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HSF Property: ROHS or Halogen-Free

1310A2548301 (SAMSUNG) R5061 CHANGE TO 6013A0107901 (45.3K OHM)
1310A2548302 (MICRON) R5061 CHANGE TO 6013A0017501 (30.1K OHM)

15CR-UMA-PV-1206

2012.1206

Chief River						
UMA	DIS					
PGA 35W(dual)-HM77						
NA	N14P-GV2 23*23				N14P-GT 29*29	
NA	900MHz 256Mx16 DDR3 4pcs (2G)		900MHz 256Mx16 DDR3 8pcs (4G)		1GHz 128Mx16 GDDR5 8pcs (2G)	
	Samsung K4W4G1646B-HC11	Micron MT41K256M16HA-107G:E	Samsung K4W4G1646B-HC11	Micron MT41K256M16HA-107G:E	Hynix H5GQ2H24AFR-T2C	Samsung K4G20325FD-FC04
6050A2548201	6050A2548301				6050A2548401	
PCB-1(6L)	PCB-2 (8L)				PCB-3 (8L)	
1310A2548201	1310A2548301	1310A2548302	1310A2548303	1310A2548304	1310A2548401	1310A2548402

USB BOARD (6L) 1310A2548501 6050A2548501
POWER BOARD (6L) 1310A2548701 6050A2548701
POWER BOARD (8L) 1310A2548801 6050A2548801
USB BOARD (8L) 1310A2548601 6050A2548601

Location	Part number	Factory	Manufacturer Part No	Marking
D300	1st : 6011A0026801	DIODES	D-BAT54-7	KL1
	2nd : 60110GA0367T	NXP	BAT54	L4
Q300	1st : 6015B0110701	TOSHIBA	SSM3K7002BFU	NM
	2nd : 6015B0142901	DIODES	DMN65D8LV-7	MM3
Q301	1st : 6015B0142901	DIODES	DMN65D8LV-7	MM3
U301	1st : 6019B0932401	MXIC	MX25L512EM-10G	
512KB	2nd : 6019B0816001	ATMEL	AT25FS128-SSH-T	
U301	1st : 6019B1016101	WINBOND	W25Q32FVSSIG	
4MB	2nd : 6019B0794701	MXIC	MX25L3206EM2I-12G	
U301	1st : 6019B095901	WINBOND	W25Q64FVSSIG	
8MB	2nd : 6019B0813101	MXIC	MX25L6406EM2I-12G	

2012/5/02	DB	X01
21-OCT-2002		
DATE	CHANGE NO.	REV

DRAWER	EE	DATE	POWER	DATE	INVENTEC			
DESIGN	Alan				MODEL, PROJECT, FUNCTION			
CHECK	Alan				Main Board			
RESPONSIBLE								
FILE NAME					SIZE	CODE	DOC NUMBER	REV
FILE NAME					C	CS	1310A2548201	A01
FILE NAME								
FILE NAME								

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43 G-SENSOR
44 AUDIO-1
45 AUDIO-2
46 AUDIO-3
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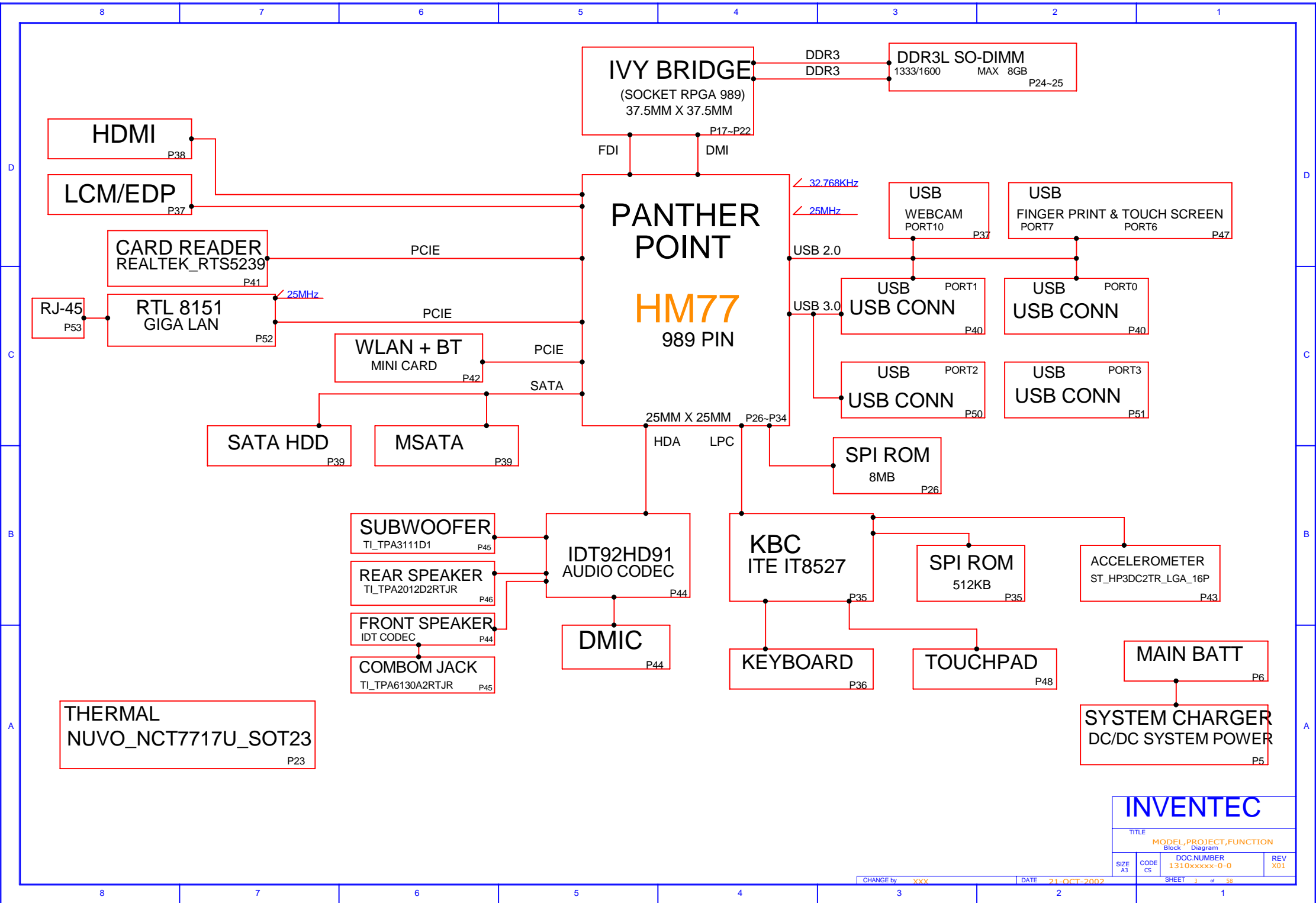
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INVENTECTITLE
MODEL,PROJECT,FUNCTION
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SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV X01
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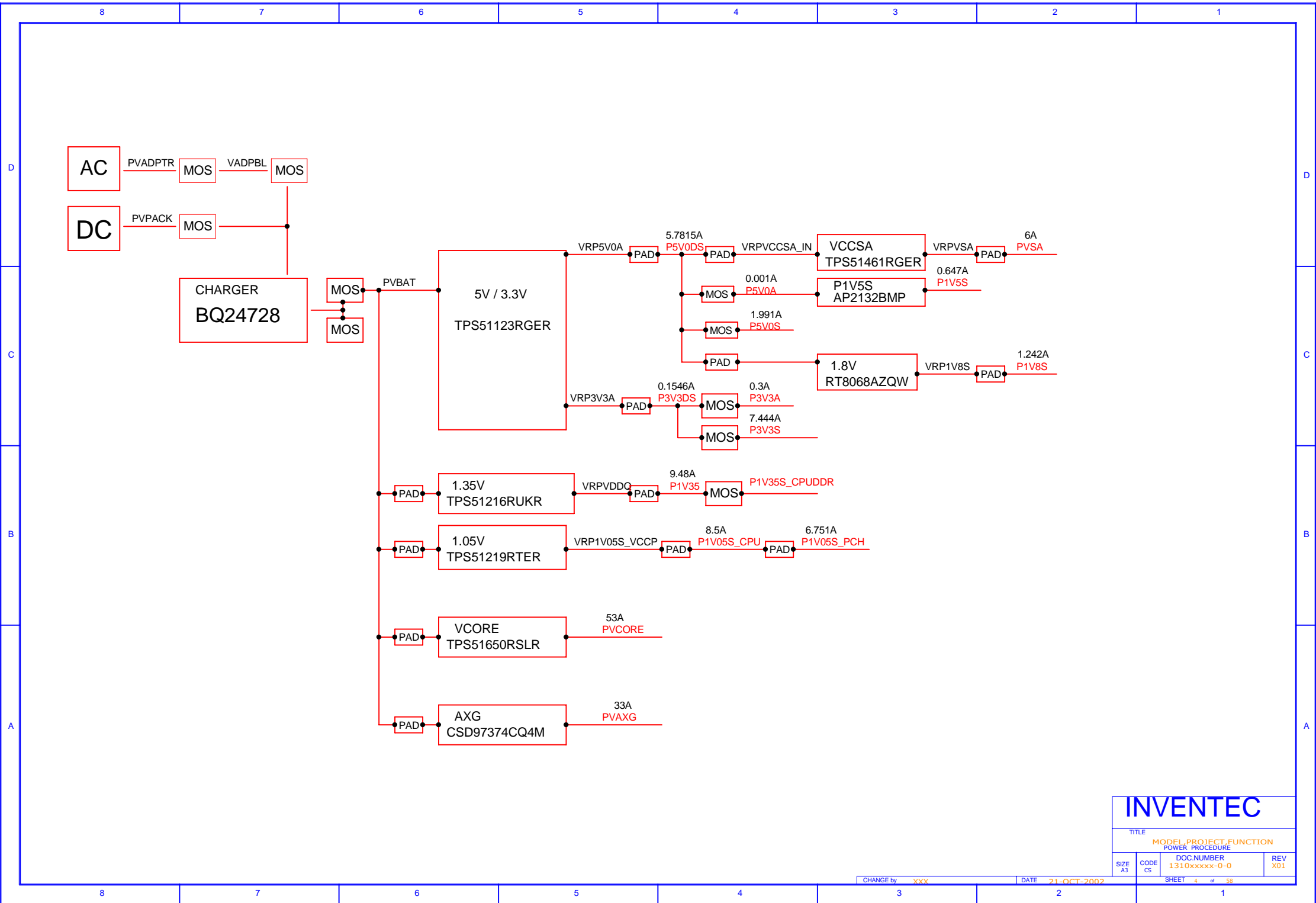
CHANGE by XXX DATE 21-OCT-2002

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INVENTEC

TITLE			
MODEL, PROJECT, FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	X01



INVENTEC

TITLE
MODEL PROJECT FUNCTION
POWER PROCEDURE

SIZE A3 CODE CS DOC NUMBER 1310xxxxx-0-0 REV X01

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D

C

B

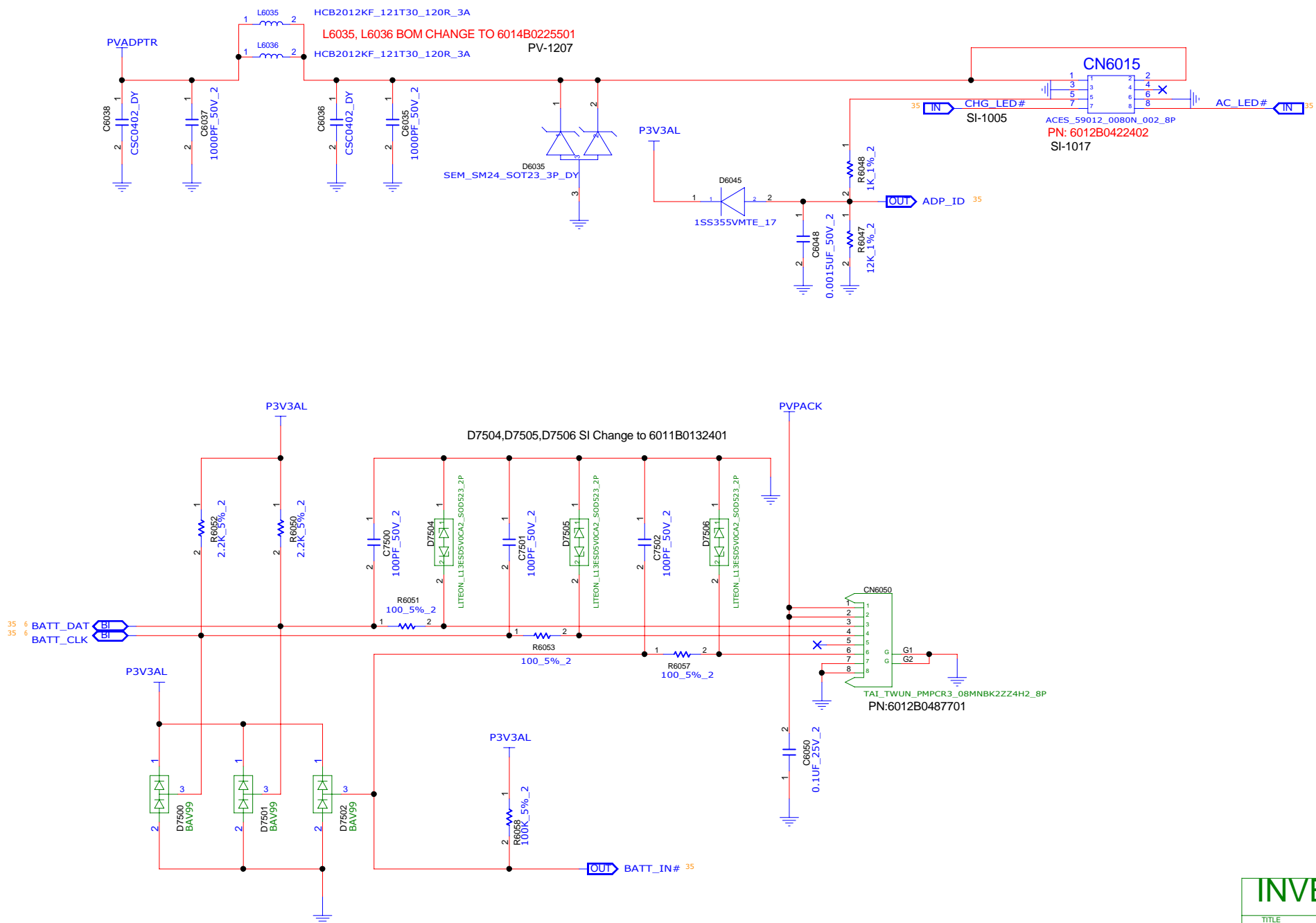
A

D

C

B

A

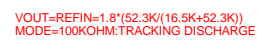
**INVENTEC**TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310xxxx-0-0 REV X01

