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A	<div style="border: 1px solid black; padding: 20px; text-align: center;"> <h1>S-SERIES</h1> <h2>Zygo(D) & Zodiac(D) & Ikon</h2> <h3>PV_Build (A01)</h3> <p style="font-size: 1.2em;">2008.04.02</p> </div>																																																																																							
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DatasheetLive

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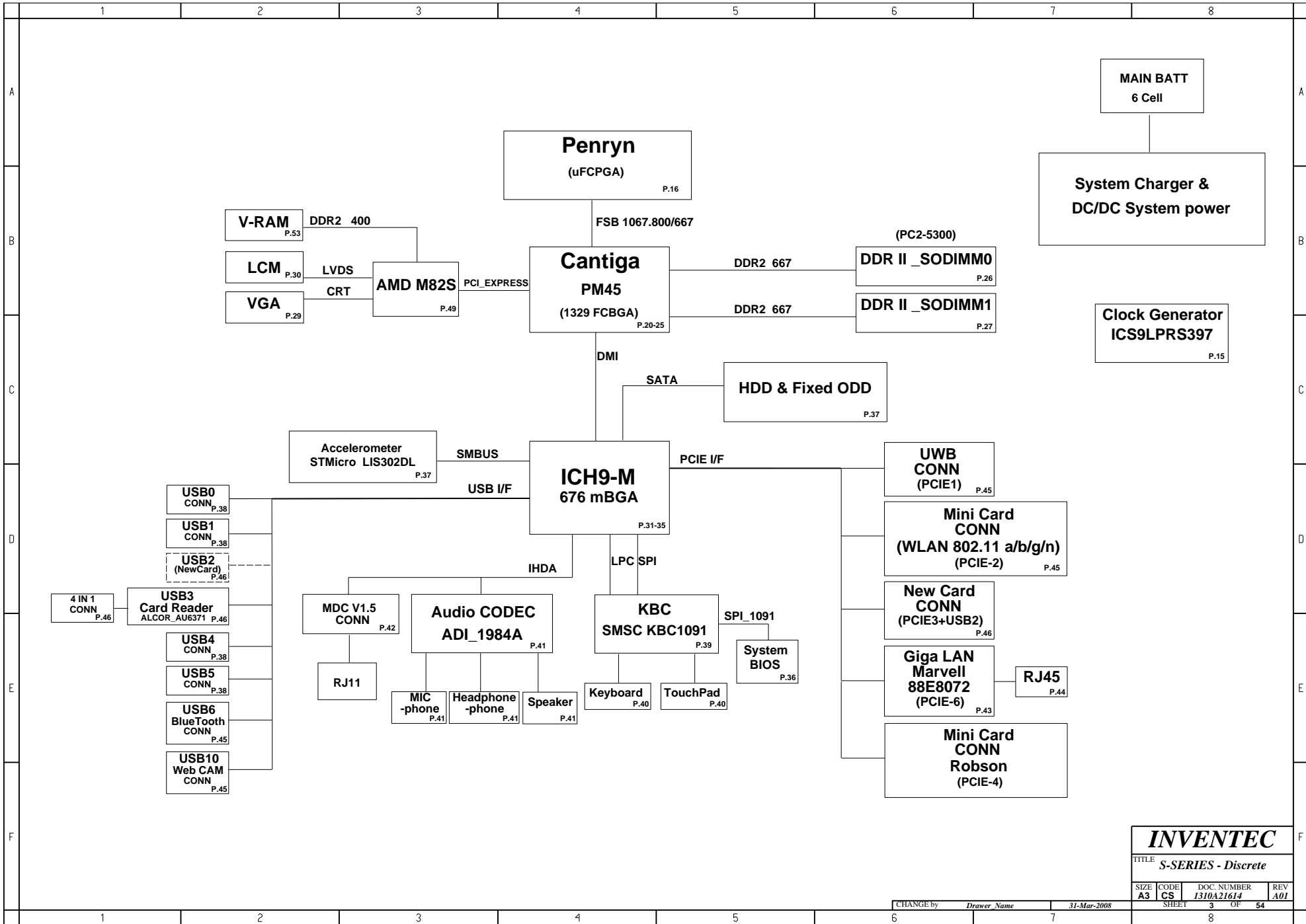
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TITLE *S-SERIES - Discrete*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

CHANGE by *Drawer Name* 31-Mar-2008

SHEET 2 OF 54



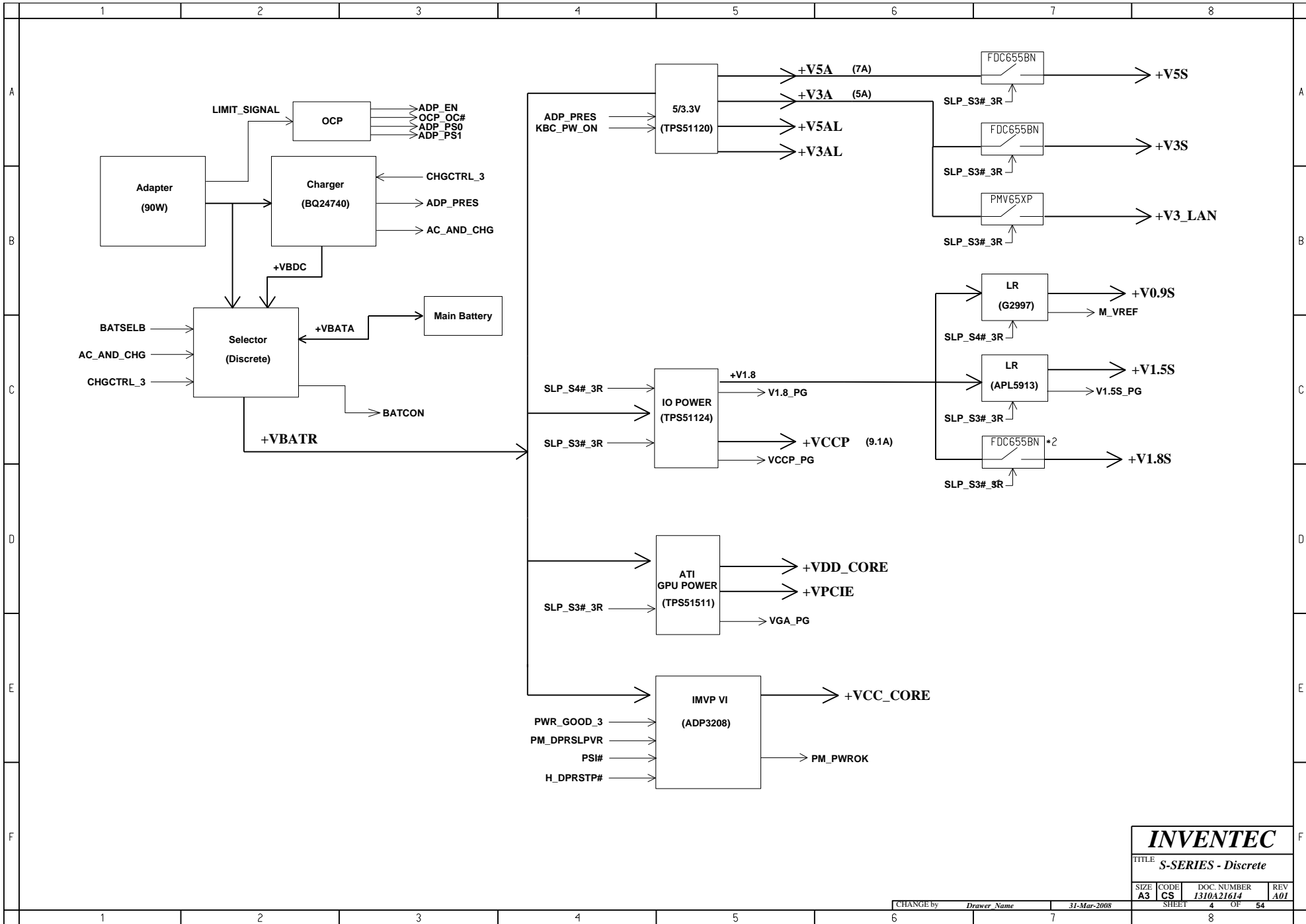
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TITLE *S-SERIES - Discrete*

SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
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CHANGE by *Drawer Name* 31-Mar-2008

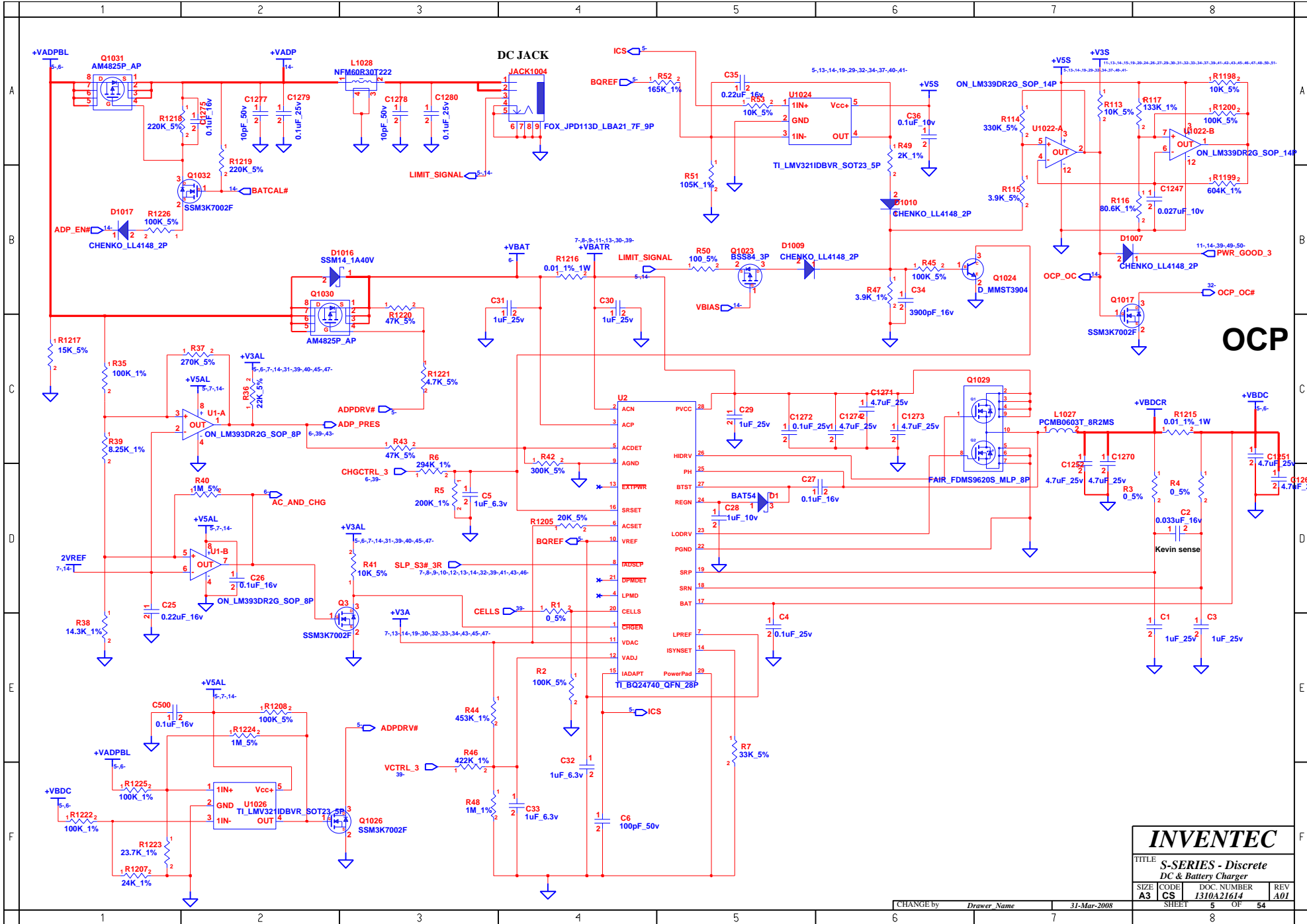
SHEET 3 OF 54



INVENTEC

TITLE **S-SERIES - Discrete**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01



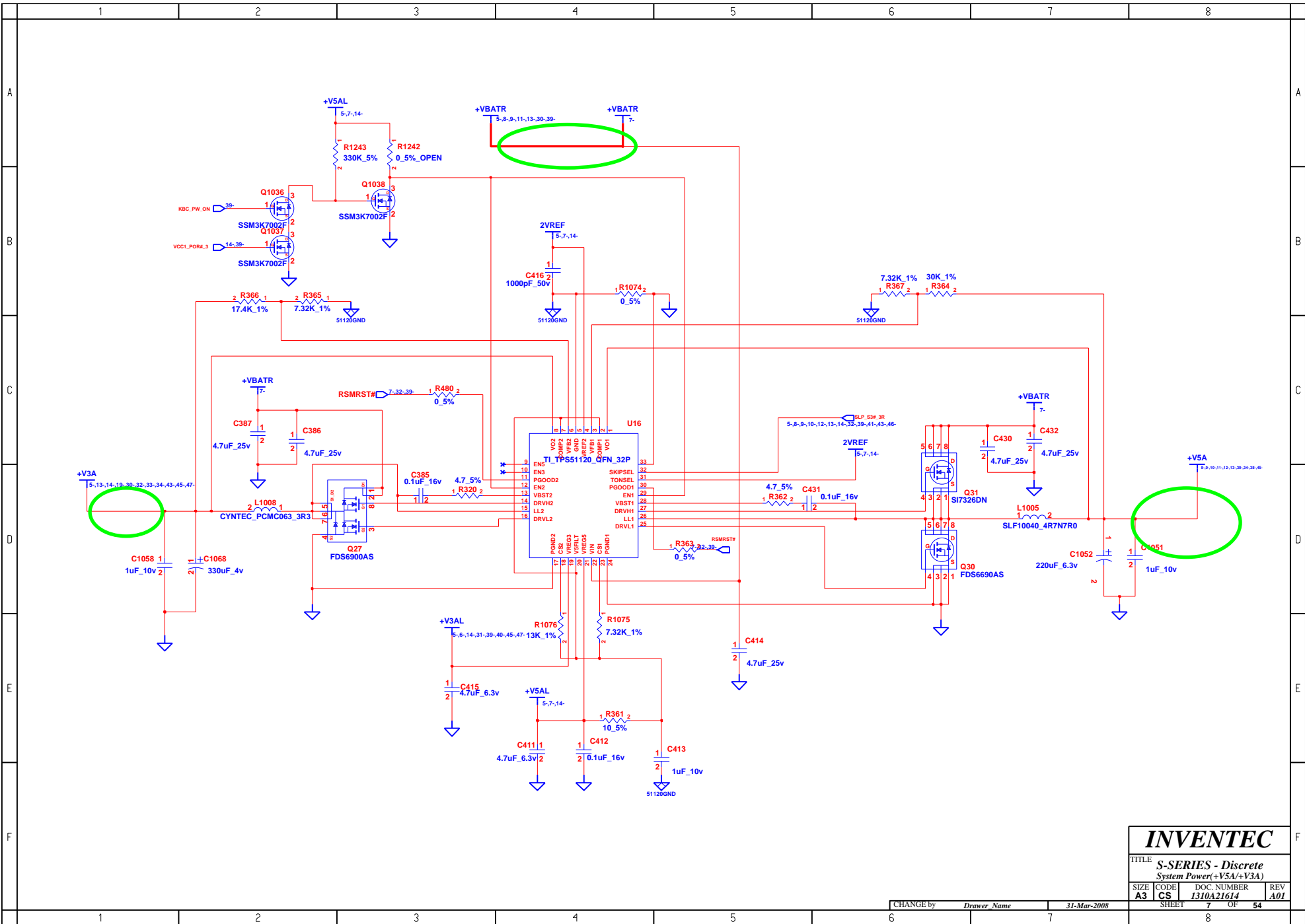
OCP

INVENTEC

TITLE
**S-SERIES - Discrete
DC & Battery Charger**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

