

1	2	3	4	5	6	7	8
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HSF Property : **Halogen-Free**

CLASH UMA

MV BUILD

2011.02.14

DATE	CHANGE NO.	REV

DRAWER	EE	DATE	POWER	DATE	INVENTEC			
DESIGN								
CHECK								
RESPONSIBLE								
TITLE					CLASHUMA			
SIZE =	3	VER :						
FILE NAME :	XXXX-XXXXXX-XX				SIZE A3	CODE CS	DOC. NUMBER	REV A02
P/N	XXXXXXXXXXXX				SHEET	1	OF	62

1	2	3	4	5	6	7	8
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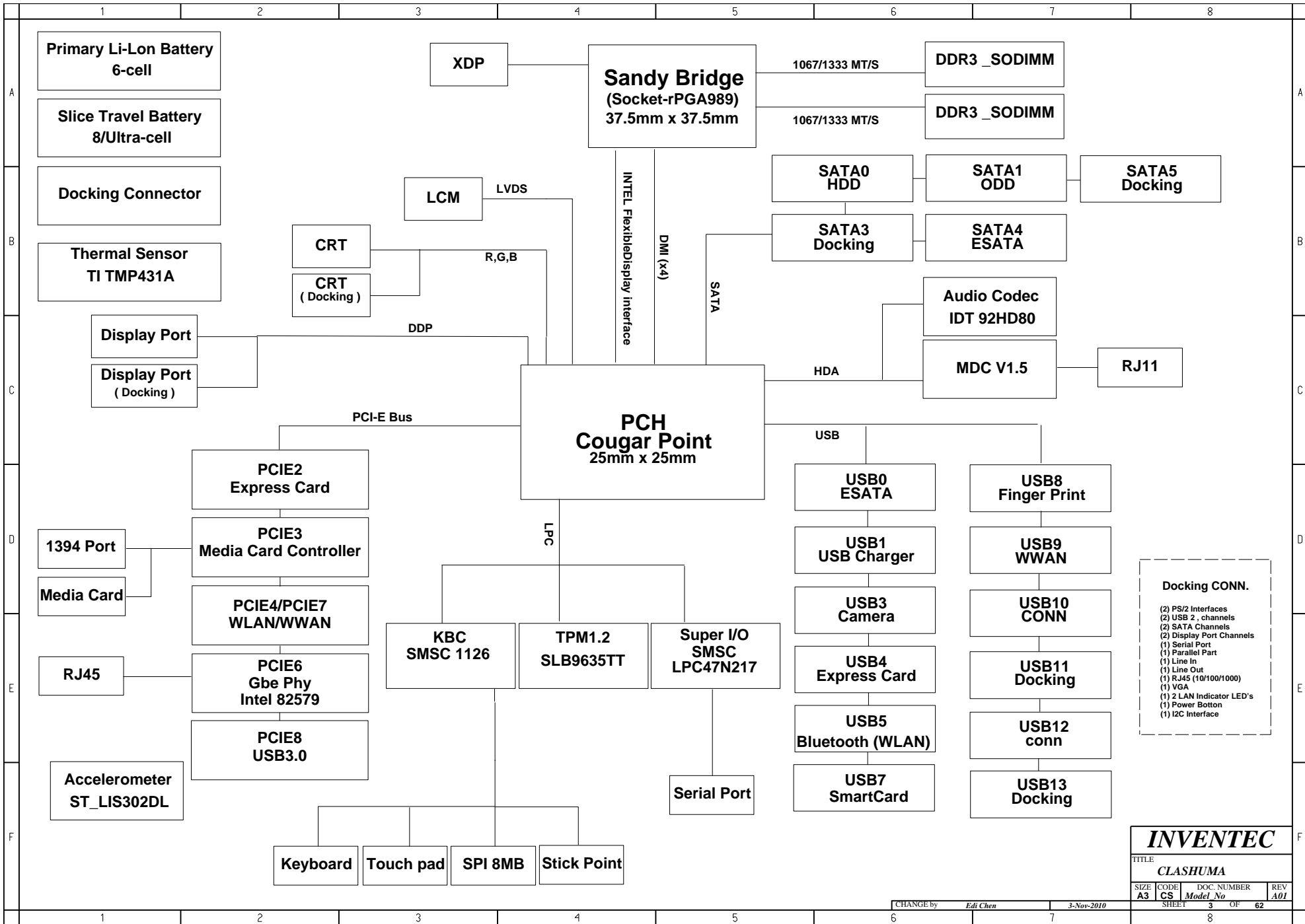
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- 5- DC& BATTERY CHARGER
- 6- SELECT & BATTERY CONN
- 7- SYSTEM POWER(+V3A/+V5A)
- 8- SYSTEM POWER(+V1.5/+V0.75S/M_REF)
- 9- SYSTEM POWER(+V1.8S/TURBO)
- 10- SYSTEM POWER(+VCCP/+1.05M_LAN)
- 11- CPU POWER(+VCCSA/+1.05S_USB3.0)
- 12- CPU POWER(+VCC_CORE)
- 13- CPU POWER(+VCC_CORE)
- 14- POWER(SLEEP)
- 15- POWER(SEQUENCE)
- 16- FAN & THERMAL
- 17- XDP CONN
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- 19- SANDY BRIDGE2
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- 21- SANDY BRIDGE3
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- 53- SCREW
- 54- WIRELESS / QUICK WEB / MUTE LED
- 55- SMART CARD
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- 58- AUDIO
- 59- EXT. MIC / MIC / HP
- 60- 1394 CONN / SD CONN
- 61- CARD READER CTRL
- 62- LID SWITCH

INVENTEC

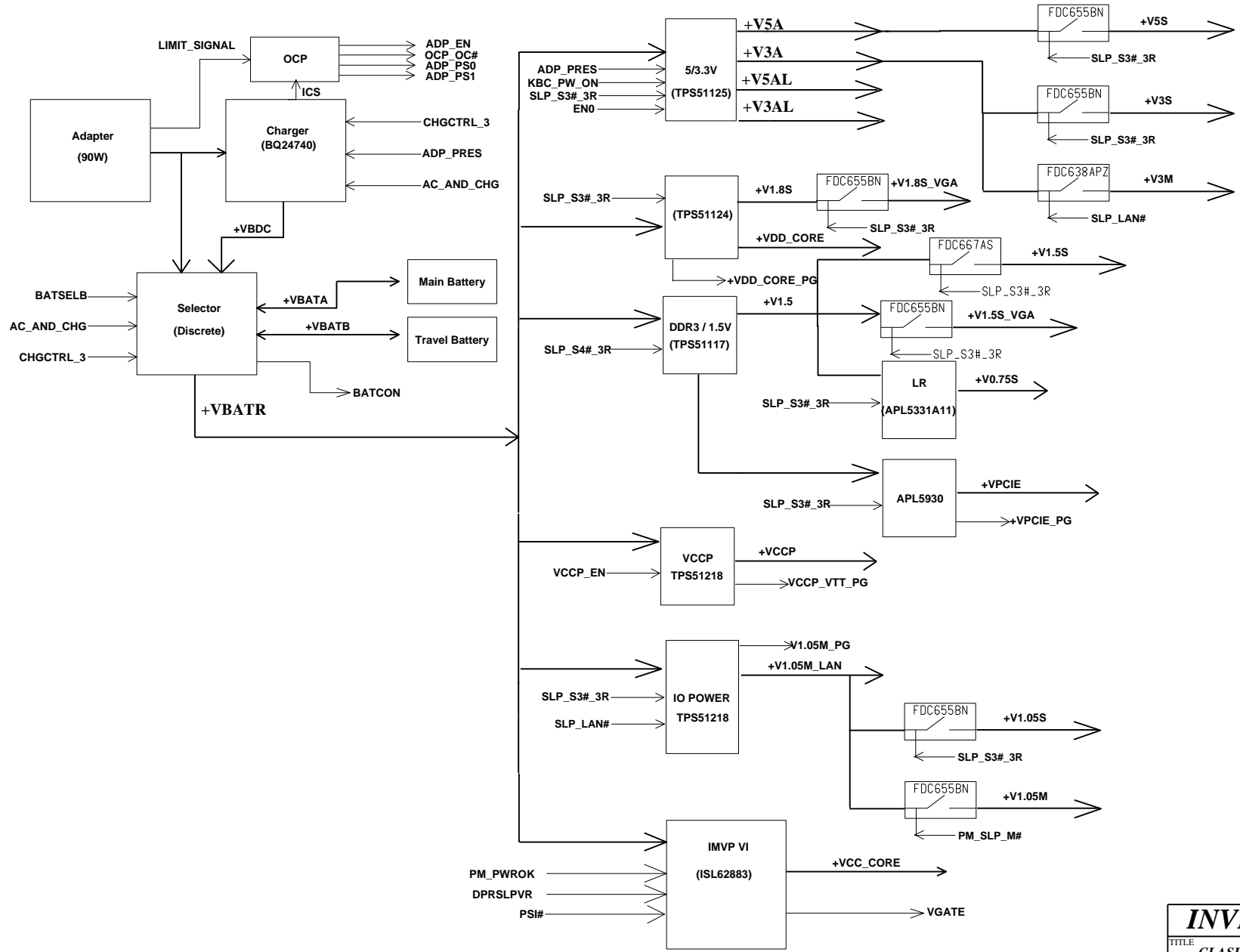
TITLE			
CLASHUMA			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01
SHEET		2	OF 62

CHANGE by *Edi Chen* 4-Nov-2010

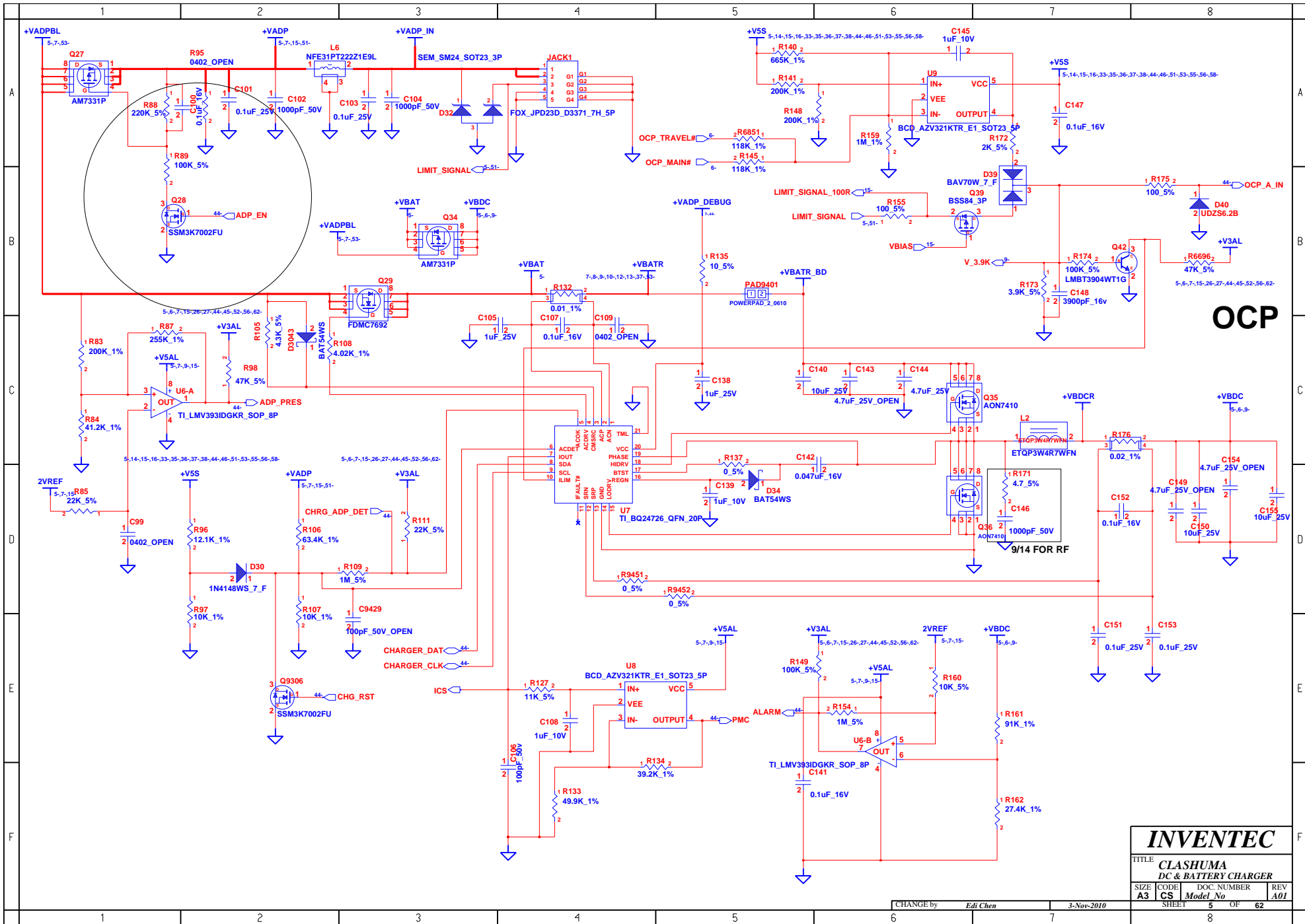


- Docking CONN.**
- (2) PS/2 Interfaces
 - (2) USB 2. channels
 - (2) SATA Channels
 - (2) Display Port Channels
 - (1) Serial Port
 - (1) Parallel Port
 - (1) Line In
 - (1) Line Out
 - (1) RJ45 (10/100/1000)
 - (1) VGA
 - (1) 2 LAN Indicator LED's
 - (1) Power Button
 - (1) I2C Interface

INVENTEC			
TITLE CLASHUMA			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 3		OF 62	

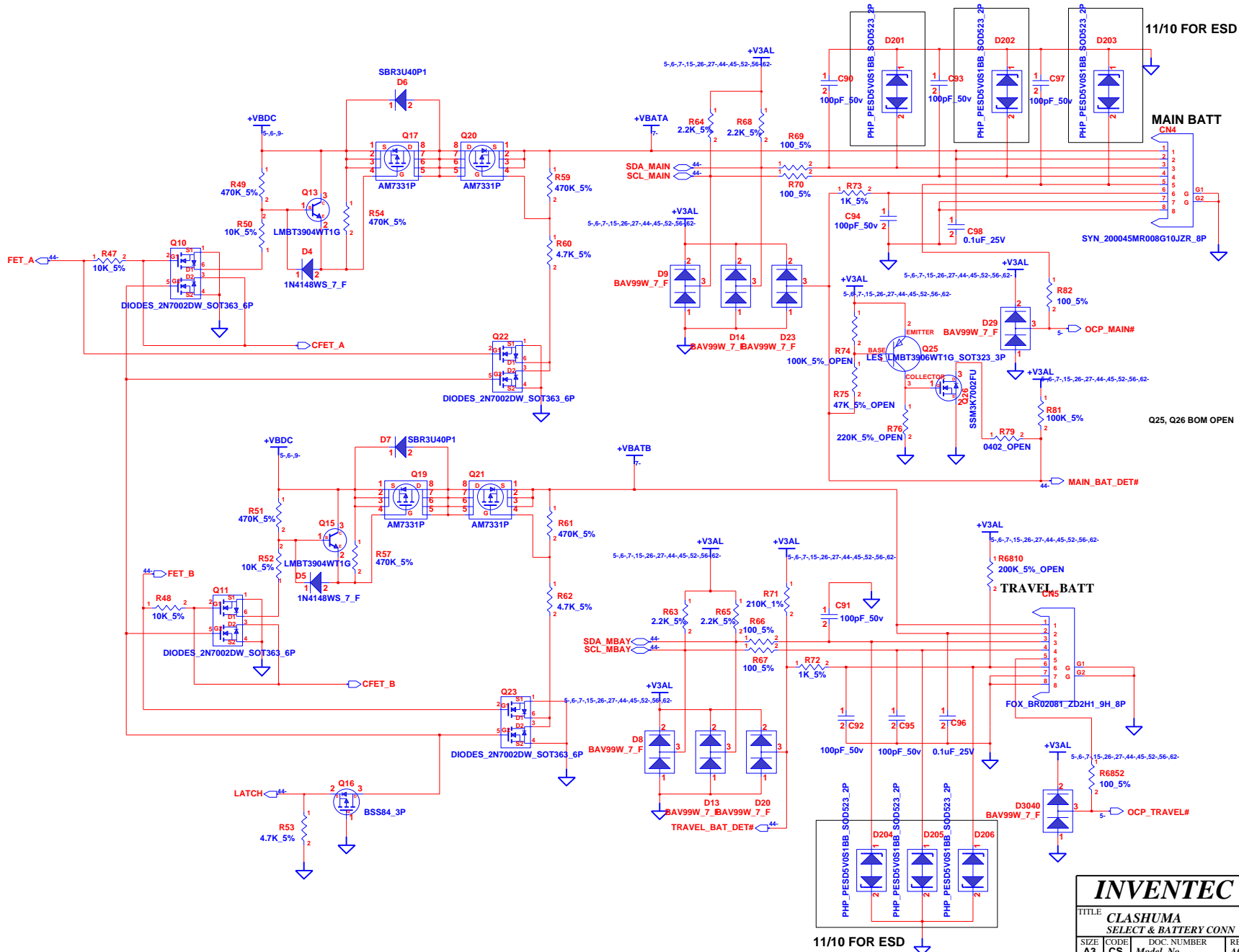


INVENTEC			
TITLE CLASHUMA			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 4		OF 62	



OCP

INVENTEC			
TITLE CLASHUMA DC & BATTERY CHARGER			
SIZE A3	CODE CS	DOC NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET		5 OF 62	



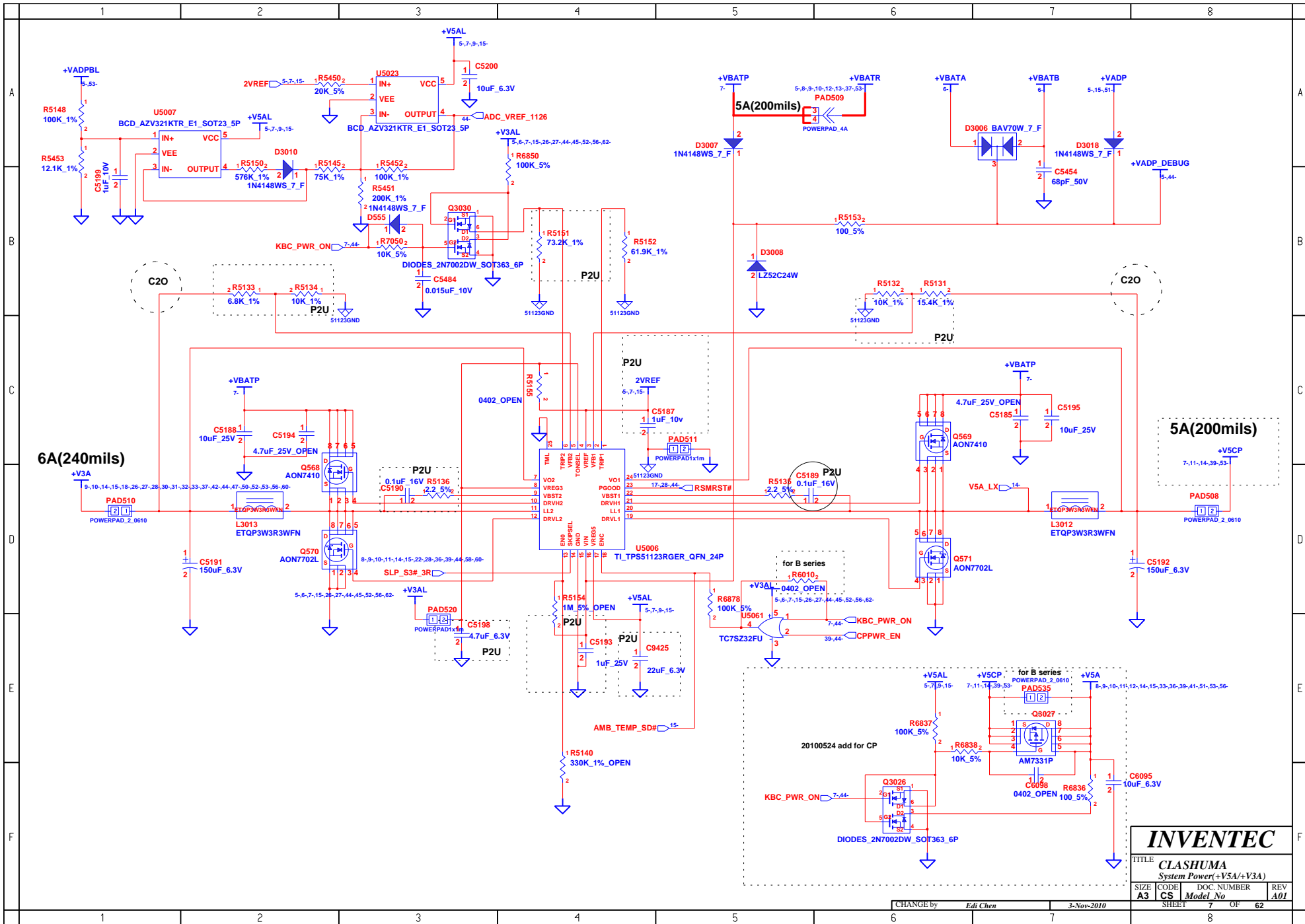
INVENTEC

TITLE			CLASHUMA
SELECT & BATTERY CONN			
SIZE	CODE	DOC NUMBER	REV
A3	CS	Model No	A01

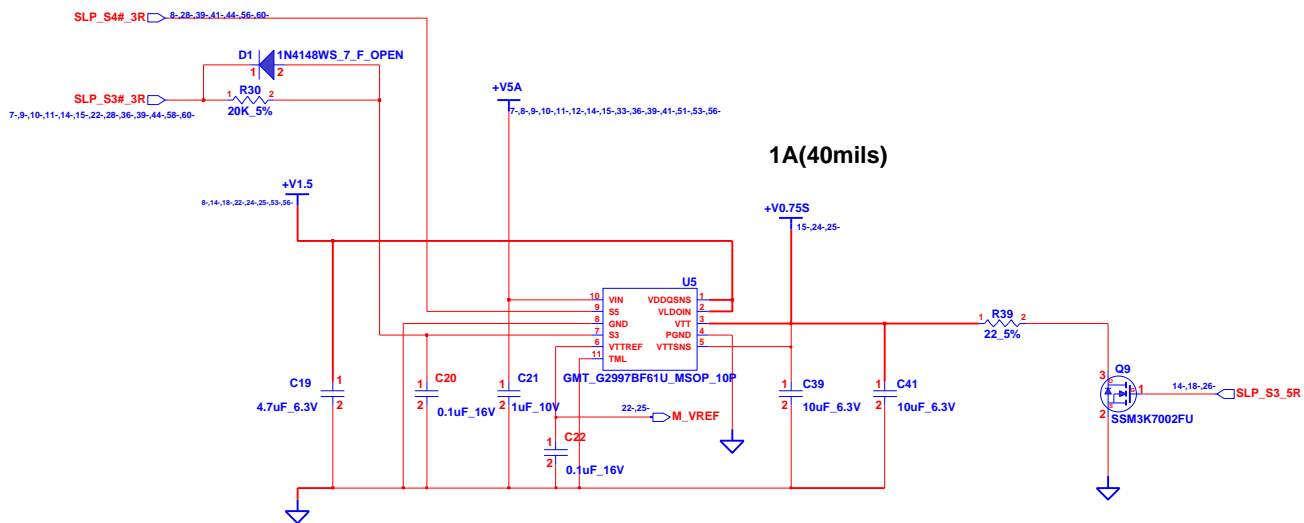
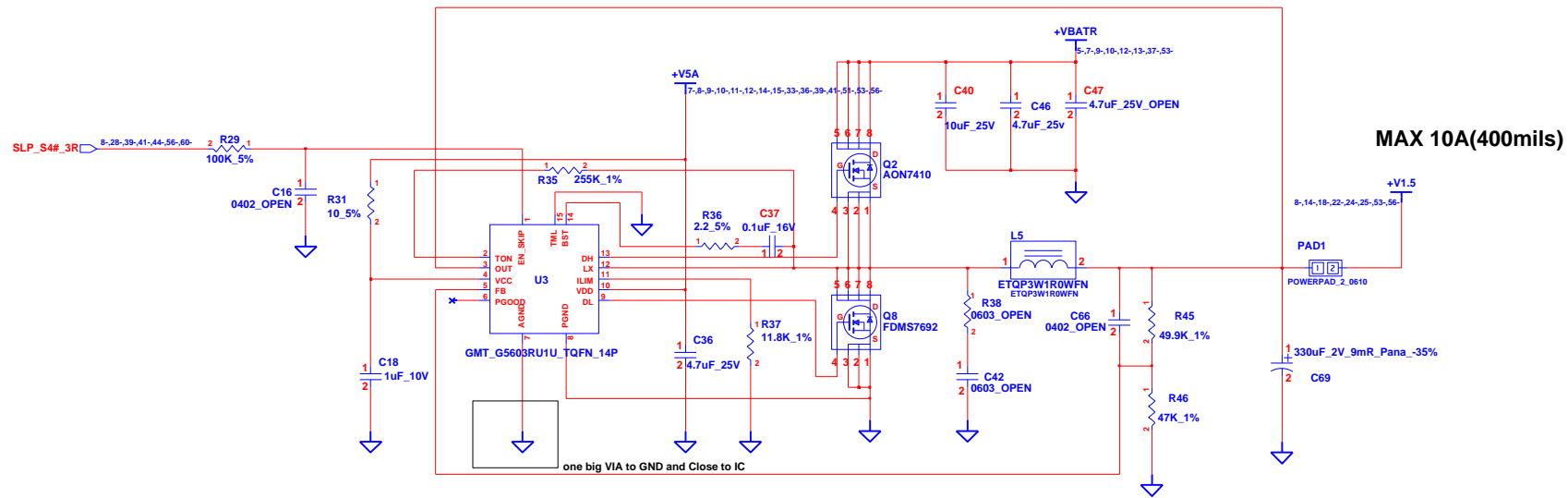
11/10 FOR ESD

CHANGE by *Edi Chen* 3-Nov-2010

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INVENTEC				
TITLE CLASHUMA System Power(+VSA/+V3A)				
SIZE A3	CODE CS	DOC NUMBER <i>Model_No</i>	REV A01	
CHANGE by <i>Edi Chen</i>		DATE <i>3-Nov-2010</i>		SHEET 7 OF 62

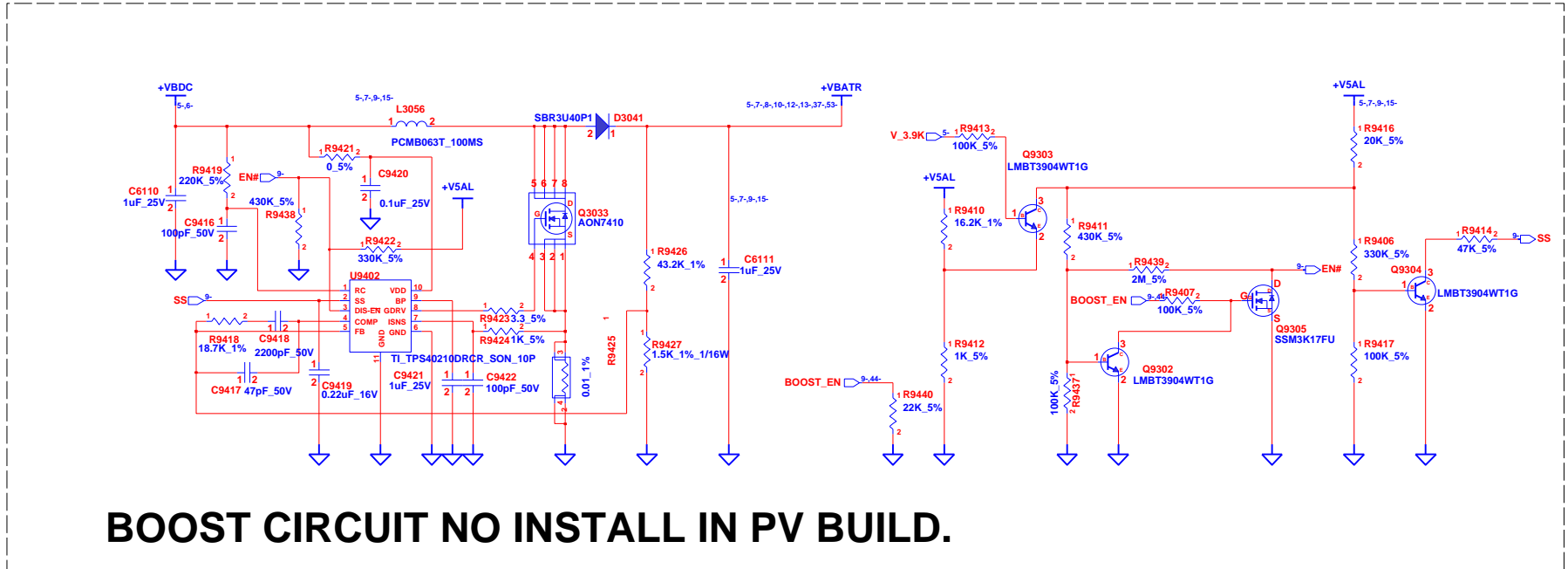
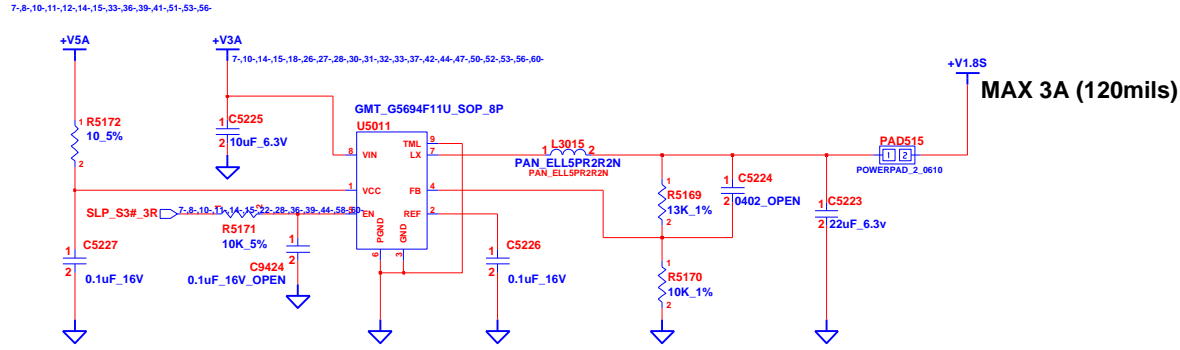


