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INVENTECTITLE
MODEL,PROJECT,FUNCTION
INDEX

SIZE A3	CODE CS	DOC NUMBER 1310A2548301	REV A02
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SHEET 2 of 69

CHANGE by Wison Lin DATE 18-DEC-2012

D

C

B

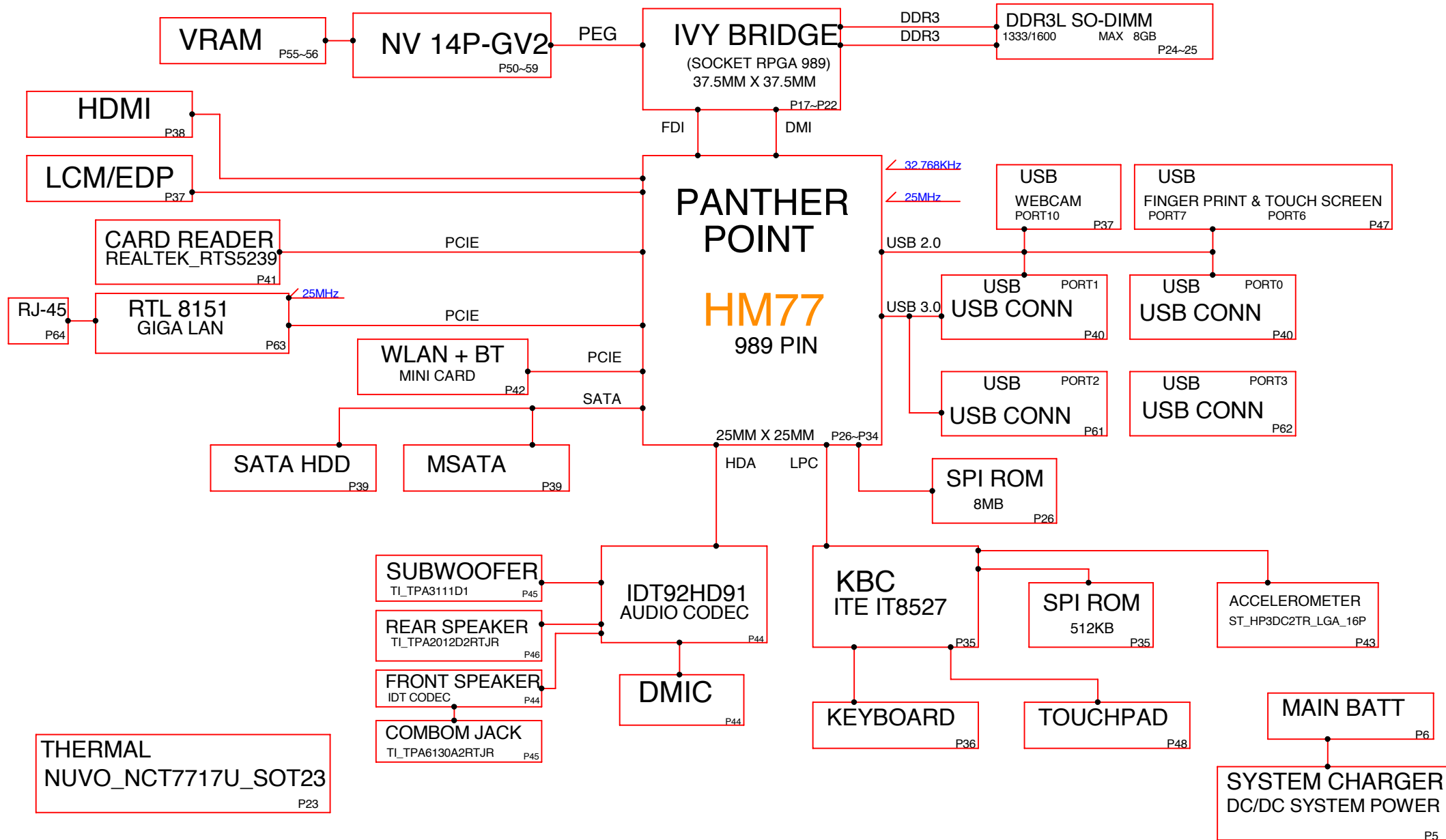
A

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**INVENTEC**TITLE
MODEL, PROJECT, FUNCTION

SIZE A3 CODE CS DOC NUMBER 1310A2548301 REV A02

CHANGE by Wison Lin DATE 18-DEC-2012

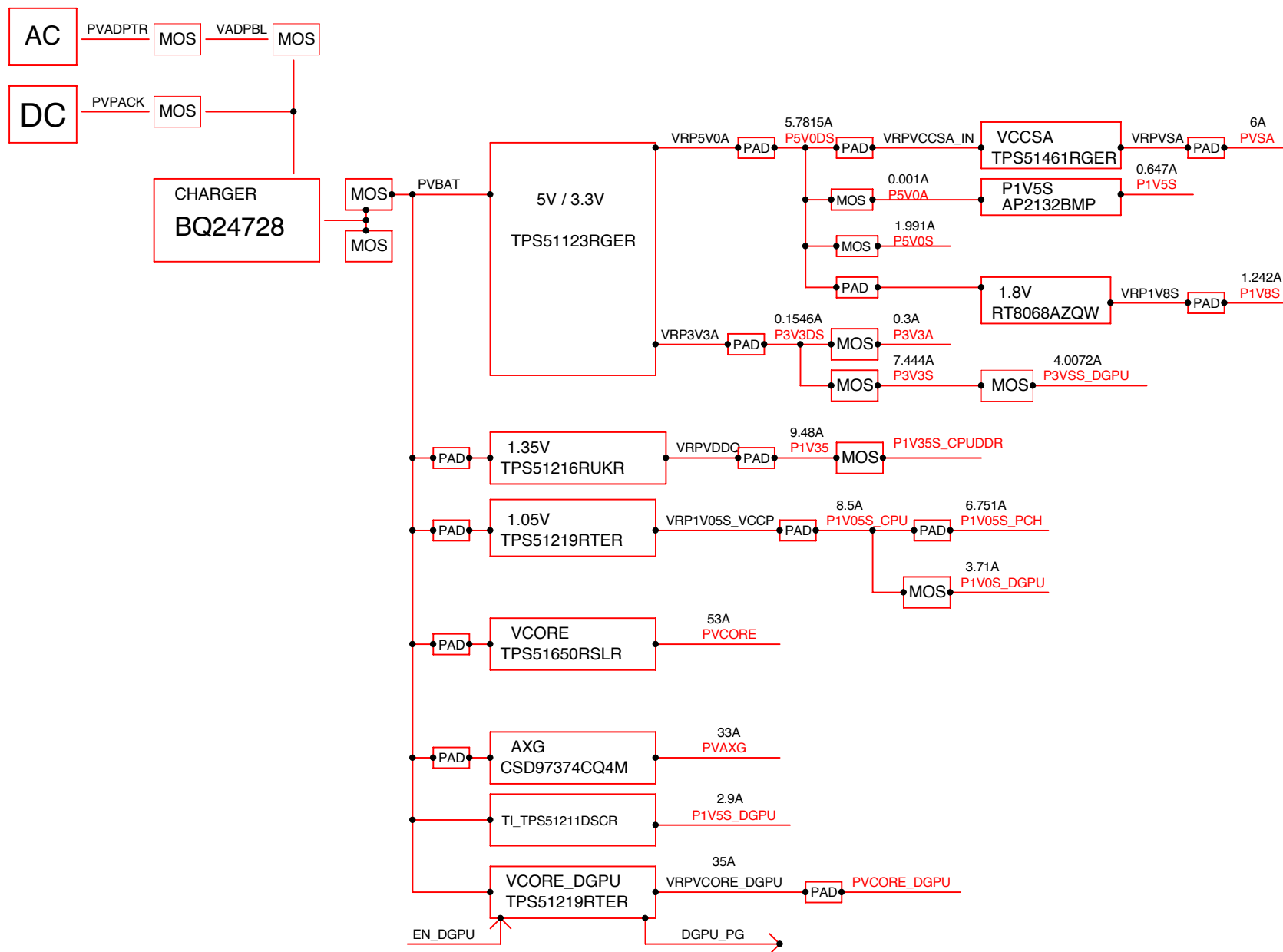
SHEET 3 of 69

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INVENTEC

TITLE
MODEL PROJECT FUNCTION
POWER PROCEDURE

SIZE A3 CODE CS DOC NUMBER 1310A2548301 REV A02

CHANGE by Wilson Lin DATE 18-DEC-2012 SHEET 4 of 69

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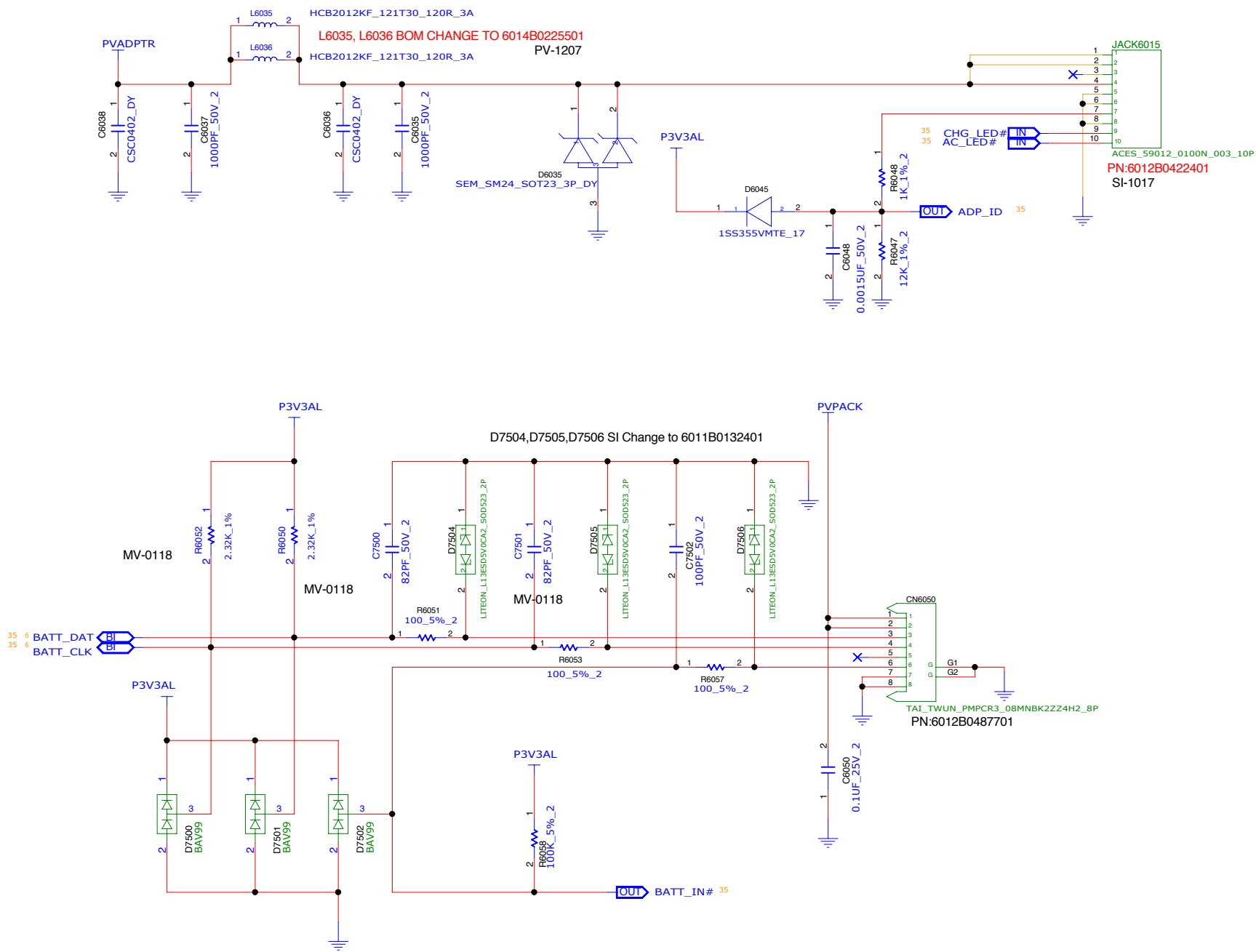
A

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INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

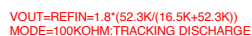
SIZE A3	CODE CS	DOC NUMBER 1310A2548301	REV A02
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CHANGE by: Wison Lin DATE: 18-DEC-2012

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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)

SHEET 0 of 6



SIZE A3	CODE CS	DOC.NUMBER 1310A2548301	F A
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CHANGE by	Wilson Lin	DATE	18-DEC-2012
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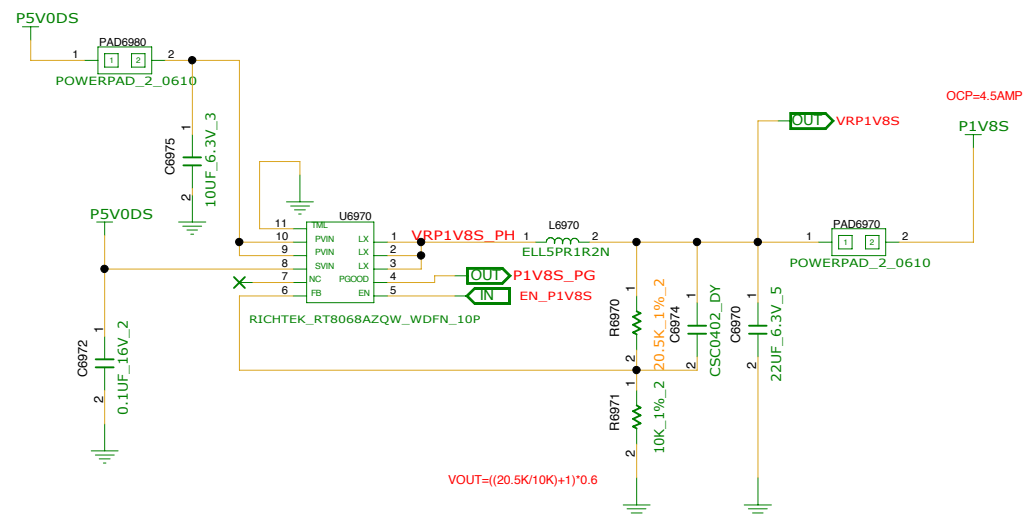
SHEET 9 of 69

D

C

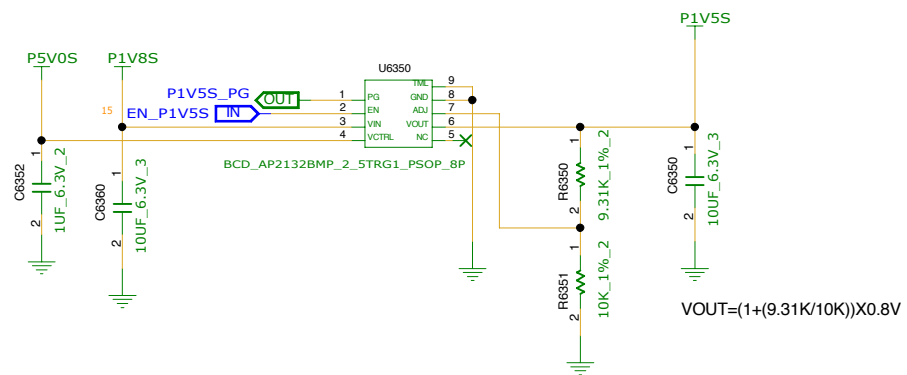
B

A

**INVENTEC**TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310A2548301 REV A02

CHANGE by Wison Lin DATE 18-DEC-2012 SHEET 10 of 69

**INVENTEC**

TITLE

MODEL, PROJECT, FUNCTION

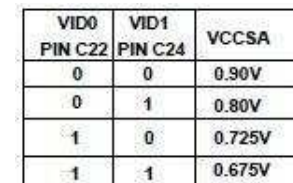
Block Diagram

SIZE
A3CODE
CSDOC NUMBER
1310A2548301REV
A02

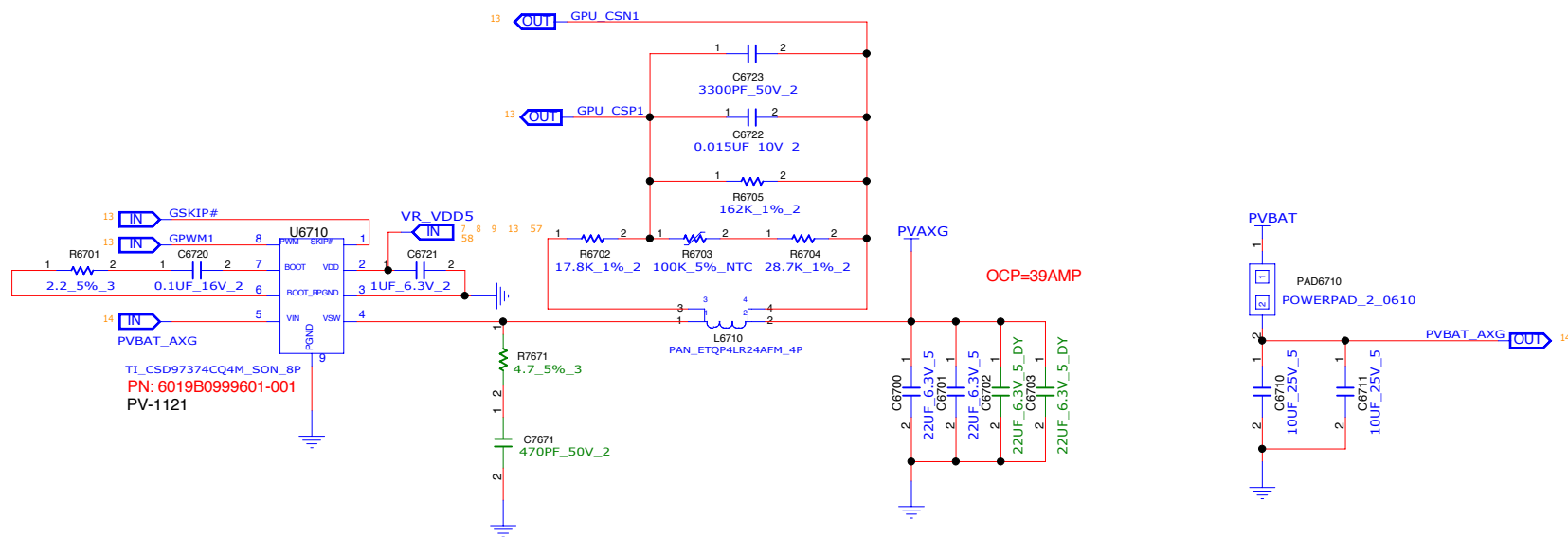
CHANGE by Wison Lin

DATE 18-DEC-2012

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SIZE A3	CODE CS	DOC.NUMBER 1310A2548301	REV A02
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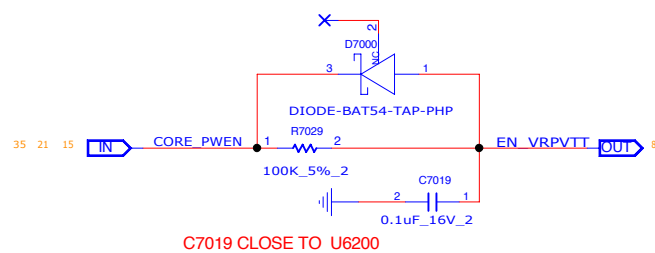
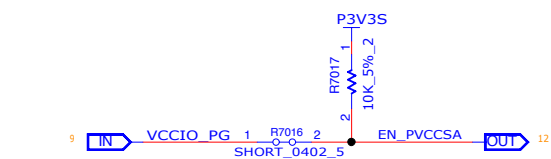
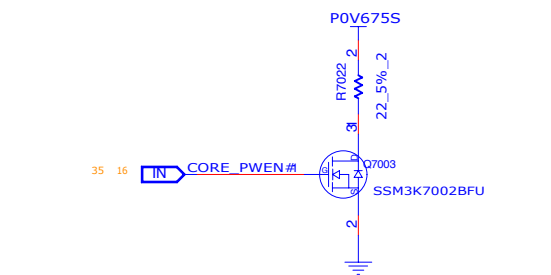
INVENTEC

TITLE
MODEL, PROJECT, FUNCTION
Block Diagram

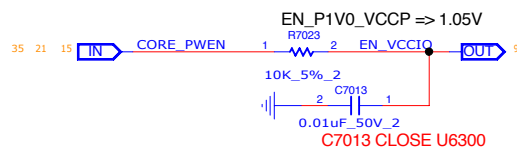
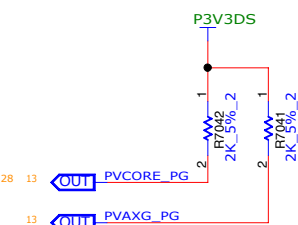
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CHANGE by Wison Lin DATE 18-DEC-2012

