

1 2 3 4 5 6 7 8

A A

B B

C C

D D

E E

F F

S-SERIES

Zygo(D) & Zodiac(D) & Ikon

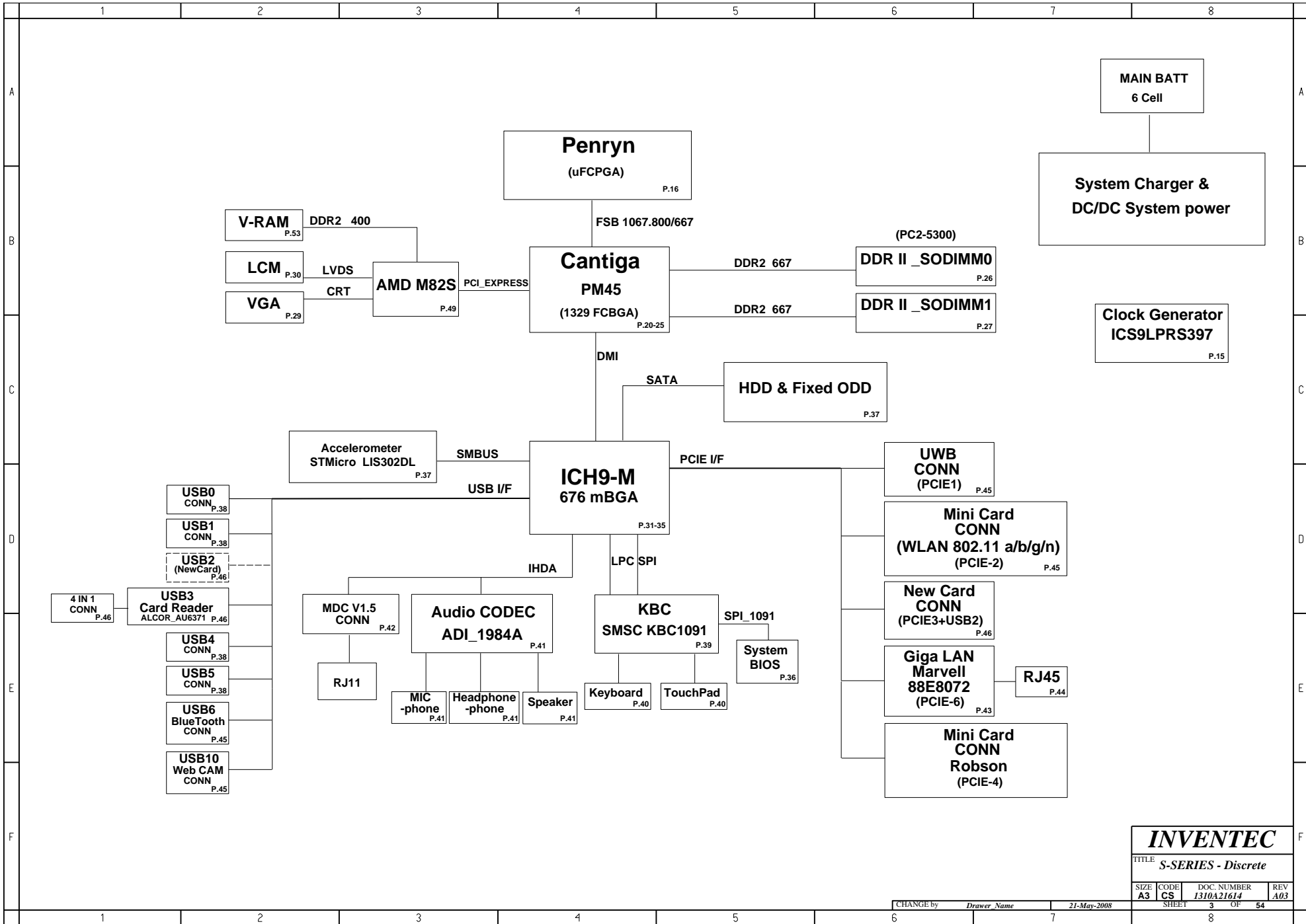
MV_Build (A03)

2008.06.03

DATE	CHANGE NO.	REV

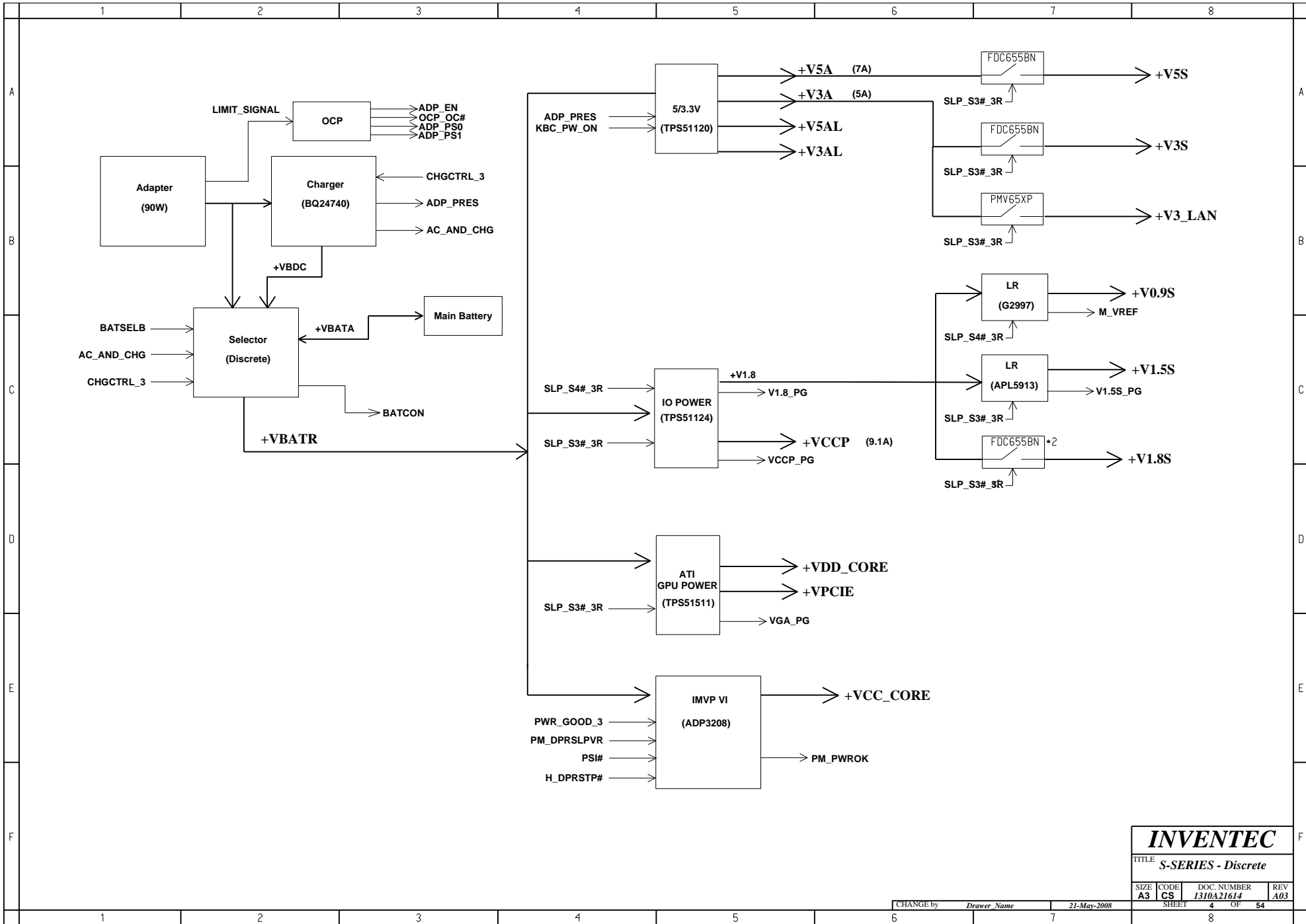
DRAWER	EE	DATE	POWER	DATE	INVENTEC			
DESIGN								
CHECK								
RESPONSIBLE								
TITLE					<i>S-SERIES - Discrete</i>			
SIZE =	3	VER :						
FILE NAME :	XXXX-XXXXXX-XX				SIZE	CODE	DOC. NUMBER	REV
P/N	XXXXXXXXXXXX				A3	CS	1310A21614	A03
					SHEET	1	OF	54

1 2 3 4 5 6 7 8



INVENTEC
 TITLE S-SERIES - Discrete

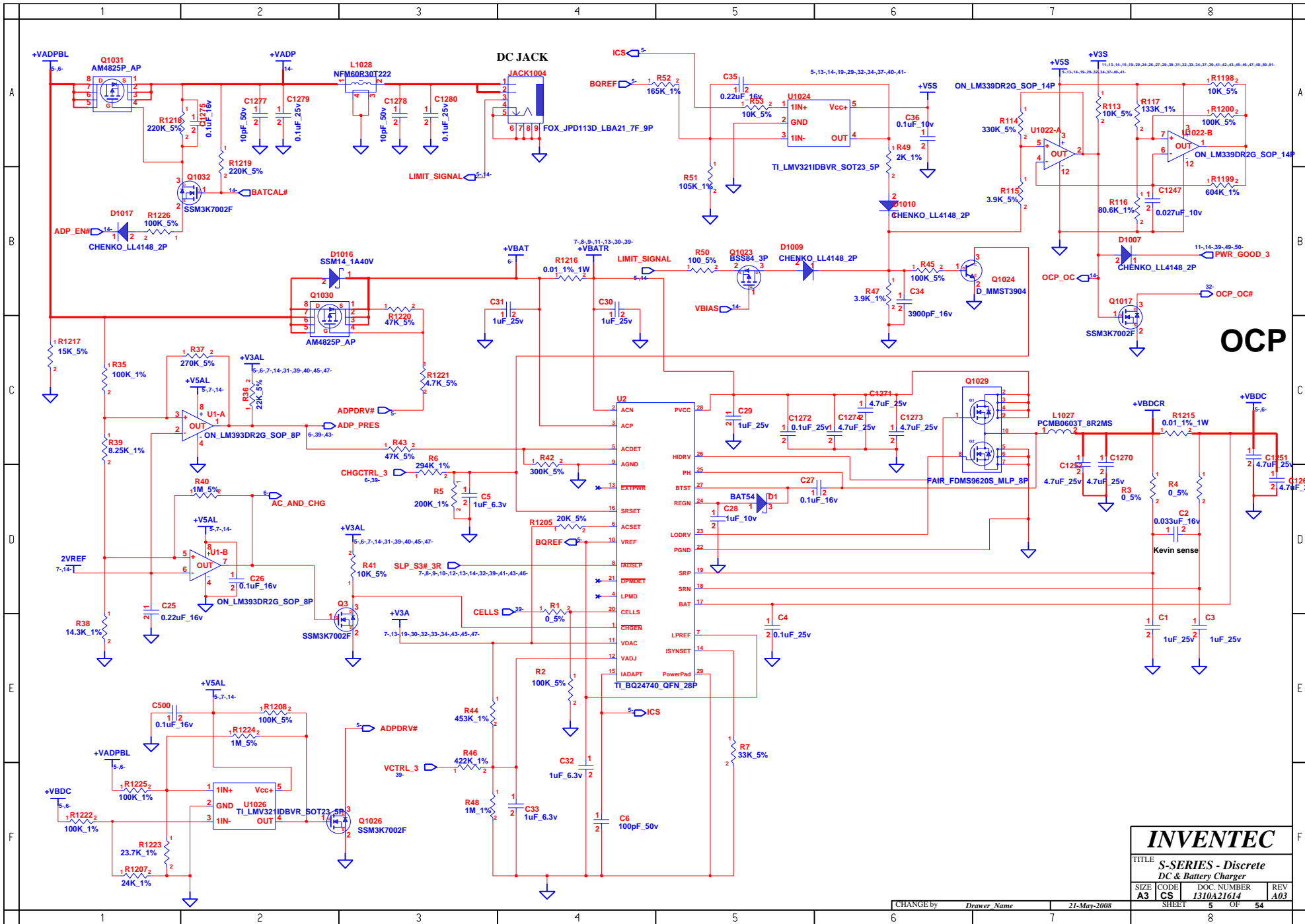
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03



INVENTEC

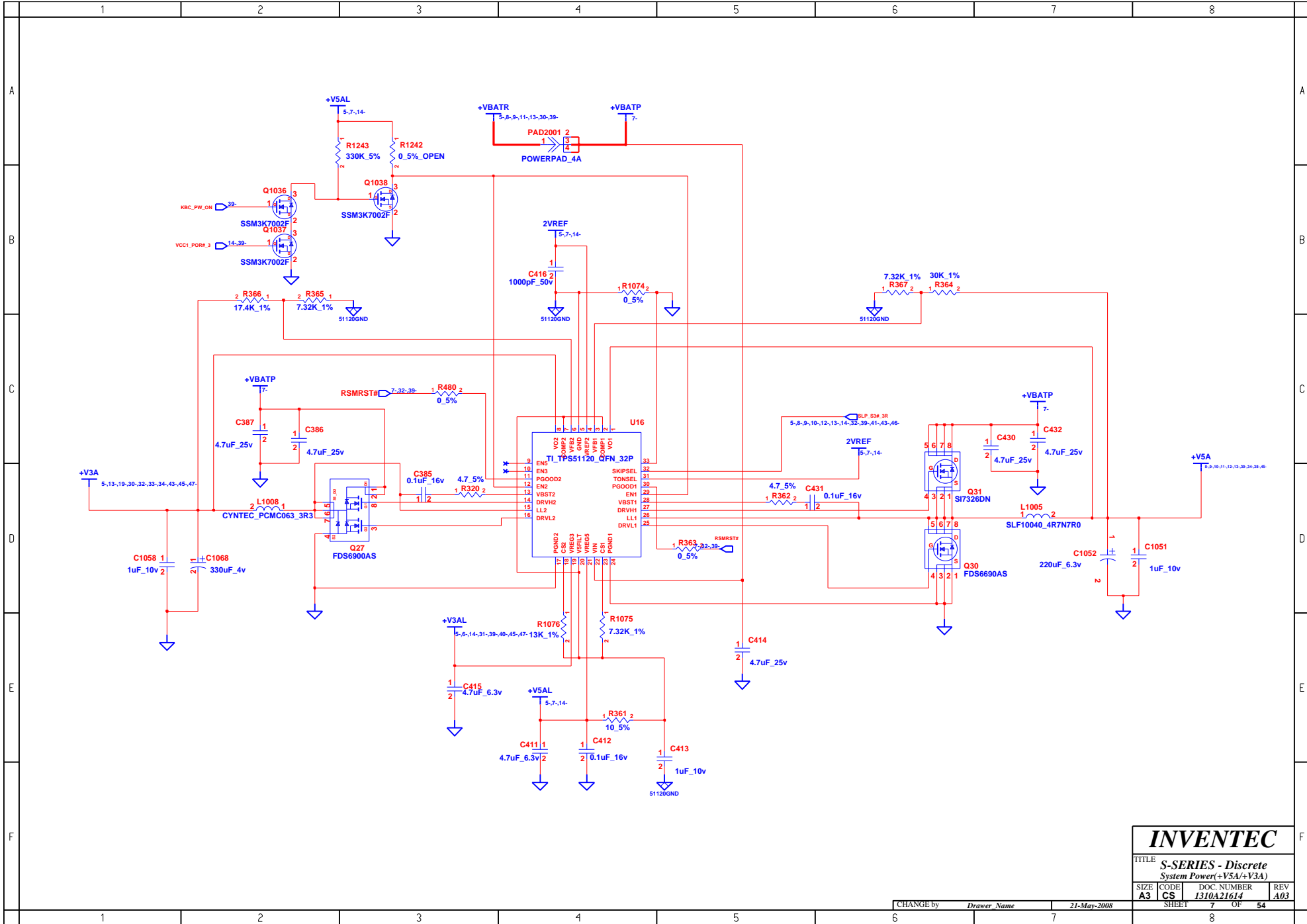
TITLE **S-SERIES - Discrete**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03



OCP

INVENTEC			
TITLE S-SERIES - Discrete DC & Battery Charger			
SIZE A3	CODE CS	DOC. NUMBER I310A21614	REV A03
CHANGE by <i>Drawer Name</i>		21-May-2008	
SHEET		5 OF 54	



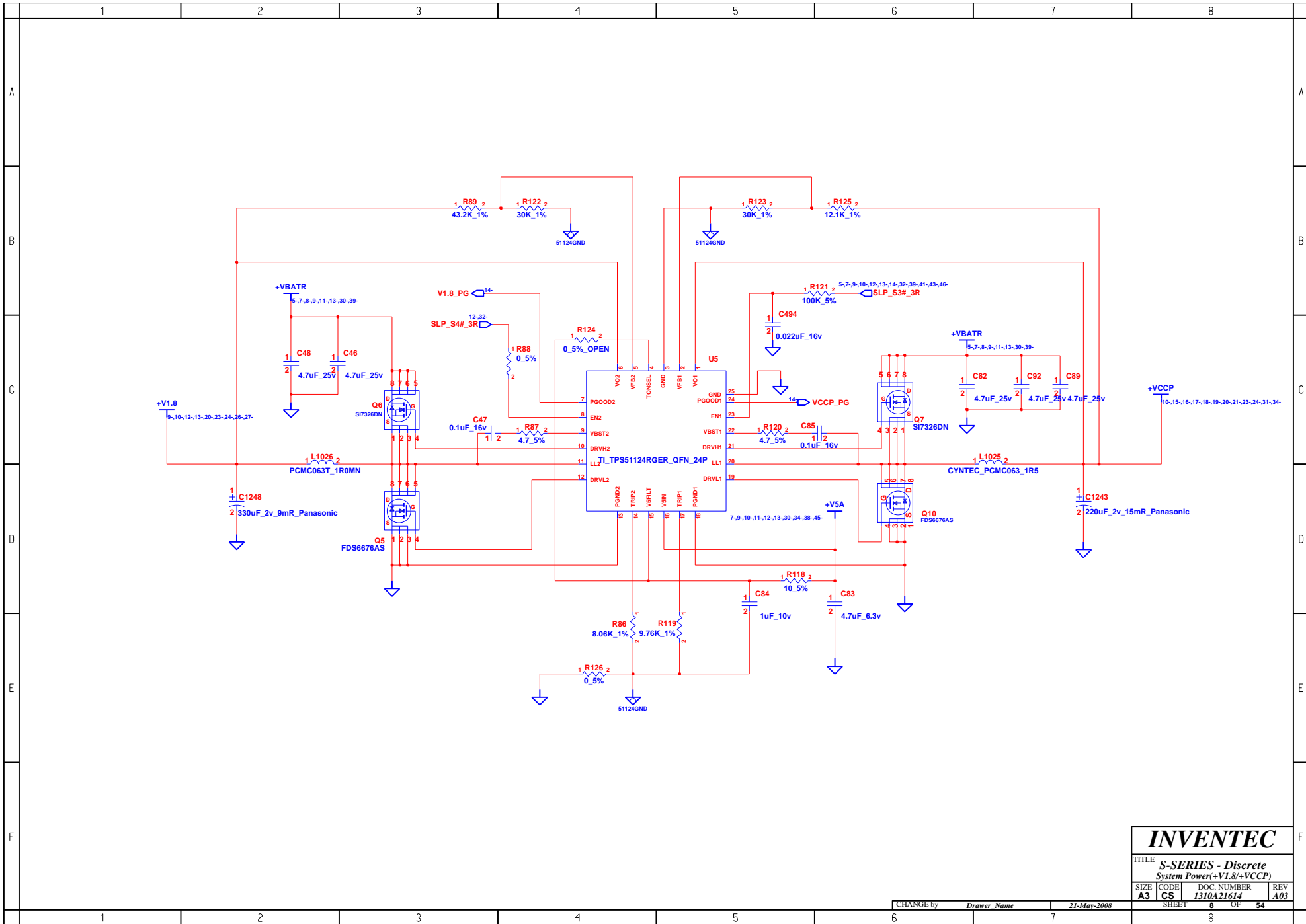
INVENTEC

TITLE
S-SERIES - Discrete
 System Power(+V5A/+V3A)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03

