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HSF Property: ROHS or Halogen-Free

GT		
R5279	SAMSUNG: 6019B0971801	6013A0017501
R5279	HYNIX: 6019B0971701	6013A0088503
GV2		
R5061	SAMSUNG: 6019B1033601	6013A0107901
R5061	MICRON: 6019B1033501	6013A0017501

	DIS	SKU
MOUNT	R307 R4834	
DEL	R309 R4832	

	UMA	SKU
MOUNT	R4819	
DEL	R7496 R4636 R4638 R4639	

U800 CN6050 IS NOT P/N

USB BOARD (6L)	1310A2548501	6050A2548501
USB BOARD (8L)	1310A2548601	6050A2548601
POWER BOARD (6L)	1310A2548701	6050A2548701
POWER BOARD (8L)	1310A2548801	6050A2548801
EMI BOARD (6L)	1310A2552101	6050A2552101
	1310A2552102	
EMI BOARD (8L)	1310A2552201	6050A2552201
	1310A2552202	

15SBGV2

SHARK BAY PGA

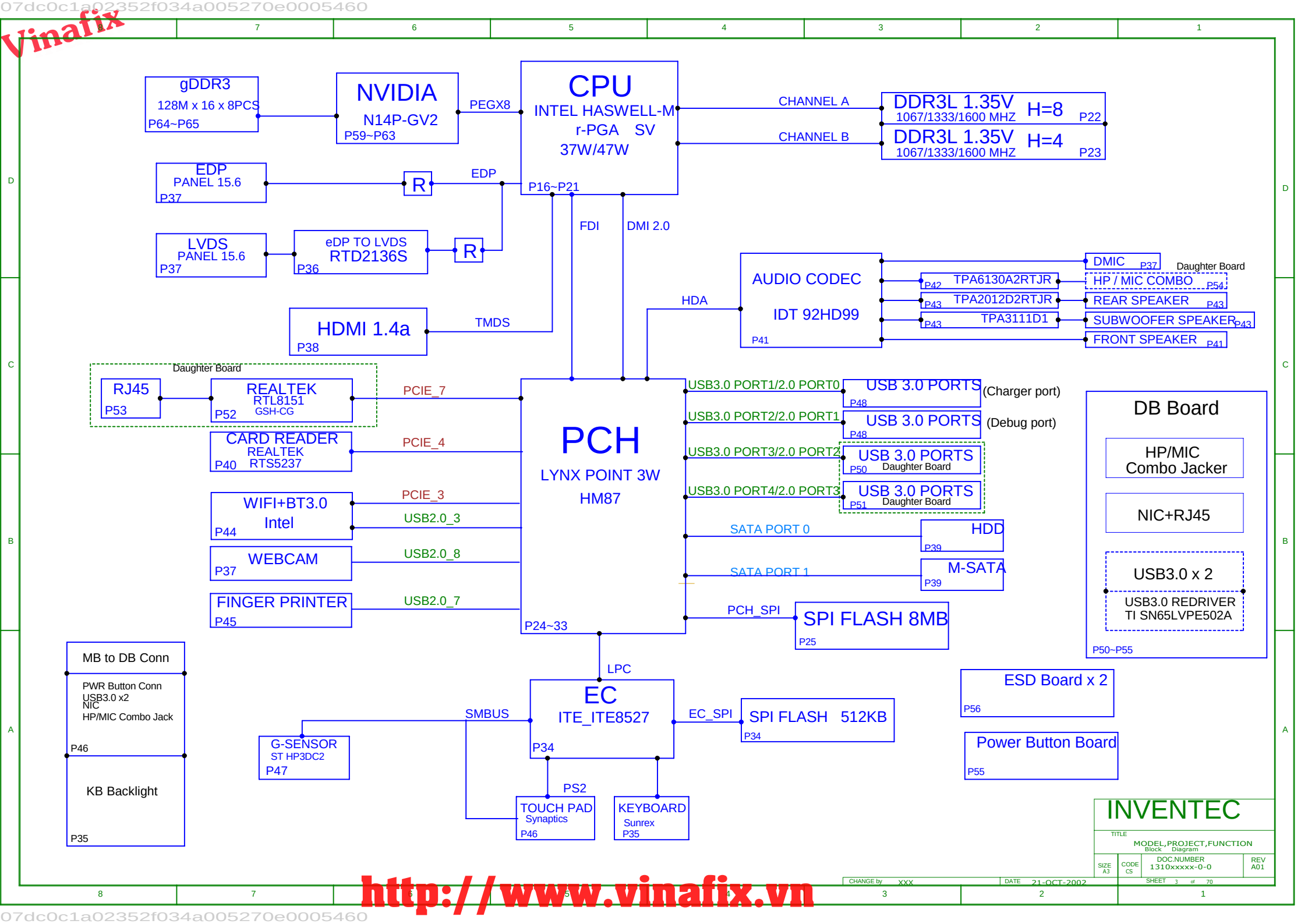
PV BUILD
2012.12.25

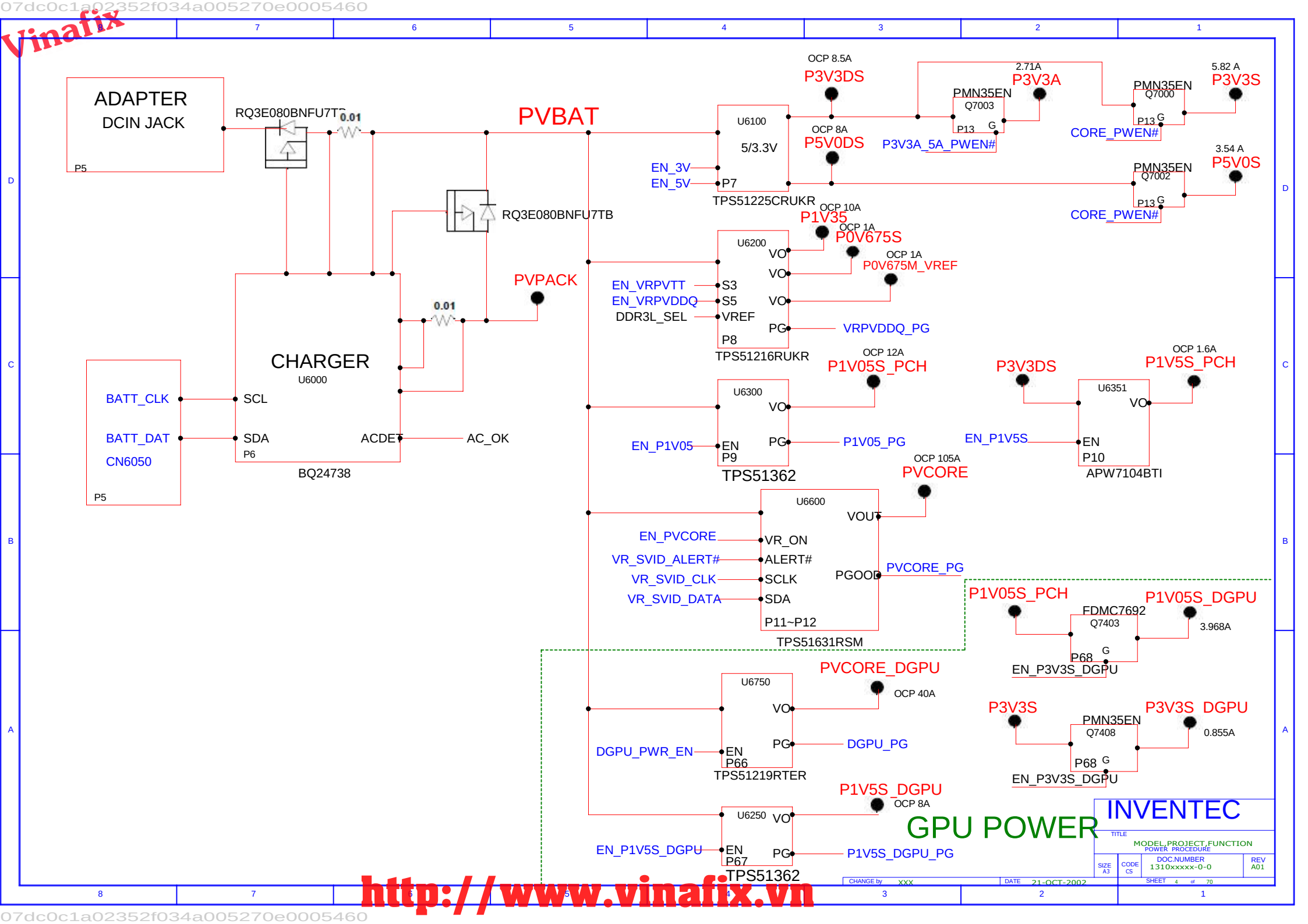
Platform	CPU	GPU	VRAM	PCB count	IEC P/N
UMA	37W (Quad)	NA	NA	6050A2547701(6L)	1310A2547701
	47W (Quad)				1310A2547702
DIS	37W (Quad)	N14P-GV2 23*23 (25W)	128Mx16 DDR3 8pcs (2G)	6050A2548101 (8L)	1310A2548101
			Samsung K4W2G1646E-BC1A (E-die) HP P/N: 601498-955 IEC P/N: 6019B1033601		1310A2548102
			Micron MT41J128M16JT-093G:K HP P/N: 601498-654 IEC P/N: 6019B1033601		1310A2548105
DIS	47W (Quad)	N14P-GV2 23*23 (25W)	128Mx16 DDR3 8pcs (2G)		1310A2548106
			Samsung K4W2G1646E-BC1A (E-die) HP P/N: 601498-955 IEC P/N: 6019B1033601		
			Micron MT41J128M16JT-093G:K HP P/N: 601498-654 IEC P/N: 6019B1033601		

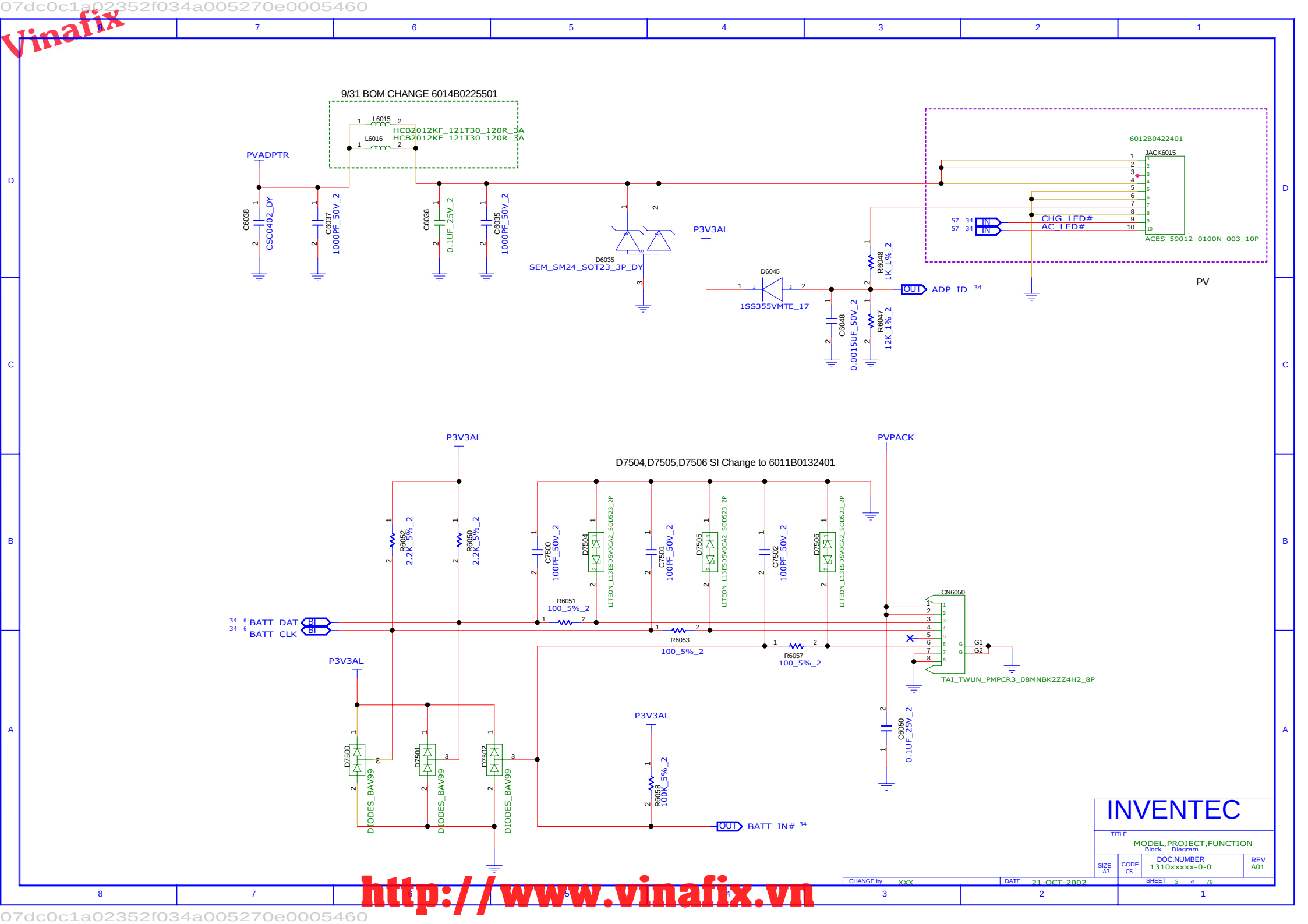
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		PV	A02
		SV	A01
		SV2	A01
		DB2	X02
		DB	X01
21-OCT-2002			
2012-5-22			
DATE	CHANGE NO.		REV

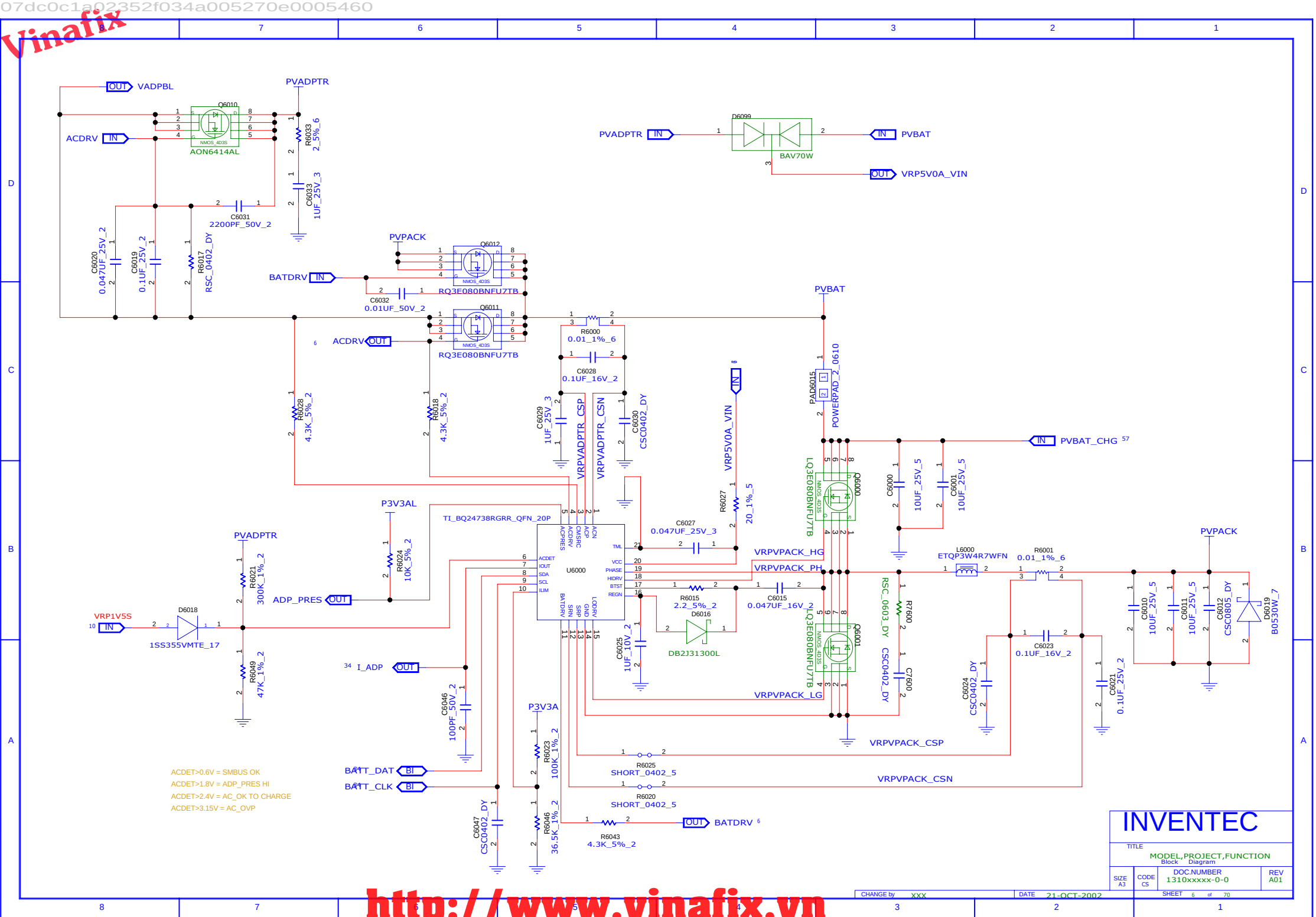
<http://www.vinafix.vn>

INVENTEC			
DRAWER	EE	DATE	POWER
DESIGN			
CHECK			
RESPONSIBLE			
SIZE		VER	
FILE NAME			
P/N	XXXX		
MODEL, PROJECT, FUNCTION			
Main Board			
SIZE	CODE	DOC NUMBER	REV
C	CS	1310XXXXX-D-0	A01
SHEET			
1 of 25			

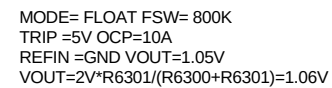












P1V05S-PCH	DEFAULT	INCREASE 1%
R6301	0	113K_1%
R6300	DY	100K_1%

TITLE	MODEL,PROJECT,FUNCTION
Model, Project, Function	Model, Project, Function

SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV A01
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D

C

B

A

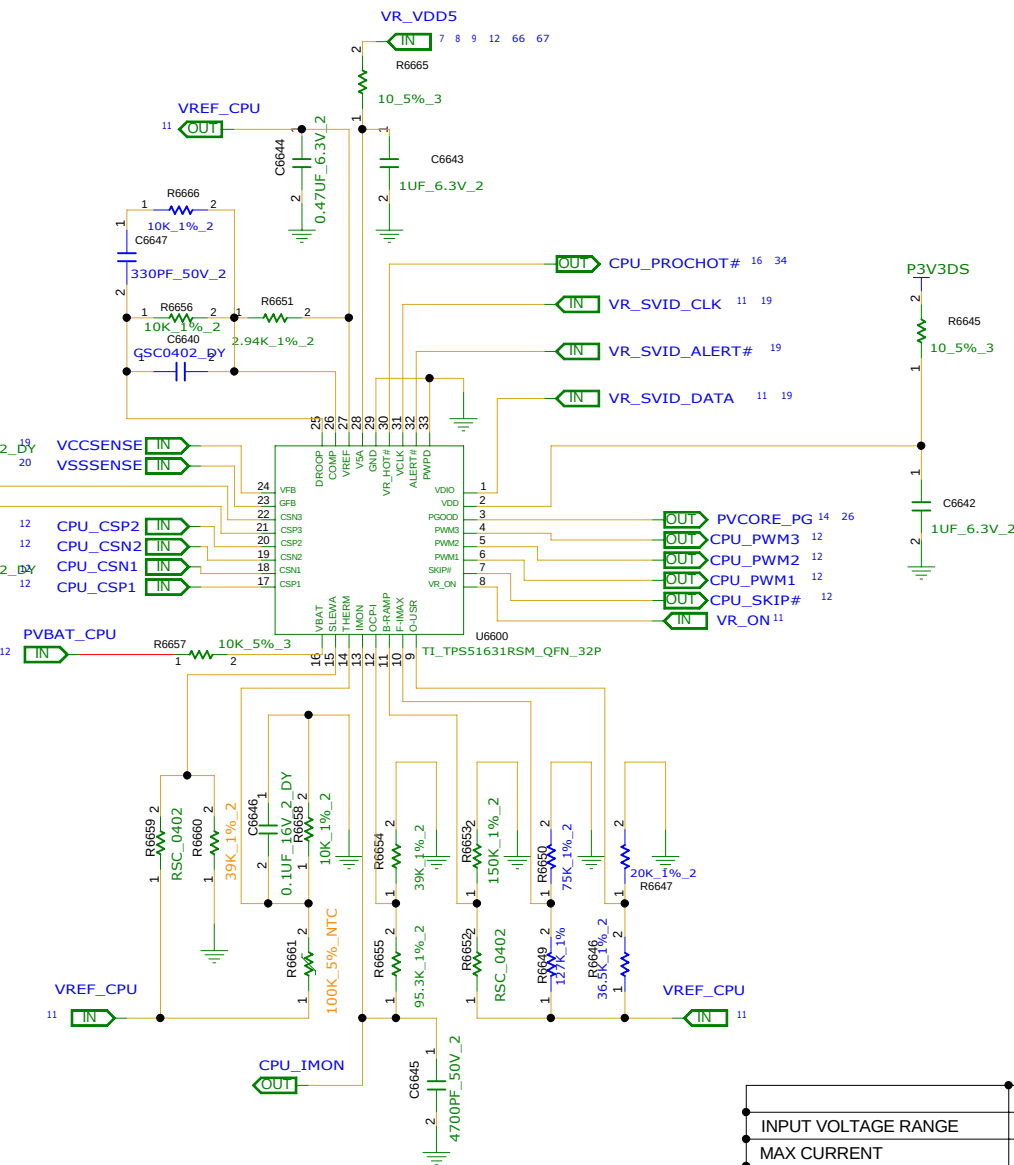
D

C

B

A

	37W 2 PHASE	47W 3 PHASE	57W 3 PHASE
R6646	64.9K	36.5K	36.5K
R6649	549K	150K	127K
R6650	150K	75K	75K
R6655	178K	91K	91K
R6662	POP	DNP	DNP
R6663	POP	DNP	DNP
R6664	DNP	POP	POP



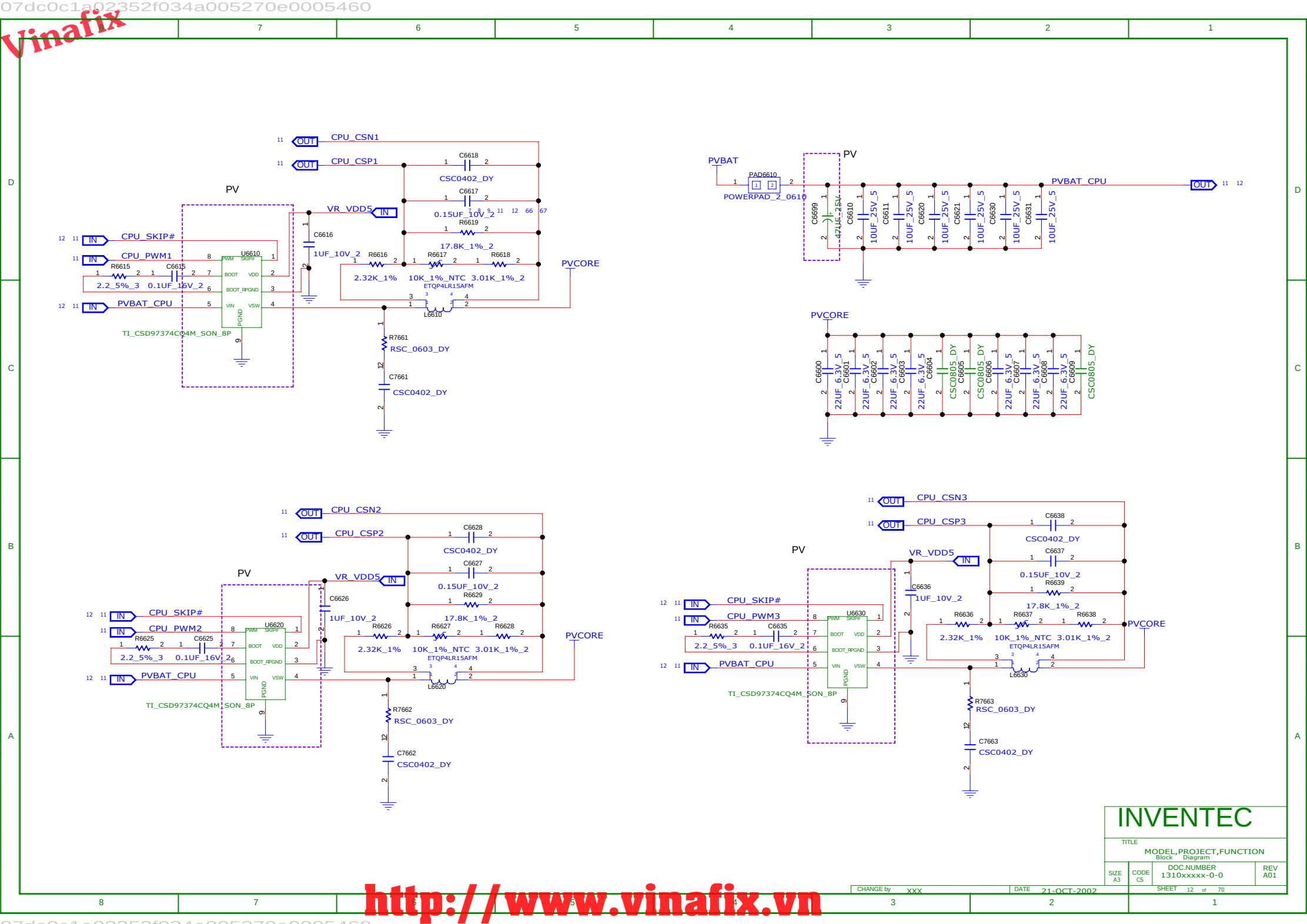
	37W	47W	57W
INPUT VOLTAGE RANGE	9V TO 20V	9V TO 20V	9V TO 20V
MAX CURRENT	55A	85A	95A
THERMAL DESIGN CURRENT	21A	27A	33A
DYNAMIC CURRENT	35A	60A	60A
OVER CURRENT LEVEL	70A	105A	105A
SWITCHING FREQUENCY	1MHZ	800KHZ	800KHZ
BOOT VOLTAGE	1.7V	1.7V	1.7V
DC LOAD-LINE	1.5MOHM	1.5MOHM	1.5MOHM

INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DDC NUMBER 1310xxxxx-0-0 REV A01

SHEET 11 of 70



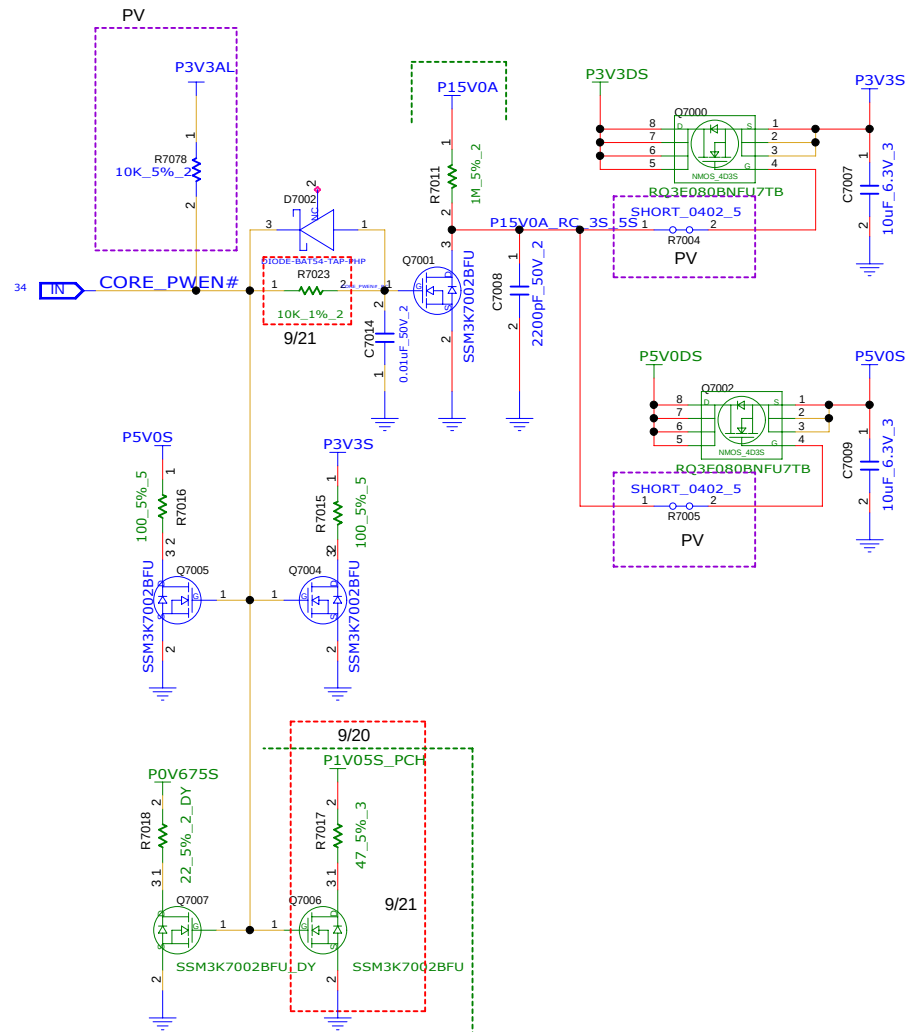
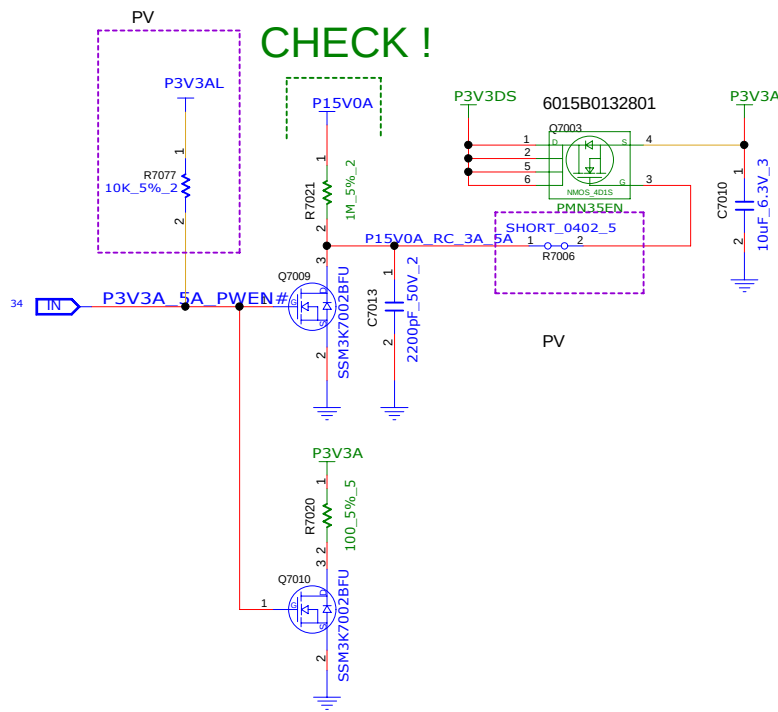
Vinafix

<http://www.vinafix.vn>

INVENTEC			
TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxx-0-0	A01
SHEET 12 of 70			

CHANGE by XXX DATE 21-OCT-2002

CHECK !



