

DRAWER		EE	DATE	POWER	DATE				
DESIGN		Abel							
CHECK		Alan							
RESPONSIBLE		Alan							
						TITLE			
						MODEL, PROJECT, FUNCTION			
						Main Board			
SIZE*					VER.	SIZE	CODE	DOC NUMBER	REV
FILE NAME:						C	CS	1310A2548201	AO

Index

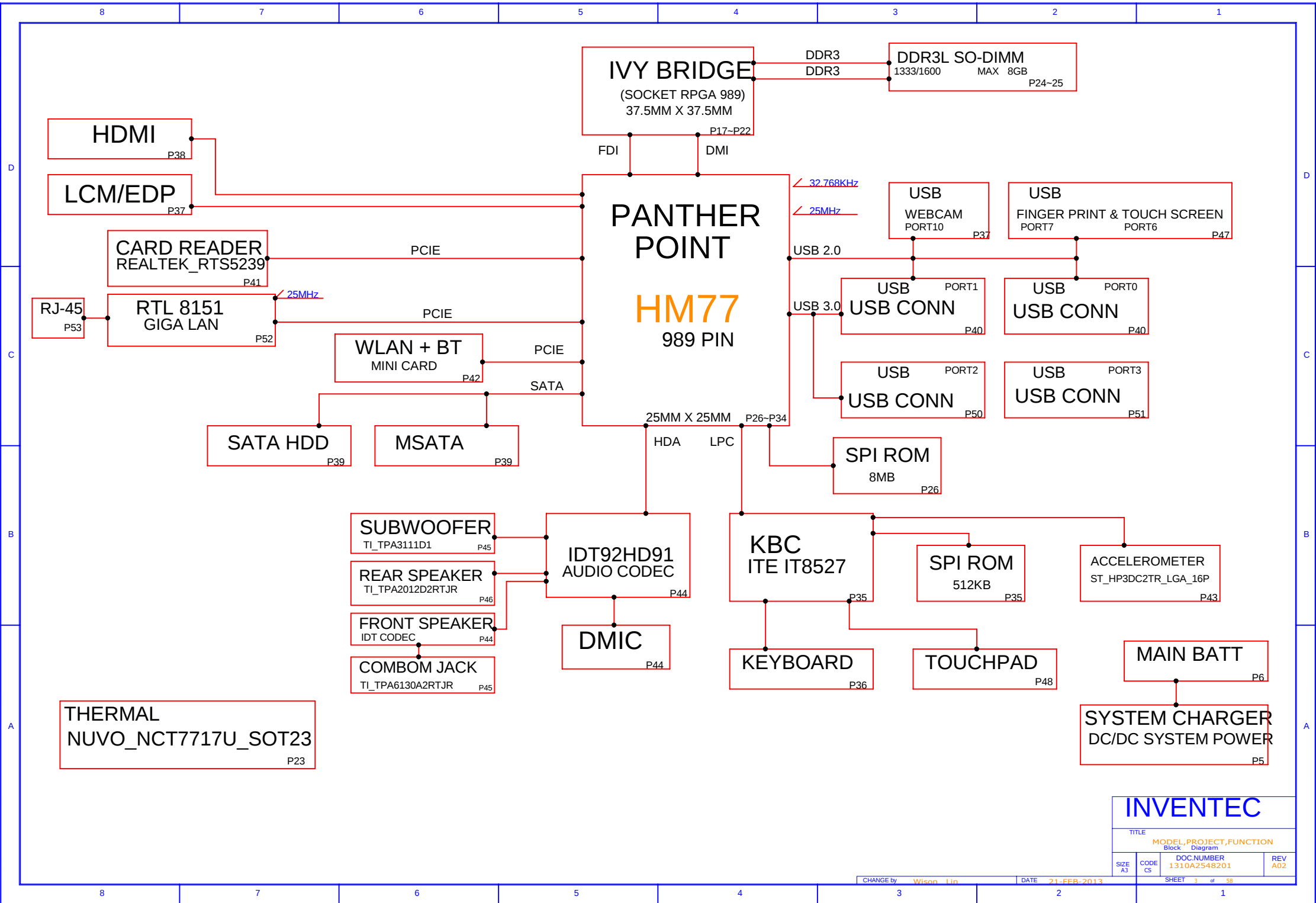
1 COVER
2 INDEX
3 BLOCK DIAGRAM
4 POWER PROCEDURE
5 SELECTOR
6 CHARGER
7 P3V3_P5V0
8 PVDDQ
9 P1V0S_VCCP
10 P1V8S
11 P1V5S
12 PVSA
13 PVCORE1
14 PVCORE2
15 POWER TO EE PORT & EMI PART
16 P5V0S & P3V3S
17 CPU1
18 CPU2_EDP & FDI & DMI & PCIE_GPU
19 CPU3
20 CPU4
21 CPU5
22 CPU6
23 THERMAL & FAN
24 DDR3-1
25 DDR3-2

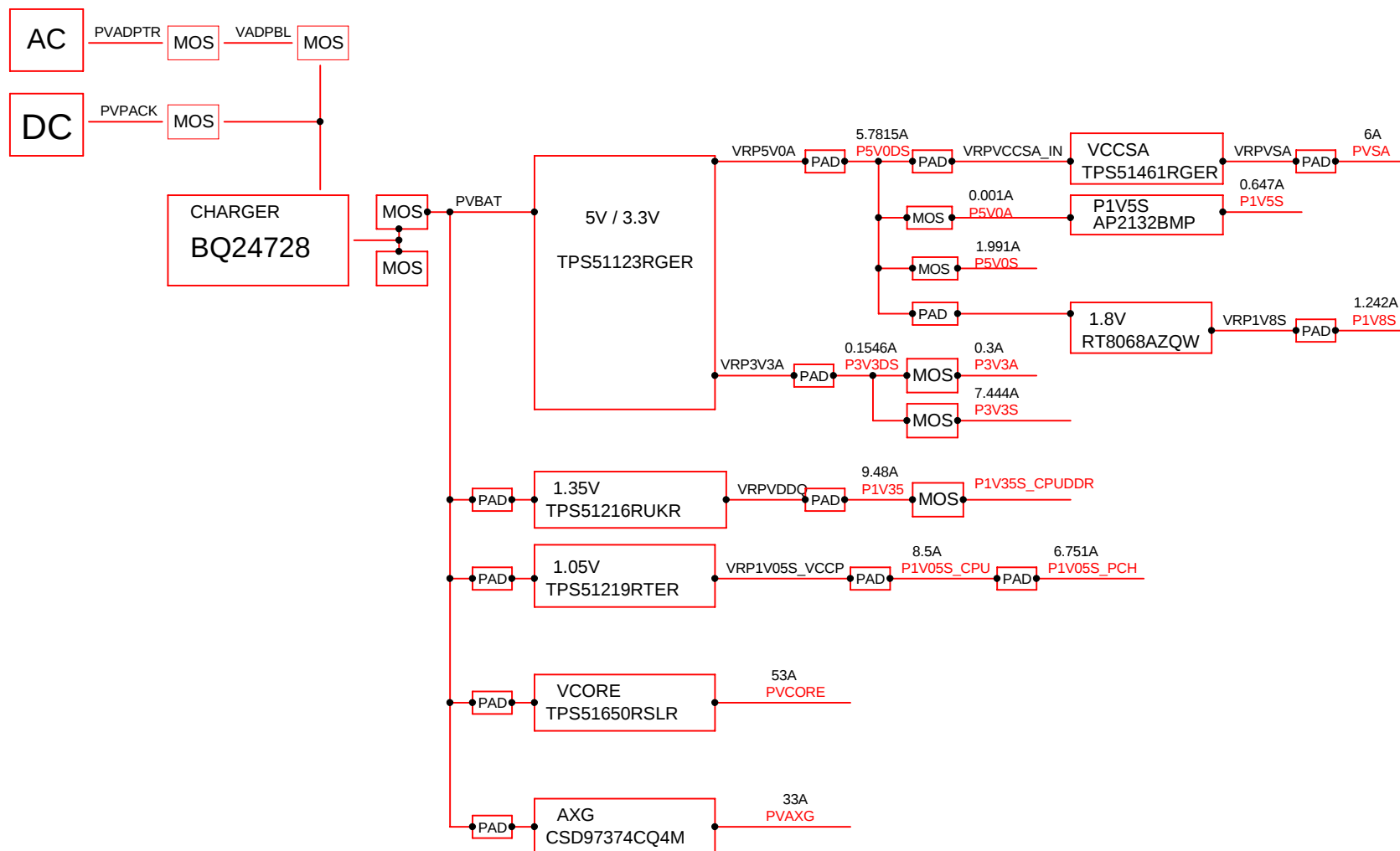
26 PCH1 RTC,HDA,SPI,LPC.SATA
27 PCH2 CLK,SMBUS,PCI-E
28 PCH3 DMI,FDI,SPM
29 PCH4 LVDS,CRT
30 PCH5 PCI,USB
31 PCH6 GPIO,CPU/MISC
32 PCH7 POWER
33 PCH8 POWER
34 PCH9 GND
35 EC IT8527
36 KB CONN & LED
37 40 PIN LCM
38 HDMI
39 SATA HDD & MSATA
40 USB3.0 CONN
41 CARD READER
42 WLAN
43 G-SENSOR
44 AUDIO-1
45 AUDIO-2
46 AUDIO-3
47 FINGER PRINT
48 MB TO DB CONN & SCREW
49 AUB_BLANK
50 AUB_USB30-1

51 AUB_USB30-2
52 LAN_RLT8161GSH-CG
53 TRANSFORMER & RJ45
54 JACK
55 DAUGHTER BOARD
56 ESD BOARD
57 POWER SEQUENCE
58 POWER SEQUENCE2

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
INDEX			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02





D

C

B

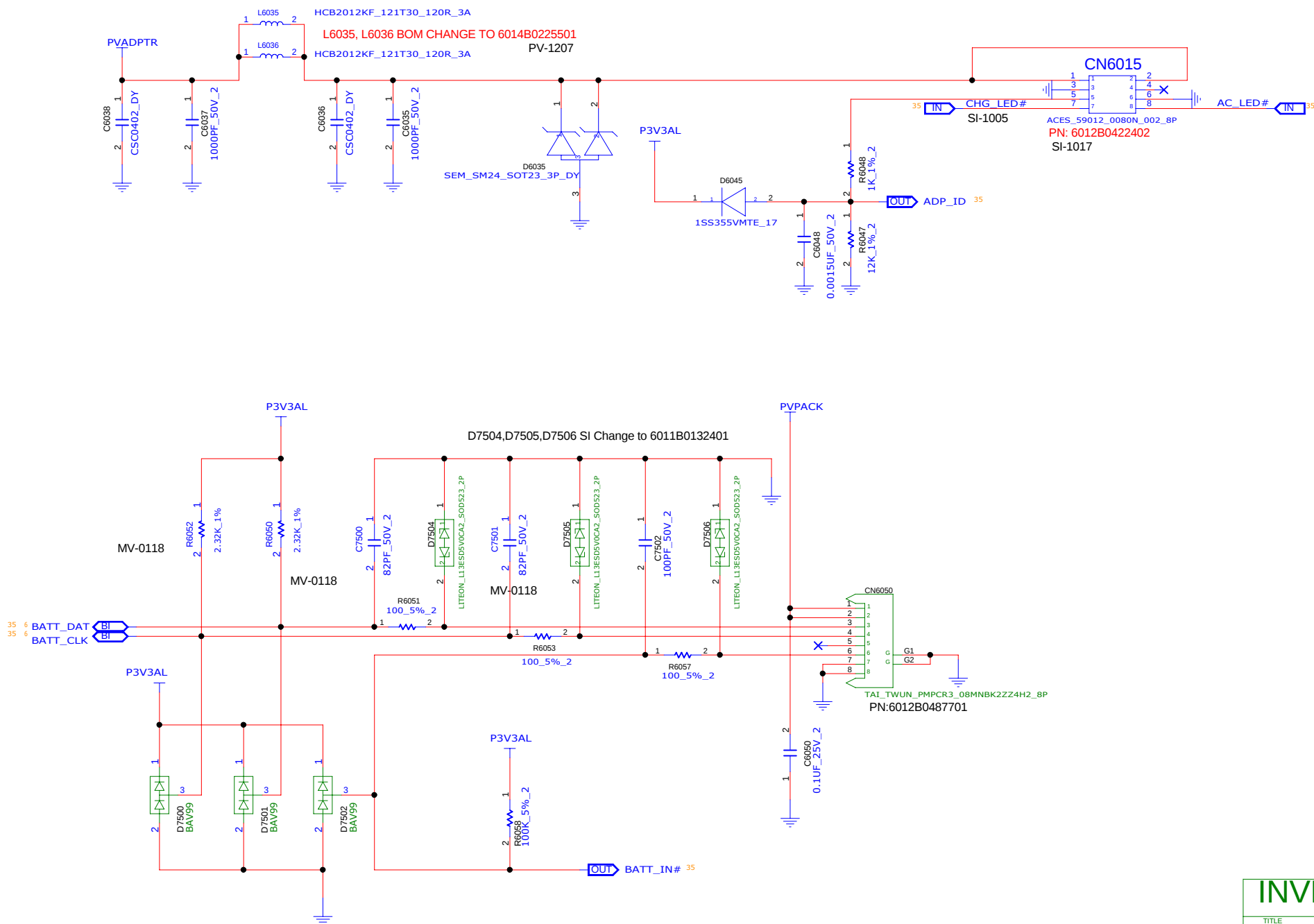
A

D

C

B

A



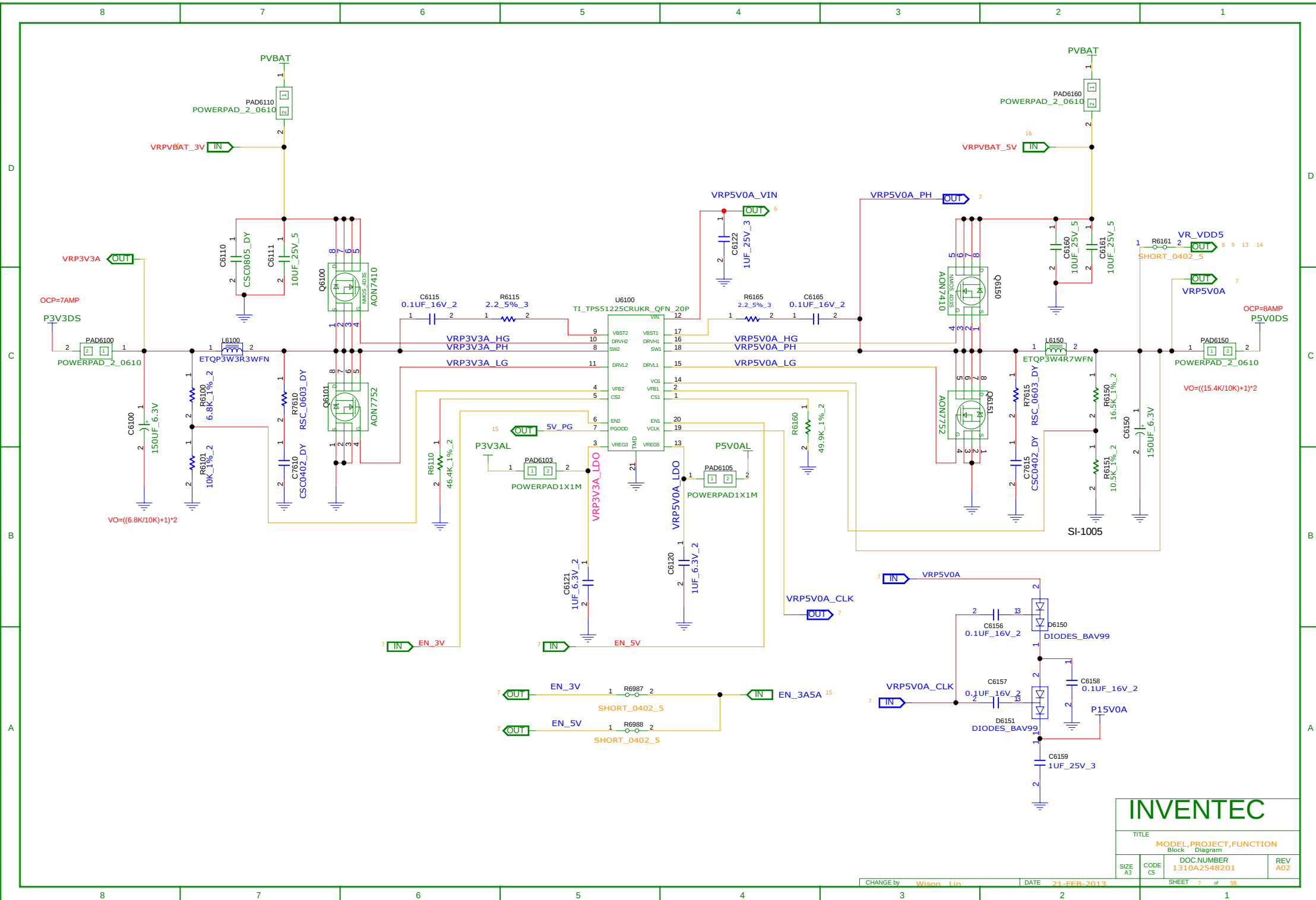
INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02