INVENTEC

TITLE			
CLASHUMA			
SYSTEM POWER(+V1.5/MREF)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

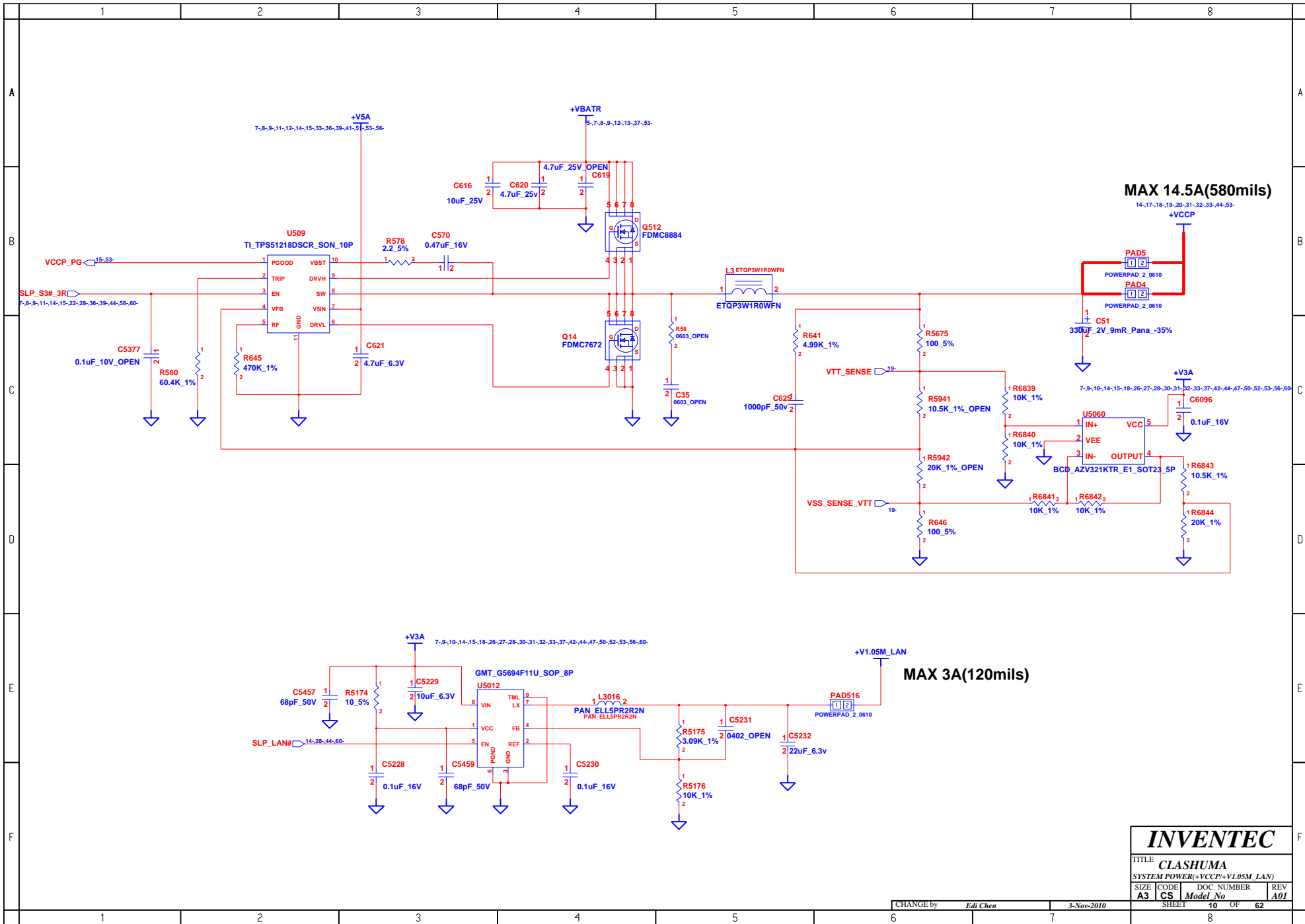
CHANGE by *Edi Chen* 3-Nov-2010

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BOOST CIRCUIT NO INSTALL IN PV BUILD.

INVENTEC			
TITLE CLASHUMA			
GPU POWER(+V1.8S/TURBO BOOST)			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 9		OF 62	



MAX 14.5A(580mils)

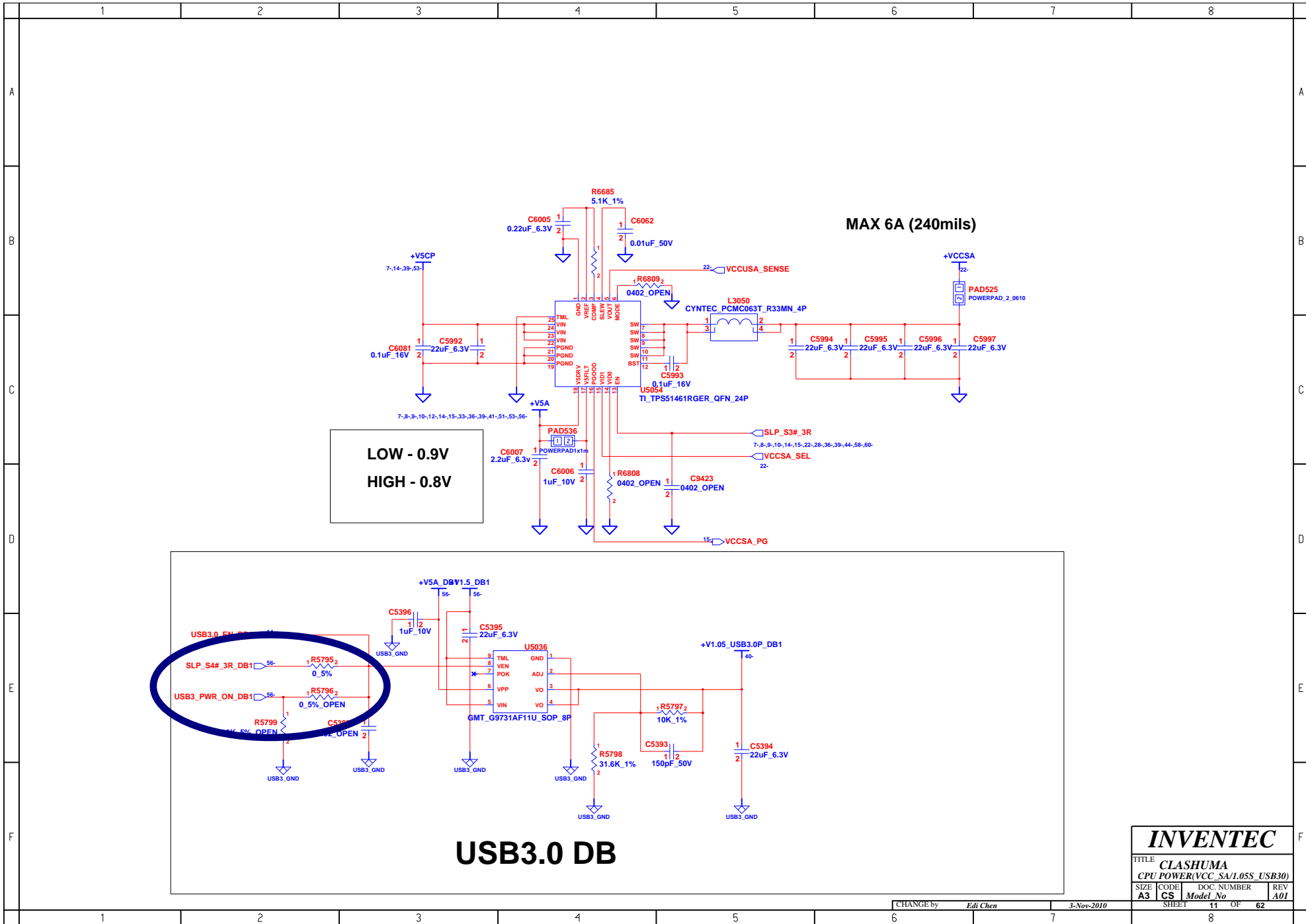
MAX 3A(120mils)

INVENTEC

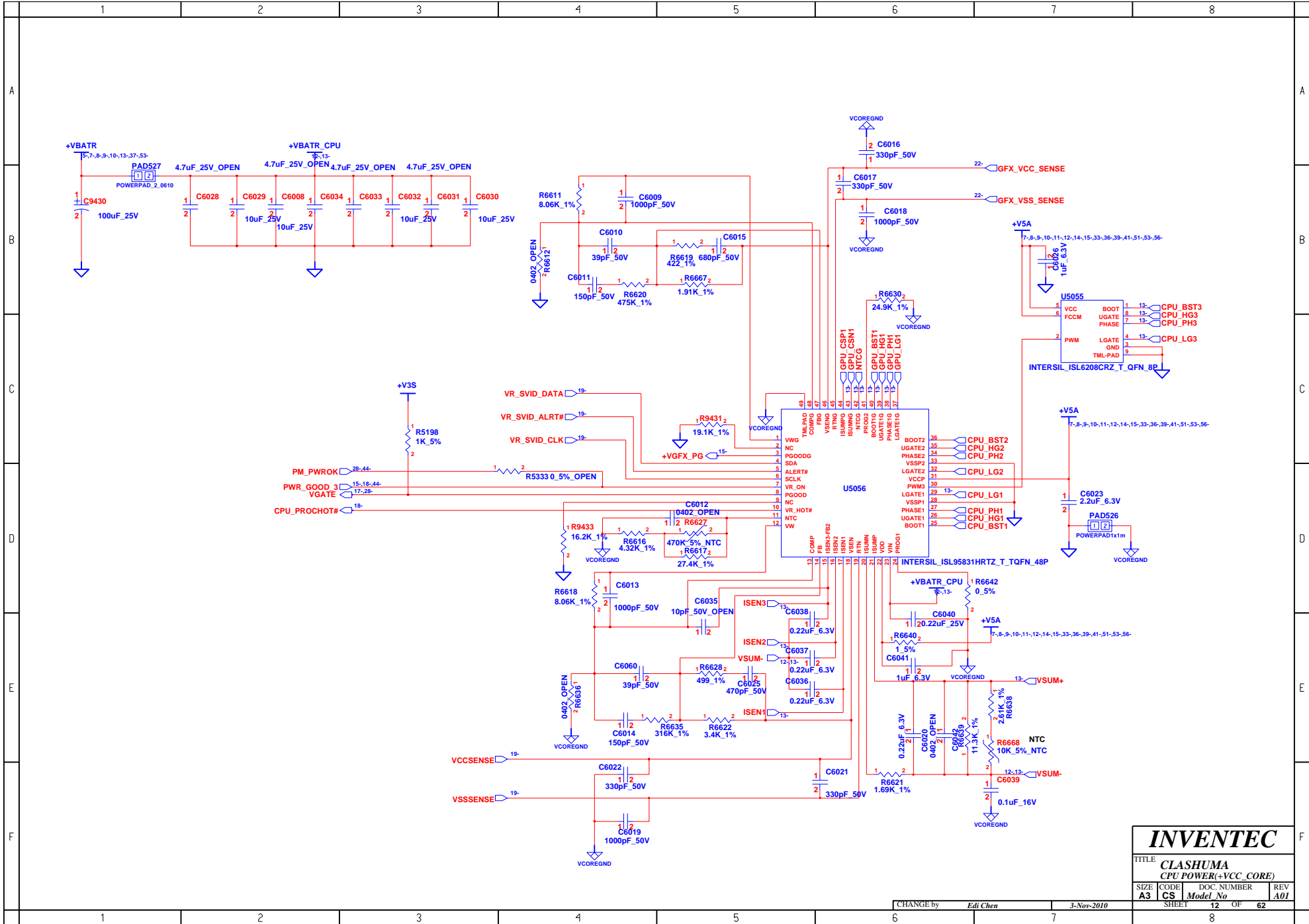
TITLE			
CLASHUMA			
SYSTEM POWER(+VCCP/+V1.05M_LAN)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

CHANGE by *Edi Chen* 3-Nov-2010

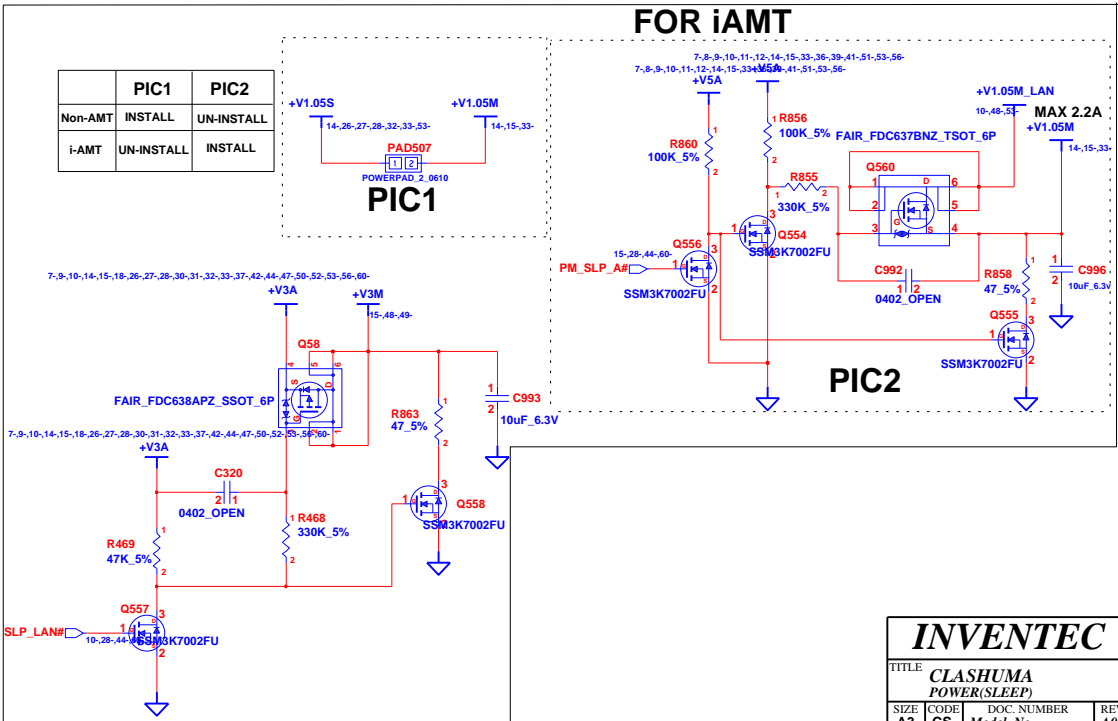
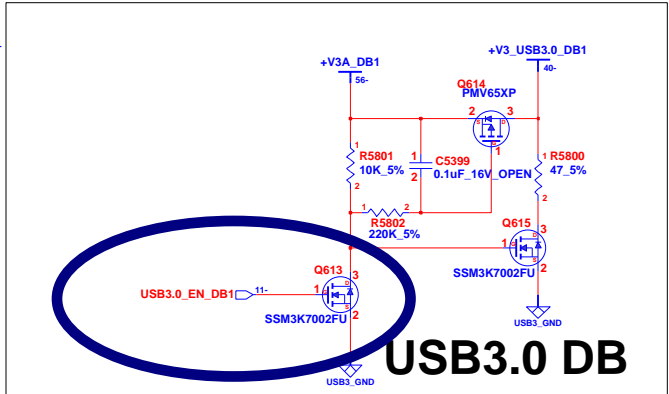
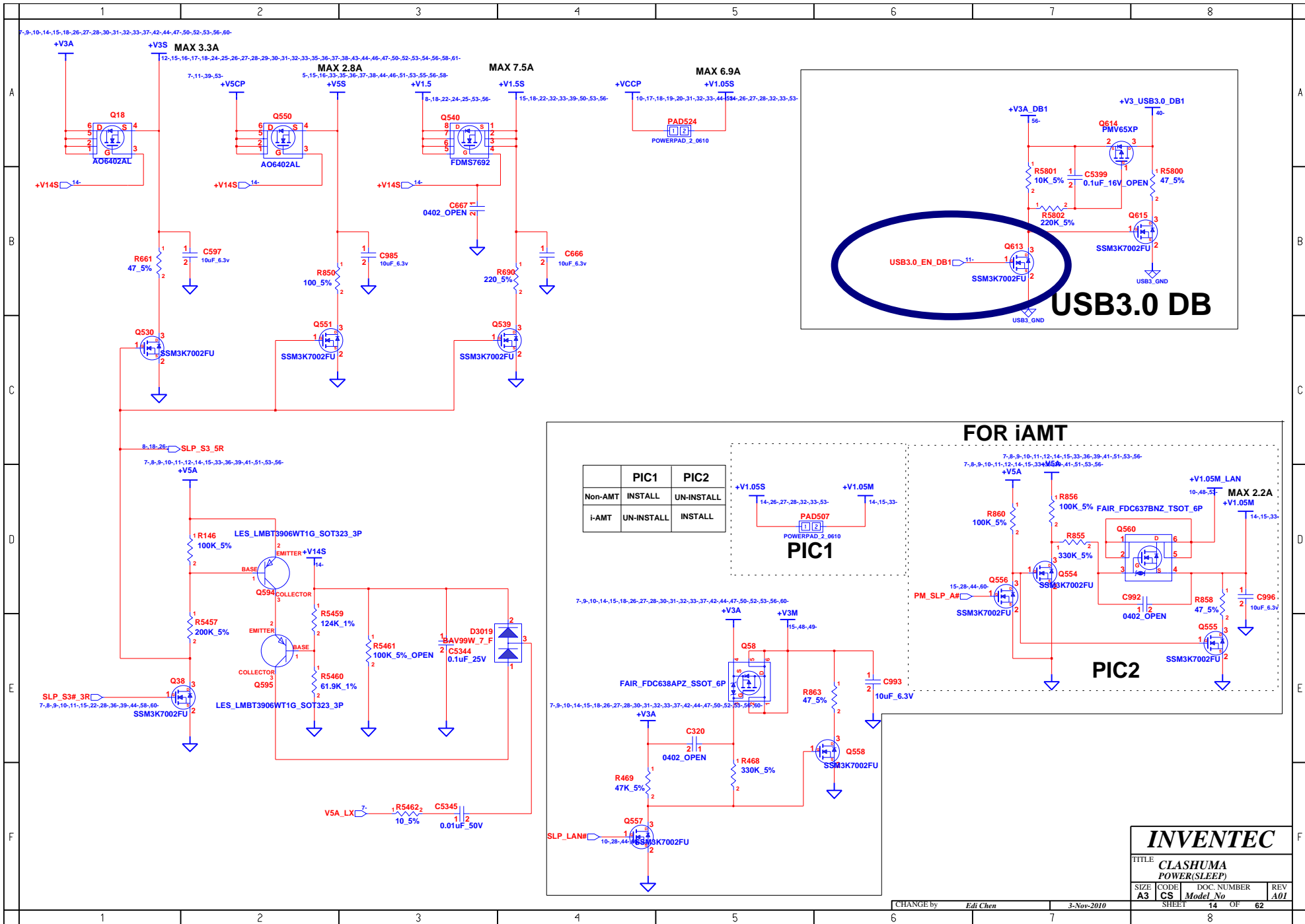
SHEET 10 OF 62



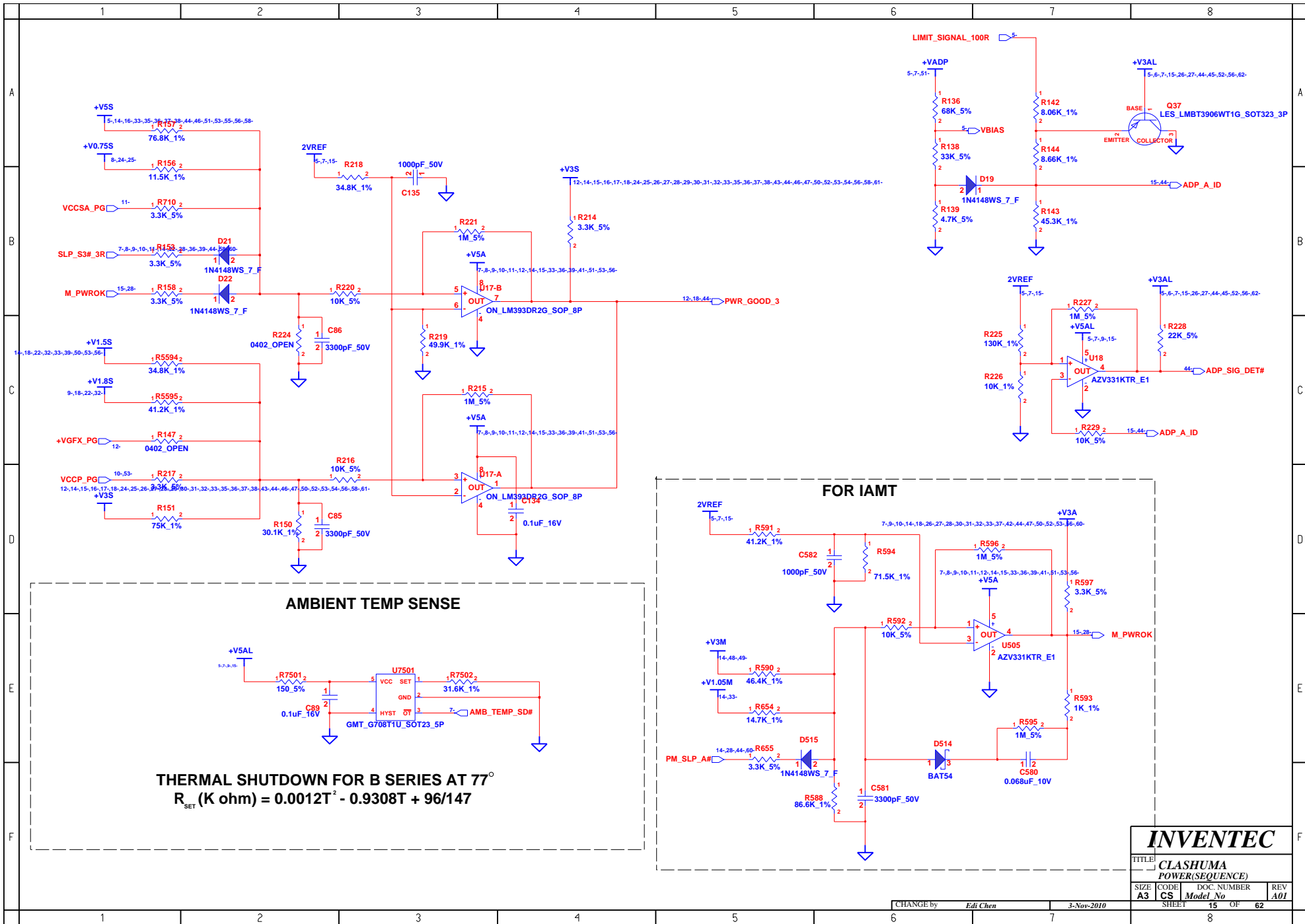
INVENTEC			
TITLE CLASHUMA			
CPU POWER(VCC_SA/1.05S_USB30)			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 11		OF 62	



INVENTEC			
TITLE CLASHUMA CPU POWER(+VCC_CORE)			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 12		OF 62	



INVENTEC			
TITLE CLASHUMA POWER(SLEEP)			
SIZE A3	CODE CS	DOC NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 14		OF 62	

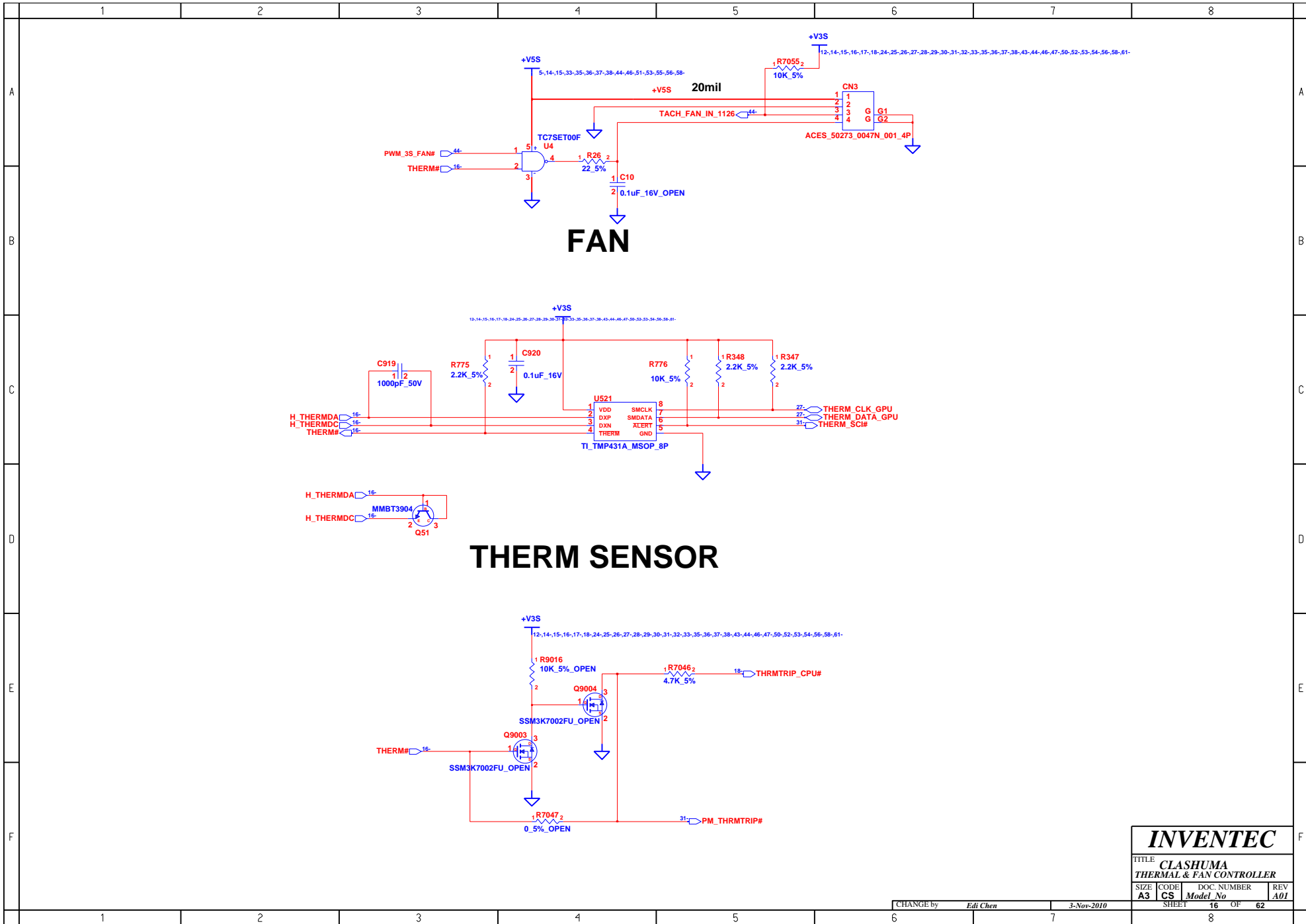


AMBIENT TEMP SENSE

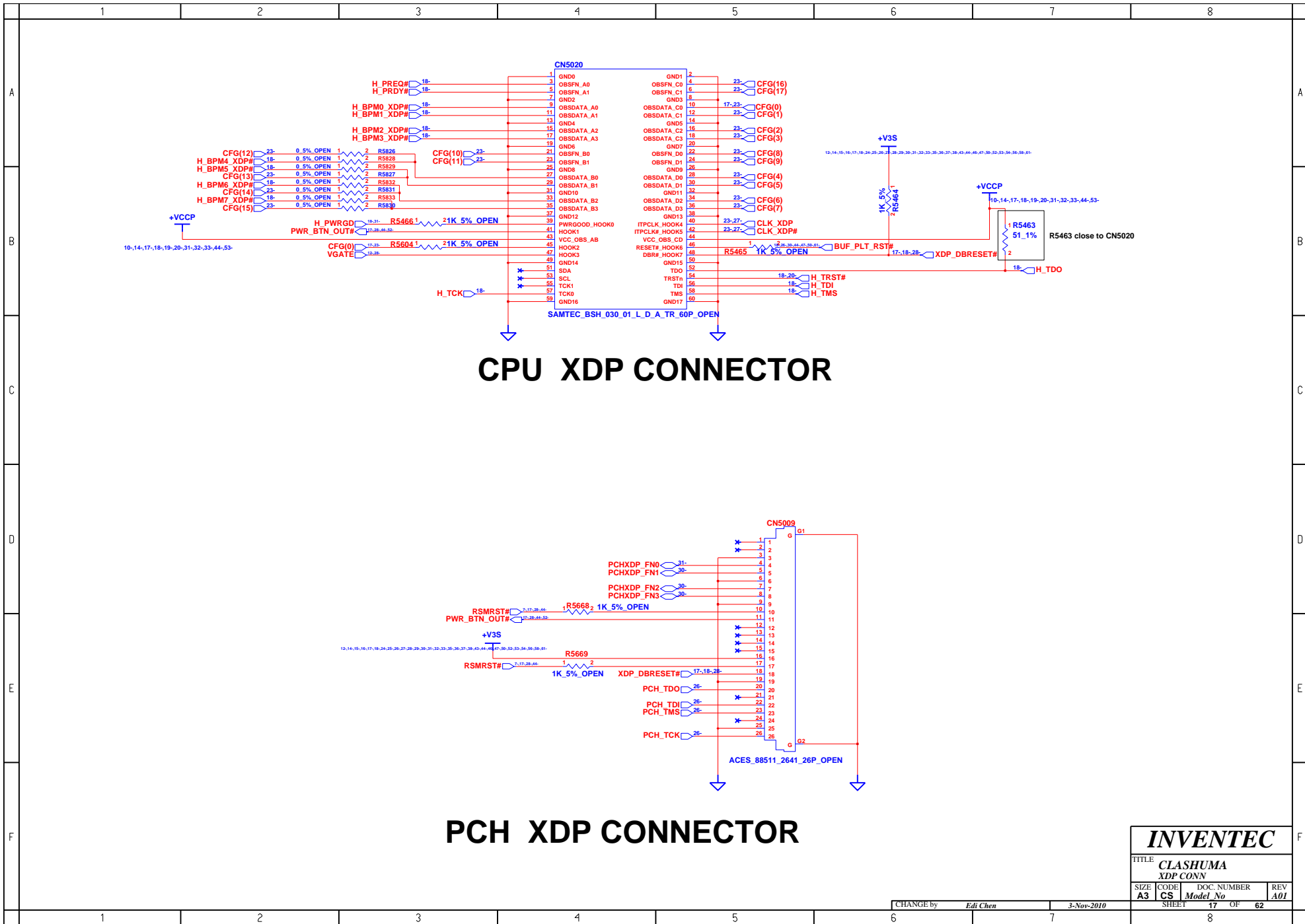
THERMAL SHUTDOWN FOR B SERIES AT 77°
 $R_{SET} (K\ ohm) = 0.0012T^2 - 0.9308T + 96/147$