CHECK !

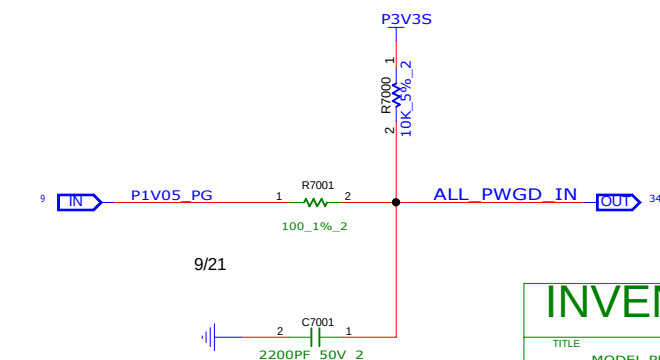
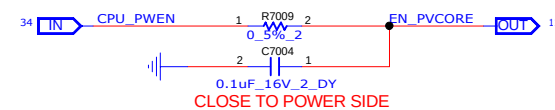
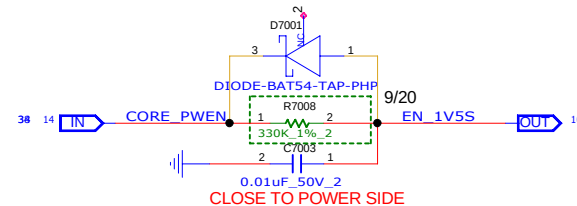
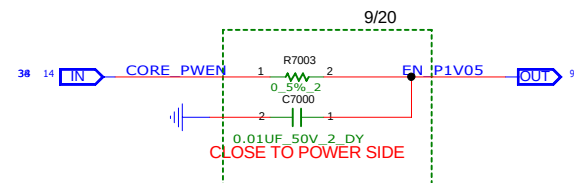
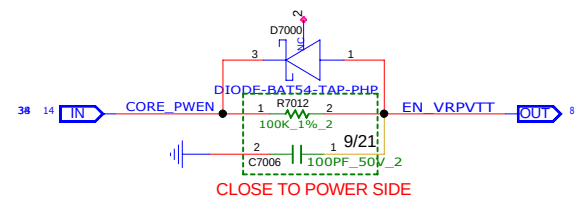
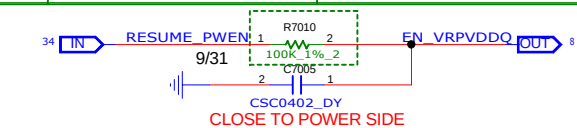
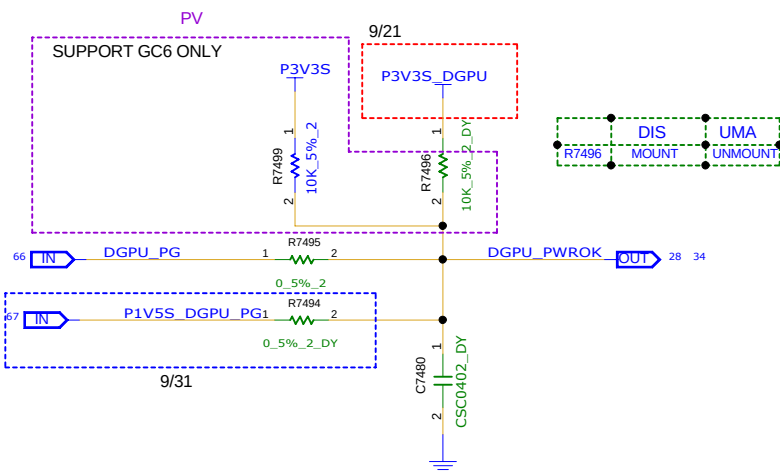
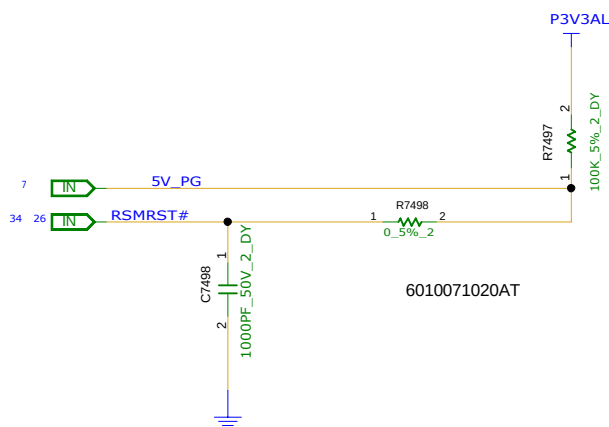
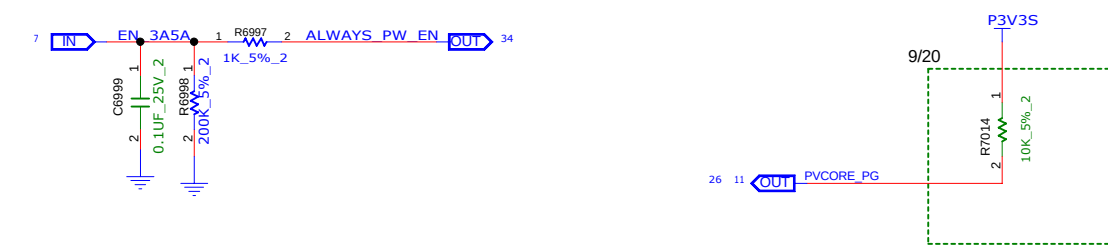
INVENTEC

TITLE
MODEL, PROJECT, FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310xxxxx-0-0 REV A01

CHANGE by XXX DATE 21-OCT-2002

SHEET 13 of 70



INVENTEC

TITLE MODEL,PROJECT,FUNCTION

Block Diagram

DOC NUMBER 1310xxxxx-0-0

REV A01

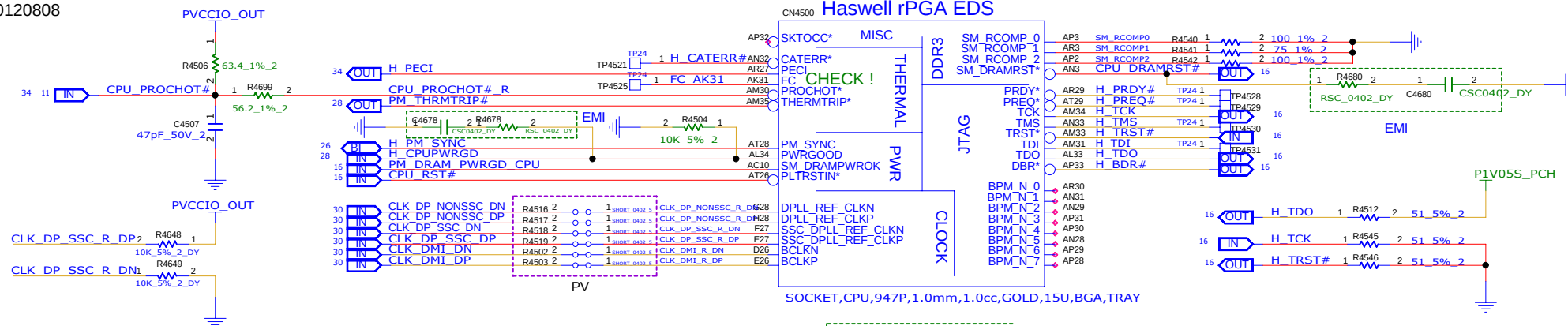
SHEET 14 of 70

CHANGE by XXX DATE 21-OCT-2002

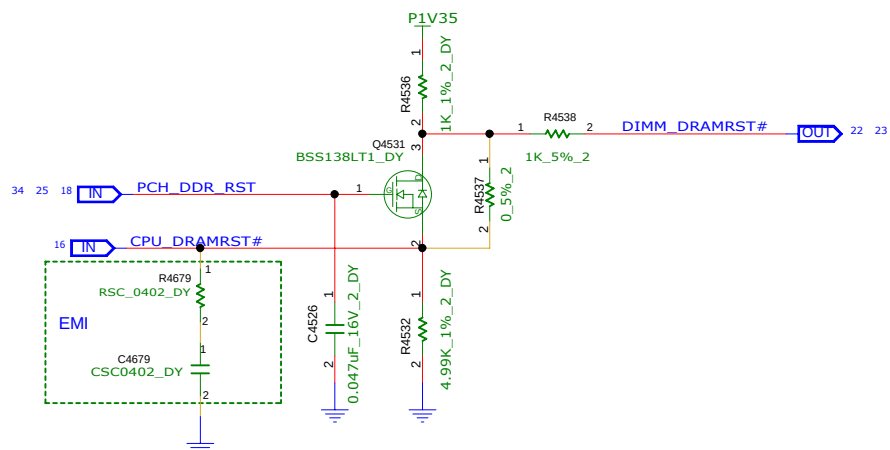
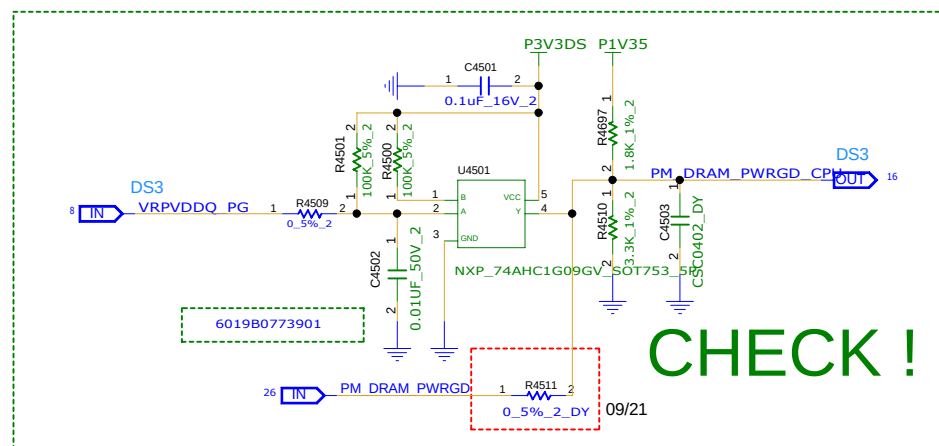
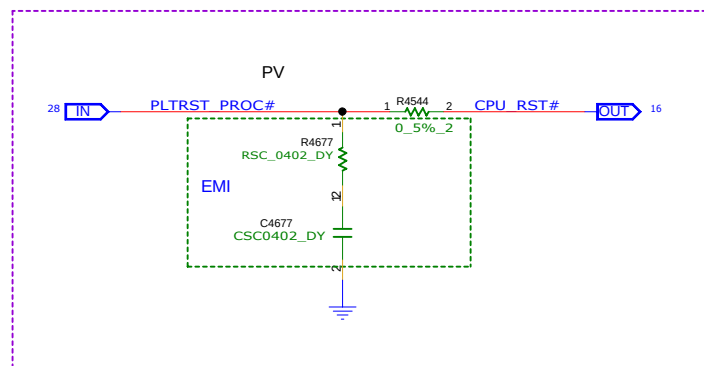
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SHEET 15 of 70

CPU
LOCATION 4500-4699
VER.01 20120808



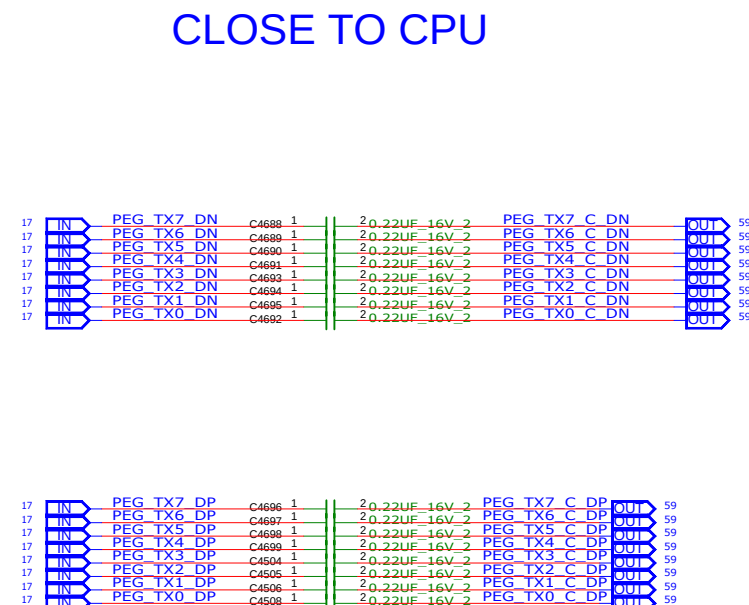
CN4500
6026B0231701



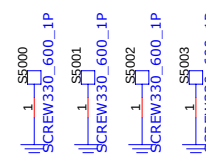
INVENTEC			
TITLE MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV A01

GV2

UMA DELETE



FOR DGPU SCREW

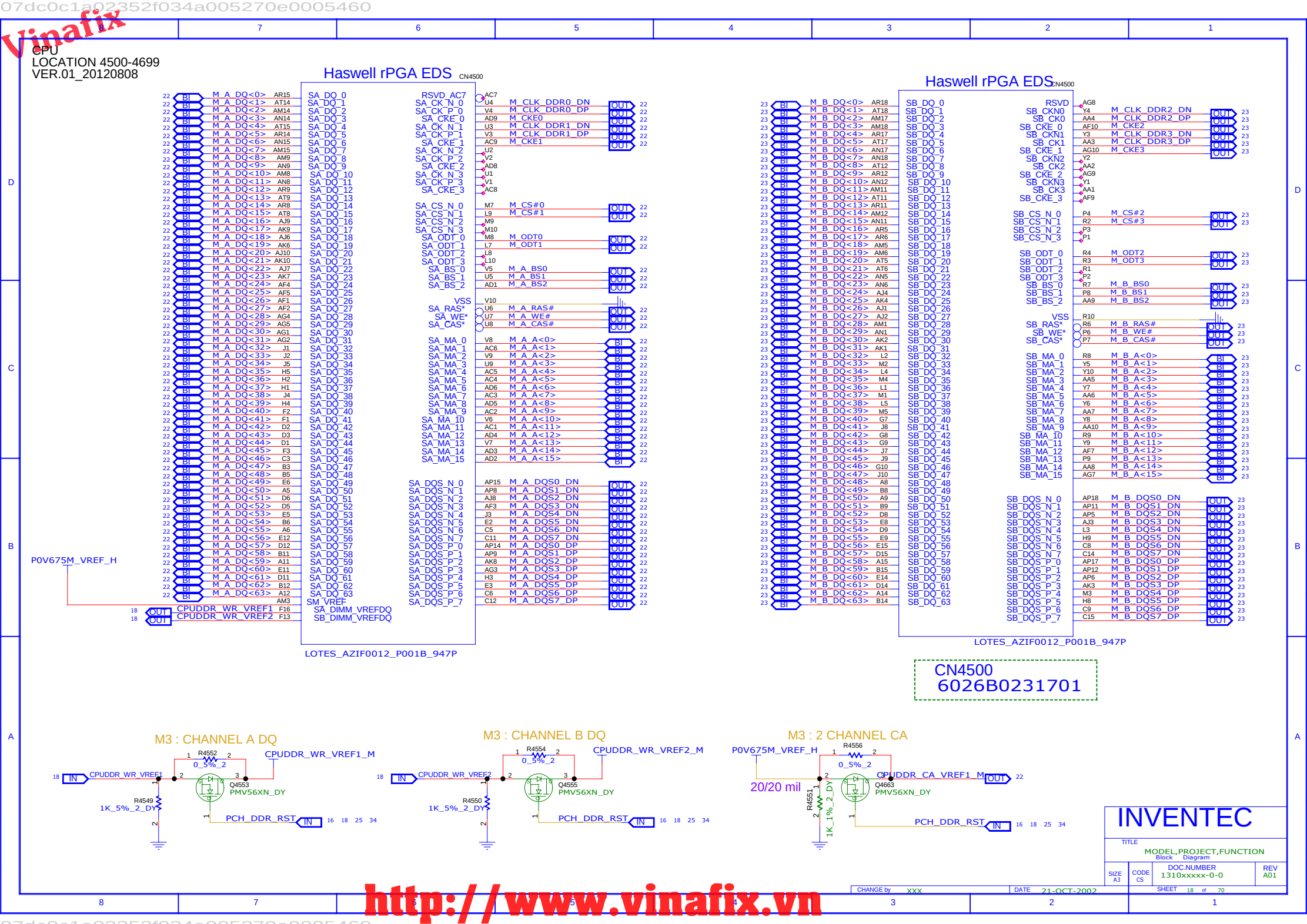


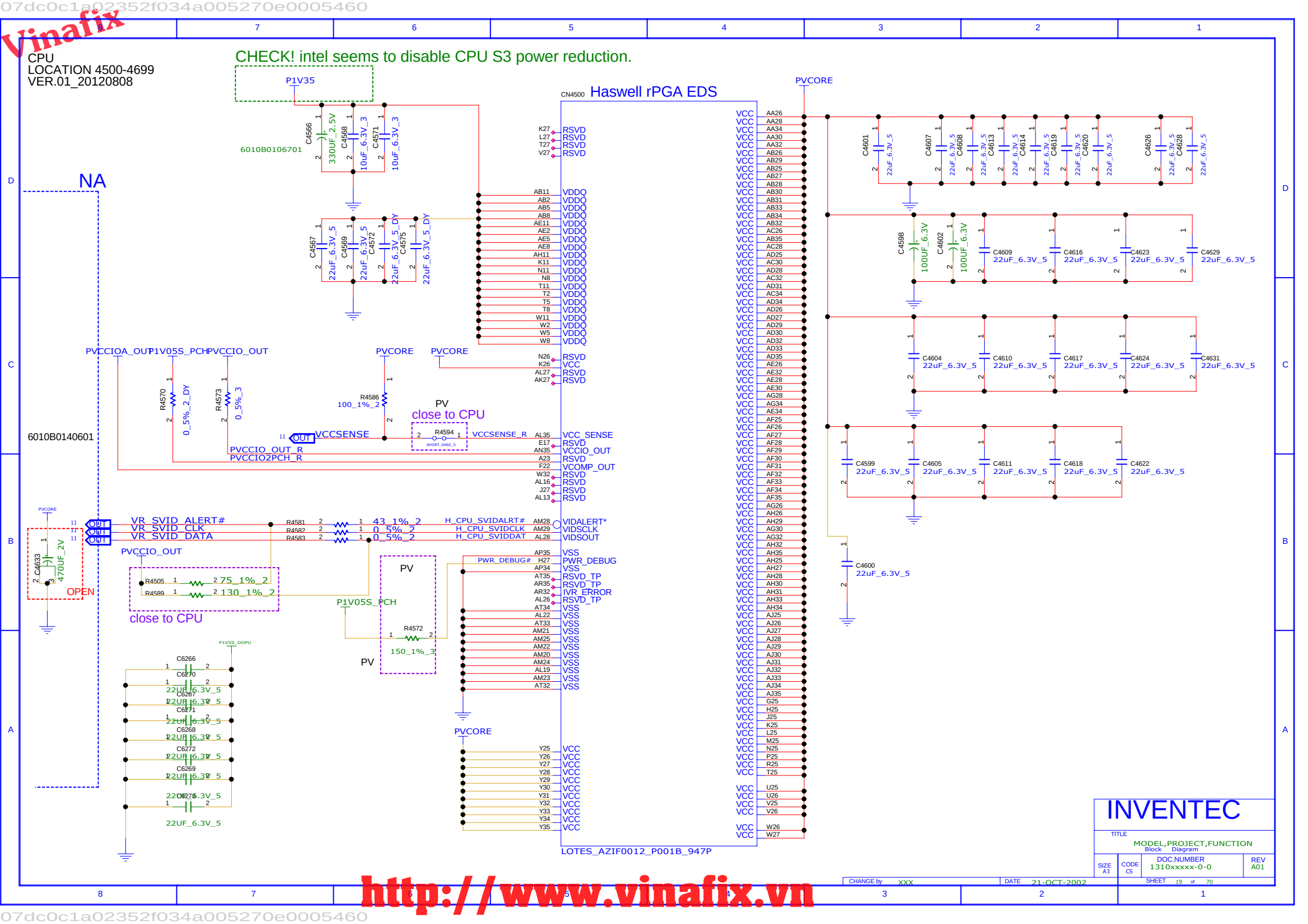
INVENTEC

TITLE	MODEL,PROJECT,FUNCTION
	Block Diagram

SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	
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SHEET 17 of 70





CPU
LOCATION 4500-4699
VER.01_20120808

CHECK! intel seems to disable CPU S3 power reduction.

Haswell rPGA EDS

PVCORE

NA

6010B0140601

B

A

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxx-0-0	A01

CHANGE by XXX DATE 21-OCT-2002

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<http://www.vinafix.vn>

CN4560 Haswell rPGA EDS

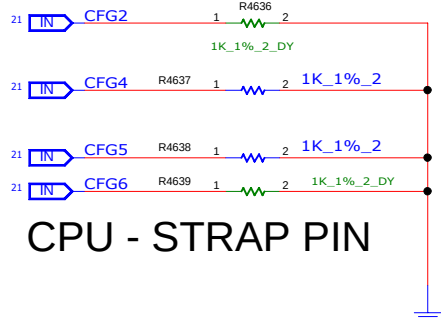
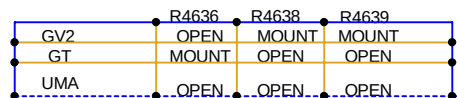
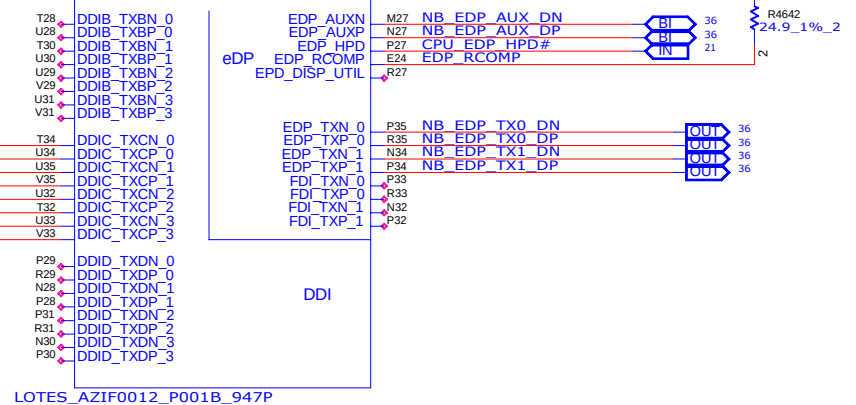
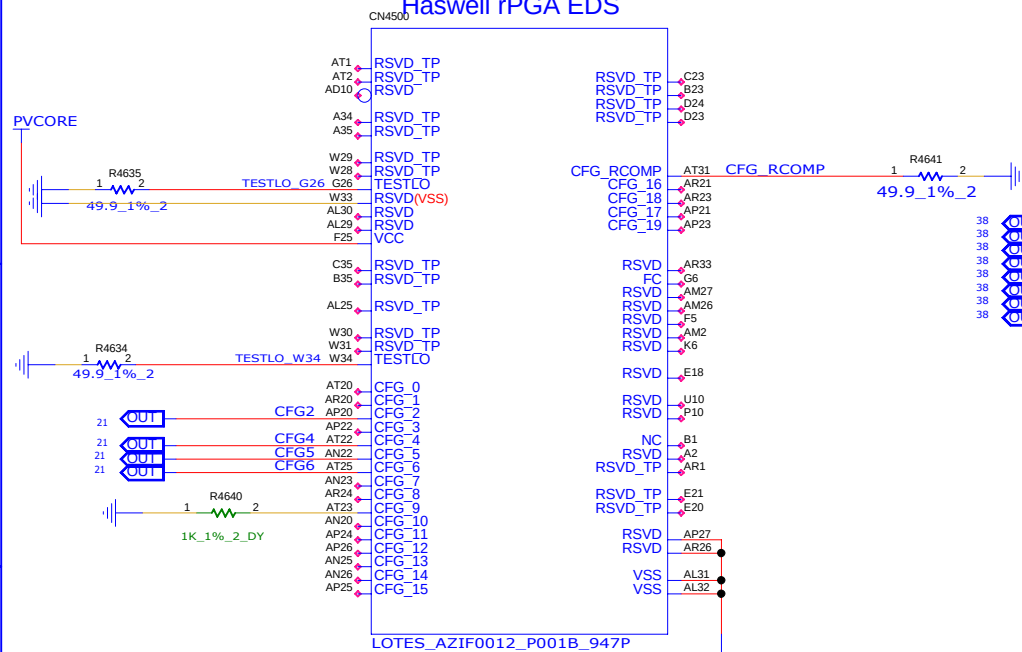


SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV A01
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SHEET 20 of 70

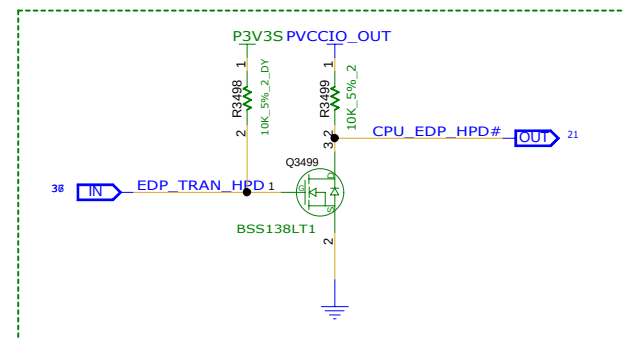
1

CPU
LOCATION 4500-4699
VER.01 20120808



CPU - STRAP PIN

- **CFG[1:0]:** Reserved configuration lane. A test point may be placed on the board for these lanes.
- **CFG[2]:** PCI Express* Static x16 Lane Numbering Reversal.
 - 1 = Normal operation
 - 0 = Lane numbers reversed.
- **CFG[3]: MSR Privacy Bit Feature**
 - 1 = Debug capability is determined by IA32_Debug_Interface_MSR (0xC80) bit[0] setting
 - 0 = IA32_Debug_Interface_MSR (0xC80) bit[0] default setting overridden
- **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[19:7]:** Reserved configuration lanes. A test point may be placed on the board for these lands.