CHANGE by Wison Lin DATE 21-FEB-2013

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D

C

B

A

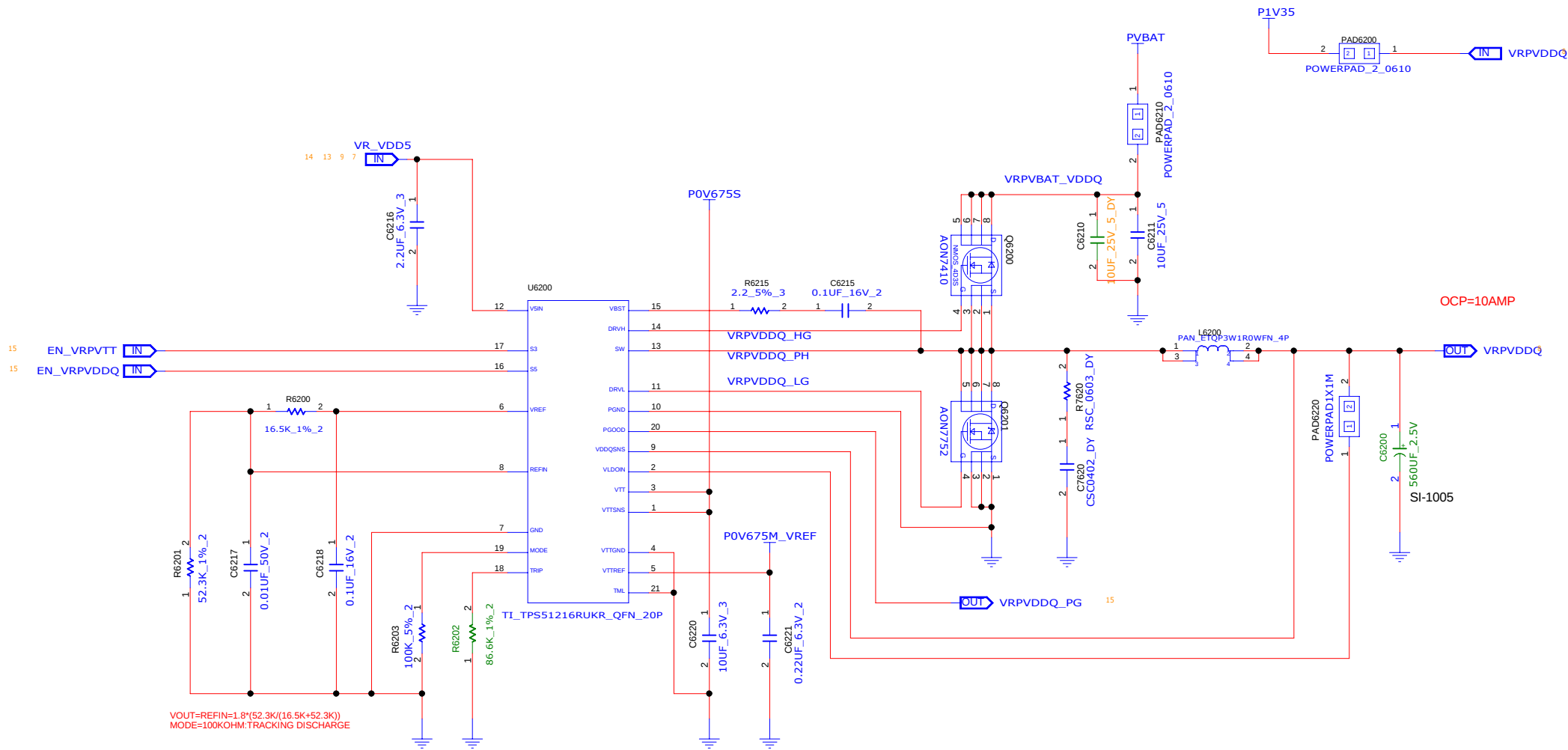


Table 1. S3/S5 Power State Control

STATE	S3	S5	VREF	VDDQ	VTTREF	VTT
S0	HI	HI	ON	ON	ON	ON
S3	LO	HI	ON	ON	ON	OFF(High-Z)
S4/S5	LO	LO	OFF	OFF(Discharge)	OFF(Discharge)	OFF(Discharge)

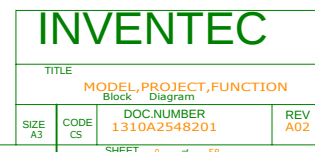
INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wison Lin DATE 21-FEB-2013

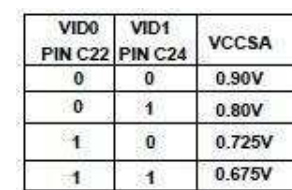
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CHANGE by	Wison Lin	DATE	21-FEB-2013
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$$V_{OUT} = (1 + (9.31K/10K)) \times 0.8V$$



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R6638

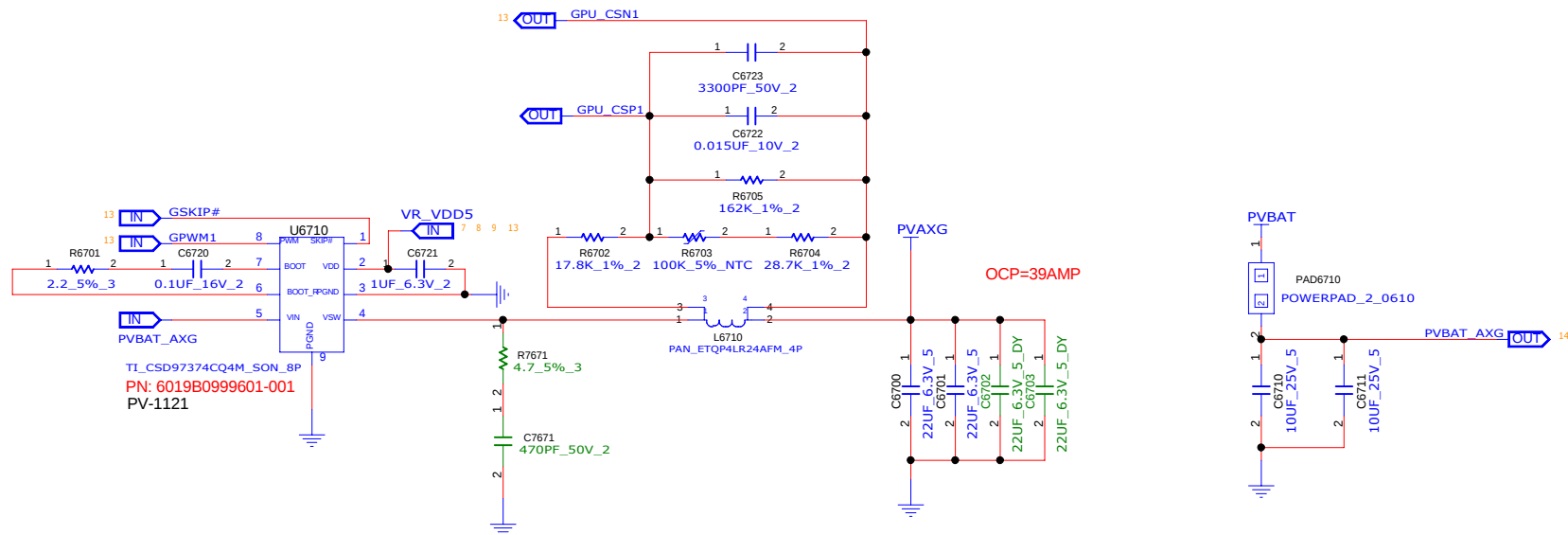
SIZE A3	CODE CS	DOC.NUMBER 1310A2548201	
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D

C

B

A



INVENTEC

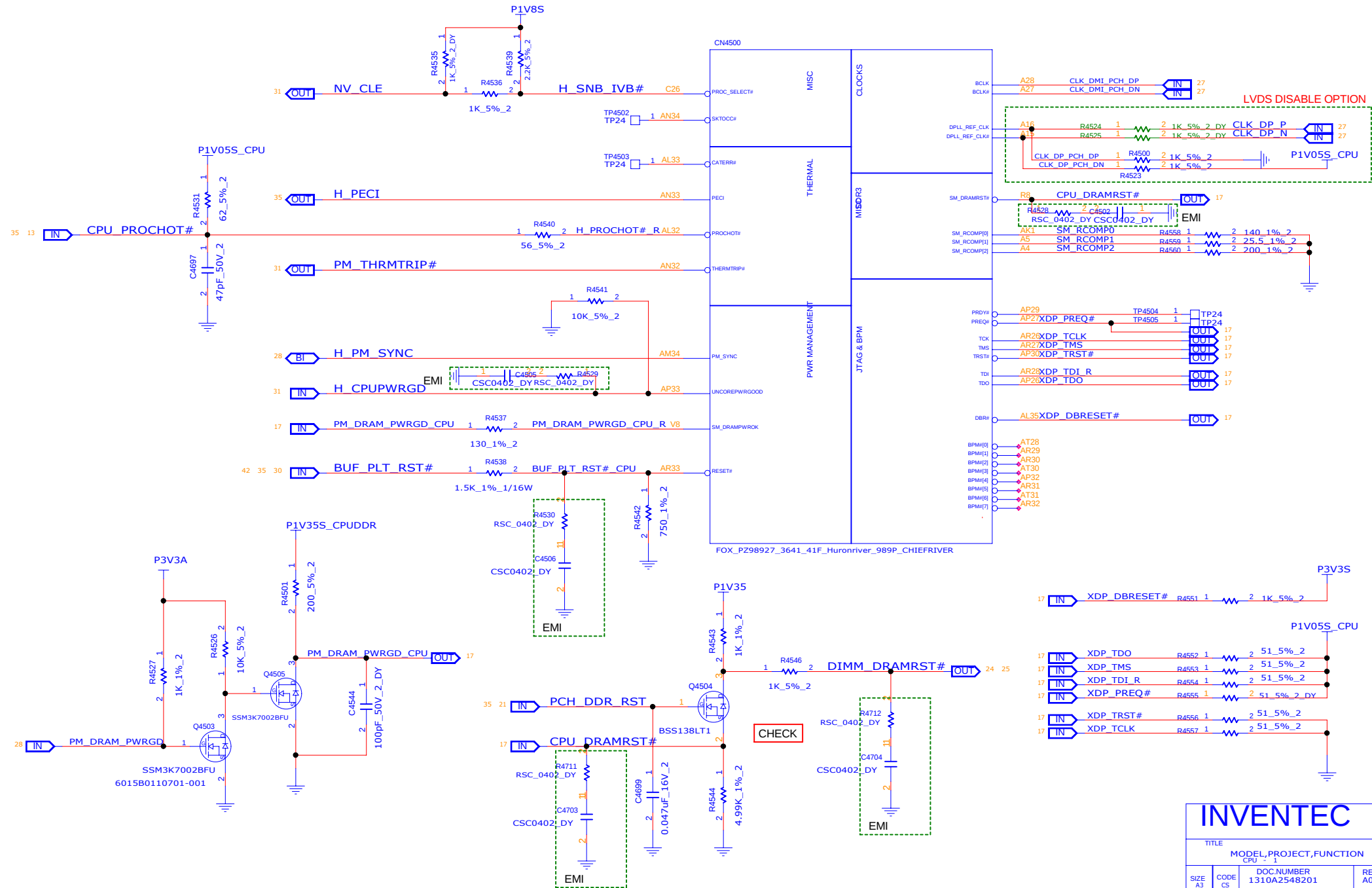
TITLE
MODEL,PROJECT,FUNCTION
Block DiagramSIZE CODE DOC NUMBER REV
A3 CS 1310A2548201 A02

CHANGE by Wison Lin DATE 21-FEB-2013

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CHIEF RIVER CPU
LOCATION 4500~4699
VER.001 20120807



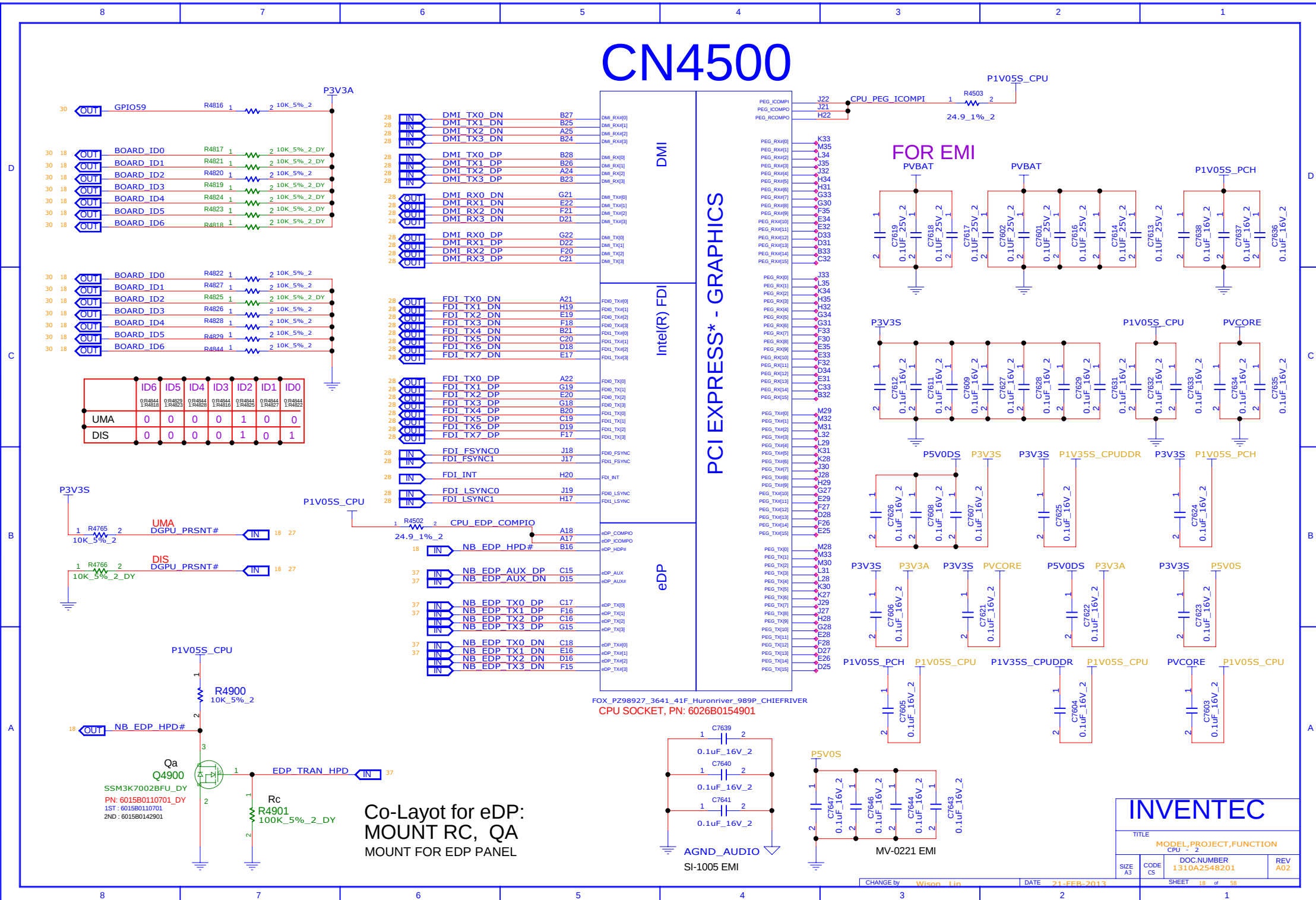
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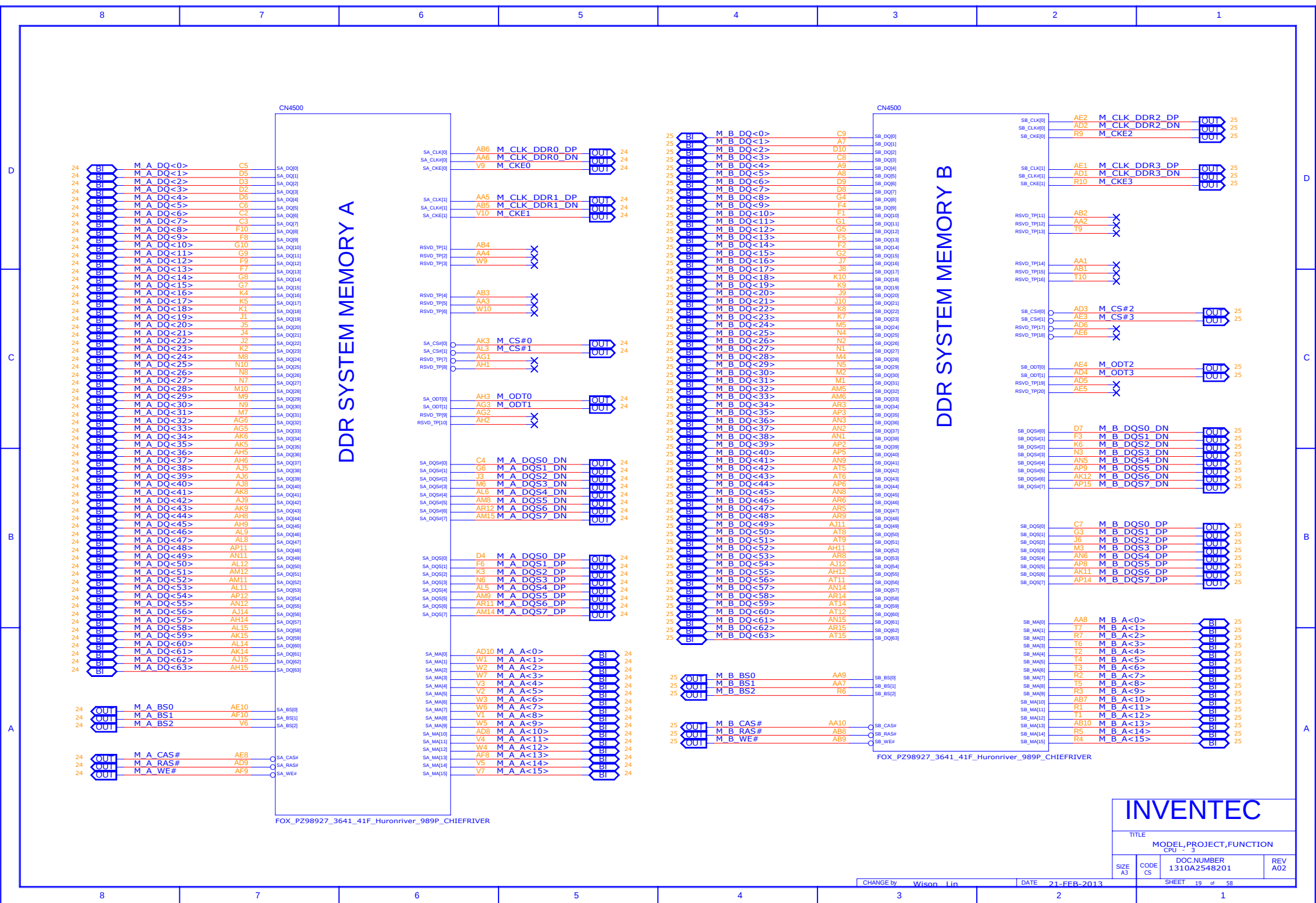
TITLE	MODEL	PROJECT	FUNCTION
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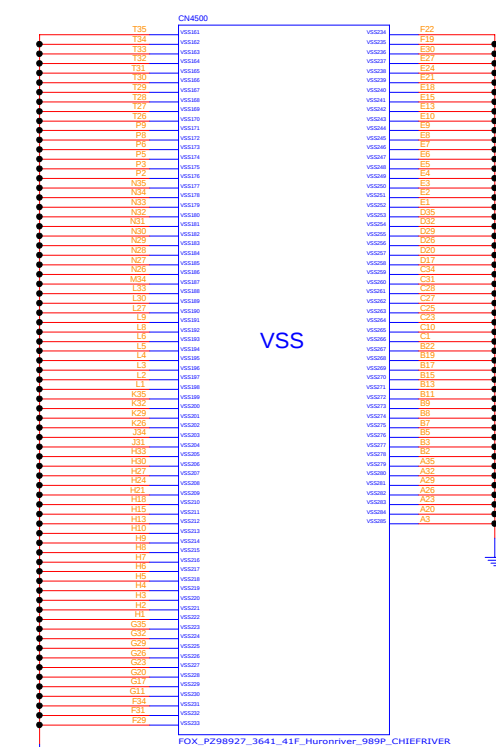
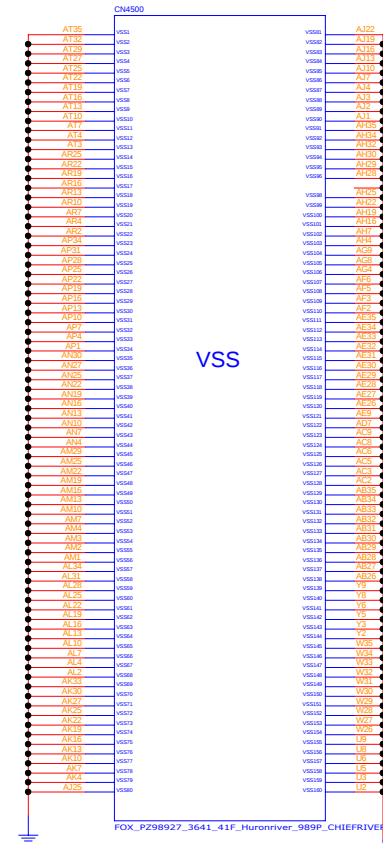
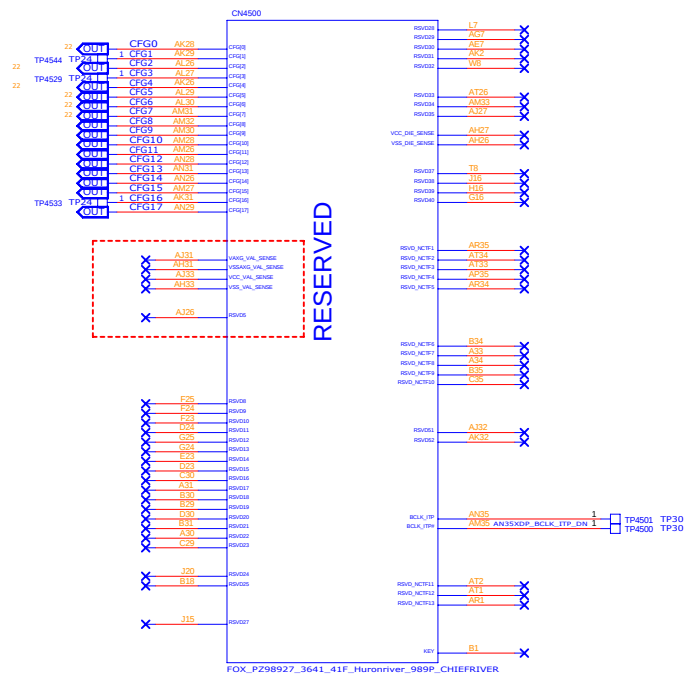
SIZE A3	CODE CS	DOC.NUMBER 1310A2548201
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CHANGE by	Wison Lin	DATE	21-FEB-2013
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1







