INVENTEC

Preliminary Test

Project A03Z45 **2009.03.05**

DATE	CHANGE NO.	REV

	EE	DATE	POWER	DATE
DRAWER				
DESIGN				
CHECK				
RESPONSIBLE				

SIZE = 3 VER :
FILE NAME : XXXX-XXXXXX-XX
P/N XXXXXXXXXXXX

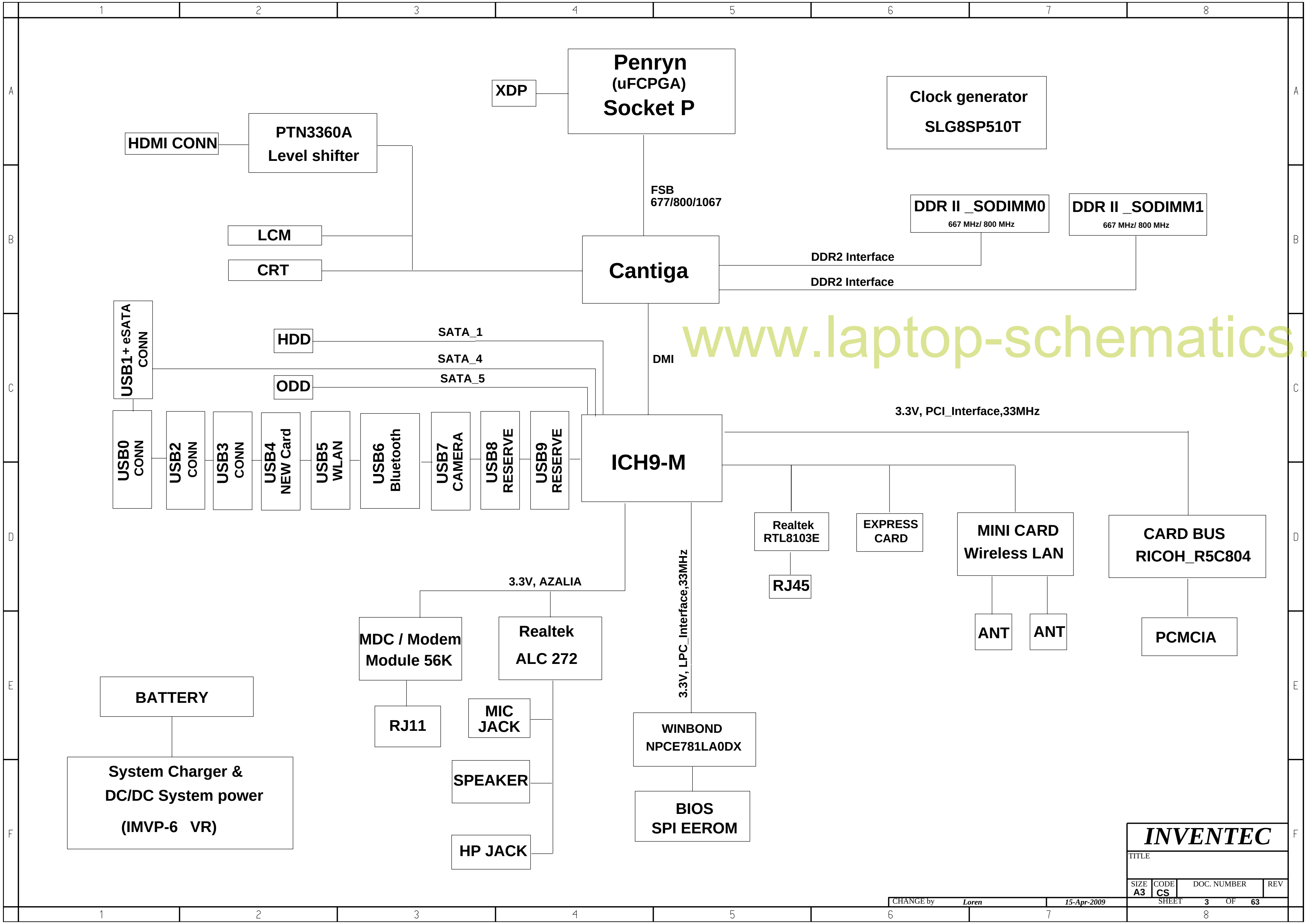
INVENTEC
TITLE

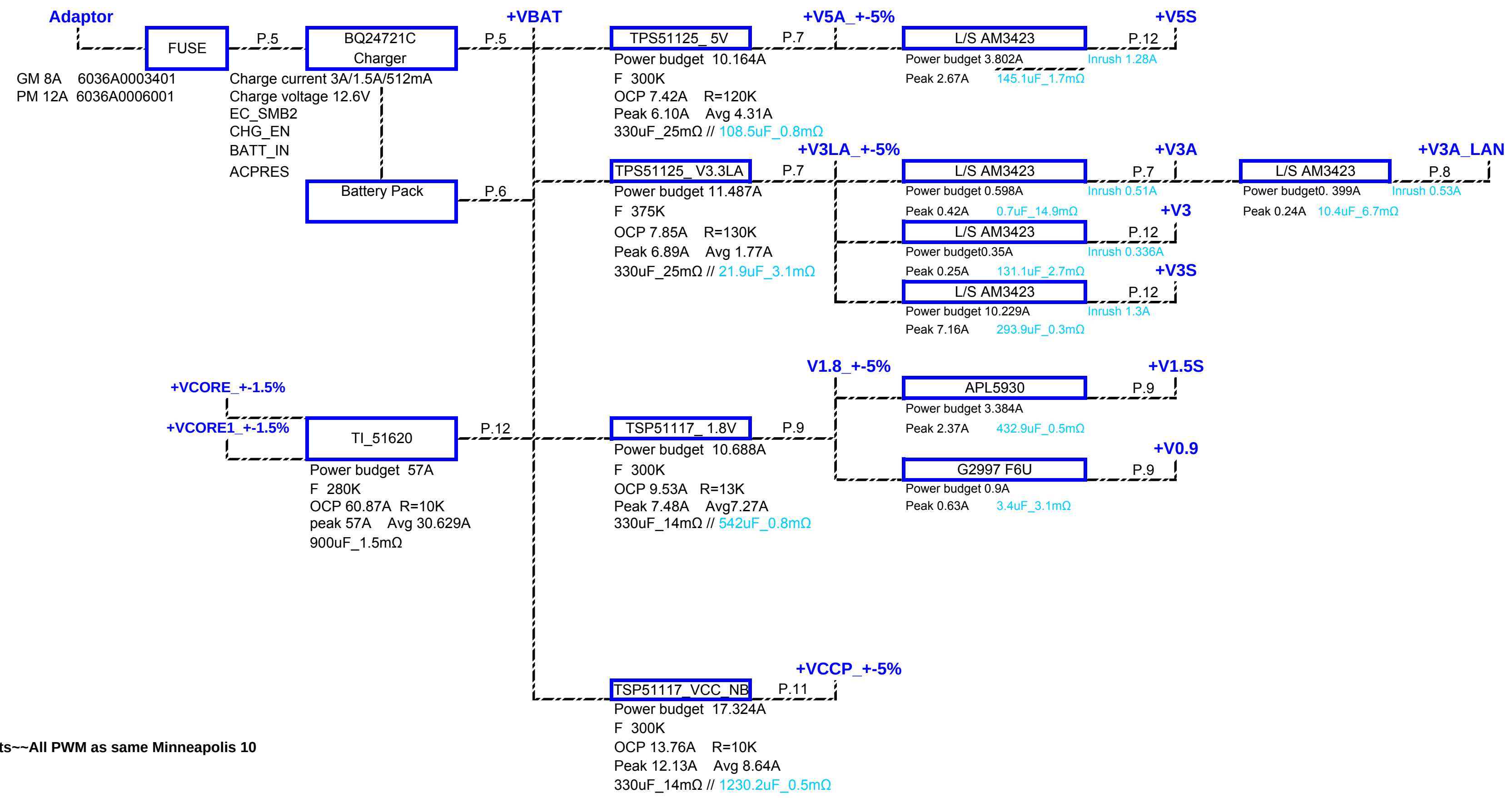
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

SHEET 1 OF 63

TABLE OF CONTENTS

INVENTEC			
TITLE			
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by Loren	24-Mar-2009	SHEET 2	OF 63

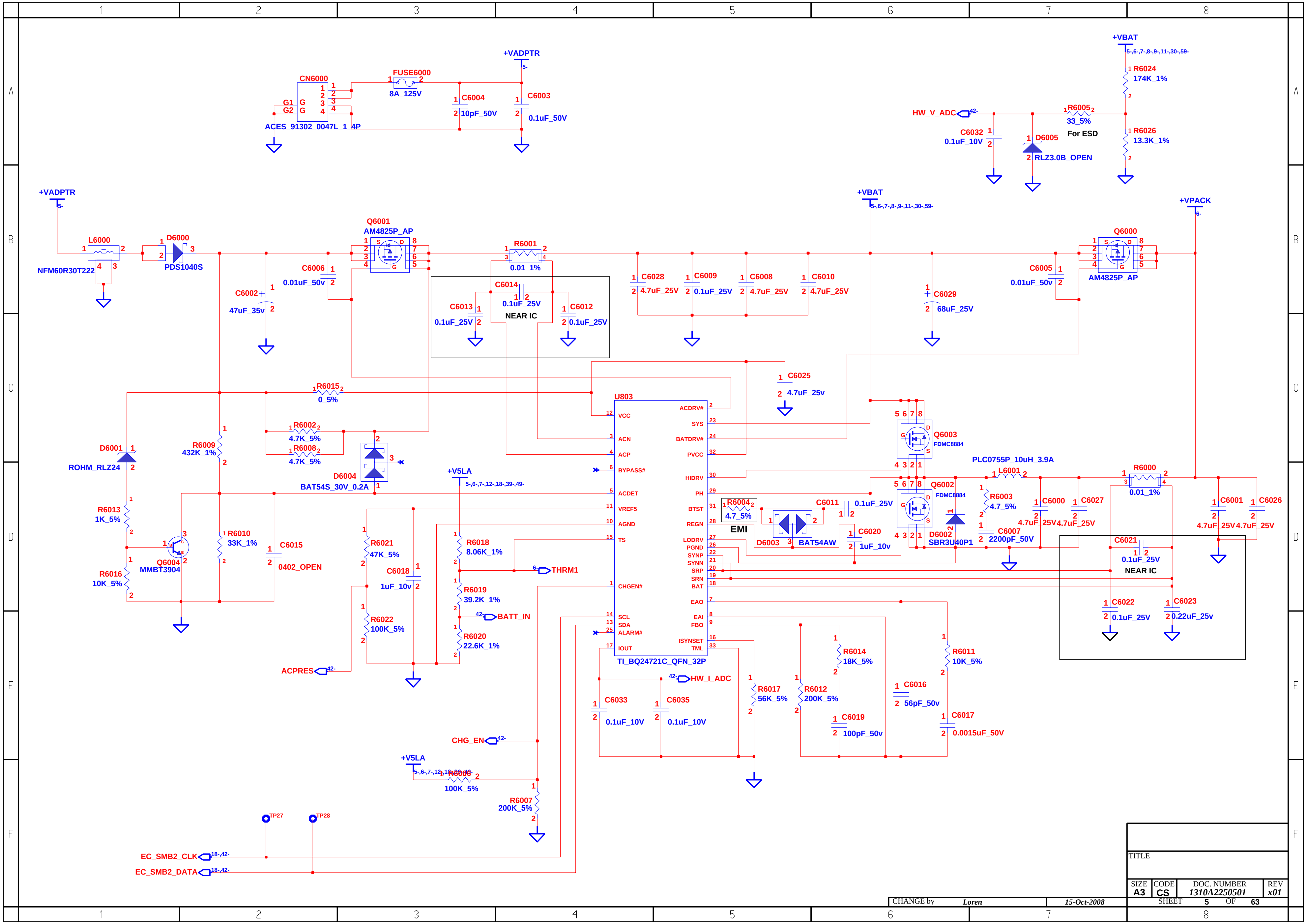

Penryn
(uFCPGA)
Socket P
XDP
Clock generator
SLG8SP510T
HDMI CONN
PTN3360A
Level shifter
FSB
677/800/1067
DDR II _SODIMM0
667 MHz/ 800 MHz
DDR II _SODIMM1
667 MHz/ 800 MHz
LCM
CRT
Cantiga
DDR2 Interface
DDR2 Interface
USB1+ eSATA
CONN
HDD
SATA_1
SATA_4
ODD
SATA_5
DMI
3.3V, PCI_Interface,33MHz
USB0
CONN
USB2
CONN
USB3
CONN
USB4
NEW Card
USB5
WLAN
USB6
Bluetooth
USB7
CAMERA
USB8
RESERVE
USB9
RESERVE
ICH9-M
Realtek
RTL8103E
EXPRESS
CARD
MINI CARD
Wireless LAN
CARD BUS
RICOH_R5C804
RJ45
3.3V, AZALIA
3.3V, LPC_Interface,33MHz
ANT
ANT
PCMCIA
MDC / Modem
Module 56K
Realtek
ALC 272
BATTERY
RJ11
MIC
JACK
SPEAKER
HP JACK
WINBOND
NPCE781LA0DX
BIOS
SPI EEROM
System Charger &
DC/DC System power
(IMVP-6 VR)
INVENTEC
TITLE
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
15-Apr-2009
SHEET 3 OF 63



Changing Points~~All PWM as same Minneapolis 10

Power budget ~~IC Spec (max current)
Peak current ~~Ratio of Internal prediction
Avg current ~~test result(max current)
Inrush ~~L/S turn no

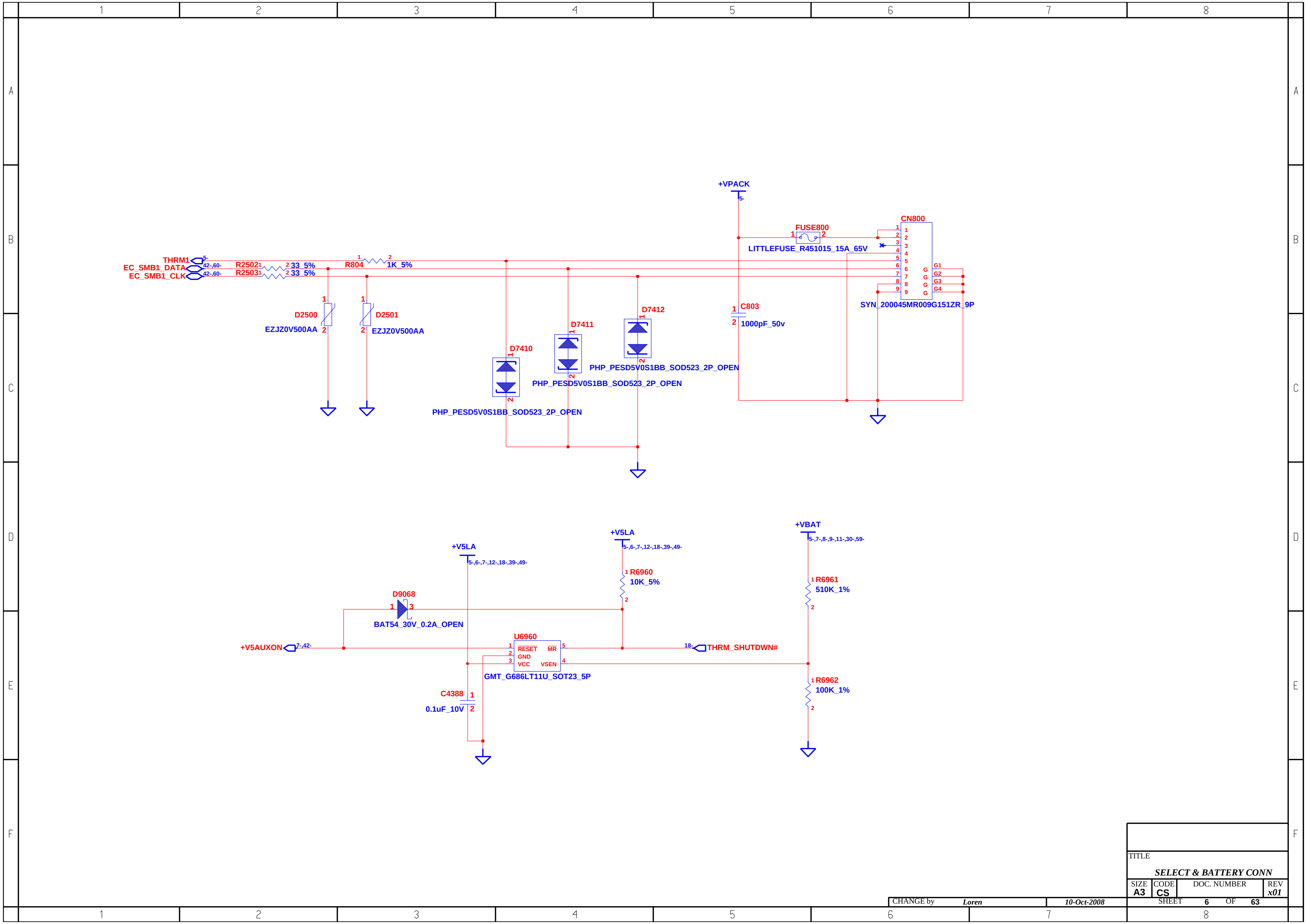
TITLE			
Power Sequence Block			
SIAE A3	CODE CS	DOC.NUMBER	REV
CHANGE by Loren Huang	14-Feb-2009	SHEET 4	OF 70

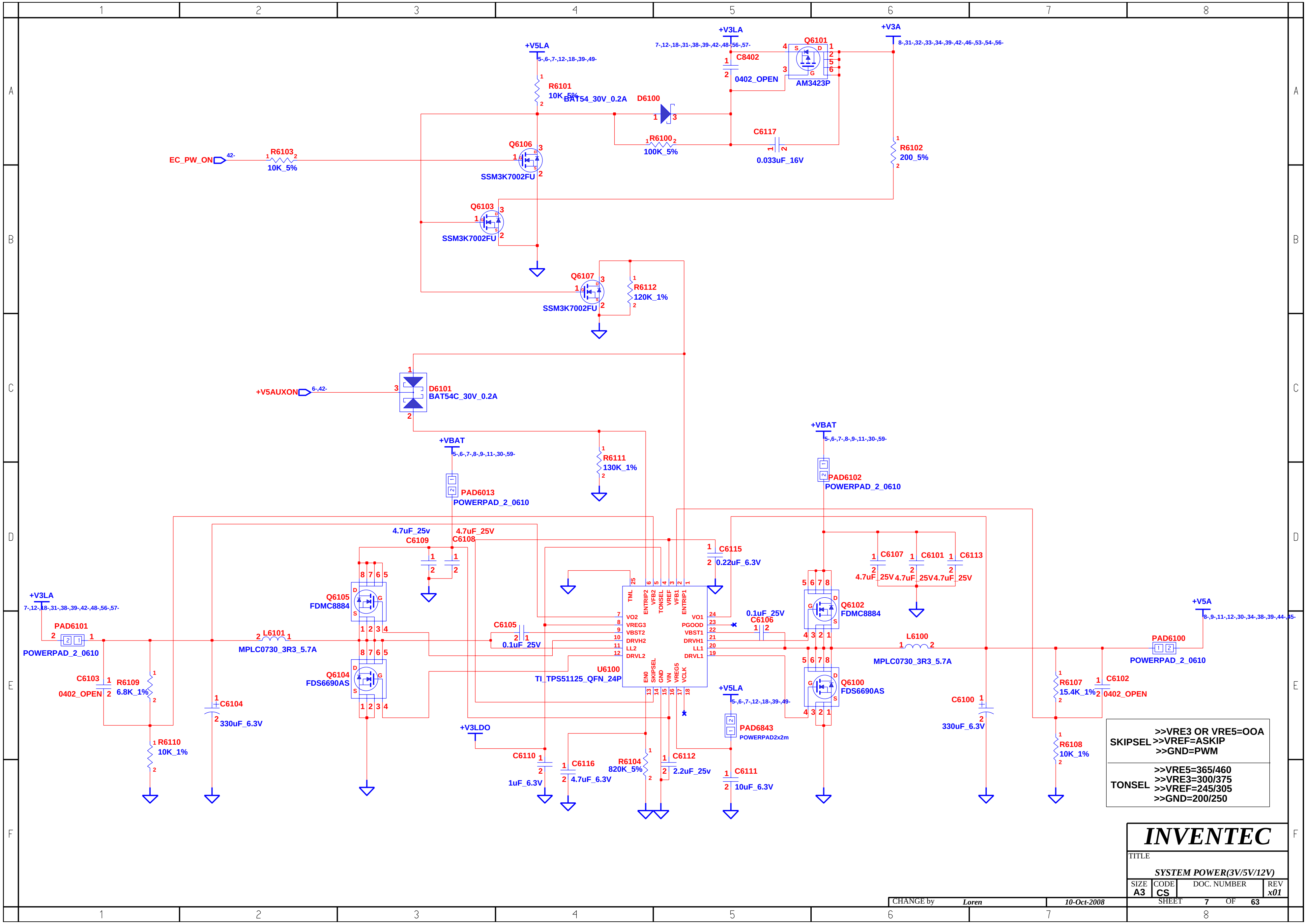


TITLE

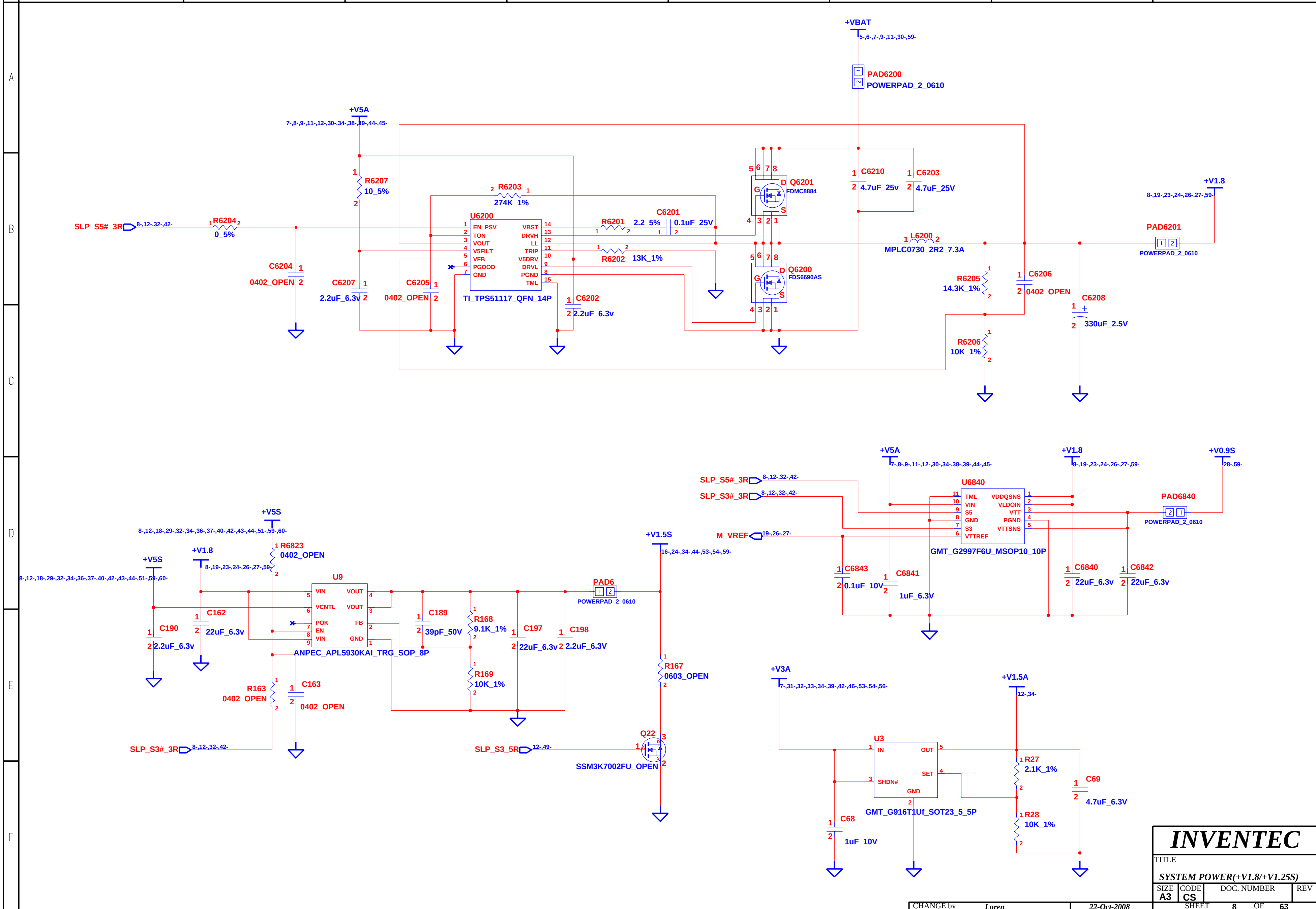
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2250501	x01

CHANGE by Loren 15-Oct-2008 SHEET 5 OF 63


+VPACK
FUSE800
LITTLEFUSE_R451015_15A_65V
CN800
SYN_200045MR009G151ZR_9P
G1
G2
G3
G4
THRM1
EC_SMB1_DATA
EC_SMB1_CLK
R2502
R2503
33_5%
33_5%
R804
1K_5%
D2500
EZJZ0V500AA
D2501
EZJZ0V500AA
D7410
D7411
D7412
PHP_PESD5V0S1BB_SOD523_2P_OPEN
PHP_PESD5V0S1BB_SOD523_2P_OPEN
PHP_PESD5V0S1BB_SOD523_2P_OPEN
C803
1000pF_50v
+V5LA
+V5LA
+VBAT
D9068
BAT54_30V_0.2A_OPEN
+V5AUXON
U6960
RESET
GND
VCC
MR
VSEN
GMT_G686LT11U_SOT23_5P
THRM_SHUTDWN#
R6960
10K_5%
R6961
510K_1%
R6962
100K_1%
C4388
0.1uF_10V
TITLE
SELECT & BATTERY CONN
SIZE A3
CODE CS
DOC. NUMBER
REV x01
CHANGE by Loren
10-Oct-2008
SHEET 6 OF 63



+V5LA
R6101
10K_5%
BAT54_30V_0.2A
D6100
+V3LA
C8402
0402_OPEN
Q6101
AM3423P
+V3A
R6100
100K_5%
C6117
0.033uF_16V
R6102
200_5%
EC_PW_ON
R6103
10K_5%
Q6106
SSM3K7002FU
Q6103
SSM3K7002FU
Q6107
SSM3K7002FU
R6112
120K_1%
+V5AUXON
D6101
BAT54C_30V_0.2A
+VBAT
PAD6013
POWERPAD_2_0610
R6111
130K_1%
PAD6102
POWERPAD_2_0610
4.7uF_25v
C6109
4.7uF_25V
C6108
C6115
0.22uF_6.3V
C6107
C6101
C6113
4.7uF 25V 4.7uF 25V 4.7uF 25V
Q6105
FDMC8884
Q6102
FDMC8884
+V3LA
PAD6101
POWERPAD_2_0610
L6101
MPLC0730_3R3_5.7A
C6105
0.1uF_25V
0.1uF_25V
C6106
L6100
MPLC0730_3R3_5.7A
+V5A
PAD6100
POWERPAD_2_0610
TML
ENTRIP2
VFB2
TONSEL
VREF
VFB1
ENTRIP1
VO2
VREG3
VBST2
DRVH2
LL2
DRVL2
VO1
PGOOD
VBST1
DRVH1
LL1
DRVL1
EN0
SKIPSEL
GND
VIN
VREG5
VCLK
U6100
TI_TPS51125_QFN_24P
C6103
0402_OPEN
R6109
6.8K_1%
C6104
330uF_6.3V
Q6104
FDS6690AS
Q6100
FDS6690AS
+V5LA
PAD6843
POWERPAD2x2m
C6100
330uF_6.3V
R6107
15.4K_1%
C6102
0402_OPEN
R6110
10K_1%
+V3LDO
C6110
1uF_6.3V
C6116
4.7uF_6.3V
R6104
820K_5%
C6112
2.2uF_25v
C6111
10uF_6.3V
R6108
10K_1%
SKIPSEL >>VRE3 OR VRE5=OOA
>>VREF=ASKIP
>>GND=PWM
TONSEL >>VRE5=365/460
>>VRE3=300/375
>>VREF=245/305
>>GND=200/250
INVENTEC
TITLE
SYSTEM POWER(3V/5V/12V)
SIZE A3
CODE CS
DOC. NUMBER
REV x01
CHANGE by Loren
10-Oct-2008
SHEET 7 OF 63



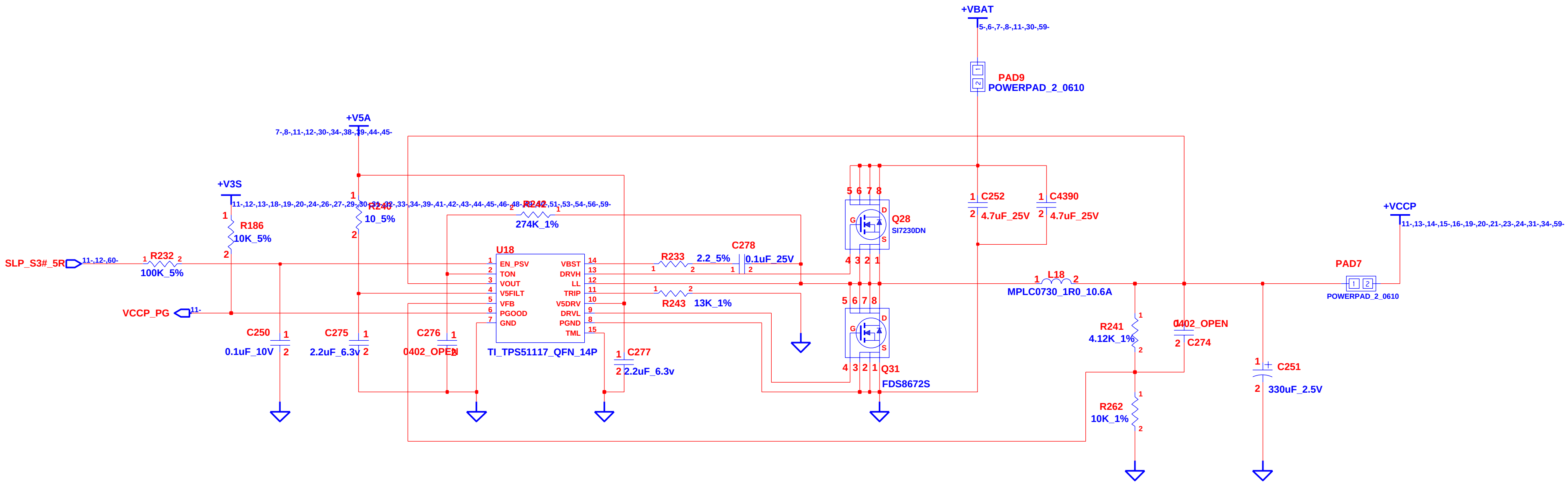
INVENTEC

TITLE

SYSTEM POWER(+V1.8/+V1.25S)