CHANGE by	Drawer Name	31-Mar-2008	SHEET	5	OF	54
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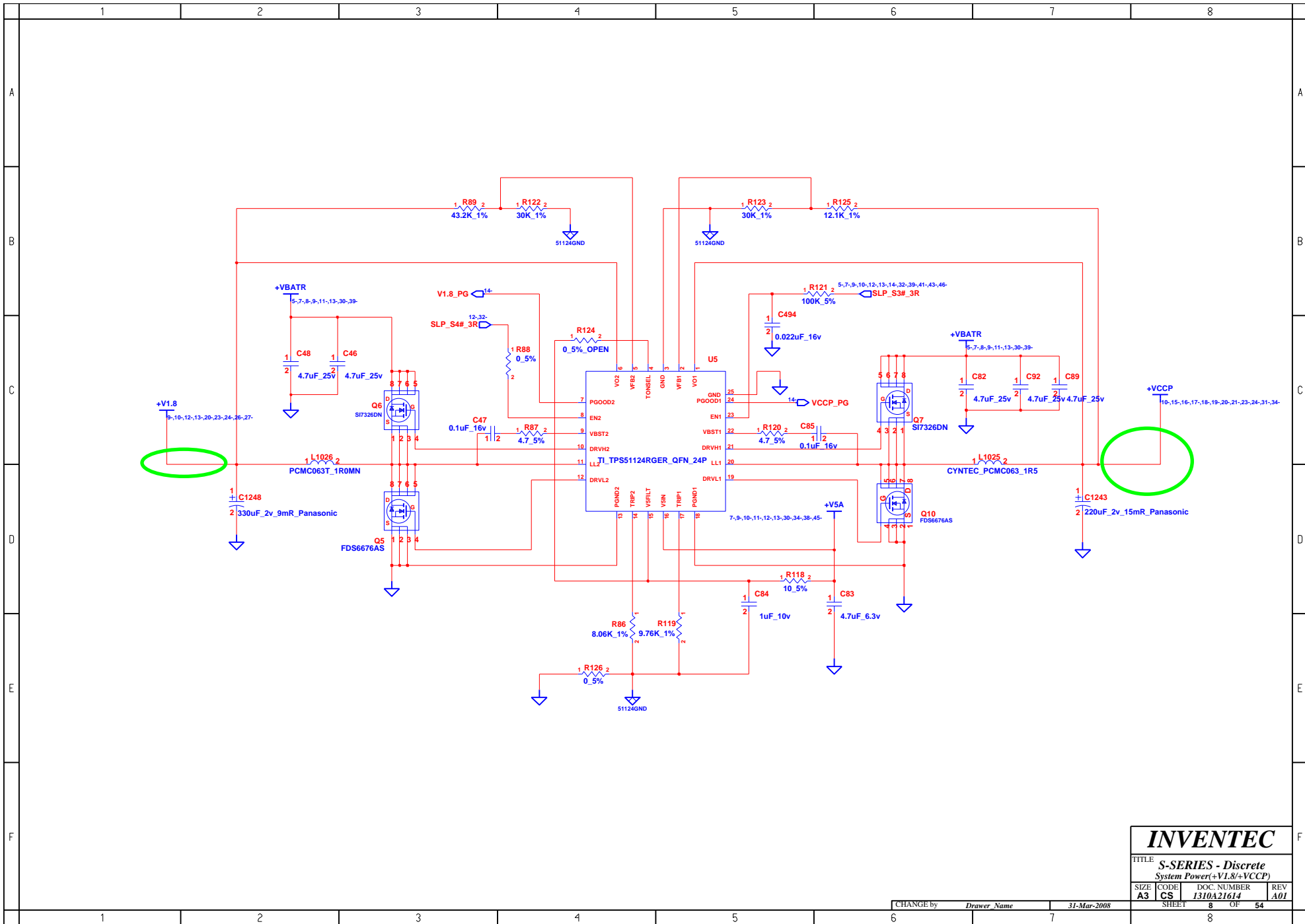
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TITLE
S-SERIES - Discrete
System Power(+V5A/+V3A)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A21614	A01

CHANGE by *Drawer Name* 31-Mar-2008

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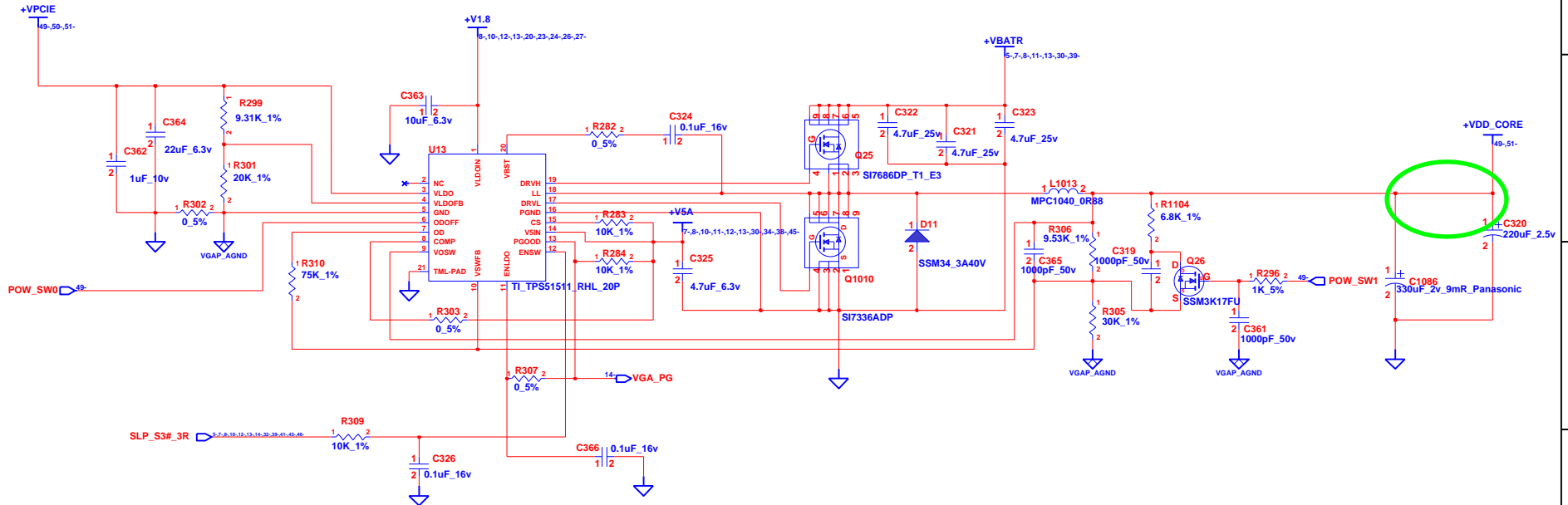