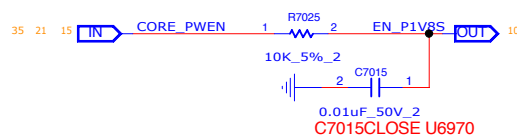
SHEET 14 of 69



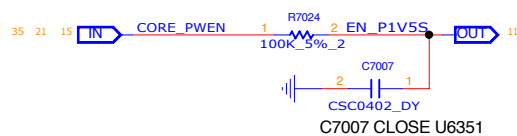
C7019 CLOSE TO U6200



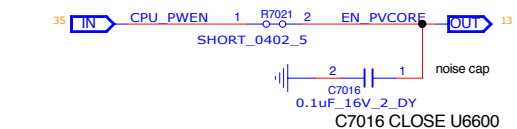
C7013 CLOSE U6300



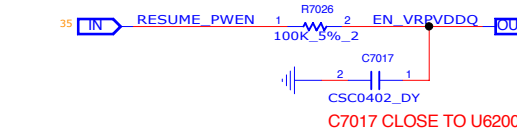
C7015CLOSE U6970



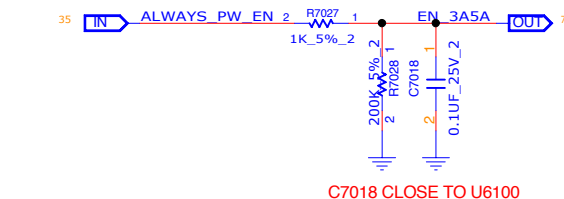
C7007 CLOSE U6351



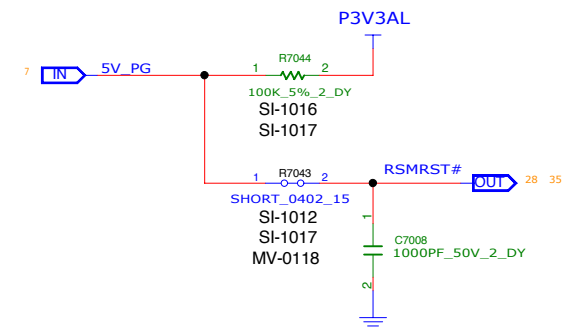
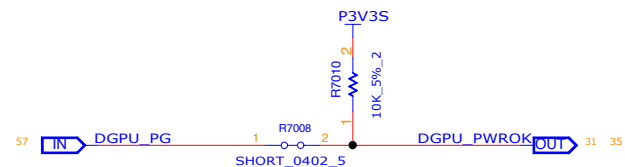
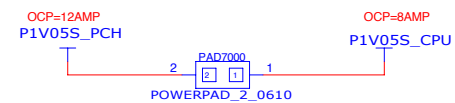
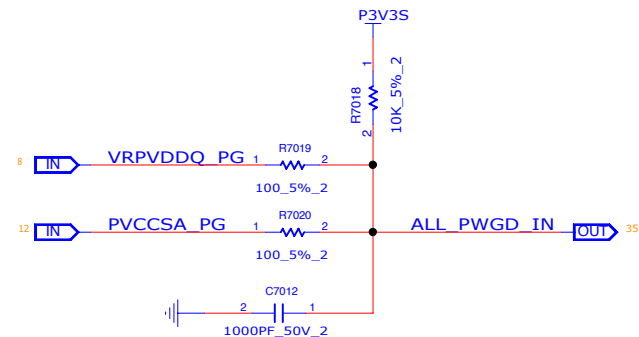
C7016 CLOSE U6600



C7017 CLOSE TO U6200



C7018 CLOSE TO U6100



INVENTEC

TITLE MODEL,PROJECT,FUNCTION

POWER TO EE PORT & EMI PART

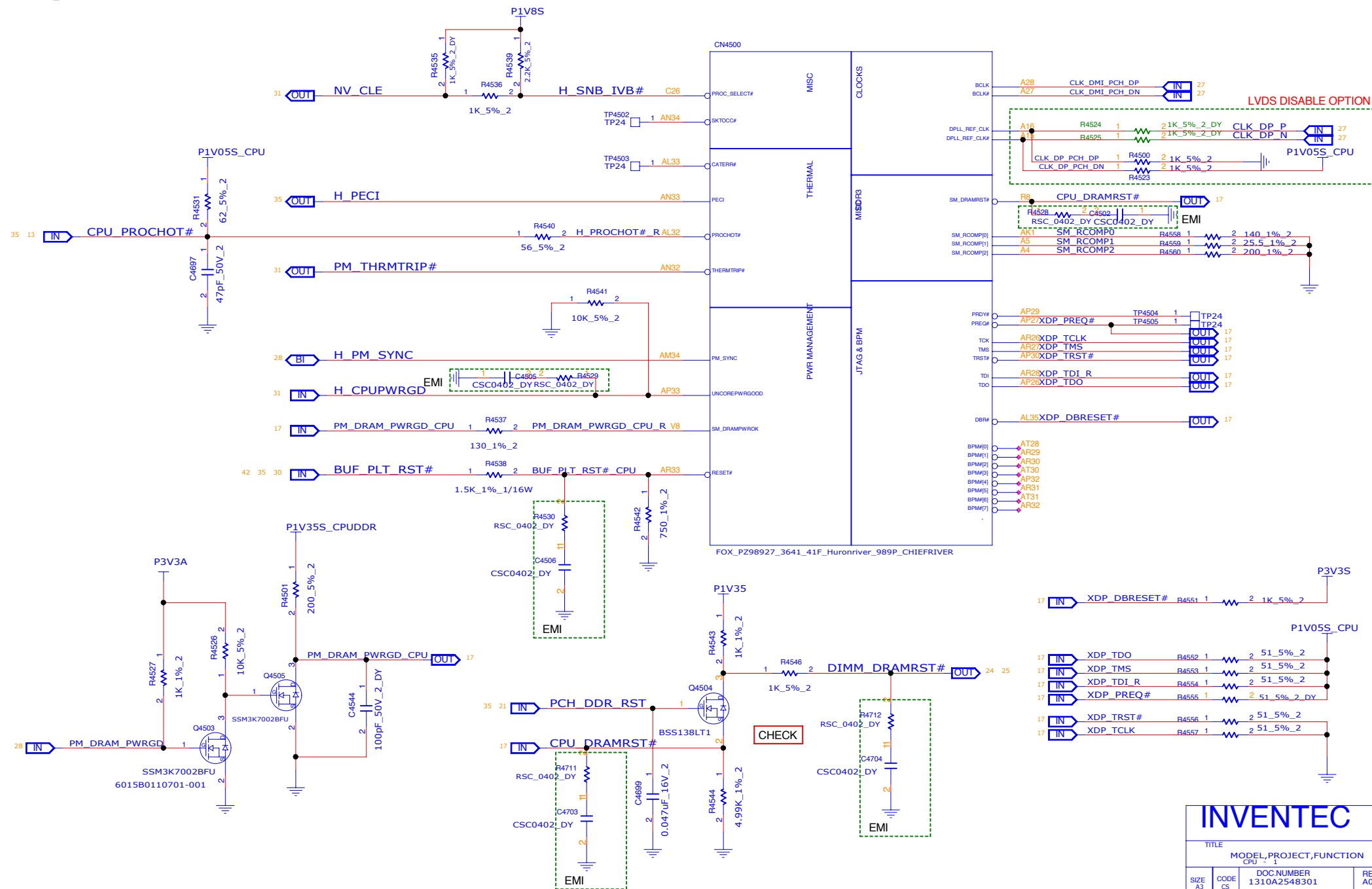
DOC NUMBER 1310A2548301

REV A02

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CHANGE by Wilson Lin DATE 18-DEC-2012

CHIEF RIVER CPU
LOCATION 4500~4699
VER.001_20120807



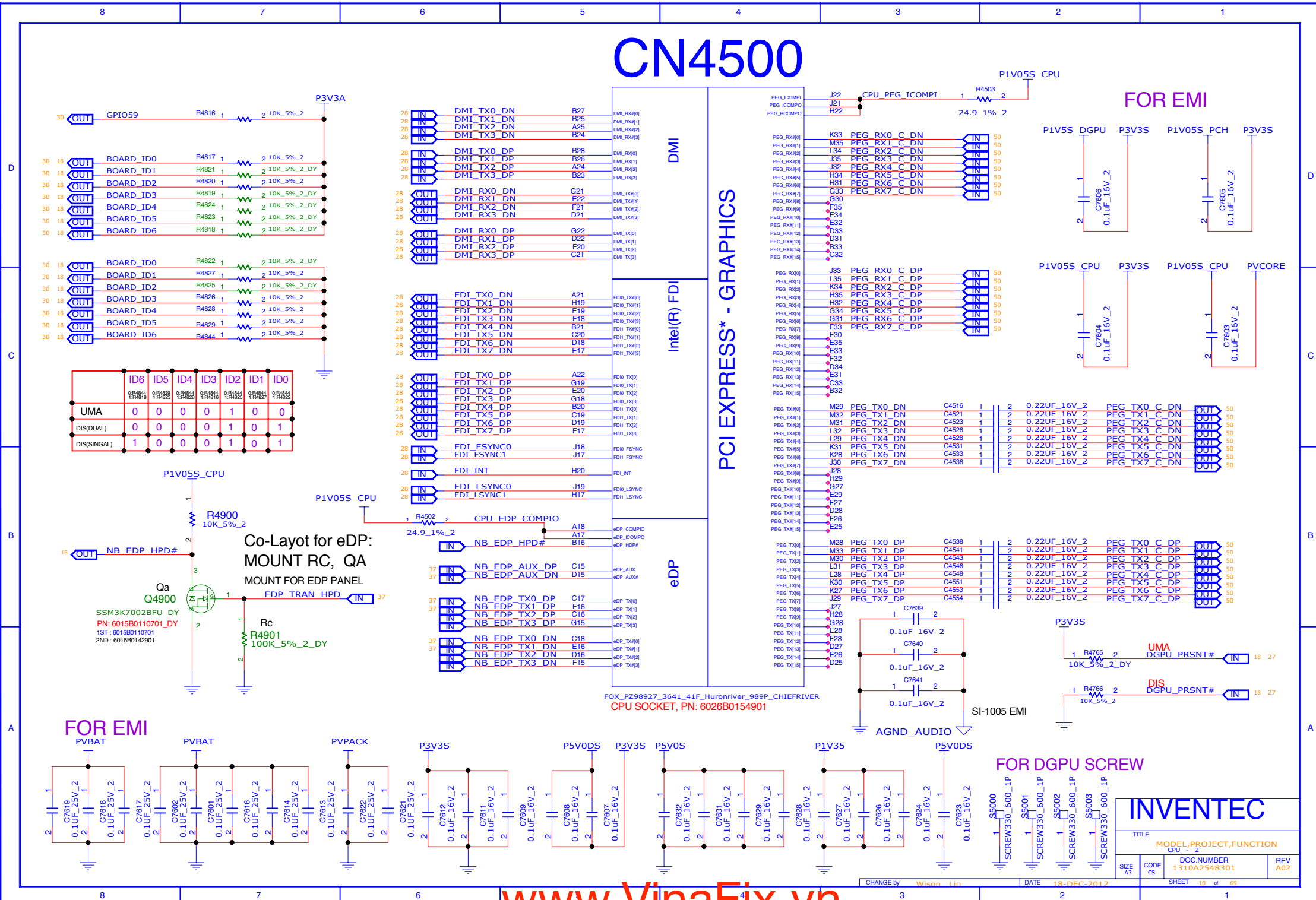
INVENTEC

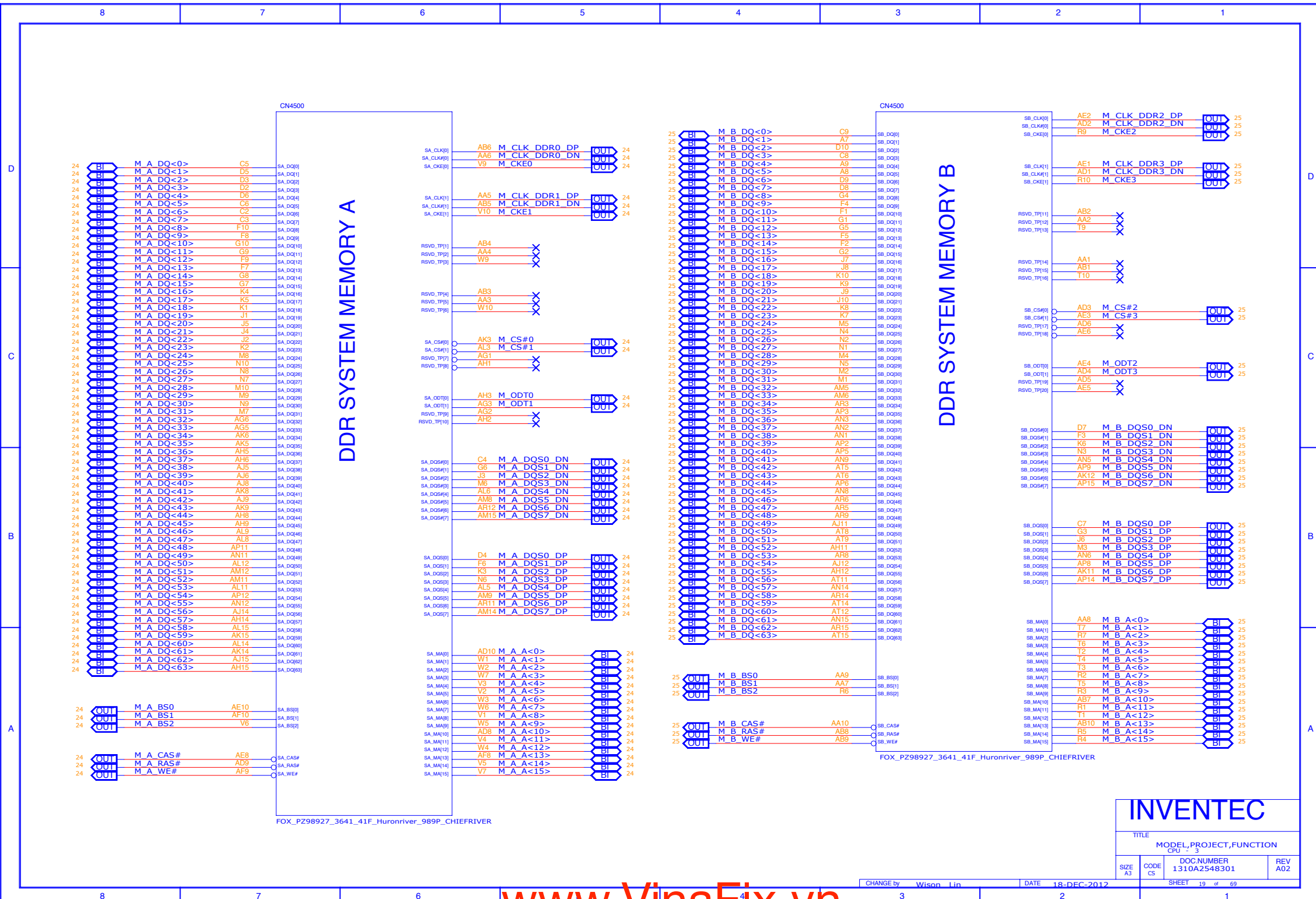
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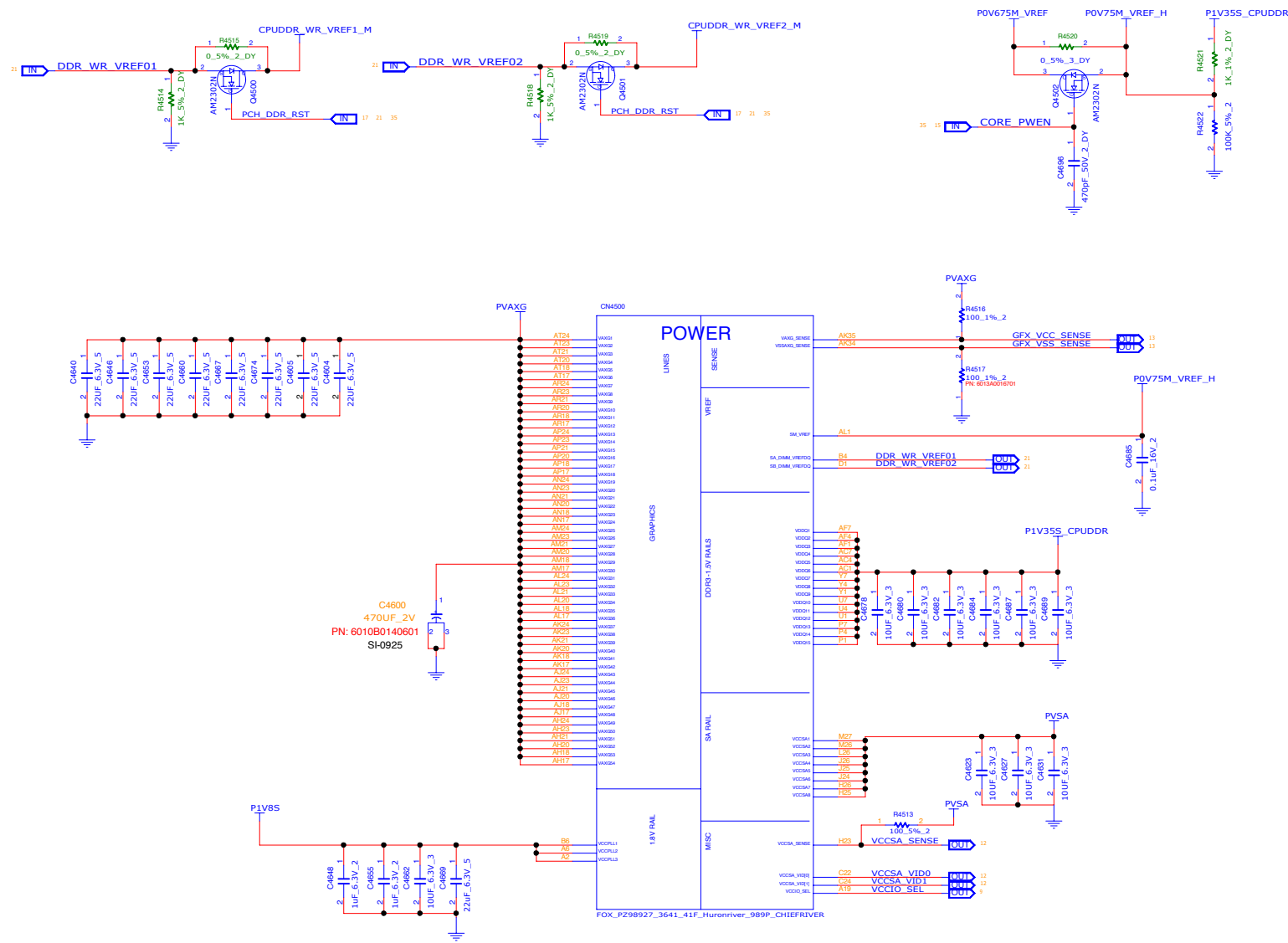
SIZE A3	CODE CS	DOC.NUMBER 1310A2548301
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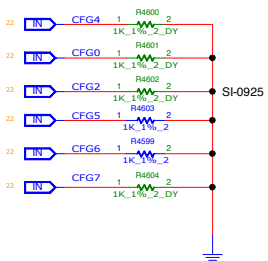
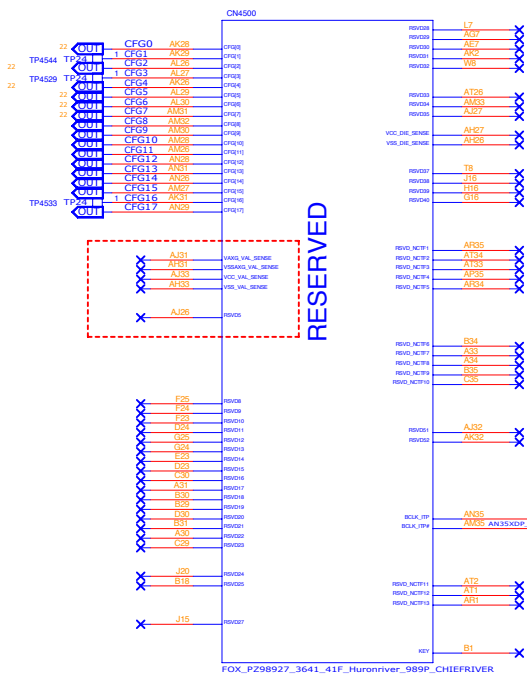
CHANGE by	Wilson Lin	DATE	18-DEC-2012
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1







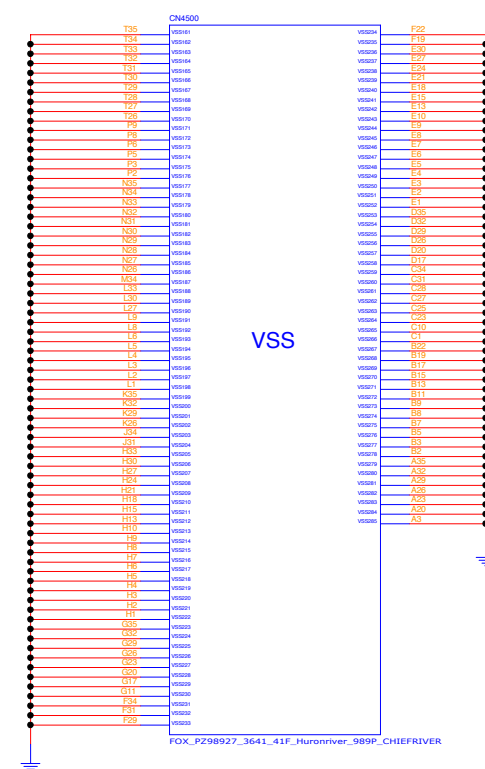
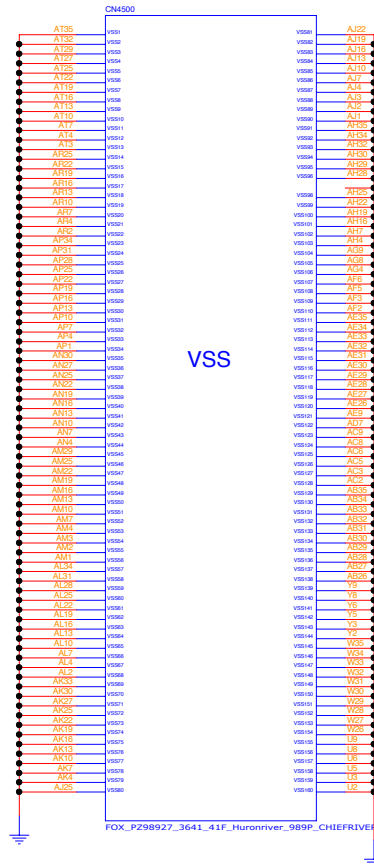


CFG[2] : PCI Express* Static x16 Lane Numbering Reversal.
1 = NORMAL MODE
0 = LANE REVERSED

