

	1	2	3	4	5	6	7	8		
A										A
B										B
C	POTOMAC 10G CS BUILD 2008.1.21									C
D										D
E										E
F										F

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	8	

	1	2	3	4	5	6	7	8																																																																							
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C	POTOMAC 10G CS BUILD																																																																														
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DATE	CHANGE NO.	REV																																																																													
DRAWER	EE	DATE	POWER	DATE	INVENTEC <i>Potomac 10G</i>																																																																										
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SIZE = 3 VER :					SIZE A3 CODE CS	DOC. NUMBER Model No	REV X01																																																																								
FILE NAME : XXXX-XXXXXX-XX																																																																															
P/N XXXXXXXXXXXX					SHEET 1 OF 63																																																																										

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POTOMAC 10G

CS BUILD

2008.1.21

DATE	CHANGE NO.	REV

DRAWER	EE	DATE	POWER	DATE	INVENTEC TITLE Potomac 10G			
DESIGN								
CHECK								
RESPONSIBLE								
SIZE = 3		VER :			SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
FILE NAME : XXXX-XXXXXX-XX								
P/N	XXXXXXXXXXXX				SHEET 1 OF 63			

TABLE OF CONTENTS

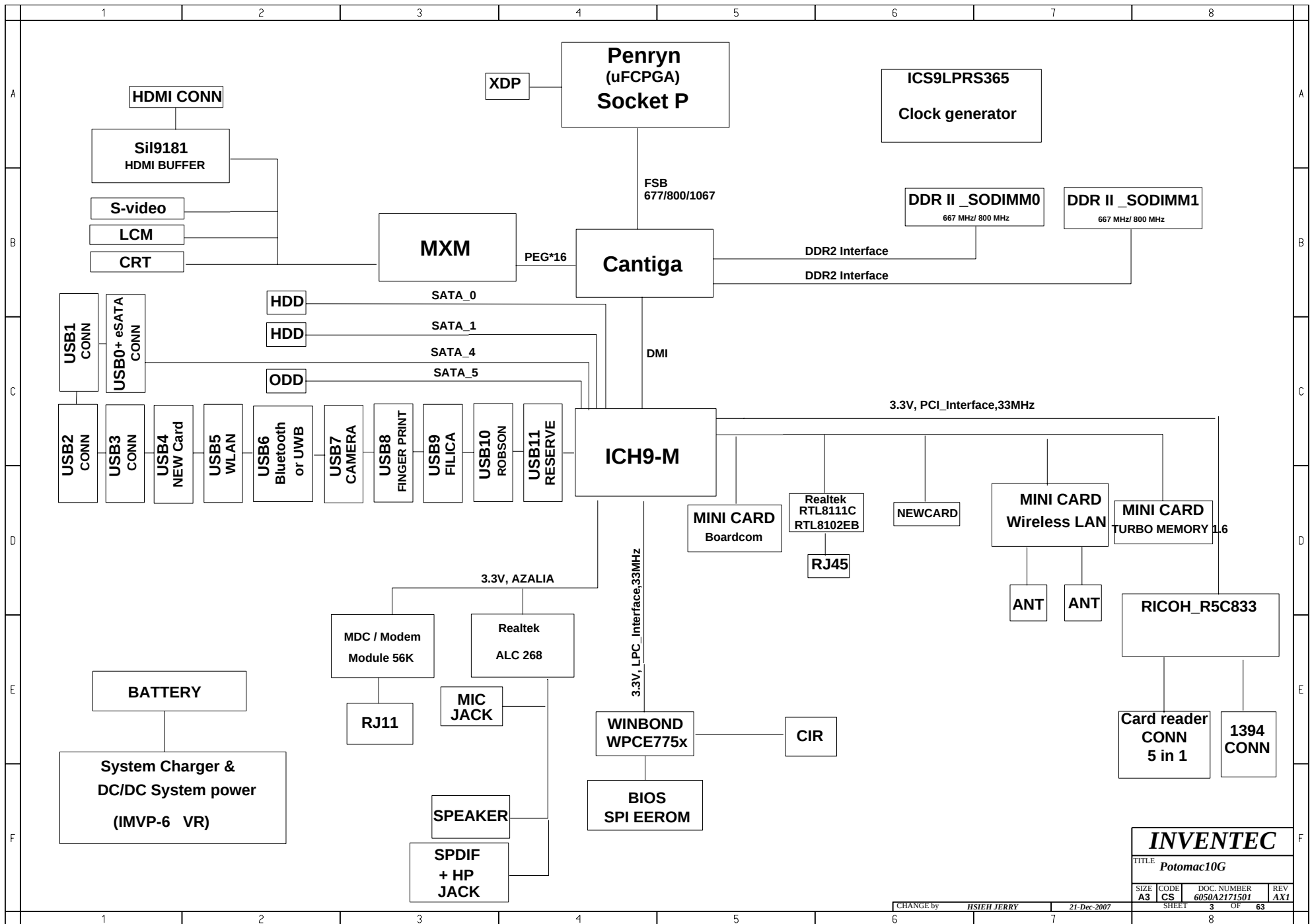
PAGE	PAGE	PAGE
1.COVER PAGE	33- ICH9-1	54.EXPRESS CARD CONN
2.INDEX	34- ICH9-2	55.ROBSON & WLAN /WiMAX (Minicard)
3.BLOCK DIAGRAM	35- ICH9-3	56.HD-DVD (Minicard)
4.POWER SEQUENCE BLOCK	36- ICH9-4	57.MDC 1.5 CONN
5-12.SYSTEM POWER	37- ICH9-5	58.LED(M/B) & HOTKEY/B CONN & Power Bottom/B CONN
13.CLOCK GENERATOR	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		

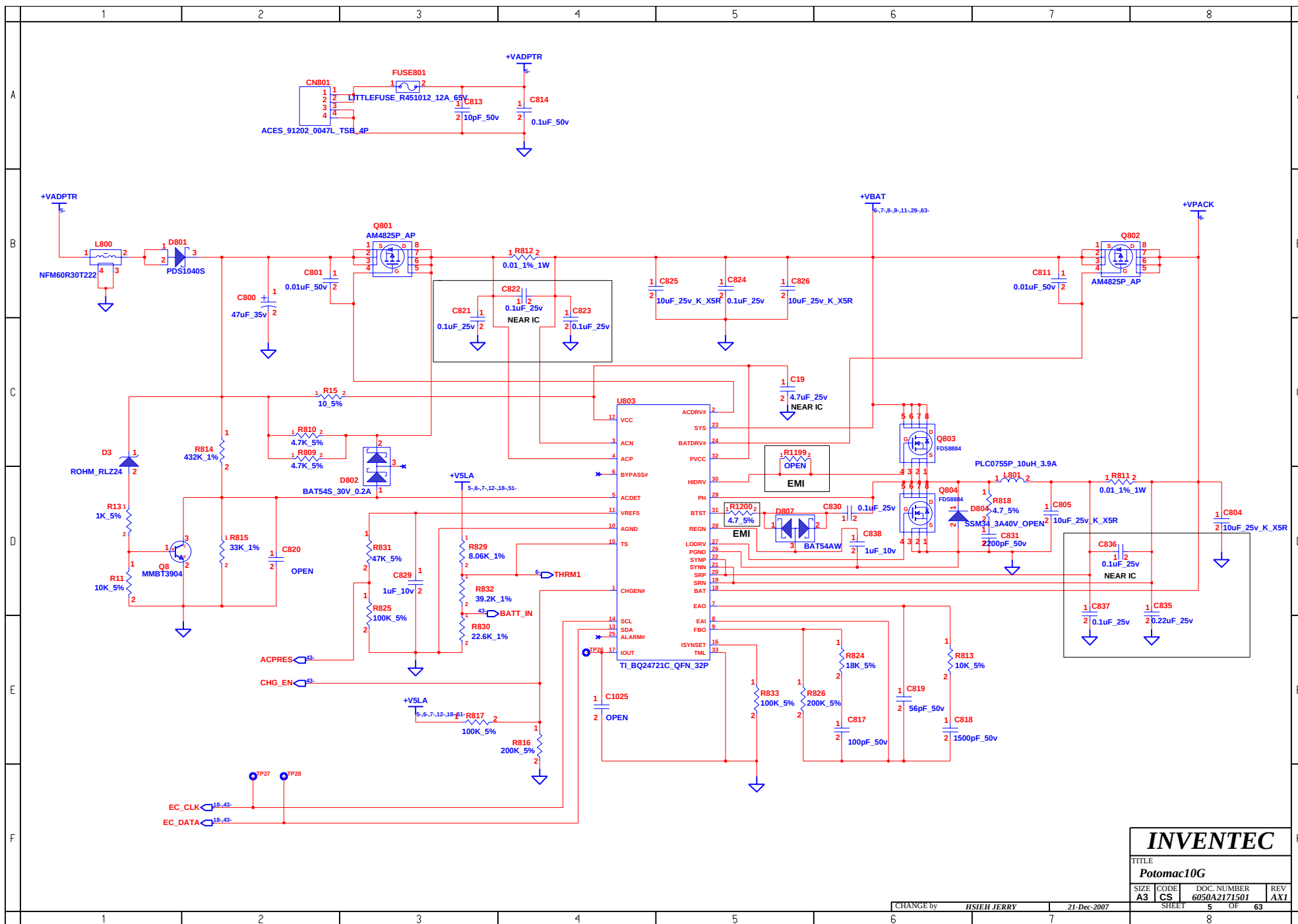
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TITLE
Potomac10G

SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
SHEET 2		OF 63	

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



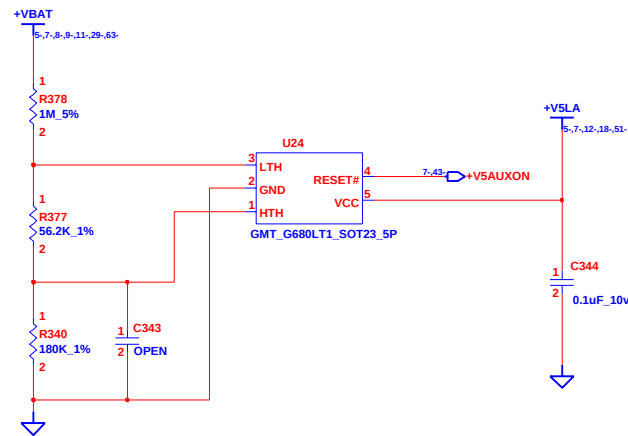
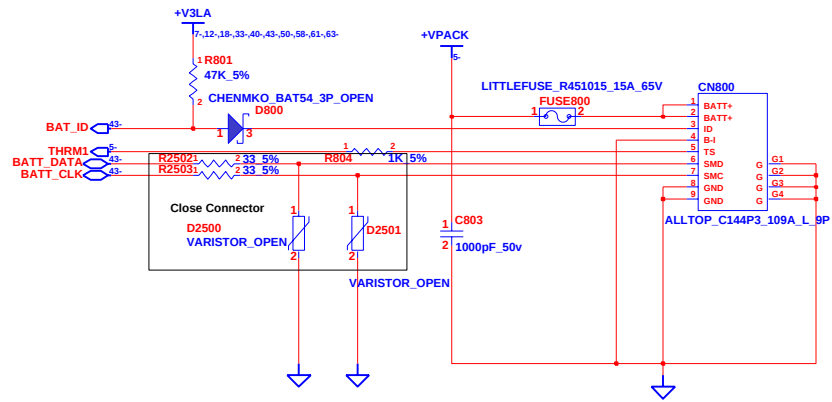


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TITLE			
Potomac10G			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

CHANGE by HSEH JERRY 21-Dec-2007

SHEET 5 OF 63

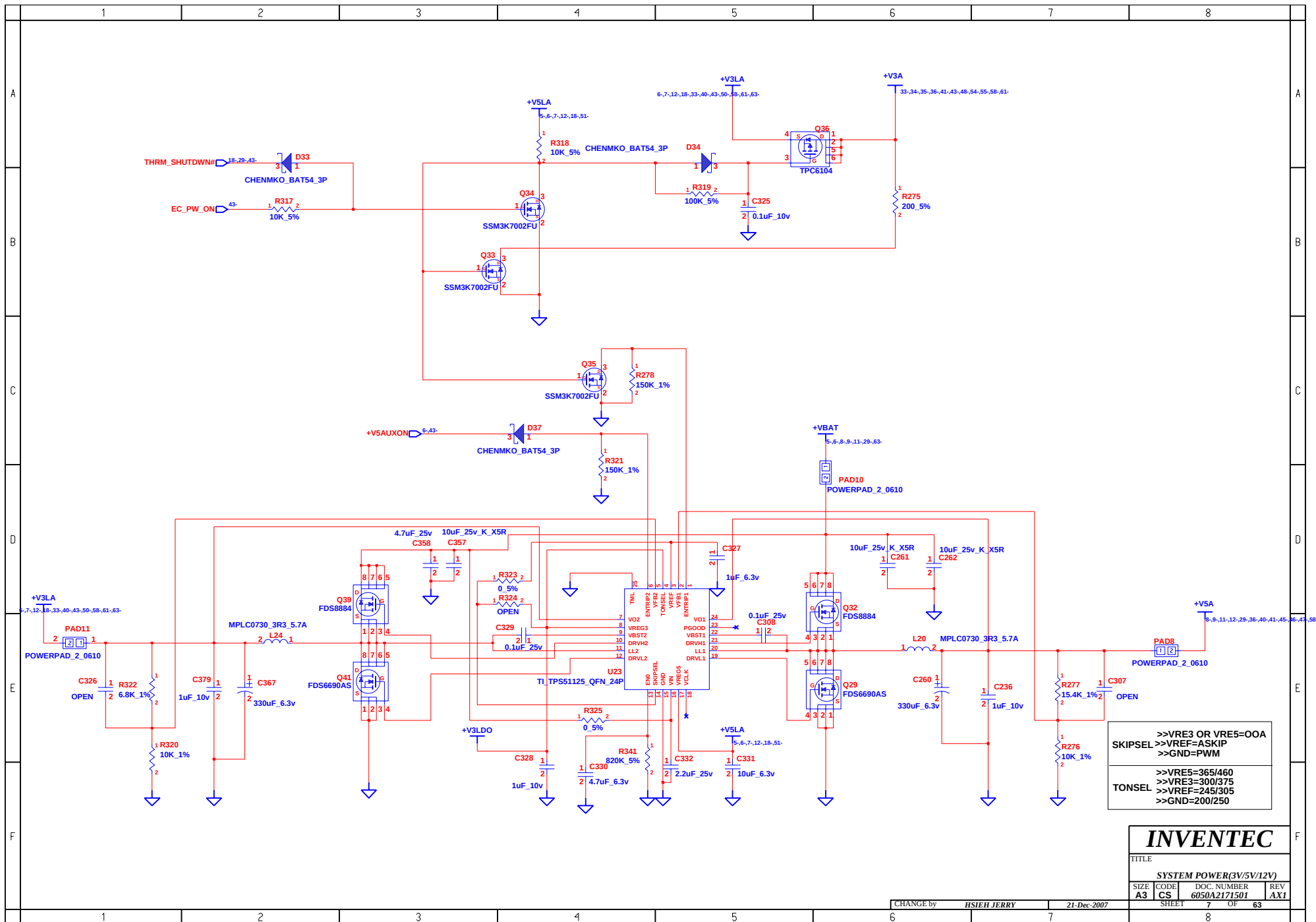


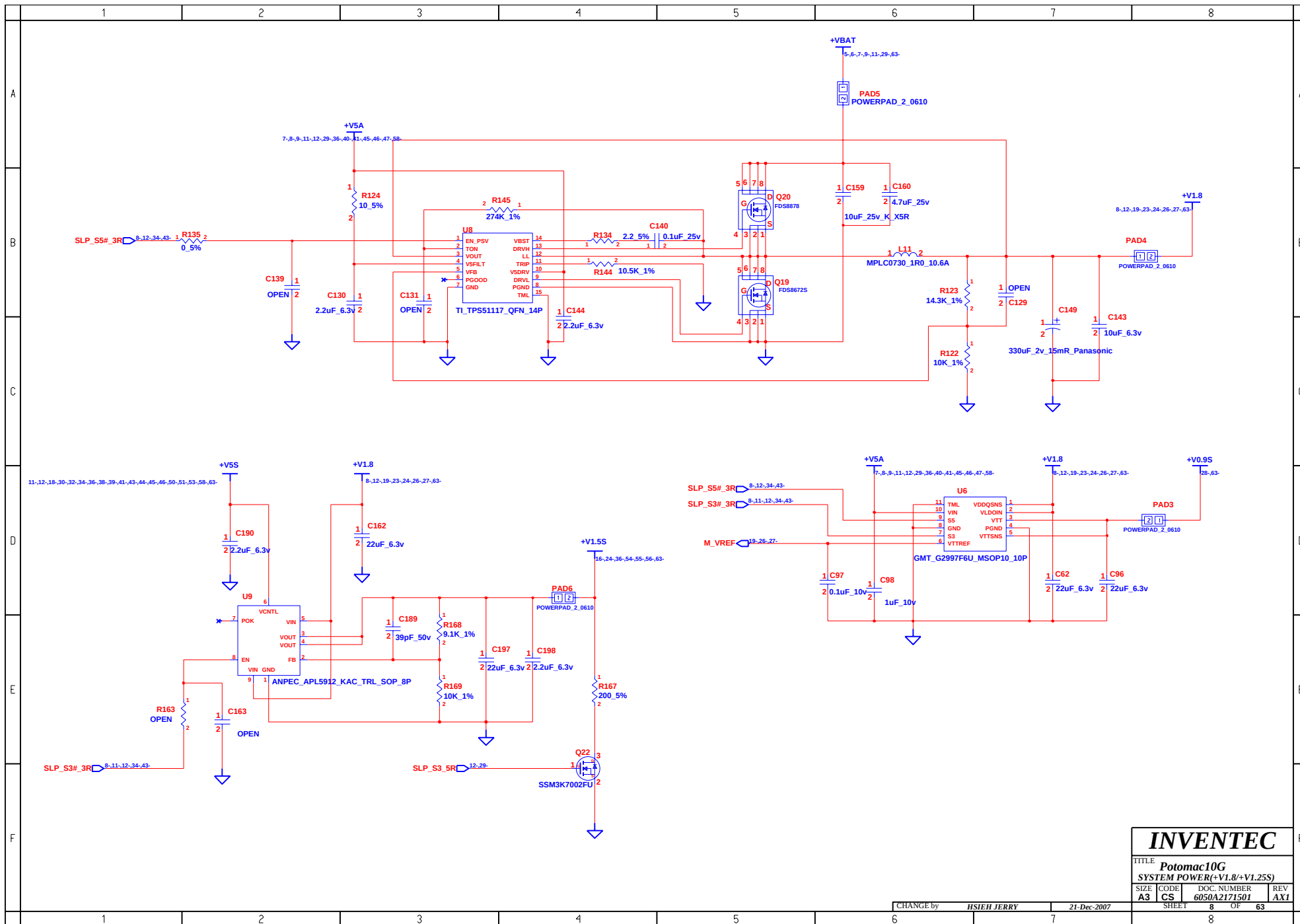
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SELECT & BATTERY CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

CHANGE by HSEH JERRY 21-Dec-2007

SHEET 6 OF 63





INVENTEC

TITLE
Potomac10G
SYSTEM POWER(+V1.8/+V1.25S)

SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
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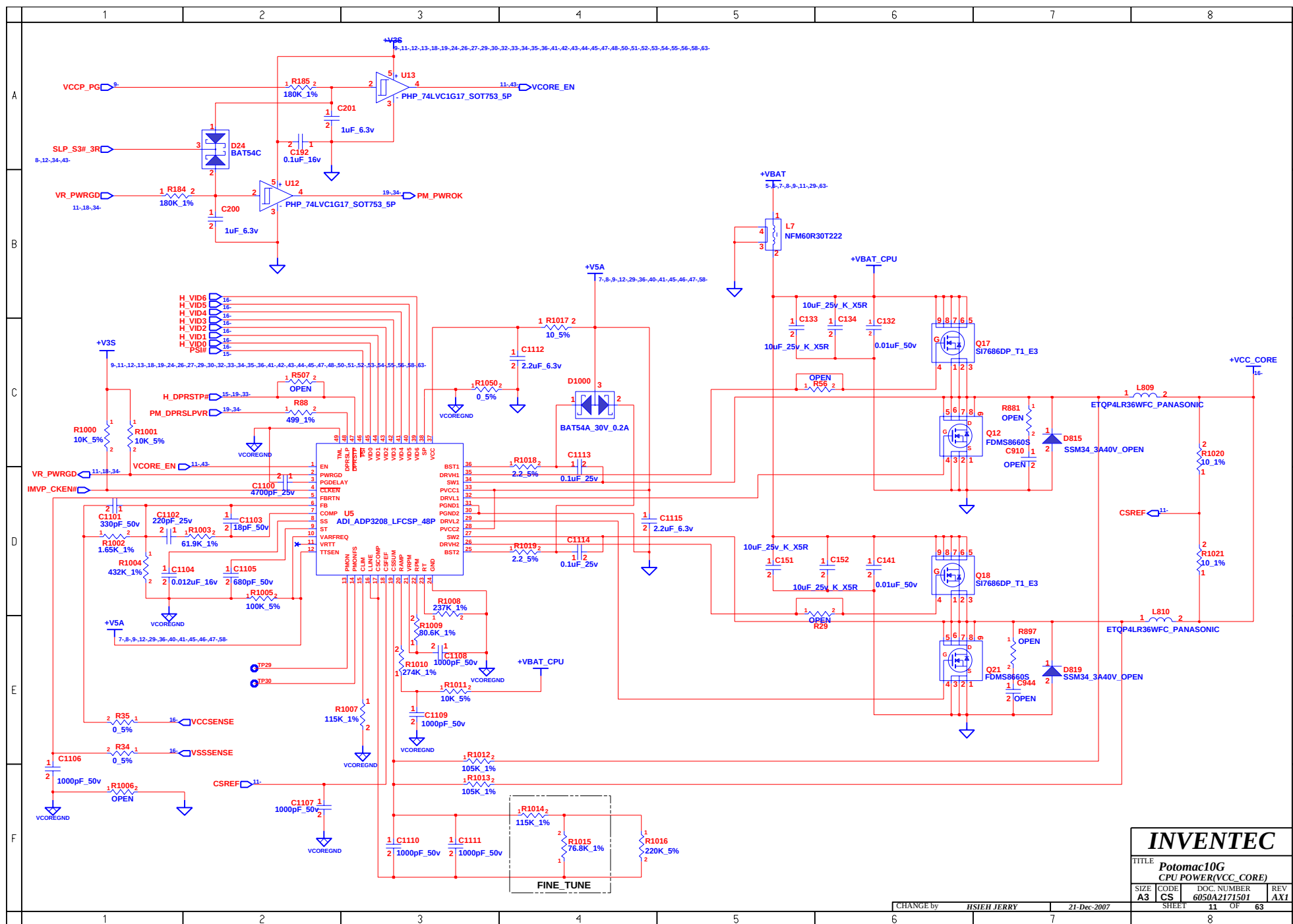
CHANGE by **Hsieh JERRY** 21-Dec-2007

