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INVENTEC

TITLE *TT1.0*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

CHANGE by *Jimmy song* 2-Mar-2007

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Inventec Confidential

AMD
Turion / Sempron
638 OuPGA

DDR2 Interface
DDR2 Interface

DDR II _SODIMM0
DDR II _SODIMM1

ATi
RS690T
FCBGA

PCIE3
PCIE x1 Docking (FF)

NIC
Giga-bit LAN (FF)
BCM 5787M
10/100 LAN (DF)
BCM 5906M

RJ45
RJ45 Docking (FF)

ATi
SB600
549 FCBGA

PCIE0
MINI CARD
WLAN

ANT_L
ANT_R

MINI CARD
WWAN

ANT_L
ANT_R

USB3
3.3V, PCI_Interface, 33MHz

Cardbus
R5C803

SPI
BIOS

SMBus
Accelero Meter (FF)

Cardbus Smart Card Slot
1394 CONN (FF)

3.3V, LPC_Interface, 33MHz

TPM
V1.2 (FF)

Super I/O
47N217 (FF)

KBC
SMSC 1070
(128P) (FF)

Parallel Port Docking (FF)
Serial Port Docking (FF)

PS/2 Port Docking (FF)
Internal Keyboard (FF)

Hyper Transport
ATi
RS690T
FCBGA

TV Docking (FF)
TV (FF)
LCM (FF)
CRT Docking (FF)
CRT (FF)

HDD
SATA
Fixed ODD
PATA

A-link

CLK GEN
ICS951418

Thermal Sensor

USB0 CONN A
USB1 Bluetooth
USB2 CONN B
USB4 Finger Print (FF)
USB5 Docking (FF)
USB6 Docking (FF)
USB7 DB CONN C (FF)
USB9 DB CONN D (FF)

5 in 1 Slot (FF)
USB8 Flash media
SMSC USB2228 (FF)

Docking connector (FF)

MAIN BATT
TRAVEL BATT

System Charger & DC/DC System power

MDC
Modem Module
V1.5

RJ11
RJ11 Docking (FF)

Audio
AD_1981HD

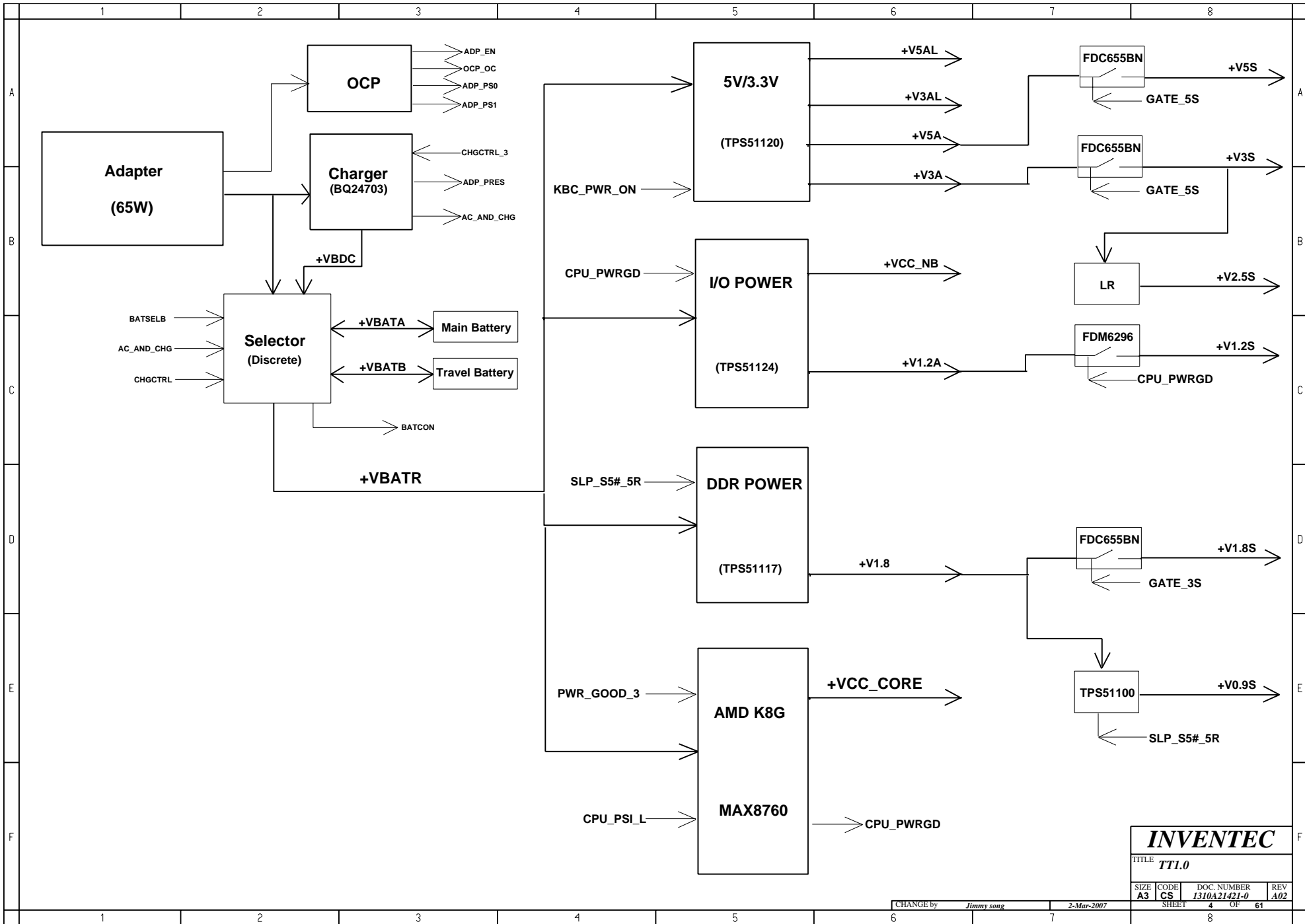
Line In Docking (FF)
Line Out Docking (FF)
MIC In
Head Phone

DF: De-Featured
FF: Full-Featured

INVENTEC

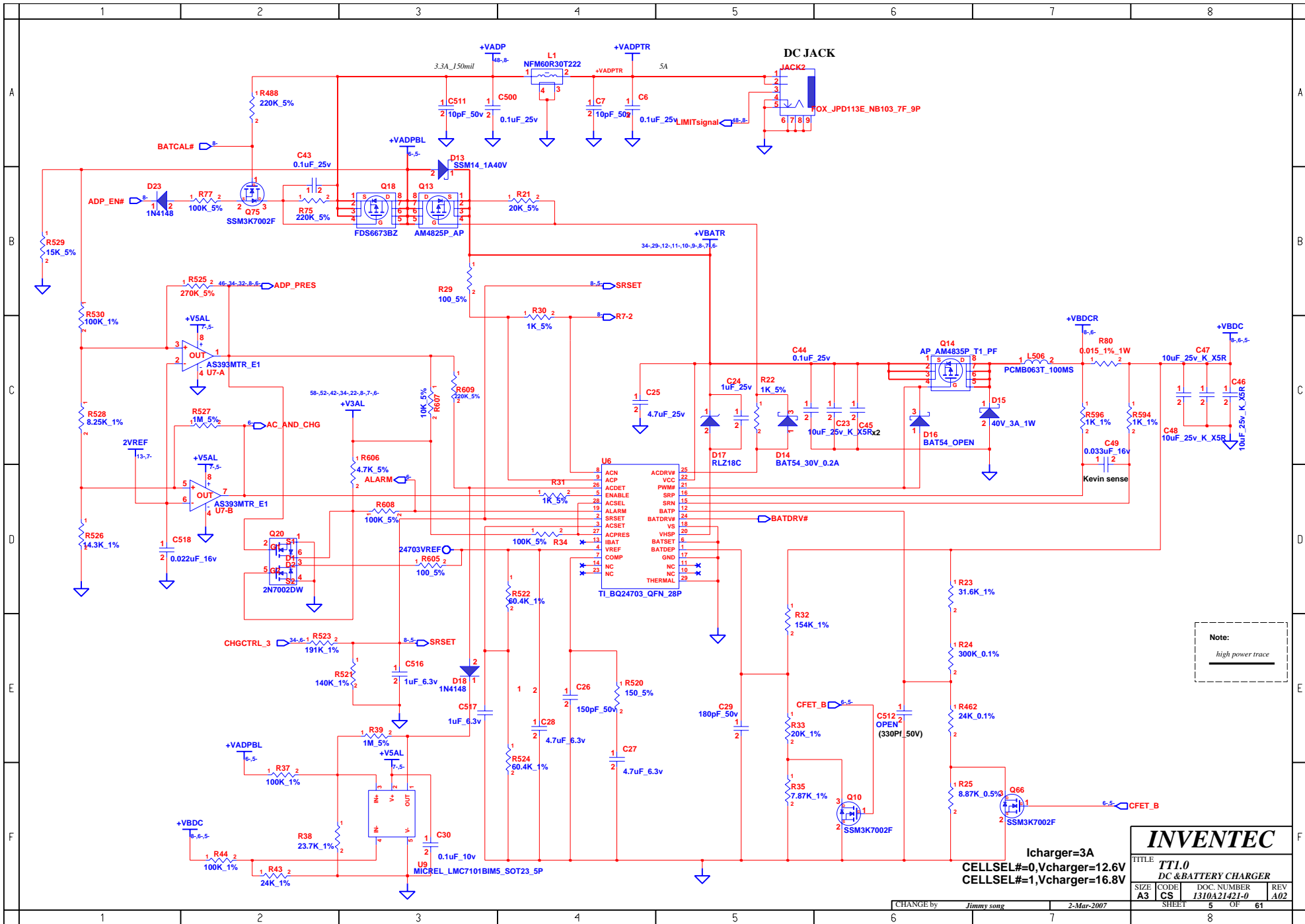
TITLE			
T11.0			
Block Diagram			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by		SHEET	
Jimmy song		3 OF 61	

CHANGE by Jimmy song 2-Mar-2007



INVENTEC

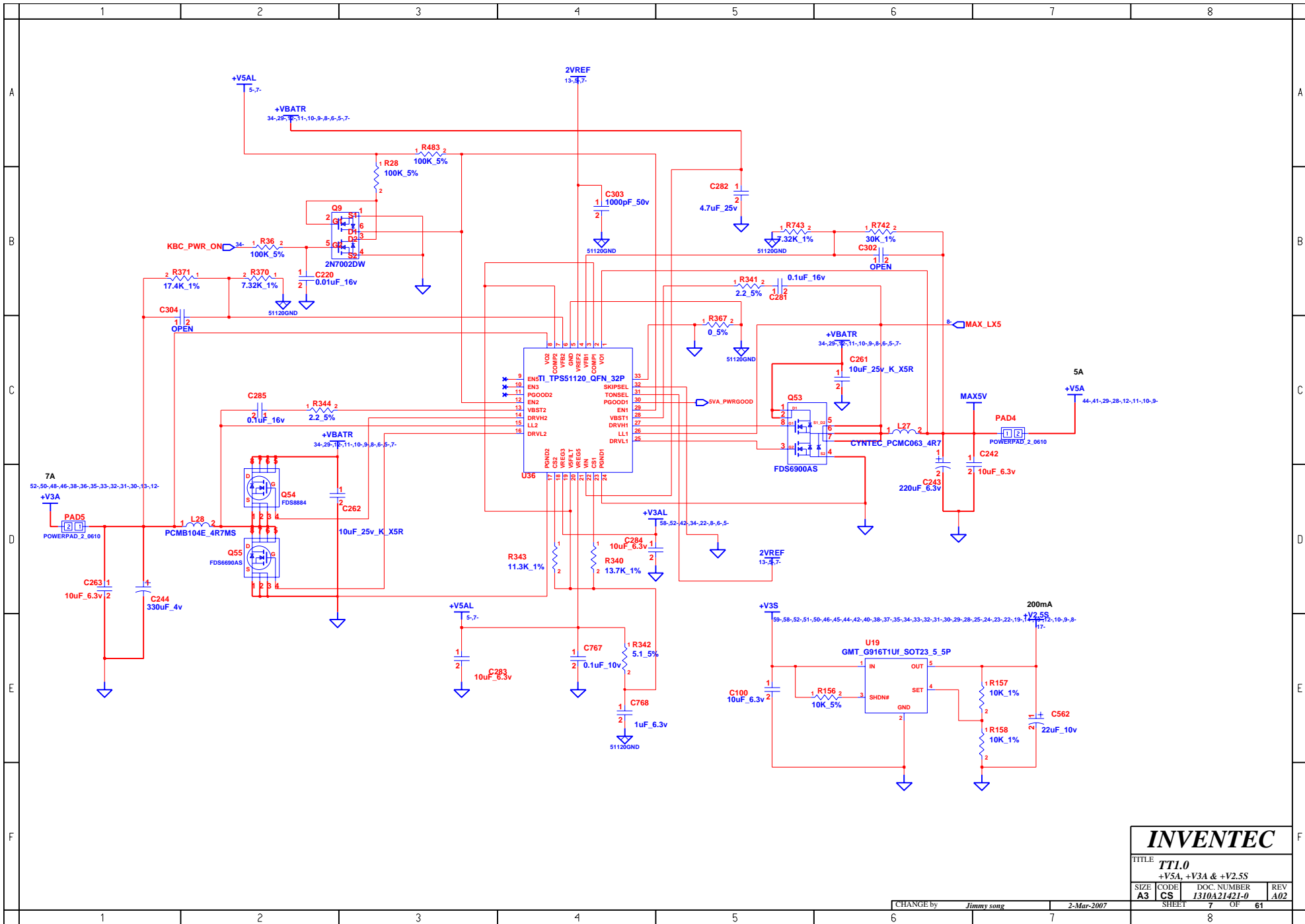
TITLE			
TT1.0			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02



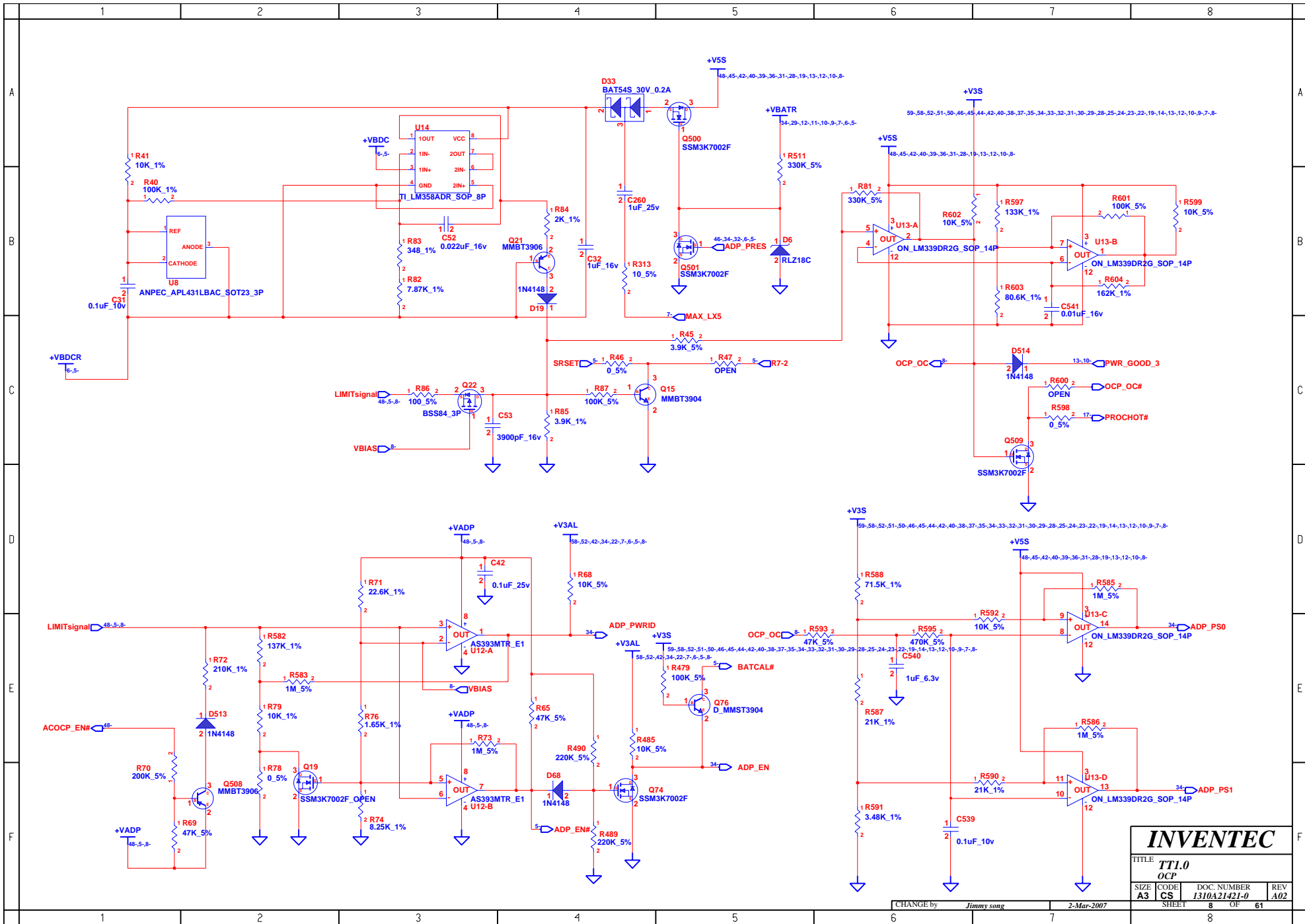
Note:
high power trace

Icharger=3A
CELLSEL#=0, Vcharger=12.6V
CELLSEL#=1, Vcharger=16.8V

INVENTEC			
TITLE TT1.0			
DC & BATTERY CHARGER			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
SHEET		OF	
5		61	



INVENTEC			
TITLE TTL0			
+V5A, +V3A & +V2.5S			
SIZE A3	CODE CS	DOC. NUMBER I310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 7		OF 61	



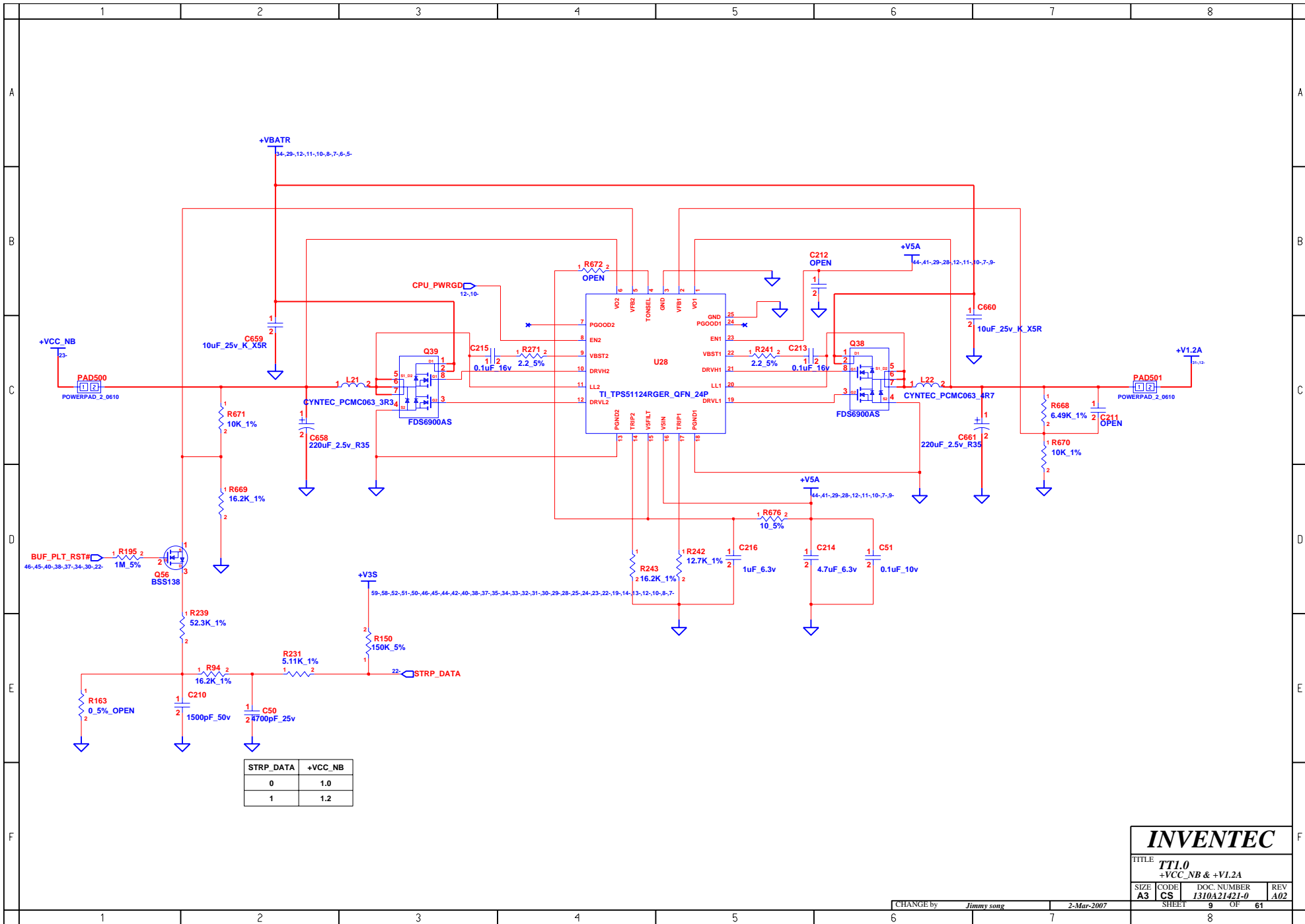
INVENTEC

TITLE **TTI.0**

OCF

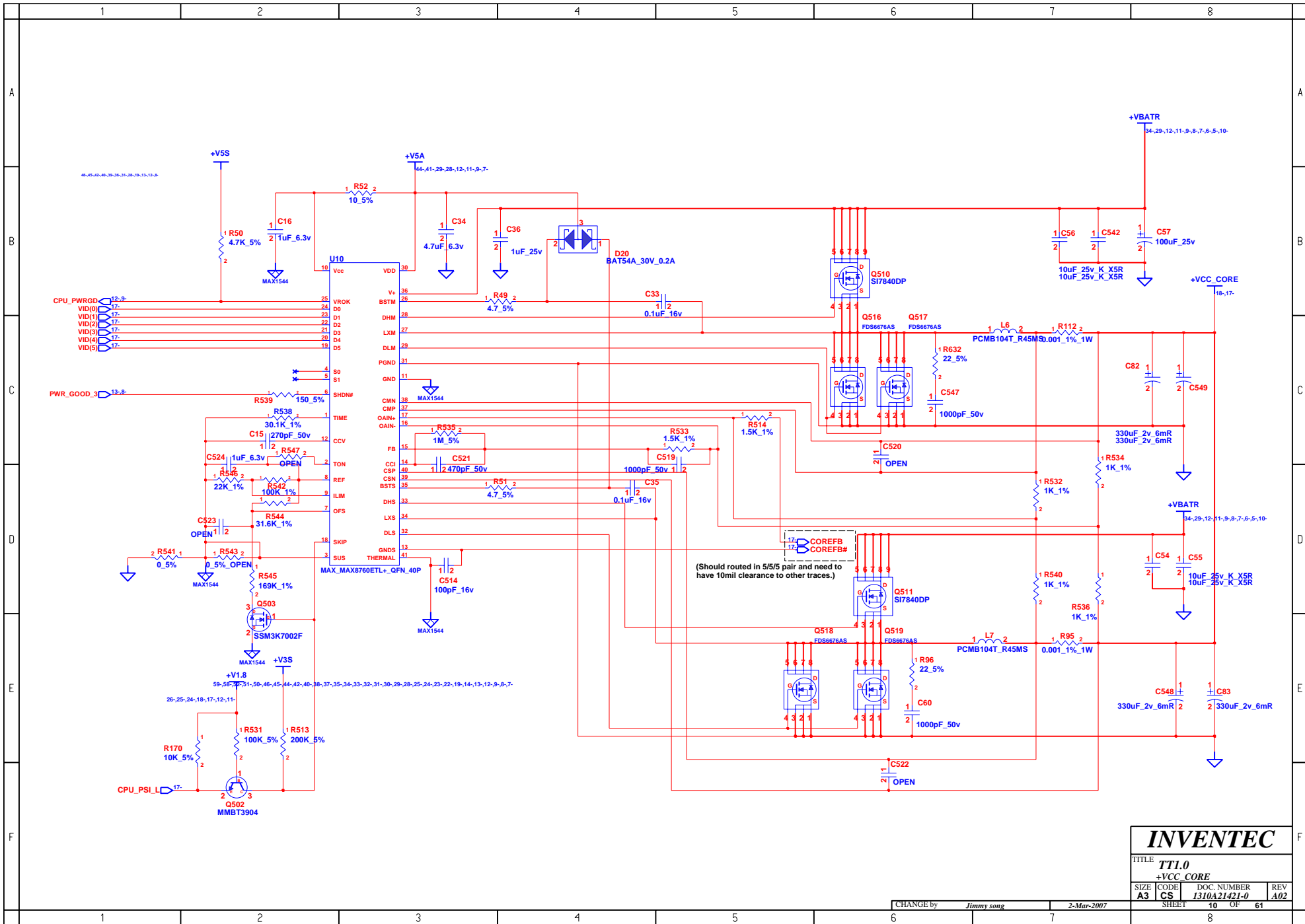
SIZE CODE DOC NUMBER REV
A3 CS 1310A21421-0 A02