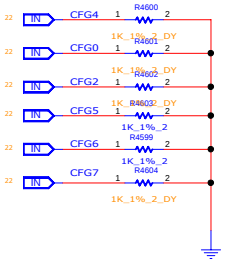
CFG[2] : PCI Express* Static x16 Lane Numbering Reversal.
1 = NORMAL MODE
0 = LANE REVERSED

CFG[4] : eDP enable
1 = Disabled
0 = Enabled

CFG[6:5] : PCI Express Bifurcation:
00 = 1 x8, 2 x4 PCI Express
01 = reserved
10 = 2 x8 PCI Express
11 = 4 x4 PCI Express

CFG[7] : PEG DEFER TRAINING

1: (Default) PEG Train immediately following RESETB deassertion
0: PEG Wait for BIOS for training



INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
CPU#			
SIZE	CODE	DOC NUMBER	REV
C	CS	1310A254B201	A02
SHEET		22	of 28

CHANGE By: Wipon, Lrp DATE: 21-FEB-2013

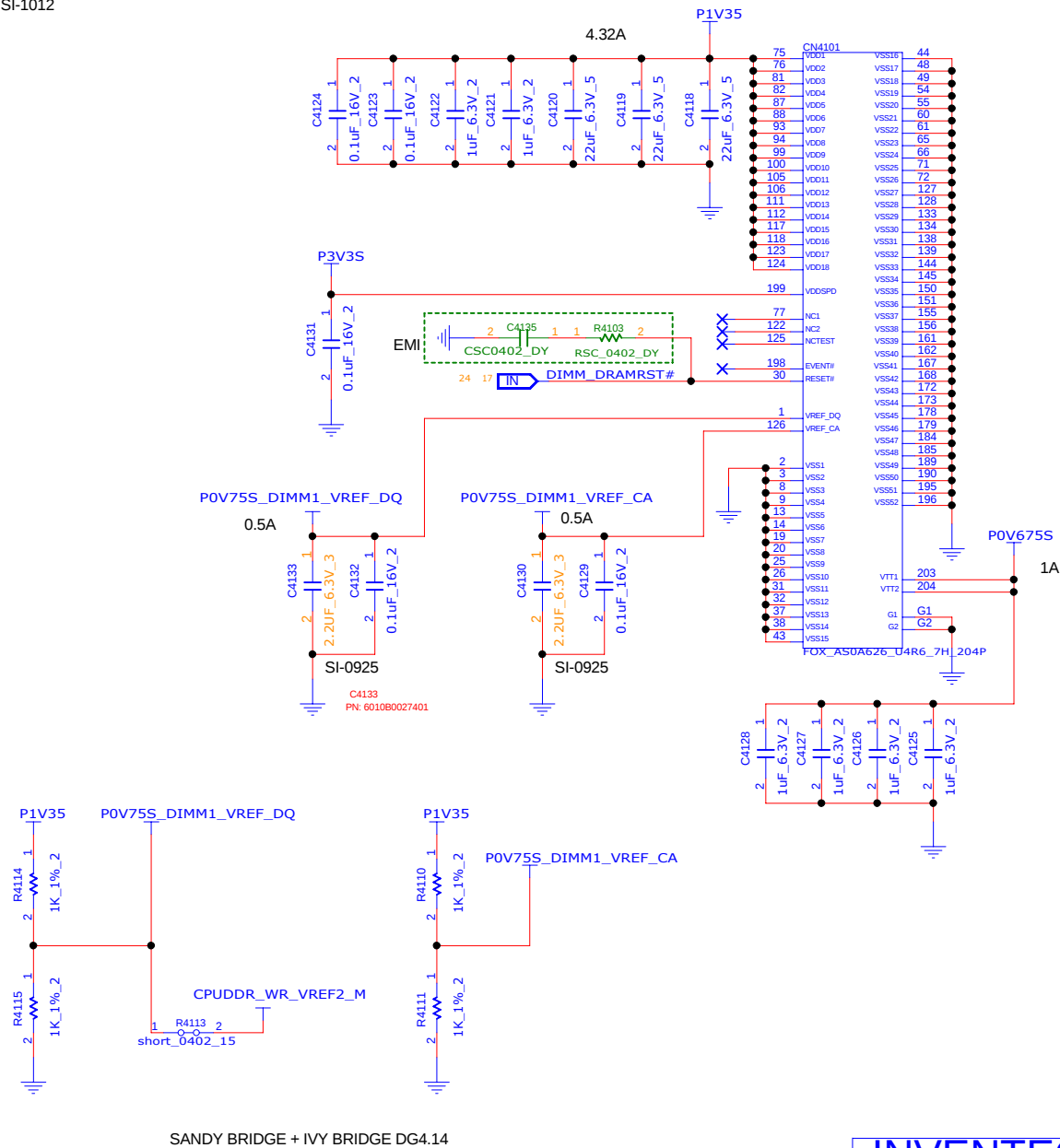
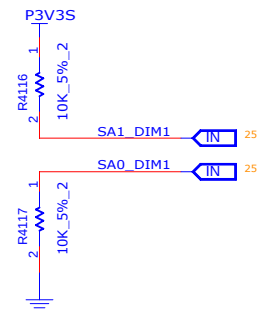
DDR3 (4MM) P/N : 6026B0216701 BOM CHANGE TO 6026B0221601

SI-1012

19	BI	M B A<0>	98	CN4101	DQ07	5	M B DQ<0>	BI	19
19	BI	M B A<1>	97	A0	DQ08	7	M B DQ<1>	BI	19
19	BI	M B A<2>	96	A2	DQ02	15	M B DQ<7>	BI	19
19	BI	M B A<3>	95	A3	DQ03	17	M B DQ<3>	BI	19
19	BI	M B A<4>	92	A4	DQ04	4	M B DQ<4>	BI	19
19	BI	M B A<5>	91	A5	DQ05	6	M B DQ<5>	BI	19
19	BI	M B A<6>	90	A6	DQ06	16	M B DQ<6>	BI	19
19	BI	M B A<7>	86	A7	DQ07	18	M B DQ<2>	BI	19
19	BI	M B A<8>	89	A8	DQ09	21	M B DQ<8>	BI	19
19	BI	M B A<9>	85	A9	DQ09	23	M B DQ<9>	BI	19
19	BI	M B A<10>	107	A10_AP	DQ10	33	M B DQ<10>	BI	19
19	BI	M B A<11>	84	A11	DQ11	35	M B DQ<11>	BI	19
19	BI	M B A<12>	83	A12	DQ12	22	M B DQ<12>	BI	19
19	BI	M B A<13>	119	A13	DQ13	24	M B DQ<13>	BI	19
19	BI	M B A<14>	80	A14	DQ14	34	M B DQ<14>	BI	19
19	BI	M B A<15>	78	A15	DQ15	36	M B DQ<15>	BI	19
19	IN	M B BS0	109	BA0	DQ16	39	M B DQ<16>	BI	19
19	IN	M B BS1	108	BA1	DQ17	41	M B DQ<17>	BI	19
19	IN	M B BS2	79	BA2	DQ18	51	M B DQ<18>	BI	19
19	IN	M CS#2	114	SB0	DQ19	53	M B DQ<19>	BI	19
19	IN	M CS#3	121	SB1	DQ20	42	M B DQ<20>	BI	19
19	IN	M CLK DDR2 DP	101	CK0	DQ22	50	M B DQ<21>	BI	19
19	IN	M CLK DDR2 DN	103	CK0W	DQ23	52	M B DQ<23>	BI	19
19	IN	M CLK DDR3 DP	102	CK1	DQ24	57	M B DQ<24>	BI	19
19	IN	M CLK DDR3 DN	104	CK1W	DQ25	59	M B DQ<25>	BI	19
19	IN	M CKE2	73	CKE1	DQ26	67	M B DQ<26>	BI	19
19	IN	M CKE3	74	CKE2	DQ27	69	M B DQ<27>	BI	19
19	IN	M B CAS#	115	CAS#	DQ28	56	M B DQ<28>	BI	19
19	IN	M B RAS#	110	RAS#	DQ29	58	M B DQ<29>	BI	19
19	IN	M B WE#	113	WE#	DQ30	68	M B DQ<31>	BI	19
25	IN	SA0_DIM1	197	SA0	DQ31	70	M B DQ<30>	BI	19
25	IN	PCH_3S_SMCLK	202	SA1	DQ32	129	M B DQ<36>	BI	19
27	IN	PCH_3S_SMDAT	200	SCL	DQ33	131	M B DQ<37>	BI	19
27	IN			SDA	DQ34	141	M B DQ<34>	BI	19
19	IN	M ODT2	116	ODT0	DQ35	143	M B DQ<35>	BI	19
19	IN	M ODT3	120	ODT1	DQ36	130	M B DQ<32>	BI	19
19					DQ37	132	M B DQ<33>	BI	19
19					DQ38	140	M B DQ<39>	BI	19
19					DQ39	142	M B DQ<38>	BI	19
19					DQ40	147	M B DQ<41>	BI	19
19					DQ41	149	M B DQ<42>	BI	19
19					DQ42	157	M B DQ<46>	BI	19
19					DQ43	159	M B DQ<44>	BI	19
19					DQ44	146	M B DQ<44>	BI	19
19					DQ45	148	M B DQ<40>	BI	19
19					DQ46	158	M B DQ<43>	BI	19
19					DQ47	160	M B DQ<47>	BI	19
19	IN	M B DQS0 DP	12	DQS0	DQ48	163	M B DQ<48>	BI	19
19	IN	M B DQS1 DP	29	DQS1	DQ49	165	M B DQ<53>	BI	19
19	IN	M B DQS2 DP	47	DQS2	DQ50	175	M B DQ<54>	BI	19
19	IN	M B DQS3 DP	64	DQS3	DQ51	177	M B DQ<55>	BI	19
19	IN	M B DQS4 DP	137	DQS4	DQ52	164	M B DQ<49>	BI	19
19	IN	M B DQS5 DP	184	DQS5	DQ53	166	M B DQ<52>	BI	19
19	IN	M B DQS6 DP	171	DQS6	DQ54	174	M B DQ<51>	BI	19
19	IN	M B DQS7 DP	188	DQS7	DQ55	176	M B DQ<50>	BI	19
19	IN	M B DQS0 DN	10	DQS0	DQ56	181	M B DQ<58>	BI	19
19	IN	M B DQS1 DN	27	DQS1	DQ57	183	M B DQ<61>	BI	19
19	IN	M B DQS2 DN	45	DQS2	DQ58	191	M B DQ<62>	BI	19
19	IN	M B DQS3 DN	62	DQS3	DQ59	193	M B DQ<63>	BI	19
19	IN	M B DQS4 DN	135	DQS4	DQ60	180	M B DQ<57>	BI	19
19	IN	M B DQS5 DN	152	DQS5	DQ61	182	M B DQ<56>	BI	19
19	IN	M B DQS6 DN	169	DQS6	DQ62	192	M B DQ<59>	BI	19
19	IN	M B DQS7 DN	186	DQS7	DQ63	194	M B DQ<60>	BI	19

FOX_AS0A626_U4R6_7H_204P

Note :

SO-DIMMA SPD Address is 0xA4
SO-DIMMA TS Address is 0x34

SANDY BRIDGE + IVY BRIDGE DG4.14

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
DDR3			
SIZE	CODE	DOCNUMBER	REV
A3	CS	1310A2548201	A02