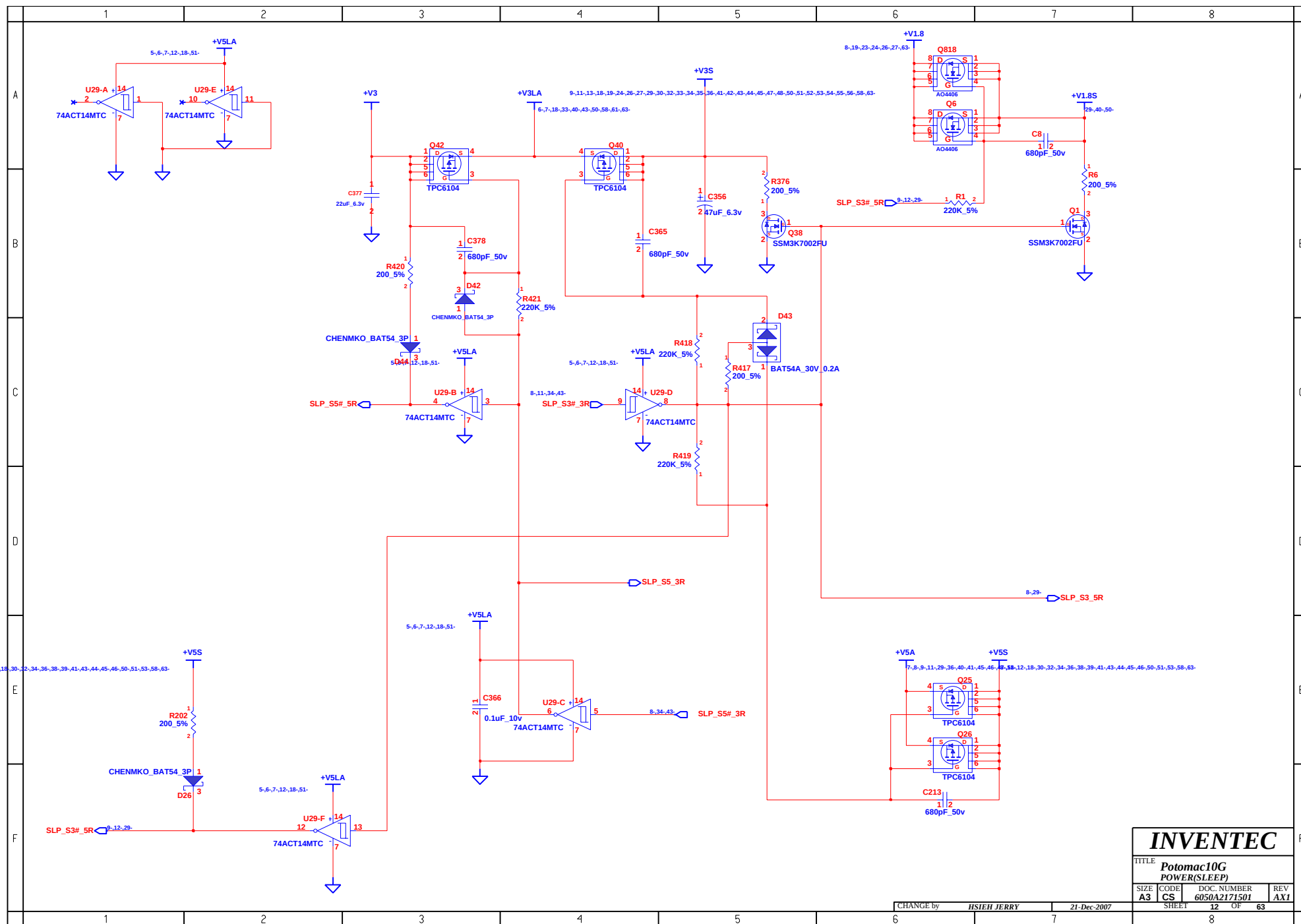
SHEET 8 OF 63



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B									B
C									C
D									D
E									E
F									F
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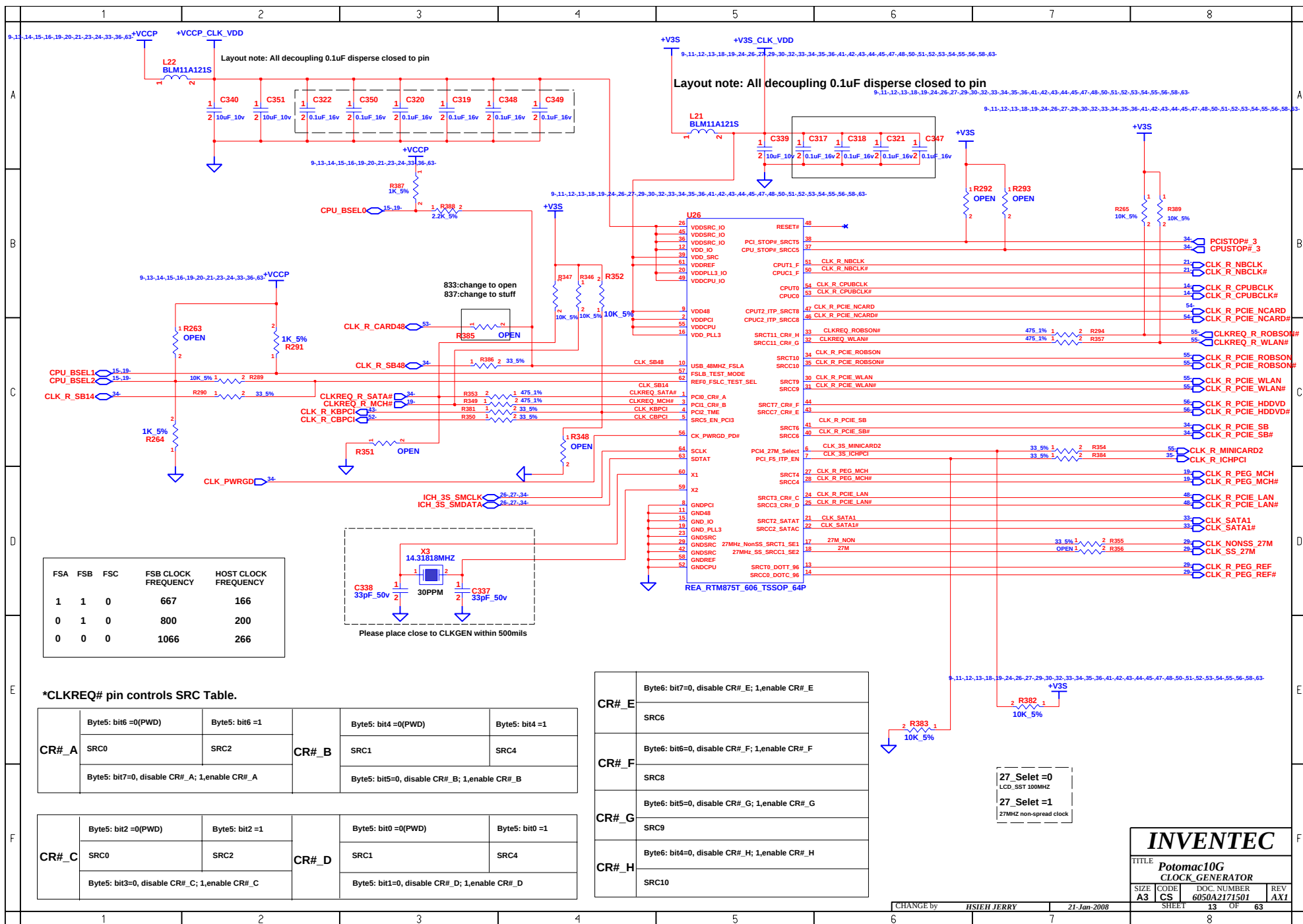
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SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1
CHANGE by		21-Dec-2007	
HSIEH JERRY			
SHEET		10	OF 63

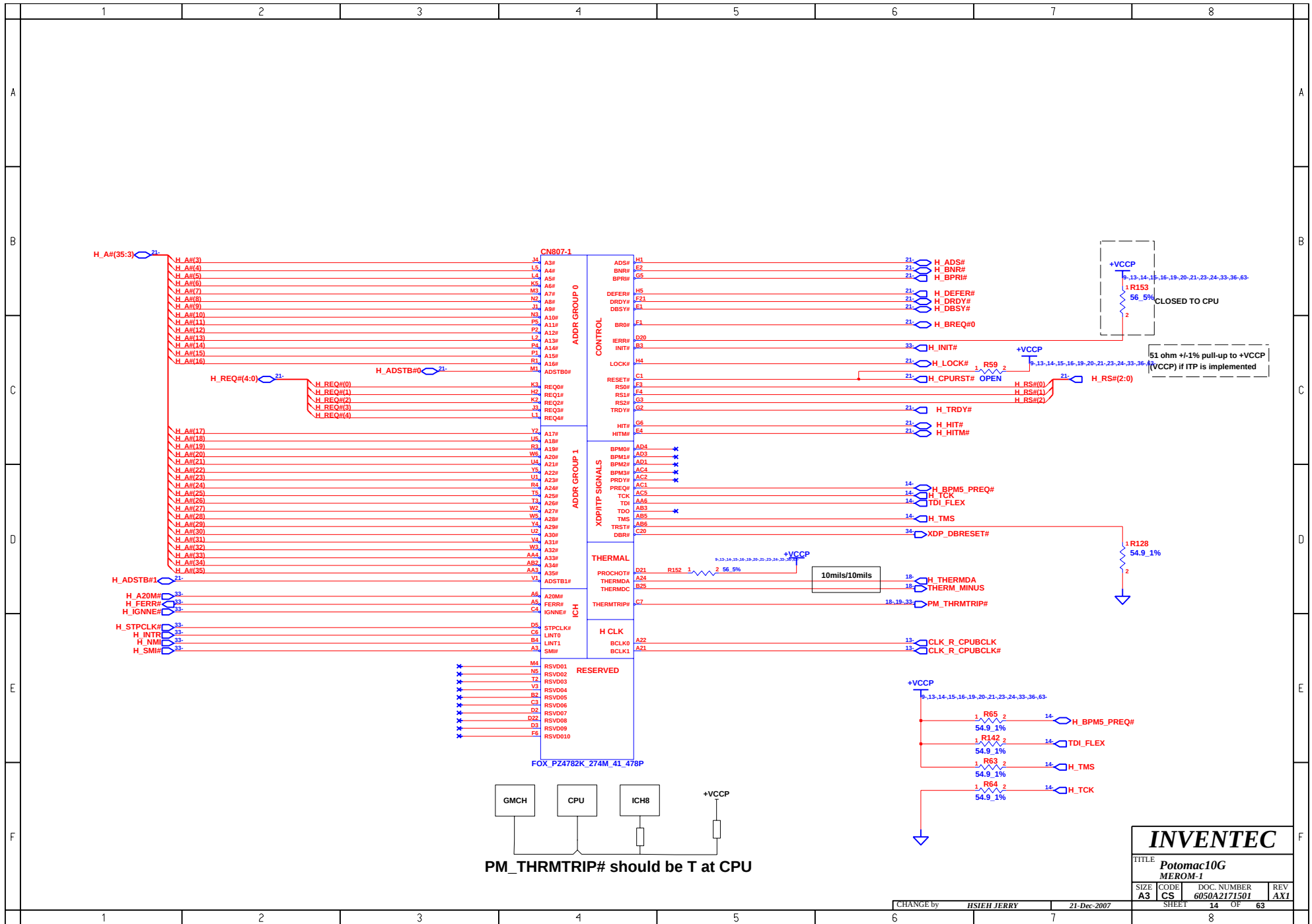


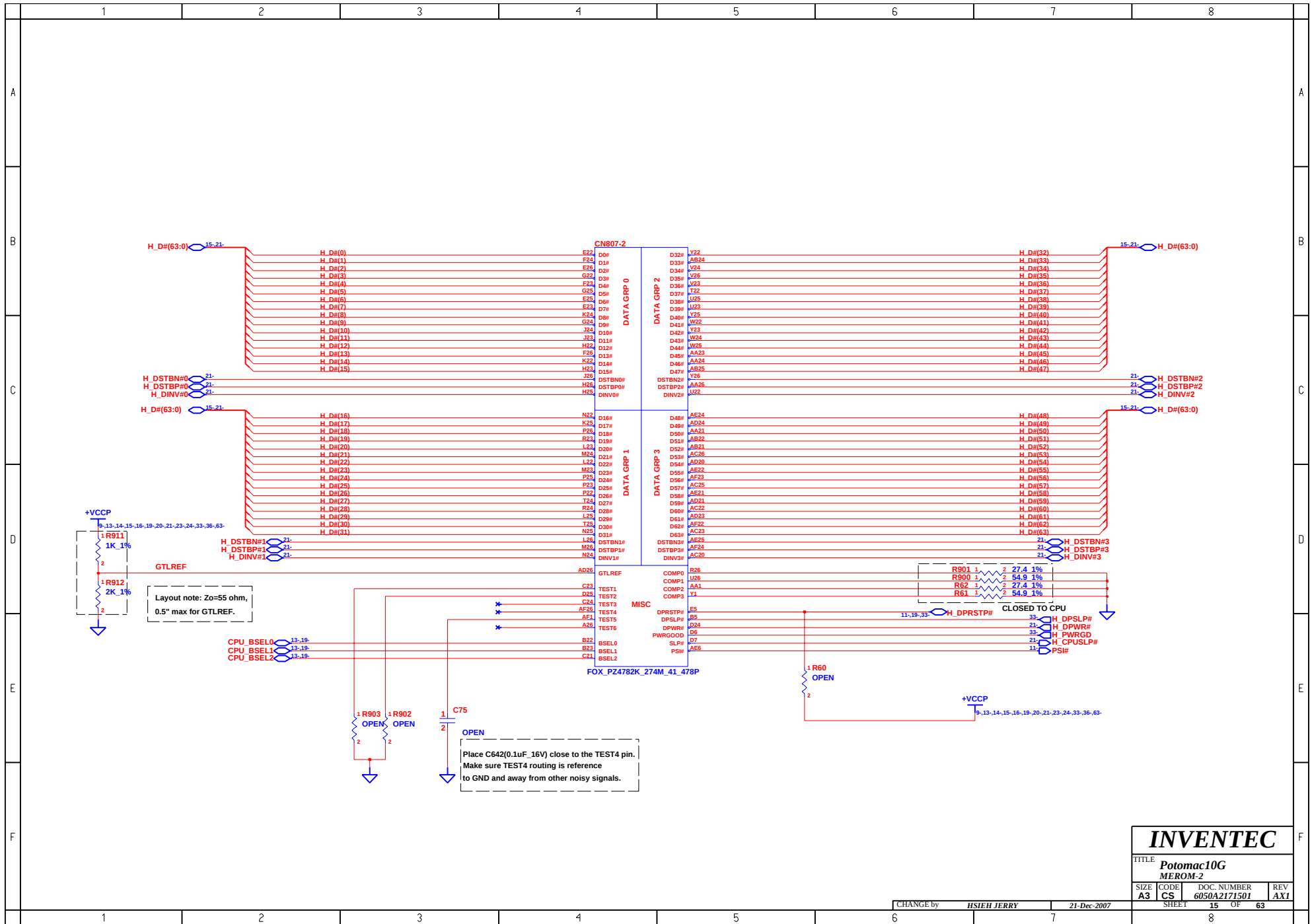


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TITLE Potomac10G POWER(SLEEP)			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
SHEET 12		OF 63	

CHANGE by HSIEH JERRY 21-Dec-2007





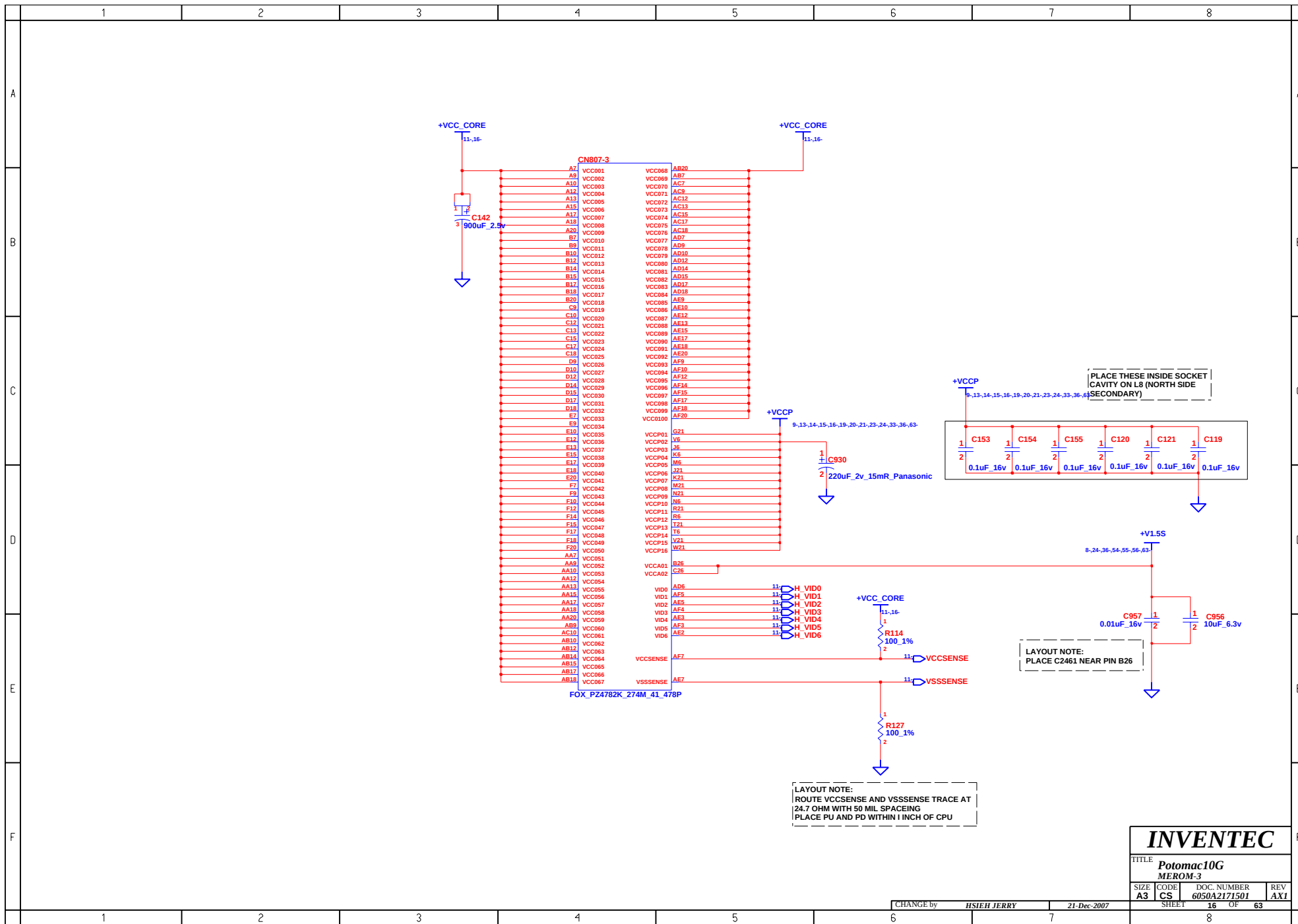


INVENTEC

TITLE Potomac10G MEROM-2			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1

CHANGE by HSEH JERRY 21-Dec-2007

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INVENTEC

TITLE			
Potomac10G			
MEROM-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

CHANGE by HSEH JERRY 21-Dec-2007

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	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