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

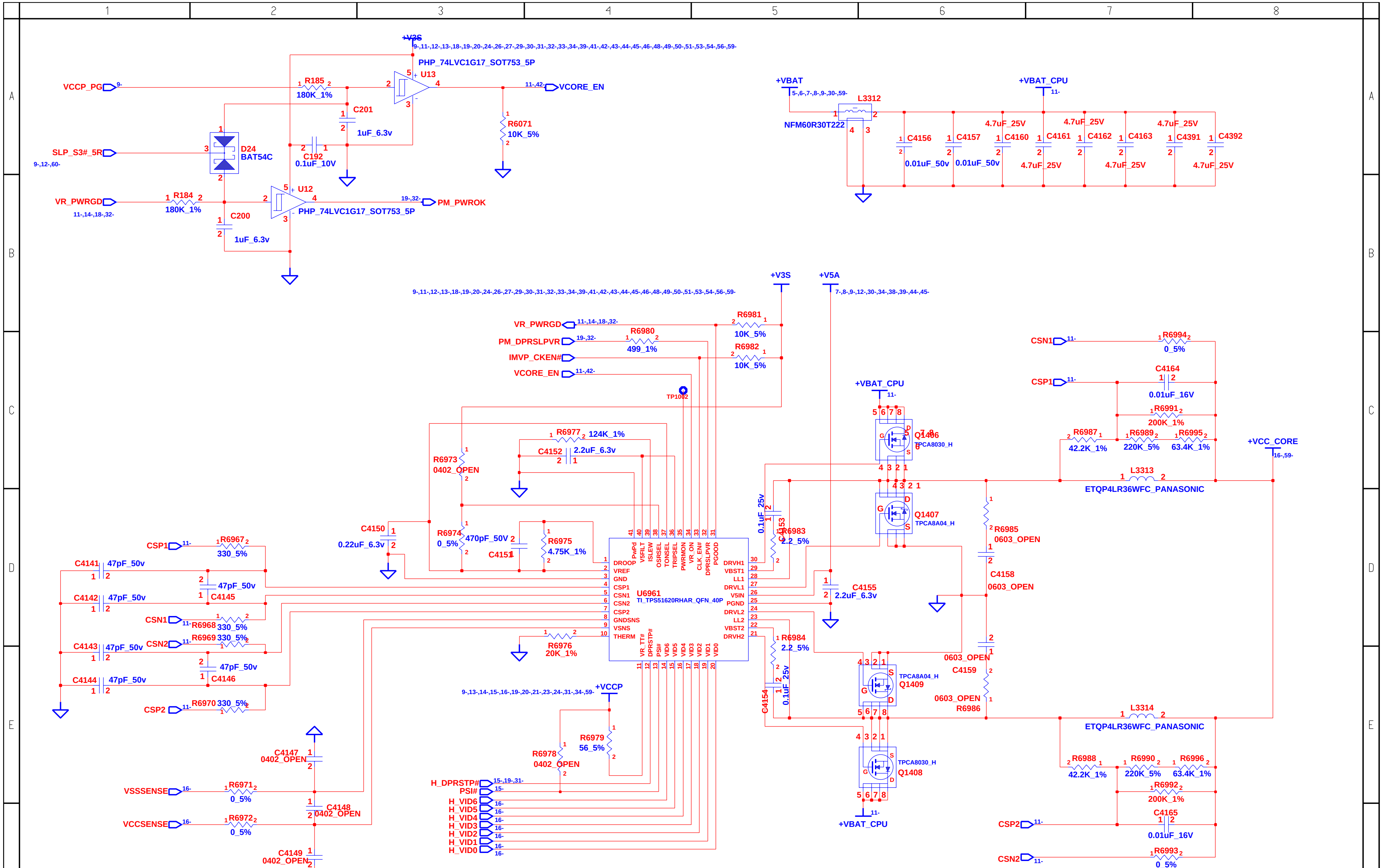
CHANGE by Loren 22-Oct-2008 SHEET 8 OF 63



INVENTEC			
TITLE			
GRAPHIC POWER (+VGFX_CORE)			
SIZE A3	CODE CS	DOC. NUMBER	REV x01
CHANGE by *Loren*	*10-Oct-2008*	SHEET 9	OF 63

BLANK

INVENTEC				
TITLE				
SYSTEM POWER(+VCCP/+V1.5S)				
SIZE A3	CODE CS	DOC. NUMBER		REV x01
CHANGE by Loren	10-Oct-2008	SHEET 10	OF 63	



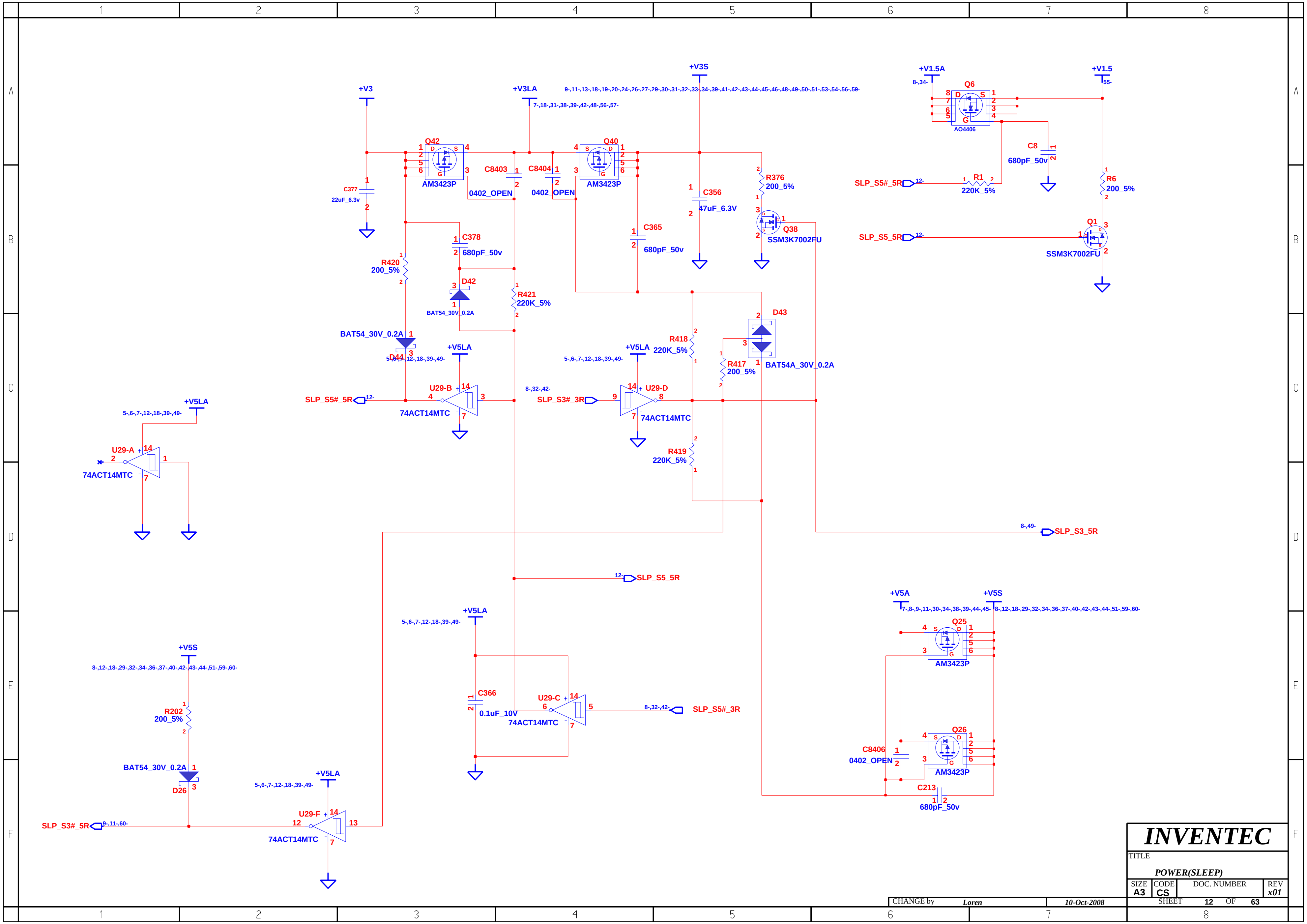
INVENTEC

TITLE

CPU POWER(VCC_CORE)

SIZE	CODE	DOC. NUMBER	REV
A3	CS		x01

CHANGE by Loren 10-Oct-2008 SHEET 11 OF 63

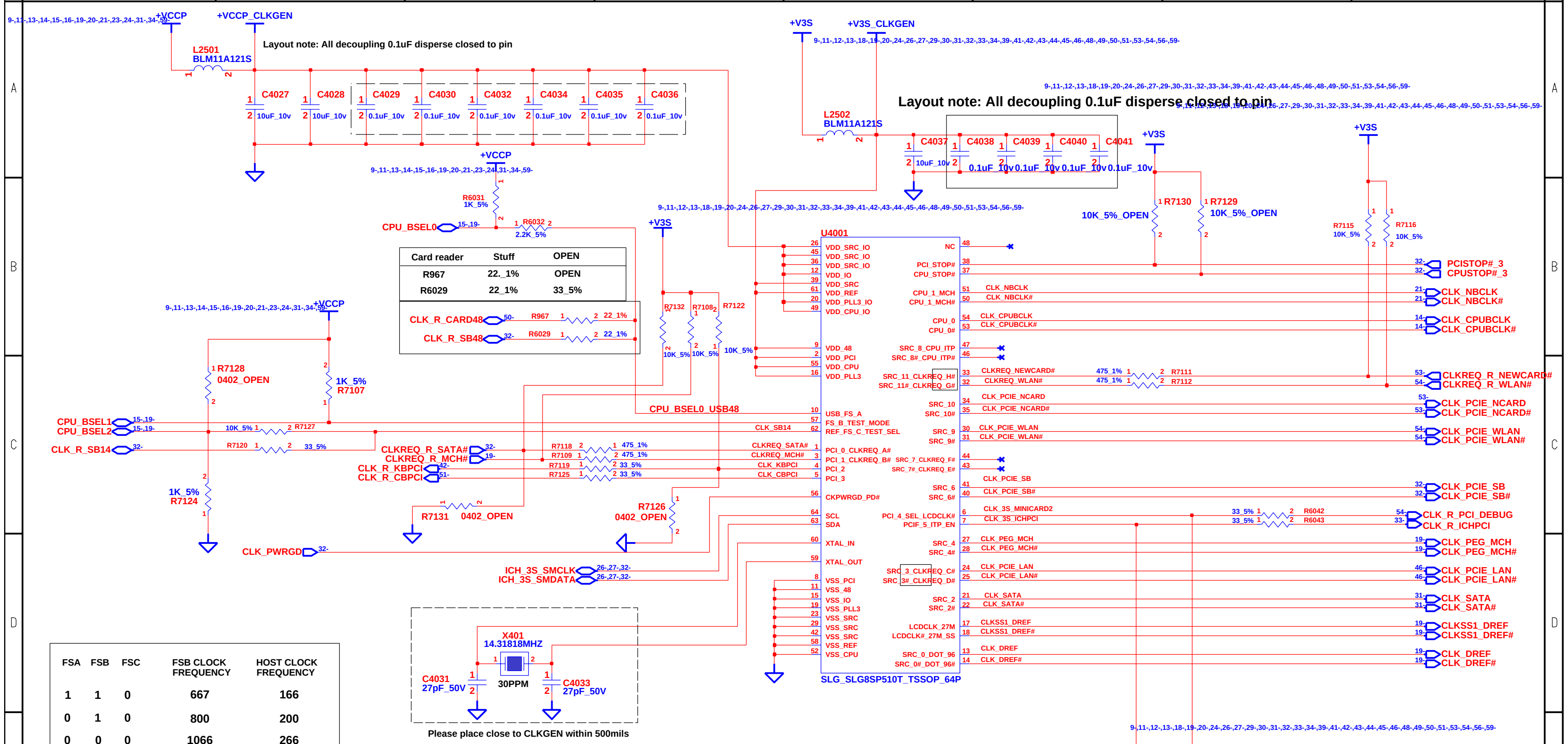


INVENTEC

TITLE POWER(SLEEP)

SIZE	CODE	DOC. NUMBER	REV
A3	CS		x01

CHANGE by Loren 10-Oct-2008 SHEET 12 OF 63



Card reader	Stuff	OPEN
R967	22_1%	OPEN
R6029	22_1%	33_5%

FSA	FSB	FSC	FSB CLOCK FREQUENCY	HOST CLOCK FREQUENCY
1	1	0	667	166
0	1	0	800	200
0	0	0	1066	266

***CLKREQ# pin controls SRC Table.**

CR#_A	Byte5: bit6 =0(PWD)	Byte5: bit6 =1
	SRC0	SRC2
	Byte5: bit7=0, disable CR#_A; 1,enable CR#_A	
CR#_B	Byte5: bit4 =0(PWD)	Byte5: bit4 =1
	SRC1	SRC4
	Byte5: bit5=0, disable CR#_B; 1,enable CR#_B	
CR#_C	Byte5: bit2 =0(PWD)	Byte5: bit2 =1
	SRC0	SRC2
	Byte5: bit3=0, disable CR#_C; 1,enable CR#_C	
CR#_D	Byte5: bit0 =0(PWD)	Byte5: bit0 =1
	SRC1	SRC4
	Byte5: bit1=0, disable CR#_D; 1,enable CR#_D	

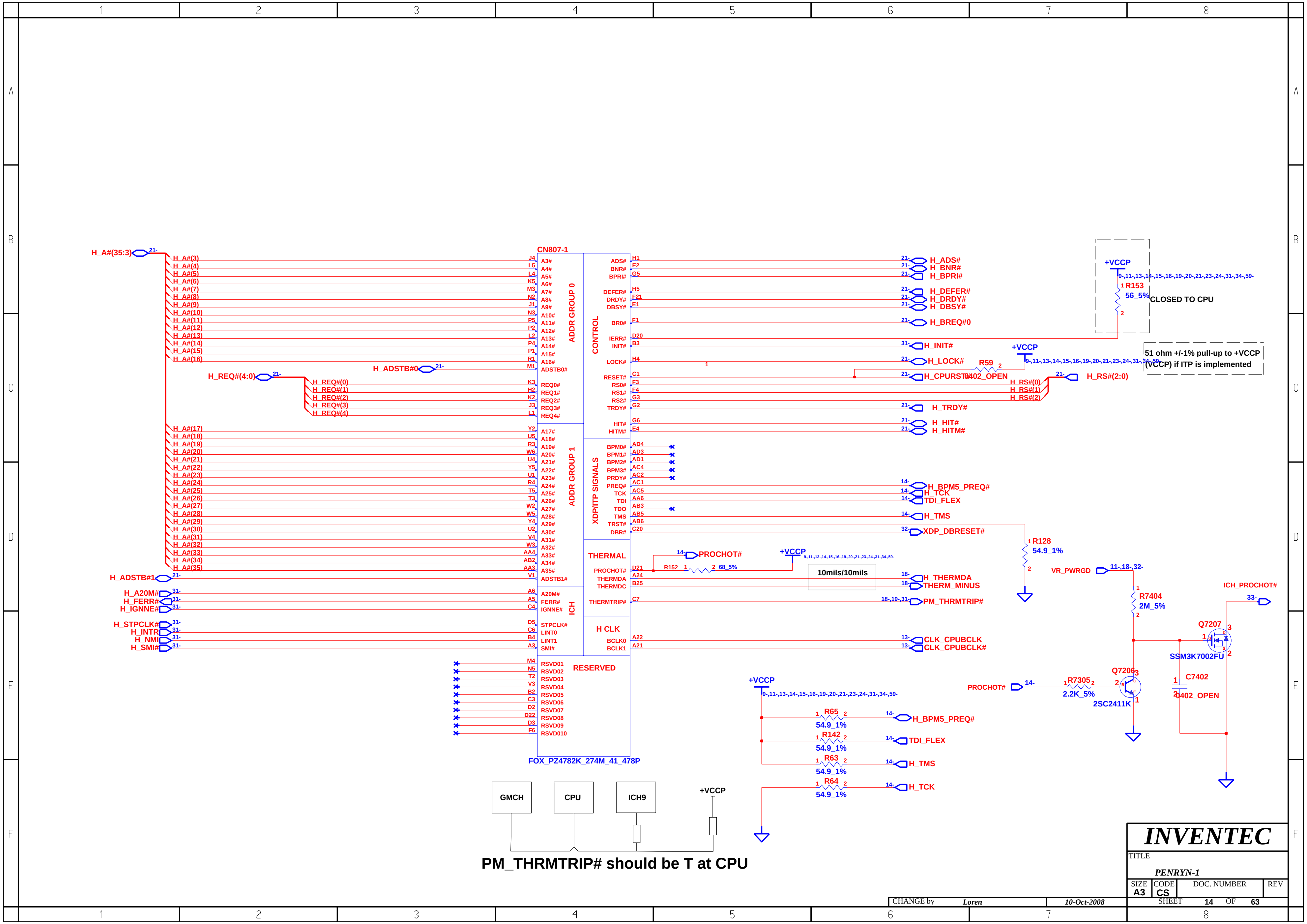
CR#_E	Byte6: bit7=0, disable CR#_E; 1,enable CR#_E
	SRC6
CR#_F	Byte6: bit6=0, disable CR#_F; 1,enable CR#_F
	SRC8
CR#_G	Byte6: bit5=0, disable CR#_G; 1,enable CR#_G
	SRC9
CR#_H	Byte6: bit4=0, disable CR#_H; 1,enable CR#_H
	SRC10

INVENTEC

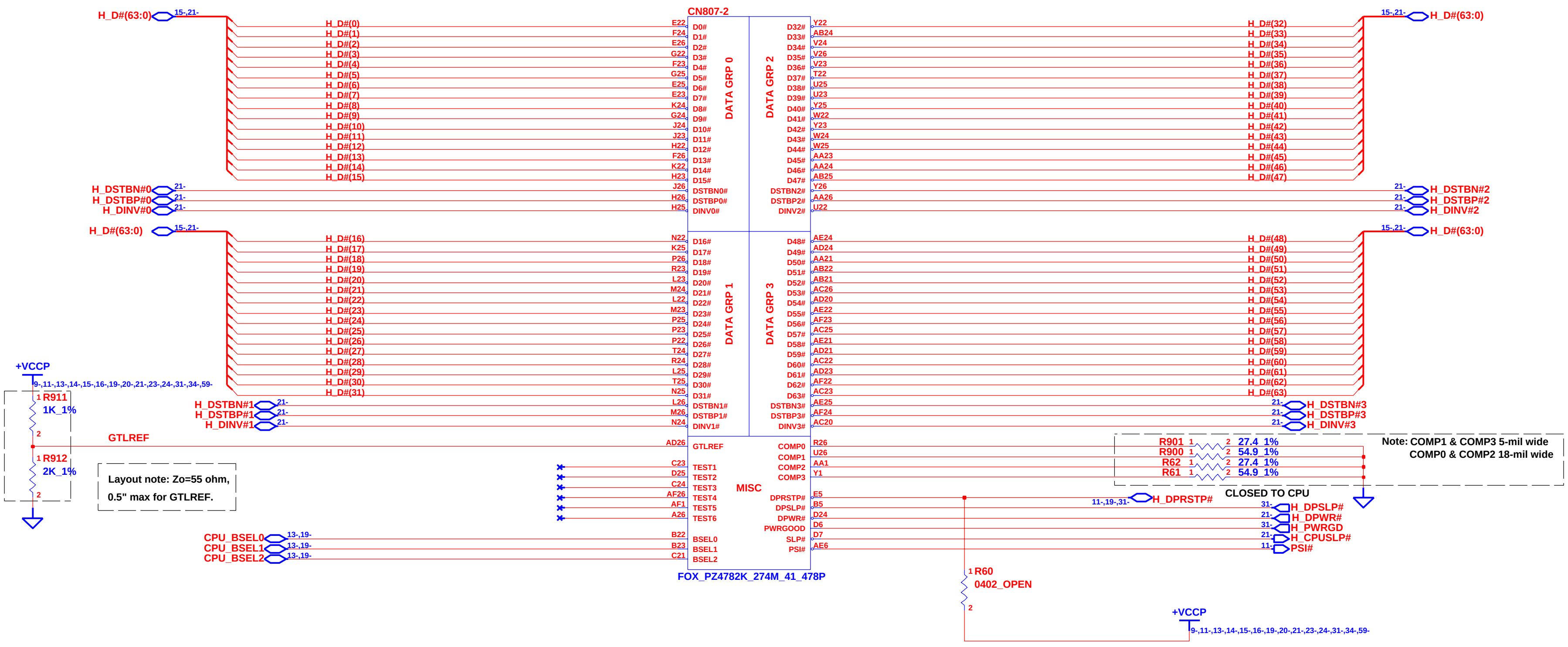
TITLE: CLOCK_GENERATOR

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 10-Oct-2008 SHEET 13 OF 63



CN807-1
FOX_PZ4782K_274M_41_478P
ADDR GROUP 0
ADDR GROUP 1
CONTROL
XDP/ITP SIGNALS
THERMAL
ICH
H CLK
RESERVED
H_A#(35:3)
H_A#(3) … H_A#(35)
H_ADSTB#0
H_ADSTB#1
H_REQ#(4:0)
H_REQ#(0) H_REQ#(1) H_REQ#(2) H_REQ#(3) H_REQ#(4)
H_A20M#
H_FERR#
H_IGNNE#
H_STPCLK#
H_INTR
H_NMI
H_SMI#
H_ADS#
H_BNR#
H_BPRI#
H_DEFER#
H_DRDY#
H_DBSY#
H_BREQ#0
H_INIT#
H_LOCK#
H_CPURST#
H_RS#(2:0)
H_RS#(0) H_RS#(1) H_RS#(2)
H_TRDY#
H_HIT#
H_HITM#
H_BPM5_PREQ#
H_TCK
TDI_FLEX
H_TMS
XDP_DBRESET#
PROCHOT#
H_THERMDA
H_THERM_MINUS
PM_THRMTRIP#
CLK_CPUBCLK
CLK_CPUBCLK#
10mils/10mils
+VCCP
R153 56_5%
CLOSED TO CPU
R59 0402_OPEN
51 ohm +/-1% pull-up to +VCCP (VCCP) if ITP is implemented
R128 54.9_1%
R152 68_5%
VR_PWRGD
R7404 2M_5%
ICH_PROCHOT#
Q7207 SSM3K7002FU
Q7206 2SC2411K
R7305 2.2K_5%
C7402 0402_OPEN
R65 54.9_1%
R142 54.9_1%
R63 54.9_1%
R64 54.9_1%
GMCH
CPU
ICH9
PM_THRMTRIP# should be T at CPU
INVENTEC
TITLE
PENRYN-1
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 14 OF 63



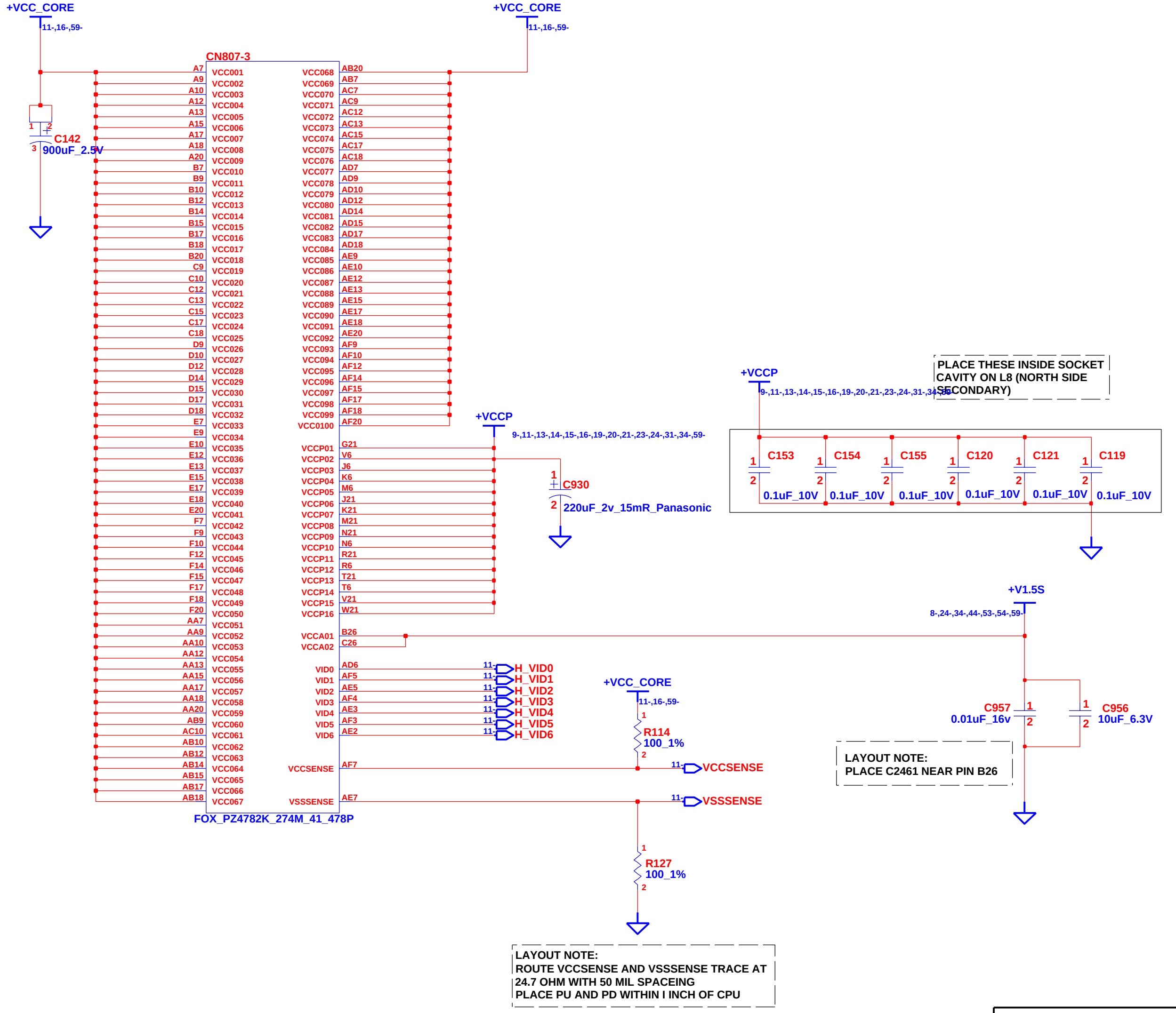
INVENTEC

TITLE

PENRYN-2

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 10-Oct-2008 SHEET 15 OF 63

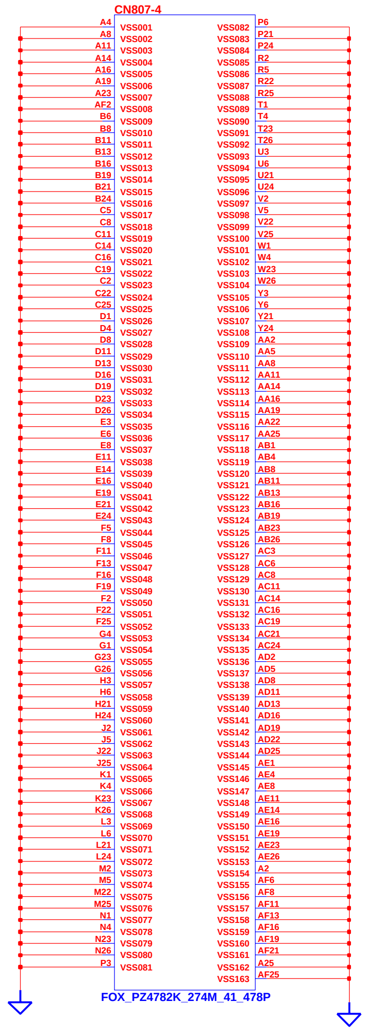


INVENTEC

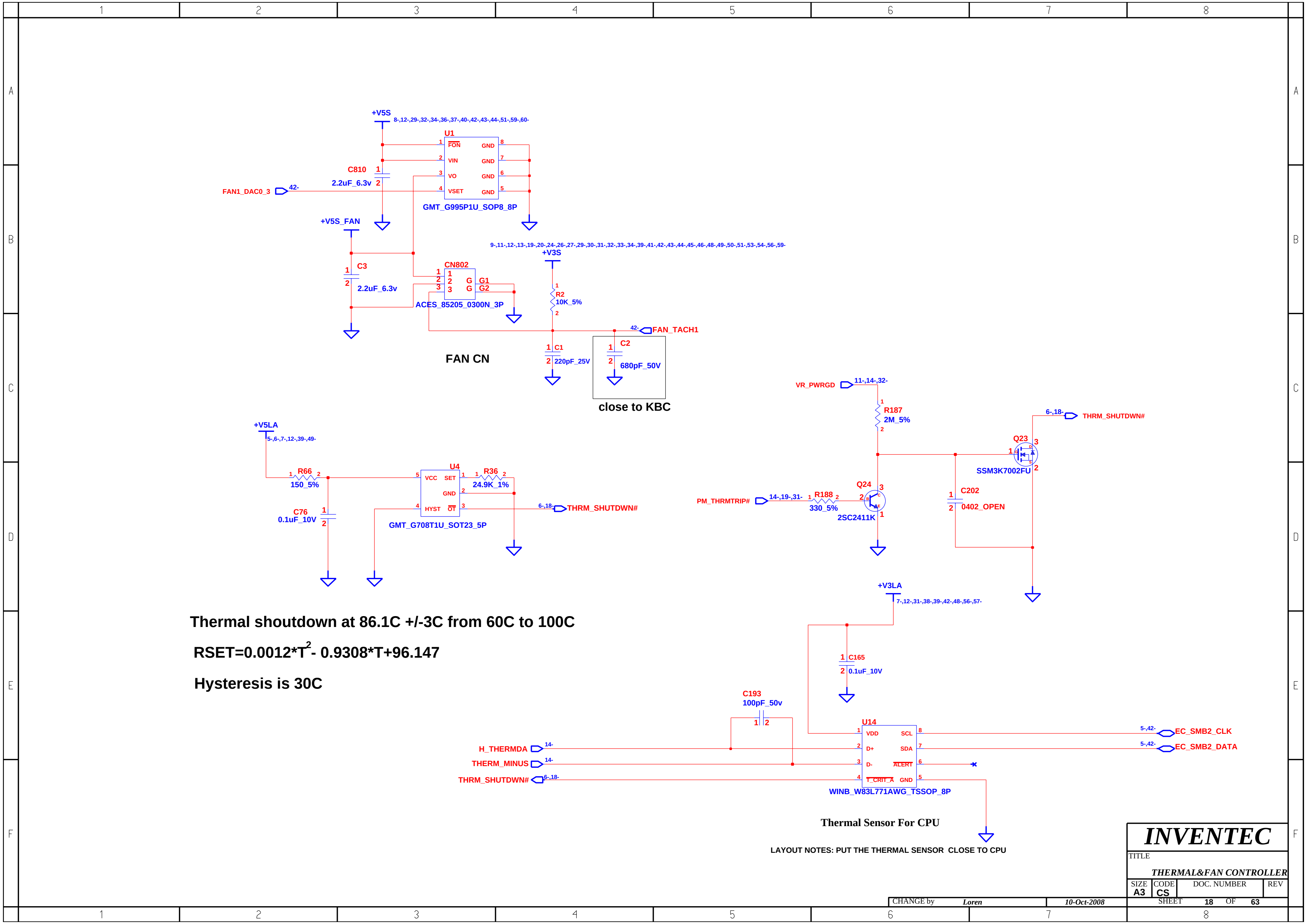
TITLE
PENRYN-3

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 10-Oct-2008 SHEET 16 OF 63



INVENTEC			
TITLE PENRYN-4			
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by Loren	10-Oct-2008	SHEET 17	OF 63