CHANGE by *Drawer Name* 21-May-2008

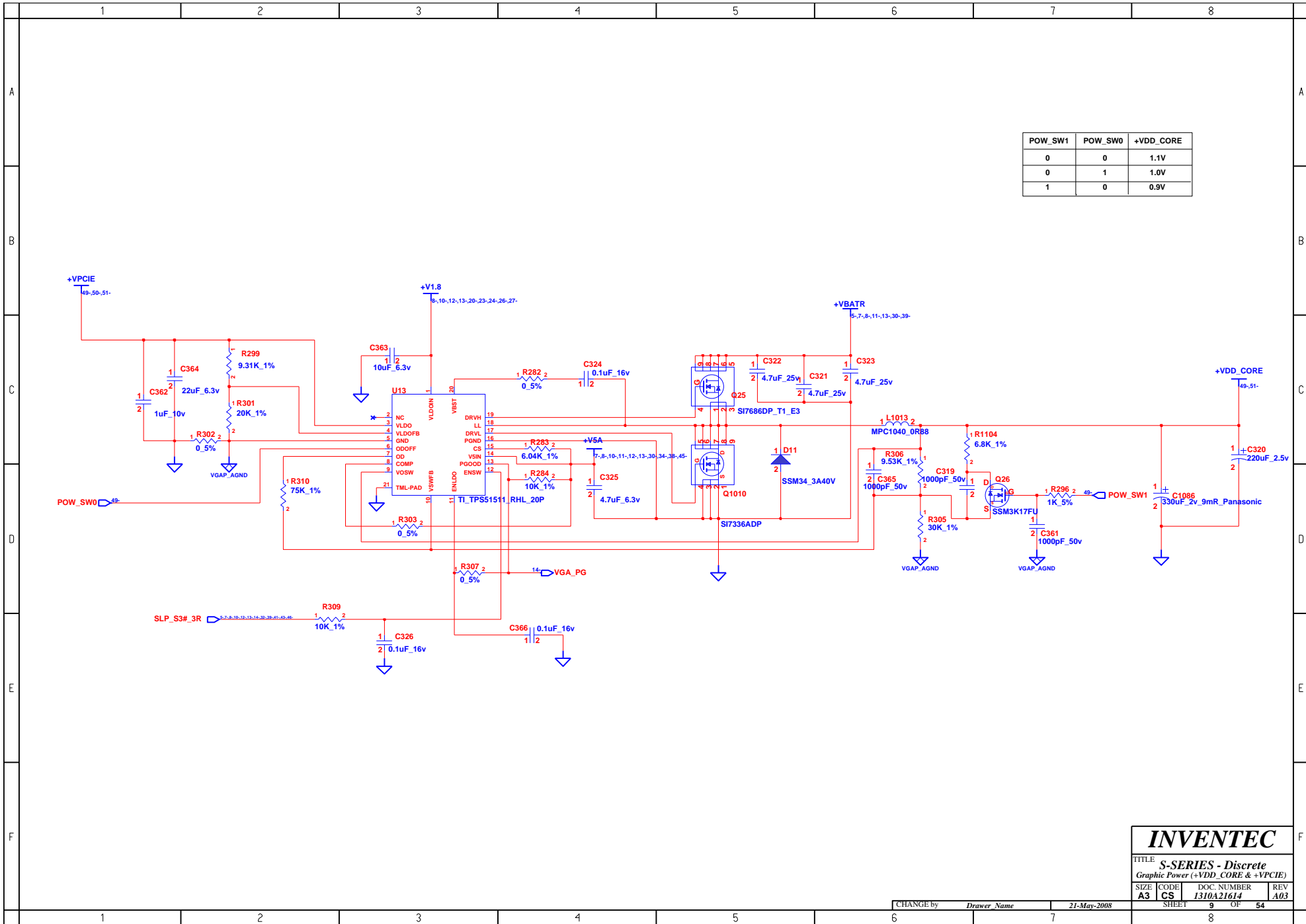
SHEET 7 OF 54



INVENTEC

TITLE
S-SERIES - Discrete
 System Power(+V1.8/+VCCP)

SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A03
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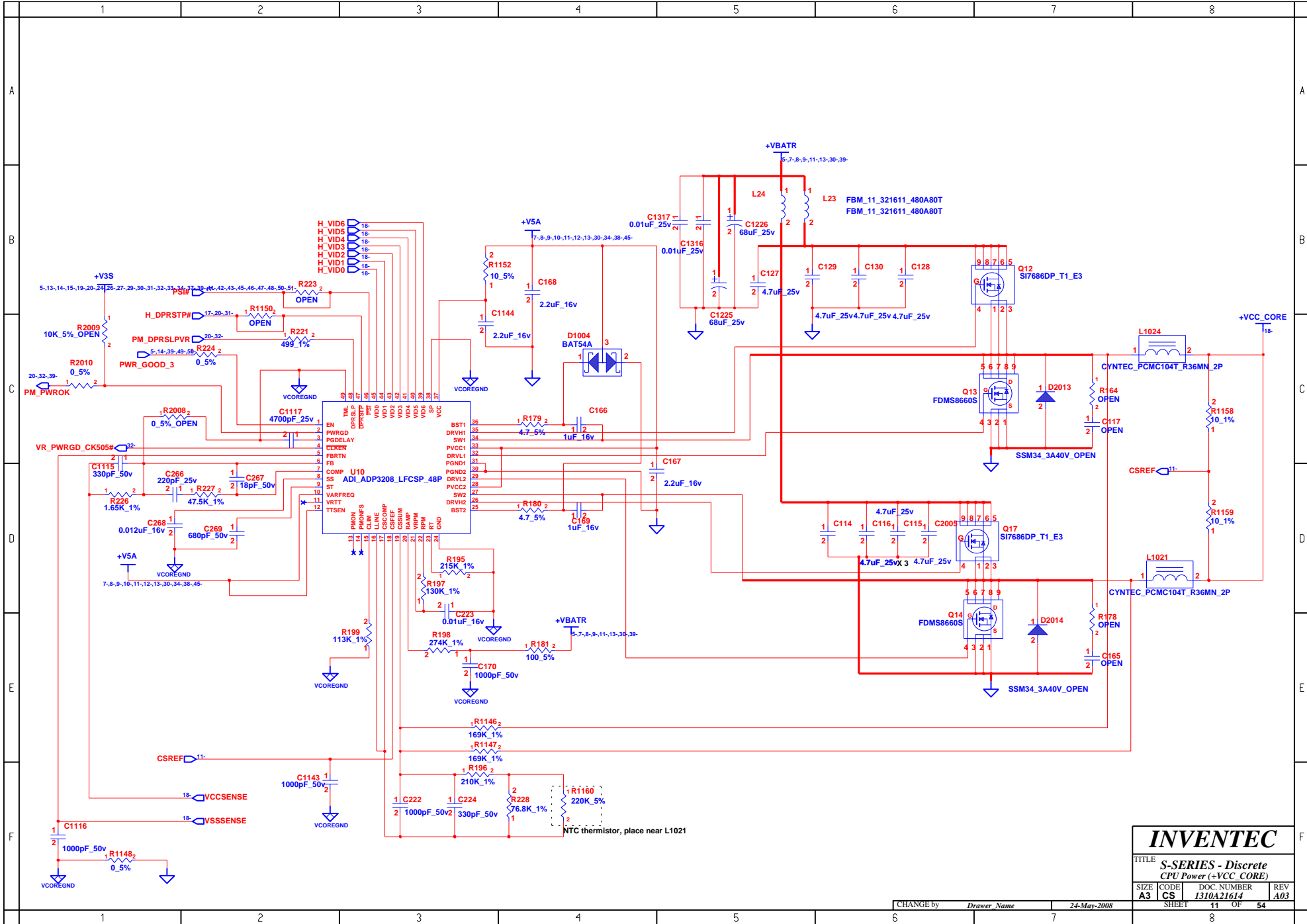


POW_SW1	POW_SW0	+VDD_CORE
0	0	1.1V
0	1	1.0V
1	0	0.9V

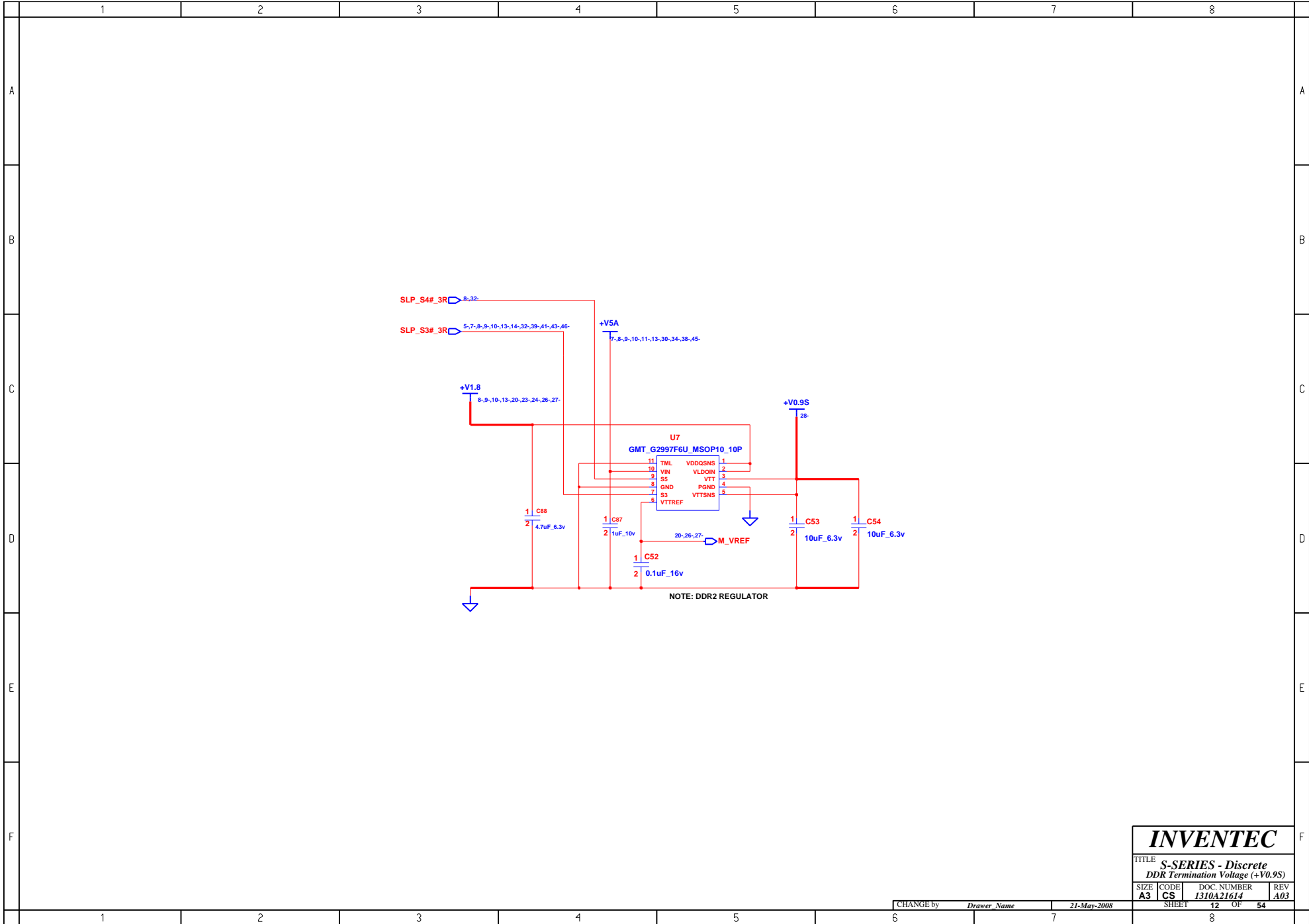
INVENTEC

TITLE
S-SERIES - Discrete
 Graphic Power (+VDD_CORE & +VPCIE)

SIZE A3	CODE CS	DOC NUMBER 1310A21614	REV A03
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INVENTEC			
TITLE S-SERIES - Discrete CPU Power (+VCC_CORE)			
SIZE A3	CODE CS	DOC. NUMBER I310A21614	REV A03
CHANGE by <i>Drawer Name</i>		24-May-2008	
SHEET 11		OF 54	



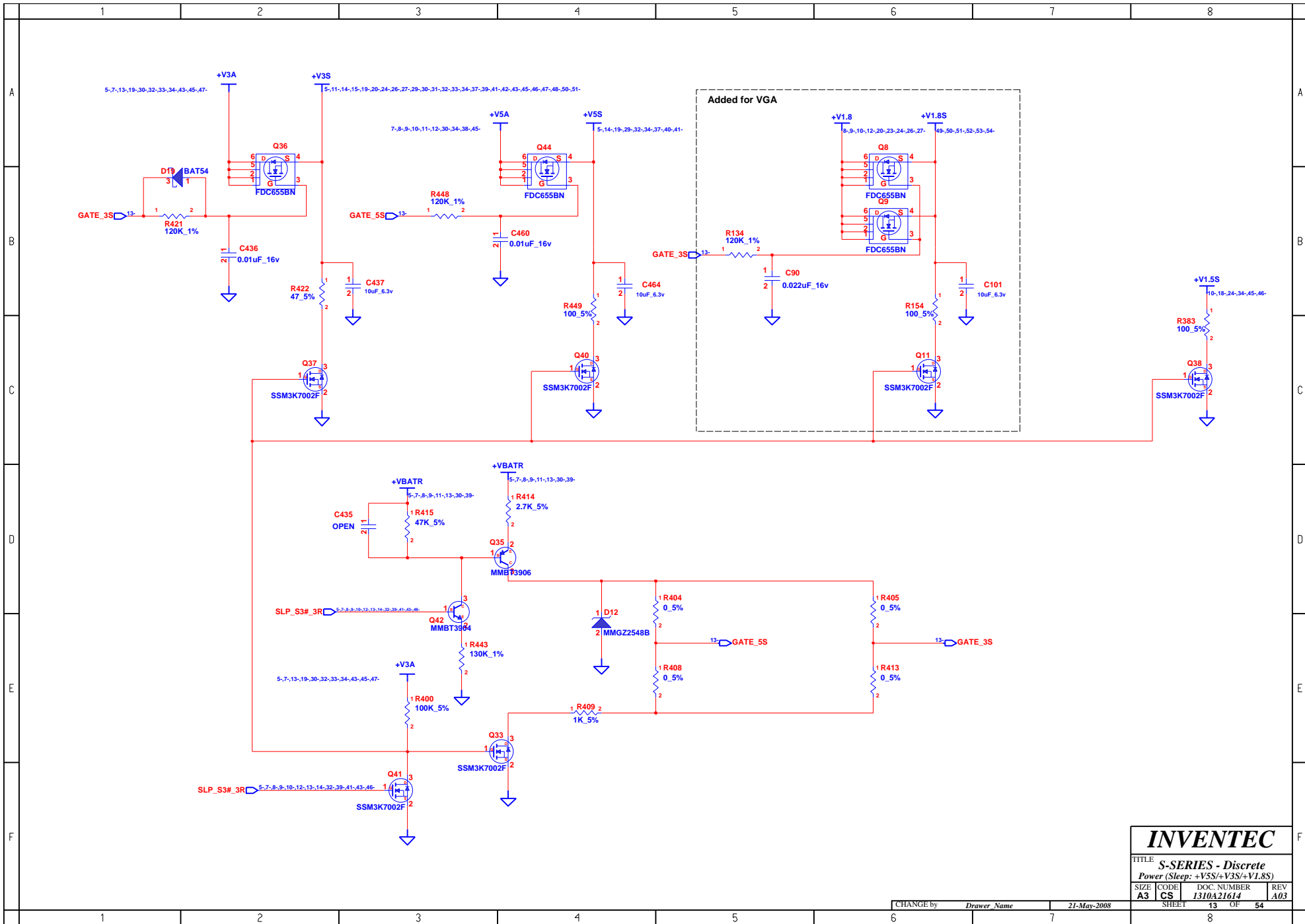
INVENTEC

TITLE **S-SERIES - Discrete**
DDR Termination Voltage (+V0.9S)

