

	1	2	3	4	5	6	7	8																																																																											
A																																																																																			
B																																																																																			
C	<div>POTOMAC 10G CS BUILD 2008.1.21</div>																																																																																		
D																																																																																			
E																																																																																			
F	<table border="1"><thead><tr><th>DATE</th><th>CHANGE NO.</th><th>REV</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>	DATE	CHANGE NO.	REV																												<table border="1"><thead><tr><th>DRAWER</th><th>EE</th><th>DATE</th><th>POWER</th><th>DATE</th></tr></thead><tbody><tr><td>DESIGN</td><td></td><td></td><td></td><td></td></tr><tr><td>CHECK</td><td></td><td></td><td></td><td></td></tr><tr><td>RESPONSIBLE</td><td></td><td></td><td></td><td></td></tr><tr><td colspan="5">SIZE = 3</td></tr><tr><td colspan="5">FILE NAME : XXXX-XXXXXX-XX</td></tr><tr><td>P/N</td><td colspan="4">XXXXXXXXXXXX</td></tr></tbody></table>	DRAWER	EE	DATE	POWER	DATE	DESIGN					CHECK					RESPONSIBLE					SIZE = 3					FILE NAME : XXXX-XXXXXX-XX					P/N	XXXXXXXXXXXX				<table border="1"><thead><tr><th>SIZE</th><th>CODE</th><th>DOC. NUMBER</th><th>REV</th></tr></thead><tbody><tr><td>A3</td><td>CS</td><td>Model No</td><td>X01</td></tr></tbody></table>	SIZE	CODE	DOC. NUMBER	REV	A3	CS	Model No	X01	<table border="1"><thead><tr><th colspan="2">TITLE</th></tr></thead><tbody><tr><td colspan="2">Potomac 10G</td></tr><tr><td>SHEET</td><td>1 OF 63</td></tr></tbody></table>	TITLE		Potomac 10G		SHEET	1 OF 63
DATE	CHANGE NO.	REV																																																																																	
DRAWER	EE	DATE	POWER	DATE																																																																															
DESIGN																																																																																			
CHECK																																																																																			
RESPONSIBLE																																																																																			
SIZE = 3																																																																																			
FILE NAME : XXXX-XXXXXX-XX																																																																																			
P/N	XXXXXXXXXXXX																																																																																		
SIZE	CODE	DOC. NUMBER	REV																																																																																
A3	CS	Model No	X01																																																																																
TITLE																																																																																			
Potomac 10G																																																																																			
SHEET	1 OF 63																																																																																		
	1	2	3	4	5	6	7	8																																																																											

	1	2	3	4	5	6	7	8																																																																													
A																																																																																					
B																																																																																					
C	<div>POTOMAC 10G CS BUILD 2008.1.21</div>																																																																																				
D																																																																																					
E																																																																																					
F	<table border="1"><thead><tr><th>DATE</th><th>CHANGE NO.</th><th>REV</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>			DATE	CHANGE NO.	REV																						<table border="1"><thead><tr><th>DRAWER</th><th>EE</th><th>DATE</th><th>POWER</th><th>DATE</th></tr></thead><tbody><tr><td>DESIGN</td><td></td><td></td><td></td><td></td></tr><tr><td>CHECK</td><td></td><td></td><td></td><td></td></tr><tr><td>RESPONSIBLE</td><td></td><td></td><td></td><td></td></tr><tr><td colspan="2">SIZE = 3</td><td colspan="3">VER :</td></tr><tr><td colspan="5">FILE NAME : XXXX-XXXXXX-XX</td></tr><tr><td>P/N</td><td colspan="4">XXXXXXXXXXXX</td></tr></tbody></table>					DRAWER	EE	DATE	POWER	DATE	DESIGN					CHECK					RESPONSIBLE					SIZE = 3		VER :			FILE NAME : XXXX-XXXXXX-XX					P/N	XXXXXXXXXXXX				<table border="1"><thead><tr><th colspan="4">INVENTEC</th></tr><tr><td colspan="4">TITLE Potomac 10G</td></tr><tr><td>SIZE A3</td><td>CODE CS</td><td>DOC. NUMBER Model No</td><td>REV X01</td></tr><tr><td colspan="2">SHEET 1</td><td colspan="2">OF 63</td></tr></thead></table>		INVENTEC				TITLE Potomac 10G				SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01	SHEET 1		OF 63	
DATE	CHANGE NO.	REV																																																																																			
DRAWER	EE	DATE	POWER	DATE																																																																																	
DESIGN																																																																																					
CHECK																																																																																					
RESPONSIBLE																																																																																					
SIZE = 3		VER :																																																																																			
FILE NAME : XXXX-XXXXXX-XX																																																																																					
P/N	XXXXXXXXXXXX																																																																																				
INVENTEC																																																																																					
TITLE Potomac 10G																																																																																					
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01																																																																																		
SHEET 1		OF 63																																																																																			

</

TABLE OF CONTENTS

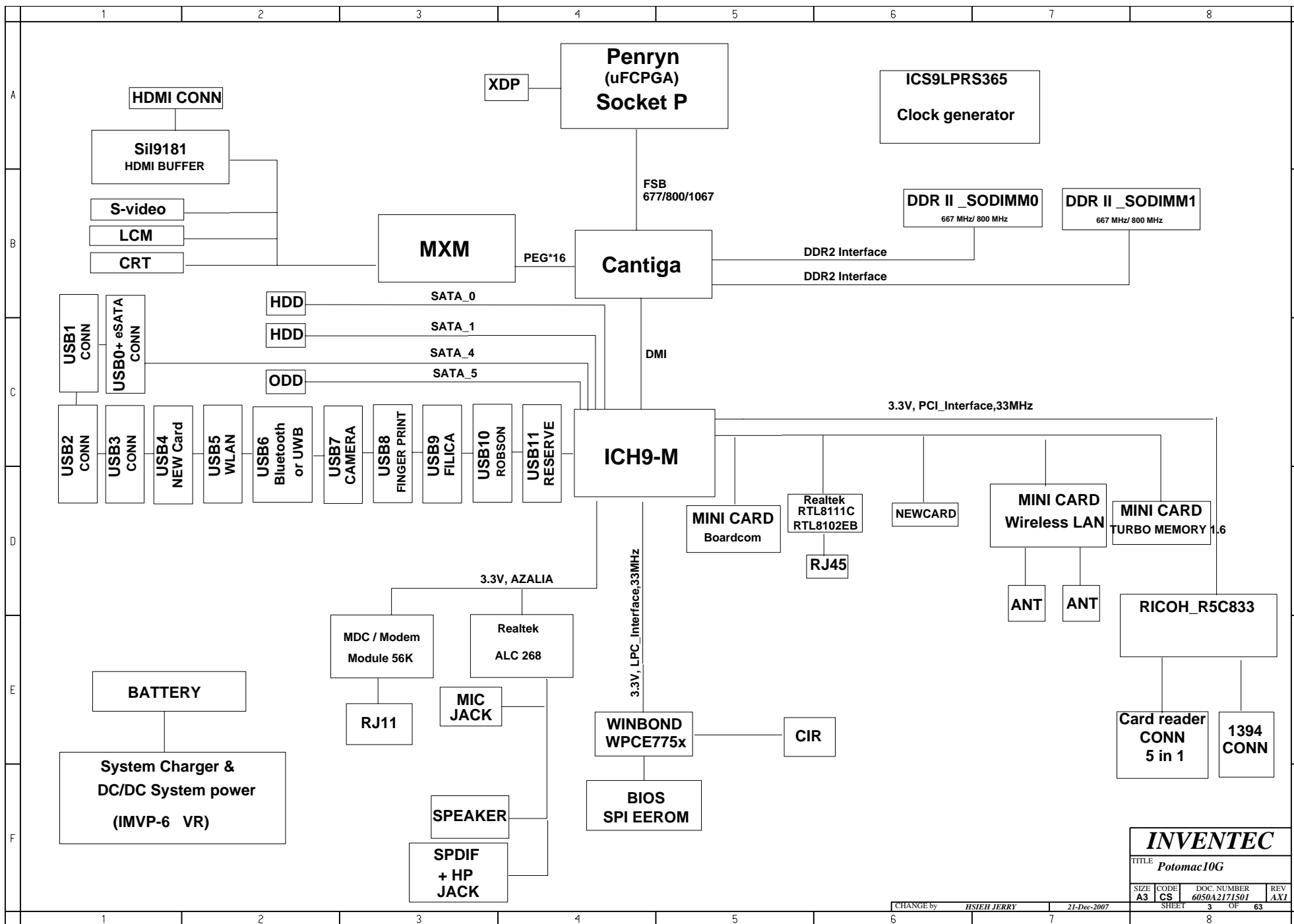
PAGE	PAGE	PAGE
1.COVER PAGE	33- ICH9-1	54.EXPRESS CARD CONN
2.INDEX	34- ICH9-2	55.ROBSON & WLAN /WiMAX (Minicard)
3.BLOCK DIAGRAM	35- ICH9-3	56.HD-DVD (Minicard)
4.POWER SEQUENCE BLOCK	36- ICH9-4	57.MDC 1.5 CONN
5-12.SYSTEM POWER	37- ICH9-5	58.LED(M/B) & HOTKEY/B CONN & Power Bottom/B CONN
13.CLOCK GENERATOR	38.SATA HDD1 CONN & SATA HDD2 CONN	59. FingerPrinter BOARD
14- PENRYN-1	39.ODD CONN	60. FM BOARD
15- PENRYN-2	40.USB CONN & eSATA CONN	61.KILL SWITCH& HALL SENSOR
16- PENRYN-3	41.FELICA/FM & FINGER PRINTER & CAMERA CONN & WLAN LED	62.DRILL HOLE
17- PENRYN-4	42.BLUE TOOTH CONN	63.EMI
18.FAN & THERMAL CONTROLLER	43.KBC	
19- CANTIGA-1	44.K/B & TP/B CONN	
20- CANTIGA-2	45.AZALIA CODEC	
21- CANTIGA-3	46.HP & SPDIF	
22- CANTIGA-4	47.AUDIO AMP & MIC & SPEAKER & VR	
23- CANTIGA-5	48.LAN CONTROLLER	
24- CANTIGA-6	49.RJ45 & TRANSFORMER	
25- CANTIGA-7	50.HDMI BUFFER & CEC uCOM	
26.DDR2 DIMM0	51.CIR & HDMI CONN	
27.DDR2 DIMM1	52.CARDBUS CONTROLLER	
28.DDR DAMPING	53.5 IN 1 CARD SLOT and 1394 CONTROLLER	
29.MXM CONN		
30.CRT CONN		
31.S-VIDEO CONN		
32.LCM CONN		

INVENTEC

TITLE
Potomac10G

SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AXI
SHEET 2		OF 63	

CHANGE by *HSEIH JERRY* 21-Dec-2007



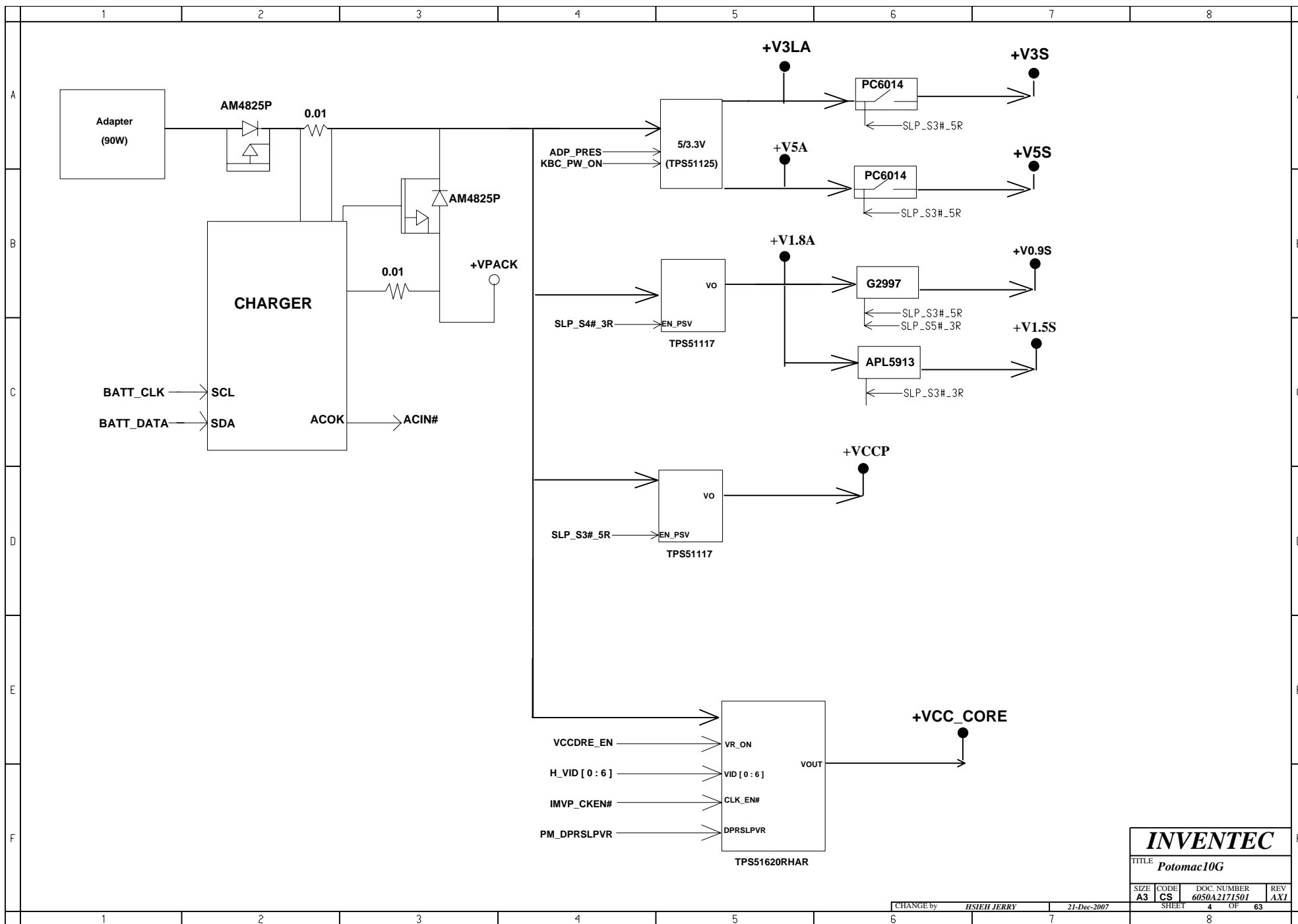
INVENTEC

TITLE
Potomac10G

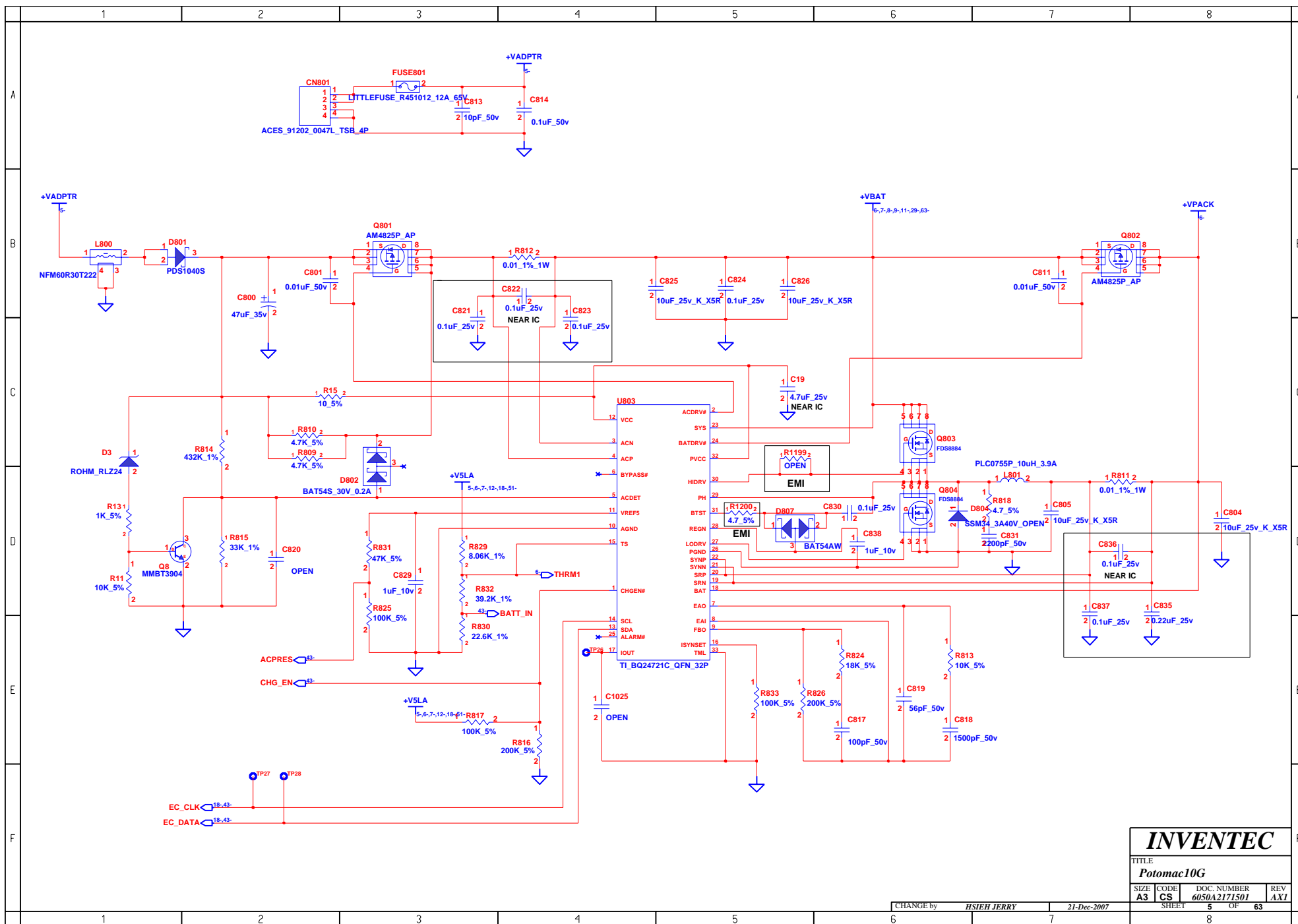
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

CHANGE by **HSEH JERRY** 21-Dec-2007

SHEET 3 OF 63



INVENTEC			
TITLE Potomac10G			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
CHANGE by HSIEH JERRY		21-Dec-2007	SHEET 4 OF 63

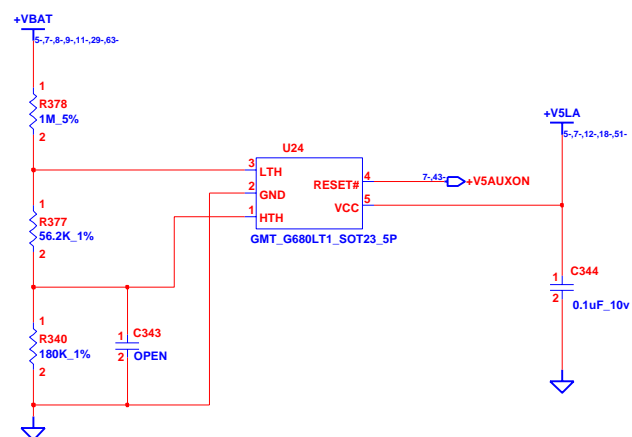


INVENTEC

TITLE
Potomac10G

SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
-------------------	-------------------	------------------------------------	-------------------

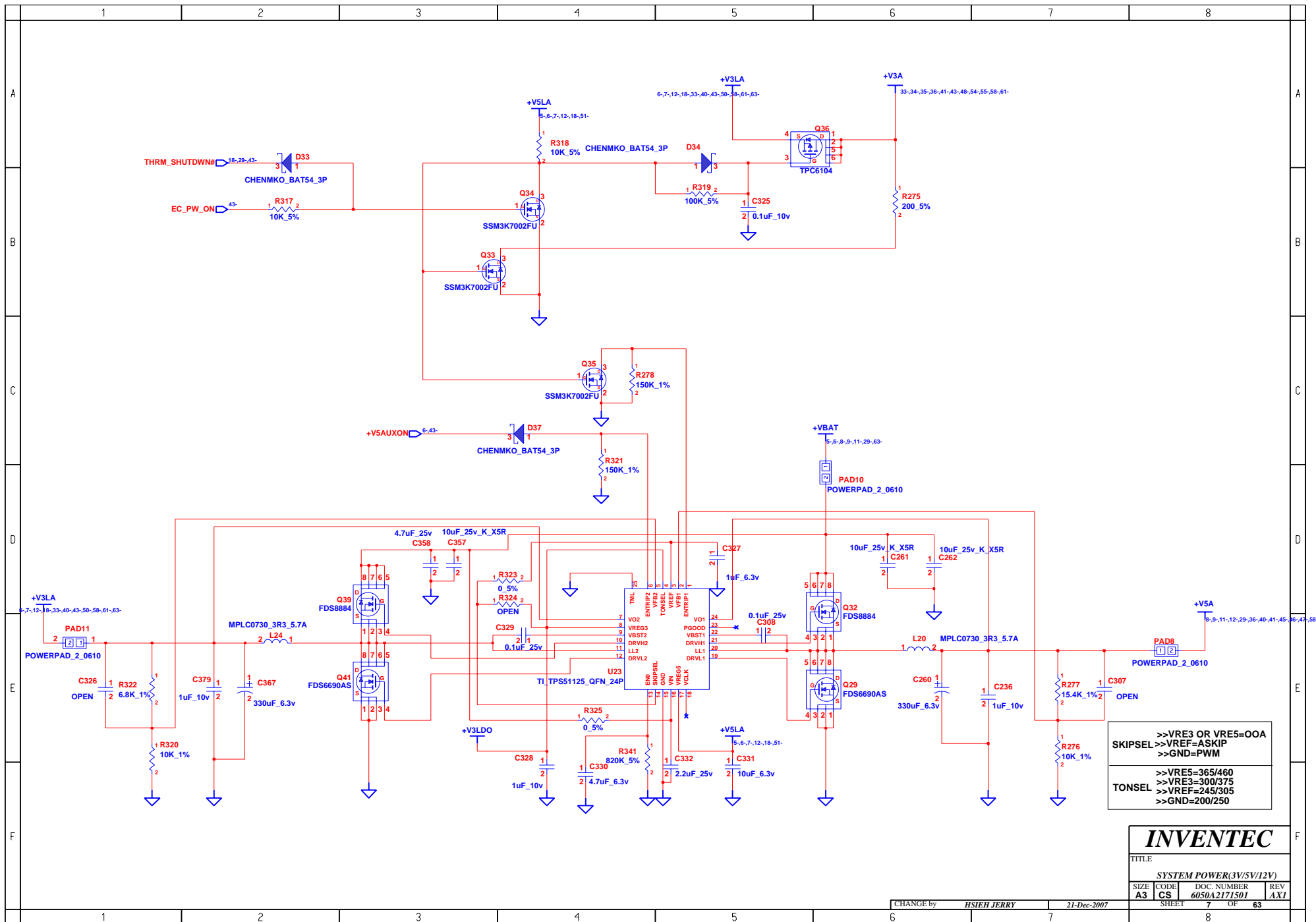
CHANGE by HSEH JERRY	21-Dec-2007	SHEET 5	OF 63
--------------------------------	-------------	-------------------	-----------------



TITLE			
<i>SELECT & BATTERY CONN</i>			
SIZE A3	CODE CS	DOC. NUMBER <i>6050A2171501</i>	REV <i>AXI</i>
SHEET		6	OF 63

CHANGE by	<i>HSIEH JERRY</i>	<i>21-Dec-2007</i>
-----------	--------------------	--------------------

