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HSF Property: ROHS or Halogen-Free(5L3?)

CALVIN UMA
SI BUILD

2011.07.01

01 JUL 2011		
DATE	CHANGE NO.	REV

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	EE	DATE	POWER	DATE	INVENTEC			
DRAWER								
DESIGN								
CHECK								
RESPONSIBLE								
SIZE:				VER:	SIZE	CODE	DOC NUMBER	REV
FILE NAME					2	CS	1310KXXXX-0-0	AK1
PIN					SHEET			

TABLE OF CONTENTS

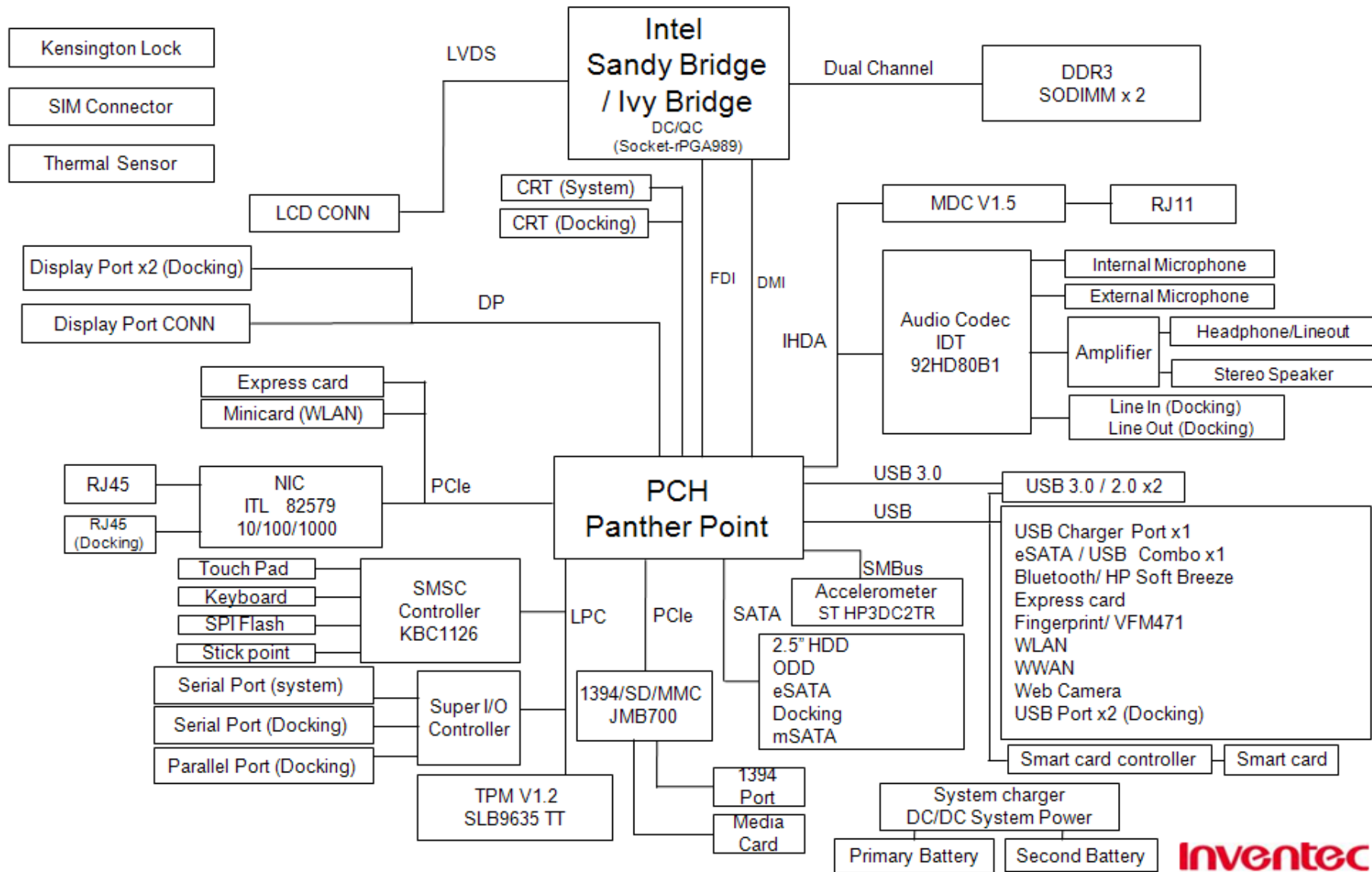
1. PROJECT NAME	23. IVY BRIDGE_1 (CLK,MISC,JTAG)	
2. TABLE OF CONTENTS	24. IVY BRIDGE_2 (POWER)	
3. BLOCK DIAGRAM	25. IVY BRIDGE_3 (DMI,DP,PEG,FDI)	
4. SYSTEM POWER(CHARGER)	26. IVY BRIDGE_4 (DDR3)	47. BLUE TOOTH & FINGER PRINTER CNTR
5. SYSTEM POWER(BATT SELECTOR)	27. IVY BRIDGE_5 (GRAPHICS POWER)	48. ACCELEMETOR
6. SYSTEM POWER(OCP)	28. IVY BRIDGE_6 (GND,RESERVED)	49. KBC & SPI
7. SYSTEM POWER(P3V3A&P5V0A)	29. DDR3_SO-DIMM0	50. KEYBOARD
8. P3V3A&P5V0A_CHG PORT	30. DDR3_SO-DIMM1	51. SUPER I/O
9. SYSTEM POWER(P1V5)	31. PANTER POINT_1 (HDA,JTAG,SPI,SATA)	52. TPM & MDC
10. SYSTEM POWER(P1V05_LAN_M)	32. PANTER POINT_2 (PCI-E,SMBUS,CLK)	53. LAN (NIC,TRANSFORMER,RJ45)
11. SYSTEM POWER(P1V0S_VCCP)	33. PANTER POINT_3 (DMI,FDI,GPIO)	54. WWAN & WLAN & SIM
12. SYSTEM POWER(P1V8S)	34. PANTER POINT_4 (LVDS,DDI)	55. DOCKING CNTR
13. SYSTEM POWER(PVSA)	35. PANTER POINT_5 (PCI,USB,NVRAM)	56. POWER & WLAN_LED
14. SYSTEM POWER(PVCORE&PVAXG-1)	36. PANTER POINT_6 (GPIO,VSS_NCFT,RSVD)	57. SCREW
15. SYSTEM POWER(PVCORE&PVAXG-2)	37. PANTER POINT_7 (POWER)	58. WIRELESS / QUICK WEB / MUTE LED
16. PVCORE_DGPU (SPARE)	38. PANTER POINT_8 (POWER)	59. SMART CARD
17. P1V35S_DGPU (SPARE)	39. PANTER POINT_9 (GND)	60. EXPRESS CARD CONN
18. HP_OCP	40. VGA SWITCH / CRT	61. EXPRESS CARD/POINT STICH/TOUCH PAD(SPARE)
19. POWER(SLEEP)	41. DISPLAY PORT CNTR	62. AUDIO
20. POWER(SEQUENCE)	42. LCM & WEBCAM	63. EXT. MIC / MIC / HP
21.FAN & THERMAL	43. EDP TO LVDS (SPARE)	64. CARD READER CTRL/1394 CONN/SD CONN
22. XDP CONN	44. SATA HDD & ODD CNTR	65. LID SWITCH
	45. USB & ESATA COMBO / USB CHARGER	66. RF SOLUTION
	46. USB CONN	

INVENTEC

TITLE			
CALVIN_UMA_S1 TABLE OF CONTENTS			
SIZE A3	CODE CS	DOC NUMBER 1310xxxx-0-0	REV X01
SHEET 2 of 95			

CHANGE by: **XXX** DATE: **06_MAR_2011**

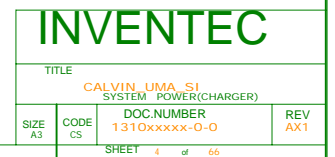
CALVIN UMA Block Diagram

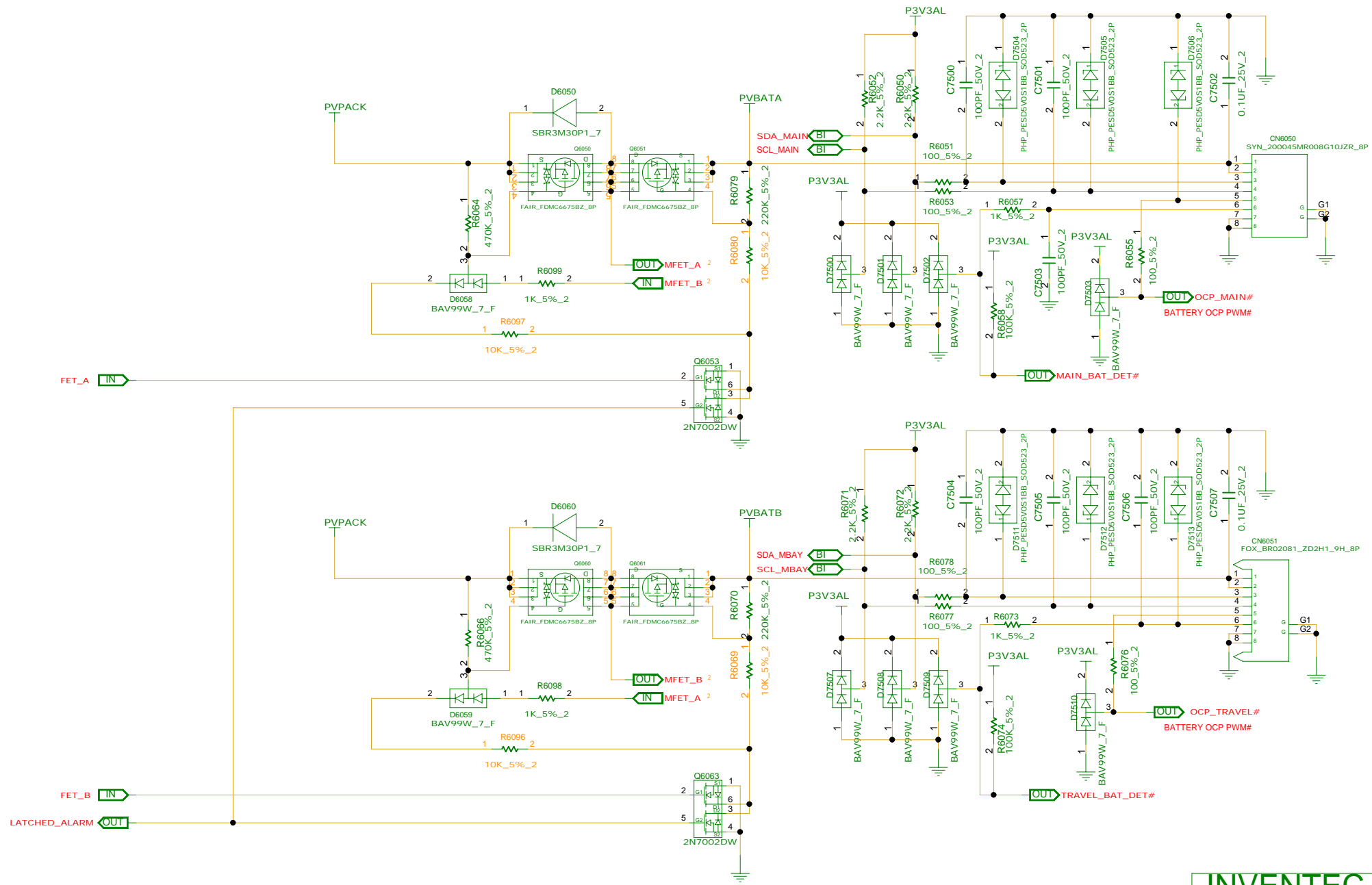


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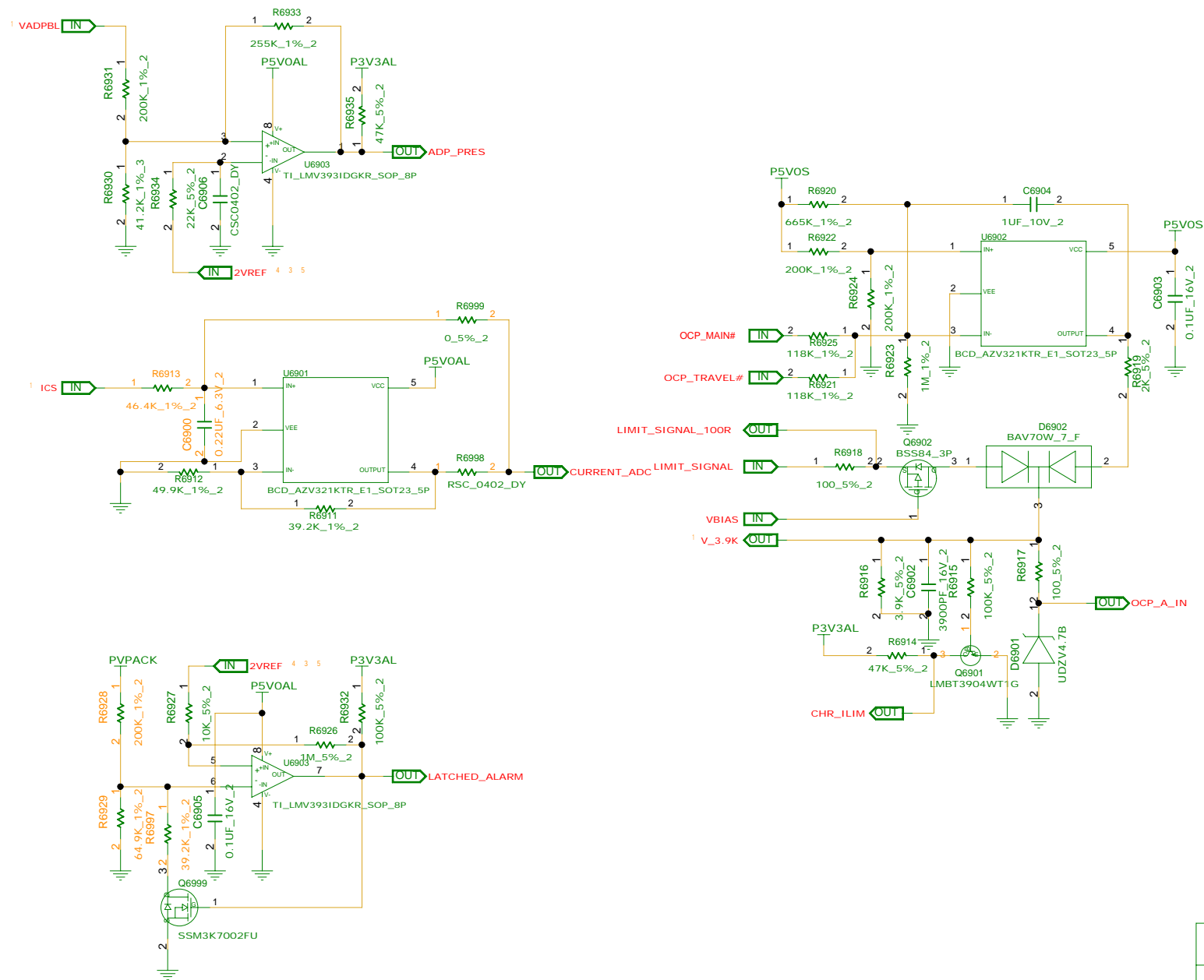
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CALVIN_UMA_S1 BLOCK DIAGRAM			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1





INVENTEC

TITLE			
CALVIN_UMA_S1 SYSTEM POWER(BATT_SELECTOR)			
DOC NUMBER			
1310xxxxx-0-0			
SIZE	CODE	REV	
A3	CS	AX1	



INVENTEC

TITLE
CALVIN_UMA_S1
SYSTEM_POWER(OCP)

