

(13"/14")

Villemont 2010

(Montevina Intel-UMA)

DDR3-MV Build (A02)

2010.03.02

DATE	CHANGE NO.	REV

DRAWER	EE	DATE	POWER	DATE	INVENTEC			
DESIGN					TITLE Villemont Intel UMA			
CHECK								
RESPONSIBLE								
SIZE =	3			VER :	SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MTR	REV A02
FILE NAME :	XXXX-XXXXXX-XX				SHEET	1	OF	59
P/N	XXXXXXXXXXXX							

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6- Select & Battery CONN.	16- CPU Penryn-1.	39- HDD & ODD CONN.
7- System Power (+V3A/+V5A).	17- CPU Penryn-2.	40- USB CONN.
8- System Power (+VCCP)	18- CPU Penryn-3.	41- Audio CODEC.
9- BLANK.	19- CPU Penryn-4 & XDP.	42- Earphone & MIC JACK & HP JACK.
10- System Power (+V1.5) .	20- Thermal & Fan.	43- MDC CONN.
11- CPU Power (+VCC_CORE).	21- N/B Cantiga-1.	44- NIC 10/100 LAN CONN.
12- DDR Termination Voltage(+V0.75S).	22- N/B Cantiga-2.	45- NIC 10/100 & RJ45 CONN.
13- Power (Sleep: +V5S/+V3S/+V1.5S).	23- N/B Cantiga-3.	46- Mini Card(WLAN) CONN.
14- Power (Sequence).	24- N/B Cantiga-4.	47- Bluetooth/MSI WiFi-BT CONN.
	25- N/B Cantiga-5.	48- Express Card.
	26- N/B Cantiga-6.	49- HDMI CONN.
	27- DDR3-DIMM0.	50- Switch CONN & LED.
	28- DDR3-DIMM1.	51- EMI CAP.
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	31- S/B ICH9-1.	54- MMC/SD CARD READER.
	32- S/B ICH9-2.	55- HEADPHONE & MIC JACK.
	33- S/B ICH9-3.	56- Power button & LID switch Board.
	34- S/B ICH9-4.	57- 14" ODD Extend Board.
	35- S/B ICH9-5.	58- USB Right side Board.
	36- KBC.	59- PICK Button Board.
	37- SPI.	

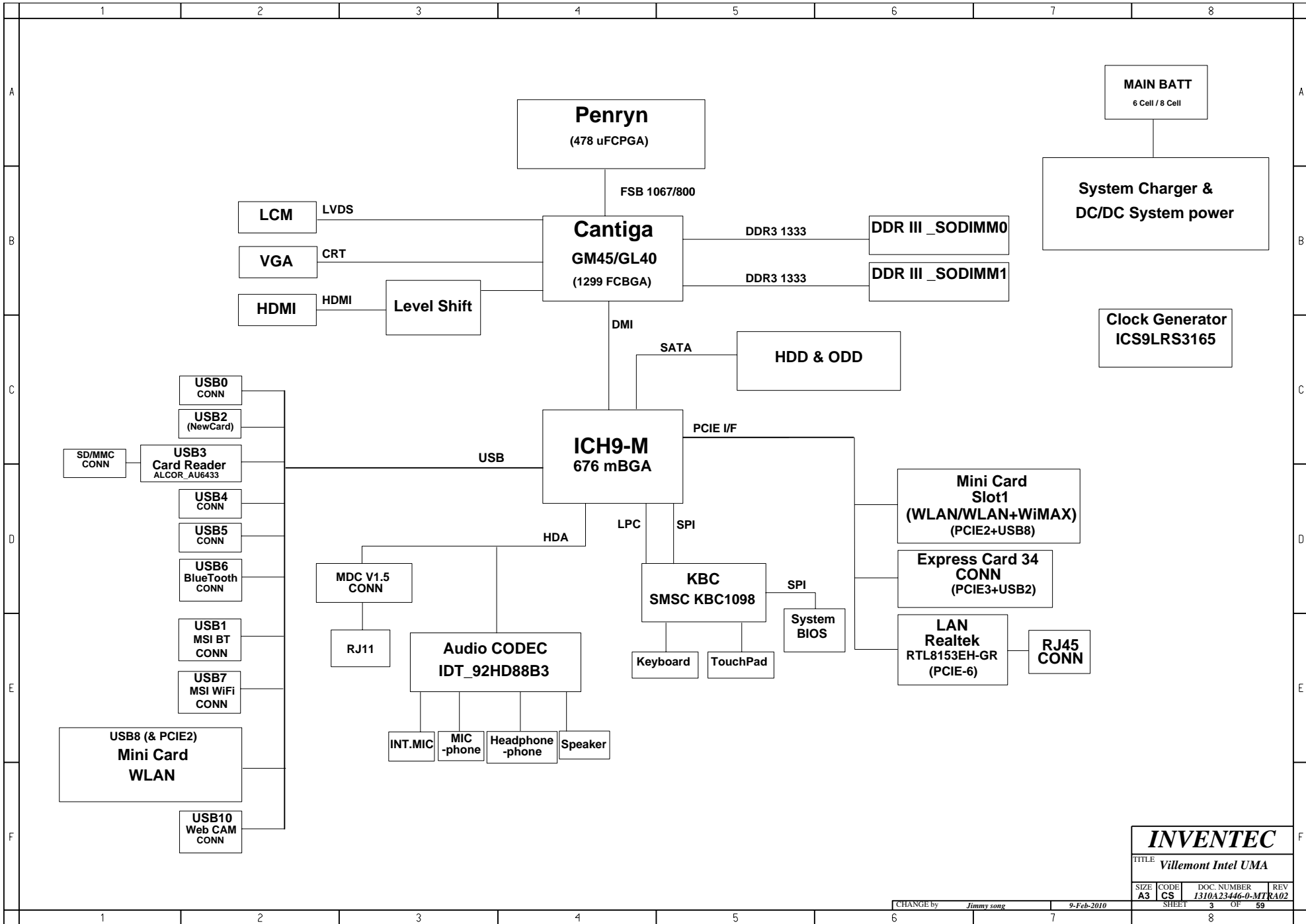
INVENTEC

TITLE **Villemont Intel UMA**
Contents

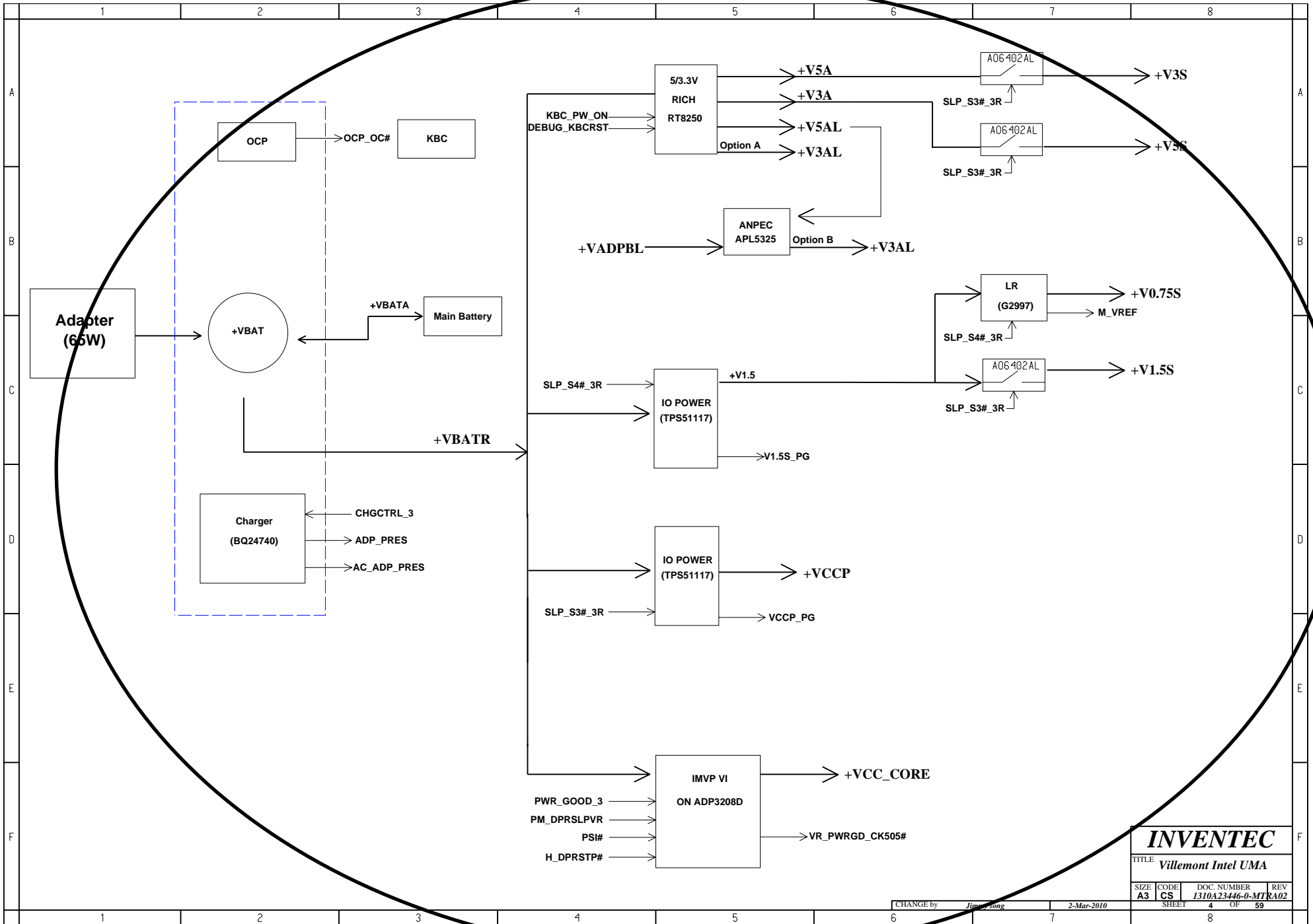
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A23446-0-MTR	A02
SHEET		2	OF 59

CHANGE by *Jimmy song* 2-Mar-2010

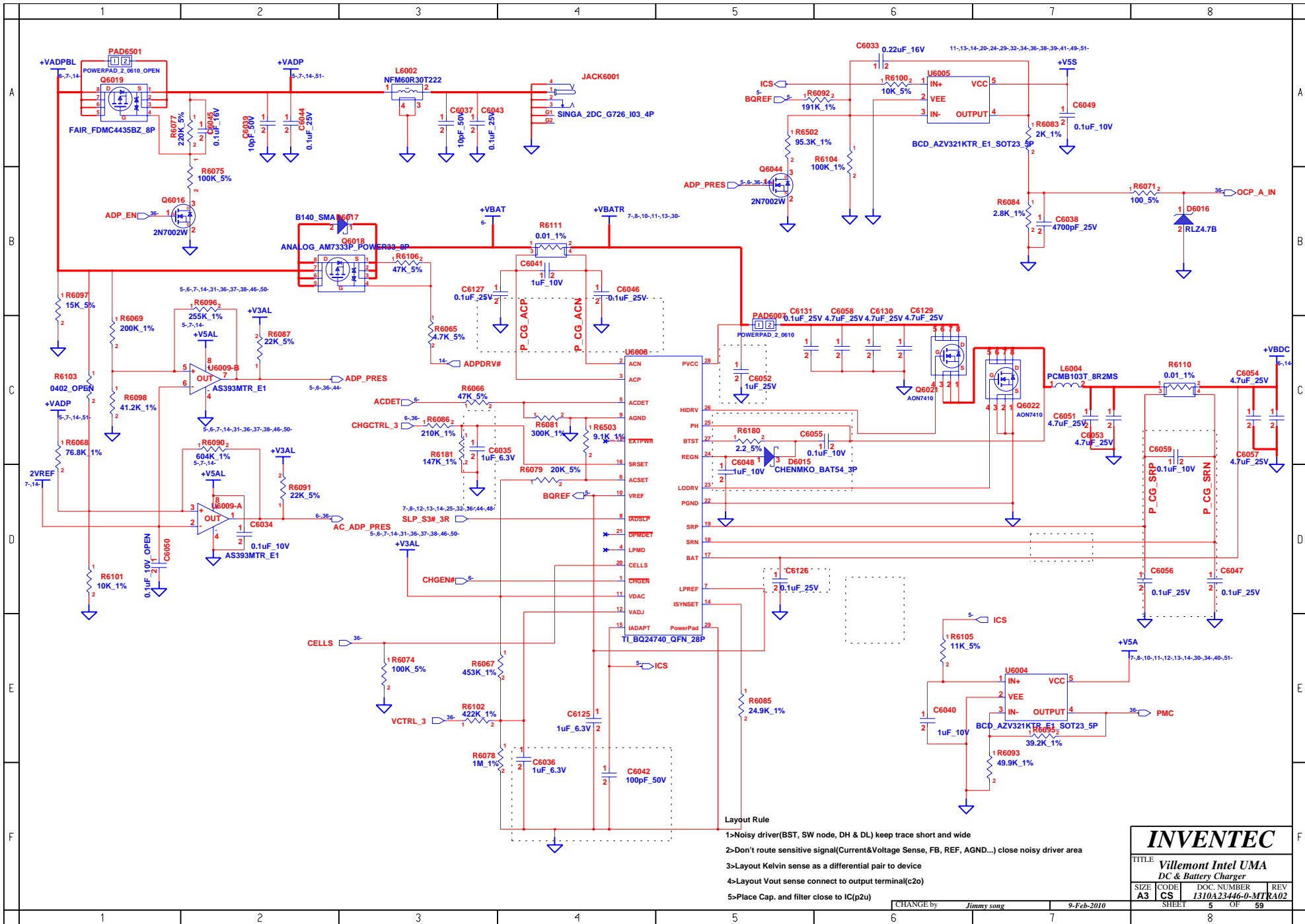
8



INVENTEC			
TITLE <i>Villemont Intel UMA</i>			
SIZE A3	CODE CS	DOC. NUMBER <i>1310A23446-0-MTR</i>	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 3		OF 59	

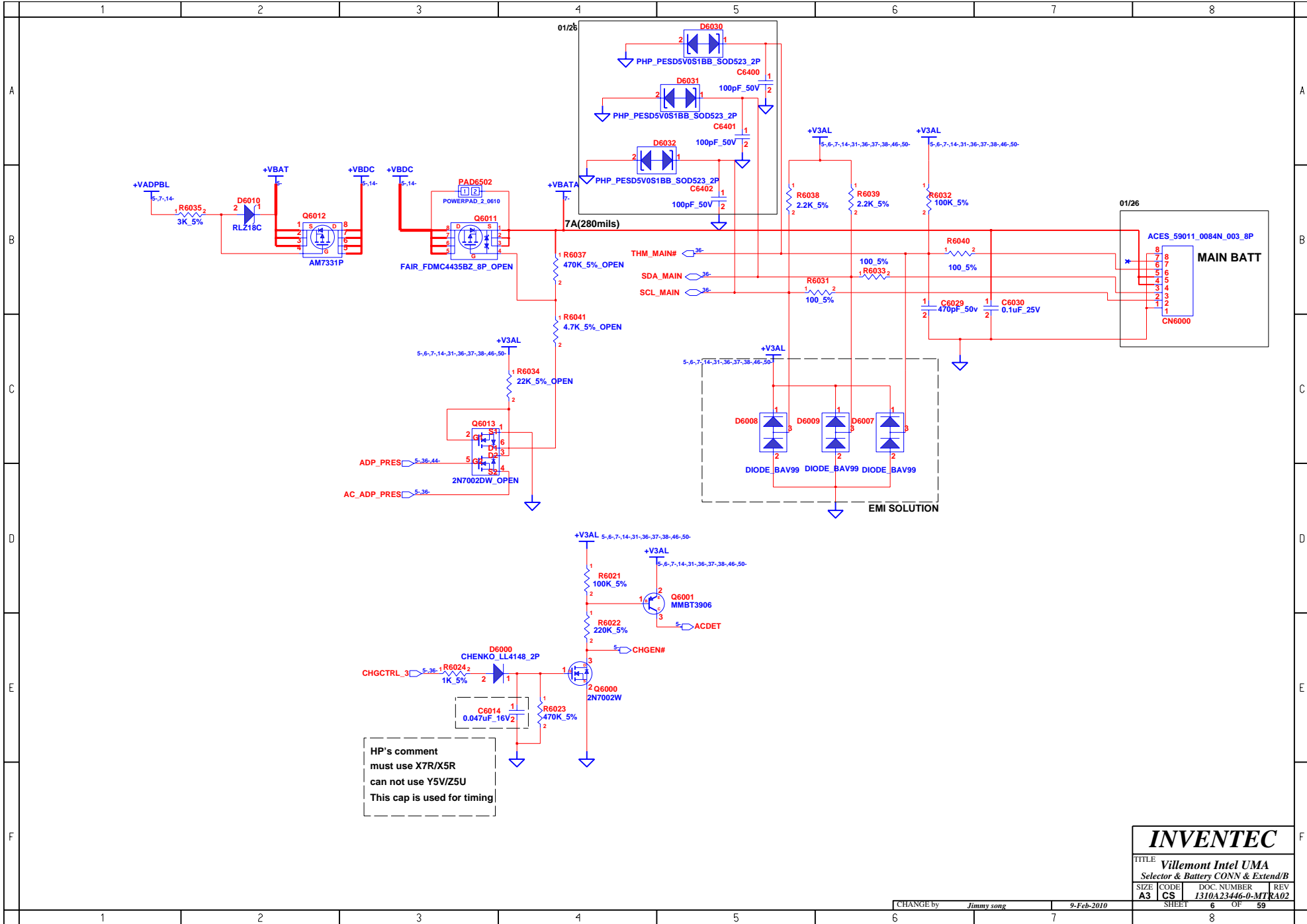


INVENTEC			
TITLE: Villemont Intel UMA			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A23446-0-MTR	REV: A02
CHANGE by: <i>Jim Song</i>		2-Mar-2010	
SHEET: 4		OF: 59	



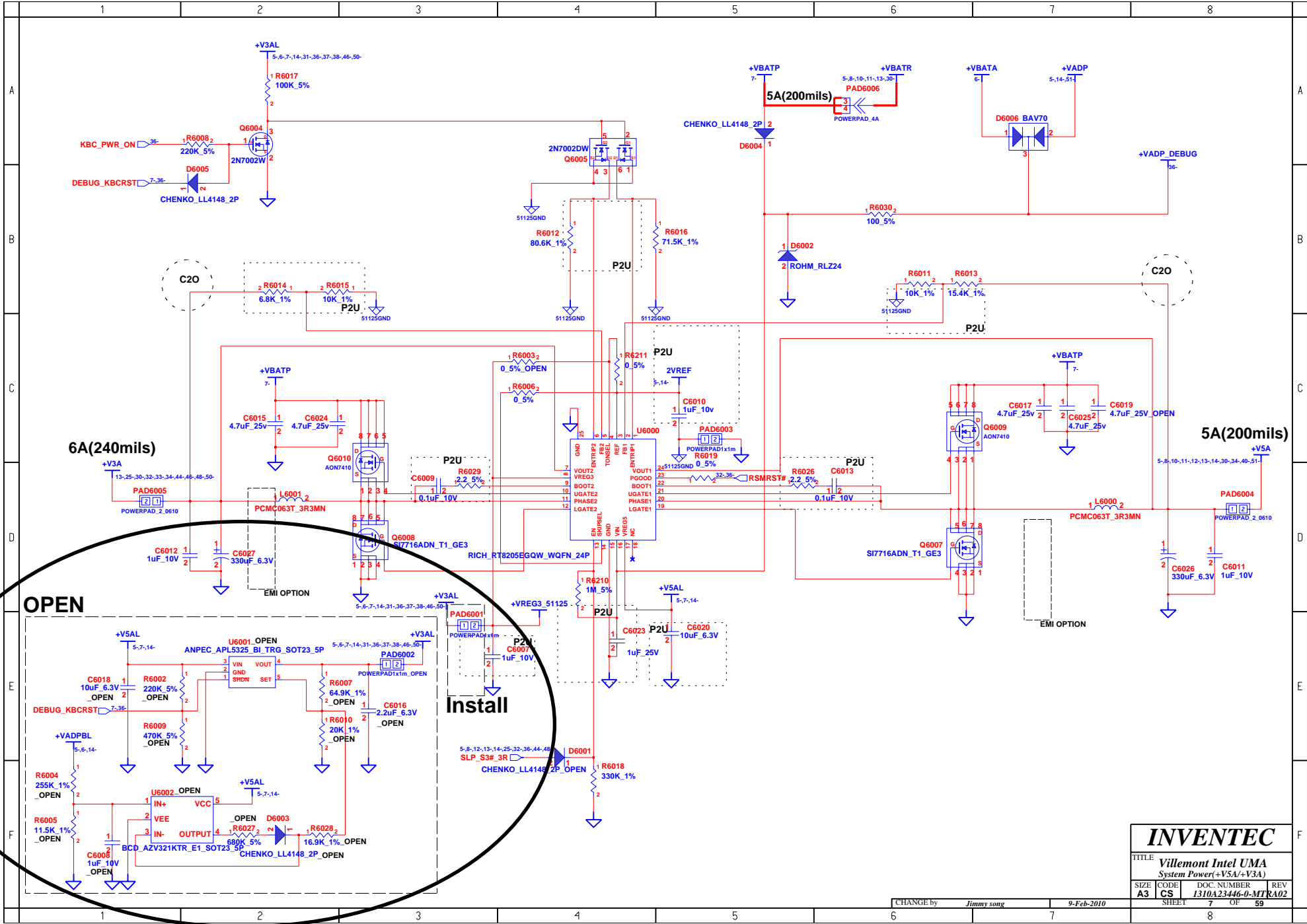
- Layout Rule
- 1>Noisy driver(BST, SW node, DH & DL) keep trace short and wide
 - 2>Don't route sensitive signal(Current&Voltage Sense, FB, REF, AGND...) close noisy driver area
 - 3>Layout Kelvin sense as a differential pair to device
 - 4>Layout Vout sense connect to output terminal(c2o)
 - 5>Place Cap. and filter close to IC(p2u)

INVENTEC			
TITLE Villemont Intel UMA DC & Battery Charger			
SIZE A3	CODE CS	DOC NUMBER I310A23446-0-MTR	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
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HP's comment
 must use X7R/X5R
 can not use Y5V/Z5U
 This cap is used for timing

INVENTEC			
TITLE Villemont Intel UMA			
Selector & Battery CONN & Extend/B			
SIZE A3	CODE CS	DOC NUMBER 1310A23446-0-MTR	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
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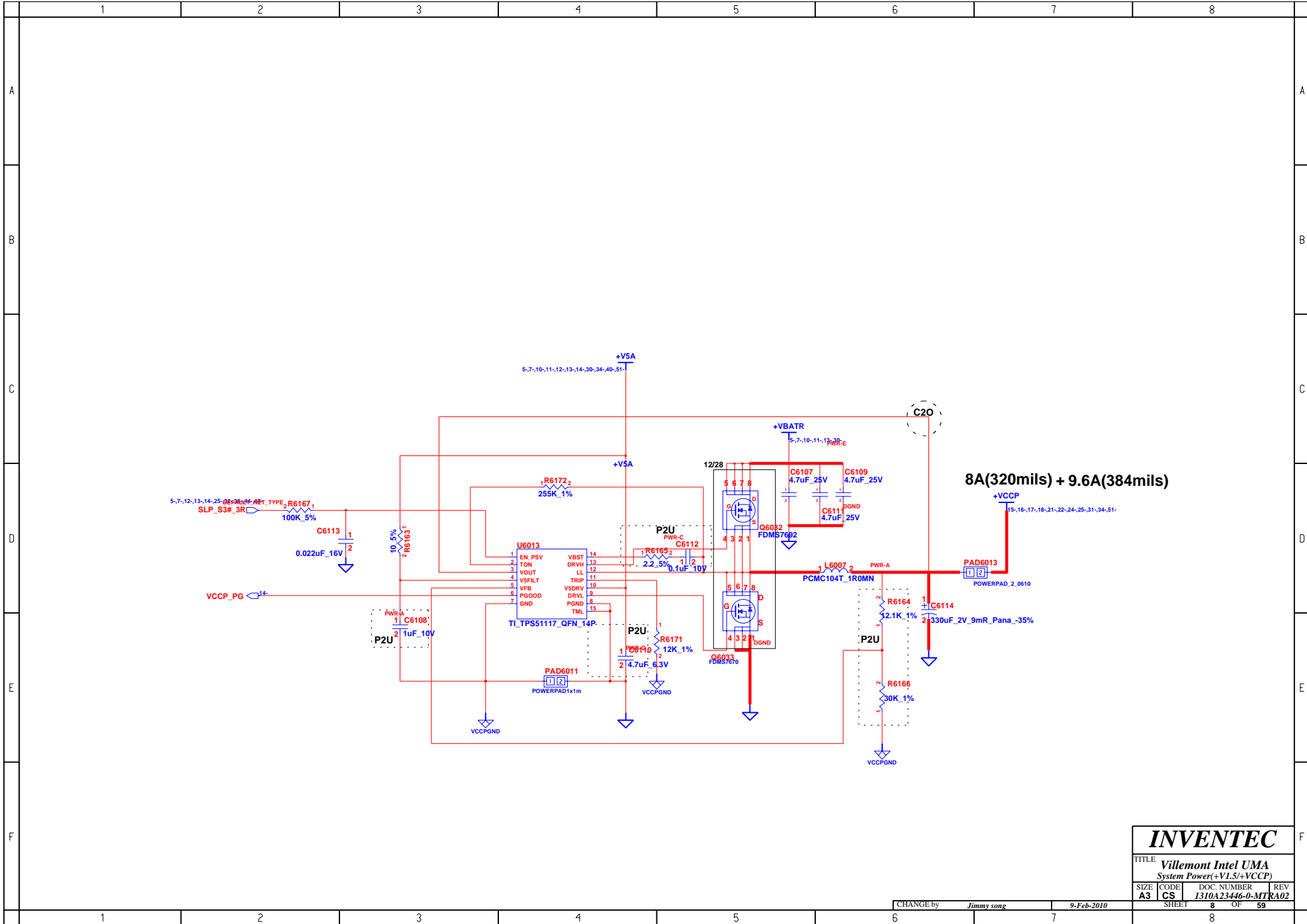
INVENTEC

TITLE: Villemont Intel UMA System Power(+VSA/+V3A)

SIZE: A3 CODE: CS DOC NUMBER: I310A23446-0-MTR REV: A02

SHEET: 7 OF 59

CHANGE by: Jimmy song 9-Feb-2010



8A(320mils) + 9.6A(384mils)

INVENTEC

TITLE **Villemont Intel UMA**
System Power(+V1.5/+VCCP)

