

1 2 3 4 5 6 7 8

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HSF Property : **RoHS**

Valima 2010

AMD C2 UMA

PV Build

2009/03/11

DATE	CHANGENO.	REV

DRAWER	EE	DATE	POWER	DATE	INVENTEC
DESIGN					
CHECK					
RESPONSIBLE					
TITLE					VV10AU2
SIZE =	3	VER :			
FILE NAME :	XXXX-XXXXXX-XX	SIZE	A3	CODE	CS
P/N	XXXXXXXXXXXX	DOC. NUMBER	MTR	REV	A01
		SHEET	1	OF	57

F

F

1 2 3 4 5 6 7 8

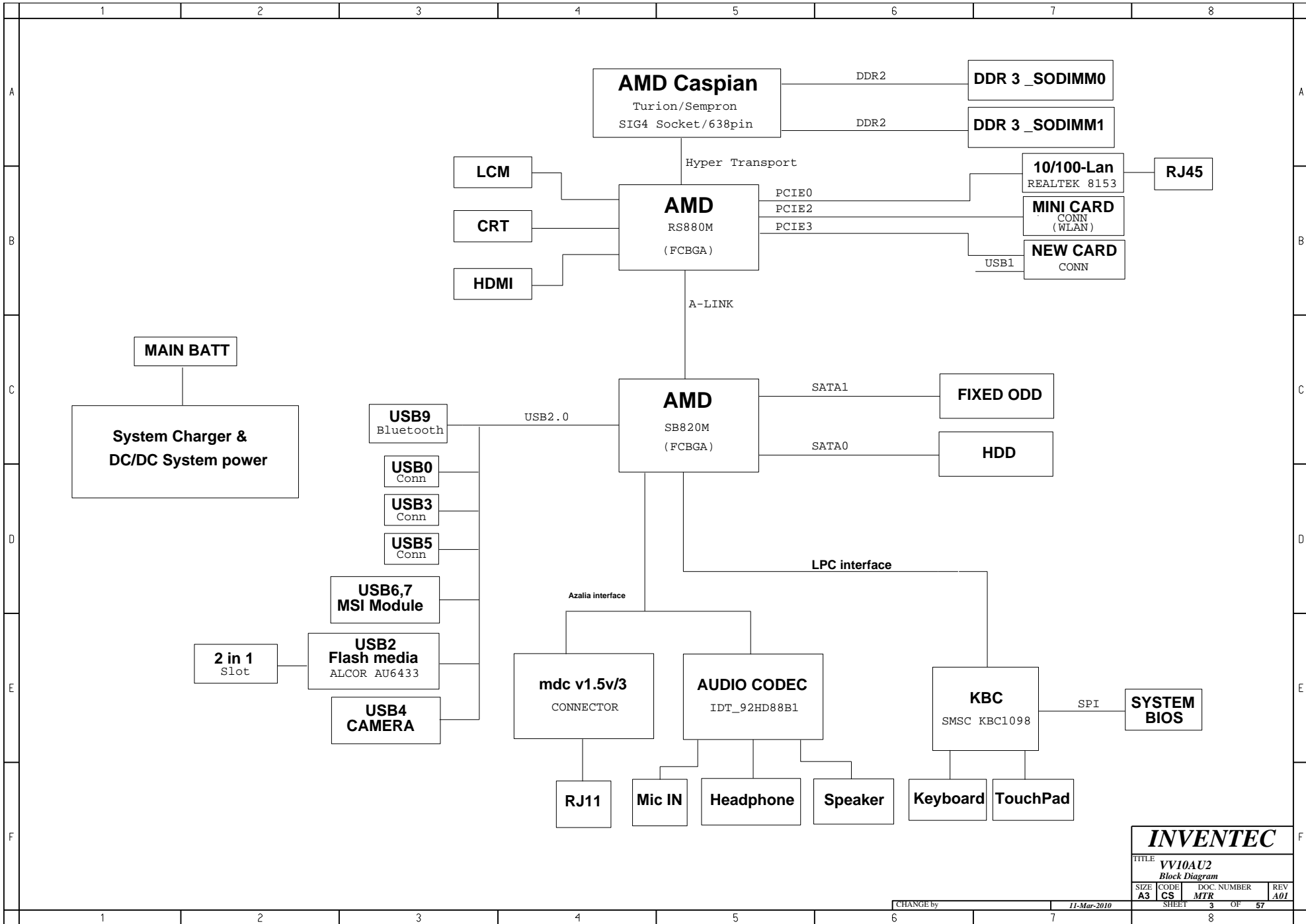
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6- SELECT & BATTERY CONN	16- CPU-2	35- KB & TP CONN
7- +V5A,+V3A & +V2.5S	17- CPU-3	36- SPI
8- OCP	18- CPU-4	37- HDD & ODD CONN
9- +VCC_NB & +V1.2A	19- DDR2-DIMM0	38- USB CONN
10- +VCC_CORE	20- DDR2-DIMM1	39- AZALIA CODEC
11- +V1.1S & +V1.5S_VGA	22- THERMAL&FAN CONTROLLER	40- Earphone & MIC JACK
12- DDR2 POWER	23- RS880M-1	41- MDC CONN
13- POWER(SLEEP)	24- RS880M-2	42- NIC 10/100 RJ45 CONN
14- POWER(SEQUENCE)	25- RS880M-3	43- 10/100-LAN- CONTROLLER
	26- RS880M-4	44- Mini CARD & BT CONN
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	28- LCD CONN & WEBCAM CONN	46- SW/B & LED/B CONN
	39- SB820-1	47- SCREW
	30- SB820-2	48- Power Plan CAP
	31- SB820-4	49- HDMI
	32- SB820-3	50- SD/MMC Card Reader
	33- SB820-5	51- Headphone & MIC JACK
		52- Power Button & LID Switch Board
		53- 14"ODD Extend Board
		54- USB Right Side Board
		55- Pick Button Board

INVENTEC

TITLE			
VV10AU2			
Table Of Content			
SIZE	CODE	DOC. NUMBER	REV
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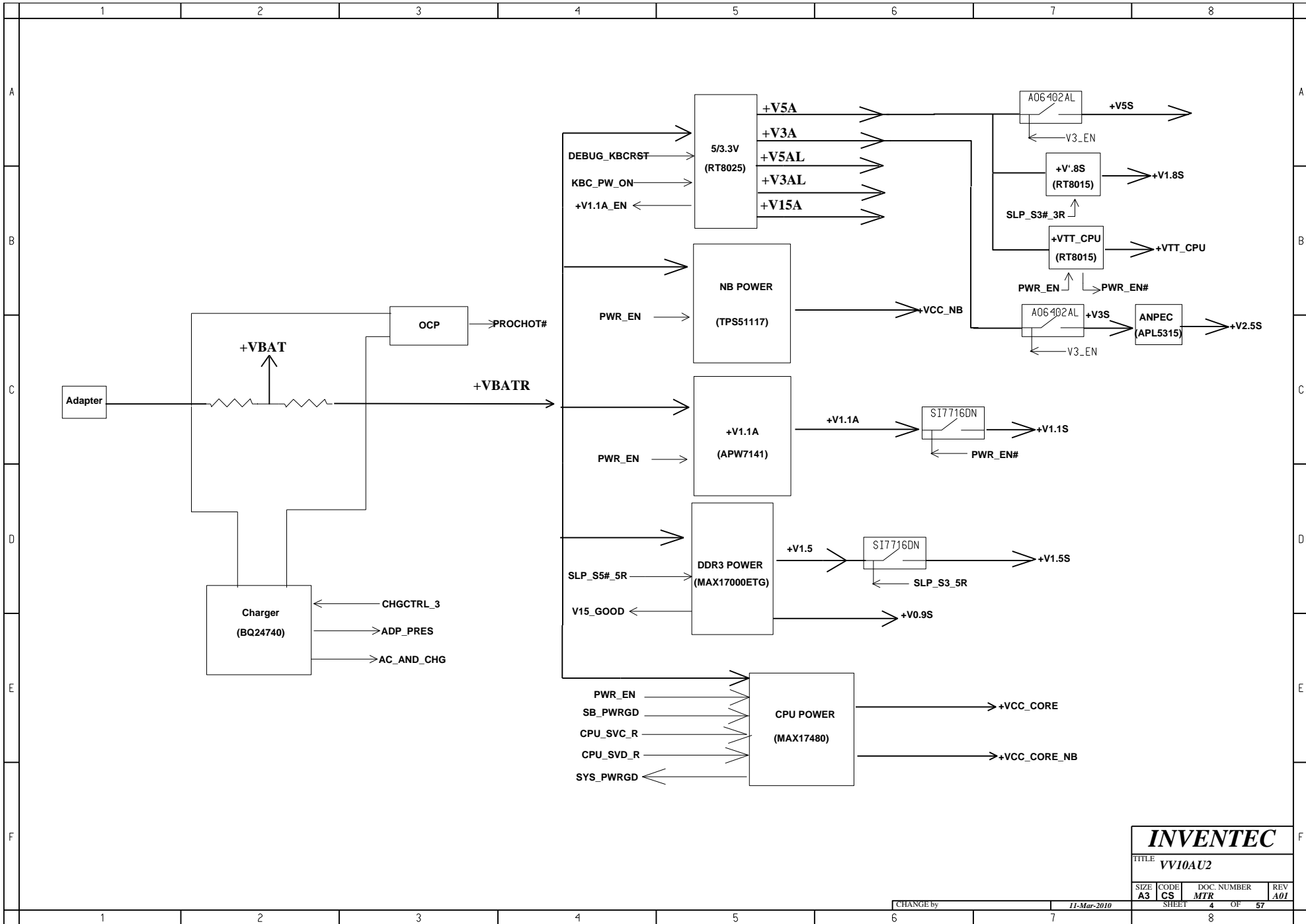
CHANGE by 11-Mar-2010



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TITLE			
VV10AU2			
Block Diagram			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
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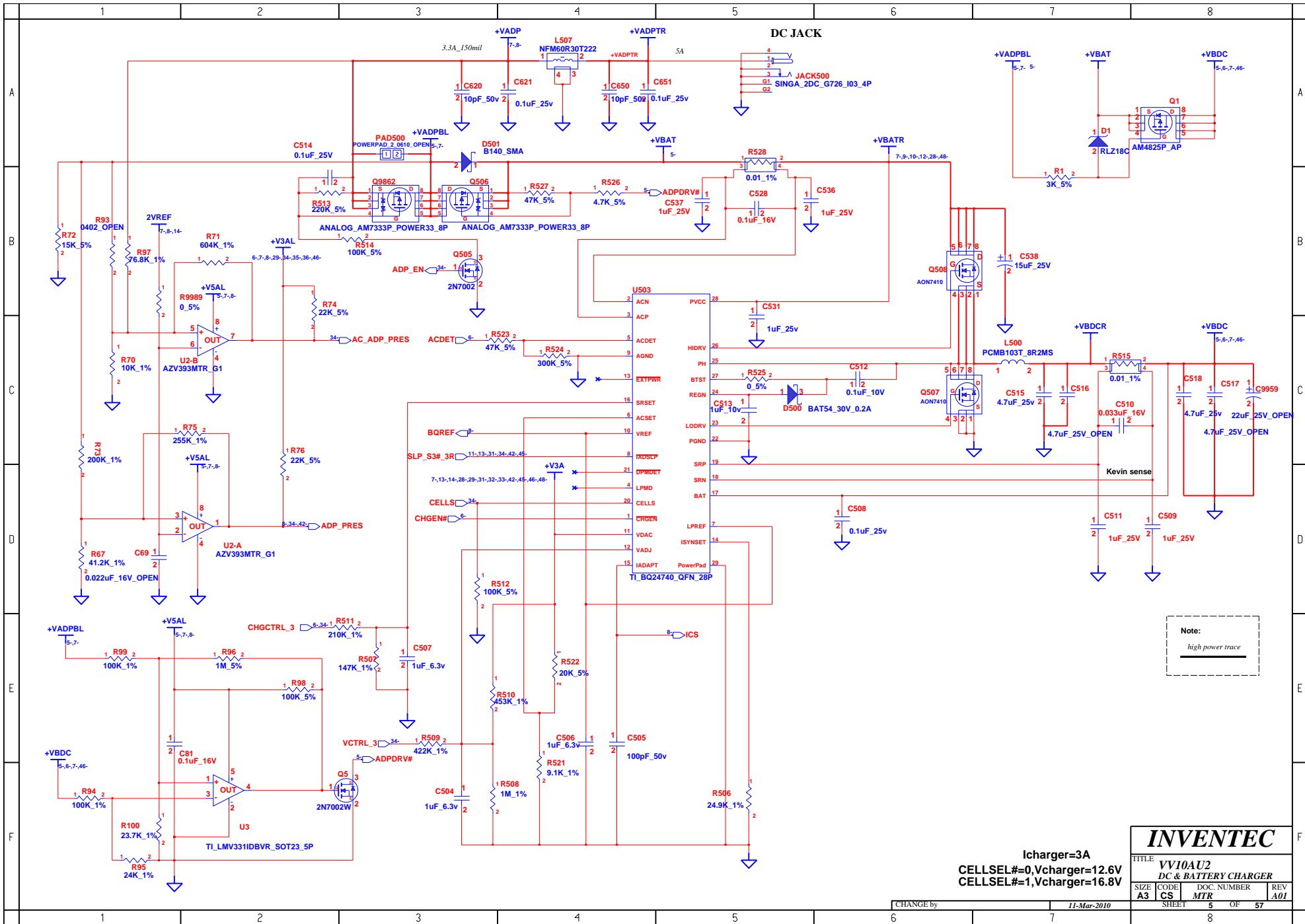
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TITLE **VV10AU2**

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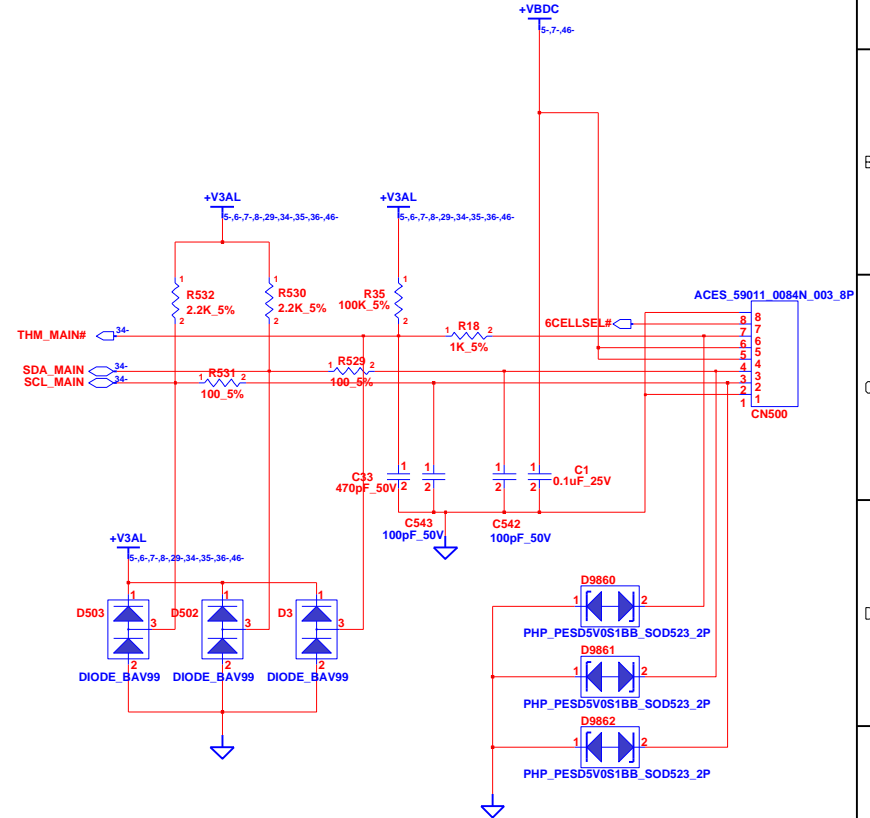
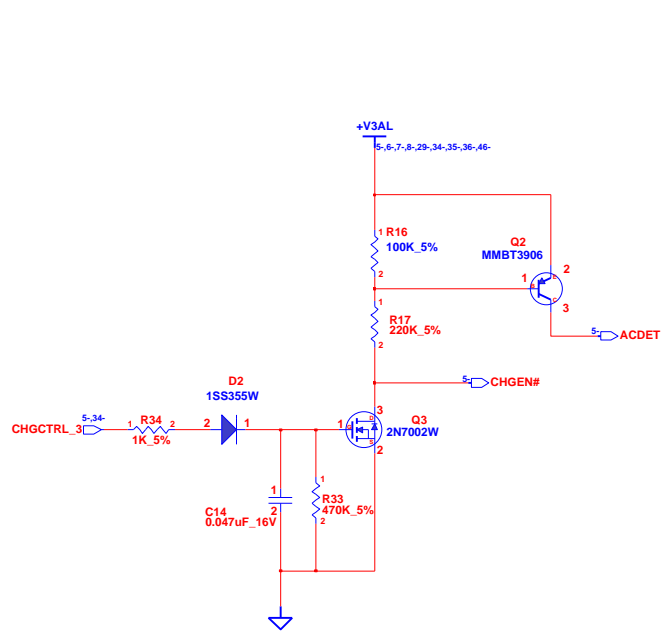
CHANGE by 11-Mar-2010

