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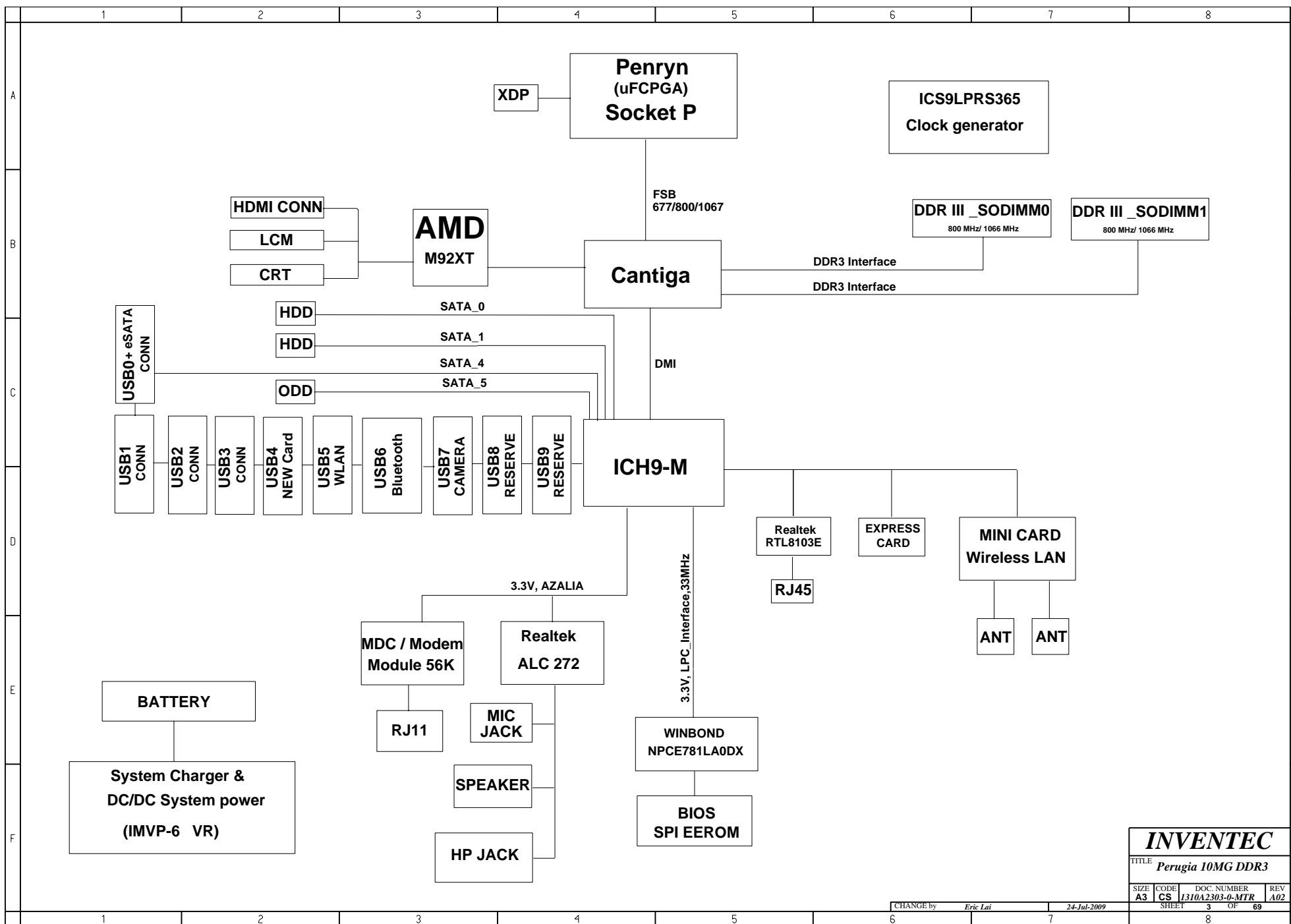
55.LAN CONTROLLER
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58.HDMI CONN
59.USB Card Reader
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61.WLAN /Debug
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INVENTEC

TITLE *Perugia 10MG DDR3*

SIZE A3	CODE CS	DOC. NUMBER J310A2303-0-MTR	REV A02
SHEET 2		OF 69	

CHANGE by *Eric Lai* 11-Aug-2009



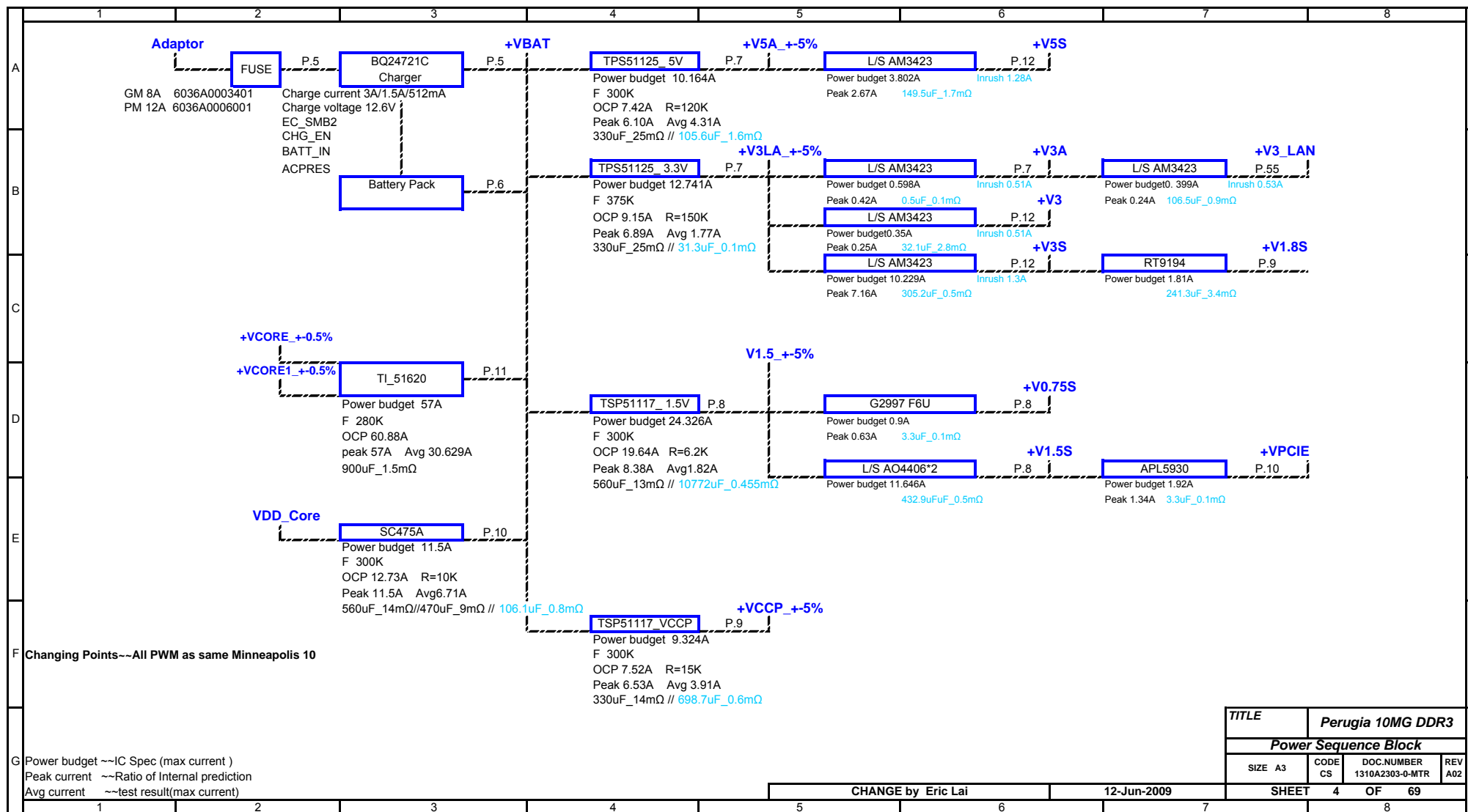
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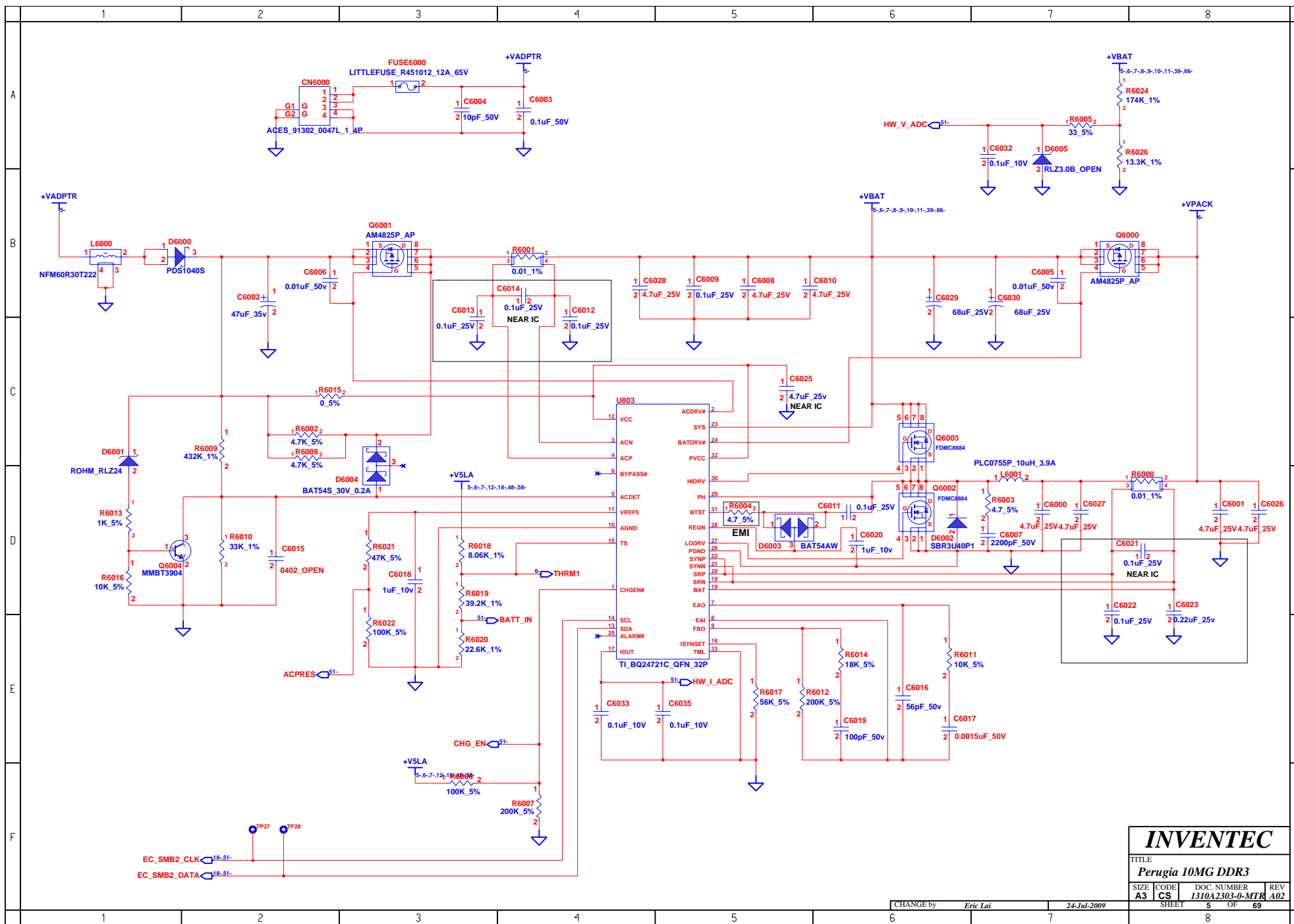
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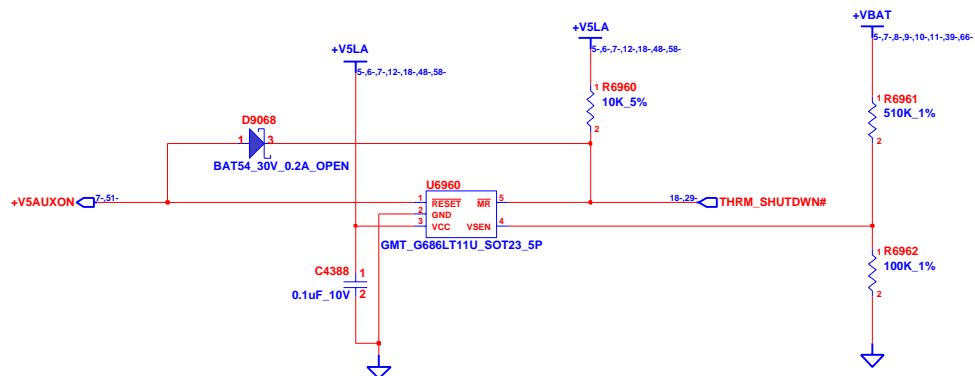
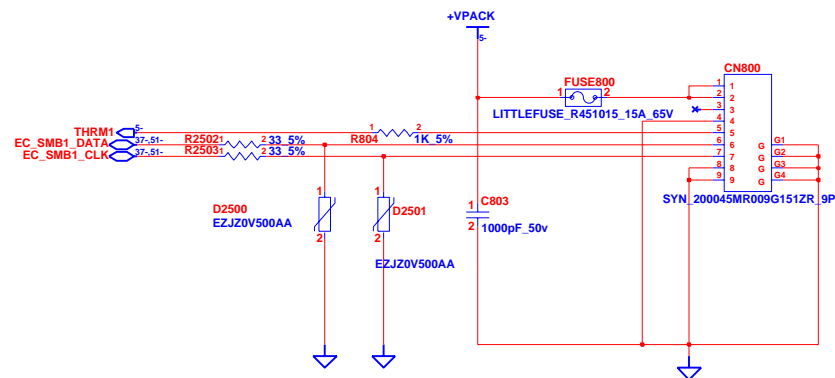
SIZE	CODE	DOC. NUMBER	REV
A3	CS	J310A2303-0-MTR	A02

CHANGE by: **Eric Lai** 24-Jul-2009

SHEET 3 OF 69







INVENTEC

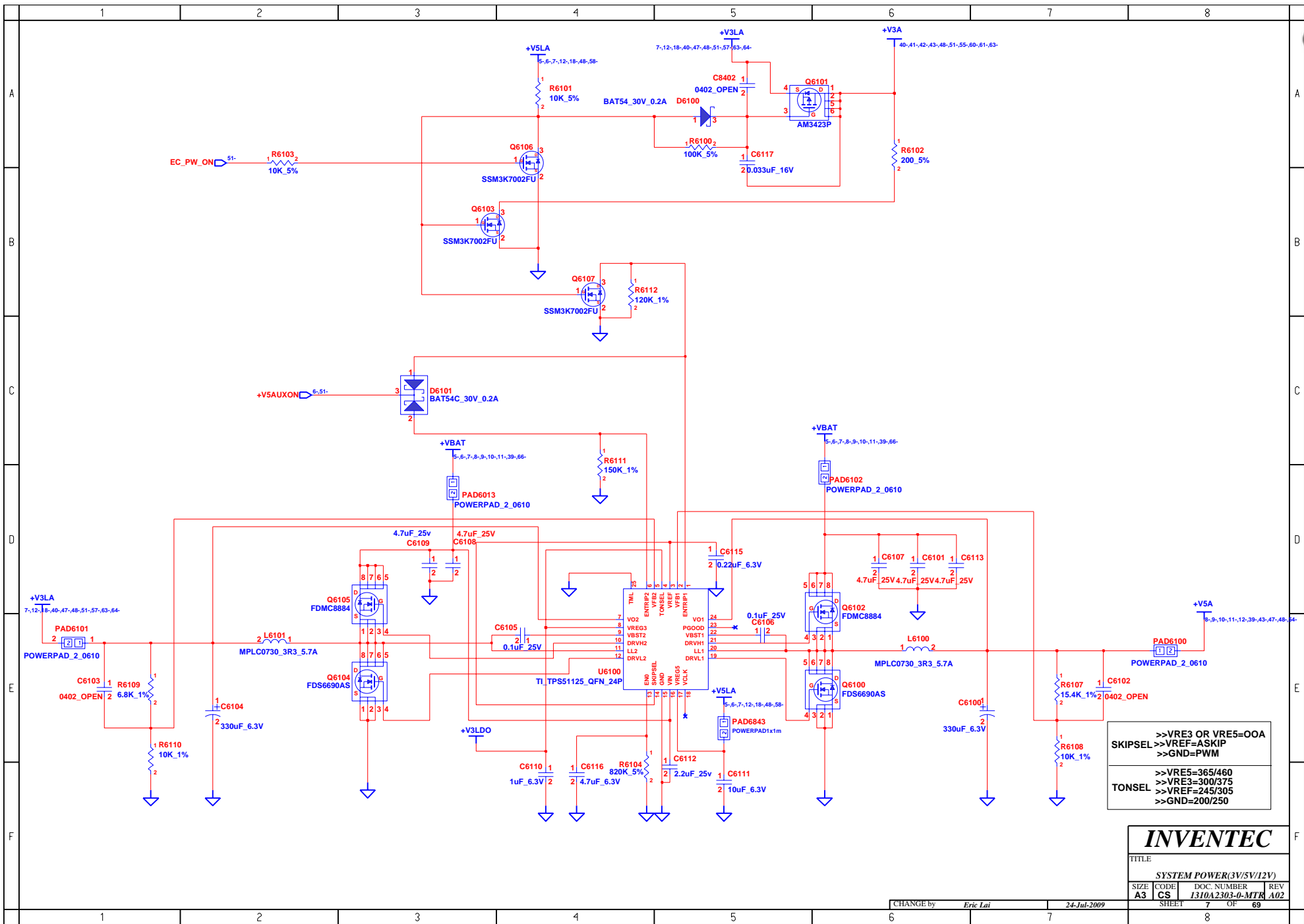
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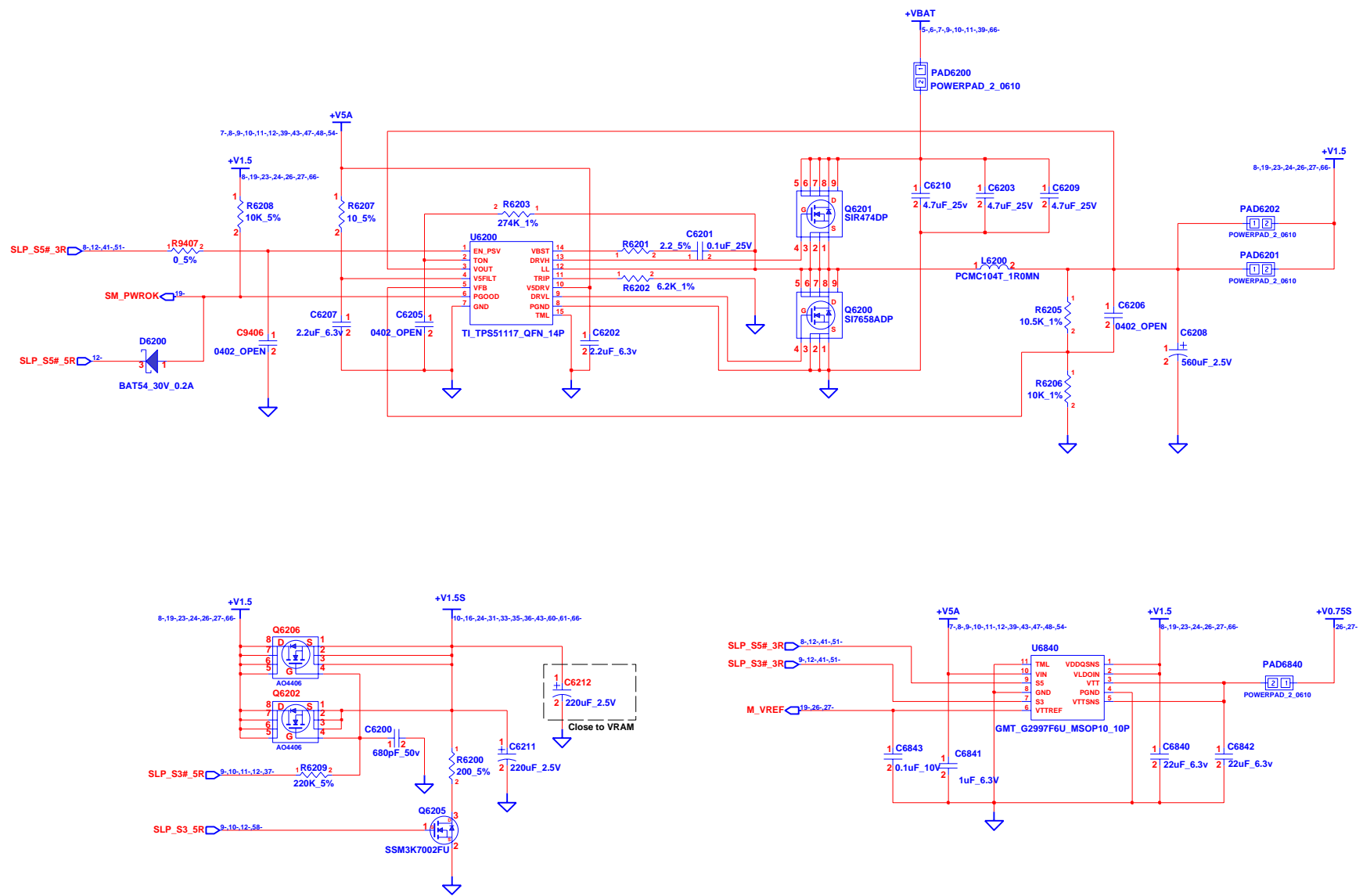
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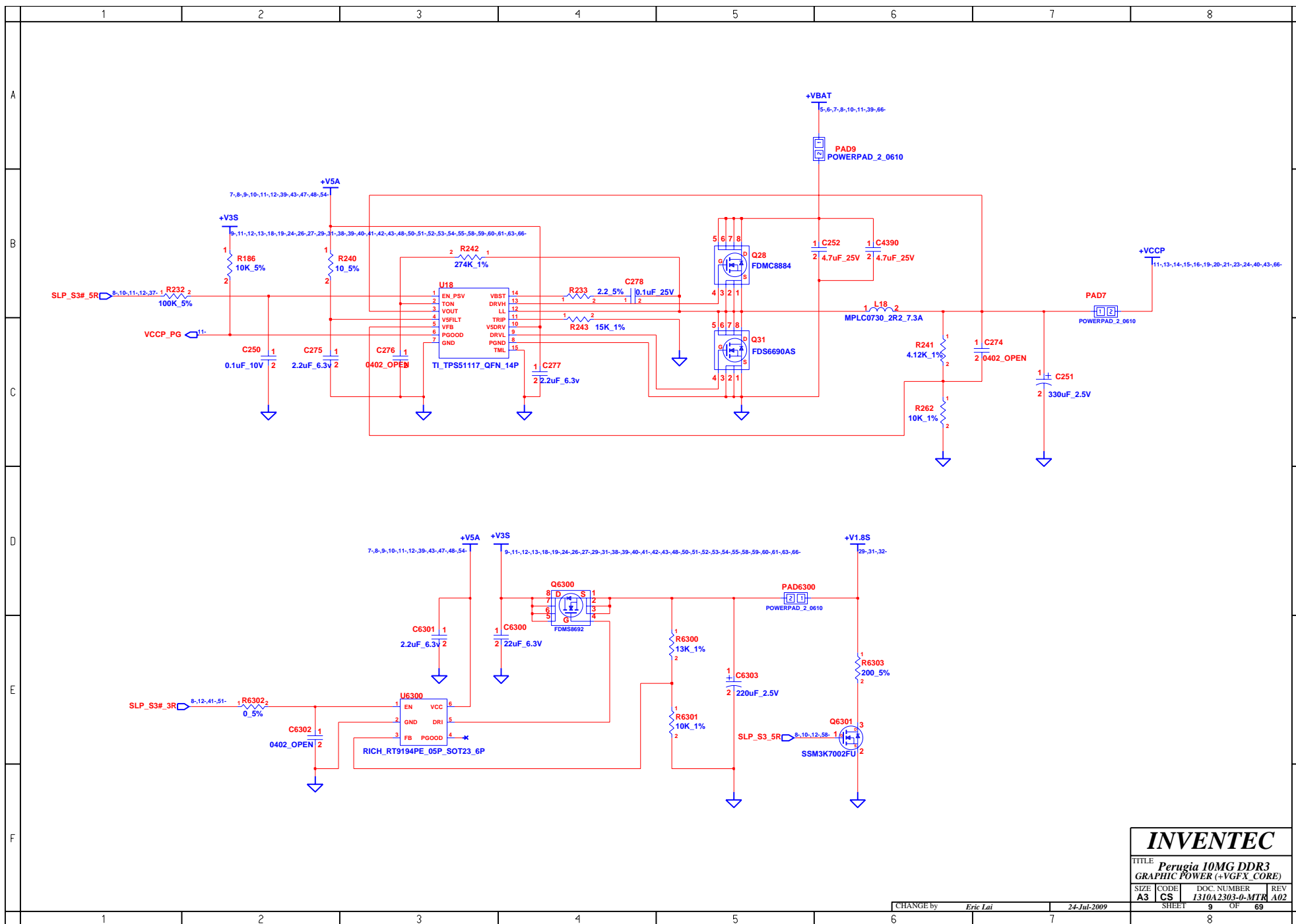
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

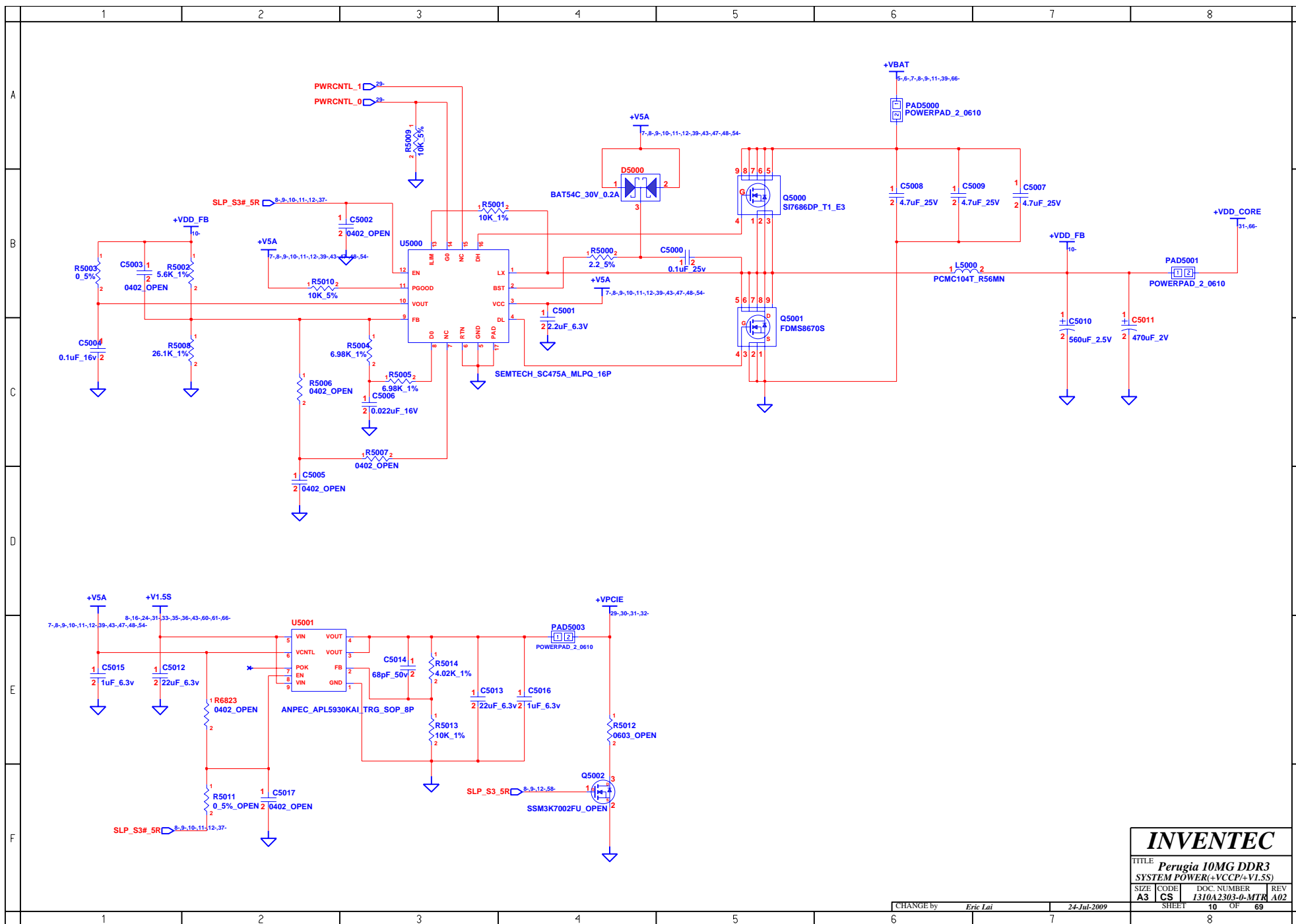
SHEET 6 OF 69







INVENTEC			
TITLE: Perugia 10MG DDR3 GRAPHIC POWER (+VGF_X_CORE)			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A2303-0-MTR	REV: A02
CHANGE by: Eric Lai		24-Jul-2009	
SHEET: 9		OF: 69	