SIZE **A3** CODE **CS** DOC. NUMBER **1310A21614** REV **A03**

CHANGE by *Drawer Name* 21-May-2008

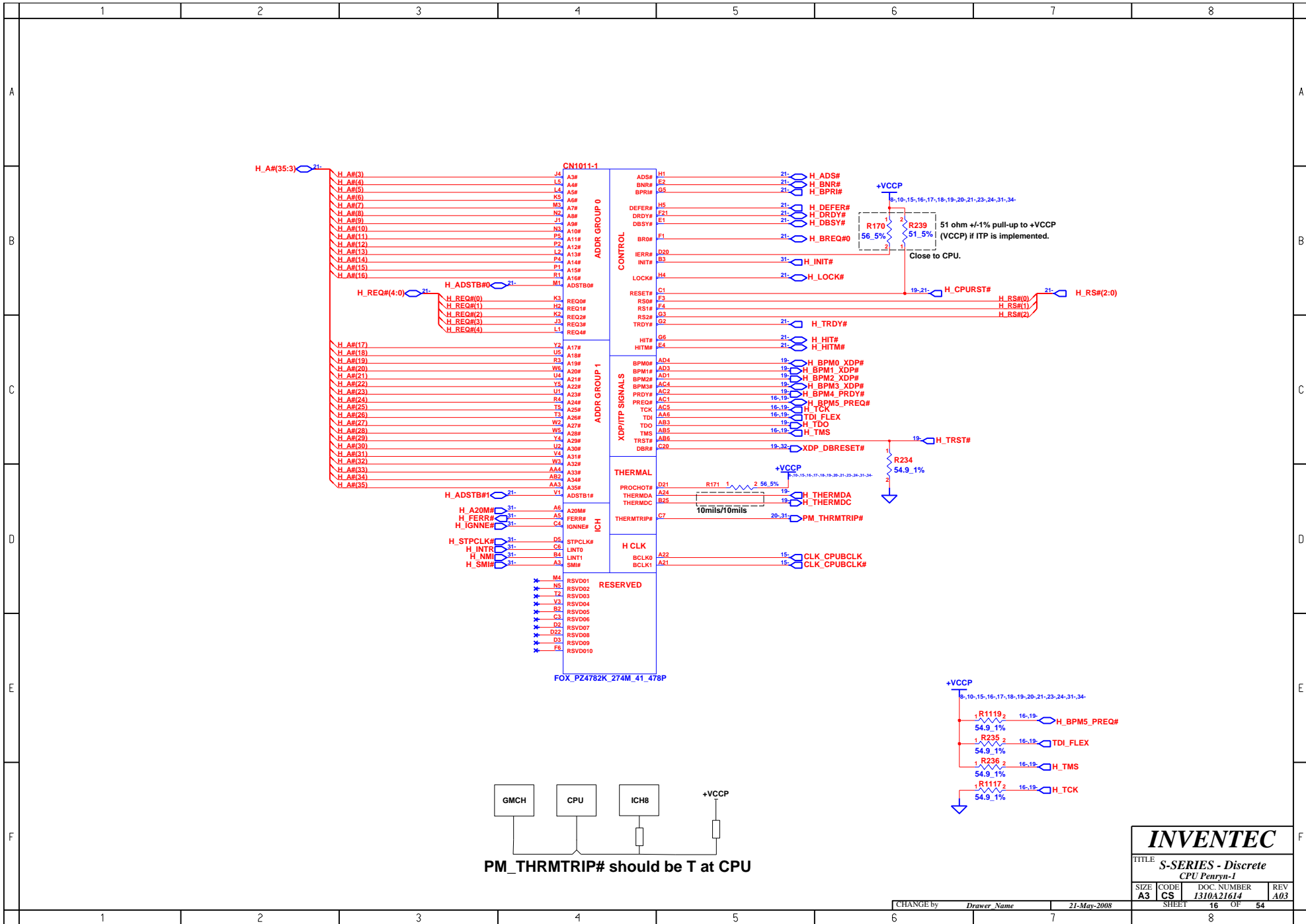
SHEET 12 OF 54



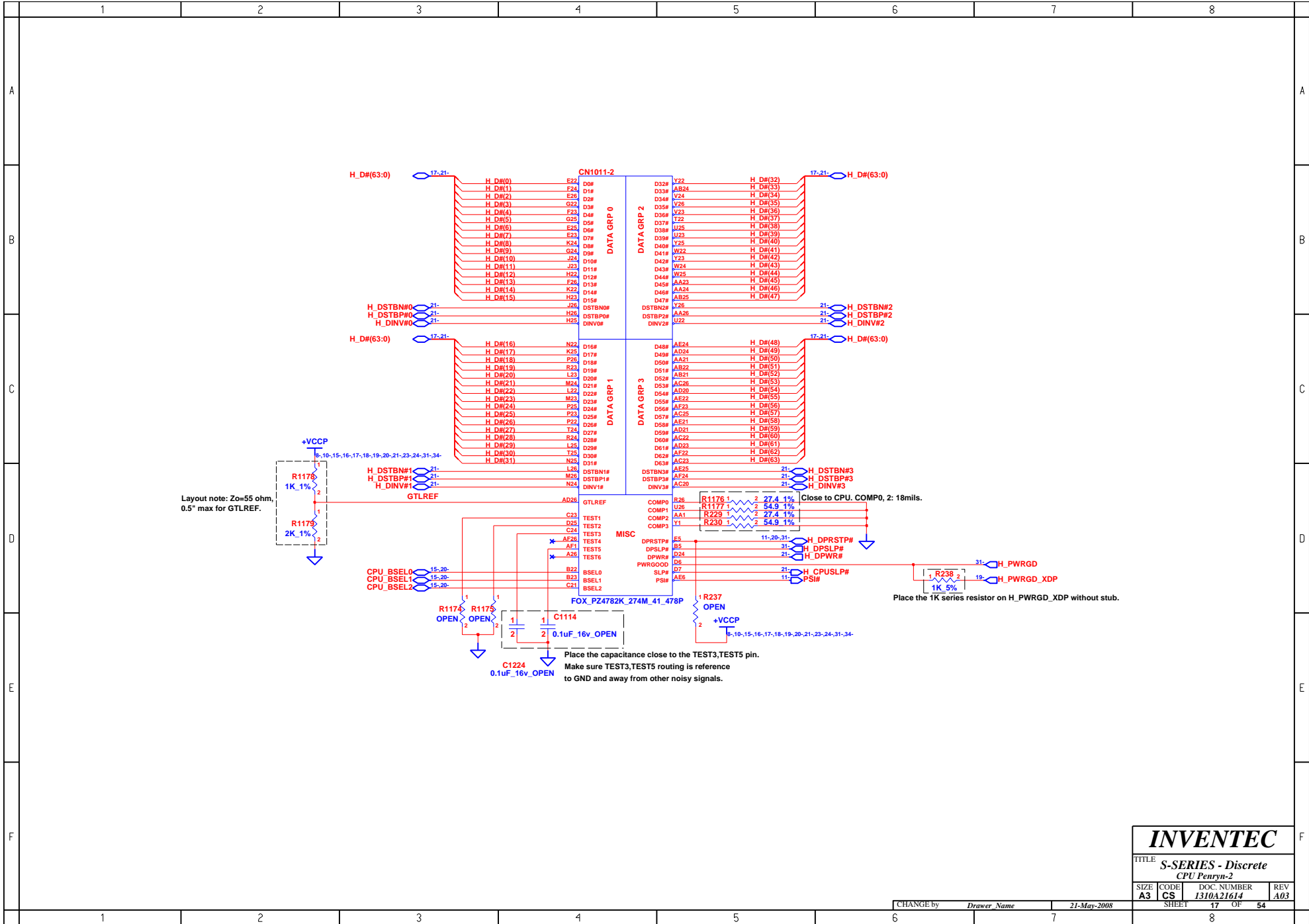
INVENTEC

TITLE **S-SERIES - Discrete**
 Power (Sleep: +V5S/+V3S/+V1.8S)

SIZE	CODE	DOC NUMBER	REV
A3	CS	I310A21614	A03



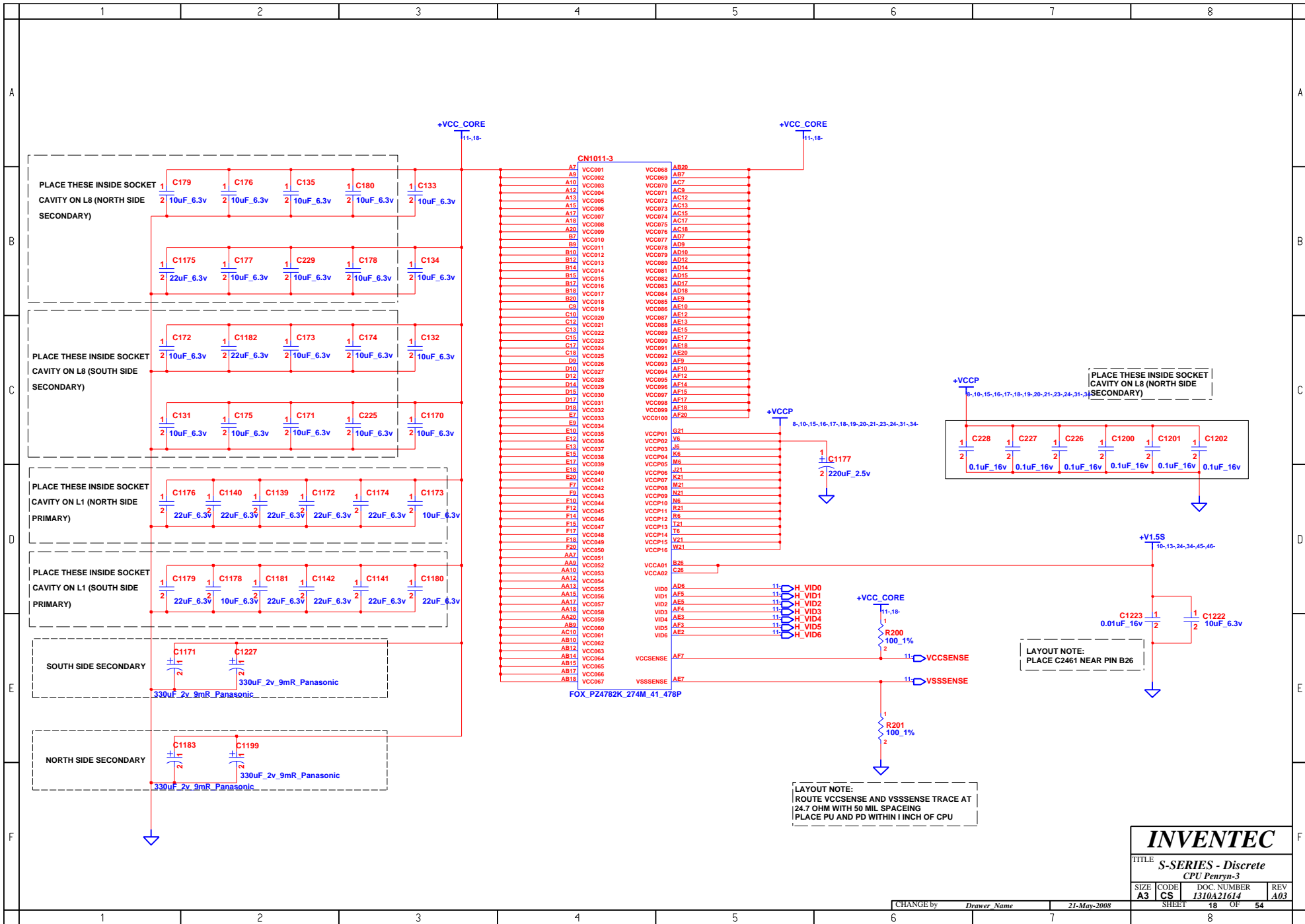
INVENTEC			
TITLE S-SERIES - Discrete CPU Penryn-1			
SIZE A3	CODE CS	DOC NUMBER 1310A21614	REV A03
CHANGE by Drawer Name		21-May-2008	SHEET 16 OF 54



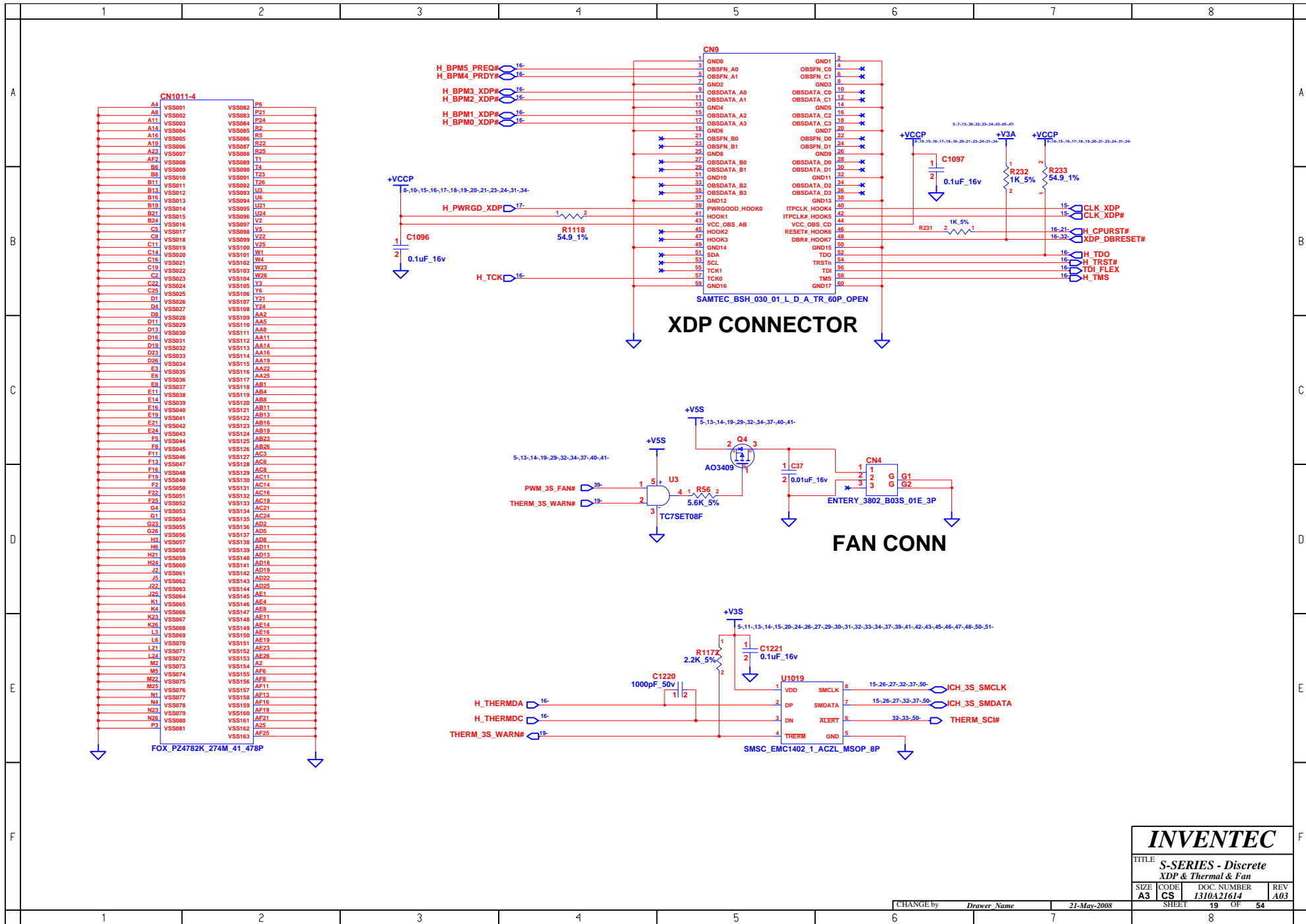
INVENTEC

TITLE
S-SERIES - Discrete
 CPU Penryn-2

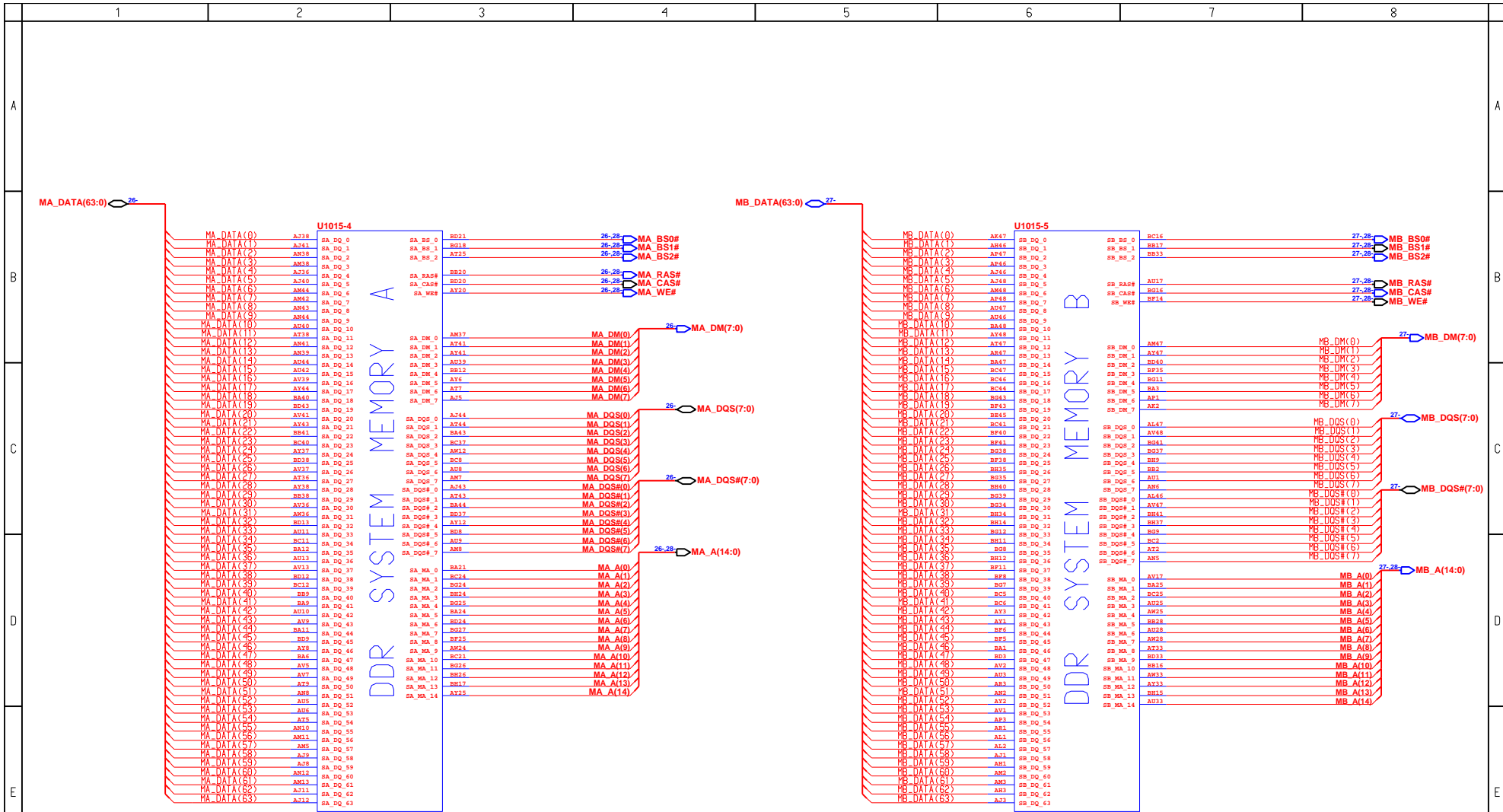
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A03
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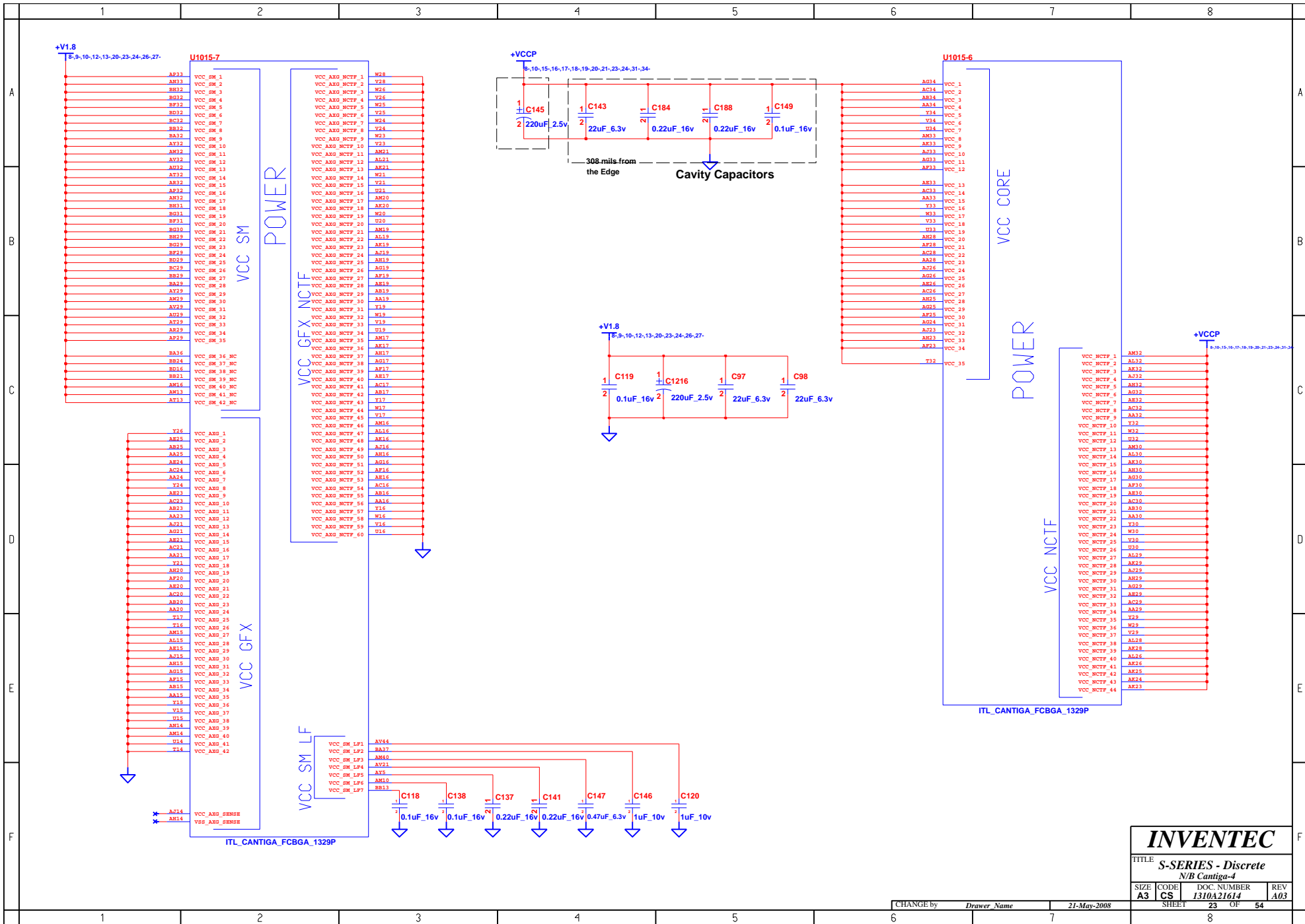
INVENTEC			
TITLE: S-SERIES - Discrete			
CPU Penryn-3			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A21614	REV: A03
CHANGE by: Drawer Name		21-May-2008	SHEET 18 OF 54