DOC NUMBER
1310xxxxx-0-0

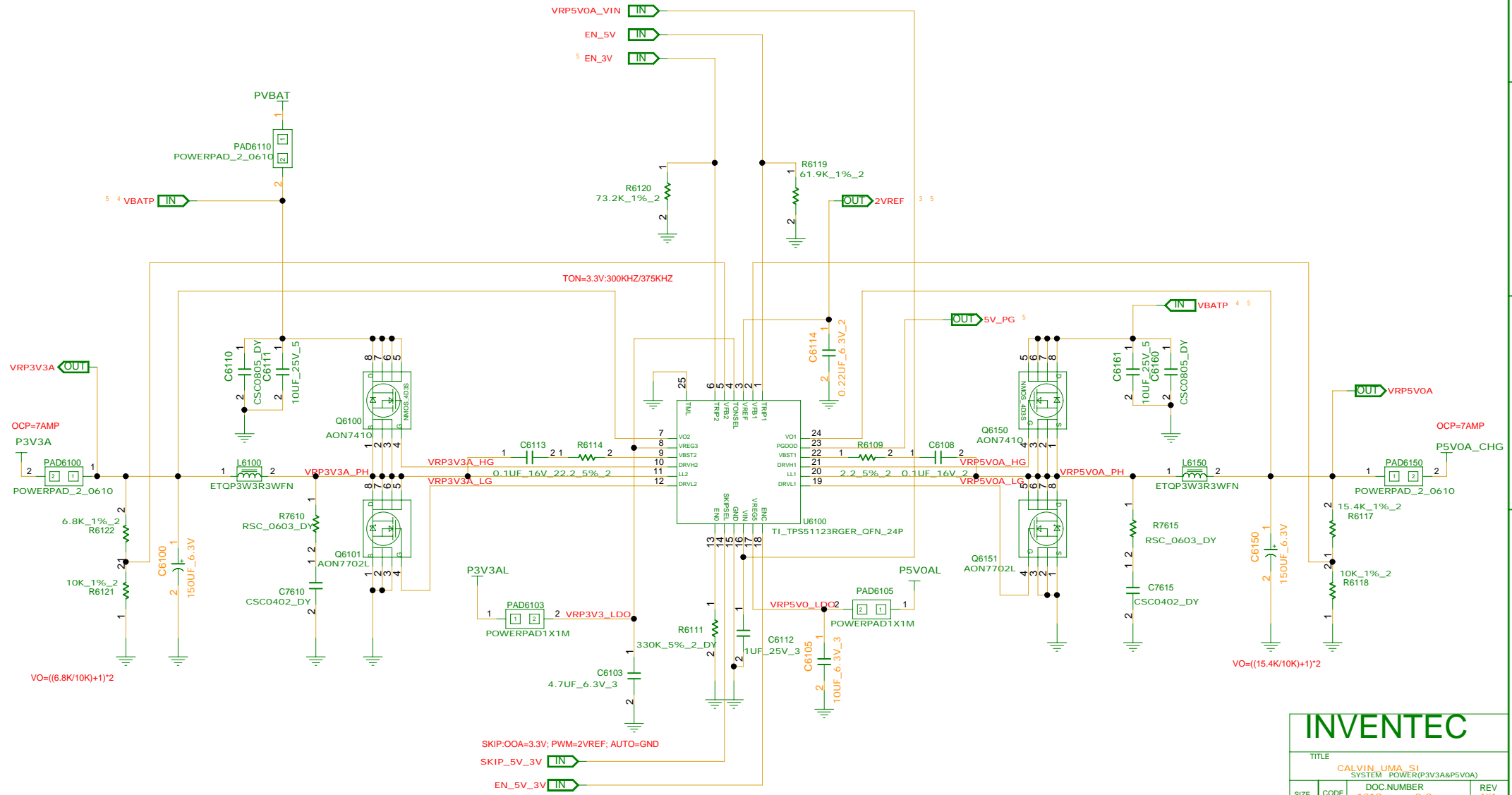
REV
AX1

SIZE
A3

CODE
CS

SHEET
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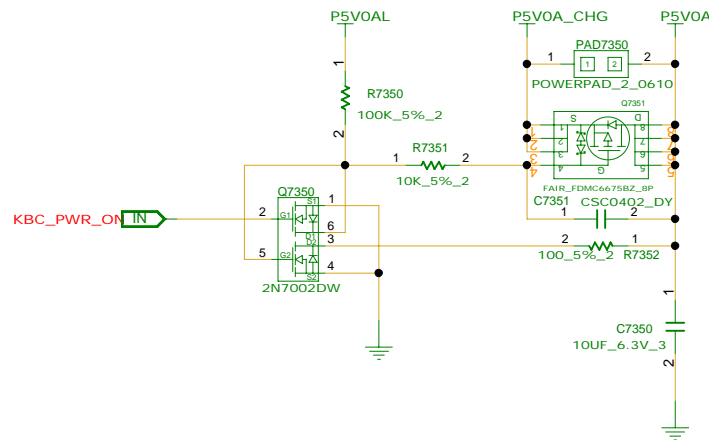
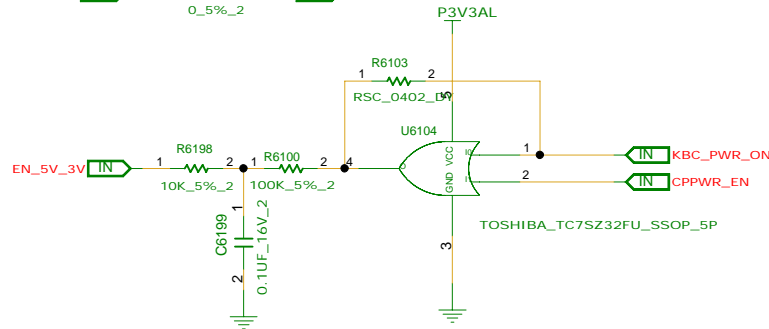
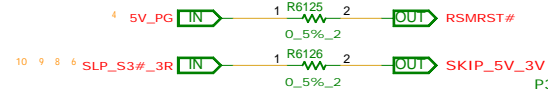
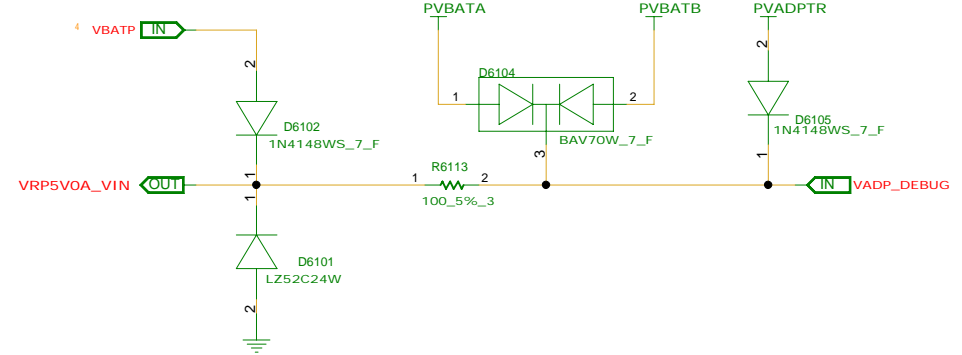
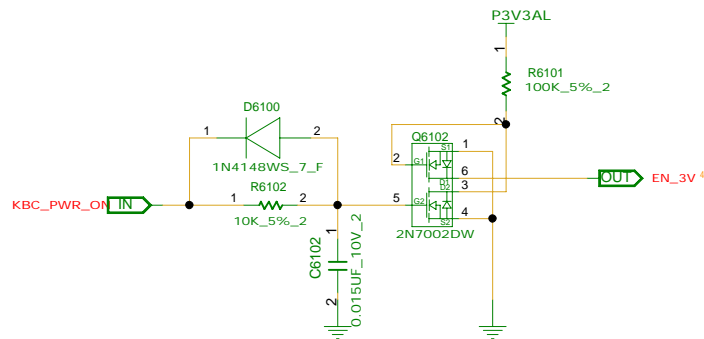
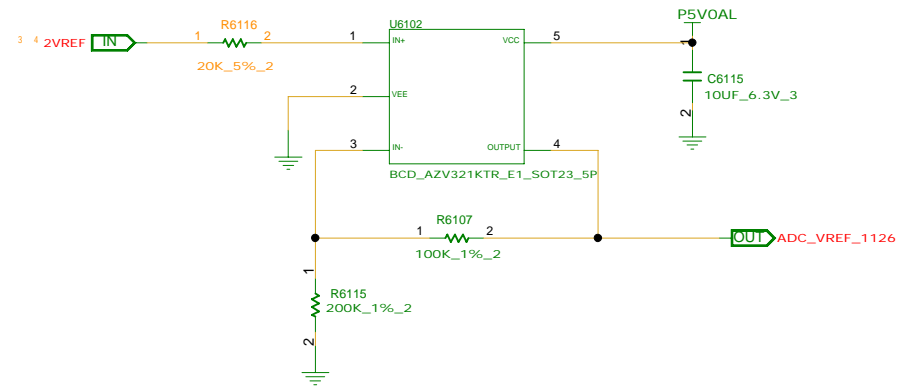
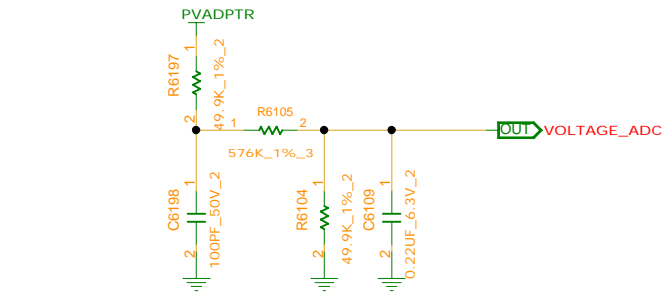
CHANGE by Edl DATE 01-JUL-2011



INVENTEC

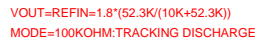
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SYSTEM_POWER(P3V3A&P5VOA)			
DOC:NUMBER			
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REV			
AX1			
SIZE	CODE	SHEET	
A3	CS	7 of 66	

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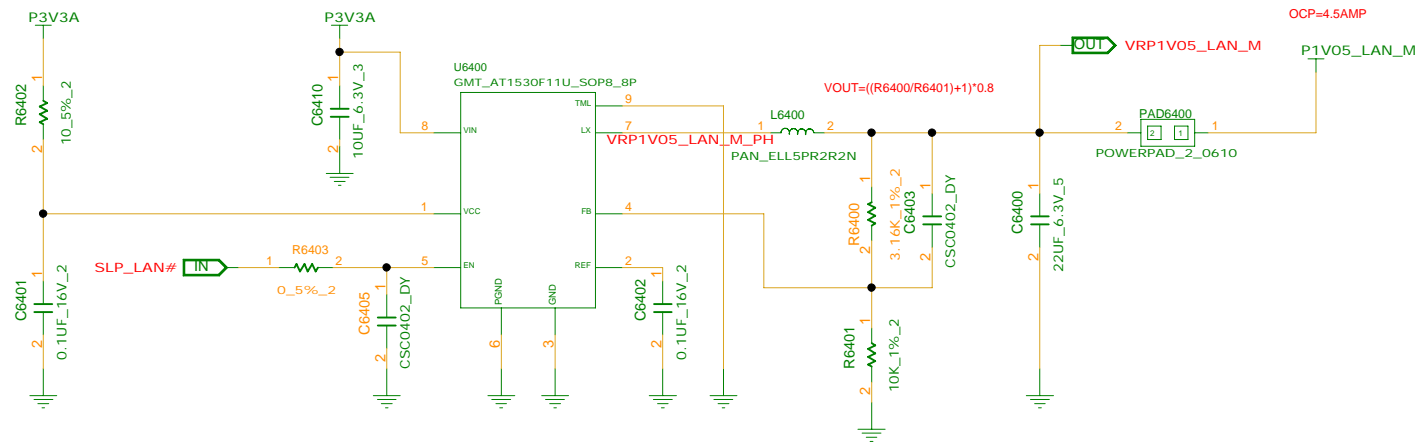
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CALVIN_UMA_S1			
P3V3A&P5V0A_CHG PORT			
DOC NUMBER			
1310xxxxx-0-0			
REV			
AX1			
SIZE	CODE	SHEET	
A3	CS	8 of 66	



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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INVENTEC

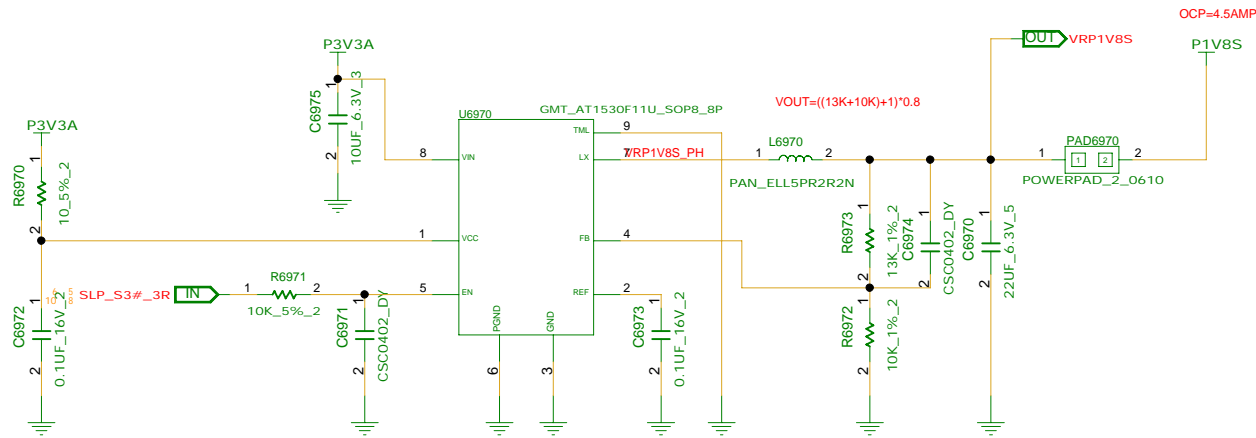
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SYSTEM_POWER(P1V05_LAN_M)

DOC NUMBER
1310xxxxx-0-0

REV
AX1

CHANGE by: Fdi DATE: 01-JUL-2011

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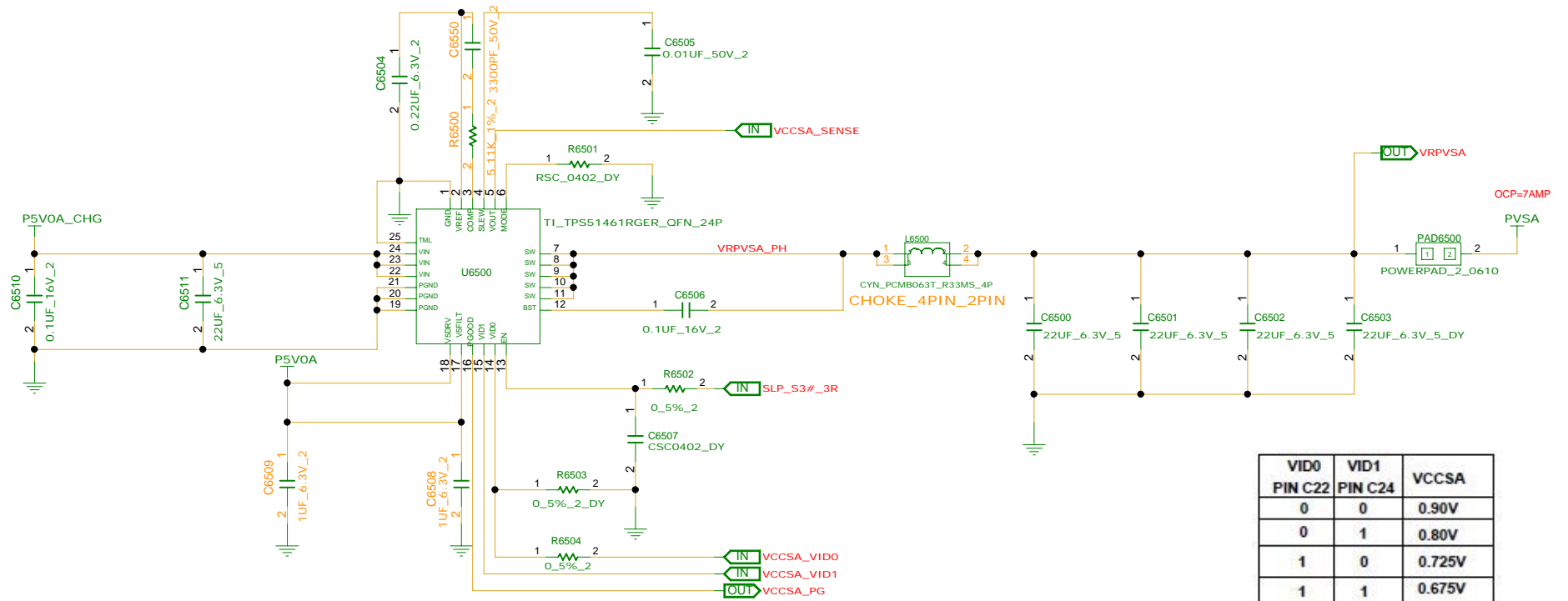


INVENTEC

TITLE			
CALVIN_UMA_S1 SYSTEM POWER(P1V8S)			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1

CHANGE by Edl DATE 01-JUL-2011

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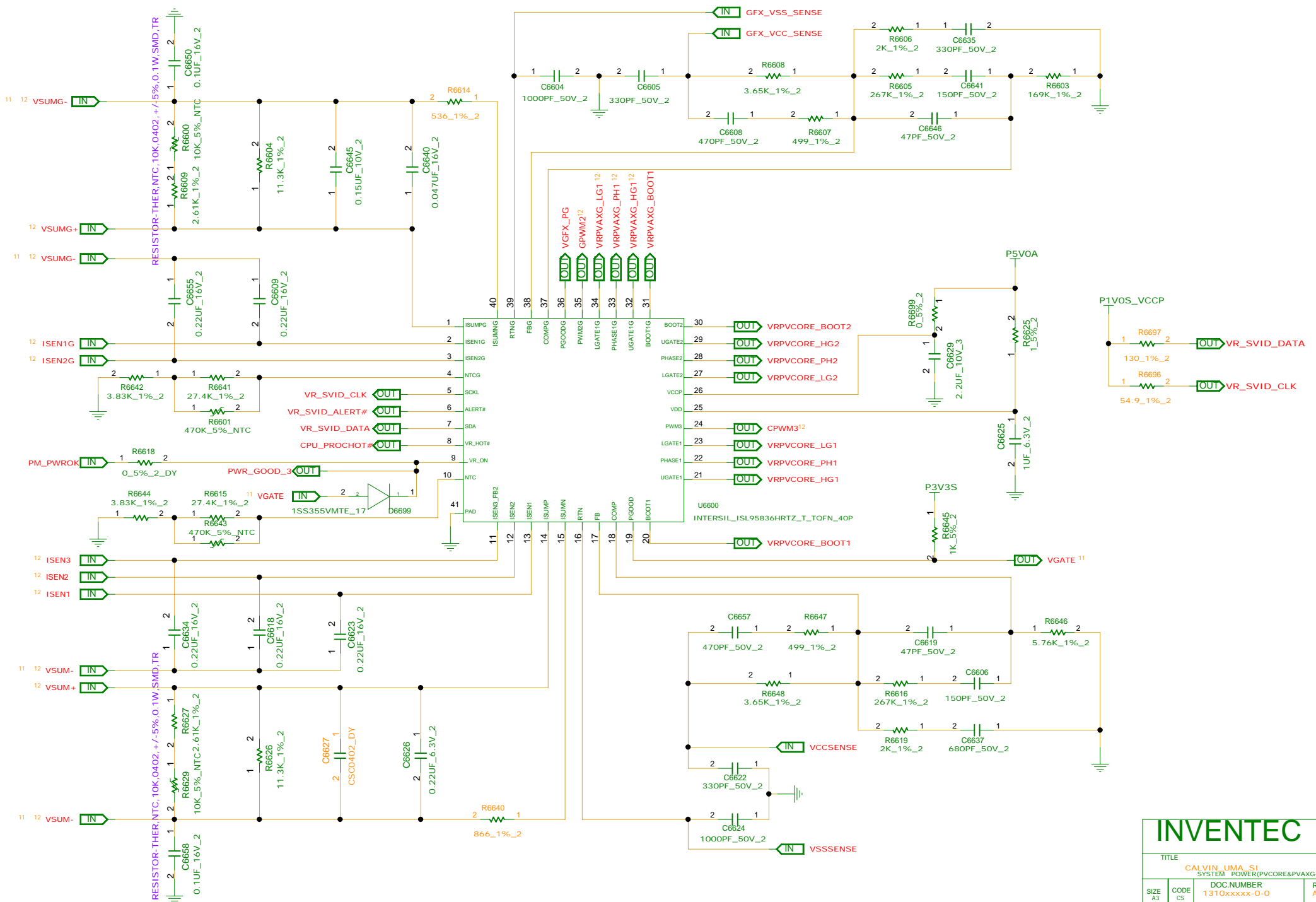
INVENTEC

TITLE
CALVIN_UMA_S1
SYSTEM_POWER(PVSA)

SIZE A3 CODE CS DOC NUMBER 1310xxxxx-0-0 REV AX1

CHANGE by Edl DATE 01-JUL-2011

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EMPTY

INVENTEC

TITLE
CALVIN_UMA_01
PVCORE_DGPU (SPARE)

SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1
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CHANGE by Edi	DATE 01-JUL-2011
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EMPTY

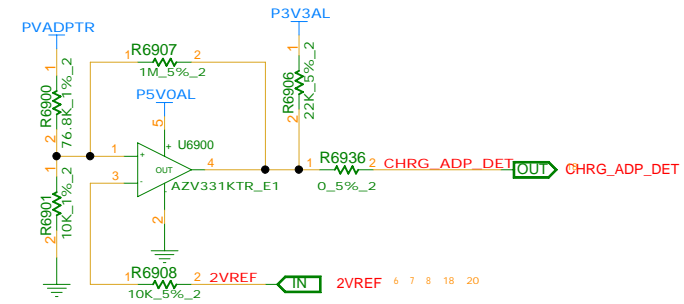
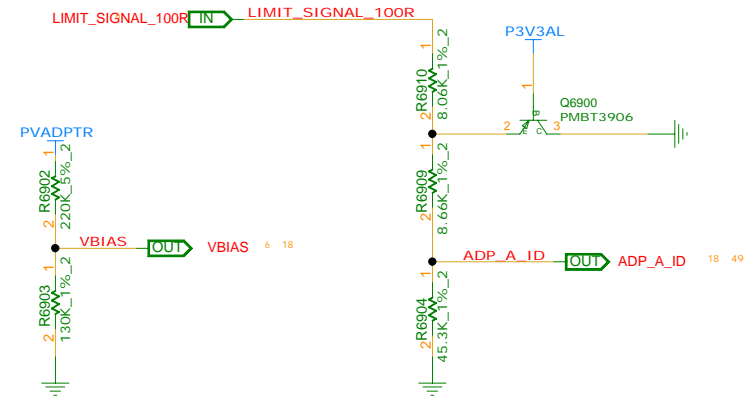
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TITLE
CALVIN_UMA_S1
PIV355_DGPU (SPARE)

SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1
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CHANGE by Edi	DATE 01-JUL-2011	SHEET 17 of 66
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REFERENCE NUMBER : 6900~6999