A8

VSS002

A11

VSS003

A14

VSS004

A16

VSS005

A19

VSS006

A23

VSS007

AF2

VSS008

B6

VSS009

B8

VSS010

B11

VSS011

B13

VSS012

B16

VSS013

B19

VSS014

B21

VSS015

B24

VSS016

C5

VSS017

C8

VSS018

C11

VSS019

C14

VSS020

C16

VSS021

C19

VSS022

C2

VSS023

C22

VSS024

C25

VSS025

D1

VSS026

D4

VSS027

D8

VSS028

D11

VSS029

D13

VSS030

D16

VSS031

D19

VSS032

D23

VSS033

D26

VSS034

E3

VSS035

E6

VSS036

E8

VSS037

E11

VSS038

E14

VSS039

E16

VSS040

E19

VSS041

E21

VSS042

E24

VSS043

F5

VSS044

F8

VSS045

F11

VSS046

F13

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F16

VSS048

F19

VSS049

F2

VSS050

F22

VSS051

F25

VSS052

G4

VSS053

G1

VSS054

G23

VSS055

G26

VSS056

H3

VSS057

H6

VSS058

H21

VSS059

H24

VSS060

J2

VSS061

J5

VSS062

J22

VSS063

J25

VSS064

K1

VSS065

K4

VSS066

K23

VSS067

K26

VSS068

L3

VSS069

L6

VSS070

L21

VSS071

L24

VSS072

M2

VSS073

M5

VSS074

M22

VSS075

M25

VSS076

N1

VSS077

N4

VSS078

N23

VSS079

N26

VSS080

F1

VSS081

P6

P21

P24

R2

R5

R22

R25

T1

T4

T23

T26

U3

U6

U21

U24

V2

V5

V22

V25

W1

W4

W23

W26

Y3

Y6

Y21

Y24

AA2

AA5

AA8

AA11

AA14

AA16

AA19

AA22

AA25

AB1

AB4

AB8

AB11

AB13

AB16

AB18

AB23

AB26

AC3

AC6

AC8

AC11

AC14

AC16

AC19

AC21

AC24

AD2

AD5

AD8

AD11

AD13

AD16

AD19

AD22

AD25

AE1

AE4

AE8

AE11

AE14

AE16

AE19

AE23

AE26

AF2

AF6

AF8

AF11

AF13

AF16

AF19

AF21

AF25

AF26

FOX_PZ4782K_274M_41_478P

INVENTEC

TITLE

Potomac10G

MEROM-4

SIZE

A3

CODE

CS

DOC. NUMBER

6050A2171501

REV

AX1

CHANGE by

Hsieh JERRY

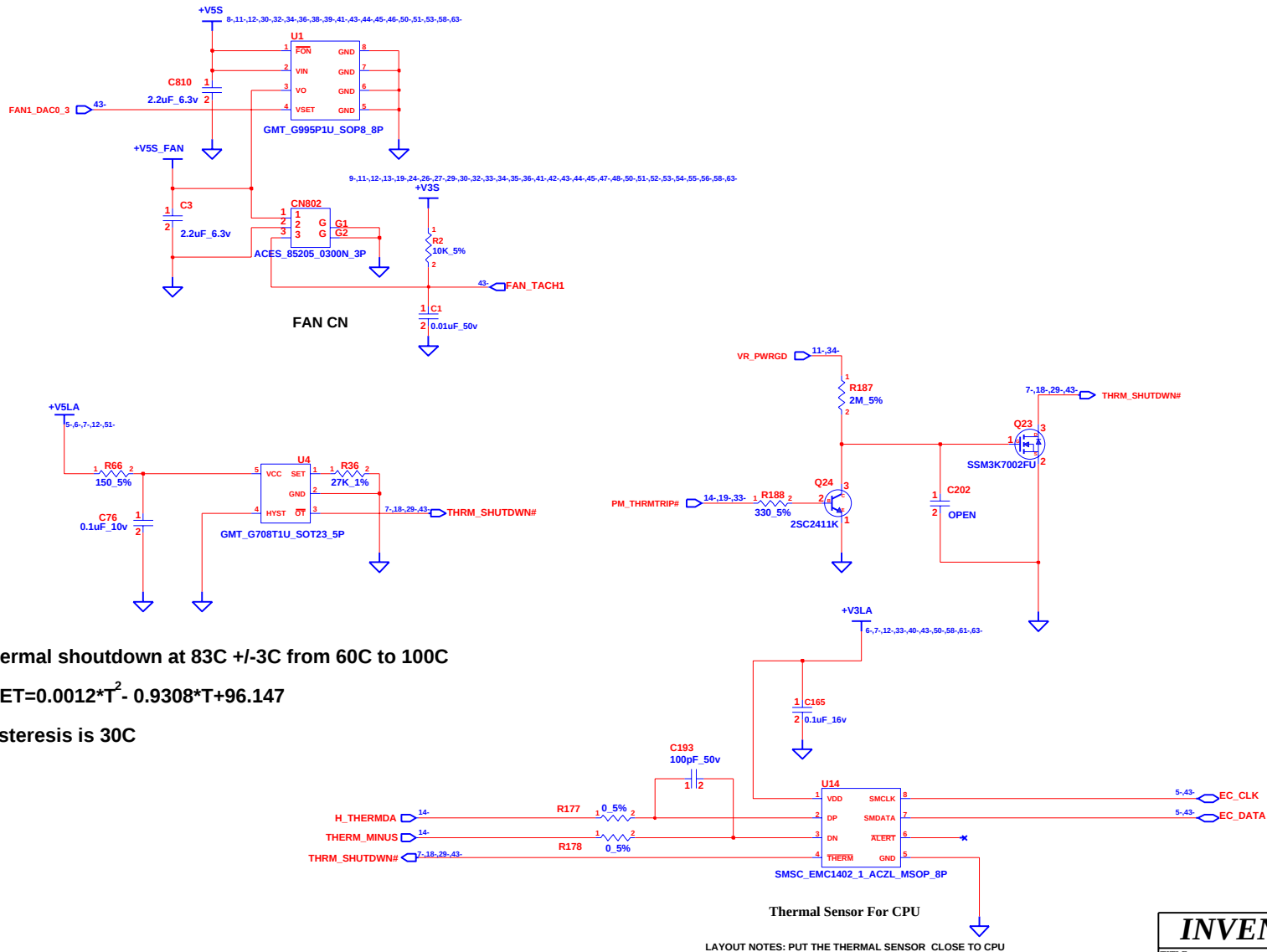
21-Dec-2007

SHEET

17

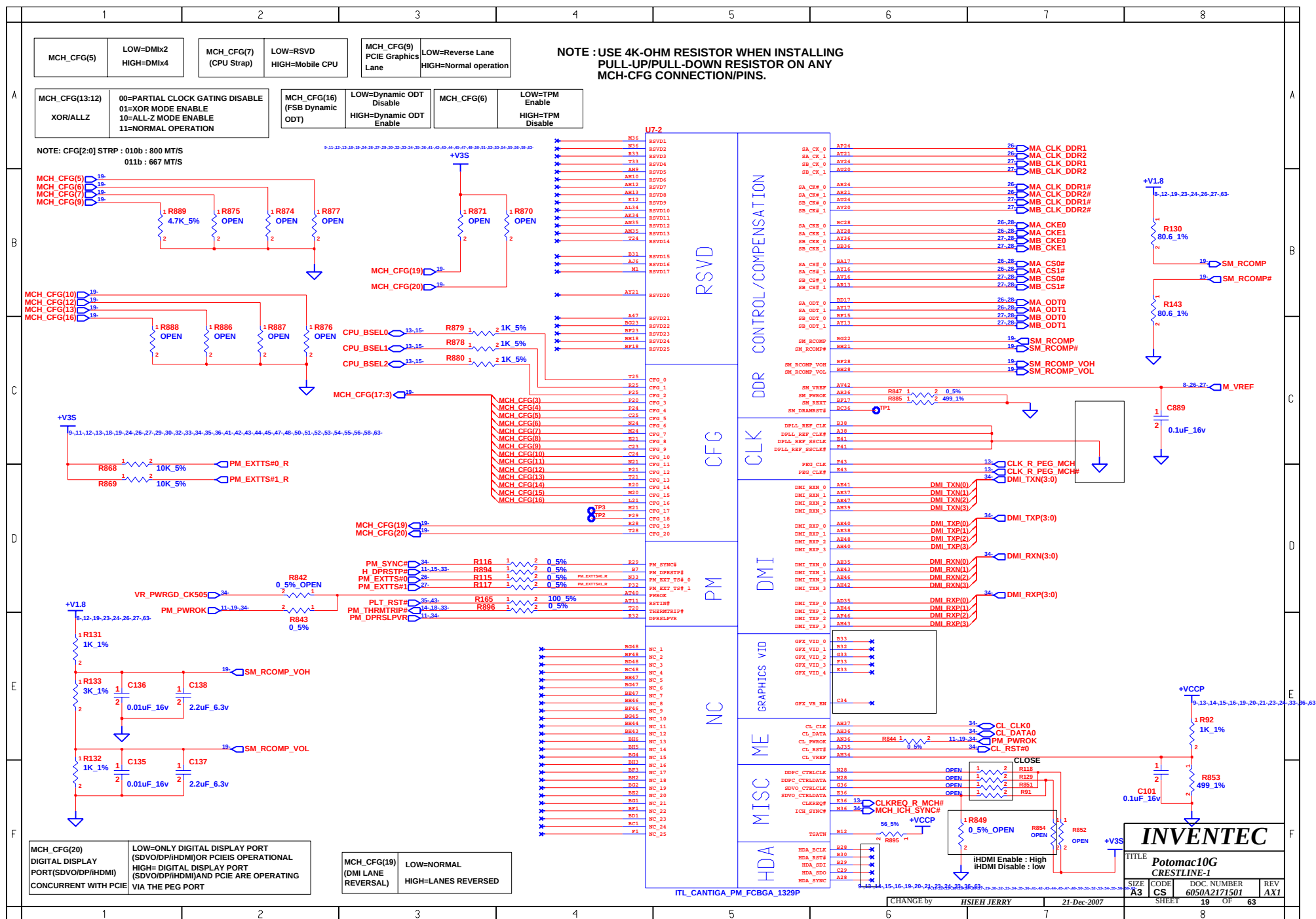
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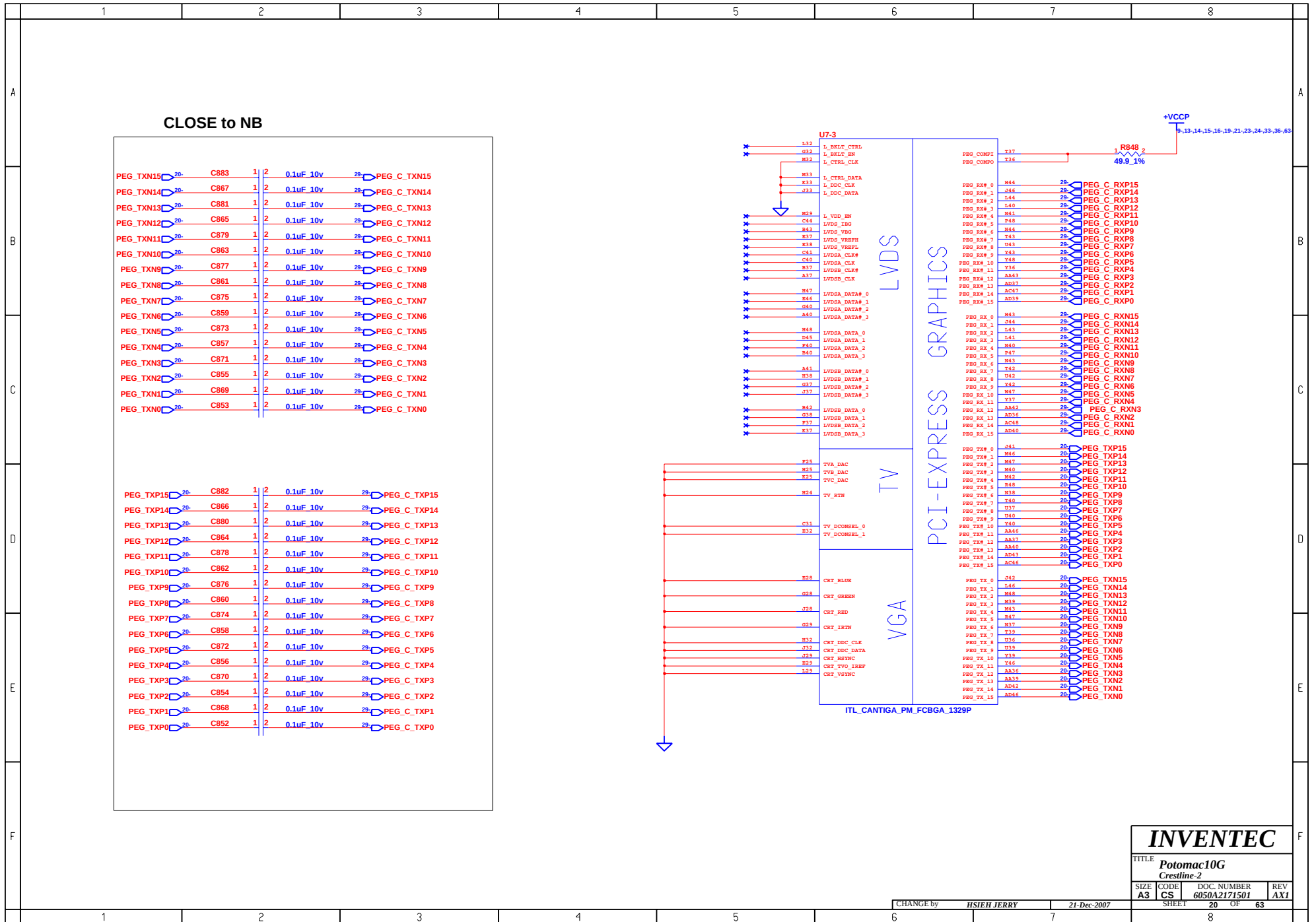
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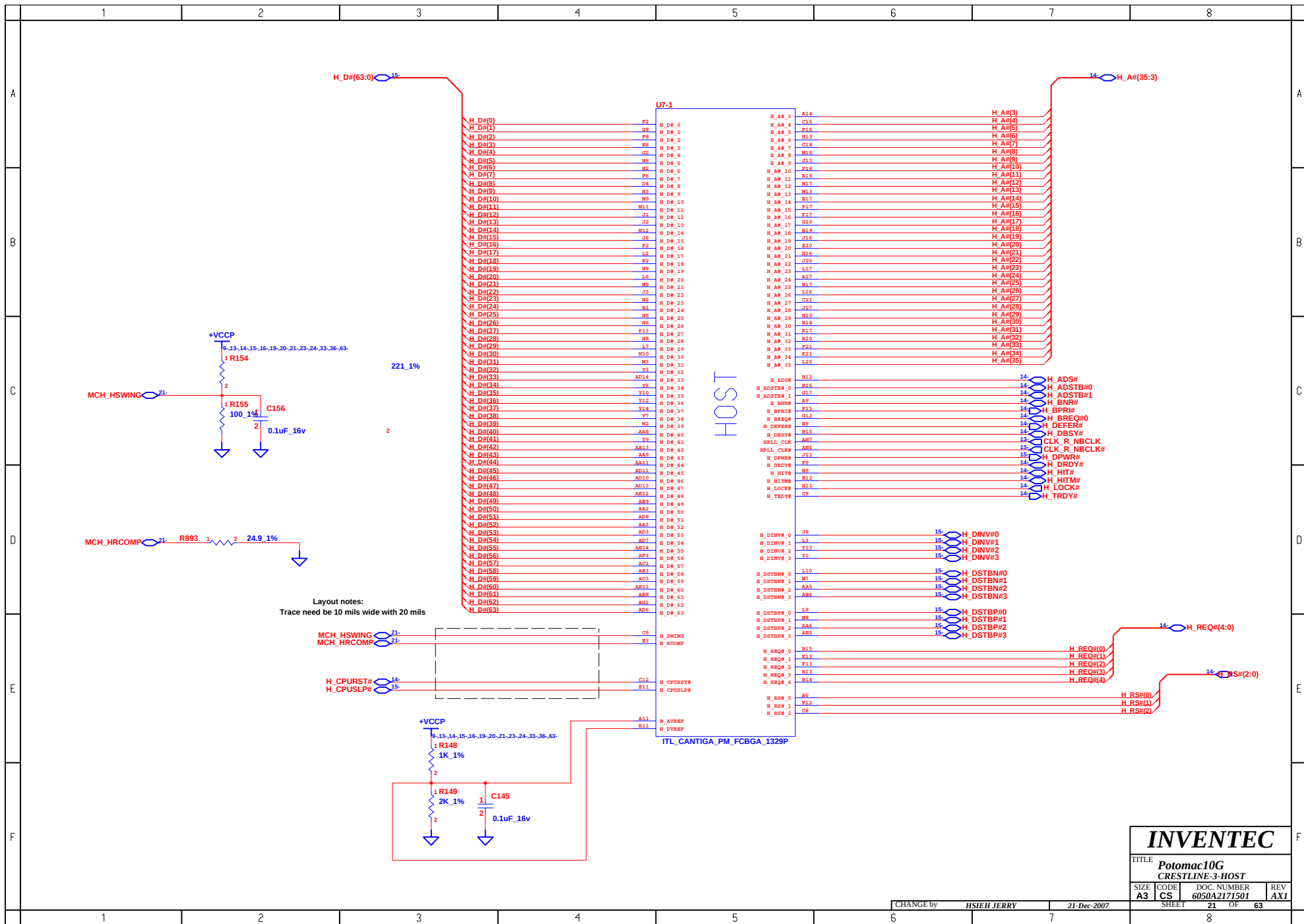


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TITLE			
Potomac10G			
THERMAL&FAN CONTROLLER			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1
SHEET		18	OF 63

CHANGE by HSEH JERRY 21-Dec-2007







Layout notes:
Trace need be 10 mils wide with 20 mils

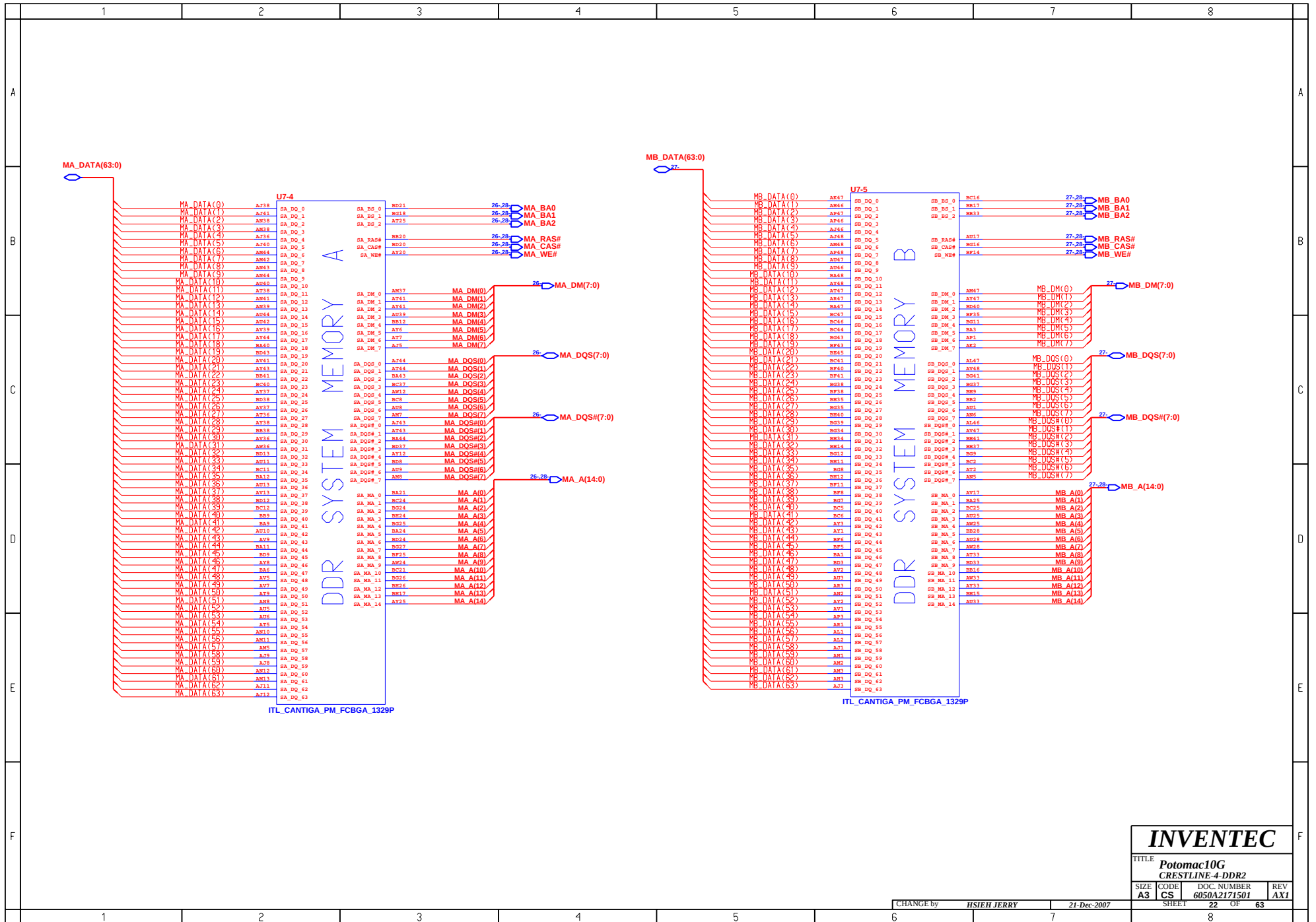
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TITLE
Potomac10G
CRESTLINE-3-HOST

SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
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CHANGE by **HSEH JERRY** 21-Dec-2007

SHEET 21 OF 63



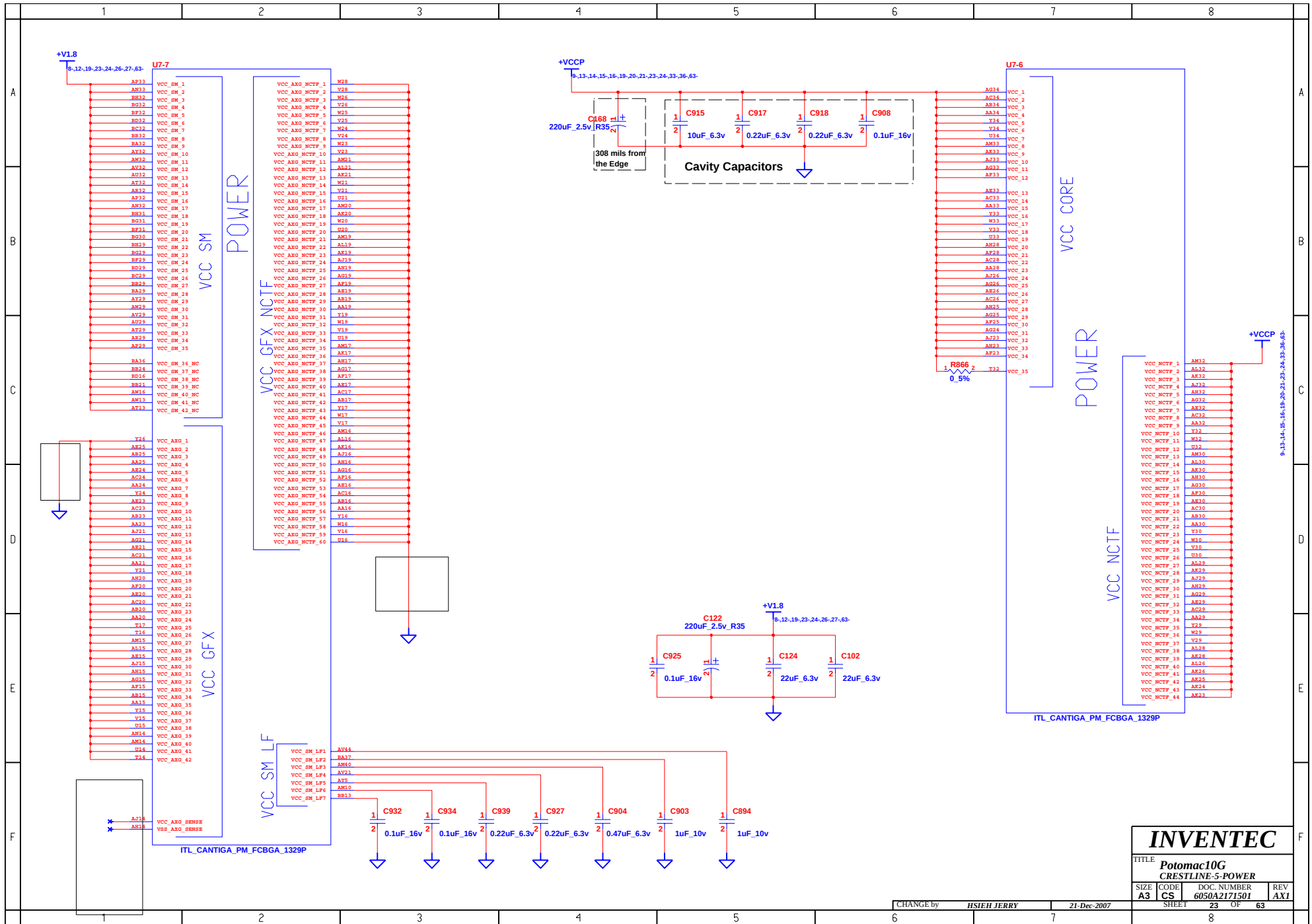
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TITLE
**Potomac10G
CRESTLINE-4-DDR2**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

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

SHEET 22 OF 63

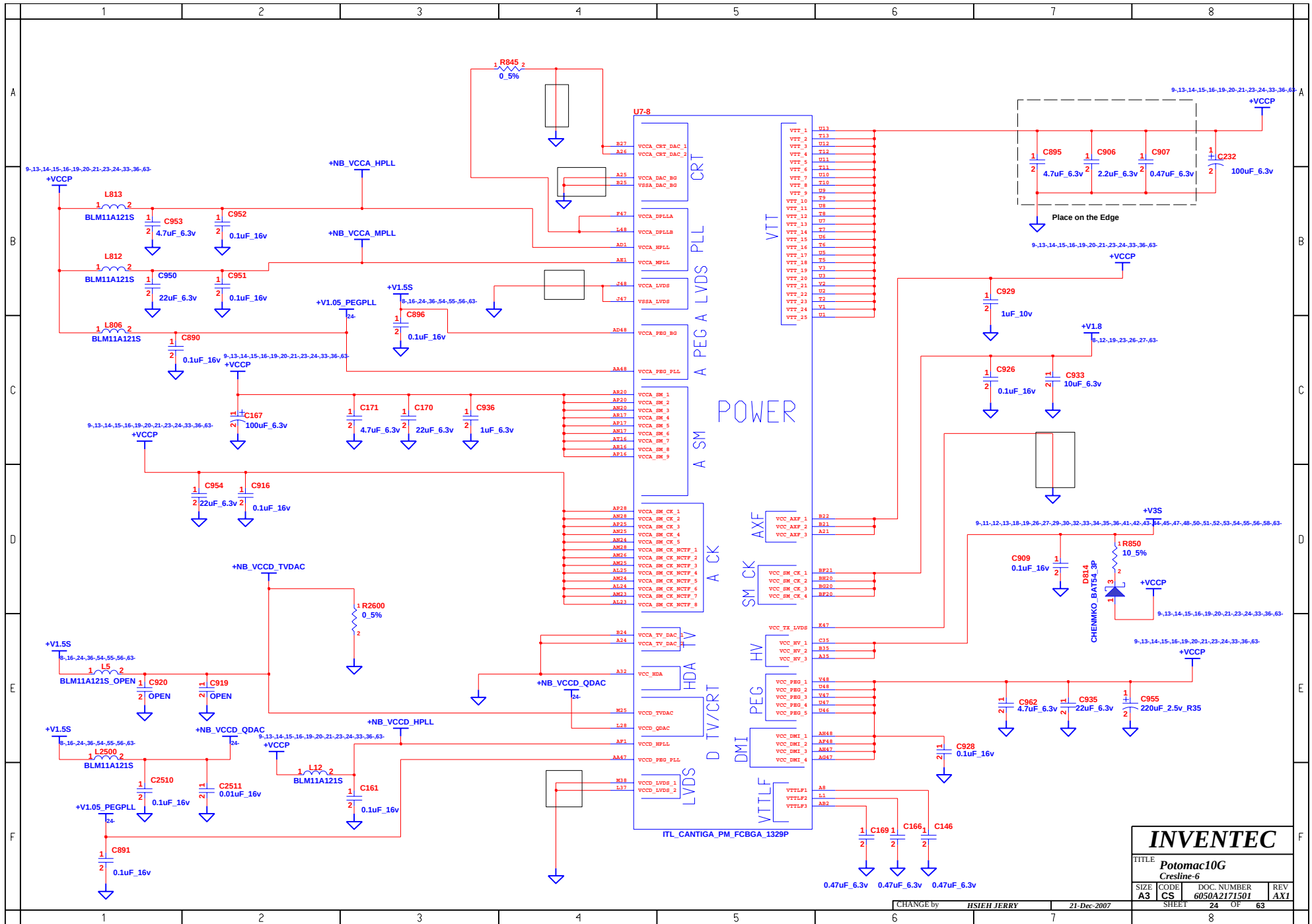


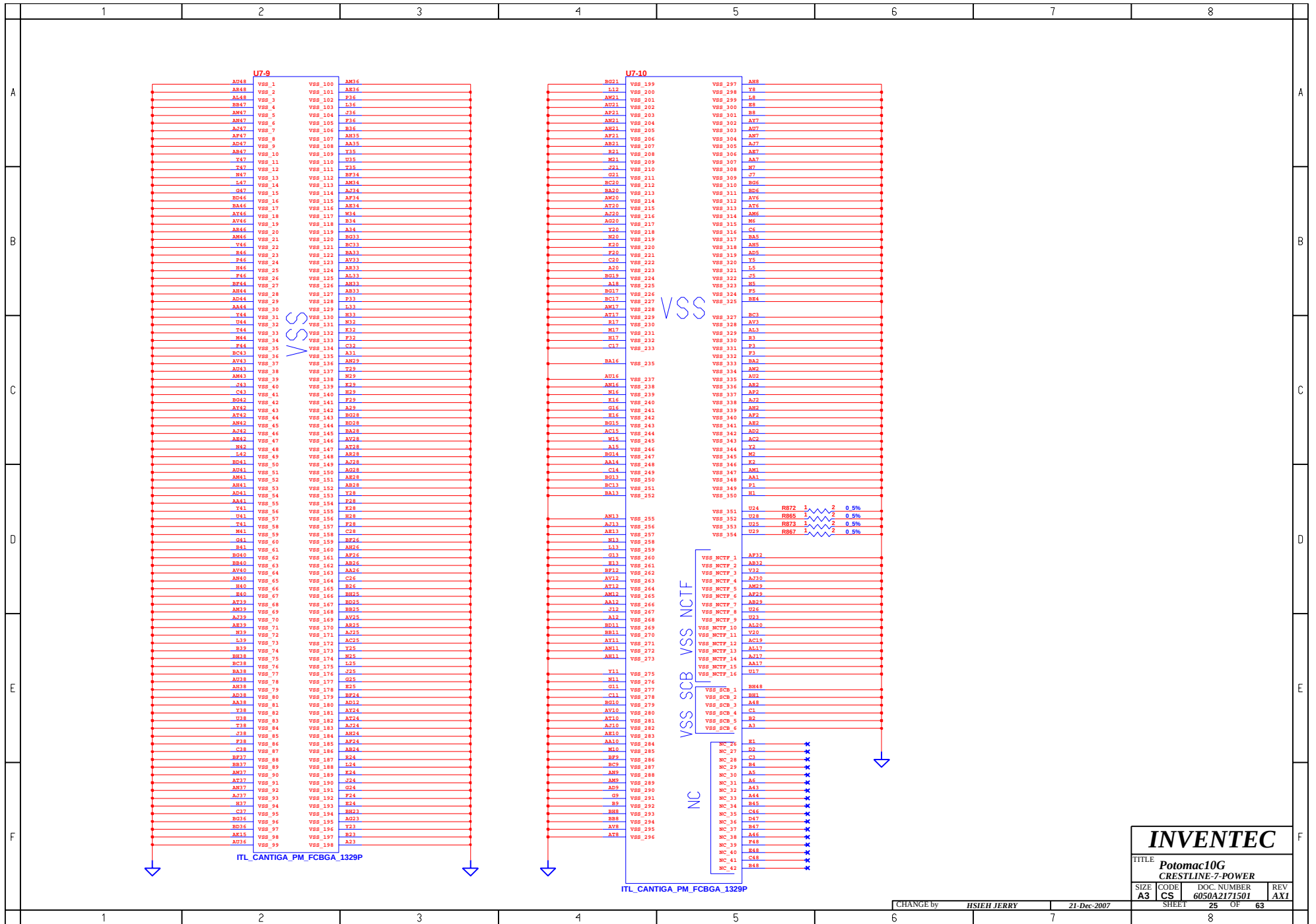
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TITLE			
Potomac10G			
CRESTLINE-5-POWER			
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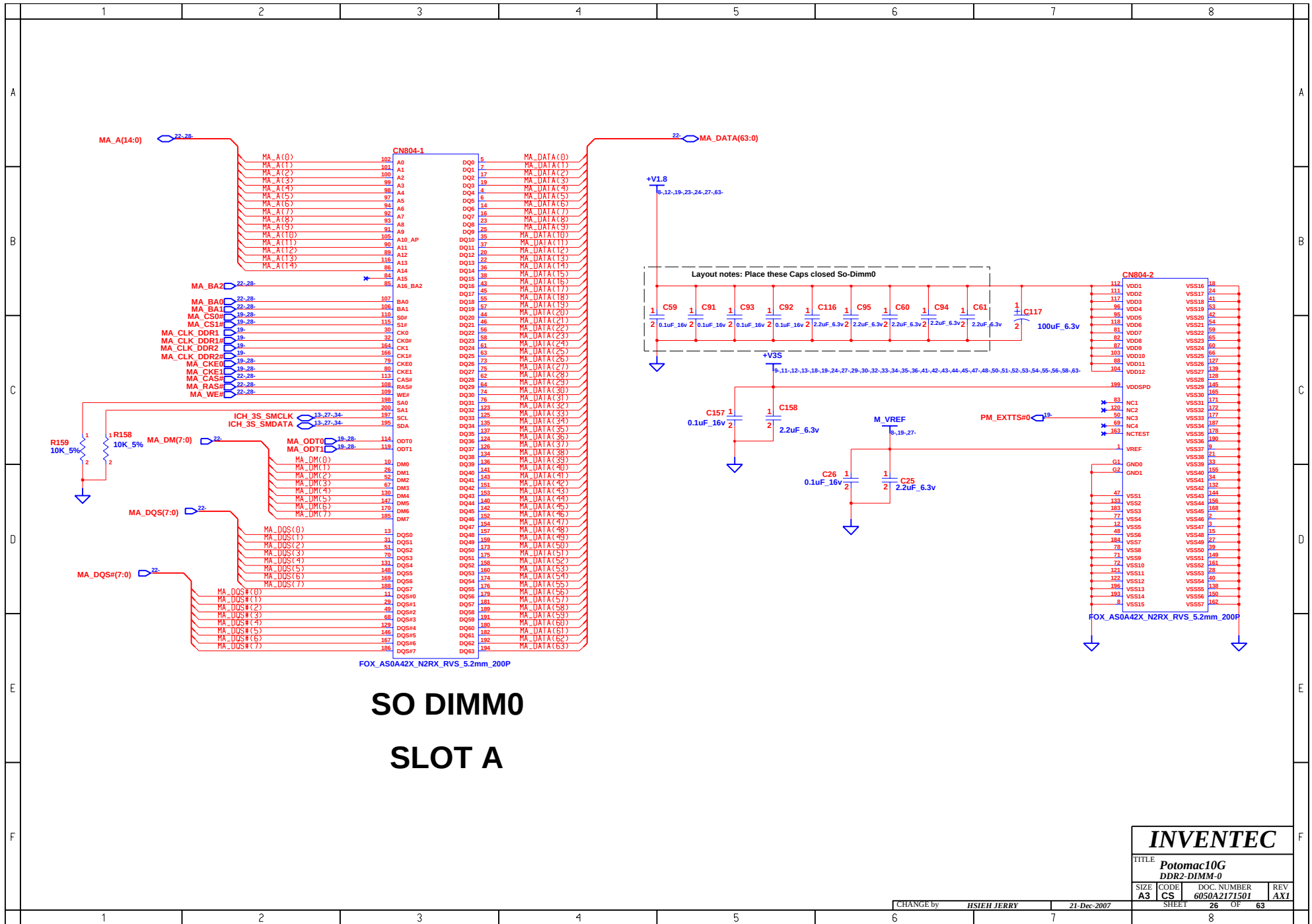
CHANGE by HSEH JERRY 21-Dec-2007