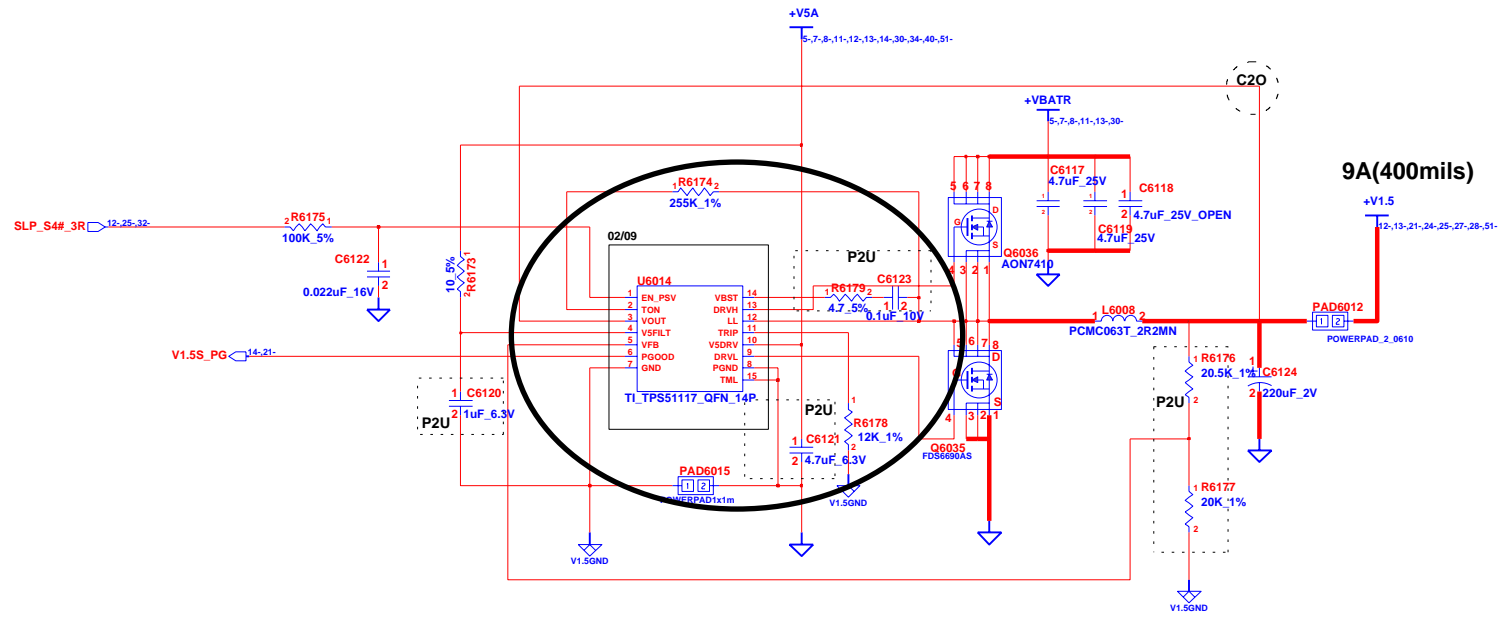
SIZE A3	CODE CS	DOC. NUMBER I310A23446-0-MTR	REV A02
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CHANGE by *Jimmy song* 9-Feb-2010

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BLANK

INVENTEC			
TITLE <i>Villemont Intel UMA</i>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	<i>1310A23446-0-MT</i>	R02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
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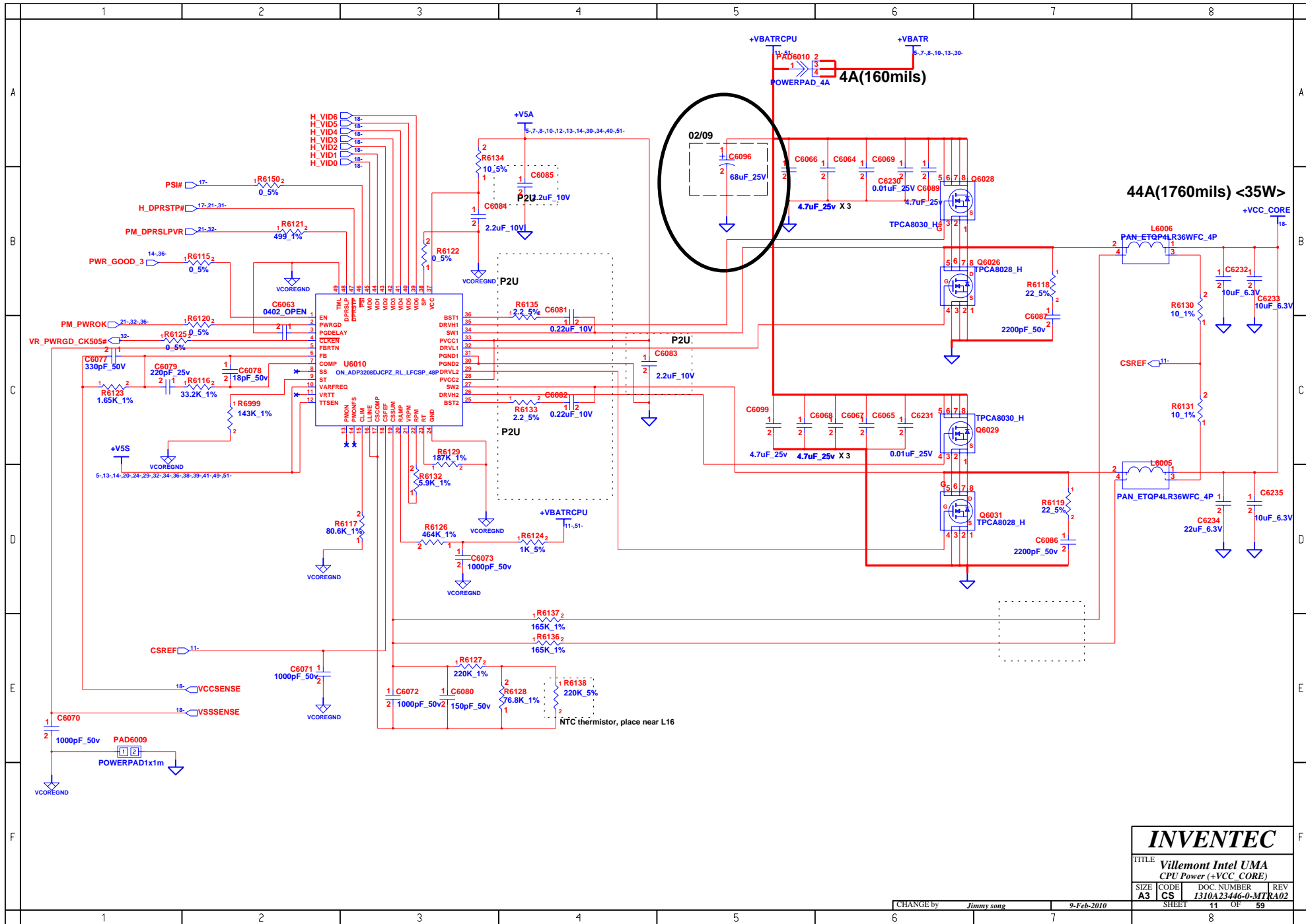
INVENTEC

TITLE **Villemont Intel UMA**
System Power (+V1.8S)

SIZE A3	CODE CS	DOC NUMBER I310A23446-0-MTR	REV A02
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CHANGE by *Jimmy song* 9-Feb-2010

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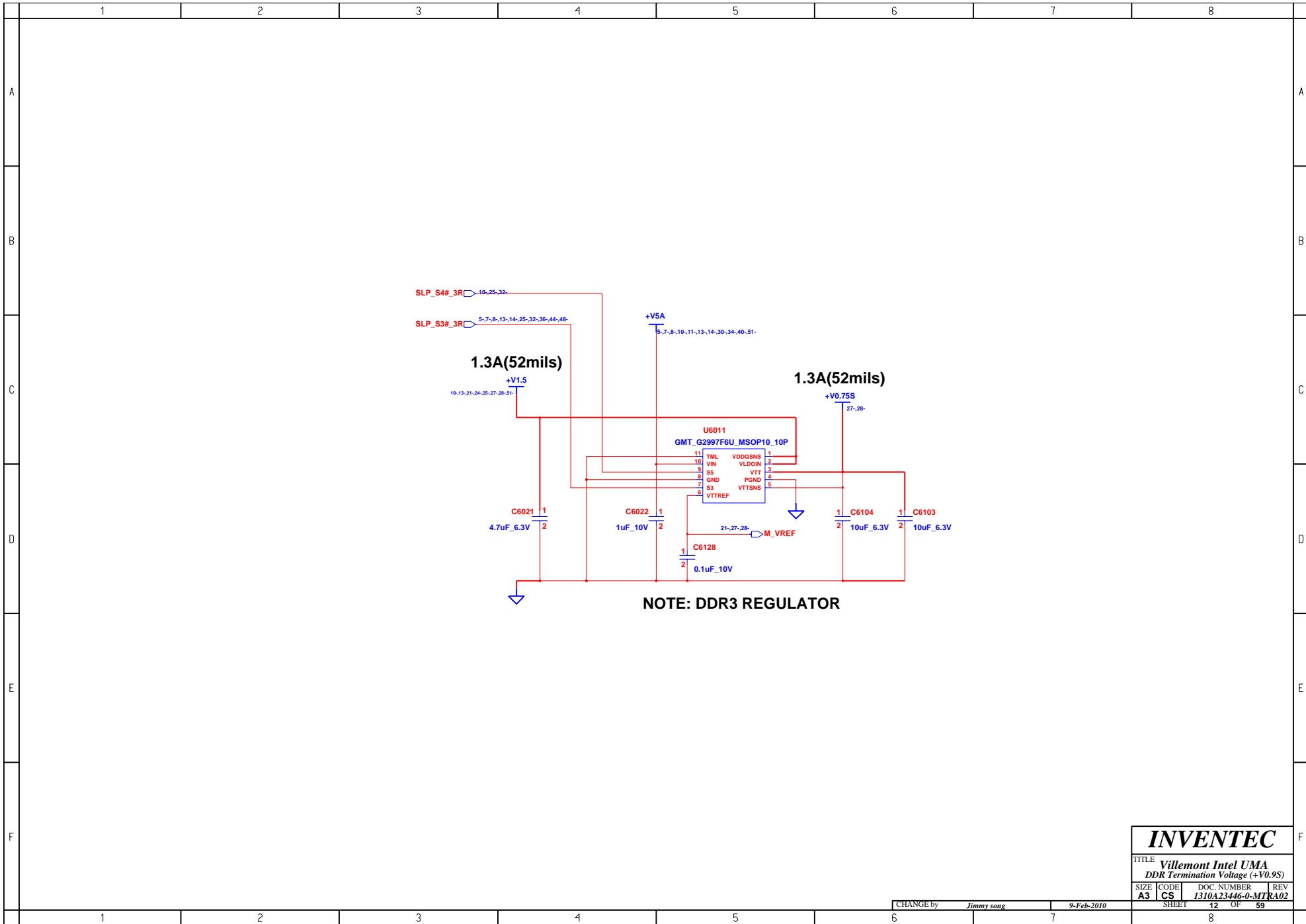


44A(1760mils) <35W>

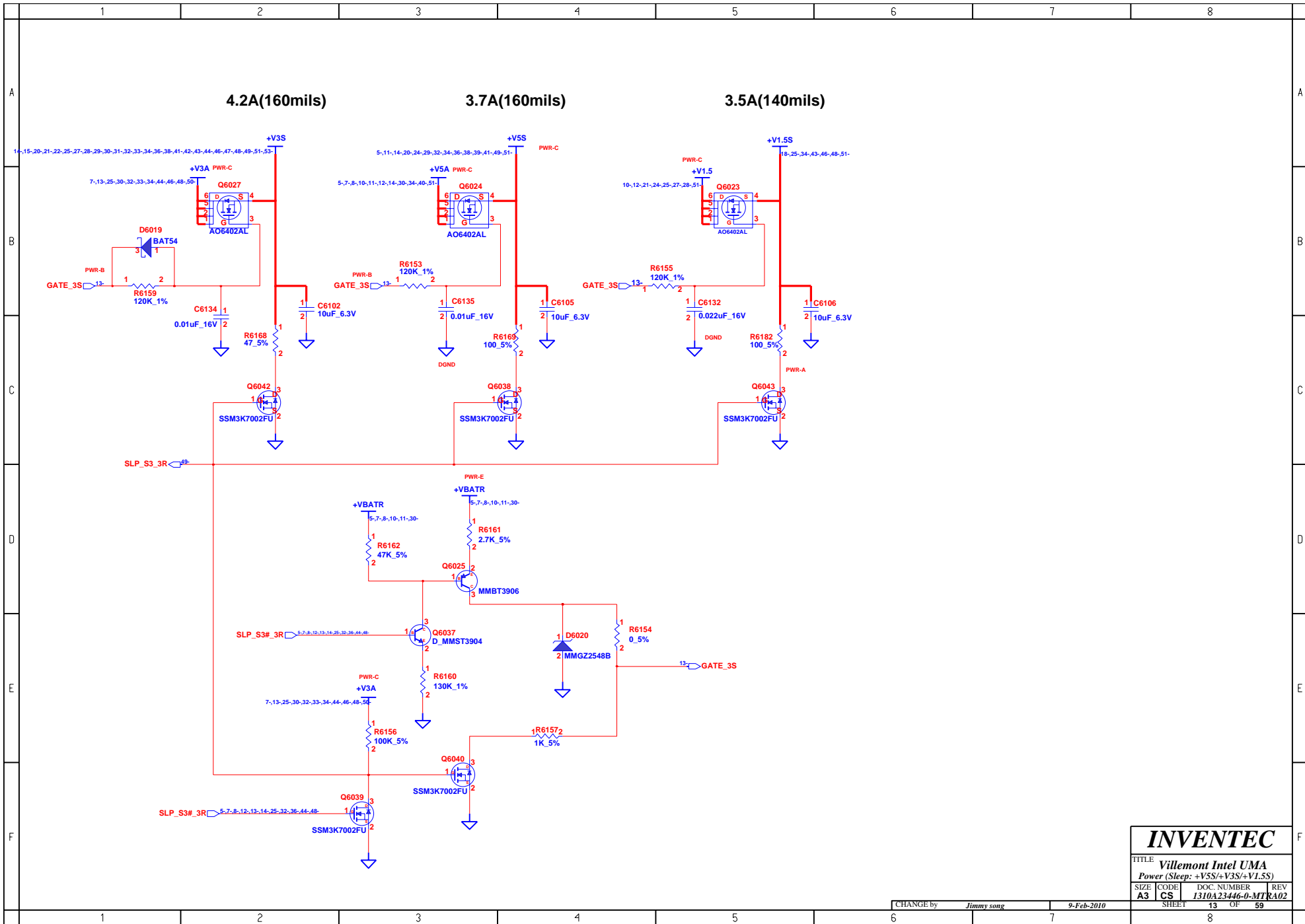
INVENTEC

TITLE			
Villemont Intel UMA			
CPU Power (+VCC_CORE)			
SIZE	CODE	DOC NUMBER	REV
A3	CS	I310A23446-0-MT	A02

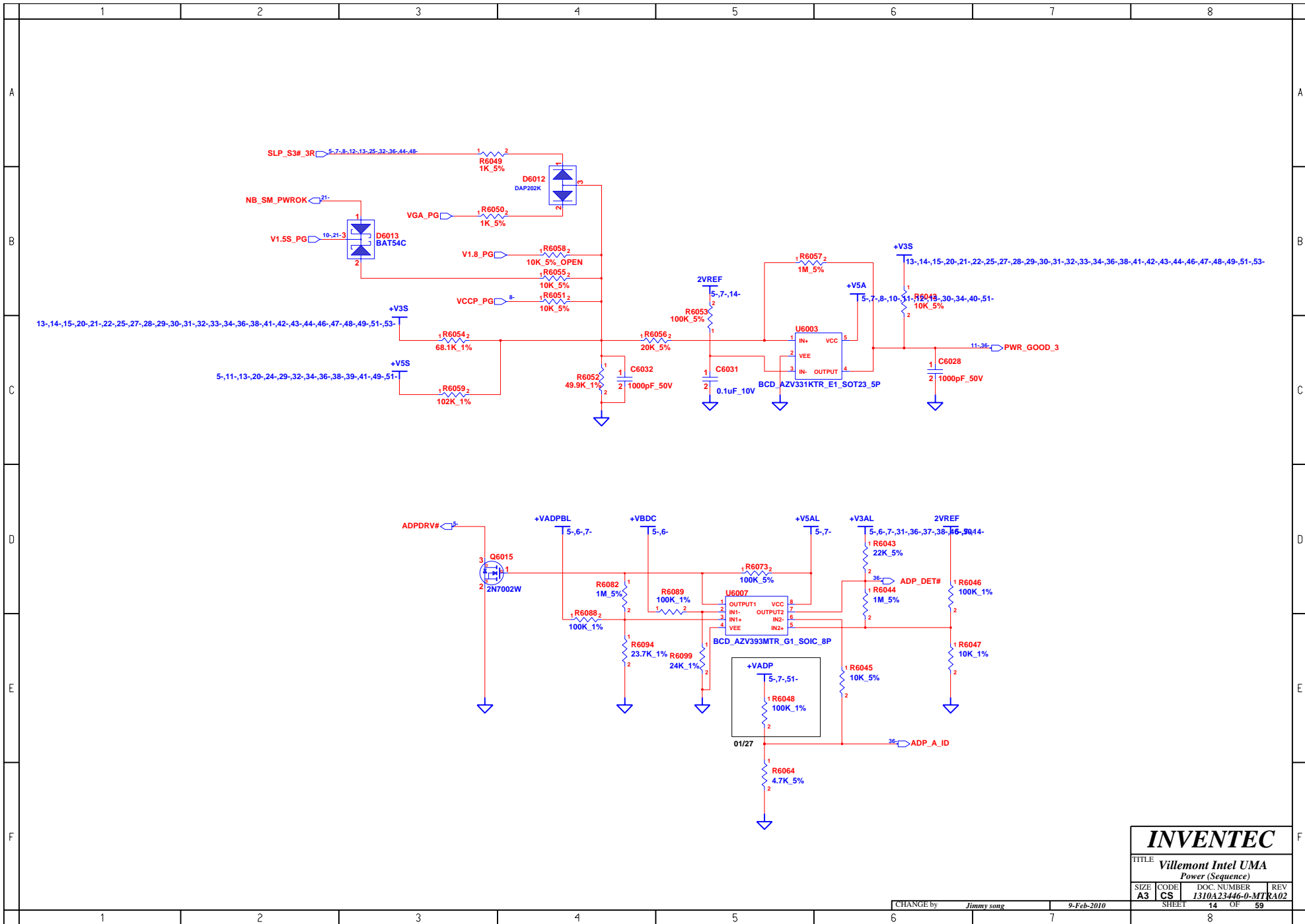
CHANGE by	Jimmy song	9-Feb-2010	SHEET	11	OF	59
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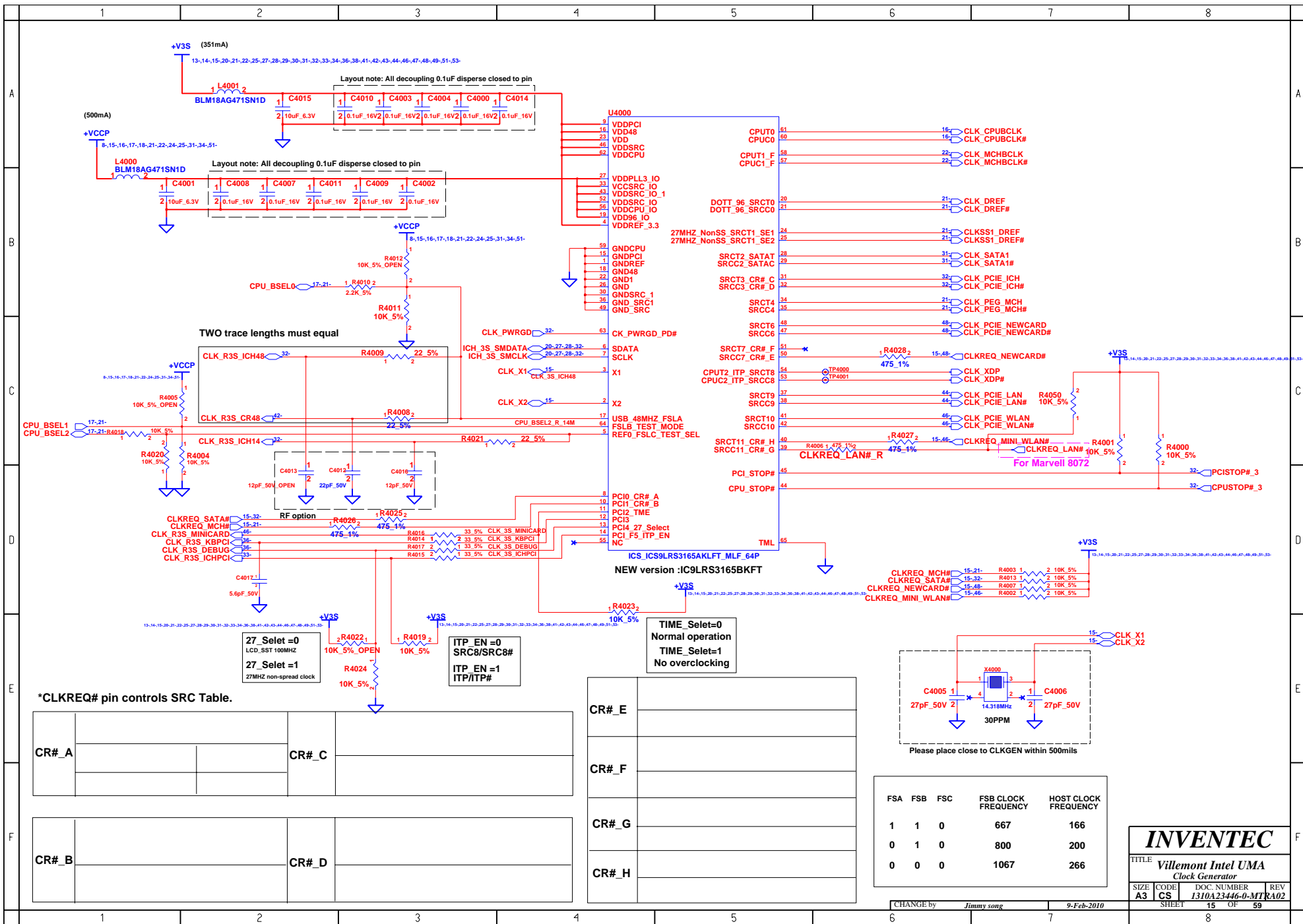
INVENTEC			
TITLE Villemont Intel UMA			
DDR Termination Voltage (+V0.9S)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MT	RA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	SHEET 12 OF 59

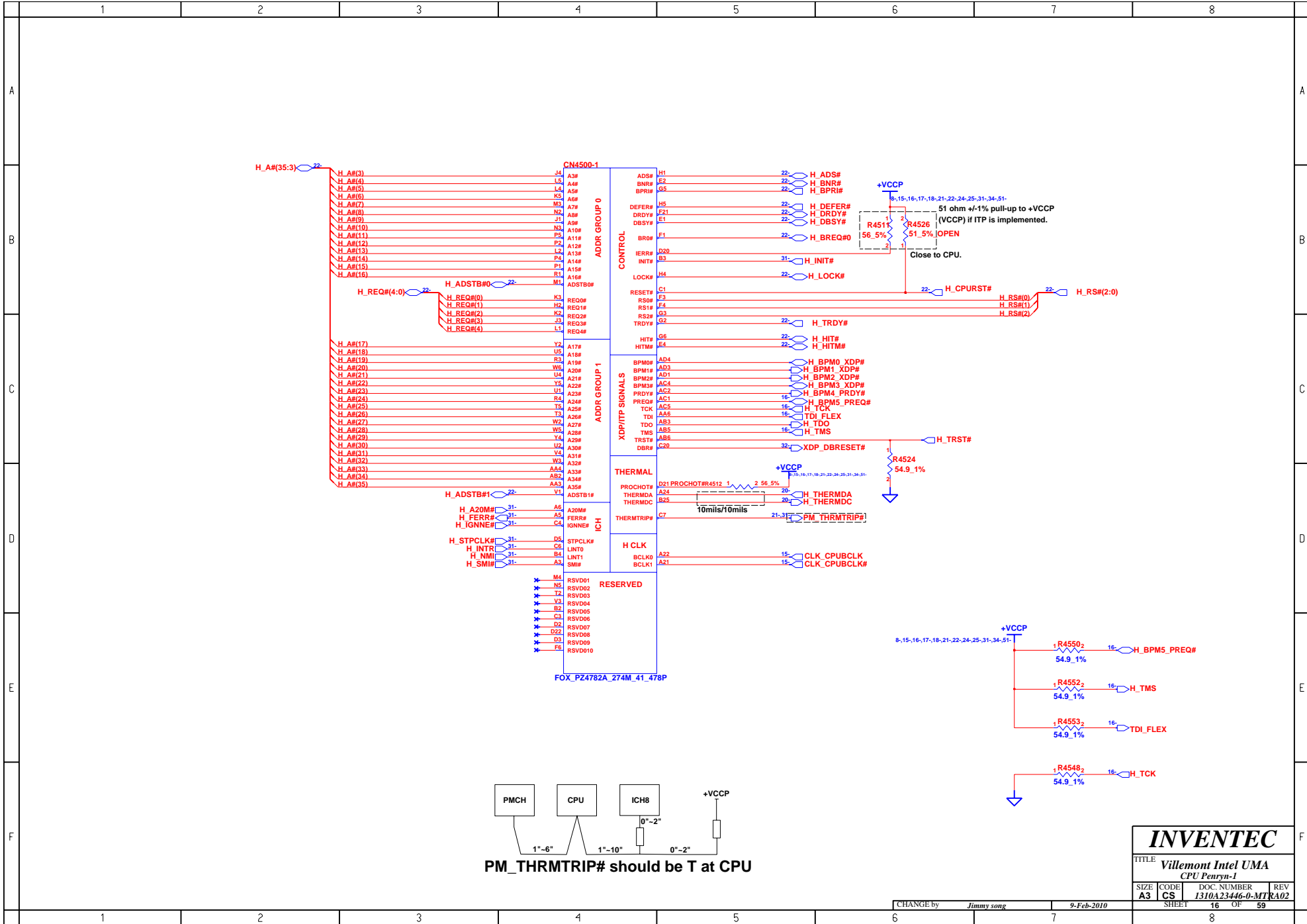


INVENTEC			
TITLE Villemont Intel UMA			
Power (Sleep: +VSS/+V3S/+V1.5S)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MT	KA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	SHEET 13 OF 59