CHANGE by Jimmy song 2-Mar-2007 SHEET 8 OF 61

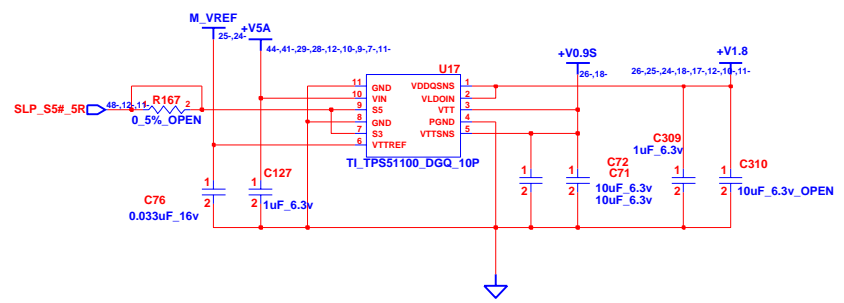
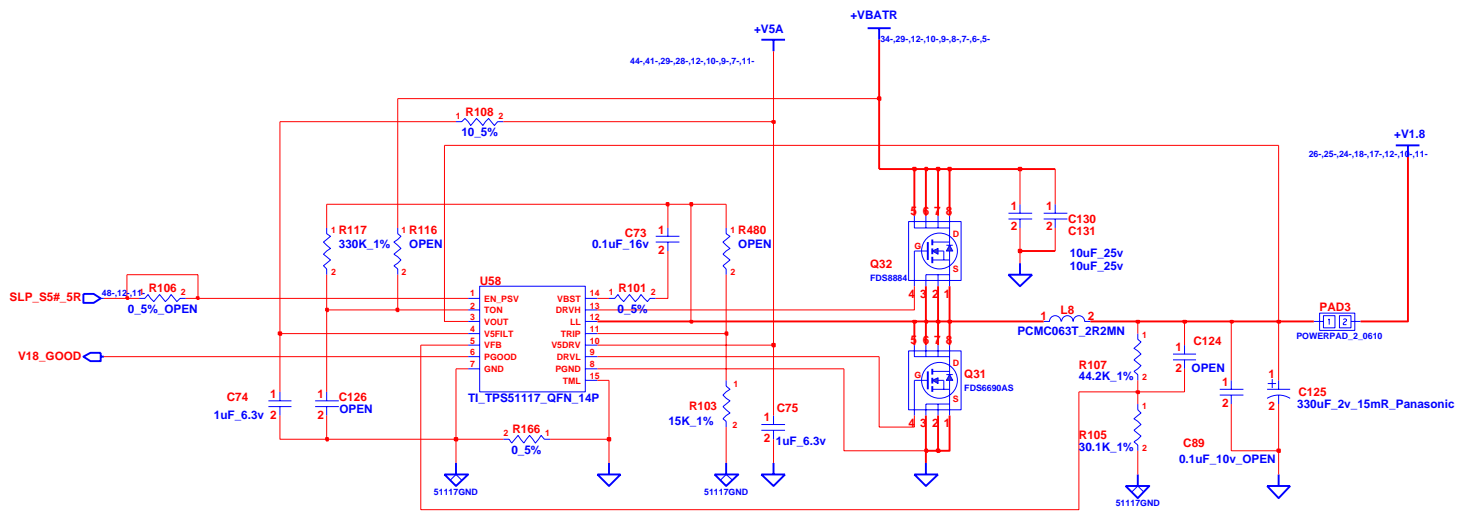


INVENTEC

TITLE			TTI.0		
+VCC_NB & +V1.2A					
SIZE	CODE	DOC. NUMBER	REV		
A3	CS	I310A21421-0	A02		
CHANGE by			JIMMY SONG		
DATE			2-MAR-2007		
SHEET			9 OF 61		



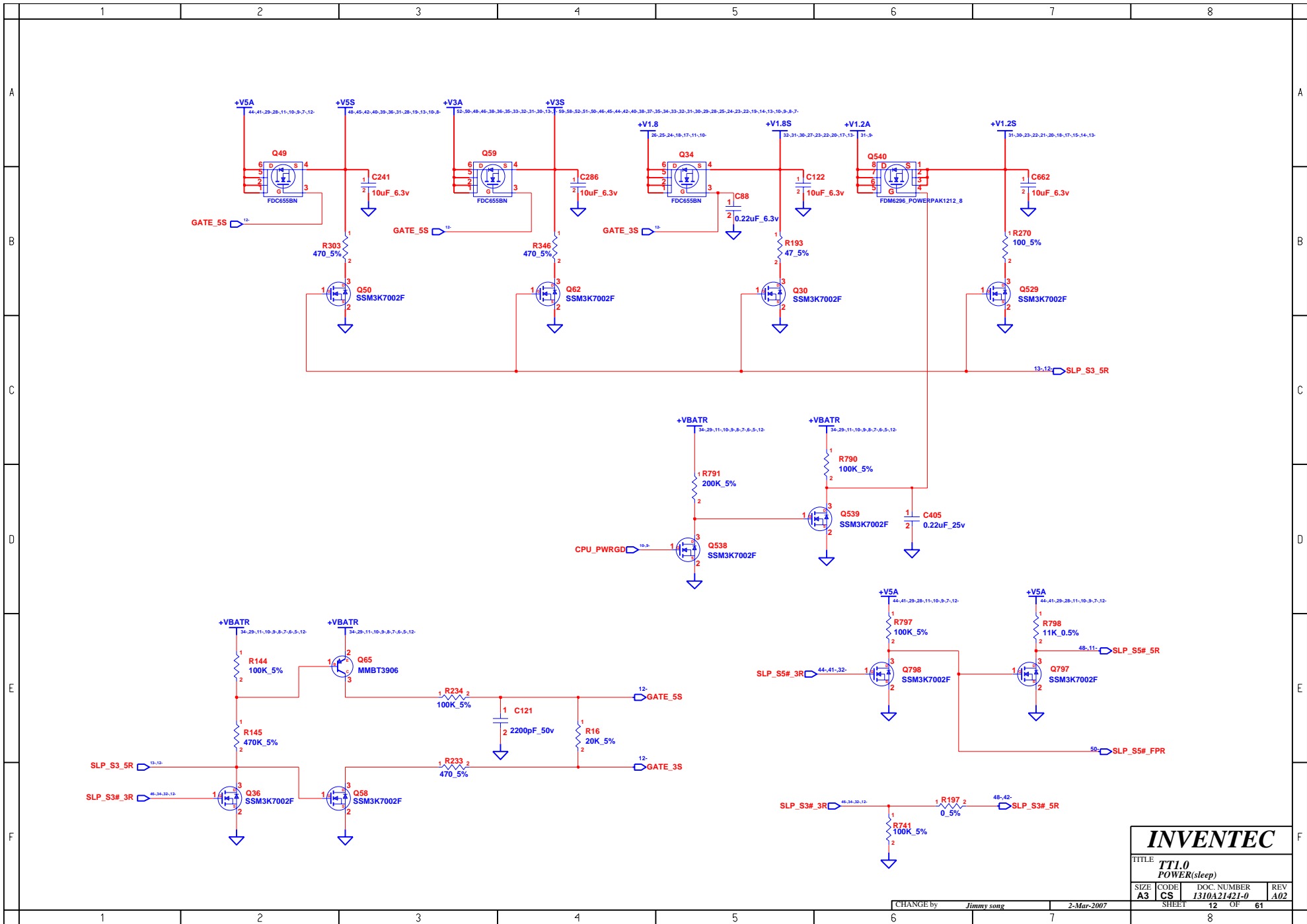
INVENTEC			
TITLE TTL0 +VCC CORE			
SIZE A3	CODE CS	DOC. NUMBER I310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 10		OF 61	



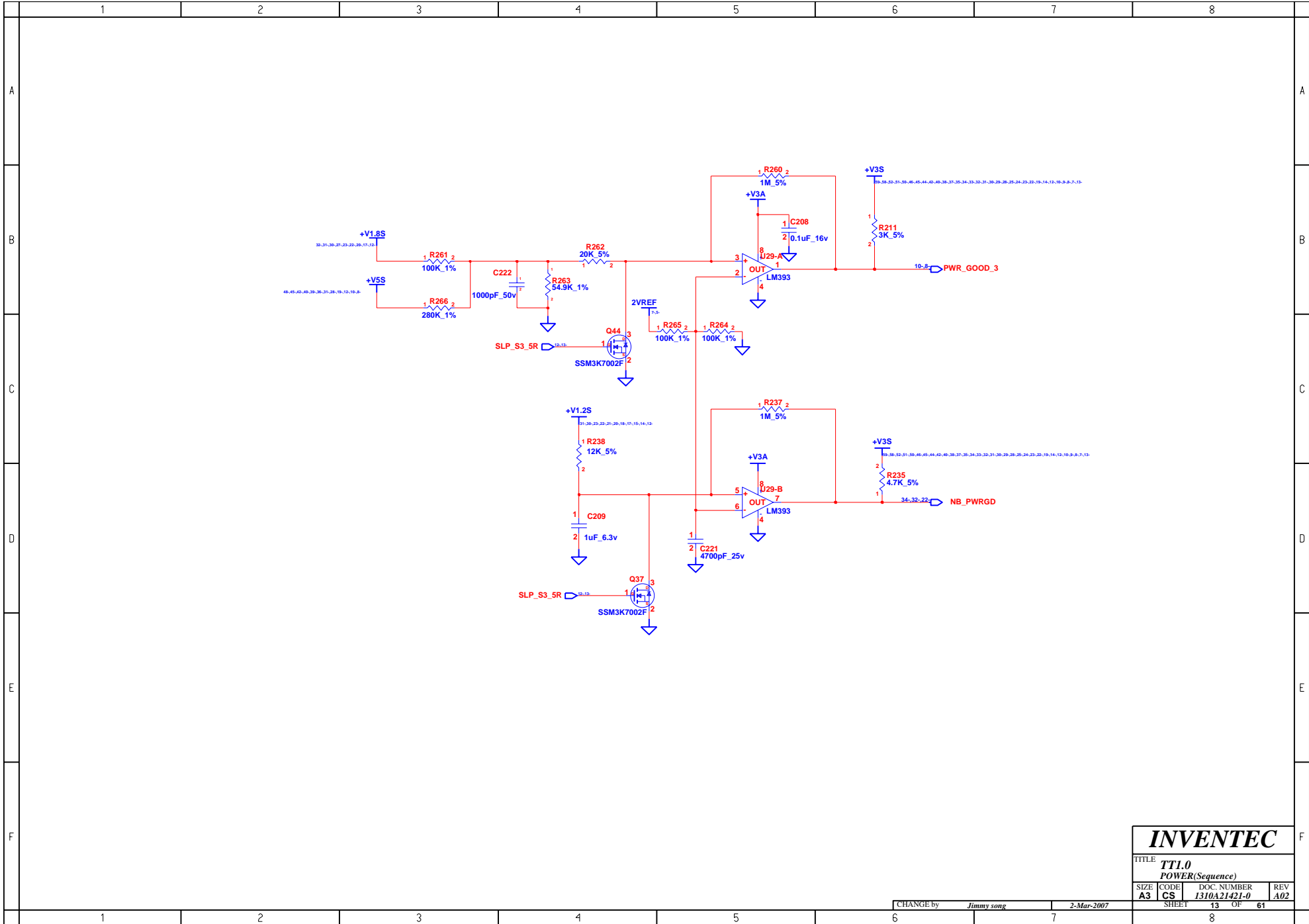
NOTE: DDR2 REGULATOR

INVENTEC

TITLE			
T11.0			
DDR2 POWER			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A21421-0	A02
CHANGE by		SHEET	
Jimmy song		11 OF 61	



INVENTEC			
TITLE TTL0 POWER(sleep)			
SIZE A3	CODE CS	DOC. NUMBER I310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 12		OF 61	



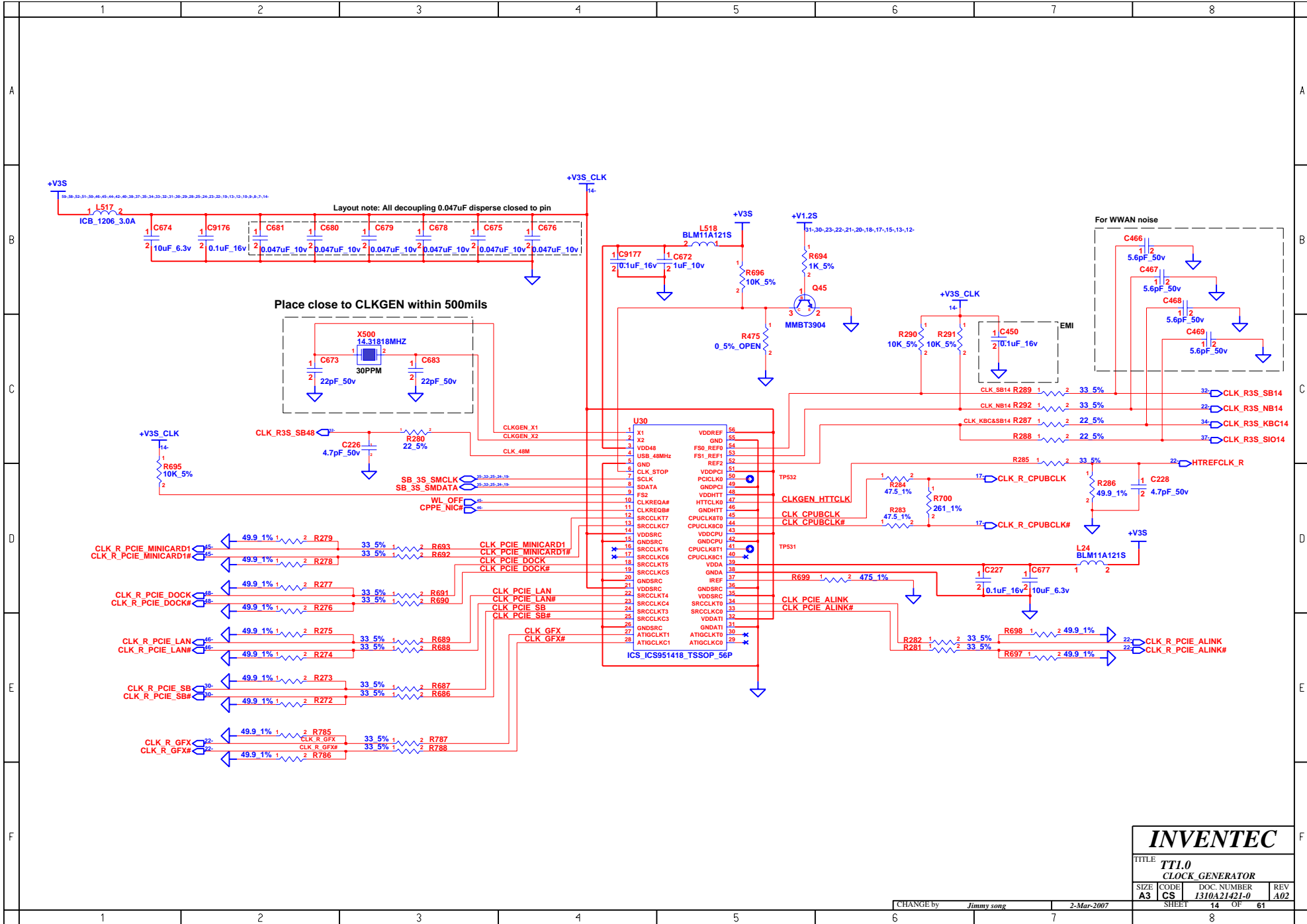
INVENTEC

TITLE **TTI.0**
POWER(Sequence)

SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
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CHANGE by *Jimmy song* 2-Mar-2007

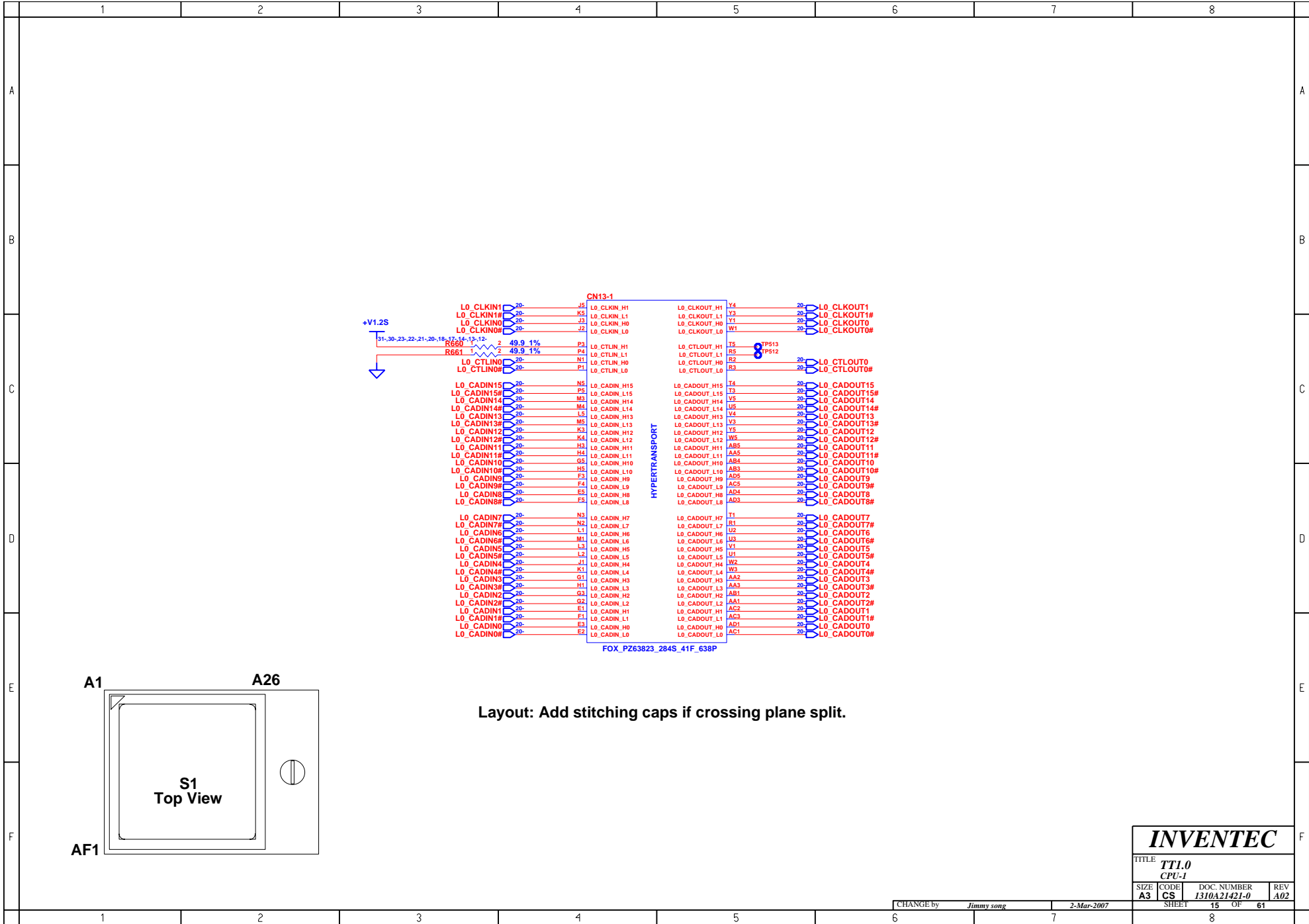
SHEET 13 OF 61



INVENTEC

TITLE			
TT1.0			
CLOCK GENERATOR			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A21421-0	A02
CHANGE by			SHEET
Jimmy song			14 OF 61

2-Mar-2007



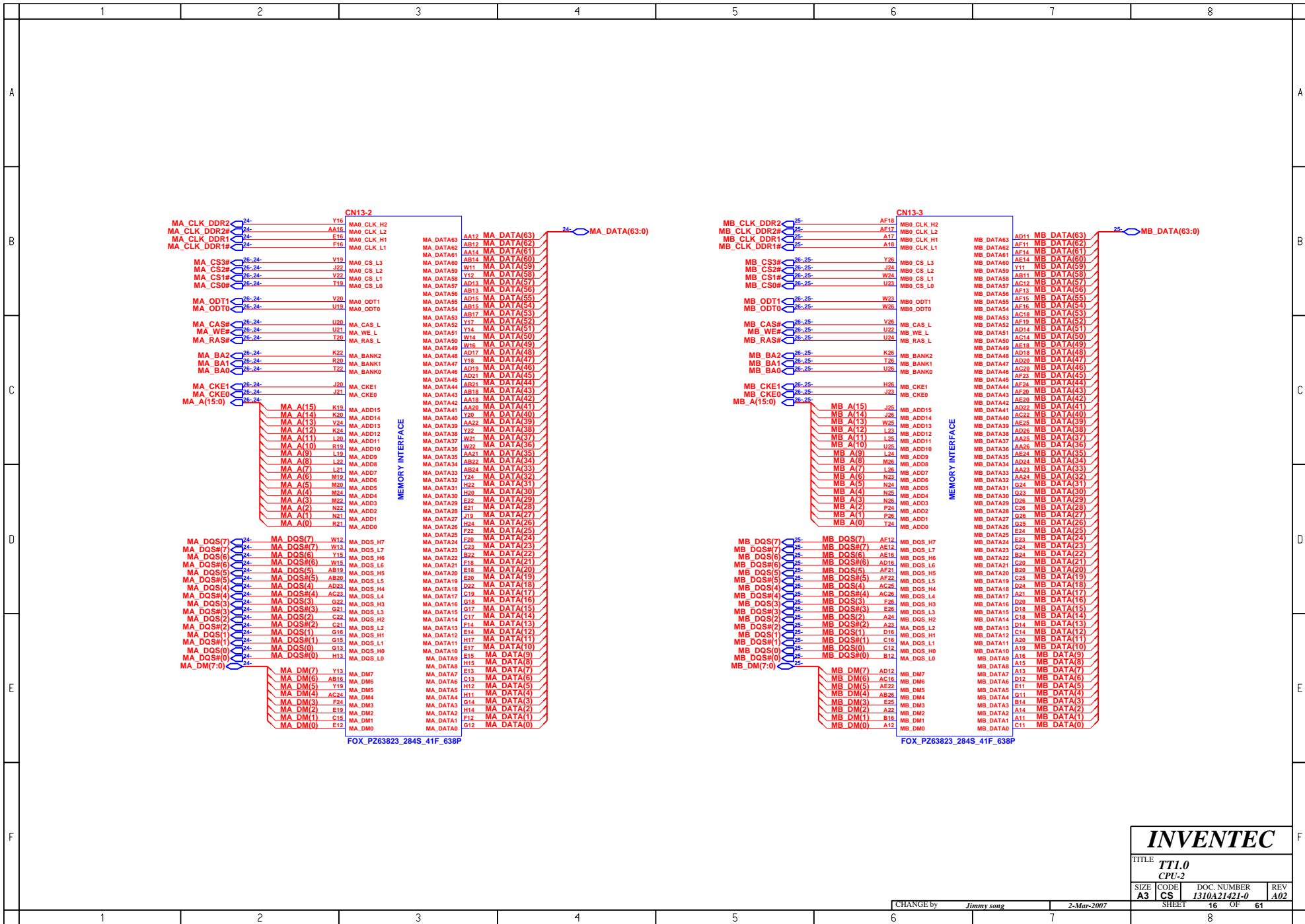
Layout: Add stitching caps if crossing plane split.