CHANGE by Wison Lin DATE 21-FEB-2013

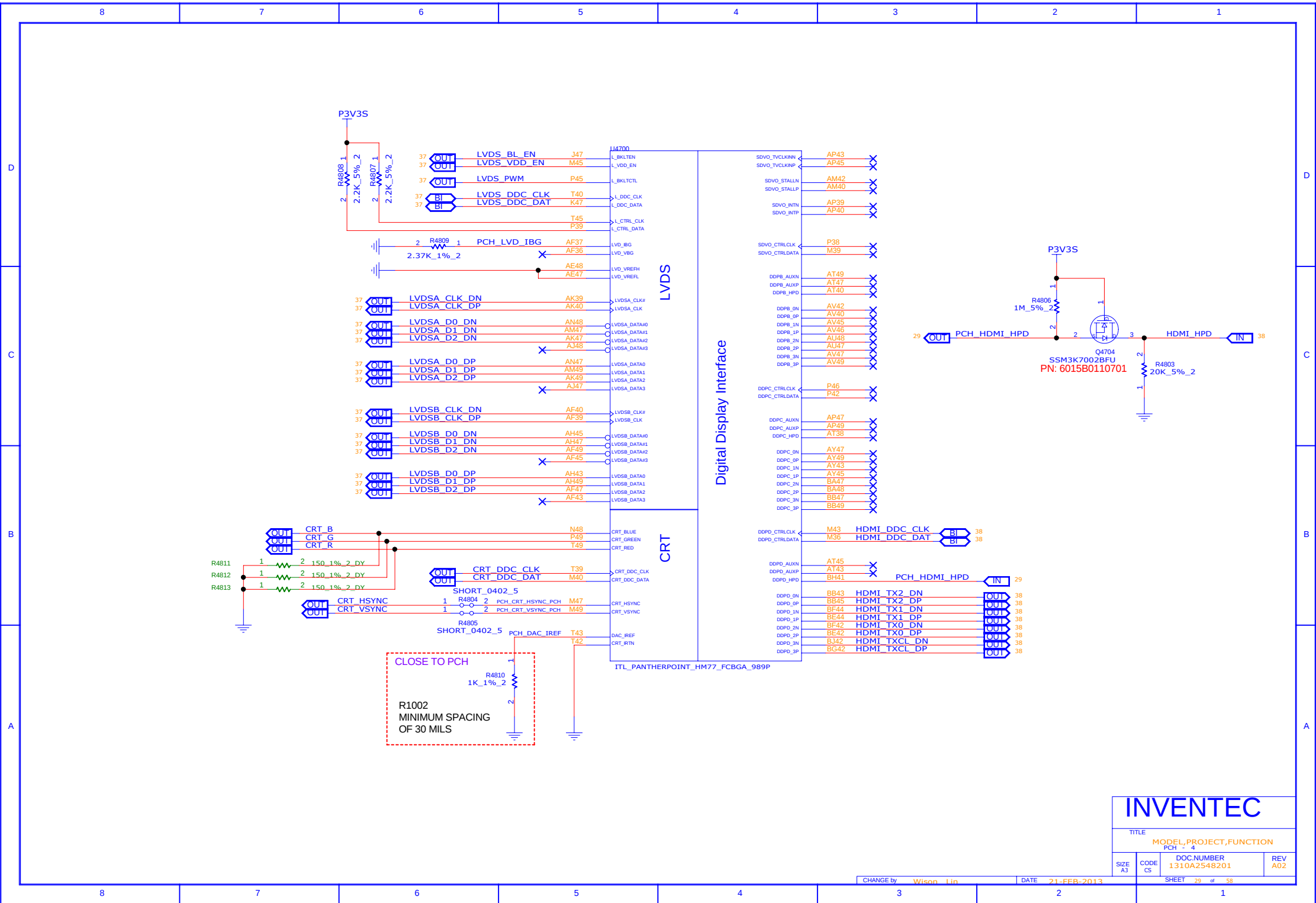
SHEET 25 of 58





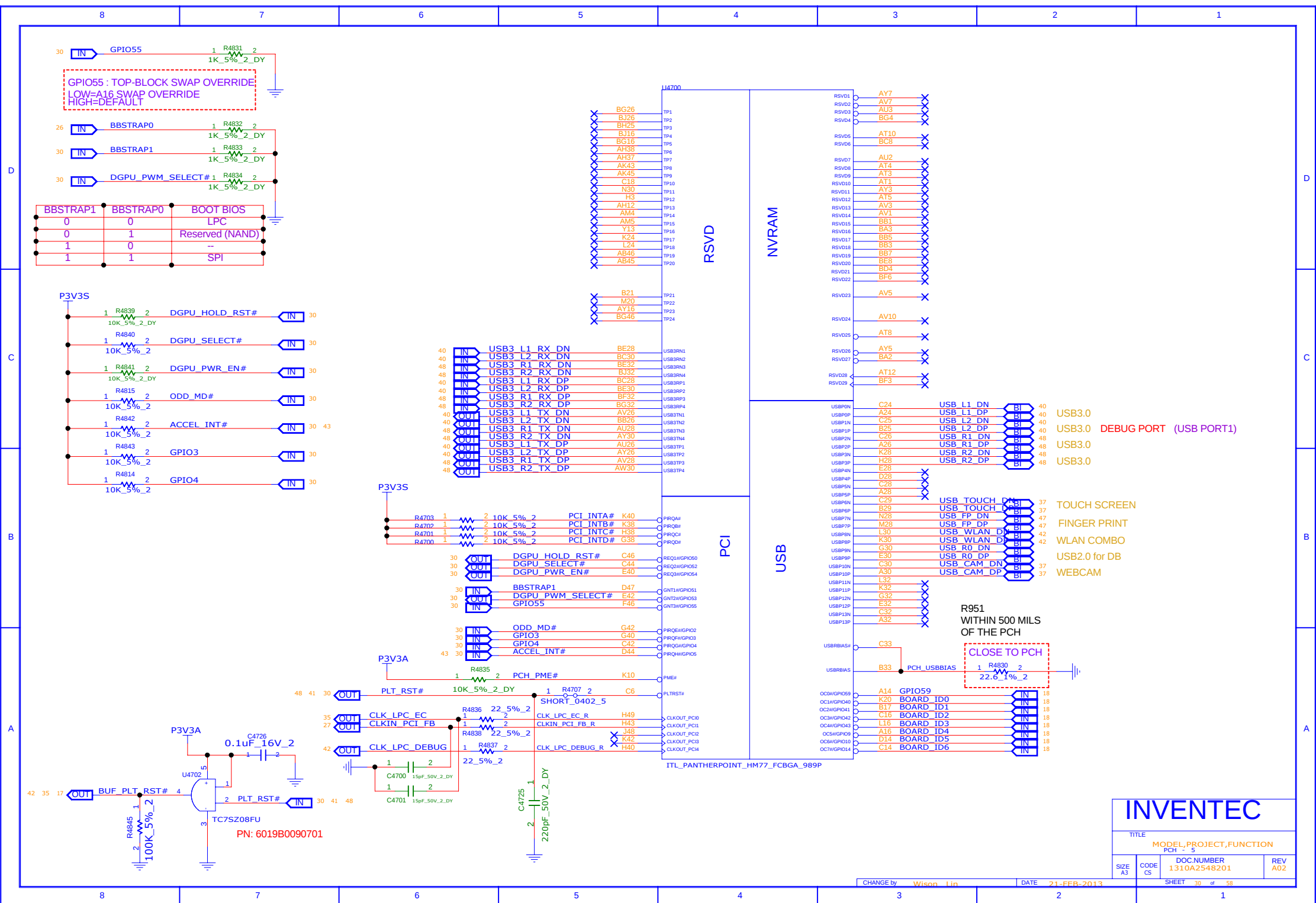


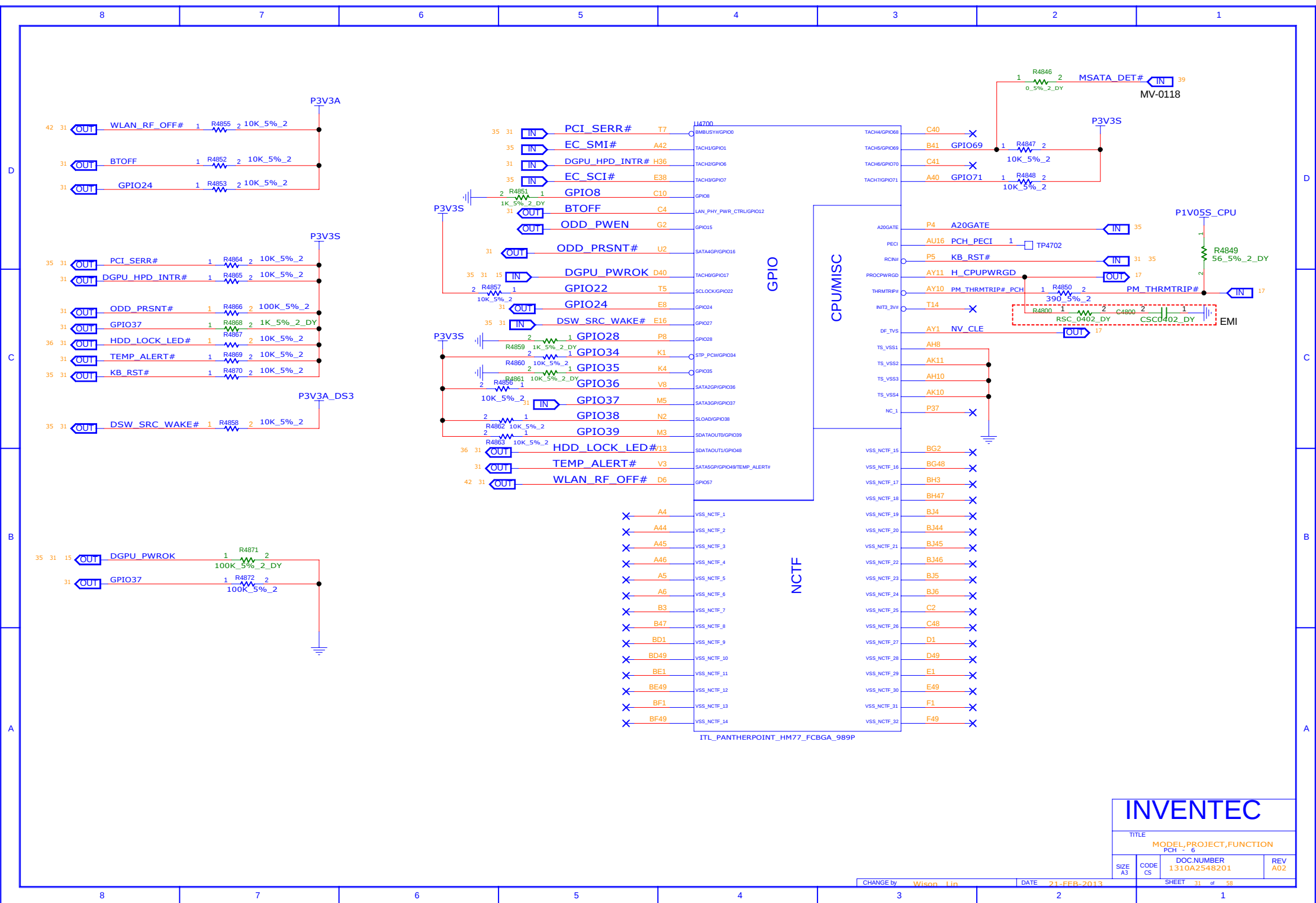
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INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
PCH - 4			
SIZE A3	CODE CS	DOC NUMBER 1310A2548201	REV A02





INVENTEC

TITLE

MODEL,PROJECT,FUNCTION

PCH - 6

SIZE A3

CODE CS

DOC NUMBER

1310A2548201

REV

A02

CHANGE by

Wilson Lin

DATE

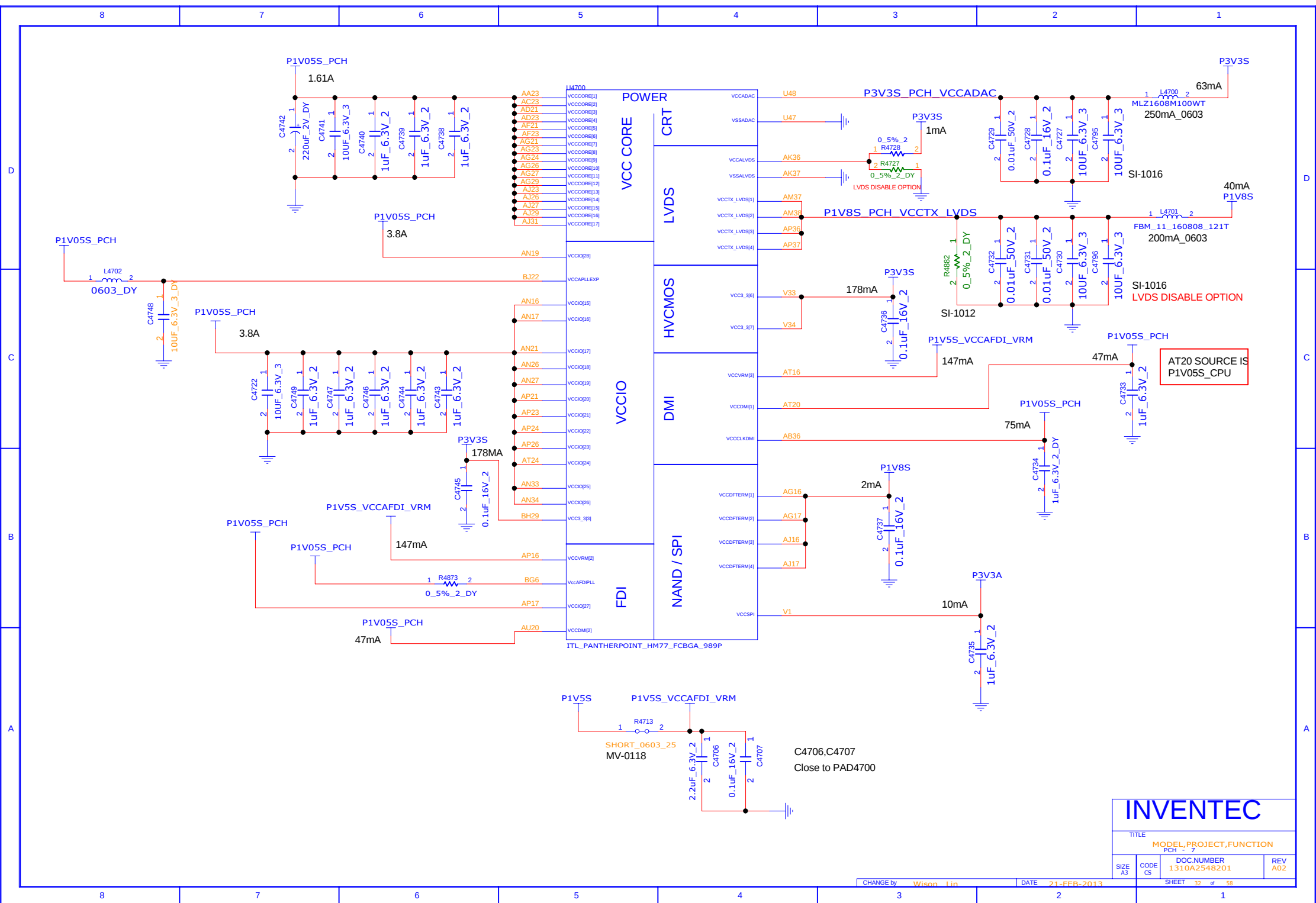
21-FEB-2013

SHEET

31

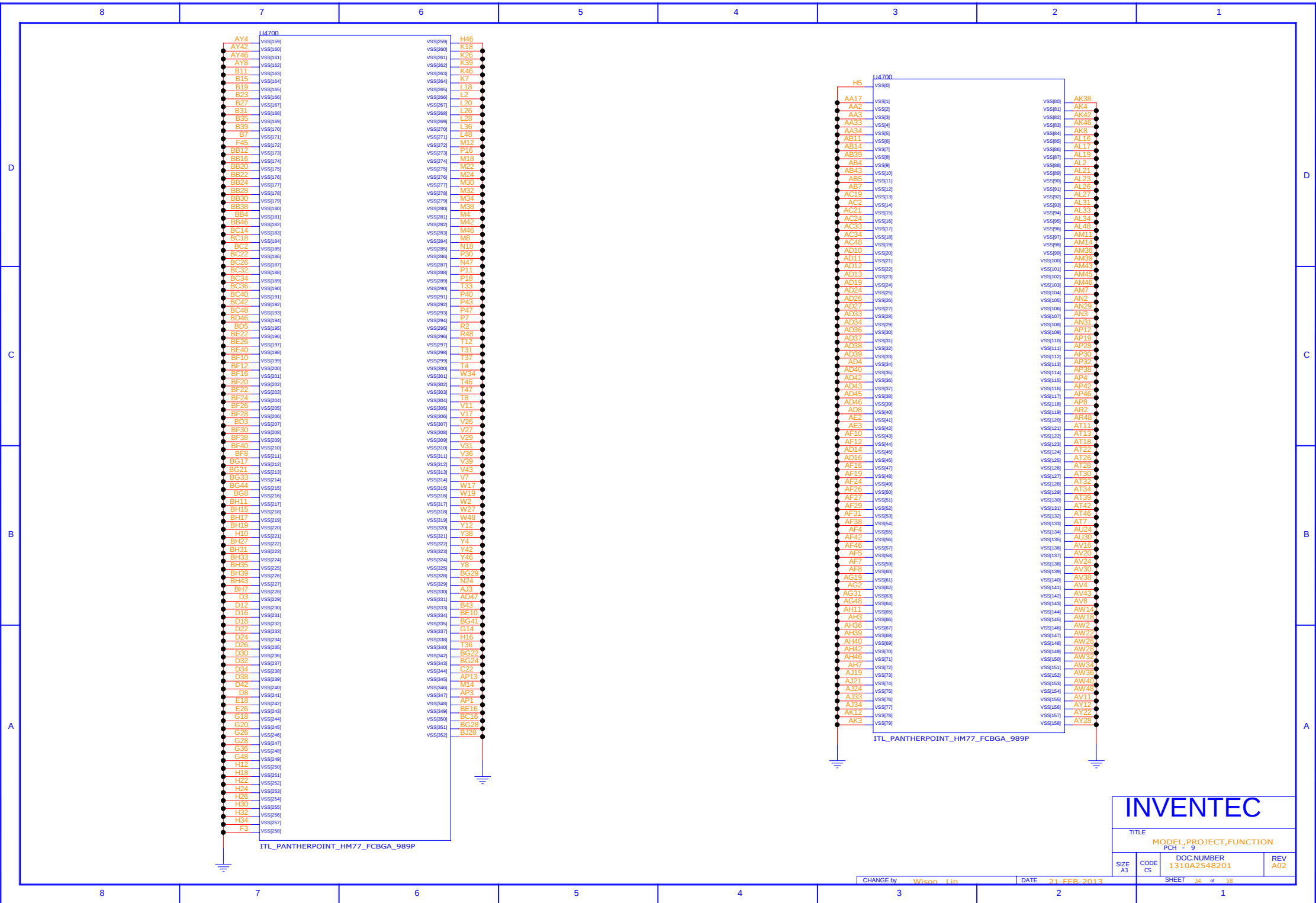
of

58



INVENTEC				
TITLE				
MODEL,PROJECT,FUNCTION				
PCH - 7				
SIZE	CODE	DOC NUMBER	REV	
A3	CS	1310A2548201	A02	





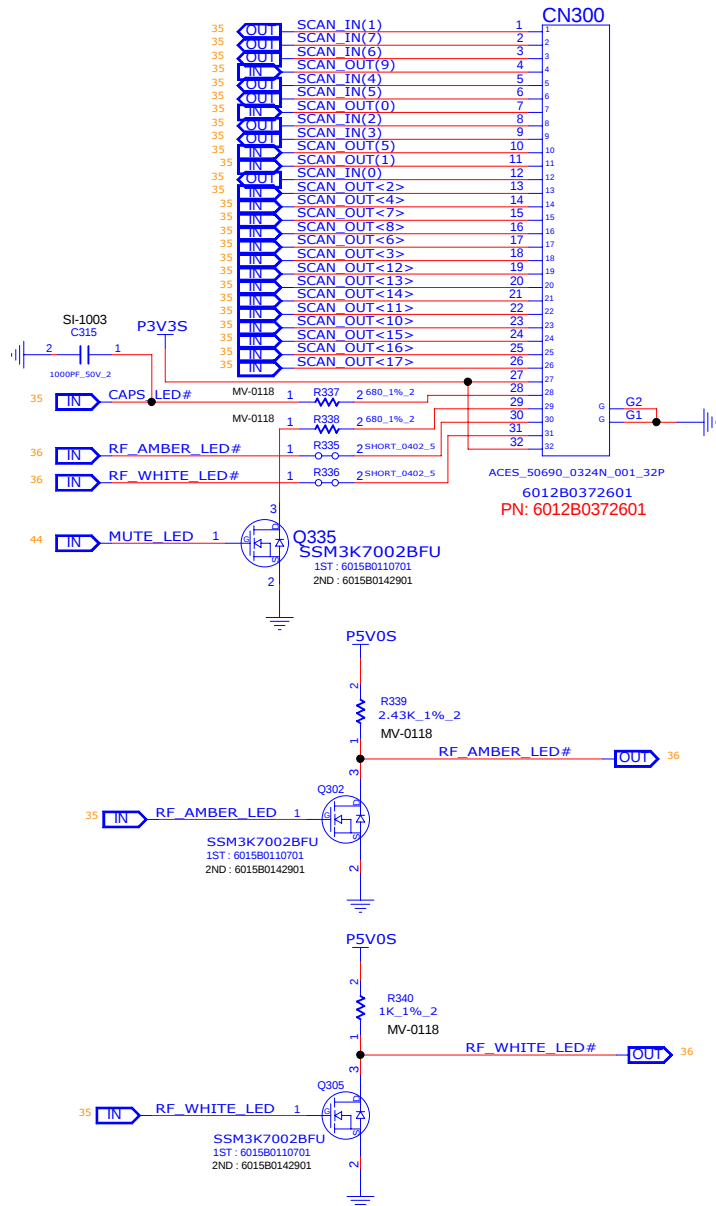
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MODEL,PROJECT,FUNCTION			
PCH 9			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02

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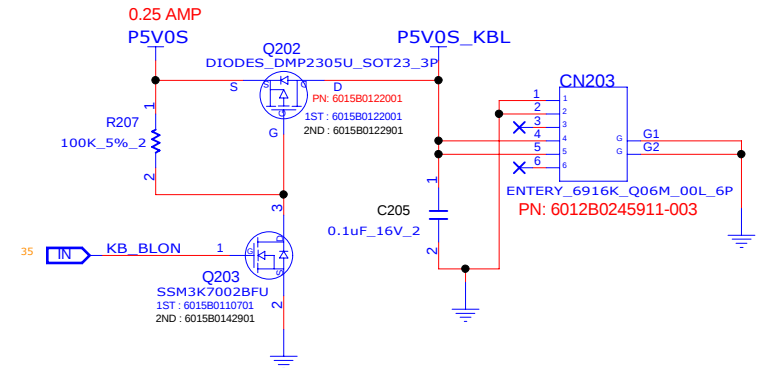
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KEYBOARD CONN(32 PIN)



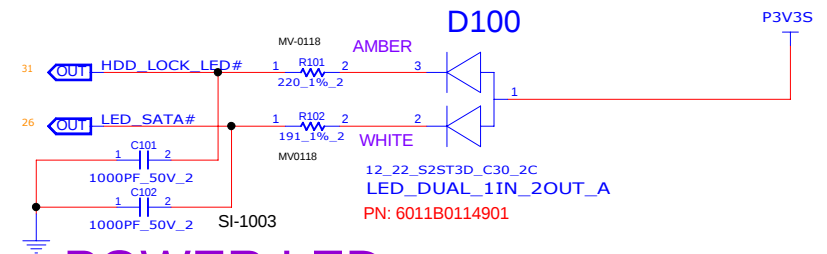
CONNECTOR KEY BOARD 200~299

KEYBOARD BACKLIGHT

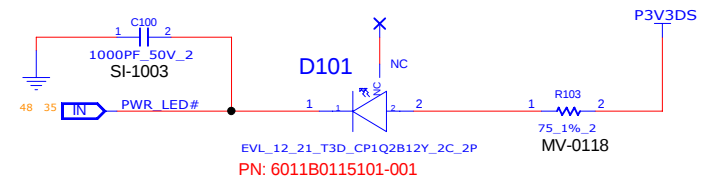


LED 100~199

HDD LED



POWER LED



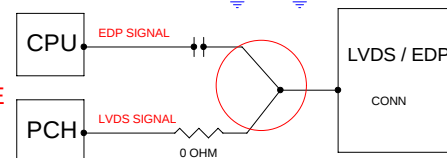
INVENTEC

TITLE			
MODEL PROJECT,FUNCTION			
KB_CONN & LED			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02