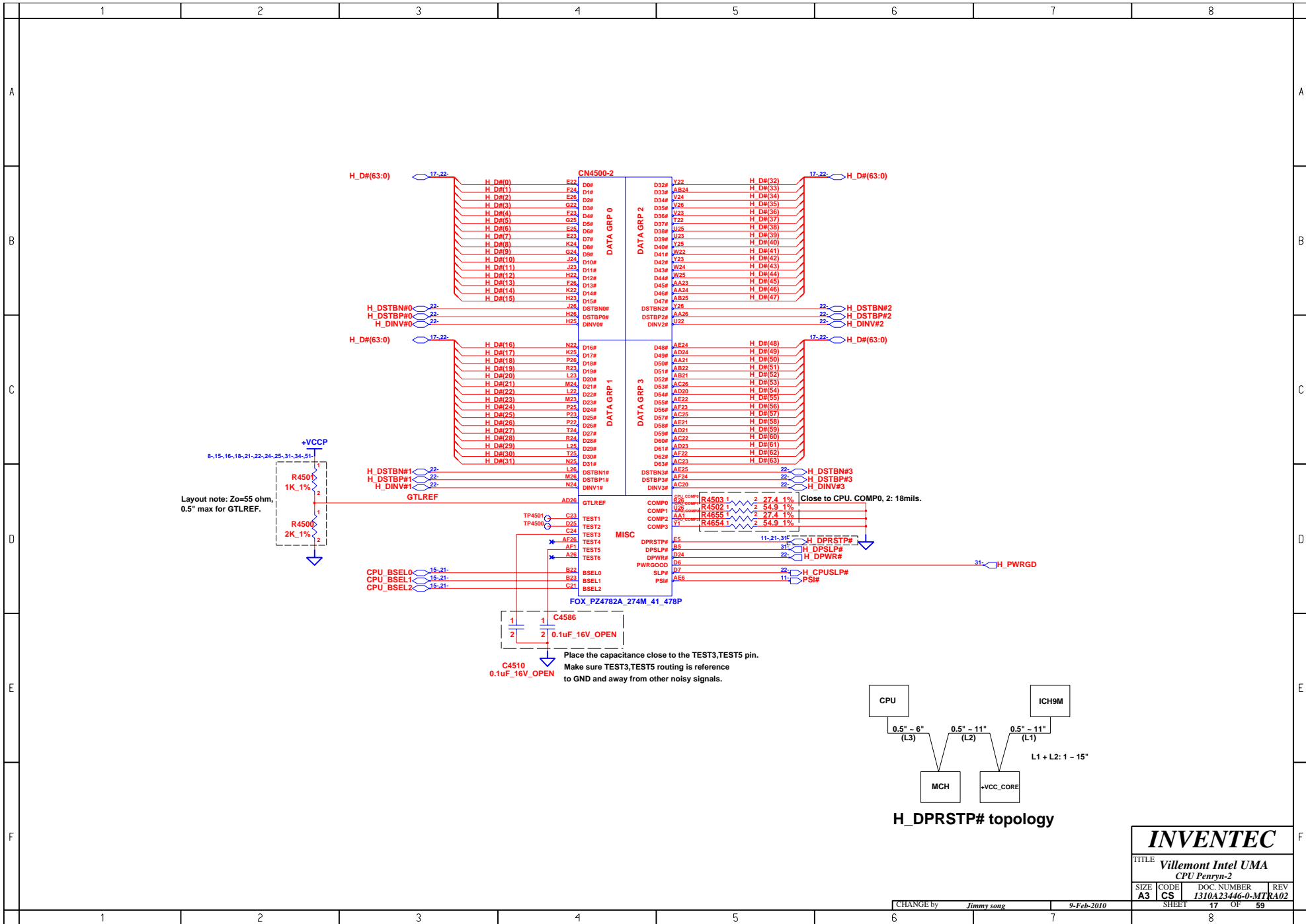


INVENTEC			
TITLE Villemont Intel UMA Power (Sequence)			
SIZE A3	CODE CS	DOC NUMBER 1310A23446-0-MTR	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
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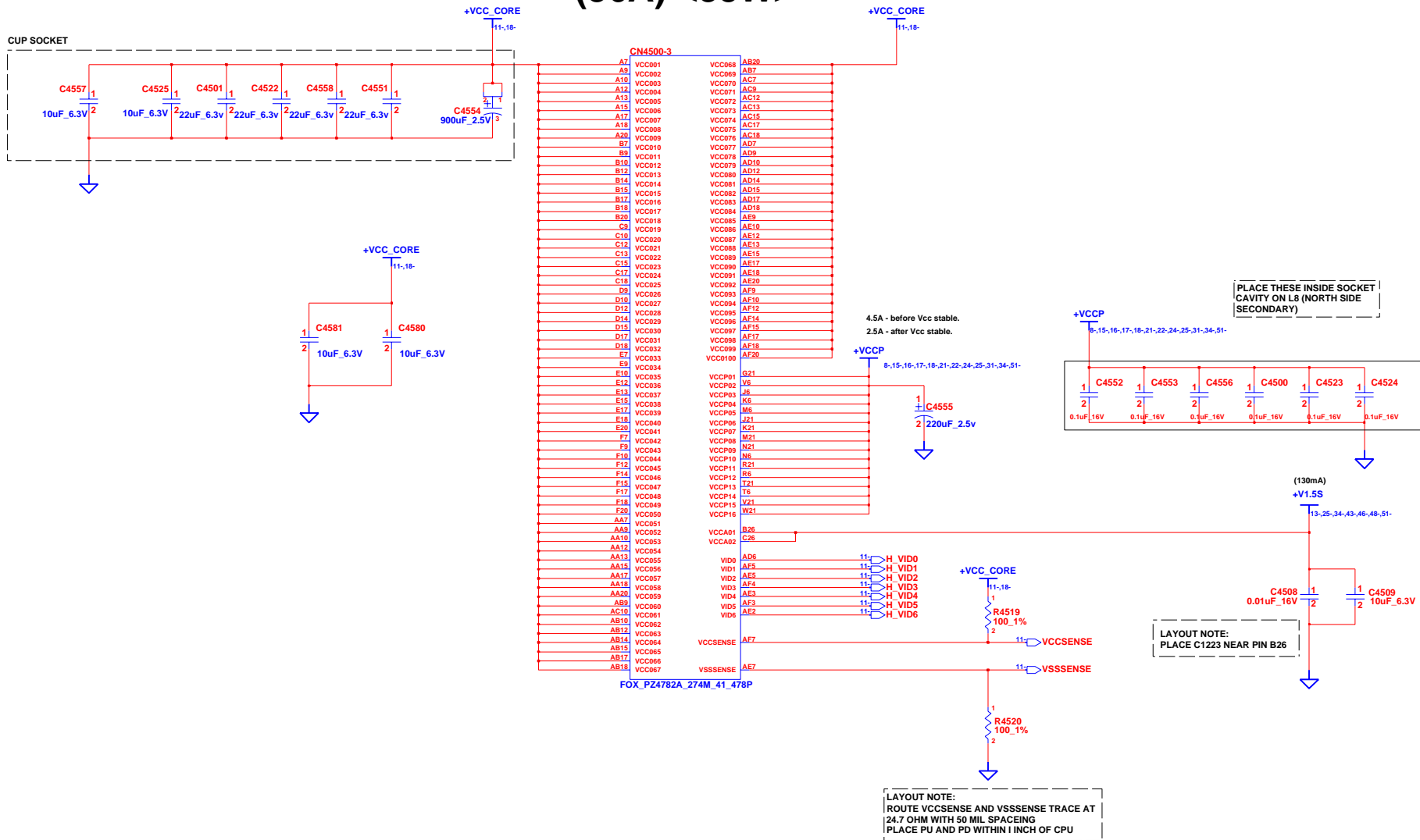




INVENTEC			
TITLE Villemont Intel UMA CPU Penryn-1			
SIZE A3	CODE CS	DOC NUMBER 1310A23446-0-MTR	REV RA02
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(36A) <35W>



INVENTEC

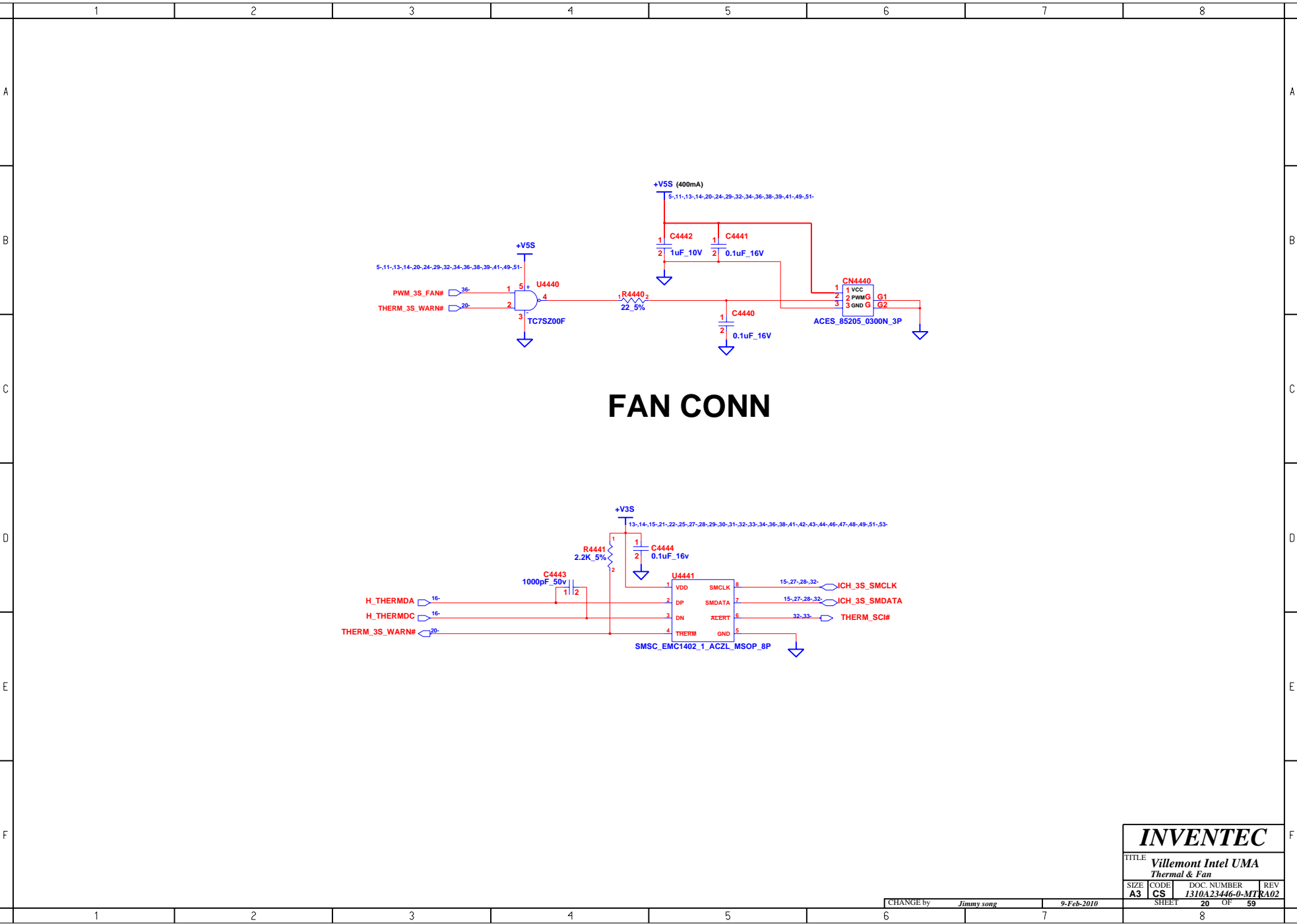
TITLE: **Villemont Intel UMA**
CPU Penryn-3

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23446-0-MT	RA02

CHANGE by: Jimmy song 9-Feb-2010 SHEET 18 OF 59

	1	2	3	4	5	6	7	8																																																																																																																																																																						
A	<p style="text-align: center; color: red;">CN4500-4</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%; text-align: center;">A4 VSS001</td><td style="width: 50%; text-align: center;">P6 VSS002</td></tr> <tr><td style="text-align: center;">A8 VSS002</td><td style="text-align: center;">P21 VSS003</td></tr> <tr><td style="text-align: center;">A11 VSS003</td><td style="text-align: center;">P24 VSS004</td></tr> <tr><td style="text-align: center;">A14 VSS004</td><td style="text-align: center;">R2 VSS005</td></tr> <tr><td style="text-align: center;">A16 VSS005</td><td style="text-align: center;">R5 VSS006</td></tr> <tr><td style="text-align: center;">A19 VSS006</td><td style="text-align: center;">R22 VSS007</td></tr> <tr><td style="text-align: center;">A23 VSS007</td><td style="text-align: center;">R25 VSS008</td></tr> <tr><td style="text-align: center;">A27 VSS008</td><td style="text-align: center;">T1 VSS009</td></tr> <tr><td style="text-align: center;">B6 VSS009</td><td style="text-align: center;">T4 VSS010</td></tr> <tr><td style="text-align: center;">B8 VSS010</td><td style="text-align: center;">T23 VSS011</td></tr> <tr><td style="text-align: center;">B11 VSS011</td><td style="text-align: center;">T26 VSS012</td></tr> <tr><td style="text-align: center;">B12 VSS012</td><td style="text-align: center;">U3 VSS013</td></tr> <tr><td style="text-align: center;">B16 VSS013</td><td style="text-align: center;">U6 VSS014</td></tr> <tr><td style="text-align: center;">B19 VSS014</td><td style="text-align: center;">U21 VSS015</td></tr> <tr><td style="text-align: center;">B21 VSS015</td><td style="text-align: center;">U24 VSS016</td></tr> <tr><td style="text-align: center;">B24 VSS016</td><td style="text-align: center;">V2 VSS017</td></tr> <tr><td style="text-align: center;">C5 VSS017</td><td style="text-align: center;">V5 VSS018</td></tr> <tr><td style="text-align: center;">C8 VSS018</td><td style="text-align: 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VSS010	T23 VSS011	B11 VSS011	T26 VSS012	B12 VSS012	U3 VSS013	B16 VSS013	U6 VSS014	B19 VSS014	U21 VSS015	B21 VSS015	U24 VSS016	B24 VSS016	V2 VSS017	C5 VSS017	V5 VSS018	C8 VSS018	V22 VSS019	C11 VSS019	V25 VSS020	C14 VSS020	W1 VSS021	C16 VSS021	W4 VSS022	C19 VSS022	W23 VSS023	C2 VSS023	W26 VSS024	C24 VSS024	Y3 VSS025	C25 VSS025	Y6 VSS026	D1 VSS026	Y21 VSS027	D4 VSS027	Y24 VSS028	D8 VSS028	AA2 VSS029	D11 VSS029	AA5 VSS030	D13 VSS030	AA8 VSS031	D16 VSS031	AA11 VSS032	D19 VSS032	AA14 VSS033	D23 VSS033	AA16 VSS034	D26 VSS034	AA19 VSS035	E3 VSS035	AA22 VSS036	E6 VSS036	AA25 VSS037	E8 VSS037	AB1 VSS038	E11 VSS038	AB4 VSS039	E14 VSS039	AB8 VSS040	E16 VSS040	AB11 VSS041	E19 VSS041	AB13 VSS042	E21 VSS042	AB16 VSS043	E24 VSS043	AB18 VSS044	F5 VSS044	AB23 VSS045	F8 VSS045	AB26 VSS046	F11 VSS046	AC3 VSS047	F13 VSS047	AC6 VSS048	F16 VSS048	AC8 VSS049	F19 VSS049	AC11 VSS050	F2 VSS050	AC14 VSS051	F22 VSS051	AC16 VSS052	F25 VSS052	AC19 VSS053	G4 VSS053	AC21 VSS054	G1 VSS054	AC24 VSS055	G23 VSS055	AD2 VSS056	G26 VSS056	AD5 VSS057	H3 VSS057	AD8 VSS058	H6 VSS058	AD11 VSS059	H21 VSS059	AD13 VSS060	H24 VSS060	AD16 VSS061	J2 VSS061	AD19 VSS062	J5 VSS062	AD22 VSS063	J22 VSS063	AD25 VSS064	J25 VSS064	AE1 VSS065	K1 VSS065	AE4 VSS066	K4 VSS066	AE8 VSS067	K23 VSS067	AE11 VSS068	K26 VSS068	AE14 VSS069	L3 VSS069	AE16 VSS070	L6 VSS070	AE19 VSS071	L21 VSS071	AE23 VSS072	L24 VSS072	AE26 VSS073	M2 VSS073	AF2 VSS074	M5 VSS074	AF6 VSS075	M22 VSS075	AF8 VSS076	M25 VSS076	AF11 VSS077	N1 VSS077	AF13 VSS078	N4 VSS078	AF16 VSS079	N23 VSS079	AF19 VSS080	N26 VSS080	AF21 VSS081	P3 VSS081	AF25 VSS082		AF25 VSS083	
A4 VSS001										P6 VSS002																																																																																																																																																																				
A8 VSS002										P21 VSS003																																																																																																																																																																				
A11 VSS003										P24 VSS004																																																																																																																																																																				
A14 VSS004										R2 VSS005																																																																																																																																																																				
A16 VSS005										R5 VSS006																																																																																																																																																																				
A19 VSS006										R22 VSS007																																																																																																																																																																				
A23 VSS007										R25 VSS008																																																																																																																																																																				
A27 VSS008										T1 VSS009																																																																																																																																																																				
B6 VSS009										T4 VSS010																																																																																																																																																																				
B8 VSS010										T23 VSS011																																																																																																																																																																				
B11 VSS011										T26 VSS012																																																																																																																																																																				
B12 VSS012										U3 VSS013																																																																																																																																																																				
B16 VSS013										U6 VSS014																																																																																																																																																																				
B19 VSS014										U21 VSS015																																																																																																																																																																				
B21 VSS015										U24 VSS016																																																																																																																																																																				
B24 VSS016										V2 VSS017																																																																																																																																																																				
C5 VSS017										V5 VSS018																																																																																																																																																																				
C8 VSS018										V22 VSS019																																																																																																																																																																				
C11 VSS019										V25 VSS020																																																																																																																																																																				
C14 VSS020	W1 VSS021																																																																																																																																																																													
C16 VSS021	W4 VSS022																																																																																																																																																																													
C19 VSS022	W23 VSS023																																																																																																																																																																													
C2 VSS023	W26 VSS024																																																																																																																																																																													
C24 VSS024	Y3 VSS025																																																																																																																																																																													
C25 VSS025	Y6 VSS026																																																																																																																																																																													
D1 VSS026	Y21 VSS027																																																																																																																																																																													
D4 VSS027	Y24 VSS028																																																																																																																																																																													
D8 VSS028	AA2 VSS029																																																																																																																																																																													
D11 VSS029	AA5 VSS030																																																																																																																																																																													
D13 VSS030	AA8 VSS031																																																																																																																																																																													
D16 VSS031	AA11 VSS032																																																																																																																																																																													
D19 VSS032	AA14 VSS033																																																																																																																																																																													
D23 VSS033	AA16 VSS034																																																																																																																																																																													
D26 VSS034	AA19 VSS035																																																																																																																																																																													
E3 VSS035	AA22 VSS036																																																																																																																																																																													
E6 VSS036	AA25 VSS037																																																																																																																																																																													
E8 VSS037	AB1 VSS038																																																																																																																																																																													
E11 VSS038	AB4 VSS039																																																																																																																																																																													
E14 VSS039	AB8 VSS040																																																																																																																																																																													
E16 VSS040	AB11 VSS041																																																																																																																																																																													
E19 VSS041	AB13 VSS042																																																																																																																																																																													
E21 VSS042	AB16 VSS043																																																																																																																																																																													
E24 VSS043	AB18 VSS044																																																																																																																																																																													
F5 VSS044	AB23 VSS045																																																																																																																																																																													
F8 VSS045	AB26 VSS046																																																																																																																																																																													
F11 VSS046	AC3 VSS047																																																																																																																																																																													
F13 VSS047	AC6 VSS048																																																																																																																																																																													
F16 VSS048	AC8 VSS049																																																																																																																																																																													
F19 VSS049	AC11 VSS050																																																																																																																																																																													
F2 VSS050	AC14 VSS051																																																																																																																																																																													
F22 VSS051	AC16 VSS052																																																																																																																																																																													
F25 VSS052	AC19 VSS053																																																																																																																																																																													
G4 VSS053	AC21 VSS054																																																																																																																																																																													
G1 VSS054	AC24 VSS055																																																																																																																																																																													
G23 VSS055	AD2 VSS056																																																																																																																																																																													
G26 VSS056	AD5 VSS057																																																																																																																																																																													
H3 VSS057	AD8 VSS058																																																																																																																																																																													
H6 VSS058	AD11 VSS059																																																																																																																																																																													
H21 VSS059	AD13 VSS060																																																																																																																																																																													
H24 VSS060	AD16 VSS061																																																																																																																																																																													
J2 VSS061	AD19 VSS062																																																																																																																																																																													
J5 VSS062	AD22 VSS063																																																																																																																																																																													
J22 VSS063	AD25 VSS064																																																																																																																																																																													
J25 VSS064	AE1 VSS065																																																																																																																																																																													
K1 VSS065	AE4 VSS066																																																																																																																																																																													
K4 VSS066	AE8 VSS067																																																																																																																																																																													
K23 VSS067	AE11 VSS068																																																																																																																																																																													
K26 VSS068	AE14 VSS069																																																																																																																																																																													
L3 VSS069	AE16 VSS070																																																																																																																																																																													
L6 VSS070	AE19 VSS071																																																																																																																																																																													
L21 VSS071	AE23 VSS072																																																																																																																																																																													
L24 VSS072	AE26 VSS073																																																																																																																																																																													
M2 VSS073	AF2 VSS074																																																																																																																																																																													
M5 VSS074	AF6 VSS075																																																																																																																																																																													
M22 VSS075	AF8 VSS076																																																																																																																																																																													
M25 VSS076	AF11 VSS077																																																																																																																																																																													
N1 VSS077	AF13 VSS078																																																																																																																																																																													
N4 VSS078	AF16 VSS079																																																																																																																																																																													
N23 VSS079	AF19 VSS080																																																																																																																																																																													
N26 VSS080	AF21 VSS081																																																																																																																																																																													
P3 VSS081	AF25 VSS082																																																																																																																																																																													
	AF25 VSS083																																																																																																																																																																													
B																																																																																																																																																																														
C																																																																																																																																																																														
D																																																																																																																																																																														
E																																																																																																																																																																														
F																																																																																																																																																																														

INVENTEC			
TITLE Villemont Intel UMA			
CPU Penrtm-4 & XDP CONN			
SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MTR	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 19		OF 59	



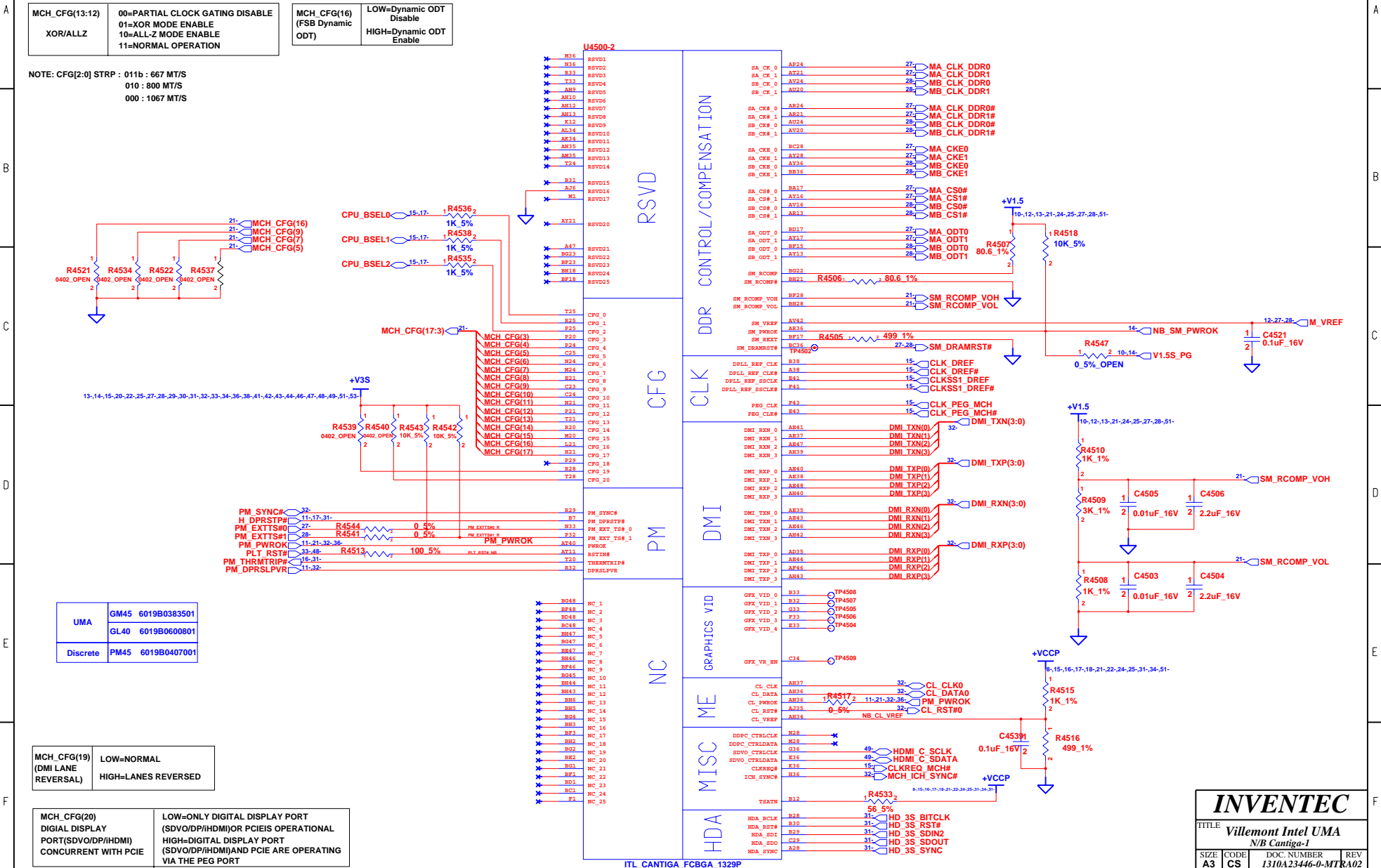
FAN CONN

INVENTEC			
TITLE Villemont Intel UMA Thermal & Fan			
SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MT	REV RA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 20		OF 59	

MCH_CFG(5)	LOW=DMIX2 HIGH=DMIX4	MCH_CFG(7) (CPU Strap)	LOW=RSVD HIGH=Mobile CPU	MCH_CFG(9) PCIe Graphics Lane	LOW=Reverse Lane HIGH=Normal operation
MCH_CFG(13:12)	00=PARTIAL CLOCK GATING DISABLE 01=XOR MODE ENABLE 10=ALL-Z MODE ENABLE 11=NORMAL OPERATION	MCH_CFG(16) (FSB Dynamic ODT)	LOW=Dynamic ODT Disable HIGH=Dynamic ODT Enable		

