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# CALVIN DIS

## MV BUILD

2012.04.23

DATE	CHANGE NO.	REV
05/07/2012	2012-ECCO-008883	D
09/23/2012	2012-ECCO-007890	D
09/19/2012	2012-ECCO-007325	B
02-2012	2012-ECCO-006248	A

EE	DATE	POWER	DATE	INVENTEC		
DESIGN	EDT CHEN	01 APR 2012	ALAN USHEV	01 APR 2012	TITLE	
CHECK	EDT CHEN	01 APR 2012	ALAN USHEV	01 APR 2012	CALVIN DIS	
RESPONSIBLE	EDT CHEN	01 APR 2012	ALAN USHEV	01 APR 2012	CALVIN DIS MAIN BOARD	
SIZE	A3		VER	A02		DOC NUMBER
FILE NAME	CALVIN.DIS.MB-1310A247001		SIZE	A3	CODE	1310A247001-0-ALG
P/N	R080A247001		REV	1		2
				SIZE	A3	CS
				SHEET	1 of 24	

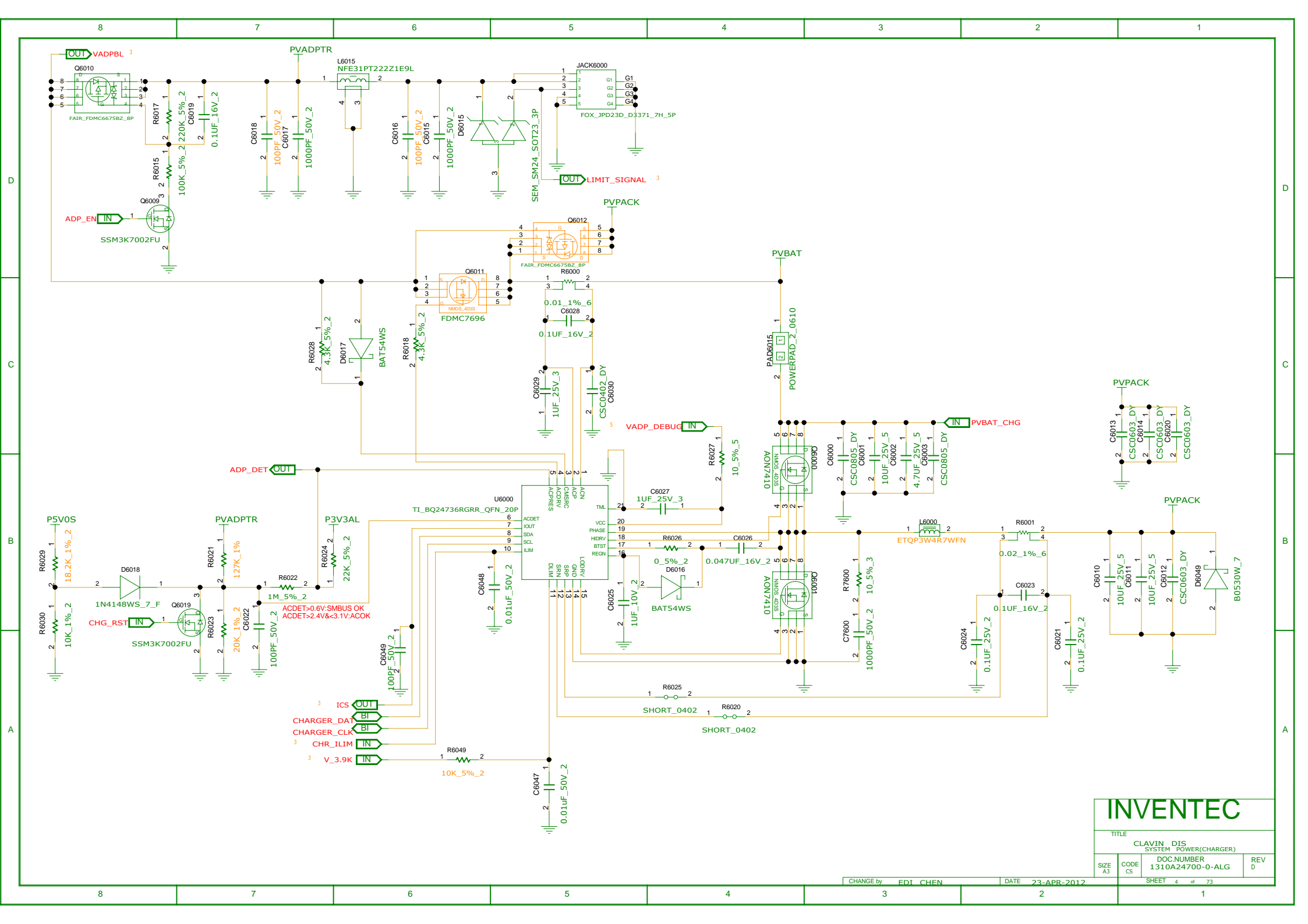
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**INVENTEC**

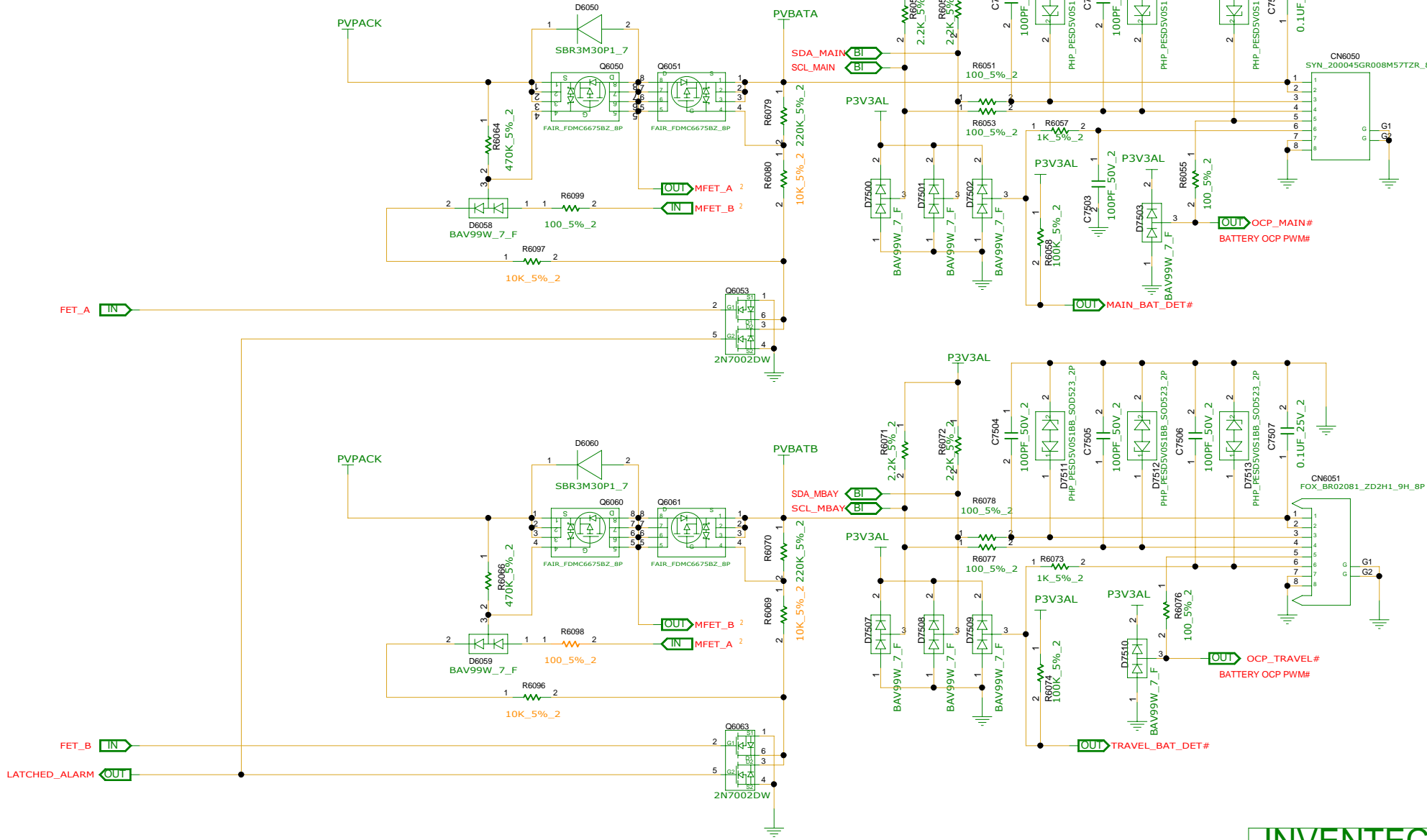
TITLE CLAVIN DIS TABLE OF CONTENTS			
SIZE A3		CODE CS	REV D
DOC NUMBER 1310A24700-0-ALG		SHEET 2 of 73	





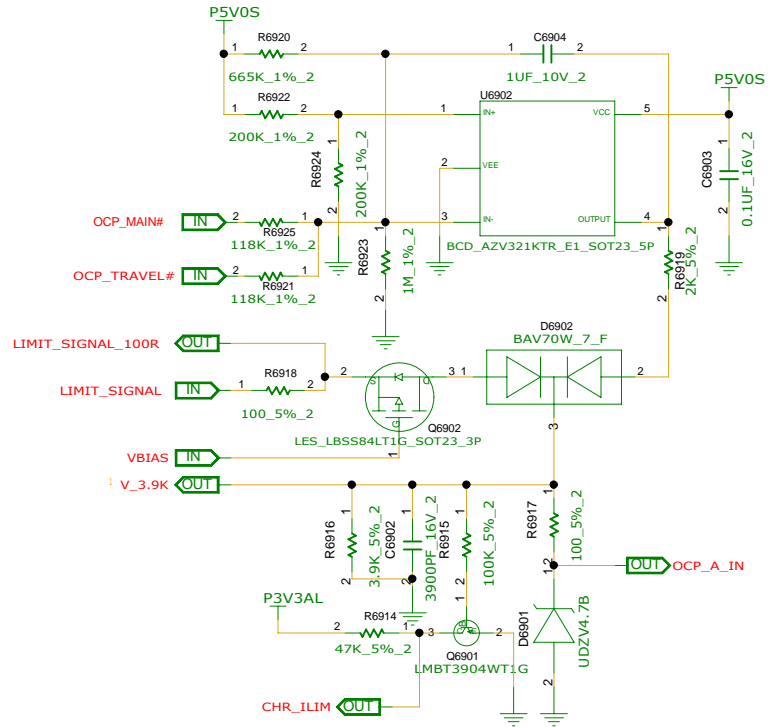
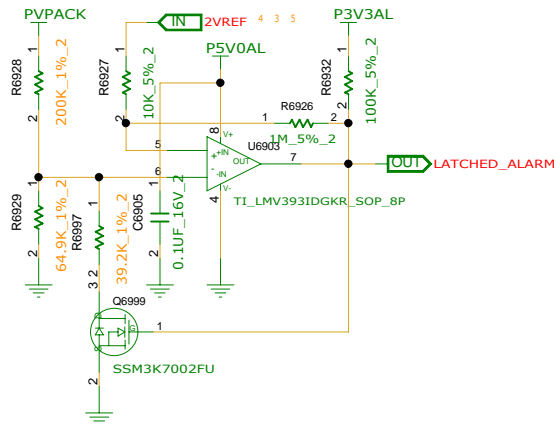
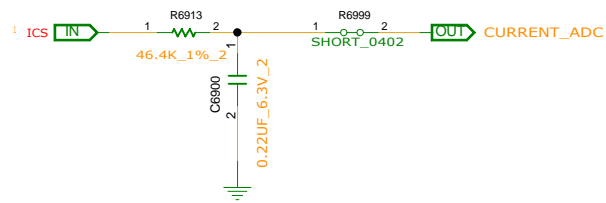
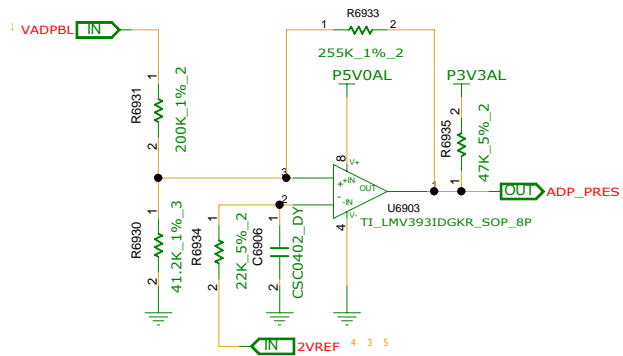
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DOC NUMBER			
1310A24700-0-ALG			
SIZE	CODE	REV	D
A3	CS		

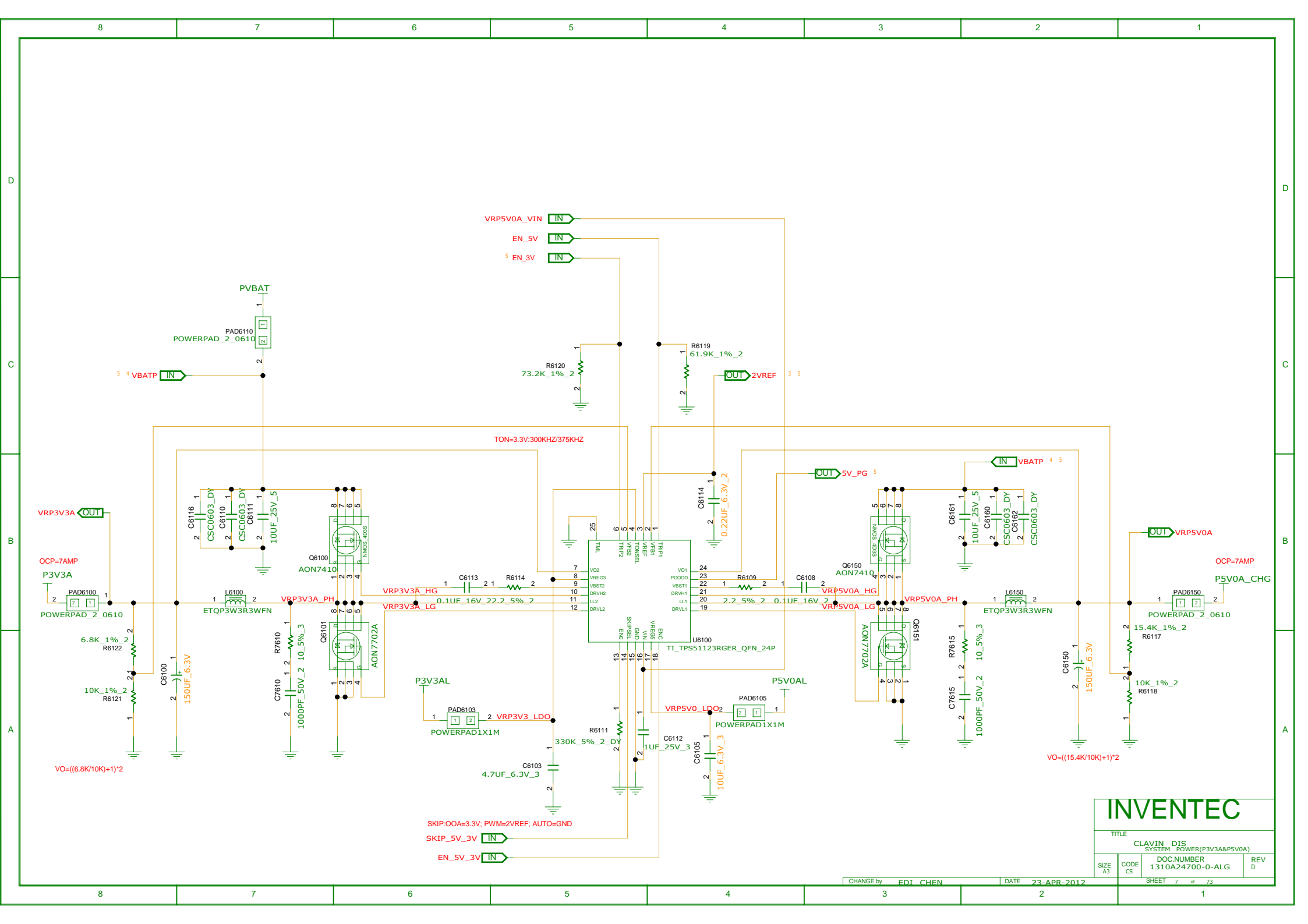


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CLAVIN_DIS SYSTEM POWER(BATT_SELECTOR)			
SIZE		CODE	REV
A3	CS	1310A24700-0-ALG	D

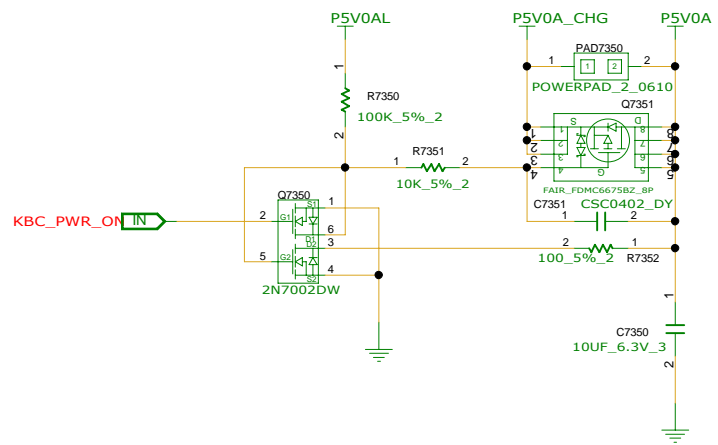
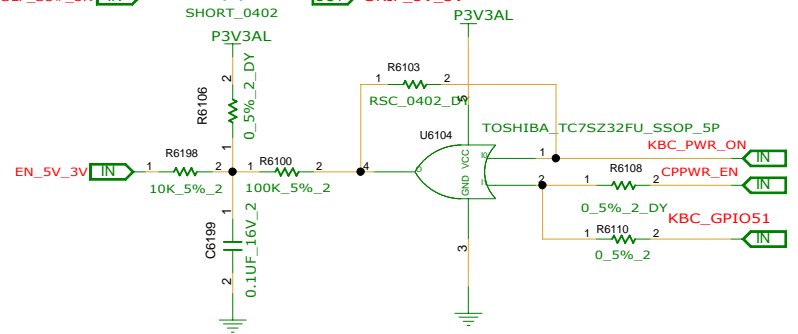
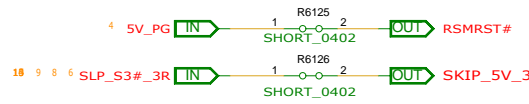
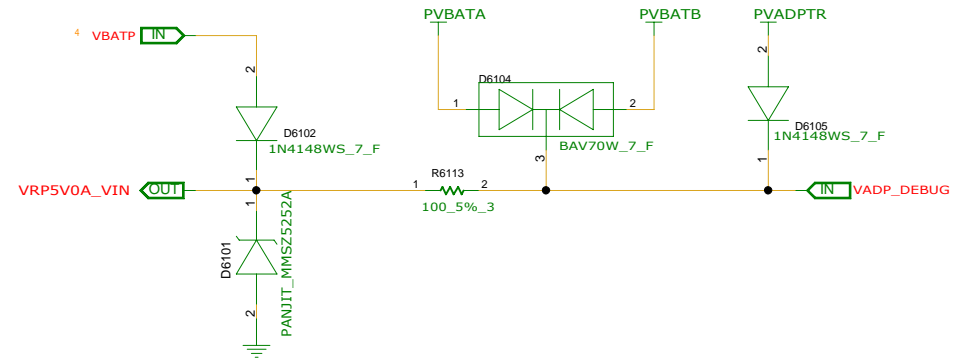
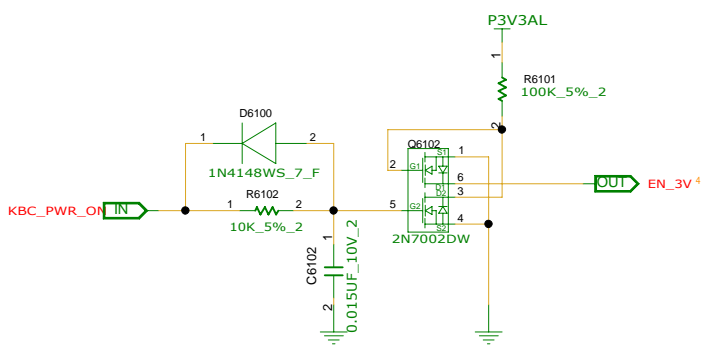
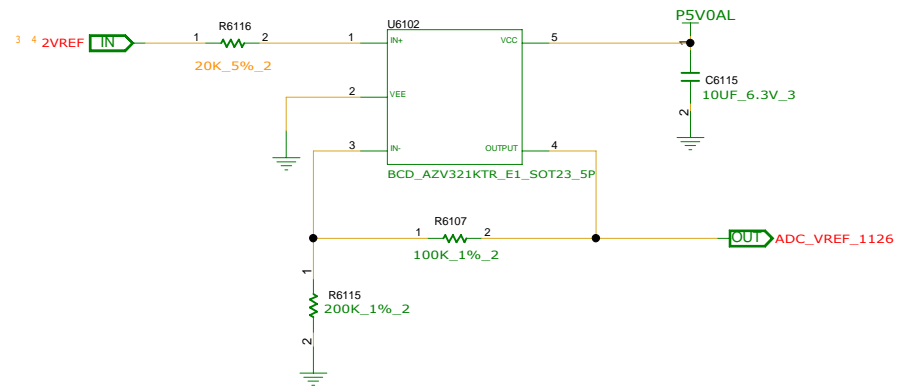
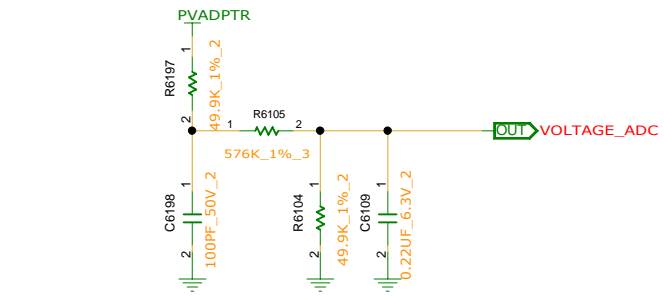


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SIZE A3		CODE CS	
DOC NUMBER 1310A24700-0-ALG		REV D	
CHANGE by EDT_CHEN		DATE 23-APR-2012	
SHEET 6		of 73	



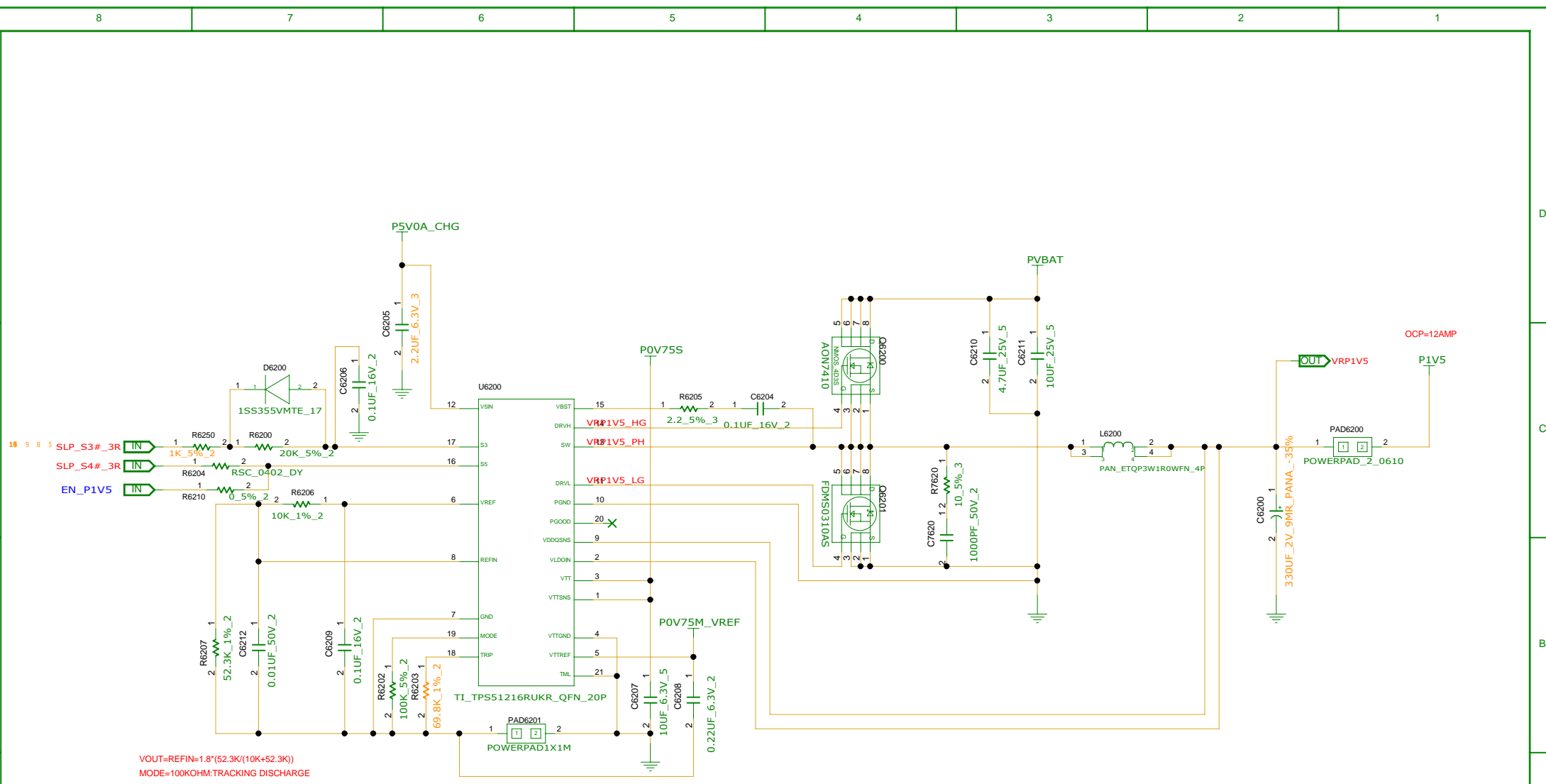
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 SKIP\_5V\_3V IN  
 EN\_5V\_3V IN

<b>INVENTEC</b>			
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CLAVIN_DIS			
SYSTEM_POWER(P3V3A&P5V0A)			
SIZE		CODE	
A3	CS	DOCNUMBER	REV
		1310A24700-0-ALG	D



<b>INVENTEC</b>			
TITLE CLAVIN_DIS P3V3AB&P5V0A_CHG_PORT			
DOCNUMBER 1310A24700-0-ALG			
SIZE A3	CODE CS	REV D	





VOUT=REFIN\*1.8\*(52.3K/(10K+52.3K))  
 MODE=100KOHM:TRACKING DISCHARGE

Table 1. S3/S5 Power State Control

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

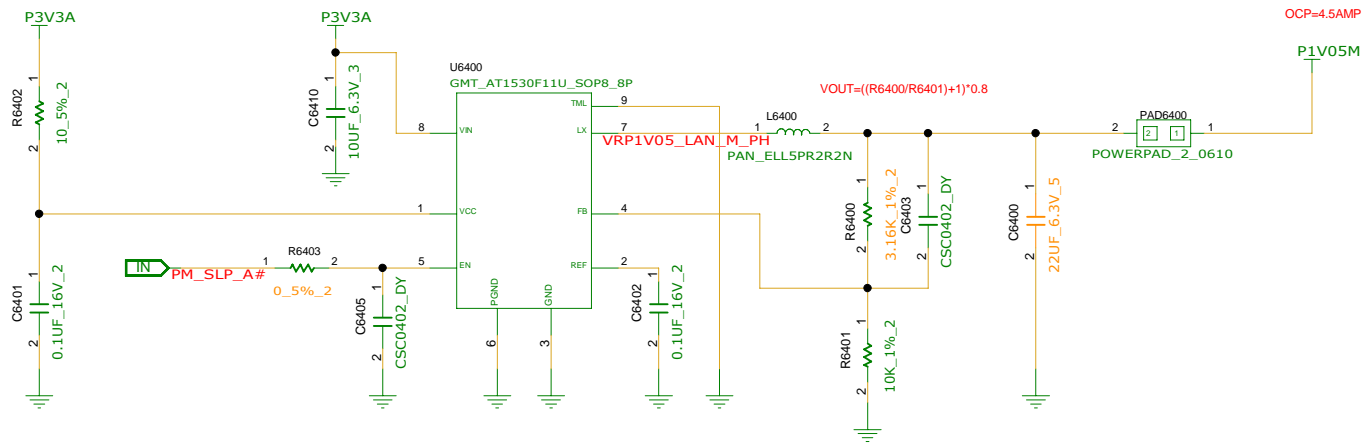
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TITLE  
 CLAVIN\_DIS  
 SYSTEM\_POWER(P1V5)

DOC NUMBER  
 1310A24700-0-ALG

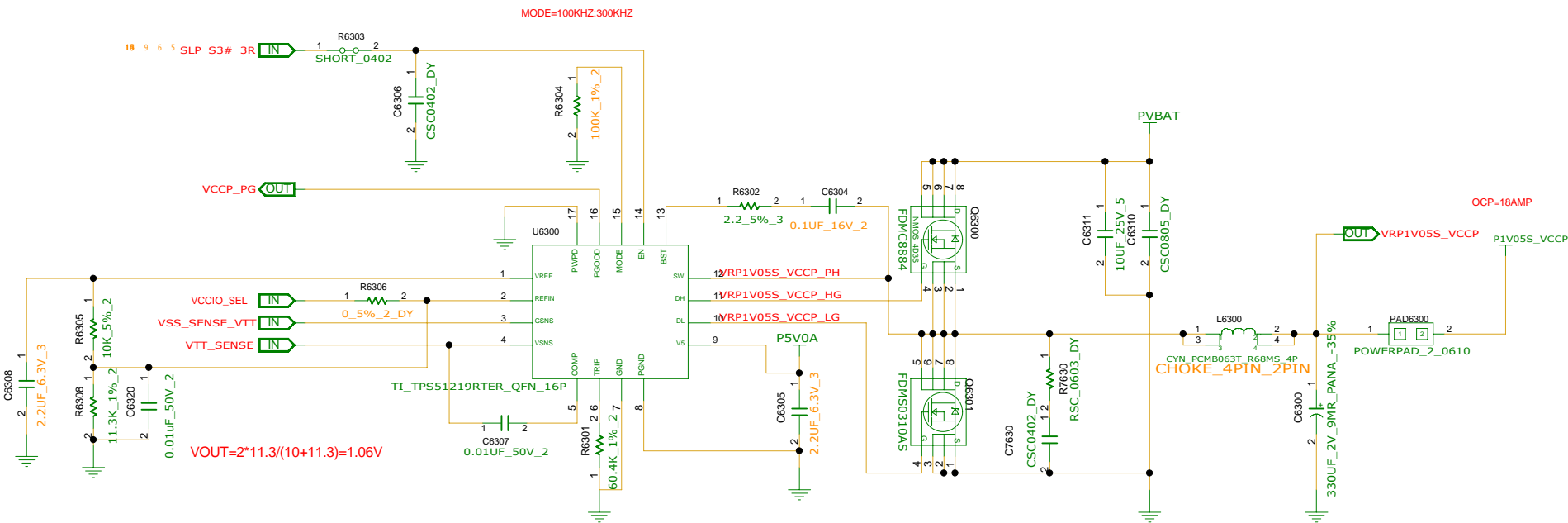
REV  
 D

CHANGE by EDI CHEN DATE 23-APR-2012 SHEET 9 of 73

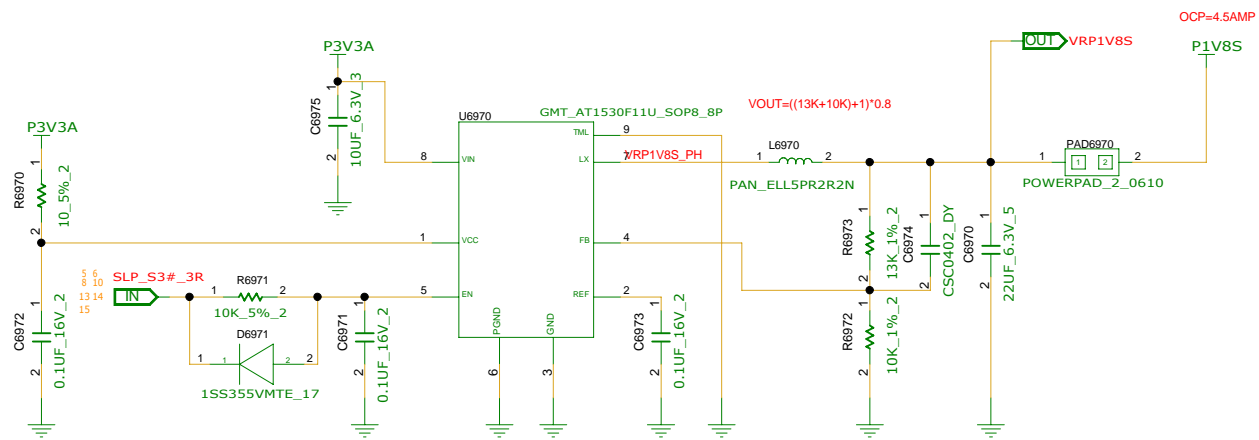


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TITLE			
CLAVIN_DIS SYSTEM_POWER(P1V05_LAN_M)			
SIZE A3		CODE CS	REV D
DOC NUMBER 1310A24700-0-ALG		SHEET 10 of 73	