CS 6050A2171501
SHEET 6 OF 63

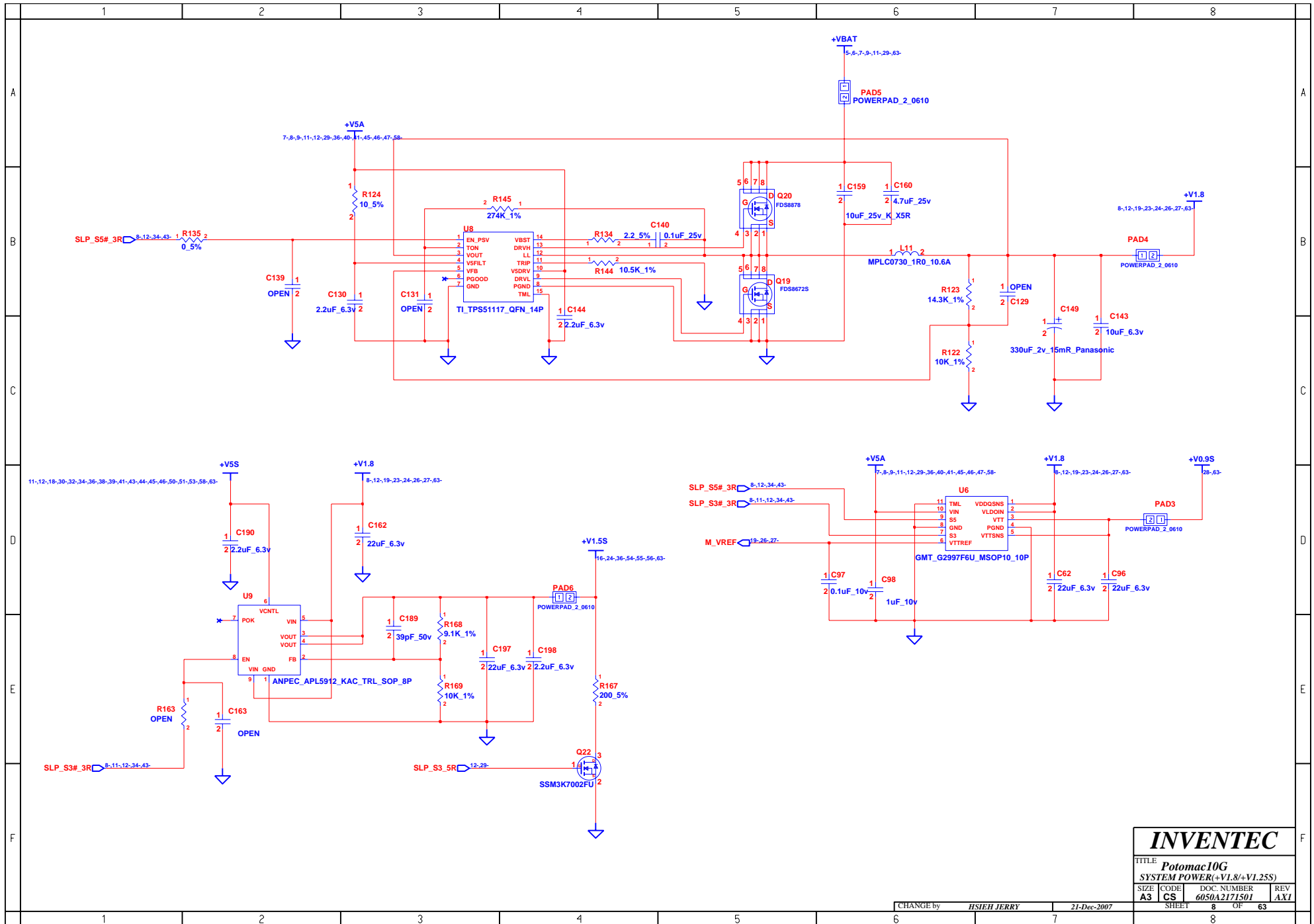


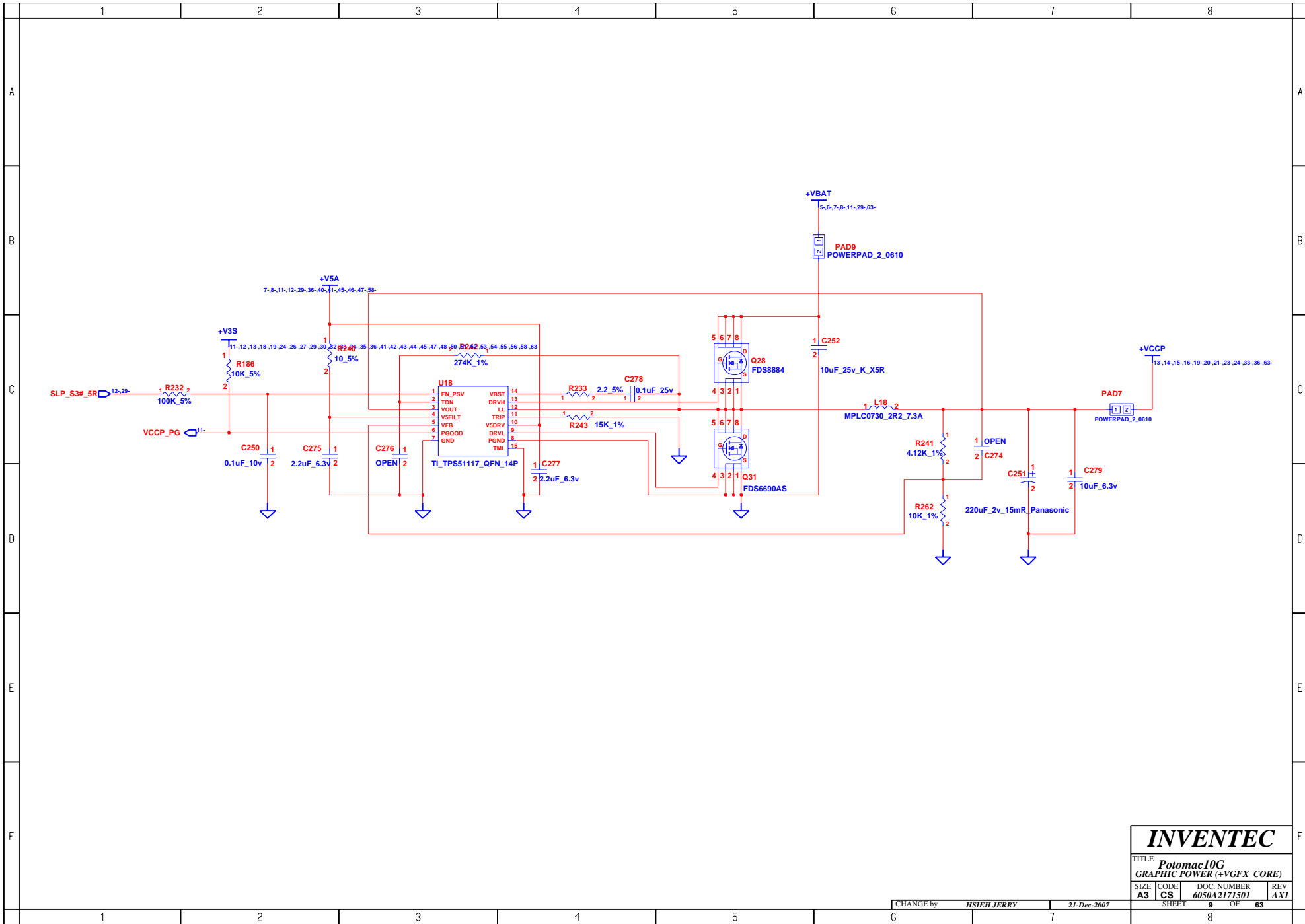
>>VRE3 OR VRE5=OOA
 SKIPSEL>>VREF=ASKIP
 >>GND=PWM
 >>VRE5=365/460
 >>VRE3=300/375
 TONSEL >>VREF=245/305
 >>GND=200/250

INVENTEC			
TITLE			
SYSTEM POWER(3V/5V/12V)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AXI

CHANGE by HSEH JERRY 21-Dec-2007

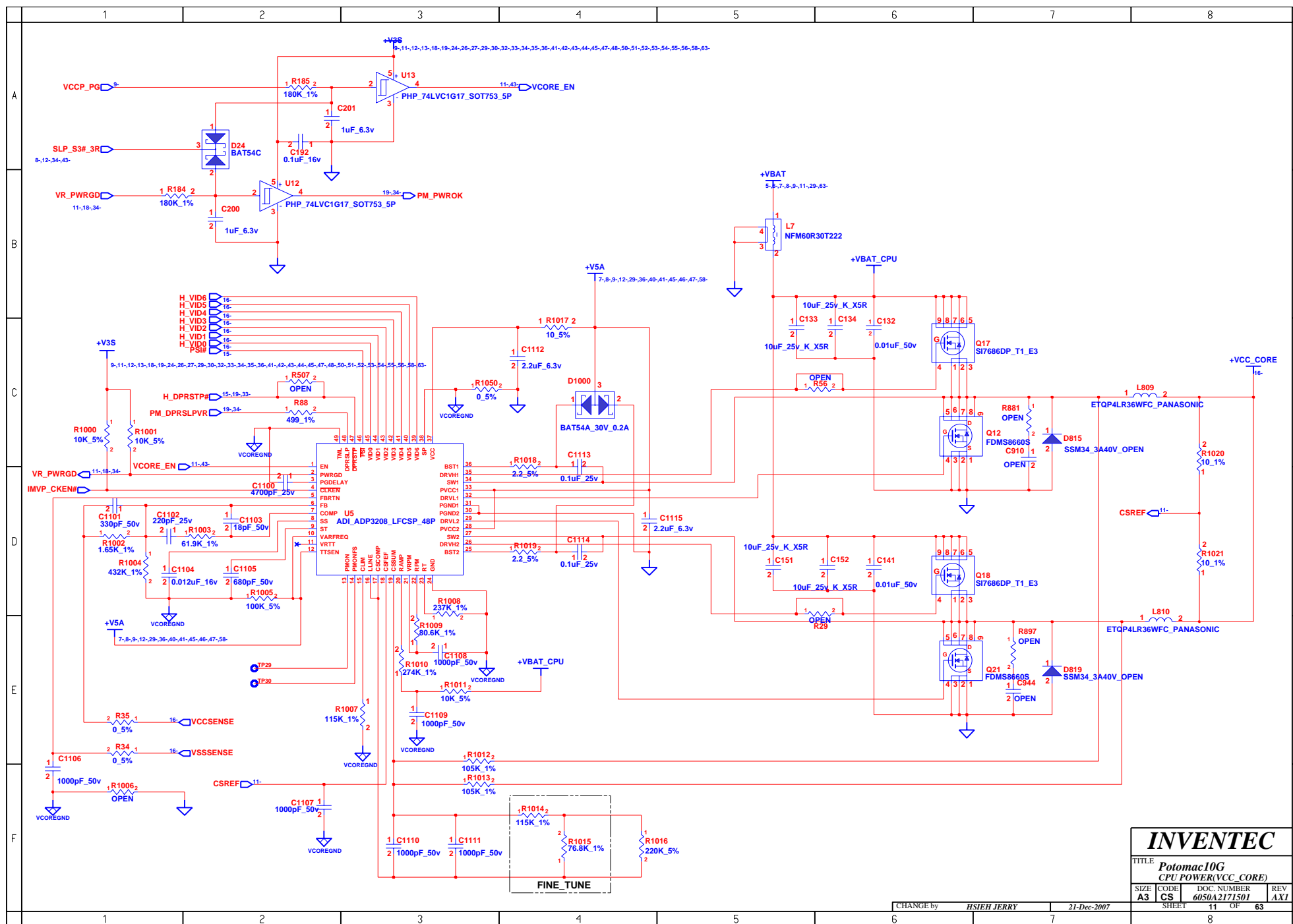
SHEET 7 OF 63

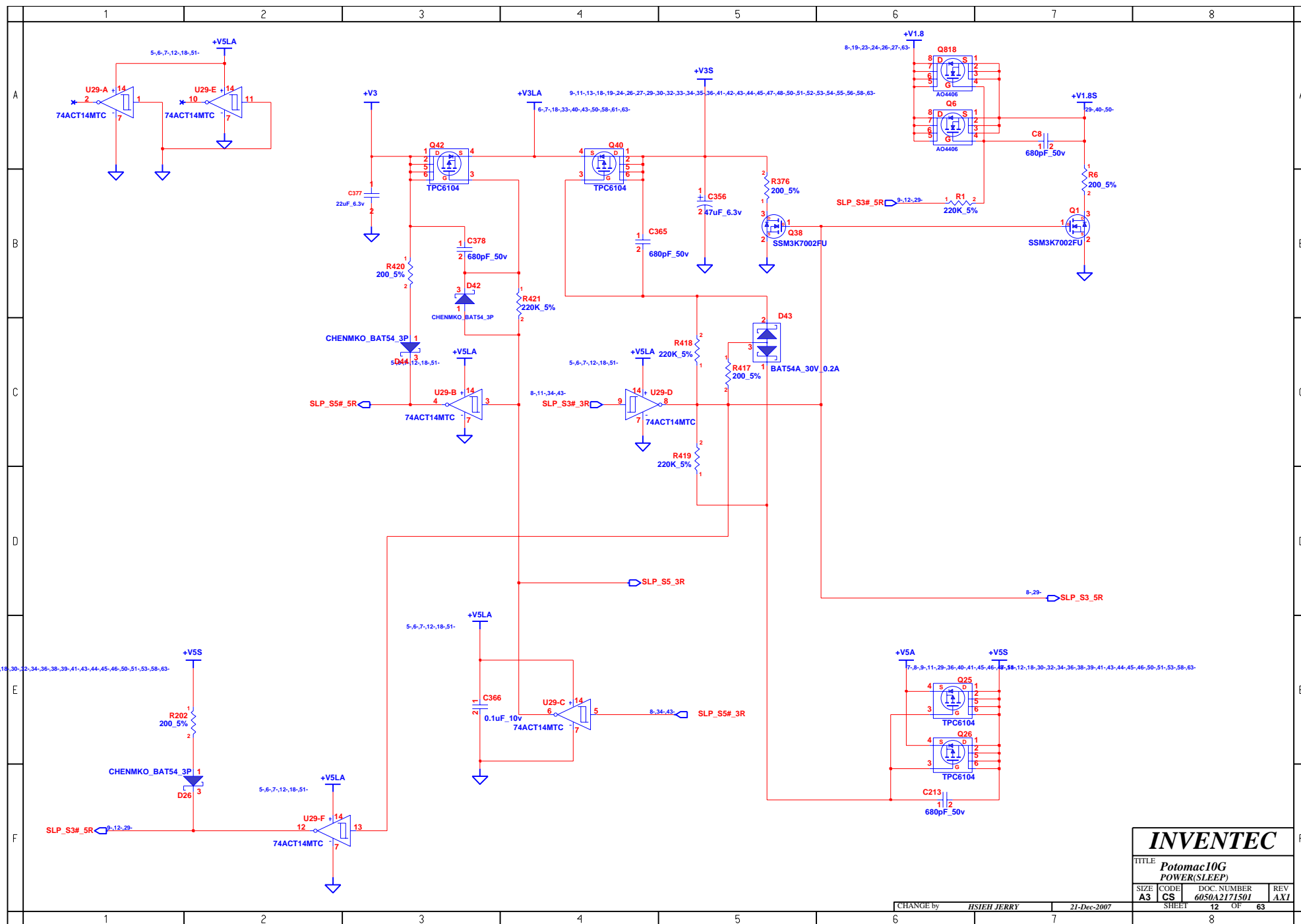




	1	2	3	4	5	6	7	8	
A	<div>BLANK</div>								A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

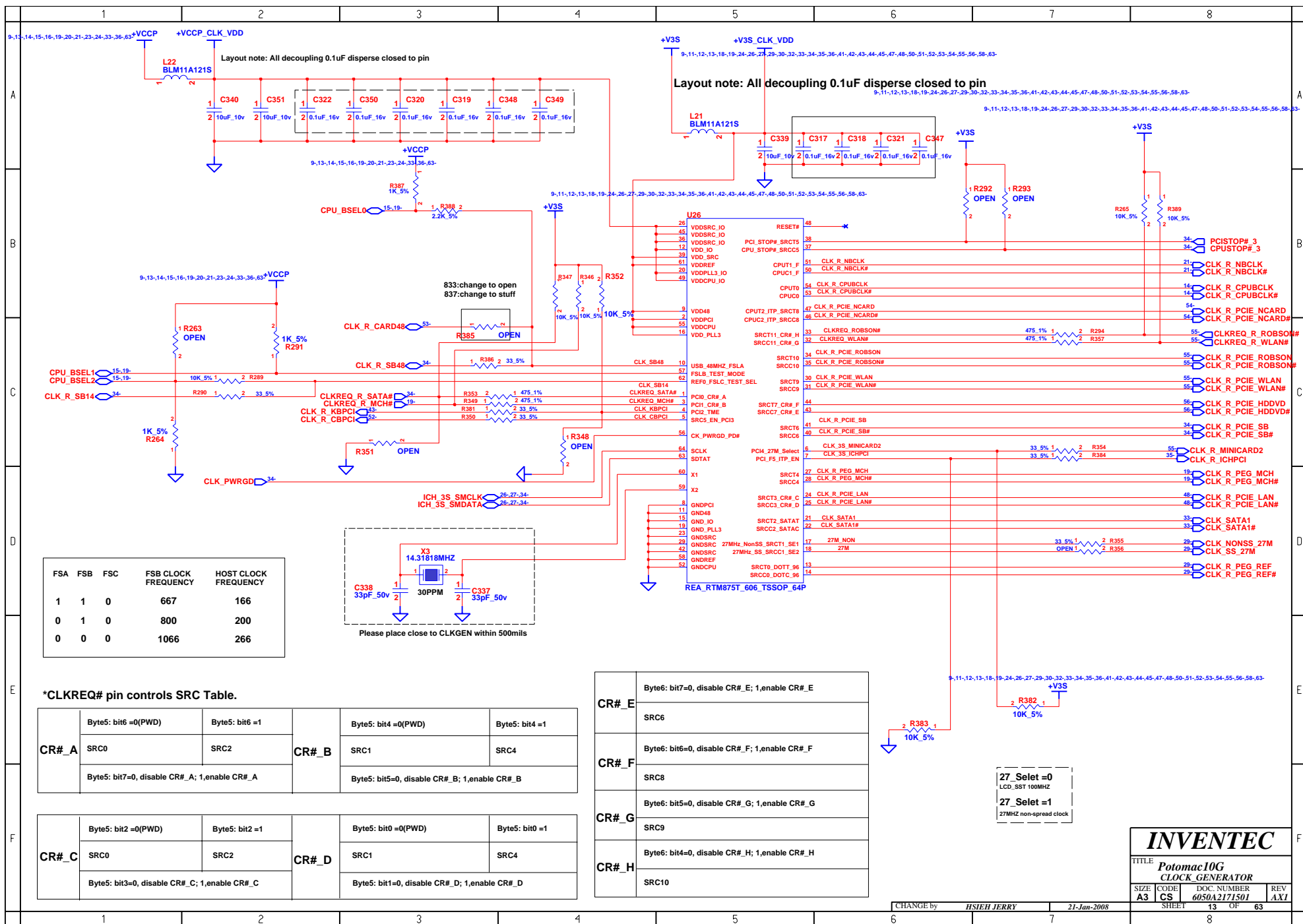
INVENTEC			
TITLE Potomac10G			
SYSTEM POWER(+VCCP/+V1.5S)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1
CHANGE by		21-Dec-2007	
HSEH JERRY			
SHEET		10 OF 63	

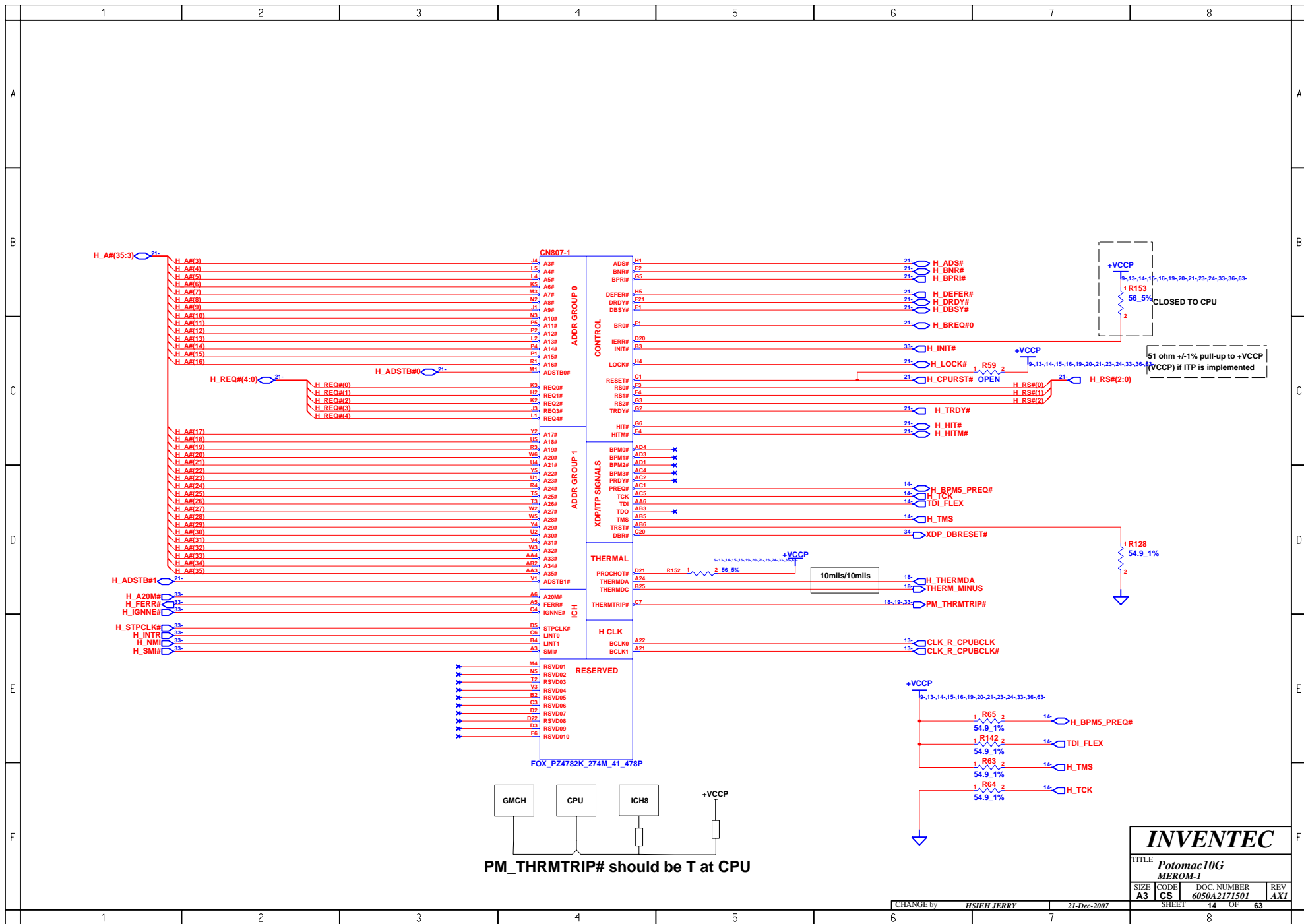


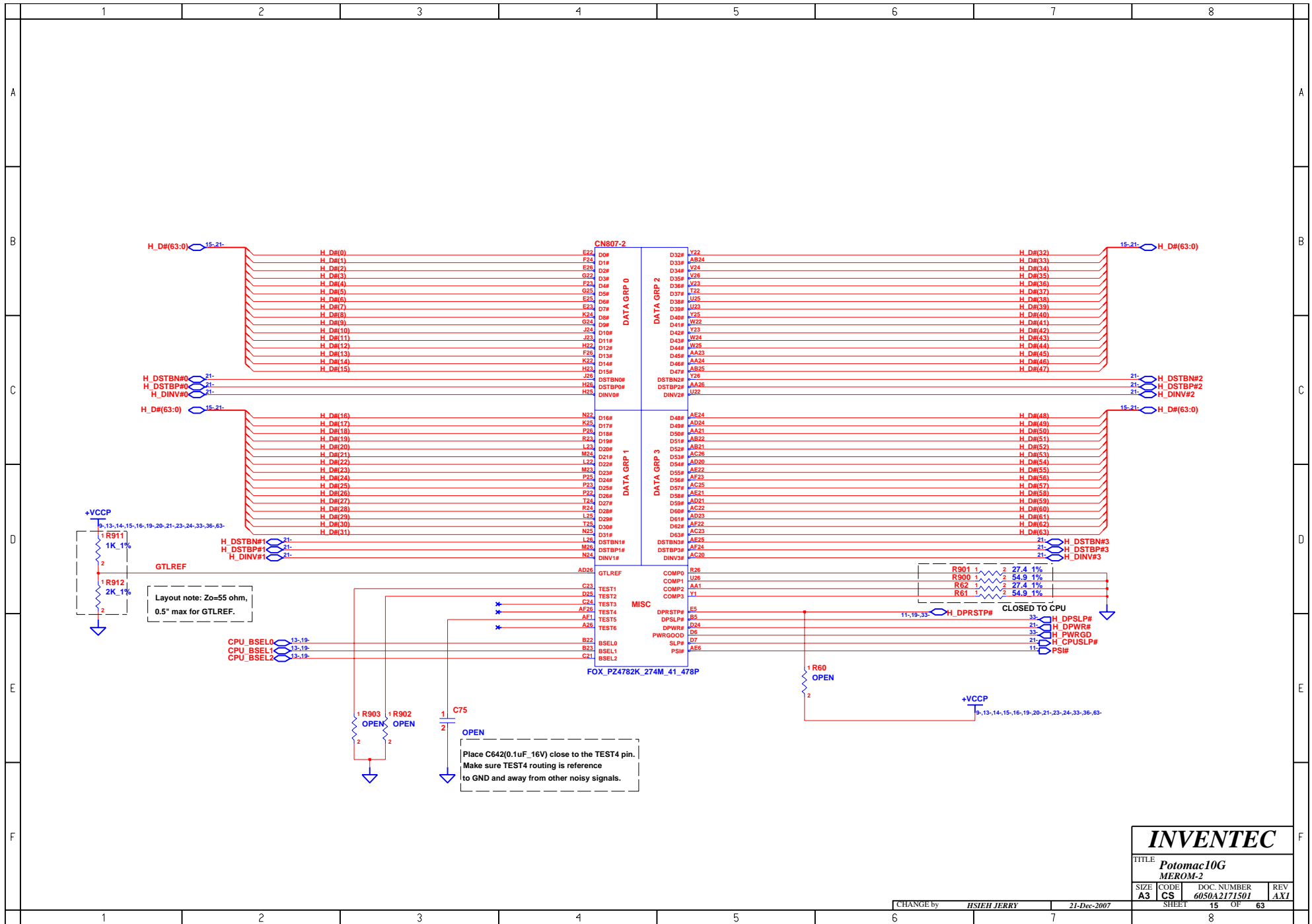


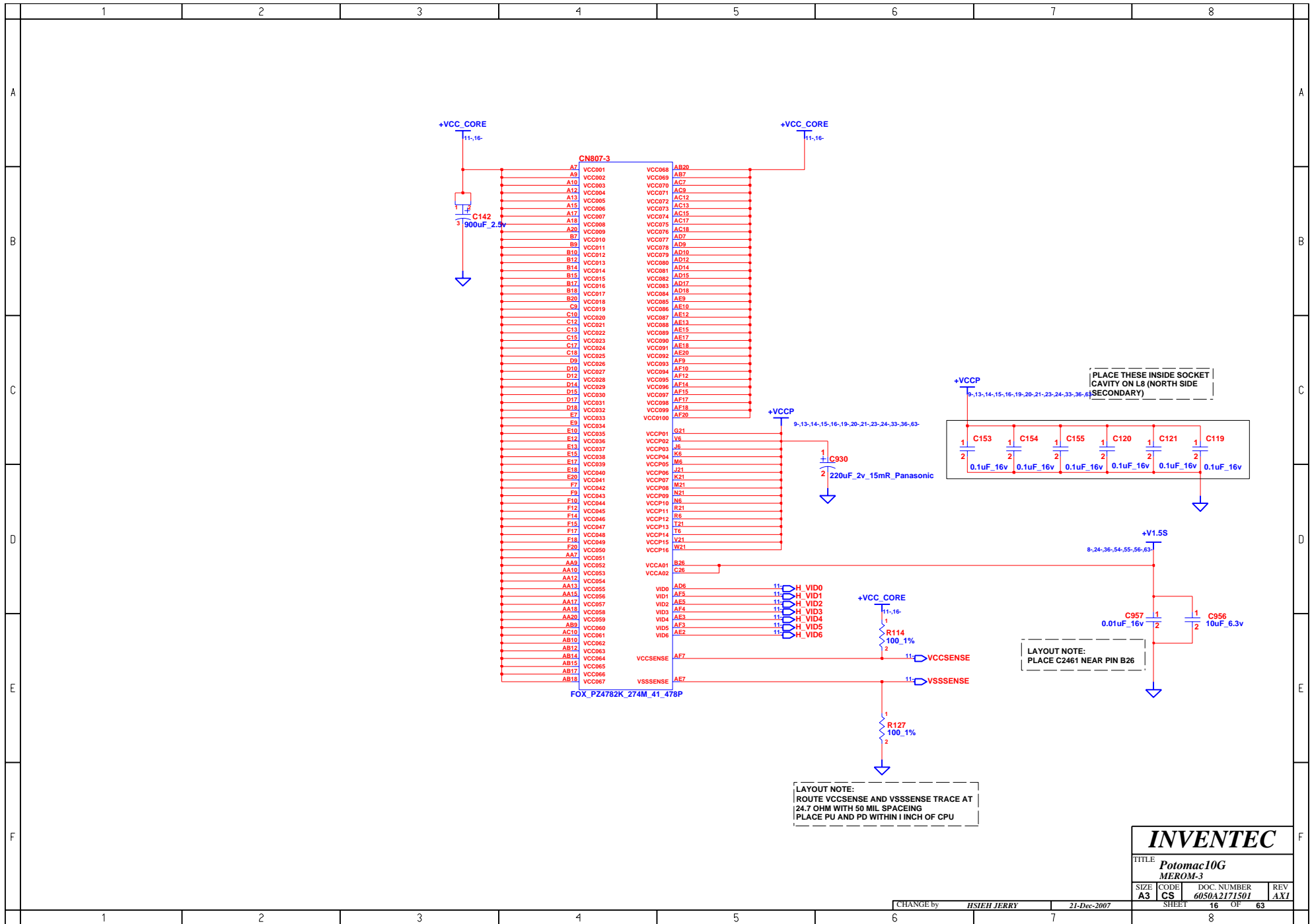
INVENTEC			
TITLE Potomac10G POWER(SLEEP)			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
SHEET 12		OF 63	