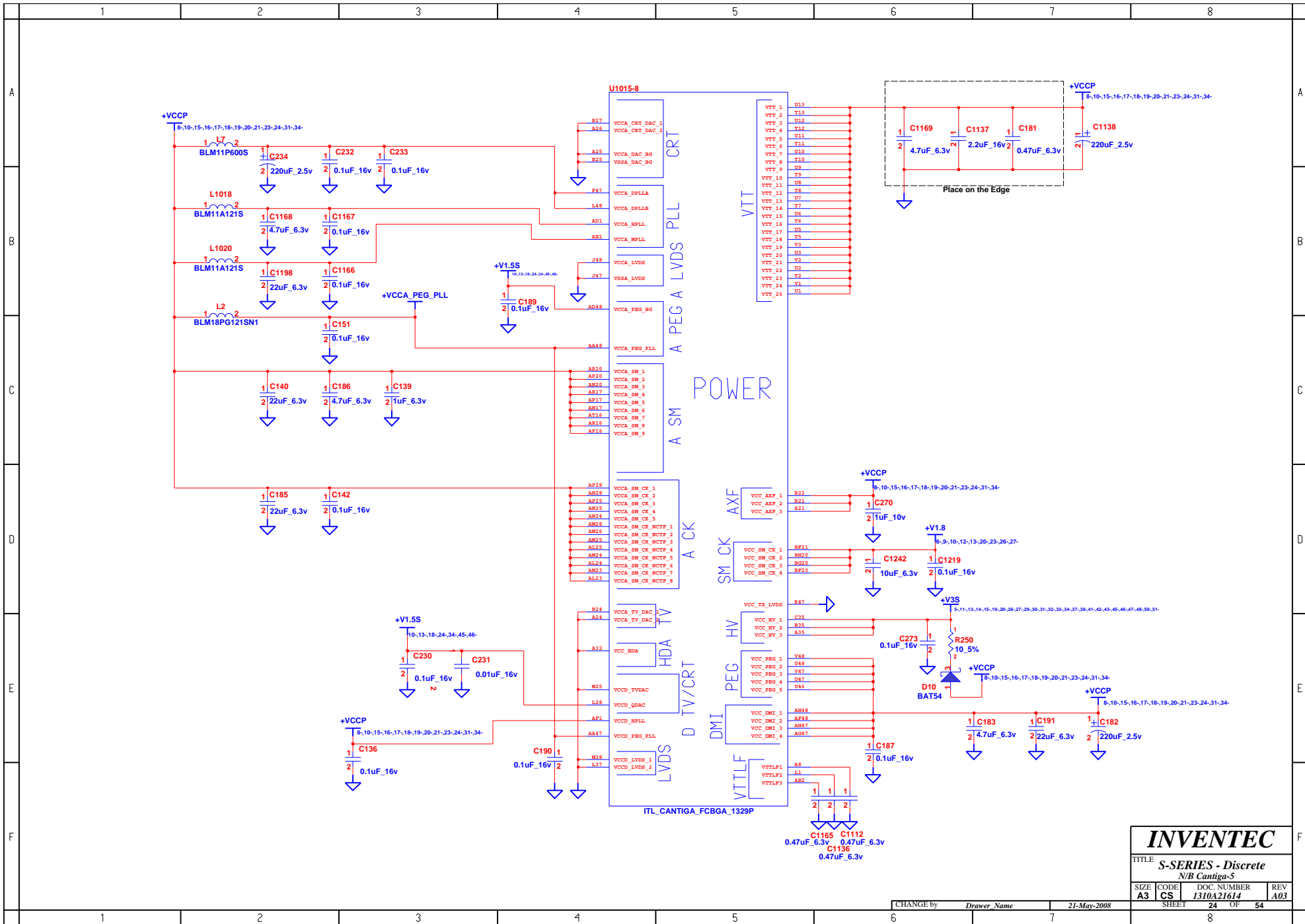
INVENTEC			
TITLE S-SERIES - Discrete XDP & Thermal & Fan			
SIZE A3	CODE CS	DOC. NUMBER I310A21614	REV A03
CHANGE by <i>Drawer Name</i>		21-May-2008	
SHEET		19 OF 54	



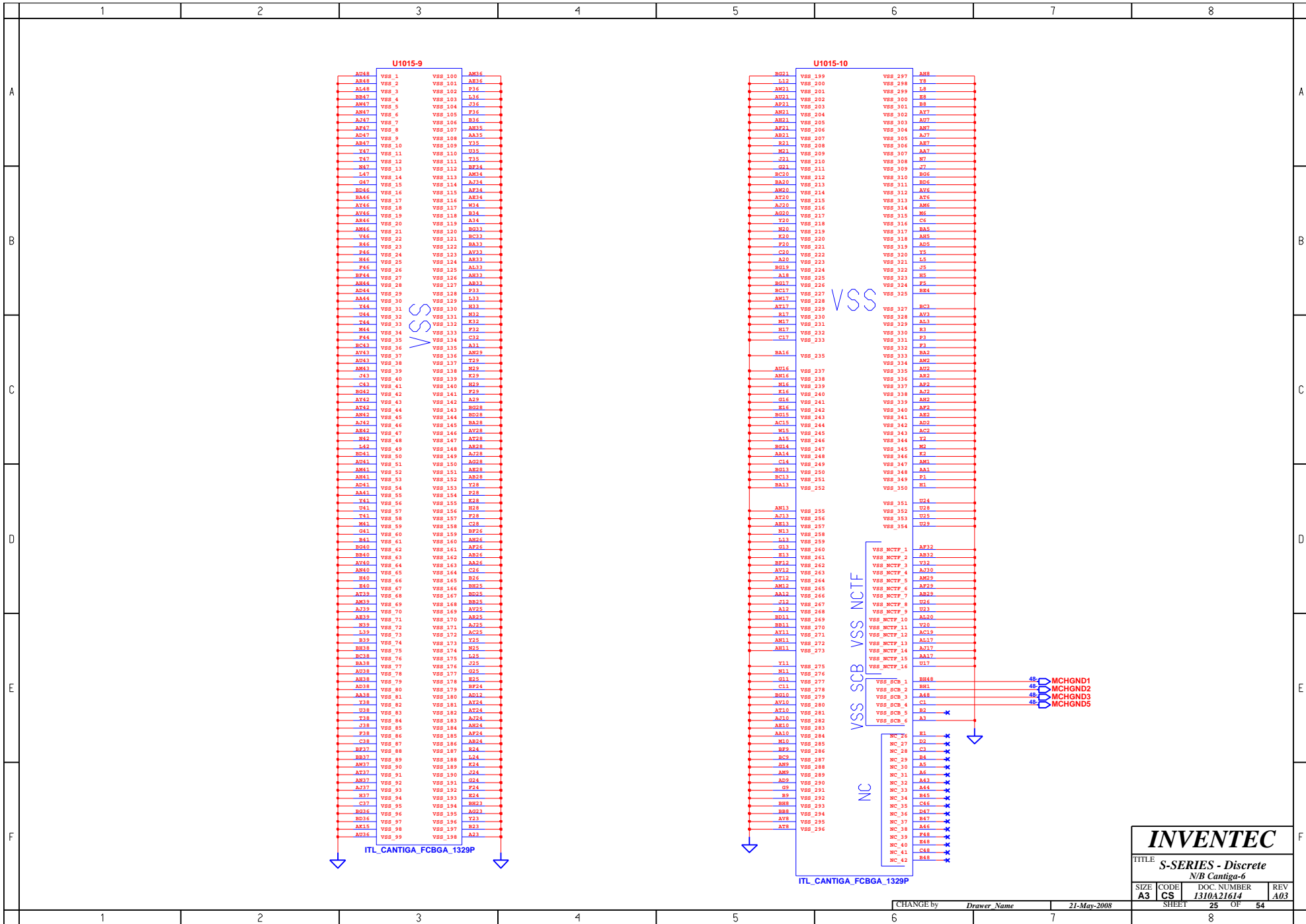
INVENTEC			
TITLE S-SERIES - Discrete N/B Cantiga-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03
CHANGE by		Drawer Name	21-May-2008
		SHEET	22 OF 54



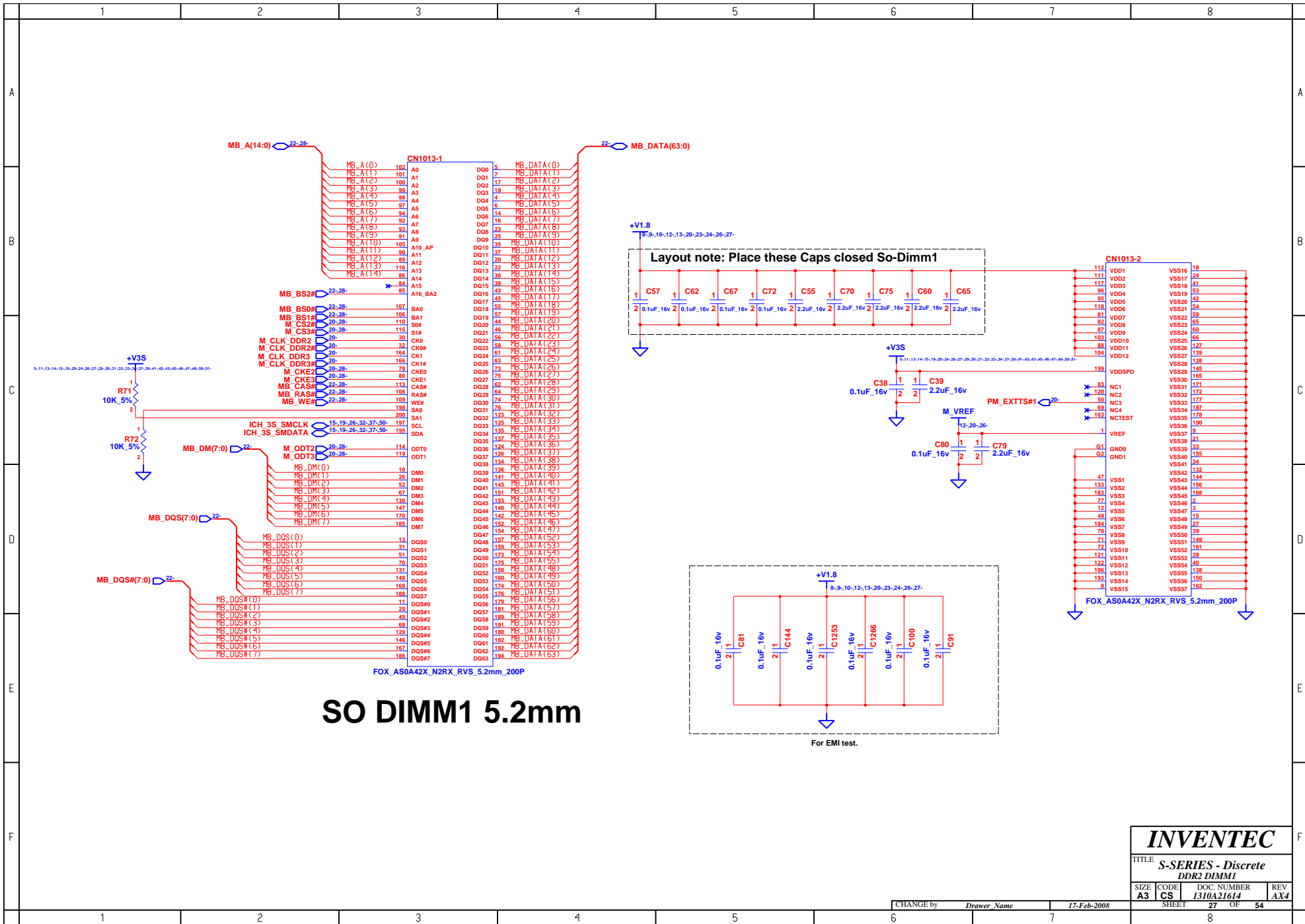
INVENTEC			
TITLE S-SERIES - Discrete N/B Cantiga-4			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A21614	A03
CHANGE by		Drawer Name	21-May-2008
SHEET		23	OF 54



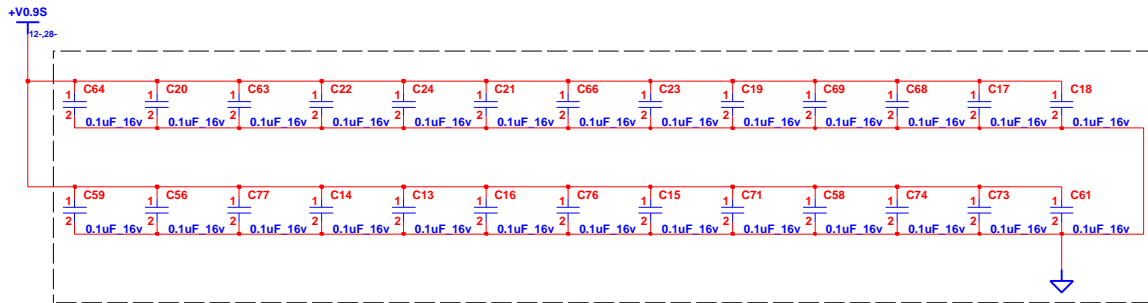
INVENTEC			
TITLE S-SERIES - Discrete N/B Cantiga-5			
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A03
CHANGE by <i>Drawer Name</i>		21-May-2008	
SHEET 24		OF 54	



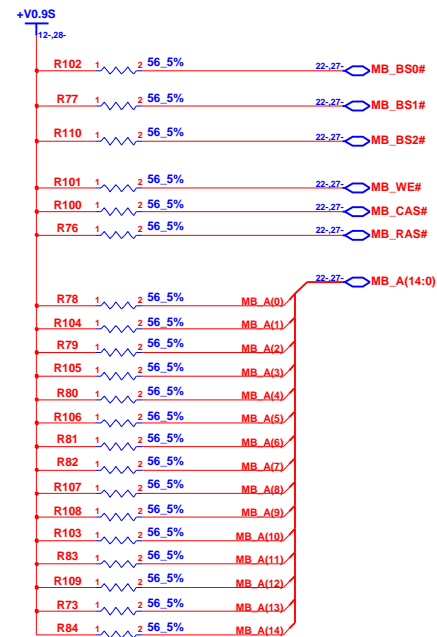
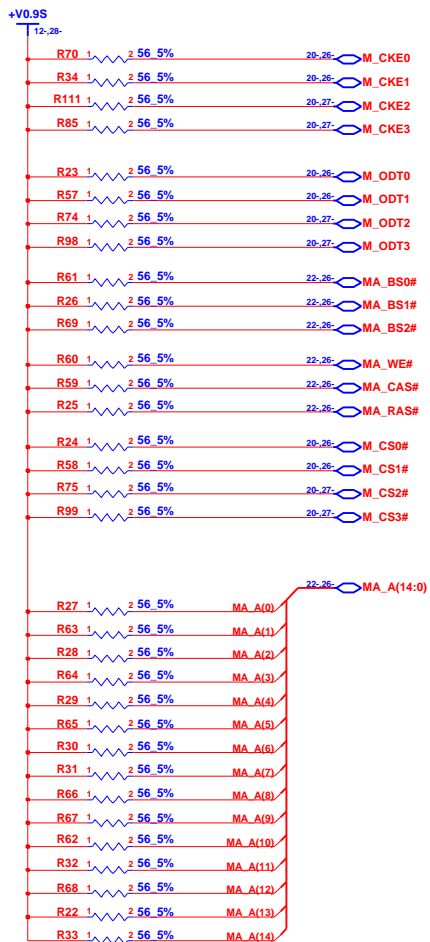
INVENTEC			
TITLE S-SERIES - Discrete			
N/B Cantiga-6			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03
CHANGE by		Drawer Name	21-May-2008
SHEET		25	OF 54



INVENTEC			
TITLE: S-SERIES - Discrete			
DDR2 DIMM1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	AX4
CHANGE by		Drawer Name	17-Feb-2008
SHEET		27	OF 54



Layout notes : Place one Cap close to every 2 pull up resistor terminated to +V0.9S.



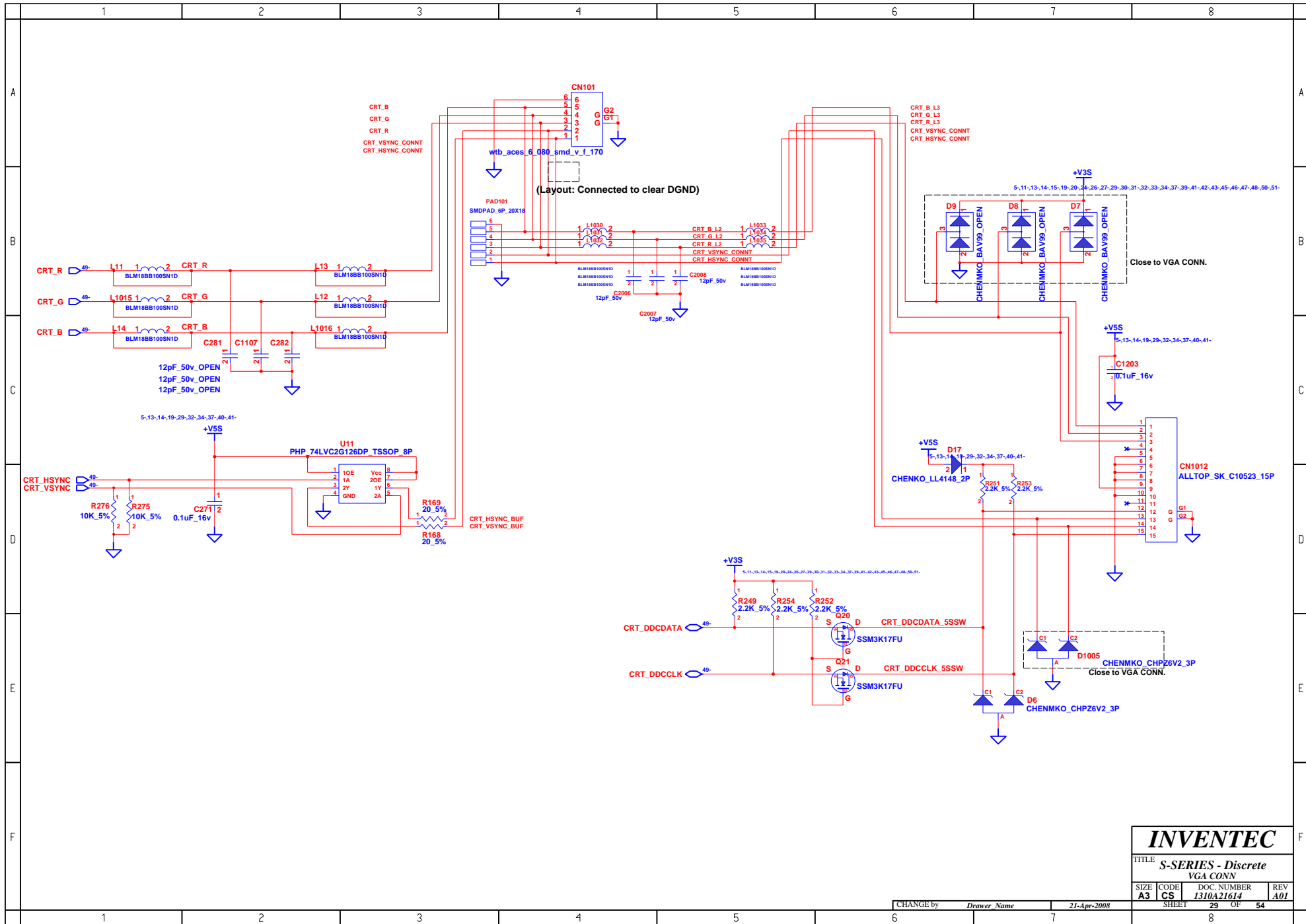
INVENTEC

TITLE
S-SERIES - Discrete
 DDR2 Damping

SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
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CHANGE by *Drawer Name* 27-Sep-2003