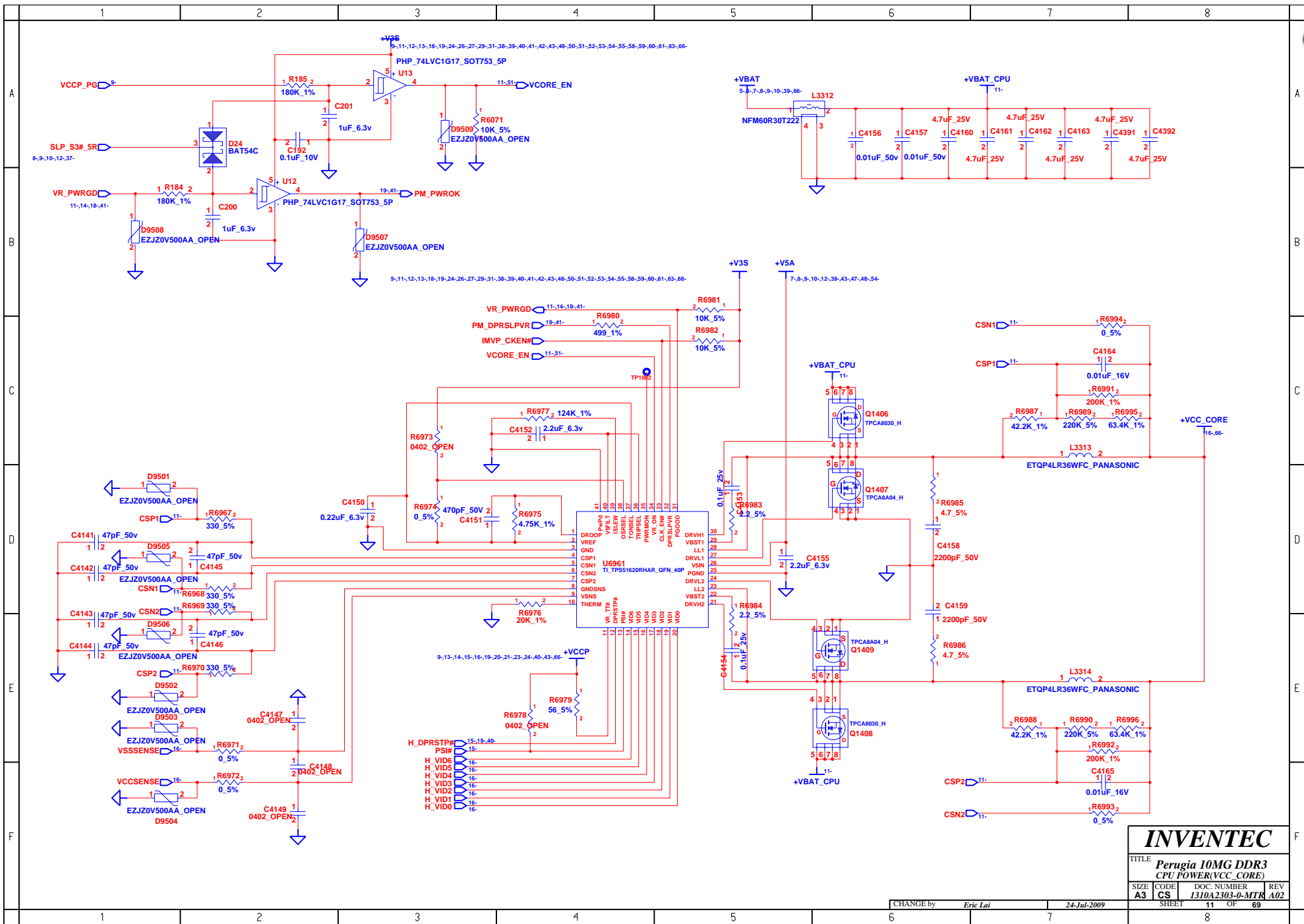


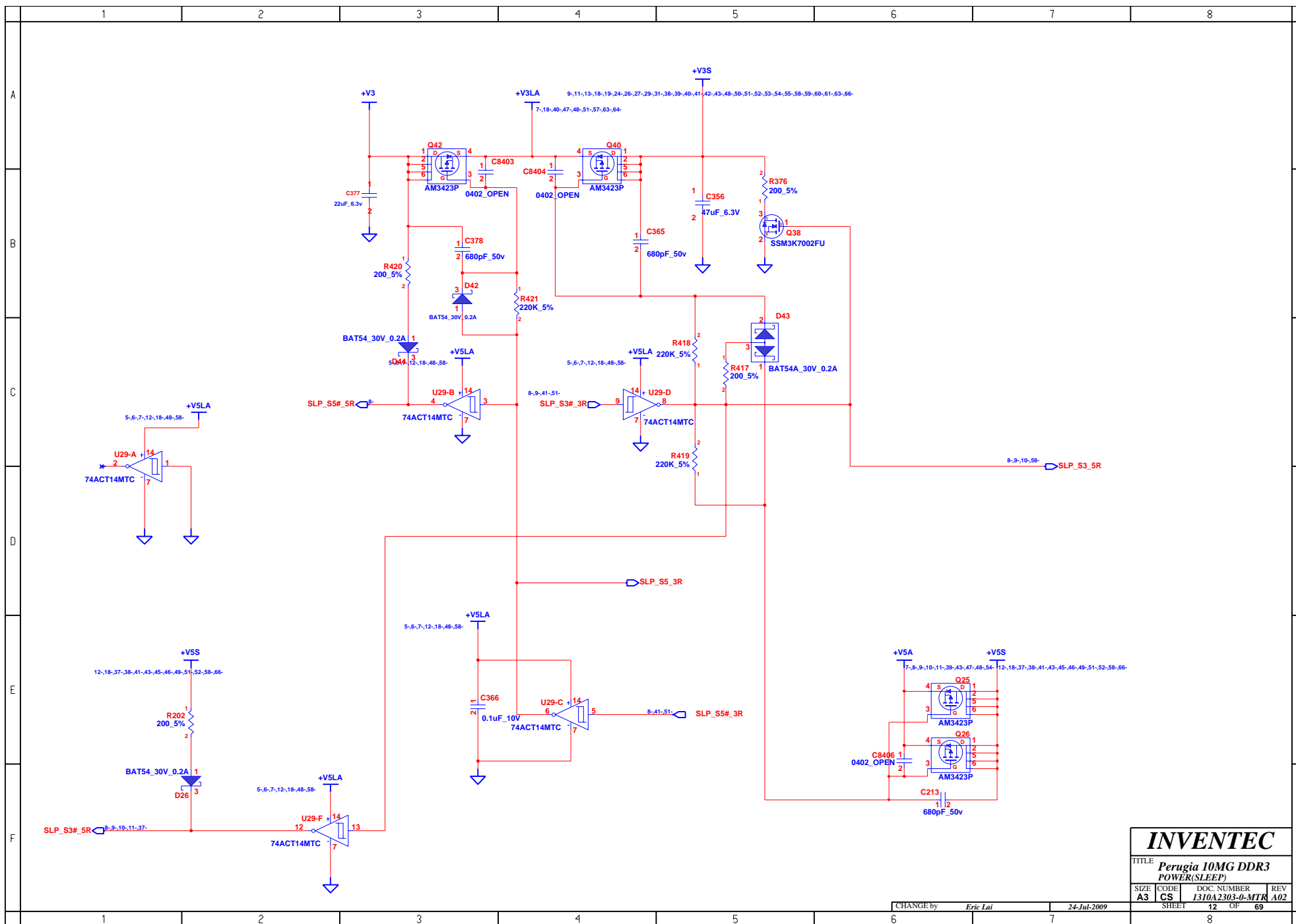
INVENTEC

TITLE			
Perugia 10MG DDR3			
SYSTEM POWER(+VCCP/+V1.5S)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02

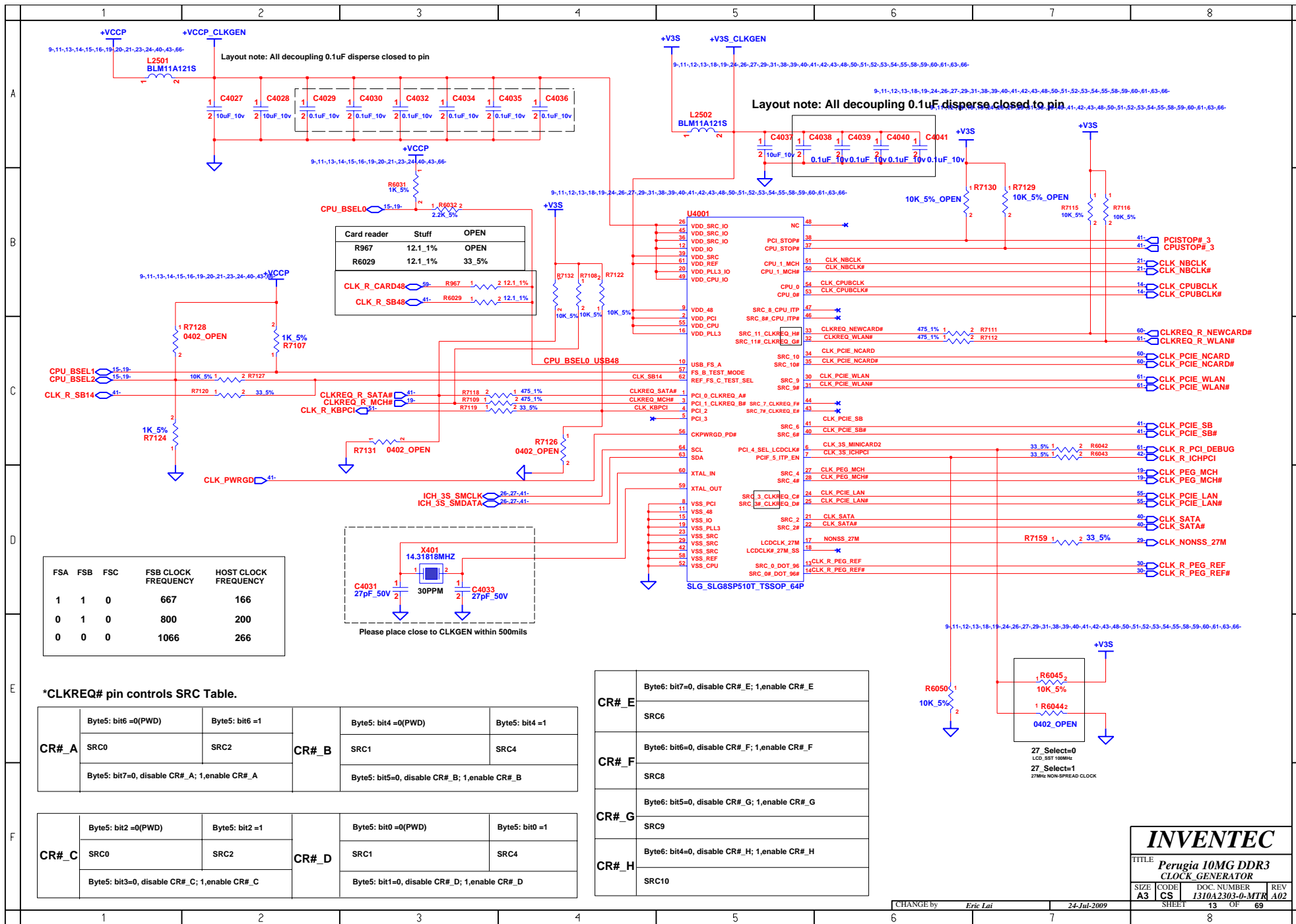
CHANGE by Eric Lai 24-Jul-2009

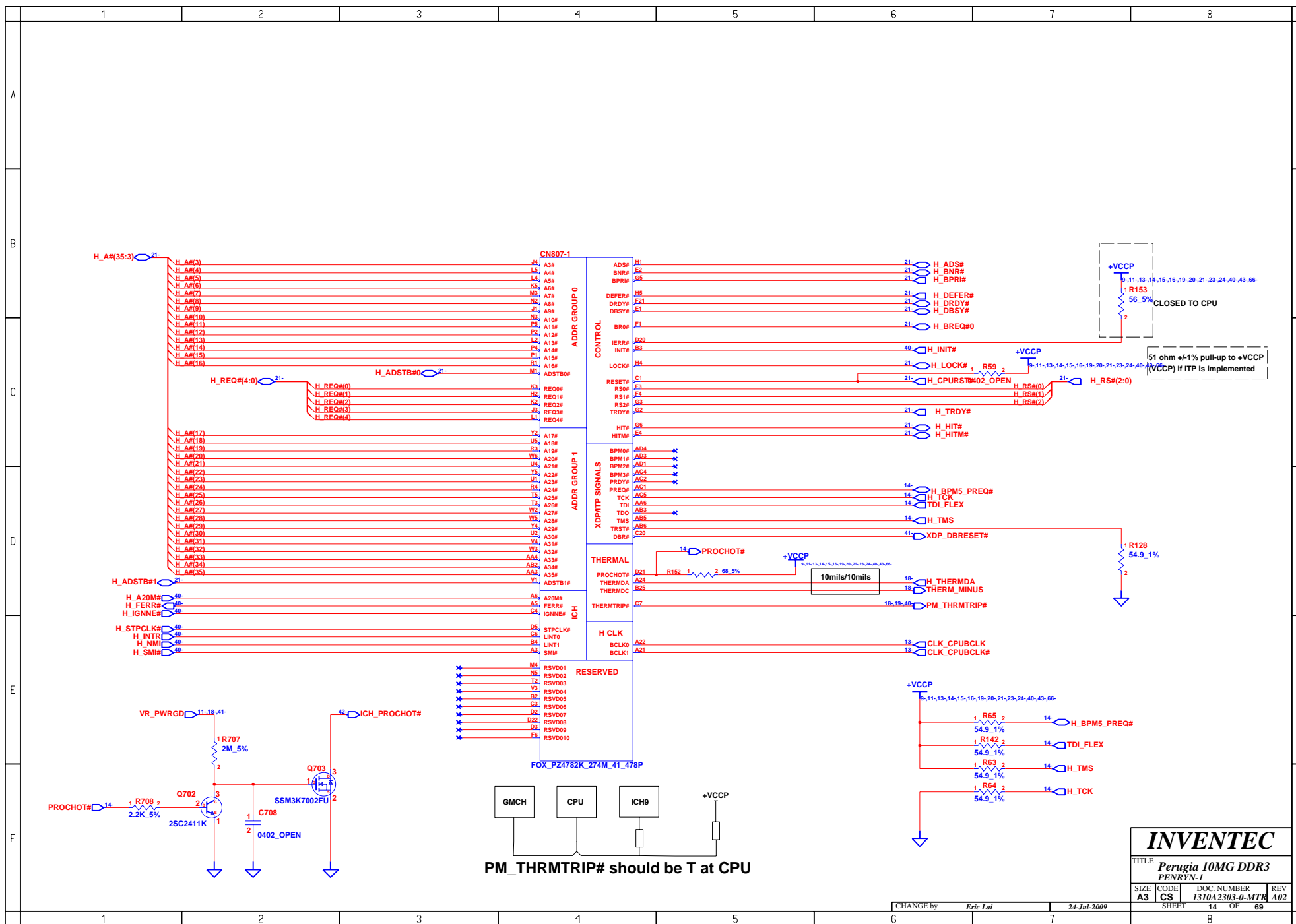
SHEET 10 OF 69

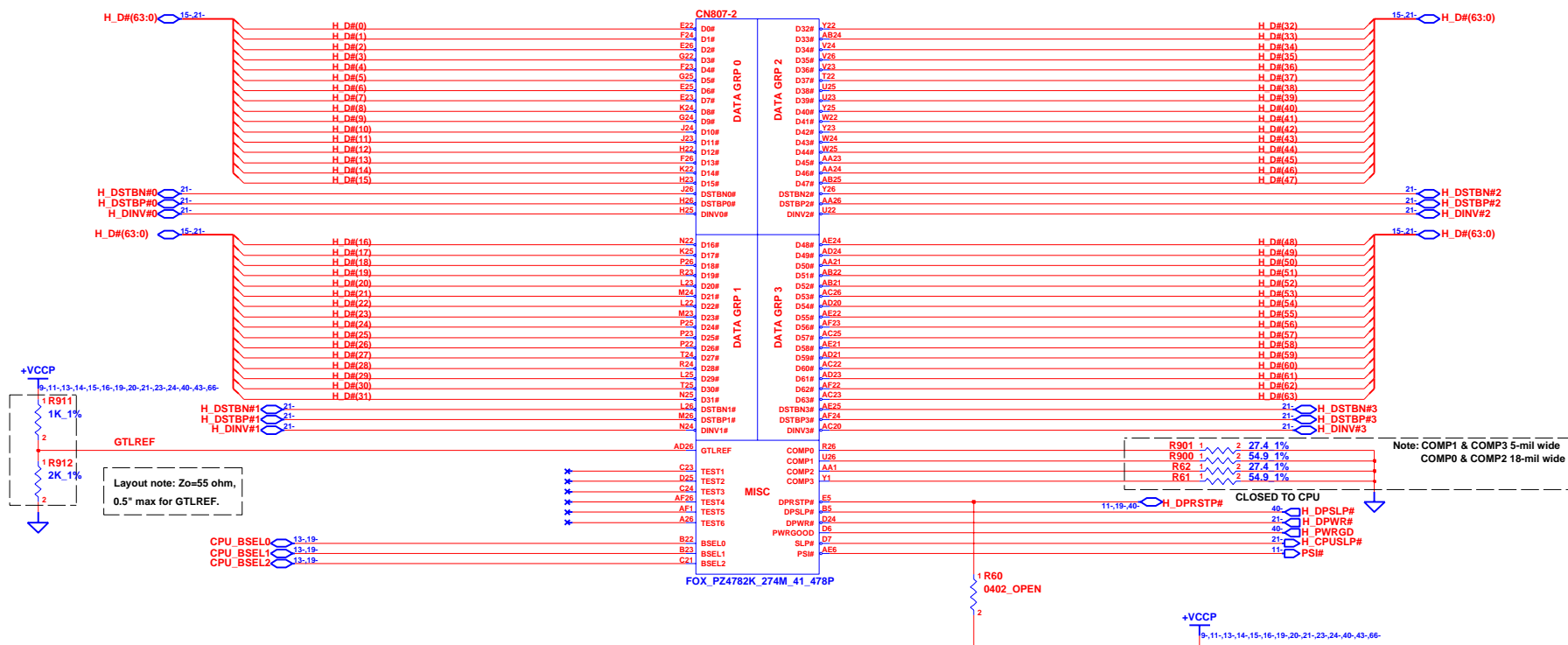


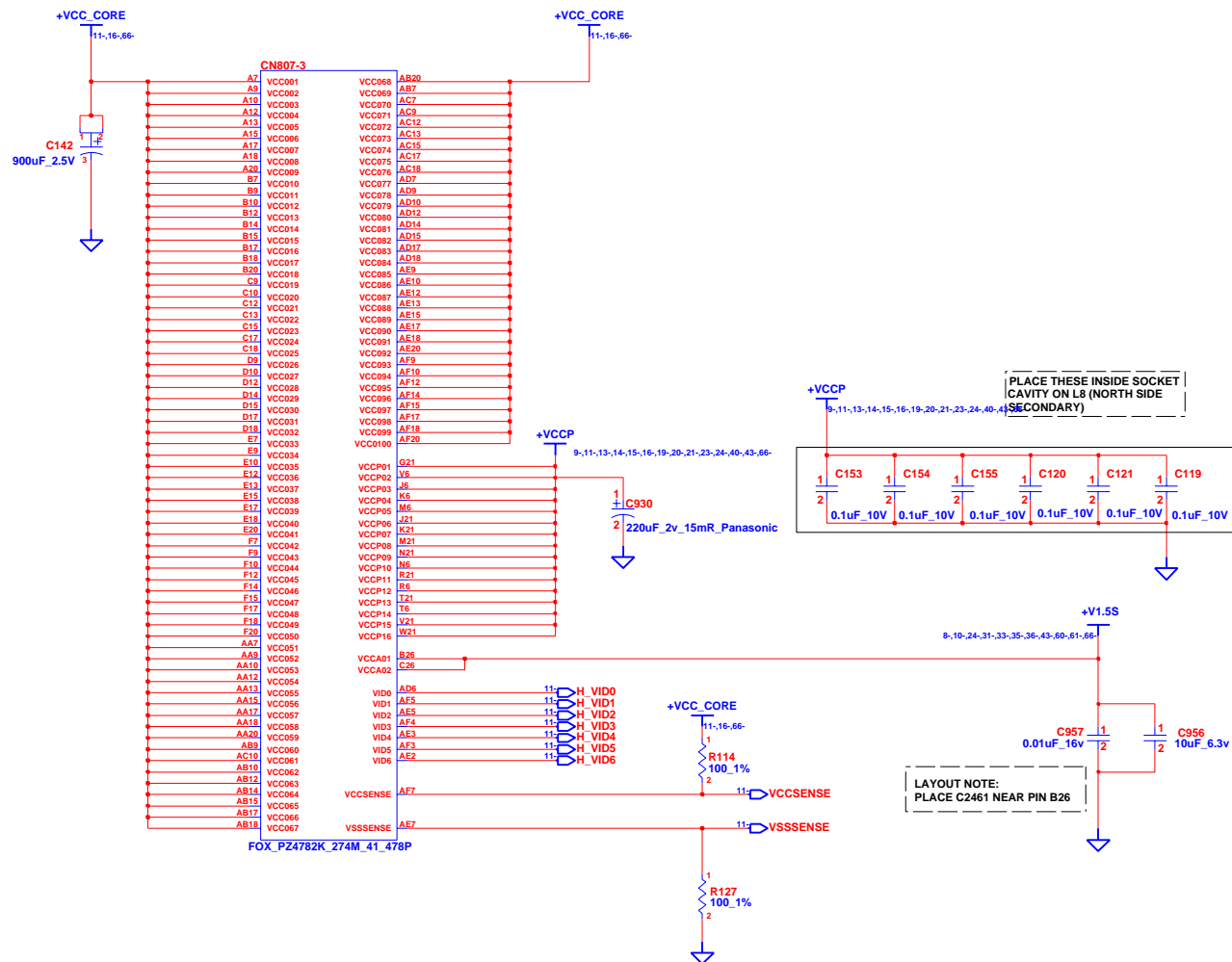


INVENTEC			
TITLE			
Perugia 10MG DDR3			
POWER(SLEEP)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02
CHANGE by		24-Jul-2009	
SHEET		12	OF 69









LAYOUT NOTE:
PLACE C2461 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

INVENTEC

TITLE
**Perugia 10MG DDR3
PENRYN-3**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02