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

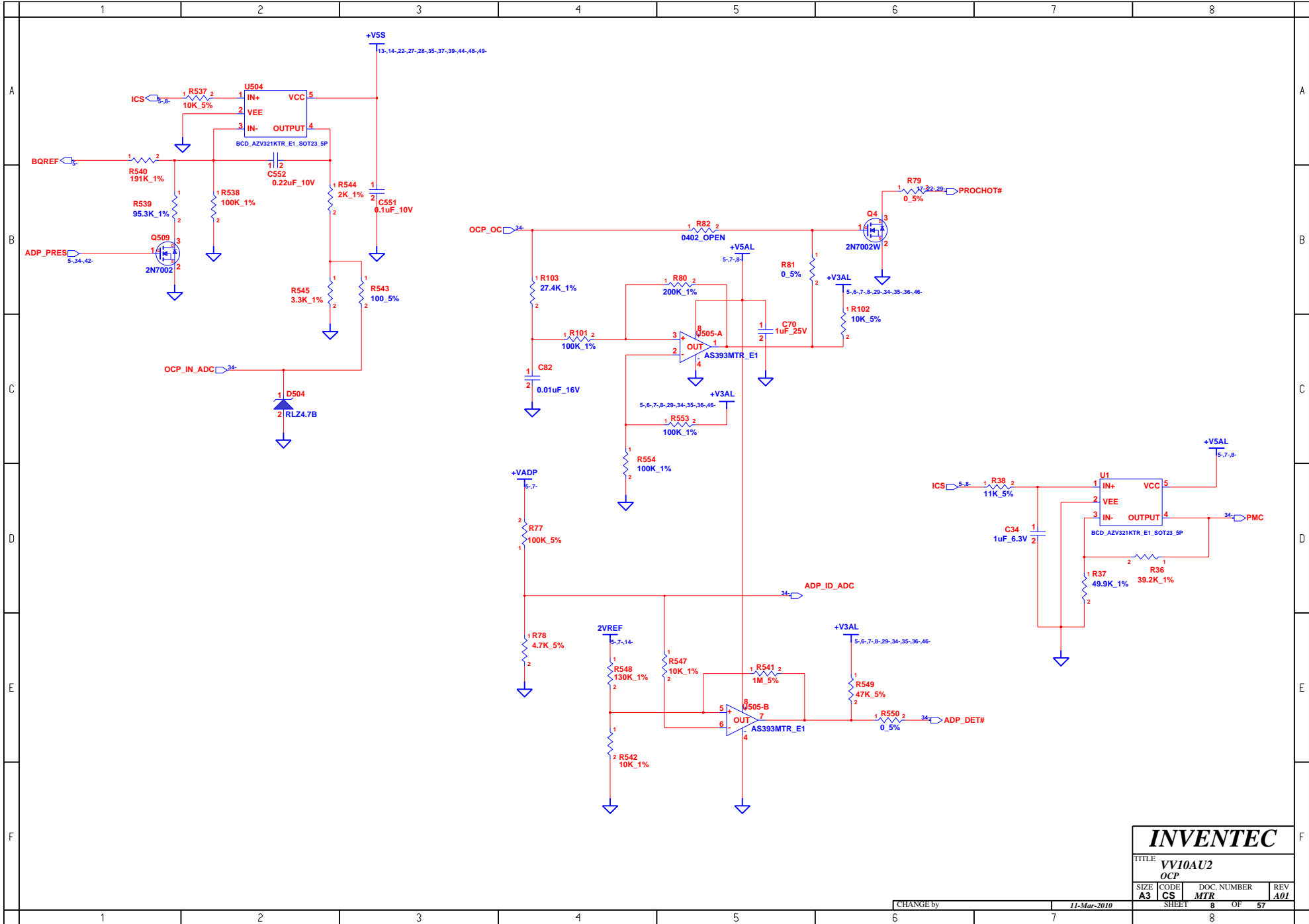
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DC & BATTERY CHARGER			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
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INVENTEC

TITLE			
VV10AU2			
SELECT & BATTERY CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01

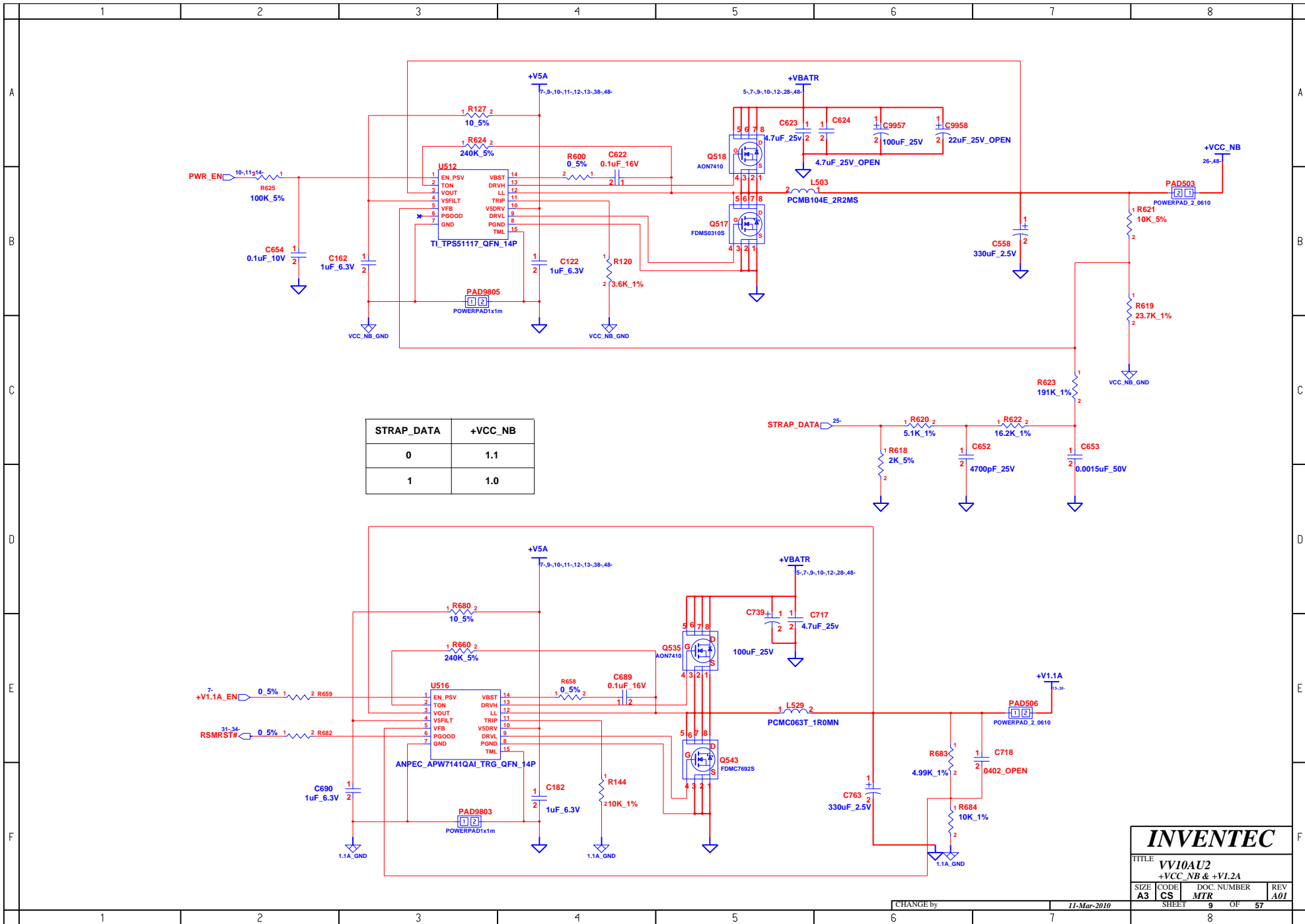
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INVENTEC

TITLE			
VV10AU2			
OCP			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
SHEET		OF	57
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CHANGE by 11-Mar-2010



STRAP_DATA	+VCC_NB
0	1.1
1	1.0

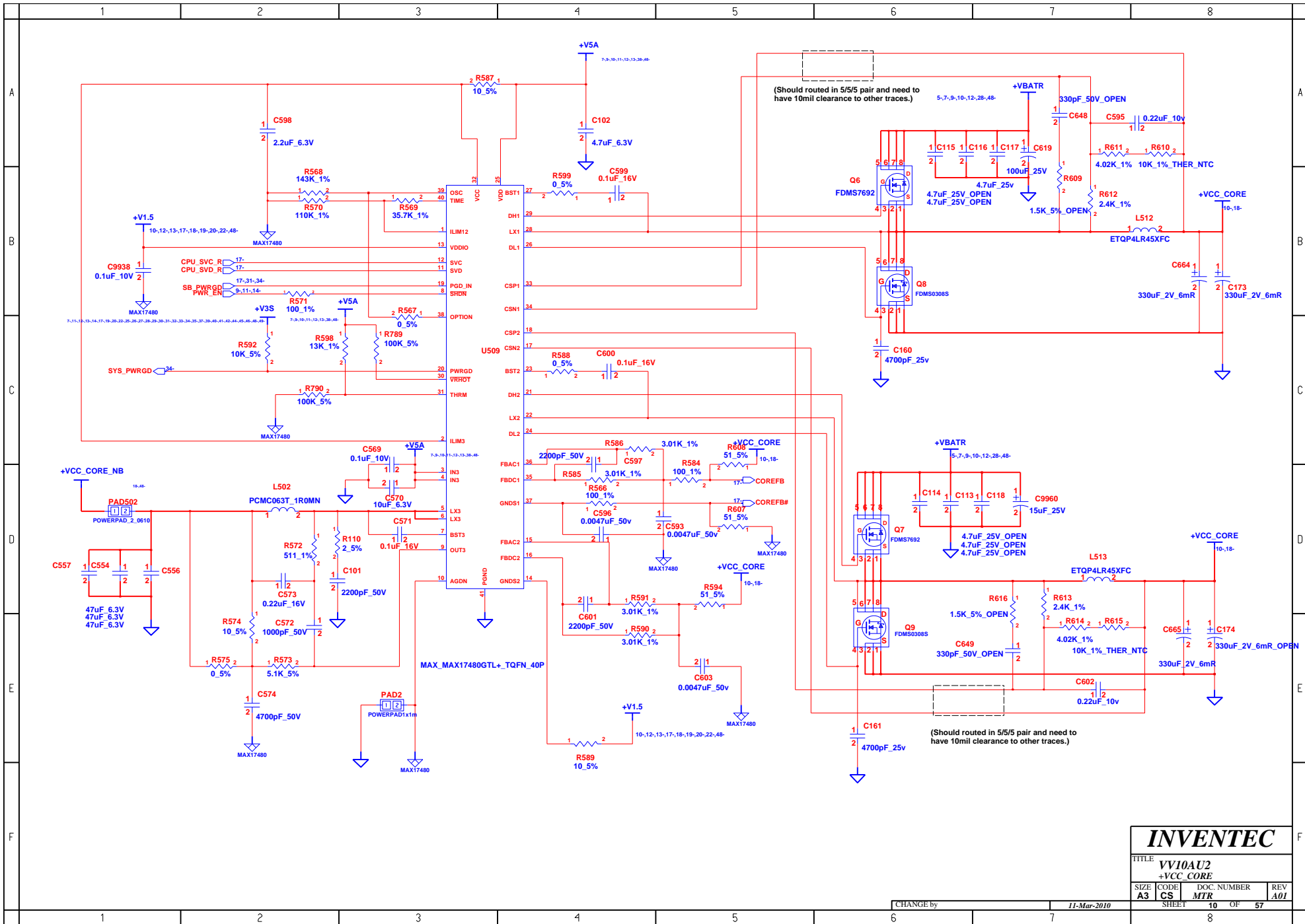
INVENTEC

TITLE
VV10AU2
+VCC_NB & +V1.2A

SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
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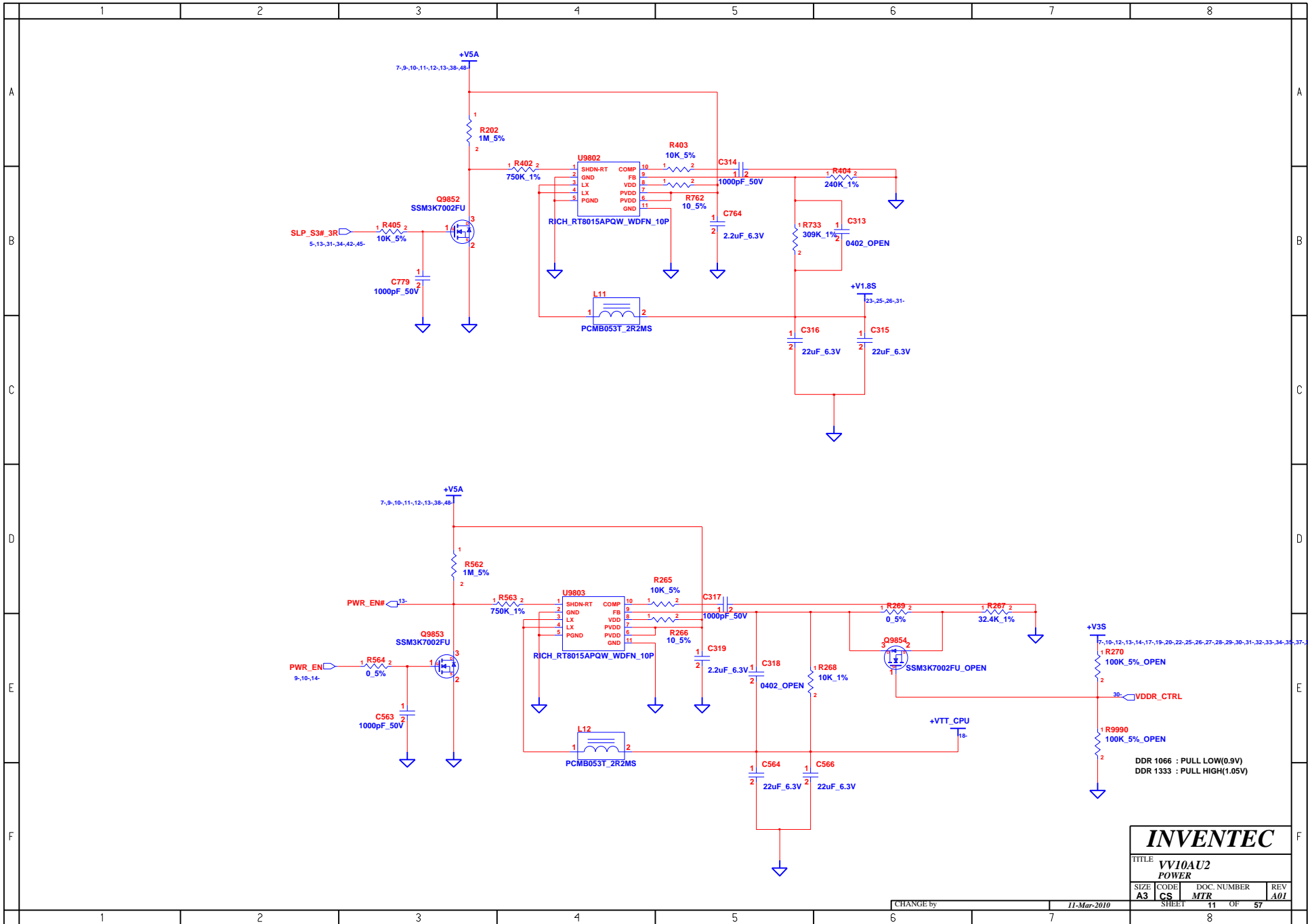
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INVENTEC

TITLE			
VV10AU2			
+VCC_CORE			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01



INVENTEC

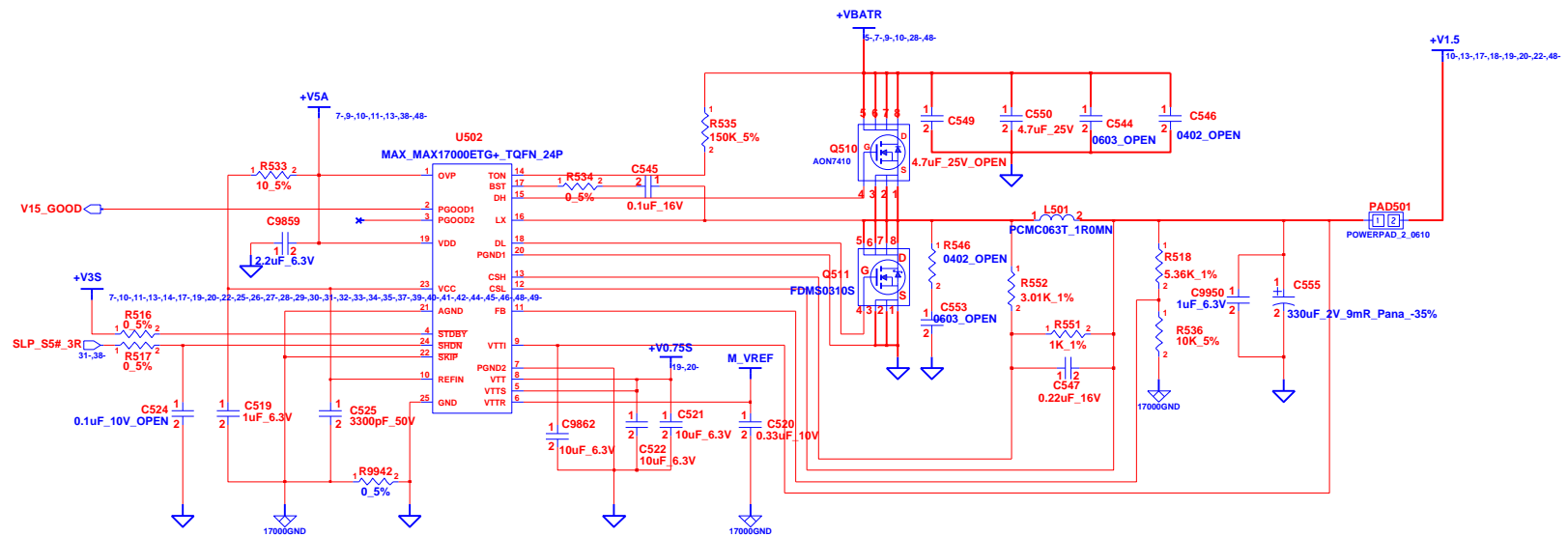
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VV10AU2
POWER

SIZE	CODE	DOC. NUMBER	REV
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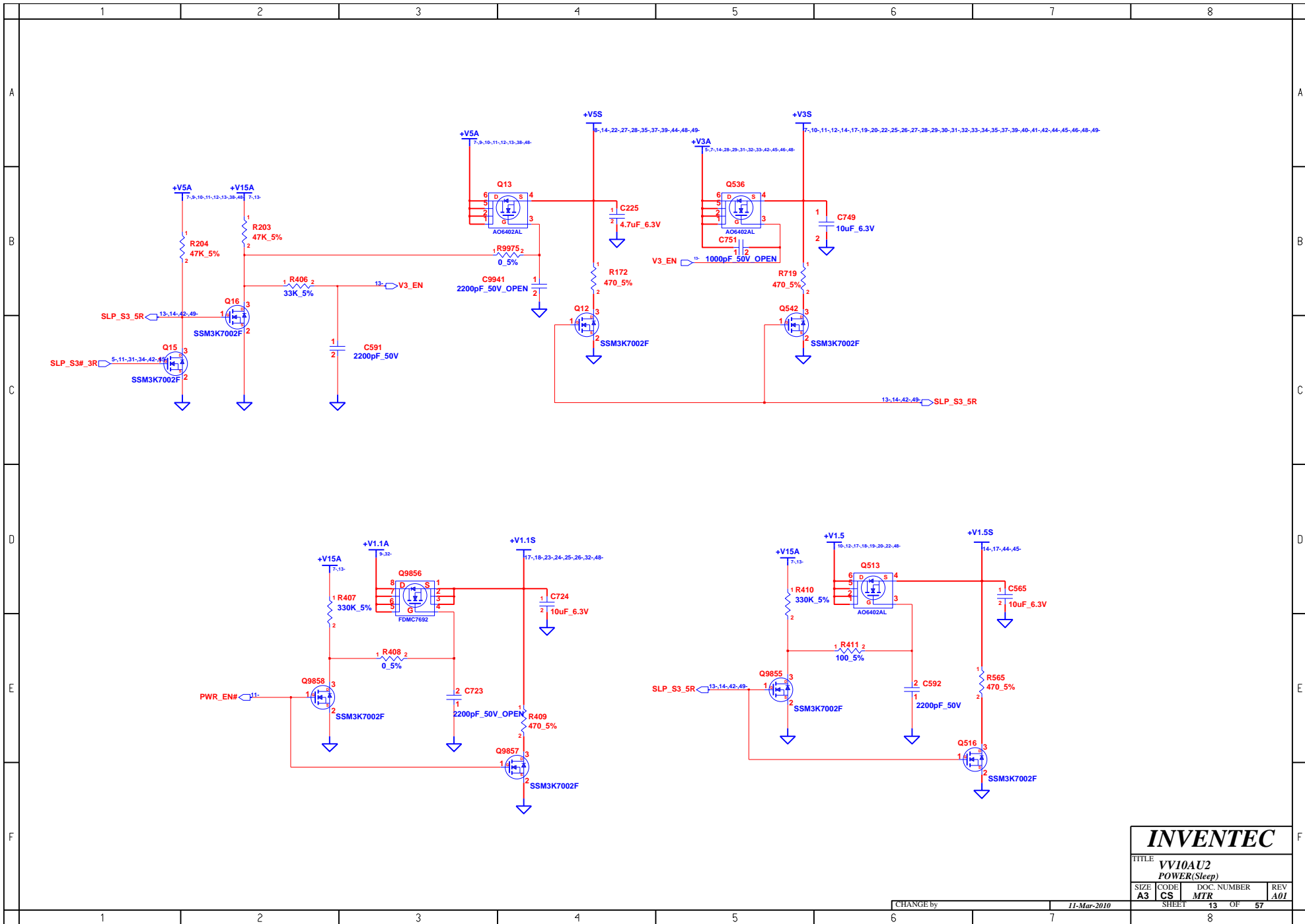