NOTE: CFG[2:0] STRP : 011b : 667 MT/S
010 : 800 MT/S
000 : 1067 MT/S

**NOTE : USE 4K-OHM RESISTOR WHEN INSTALLING
PULL-UP/PULL-DOWN RESISTOR ON ANY
MCH-CFG CONNECTION/PINS.**



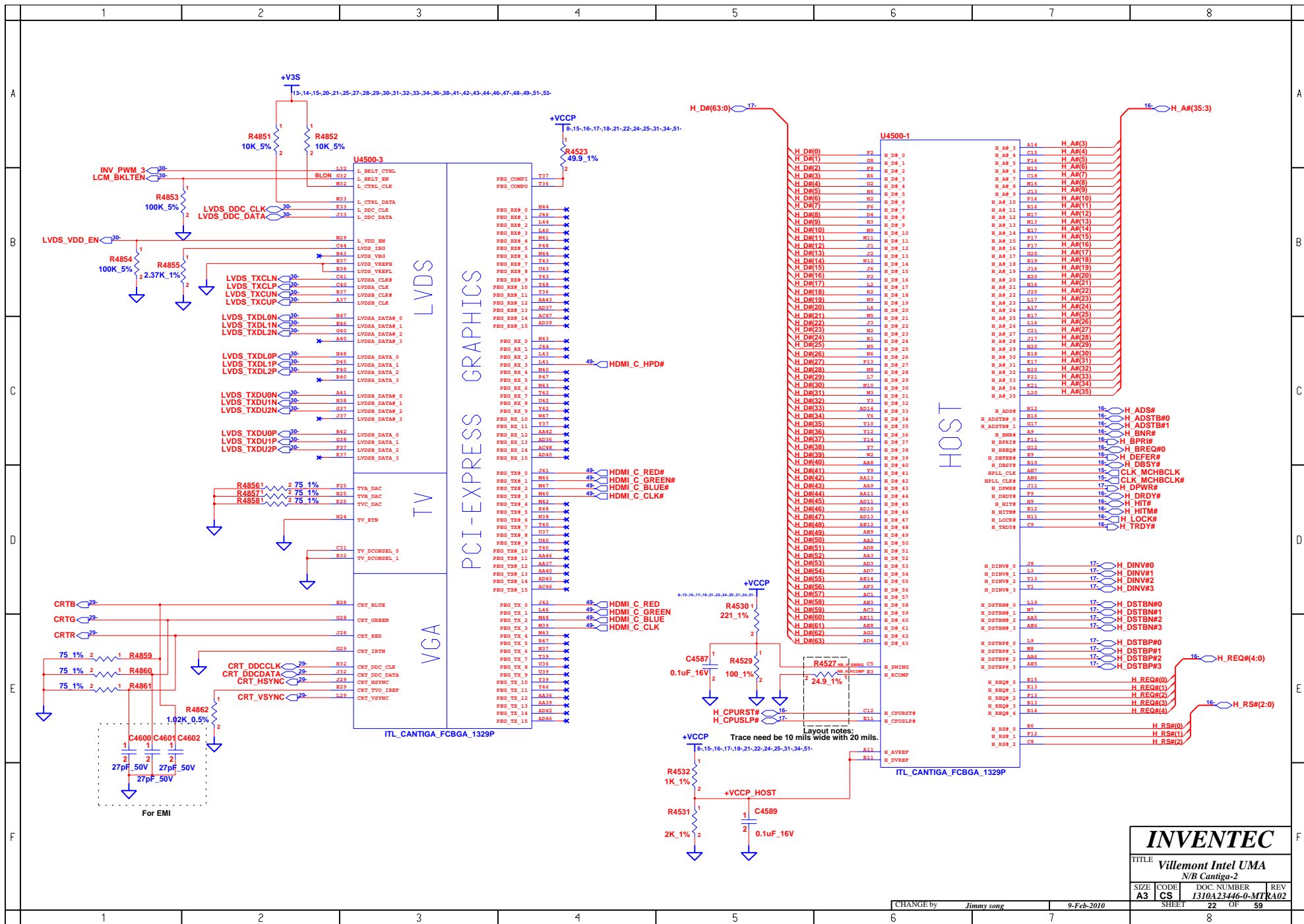
UMA	GM45 6019B0383501
	GL40 6019B0608081
Discrete	PM45 6019B0407001

MCH_CFG(19) (DMI LANE REVERSAL)	LOW=NORMAL HIGH=LANES REVERSED
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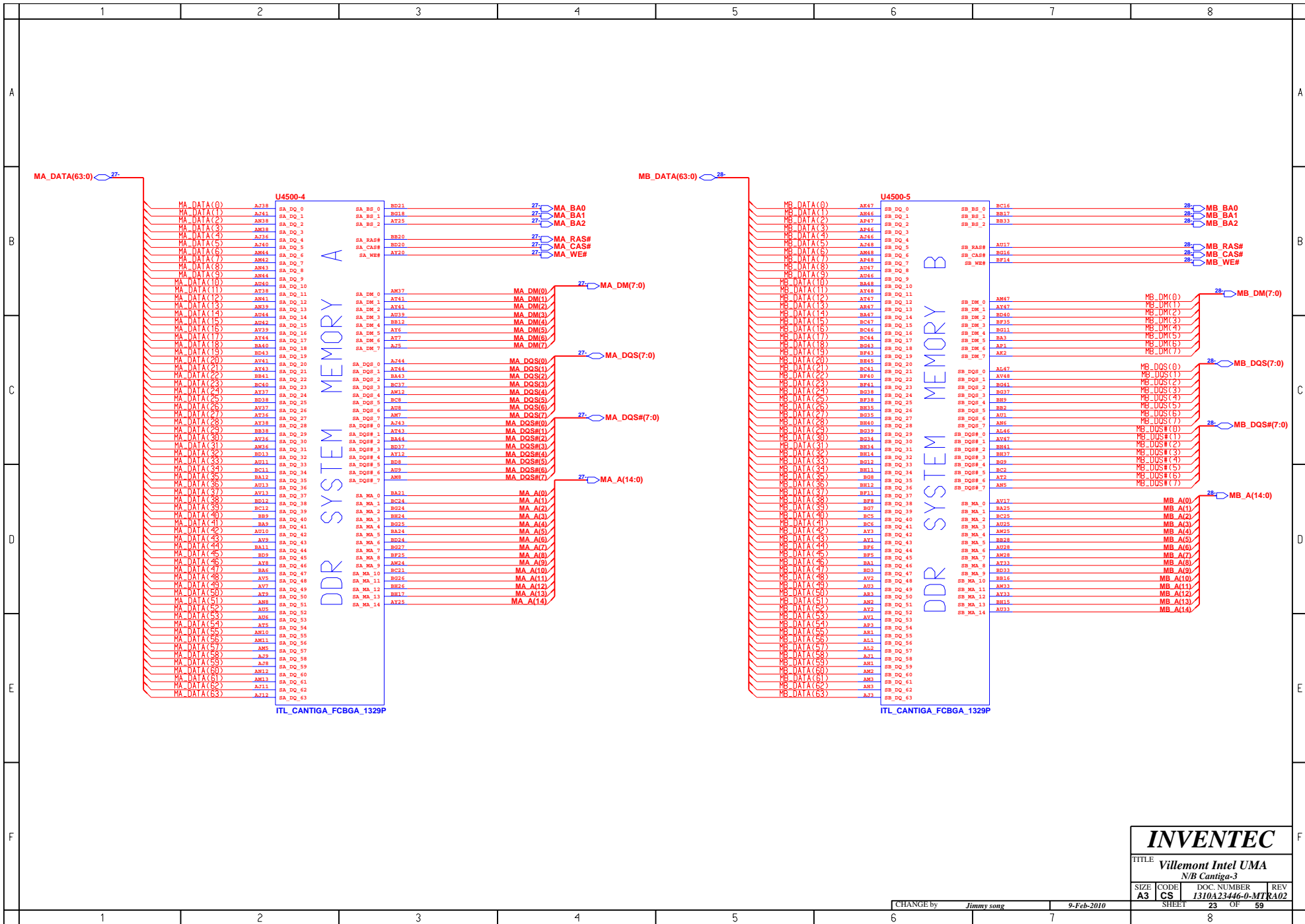
MCH_CFG(20) DIGITAL DISPLAY PORT(SDVO/DP/HDMI) CONCURRENT WITH PCIE	LOW=ONLY DIGITAL DISPLAY PORT (SDVO/DP/HDMI)OR PCIEIS OPERATIONAL HIGH=DIGITAL DISPLAY PORT (SDVO/DP/HDMI)AND PCIE ARE OPERATING VIA THE PEG PORT
--	---



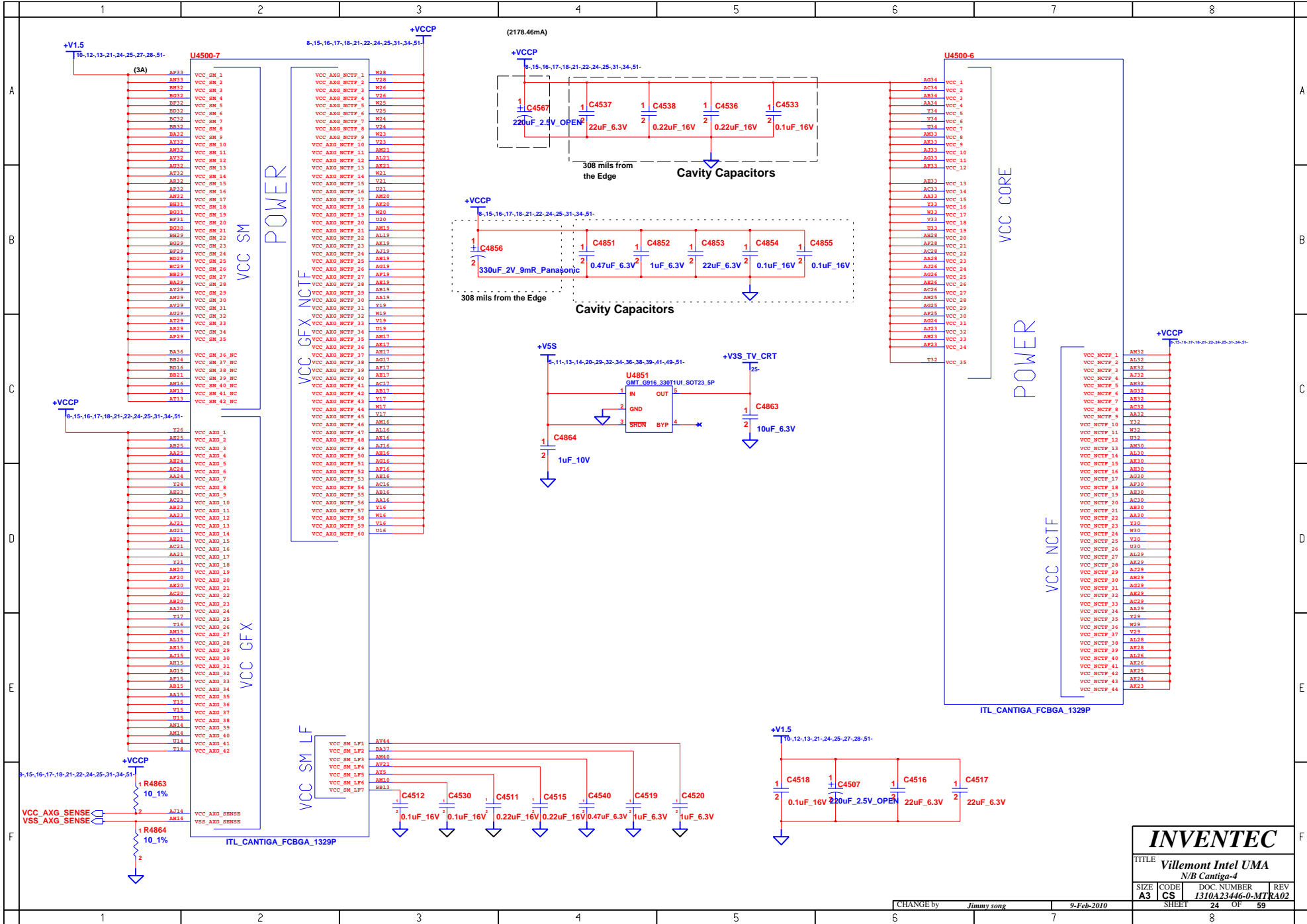
TITLE			
Villemont Intel UMA N/B Cantiga-1			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A23446-0-MT	A02
SHEET			OF
21			59



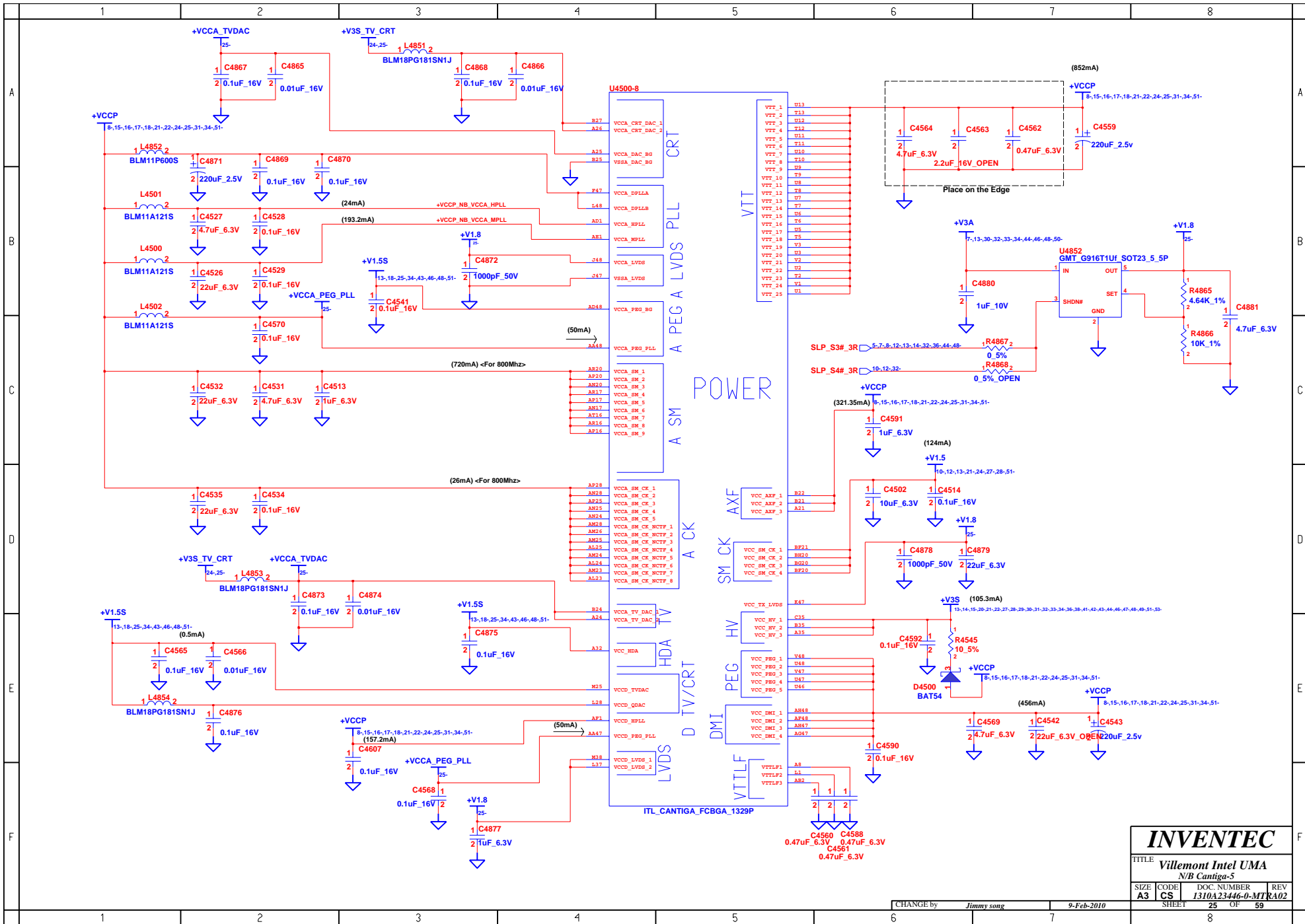
INVENTEC			
TITLE Villemont Intel UMA N/B Cantiga-2			
SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MTR	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 22		OF 59	



INVENTEC			
TITLE Villemont Intel UMA			
N/B Cantiga-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MIT	A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 23		OF 59	



INVENTEC			
TITLE Villemont Intel UMA <i>N/B Cantiga-4</i>			
SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MT	REV RA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 24		OF 59	



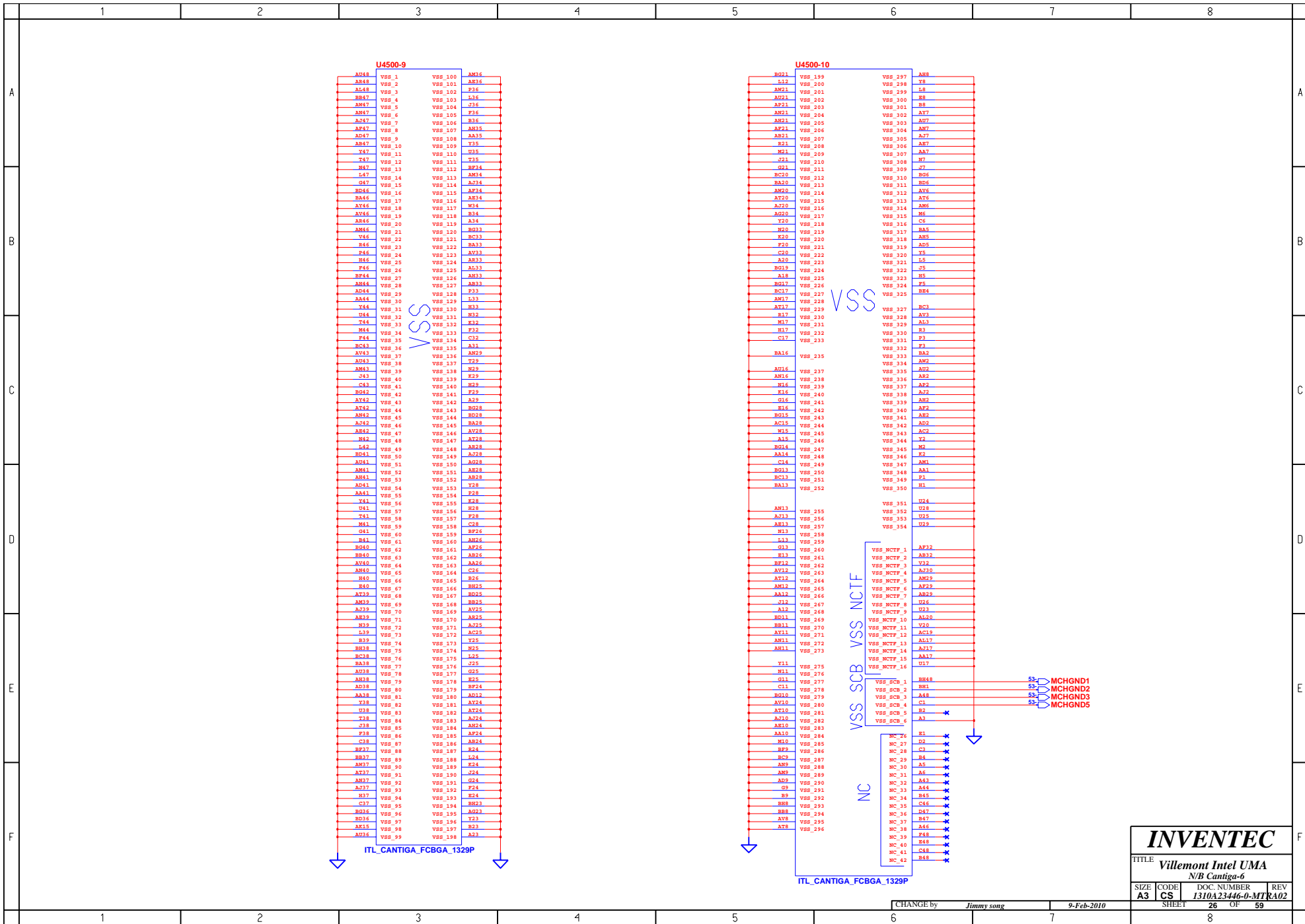
INVENTEC

TITLE **Villemont Intel UMA N/B Cantiga-5**

SIZE CODE CS DOC NUMBER REV
A3 CS 1310A23446-0-MTR A02

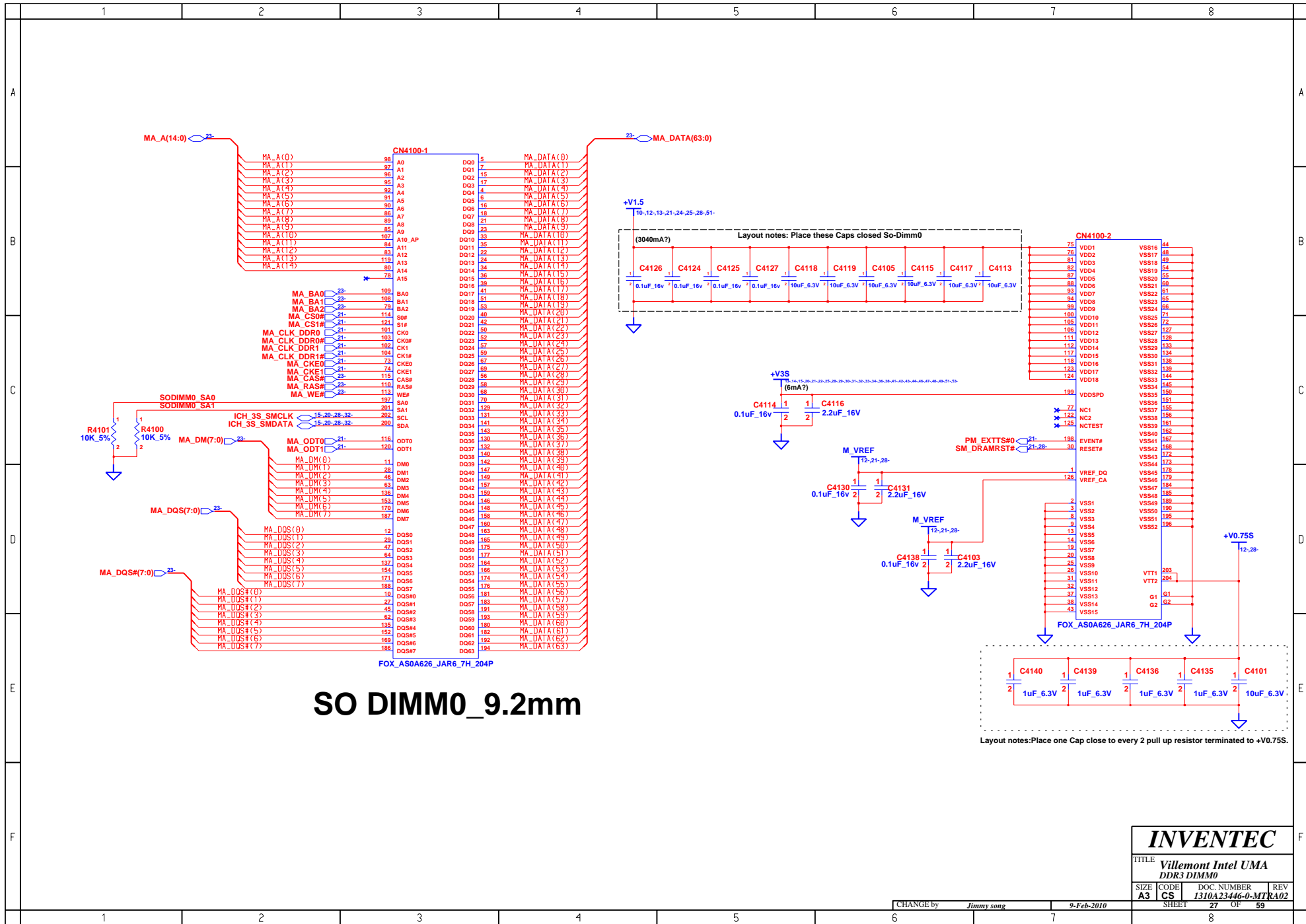
SHEET 25 OF 59

CHANGE by *Jimmy song* 9-Feb-2010



INVENTEC			
TITLE Villemont Intel UMA			
N/B Cantiga-6			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MT	RA02
SHEET		26	OF 59