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VTT
ON
(High-Z)
Discharge)

VTT
ON
(High-Z)
Discharge)

TITLE	MODEL,PROJECT,FUNCTION
	Block Diagram

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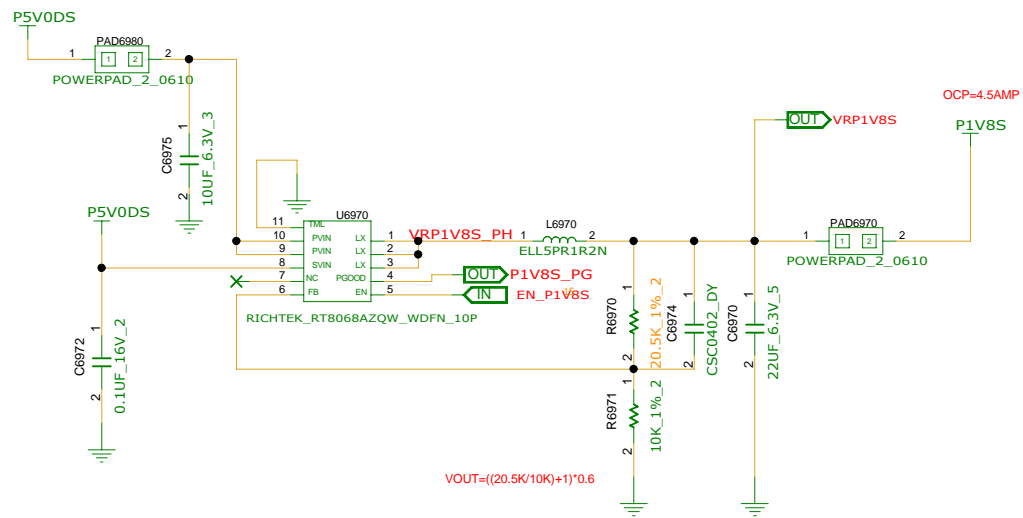
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D

C

B

A



INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE CODE DOC NUMBER REV
A3 CS 1310xxxxx-0-0 X01

CHANGE by XXX DATE 21-OCT-2002

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$$V_{OUT} = (1 + (9.31K/10K)) \times 0.8V$$

D

C

B

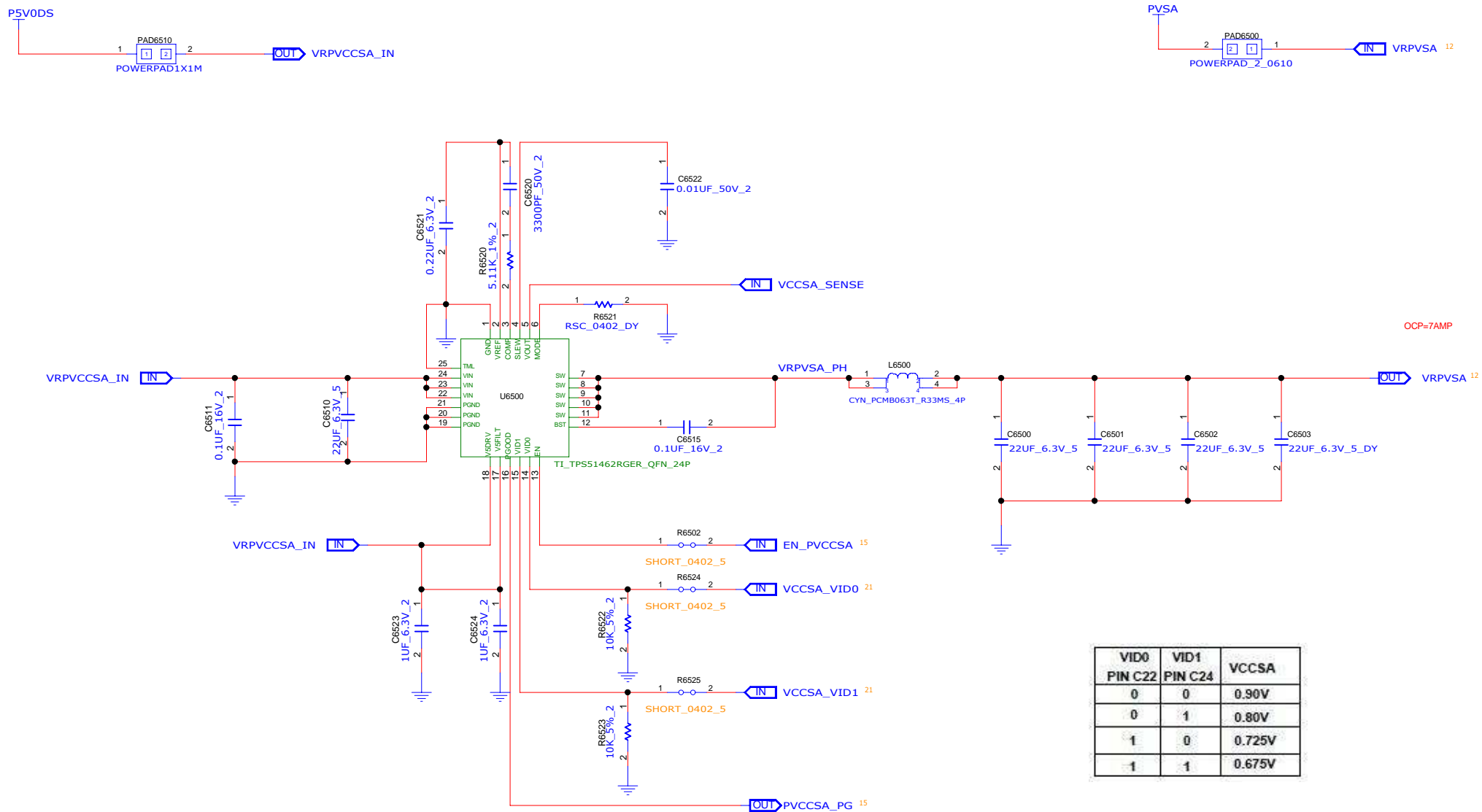
A

D

C

B

A



INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

SIZE A3 CODE CS DOC NUMBER 1310xxxxx-0-0 REV X01

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R6638

TITLE	MODEL.PROJECT.FUNCTION

SIZE	CODE	DOC.NUMBER	
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CHANGE by	XXX	DATE	21-OCT-2002
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D

C

B

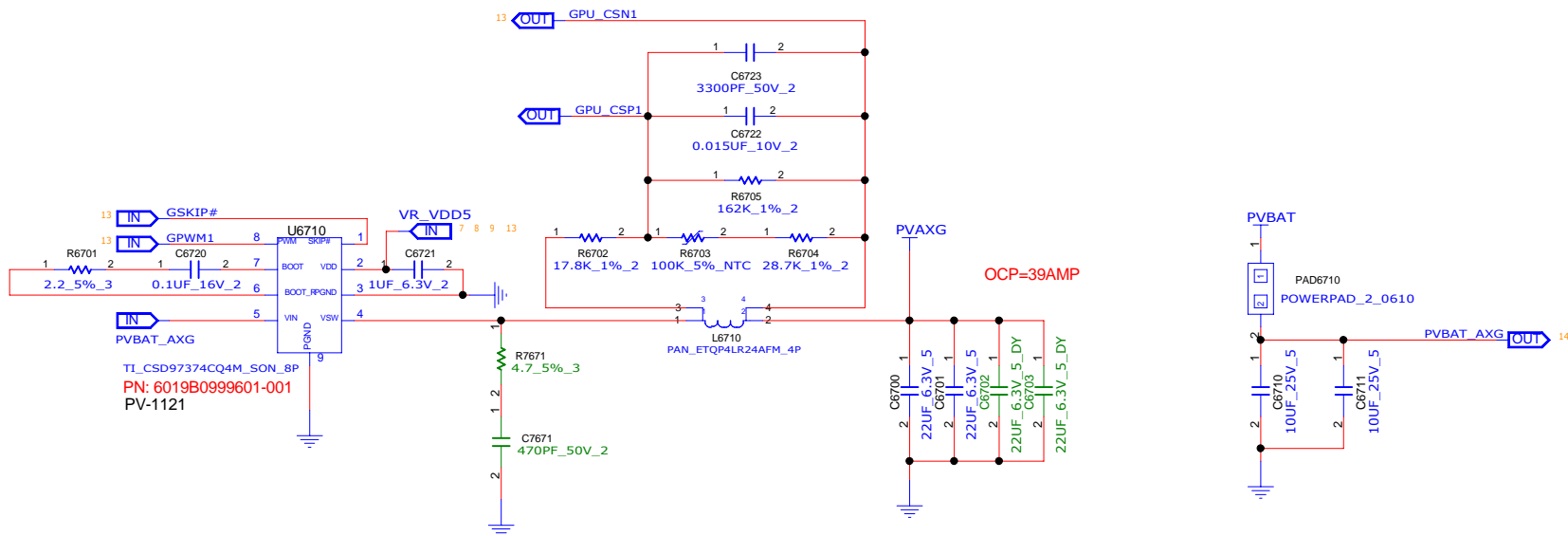
A

D

C

B

A



INVENTEC

TITLE
MODEL,PROJECT,FUNCTION
Block Diagram

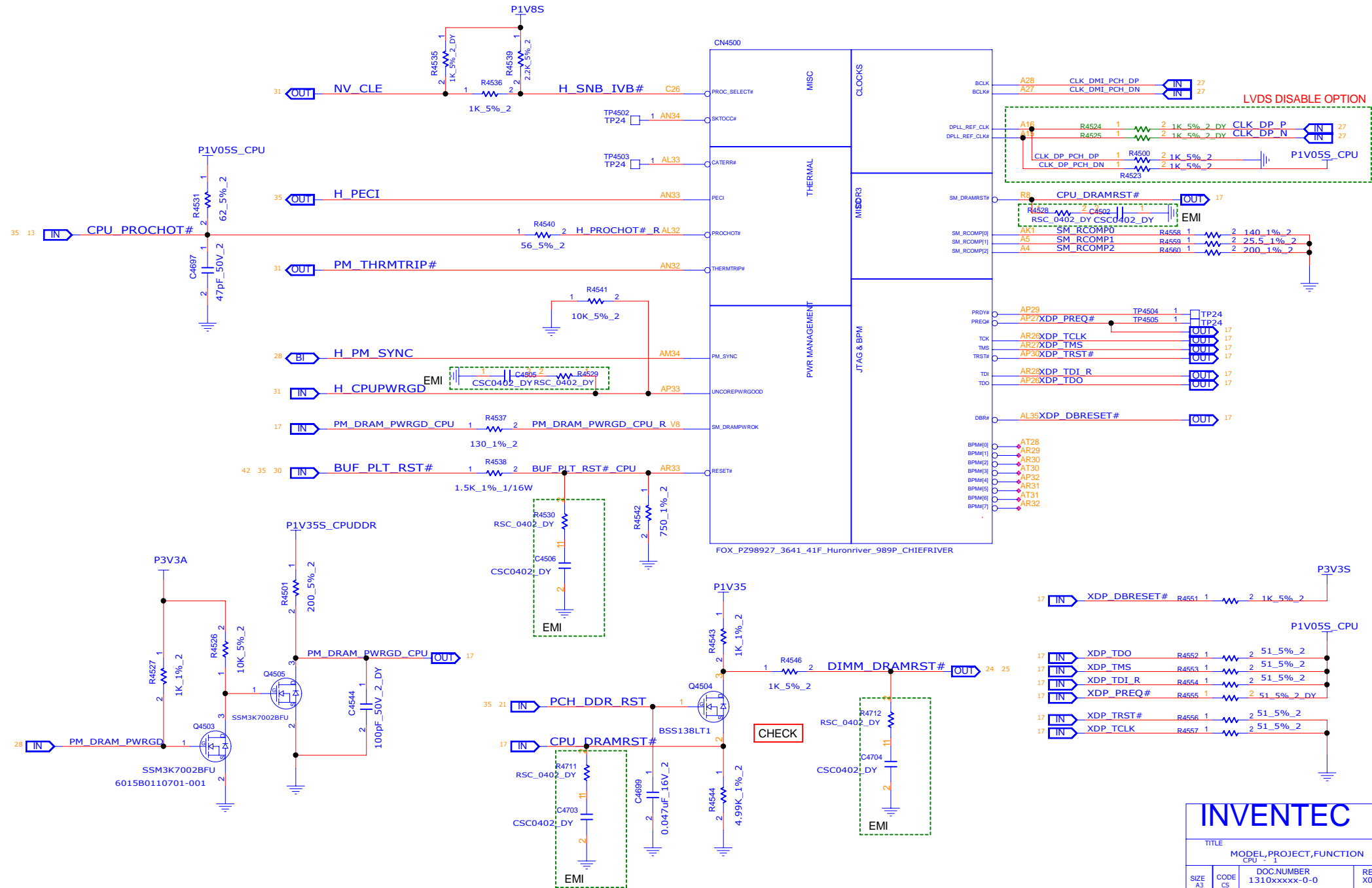
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CHANGE by XXX DATE 21-OCT-2002