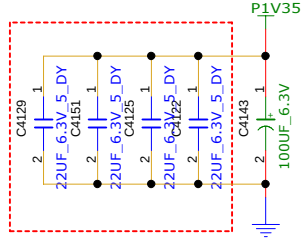
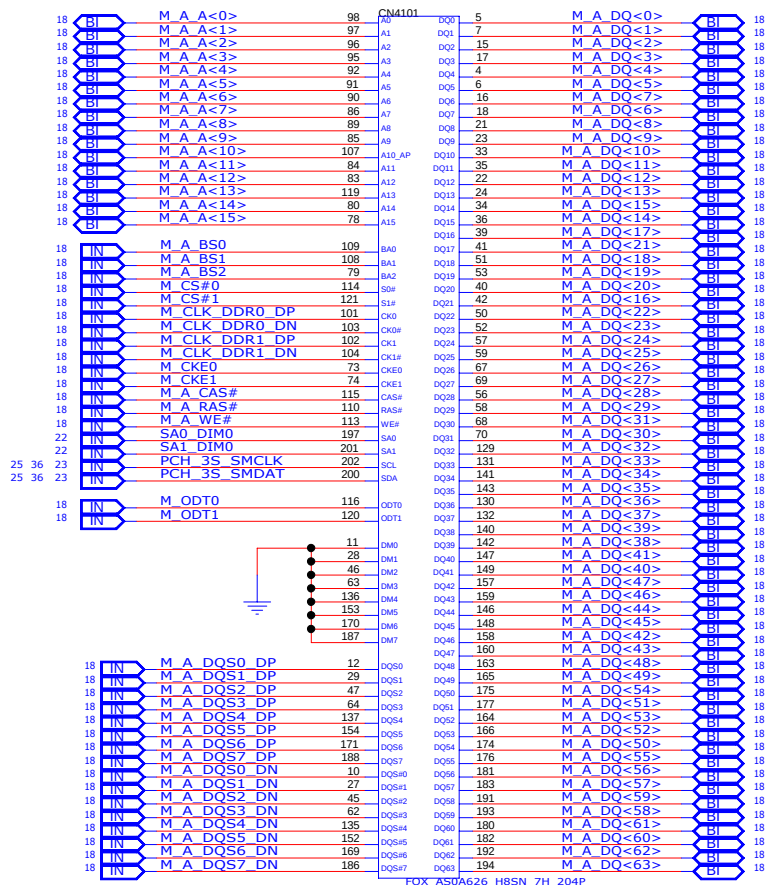


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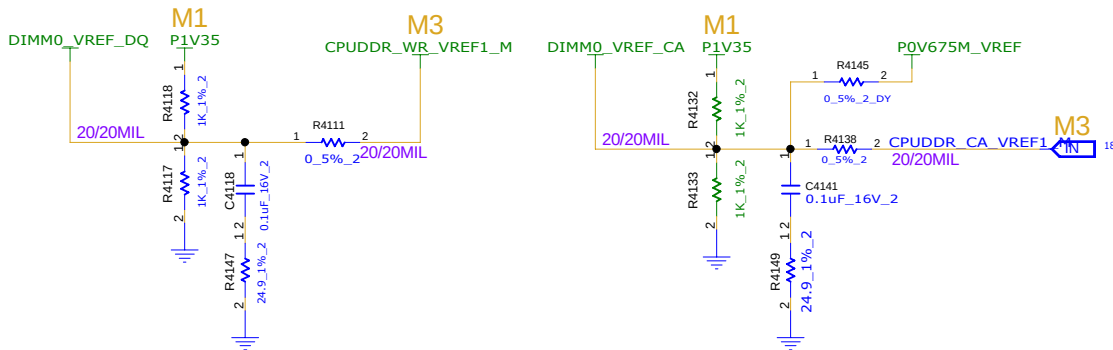
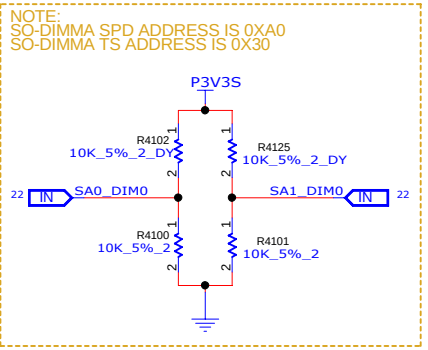
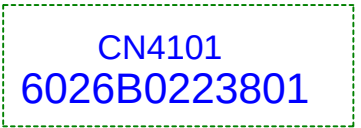
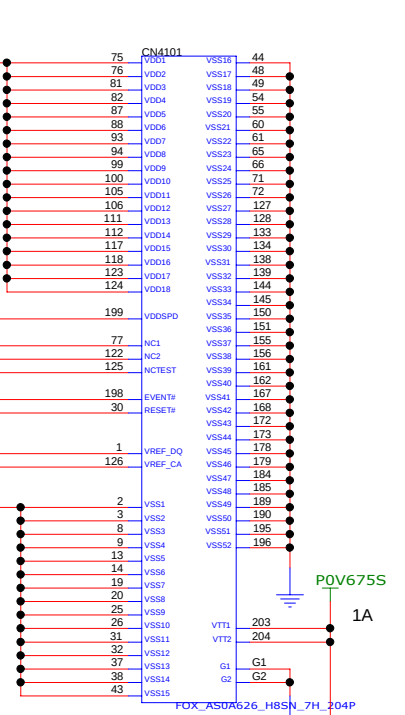
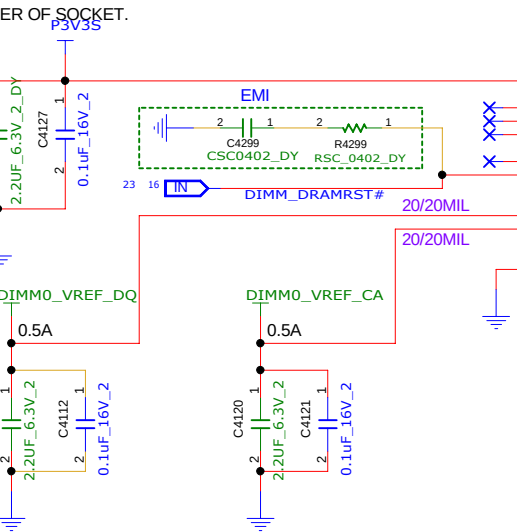
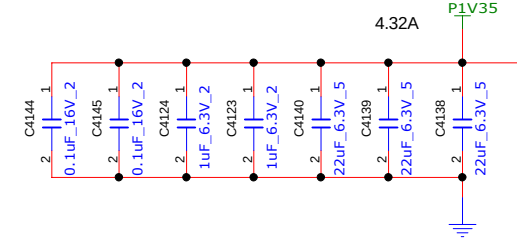
TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV A01

CH A - DIMM0, H = 8MM STD

6026B0223801

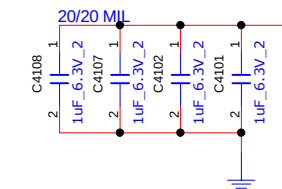
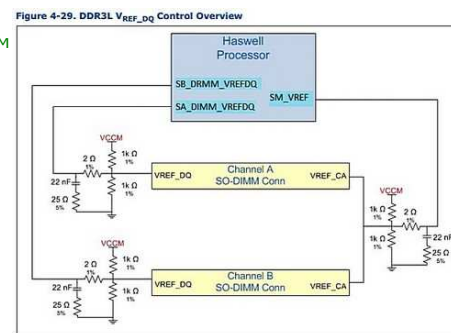


PLEASE PLACE 4 CAPS IN THE CENTER OF SOCKET.



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MODEL,PROJECT,FUNCTION			
Block Diagram			
DOC NUMBER		REV	
1310xxxxx-0-0		A01	
SIZE	CODE	SHEET	
A3	CS	22 of 70	

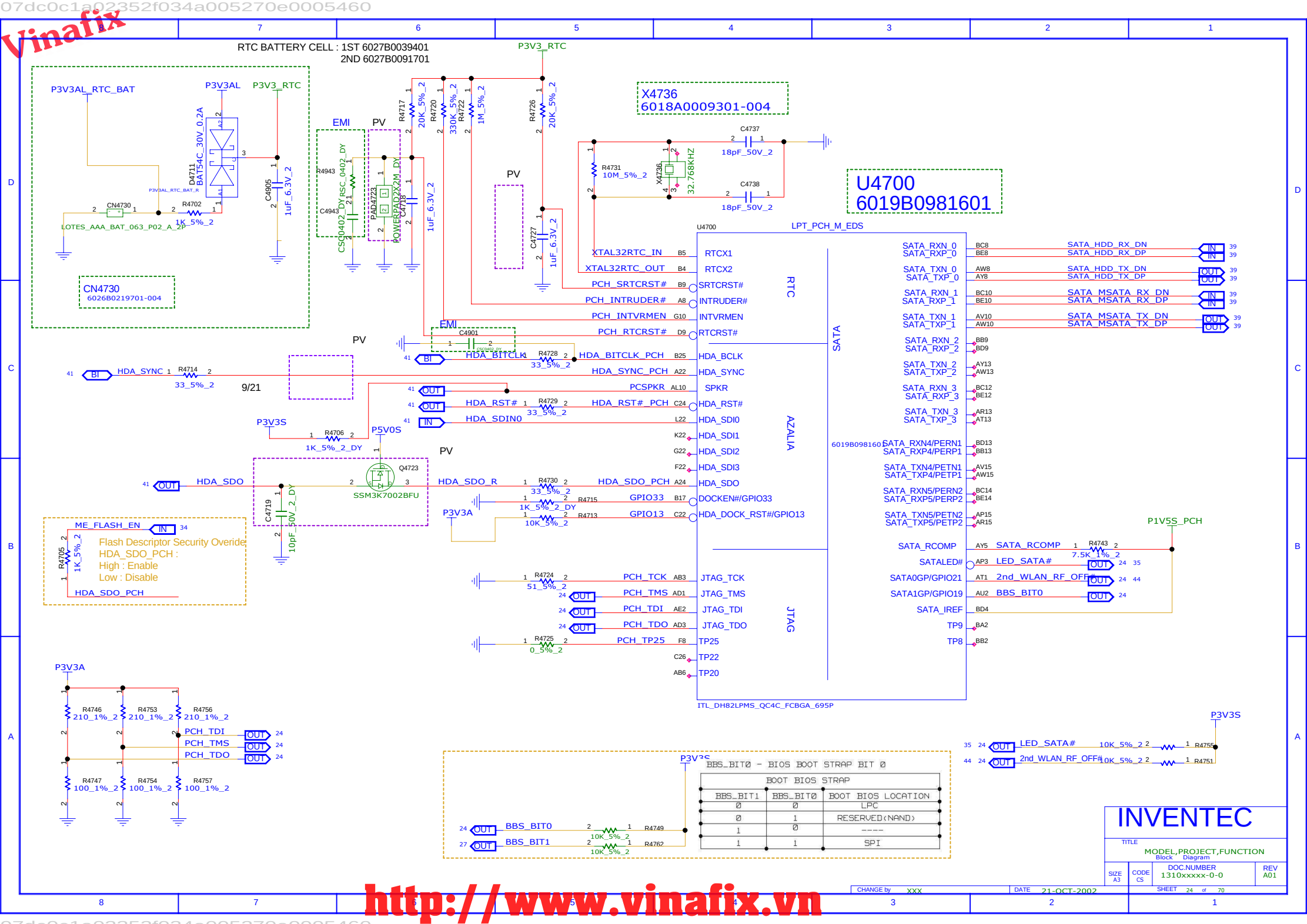
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TITLE	MODEL PROJECT FUNCTION
1. Project Overview	1. Project Overview
2. Project Objectives	2. Project Objectives
3. Project Scope	3. Project Scope
4. Project Organization	4. Project Organization
5. Project Schedule	5. Project Schedule
6. Project Budget	6. Project Budget
7. Project Risk Management	7. Project Risk Management
8. Project Communication	8. Project Communication
9. Project Monitoring and Control	9. Project Monitoring and Control
10. Project Closure	10. Project Closure

		DOC.NUMBER	
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SIZE A3	CODE CS	1310xxxxx-0-0	A
SHEET 23 of 30			



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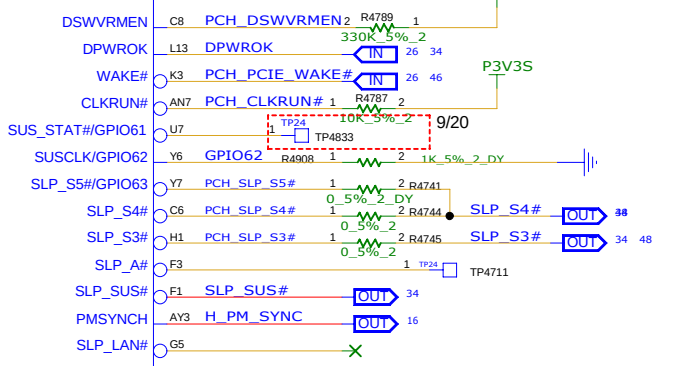
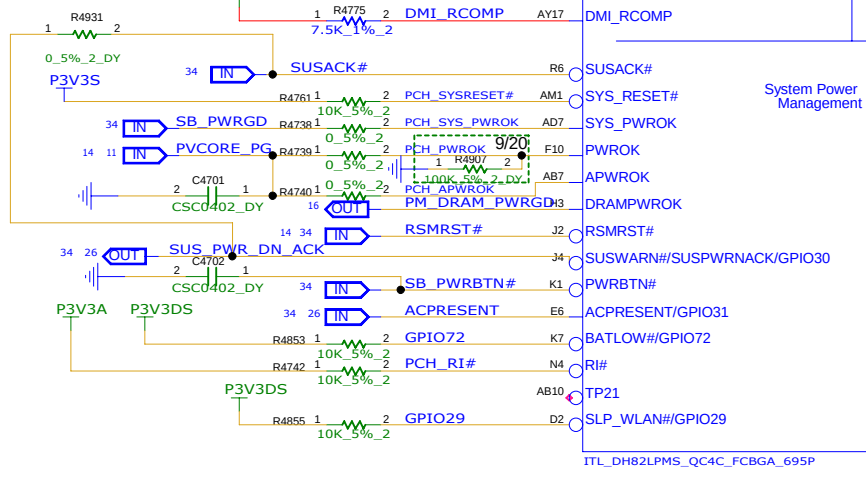
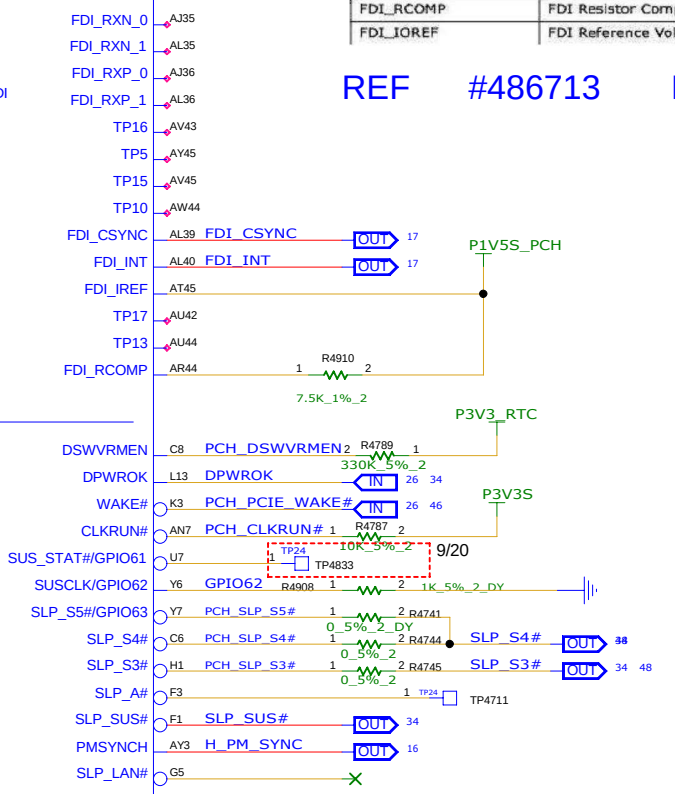
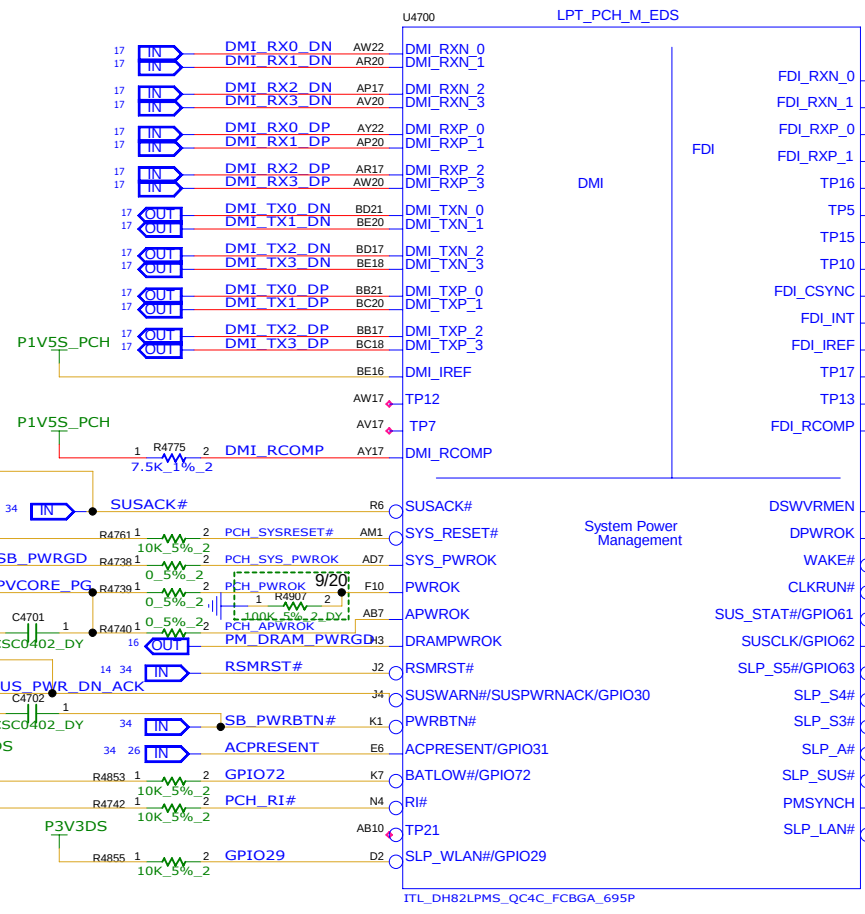
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TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	A01



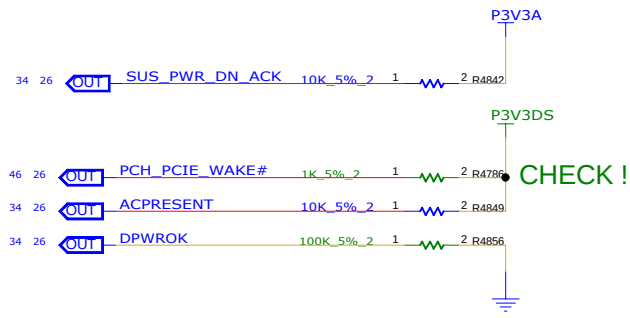


Signal	Description	Disable Guidelines
FDI_RXP[0:1] FDI_RXN[0:1]	Intel FDI Receive Differential Pair on PCH	Float
FDI_TXP[0:1] FDI_TXN[0:1]	Intel FDI Transmit Differential Pair on Processor	Float
FDI_CSXNC	Intel FDI Composite Sync	Connect to Processor and PCH
DISP_INT	Intel FDI Hot Plug Interrupt	Connect to Processor and PCH
FDI_RCOMP	FDI Resistor Compensation	Float
FDI_IREF	FDI Reference Voltage	Float

REF #486713 INTEL SBY DG V1.0



power rail ->DSW :
SLP_A#
SLP_S3#
SLP_S4#
SLP_SUS#
SLP_LAN#
SLP_WLAN#/GPIO29
GPIO27
PWRBRTN#
WAKE#
ACPRESENT/GPIO31
BATTLOW#/GPIO72
VCCDSW3_3
LAN_PHY_PWR_CTRL/GPIO12



INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	A01

D

C

B

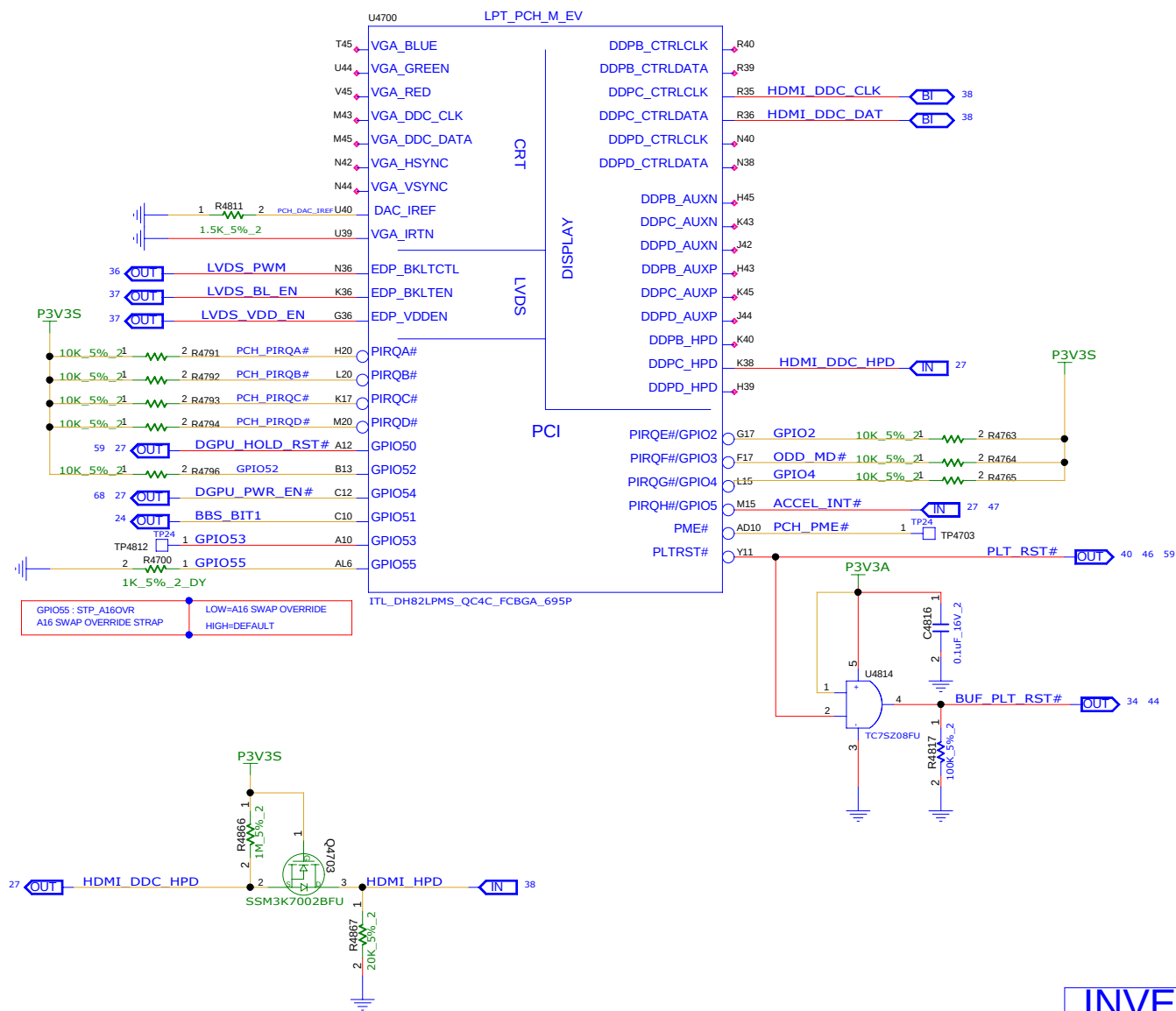
A

D

C

B

A



INVENTEC

TITLE

MODEL,PROJECT,FUNCTION

Block Diagram

DOC NUMBER

1310xxxxx-0-0

REV

A01

SHEET 27 of 70

CHANGE by XXX DATE 21-OCT-2002

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D

C

B

A

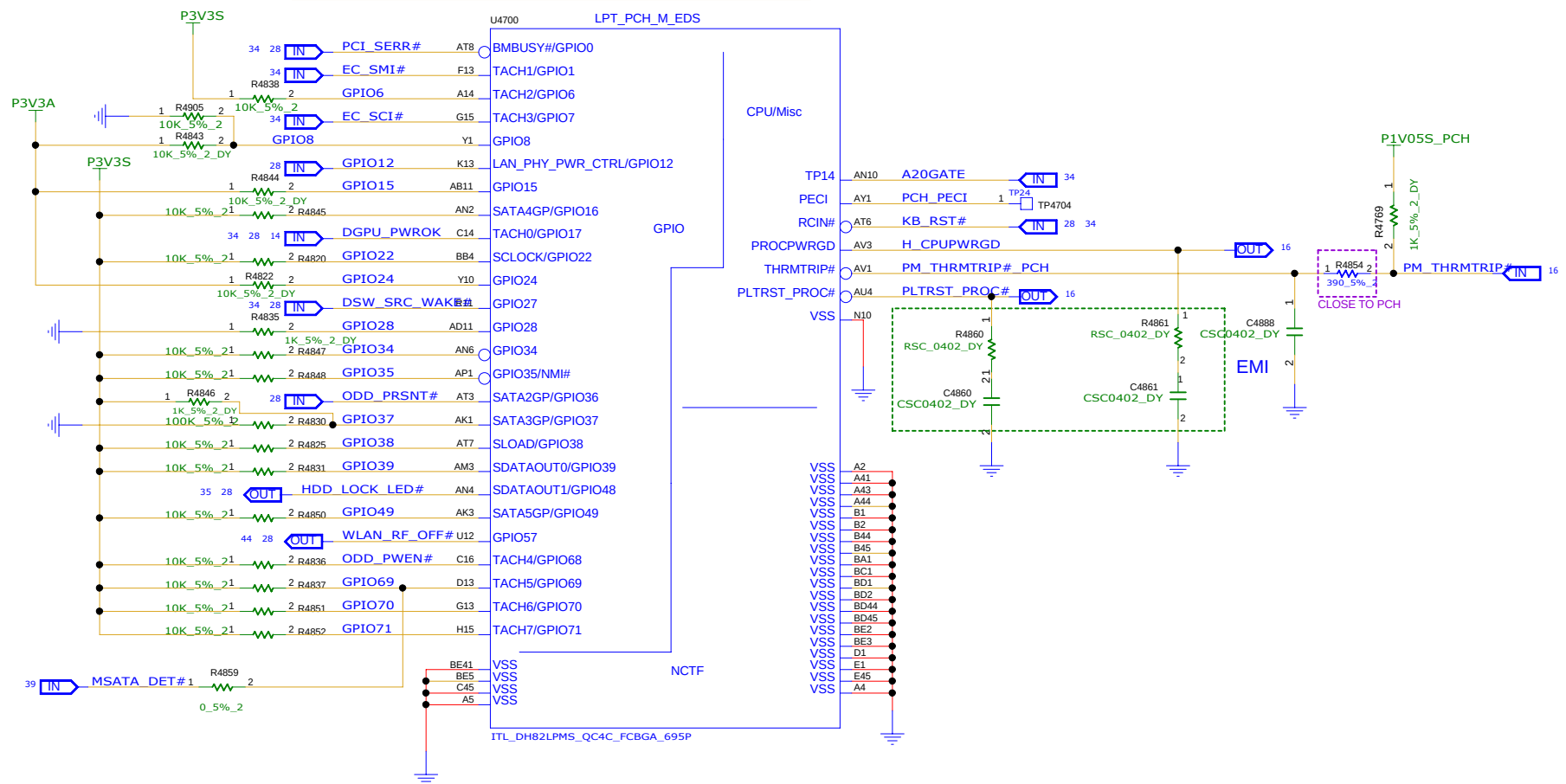
D

C

B

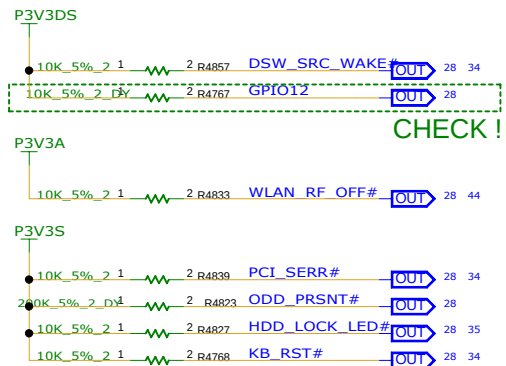
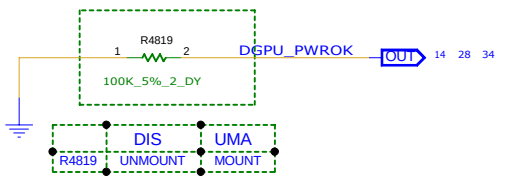
A

GPIO28
THE PIN REQUIRES GLITCH-FREE OUTPUT POWER SEQUENCE.
THE PAD SHOULD ONLY BE PULLED LOW
MOMENTARY
WHEN THE CORRESPONDING BUFFER POWER SUPPLY IS NOT STABLE.



GPIO36	RSVD	Rising edge of PWROK	This signal has a weak internal pull-down. NOTE: The internal pull-down is disabled after PLTRST# deasserts.
SATA3GP/GPIO37	TLS Confidentiality	Rising edge of PWROK pin	Low = Intel ME Crypto Transport Layer Security (TLS) cipher suite with no confidentiality High = Intel ME Crypto TLS cipher suite with confidentiality This signal has a weak internal pull-down. NOTES: 1. A strong pull-up may be needed for GPIO functionality. 2. This signal must be pulled up to support Intel AMT with TLS. Intel ME configuration parameters also need to be set correctly to enable TLS.

UMA



CHECK !