CHANGE by *Jimmy song* 9-Feb-2010



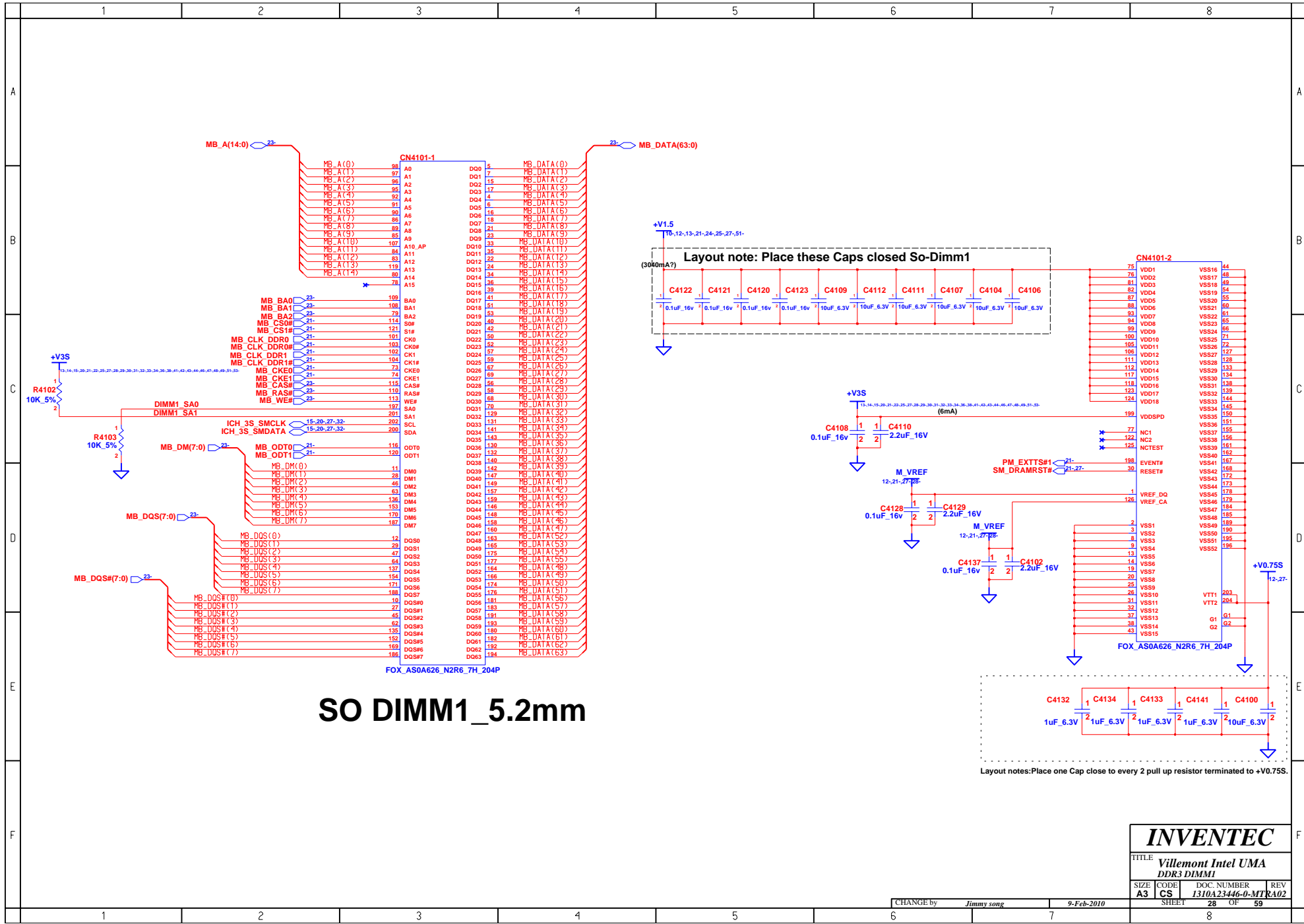
INVENTEC

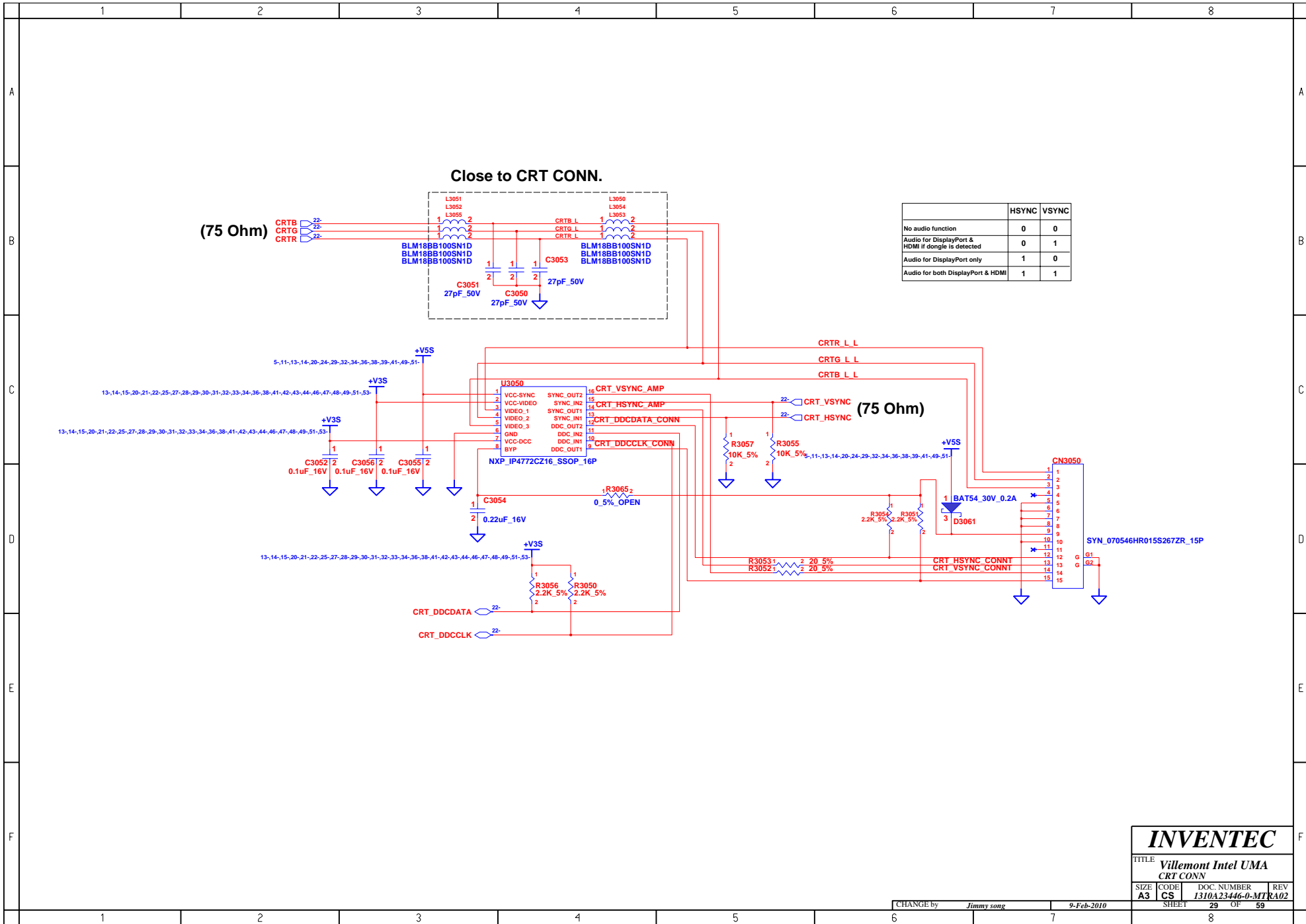
TITLE: **Villemont Intel UMA
DDR3 DIMM0**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MTR	A02

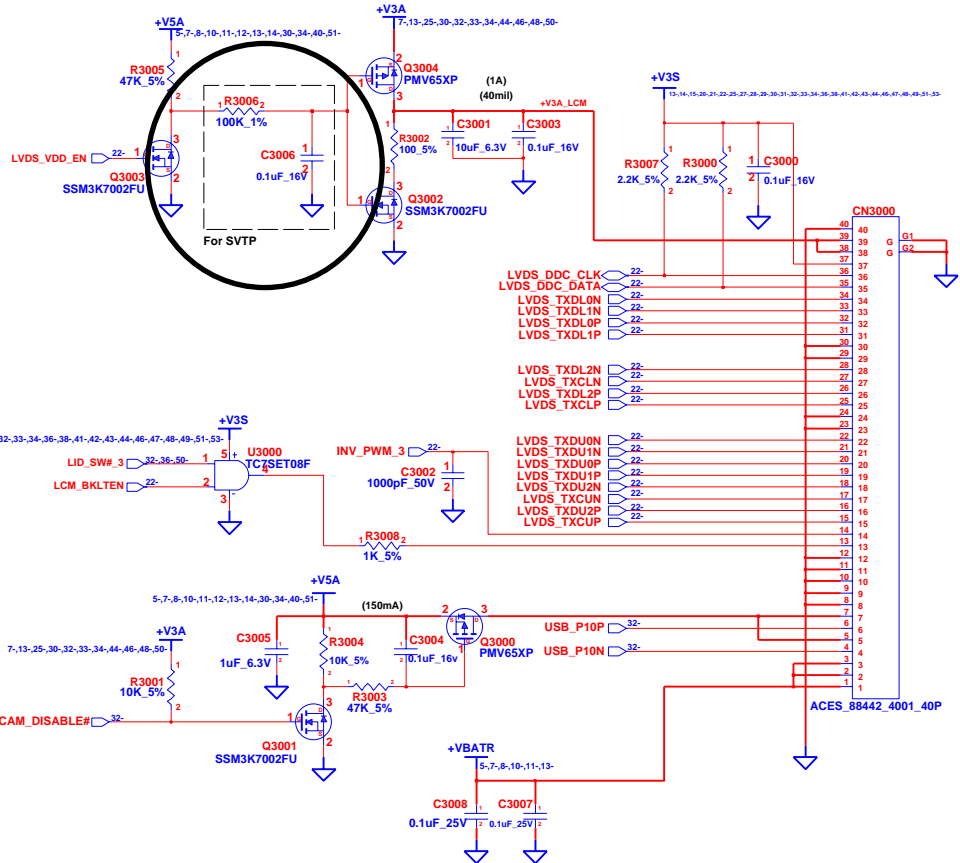
CHANGE by Jimmy song 9-Feb-2010

SHEET 27 OF 59





INVENTEC			
TITLE Villemont Intel UMA CRT CONN			
SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MTR	REV A02
CHANGE by Jimmy song		9-Feb-2010	
SHEET 29		OF 59	

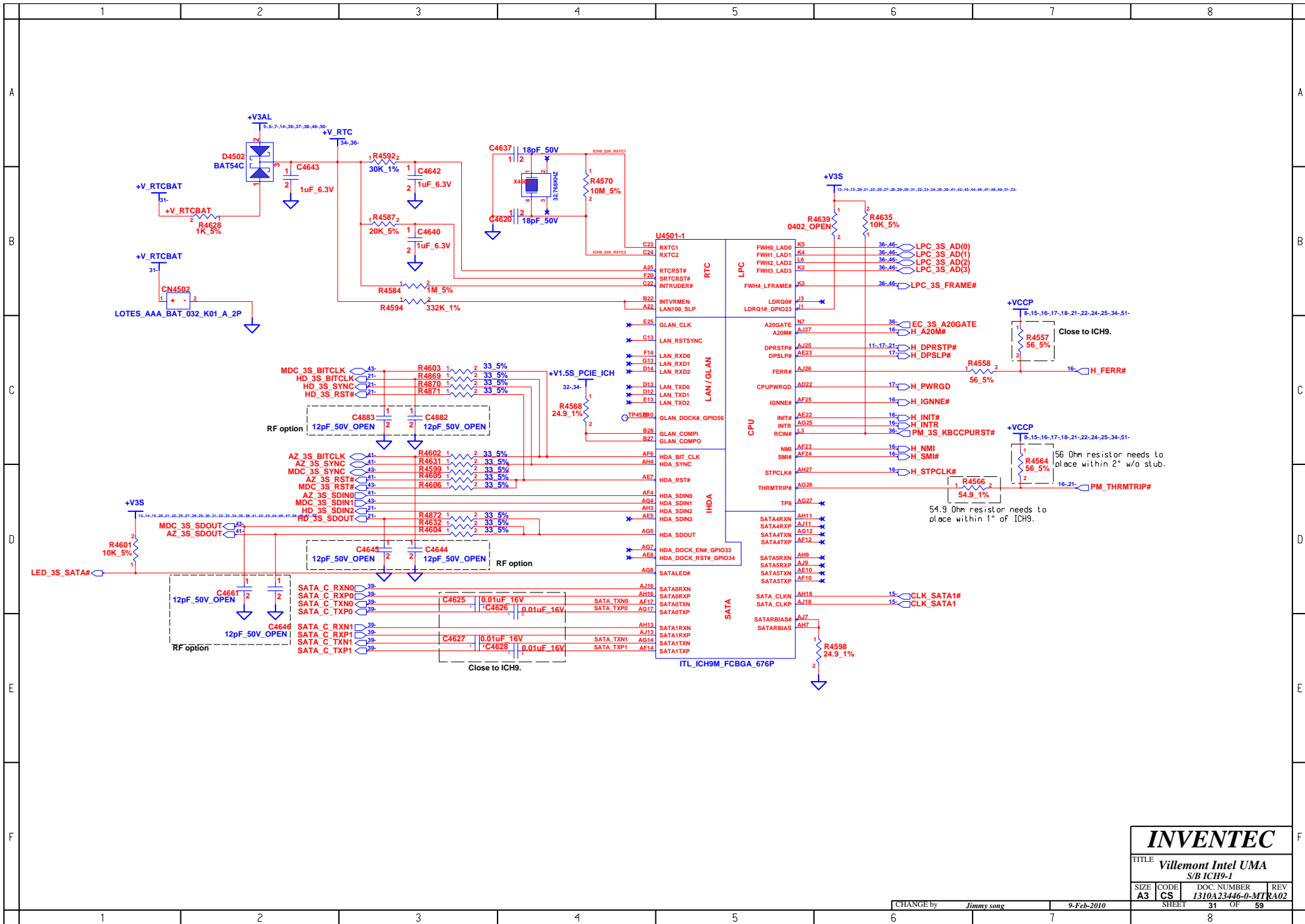


Web CAM
LCM & WebCam CONN

INVENTEC

TITLE **Villemont Intel UMA**
LCM, WebCam CONN

SIZE A3	CODE CS	DOC. NUMBER I310A23446-0-MTR	REV A02
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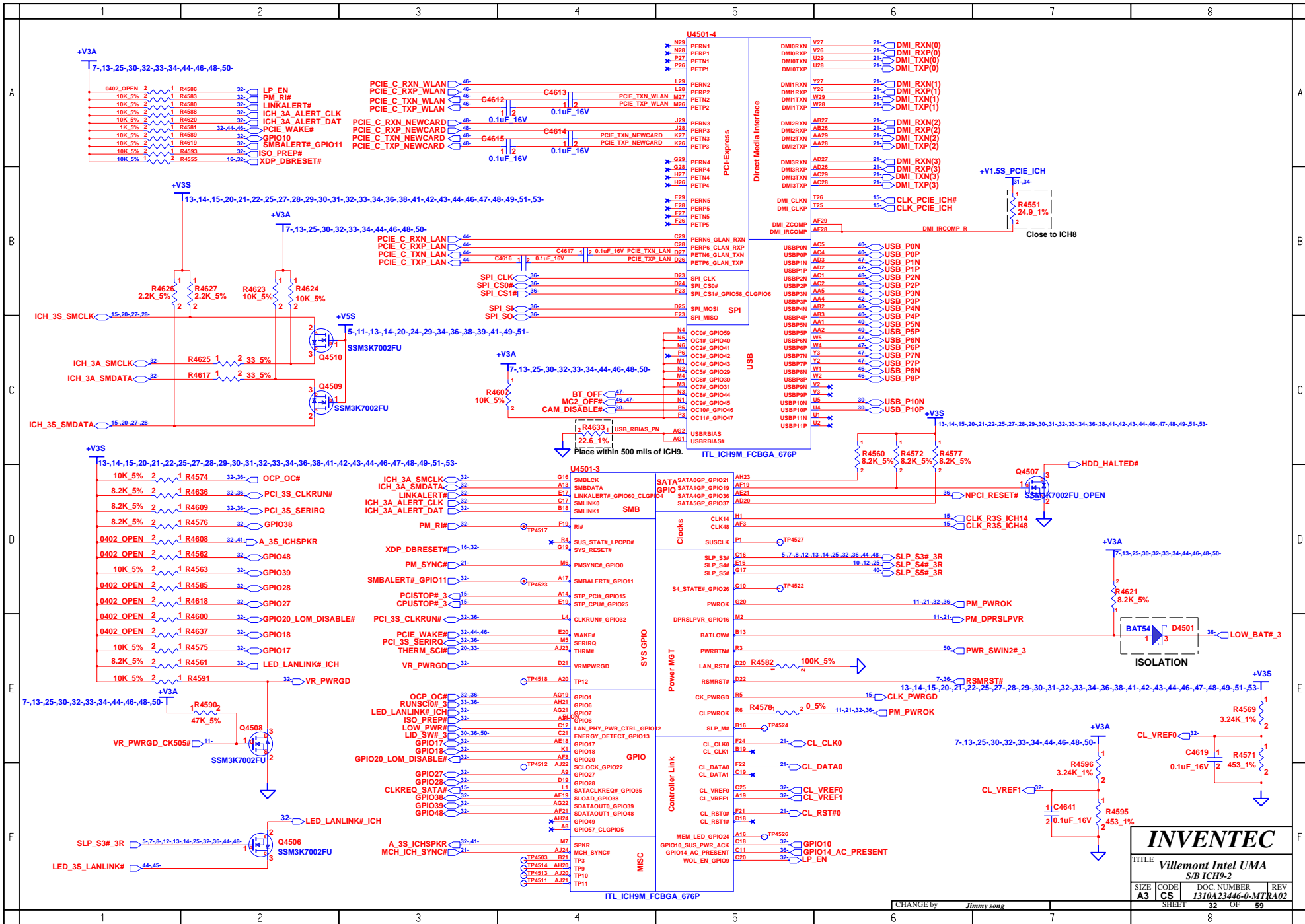
INVENTEC

TITLE **Villemont Intel UMA**
S/B ICH9-1

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23446-0-MTR	A02

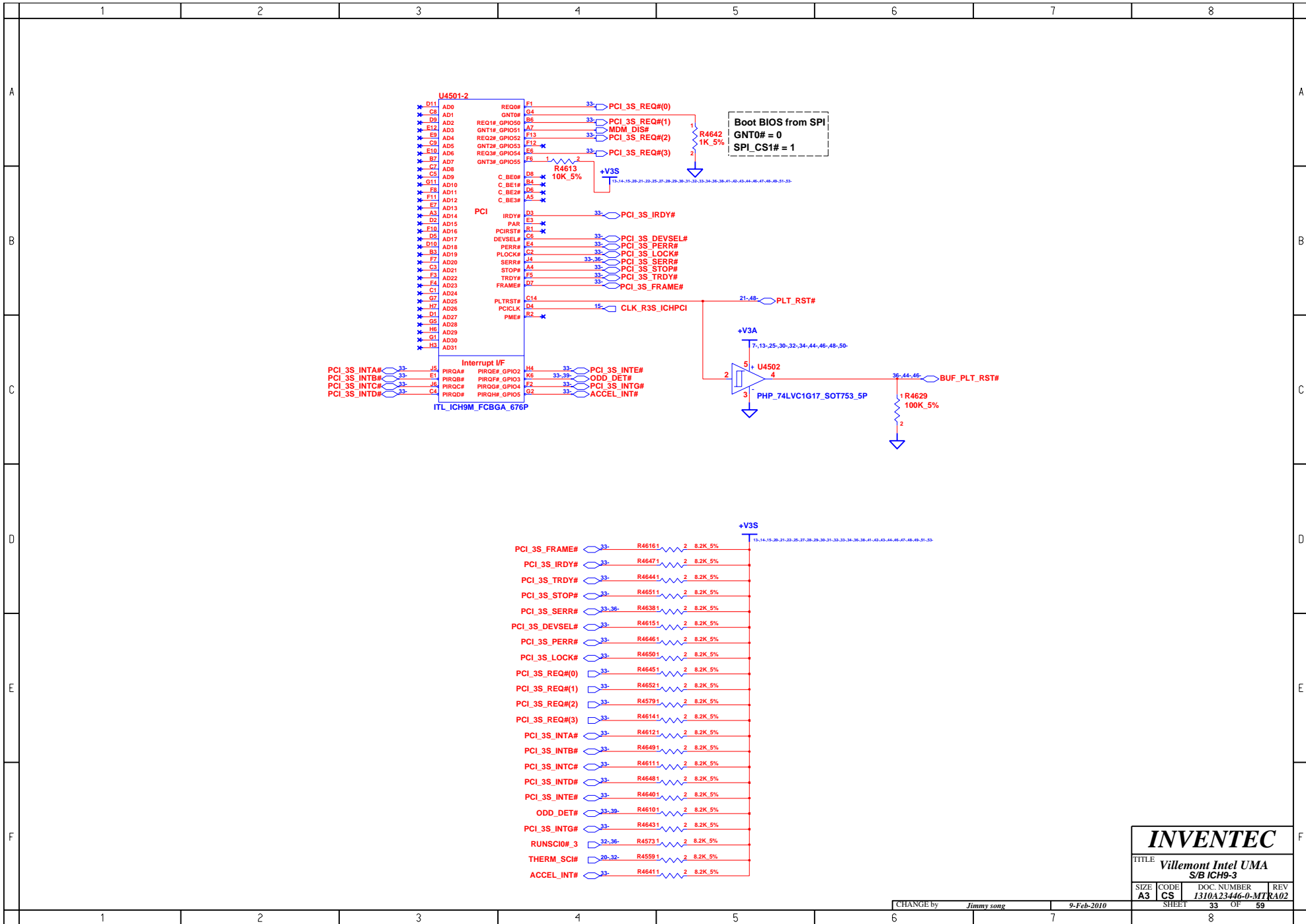
CHANGE by Jimmy song 9-Feb-2010

SHEET 31 OF 59



INVENTEC
 TITLE: Villemont Intel UMA
 S/B ICH9-2
 SIZE: A3 CODE: CS DOC. NUMBER: I310A23446-0-MTR REV: R01
 SHEET: 32 OF 59

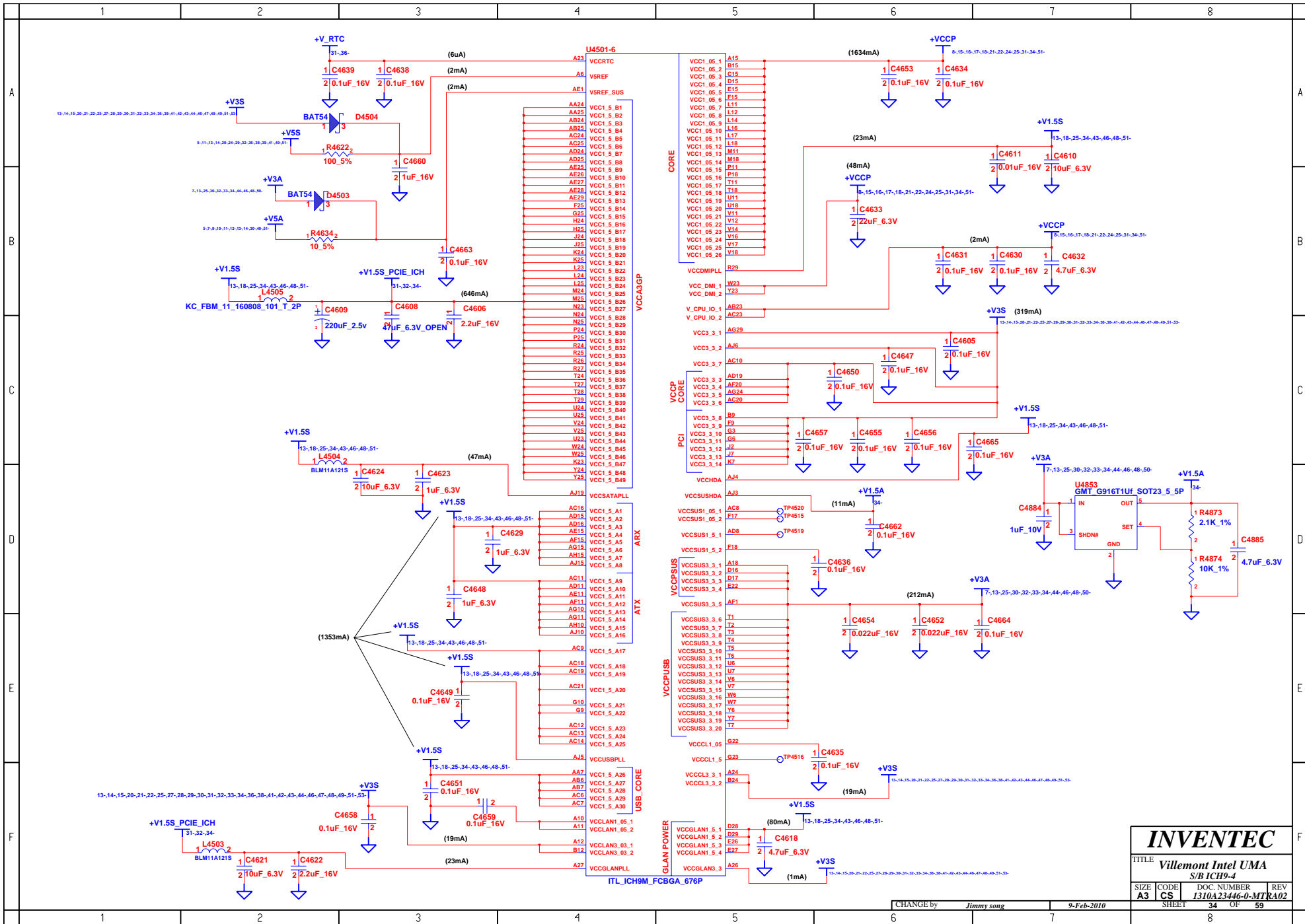
CHANGE by Jimmy song



INVENTEC

TITLE
Villemont Intel UMA
S/B ICH9-3

SIZE A3	CODE CS	DOC NUMBER I310A23446-0-MTR	REV A02
CHANGE by Jimmy song		9-Feb-2010	
SHEET 33		OF 59	