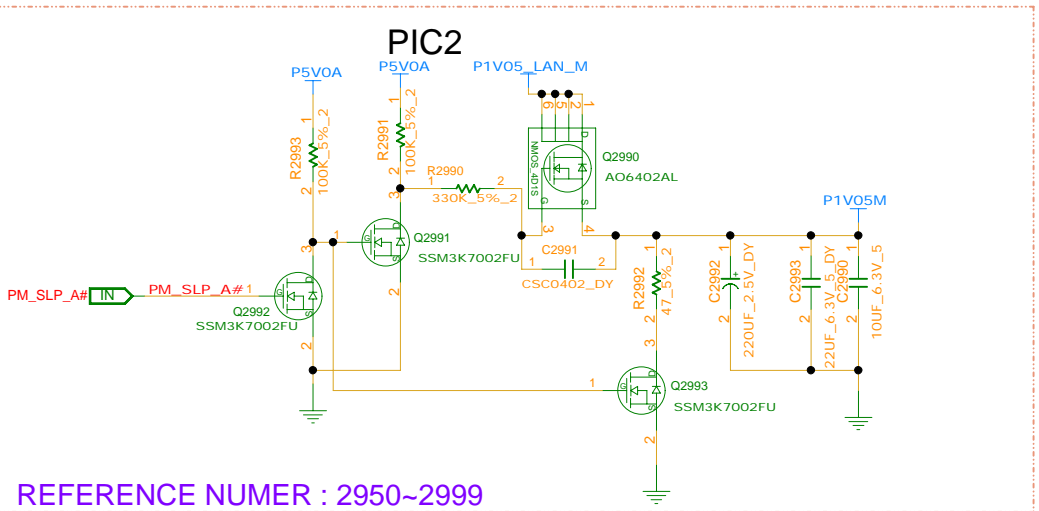
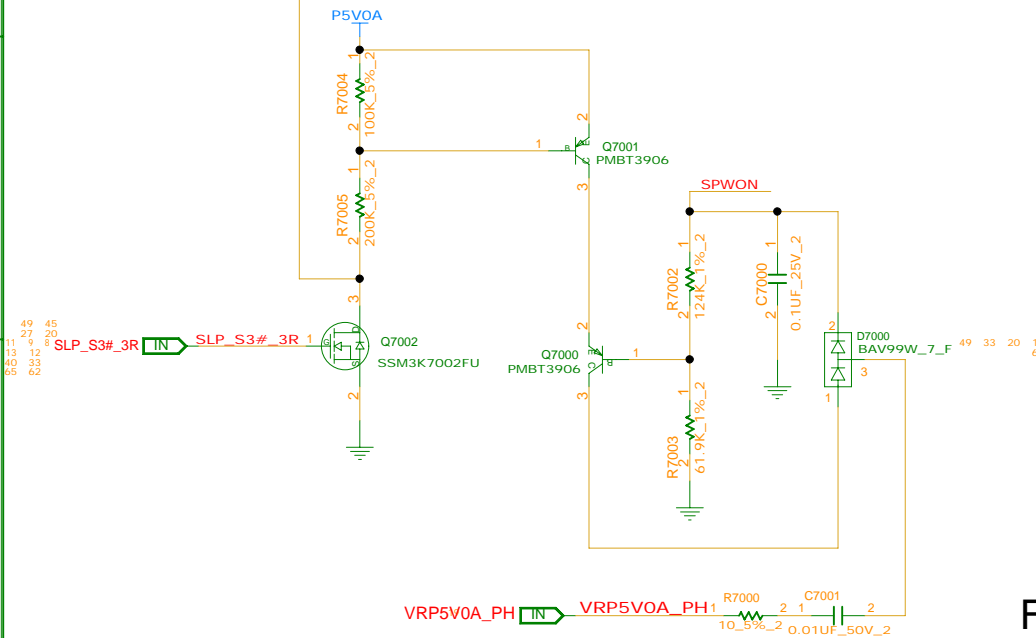
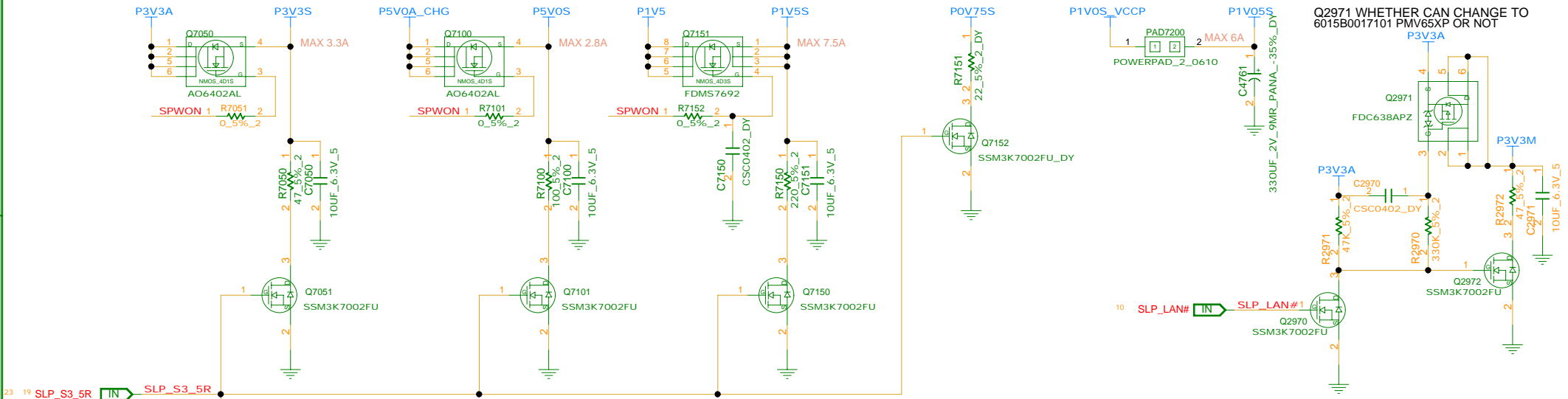
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TITLE			
CALVIN_UMA_SI			
HP_OCP			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1

CHANGE by Edd DATE 01-JUL-2011

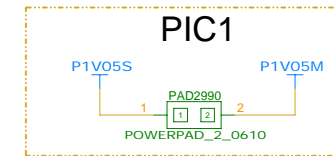
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REFERENCE NUMER : 7000~7350



FOR IAMT

	PIC1	PIC2
NON-AMT	INSTALL	UN-INSTALL
I-AMT	UN-INSTALL	INSTALL



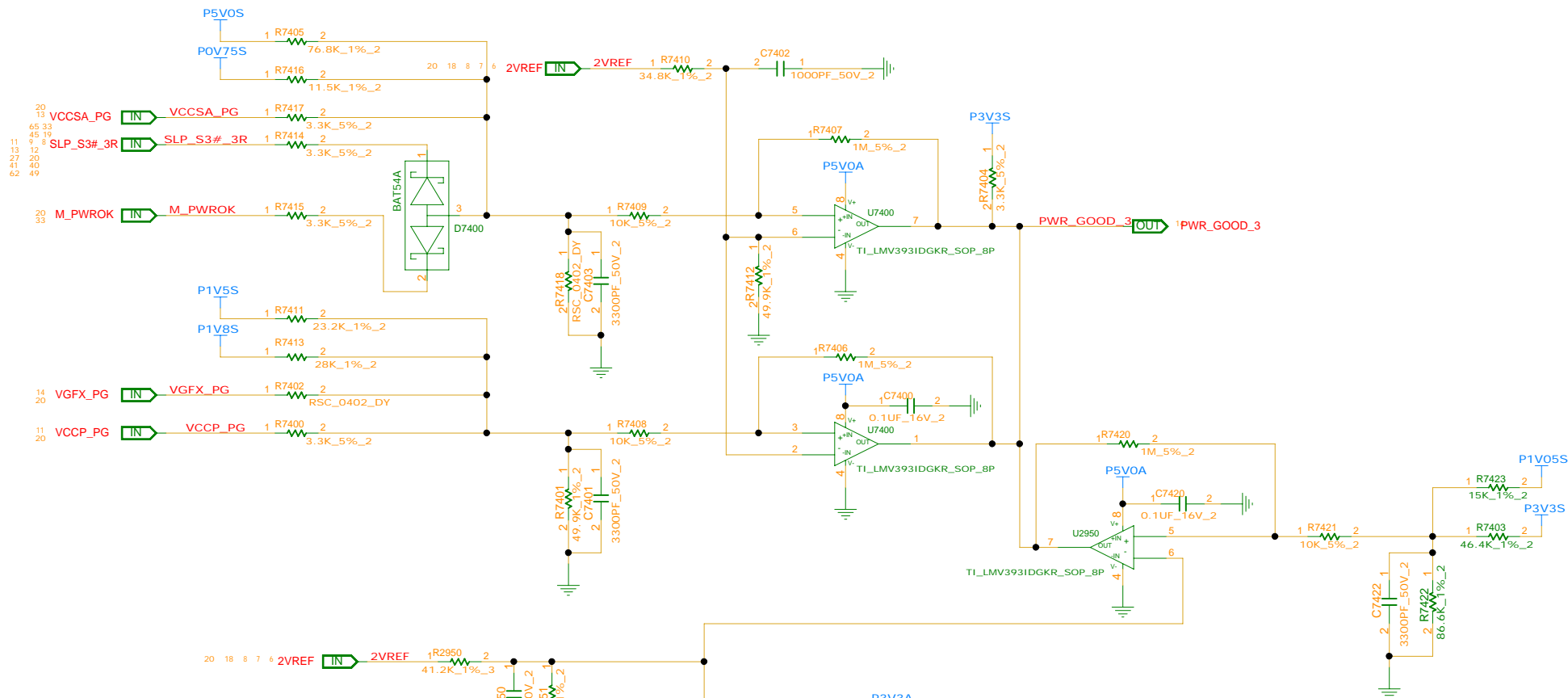
INVENTEC

TITLE			
CALVIN_UMA_S1 POWER(SLEEP)			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1

CHANGE by Edl DATE 01-JUL-2011

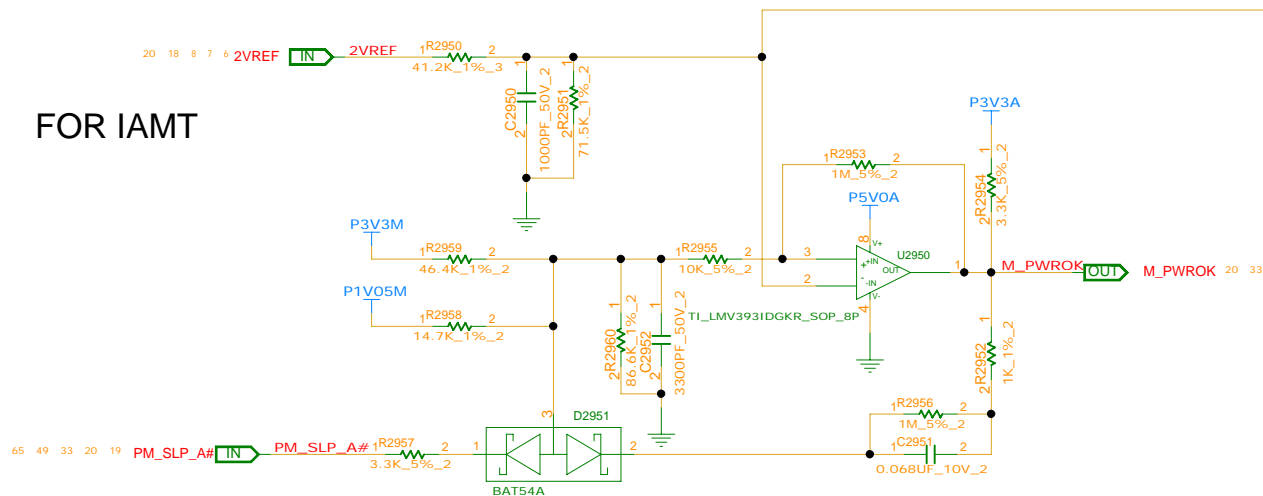
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REFERENCE NUMER : 7400~7450



FOR IAMT

REFERENCE NUMER : 2950~2999



INVENTEC

TITLE
CALVIN_UMA_S1
POWER(SEQUENCE)

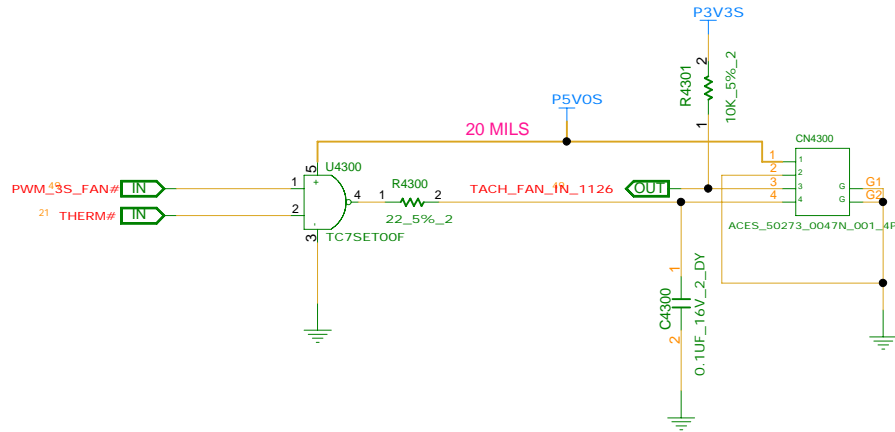
DOC NUMBER
1310xxxxxx-0-0

REV
AX1

CHANGE by Edl DATE 01-JUL-2011

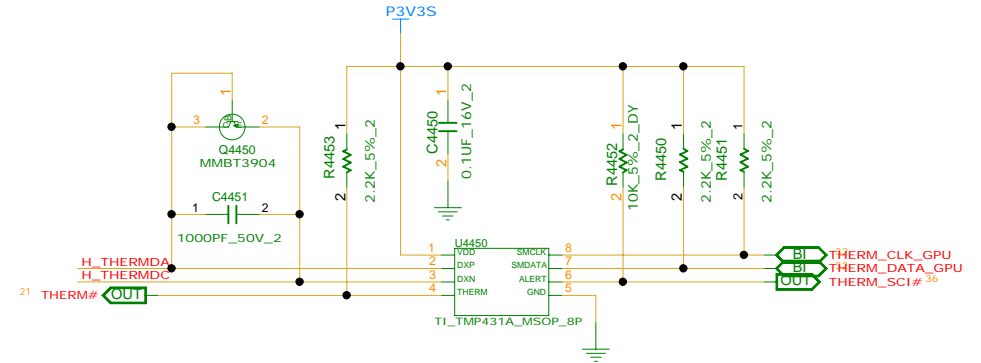
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REFERENCE NUMBER:4400~4349



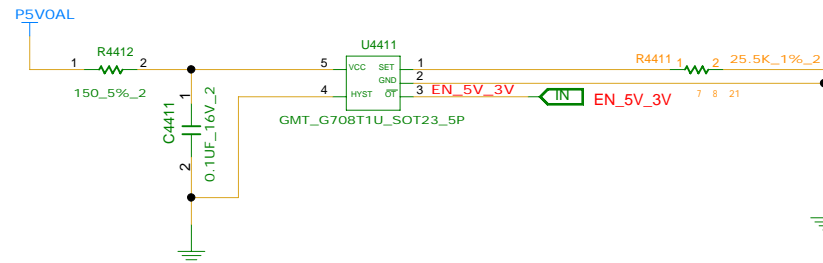
REFERENCE NUMBER:4450~4499

THERM SENSOR



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

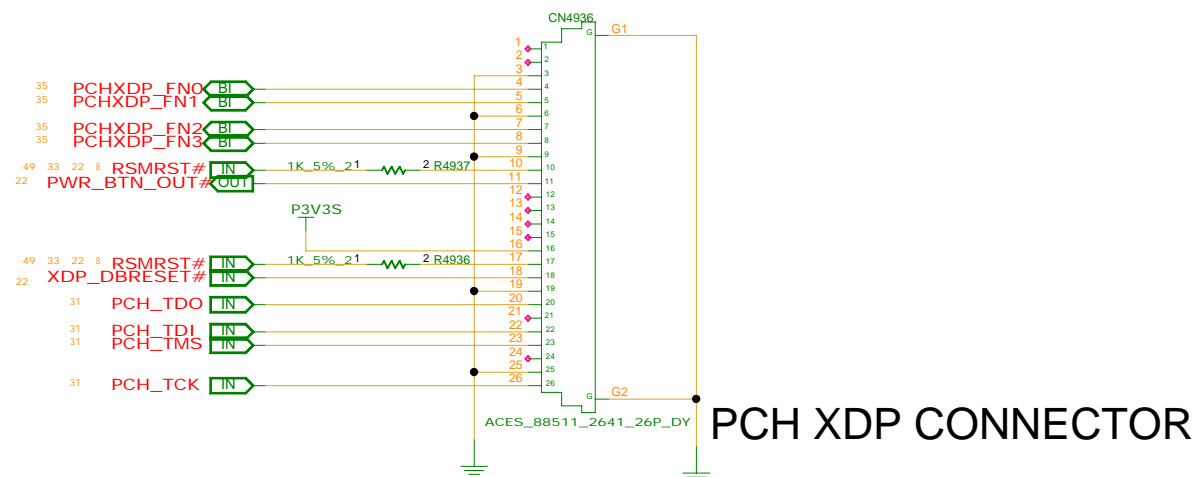
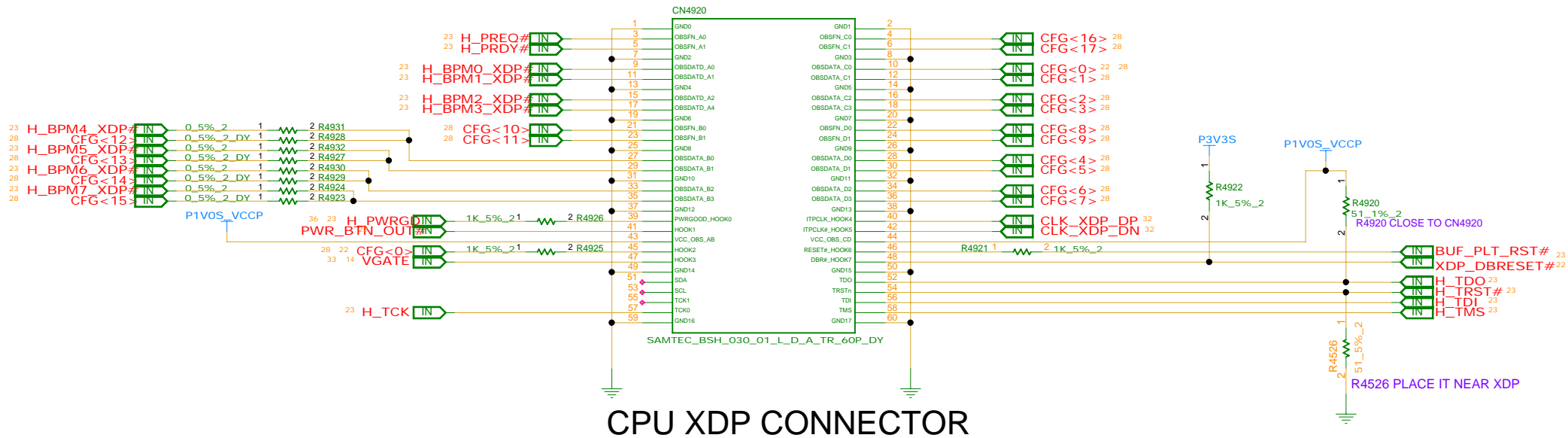


RSET (K OHM) = 0.0012T^2 - 0.9308T + 96.147
THERMAL SHUTDOWN AT 85 DEG.

REFERENCE NUMBER:4411~4449

INVENTEC

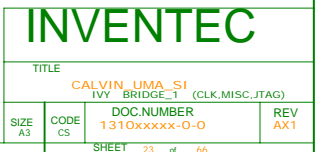
TITLE			
CALVIN_UMA_S1 FAN & THERMAL			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1
SHEET 21 of 66			



INVENTEC

TITLE			
CALVIN_UMA_S1 XDP_CONN			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1
SHEET 22 of 66			

PM_THRMTRIP# OUT IN THRMTRIP_CPU#





D

C

B

A

D

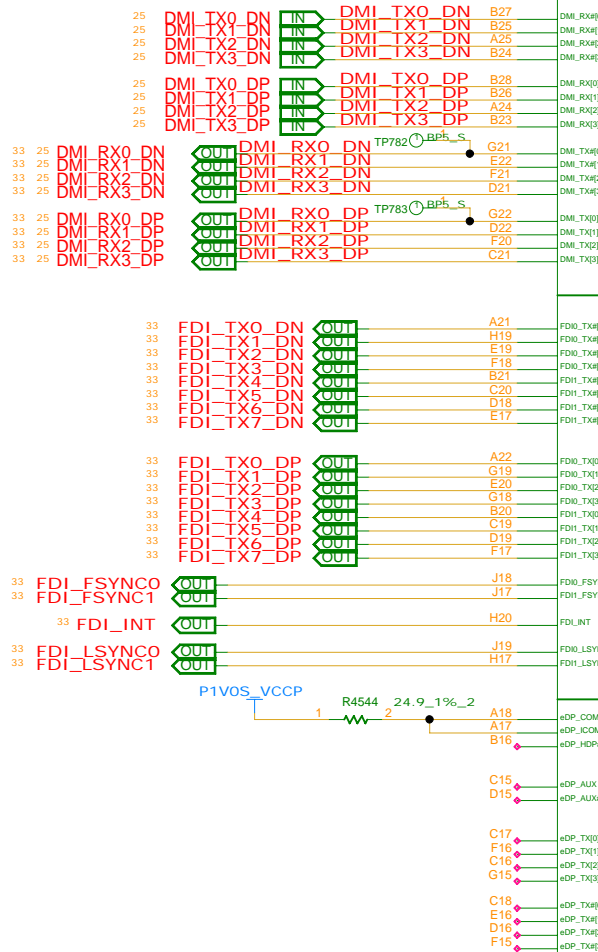
C

B

A

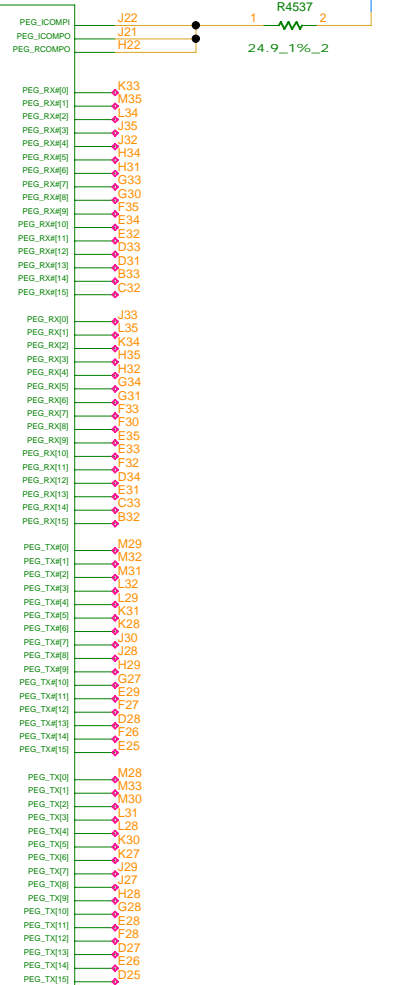
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CN4500



FOX_PZ98927_3641_41F_HURONRIVER_989P_CHIEFRIVER

PCI EXPRESS* - GRAPHICS



INVENTEC

TITLE
CALVIN_UMA_S1
IVY BRIDGE_3 (DMI, DP, PEG, FDI)