FOR IAMT

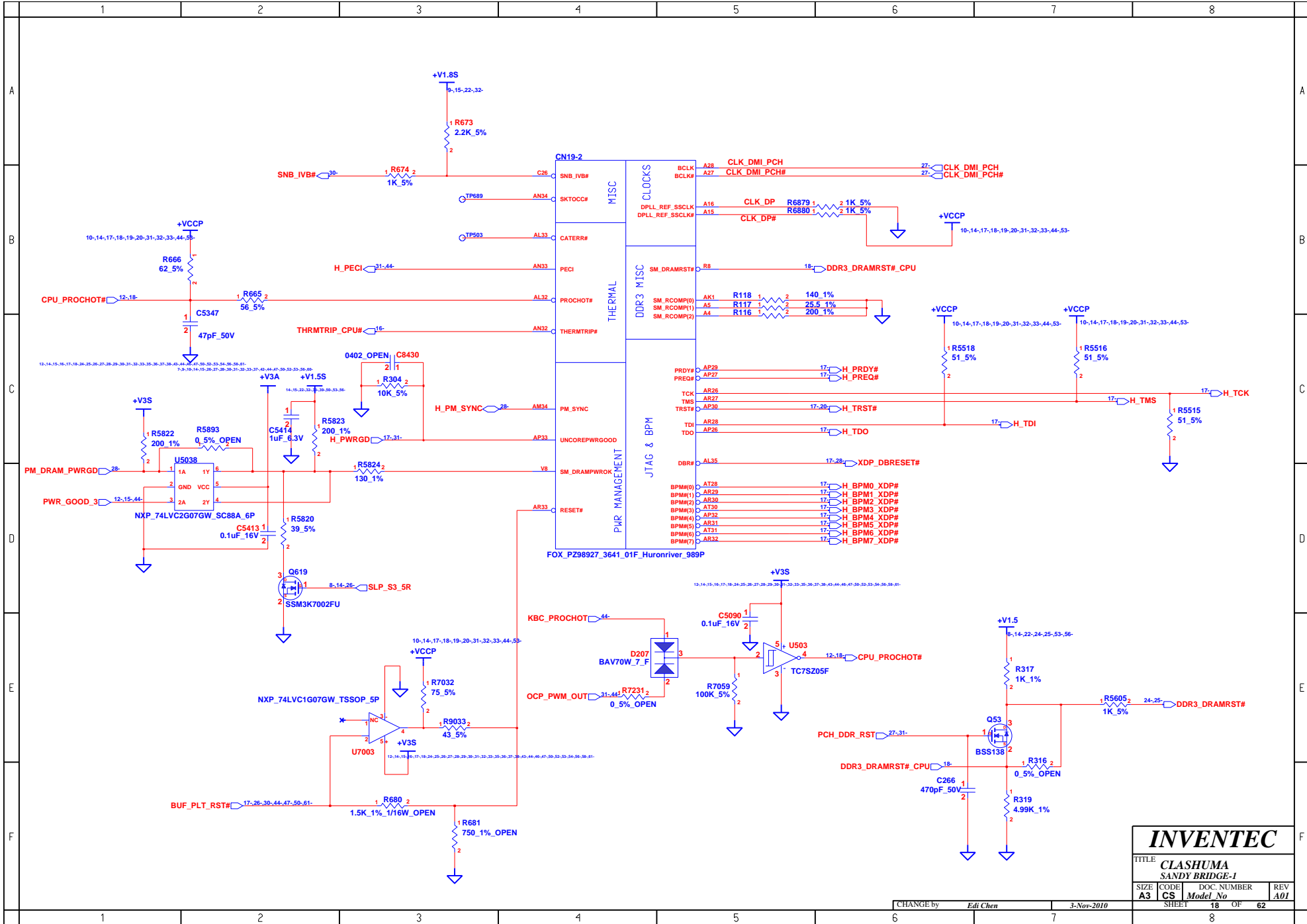
INVENTEC			
TITLE: CLASHUMA POWER(SEQUENCE)			
SIZE: A3	CODE: CS	DOC. NUMBER: Model No	REV: A01
CHANGE by: <i>Edi Chen</i>		3-Nov-2010	
SHEET: 15		OF: 62	



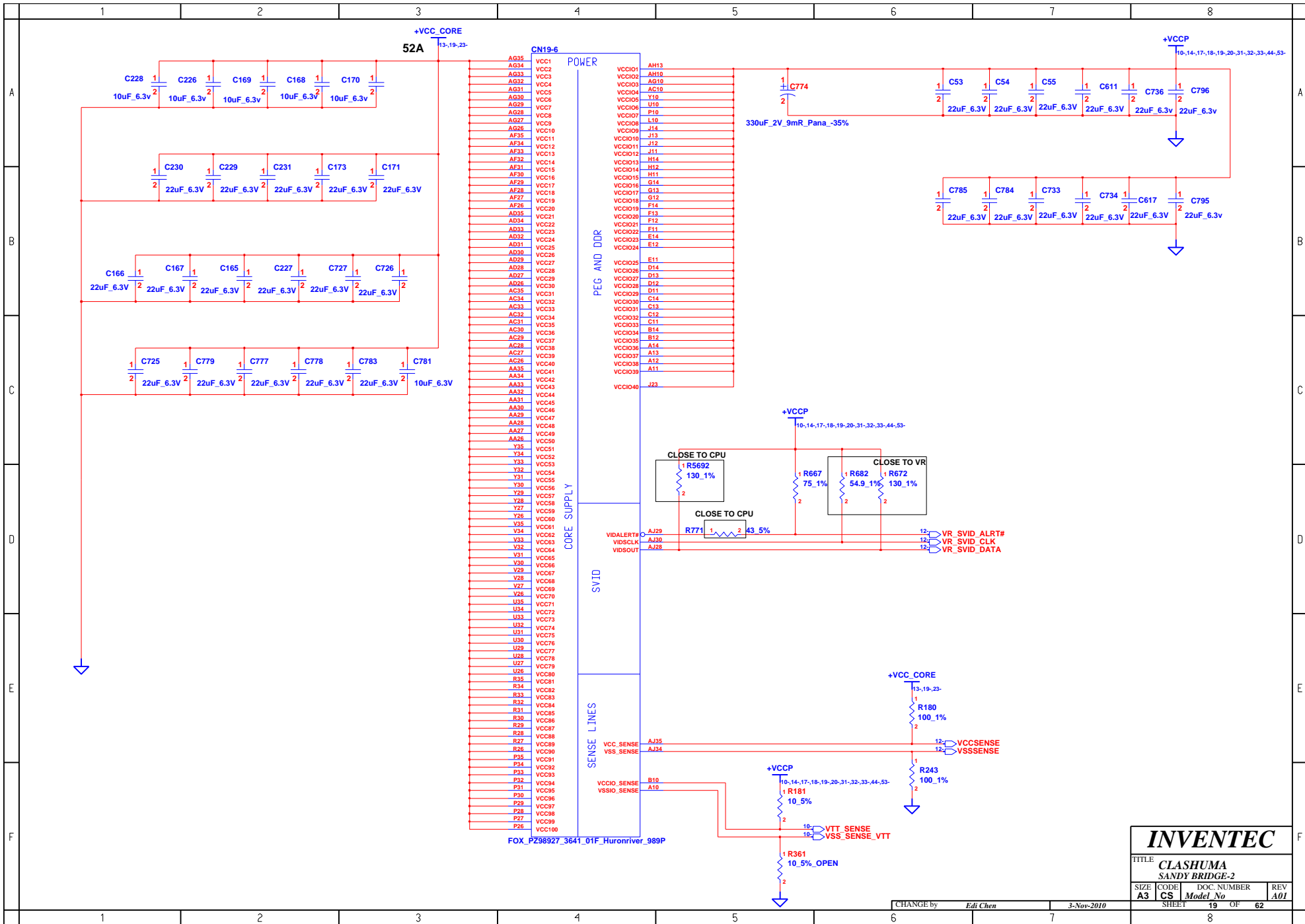
INVENTEC			
TITLE CLASHUMA			
THERMAL & FAN CONTROLLER			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	SHEET 16 OF 62



INVENTEC			
TITLE CLASHUMA XDP CONN			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 17		OF 62	

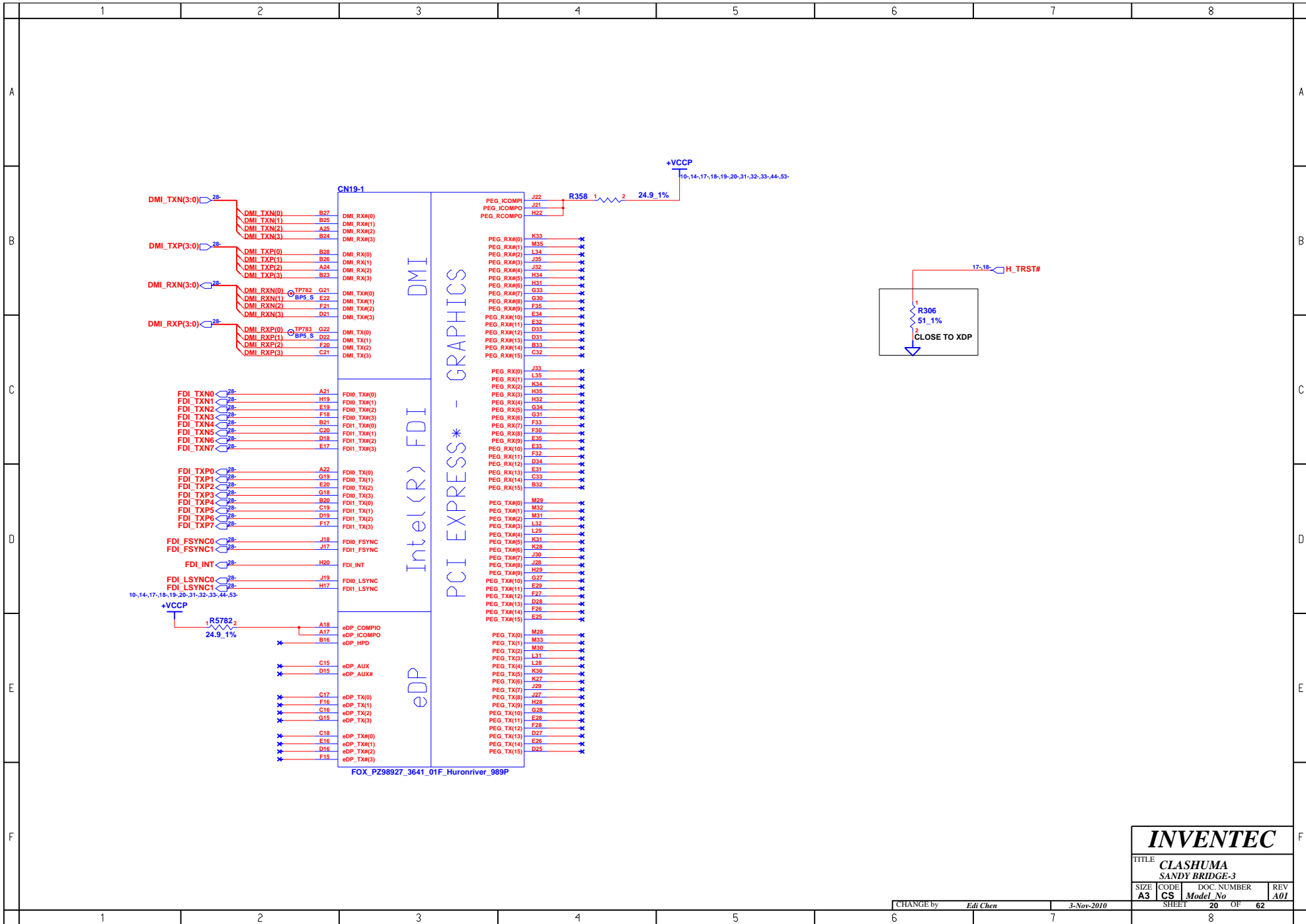


INVENTEC			
TITLE CLASHUMA SANDY BRIDGE-1			
SIZE A3	CODE CS	DOC NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 18		OF 62	

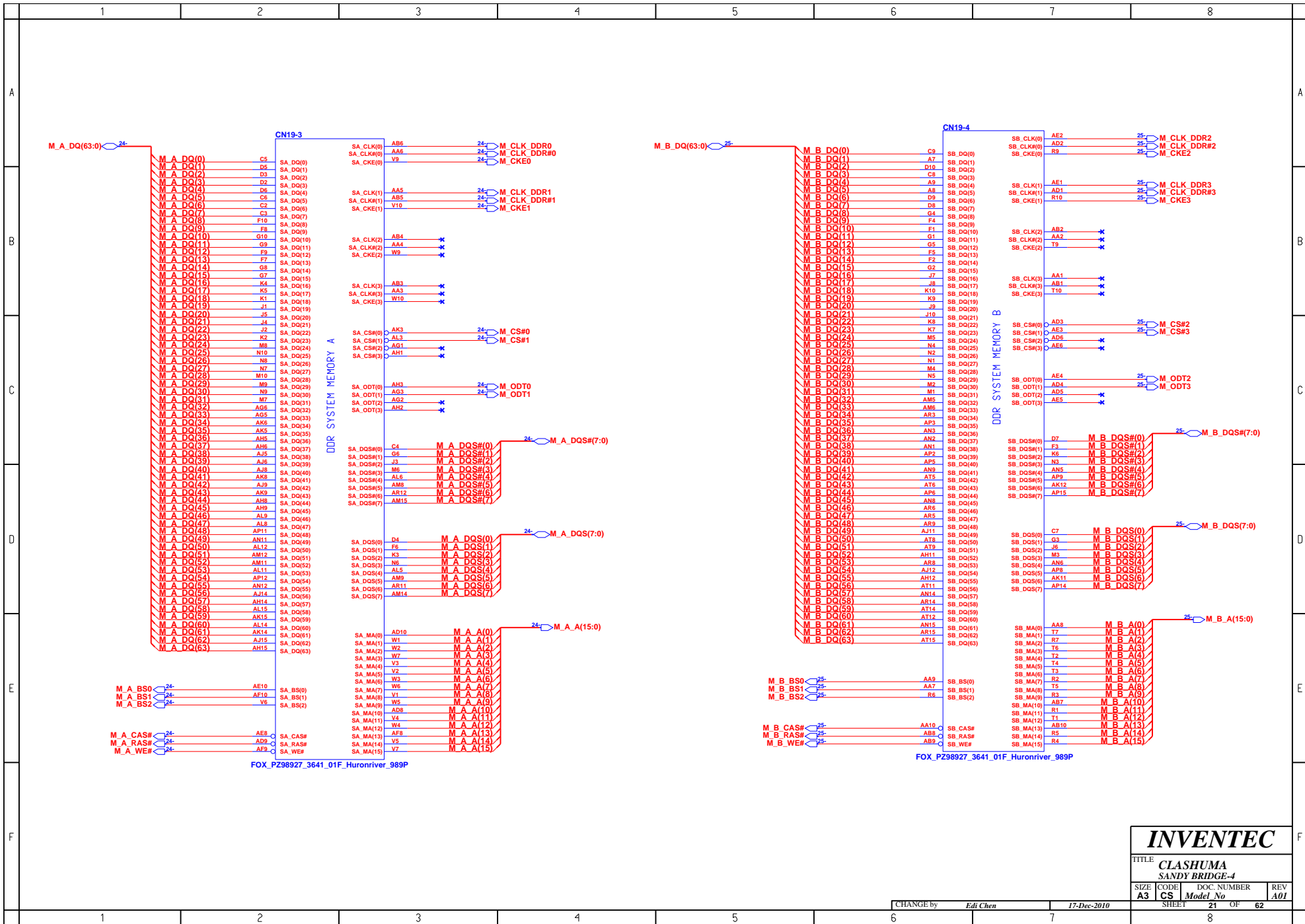


FOX_PZ98927_3641_01F_Huronriver_989P

INVENTEC			
TITLE CLASHUMA SANDY BRIDGE-2			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 19		OF 62	



INVENTEC			
TITLE CLASHUMA SANDY BRIDGE-3			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 20		OF 62	



FOX_PZ98927_3641_01F_Huronriver_989P

FOX_PZ98927_3641_01F_Huronriver_989P

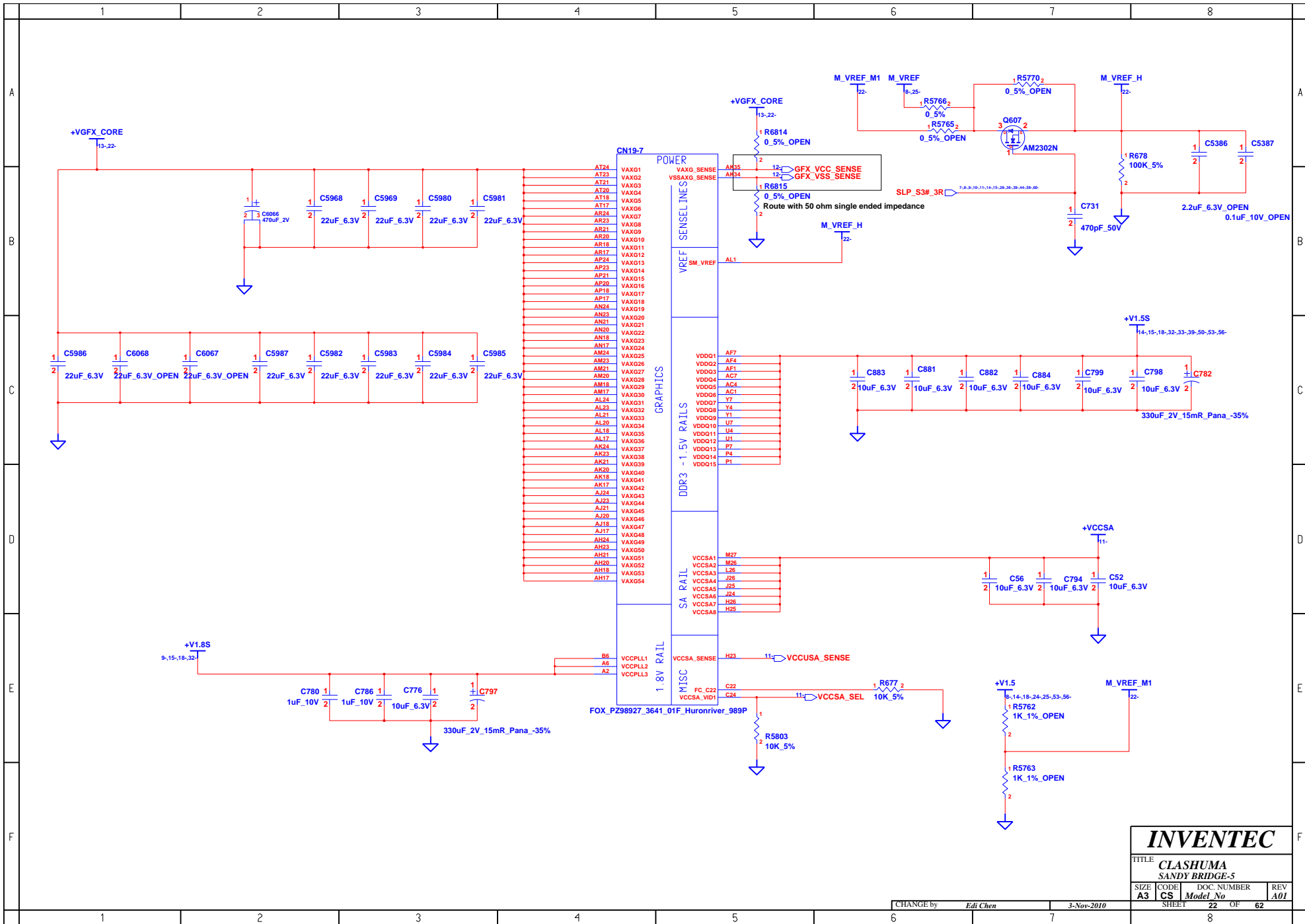
INVENTEC

TITLE
**CLASHUMA
 SANDY BRIDGE-4**

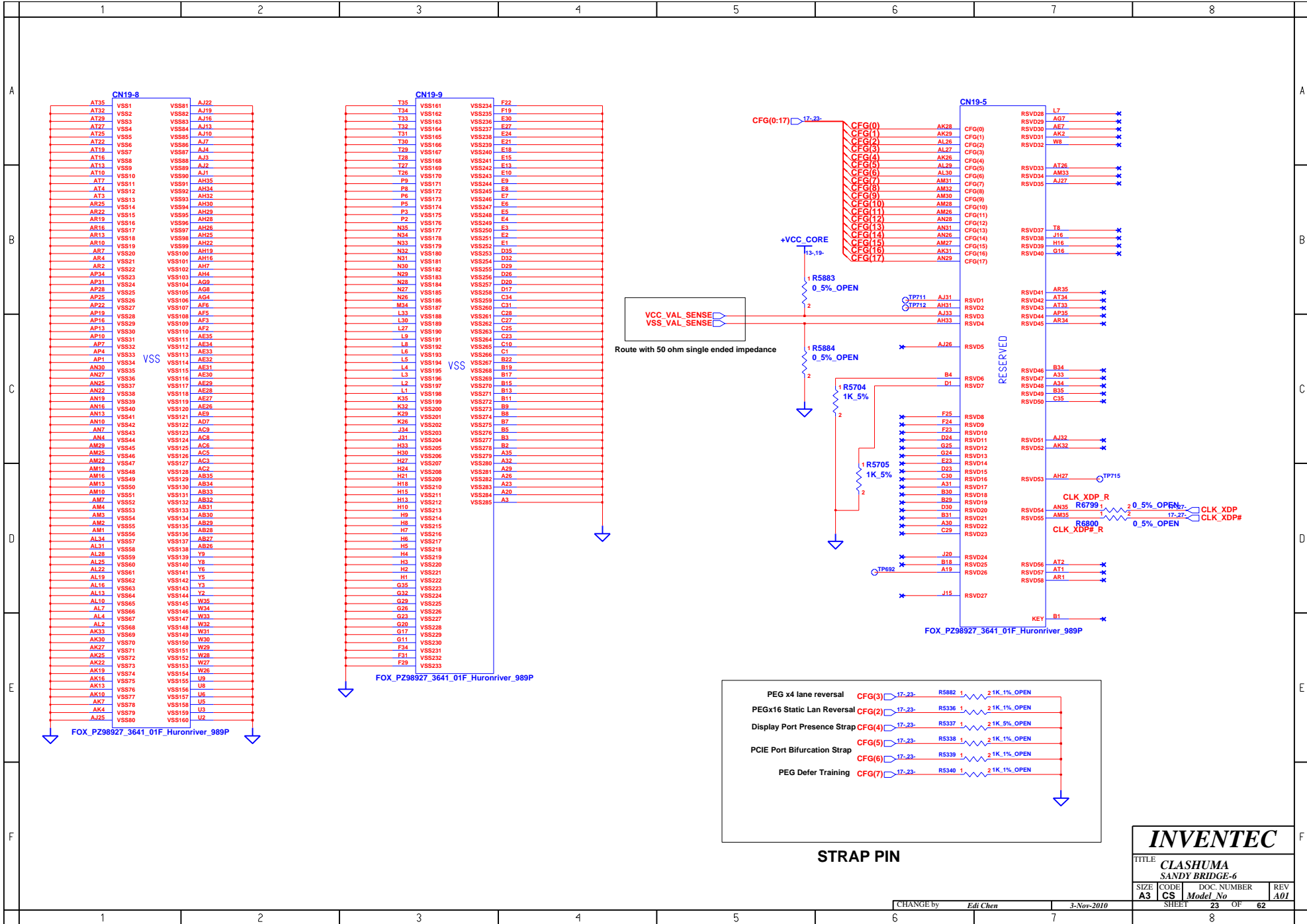
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
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CHANGE by *Edi Chen* 17-Dec-2010

SHEET 21 OF 62



INVENTEC			
TITLE CLASHUMA SANDY BRIDGE-S			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 22		OF 62	