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

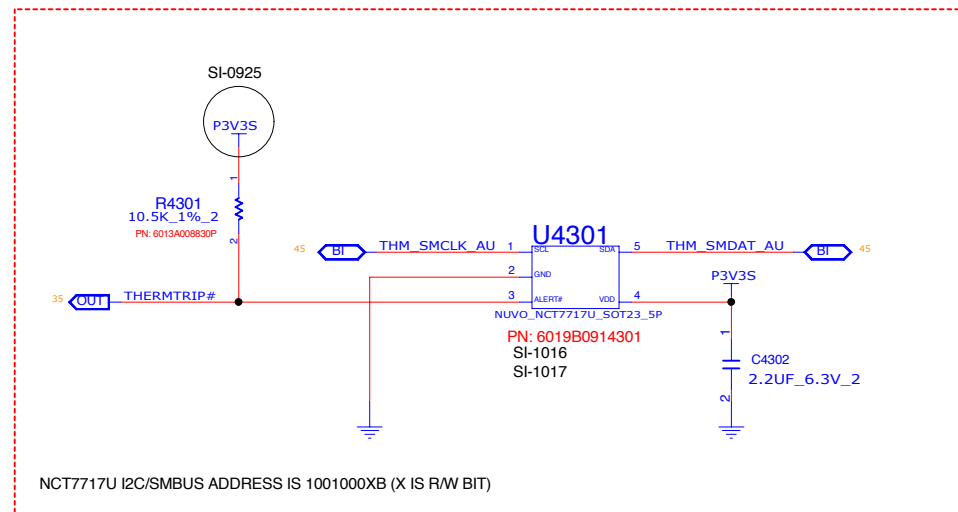
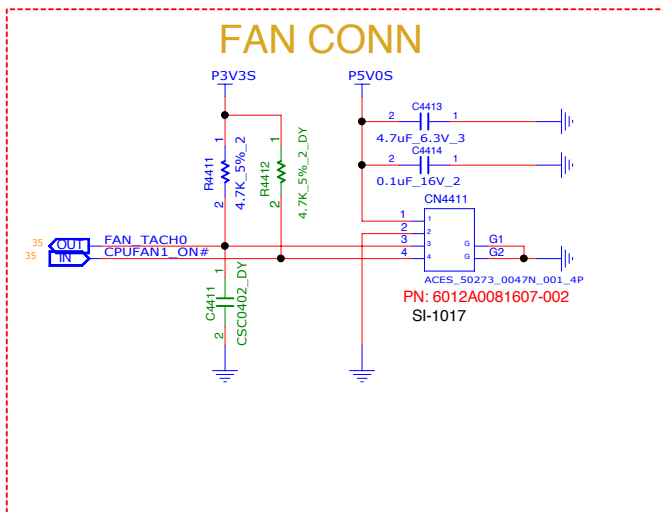
CFG[6:5] : PCI Express Bifurcation:
00 = 1 x8, 2 x4 PCI Express
01 = reserved
10 = 2 x8 PCI Express
11 = 1 x16 PCI Express

CFG[7] : PEG DEFER TRAINING
1: (Default) PEG Train immediately following RESETB deassertion
0: PEG Wait for BIOS for training



INVENTEC

FILE			
MODEL,PROJECT,FUNCTION			
CPU6			
SIZE	CODE	DOC NUMBER	REV
C	CS	1310A254E301	A02
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6.6 ALERT# point hardware power-on setting

The default value could be set after power up 100ms by different pull-up resistor of ALERT# pin:

PULL-UP RESISTOR		TEMPERATURE (°C)
ALERT	2KΩ	75
	7.5KΩ	90
	10.5KΩ	100
	14KΩ	105
	18.7KΩ	110

1. THERMAL SENSOR ON PCB TO PROTECT AGAINST POSSIBLE SYSTEM CASE DEFORMATION. SENSOR SHOULD BE ABLE TO THROTTLE SYSTEM AND ALSO CAUSE SYSTEM SHUT DOWN IF NEEDED.(FOR ALL PLATFORM)
2. SUPPORT DPTF FUNCTION. (FOR INTEL SBY)

INVENTEC			
TITLE			
MODEL PROJECT FUNCTION			
THERMAL & FAN			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548301	A02
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DDR3 (4MM) P/N : 6026B0216701

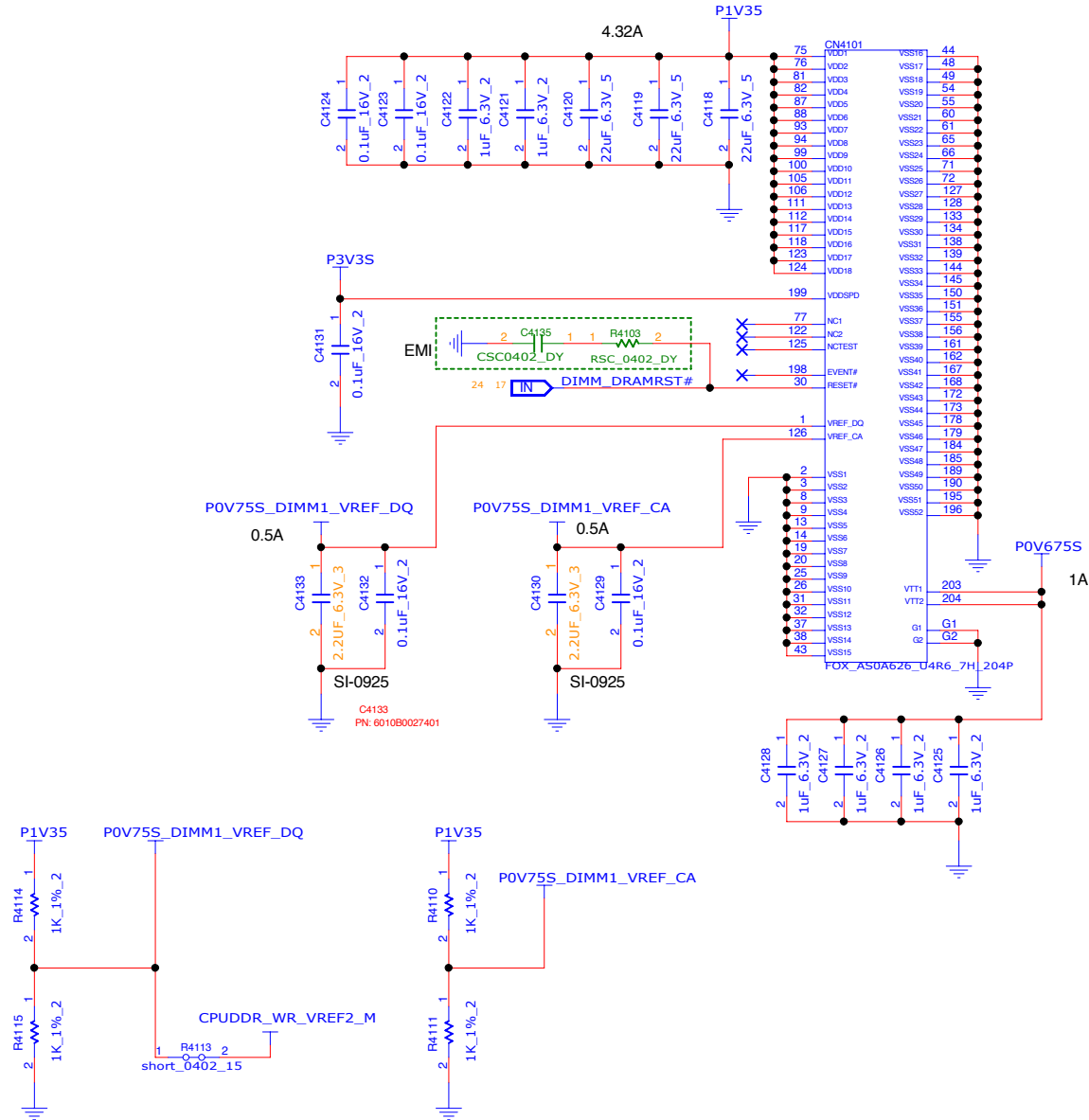
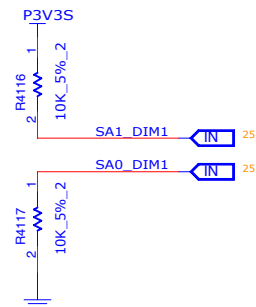
BOM CHANGE TO 6026B0221601

SI-1012

19	BI	M B A<0>	98	CN4101	DQ0	5	M B DQ<0>	19
19	BI	M B A<1>	97	A0	DQ1	7	M B DQ<1>	19
19	BI	M B A<2>	96	A2	DQ2	15	M B DQ<2>	19
19	BI	M B A<3>	95	A3	DQ3	17	M B DQ<3>	19
19	BI	M B A<4>	92	A4	DQ4	4	M B DQ<4>	19
19	BI	M B A<5>	91	A5	DQ5	6	M B DQ<5>	19
19	BI	M B A<6>	90	A6	DQ6	16	M B DQ<6>	19
19	BI	M B A<7>	86	A7	DQ7	18	M B DQ<7>	19
19	BI	M B A<8>	89	A8	DQ8	21	M B DQ<8>	19
19	BI	M B A<9>	85	A9	DQ9	23	M B DQ<9>	19
19	BI	M B A<10>	107	A10_AP	DQ10	33	M B DQ<10>	19
19	BI	M B A<11>	84	A11	DQ11	35	M B DQ<11>	19
19	BI	M B A<12>	83	A12	DQ12	22	M B DQ<12>	19
19	BI	M B A<13>	119	A13	DQ13	24	M B DQ<13>	19
19	BI	M B A<14>	80	A14	DQ14	34	M B DQ<14>	19
19	BI	M B A<15>	78	A15	DQ15	36	M B DQ<15>	19
19	IN	M B BS0	109	BA0	DQ16	39	M B DQ<16>	19
19	IN	M B BS1	108	BA1	DQ17	41	M B DQ<17>	19
19	IN	M B BS2	79	BA2	DQ18	51	M B DQ<18>	19
19	IN	M CS#2	114	30P	DQ19	53	M B DQ<19>	19
19	IN	M CS#3	121	30P	DQ20	42	M B DQ<20>	19
19	IN	M CLK DDR2 DP	101	CK0	DQ22	50	M B DQ<22>	19
19	IN	M CLK DDR2 DN	103	CK0#	DQ23	52	M B DQ<23>	19
19	IN	M CLK DDR3 DP	102	CK1	DQ24	57	M B DQ<24>	19
19	IN	M CLK DDR3 DN	104	CK1#	DQ25	59	M B DQ<25>	19
19	IN	M CKE2	73	CKE2	DQ26	67	M B DQ<26>	19
19	IN	M CKE3	74	CKE3	DQ27	69	M B DQ<27>	19
19	IN	M B CAS#	115	CAS#	DQ28	56	M B DQ<28>	19
19	IN	M B RAS#	110	RAS#	DQ29	58	M B DQ<29>	19
19	IN	M B WE#	113	WE#	DQ30	68	M B DQ<30>	19
25	IN	SA0_DIM1	197	SA0	DQ31	70	M B DQ<31>	19
25	IN	PCH_3S_SMCLK	202	SA1	DQ32	129	M B DQ<32>	19
27	IN	PCH_3S_SMDAT	200	SCL	DQ33	131	M B DQ<33>	19
27	IN			SDA	DQ34	141	M B DQ<34>	19
19	IN	M ODT2	116	ODT0	DQ35	143	M B DQ<35>	19
19	IN	M ODT3	120	ODT1	DQ36	130	M B DQ<36>	19
19					DQ37	132	M B DQ<37>	19
19					DQ38	140	M B DQ<38>	19
19					DQ39	142	M B DQ<39>	19
19					DQ40	147	M B DQ<40>	19
19					DQ41	149	M B DQ<41>	19
19					DQ42	157	M B DQ<42>	19
19					DQ43	159	M B DQ<43>	19
19					DQ44	146	M B DQ<44>	19
19					DQ45	148	M B DQ<45>	19
19					DQ46	158	M B DQ<46>	19
19					DQ47	160	M B DQ<47>	19
19	IN	M B DQS0 DP	12	DQS0	DQ48	163	M B DQ<48>	19
19	IN	M B DQS1 DP	29	DQS1	DQ49	165	M B DQ<49>	19
19	IN	M B DQS2 DP	47	DQS2	DQ50	175	M B DQ<50>	19
19	IN	M B DQS3 DP	64	DQS3	DQ51	177	M B DQ<51>	19
19	IN	M B DQS4 DP	137	DQS4	DQ52	164	M B DQ<52>	19
19	IN	M B DQS5 DP	184	DQS5	DQ53	166	M B DQ<53>	19
19	IN	M B DQS6 DP	171	DQS6	DQ54	174	M B DQ<54>	19
19	IN	M B DQS7 DP	188	DQS7	DQ55	176	M B DQ<55>	19
19	IN	M B DQS0 DN	10	DQS#0	DQ56	181	M B DQ<56>	19
19	IN	M B DQS1 DN	27	DQS#1	DQ57	183	M B DQ<57>	19
19	IN	M B DQS2 DN	45	DQS#2	DQ58	191	M B DQ<58>	19
19	IN	M B DQS3 DN	62	DQS#3	DQ59	193	M B DQ<59>	19
19	IN	M B DQS4 DN	135	DQS#4	DQ60	180	M B DQ<60>	19
19	IN	M B DQS5 DN	152	DQS#5	DQ61	182	M B DQ<61>	19
19	IN	M B DQS6 DN	169	DQS#6	DQ62	192	M B DQ<62>	19
19	IN	M B DQS7 DN	186	DQS#7	DQ63	194	M B DQ<63>	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	DOC NUMBER	REV
A3	CS	1310A2548301	A02

CHANGE by Wison Lin DATE 18-DEC-2012

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D

C

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C

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A

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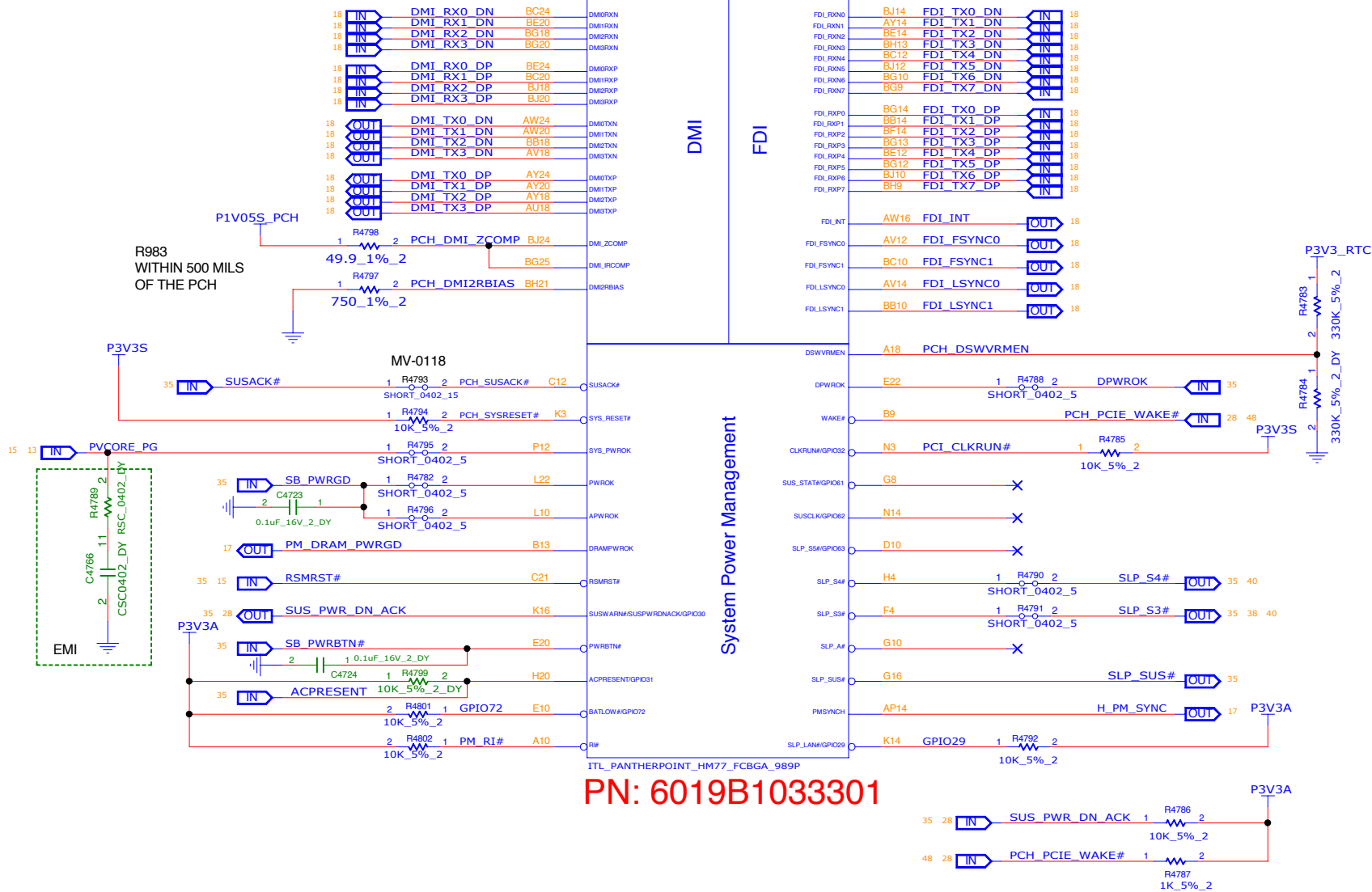
4

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U4700



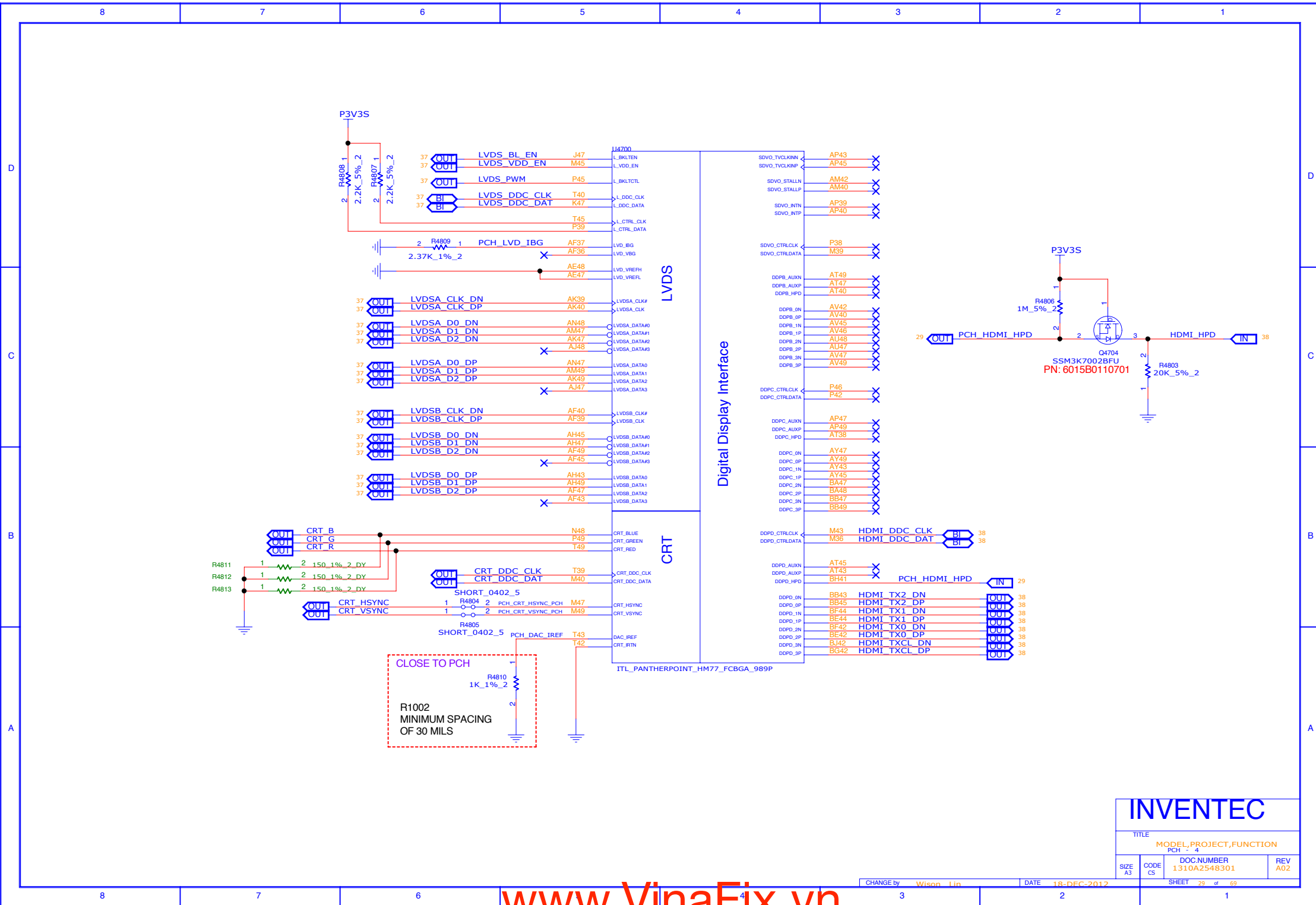
PN: 6019B1033301

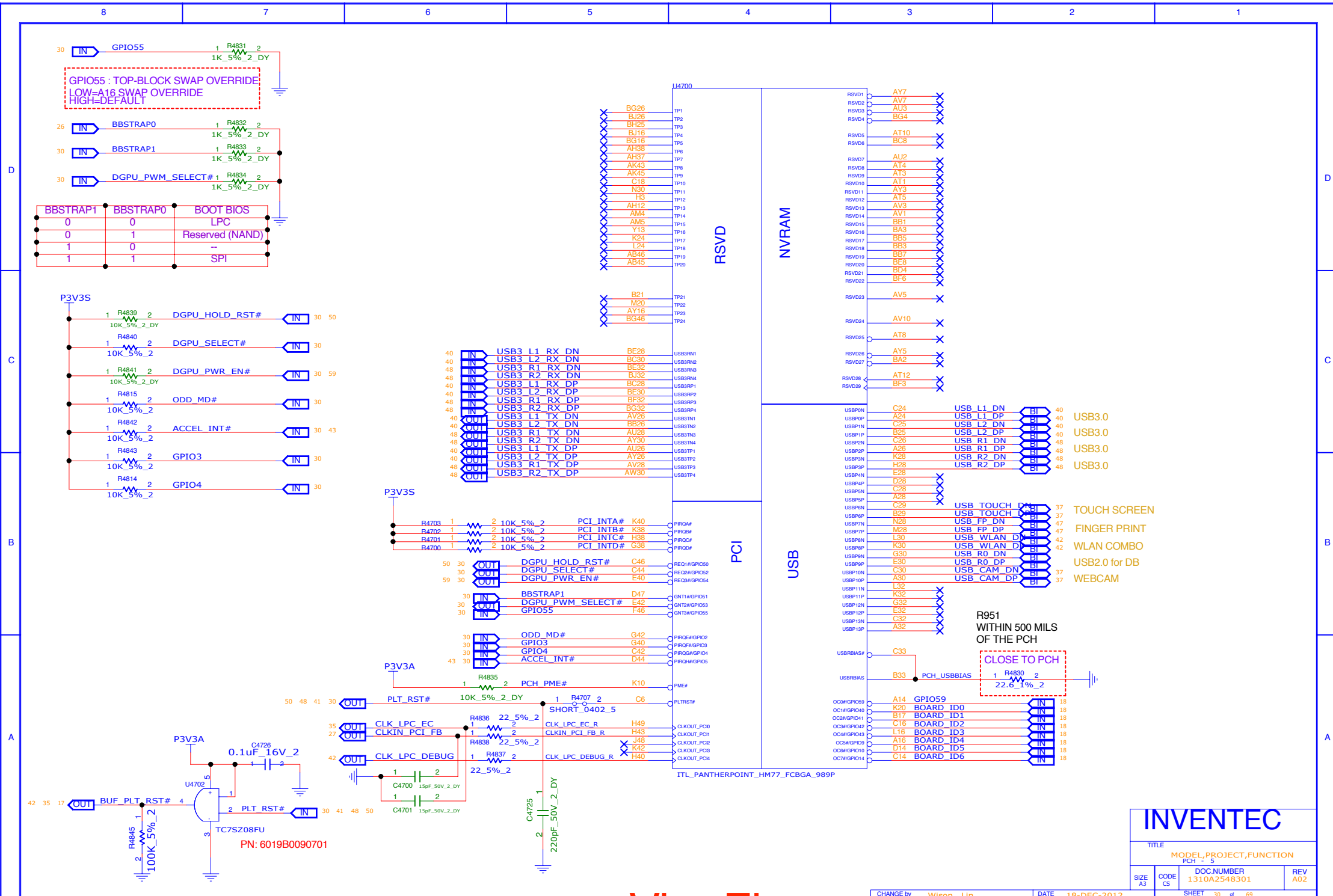
INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
PCH - 3SIZE CODE DOC NUMBER REV
A3 CS 1310A2548301 A02

