

(13"/14")

# Villemont 2010

## Montevina (Intel-Discrete)

### DDR3-MV Build (A02)

2010.03.02

DATE	CHANGE NO.	REV

DRAWER	EE	DATE	POWER	DATE	<b>INVENTEC</b>			
DESIGN					TITLE <b>Villemont Intel Discrete</b>			
CHECK								
RESPONSIBLE								
SIZE =	3			VER :	SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>J310A23277-0-MTR</b>	REV <b>A02</b>
FILE NAME :	XXXX-XXXXXX-XX				SHEET	1 OF 70		
P/N	XXXXXXXXXXXX							

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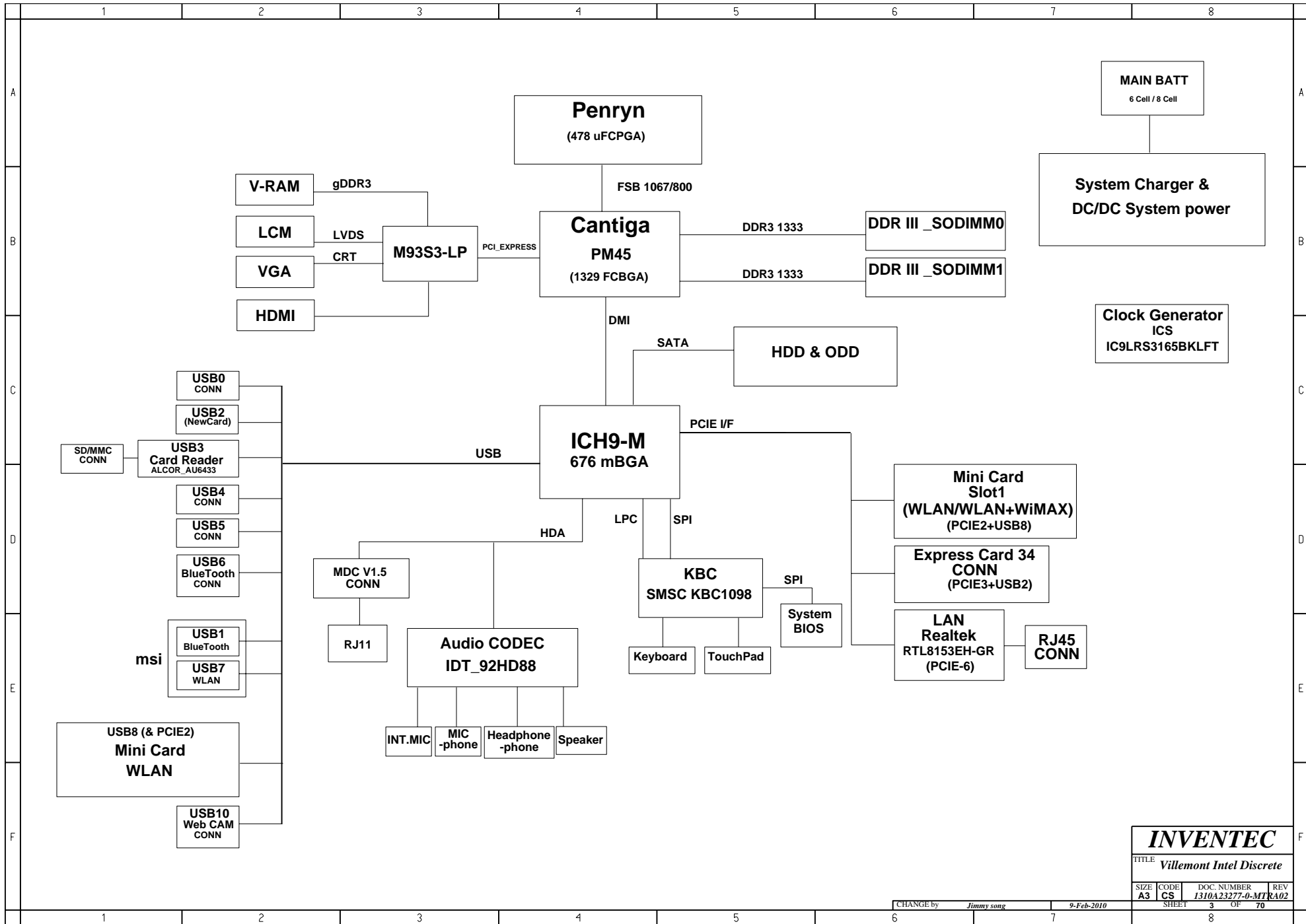
Page	Page	Page
5- DC & Battery Charger & OCP.	15- Clock Generator.	39- Keyboard & TouchPad CONN.
6- Select & Battery CONN.	16- CPU Penryn-1.	40- HDD & ODD CONN.
7- System Power (+V3A/+V5A).	17- CPU Penryn-2.	41- USB CONN.
8- System Power (+V1.5/+VCCP) .	18- CPU Penryn-3.	42- Audio CODEC.
9- Graphic Power (+VDD_CORE & +VPCIE).	19- CPU Penryn-4 & XDP.	43- Speaker & MIC AUDIO CONN MB SIDE.
10- System Power (+V1.8S) .	20- Thermal & Fan.	44- BLANK.
11- CPU Power (+VCC_CORE).	21- N/B Cantiga-1.	45- MDC CONN.
12- DDR Termination Voltage(+V0.75S).	22- N/B Cantiga-2.	46- NIC 10/100 LAN CONN.
13- Power (Sleep: +V5S/+V3S/+V1.5S).	23- N/B Cantiga-3.	47- NIC 10/100 & RJ45 CONN.
14- Power (Sequence).	24- N/B Cantiga-4.	48- Mini Card(WLAN) CONN.
	25- N/B Cantiga-5.	49- Bluetooth CONN.
	26- N/B Cantiga-6.	50- Express Card.
	27- DDR3-DIMM0.	51- BLANK
	28- DDR3-DIMM1.	52- HDMI CONN.
	29- BLANK.	53- Switch CONN & LED.
	30- CRT CONN.	54- EMI CAP.
	31- LCD & WebCam CONN.	55- Screws.
	32- S/B ICH9-1.	56- Crack testing circuit.
	33- S/B ICH9-2.	57- AMD M93LP-1.
	34- S/B ICH9-3.	58- AMD M93LP-2.
	35- S/B ICH9-4.	59- AMD M93LP-3.
	36- S/B ICH9-5.	60- AMD M93LP-4.
	37- KBC.	61- Video RAM-1 (DDR3).
	38- SPI	62- Video RAM-2 (DDR3).
		63- CardRead SD/MMC Board.
65- Power button & LID swithch Board.	69- BLANK	64- Headphone JACK & MIC JACK Board.
66- 14"ODD Extend Board.	70- BLANK	
67- USB Right side Board.		
68- PICK Button Board.		

**INVENTEC**

TITLE *Villemont Intel Discrete Contents*

SIZE <b>A3</b>	CODE <b>CS</b>	DOC NUMBER <i>1310A23277-0-MTR</i>	REV <b>A02</b>
SHEET		2	OF 70

CHANGE by *Jimmy song* 9-Feb-2010

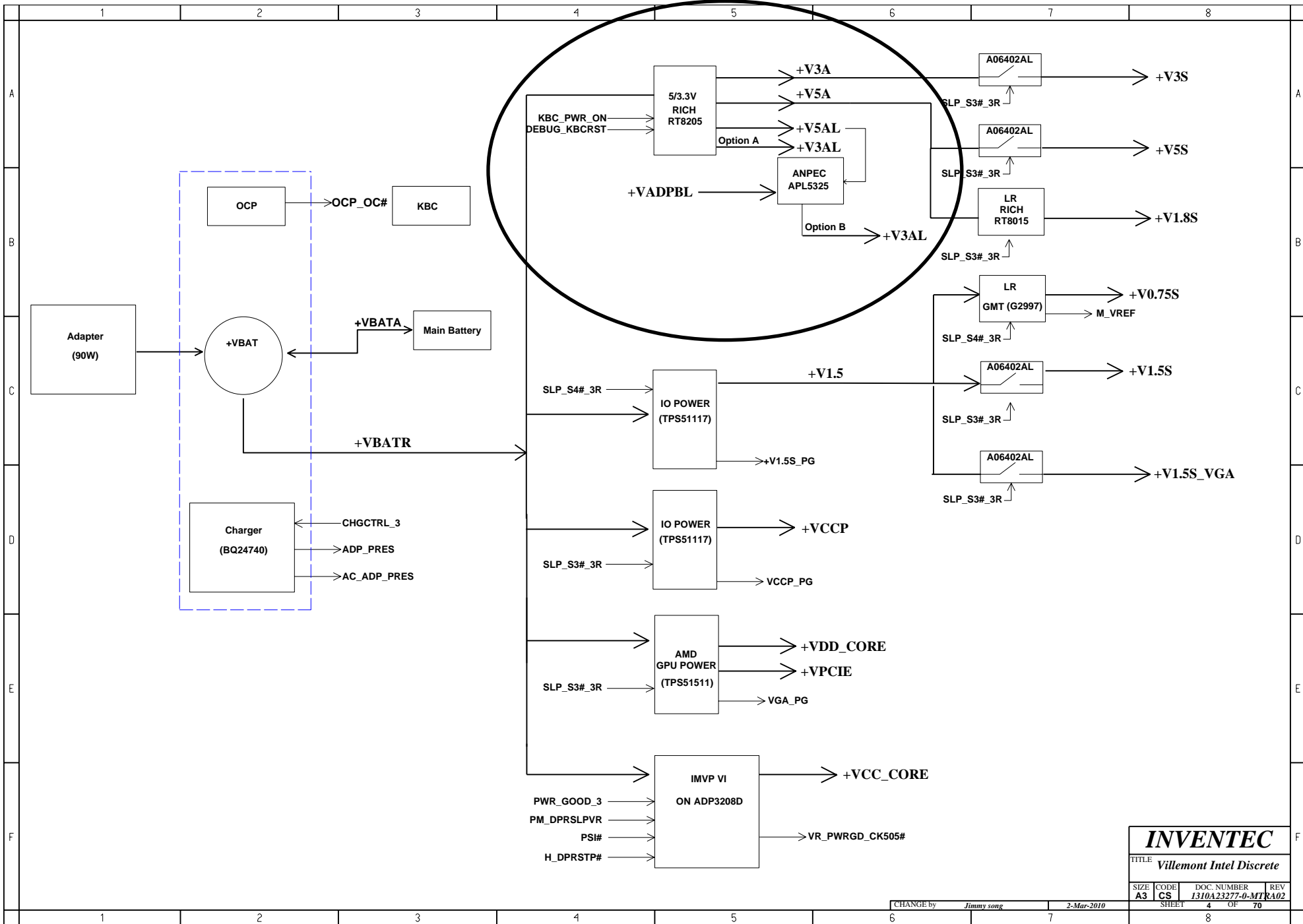


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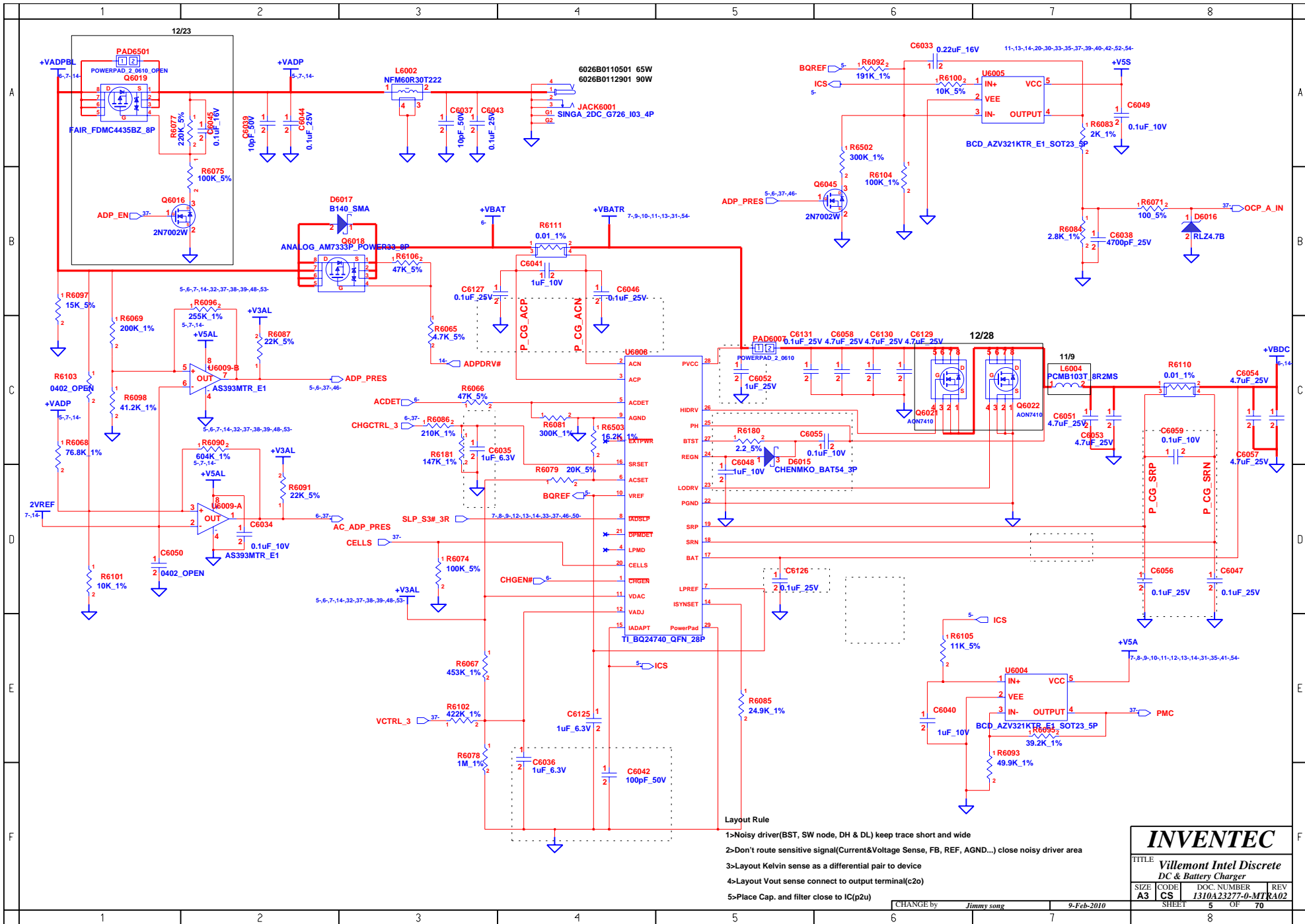
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SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MTR	A02

CHANGE by	9-Feb-2010	SHEET	3	OF	70
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<b>INVENTEC</b>			
TITLE Villemont Intel Discrete			
SIZE A3	CODE CS	DOC. NUMBER 1310A23277-0-MTR	REV A02
CHANGE by Jimmy song		2-Mar-2010	
SHEET 4		OF 70	



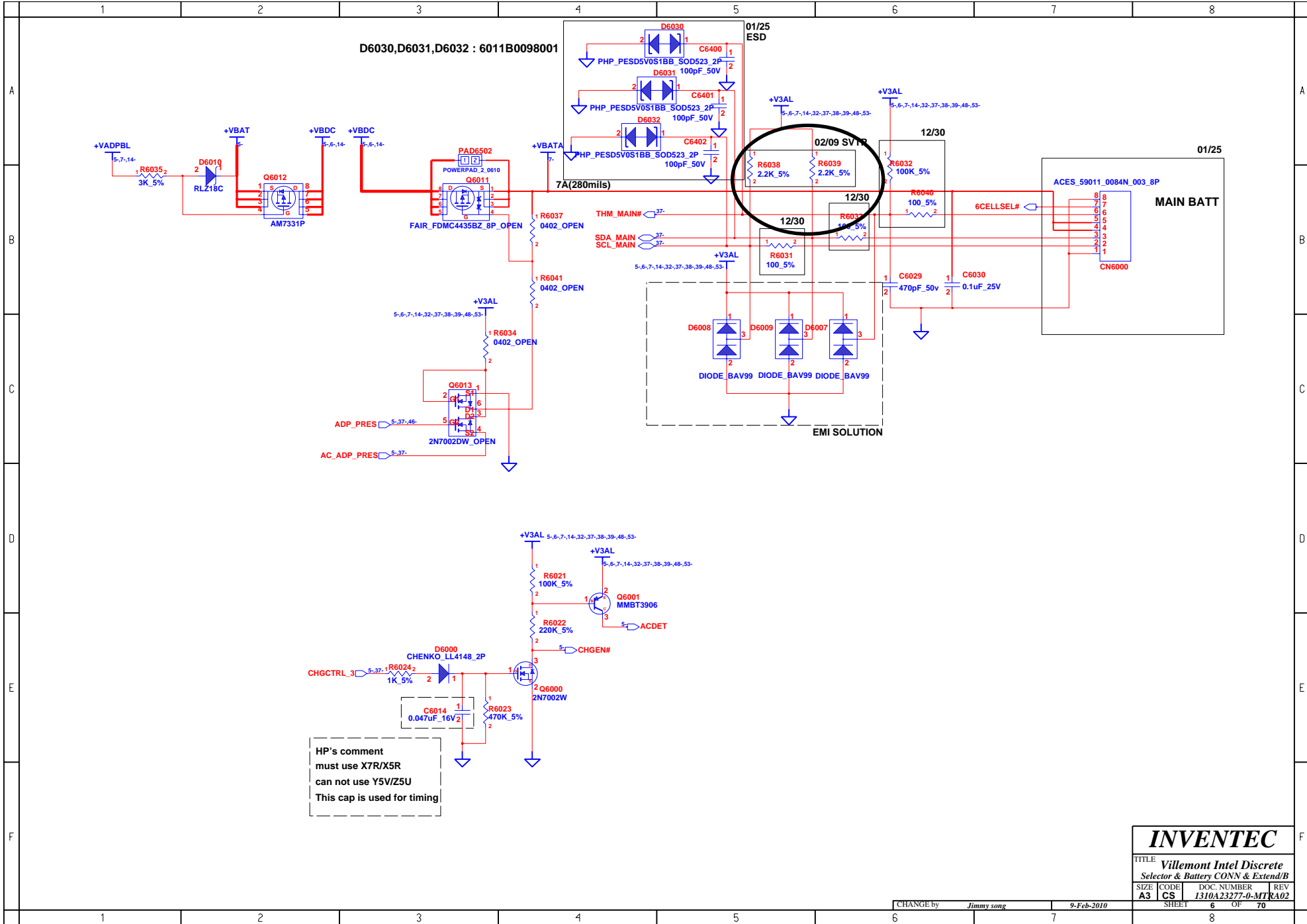
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TITLE  
**Villemont Intel Discrete  
 DC & Battery Charger**

SIZE	CODE	DOC NUMBER	REV
A3	CS	I310A23277-0-MT	R402

SHEET	OF
5	70

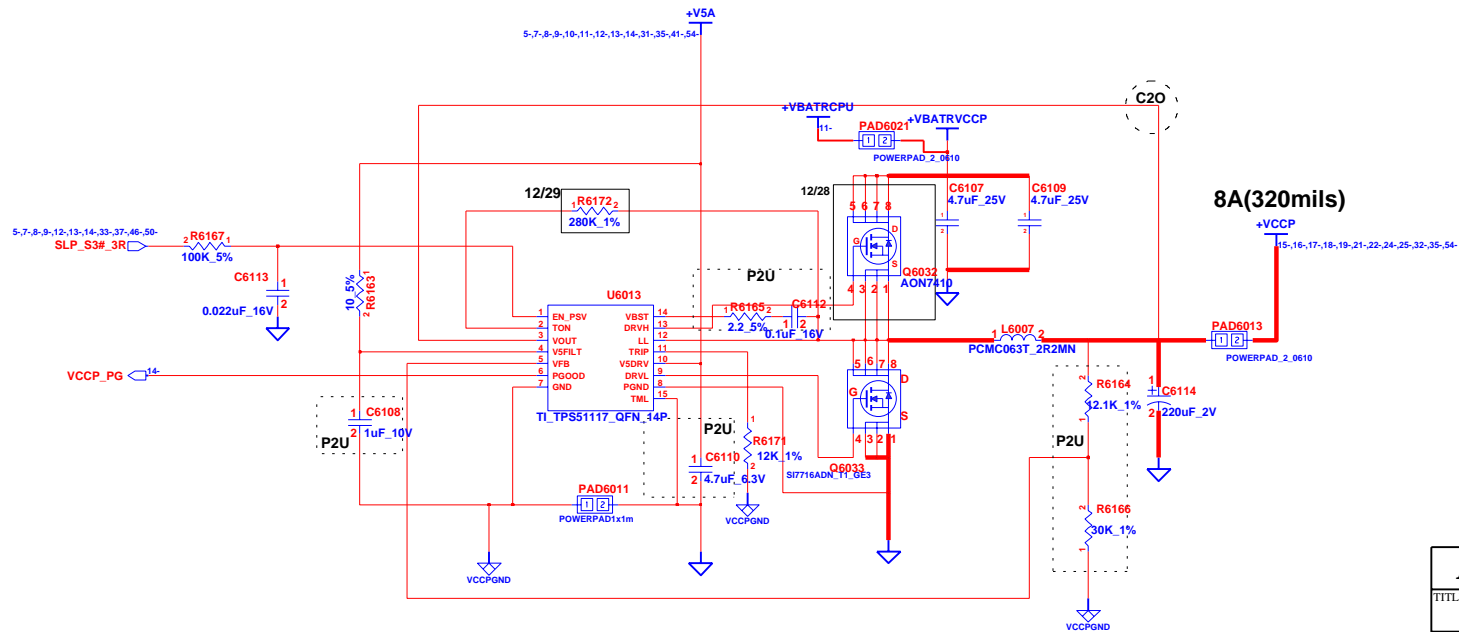
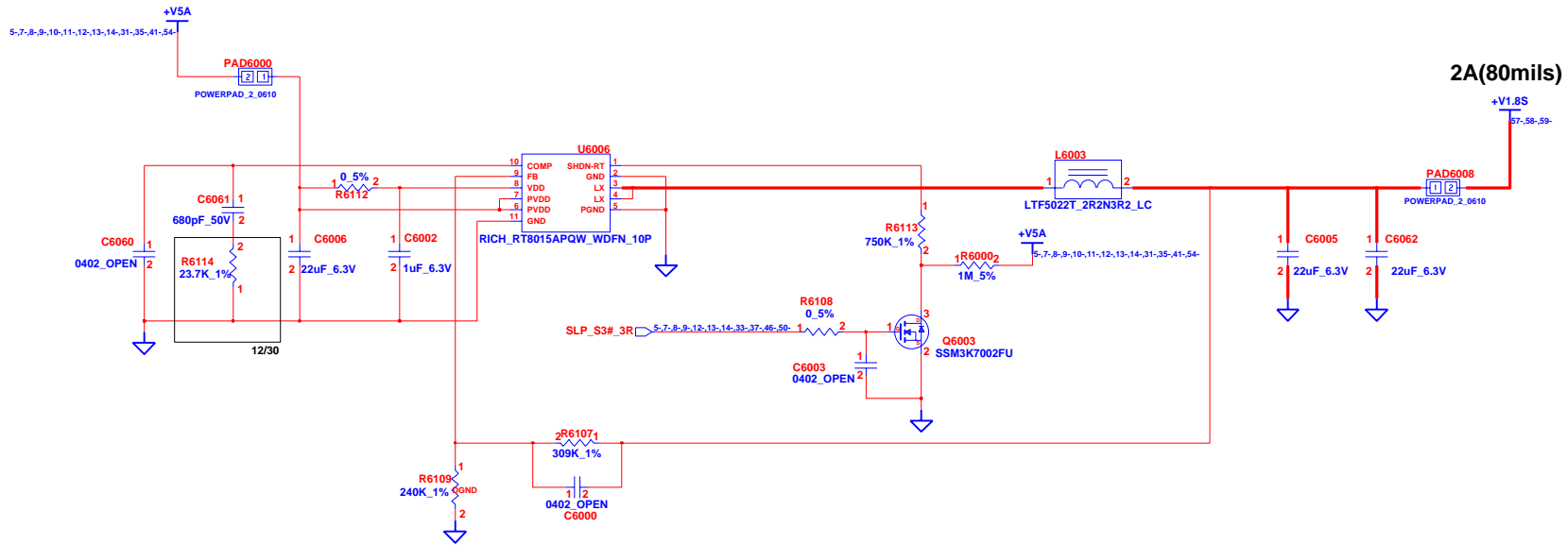
CHANGE by Jimmy song 9-Feb-2010



HP's comment  
must use X7R/X5R  
can not use Y5V/Z5U  
This cap is used for timing

<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete</i>			
Selector & Battery CONN & Extend/B			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A23277-0-MT	RA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	SHEET 6 OF 70

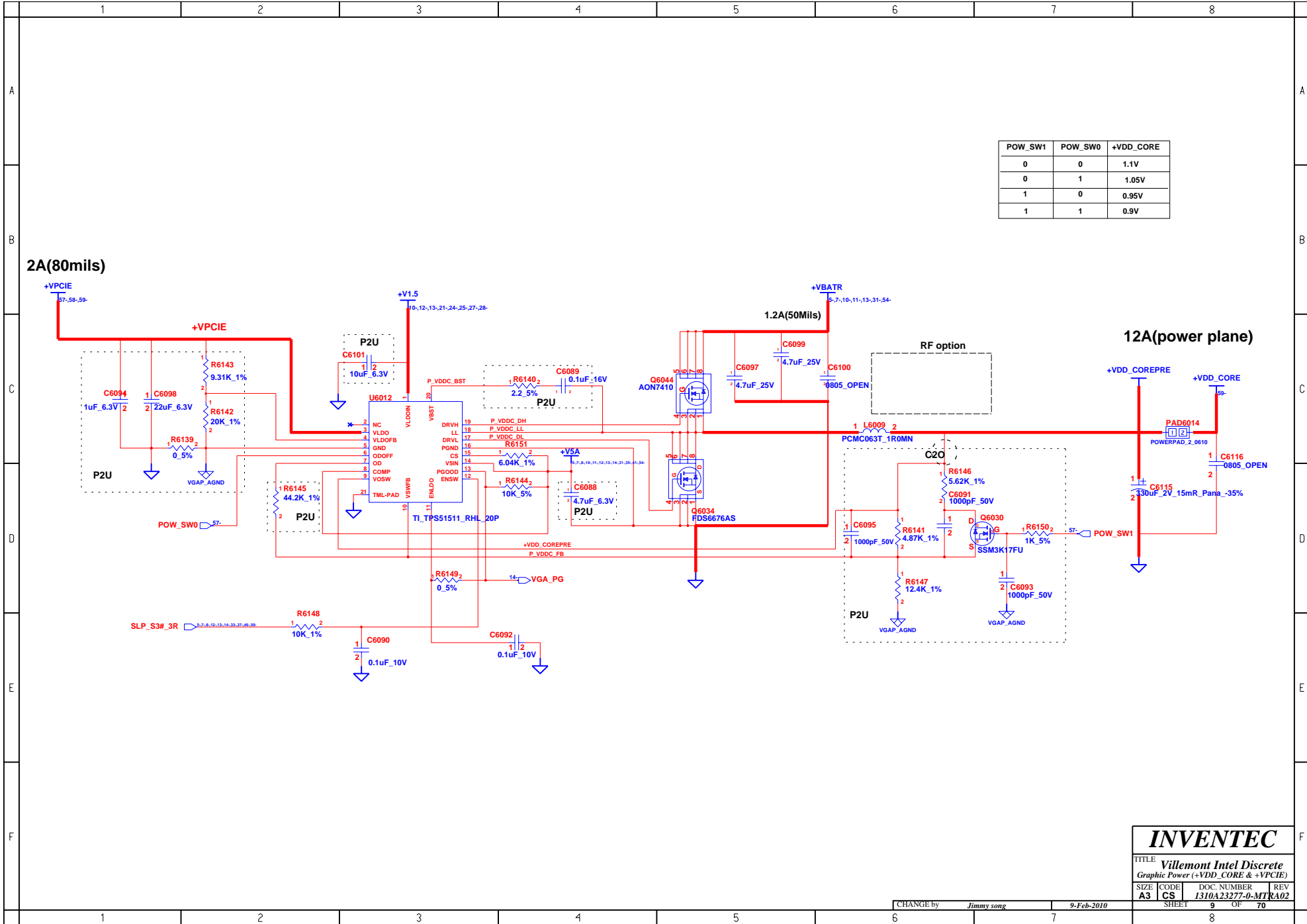




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TITLE <i>Villemont Intel Discrete</i>			
System Power(+V1.5/+VCCP)			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A23277-0-MT	RA02
SHEET		OF	
8		70	