NOTE: DDR2 REGULATOR

INVENTEC

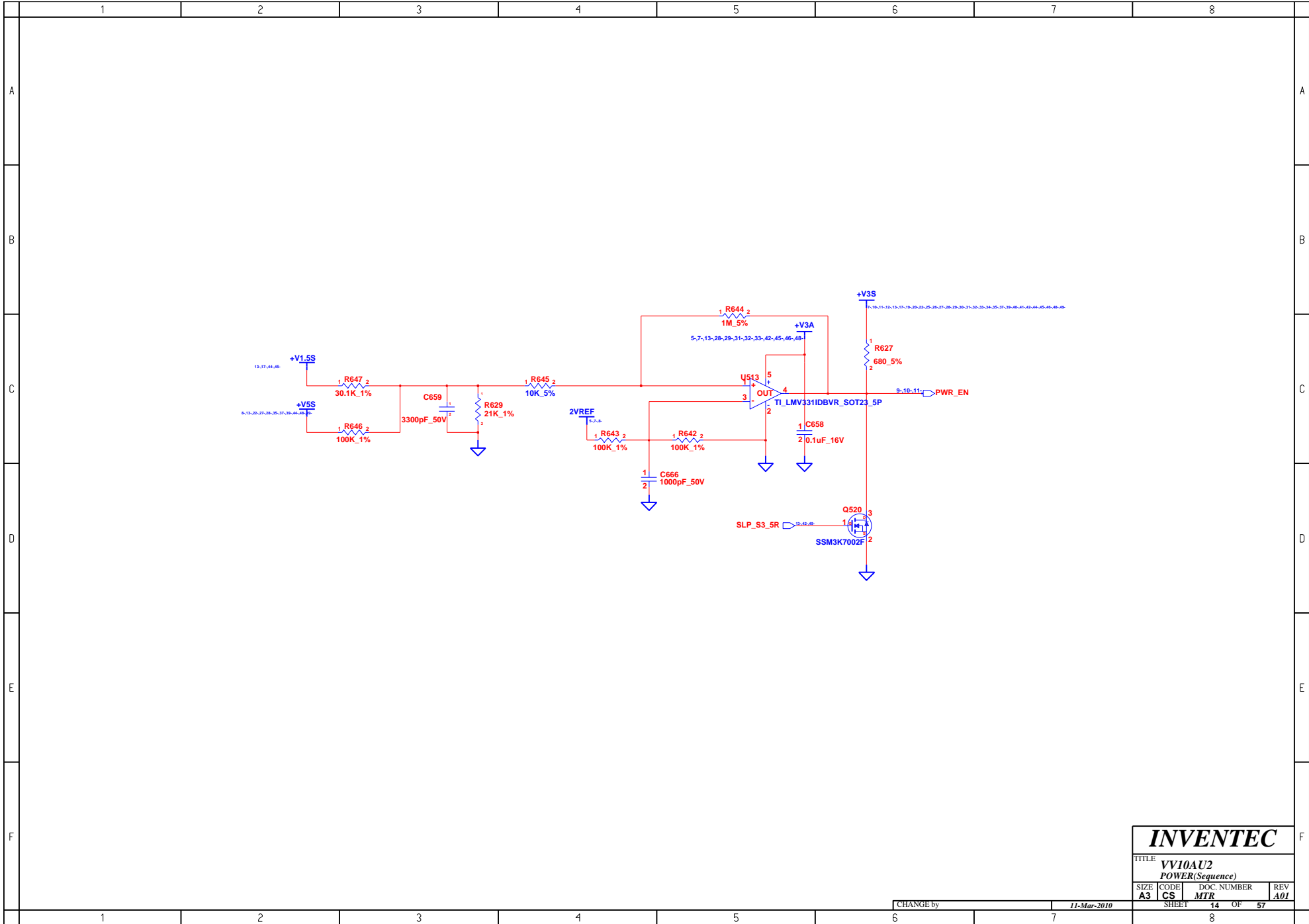
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VVI0AU2			
DDR2 POWER			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
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INVENTEC

TITLE			
VV10AU2			
POWER(Sleep)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
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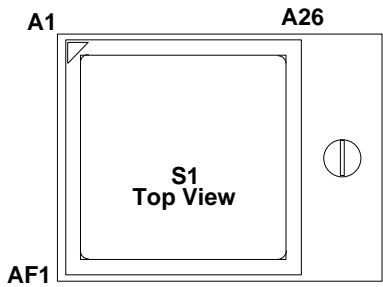
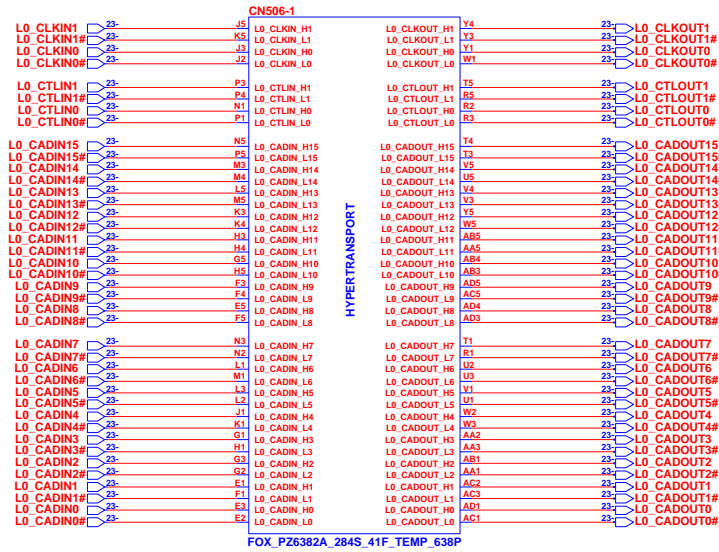


INVENTEC

TITLE
**VV10AU2
 POWER(Sequence)**

SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
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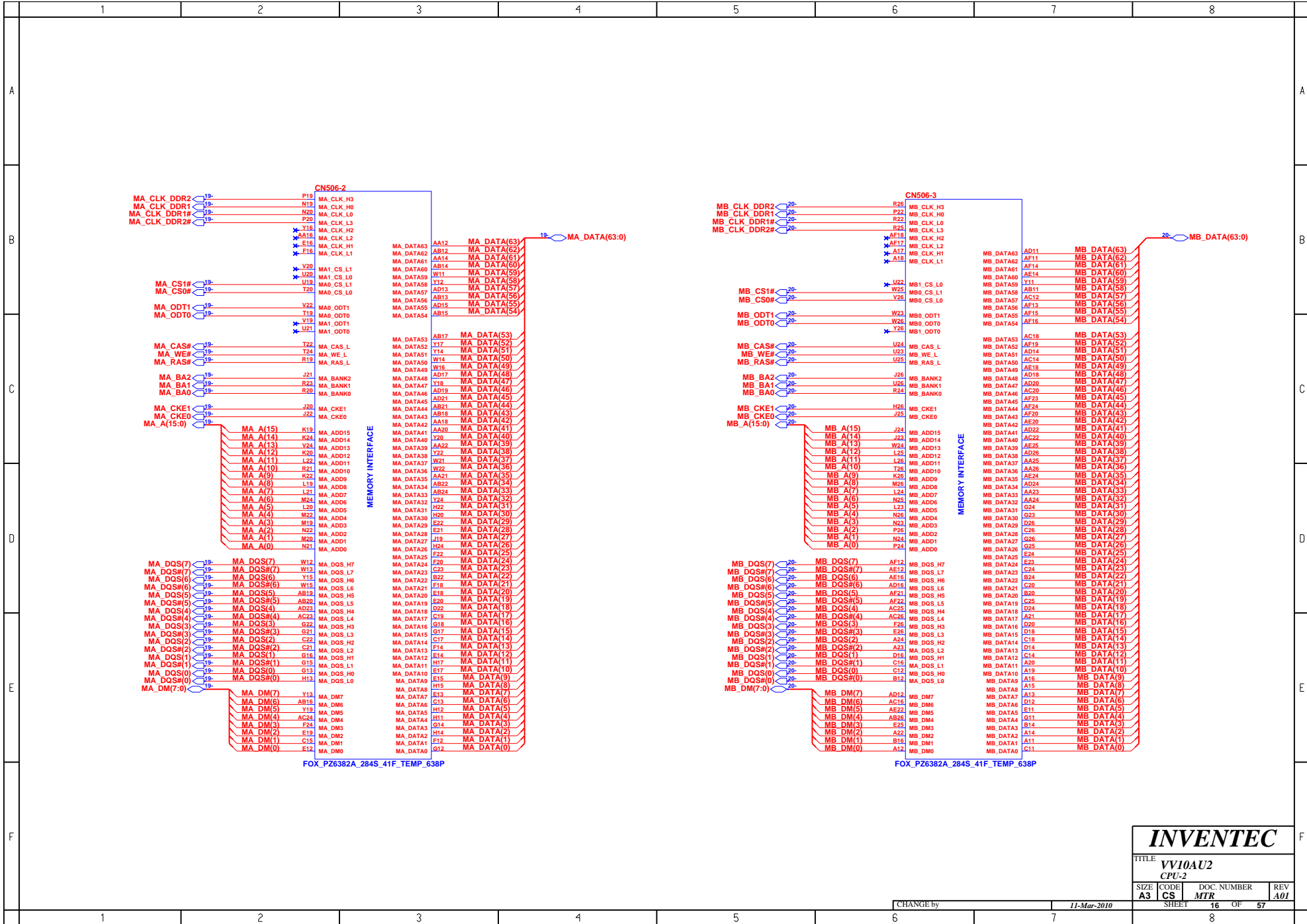
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A									
B									
C									
D									
E									
F									



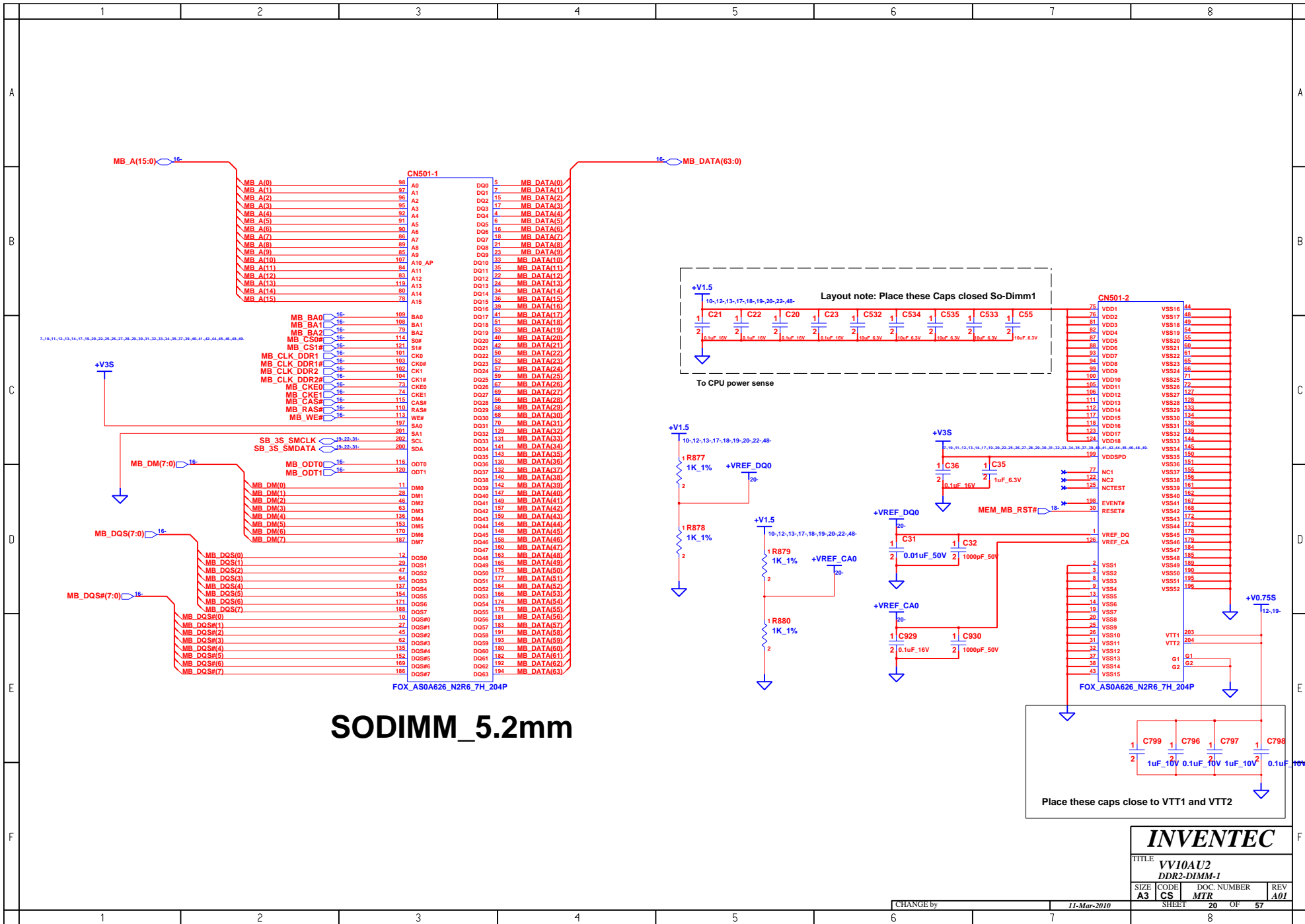
Layout: Add stitching caps if crossing plane split.

INVENTEC			
TITLE VV10AU2 CPU-1			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	
SHEET		15 OF 57	

	1	2	3	4	5	6	7	8	
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INVENTEC			
TITLE VV10AU2 CPU-2			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
CHANGE by		11-Mar-2010	
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INVENTEC			
TITLE VV10AU2			
DDR2-DIMM-1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
CHANGE by		11-Mar-2010	
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	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	

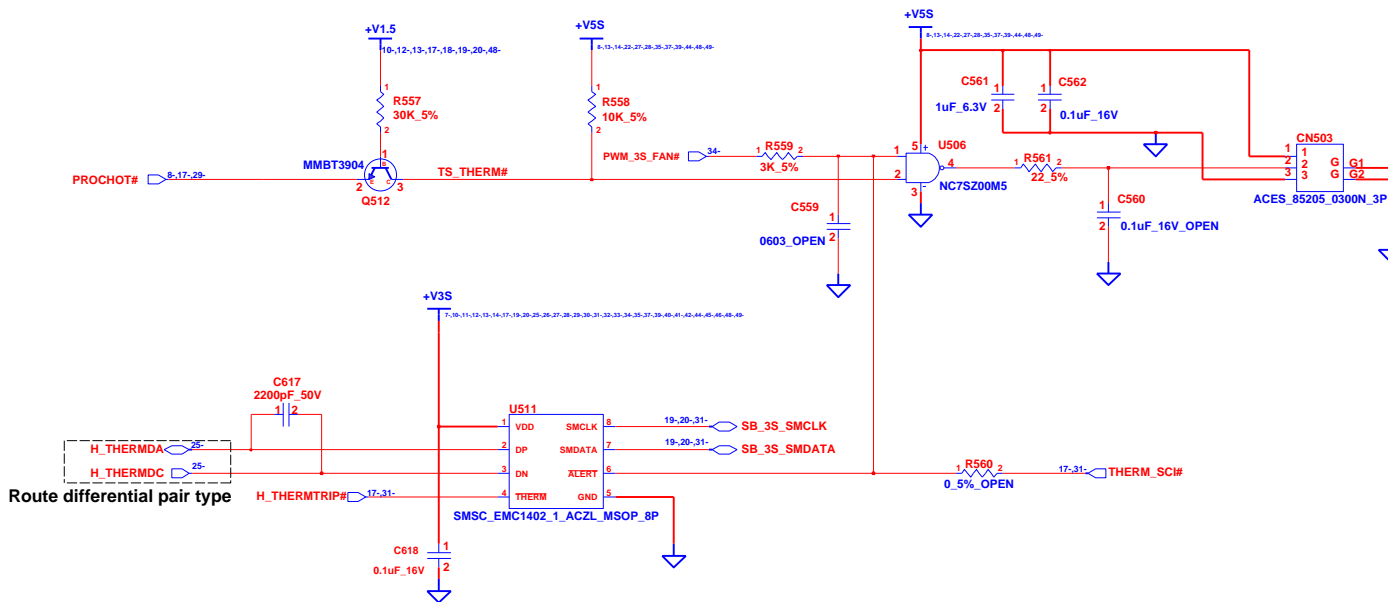
INVENTEC

TITLE **VV10AU2**
DDR2-DAMPING

SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01

CHANGE by **11-Mar-2010**

SHEET **21** OF **57**



LAYOUT Note: Put the thermal sensor close to CPU.