DOC NUMBER
1310xxxxx-0-0

REV
AX1

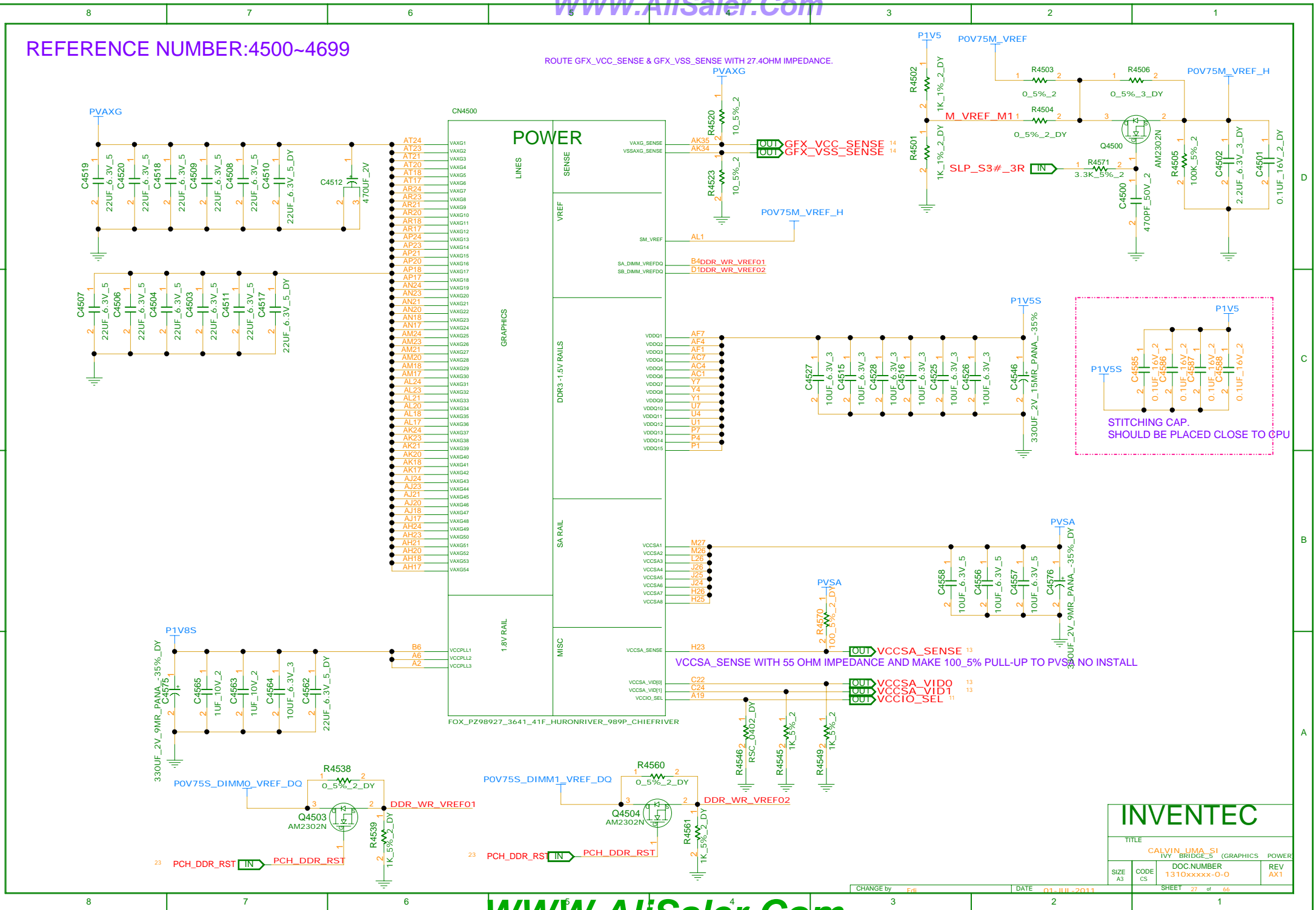
CHANGE by Fdi DATE 01-JUL-2011

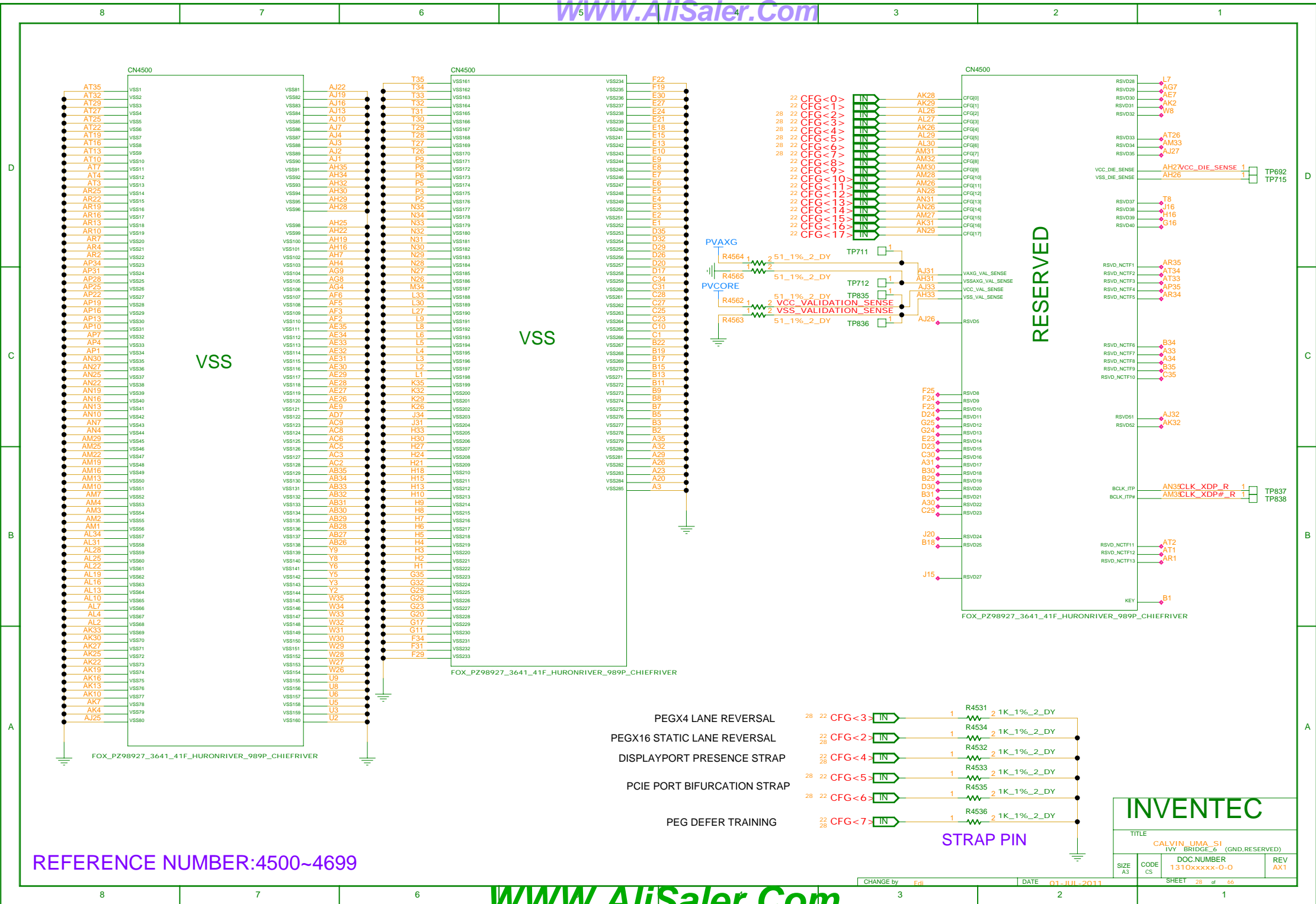
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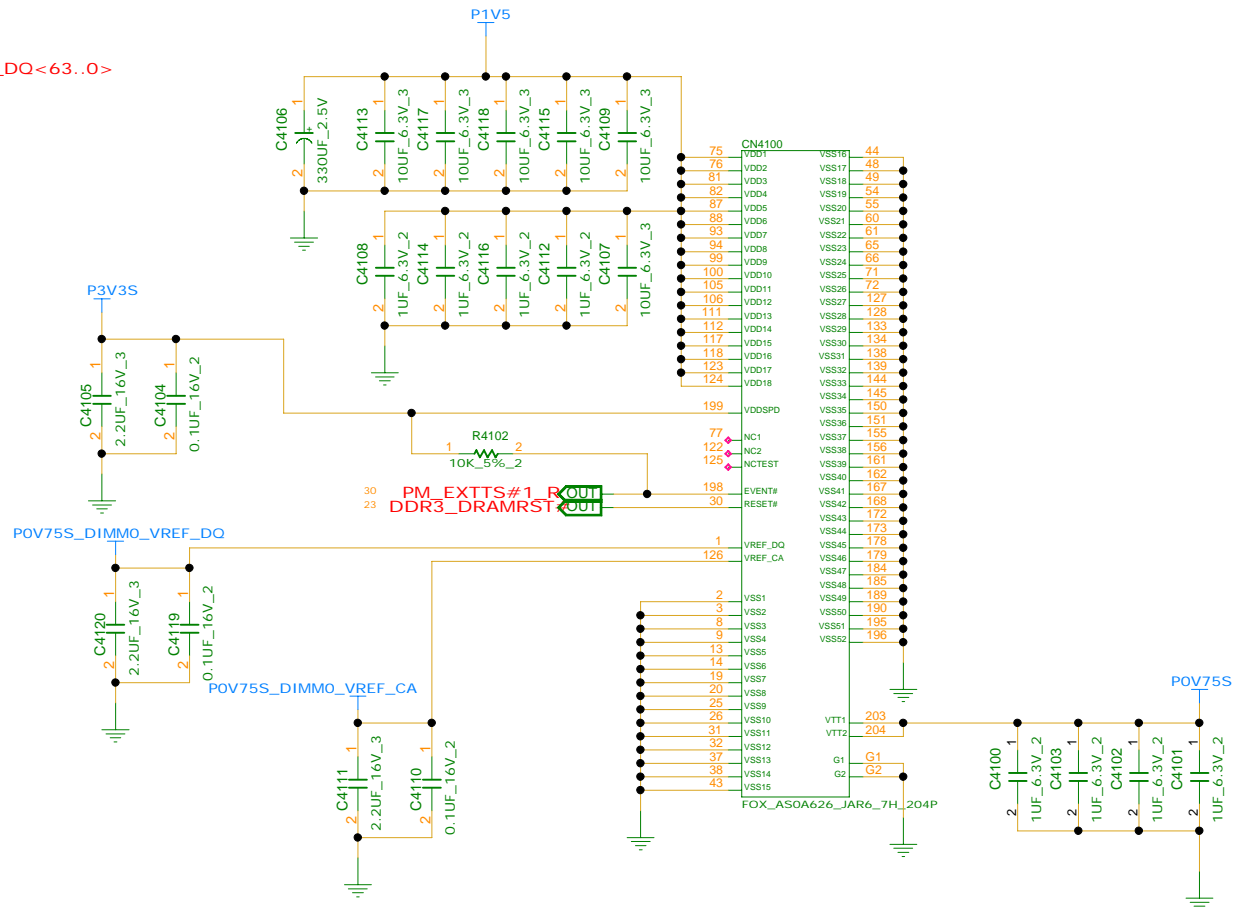
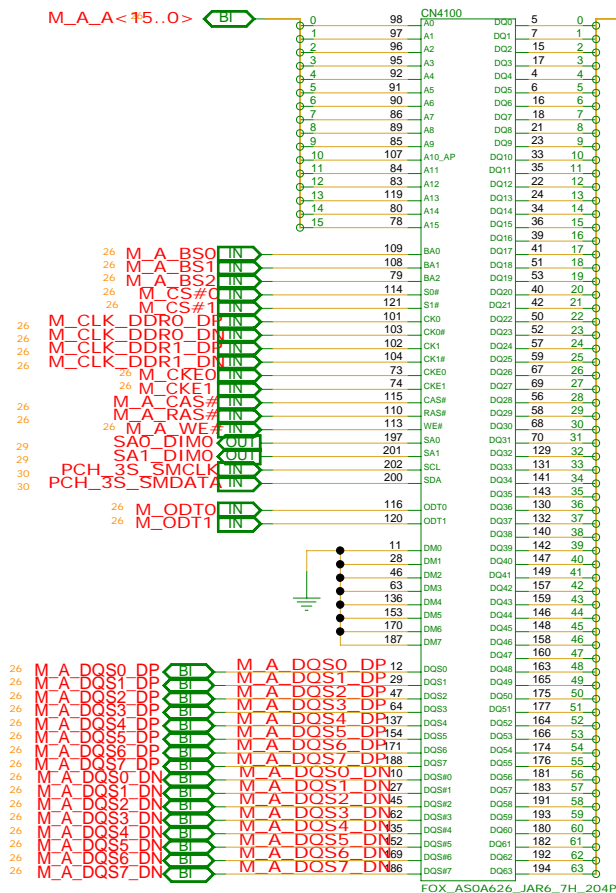
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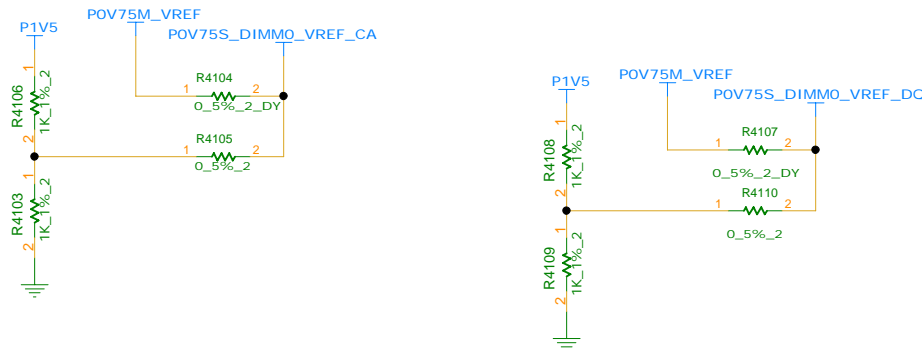
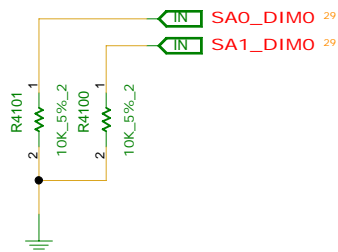
M_A_A<15..0> BI M_A_DQ<63..0>



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



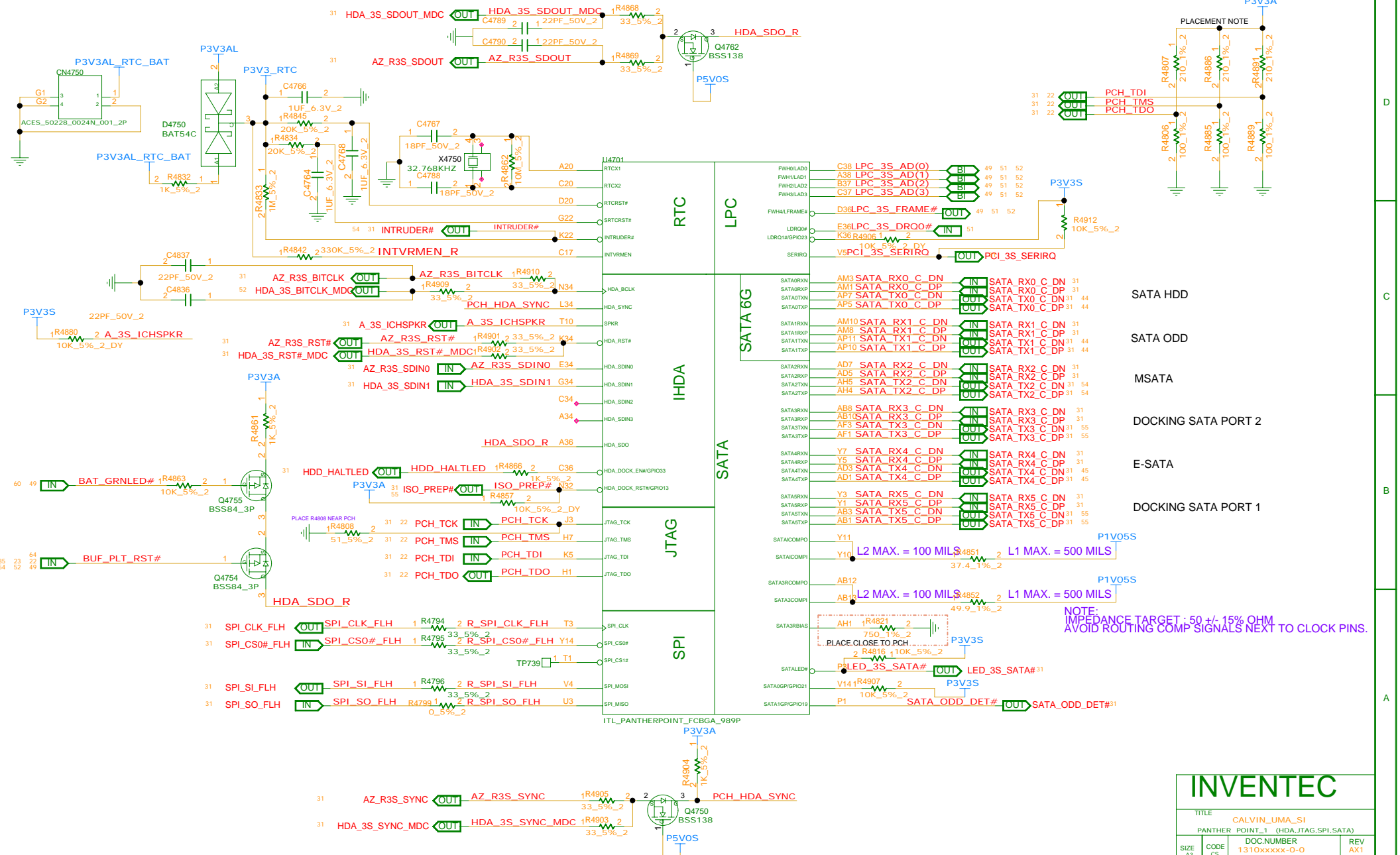
REFERENCE NUMBER:4100~4299

INVENTEC

TITLE			
CALVIN_UMA_S1 DDR3_SO-DIMMA			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxx-0-0	AX1

REFERENCE NUMBER:4100~4299

REFERENCE NUMBER : 4700~4949



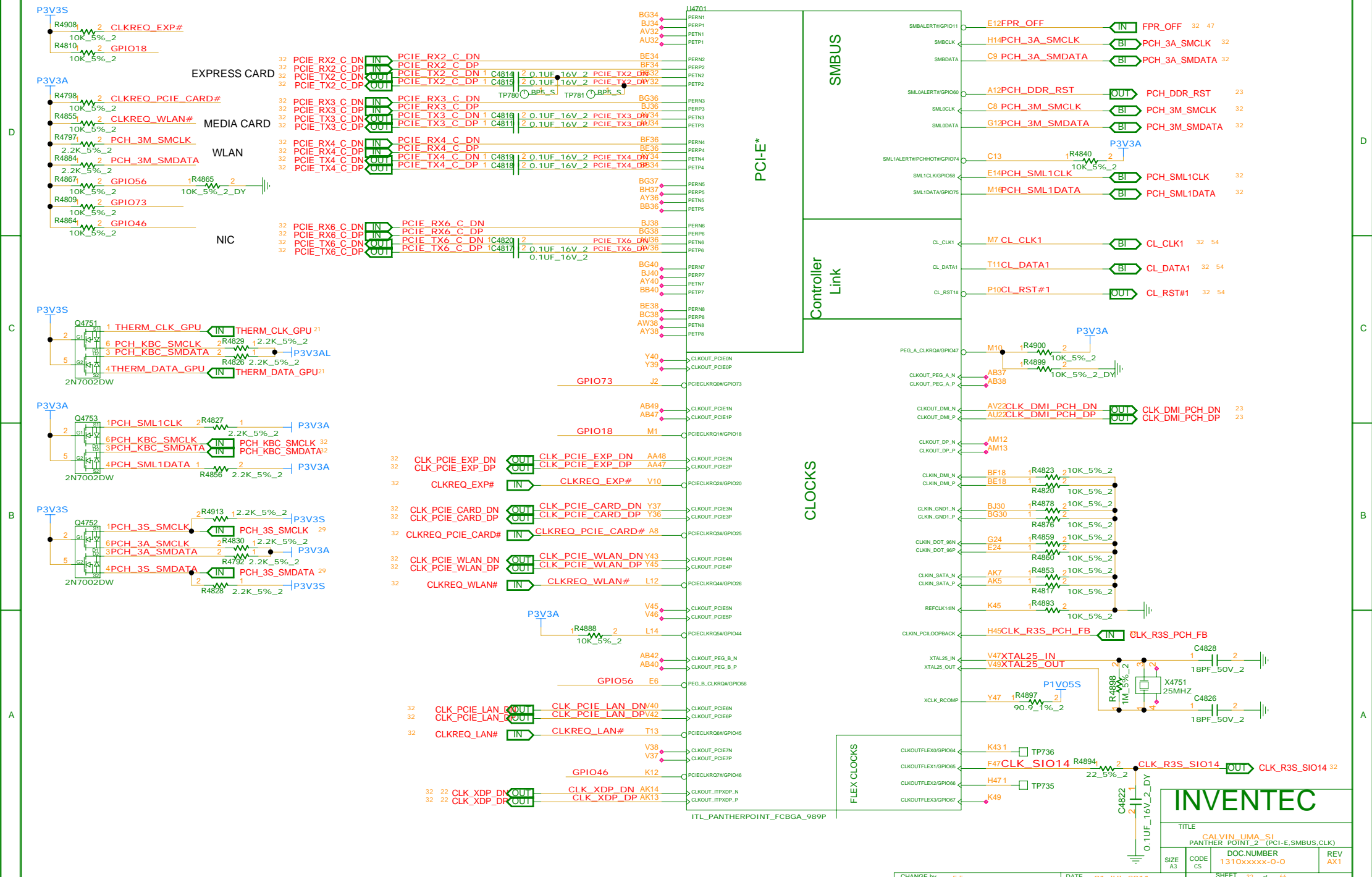
LAYOUT NOTE: JTAG_TMS TERMINATIONS NEED TO BE PLACED NEAR PCH
LAYOUT NOTE: JTAG_TDI TERMINATIONS NEED TO BE PLACED NEAR PCH
LAYOUT NOTE: JTAG_TDO TERMINATIONS NEED TO BE PLACED NEAR XDP