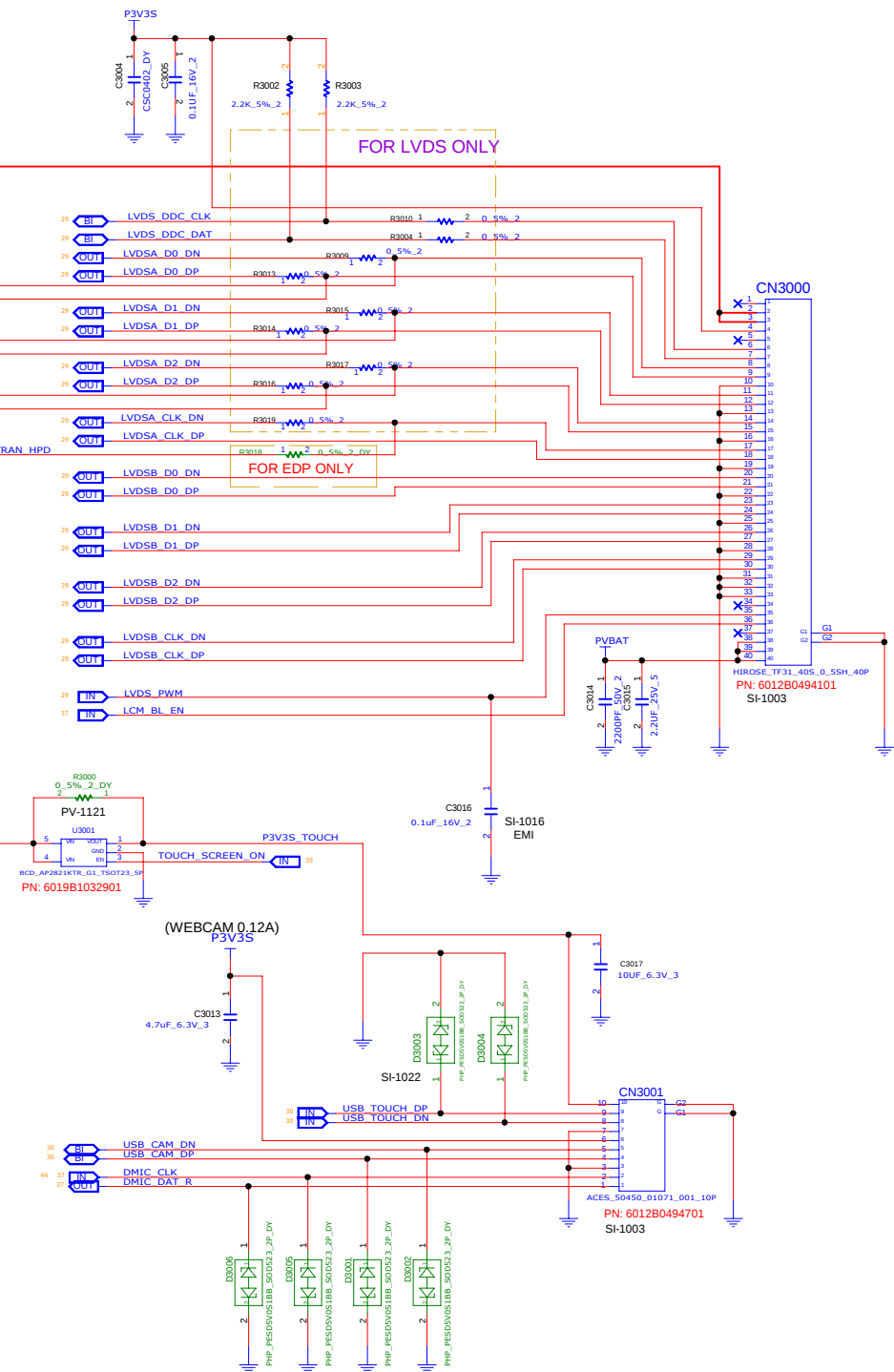
CHANGE by **Wilson Lin** DATE **21-FEB-2013**

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LOCATION 3000~3049
VER.01 20120822



CO-LAYOUT	LVDS	EDP
Q4900, R4901	×	○
R4600	×	○
R4500, R4523	○	×
R4524, R4525	×	○
C3006, C3007, C3009 C3010, C3011, C3012	×	○
R3018	×	○
R4727, R4882	×	○
C4730, C4731, C4732 L4701, R4728, C4796	○	×
R4807, R4808	○	×
R3002, R3003, R3004 R3009, R3010, R3013 R3014, R3015, R3016 R3017, R3019	○	×

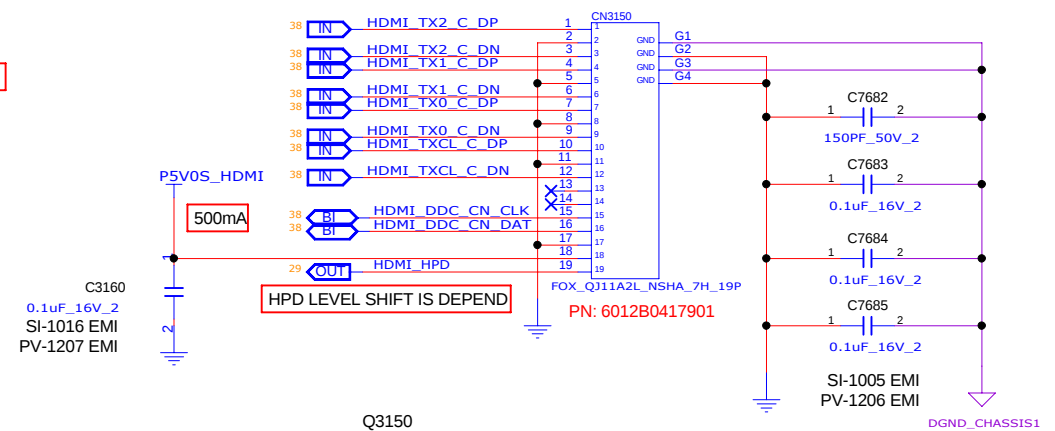
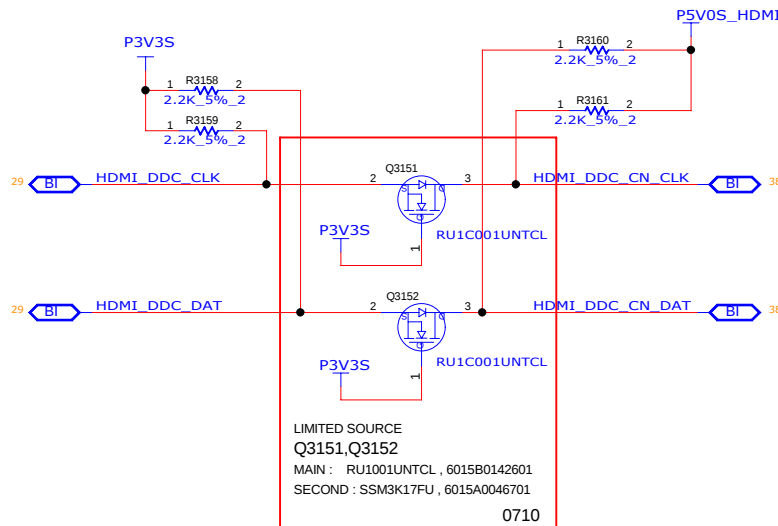
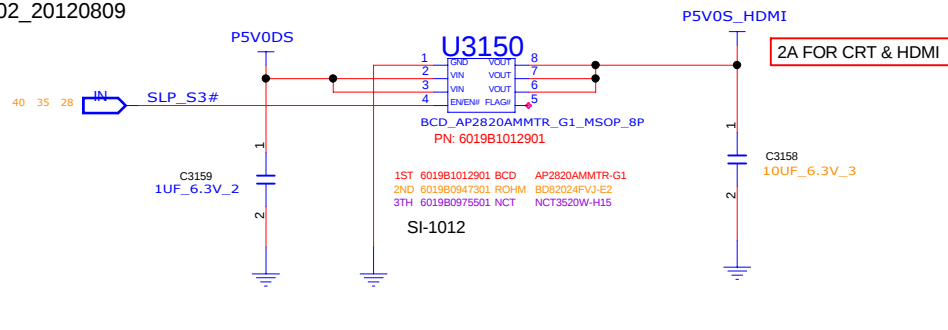


WEBCAM+TOUCHN SCREEN

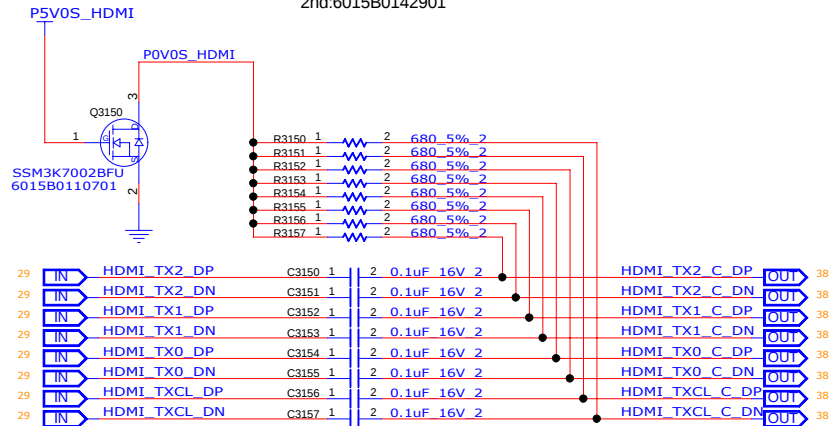
INVENTEC			
TITLE MODEL,PROJECT,FUNCTION LVDS			
SIZE C	CODE CS	DOC NUMBER 1310A2548201	
SHEET		37	of 58

HDMI

Location 3150 ~ 3199
Ver.02_20120809



Q3150
1st:6015B0110701
2nd:6015B0142901



Location	Part number	Factory	Manufacturer Part No	Marking
D300	1ST : 6011A0026801	DIODES	D-BAT54-7	KL1
	2nd : 60110GA0367T	NXP	BAT54	
Q300	1ST : 6015B0124601	NXP	2N7002P	LWx
Q301	2nd : 6015B0140901	DIODES	DMN65D8L-7	MM6
U301	1ST : 6019B0932401	MXIC	MX25L512EMI-10G	
512KB	2nd : 6019B0816001	ATMEL	AT25F512B-SSH-T	
U301	1ST : 6019B1016101	WINBOND	W25Q32FVSSIG	
4MB	2nd : 6019B0794701	MXIC	MX25L3206EM2I-12G	

INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
HDMI_CONN

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

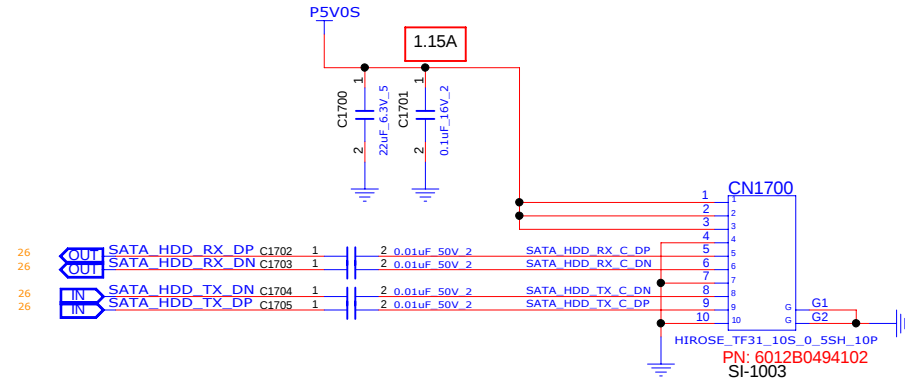
CHANGE by Wison Lin DATE 21-FEB-2013

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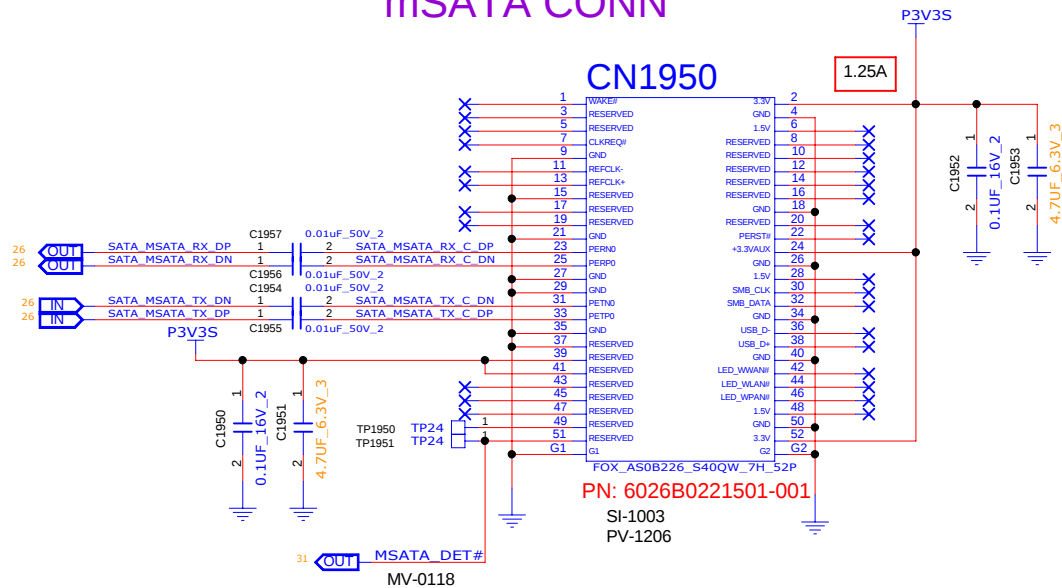
SATA HDD
Location 1700 ~ 1749

mSATA
Location 1950 ~ 1999
Ver.01_20120808

SATA HDD CABLE CONN on MB



mSATA CONN



INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
SATA HDD & SATA ODD			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02



SI-0925

CHANGE by	Wison Lin	DATE	21-FEB-2013
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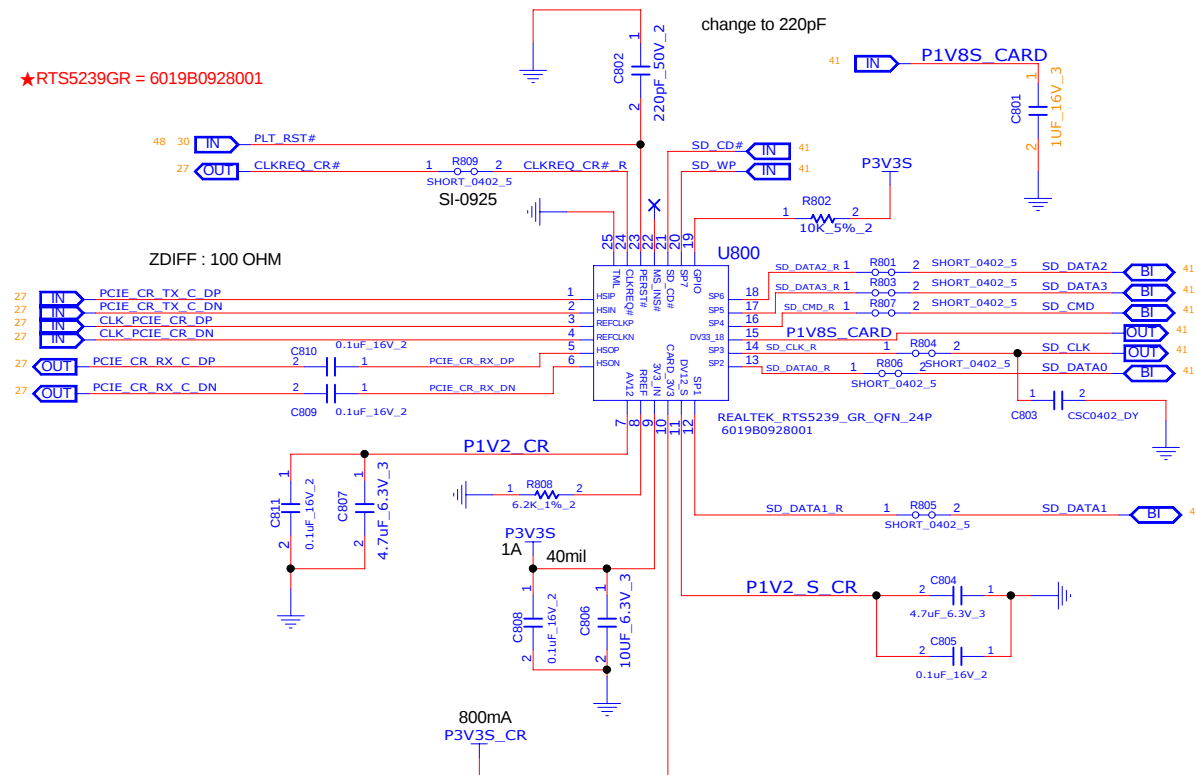
INVENTEC