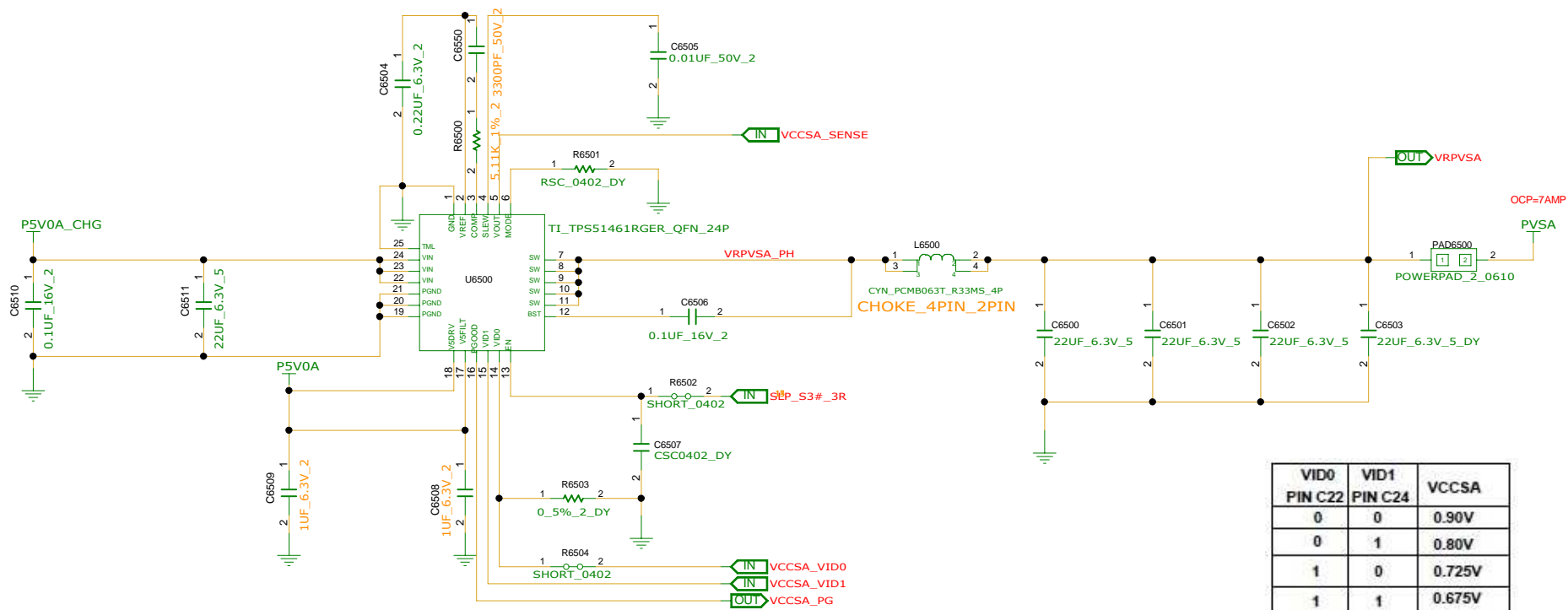
<b>INVENTEC</b>			
TITLE CLAVIN_DIS SYSTEM_POWER(P1V05S_VCCP)			
SIZE A3		CODE CS	
DOCNUMBER 1310A24700-0-ALG		REV D	



**INVENTEC**

TITLE CLAVIN DIS  
SYSTEM POWER(P1V8S)

SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
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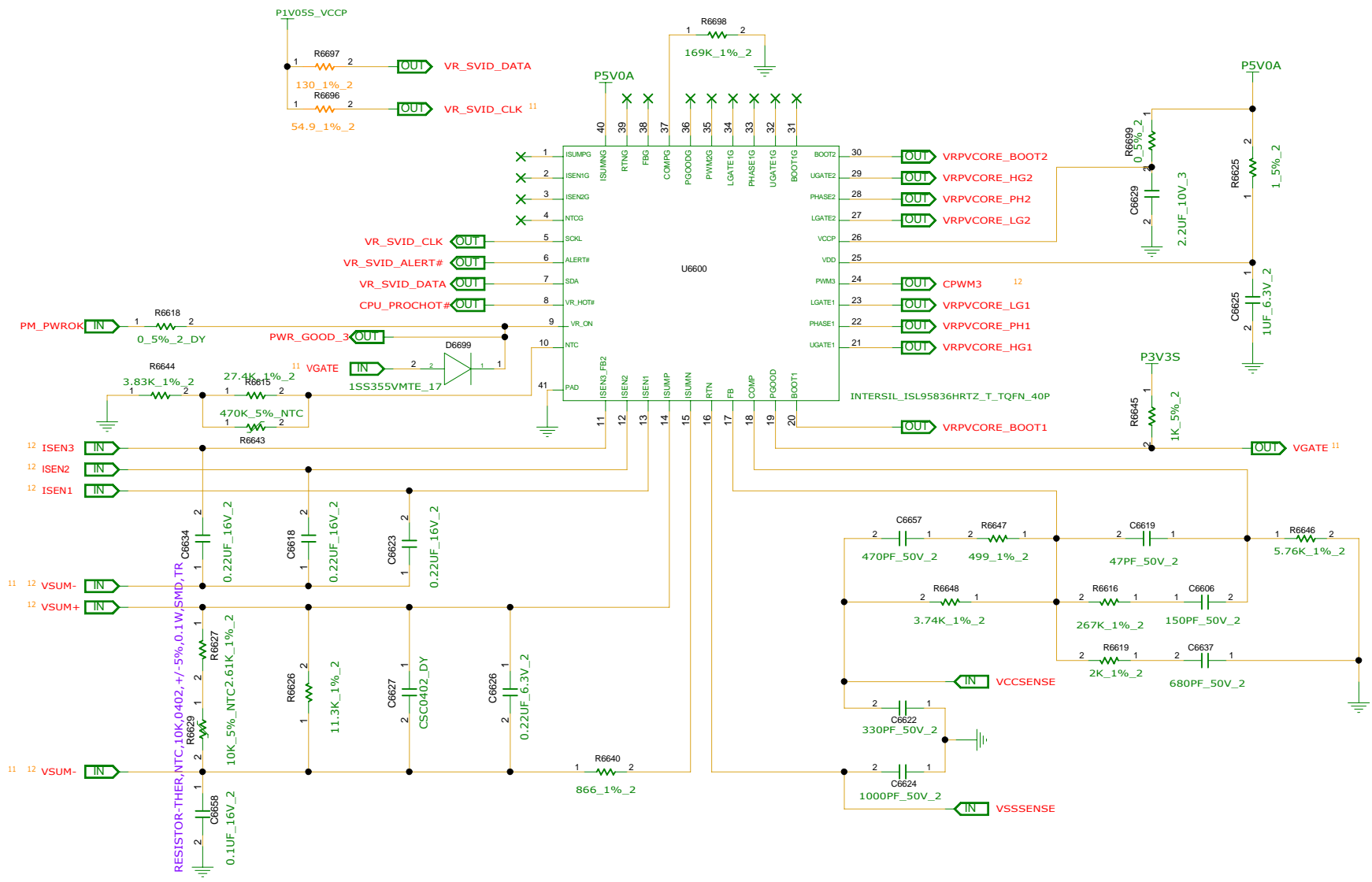


VID0 PIN C22	VID1 PIN C24	VCCSA
0	0	0.90V
0	1	0.80V
1	0	0.725V
1	1	0.675V

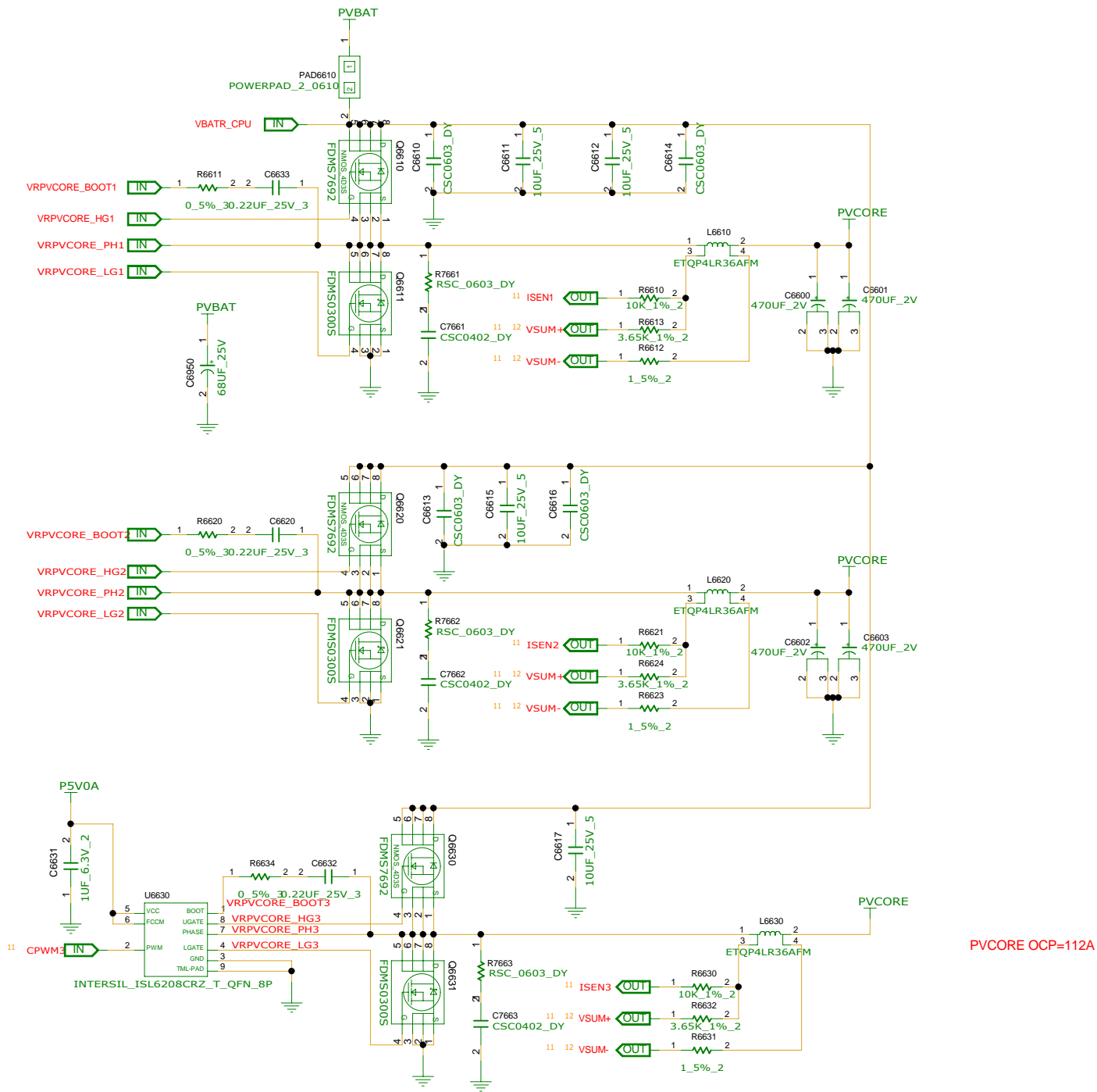
**INVENTEC**

TITLE  
CLAVIN\_DIS  
SYSTEM\_POWER(PVSA)

SIZE A3	CODE CS	DOCNUMBER 1310A24700-0-ALG	REV D
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<b>INVENTEC</b>			
TITLE CLAVIN DIS SYSTEM POWER(PVCORE)			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D

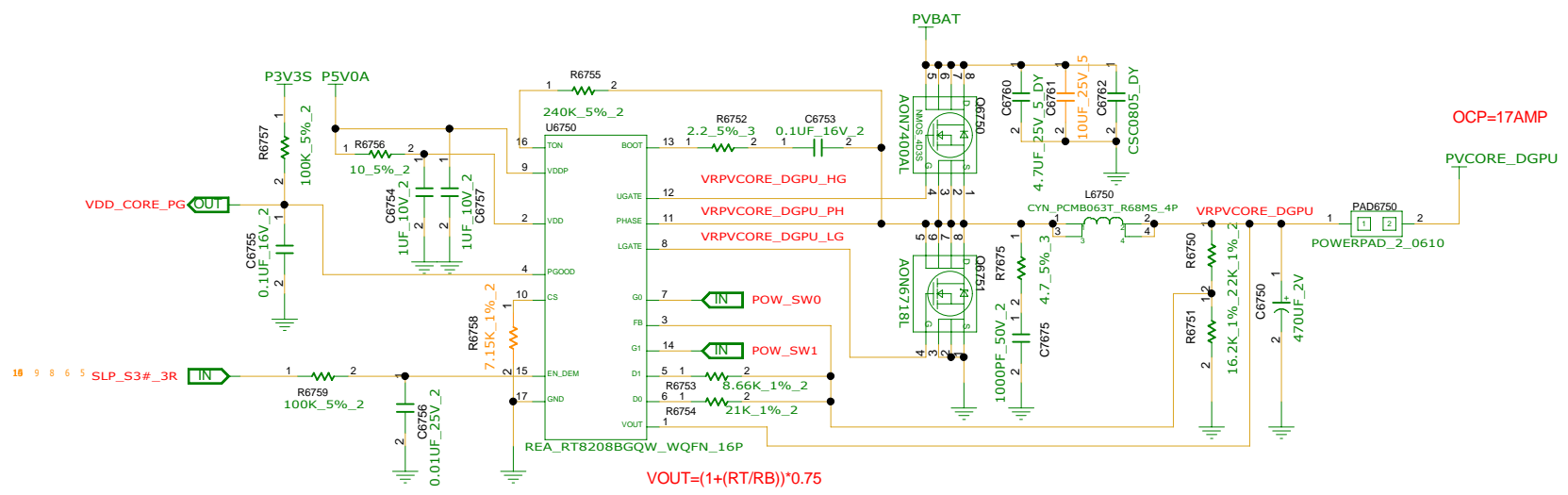


# INVENTEC

TITLE CLAVIN DIS  
SYSTEM POWER(PVCORE)

DOC NUMBER 1310A24700-0-ALG REV D

SIZE A3 CODE CS SHEET 15 of 73



$VOUT = (1 + (RT/RB)) * 0.75$

VOUT	SW1	SW0
1.10	0	0
1.00	0	1
0.90	1	0
0.85	1	1

**INVENTEC**

TITLE CLAVIN DIS  
 SYSTEM\_POWER(PVCORE\_DGPU)

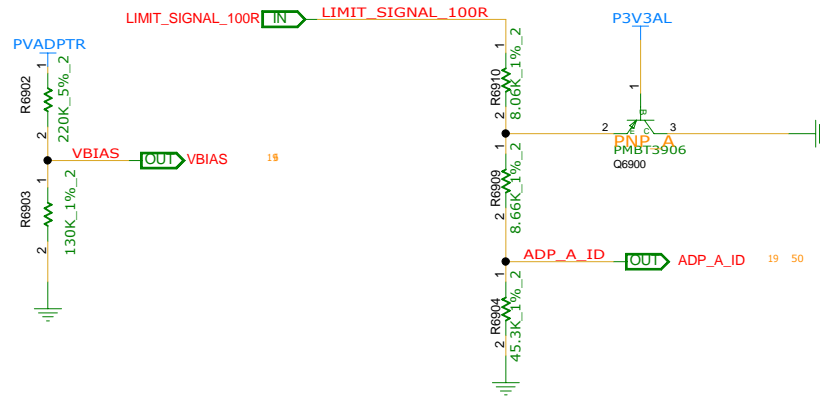
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REFERENCE NUMBER : 6900~6999



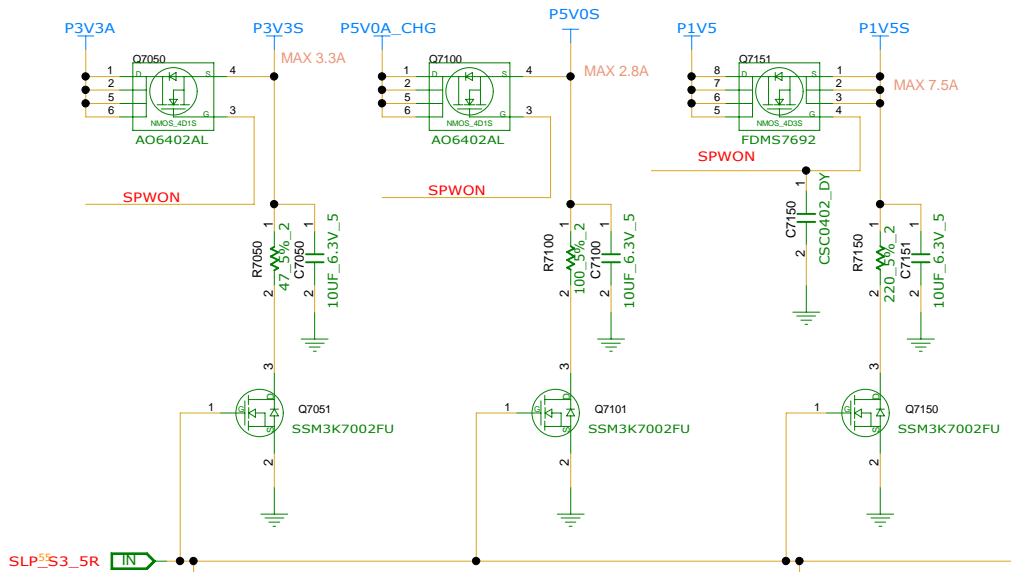
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TITLE			
CLAVIN_DIS HP_OCP			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A24700-0-ALG	D

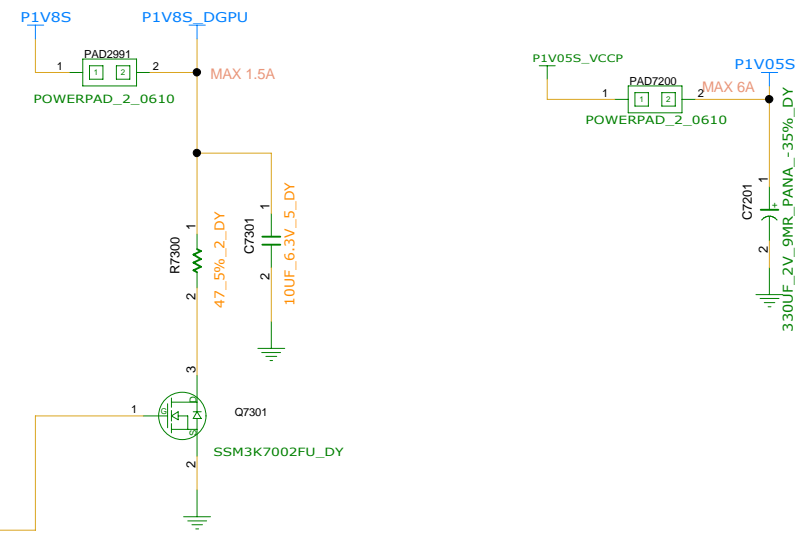
CHANGE by EDI\_CHEN DATE 23-APR-2012

SHEET 19 of 73

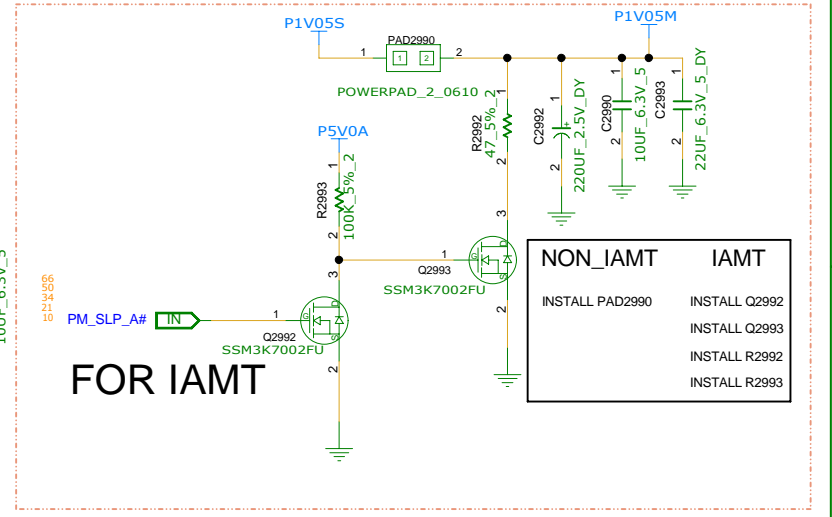
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FOR DGPU

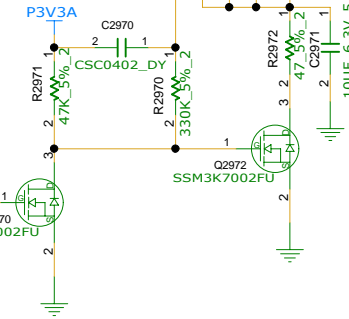
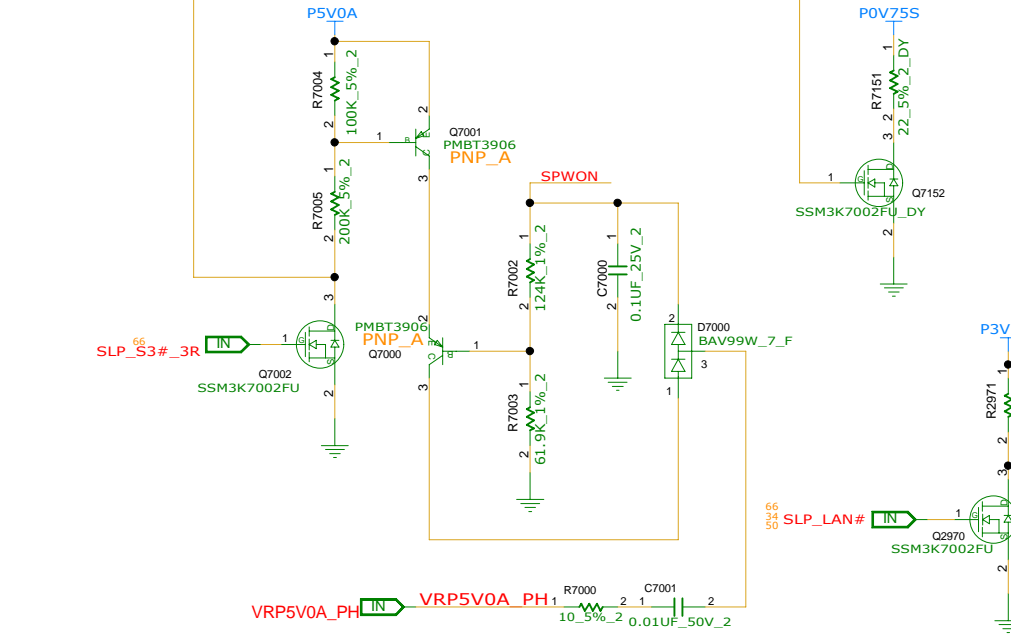


REFERENCE NUMER : 2950~2999



NON_IAMT	IAMT
INSTALL PAD2990	INSTALL Q2992
	INSTALL Q2993
	INSTALL R2992
	INSTALL R2993

FOR IAMT



**INVENTEC**

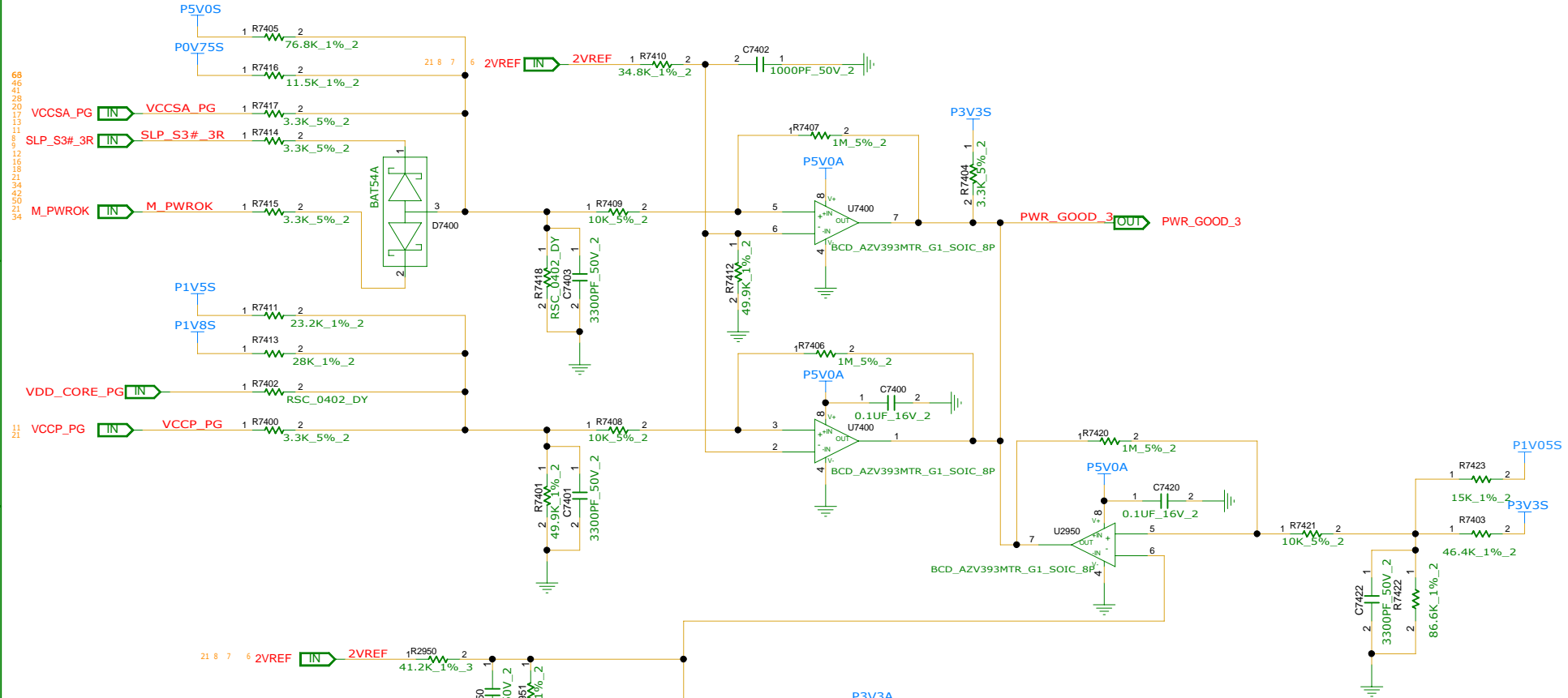
TITLE  
CLAVIN\_DIS  
POWER(SLEEP)

DOC NUMBER  
1310A24700-0-ALG

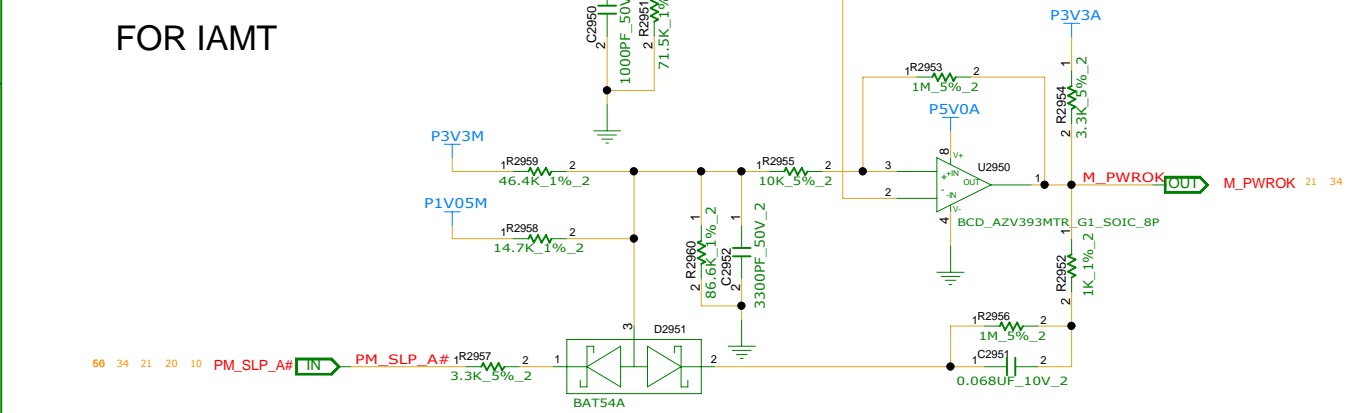
REV  
D

CHANGE by: FDI, CHEN      DATE: 23-APR-2012      SHEET 20 of 73

REFERENCE NUMER : 7400~7450



FOR IAMT

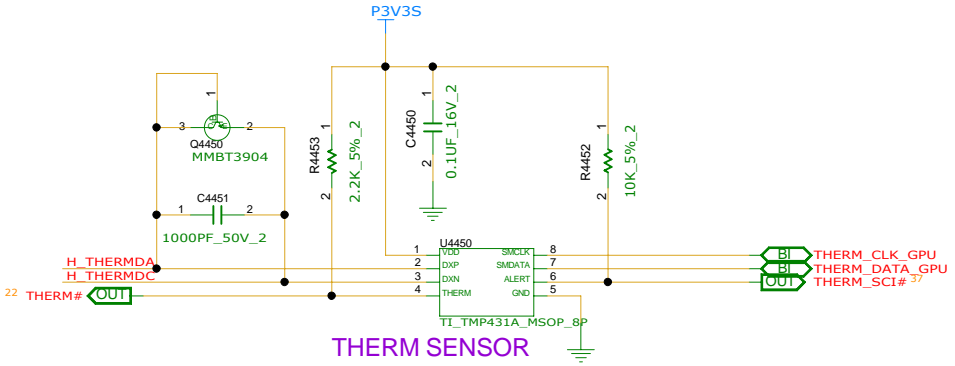
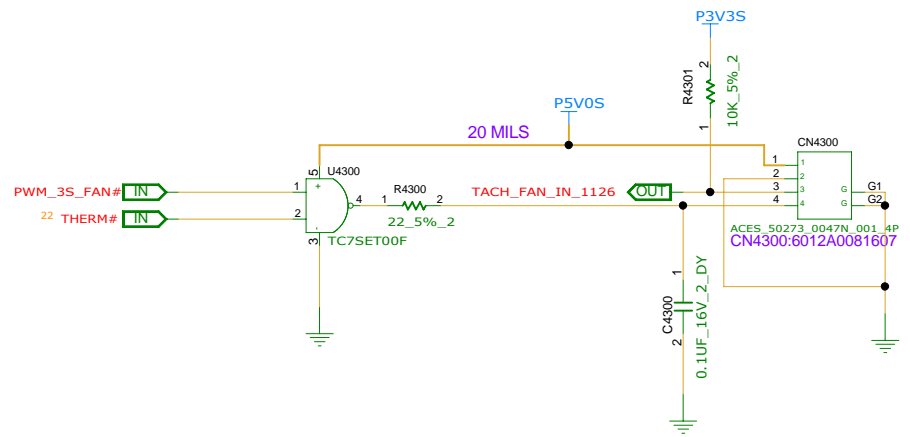


REFERENCE NUMER : 2950~2999

<b>INVENTEC</b>			
TITLE CLAVIN_DIS POWER(SEQUENCE)			
CODE CS		DOC NUMBER 1310A24700-0-ALG	
SIZE A3	REV D	DATE 23-APR-2012	SHEET 21 of 73

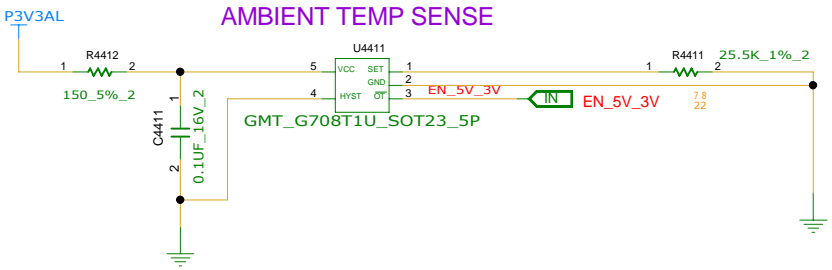
REFERENCE NUMBER:4450~4499

REFERENCE NUMBER:4400~4349



Fan speeds (RPM) :	2500	3300	3800	4300	5000	0	0	0
CPU temperature trip points :	45	57	68	80	91	0	0	0

AMBIENT TEMP SENSE



RSET (K OHM) = 0.0012T^2 - 0.9308T + 96.147  
THERMAL SHUTDOWN AT 77 DEG. FOR B SERIES

REFERENCE NUMBER:4411~4449

**INVENTEC**

TITLE: CLAVIN' DIS FAN & THERMAL

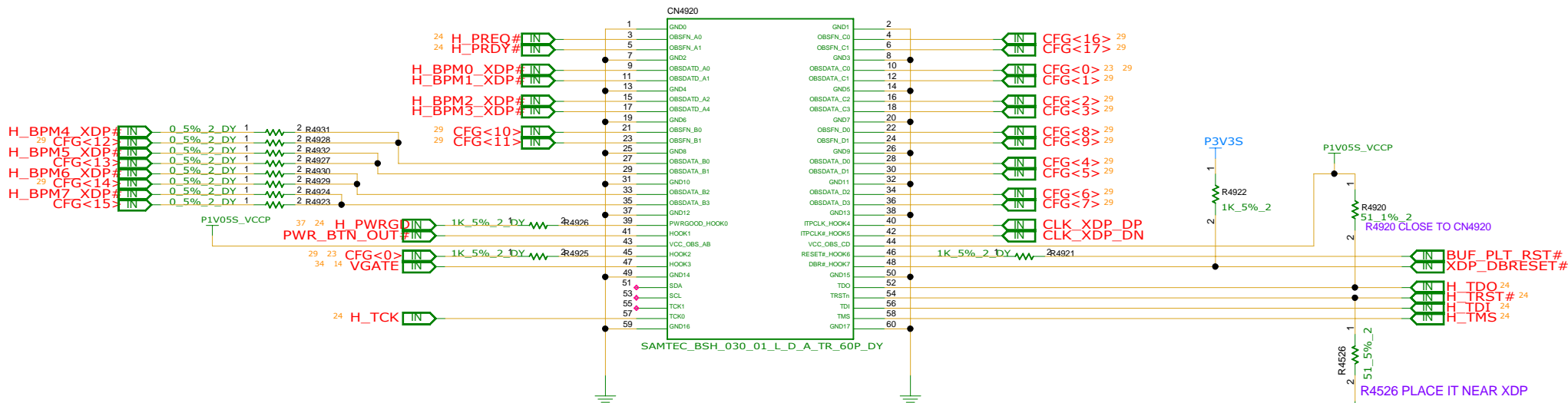
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REV: D