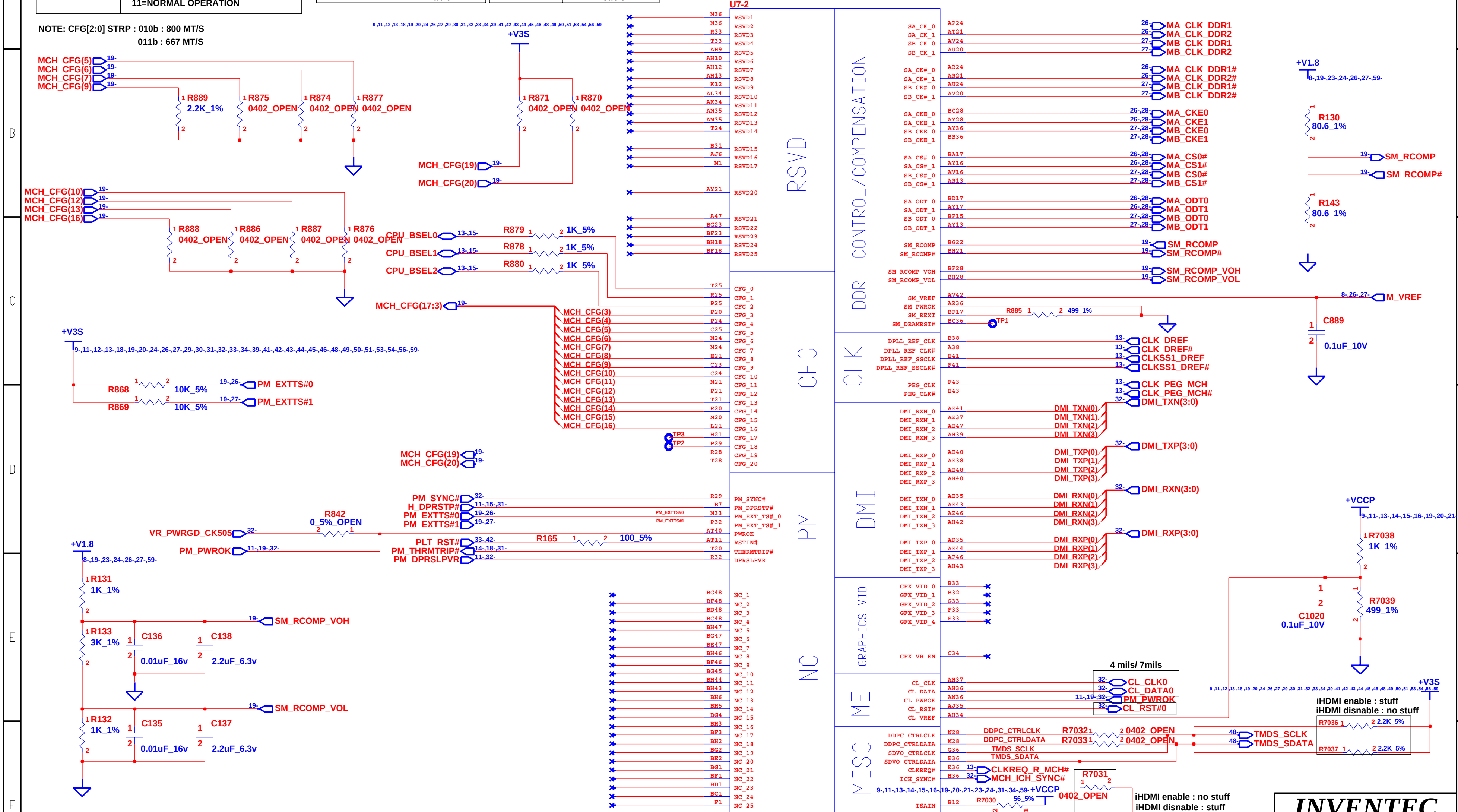
+V5S
U1
FON
VIN
VO
VSET
GND
C810
2.2uF_6.3v
FAN1_DAC0_3
GMT_G995P1U_SOP8_8P
+V5S_FAN
C3
2.2uF_6.3v
CN802
ACES_85205_0300N_3P
+V3S
R2
10K_5%
FAN_TACH1
C1
220pF_25V
C2
680pF_50V
FAN CN
close to KBC
+V5LA
R66
150_5%
C76
0.1uF_10V
U4
VCC
SET
GND
HYST
OT
R36
24.9K_1%
THRM_SHUTDWN#
GMT_G708T1U_SOT23_5P
Thermal shoutdown at 86.1C +/-3C from 60C to 100C
RSET=0.0012*T^2- 0.9308*T+96.147
Hysteresis is 30C
VR_PWRGD
R187
2M_5%
Q23
SSM3K7002FU
PM_THRMTRIP#
R188
330_5%
Q24
2SC2411K
C202
0402_OPEN
+V3LA
C165
0.1uF_10V
C193
100pF_50v
U14
VDD
D+
D-
T_CRIT_A
SCL
SDA
ALERT
GND
H_THERMDA
THERM_MINUS
EC_SMB2_CLK
EC_SMB2_DATA
WINB_W83L771AWG_TSSOP_8P
Thermal Sensor For CPU
LAYOUT NOTES: PUT THE THERMAL SENSOR CLOSE TO CPU
INVENTEC
TITLE
THERMAL&FAN CONTROLLER
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 18 OF 63

MCH_CFG(5)	LOW=DMIx2 HIGH=DMIx4	
MCH_CFG(7) (CPU Strap)	LOW=RSVD HIGH=Mobile CPU	
MCH_CFG(9) PCIE Graphics Lane	LOW=Reverse Lane HIGH=Normal operation	

NOTE : USE 4K-OHM RESISTOR WHEN INSTALLING PULL-UP/PULL-DOWN RESISTOR ON ANY MCH-CFG CONNECTION/PINS.

MCH_CFG(13:12) XOR/ALLZ	00=PARTIAL CLOCK GATING DISABLE 01=XOR MODE ENABLE 10=ALL-Z MODE ENABLE 11=NORMAL OPERATION
MCH_CFG(16) (FSB Dynamic ODT)	LOW=Dynamic ODT Disable HIGH=Dynamic ODT Enable
MCH_CFG(6)	LOW=TPM Enable HIGH=TPM Disable

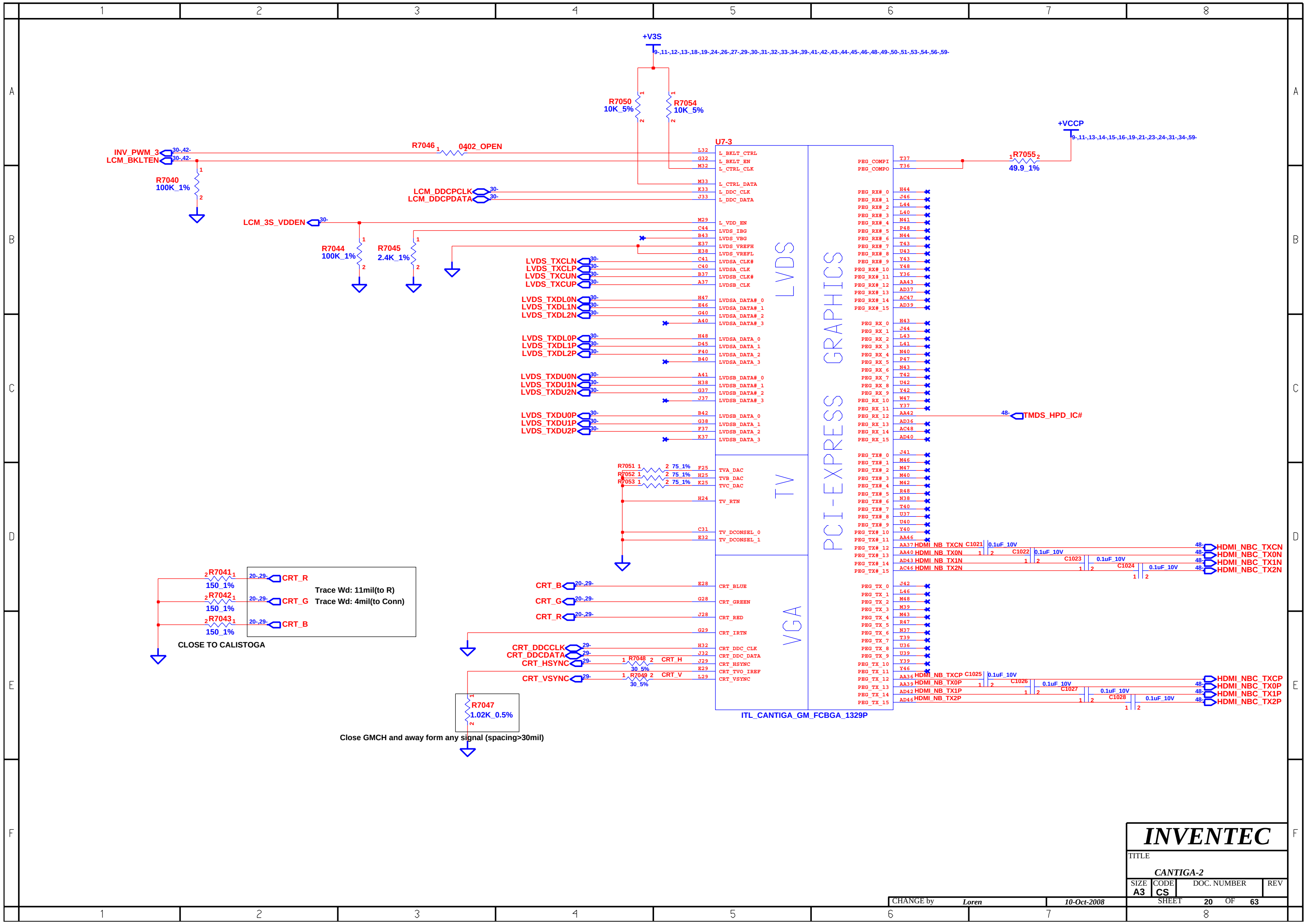
NOTE: CFG[2:0] STRP : 010b : 800 MT/S
011b : 667 MT/S



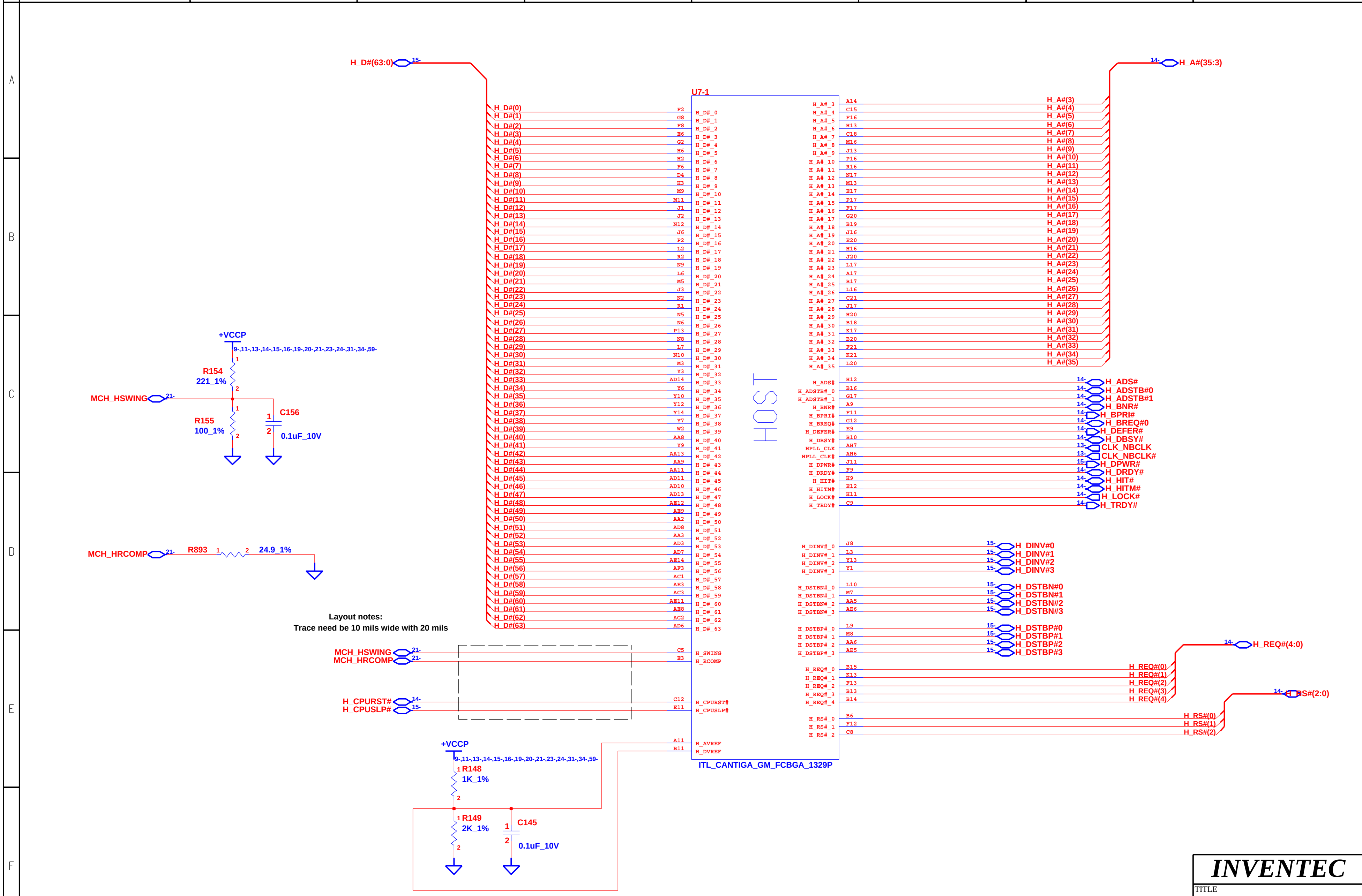
MCH_CFG(20) DIGITAL DISPLAY PORT(SDVO/DP/iHDMI) CONCURRENT WITH PCIE	LOW=ONLY DIGITAL DISPLAY PORT (SDVO/DP/iHDMI)OR PCIEIS OPERATIONAL HIGH= DIGITAL DISPLAY PORT (SDVO/DP/iHDMI)AND PCIE ARE OPERATING VIA THE PEG PORT
MCH_CFG(19) (DMI LANE REVERSAL)	LOW=NORMAL HIGH=LANES REVERSED

INVENTEC

TITLE	CANTIGA-1		
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by Loren	10-Oct-2008	SHEET 19	OF 63



+V3S
+VCCP
U7-3
R7050 10K_5%
R7054 10K_5%
R7046 0402_OPEN
R7055 49.9_1%
R7040 100K_1%
R7044 100K_1%
R7045 2.4K_1%
INV_PWM_3
LCM_BKLTEN
LCM_DDCPCLK
LCM_DDCPDATA
LCM_3S_VDDEN
LVDS_TXCLN
LVDS_TXCLP
LVDS_TXCUN
LVDS_TXCUP
LVDS_TXDL0N
LVDS_TXDL1N
LVDS_TXDL2N
LVDS_TXDL0P
LVDS_TXDL1P
LVDS_TXDL2P
LVDS_TXDU0N
LVDS_TXDU1N
LVDS_TXDU2N
LVDS_TXDU0P
LVDS_TXDU1P
LVDS_TXDU2P
LVDS
TV
VGA
PCI-EXPRESS GRAPHICS
R7051 75_1%
R7052 75_1%
R7053 75_1%
TMDS_HPD_IC#
HDMI_NB_TXCN
HDMI_NB_TX0N
HDMI_NB_TX1N
HDMI_NB_TX2N
HDMI_NB_TXCP
HDMI_NB_TX0P
HDMI_NB_TX1P
HDMI_NB_TX2P
HDMI_NBC_TXCN
HDMI_NBC_TX0N
HDMI_NBC_TX1N
HDMI_NBC_TX2N
HDMI_NBC_TXCP
HDMI_NBC_TX0P
HDMI_NBC_TX1P
HDMI_NBC_TX2P
0.1uF_10V
R7041 150_1%
R7042 150_1%
R7043 150_1%
CRT_R
CRT_G
CRT_B
Trace Wd: 11mil(to R)
Trace Wd: 4mil(to Conn)
CLOSE TO CALISTOGA
CRT_DDCCLK
CRT_DDCDATA
CRT_HSYNC
CRT_VSYNC
R7048 30_5%
R7049 30_5%
CRT_H
CRT_V
R7047 1.02K_0.5%
Close GMCH and away form any signal (spacing>30mil)
ITL_CANTIGA_GM_FCBGA_1329P
INVENTEC
TITLE
CANTIGA-2
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 20 OF 63



INVENTEC

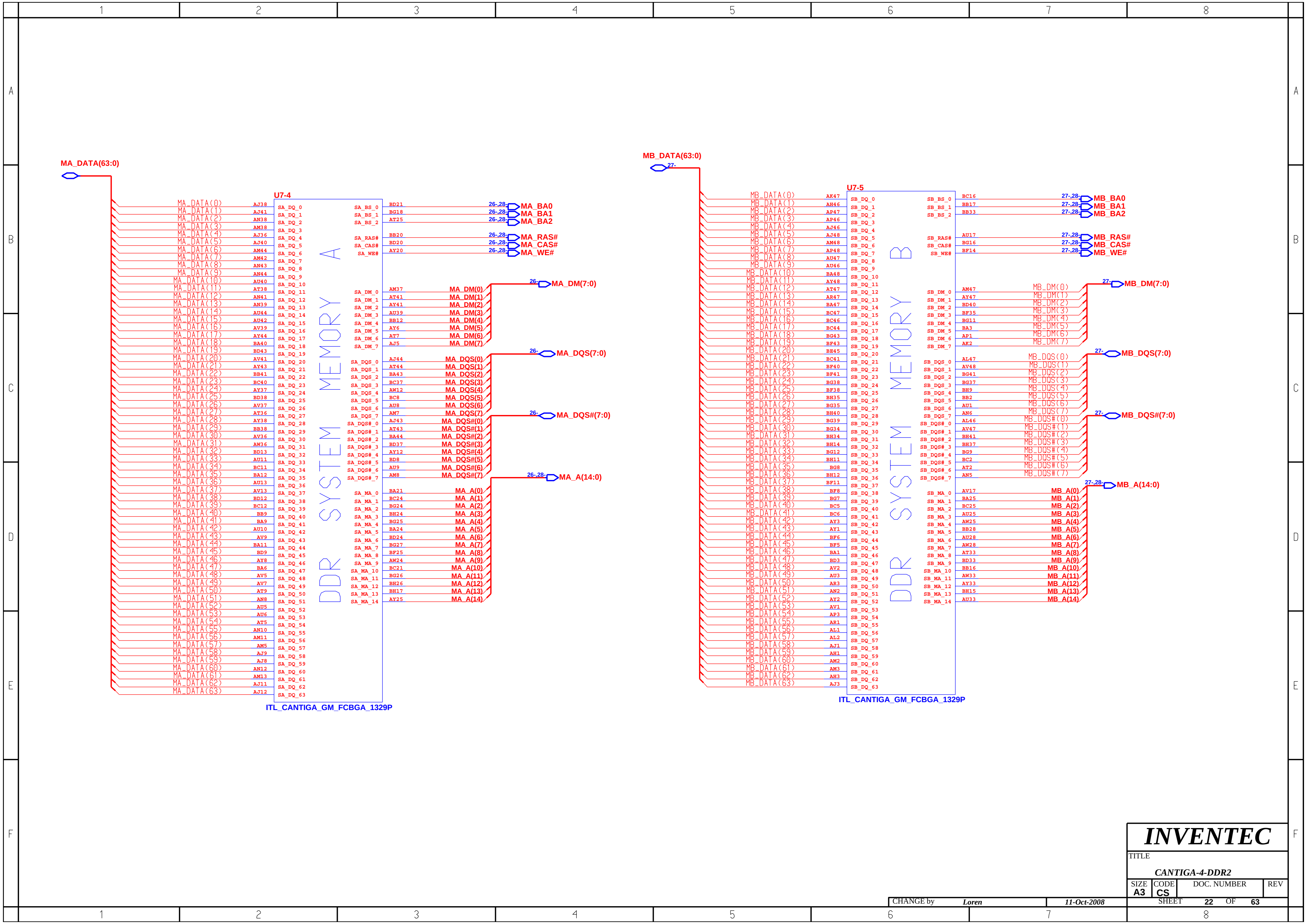
TITLE

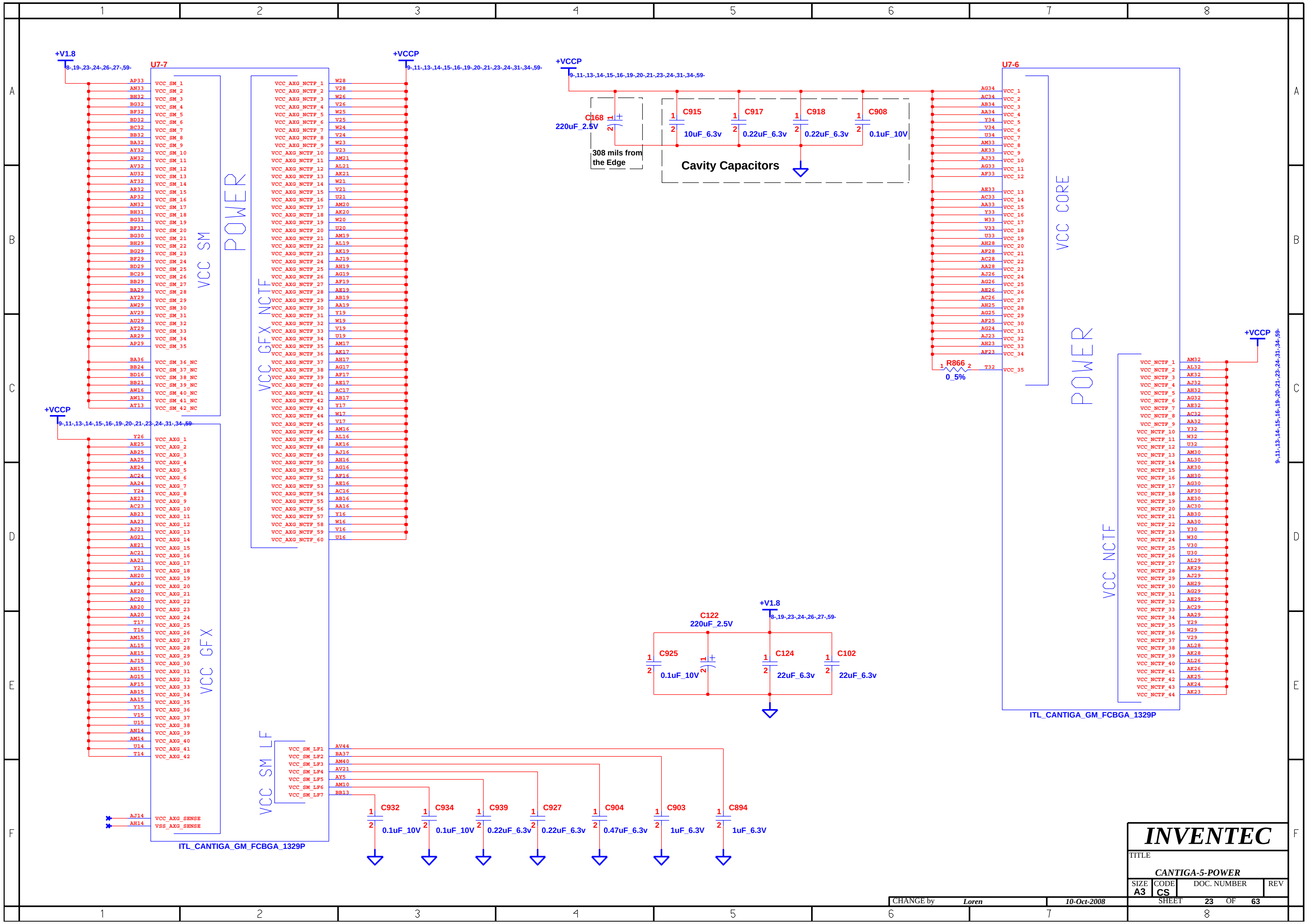
CANTIGA-3-HOST

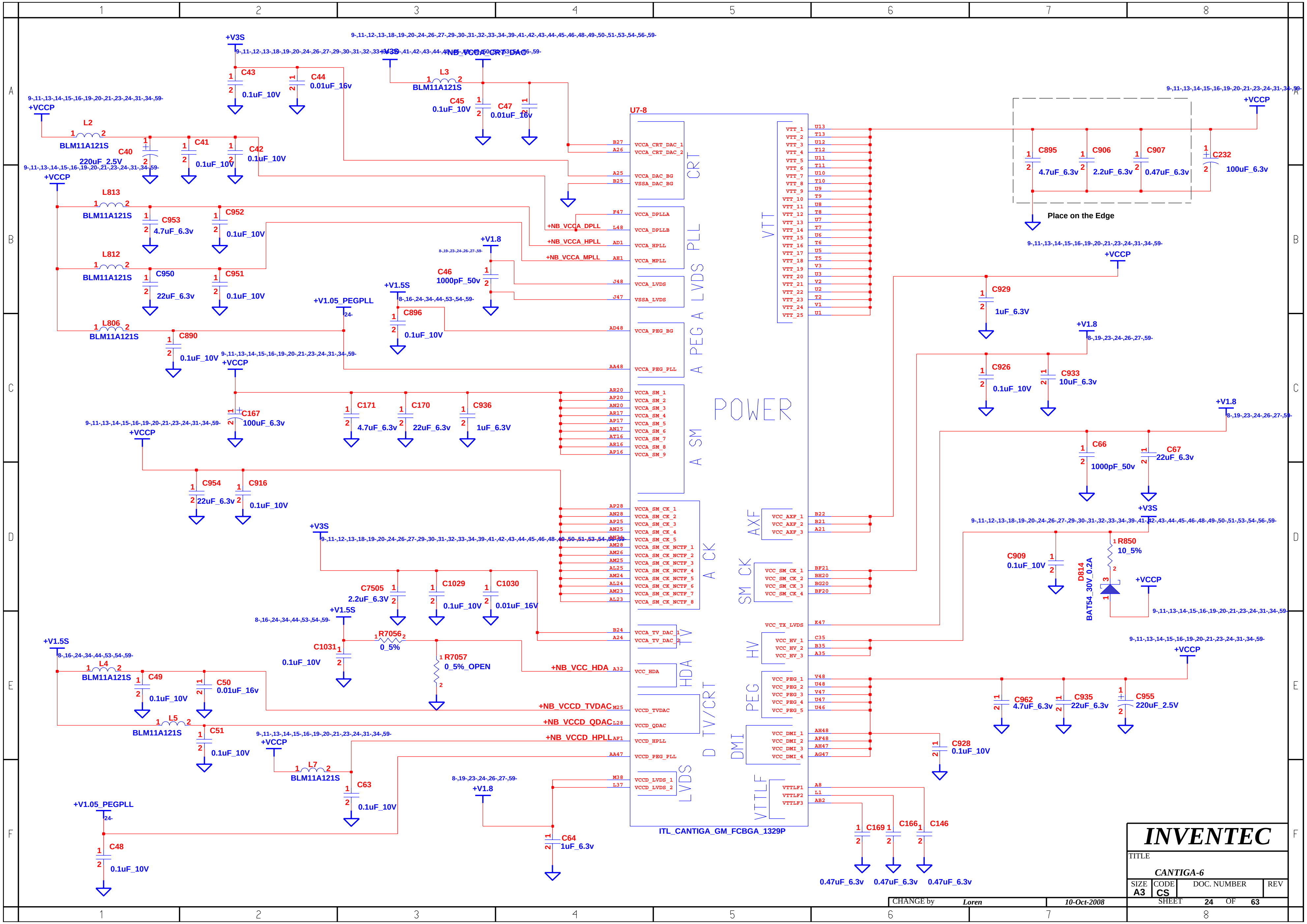
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

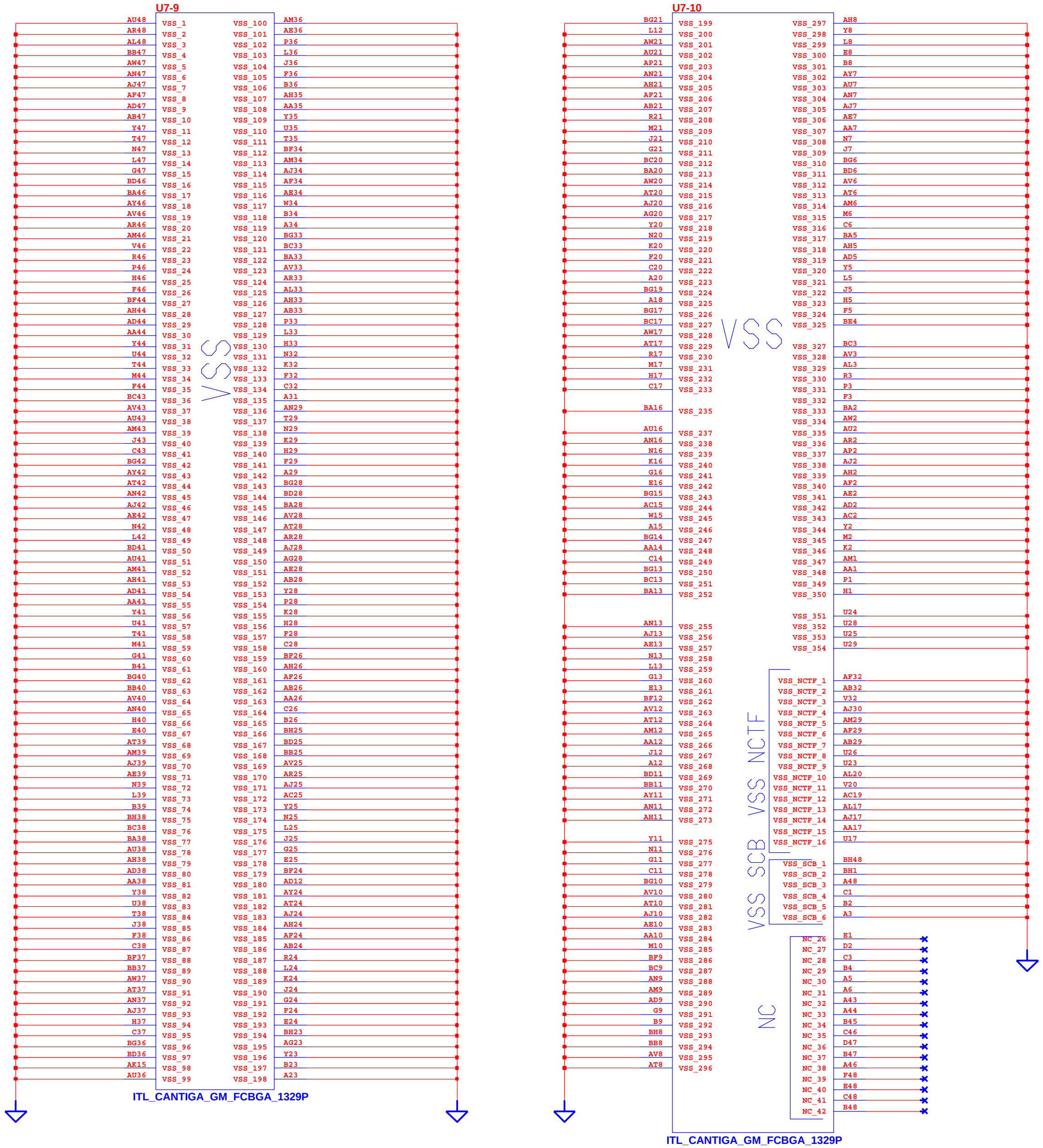
CHANGE by Loren 10-Oct-2008

SHEET 21 OF 63


MA_DATA(63:0)
U7-4
DDR SYSTEM MEMORY A
MA_BA0
MA_BA1
MA_BA2
MA_RAS#
MA_CAS#
MA_WE#
MA_DM(7:0)
MA_DQS(7:0)
MA_DQS#(7:0)
MA_A(14:0)
ITL_CANTIGA_GM_FCBGA_1329P
MB_DATA(63:0)
U7-5
DDR SYSTEM MEMORY B
MB_BA0
MB_BA1
MB_BA2
MB_RAS#
MB_CAS#
MB_WE#
MB_DM(7:0)
MB_DQS(7:0)
MB_DQS#(7:0)
MB_A(14:0)
ITL_CANTIGA_GM_FCBGA_1329P
INVENTEC
TITLE
CANTIGA-4-DDR2
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
11-Oct-2008
SHEET 22 OF 63