CHANGE by *Eric Lai* 24-Jul-2009

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

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

VSS047

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

J4

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

P1

VSS081

P6

VSS082

P21

VSS083

P24

VSS084

R2

VSS085

R5

VSS086

R22

VSS087

R25

VSS088

T1

VSS089

T4

VSS090

T23

VSS091

T26

VSS092

U3

VSS093

U6

VSS094

U21

VSS095

U24

VSS096

V2

VSS097

V5

VSS098

V22

VSS099

V25

VSS100

W1

VSS101

W4

VSS102

W23

VSS103

W26

VSS104

Y3

VSS105

Y6

VSS106

Y21

VSS107

Y24

VSS108

AA2

VSS109

AA5

VSS110

AA8

VSS111

AA11

VSS112

AA14

VSS113

AA16

VSS114

AA19

VSS115

AA22

VSS116

AA25

VSS117

AB1

VSS118

AB4

VSS119

AB8

VSS120

AB11

VSS121

AB13

VSS122

AB16

VSS123

AB18

VSS124

AB23

VSS125

AB26

VSS126

AC3

VSS127

AC6

VSS128

AC8

VSS129

AC11

VSS130

AC14

VSS131

AC16

VSS132

AC19

VSS133

AC21

VSS134

AC24

VSS135

AD2

VSS136

AD5

VSS137

AD8

VSS138

AD11

VSS139

AD13

VSS140

AD16

VSS141

AD19

VSS142

AD22

VSS143

AD25

VSS144

AE1

VSS145

AE4

VSS146

AE8

VSS147

AE11

VSS148

AE14

VSS149

AE16

VSS150

AE19

VSS151

AE23

VSS152

AE26

VSS153

A2

VSS154

AF6

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VSS158

AF16

VSS159

AF19

VSS160

AF21

VSS161

A25

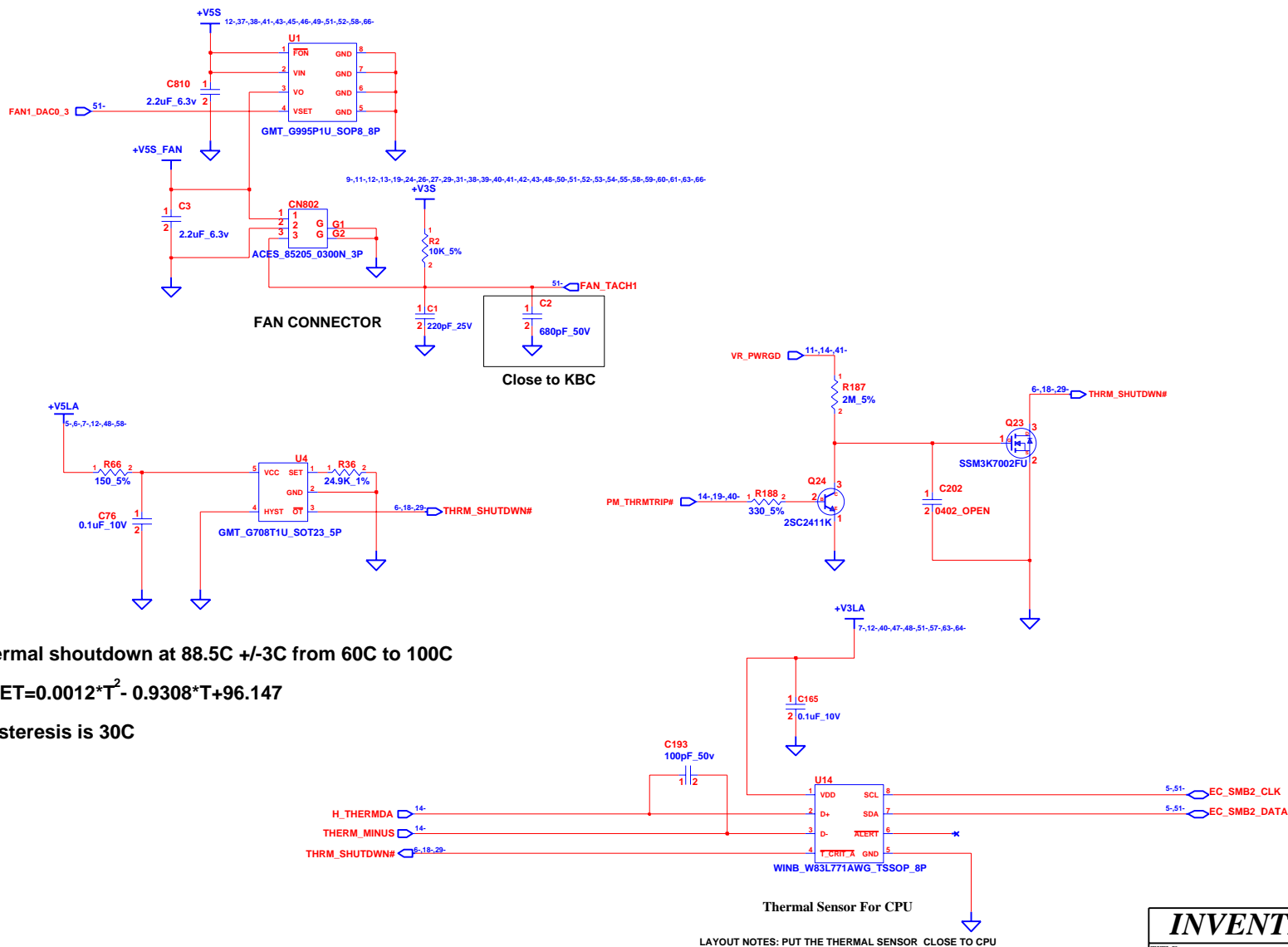
VSS162

AF25

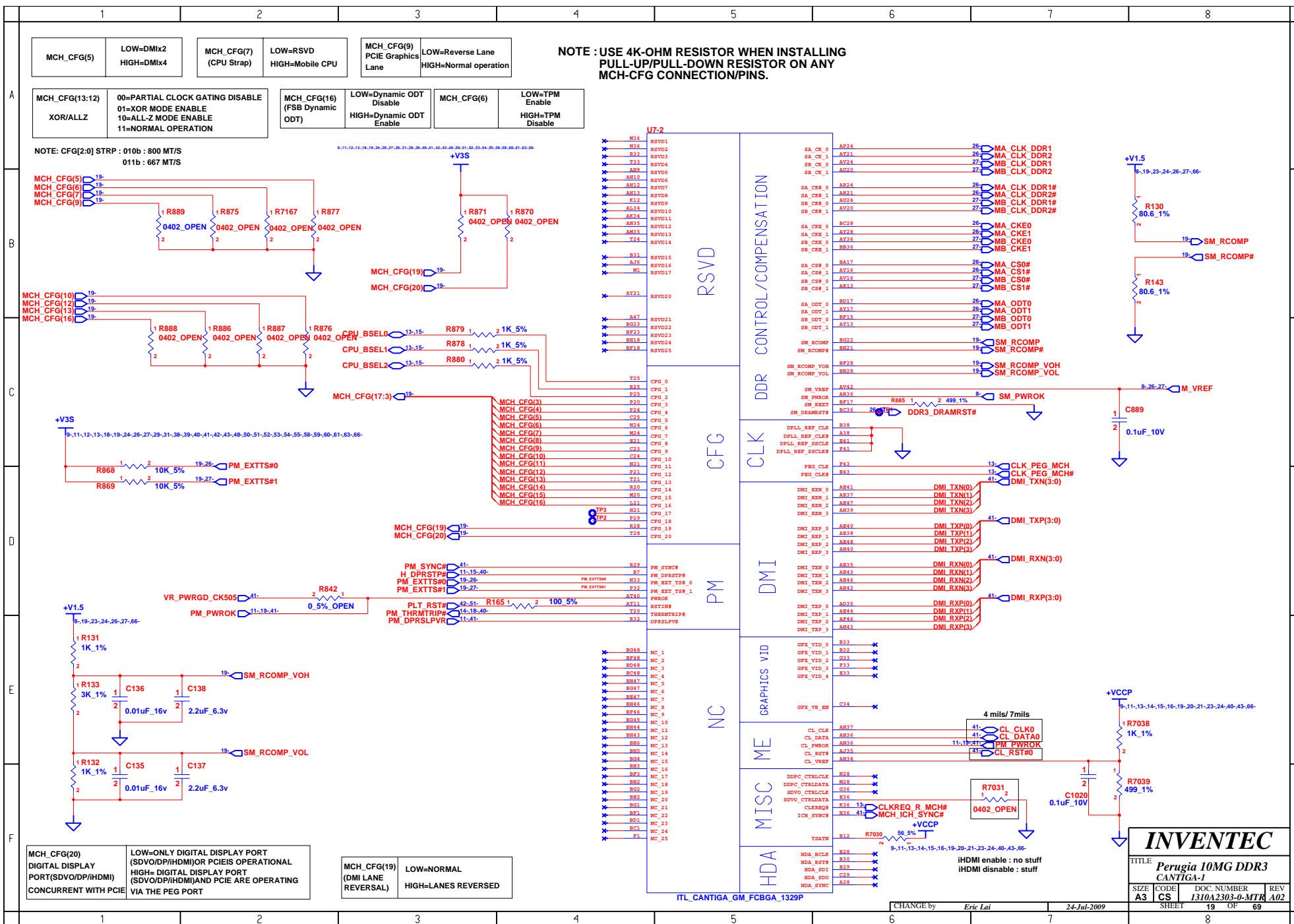
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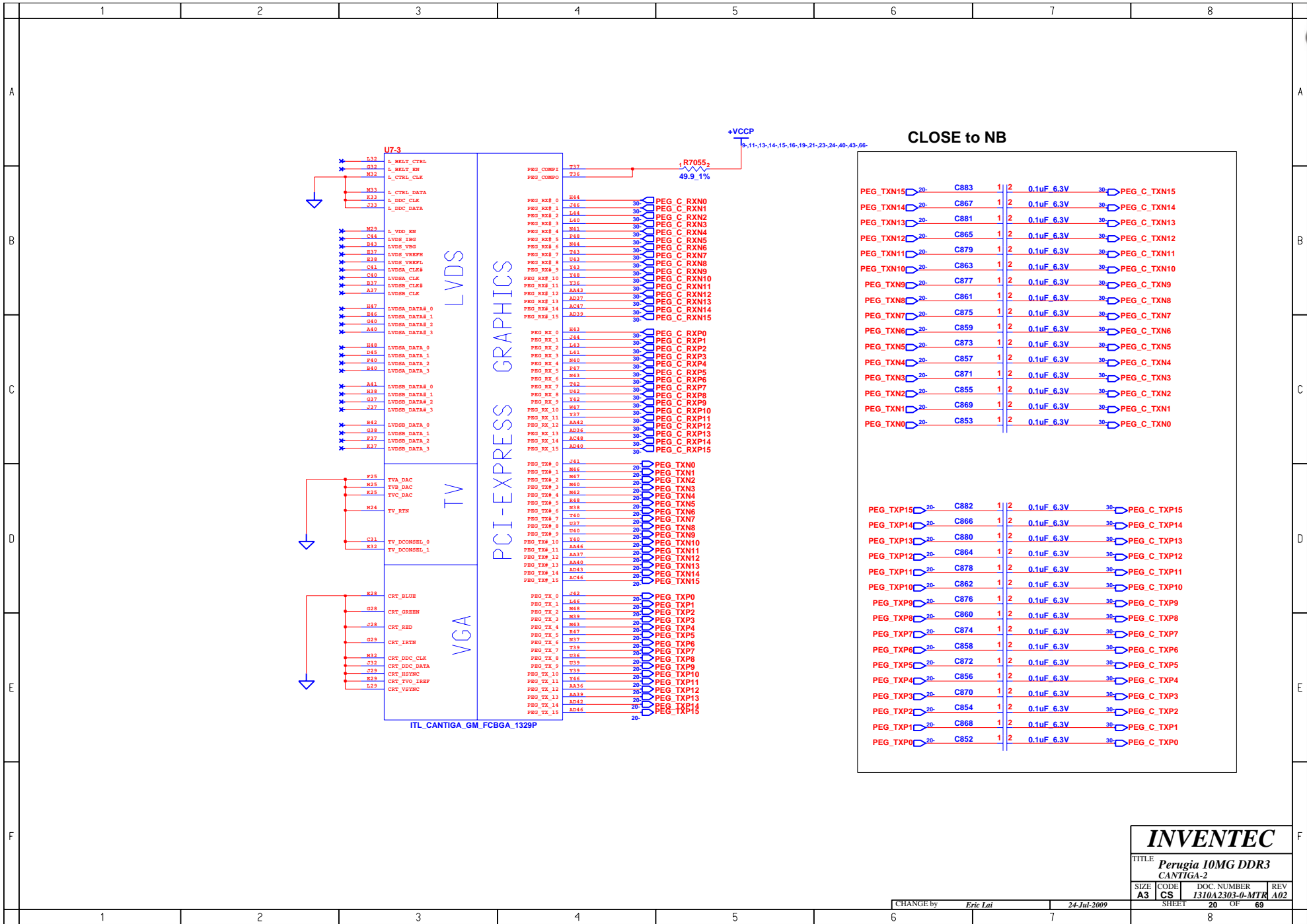
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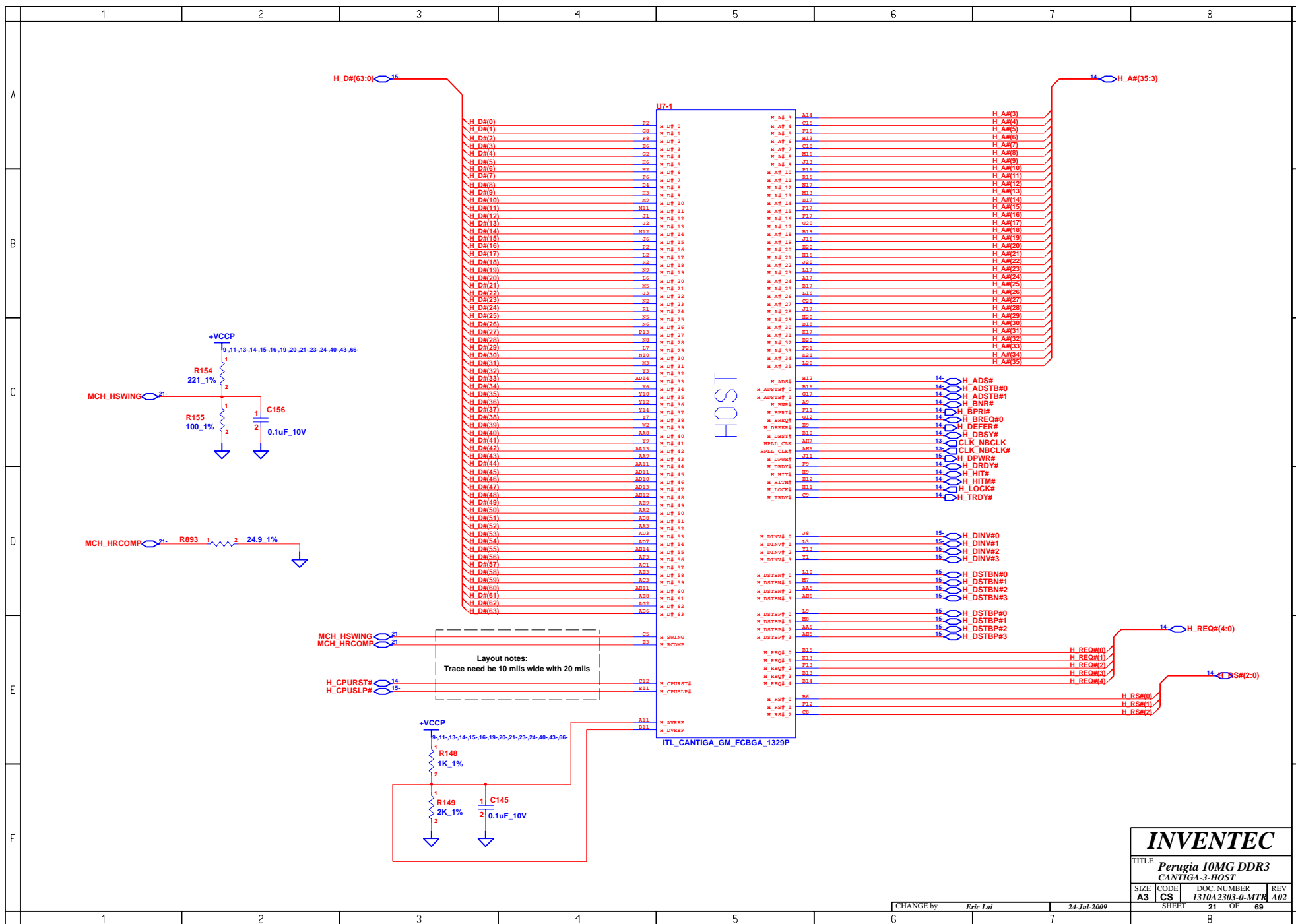
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Perugia 10MG DDR3			
PENRYN-4			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02
CHANGE by		Eric Lai	24-Jul-2009
SHEET		17	OF 69

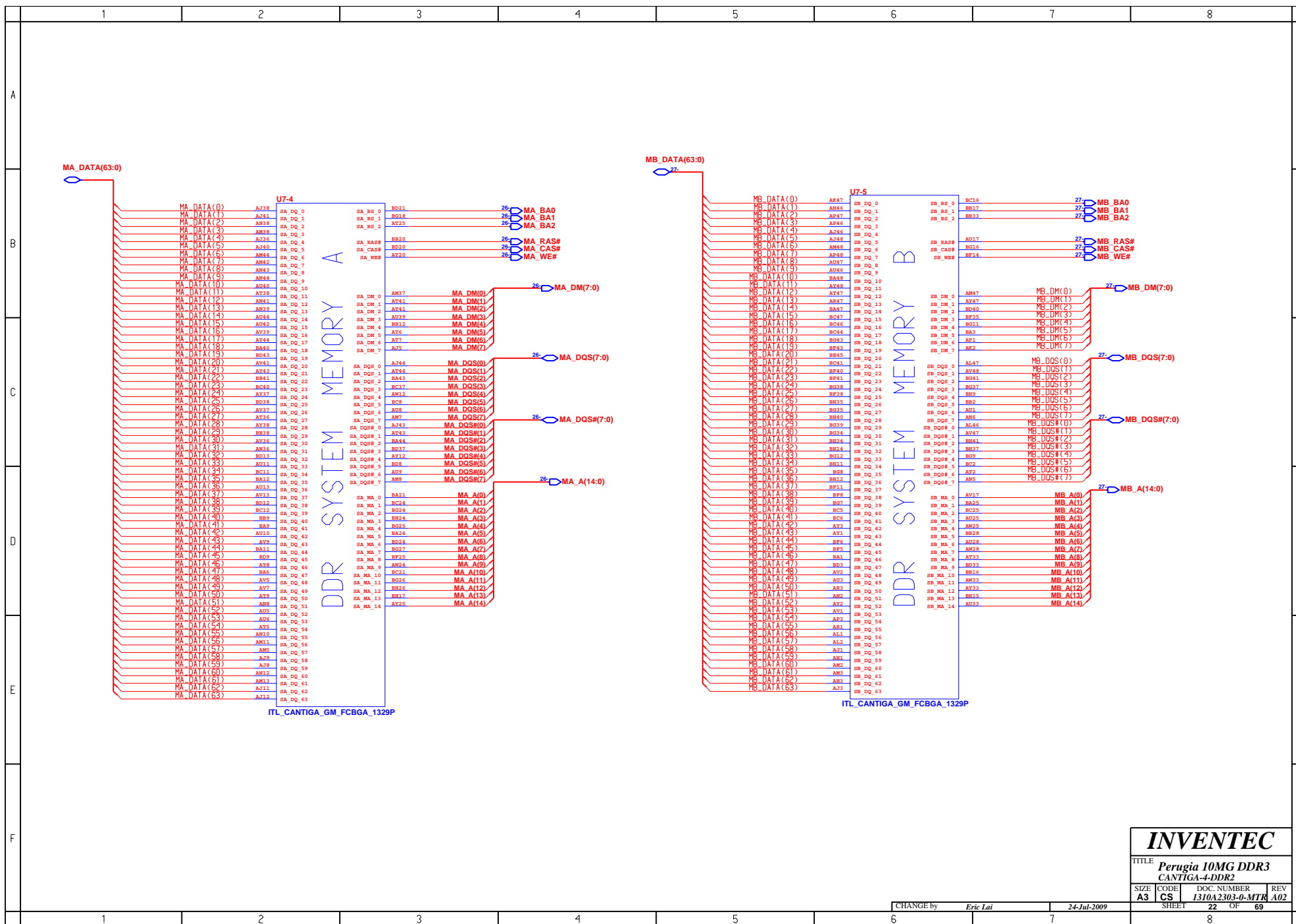


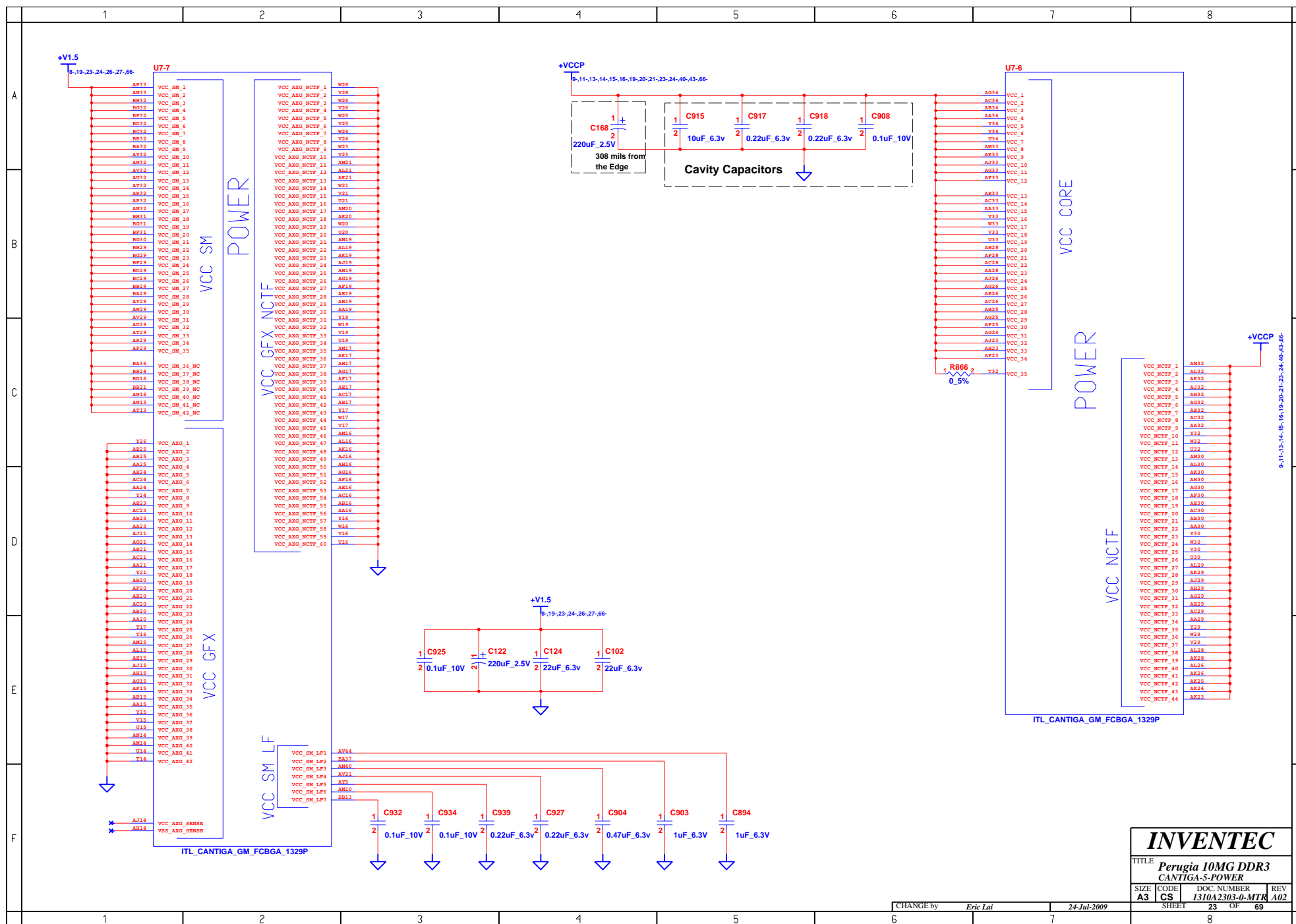
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TITLE: Perugia 10MG DDR3 THERMAL&FAN CONTROLLER			
SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
CHANGE by Eric Lai		24-Jul-2009	
SHEET 18		OF 69	