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

INVENTEC

TITLE			
CALVIN_UMA_SI			
PANTHER POINT_1 (HDA,JTAG,SPI,SATA)			
SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV AX1
SHEET 31 of 66			

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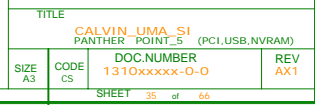


3.PCH_DPWROK PULL UP TO P3V3S ENABLES DSW WUPPORT. NO INSTALL R4752 TO DISABLE DSW

INSTALL



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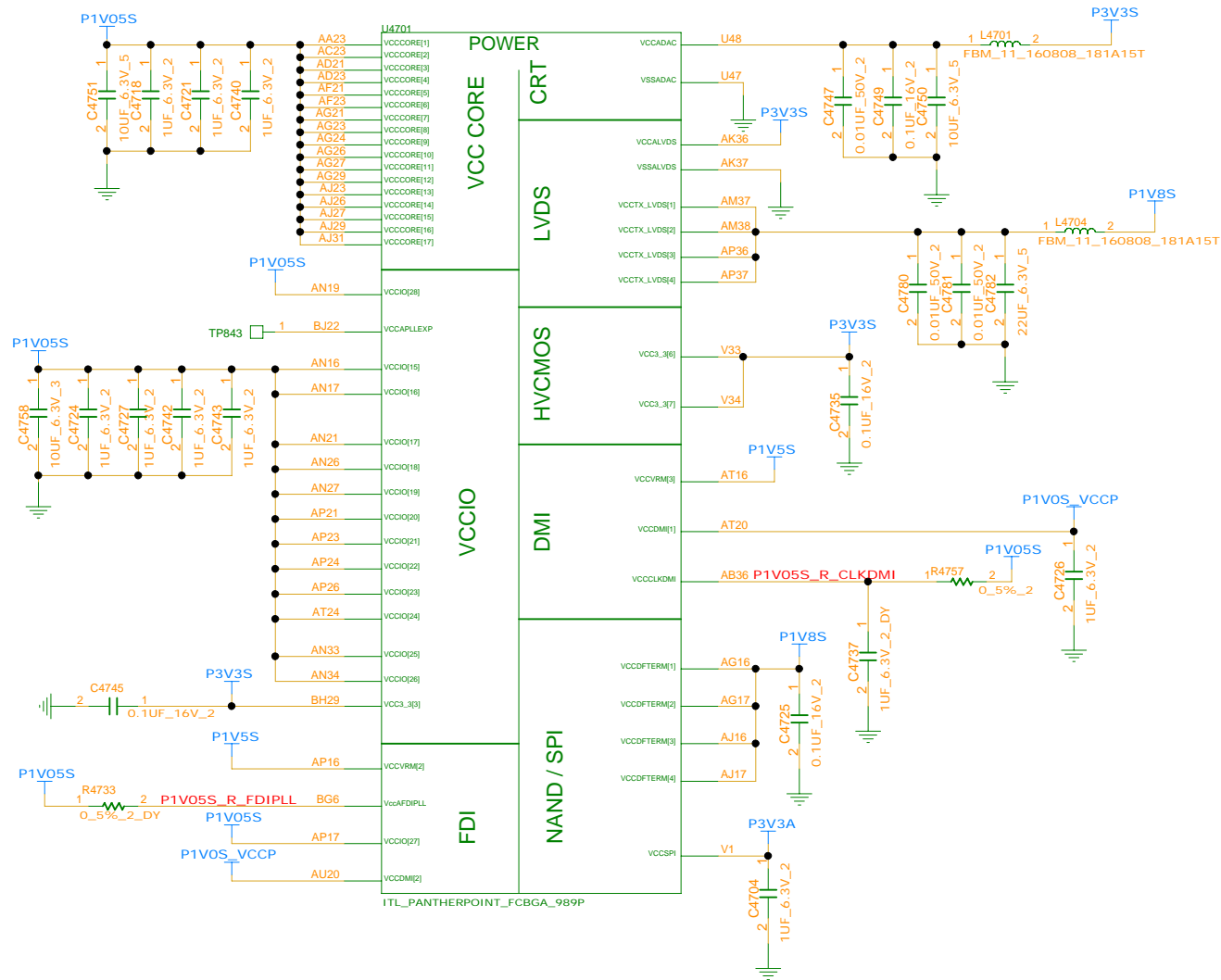


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CHANGE by	Edi	DATE	01-JUL-2011
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REFERENCE NUMER : 4700~4949



INVENTEC

TITLE
CALVIN_UMA_S1
PANTHER_POINT_7 (POWER)

DOC NUMBER
1310xxxxx-0-0

REV
AX1

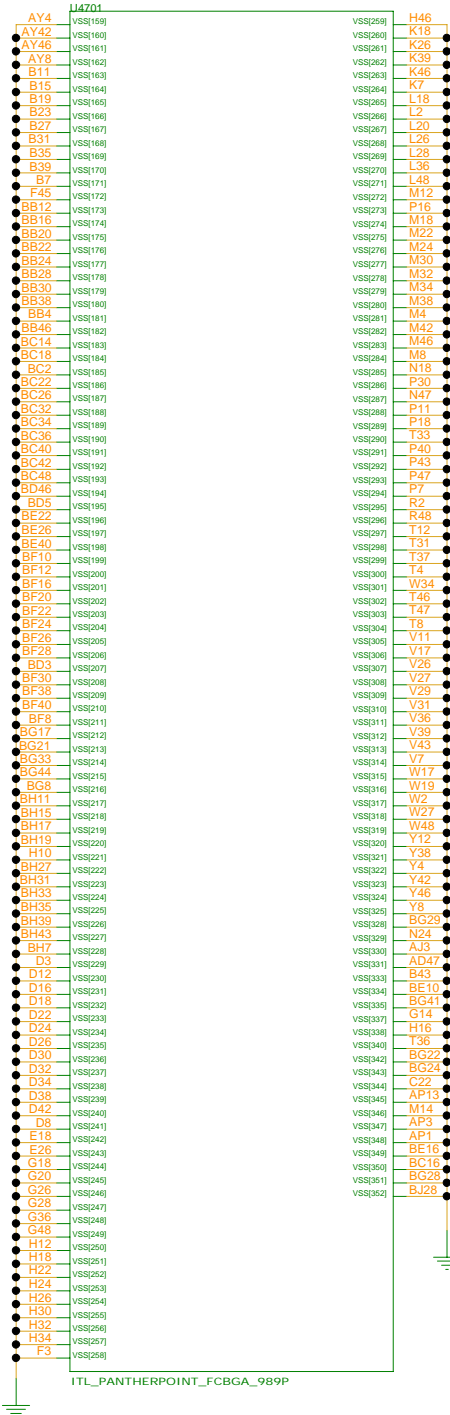
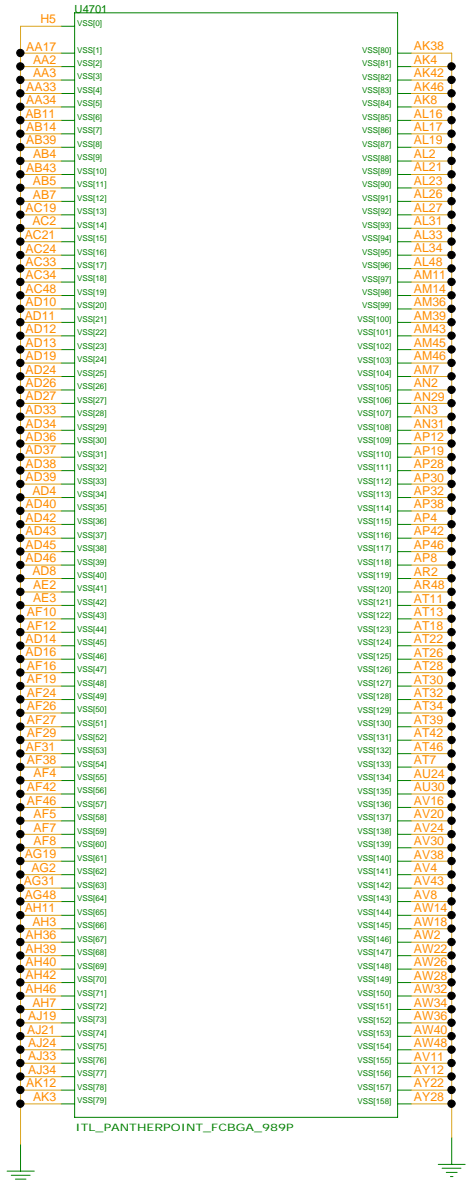
CHANGE by Fdi DATE 01-JUL-2011

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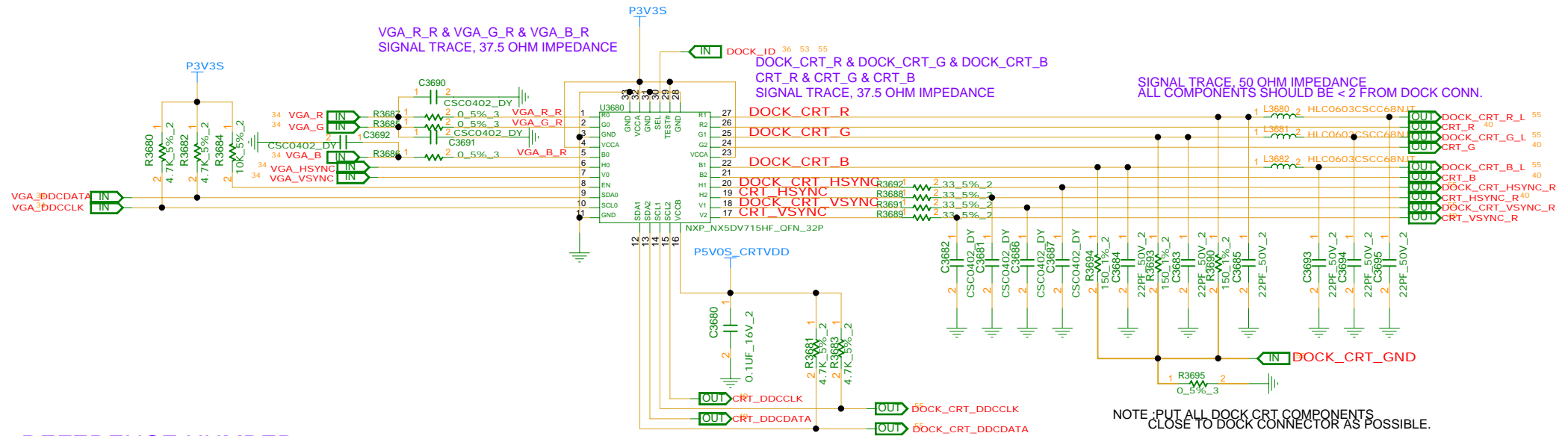
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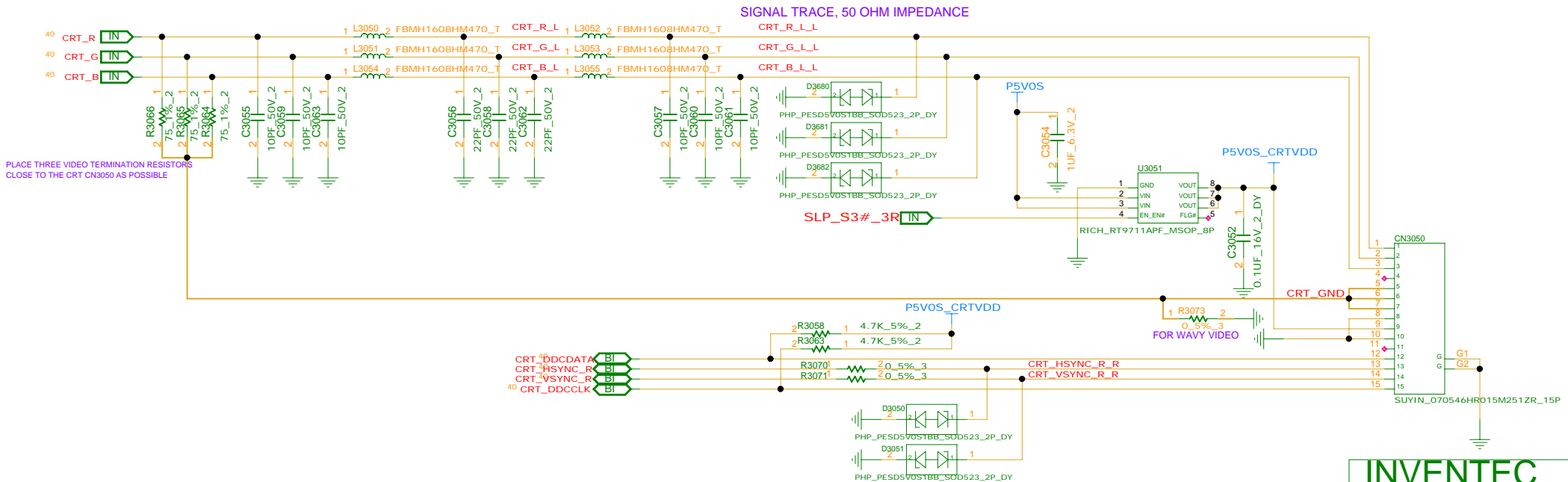
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INVENTEC			
TITLE			
CALVIN_UMA_S1 PANTHER POINT_9 (GND)			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1
SHEET 39 of 66			



REFERENCE NUMBER:3680~3699

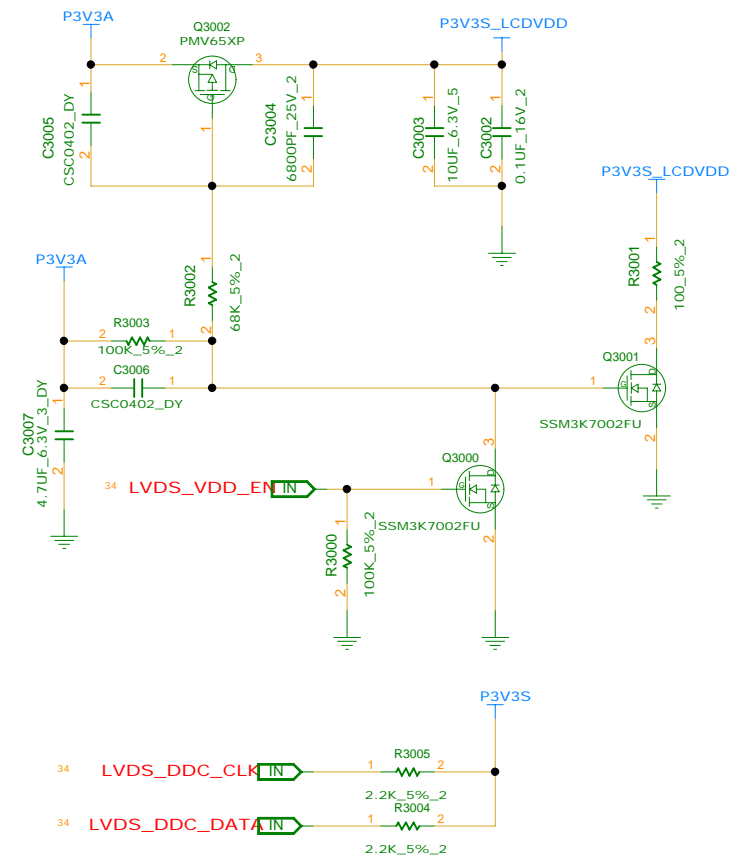


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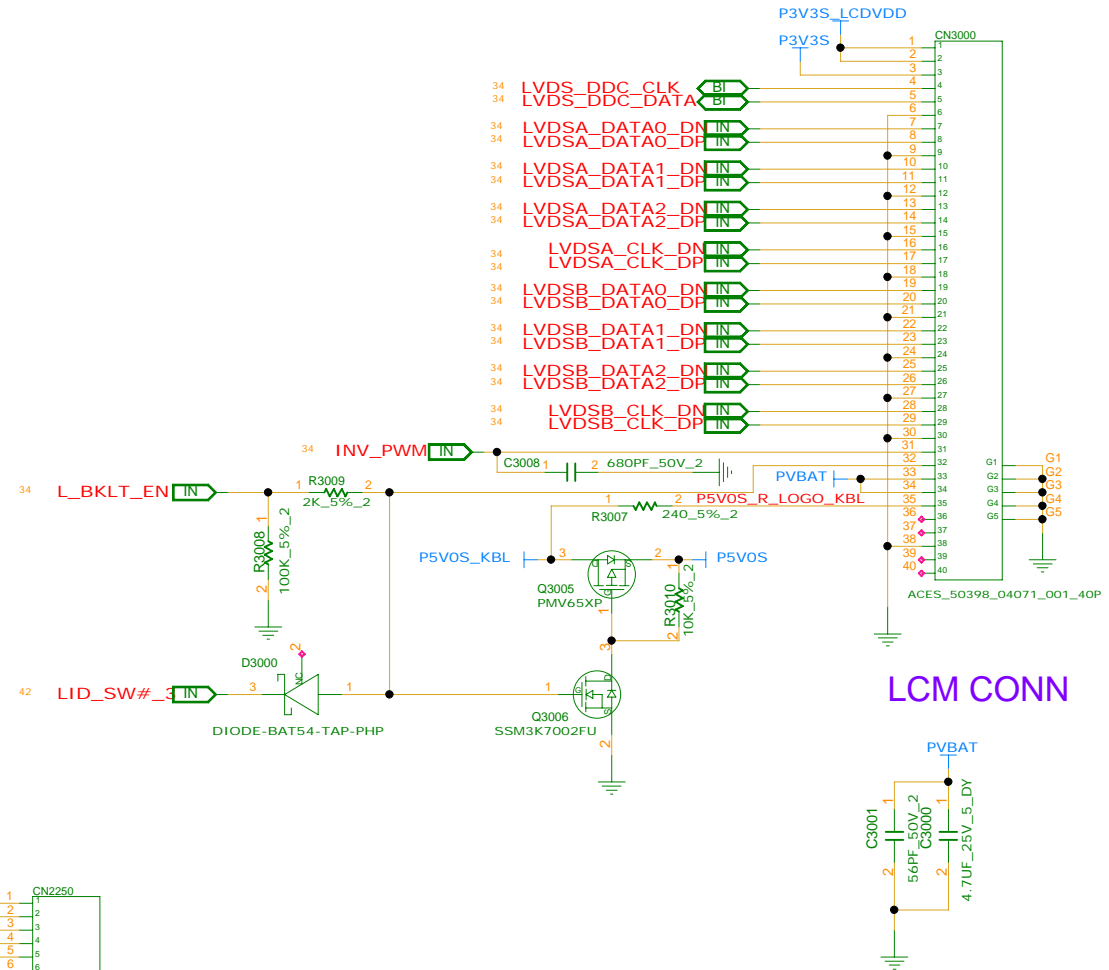
INVENTEC			
TITLE			
CALVIN_UMA_S1 VGA SWITCH / CRT			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1
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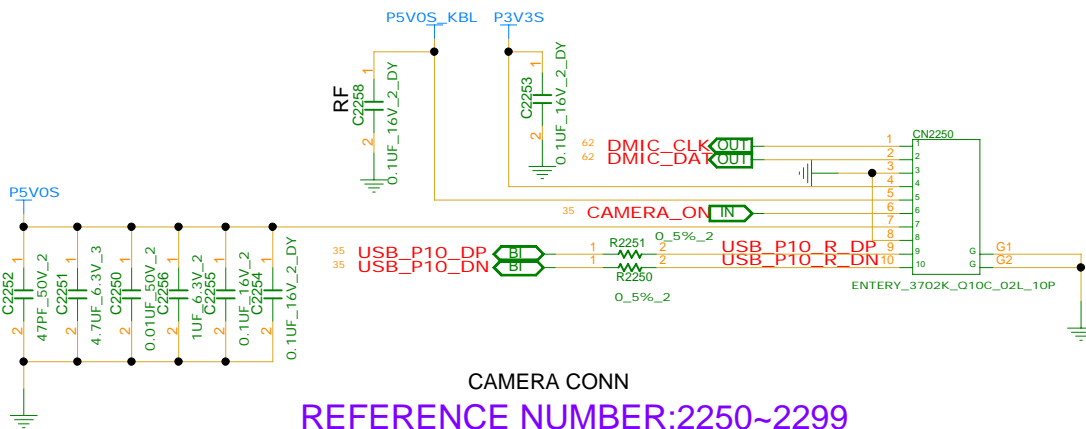
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REFERENCE NUMBER:3000~3049