CHANGE by HSIEH JERRY 21-Dec-2007









INVENTEC

TITLE			
Potomac10G MEROM-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AXI
CHANGE by		21-Dec-2007	
SHEET		16	OF 63

	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	

CN807-4

A4	VSS001	VSS002	P6
A8	VSS002	VSS003	P21
A11	VSS003	VSS004	P24
A14	VSS004	VSS005	R2
A16	VSS005	VSS006	R5
A19	VSS006	VSS007	R22
A23	VSS007	VSS008	R25
AF2	VSS008	VSS009	T1
B6	VSS009	VSS010	T4
B8	VSS010	VSS011	T23
B11	VSS011	VSS012	T26
B13	VSS012	VSS013	U3
B16	VSS013	VSS014	U6
B19	VSS014	VSS015	U21
B21	VSS015	VSS016	U24
B24	VSS016	VSS017	V2
C5	VSS017	VSS018	V5
C8	VSS018	VSS019	V22
C11	VSS019	VSS020	V25
C14	VSS020	VSS021	W1
C16	VSS021	VSS022	W4
C19	VSS022	VSS023	W23
C2	VSS023	VSS024	W26
C22	VSS024	VSS025	Y3
C25	VSS025	VSS026	Y6
D1	VSS026	VSS027	Y21
D4	VSS027	VSS028	Y24
D8	VSS028	VSS029	AA2
D11	VSS029	VSS030	AA5
D13	VSS030	VSS031	AA8
D16	VSS031	VSS032	AA11
D19	VSS032	VSS033	AA14
D23	VSS033	VSS034	AA16
D26	VSS034	VSS035	AA19
E3	VSS035	VSS036	AA22
E6	VSS036	VSS037	AA25
E8	VSS037	VSS038	AB1
E11	VSS038	VSS039	AB4
E14	VSS039	VSS040	AB8
E16	VSS040	VSS041	AB11
E19	VSS041	VSS042	AB13
E21	VSS042	VSS043	AB16
E24	VSS043	VSS044	AB18
F5	VSS044	VSS045	AB23
F8	VSS045	VSS046	AB26
F11	VSS046	VSS047	AC3
F13	VSS047	VSS048	AC6
F16	VSS048	VSS049	AC8
F19	VSS049	VSS050	AC11
F2	VSS050	VSS051	AC14
F22	VSS051	VSS052	AC16
F25	VSS052	VSS053	AC19
G4	VSS053	VSS054	AC21
G1	VSS054	VSS055	AC24
G23	VSS055	VSS056	AD2
G26	VSS056	VSS057	AD5
H3	VSS057	VSS058	AD8
H6	VSS058	VSS059	AD11
H21	VSS059	VSS060	AD13
H24	VSS060	VSS061	AD16
J4	VSS061	VSS062	AD19
J5	VSS062	VSS063	AD22
J22	VSS063	VSS064	AD25
J25	VSS064	VSS065	AE1
K1	VSS065	VSS066	AE4
K4	VSS066	VSS067	AE8
K23	VSS067	VSS068	AE11
K26	VSS068	VSS069	AE14
L3	VSS069	VSS070	AE16
L6	VSS070	VSS071	AE19
L21	VSS071	VSS072	AE23
M2	VSS072	VSS073	AE26
M5	VSS073	VSS074	A2
M22	VSS074	VSS075	AF6
M25	VSS075	VSS076	AF8
N1	VSS076	VSS077	AF11
N4	VSS077	VSS078	AF13
N23	VSS078	VSS079	AF16
N26	VSS079	VSS080	AF19
P3	VSS080	VSS081	AF21
			AF25

FOX_PZ4782K_274M_41_478P

INVENTEC

TITLE

Potomac10G

MEROM-4

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

CHANGE by

Hsieh JERRY

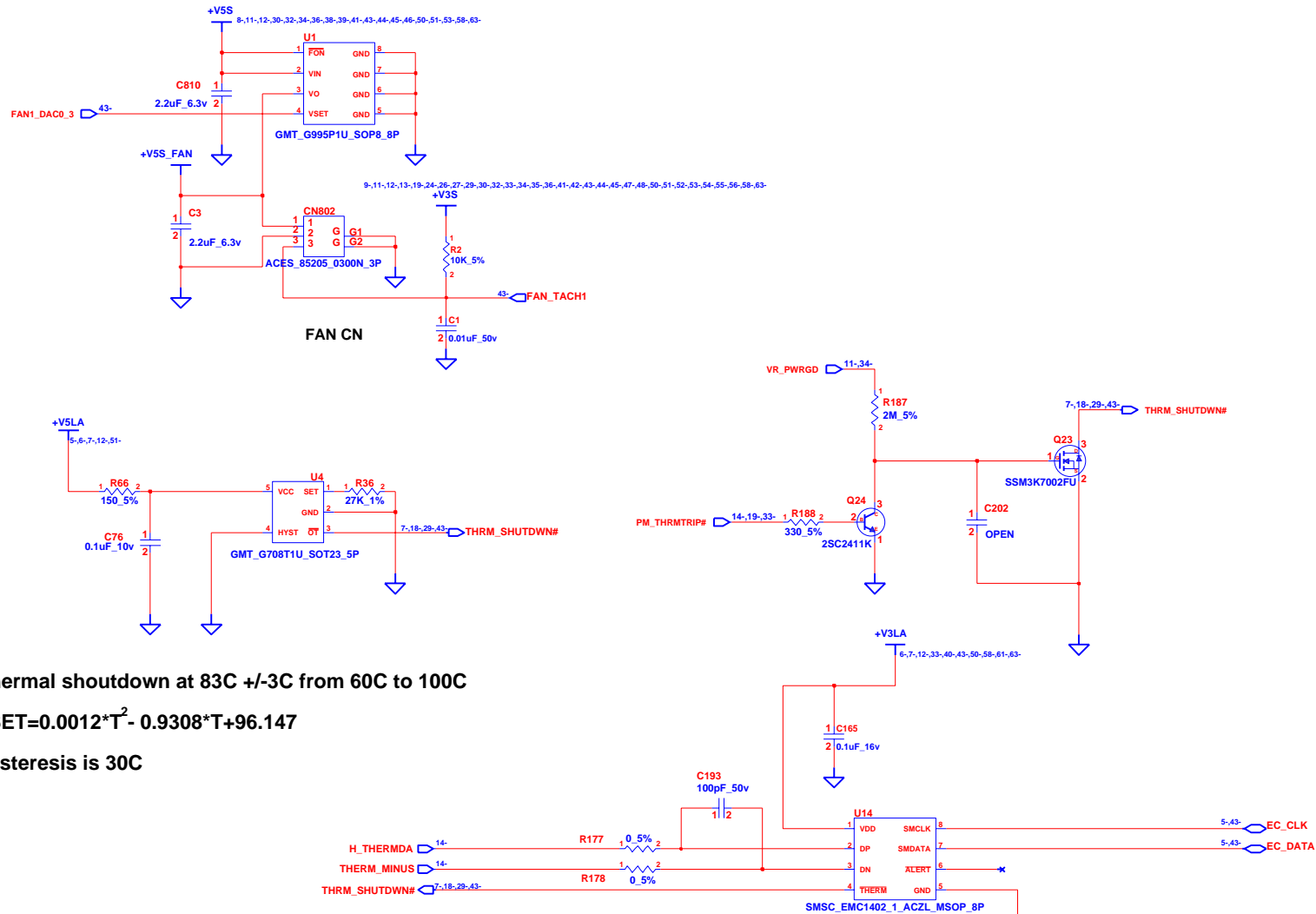
21-Dec-2007

SHEET

17

OF

63



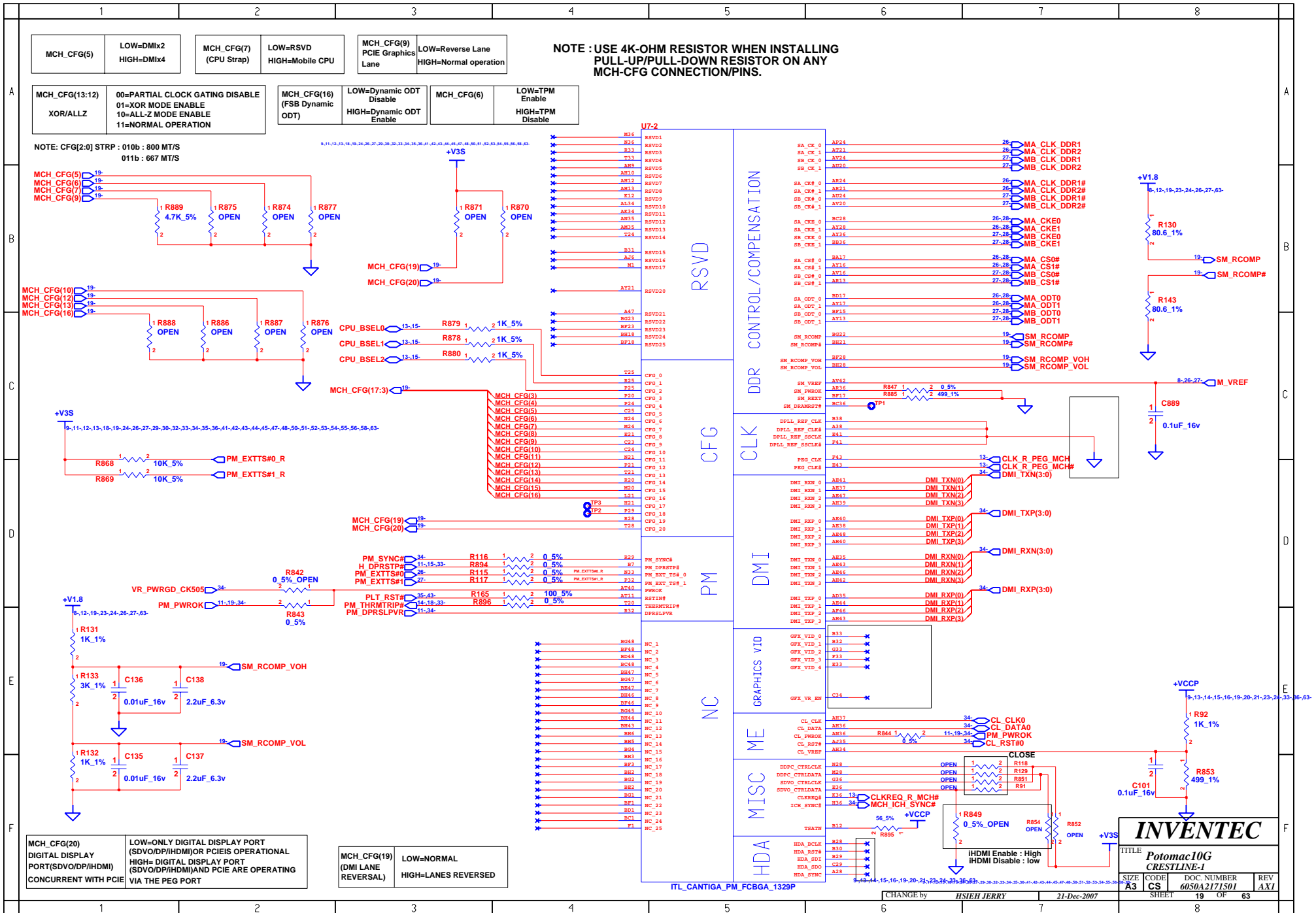
Thermal shoutdown at 83C +/-3C from 60C to 100C

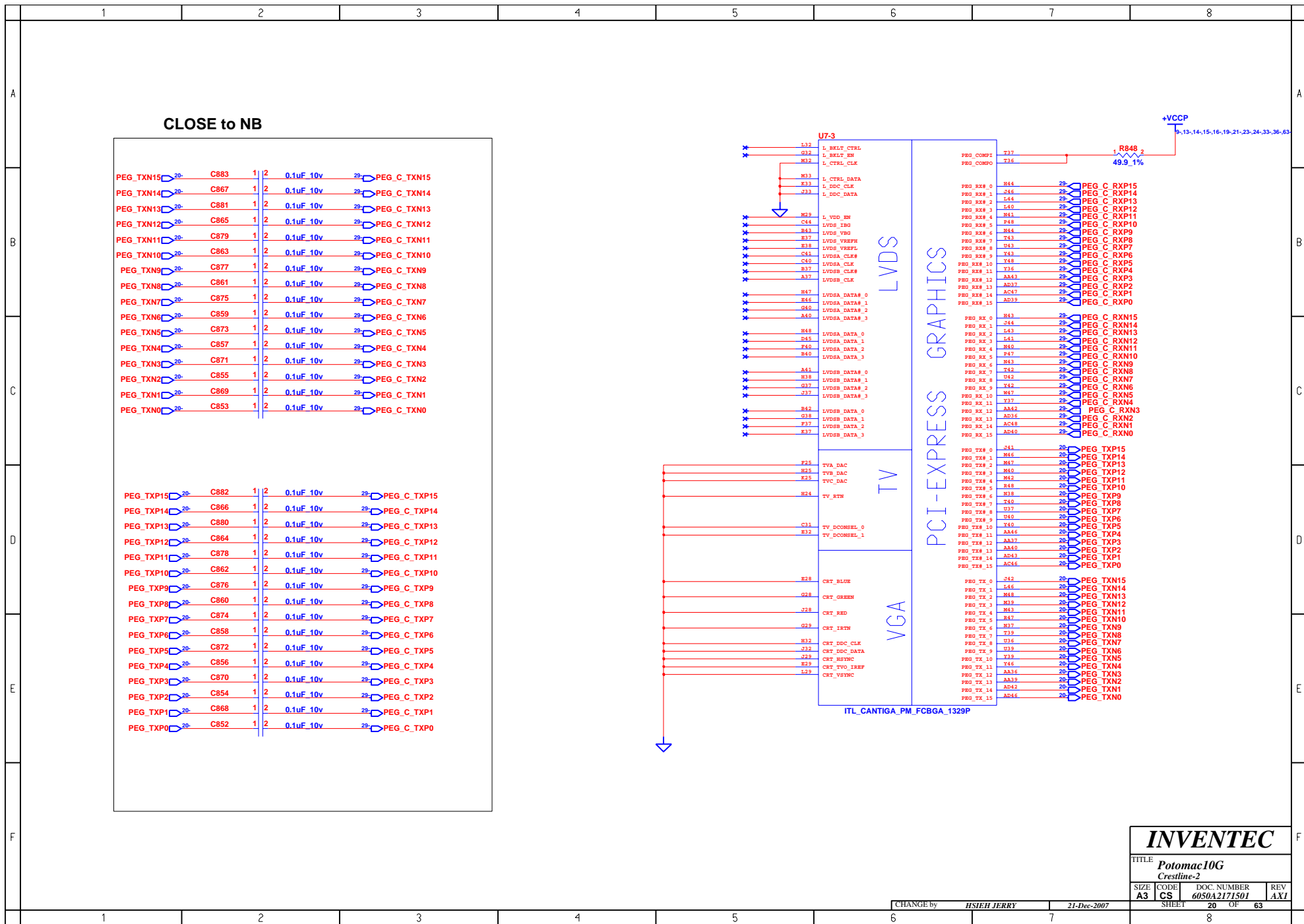
$$RSET=0.0012 \cdot T^2 - 0.9308 \cdot T + 96.147$$

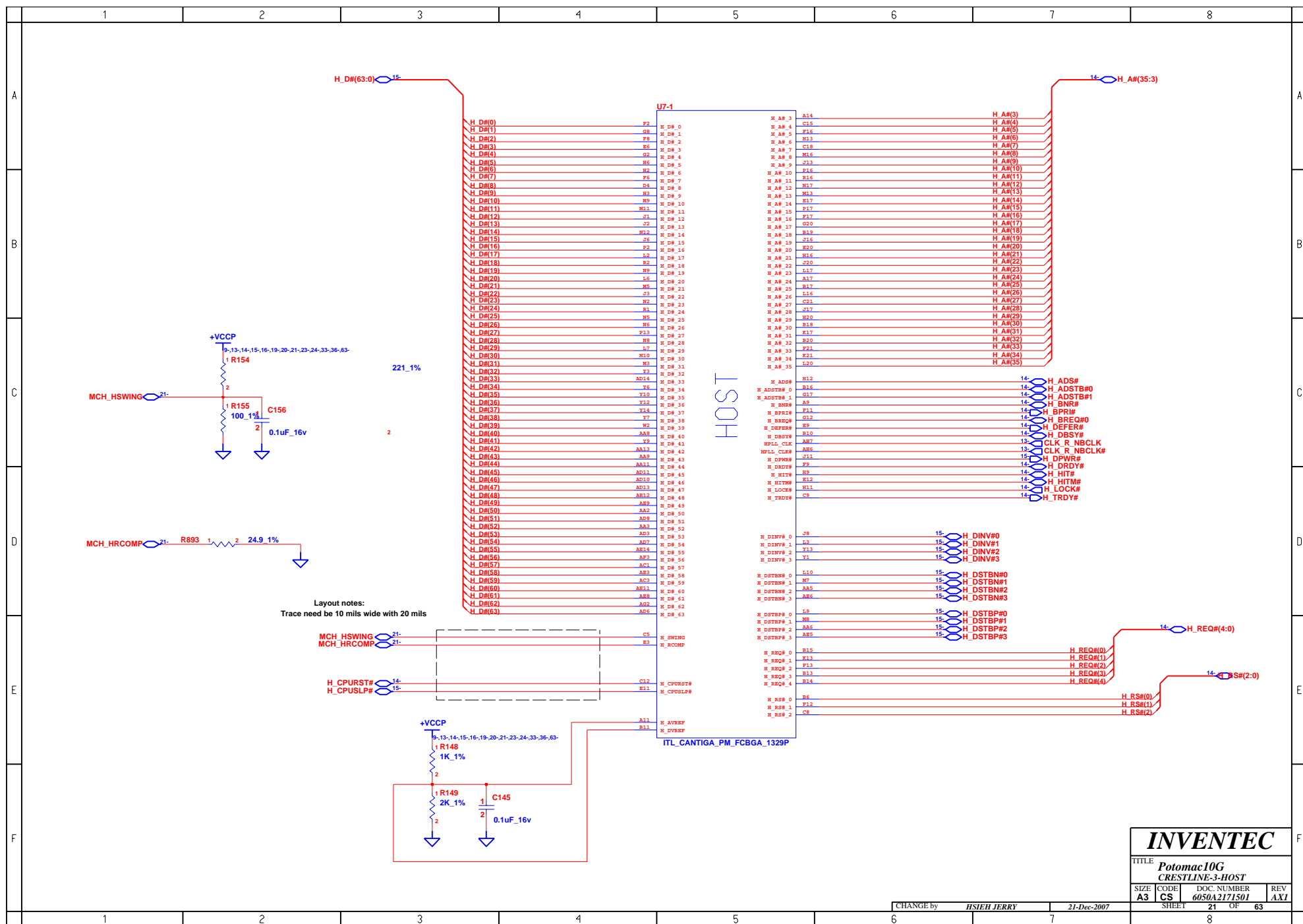
Hysteresis is 30C

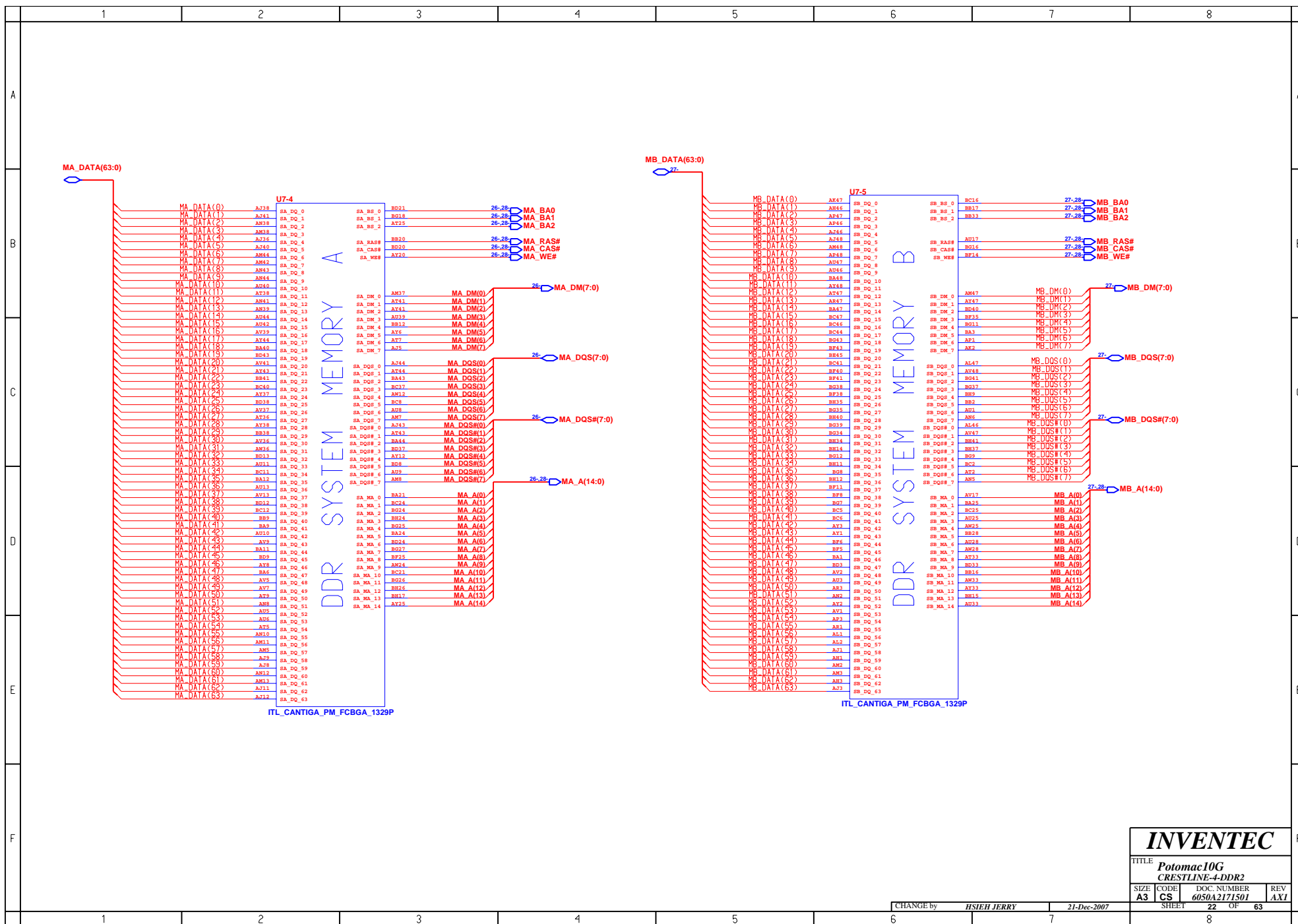
Thermal Sensor For CPU
LAYOUT NOTES: PUT THE THERMAL SENSOR CLOSE TO CPU