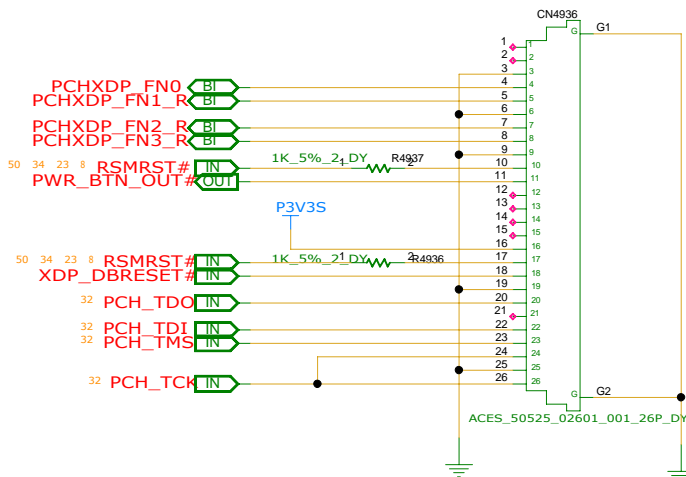
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CODE: CS

SHEET: 22 of 73

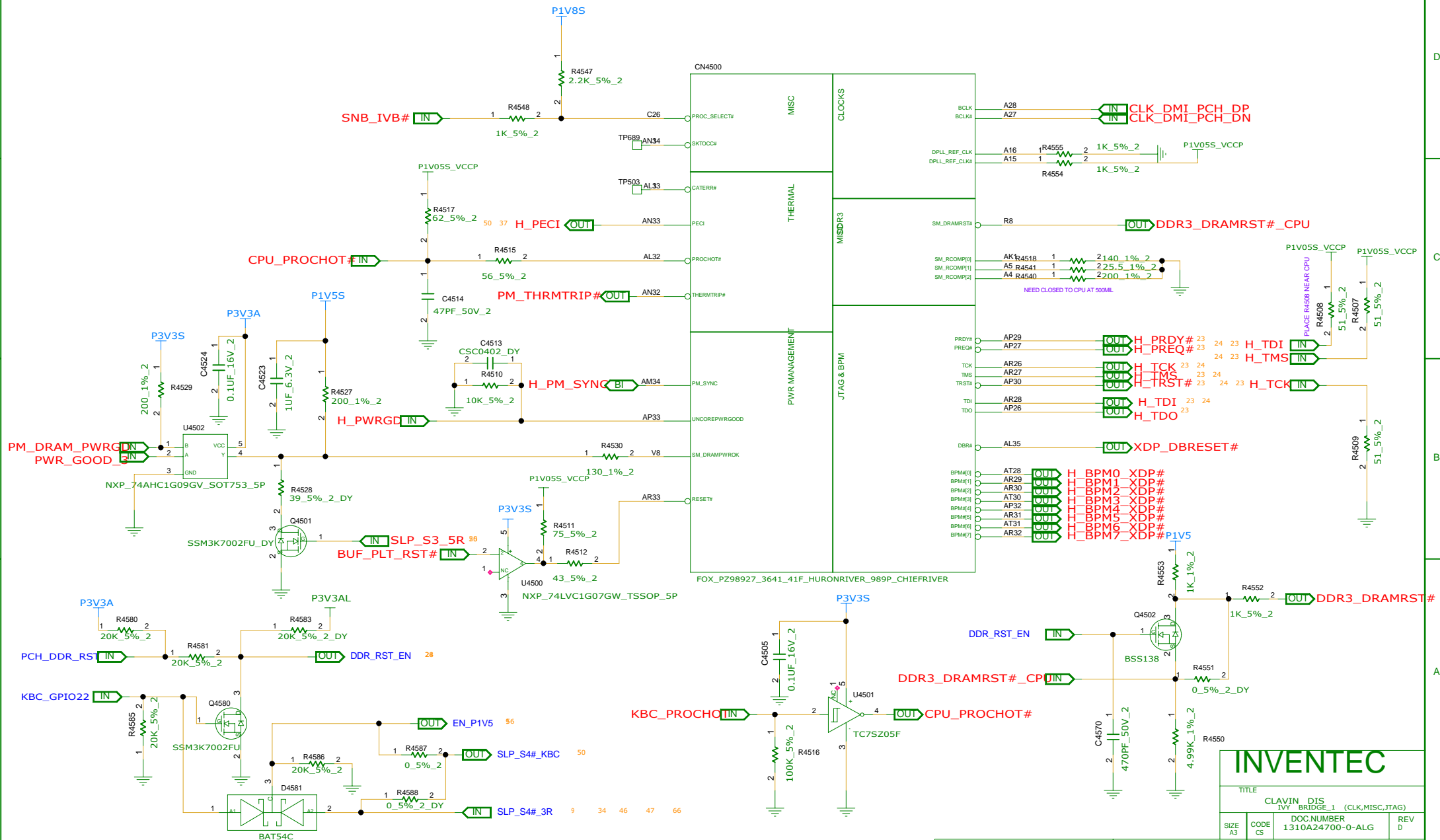


### CPU XDP CONNECTOR



### PCH XDP CONNECTOR

<b>INVENTEC</b>			
TITLE CLAVIN_DIS XDP_CONN			
SIZE A3	CODE CS	DOCNUMBER 1310A24700-0-ALG	REV D
CHANGE by EDT_CHEN		DATE 23-APR-2012	SHEET 23 of 73



<b>INVENTEC</b>			
TITLE CLAVIN_D1S IVY BRIDGE 1 (CLK,MISC,JTAG)			
DOC NUMBER 1310A24700-0-ALG			
REV D			
SIZE A3	CODE CS	SHEET 24 of 73	



REFERENCE NUMBER:4500~4699

- AG35 VCC1
- AG34 VCC2
- AG33 VCC3
- AG32 VCC4
- AG31 VCC5
- AG30 VCC6
- AG29 VCC7
- AG28 VCC8
- AG27 VCC9
- AG26 VCC10
- AF35 VCC11
- AF34 VCC12
- AF33 VCC13
- AF32 VCC14
- AF31 VCC15
- AF30 VCC16
- AF29 VCC17
- AF28 VCC18
- AF27 VCC19
- AF26 VCC20
- AD35 VCC21
- AD34 VCC22
- AD33 VCC23
- AD32 VCC24
- AD31 VCC25
- AD30 VCC26
- AD29 VCC27
- AD28 VCC28
- AD27 VCC29
- AD26 VCC30
- AC35 VCC31
- AC34 VCC32
- AC33 VCC33
- AC32 VCC34
- AC31 VCC35
- AC30 VCC36
- AC29 VCC37
- AC28 VCC38
- AC27 VCC39
- AC26 VCC40
- AA35 VCC41
- AA34 VCC42
- AA33 VCC43
- AA32 VCC44
- AA31 VCC45
- AA30 VCC46
- AA29 VCC47
- AA28 VCC48
- AA27 VCC49
- AA26 VCC50
- Y35 VCC51
- Y34 VCC52
- Y33 VCC53
- Y32 VCC54
- Y31 VCC55
- Y30 VCC56
- Y29 VCC57
- Y28 VCC58
- Y27 VCC59
- Y26 VCC60
- V35 VCC61
- V34 VCC62
- V33 VCC63
- V32 VCC64
- V31 VCC65
- V30 VCC66
- V29 VCC67
- V28 VCC68
- V27 VCC69
- V26 VCC70
- U35 VCC71
- U34 VCC72
- U33 VCC73
- U32 VCC74
- U31 VCC75
- U30 VCC76
- U29 VCC77
- U28 VCC78
- U27 VCC79
- U26 VCC80
- R35 VCC81
- R34 VCC82
- R33 VCC83
- R32 VCC84
- R31 VCC85
- R30 VCC86
- R29 VCC87
- R28 VCC88
- R27 VCC89
- R26 VCC90
- P35 VCC91
- P34 VCC92
- P33 VCC93
- P32 VCC94
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- P30 VCC96
- P29 VCC97
- P28 VCC98
- P27 VCC99
- P26 VCC100

POWER

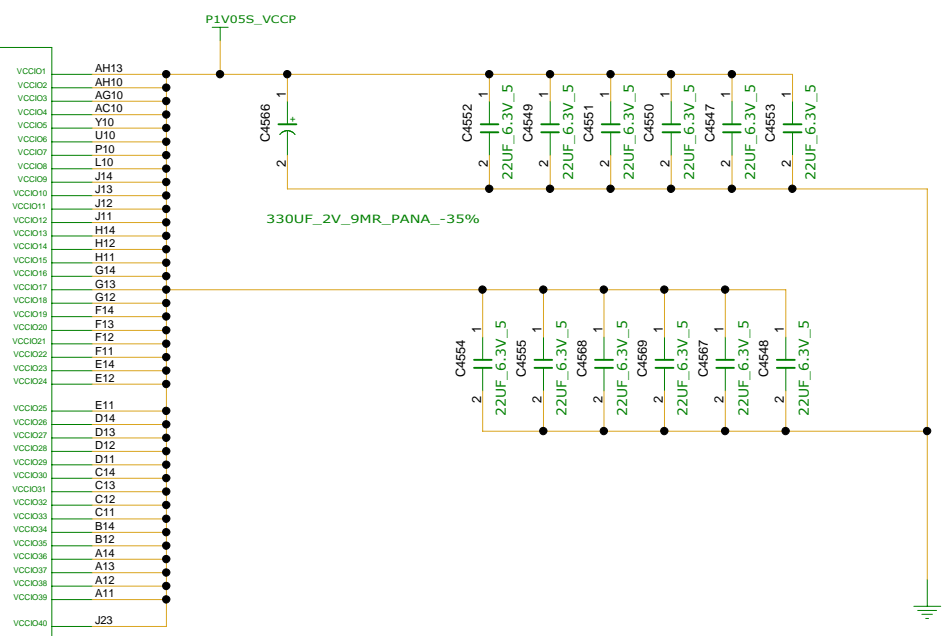
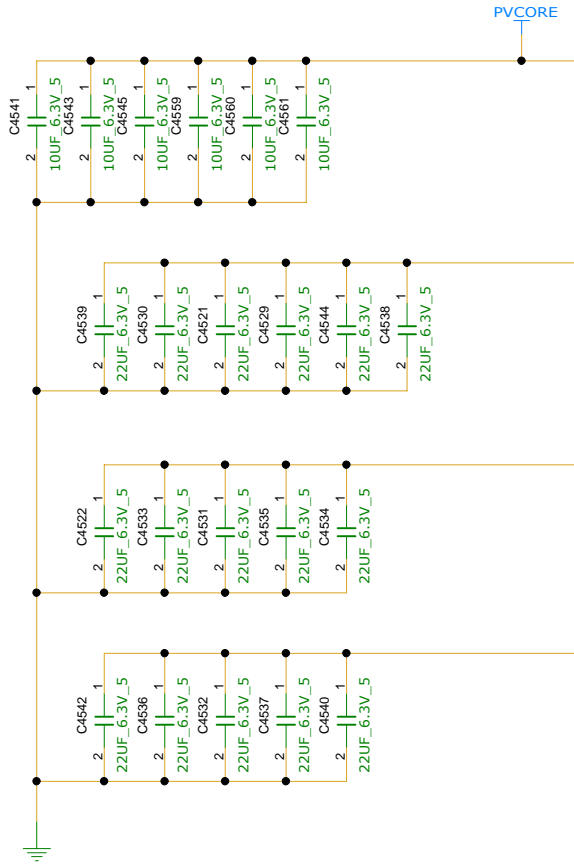
CORE SUPPLY

SVID

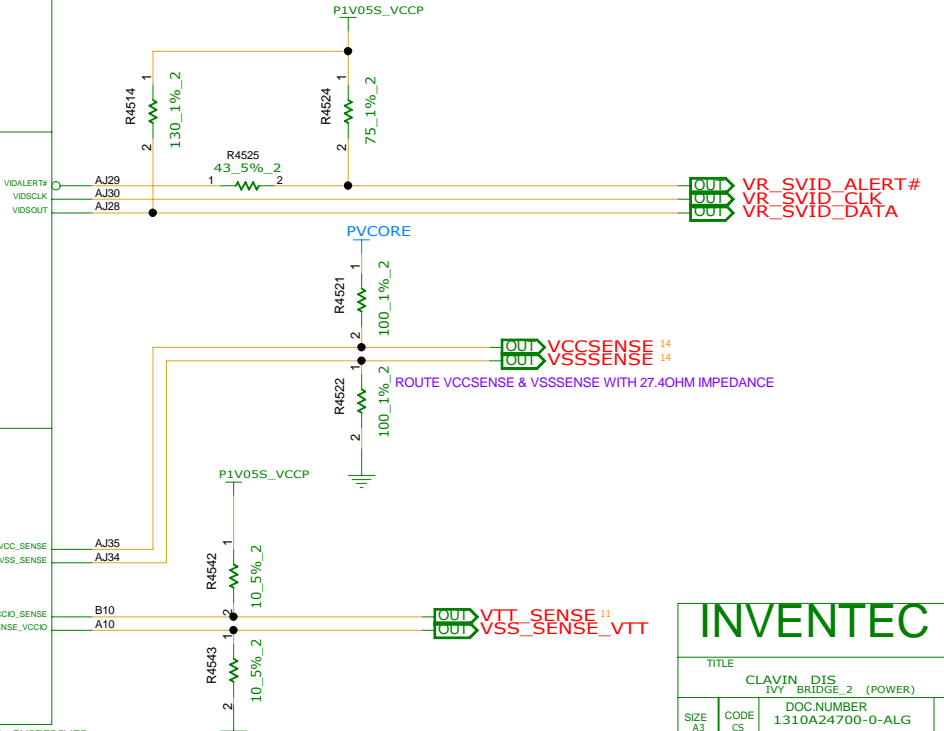
SENSE LINES

PEG AND DDR

- AH13 VCC001
- AH10 VCC002
- AC10 VCC003
- U10 VCC004
- P10 VCC005
- L10 VCC006
- J14 VCC007
- J13 VCC008
- J12 VCC009
- J11 VCC010
- H14 VCC011
- H12 VCC012
- H11 VCC013
- G14 VCC014
- G13 VCC015
- G12 VCC016
- F14 VCC017
- F13 VCC018
- F12 VCC019
- F11 VCC020
- E14 VCC021
- E12 VCC022
- E11 VCC023
- D14 VCC024
- D13 VCC025
- D12 VCC026
- D11 VCC027
- C14 VCC028
- C13 VCC029
- C12 VCC030
- C11 VCC031
- B14 VCC032
- B12 VCC033
- A14 VCC034
- A13 VCC035
- A12 VCC036
- A11 VCC037
- J23 VCC038



R4514,R4525,R4524 CLOSE TO CPU



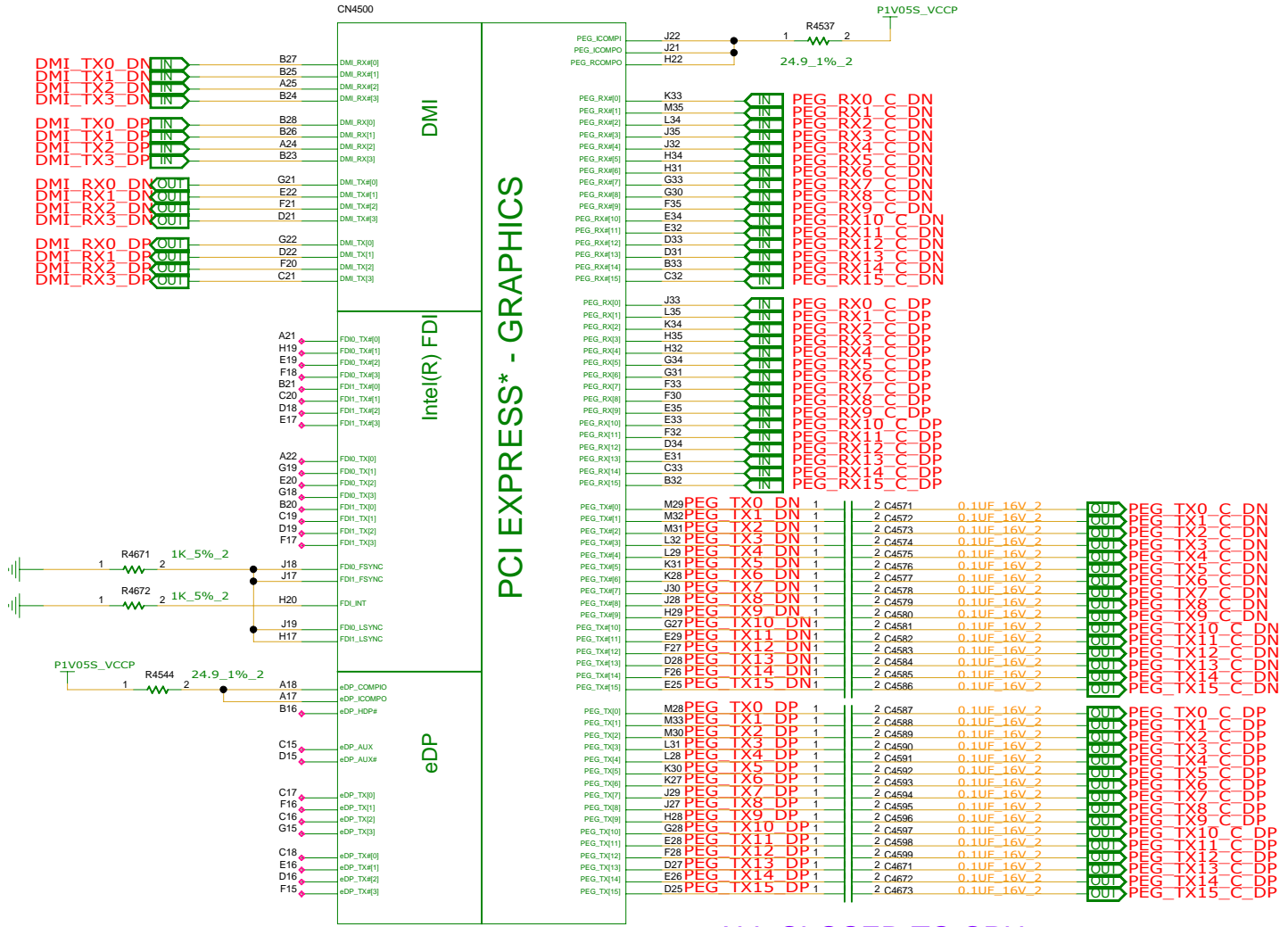
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TITLE: CLAVIN\_DIS I\_VY BRIDGE\_2 (POWER)

DOC NUMBER: 1310A24700-0-ALG

REV: D

CHANGE by: FDI, CHEN      DATE: 23-APR-2012      SHEET: 25 of 73



FOX\_PZ98927\_3641\_41F\_HURONRIVER\_989P\_CHIEFRIVER

ALL CLOSED TO CPU

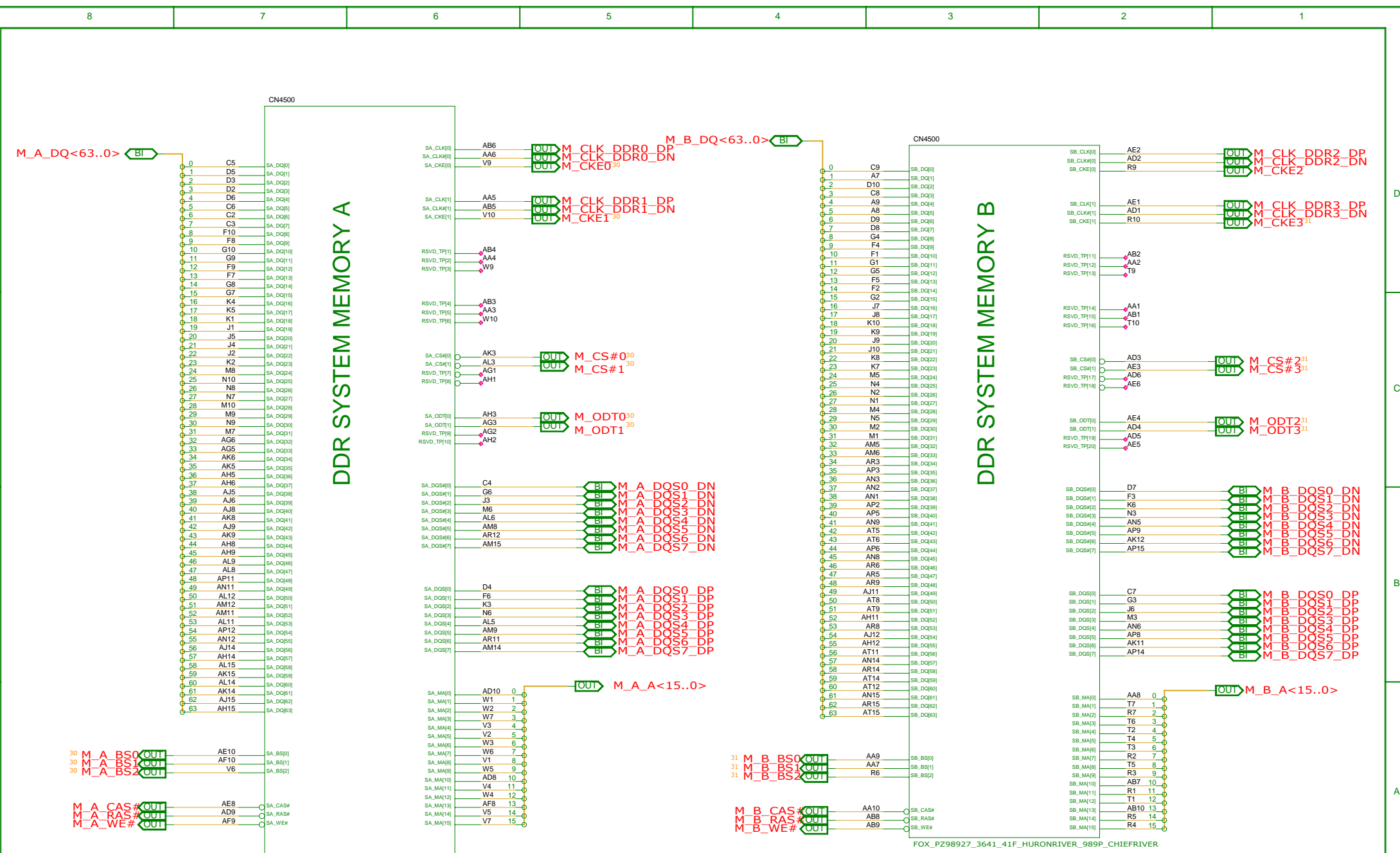
REFERENCE NUMBER:4500~4699

**INVENTEC**

TITLE  
CLAVIN\_DJS  
IVY BRIDGE\_3 (DMI,DP,PEG,FDI)

SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
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DDR SYSTEM MEMORY A

DDR SYSTEM MEMORY B

REFERENCE NUMBER:4500~4699

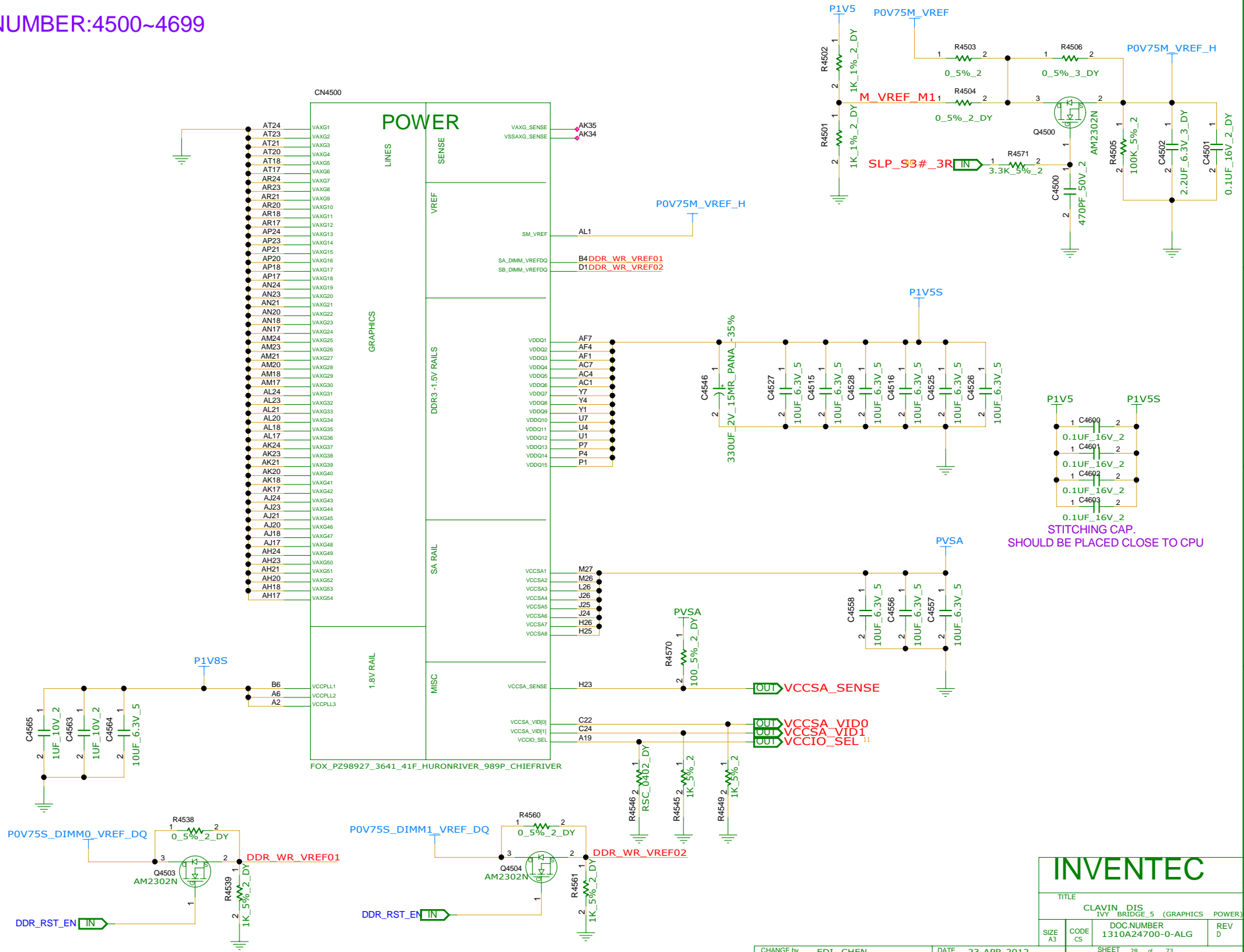
**INVENTEC**

TITLE  
CLAVIN DIS  
I.VY BRIDGE 4 (DDR3)

SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
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CHANGE by FDT\_CHEN DATE 23-APR-2012 SHEET 27 of 73

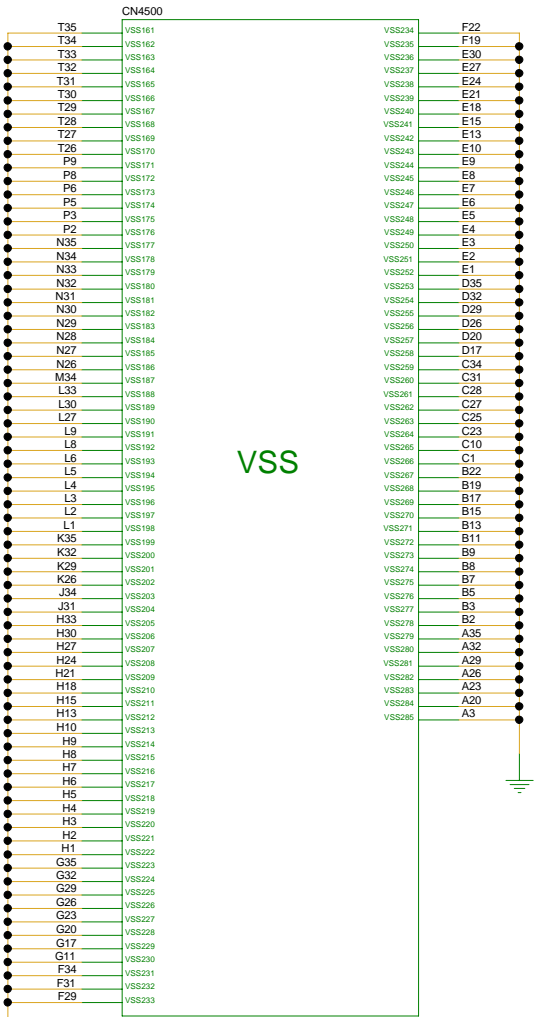
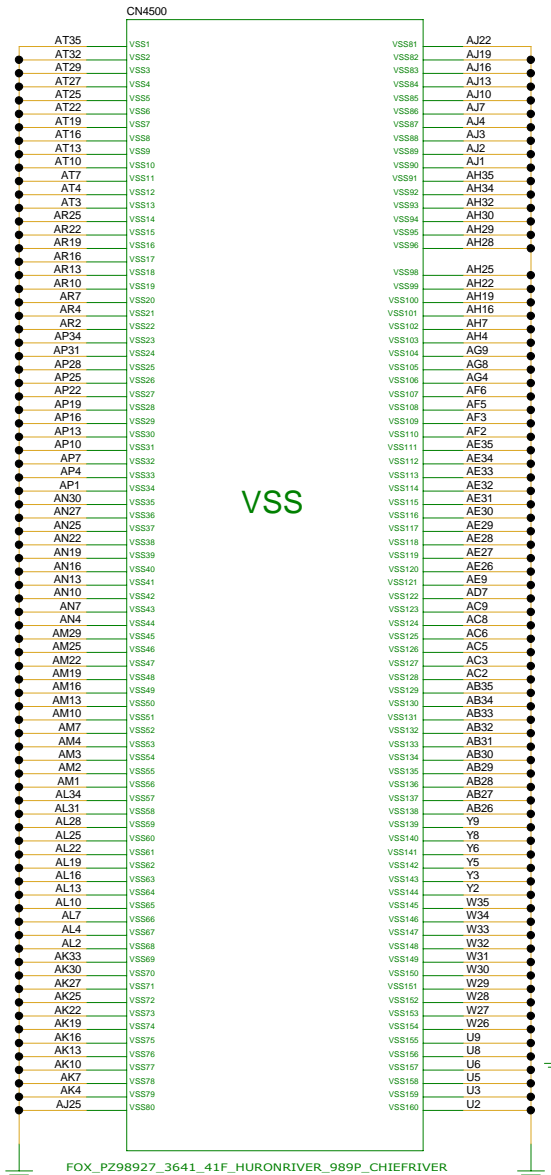
REFERENCE NUMBER:4500~4699



P1V5 P1V5S  
 0.1UF\_16V\_2  
 1 C4601 2  
 0.1UF\_16V\_2  
 1 C4602 2  
 0.1UF\_16V\_2  
 1 C4603 2  
 0.1UF\_16V\_2  
 1 C4604 2  
 STITCHING CAP.  
 SHOULD BE PLACED CLOSE TO CPU

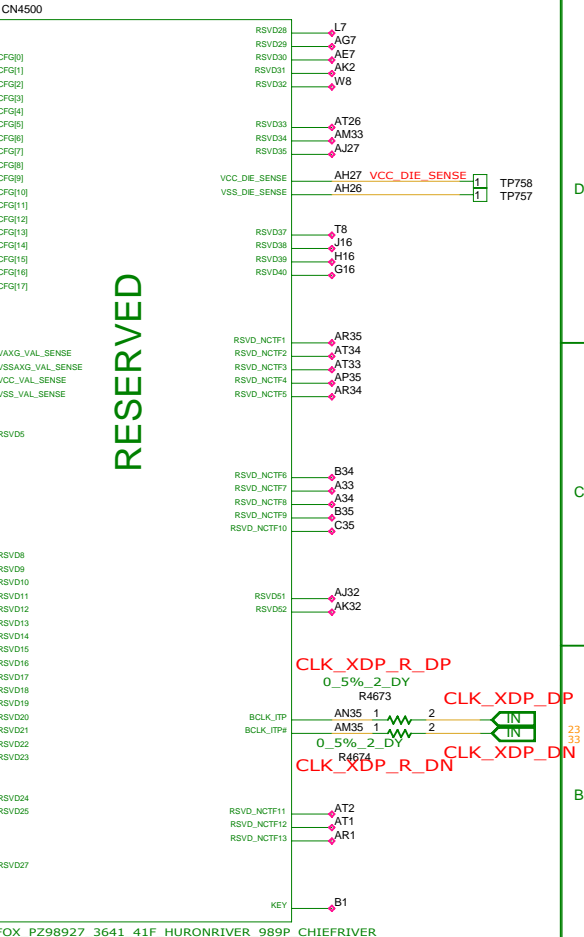
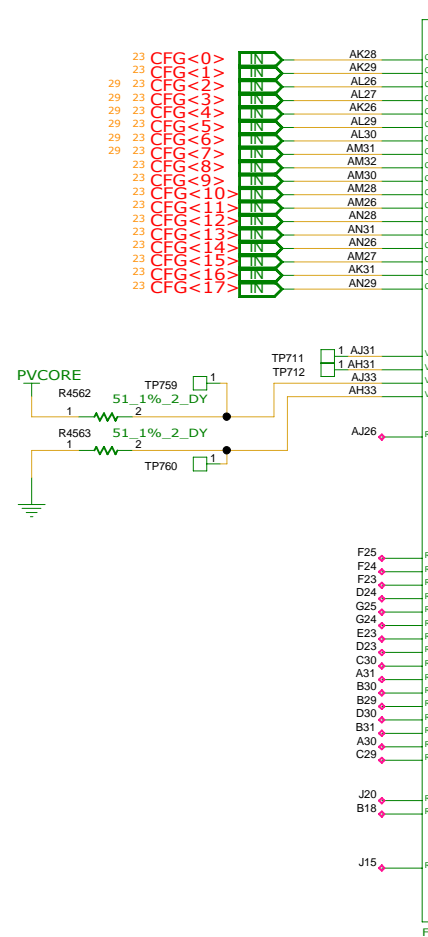
# INVENTEC

TITLE			
CLAVIN_DIS IVY BRIDGE_5 (GRAPHICS POWER)			
SIZE A3		CODE CS	REV D
DOC NUMBER 1310A24700-0-ALG		DATE 23-APR-2012	
SHEET 28		of 73	