CHANGE by Wilson Lin DATE 18-DEC-2012

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CHIEF	31	67	69
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D

C

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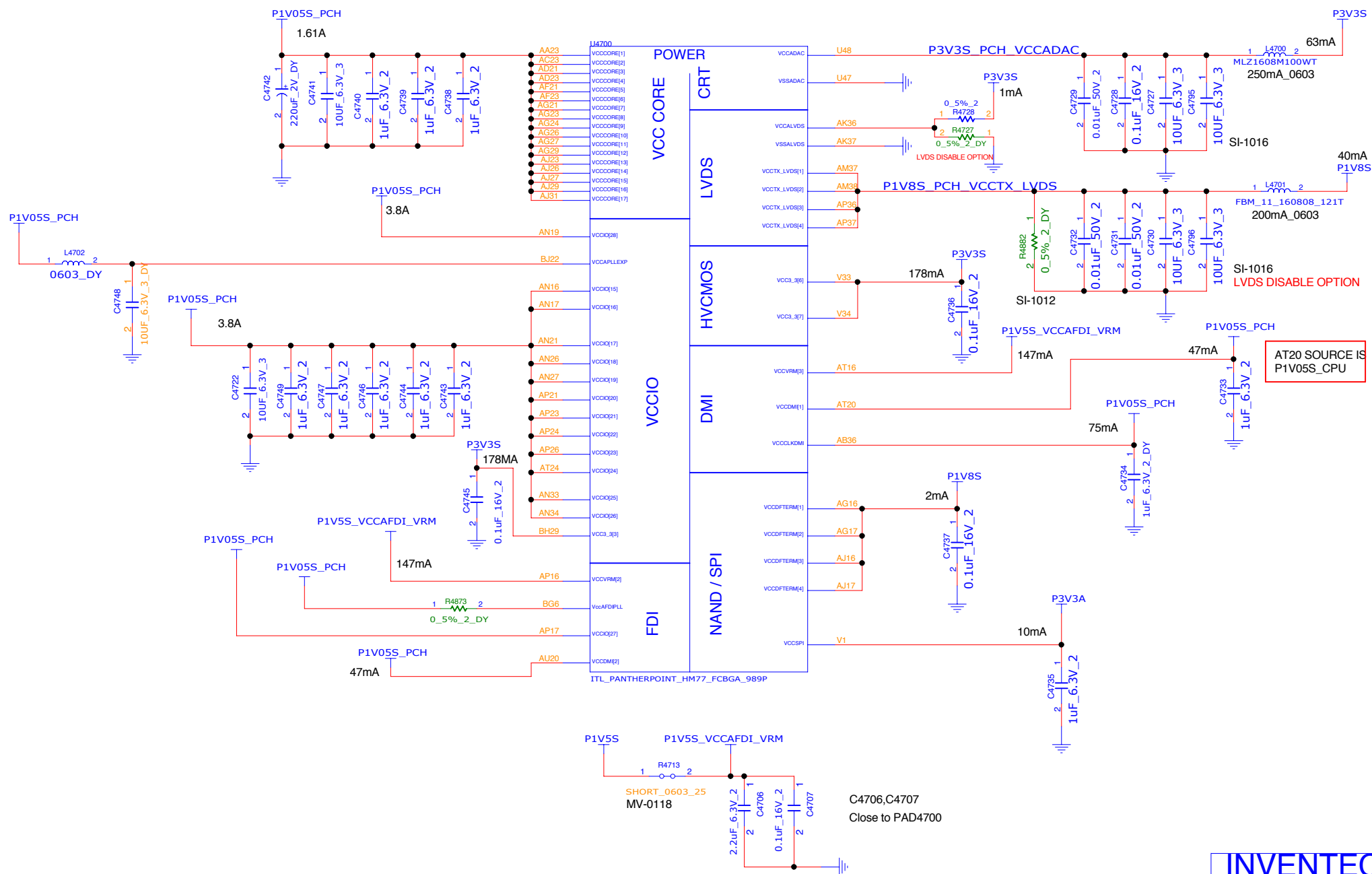
A

D

C

B

A



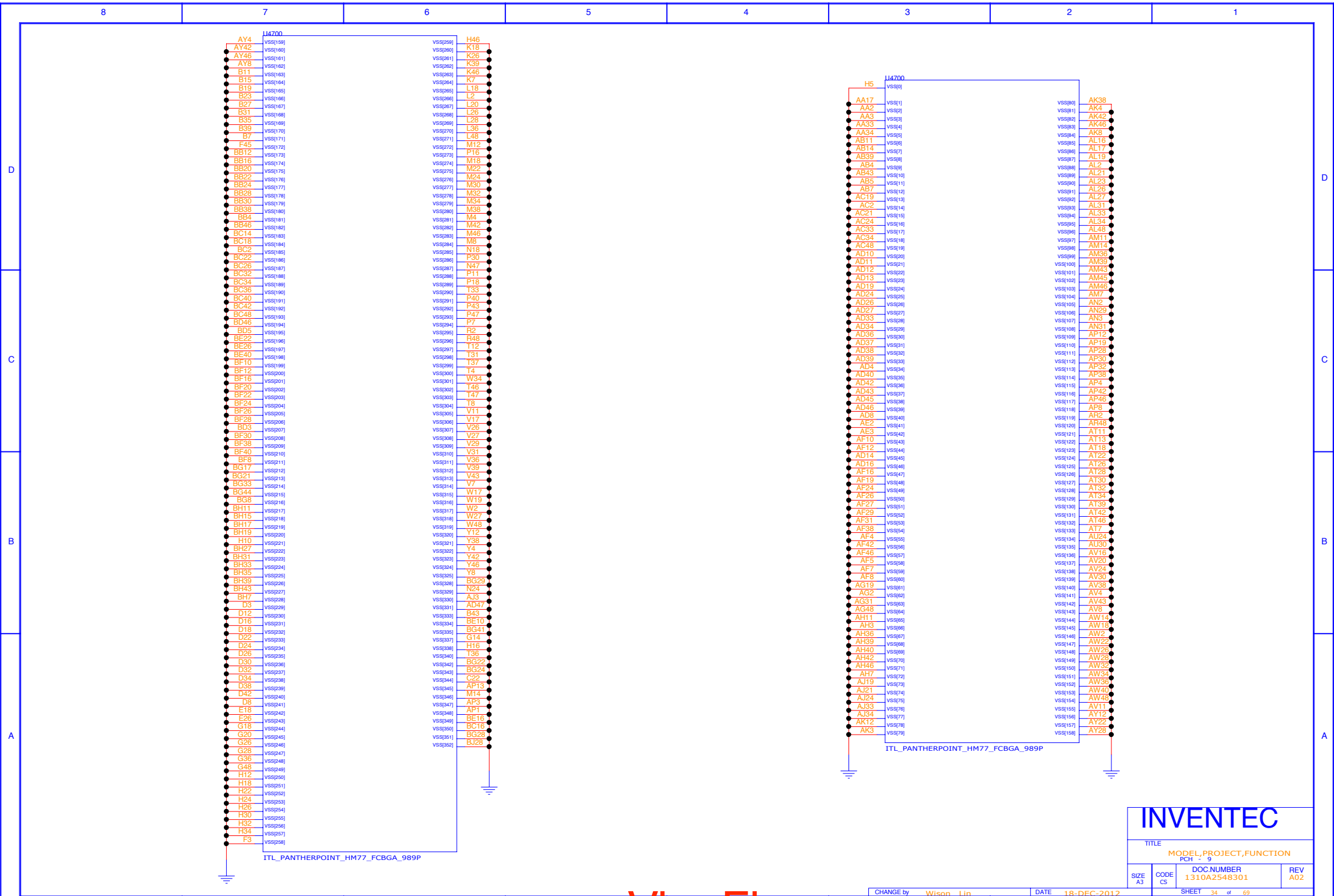
INVENTEC

TITLE			
MODEL, PROJECT, FUNCTION			
PCH - 7			
SIZE A3	CODE CS	DOC NUMBER 1310A2548301	REV A02

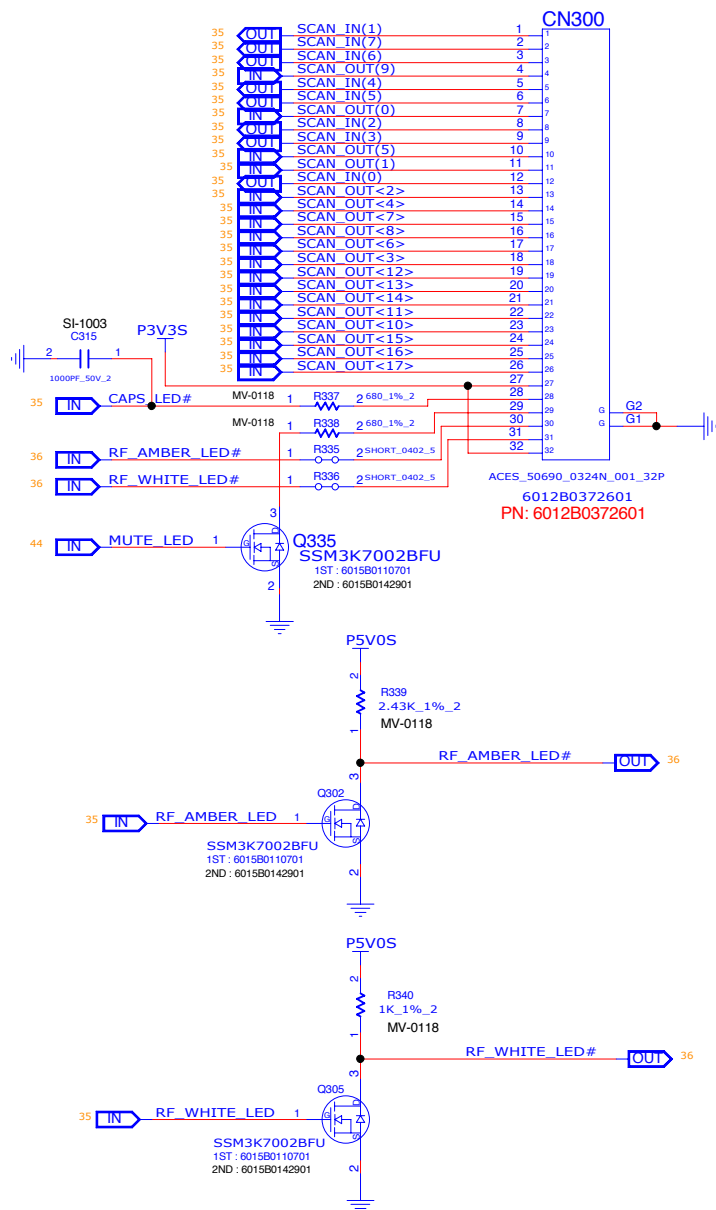
CHANGE by Wison Lin DATE 18-DEC-2012

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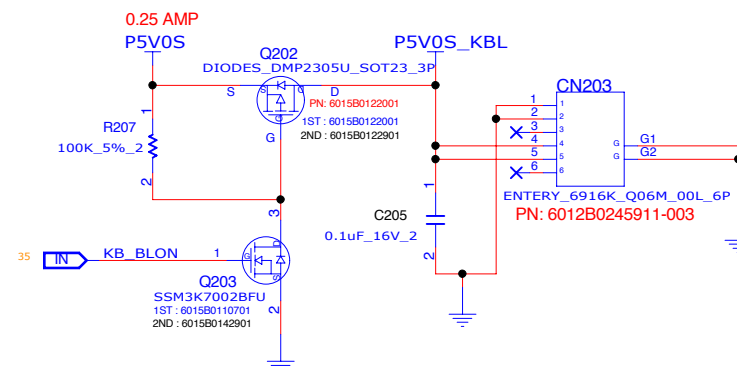


KEYBOARD CONN(32 PIN)



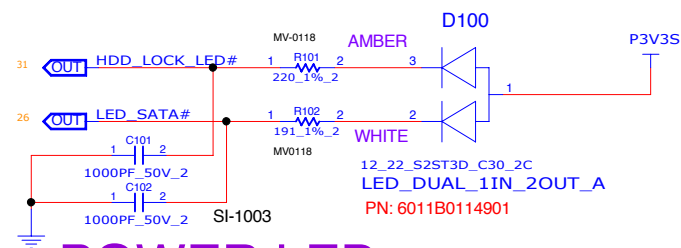
CONNECTOR KEY BOARD 200~299

KEYBOARD BACKLIGHT

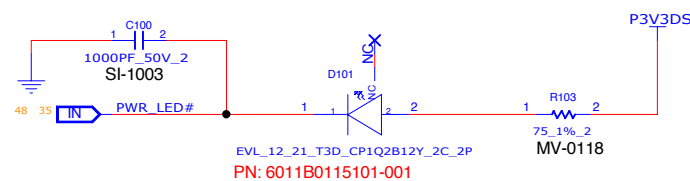


LED 100~199

HDD LED



POWER LED


INVENTEC

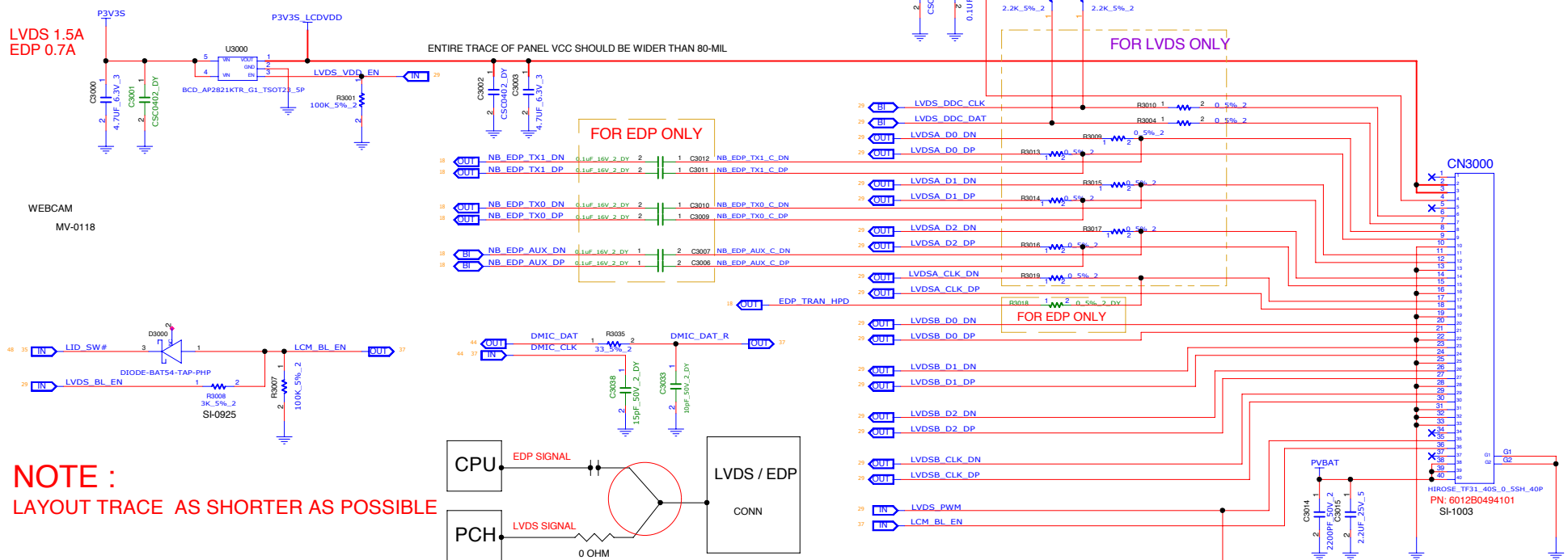
TITLE			
MODEL PROJECT,FUNCTION			
KB_CONN & LED			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548301	A02

CHANGE by Wison Lin DATE 18-DEC-2012

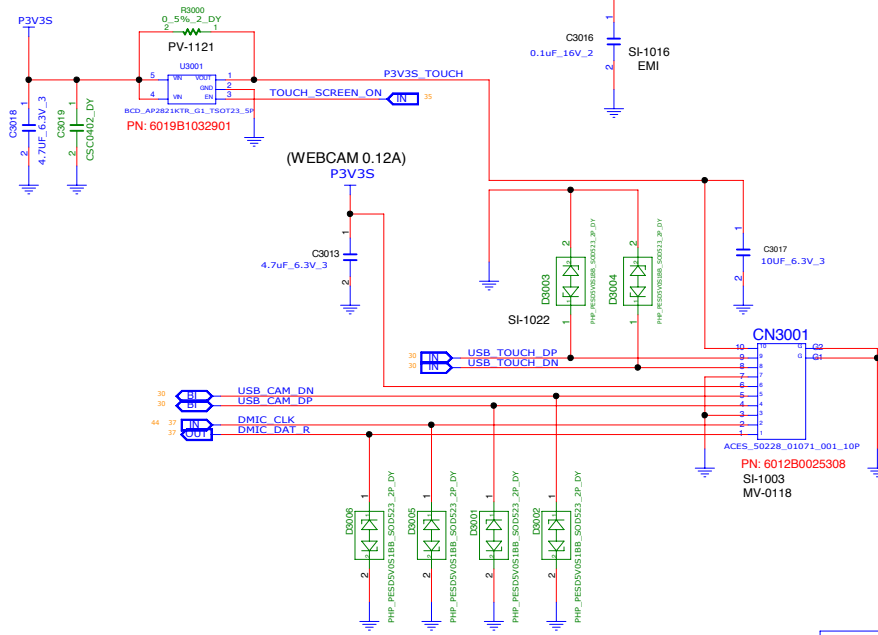
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40 PIN LCM CONN FOR DREAMWORK CR

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	○	×



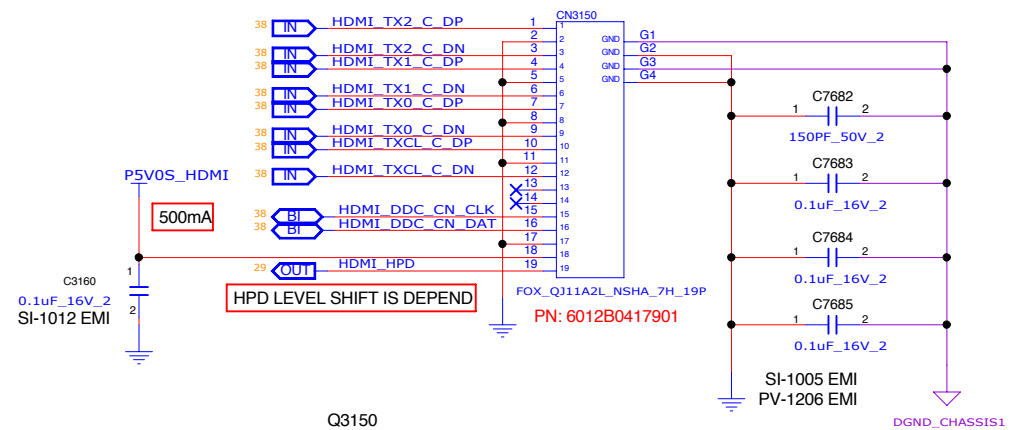
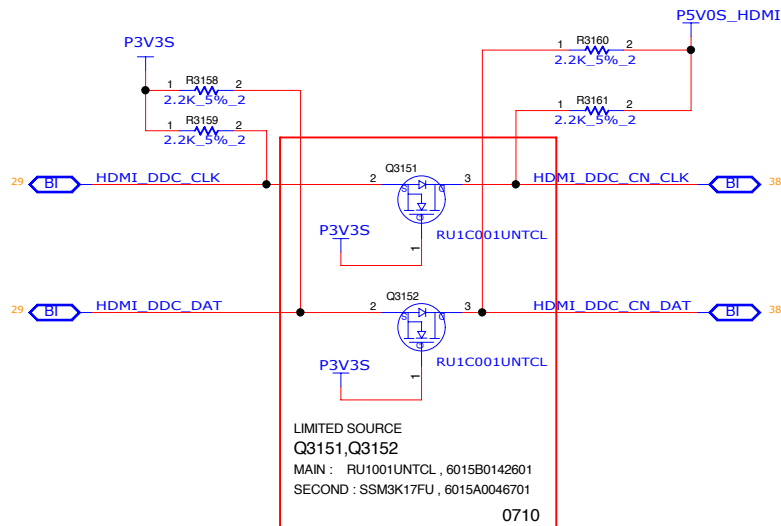
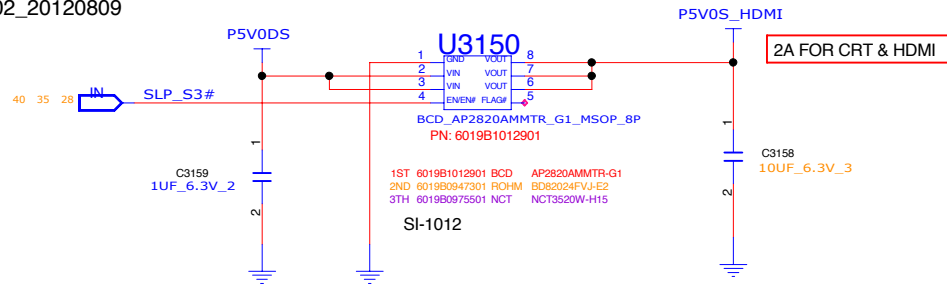
WEBCAM+TOUCH SCREEN