INVENTEC			
TITLE Potomac10G THERMAL&FAN CONTROLLER			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
CHANGE by HSIEH JERRY		21-Dec-2007	SHEET 18 OF 63









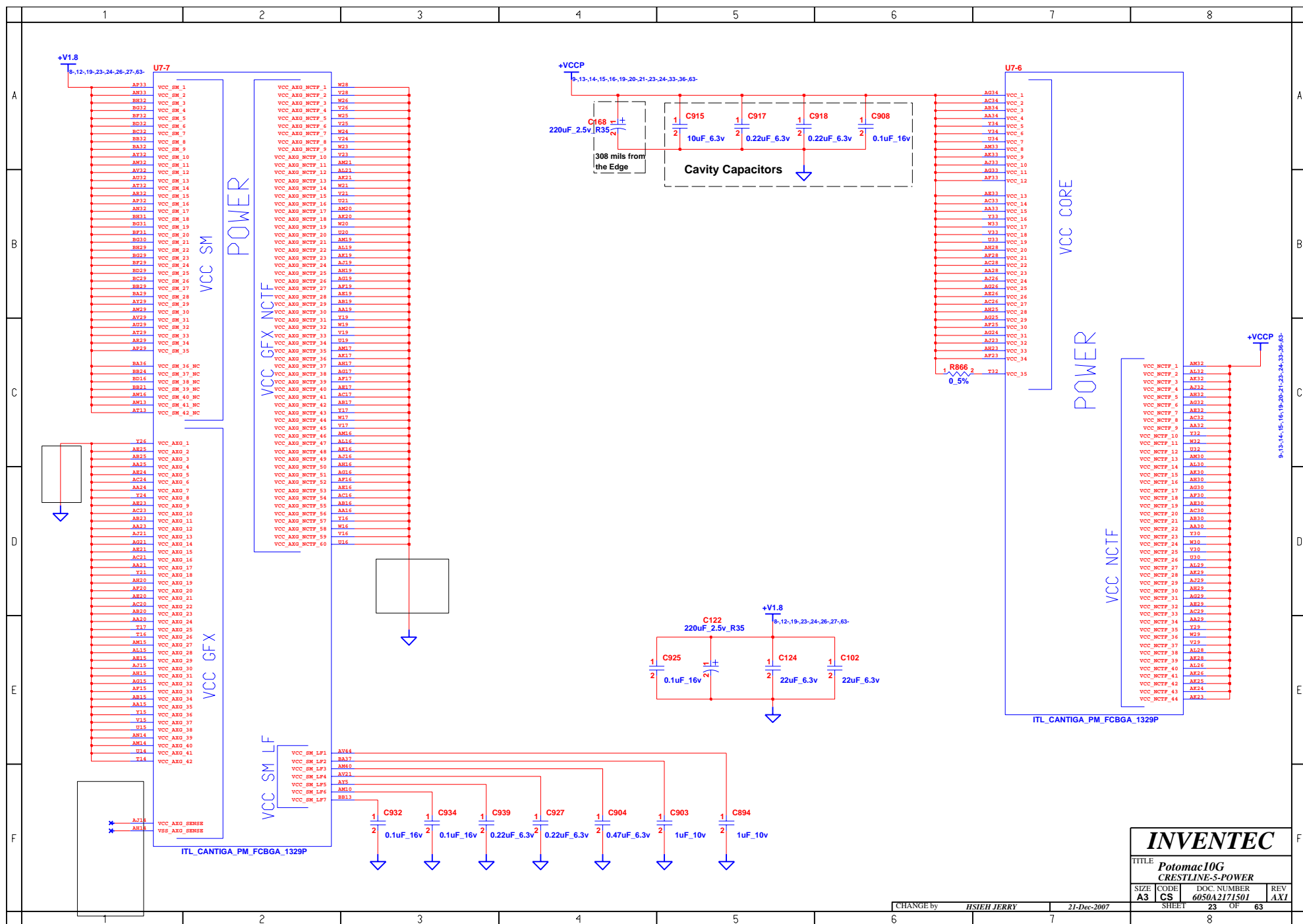
INVENTEC

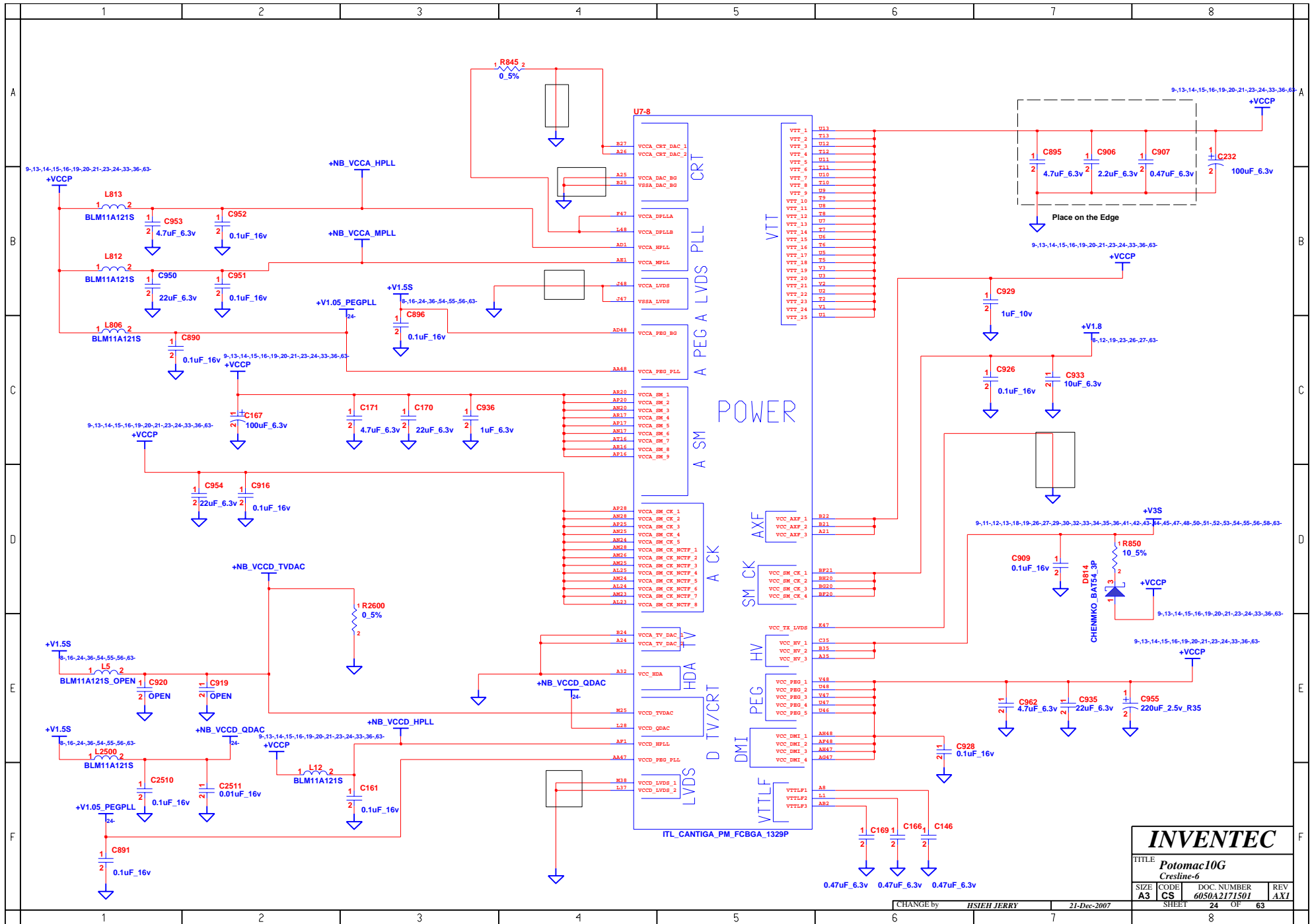
TITLE
Potomac10G
CRESTLINE-4-DDR2

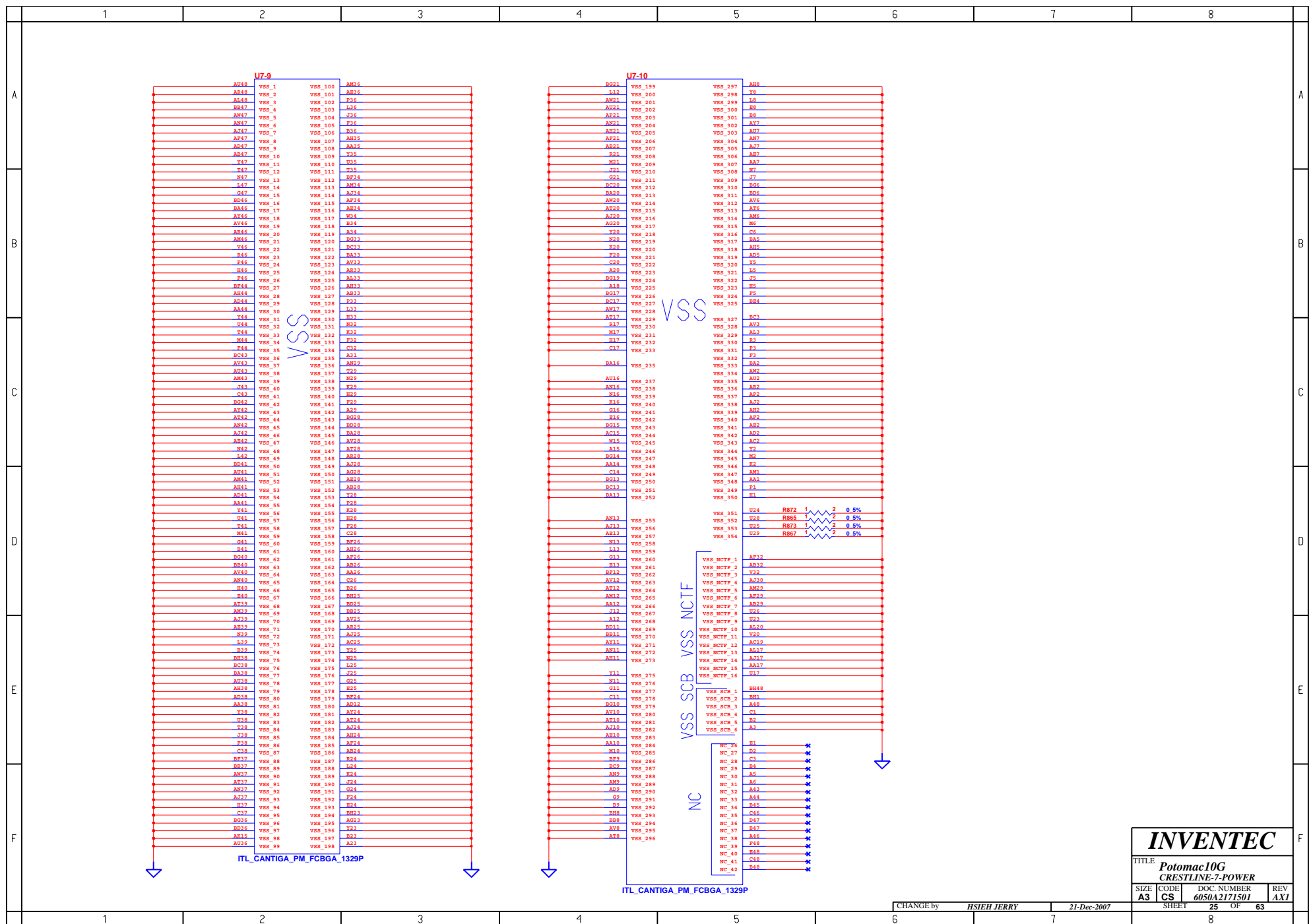
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