LCM CONN



CAMERA CONN

REFERENCE NUMBER:2250~2299

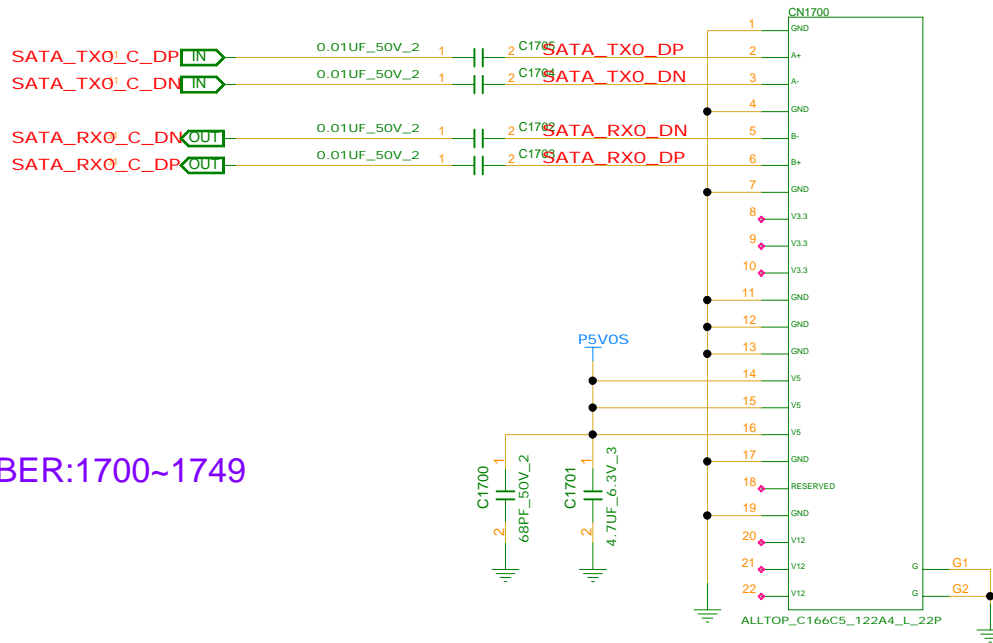
INVENTEC

TITLE			
CALVIN_UMA_S1 LCM & WEBAM			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1
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EMPTY

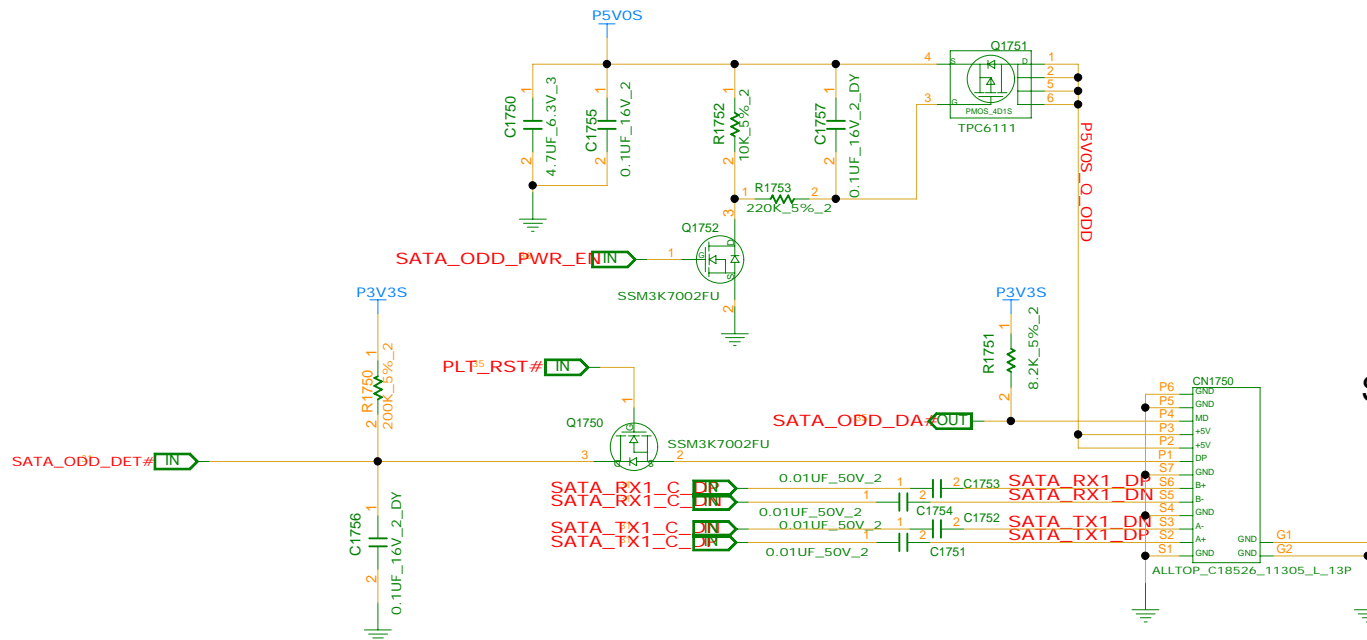
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INVENTEC			
TITLE CALVIN,UMA,S1 EDP TO LVDS (SPARE)			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1
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SATA HDD

REFERENCE NUMBER:1700~1749



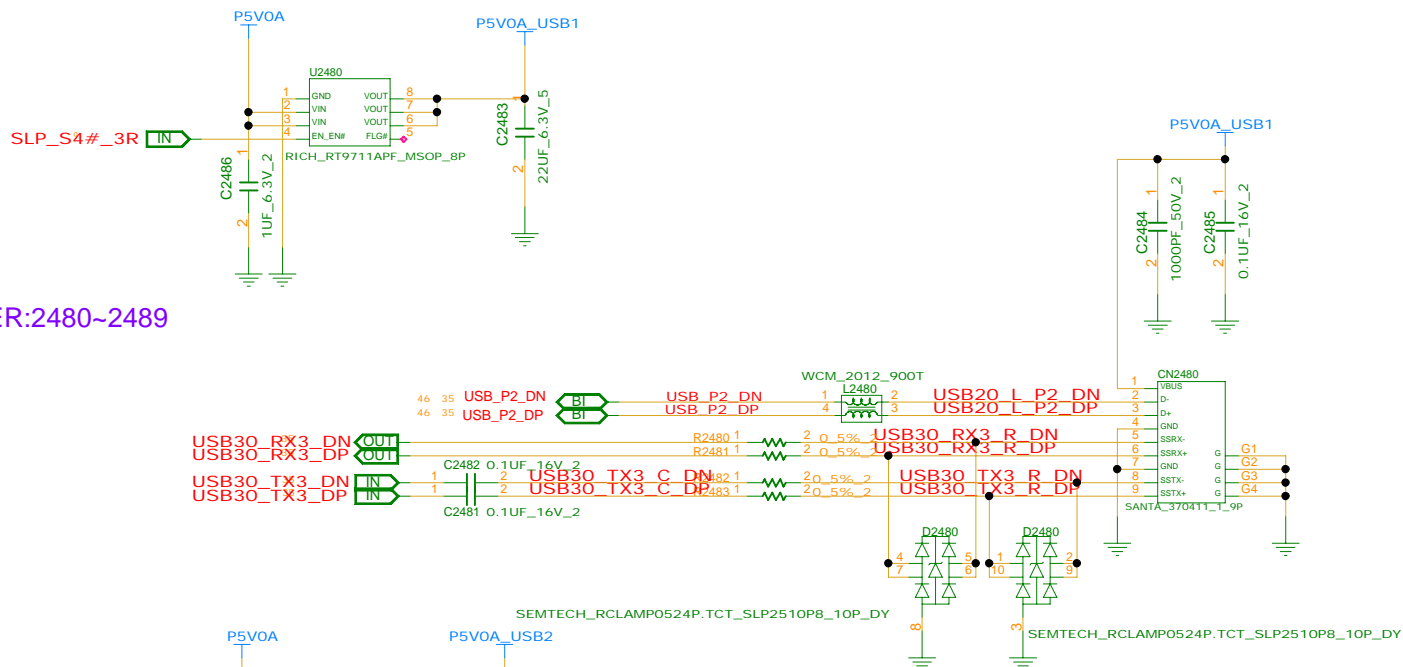
SATA ODD

REFERENCE NUMBER:1750~1799

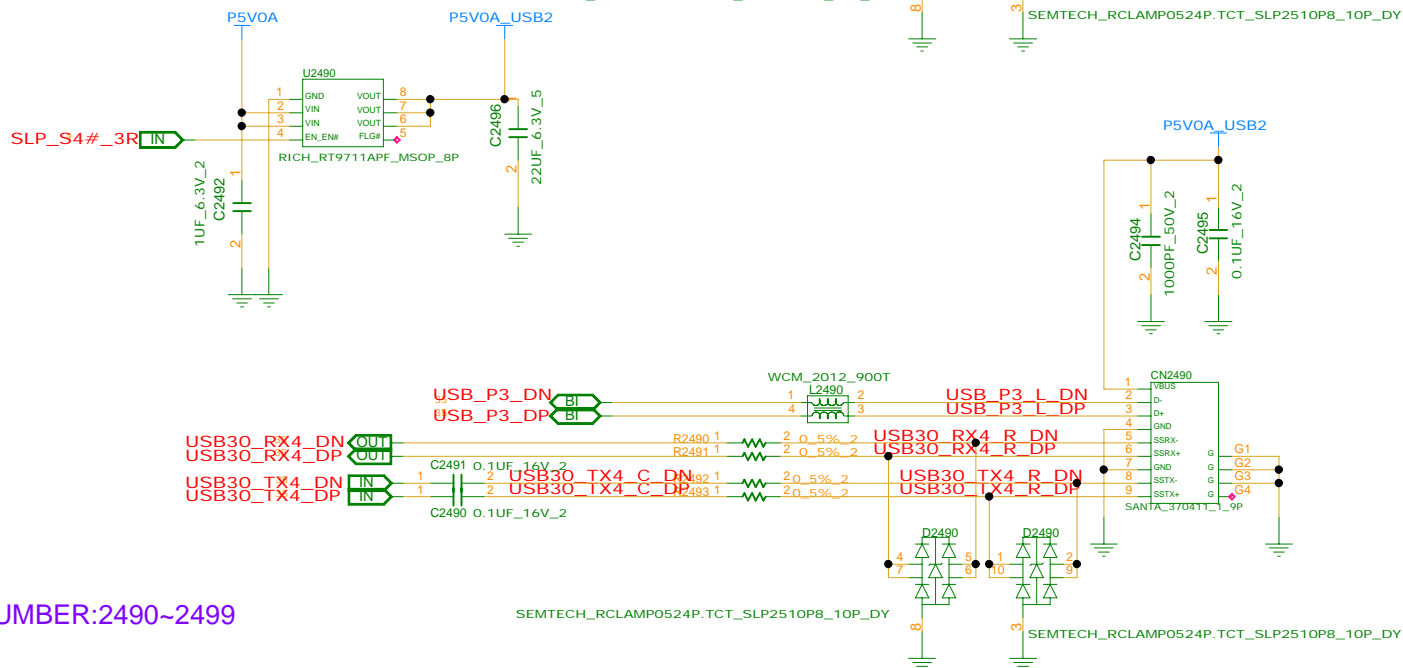
INVENTEC

TITLE			
CALVIN_UMA_S1			
SATA HDD & ODD CNTR			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1
SHEET 44 of 66			





REFERENCE NUMBER:2480~2489



REFERENCE NUMBER:2490~2499

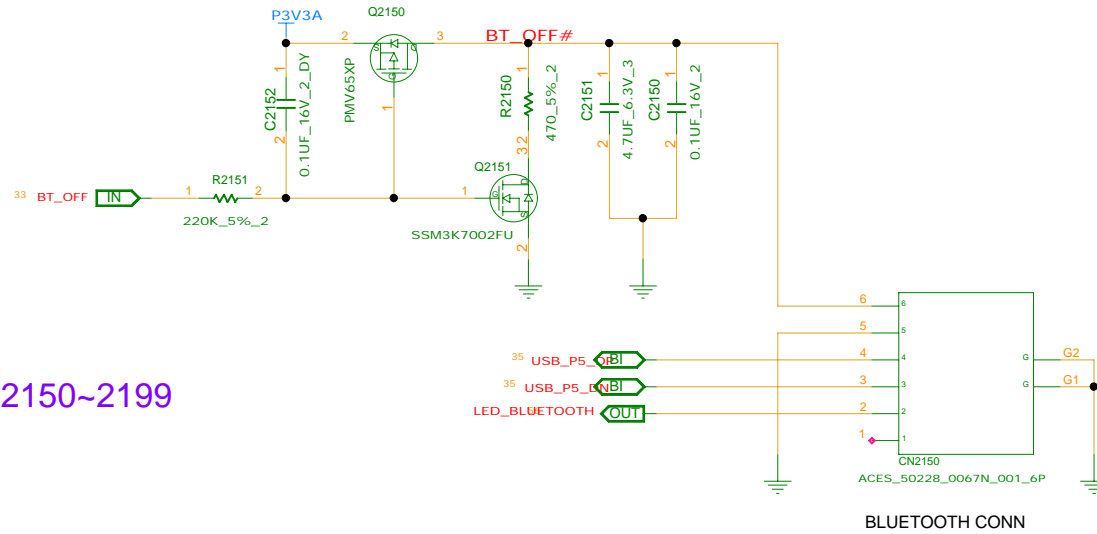
INVENTEC

TITLE			
CALVIN_UMA_S1			
USB_CONN			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1

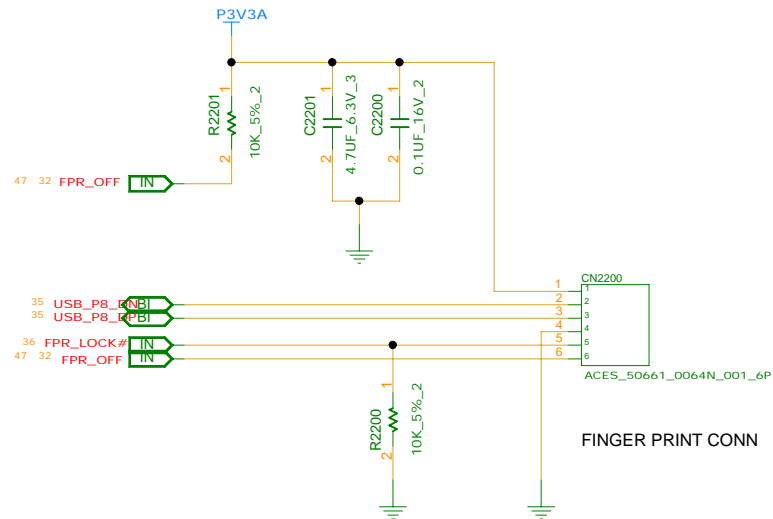
CHANGE by Edl DATE 01-JUL-2011

SHEET 46 of 66

REFERENCE:2150~2199



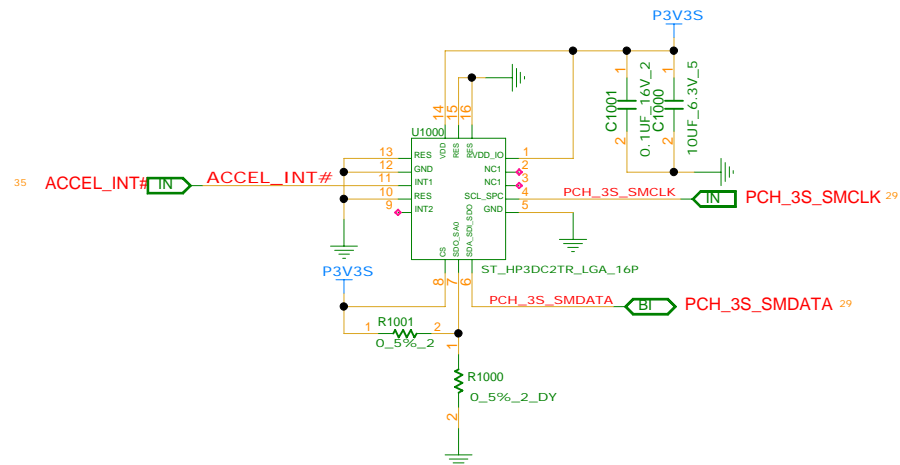
REFERENCE:2200~2249



INVENTEC

TITLE			
BLUE TOOTH & FINGER PRINTER CNTR			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1

REFERENCE NUMER : 1000~1099

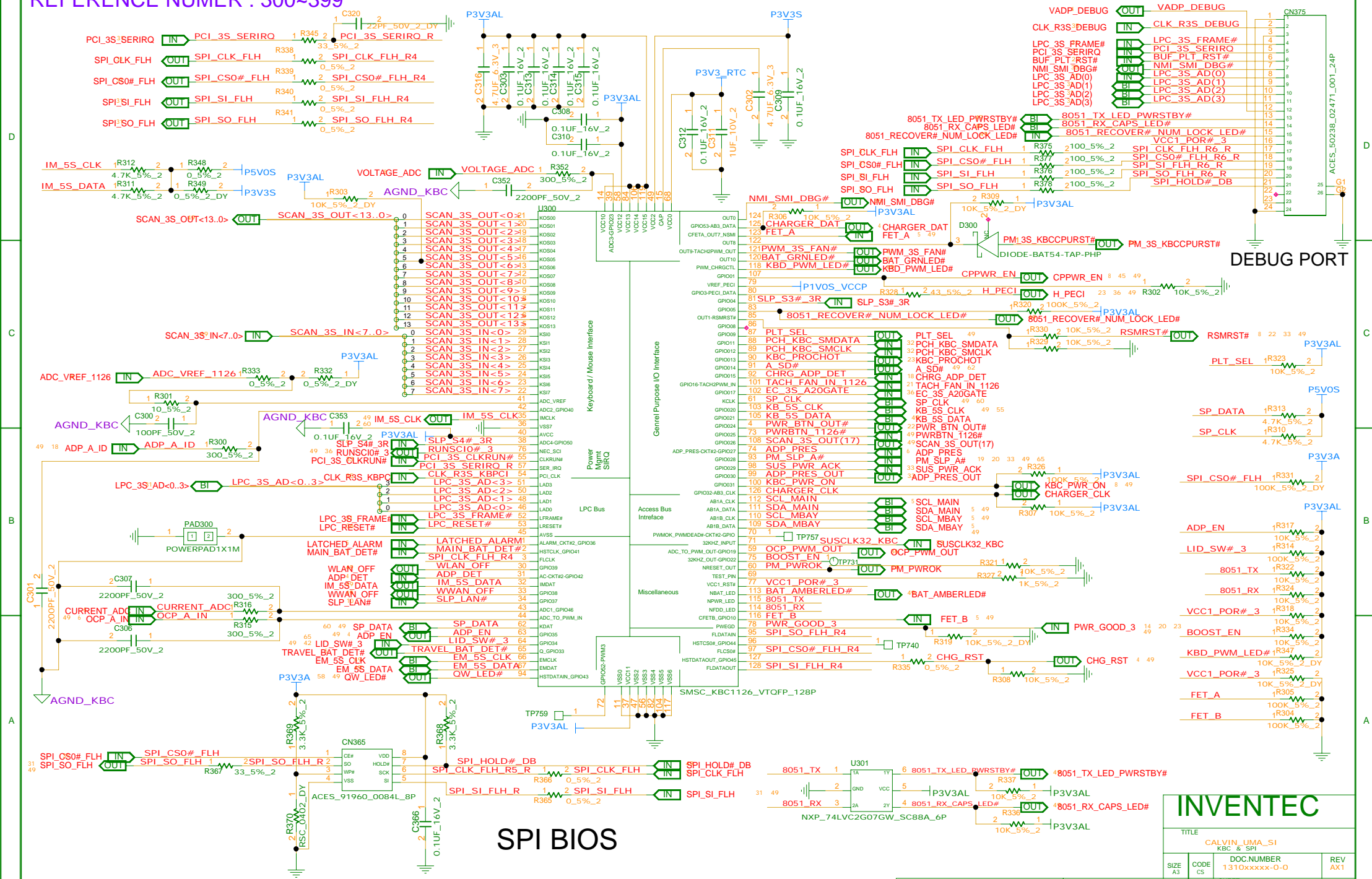


ACCELEMETOR

INVENTEC

TITLE			
CALVIN_UMA_51 ACCELEMETOR			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1