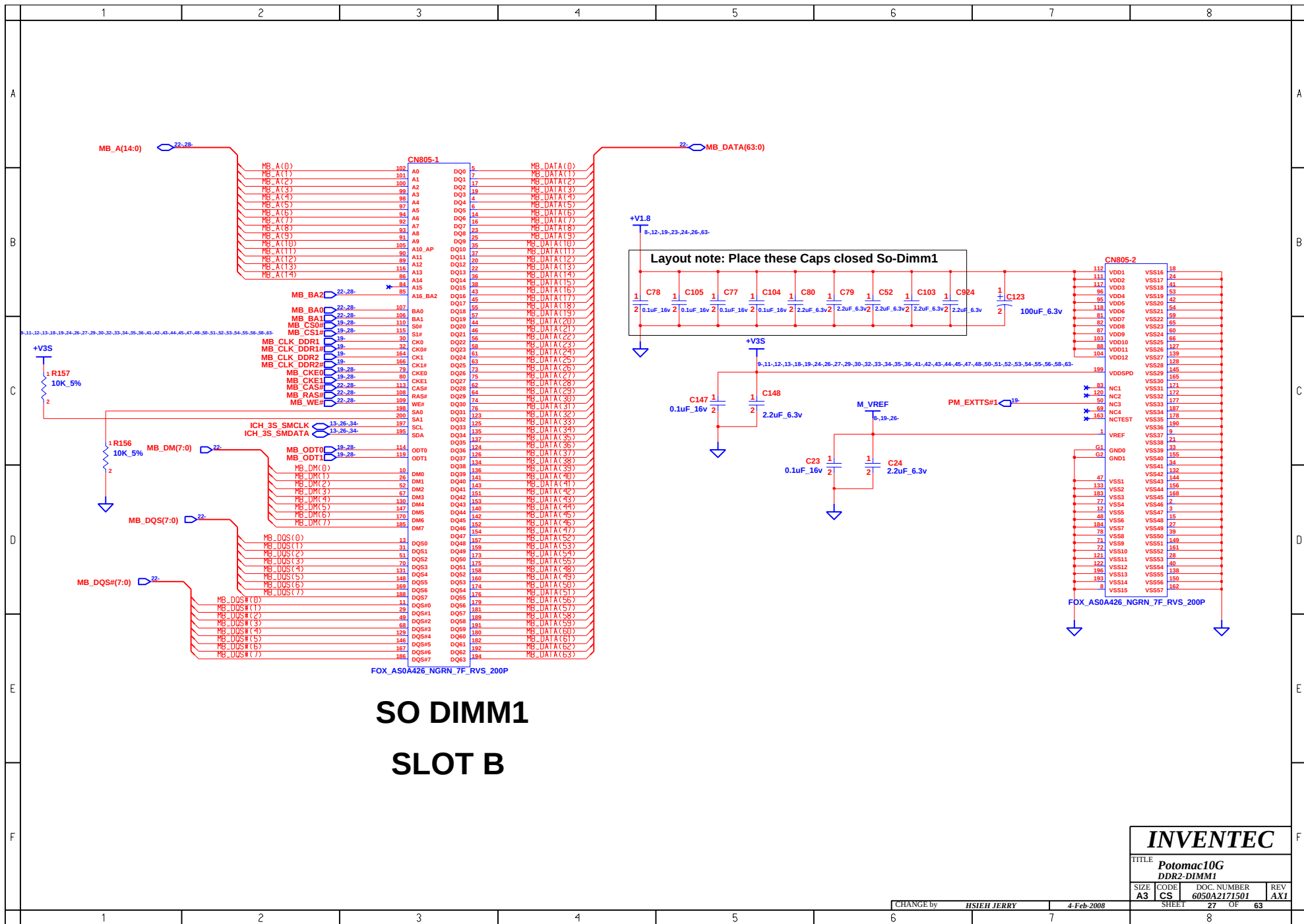
SHEET 23 OF 63





INVENTEC			
TITLE Potomac10G CRESTLINE-7-POWER			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
SHEET 25		OF 63	

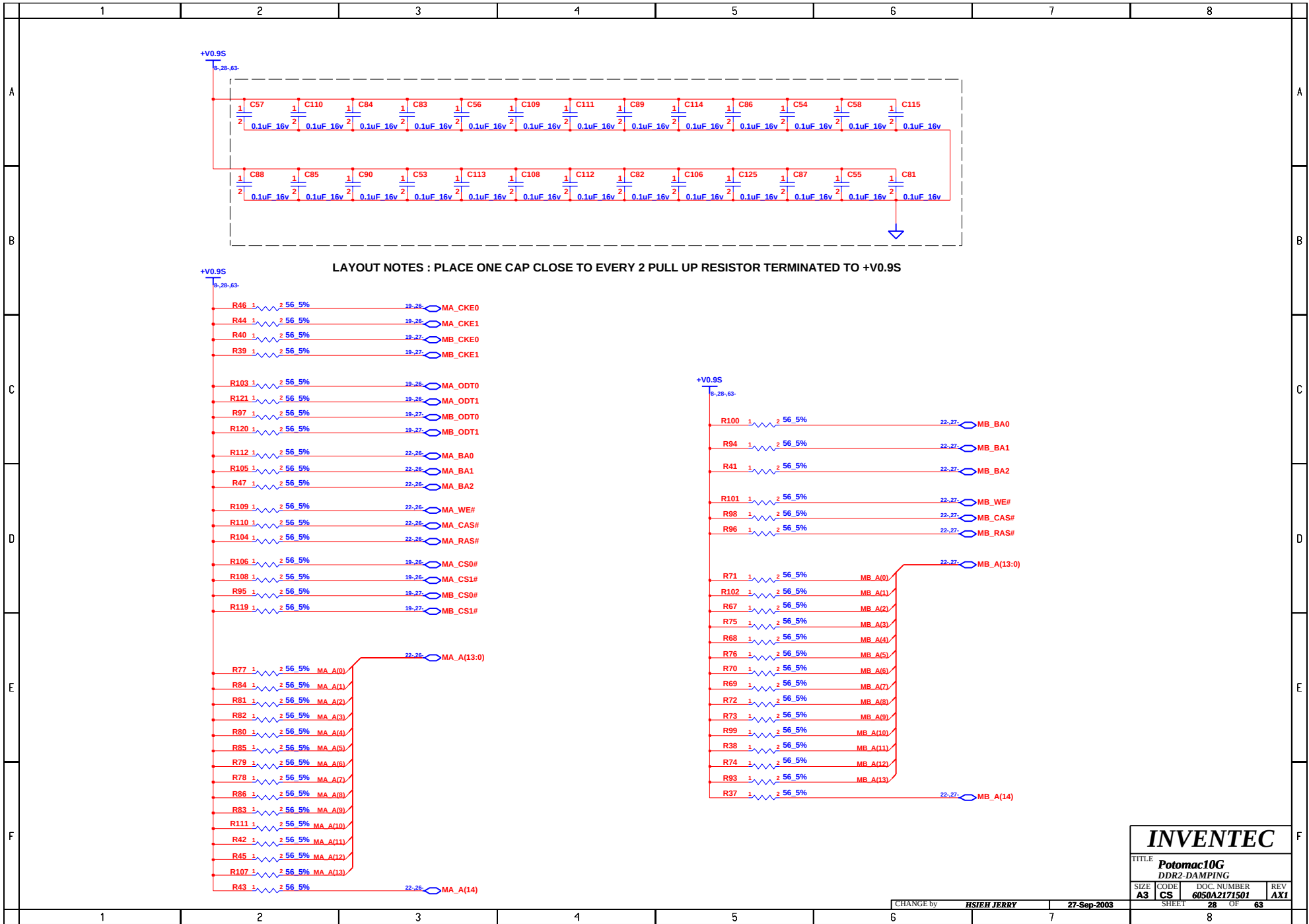


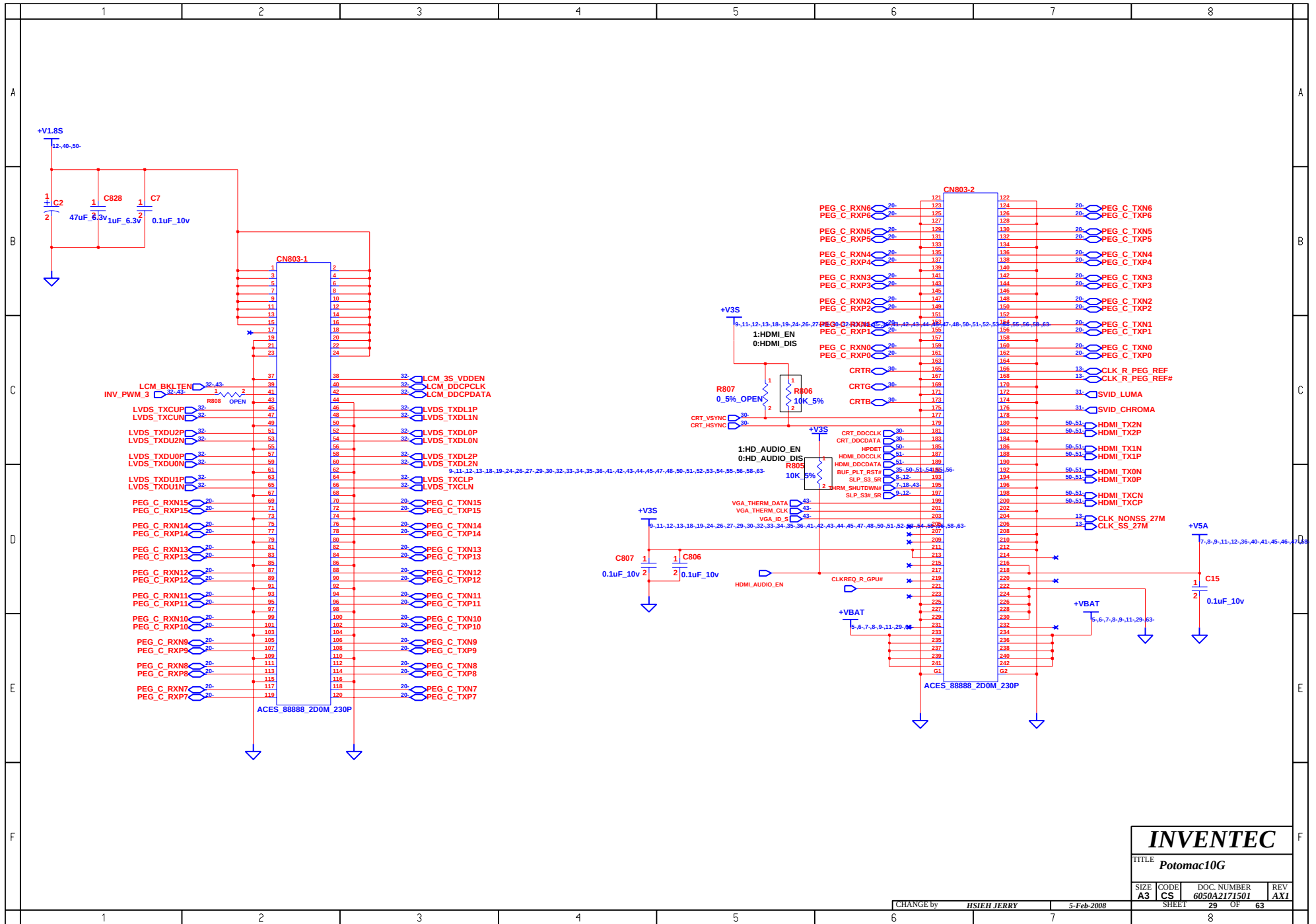


INVENTEC

TITLE Potomac10G DDR2-DIMM1			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1

CHANGE by Hsieh JERRY	4-Feb-2008	SHEET 27	OF 63
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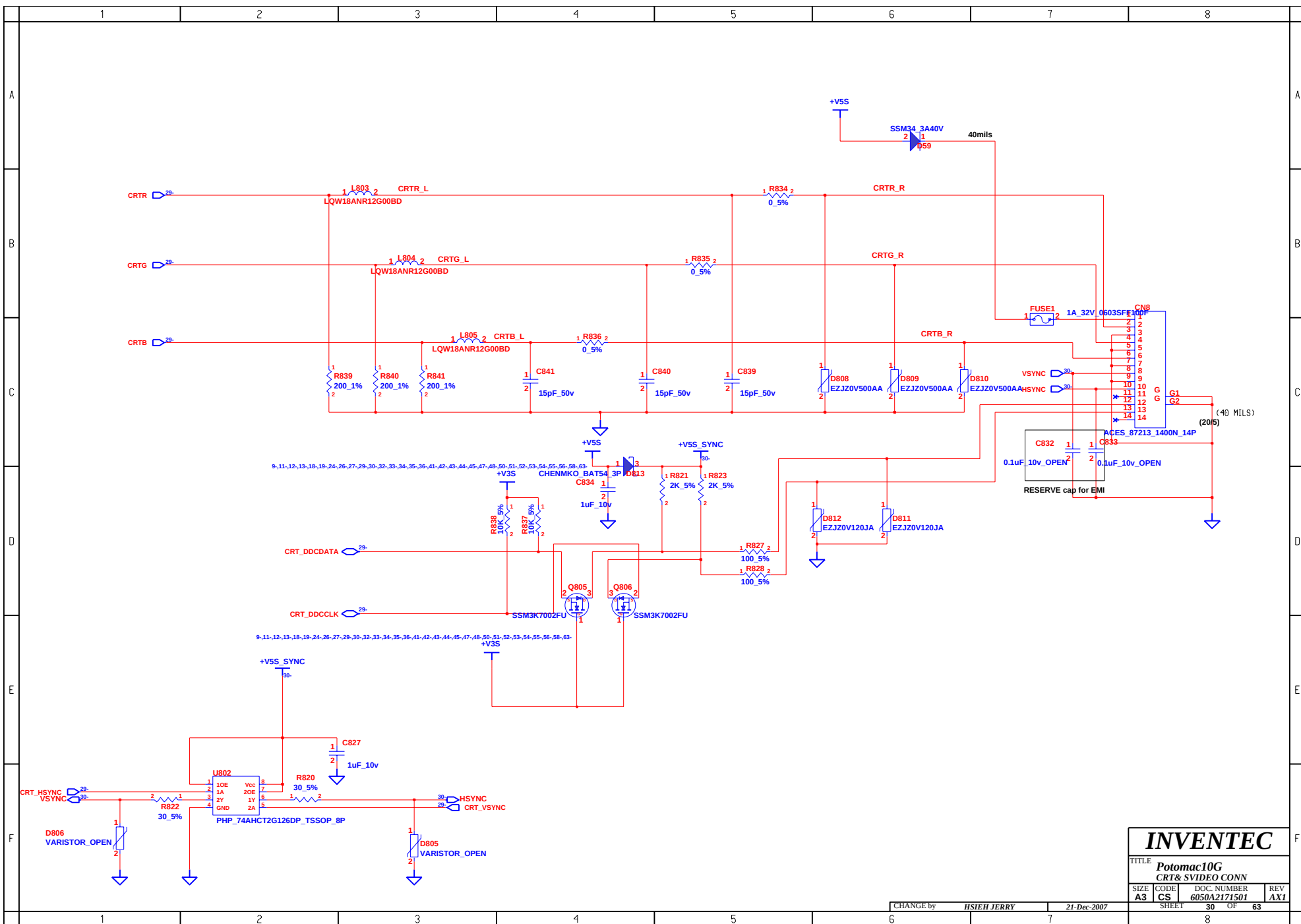
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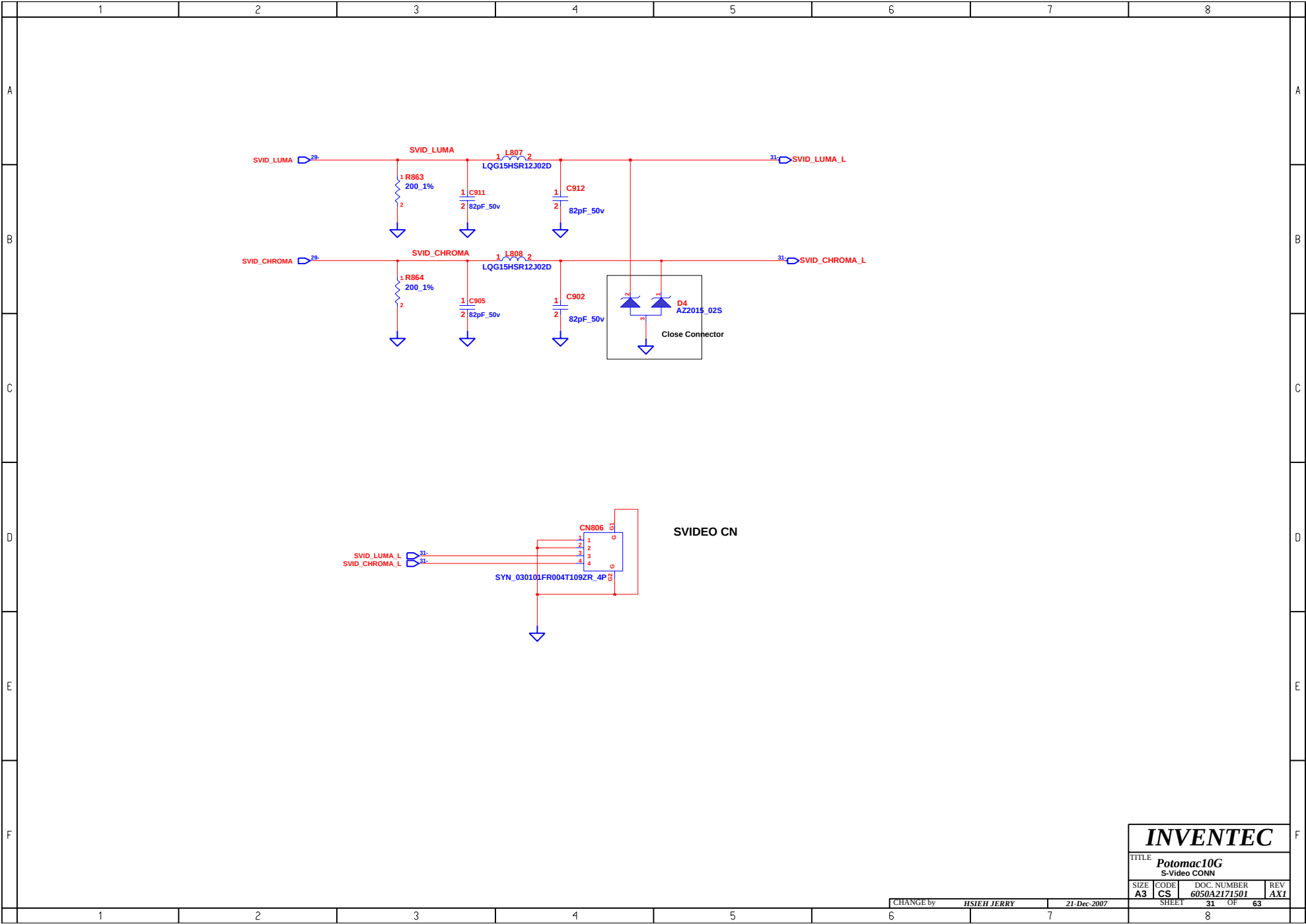
TITLE
Potomac10G

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

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

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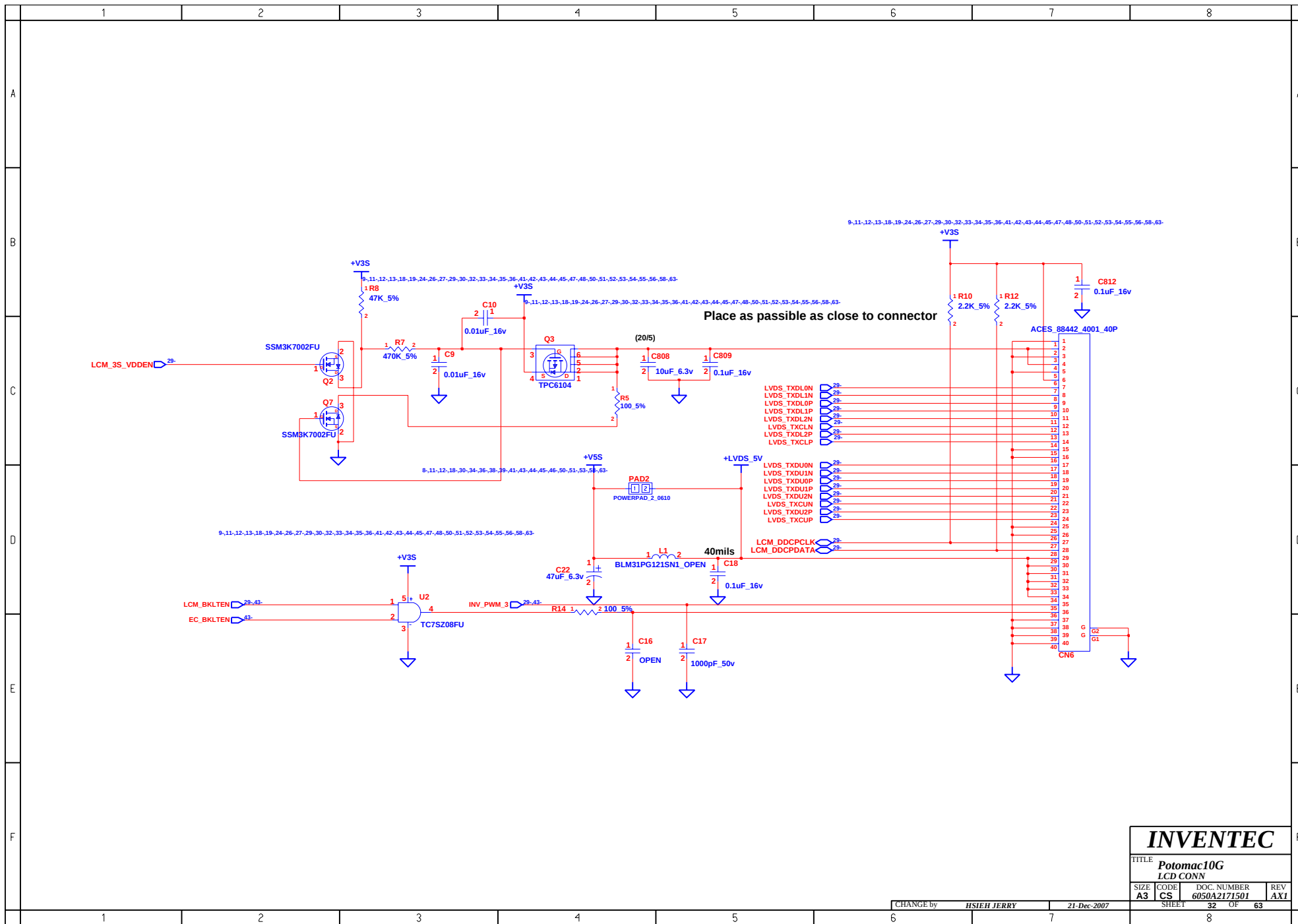




INVENTEC

TITLE
Potomac10G
S-Video CONN

SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
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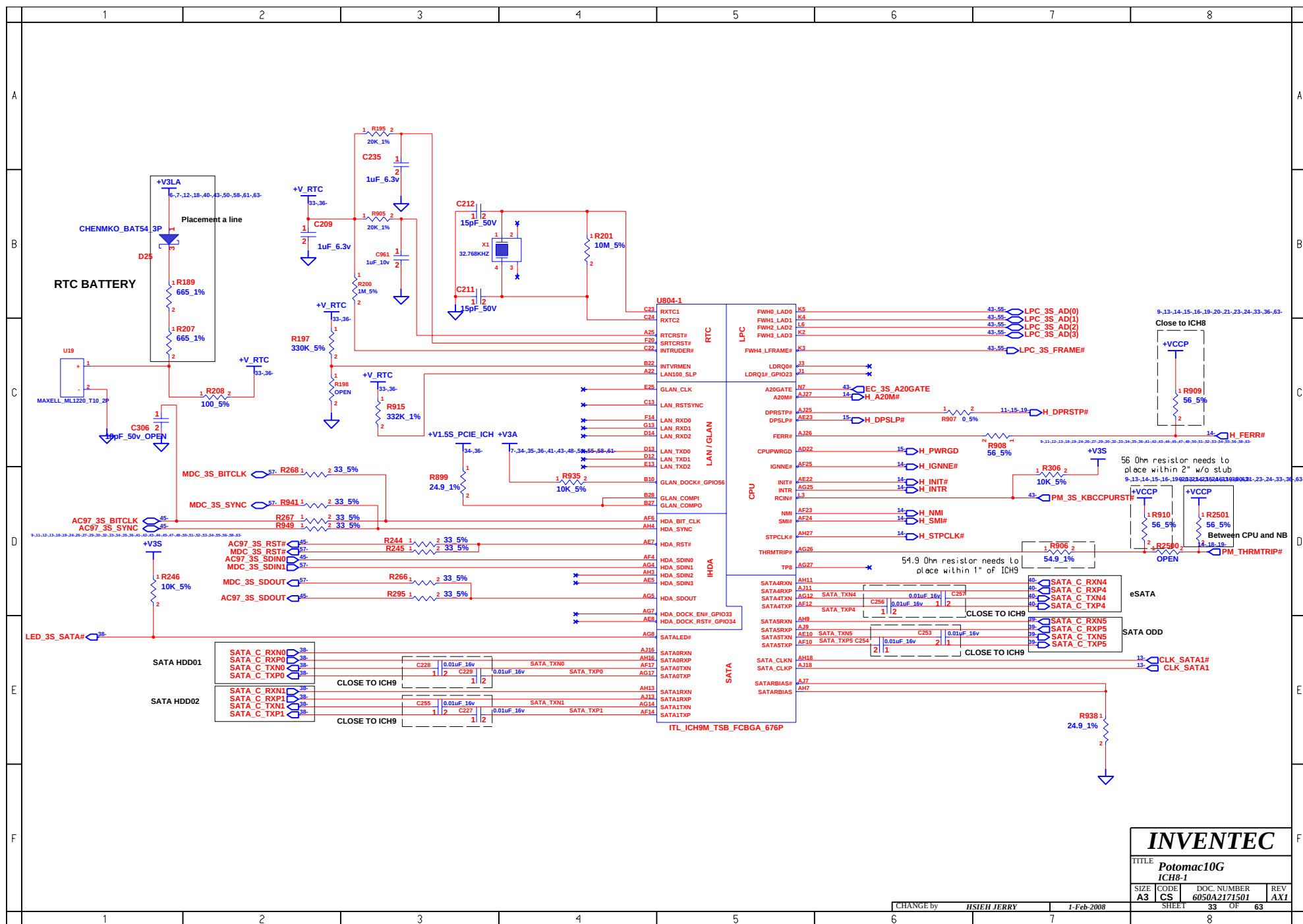