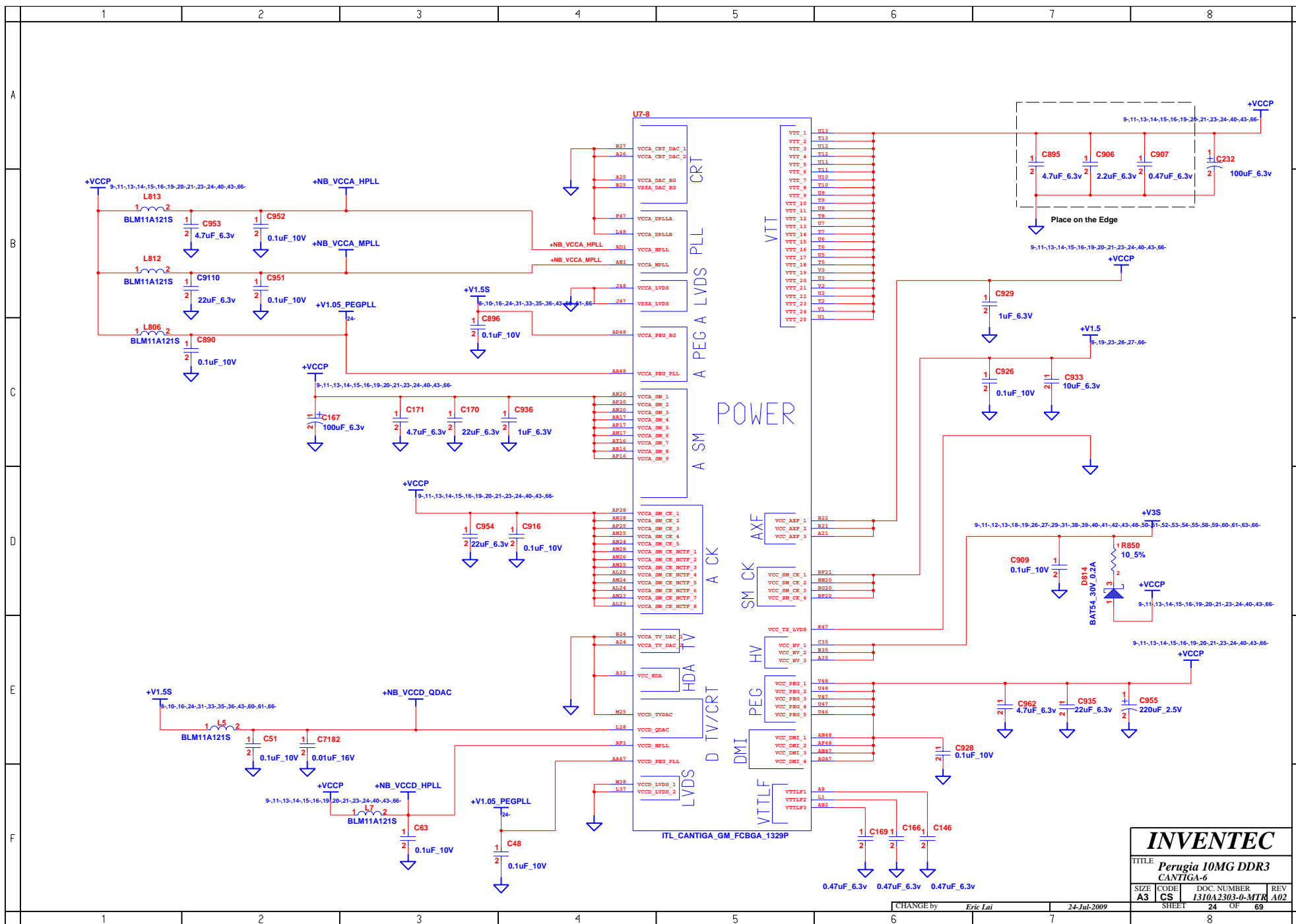


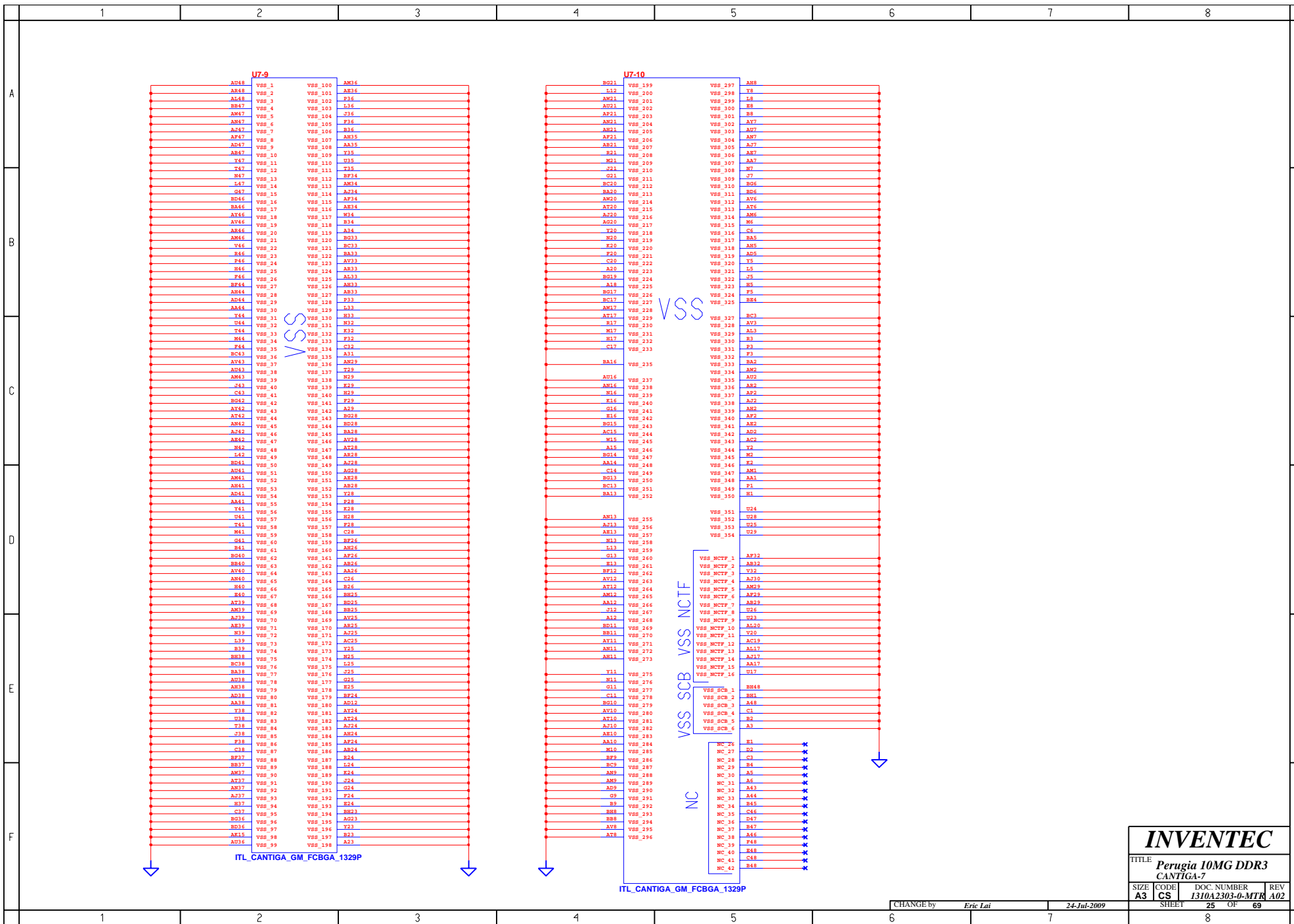


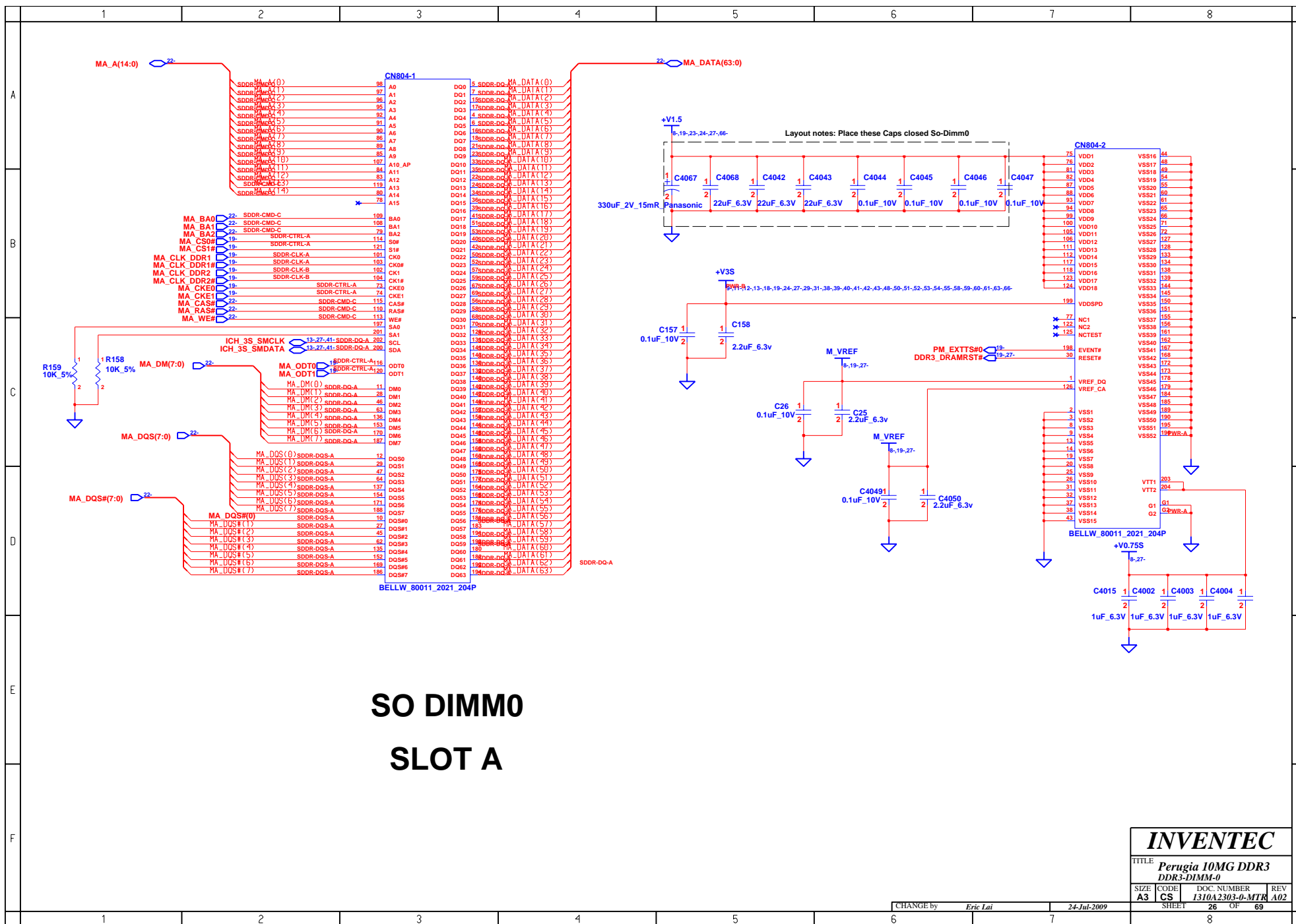


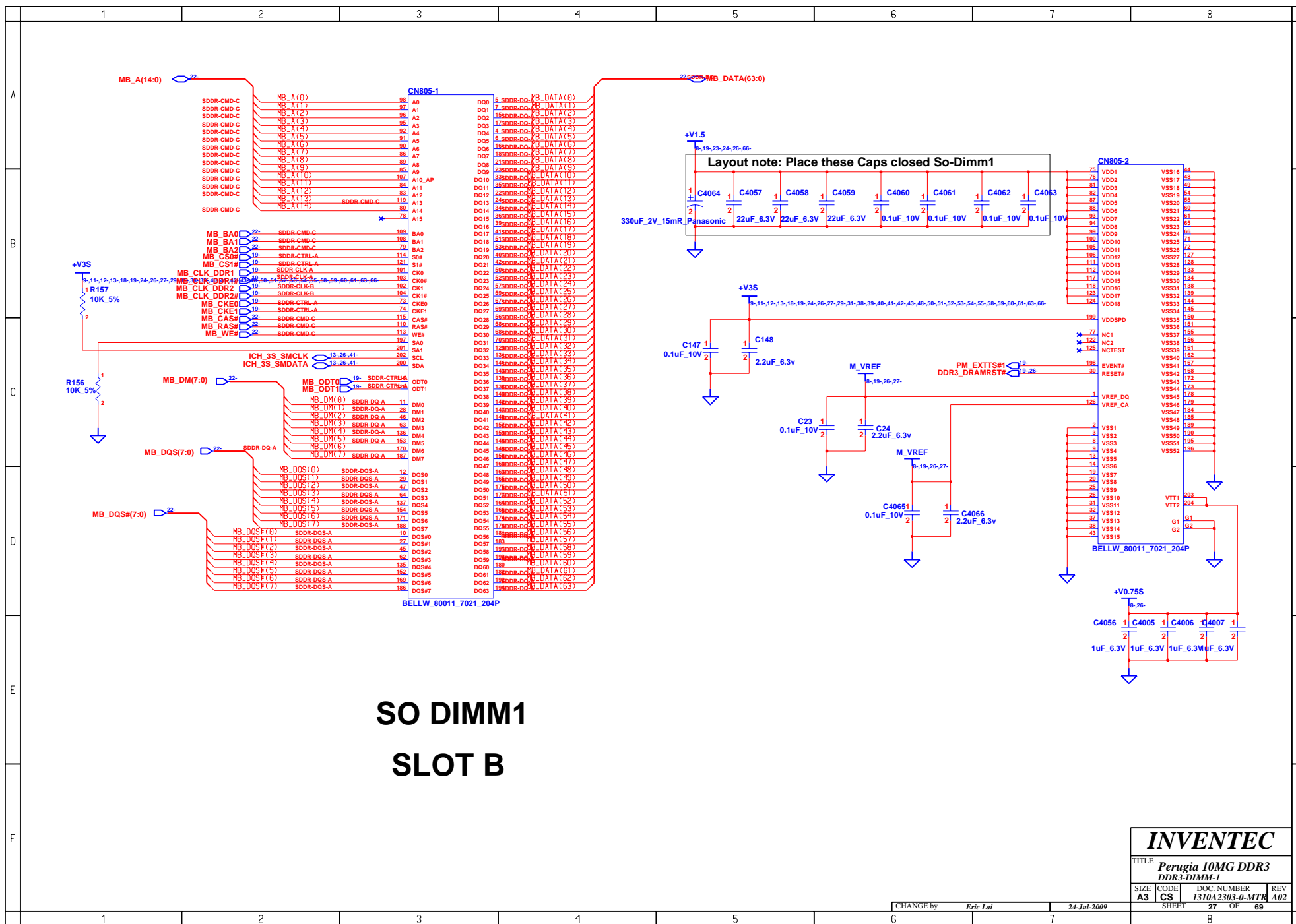


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TITLE			
Perugia 10MG DDR3			
CANTIGA-5-POWER			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02
CHANGE by		Eric Lai	24-Jul-2009
SHEET		23	OF 69











	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	

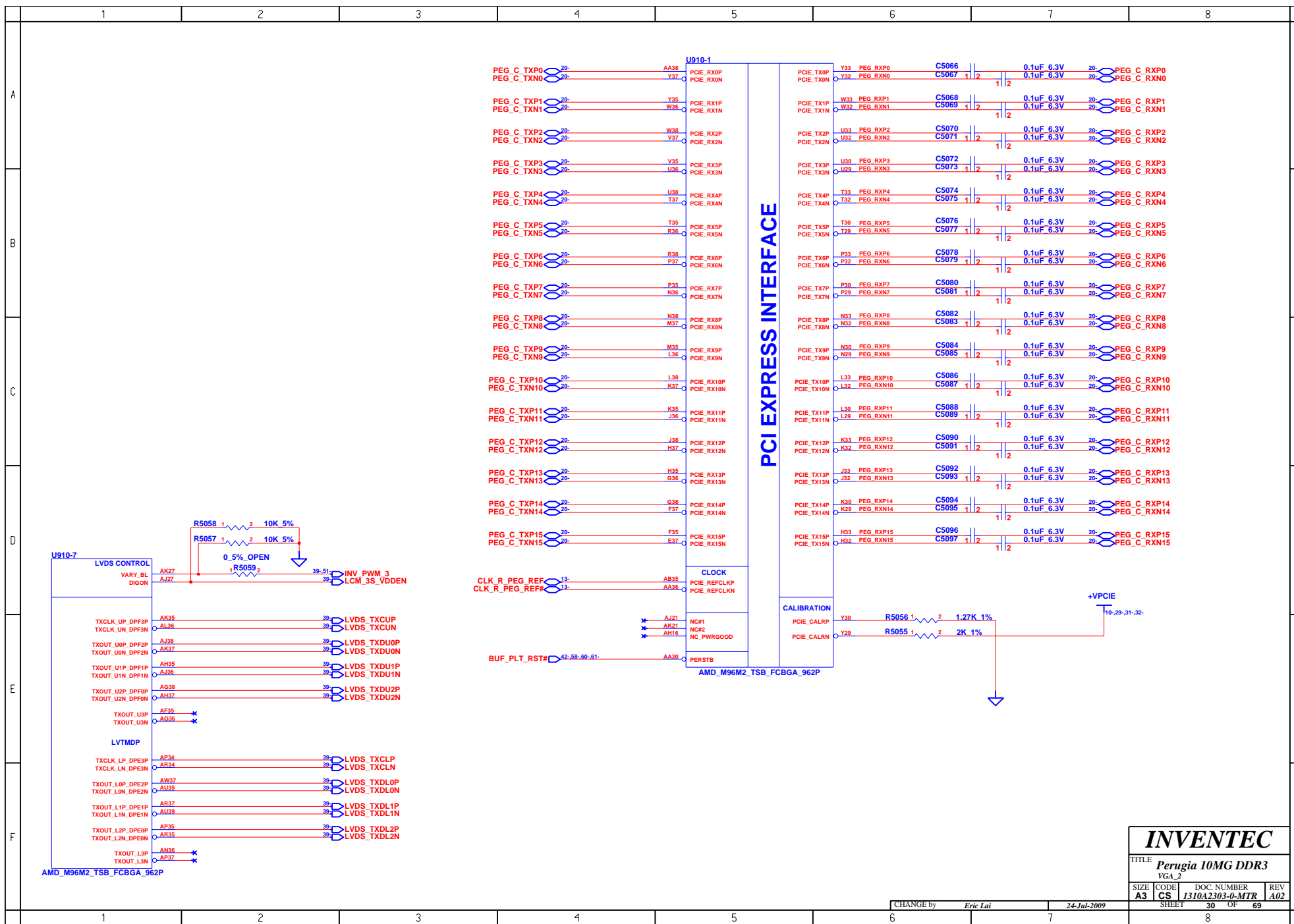
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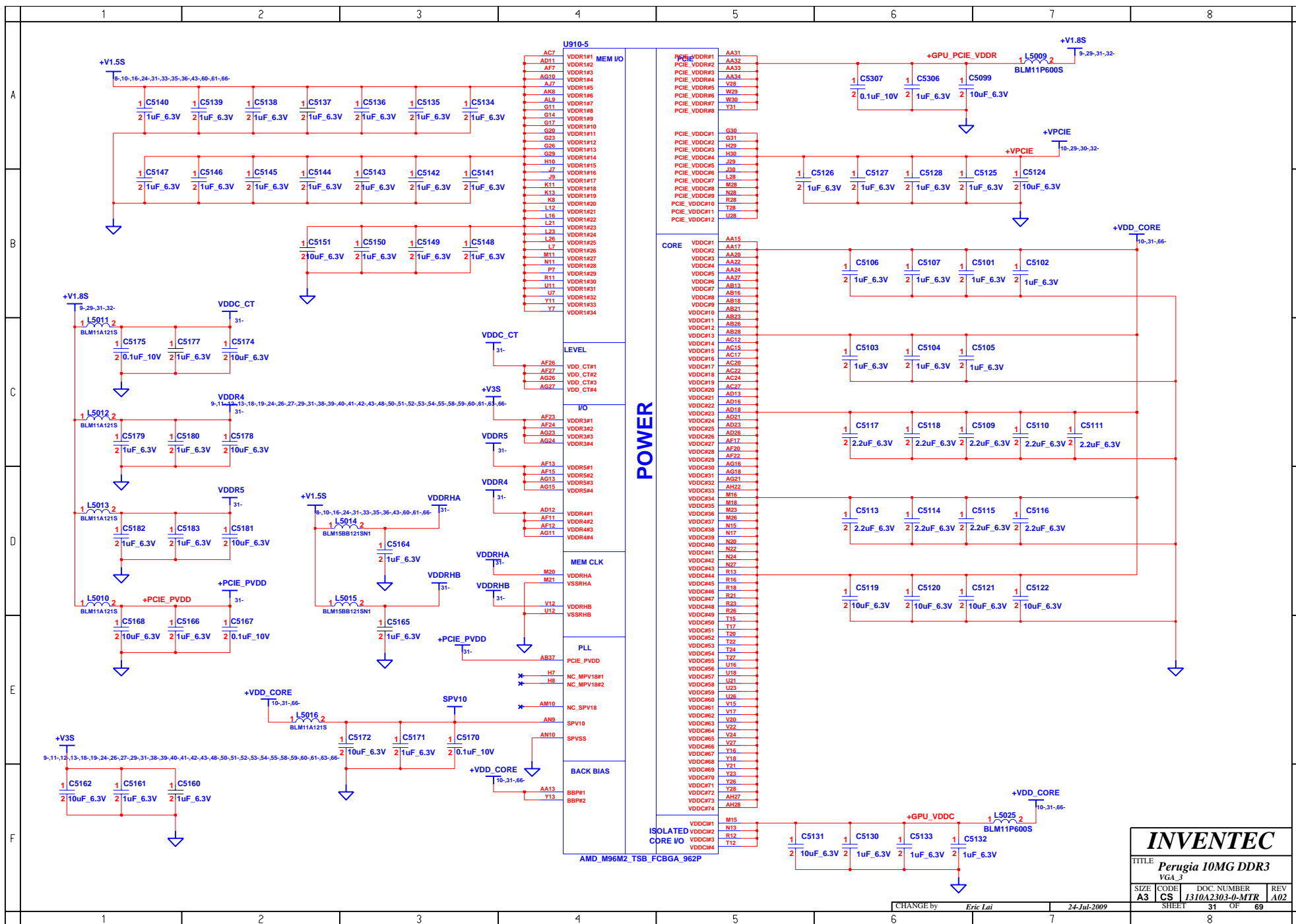
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DDR2-DAMPING

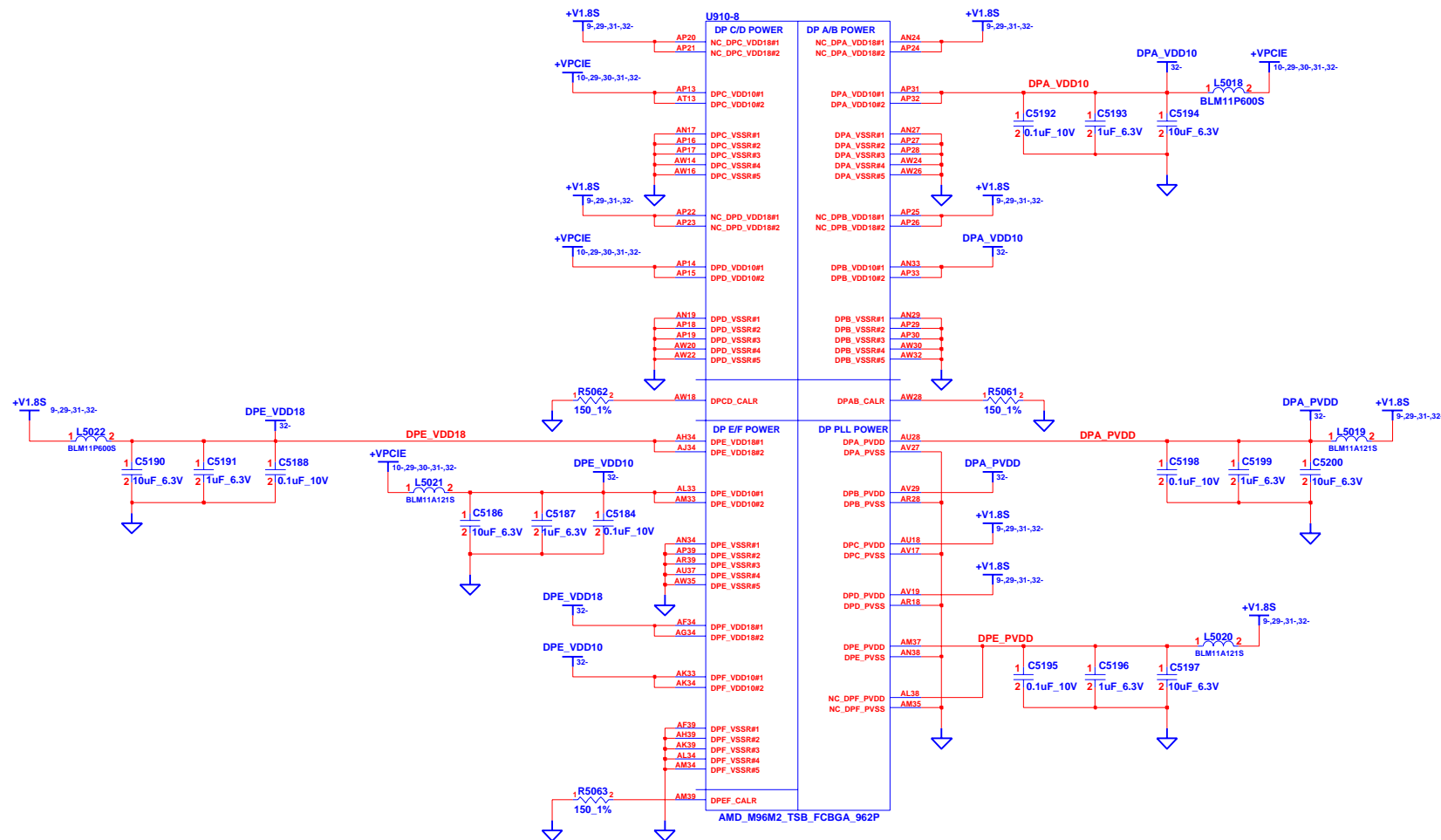
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A3	CS	1310A2303-0-MTR	A02

CHANGE by *Eric Lal* 27-Sep-2003

SHEET 28 OF 69





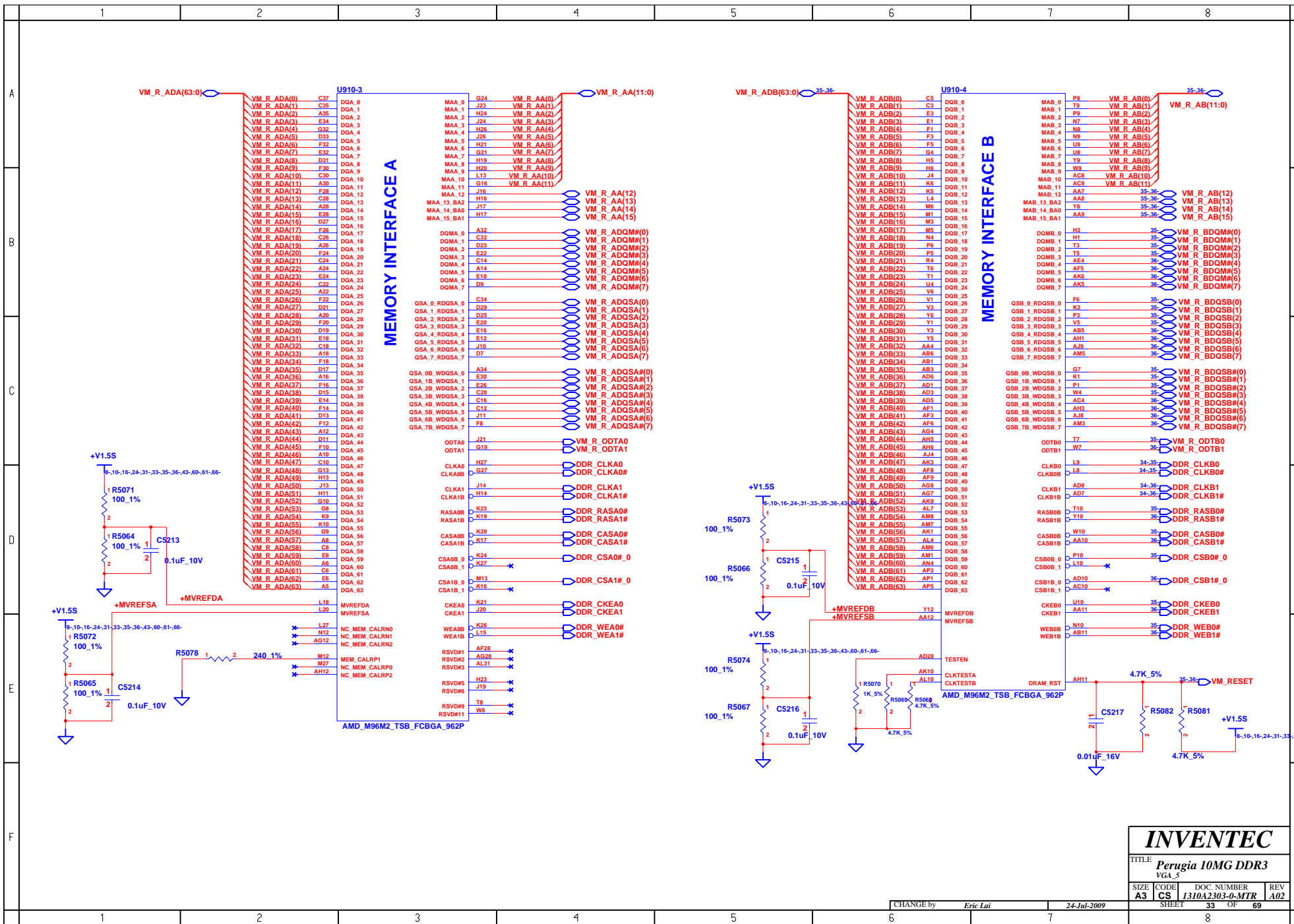


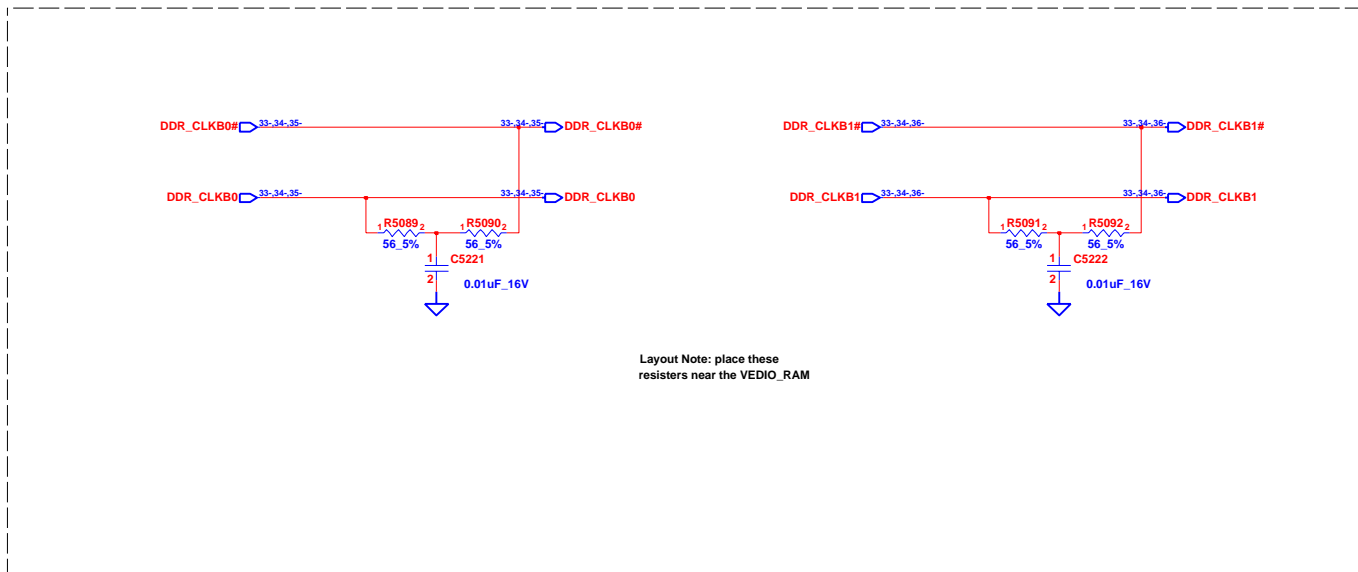
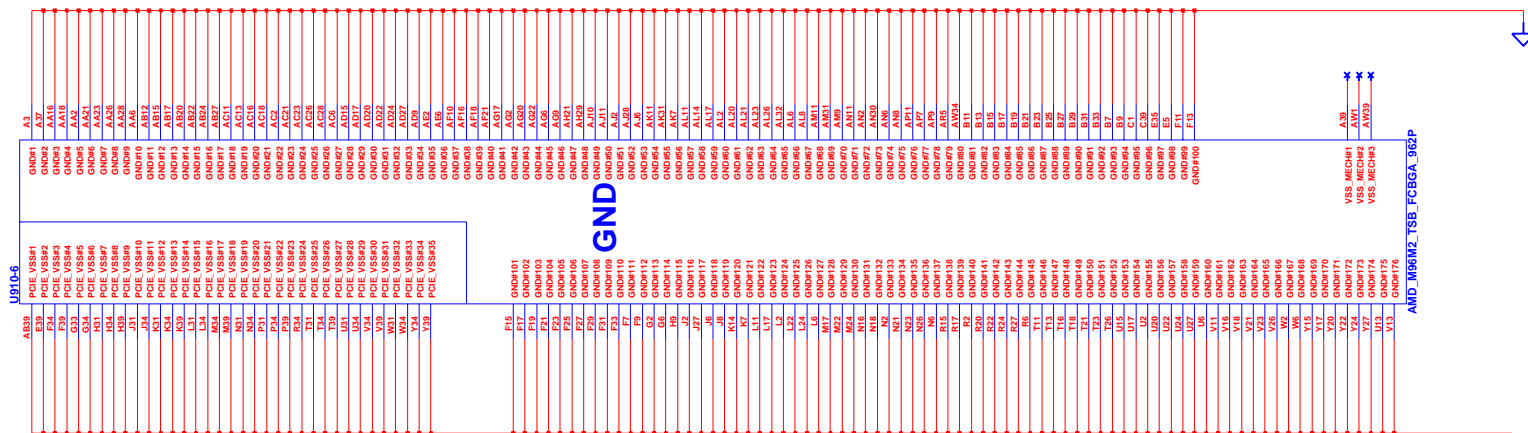
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TITLE			
VGA_4			
Perugia 10MG DDR3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 32 OF 69