INVENTEC			
MODEL/PROJECT/FUNCTION			
LVDS			
SIZE	CODE	DOC NUMBER	REV
C	IS	1310A2548301	A02
SHEET		37	68

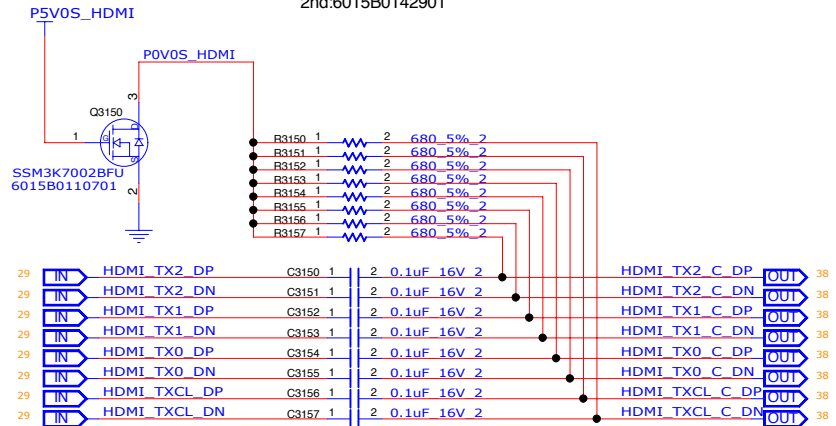
www.VinaFix.vn

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			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548301	A02

CHANGE by Wison Lin DATE 18-DEC-2012

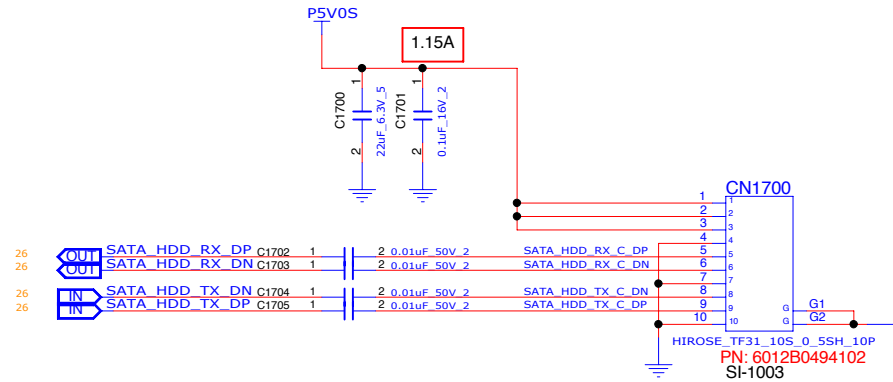
SHEET 38 of 69

SATA HDD

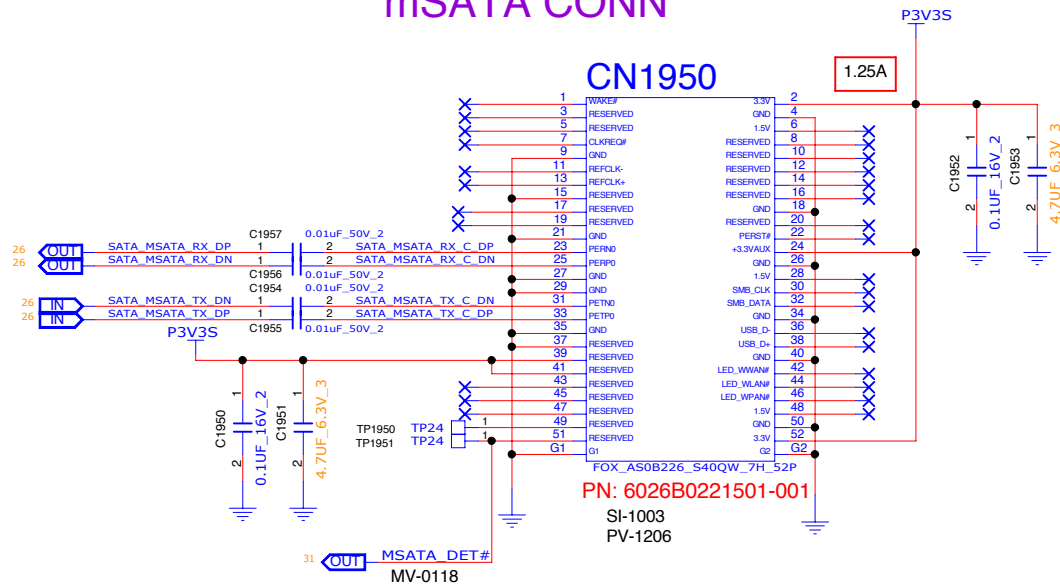
Location 1700 ~ 1749

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 A3 CODE CS DOC NUMBER 1310A2548301 REV A02

CHANGE by Wilson Lin DATE 18-DEC-2012

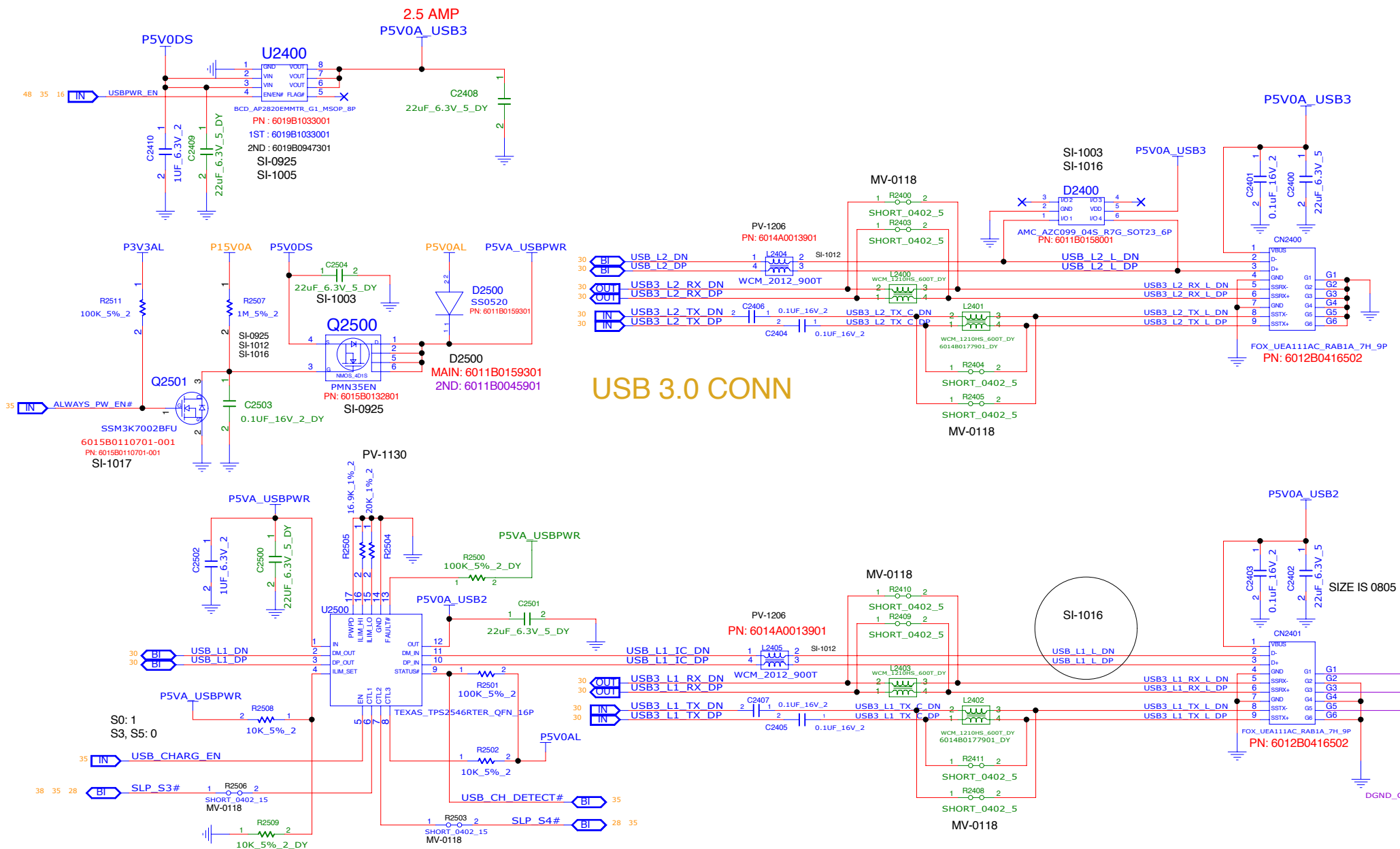
SHEET 39 of 69

D

C

B

A



TPS2543
PN--> 6019B0939201
(FOR DB BUILD)

TPS2543 IMPLEMENT ON SB DIS 1310A2548105 AND CR DIS 1310A2548302 BOTH.
TPS 2543 WILL BUILD ON ELMO SB DIS SKU2 AND CR DIS SKU5 WHEN PV BUILD.

USB CHARGING TPS2546

PN: 6019B1035901
SI-0925

INVENTEC

TITLE			
MODEL PROJECT FUNCTION			
USB 3.0 CONN & N/B TO D/B CONN			
SIZE A3	CODE CS	DOC NUMBER 1310A2548301	REV A02

CHANGE by Wison Lin DATE 18-DEC-2012

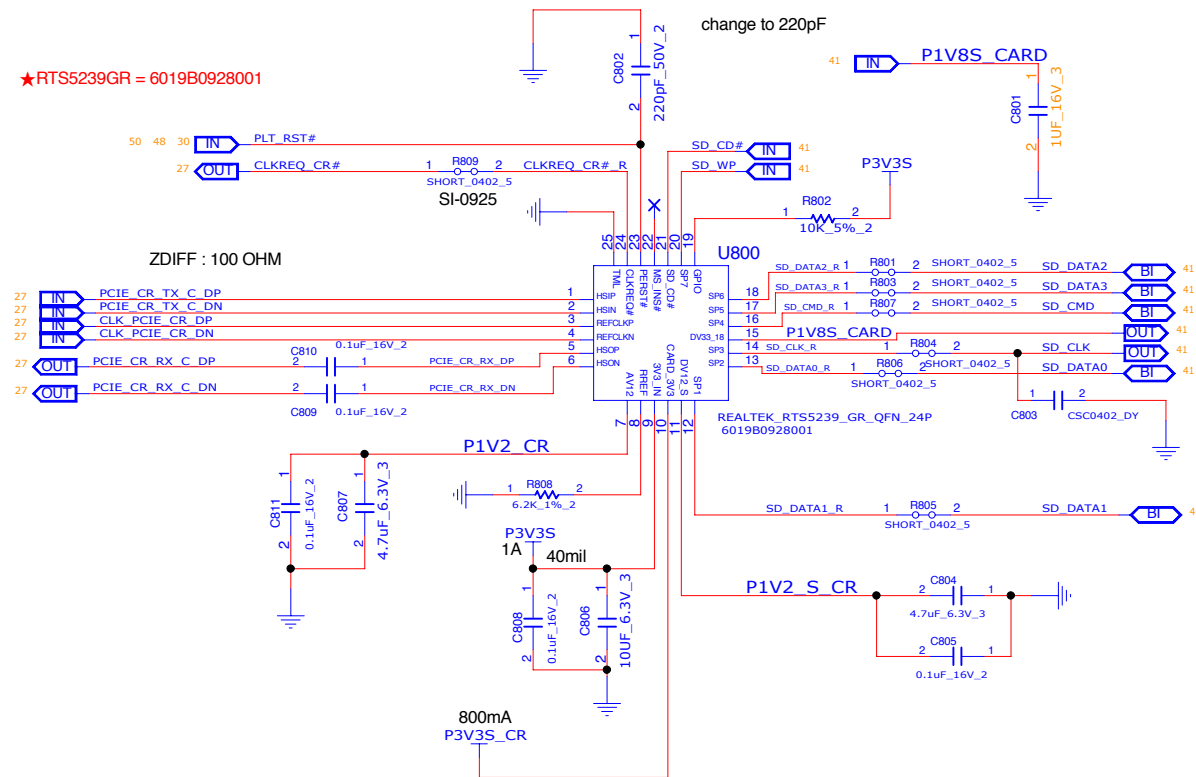
SHEET 40 of 69

CARD READER RTS5239

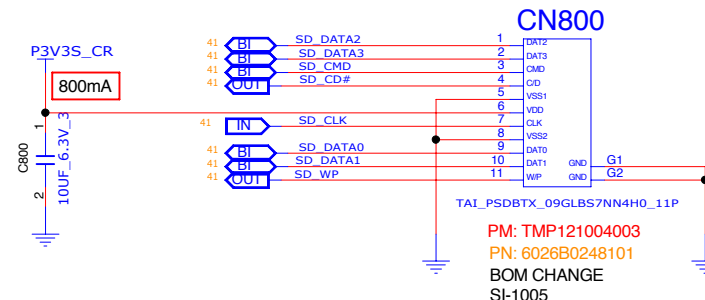
LOCATION: 800~899

VER_04 . 20120823

★RTS5239GR = 6019B0928001



CARDREADER CONN



INVENTEC

TITLE
MODEL, PROJECT, FUNCTION
CARD READER

SIZE A3 CODE CS DOC NUMBER 1310A2548301 REV A02

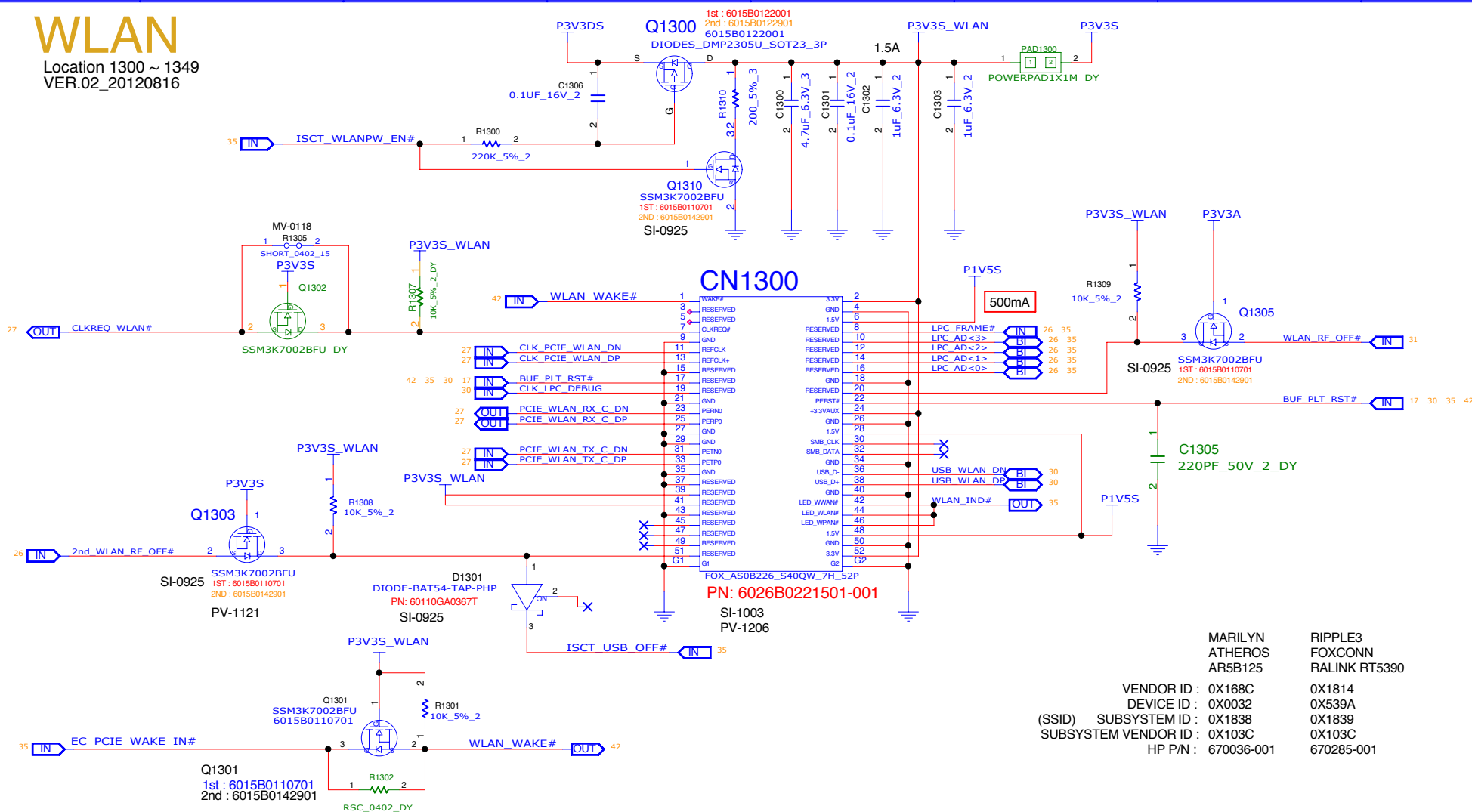
SHEET 41 of 69

CHANGE by Wilson Lin DATE 18-DEC-2012

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WLAN

Location 1300 ~ 1349
VER.02_20120816



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

WLAN & BT

SIZE A3 CODE CS DOC NUMBER 1310A2548301 REV A02

SHEET 42 of 69

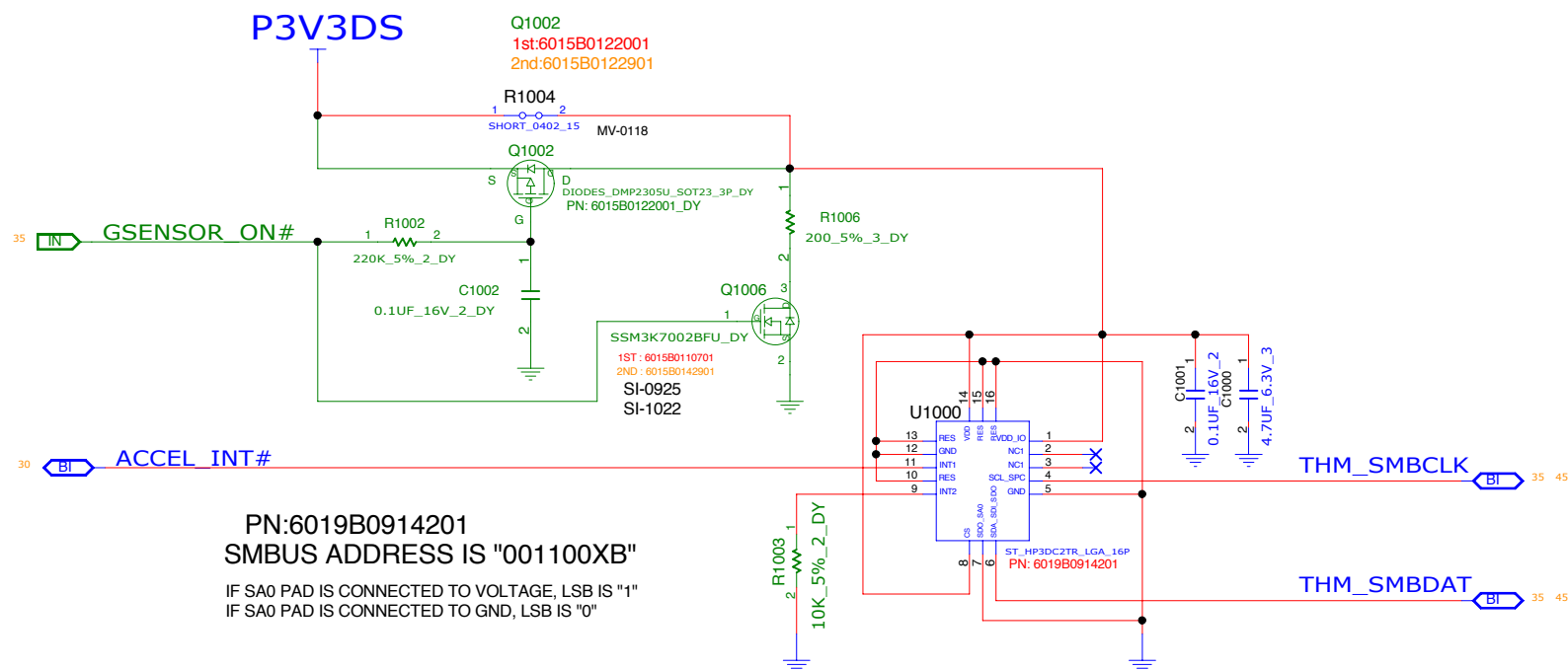
CHANGE by Wison Lin DATE 18-DEC-2012

G-Sensor

Loctaion 1000 ~ 1099

VER.02_20120925

HARDDRIVE PROTECTION



INVENTEC

TITLE
MODEL, PROJECT, FUNCTION

SIZE A3 CODE CS DOC NUMBER 1310A2548301 REV A02

CHANGE by Wison Lin DATE 18-DEC-2012

SHEET 43 of 69

AUDIO-1

CODEC

LOCATION: 500-549
VER.10_20121015

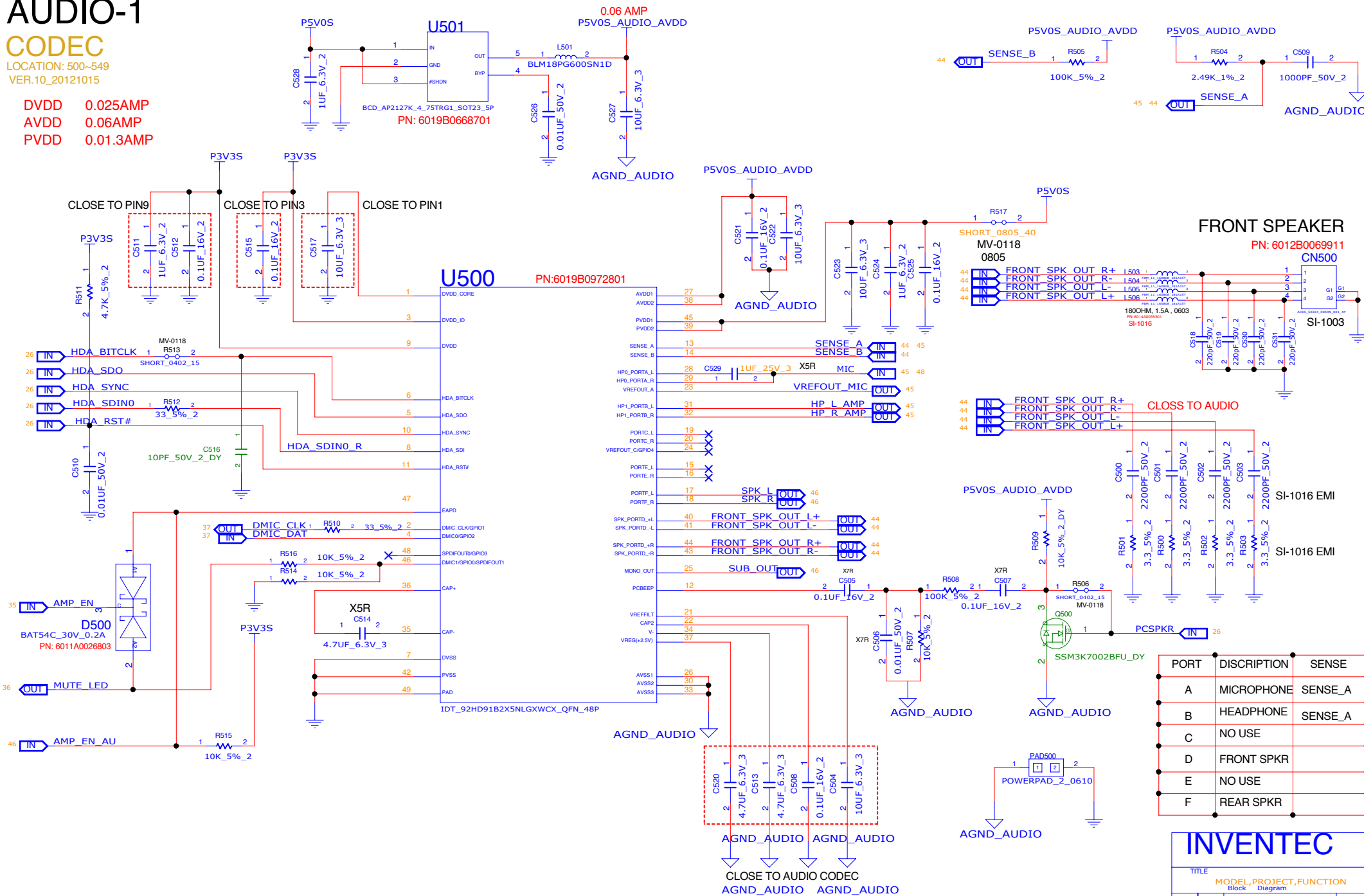
DVDD 0.025AMP
AVDD 0.06AMP
PVDD 0.01.3AMP