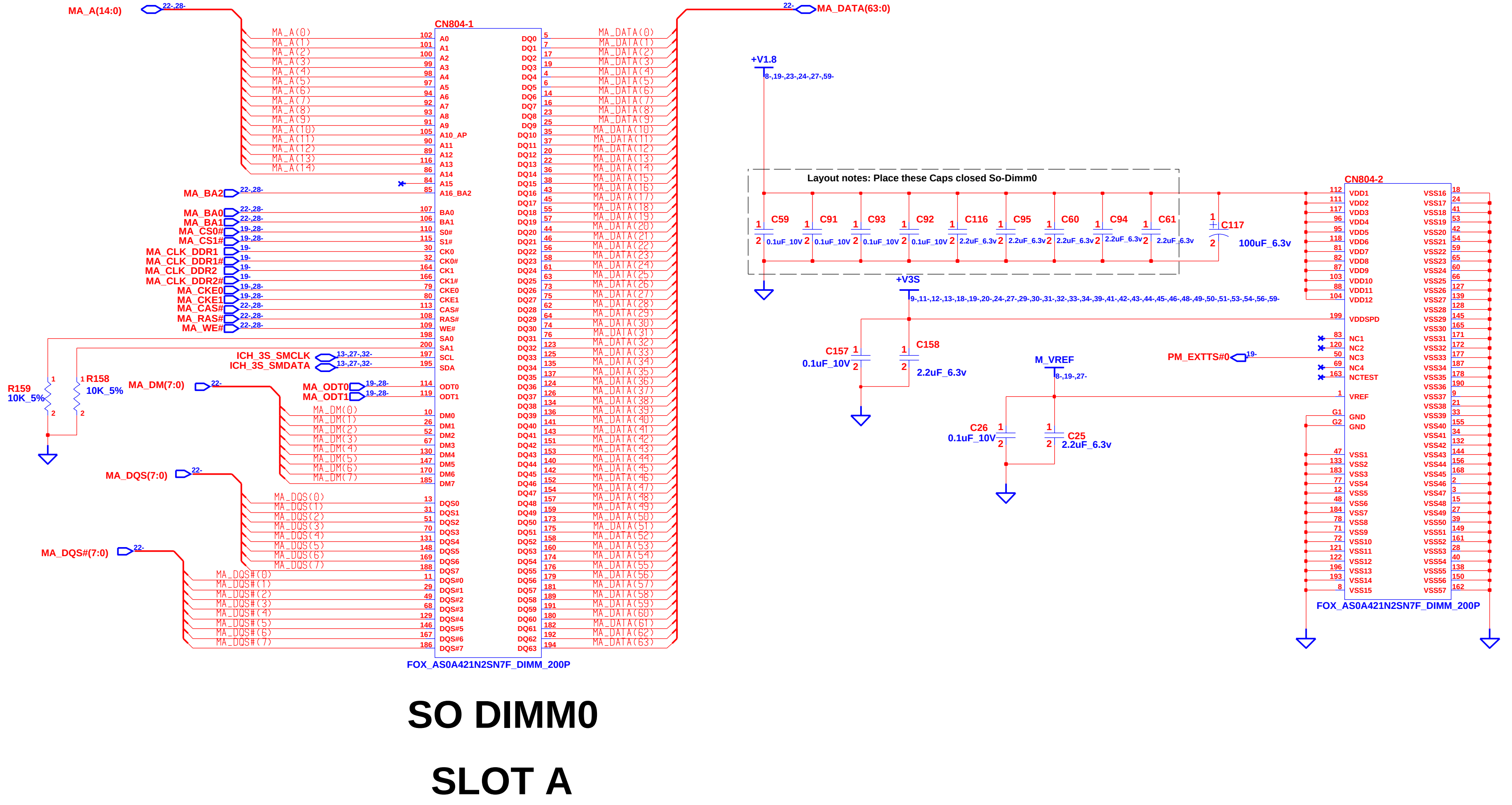

+V1.8
U7-7
+VCCP
VCC SM
POWER
VCC GFX NCTF
VCC GFX
VCC SM LF
C168
220uF_2.5V
308 mils from the Edge
C915
10uF_6.3v
C917
0.22uF_6.3v
C918
0.22uF_6.3v
C908
0.1uF_10V
Cavity Capacitors
U7-6
VCC CORE
POWER
VCC NCTF
R866
0_5%
C122
220uF_2.5V
C925
0.1uF_10V
C124
22uF_6.3v
C102
22uF_6.3v
C932
0.1uF_10V
C934
0.1uF_10V
C939
0.22uF_6.3v
C927
0.22uF_6.3v
C904
0.47uF_6.3v
C903
1uF_6.3V
C894
1uF_6.3V
ITL_CANTIGA_GM_FCBGA_1329P
ITL_CANTIGA_GM_FCBGA_1329P
INVENTEC
TITLE
CANTIGA-5-POWER
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 23 OF 63


U7-8
ITL_CANTIGA_GM_FCBGA_1329P
POWER
CRT
PLL
LVDS
A PEG
A SM
A CK
SM CK
VTT
AXF
TV
HDA
D TV/CRT
HV
PEG
DMI
LVDS
VTTLF
VCCA_CRT_DAC_1
VCCA_CRT_DAC_2
VCCA_DAC_BG
VSSA_DAC_BG
VCCA_DPLLA
VCCA_DPLLB
VCCA_HPLL
VCCA_MPLL
VCCA_LVDS
VSSA_LVDS
VCCA_PEG_BG
VCCA_PEG_PLL
VCCA_SM_1
VCCA_SM_2
VCCA_SM_3
VCCA_SM_4
VCCA_SM_5
VCCA_SM_6
VCCA_SM_7
VCCA_SM_8
VCCA_SM_9
VCCA_SM_CK_1
VCCA_SM_CK_2
VCCA_SM_CK_3
VCCA_SM_CK_4
VCCA_SM_CK_5
VCCA_SM_CK_NCTF_1
VCCA_SM_CK_NCTF_2
VCCA_SM_CK_NCTF_3
VCCA_SM_CK_NCTF_4
VCCA_SM_CK_NCTF_5
VCCA_SM_CK_NCTF_6
VCCA_SM_CK_NCTF_7
VCCA_SM_CK_NCTF_8
VCCA_TV_DAC_1
VCCA_TV_DAC_2
VCC_HDA
VCCD_TVDAC
VCCD_QDAC
VCCD_HPLL
VCCD_PEG_PLL
VCCD_LVDS_1
VCCD_LVDS_2
VTT_1 … VTT_25
VCC_AXF_1
VCC_AXF_2
VCC_AXF_3
VCC_SM_CK_1
VCC_SM_CK_2
VCC_SM_CK_3
VCC_SM_CK_4
VCC_TX_LVDS
VCC_HV_1
VCC_HV_2
VCC_HV_3
VCC_PEG_1
VCC_PEG_2
VCC_PEG_3
VCC_PEG_4
VCC_PEG_5
VCC_DMI_1
VCC_DMI_2
VCC_DMI_3
VCC_DMI_4
VTTLF1
VTTLF2
VTTLF3
+V3S
+VCCP
+V1.8
+V1.5S
+V1.05_PEGPLL
+NB_VCCA_CRT_DAC
+NB_VCCA_DPLL
+NB_VCCA_HPLL
+NB_VCCA_MPLL
+NB_VCC_HDA
+NB_VCCD_TVDAC
+NB_VCCD_QDAC
+NB_VCCD_HPLL
L2 BLM11A121S
L3 BLM11A121S
L4 BLM11A121S
L5 BLM11A121S
L7 BLM11A121S
L806 BLM11A121S
L812 BLM11A121S
L813 BLM11A121S
C40 220uF_2.5V
C41 0.1uF_10V
C42 0.1uF_10V
C43 0.1uF_10V
C44 0.01uF_16v
C45 0.1uF_10V
C47 0.01uF_16v
C46 1000pF_50v
C48 0.1uF_10V
C49 0.1uF_10V
C50 0.01uF_16v
C51 0.1uF_10V
C63 0.1uF_10V
C64 1uF_6.3v
C66 1000pF_50v
C67 22uF_6.3v
C146 0.47uF_6.3v
C166 0.47uF_6.3v
C169 0.47uF_6.3v
C167 100uF_6.3v
C170 22uF_6.3v
C171 4.7uF_6.3v
C232 100uF_6.3v
C890 0.1uF_10V
C895 4.7uF_6.3v
C896 0.1uF_10V
C906 2.2uF_6.3v
C907 0.47uF_6.3v
C909 0.1uF_10V
C916 0.1uF_10V
C926 0.1uF_10V
C928 0.1uF_10V
C929 1uF_6.3V
C933 10uF_6.3v
C935 22uF_6.3v
C936 1uF_6.3v
C950 22uF_6.3v
C951 0.1uF_10V
C952 0.1uF_10V
C953 4.7uF_6.3v
C954 22uF_6.3v
C955 220uF_2.5V
C962 4.7uF_6.3v
C1029 0.1uF_10V
C1030 0.01uF_16V
C1031 0.1uF_10V
C7505 2.2uF_6.3V
R7056 0_5%
R7057 0_5%_OPEN
R850 10_5%
D814 BAT54_30V_0.2A
Place on the Edge
INVENTEC
TITLE
CANTIGA-6
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 24 OF 63



INVENTEC

TITLE	CANTIGA-7		
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by Loren	10-Oct-2008	SHEET 25 OF 63	



INVENTEC

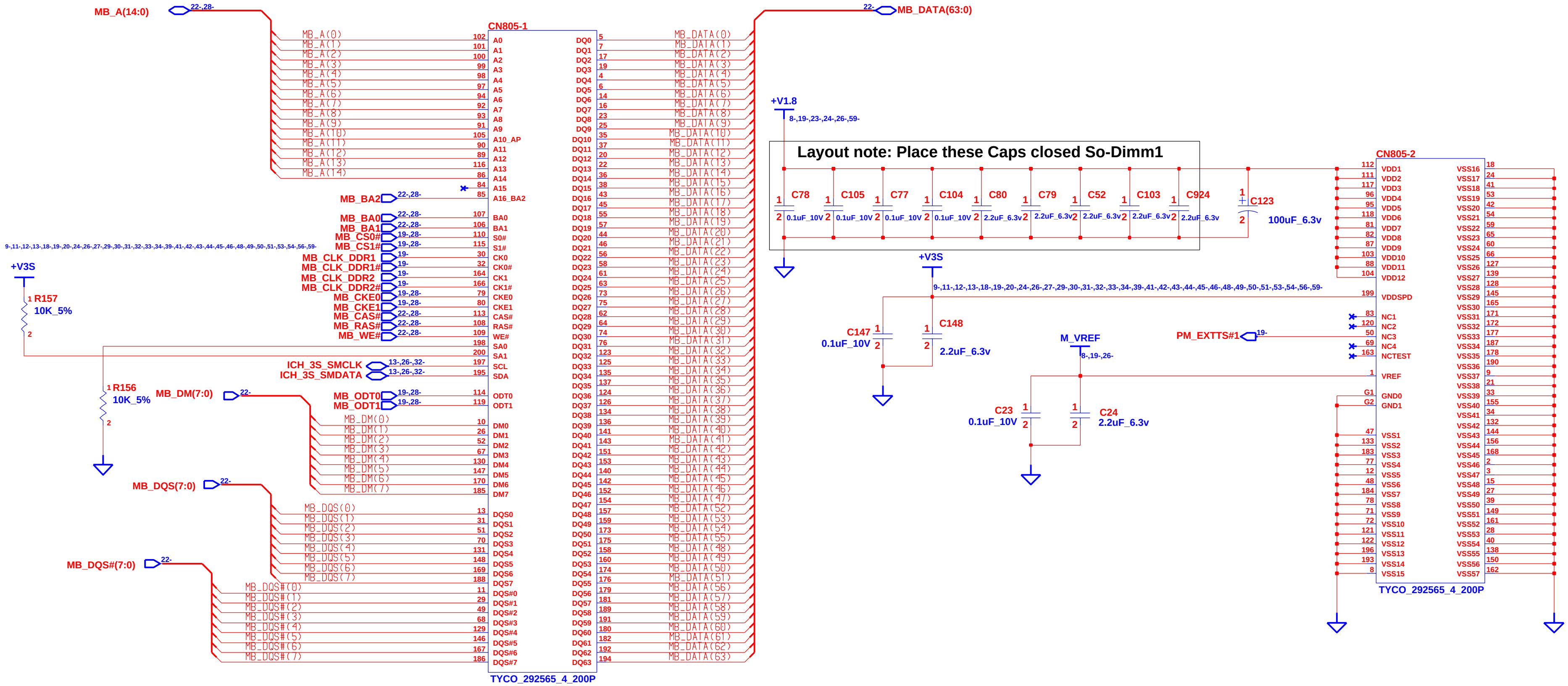
TITLE

DDR2-DIMM-0

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 10-Oct-2008

SHEET 26 OF 63



SO DIMM1

SLOT B

INVENTEC

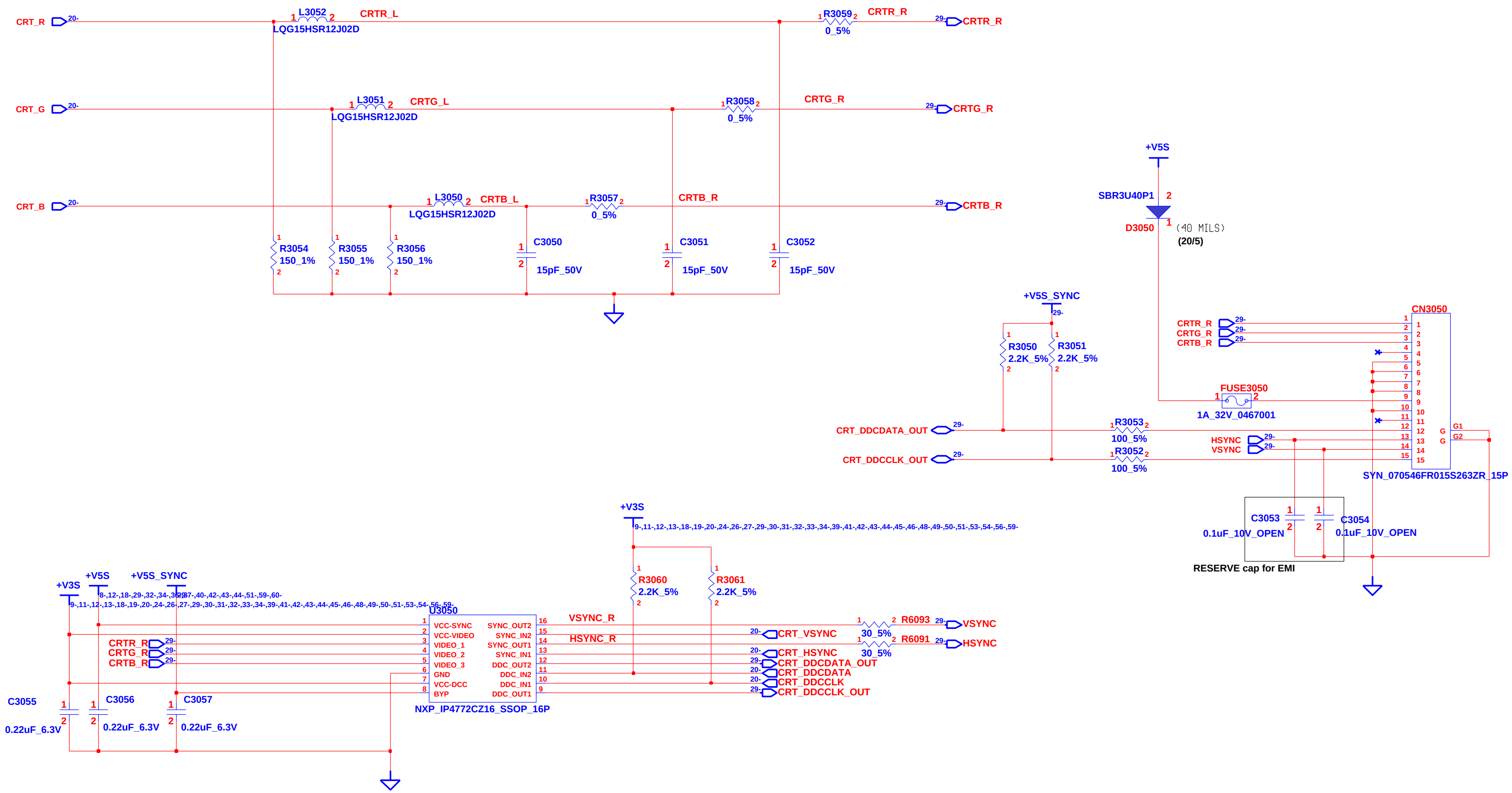
TITLE

DDR2-DIMM1

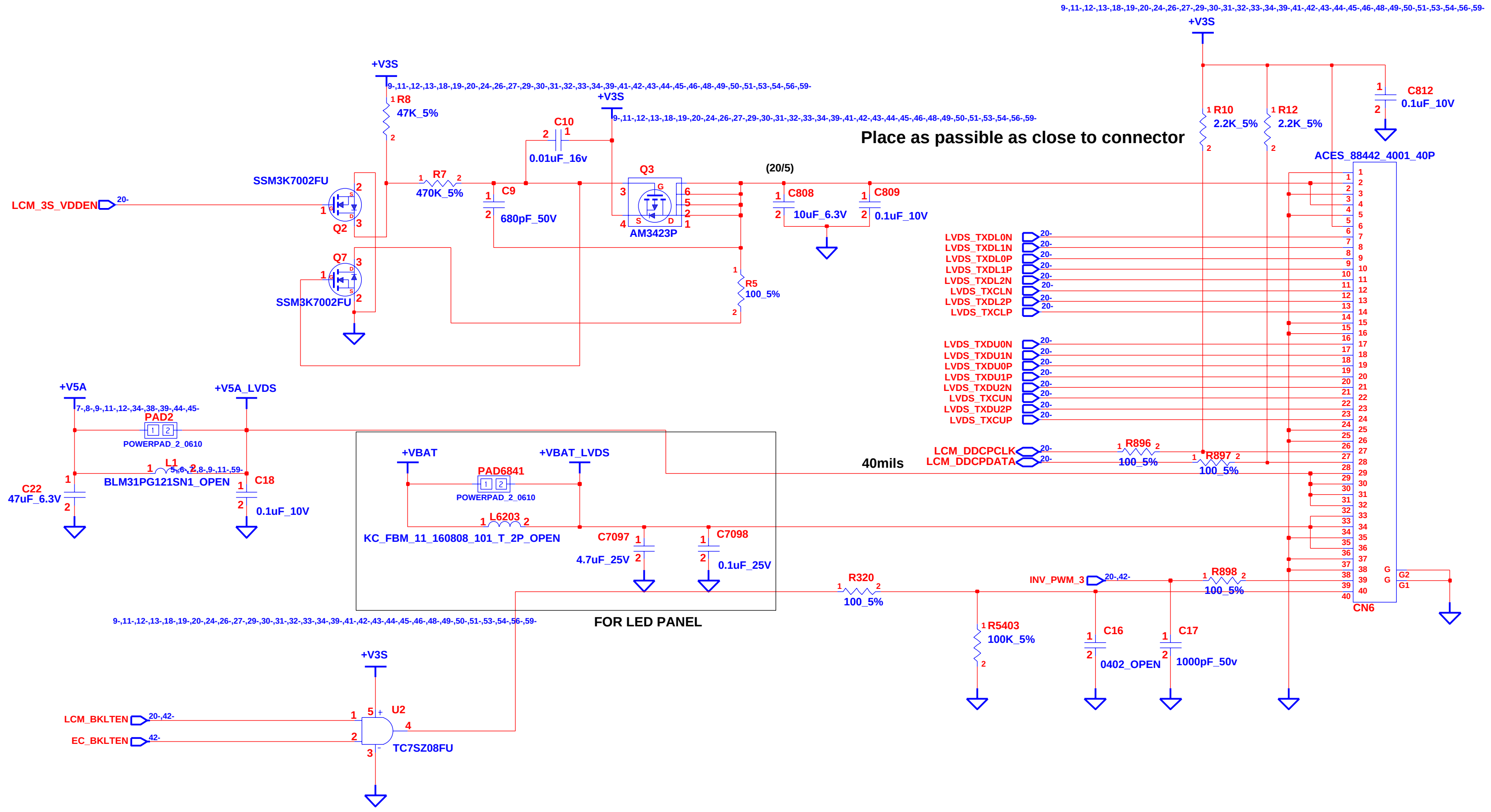
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 11-Oct-2008 SHEET 27 OF 63


1 2 3 4 5 6 7 8
A B C D E F
+V0.9S
8-,28-,59-
C57 C110 C84 C83 C56 C109 C111 C89 C114 C86 C54 C58 C115
0.1uF 10V
C88 C85 C90 C53 C113 C108 C112 C82 C106 C125 C87 C55 C81
0.1uF 10V
LAYOUT NOTES : PLACE ONE CAP CLOSE TO EVERY 2 PULL UP RESISTOR TERMINATED TO +V0.9S
R46 56_5% 19-,26- MA_CKE0
R44 56_5% 19-,26- MA_CKE1
R40 56_5% 19-,27- MB_CKE0
R39 56_5% 19-,27- MB_CKE1
R103 56_5% 19-,26- MA_ODT0
R121 56_5% 19-,26- MA_ODT1
R97 56_5% 19-,27- MB_ODT0
R120 56_5% 19-,27- MB_ODT1
R112 56_5% 22-,26- MA_BA0
R105 56_5% 22-,26- MA_BA1
R47 56_5% 22-,26- MA_BA2
R109 56_5% 22-,26- MA_WE#
R110 56_5% 22-,26- MA_CAS#
R104 56_5% 22-,26- MA_RAS#
R106 56_5% 19-,26- MA_CS0#
R108 56_5% 19-,26- MA_CS1#
R95 56_5% 19-,27- MB_CS0#
R119 56_5% 19-,27- MB_CS1#
22-,26- MA_A(13:0)
R77 56_5% MA_A(0)
R84 56_5% MA_A(1)
R81 56_5% MA_A(2)
R82 56_5% MA_A(3)
R80 56_5% MA_A(4)
R85 56_5% MA_A(5)
R79 56_5% MA_A(6)
R78 56_5% MA_A(7)
R86 56_5% MA_A(8)
R83 56_5% MA_A(9)
R111 56_5% MA_A(10)
R42 56_5% MA_A(11)
R45 56_5% MA_A(12)
R107 56_5% MA_A(13)
R43 56_5% 22-,26- MA_A(14)
R100 56_5% 22-,27- MB_BA0
R94 56_5% 22-,27- MB_BA1
R41 56_5% 22-,27- MB_BA2
R101 56_5% 22-,27- MB_WE#
R98 56_5% 22-,27- MB_CAS#
R96 56_5% 22-,27- MB_RAS#
22-,27- MB_A(13:0)
R71 56_5% MB_A(0)
R102 56_5% MB_A(1)
R67 56_5% MB_A(2)
R75 56_5% MB_A(3)
R68 56_5% MB_A(4)
R76 56_5% MB_A(5)
R70 56_5% MB_A(6)
R69 56_5% MB_A(7)
R72 56_5% MB_A(8)
R73 56_5% MB_A(9)
R99 56_5% MB_A(10)
R38 56_5% MB_A(11)
R74 56_5% MB_A(12)
R93 56_5% MB_A(13)
R37 56_5% 22-,27- MB_A(14)
INVENTEC
TITLE
DDR2-DAMPING
SIZE A3 CODE CS DOC. NUMBER REV
CHANGE by Loren 27-Sep-2003 SHEET 28 OF 63



INVENTEC			
TITLE: CRT CONN			
SIZE A3	CODE CS	DOC. NUMBER	REV x01
CHANGE by Loren	10-Oct-2008	SHEET 29	OF 63



INVENTEC

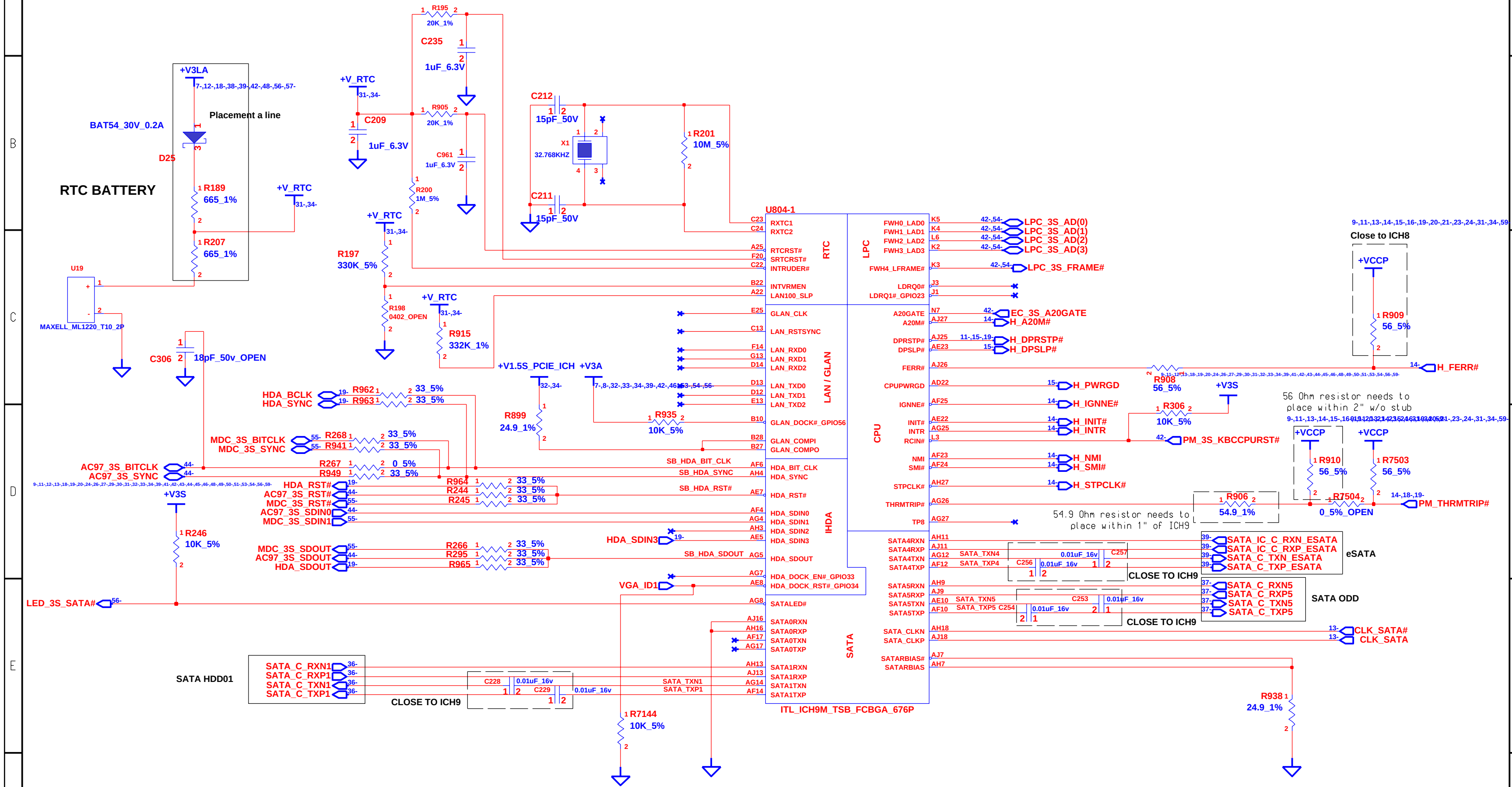
TITLE

LCD CONN

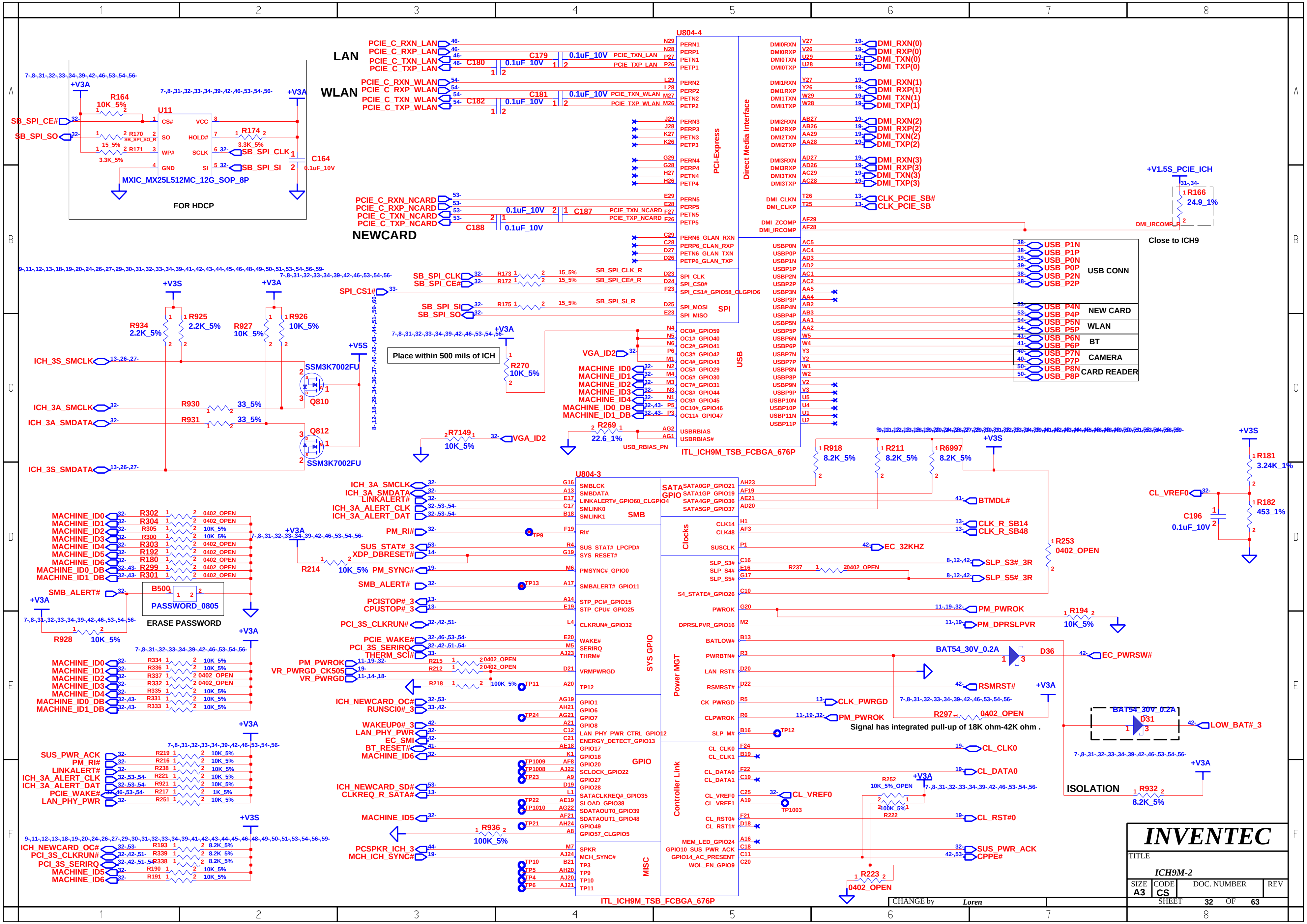
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