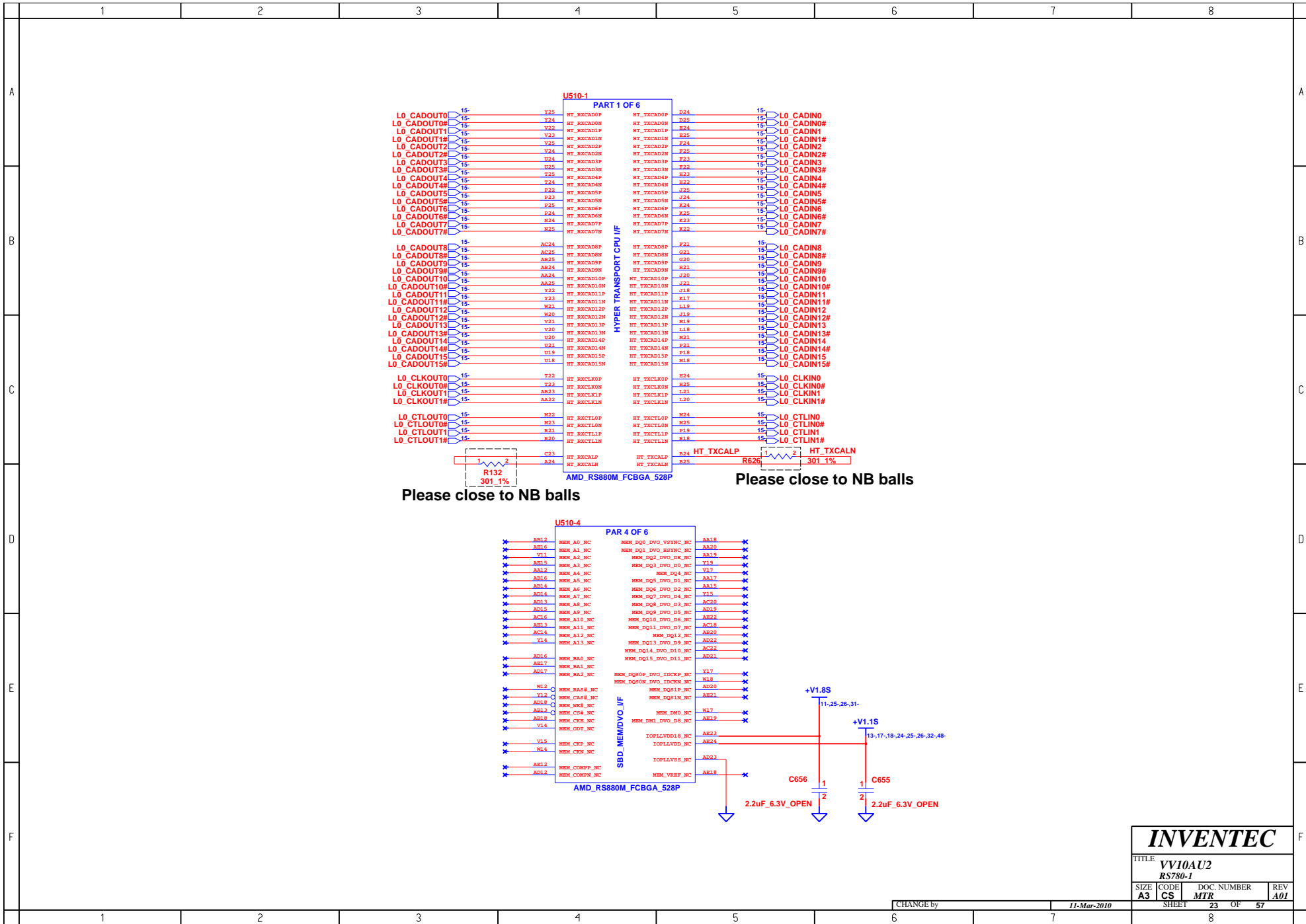
INVENTEC

TITLE
VV10AU2
 THERMAL & FAN CONTROLLER

SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
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CHANGE by 11-Mar-2010

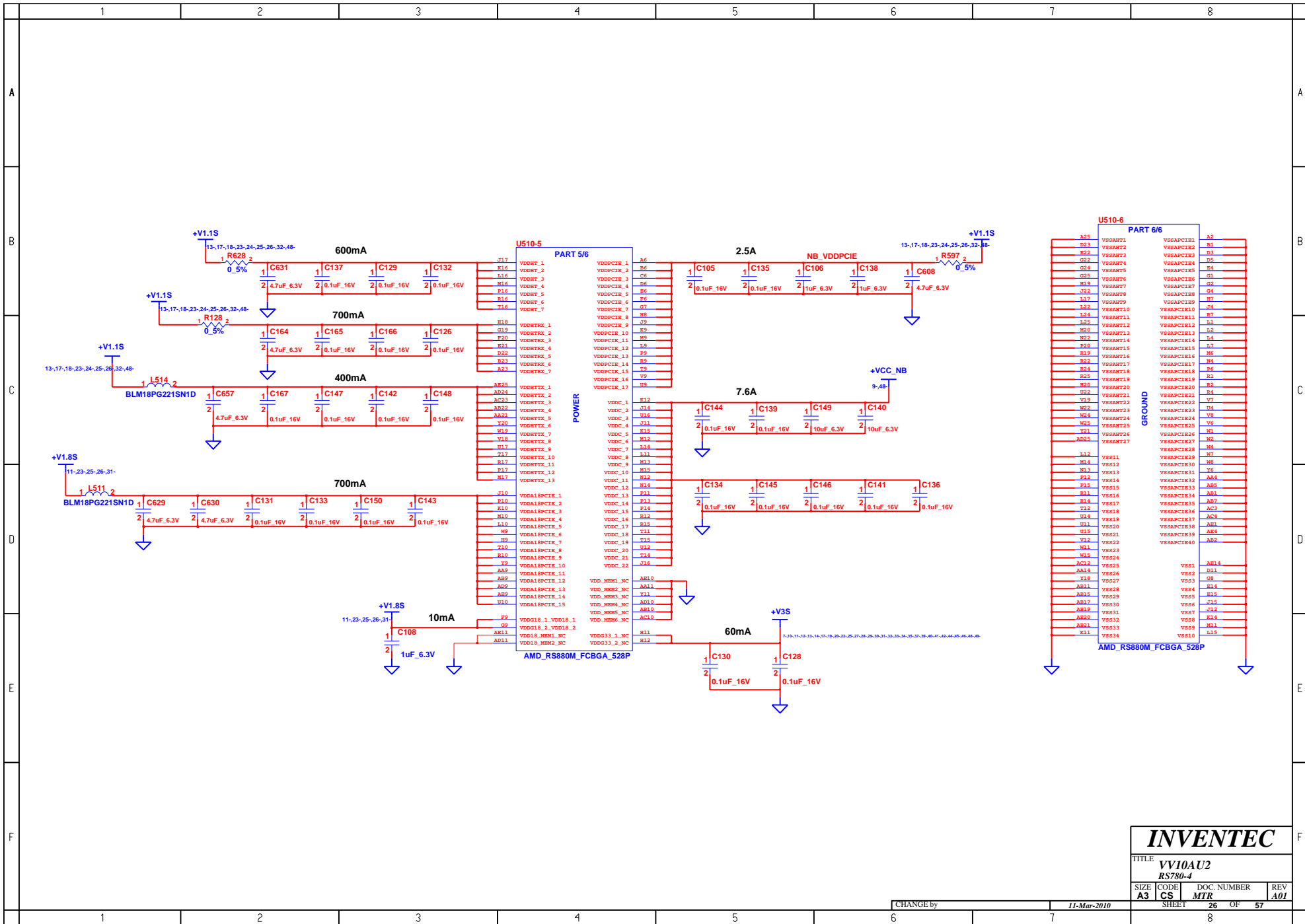
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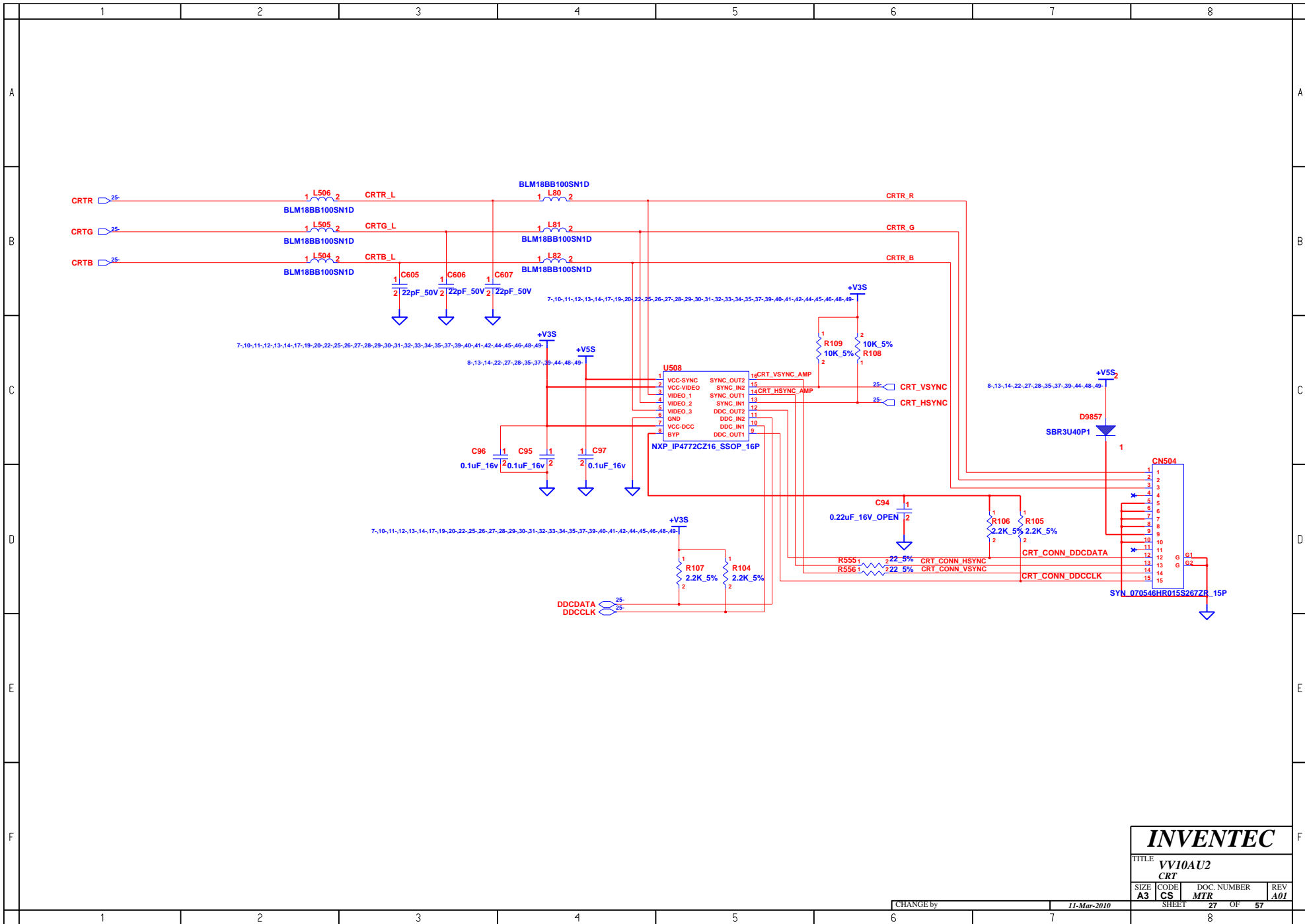
Please close to NB balls

Please close to NB balls

INVENTEC			
TITLE VV10AU2 RS780-1			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	
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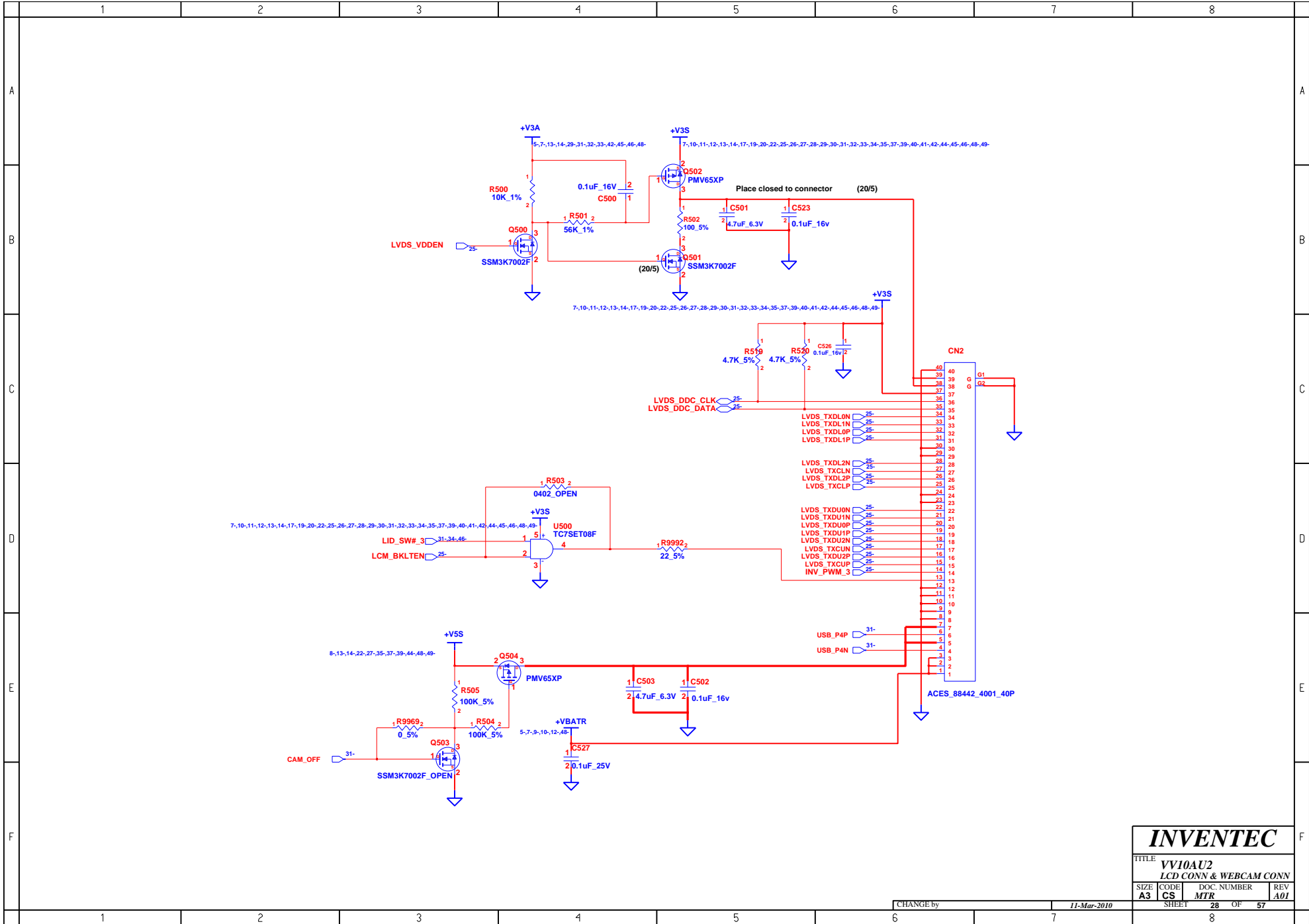
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TITLE VV10AU2 RS780-4			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	SHEET 26 OF 57
1		2	8



INVENTEC

TITLE			
VV10AU2			
CRT			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
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CHANGE by 11-Mar-2010



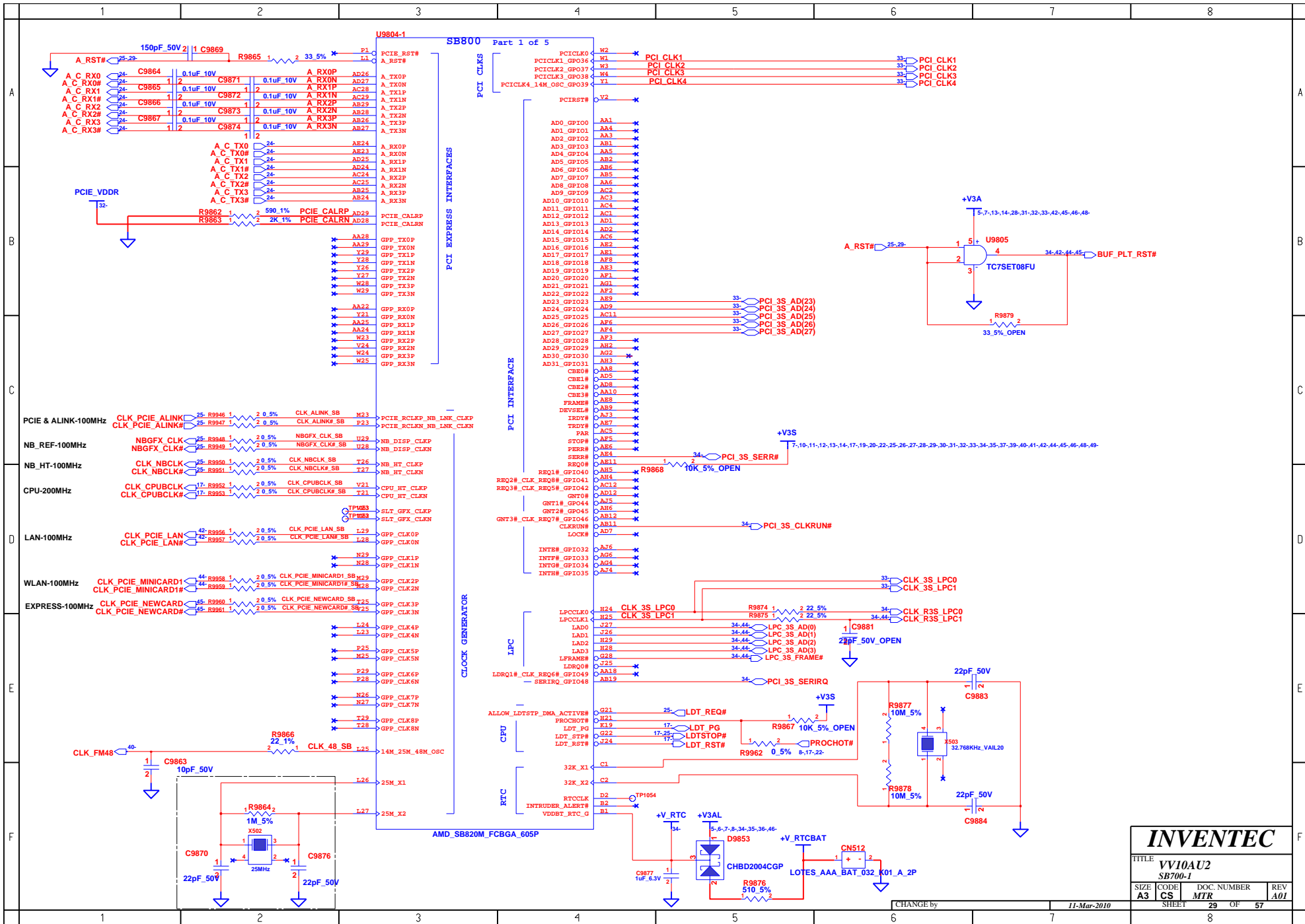
INVENTEC

TITLE
VV10AU2
LCD CONN & WEBCAM CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01