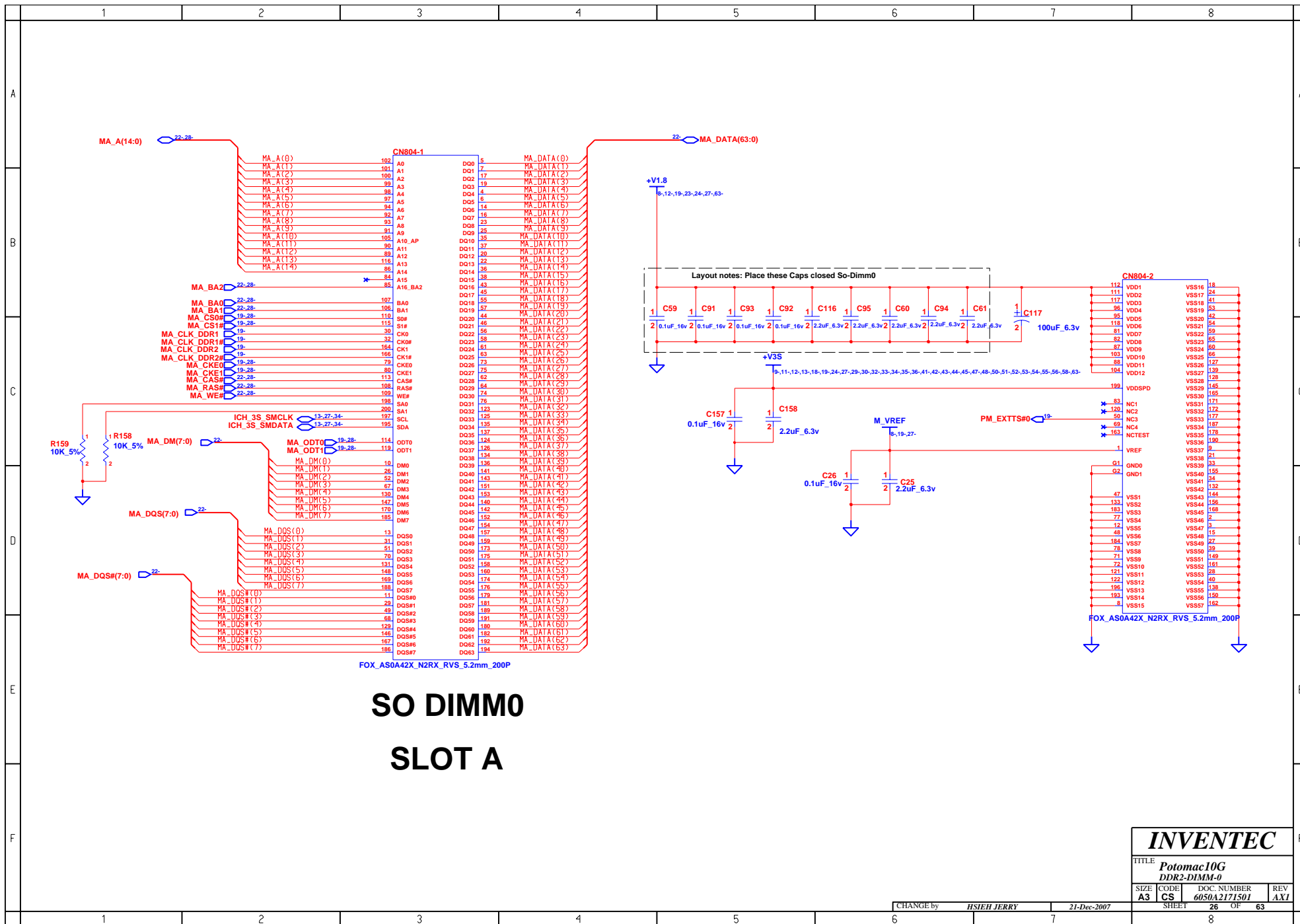
CHANGE by **HSEH JERRY** 21-Dec-2007

SHEET 22 OF 63

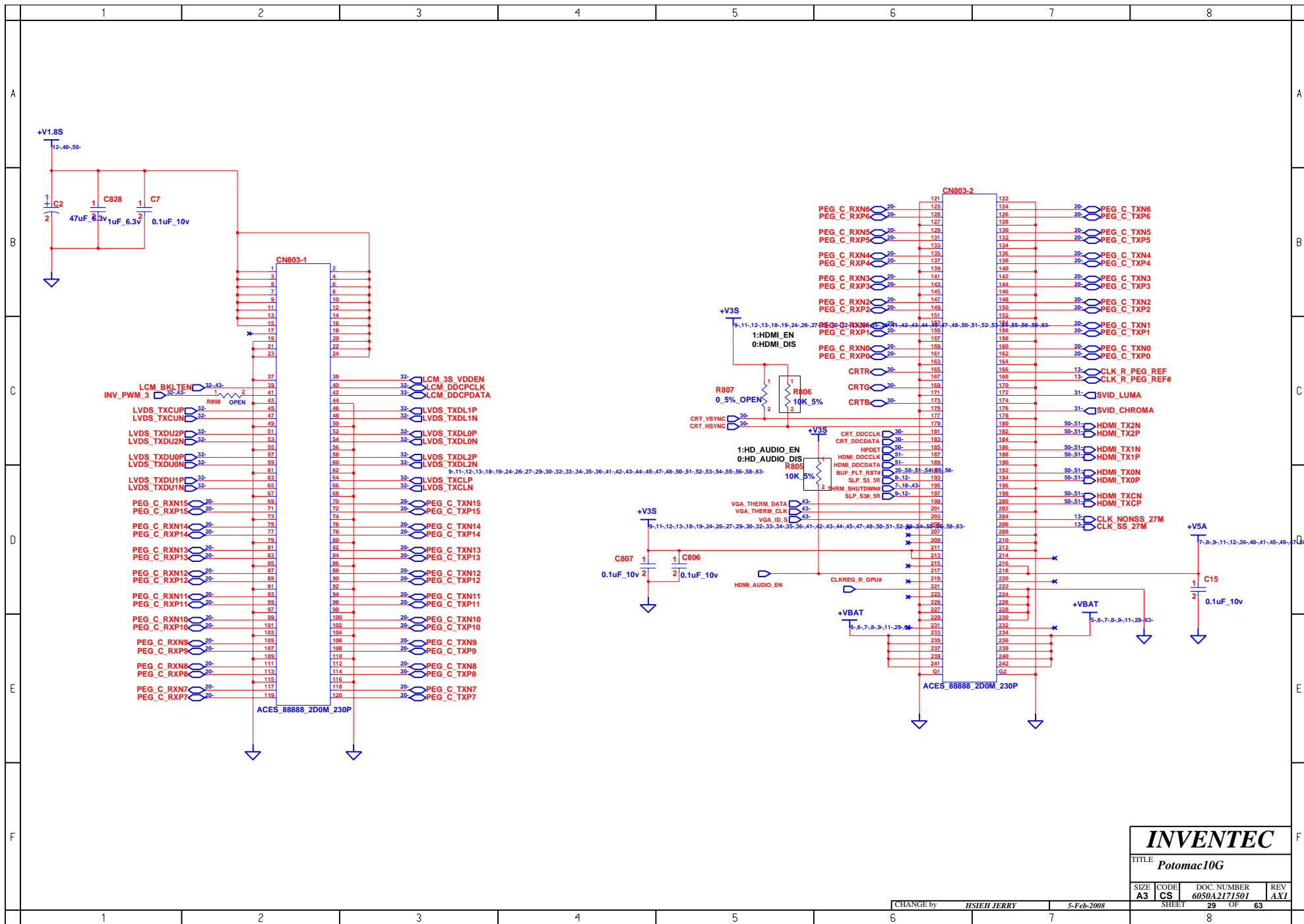












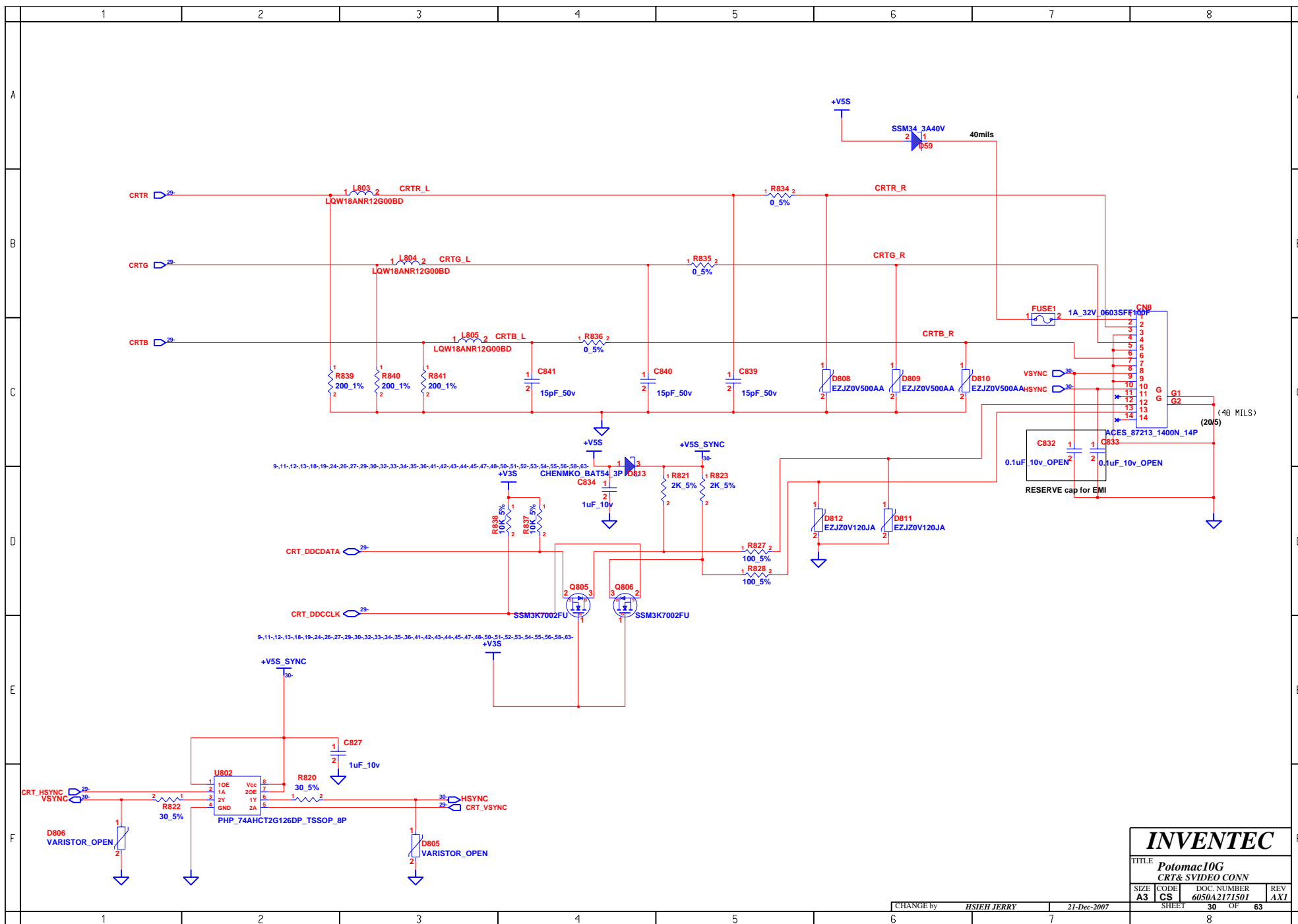
INVENTEC

TITLE
Potomac10G

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

CHANGE by **HSEH JERRY** 5-Feb-2008

SHEET 29 OF 63

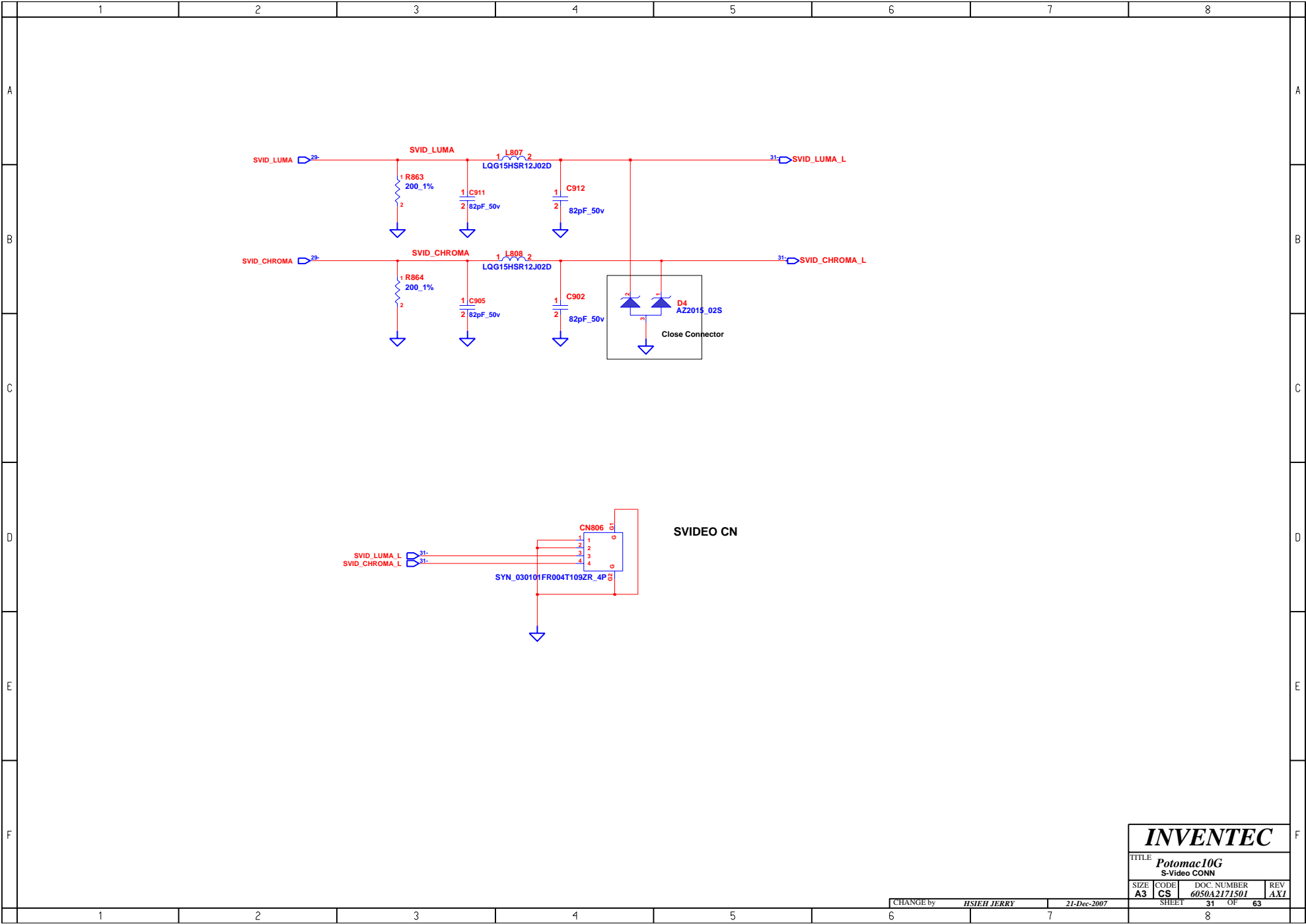


INVENTEC

TITLE		
Potomac10G		
CRT & SVIDEO CONN		
SIZE	CODE	DOC. NUMBER
A3	CS	6050A2171501
REV		AXI

CHANGE by HSEH JERRY 21-Dec-2007

SHEET 30 OF 63



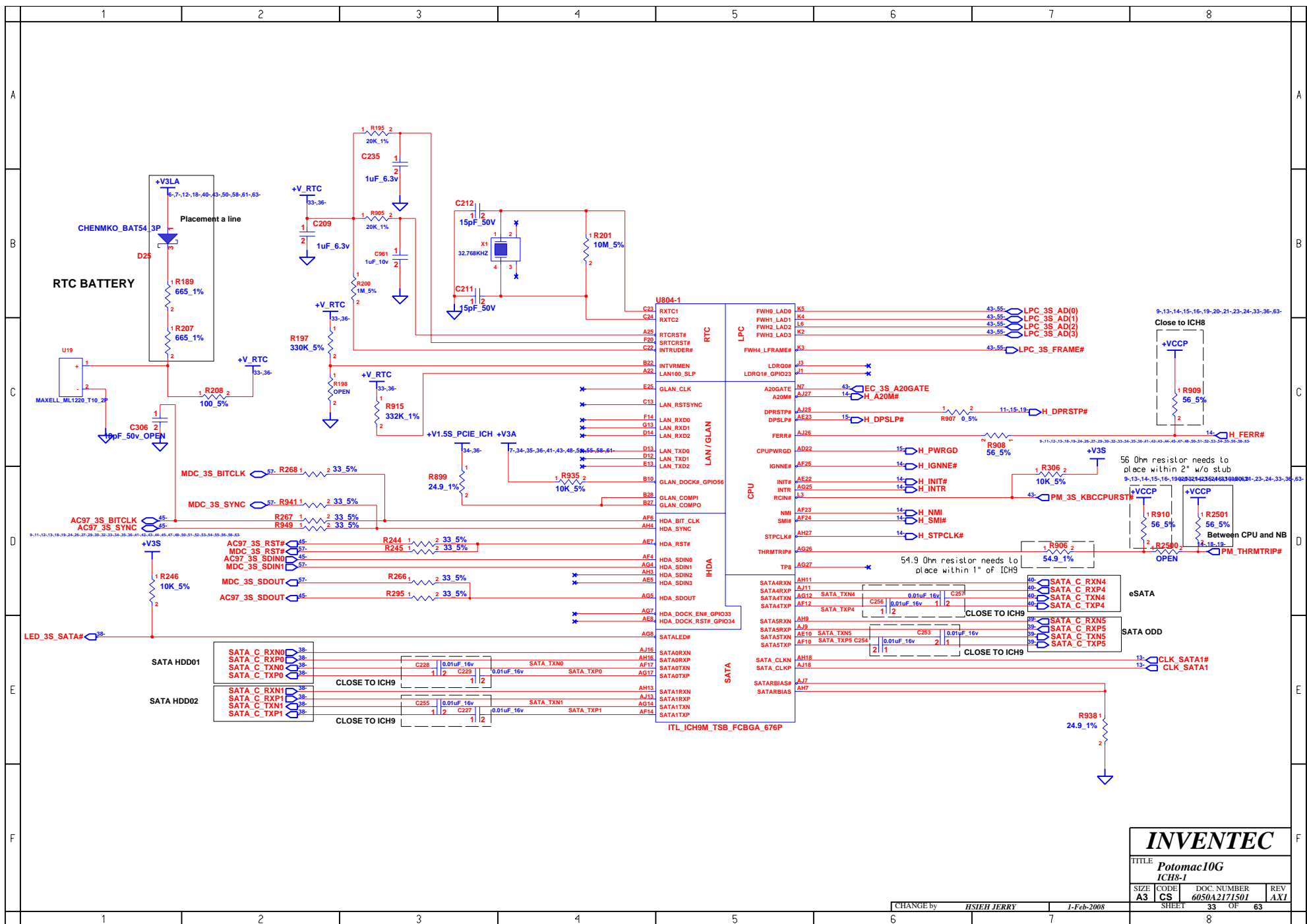
INVENTEC

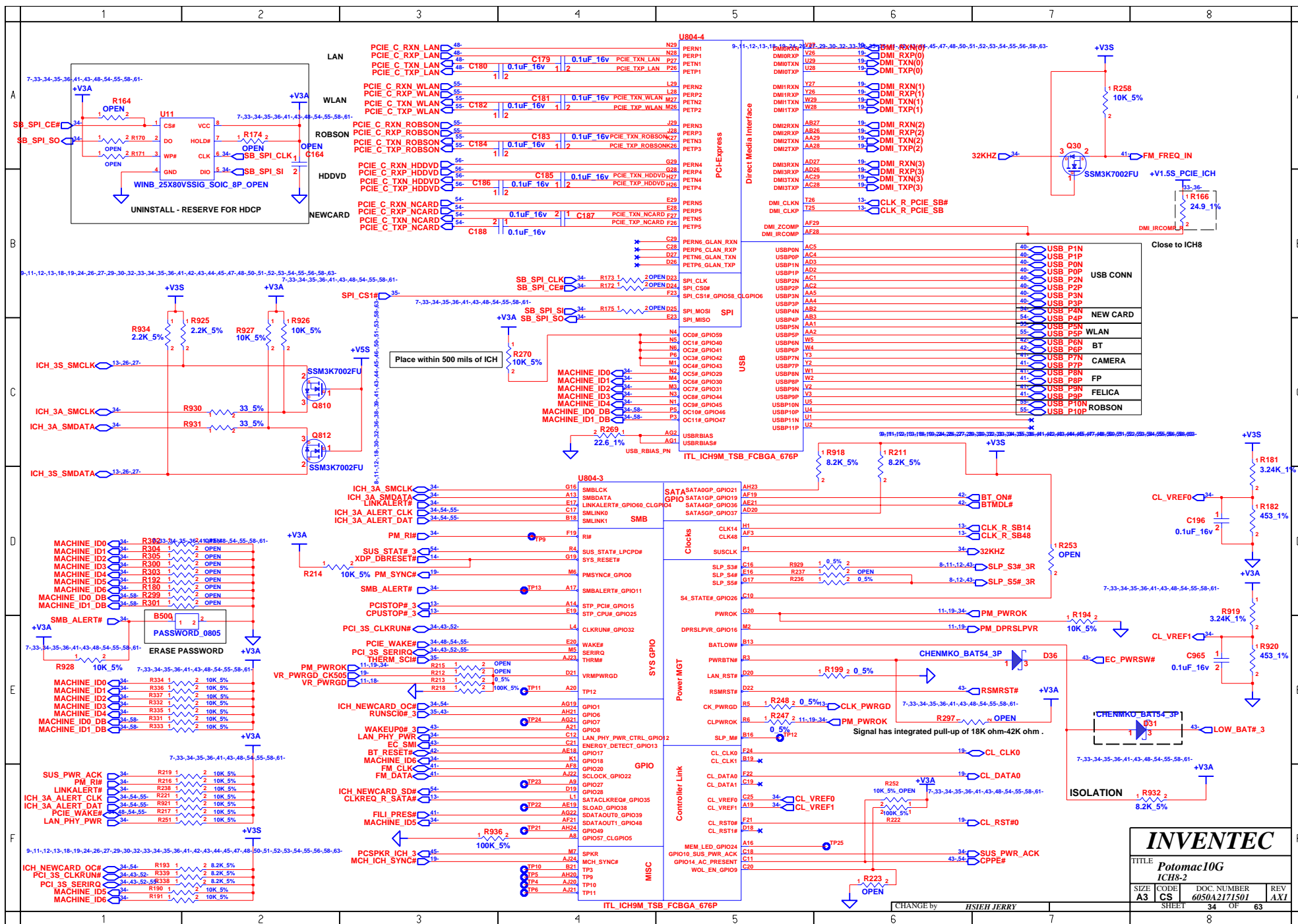
TITLE **Potomac10G**
S-Video CONN

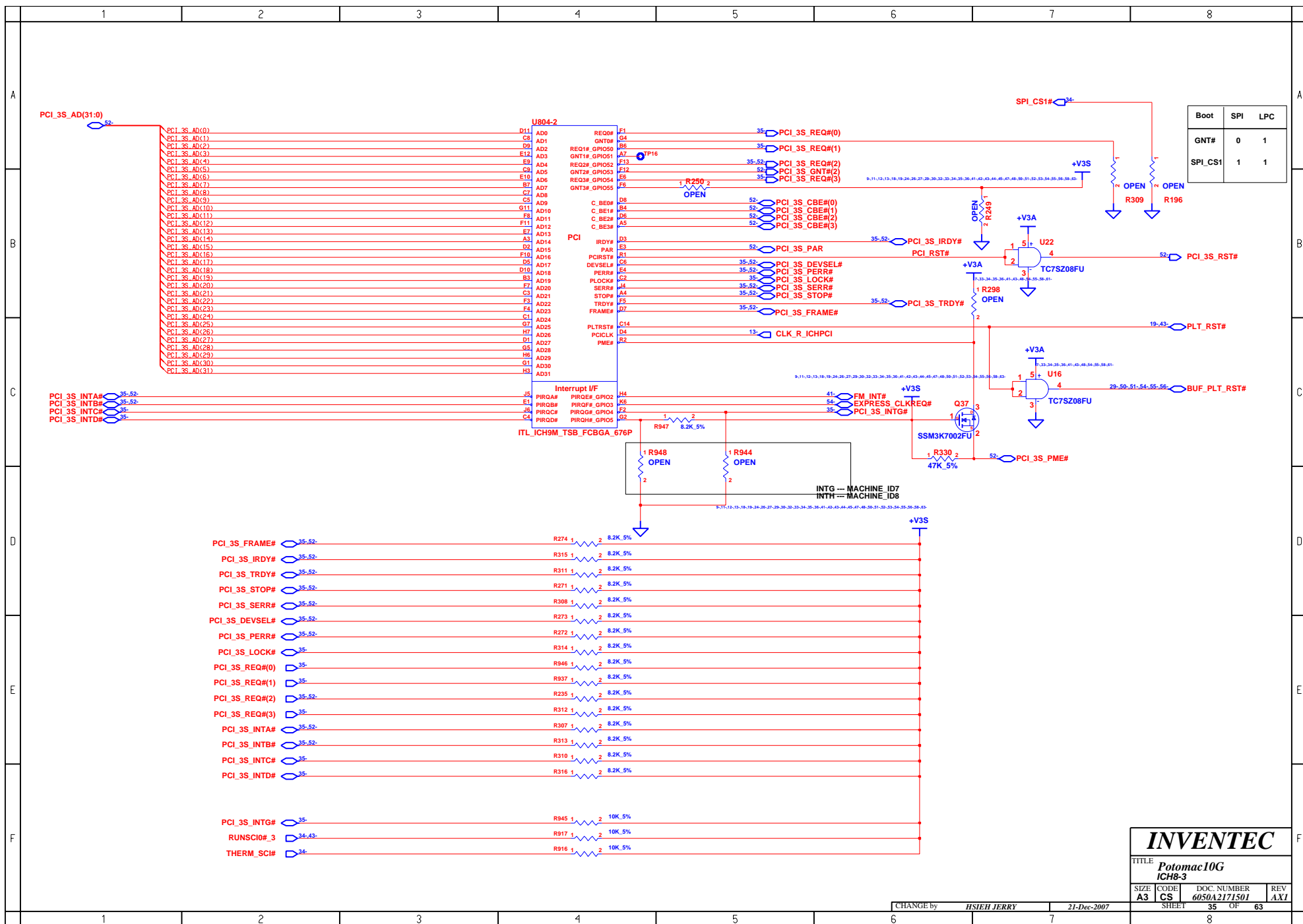
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
-------------------	-------------------	------------------------------------	-------------------

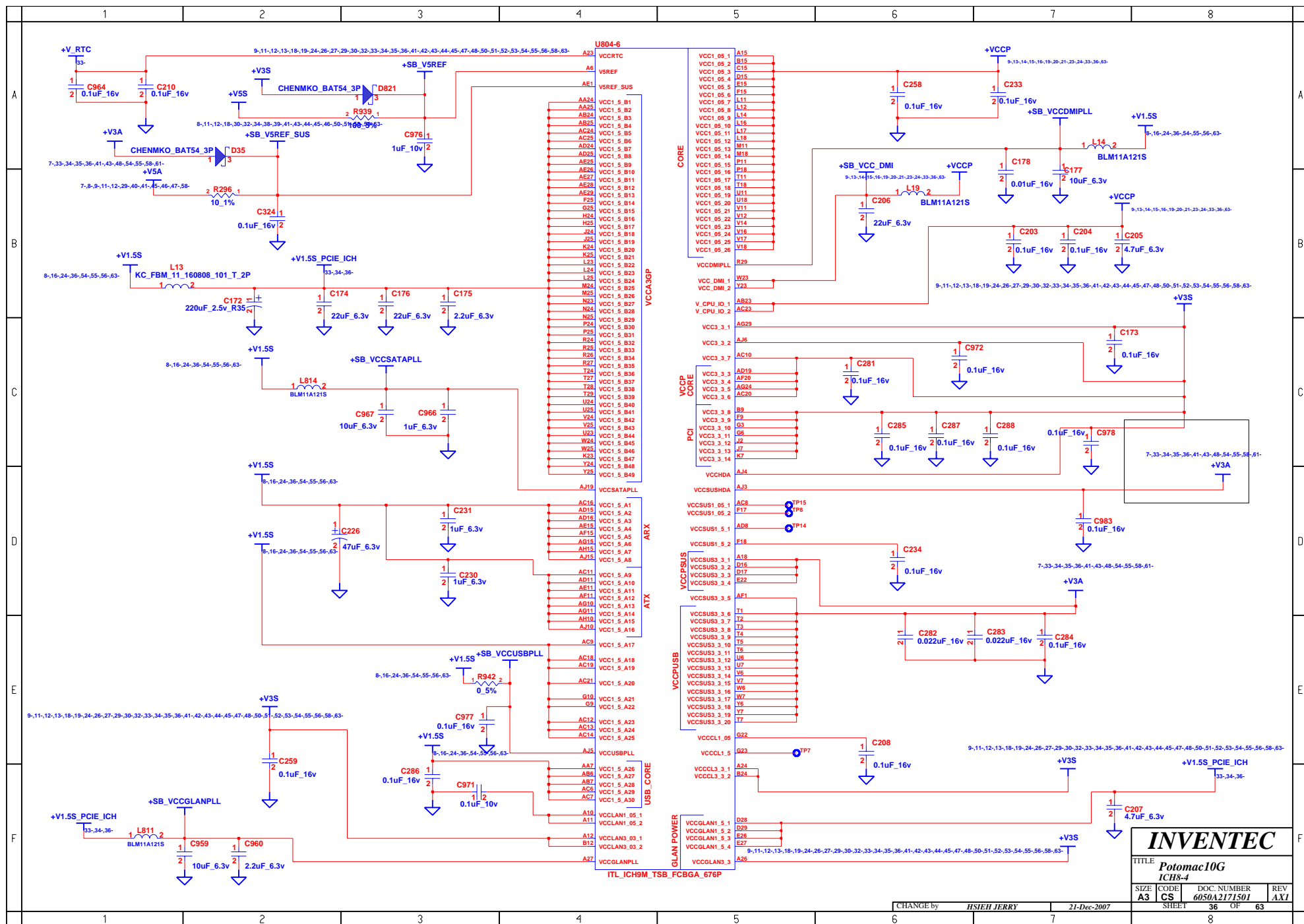
CHANGE by **HSEH JERRY** 21-Dec-2007

SHEET 31 OF 63



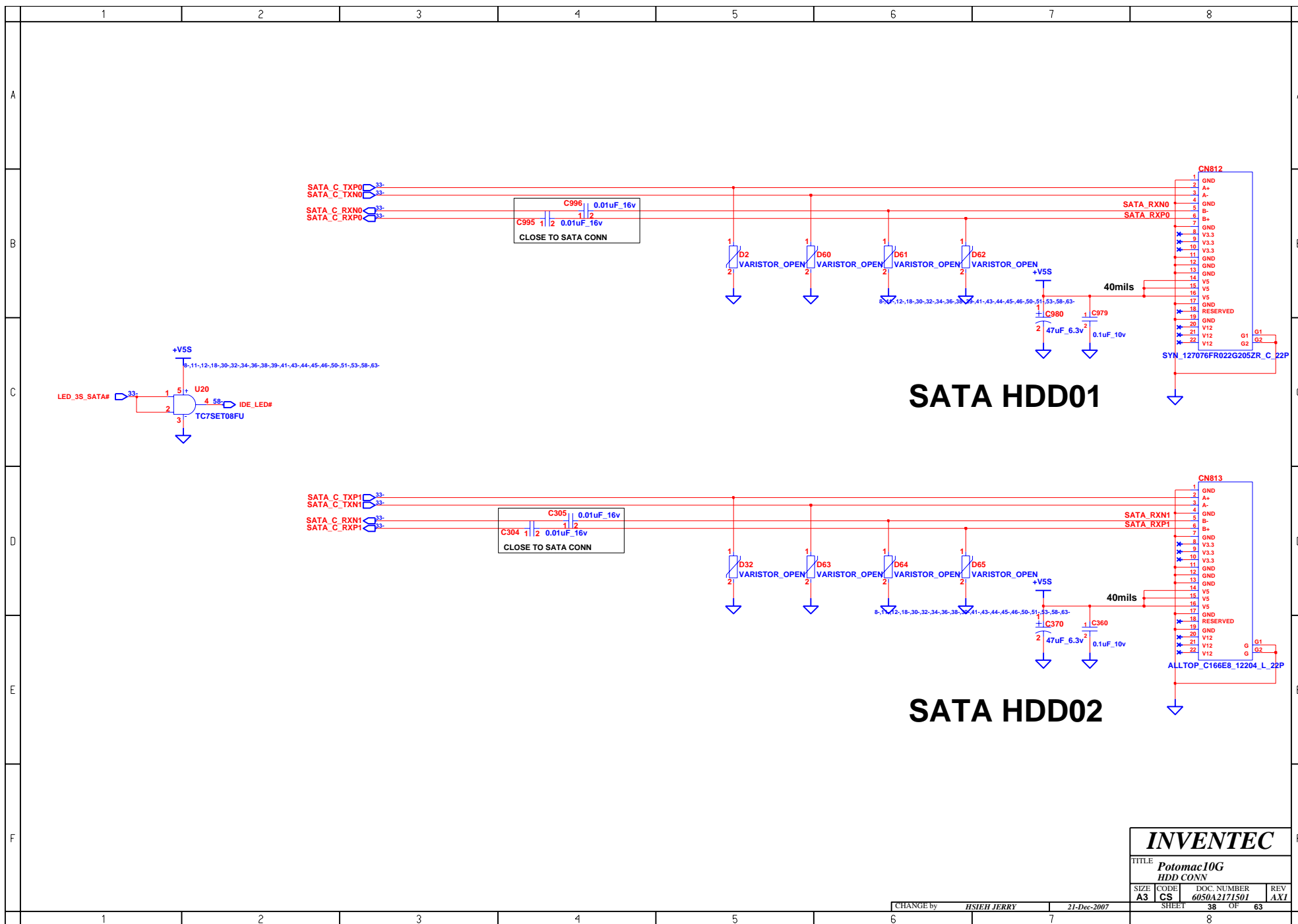


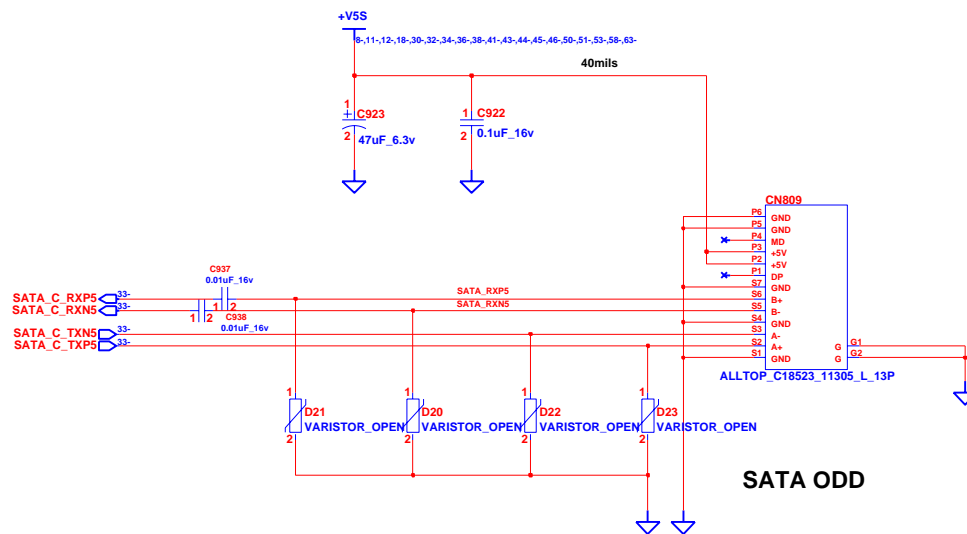




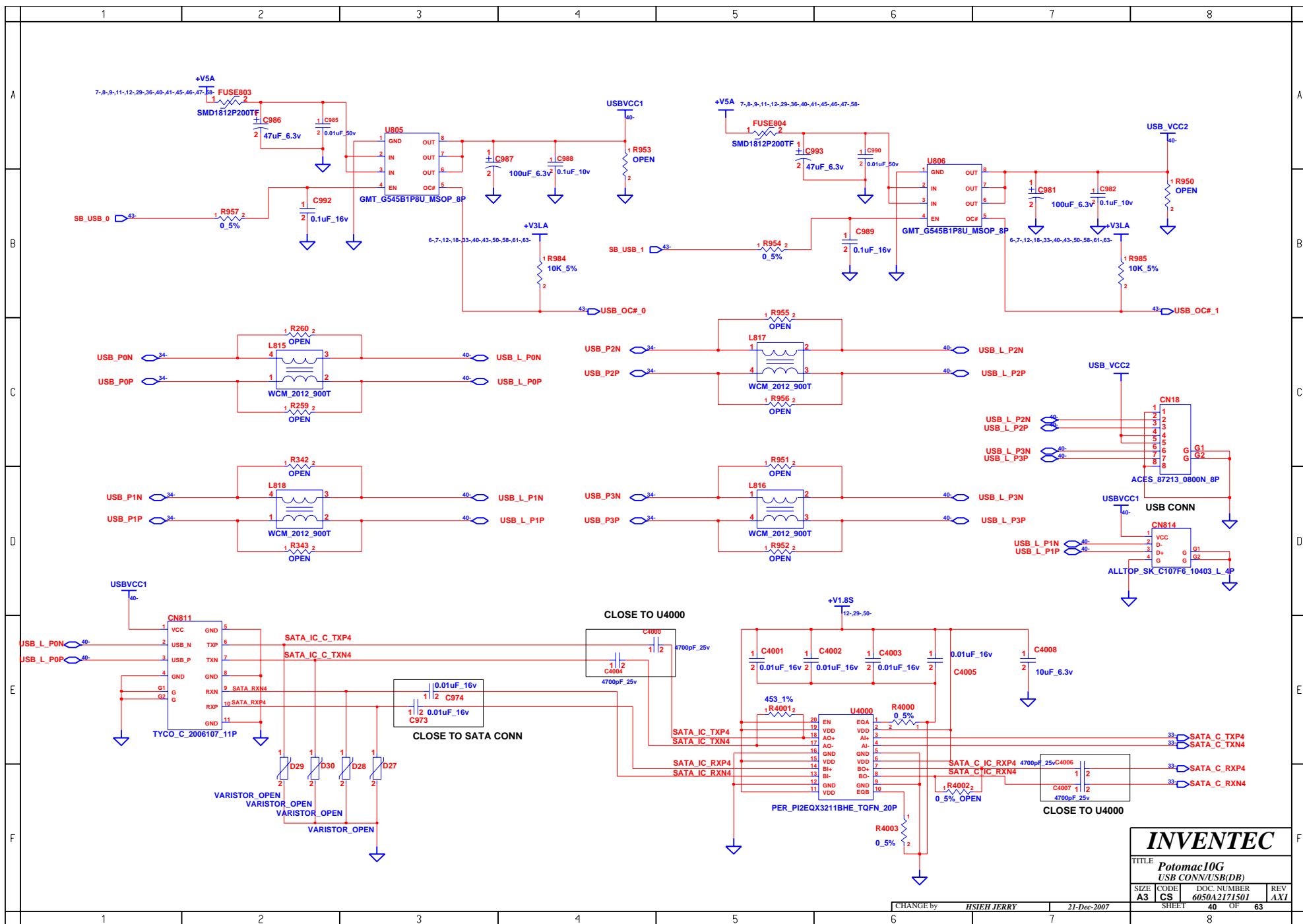
	1	2	3	4	5	6	7	8
A								
B								
C								
D								
E								
F								