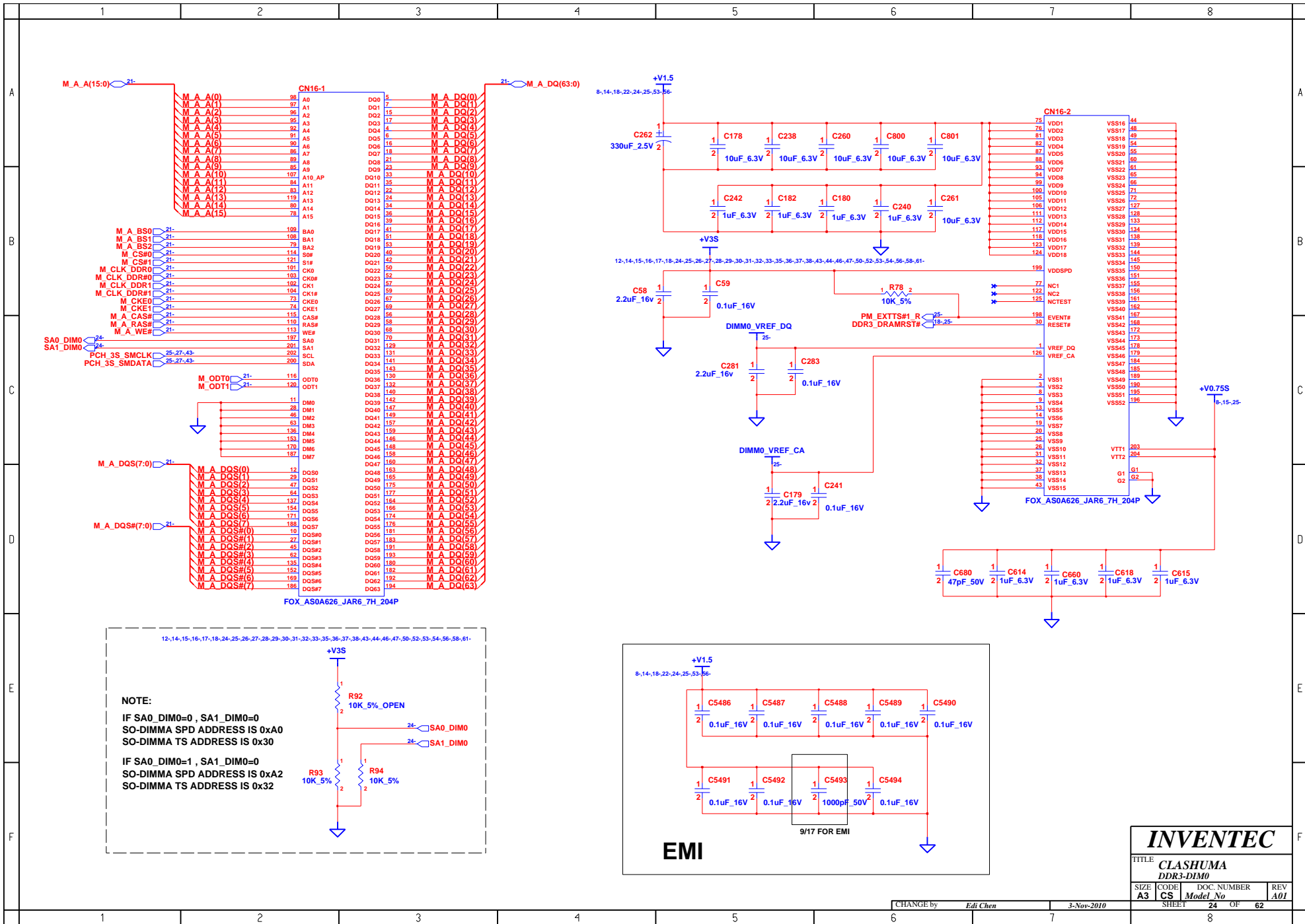
STRAP PIN

INVENTEC

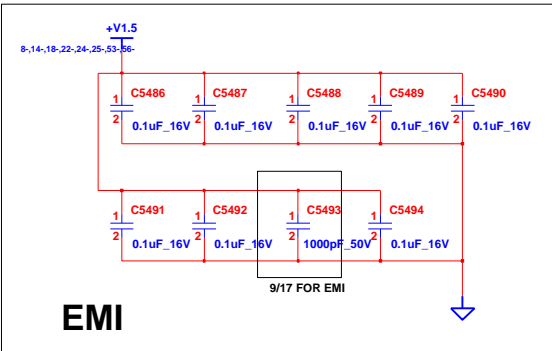
TITLE
CLASHUMA
SANDY BRIDGE-6

SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
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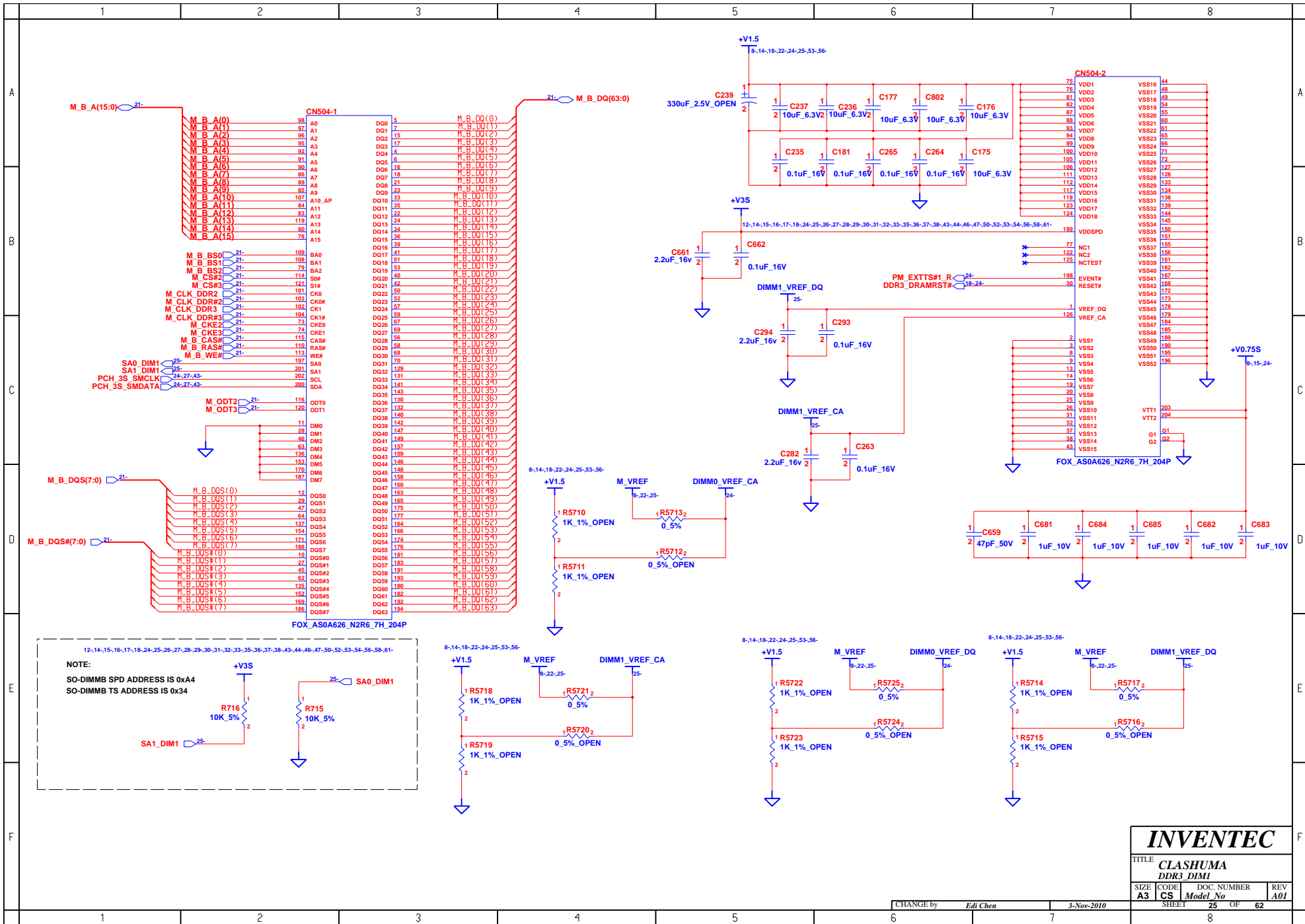
CHANGE by *Edi Chen* 3-Nov-2010



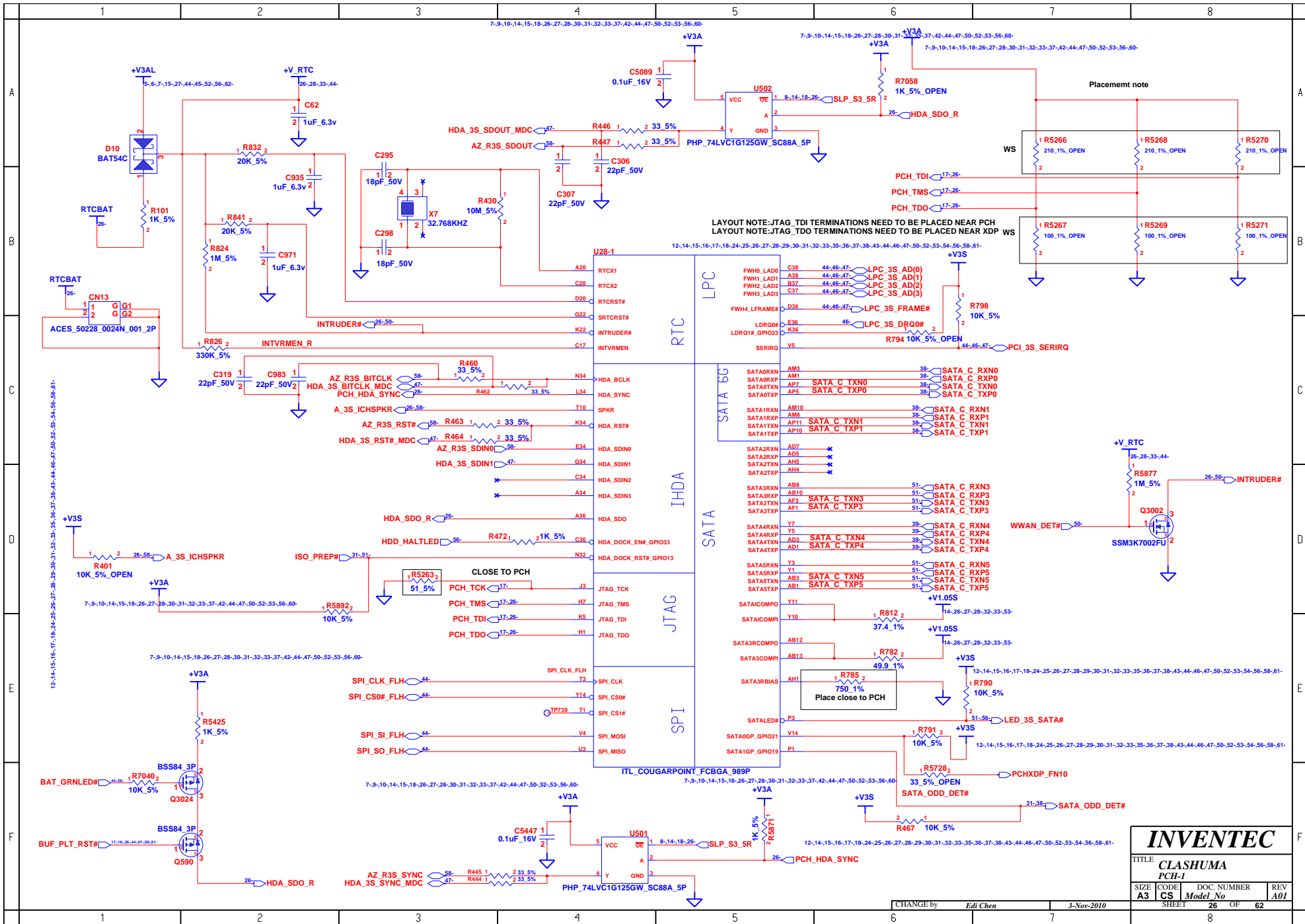
NOTE:
 IF SA0_DIM0=0, SA1_DIM0=0
 SO-DIMMA SPD ADDRESS IS 0xA0
 SO-DIMMA TS ADDRESS IS 0x30
 IF SA0_DIM0=1, SA1_DIM0=0
 SO-DIMMA SPD ADDRESS IS 0xA2
 SO-DIMMA TS ADDRESS IS 0x32



INVENTEC			
TITLE CLASHUMA DDR3-DIM0			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 24		OF 62	

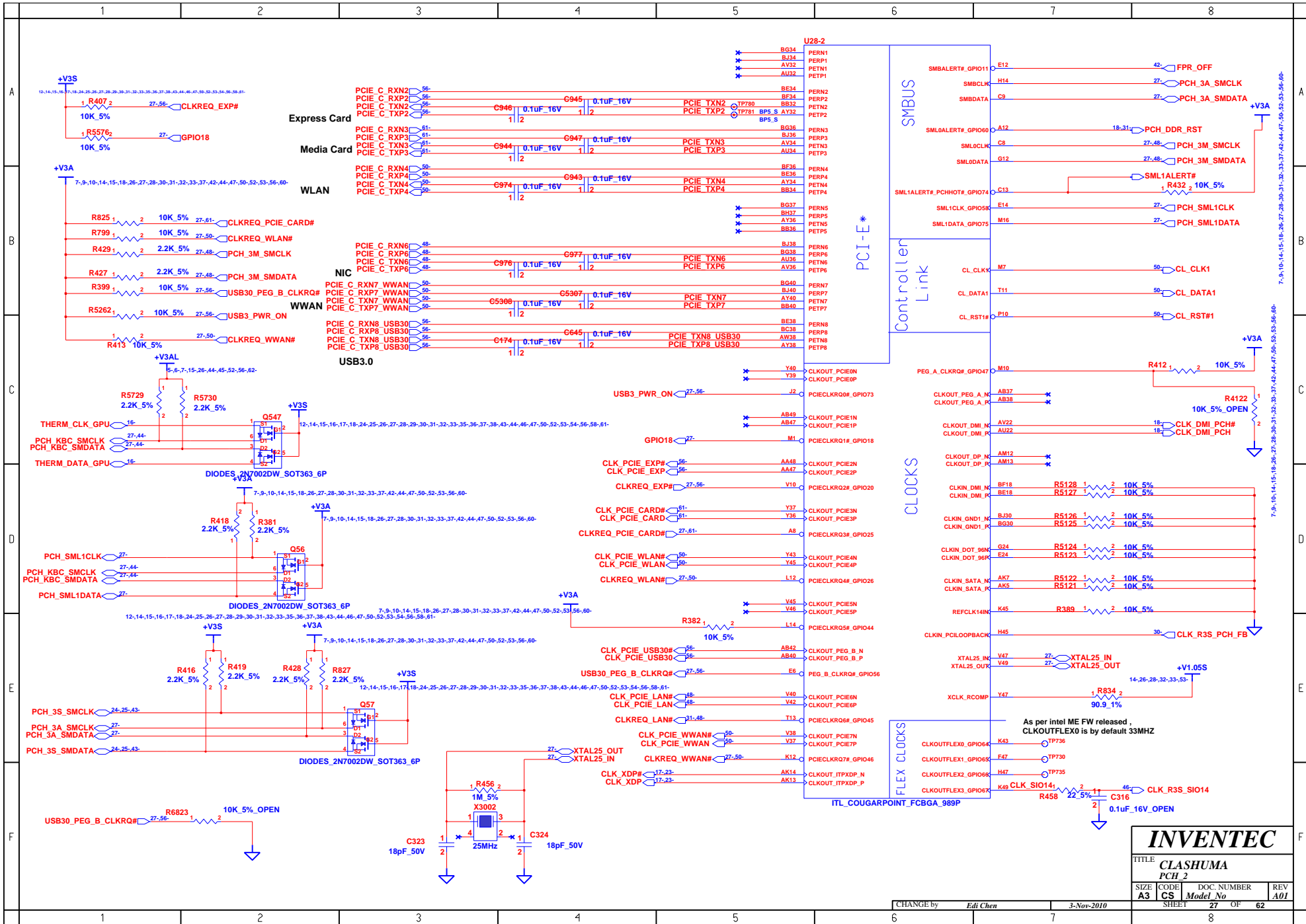


INVENTEC			
TITLE CLASHUMA DDR3_DIM1			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 25		OF 62	



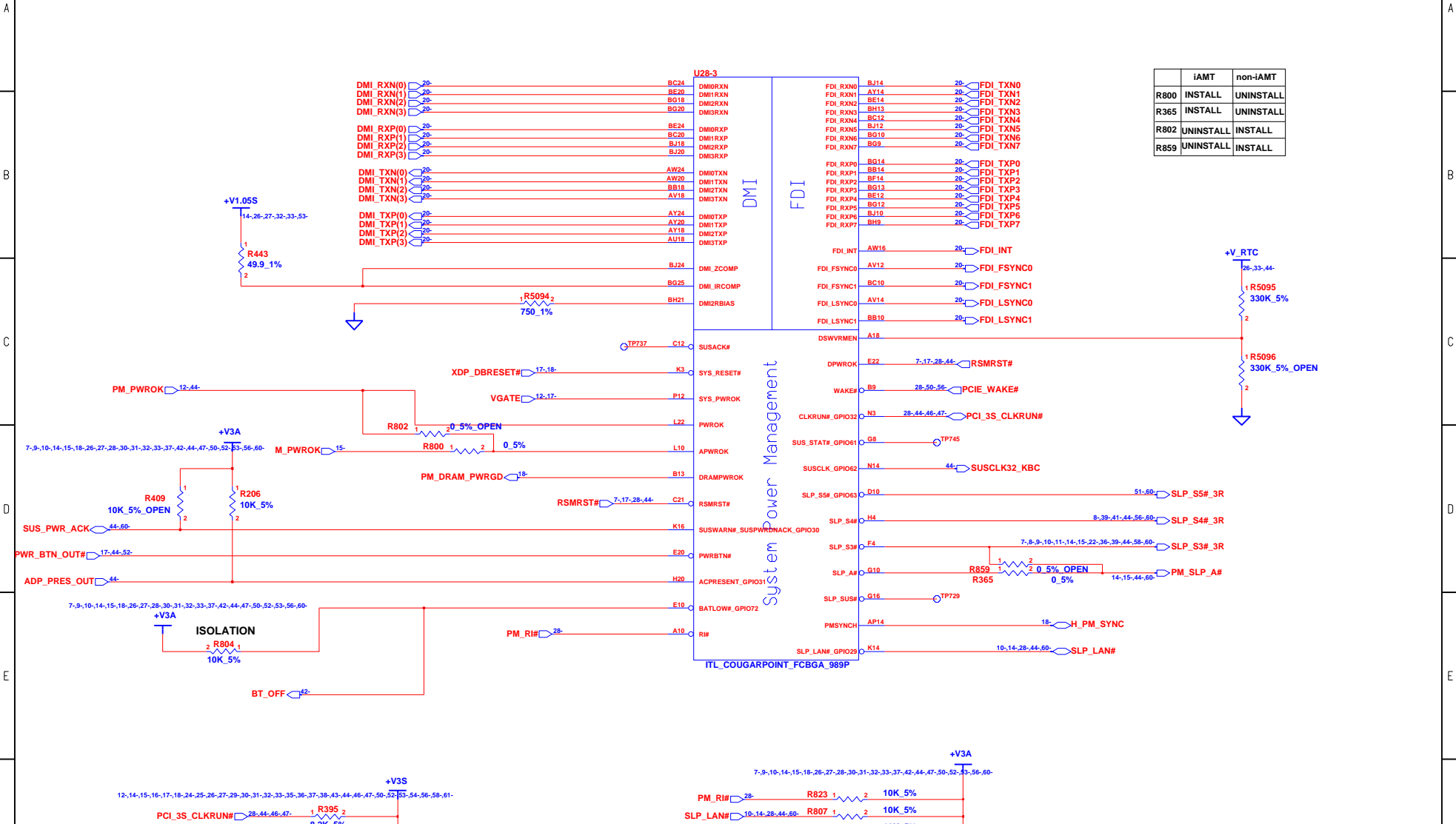
INVENTEC			
TITLE CLASHUMA PCH-1			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
SHEET 26		OF 62	

CHANGE by *Edi Chen* 3-Nov-2010



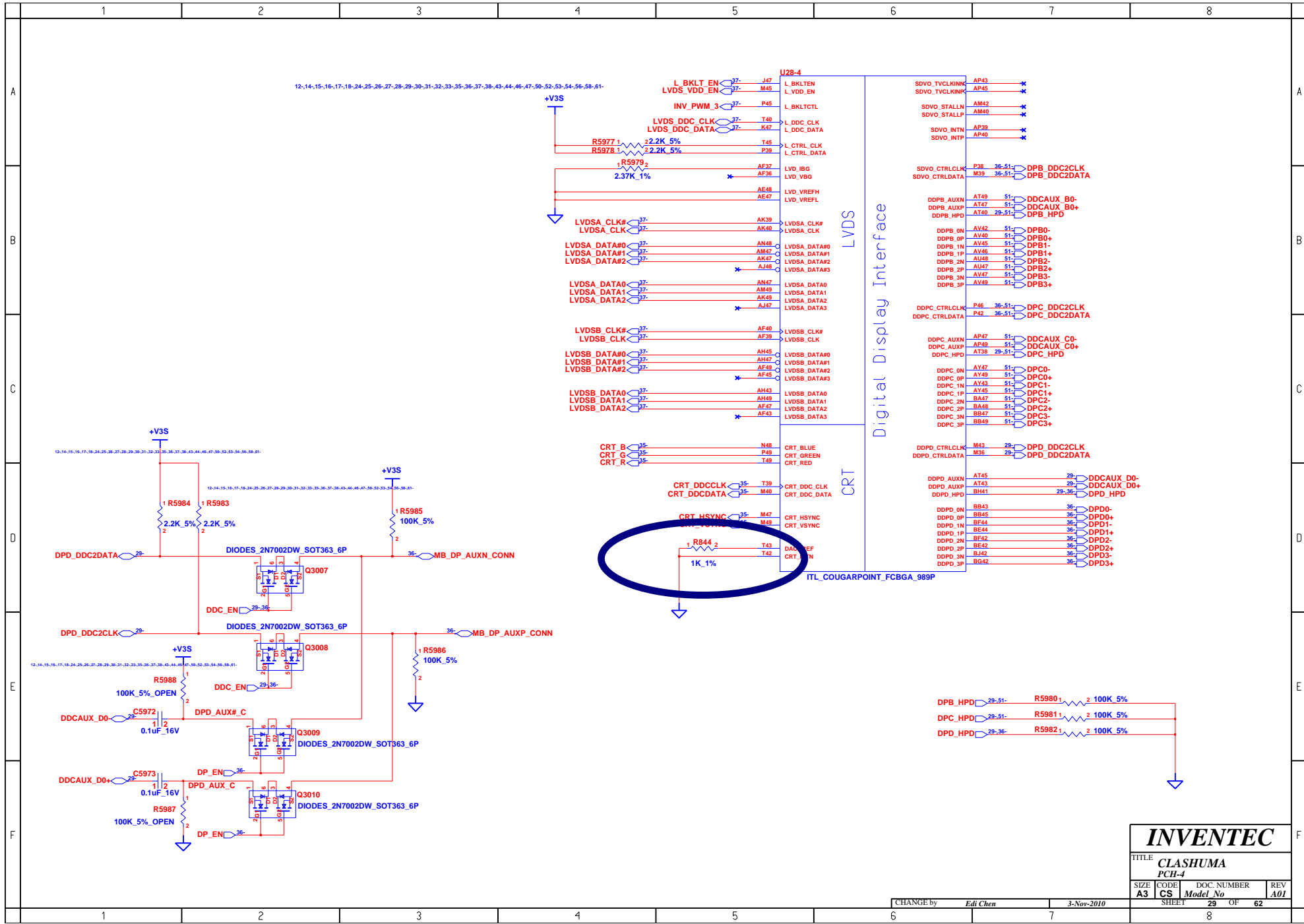
INVENTEC			
TITLE CLASHUMA PCH 2			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 27		OF 62	

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 support. No install R5261 to disable DSW

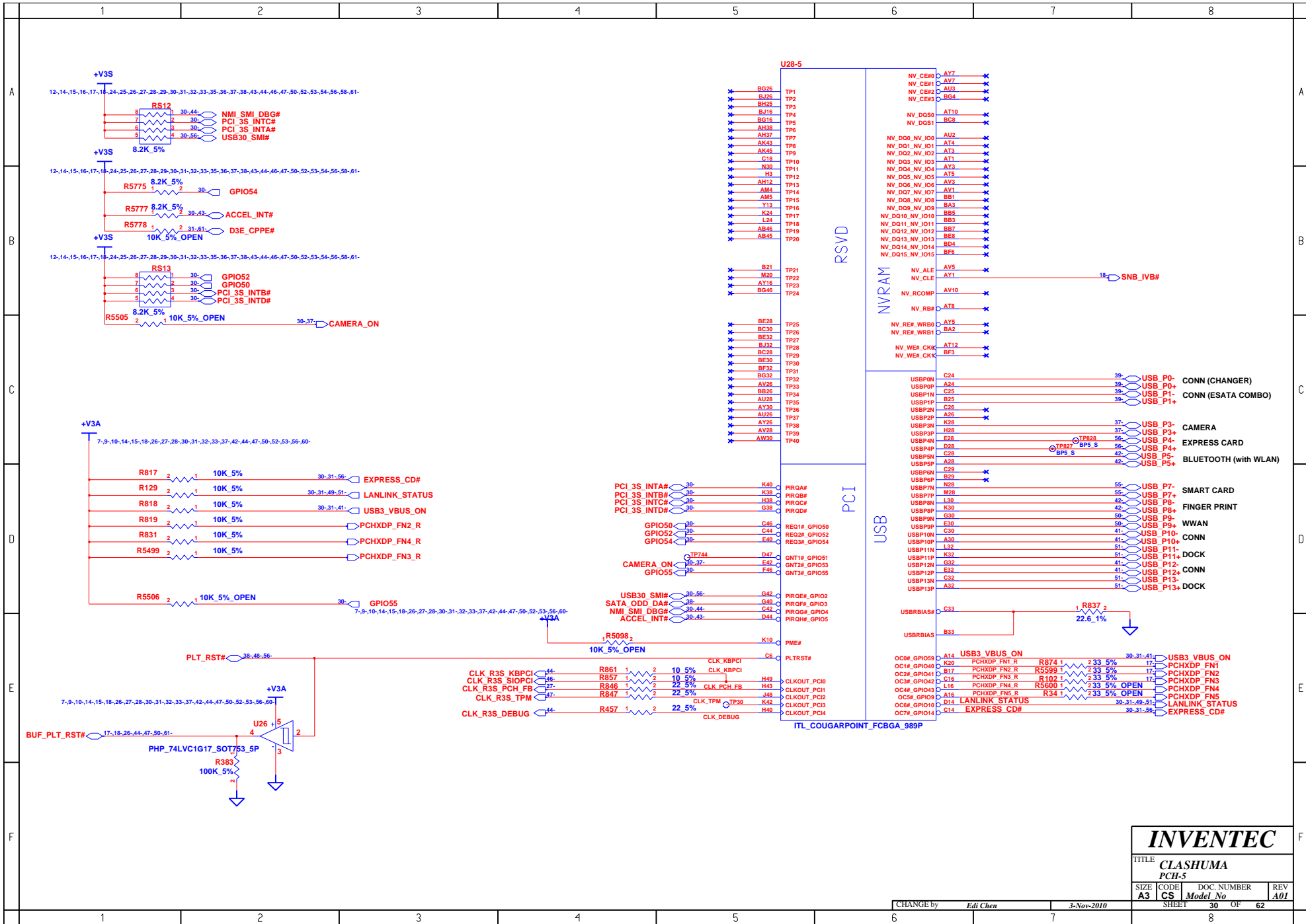


	iAMT	non-iAMT
R800	INSTALL	UNINSTALL
R365	INSTALL	UNINSTALL
R802	UNINSTALL	INSTALL
R859	UNINSTALL	INSTALL

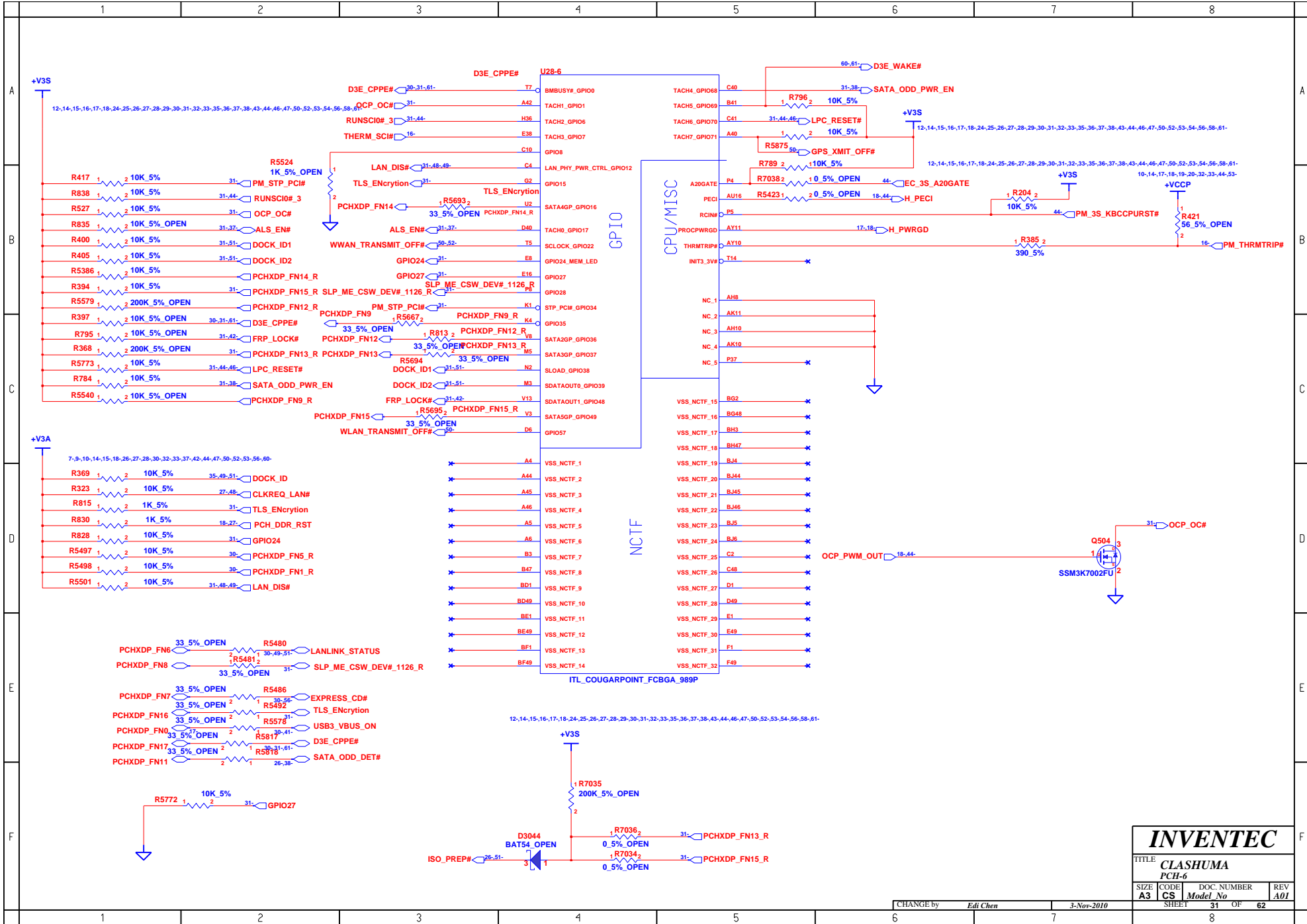
INVENTEC			
TITLE CLASHUMA PCH-3			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 28		OF 62	