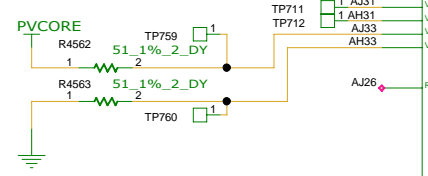
FOX\_PZ98927\_3641\_41F\_HURONRIVER\_989P\_CHIEFRIVER

VSS

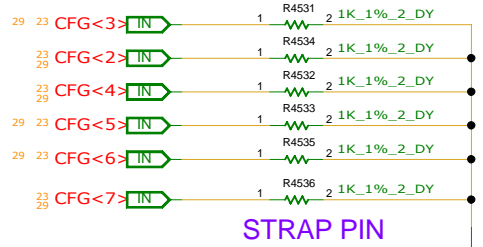


FOX\_PZ98927\_3641\_41F\_HURONRIVER\_989P\_CHIEFRIVER

RESERVED



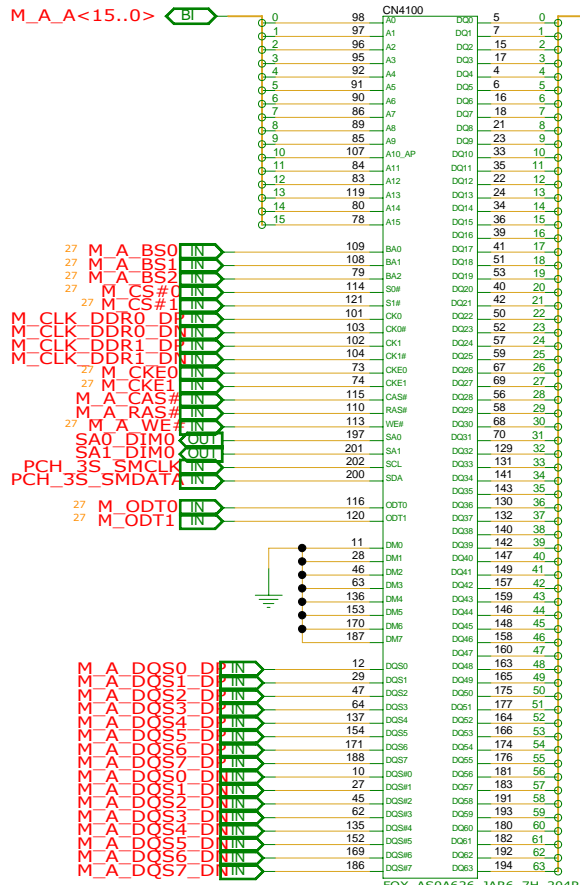
- PEGX4 LANE REVERSAL
- PEGX16 STATIC LANE REVERSAL
- DISPLAYPORT PRESENCE STRAP
- PCIe PORT BIFURCATION STRAP
- PEG DEFER TRAINING



STRAP PIN

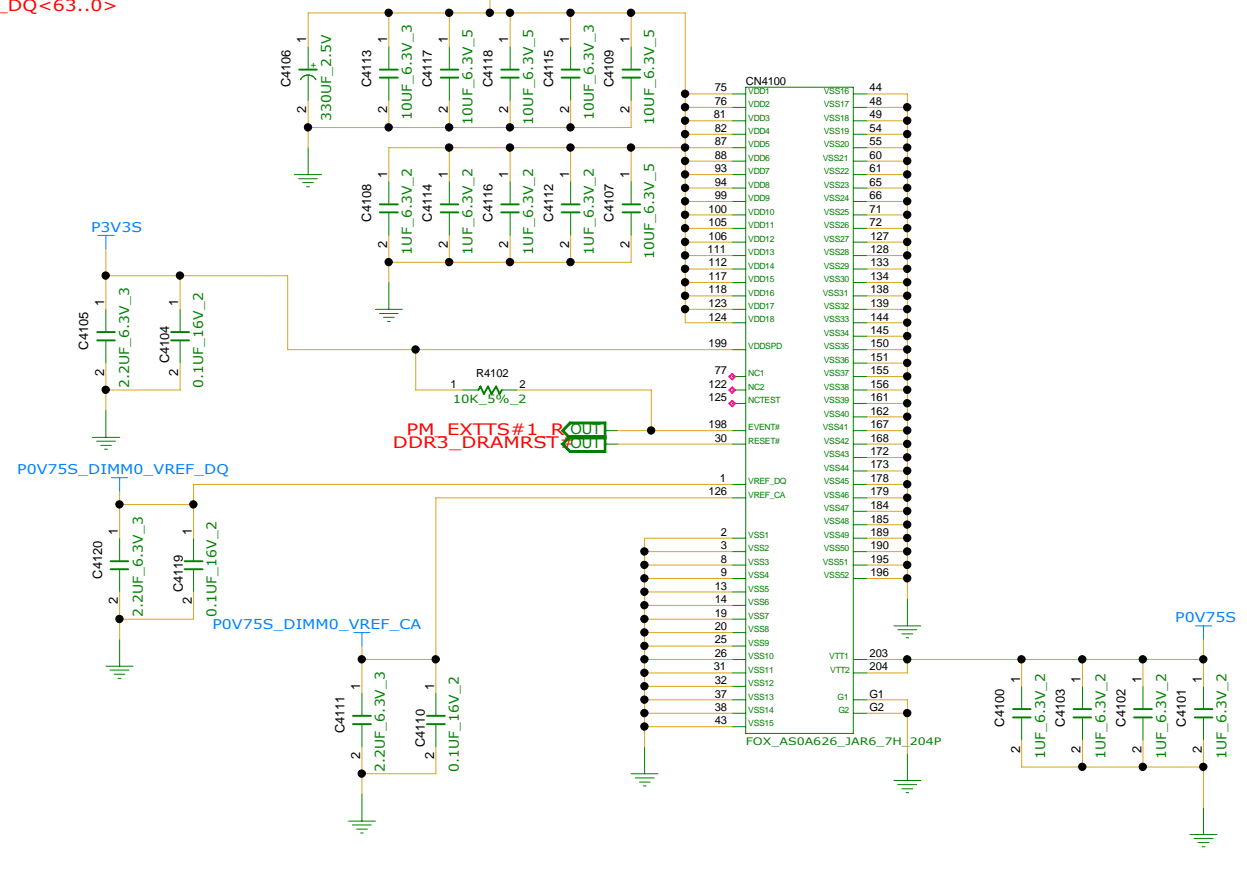
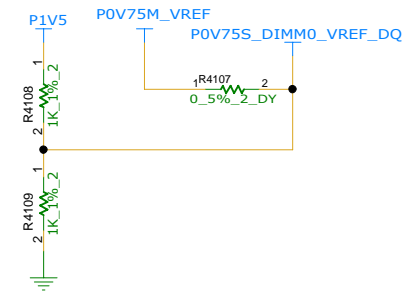
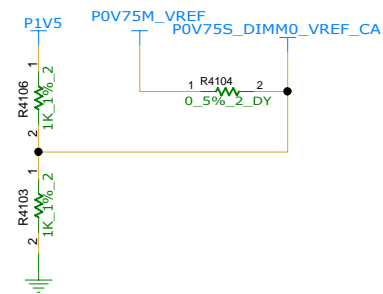
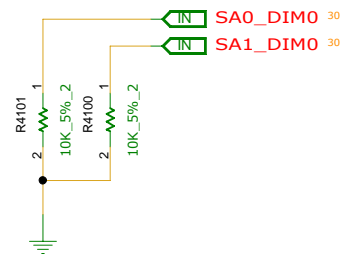
REFERENCE NUMBER:4500~4699

<b>INVENTEC</b>			
TITLE			
CLAVIN DIS TY BRIDGE 6 (GND,RESERVED)			
SIZE		DOC NUMBER	
A3		1310A24700-0-ALG	
CODE		REV	
CS		D	
CHANGE by		DATE	
FDT CHEN		23-APR-2012	
SHEET		of	
29		73	



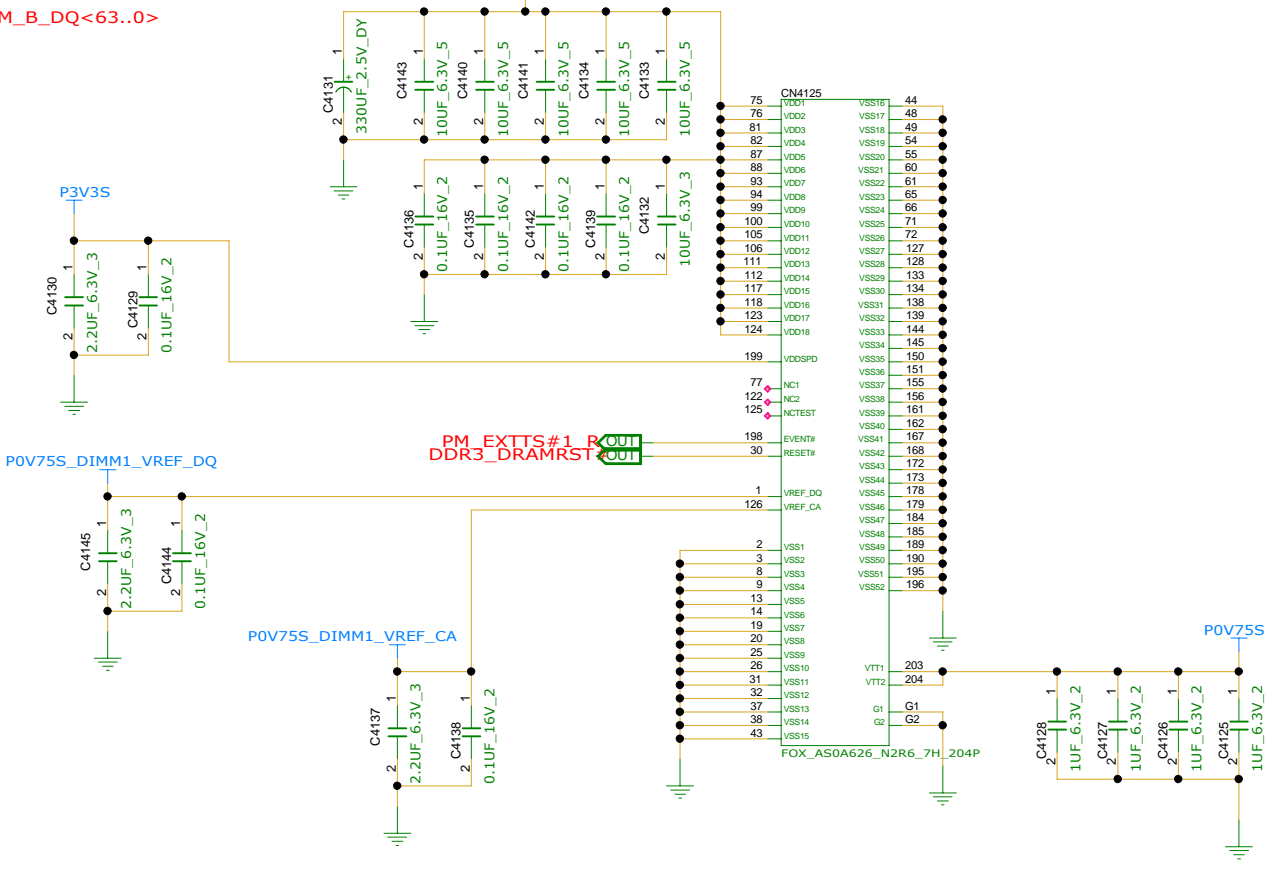
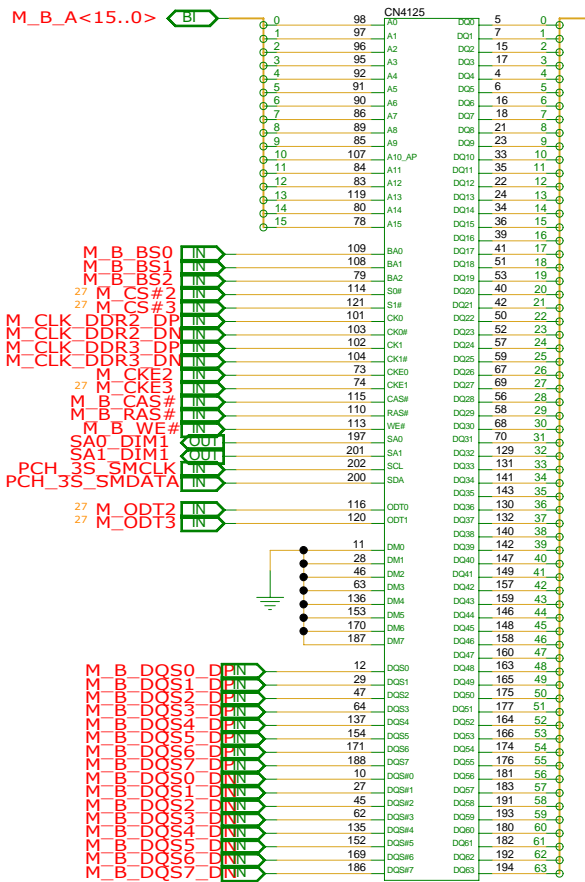
CN4650:6026B0162603

**NOTE:**  
 IF SA0\_DIM0=0, SA1\_DIM0=0  
 SO-DIMMA SPD ADDRESS IS 0XA0  
 SO-DIMMA TS ADDRESS IS 0X30  
  
 IF SA0\_DIM0=1, SA1\_DIM0=0  
 SO-DIMMA SPD ADDRESS IS 0XA2  
 SO-DIMMA TS ADDRESS IS 0X32

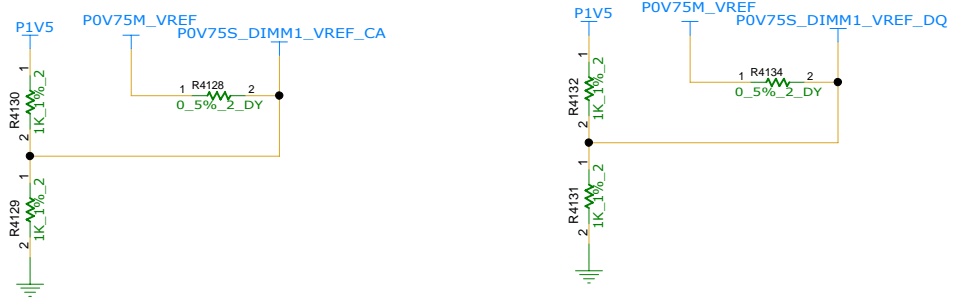
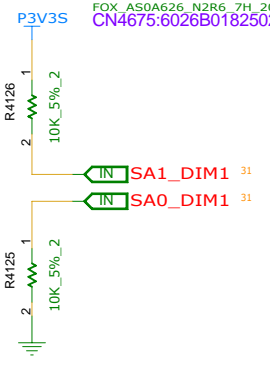


<b>INVENTEC</b>			
TITLE			
CLAVIN_DIS DDR3_SO_DIMM0			
SIZE		DOC NUMBER	
A3	CS	1310A24700-0-ALG	
CHANGE by			REV
EDT_CHEN			D
DATE			SHEET
23-APR-2012			30 of 73

REFERENCE NUMBER:4100~4299



NOTE:  
 SO-DIMMB SPD ADDRESS IS 0XA4  
 SO-DIMMB TS ADDRESS IS 0X34



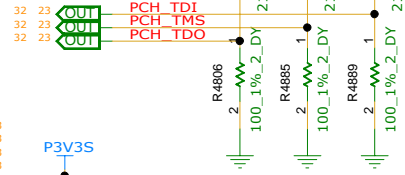
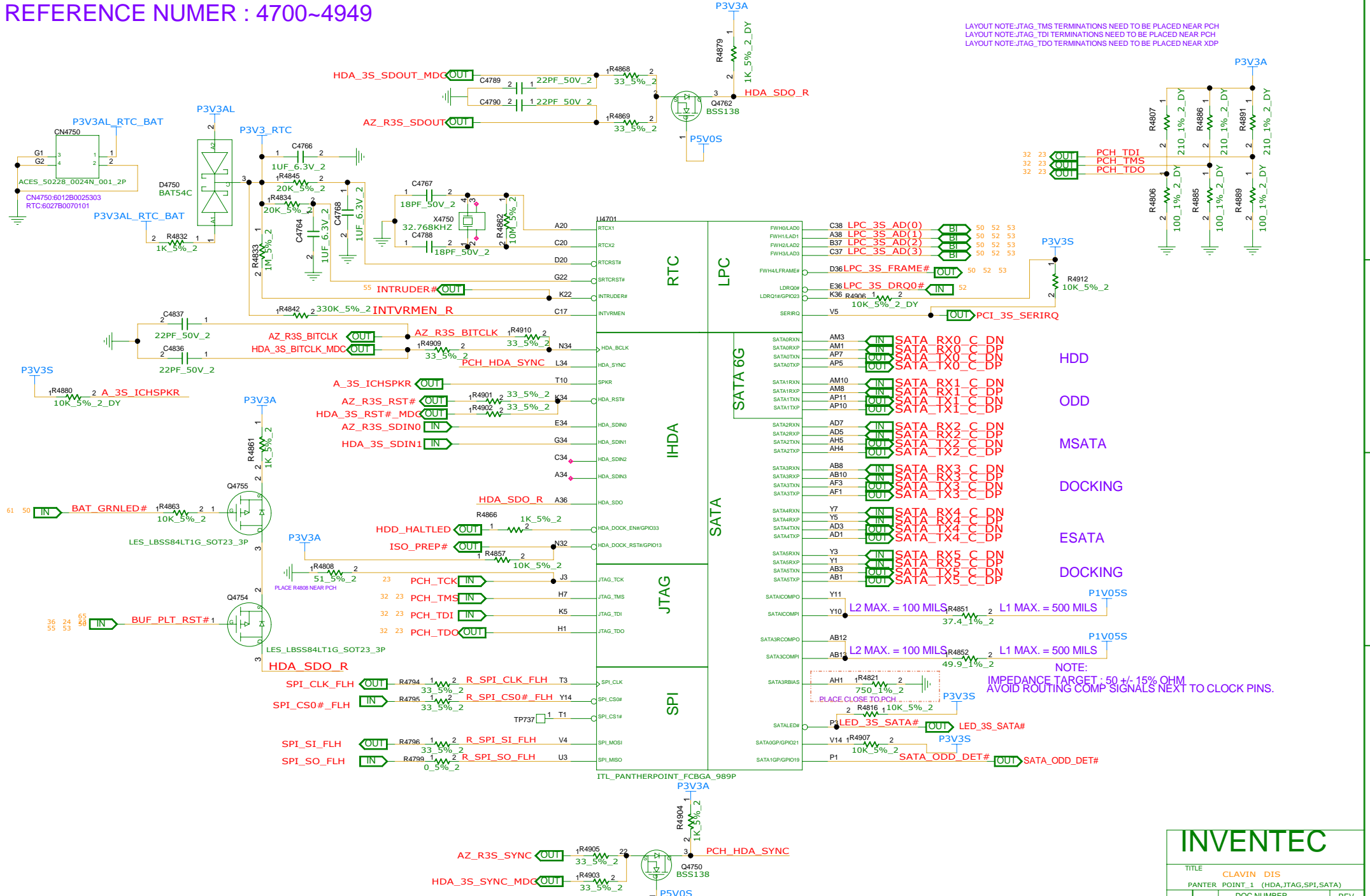
REFERENCE NUMBER:4100~4299

<b>INVENTEC</b>			
TITLE CLAVIN_DIS DDR3_SO_DIMM1			
SIZE A3		CODE CS	
DOC NUMBER 1310A24700-0-ALG		REV D	
CHANGE by EDT_CHEN		DATE 23-APR-2012	
SHEET 31		of 73	



# REFERENCE NUMBER : 4700~4949

LAYOUT NOTE: JTAG\_TMS TERMINATIONS NEED TO BE PLACED NEAR PCH  
 LAYOUT NOTE: JTAG\_TDI TERMINATIONS NEED TO BE PLACED NEAR PCH  
 LAYOUT NOTE: JTAG\_TDO TERMINATIONS NEED TO BE PLACED NEAR XDP



Signal	Direction	Component	Value	Notes
LPC_3S_AD(0)	IN	C38	50 52 53	
LPC_3S_AD(1)	IN	A38	50 52 53	
LPC_3S_AD(2)	IN	B37	50 52 53	
LPC_3S_AD(3)	IN	C37	50 52 53	
LPC_3S_FRAME#	OUT	D36	50 52 53	
LPC_3S_DRQ0#	IN	E36	52	
LPC_3S_DRQ1#	IN	K36	10K_5%_2	
PCI_3S_SERIRQ	OUT	V5	10K_5%_2_DY	
SATA_RX0	IN	AM3	C DN	HDD
SATA_TX0	OUT	AP7	C DP	HDD
SATA_RX1	IN	AM8	C DN	ODD
SATA_TX1	OUT	AP11	C DP	ODD
SATA_RX2	IN	AD7	C DN	MSATA
SATA_TX2	OUT	AD5	C DP	MSATA
SATA_RX3	IN	AB8	C DN	DOCKING
SATA_TX3	OUT	AB10	C DN	DOCKING
SATA_RX4	IN	Y7	C DN	ESATA
SATA_TX4	OUT	Y5	C DP	ESATA
SATA_RX5	IN	Y1	C DN	DOCKING
SATA_TX5	OUT	Y11	C DP	DOCKING
SATA_ODD_DET#	OUT	P1		

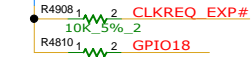
NOTE:  
 IMPEDANCE TARGET : 50 +/- 15% OHM  
 AVOID ROUTING COMP SIGNALS NEXT TO CLOCK PINS.

<b>INVENTEC</b>			
TITLE	CLAVIN DIS		
PANTER	POINT_1 (HDA,JTAG,SPI,SATA)		
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A24700-0-ALG	D

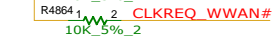
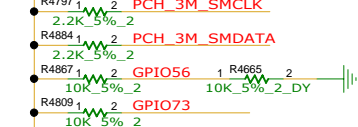
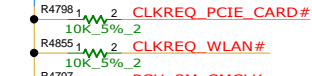


REFERENCE NUMER : 4700~4949

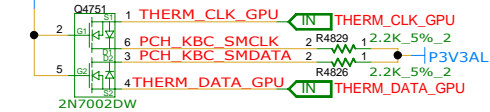
P3V3S



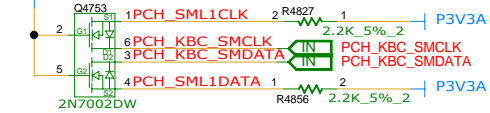
P3V3A



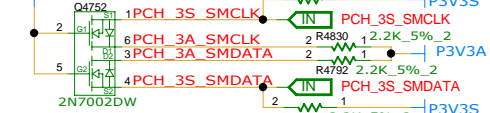
P3V3S



P3V3A



P3V3S

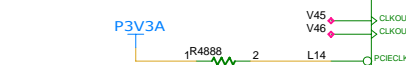
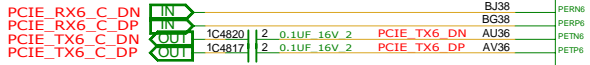
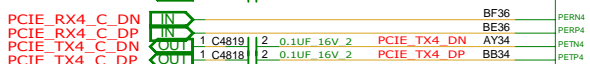
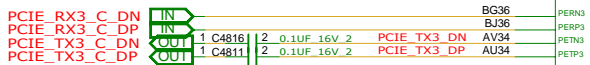
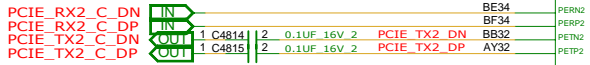


EXPRESS CARD

MEDIA CARD

WLAN

NIC



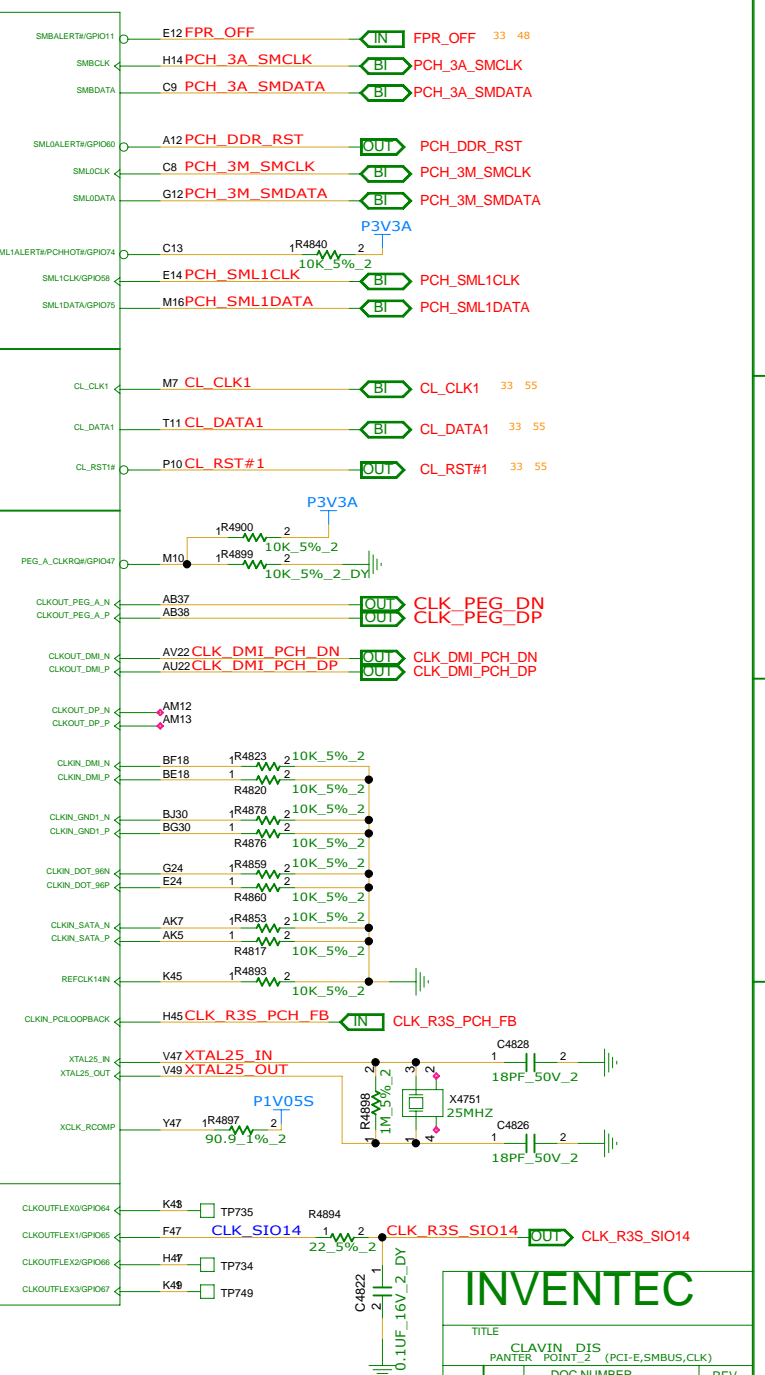
PCIE\*

Controller Link

CLOCKS

FLEX CLOCKS

SMBUS



INVENTEC

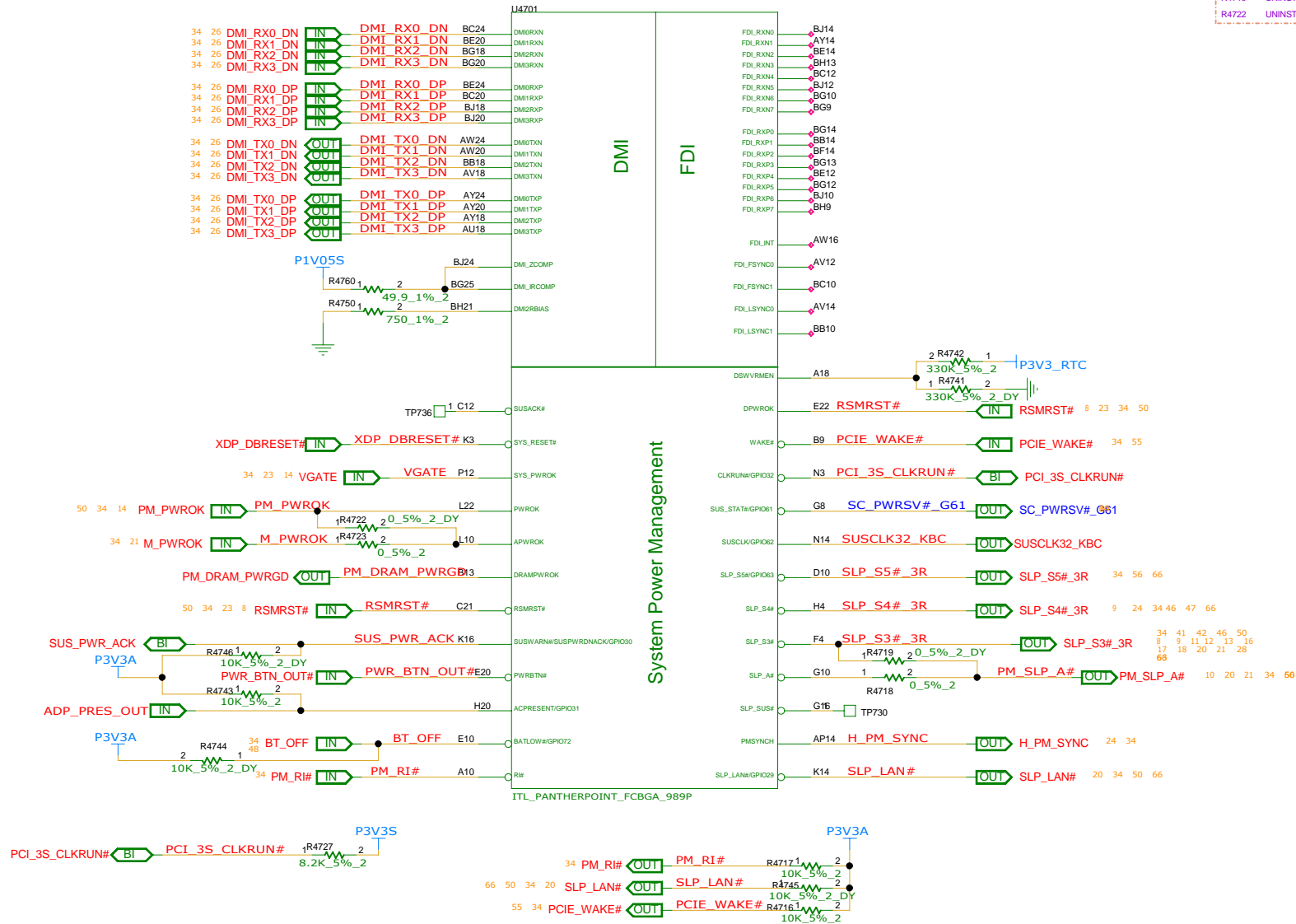
TITLE			
CLAVIN_DJS			
PANTER POINT_2 (PCI-E,SMBUS,CLK)			
SIZE	CODE	DOCNUMBER	REV
A3	CS	1310A24700-0-ALG	D

REFERENCE NUMBER : 4700~4949

NOTE:

- 1.SLP\_SUS AND SUSACK# ARE NC IF DSW IS NOT SUPPORTED
- 2.DPWROK SHOULD CONNECT TO RSMRST# IF DSW NOT SUPPORTED
- 3.PCH\_DPWROK PULL UP TO +V3S ENABLES DSW WUPPORT. NO INSTALL R5261 TO DISABLE DSW

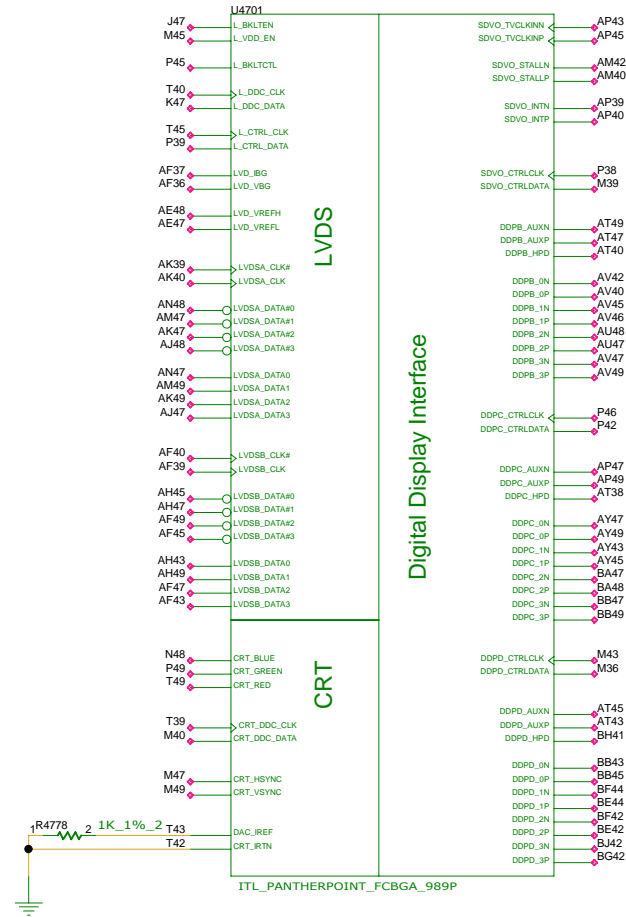
	IAMT	NON-IAMT
R4718	INSTALL	UNINSTALL
R4723	INSTALL	UNINSTALL
R4719	UNINSTALL	INSTALL
R4722	UNINSTALL	INSTALL