CARD READER RTS5239

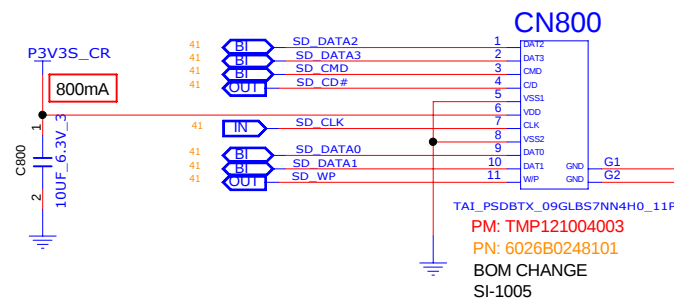
LOCATION: 800~899

VER_04 . 20120823

★RTS5239GR = 6019B0928001



CARDREADER CONN



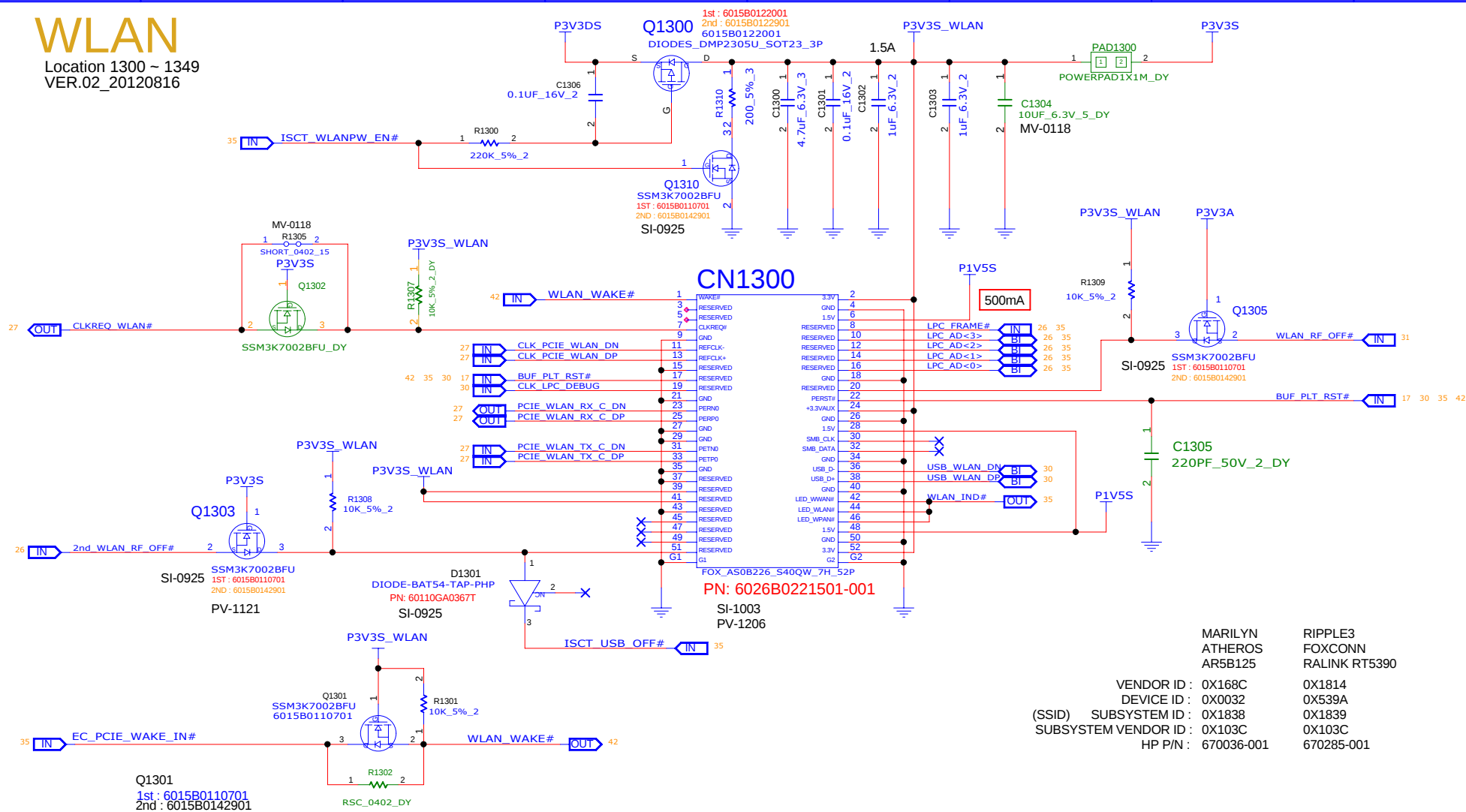
INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
CARD READER			
SIZE A3	CODE CS	DOC NUMBER 1310A2548201	REV A02

CHANGE by Wison Lin DATE 21-FEB-2013

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WLAN

Location 1300 ~ 1349
VER.02_20120816

MARILYN
ATHEROS
AR5B125

RIPLLE3
FOXCONN
RALINK RT5390

VENDOR ID : 0X168C
DEVICE ID : 0X0032
(SSID) SUBSYSTEM ID : 0X1838
SUBSYSTEM VENDOR ID : 0X103C
HP P/N : 670036-001

0X1814
0X539A
0X1839
0X103C
670285-001

Location	Part number	Factory	Manufacturer Part No	Marking
D1300	1st : 6011A0026801	DIODES	D-BAT54-7	KL1
	2nd : 60110GA0367T	NXP	BAT54	
Q1301	1st : 6015B0110701	TOSHIBA	SSM3K7002BFU	NM
	2nd : 6015B0142901	DIODES	DMN65D8LW-7	MM3
Q1300	1st : 6015B0122001	DIODES	DMP2305U	23P
	2nd : 6015B0122901	TOSHIBA	SSM3J327R	KFG

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02

CHANGE by Wilson Lin DATE 21-FEB-2013

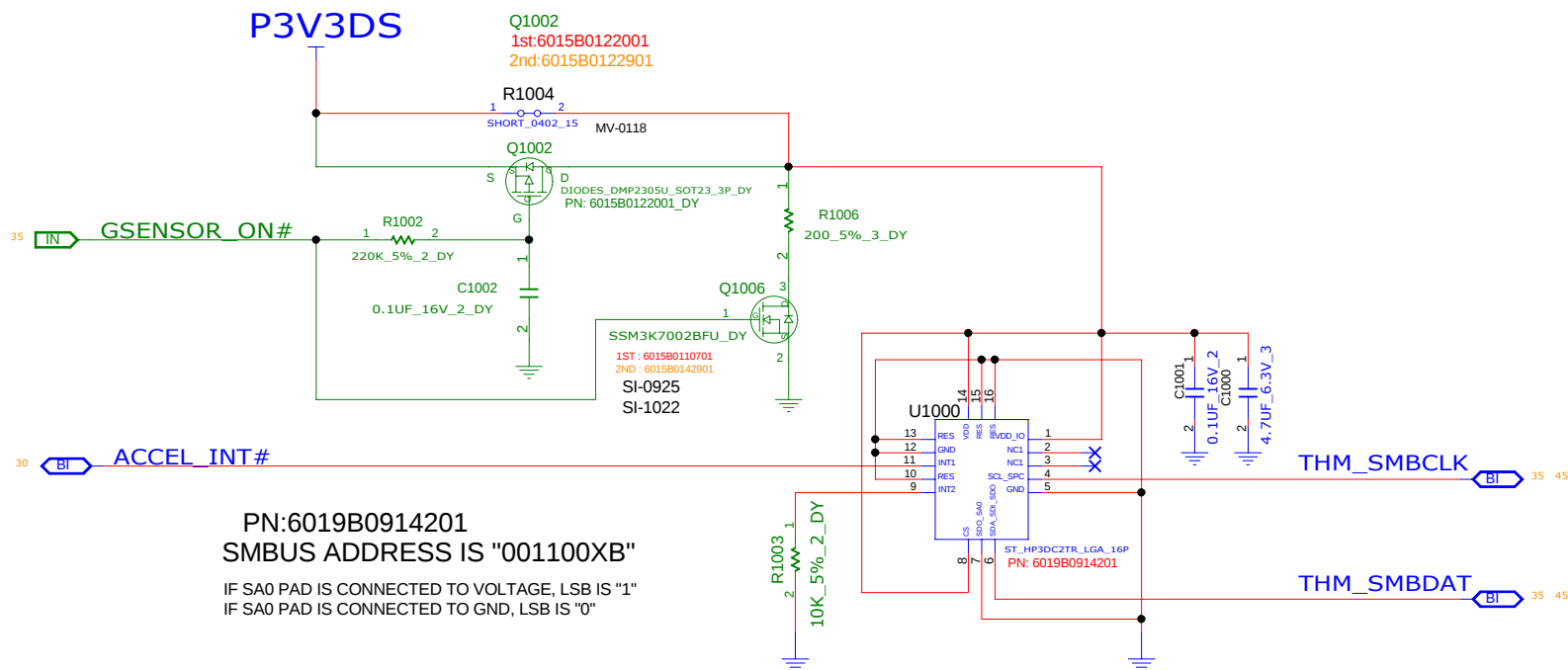
SHEET 42 of 58

G-Sensor

Loctaion 1000 ~ 1099

Ver.01_20120807

HARDDRIVE PROTECTION


INVENTEC

 TITLE
 MODEL,PROJECT,FUNCTION

 SIZE CODE DOC NUMBER REV
 A3 CS 1310A2548201 A02

CHANGE by Wison Lin DATE 21-FEB-2013

SHEET 43 of 58

AUDIO-1

CODEC

LOCATION: 500-549
VER.09_20120829

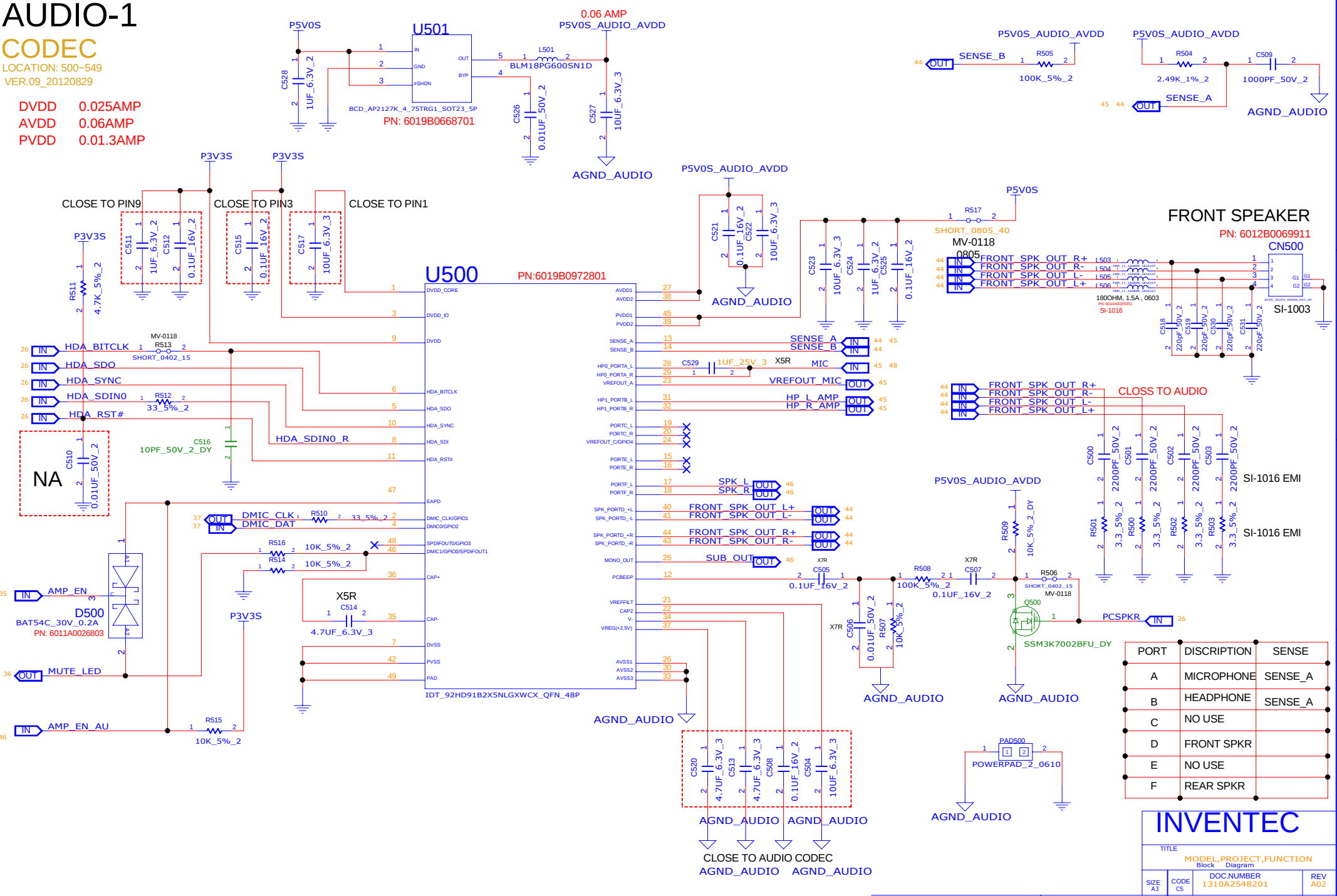
DVDD 0.025AMP
AVDD 0.06AMP
PVDD 0.01.3AMP

D

C

B

A



D

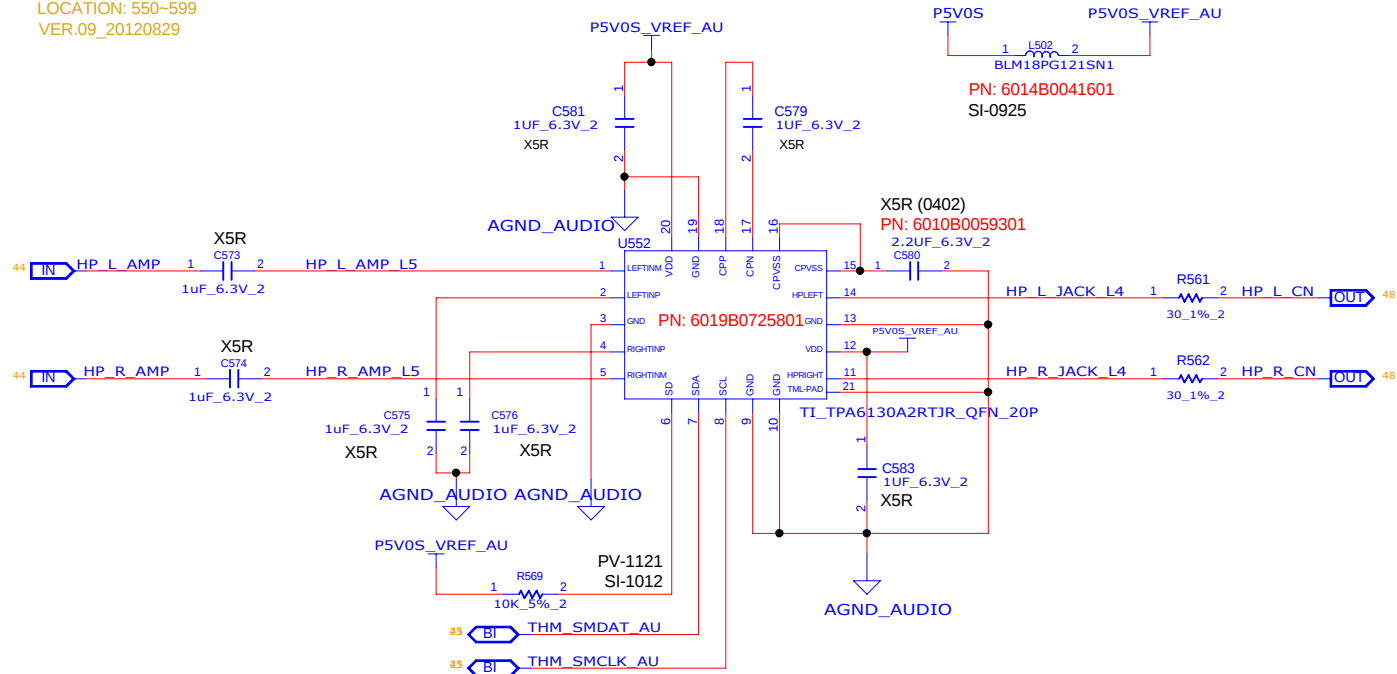
C

B

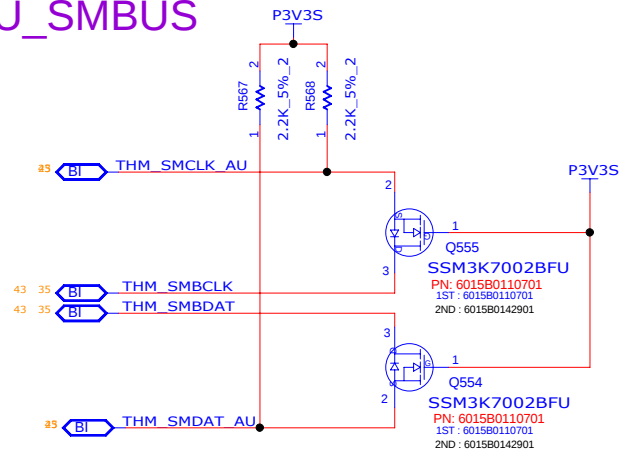
A

AUDIO (AMP) 550-599

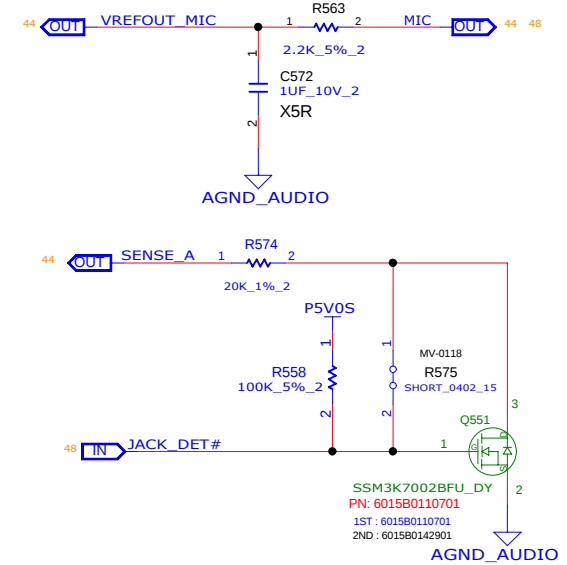
AUDIO-2 CODEC

LOCATION: 550-599
VER.09_20120829

AU_SMBUS



COMBO JACK



Location	Part number	Factory	Manufacturer Part No	Marking
Q9401	1st : 6015B0122001	DIODES	DMP2305U	23P
	2nd : 6015B0122901	TOSHIBA	SSM3J327R	KFG
L9401	1st : 6014B0200401	TAI-TECH	SWF2520CF-2R2M-R15	
	2nd : 6014B0190301	CYNTEC	PHI25201B-2R2MS	
X9401	1st : 6018B0060301	EPSON	FA-238G	2500M
	2nd : 6018B0054701	TXC	7V25000014	T250