INVENTEC

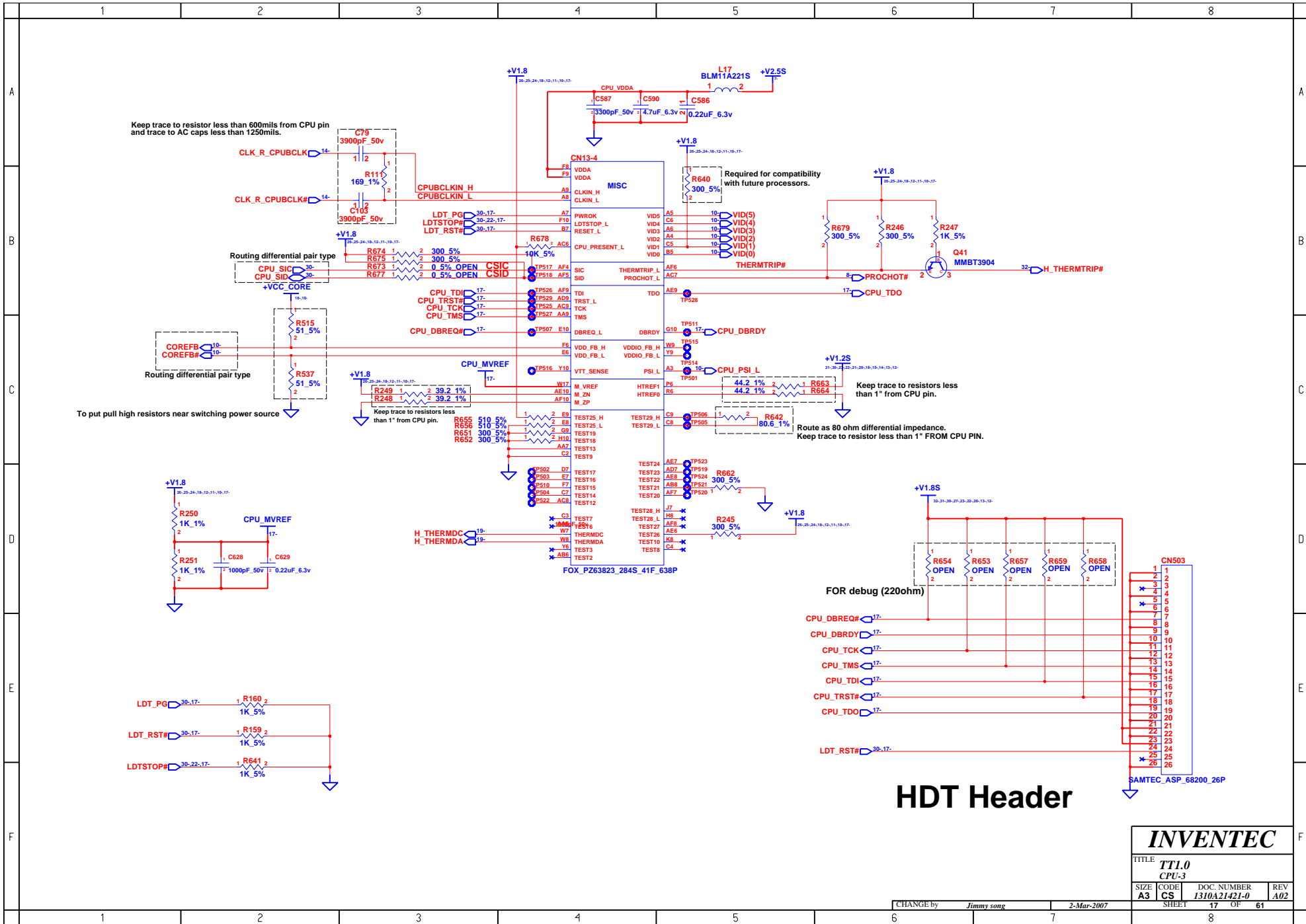
TITLE TTL0 CPU-1			
SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 15		OF 61	

CHANGE by Jimmy song 2-Mar-2007

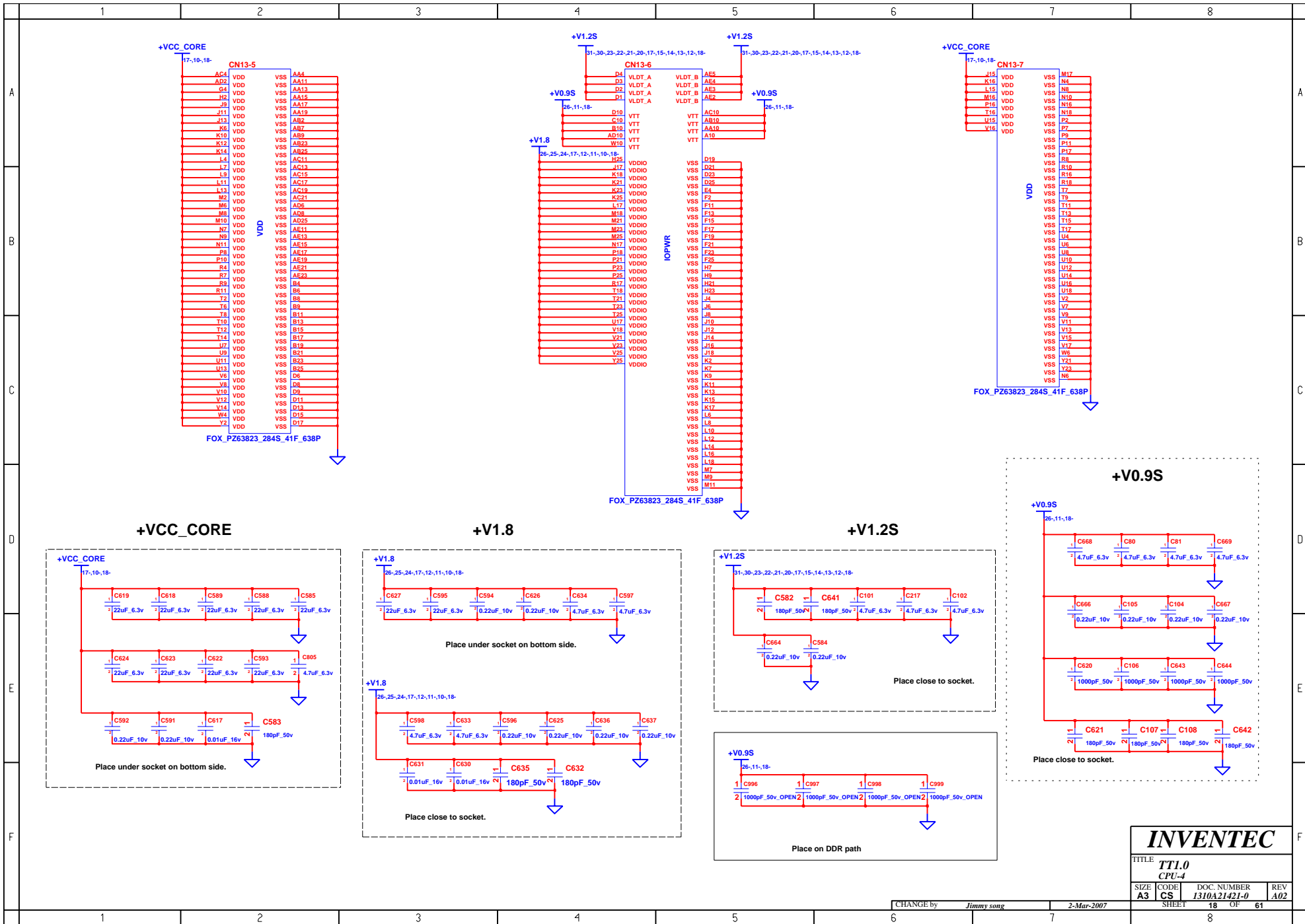
SHEET 15 OF 61



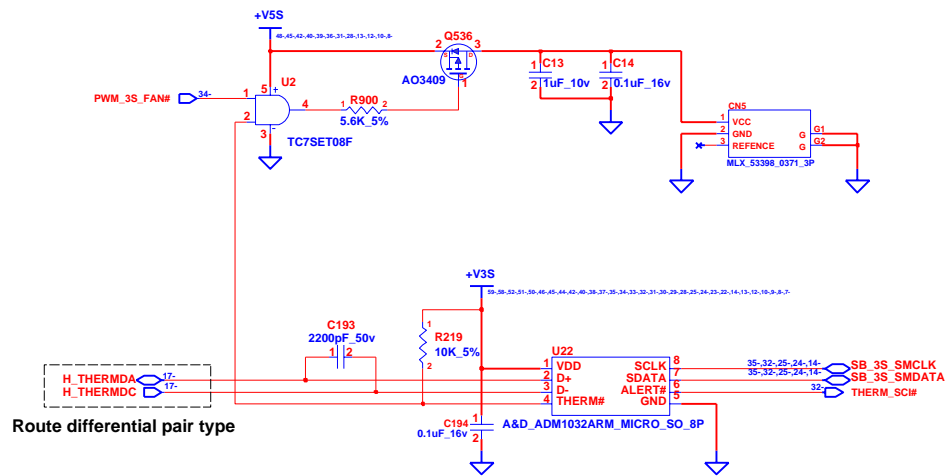
INVENTEC			
TITLE TTI.0 CPU-2			
SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 16		OF 61	



INVENTEC			
TITLE TT1.0			
CPU-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by		Jimmy song	
		2-Mar-2007	
SHEET		17 OF 61	



INVENTEC			
TITLE TTL0 CPU-4			
SIZE A3	CODE CS	DOC. NUMBER I310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 18		OF 61	



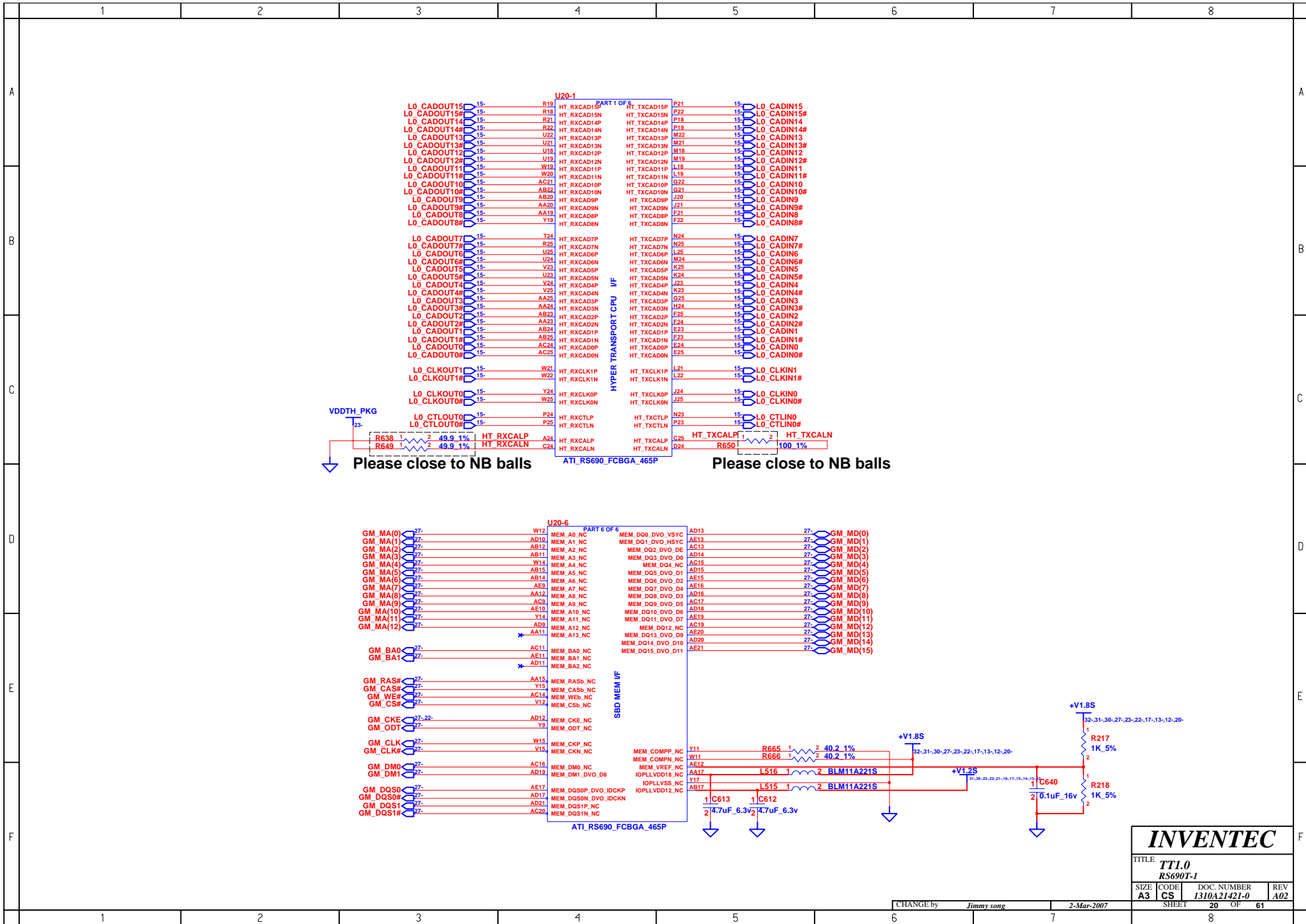
LAYOUT Note: Put the thermal sensor close to CPU.

INVENTEC

TITLE		
TT1.0		
THERMAL&FAN CONTROLLER		
SIZE	CODE	DOC. NUMBER
A3	CS	1310A21421-0
REV		REV
A02		A02

CHANGE by Jimmy song 2-Mar-2007

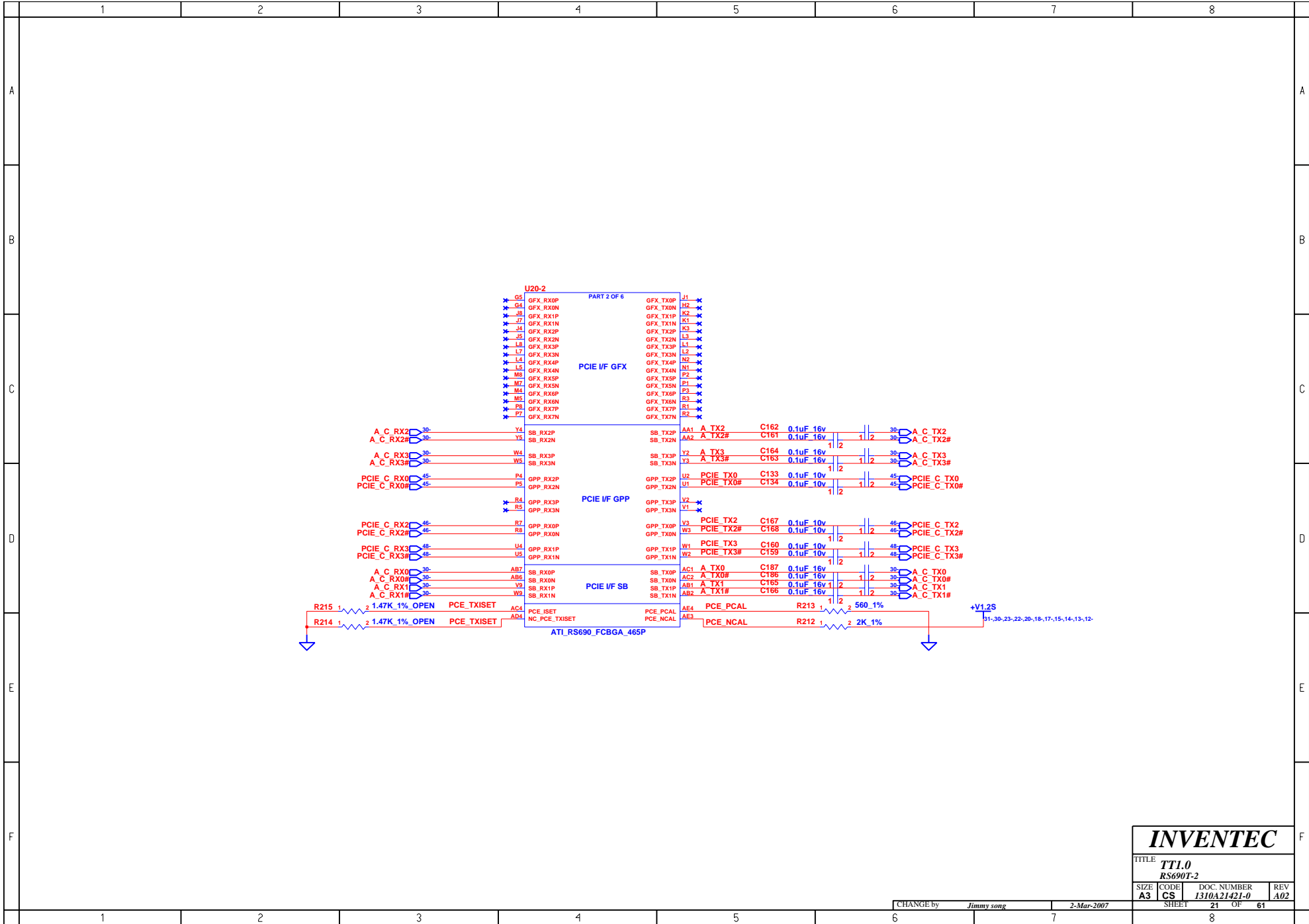
SHEET 19 OF 61



Please close to NB balls

Please close to NB balls

INVENTEC			
TITLE TT1.0 RS690T-1			
SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 20		OF 61	

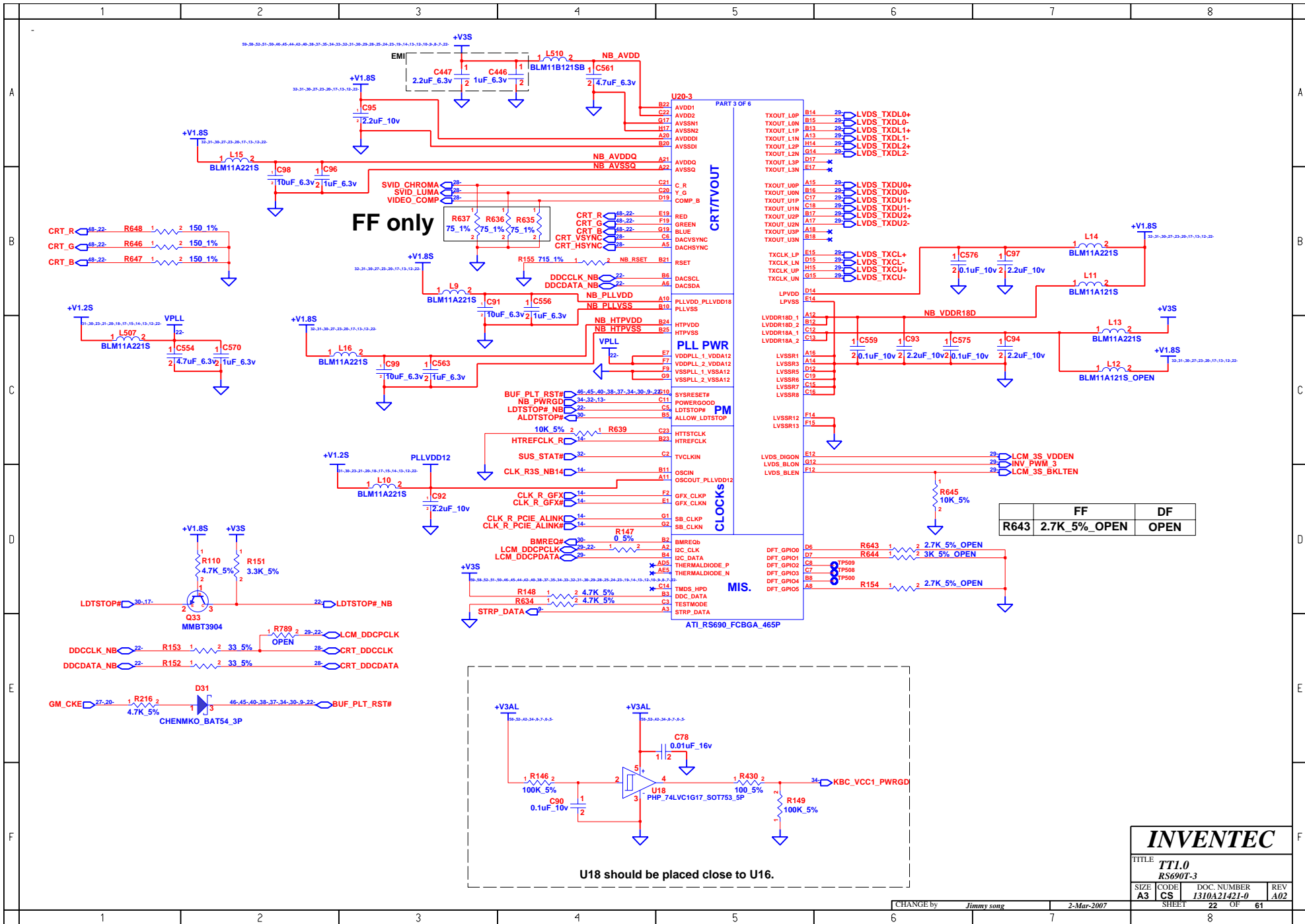


INVENTEC

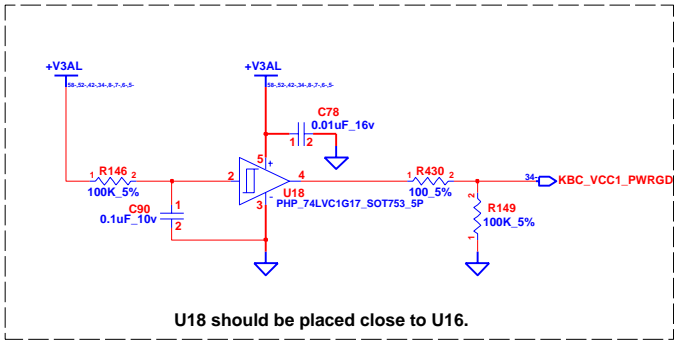
TITLE
TTL0
RS690T-2

SIZE CODE DOC. NUMBER REV
A3 CS 1310A21421-0 A02

SHEET 21 OF 61



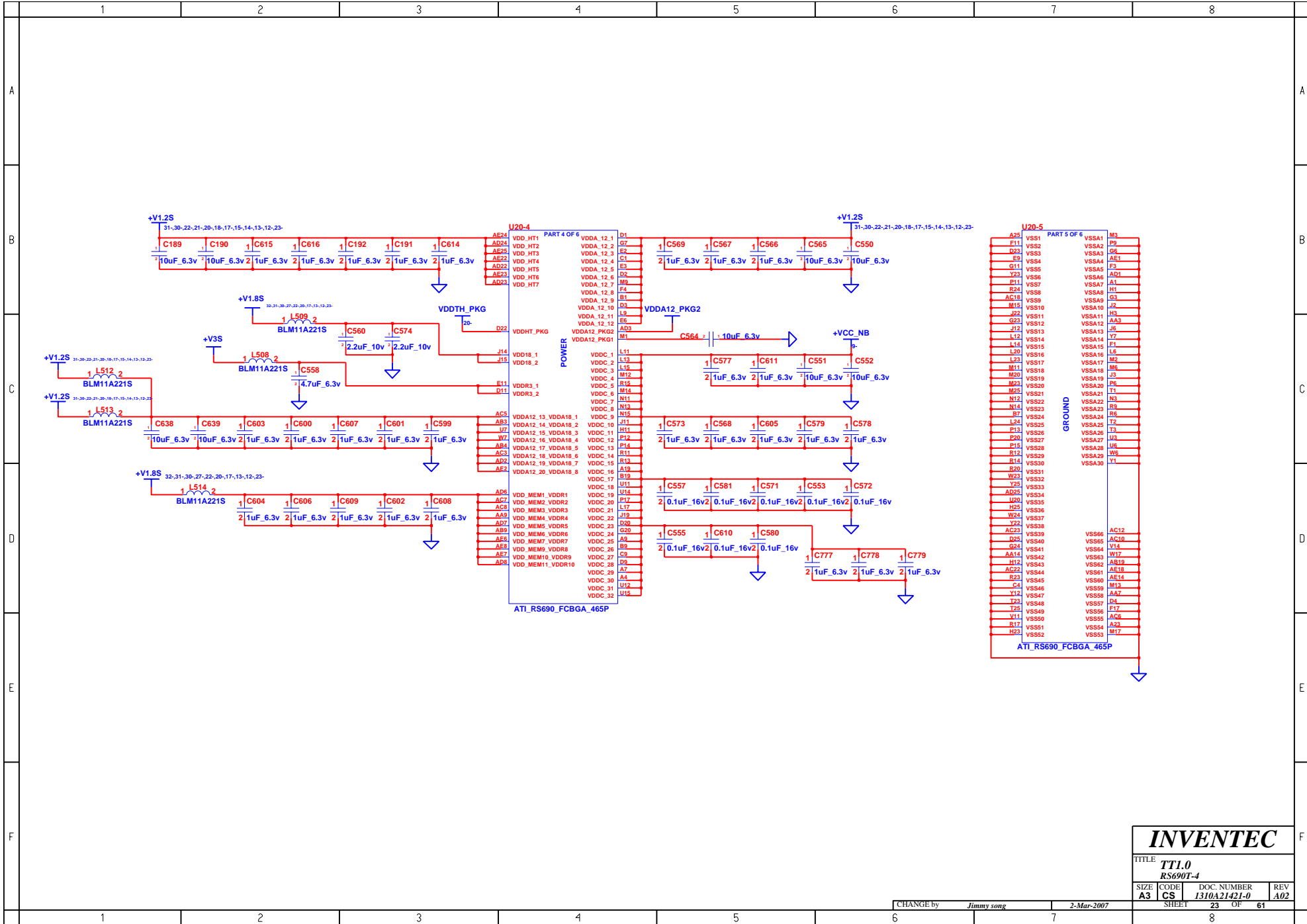
	FF	DF
R643	2.7K 5% OPEN	OPEN



U18 should be placed close to U16.