INVENTEC			
TITLE MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV A01
CHANGE by XXX		DATE 21-OCT-2002	SHEET 28 of 70

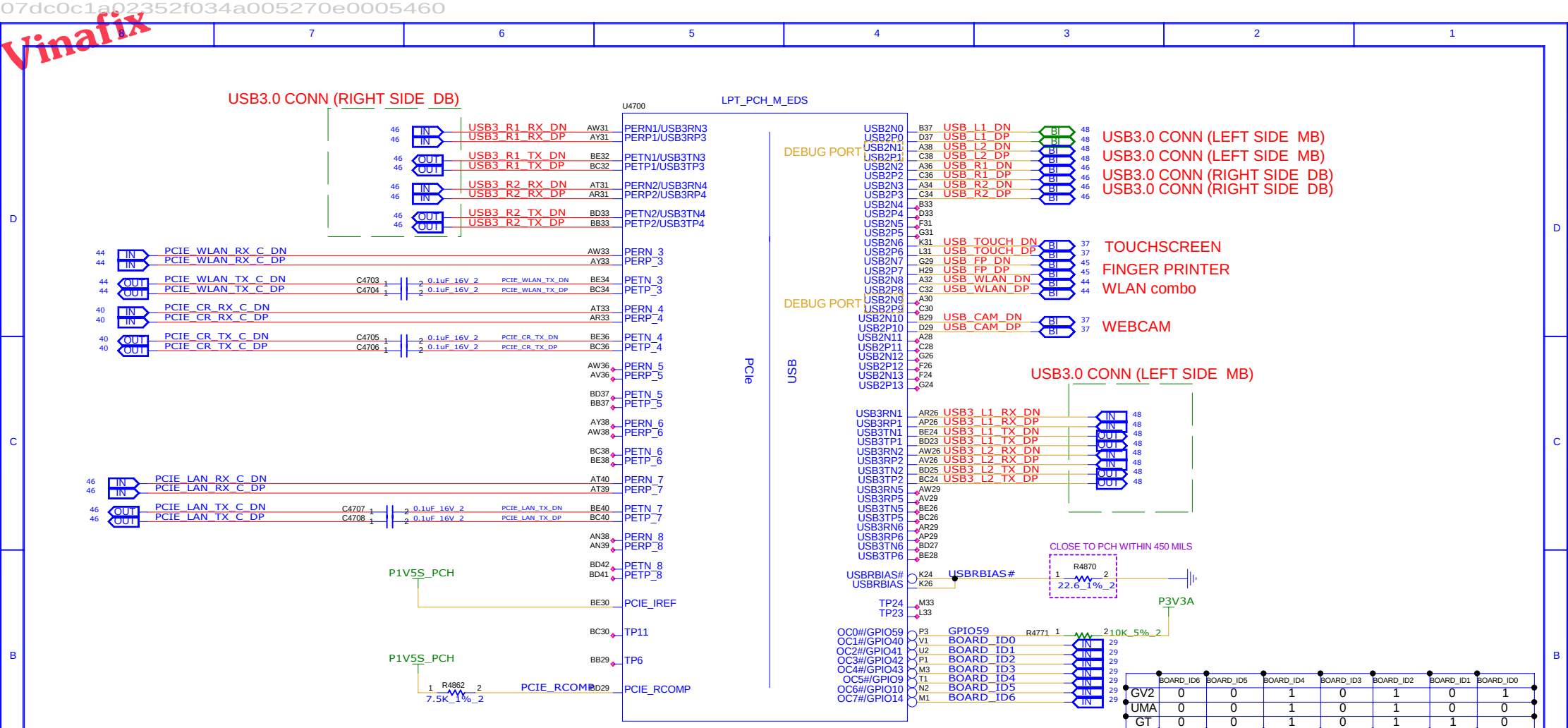
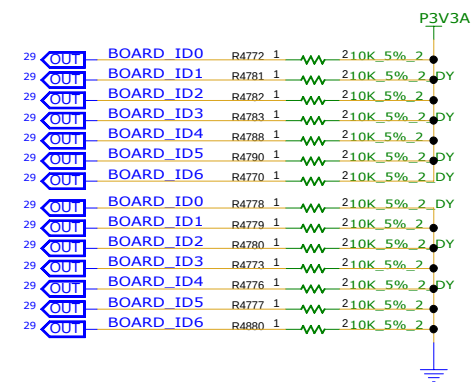
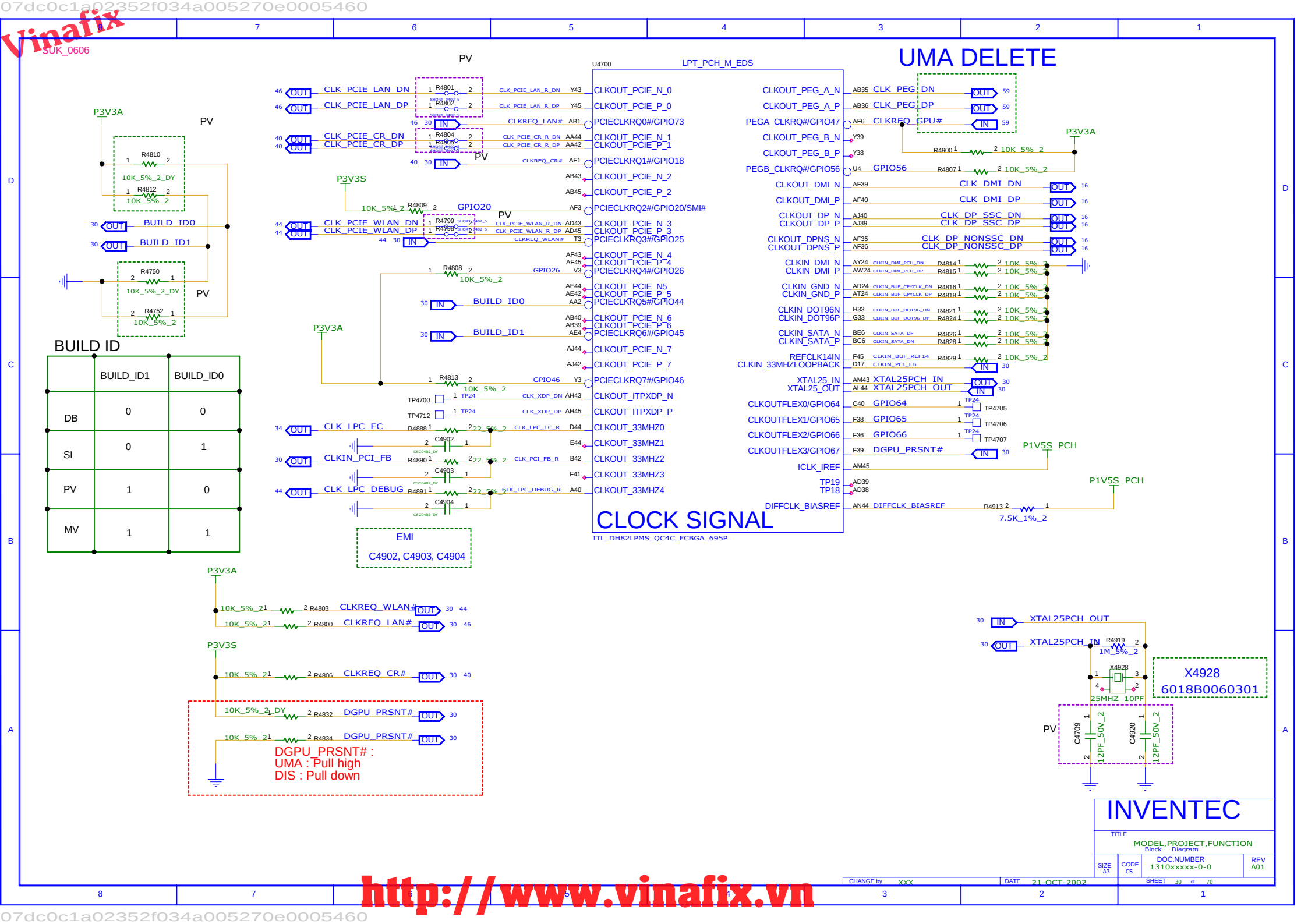


Table 1-5. Mobile Lynx Point SKUs Flexible I/O Map

SKU	High Speed I/O Ports																	
	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6	Port 7	Port 8	Port 9	Port 10	Port 11	Port 12	Port 13	Port 14	Port 15	Port 16	Port 17	Port 18
QM87	USB 3.0 Port 1	USB 3.0 Port 2	USB 3.0 Port 5	USB 3.0 Port 6	USB 3.0 Port 3	USB 3.0 Port 4	PCIe* Port 3	PCIe* Port 5	PCIe* Port 6	PCIe* Port 7	PCIe* Port 8	PCIe* Port 9	SATA 6Gb/s Port 4	SATA 6Gb/s Port 5	SATA 6Gb/s Port 0	SATA 3Gb/s Port 1	SATA 3Gb/s Port 2	SATA 3Gb/s Port 3
HM87	USB 3.0 Port 1	USB 3.0 Port 2	USB 3.0 Port 5	USB 3.0 Port 6	USB 3.0 Port 3	USB 3.0 Port 4	PCIe* Port 3	PCIe* Port 5	PCIe* Port 6	PCIe* Port 7	PCIe* Port 8	PCIe* Port 9	SATA 6Gb/s Port 4	SATA 6Gb/s Port 5	SATA 6Gb/s Port 0	SATA 3Gb/s Port 1	SATA 3Gb/s Port 2	SATA 3Gb/s Port 3
HM86	USB 3.0 Port 1	USB 3.0 Port 2	NA	NA	USB 3.0 Port 3	USB 3.0 Port 4	PCIe* Port 3	PCIe* Port 5	PCIe* Port 6	PCIe* Port 7	PCIe* Port 8	PCIe* Port 9	SATA 6Gb/s Port 4	SATA 6Gb/s Port 5	SATA 3Gb/s Port 0	NA	SATA 3Gb/s Port 2	NA



INVENTEC			
TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV A01
CHANGE by XXX		DATE 21-OCT-2002	SHEET 29 of 70





PLACE CLOSE TO IC P1V05S_PCH

C

B

A

TITLE	MODEL PROJECT FUNCTION
-------	------------------------

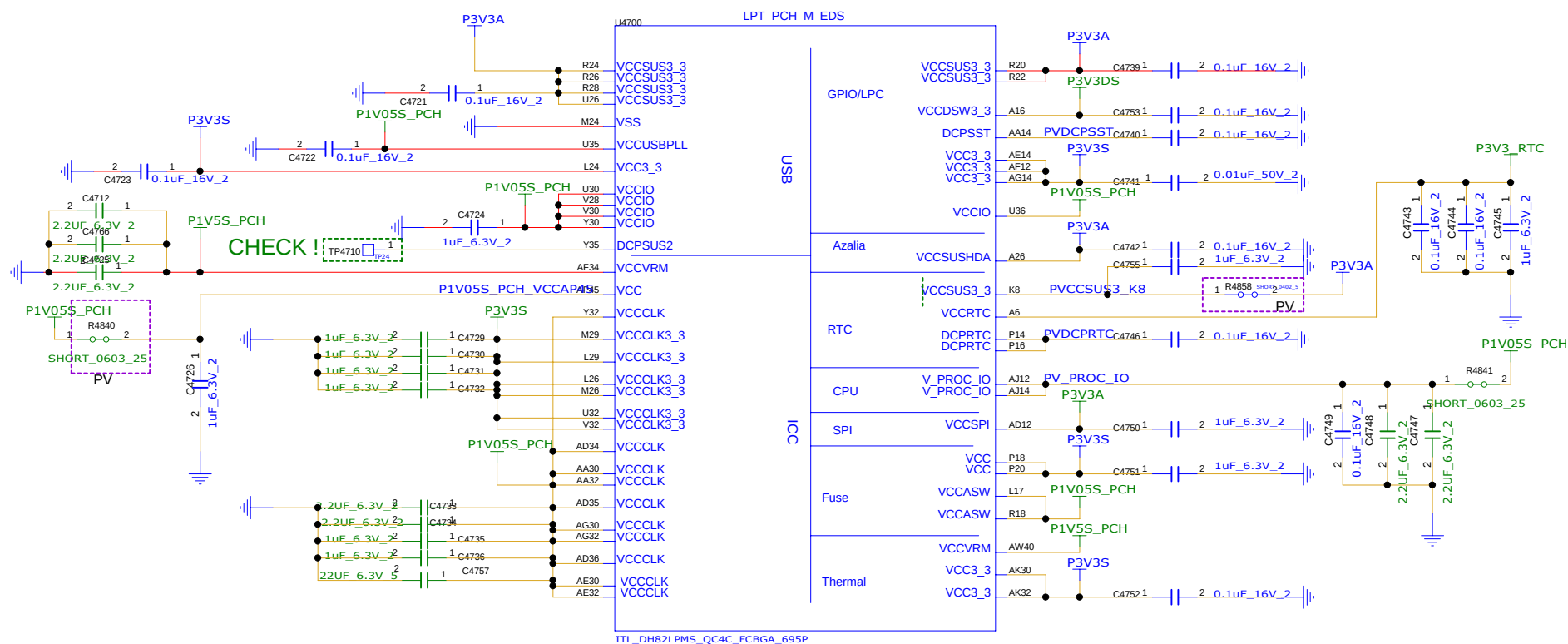
Block		Diagram	
	DOC.NUMBER		

SIZE A3	CODE CS	1310xxxxx-0-0	A
SHEET 31 of 30			

1

http://www.vinafix.vn

REF INTEL SBY DG #486713 V1.0		
V3.3 _{SS} (3.3V)		USB3: AJ30, AJ32
		USB2: R24, R26, R28, U26
		Sus: R20, R22
		AZALIA: A26
		RTC: K8



INVENTEC

TITLE	MODEL.PROJECT.FUNCTION
1.1	1.1.1
1.2	1.2.1
1.3	1.3.1
1.4	1.4.1
1.5	1.5.1
1.6	1.6.1
1.7	1.7.1
1.8	1.8.1
1.9	1.9.1
1.10	1.10.1
1.11	1.11.1
1.12	1.12.1
1.13	1.13.1
1.14	1.14.1
1.15	1.15.1
1.16	1.16.1
1.17	1.17.1
1.18	1.18.1
1.19	1.19.1
1.20	1.20.1
1.21	1.21.1
1.22	1.22.1
1.23	1.23.1
1.24	1.24.1
1.25	1.25.1
1.26	1.26.1
1.27	1.27.1
1.28	1.28.1
1.29	1.29.1
1.30	1.30.1
1.31	1.31.1
1.32	1.32.1
1.33	1.33.1
1.34	1.34.1
1.35	1.35.1
1.36	1.36.1
1.37	1.37.1
1.38	1.38.1
1.39	1.39.1
1.40	1.40.1
1.41	1.41.1
1.42	1.42.1
1.43	1.43.1
1.44	1.44.1
1.45	1.45.1
1.46	1.46.1
1.47	1.47.1
1.48	1.48.1
1.49	1.49.1
1.50	1.50.1
1.51	1.51.1
1.52	1.52.1
1.53	1.53.1
1.54	1.54.1
1.55	1.55.1
1.56	1.56.1
1.57	1.57.1
1.58	1.58.1
1.59	1.59.1
1.60	1.60.1
1.61	1.61.1
1.62	1.62.1
1.63	1.63.1
1.64	1.64.1
1.65	1.65.1
1.66	1.66.1
1.67	1.67.1
1.68	1.68.1
1.69	1.69.1
1.70	1.70.1
1.71	1.71.1
1.72	1.72.1
1.73	1.73.1
1.74	1.74.1
1.75	1.75.1
1.76	1.76.1
1.77	1.77.1
1.78	1.78.1
1.79	1.79.1
1.80	1.80.1
1.81	1.81.1
1.82	1.82.1
1.83	1.83.1
1.84	1.84.1
1.85	1.85.1
1.86	1.86.1
1.87	1.87.1
1.88	1.88.1
1.89	1.89.1
1.90	1.90.1
1.91	1.91.1
1.92	1.92.1
1.93	1.93.1
1.94	1.94.1
1.95	1.95.1
1.96	1.96.1
1.97	1.97.1
1.98	1.98.1
1.99	1.99.1
2.00	2.00.1
2.01	2.01.1
2.02	2.02.1
2.03	2.03.1
2.04	2.04.1
2.05	2.05.1
2.06	2.06.1
2.07	2.07.1
2.08	2.08.1
2.09	2.09.1
2.10	2.10.1
2.11	2.11.1
2.12	2.12.1
2.13	2.13.1
2.14	2.14.1
2.15	2.15.1
2.16	2.16.1
2.17	2.17.1
2.18	2.18.1
2.19	2.19.1
2.20	2.20.1
2.21	2.21.1
2.22	2.22.1
2.23	2.23.1
2.24	2.24.1
2.25	2.25.1
2.26	2.26.1
2.27	2.27.1
2.28	2.28.1
2.29	2.29.1
2.30	2.30.1
2.31	2.31.1
2.32	2.32.1
2.33	2.33.1
2.34	2.34.1
2.35	2.35.1
2.36	2.36.1
2.37	2.37.1
2.38	2.38.1
2.39	2.39.1
2.40	2.40.1
2.41	

Block Diagram			
SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	F A

SHEET 32 of 70

D

C

B

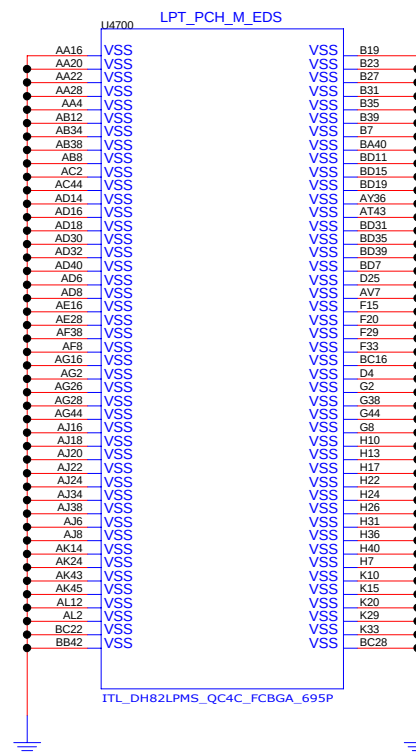
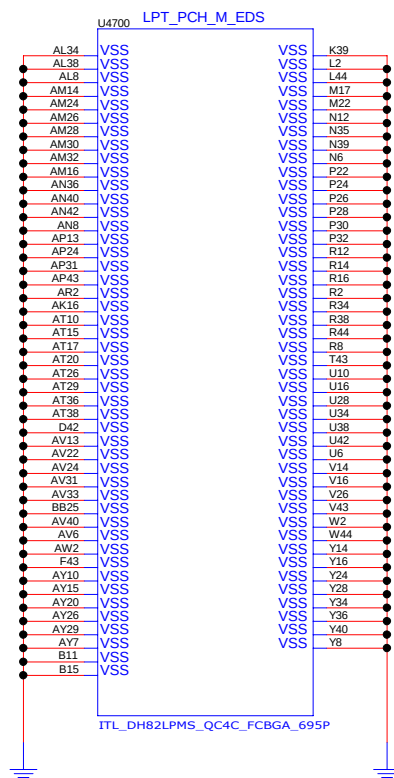
A

D

C

B

A



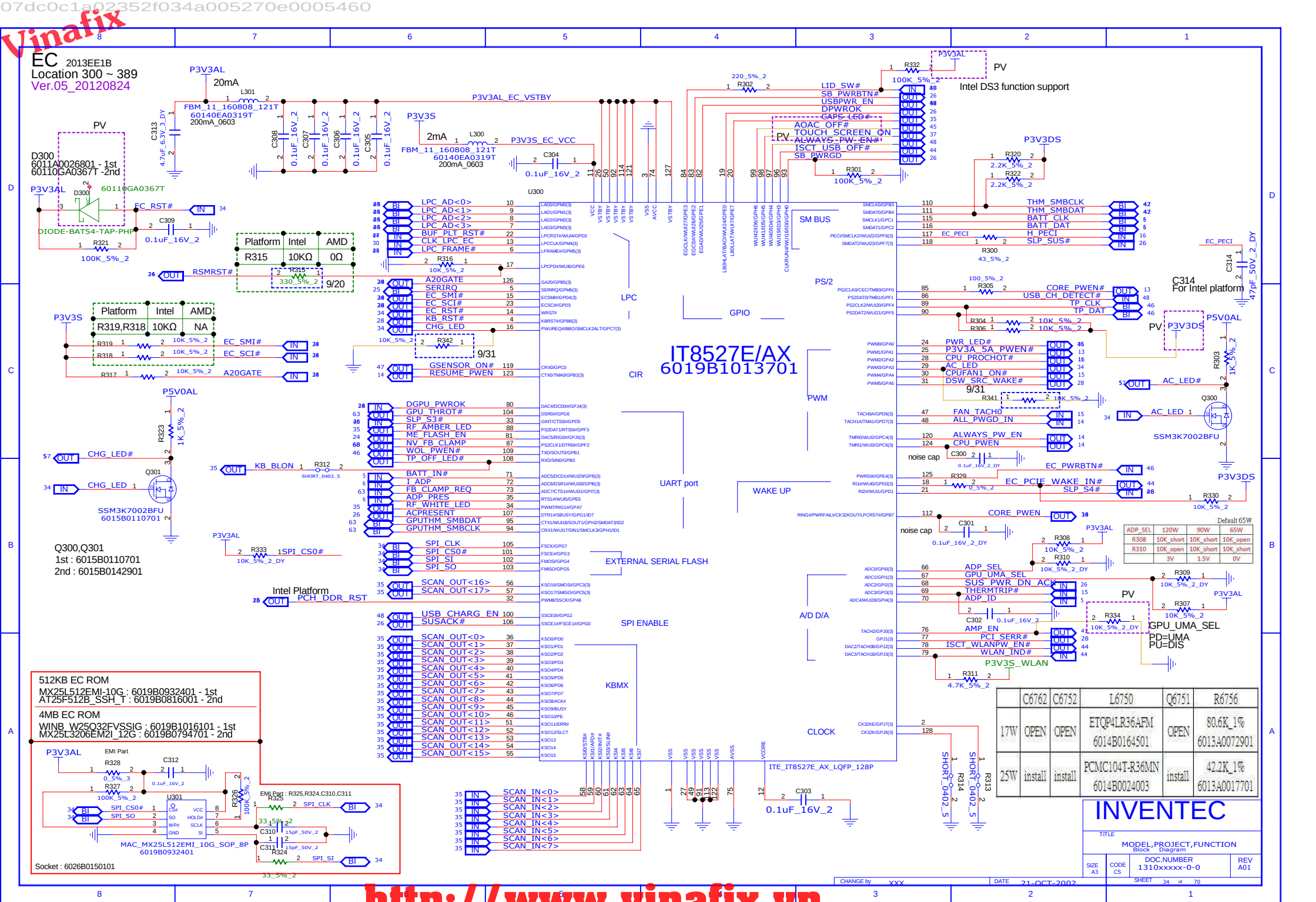
INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

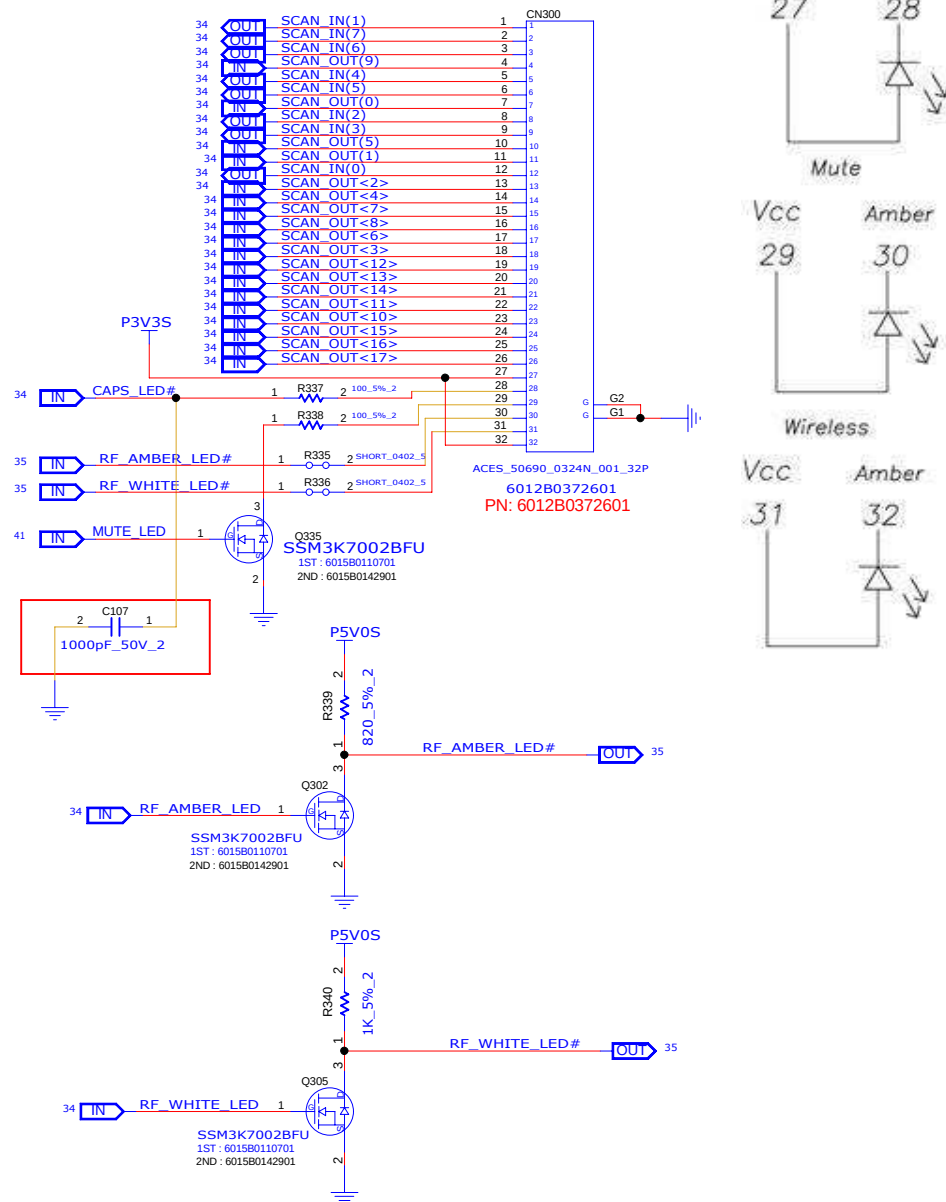
SIZE A3 CODE CS DOC NUMBER 1310xxxxx-0-0 REV A01

CHANGE by XXX DATE 21-OCT-2002

SHEET 33 of 70

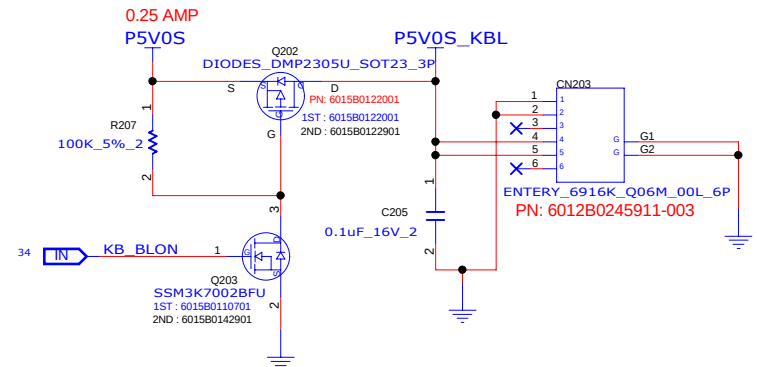


KEYBOARD CONN(32 PIN)