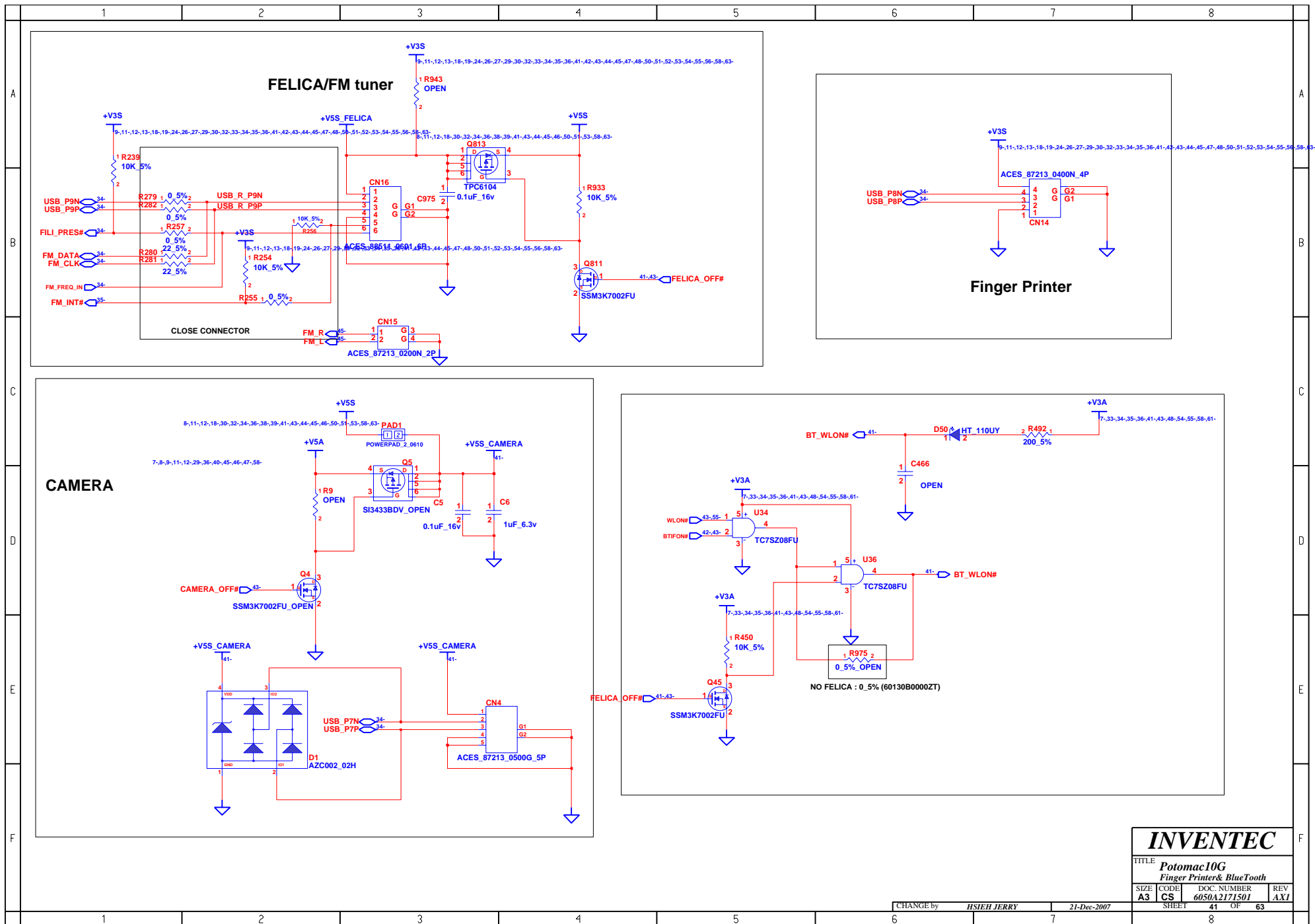
INVENTEC			
TITLE Potomac10G			
ICH8-5			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
CHANGE by HSIEH JERRY		21-Dec-2007	SHEET 37 OF 63

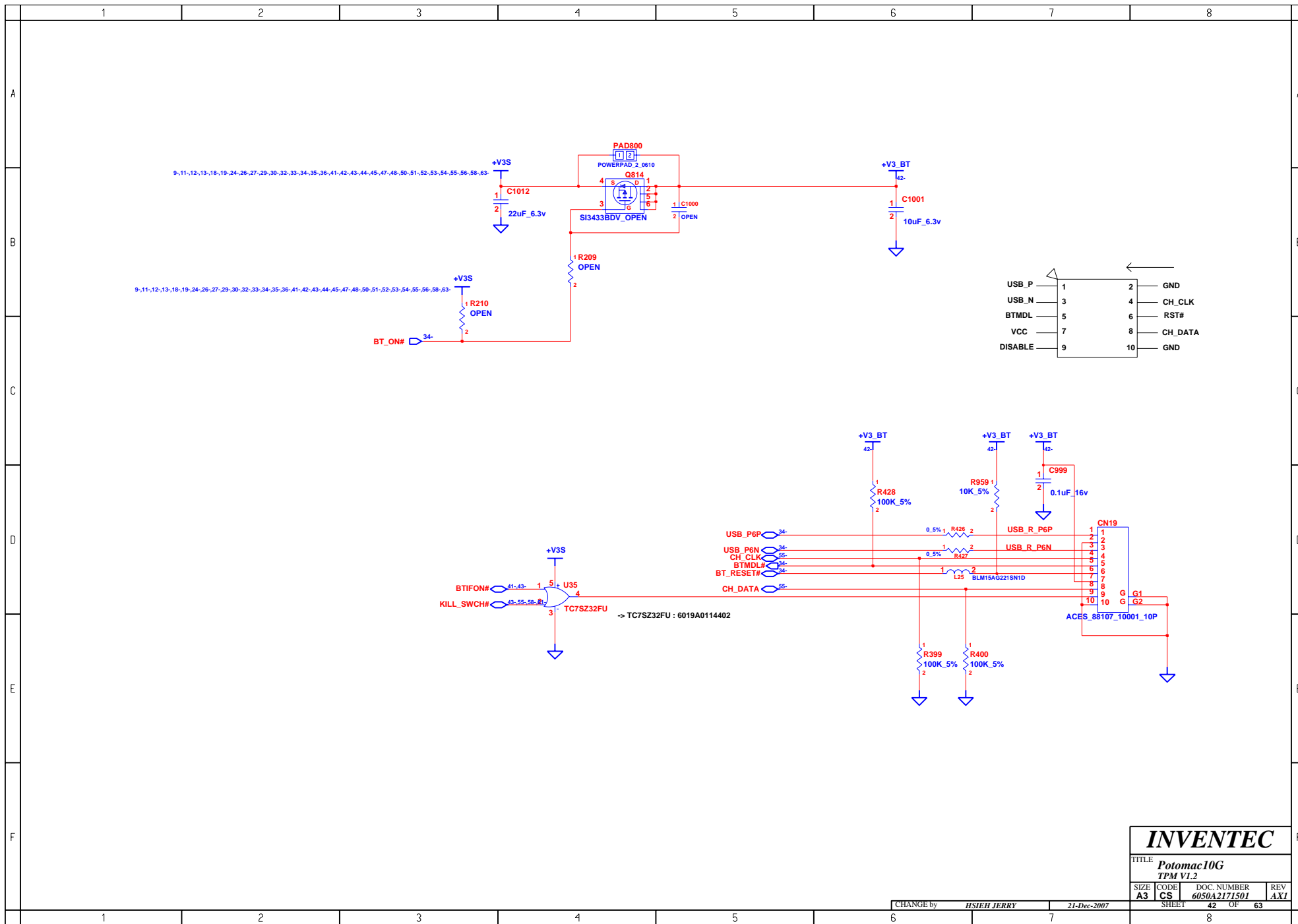




INVENTEC			
TITLE			
Potomac10G			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1
CHANGE by		SHEET	OF
HSEH JERRY		39	63
21-Dec-2007		8	





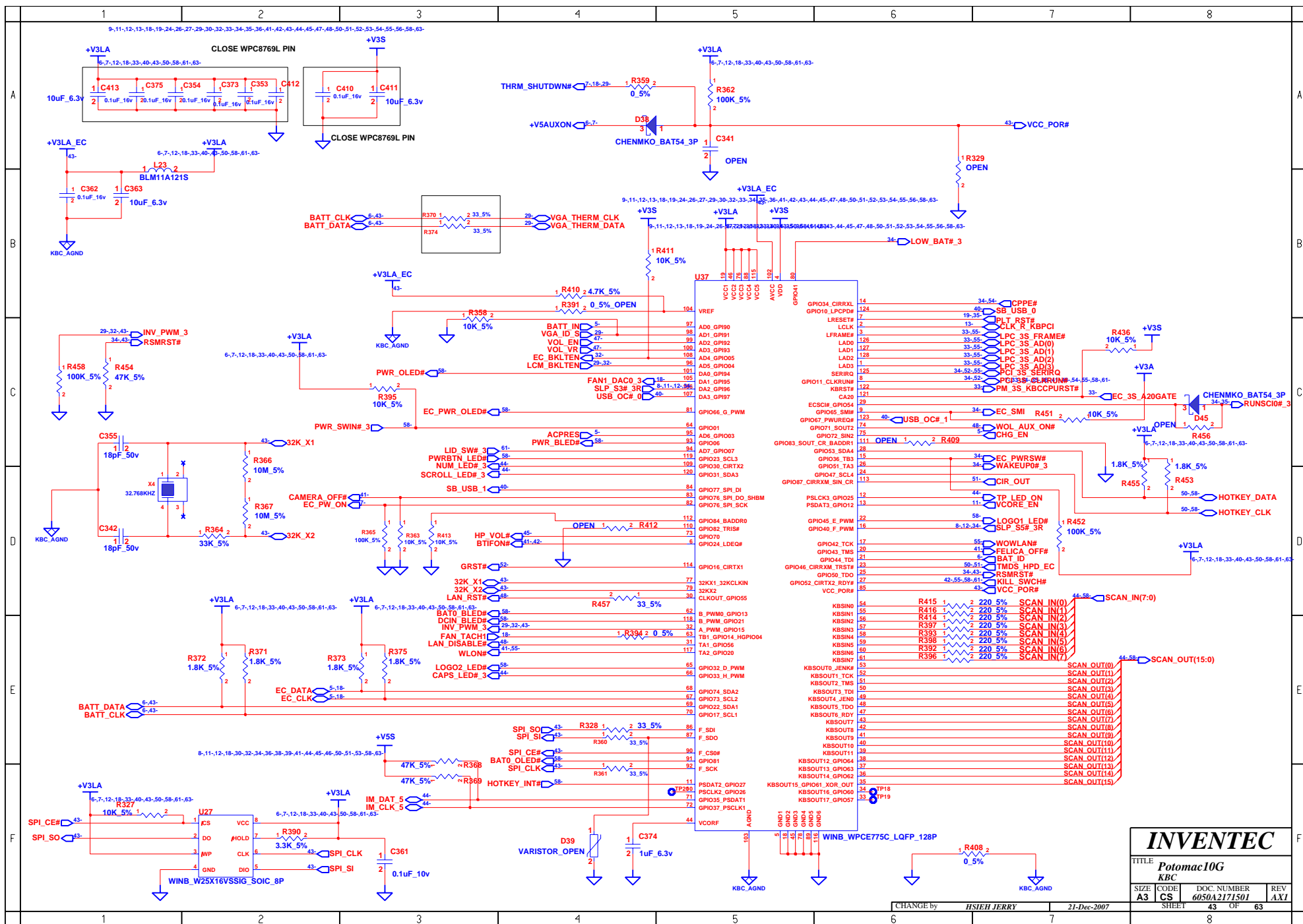


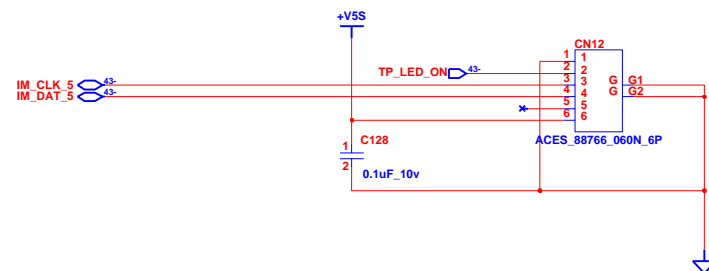
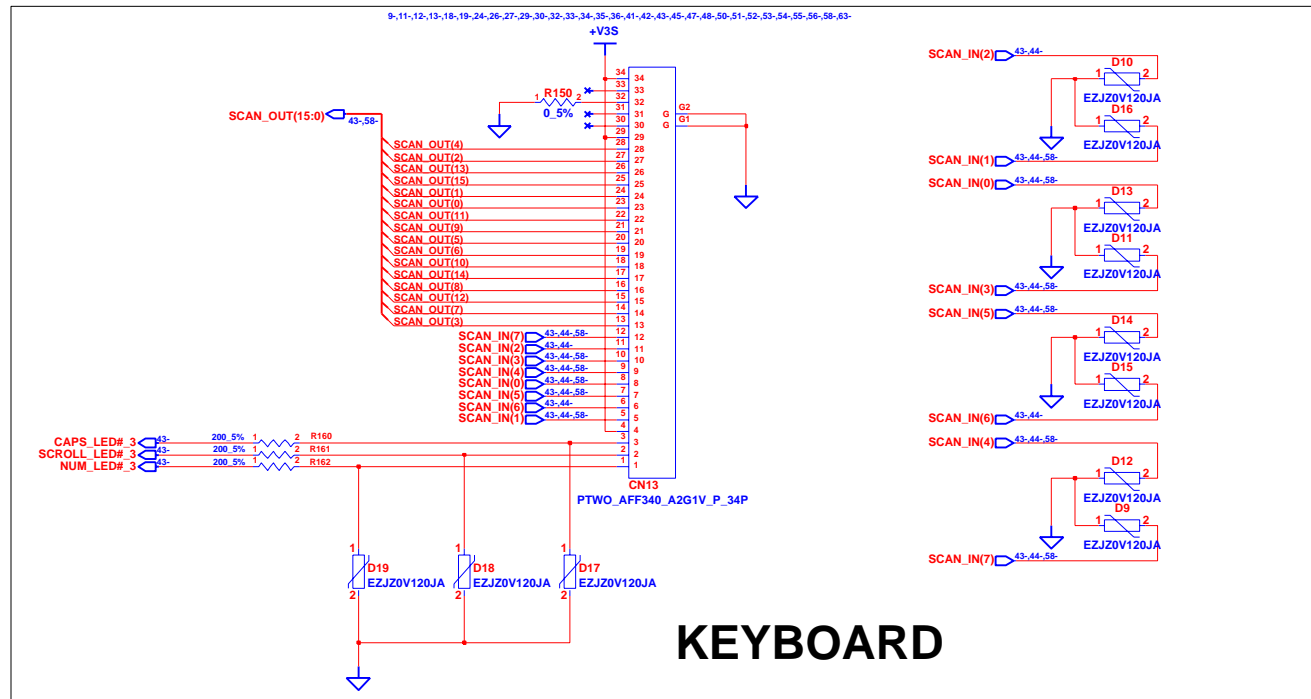
INVENTEC

TITLE			
Potomac10G			
TPM V1.2			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

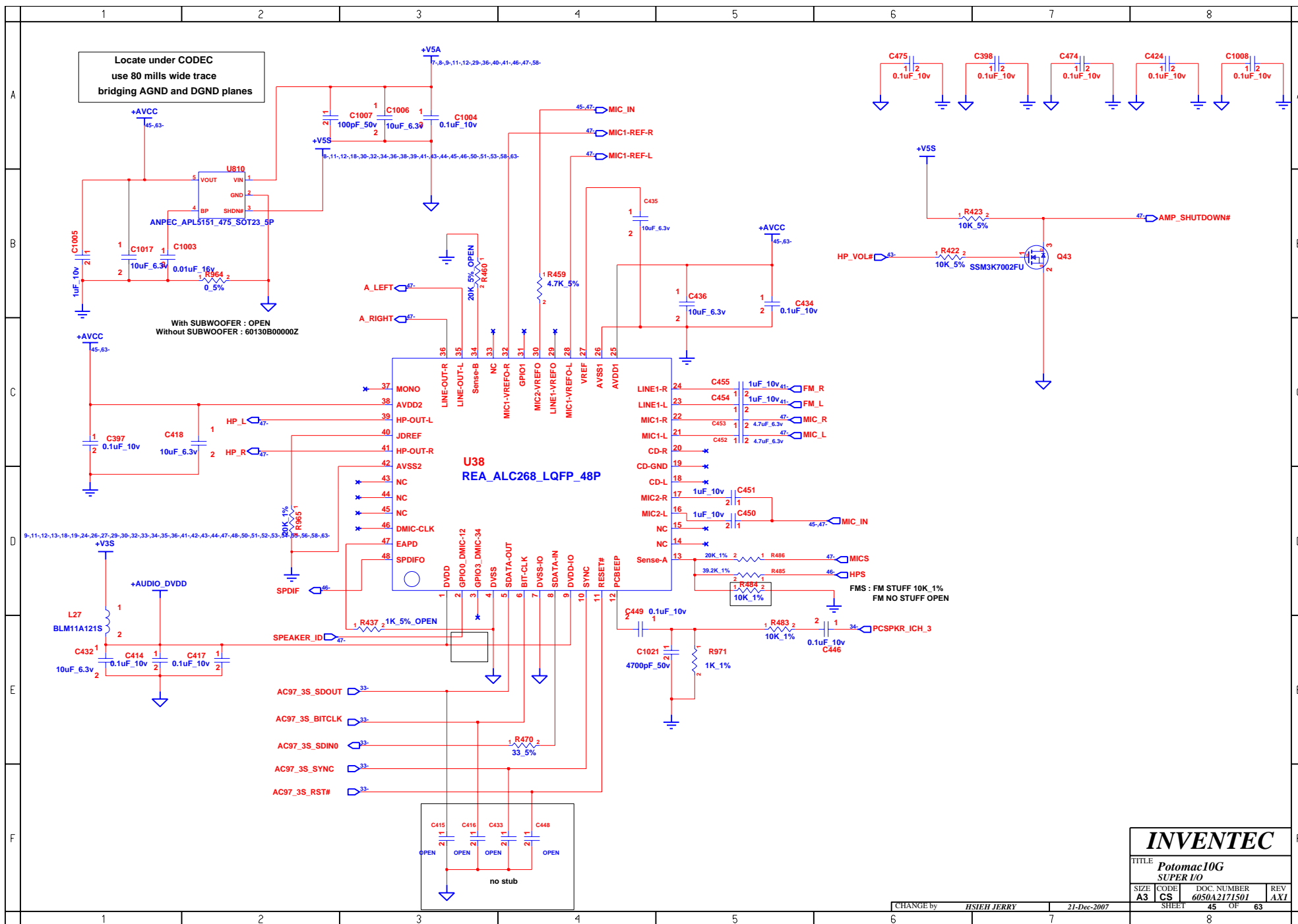
CHANGE by HSEH JERRY 21-Dec-2007

SHEET 42 OF 63





INVENTEC			
TITLE			
Potomac10G			
INT.KBC/POINT DEVICES			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AXI
CHANGE by		21-Dec-2007	
SHEET		44	OF 63



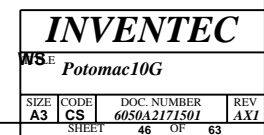
INVENTEC

TITLE
**Potomac10G
SUPER I/O**

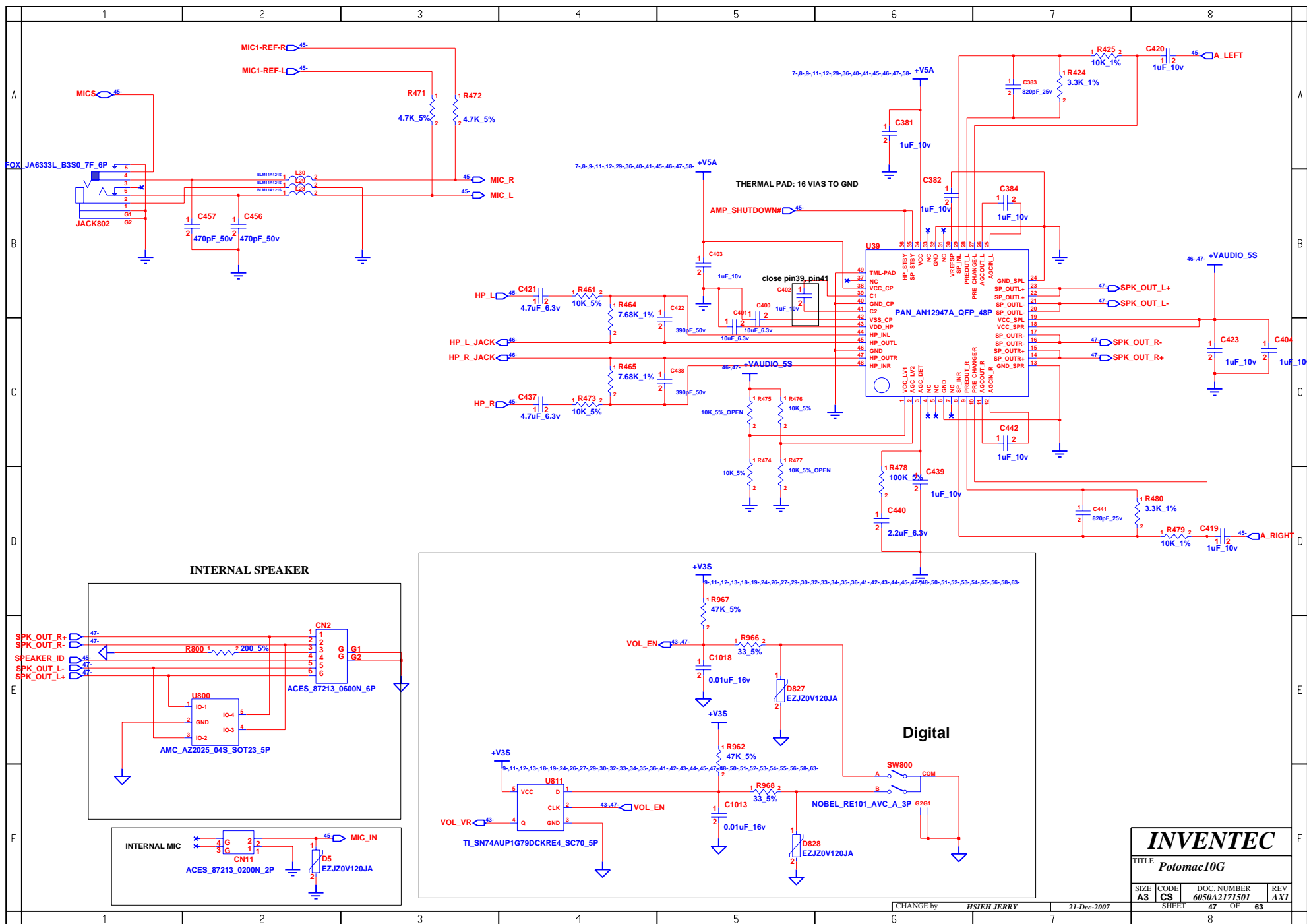
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

