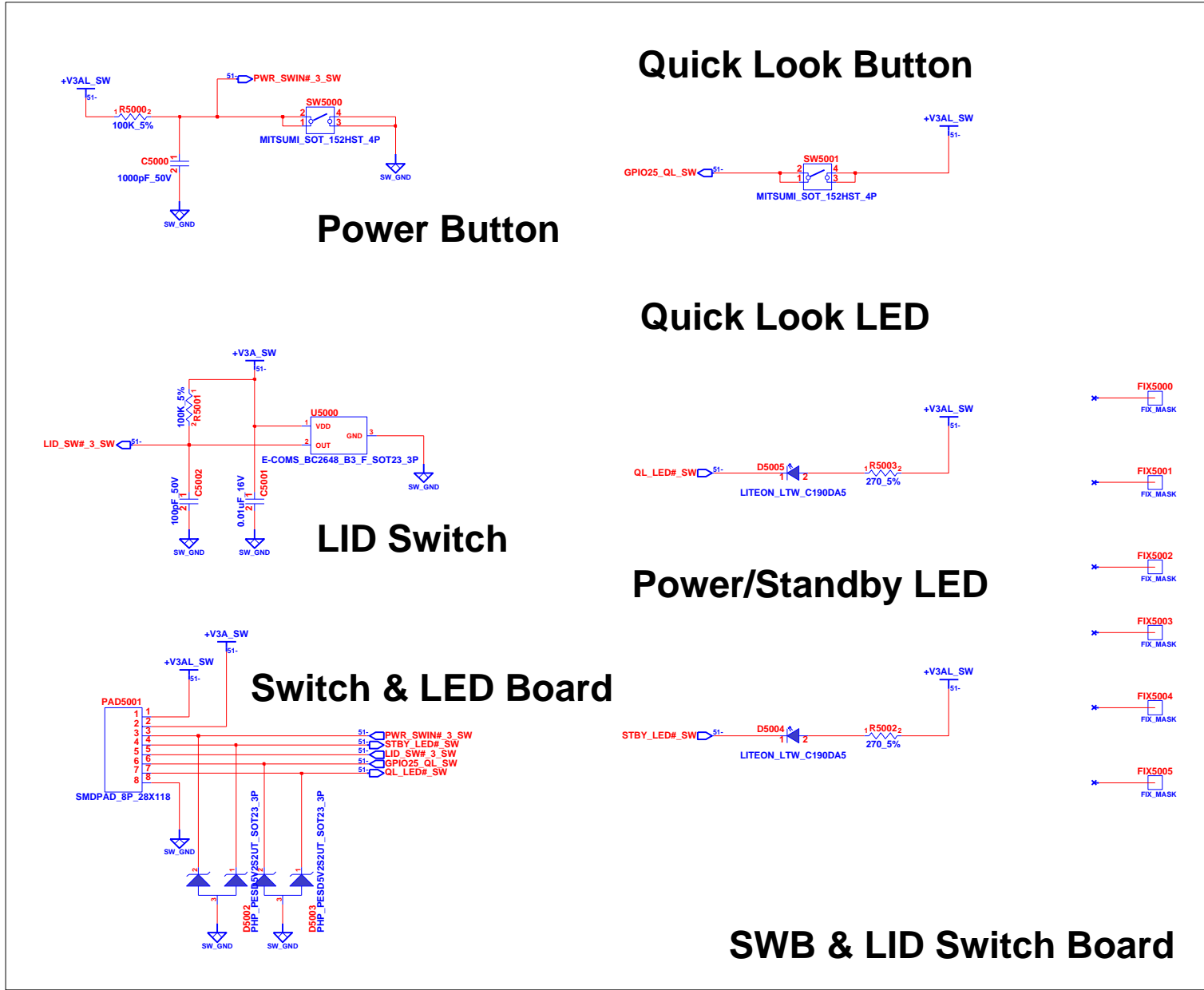
CHANGE by *Jason Chin* 16-Mar-2009



INVENTEC			
TITLE Zenith UMA C1			
HDMI CONN & LEVEL SHIFT			
SIZE A3	CODE CS	DOC NUMBER I310A2326-0-MTR	REV A03
CHANGE by <i>Jason Chiu</i>		DATE 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