INVENTEC			
TITLE CLASHUMA			
PCH-4			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 29		OF 62	

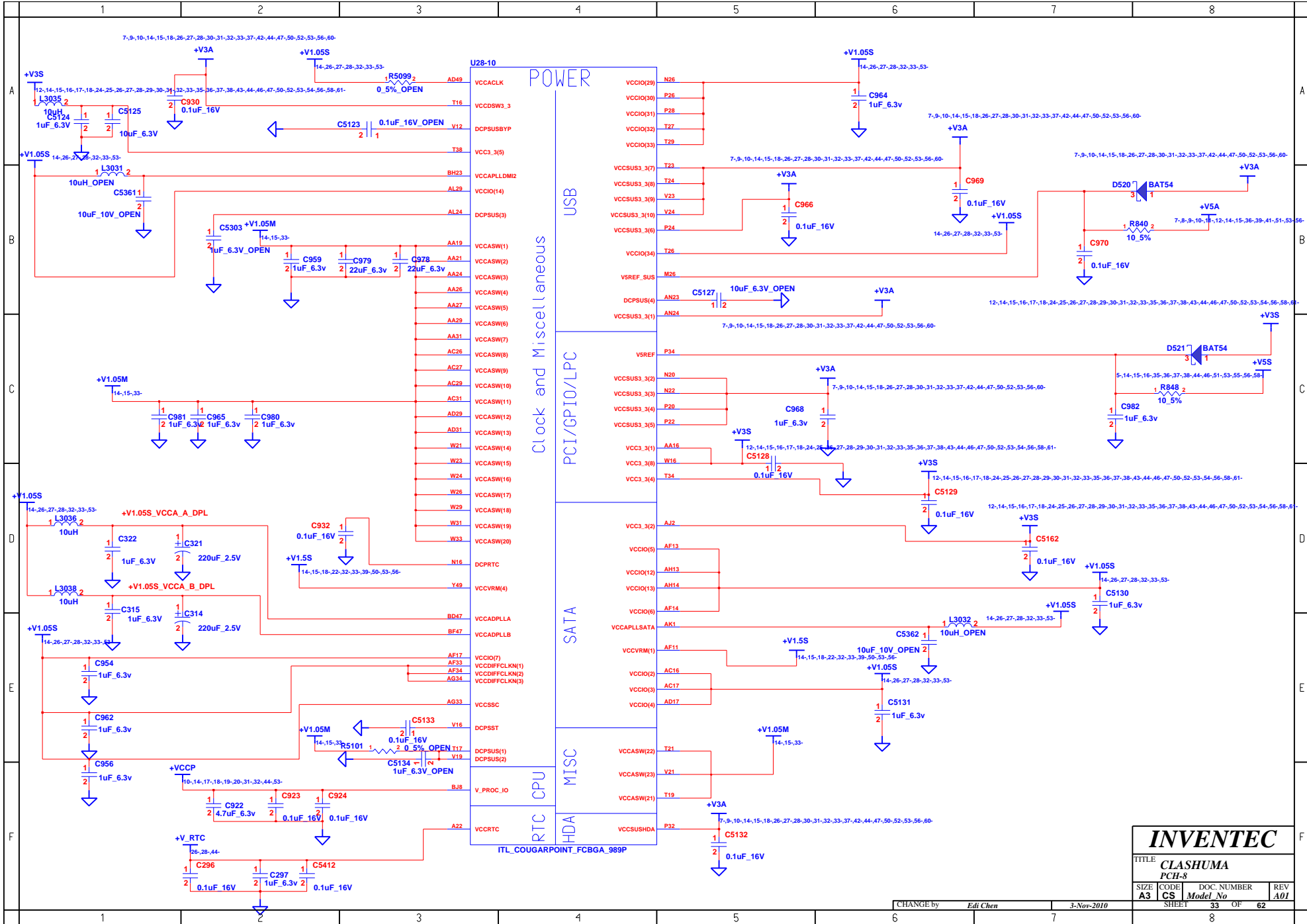


INVENTEC			
TITLE CLASHUMA PCH-5			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 30		OF 62	



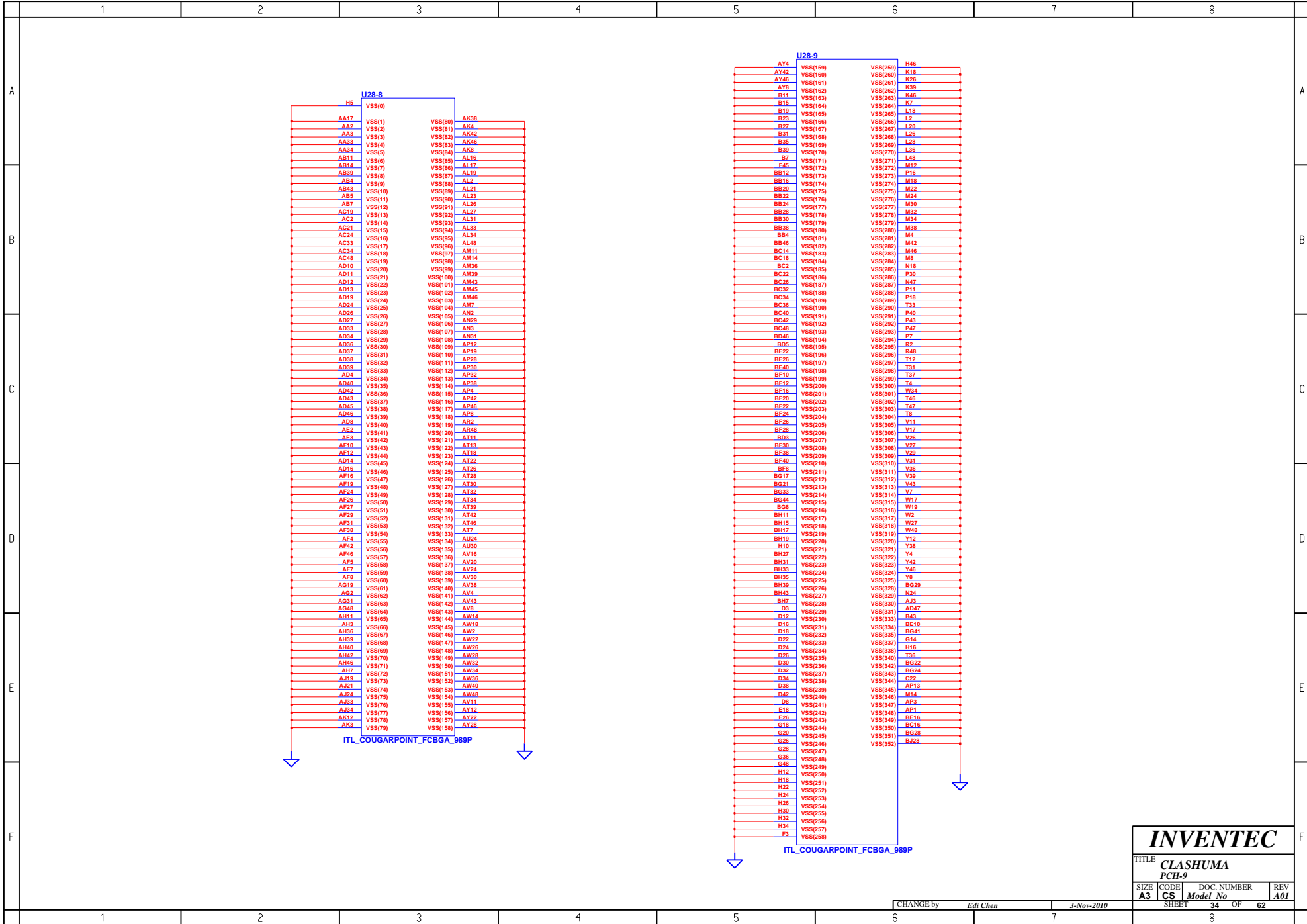
INVENTEC			
TITLE CLASHUMA PCH-6			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
SHEET 31		OF 62	

CHANGE by *Edi Chen* 3-Nov-2010



INVENTEC			
TITLE CLASHUMA PCH-8			
SIZE A3	CODE CS	DOC NUMBER	REV A01
SHEET 33		OF 62	

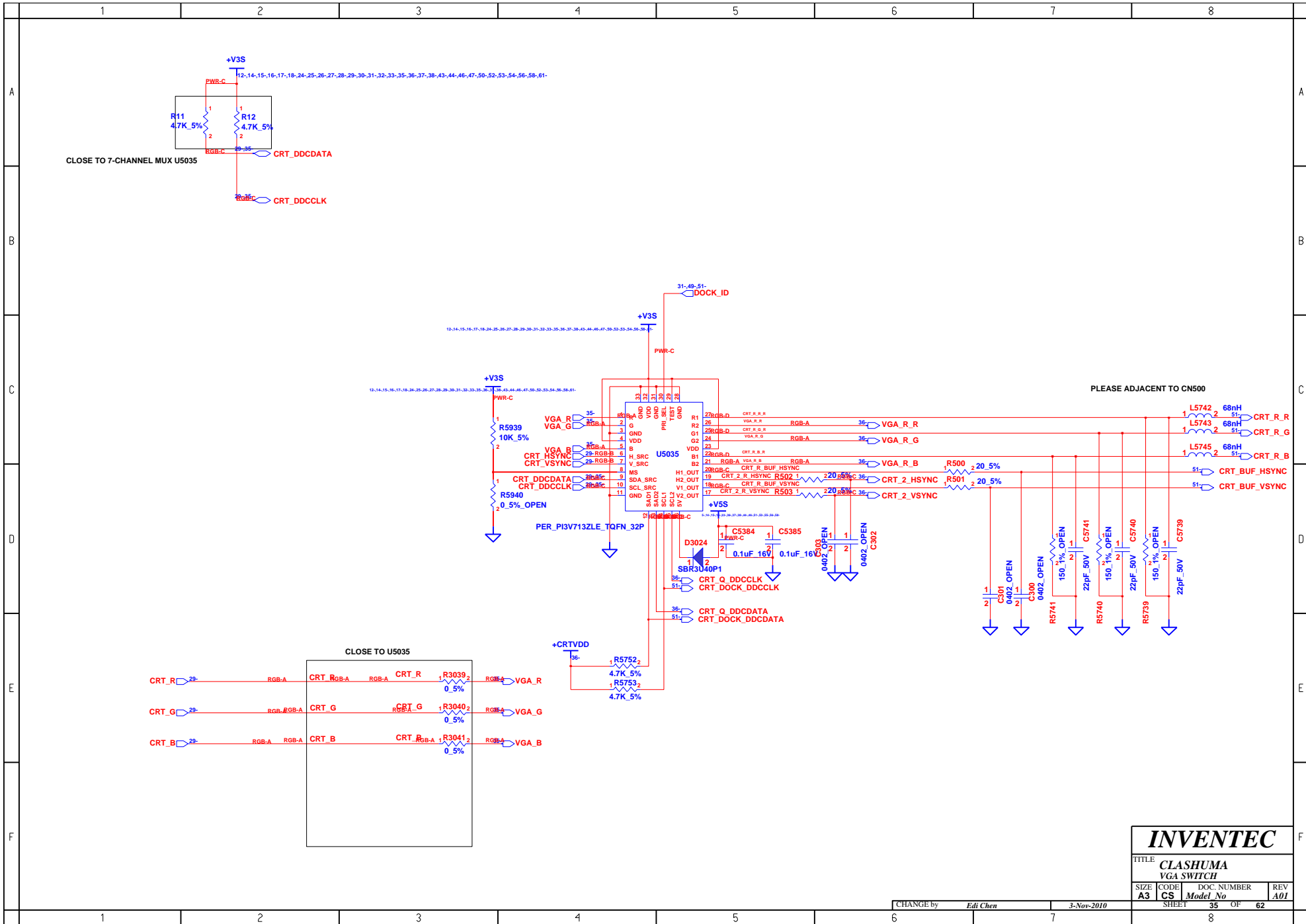
CHANGE by *Edi Chen* 3-Nov-2010



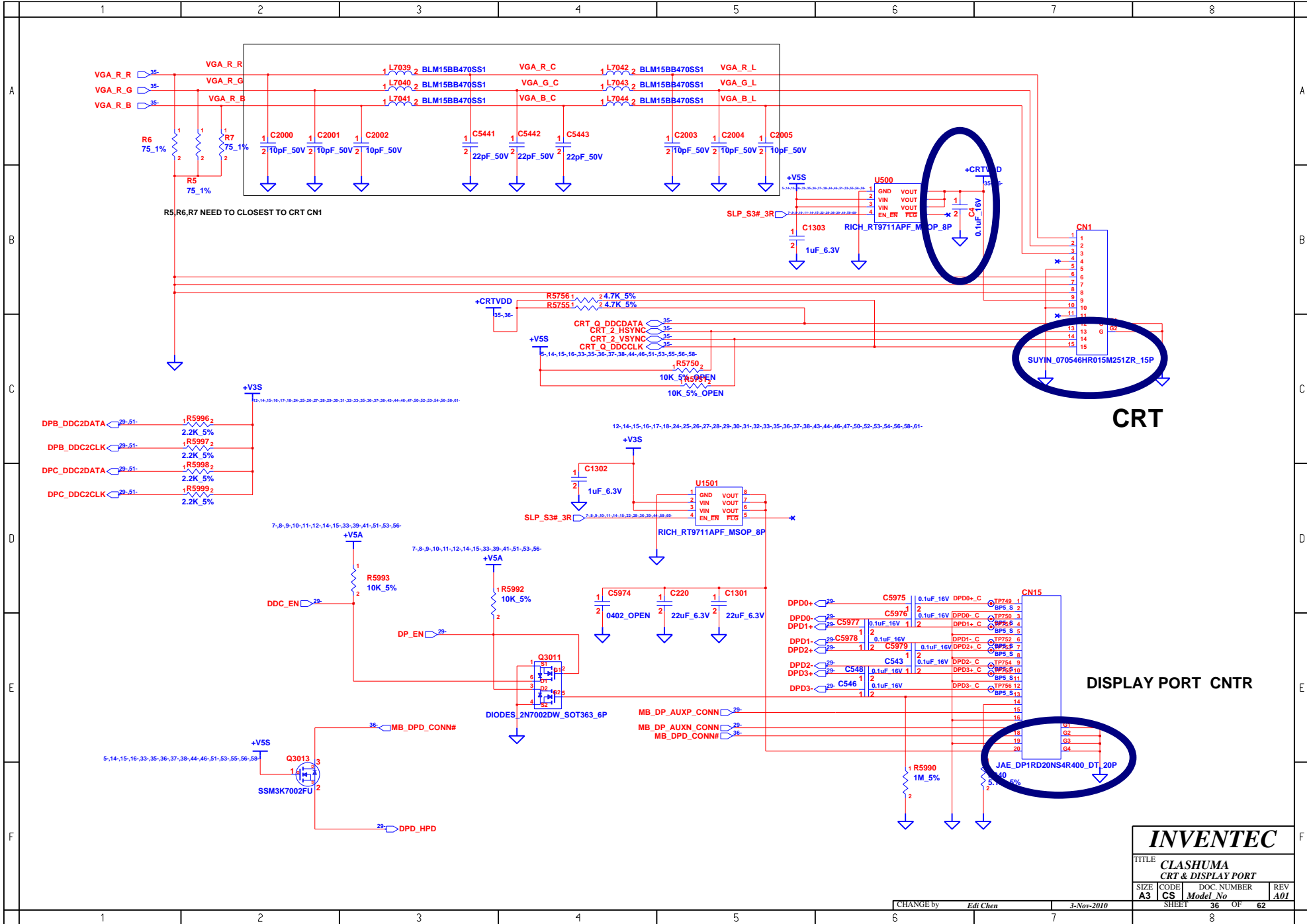
INVENTEC

TITLE **CLASHUMA**
PCH-9

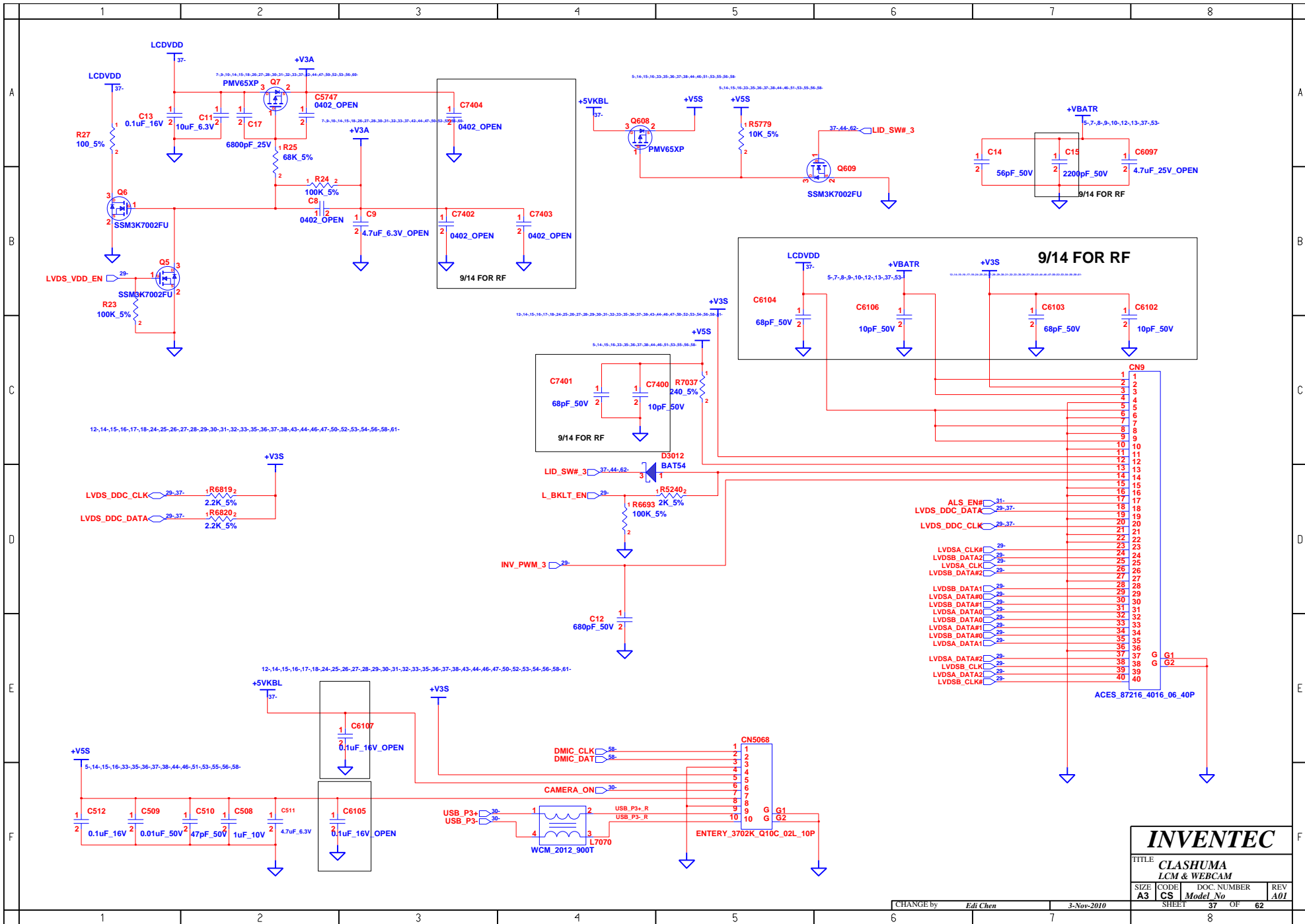
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET		34 OF 62	



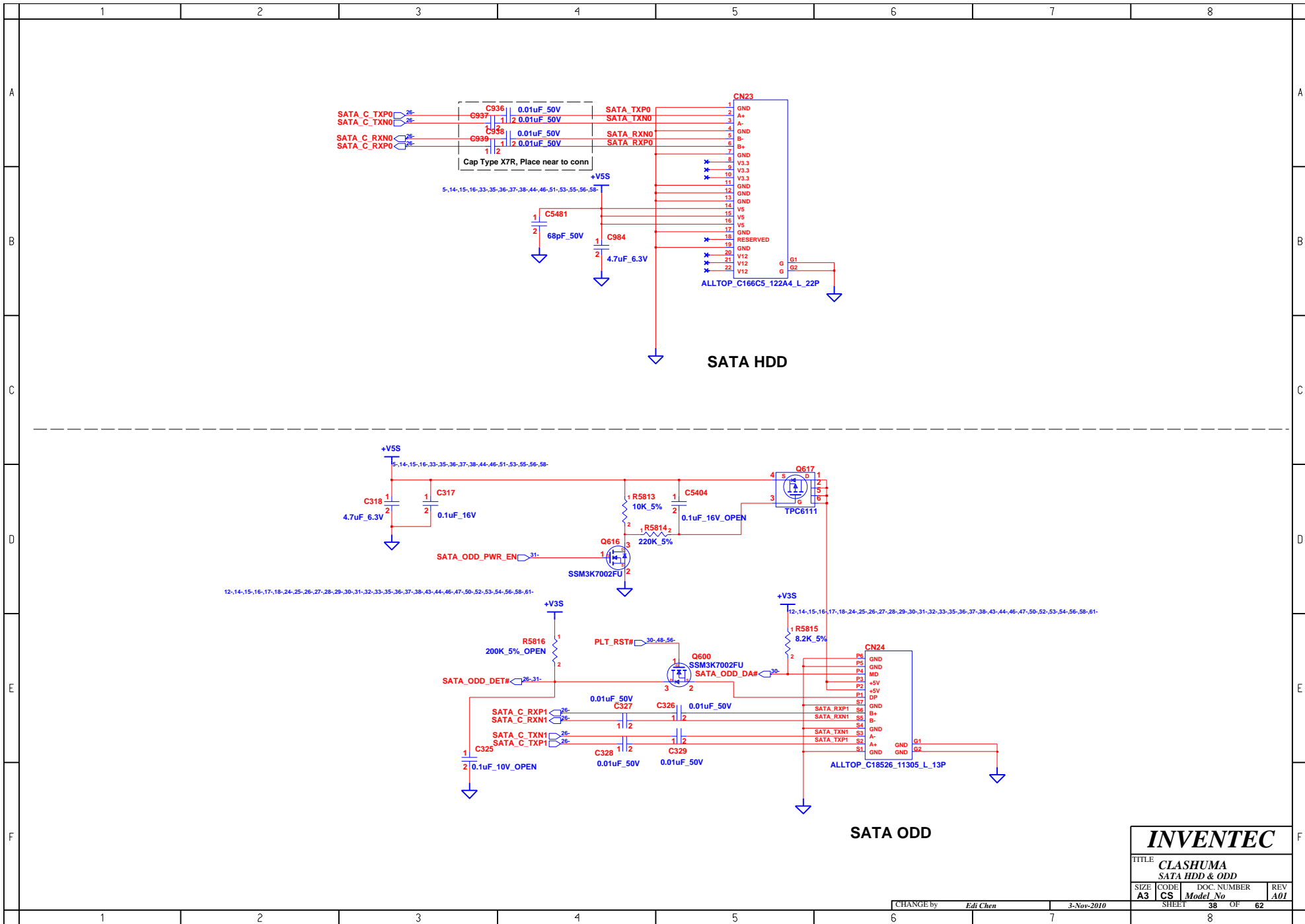
INVENTEC			
TITLE CLASHUMA VGA SWITCH			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 35		OF 62	



INVENTEC			
TITLE CLASHUMA CRT & DISPLAY PORT			
SIZE A3	CODE CS	DOC NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 36		OF 62	

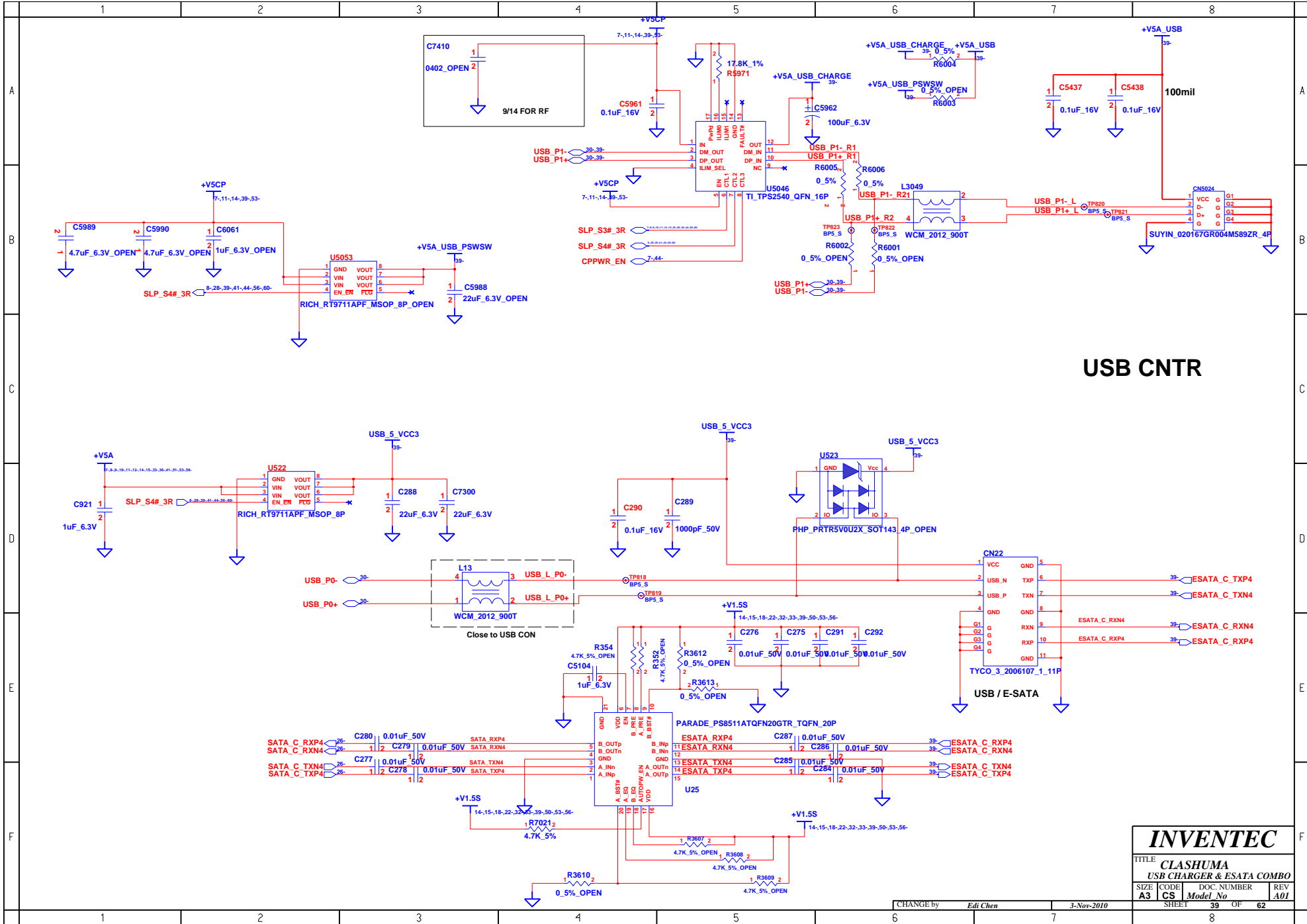


INVENTEC			
TITLE CLASHUMA LCM & WEBCAM			
SIZE A3	CODE CS	DOC NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 37		OF 62	