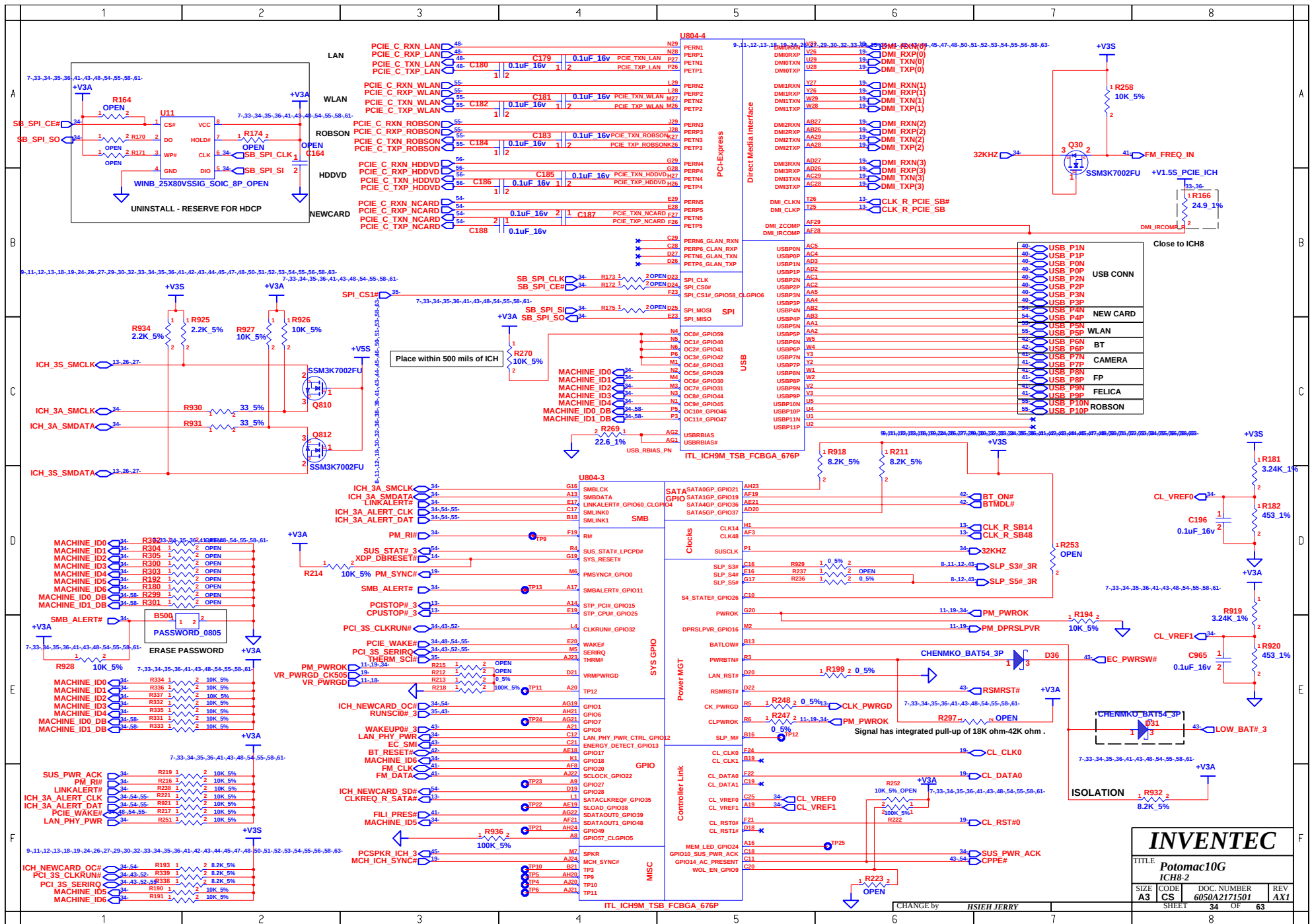
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TITLE			
Potomac10G			
LCD CONN			
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A3	CS	6050A2171501	AX1

CHANGE by HSEH JERRY 21-Dec-2007

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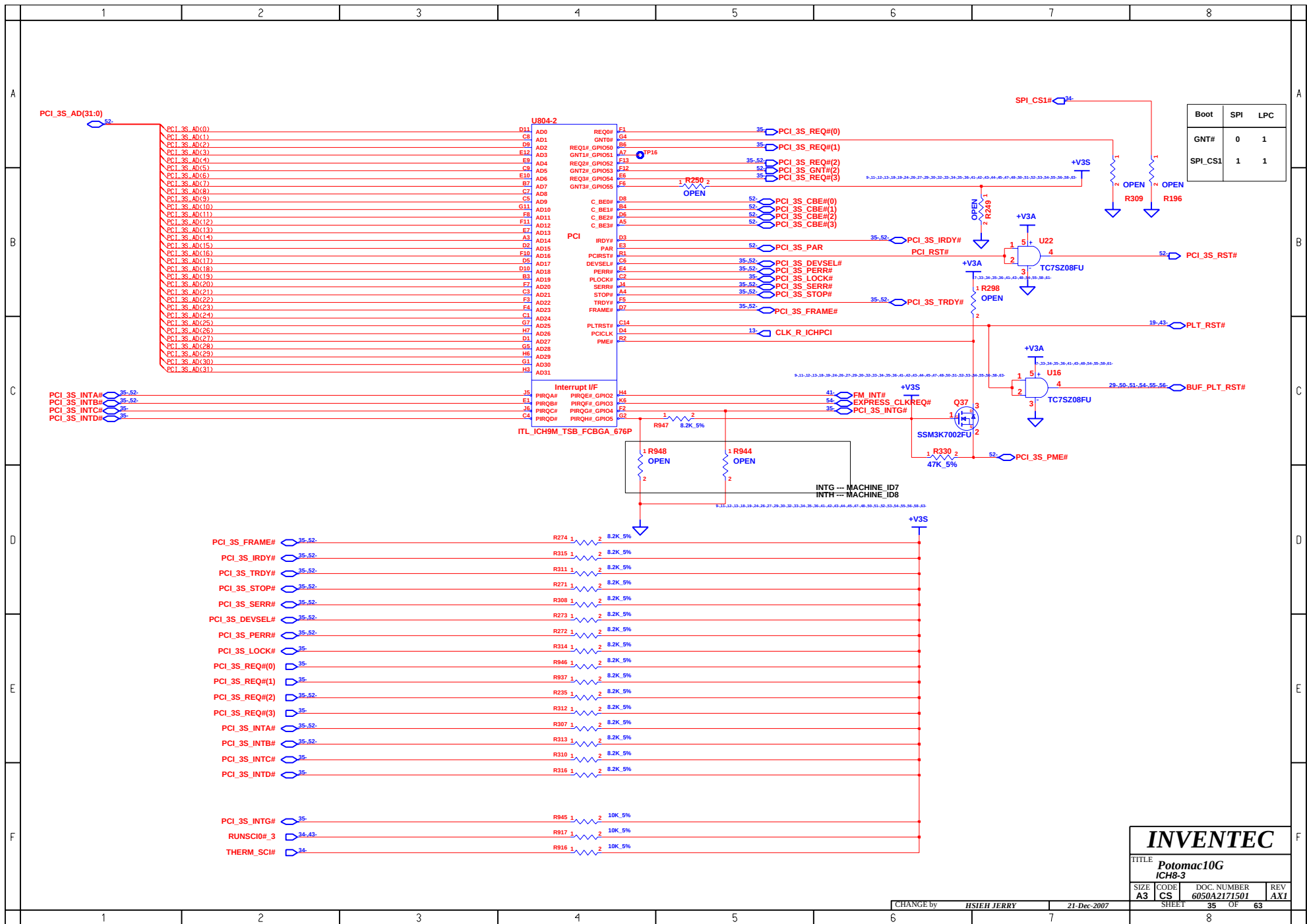




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TITLE: Potomac10G ICH8-2

SIZE: A3	CODE: CS	DOC. NUMBER: 6050A2171501	REV: AX1
SHEET: 34		OF: 63	

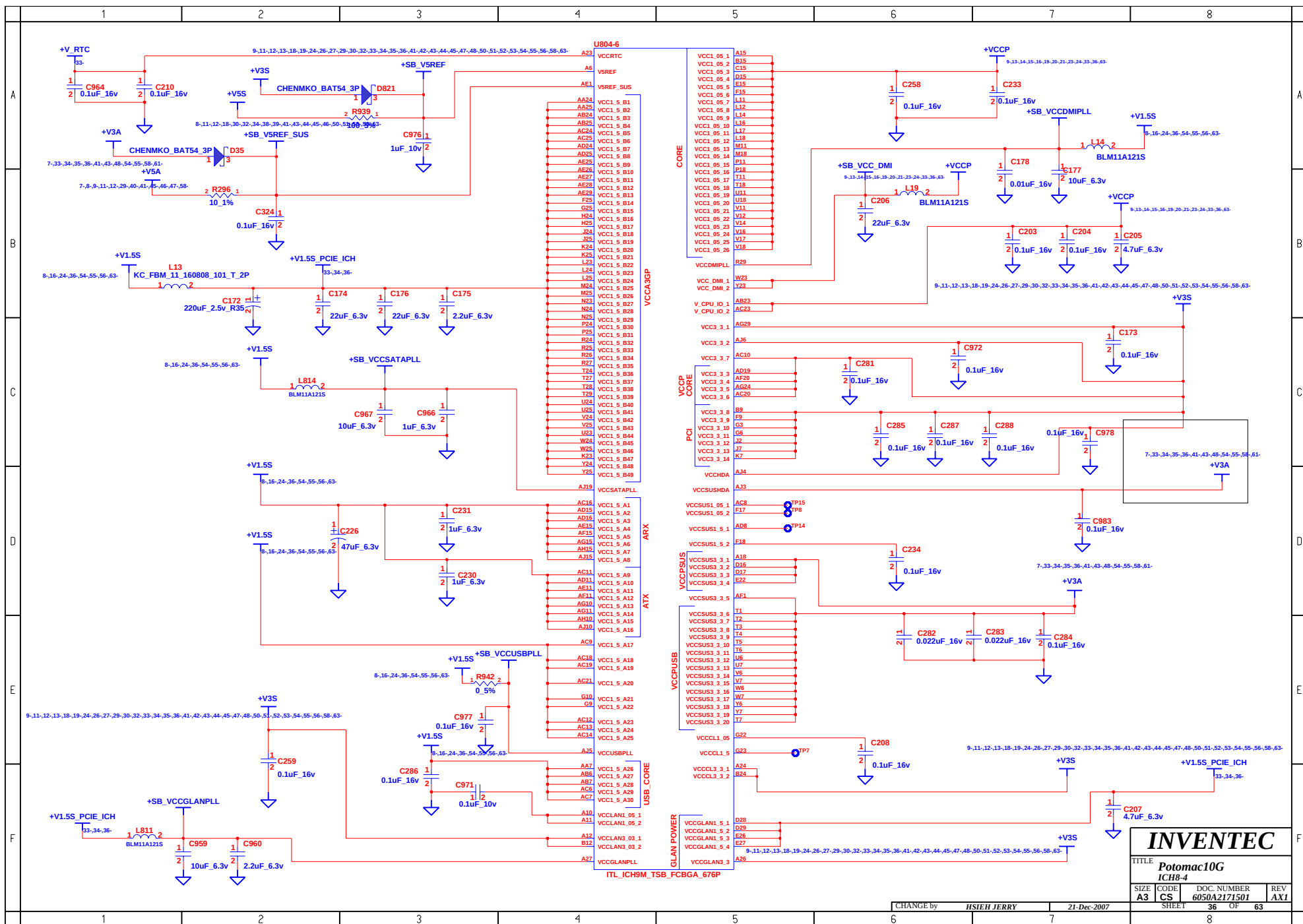


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SPI_CS1	1	1

INVENTEC

TITLE Potomac10G iCH8-3			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
SHEET 35		OF 63	

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



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A									A
B									B
C									C
D									D
E									E
F									F

U804-5

AA26 VSS001 H5
AA27 VSS002 J23
AA28 VSS003 VSS108 J26
AB1 VSS004 VSS109 J28
AB2 VSS005 VSS110 J27
AB3 VSS006 VSS111 AC22
AB4 VSS007 VSS112 K28
AB5 VSS008 VSS113 K29
AB6 VSS009 VSS114 L12
AB7 VSS010 VSS115 L15
AB8 VSS011 VSS116 L2
AB9 VSS012 VSS117 L26
AC1 VSS013 VSS118 L27
AC2 VSS014 VSS119 L5
AC3 VSS015 VSS120 L7
AD1 VSS016 VSS121 M12
AD2 VSS017 VSS122 M13
AD3 VSS018 VSS123 M14
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AD6 VSS021 VSS126 M17
AD7 VSS022 VSS127 M23
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AD16 VSS031 VSS136 N17
AD17 VSS032 VSS137 N18
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AD29 VSS044 VSS150 P4
AD30 VSS045 VSS151 P7
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AD32 VSS047 VSS153 R12
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AD39 VSS054 VSS160 R28
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AD42 VSS057 VSS163 T14
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AD59 VSS074 VSS180 V13
AD60 VSS075 VSS181 V15
AD61 VSS076 VSS182 V23
AD62 VSS077 VSS183 V28
AD63 VSS078 VSS184 V29
AD64 VSS079 VSS185 V4
AD65 VSS080 VSS186 V5
AD66 VSS081 VSS187 W26
AD67 VSS082 VSS188 W27
AD68 VSS083 VSS189 W3
AD69 VSS084 VSS190 Y1
AD70 VSS085 VSS191 Y28
AD71 VSS086 VSS192 Y29
AD72 VSS087 VSS193 Y4
AD73 VSS088 VSS194 Y5
AD74 VSS089 VSS195 AG28
AD75 VSS090 VSS196 AH6
AD76 VSS091 VSS197 AF2
AD77 VSS092 VSS198 B25
AD78 VSS093
AD79 VSS094 VSS_NCTF1 A1
AD80 VSS095 VSS_NCTF2 A2
AD81 VSS096 VSS_NCTF3 A28
AD82 VSS097 VSS_NCTF4 A29
AD83 VSS098 VSS_NCTF5 AH1
AD84 VSS099 VSS_NCTF6 AH28
AD85 VSS100 VSS_NCTF7 A31
AD86 VSS101 VSS_NCTF8 A32
AD87 VSS102 VSS_NCTF9 A328
AD88 VSS103 VSS_NCTF10 B1
AD89 VSS104 VSS_NCTF11 A329
AD90 VSS105 VSS_NCTF12 B29
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ITL ICH9M_TSB_FCBGA_676P

INVENTEC

TITLEPotomac10G
ICH8-5

SIZEA3

CODECS

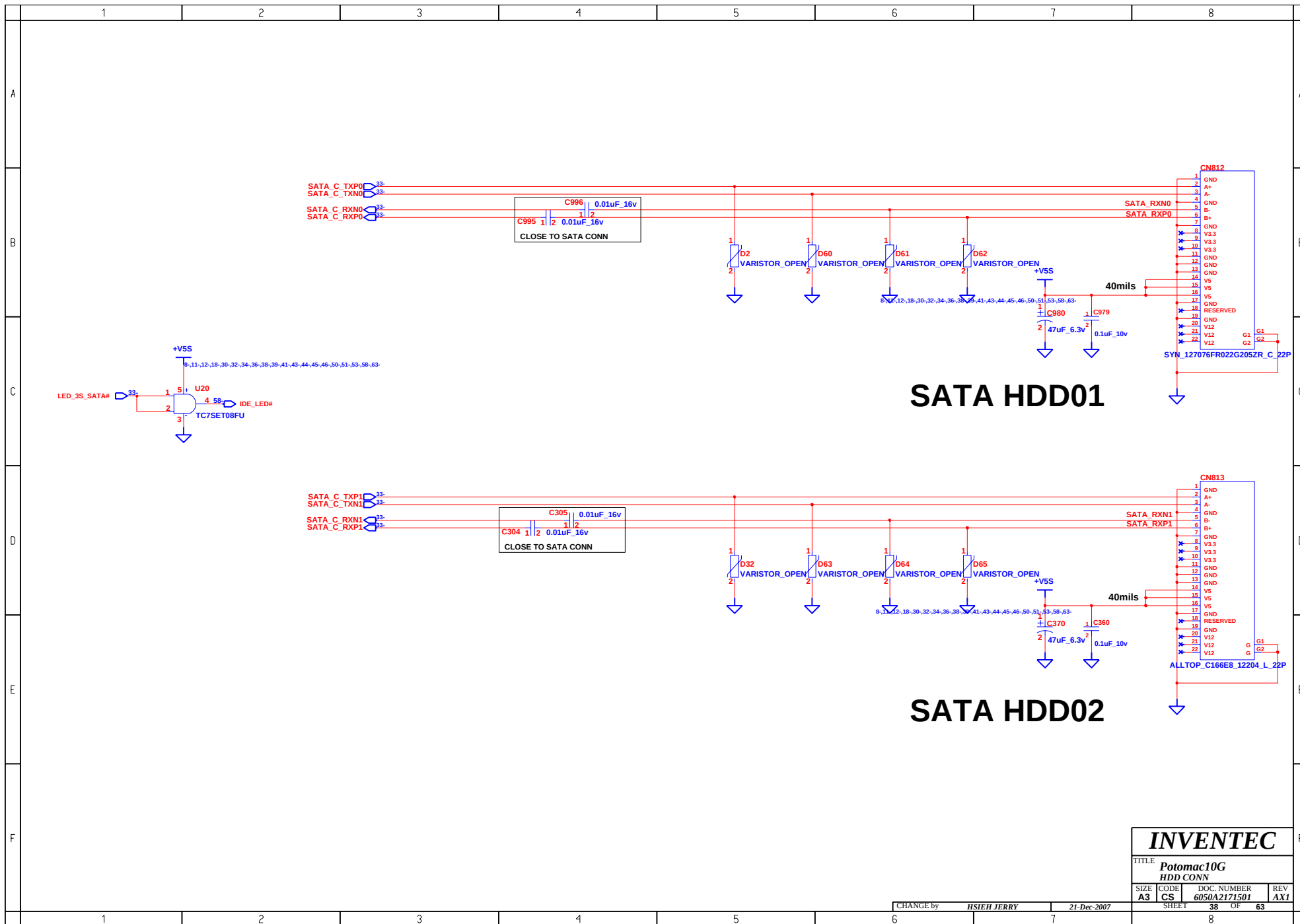
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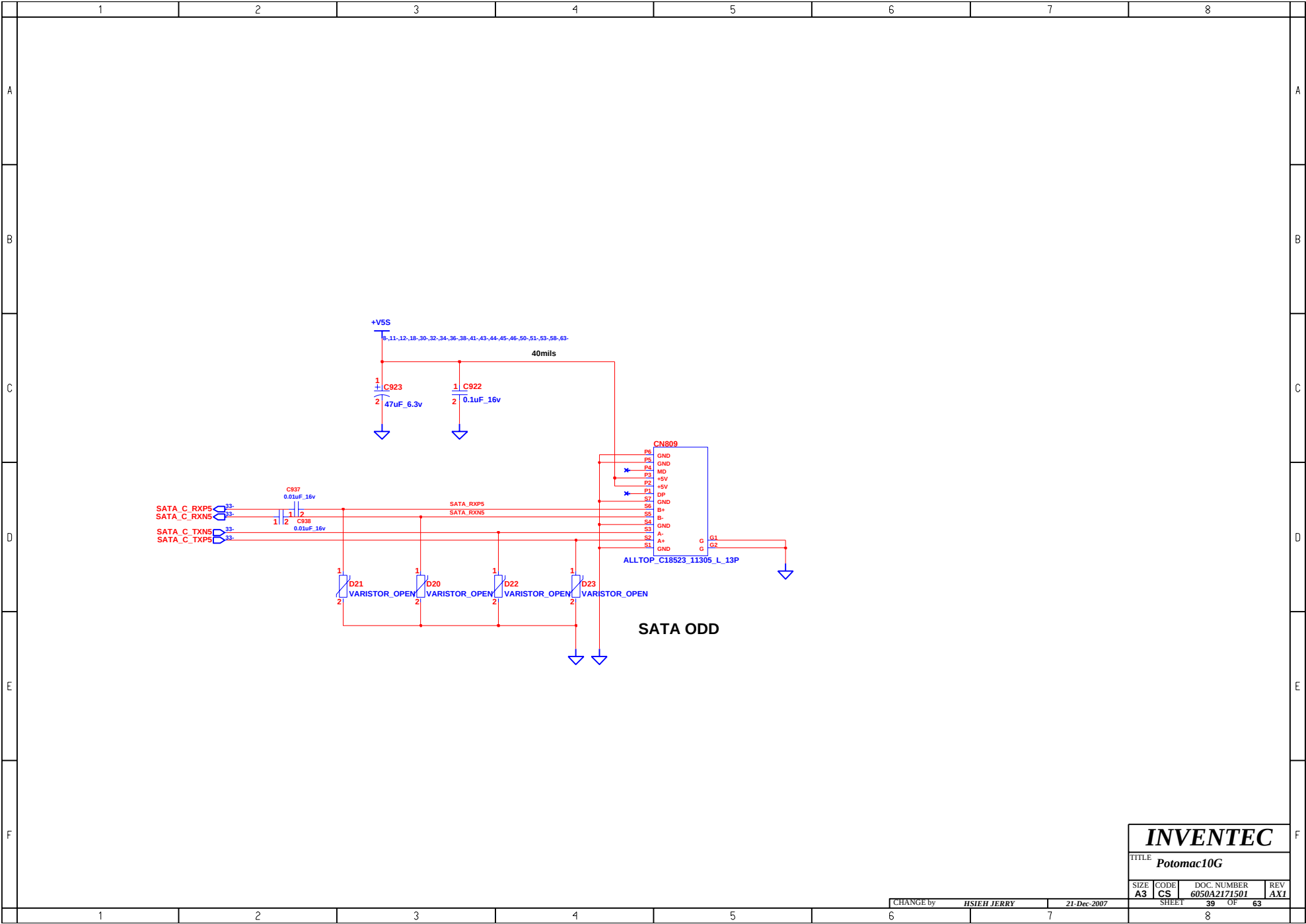
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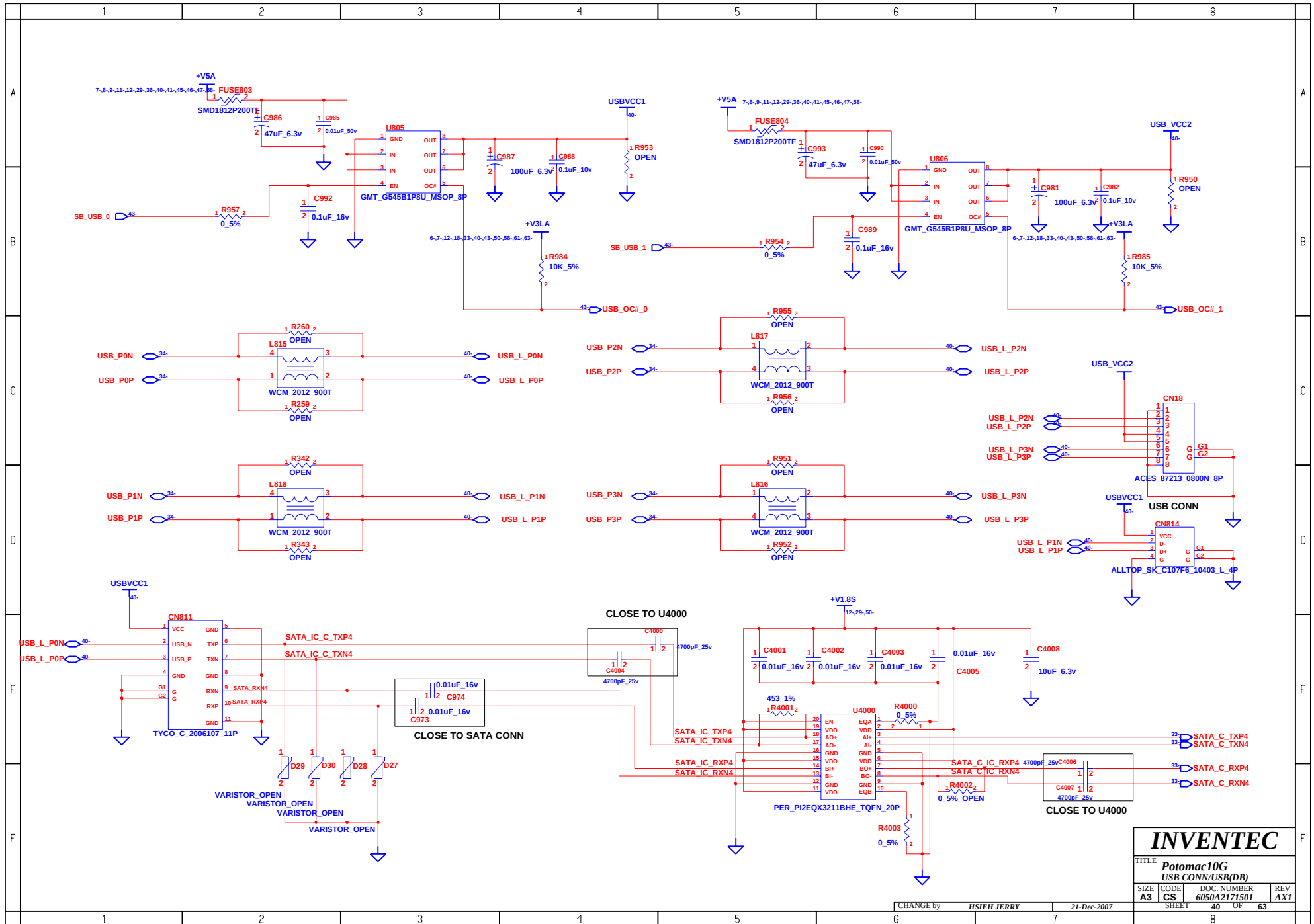
SHEET37