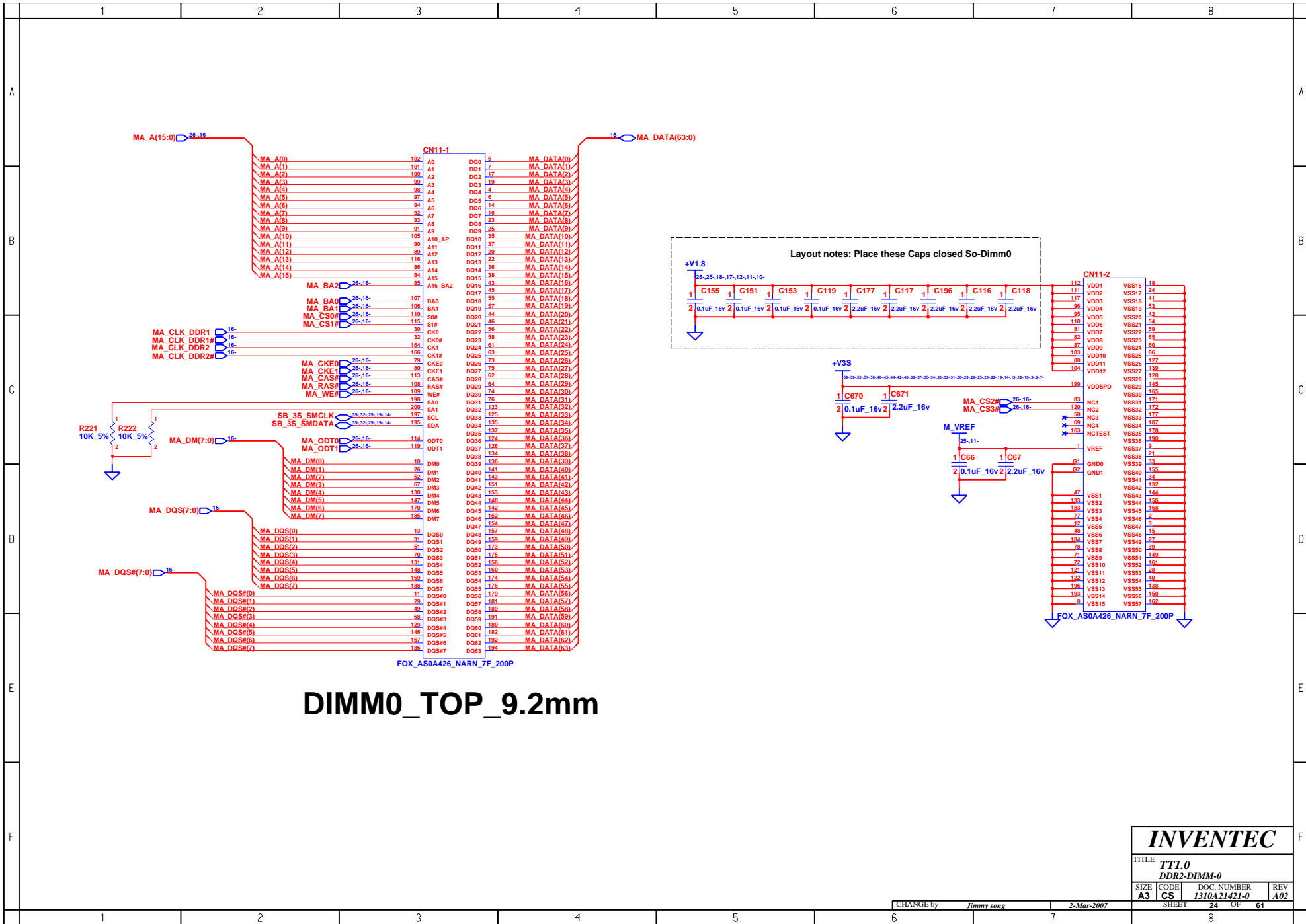
INVENTEC

TITLE			
TT1.0			
RS690T-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A21421-0	A02
SHEET		22	OF 61



INVENTEC

TITLE			
TT1.0			
RS690T-4			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02



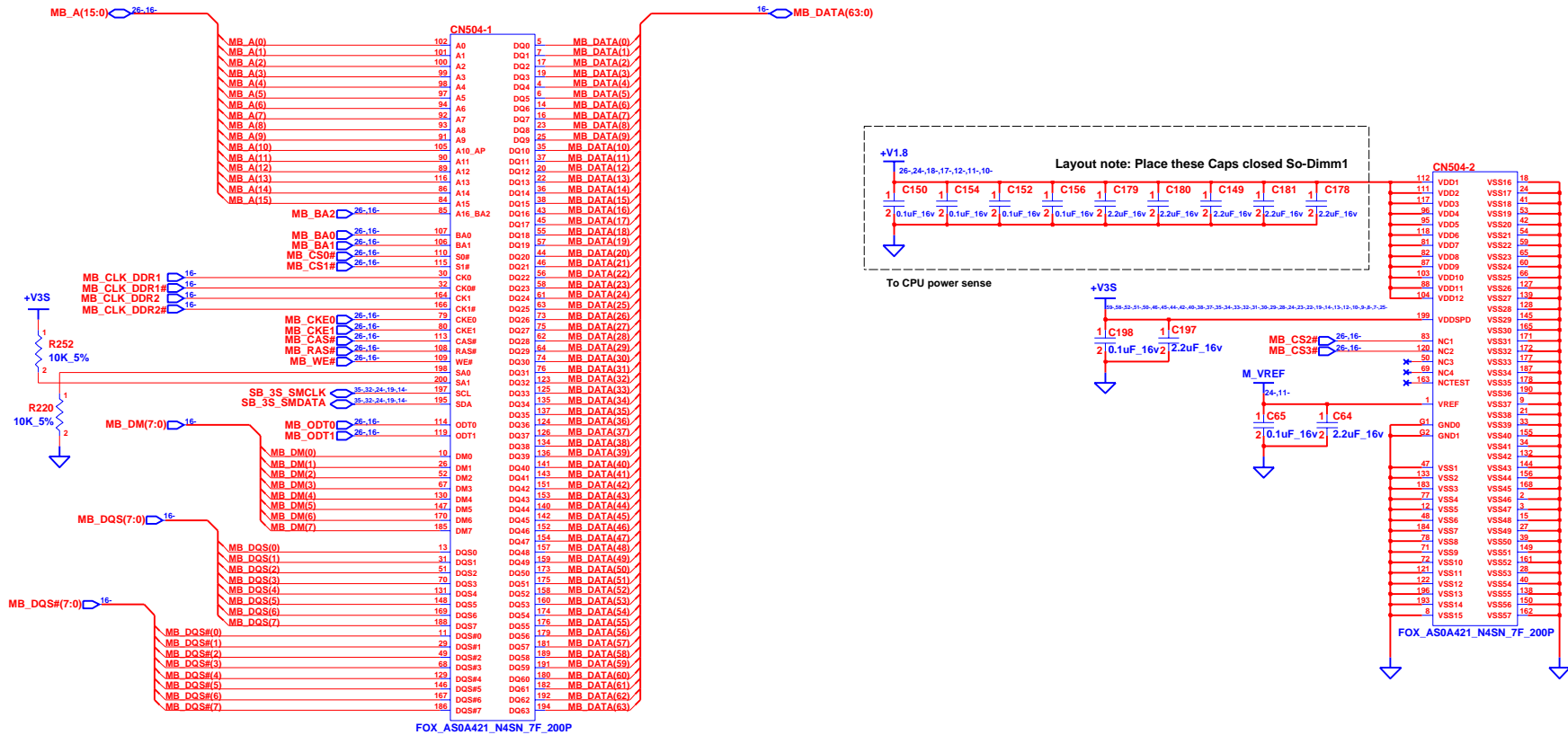
DIMM0_TOP_9.2mm

INVENTEC

TITLE **TT1.0**
DDR2-DIMM-0

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

CHANGE by *Jimmy song* 2-Mar-2007 SHEET 24 OF 61



DIMM1_BTM_4.0mm

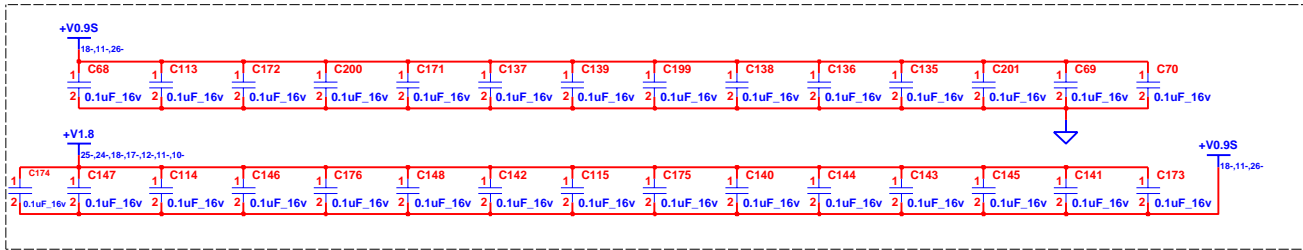
INVENTEC

TITLE
TT1.0
DDR2-DIMM-1

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

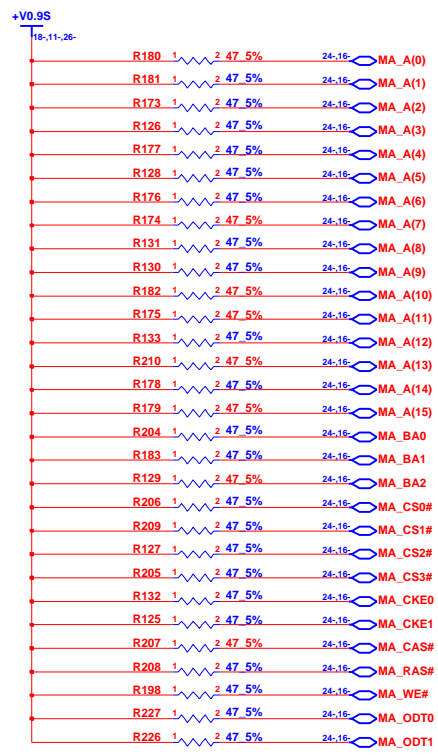
CHANGE by Jimmy song 2-Mar-2007

SHEET 25 OF 61

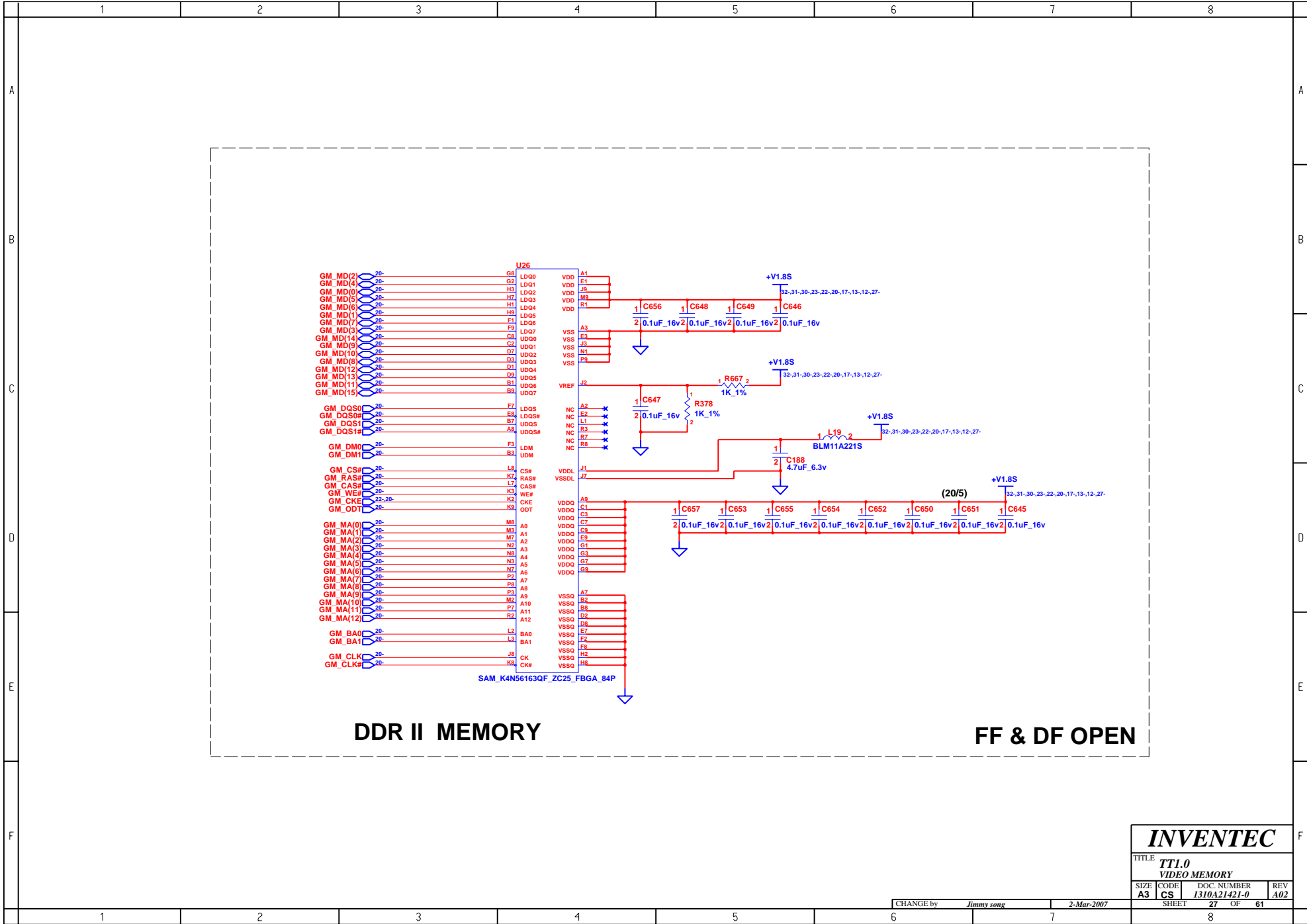


To CPU power sense

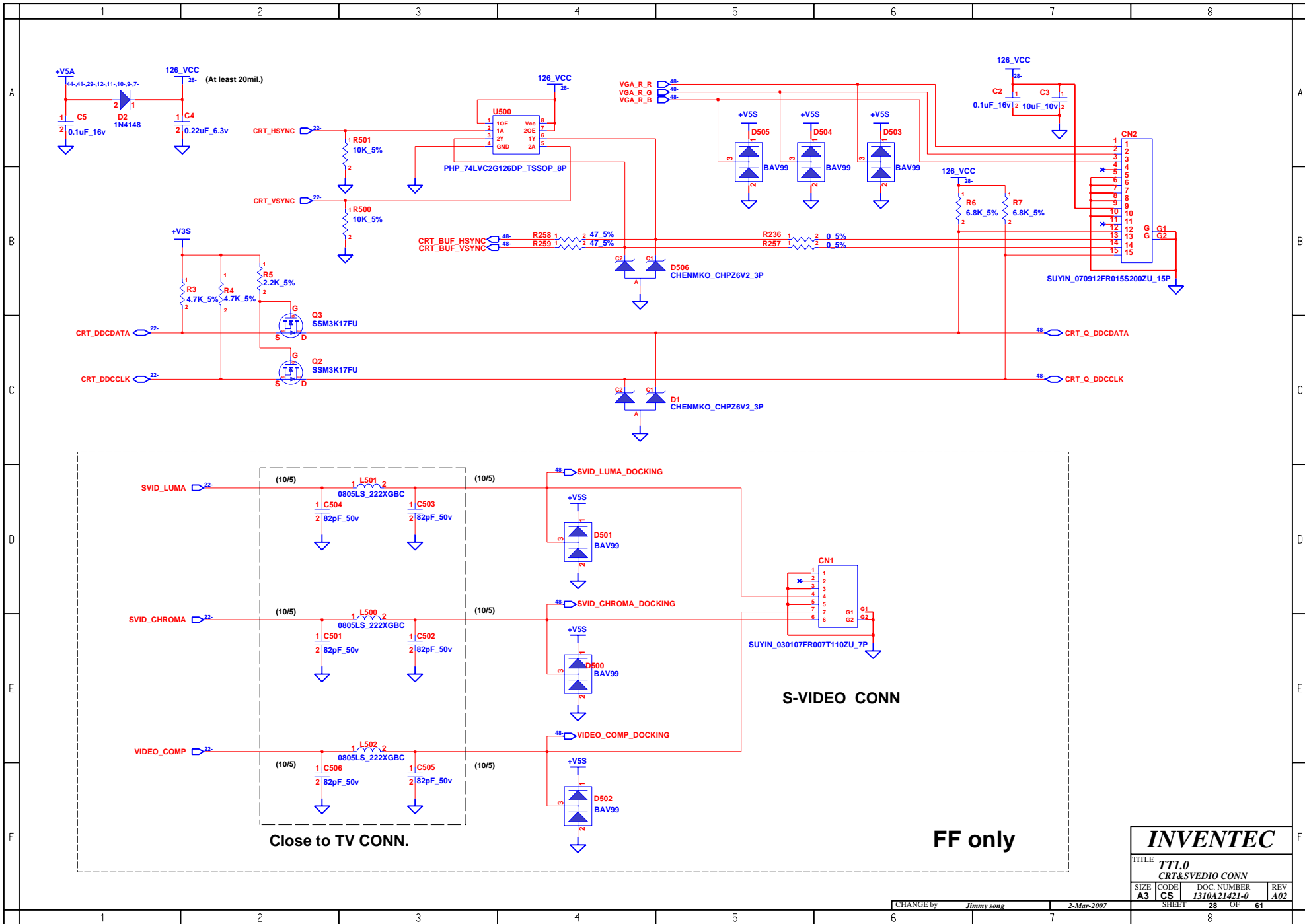
Place CAPs close to DIMM



INVENTEC			
TITLE TTL0			
DDR2-DAMPING			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A21421-0	A02
CHANGE by		SHEET	OF
<i>Jimmy song</i>		26	61



INVENTEC			
TITLE TT1.0			
VIDEO MEMORY			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by		2-Mar-2007	
SHEET		27 OF 61	
		8	