SHEET 28 OF 54



INVENTEC

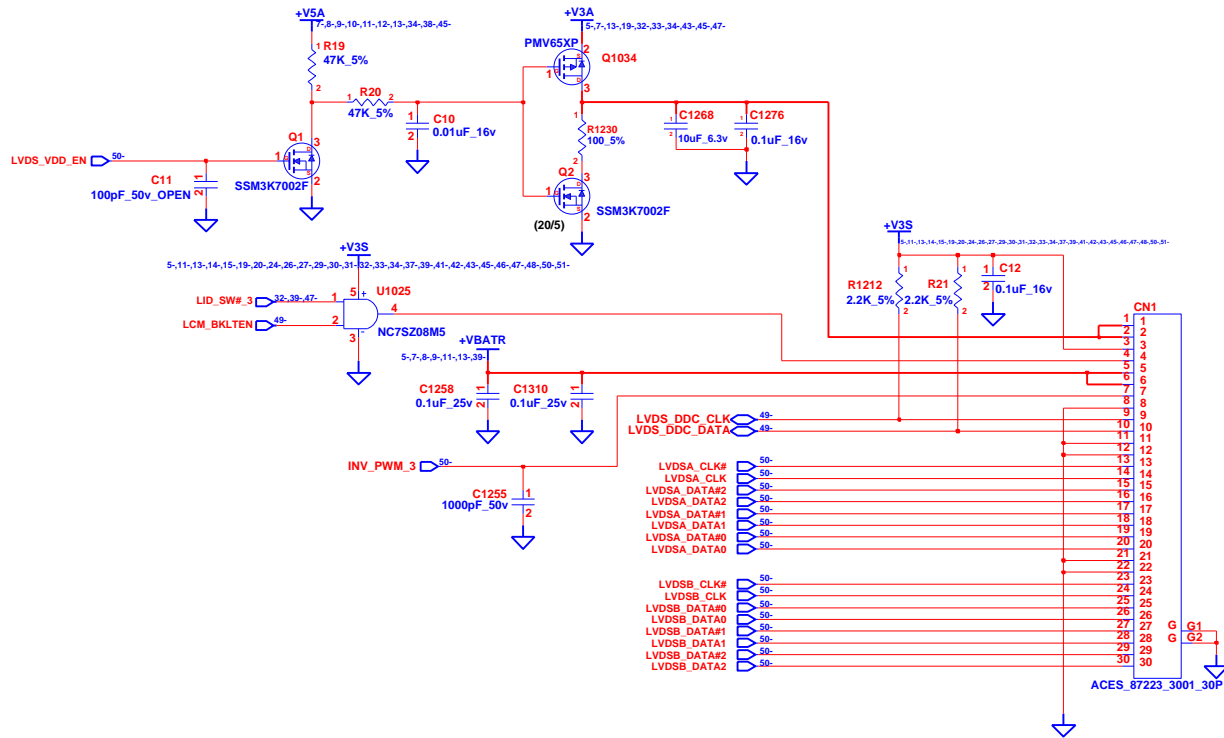
TITLE
S-SERIES - Discrete
VGA CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

CHANGE by *Drawer Name* 21-Apr-2008

SHEET 29 OF 54

Place closed to connector



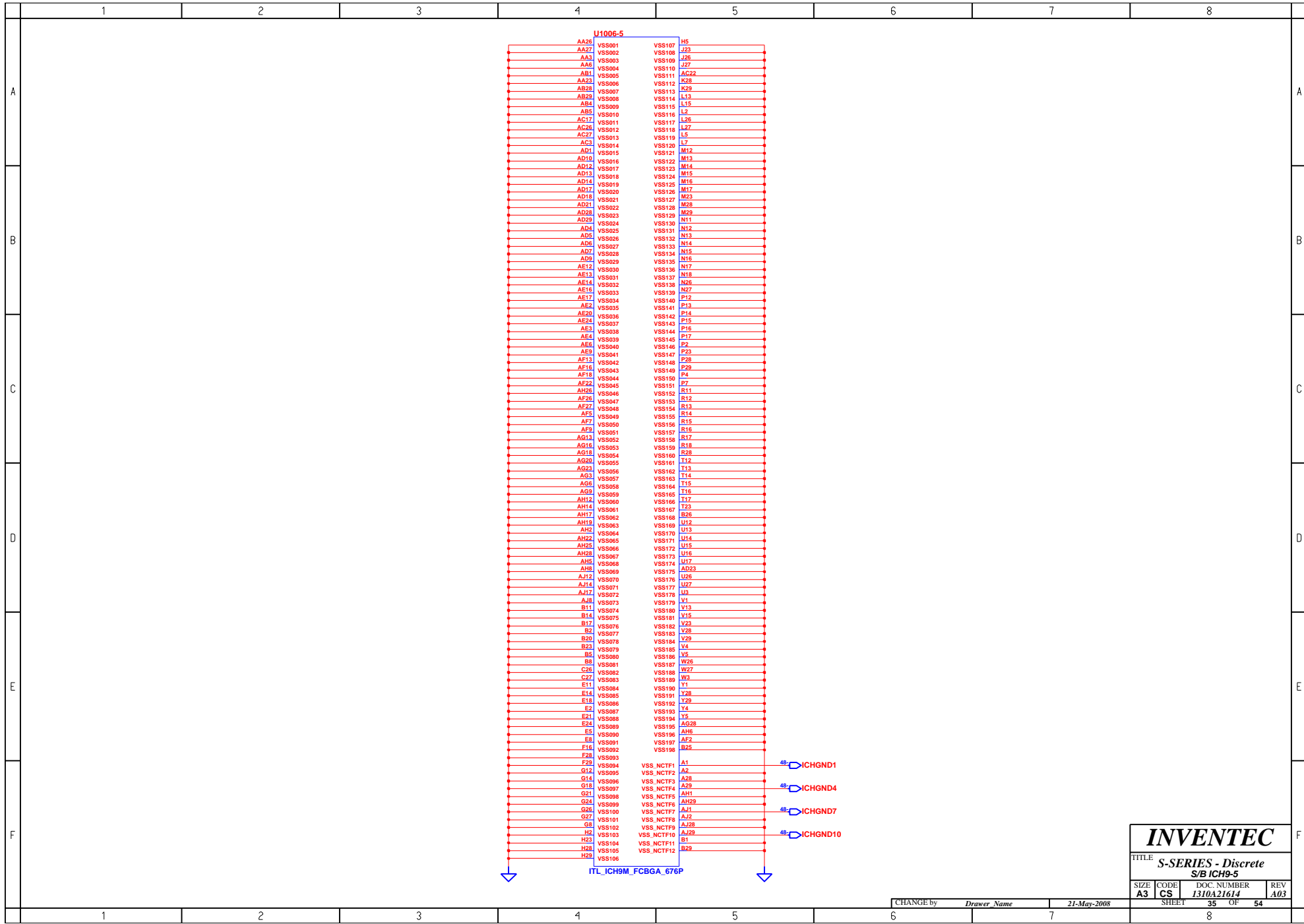
INVENTEC

TITLE
S-SERIES - Discrete
LCM CONN

SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A03
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CHANGE by *Drawer Name* 21-May-2008

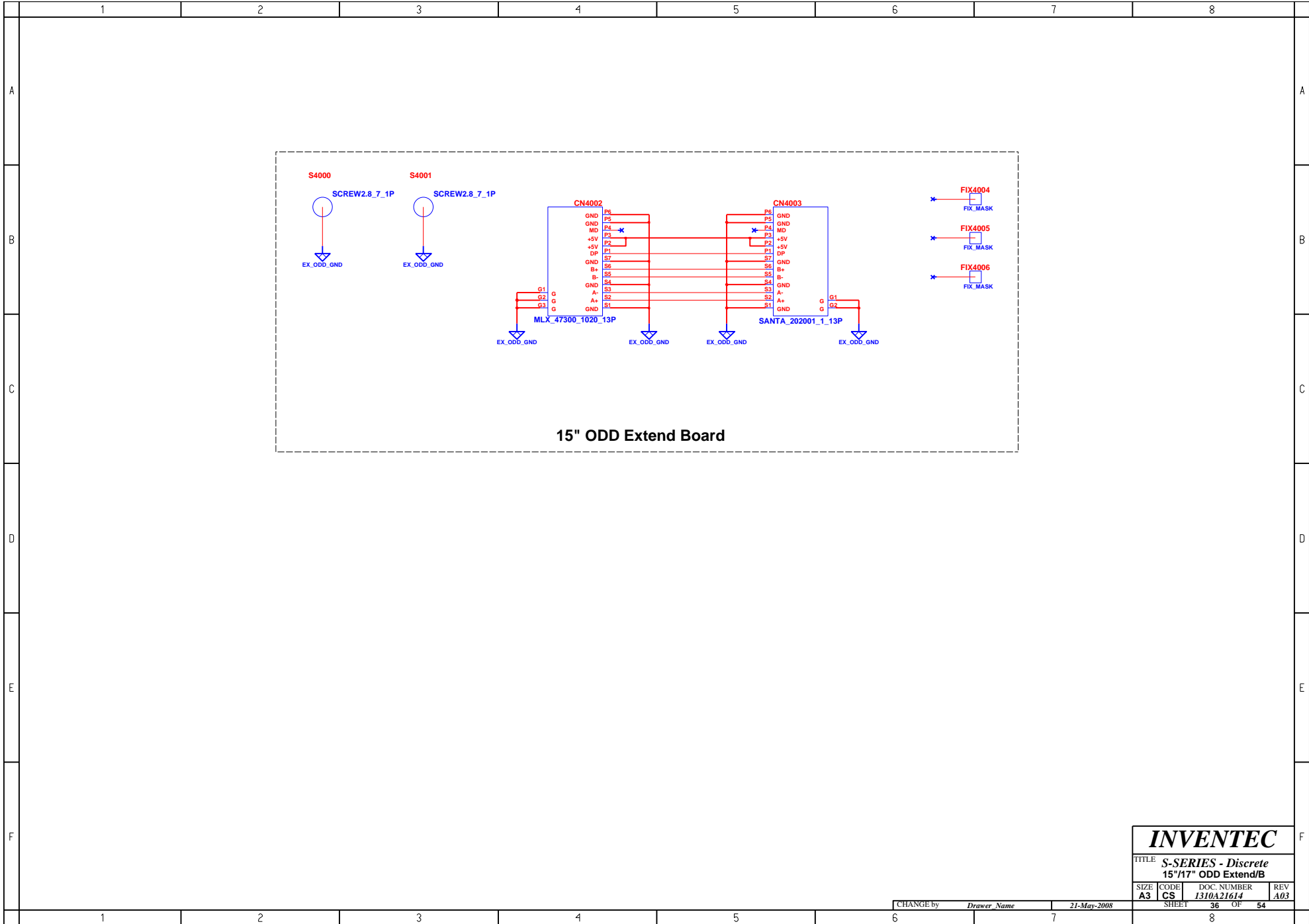
SHEET 30 OF 54



INVENTEC
 TITLE S-SERIES - Discrete
 S/B ICH9-5

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03

CHANGE by *Drawer Name* 21-May-2008 SHEET 35 OF 54



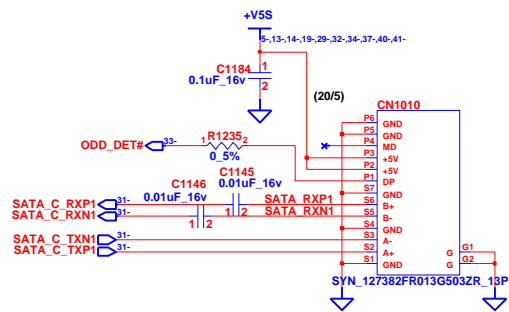
INVENTEC

TITLE *S-SERIES - Discrete*
15"17" ODD Extend/B

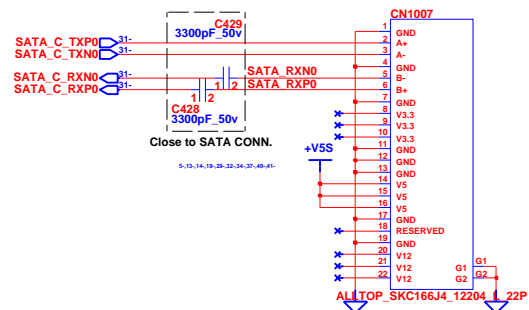
SIZE A3	CODE CS	DOC. NUMBER <i>1310A21614</i>	REV A03
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CHANGE by *Drawer Name* 21-May-2008

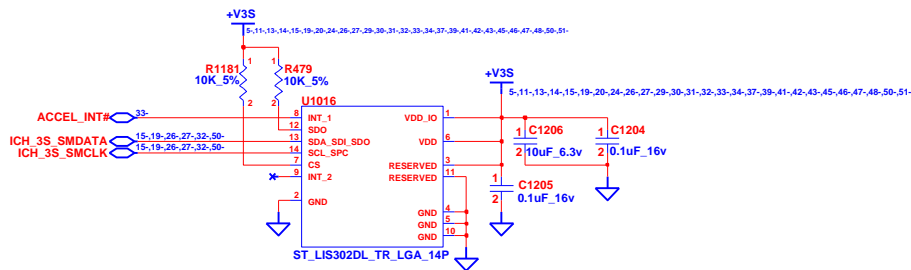
SHEET 36 OF 54



SATA ODD



SATA HDD



Accelerometer

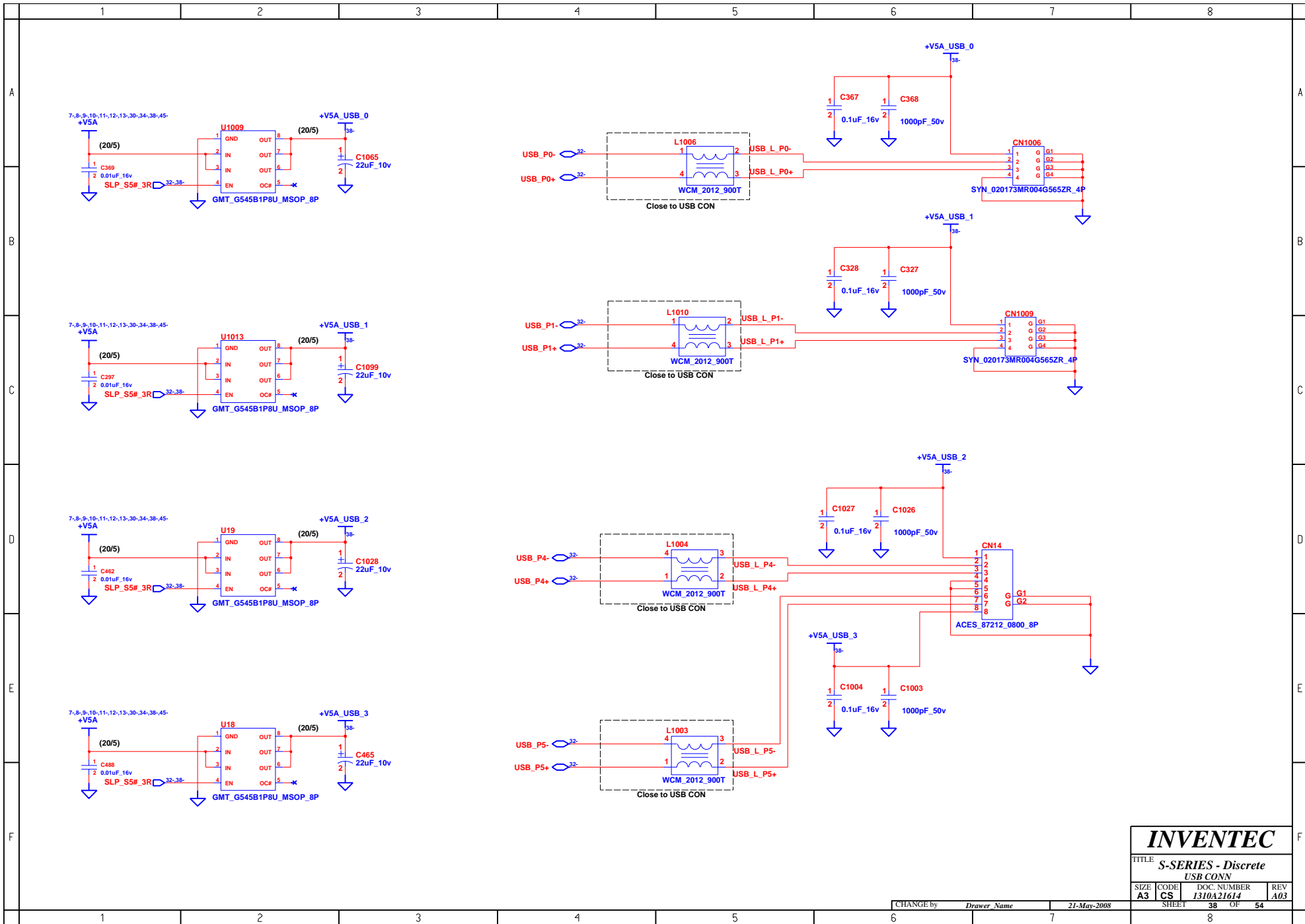
INVENTEC

TITLE
S-SERIES - Discrete
HDD & ODD CONN & Accelerometer

SIZE A3	CODE CS	DOC NUMBER 1310A21614	REV A03
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CHANGE by *Drawer Name* 21-May-2008