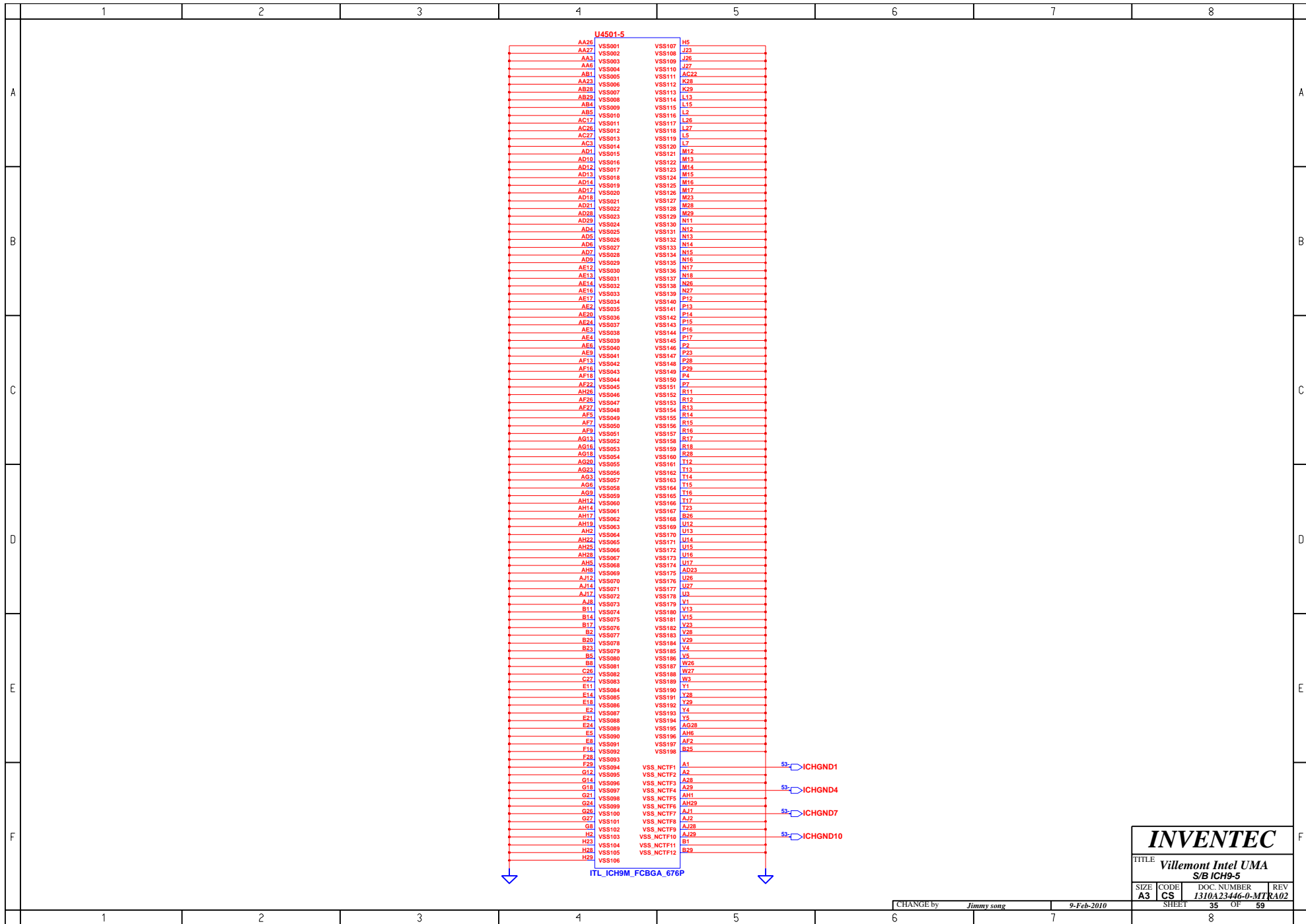
INVENTEC

TITLE: **Villemont Intel UMA S/B ICH9-d**

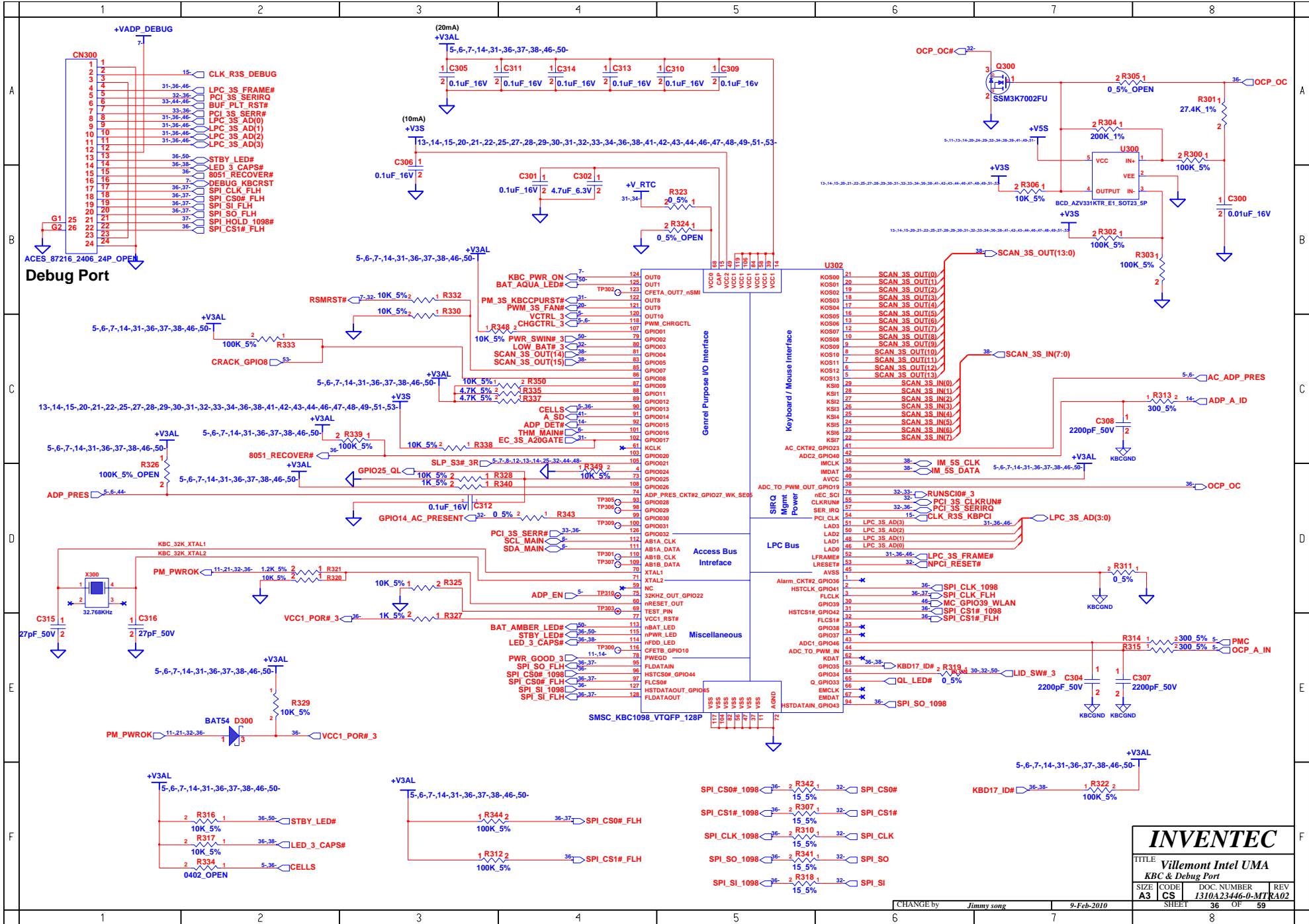
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23446-0-MIT	R02

SHEET 34 OF 59

CHANGE by *Jimmy song* 9-Feb-2010



INVENTEC		
TITLE Villemont Intel UMA		
S/B ICH9-5		
SIZE A3	CODE CS	DOC NUMBER 1310A23446-0-MT
SHEET 35		REV A02
CHANGE by Jimmy song		9-Feb-2010
OF 59		

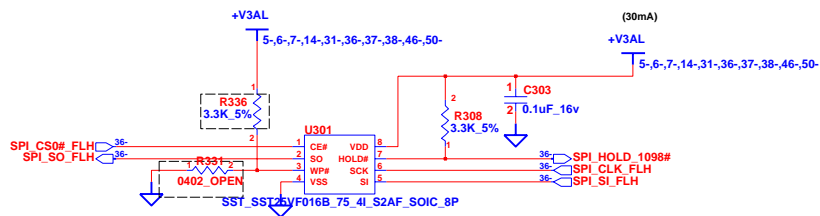


INVENTEC

TITLE **Villemont Intel UMA**
KBC & Debug Port

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MIT	R02

CHANGE by *Jimmy song* 9-Feb-2010
 SHEET 36 OF 59

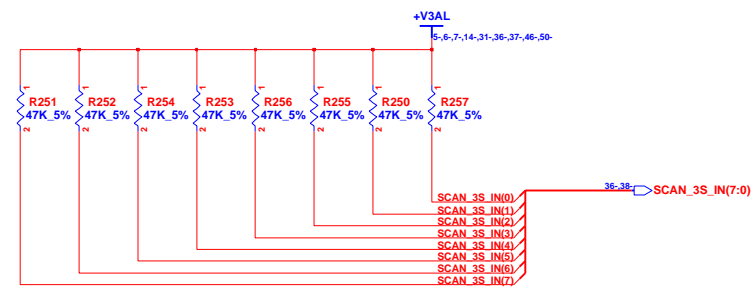
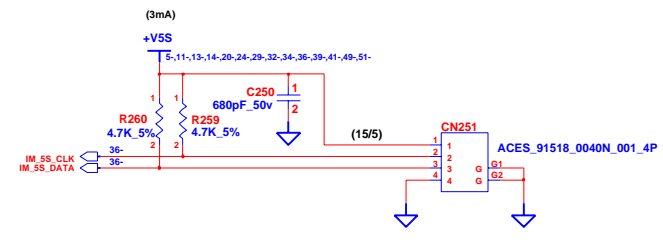
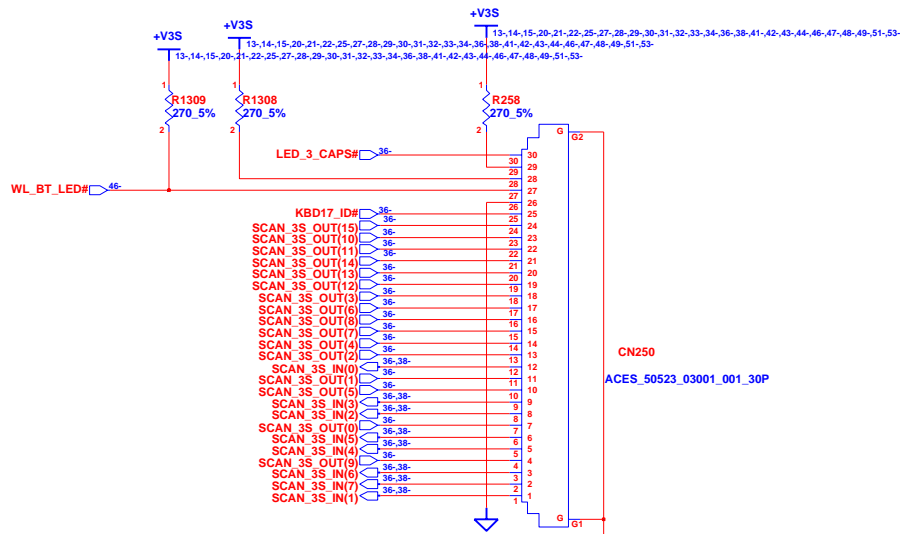


SPI Socket P/N:6026B0150101

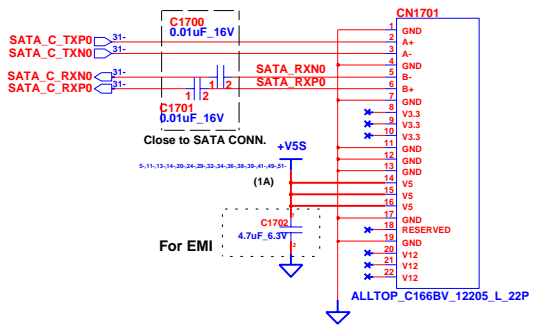
After MV: P/D.

SPI Flash

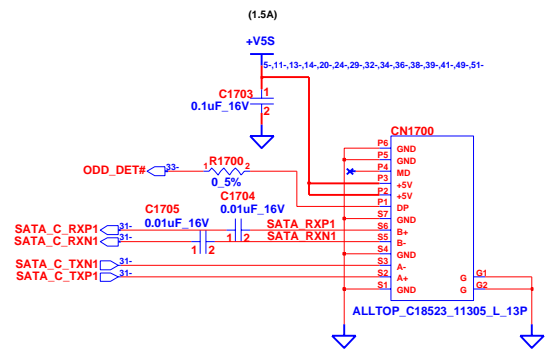
INVENTEC			
TITLE Villemont Intel UMA			
BIOS ROM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MTR	A02
CHANGE by		9-Feb-2010	SHEET 37 OF 59
		Jimmy song	



INVENTEC			
TITLE: Villemont Intel UMA			
Keyboard & TouchPad & B/B CONN			
SIZE: A3	CODE: CS	DOC NUMBER: 1310A23446-0-MT	REV: KA02
CHANGE by: <i>Jimmy song</i>		9-Feb-2010	
SHEET: 38		OF: 59	

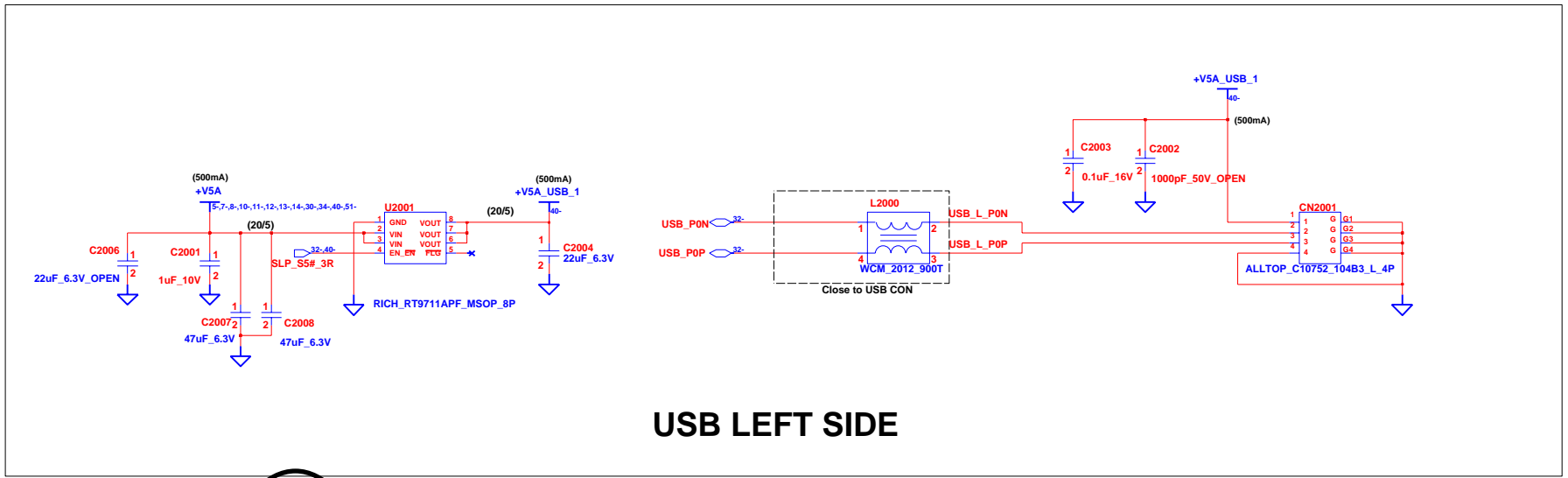


SATA HDD

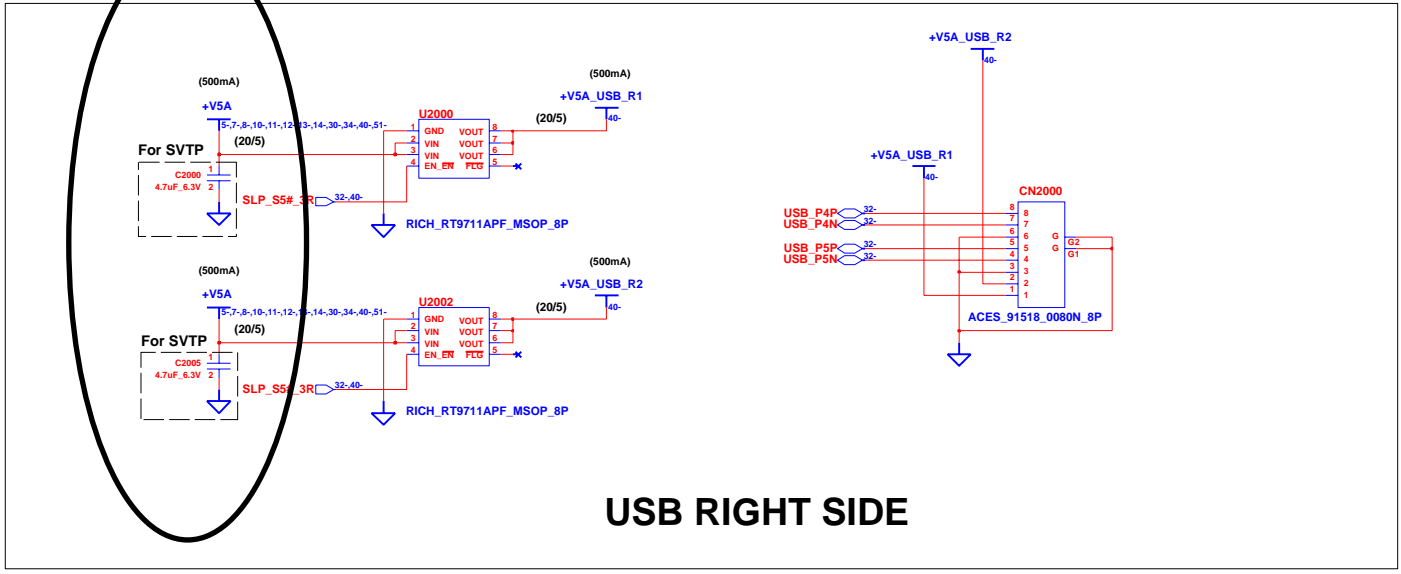


SATA ODD

INVENTEC			
TITLE Villemont Intel UMA			
HDD & ODD CONN			
SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MT	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 39		OF 59	



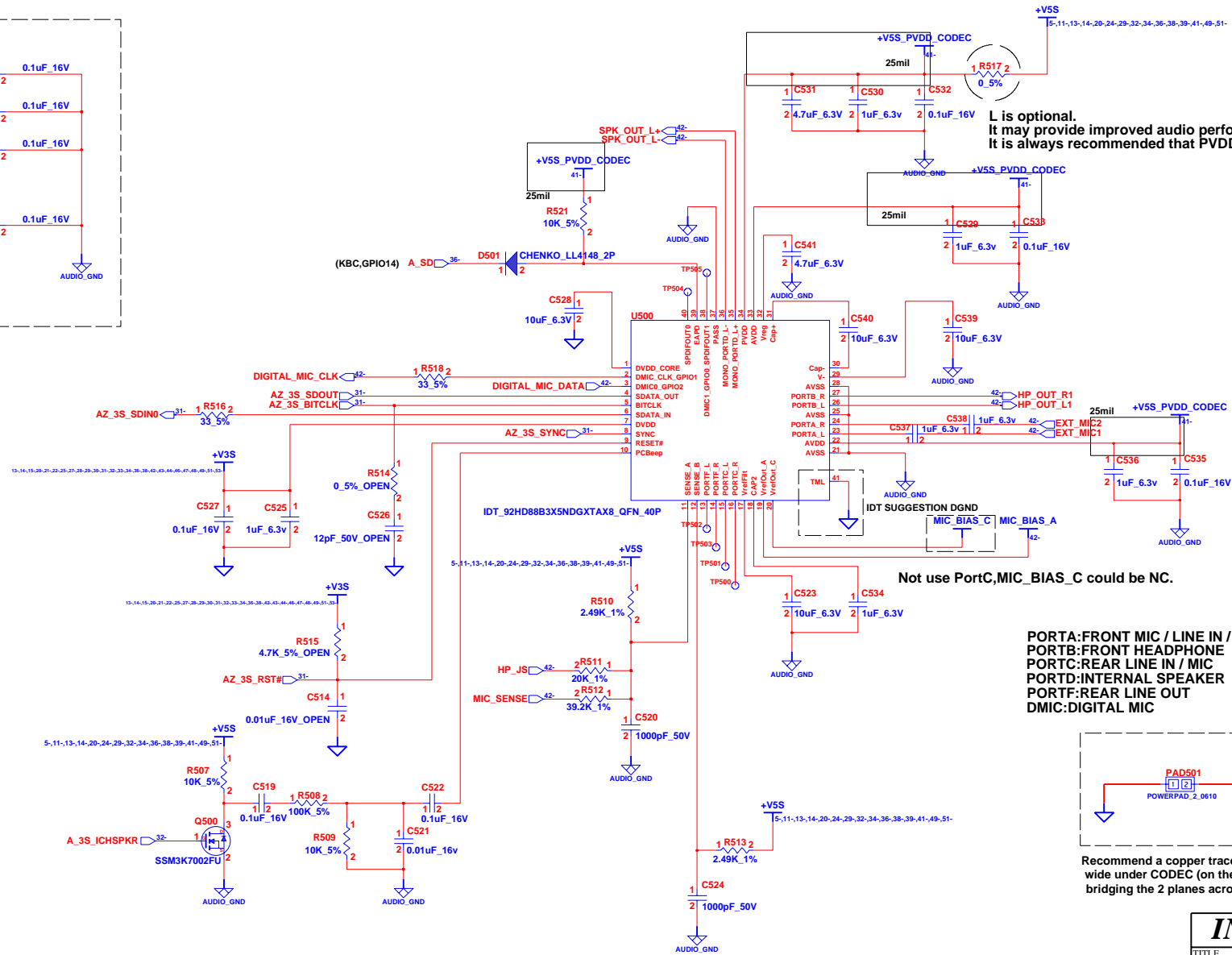
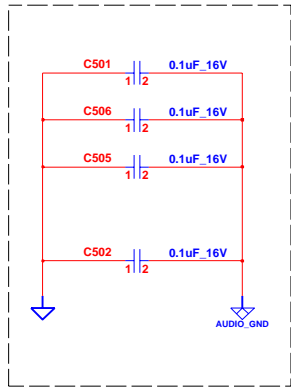
USB LEFT SIDE



USB RIGHT SIDE

INVENTEC			
TITLE Villemont Intel UMA			
USB CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MT	RA02

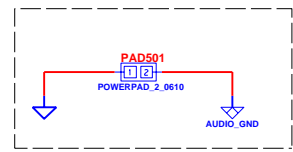
For EMI



L is optional. It may provide improved audio performance. It is always recommended that PVDD be filtered from 5V.

Not use PortC, MIC_BIAS_C could be NC.

PORTA: FRONT MIC / LINE IN / HEADPHONE
 PORTB: FRONT HEADPHONE
 PORTC: REAR LINE IN / MIC
 PORTD: INTERNAL SPEAKER
 PORTF: REAR LINE OUT
 DMIC: DIGITAL MIC



Recommend a copper trace about 100 mills wide under CODEC (on the GND layer) bridging the 2 planes across the moat.

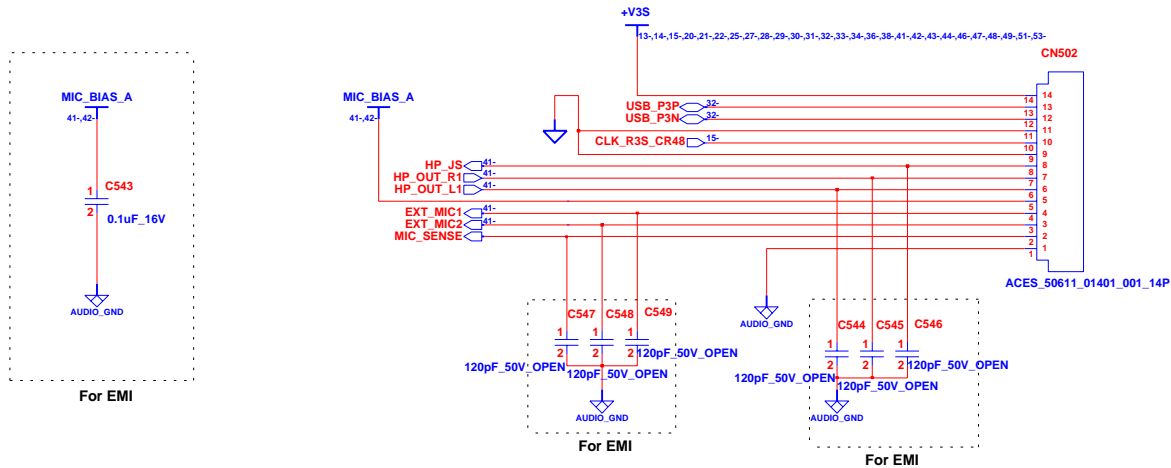
INVENTEC

TITLE: **Villemont Intel UMA AZALIA CODEC**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MT	A02

CHANGE by *Jimmy song* 9-Feb-2010

SHEET 41 OF 59



SD/MMC & AUDIO JACK CONNECTOR SIDE



Internal Speaker

INT. DIGITAL MIC

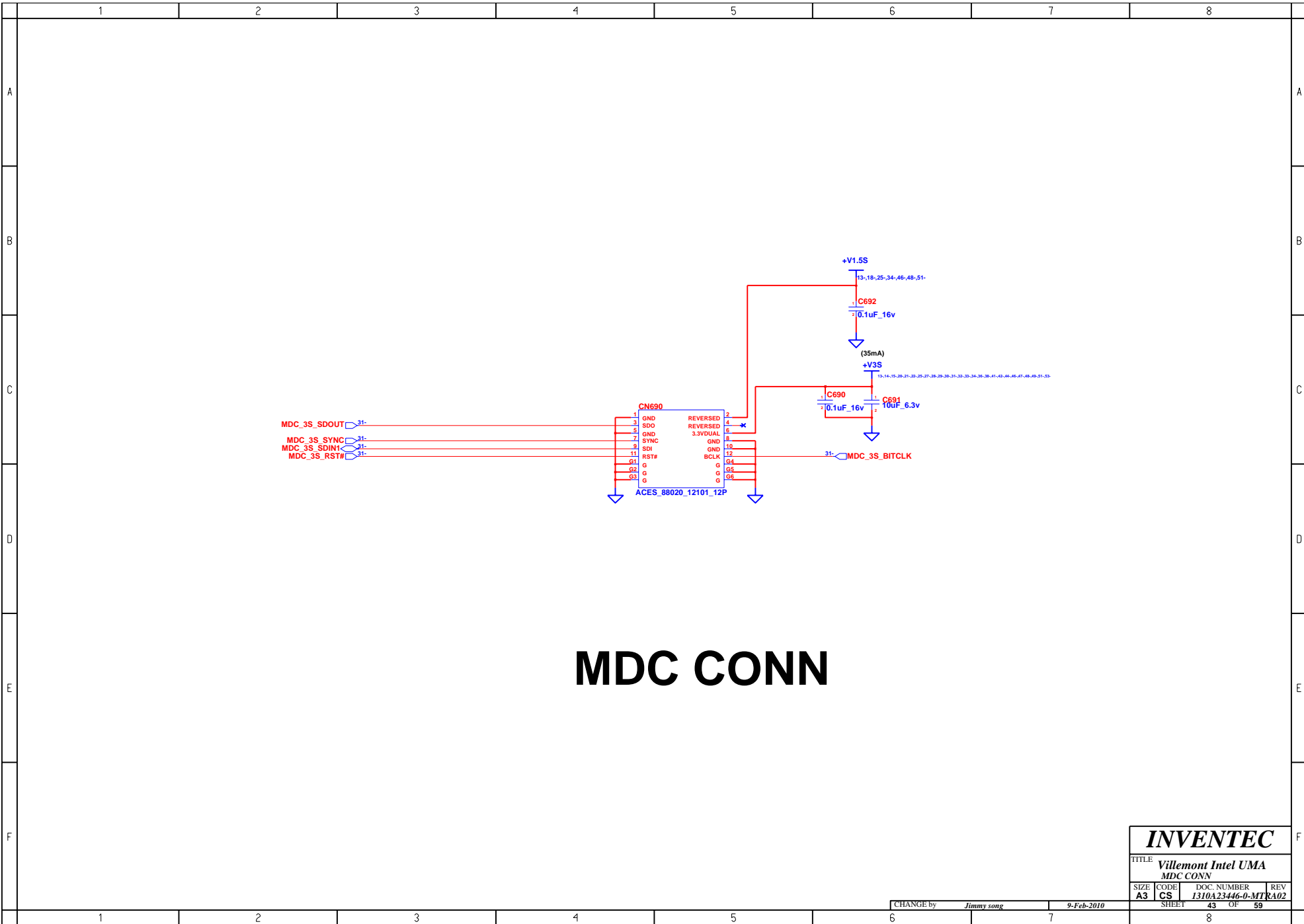
INVENTEC

TITLE
Villemont Intel UMA
Earphone & MIC JACK Board

SIZE A3	CODE CS	DOC NUMBER 1310A23446-0-MTR	REV A02
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CHANGE by Jimmy song 9-Feb-2010