INVENTEC

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

SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
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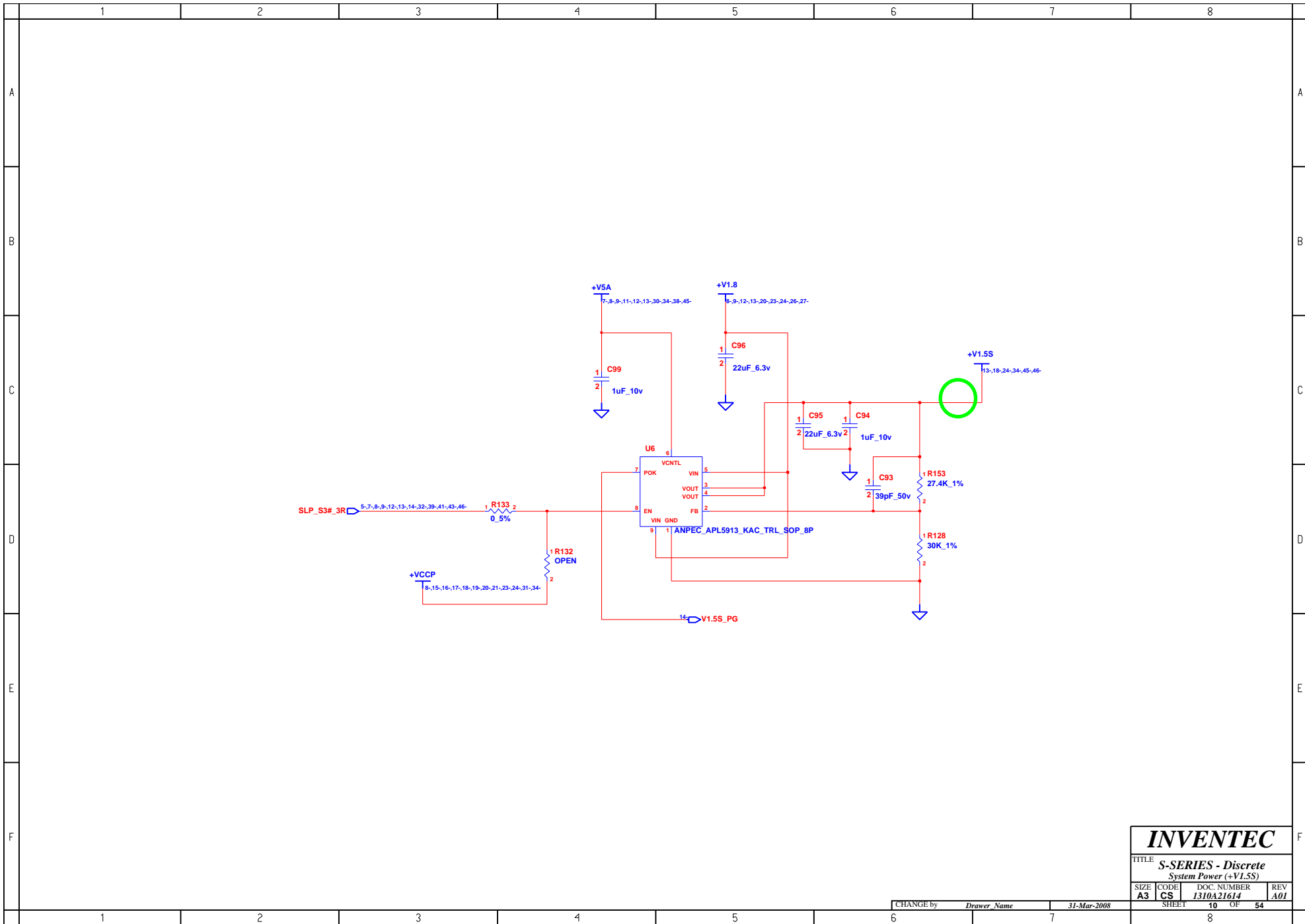
POW_SW1	POW_SW0	+VDD_CORE
0	0	1.1V
0	1	1.0V
1	0	0.9V



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

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

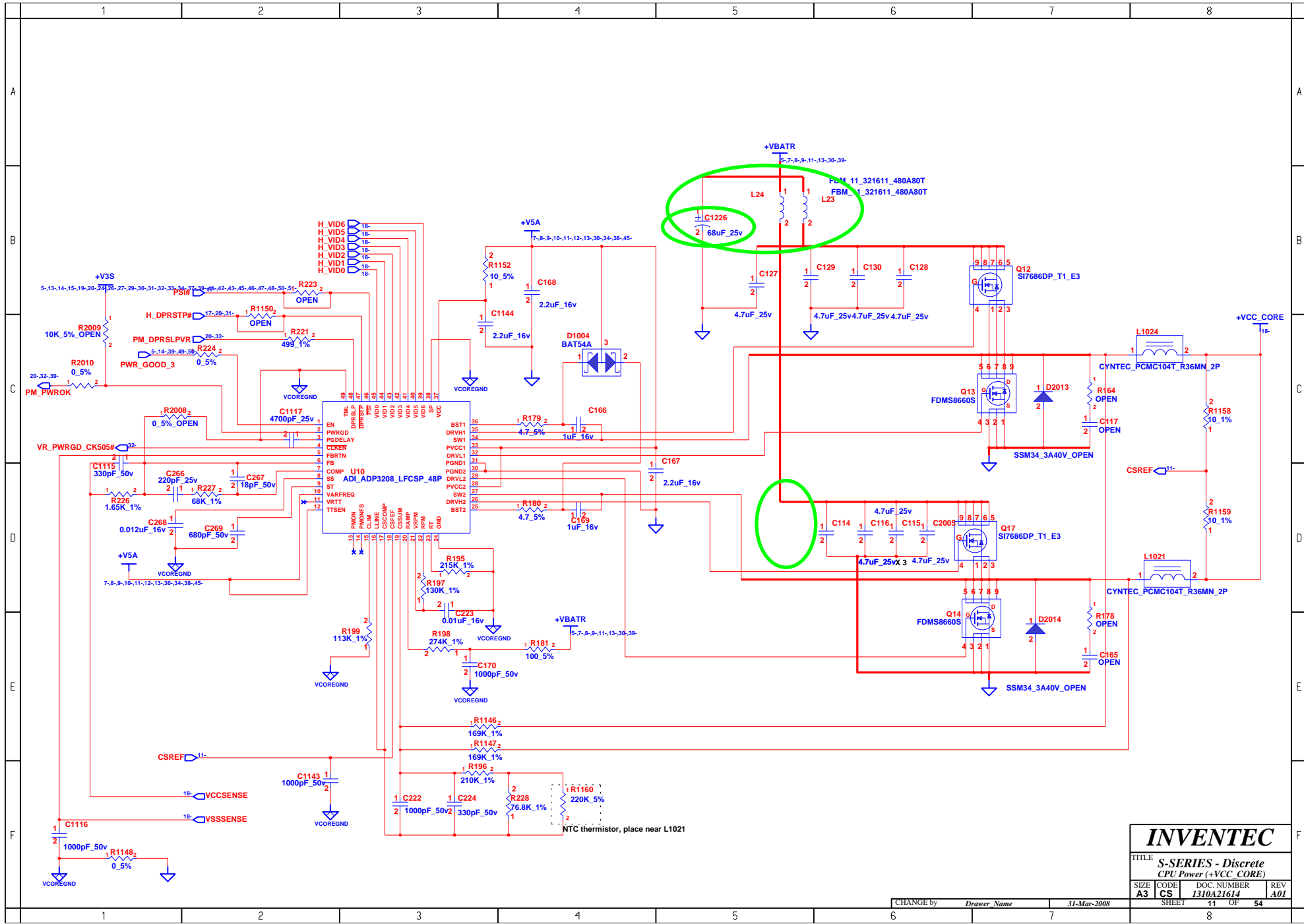
CHANGE by	Drawer Name	31-Mar-2008	SHEET	9	OF	54
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INVENTEC