D

C

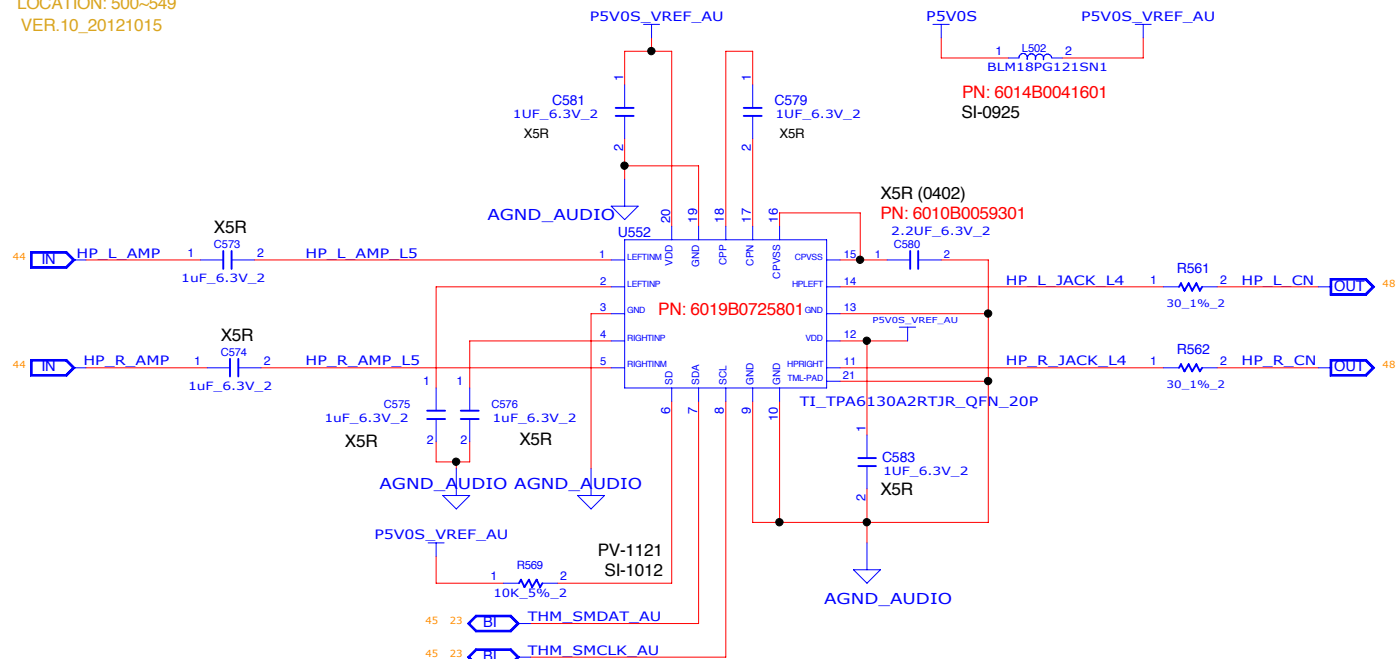
B

A

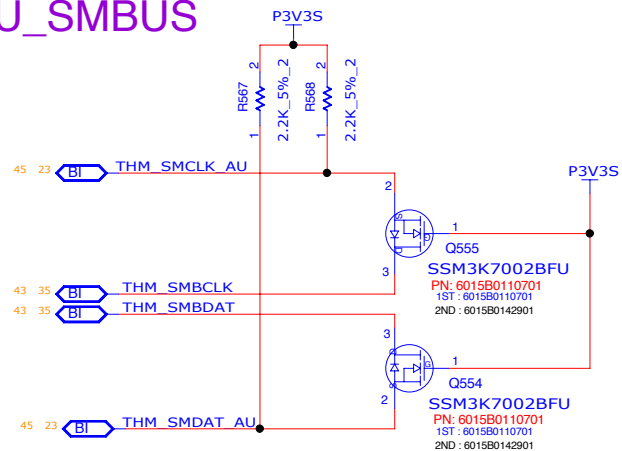


AUDIO (AMP) 550-599

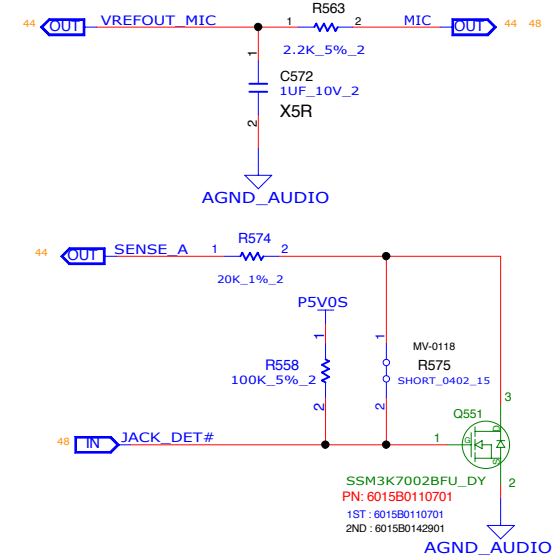
AUDIO-2 CODEC

LOCATION: 500-549
VER.10_20121015

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 A3	CODE CS	DOC NUMBER 1310A2548301	REV A02

CHANGE by Wison Lin DATE 18-DEC-2012

SHEET 45 of 69

AUDIO (AMP) 550~599

AUDIO-3

CODEC

LOCATION: 500~549
VER.10_20121015

REAR SPEAKER

REAR SPEAKER

SUBWOOFER

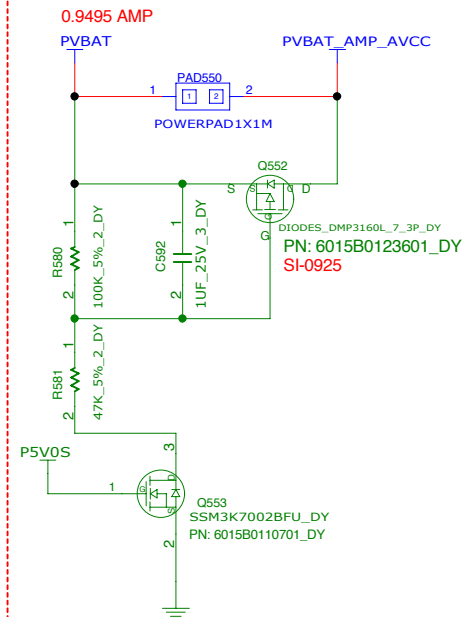
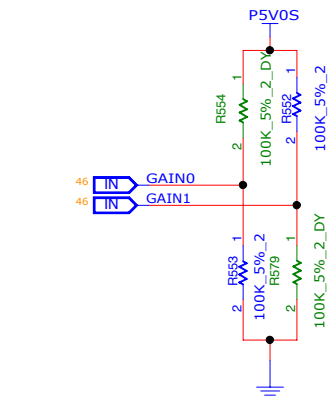
SUBWOOFER

INVENTEC

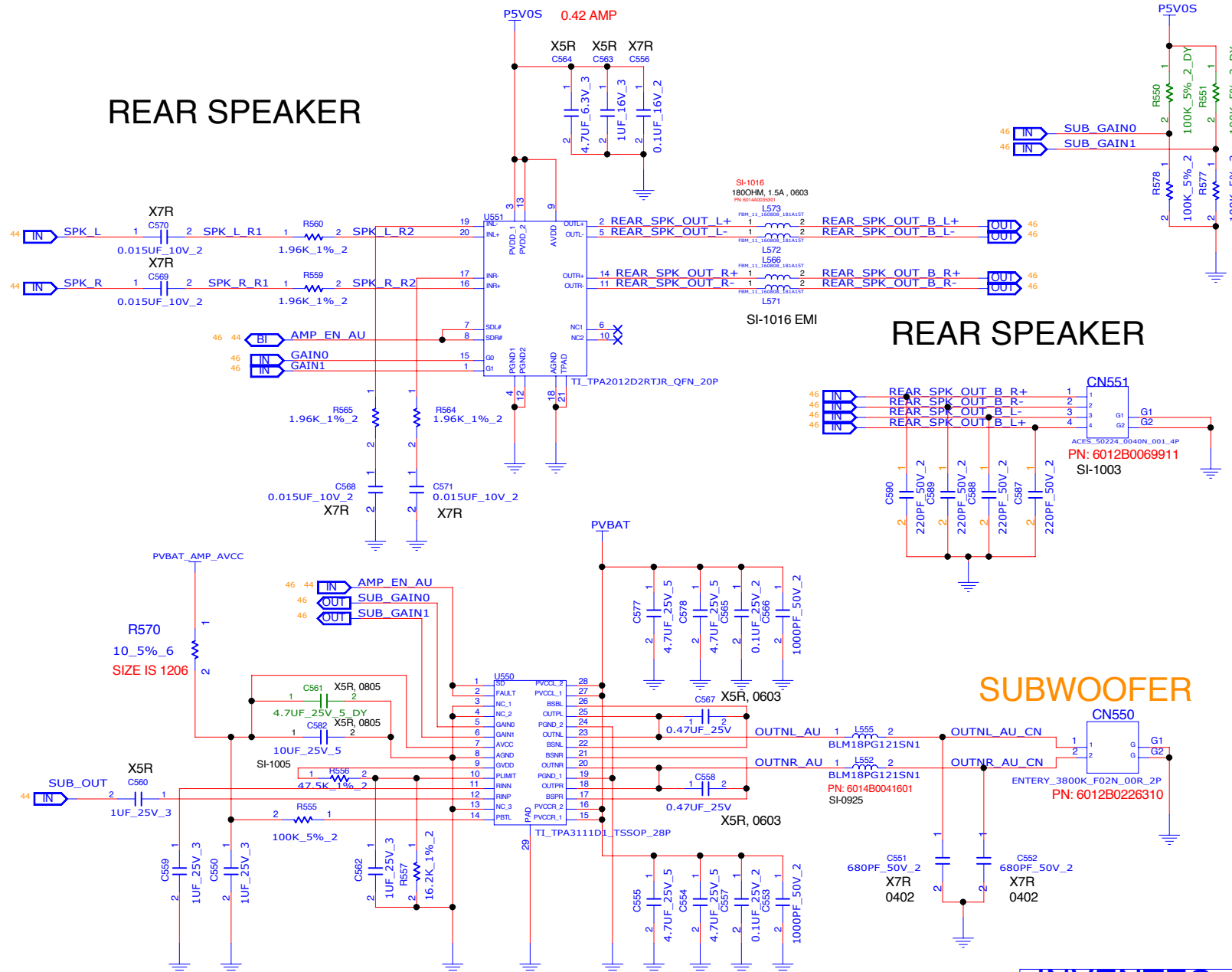
TITLE
MODEL, PROJECT, FUNCTION
Block DiagramSIZE CODE DOC NUMBER REV
A3 CS 1310A2548301 A02

SHEET 46 of 69

TI TPA3111D1 (HP PART NUMBER HPA00836PWPR)



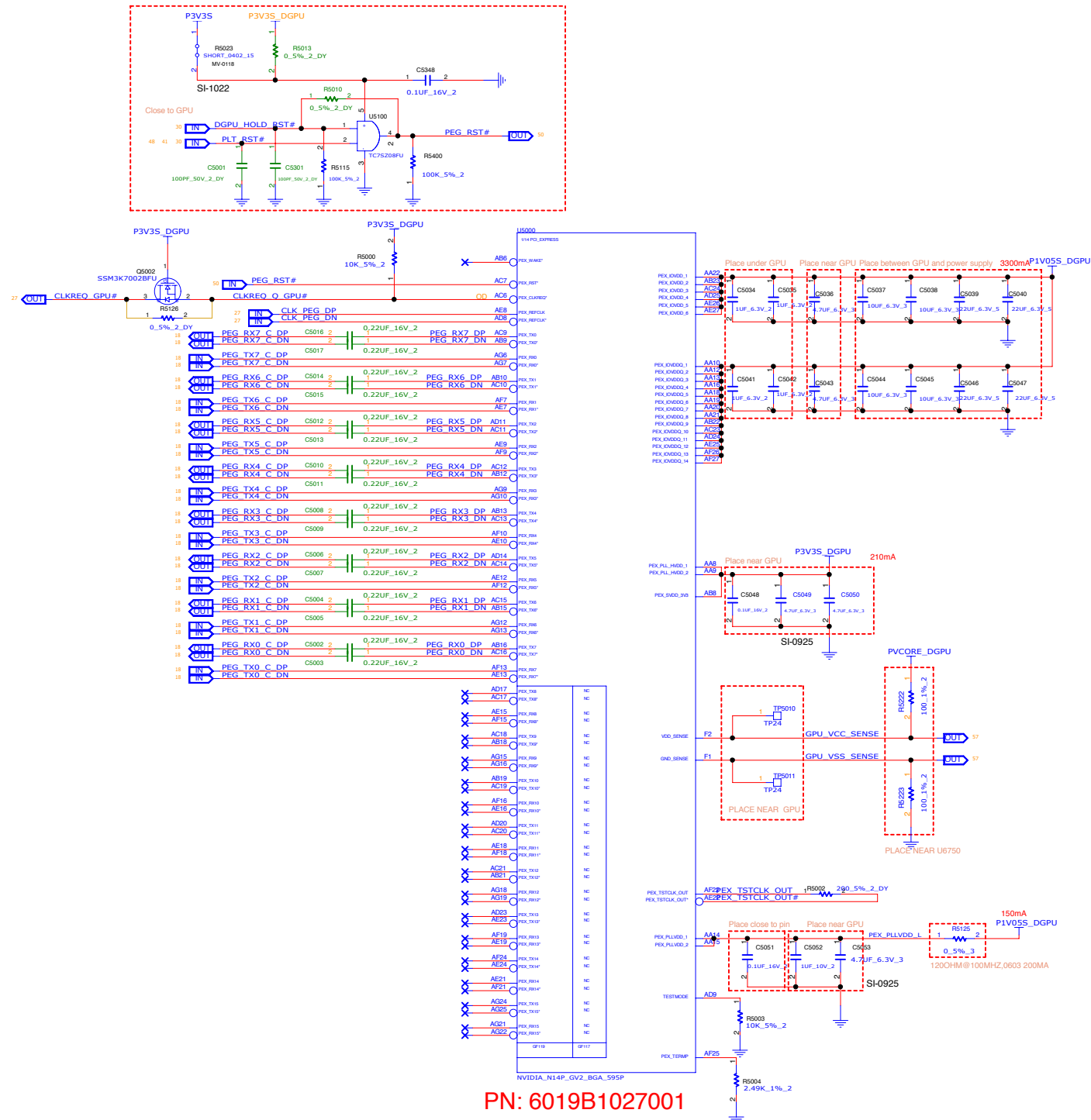
BACK UP SOLUTION FOR SUB CHIP

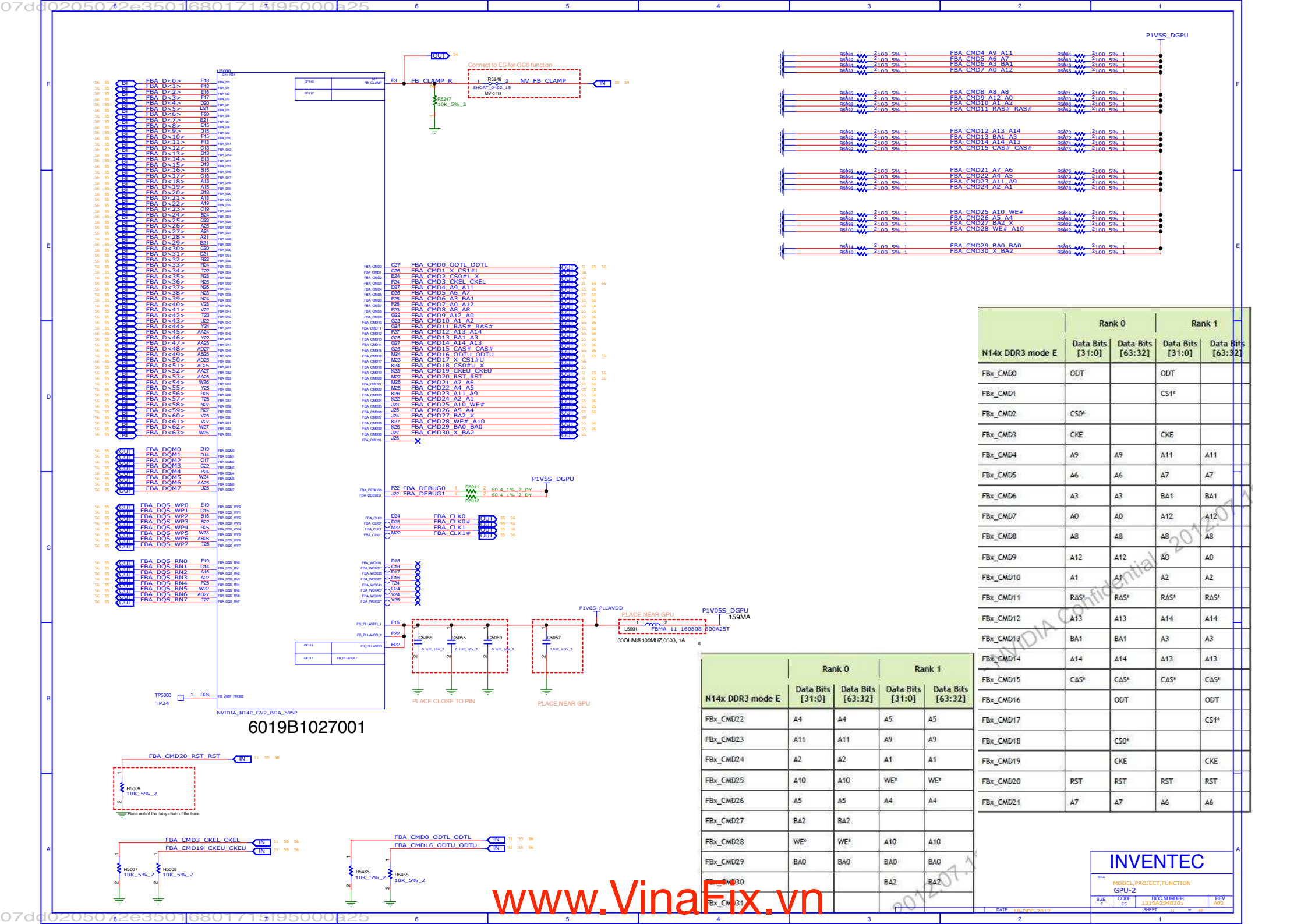


SHEET 47 of 69



8	7	6	5	4	3	2	1
GPU Location:GPU 5000~5499 VRAM 5500~5799 GPU SWITCH 7400~7499 VER.11_20120824							
N14P-GV2 GB2-64 25W DUAL RANK DDR3							
CHANGE by Wilson Lin						DATE 18-DEC-2012	
SIZE A3		CODE CS		MODEL,PROJECT,FUNCTION DOC:NUMBER 1310A2548301		REV A02	
				SHEET 49 of 69		1	