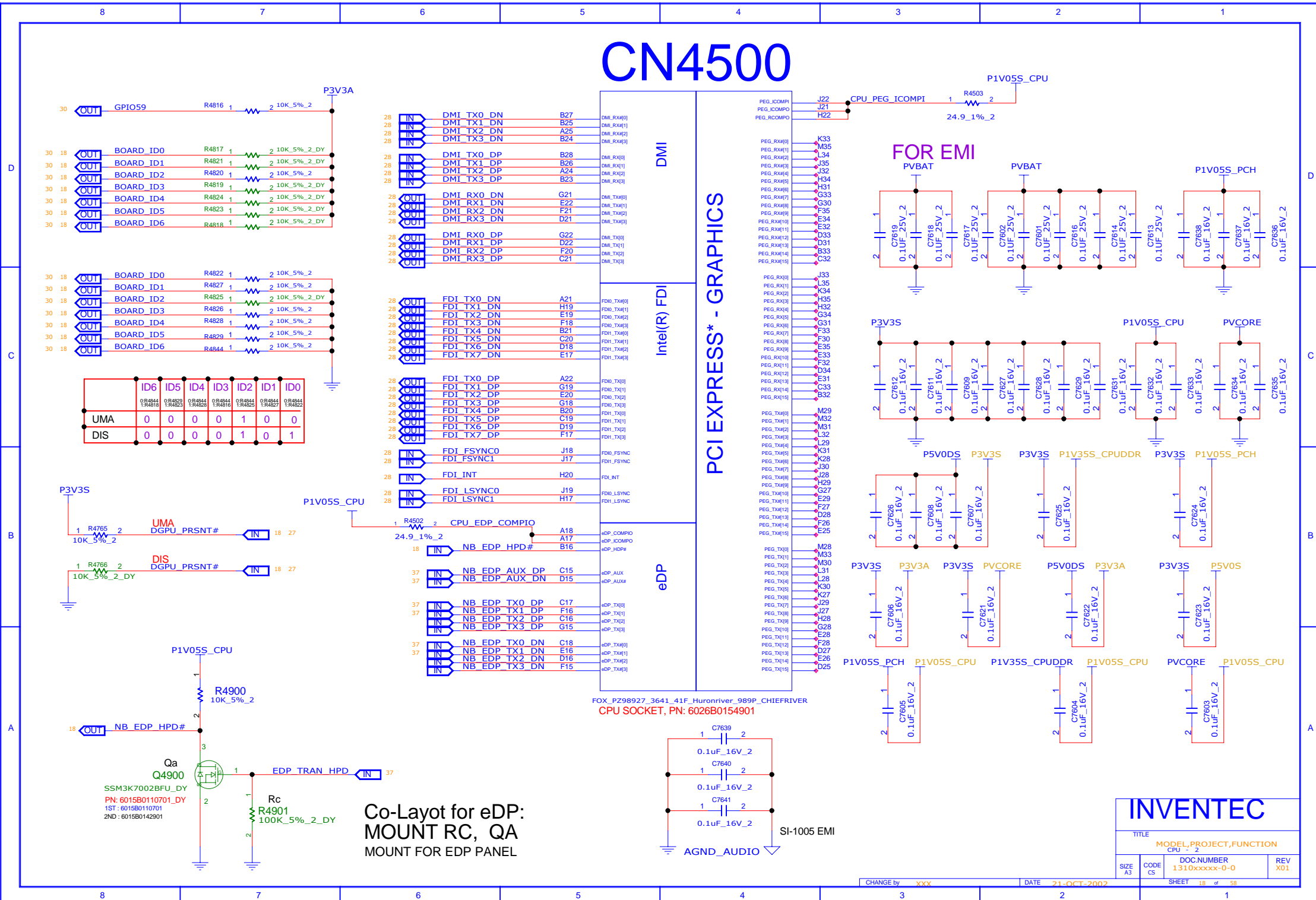
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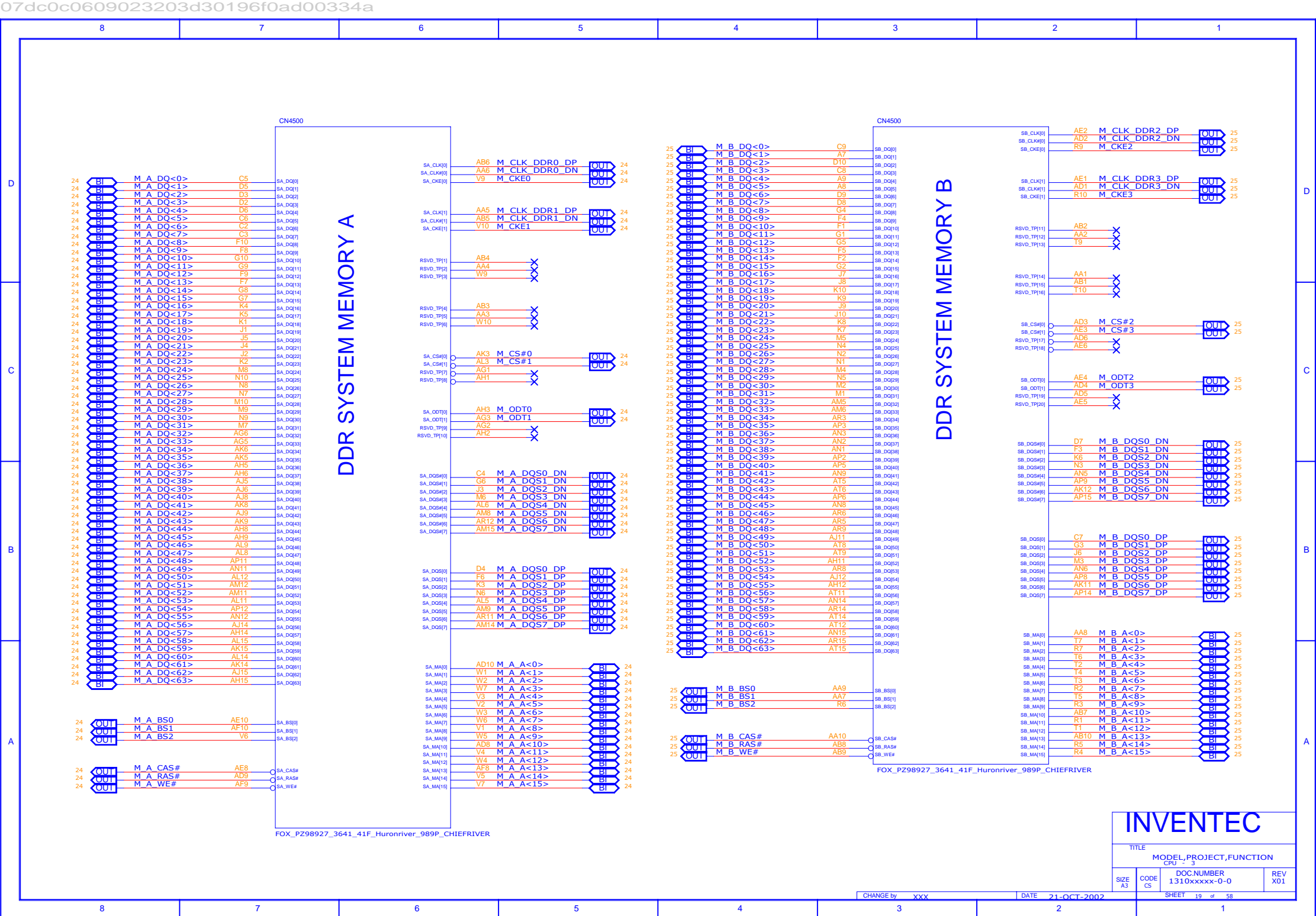


CHIEF RIVER CPU
LOCATION 4500-4699
VER.001_20120807

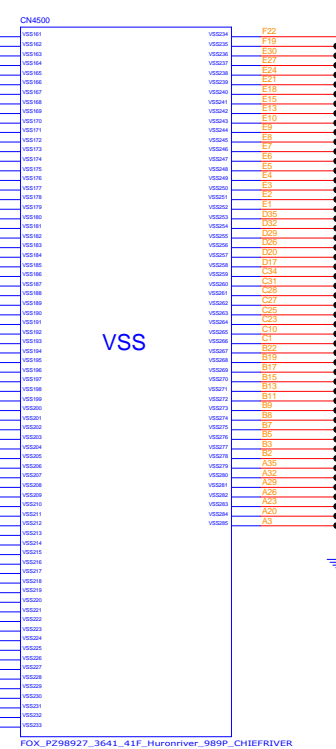
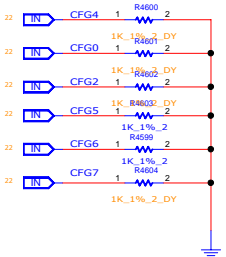


INVENTEC			
TITLE			
MODEL,PROJECT,FUNCTION			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	X01