INVENTEC

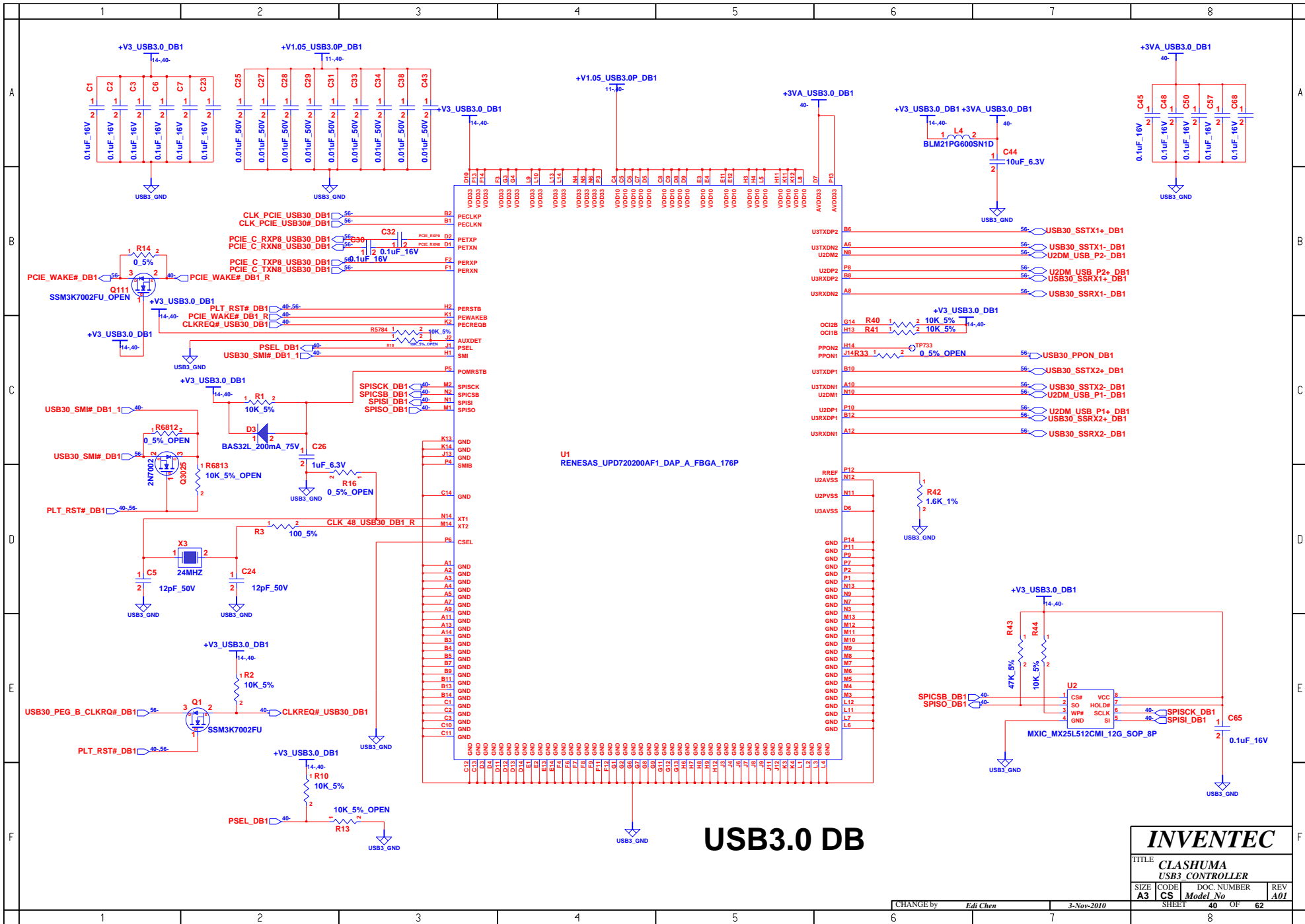
TITLE			
CLASHUMA			
SATA HDD & ODD			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01



USB CNTR

INVENTEC			
TITLE CLASHUMA			
USB CHARGER & ESATA COMBO			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
SHEET 39		OF 62	

CHANGE by *Edi Chen* 3-Nov-2010

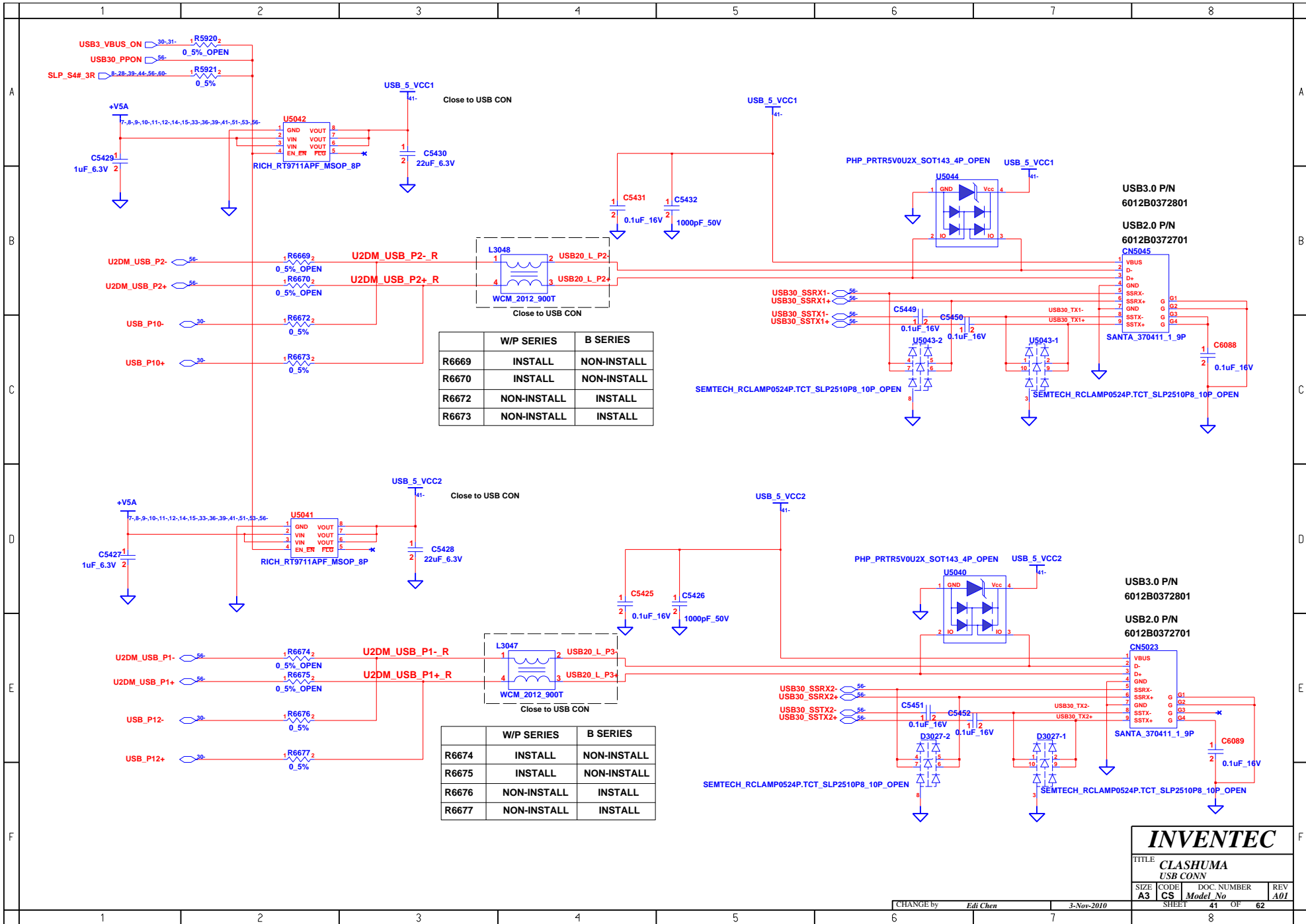


USB3.0 DB

INVENTEC

TITLE			
CLASHUMA			
USB3_CONTROLLER			
SIZE	CODE	DOC NUMBER	REV
A3	CS	Model No	A01

CHANGE by	Edi Chen	3-Nov-2010	SHEET	40	OF	62
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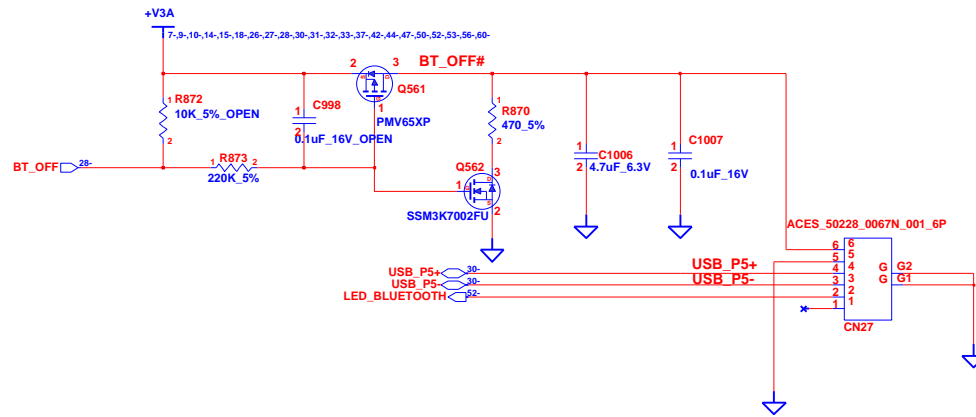
	W/P SERIES	B SERIES
R6669	INSTALL	NON-INSTALL
R6670	INSTALL	NON-INSTALL
R6672	NON-INSTALL	INSTALL
R6673	NON-INSTALL	INSTALL

	W/P SERIES	B SERIES
R6674	INSTALL	NON-INSTALL
R6675	INSTALL	NON-INSTALL
R6676	NON-INSTALL	INSTALL
R6677	NON-INSTALL	INSTALL

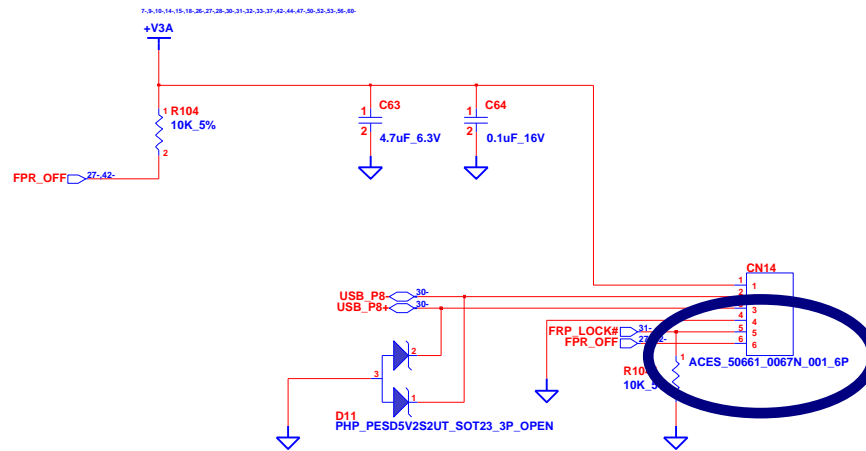
INVENTEC

TITLE: **CLASHUMA USB CONN**

SIZE: A3	CODE: CS	DOC. NUMBER: Model No	REV: A01
CHANGE by: Edi Chen		3-Nov-2010	
SHEET: 41		OF: 62	



BLUETOOTH



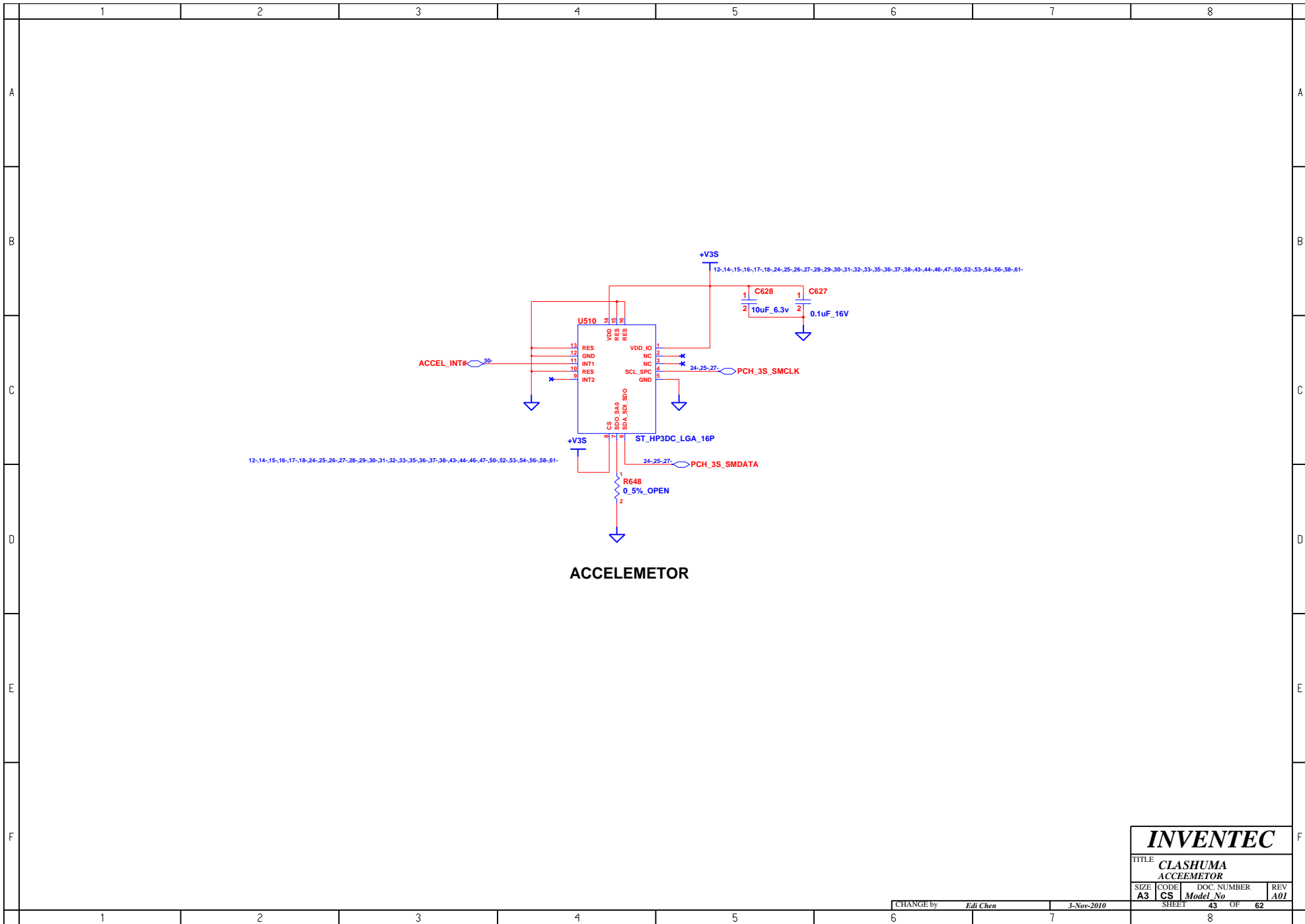
FINGER PRINTER CNTR

INVENTEC

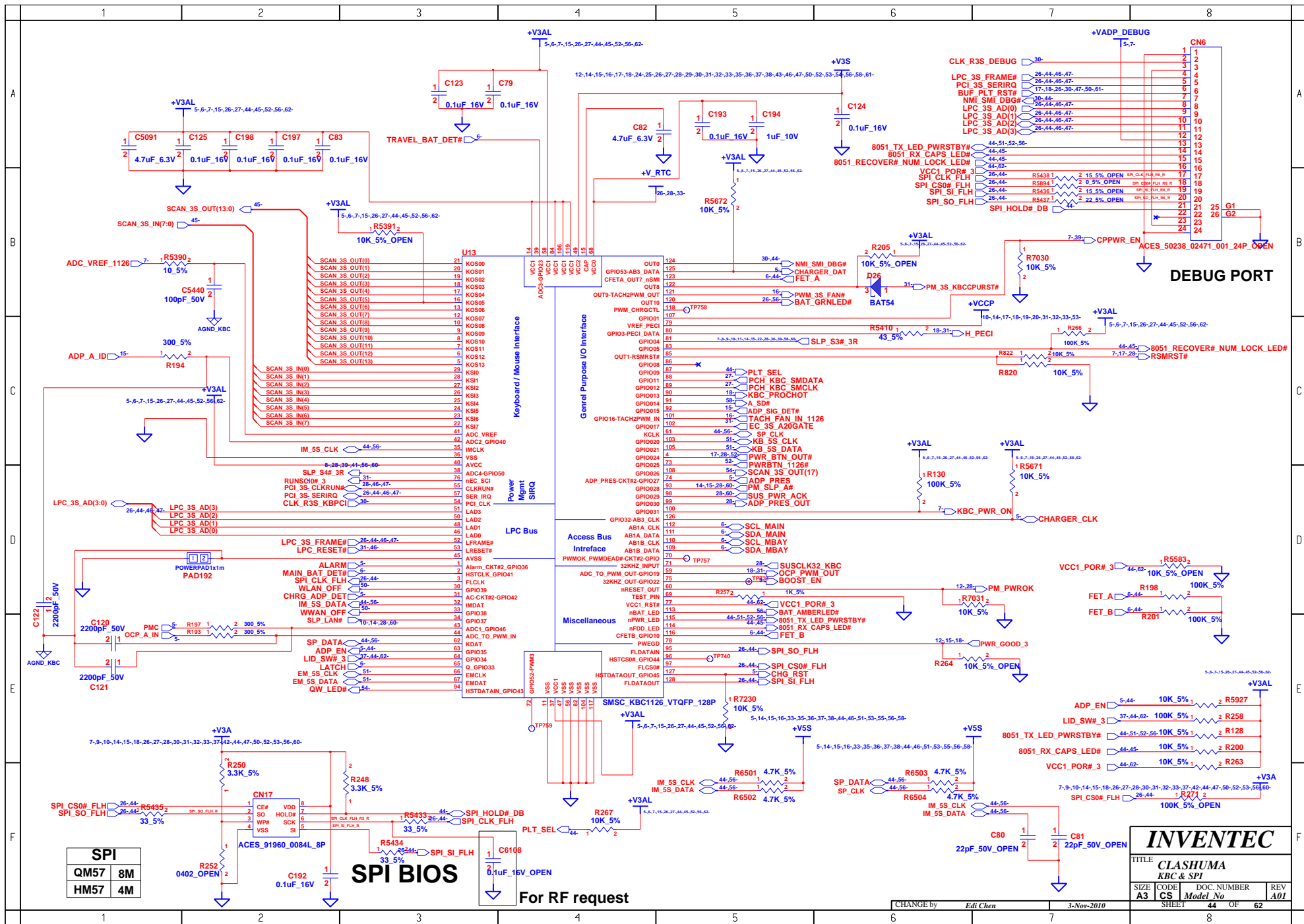
TITLE			
CLASHUMA			
BLUETOOTH & FINGER PRINTER			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

CHANGE by *Edi Chen* 3-Nov-2010

SHEET 42 OF 62



INVENTEC			
TITLE CLASHUMA ACCELEMOTOR			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET		43 OF 62	



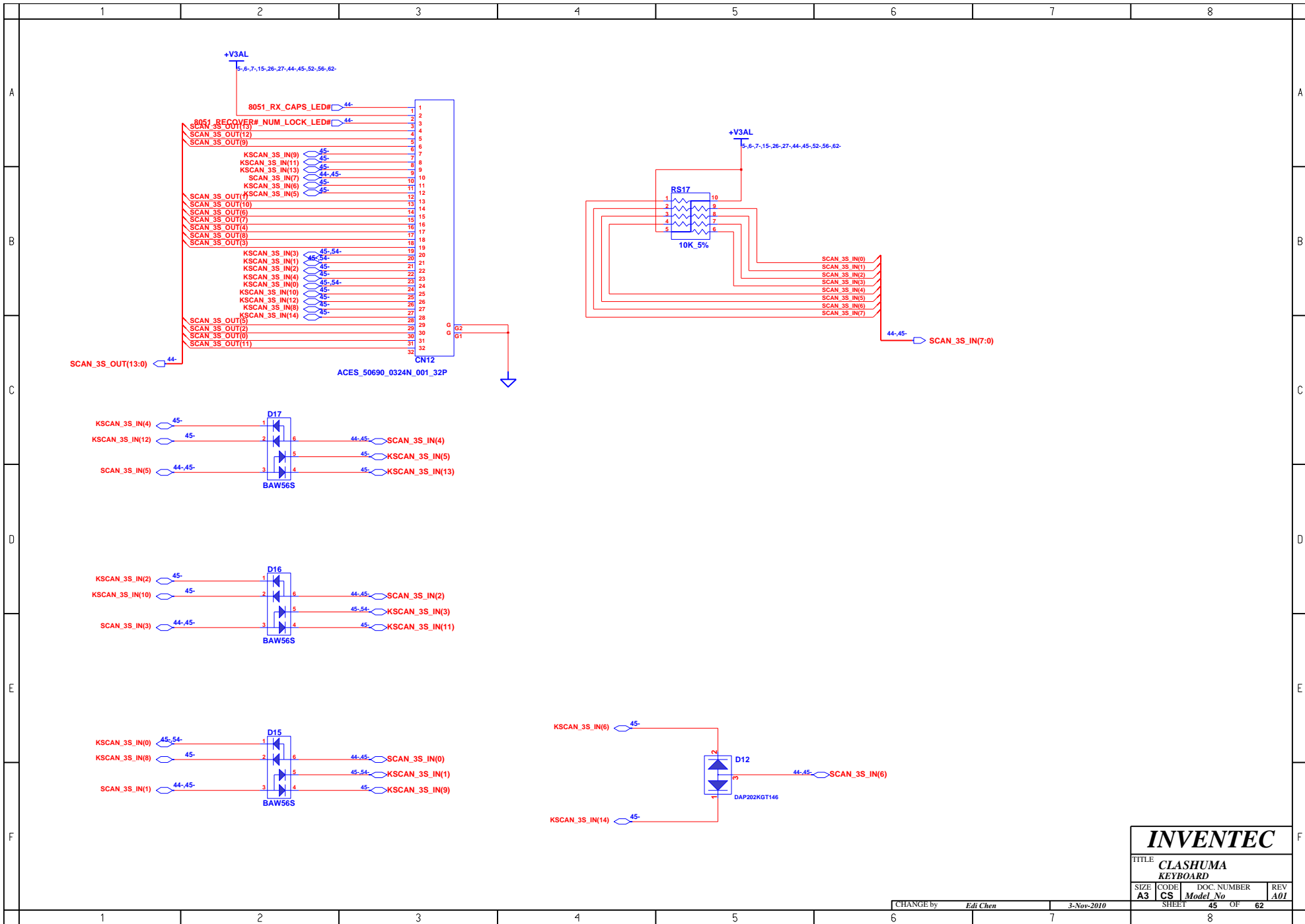
SPI	
QM57	8M
HM57	4M

SPI BIOS

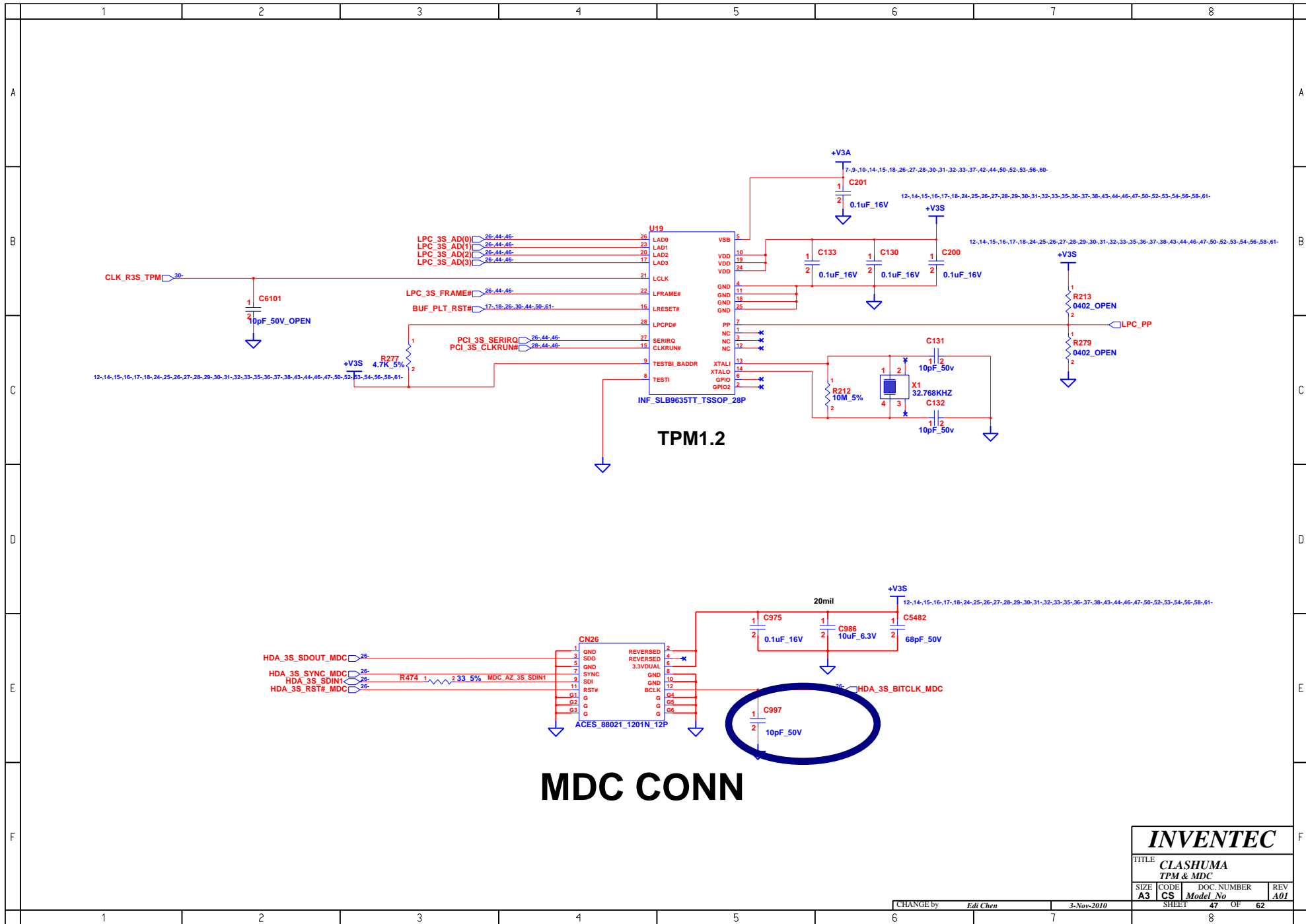
For RF request

INVENTEC			
TITLE CLASHUMA KBC & SPI			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01
SHEET		44 OF 62	