INVENTEC

TITLE			
CLAVIN_DIS PANTHER POINT_3 (DMI,FDI,GPIO)			
SIZE A3		CODE CS	REV D
DOC NUMBER 1310A24700-0-ALG		SHEET 34 of 73	

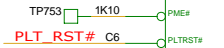
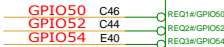
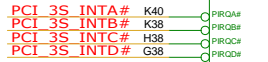
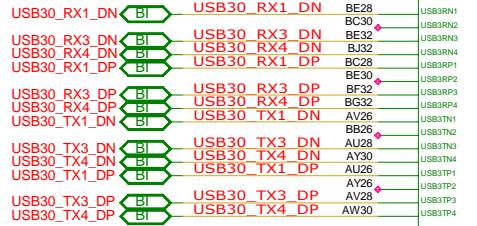
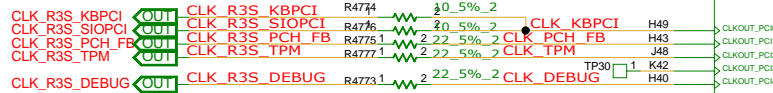
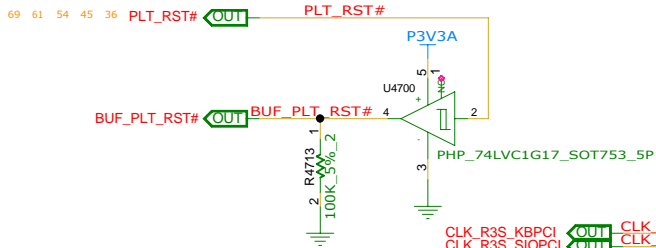
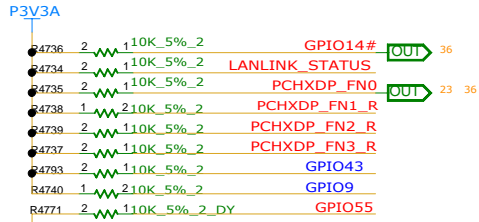
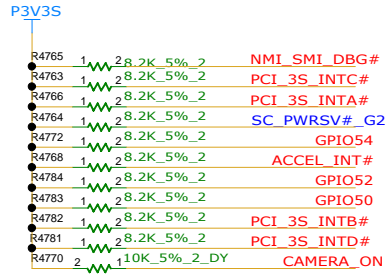
REFERENCE NUMER : 4700~4949



**INVENTEC**

TITLE			
CLAVIN DIS PANTHER POINT_4 (LVDS,DDI)			
SIZE		CODE	REV
A3	CS	DOC NUMBER	D
		1310A24700-0-ALG	
SHEET 35 of 73			

REFERENCE NUMER : 4700~4949

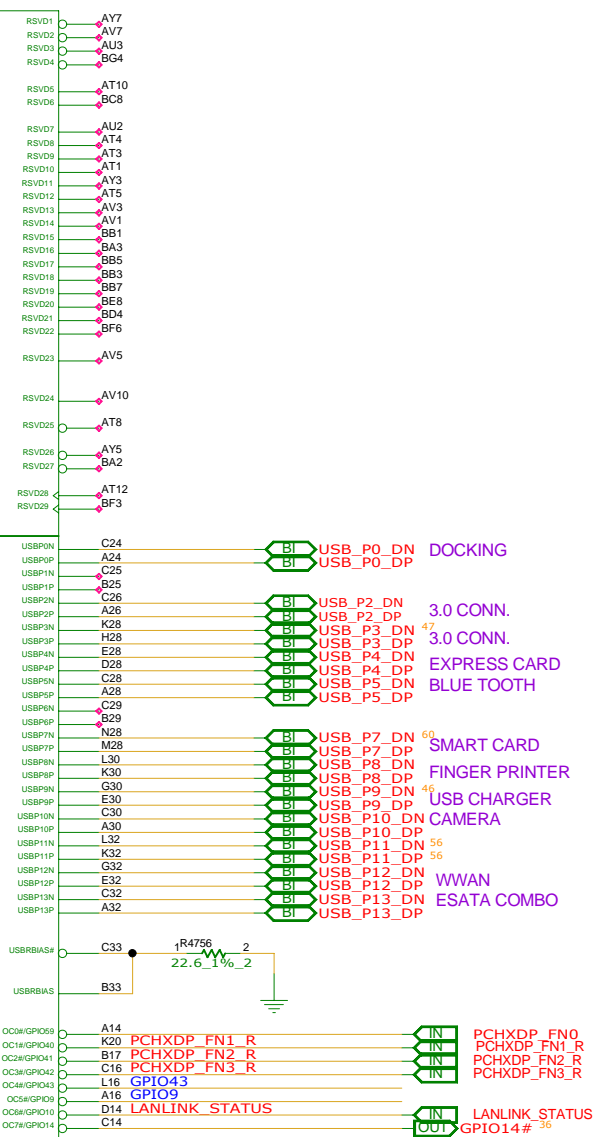


RSVD

NVRAM

USB

ITL\_PANTHERPOINT\_FCBGA\_989P

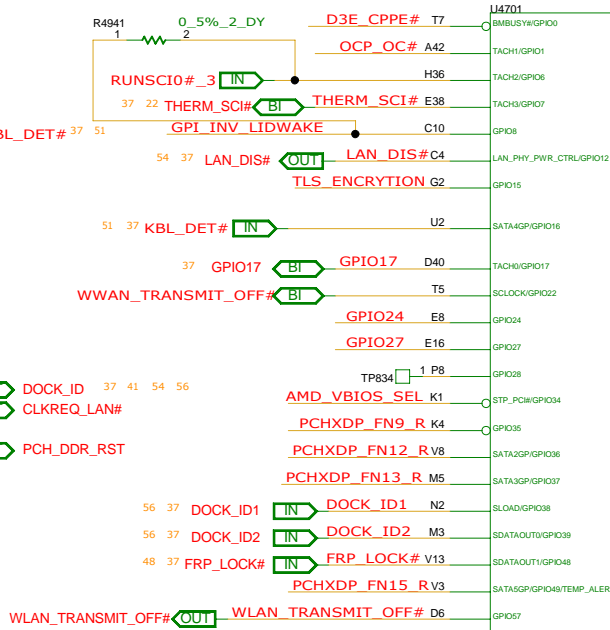
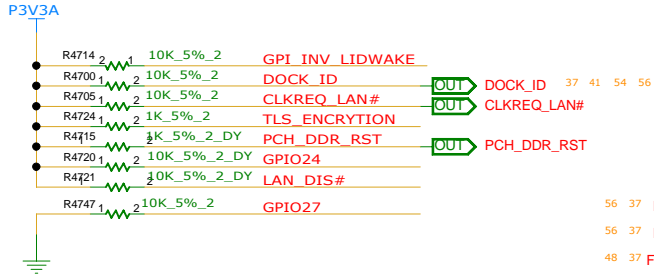
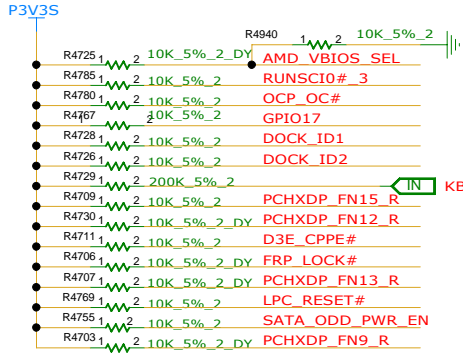
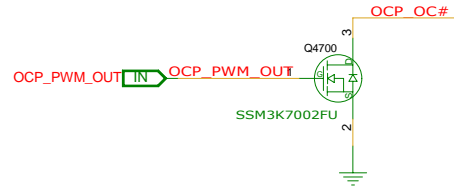


**INVENTEC**

TITLE			
CLAVIN_DIS PANTHER_POINT_5 (PCI,USB,NVRAM)			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A24700-0-ALG	D

# REFERENCE NUMER : 4700~4949

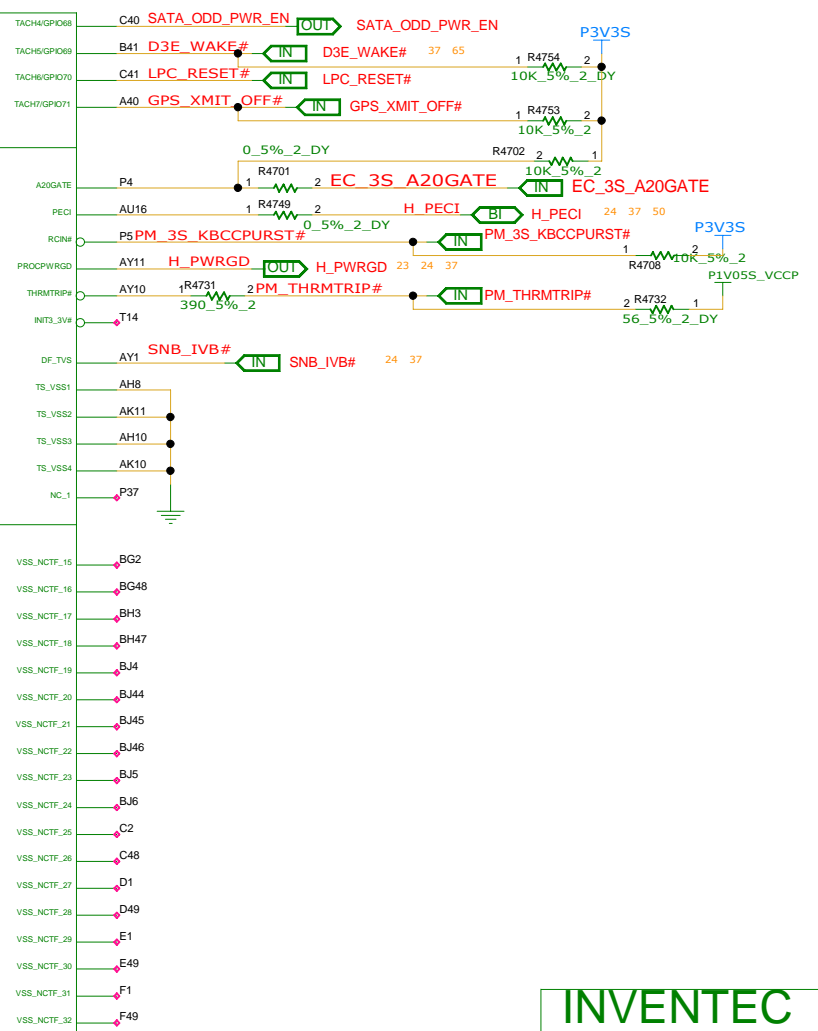
Hynix	install	un-install
New die	R4725	R4940
Old Die	R4940	R4725



GPIO

CPU/MISC

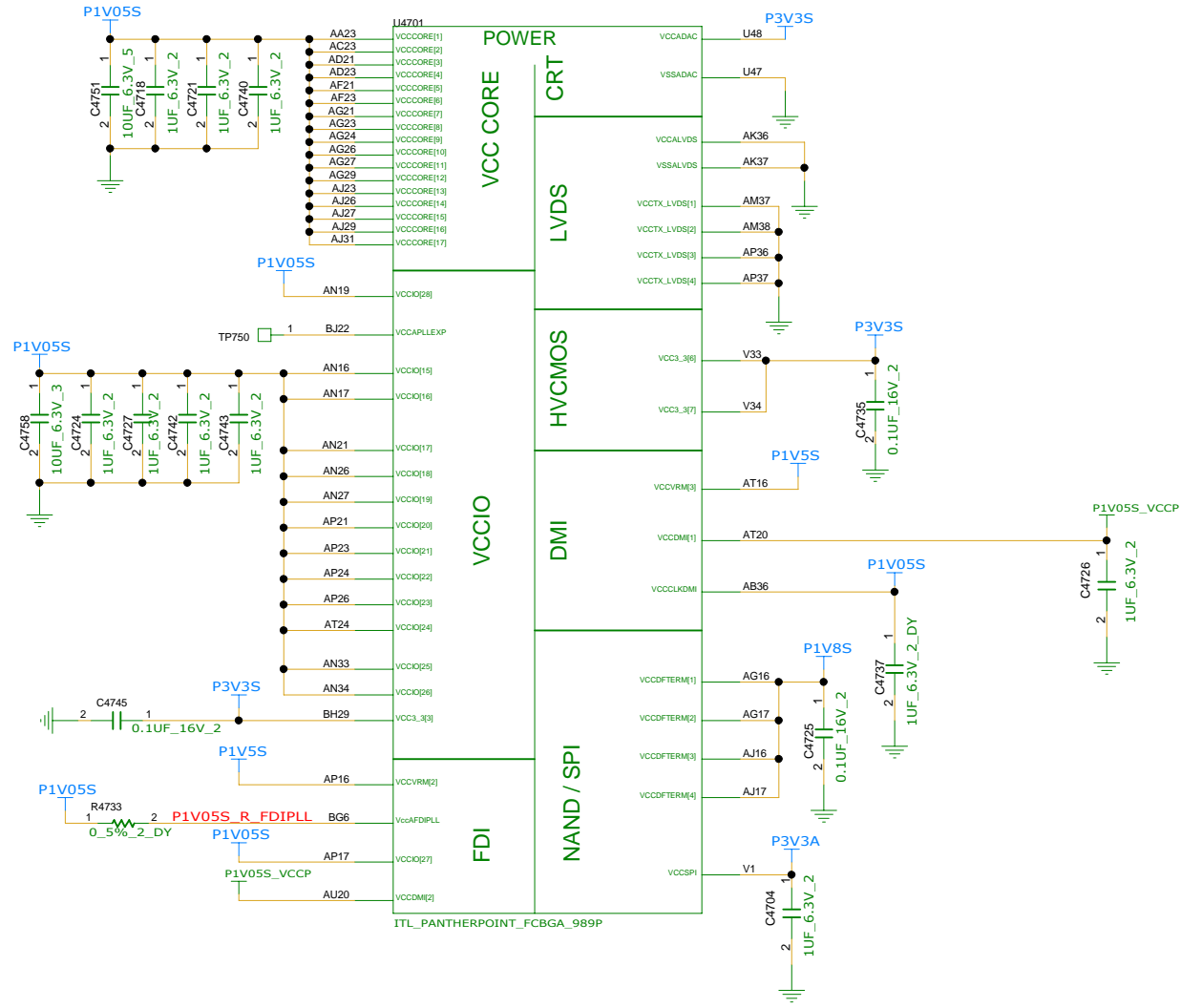
NCTF



**INVENTEC**

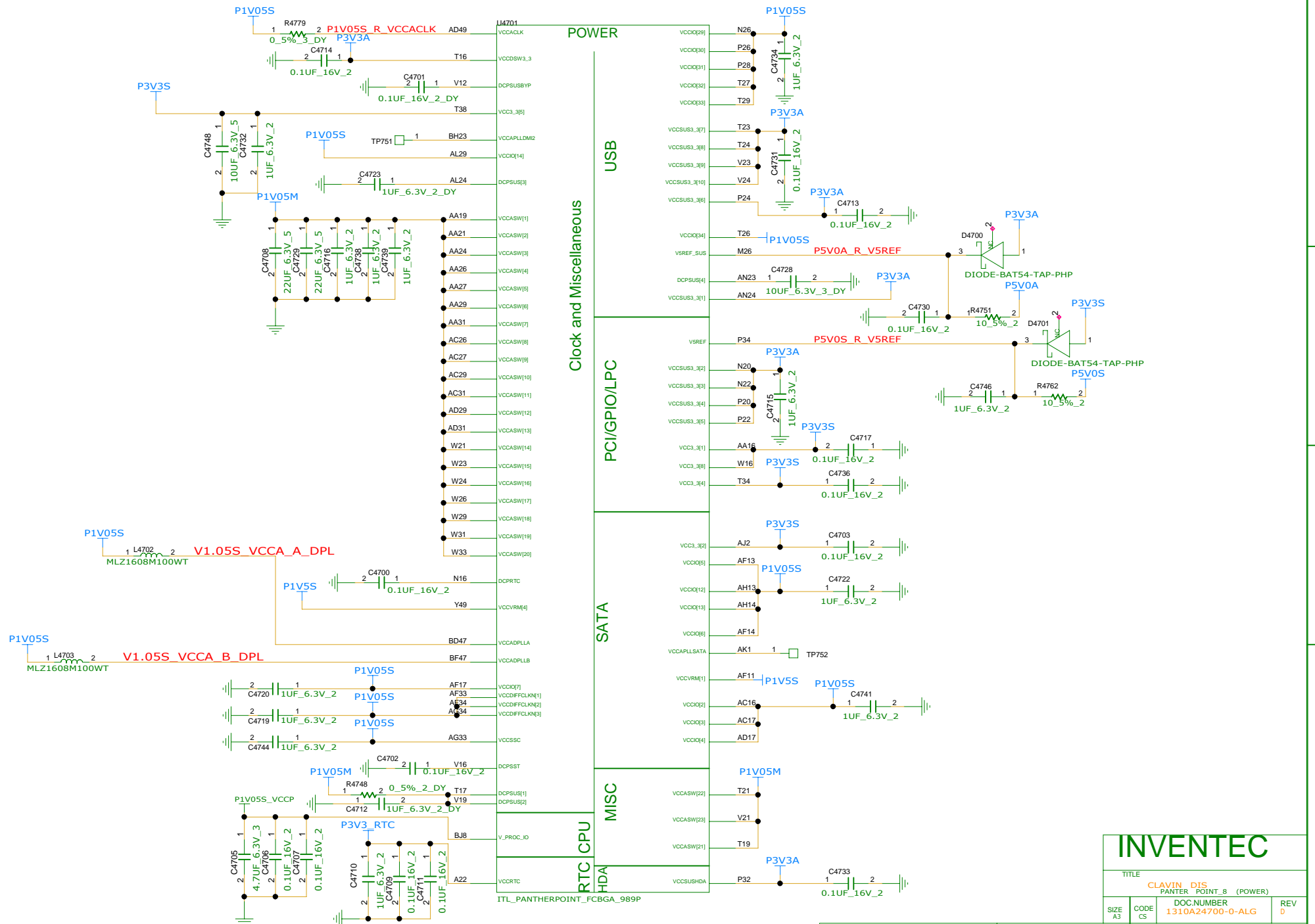
TITLE			
CLAVIN_DIS			
PANTER_POINT_6 (GPIO_VSS_NCTF_RSVD)			
SIZE		CODE	
A3	CS	DOC NUMBER	REV
		1310A24700-0-ALG	D

REFERENCE NUMER : 4700~4949



<b>INVENTEC</b>			
TITLE CLAVIN_DIS PANTHER_POINT_7 (POWER)			
DOC NUMBER 1310A24700-0-ALG		REV D	
SIZE A3	CODE CS		

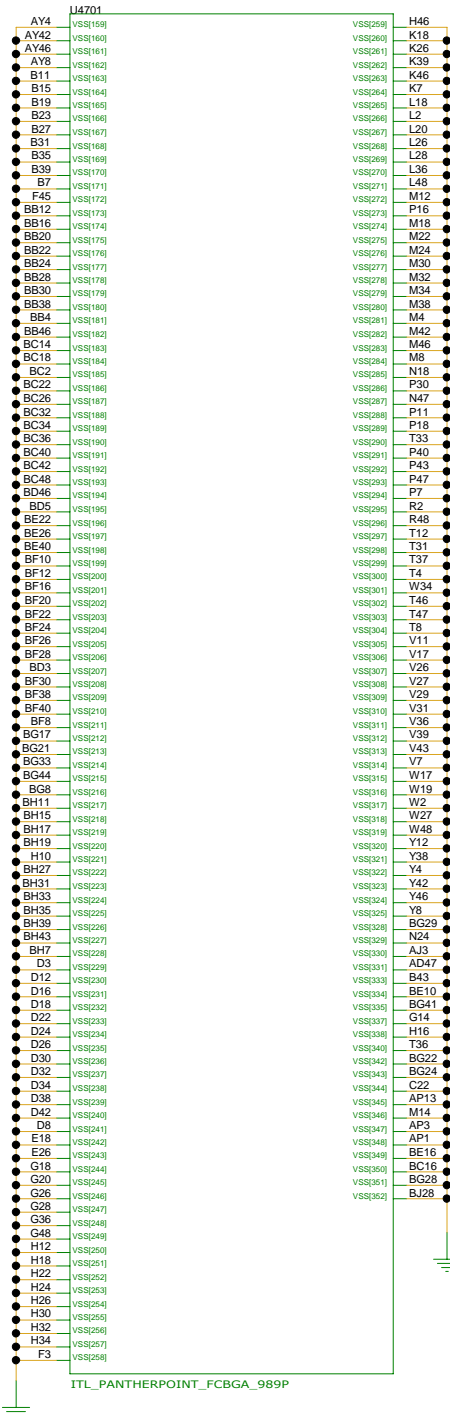
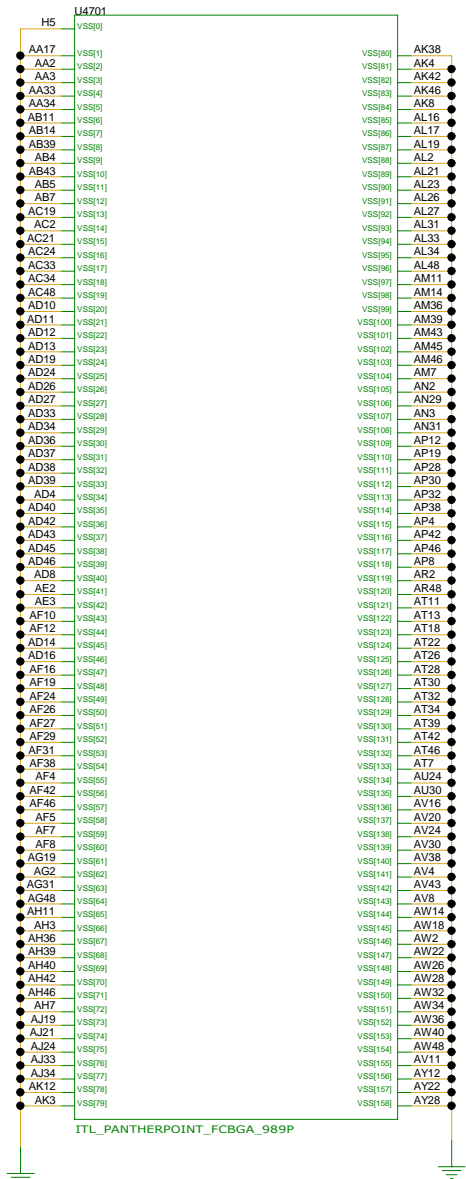
REFERENCE NUMER : 4700~4949



<b>INVENTEC</b>			
TITLE CLAVIN_DIS PANTHER_POINT_8 (POWER)			
DOC NUMBER 1310A24700-0-ALG			
SIZE A3	CODE CS	REV D	SHEET 39 of 73

CHANGE by **FDI\_CHEN** DATE **23-APR-2012**

REFERENCE NUMBER : 4700~4949



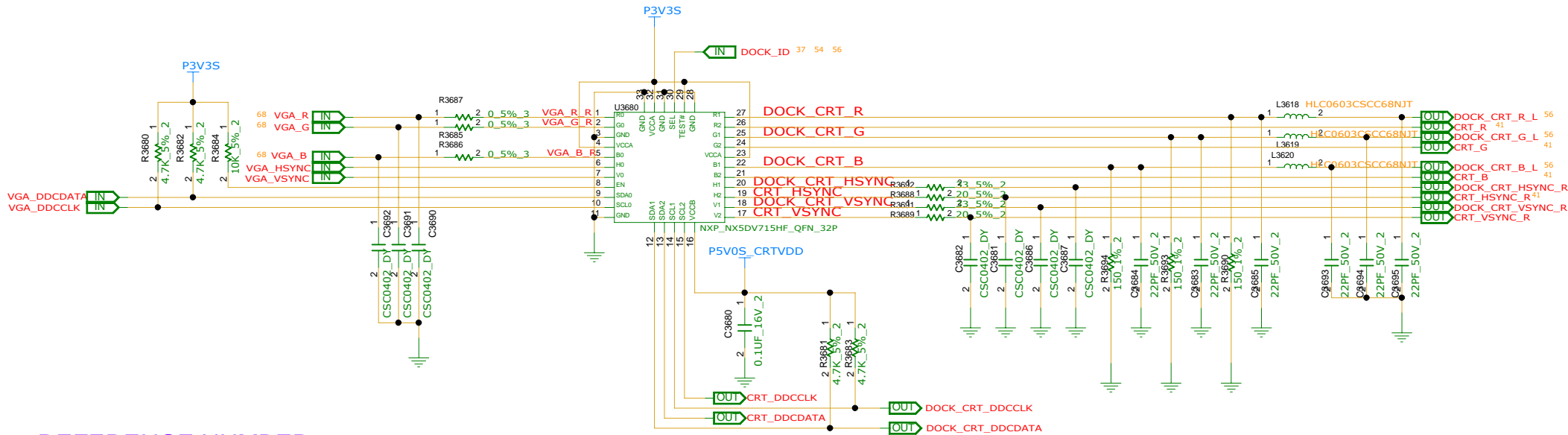
**INVENTEC**

TITLE  
CLAVIN\_DIS  
PANTHER\_POINT\_9 (GND)

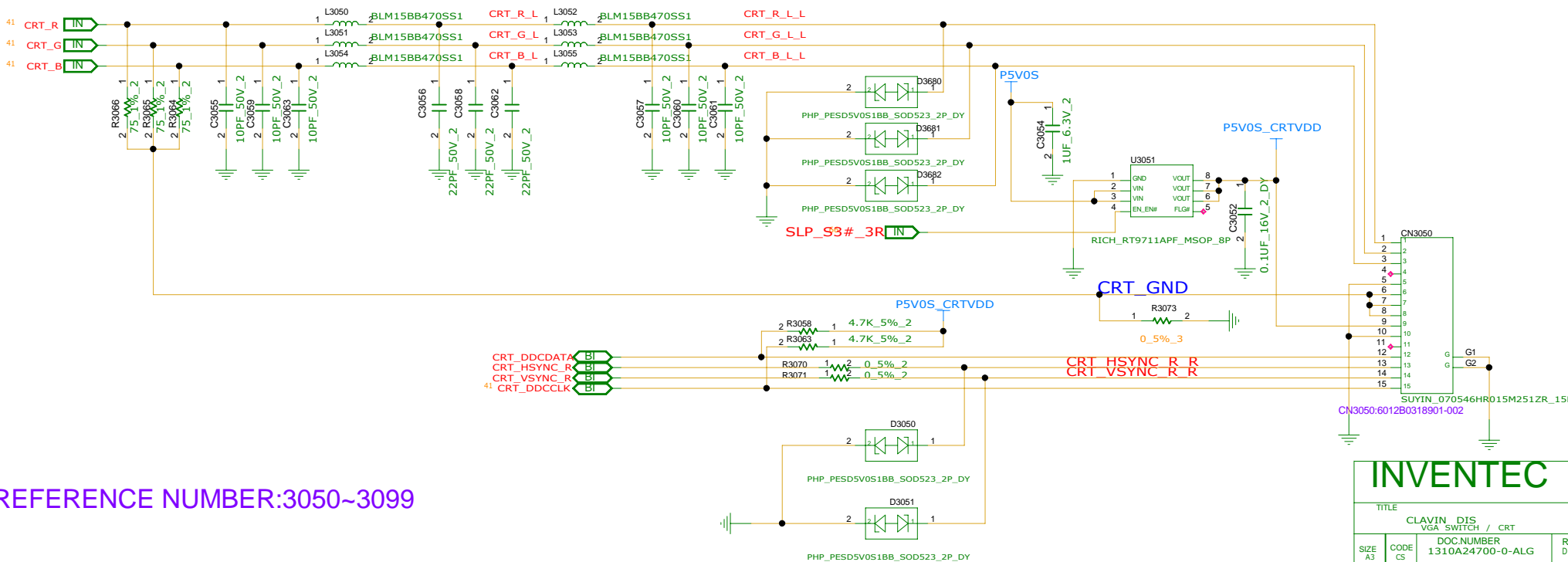
SIZE CODE DOC NUMBER REV  
A3 CS 1310A24700-0-ALG D

CHANGE by FDT CHEN DATE 23-APR-2012 SHEET 40 of 73





REFERENCE NUMBER:3680~3699



REFERENCE NUMBER:3050~3099

<b>INVENTEC</b>			
TITLE CLAVIN_DIS VGA SWITCH / CRT			
SIZE A3		CODE CS	
DOC NUMBER 1310A24700-0-ALG		REV D	
CHANGE by EDT_CHEN		DATE 23-APR-2012	
SHEET 41 of 73			

D

D

C

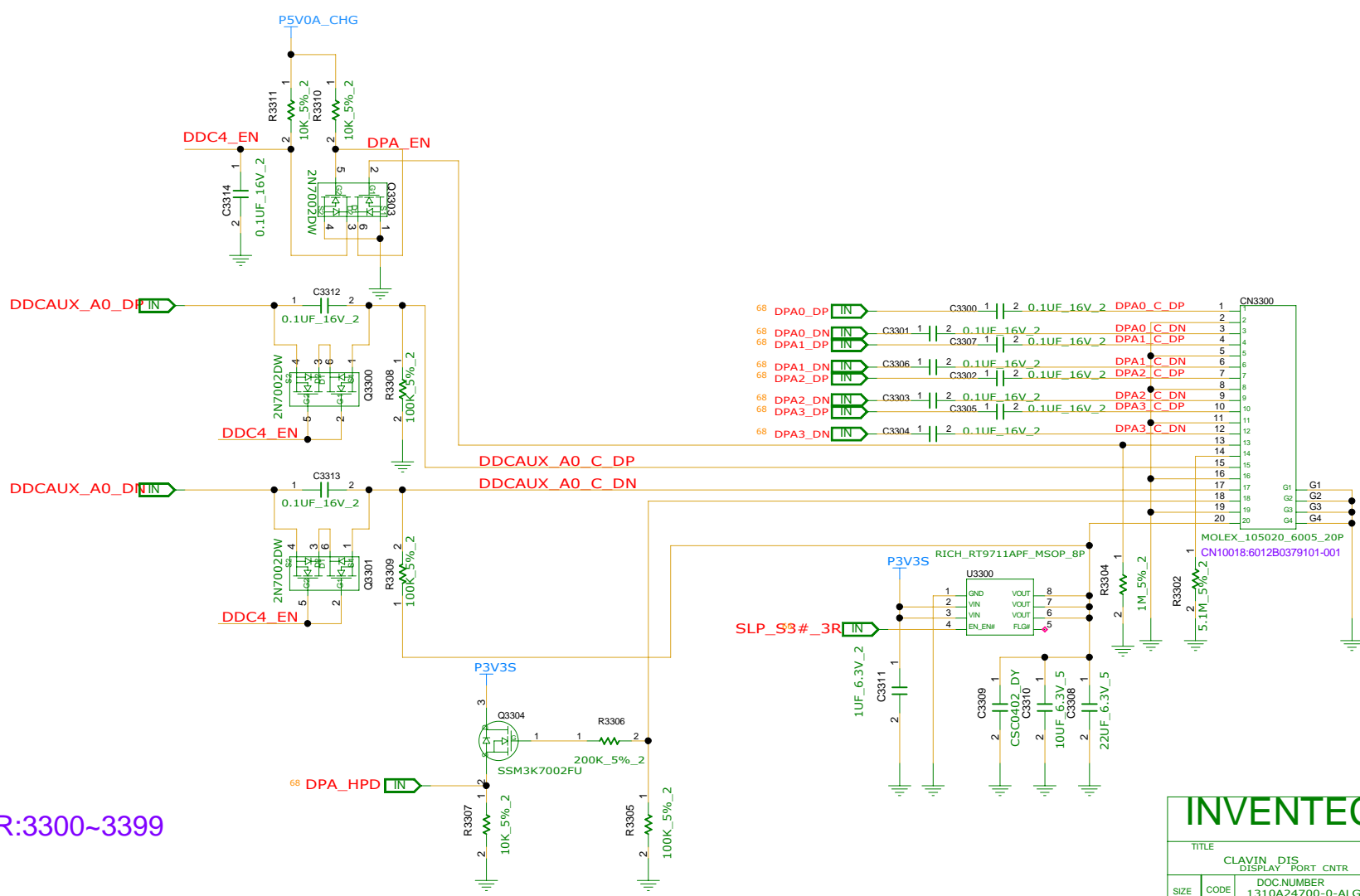
C

B

B

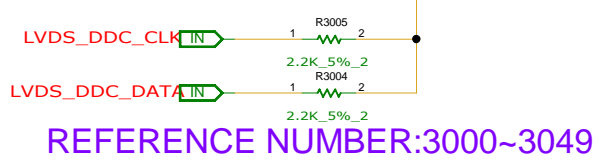
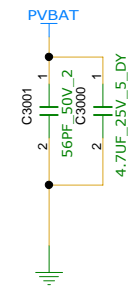
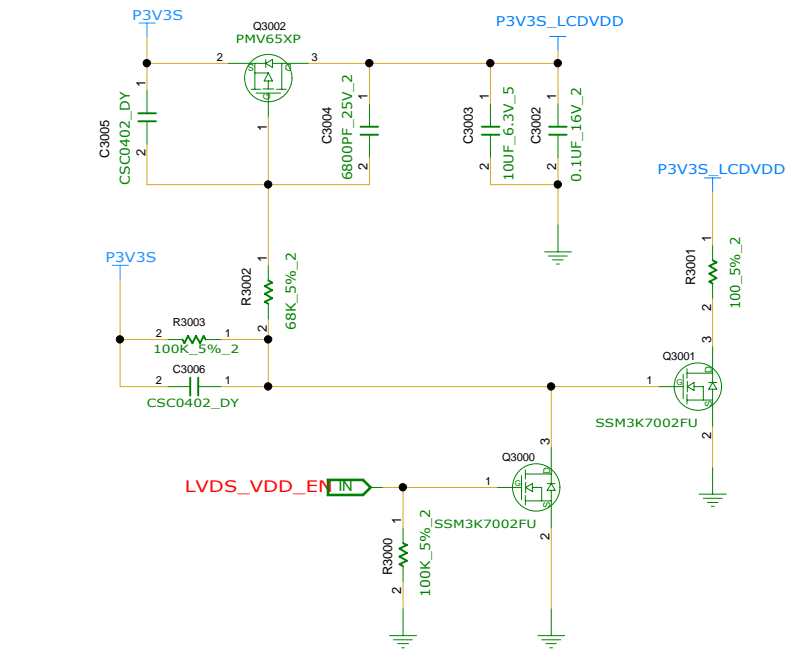
A

A



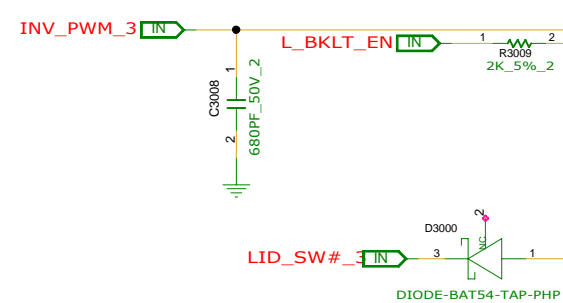
REFERENCE NUMBER:3300~3399

<b>INVENTEC</b>			
TITLE CLAVIN_DISP_DISPLAY_PORT_CNTR			
DOC NUMBER 1310A24700-0-ALG		REV D	
SIZE A3	CODE CS		

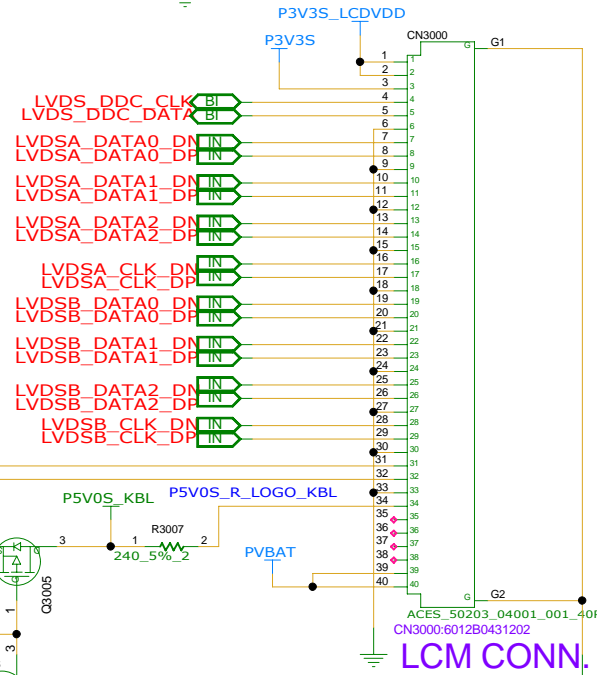
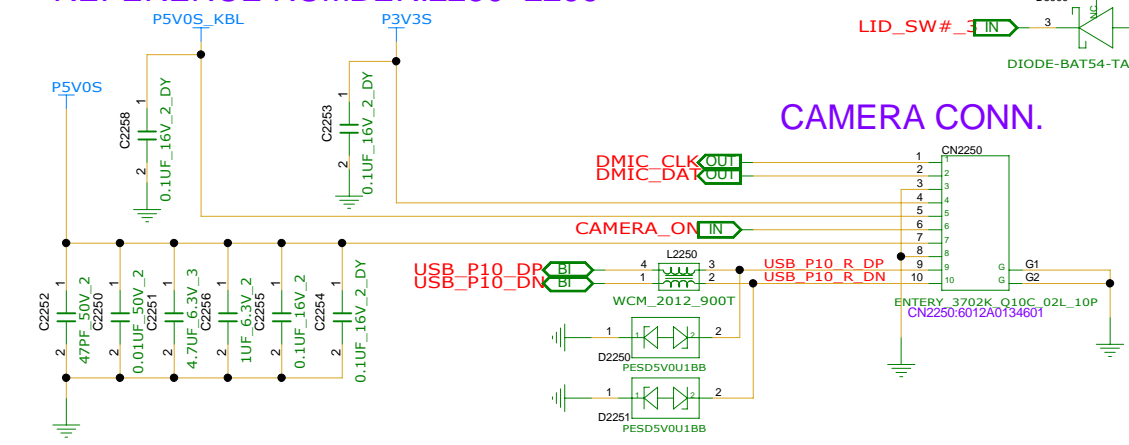


REFERENCE NUMBER:3000~3049

REFERENCE NUMBER:2250~2299



CAMERA CONN.