SHEET 37 OF 54



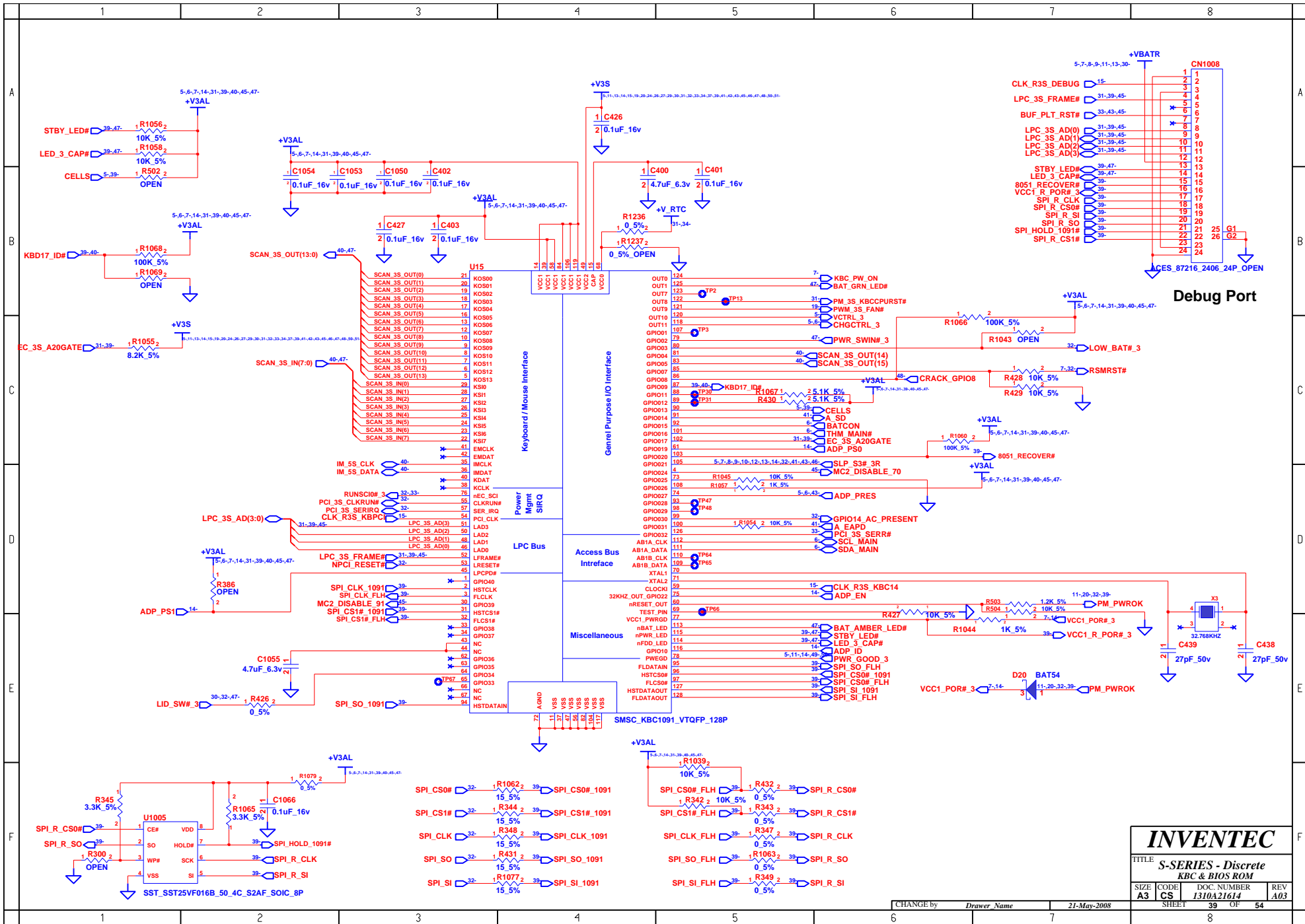
INVENTEC

TITLE
S-SERIES - Discrete
 USB CONN

SIZE A3	CODE CS	DOC. NUMBER I310A21614	REV A03
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CHANGE by *Drawer Name* 21-May-2008

SHEET 38 OF 54

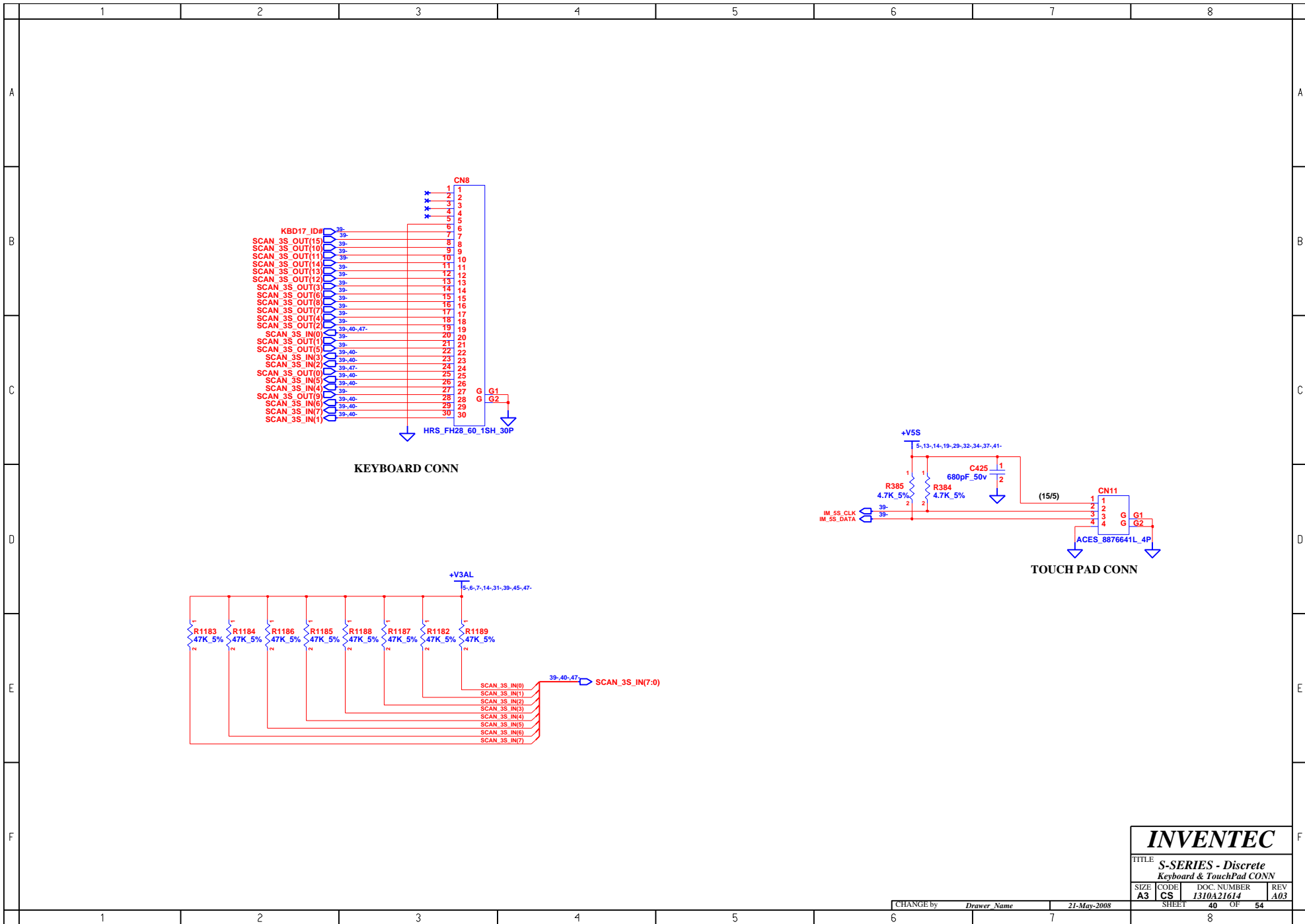


INVENTEC

TITLE: **S-SERIES - Discrete KBC & BIOS ROM**

SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A21614	A03

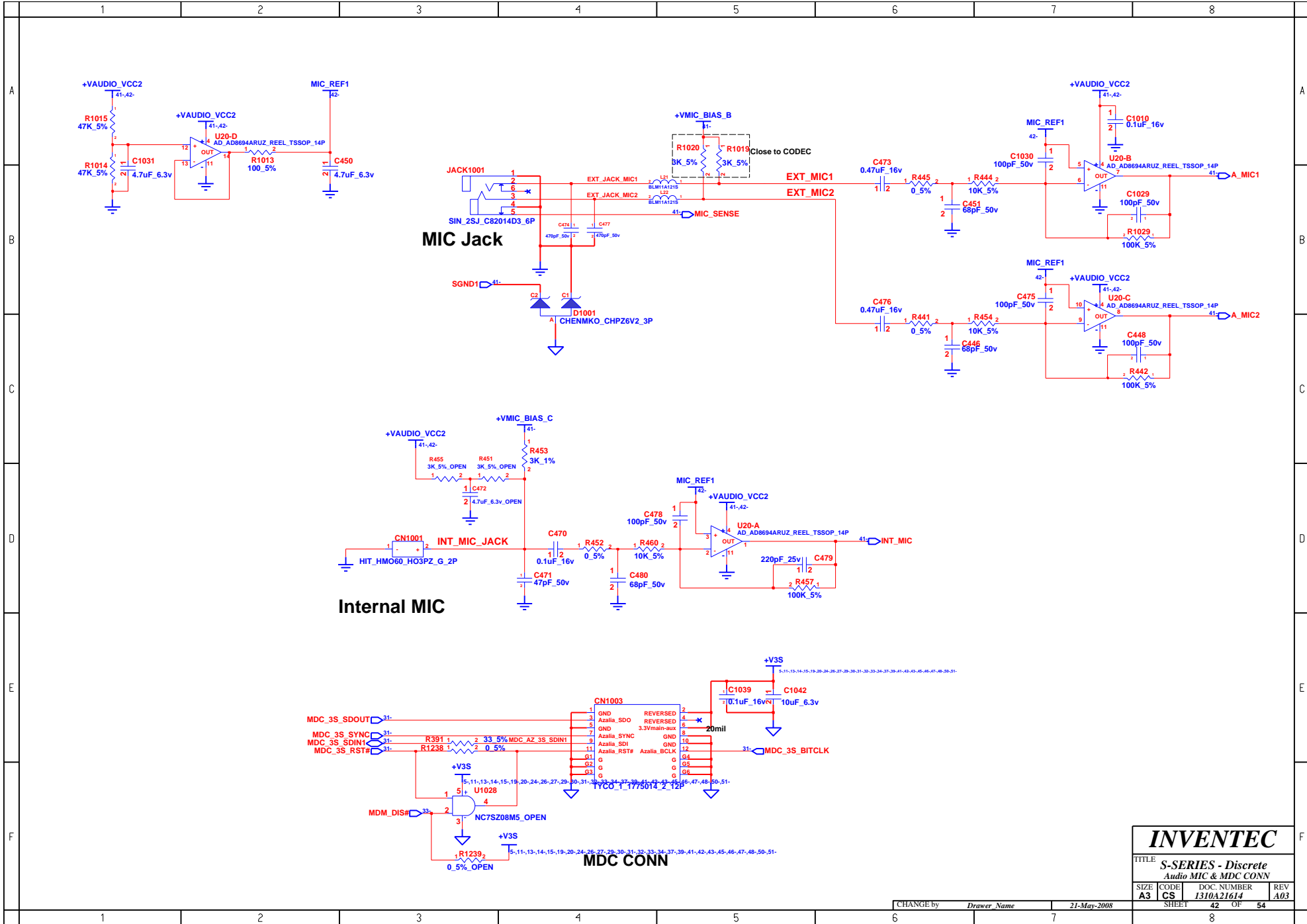
SHEET 39 OF 54



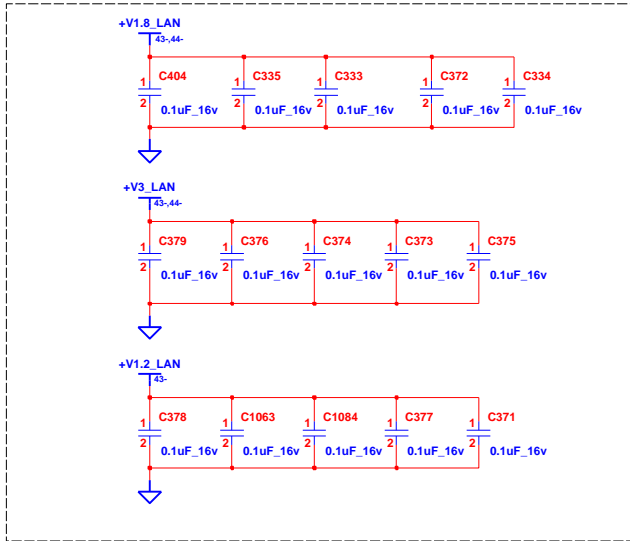
INVENTEC

TITLE
S-SERIES - Discrete
 Keyboard & TouchPad CONN

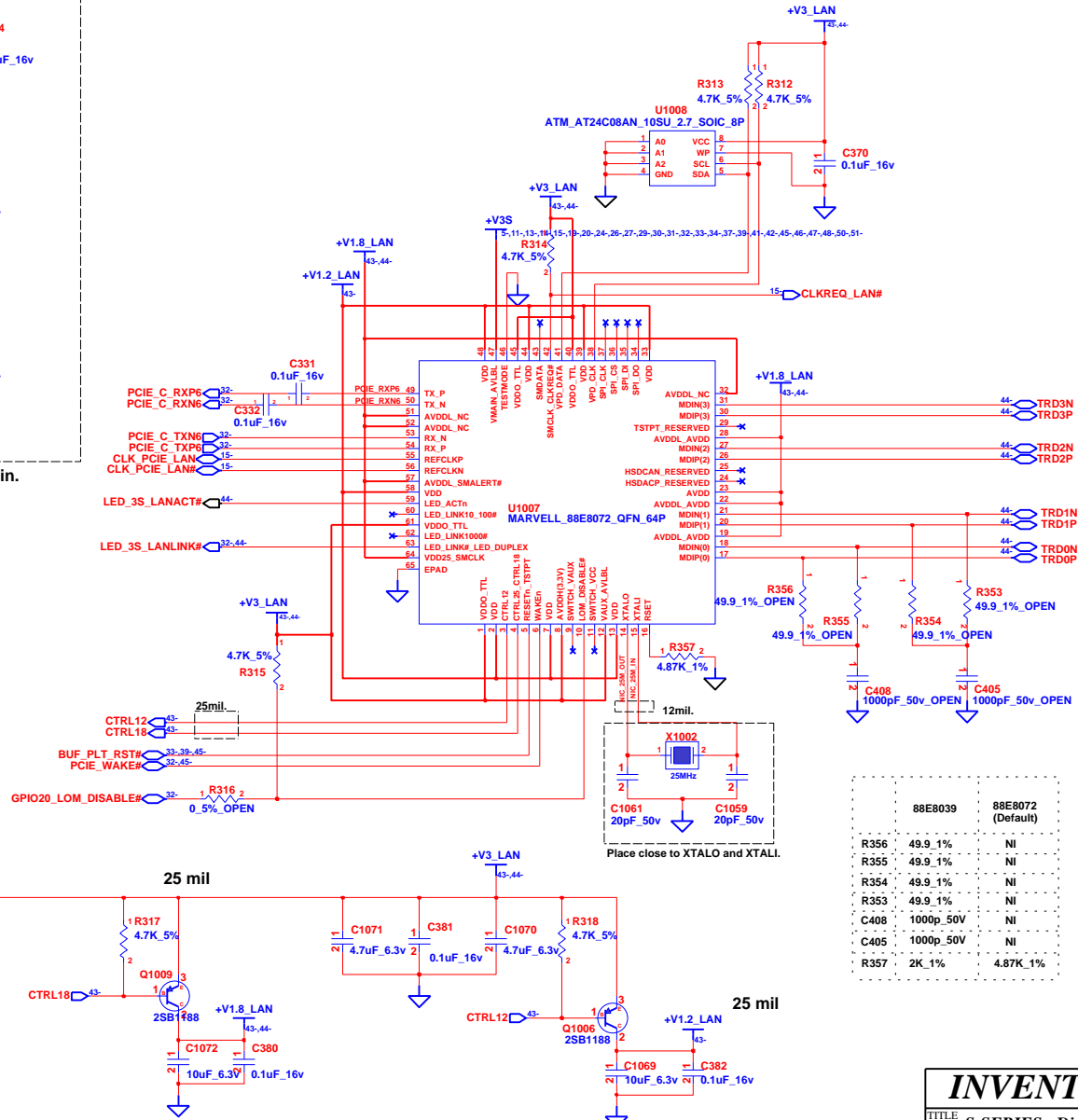
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A03
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INVENTEC			
TITLE S-SERIES - Discrete Audio MIC & MDC CONN			
SIZE A3	CODE CS	DOC NUMBER I310A21614	REV A03
CHANGE by <i>Drawer Name</i>		21-May-2008	
SHEET		42 OF 54	



Place bypass cap as close as possible with every power pin.



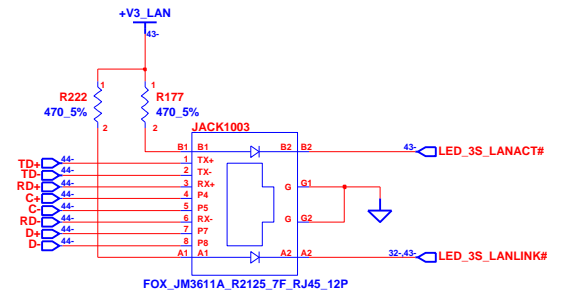
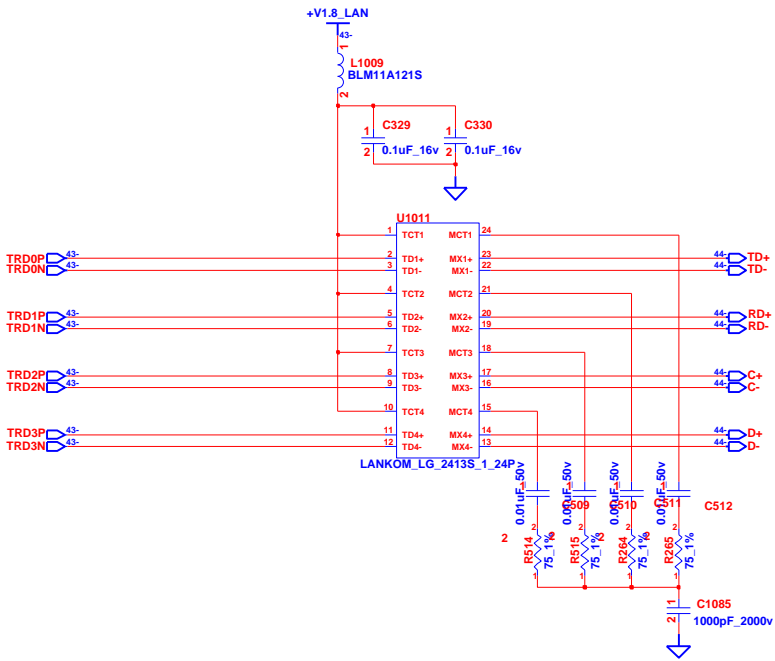
	88E8039	88E8072 (Default)
R356	49.9_1%	NI
R355	49.9_1%	NI
R354	49.9_1%	NI
R353	49.9_1%	NI
C408	1000p_50V	NI
C405	1000p_50V	NI
R357	2K_1%	4.87K_1%

Place close to XTAL0 and XTAL1.