CHANGE by Jimmy song 9-Feb-2010



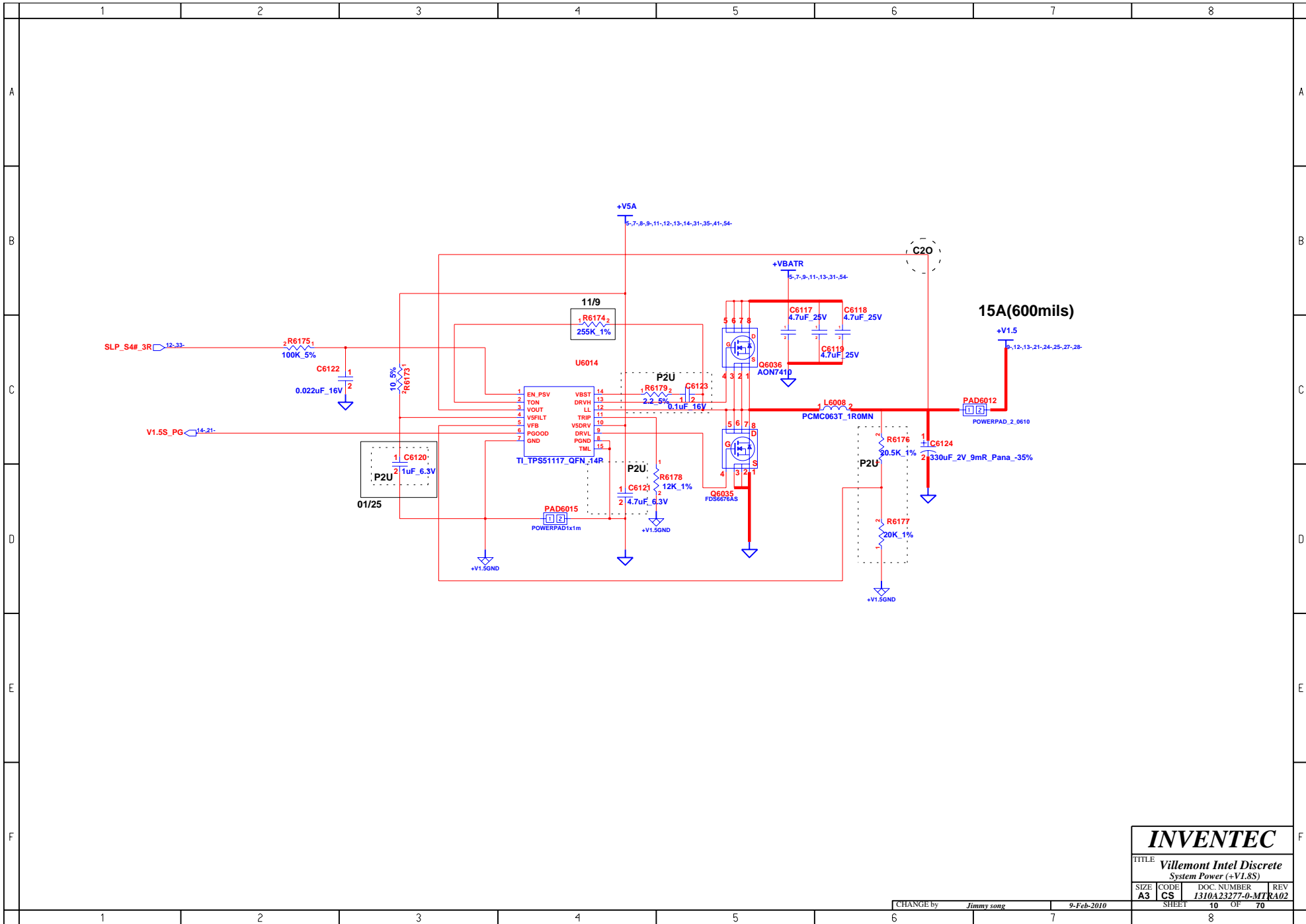


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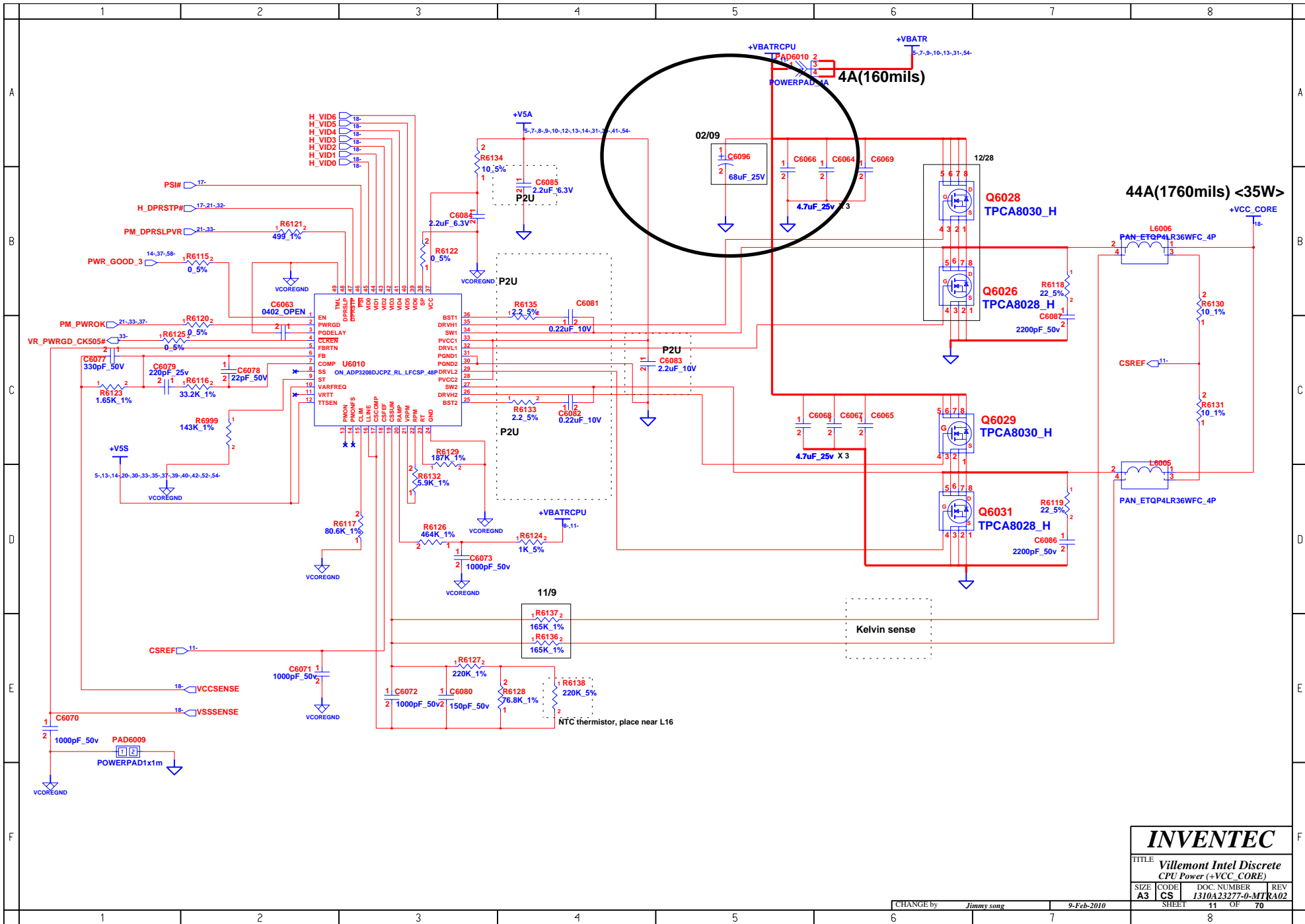
TITLE: **Villemont Intel Discrete Graphic Power (+VDD\_CORE & +VPCIE)**

SIZE	CODE	DOC. NUMBER	REV
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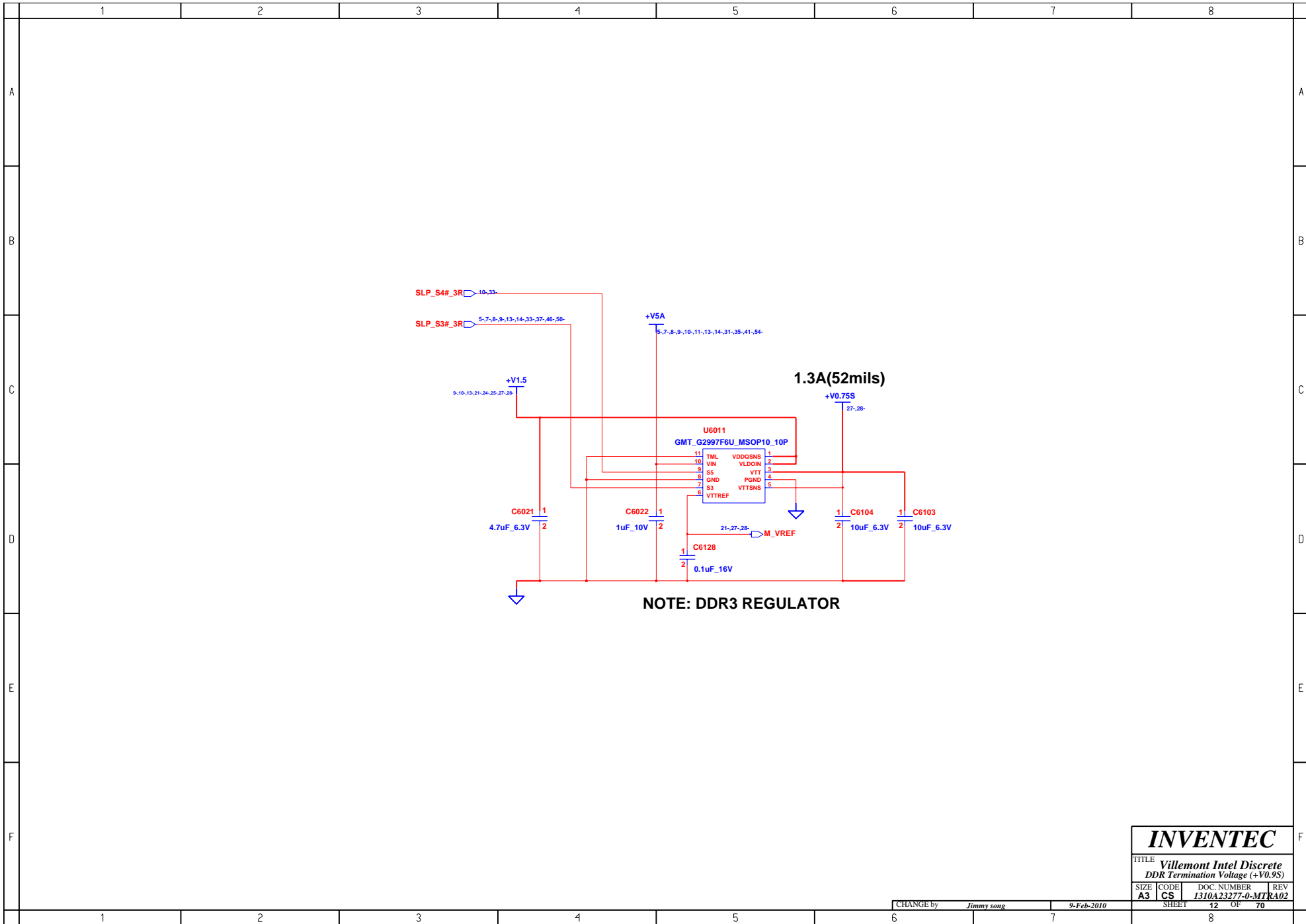
CHANGE by: Jimmy song      9-Feb-2010      SHEET 9 OF 70



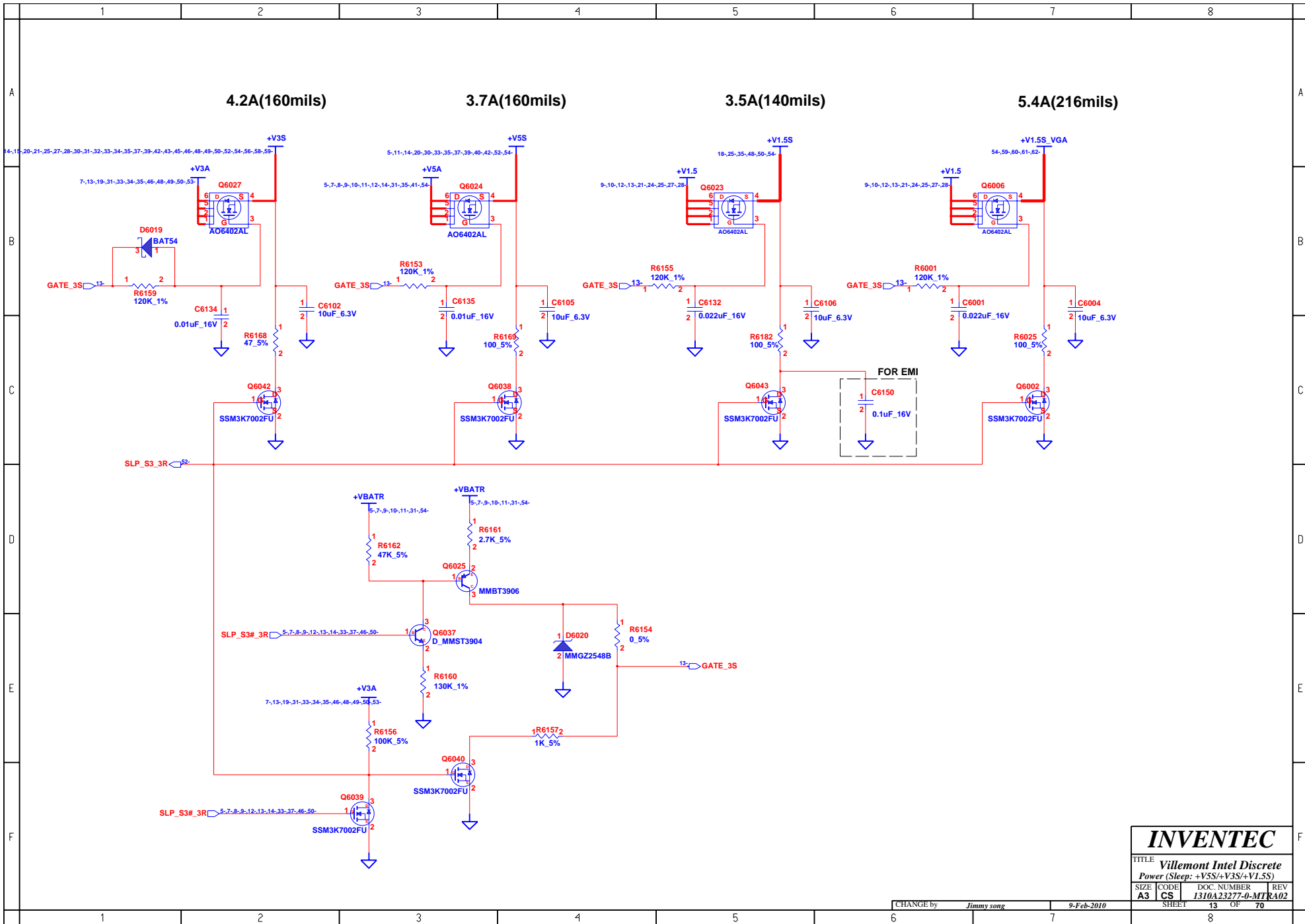
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TITLE <b>Villemont Intel Discrete System Power (+V1.8S)</b>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>I310A23277-0-MTR</b>	REV <b>A02</b>
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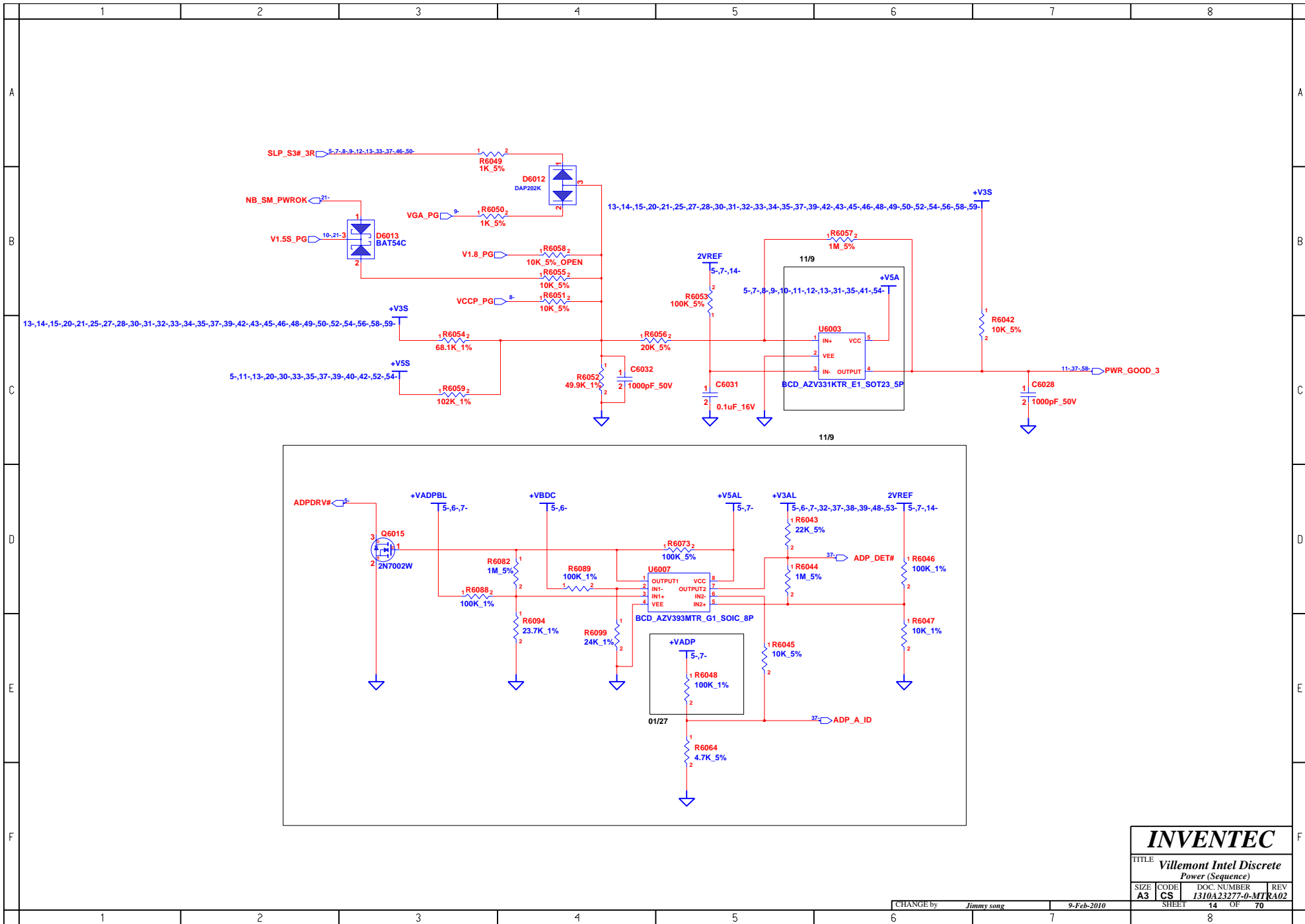
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SHEET <b>11</b>		OF <b>70</b>	



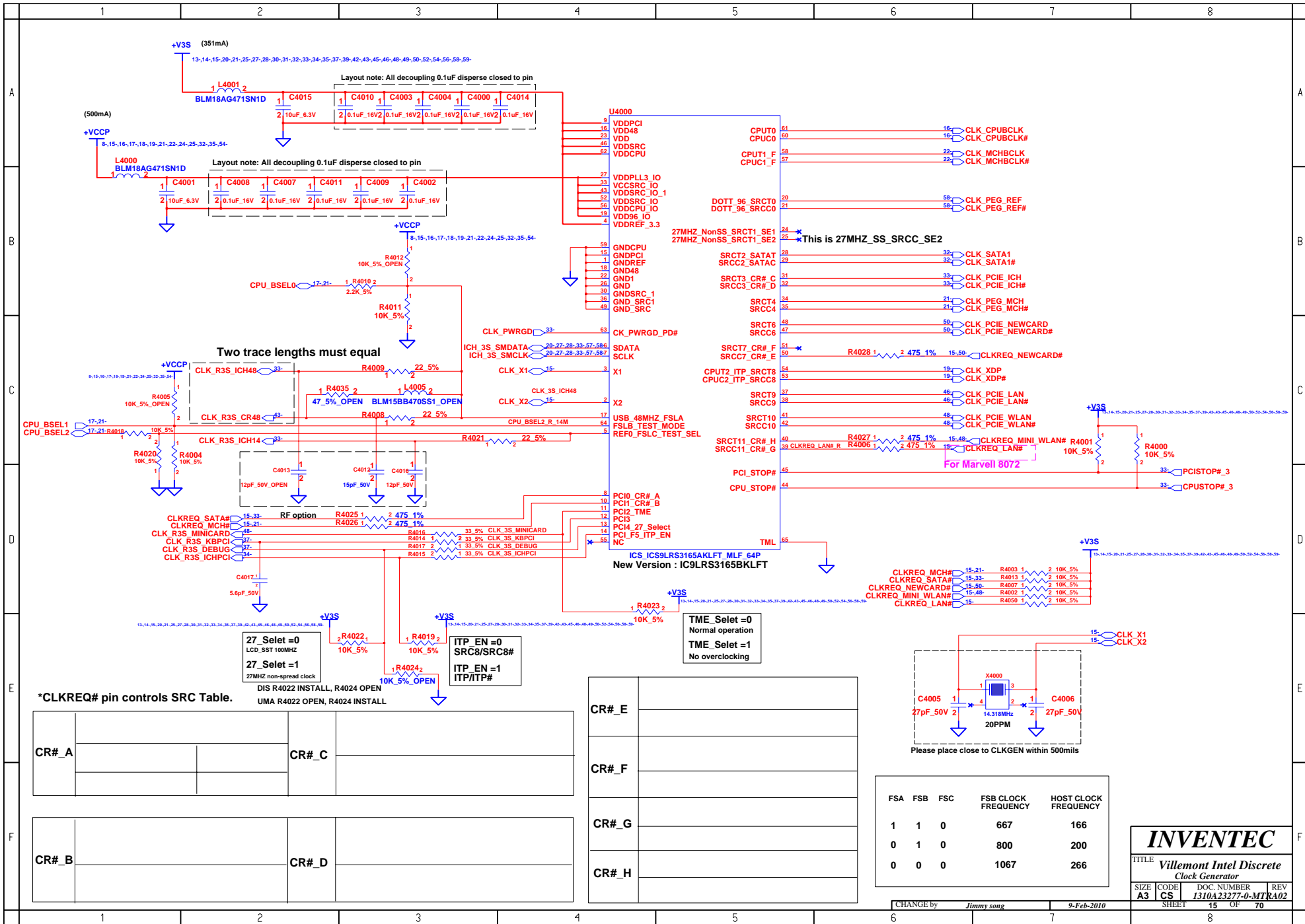
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DDR Termination Voltage (+V0.9S)			
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A3	CS	1310A23277-0-MT	KA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET		12	OF 70



<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b>			
Power (Sleep: +V5S/+V3S/+V1.5S)			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>I310A23277-0-MTR</b>	REV <b>RA02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>13</b>		OF <b>70</b>	



<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete Power (Sequence)</b>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MTR</b>	REV <b>RA02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>14</b>		OF <b>70</b>	



FSA	FSB	FSC	FSB CLOCK FREQUENCY	HOST CLOCK FREQUENCY
1	1	0	667	166
0	1	0	800	200
0	0	0	1067	266

**INVENTEC**

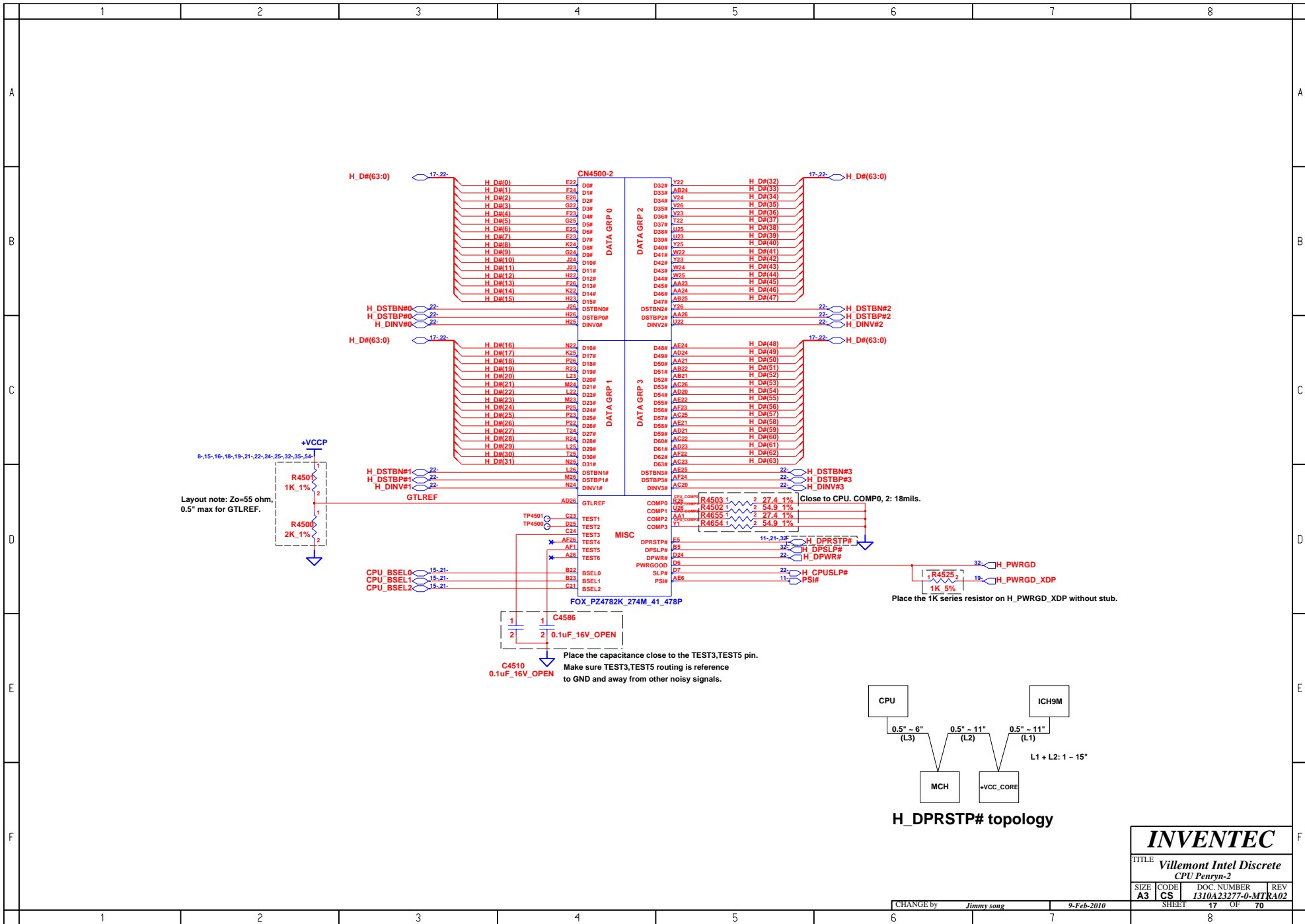
TITLE: **Villemont Intel Discrete Clock Generator**