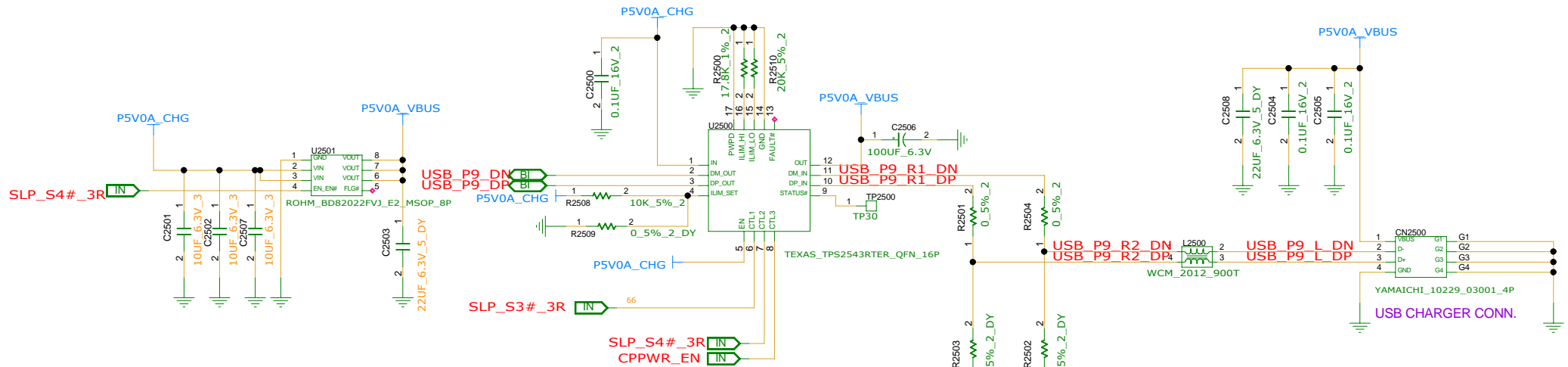
<b>INVENTEC</b>			
TITLE CLAVIN' DIS LCM & WEBCAM			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
CHANGE by EDT, CHEN		DATE 23-APR-2012	SHEET 43 of 73

# BLANK

REFERENCE NUMBER:3400~3499

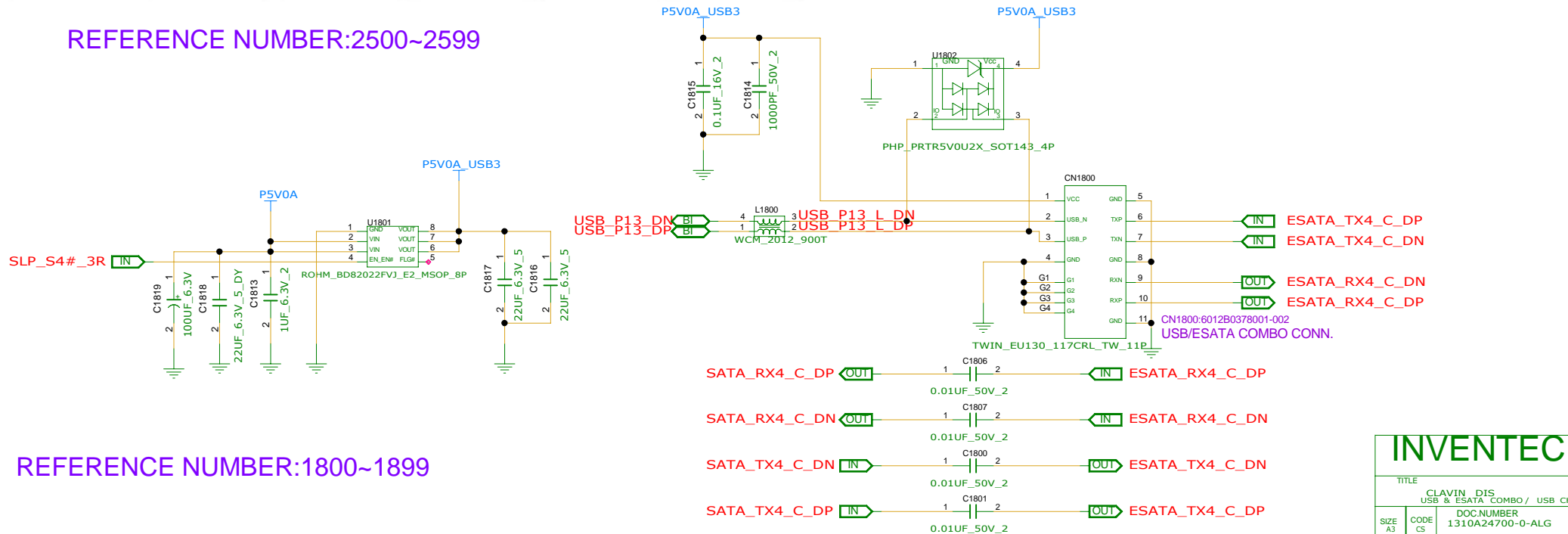
<b>INVENTEC</b>			
TITLE			
CLAVIN _ DIS EDP TO LYDS			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A24700-0-ALG	D
SHEET 44 of 73			





	R2510	R2508	R2509	R2511	R2512
TPS2543	20K	10K	NI	0	NI
TPS2540/A	NI	NI	0	0	NI
PI5USB2543	NI	NI	0	NI	0

REFERENCE NUMBER:2500~2599



REFERENCE NUMBER:1800~1899

**INVENTEC**

TITLE: CLAVIN\_DIS USB & ESATA COMBO / USB CHARGER

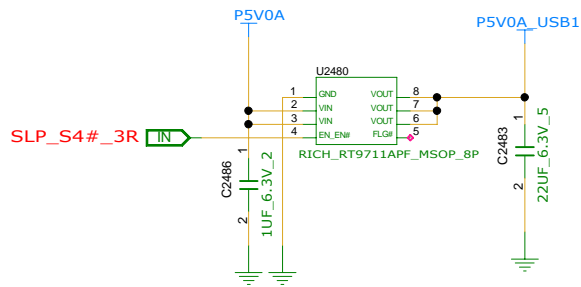
DOC NUMBER: 1310A24700-0-ALG

REV: D

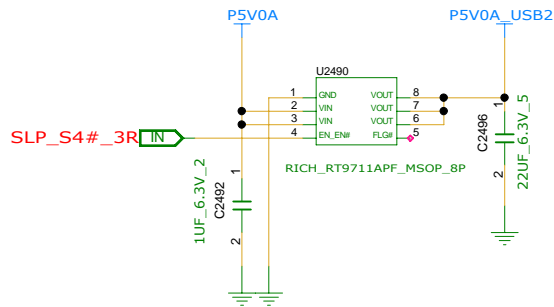
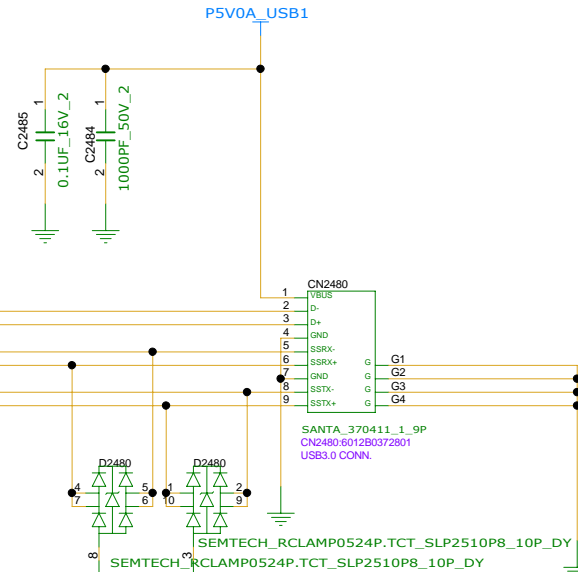
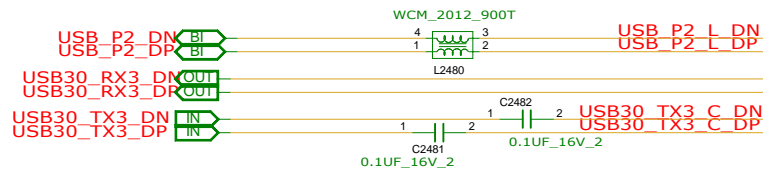
SIZE: A3

CODE: CS

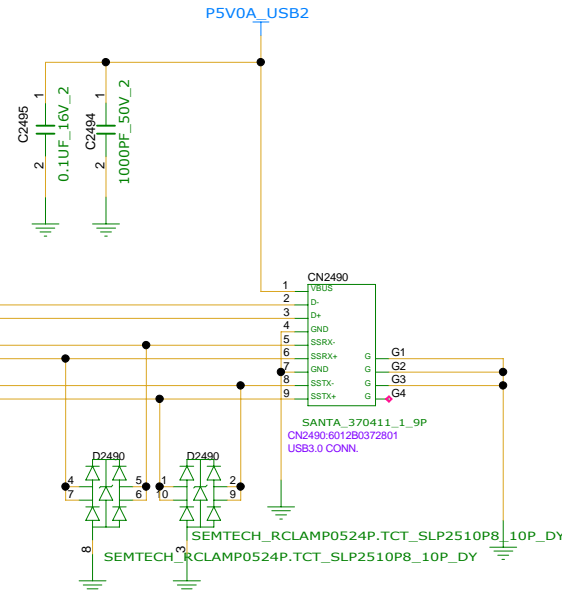
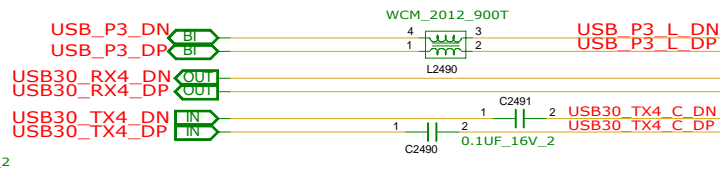
SHEET: 46 of 73



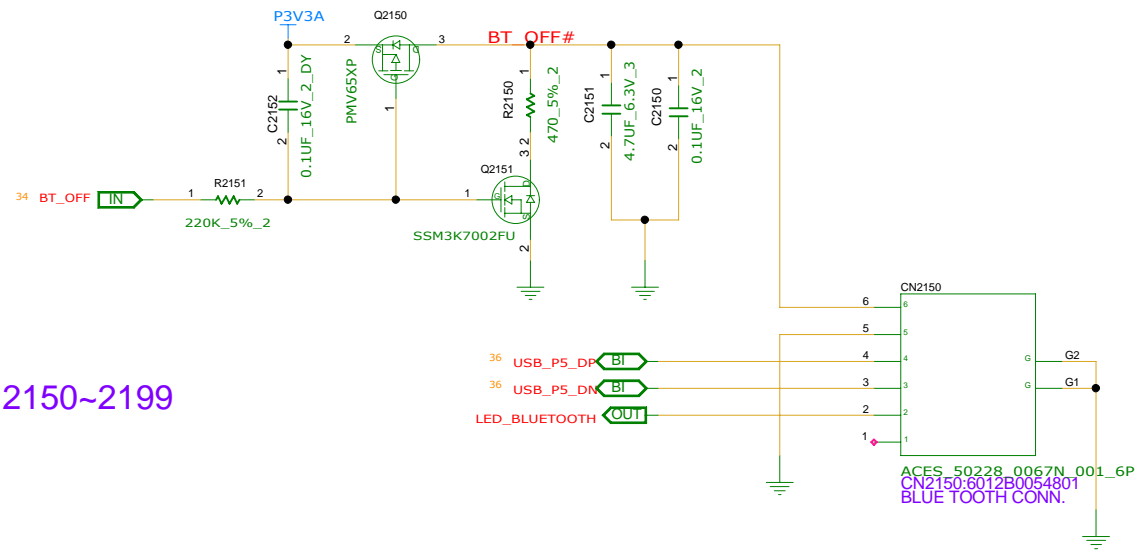
REFERENCE NUMBER:2480~2489



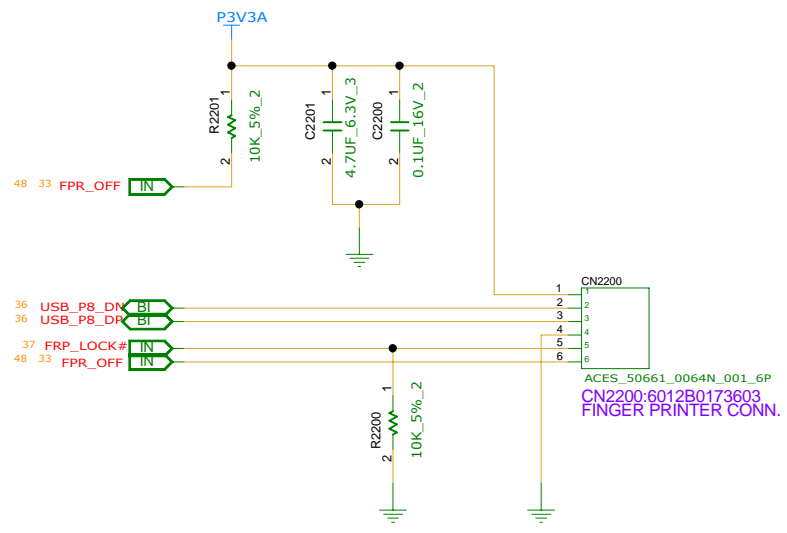
REFERENCE NUMBER:2490~2499



<b>INVENTEC</b>			
TITLE CLAVIN_DIS USB_CONN			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
CHANGE by EDT_CHEW      DATE 23-APR-2012      SHEET 47 of 73			



REFERENCE:2150~2199

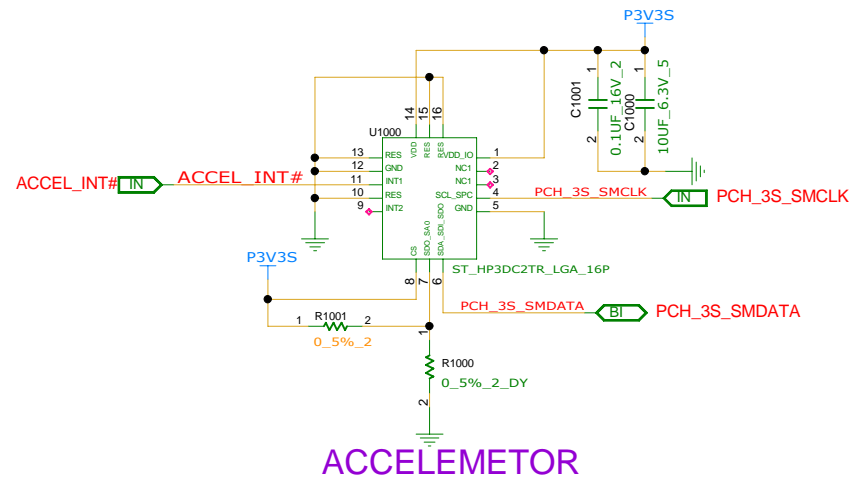


REFERENCE:2200~2249

<b>INVENTEC</b>			
TITLE CLAVIN DIS BLUE TOOTH & FINGER PRINTER CNTR			
SIZE A3		CODE CS	
DOC NUMBER 1310A24700-0-ALG		REV D	
SHEET 48 of 73			



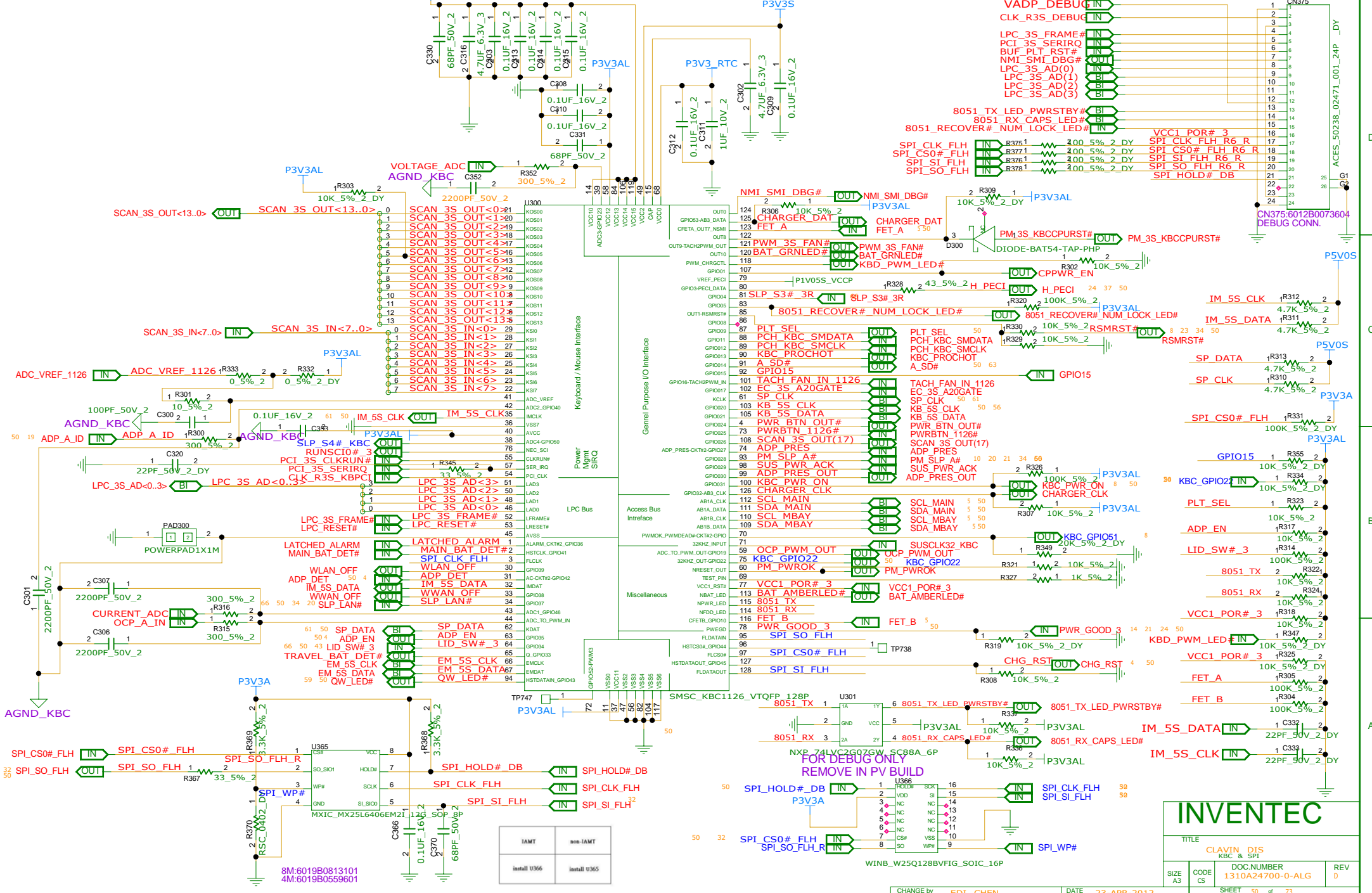
REFERENCE NUMER : 1000~1099



ACCELEMATOR

**INVENTEC**

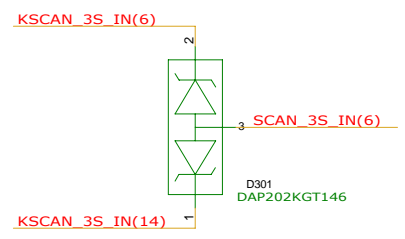
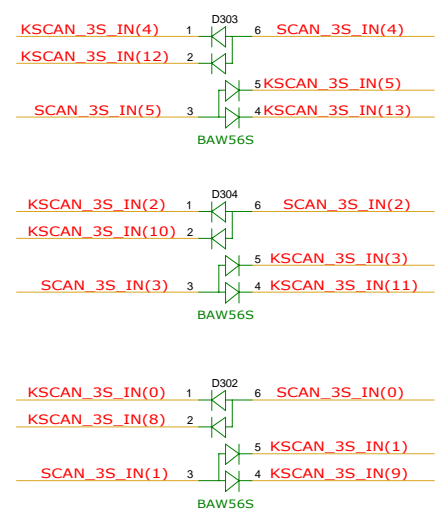
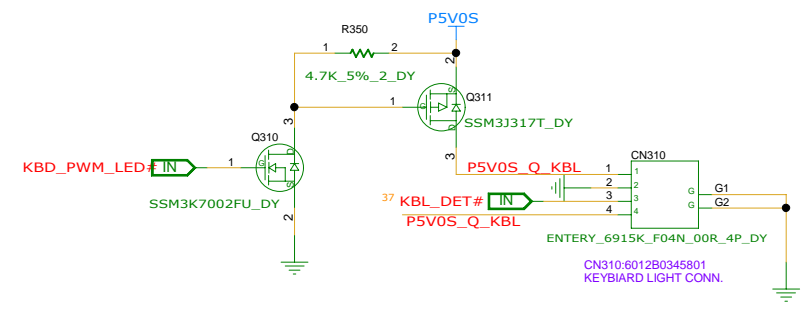
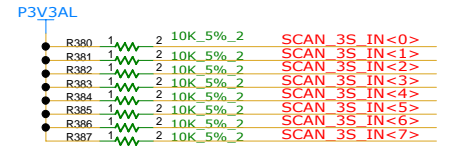
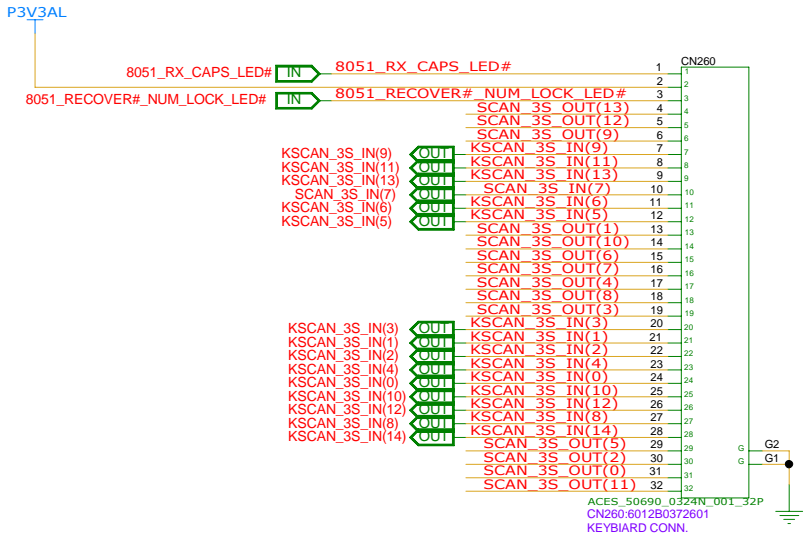
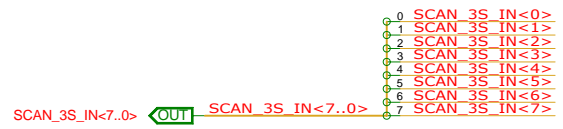
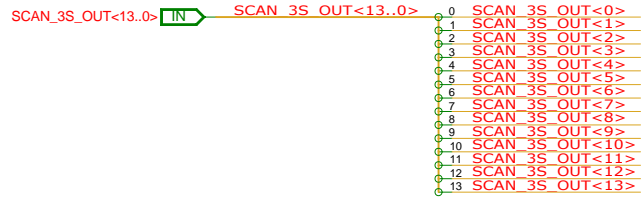
TITLE			
CLAVIN_DIS ACCELEMATOR			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A24700-0-ALG	D



<b>INVENTEC</b>			
TITLE CLAVIN_DIS KBC & SPI			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
CHANGE by FDI_CHEN		DATE 23-APR-2012	SHEET 50 of 73

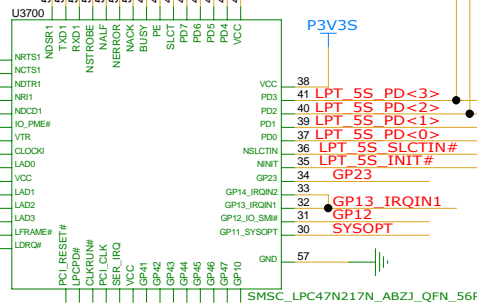
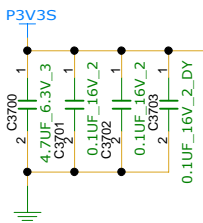
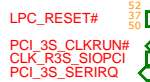
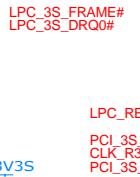
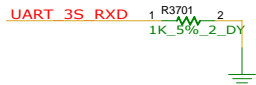
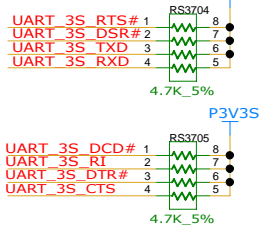
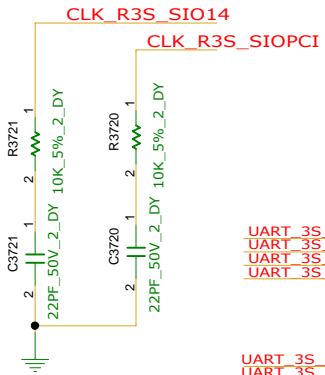
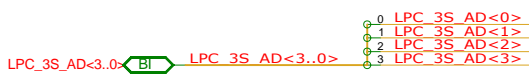
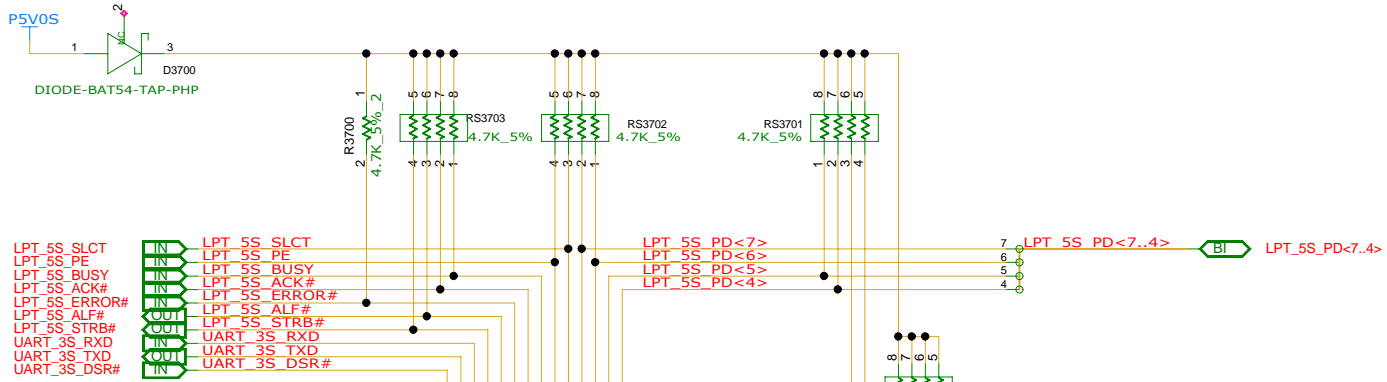
IAMT	non-IAMT
install U366	install U365

# REFERENCE NUMER : 300~389

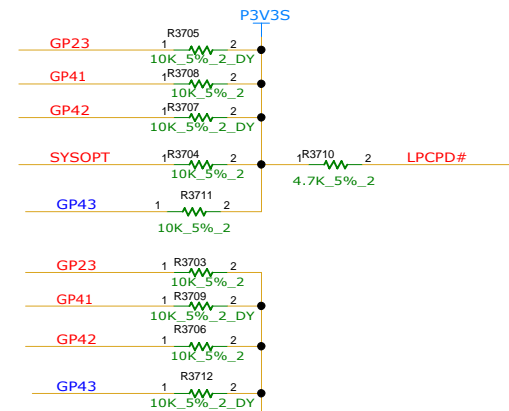
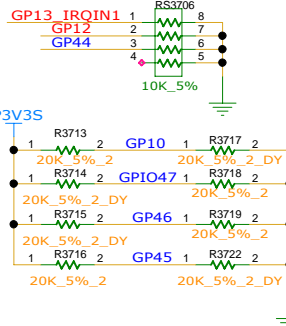


<b>INVENTEC</b>			
TITLE CLAVIN_DJIS KEYBOARD			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
CHANGE by EDT_CHEN		DATE 23-APR-2012	SHEET 51 of 73

# REFERENCE NUMER : 3700~3799



BASE I/O ADDRESS  
0 = 02EH  
\* 1 = 04EH



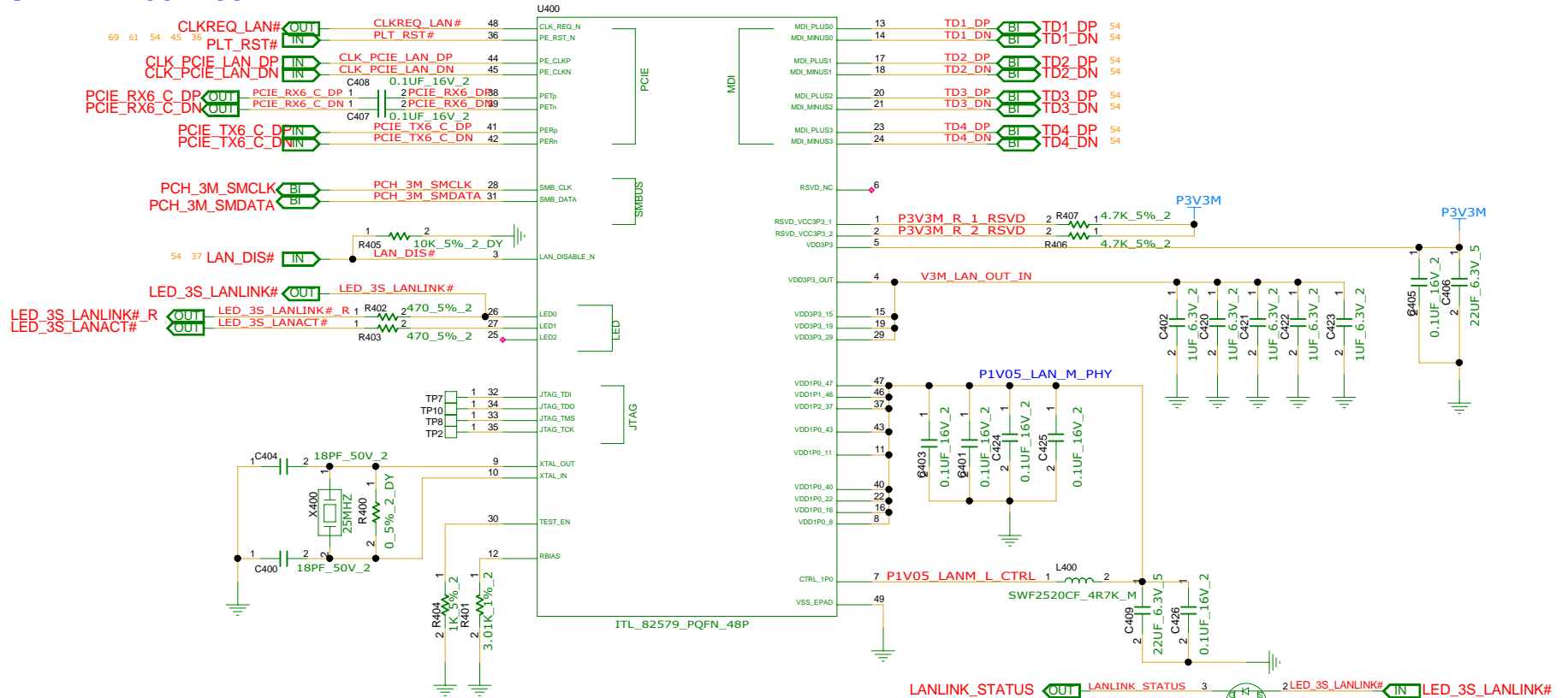
R3713	R3714	R3715	R3716	R3717	R3718	R3719	R3722	System Board Revision
Installed	DY	Installed	DY	Installed	DY	Installed	Installed	S11
DY	Installed	DY	Installed	Installed	DY	Installed	DY	S11-B
Installed	DY	DY	DY	Installed	Installed	Installed	Installed	PV
Installed	DY	DY	Installed	DY	Installed	Installed	DY	PV-R
Installed	Installed	DY	DY	DY	Installed	Installed	Installed	MV