SHEET 42 OF 59

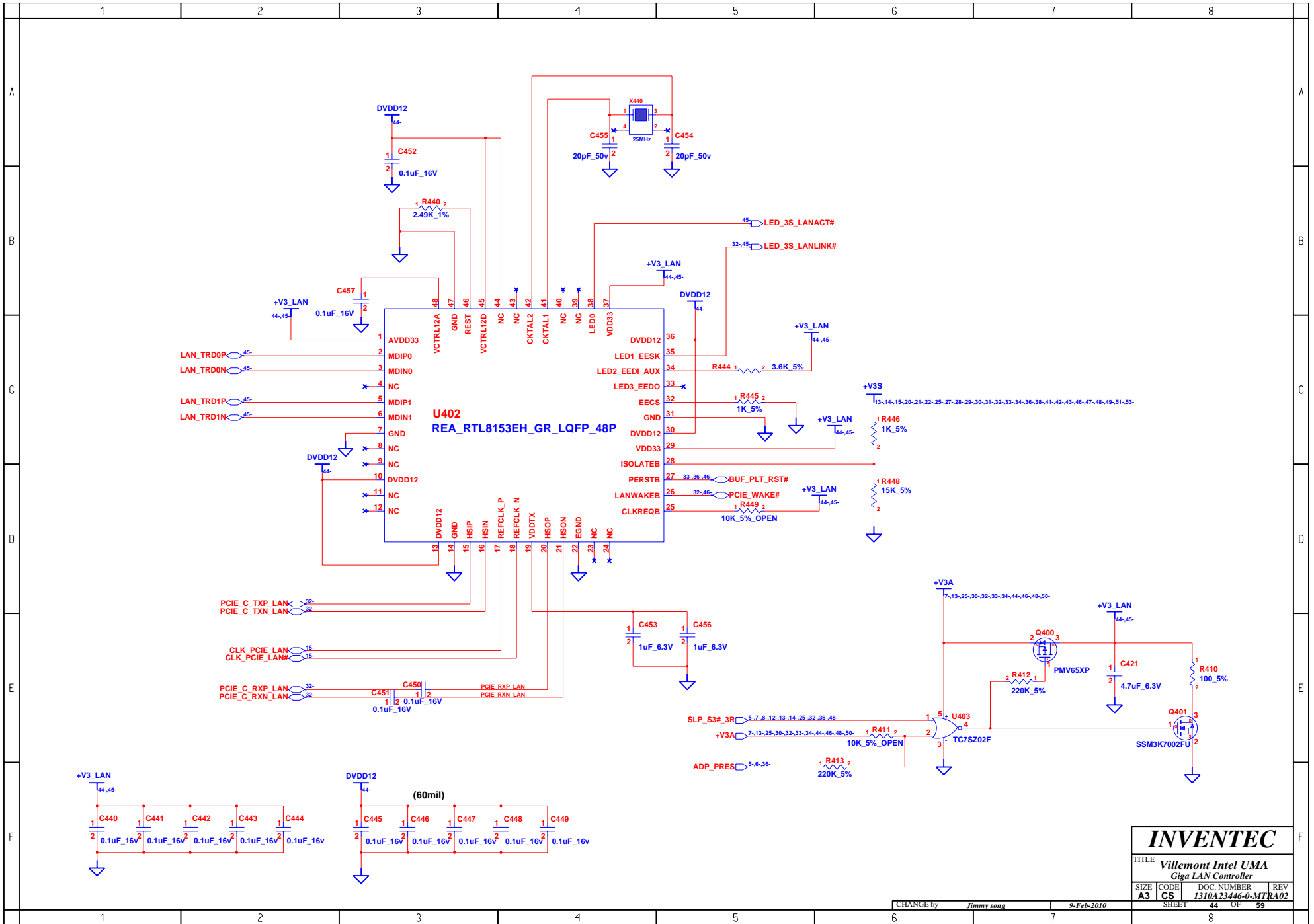


MDC CONN

INVENTEC

TITLE **Villemont Intel UMA**
MDC CONN

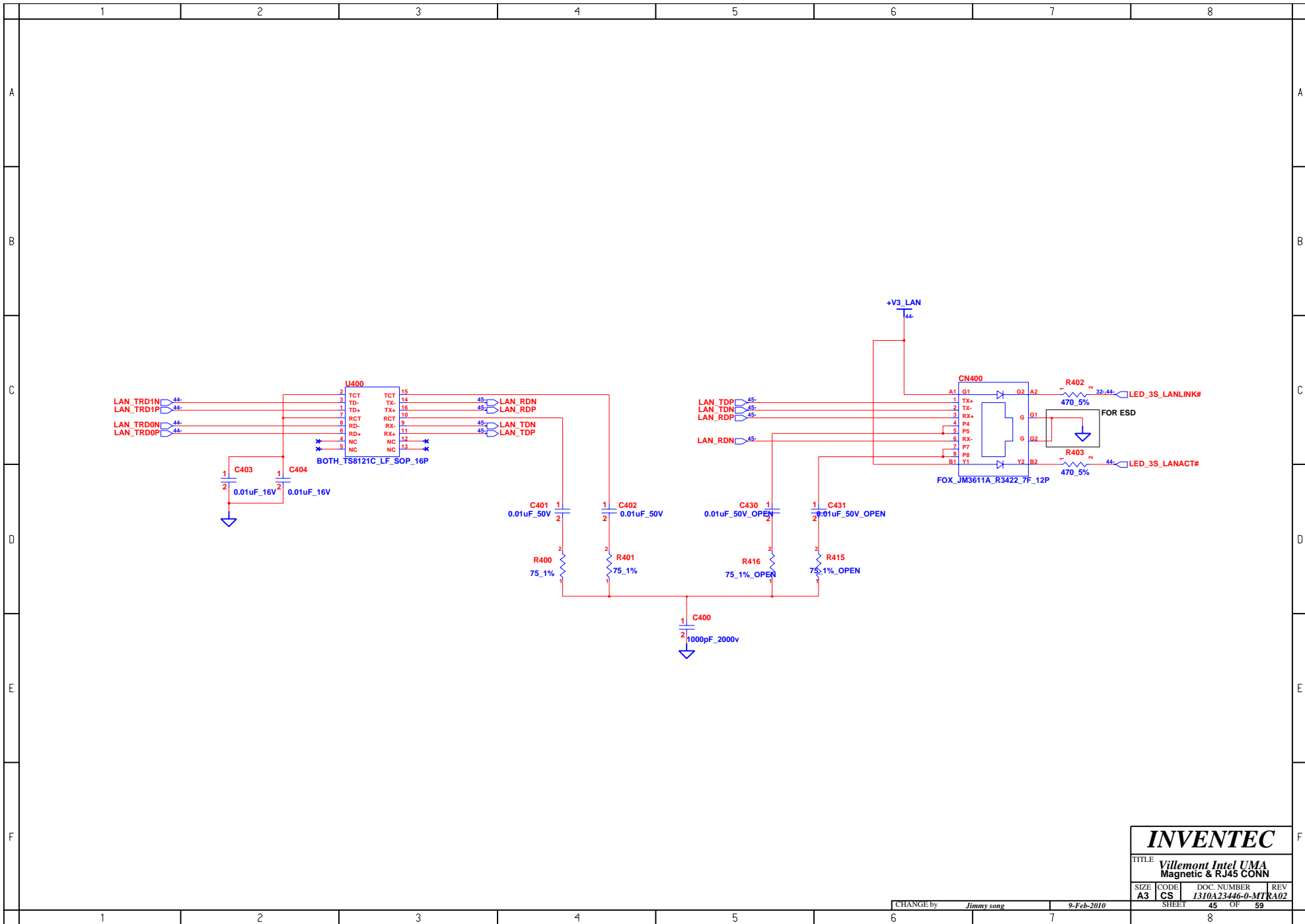
SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MTR	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	SHEET 43 OF 59



INVENTEC

TITLE
Villemont Intel UMA
Giga LAN Controller

SIZE A3	CODE CS	DOC NUMBER I310A23446-0-MT	REV R02
SHEET 44		OF 59	



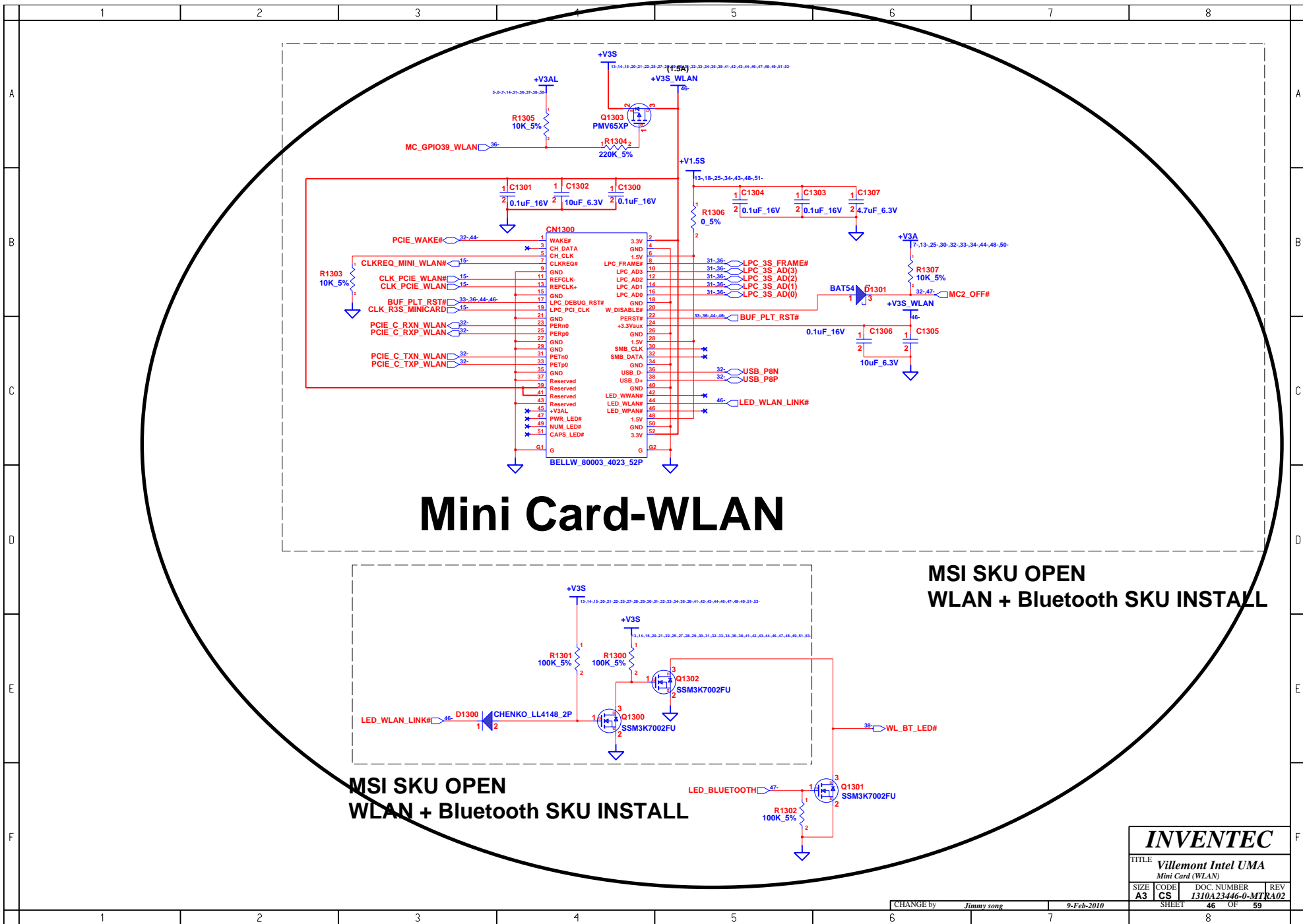
INVENTEC

TITLE **Villemont Intel UMA
Magnetic & RJ45 CONN**

SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MT	REV R402
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CHANGE by *Jimmy song* 9-Feb-2010

SHEET 45 OF 59

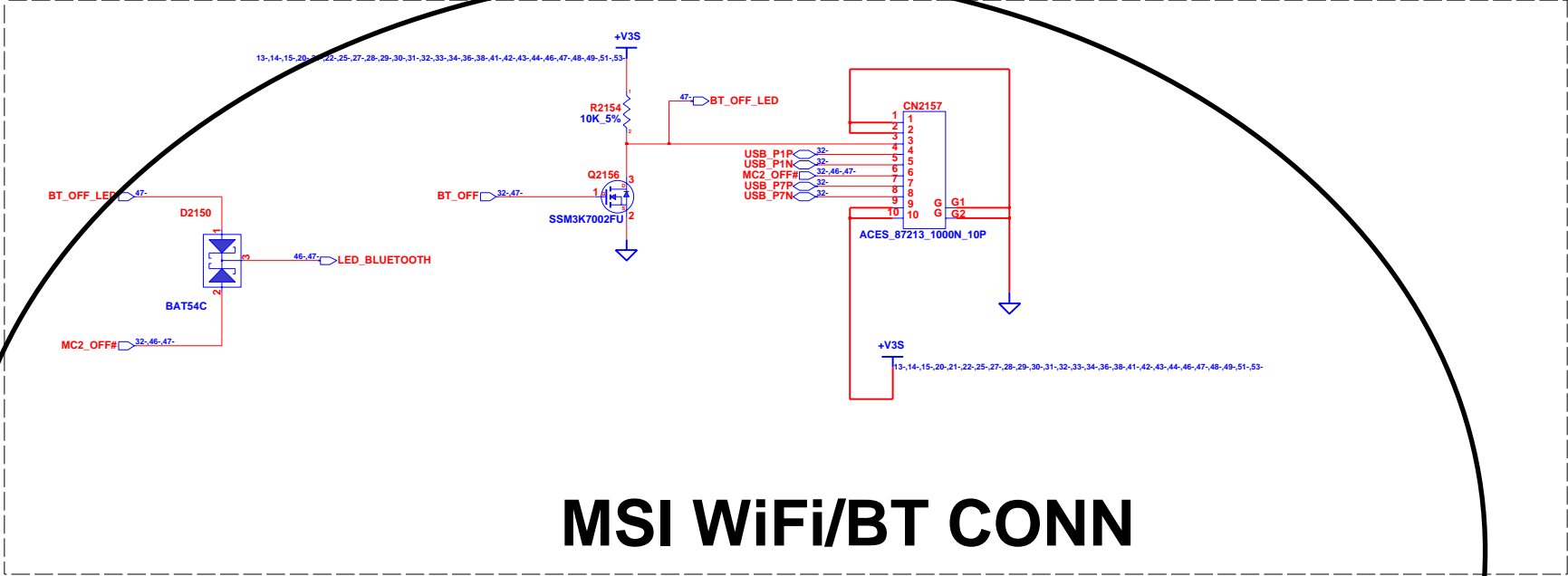


Mini Card-WLAN

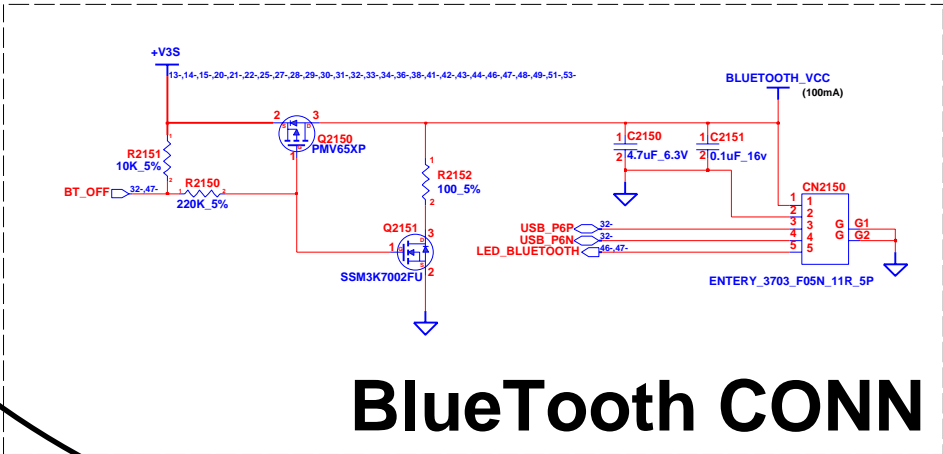
MSI SKU OPEN WLAN + Bluetooth SKU INSTALL

MSI SKU OPEN WLAN + Bluetooth SKU INSTALL

INVENTEC			
TITLE Villemont Intel UMA Mini Card (WLAN)			
SIZE A3	CODE CS	DOC NUMBER I310A23446-0-MTR02	REV 1
CHANGE by Jimmy song		9-Feb-2010	
SHEET 46		OF 59	



MSI WiFi/BT CONN

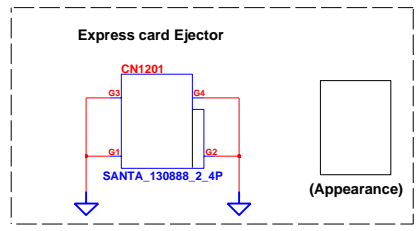
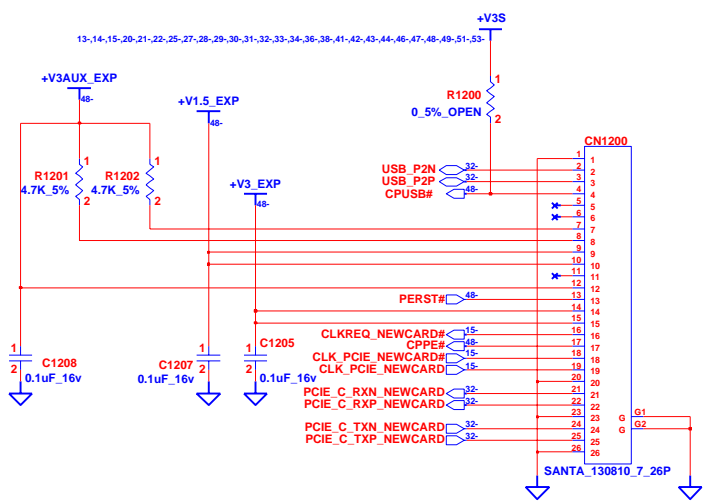
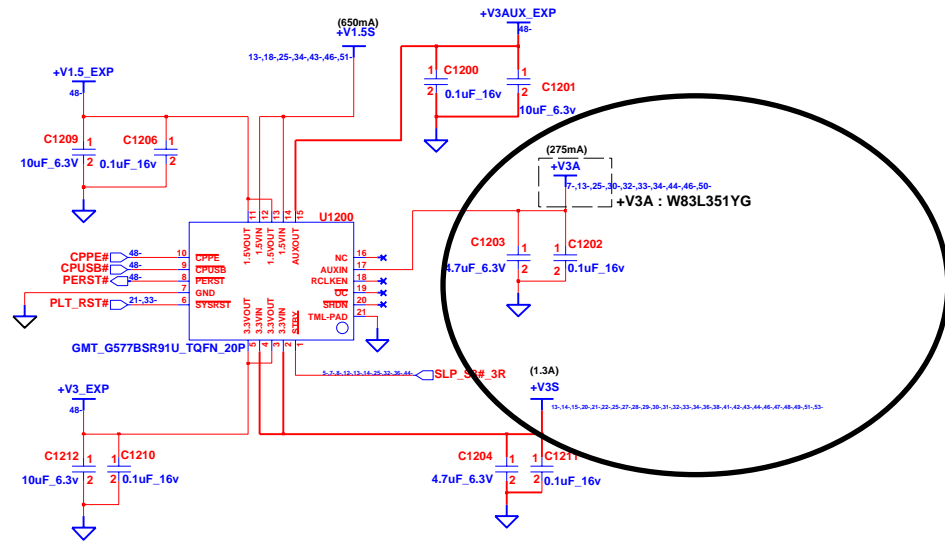


BlueTooth CONN

**MSI SKU INSTALL
WLAN + Bluetooth SKU OPEN**

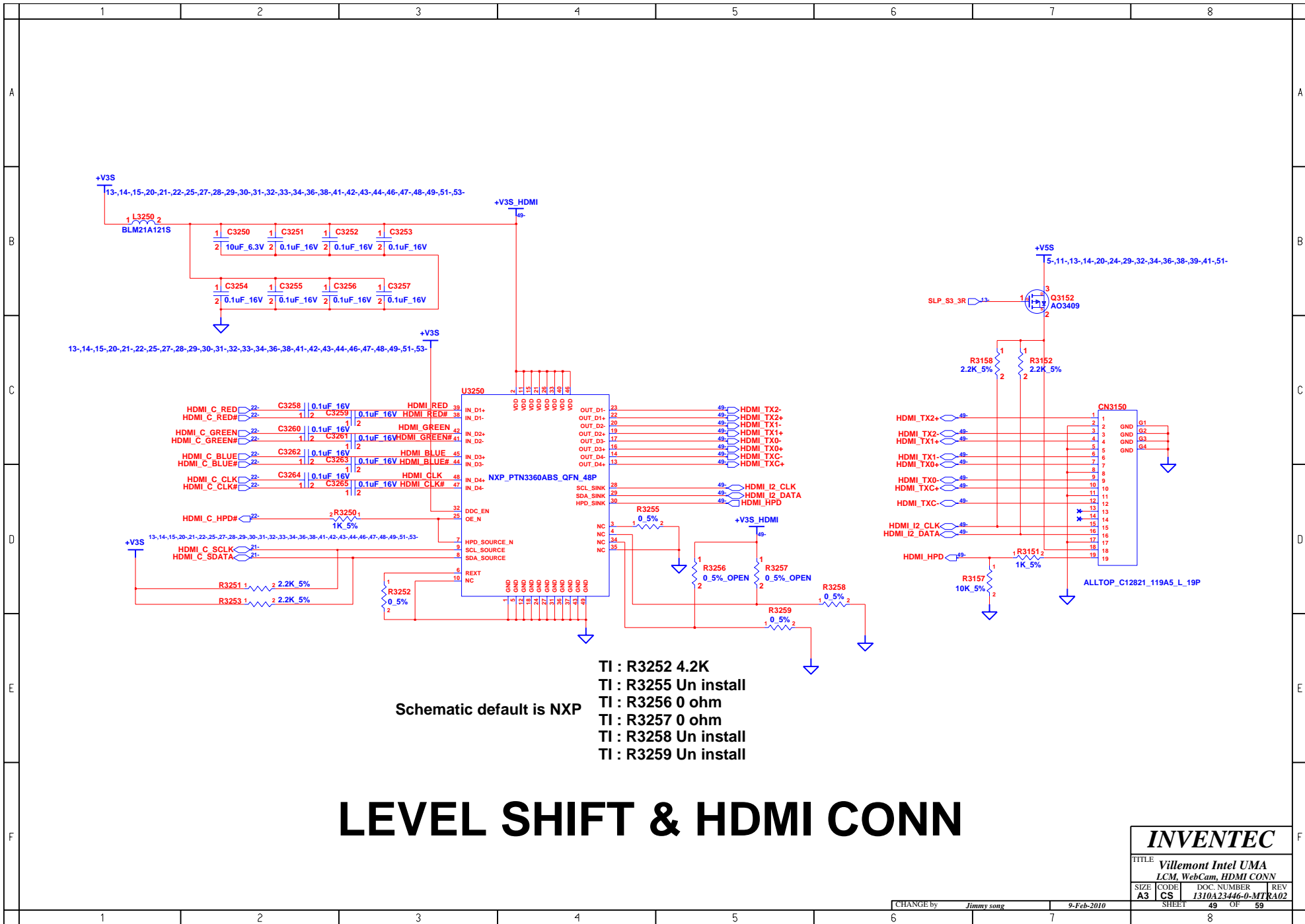
**MSI SKU OPEN
WLAN + Bluetooth SKU INSTALL**

INVENTEC			
TITLE: Villemont Intel UMA			
Bluetooth CONN			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A23446-0-MTR	REV: RA02
CHANGE by: <i>Jimmy song</i>		9-Feb-2010	
SHEET: 47		OF: 59	



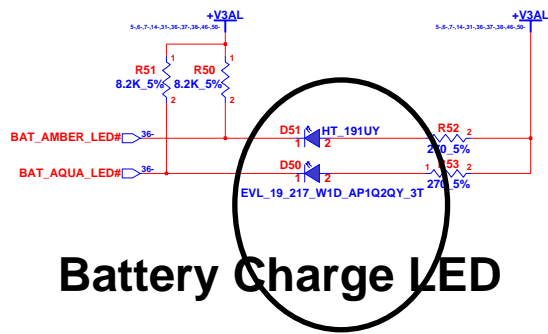
Express card

INVENTEC			
TITLE Villemont Intel UMA			
Express Card			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MT	RA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	SHEET 48 OF 59

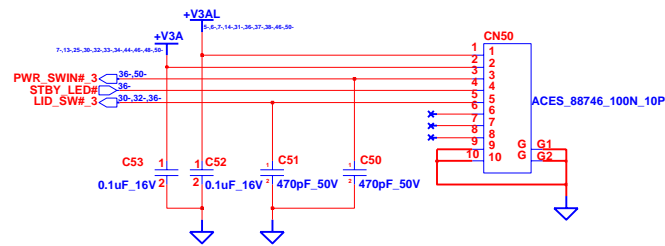
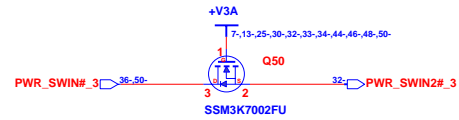


INVENTEC

TITLE **Villemont Intel UMA**
LCM, WebCam, HDMI CONN
 SIZE CODE DOC NUMBER REV
A3 CS 1310A23446-0-MT R02