SIZE	CODE	DOC. NUMBER	REV
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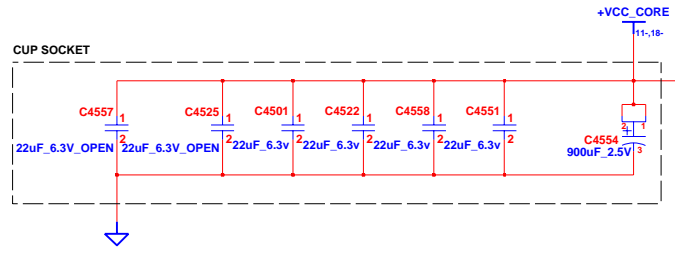
CHANGE by: Jimmy song      9-Feb-2010      SHEET 15 OF 70







# (36A) <35W>

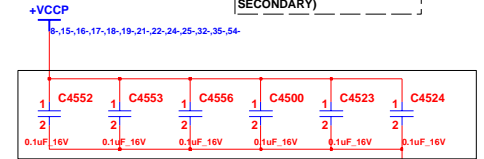


**CN4500-3**

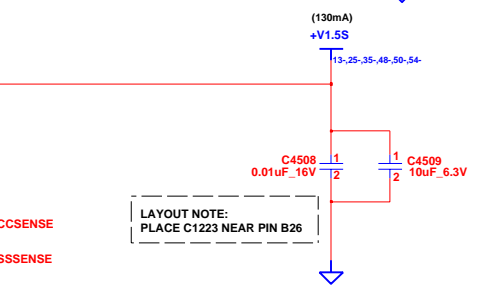
A7	VCC001	AB20	VCC068
A9	VCC002	AB7	VCC069
A10	VCC003	AC7	VCC070
A11	VCC004	AC9	VCC071
A13	VCC005	AC12	VCC072
A15	VCC006	AC13	VCC073
A17	VCC007	AC15	VCC074
A18	VCC008	AC17	VCC075
A20	VCC009	AC18	VCC076
B7	VCC010	AD7	VCC077
B9	VCC011	AD9	VCC078
B10	VCC012	AD10	VCC079
B12	VCC013	AD12	VCC080
B14	VCC014	AD14	VCC081
B15	VCC015	AD15	VCC082
B17	VCC016	AD17	VCC083
B18	VCC017	AD18	VCC084
B20	VCC018	AE9	VCC085
C9	VCC019	AE10	VCC086
C10	VCC020	AE12	VCC087
C12	VCC021	AE13	VCC088
C13	VCC022	AE15	VCC089
C15	VCC023	AE17	VCC090
C17	VCC024	AE18	VCC091
C18	VCC025	AE20	VCC092
D9	VCC026	AF9	VCC093
D10	VCC027	AF10	VCC094
D12	VCC028	AF12	VCC095
D14	VCC029	AF14	VCC096
D15	VCC030	AF15	VCC097
D17	VCC031	AF17	VCC098
D18	VCC032	AF18	VCC099
E7	VCC033	AF20	VCC100
E9	VCC034	G21	VCC091
E10	VCC035	V6	VCC092
E12	VCC036	V6	VCC093
E13	VCC037	J6	VCC094
E15	VCC038	KE	VCC095
E17	VCC039	ME	VCC096
E18	VCC040	ME	VCC097
E20	VCC041	K21	VCC098
F7	VCC042	M21	VCC099
F9	VCC043	N21	VCC100
F10	VCC044	N6	VCC101
F12	VCC045	R21	VCC102
F14	VCC046	R6	VCC103
F15	VCC047	T21	VCC104
F17	VCC048	T6	VCC105
F18	VCC049	V21	VCC106
F20	VCC050	W21	VCC107
AA7	VCC051		
AA9	VCC052		
AA10	VCC053		
AA12	VCC054		
AA13	VCC055		
AA15	VCC056		
AA17	VCC057		
AA18	VCC058		
AA20	VCC059		
AB9	VCC060		
AB10	VCC061		
AB12	VCC062		
AB14	VCC063		
AB15	VCC064		
AB17	VCC065		
AB18	VCC066		
AB18	VCC067		

4.5A - before Vcc stable.  
2.5A - after Vcc stable.

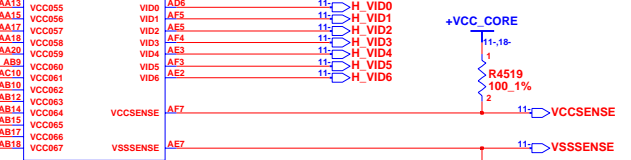
+VCCP 8-15-16-17-18-19-21-22-24-25-32-35-54



PLACE THESE INSIDE SOCKET CAVITY ON L8 (NORTH SIDE SECONDARY)



LAYOUT NOTE: PLACE C1223 NEAR PIN B26

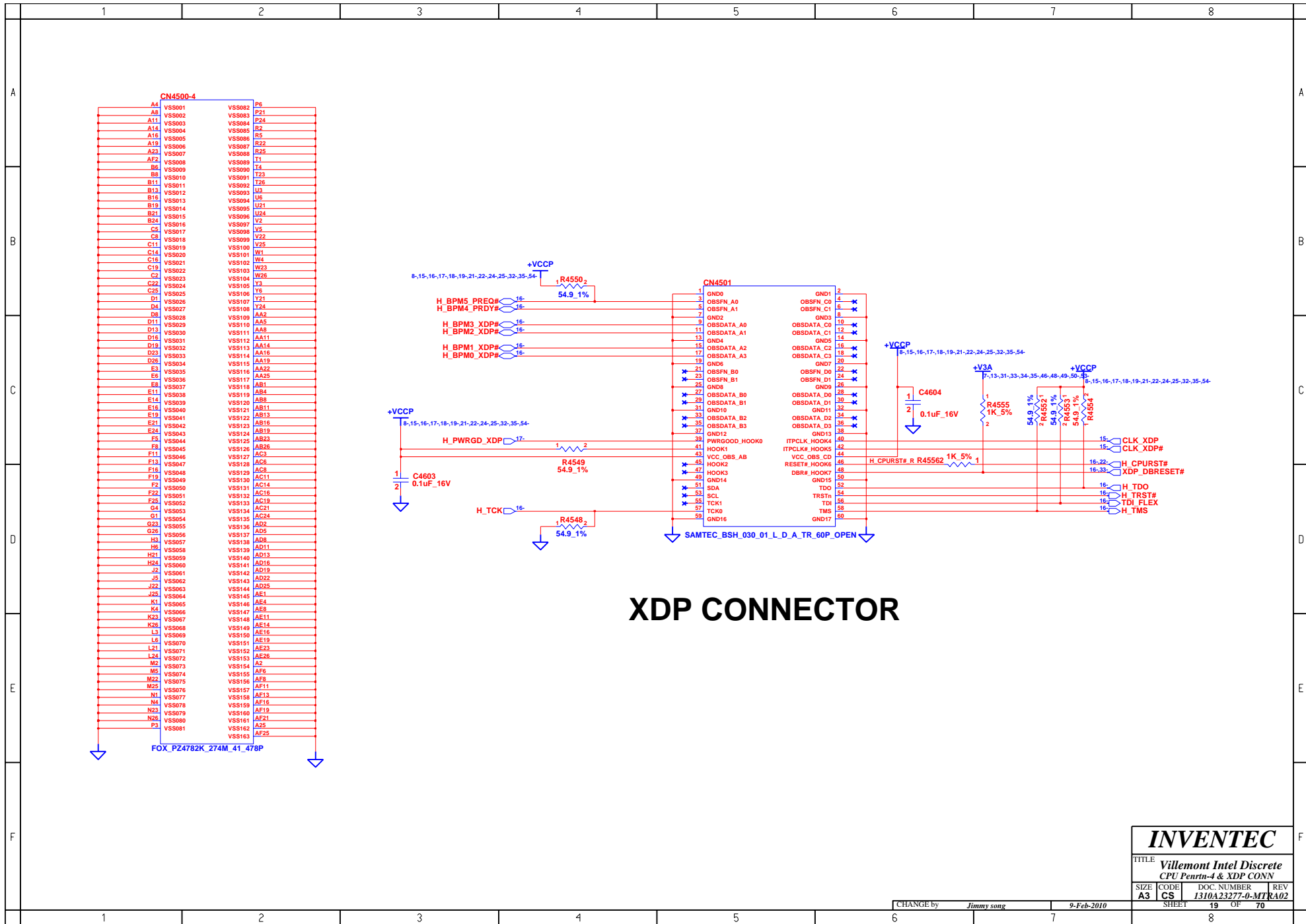


LAYOUT NOTE: ROUTE VCCSENSE AND VSSSENSE TRACE AT 24.7 OHM WITH 50 MIL SPACING PLACE PU AND PD WITHIN 1 INCH OF CPU

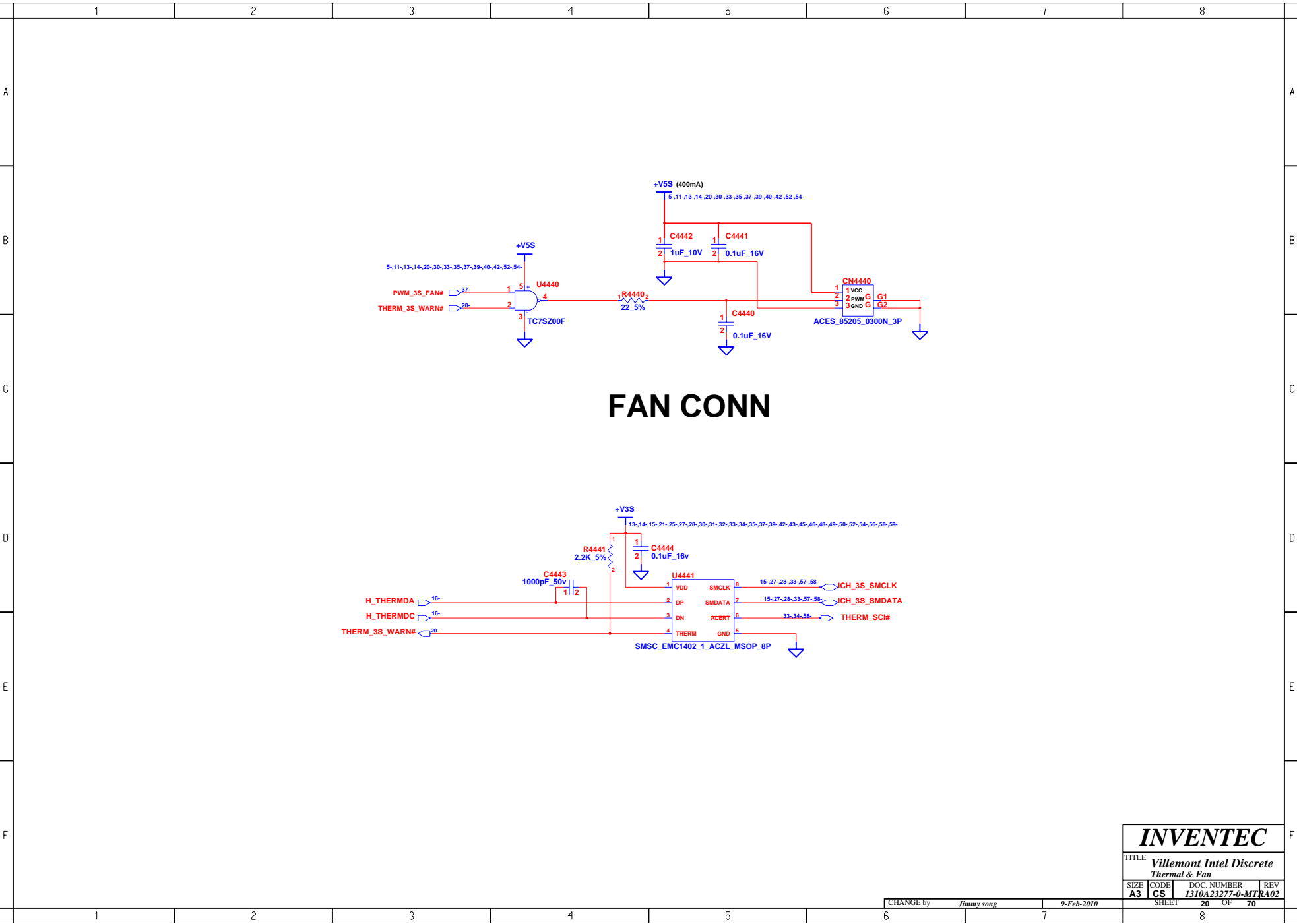
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TITLE: **Villemont Intel Discrete CPU Penryn-3**

SIZE: <b>A3</b>	CODE: <b>CS</b>	DOC. NUMBER: <b>I310A23277-0-MTR</b>	REV: <b>A02</b>
CHANGE by: <i>Jimmy song</i>		9-Feb-2010	
SHEET: <b>18</b>		OF: <b>70</b>	



<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete CPU Penryn-4 &amp; XDP CONN</i>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <i>1310A23277-0-MTR</i>	REV <b>A02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>19</b>		OF <b>70</b>	



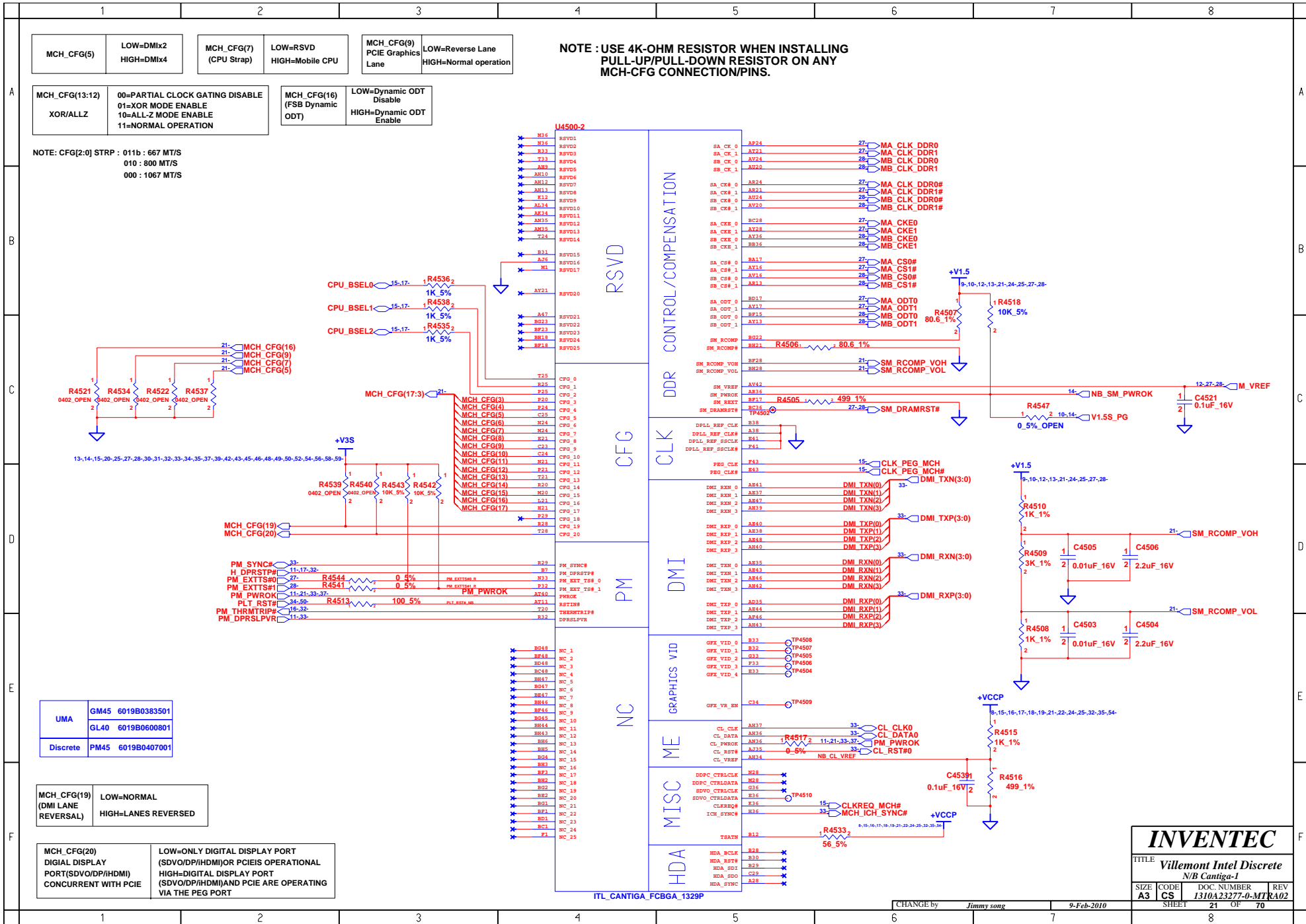
**INVENTEC**

TITLE  
**Villemont Intel Discrete**  
 Thermal & Fan

SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MT</b>	REV <b>RA02</b>
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CHANGE by *Jimmy song* 9-Feb-2010

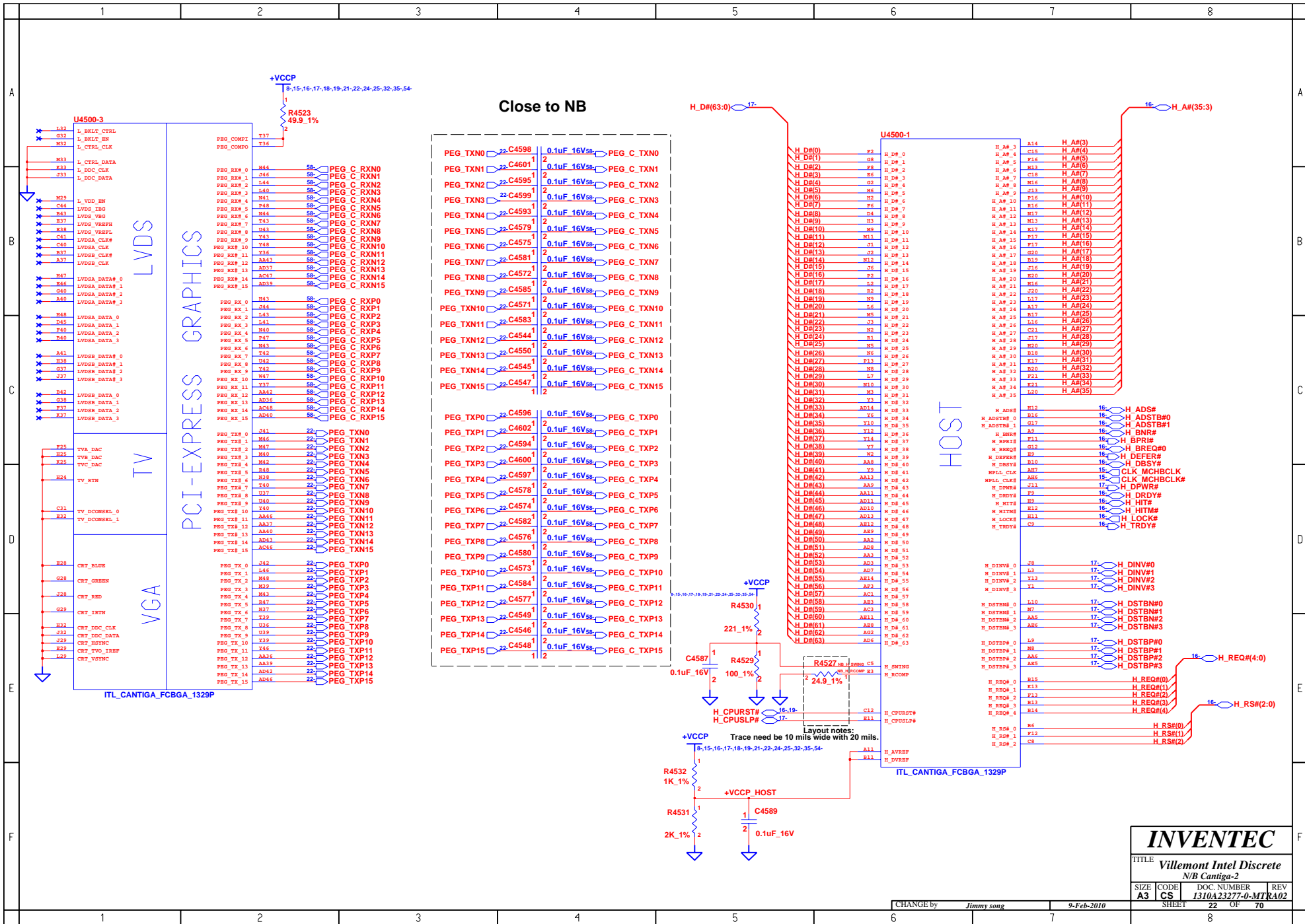
SHEET 20 OF 70



**INVENTEC**

TITLE: Villemont Intel Discrete  
N/B Cantiga-1

SIZE A3	CODE CS	DOC. NUMBER 1310A23277-0-MT	REV RA02
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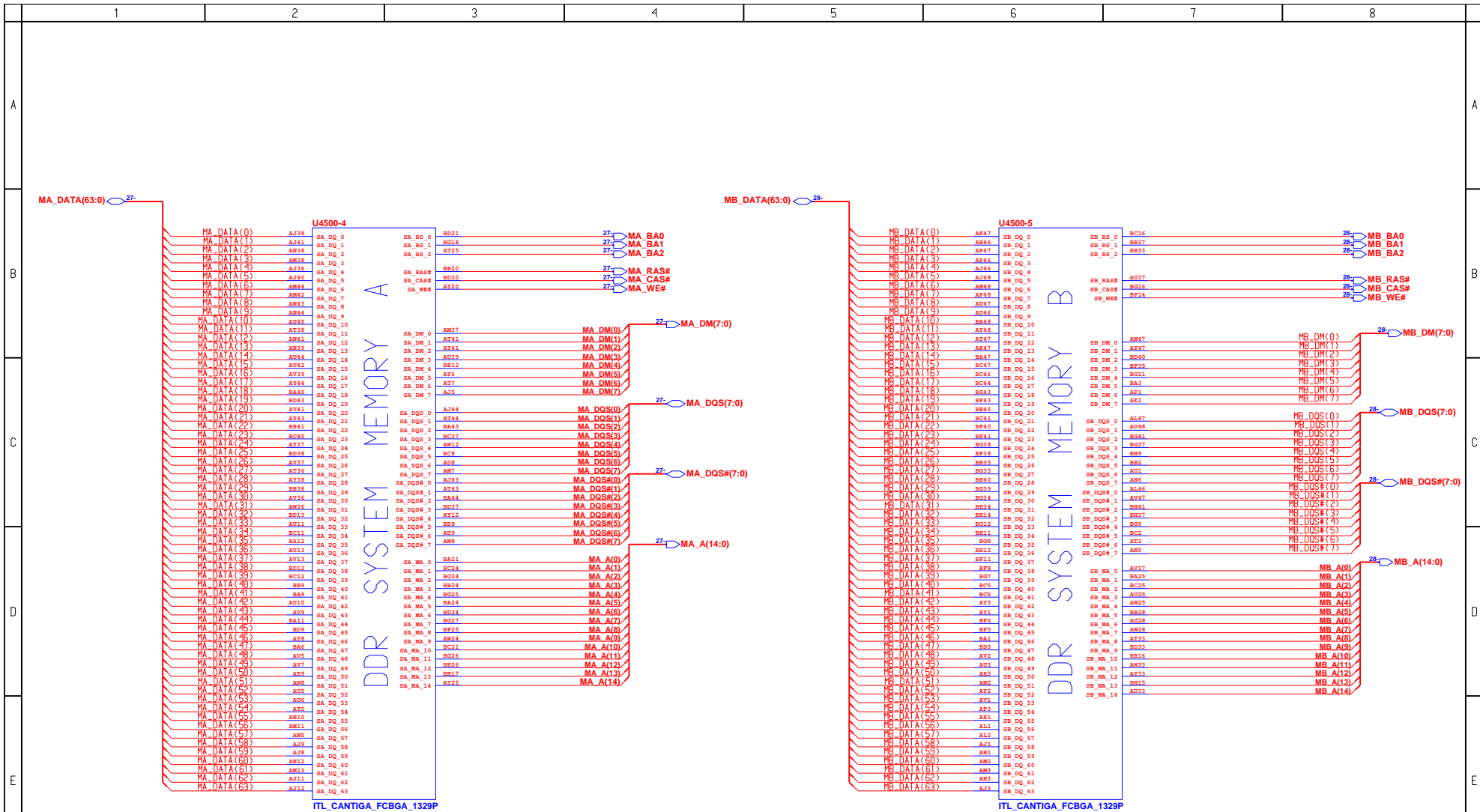
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TITLE: **Villemont Intel Discrete**  
N/B Cantiga-2

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	R02

CHANGE by: *Jimmy song* 9-Feb-2010

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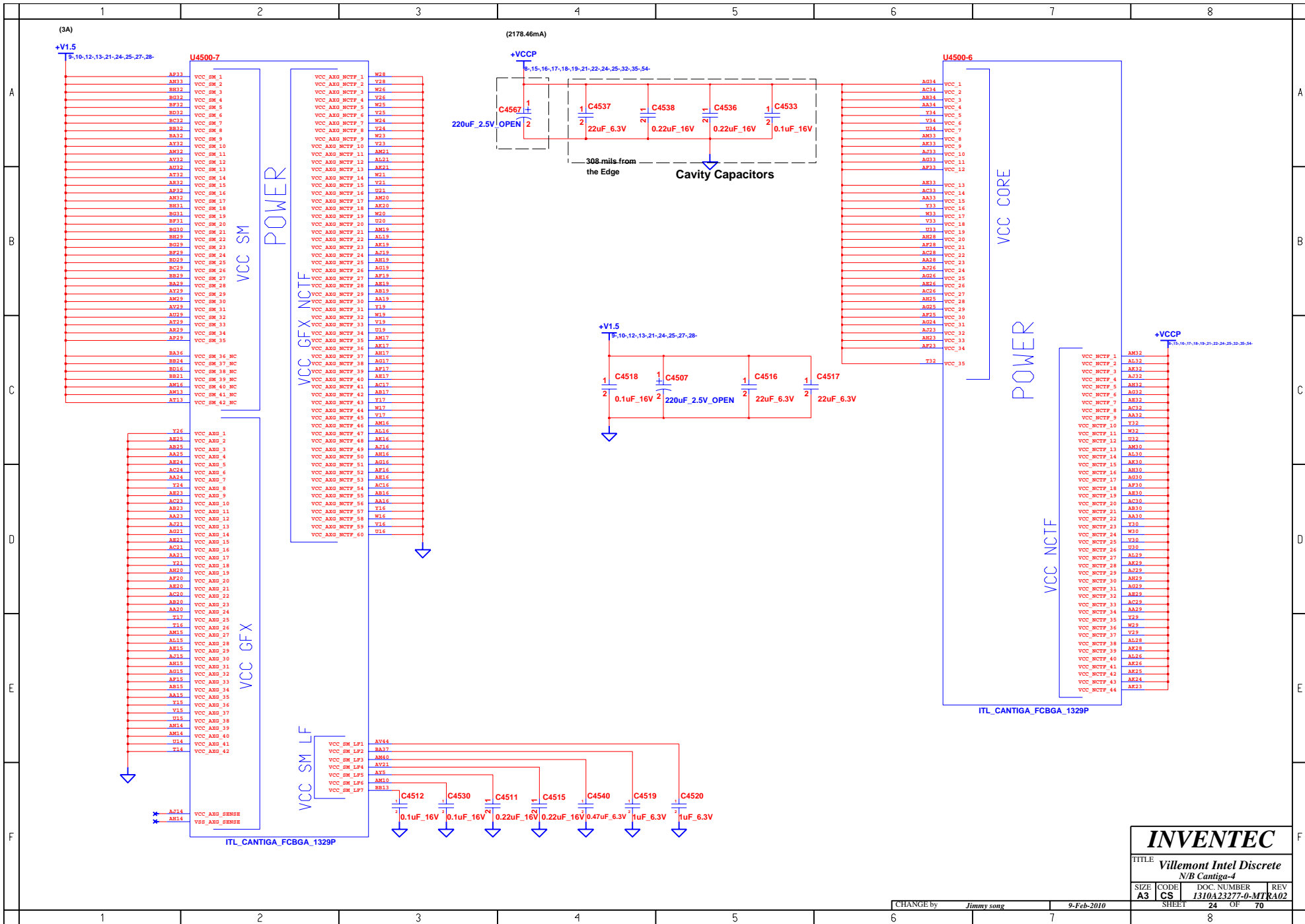