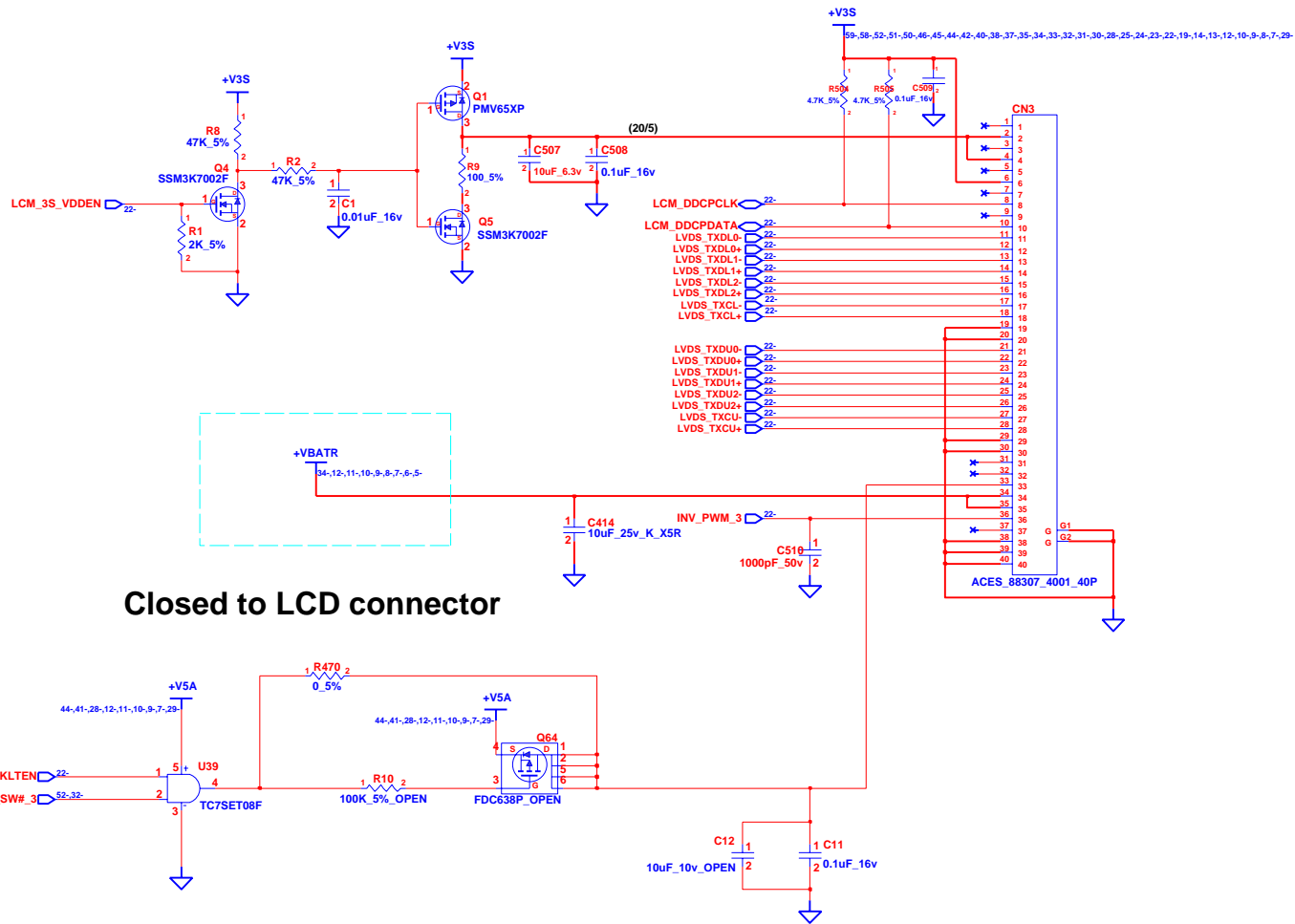
INVENTEC

TITLE
TTI.0
CRT&SVEDIO CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

SHEET 28 OF 61

CHANGE by Jimmy song 2-Mar-2007



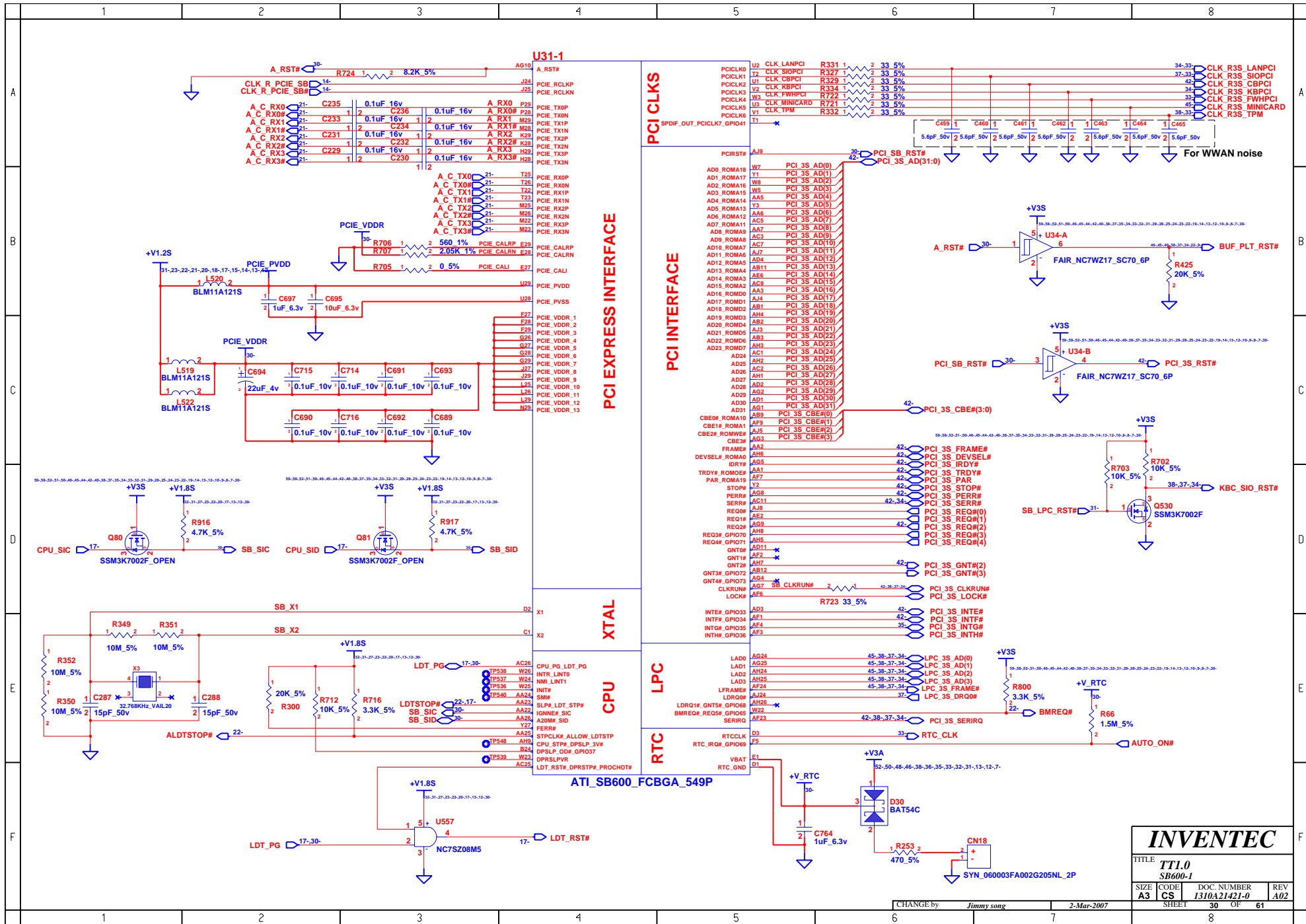
Closed to LCD connector

INVENTEC

TITLE			
TTL0			
LCD CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

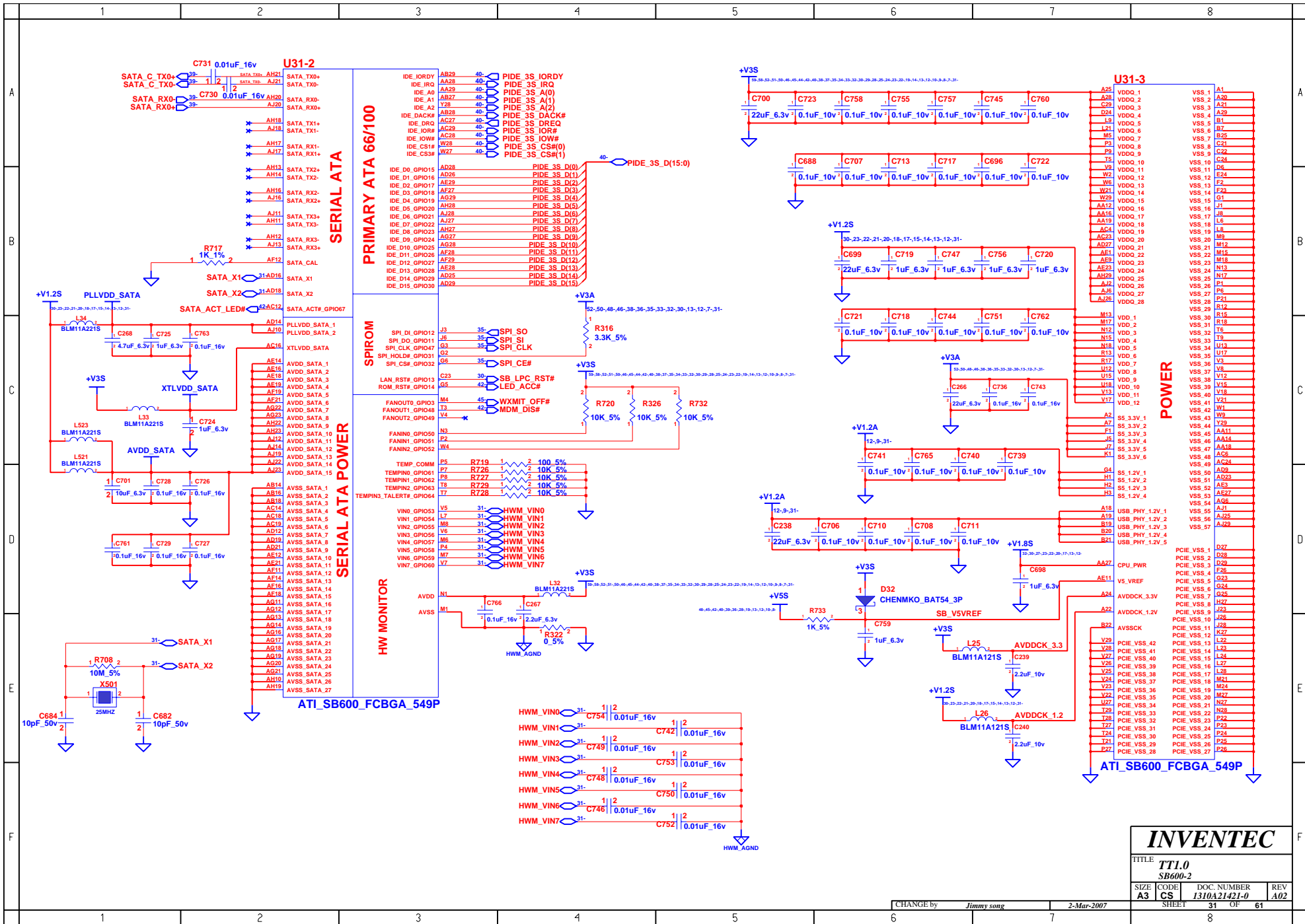
CHANGE by Jimmy song 2-Mar-2007

SHEET 29 OF 61



INVENTEC

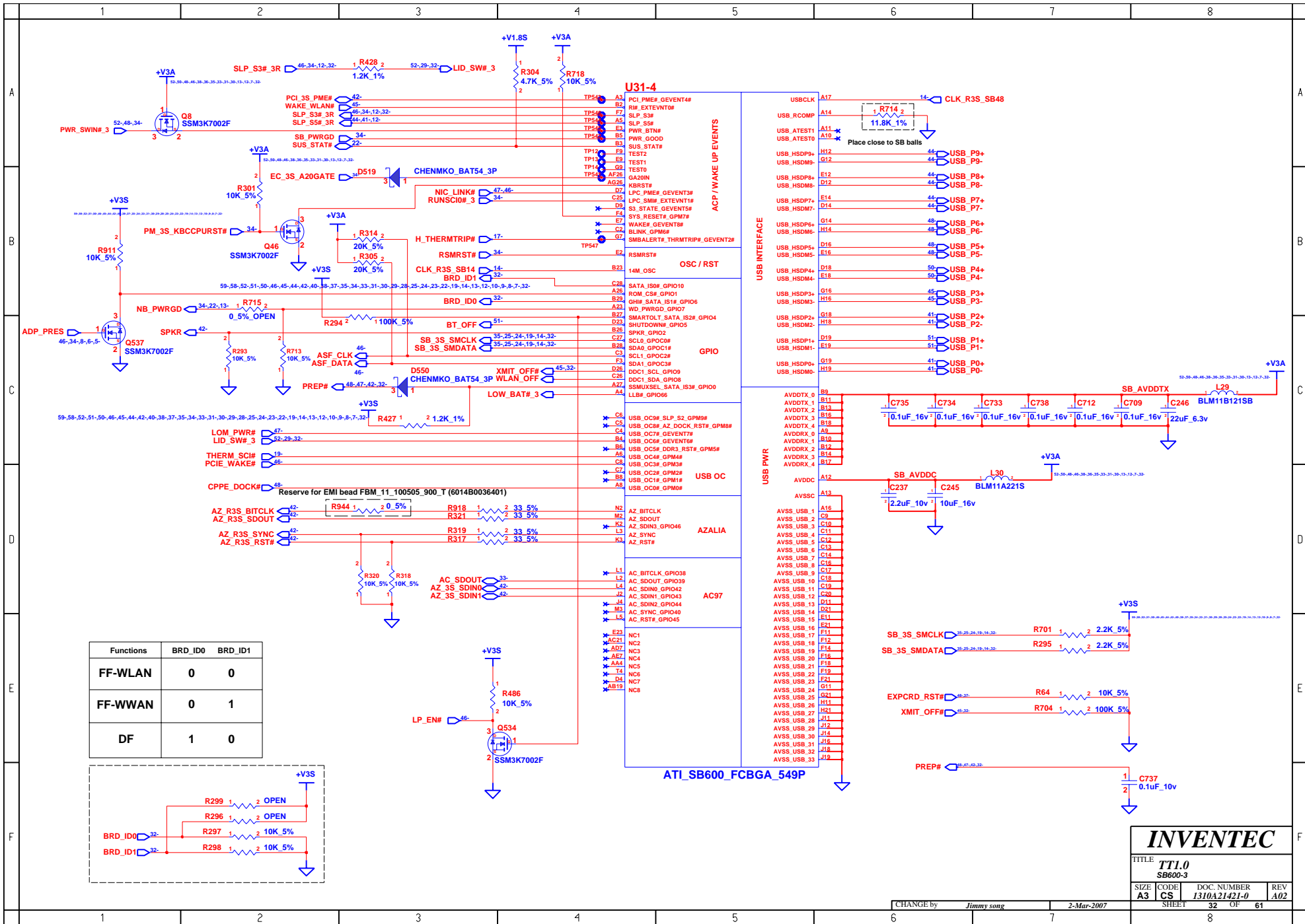
TITLE TT1.0 SB600-1			
SIZE A3	CODE CS	DOC. NUMBER 1310A2142-0	REV A02
SHEET 30		OF 61	



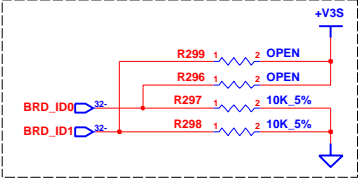
INVENTEC

TITLE
**TI1.0
 SB600-2**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02



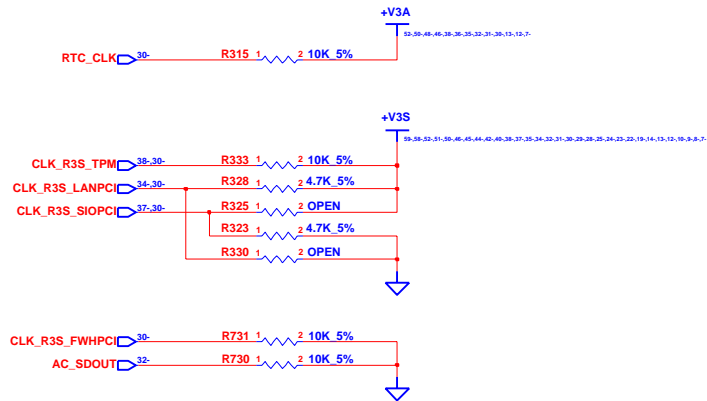
Functions	BRD_ID0	BRD_ID1
FF-WLAN	0	0
FF-WWAN	0	1
DF	1	0



INVENTEC
 TITLE **TT1.0 SB600-3**
 SIZE **A3** CODE **CS** DOC. NUMBER **1310A21421-0** REV **A02**
 SHEET **32** OF **61**

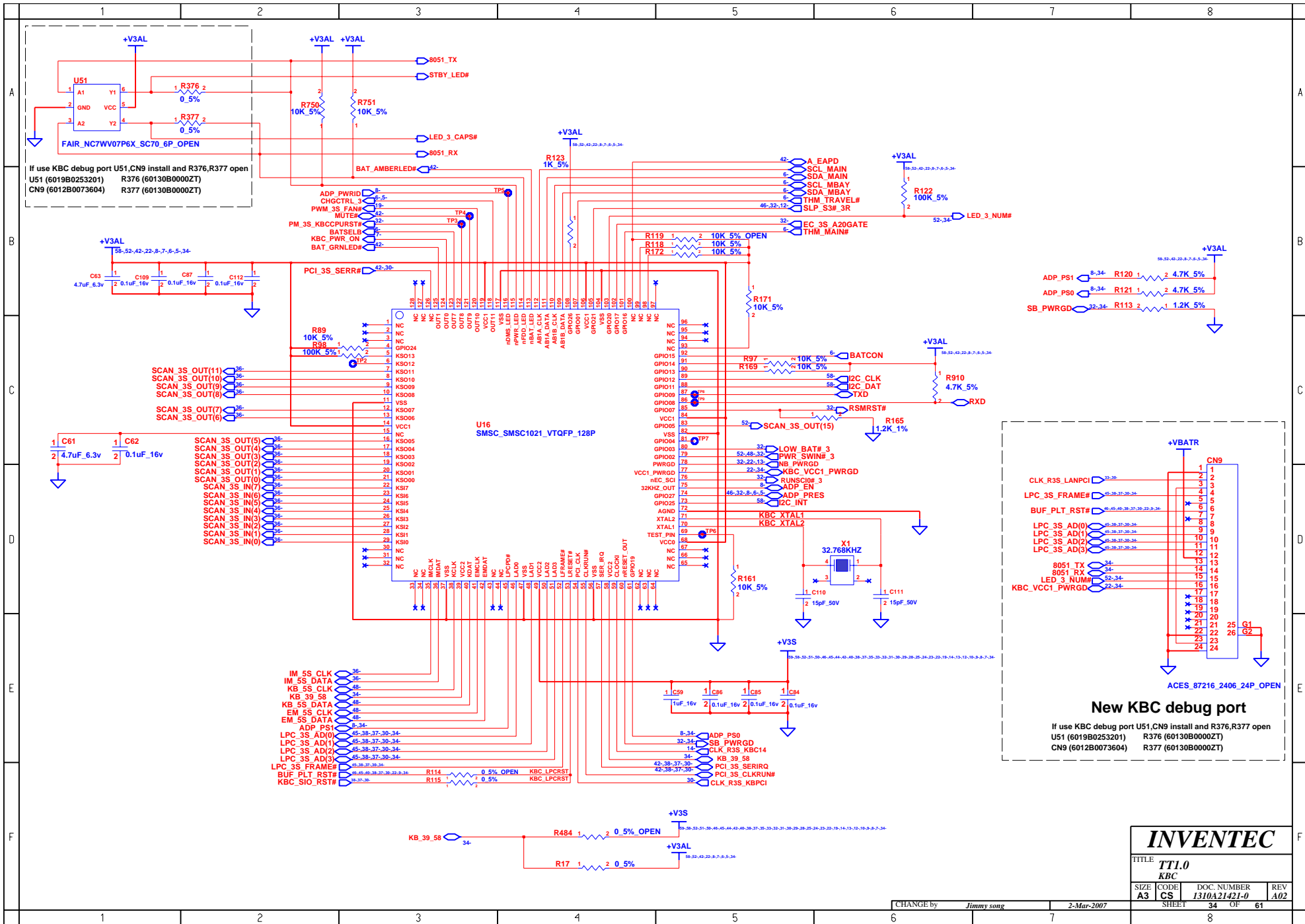
Required Straps:

	AC_SDOUT	RTC_CLK	CLK_R3S_FWHPCI	PCI_CLK6	PCI_CLK0 PCI_CLK1
PULL HIGH	USE DEBUG STRAPS	INTERNAL RTC	USE INT. PLL48	CPU K8	HH: PCI ROM HL: SPI ROM
PULL LOW	IGNORE DEBUG STRAPS	EXTERNAL RTC	USE EXT. 48M CLK	CPU P4	LH: LPC ROM LL: FWH ROM

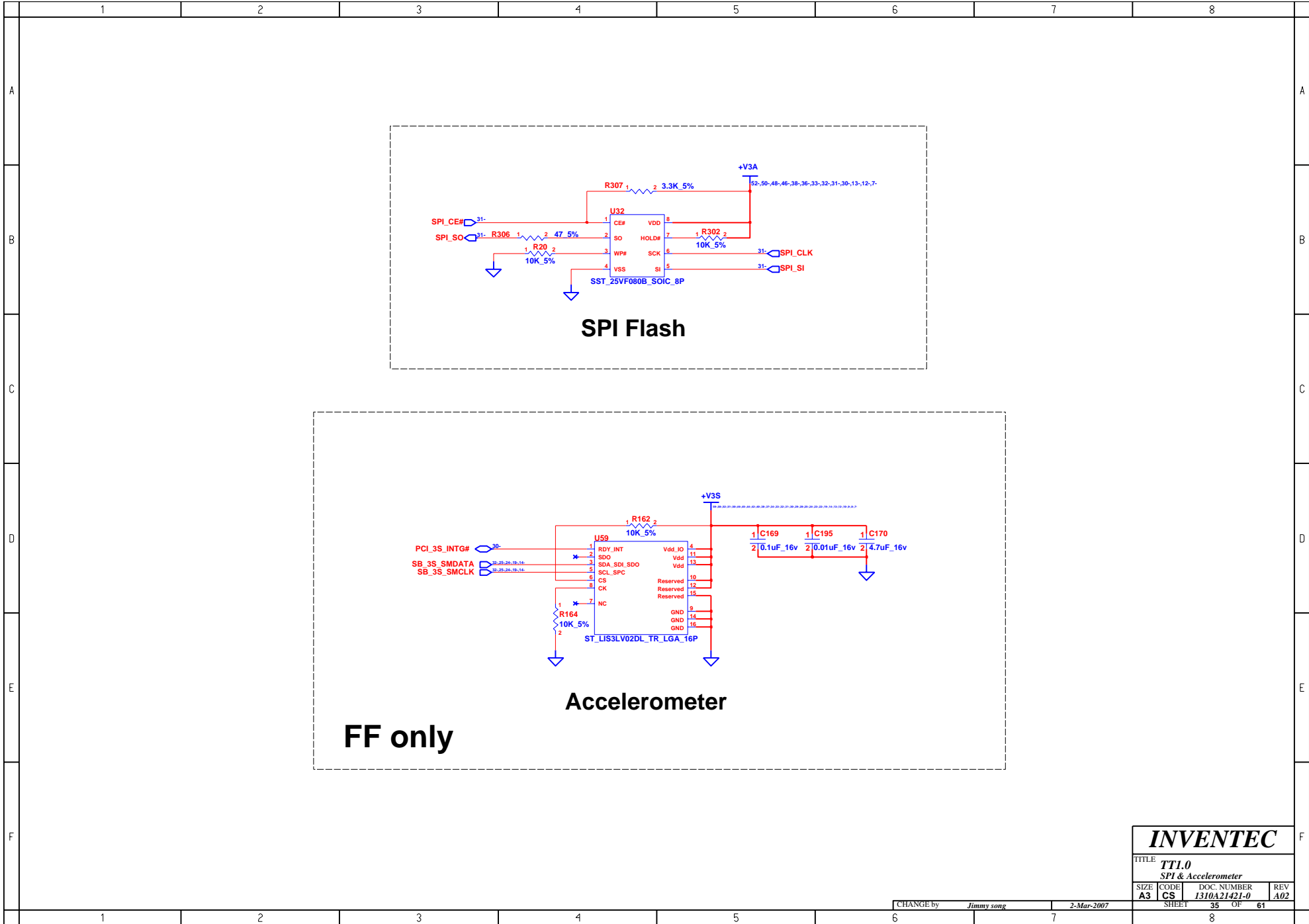


INVENTEC

TITLE <i>TT1.0</i>			
SB600-4			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	SHEET 33 OF 61



INVENTEC			
TITLE TT1.0 KBC			
SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 34		OF 61	



INVENTEC

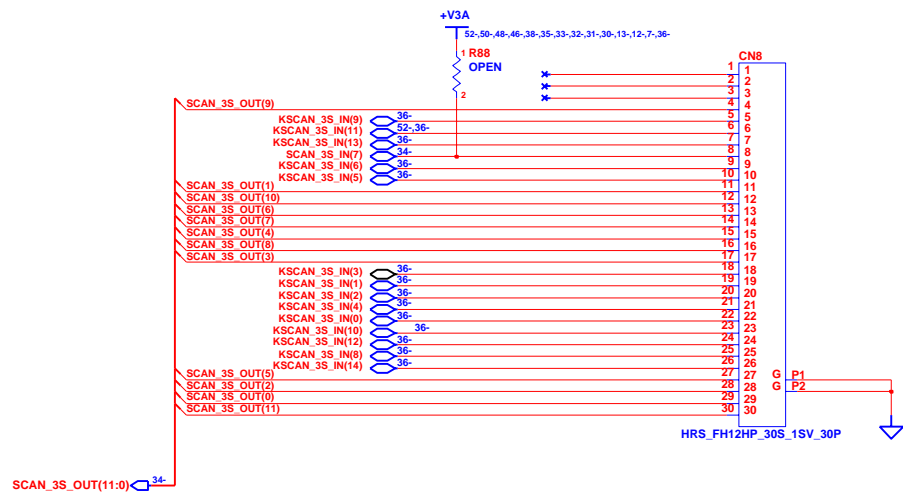
TITLE *TTL.0*
SPI & Accelerometer

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

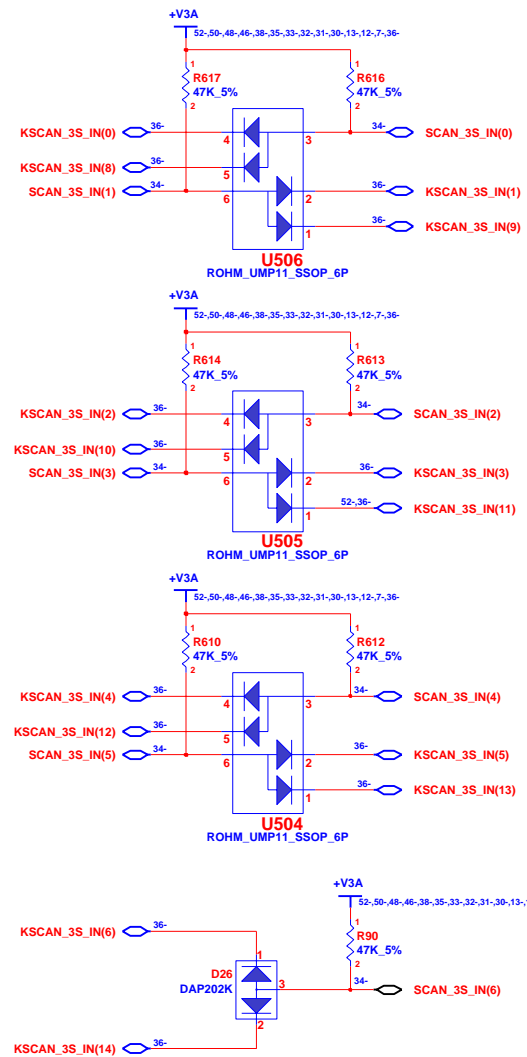
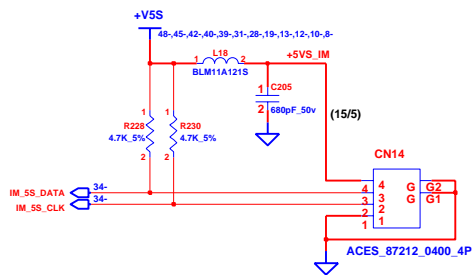
CHANGE by Jimmy song 2-Mar-2007