SWB & LID Switch Board

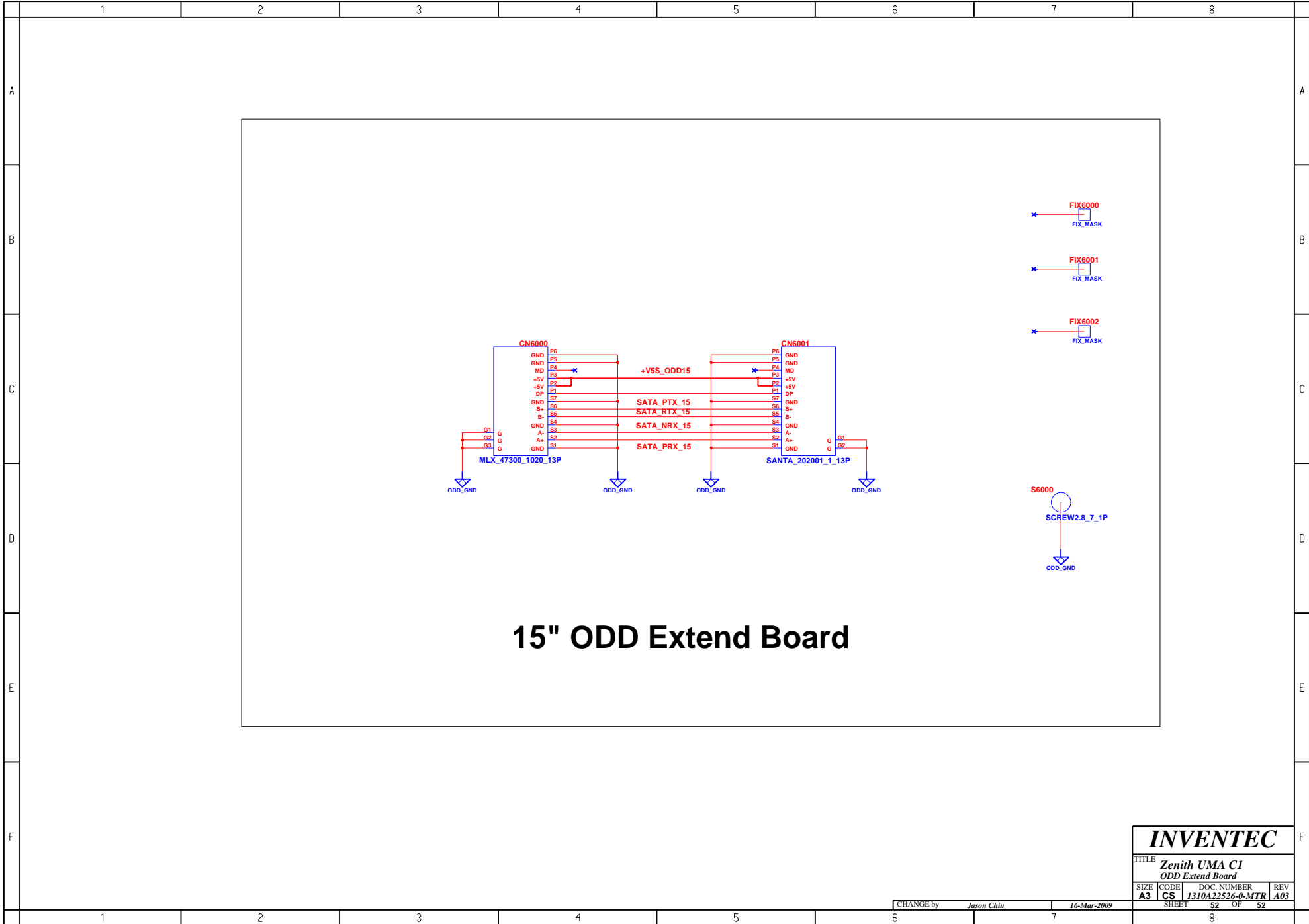
INVENTEC

TITLE
Zenith UMA C1
SWB & LID Switch

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

SHEET 51 OF 52



15" ODD Extend Board

INVENTEC

TITLE: *Zenith UMA C1
ODD Extend Board*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22526-0-MTR	A03

CHANGE by *Jason Chiu* 16-Mar-2009

SHEET 52 OF 52