REFERENCE NUMBER : 300~399

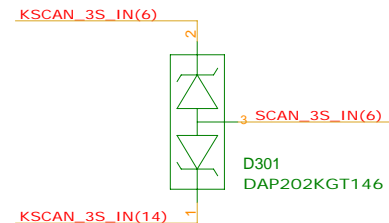
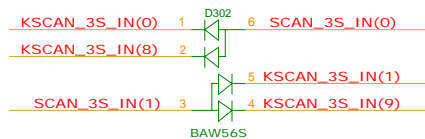
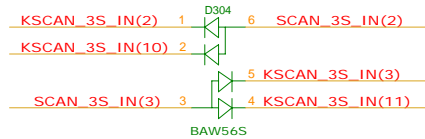
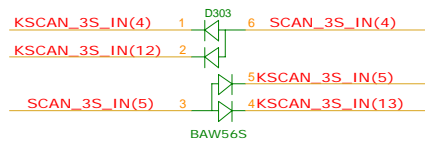
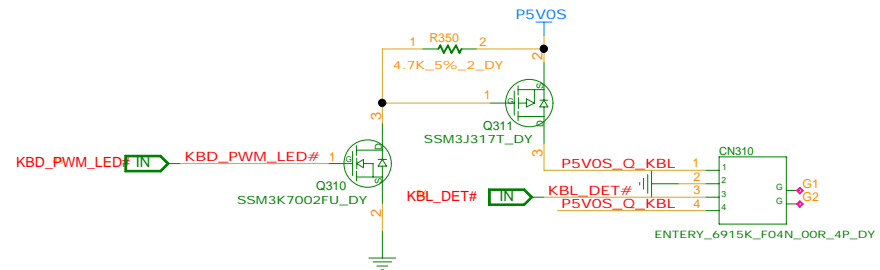
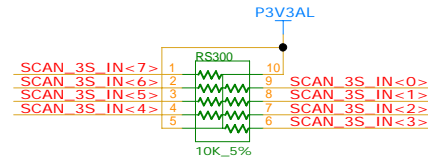
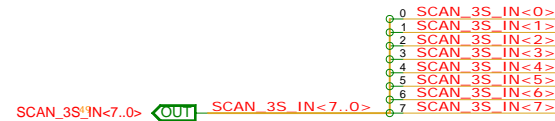


SPI BIOS

INVENTEC

TITLE			
CALVIN_UMA_SI KBC & SPI			
SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV AX1

REFERENCE NUMER : 300~389



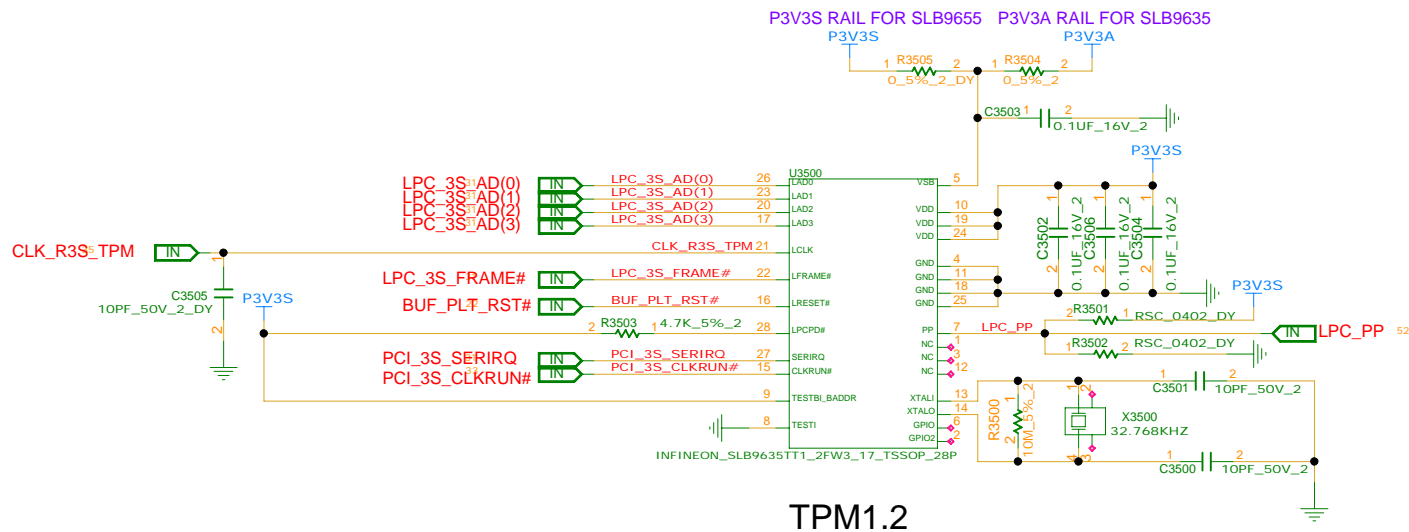
INVENTEC

TITLE			
CALVIN_UMA_S1			
KEYBOARD			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1
SHEET 50 of 66			

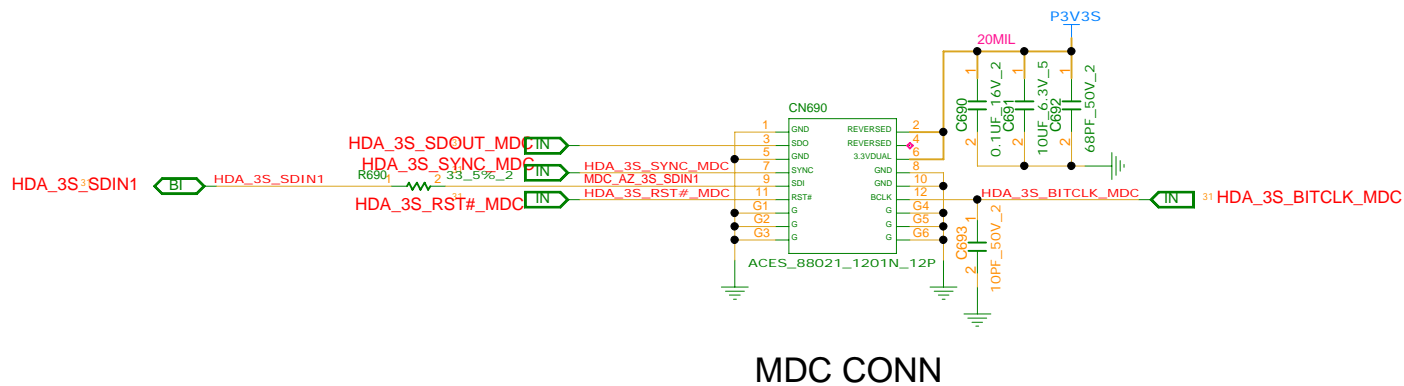
WWW.AliSaler.Com



REFERENCE NUMER : 3500~3549



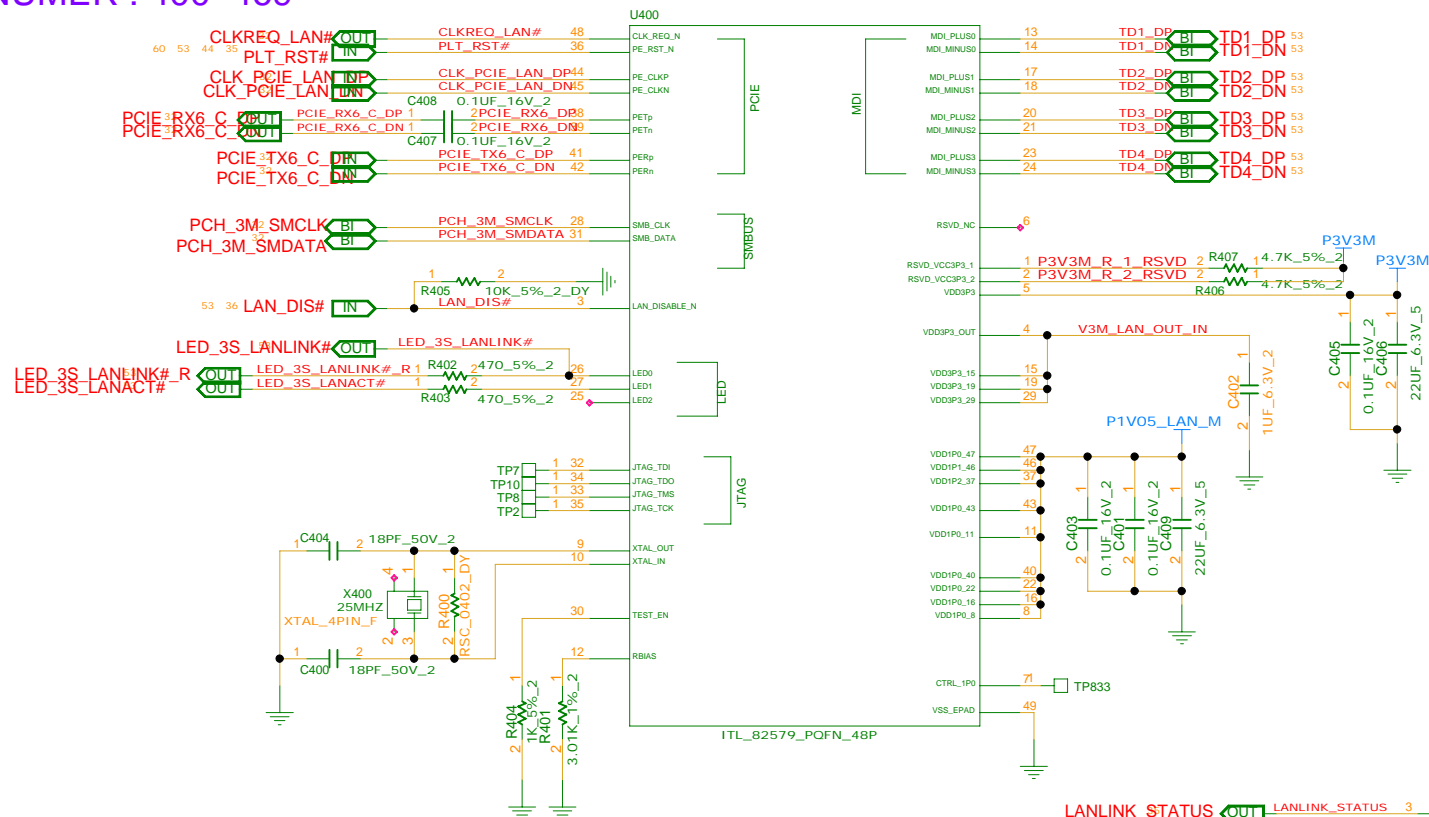
REFERENCE NUMER : 650~699



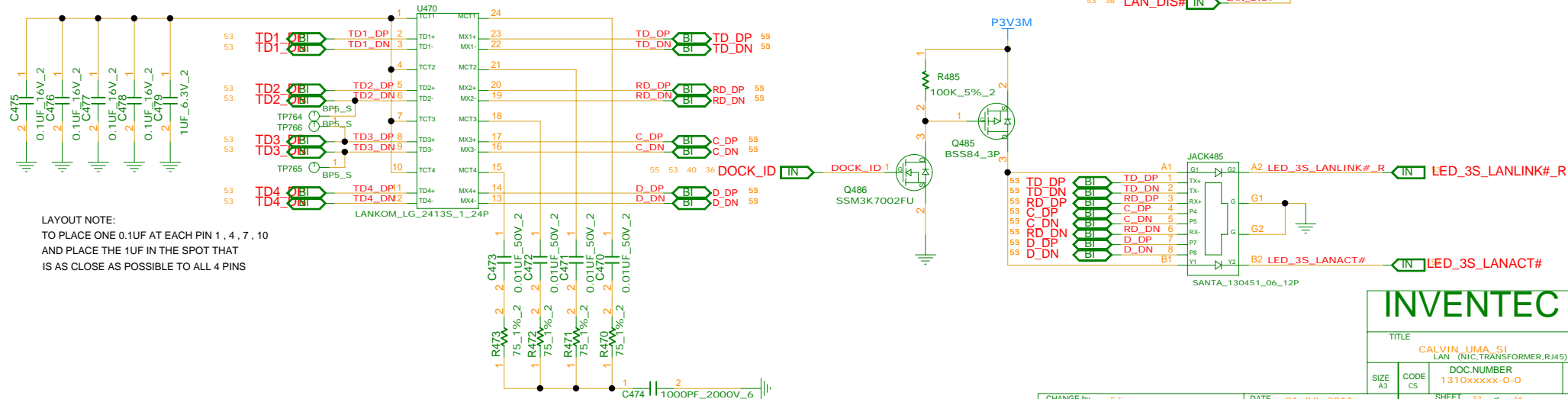
INVENTEC

TITLE			
CALVIN_UMA_S1 TPM & MDC			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxx-0-0	AX1

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

INVENTEC

TITLE			
CALVIN_UMA_S1 LAN (NIC TRANSFORMER RJ45)			
SIZE A3	CODE CS	DOC NUMBER 1310xxxxx-0-0	REV AX1
SHEET 53 of 66			



D

C

B

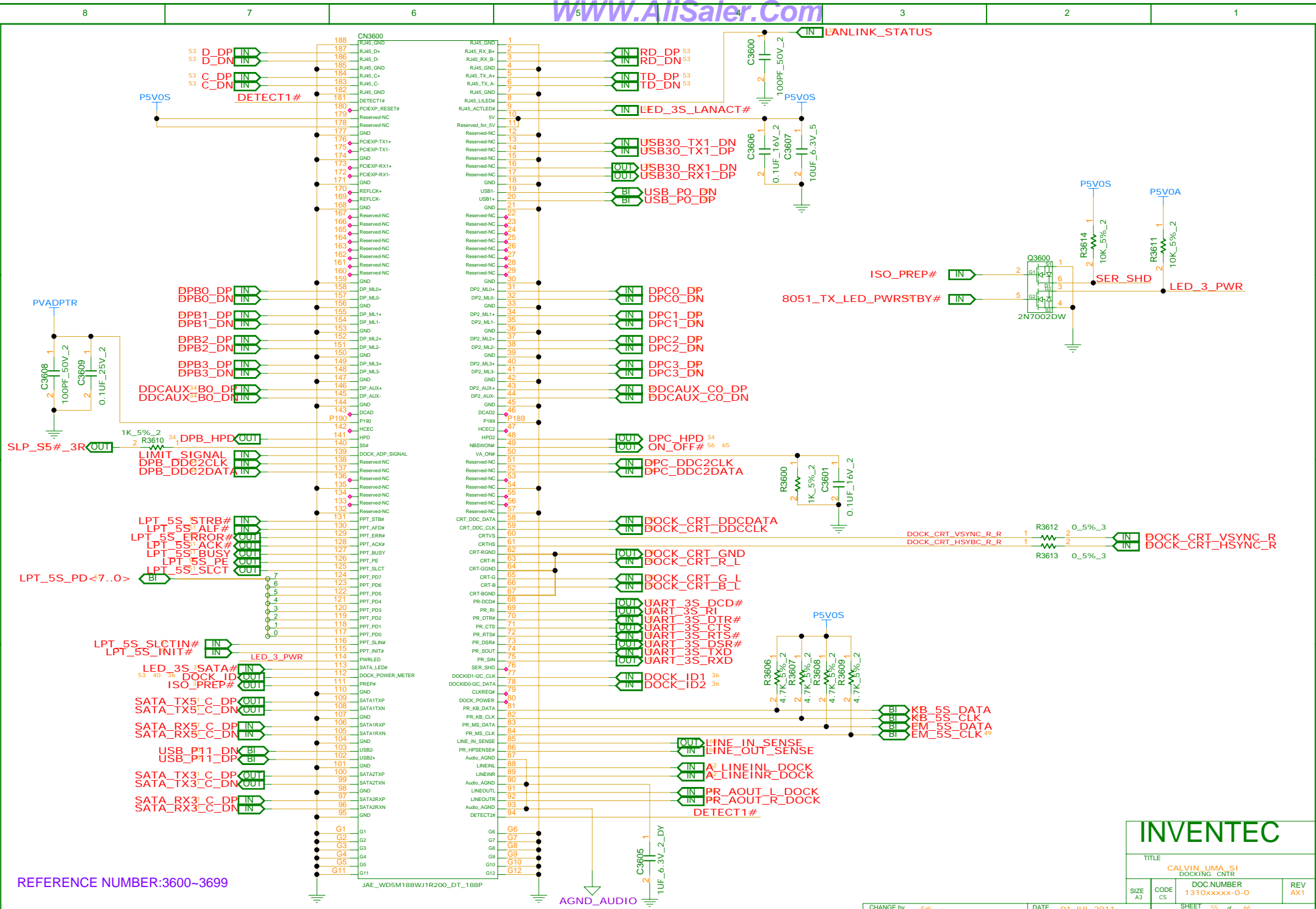
A

D

C

B

A



REFERENCE NUMBER:3600~3699

INVENTEC

TITLE

CALVIN_UMA_S1 DOCKING_CNTR

DOC NUMBER

1310xxxxx-0-0

REV

AX1

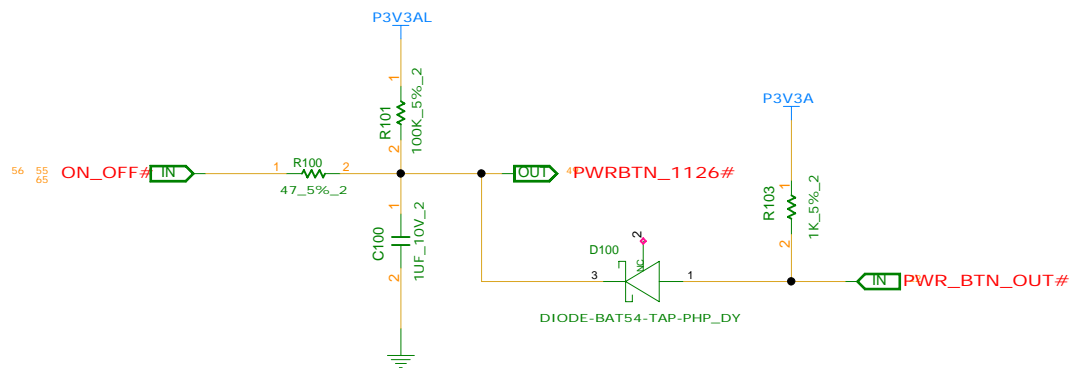
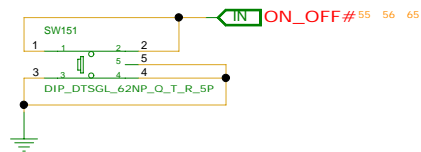
SHEET 55 of 66