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Keyboard CONN



Touch Pad CONN



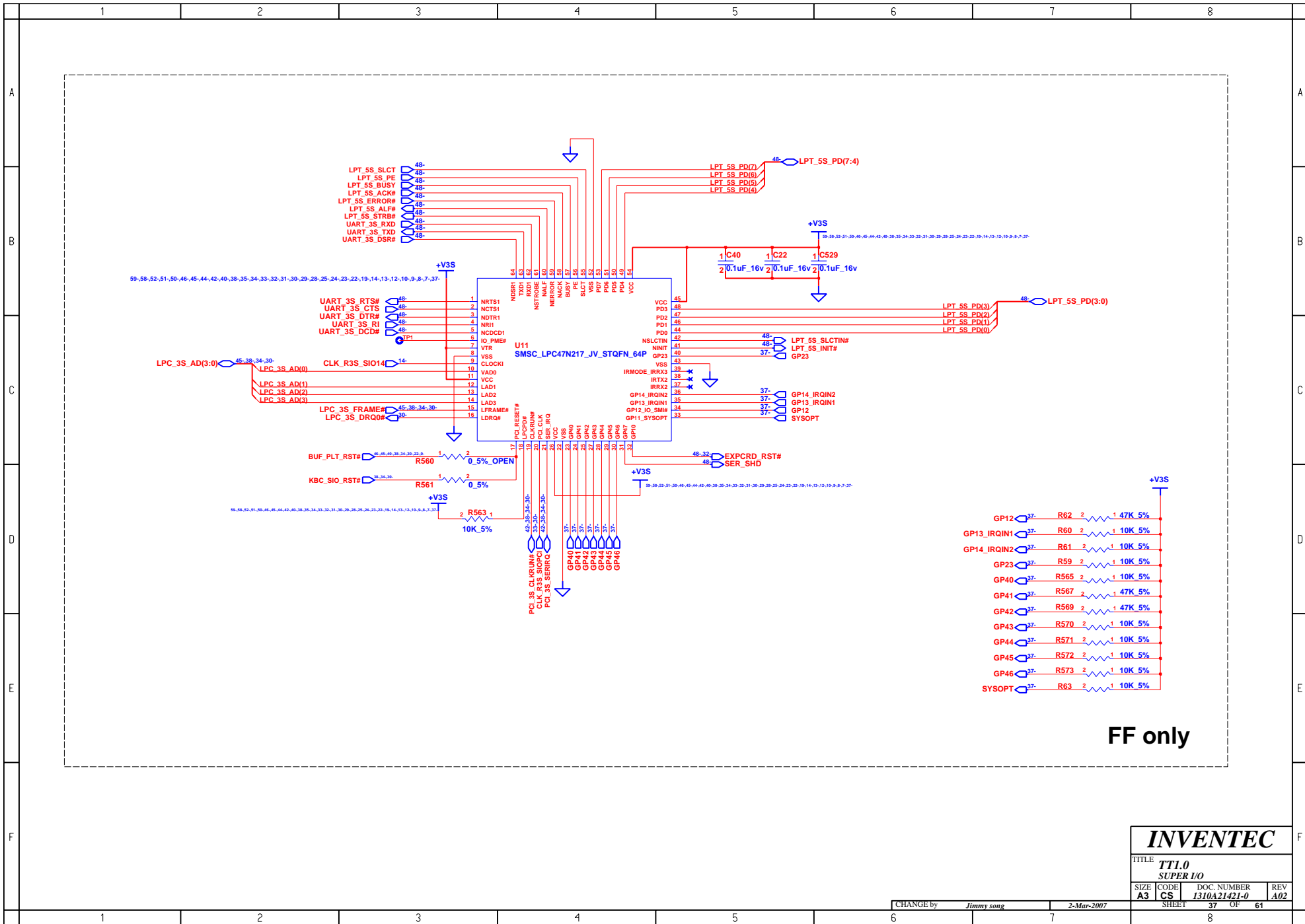
INVENTEC

TITLE
TTL0
INT.KBC/POINT DEVICES

SIZE CODE DOC. NUMBER REV
A3 CS 1310A21421-0 A02

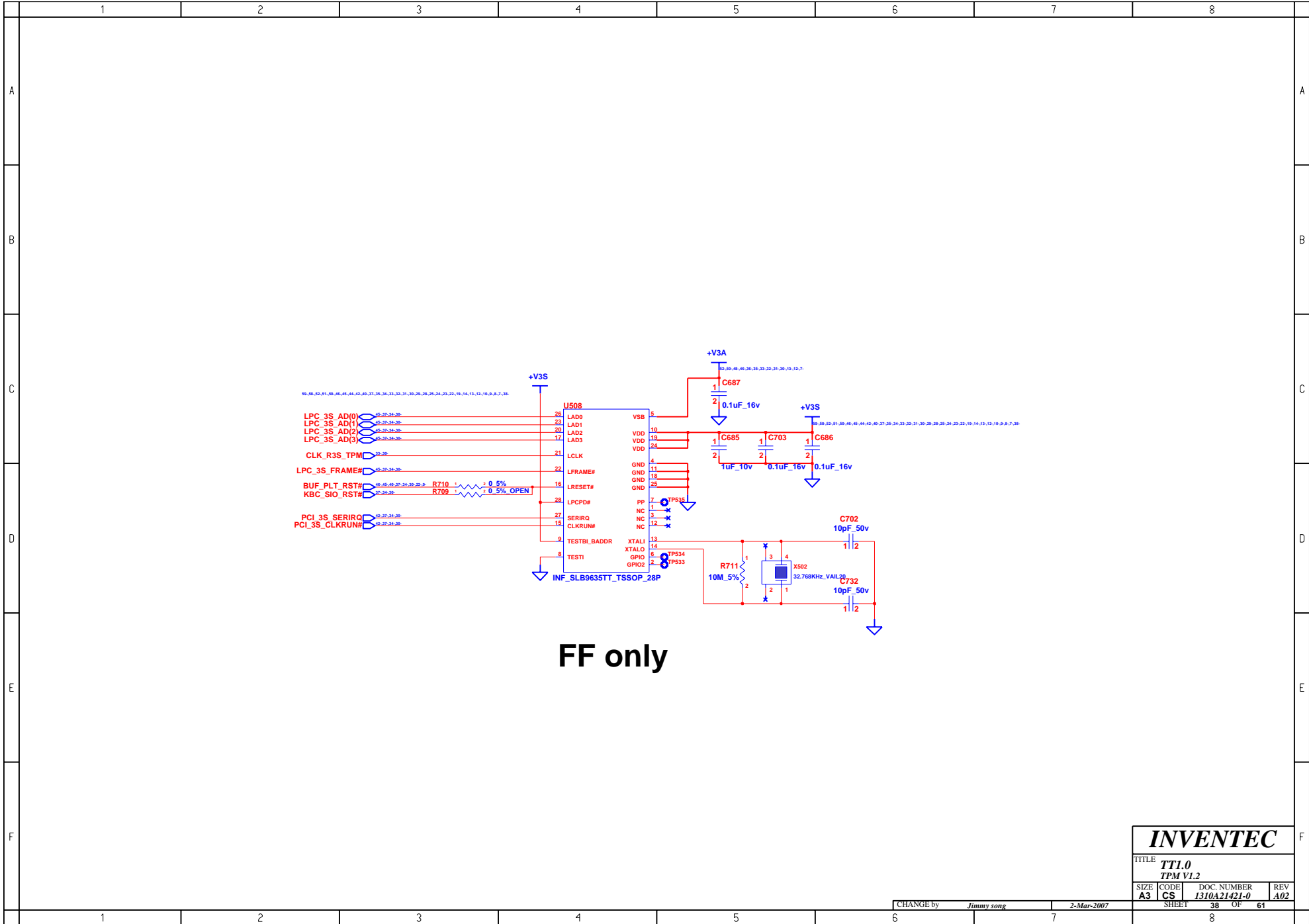
CHANGE by Jimmy song 2-Mar-2007

SHEET 36 OF 61



INVENTEC

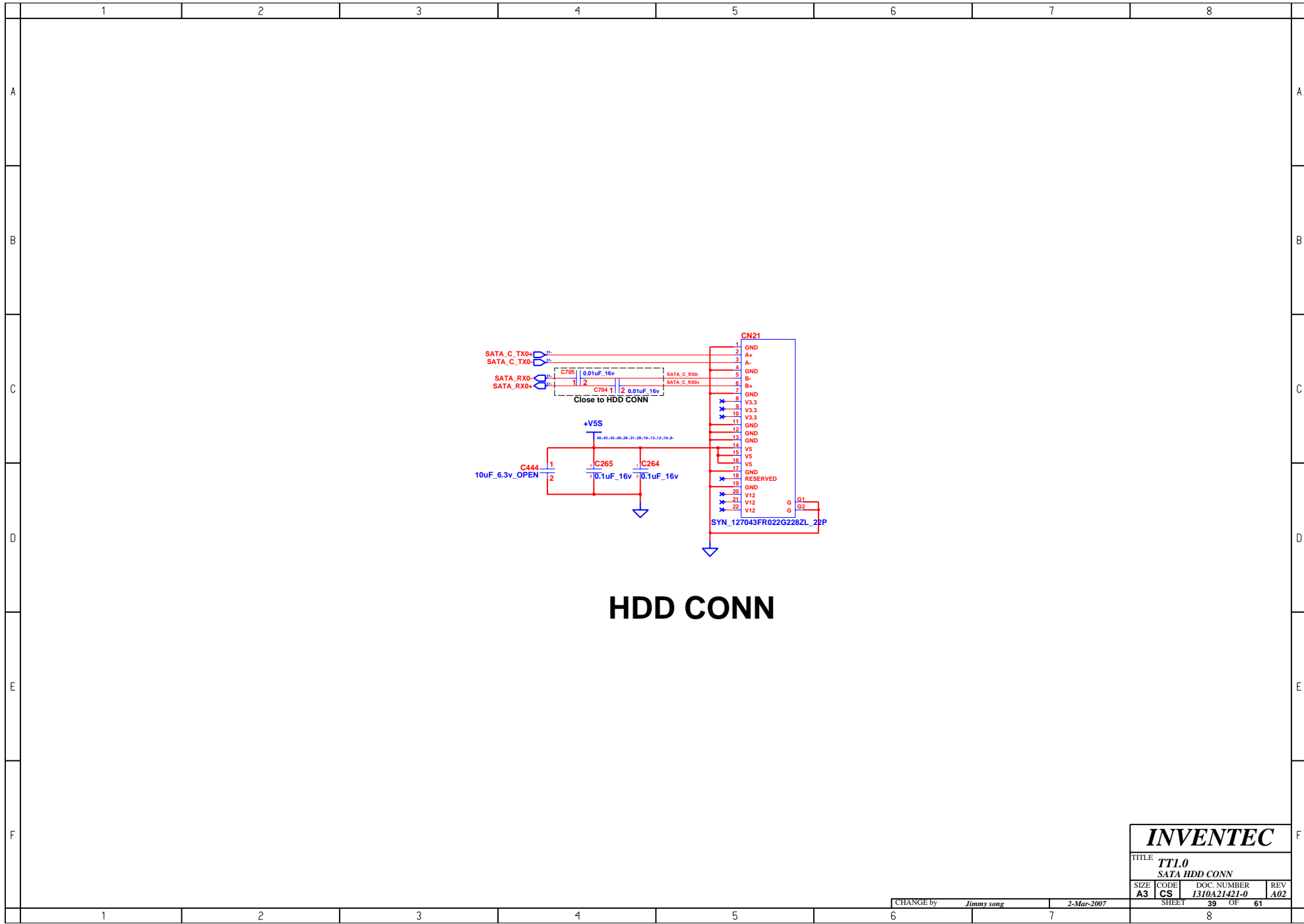
TITLE TT1.0 SUPER I/O			
SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET 37		OF 61	



INVENTEC

TITLE
TT1.0
TPM V1.2

SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
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HDD CONN

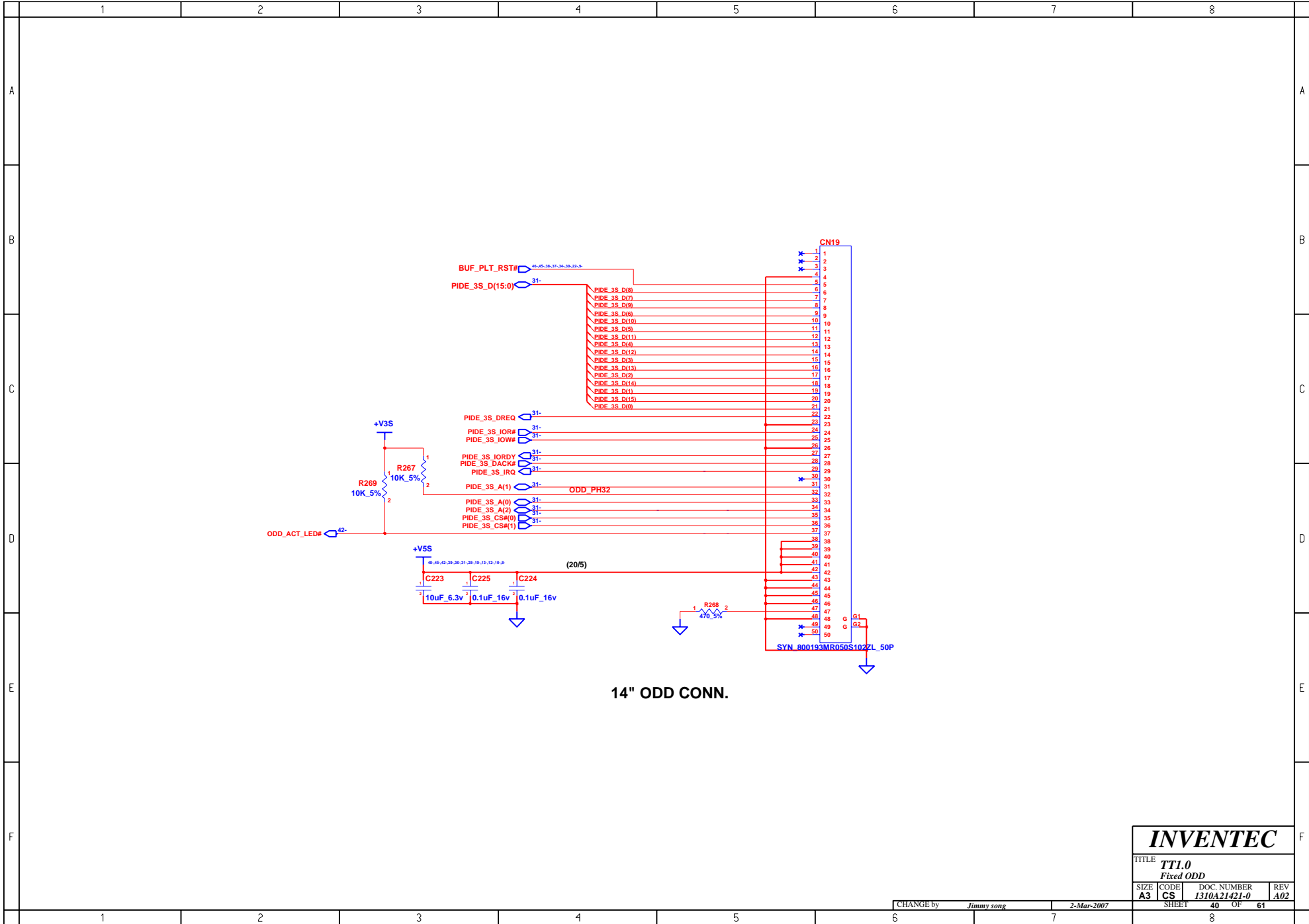
INVENTEC

TITLE *TTL.0*
SATA HDD CONN

SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
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CHANGE by *Jimmy song* 2-Mar-2007

SHEET 39 OF 61



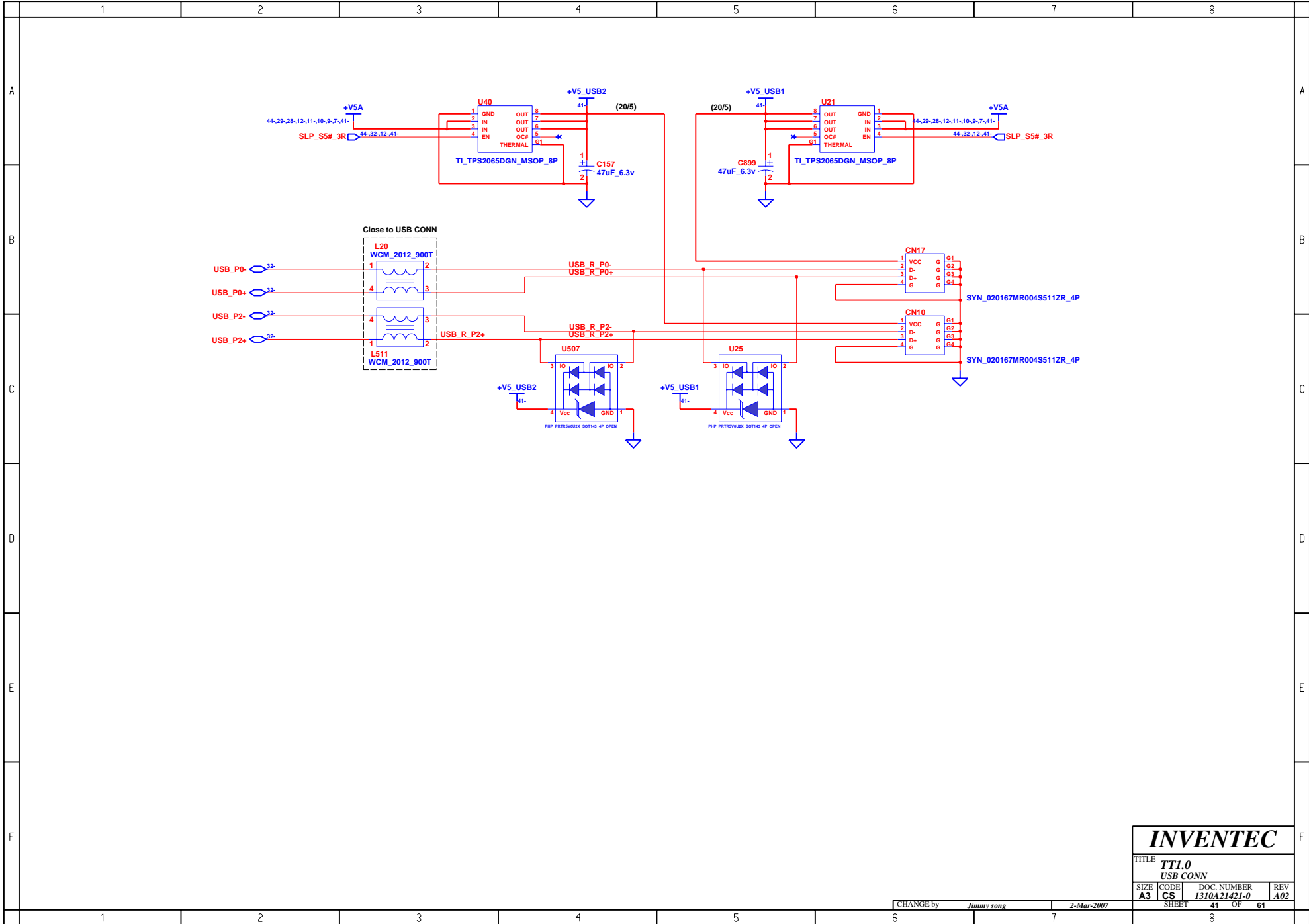
INVENTEC

TITLE *TTL0*
Fixed ODD

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

CHANGE by Jimmy song 2-Mar-2007

SHEET 40 OF 61

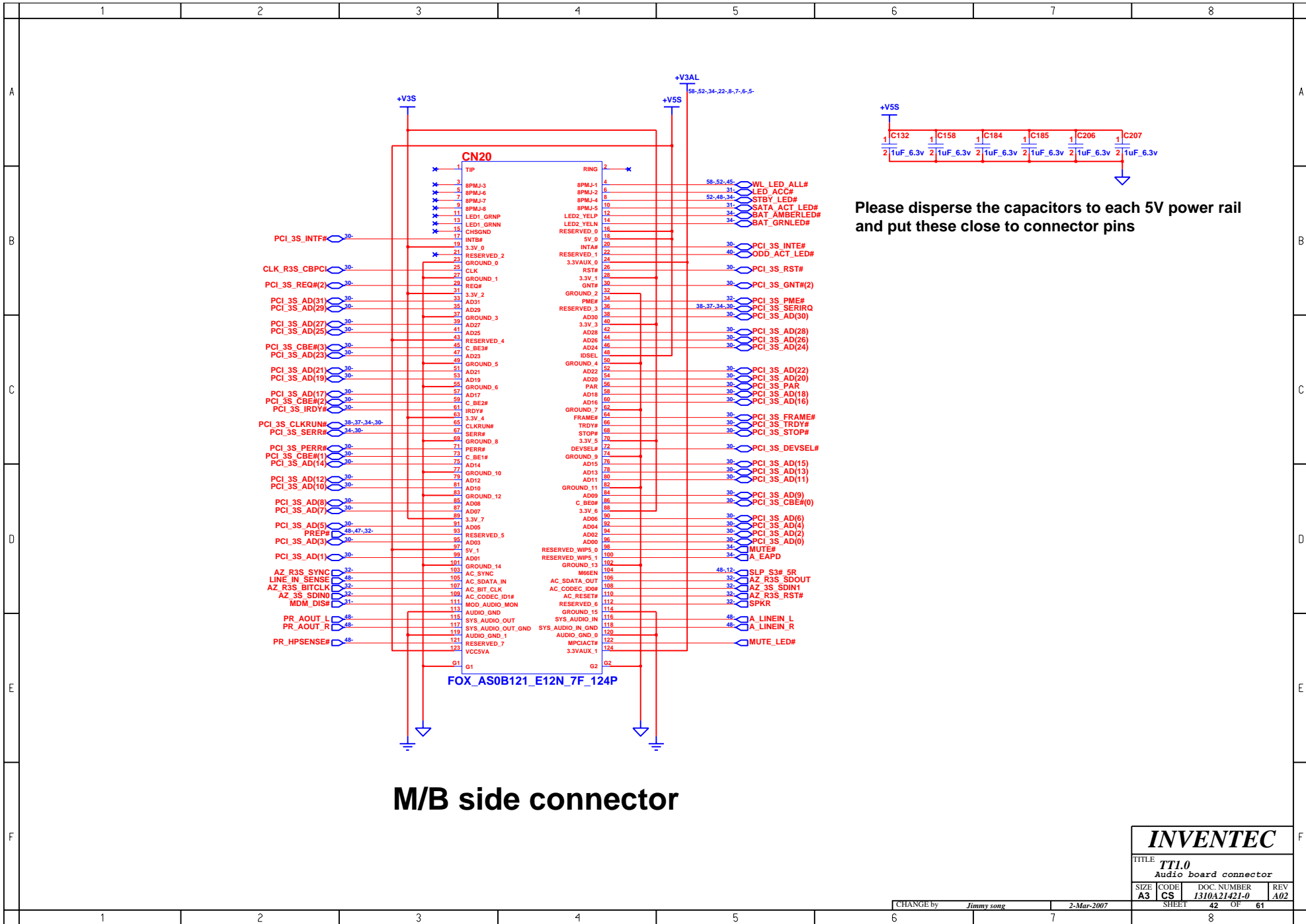


INVENTEC

TITLE			
TTL.0			
USB CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

CHANGE by Jimmy song 2-Mar-2007

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Please disperse the capacitors to each 5V power rail and put these close to connector pins

INVENTEC

TITLE *TT1.0*
Audio board connector

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

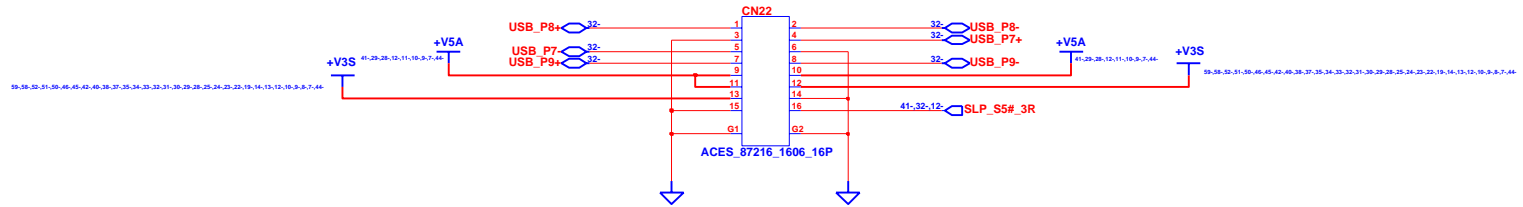
BLANK

INVENTEC

TITLE			
<i>TT1.0</i>			
<i>BLANK</i>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	<i>1310A21421-0</i>	<i>A02</i>

CHANGE by *Jimmy song* 2-Mar-2007

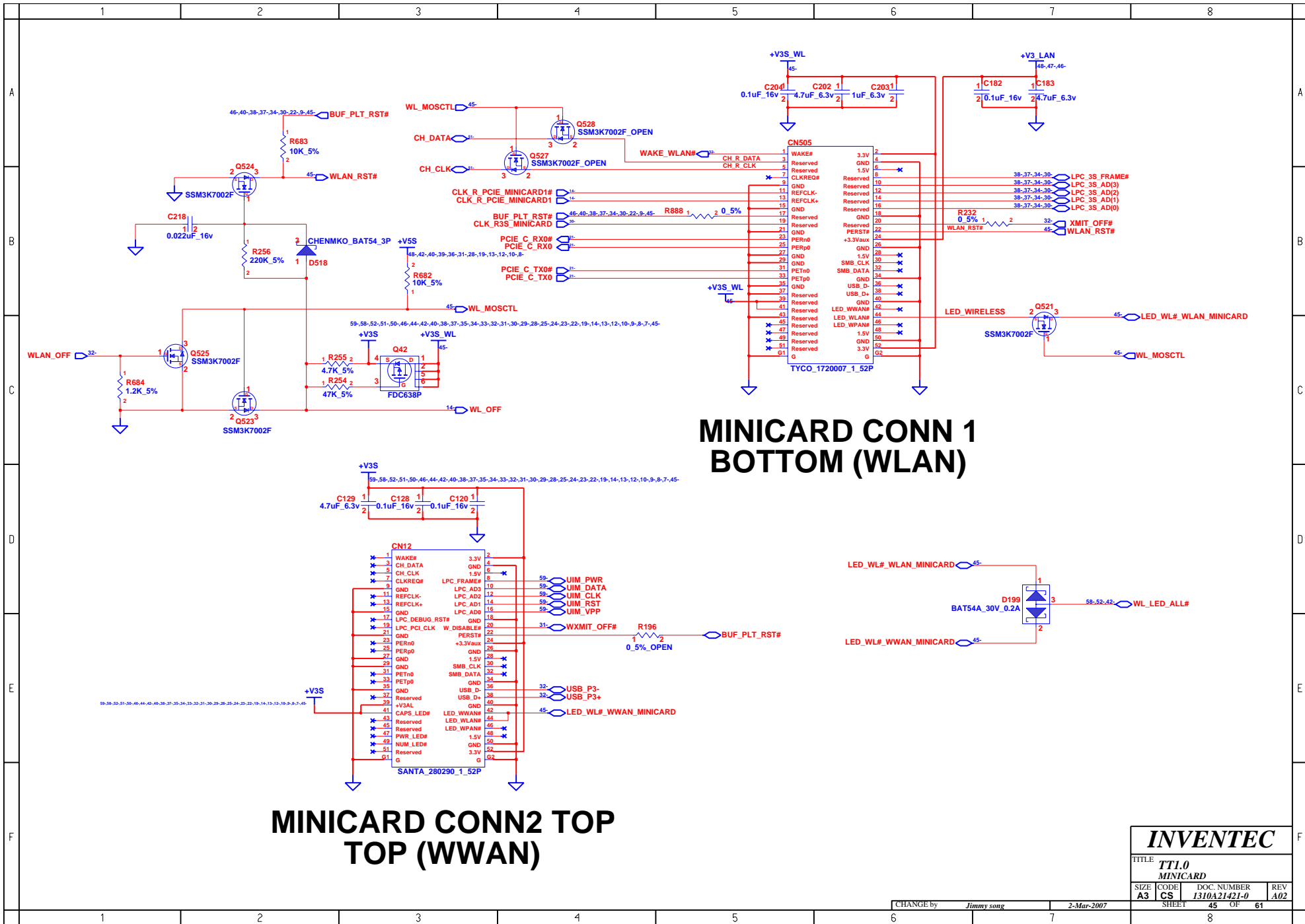
SHEET 43 OF 61



M/B side connector

INVENTEC			
TITLE TT1.0			
5 in 1 connector			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET		44 OF 61	