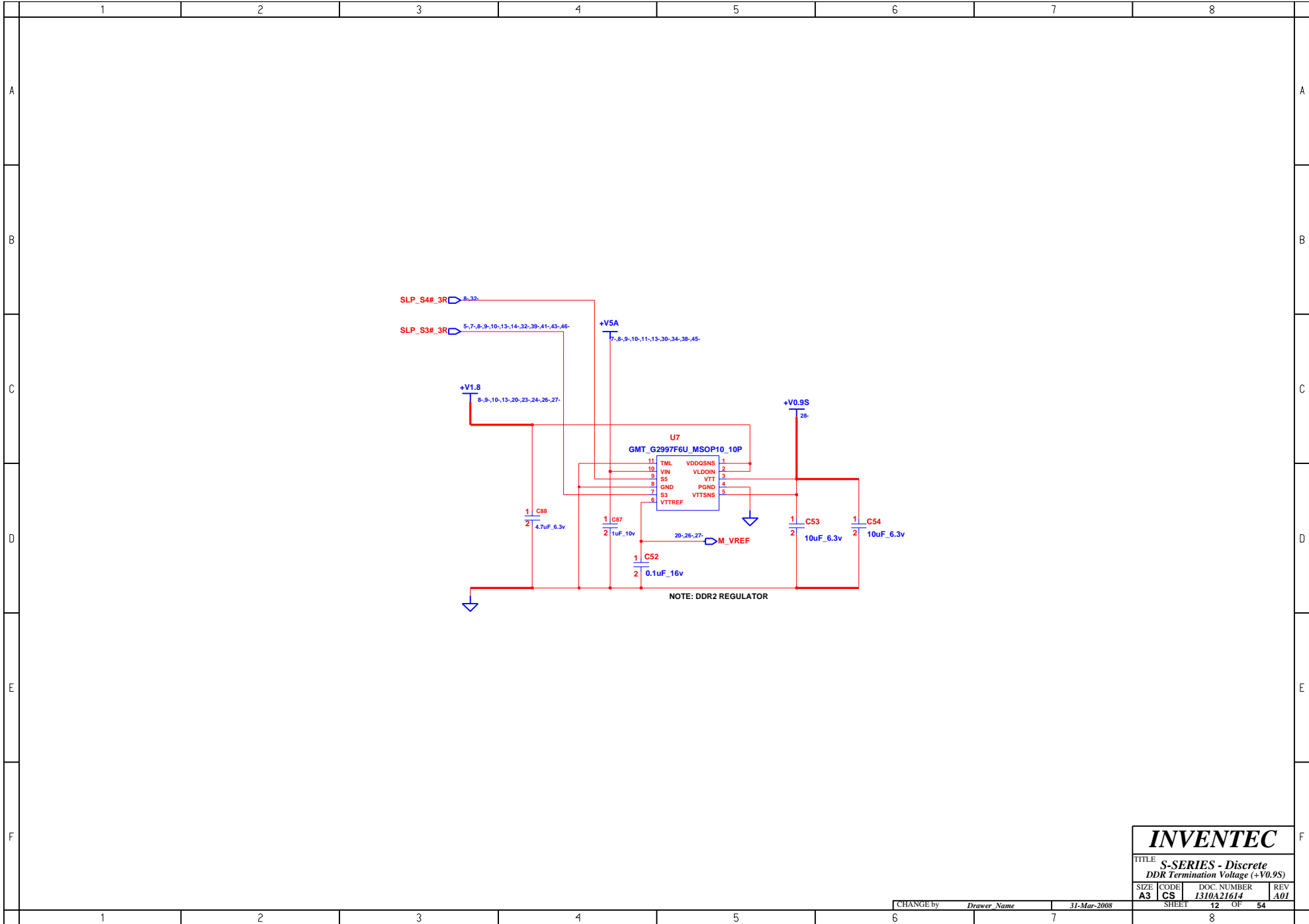
TITLE
S-SERIES - Discrete
 System Power (+V1.5S)

SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
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INVENTEC			
TITLE S-SERIES - Discrete CPU Power (+VCC_CORE)			
SIZE A3	CODE CS	DOC. NUMBER I310A21614	REV A01
CHANGE by <i>Drawer Name</i>		31-Mar-2008	
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NTC thermistor, place near L1021