## INVENTEC

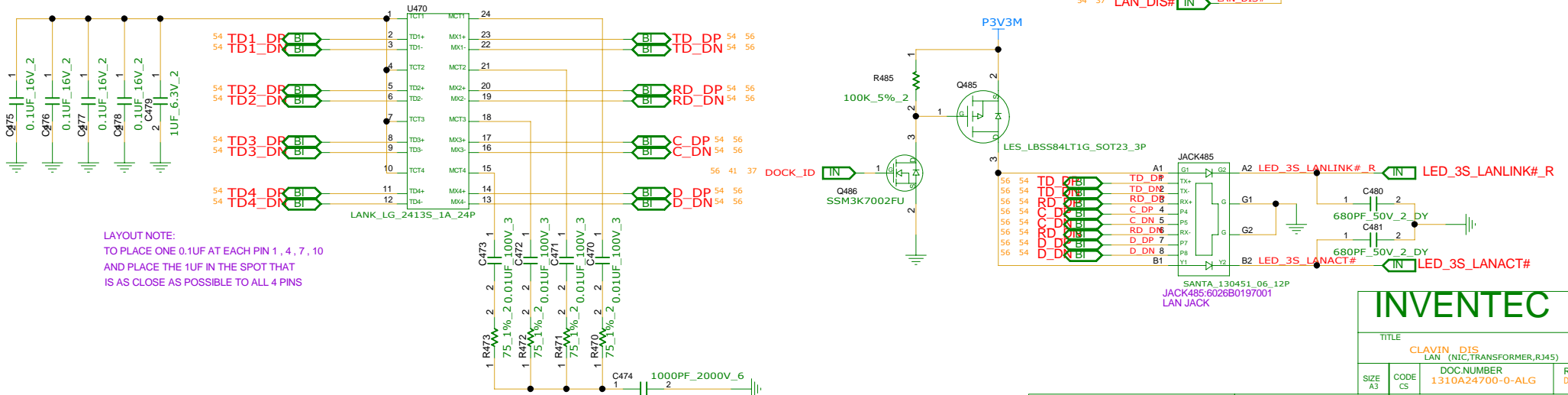
TITLE CLAVIN DIS SUPER I/O			
DOC NUMBER 1310A24700-0-ALG			
SIZE A3	CODE CS	REV D	SHEET 52 of 73



# REFERENCE NUMER : 400~469



# REFERENCE NUMER : 470~499



LAYOUT NOTE:  
TO PLACE ONE 0.1UF AT EACH PIN 1, 4, 7, 10  
AND PLACE THE 1UF IN THE SPOT THAT  
IS AS CLOSE AS POSSIBLE TO ALL 4 PINS

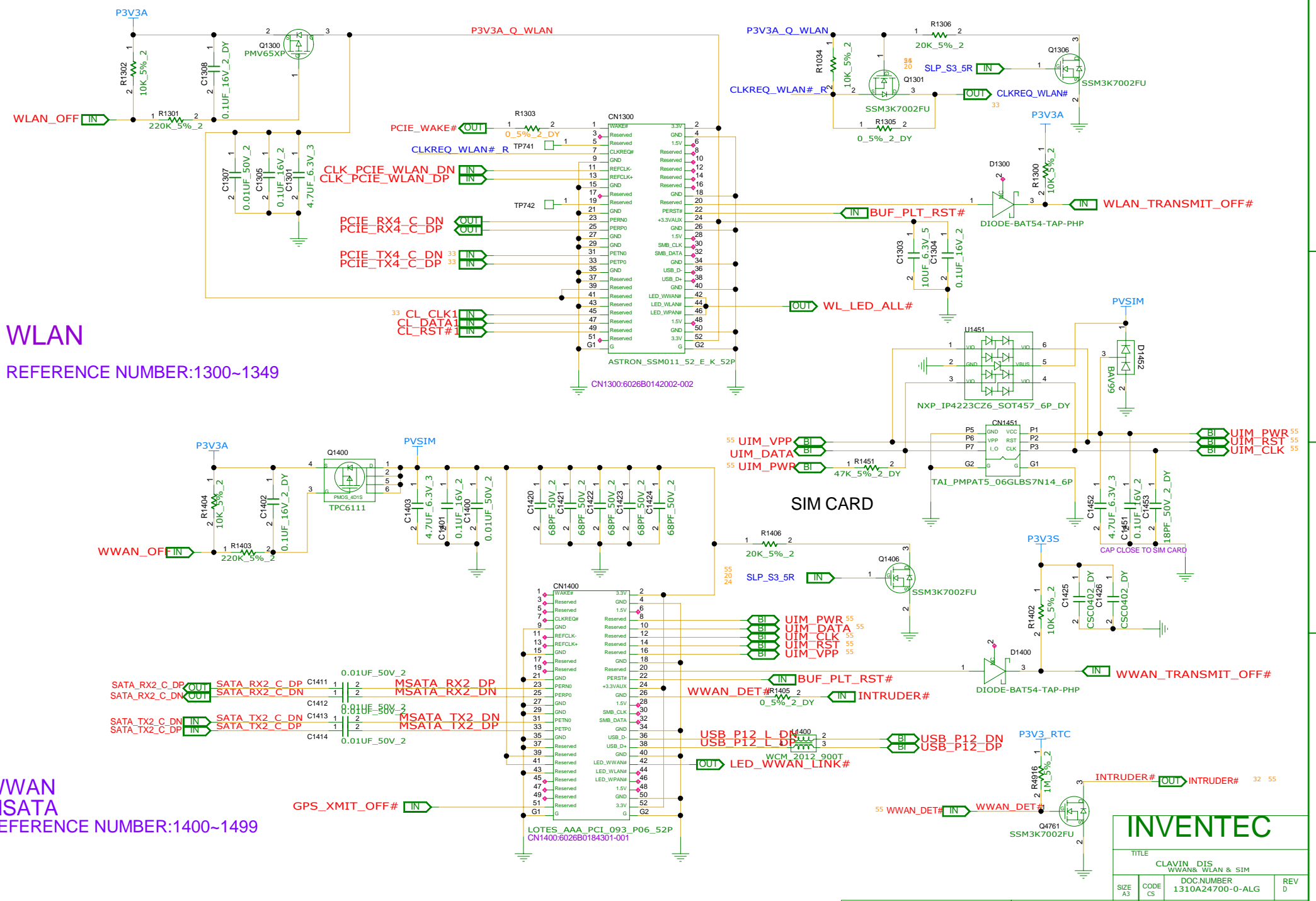
<b>INVENTEC</b>			
TITLE CLAVIN_DIS LAN (NIC TRANSFORMER, RJ45)			
SIZE A3		CODE CS	
DOC NUMBER 1310A24700-0-ALG		REV D	
CHANGE by FDI_CHEN		DATE 23-APR-2012	
SHEET 54 of 73			

# WLAN

REFERENCE NUMBER:1300~1349

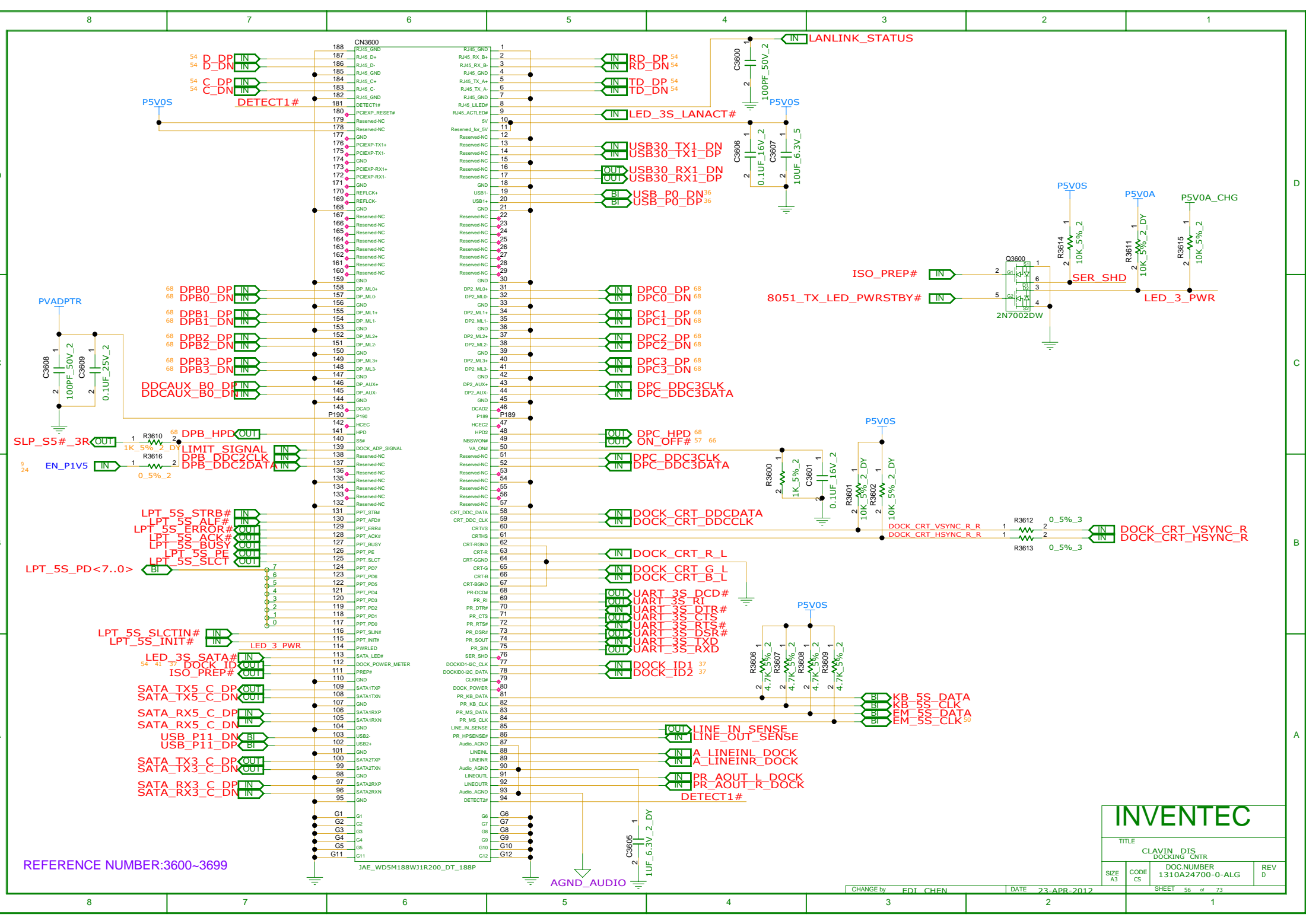
# WWAN MSATA

REFERENCE NUMBER:1400~1499



<b>INVENTEC</b>			
TITLE CLAVIN_DIS WWAN& WLAN & SIM			
SIZE A3		CODE CS	
DOC NUMBER 1310A24700-0-ALG		REV D	
SHEET 55 of 73			

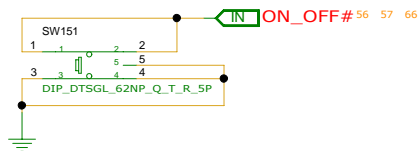




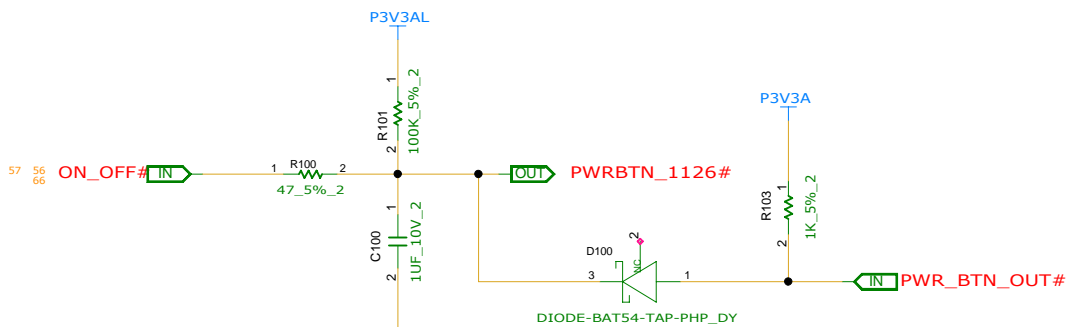
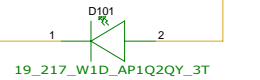
REFERENCE NUMBER:3600-3699

<b>INVENTEC</b>			
TITLE CLAVIN_D1S DOCKING_CNTR			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
CHANGE by EDT_CHEN		DATE 23-APR-2012	SHEET 56 of 73

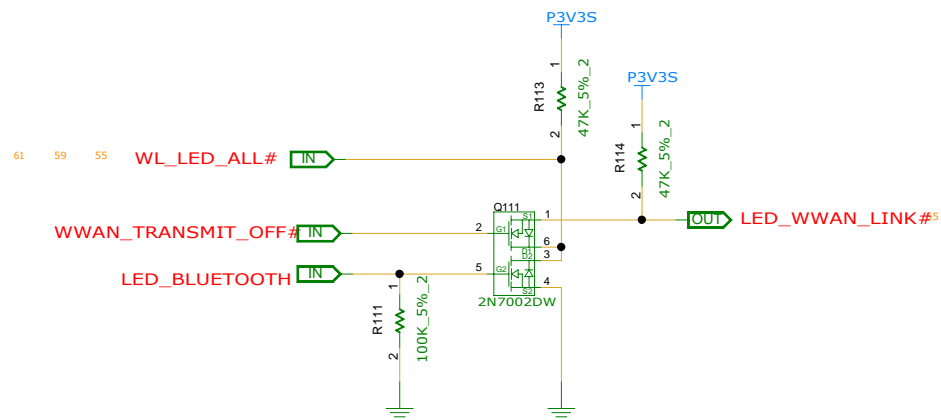




8051\_TX\_LED\_PWRSTBY#



POWER / STANDBY LED

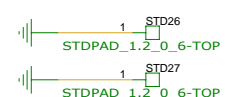
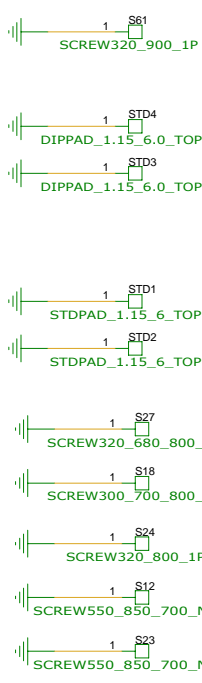
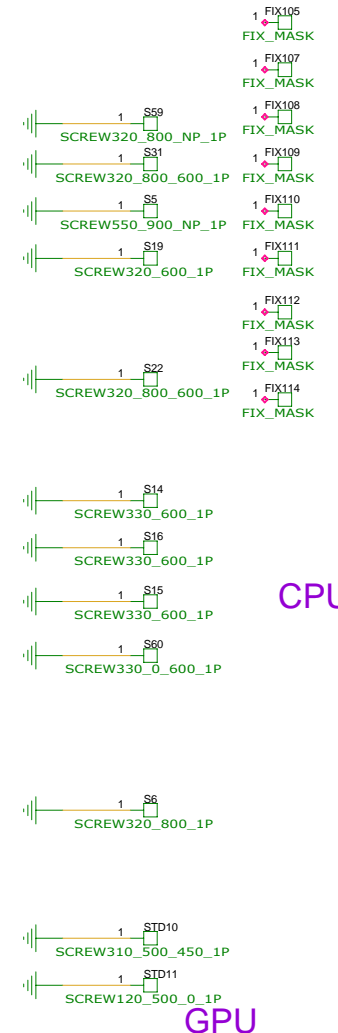
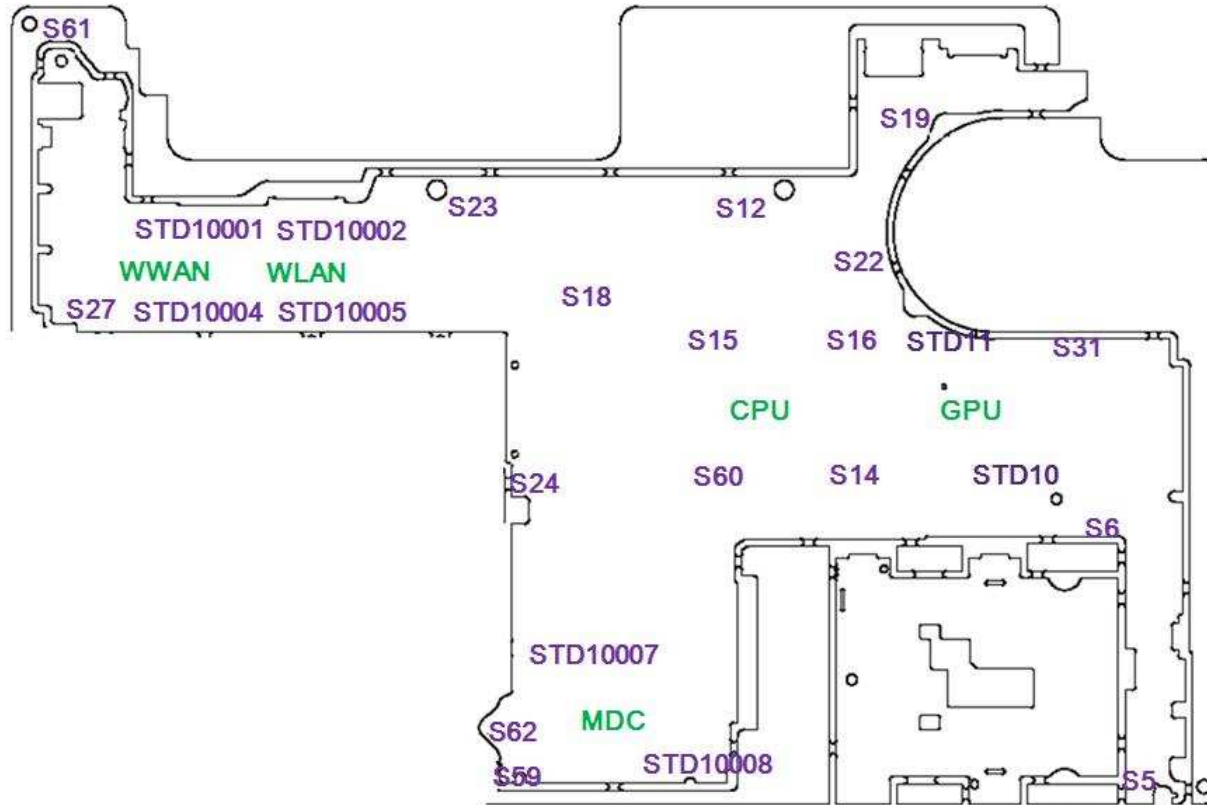


WLAN\_WWAN\_BLUETOOTH\_LED

REFERENCE NUMBER:100~199

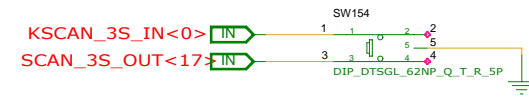
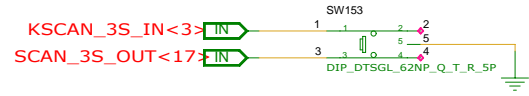
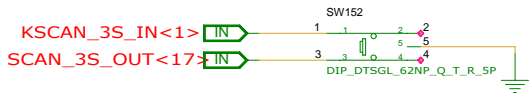
<b>INVENTEC</b>			
TITLE CLAVIN_DIS POWER & WLAN_LED			
SIZE A3		CODE CS	
DOC NUMBER 1310A24700-0-ALG		REV D	

# SCREW

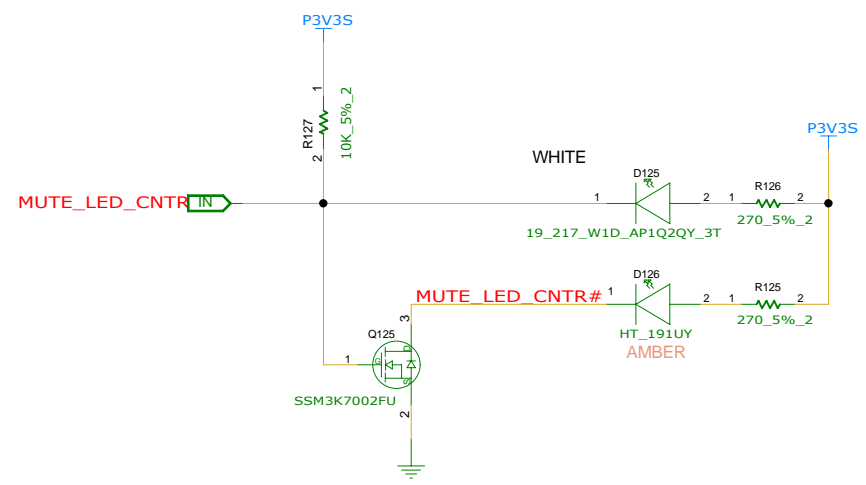
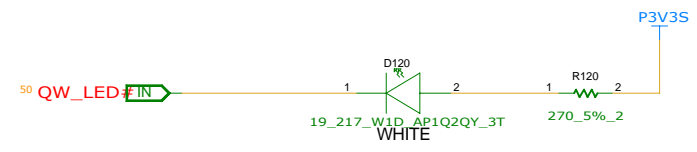
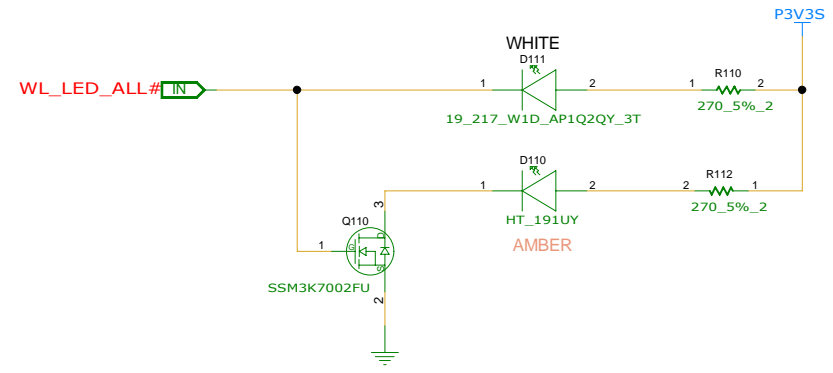


NOTE :  
S9000 .S9001 .STD9000 ON PAGE 60

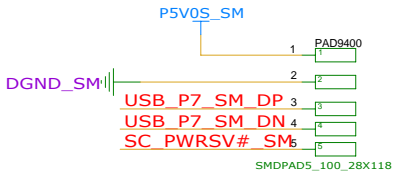
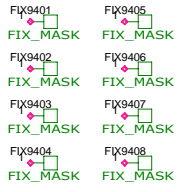
<b>INVENTEC</b>			
TITLE SCREW			
CLAVIN, DIS			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D



REFERENCE NUMBER:100~199

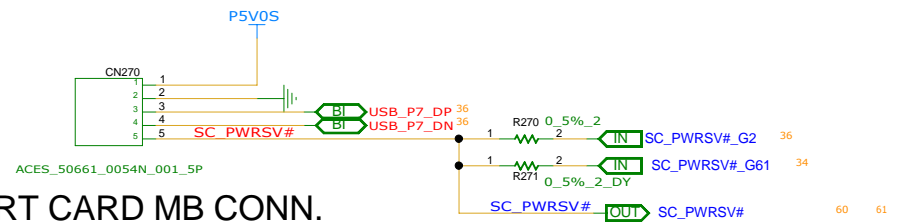
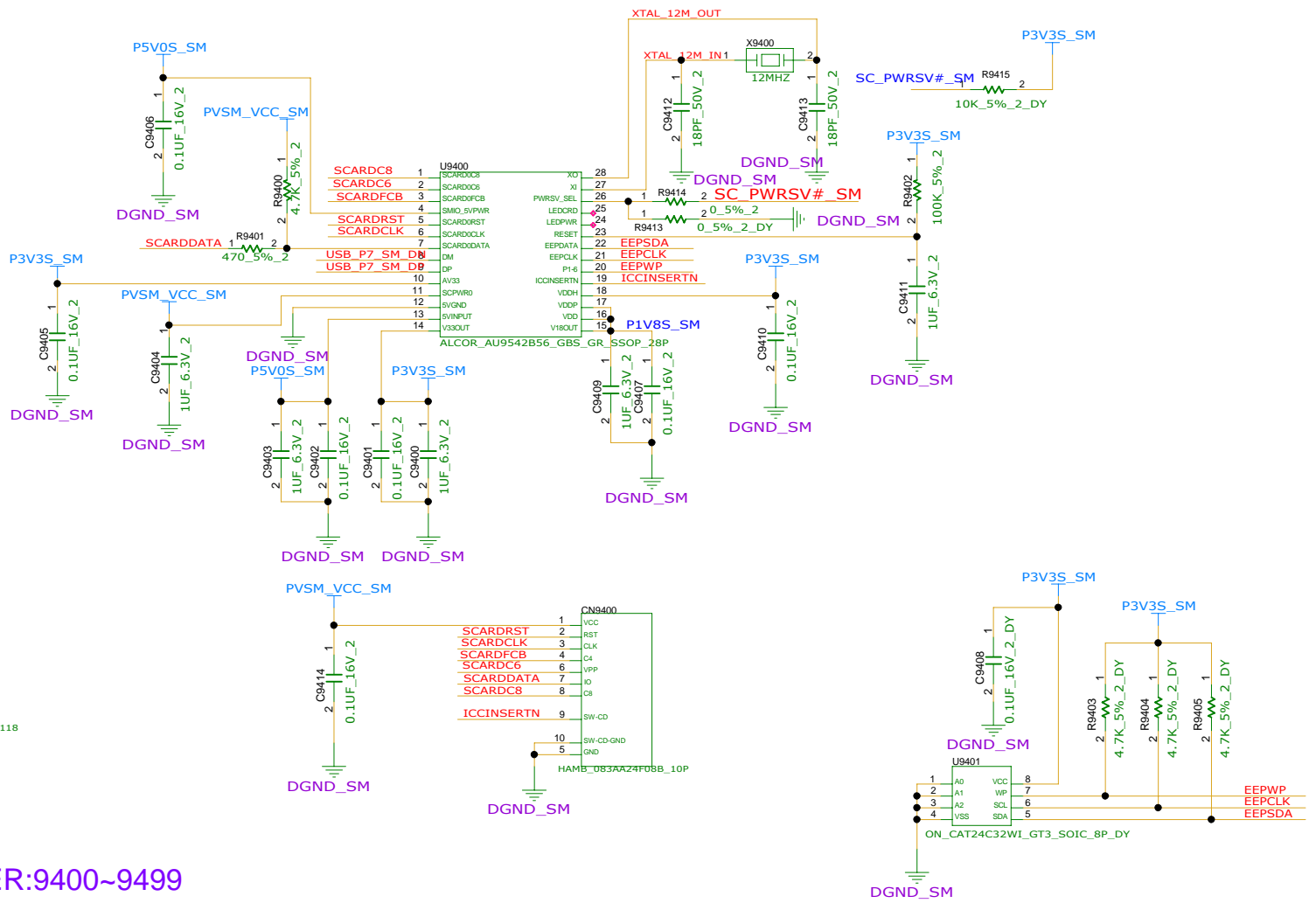


<b>INVENTEC</b>			
TITLE CLAVIN / DIS WIRELESS / QUICK WEB / MUTE LED			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
CHANGE by EDT_CHEN			DATE 23-APR-2012
SHEET 59 of 73			



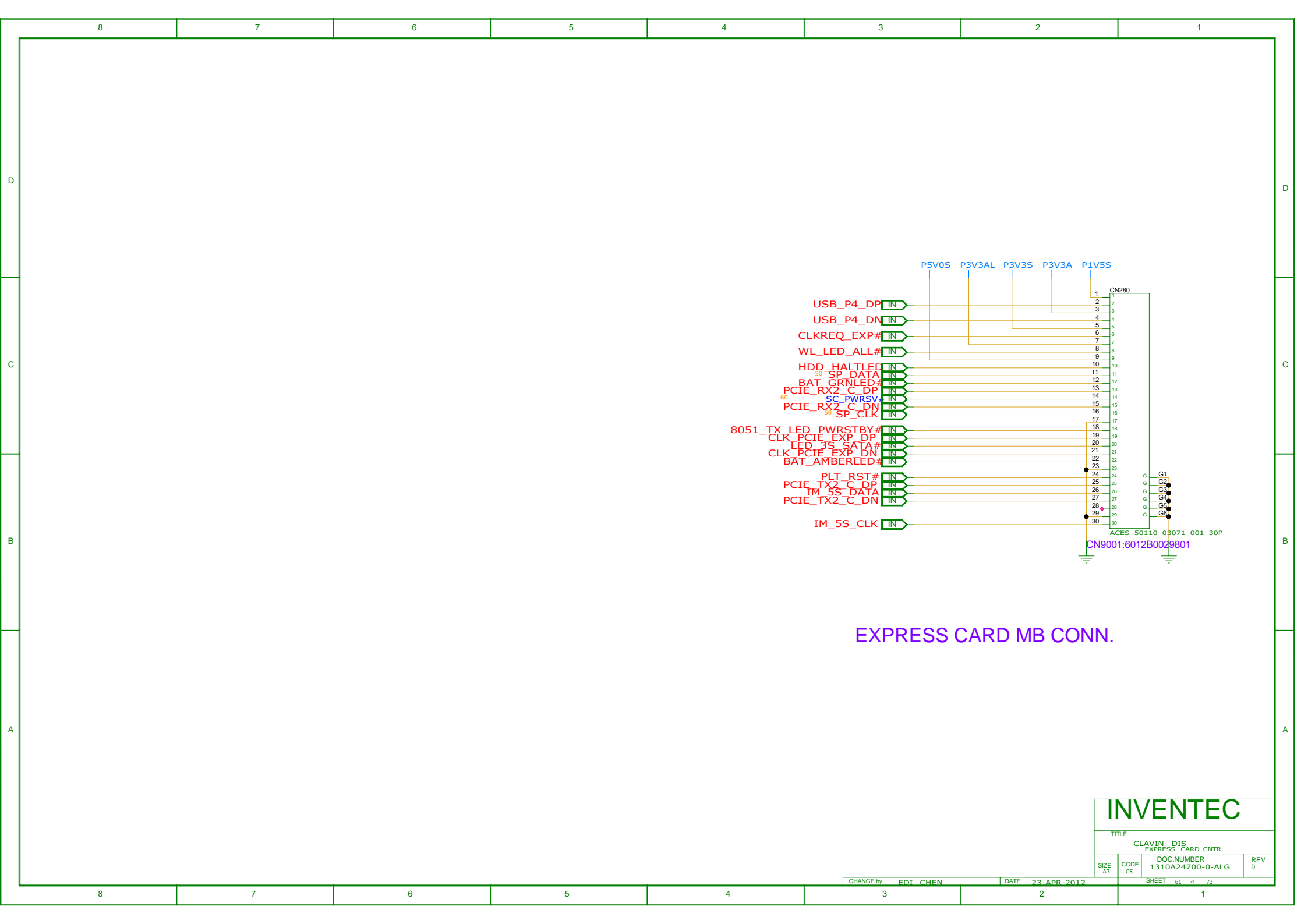
SMART CARD DB

REFERENCE NUMBER:9400~9499



SMART CARD MB CONN.

<b>INVENTEC</b>			
TITLE CLAVIN_DIS SMART_CARD			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D
CHANGE by EDT_CHEN		DATE 23-APR-2012	SHEET 60 of 73



EXPRESS CARD MB CONN.