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02

CHANGE by Wison Lin DATE 21-FEB-2013

SHEET 45 of 58

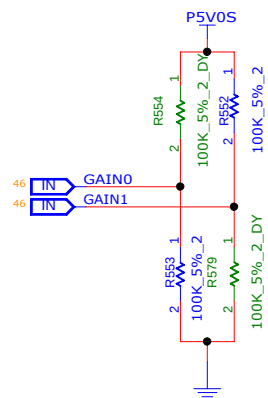
AUDIO (AMP) 550~599

AUDIO-3

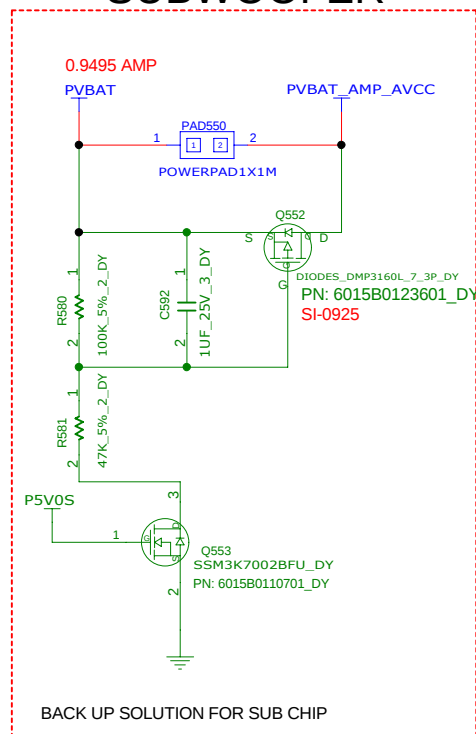
CODEC

LOCATION: 550~599

VER.09 20120829

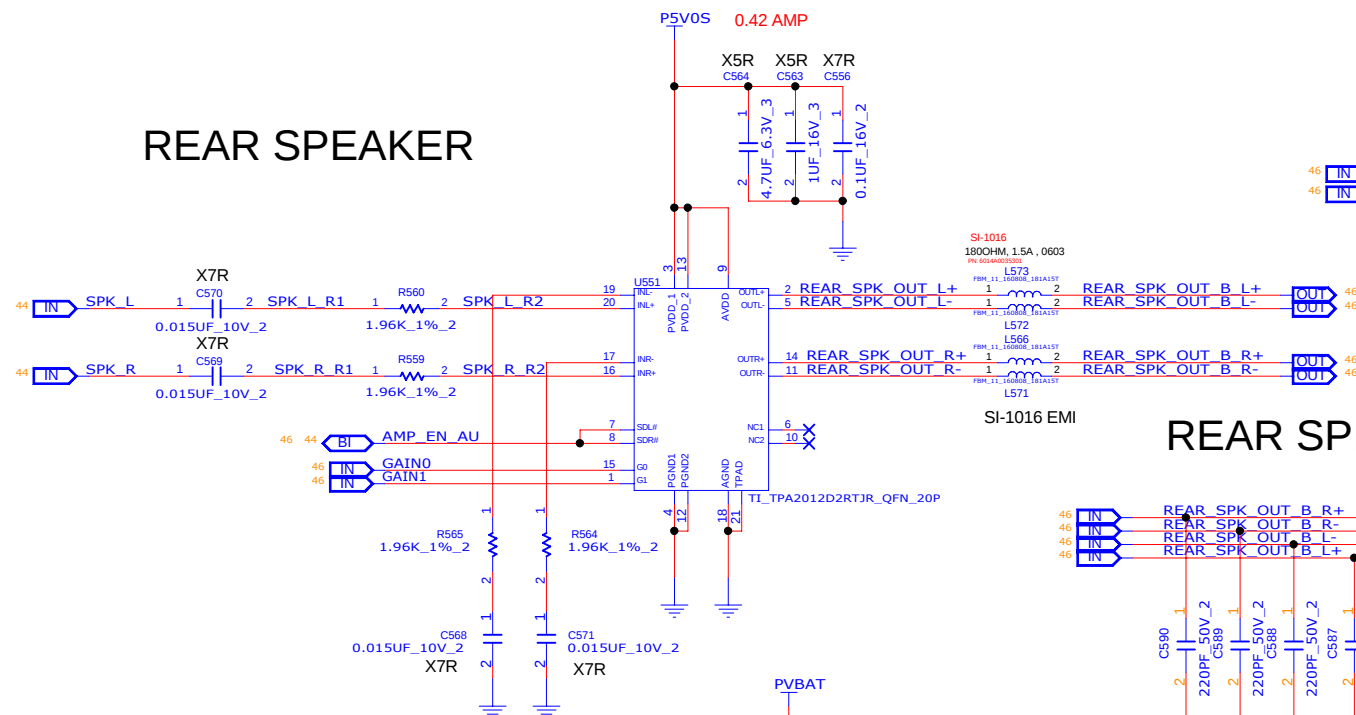


SUBWOOFER

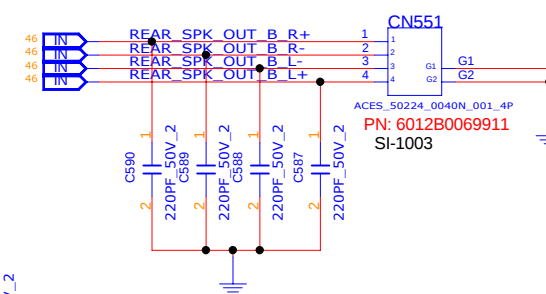


BACK UP SOLUTION FOR SUB CHIP

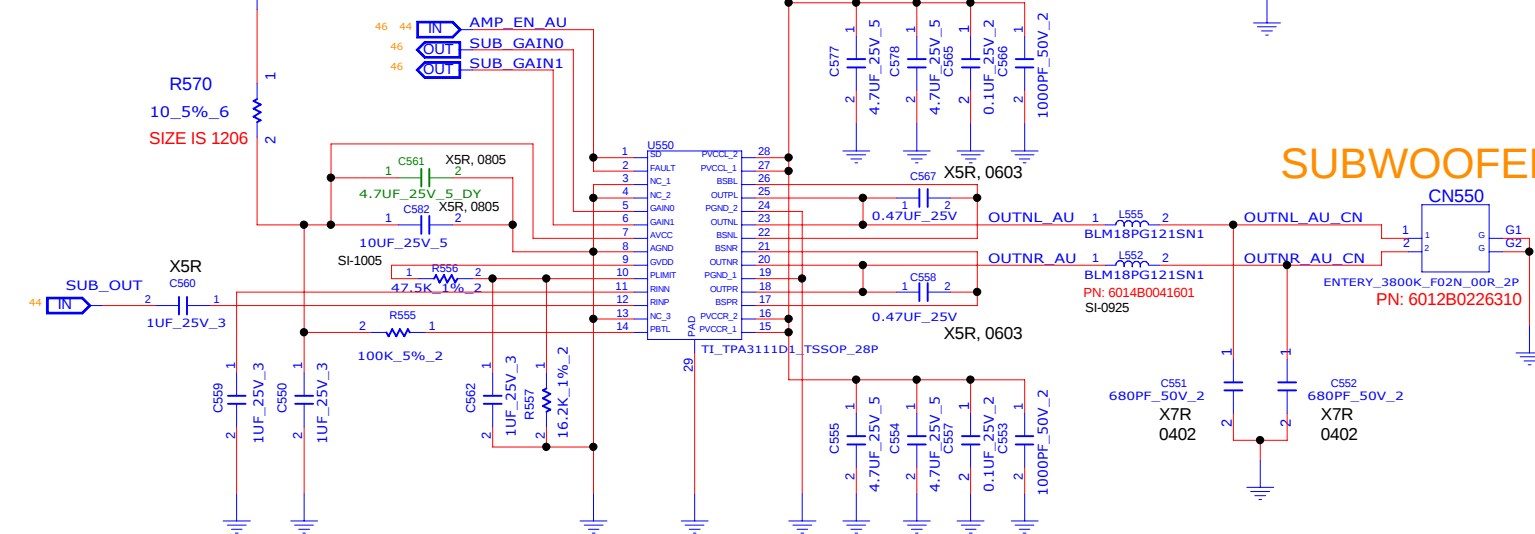
REAR SPEAKER



REAR SPEAKER



SUBWOOFER



TI TPA3111D1 (HP PART NUMBER HPA00836PWPR)

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC.NUMBER 1310A2548201	R A

07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB_FP_DP
USB_FP_DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
0.5%_2_DY

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

R2201
100K_5%_2

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

AOAC OFF#

CN2200

SI-0925

ENTERY_6916K_Q06M_00L_6P
PN: 6012B0245911-003

C2203
0.1UF_16V_2_DY

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

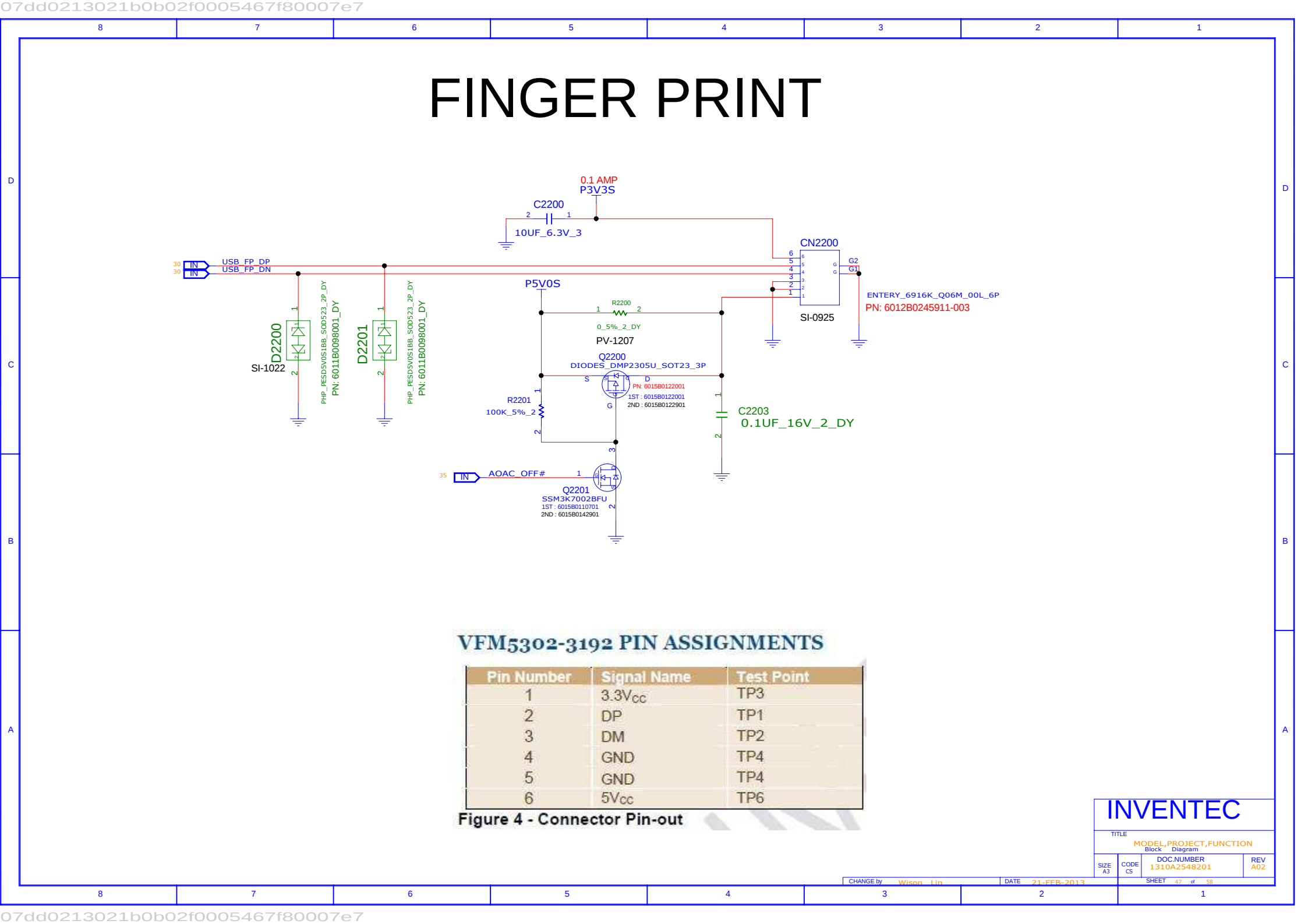
INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

07dd0213021b0b02f0005467f80007e7



07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB FP DP
USB FP DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
0_5%_2_DY

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P

PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

R2201
100K_5%_2

C2203
0.1UF_16V_2_DY

ENTERY_6916K-Q06M-00L-6P
PN: 6012B0245911-003

SI-0925

AOAC OFF#

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

07dd0213021b0b02f0005467f80007e7

07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB FP DP
USB FP DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
0.5%_2_DY

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

R2201
100K_5%_2

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

Q2202
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

CN2200

SI-0925

ENTERY_6916K-Q06M-00L-6P
PN: 6012B0245911-003

C2203
0.1UF_16V_2_DY

AOAC OFF#

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

TITLE
MODEL, PROJECT, FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

07dd0213021b0b02f0005467f80007e7

07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB_FP_DP
USB_FP_DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
0.5%_2_DY

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

R2201
100K_5%_2

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

AOAC OFF#

CN2200

SI-0925

ENTERY_6916K_Q06M_00L_6P
PN: 6012B0245911-003

C2203
0.1UF_16V_2_DY

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

TITLE
MODEL, PROJECT, FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

07dd0213021b0b02f0005467f80007e7

[illegible]

07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB_FP_DP
USB_FP_DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
0.5%_2_DY

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

R2201
100K_5%_2

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

AOAC OFF#

CN2200

SI-0925

ENTERY_6916K_Q06M_00L_6P
PN: 6012B0245911-003

C2203
0.1UF_16V_2_DY

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

07dd0213021b0b02f0005467f80007e7

07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB FP DP
USB FP DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
100K_5%_2

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

AOAC OFF#

CN2200

SI-0925

ENTERY_6916K_Q06M_00L_6P
PN: 6012B0245911-003

C2203
0.1UF_16V_2_DY

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

07dd0213021b0b02f0005467f80007e7

07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB_FP_DP
USB_FP_DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
0.5%_2_DY

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

R2201
100K_5%_2

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

AOAC OFF#

CN2200

SI-0925

ENTERY_6916K_Q06M_00L_6P
PN: 6012B0245911-003

C2203
0.1UF_16V_2_DY

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

TITLE
MODEL, PROJECT, FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

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[illegible]

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FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB FP DP
USB FP DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
100K_5%_2

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

AOAC OFF#

CN2200

SI-0925

ENTERY_6916K_Q06M_00L_6P
PN: 6012B0245911-003

C2203
0.1UF_16V_2_DY

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

TITLE
MODEL, PROJECT, FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

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07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB_FP_DP
USB_FP_DN

SI-1022

D2200

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
0.5%_2_DY

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

R2201
100K_5%_2

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

AOAC OFF#

CN2200

SI-0925

ENTERY_6916K_Q06M_00L_6P
PN: 6012B0245911-003

C2203
0.1UF_16V_2_DY

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

07dd0213021b0b02f0005467f80007e7

07dd0213021b0b02f0005467f80007e7

FINGER PRINT

0.1 AMP
P3V3S

C2200
10UF_6.3V_3

USB_FP_DP
USB_FP_DN

SI-0925

ENTERY_6916K_Q06M_00L_6P
PN: 6012B0245911-003

D2200
SI-1022

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

D2201

PHP_PESDV051B8_S00523_2P_DY
PN: 6011B0098001_DY

P5V0S

R2200
0.5%_2_DY

PV-1207

Q2200
DIODES_DMP2305U_SOT23_3P
PN: 6015B0122001
1ST: 6015B0122001
2ND: 6015B0122901

R2201
100K_5%_2

Q2201
SSM3K7002BFU
1ST: 6015B0110701
2ND: 6015B0142901

AOAC_OFF#

C2203
0.1UF_16V_2_DY

VFM5302-3192 PIN ASSIGNMENTS

Pin Number	Signal Name	Test Point
1	3.3V _{CC}	TP3
2	DP	TP1
3	DM	TP2
4	GND	TP4
5	GND	TP4
6	5V _{CC}	TP6

Figure 4 - Connector Pin-out

INVENTEC

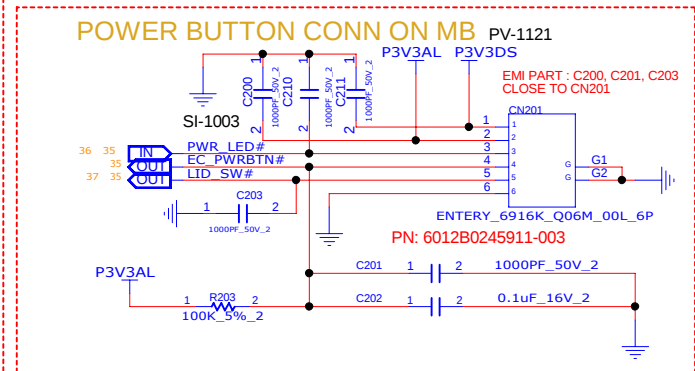
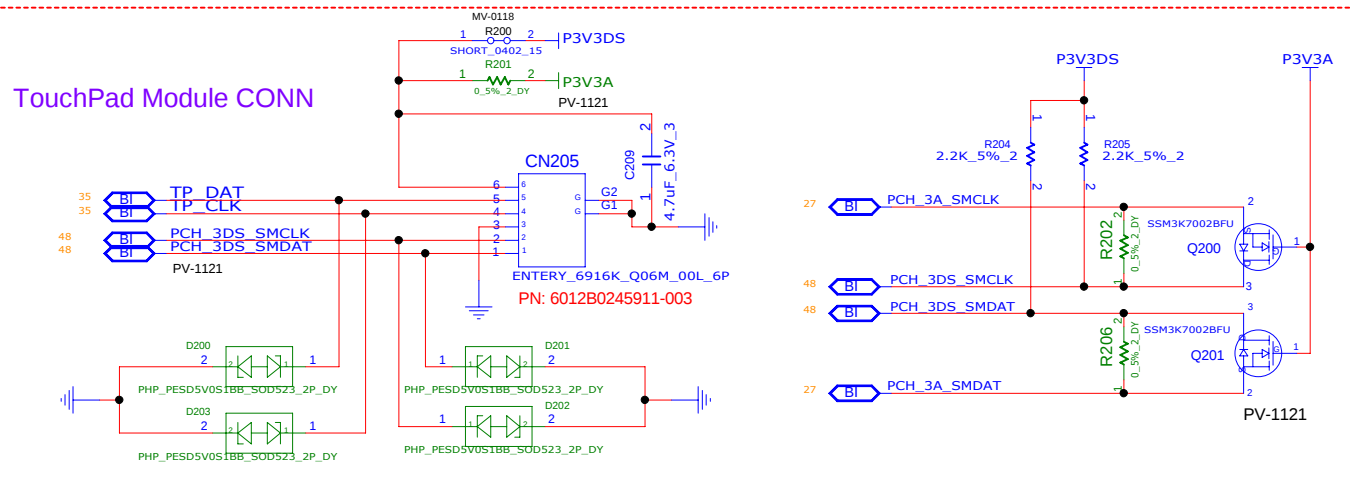
TITLE
MODEL, PROJECT, FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

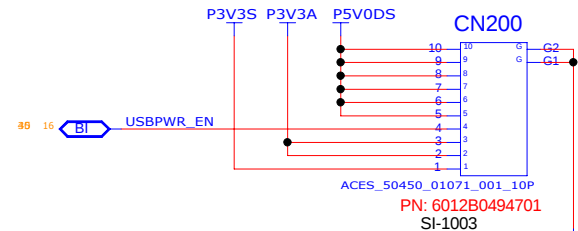
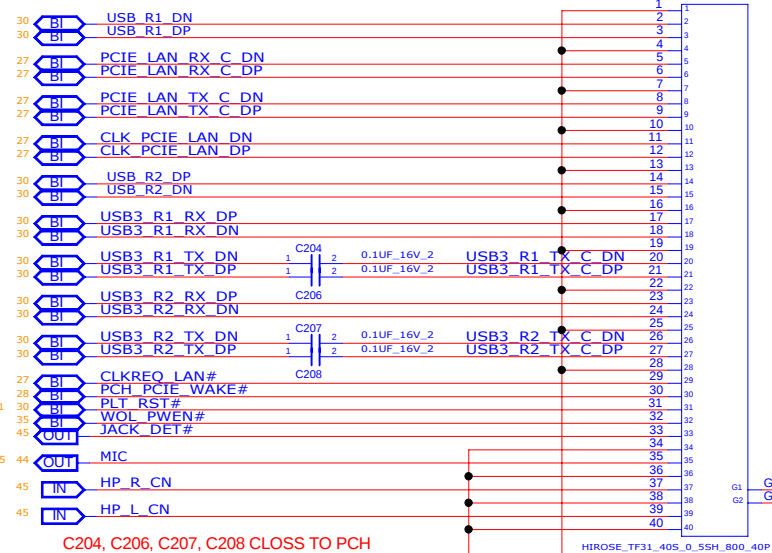
CHANGE by Wilson Lin DATE 21-FEB-2013 SHEET 47 of 58