	1	2	3	4	5	6	7	8	
A									
B									
C									
D									
E									
F									
	1	2	3	4	5	6	7	8	



MINICARD CONN 1 BOTTOM (WLAN)

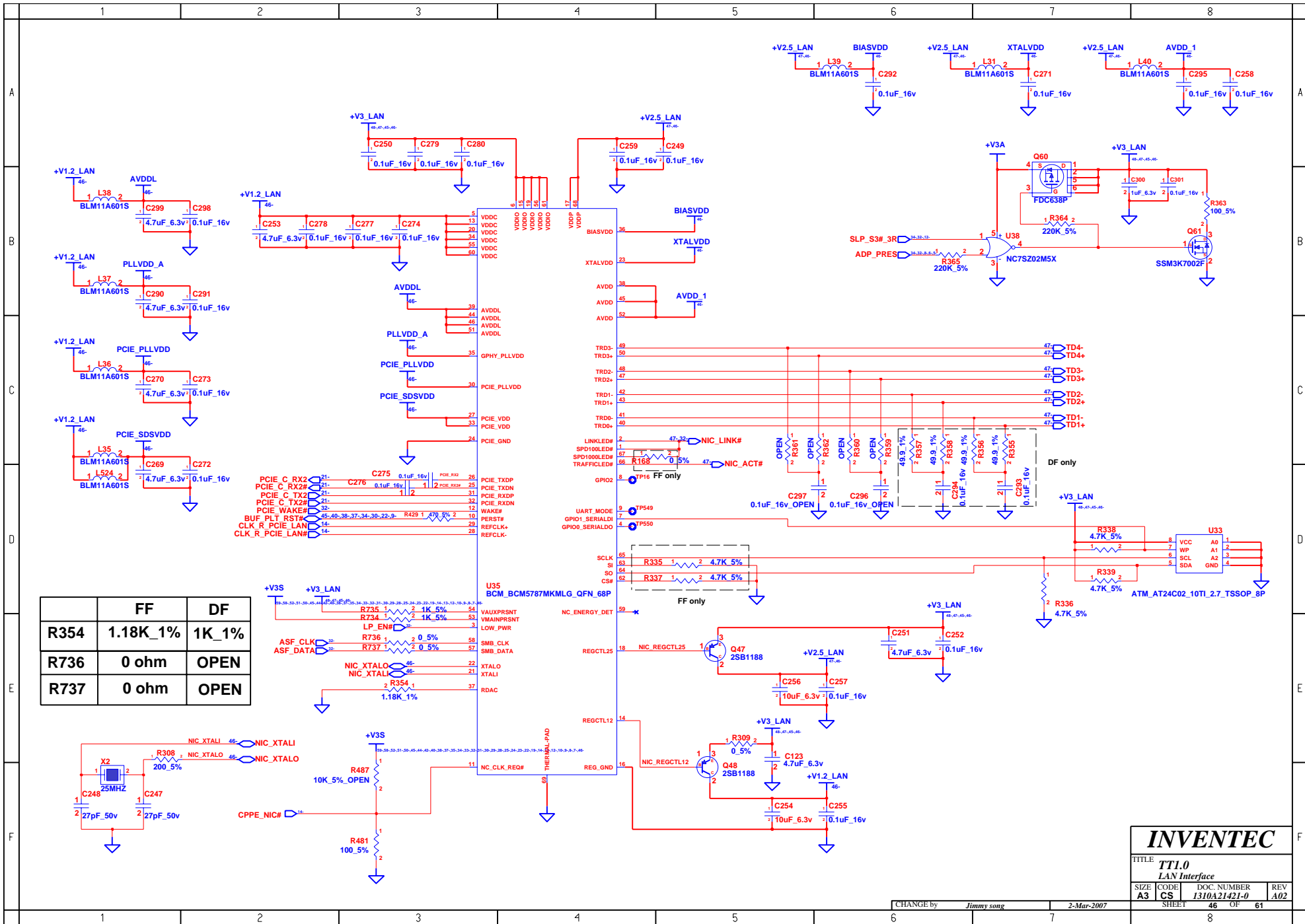
MINICARD CONN2 TOP TOP (WWAN)

INVENTEC

TITLE			
TTL0			
MINICARD			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

CHANGE by Jimmy song 2-Mar-2007

SHEET 45 OF 61

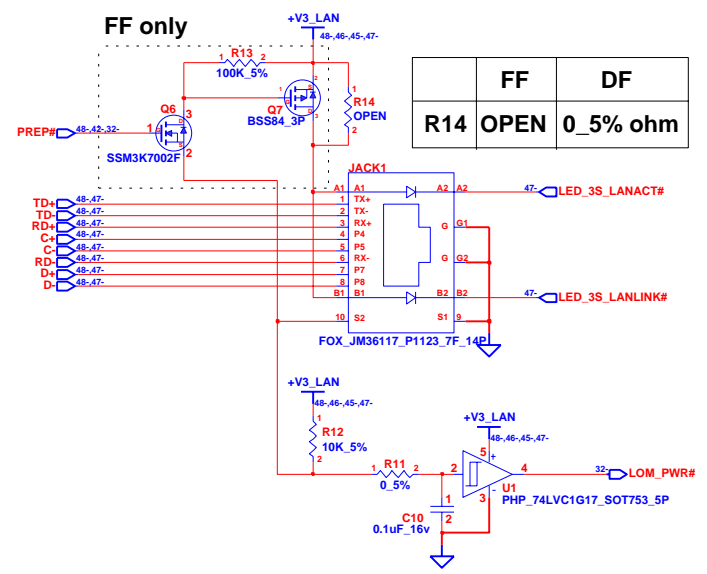
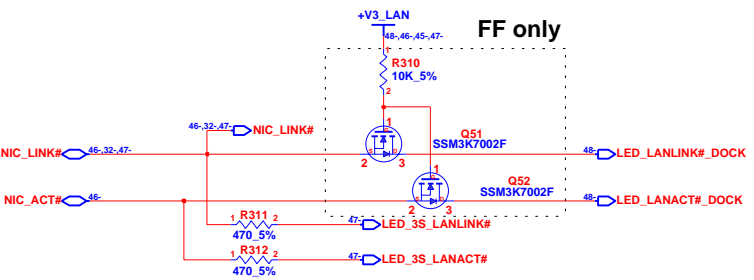
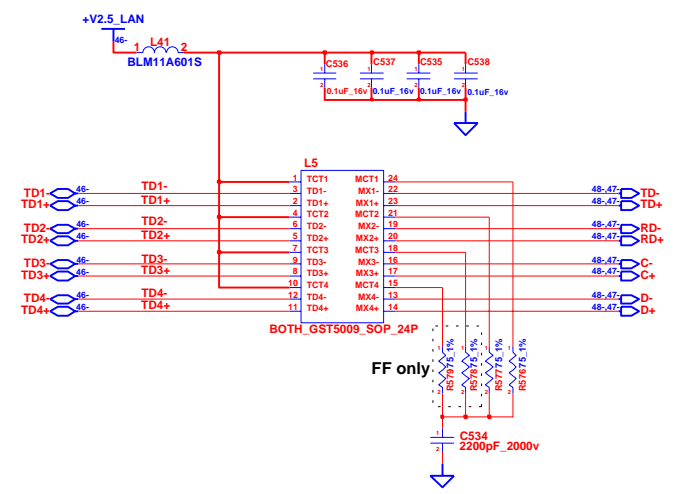


	FF	DF
R354	1.18K_1%	1K_1%
R736	0 ohm	OPEN
R737	0 ohm	OPEN

INVENTEC

TITLE
TT1.0
 LAN Interface

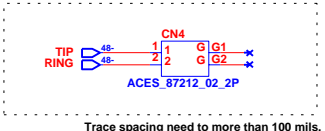
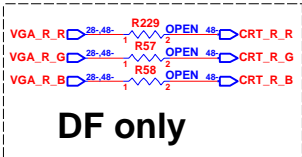
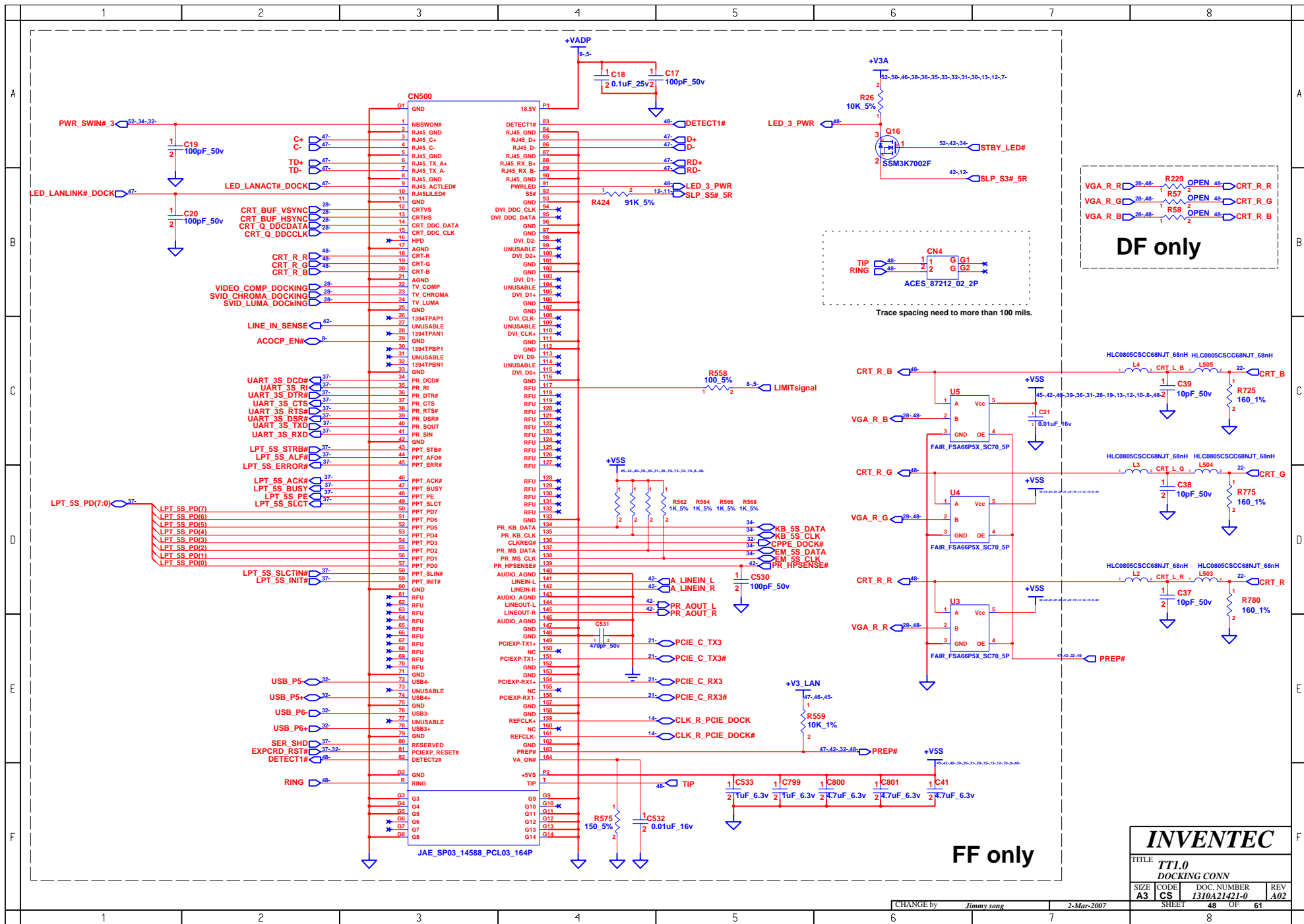
SIZE A3	CODE CS	DOC. NUMBER I310A21421-0	REV A02
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	FF	DF
R14	OPEN	0.5% ohm

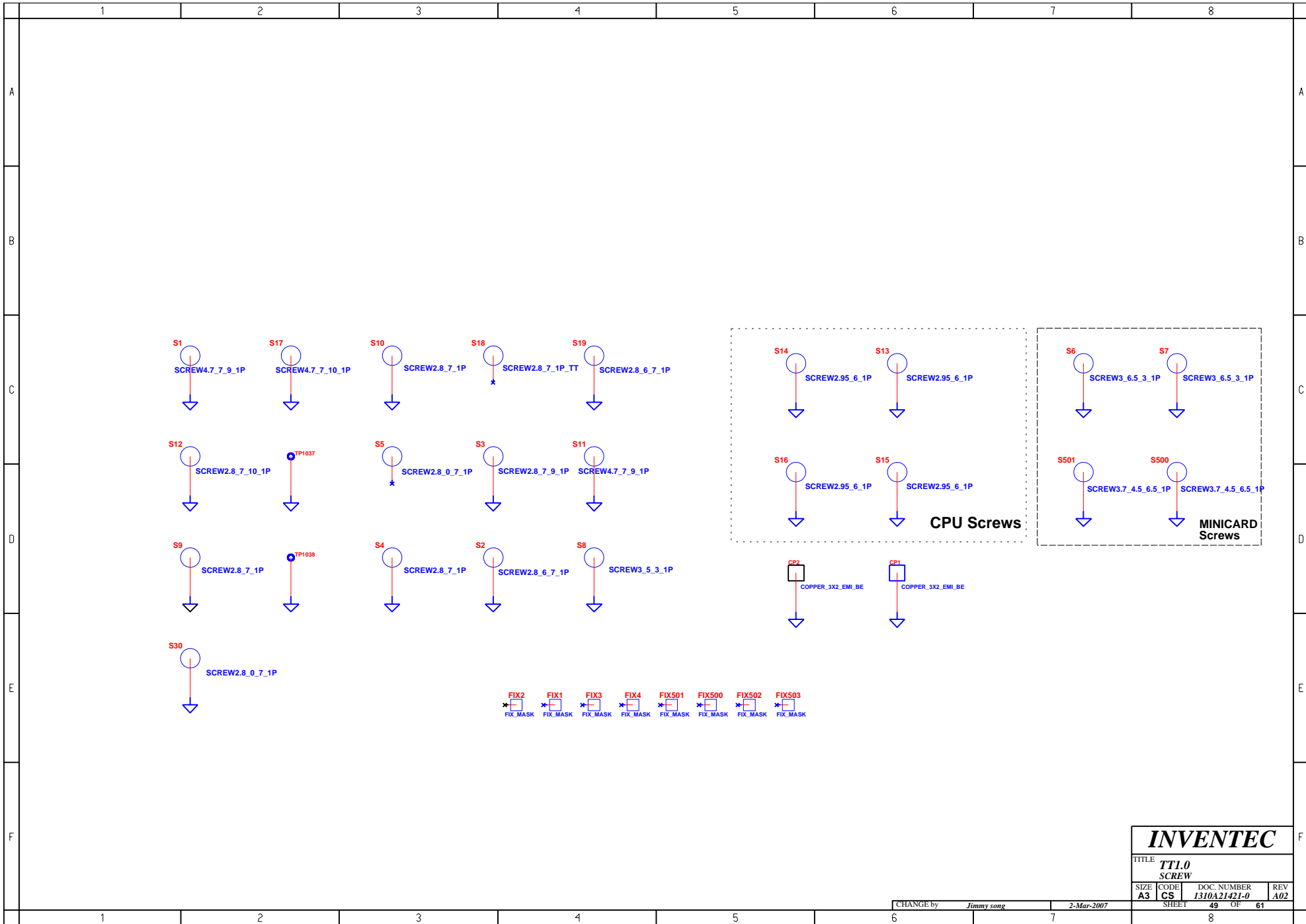
INVENTEC
 TITLE *TTL0*
LAN RJ45 CONN

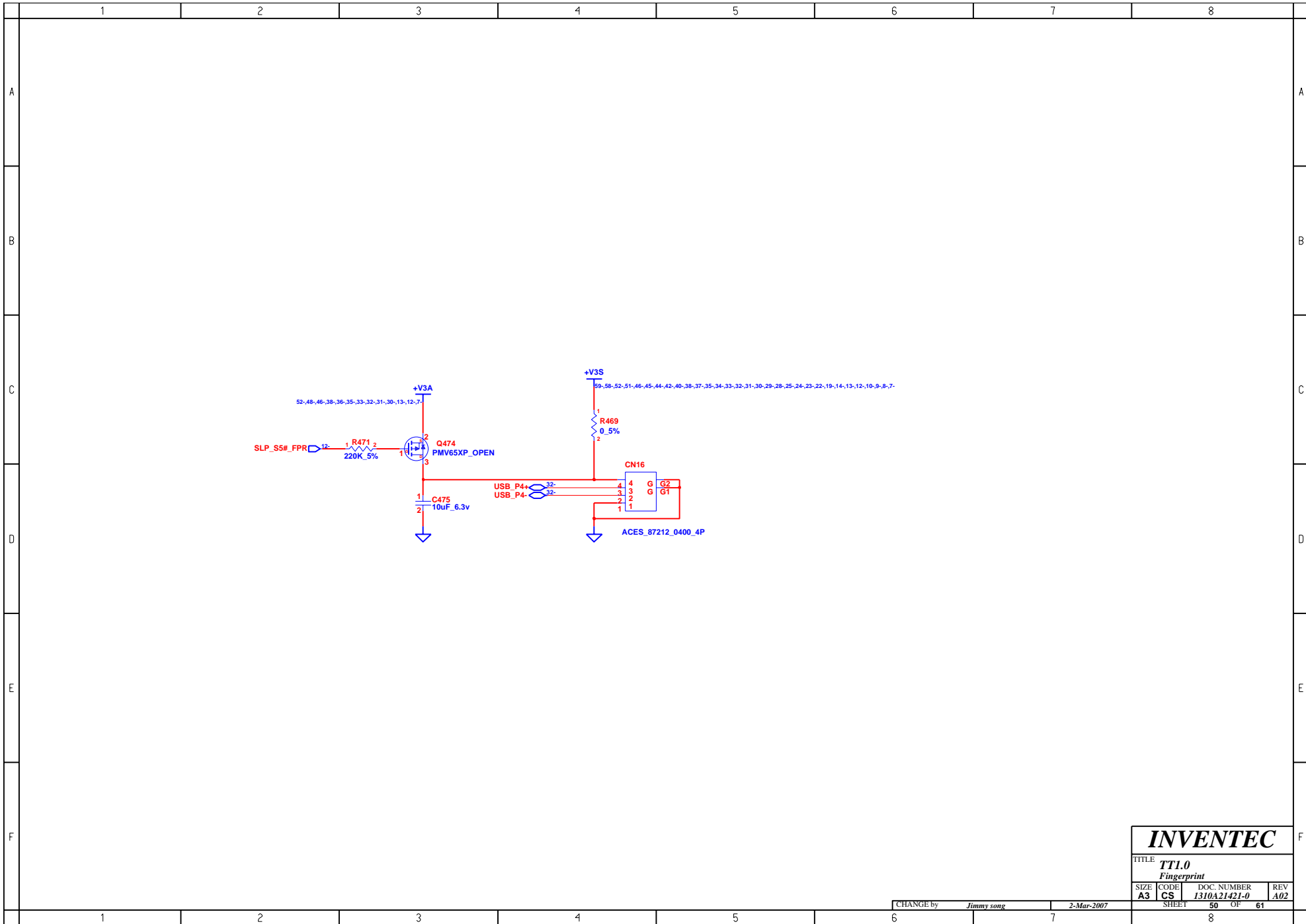
SIZE A3	CODE CS	DOC. NUMBER <i>1310A21421-0</i>	REV A02
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INVENTEC

TITLE TT1.0 DOCKING CONN			
SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
SHEET 48		OF 61	





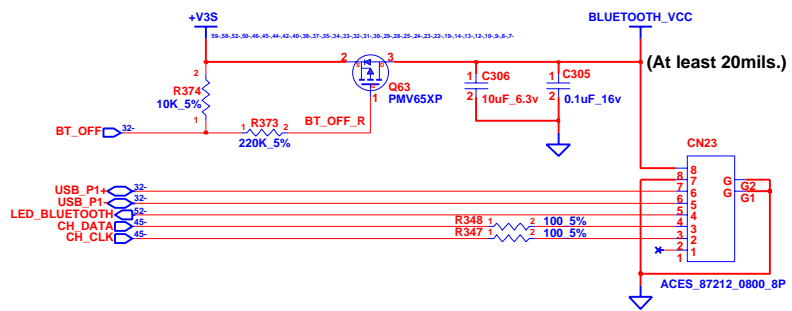
INVENTEC

TITLE *TT1.0*
Fingerprint

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02

CHANGE by *Jimmy song* 2-Mar-2007

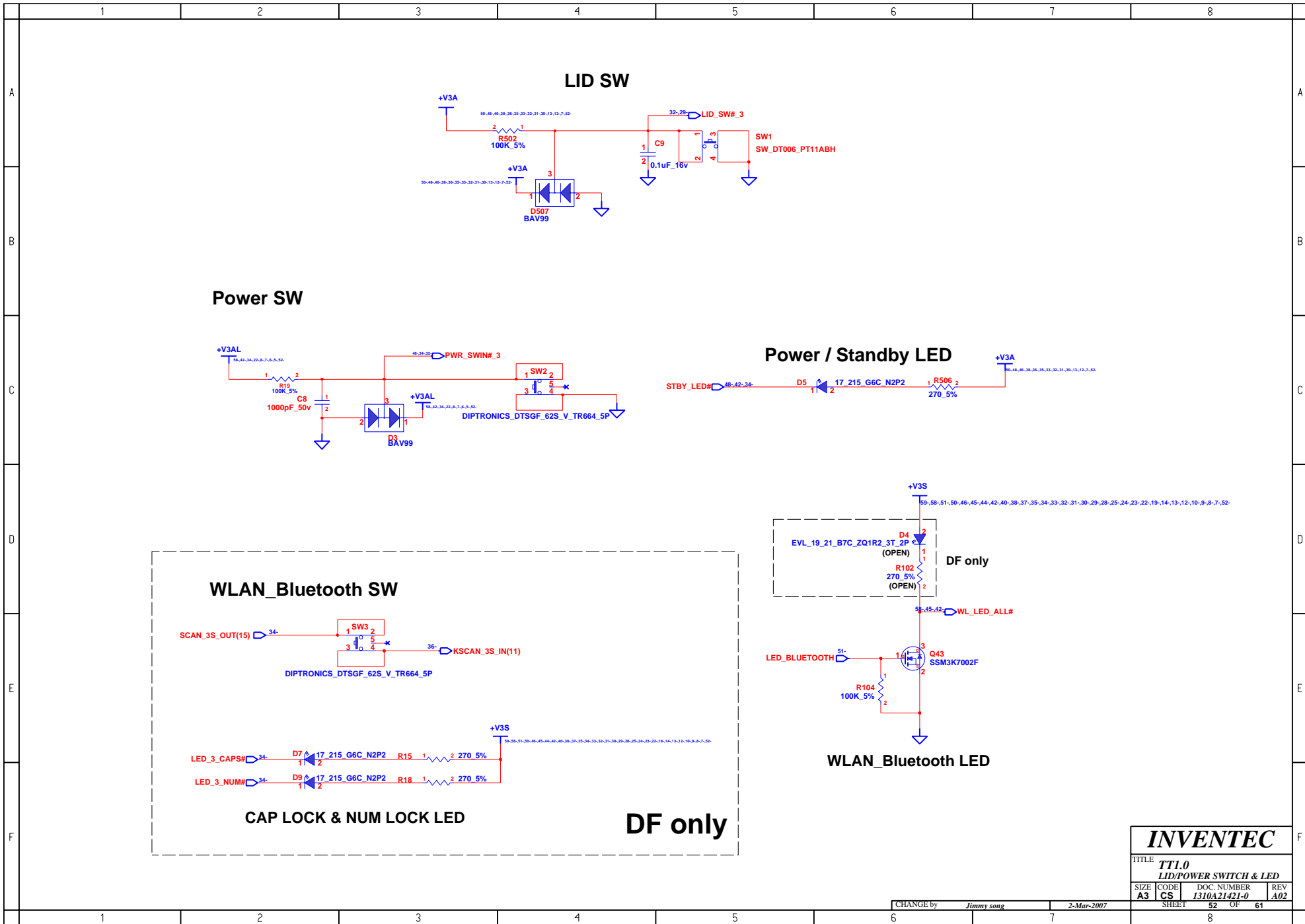
SHEET 50 OF 61



INVENTEC

TITLE			
TT1.0			
BLUETOOTH			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
SHEET		OF	
51		61	