OF63

CHANGE byHSIEH JERRY21-Dec-2007







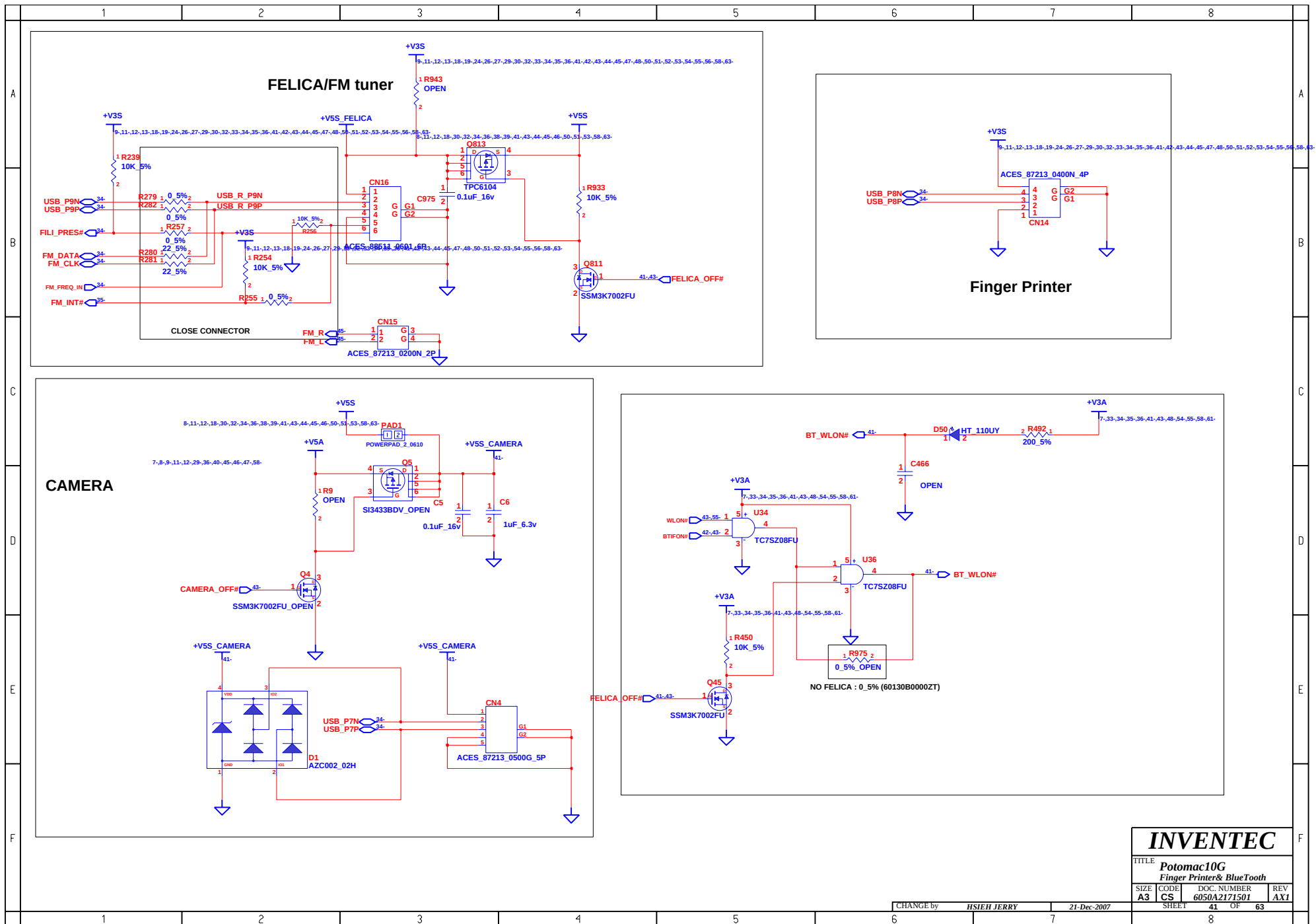
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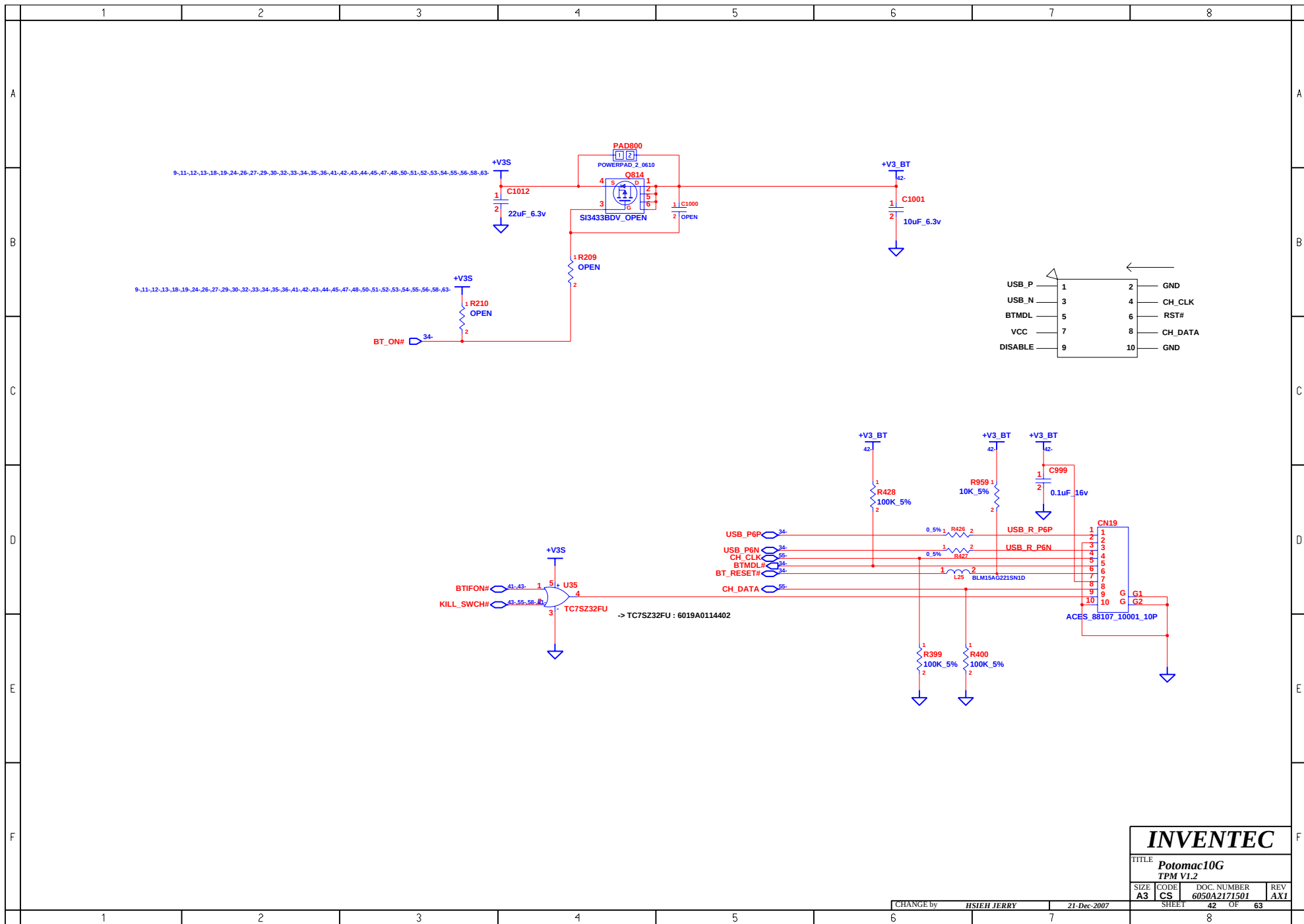
TITLE
Potomac10G
USB CONN/USB(DB)

SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
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CHANGE by **HSEH JERRY** 21-Dec-2007

SHEET **40** OF **63**





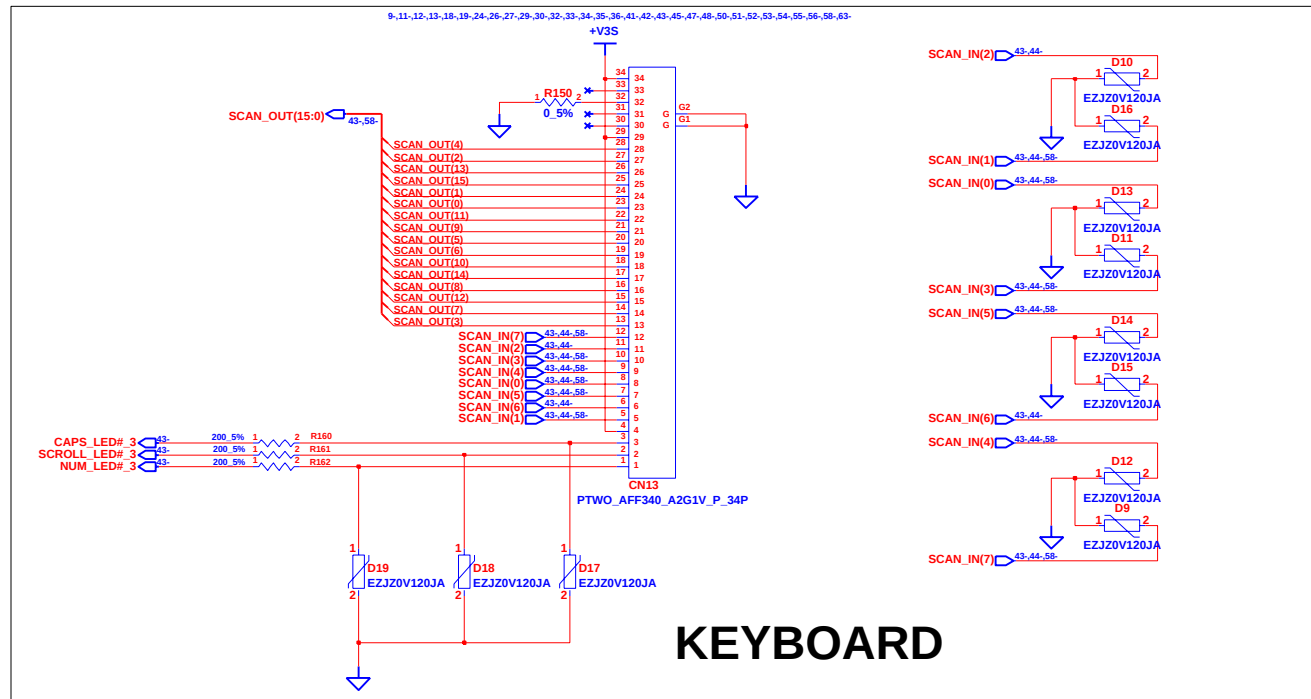
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TITLE
Potomac10G
TPM V1.2

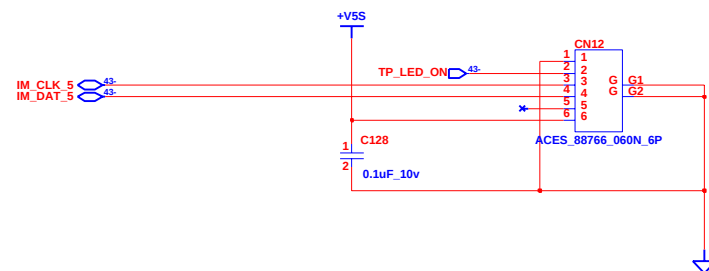
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

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

SHEET 42 OF 63



KEYBOARD



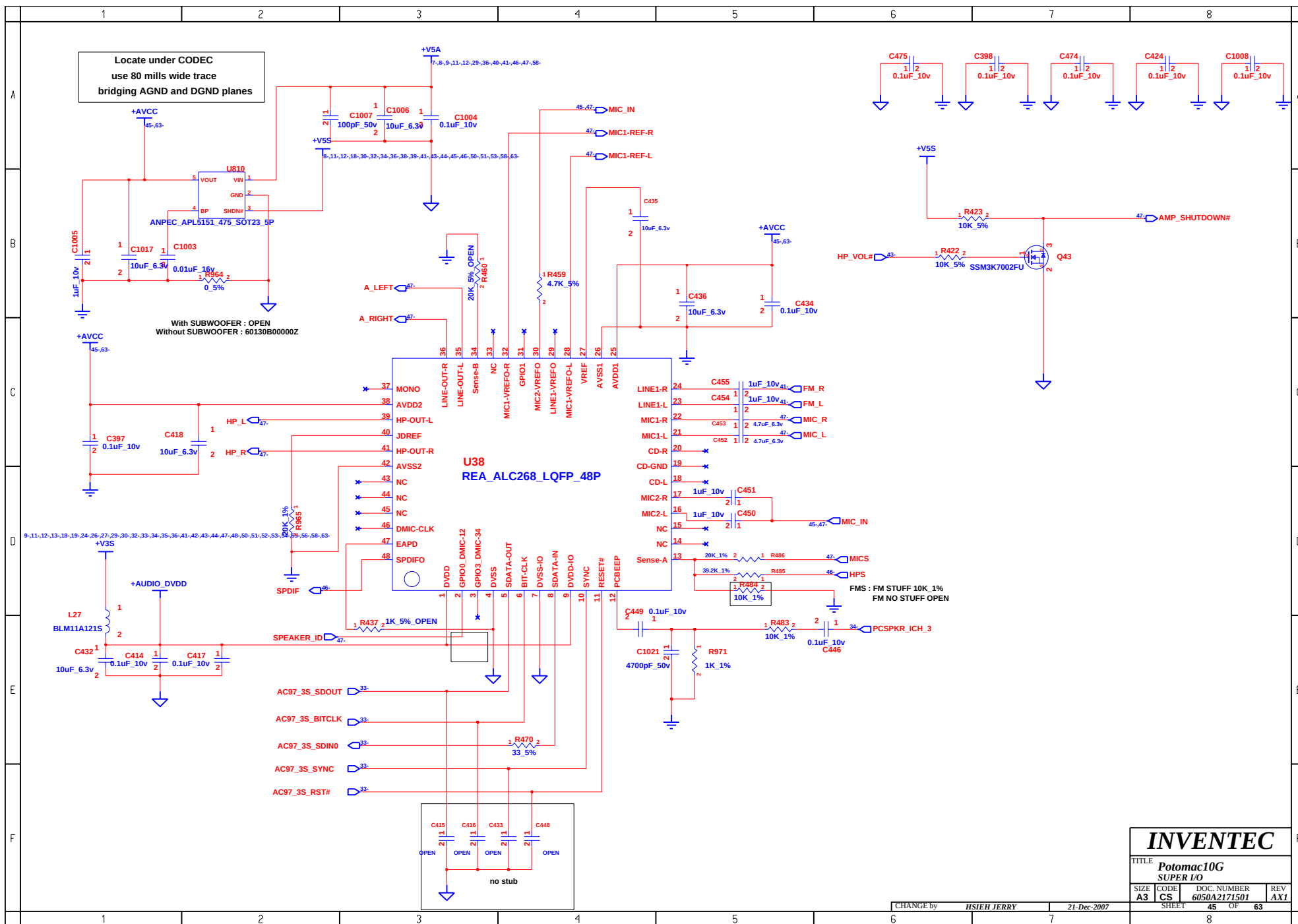
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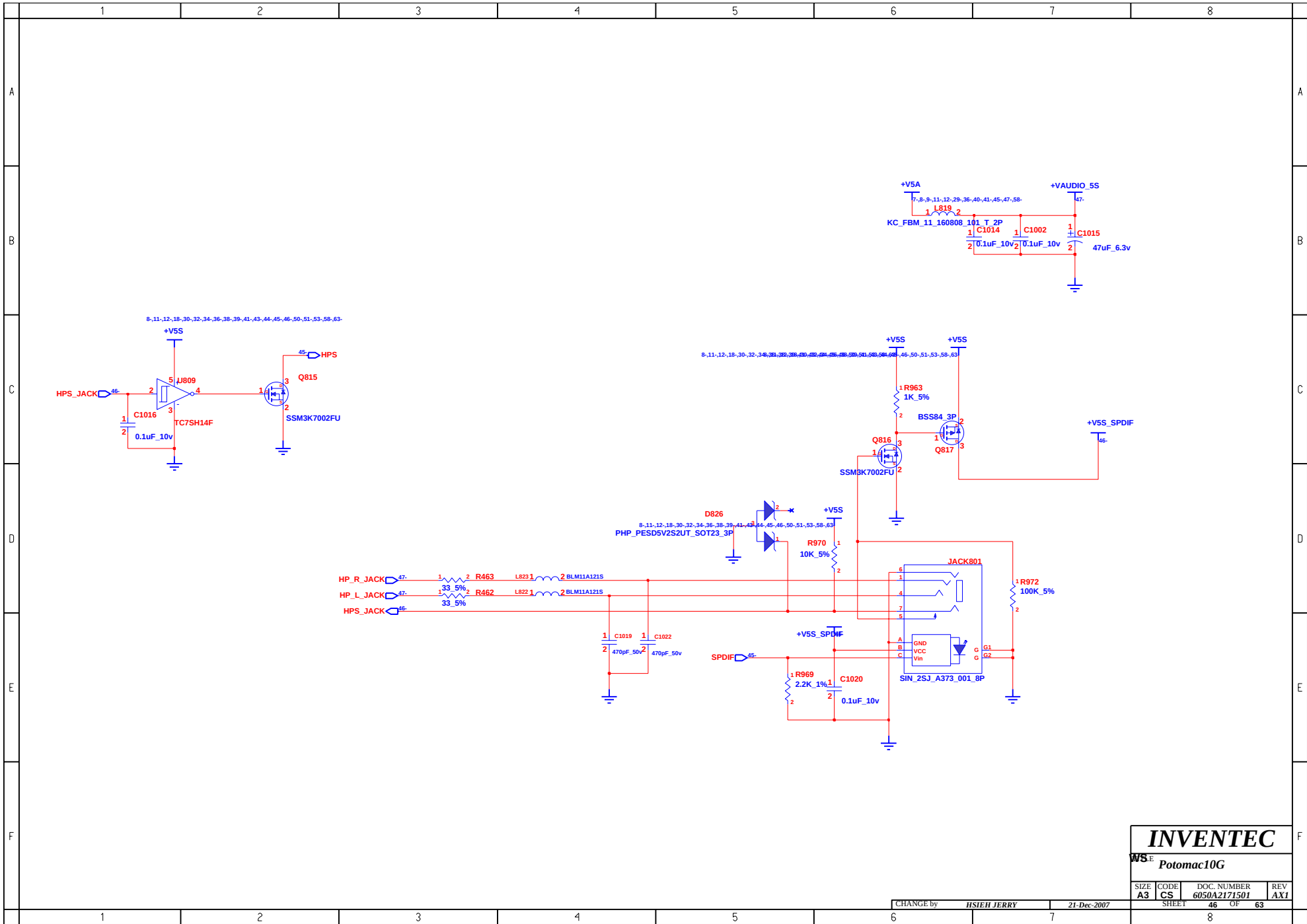
TITLE
Potomac10G
INT.KBC/POINT DEVICES

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

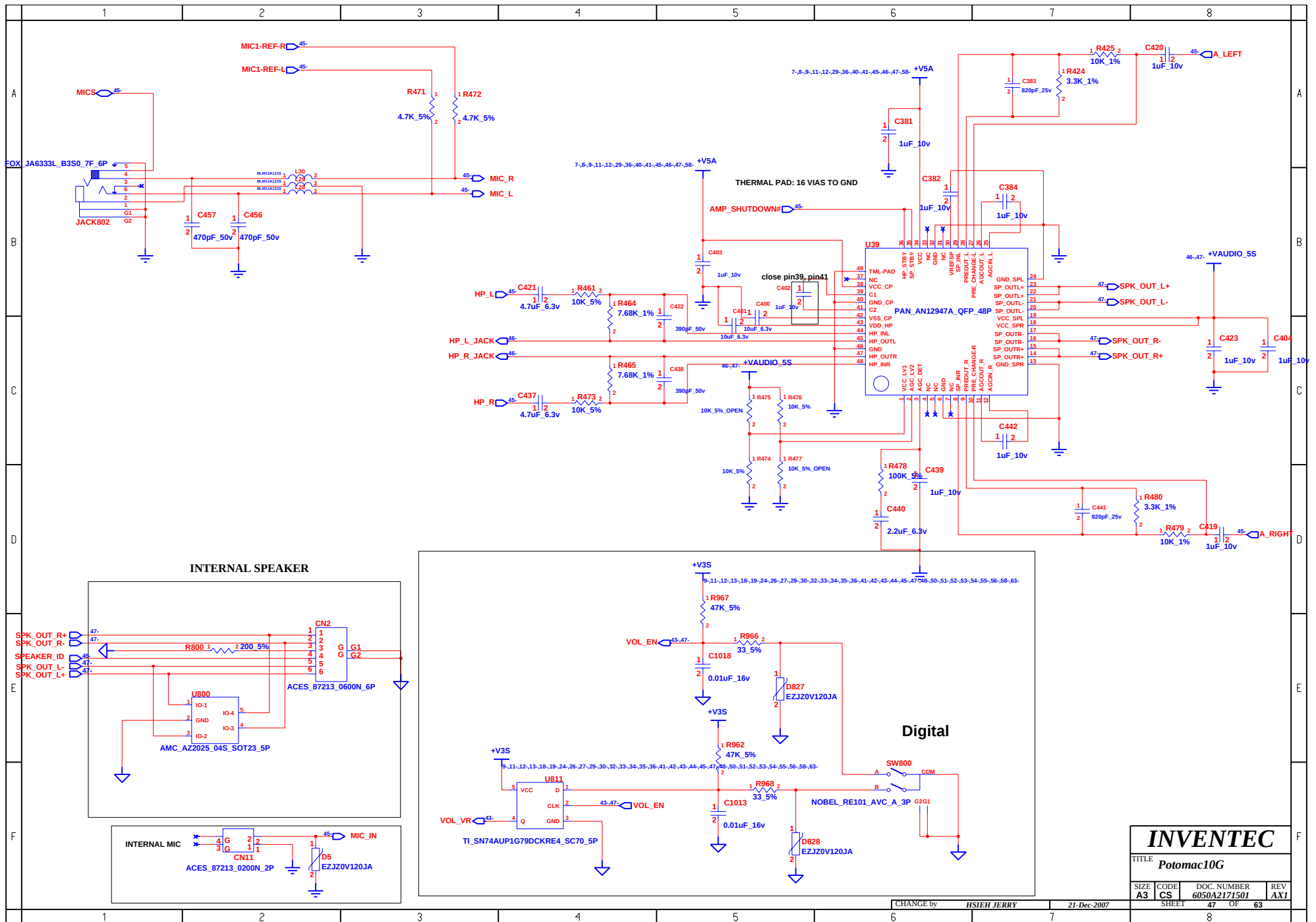
CHANGE by **Hsieh JERRY** 21-Dec-2007

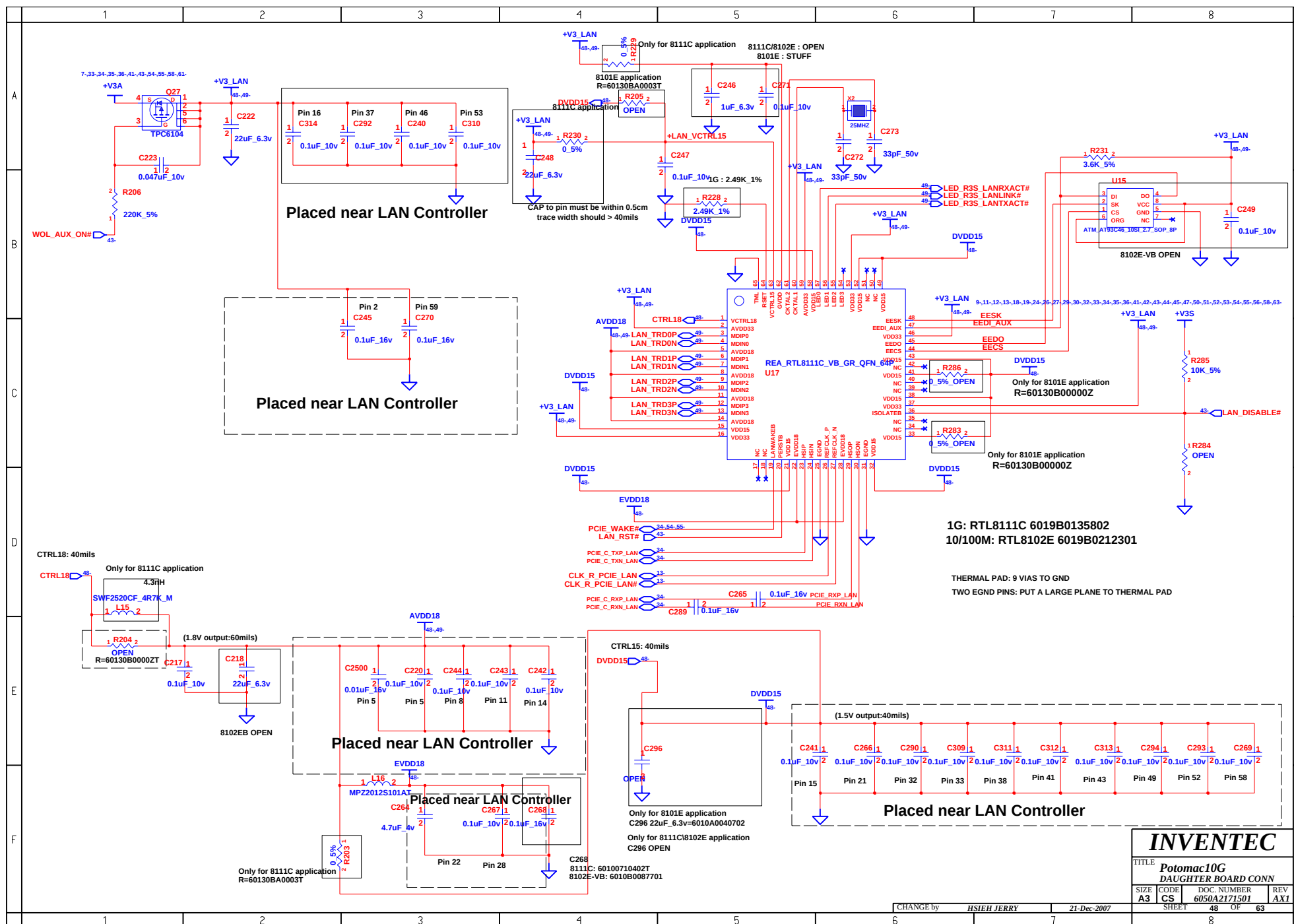
SHEET 44 OF 63

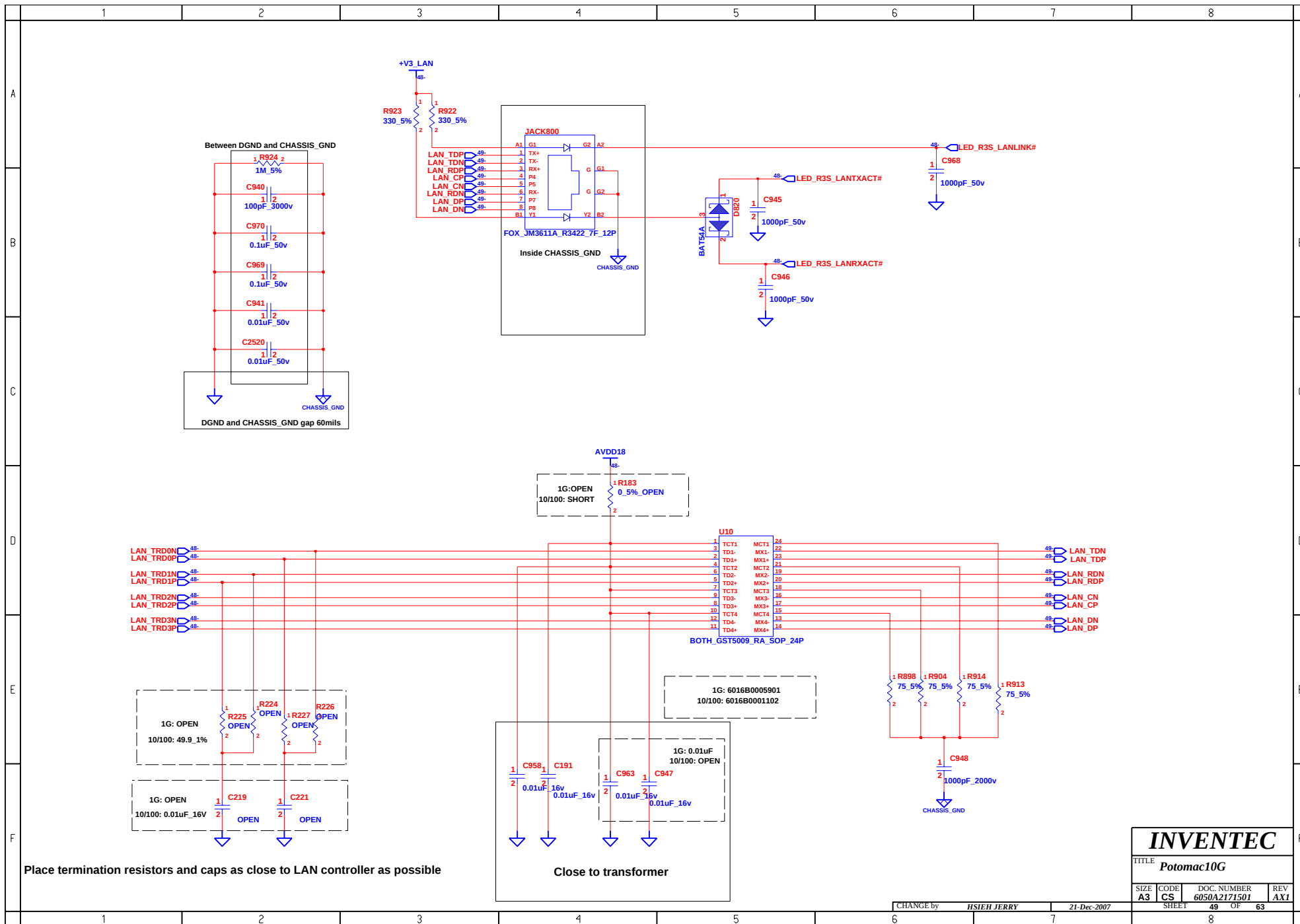




INVENTEC			
WS-E Potomac10G			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1
CHANGE by		21-Dec-2007	
HSH JERRY			
SHEET		46	OF 63
		8	