CHANGE by: Edi Chen 3-Nov-2010



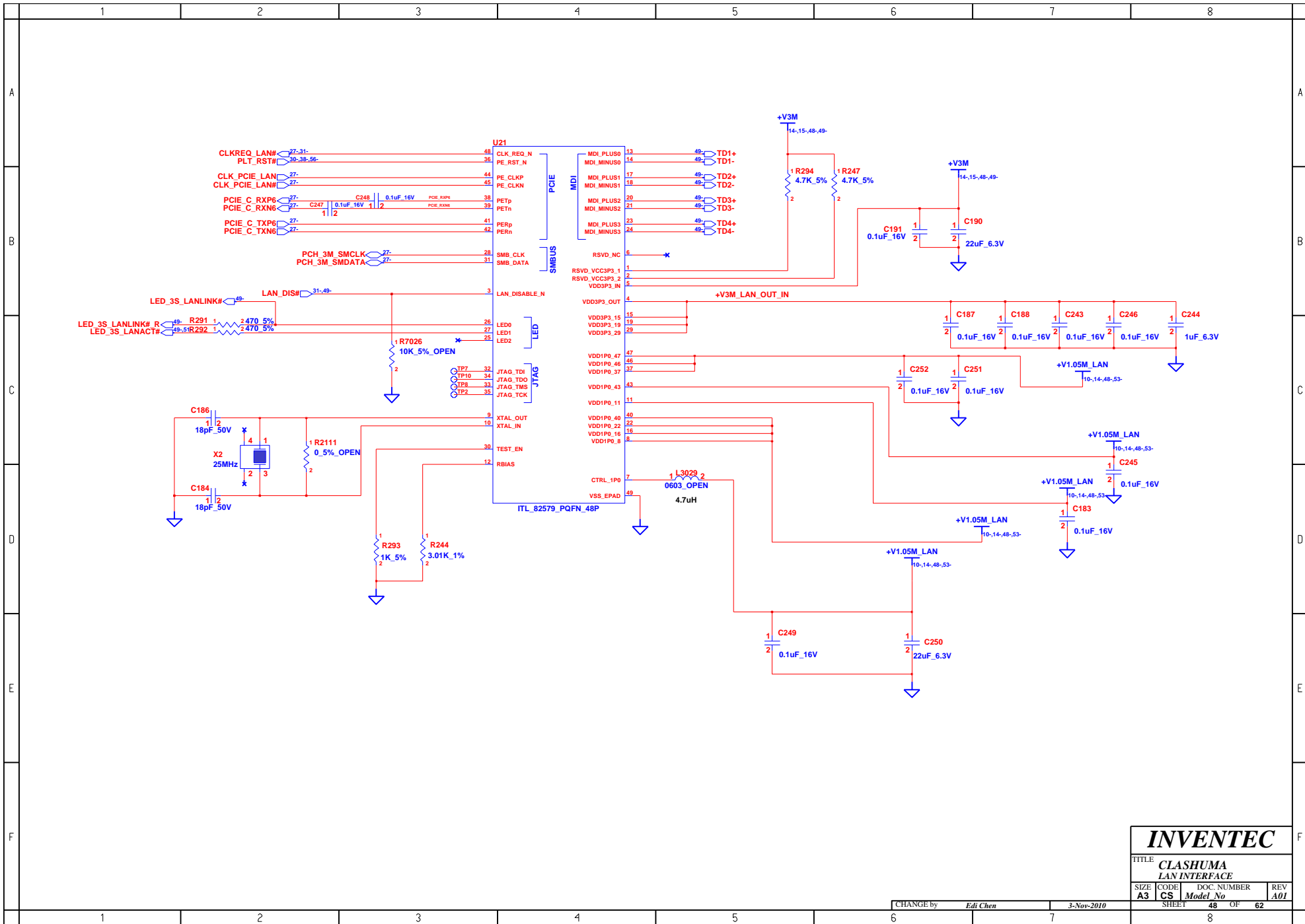
INVENTEC			
TITLE CLASHUMA KEYBOARD			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 45		OF 62	



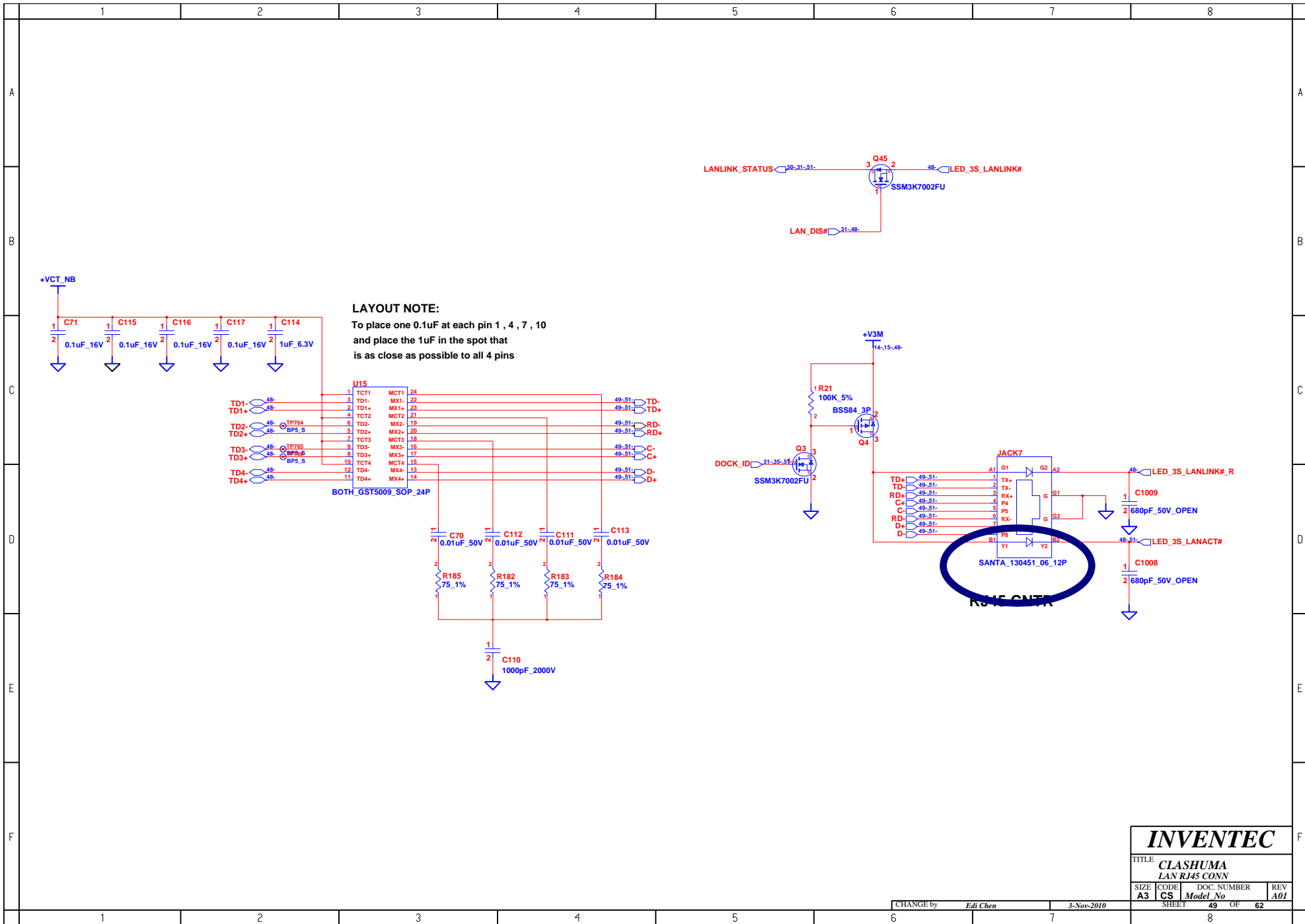
INVENTEC

TITLE			
CLASHUMA			
TPM & MDC			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01
SHEET		OF	62

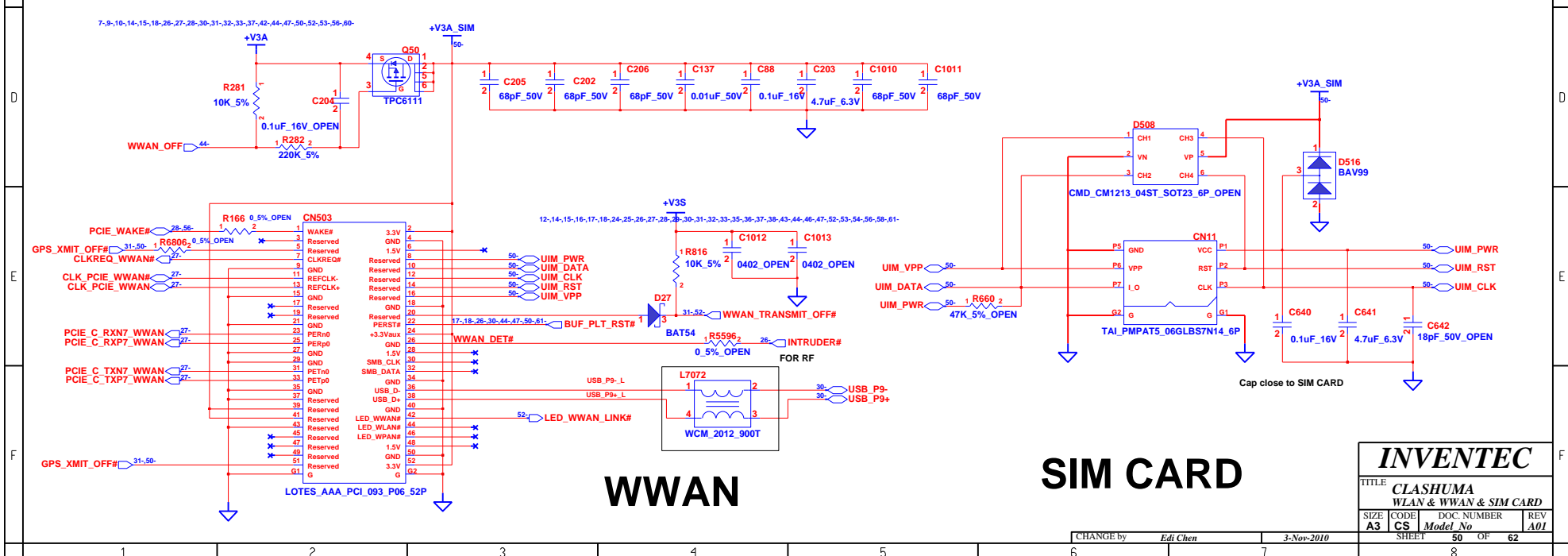
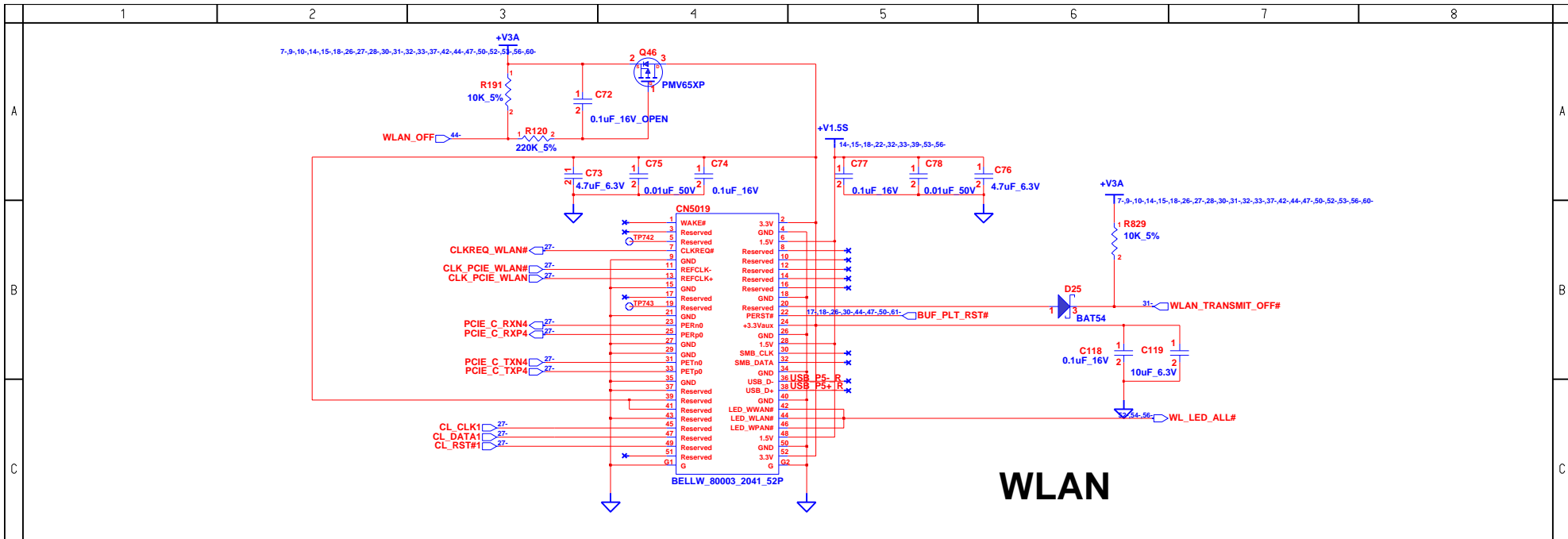
CHANGE by *Edi Chen* 3-Nov-2010



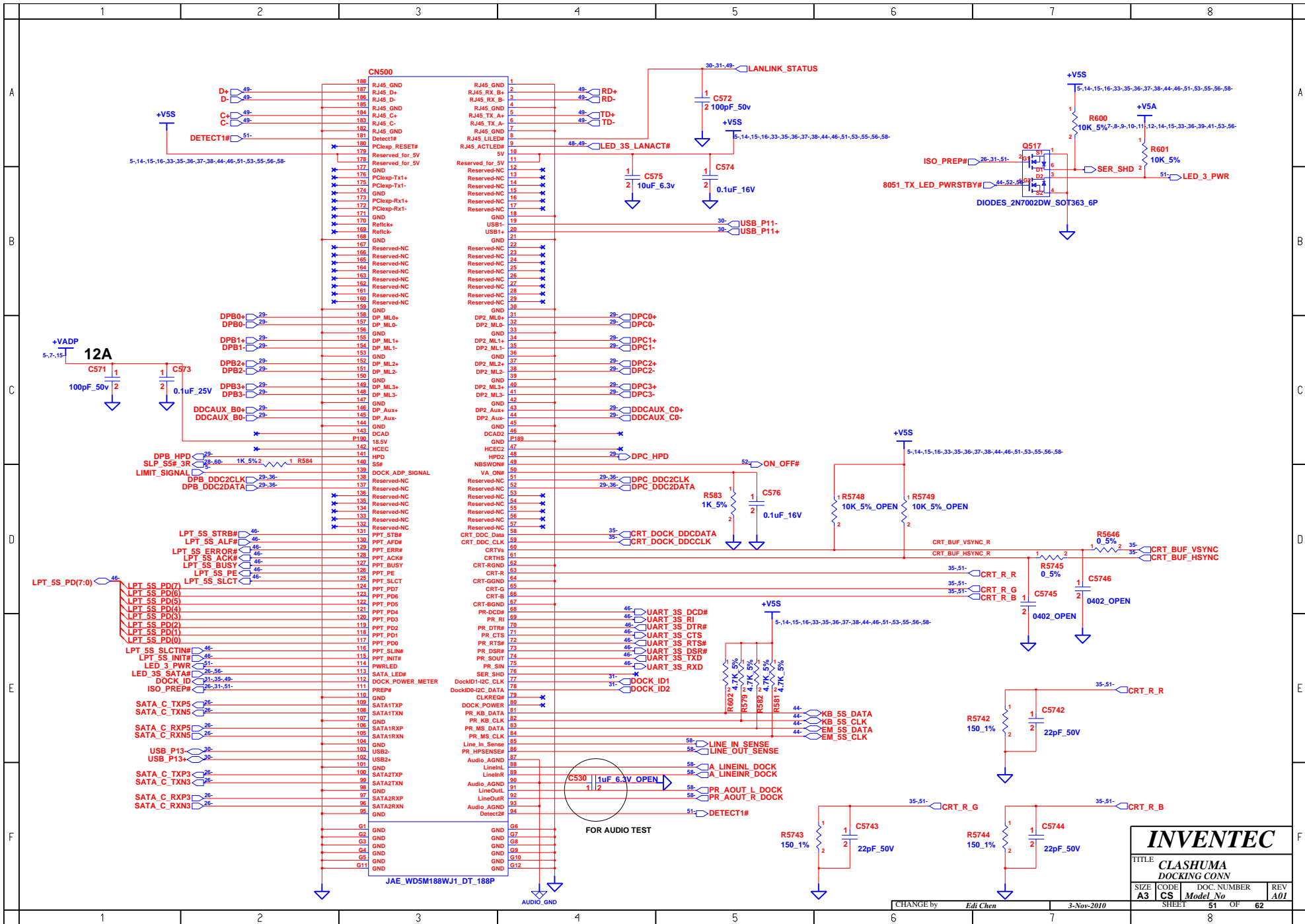
INVENTEC			
TITLE CLASHUMA LAN INTERFACE			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 48		OF 62	



INVENTEC			
TITLE CLASHUMA LAN RJ45 CONN			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET		49 OF 62	
1		8	

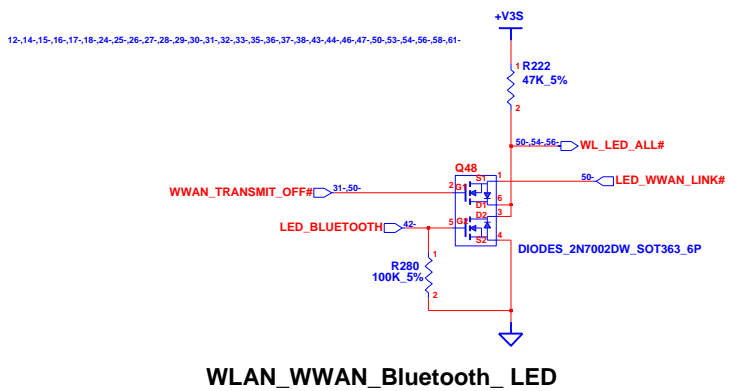
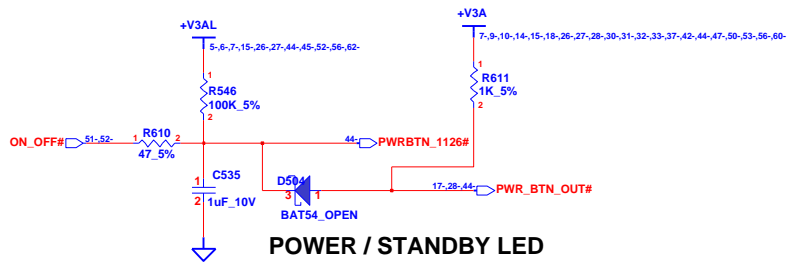
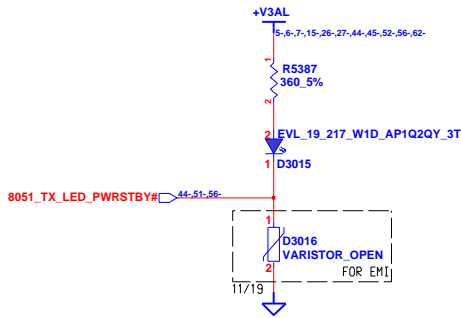
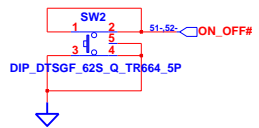


INVENTEC			
TITLE CLASHUMA WLAN & WWAN & SIM CARD			
SIZE A3	CODE CS	DOC NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 50		OF 62	

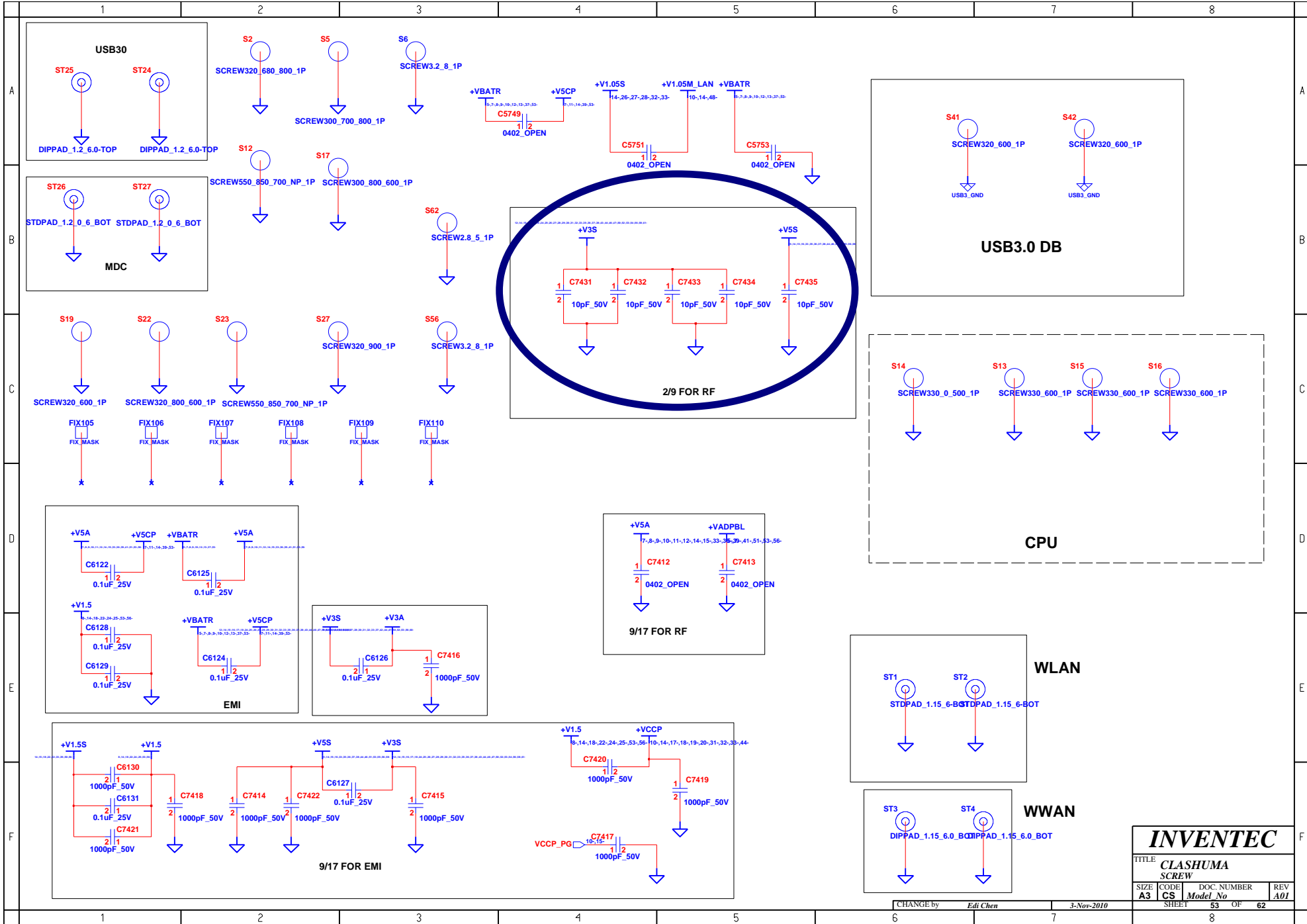


INVENTEC			
TITLE CLASHUMA DOCKING CONN			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
SHEET 51		OF 62	

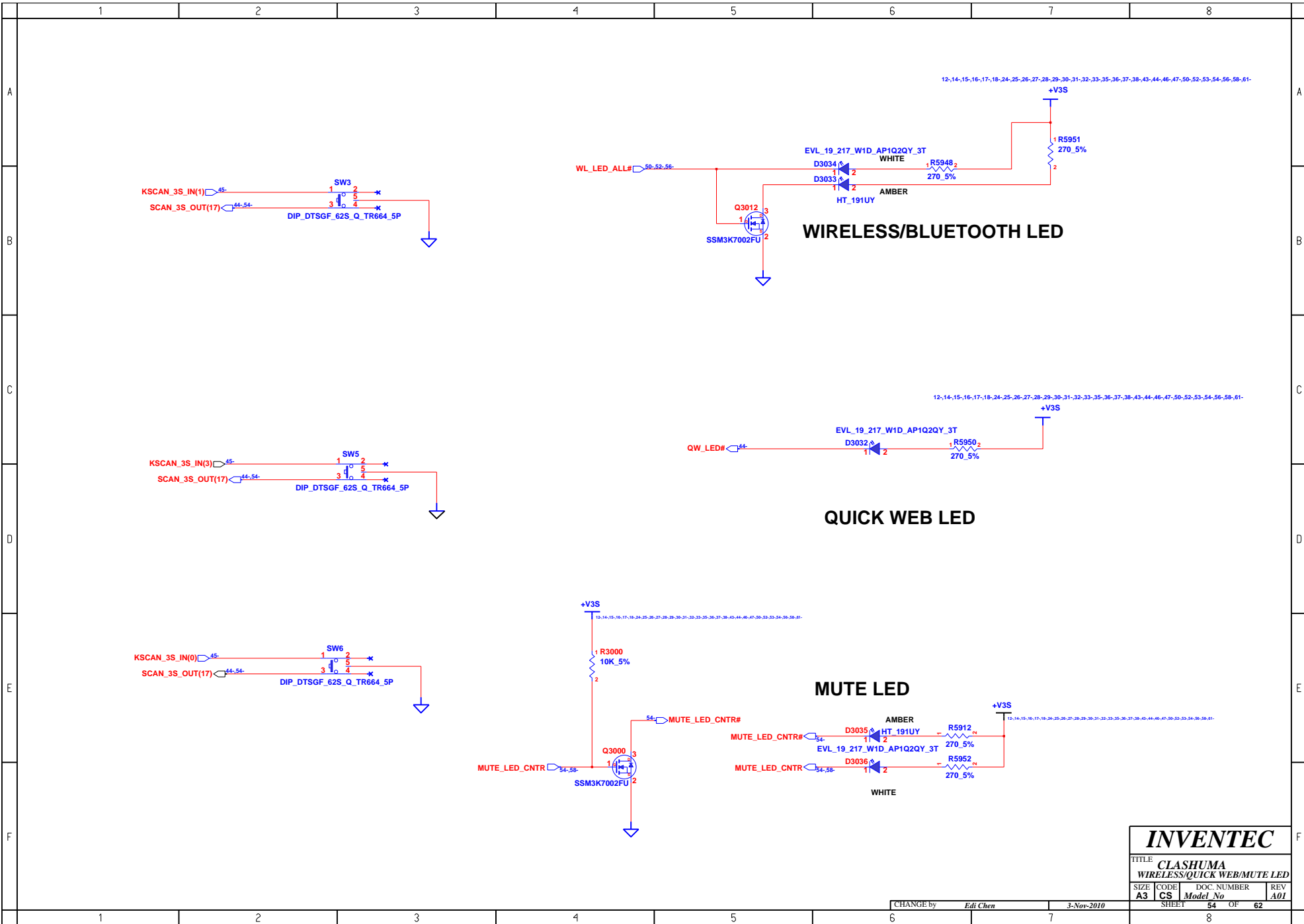
CHANGE by *Edi Chen* 3-Nov-2010



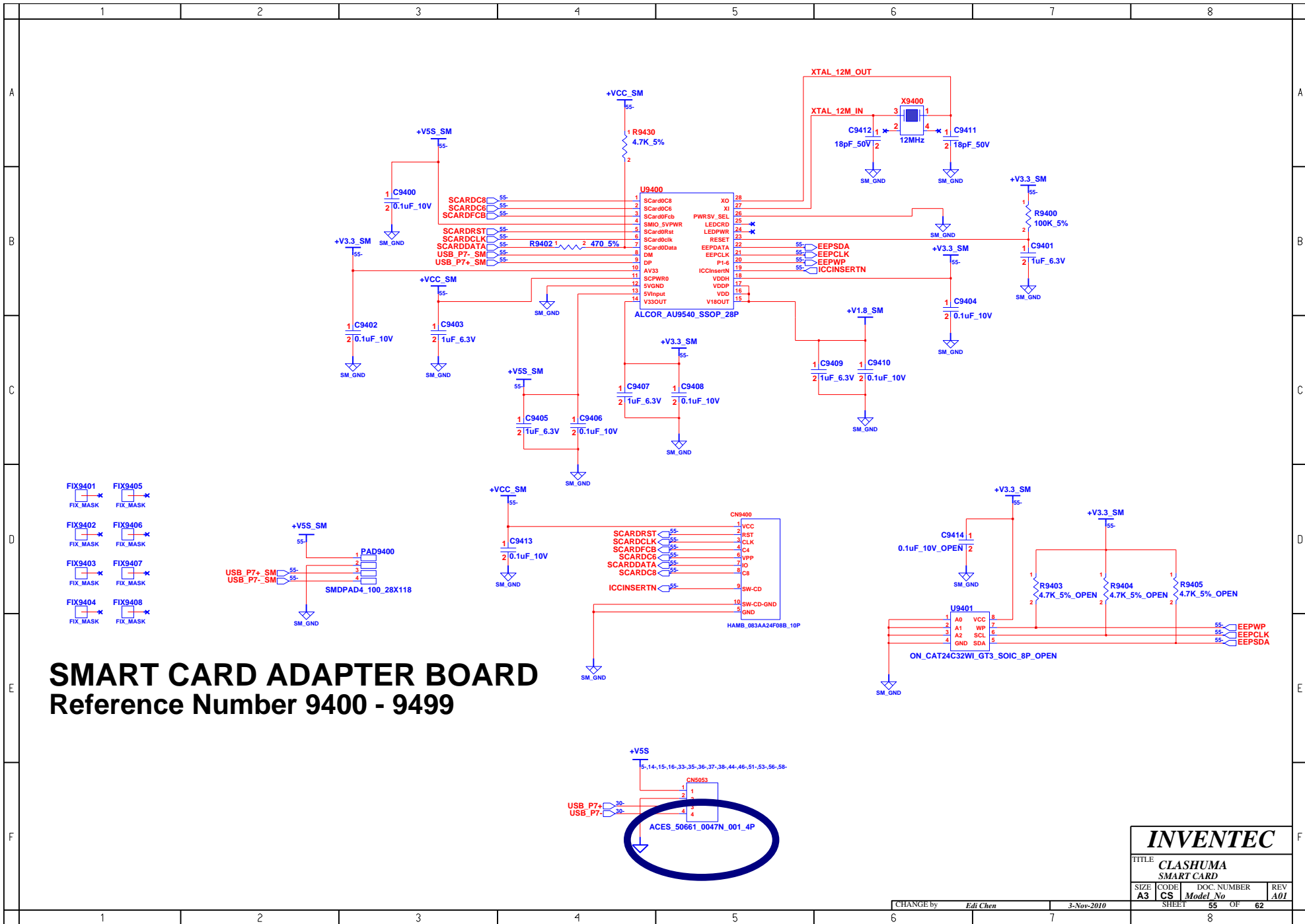
INVENTEC			
TITLE CLASHUMA POWER & WLAN LED			
SIZE A3	CODE CS	DOC NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 52		OF 62	