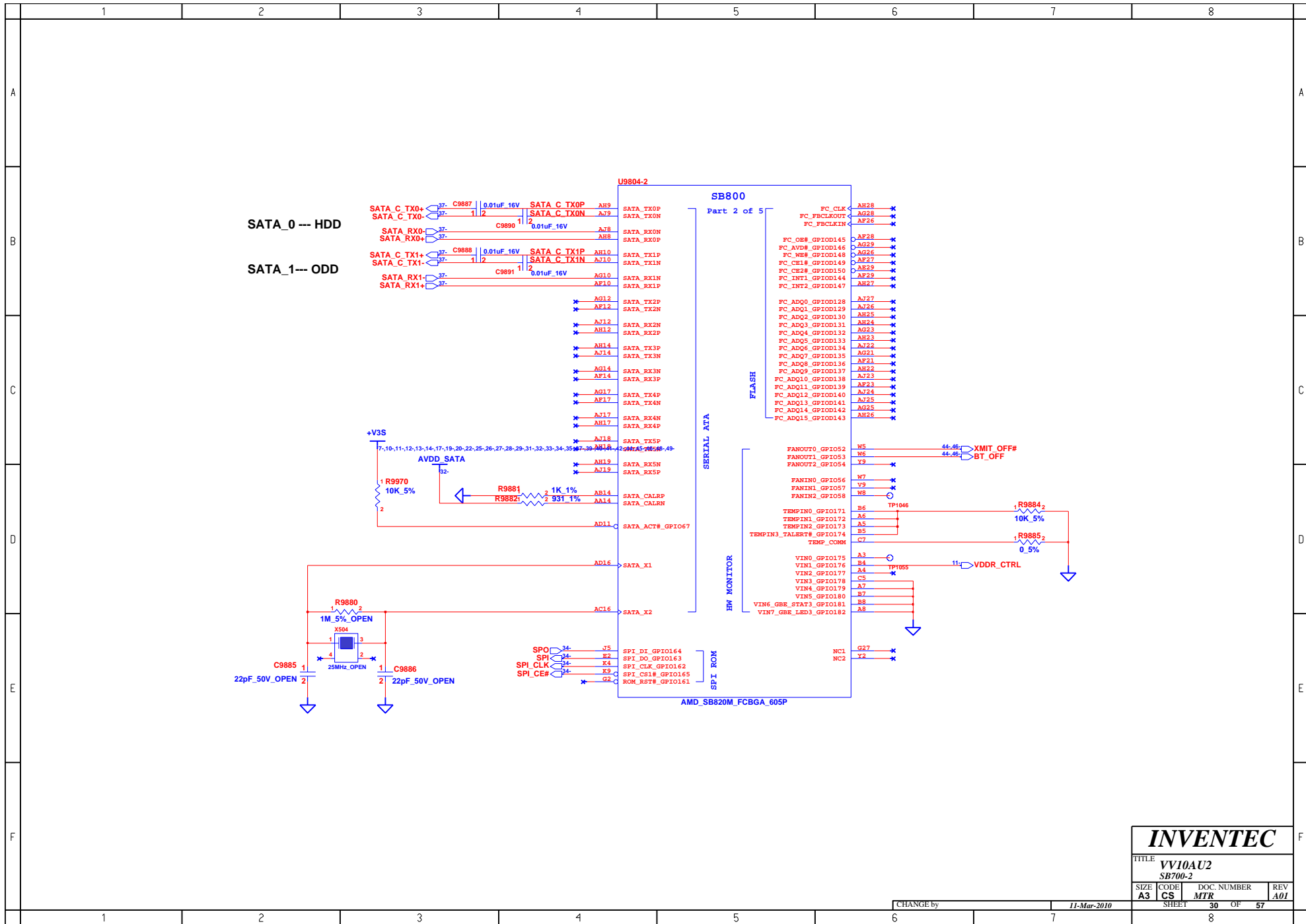
CHANGE by 11-Mar-2010

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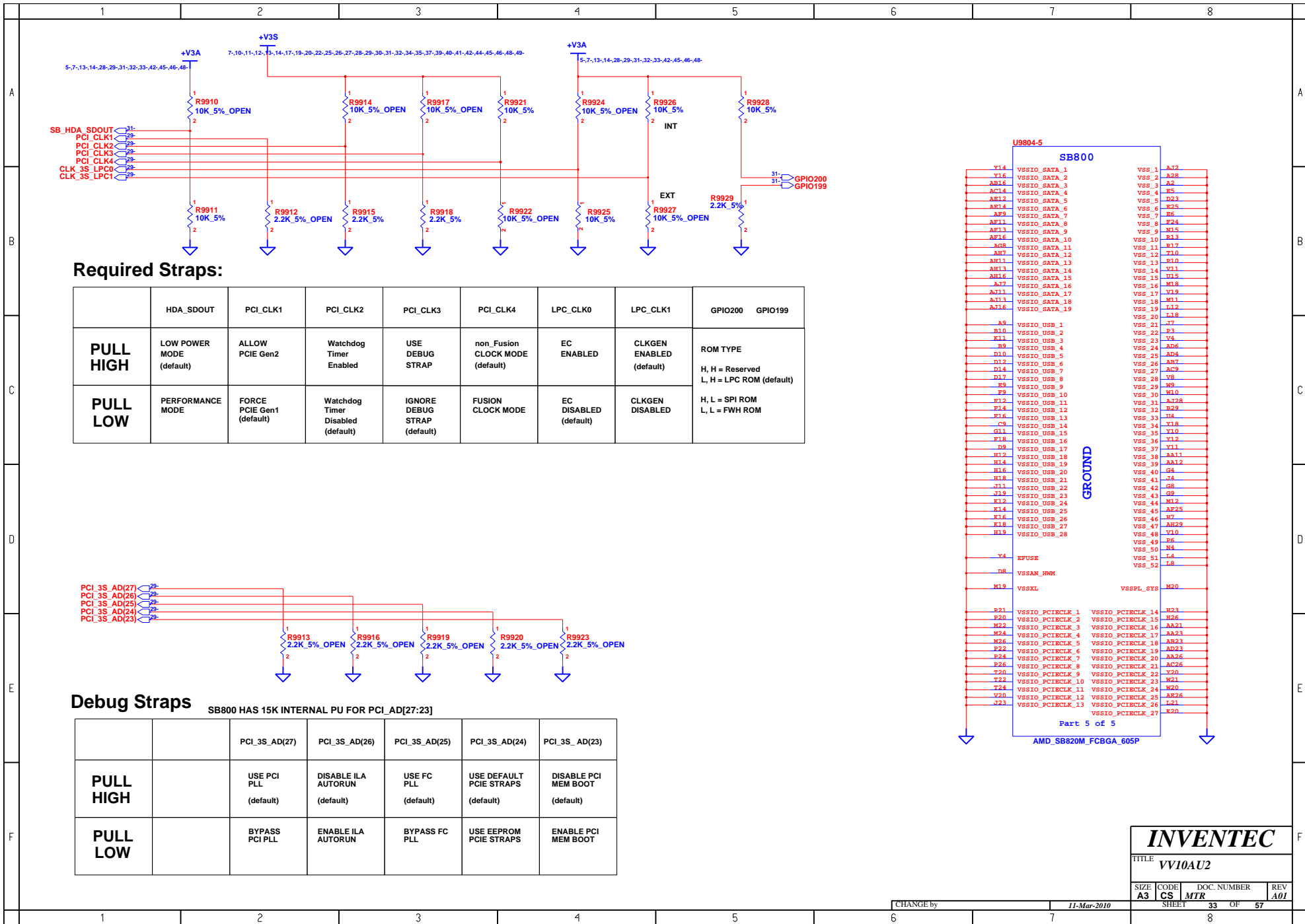


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SB700-1			
SIZE	CODE	DOC. NUMBER	REV
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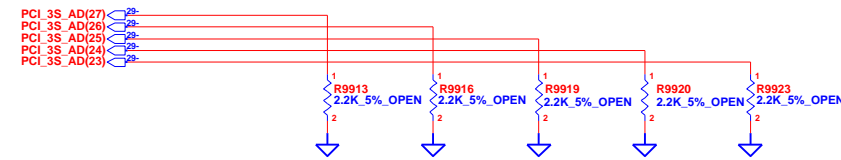


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TITLE VV10AU2 SB700-2			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	
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Required Straps:

	HDA_SDOUT	PCI_CLK1	PCI_CLK2	PCI_CLK3	PCI_CLK4	LPC_CLK0	LPC_CLK1	GPIO200	GPIO199
PULL HIGH	LOW POWER MODE (default)	ALLOW PCIE Gen2	Watchdog Timer Enabled	USE DEBUG STRAP	non_Fusion CLOCK MODE (default)	EC ENABLED	CLKGEN ENABLED (default)	ROM TYPE	H, H = Reserved L, H = LPC ROM (default)
PULL LOW	PERFORMANCE MODE	FORCE PCIE Gen1 (default)	Watchdog Timer Disabled (default)	IGNORE DEBUG STRAP (default)	FUSION CLOCK MODE	EC DISABLED (default)	CLKGEN DISABLED	H, L = SPI ROM L, L = FWH ROM	



Debug Straps

SB800 HAS 15K INTERNAL PU FOR PCI_AD[27:23]

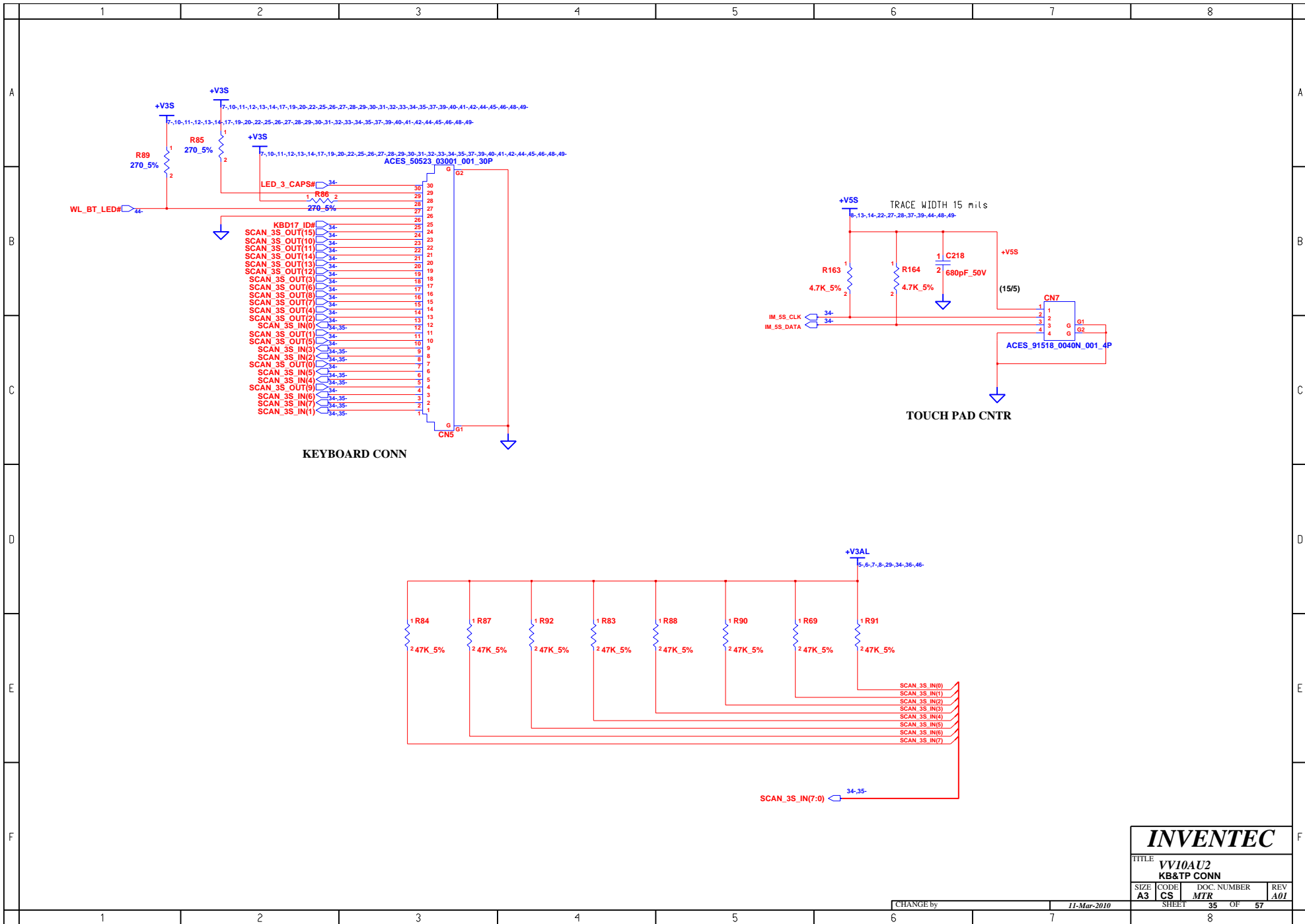
	PCI_3S_AD(27)	PCI_3S_AD(26)	PCI_3S_AD(25)	PCI_3S_AD(24)	PCI_3S_AD(23)
PULL HIGH	USE PCI PLL (default)	DISABLE ILA AUTORUN (default)	USE FC PLL (default)	USE DEFAULT PCIE STRAPS (default)	DISABLE PCI MEM BOOT (default)
PULL LOW	BYPASS PCI PLL	ENABLE ILA AUTORUN	BYPASS FC PLL	USE EEPROM PCIE STRAPS	ENABLE PCI MEM BOOT

SB800		
Y14	VSSIO_SATA_1	VSS_1_A17
Y16	VSSIO_SATA_2	VSS_2_A28
AB16	VSSIO_SATA_3	VSS_3_A2
AC14	VSSIO_SATA_4	VSS_4_E5
AE12	VSSIO_SATA_5	VSS_5_D23
AE14	VSSIO_SATA_6	VSS_6_E25
AF9	VSSIO_SATA_7	VSS_7_E6
AF13	VSSIO_SATA_8	VSS_8_E24
AF13	VSSIO_SATA_9	VSS_9_N15
AF16	VSSIO_SATA_10	VSS_10_E13
AG8	VSSIO_SATA_11	VSS_11_R17
AG7	VSSIO_SATA_12	VSS_12_T10
AH11	VSSIO_SATA_13	VSS_13_E10
AH13	VSSIO_SATA_14	VSS_14_V11
AH16	VSSIO_SATA_15	VSS_15_W15
AJ7	VSSIO_SATA_16	VSS_16_M18
AJ11	VSSIO_SATA_17	VSS_17_V19
AJ13	VSSIO_SATA_18	VSS_18_M11
AJ16	VSSIO_SATA_19	VSS_19_I12
A9	VSSIO_USB_1	VSS_20_I18
B10	VSSIO_USB_2	VSS_21_I7
K11	VSSIO_USB_3	VSS_22_E3
AB9	VSSIO_USB_4	VSS_23_V4
D10	VSSIO_USB_5	VSS_24_ADE
D12	VSSIO_USB_6	VSS_25_AD4
D14	VSSIO_USB_7	VSS_26_AB7
D17	VSSIO_USB_8	VSS_27_ACD
E9	VSSIO_USB_9	VSS_28_V8
F9	VSSIO_USB_10	VSS_29_W9
F12	VSSIO_USB_11	VSS_30_W10
F14	VSSIO_USB_12	VSS_31_A12B
F16	VSSIO_USB_13	VSS_32_B29
G9	VSSIO_USB_14	VSS_33_I4
G11	VSSIO_USB_15	VSS_34_V18
F18	VSSIO_USB_16	VSS_35_Y10
D9	VSSIO_USB_17	VSS_36_Y12
H12	VSSIO_USB_18	VSS_37_Y11
H14	VSSIO_USB_19	VSS_38_AA11
H16	VSSIO_USB_20	VSS_39_AA12
H18	VSSIO_USB_21	VSS_40_G4
J11	VSSIO_USB_22	VSS_41_I4
J12	VSSIO_USB_23	VSS_42_G8
K12	VSSIO_USB_24	VSS_43_G9
K14	VSSIO_USB_25	VSS_44_M12
K16	VSSIO_USB_26	VSS_45_AE25
K18	VSSIO_USB_27	VSS_46_I7
H19	VSSIO_USB_28	VSS_47_AH29
Y4	EFUSE	VSS_48_V10
D8	VSSAN_HRM	VSS_49_E6
M19	VSSXL	VSS_50_N4
		VSS_51_I4
		VSS_52_I8
		VSSPL_SVS N20
P21	VSSIO_PCIECLK_1	VSSIO_PCIECLK_14 H23
P20	VSSIO_PCIECLK_2	VSSIO_PCIECLK_15 H26
M22	VSSIO_PCIECLK_3	VSSIO_PCIECLK_16 AA21
M24	VSSIO_PCIECLK_4	VSSIO_PCIECLK_17 AA23
M26	VSSIO_PCIECLK_5	VSSIO_PCIECLK_18 AB23
P22	VSSIO_PCIECLK_6	VSSIO_PCIECLK_19 AD23
P24	VSSIO_PCIECLK_7	VSSIO_PCIECLK_20 AA26
P26	VSSIO_PCIECLK_8	VSSIO_PCIECLK_21 AC26
T20	VSSIO_PCIECLK_9	VSSIO_PCIECLK_22 Y20
T22	VSSIO_PCIECLK_10	VSSIO_PCIECLK_23 W21
T24	VSSIO_PCIECLK_11	VSSIO_PCIECLK_24 W20
V20	VSSIO_PCIECLK_12	VSSIO_PCIECLK_25 AB26
V22	VSSIO_PCIECLK_13	VSSIO_PCIECLK_26 I26
		VSSIO_PCIECLK_27 K20

GROUND

Part 5 of 5
AMD_SB820M_FCBGA_605P

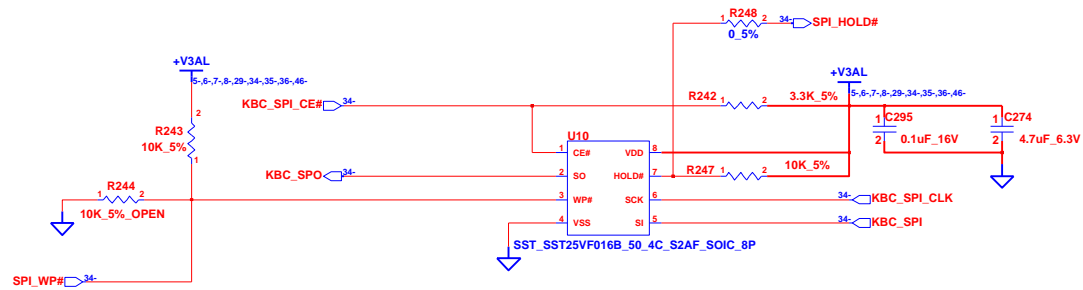
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SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01	
CHANGE by		11-Mar-2010		
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INVENTEC

TITLE			
VV10AU2			
KB&TP CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01