Layout Note: place these
resistors near the VEDIO_RAM

INVENTEC

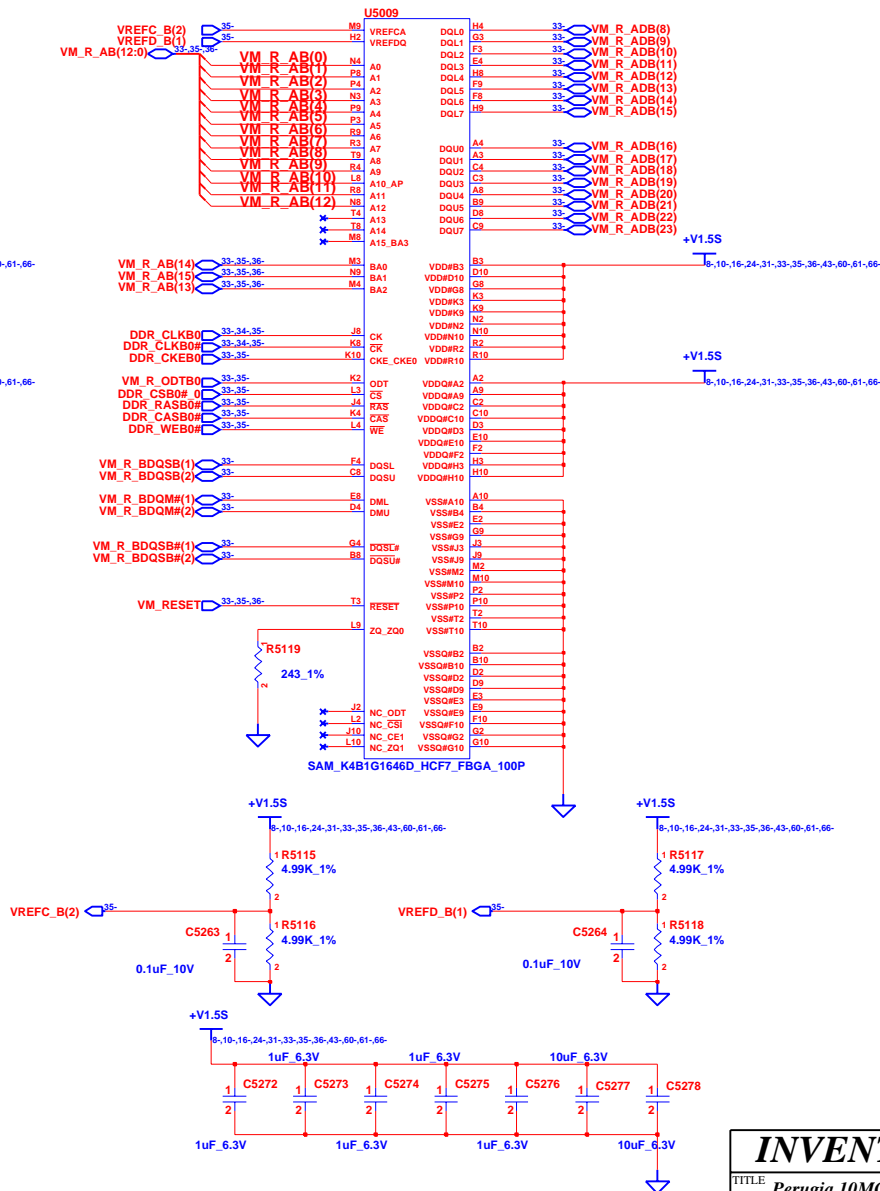
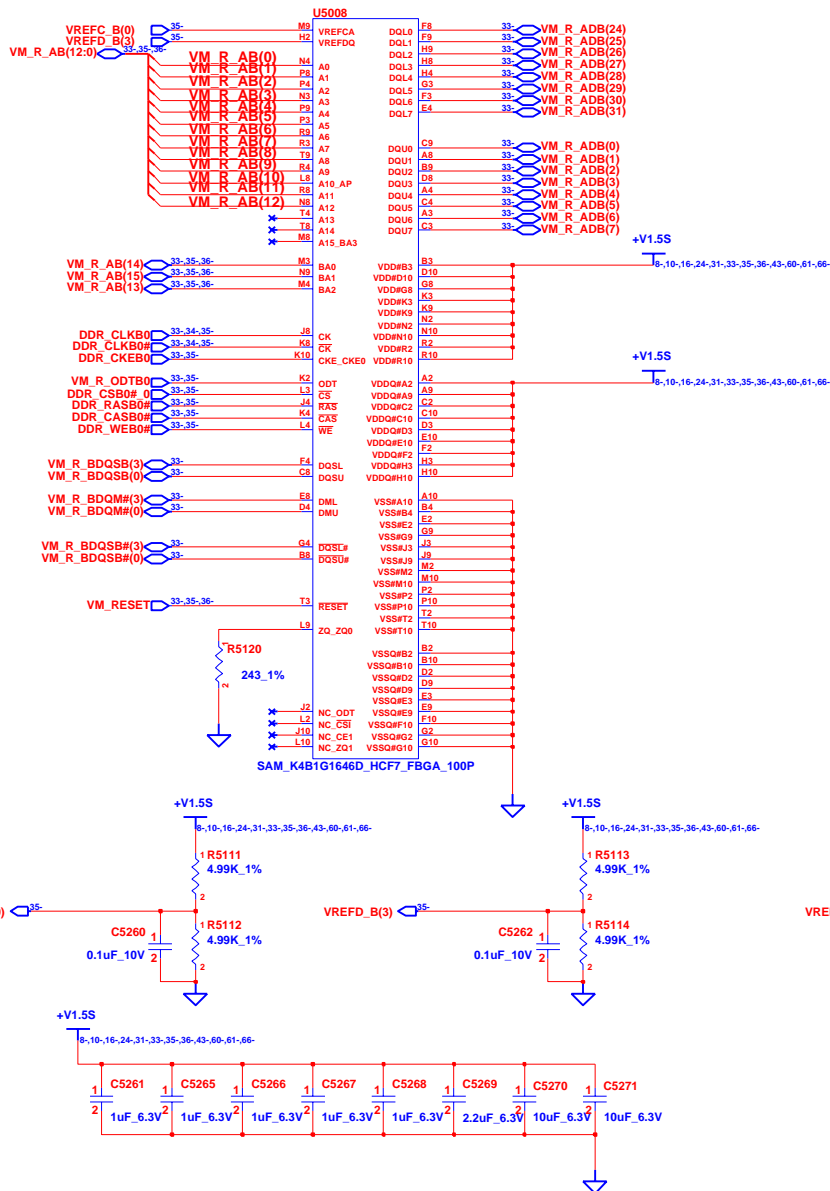
TITLE
Perugia 10MG DDR3
VGA_6

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02

CHANGE by *Eric Lai* 24-Jul-2009

SHEET 34 OF 69

M92 Use channel B



INVENTEC

TITLE: **Perugia 10MG DDR3**

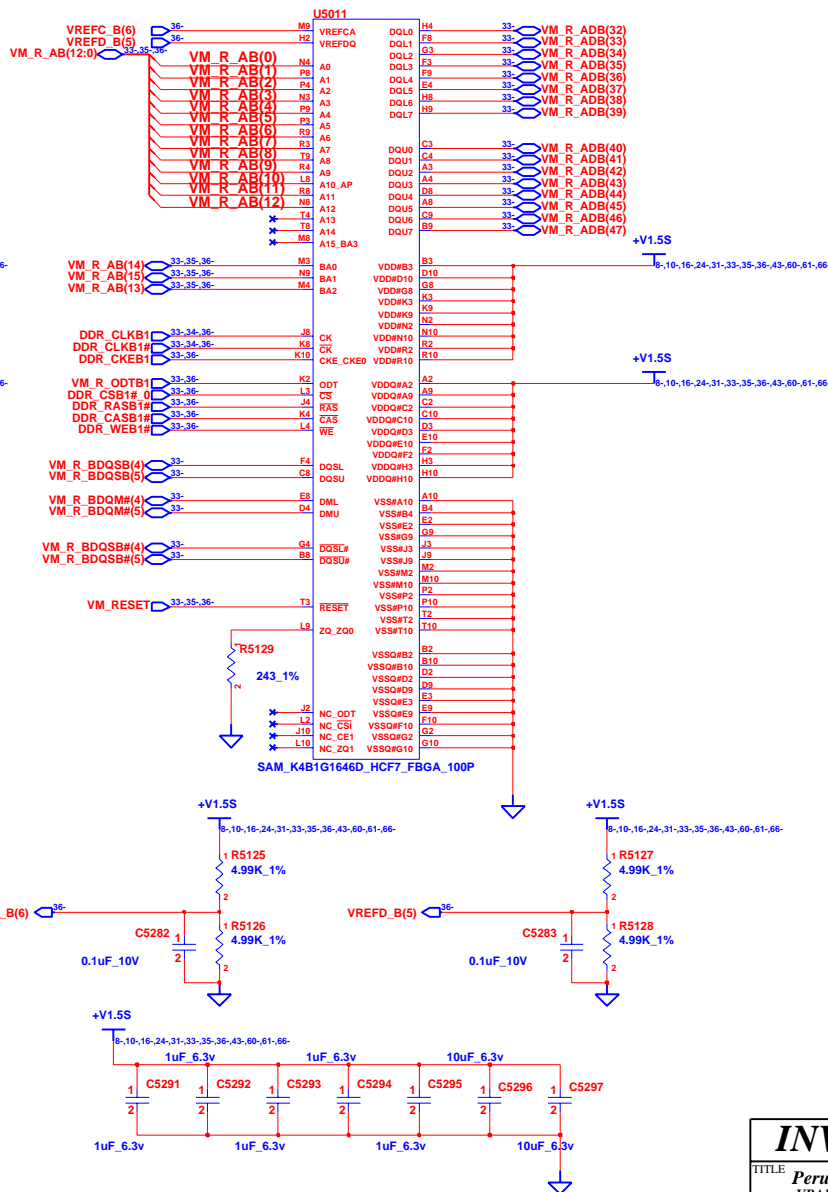
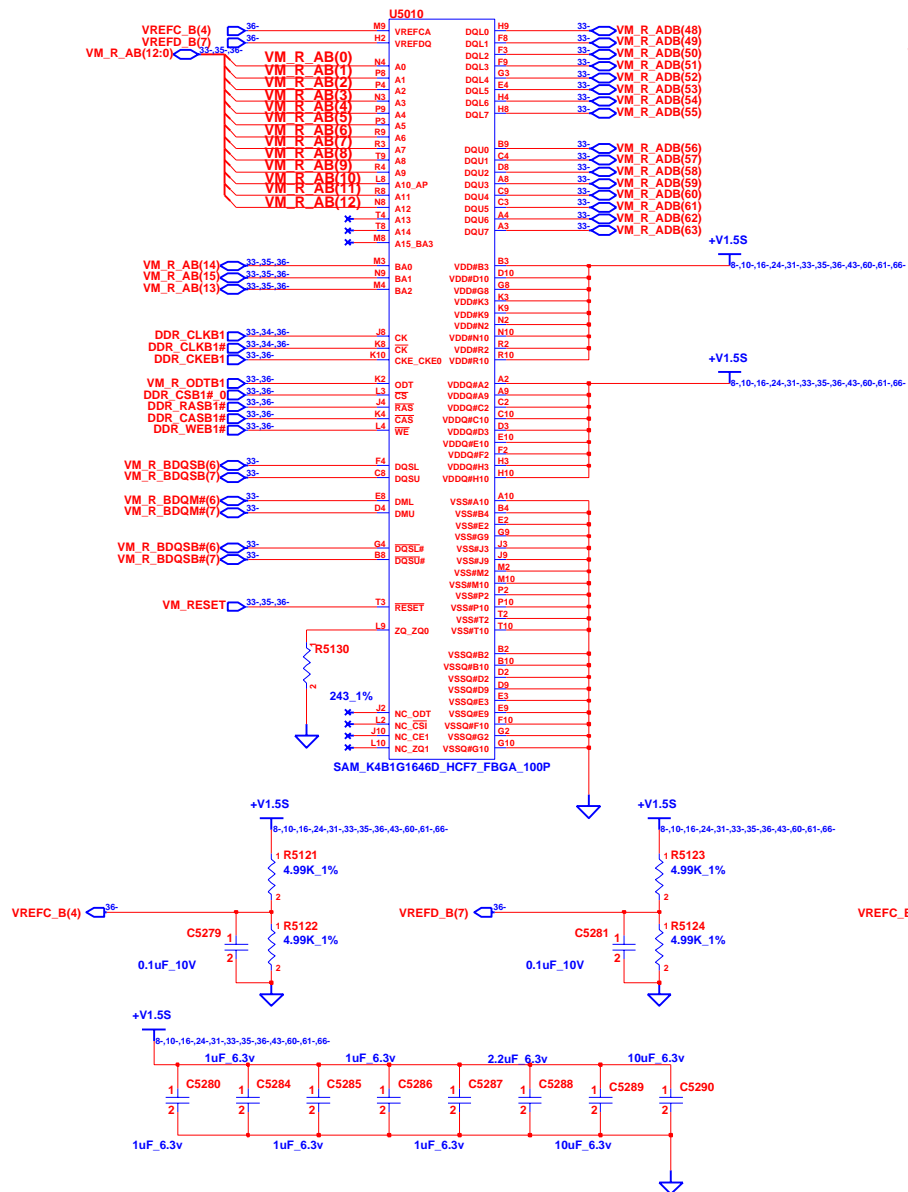
VRAM_0

SIZE CODE DOC. NUMBER REV
A3 CS 1310A2303-0-MTR A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 35 OF 69

M92 Use channel B



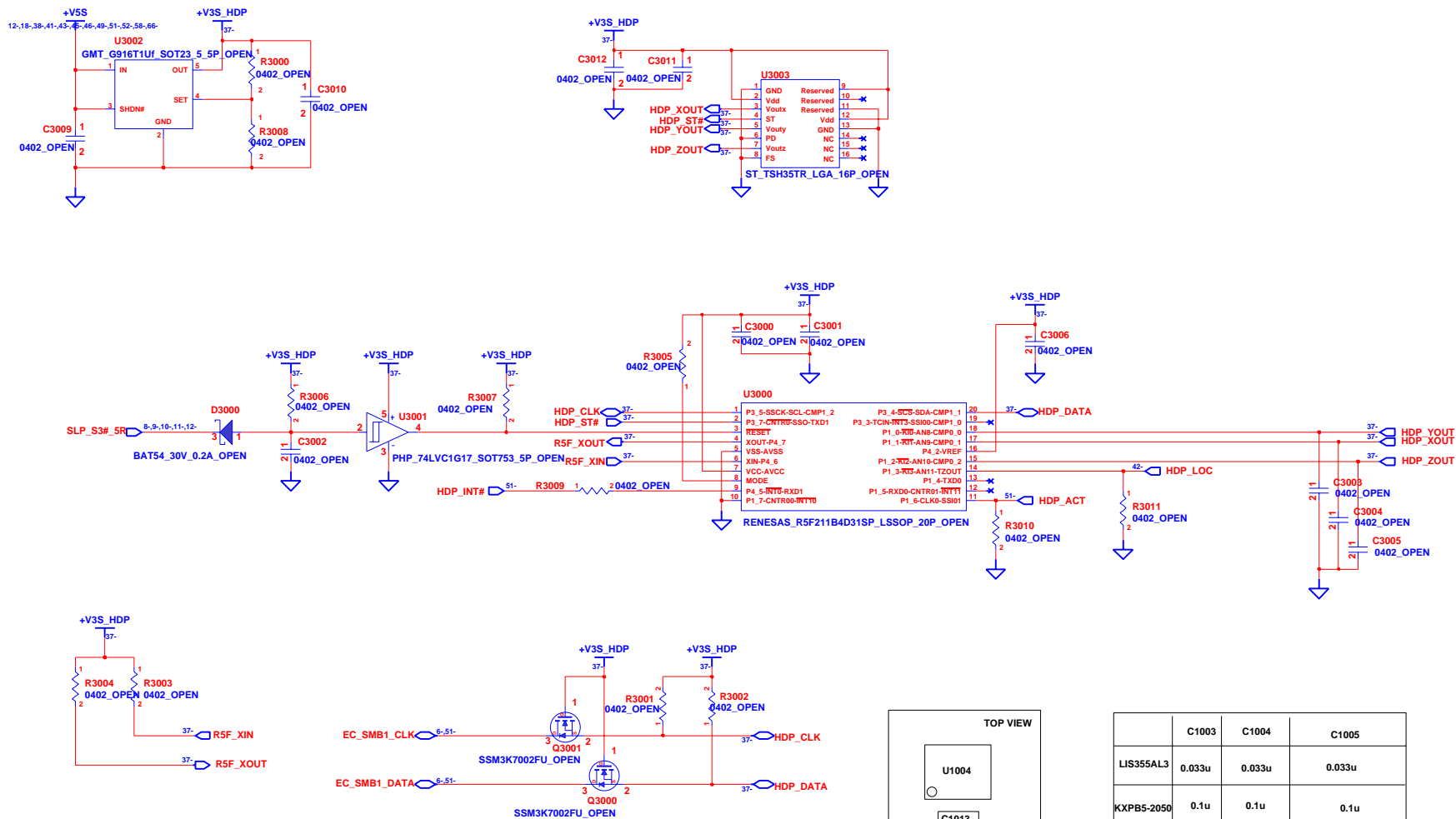
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TITLE
Perugia 10MG DDR3
VRAM_1

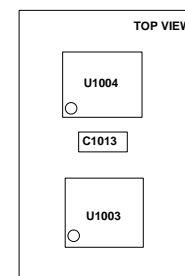
SIZE A3	CODE CS	DOC. NUMBER 1310A2303-0-MTR	REV A02
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CHANGE by Eric Lai 24-Jul-2009

SHEET 36 OF 69



	C1003	C1004	C1005
LIS355AL3	0.033u	0.033u	0.033u
KXPB5-2050	0.1u	0.1u	0.1u



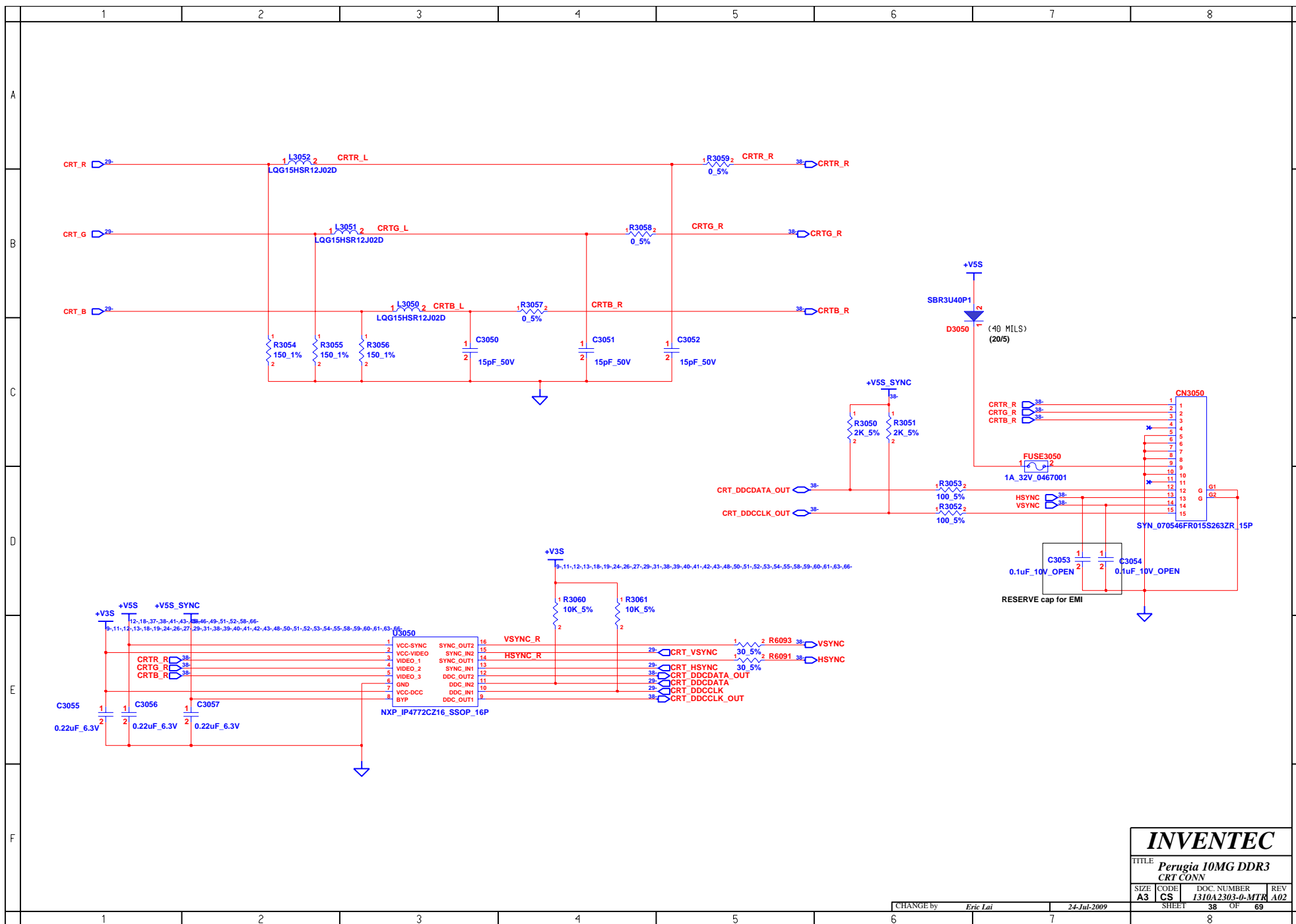
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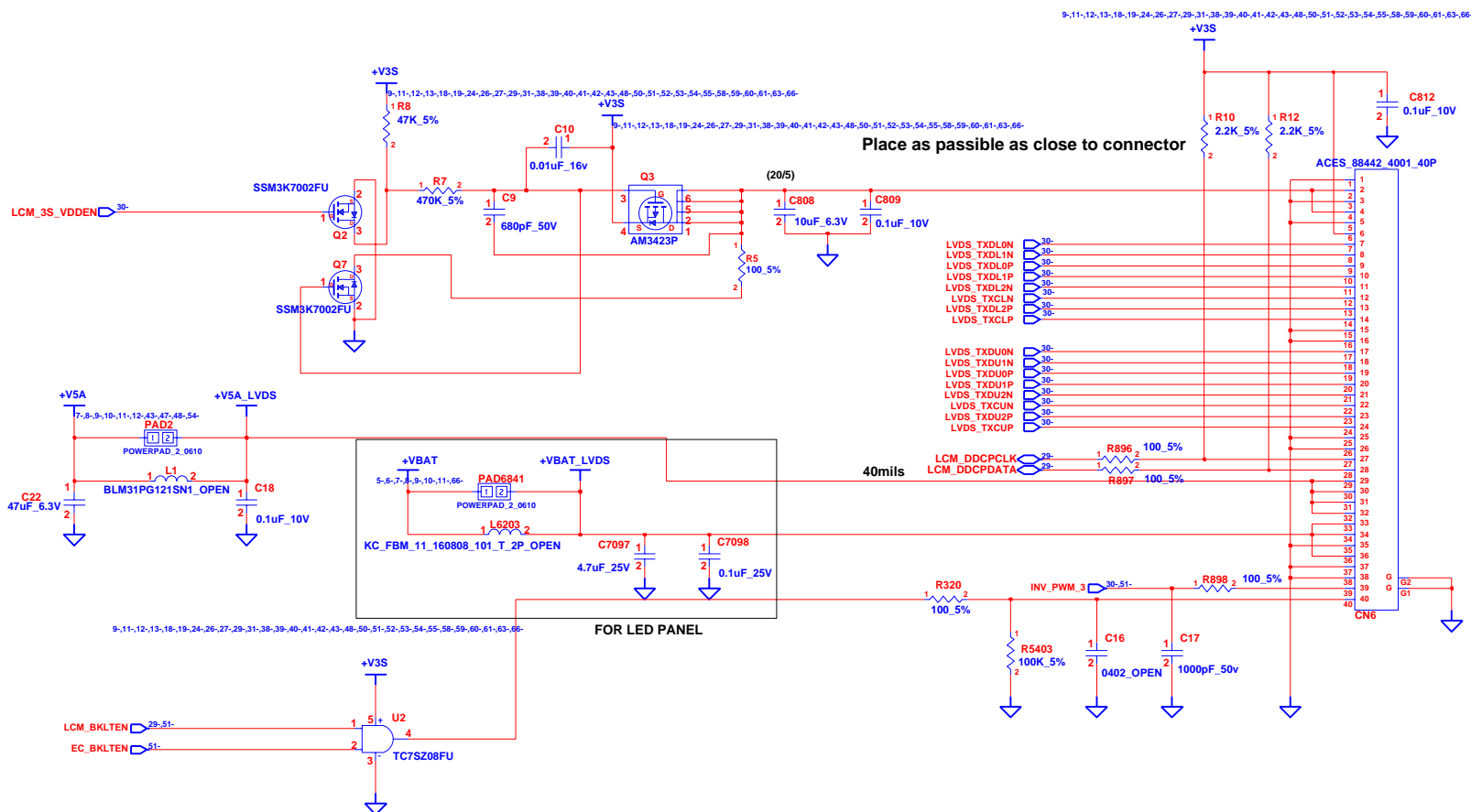
TITLE
Perugia 10MG DDR3
3D Sensor

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 37 OF 69





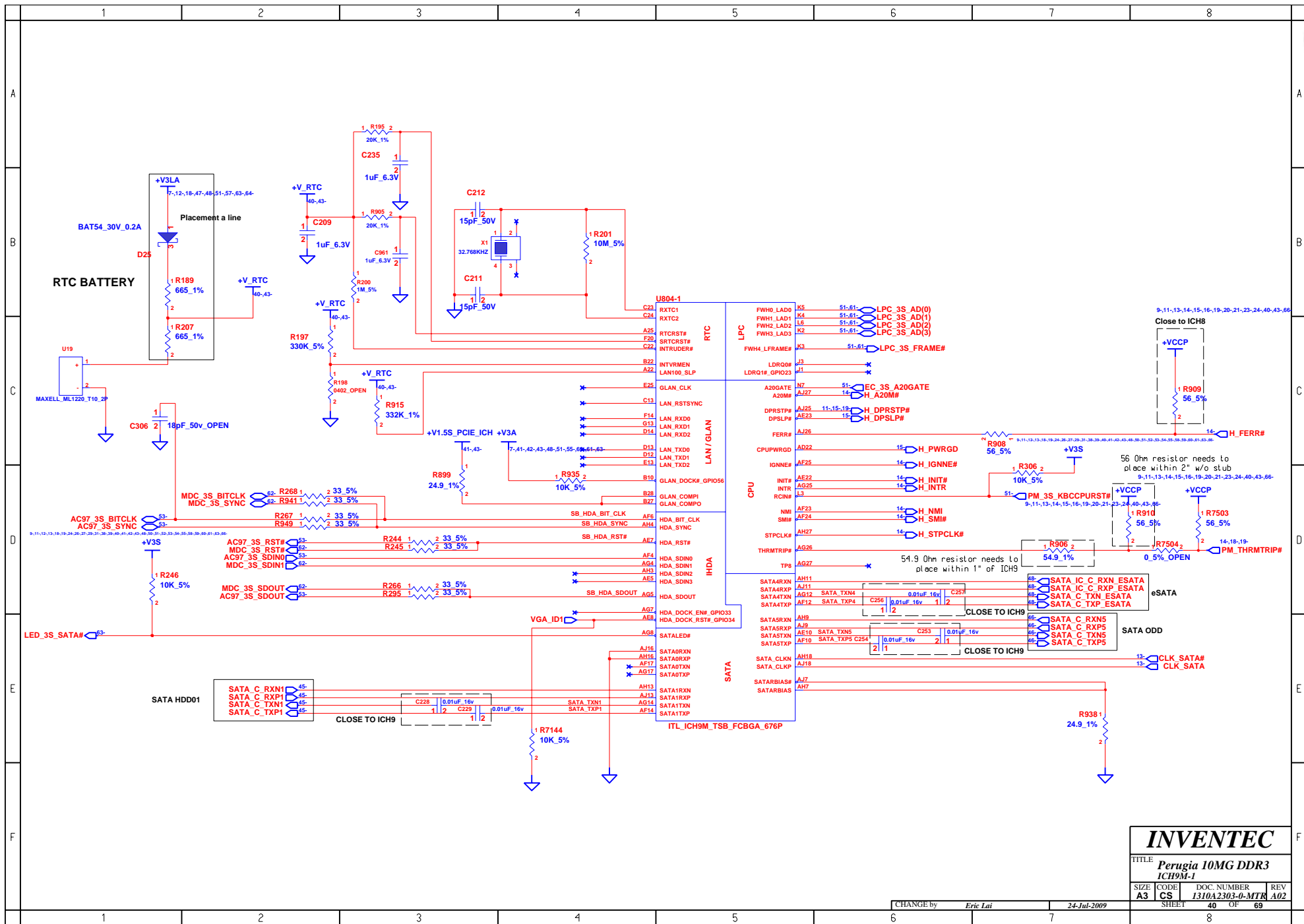
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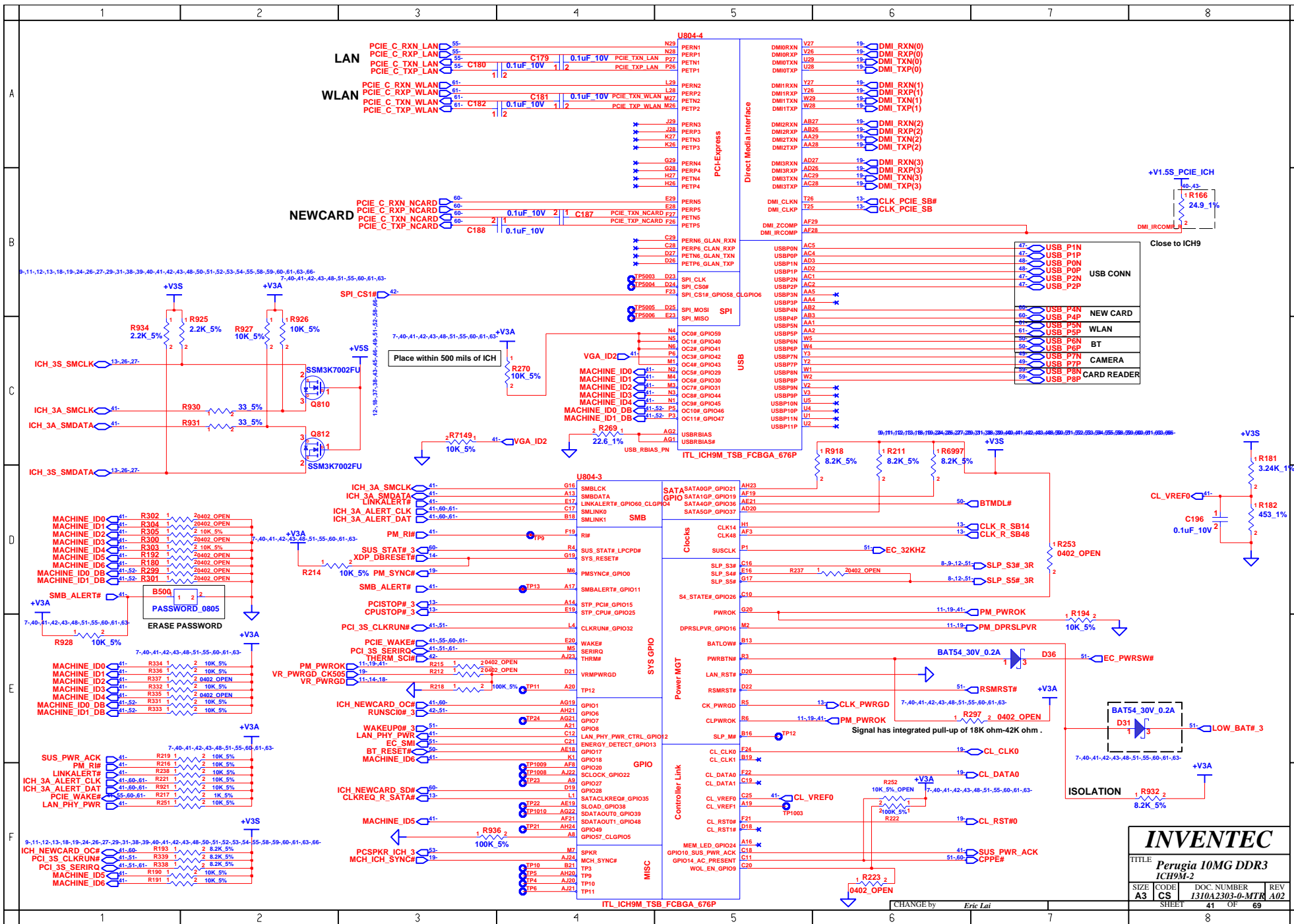
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**Perugia 10MG DDR3
LCD CONN**