**INVENTEC**  
 TITLE: **Villemont Intel Discrete**  
 N/B Cantiga-3

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	A02

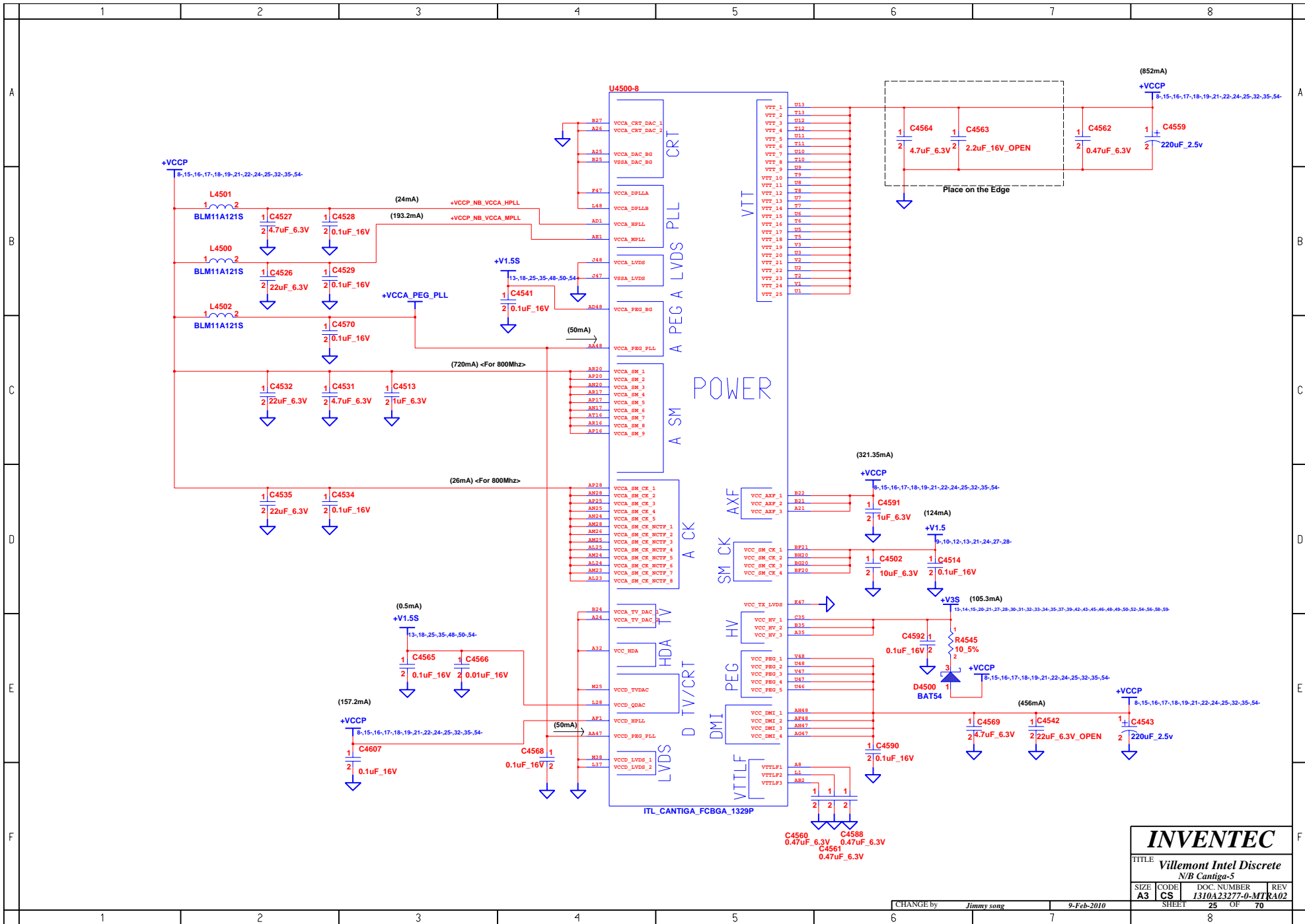
CHANGE by: Jimmy song      9-Feb-2010

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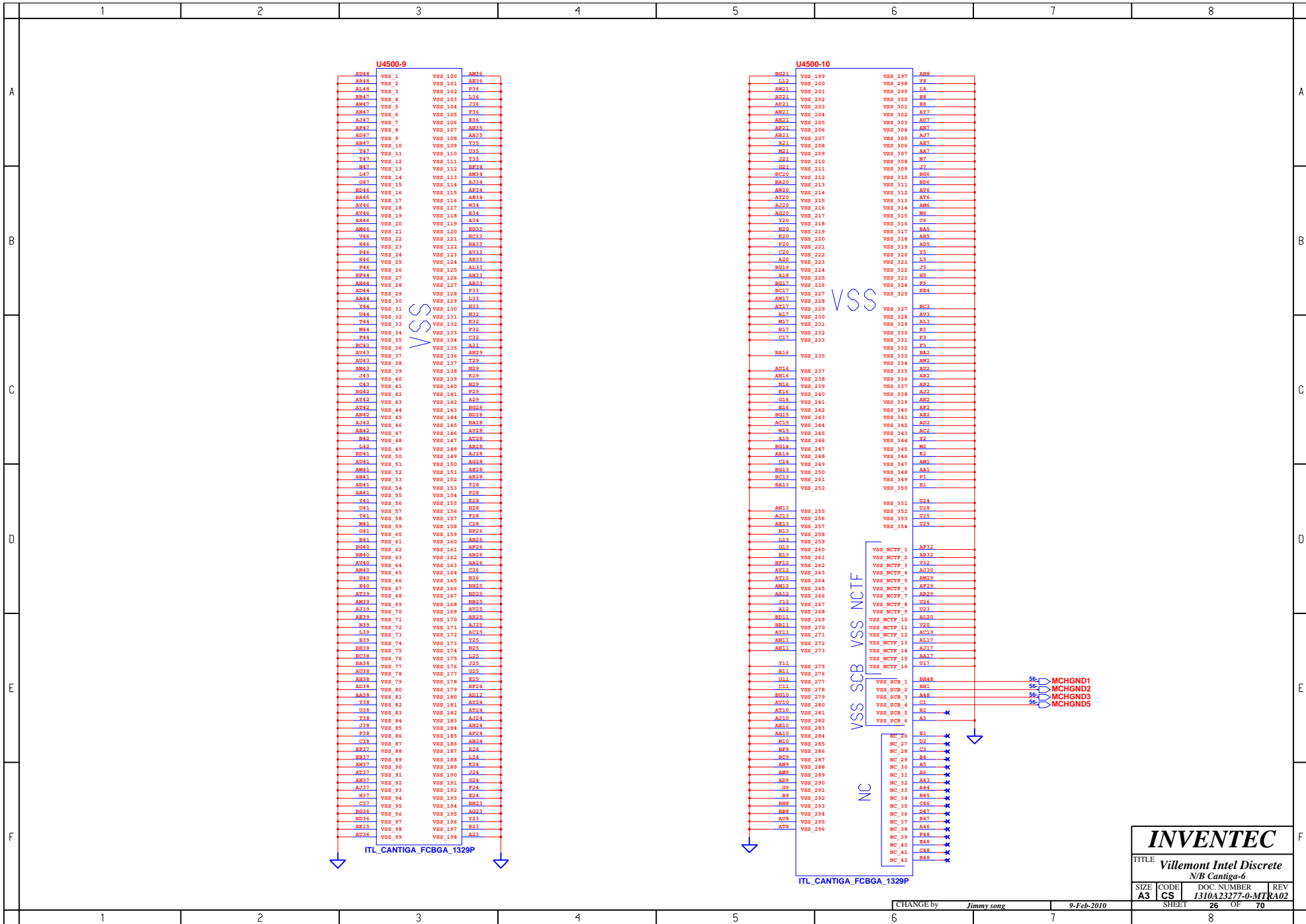


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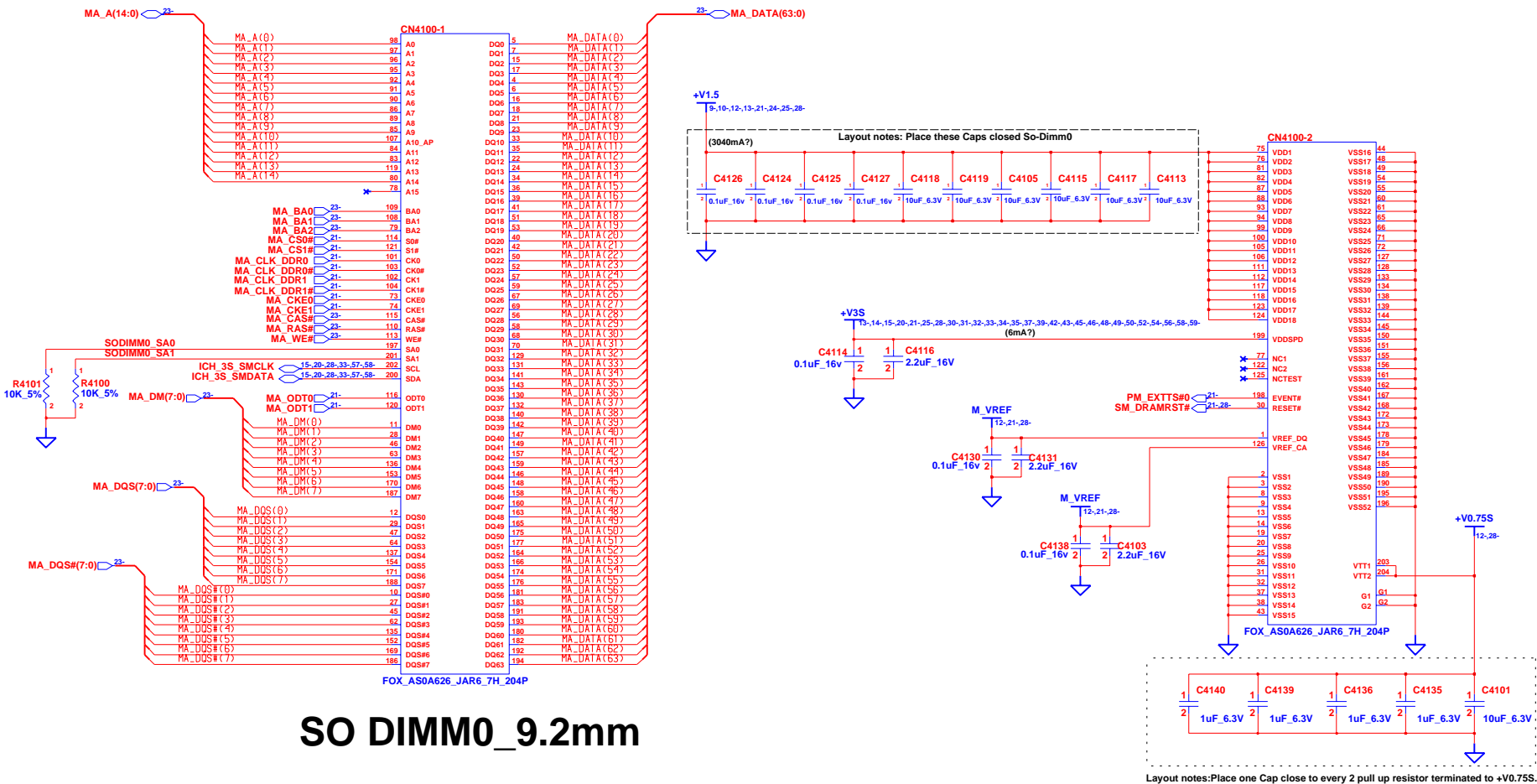


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SIZE A3	CODE CS	DOC NUMBER I310A23277-0-MT	REV A02
CHANGE by Jimmy song		9-Feb-2010	
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CHANGE by Jimmy song 9-Feb-2010

<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b>			
N/B Cantiga-6			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MT</b>	REV <b>A02</b>
SHEET <b>26</b>		OF <b>70</b>	



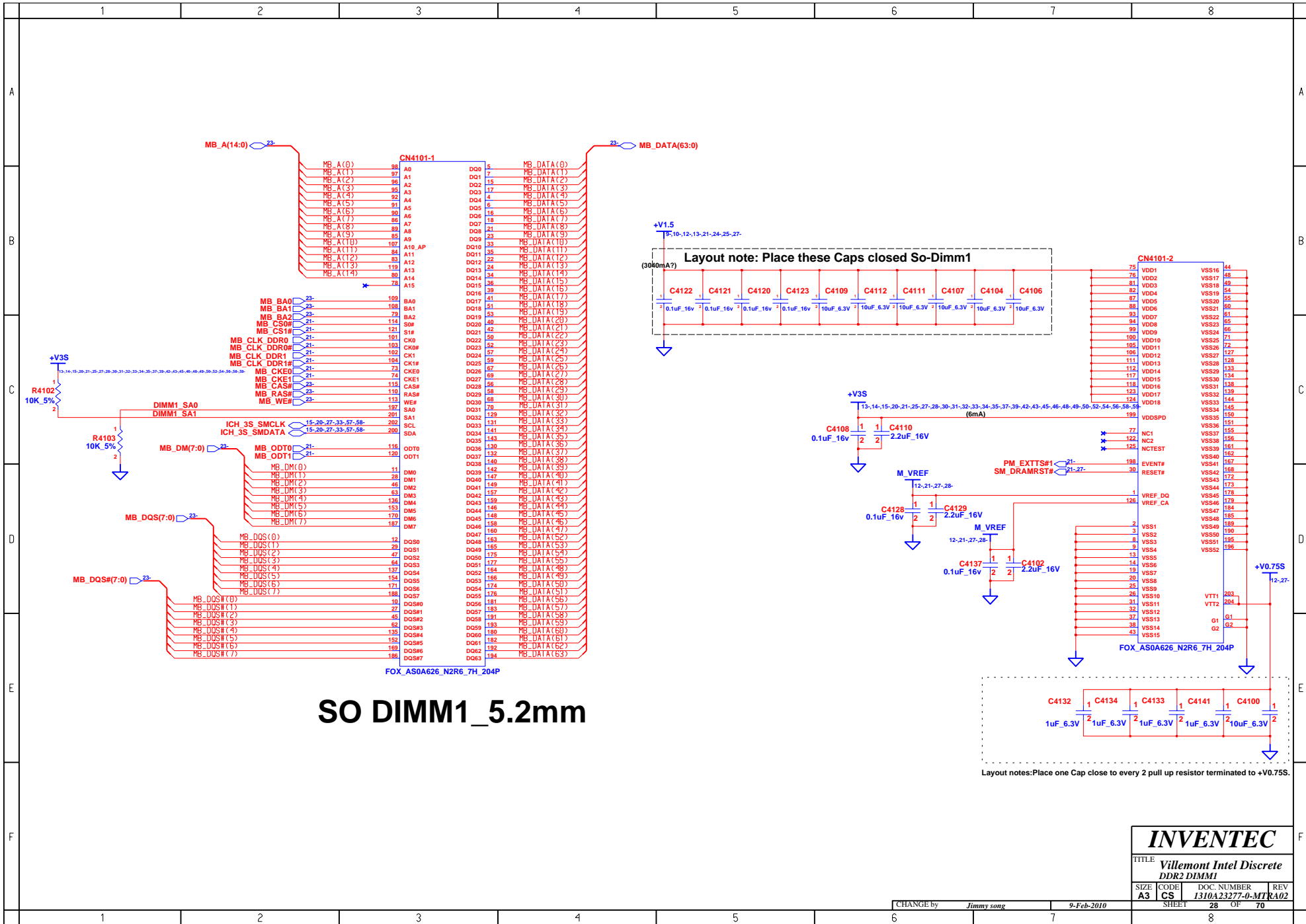
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TITLE: **Villemont Intel Discrete DDR2 DIMM0**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MTR	KA02

CHANGE by: Jimmy song      9-Feb-2010

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# SO DIMM1\_5.2mm

Layout notes: Place one Cap close to every 2 pull up resistor terminated to +V0.75S.

**INVENTEC**

TITLE  
Villemont Intel Discrete  
DDR2 DIMM1

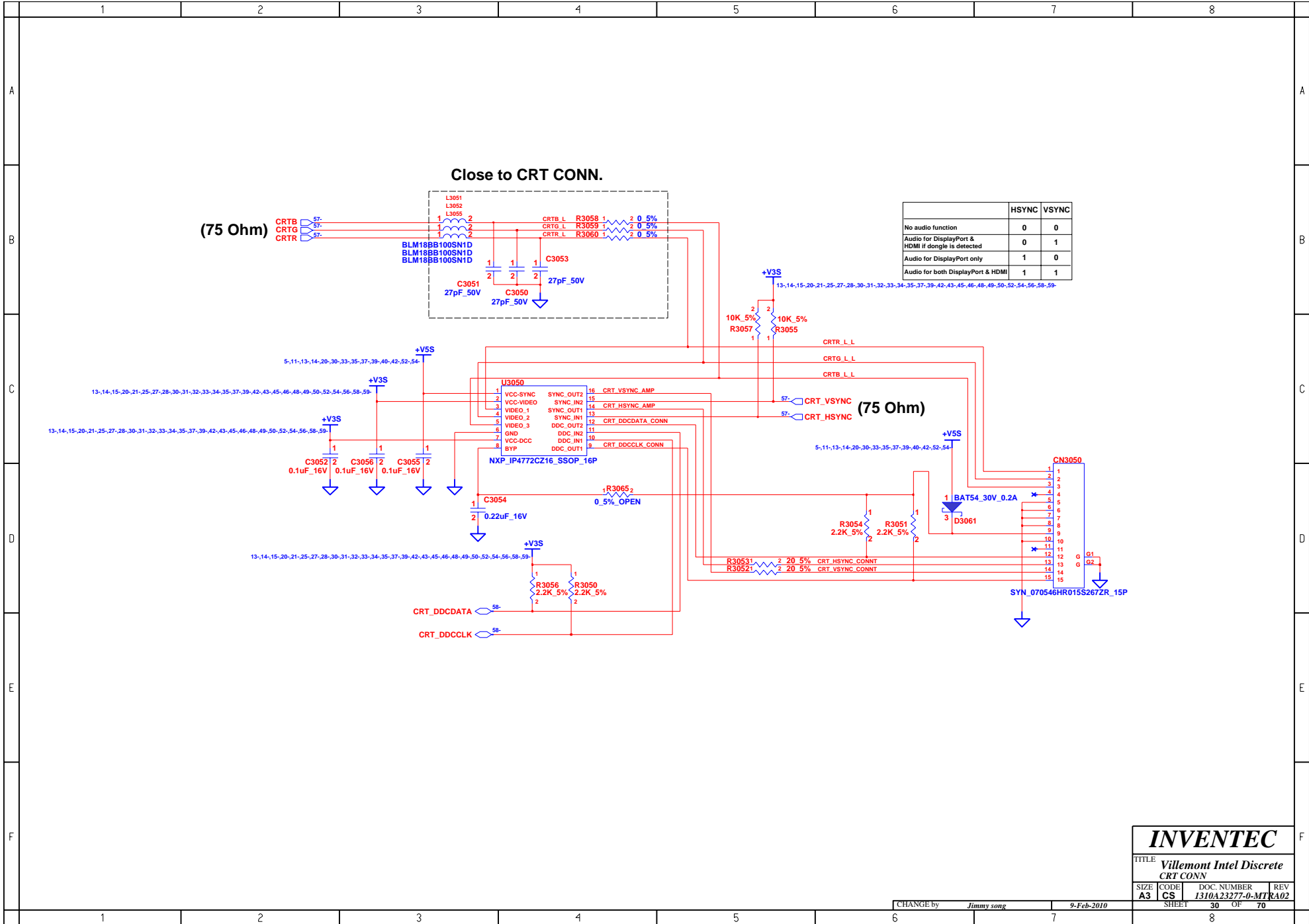
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A3	CS	I310A23277-0-MT	A02

CHANGE by Jimmy song 9-Feb-2010

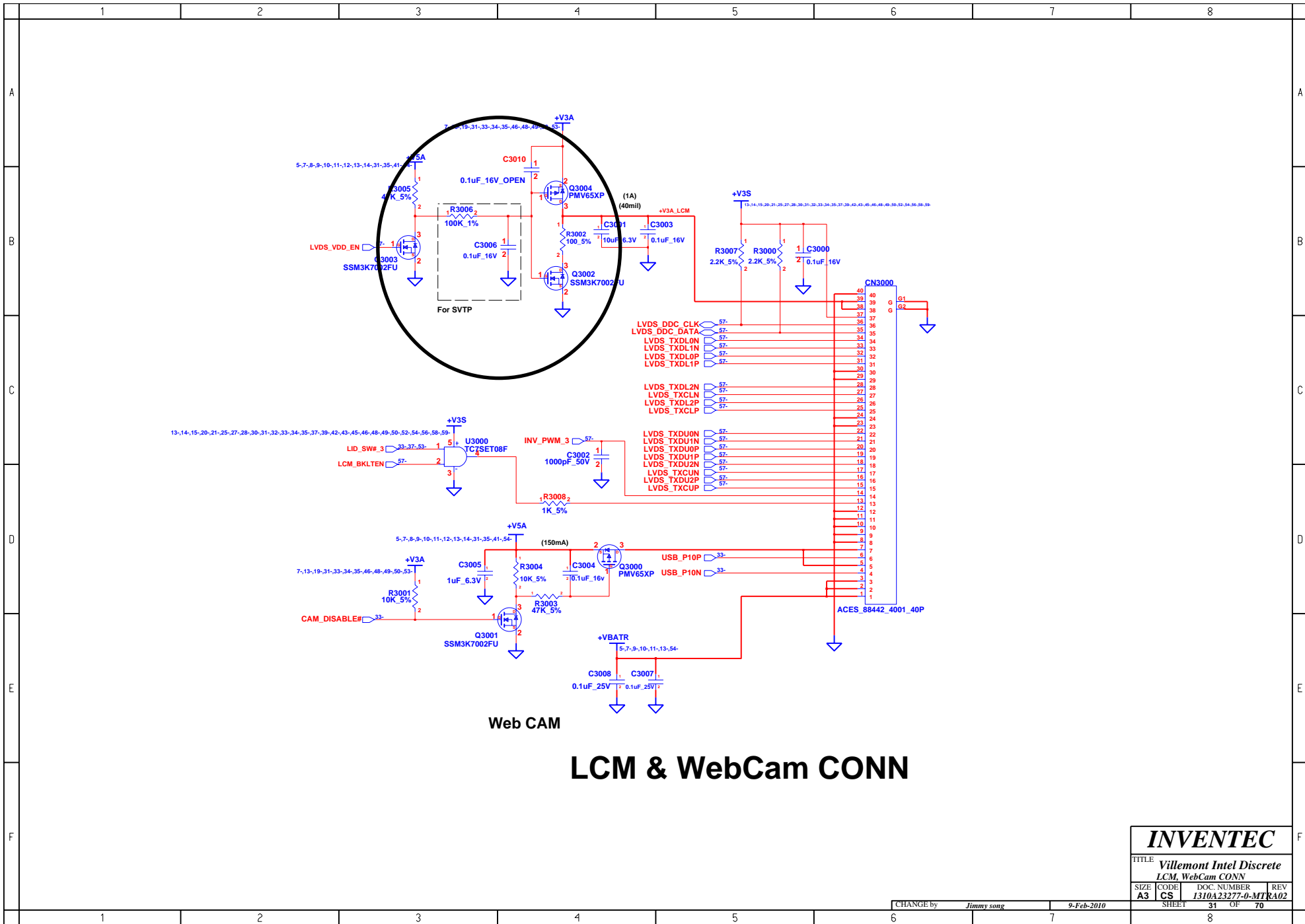
SHEET	28	OF	70
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<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b>			
DDR2 Damping			
SIZE	CODE	DOC. NUMBER	REV
<b>A3</b>	<b>CS</b>	<b>1310A23277-0-MTR</b>	<b>A02</b>
CHANGE by <i>Jimmy song</i>		27-Sep-2003	
SHEET		29	OF 70



<b>INVENTEC</b>			
TITLE Villemont Intel Discrete CRT CONN			
SIZE A3	CODE CS	DOC. NUMBER 1310A23277-0-MT	REV RA02
CHANGE by Jimmy song		9-Feb-2010	
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# LCM & WebCam CONN

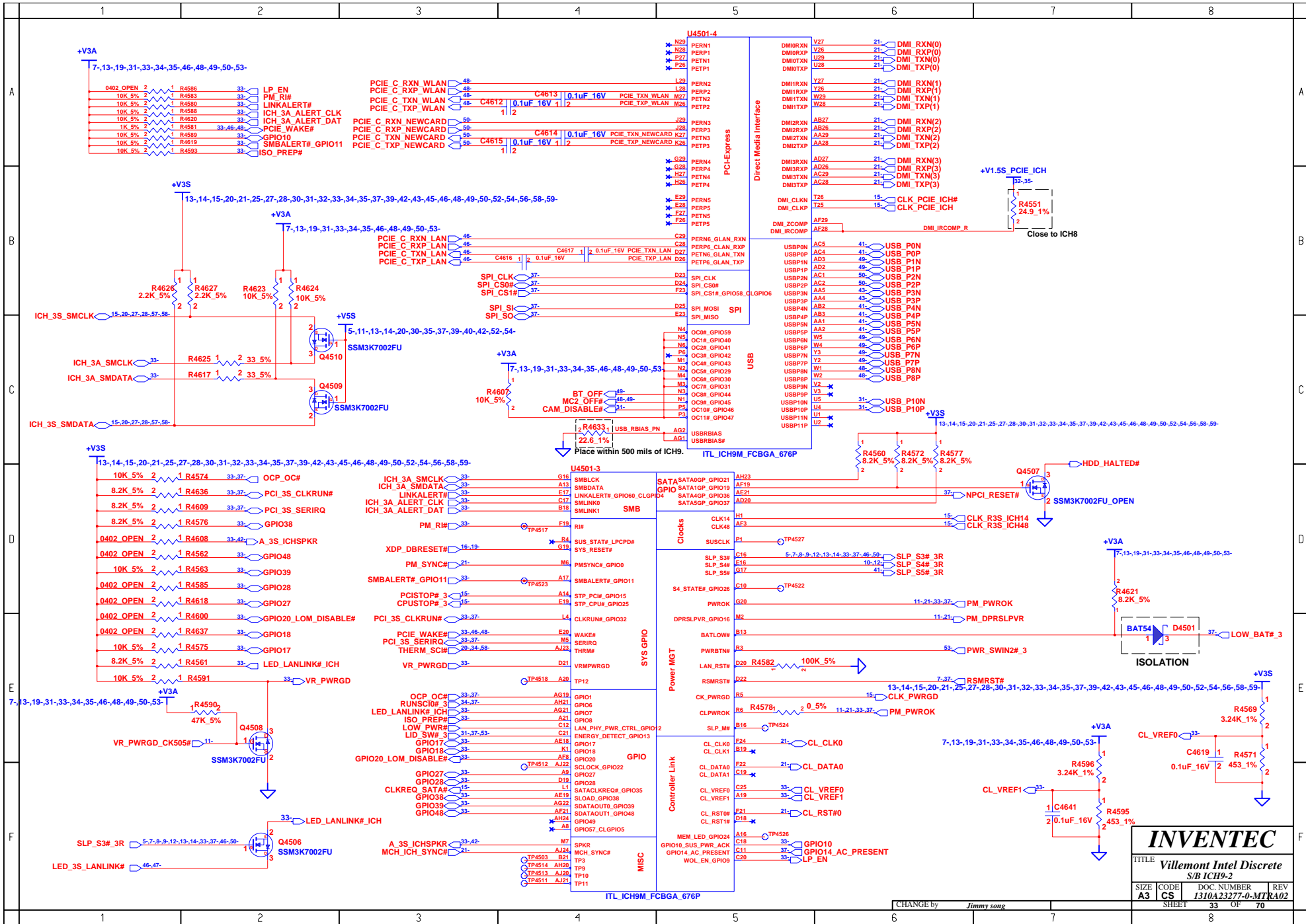
**INVENTEC**

TITLE			
Villemont Intel Discrete			
LCM, WebCam CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MTR	A02
CHANGE by		SHEET	
Jimmy song		31 OF 70	