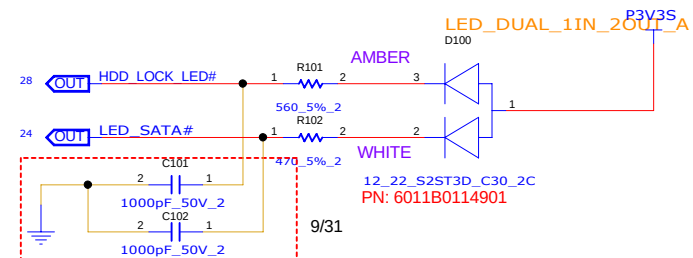
CONNECTOR KEY BOARD 200~299

KEYBOARD BACKLIGHT

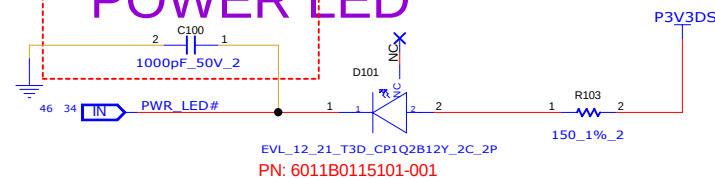


LED 100~199

HDD LED



POWER LED



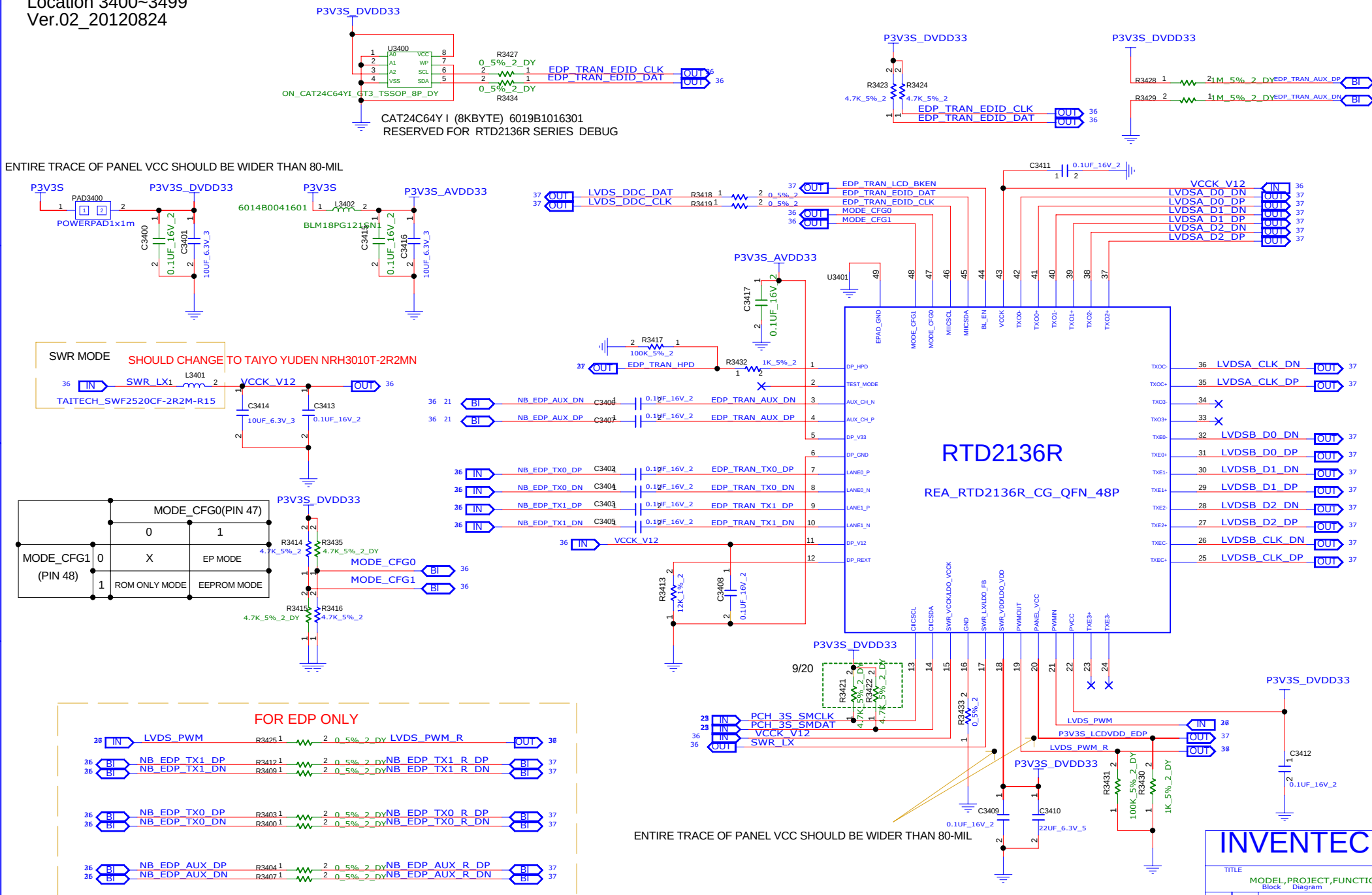
INVENTEC

TITLE			
MODEL PROJECT FUNCTION			
KB CONN & LED			
SIZE A3	CODE CS	DOC NUMBER 1310xxxx-0-0	REV A01

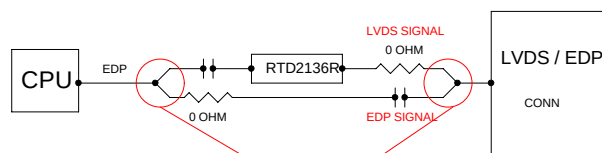
CHANGE by XXX DATE 21-OCT-2002

SHEET 35 of 70

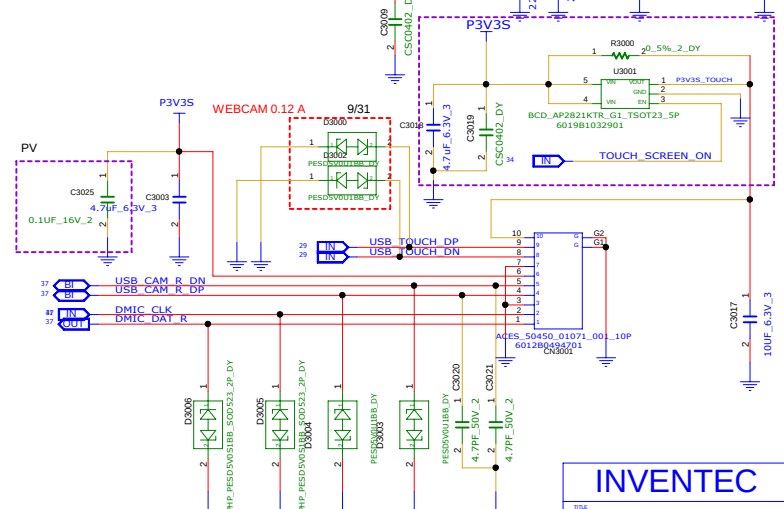
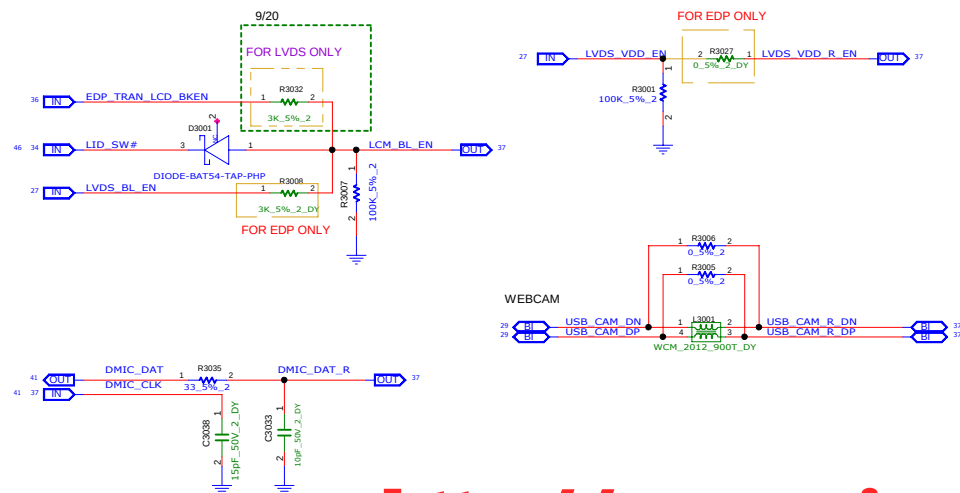
Location 3400~3499
Ver.02_20120824



Location 3000~3049
Ver.02 20120824



NOTE :
LAYOUT TRACE AS SHORTER AS POSSIBLE



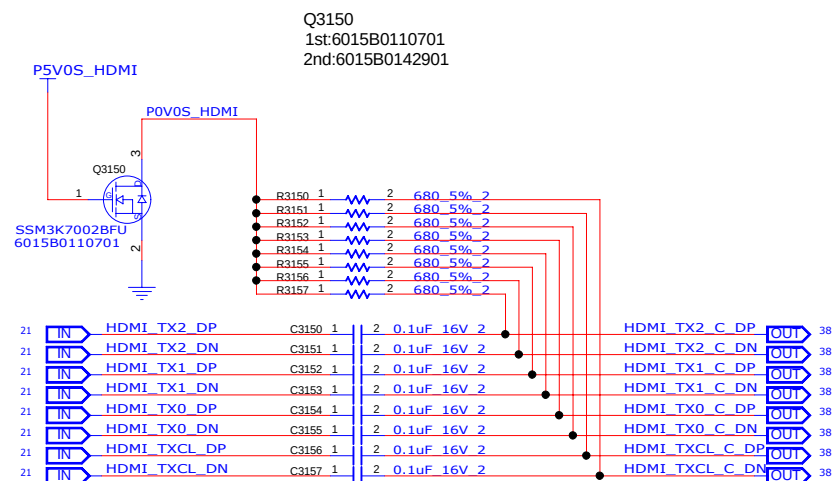
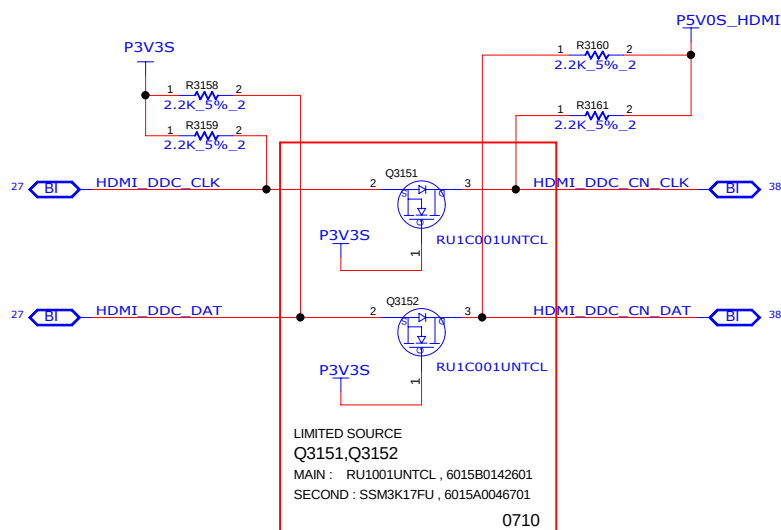
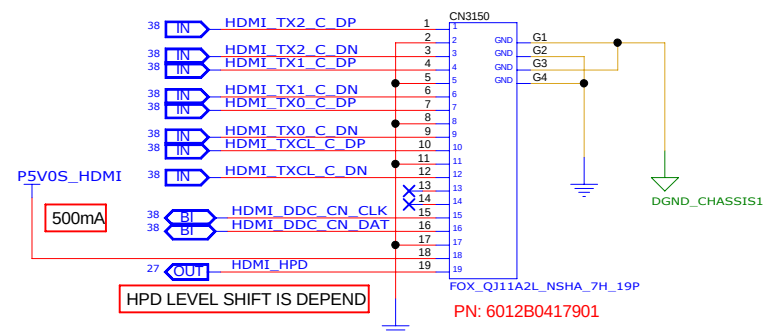
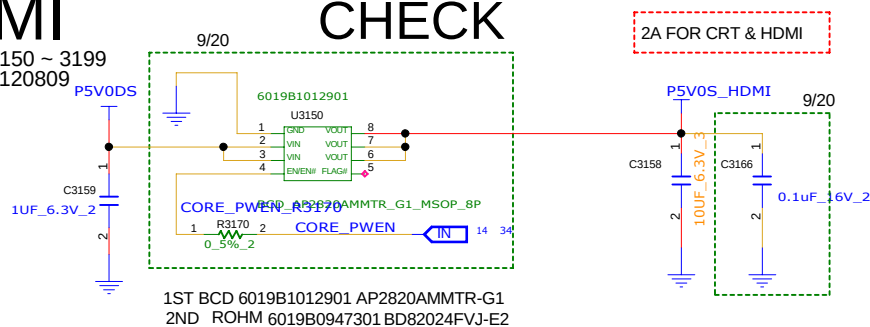
http://www.vinafix.vn W/ECAM+TOUCHN SCREEN

INVENTEC			
TITLE MODEL,PROJECT,FUNCTION LVDS			
SIZE C	CODE CS	DOC NUMBER 1310XXXXXX-0-0	
SHEET		37	of 75

HDMI

Location 3150 ~ 3199
Ver.02_20120809

CHECK



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 1310xxxxx-0-0 REV A01

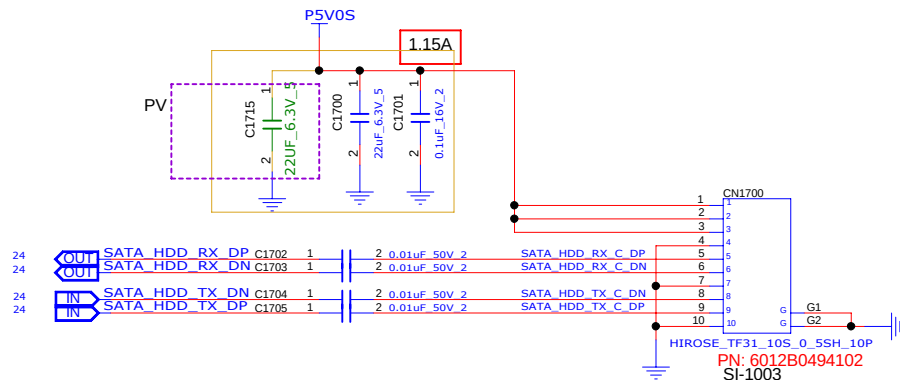
SHEET 38 of 70

SATA HDD

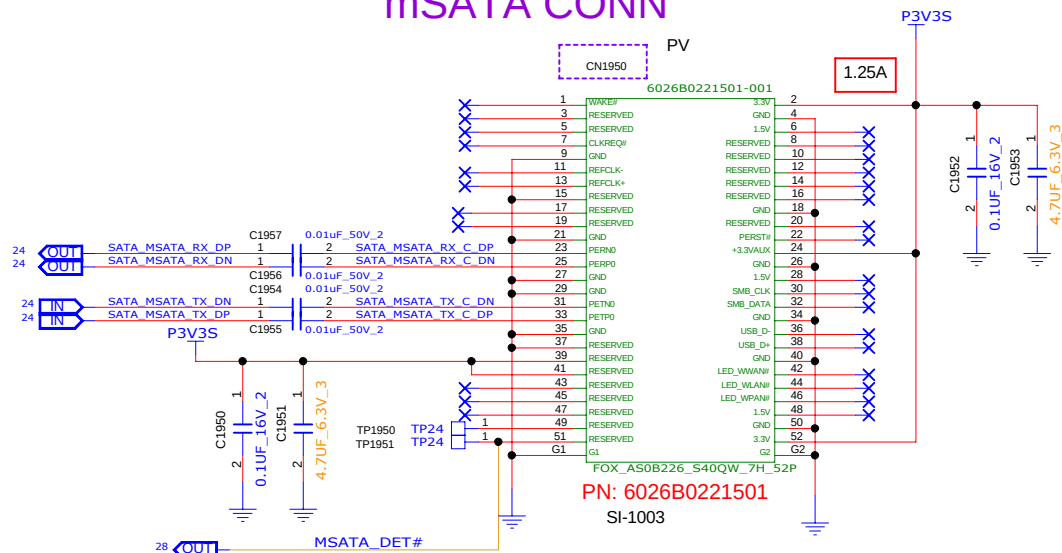
Location 1700 ~ 1749

mSATA
Location 1950 ~ 1999
Ver.01_20120808

SATA HDD CABLE CONN on MB



mSATA CONN

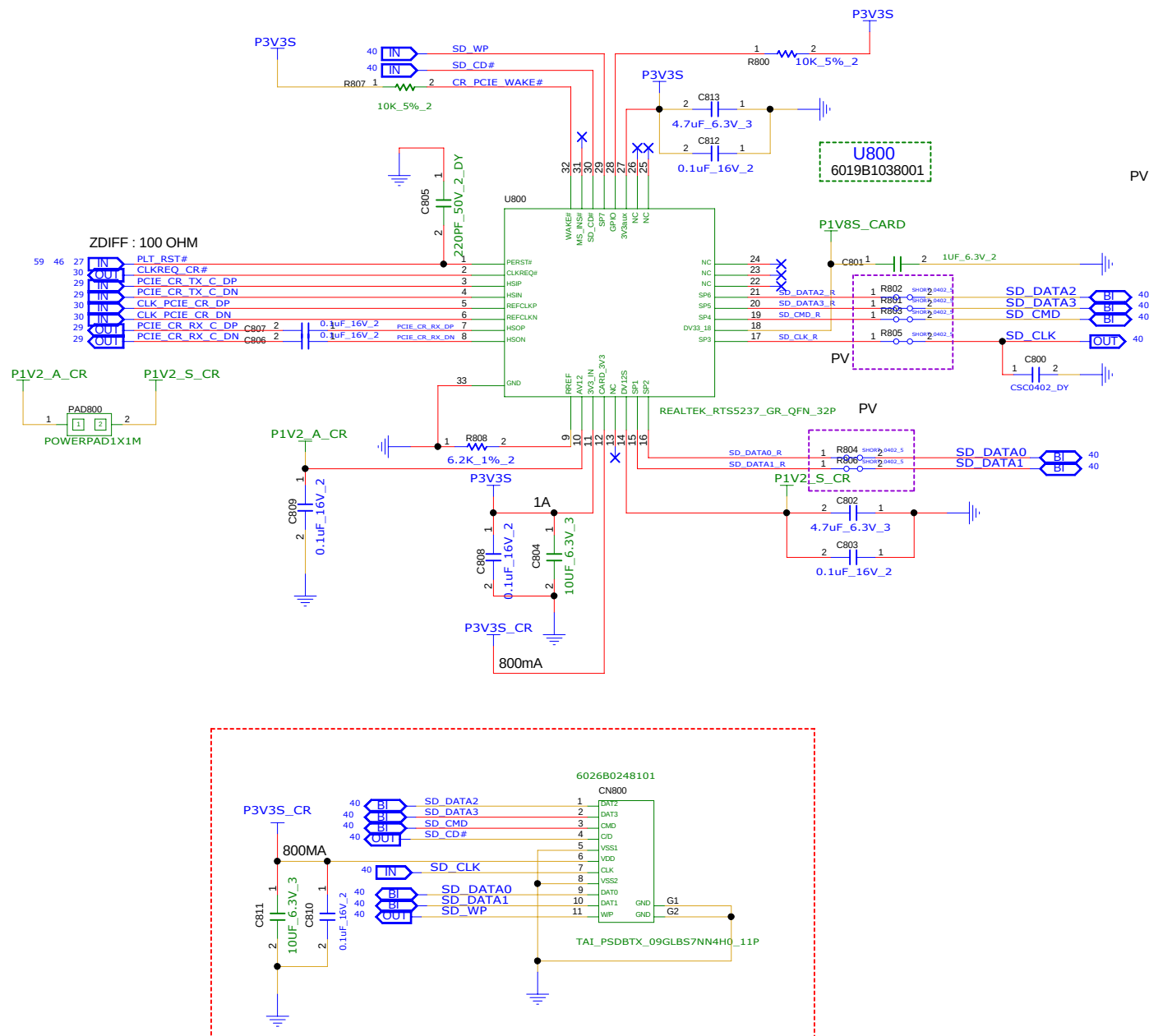


INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
SATA HDD & SATA ODD			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	A01

CARD READER RTS5237

LOCATION: 800~899
VER_03 . 20120823



INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	A01

CHANGE by XXX DATE 21-OCT-2002

SHEET 40 of 70

AUDIO-1

CODEC

LOCATION: 500-549

VER.06_20120824

DVDD 0.025AMP

AVDD 0.06AMP

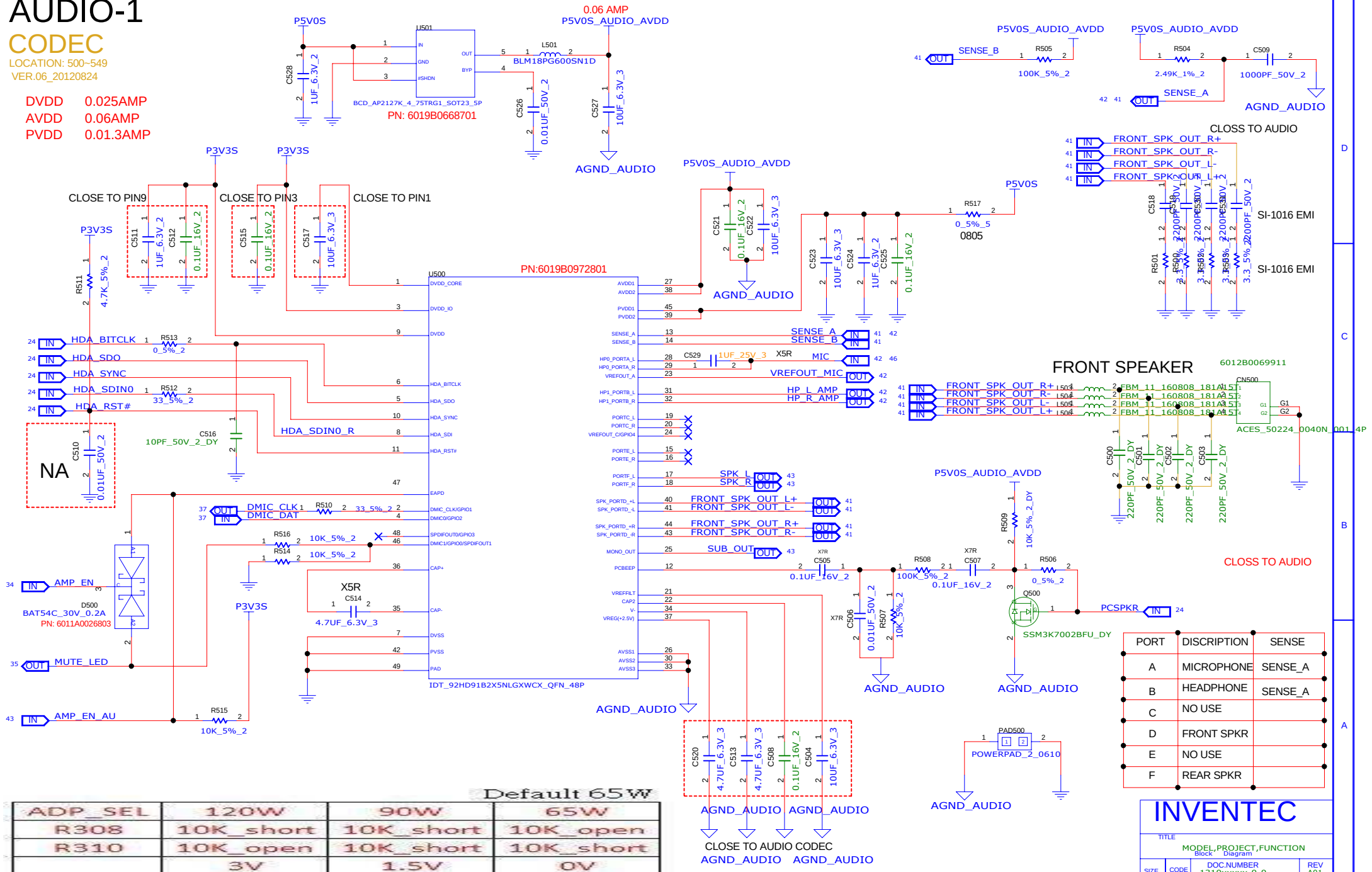
PVDD 0.01.3AMP

D

C

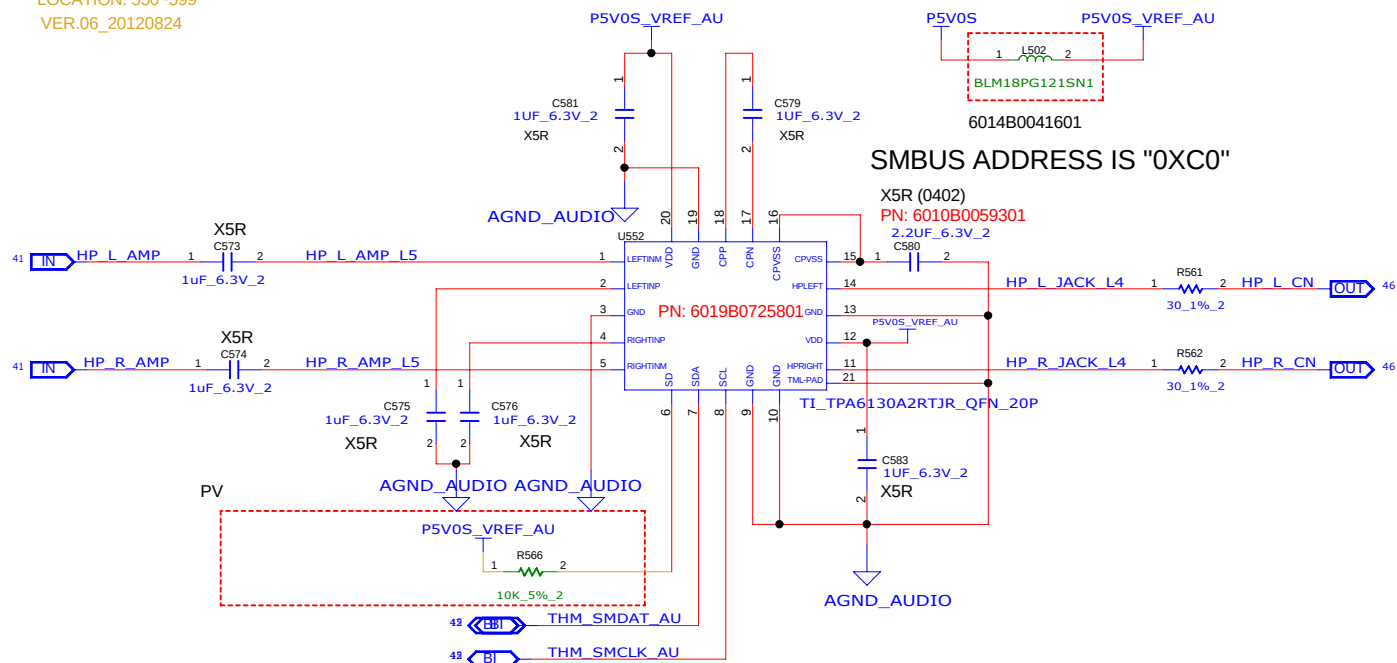
B

A

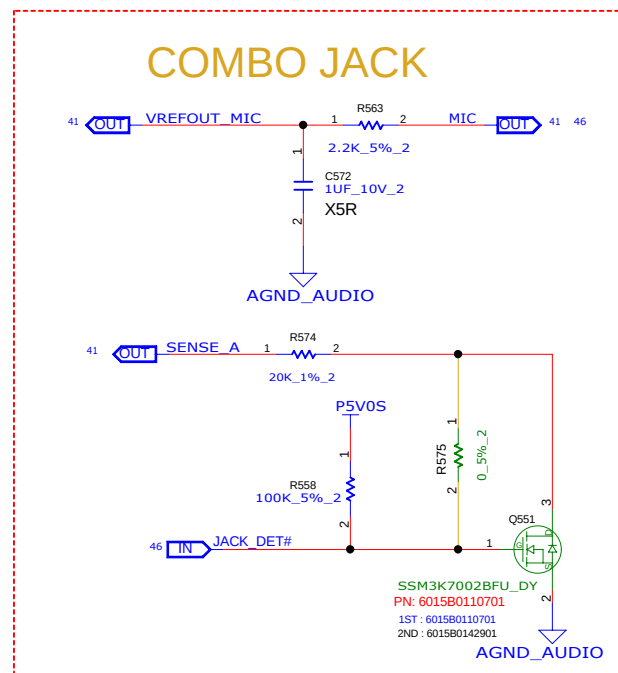
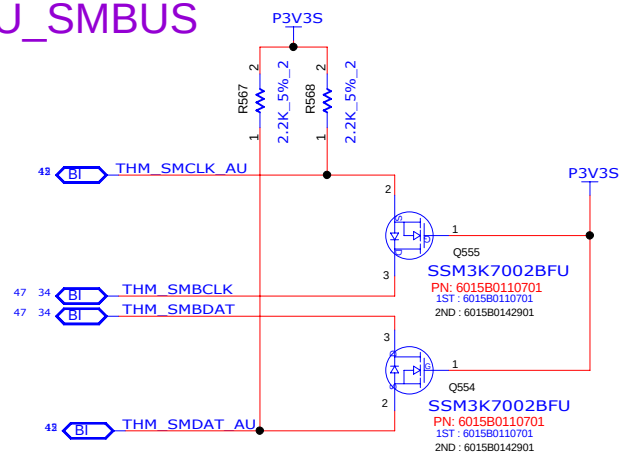


CODEC

LOCATION: 550~599
VER.06 20120824



AU SMBUS

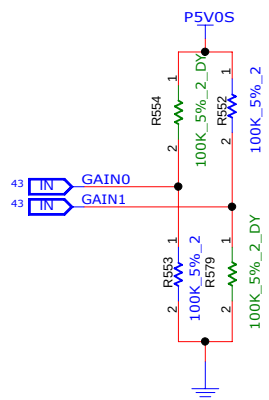


Location	Part number	Factory	Manufacturer Part No	Marking
Q9401	1st : 6015B0122001	DIODES	DMP2305U	23P
	2nd : 6015B0122901	TOSHIBA	SSM3J327R	KFG
L9401	1st : 6014B0200401	TAI-TECH	SWF2520CF-2R2M-R15	
	2nd : 6014B0190301	CYNTEC	PHI25201B-2R2MS	
X9401	1st : 6018B0060301	EPSON	FA-238G	2500M
	2nd : 6018B0054701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