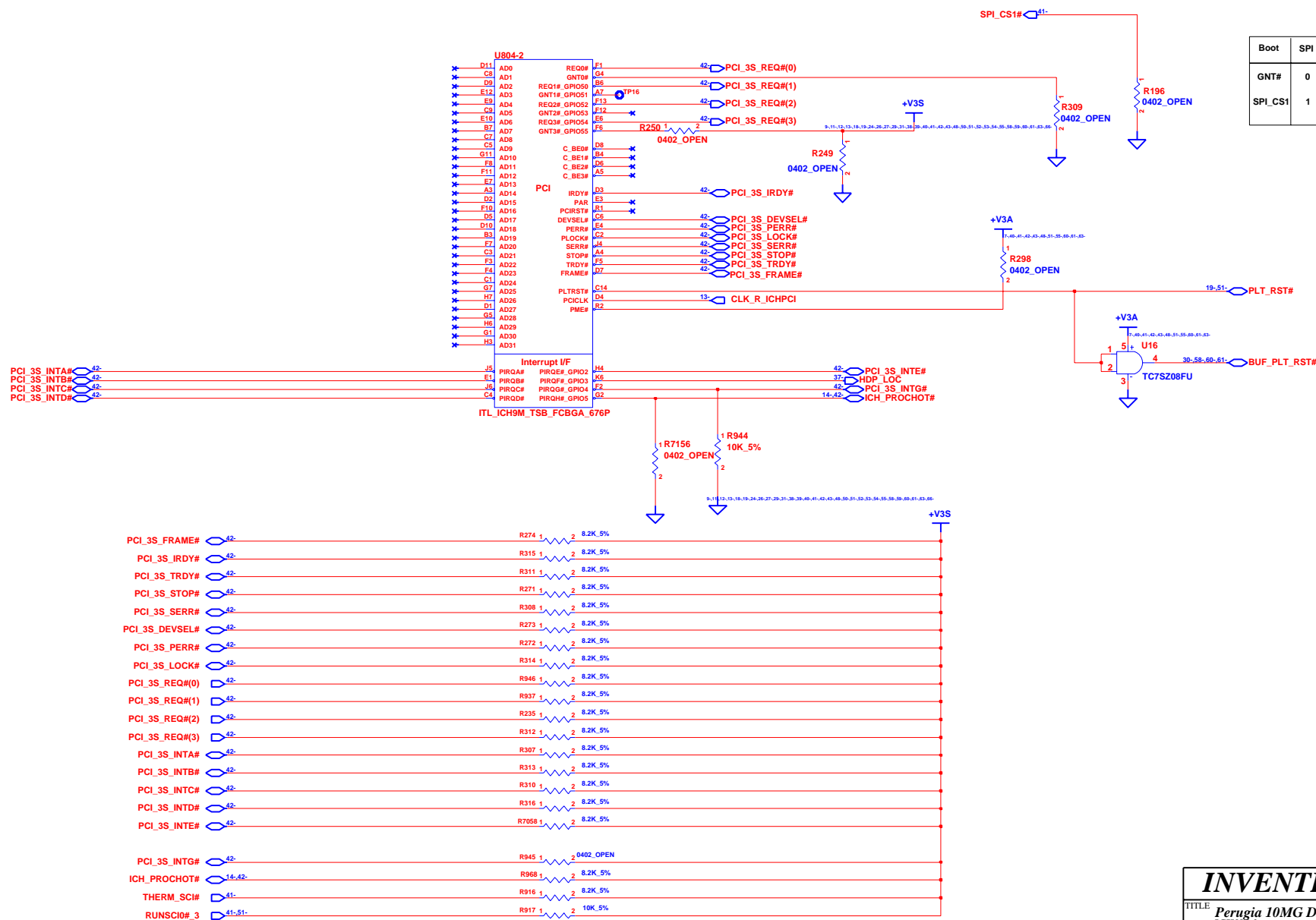
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02

CHANGE by *Eric Lai* 24-Jul-2009

SHEET 39 OF 69







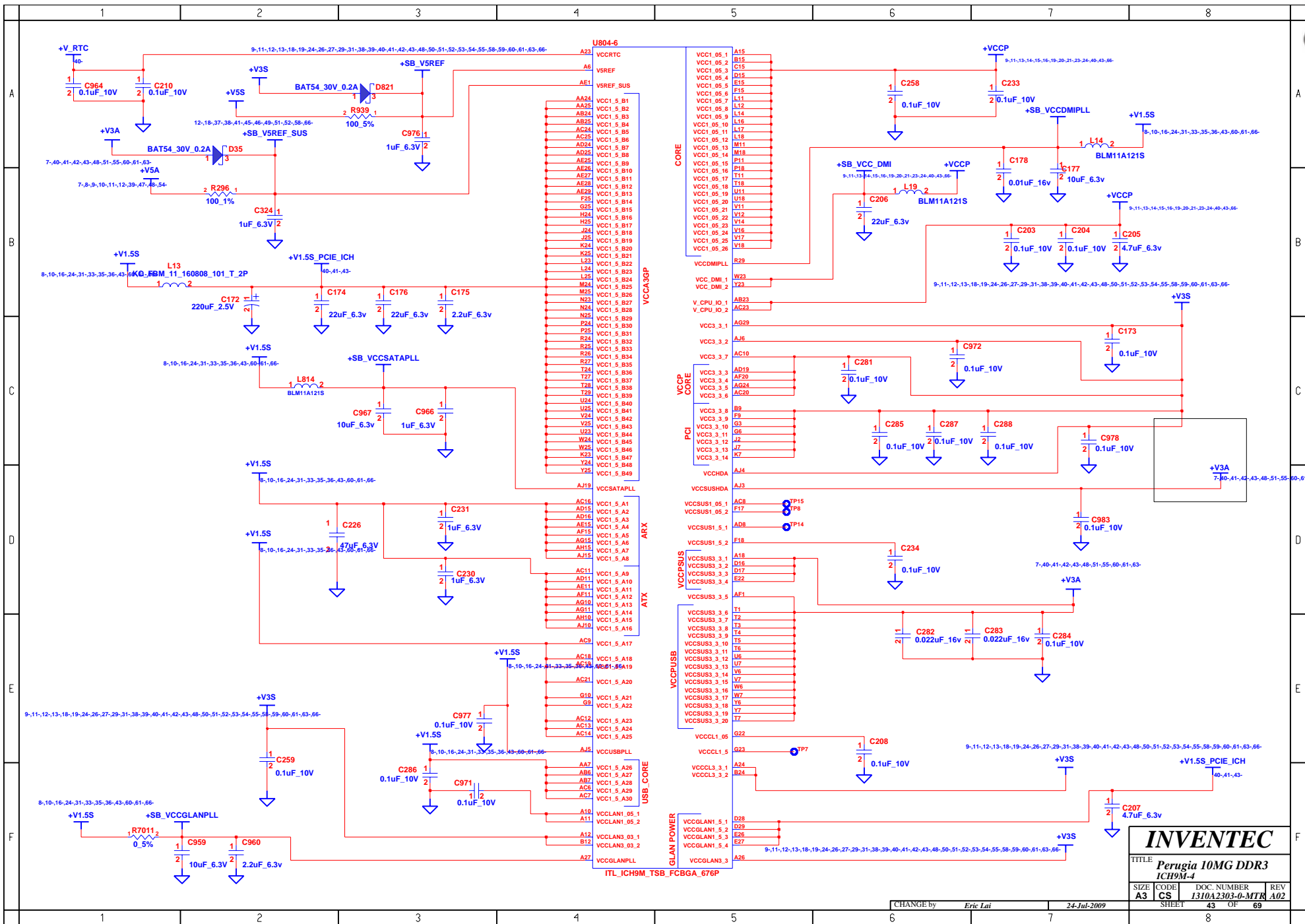
INVENTEC

TITLE
**Perugia 10MG DDR3
ICH9M-3**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02

CHANGE by *Eric Lai* 24-Jul-2009

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

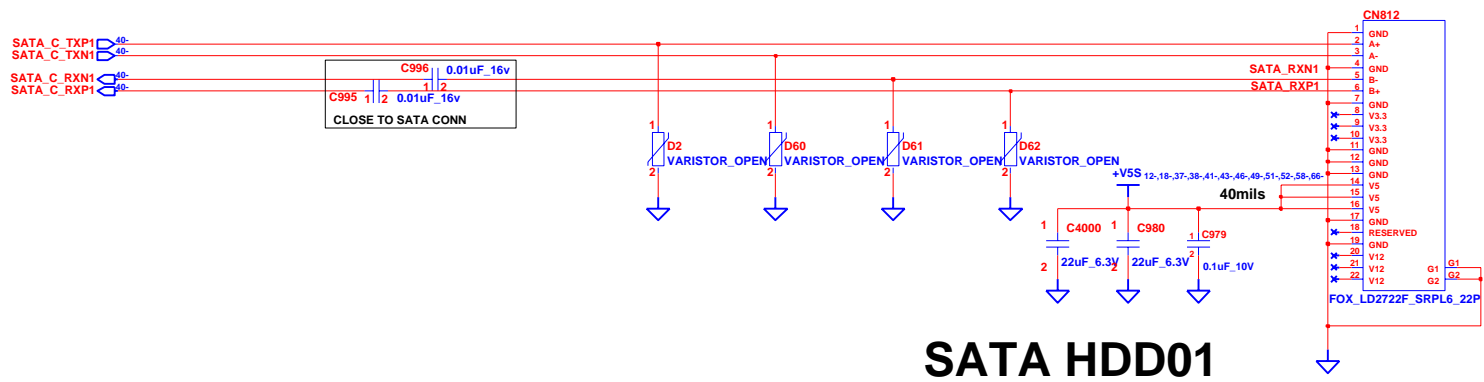
U804-5

AA26	VSS001	VSS107	H5
AA27	VSS002	VSS108	J23
AA2	VSS003	VSS109	J26
AA6	VSS004	VSS110	J27
AB1	VSS005	VSS111	AC22
AA23	VSS006	VSS112	K28
AB26	VSS007	VSS113	K29
AB25	VSS008	VSS114	L13
AB4	VSS009	VSS115	L15
AB5	VSS010	VSS116	L2
AC17	VSS011	VSS117	L26
AC25	VSS012	VSS118	L27
AC27	VSS013	VSS119	L5
AC3	VSS014	VSS120	L7
AD1	VSS015	VSS121	M12
AD10	VSS016	VSS122	M13
AD12	VSS017	VSS123	M14
AD13	VSS018	VSS124	M15
AD14	VSS019	VSS125	M16
AD17	VSS020	VSS126	M17
AD18	VSS021	VSS127	M23
AD21	VSS022	VSS128	M28
AD25	VSS023	VSS129	M29
AD23	VSS024	VSS130	N11
AD4	VSS025	VSS131	N12
AD5	VSS026	VSS132	N13
AD6	VSS027	VSS133	N14
AD7	VSS028	VSS134	N15
AD9	VSS029	VSS135	N16
AE13	VSS030	VSS136	N17
AE13	VSS031	VSS137	N18
AE14	VSS032	VSS138	N26
AE16	VSS033	VSS139	N27
AE17	VSS034	VSS140	P12
AE1	VSS035	VSS141	P13
AE20	VSS036	VSS142	P14
AE24	VSS037	VSS143	P15
AE3	VSS038	VSS144	P16
AE4	VSS039	VSS145	P17
AE5	VSS040	VSS146	P2
AE9	VSS041	VSS147	P23
AF13	VSS042	VSS148	P28
AF16	VSS043	VSS149	P29
AF18	VSS044	VSS150	P4
AF24	VSS045	VSS151	P7
AH25	VSS046	VSS152	R11
AF28	VSS047	VSS153	R12
AF27	VSS048	VSS154	R13
AF3	VSS049	VSS155	R14
AF7	VSS050	VSS156	R15
AF9	VSS051	VSS157	R16
AG13	VSS052	VSS158	R17
AG16	VSS053	VSS159	R18
AG18	VSS054	VSS160	R28
AG20	VSS055	VSS161	T12
AG23	VSS056	VSS162	T13
AG3	VSS057	VSS163	T14
AG5	VSS058	VSS164	T15
AG9	VSS059	VSS165	T16
AH12	VSS060	VSS166	T17
AH14	VSS061	VSS167	T23
AH17	VSS062	VSS168	B26
AH19	VSS063	VSS169	U12
AH2	VSS064	VSS170	U13
AH22	VSS065	VSS171	U14
AH23	VSS066	VSS172	U15
AH28	VSS067	VSS173	U16
AH5	VSS068	VSS174	U17
AH6	VSS069	VSS175	AD23
AJ12	VSS070	VSS176	U26
AJ14	VSS071	VSS177	U27
AJ17	VSS072	VSS178	U3
AJ8	VSS073	VSS179	V1
B11	VSS074	VSS180	V13
B14	VSS075	VSS181	V15
B17	VSS076	VSS182	V23
B2	VSS077	VSS183	V28
B20	VSS078	VSS184	V29
B23	VSS079	VSS185	V4
B5	VSS080	VSS186	V5
B5	VSS081	VSS187	W26
C26	VSS082	VSS188	W27
C27	VSS083	VSS189	W3
E11	VSS084	VSS190	Y1
E14	VSS085	VSS191	Y28
E18	VSS086	VSS192	Y29
E2	VSS087	VSS193	Y4
E21	VSS088	VSS194	Y5
E24	VSS089	VSS195	AG28
E5	VSS090	VSS196	AH6
E8	VSS091	VSS197	AF2
F16	VSS092	VSS198	B25
F28	VSS093		
F29	VSS094	VSS_NCTF1	A1
G12	VSS095	VSS_NCTF2	A2
G14	VSS096	VSS_NCTF3	A28
G19	VSS097	VSS_NCTF4	A29
G21	VSS098	VSS_NCTF5	AH1
G24	VSS099	VSS_NCTF6	AH29
G25	VSS100	VSS_NCTF7	AJ1
G27	VSS101	VSS_NCTF8	AJ2
G8	VSS102	VSS_NCTF9	AJ28
H3	VSS103	VSS_NCTF10	AJ29
H25	VSS104	VSS_NCTF11	B1
H28	VSS105	VSS_NCTF12	B29
H29	VSS106		

ITL ICH9M_TSB_FCBGA_676P

INVENTEC			
TITLE			
Perugia 10MG DDR3			
ICH9M-5			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02
SHEET		44	OF 69

CHANGE by Eric Lai 24-Jul-2009



SATA HDD01

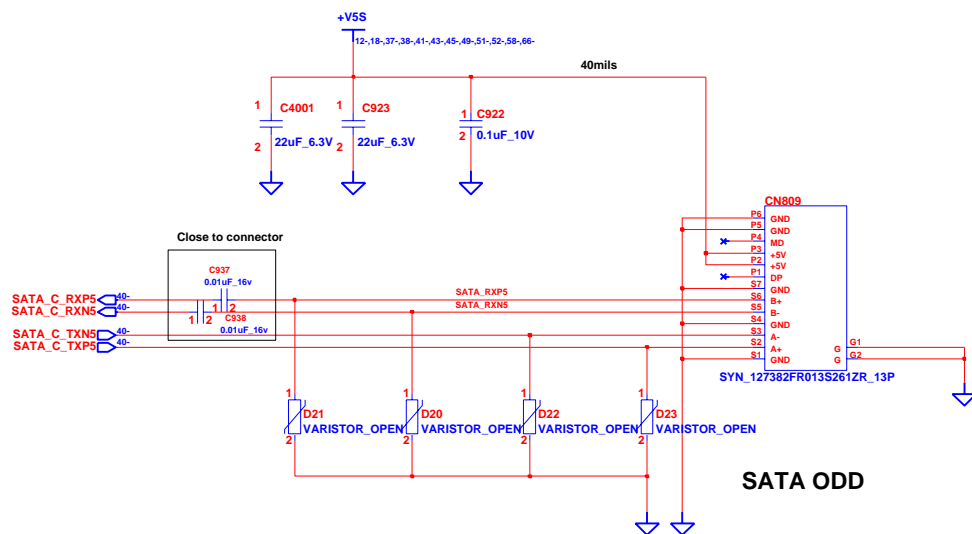
INVENTEC

TITLE **Perugia 10MG DDR3
HDD CONN**

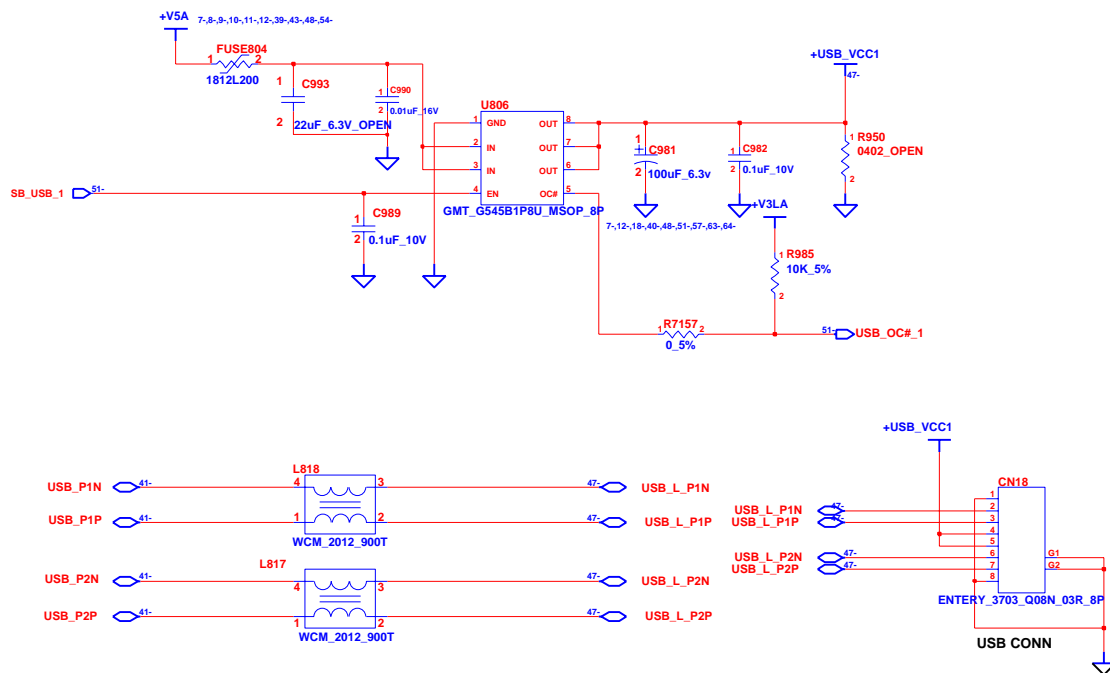
SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
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CHANGE by *Eric Lai* 24-Jul-2009

SHEET 45 OF 69



CHANGE by	<i>Eric Lai</i>	<i>24-Jul-2009</i>
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INVENTEC

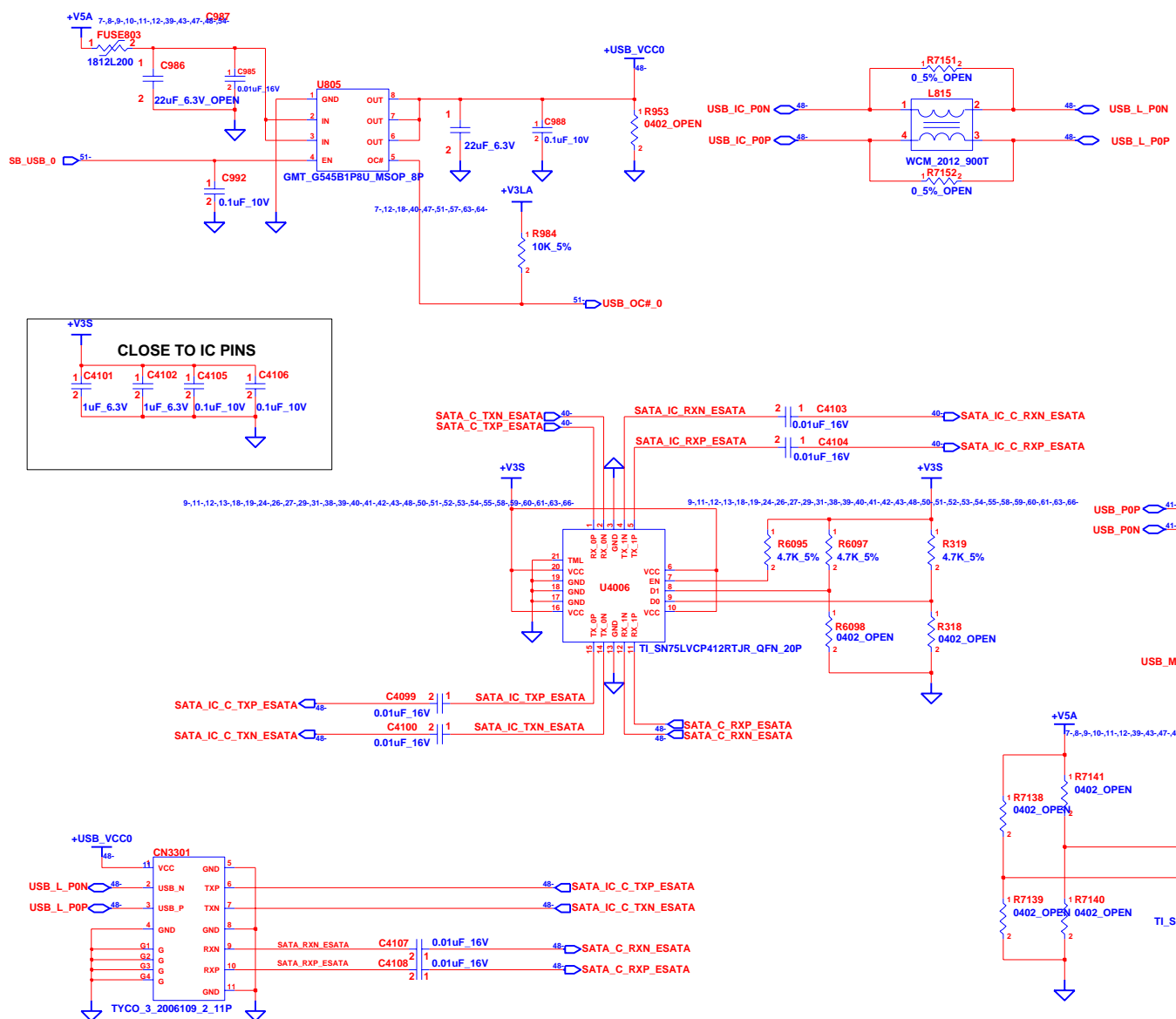
TITLE
Perugia 10MG DDR3
USB CONN/USB(DB)

SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
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CHANGE by *Eric Lai* 24-Jul-2009

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EN	D0	D1	FUNCTION
0	X	X	STANDBY
1	0	0	DEFAULT
1	1	0	CH0->5DB
1	0	1	CH1->5DB
1	1	1	CH0,1->5DB



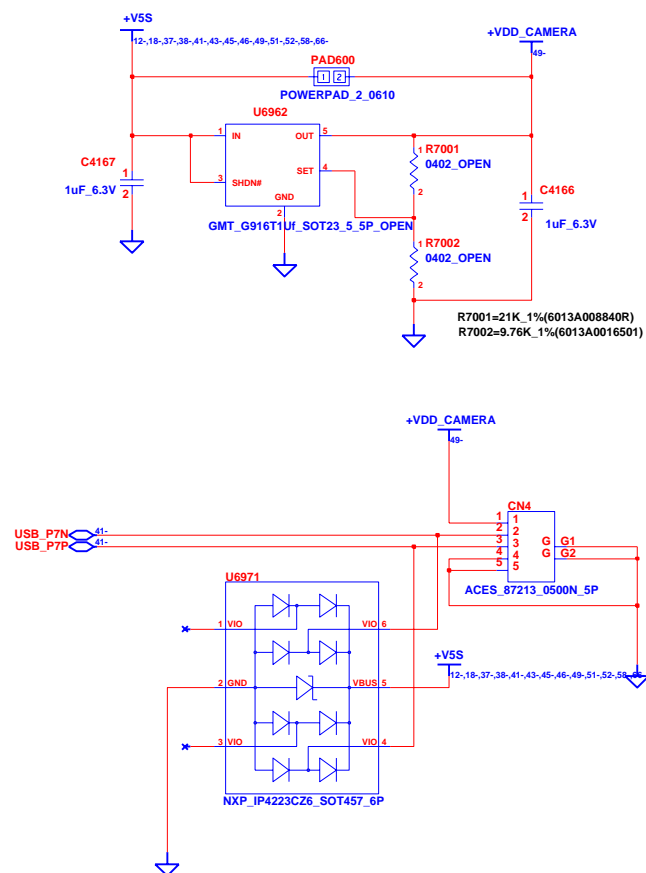
INVENTEC

TITLE
Perugia 10MG DDR3
E-SATA CONN

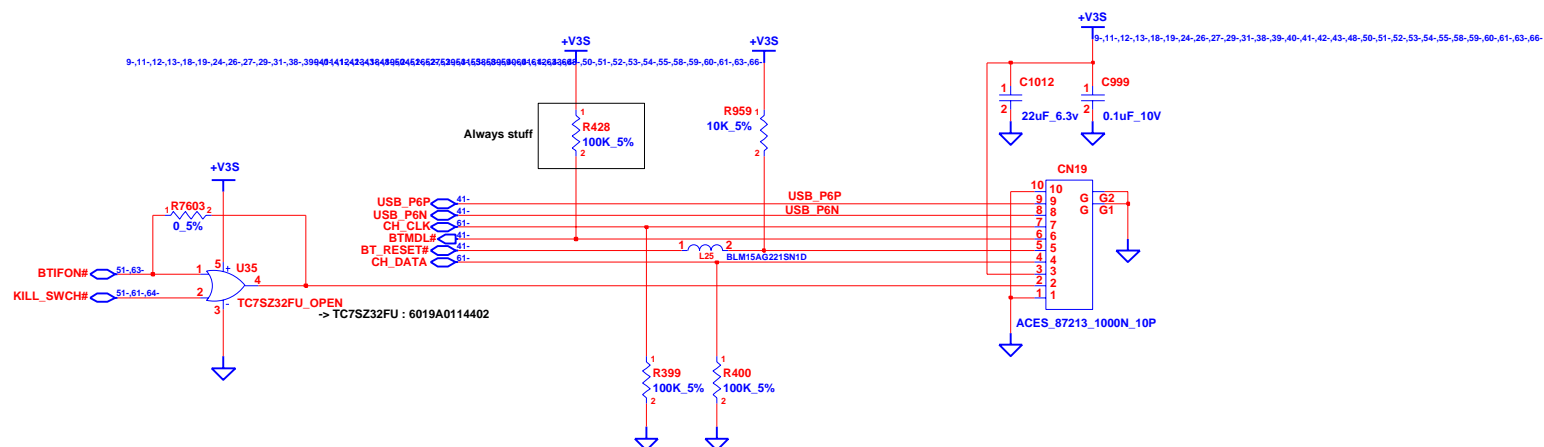
SIZE CODE DOC NUMBER REV
A3 CS 1310A2303-0-MTR A02

CHANGE by Eric Lai 24-Jul-2009

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INVENTEC			
TITLE Perugia 10MG DDR3 Camera			
SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
CHANGE by Eric Lai		24-Jul-2009	
SHEET		49 OF 69	