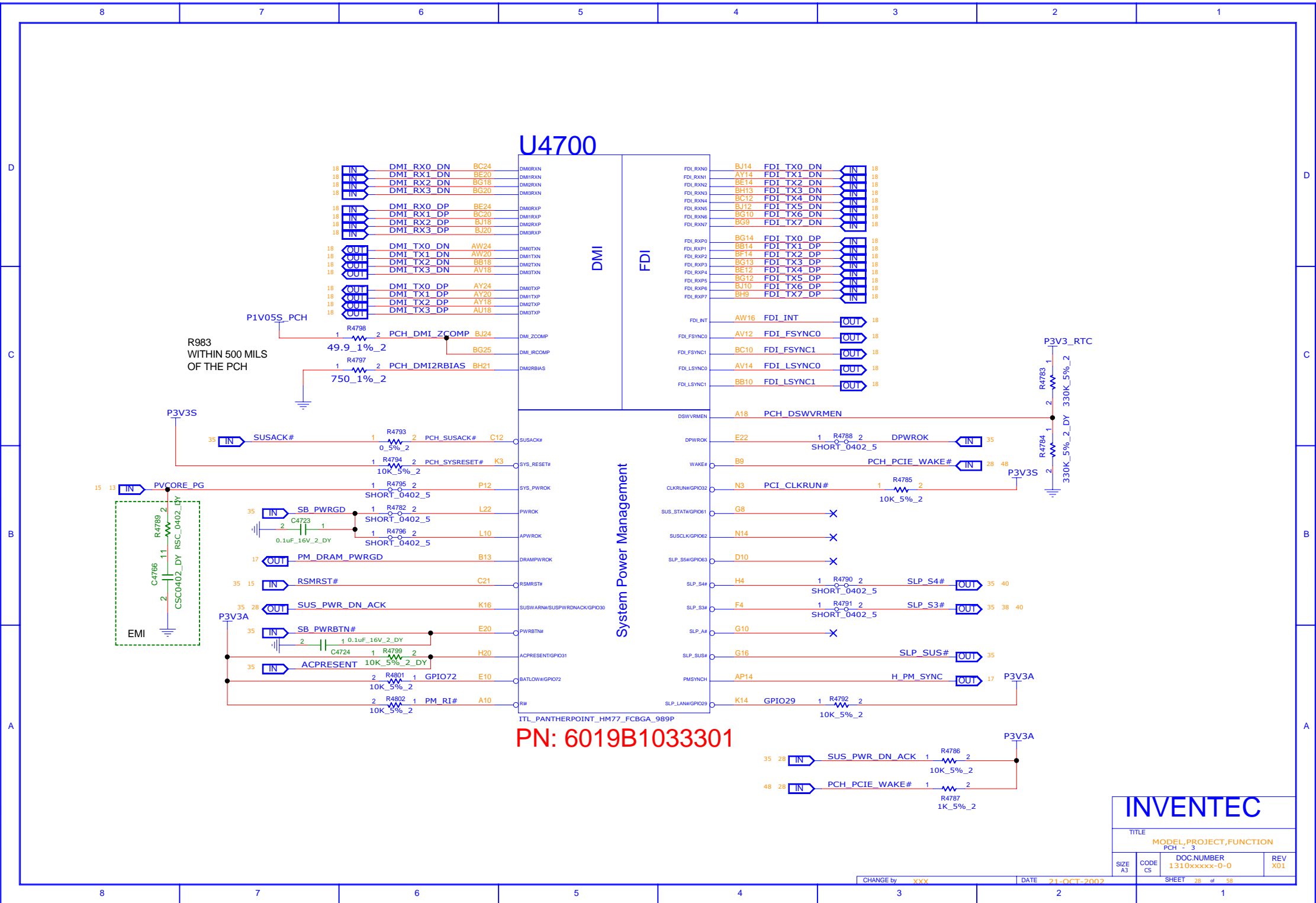


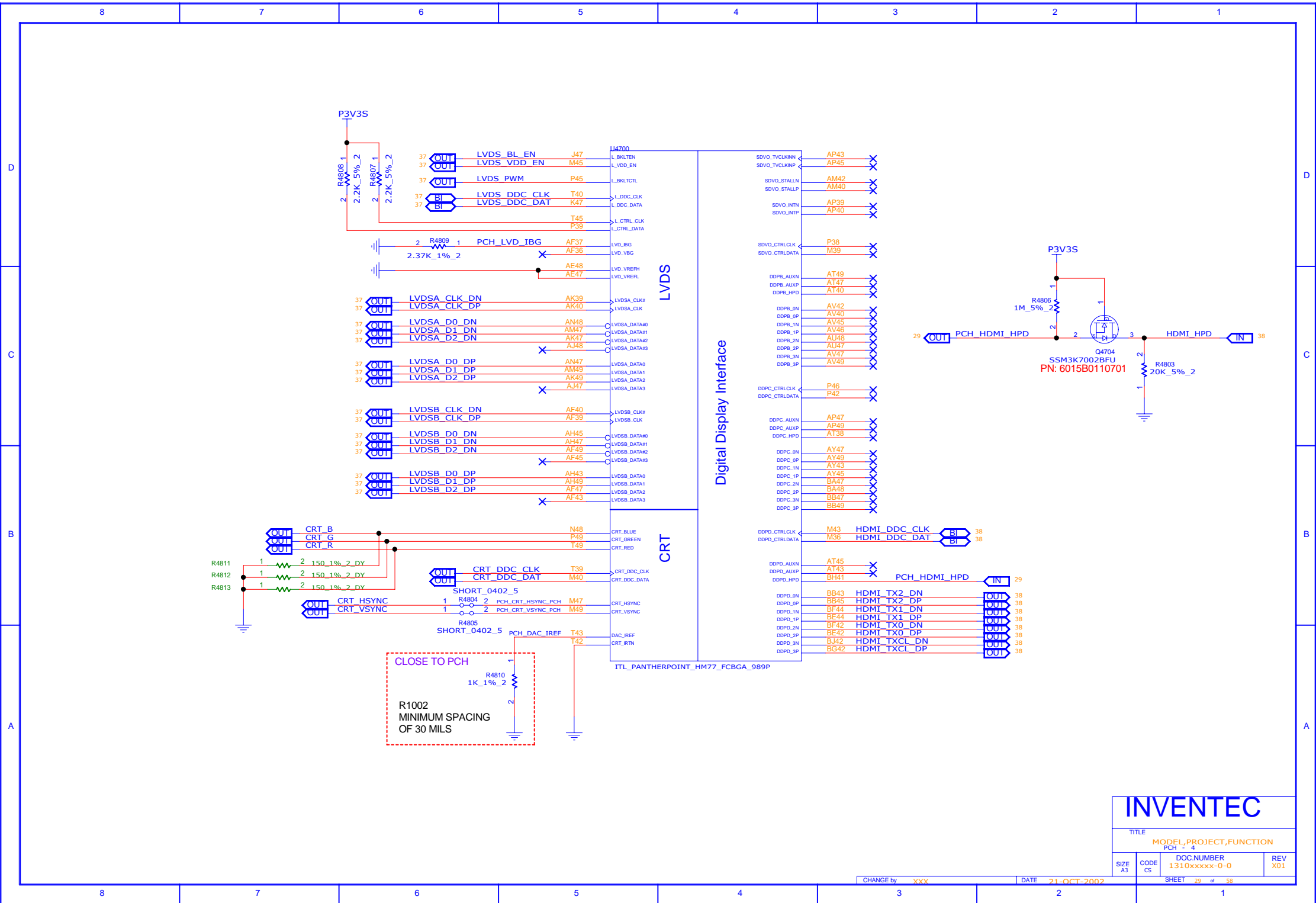




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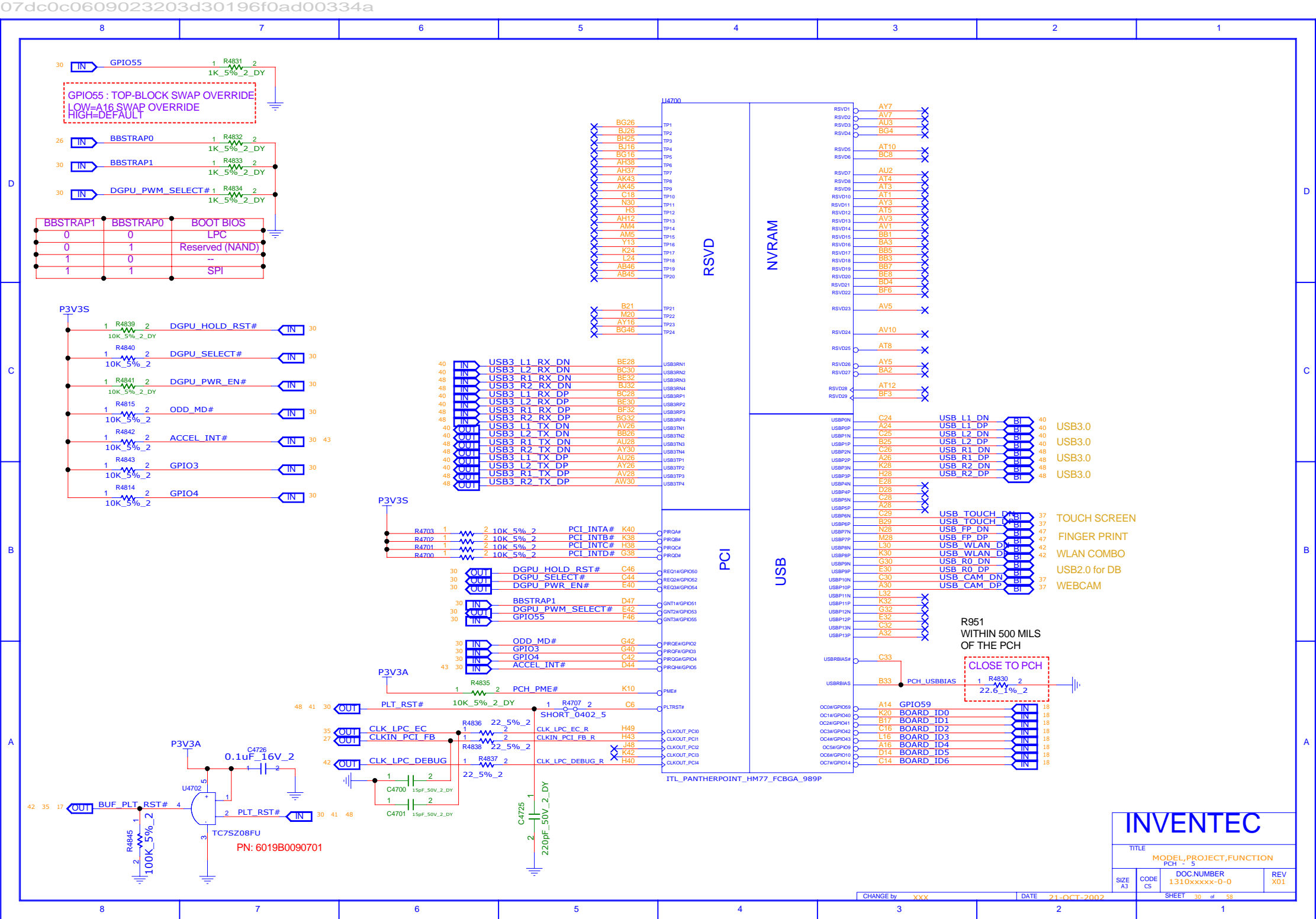
INVENTEC

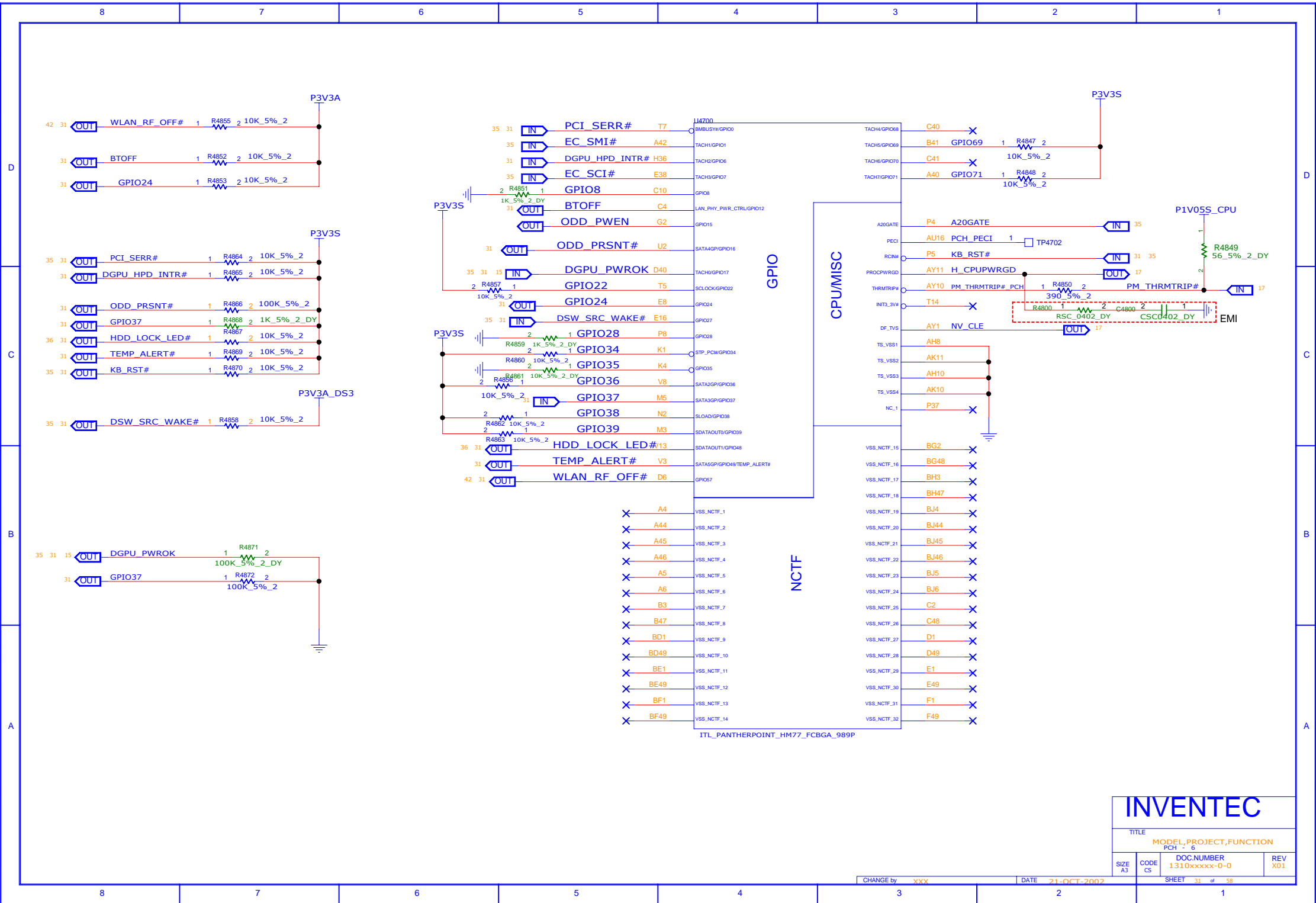
TITLE
MODEL,PROJECT,FUNCTION
PCH - 4

SIZE A3 CODE CS DOC NUMBER 1310xxxxx-0-0 REV X01

CHANGE by XXX DATE 21-OCT-2002

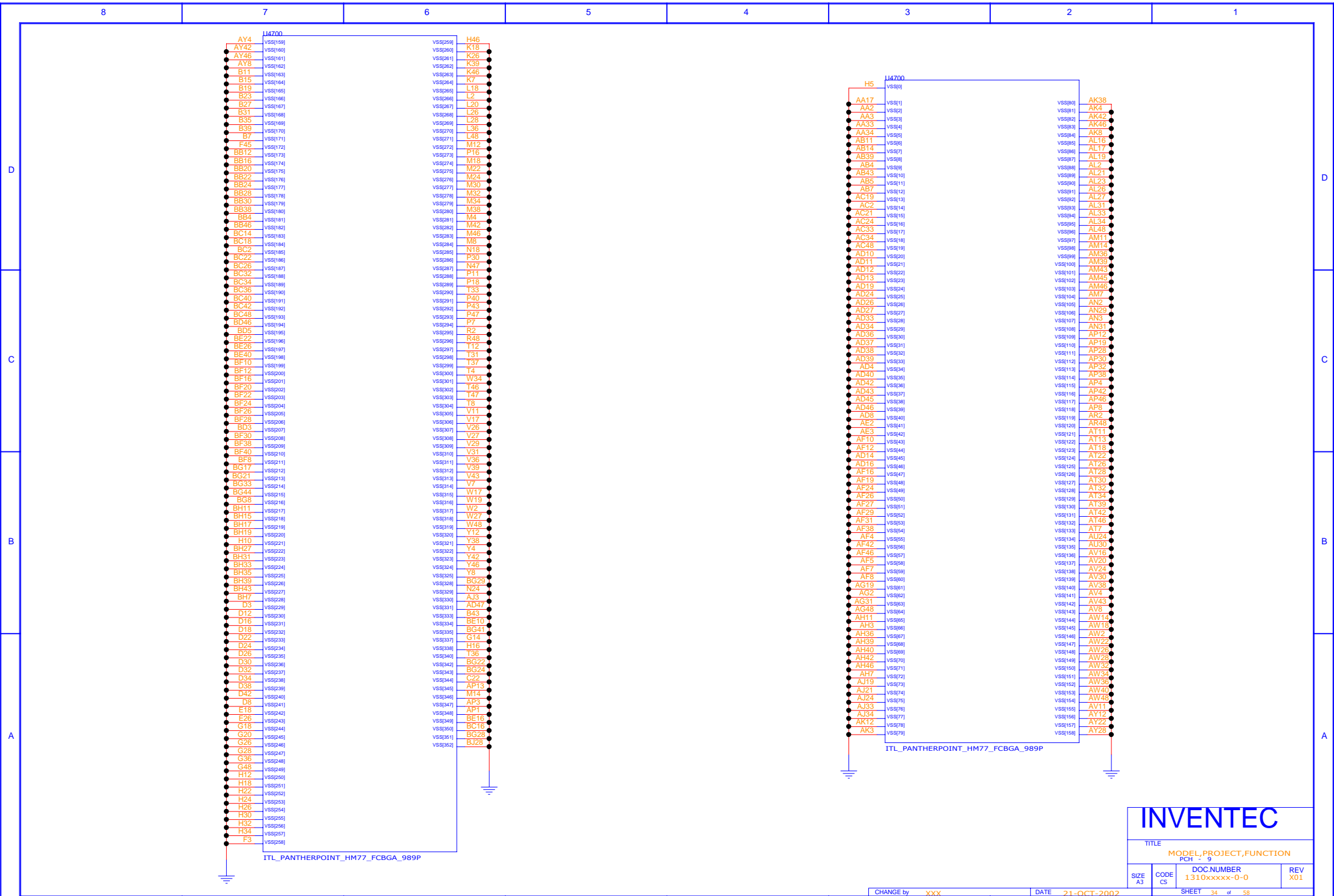
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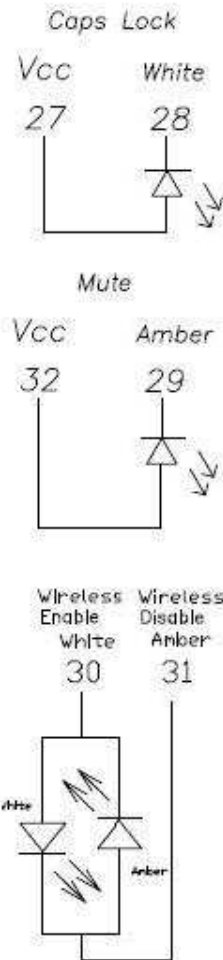
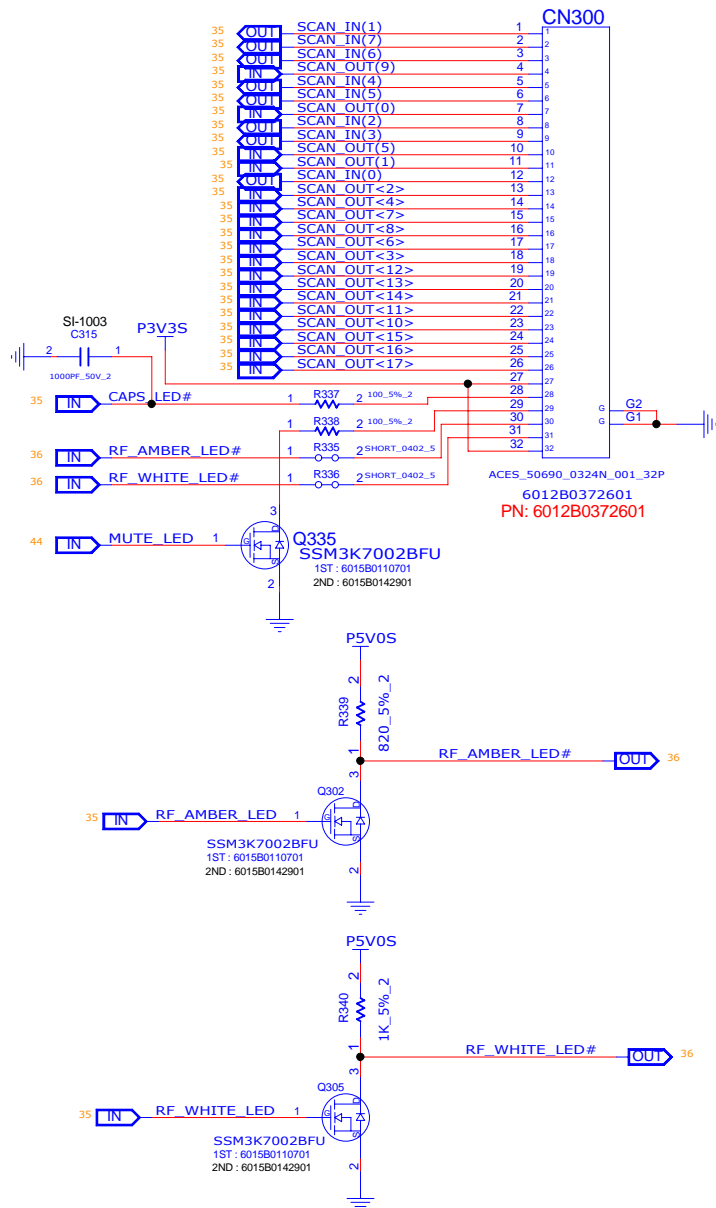