9-Feb-2010







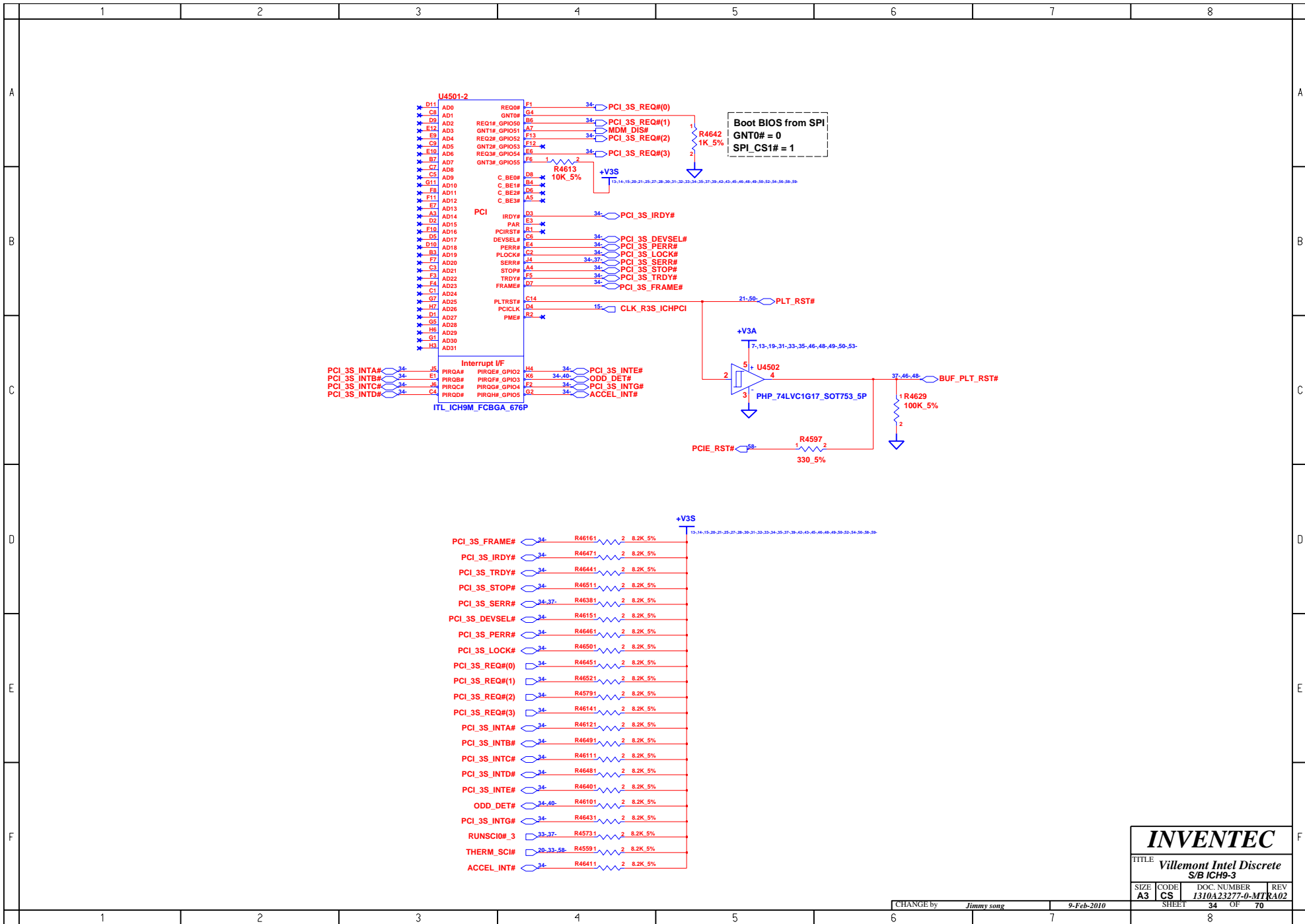
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TITLE: **Villemont Intel Discrete S/B ICH9-2**

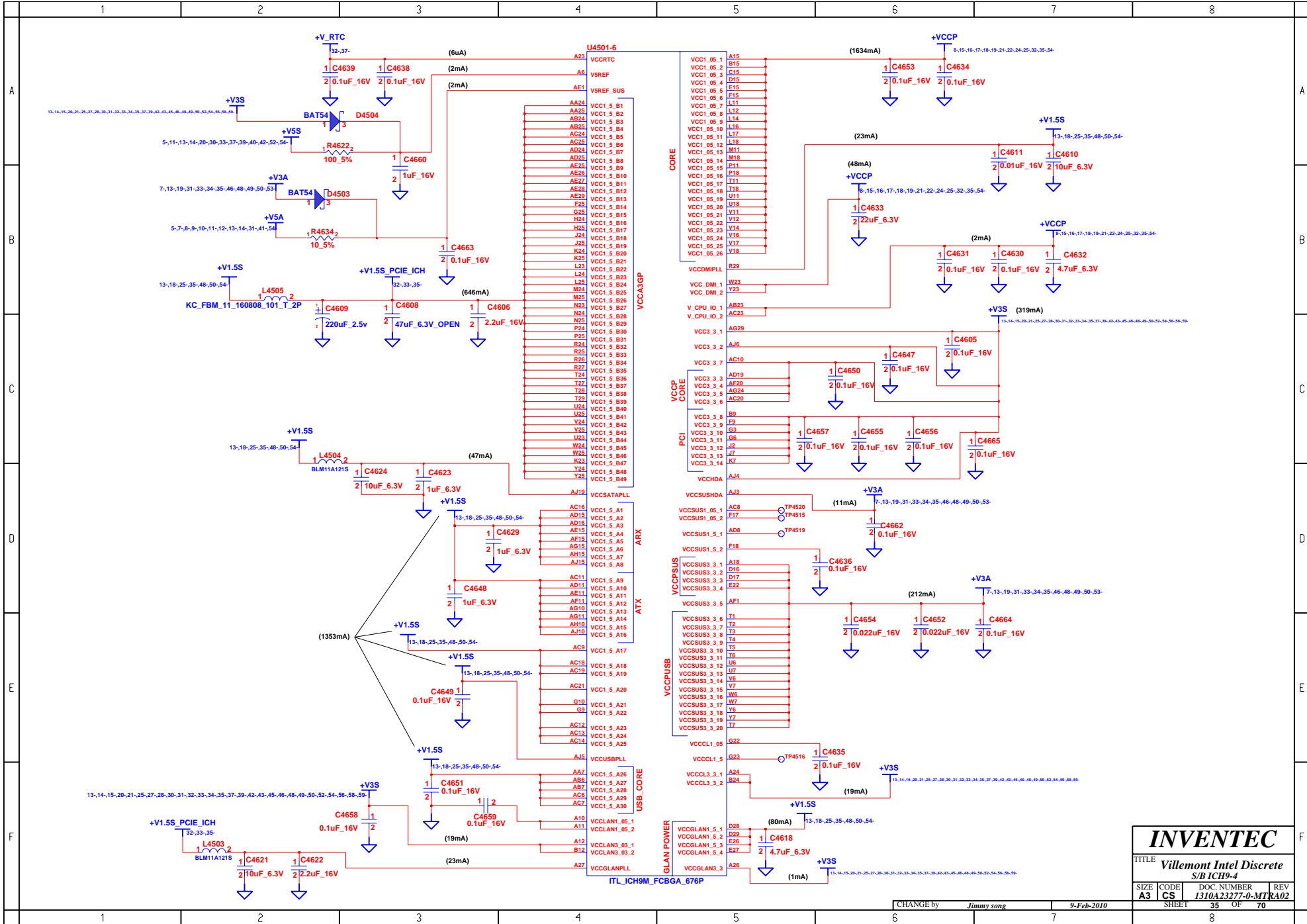
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SHEET: **33** OF: **70**

CHANGE by *Jimmy song*



<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete S/B ICH9-3</b>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>I310A23277-0-MTR</b>	REV <b>A02</b>
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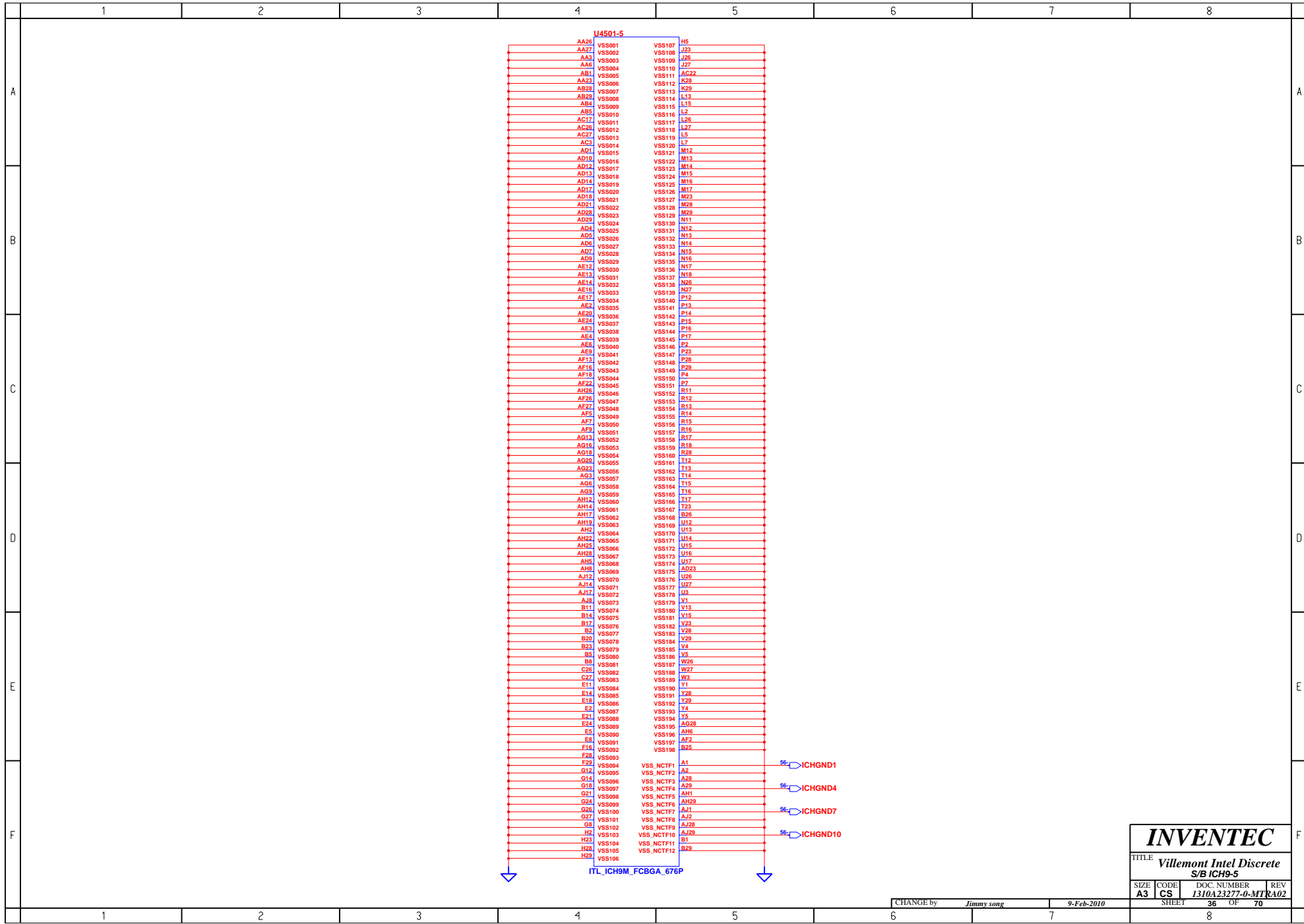
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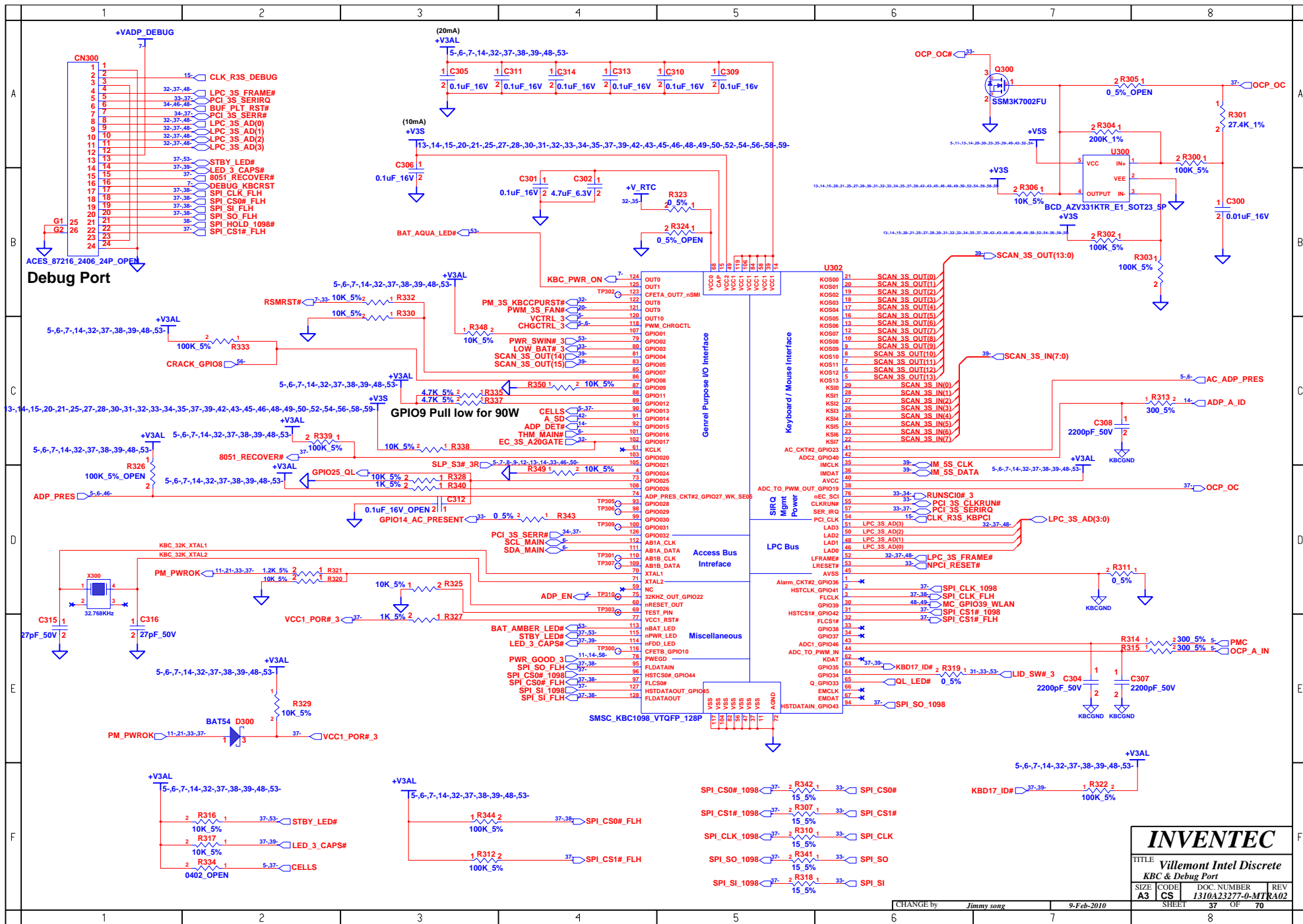
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23277-0-MTR	RA02

SHEET 35 OF 70

CHANGE by *Jimmy song* 9-Feb-2010



<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b>			
S/B <b>ICH9-5</b>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	KA02
CHANGE by		Jimmy song	9-Feb-2010
SHEET		36	OF 70



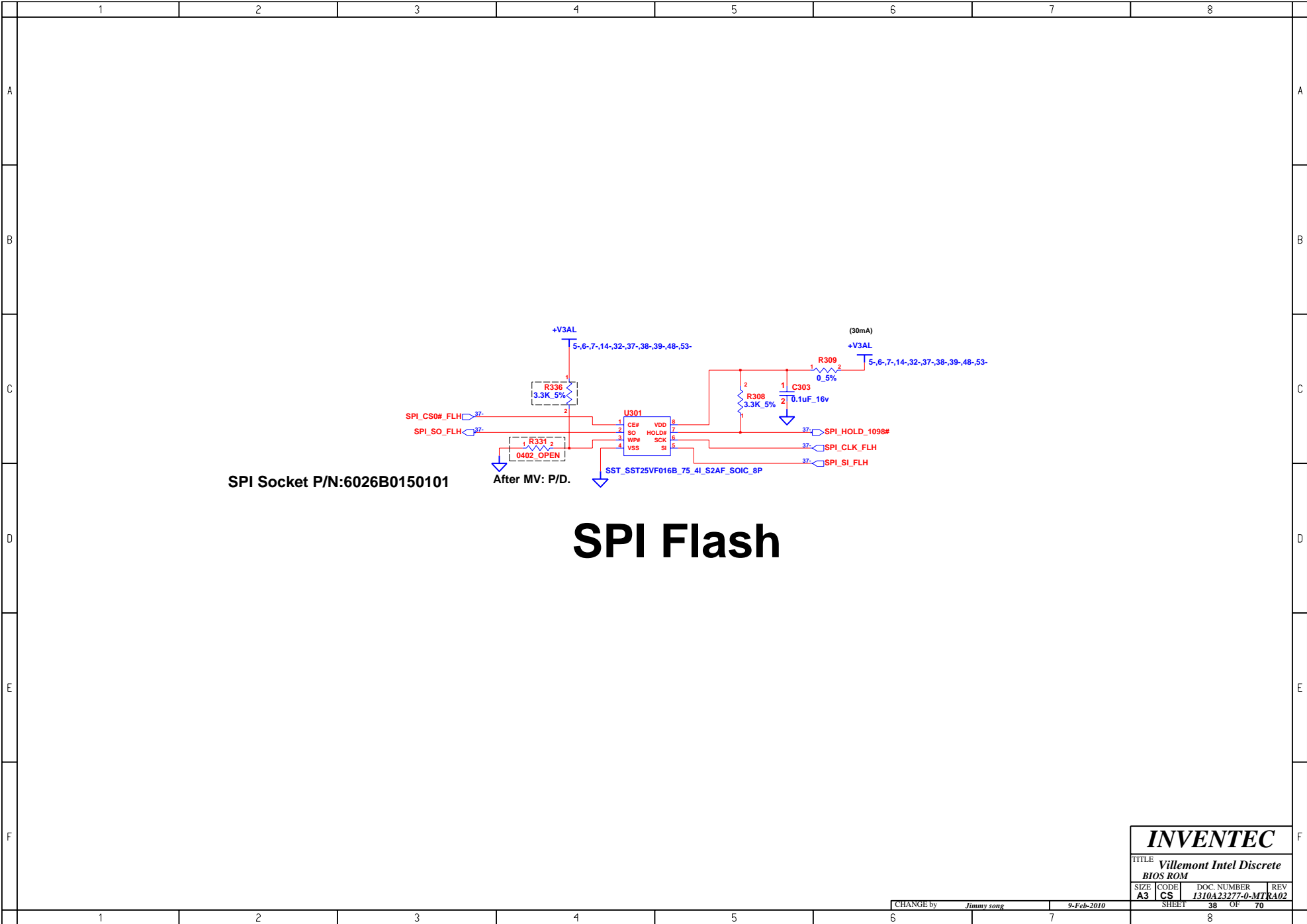
**INVENTEC**

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

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MTR	RA02

SHEET 37 OF 70

CHANGE by *Junmy song* 9-Feb-2010



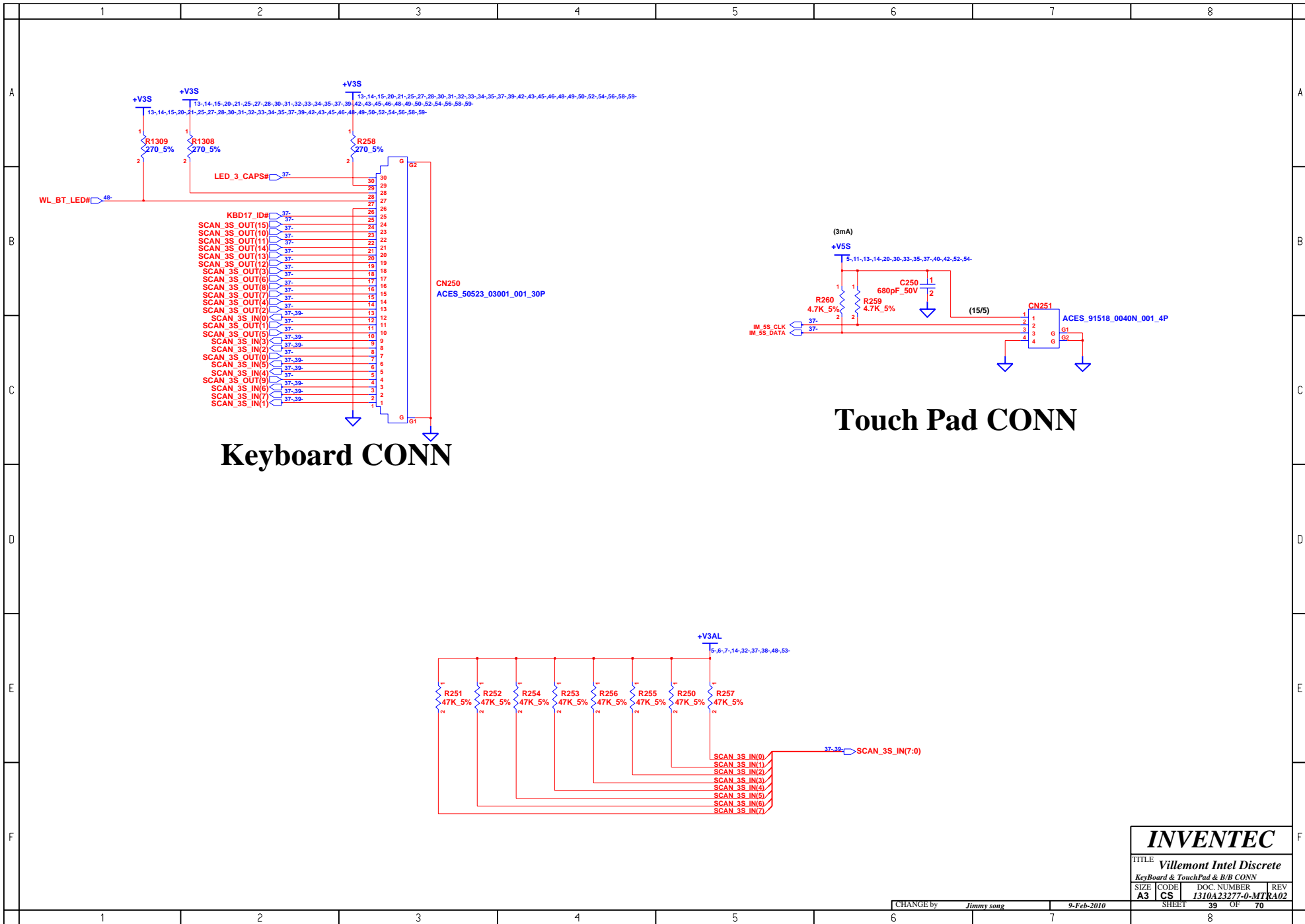
**INVENTEC**

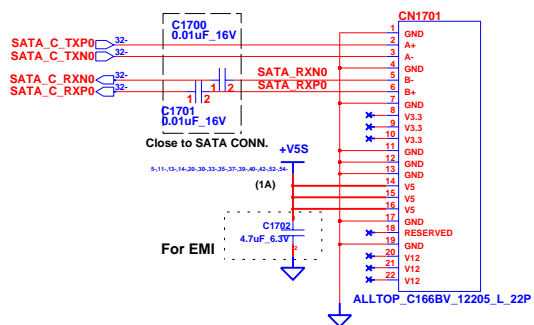
TITLE *Villemont Intel Discrete BIOS ROM*

SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <i>1310A23277-0-MTR</i>	REV <b>RA02</b>
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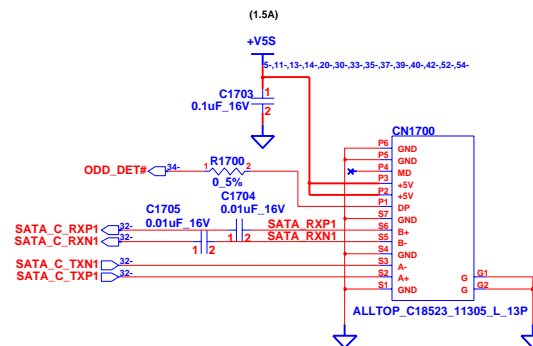
CHANGE by *Jimmy song* 9-Feb-2010