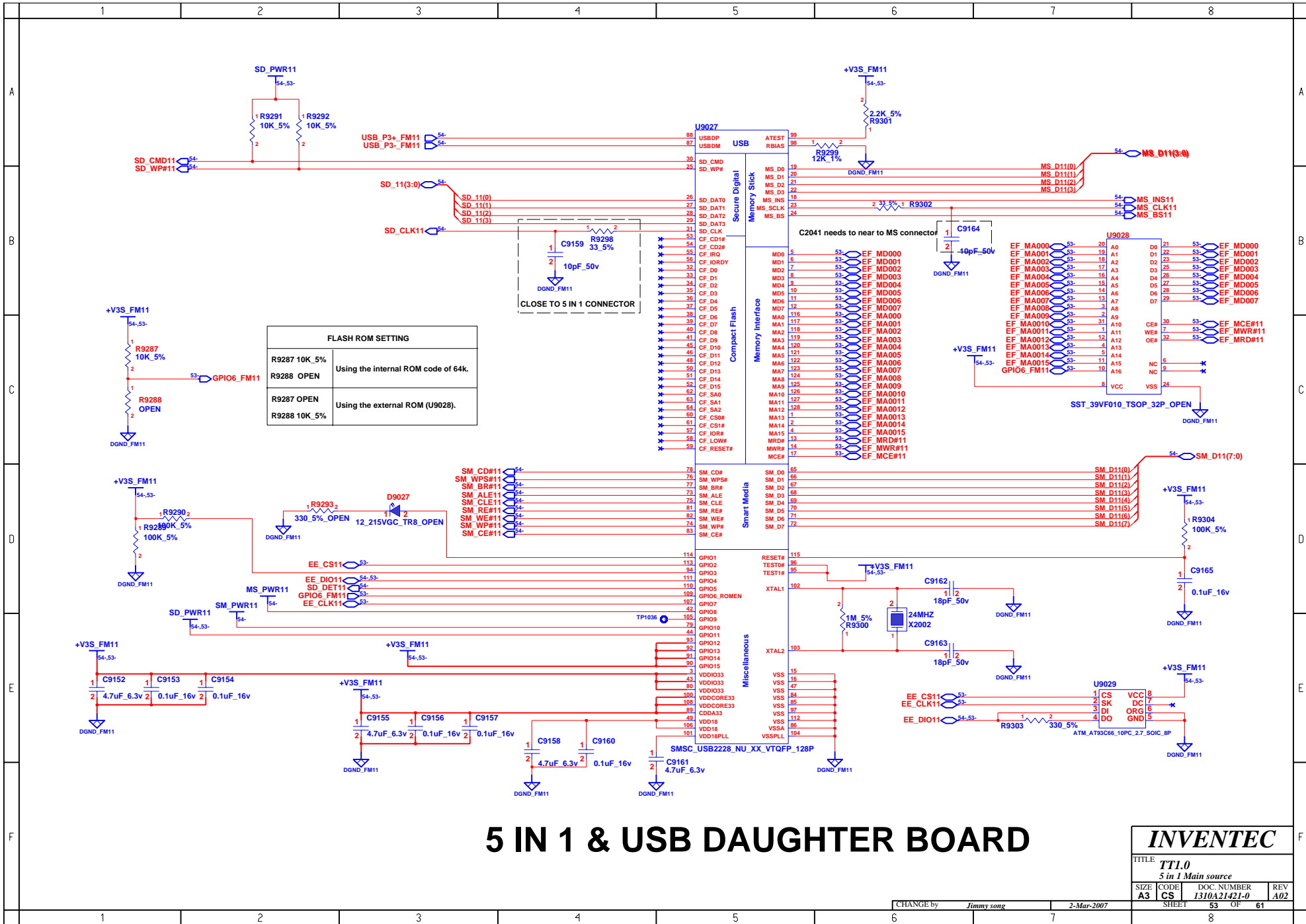
CHANGE by Jimmy song 2-Mar-2007



INVENTEC

TITLE			
TTL0			
LID/POWER SWITCH & LED			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by		SHEET	
Jimmy song		52 OF 61	

2-Mar-2007

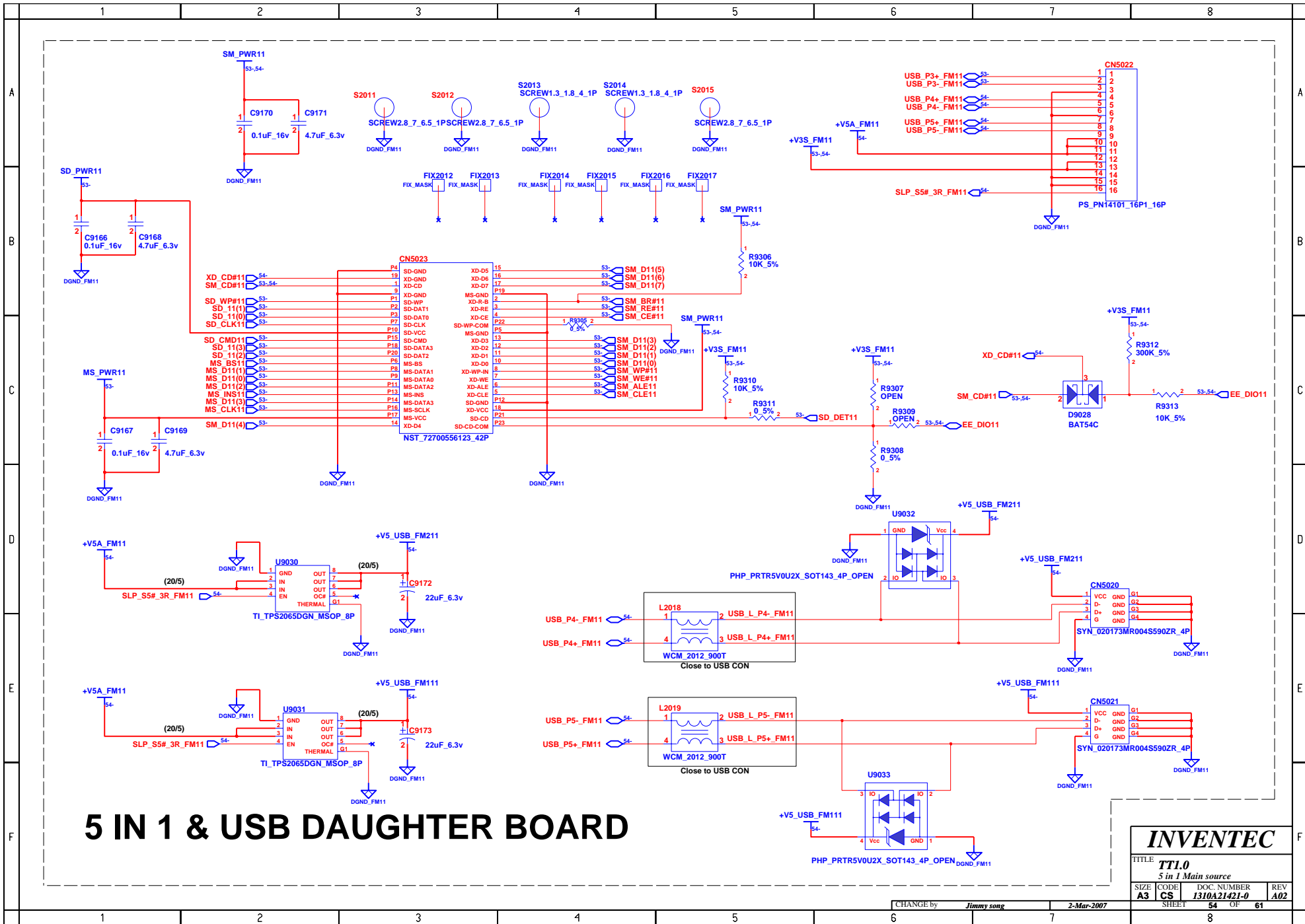


5 IN 1 & USB DAUGHTER BOARD

INVENTEC

TITLE: **TT1.0**
 5 in 1 Main source

SIZE: A3	CODE: CS	DOC. NUMBER: I310A21421-0	REV: A02
CHANGE by: <i>Jimmy song</i>		2-Mar-2007	
SHEET: 53		OF: 61	



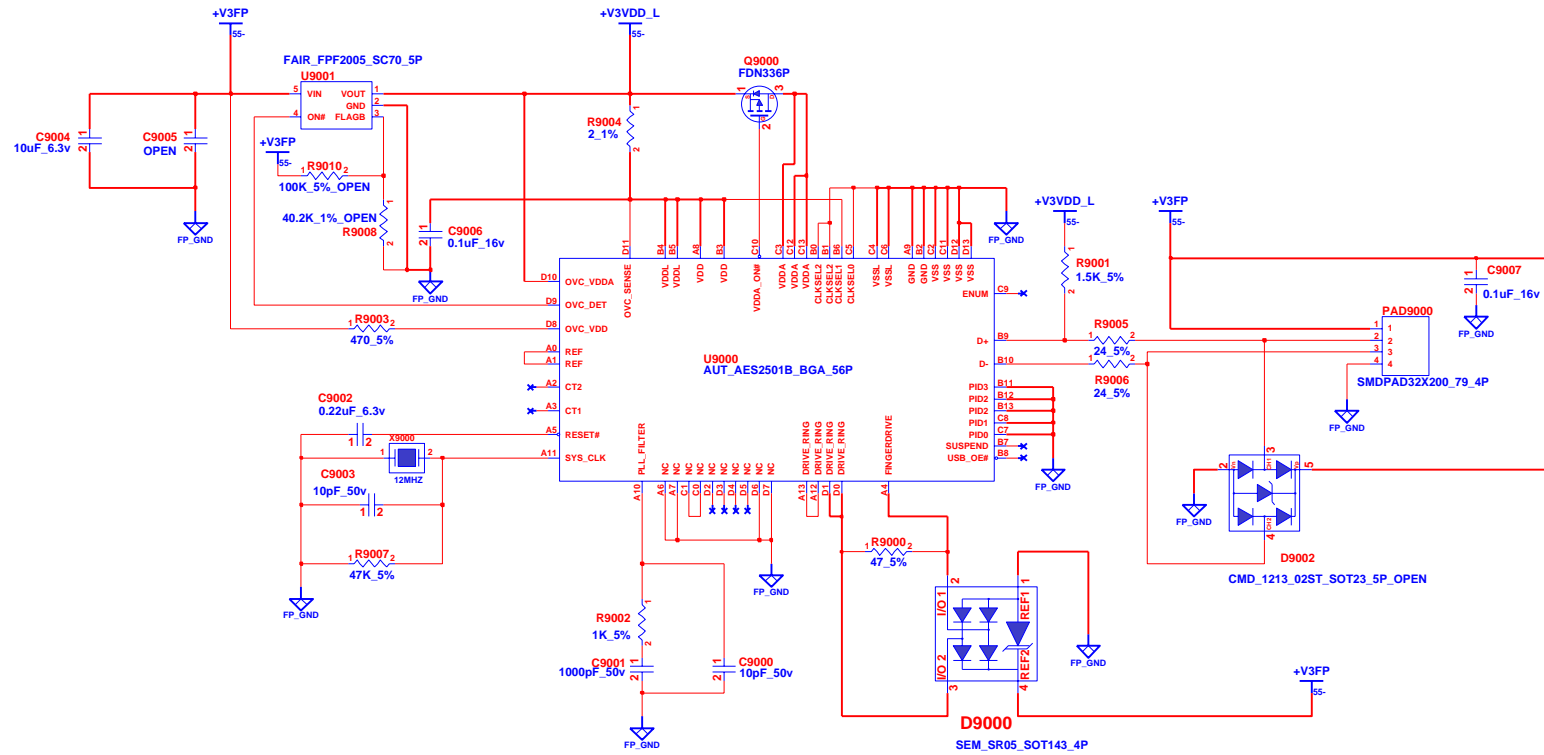
5 IN 1 & USB DAUGHTER BOARD

INVENTEC			
TITLE TT1.0			
5 in 1 Main source			
SIZE A3	CODE CS	DOC. NUMBER I310A21421-0	REV A02
SHEET 54		OF 61	

CHANGE by *Jimmy song* 2-Mar-2007

Finger Print Reader DB

(Same as DAVOS30 FPR circuit.)



INVENTEC

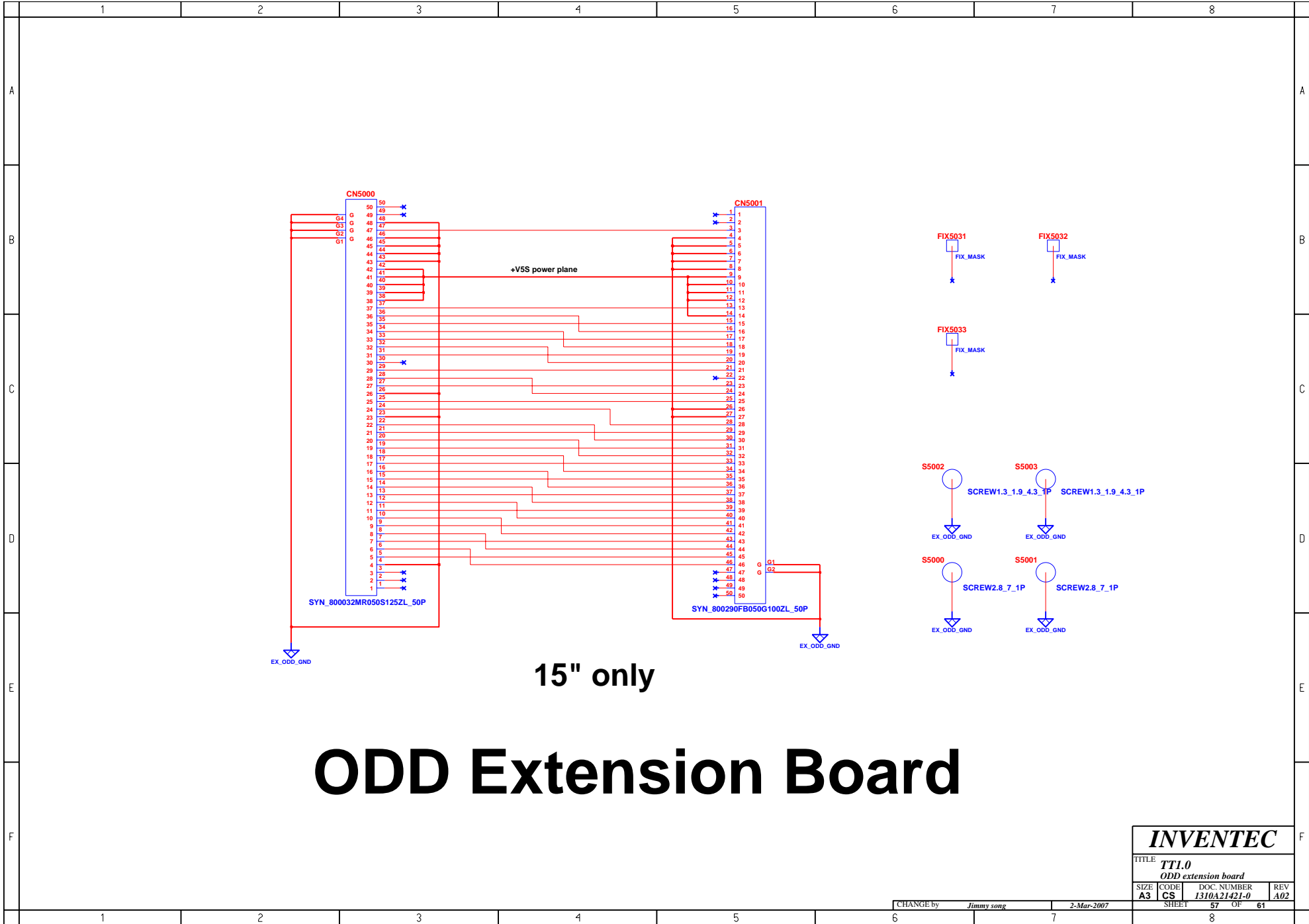
TITLE			
TT1.0			
Finger Print board			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by		SHEET	OF
Jimmy song		55	61

2-Mar-2007

BLANK

INVENTEC			
TITLE <i>TT1.0</i>			
BLANK			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	
SHEET		56	OF 61

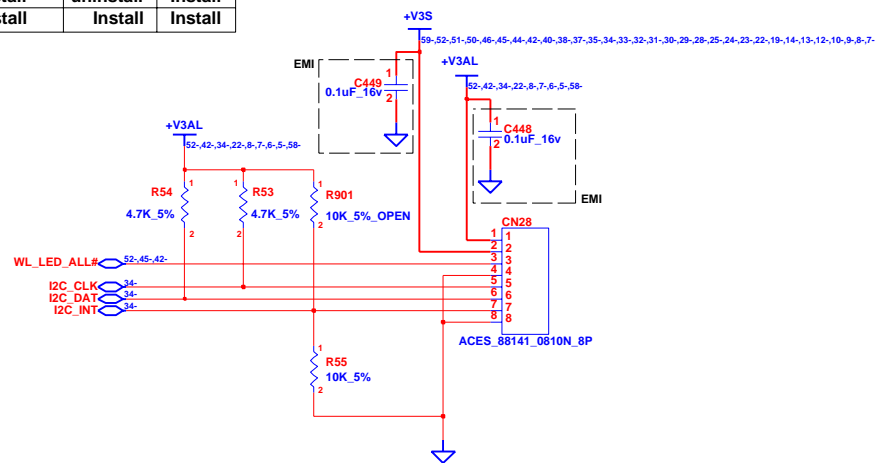
	1	2	3	4	5	6	7	8	
A									A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	



ODD Extension Board

INVENTEC			
TITLE <i>TT1.0</i>			
ODD extension board			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
CHANGE by <i>Jimmy song</i>		2-Mar-2007	SHEET 57 OF 61

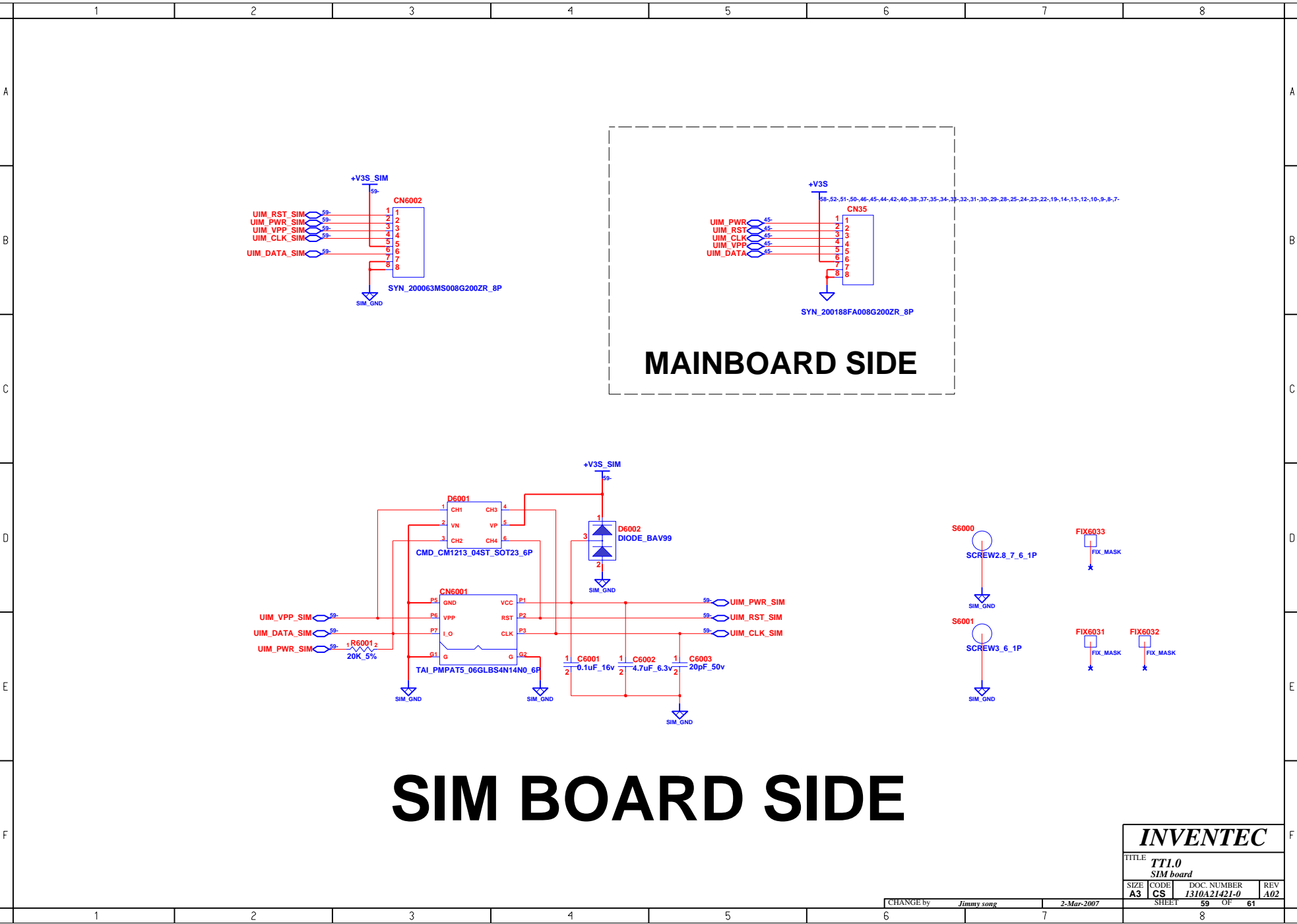
	FF+WWAN	DF	FF
CN28,C448,C449	Install	uninstall	Install
R53,R54,R55	Install	Install	Install



INVENTEC

TITLE <i>TTI.0</i>			
SW/B connector			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21421-0	A02
SHEET		58	OF 61

CHANGE by *Jimmy song* 2-Mar-2007



MAINBOARD SIDE

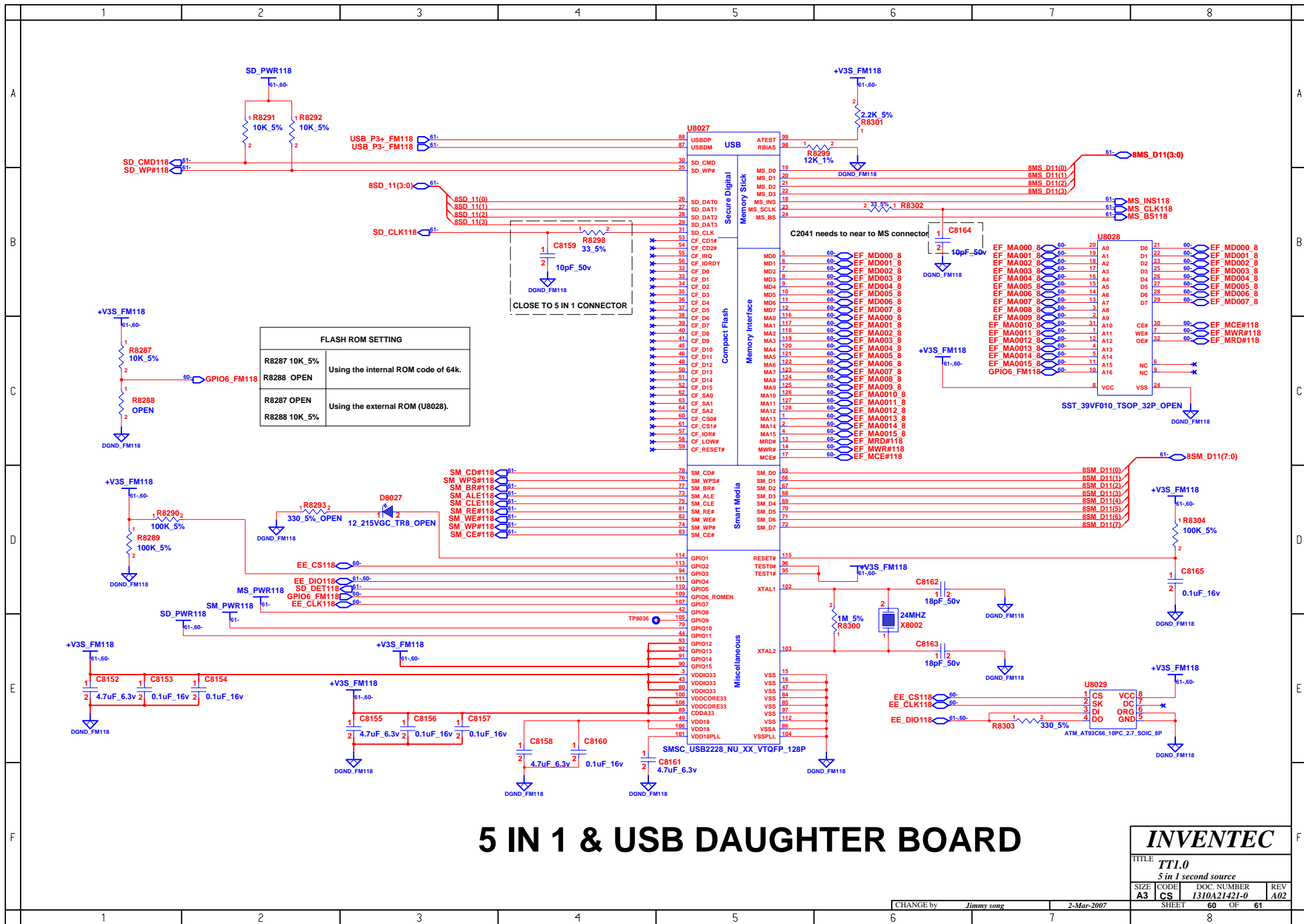
SIM BOARD SIDE

INVENTEC

TITLE
TT1.0
 SIM board

SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
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CHANGE by *Jimmy song* 2-Mar-2007 SHEET 59 OF 61



INVENTEC

TITLE
T11.0
 5 in 1 second source

SIZE A3	CODE CS	DOC. NUMBER 1310A21421-0	REV A02
CHANGE by Jimmy song		2-Mar-2007	
SHEET 60		OF 61	