INVENTEC

TITLE: **S-SERIES - Discrete Giga LAN Controller**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03



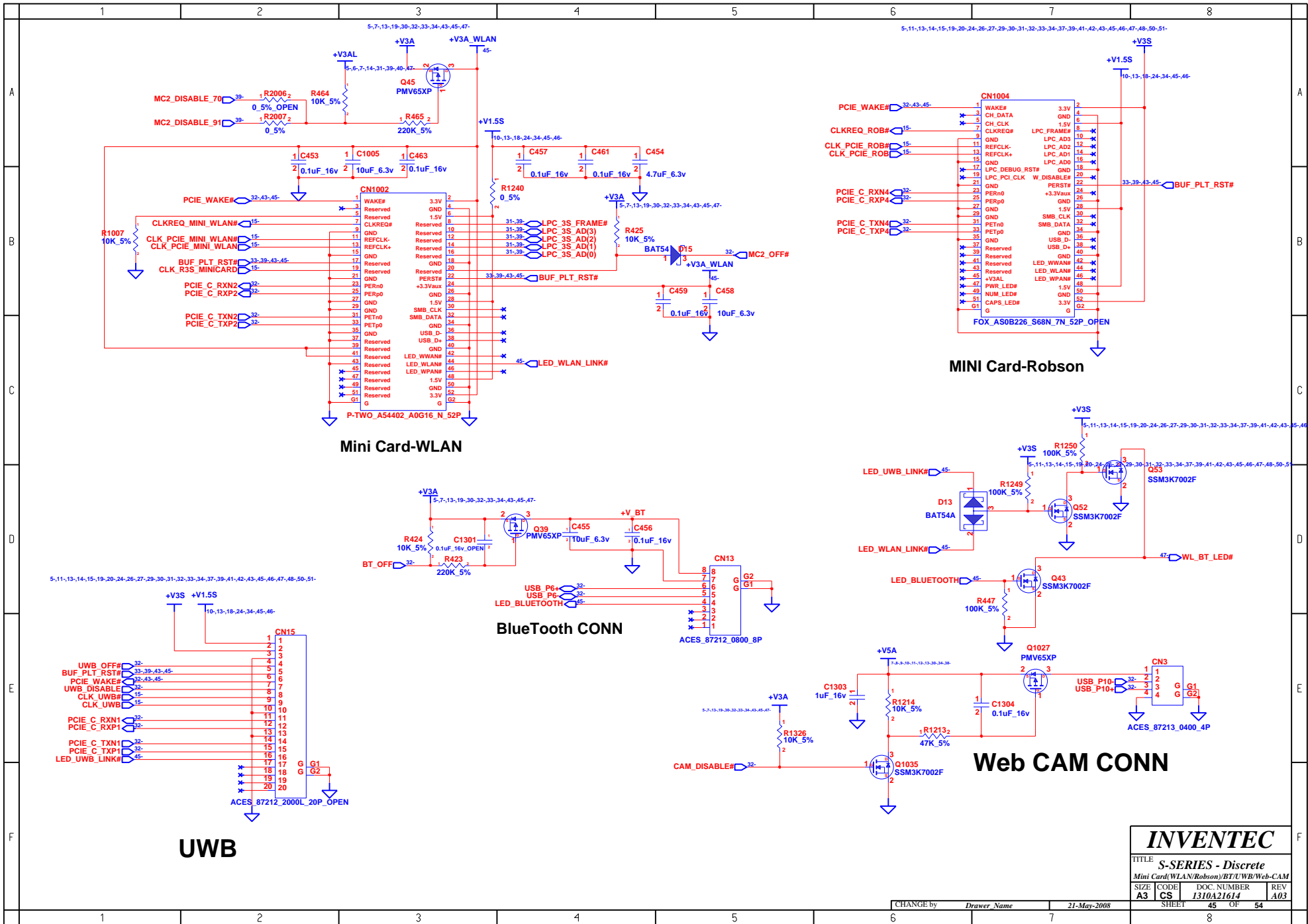
INVENTEC

TITLE **S-SERIES - Discrete
Magnetic & RJ45 CONN**

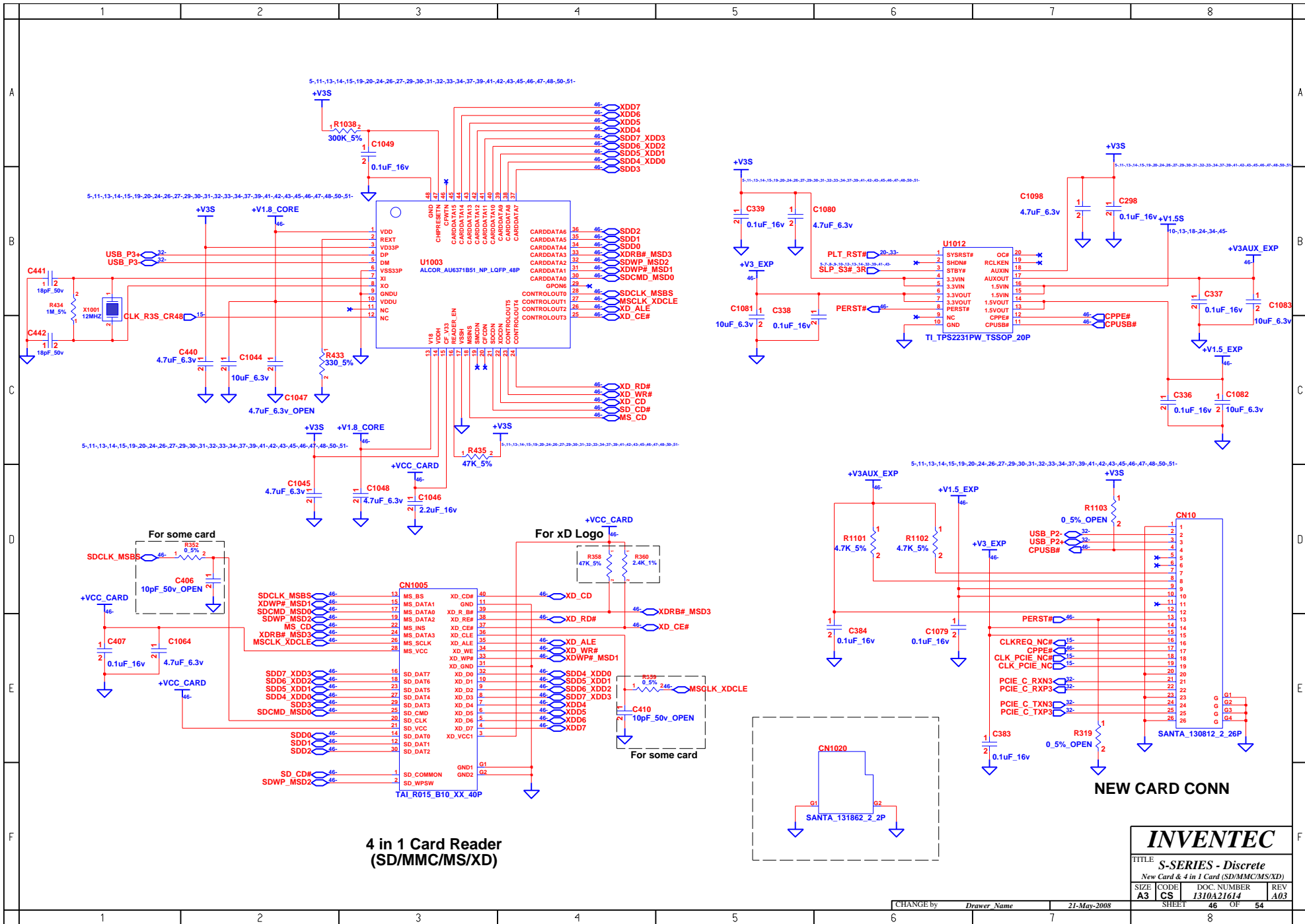
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03

CHANGE by *Drawer Name* 21-May-2008

SHEET 44 OF 54



INVENTEC			
TITLE S-SERIES - Discrete			
Mini Card(WLAN/Robson)/BT/UWB/Web-CAM			
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A03
CHANGE by <i>Drawer Name</i>		21-May-2008	
SHEET 45		OF 54	



**4 in 1 Card Reader
(SD/MMC/MS/XD)**

NEW CARD CONN

INVENTEC

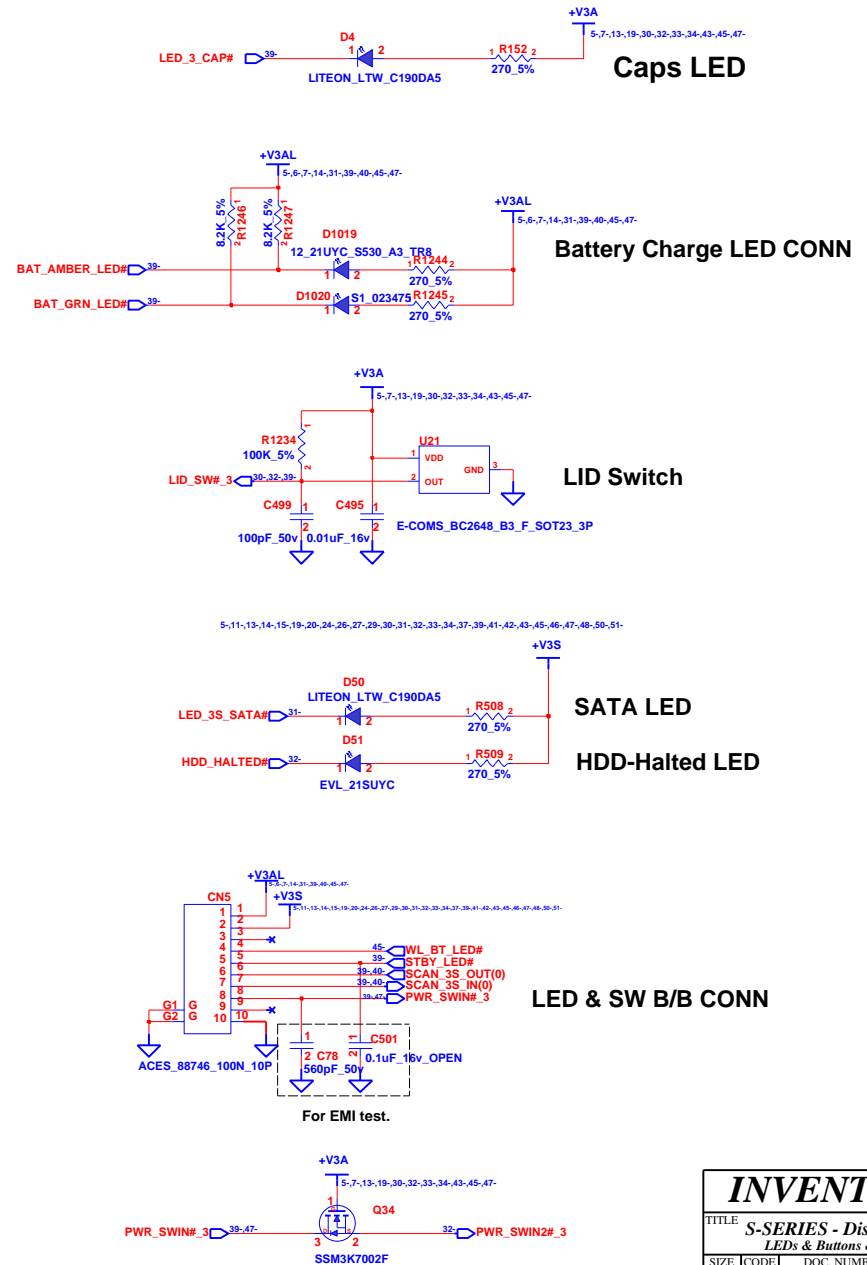
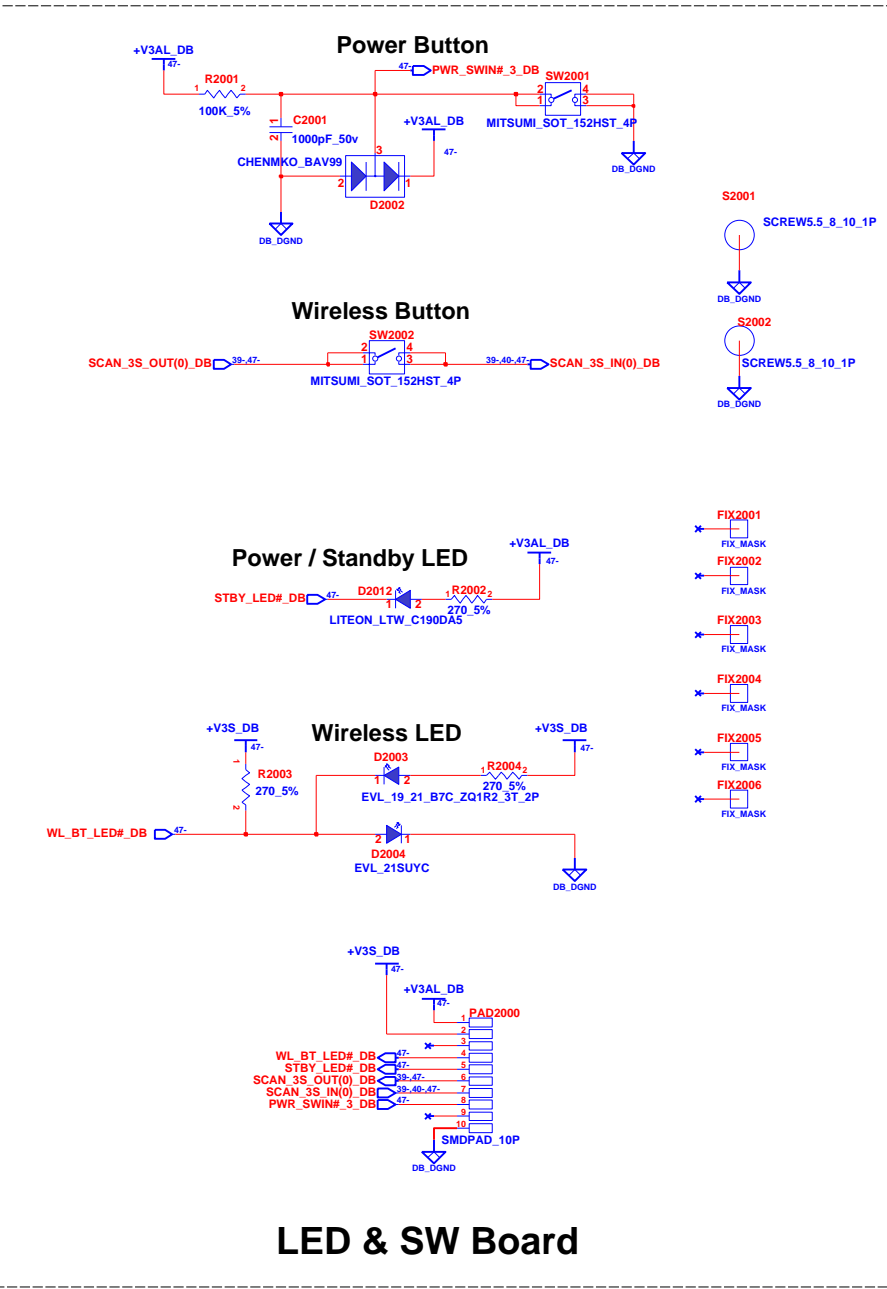
TITLE **S-SERIES - Discrete**

New Card & 4 in 1 Card (SD/MMC/MS/XD)

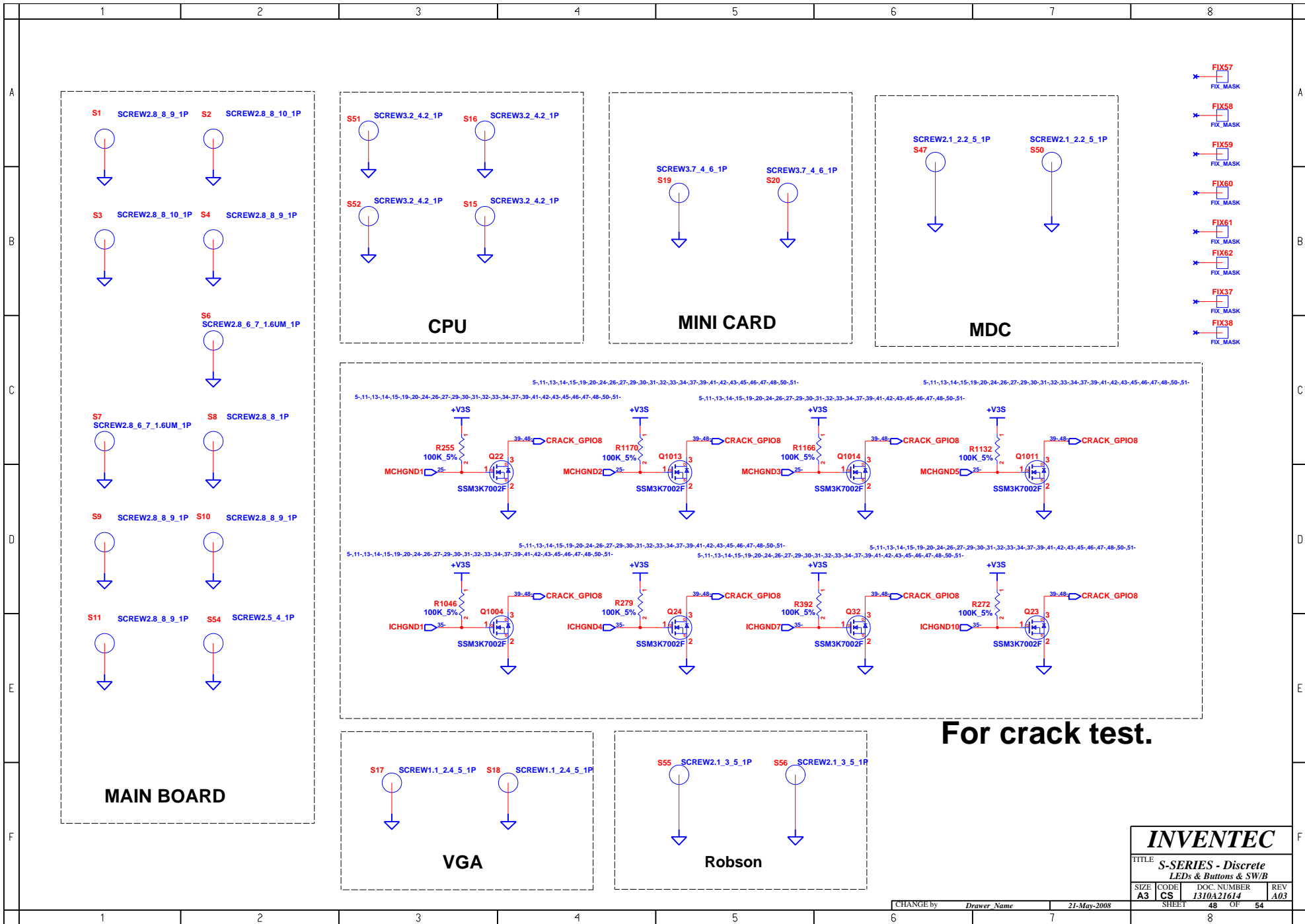
SIZE **A3** CODE **CS** DOC. NUMBER **1310A21614** REV **A03**

SHEET **46** OF **54**

CHANGE by *Drawer Name* 21-May-2008



INVENTEC			
TITLE: S-SERIES - Discrete			
LEDs & Buttons & SW/B			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A21614	A03



- FIX57
FIX_MASK
- FIX58
FIX_MASK
- FIX59
FIX_MASK
- FIX60
FIX_MASK
- FIX61
FIX_MASK
- FIX62
FIX_MASK
- FIX37
FIX_MASK
- FIX38
FIX_MASK

For crack test.