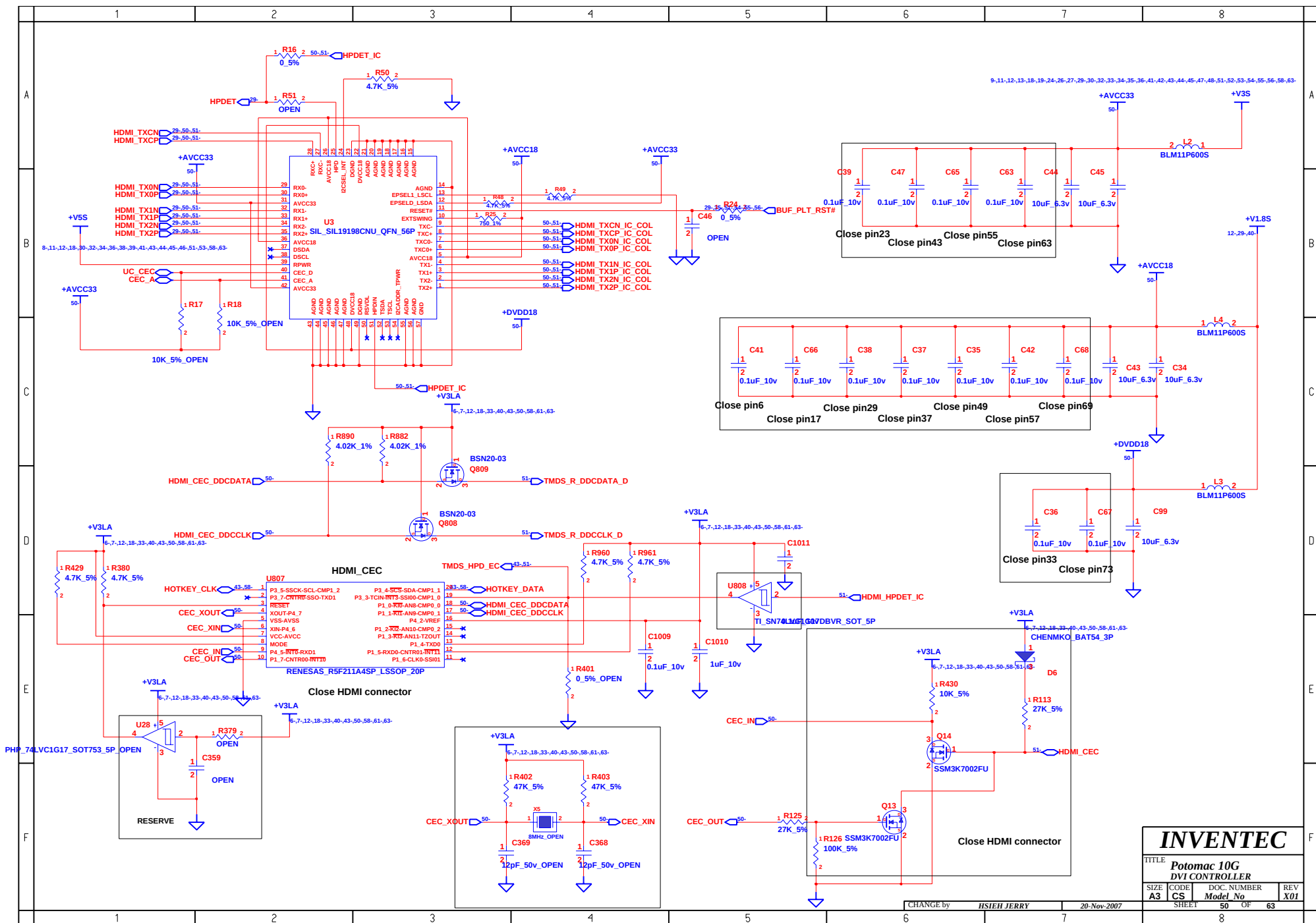
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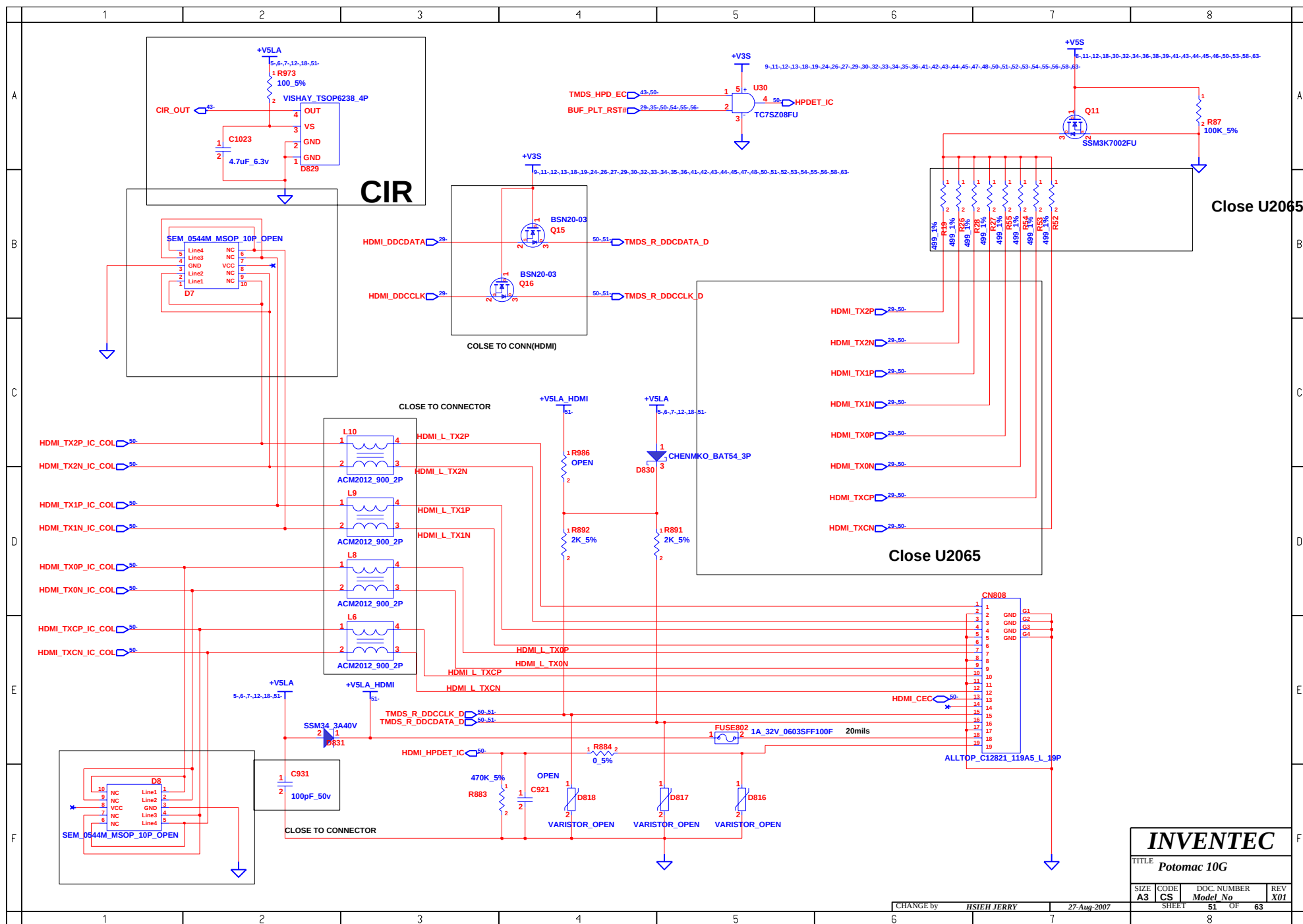
TITLE
Potomac10G

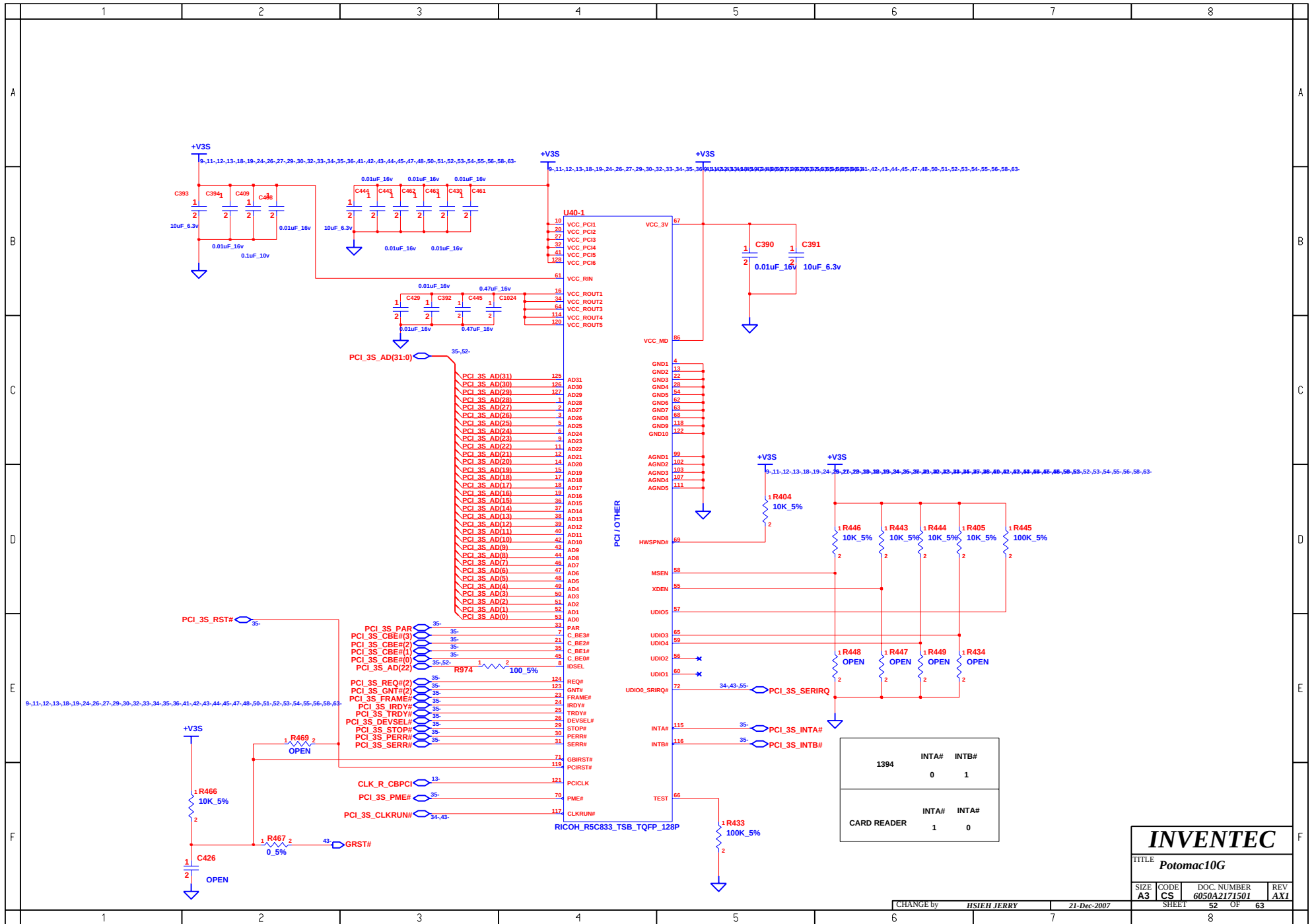
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

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

SHEET 49 OF 63







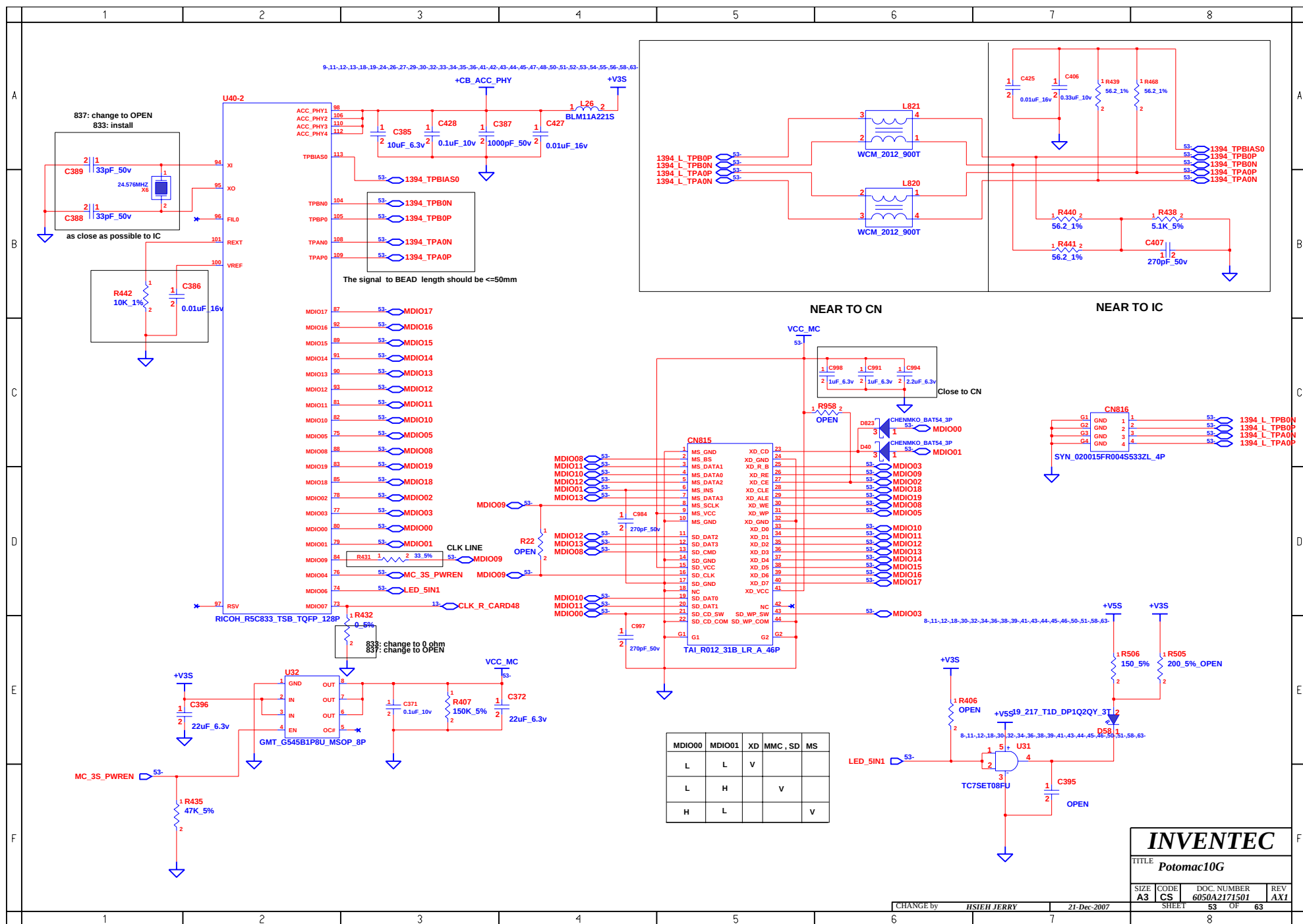
INVENTEC

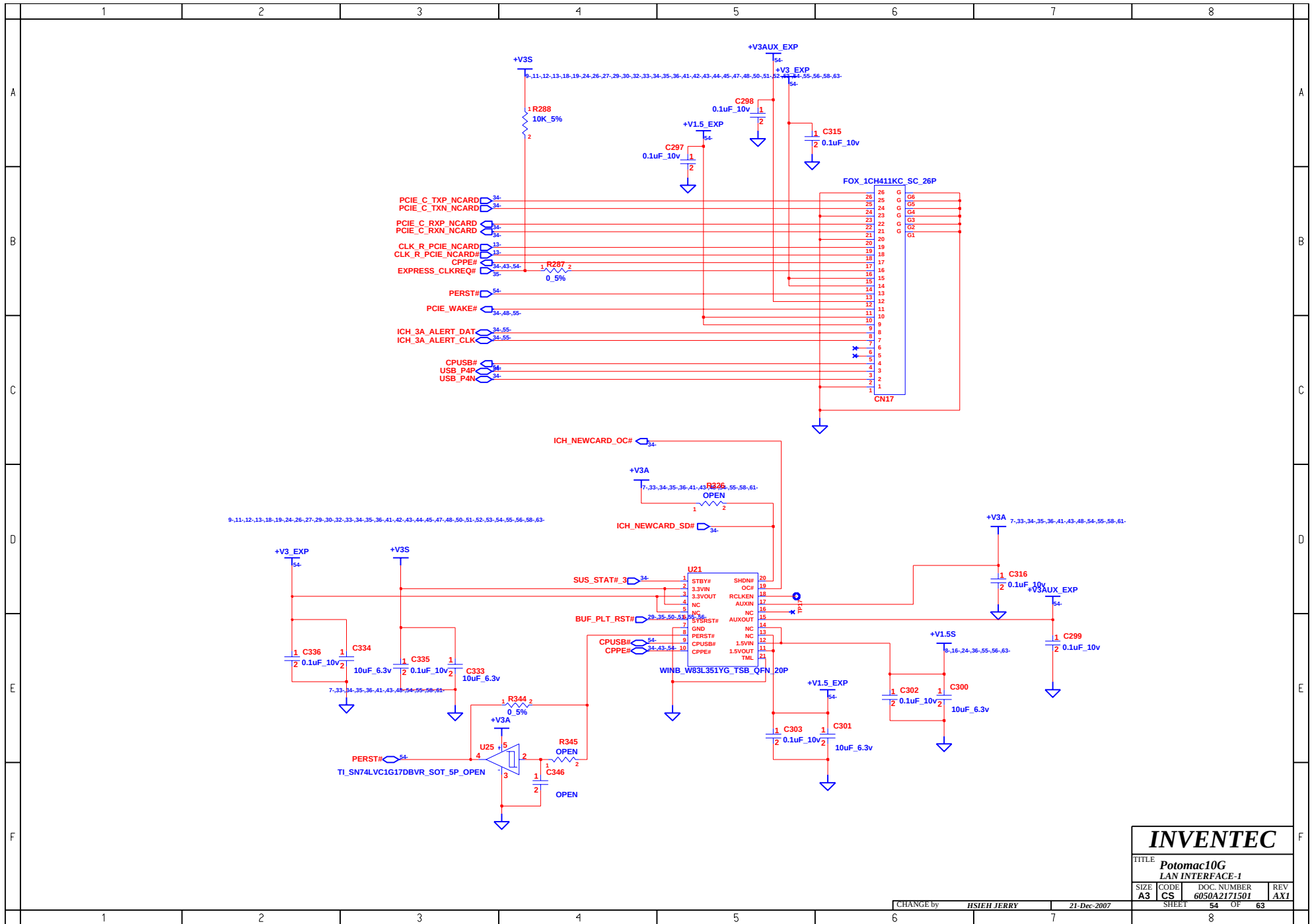
TITLE
Potomac10G

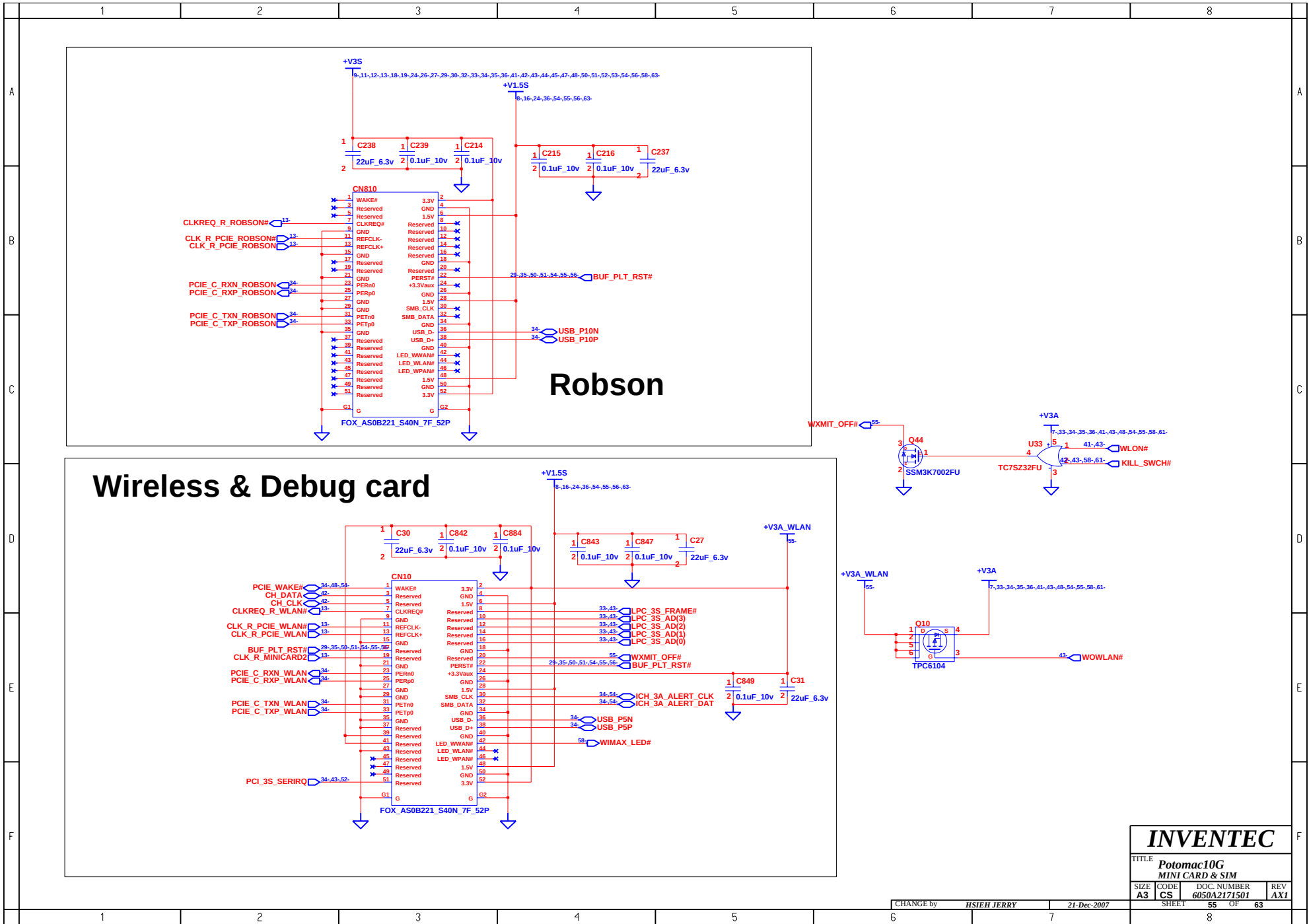
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