SHEET 38 OF 70





# SATA HDD



# SATA ODD

**INVENTEC**

TITLE **Villemont Intel Discrete**

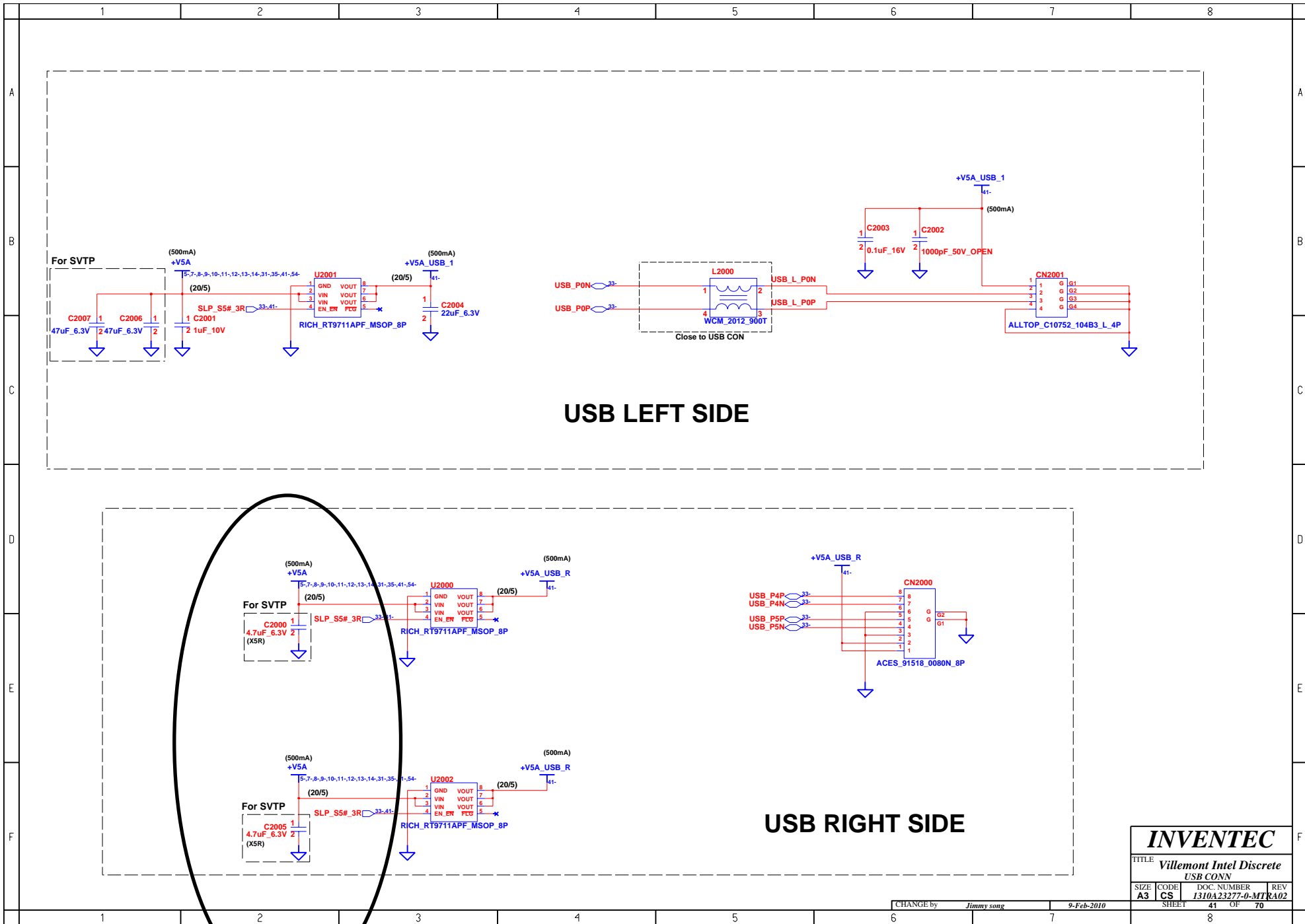
HDD & ODD CONN

SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MTR</b>	REV <b>A02</b>
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CHANGE by *Jimmy song* 9-Feb-2010

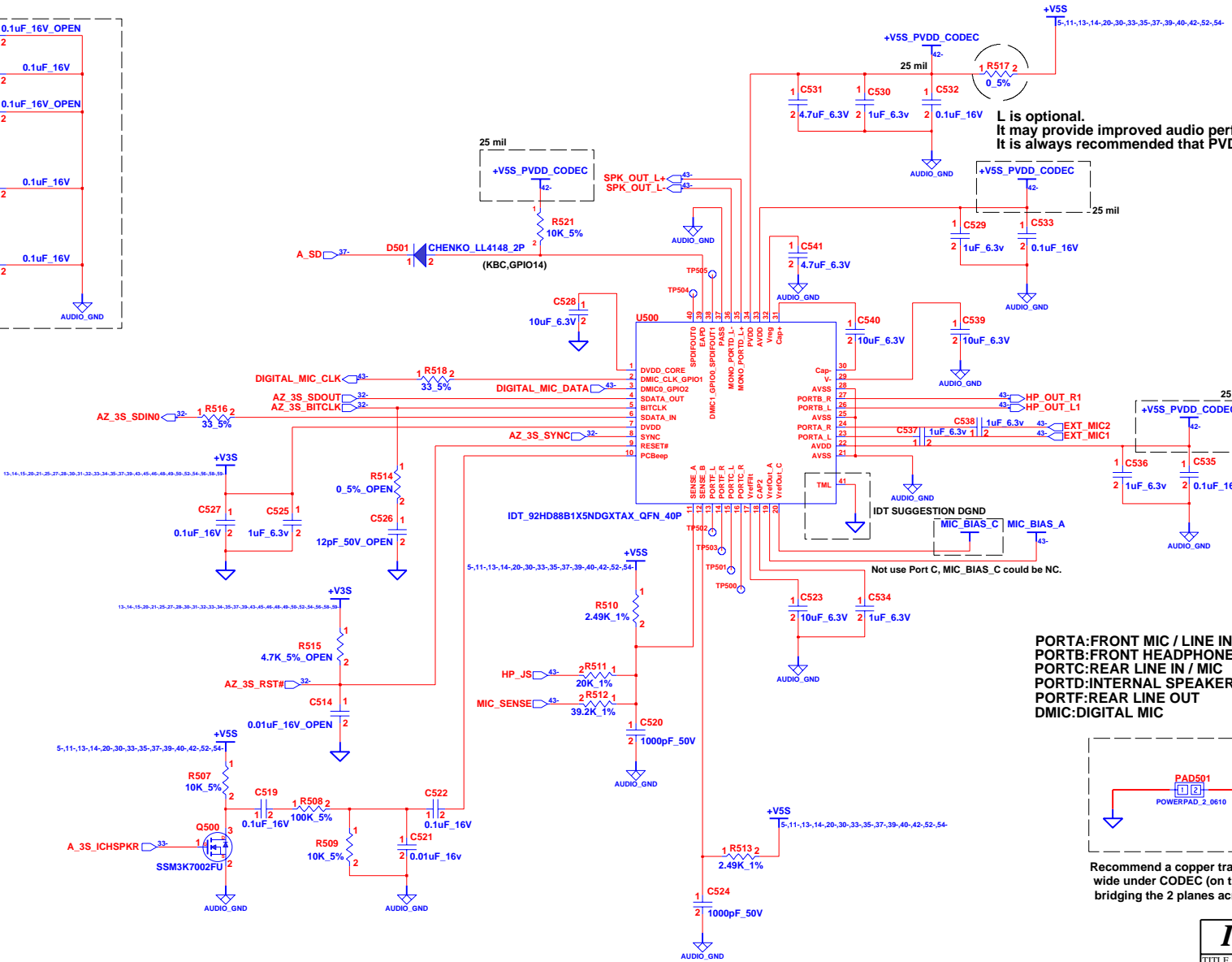
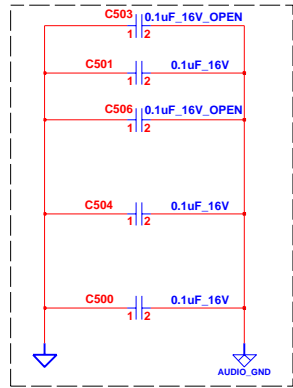
SHEET 40 OF 70





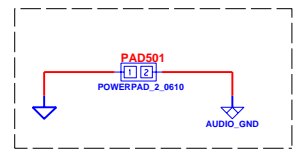
<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete USB CONN</b>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MT</b>	REV <b>A02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>41</b>		OF <b>70</b>	

# For EMI



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

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

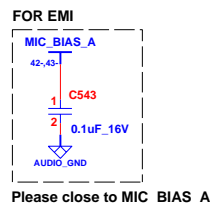


Recommend a copper trace about 100 mills wide under CODEC (on the GND layer) bridging the 2 planes across the moat.

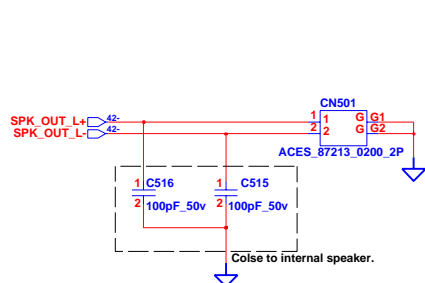
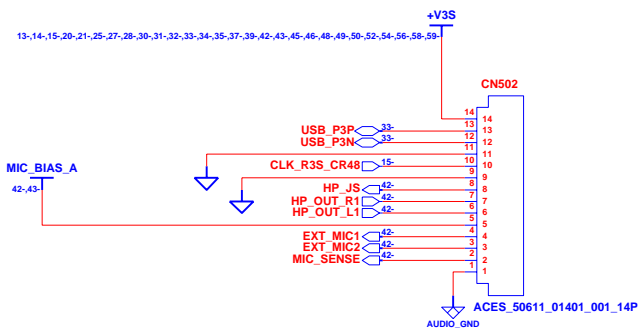
**INVENTEC**  
TITLE: *Villemont Intel Discrete*  
AZALIA CODEC

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	A02

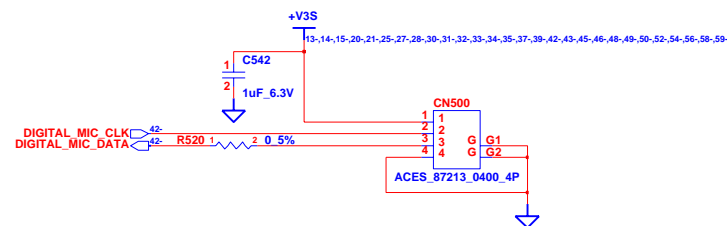
# SD/MMC & AUDIO JACK CONNECTOR MB SIDE



Please close to MIC\_BIAS\_A



## Internal Speaker



## INT. DIGITAL MIC

**INVENTEC**

TITLE			
Villemont Intel Discrete Earphone & MIC JACK Board			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A23277-0-MTR	RA02

CHANGE by Jimmy song 9-Feb-2010

SHEET 43 OF 70

**BLANK**

**INVENTEC**

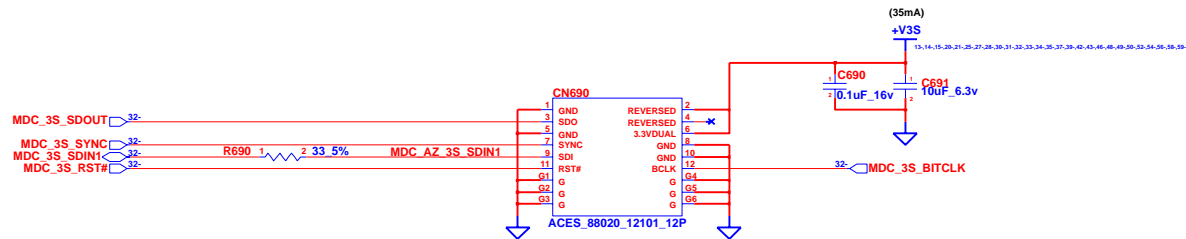
TITLE *Villemont Intel Discrete  
AUDIO AMP & HP JACK*

SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <i>1310A23277-0-MTR</i>	REV <b>A02</b>
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CHANGE by *Jimmy song* 9-Feb-2010

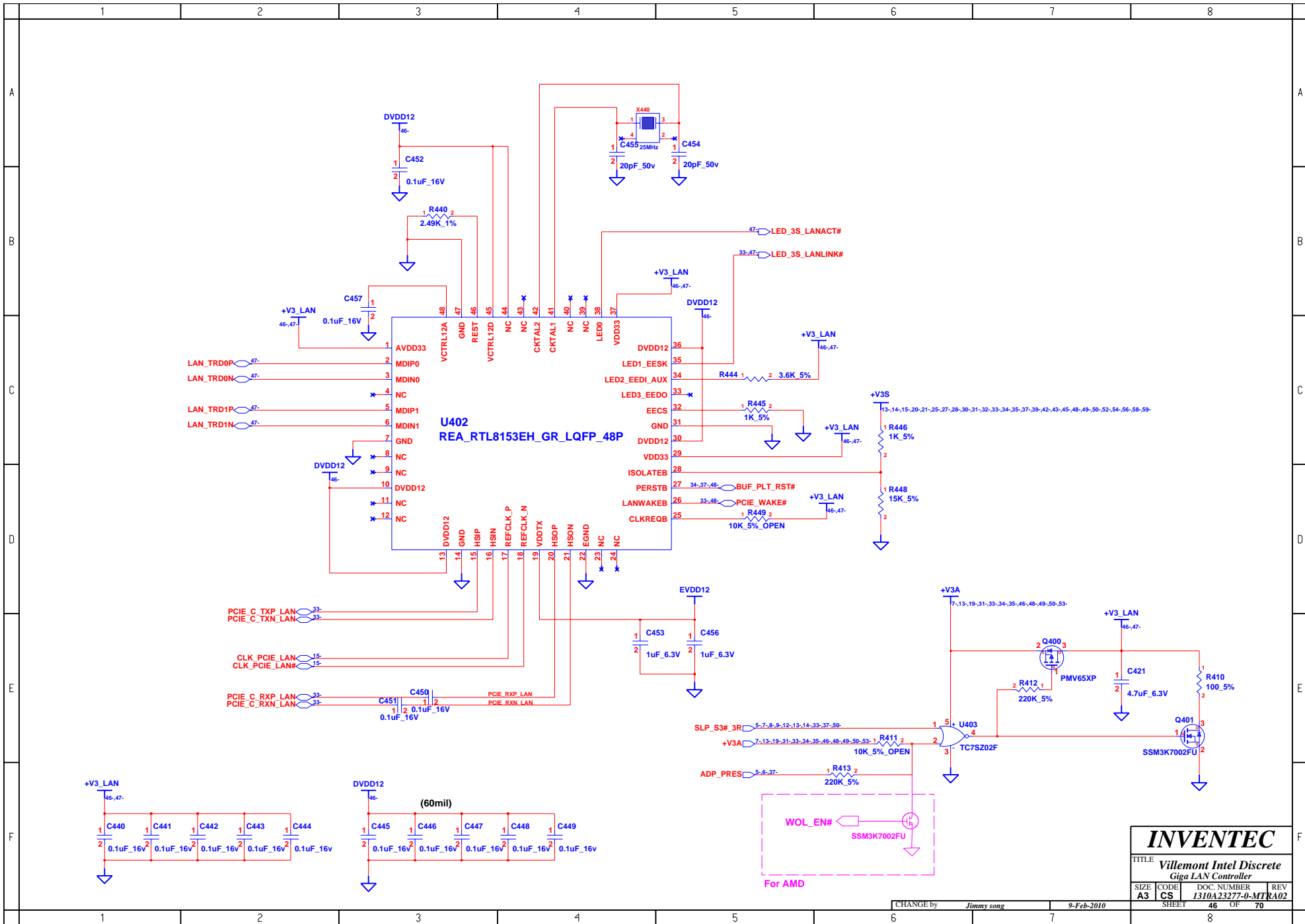
SHEET 44 OF 70

	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	



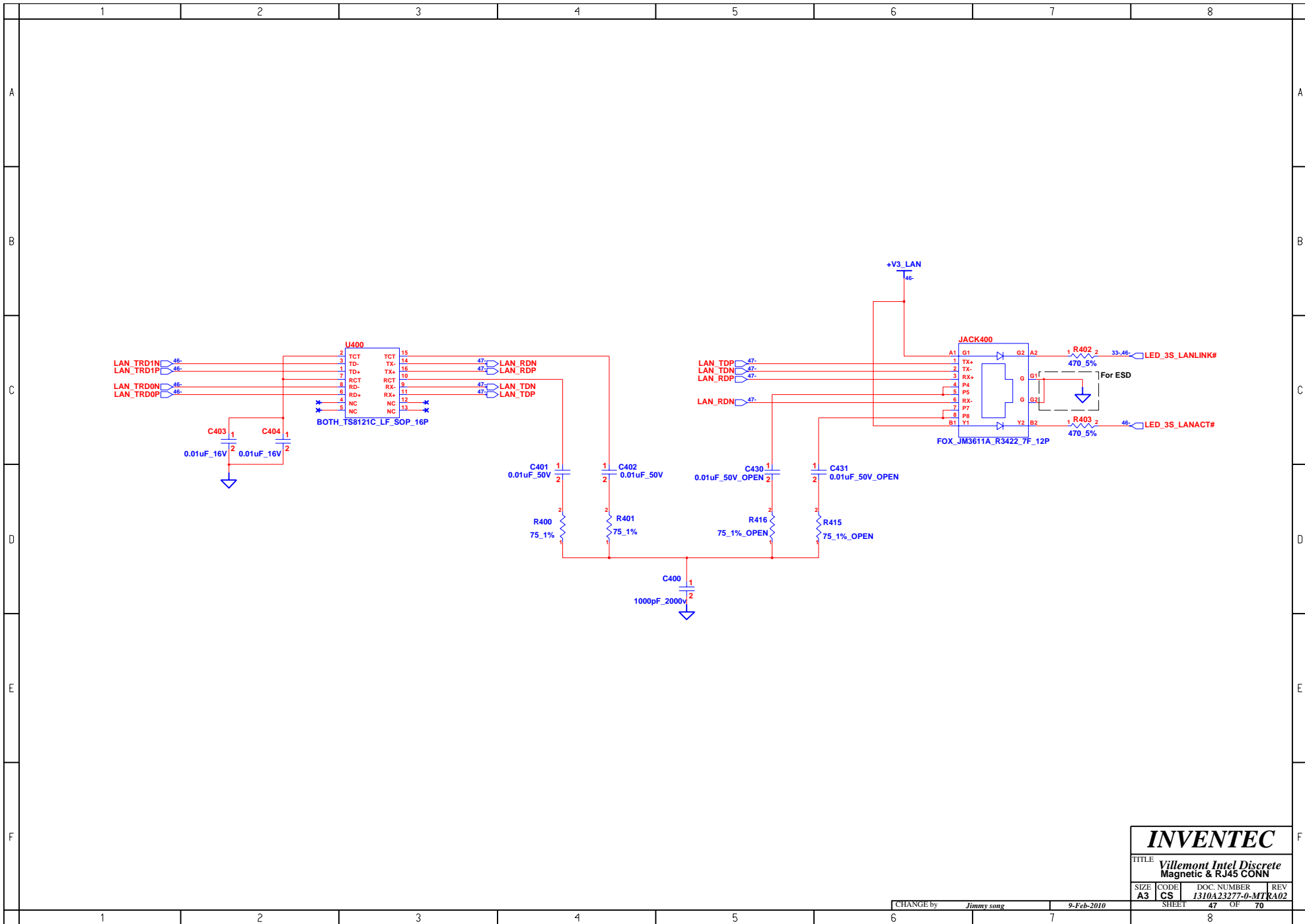
# MDC CONN

<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete</i>			
MDC CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	RA02
CHANGE by		SHEET	
Jimmy song		45 OF 70	
		9-Feb-2010	



<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete Giga LAN Controller</b>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC NUMBER <b>I310A23277-0-MT</b>	REV <b>R02</b>
SHEET <b>46</b>		OF <b>70</b>	

CHANGE by Jimmy song 9-Feb-2010



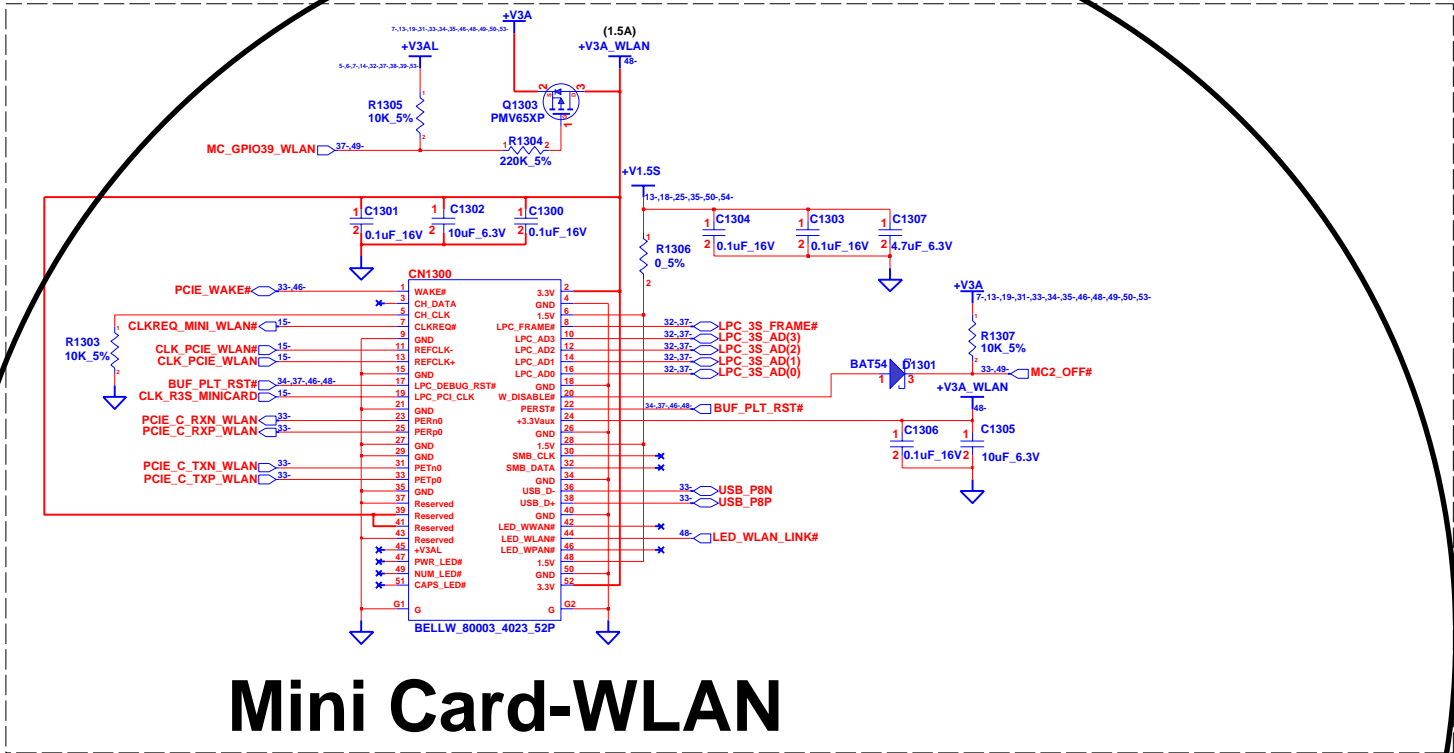
# INVENTEC

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

SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MTR</b>	REV <b>A02</b>
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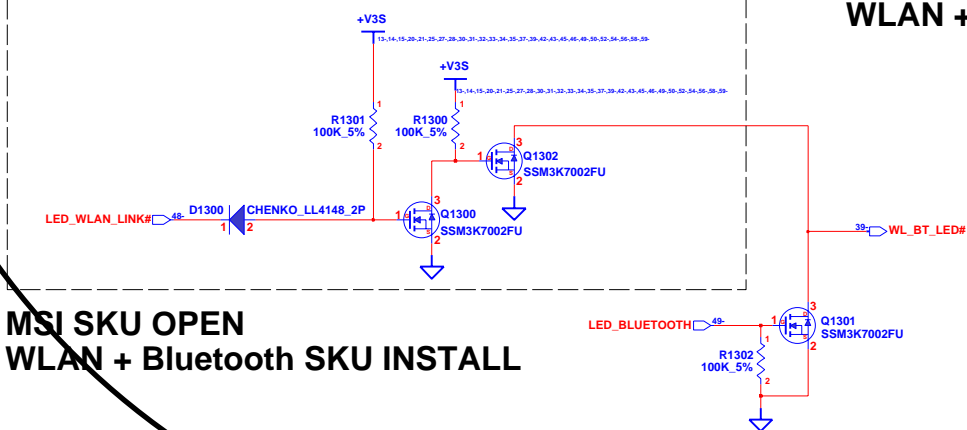
CHANGE by *Jimmy song* 9-Feb-2010

SHEET 47 OF 70



# Mini Card-WLAN

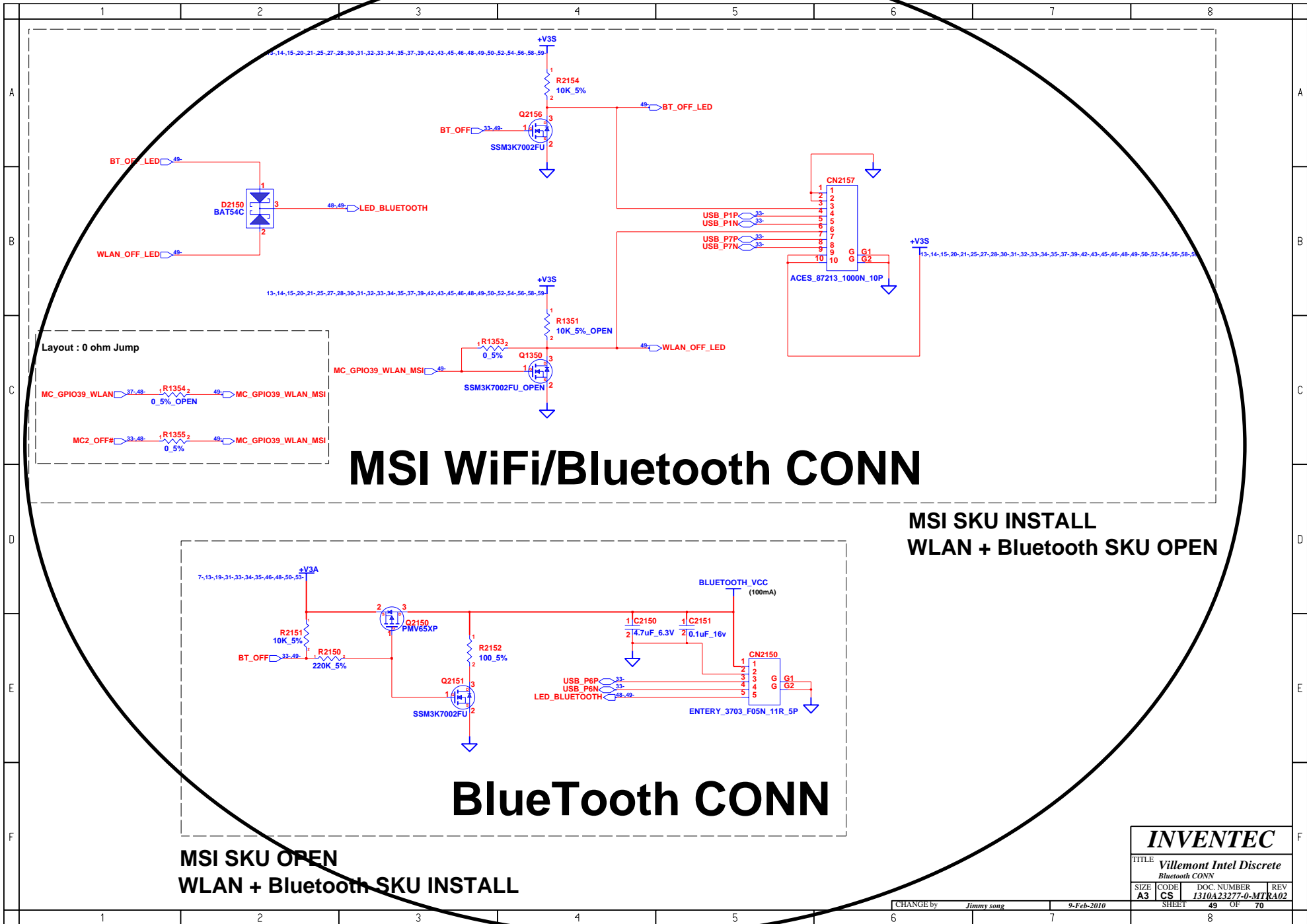
## MSI SKU OPEN WLAN + Bluetooth SKU INSTALL



## MSI SKU OPEN WLAN + Bluetooth SKU INSTALL

<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete</i> <i>Mini Card (WLAN)</i>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC NUMBER <b>I310A23277-0-MT</b>	REV <b>KA02</b>
CHANGE BY <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>48</b>		OF <b>70</b>	