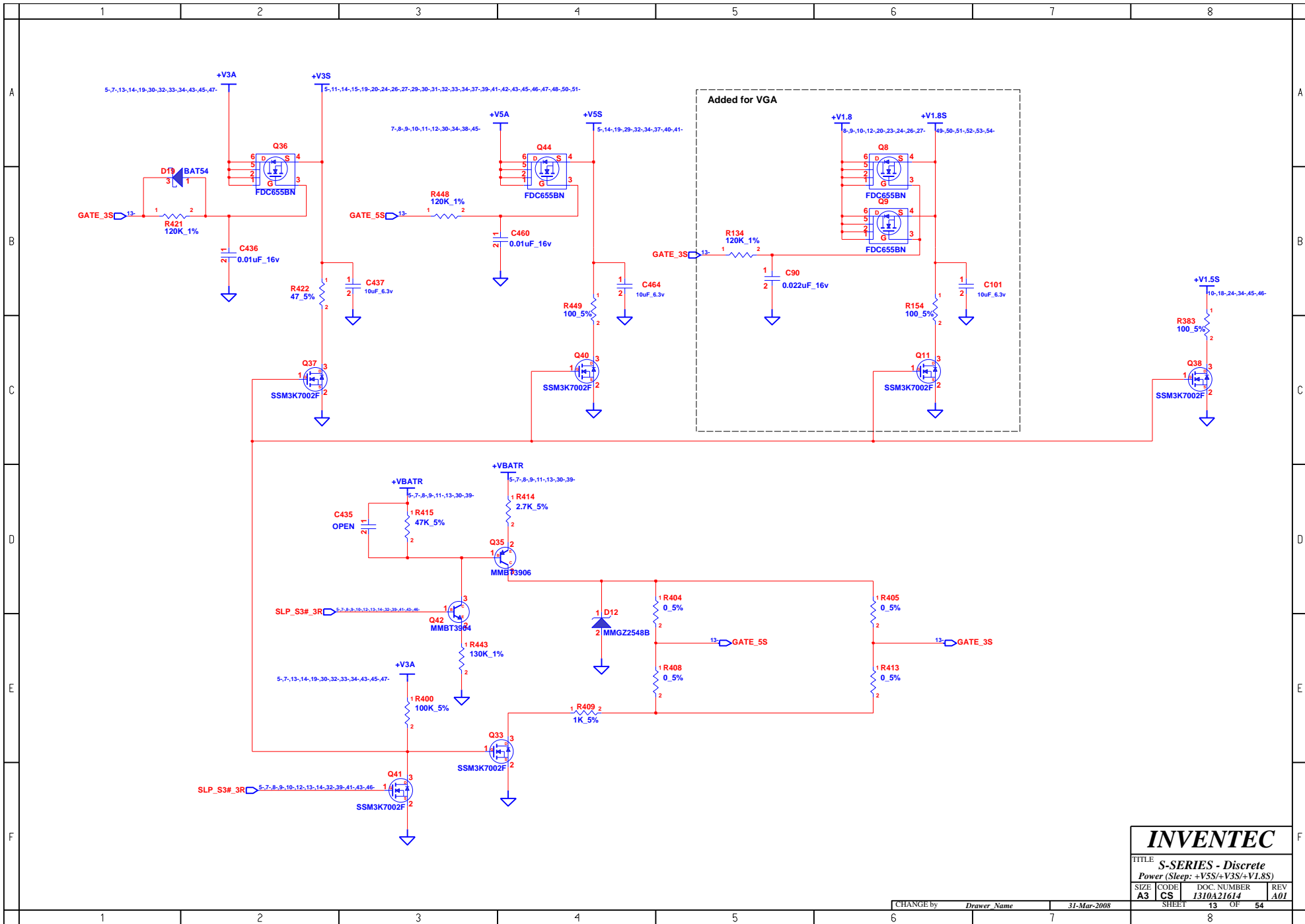


INVENTEC

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

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

CHANGE by *Drawer Name* 31-Mar-2008 SHEET 12 OF 54



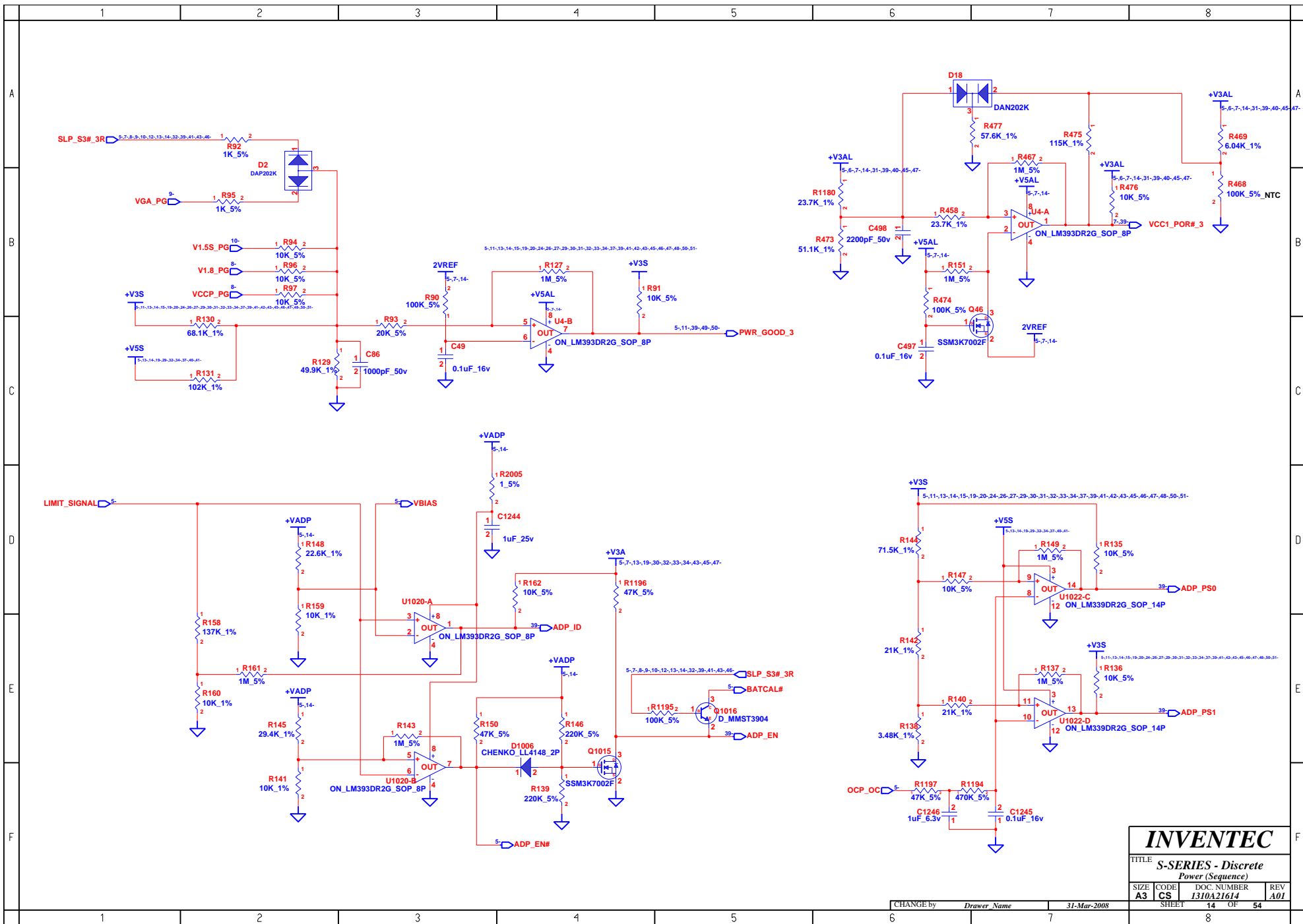
INVENTEC

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

SIZE A3	CODE CS	DOC NUMBER I310A21614	REV A01
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CHANGE by *Drawer Name* 31-Mar-2008

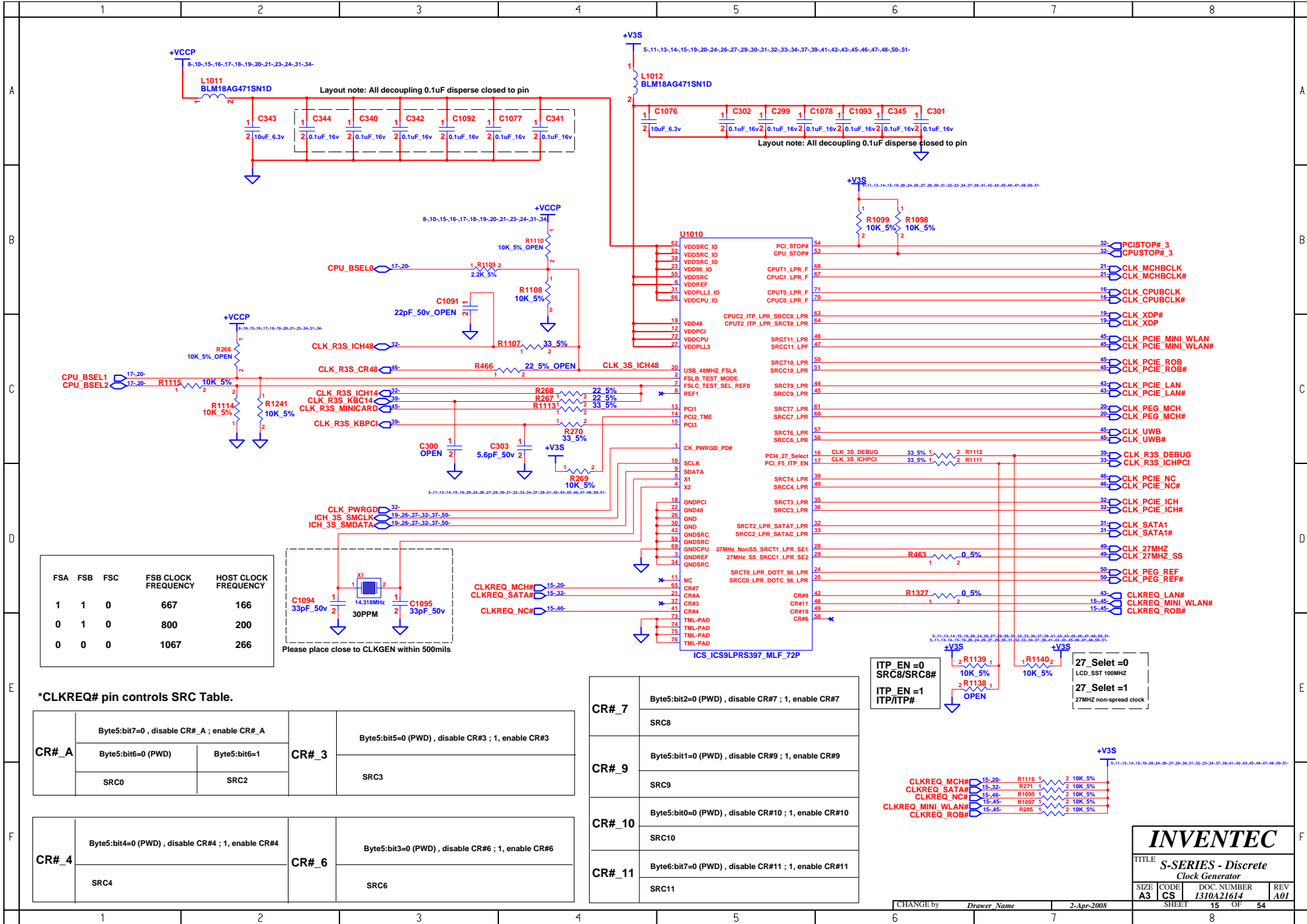
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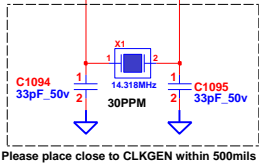
INVENTEC

TITLE: *S-SERIES - Discrete Power (Sequence)*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01



FSA	FSB	FSC	FSB CLOCK FREQUENCY	HOST CLOCK FREQUENCY
1	1	0	667	166
0	1	0	800	200
0	0	0	1067	266

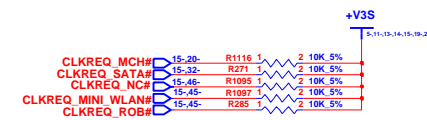


*CLKREQ# pin controls SRC Table.