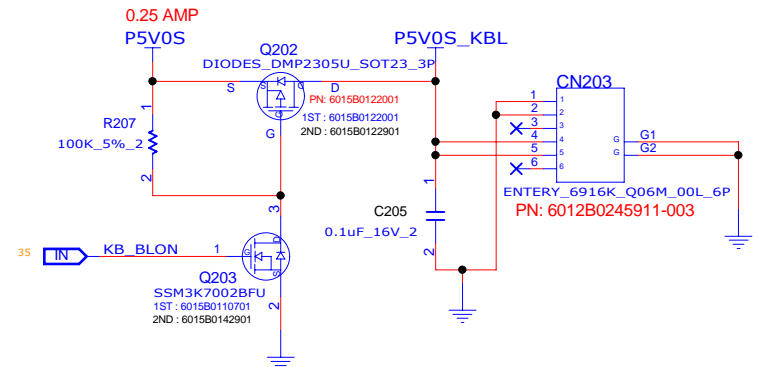


KEYBOARD CONN(32 PIN)



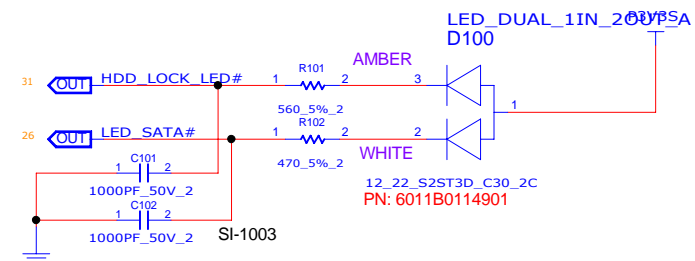
CONNECTOR KEY BOARD 200-299

KEYBOARD BACKLIGHT

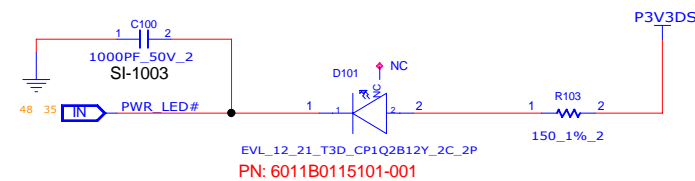


LED 100~199

HDD LED



POWER LED



INVENTEC

TITLE			
MODEL PROJECT,FUNCTION			
KB_CONN & LED			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	X01

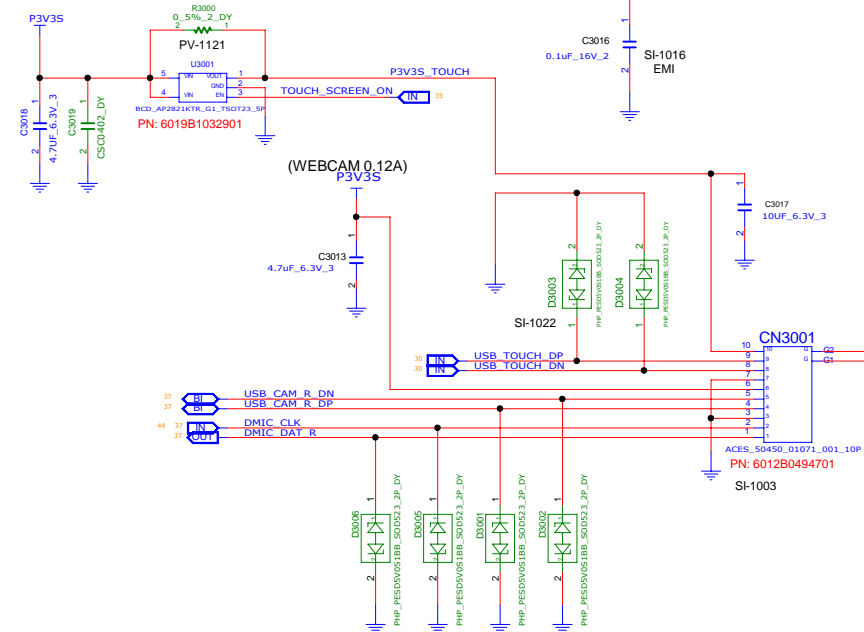
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LOCATION 3000~3049
VER.01_20120822



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	○	×

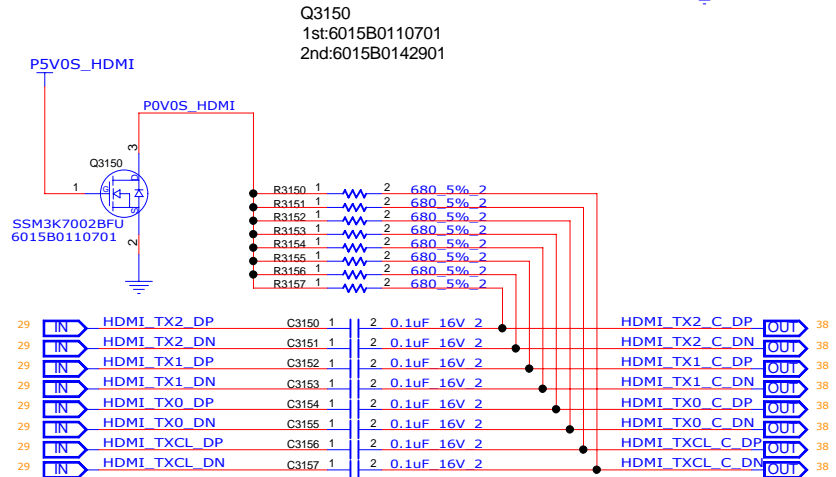
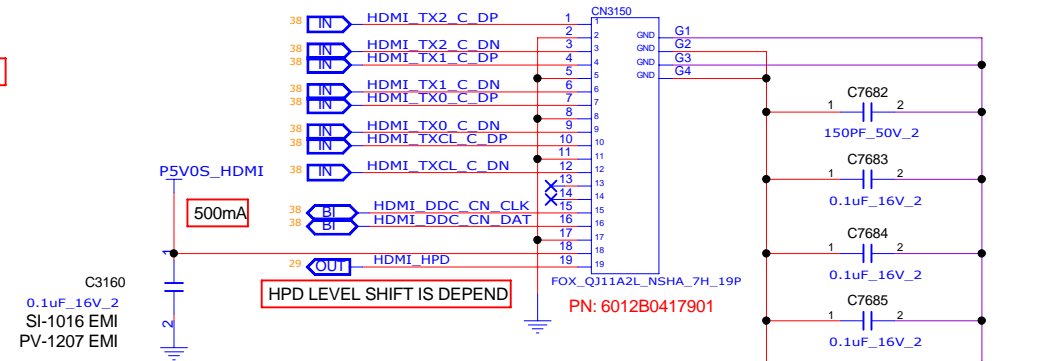
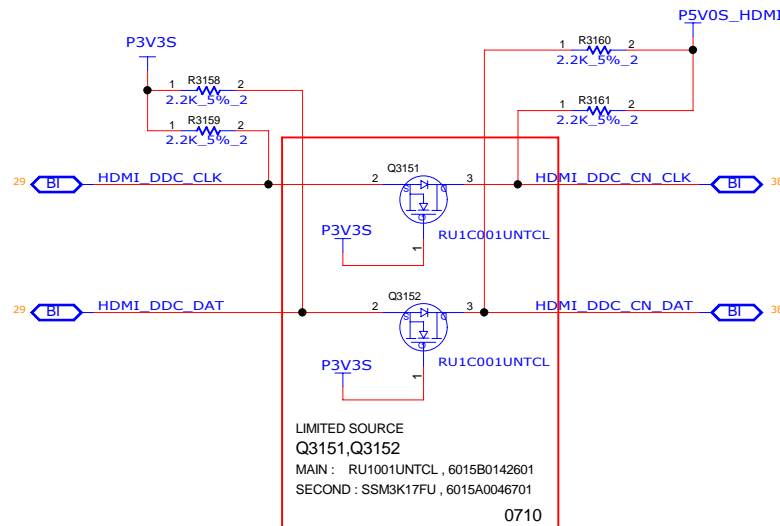
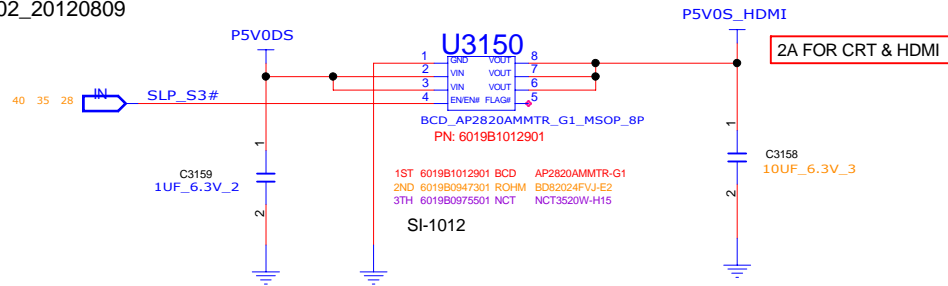


WEBCAM+TOUCHN SCREEN

INVENTEC			
TITLE MODEL,PROJECT,FUNCTION LVDS			
SIZE C	CODE CS	DOC NUMBER 1310xxxxxx-0-0	REV X01
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HDMI

Location 3150 ~ 3199
Ver.02_20120809



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 CODE DOC NUMBER REV
A3 CS 1310xxxx-0-0 X01

CHANGE by XXX DATE 21-OCT-2002

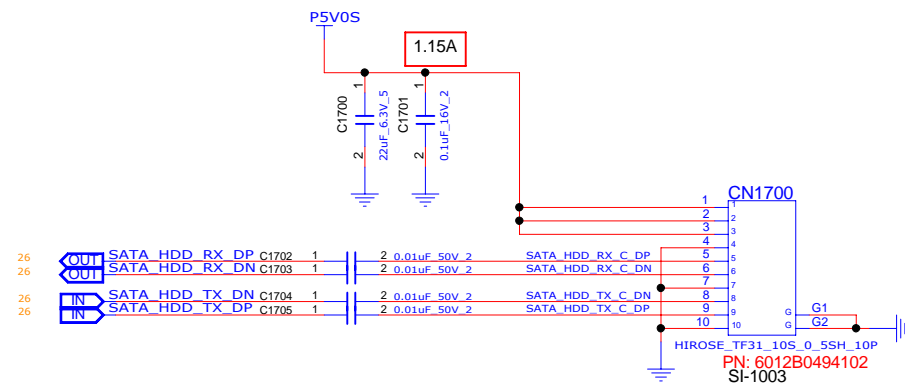
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SATA HDD