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

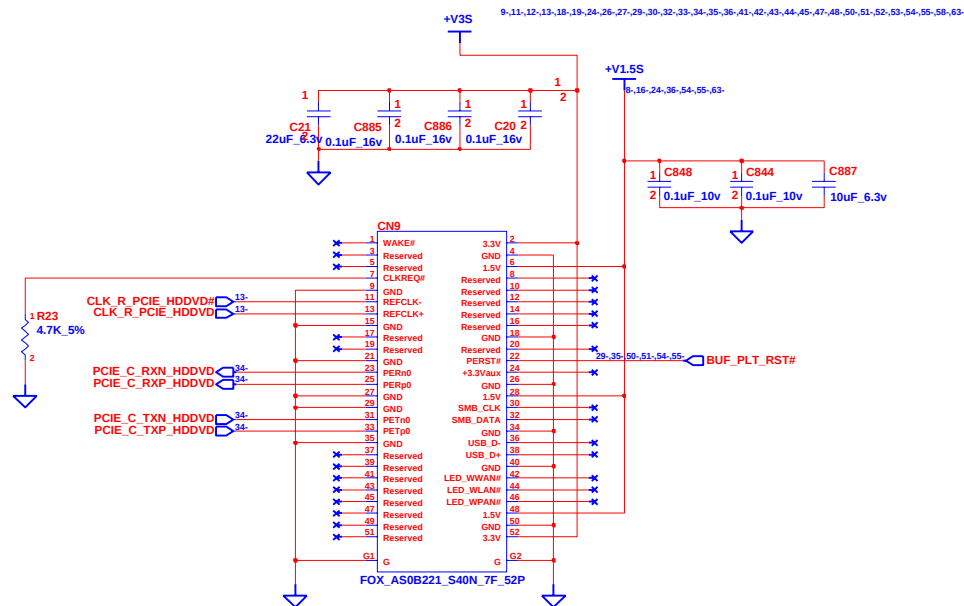
SHEET 52 OF 63







HD-DVD Bordcom



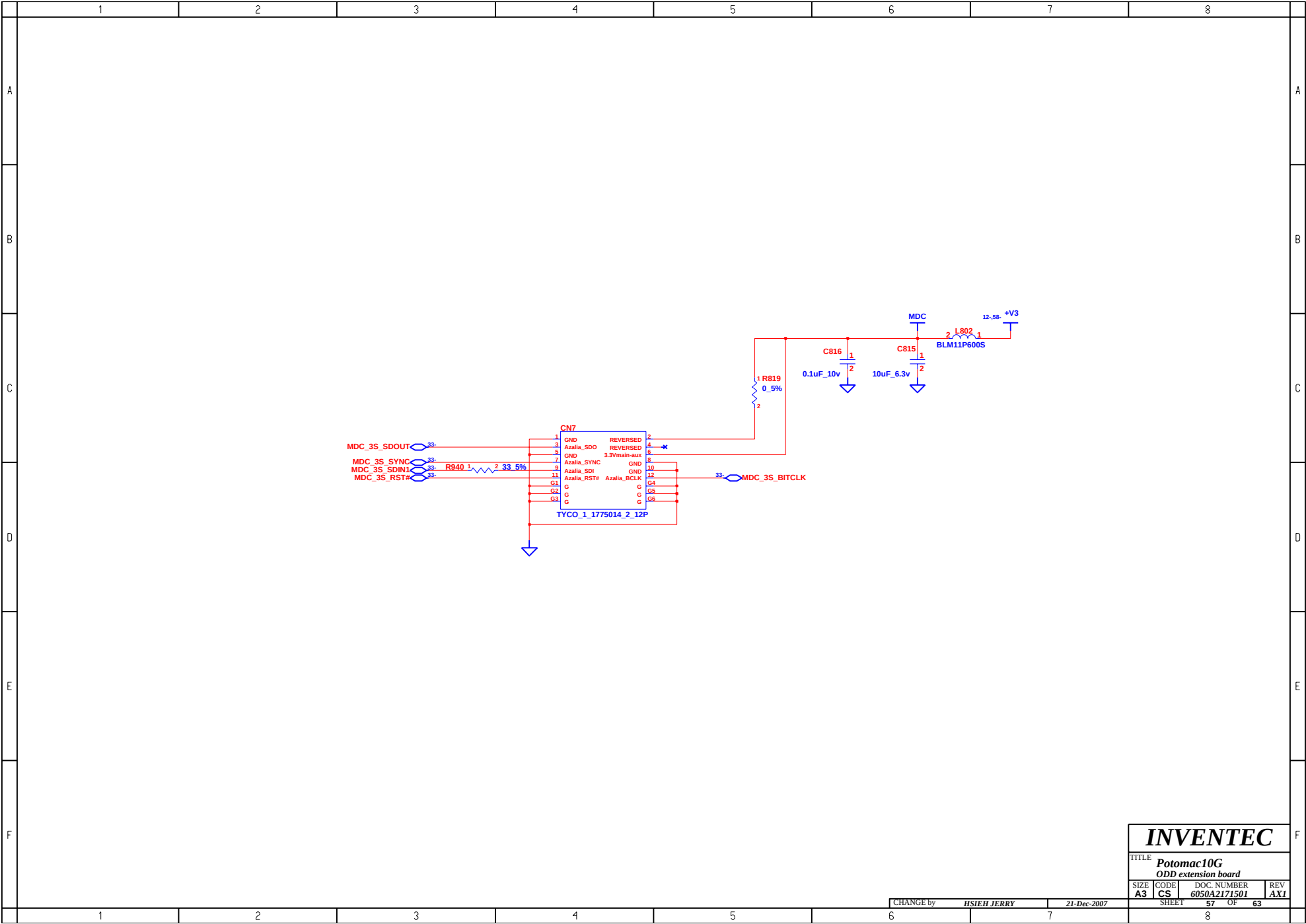
INVENTEC

TITLE
Potomac10G

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

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

SHEET 56 OF 63



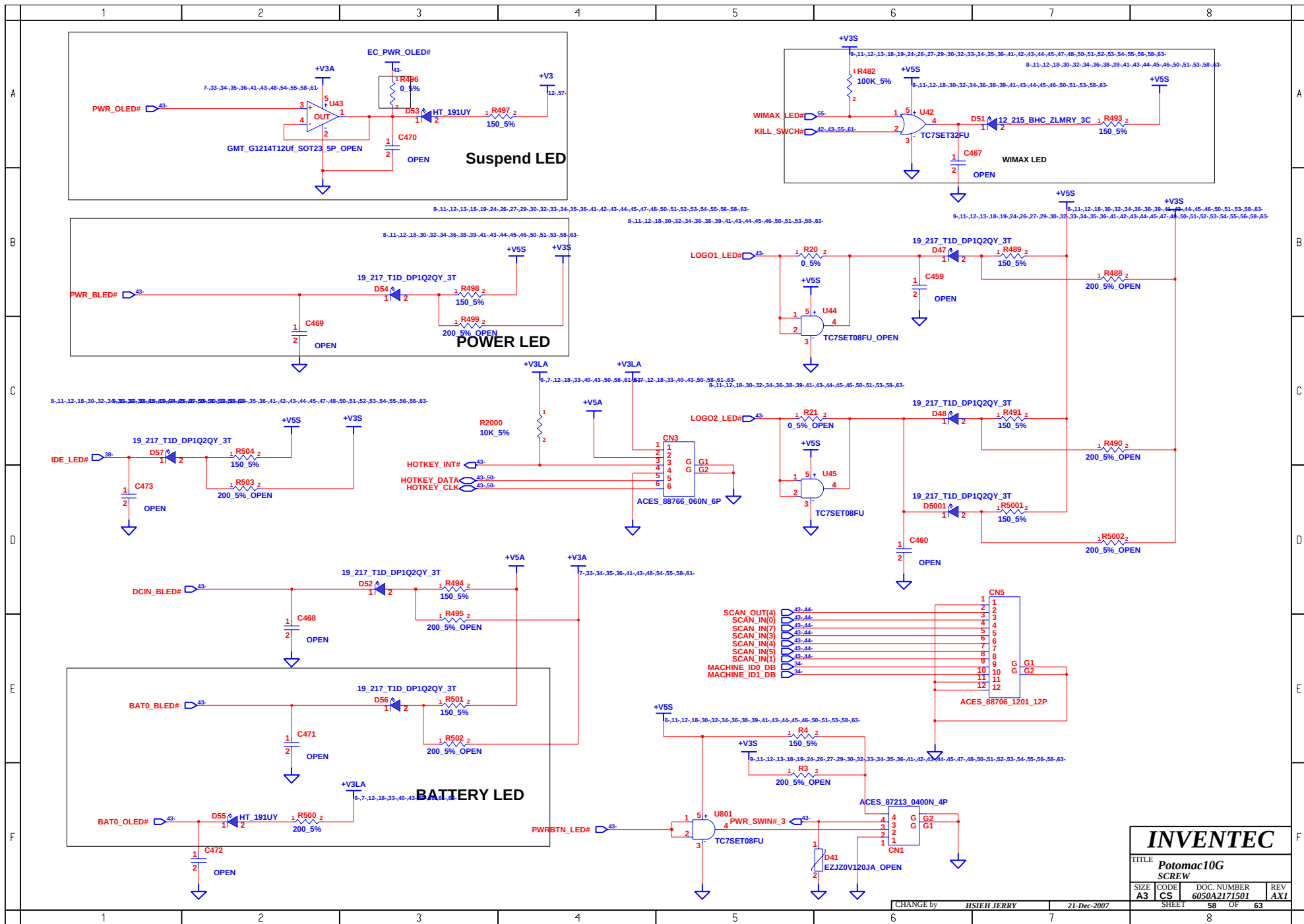
INVENTEC

TITLE
Potomac10G
ODD extension board

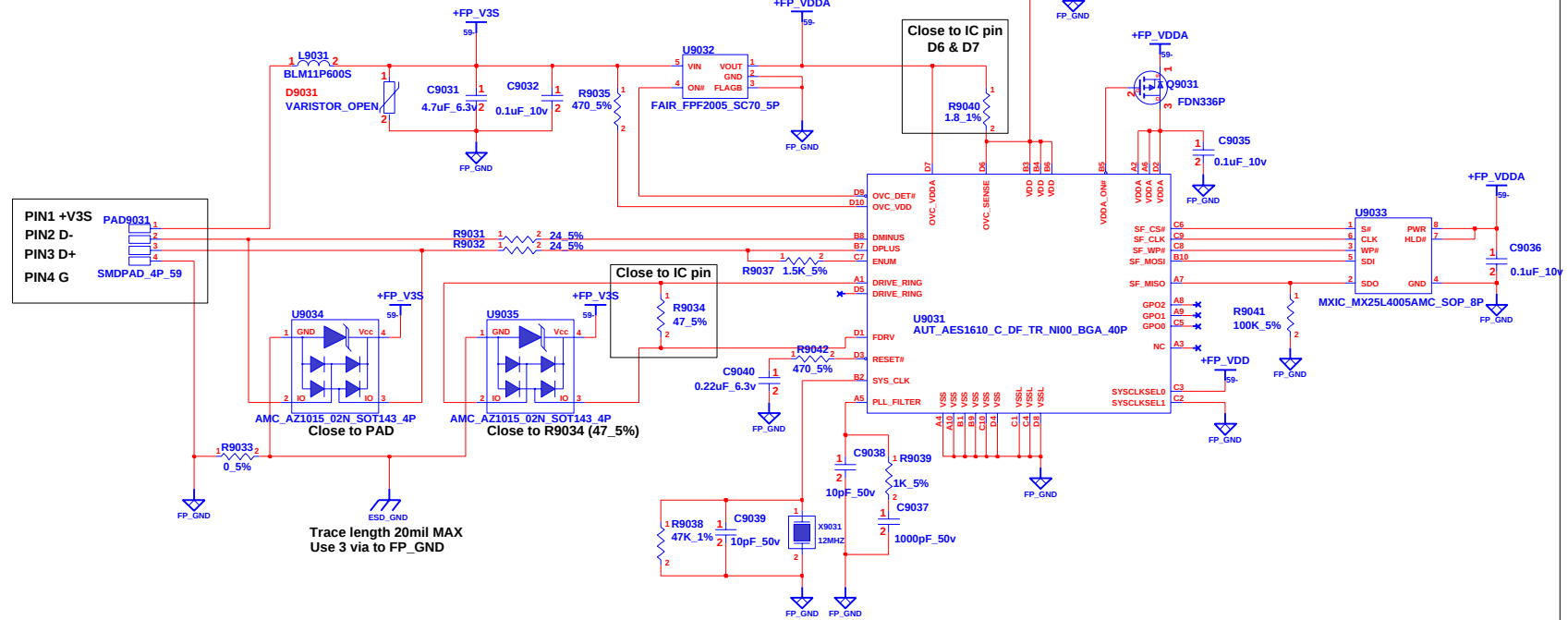
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

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

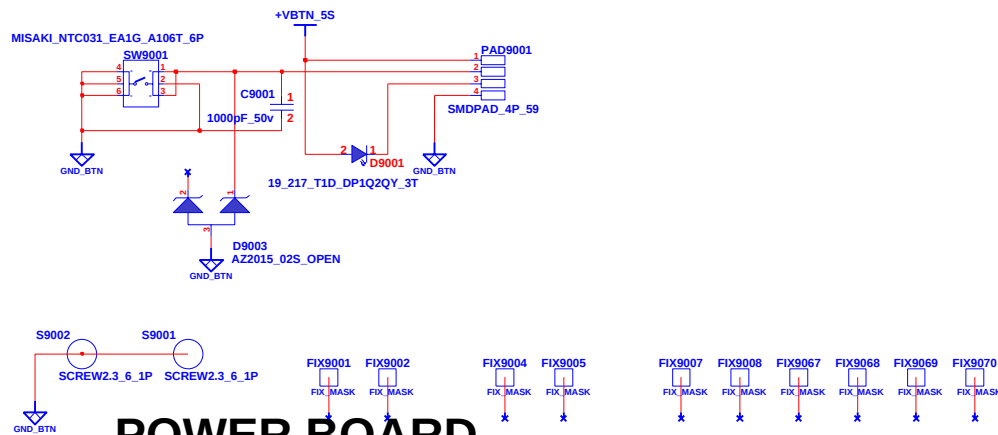
SHEET 57 OF 63



Finger Print Reader DB



Trace length 20mil MAX
Use 3 via to FP_GND

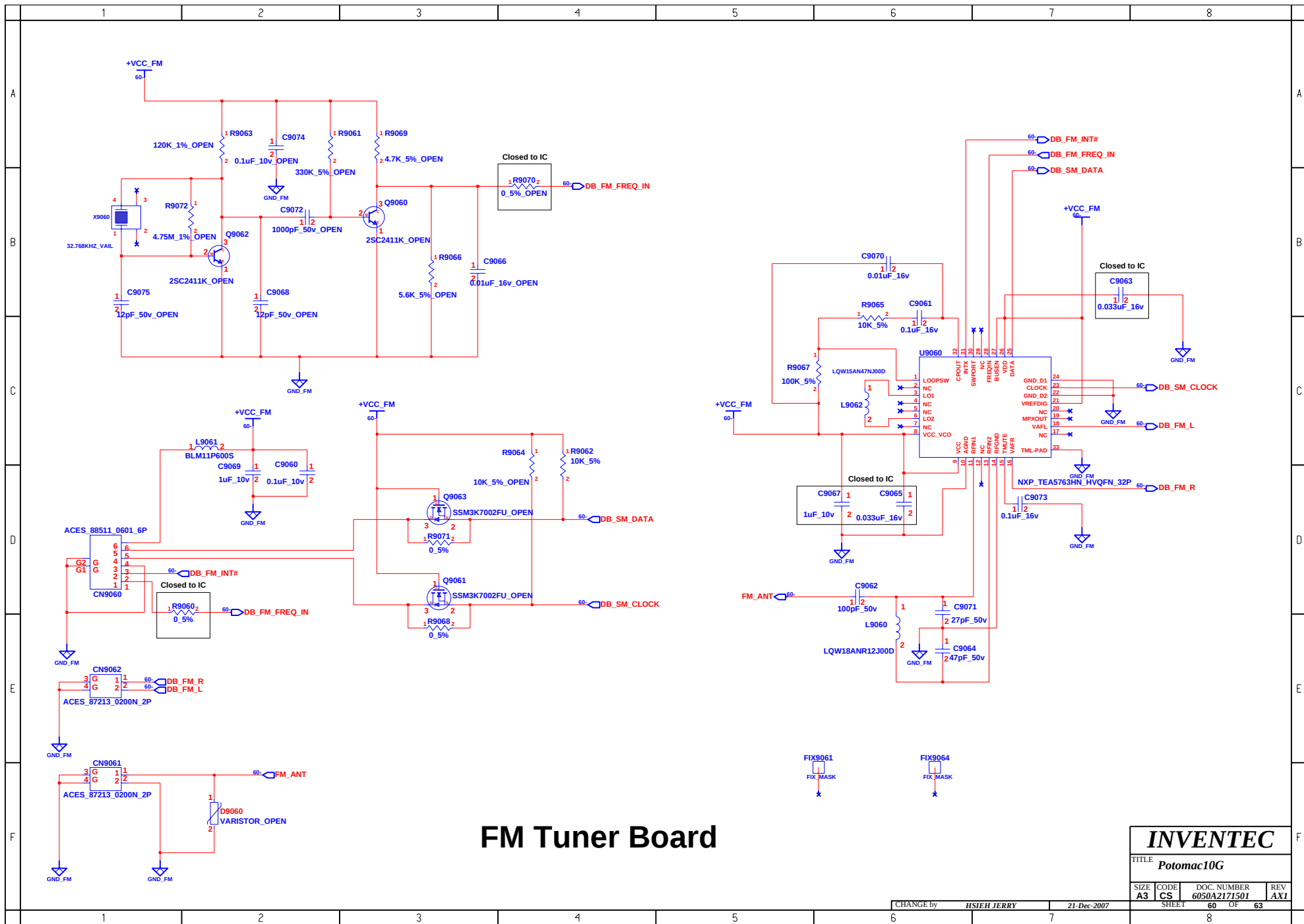


POWER BOARD

INVENTEC

TITLE Potomac10G Switch board Conn			
SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
SHEET 59		OF 63	

CHANGE by HSEH JERRY 21-Feb-2008



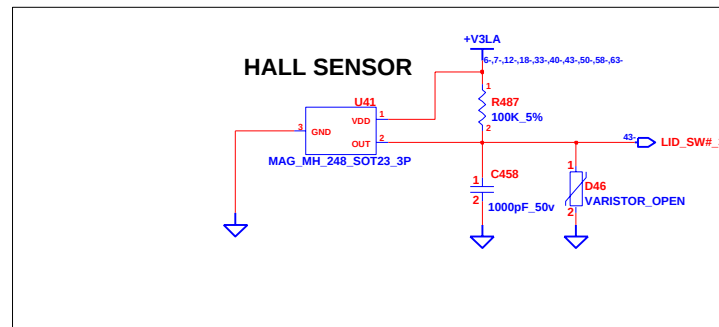
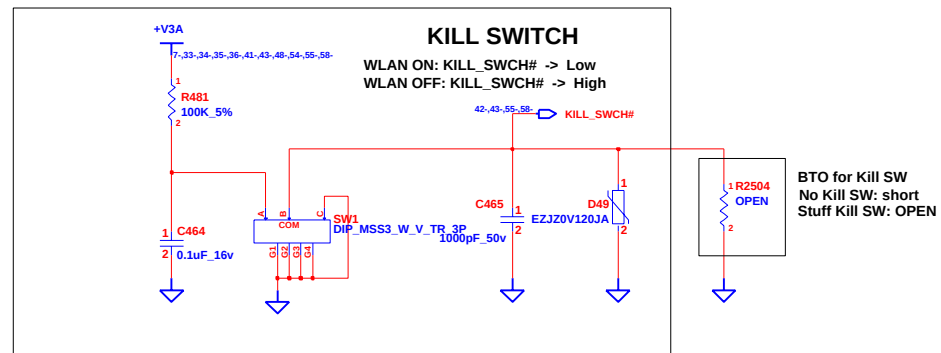
INVENTEC

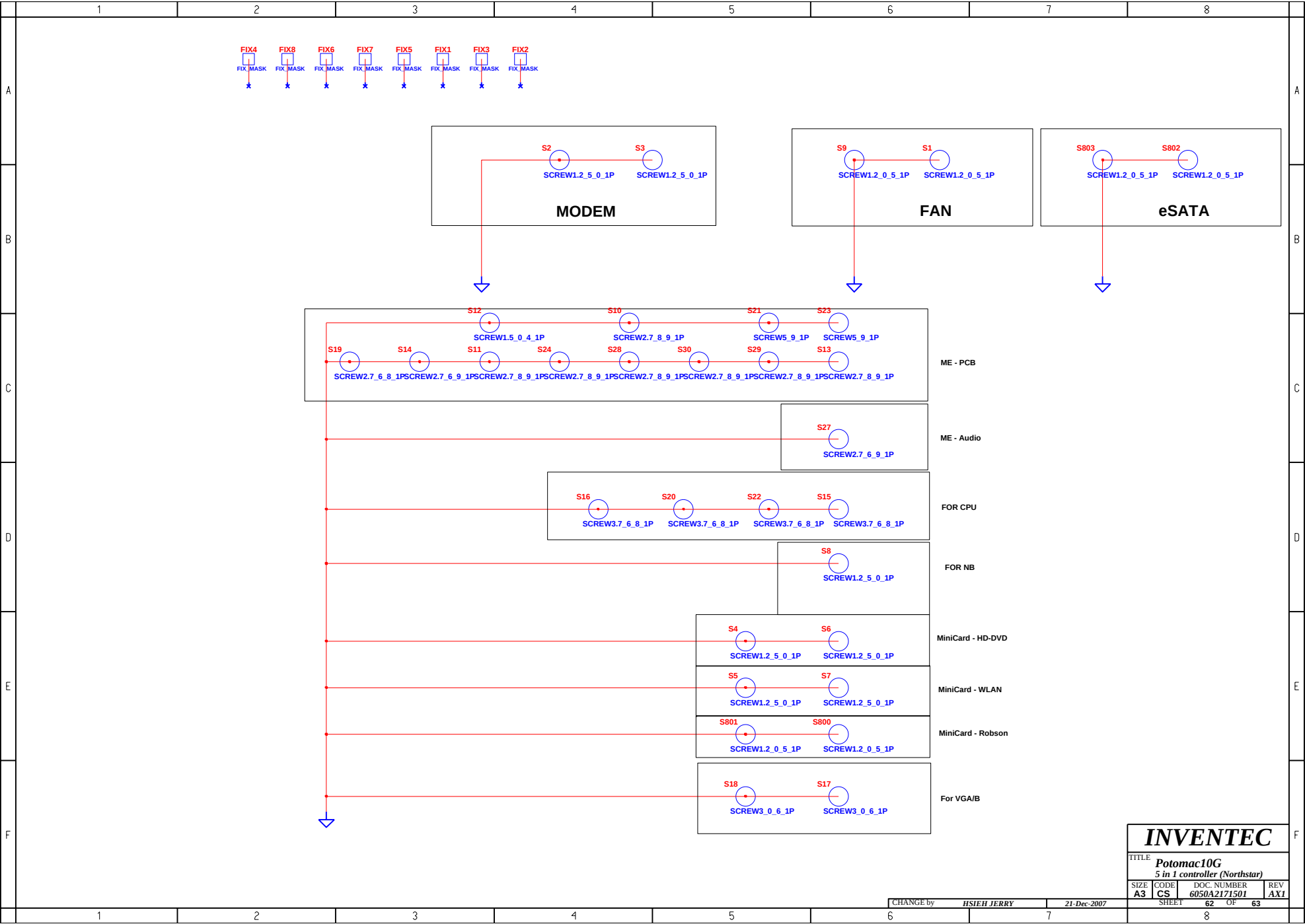
TITLE
Potomac10G

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2171501	AX1

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

SHEET 60 OF 63





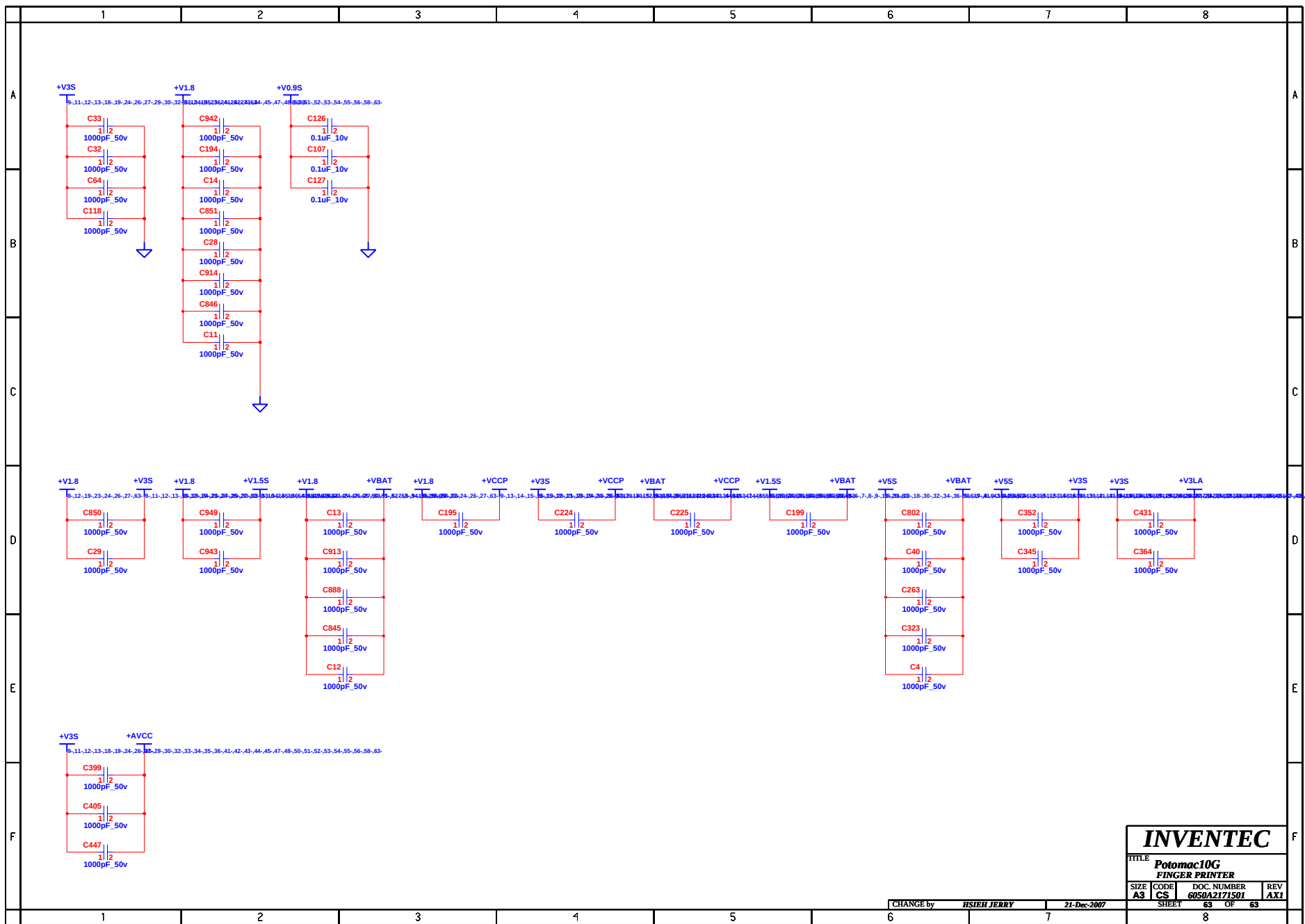
INVENTEC

TITLE
Potomac10G
5 in 1 controller (Northstar)

SIZE A3	CODE CS	DOC. NUMBER 6050A2171501	REV AX1
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CHANGE by **Hsieh JERRY** 21-Dec-2007

SHEET 62 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