INVENTEC

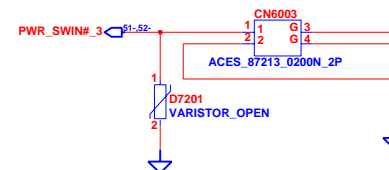
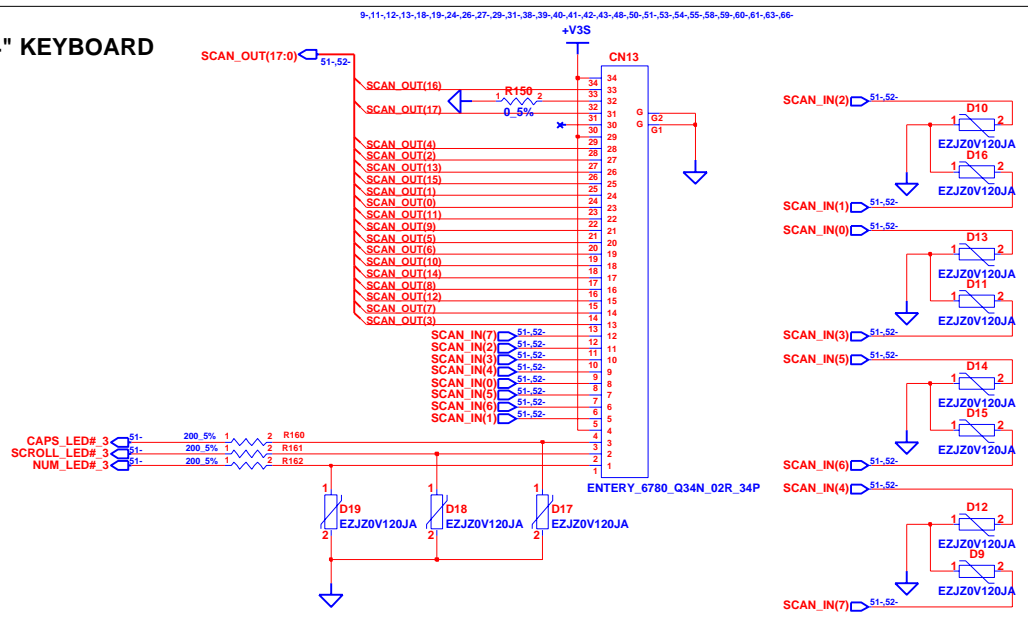
TITLE
**Perugia 10MG DDR3
Bluetooth**

SIZE CODE DOC. NUMBER REV
A3 CS 1310A2303-0-MTR A02

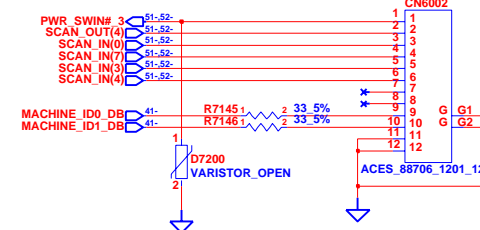
CHANGE by **Eric Lai** 24-Jul-2009

SHEET **50** OF **69**

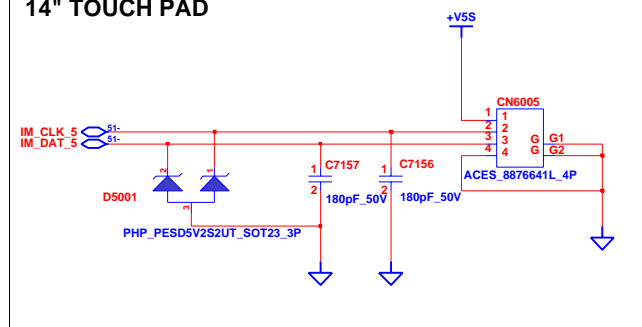
14" KEYBOARD



Hotkey



14" TOUCH PAD



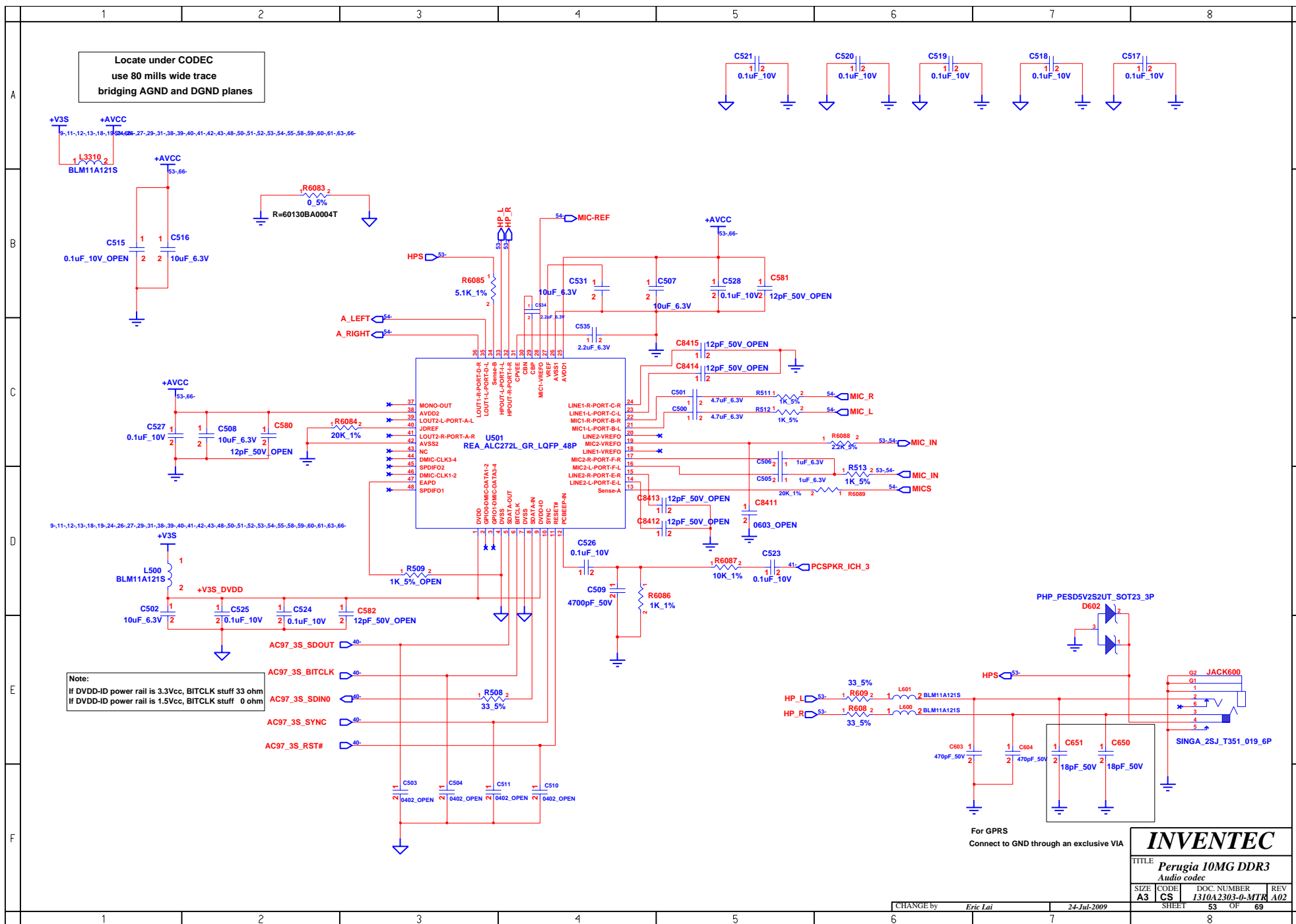
INVENTEC

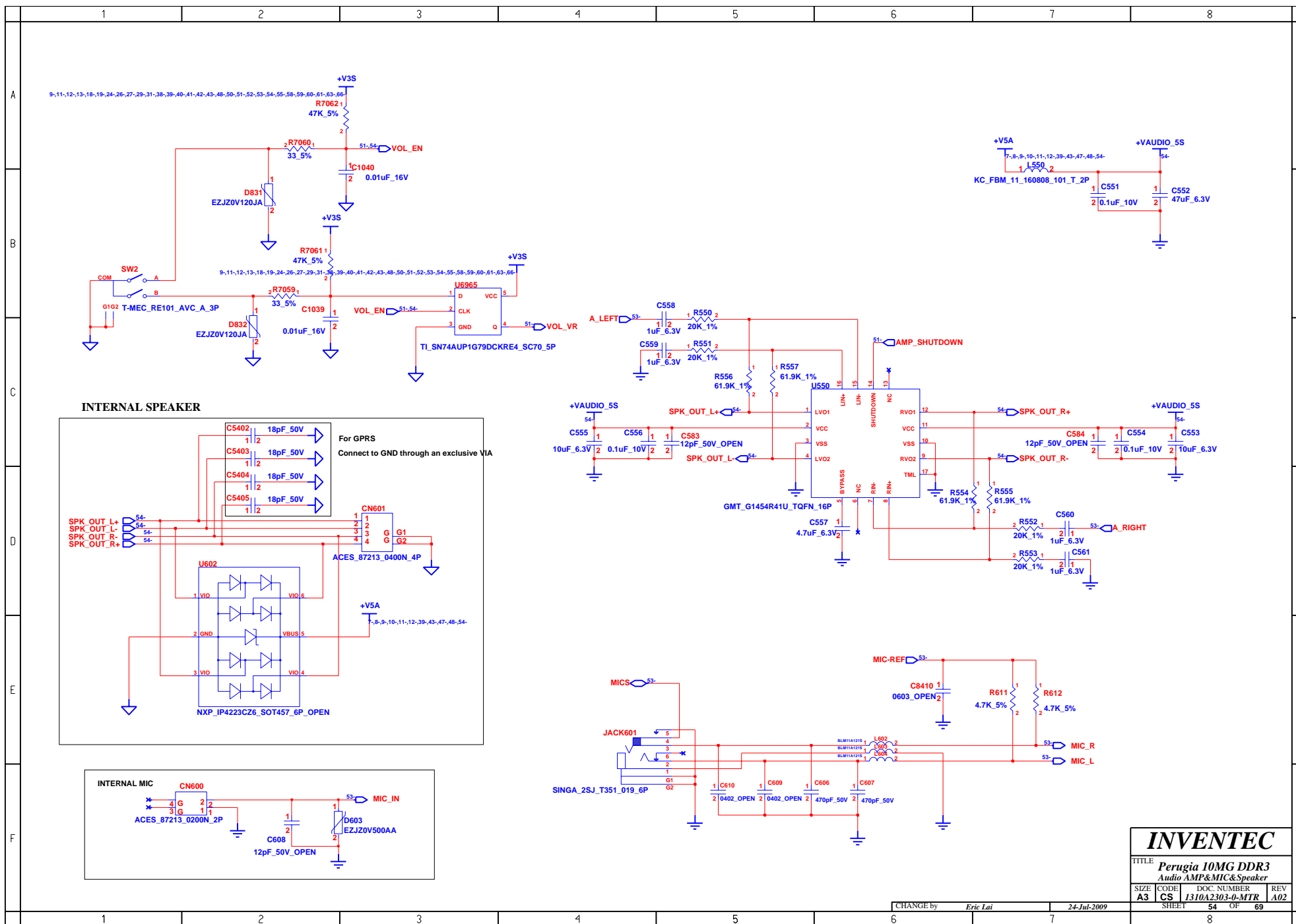
TITLE: **Perugia 10MG DDR3
K/B & TP/B CONN**

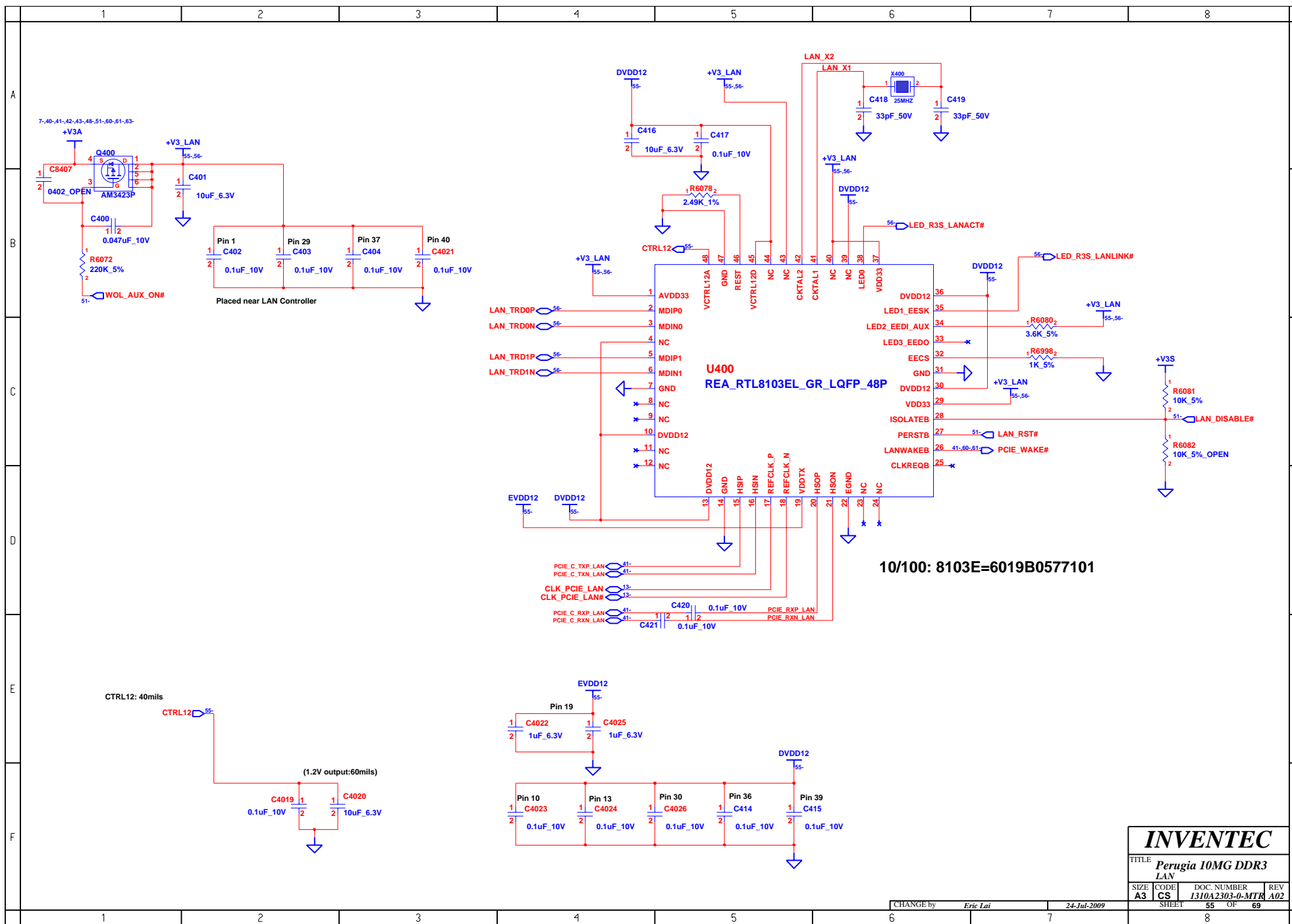
SIZE: **A3** CODE: **CS** DOC. NUMBER: **1310A2303-0-MTR** REV: **A02**

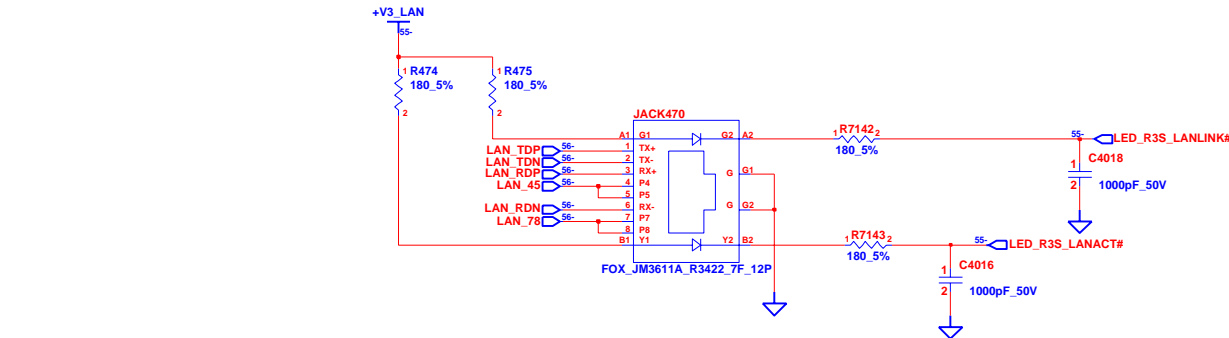
CHANGE by: **Eric Lai** 24-Jul-2009

SHEET: **52** OF: **69**

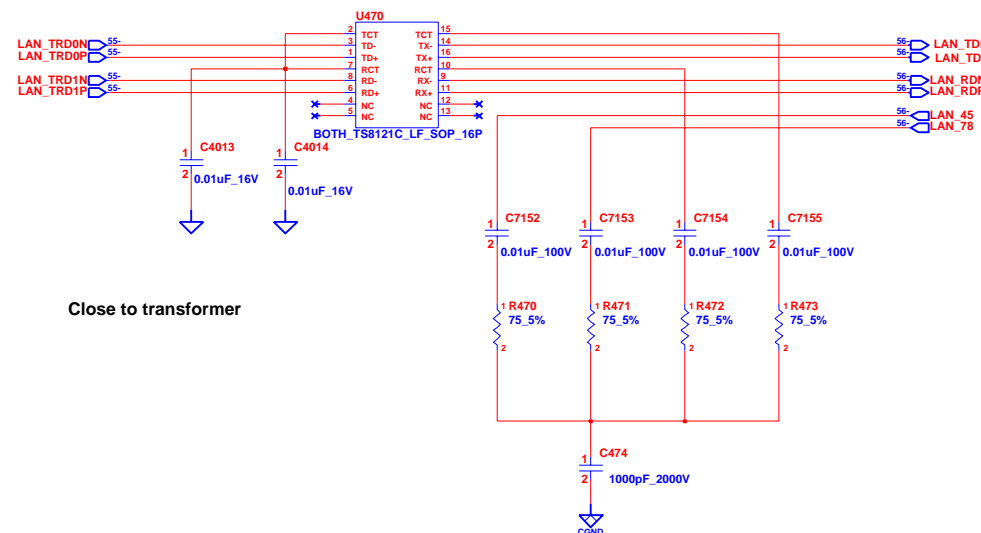
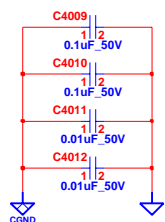








LEDS1-0	00	* 01	10	11
LED0	Tx/Rx	Tx/Rx	Tx	LINK10 ACT
LED1	LINK100	LINK 10/100/1000	LINK	LINK100 ACT
LED2	LINK10	LINK10/100	Rx	ULL
LED3	LINK1000	LINK1000	ULL	LINK1000 ACT



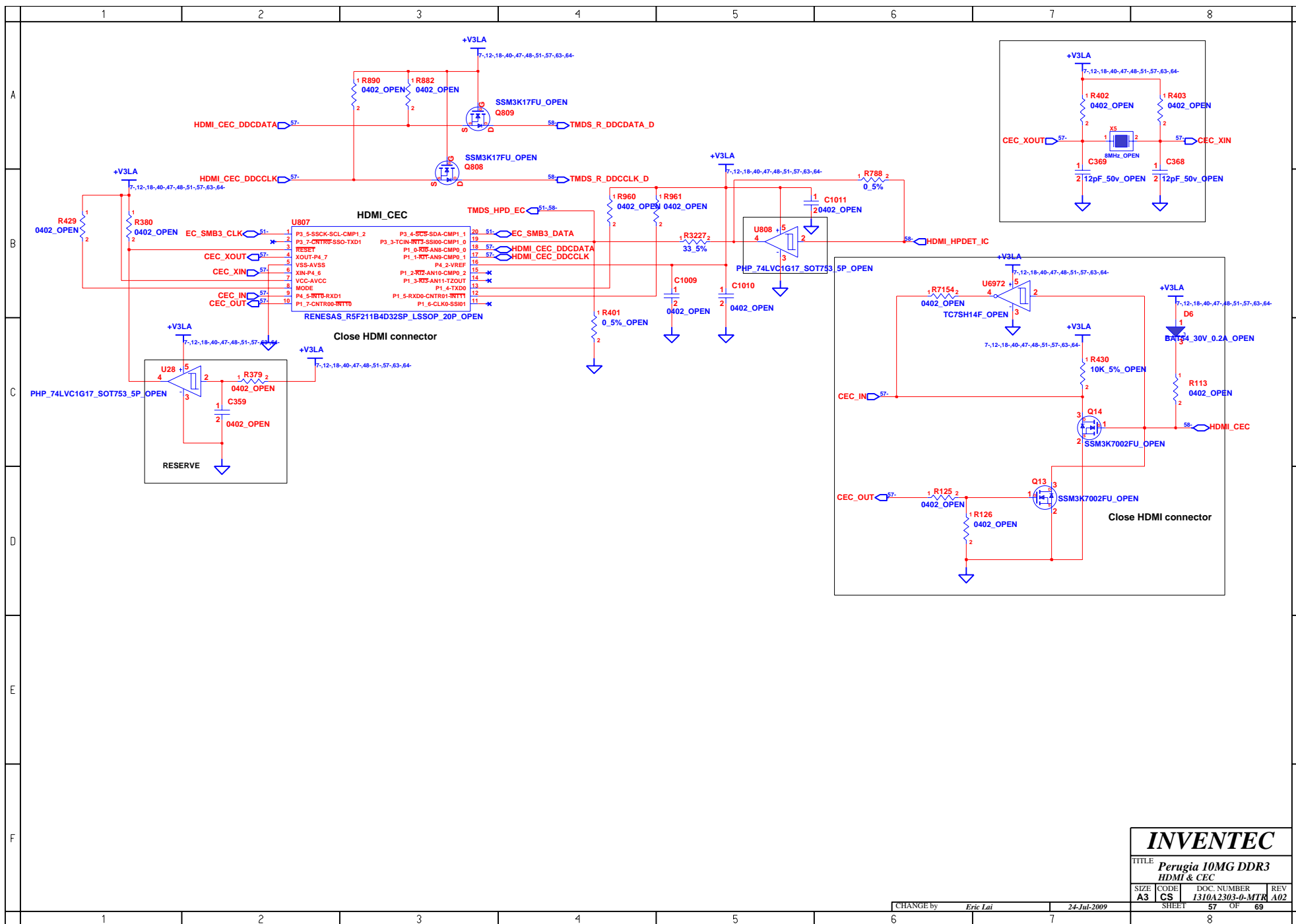
INVENTEC

TITLE
Perugia 10MG DDR3
Transformer&RJ45

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

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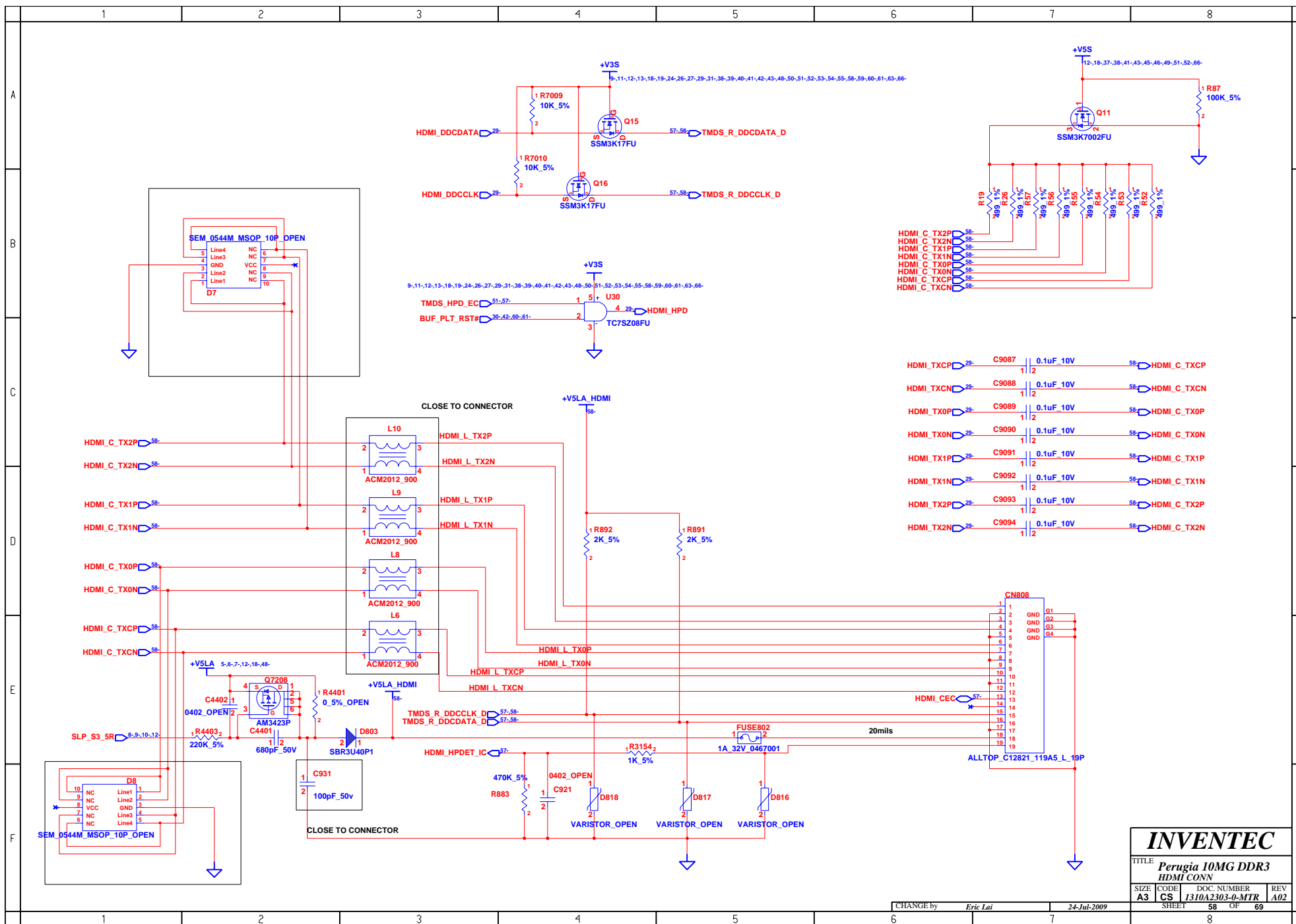
INVENTEC

TITLE
Perugia 10MG DDR3
HDMI & CEC

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 57 OF 69



INVENTEC

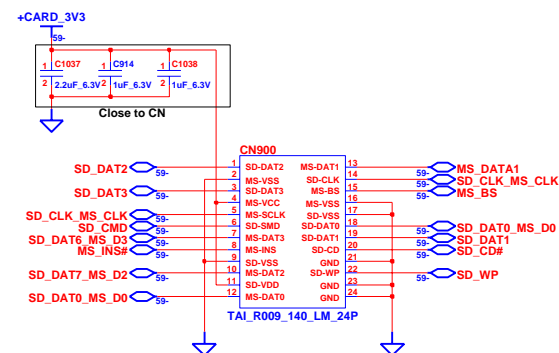
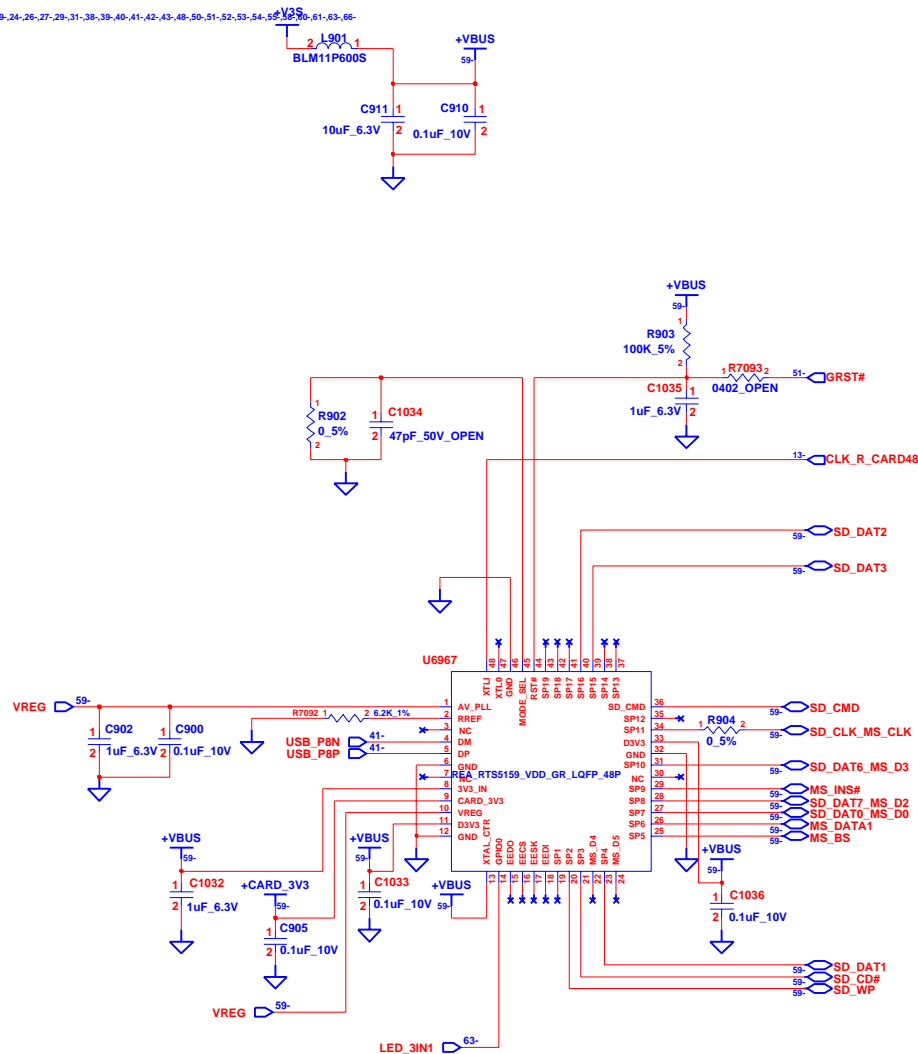
TITLE
Perugia 10MG DDR3
HDMI CONN