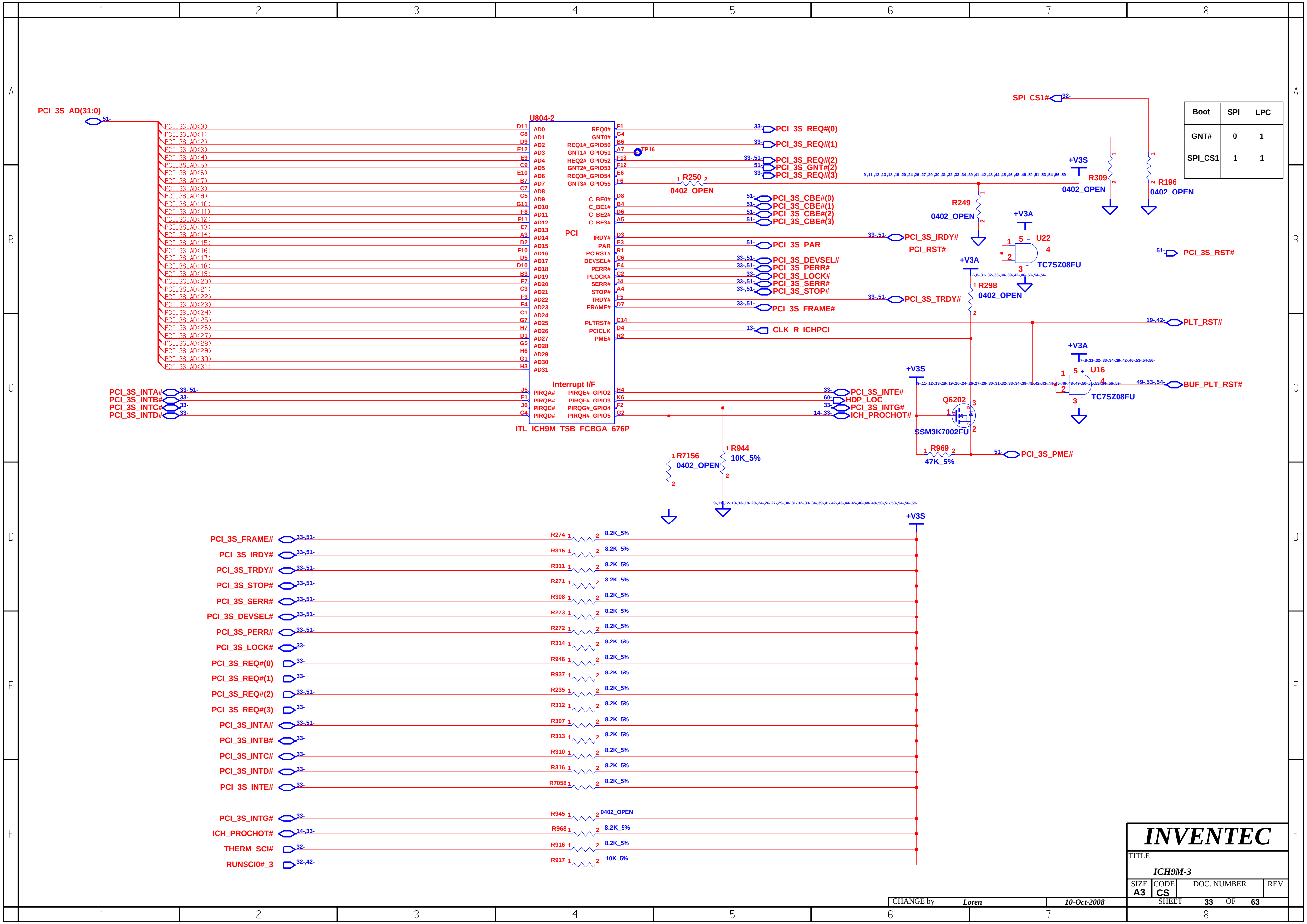
CHANGE by Loren 10-Oct-2008

SHEET 30 OF 63



INVENTEC	
TITLE	ICH9M-1
SIZE	A3
CODE	CS
DOC. NUMBER	
REV	
CHANGE by	Loren
Date	10-Oct-2008
SHEET	31 OF 63


U804-4
LAN
WLAN
NEWCARD
PCIE_C_RXN_LAN
PCIE_C_RXP_LAN
PCIE_C_TXN_LAN
PCIE_C_TXP_LAN
PCIE_C_RXN_WLAN
PCIE_C_RXP_WLAN
PCIE_C_TXN_WLAN
PCIE_C_TXP_WLAN
PCIE_C_RXN_NCARD
PCIE_C_RXP_NCARD
PCIE_C_TXN_NCARD
PCIE_C_TXP_NCARD
C179 0.1uF_10V
C180 0.1uF_10V
C181 0.1uF_10V
C182 0.1uF_10V
C187 0.1uF_10V
C188 0.1uF_10V
PCI-Express
Direct Media Interface
DMI_RXN(0)
DMI_RXP(0)
DMI_TXN(0)
DMI_TXP(0)
DMI_RXN(1)
DMI_RXP(1)
DMI_TXN(1)
DMI_TXP(1)
DMI_RXN(2)
DMI_RXP(2)
DMI_TXN(2)
DMI_TXP(2)
DMI_RXN(3)
DMI_RXP(3)
DMI_TXN(3)
DMI_TXP(3)
CLK_PCIE_SB#
CLK_PCIE_SB
+V1.5S_PCIE_ICH
R166 24.9_1%
Close to ICH9
USB_P1N
USB_P1P
USB_P0N
USB_P0P
USB_P2N
USB_P2P
USB CONN
USB_P4N
USB_P4P
NEW CARD
USB_P5N
USB_P5P
WLAN
USB_P6N
USB_P6P
BT
USB_P7N
USB_P7P
CAMERA
USB_P8N
USB_P8P
CARD READER
SPI
USB
ITL_ICH9M_TSB_FCBGA_676P
FOR HDCP
U11
MXIC_MX25L512MC_12G_SOP_8P
SB_SPI_CE#
SB_SPI_SO
SB_SPI_CLK
SB_SPI_SI
R164 10K_5%
R170 15_5%
R171 3.3K_5%
R174 3.3K_5%
C164 0.1uF_10V
SPI_CS1#
R173 15_5%
R172 15_5%
R175 15_5%
ICH_3S_SMCLK
ICH_3A_SMCLK
ICH_3A_SMDATA
ICH_3S_SMDATA
SSM3K7002FU
Q810
Q812
R934 2.2K_5%
R925 2.2K_5%
R927 10K_5%
R926 10K_5%
R930 33_5%
R931 33_5%
Place within 500 mils of ICH
R270 10K_5%
VGA_ID2
R7149 10K_5%
R269 22.6_1%
MACHINE_ID0
MACHINE_ID1
MACHINE_ID2
MACHINE_ID3
MACHINE_ID4
MACHINE_ID0_DB
MACHINE_ID1_DB
U804-3
SMB
SATA GPIO
Clocks
SYS GPIO
Power MGT
Controller Link
GPIO
MISC
B500
PASSWORD_0805
ERASE PASSWORD
R928 10K_5%
R214 10K_5%
BTMDL#
CLK_R_SB14
CLK_R_SB48
EC_32KHZ
SLP_S3#_3R
SLP_S5#_3R
R253 0402_OPEN
PM_PWROK
PM_DPRSLPVR
R194 10K_5%
BAT54_30V_0.2A
D36
EC_PWRSW#
RSMRST#
CLK_PWRGD
R297 0402_OPEN
Signal has integrated pull-up of 18K ohm-42K ohm .
D31
LOW_BAT#_3
ISOLATION
R932 8.2K_5%
CL_CLK0
CL_DATA0
CL_VREF0
CL_RST#0
SUS_PWR_ACK
CPPE#
R223 0402_OPEN
R181 3.24K_1%
R182 453_1%
C196 0.1uF_10V
R918 8.2K_5%
R211 8.2K_5%
R6997 8.2K_5%
R936 100K_5%
INVENTEC
TITLE
ICH9M-2
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
SHEET 32 OF 63



Boot	SPI	LPC
GNT#	0	1
SPI_CS1	1	1

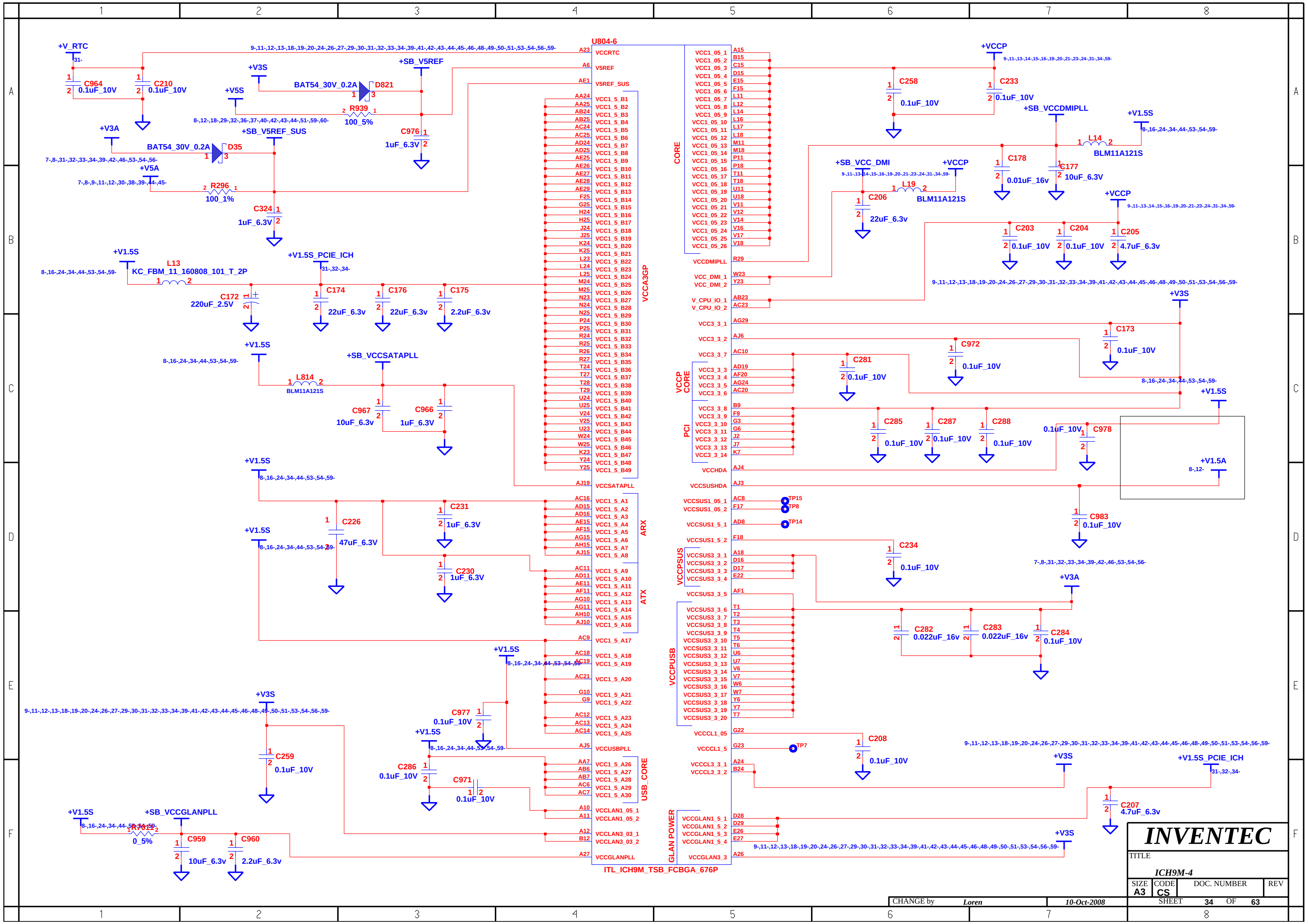
INVENTEC

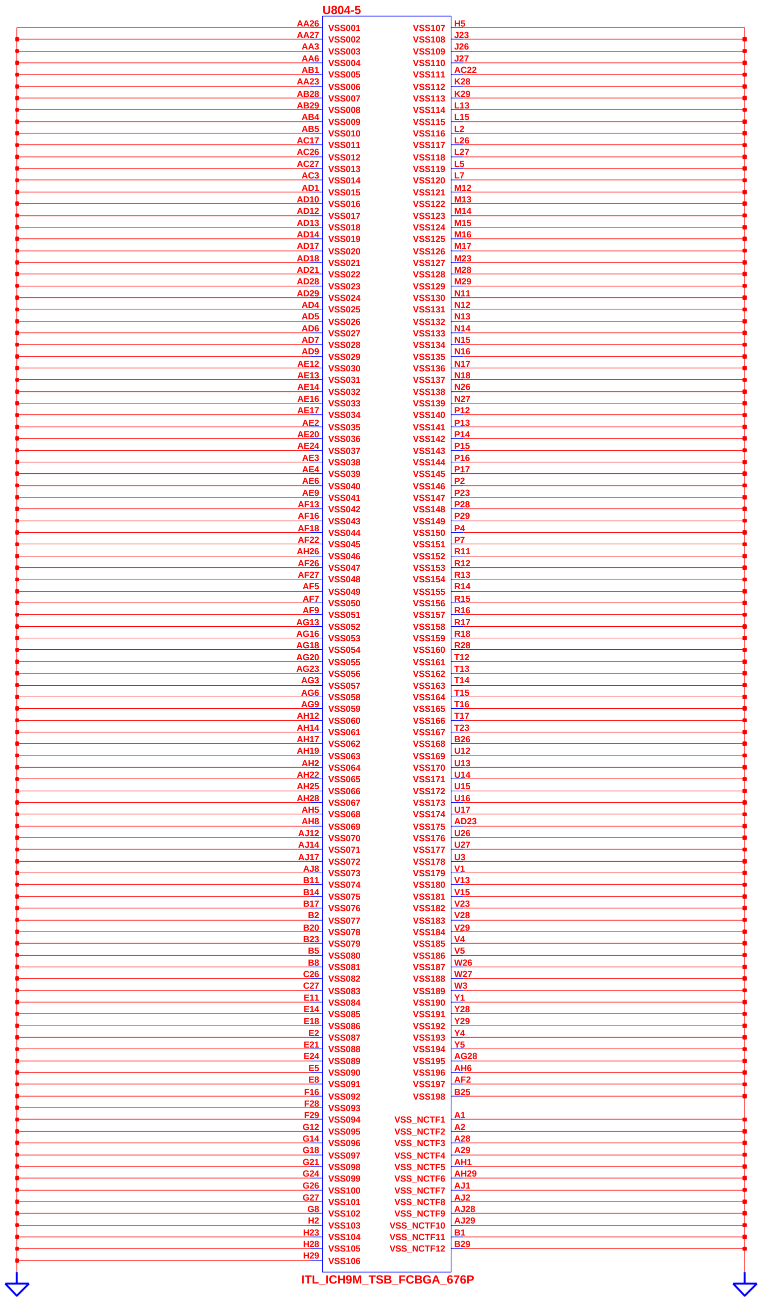
TITLE ICH9M-3

SIZE A3 CODE CS DOC. NUMBER REV

CHANGE by Loren 10-Oct-2008

SHEET 33 OF 63


U804-6
ITL_ICH9M_TSB_FCBGA_676P
VCCRTC
V5REF
V5REF_SUS
VCCA3GP
CORE
VCCDMIPLL
VCC_DMI_1
VCC_DMI_2
V_CPU_IO_1
V_CPU_IO_2
VCCP CORE
PCI
VCCHDA
VCCSUSHDA
VCCSATAPLL
ARX
ATX
VCCPSUS
VCCPUSB
VCCUSBPLL
USB_CORE
VCCLAN1_05_1
VCCLAN1_05_2
VCCLAN3_03_1
VCCLAN3_03_2
VCCGLANPLL
GLAN POWER
VCCGLAN1_5_1
VCCGLAN1_5_2
VCCGLAN1_5_3
VCCGLAN1_5_4
VCCGLAN3_3
+V_RTC
+V3S
+V5S
+V3A
+V5A
+SB_V5REF
+SB_V5REF_SUS
+V1.5S
+V1.5S_PCIE_ICH
+SB_VCCSATAPLL
+SB_VCC_DMI
+SB_VCCDMIPLL
+SB_VCCGLANPLL
+VCCP
+V1.5A
BAT54_30V_0.2A
D821
D35
R939
100_5%
R296
100_1%
L13
KC_FBM_11_160808_101_T_2P
L814
BLM11A121S
L19
L14
C964 0.1uF_10V
C210 0.1uF_10V
C976 1uF_6.3V
C324 1uF_6.3V
C172 220uF_2.5V
C174 22uF_6.3v
C176 22uF_6.3v
C175 2.2uF_6.3v
C967 10uF_6.3V
C966 1uF_6.3V
C226 47uF_6.3V
C231 1uF_6.3V
C230 1uF_6.3V
C259 0.1uF_10V
C977 0.1uF_10V
C286 0.1uF_10V
C971 0.1uF_10V
C959 10uF_6.3v
C960 2.2uF_6.3v
R701 0_5%
C258 0.1uF_10V
C233 0.1uF_10V
C178 0.01uF_16v
C177 10uF_6.3V
C206 22uF_6.3v
C203 0.1uF_10V
C204 0.1uF_10V
C205 4.7uF_6.3v
C173 0.1uF_10V
C972 0.1uF_10V
C281 0.1uF_10V
C285 0.1uF_10V
C287 0.1uF_10V
C288 0.1uF_10V
C978 0.1uF_10V
C983 0.1uF_10V
C234 0.1uF_10V
C282 0.022uF_16v
C283 0.022uF_16v
C284 0.1uF_10V
C208 0.1uF_10V
C207 4.7uF_6.3v
TP15
TP8
TP14
TP7
INVENTEC
TITLE
ICH9M-4
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 34 OF 63

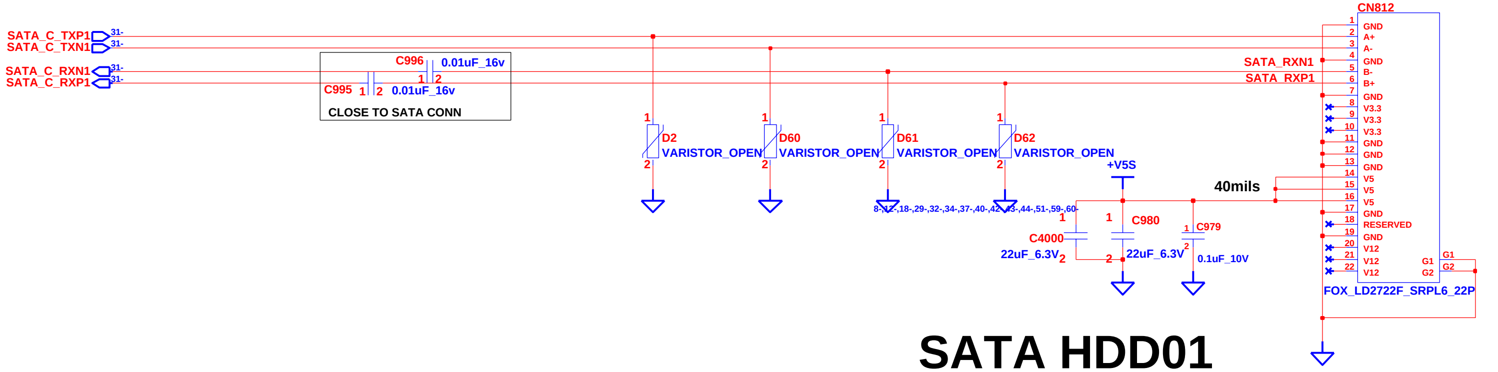


INVENTEC

TITLE: *ICH9M-5*

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by *Loren* *10-Oct-2008* SHEET 35 OF 63



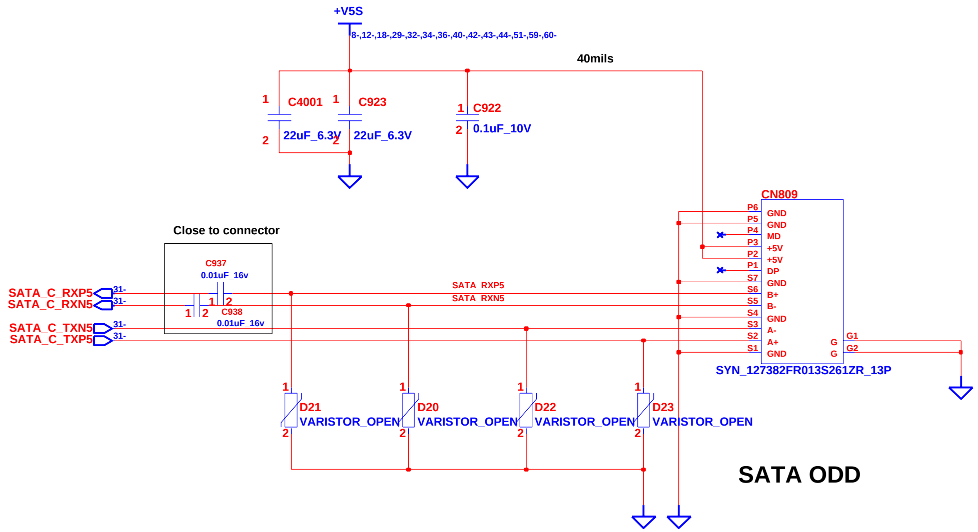
SATA HDD01

INVENTEC

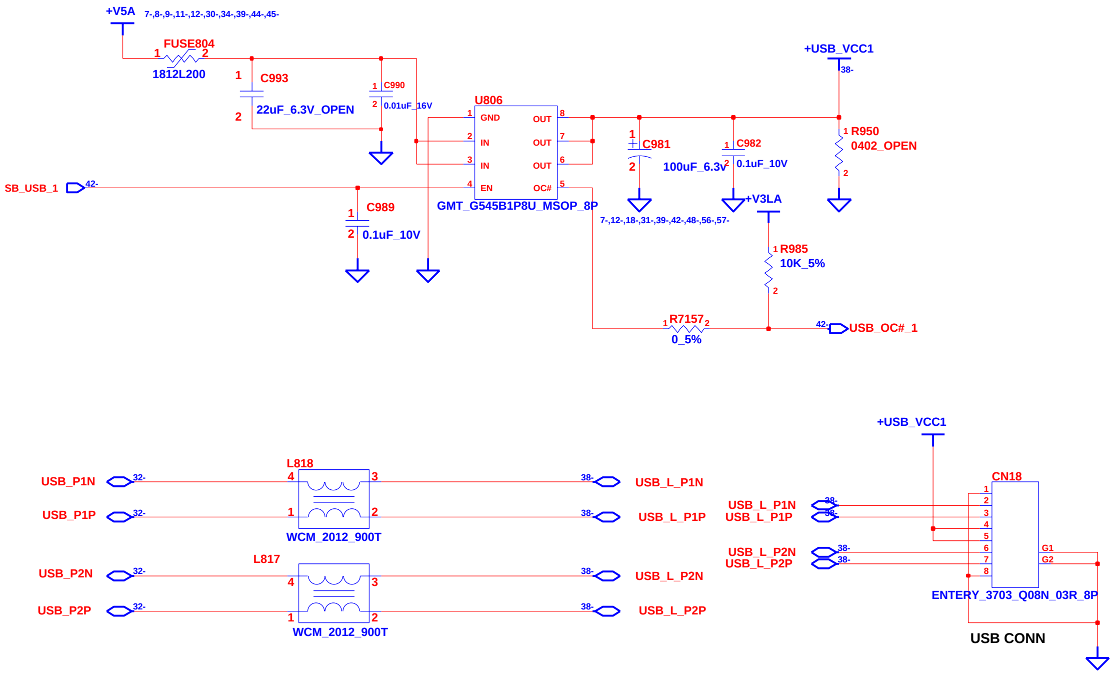
TITLE: *HDD CONN*

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by *Loren* *11-Oct-2008* SHEET 36 OF 63



INVENTEC				
TITLE SATA ODD				
SIZE A3	CODE CS	DOC. NUMBER		REV
CHANGE by Loren	10-Oct-2008	SHEET 37	OF 63	



INVENTEC

TITLE

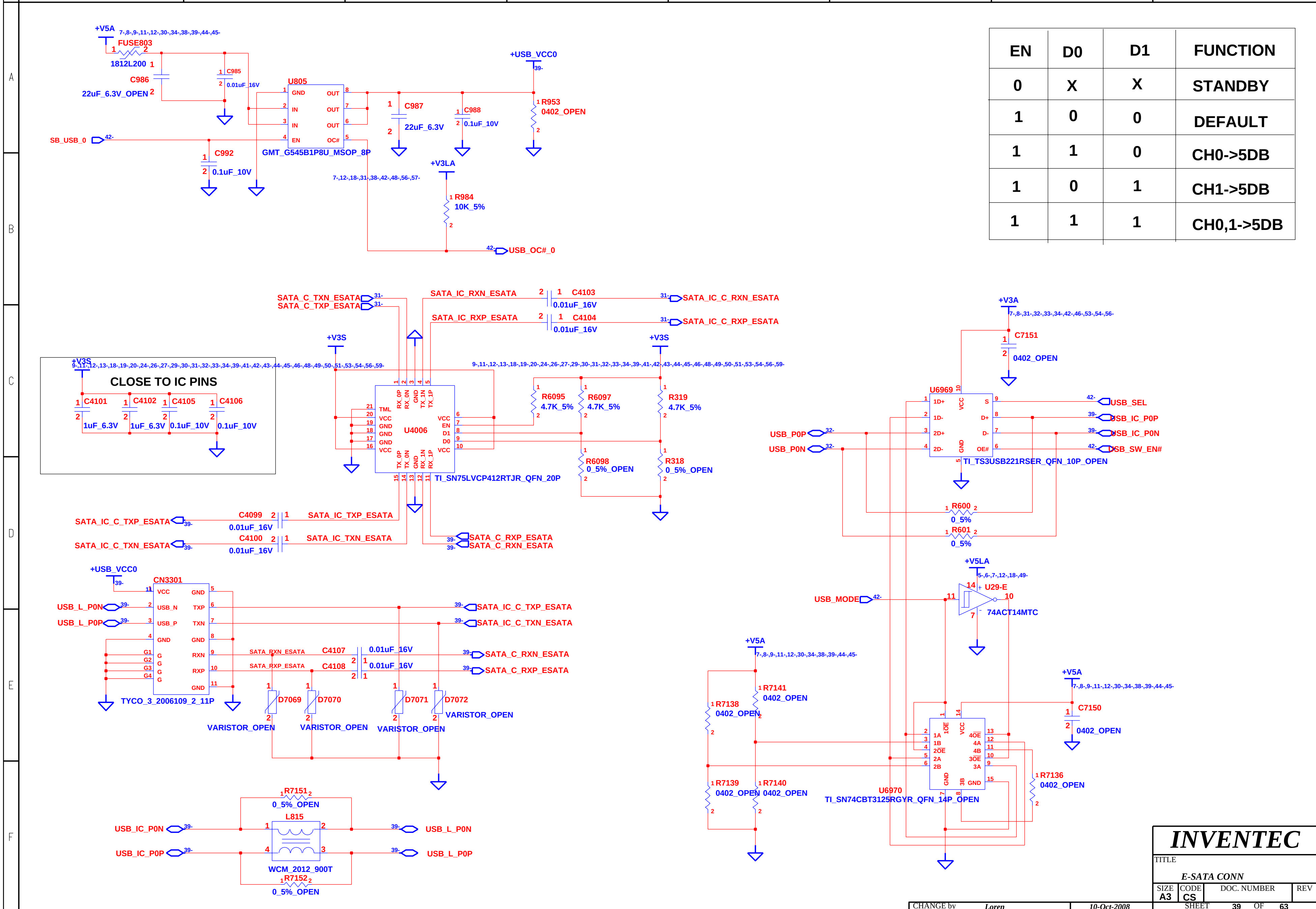
USB CONN/USB(DB)