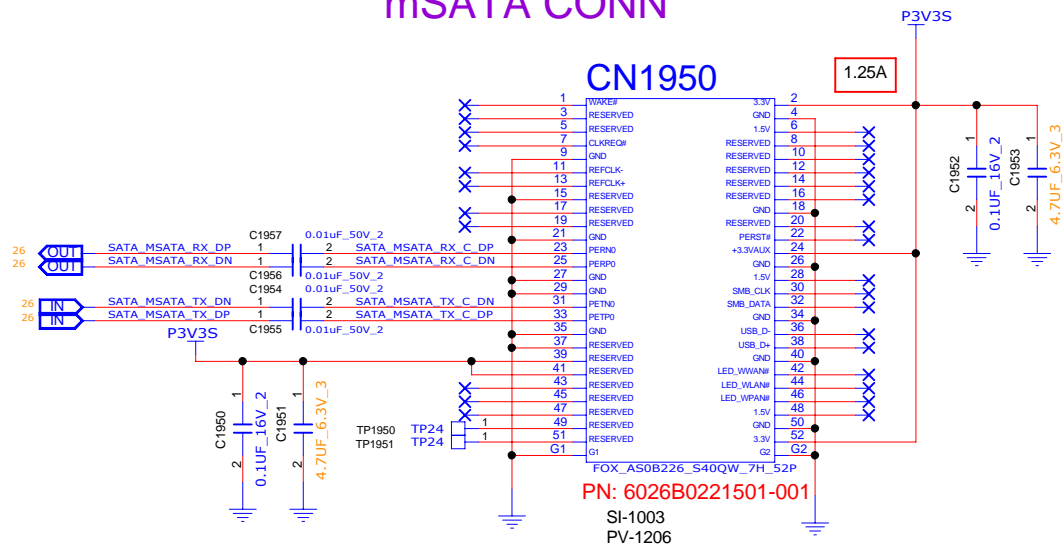
Location 1700 ~ 1749

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	1310xxxxx-0-0	X01

CHANGE by XXX DATE 21-OCT-2002

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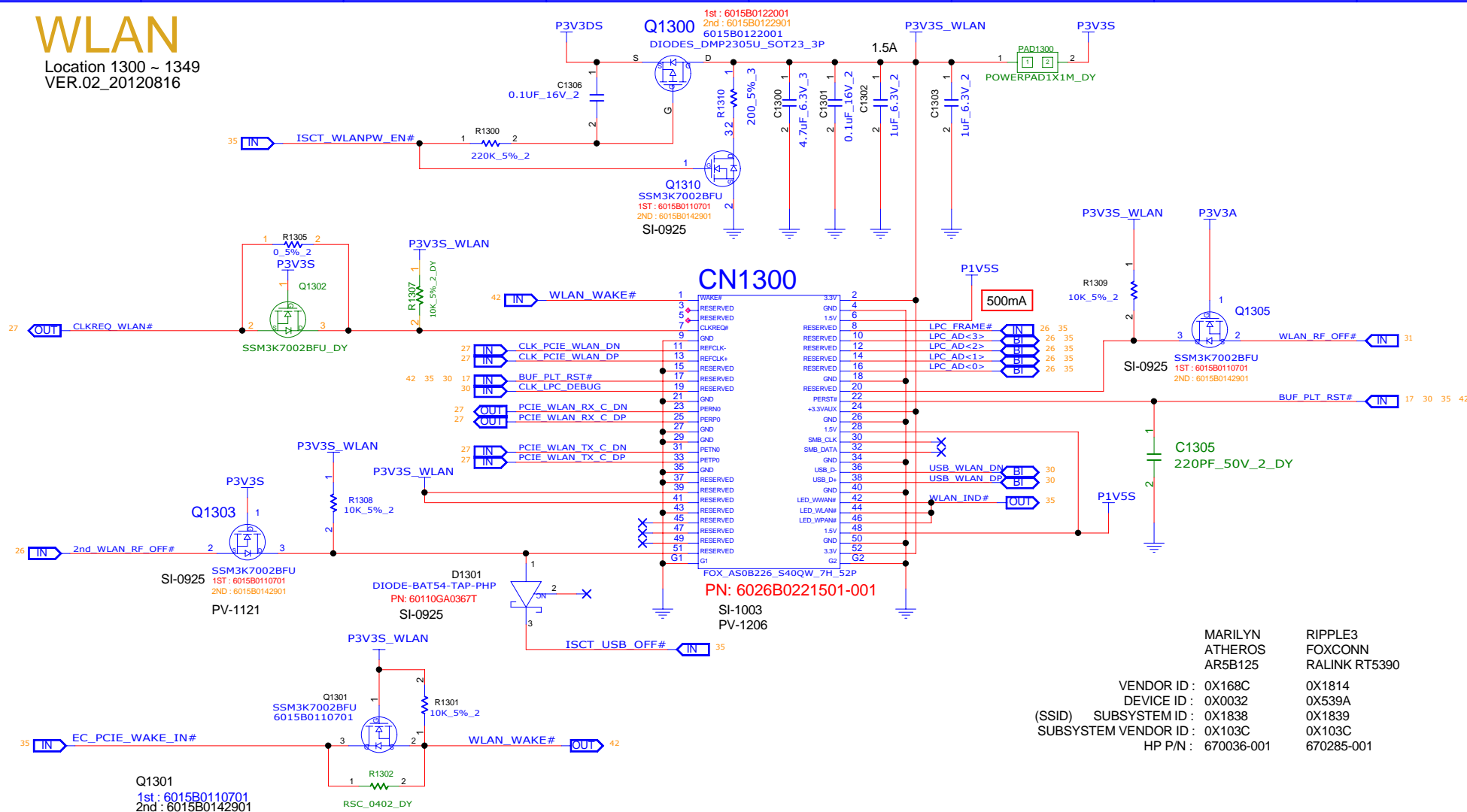


SI-0925

CHANGE by	XXX	DATE	21-OCT-2002
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INVENTEC

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

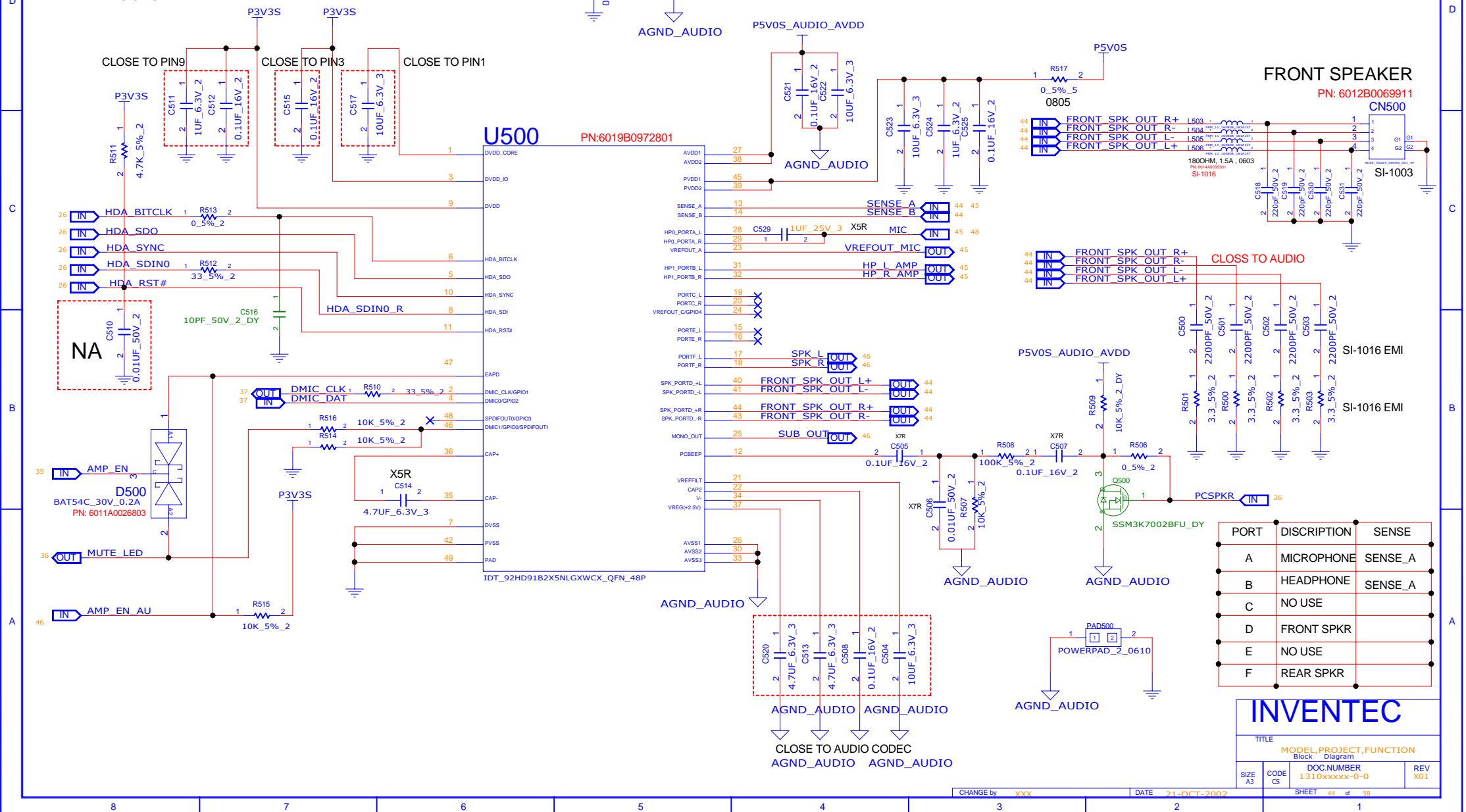
TITLE			
MODEL, PROJECT, FUNCTION			
WLAN & BT			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	X01

CHANGE by XXX DATE 21-OCT-2002

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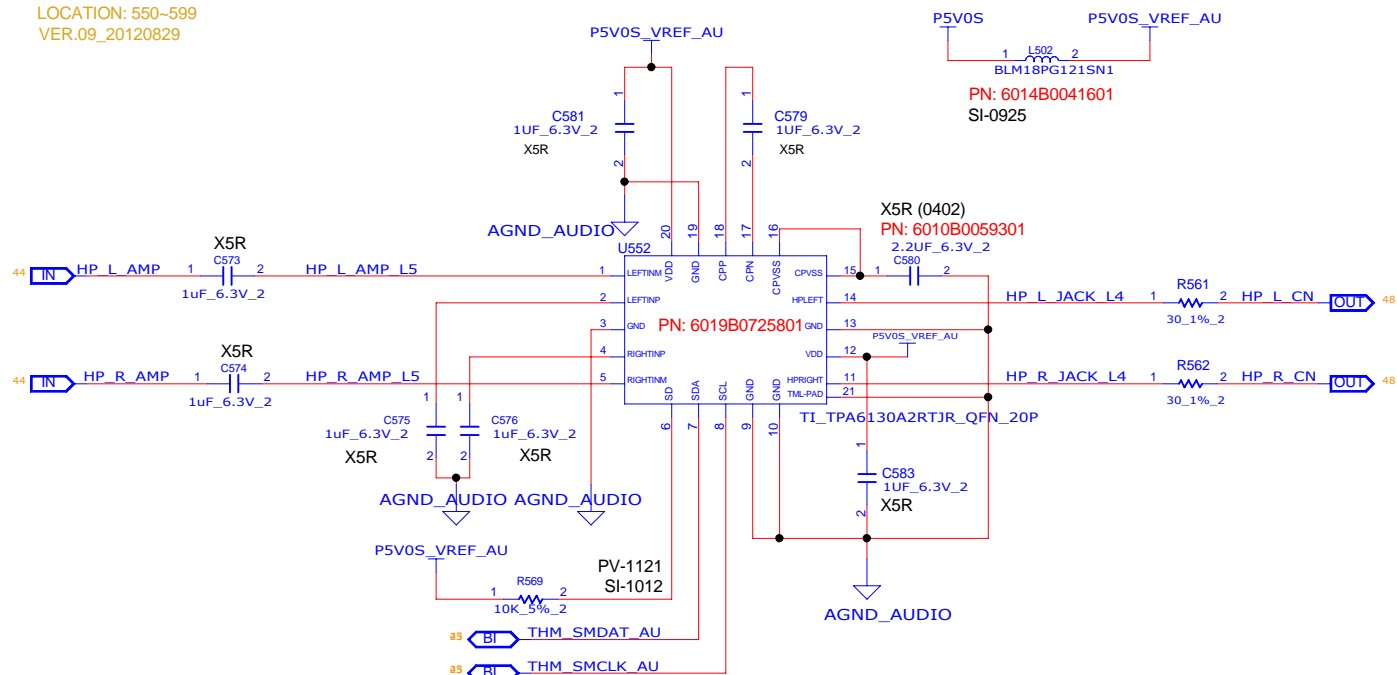
LOCATION: 500~549
VER.09_20120829

DVDD	0.025AMP
AVDD	0.06AMP
PVDD	0.01.3AMP

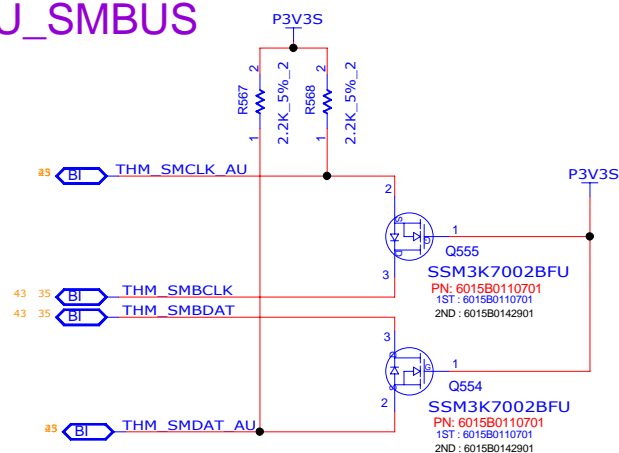


AUDIO-2 CODEC

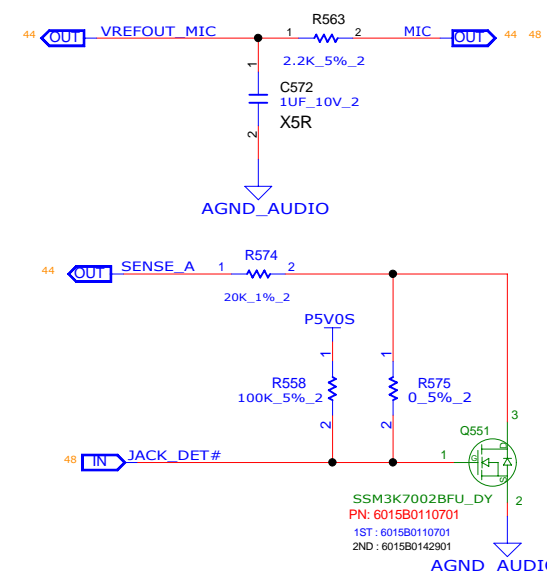
LOCATION: 550~599
VER.09 20120829



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
	Block Diagram

SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV X01
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CHANGE by	XXX	DATE	21-OCT-2002
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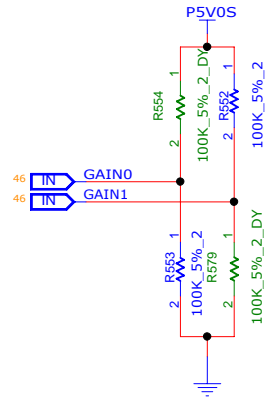
AUDIO (AMP) 550~599