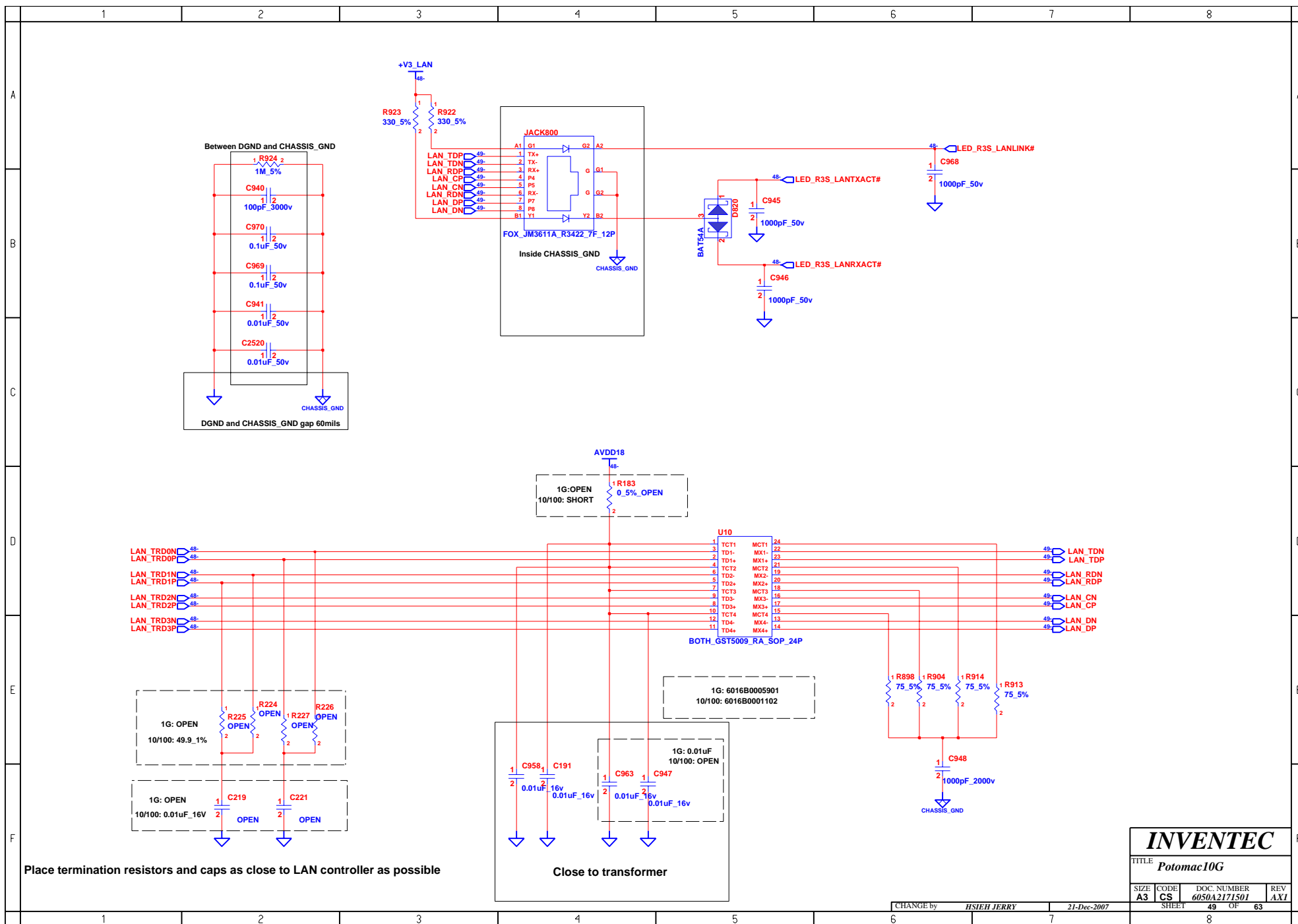
CHANGE by **HSEH JERRY** 21-Dec-2007

SHEET 45 OF 63



CHANGE by	<i>HSIEH JERRY</i>	<i>21-Dec-2007</i>
-----------	--------------------	--------------------





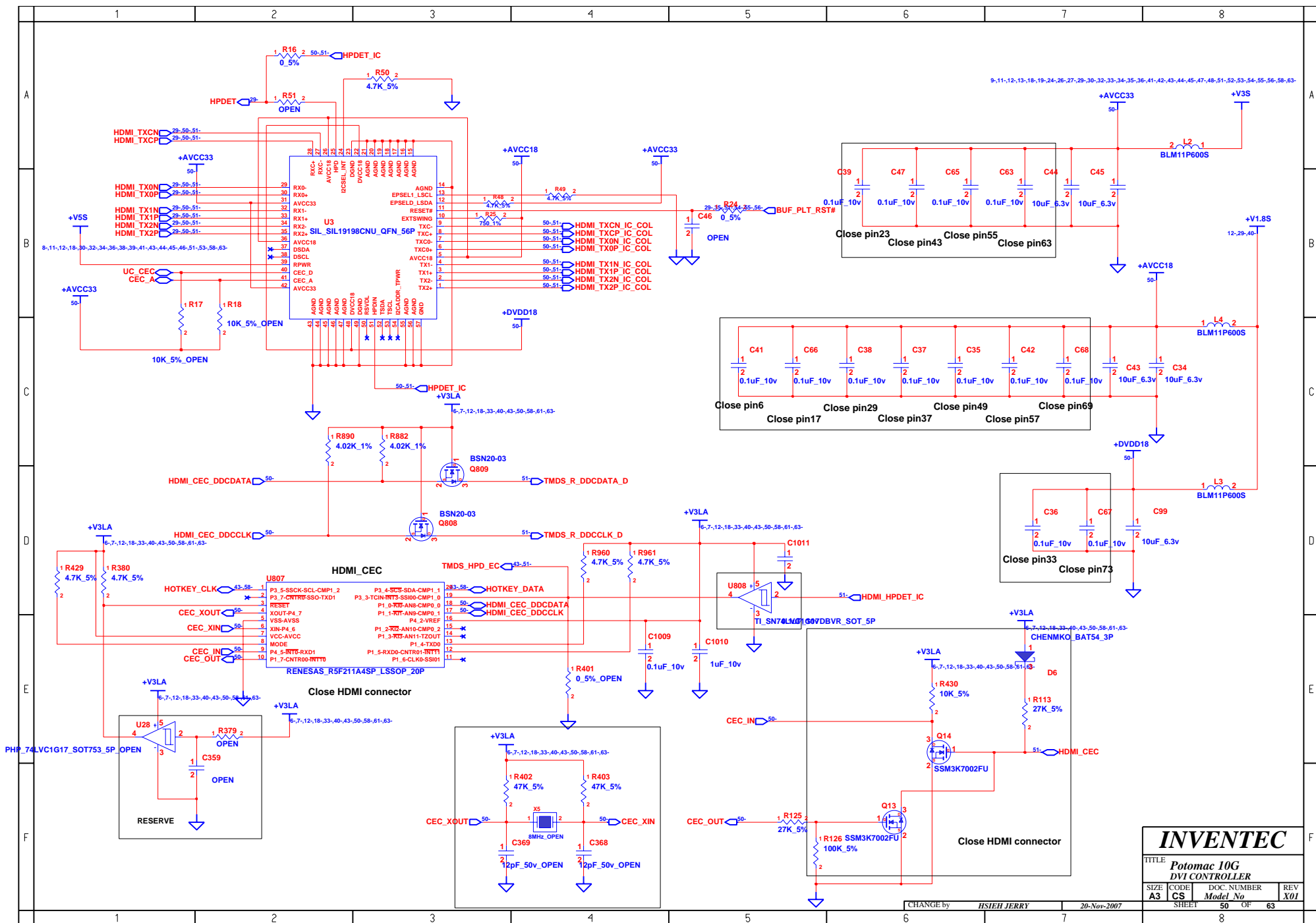
INVENTEC

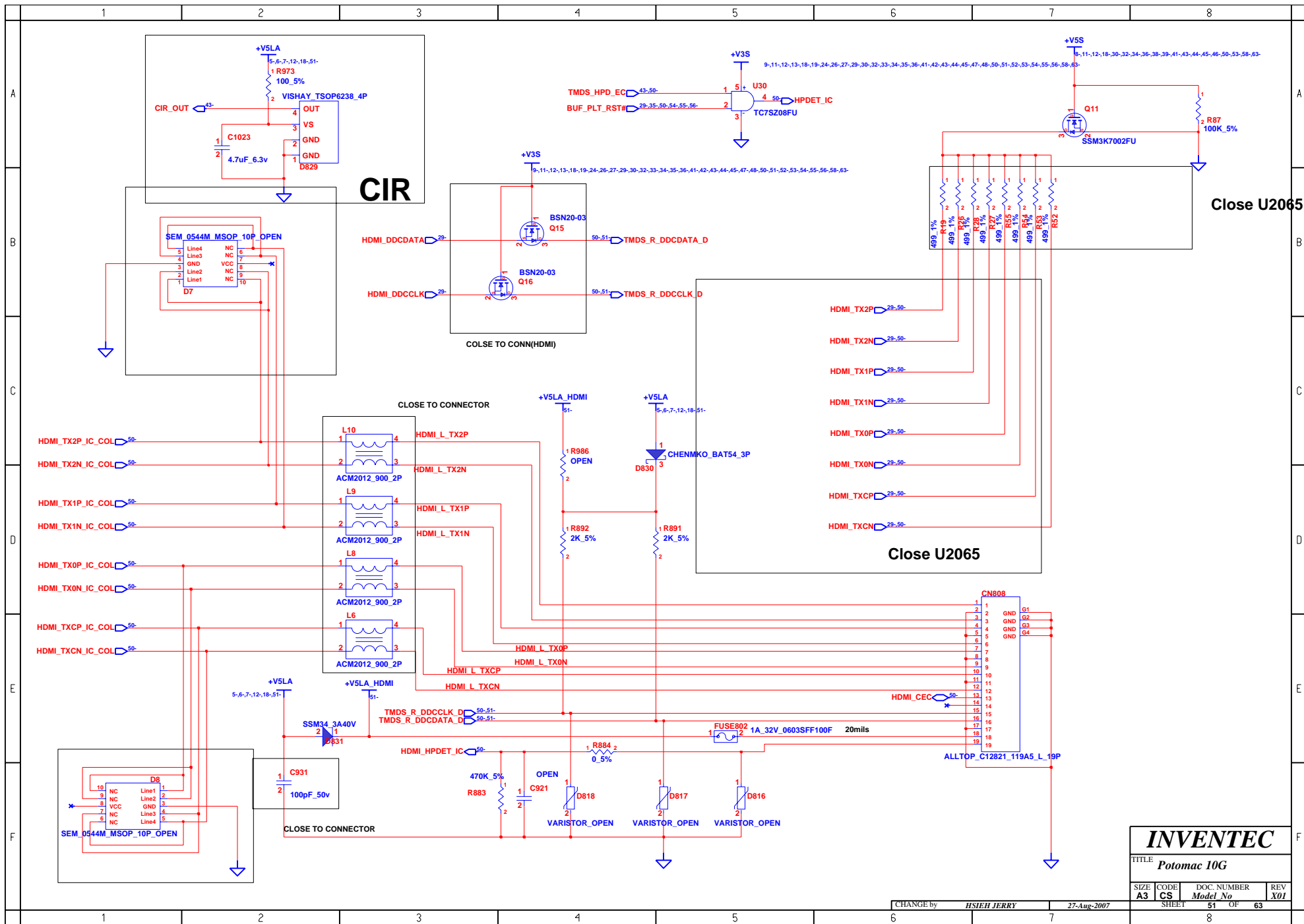
TITLE
Potomac10G

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

CHANGE by **HSEH JERRY** 21-Dec-2007

SHEET 49 OF 63





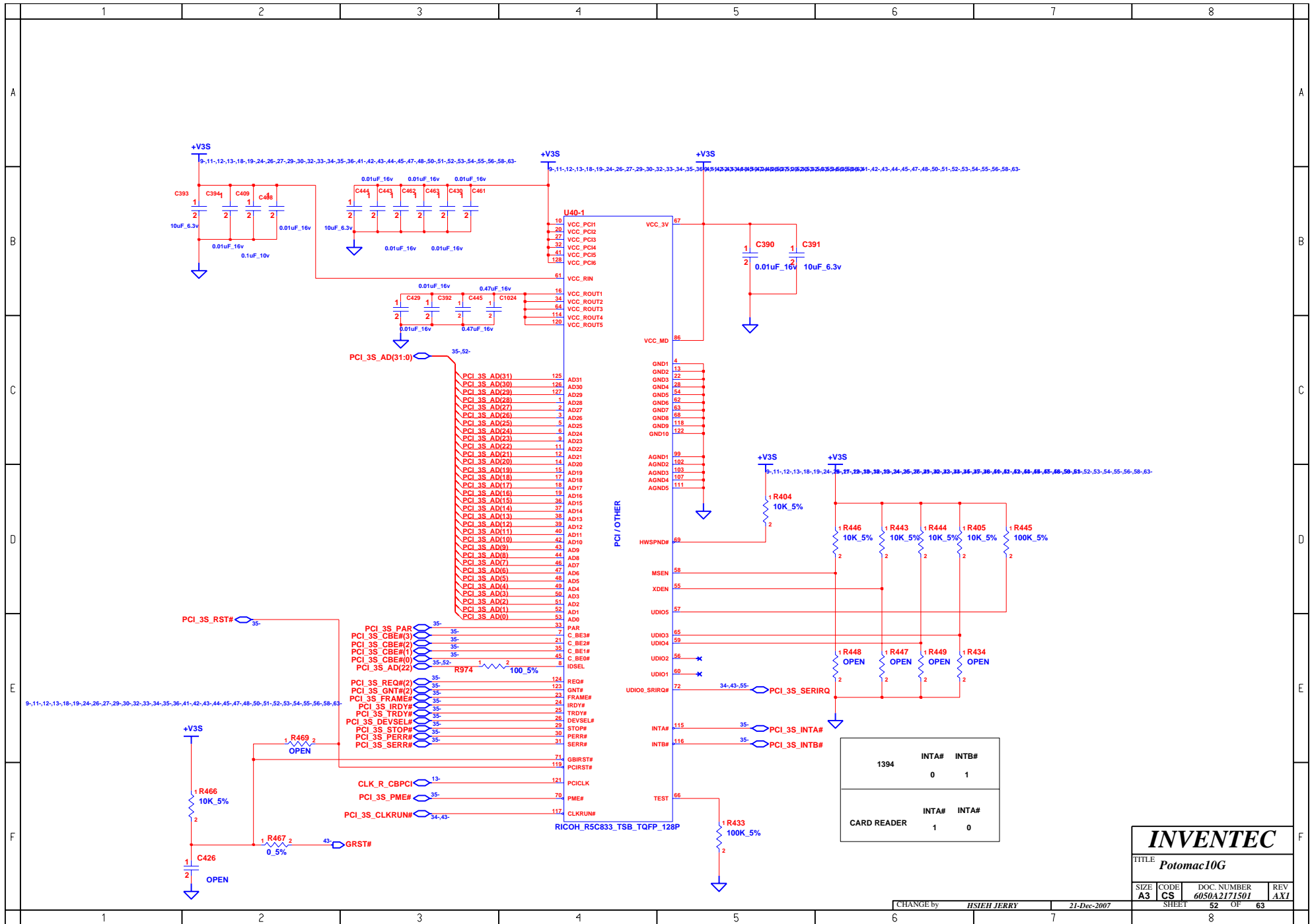
INVENTEC

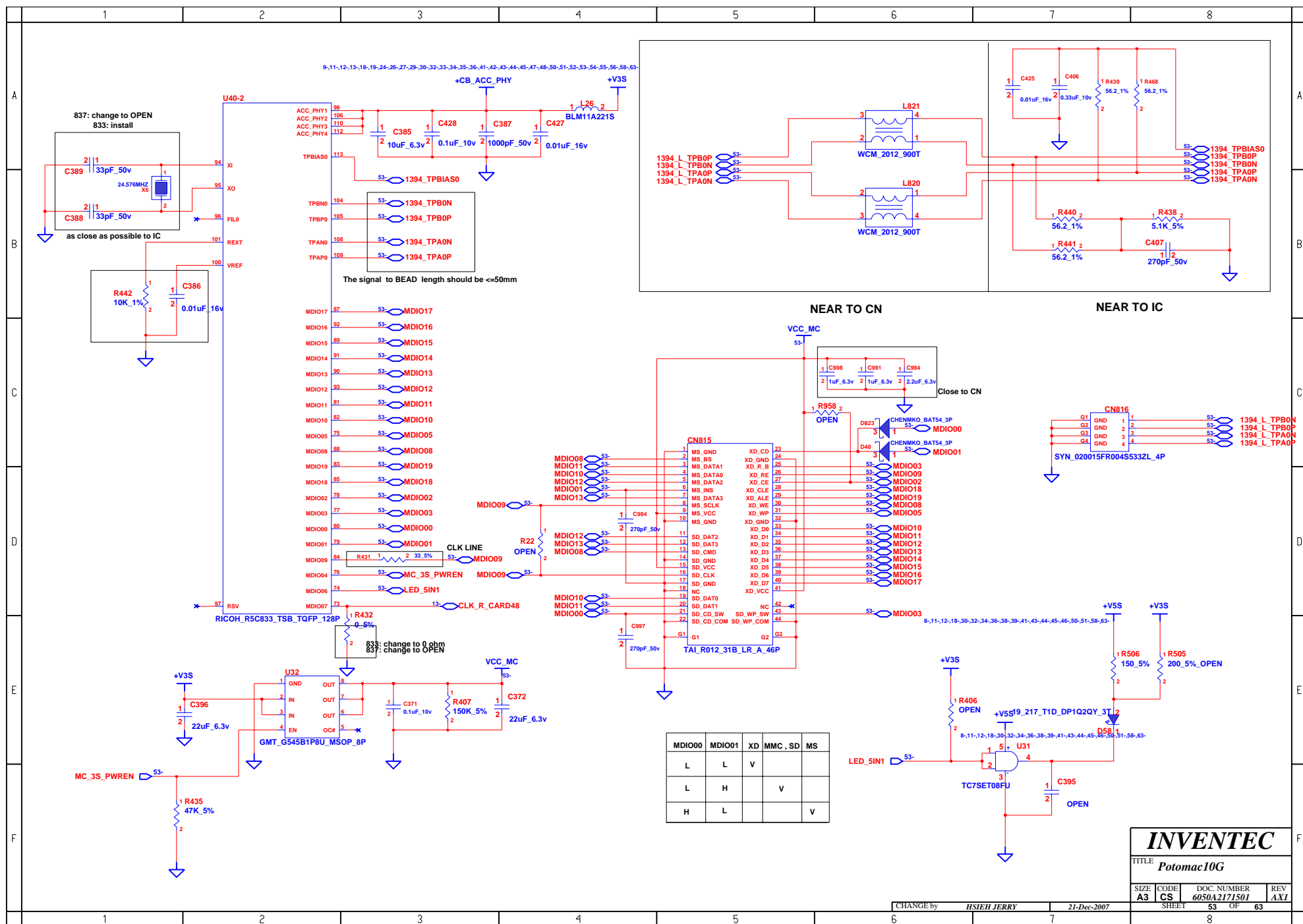
TITLE
Potomac 10G

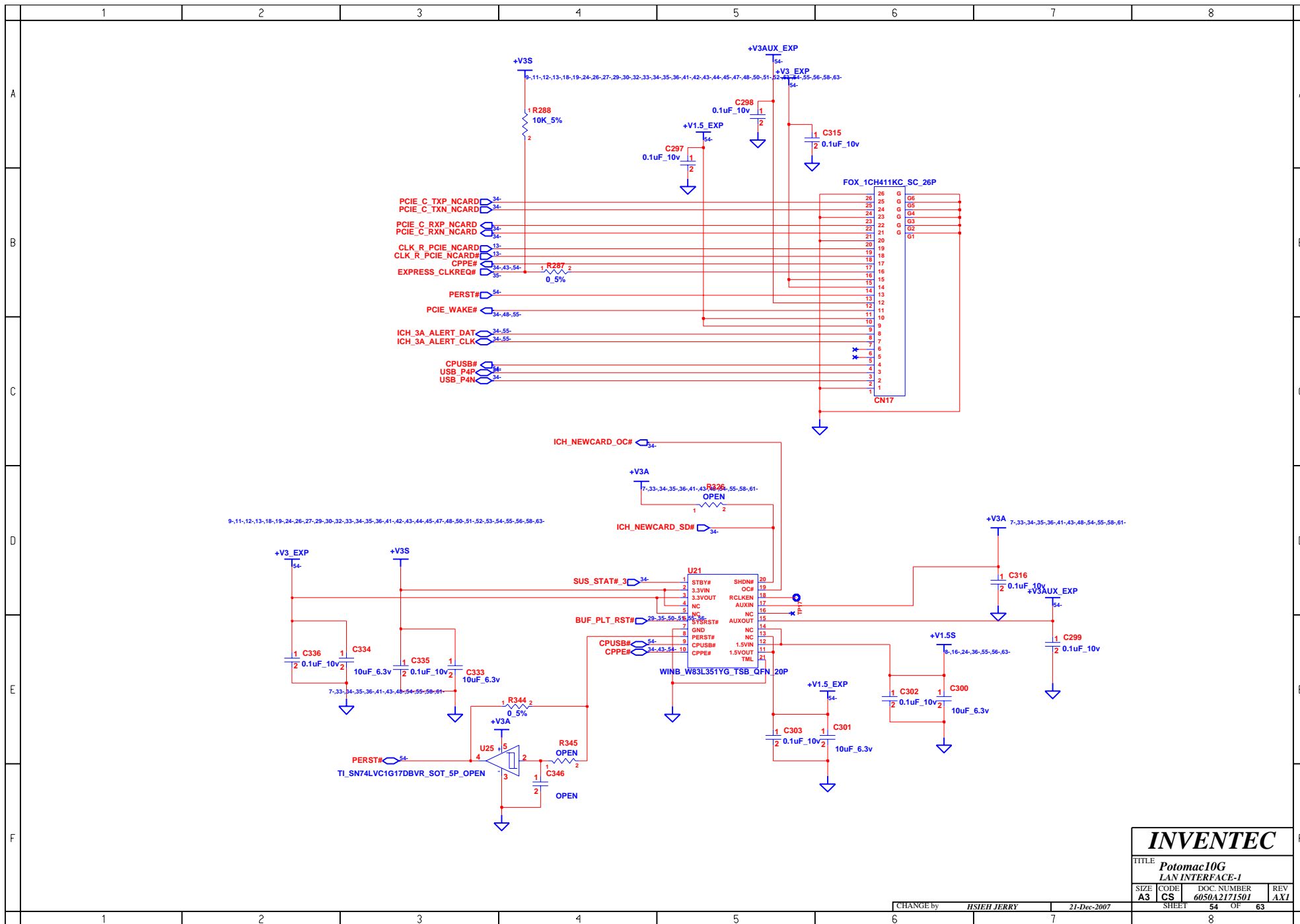
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by **HSEH JERRY** 27-Aug-2007