INVENTEC			
TITLE <i>S-SERIES - Discrete LEDs & Buttons & SW/B</i>			
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A03
CHANGE by <i>Drawer Name</i>		21-May-2008	
SHEET		48 OF 54	

STRAPS	PIN	Description of default settings	
TX_PWRS_ENB	GPIO0	PCIe full TX output swing.	1
TX_DEEMPH_EN	GPIO1	PCIe transmitter de-emphasis enabled.	1
BIF_DEBUG_ACCESS	GPIO4	Debug signals muxed out.	0
ROMIDCFG(0:3)	GPIO[11:13,9]	Memory aperture type	X X X X

X = DESIGN DEPENDANT
 0 = DO NOT INSTALL RESISTOR
 1 = INSTALL 10K RESISTOR

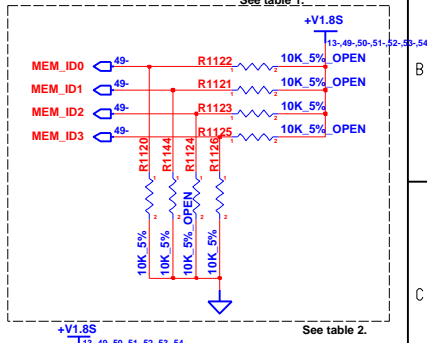
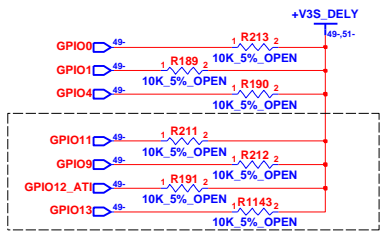
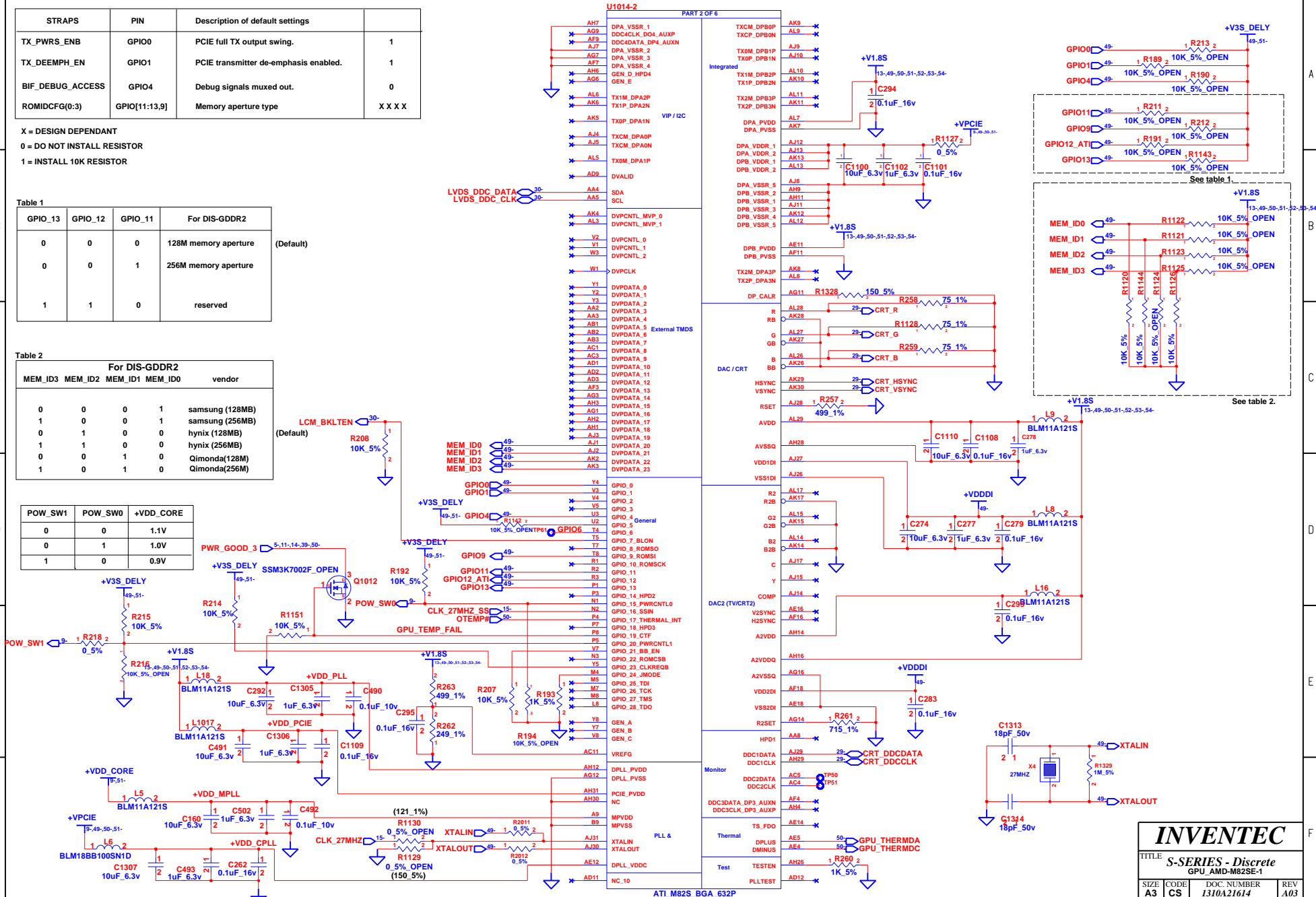
Table 1

GPIO_13	GPIO_12	GPIO_11	For DIS-GDDR2
0	0	0	128M memory aperture (Default)
0	0	1	256M memory aperture
1	1	0	reserved

Table 2

MEM_ID3	MEM_ID2	MEM_ID1	MEM_ID0	vendor
0	0	0	1	samsung (128MB)
1	0	0	1	samsung (256MB)
0	1	0	0	hynix (128MB)
1	1	0	0	hynix (256MB)
0	0	1	0	Qimonda(128MB)
1	0	1	0	Qimonda(256M)

POW_SW1	POW_SW0	+VDD_CORE
0	0	1.1V
0	1	1.0V
1	0	0.9V

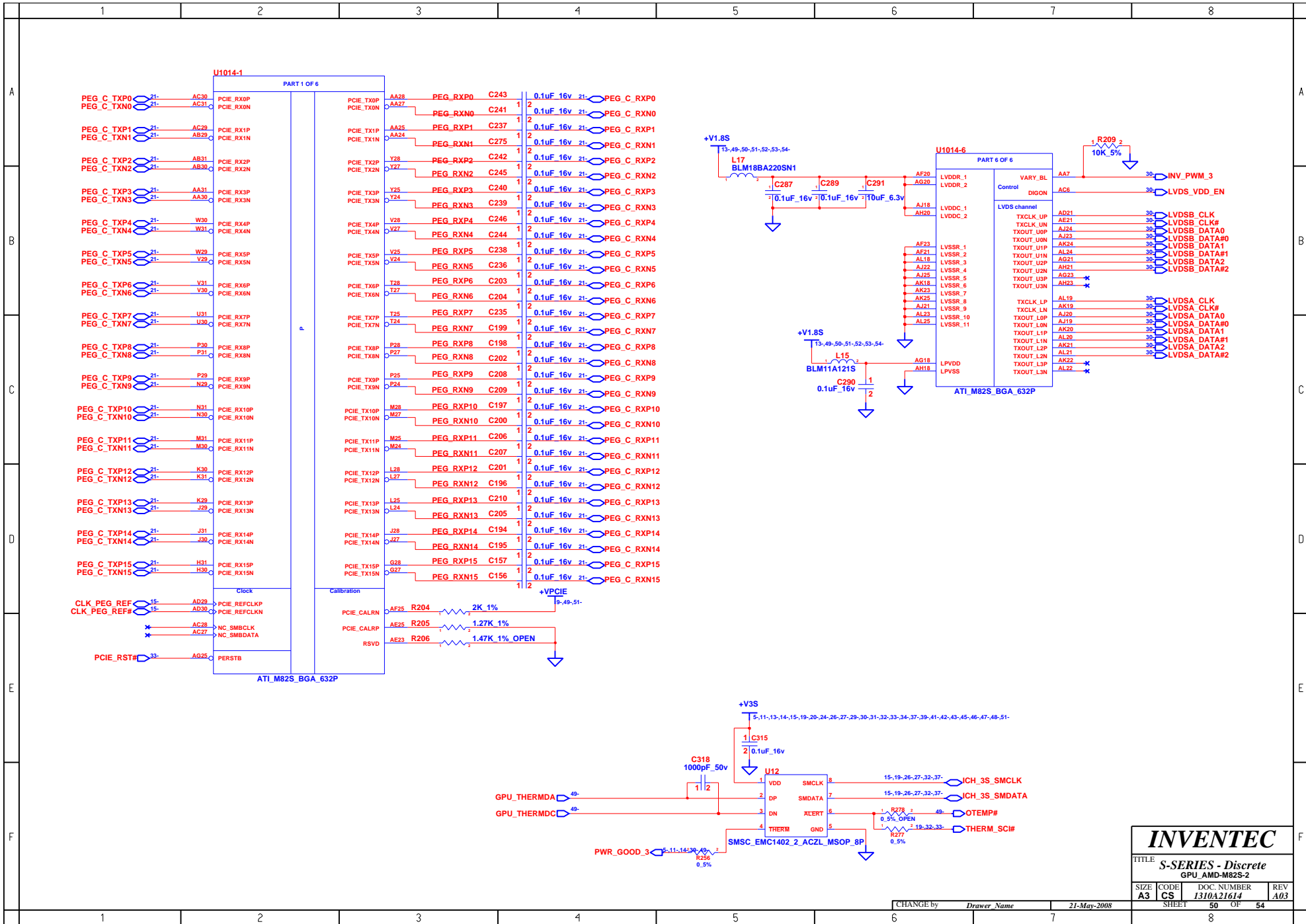


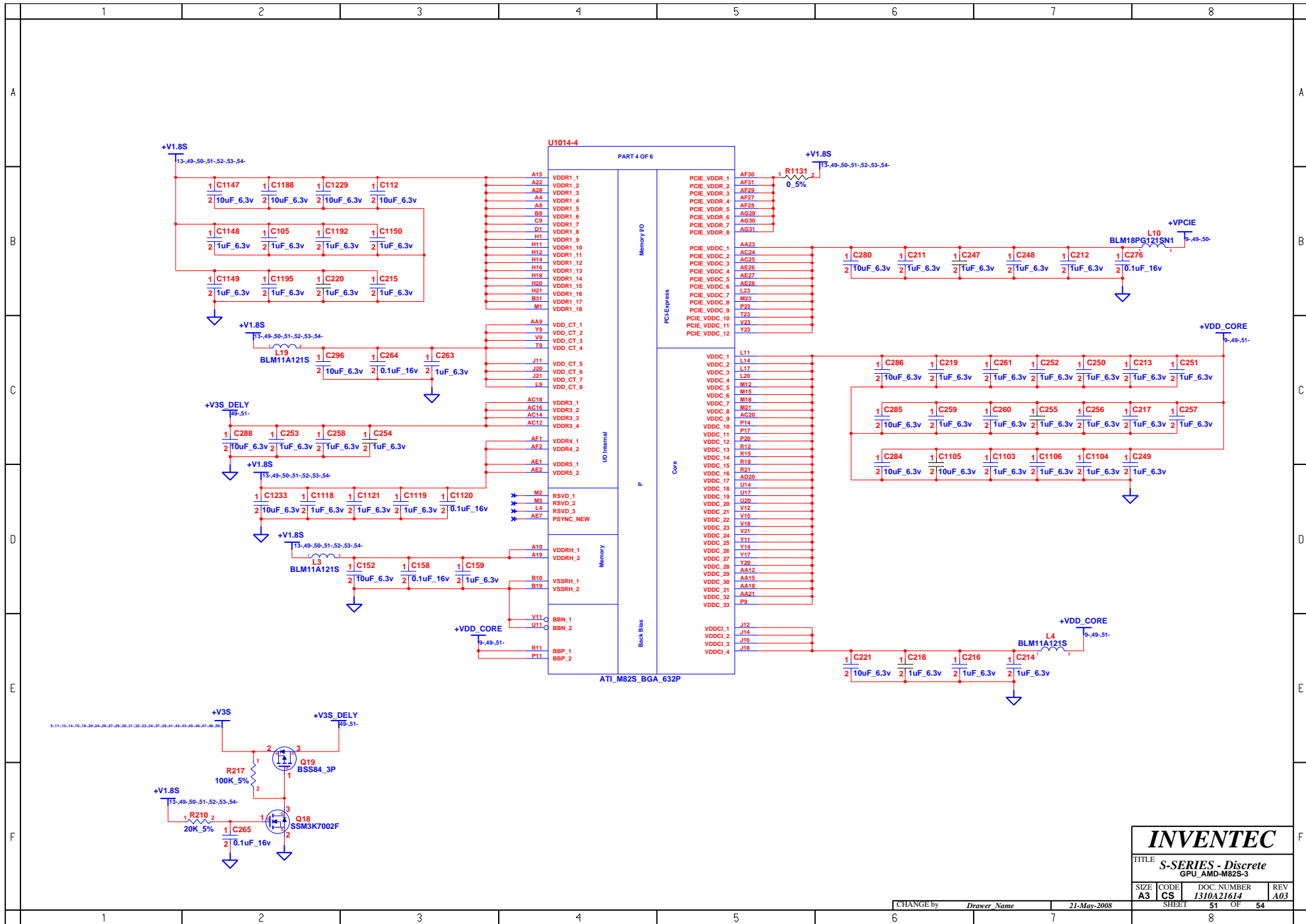
INVENTEC

TITLE: **S-SERIES - Discrete GPU_AMD-M82SE-1**

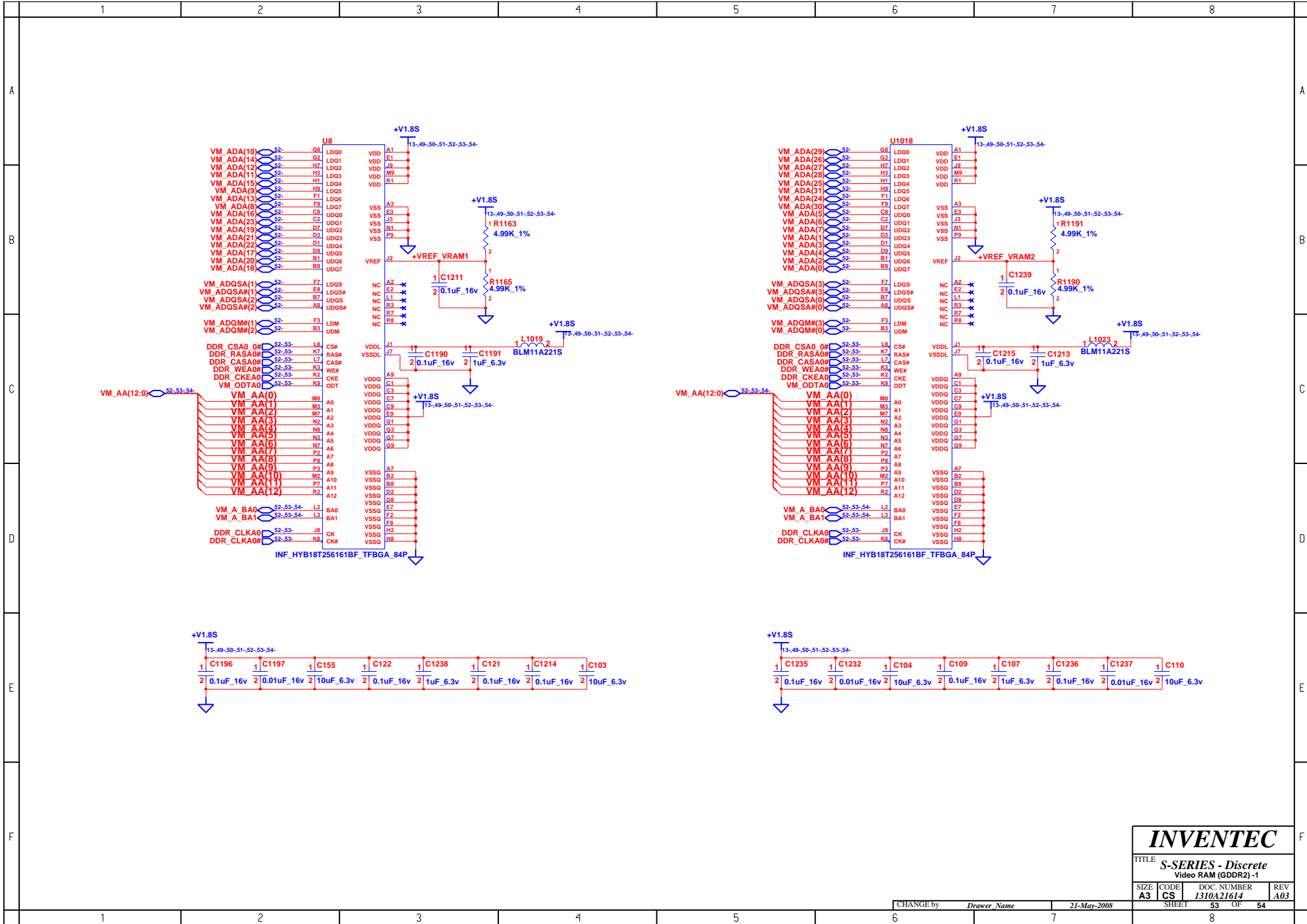
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03

SHEET 49 OF 54

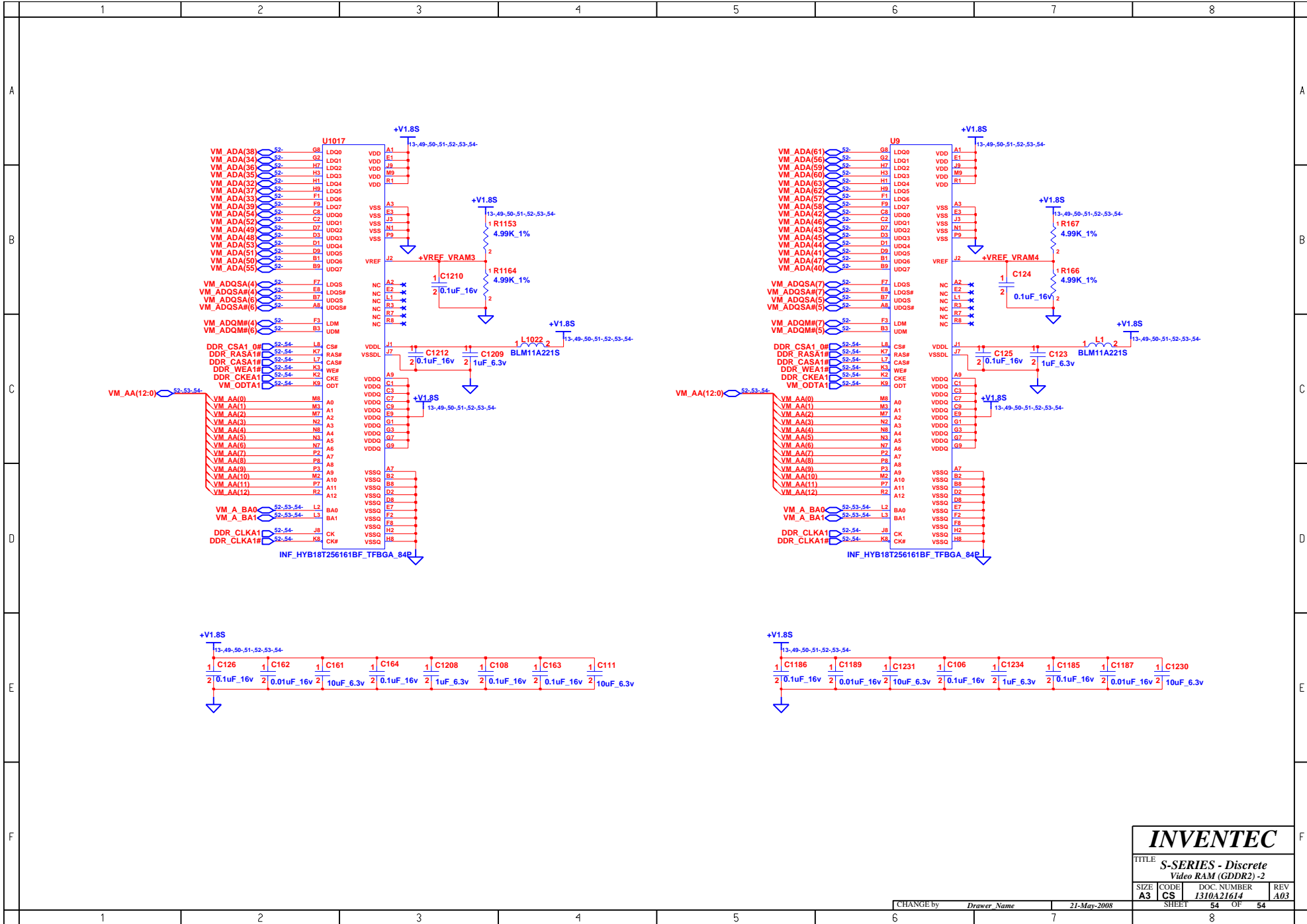




INVENTEC			
TITLE S-SERIES - Discrete GPU_AMD-M82S-3			
SIZE A3	CODE CS	DOC. NUMBER I310A21614	REV A03
CHANGE by <i>Drawer Name</i>		21-May-2008	
SHEET 51		OF 54	



INVENTEC			
TITLE S-SERIES - Discrete			
Video RAM (GDDR2) -1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03
CHANGE by		Drawer Name	21-May-2008
SHEET		53	OF 54



INVENTEC

TITLE
S-SERIES - Discrete
 Video RAM (GDDR2) -2

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A03

CHANGE by *Drawer Name* 21-May-2008

SHEET 54 OF 54