CR#_A	Byte5:bit7=0 (PWD), disable CR#_A ; enable CR#_A	Byte5:bit6=0 (PWD)	Byte5:bit6=1	CR#_3	Byte5:bit5=0 (PWD), disable CR#3 ; 1, enable CR#3
		SRC0	SRC2		SRC3

CR#_4	Byte5:bit4=0 (PWD), disable CR#4 ; 1, enable CR#4	CR#_6	Byte5:bit3=0 (PWD), disable CR#6 ; 1, enable CR#6
	SRC4		SRC6

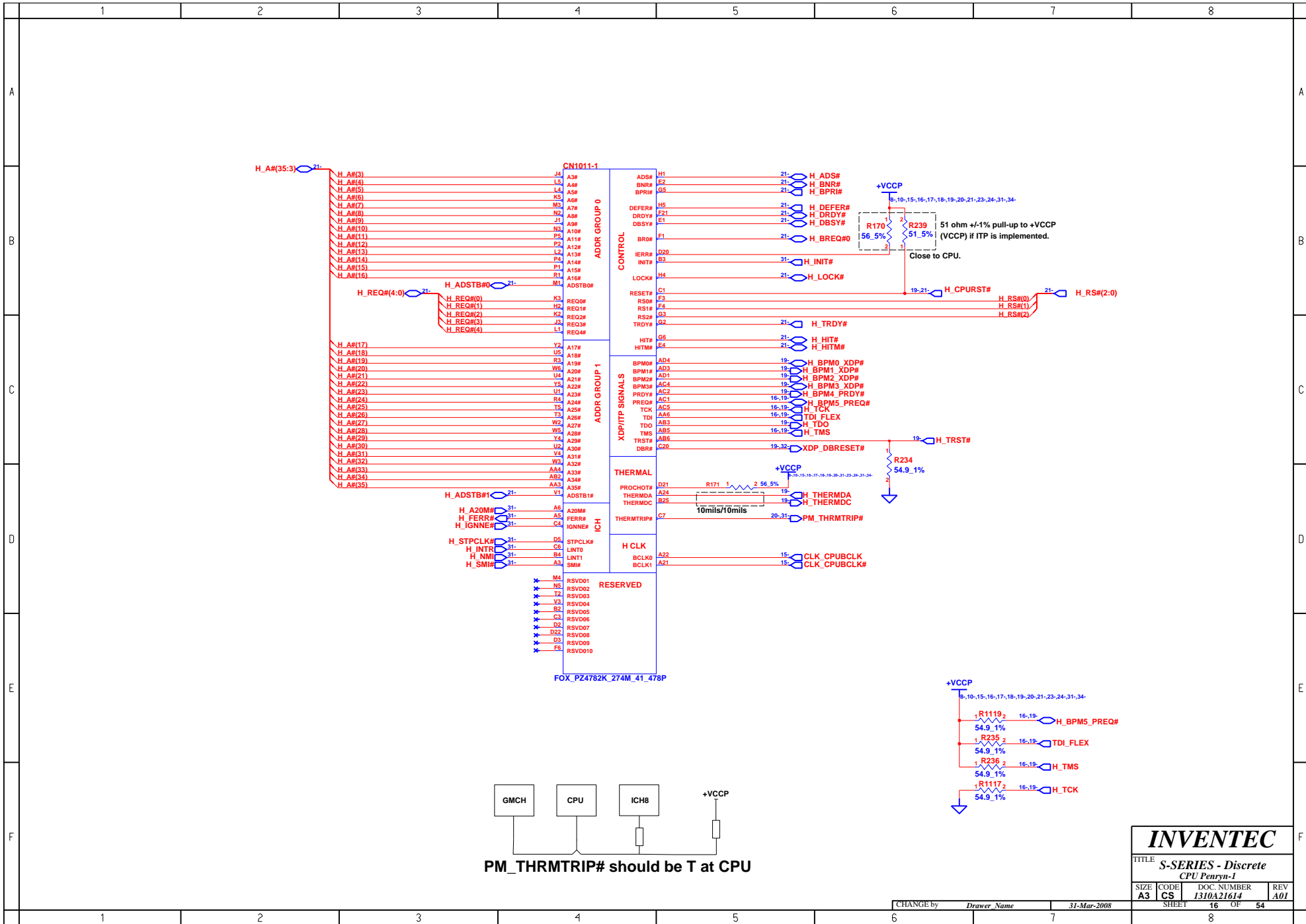
CR#_7	Byte5:bit2=0 (PWD), disable CR#7 ; 1, enable CR#7
	SRC8
CR#_9	Byte5:bit1=0 (PWD), disable CR#9 ; 1, enable CR#9
	SRC9
CR#_10	Byte5:bit0=0 (PWD), disable CR#10 ; 1, enable CR#10
	SRC10
CR#_11	Byte6:bit7=0 (PWD), disable CR#11 ; 1, enable CR#11
	SRC11