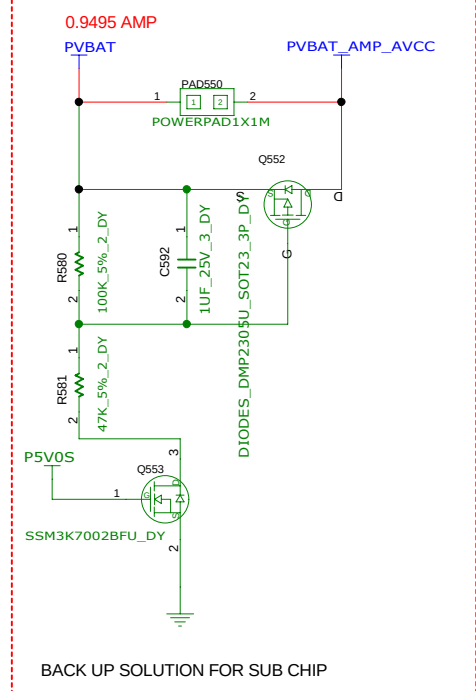
INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A2	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REVISION A0

LOCATION: 550~599
VER.06 20120824

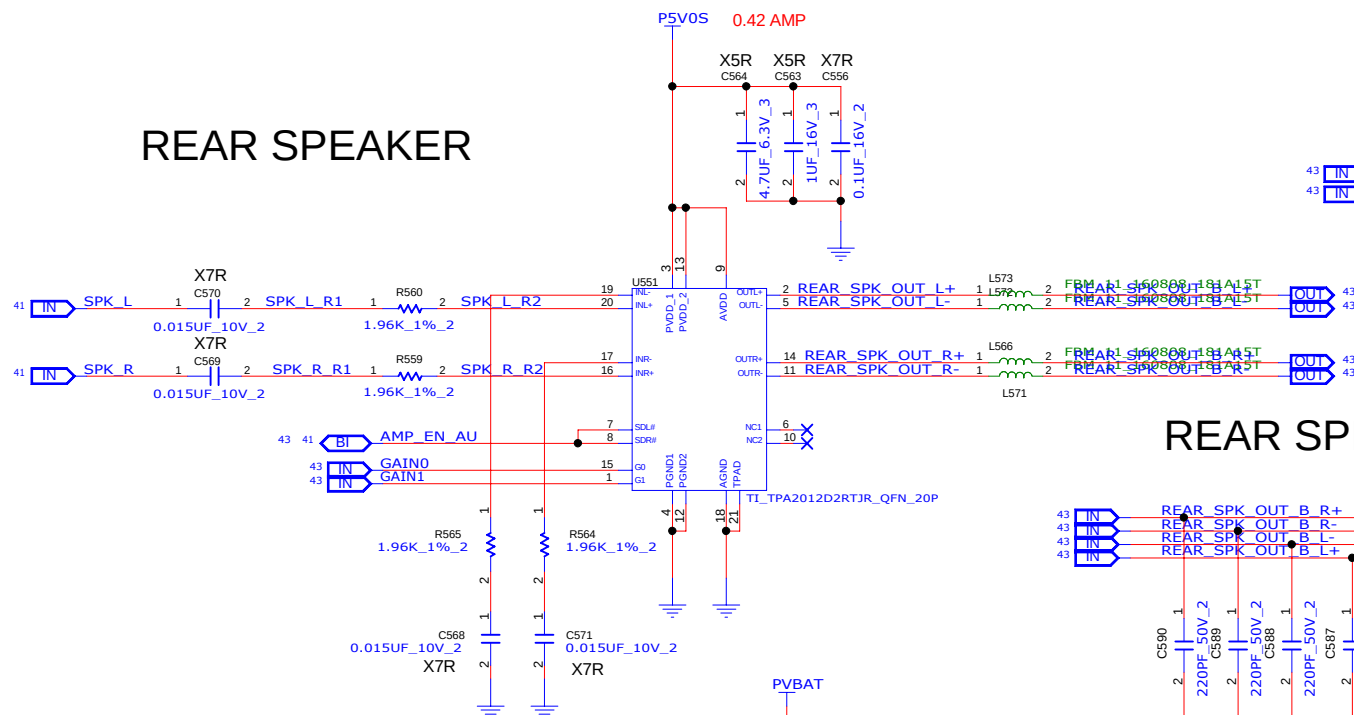


NA

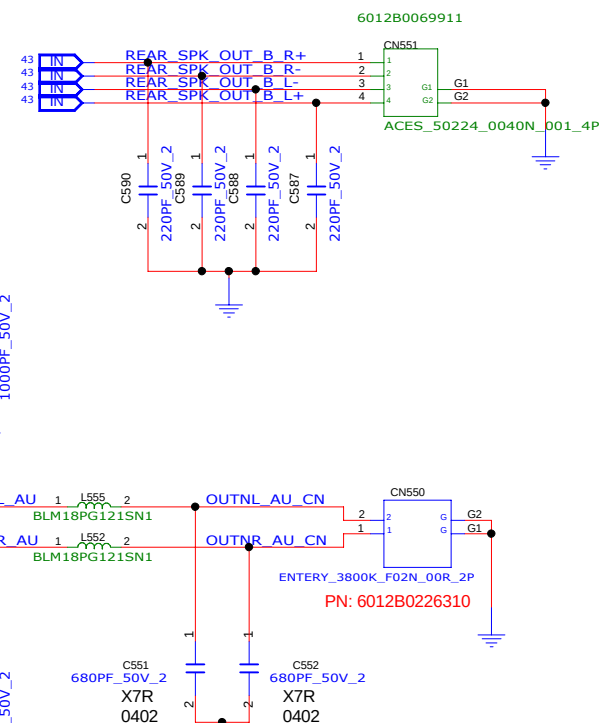


BACK UP SOLUTION FOR SUB CHIP

REAR SPEAKER



REAR SPEAKER

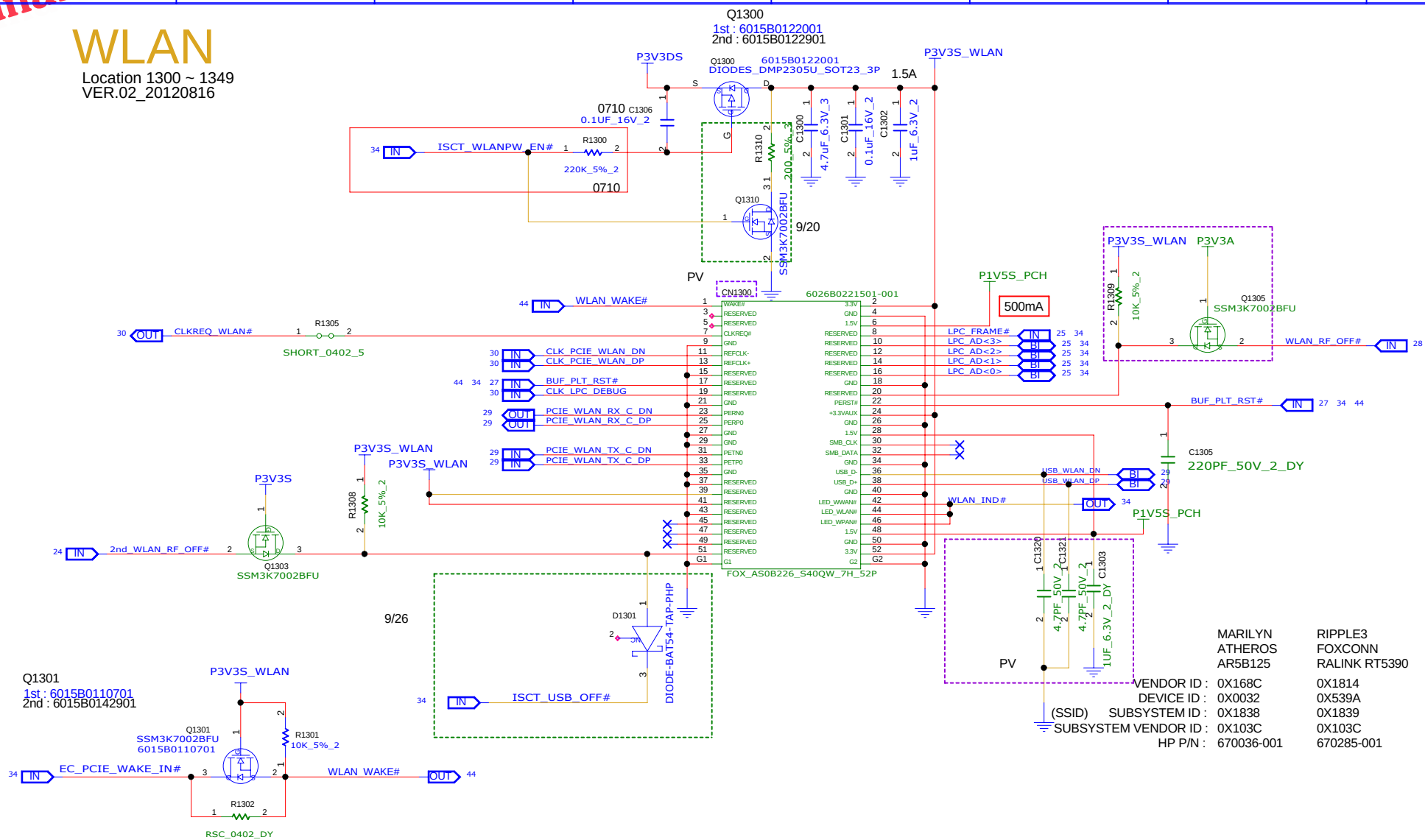


TI TPA3111D1 (HP PART NUMBER HPA00836PWPR)

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV A01

Location 1300 ~ 1349
VER.02 20120816

MARILYN
ATHEROS
AR5B125

RIPPLE3
FOXCONN
RALINK RT5390

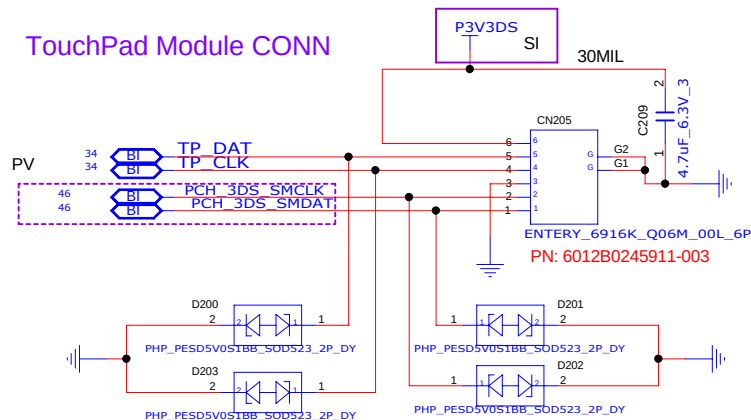
VENDOR ID : 0X168C
DEVICE ID : 0X0032
(SSID) SUBSYSTEM ID : 0X1838
SUBSYSTEM VENDOR ID : 0X103C
HP P/N : 670036-001

0X1814
0X539A
0X1839
0X103C
670285-001

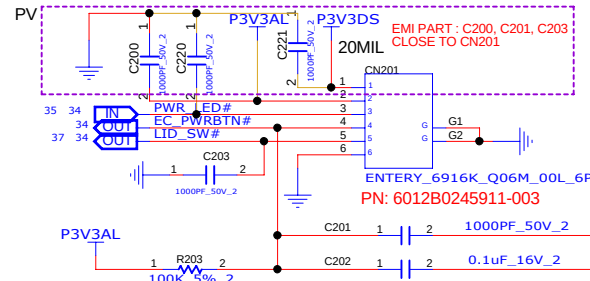
INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION WLAN & BT			
SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV A01

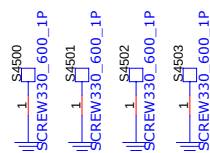
TouchPad Module CONN



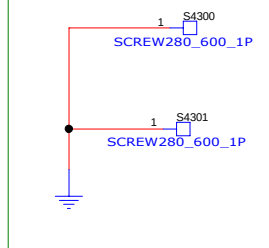
POWER BUTTON CONN ON MB



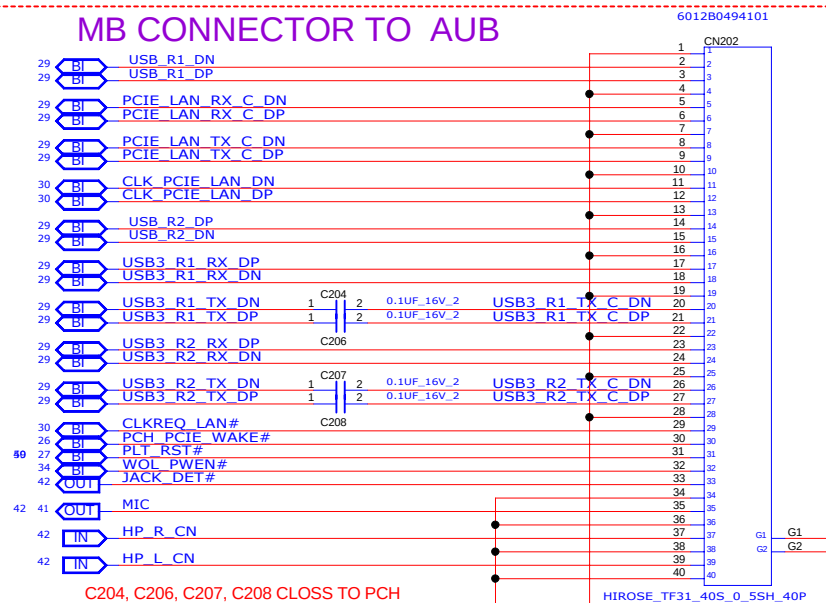
FOR CPU



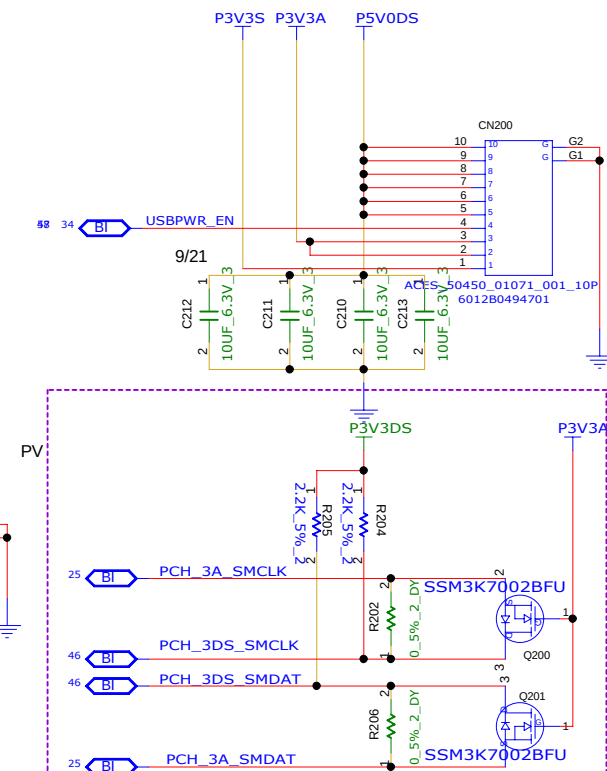
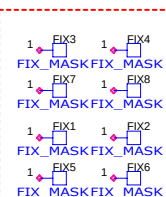
FOR FAN



MB CONNECTOR TO AUB



C204, C206, C207, C208 CLOSS TO PCH



INVENTEC

TITLE			
MODEL PROJECT,FUNCTION			
POWER BUTTON			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	A01

CHANGE by XXX DATE 21-OCT-2002

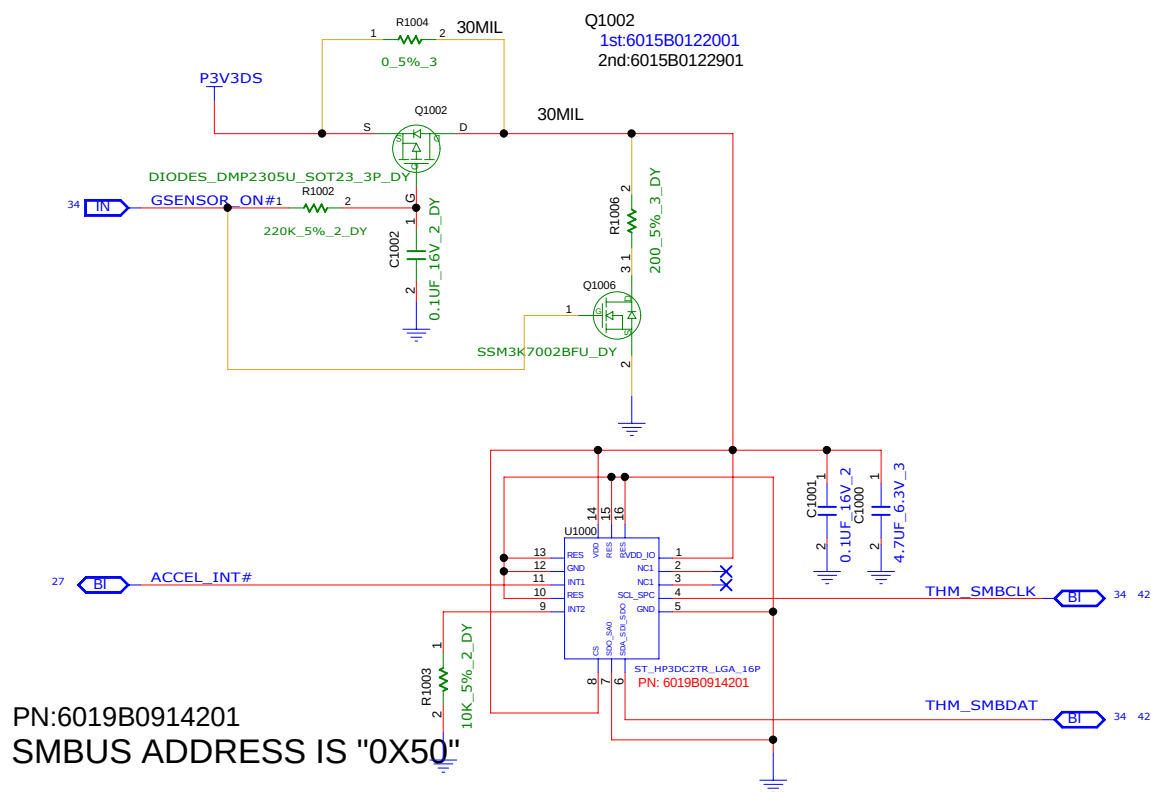
SHEET 46 of 70

G-Sensor

Locaion 1000 ~ 1099

Ver.01_20120807

HARDDRIVE PROTECTION

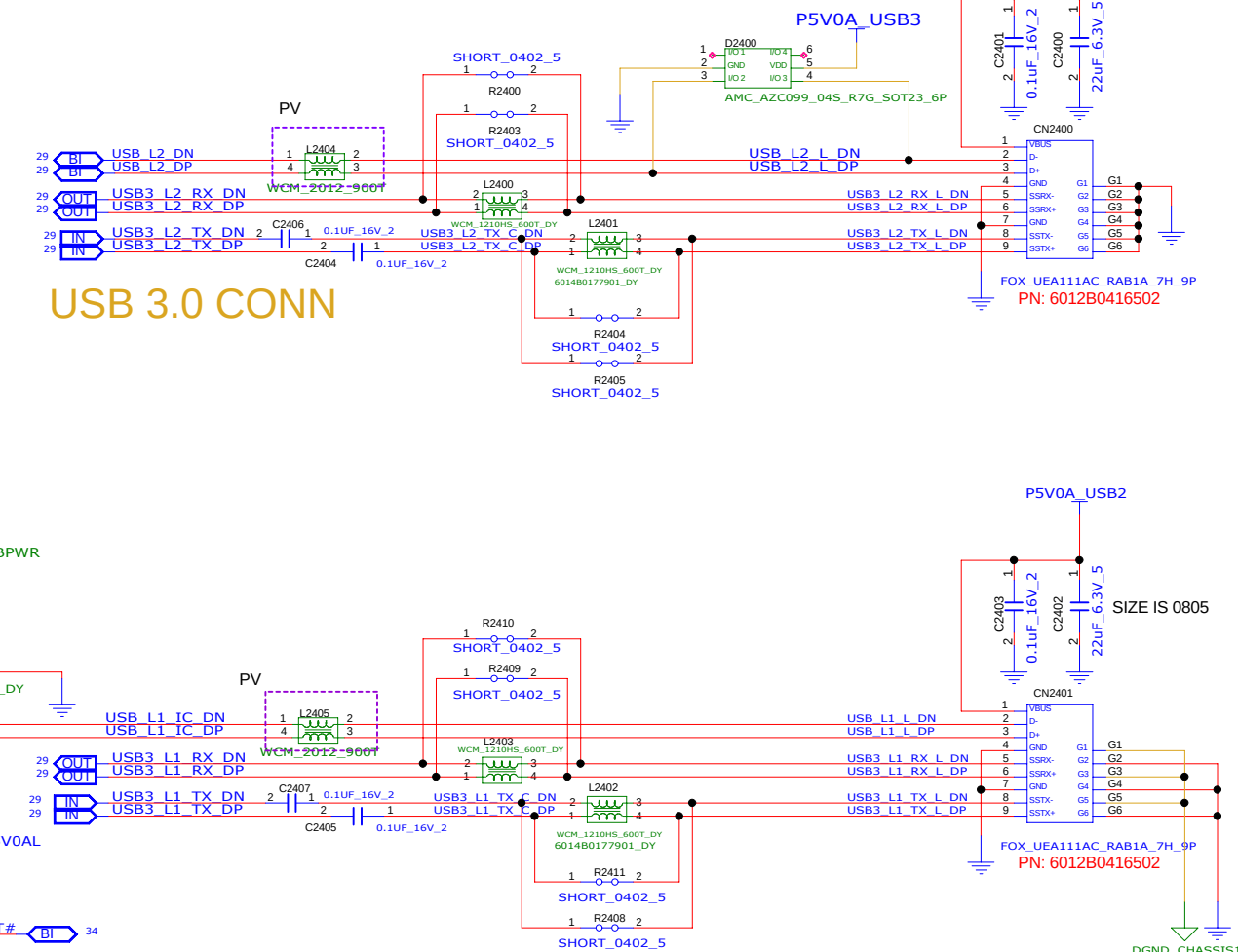
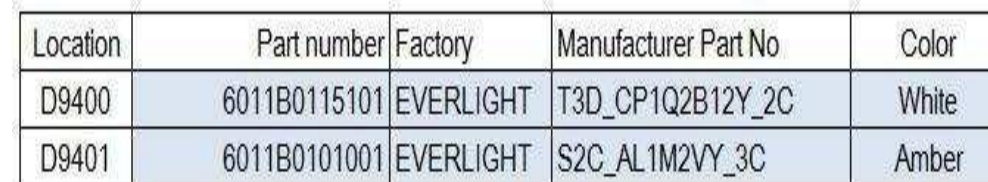
**INVENTEC**TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310xxxxx-0-0 REV A01

SHEET 47 of 70

CHANGE by XXX DATE 21-OCT-2002

1ST: 6019B1012901 BCD AP2820AMMTR-
2ND: 6019B0947301 ROHM BD82024FVJ-E
3TH: 6019B0975501 NCT NCT3520W-H15



USB CHARGING TPS2546

PN: 6019B1035901

INVENTEC			
TITLE			
MODEL, PROJECT, FUNCTION			
USB 3.0 CONN & M/B TO D/B CONN			
SIZE A3	CODE CS	DOC. NUMBER 1310xxxxx-0-0	REV A01
SHEET 40 of 70			

AUB BOARD

INVENTECTITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV A01
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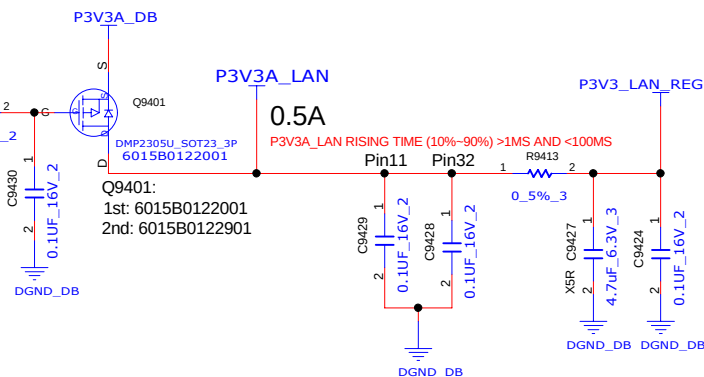
SHEET 49 of 70

CHANGE by XXX DATE 21-OCT-2002

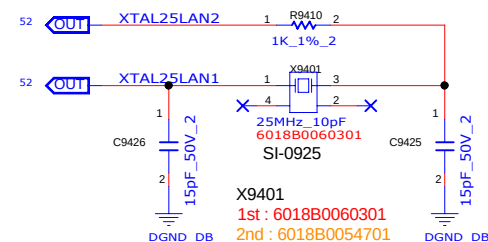
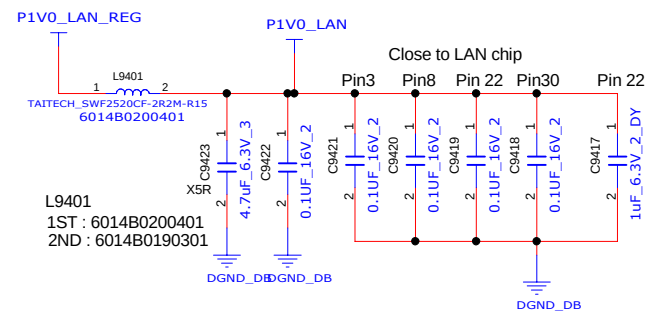
<http://www.vinafix.vn>



Location 9400 ~ 9499
Ver.03 20120807



6019B1032001 RTL8151GSH-CG 10/100/1000

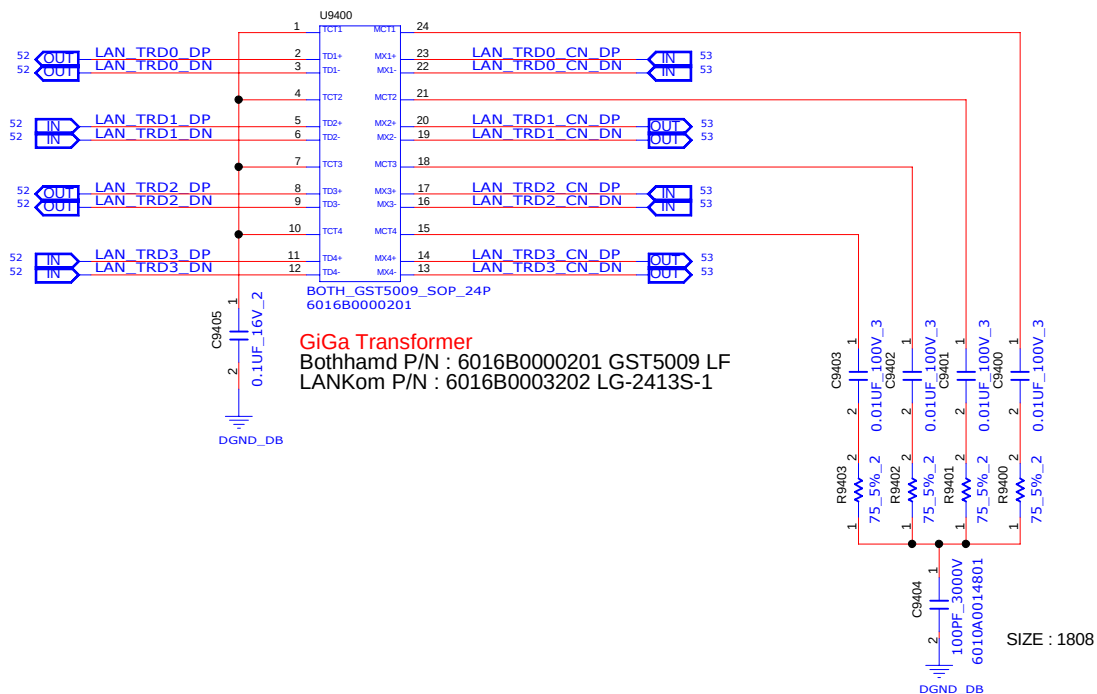


INVENTEC			
TITLE			
MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxxx-0-0	REV A01
SHEET 63 of 70			

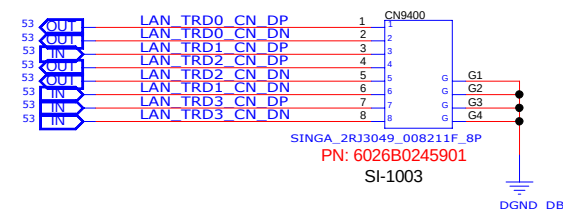
LAN (Transformer & RJ45)

Location 9400 ~ 9499

Ver.06_20120813



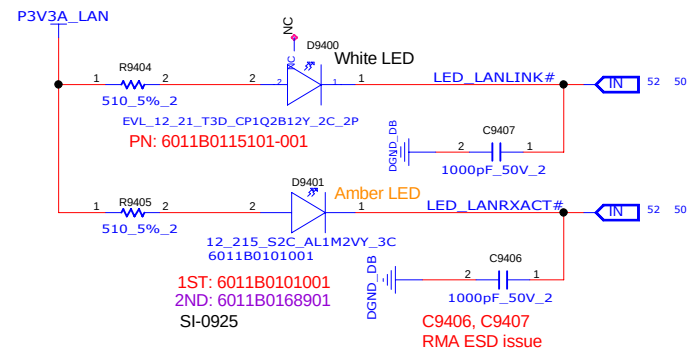
RJ-45



★Layout

D9400 White LED place on TOP side.