AUDIO-3

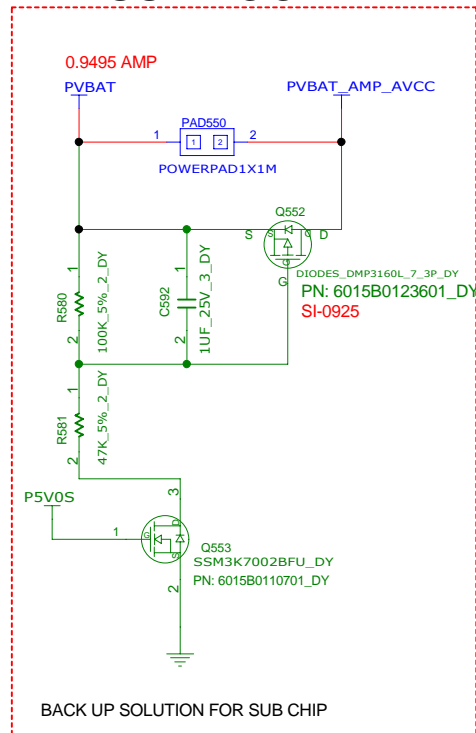
CODEC

LOCATION: 550~599

VER.09_20120829

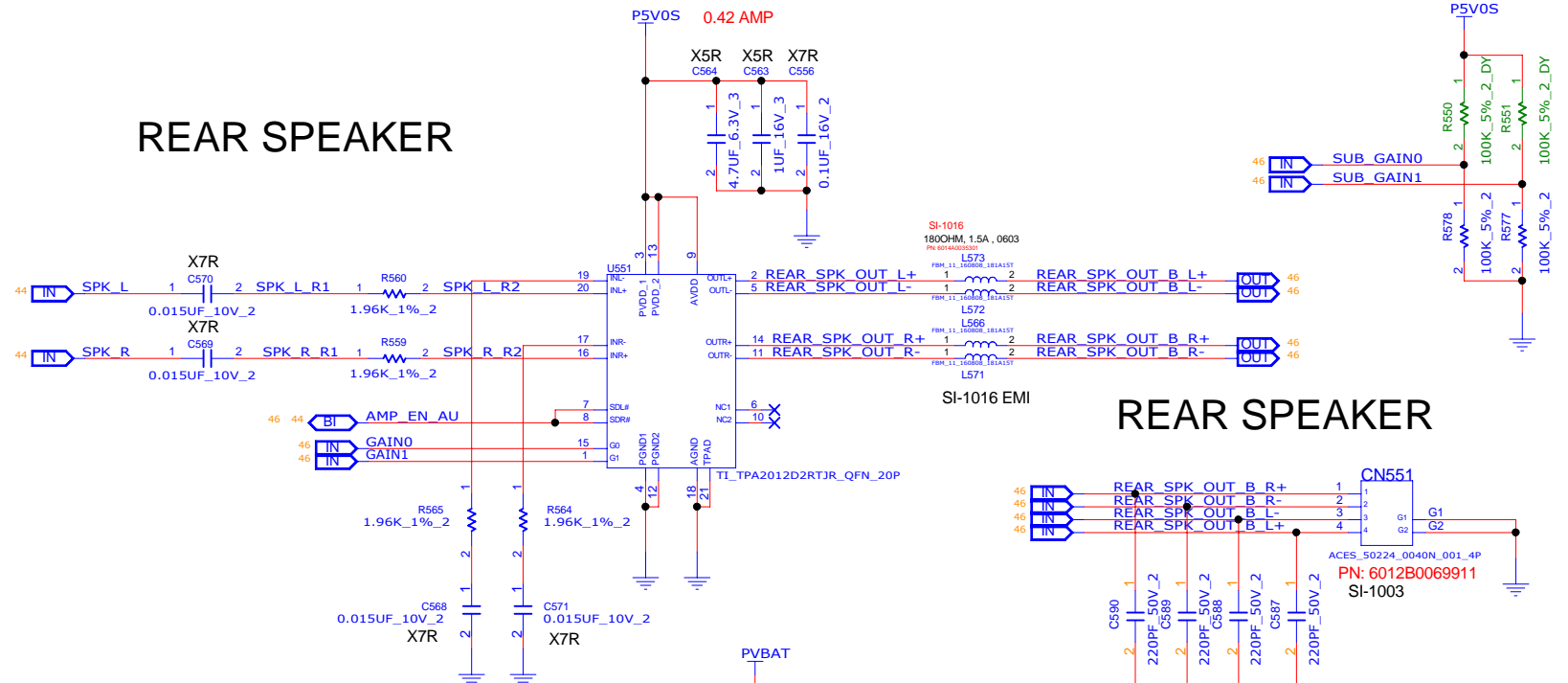


SUBWOOFER

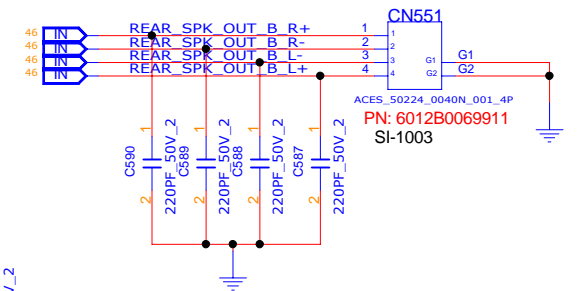


BACK UP SOLUTION FOR SUB CHIP

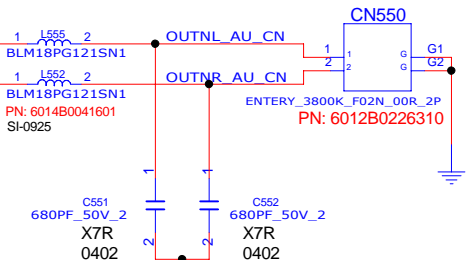
REAR SPEAKER



REAR SPEAKER



SUBWOOFER



TI TPA311D1 (HP PART NUMBER HPA00836PWPR)

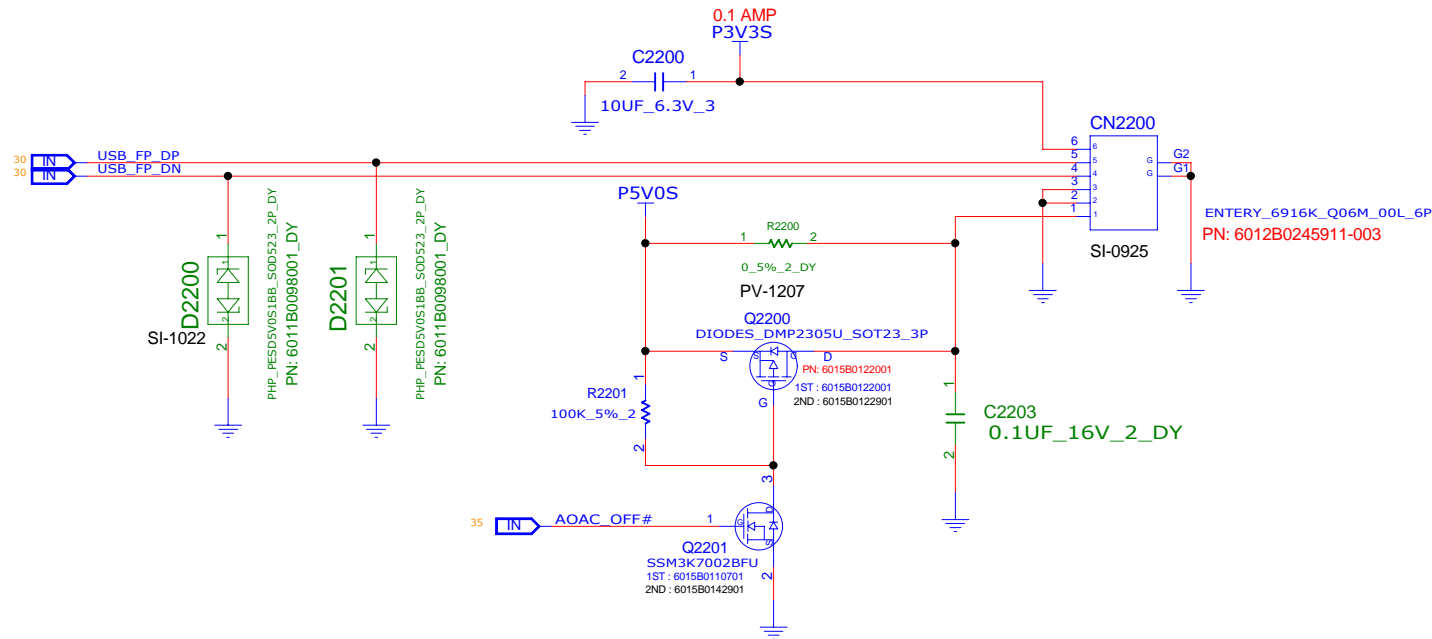
INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	X01

CHANGE by XXX DATE 21-OCT-2002

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FINGER PRINT



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 1310xxxxx-0-0	REV X01

CHANGE by XXX DATE 21-OCT-2002

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AUB
LOCATION: 9000-9999
VER.03_20120814

AUB BOARD

INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION Block Diagram			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV X01

CHANGE by XXX DATE 21-OCT-2002

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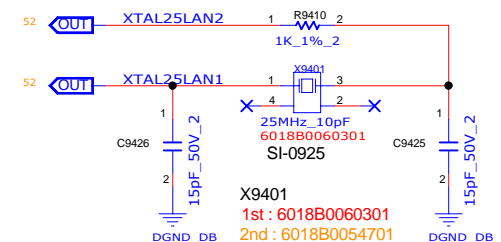
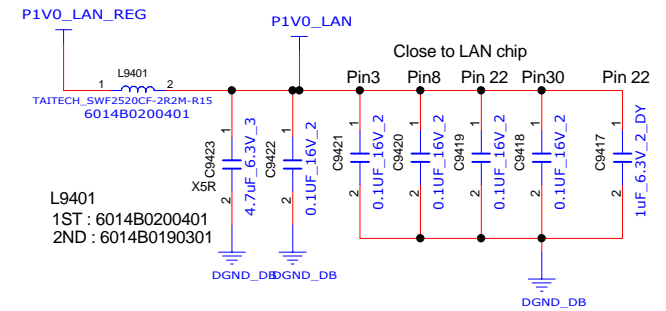
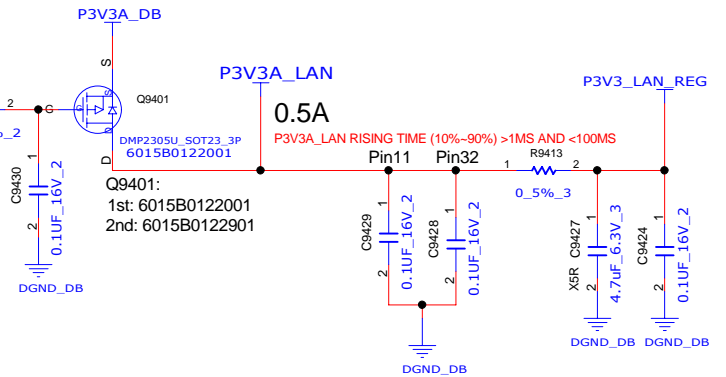
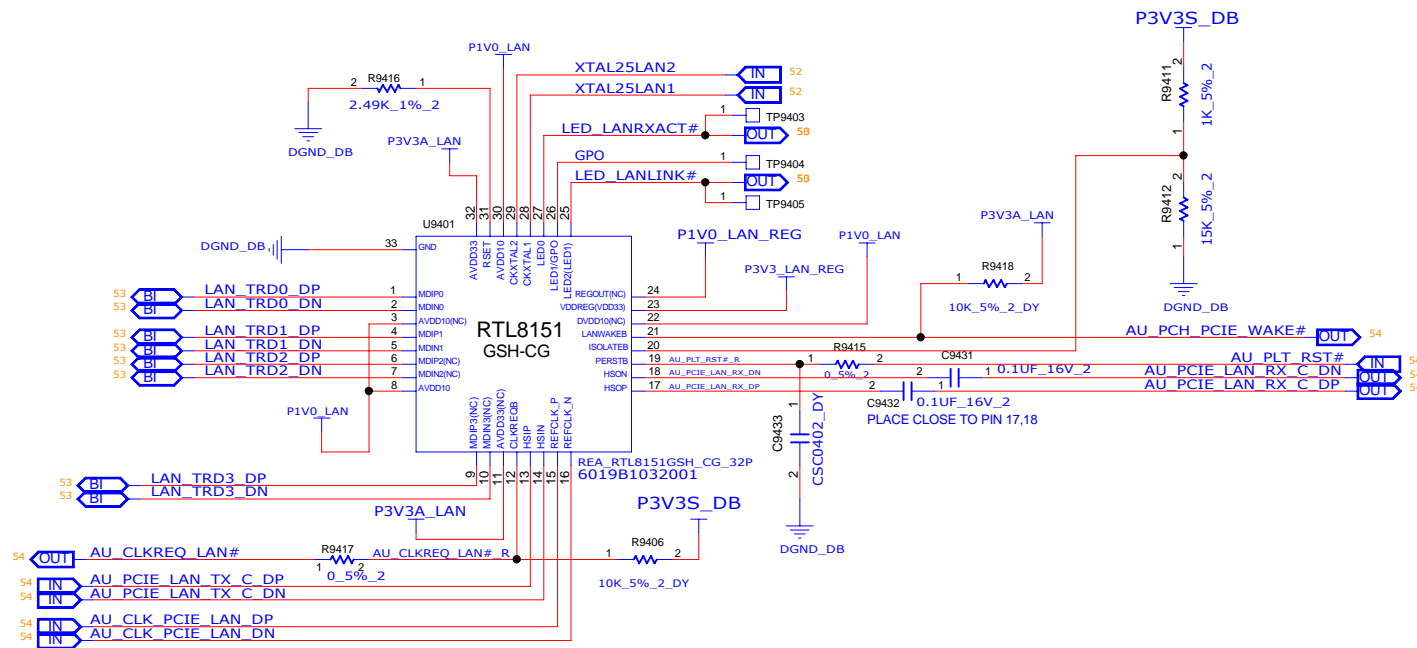
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LAN (Controller)