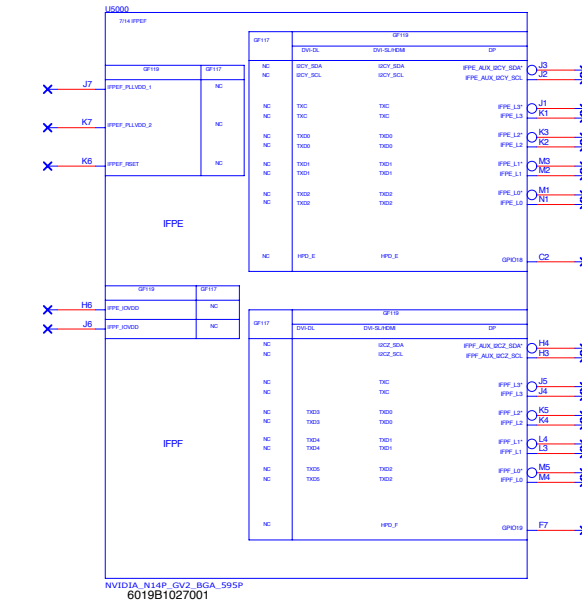
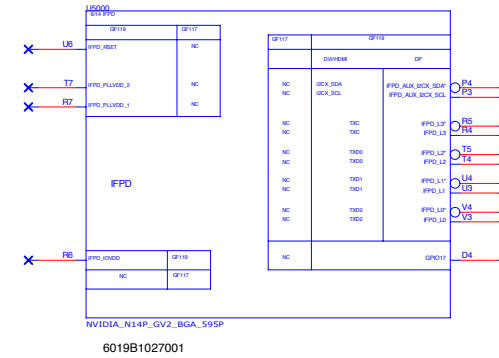
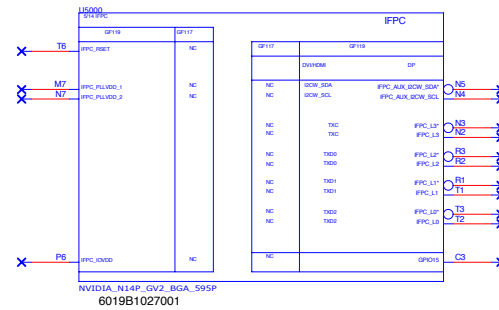
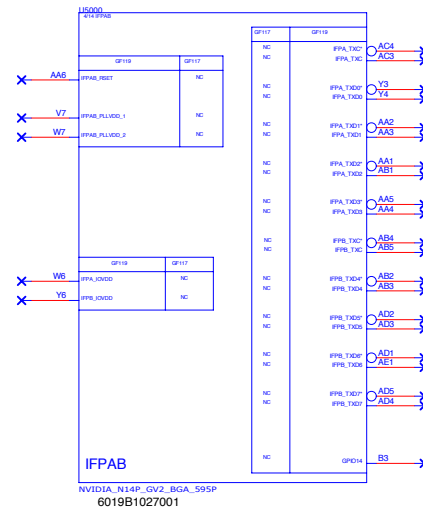


N14x DDR3 mode E	Rank 0		Rank 1	
	Data Bits [31:0]	Data Bits [63:32]	Data Bits [31:0]	Data Bits [63:32]
FBx_CMD0	ODT		ODT	
FBx_CMD1			CS1*	
FBx_CMD2	CS0*			
FBx_CMD3	CKE		CKE	
FBx_CMD4	A9	A9	A11	A11
FBx_CMD5	A6	A6	A7	A7
FBx_CMD6	A3	A3	BA1	BA1
FBx_CMD7	A0	A0	A12	A12
FBx_CMD8	A8	A8	A8	A8
FBx_CMD9	A12	A12	A0	A0
FBx_CMD10	A1	A1	A2	A2
FBx_CMD11	RAS*	RAS*	RAS*	RAS*
FBx_CMD12	A13	A13	A14	A14
FBx_CMD13	BA1	BA1	A3	A3
FBx_CMD14	A14	A14	A13	A13
FBx_CMD15	CAS*	CAS*	CAS*	CAS*
FBx_CMD16	ODT		ODT	
FBx_CMD17			CS1*	
FBx_CMD18	CS0*			
FBx_CMD19	CKE		CKE	
FBx_CMD20	RST	RST	RST	RST
FBx_CMD21	A7	A7	A6	A6

N14x DDR3 mode E	Rank 0		Rank 1	
	Data Bits [31:0]	Data Bits [63:32]	Data Bits [31:0]	Data Bits [63:32]
FBx_CMD22	A4	A4	A5	A5
FBx_CMD23	A11	A11	A9	A9
FBx_CMD24	A2	A2	A1	A1
FBx_CMD25	A10	A10	WE*	WE*
FBx_CMD26	A5	A5	A4	A4
FBx_CMD27	BA2	BA2		
FBx_CMD28	WE*	WE*	A10	A10
FBx_CMD29	BA0	BA0	BA0	BA0
FBx_CMD30			BA2	BA2
FBx_CMD31				

INVENTEC

MODEL/PROJECT/FUNCTION	GPU-2
CODE CS	1310002543001
REV	002



Resistor Values	Pull-up to VDD33	Pull-down to GND
4.99 k	1000	0000
10.0 k	1001	0001
15.0 k	1010	0010
20.0 k	1011	0011
24.9 k	1100	0100
30.1 k	1101	0101
34.8 k	1110	0110
45.3 k	1111	0111

Strap Pin Name	Logical Strapping Bit 3	Logical Strapping Bit 2	Logical Strapping Bit 1	Logical Strapping Bit 0
ROM_SCLK	PCI_DEV0[4]	SUB_VEN0R	PCI_DEV0[5]	PEX_PLL_EN_TERM
ROM_SI	RAM_CFG[3]	RAM_CFG[2]	RAM_CFG[1]	RAM_CFG[0]
ROM_SO	FB[1]	FB[0]	SWB_ALT_ADDR	VGA_DEVICE
STRAP0	USER[3]	USER[2]	USER[1]	USER[0]
STRAP1	3GIO_PADCFG[3]	3GIO_PADCFG[2]	3GIO_PADCFG[1]	3GIO_PADCFG[0]
STRAP2	PCI_DEV0[3]	PCI_DEV0[2]	PCI_DEV0[1]	PCI_DEV0[0]
STRAP3	SOR3_EXPOSED	SOR2_EXPOSED	SOR1_EXPOSED	SOR0_EXPOSED
STRAP4	RESERVED	PCIE_SPEED_CHAI GE_GEN3	PCIE_MAX_SPEED	DP_PLL_VDD33V

STRAP1	Description
0110	Gen 1 / Gen 2 support only
0000	Gen 3 support
Other settings	RESERVED

RAMCFG[3:1]	Configuration
0000 5K	<reserved>
0001 10K	<reserved>
0010 15K	<reserved>
0011 20K	<reserved>
0100 25K	<reserved>
0101 30K	Samsung 32Mx32
0110 35K	<reserved>
0111 45K	<reserved>

STRAP4	Configuration
0000 5K	reserved
0001 10K	reserved for PCIE GEN3 speed function
0010 15K	0: default
0011 20K	1: limit to PCIE Gen1
0100 25K	1: PCIE Gen2/3 capable
0101 30K	reserved for future use
0110 35K	0: default
0111 45K	0: default

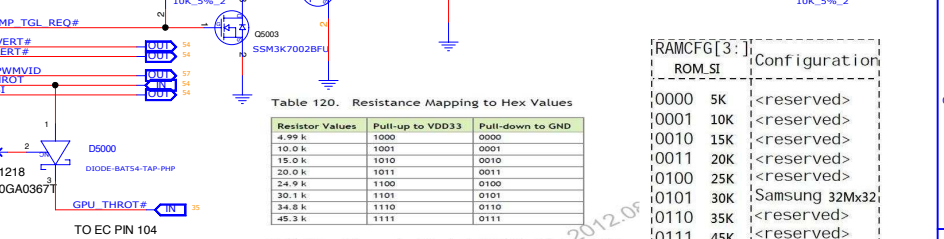
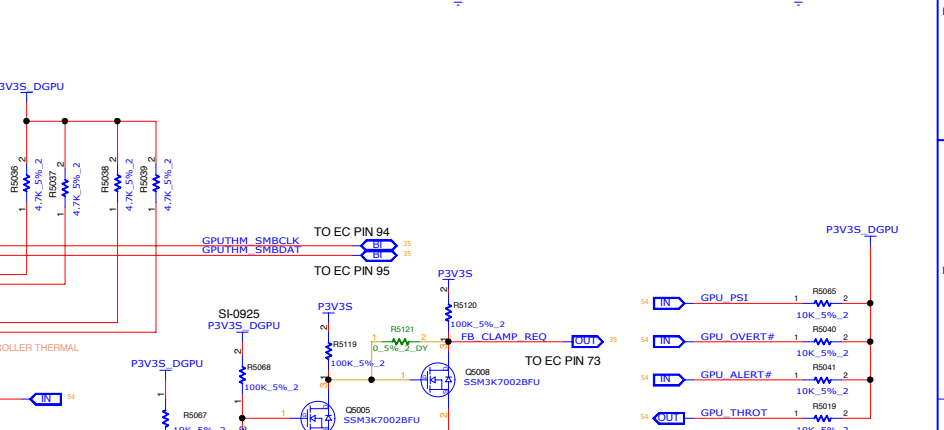
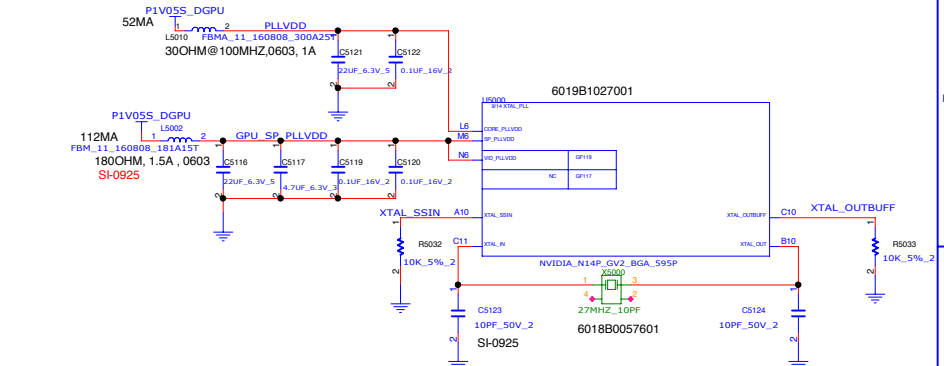
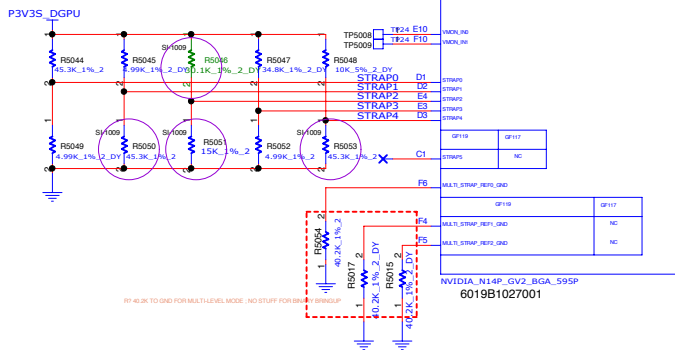
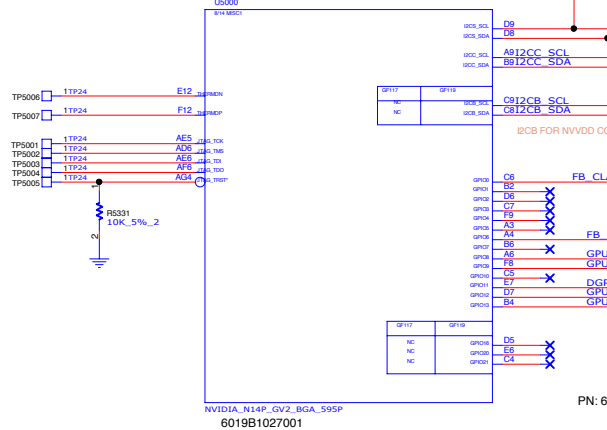
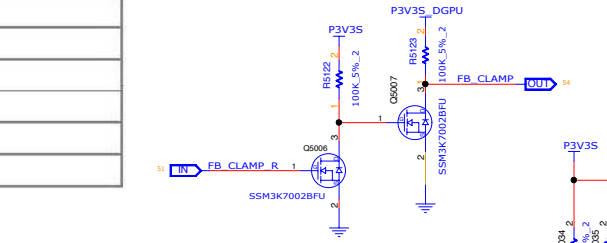
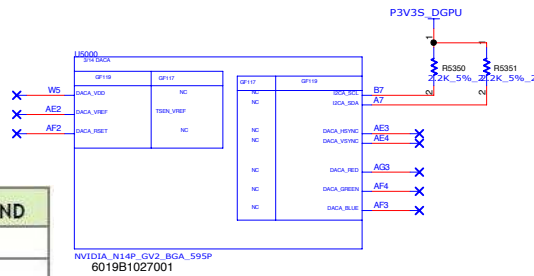


Table 120. Resistance Mapping to Hex Values

Resistor Values	Pull-up to VDD33	Pull-down to GND
4.99 k	1000	0000
10.0 k	1001	0001
15.0 k	1010	0010
20.0 k	1011	0011
24.9 k	1100	0100
30.1 k	1101	0101
34.8 k	1110	0110
45.3 k	1111	0111

Table 121 contains mapping tables for the Multi-Level Strapping Mode

RAMCFG[3:1]	Configuration
0000 5K	<reserved>
0001 10K	<reserved>
0010 15K	<reserved>
0011 20K	<reserved>
0100 25K	<reserved>
0101 30K	Samsung 32Mx32
0110 35K	<reserved>
0111 45K	<reserved>

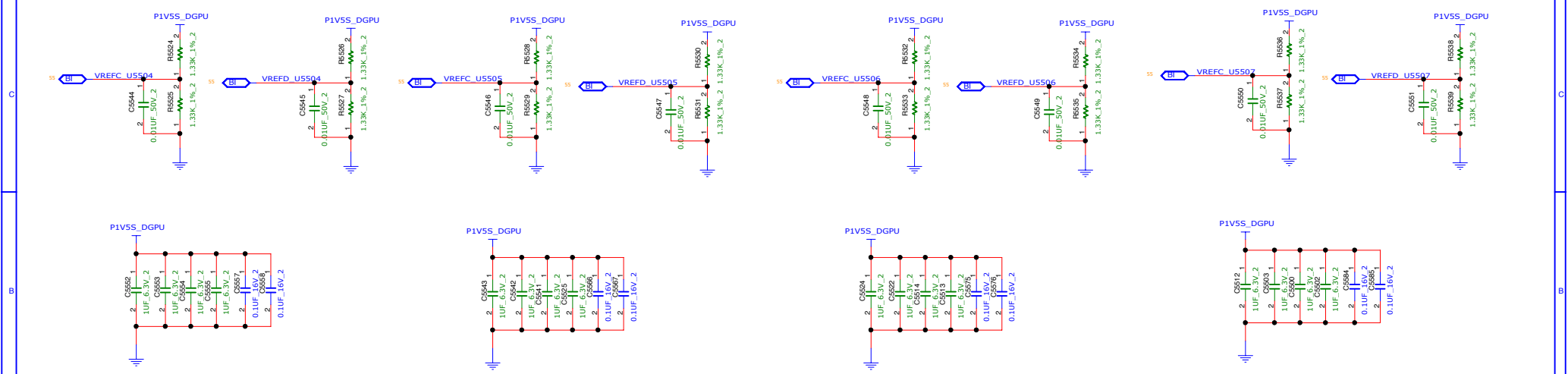
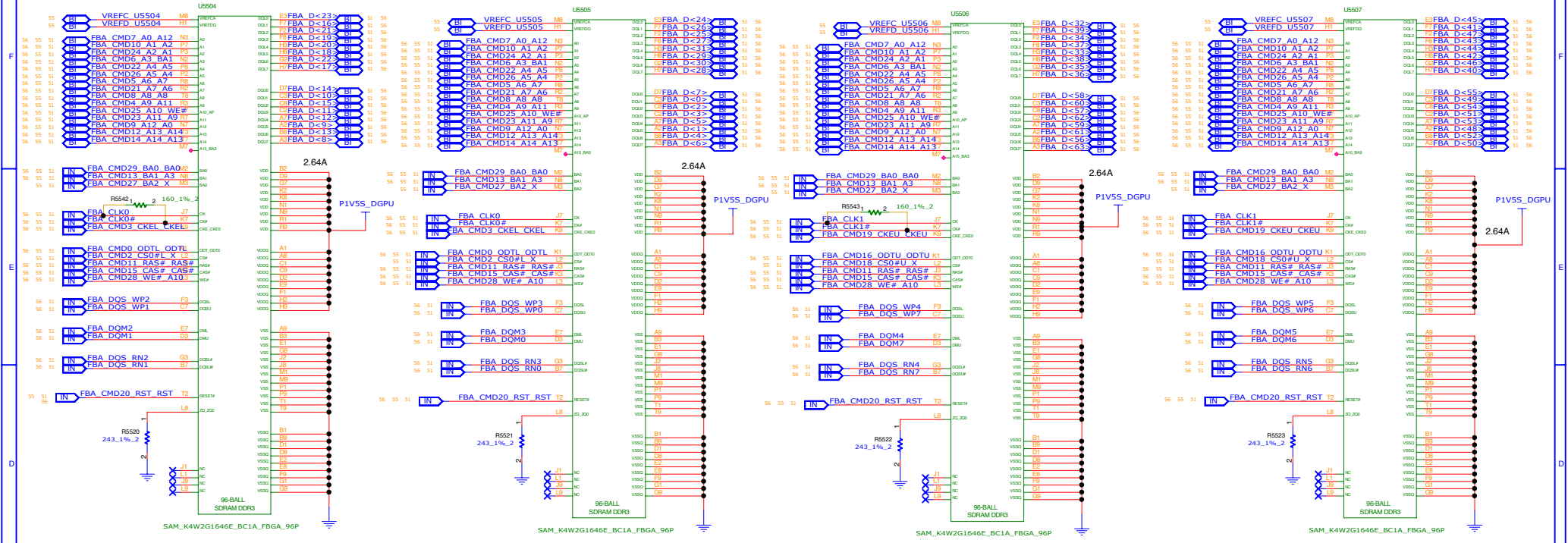
ROM SO	Configuration
0000 5K	00, 01, 11: reserved
0001 10K	10: 256M frame buffer
0010 15K	0: I2CS slave address=0x9E
0011 20K	1: I2CS slave address=0x9C
0100 25K	0: 3D device
0101 30K	1: VGA device
0110 35K	
0111 45K	

ROM SCLK	Configuration
0000 5K	GPU device ID
0001 10K	0: No VBIOS ROM
0010 15K	1: VBIOS ROM is present
0011 20K	0: Disable PCIE PLL termination
0100 25K	1: Enable PCIE PLL termination
0101 30K	
0110 35K	
0111 45K	

VENDER	DENSITY	VENDER PN	IEC PN	STRAP	R5061
SAMSUNG	128MX16	K4W2G1648E-BC1A	6019B1033601	0X7	45.3K
MICRON	128MX16	MT41K128M16JT-093G.K	6019B1033501	0X5	30.1K

INVENTEC			
MODEL, PROJECT, FUNCTION			
GPU-5			
SIZE	CODE	DOC NUMBER	REV
E	13	1310A254B301	A02
SHEET		34	of 69

RANK0



CHANNEL A MEMORY

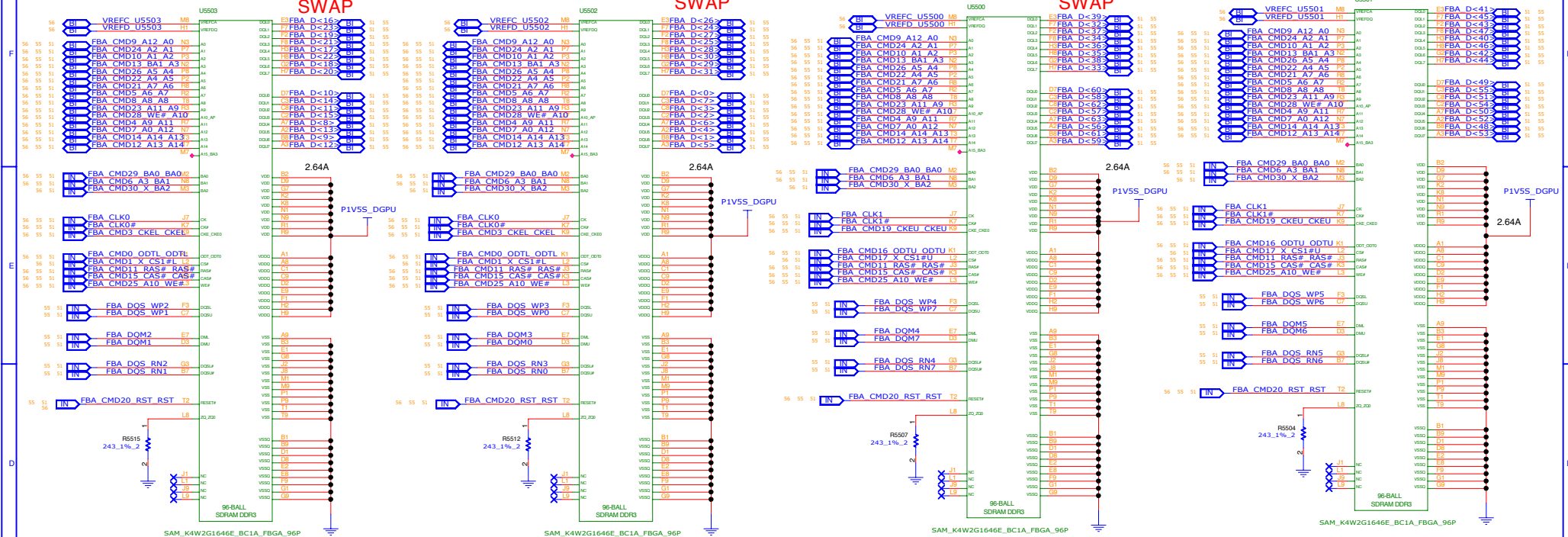
VENDER	DENSITY	VENDER PN	IEC PN	STRAP
SAMSUNG	128MX16	K4W2G1646E-BC1A	6019B1033601	0X7
MICRON	128MX16	MT41K128M16JT-093G-K	6019B1033501	0X5

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INVENTEC

FILE	MODEL,PROJECT,FUNCTION	VRAM DDR3
SIZE	CODE	DOC NUMBER
1	1310A2548301	REV A02
SHEET	51	69

RANK1



CHANNEL A MEMORY

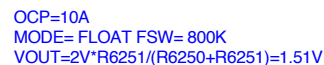
VENDER	DENSITY	VENDER PN	IEC PN	STRAP
SAMSUNG	128MX16	K4W2G1646E-BC1A	6019B1033601	0X7
MICRON	128MX16	MT41K128M16JT-093G-K	6019B1033501	0X5