D9401 Amber LED place on Bottom side.



INVENTEC

TITLE MODEL,PROJECT,FUNCTION

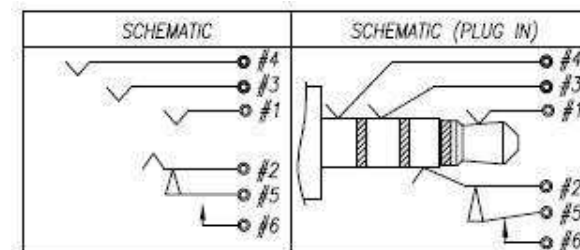
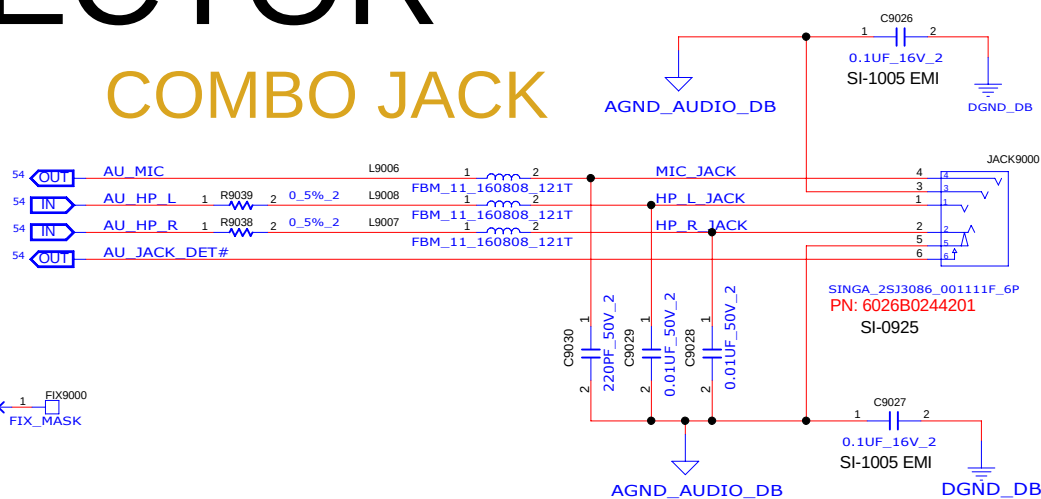
Block Diagram

DOC NUMBER 1310xxxxx-0-0

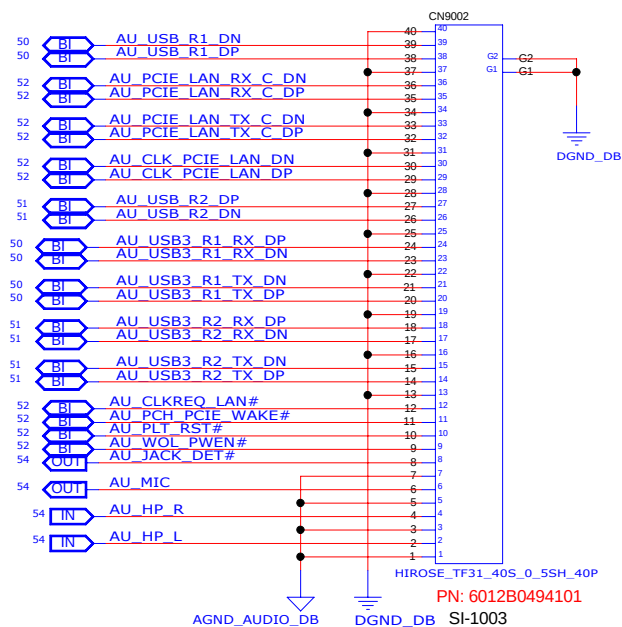
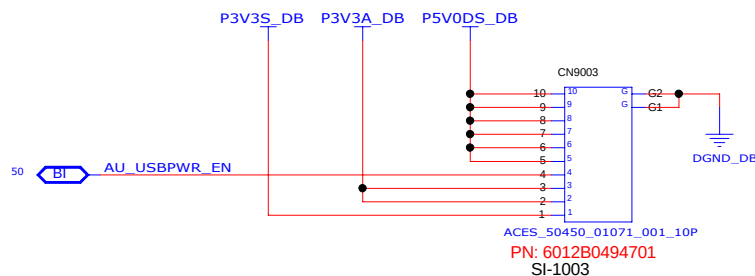
REV A01

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COMBO JACK



MB TO AUB CONNECTOR



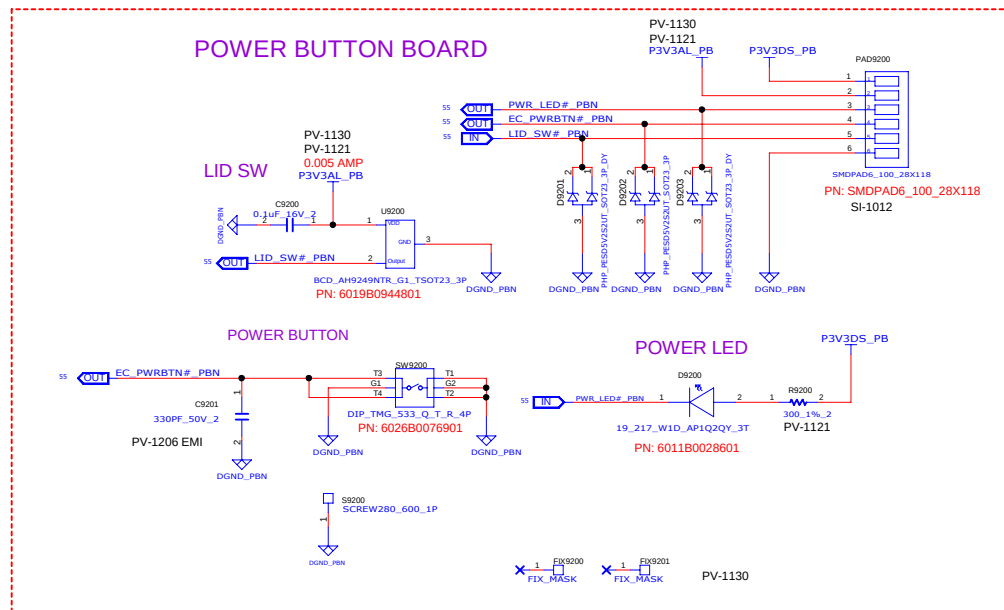
INVENTEC

TITLE	MODEL,PROJECT,FUNCTION
	Block Diagram

SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	FR A
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SHEET 54 of 70

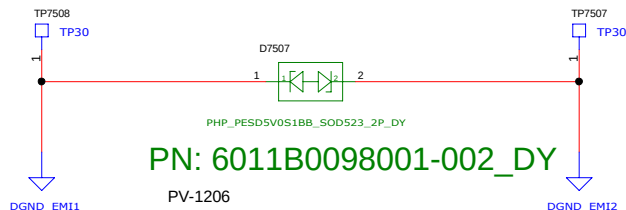
POWER BUTTON BOARD



8 7 6 5 4 3 2 1

1310A2552101 (6L)
1310A2552201 (8L)

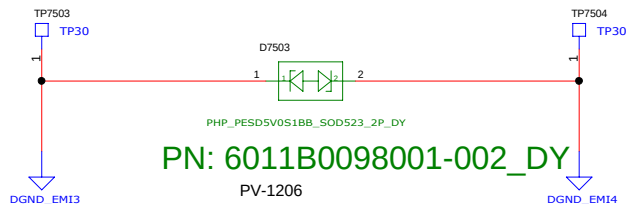
ESD BOARD 1



USB BOARD (6L)	1310A2548501	6050A2548501
USB BOARD (8L)	1310A2548601	6050A2548601
POWER BOARD (6L)	1310A2548701	6050A2548701
POWER BOARD (8L)	1310A2548801	6050A2548801
EMI BOARD (6L)	1310A2552101 1310A2552102	6050A2552101
EMI BOARD (8L)	1310A2552201 1310A2552202	6050A2552201

1310A2552102 (6L)
1310A2552202 (8L)

ESD BOARD 2



CHIEF RIVER	DIS	NVIDIA N14P-GV2 (GEFORCE 630M)	4G	SAMSUNG K4W4G1646B-HC11	1310A2548301
CHIEF RIVER	DIS	NVIDIA N14P-GV2 (GEFORCE 630M)	2G	MICRON MT41K256M16HA-107G:E	1310A2548302
CHIEF RIVER	UMA	N/A	N/A	N/A	1310A2548201

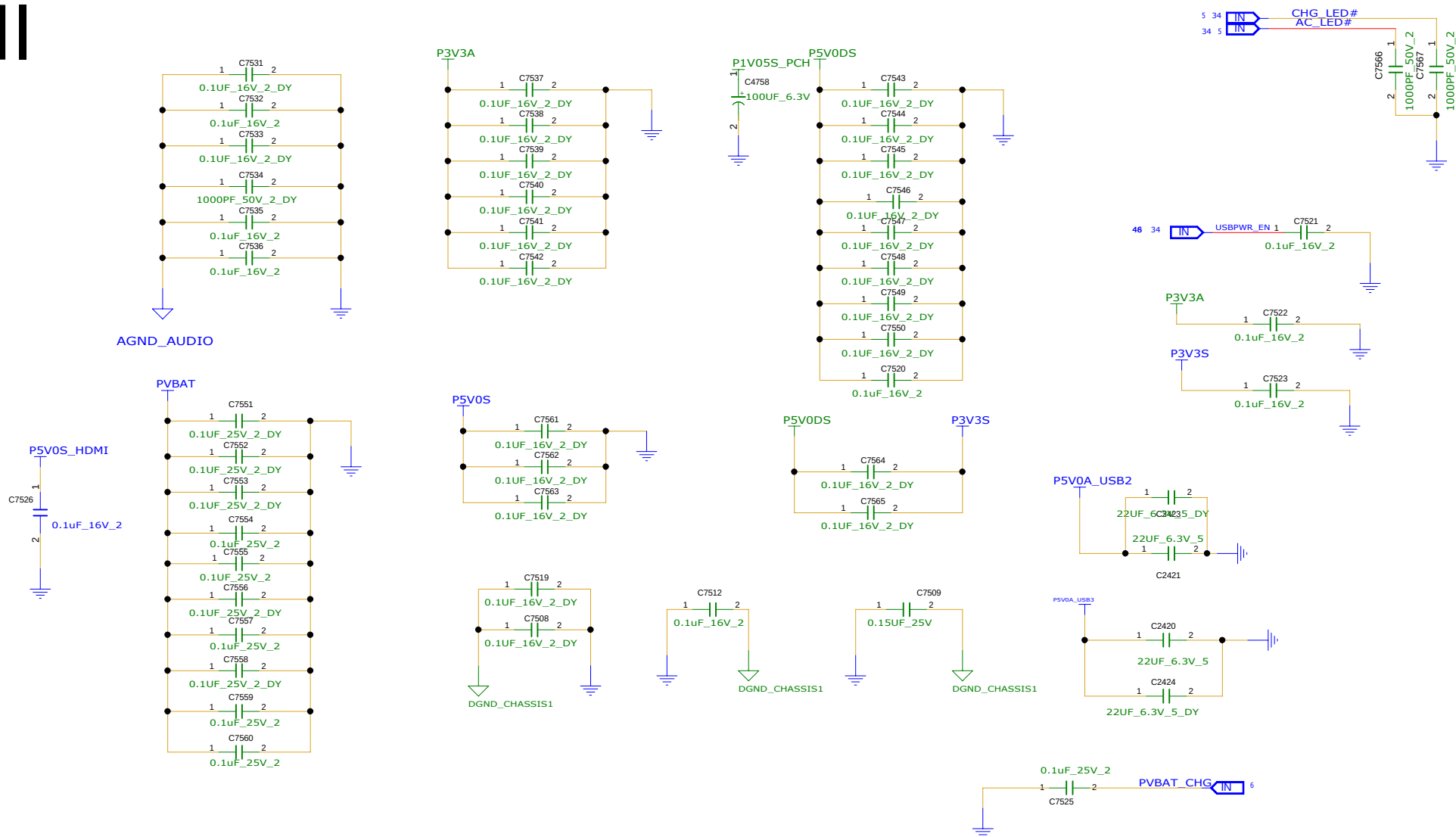
INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV A01
SHEET 56 of 70			

CHANGE by XXX DATE 21-OCT-2002

8 7 6 5 4 3 2 1

EMI



INVENTEC

TITLE MODEL, PROJECT, FUNCTION

Block Diagram

DOC NUMBER 1310xxxxx-0-0

REV A01

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CHANGE by XXX DATE 21-OCT-2002

<http://www.vinafix.vn>

VER.11_20120824

N14P-GV2 GB2-64 25W DUAL RANK DDR3

INVENTEC

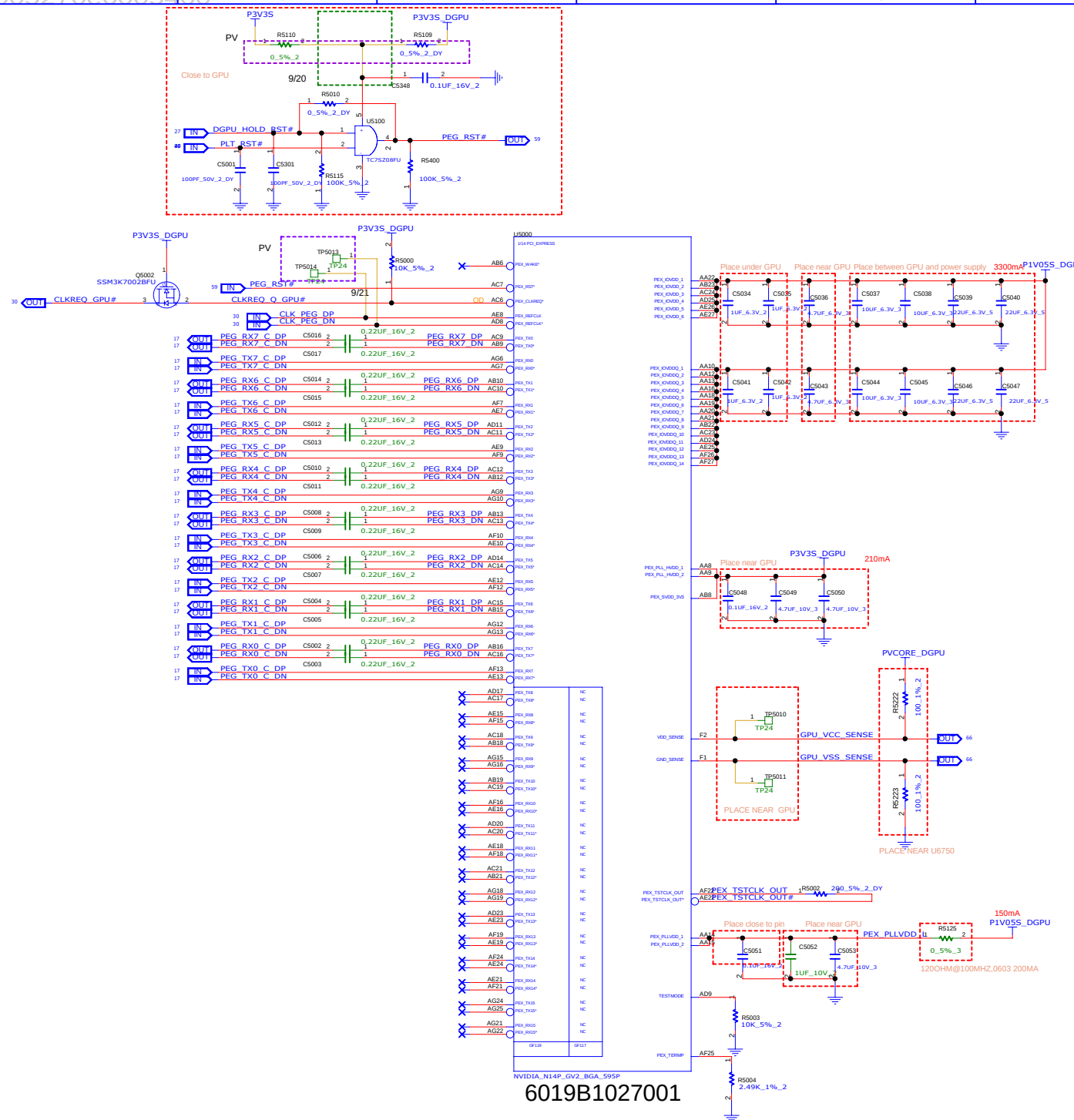
TITLE	MODEL,PROJECT,FUNCTION
Block	Diagram

SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV A01
SHEET 58 of 70			

CHANGE by	xxx	DATE	21-OCT-2002
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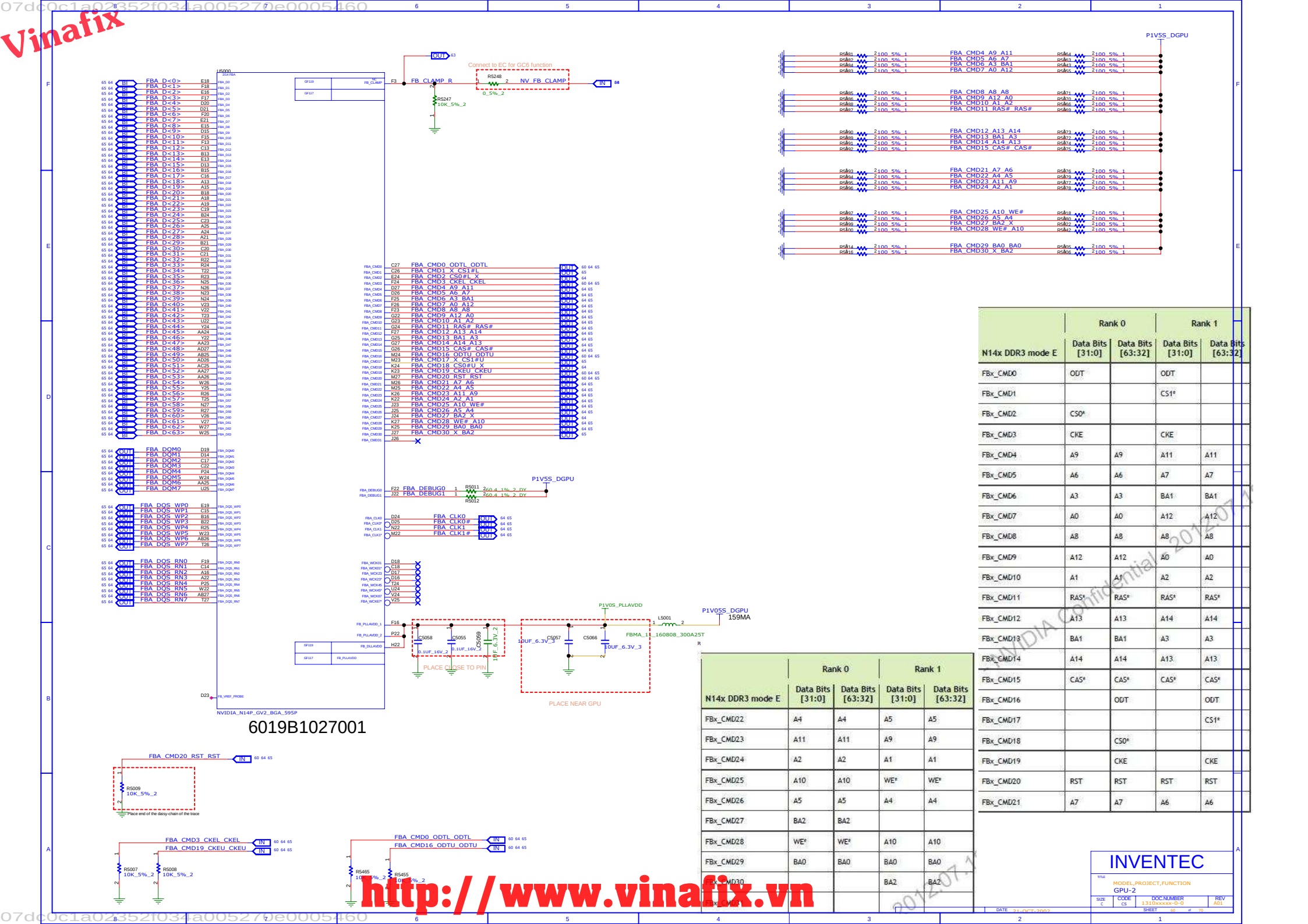
SHEET 58 of 70

Vinafix



<http://www.vinafix.vn>

INVENTEC				
MODEL/PROJECT/FUNCTION				
GPU-1				
SIZE	CODE	DOC NUMBER	REV	
C	CS	1310VXXXX-0-0	R01	
SHEET		38	38	



Vinafix

6019B1027001

<http://www.vinafix.vn>

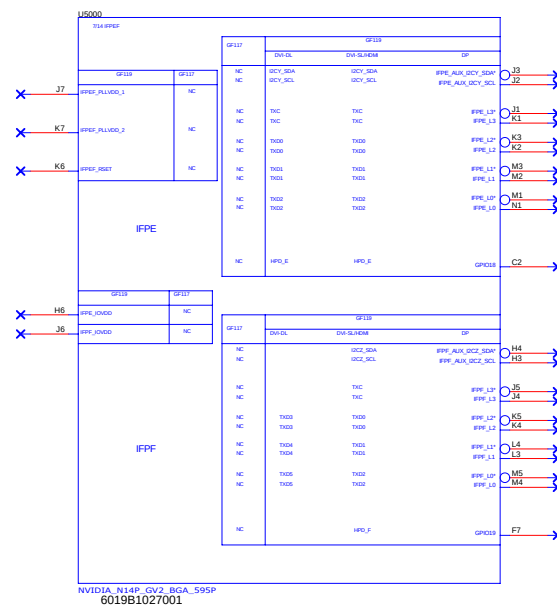
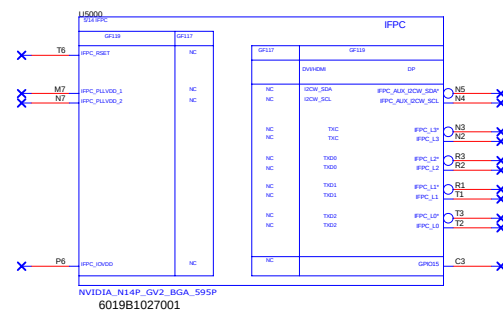
N14x DDR3 mode E	Rank 0		Rank 1	
	Data Bits [31:0]	Data Bits [63:32]	Data Bits [31:0]	Data Bits [63:32]
FBx_CMD0	ODT		ODT	
FBx_CMD1			CS1*	
FBx_CMD2	CS0*			
FBx_CMD3	CKE		CKE	
FBx_CMD4	A9	A9	A11	A11
FBx_CMD5	A6	A6	A7	A7
FBx_CMD6	A3	A3	BA1	BA1
FBx_CMD7	A0	A0	A12	A12
FBx_CMD8	A8	A8	A8	A8
FBx_CMD9	A12	A12	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

INVENTEC

MODEL,PROJECT,FUNCTION
GPU-2
DATE: 21-07-2007
SIZE: 1310x1000x100
SHEET: 60





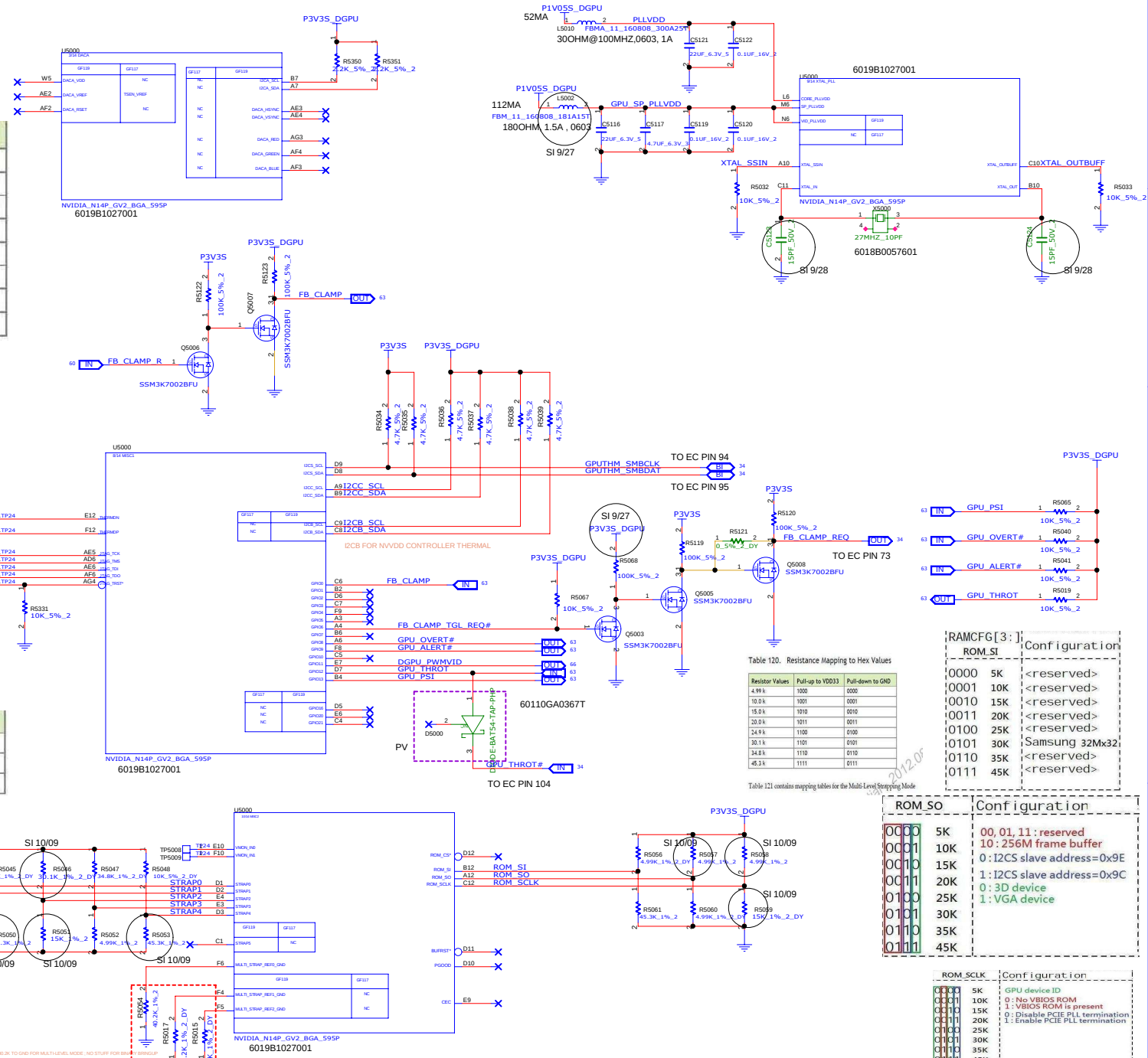
Resistor Values	Pull-up to VDD33	Pull-down to GND
4.99 k	1000	0000
10.0 k	1001	0001
15.0 k	1010	0010
20.0 k	1011	0011
24.9 k	1100	0100
30.1 k	1101	0101
34.8 k	1110	0110
45.3 k	1111	0111