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

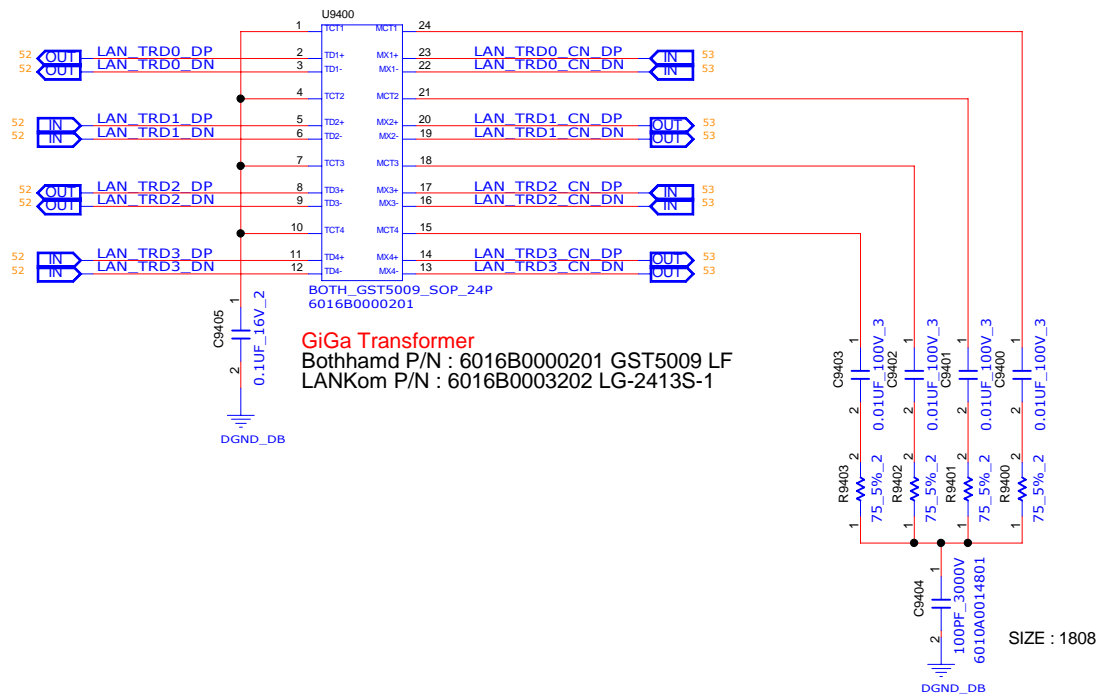
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A3	CS	1310xxxx-0-0	X01

CHANGE by XXX DATE 21-OCT-2002

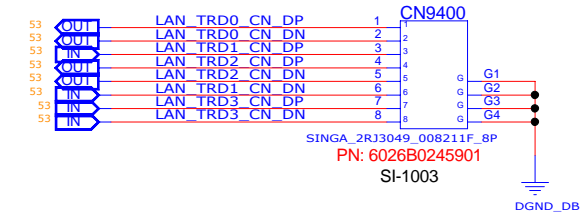
SHEET 52 of 58

LAN (Transformer & RJ45)

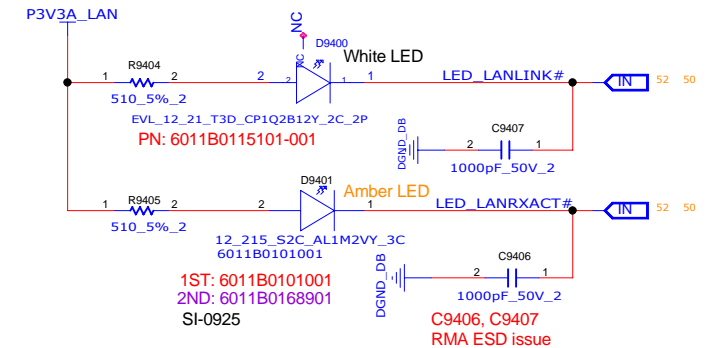
Location 9400 ~ 9499
Ver.06_20120813



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	TOSHIBA	SSM3K7002BFLU	NM
Q301	2nd : 6015B0142901	DIODES	DMN65D8LW-7	MM3
U301	1st : 6019B0932401	MXIC	MX25L512EML-10G	
512KB	2nd : 6019B0816001	ATMEL	AT25F512B-SSH-T	
U301	1st : 6019B1016101	WINBOND	W25Q32FVSSIG	
4MB	2nd : 6019B0794701	MXIC	MX25L3206EM2I-12G	
U301	1st : 6019B0955901	WINBOND	W25Q64FV55IG	
8MB	2nd : 6019B0813101	MXIC	MX25L6406EM2I-12G	

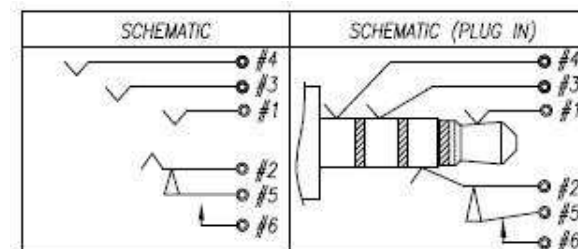
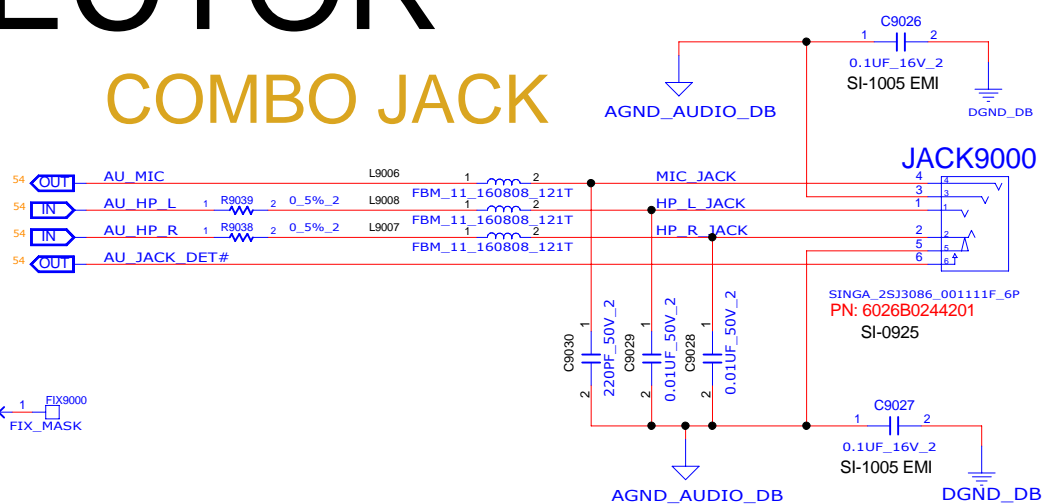
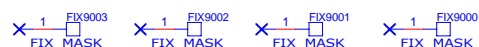
INVENTEC

TITLE			
MODEL,PROJECT,FUNCTION			
Block Diagram			
SHEET	CODE	DOC NUMBER	REV
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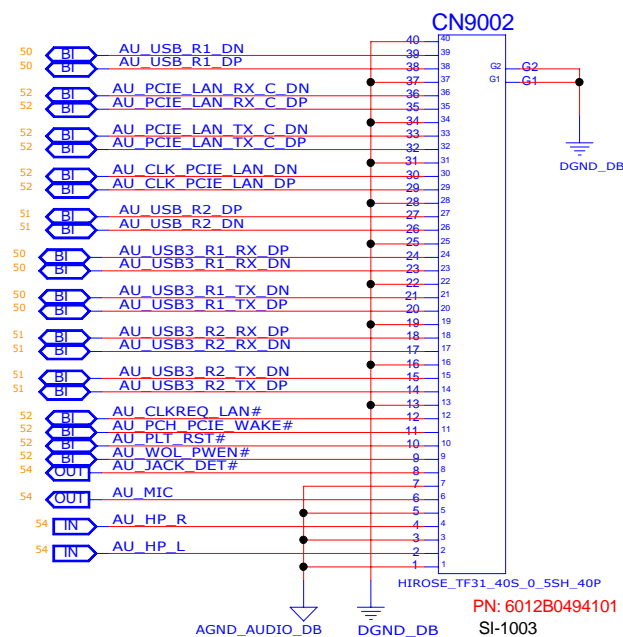
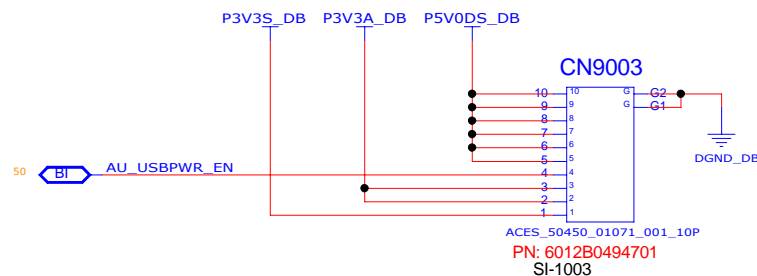
CHANGE by XXX DATE 21-OCT-2002

SHEET 53 of 58

COMBO JACK



MB TO AUB CONNECTOR



INVENTEC

CHANGE by	XXX	DATE	21-OCT-2002
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SHEET 55 of

8	7	6	5	4	3	2	1
<div><div><div>1310A2552101 (6L) 1310A2552201 (8L)</div><div>ESD BOARD 1</div><div><div><div>TP7508 TP30</div><div>TP7507 TP30</div></div><div><div>D7507</div><div>12</div></div><div>PHP_PESD5V0S1BB_SOD523_2P_DY</div><div>PN: 6011B0098001-002_DY</div><div>PV-1206</div><div>DGND_EM11</div><div>DGND_EM12</div></div></div></div> <div><div>USB BOARD (6L) USB BOARD (8L)</div><div>POWER BOARD (6L) POWER BOARD (8L)</div><div>EMI BOARD (6L) EMI BOARD (8L)</div><div>1310A2548501 1310A2548601</div><div>1310A2548701 1310A2548801</div><div>1310A2552101 1310A2552102</div><div>1310A2552201 1310A2552202</div><div>6050A2548501 6050A2548601</div><div>6050A2548701 6050A2548801</div><div>6050A2552101 6050A2552102</div><div>6050A2552201 6050A2552202</div></div>							
<div><div><div>1310A2552102 (6L) 1310A2552202 (8L)</div><div>ESD BOARD 2</div><div><div><div>TP7503 TP30</div><div>TP7504 TP30</div></div><div><div>D7503</div><div>12</div></div><div>PHP_PESD5V0S1BB_SOD523_2P_DY</div><div>PN: 6011B0098001-002_DY</div><div>PV-1206</div><div>DGND_EM13</div><div>DGND_EM14</div></div></div></div>							
<div><div><div>CHIEF RIVER CHIEF RIVER CHIEF RIVER</div><div>DIS DIS UMA</div><div>NVIDIA N14P-GV2 (GEFORCE 630M) NVIDIA N14P-GV2 (GEFORCE 630M) N/A</div><div>4G 2G N/A</div><div>SAMSUNG K4W4G1646B-HC11 MICRON MT41K256M16HA-107G:E N/A</div><div>1310A2548301 1310A2548302 1310A2548201</div></div></div>							
<div><div>INVENTEC</div><div><div>TITLE</div><div>MODEL,PROJECT,FUNCTION Block Diagram</div></div><div><div>SIZE A3</div><div>CODE CS</div><div>DOC NUMBER 1310xxxxx-0-0</div><div>REV X01</div></div><div><div>CHANGE by xxx</div><div>DATE 21-OCT-2002</div><div>SHEET 56 of 58</div></div></div>							
8	7	6	5	4	3	2	1

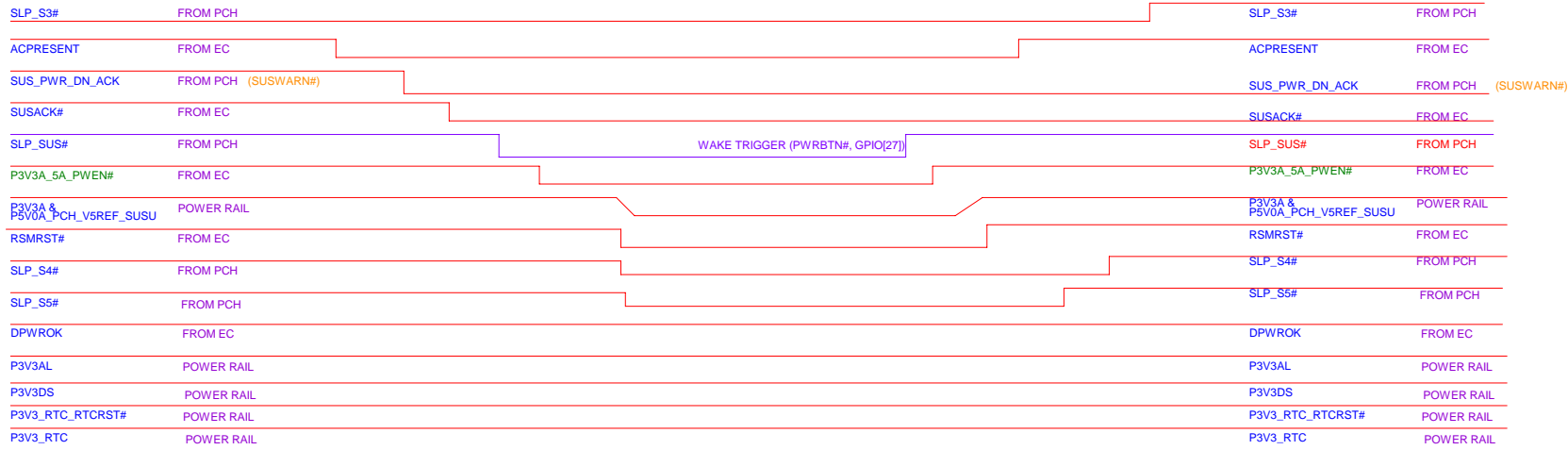
S3



TITLE			
MODEL,PROJECT,FUNCTION Block Diagram			
SIZE C	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV X01
SHEET 57 of 58			

S3 TO DEEP S3

DEEP S3 TO S0



INVENTEC

Title			
MODEL, PROJECT, FUNCTION			
Block Diagram			
SIZE	CODE	DOC NUMBER	REV
C	CS	1310xxxxx-0-0	X01
SHEET		58	of 58