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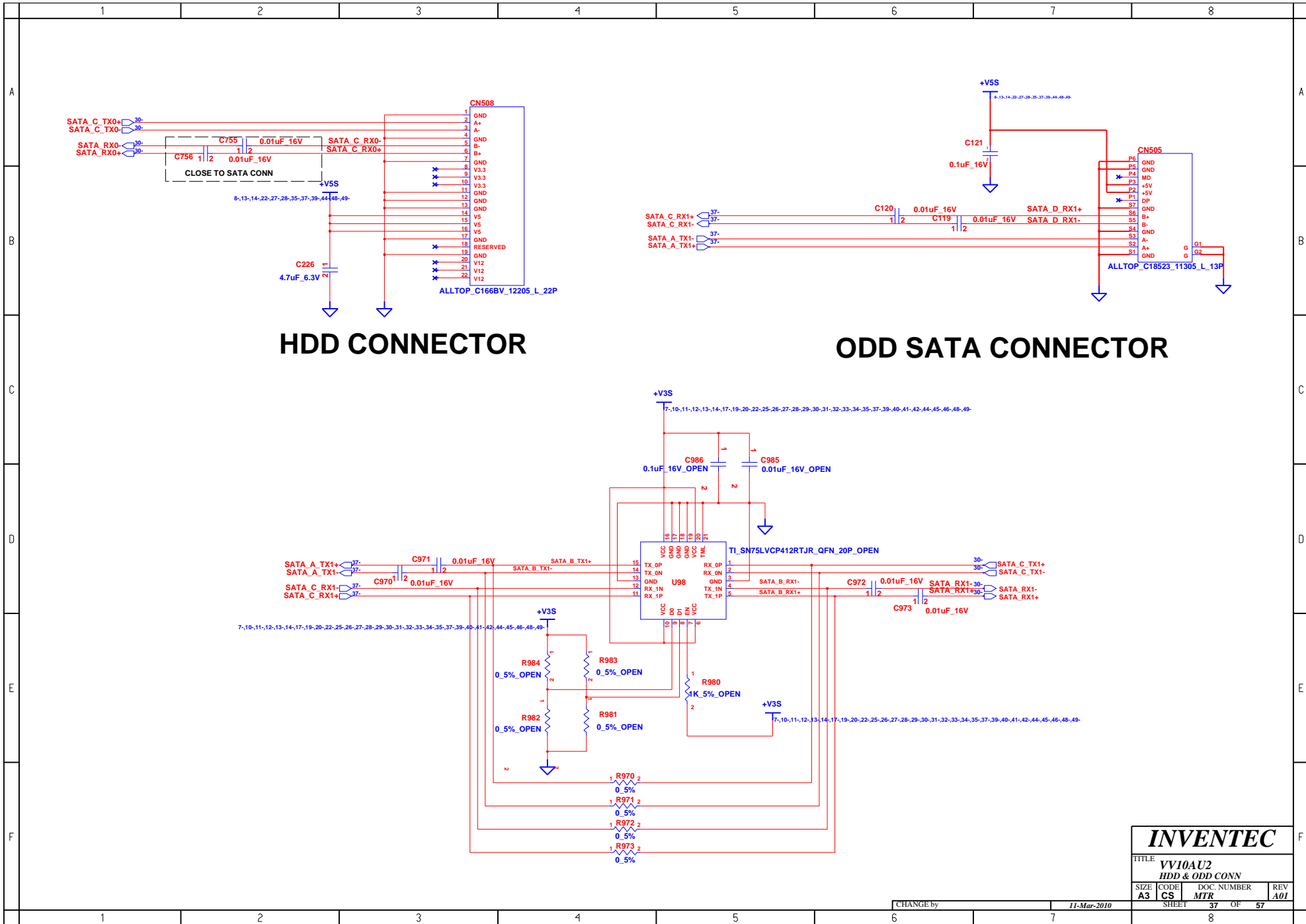


SPI Flash

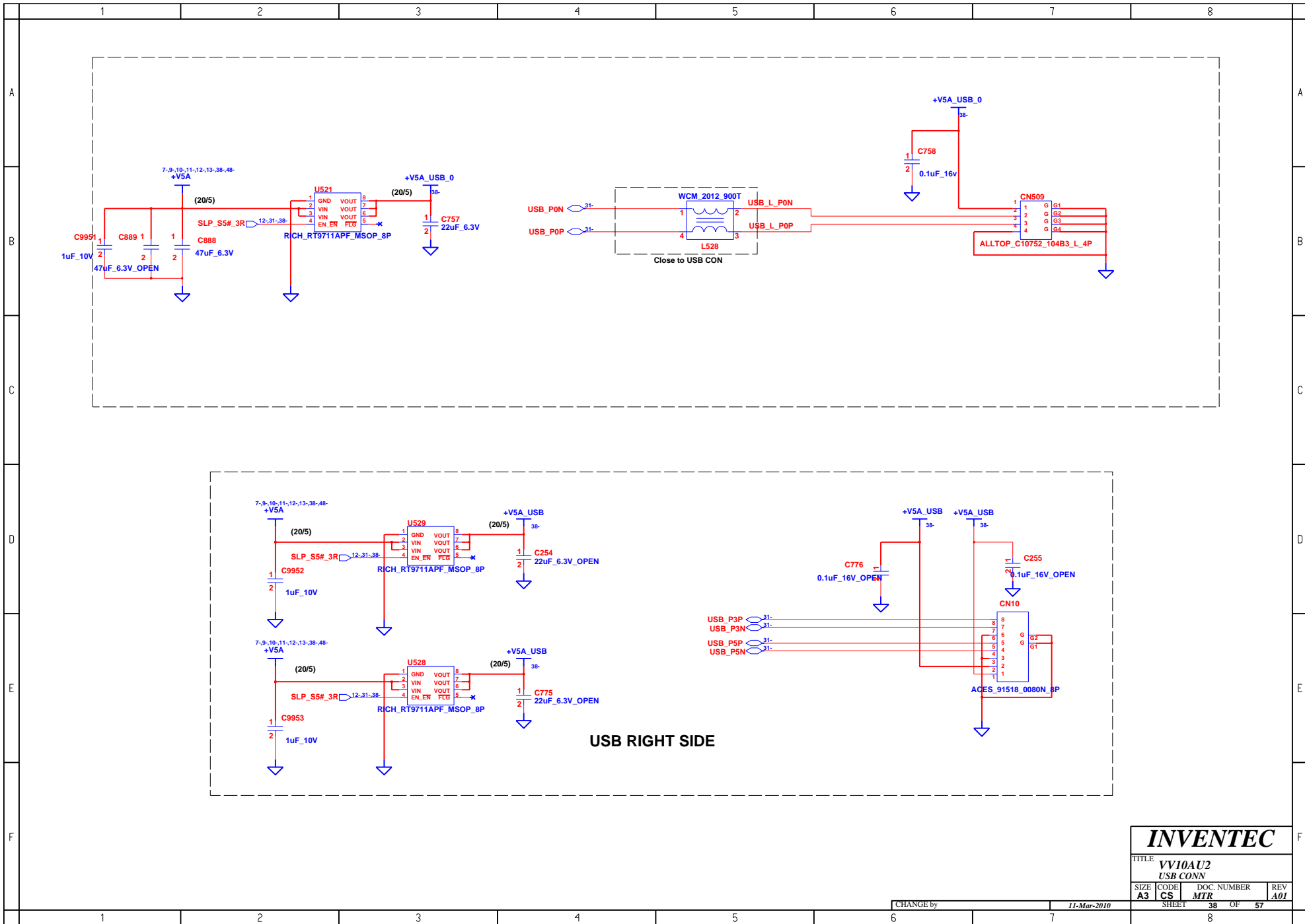
INVENTEC

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VV10AU2			
SPI			
SIZE	CODE	DOC. NUMBER	REV
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SHEET		OF	
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CHANGE by 11-Mar-2010



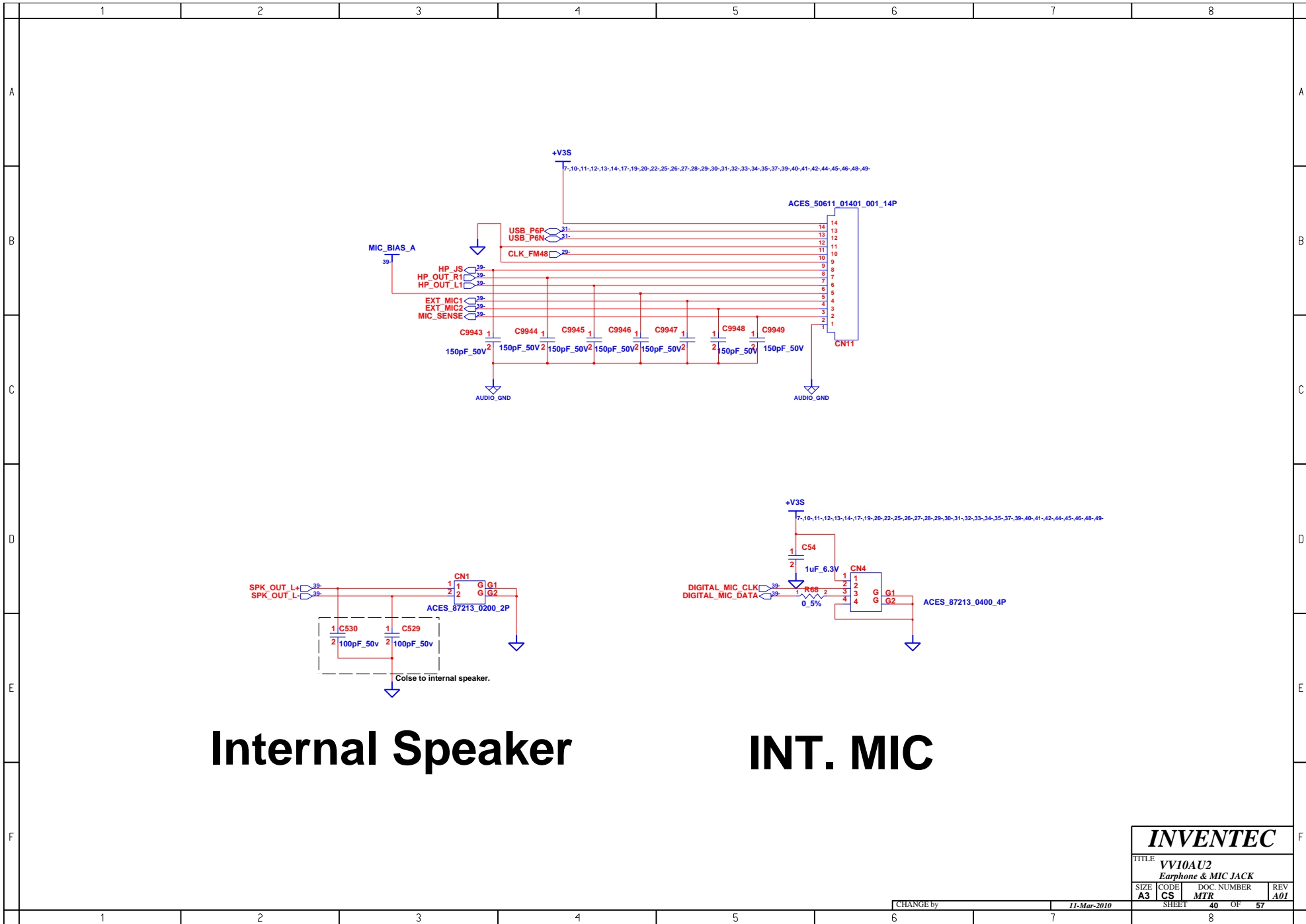
INVENTEC			
TITLE VV10AU2			
HDD & ODD CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
CHANGE by		11-Mar-2010	SHEET 37 OF 57



USB RIGHT SIDE

INVENTEC

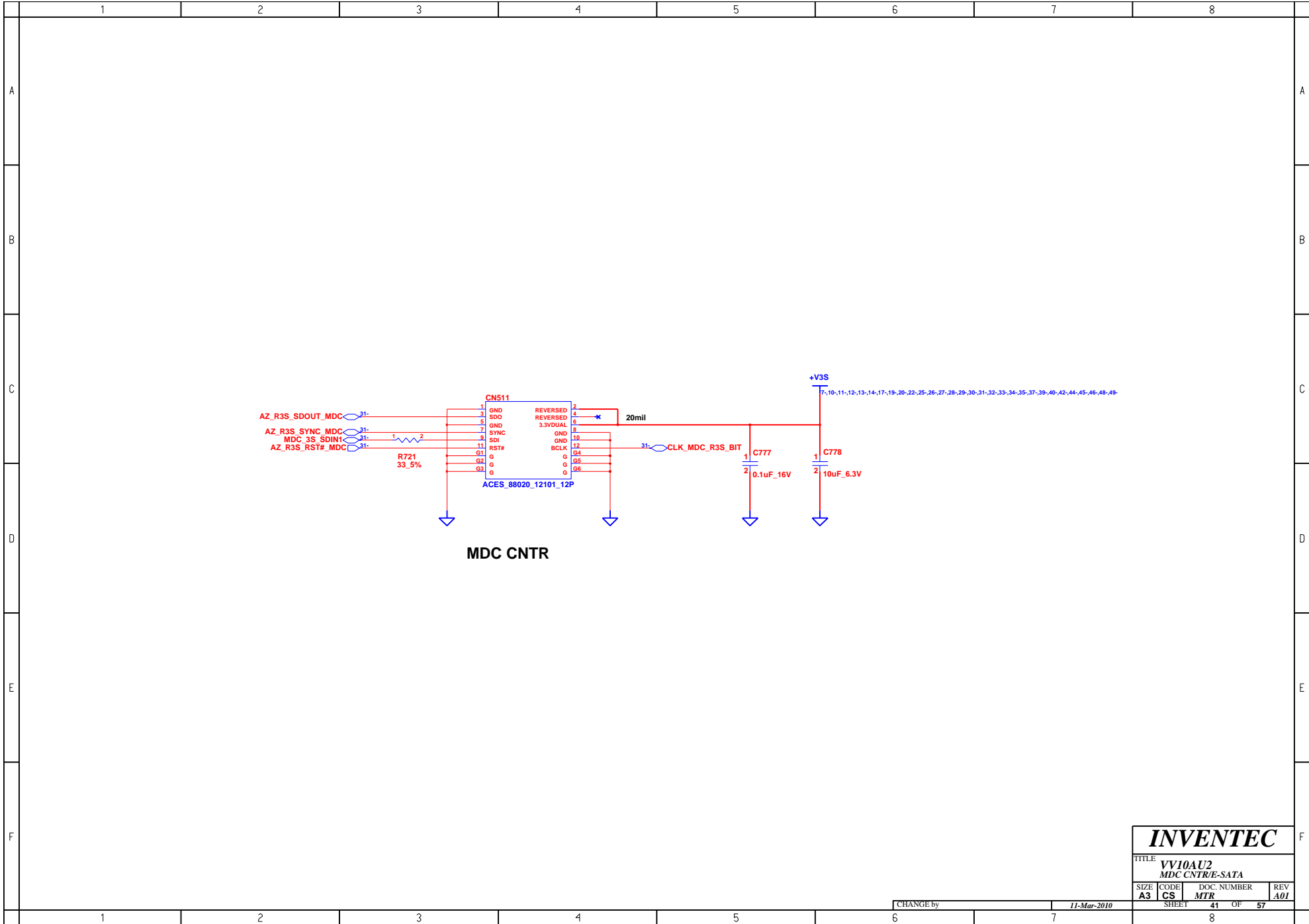
TITLE			
VV10AU2			
USB CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01



Internal Speaker

INT. MIC

INVENTEC			
TITLE VV10AU2 <i>Earphone & MIC JACK</i>			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	SHEET 40 OF 57