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

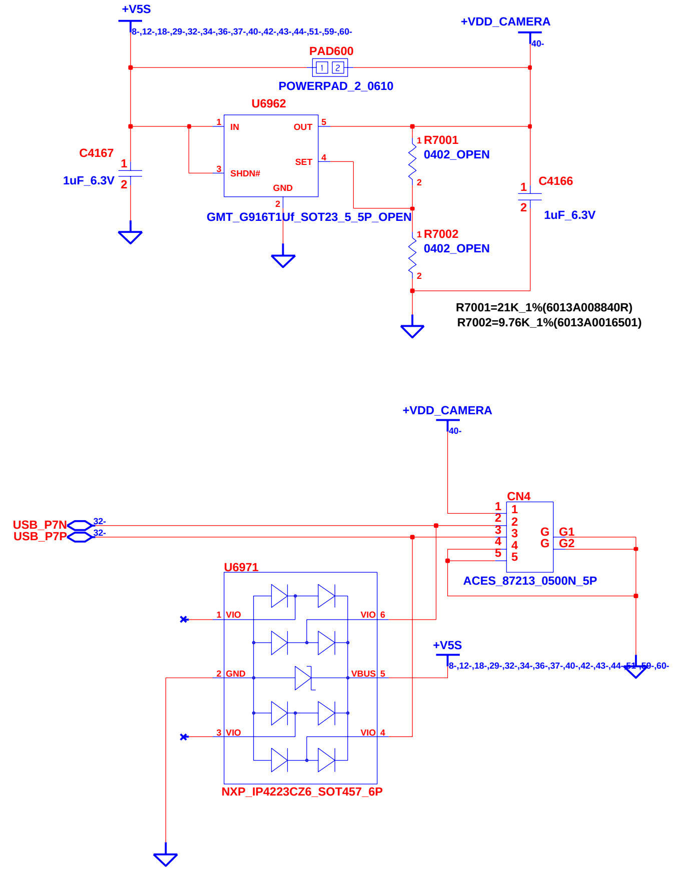
CHANGE by *Loren* *10-Oct-2008*

SHEET 38 OF 63

EN	D0	D1	FUNCTION
0	X	X	STANDBY
1	0	0	DEFAULT
1	1	0	CH0->5DB
1	0	1	CH1->5DB
1	1	1	CH0,1->5DB



INVENTEC		
TITLE	E-SATA CONN	
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by Loren	10-Oct-2008	SHEET 39 OF 63



INVENTEC

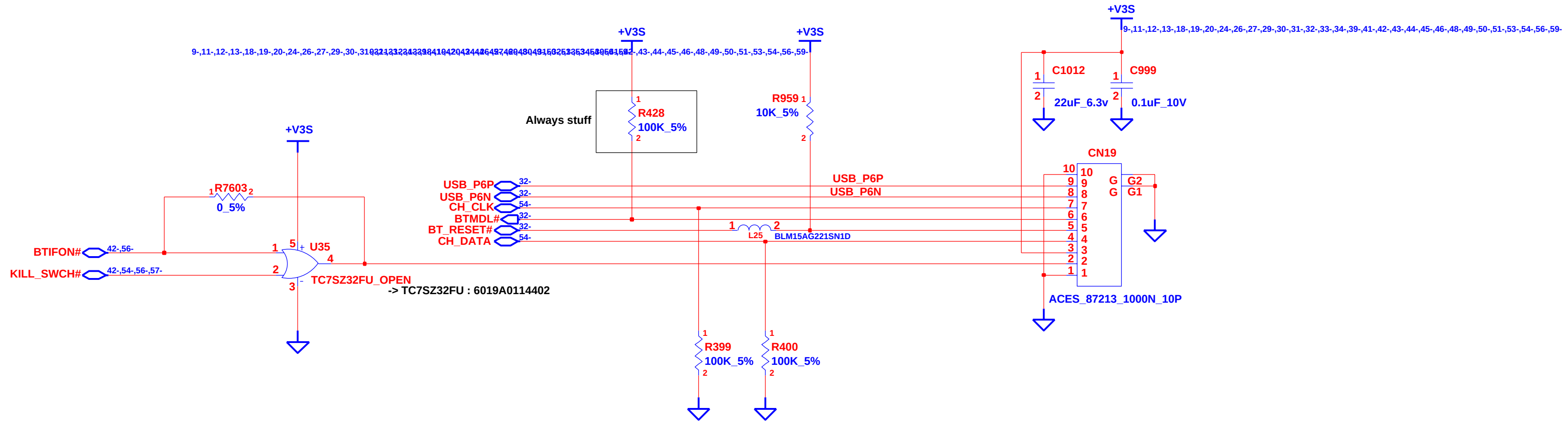
TITLE

Camera

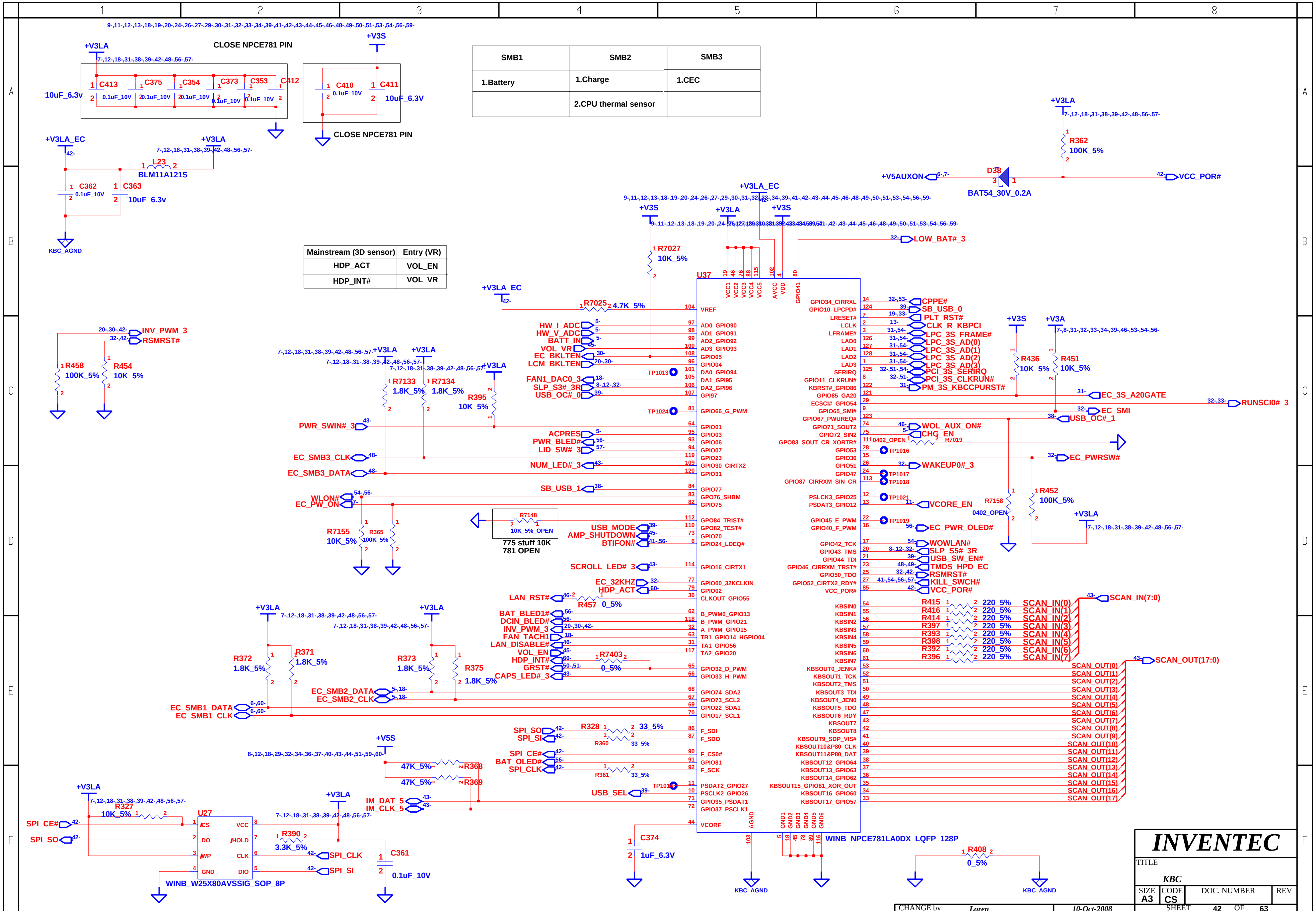
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 10-Oct-2008

SHEET 40 OF 63



INVENTEC			
TITLE: *Bluetooth*			
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by *Loren*	*10-Oct-2008*	SHEET 41	OF 63



SMB1	SMB2	SMB3
1.Battery	1.Charge	1.CEC
	2.CPU thermal sensor	

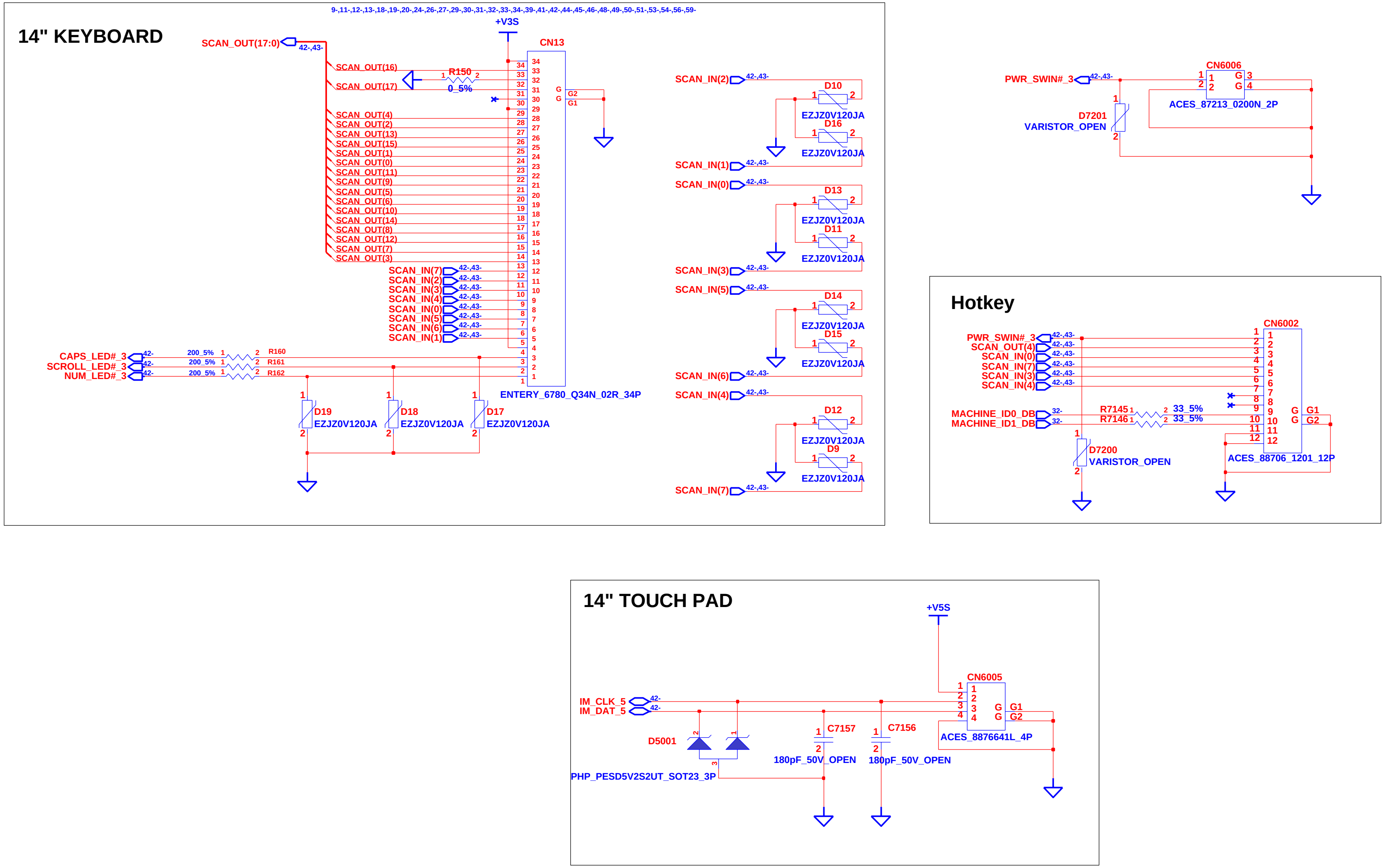
Mainstream (3D sensor)	Entry (VR)
HDP_ACT	VOL_EN
HDP_INT#	VOL_VR

INVENTEC

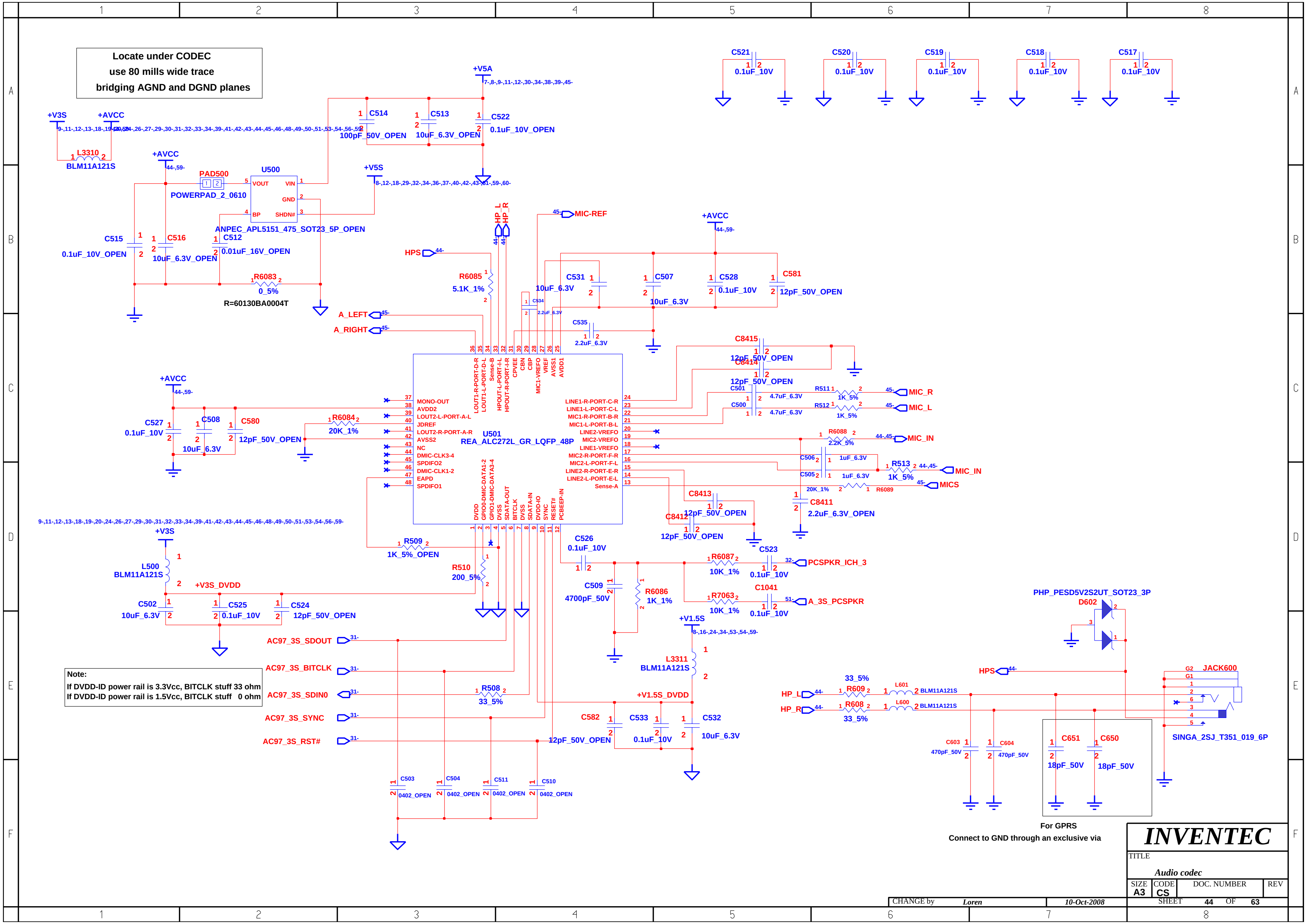
TITLE: KBC

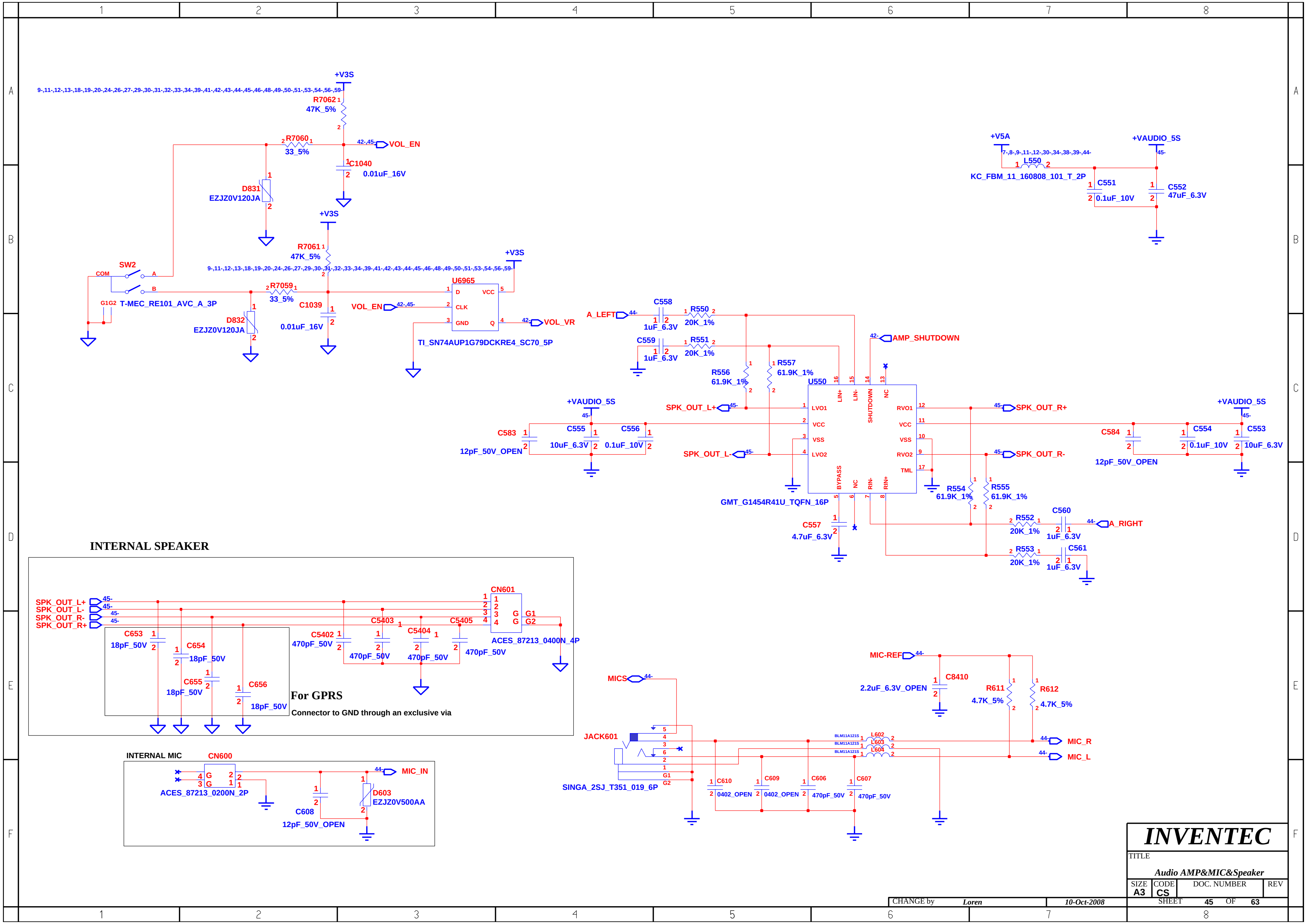
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 10-Oct-2008 SHEET 42 OF 63



INVENTEC			
TITLE	K/B & TP/B CONN		
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by Loren	10-Oct-2008	SHEET 43	OF 63


Locate under CODEC
use 80 mills wide trace
bridging AGND and DGND planes
+V3S
+AVCC
L3310
BLM11A121S
PAD500
POWERPAD_2_0610
U500
VOUT
VIN
GND
BP
SHDN#
ANPEC_APL5151_475_SOT23_5P_OPEN
+V5A
+V5S
C514
100pF_50V_OPEN
C513
10uF_6.3V_OPEN
C522
0.1uF_10V_OPEN
C515
0.1uF_10V_OPEN
C516
10uF_6.3V_OPEN
C512
0.01uF_16V_OPEN
R6083
0_5%
R=60130BA0004T
C521
C520
C519
C518
C517
0.1uF_10V
MIC-REF
HP_L
HP_R
HPS
R6085
5.1K_1%
A_LEFT
A_RIGHT
C531
10uF_6.3V
C507
C528
0.1uF_10V
C581
12pF_50V_OPEN
C534
2.2uF_6.3V
C535
C8415
C8414
12pF_50V_OPEN
C501
C500
4.7uF_6.3V
R511
R512
1K_5%
MIC_R
MIC_L
R6088
2.2K_5%
MIC_IN
C506
C505
1uF_6.3V
R513
1K_5%
MICS
R6089
20K_1%
C8411
2.2uF_6.3V_OPEN
C8413
C8412
U501
REA_ALC272L_GR_LQFP_48P
MONO-OUT
AVDD2
LOUT2-L-PORT-A-L
JDREF
LOUT2-R-PORT-A-R
AVSS2
NC
DMIC-CLK3-4
SPDIFO2
DMIC-CLK1-2
EAPD
SPDIFO1
LINE1-R-PORT-C-R
LINE1-L-PORT-C-L
MIC1-R-PORT-B-R
MIC1-L-PORT-B-L
LINE2-VREFO
MIC2-VREFO
LINE1-VREFO
MIC2-R-PORT-F-R
MIC2-L-PORT-F-L
LINE2-R-PORT-E-R
LINE2-L-PORT-E-L
Sense-A
DVDD
GPIO0-DMIC-DATA1-2
GPIO1-DMIC-DATA3-4
DVSS
SDATA-OUT
BITCLK
SDATA-IN
DVDD-IO
SYNC
RESET#
PCBEEP-IN
+AVCC
C527
0.1uF_10V
C508
10uF_6.3V
C580
12pF_50V_OPEN
R6084
20K_1%
R509
1K_5%_OPEN
R510
200_5%
L500
BLM11A121S
+V3S_DVDD
C502
10uF_6.3V
C525
0.1uF_10V
C524
12pF_50V_OPEN
C526
0.1uF_10V
C509
4700pF_50V
R6086
1K_1%
R6087
10K_1%
C523
PCSPKR_ICH_3
R7063
10K_1%
C1041
A_3S_PCSPKR
+V1.5S
L3311
BLM11A121S
+V1.5S_DVDD
AC97_3S_SDOUT
AC97_3S_BITCLK
AC97_3S_SDIN0
AC97_3S_SYNC
AC97_3S_RST#
R508
33_5%
C582
12pF_50V_OPEN
C533
C532
10uF_6.3V
C503
C504
C511
C510
0402_OPEN
Note:
If DVDD-ID power rail is 3.3Vcc, BITCLK stuff 33 ohm
If DVDD-ID power rail is 1.5Vcc, BITCLK stuff 0 ohm
PHP_PESD5V2S2UT_SOT23_3P
D602
HP_L
HP_R
R609
R608
33_5%
L601
L600
BLM11A121S
C603
470pF_50V
C604
470pF_50V
C651
C650
18pF_50V
JACK600
SINGA_2SJ_T351_019_6P
For GPRS
Connect to GND through an exclusive via
INVENTEC
TITLE
Audio codec
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 44 OF 63



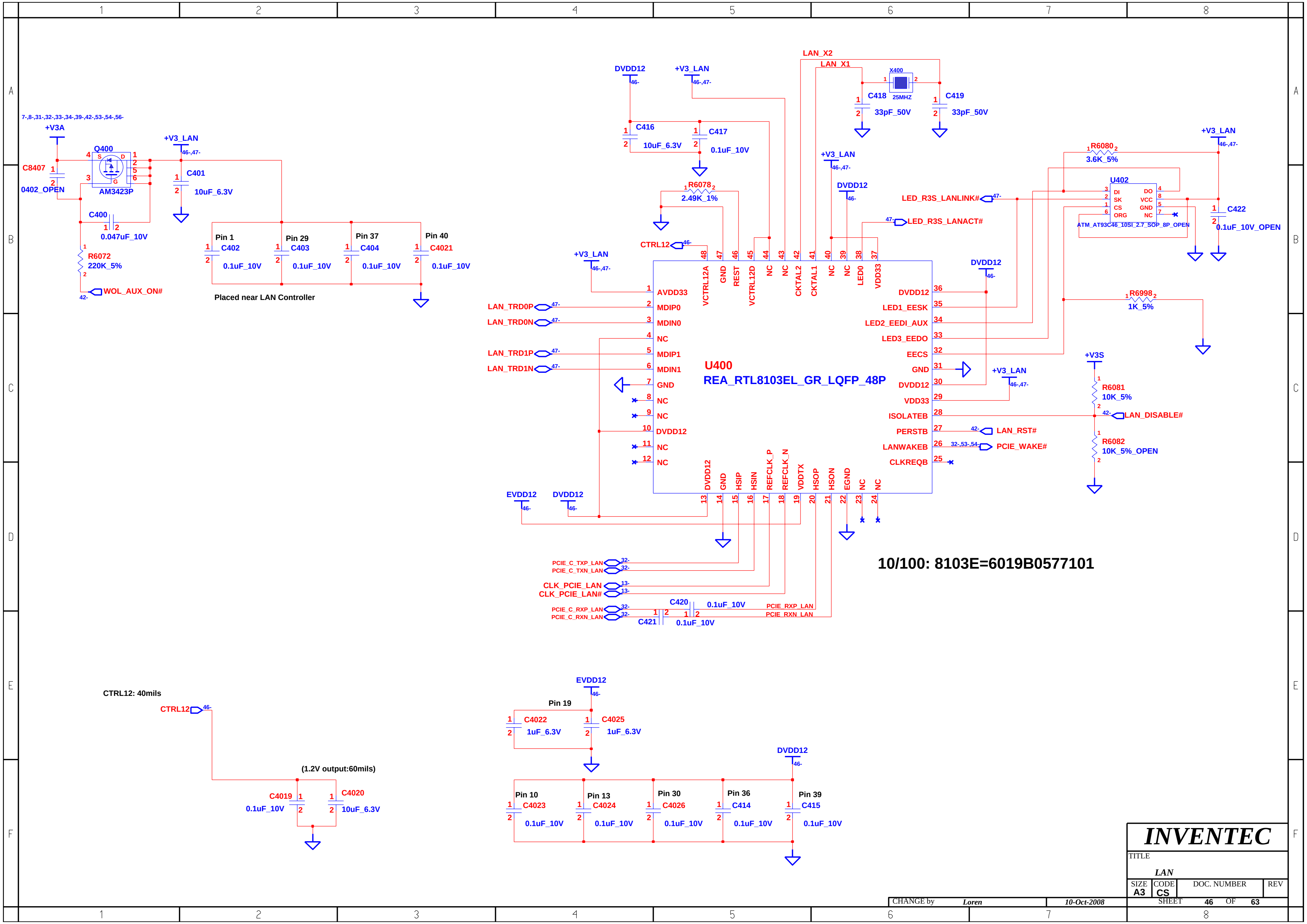
www.laptop-schematics.com

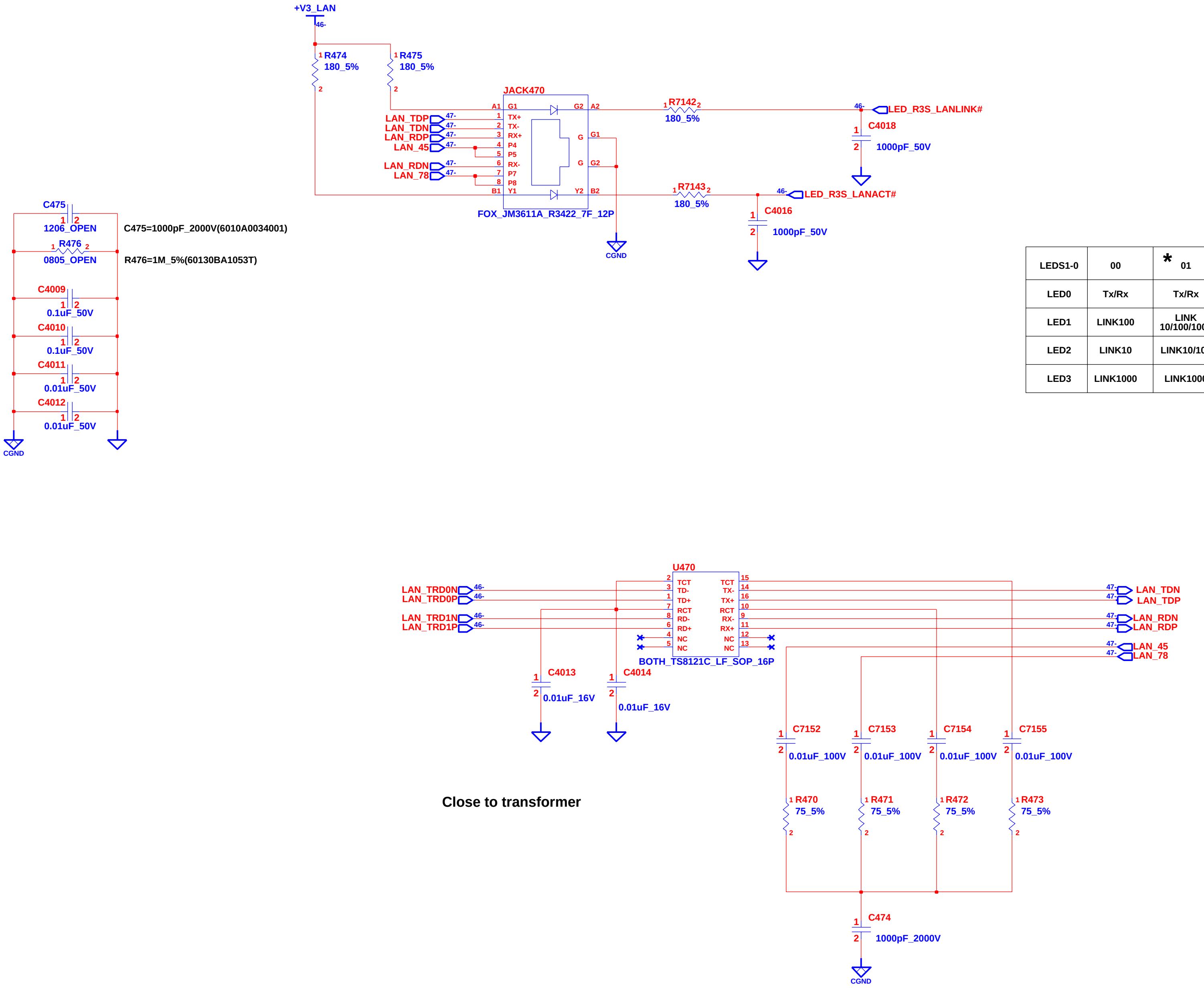
INVENTEC

TITLE: Audio AMP&MIC&Speaker

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 10-Oct-2008 SHEET 45 OF 63


U400
REA_RTL8103EL_GR_LQFP_48P
AVDD33
MDIP0
MDIN0
MDIP1
MDIN1
GND
NC
DVDD12
VCTRL12A
REST
VCTRL12D
CKTAL2
CKTAL1
LED0
VDD33
LED1_EESK
LED2_EEDI_AUX
LED3_EEDO
EECS
ISOLATEB
PERSTB
LANWAKEB
CLKREQB
HSIP
HSIN
REFCLK_P
REFCLK_N
VDDTX
HSOP
HSON
EGND
LAN_TRD0P
LAN_TRD0N
LAN_TRD1P
LAN_TRD1N
LAN_X1
LAN_X2
X400
25MHZ
C418 33pF_50V
C419 33pF_50V
C416 10uF_6.3V
C417 0.1uF_10V
R6078 2.49K_1%
CTRL12
R6080 3.6K_5%
U402
ATM_AT93C46_10SI_2.7_SOP_8P_OPEN
DI SK CS ORG DO VCC GND NC
LED_R3S_LANLINK#
LED_R3S_LANACT#
C422 0.1uF_10V_OPEN
R6998 1K_5%
R6081 10K_5%
LAN_DISABLE#
R6082 10K_5%_OPEN
LAN_RST#
PCIE_WAKE#
+V3S
+V3A
+V3_LAN
DVDD12
EVDD12
Q400
AM3423P
C8407 0402_OPEN
C401 10uF_6.3V
C400 0.047uF_10V
R6072 220K_5%
WOL_AUX_ON#
Pin 1 C402 0.1uF_10V
Pin 29 C403 0.1uF_10V
Pin 37 C404 0.1uF_10V
Pin 40 C4021 0.1uF_10V
Placed near LAN Controller
PCIE_C_TXP_LAN
PCIE_C_TXN_LAN
CLK_PCIE_LAN
CLK_PCIE_LAN#
PCIE_C_RXP_LAN
PCIE_C_RXN_LAN
C420 0.1uF_10V
C421 0.1uF_10V
PCIE_RXP_LAN
PCIE_RXN_LAN
10/100: 8103E=6019B0577101
CTRL12: 40mils
(1.2V output:60mils)
C4019 0.1uF_10V
C4020 10uF_6.3V
Pin 19
C4022 1uF_6.3V
C4025 1uF_6.3V
Pin 10 C4023 0.1uF_10V
Pin 13 C4024 0.1uF_10V
Pin 30 C4026 0.1uF_10V
Pin 36 C414 0.1uF_10V
Pin 39 C415 0.1uF_10V
INVENTEC
TITLE
LAN
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 46 OF 63