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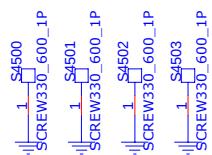
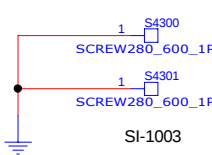
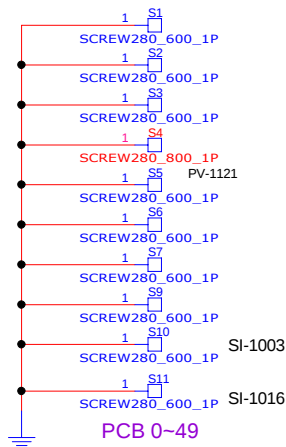
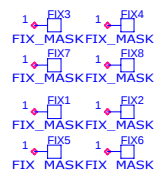
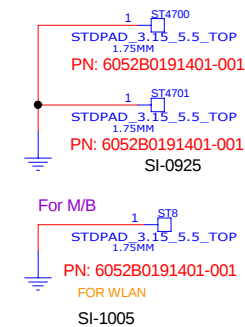
D



C

MB CONNECTOR TO AUB

B

FOR CPU**FOR FAN****For M/B****FOR PCH**

A

INVENTECTITLE
MODEL PROJECT FUNCTION
POWER BUTTON

SIZE A3 CODE CS DOC NUMBER 1310A2548201 REV A02

CHANGE by Wison Lin DATE 21-FEB-2013

SHEET 48 of 58

AUB
LOCATION: 9000~9999
VER.03_20120814

USB BOARD-PV

INVENTEC

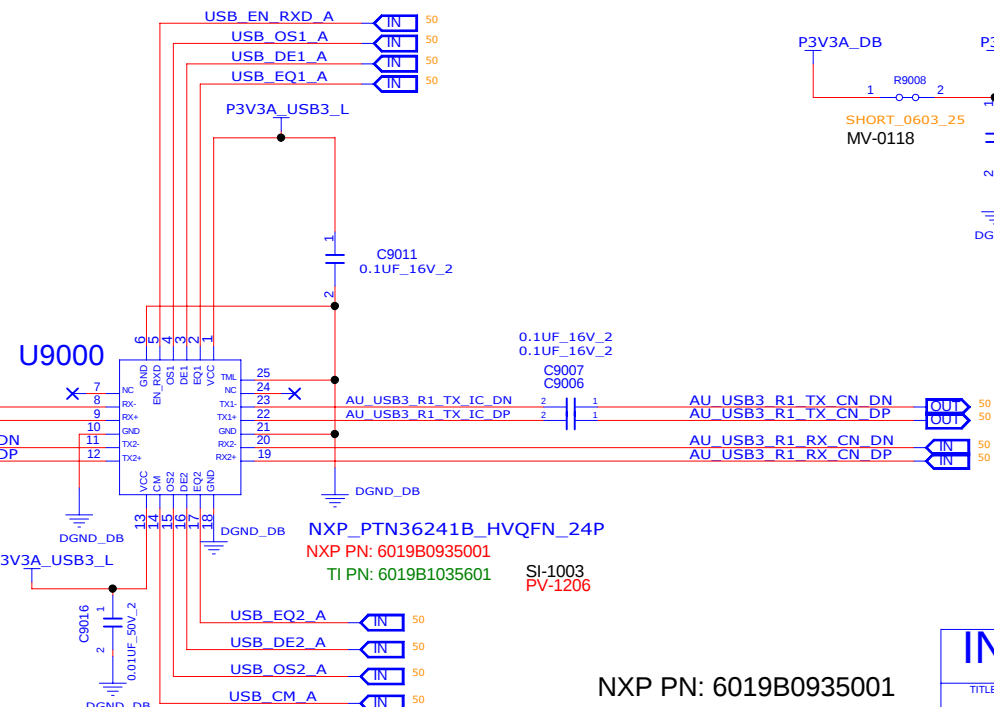
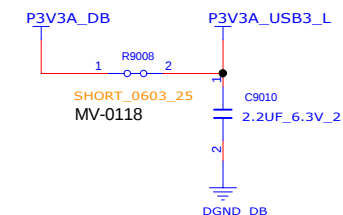
TITLE			
MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC.NUMBER 1310A2548201	REV A02

CHANGE by Wison Lin DATE 21.FEB.2013

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USB30 REDRIVER PORT1

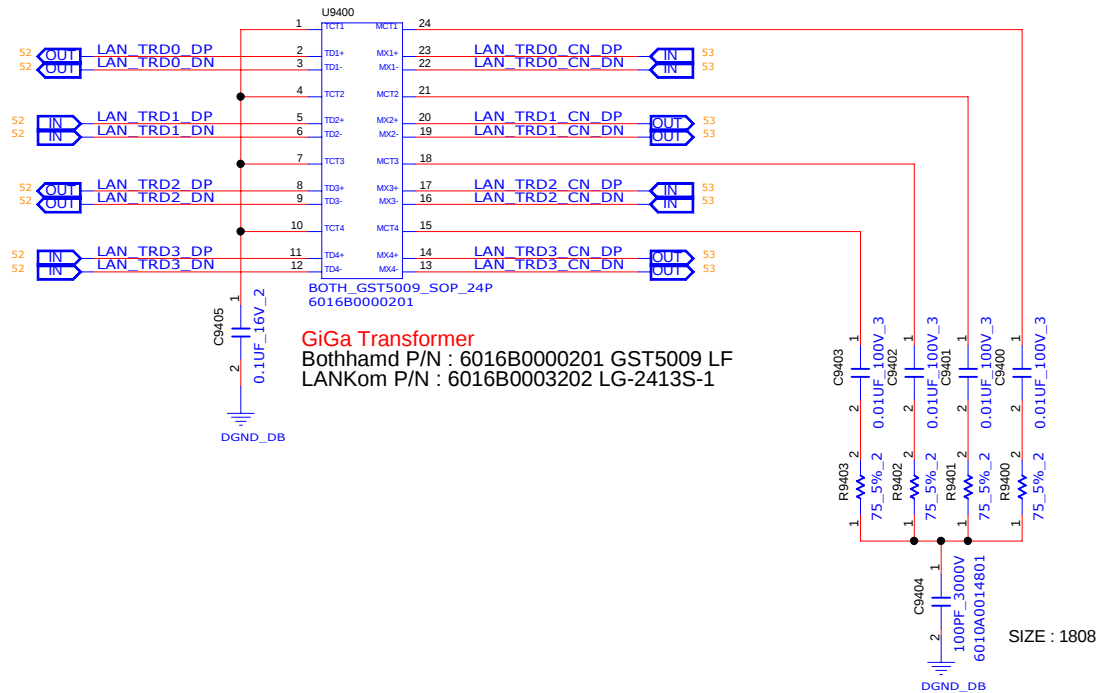


NXP PN: 6019B0935001
TI PN: 6019B1035601

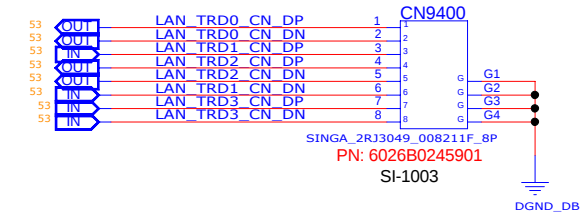
INVENTEC			
TITLE			
MODEL, PROJECT, FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC NUMBER 1310A2548201	REV A02
SHEET 50 of 50			

LAN (Transformer & RJ45)

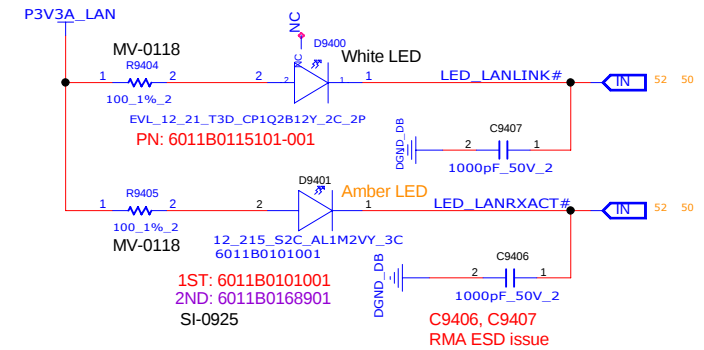
Location 9400 ~ 9499
Ver.06_20120813



RJ-45



★Layout
D9400 White LED place on TOP side.
D9401 Amber LED place on Bottom side.



Location	Part number	Factory	Manufacturer Part No	Color
D9400	6011B0115101	EVERLIGHT	T3D_CP1Q2B12Y_2C	White
D9401	6011B0101001	EVERLIGHT	S2C_AL1M2VY_3C	Amber

Location	Part number	Factory	Manufacturer Part No	Marking
D300	1st : 6011A0026801 2nd : 60110GA0367T	DIODES	D-BAT54-7	KL1
Q300	1st : 6015B0110701	NXP	BAT54	L4
Q301	1st : 6015B0142901	TOSHIBA	SSM3K7002BFLU	NM
U301	1st : 6015B0932401	DIODES	DMN65D8LW-7	MM3
512KB	2nd : 6019B0816001	MXIC	MX25L512EML-10G	
U301	1st : 6019B1016101	ATMEL	AT25F512B-SSH-T	
4MB	2nd : 6019B0794701	WINBOND	W25Q32FVSSIG	
U301	1st : 6019B0955901	MXIC	MX25L3206EM2I-12G	
8MB	2nd : 6019B0813101	WINBOND	W25Q64FV55IG	
		MXIC	MX25L6406EM2I-12G	

INVENTEC

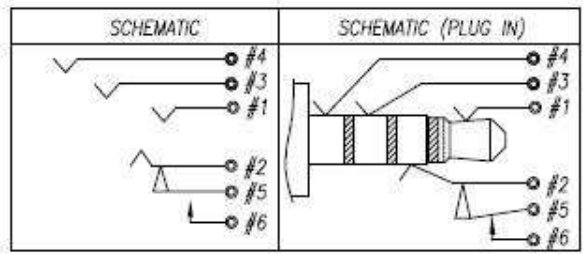
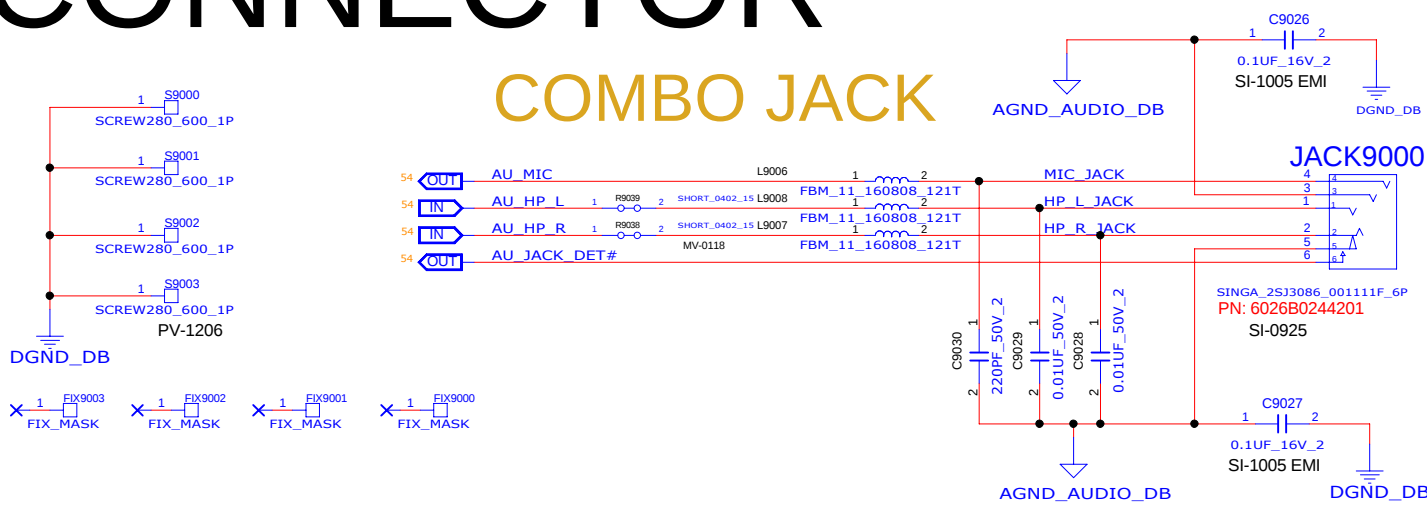
TITLE			
MODEL,PROJECT,FUNCTION			
SHEET	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02

CHANGE by Wilson Lin DATE 21-FEB-2013

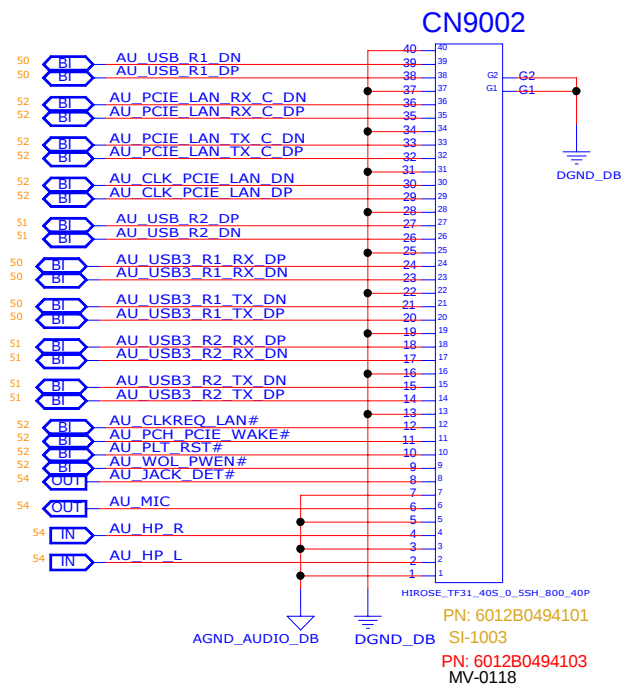
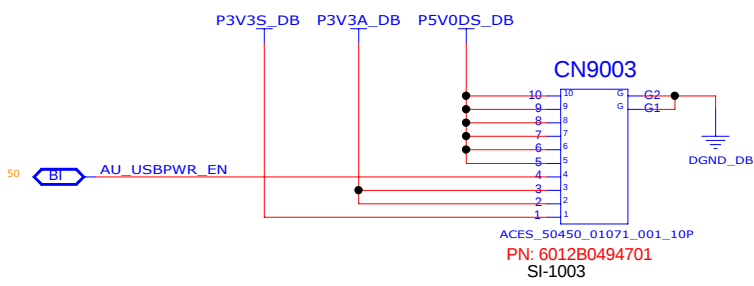
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CONNECTOR

COMBO JACK



MB TO AUB CONNECTOR



INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548201	A02

[illegible]

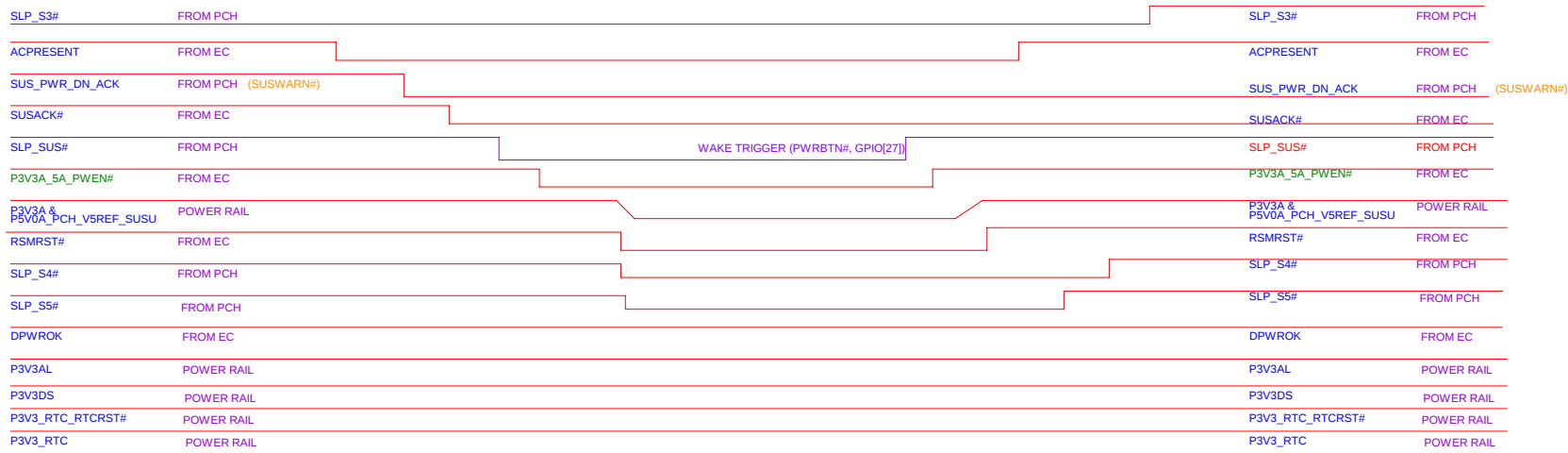
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1310A2552101 (6L) 1310A2552201 (8L) ESD BOARD 1 MV-0118 1310A2552102 (6L) 1310A2552202 (8L) ESD BOARD 2 MV-0118 CHIEF RIVERDISNVIDIA N14P-GV2 4GSAMSUNG1310A2548301 CHIEF RIVERDISNVIDIA N14P-GV2 2GMICRON1310A2548302 CHIEF RIVERUMAN/AN/AN1310A2548201							
USB BOARD (6L)1310A25485016050A2548501 USB BOARD (8L)1310A25486016050A2548601 POWER BOARD (6L)1310A25487016050A2548701 POWER BOARD (8L)1310A25488016050A2548801 EMI BOARD (6L)1310A25521016050A2552101 1310A2552102 EMI BOARD (8L)1310A25522016050A2552201 1310A2552202 INVENTEC TITLEMODEL, PROJECT, FUNCTIONBlockDiagram SIZEA3CODECS DOC. NUMBER1310A2548201REV A02 CHANGE byWilson LinDATE21-FEB-2013SHEET56 of 58							
8	7	6	5	4	3	2	1

S3



S3 TO DEEP S3

DEEP S3 TO S0



INVENTEC

MODEL, PROJECT, FUNCTION
Block Diagram

SIZE	CODE	DOC NUMBER	REV
C	CS	1310A254B201	A02

CHANGED By: Wilson, Jia DATE: 21-FEB-2013

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