INVENTEC			
TITLE CLASHUMA SCREW			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET		53	OF 62



INVENTEC			
TITLE CLASHUMA			
WIRELESS/QUICK WEB/MUTE LED			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 54		OF 62	



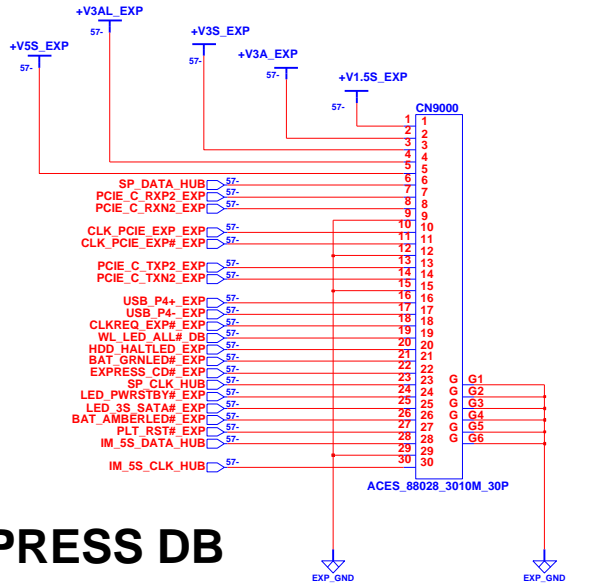
SMART CARD ADAPTER BOARD

Reference Number 9400 - 9499

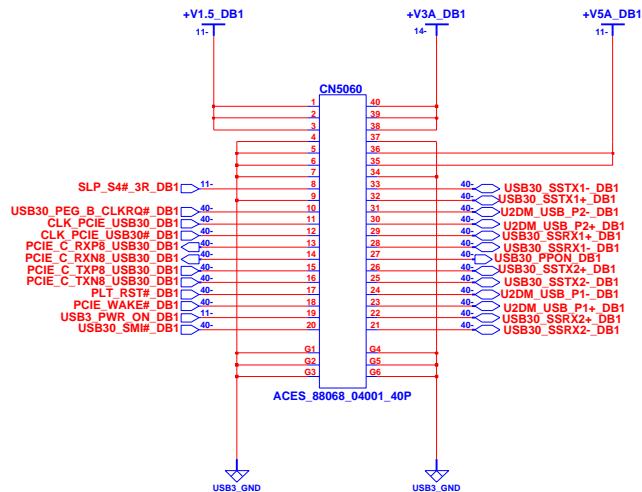
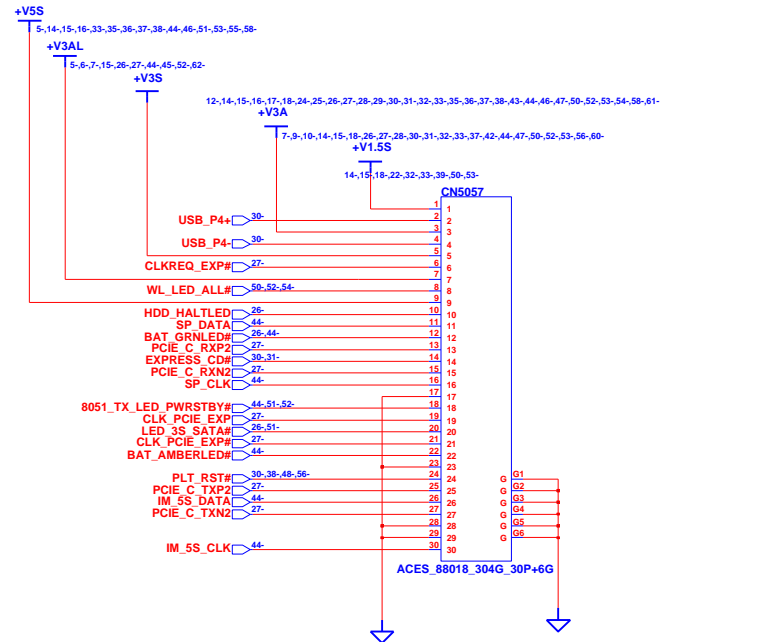
INVENTEC

TITLE CLASHUMA SMART CARD			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01

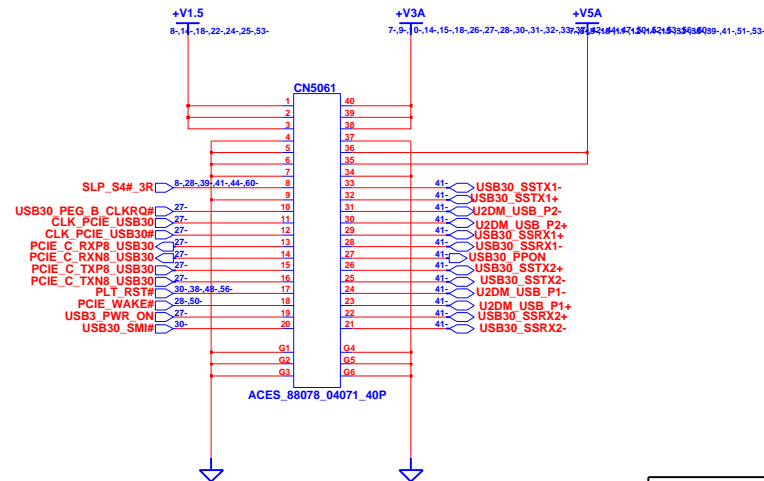
Reference Number 9000 - 9099



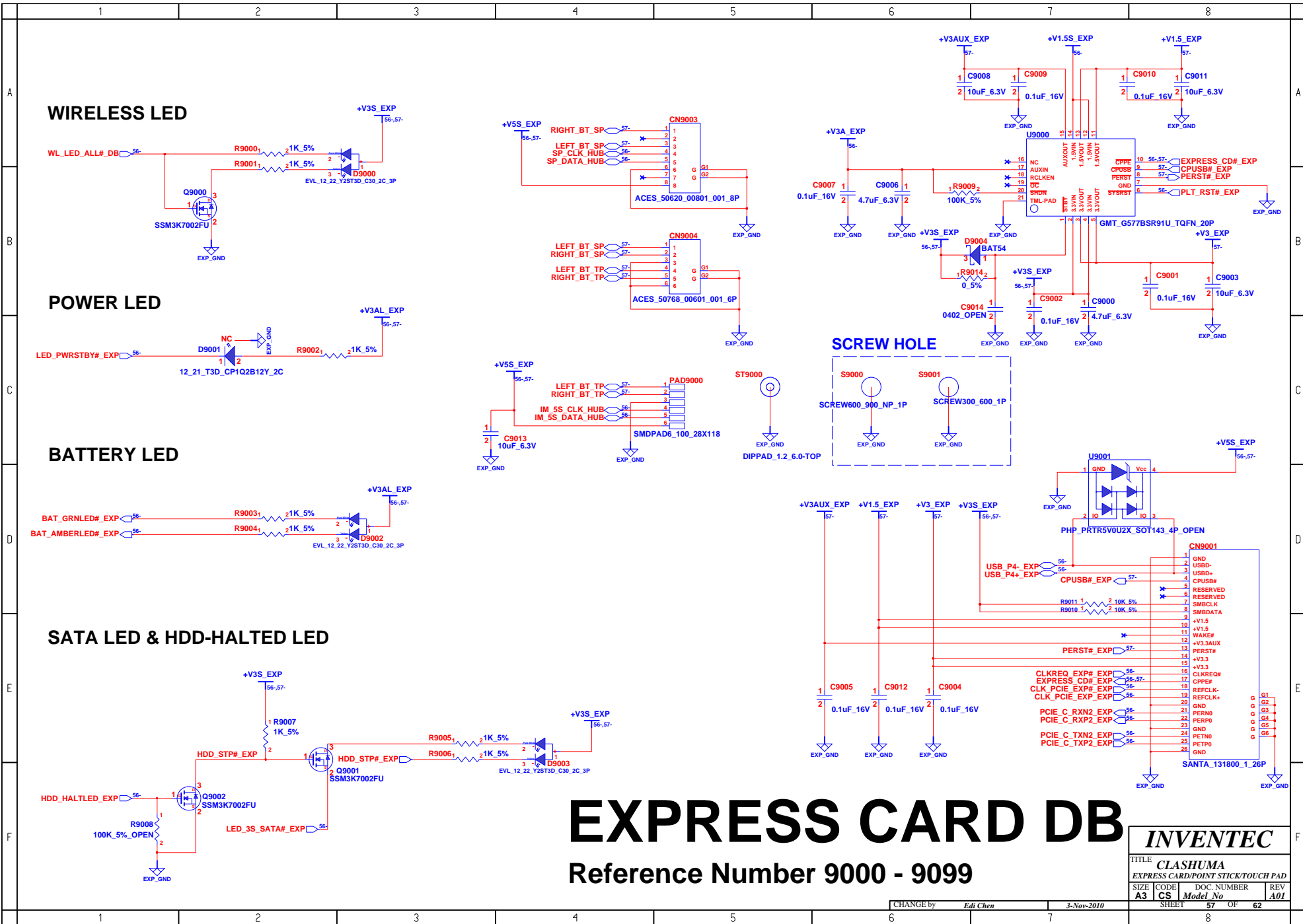
EXPRESS DB



USB3.0 DB



INVENTEC			
TITLE CLASHUMA			
USB3.0+EXPRESS CARD BTB CNTR			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 56		OF 62	

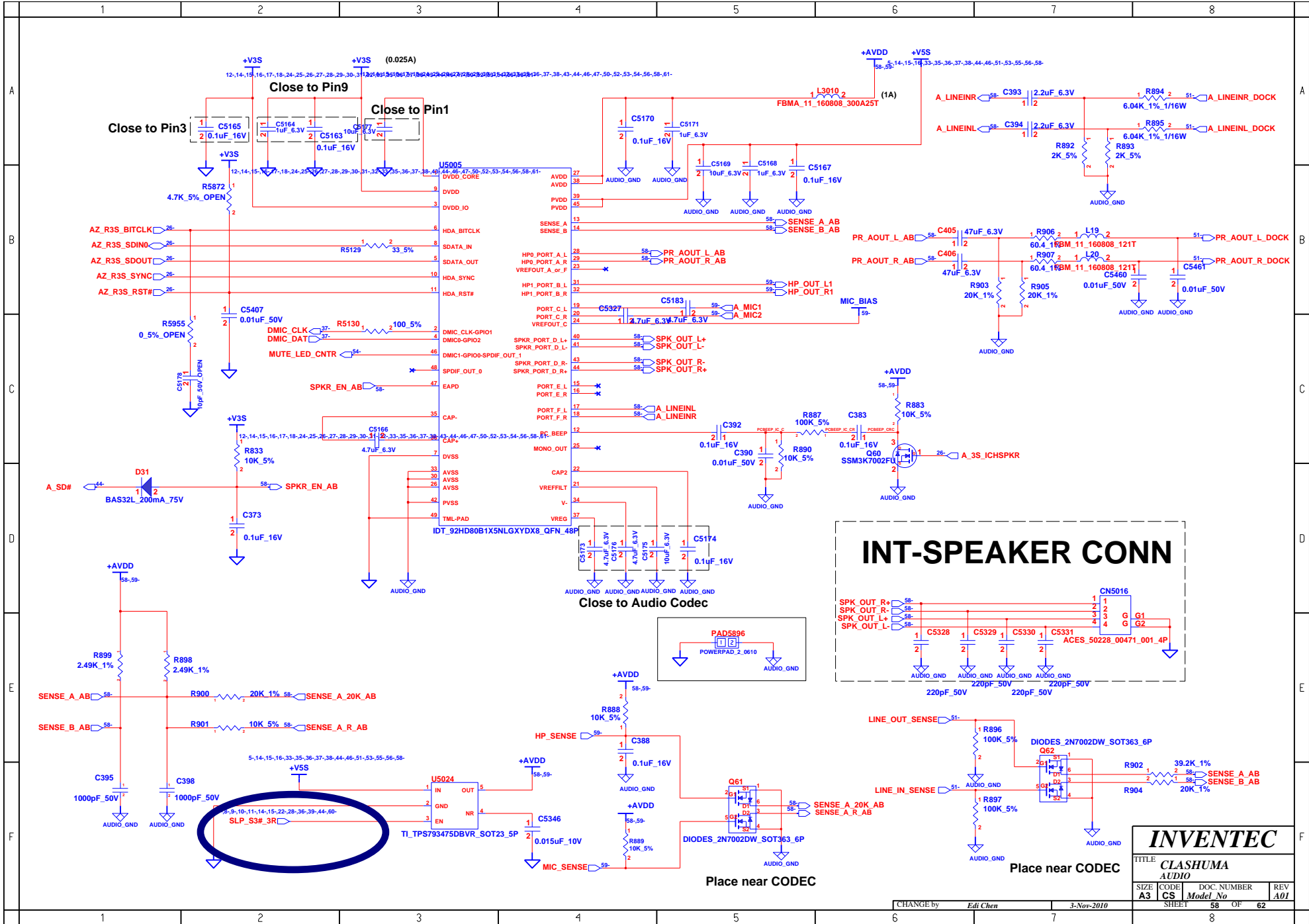


EXPRESS CARD DB

Reference Number 9000 - 9099

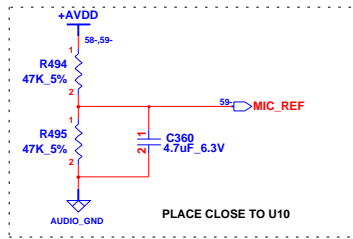
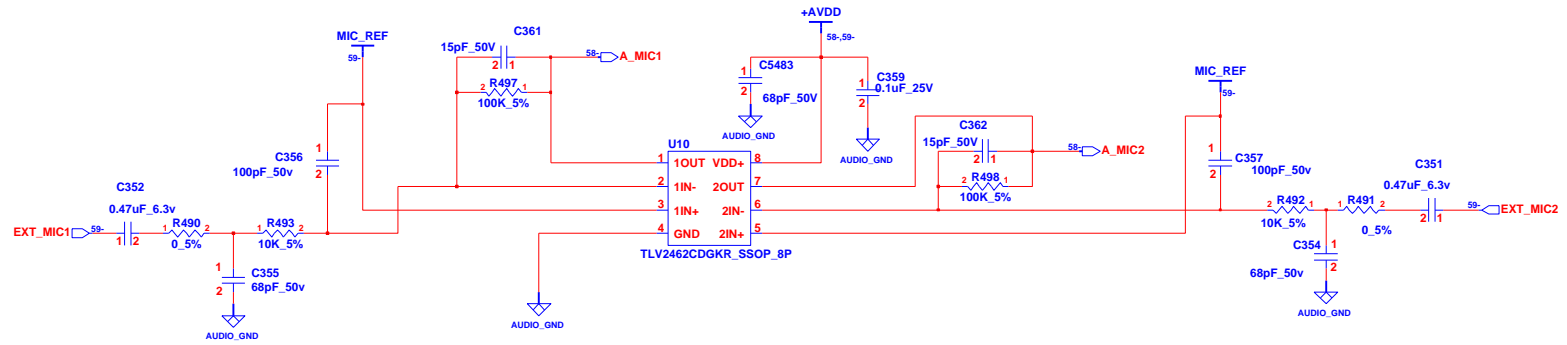
INVENTEC			
TITLE CLASHUMA			
EXPRESS CARD/POINT STICK/TOUCH PAD			
SIZE A3	CODE CS	DOC NUMBER	REV A01
Model No		SHEET 57 OF 62	

CHANGE by *Edi Chen* 3-Nov-2010

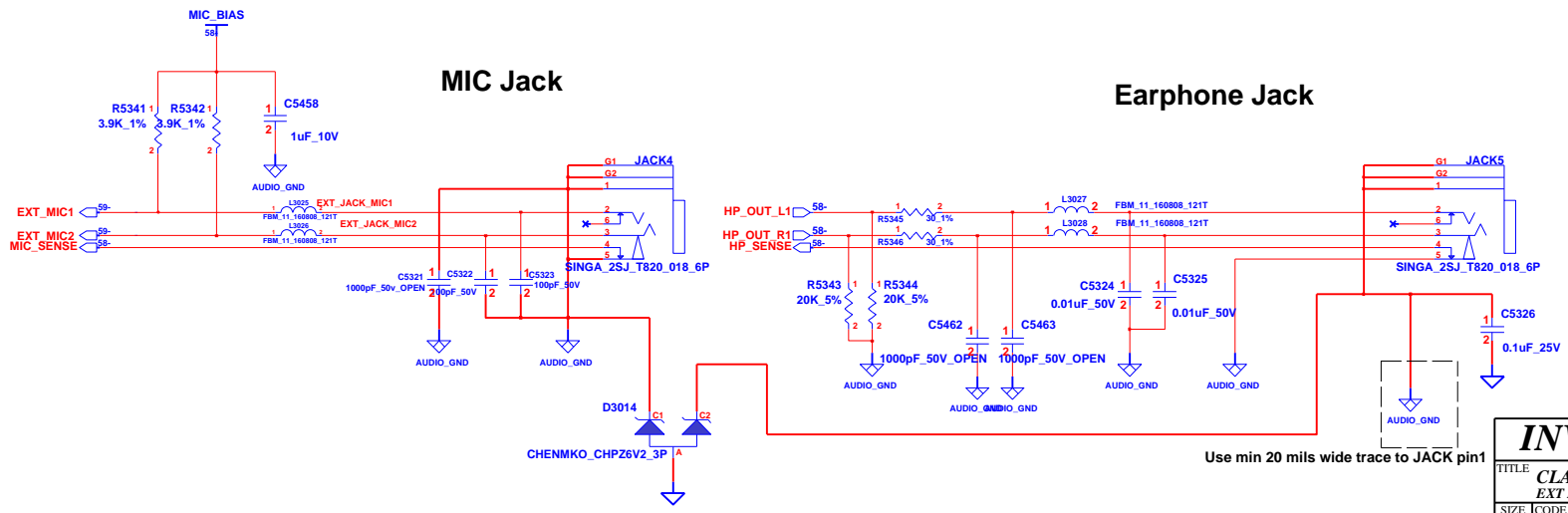


INVENTEC			
TITLE CLASHUMA AUDIO			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
SHEET 58		OF 62	

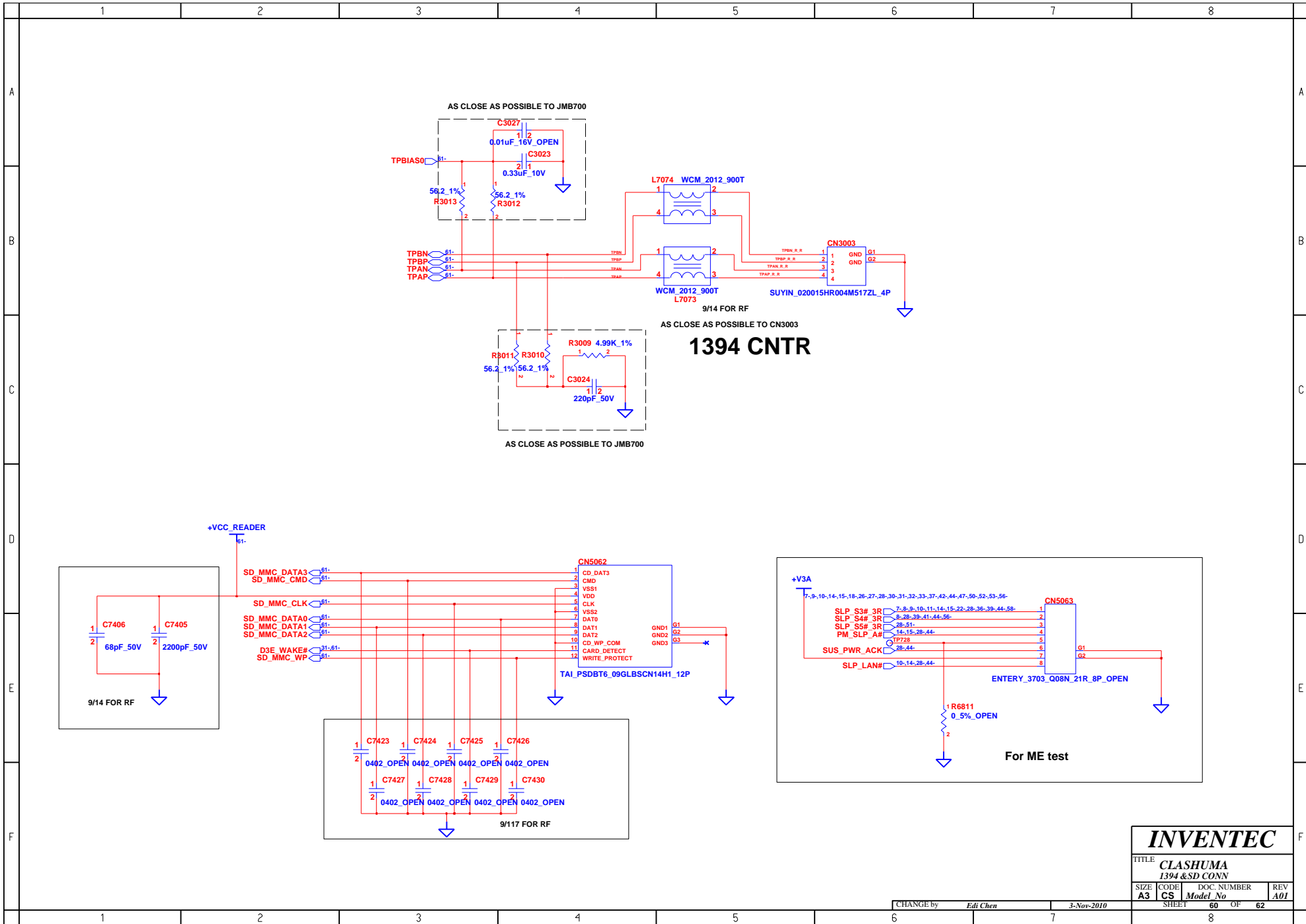
CHANGE by *Edi Chen* 3-Nov-2010



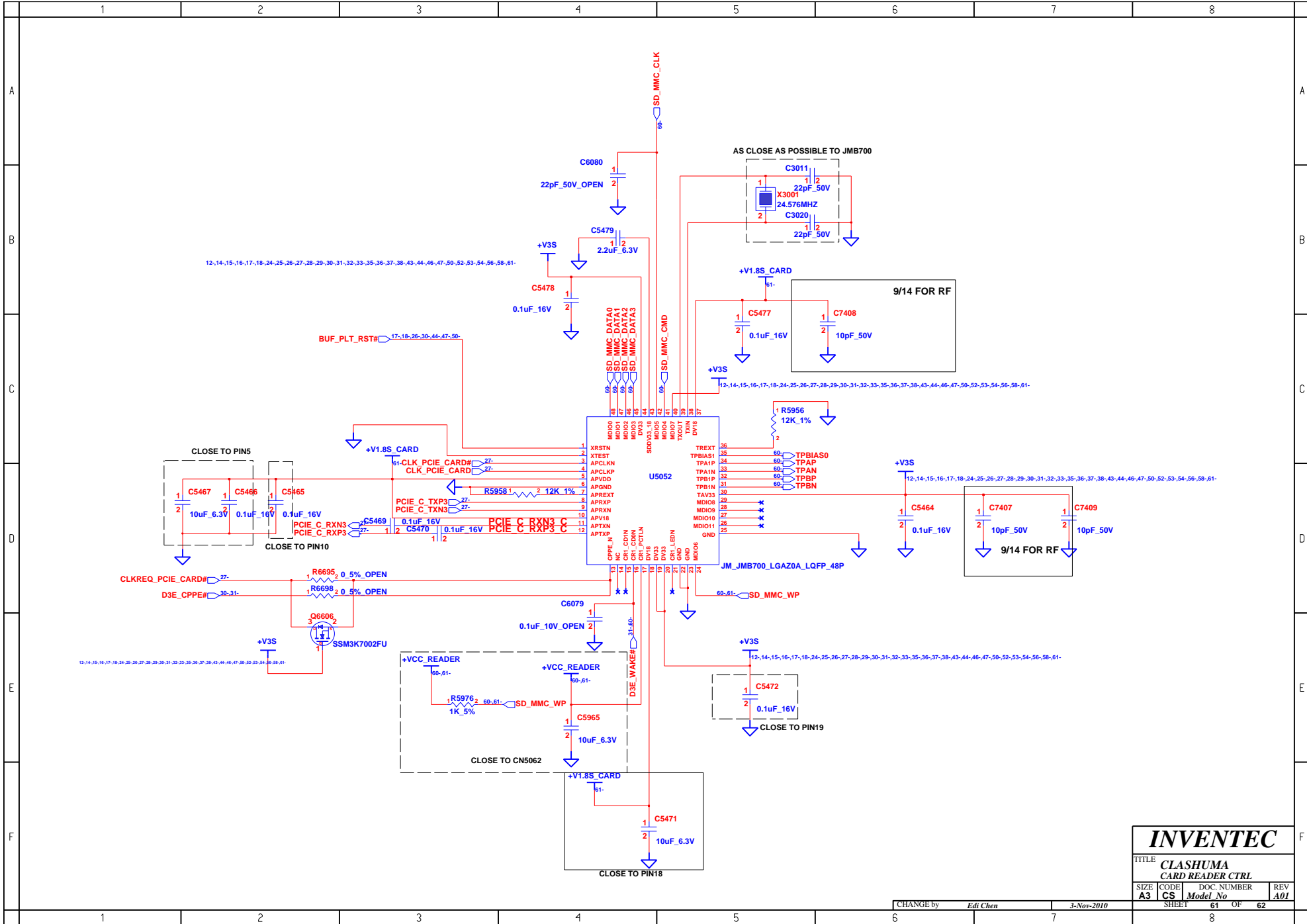
EXT. MIC



INVENTEC			
TITLE CLASHUMA EXT MIC/MIC/HP			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
CHANGE by Edi Chen		3-Nov-2010	
SHEET 59		OF 62	

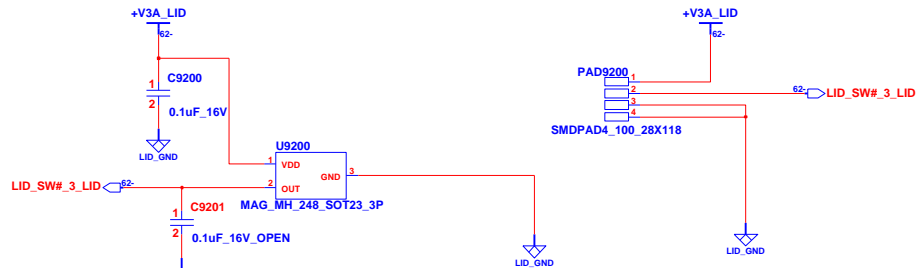


INVENTEC			
TITLE CLASHUMA 1394 & SD CONN			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 60		OF 62	

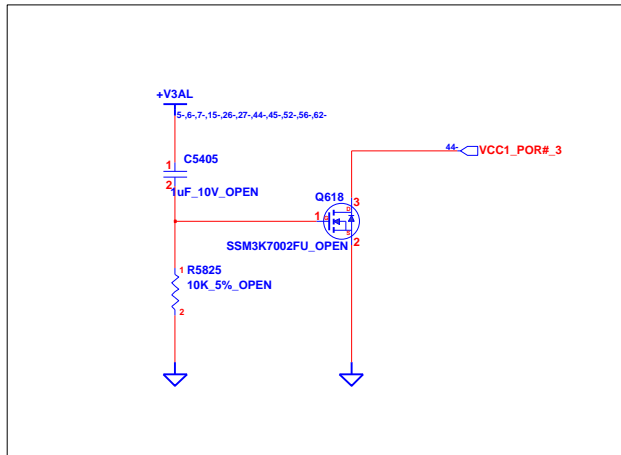


INVENTEC			
TITLE CLASHUMA CARD READER CTRL			
SIZE A3	CODE CS	DOC NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Edi Chen</i>		3-Nov-2010	
SHEET 61		OF 62	

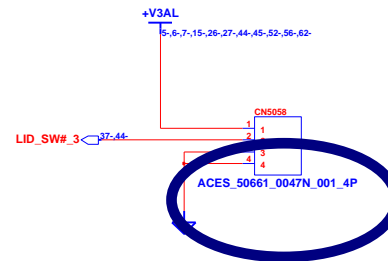
Reference Number 9200 - 9299



LID SWITCH DB



CLOSE TO KBC



INVENTEC

TITLE			
CLASHUMA			
LID SWITCH			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

CHANGE by *Edi Chen* 3-Nov-2010

SHEET 62 OF 62