LEDS1-0	00	* 01	10	11
LED0	Tx/Rx	Tx/Rx	Tx	LINK10 ACT
LED1	LINK100	LINK 10/100/1000	LINK	LINK100 ACT
LED2	LINK10	LINK10/100	Rx	ULL
LED3	LINK1000	LINK1000	ULL	LINK1000 ACT

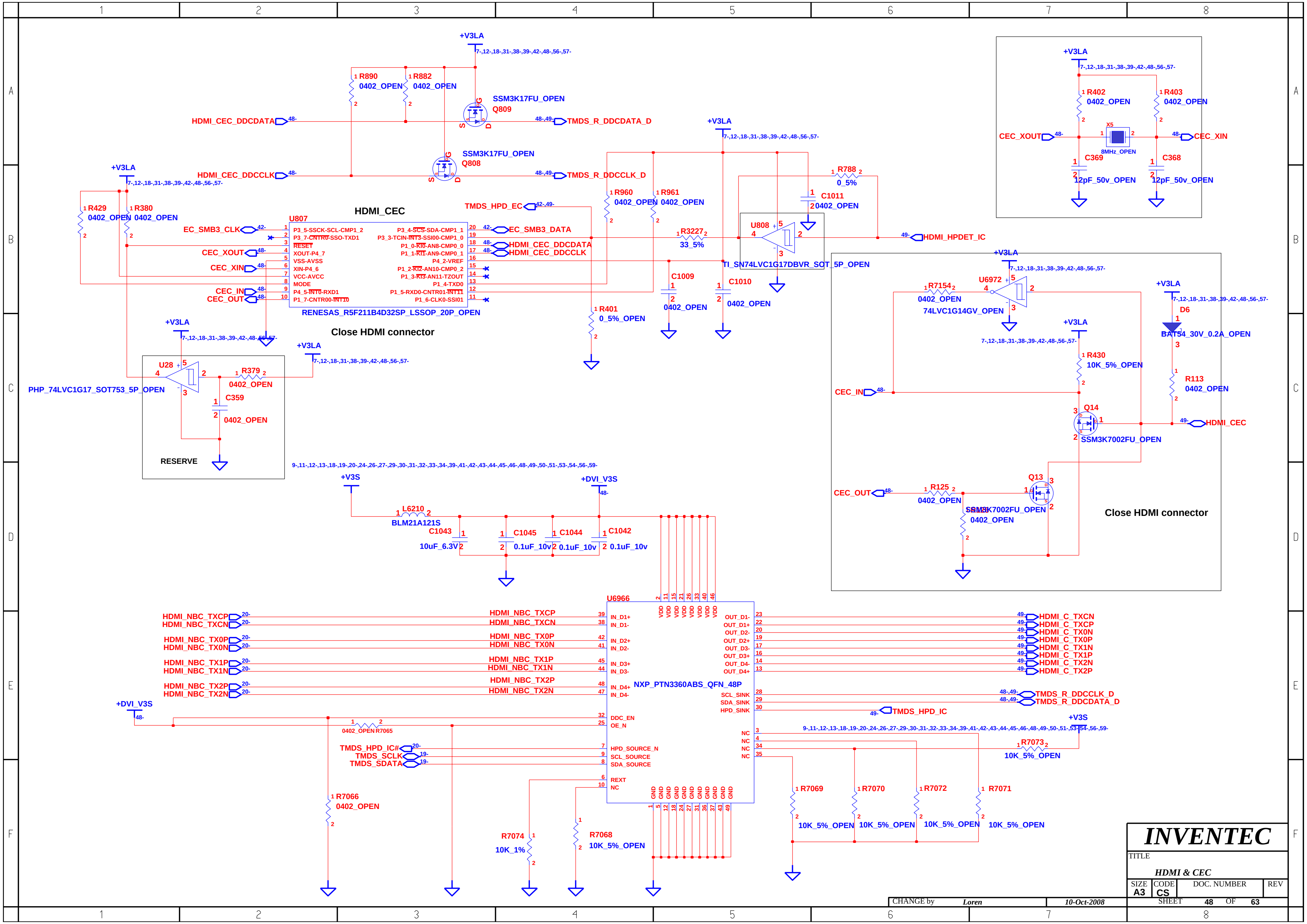
INVENTEC

TITLE

Transformer&RJ45

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by *Loren* *20-Oct-2008* SHEET 47 OF 63



INVENTEC

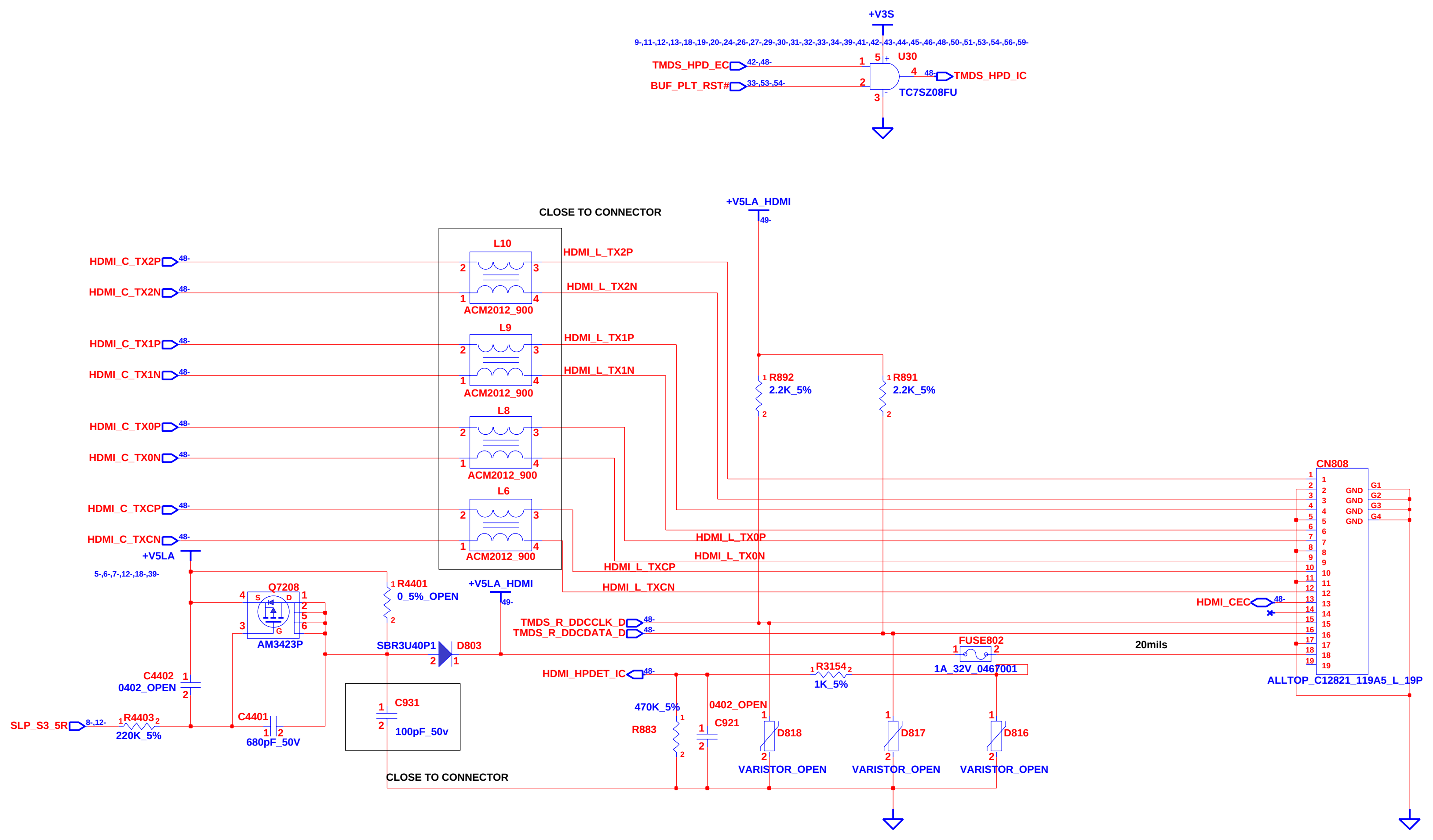
TITLE

HDMI & CEC

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 10-Oct-2008

SHEET 48 OF 63



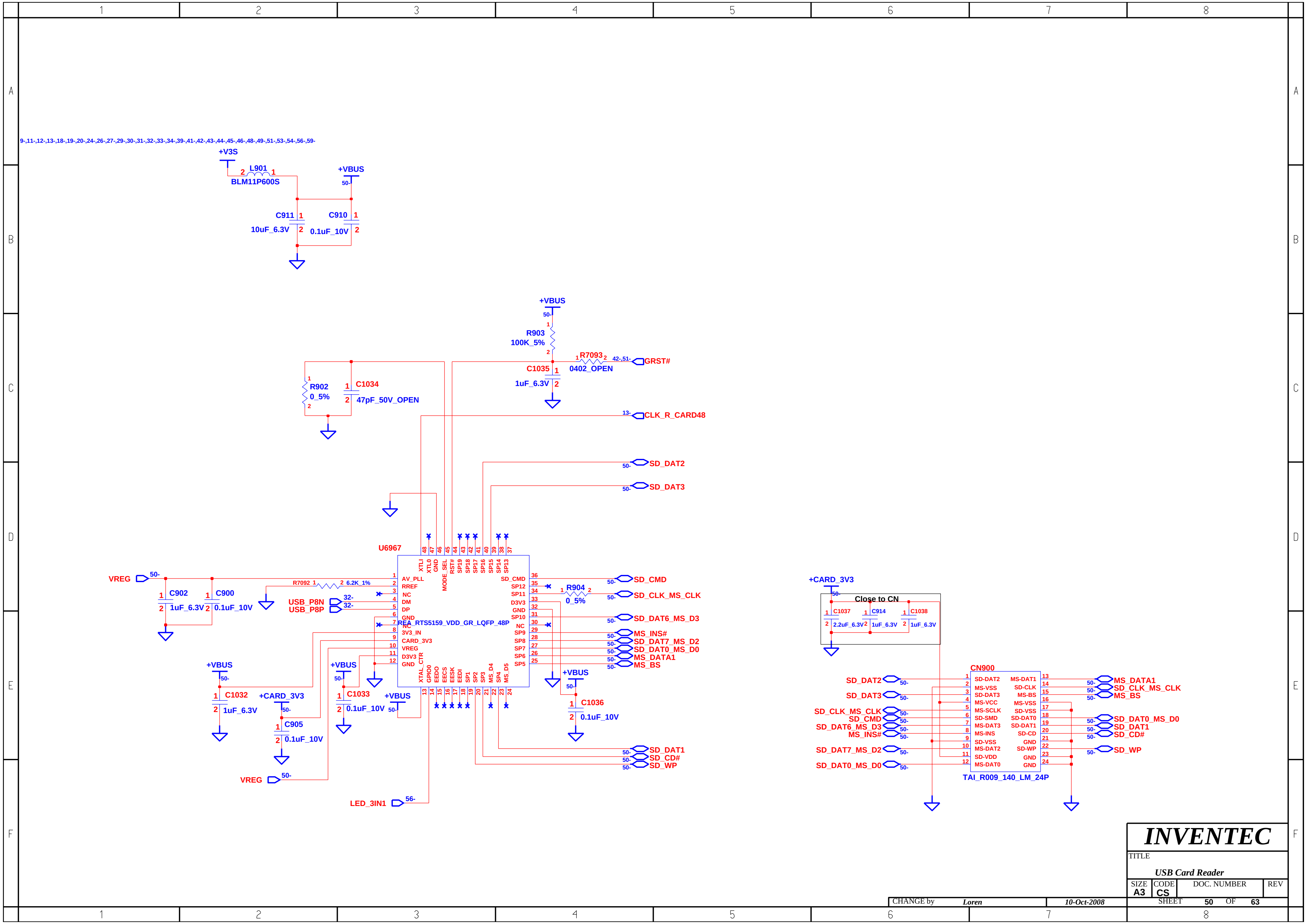
INVENTEC

TITLE

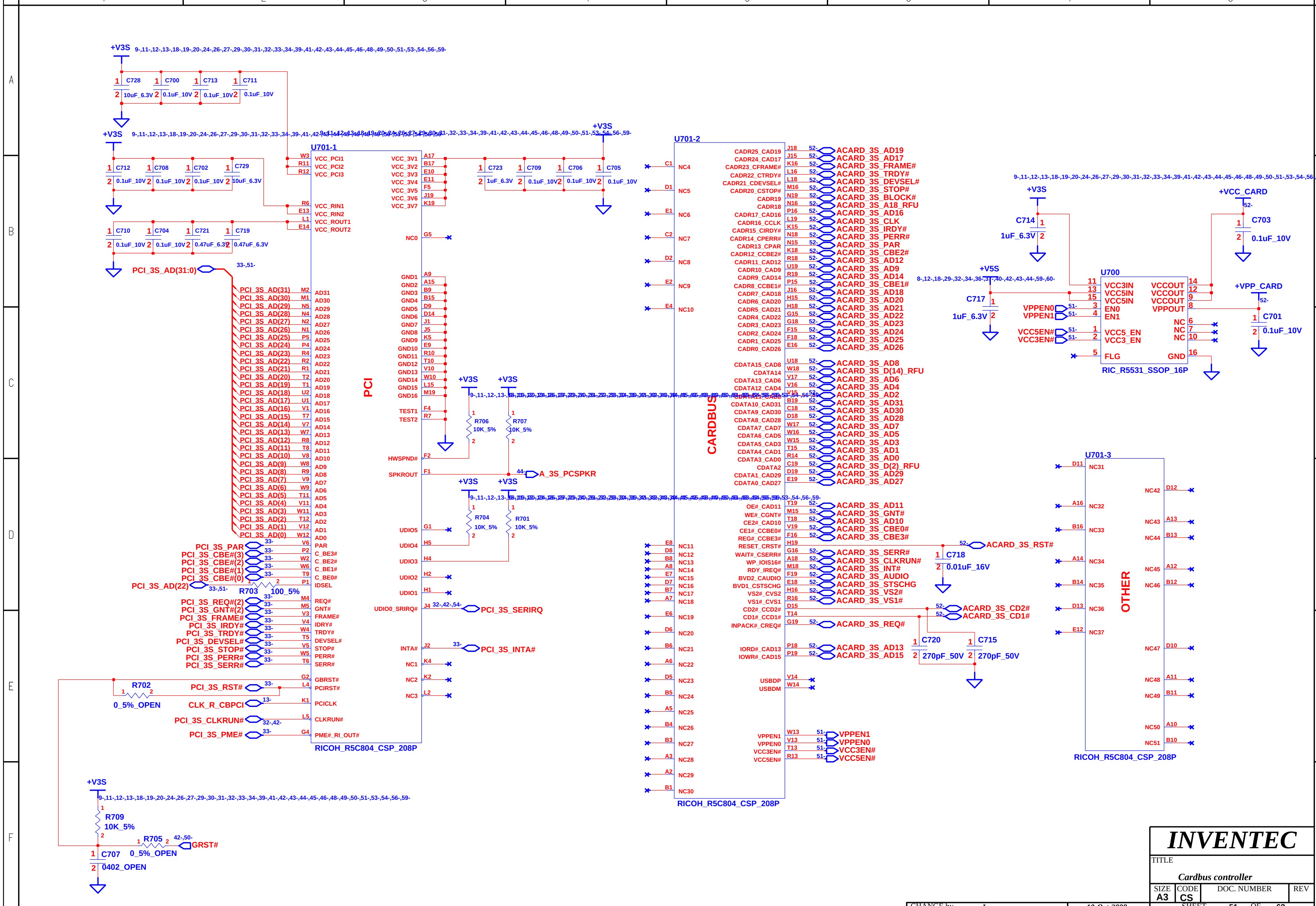
HDMI CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

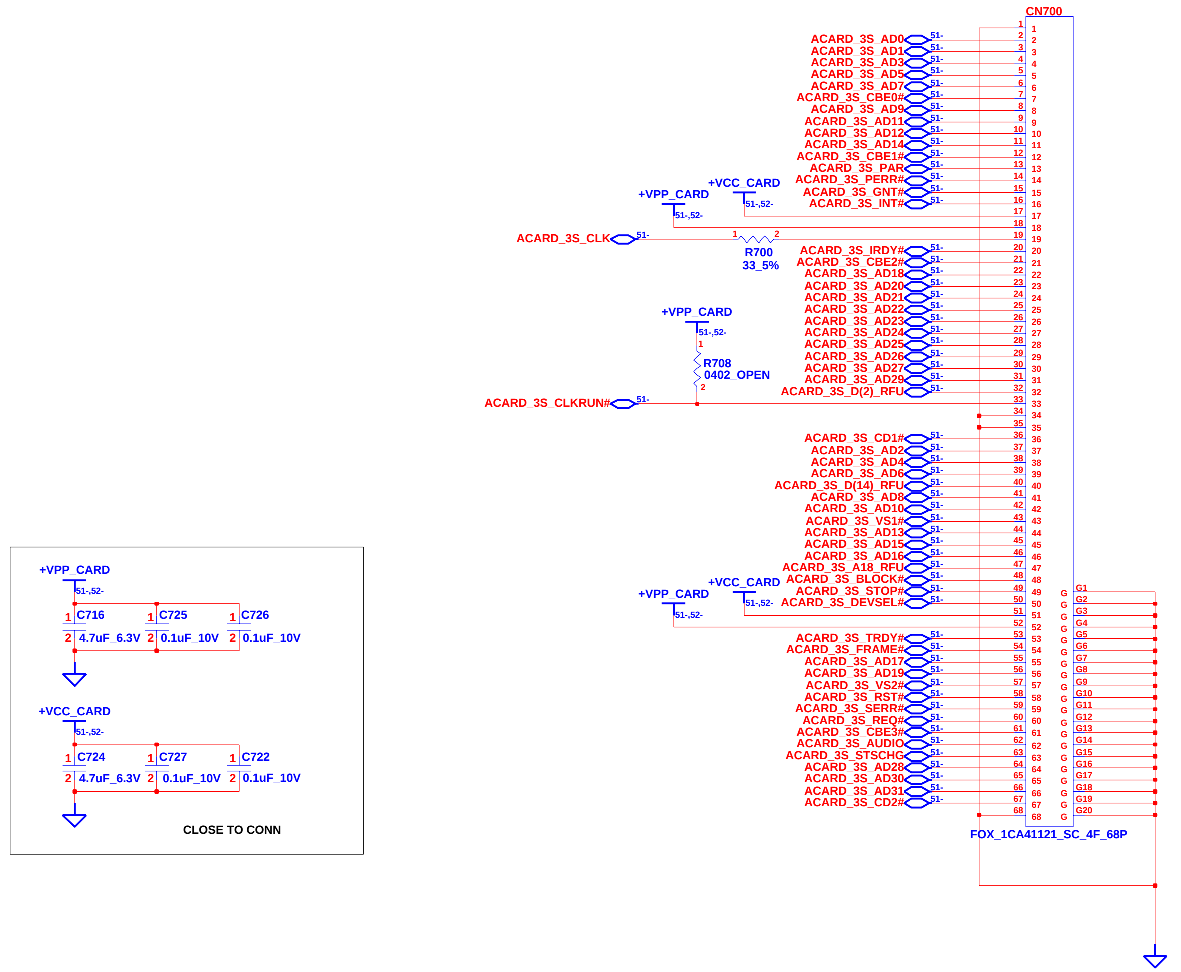
CHANGE by Loren 10-Oct-2008 SHEET 49 OF 63



+V3S
L901
BLM11P600S
+VBUS
C911
10uF_6.3V
C910
0.1uF_10V
R903
100K_5%
R7093
0402_OPEN
GRST#
C1035
1uF_6.3V
R902
0_5%
C1034
47pF_50V_OPEN
CLK_R_CARD48
SD_DAT2
SD_DAT3
U6967
REA_RTS5159_VDD_GR_LQFP_48P
VREG
C902
1uF_6.3V
C900
0.1uF_10V
R7092
6.2K_1%
USB_P8N
USB_P8P
AV_PLL
RREF
NC
DM
DP
GND
3V3_IN
CARD_3V3
VREG
D3V3
GND
SD_CMD
SP12
SP11
D3V3
GND
SP10
NC
SP9
SP8
SP7
SP6
SP5
XTLI
XTLO
GND
MODE_SEL
RST#
SP19
SP18
SP17
SP16
SP15
SP14
SP13
XTAL_CTR
GPIO0
EEDO
EECS
EESK
EEDI
SP1
SP2
SP3
MS_D4
SP4
MS_D5
R904
0_5%
SD_CMD
SD_CLK_MS_CLK
SD_DAT6_MS_D3
MS_INS#
SD_DAT7_MS_D2
SD_DAT0_MS_D0
MS_DATA1
MS_BS
C1032
1uF_6.3V
+CARD_3V3
C905
0.1uF_10V
C1033
0.1uF_10V
C1036
0.1uF_10V
SD_DAT1
SD_CD#
SD_WP
LED_3IN1
Close to CN
C1037
2.2uF_6.3V
C914
1uF_6.3V
C1038
1uF_6.3V
CN900
TAI_R009_140_LM_24P
SD-DAT2
MS-VSS
SD-DAT3
MS-VCC
MS-SCLK
SD-SMD
MS-DAT3
MS-INS
SD-VSS
MS-DAT2
SD-VDD
MS-DAT0
MS-DAT1
SD-CLK
MS-BS
MS-VSS
SD-DAT0
SD-DAT1
SD-CD
GND
SD-WP
GND
GND
SD_CLK_MS_CLK
SD_CMD
SD_DAT6_MS_D3
MS_INS#
SD_DAT7_MS_D2
SD_DAT0_MS_D0
MS_DATA1
MS_BS
SD_DAT0_MS_D0
SD_DAT1
SD_CD#
SD_WP
INVENTEC
TITLE
USB Card Reader
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 50 OF 63



INVENTEC			
TITLE	Cardbus controller		
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by Loren	10-Oct-2008	SHEET 51	OF 63



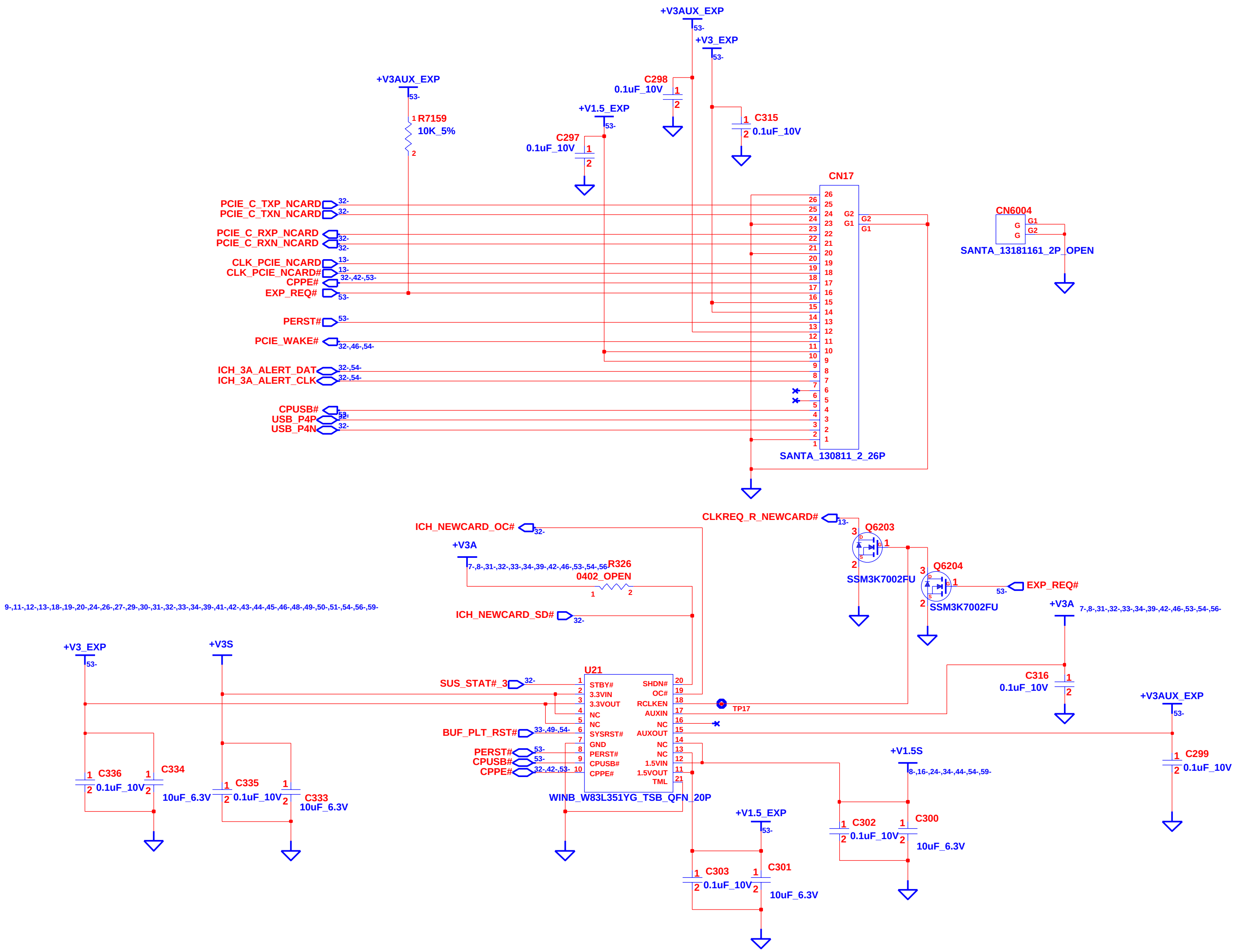
INVENTEC

TITLE

Cardbus controller

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by *Loren* *10-Oct-2008* SHEET 52 OF 63



INVENTEC

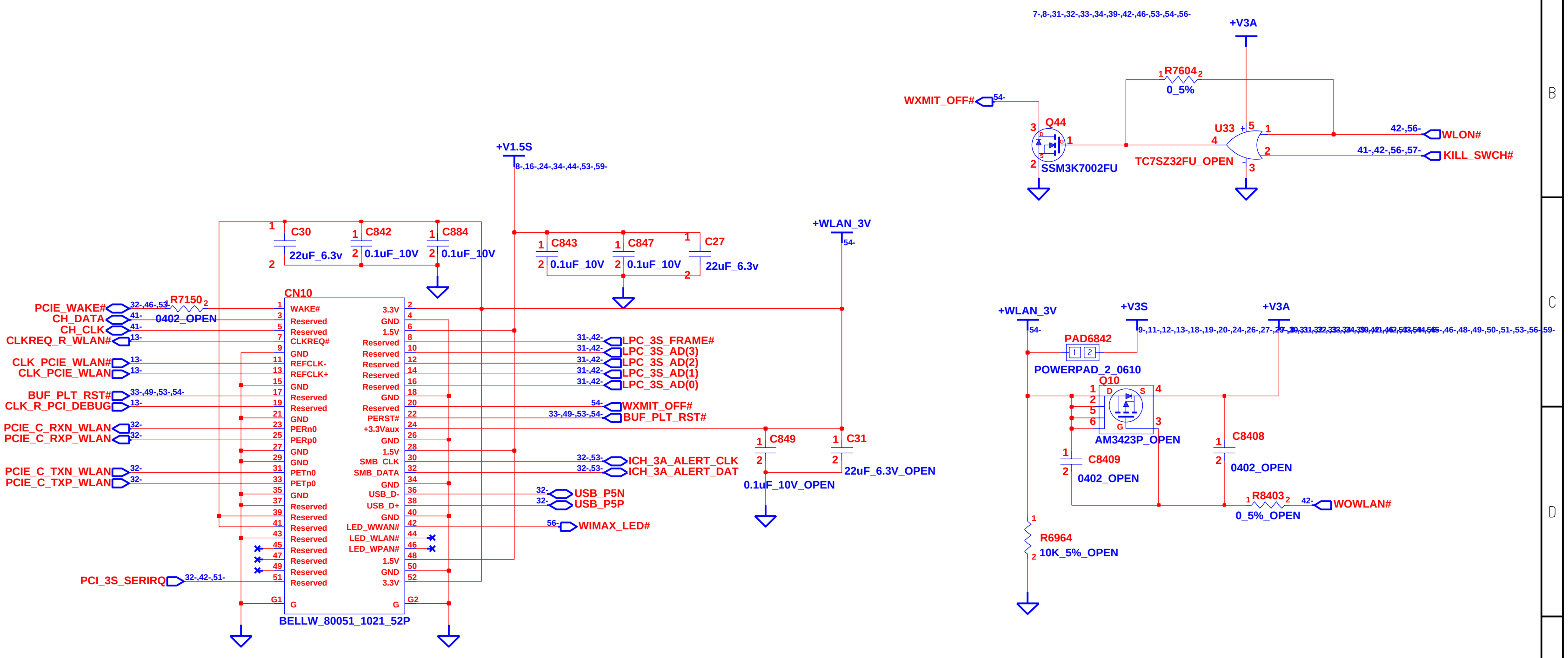
TITLE

Express Card CONN

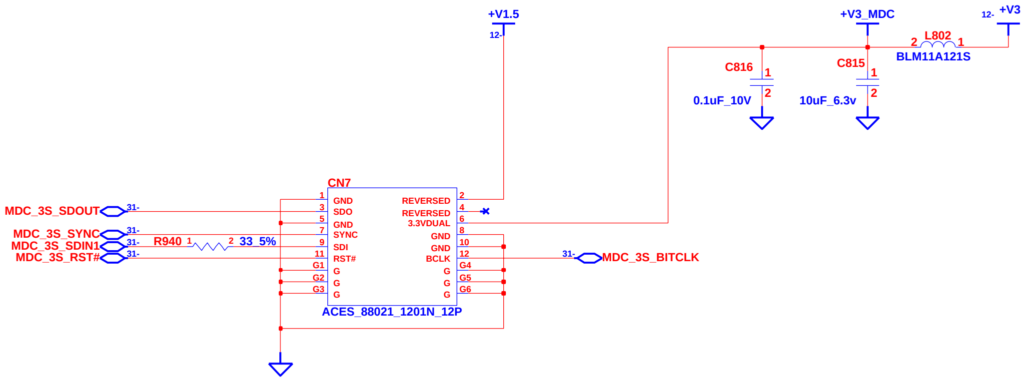
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by *Loren* *10-Oct-2008* SHEET 53 OF 63