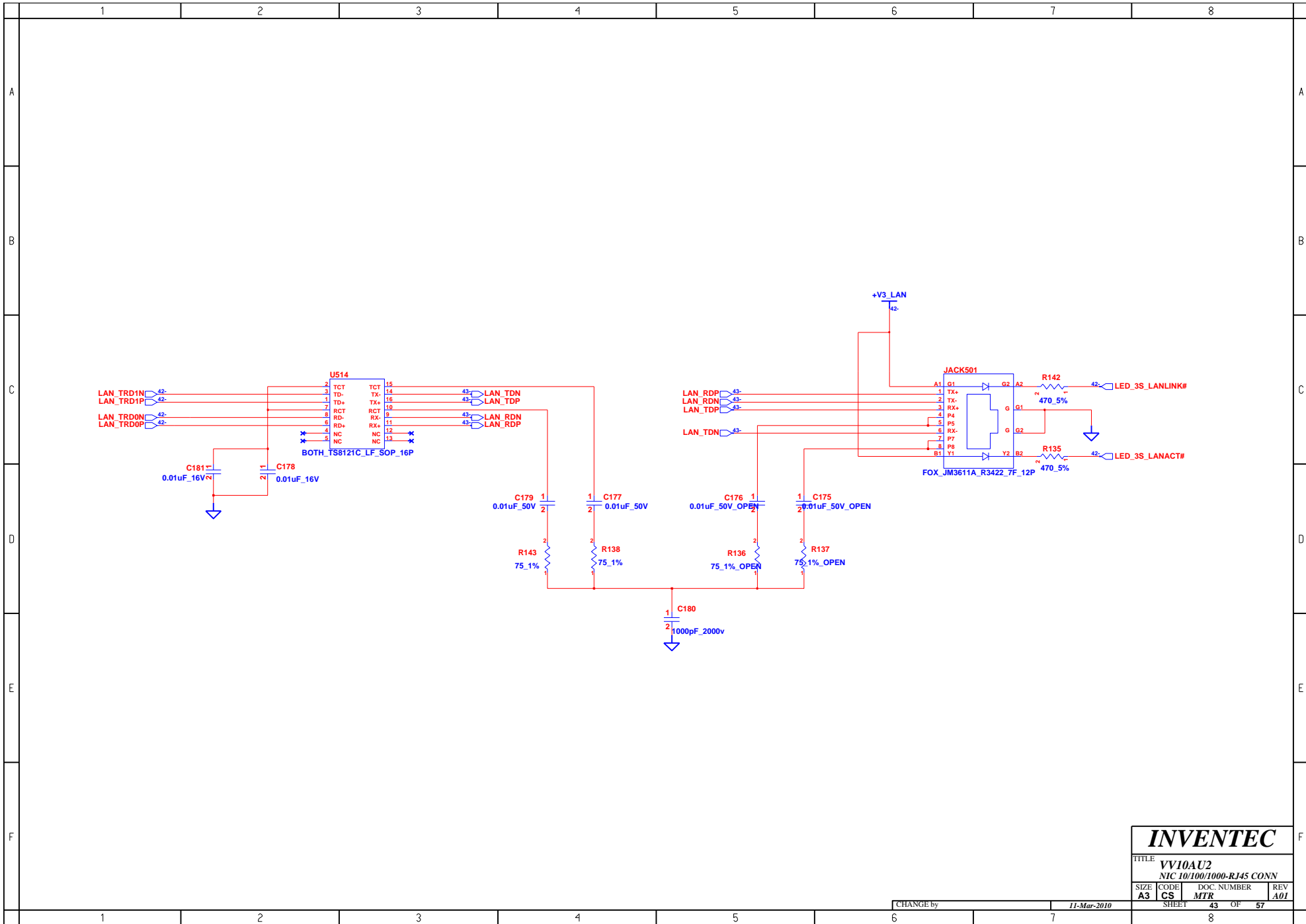
INVENTEC

TITLE **VV10AU2**
MDC CNTR/E-SATA

SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01

CHANGE by 11-Mar-2010

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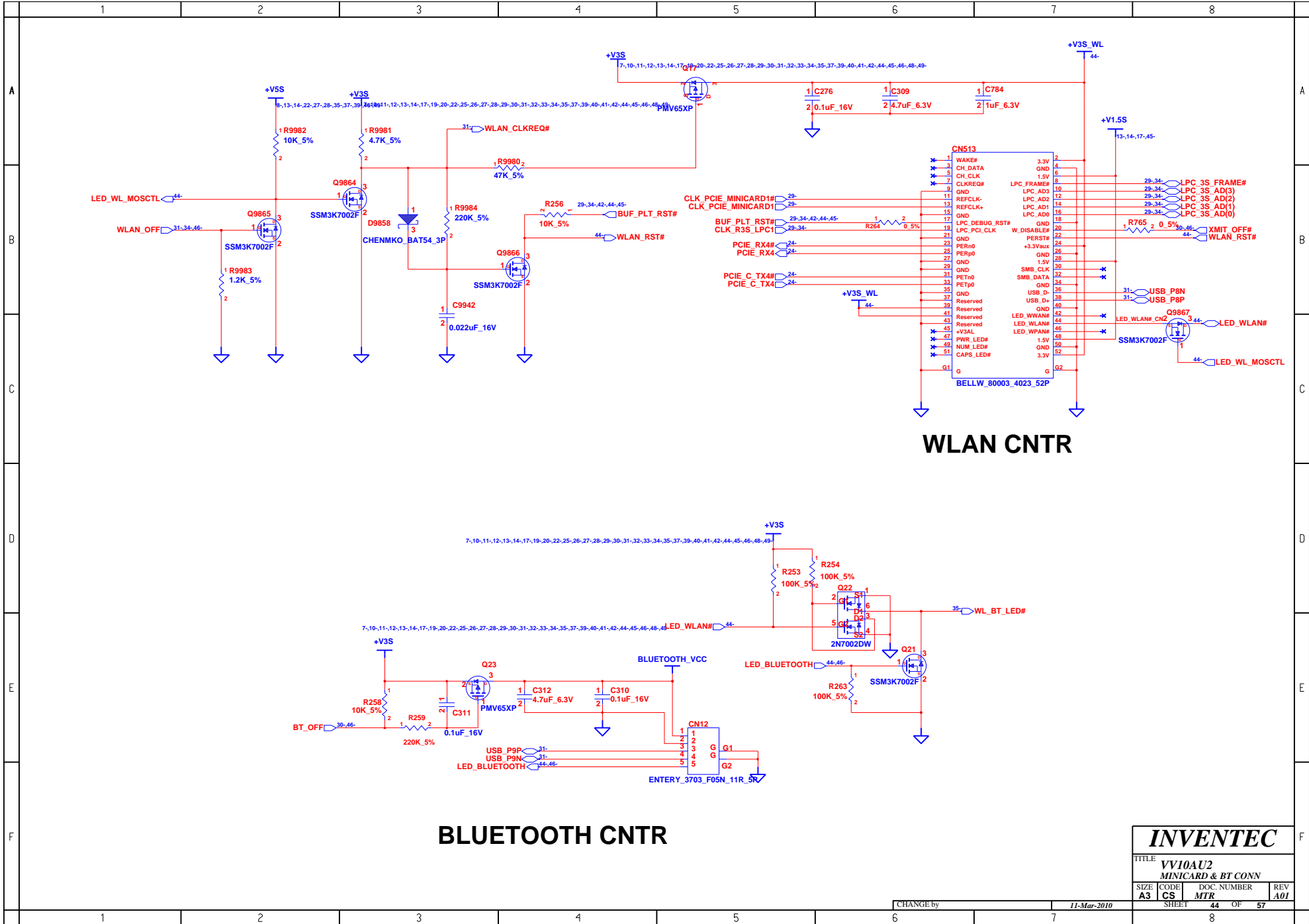
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TITLE **VV10AU2**
NIC 10/100/1000-RJ45 CONN

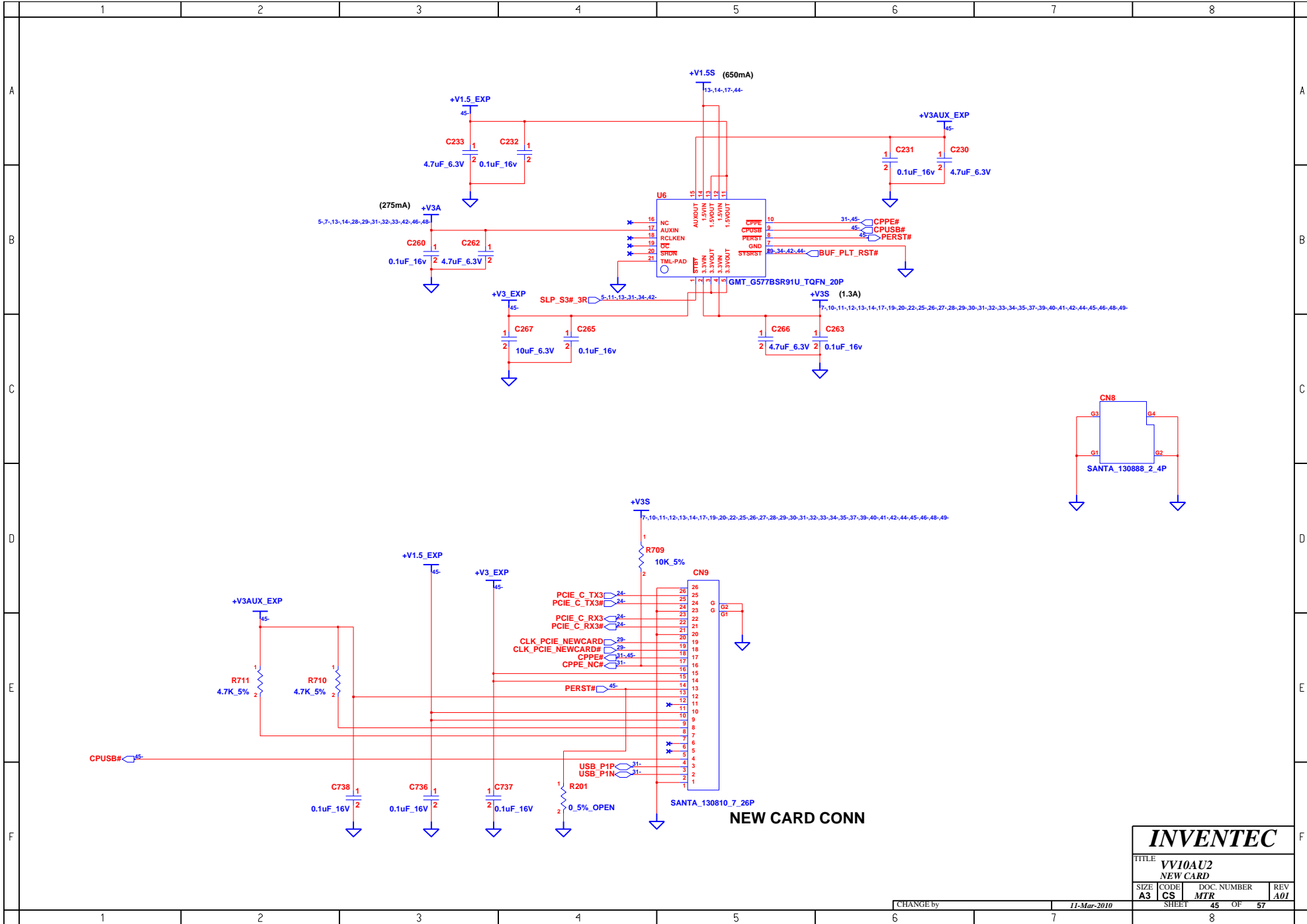
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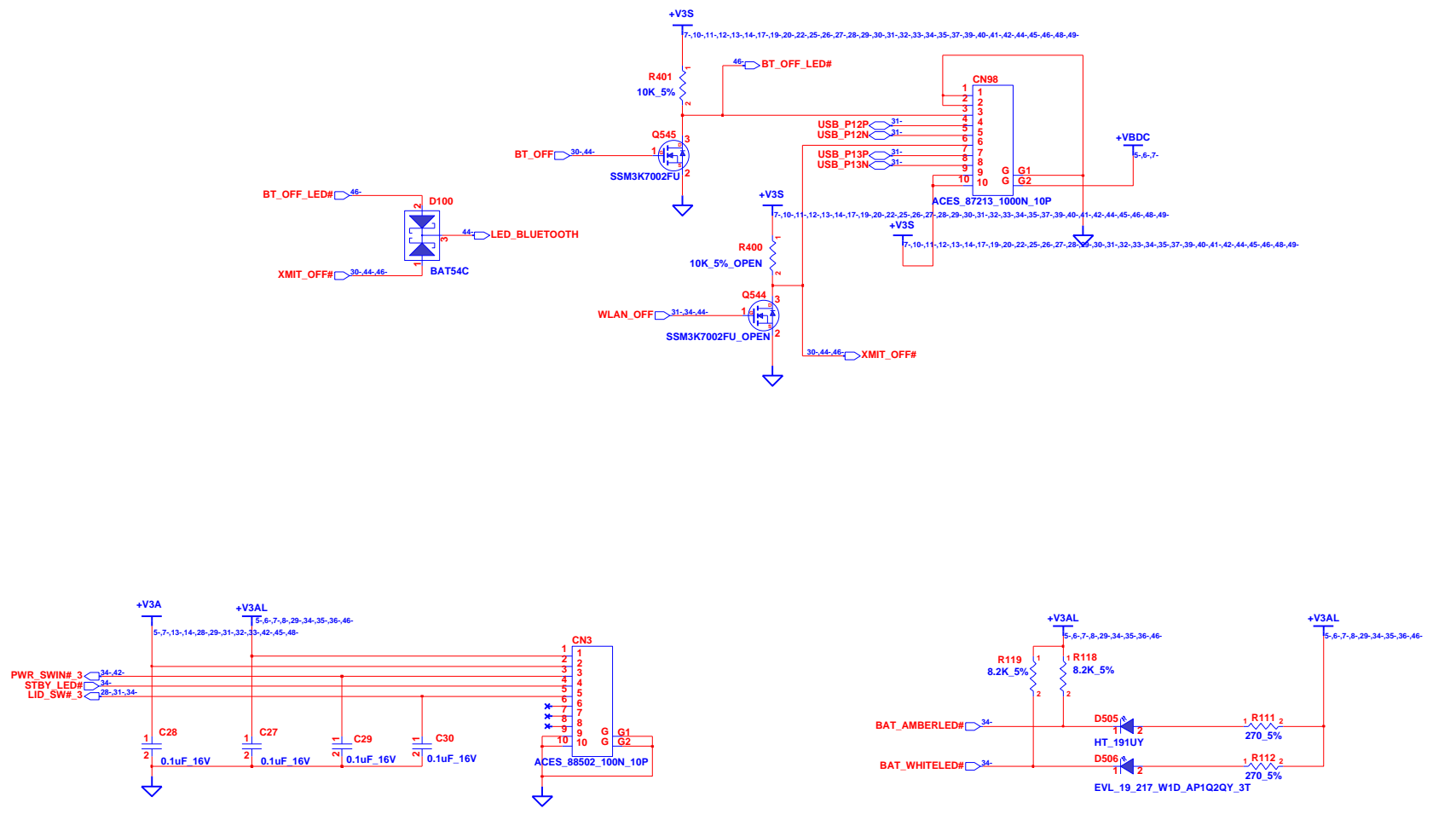
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INVENTEC			
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MINICARD & BT CONN			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
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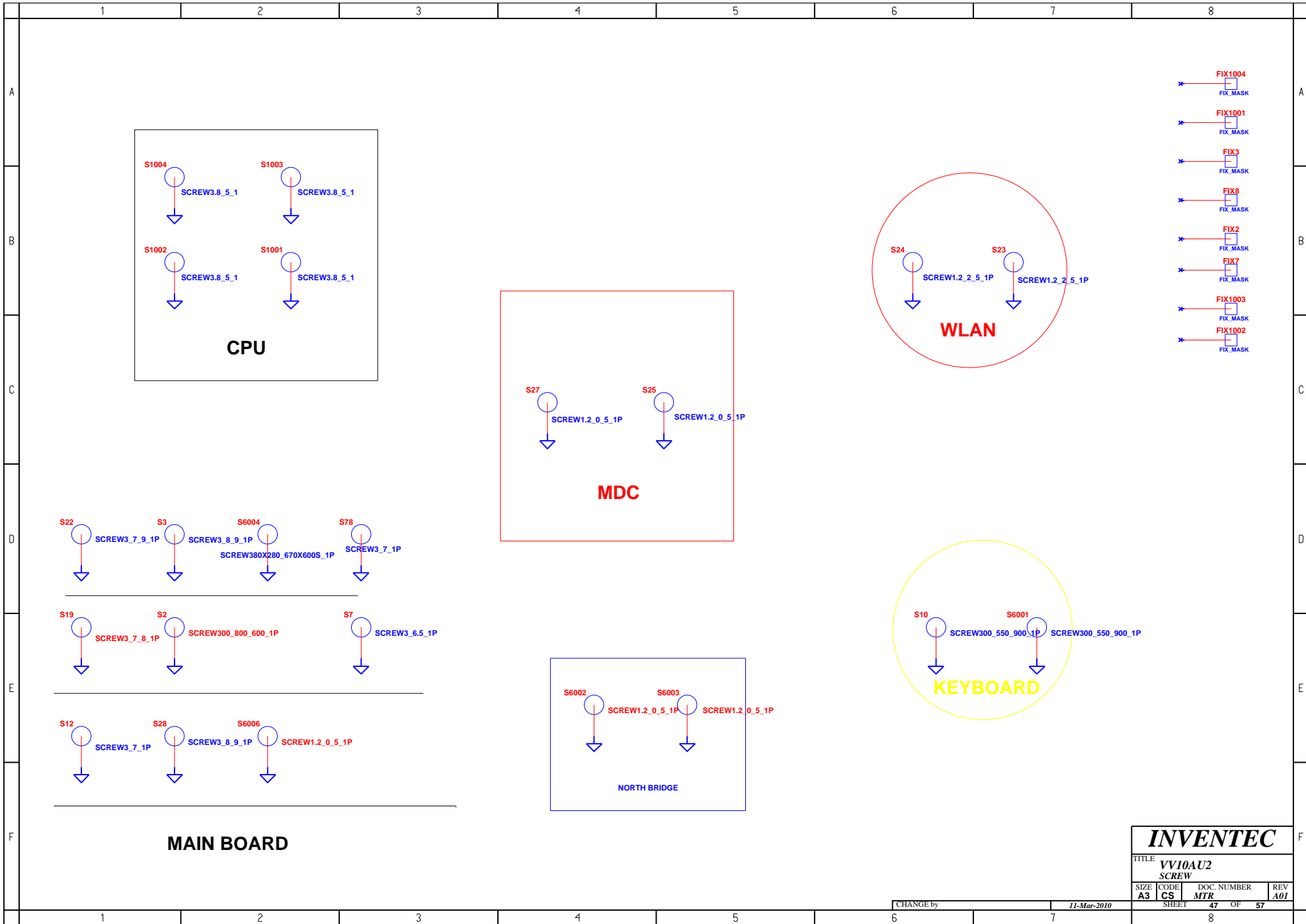
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CHANGE by		11-Mar-2010	
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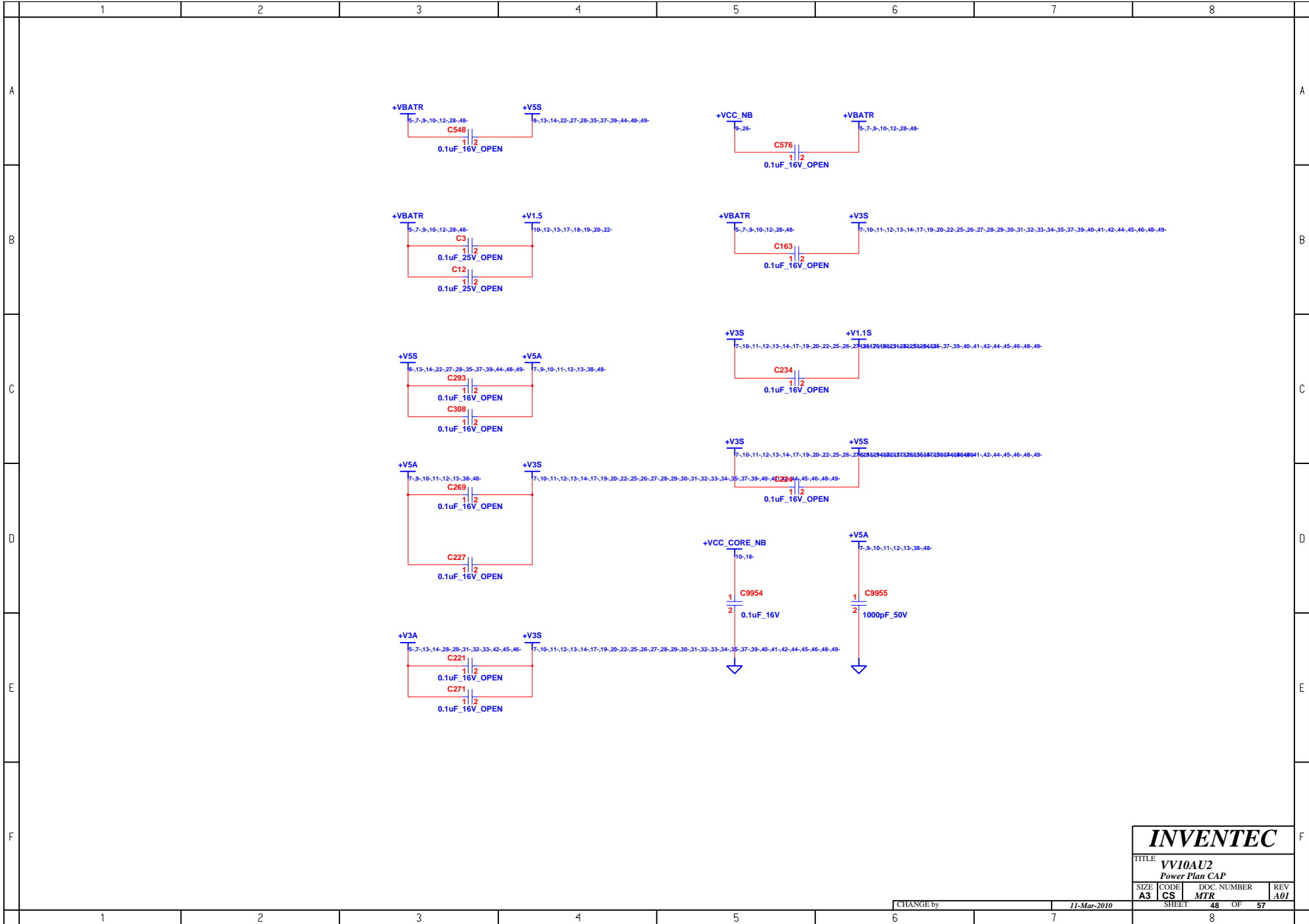
Swich Board & LED Board CONN

Battery charger LED

INVENTEC			
TITLE VV10AU2			
W/B & SW/B & LED/B CONN			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01