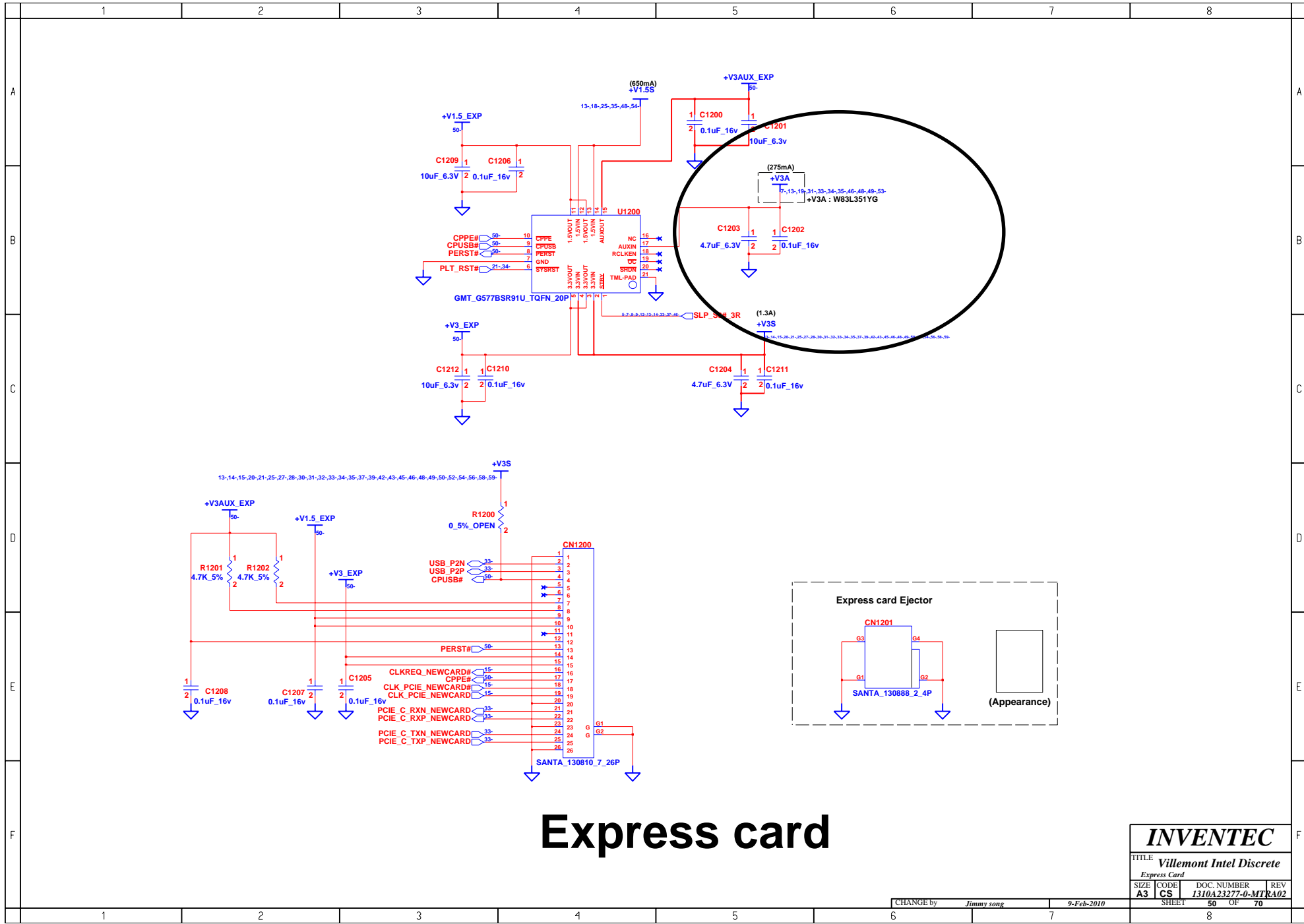
# MSI WiFi/Bluetooth CONN

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

# BlueTooth CONN

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

<b>INVENTEC</b>			
TITLE: <i>Villemont Intel Discrete Bluetooth CONN</i>			
SIZE: <b>A3</b>	CODE: <b>CS</b>	DOC. NUMBER: <b>1310A23277-0-MTR</b>	REV: <b>RA02</b>
CHANGE by: <i>Jimmy song</i>		9-Feb-2010	
SHEET: <b>49</b>		OF: <b>70</b>	



# Express card

**INVENTEC**

TITLE **Villemont Intel Discrete**  
Express Card

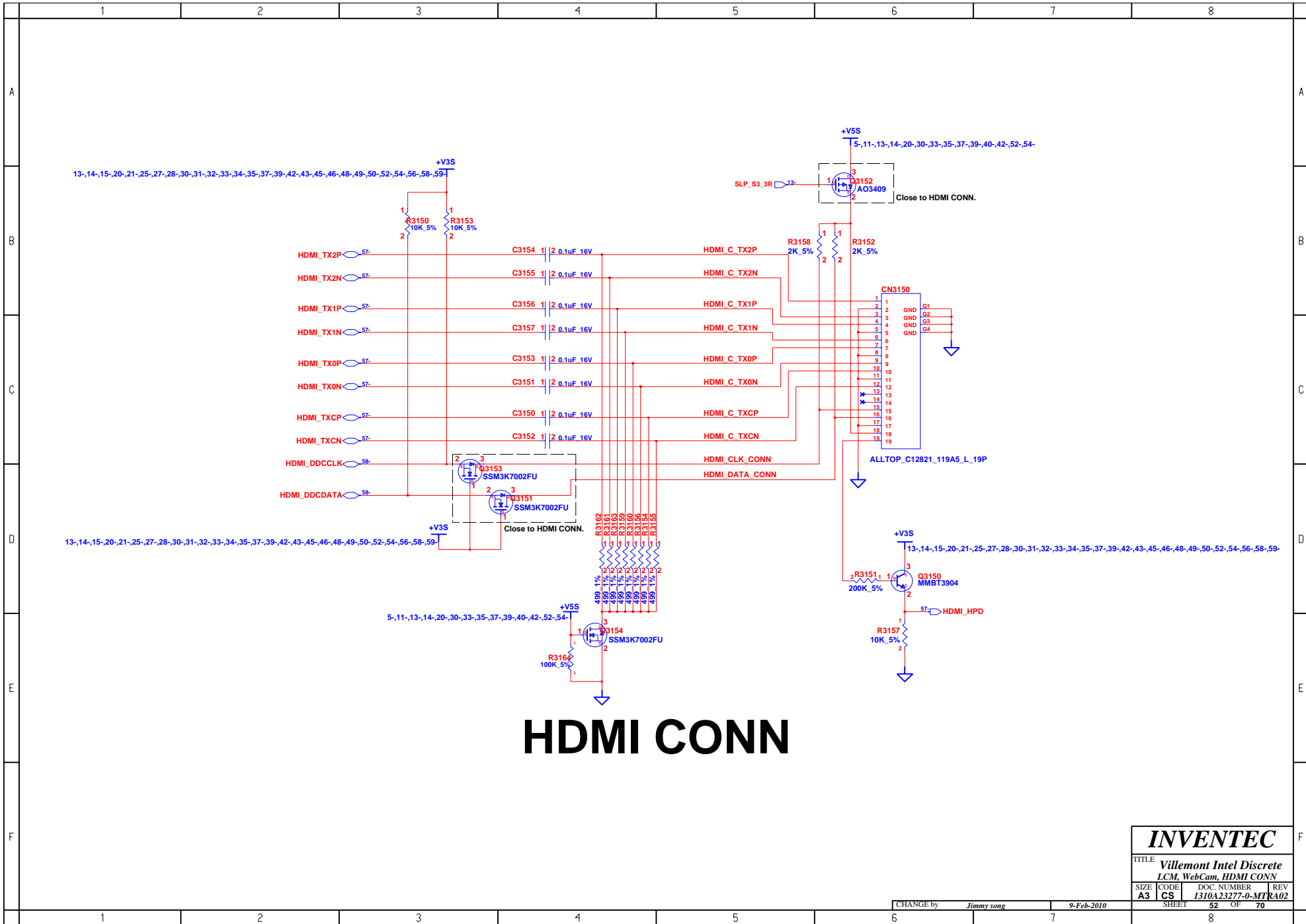
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	RA02

CHANGE by	9-Feb-2010
Jimmy song	

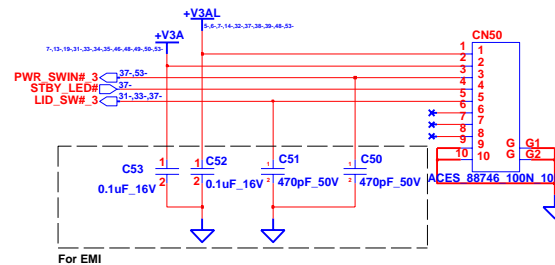
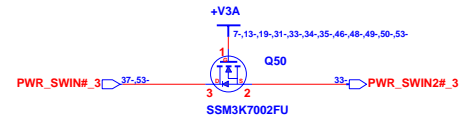
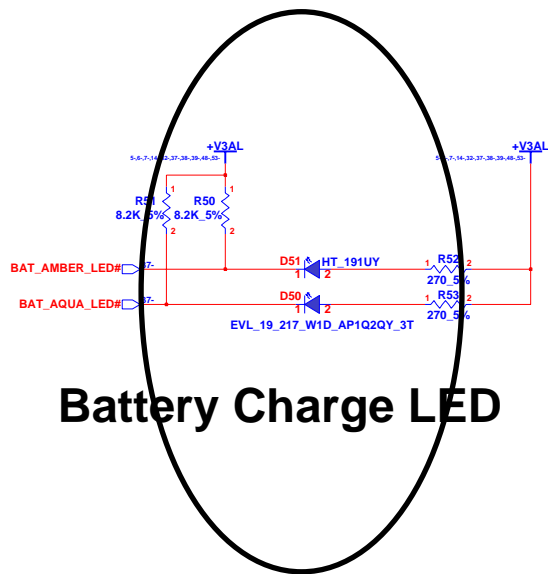
SHEET	OF
50	70

# BLANK

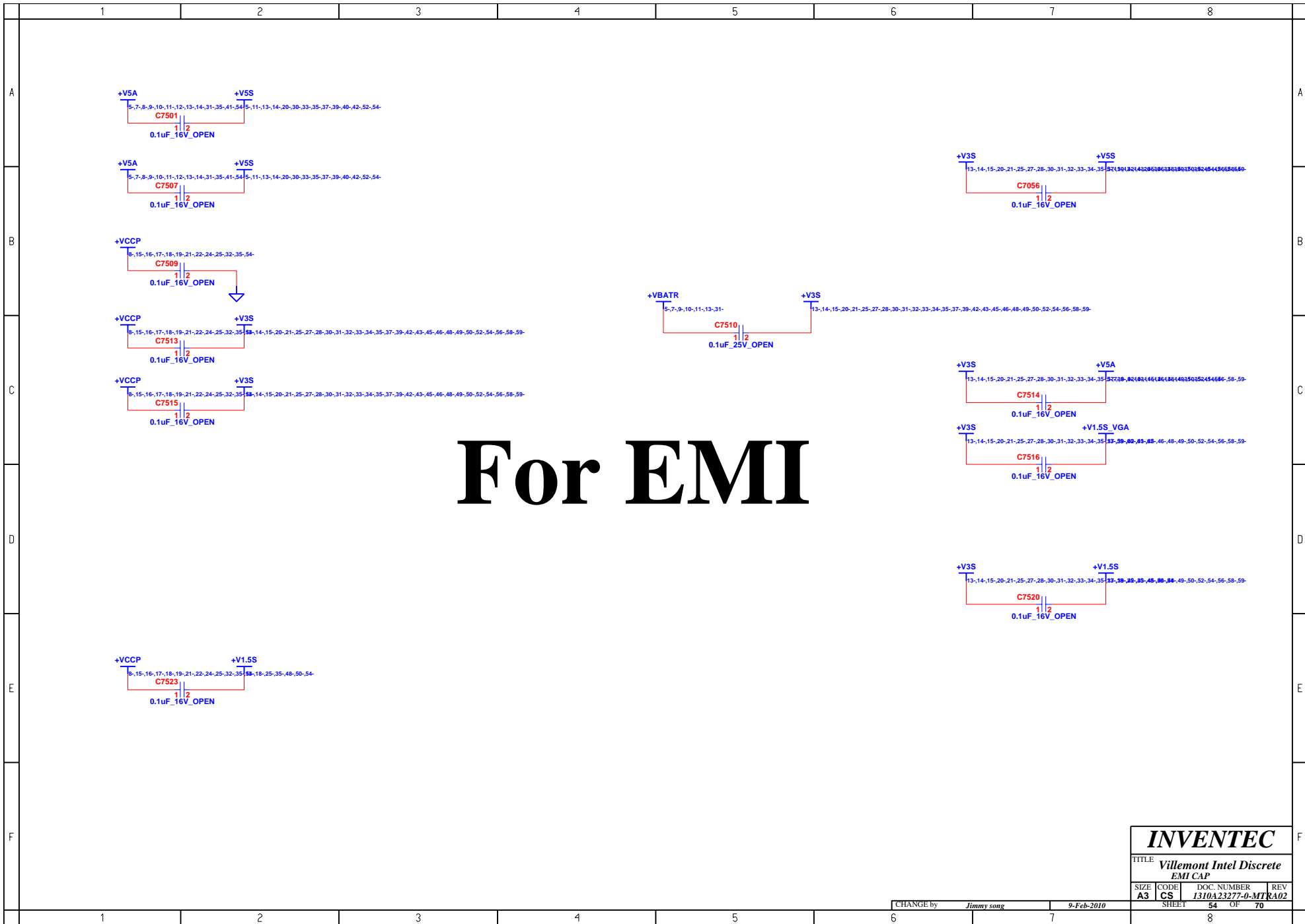
<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete</i>			
BLANK			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	RA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET		51	OF 70



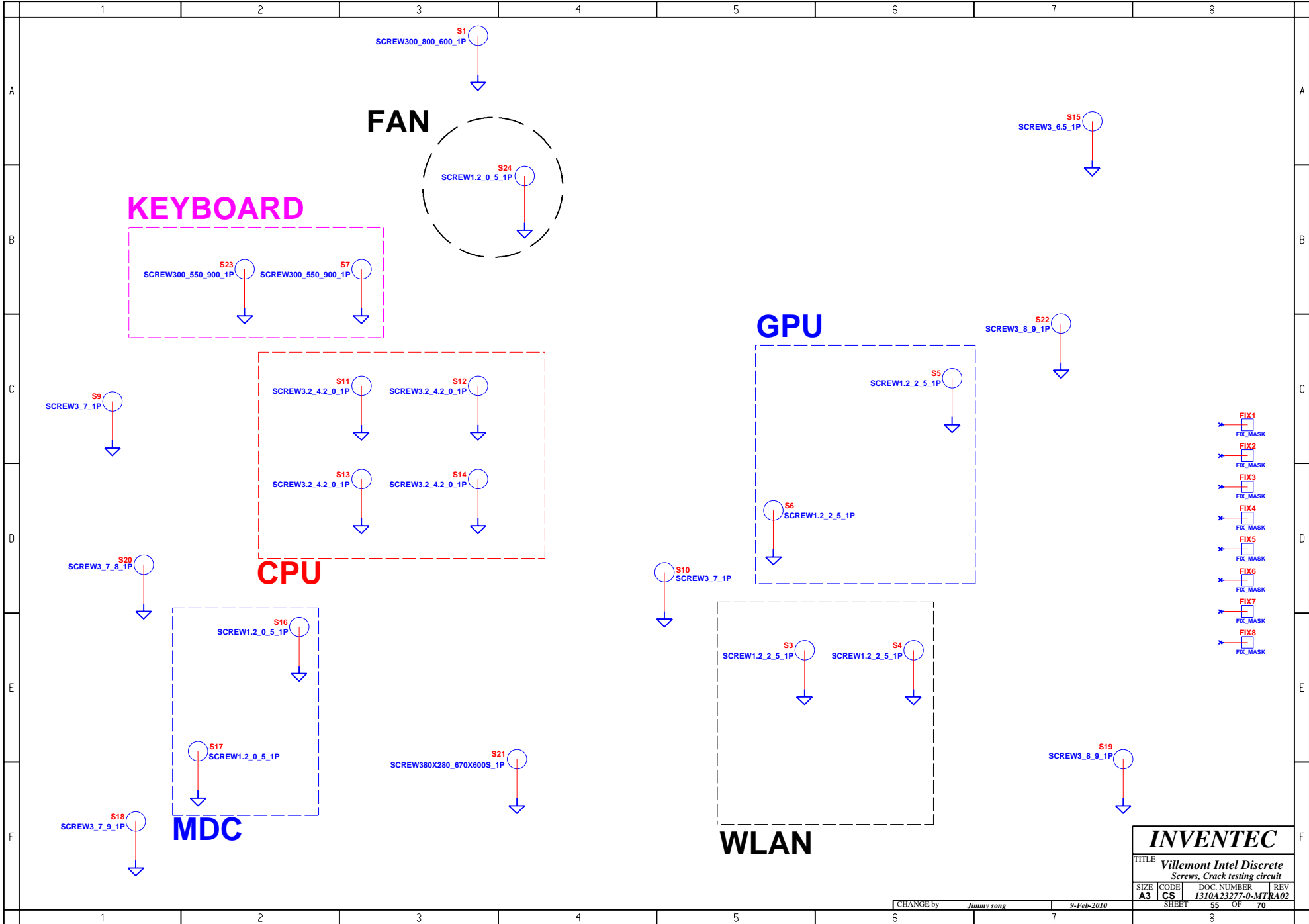
<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete</i> <i>LCM, WebCam, HDMI CONN</i>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC NUMBER <i>1310A23277-0-MTR</i>	REV <b>RA02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET		52 OF 70	

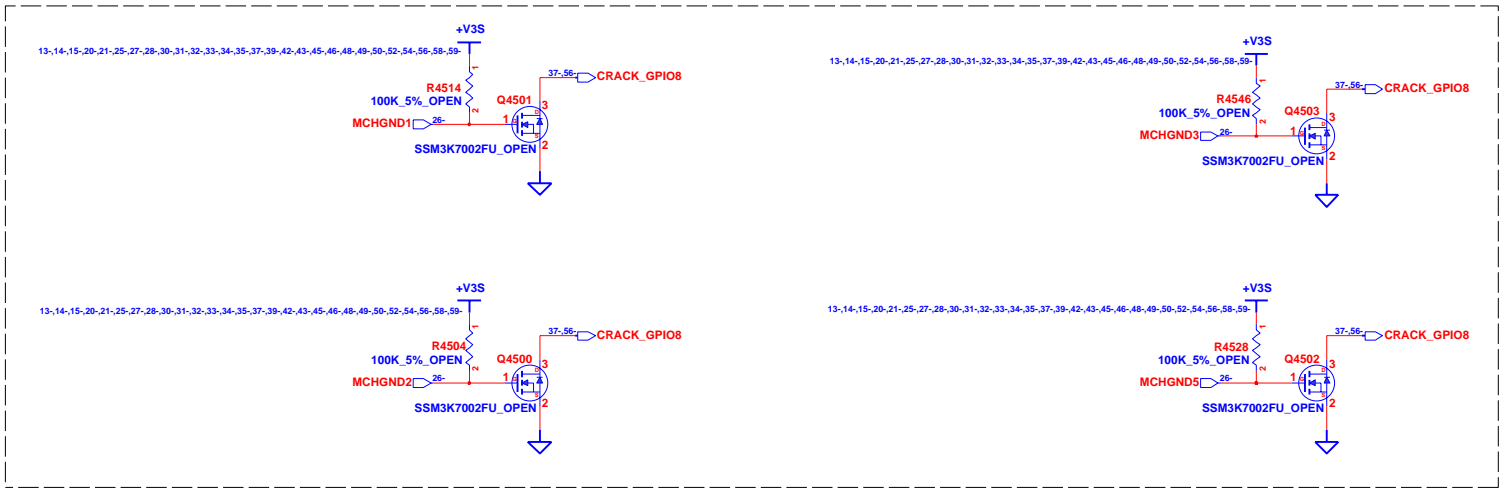


<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete LEDs</i>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <i>1310A23277-0-MTR</i>	REV <b>A02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>53</b>		OF <b>70</b>	

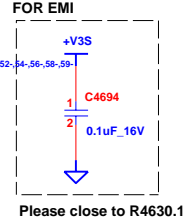
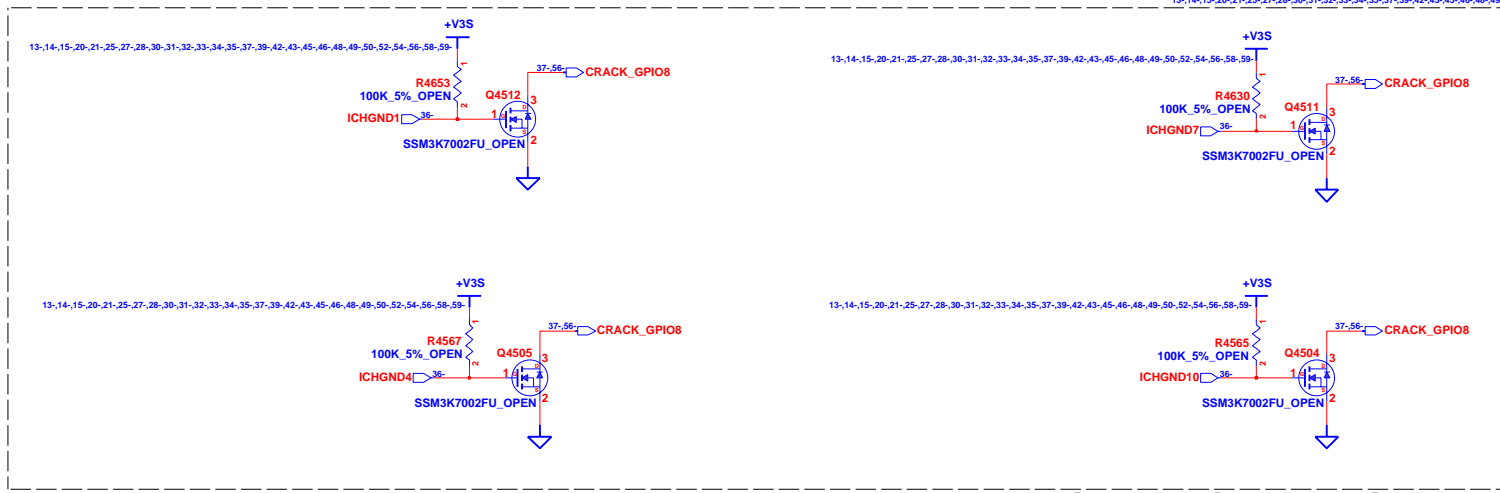


<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b>			
EMI CAP			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MTR	A02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET		54	OF 70





# NB Cantiga Side



# For Crack Test

# SB ICH9 Side

<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete</i>			
Crack testing circuit			
SIZE	CODE	DOC NUMBER	REV
A3	CS	I310A23277-0-MT	KA02
CHANGE by		SHEET	
Jimmy song		56 OF 70	

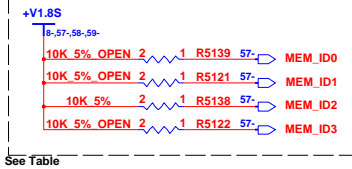
9-Feb-2010

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



STRAPS	PIN	Description of default settings	
TX_PWRS_ENB	GPIO0	PCIe full TX output swing.	1
TX_DEEMPH_EN	GPIO1	PCIe transmitter de-emphasis enabled.	1
BIF_DEBUG_ACCESS	GPIO4	Debug signals muxed out.	0
ROMIDCFG(0:3)	GPIO[11:13,9]	Memory aperture type	X X X X

X = DESIGN DEPENDANT  
 0 = DO NOT INSTALL RESISTOR  
 1 = INSTALL 10K RESISTOR

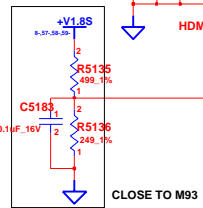
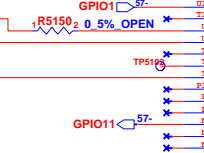
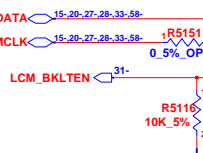
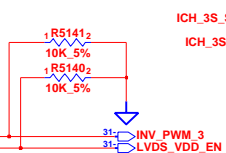
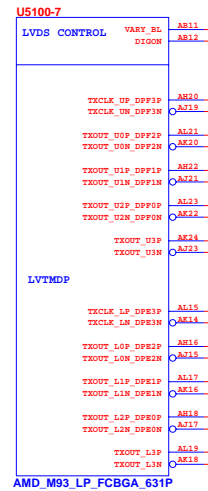


See Table

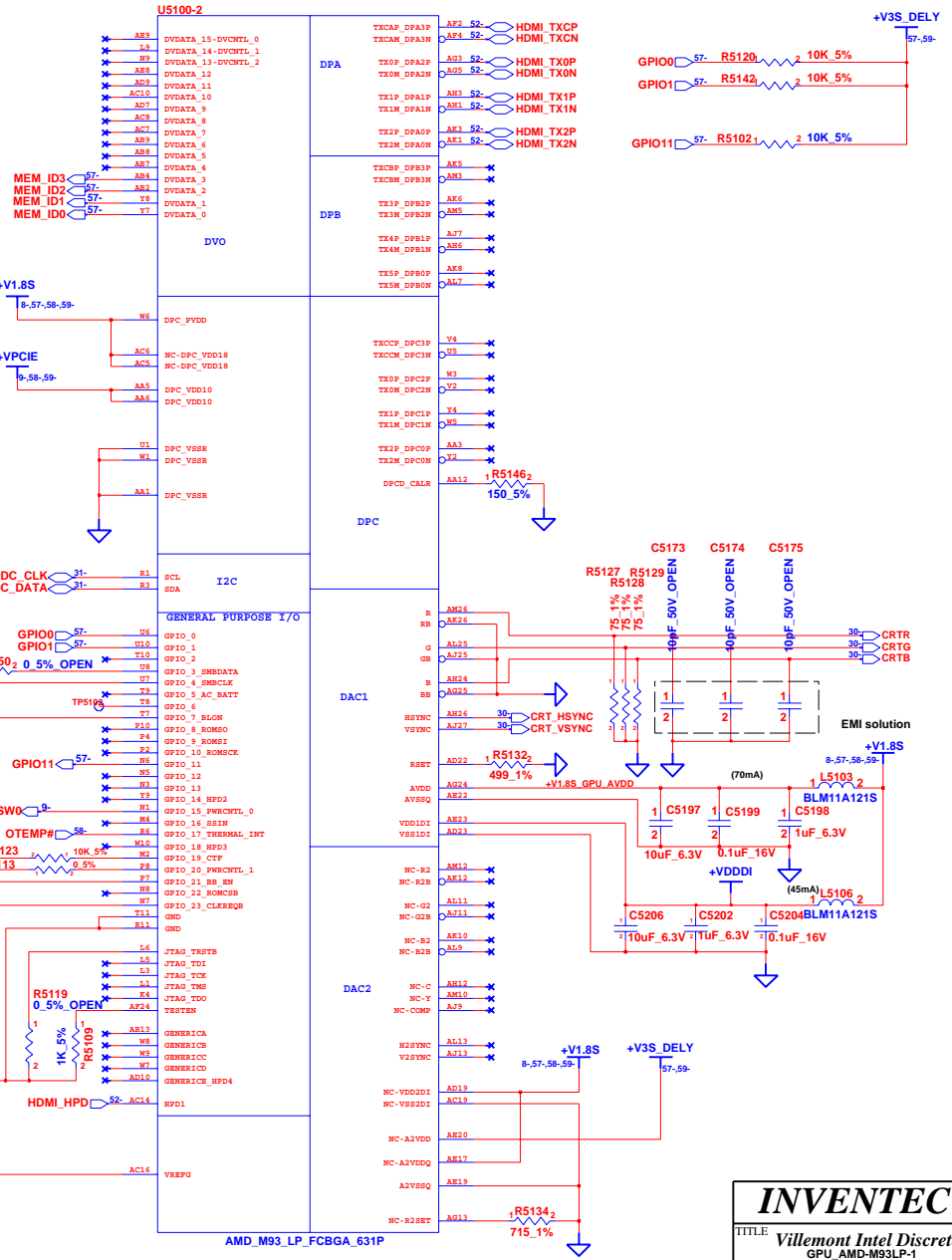
POW_SW1	POW_SW0	+VDD_CORE
0	0	1.1V
0	1	1.05V
1	0	0.95V
1	1	0.9V