CHANGE by

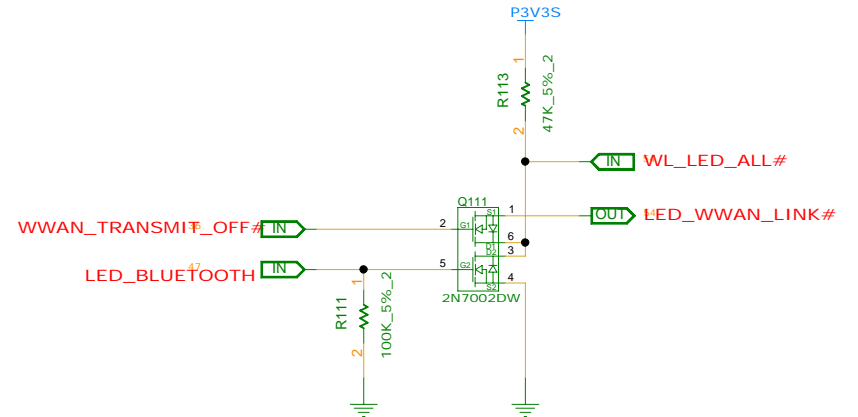
Edi

DATE

01-JUL-2011



POWER / STANDBY LED



WLAN_WWAN_BLUETOOTH_LED

REFERENCE NUMBER:100~199

INVENTEC

TITLE
CALVIN_UMA_S1
POWER & WLAN_LED

DOC.NUMBER
1310xxxxx-0-0

REV
AX1

CHANGE by Edl DATE 01-JUL-2011

SHEET 56 of 66

SCREW

S27
SCREW320_900_1P

STD3
DIPPAD_1.15_6_0_TOP
STD4
DIPPAD_1.15_6_0_TOP

STD1
STDPAD_1.15_6_TOP
STD2
STDPAD_1.15_6_TOP

S2
SCREW320_680_800_1P

S5
SCREW300_700_800_1P

S6
SCREW320_800_1P

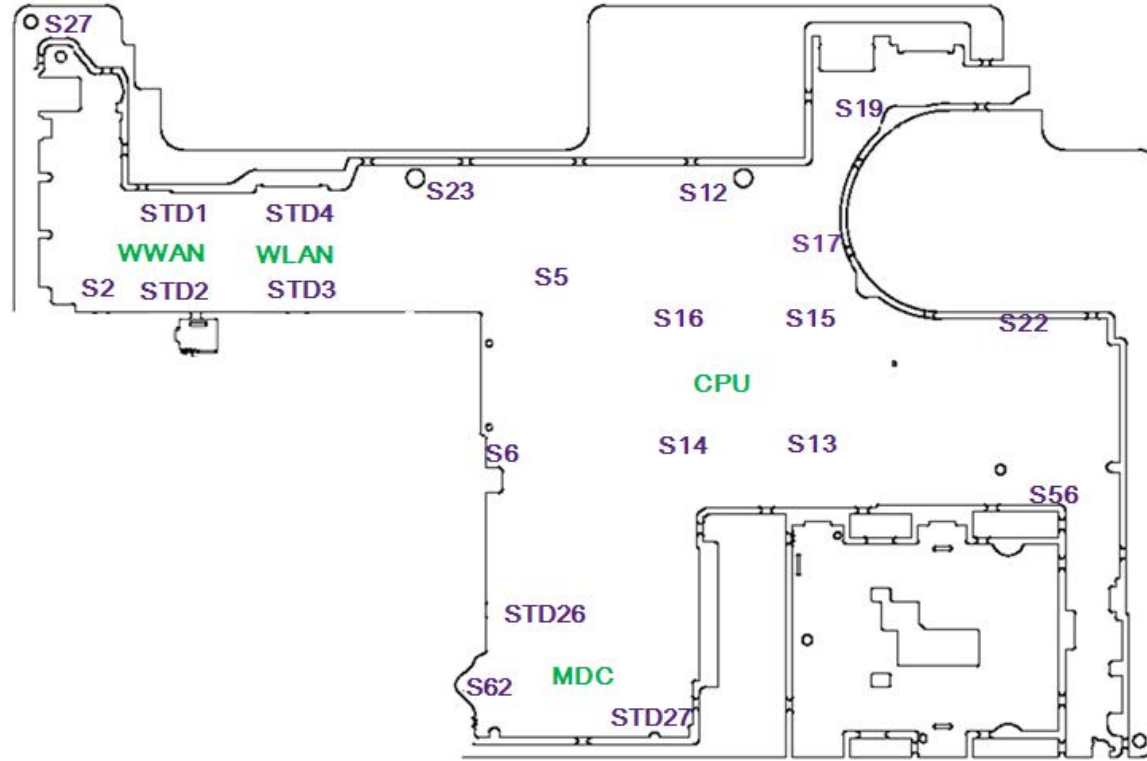
S12
SCREW550_850_700_NP_1P

S23
SCREW550_850_700_NP_1P

S17
SCREW300_800_600_1P

WLAN

WWAN



S62
SCREW280_500_1P

STD26
STDPAD_1.2_0_6-TOP
STD27
STDPAD_1.2_0_6-TOP

MDC

FIX105
FIX_MASK
FIX106
FIX_MASK
FIX107
FIX_MASK
FIX108
FIX_MASK
FIX109
FIX_MASK
FIX110
FIX_MASK

S19
SCREW320_600_1P

S22
SCREW320_800_600_1P

S13
SCREW330_600_1P

S15
SCREW330_600_1P

S16
SCREW330_600_1P

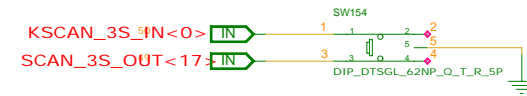
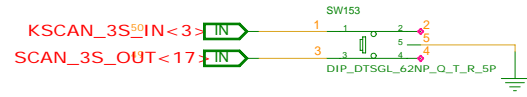
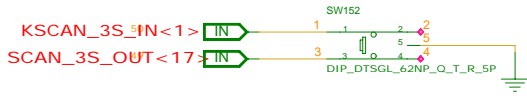
S14
SCREW330_0_500_1P

S56
SCREW320_800_1P

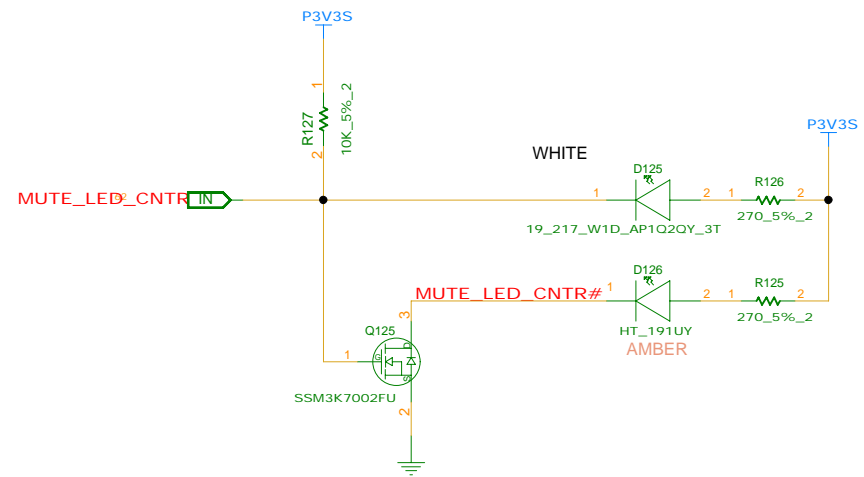
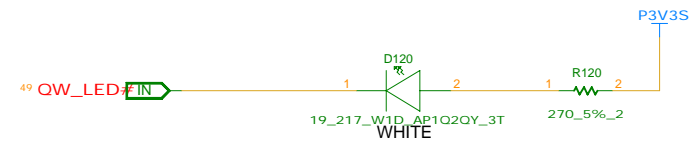
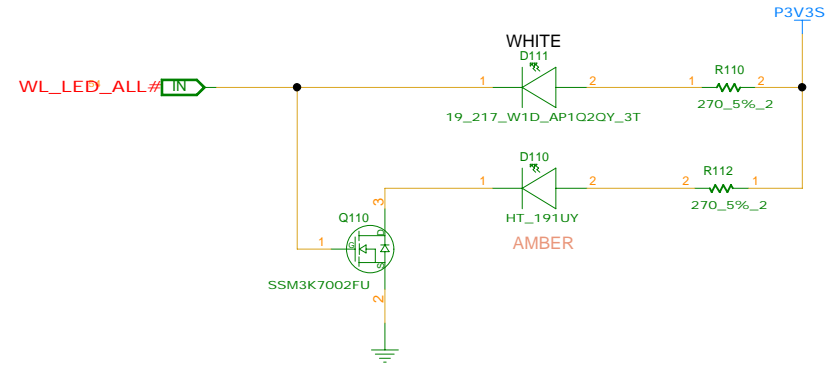
CPU

INVENTEC

TITLE			
CALVIN_UMA_SI SCREW			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1
SHEET 57 of 66			



REFERENCE NUMBER:100~199

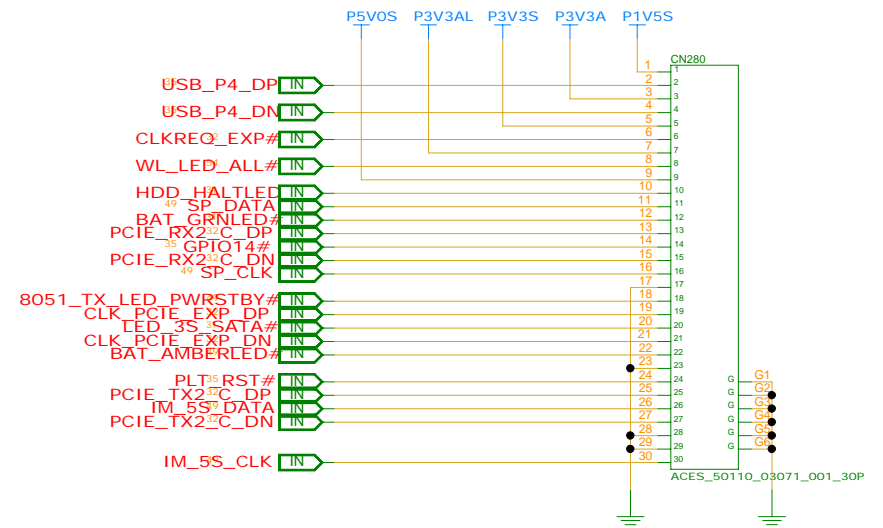


INVENTEC

TITLE			
CALVIN_UMA_S1 WIRELESS / QUICK WEB / MUTE LED			
DOC NUMBER		REV	
1310xxxx-0-0		AX1	
SIZE	CODE	SHEET	
A3	CS	58 of 66	



CHANGE by	Fdi	DATE	01-JUL-2011	SHEET	59	of	66
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REFERENCE NUMBER:9000~9099

EXPRESS CARD MB CONN.

INVENTEC

TITLE
CALVIN_UMA_S1
EXPRESS_CARD_CNTR

DOC NUMBER
1310xxxxx-0-0

REV
AX1

CHANGE by Edl DATE 01-JUL-2011

SHEET 60 of 66

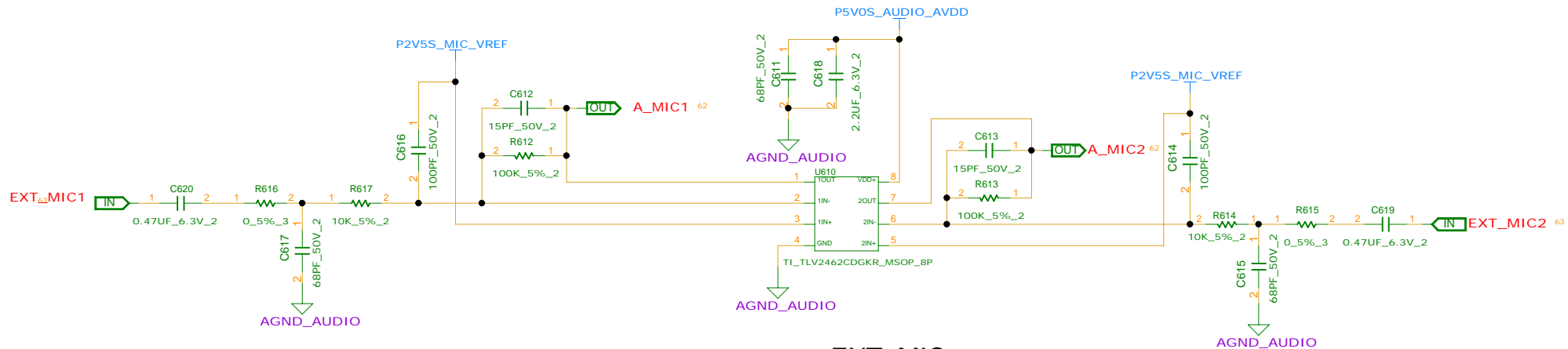
EMPTY

INVENTEC

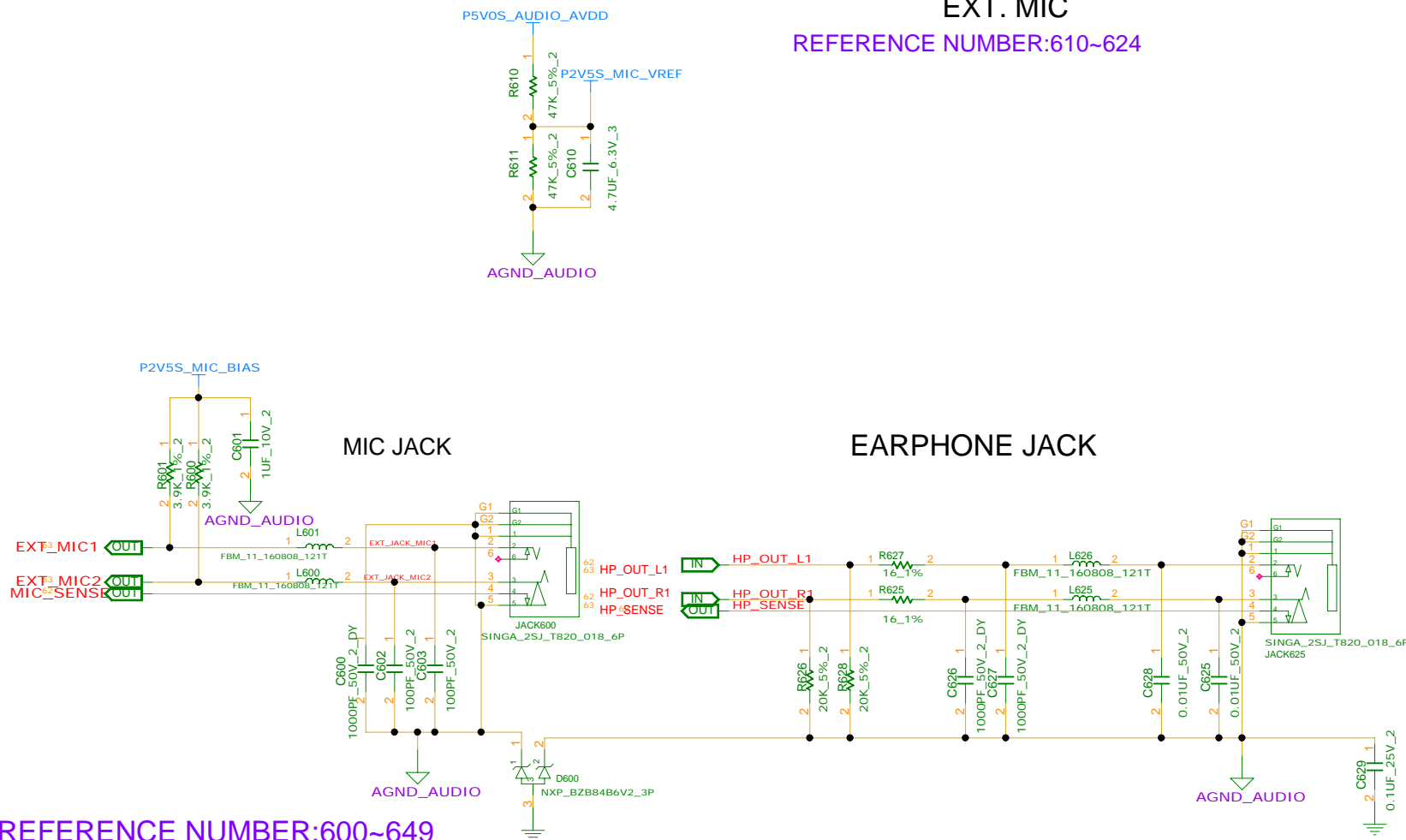
TITLE
EXPRESS CALVIN,UMA,SI CARD/POINT STICH/TOUCH PAD(SPARE)

SIZE A3	CODE CS	DOC.NUMBER 1310xxxxx-0-0	REV AX1
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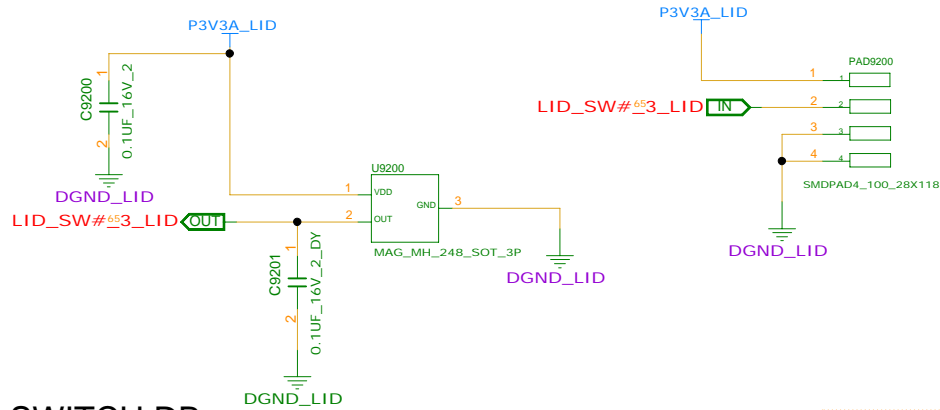


EXT. MIC
REFERENCE NUMBER:610~624



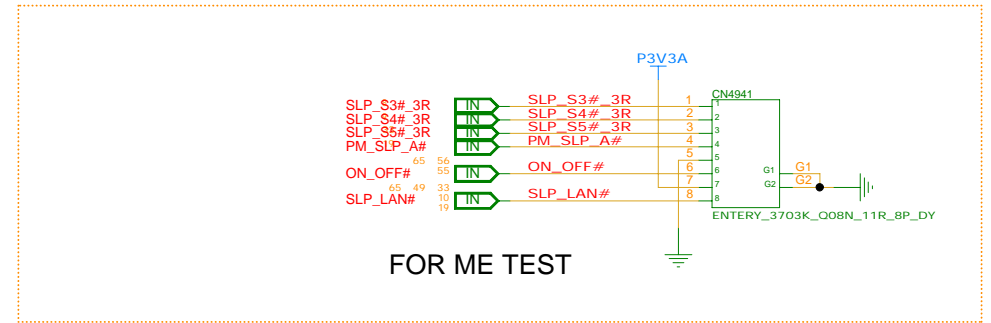
REFERENCE NUMBER:600~649

INVENTEC			
TITLE			
CALVIN_UMA-S1			
EXT. MIC / MIC / HP			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1
SHEET 63 of 66			

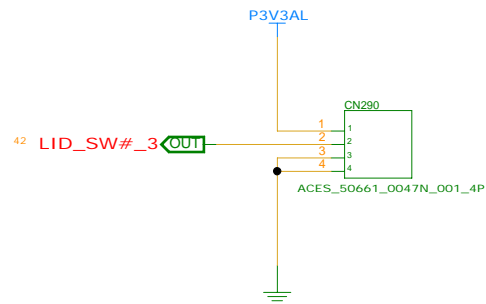


LID SWITCH DB

REFERENCE NUMBER:9200~9299



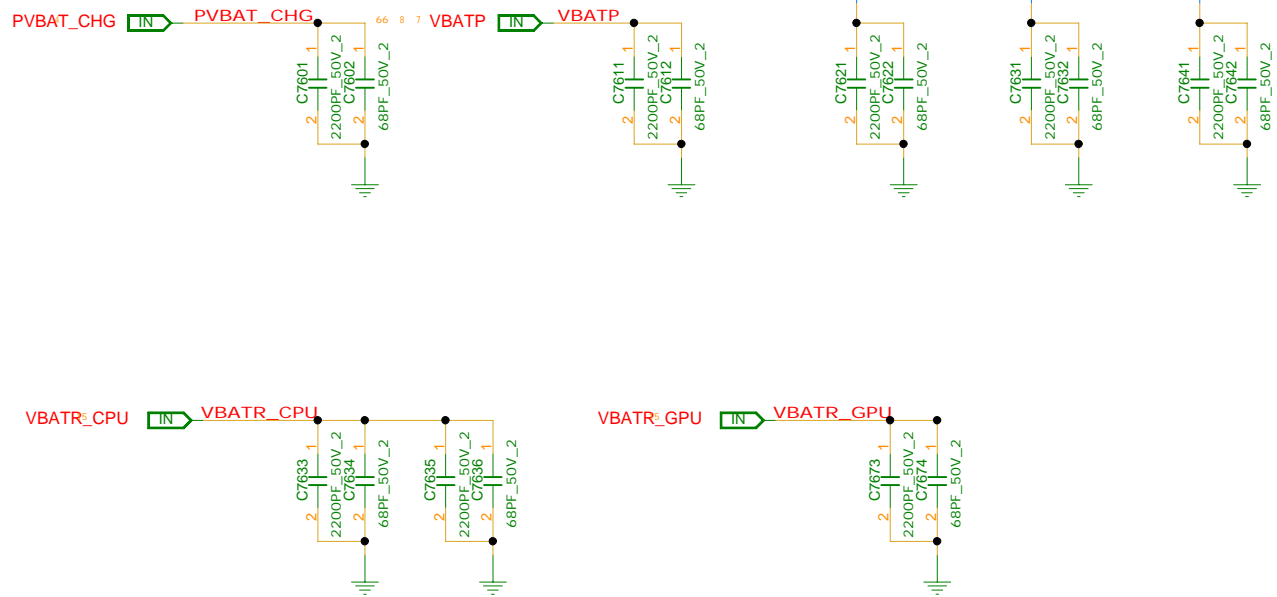
FOR ME TEST



LID SWITCH MB CONN.

INVENTEC

TITLE			
CALVIN_UMA_SI			
LID_SWITCH			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310xxxxx-0-0	AX1



INVENTEC

TITLE CALVIN_UMA_S1 RF SOLUTION

SIZE A3 CODE CS DOC NUMBER 1310xxxxx-0-0 REV AX1

CHANGE by Edl DATE 01-JUL-2011 SHEET 66 of 66