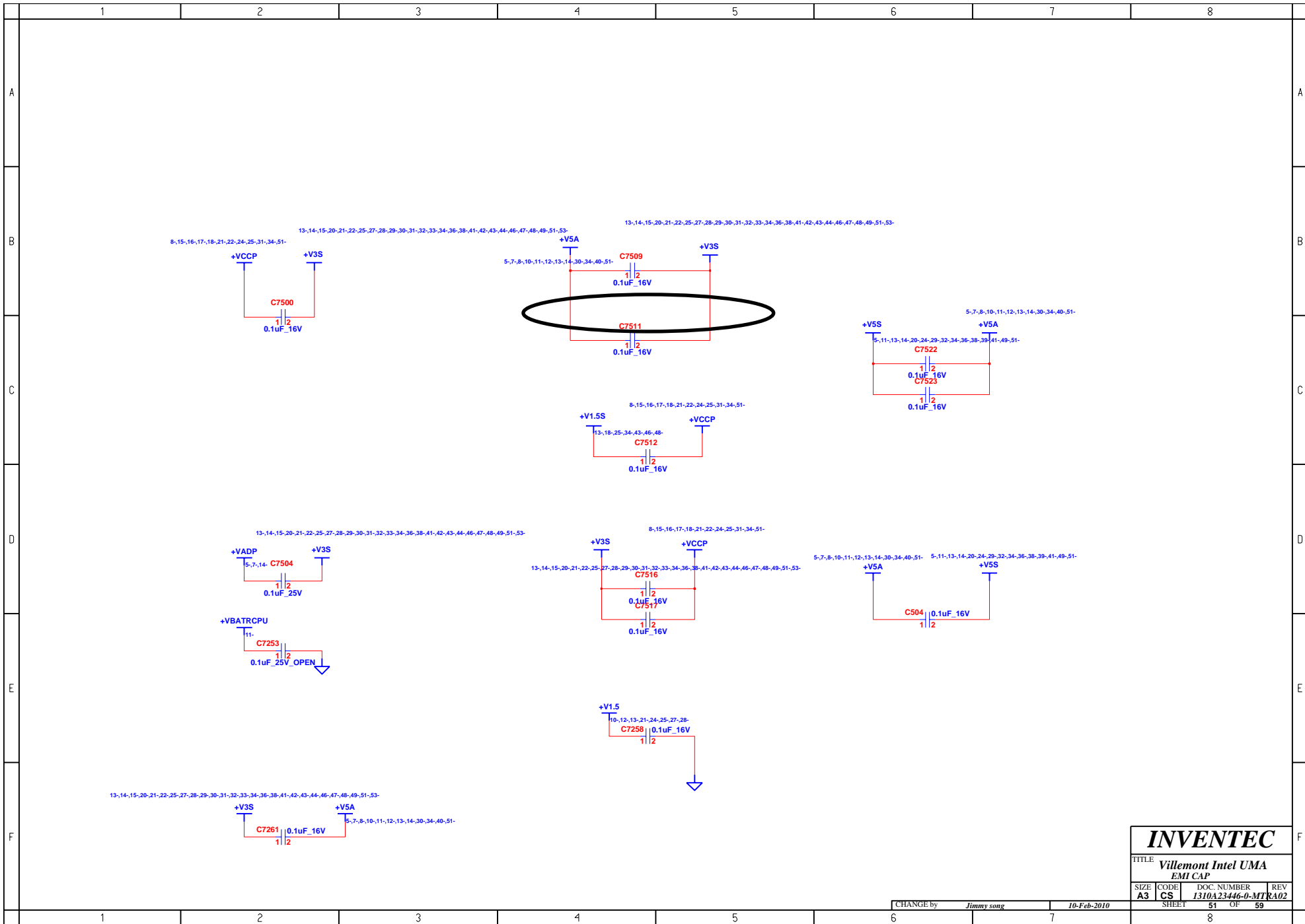


Battery Charge LED



Switch B/B CONN

INVENTEC			
TITLE Villemont Intel UMA			
LEDs			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23446-0-MT	KA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	SHEET 50 OF 59



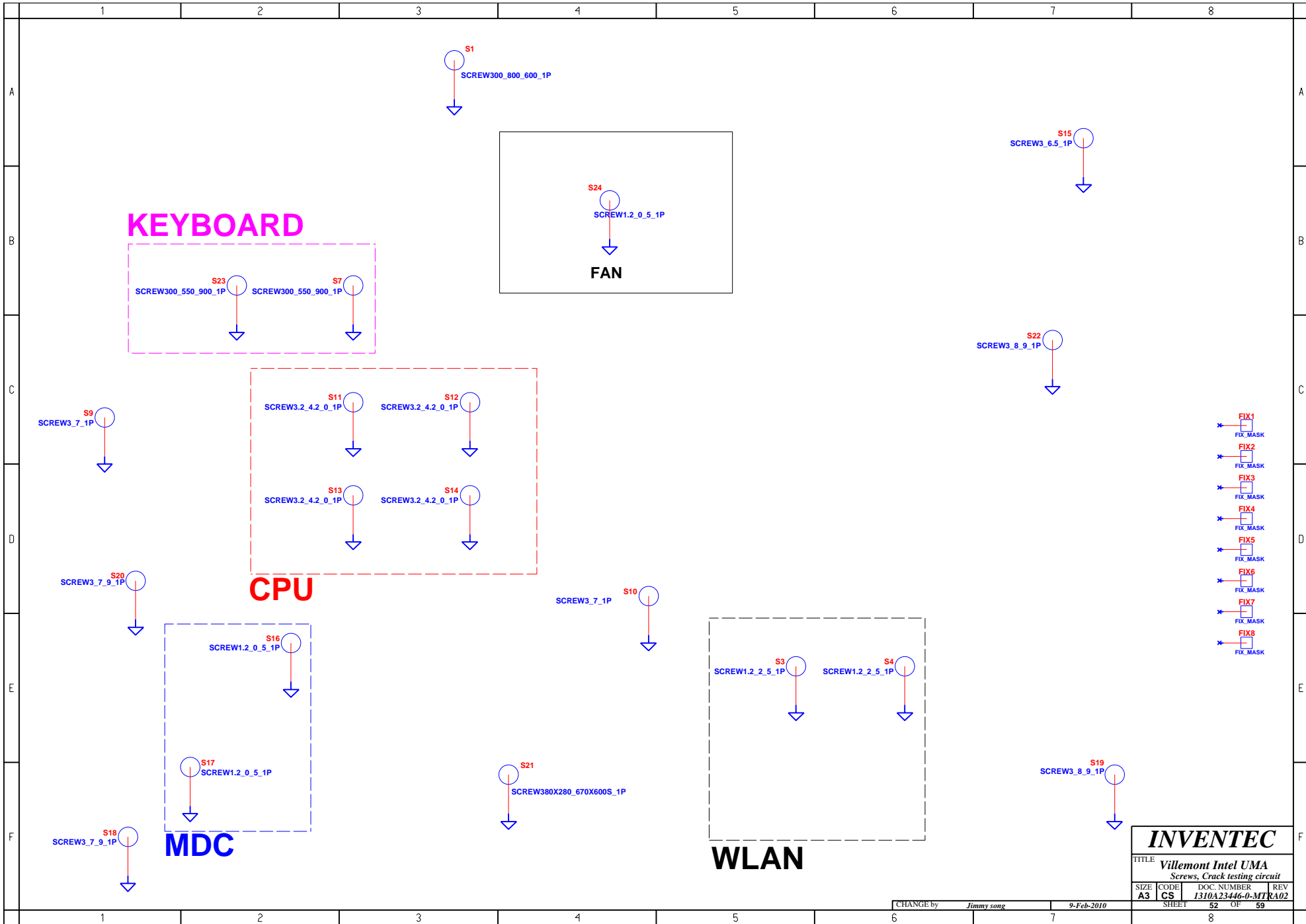
INVENTEC

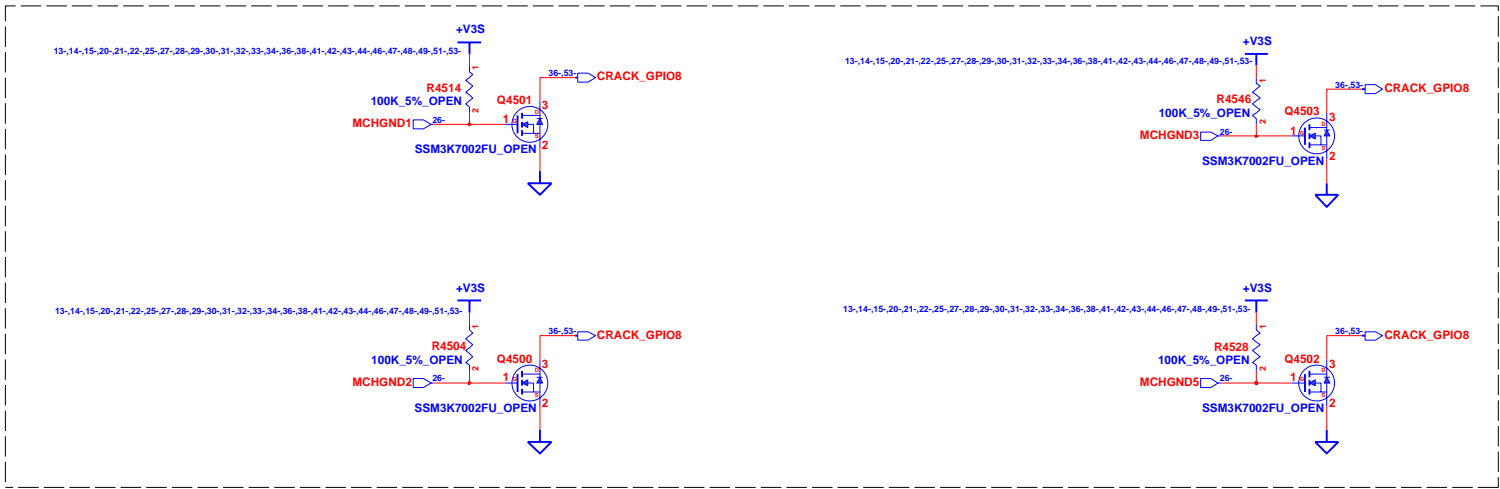
TITLE
Villemont Intel UMA
 EMI CAP

SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MTR	REV A02
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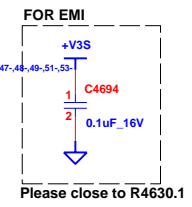
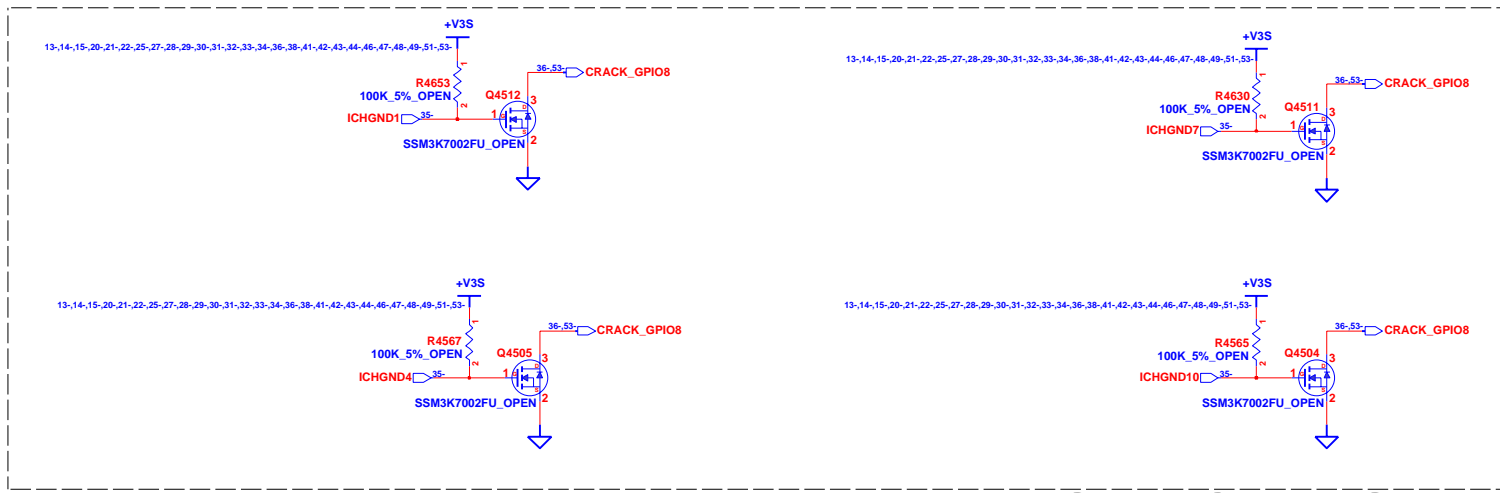
CHANGE by *Jimmy song* 10-Feb-2010

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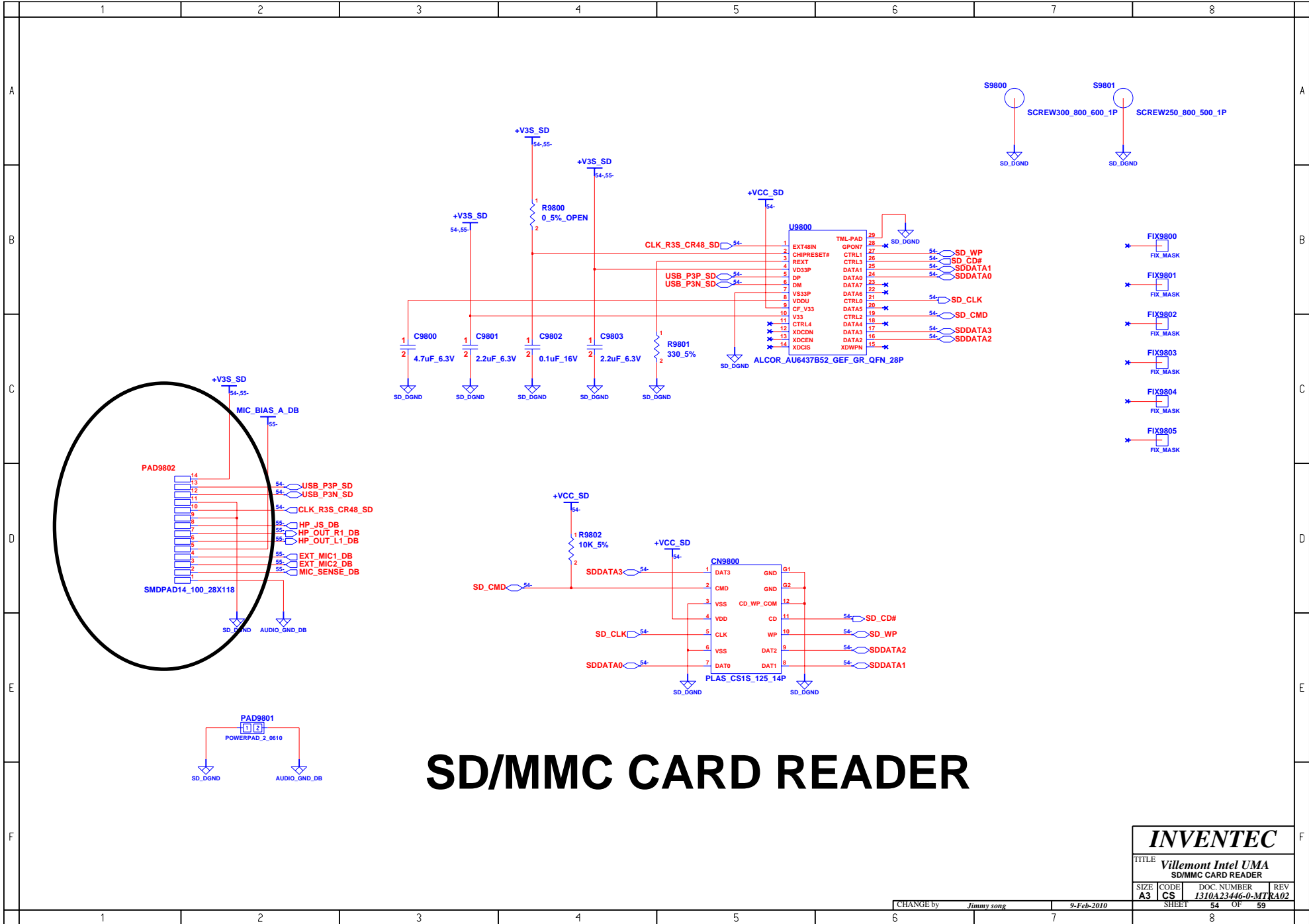
NB Cantiga Side



For Crack Test

SB ICH9 Side

INVENTEC			
TITLE Villemont Intel UMA <i>Crack testing circuit</i>			
SIZE A3	CODE CS	DOC NUMBER I310A23446-0-MT	REV KA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 53		OF 59	



SD/MMC CARD READER

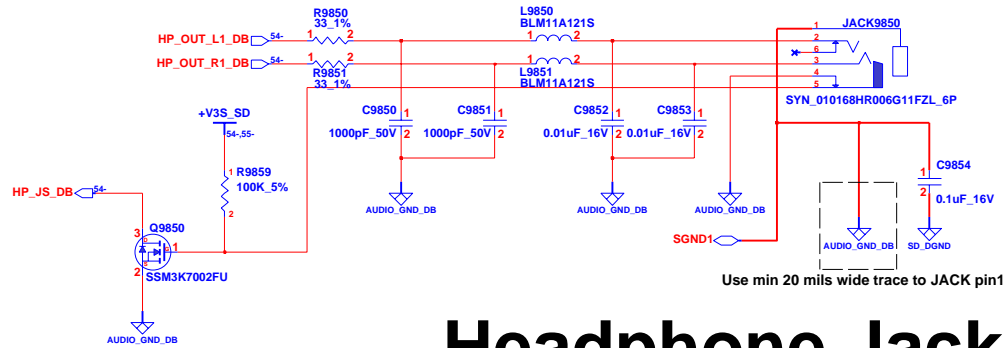
INVENTEC

TITLE **Villemont Intel UMA**
SD/MMC CARD READER

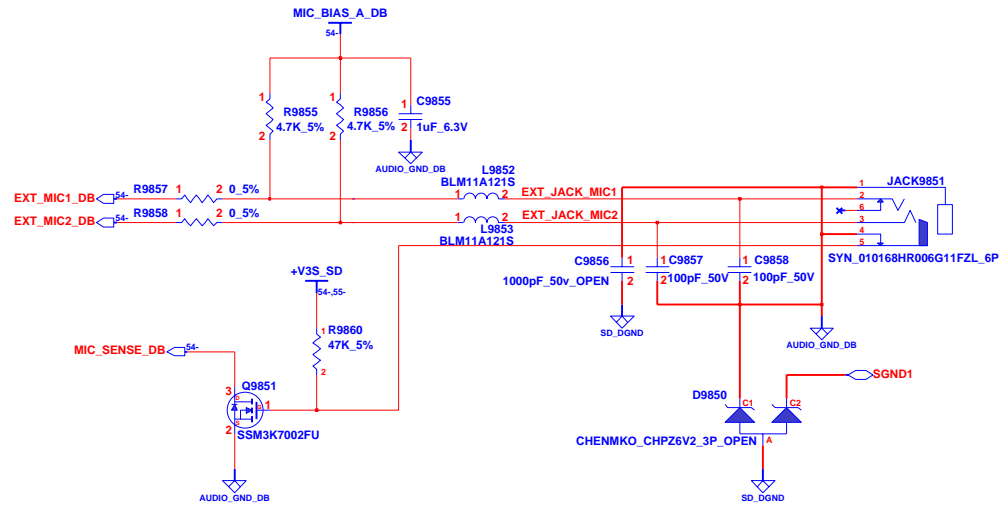
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A23446-0-MT	RA02

CHANGE by *Jimmy song* 9-Feb-2010

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Headphone Jack



MIC Jack

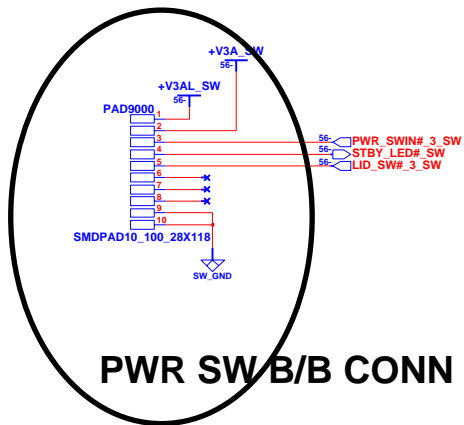
INVENTEC

TITLE **Villemont Intel UMA
HEADPHONE & MIC JACK**

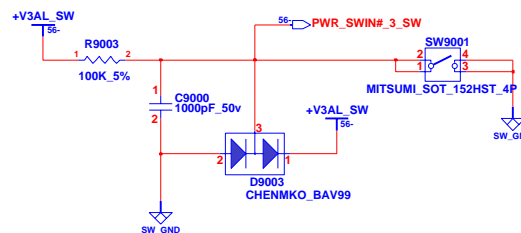
SIZE A3	CODE CS	DOC NUMBER I310A23446-0-MT	REV A02
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CHANGE by *Jimmy song* 9-Feb-2010

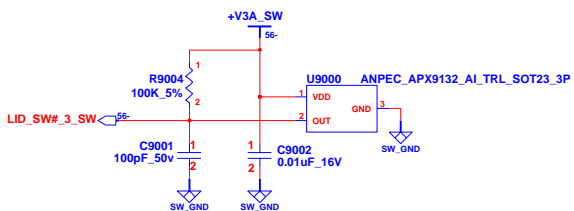
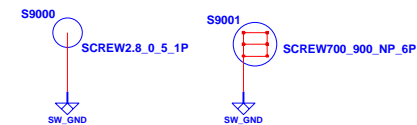
SHEET 55 OF 59



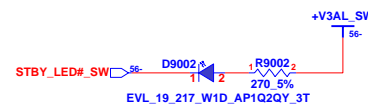
PWR SW/B/B CONN



Power Button



LID Switch



Power / Standby LED

Power Button & LID Switch Board

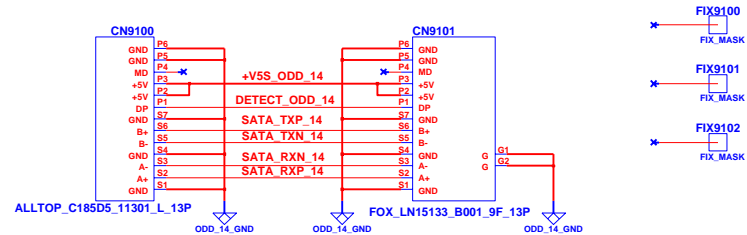
INVENTEC

TITLE **Villemont Intel UMA HEADPHONE & MIC JACK**

SIZE CODE DOC NUMBER REV
A3 CS 1310A23446-0-MTR **A02**

CHANGE by *Jimmy song* 9-Feb-2010

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14" ODD Extend Board

INVENTEC			
TITLE Villemont Intel UMA HEADPHONE & MIC JACK			
SIZE A3	CODE CS	DOC. NUMBER 1310A23446-0-MT	REV RA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 57		OF 59	

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

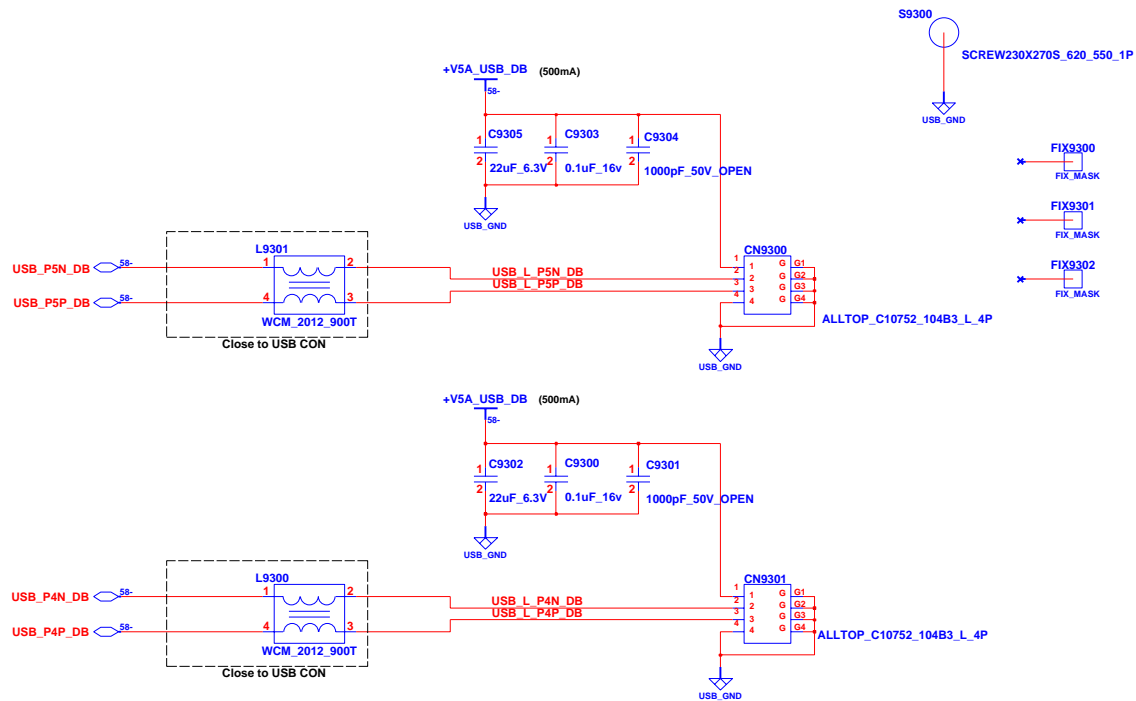
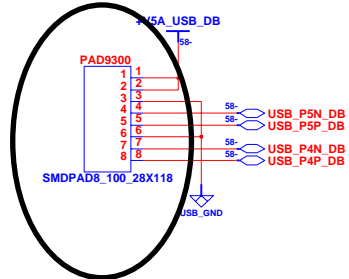
B

C

D

E

F



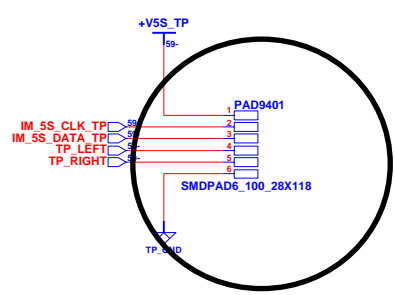
USB Right Side Board

INVENTEC

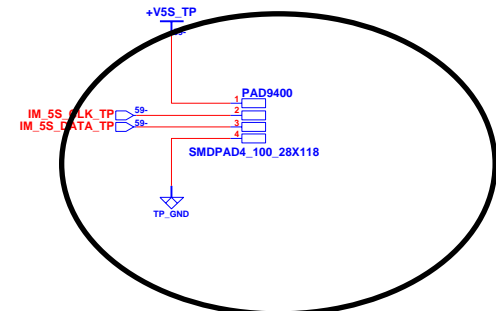
TITLE			
Villemont Intel UMA HEADPHONE & MIC JACK			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A23446-0-MT	KA02

CHANGE by	Jimmy song	9-Feb-2010	SHEET	58	OF	59
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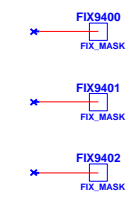
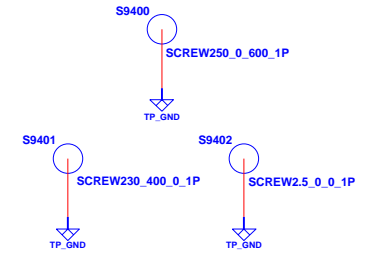
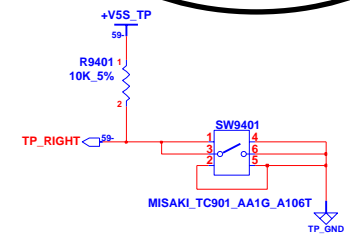
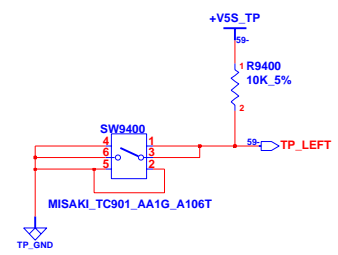
1 2 3 4 5 6 7 8



LEFT BUTTON



RIGHT BUTTON



PICK Button Board

INVENTEC			
TITLE Villemont Intel UMA HEADPHONE & MIC JACK			
SIZE A3	CODE CS	DOC NUMBER 1310A23446-0-MTR	REV A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	SHEET 59 OF 59