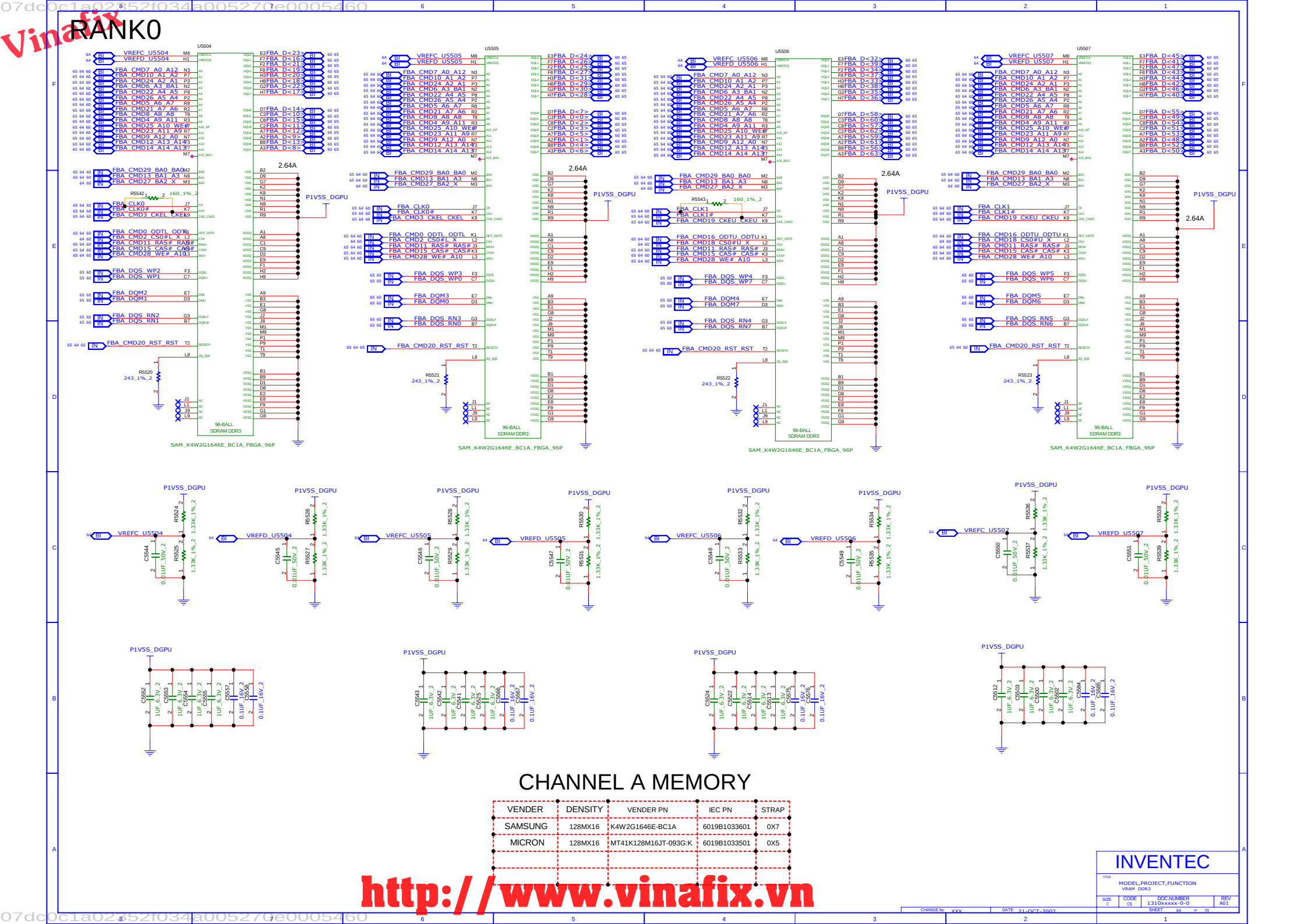
Strap Pin Name	Logical Strapping Bit 3	Logical Strapping Bit 2	Logical Strapping Bit 1	Logical Strapping Bit 0
ROM_SCLK	PCI_DEVID[4]	SUB_VENDOR	PCI_DEVID[5]	PEX_PLL_EH_TERM
ROM_SI	RAM_CFG[3]	RAM_CFG[2]	RAM_CFG[1]	RAM_CFG[0]
ROM_SO	FB[1]	FB[0]	SMB_ALT_ADDR	VGA_DEVICE
STRAPO	USER[3]	USER[2]	USER[1]	USER[0]
STRAP1	3GIO_PADCFG[3]	3GIO_PADCFG[2]	3GIO_PADCFG[1]	3GIO_PADCFG[0]
STRAP2	PCI_DEVID[3]	PCI_DEVID[2]	PCI_DEVID[1]	PCI_DEVID[0]
STRAP3	SOR3_EXPOSED	SOR2_EXPOSED	SOR1_EXPOSED	SOR0_EXPOSED
STRAP4	RESERVED	PCIE_SPEED_CHAN_GE_GEN3	PCIE_MAX_SPEED	DP_PLL_VDD33V

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

STRAP3	HDMI0P	DVI	LVDS	eDP	Not in Use
Standard Mode	FFA/B	SOR1_EXP=1	SOR2_EXP=0	SOR3_EXP=0	SOR0_EXP=0
FFC	SOR1_EXP=1				
FFD	SOR1_EXP=1				
FFB	SOR1_EXP=1				
FFA	SOR1_EXP=1				
FFC	SOR1_EXP=1				
FFD	SOR1_EXP=1				
Combined Mode	FFA/B	SOR1_EXP=1	SOR2_EXP=1	SOR3_EXP=0	SOR0_EXP=0
FFC	SOR1_EXP=1				
FFD	SOR1_EXP=1				
FFB	SOR1_EXP=1				
FFA	SOR1_EXP=1				
FFC	SOR1_EXP=1				
FFD	SOR1_EXP=1				

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





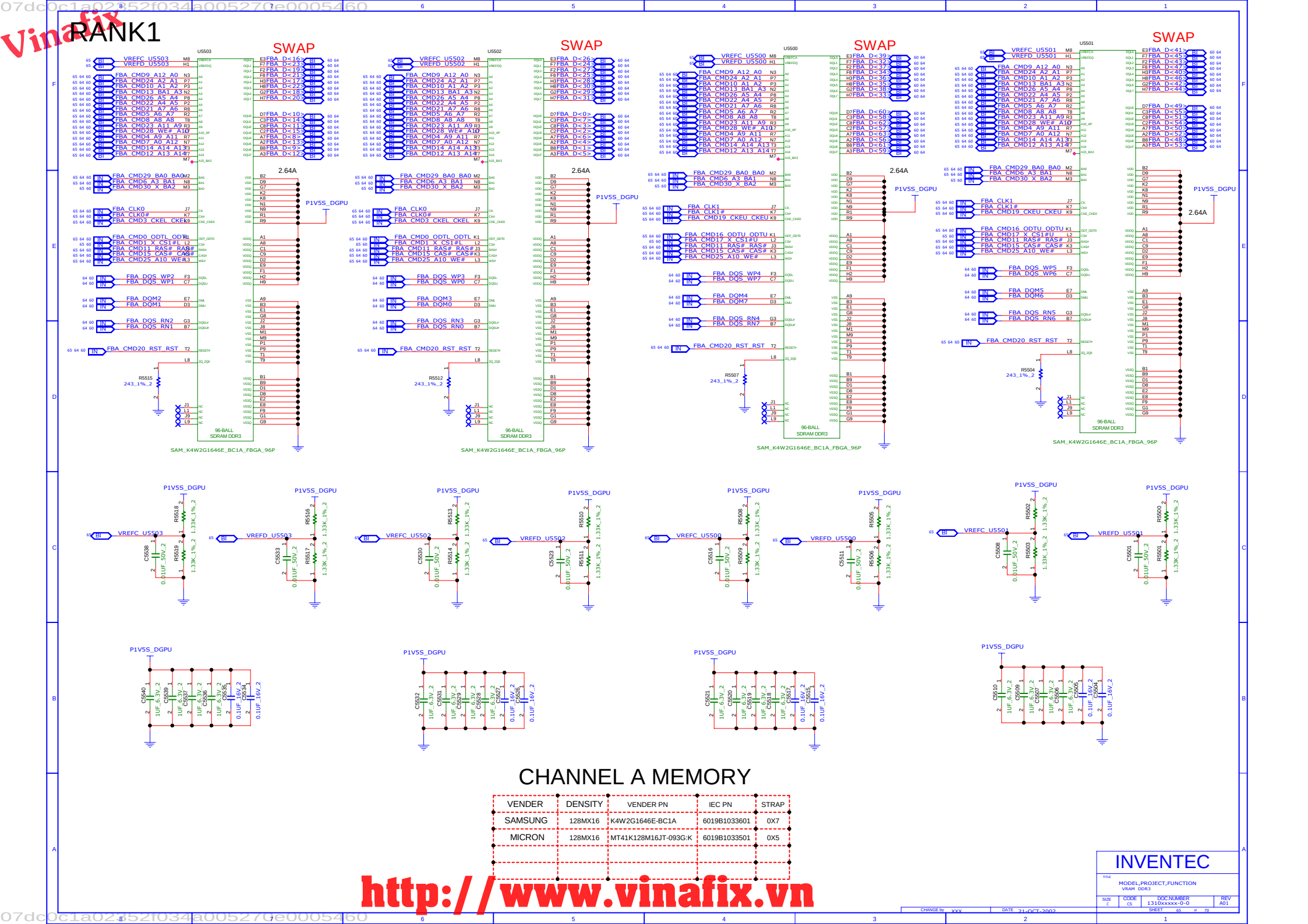
CHANNEL A MEMORY

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

<http://www.vinafix.vn>

INVENTEC

FILE	MODEL,PROJECT,FUNCTION	REV
SIZE	CODE	DOC NUMBER
1310XXXX-0-0	1310XXXX-0-0	1310XXXX-0-0
SHEET	64	09



[illegible]

VMAX=1.2V BY PWM D=100%
 VMIN=0.6V PWM D=0%
 VBOOT=0.875~0.9V BY PWM TRISTATE
 VSTB=0.3V BY EXT MOS INPUT
 FPWM=1.125MHZ
 PWM PULSE MIN.=9.26NS
 VID TRANS. TIME=90US

INVENTEC

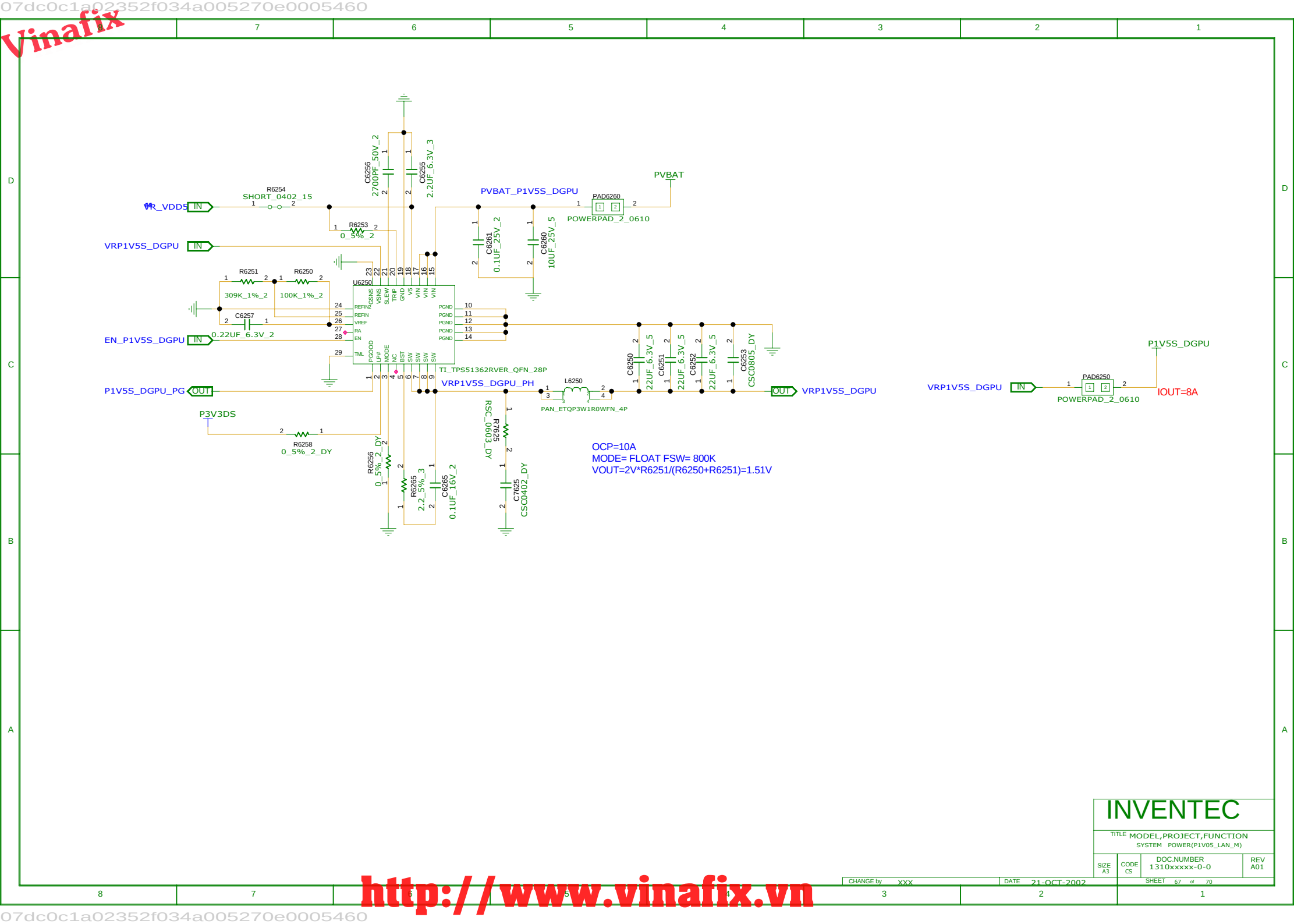
TITLE	MODEL PROJECT FUNCTION
1. Project Overview	1. Project Overview
2. Project Objectives	2. Project Objectives
3. Project Scope	3. Project Scope
4. Project Organization	4. Project Organization
5. Project Schedule	5. Project Schedule
6. Project Budget	6. Project Budget
7. Project Risks	7. Project Risks
8. Project Communication	8. Project Communication
9. Project Monitoring and Control	9. Project Monitoring and Control
10. Project Closure	10. Project Closure

SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0
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SHEET 66 of 70

1

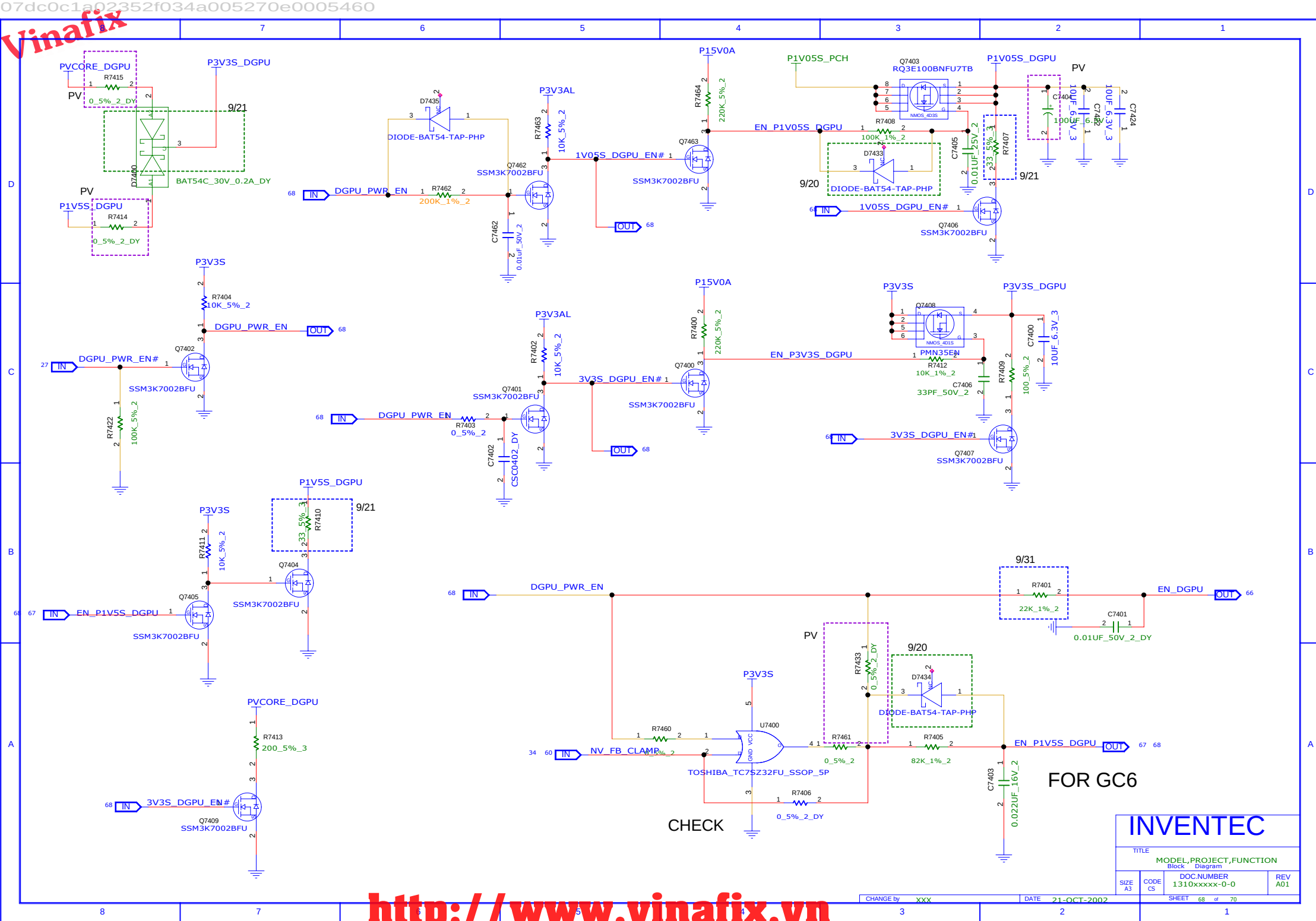
<http://www.vinafix.vn>

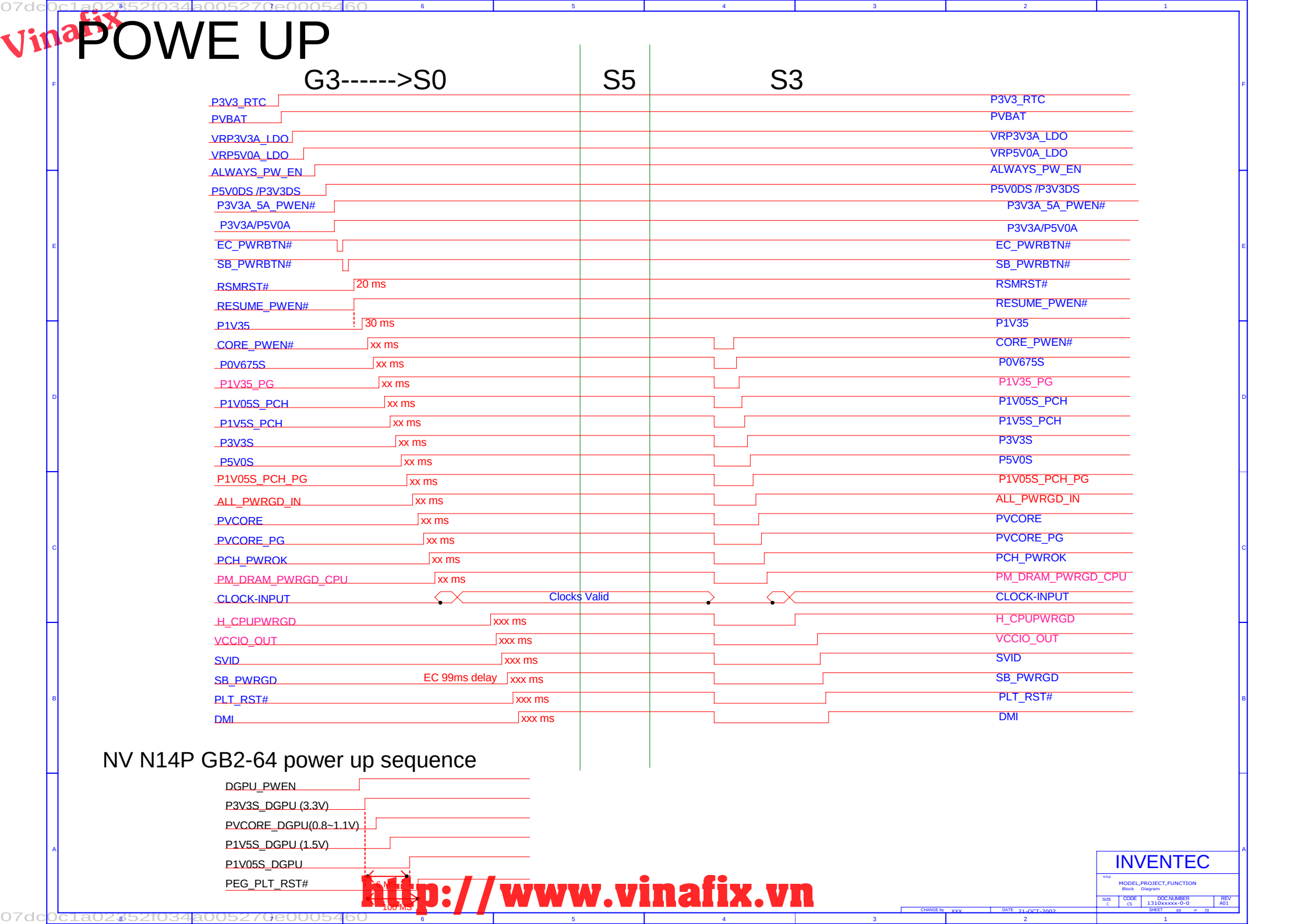


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<http://www.vinafix.vn>

INVENTEC			
TITLE MODEL,PROJECT,FUNCTION SYSTEM POWER(P1V05_LAN_M)			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV A01
CHANGE by XXX		DATE 21-OCT-2002	SHEET 67 of 70



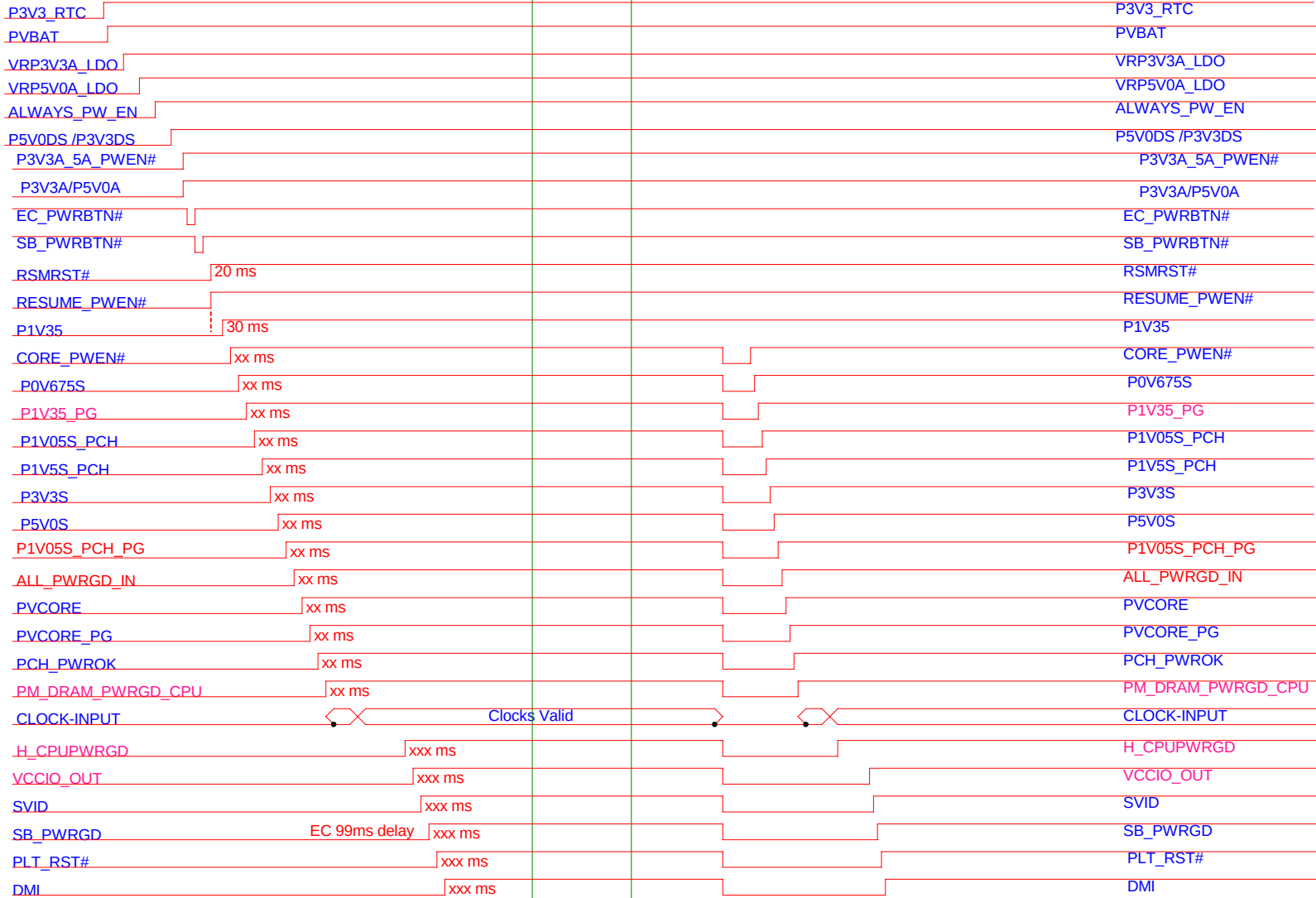


POWER UP

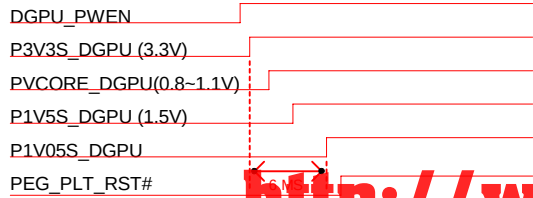
G3----->S0

S5

S3



NV N14P GB2-64 power up sequence

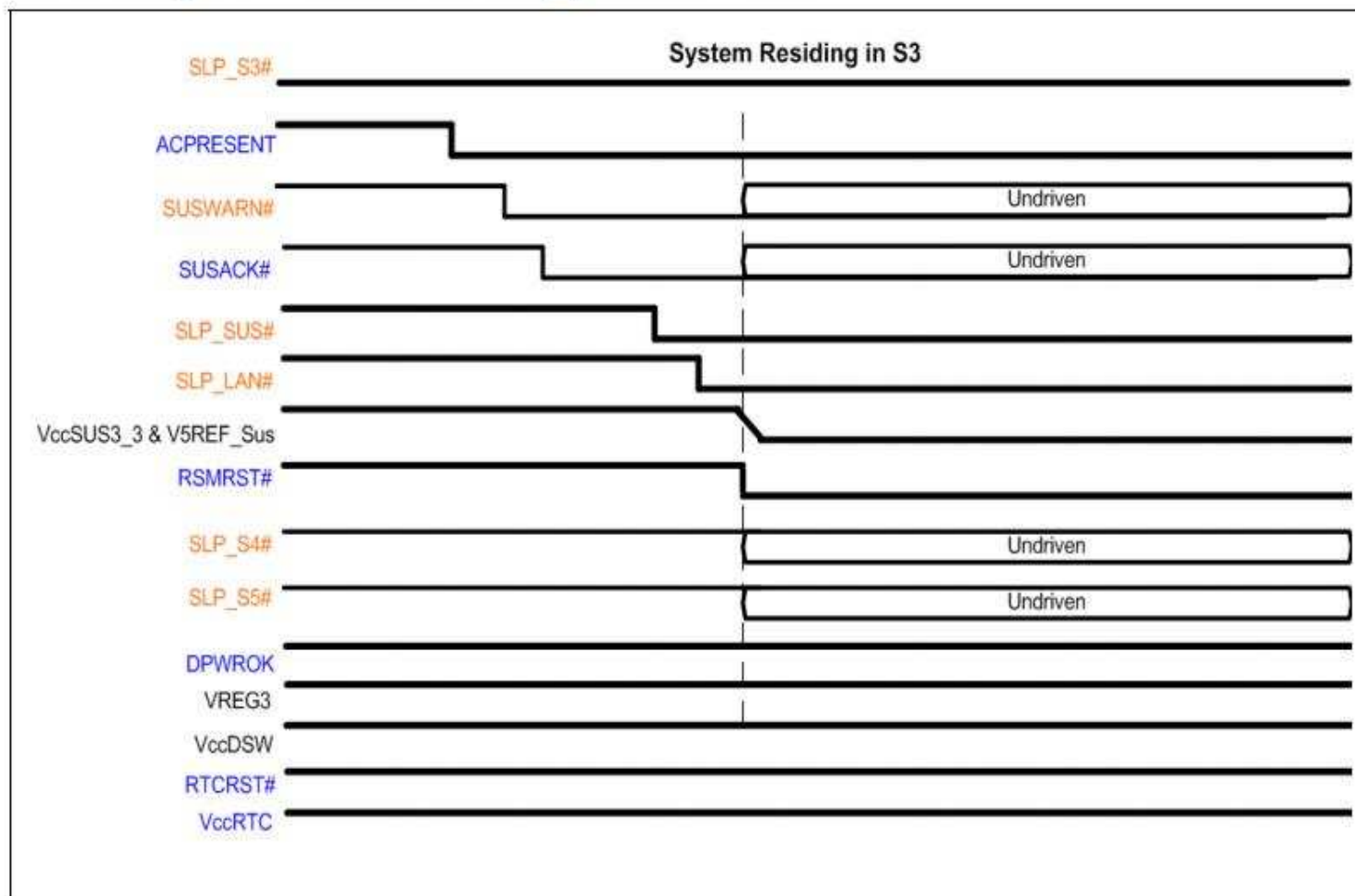


<http://www.vinafix.vn>

INVENTEC

Title			
MODEL, PROJECT, FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
C	CS	1310xxxxx-0-0	A01
SHEET		69	of 70

S3 to Deep S3 Transition on AC_PRESENT Low



INVENTEC			
TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	A01
SHEET 70 of 70			