SIZE CODE DOC NUMBER REV
A3 CS 1310A2303-0-MTR A02

CHANGE by Eric Lai 24-Jul-2009

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9,11,12,13,18,19,24,26,27,29,31,38,39,40,41,42,43,48,50,51,52,53,54,55,56,59,61,63,66



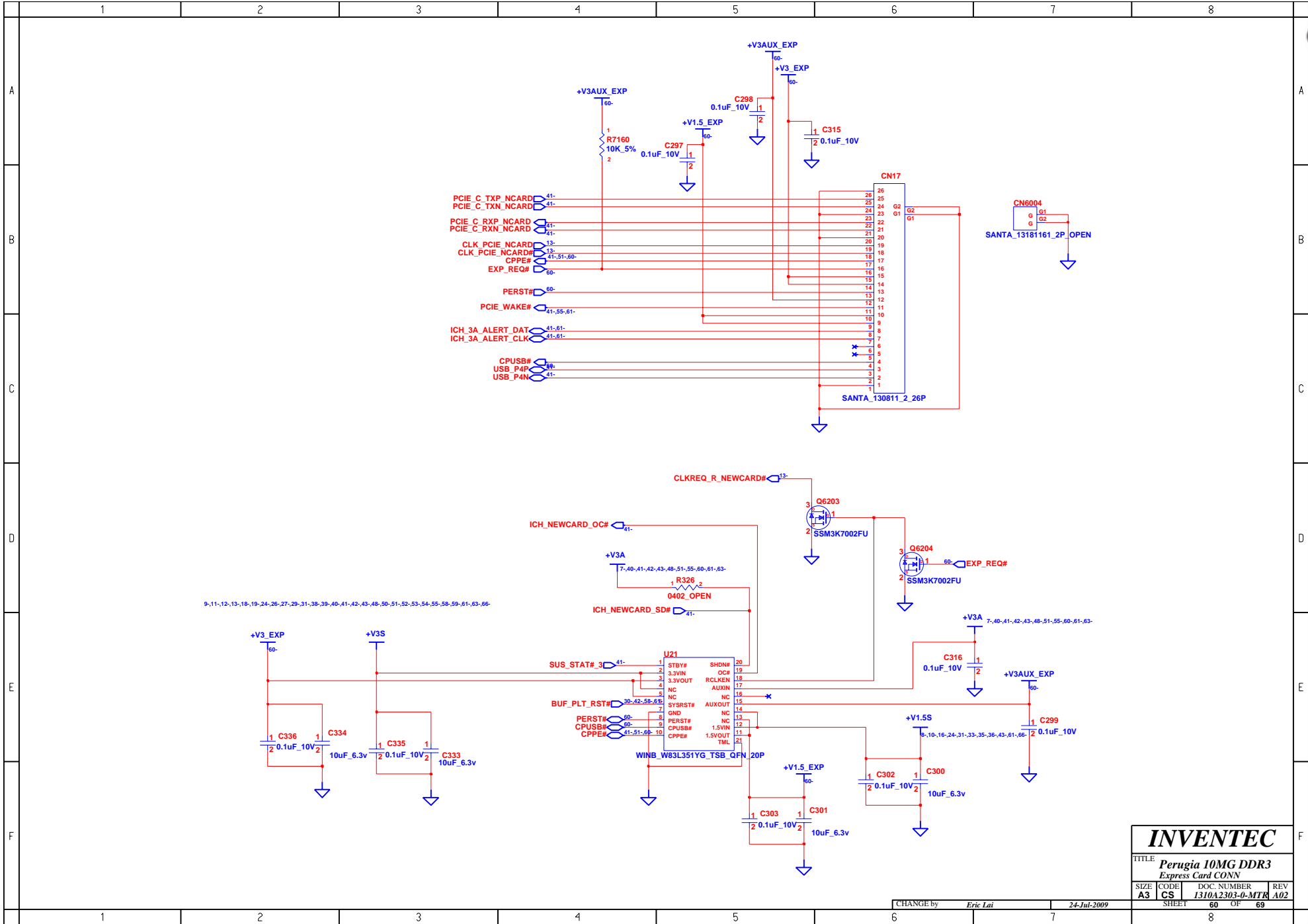
INVENTEC

TITLE
Perugia 10MG DDR3
USB Card Reader

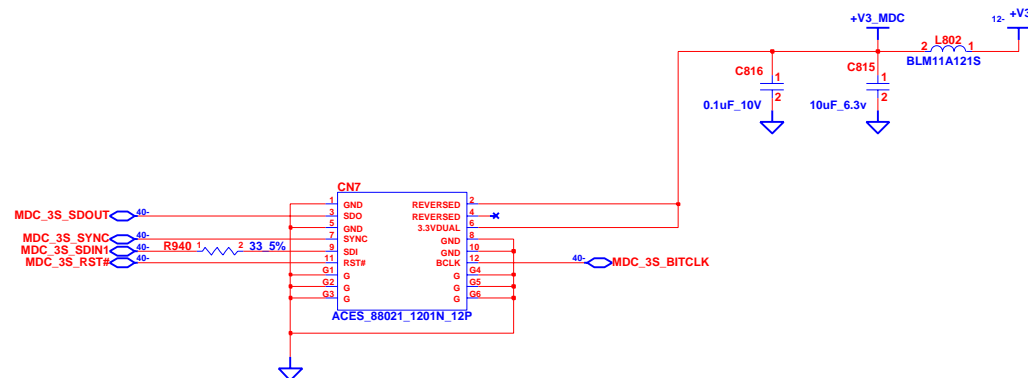
SIZE CODE DOC. NUMBER REV
A3 CS 1310A2303-0-MTR A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 59 OF 69







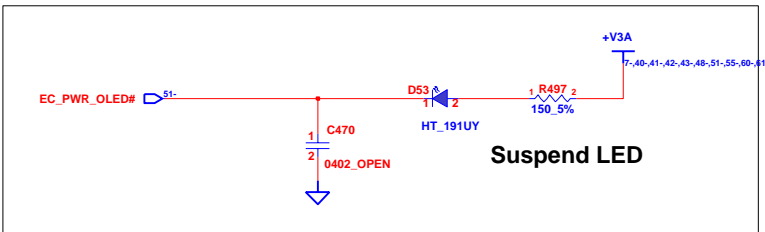
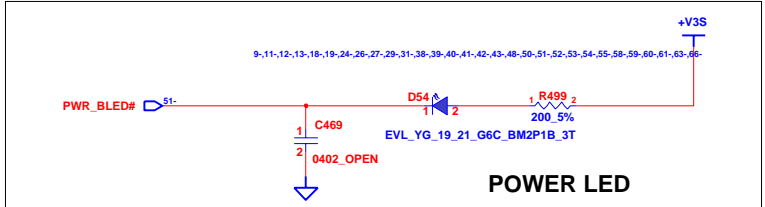
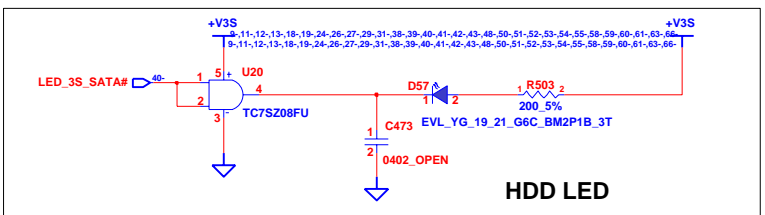
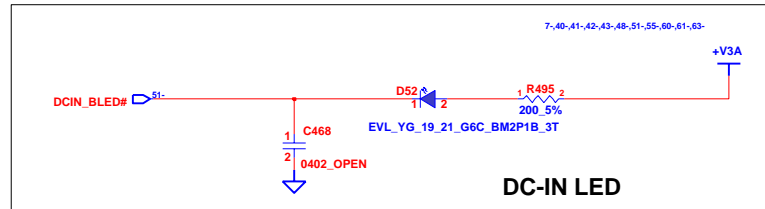
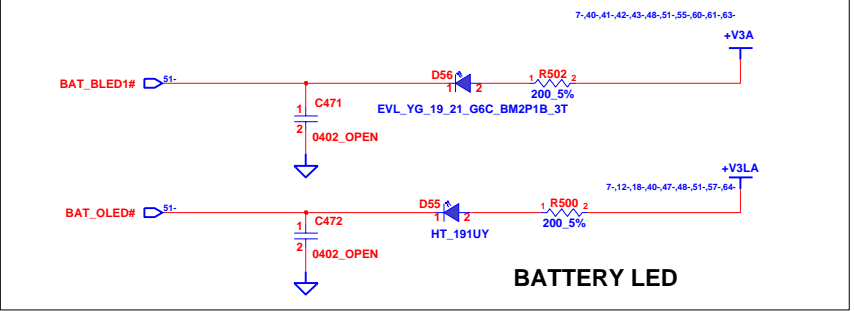
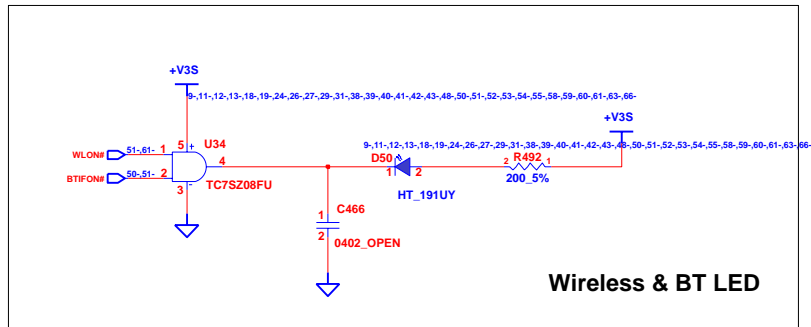
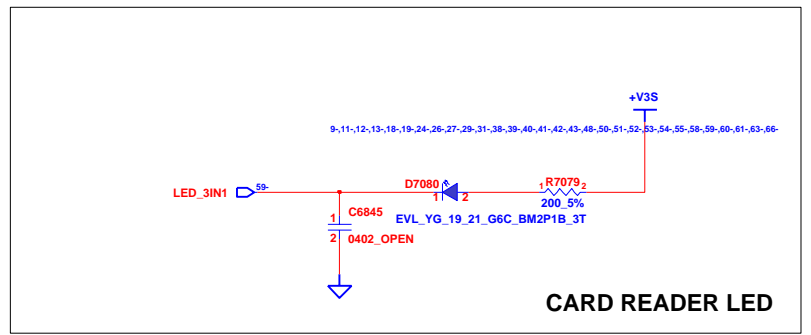
INVENTEC

TITLE
**Perugia 10MG DDR3
MDC CONN**

SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
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CHANGE by *Eric Lai* 24-Jul-2009

SHEET 62 OF 69

	1	2	3	4	5	6	7	8	
A	 <p>Suspend LED</p>								A
B	 <p>POWER LED</p>								B
C	 <p>HDD LED</p>								C
D	 <p>DC-IN LED</p>								D
E	 <p>BATTERY LED</p>								E
F	 <p>Wireless & BT LED</p>								F
	 <p>CARD READER LED</p>								
	1	2	3	4	5	6	7	8	

INVENTEC

TITLE
**Perugia 10MG DDR3
LED & Hotkey CONN**

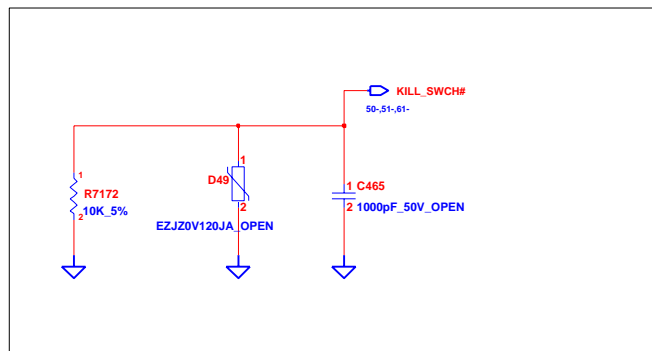
SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
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CHANGE by Eric Lai 24-Jul-2009

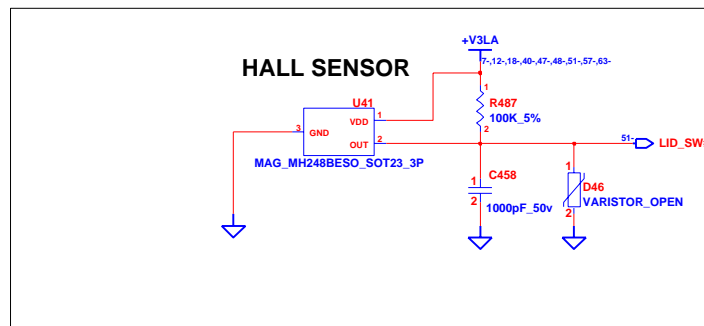
SHEET 63 OF 69

KILL SWITCH

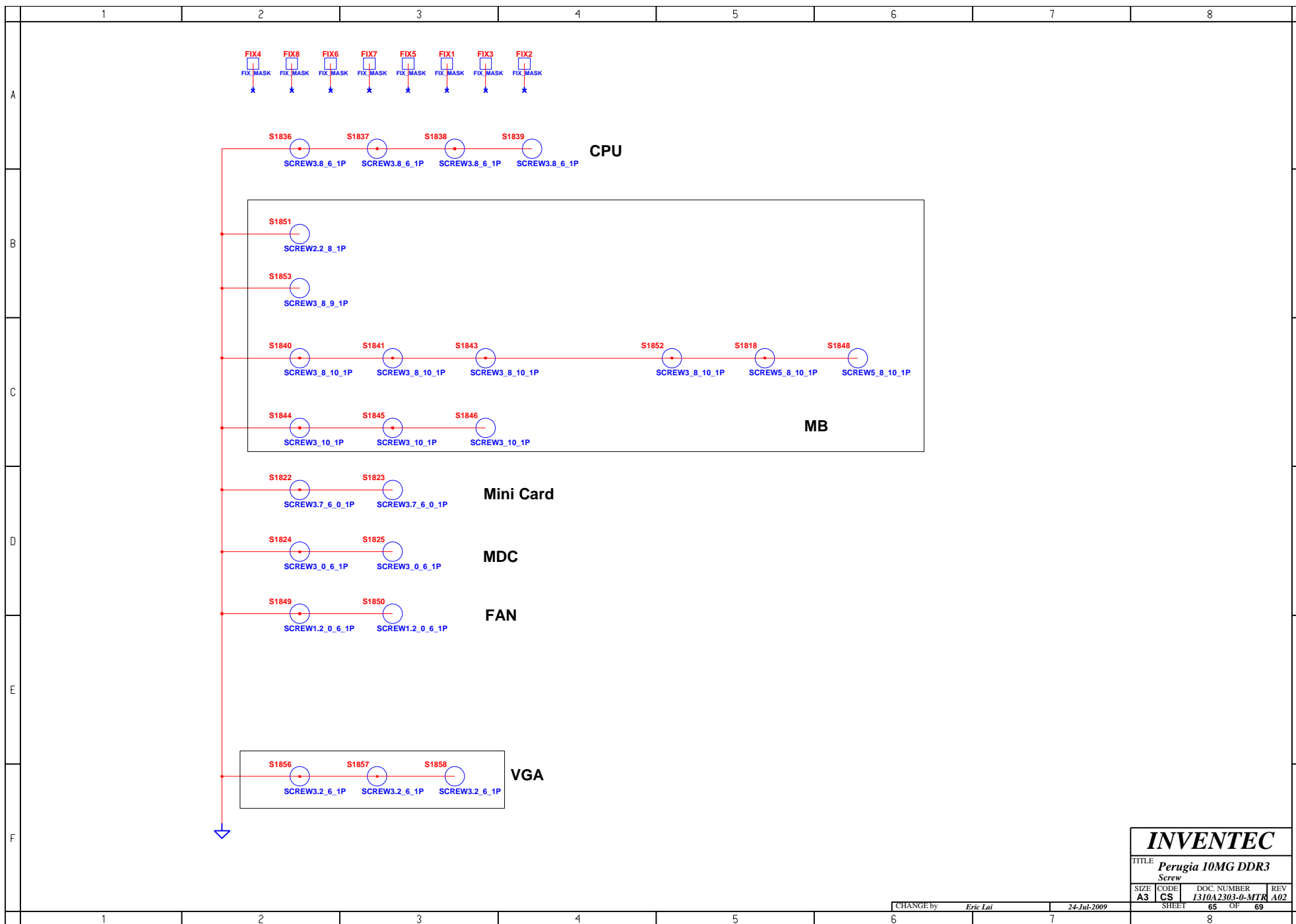
WLAN ON: KILL_SWCH# -> Low
WLAN OFF: KILL_SWCH# -> High



HALL SENSOR

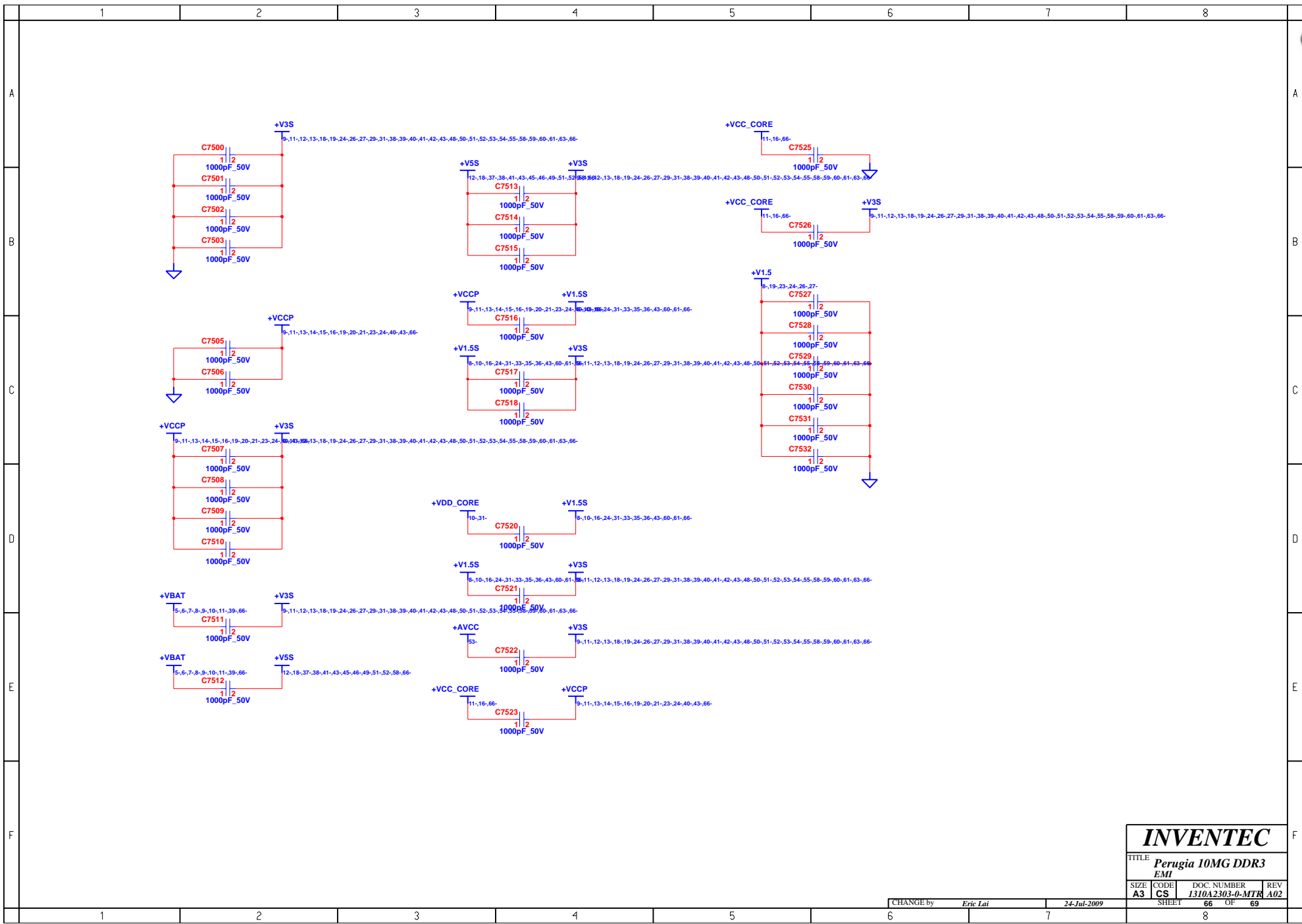


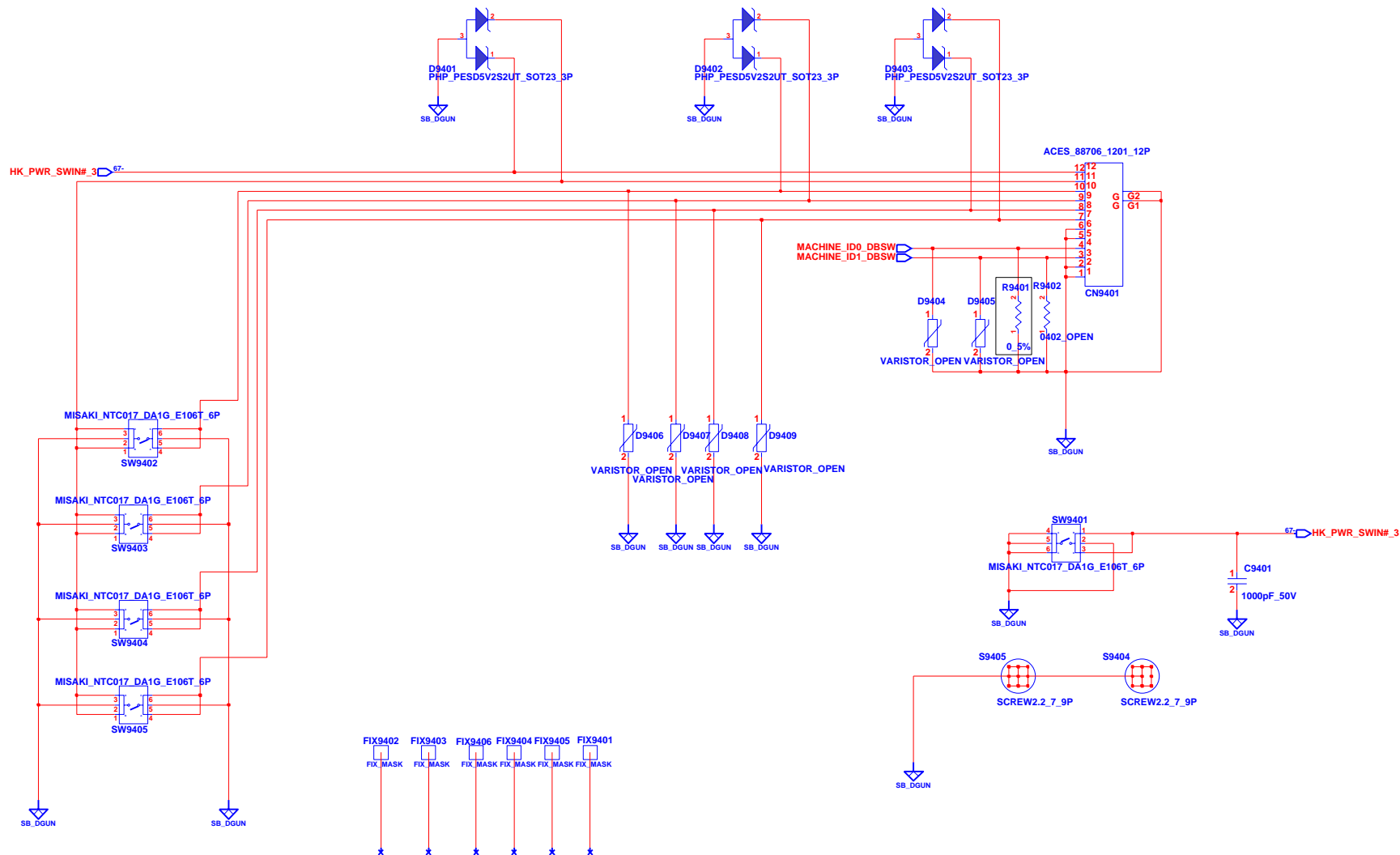
INVENTEC			
TITLE: Perugia 10MG DDR3 Kill Swich & Hall Sensor			
SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
CHANGE by Eric Lai		24-Jul-2009	
SHEET 64		OF 69	



INVENTEC			
TITLE			
Perugia 10MG DDR3			
Screw			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02
SHEET		65	OF 69

CHANGE by Eric Lai 24-Jul-2009





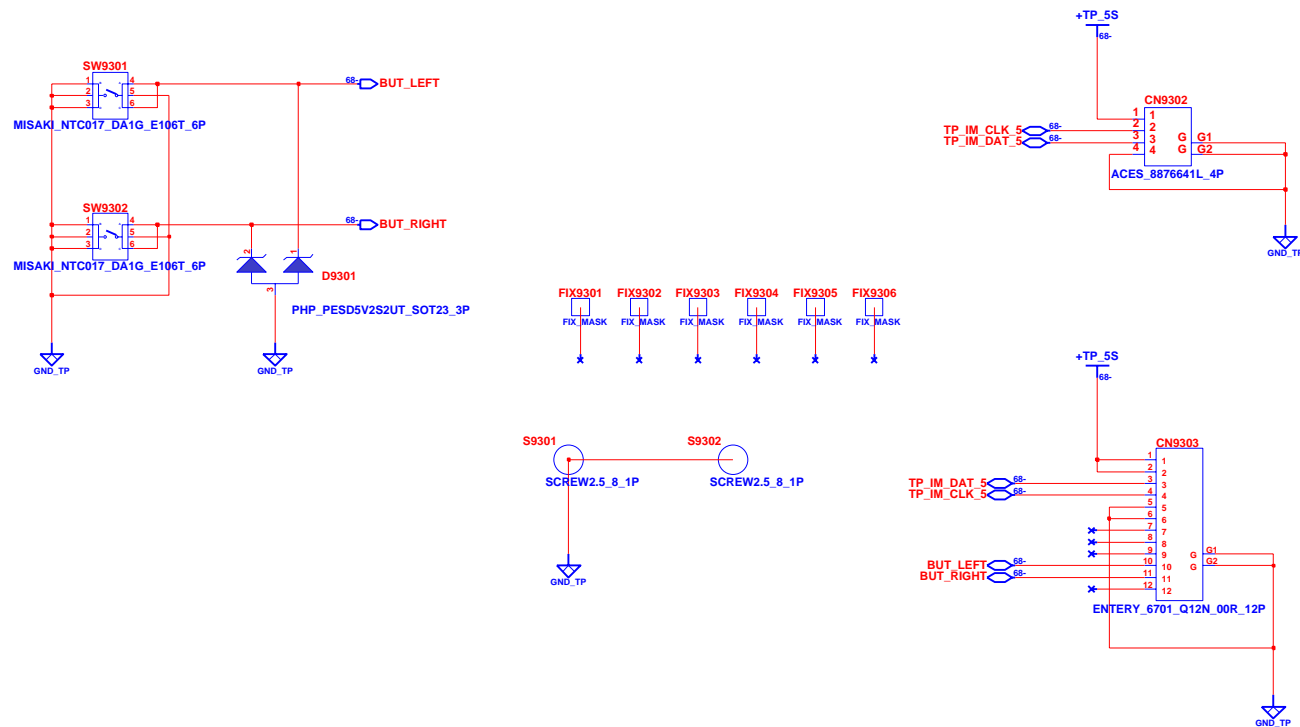
INVENTEC

TITLE
Perugia 10MG DDR3
Hotkey board

SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
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CHANGE by *Eric Lai* 11-Aug-2009

SHEET 67 OF 69



INVENTEC

TITLE
Perugia 10MG DDR3
Touch pad board

SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
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CHANGE by *Eric Lai* 24-Jul-2009

SHEET 68 OF 69