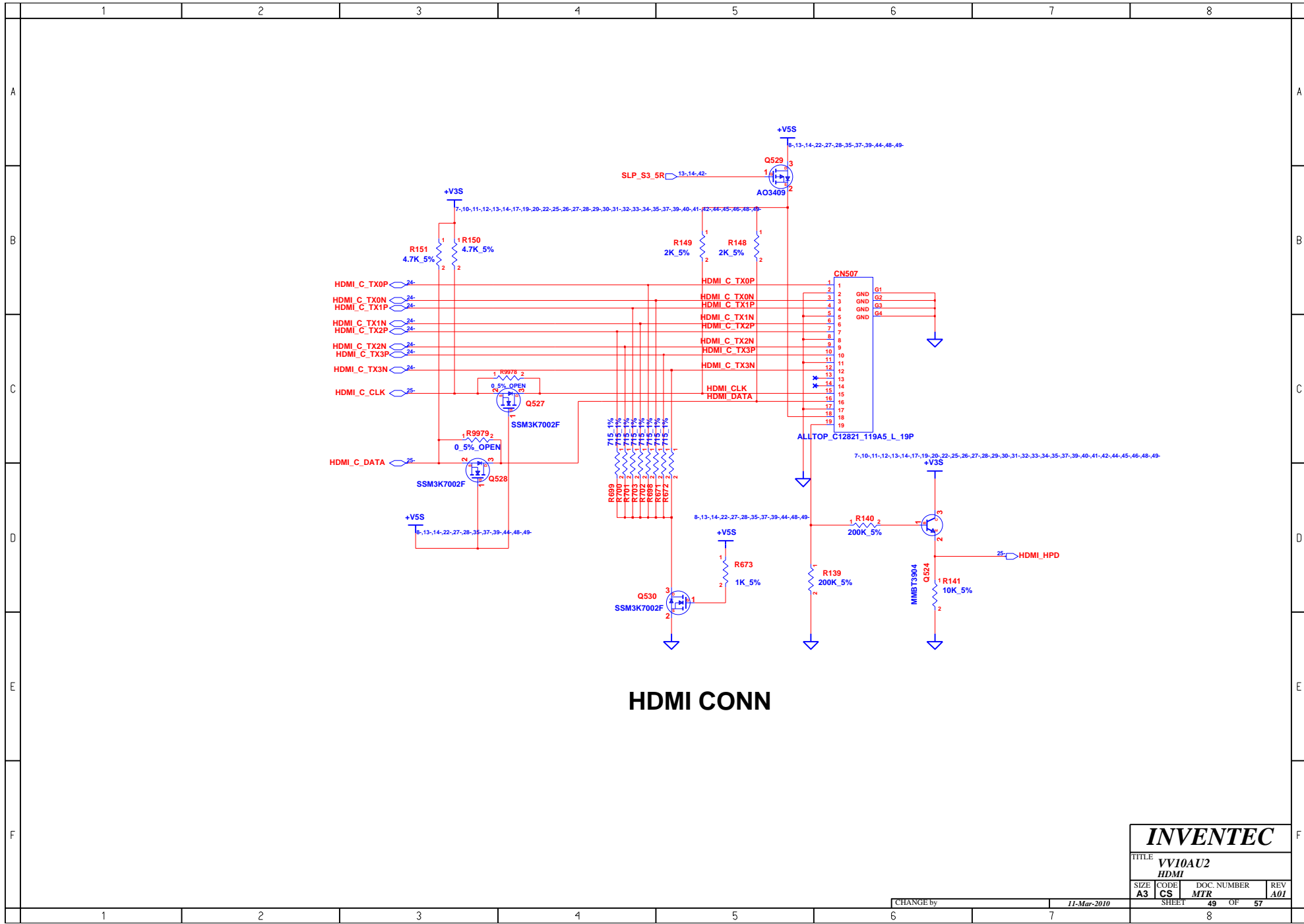
INVENTEC			
TITLE VV10AU2			
SCREW			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
CHANGE by		11-Mar-2010	SHEET 47 OF 57



INVENTEC

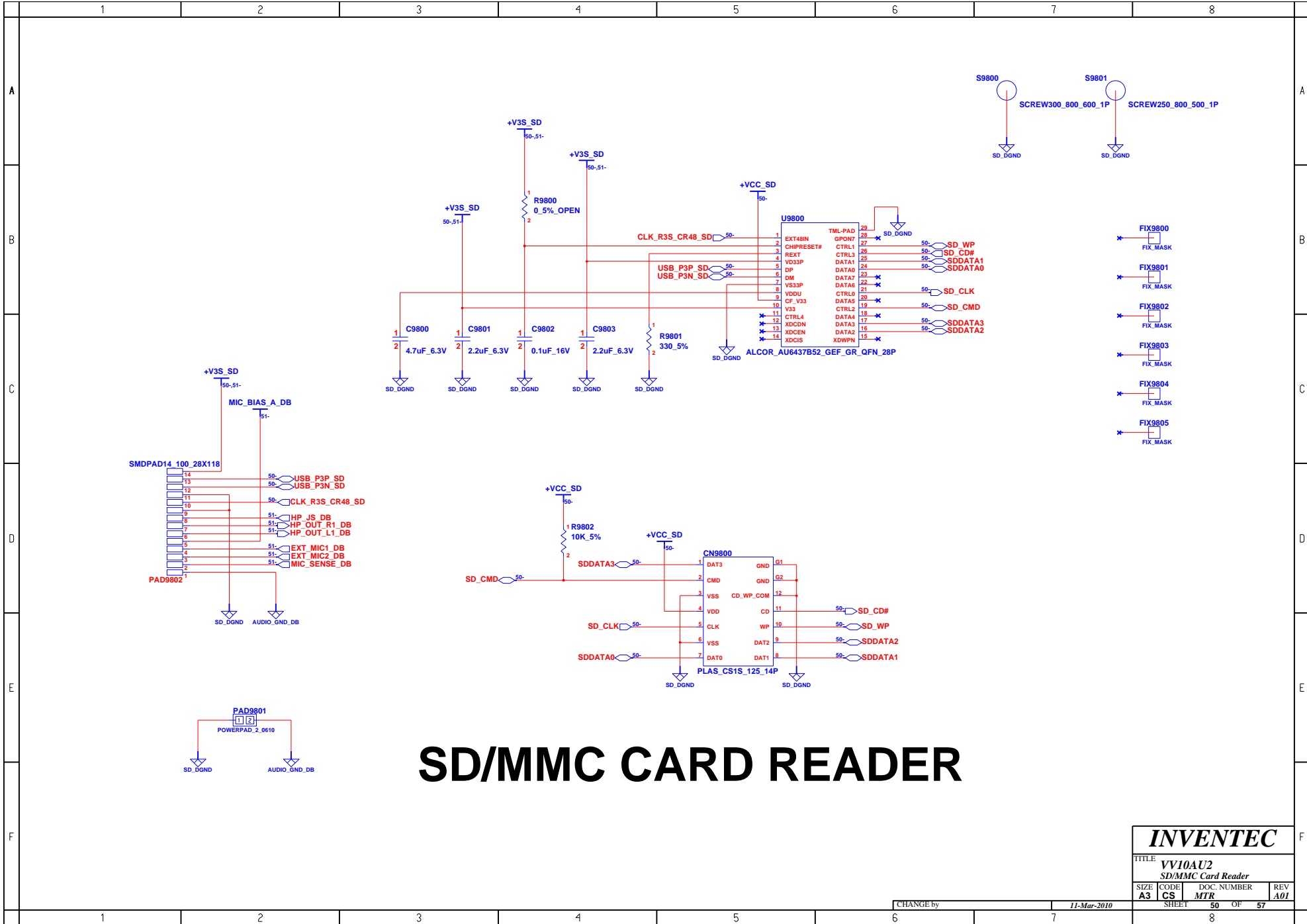
TITLE			
VV10AU2			
Power Plan CAP			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01

CHANGE by 11-Mar-2010



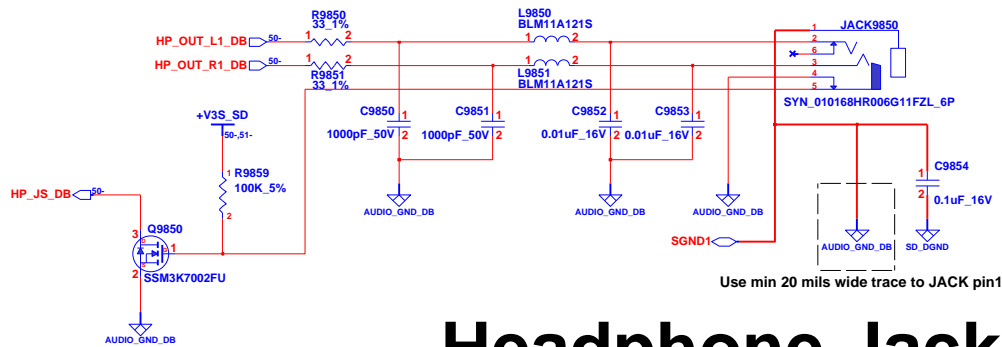
HDMI CONN

INVENTEC			
TITLE VV10AU2			
HDMI			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	SHEET 49 OF 57

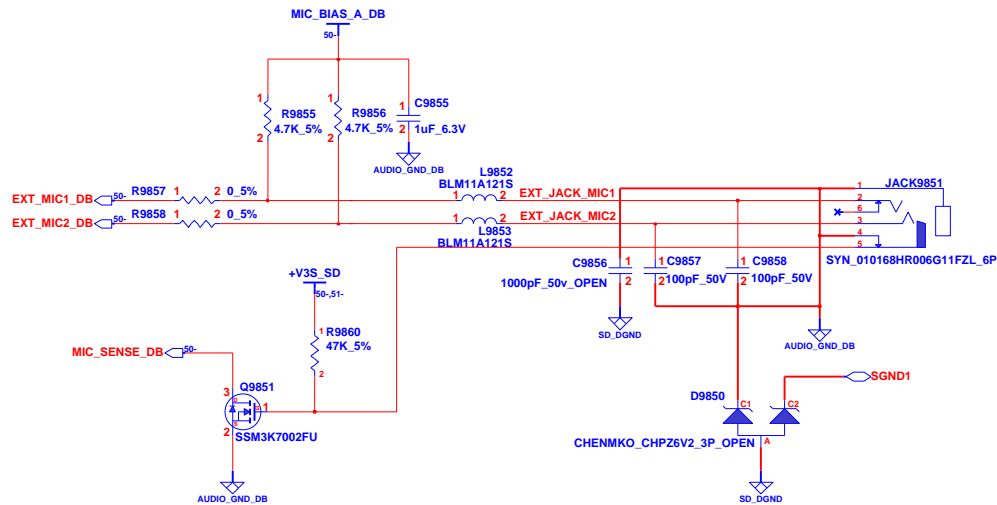


SD/MMC CARD READER

INVENTEC			
TITLE VV10AU2 SD/MMC Card Reader			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	
SHEET		50 OF 57	



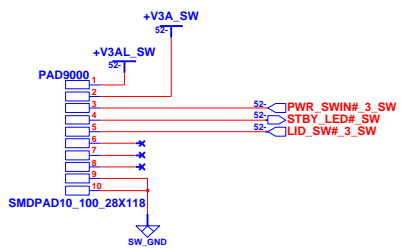
Headphone Jack



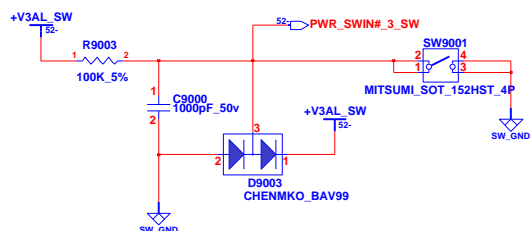
MIC Jack

INVENTEC

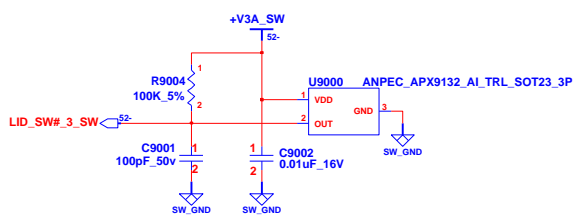
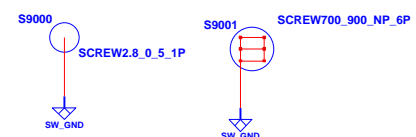
TITLE			
VV10AU2			
Headphone & MIC JACK			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
CHANGE by		11-Mar-2010	SHEET 51 OF 57



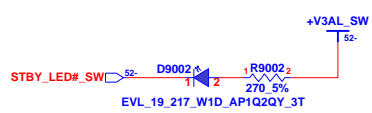
PWR SW B/B CONN



Power Button



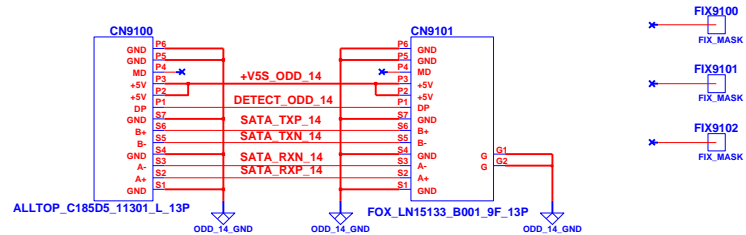
LID Switch



Power / Standby LED

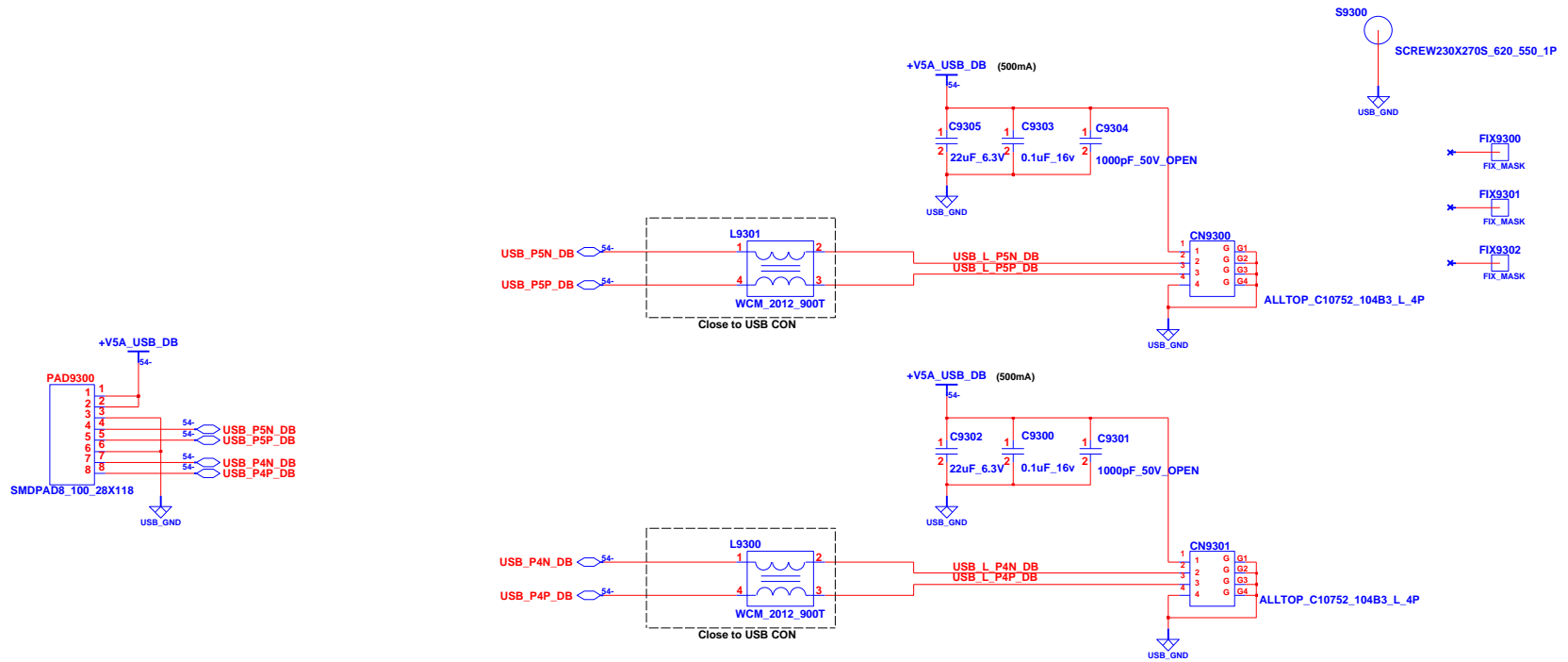
Power Button & LID Switch Board

INVENTEC			
TITLE VV10AU2			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	SHEET 52 OF 57



14'' ODD Extend Board

INVENTEC			
TITLE VV10AU2			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	
SHEET		53 OF 57	



USB Right Side Board

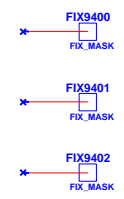
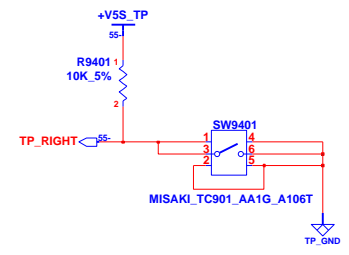
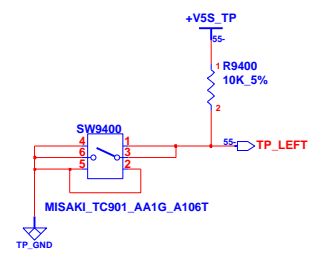
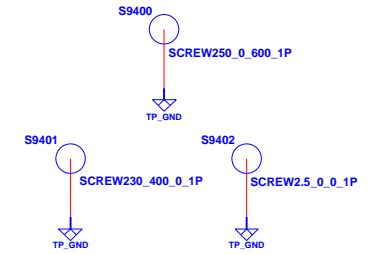
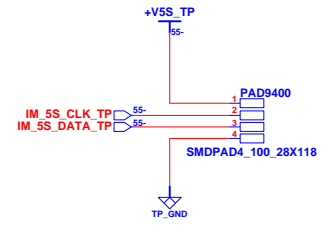
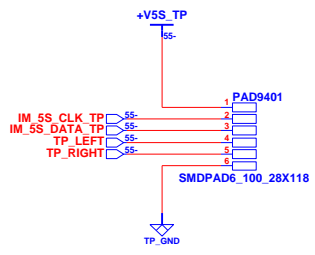
INVENTEC

TITLE
VV10AU2

SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
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CHANGE by 11-Mar-2010

SHEET 54 OF 57



LEFT BUTTON

RIGHT BUTTON

PICK Button Board

INVENTEC			
TITLE VV10AU2			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01

BLANK

15" ODD Extend Board

INVENTEC			
TITLE VV10AU2			
SIZE A3	CODE CS	DOC. NUMBER MTR	REV A01
CHANGE by		11-Mar-2010	
SHEET		56	OF 57
		8	

BLANK

15" SATA HDD Extend Board

INVENTEC			
TITLE VV10AU2			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	MTR	A01
SHEET		57	OF 57

CHANGE by 11-Mar-2010