SHEET 51 OF 63







INVENTEC

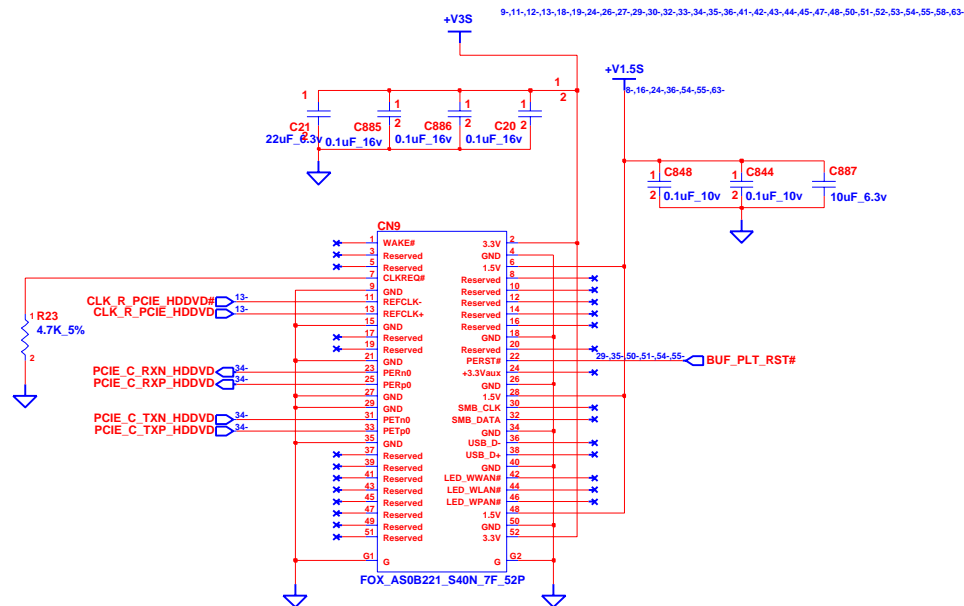
TITLE
Potomac10G
LAN INTERFACE-1

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

CHANGE by HSEH JERRY 21-Dec-2007

SHEET 54 OF 63

HD-DVD Bordcom



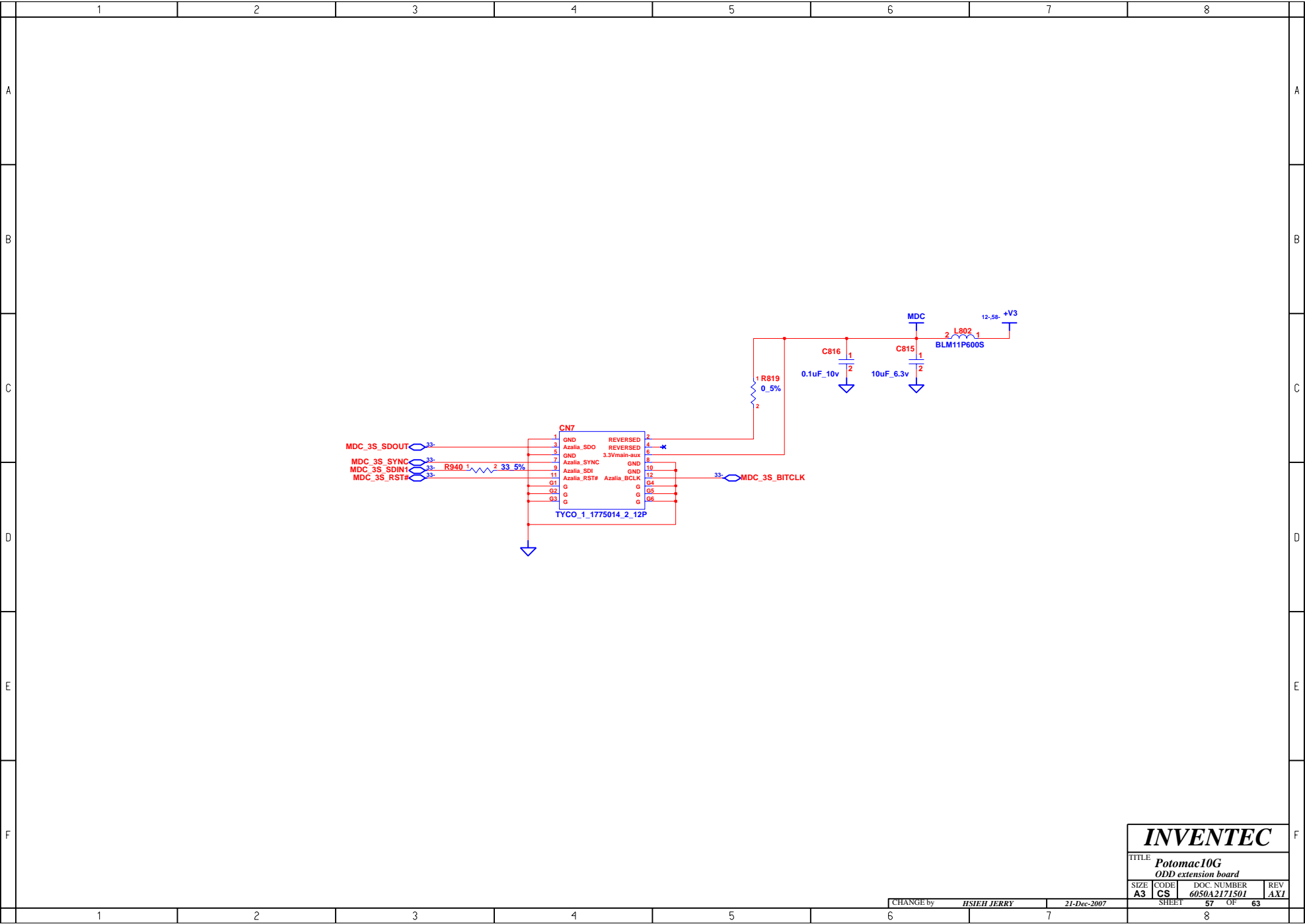
INVENTEC

TITLE
Potomac10G

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AXI

CHANGE by **HSEH JERRY** 21-Dec-2007

SHEET 56 OF 63



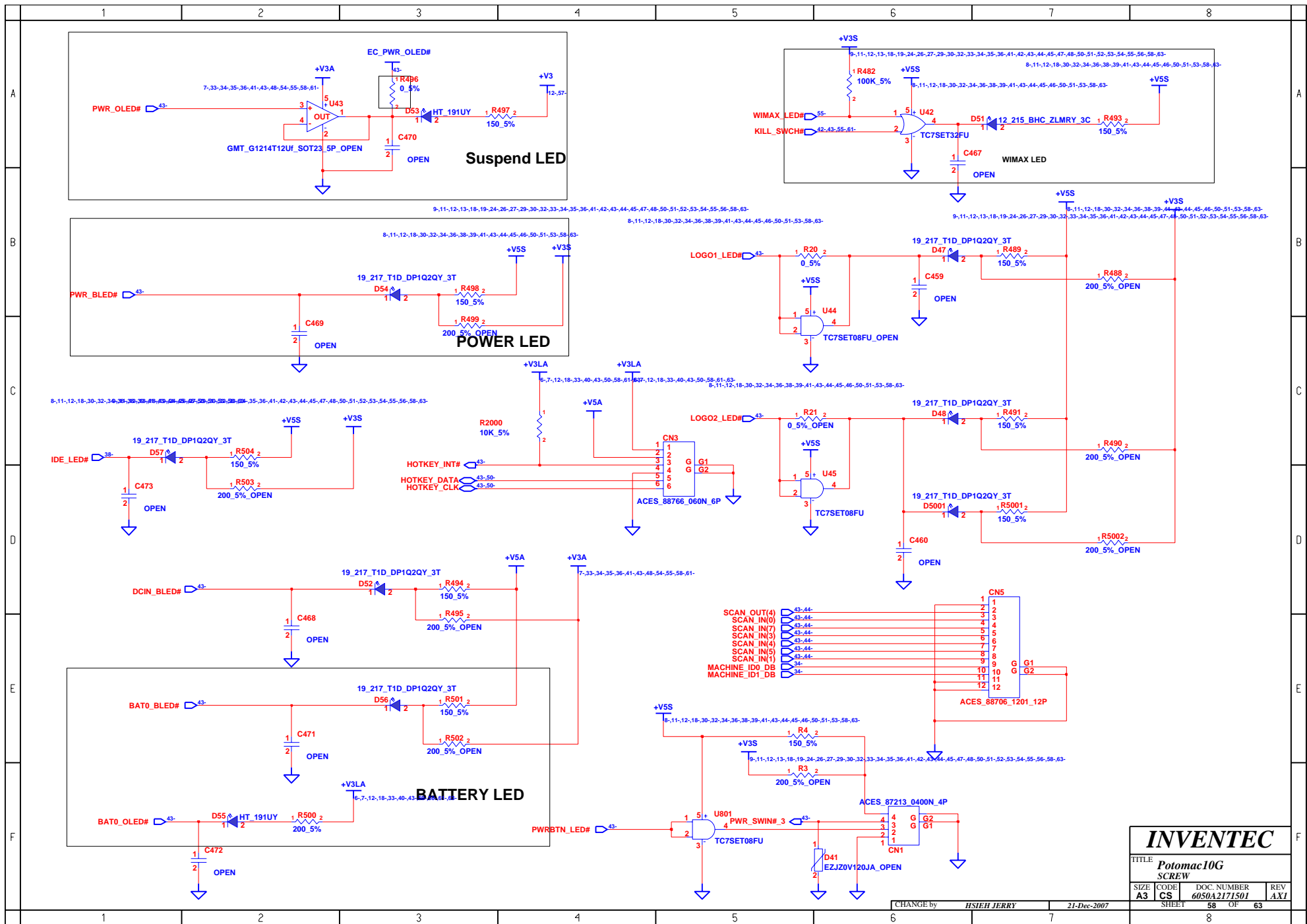
INVENTEC

TITLE
Potomac10G
ODD extension board

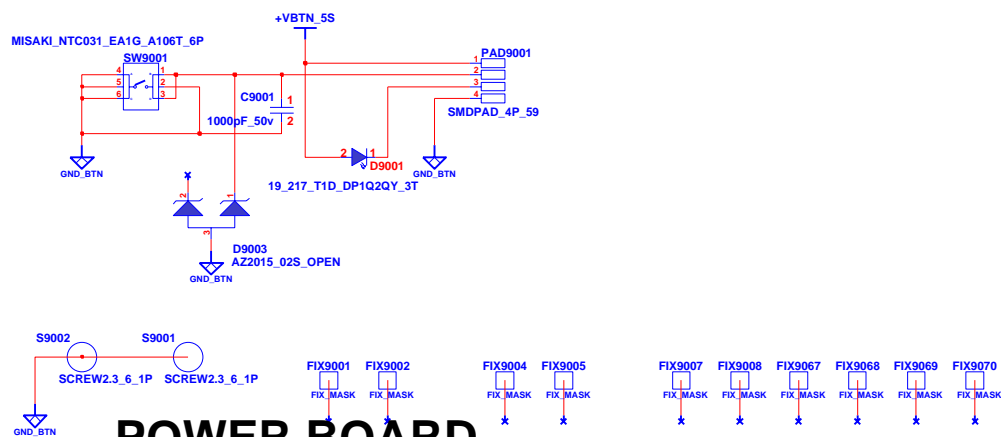
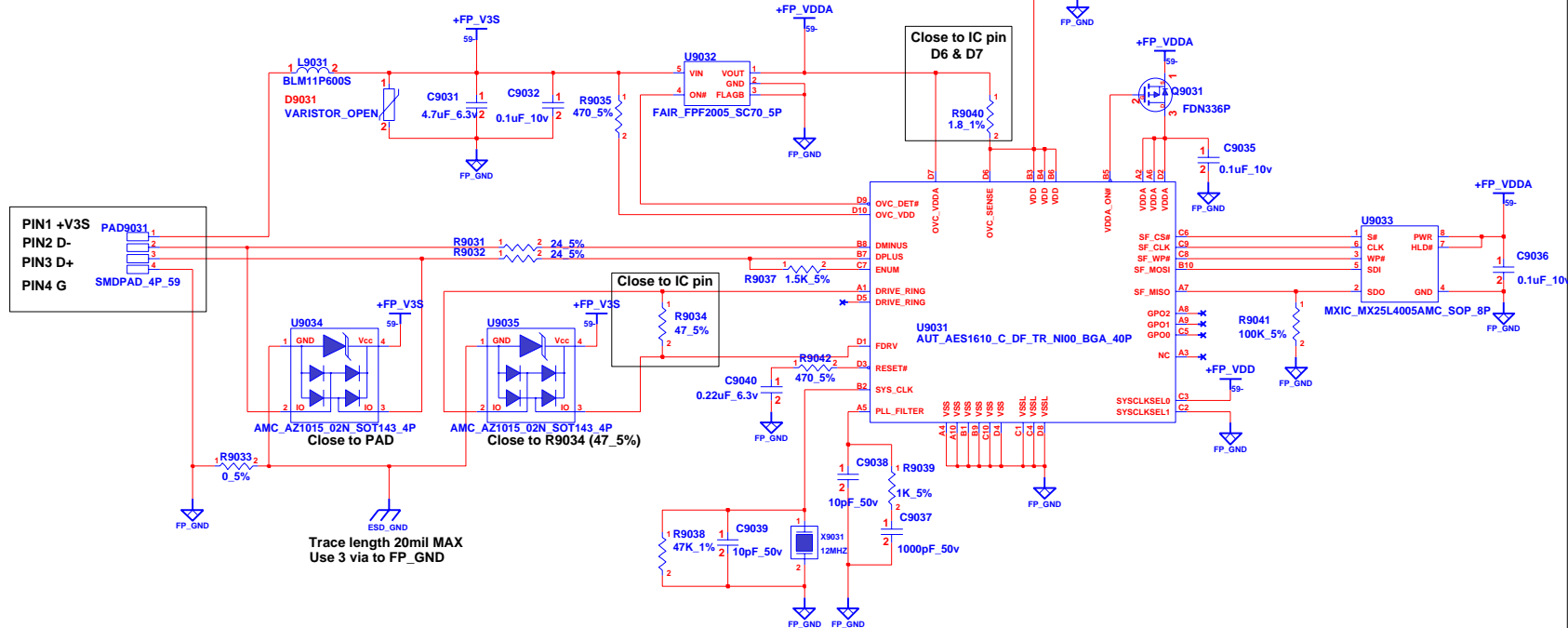
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
-------------------	-------------------	------------------------------------	-------------------

CHANGE by **Hsieh Jerry** 21-Dec-2007

SHEET 57 OF 63



Finger Print Reader DB



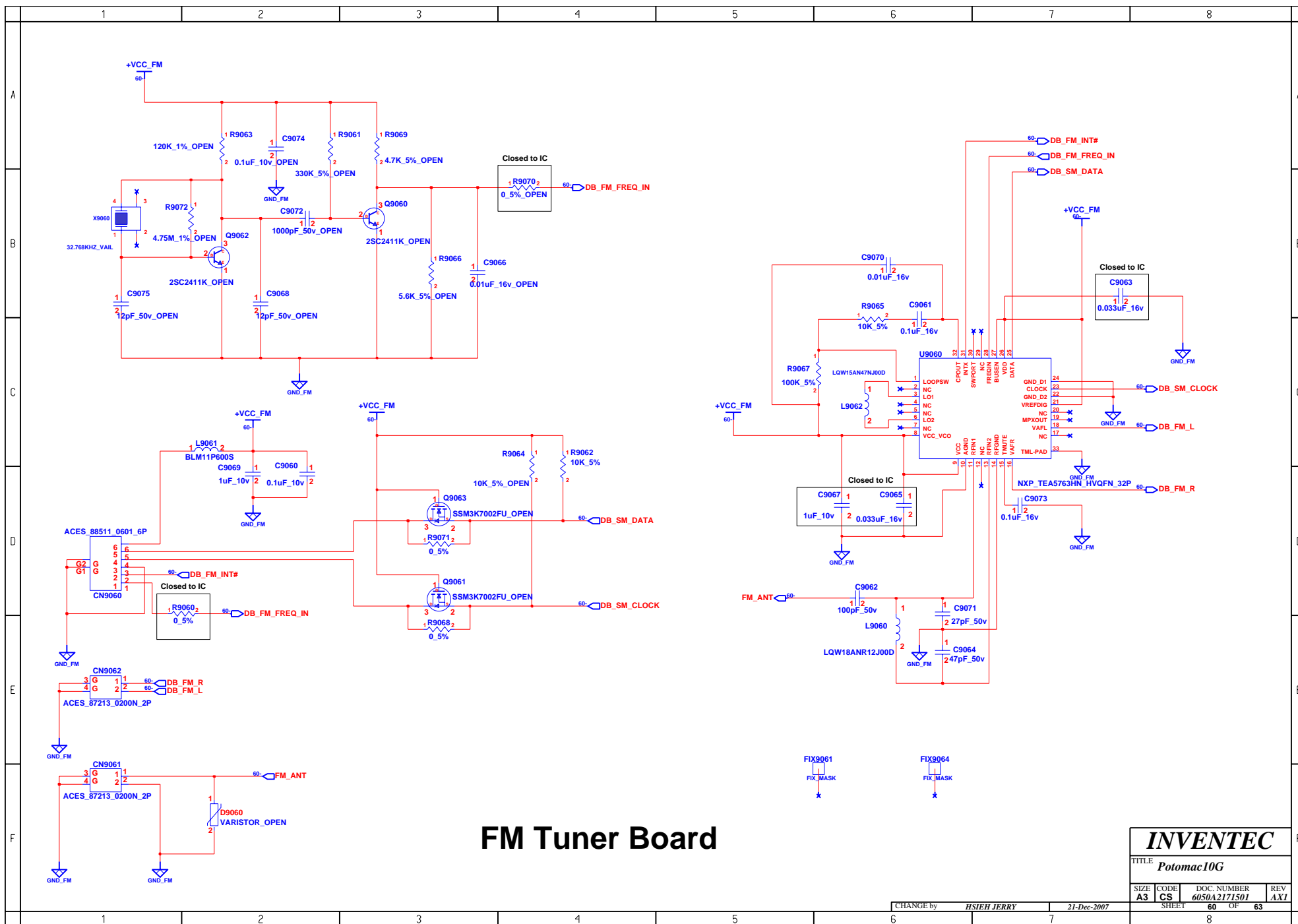
POWER BOARD

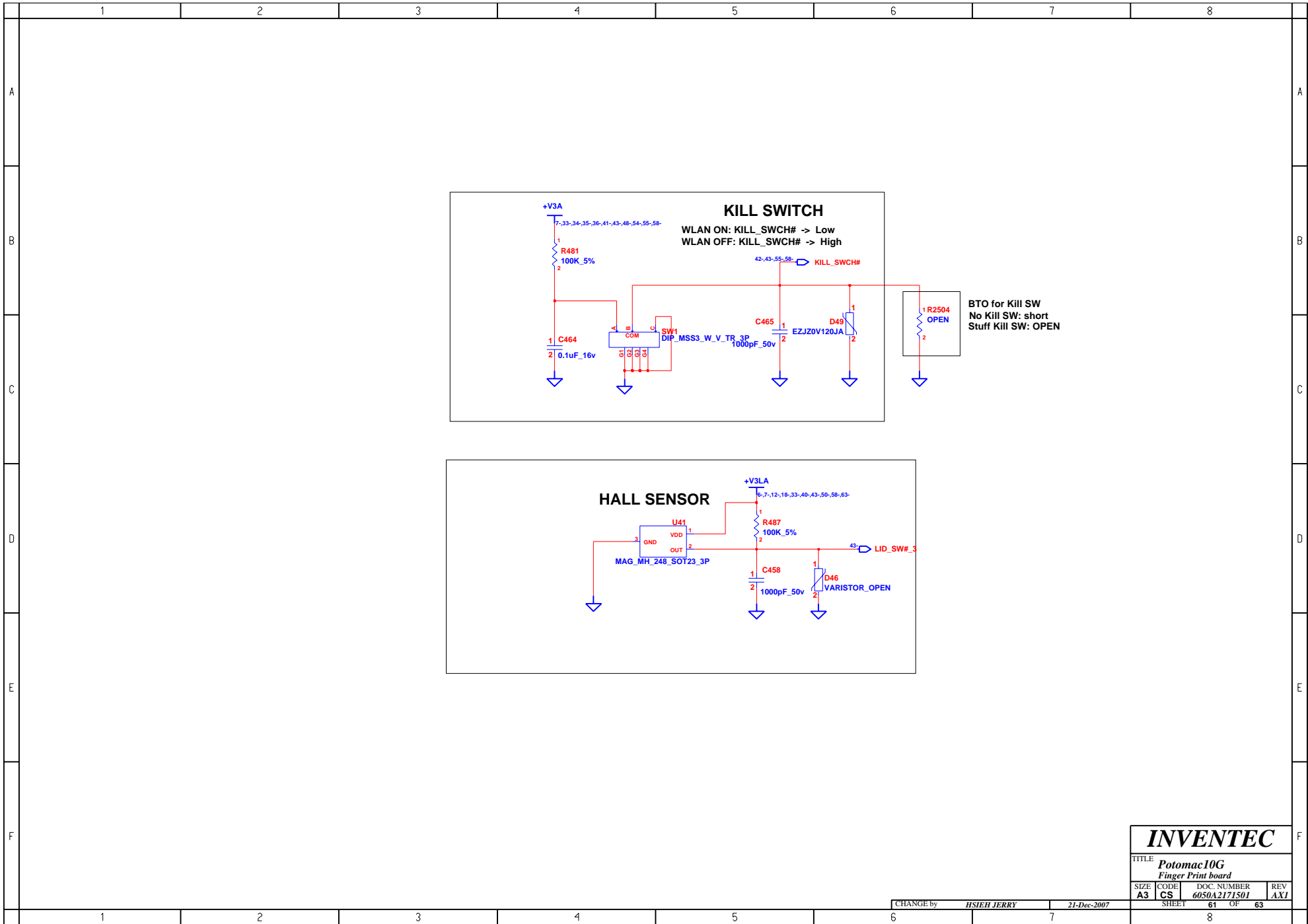
INVENTEC

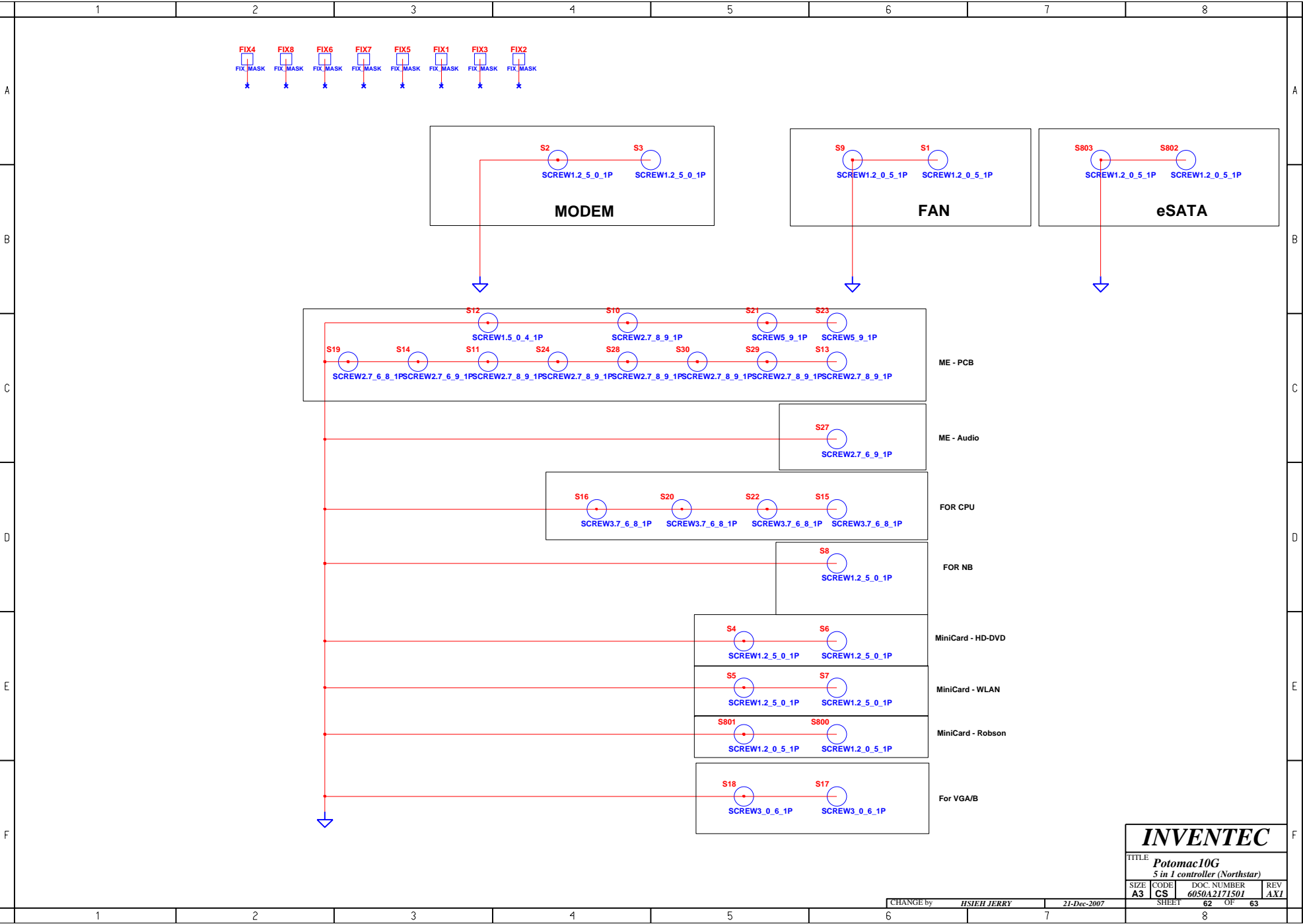
TITLE Potomac10G Switch board Conn			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1

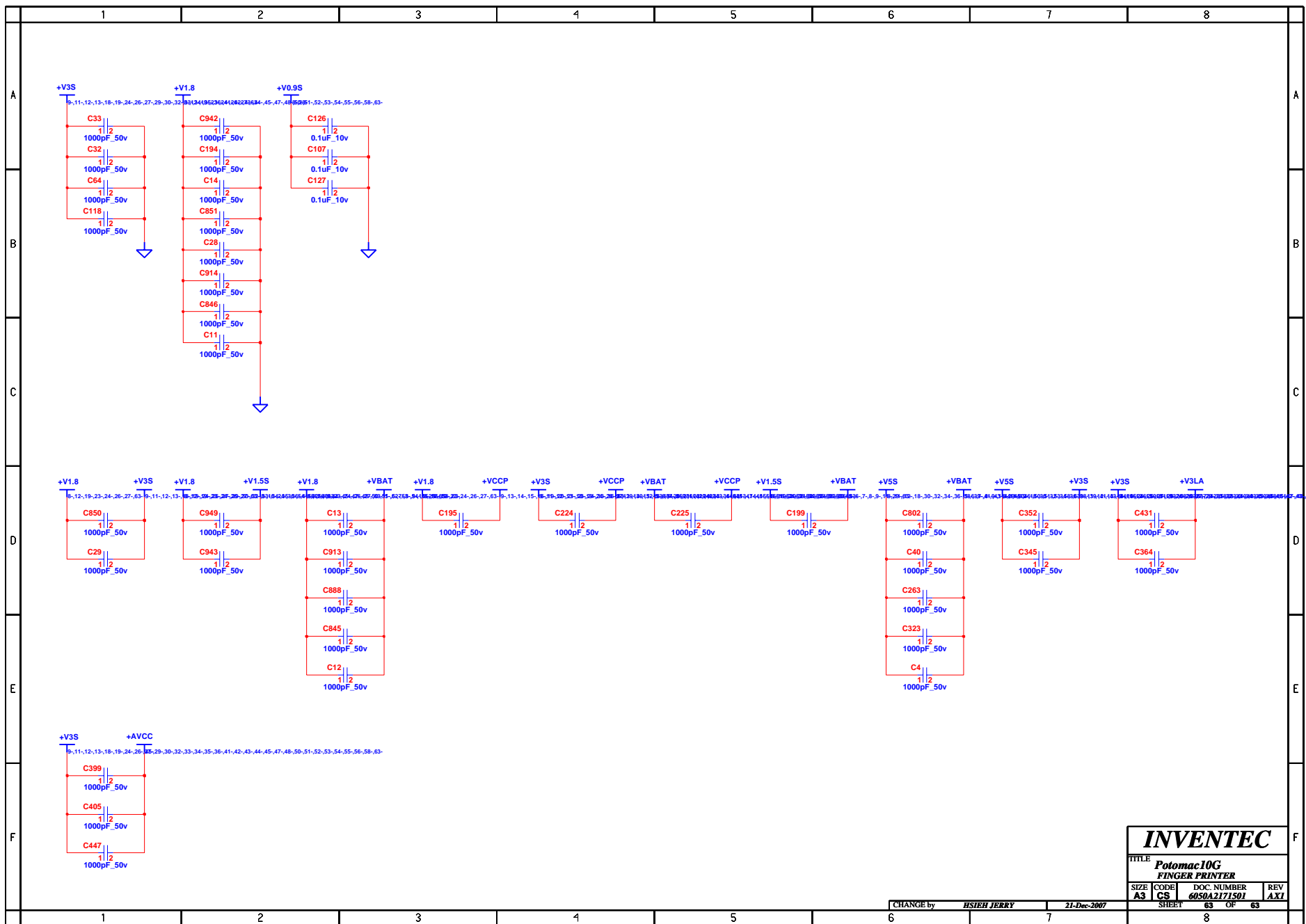
CHANGE by HSEH JERRY 21-Feb-2008

SHEET 59 OF 63









INVENTEC			
TITLE Potomac10G FINGER PRINTER			
SIZE A3	CODE CS	DOC NUMBER 6050A2171501	REV AX1
SHEET 63		OF 63	

CHANGE by HSIEN JERRY 21-Dec-2007

www.s-manuals.com