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INVENTEC

FILE	MODEL,PROJECT,FUNCTION	VRAM DDR3
SIZE	CODE	DOC NUMBER
1	1310A2548301	REV A02
SHEET	56	69

07dd0205072e35016801715f95000a25



CHANGE by	Wison Lin	DATE	18-DEC-2012
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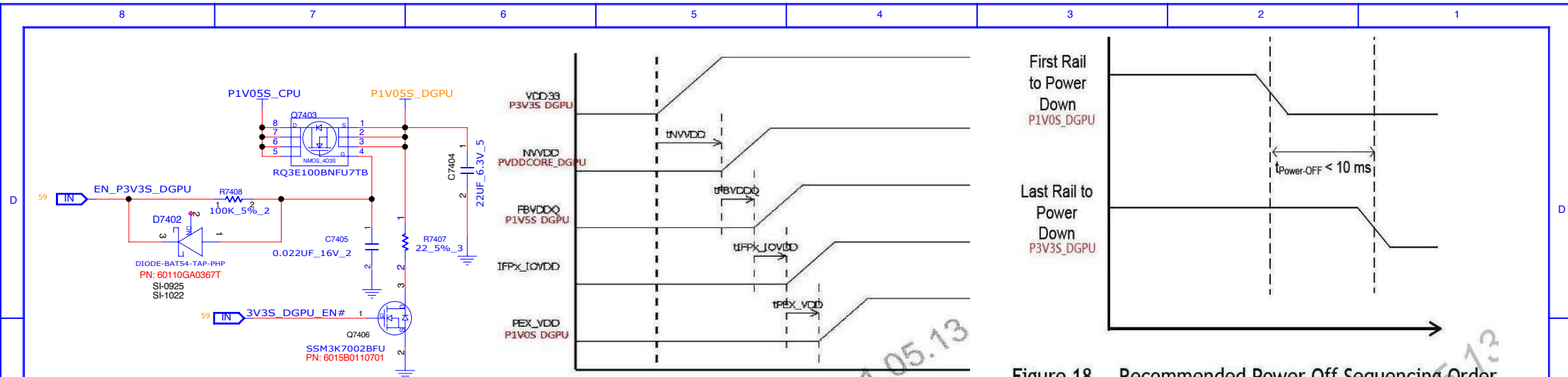
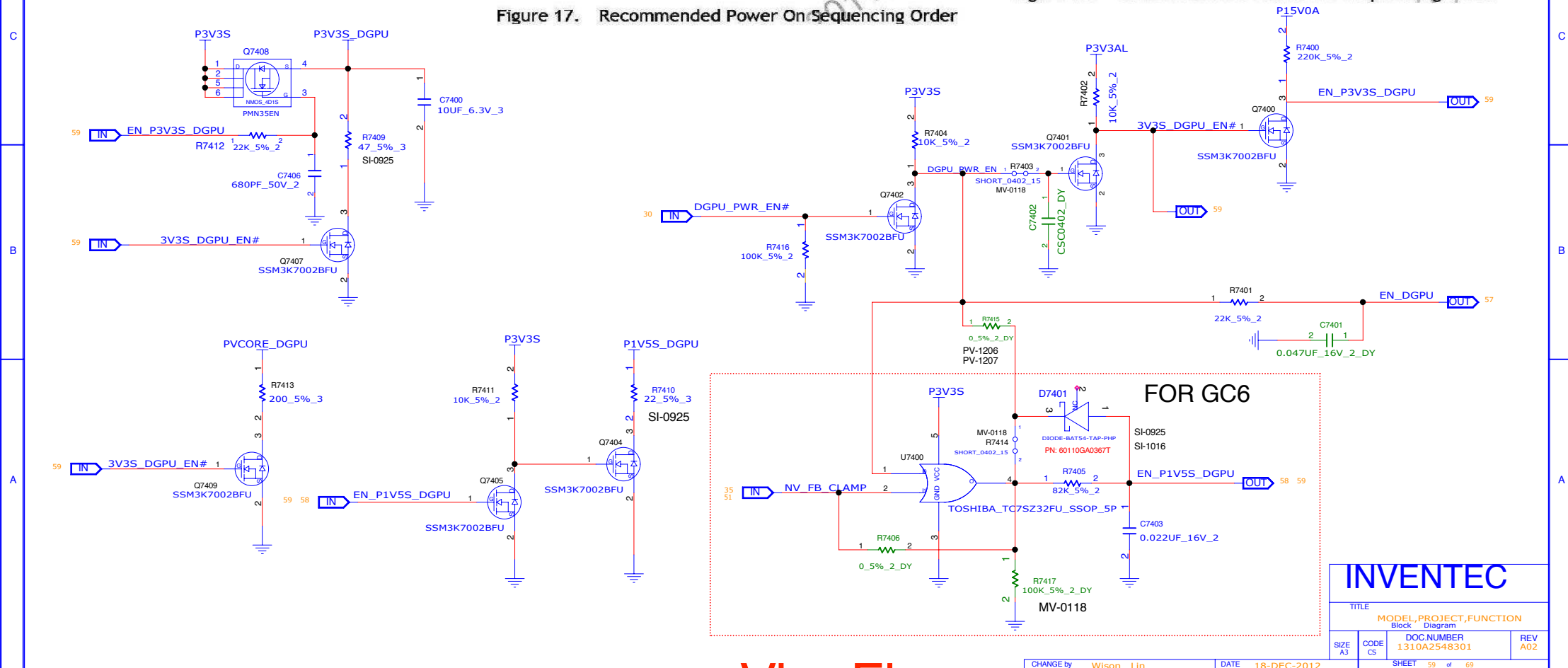


Figure 18. Recommended Power Off Sequencing Order



AUB

LOCATION: 9000~9999
VER.03_20120814

AUB BOARD

INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3	CODE CS	DOC NUMBER 1310A2548301	REV A02
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CHANGE by Wilson Lin DATE 18-DEC-2012

SHEET 60 of 69

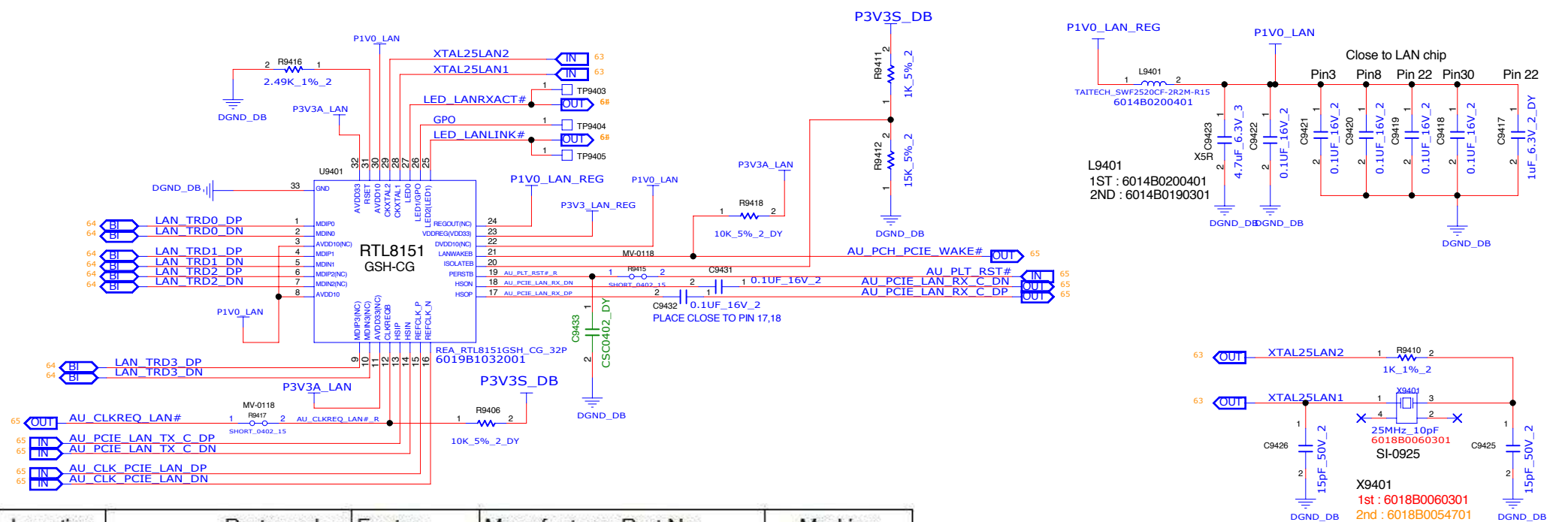


LAN (Controller)

Location 9400 ~ 9499
Ver.03_20120807

6019B1032101_RTL8161GSH-CG_10/100/1000

6019B1032001_RTL8151GSH-CG_10/100/1000



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

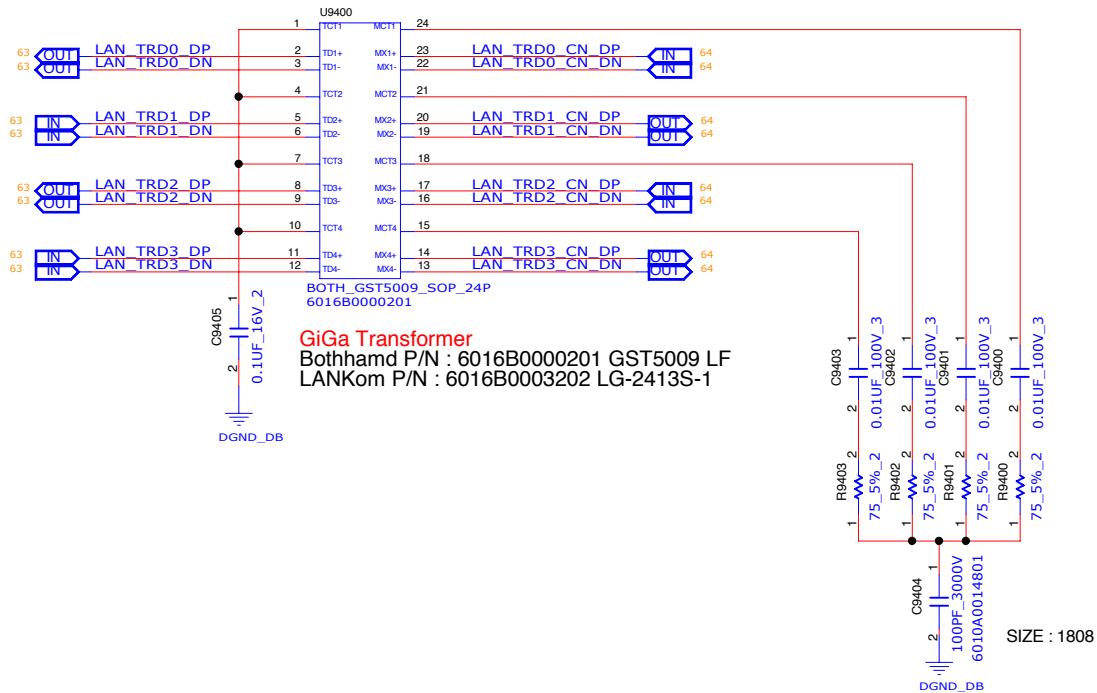
TITLE
MODEL,PROJECT,FUNCTION
Block Diagram
SIZE A3 CODE CS DOC NUMBER 1310A2548301 REV A02

CHANGE by Wison Lin DATE 18-DEC-2012

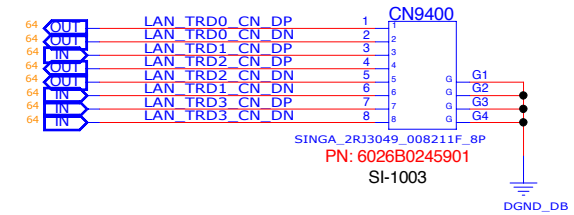
SHEET 63 of 69

LAN (Transformer & RJ45)

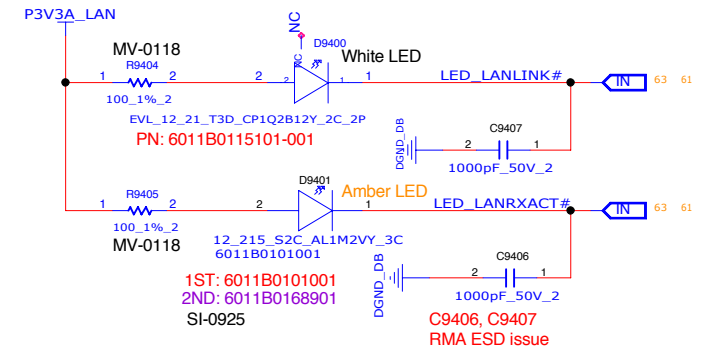
Location 9400 ~ 9499
Ver.06_20120813



RJ-45



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



	C6762	C6752	L6750	Q6751	R6756	C7675
17W	OPEN	OPEN	ETQP4LR36AFM 6014B0164501	OPEN	130K_1% 6013A0075701	220pF 6010B0076701
25W	install	install	PCMC104T-R36MN 6014B0024003	install	64.9K_1% 6013A008860F	330pF 6010A0010301

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	SSM3K7002BFU	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	

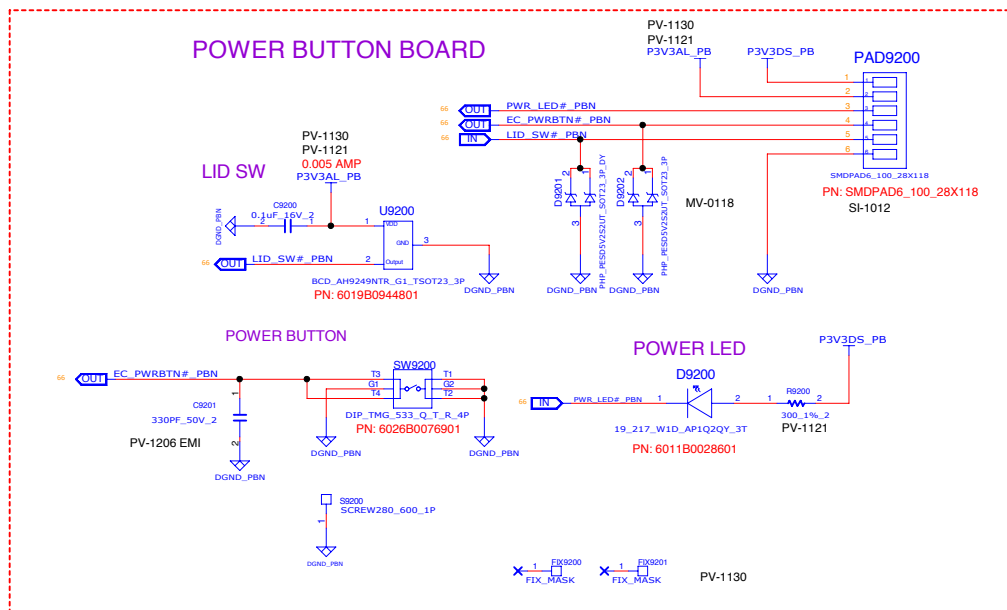
INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A2548301	A02

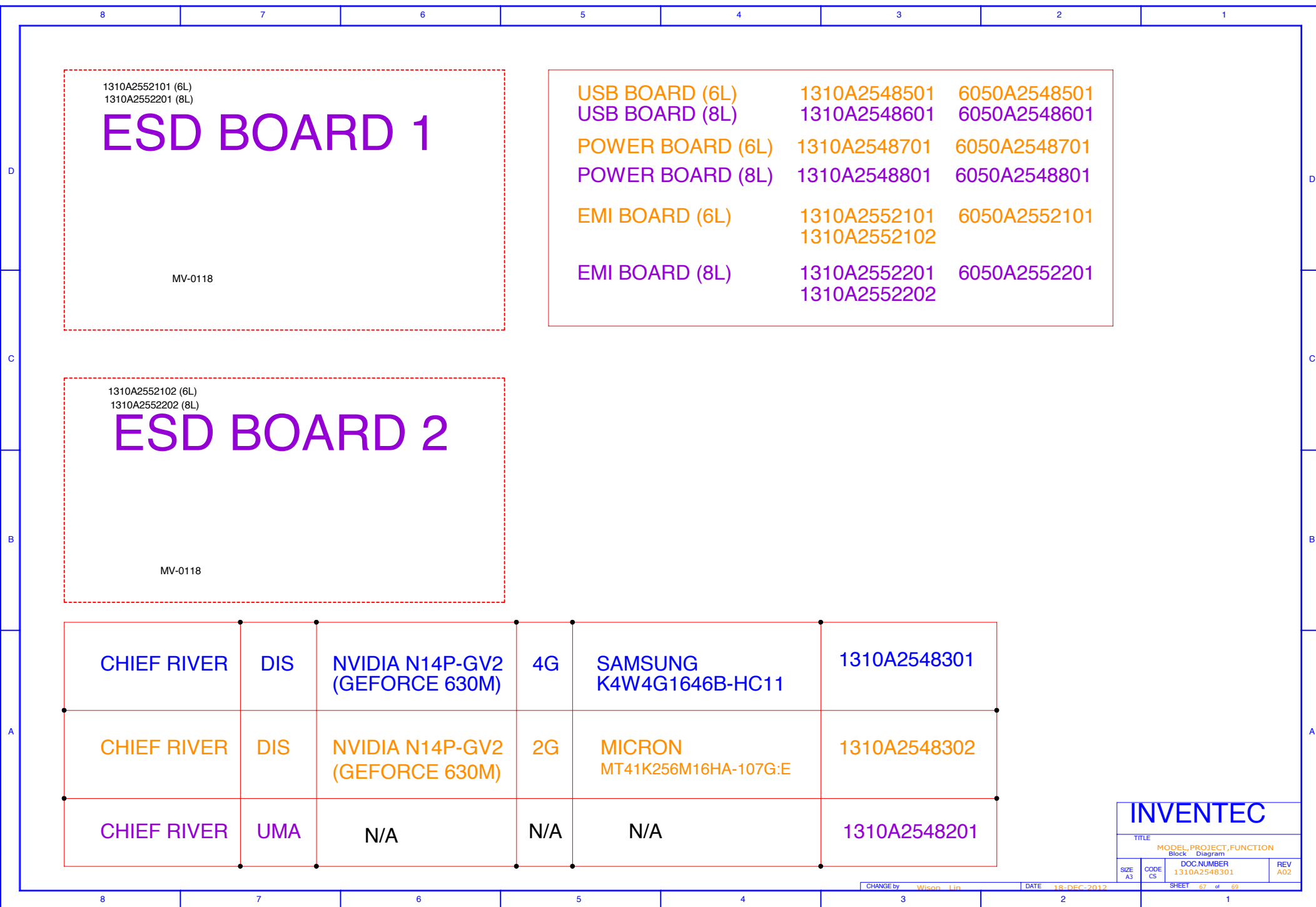
CHANGE by Wilson Lin DATE 18-DEC-2012

SHEET 64 of 69

POWER BUTTON BOARD



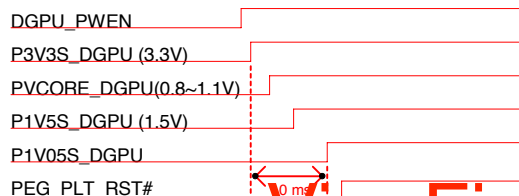
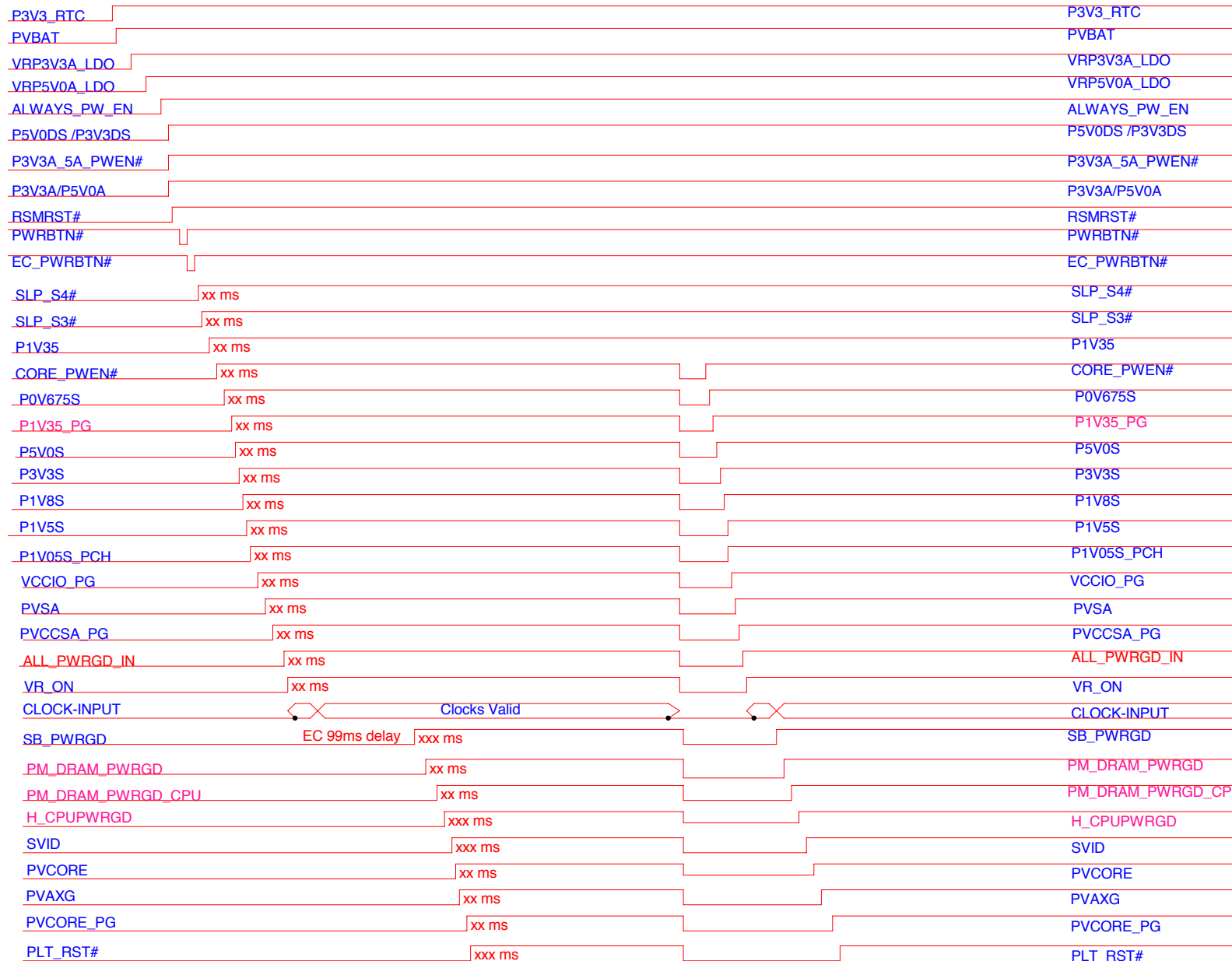
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MODEL,PROJECT,FUNCTION			
Block		Diagram	
SIZE C	CODE CS	DOC.NUMBER 1310A2548301	REV A02
SHEET 66 of 69			



POWE UP

S5----->S0

S3



NV N14P GV2 POWER UP SEQUENCE

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
C	CS	1310A2548301	A02
SHEET		68	69

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S3 TO DEEP S3

DEEP S3 TO S0