For DIS-VRAM DDR3			
MEM_ID2	MEM_ID1	MEM_ID0	vendor
0	0	0	Samsung (512MB)
0	0	1	Hynix (512MB)

MEM\_ID2 IS "0" -> AMD  
 MEM\_ID2 IS "1" -> INTEL



CLOSE TO M93



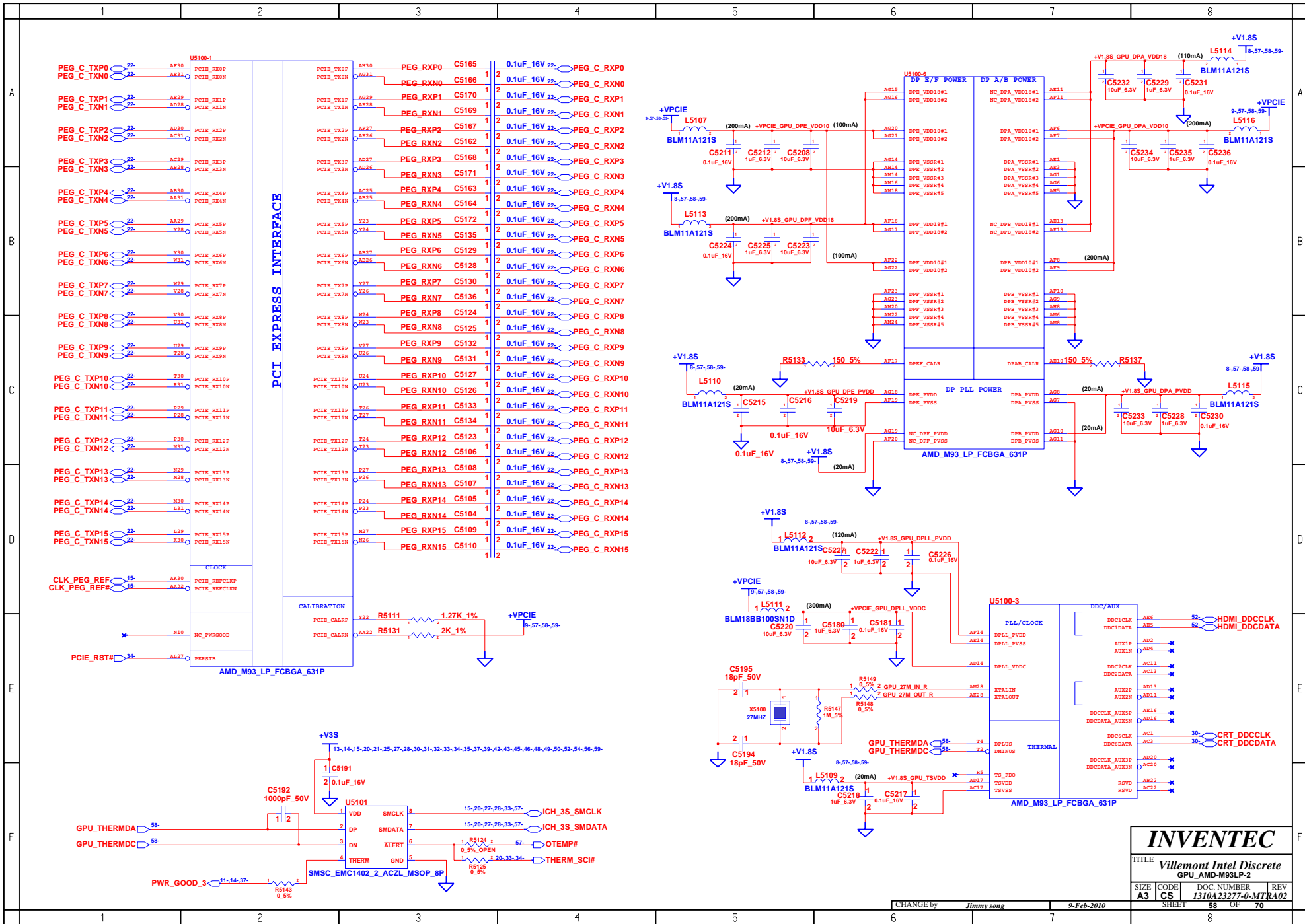
**INVENTEC**

TITLE: **Villemont Intel Discrete GPU\_AMD-M93LP-1**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A23277-0-MTR	A02

SHEET 57 OF 70

CHANGE by Jimmy song 9-Feb-2010



**INVENTEC**

TITLE: **Villemont Intel Discrete GPU\_AMD-M93LP-2**

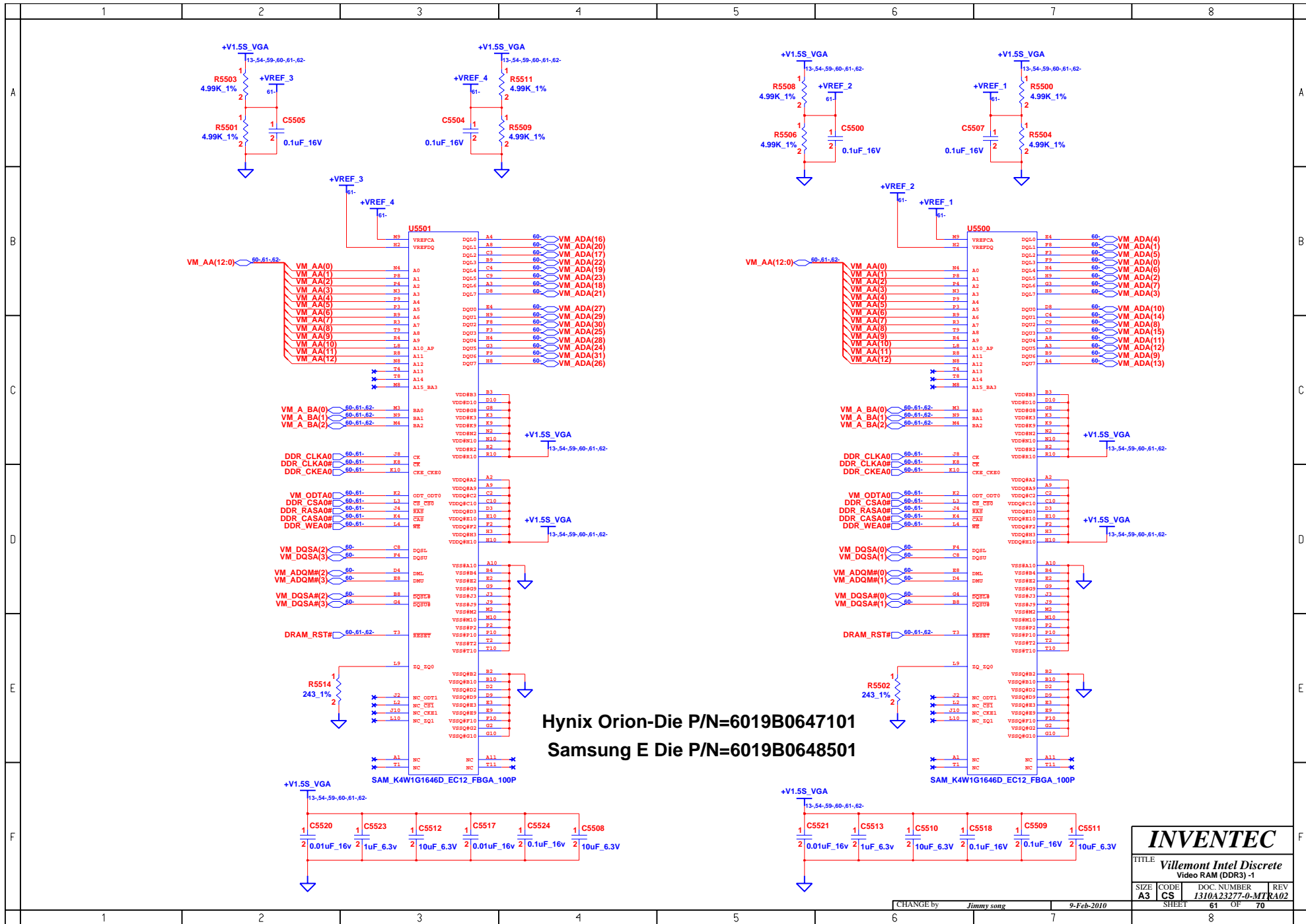
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MTR	A02

CHANGE by: Jimmy song 9-Feb-2010

SHEET 58 OF 70

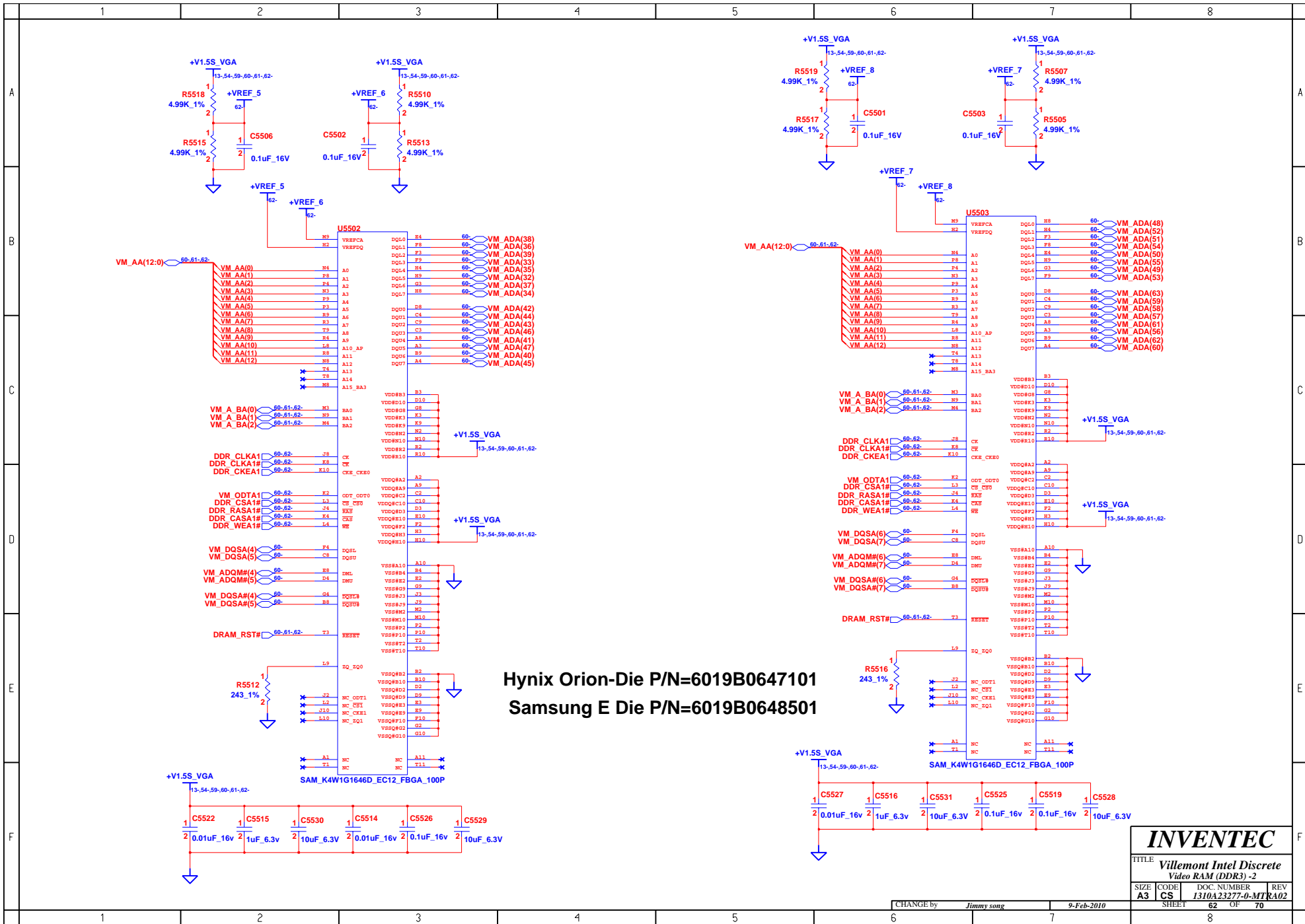






<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete Video RAM (DDR3) -1</b>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MTR</b>	REV <b>A02</b>
SHEET <b>61</b>		OF <b>70</b>	

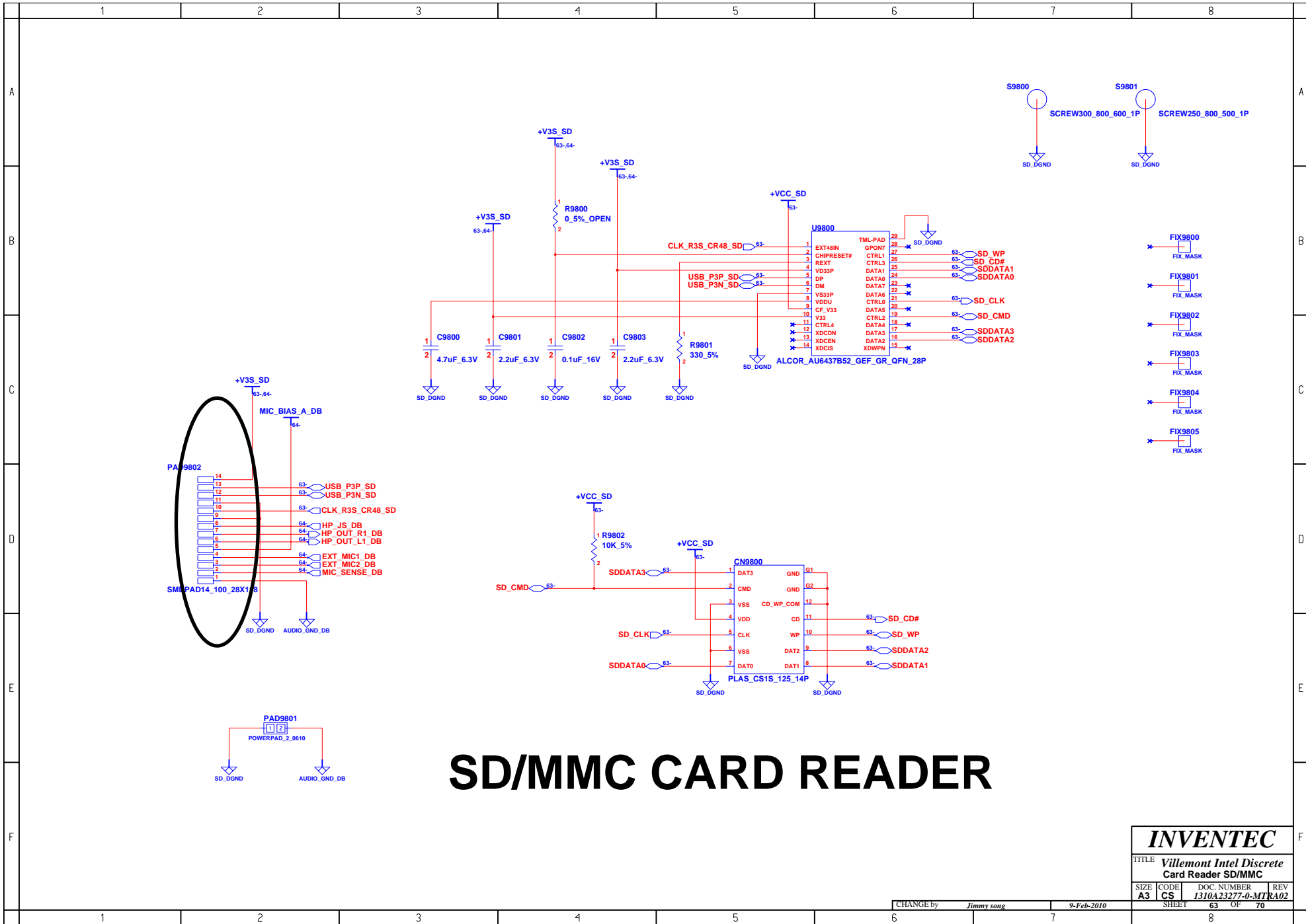
CHANGE by *Jimmy song* 9-Feb-2010



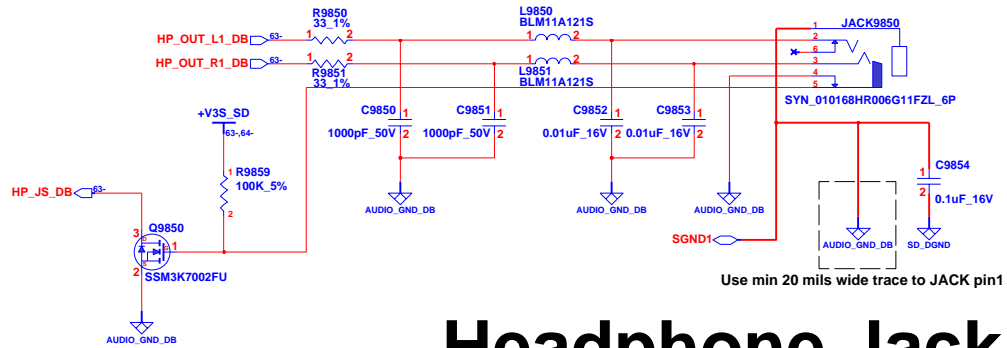
Hynix Orion-Die P/N=6019B0647101  
 Samsung E Die P/N=6019B0648501

<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete Video RAM (DDR3) -2</b>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MTR	A02
SHEET		62	OF 70

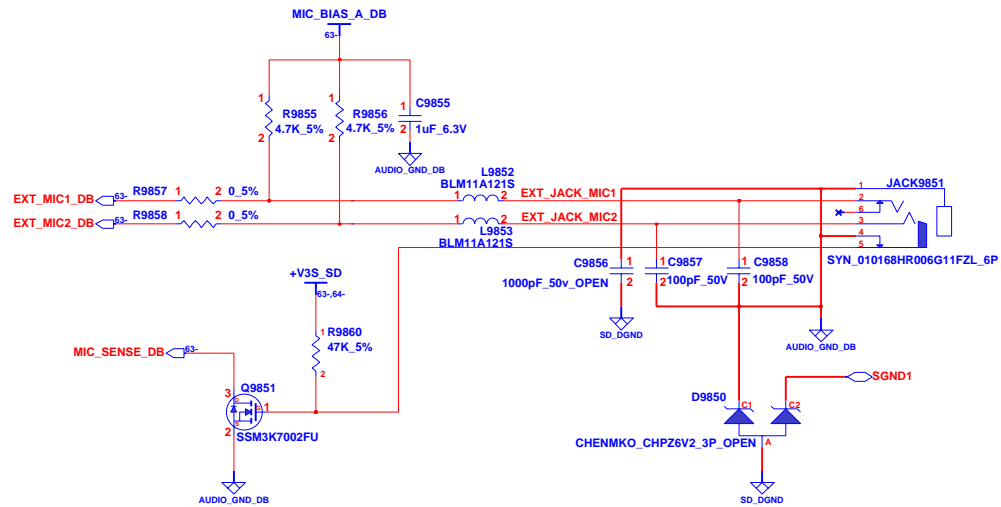
CHANGE by Jimmy song 9-Feb-2010



<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete Card Reader SD/MMC</i>			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A23277-0-MTR	KA02
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET 63		OF 70	



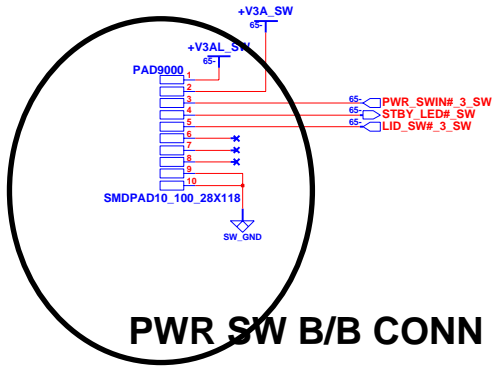
# Headphone Jack



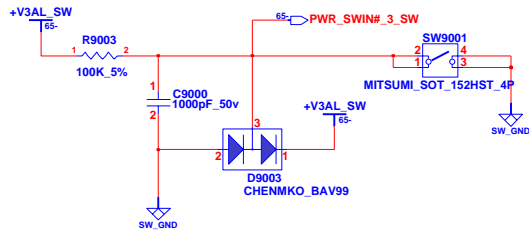
# MIC Jack

<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b>			
Headphone & MIC			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MT</b>	REV <b>KA02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	SHEET <b>64</b> OF <b>70</b>

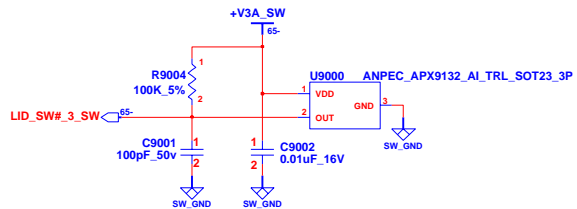
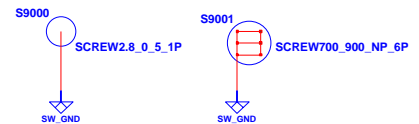




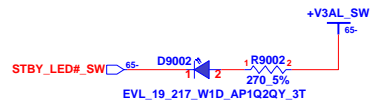
**PWR SW B/B CONN**



**Power Button**



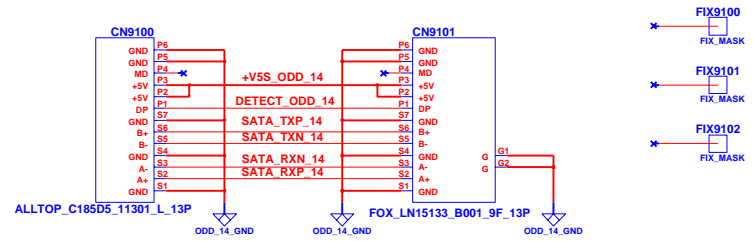
**LID Switch**



**Power / Standby LED**

# Power Button & LID Switch Board

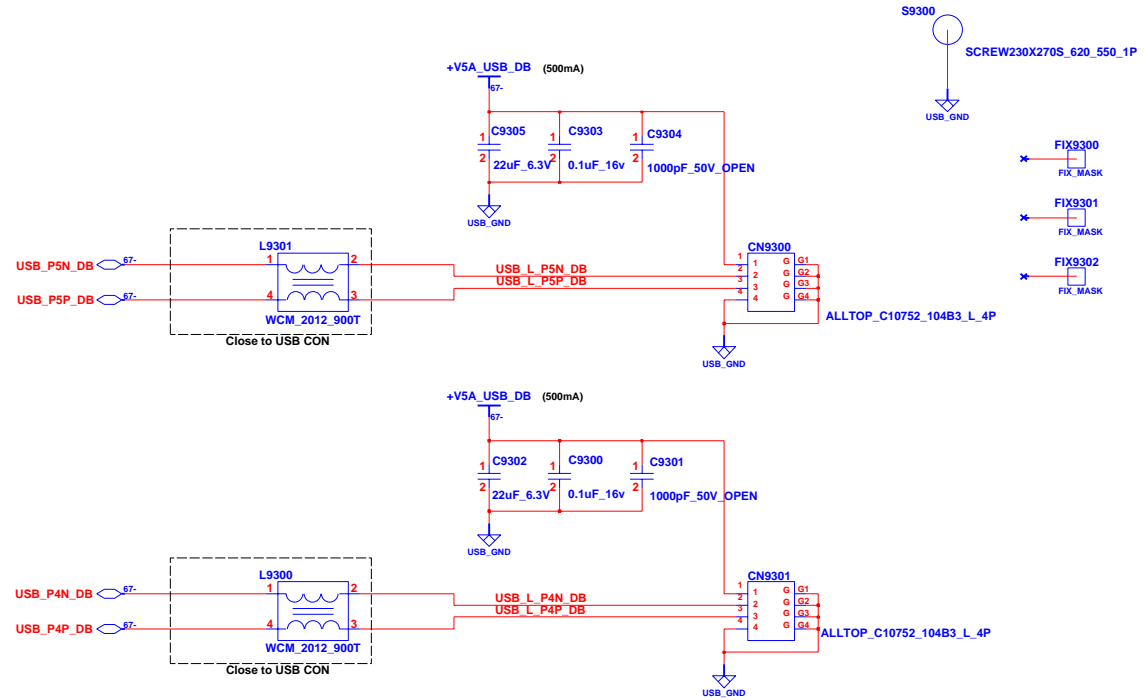
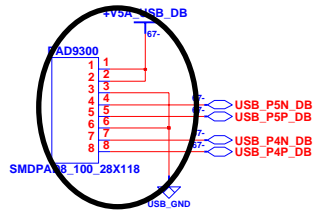
<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b> Power button & LID switch			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC NUMBER <b>1310A23277-0-MTR</b>	REV <b>A02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>65</b>		OF <b>70</b>	



# 14" ODD Extend Board

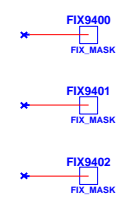
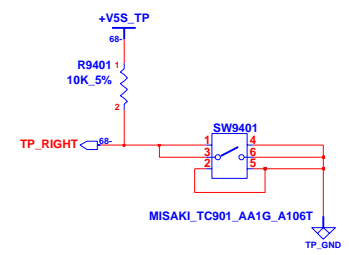
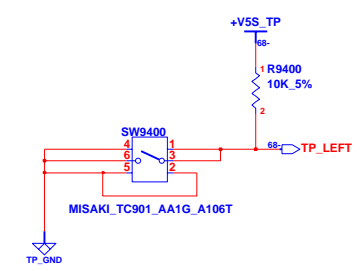
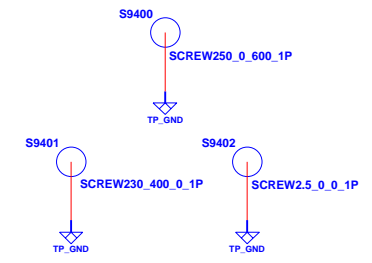
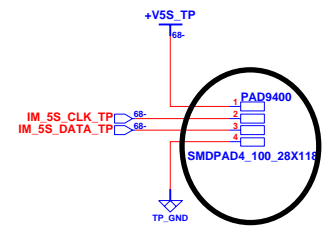
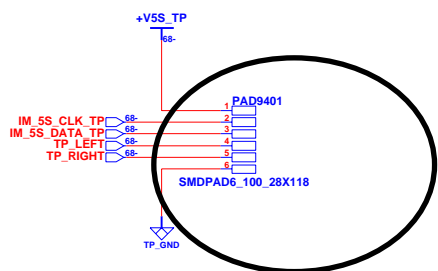
<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b>			
<small>14" ODD EXT/B</small>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MT</b>	REV <b>RA02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>66</b>		OF <b>70</b>	

	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	



# USB Right Side Board

<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete</b>			
USB Right side			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	KA02
CHANGE by Jimmy song		9-Feb-2010	
SHEET 67		OF 70	



**LEFT BUTTON**

**RIGHT BUTTON**

# PICK Button Board

<b>INVENTEC</b>			
TITLE <b>Villemont Intel Discrete Pick button</b>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MTR</b>	REV <b>A02</b>
CHANGE by <b>Jimmy song</b>		DATE <b>27-Sep-2003</b>	SHEET <b>68</b> OF <b>70</b>

# BLANK

<b>INVENTEC</b>			
TITLE <i>Villemont Intel Discrete USB Left Side Board</i>			
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER <b>1310A23277-0-MT</b>	REV <b>R02</b>
CHANGE by <i>Jimmy song</i>		9-Feb-2010	
SHEET <b>69</b>		OF <b>70</b>	

**BLANK**

**INVENTEC**

TITLE *Villemont Intel Discrete  
USB Left Side Board*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A23277-0-MT	RA02

CHANGE by *Jimmy song* 9-Feb-2010

SHEET 70 OF 70