**INVENTEC**

TITLE			
CLAVIN_DIS EXPRESS_CARD_CNTR			
SIZE A3		CODE CS	REV D
DOC NUMBER 1310A24700-0-ALG			

BLANK

<b>INVENTEC</b>			
TITLE			
CLAVIN DIS		BLANK	
DOC NUMBER		REV	
1310A24700-0-ALG	D		
SIZE A3	CODE CS	SHEET 62 of 73	

D

D

C

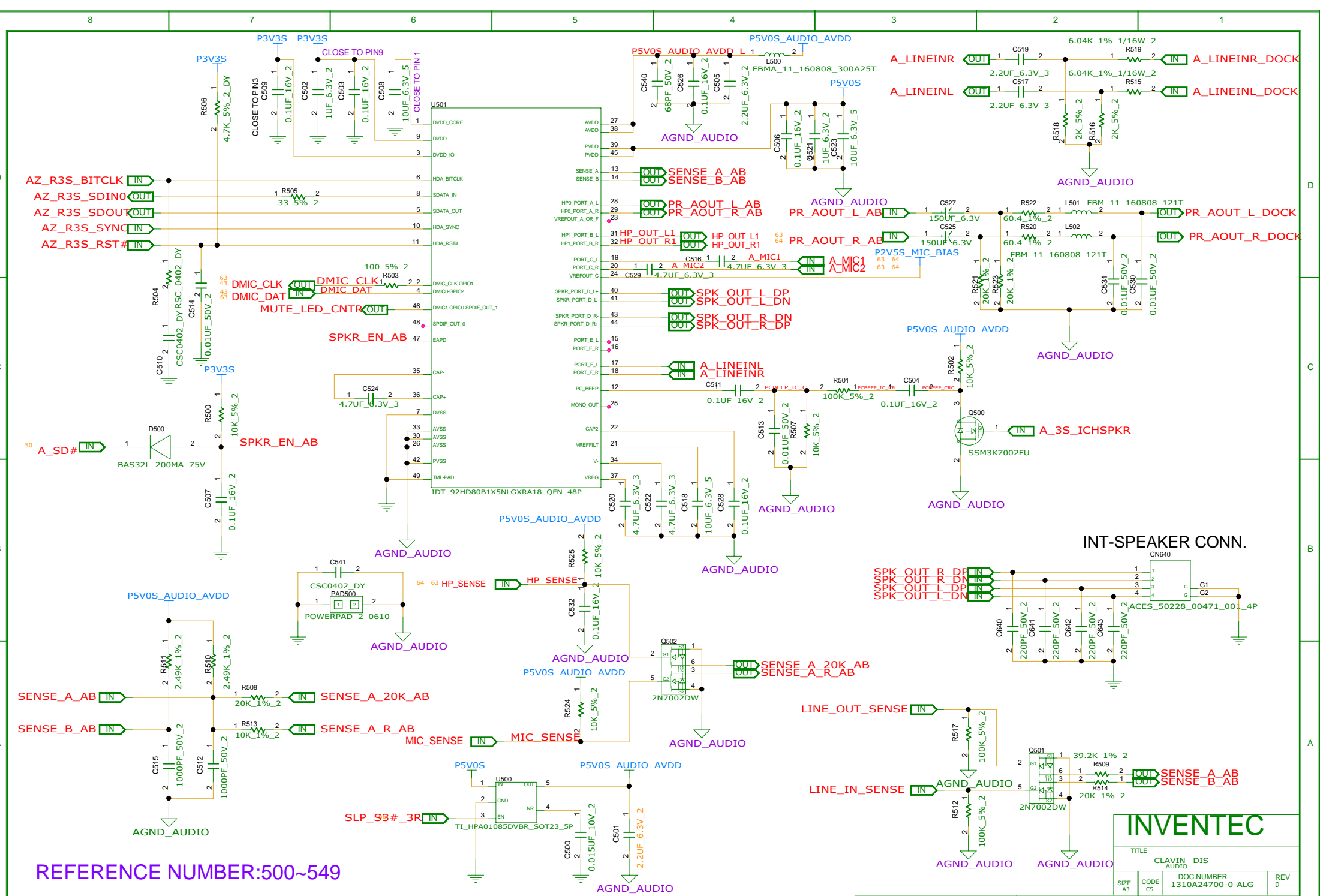
C

B

B

A

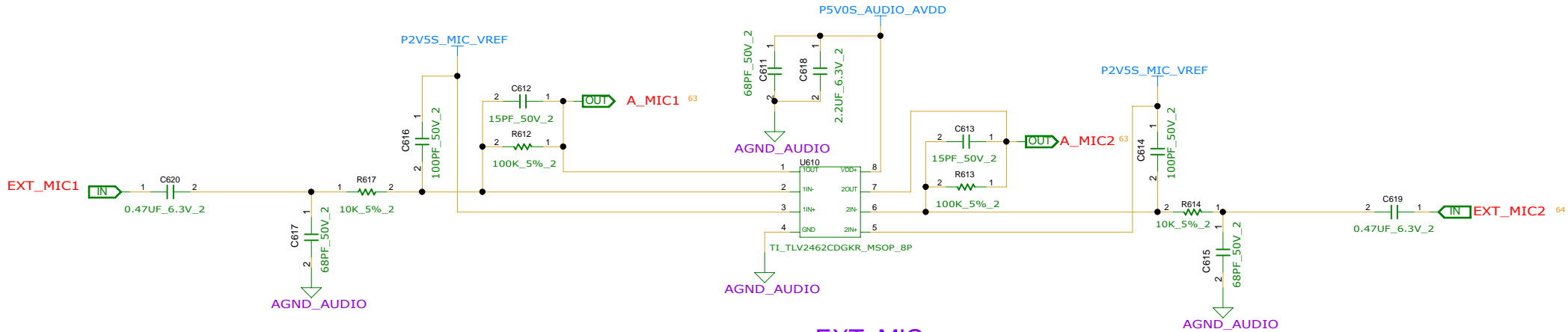
A



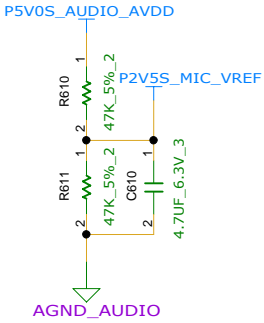
REFERENCE NUMBER:500~549

**INVENTEC**

TITLE			
CLAVIN DIS			
SIZE		DOC NUMBER	
A3	CS	1310A24700-0-ALG	
CODE		REV	
CS		D	
CHANGE by		DATE	
EDT_CHEN		23-APR-2012	
SHEET			63 of 73

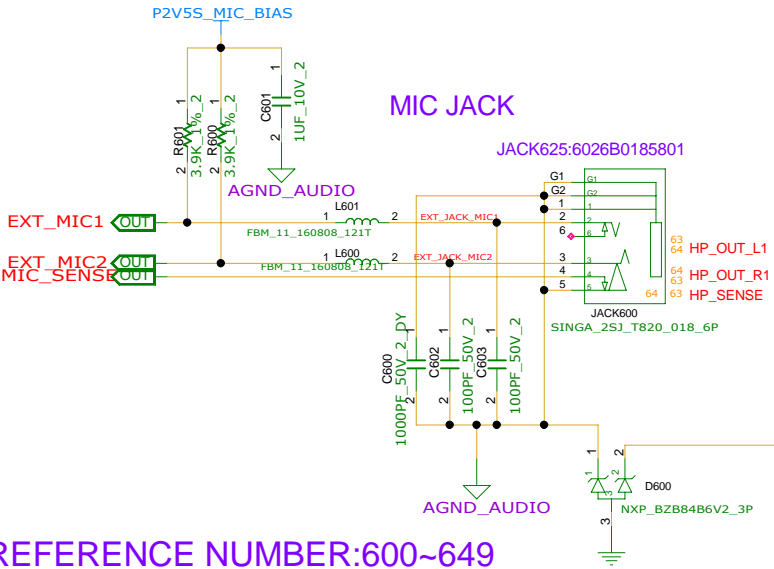


EXT. MIC  
REFERENCE NUMBER:610~624

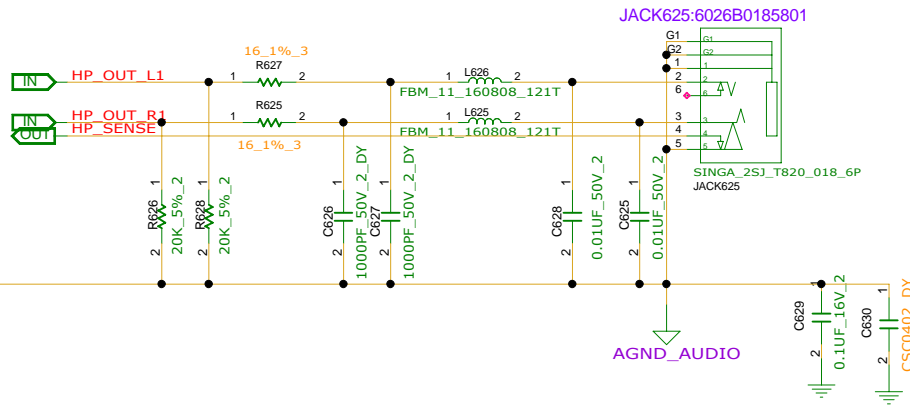


MIC JACK

EARPHONE JACK



REFERENCE NUMBER:600~649

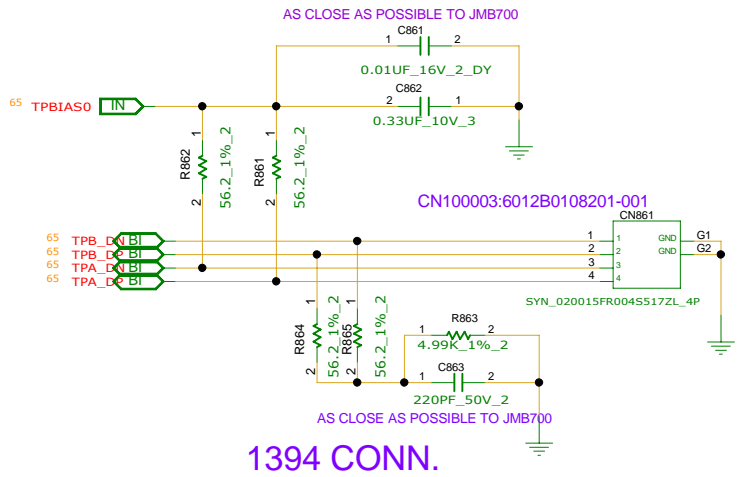
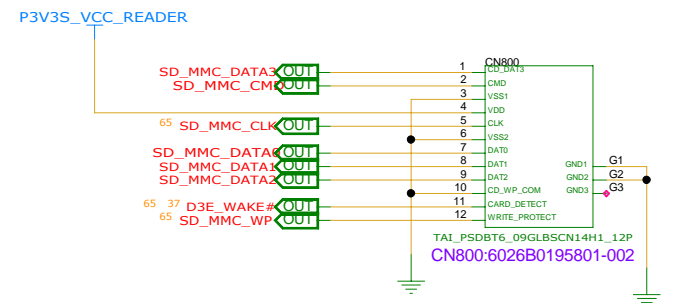
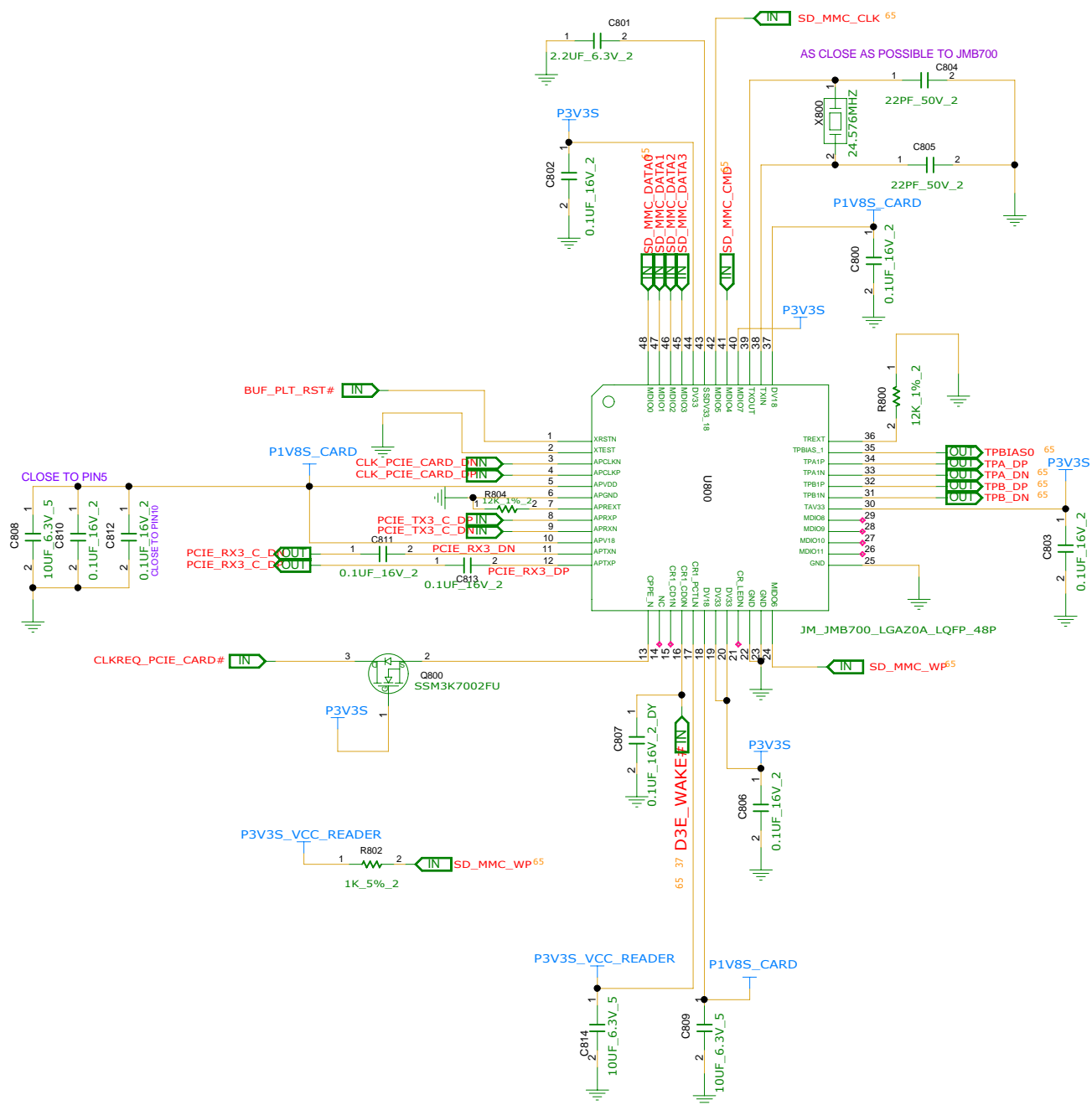


**INVENTEC**

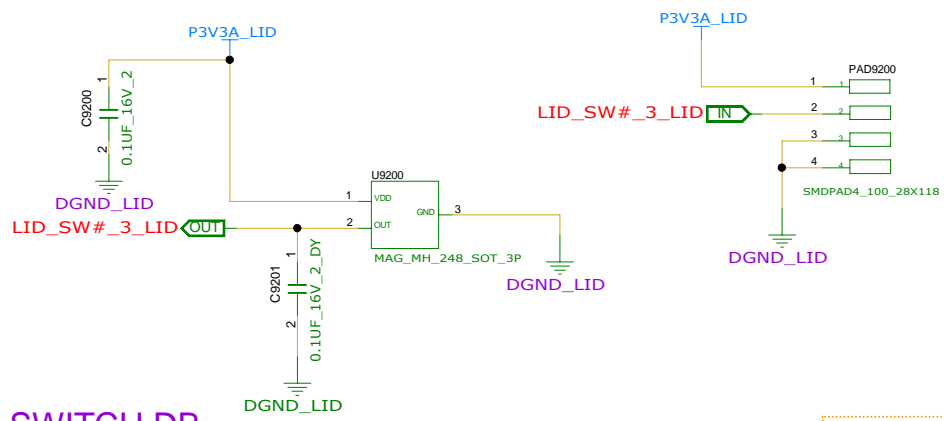
TITLE			
CLAVIN_DIS			
EXT_MIC / MIC / HP			
DOC NUMBER			
1310A24700-0-ALG			
SIZE	CODE	REV	D
A3	CS		



REFERENCE NUMBER:800~899

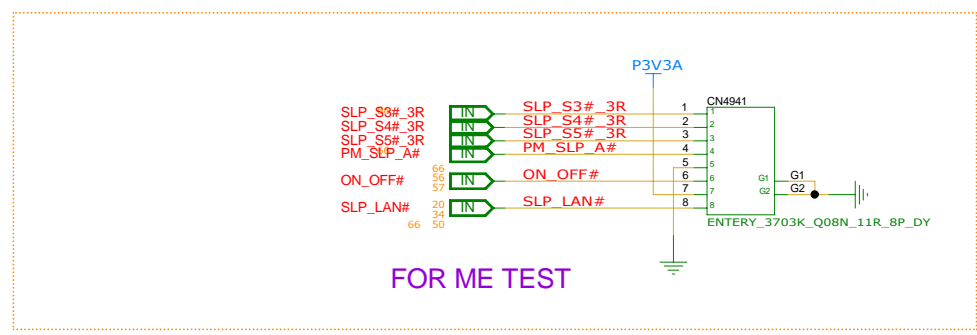


<b>INVENTEC</b>			
TITLE			
CARD READER CTRL / 1394 CONN / SD CONN			
DOC NUMBER			
1310A24700-0-ALG			
REV			
D			

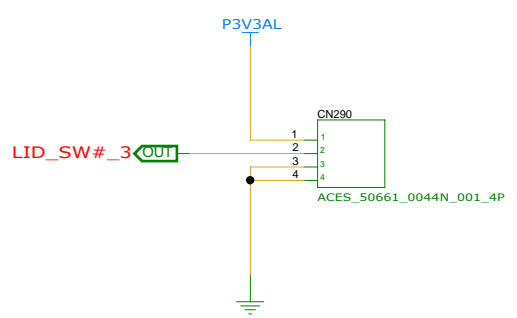


LID SWITCH DB

REFERENCE NUMBER:9200~9299



FOR ME TEST



LID SWITCH MB CONN.

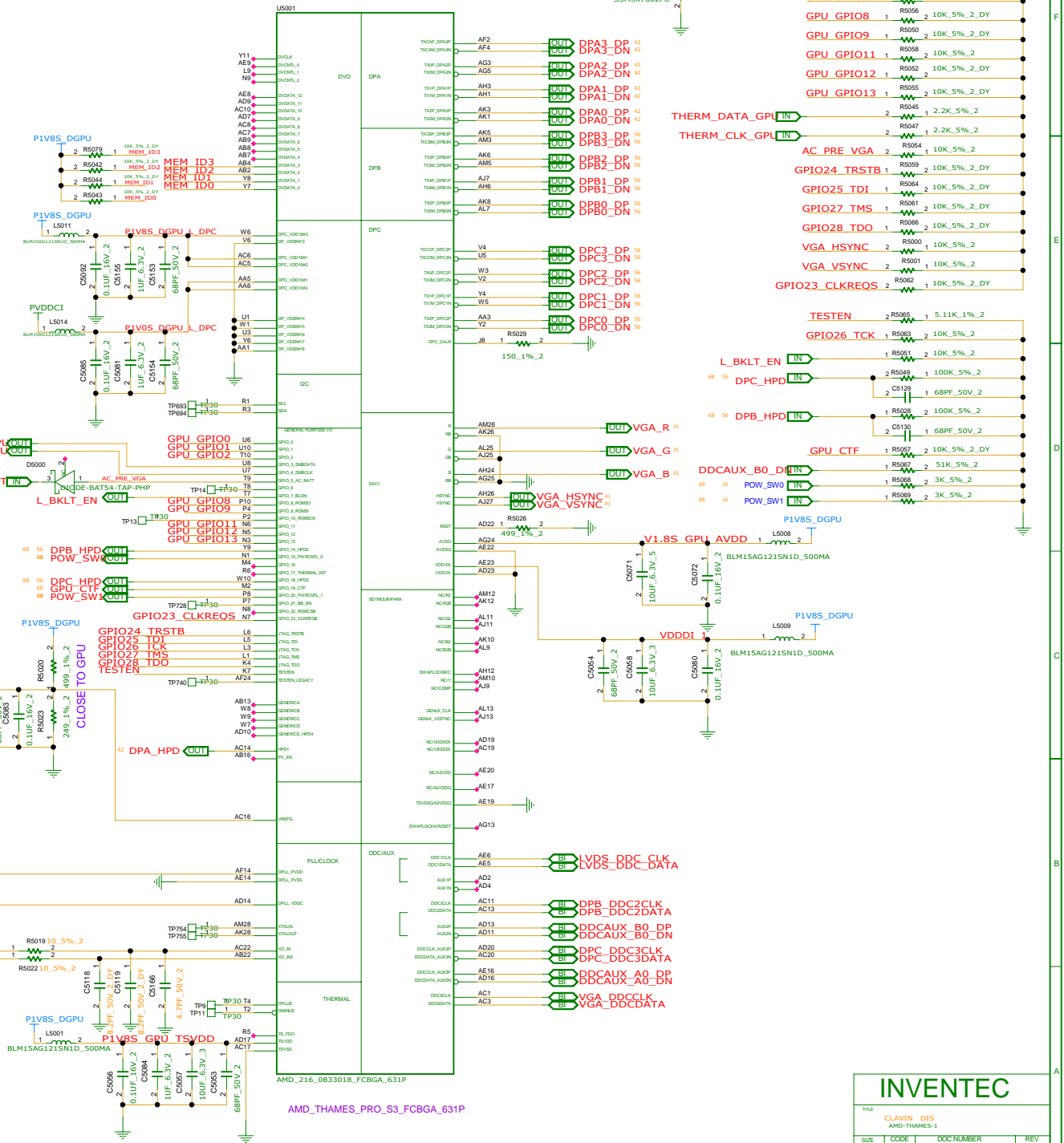
<b>INVENTEC</b>			
TITLE CLAVIN_DIS LID_SWITCH1			
SIZE A3	CODE CS	DOC NUMBER 1310A24700-0-ALG	REV D



STRAPS	PIN	DESCRIPTION FOR DEFAULT SETTING	
TX_PWRS_ENB	GPIO0	PCIe FULL TX OUTPUT SWING.	1
TX_DEEMPH_EN	GPIO1	PCIe transmitter de-emphasis enable.	1
BIF_DEBUG_ACCESS	GPIO4	Debug signals muxed out.	0
ROMIDCFG	GPIO[11:13,9]	Memory aperture type.	XXXX

GPIO_13	GPIO_12	GPIO_11	MEMORY APERTURE SIZE
0	0	1	512MB/256MB memory aperture. (Default)
1	1	0	Reserved

PCH GPIO34		MEM_ID1	MEM_ID0	VENDOR
R4725 (high)	R4940 (low)	R5044	R5043	
In	In	0	0	Hynix Vega die H5GQ2H24MFR-T2C (128Mx16=1G)
In	In	0	1	Samsung C die K4G20325FC-HC04
In	In	1	0	N/A
In	In	1	1	Samsung D die
In	In	0	0	Elpida B die EDW2032BBBG-50F
In	In	0	1	Reserved
In	In	1	0	Hynix Gemina die H6GQ2H24AFR-T2C
In	In	1	1	N/A

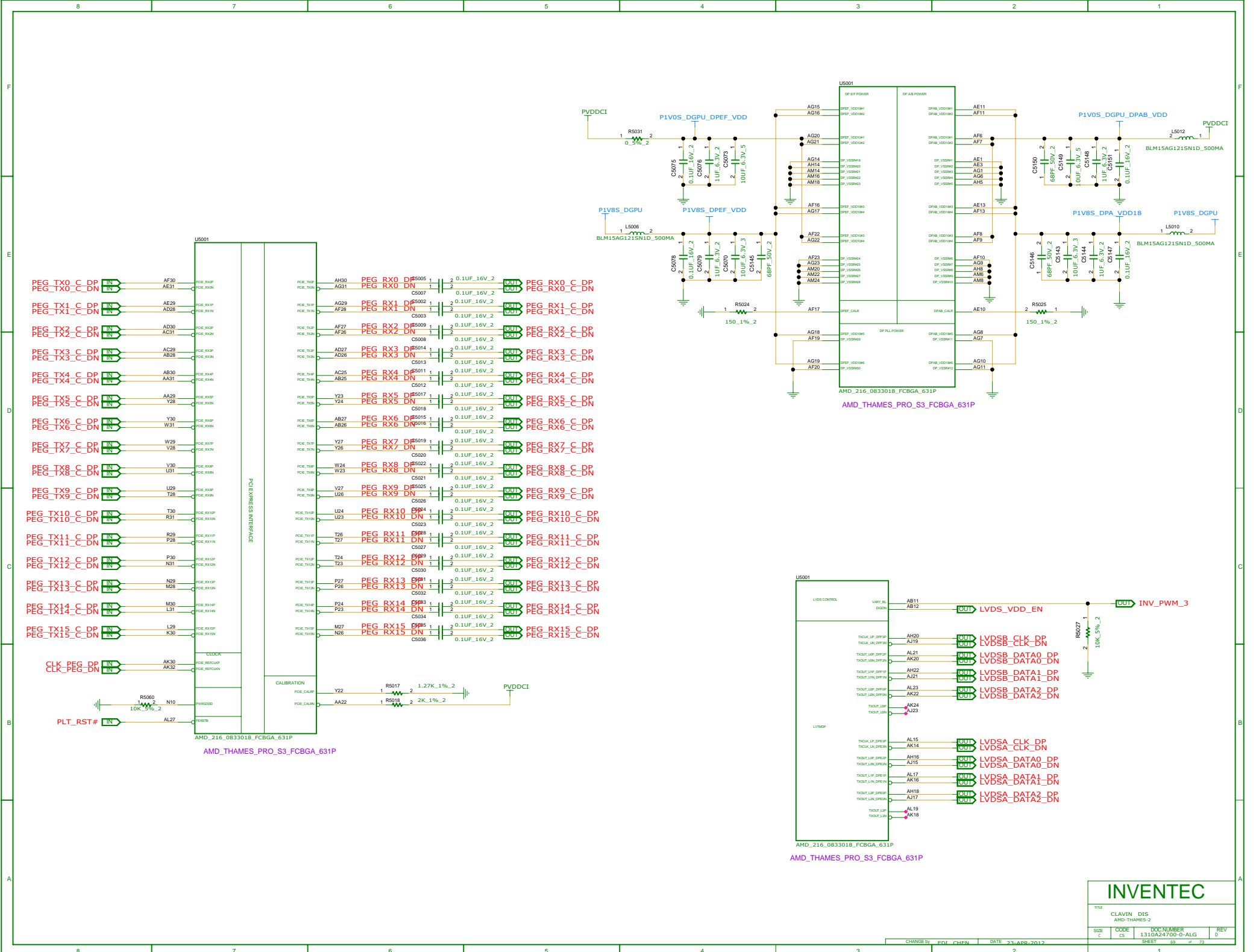


**INVENTEC**

TITLE: CLAVIN\_DIS  
AMD-THAMES-1

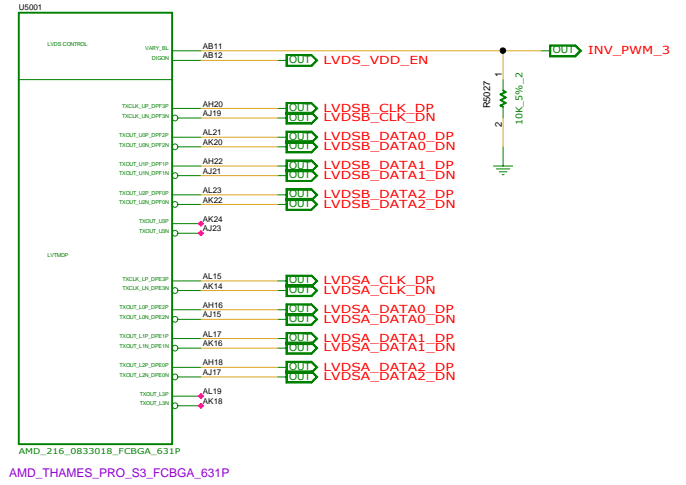
SIZE: C CODE: 13110A24700-0-ALG REV: 1

SHEET: 88 OF 91



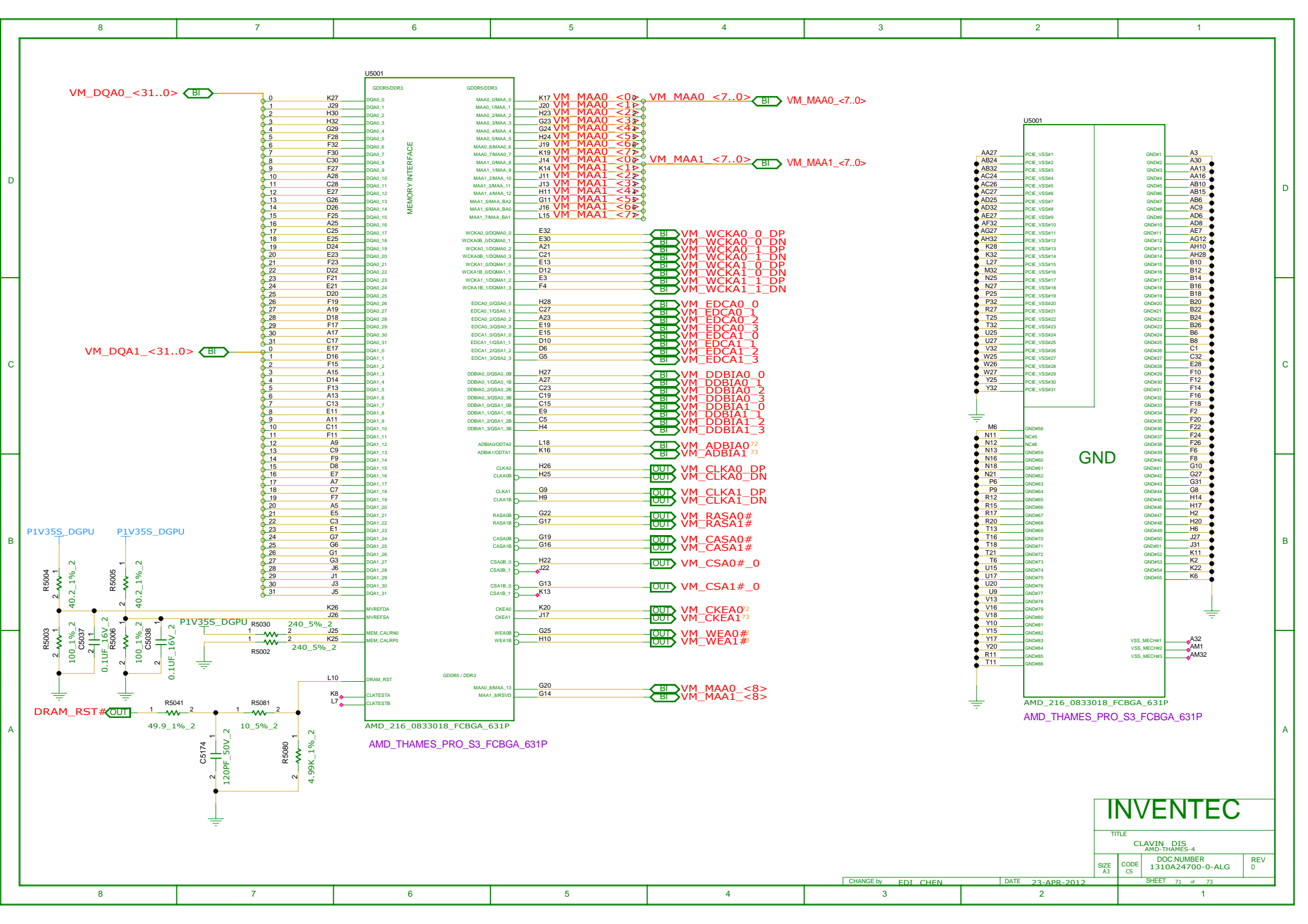
Signal	Pin	Function	Value	Notes
PEG TX0_C DP	AF30	PCE_RX0P		
PEG TX0_C DN	AE31	PCE_RX0N		
PEG TX1_C DP	AE29	PCE_RX1P		
PEG TX1_C DN	AD28	PCE_RX1N		
PEG TX2_C DP	AD30	PCE_RX2P		
PEG TX2_C DN	AC29	PCE_RX2N		
PEG TX3_C DP	AC29	PCE_RX3P		
PEG TX3_C DN	AB28	PCE_RX3N		
PEG TX4_C DP	AB30	PCE_RX4P		
PEG TX4_C DN	AA31	PCE_RX4N		
PEG TX5_C DP	AA29	PCE_RX5P		
PEG TX5_C DN	Y28	PCE_RX5N		
PEG TX6_C DP	Y30	PCE_RX6P		
PEG TX6_C DN	W31	PCE_RX6N		
PEG TX7_C DP	W29	PCE_RX7P		
PEG TX7_C DN	Y28	PCE_RX7N		
PEG TX8_C DP	V30	PCE_RX8P		
PEG TX8_C DN	U31	PCE_RX8N		
PEG TX9_C DP	U29	PCE_RX9P		
PEG TX9_C DN	T28	PCE_RX9N		
PEG TX10_C DP	T30	PCE_RX10P		
PEG TX10_C DN	R31	PCE_RX10N		
PEG TX11_C DP	R29	PCE_RX11P		
PEG TX11_C DN	P28	PCE_RX11N		
PEG TX12_C DP	P30	PCE_RX12P		
PEG TX12_C DN	N31	PCE_RX12N		
PEG TX13_C DP	N29	PCE_RX13P		
PEG TX13_C DN	M28	PCE_RX13N		
PEG TX14_C DP	M30	PCE_RX14P		
PEG TX14_C DN	L31	PCE_RX14N		
PEG TX15_C DP	L29	PCE_RX15P		
PEG TX15_C DN	K30	PCE_RX15N		
CLK_PEG_DP	AK30	CLOCK		
CLK_PEG_DN	AK32	PCE_REFCLKUP		
		PCE_REFCLKDN		
PLT_RST#	AL27	PERSTB		
Y22	R5017	POE_CALMP	1.27K_1%_2	
AA22	R5016	POE_CALIN	2K_1%_2	

AMD\_216\_0833018\_FCBGA\_631P  
AMD\_THAMES\_PRO\_S3\_FCBGA\_631P



AMD\_216\_0833018\_FCBGA\_631P  
AMD\_THAMES\_PRO\_S3\_FCBGA\_631P





**INVENTEC**

TITLE  
CLAVIN\_D1S  
AMD\_THAMES-4

SIZE A3	CODE CS	DOCNUMBER 1310A24700-0-ALG	REV D
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