Wireless & Debug card



INVENTEC			
TITLE: Wireless & debug card			
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by Loren	10-Oct-2008	SHEET 54	OF 63



INVENTEC

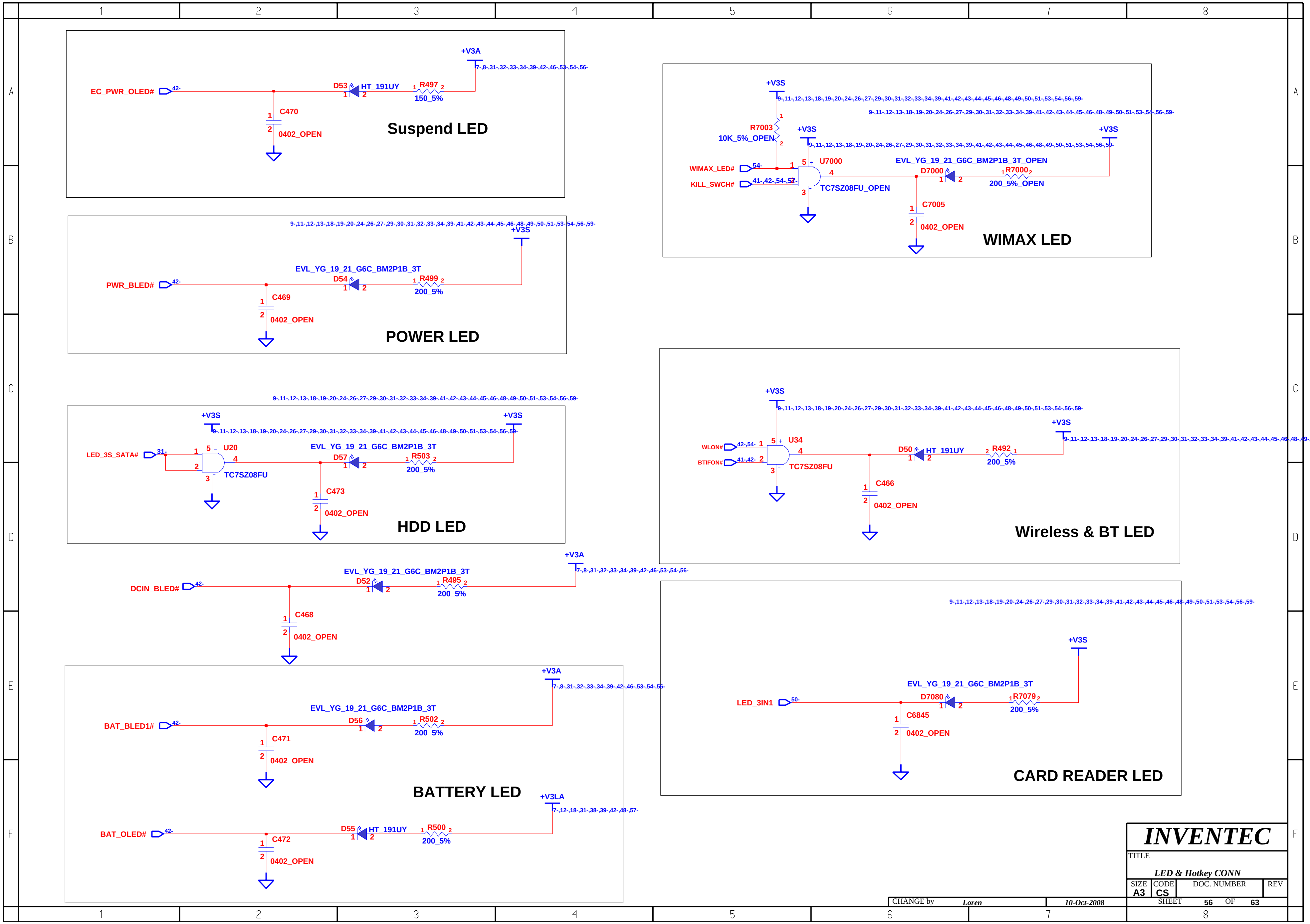
TITLE

MDC CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

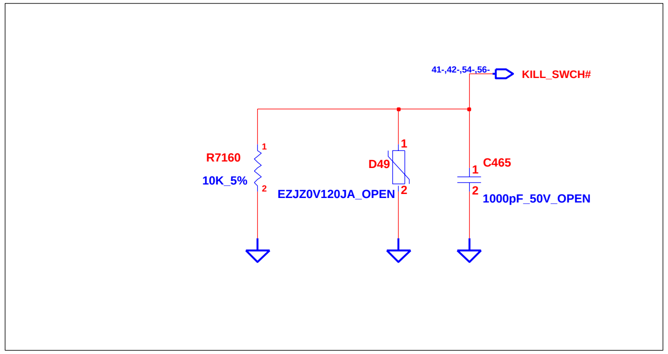
CHANGE by *Loren* *10-Oct-2008*

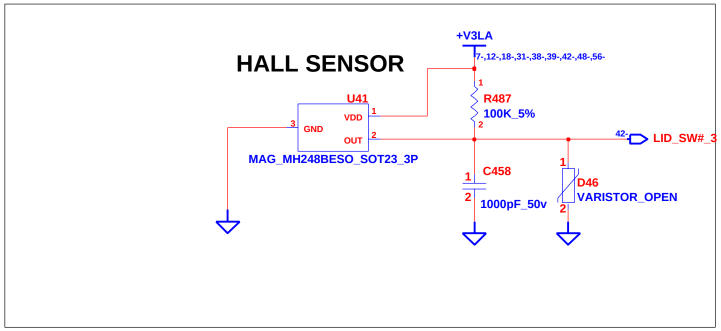
SHEET 55 OF 63


Suspend LED
EC_PWR_OLED#
D53
HT_191UY
R497
150_5%
C470
0402_OPEN
+V3A
POWER LED
PWR_BLED#
EVL_YG_19_21_G6C_BM2P1B_3T
D54
R499
200_5%
C469
0402_OPEN
+V3S
HDD LED
LED_3S_SATA#
U20
TC7SZ08FU
D57
R503
200_5%
C473
0402_OPEN
DCIN_BLED#
D52
R495
200_5%
C468
0402_OPEN
BATTERY LED
BAT_BLED1#
D56
R502
200_5%
C471
0402_OPEN
BAT_OLED#
D55
HT_191UY
R500
200_5%
C472
0402_OPEN
+V3LA
WIMAX LED
WIMAX_LED#
KILL_SWCH#
R7003
10K_5%_OPEN
U7000
TC7SZ08FU_OPEN
EVL_YG_19_21_G6C_BM2P1B_3T_OPEN
D7000
R7000
200_5%_OPEN
C7005
0402_OPEN
Wireless & BT LED
WLON#
BTIFON#
U34
TC7SZ08FU
D50
HT_191UY
R492
200_5%
C466
0402_OPEN
CARD READER LED
LED_3IN1
D7080
R7079
200_5%
C6845
0402_OPEN
INVENTEC
TITLE
LED & Hotkey CONN
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
10-Oct-2008
SHEET 56 OF 63

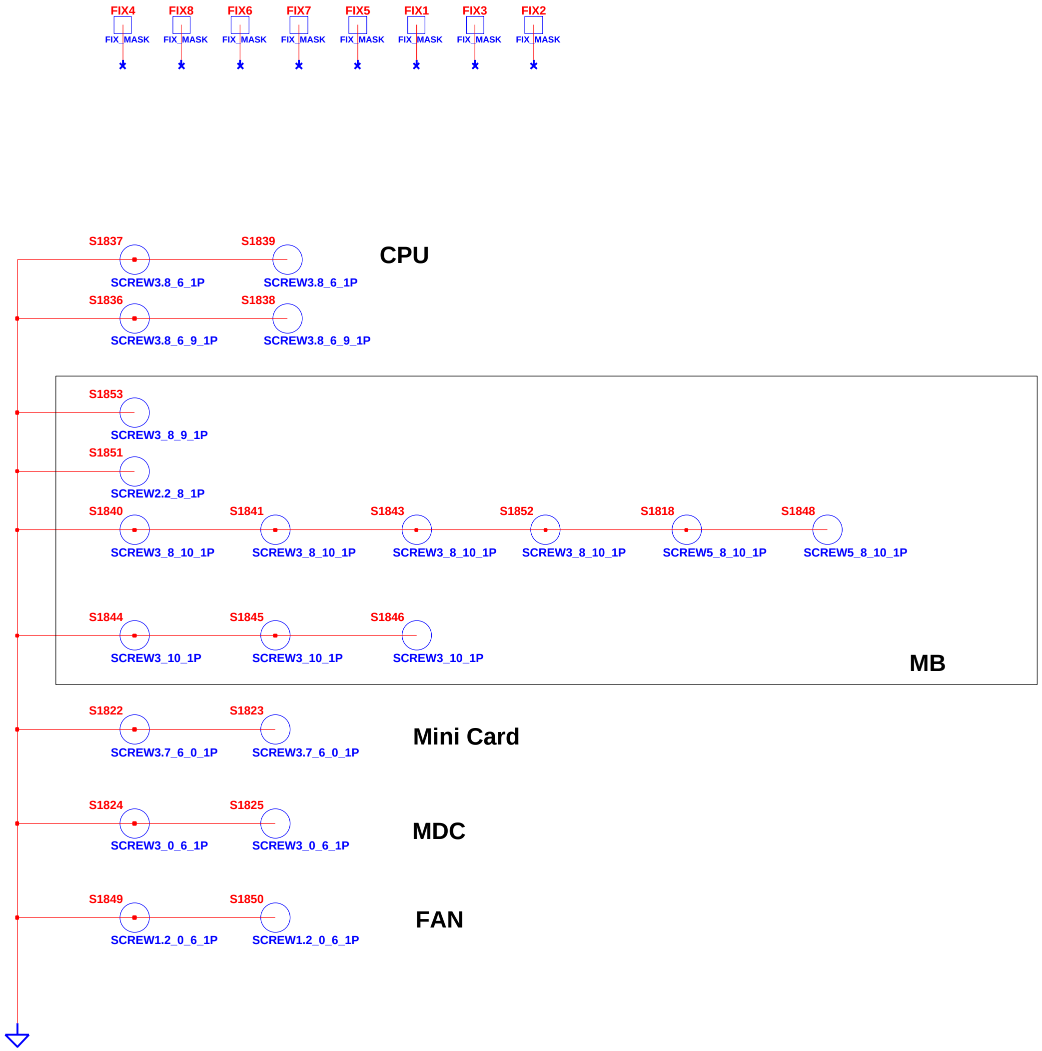
KILL SWITCH

WLAN ON: KILL_SWCH# -> Low
WLAN OFF: KILL_SWCH# -> High





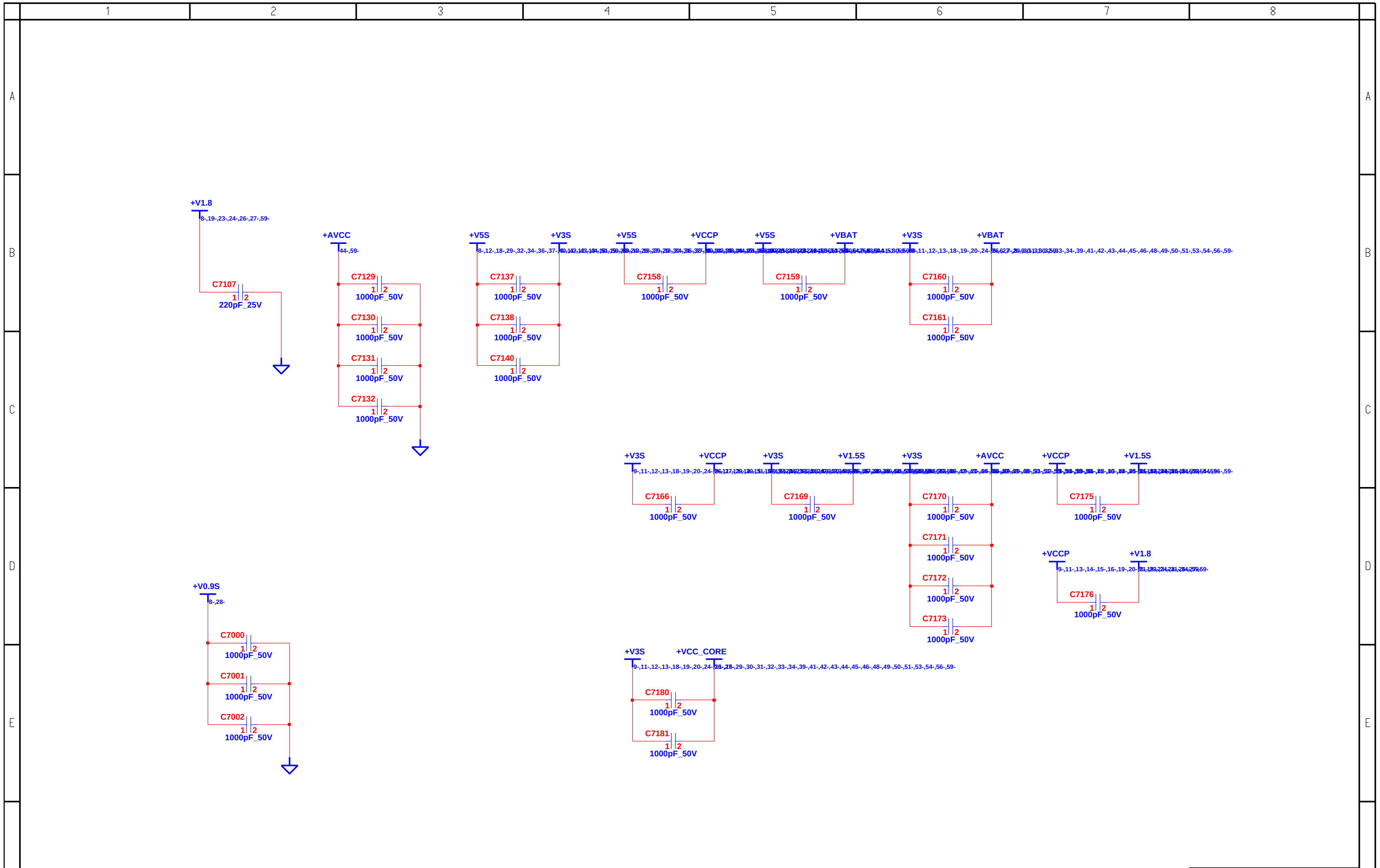
INVENTEC			
TITLE: *Kill Swich & Hall Sensor*			
SIZE A3	CODE CS	DOC. NUMBER	REV
CHANGE by *Loren*	*10-Oct-2008*	SHEET 57	OF 63



INVENTEC

TITLE			
Screw			
SIZE A3	CODE CS	DOC. NUMBER	REV
SHEET 58 OF 63			

CHANGE by Loren 10-Oct-2008

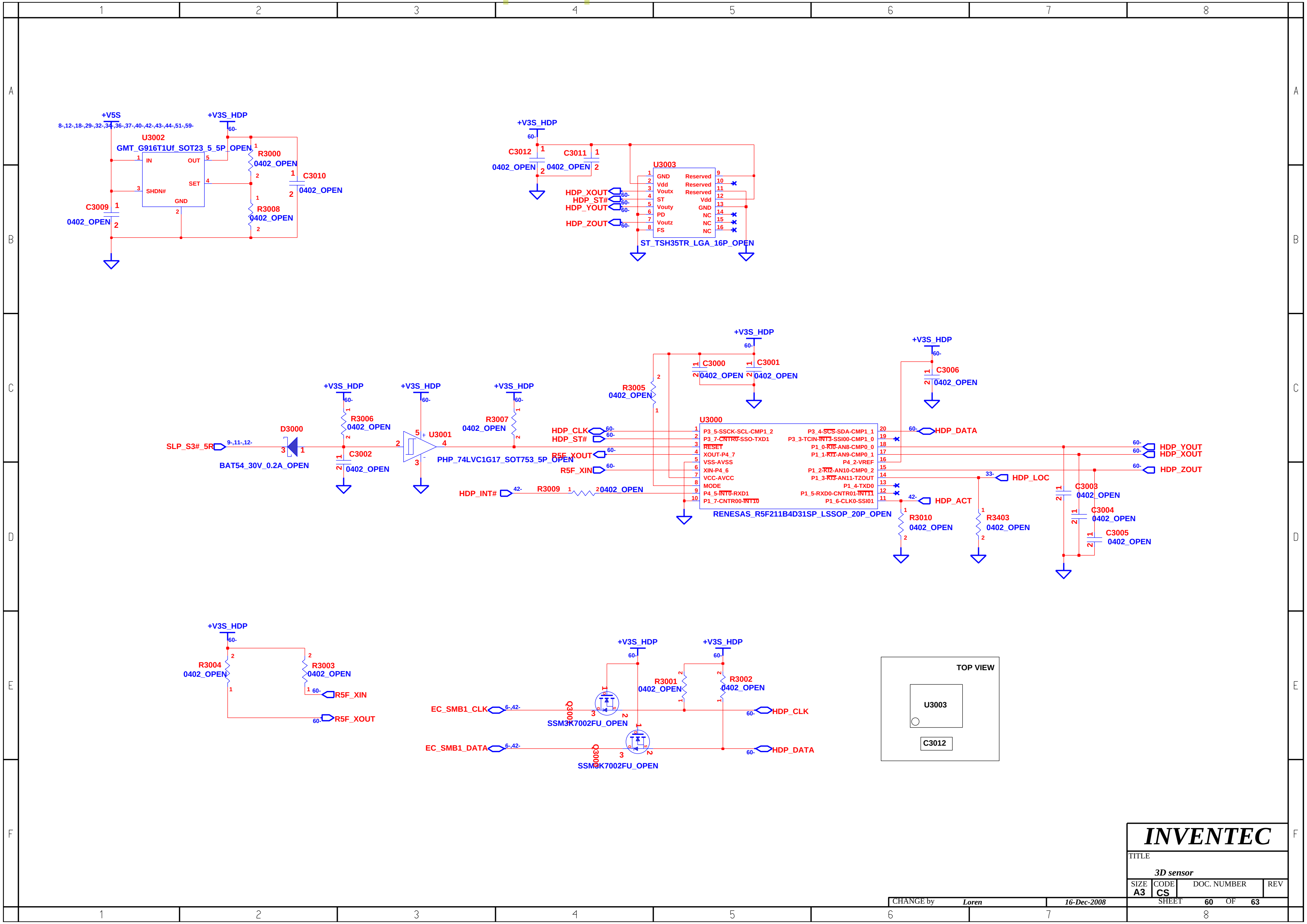


INVENTEC

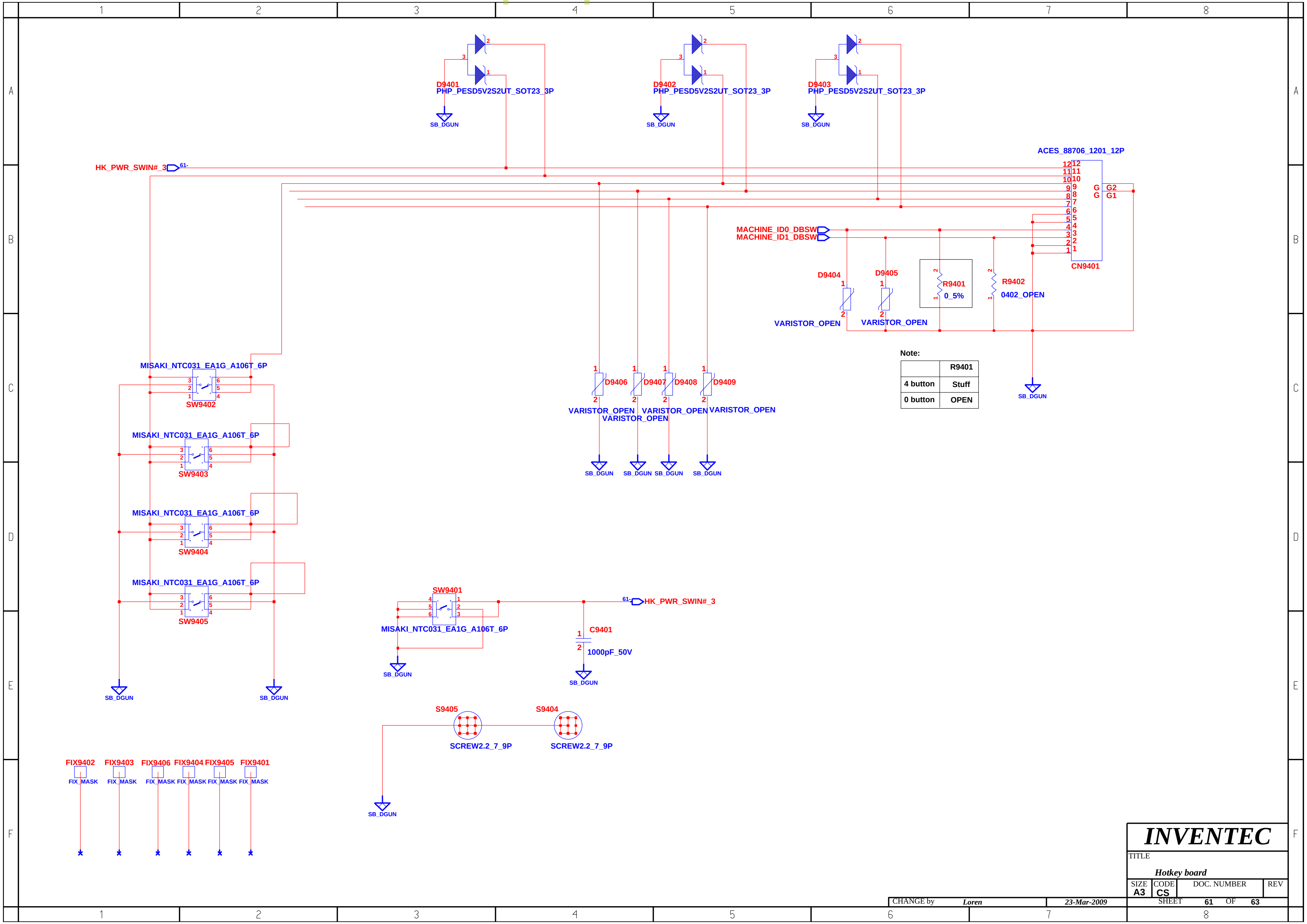
TITLE: EMI

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by Loren 11-Oct-2008



+V5S
+V3S_HDP
U3002
GMT_G916T1Uf_SOT23_5_5P_OPEN
IN
OUT
SET
SHDN#
GND
R3000
0402_OPEN
C3010
0402_OPEN
R3008
0402_OPEN
C3009
0402_OPEN
C3012
0402_OPEN
C3011
0402_OPEN
U3003
GND
Vdd
Voutx
ST
Vouty
PD
Voutz
FS
Reserved
Reserved
Reserved
Vdd
GND
NC
NC
NC
HDP_XOUT
HDP_ST#
HDP_YOUT
HDP_ZOUT
ST_TSH35TR_LGA_16P_OPEN
C3000
0402_OPEN
C3001
0402_OPEN
C3006
0402_OPEN
R3005
0402_OPEN
U3000
P3_5-SSCK-SCL-CMP1_2
P3_7-CNTR0-SSO-TXD1
RESET
XOUT-P4_7
VSS-AVSS
XIN-P4_6
VCC-AVCC
MODE
P4_5-INT0-RXD1
P1_7-CNTR00-INT10
P3_4-SCS-SDA-CMP1_1
P3_3-TCIN-INT3-SSI00-CMP1_0
P1_0-KI0-AN8-CMP0_0
P1_1-KI1-AN9-CMP0_1
P4_2-VREF
P1_2-KI2-AN10-CMP0_2
P1_3-KI3-AN11-TZOUT
P1_4-TXD0
P1_5-RXD0-CNTR01-INT11
P1_6-CLK0-SSI01
RENESAS_R5F211B4D31SP_LSSOP_20P_OPEN
HDP_DATA
HDP_CLK
HDP_ST#
R5F_XOUT
R5F_XIN
HDP_INT#
R3009
0402_OPEN
HDP_YOUT
HDP_XOUT
HDP_ZOUT
HDP_LOC
HDP_ACT
R3010
0402_OPEN
R3403
0402_OPEN
C3003
0402_OPEN
C3004
0402_OPEN
C3005
0402_OPEN
SLP_S3#_5R
D3000
BAT54_30V_0.2A_OPEN
R3006
0402_OPEN
C3002
0402_OPEN
U3001
PHP_74LVC1G17_SOT753_5P_OPEN
R3007
0402_OPEN
R3004
0402_OPEN
R3003
0402_OPEN
R5F_XIN
R5F_XOUT
EC_SMB1_CLK
EC_SMB1_DATA
Q3001
Q3002
SSM3K7002FU_OPEN
SSM3K7002FU_OPEN
R3001
0402_OPEN
R3002
0402_OPEN
HDP_CLK
HDP_DATA
TOP VIEW
U3003
C3012
INVENTEC
TITLE
3D sensor
SIZE A3
CODE CS
DOC. NUMBER
REV
CHANGE by Loren
16-Dec-2008
SHEET 60 OF 63



Note:

	R9401
4 button	Stuff
0 button	OPEN

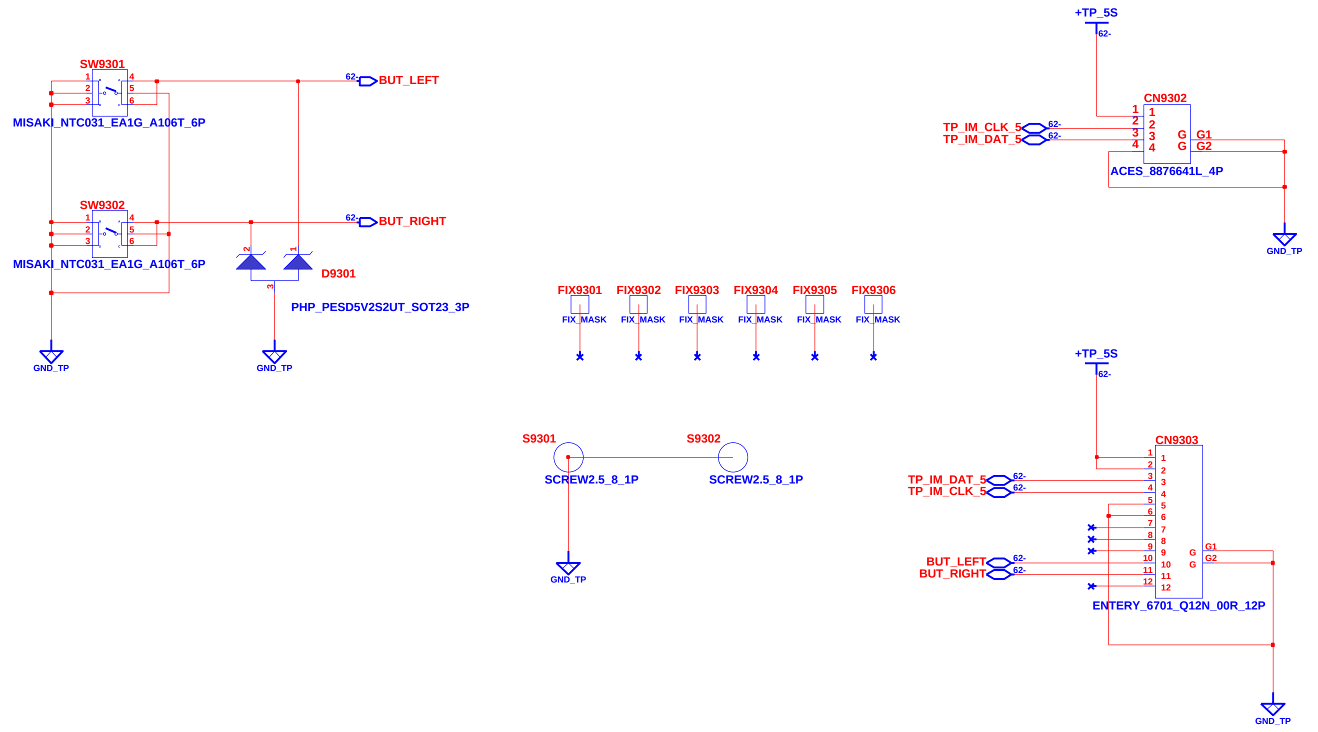
INVENTEC

TITLE

Hotkey board

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by *Loren* *23-Mar-2009* SHEET 61 OF 63



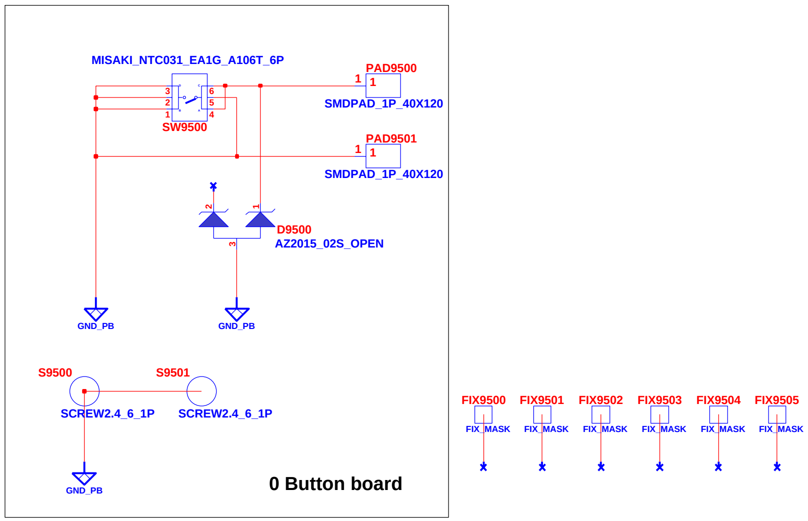
INVENTEC

TITLE
touch pad board

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by *Loren* *16-Dec-2008*

SHEET 62 OF 63



INVENTEC				
TITLE power board				
SIZE A3	CODE CS	DOC. NUMBER		REV
CHANGE by Loren	22-Apr-2009	SHEET 63	OF 63	