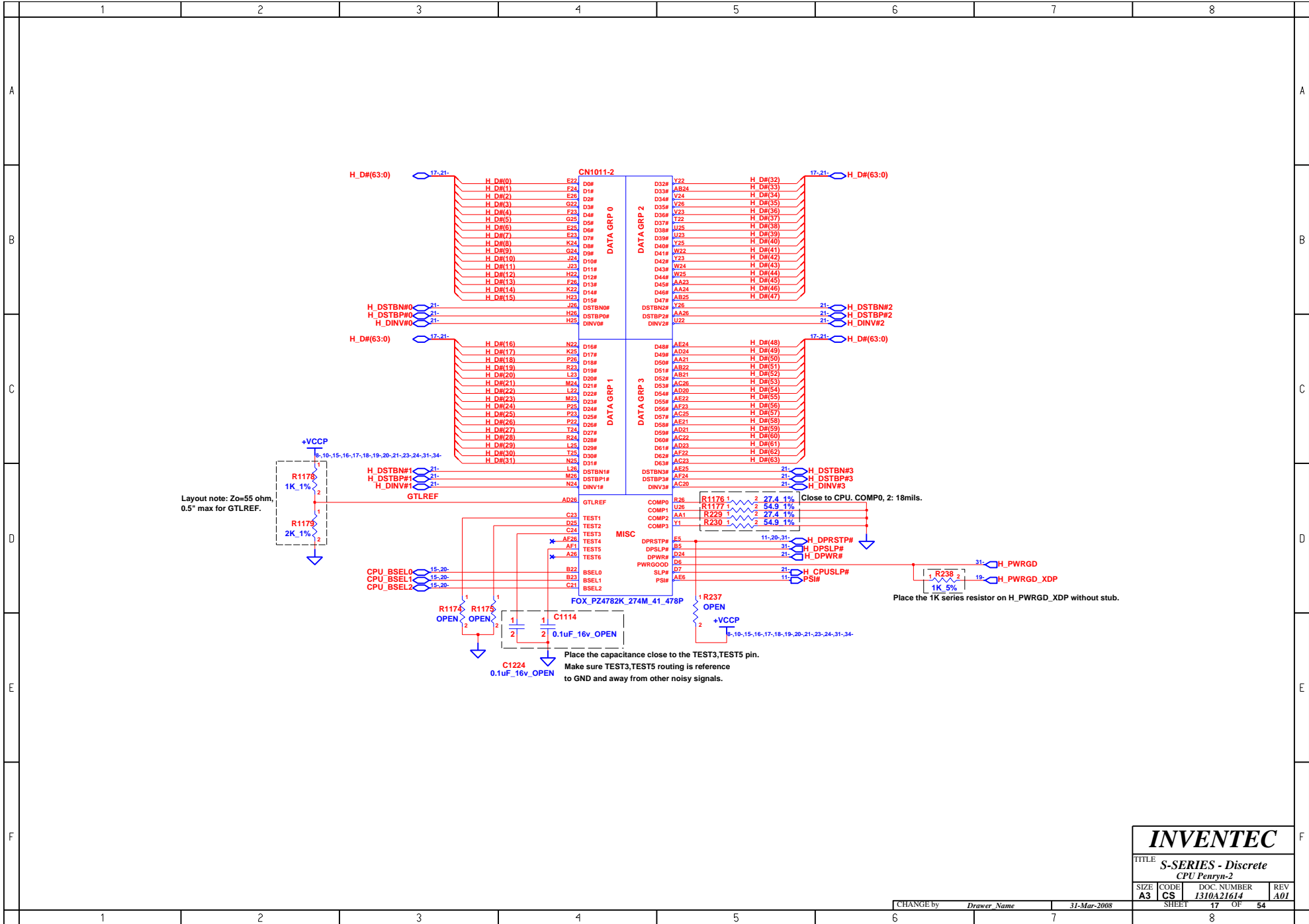
INVENTEC

TITLE: S-SERIES - Discrete Clock Generator

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01



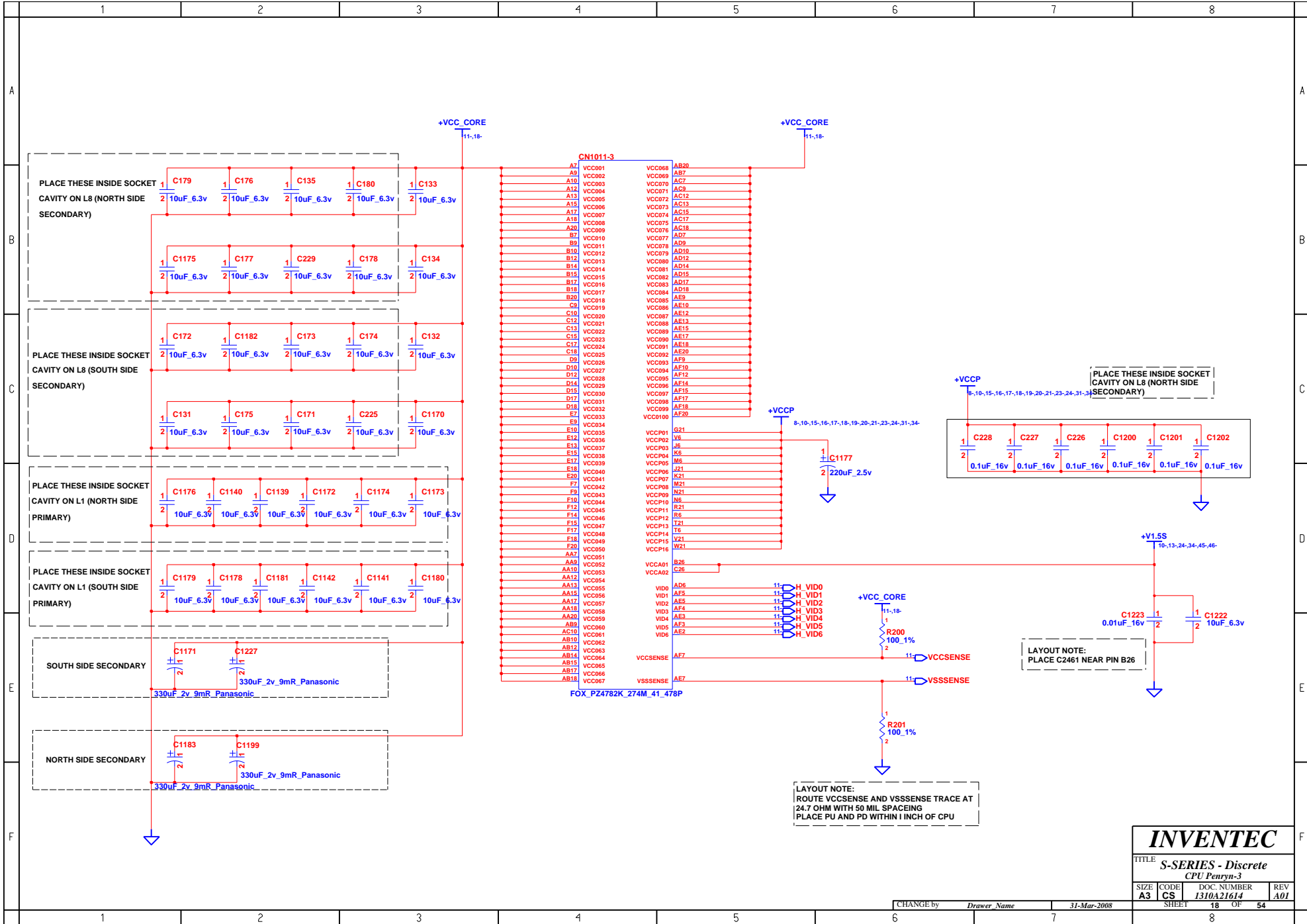
INVENTEC			
TITLE S-SERIES - Discrete CPU Penryn-1			
SIZE A3	CODE CS	DOC NUMBER 1310A21614	REV A01
CHANGE by Drawer Name		31-Mar-2008	SHEET 16 OF 54



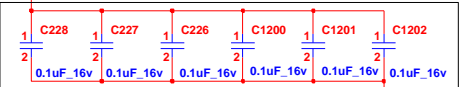
INVENTEC

TITLE **S-SERIES - Discrete**
CPU Penryn-2

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01



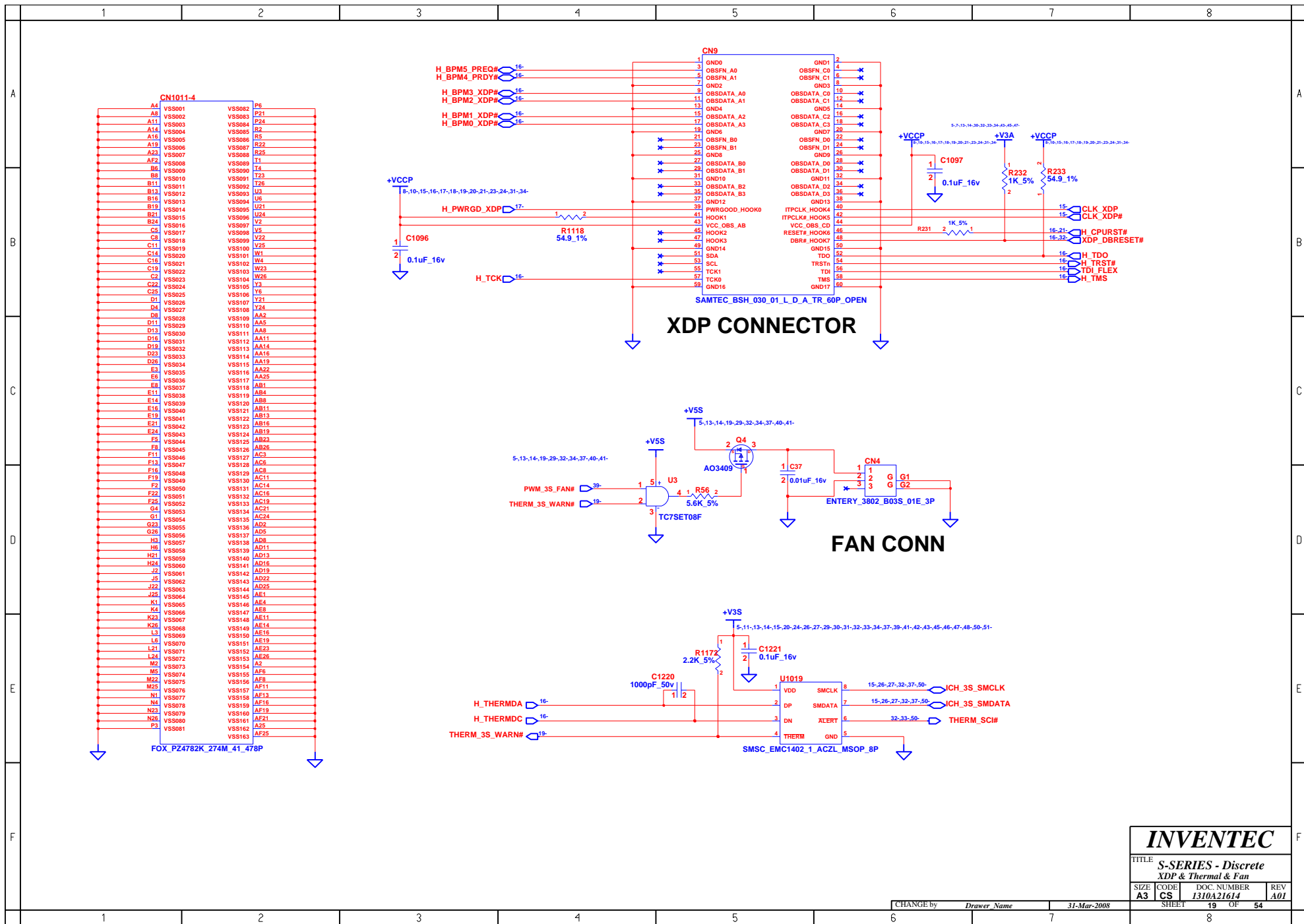
PLACE THESE INSIDE SOCKET CAVITY ON L8 (NORTH SIDE SECONDARY)



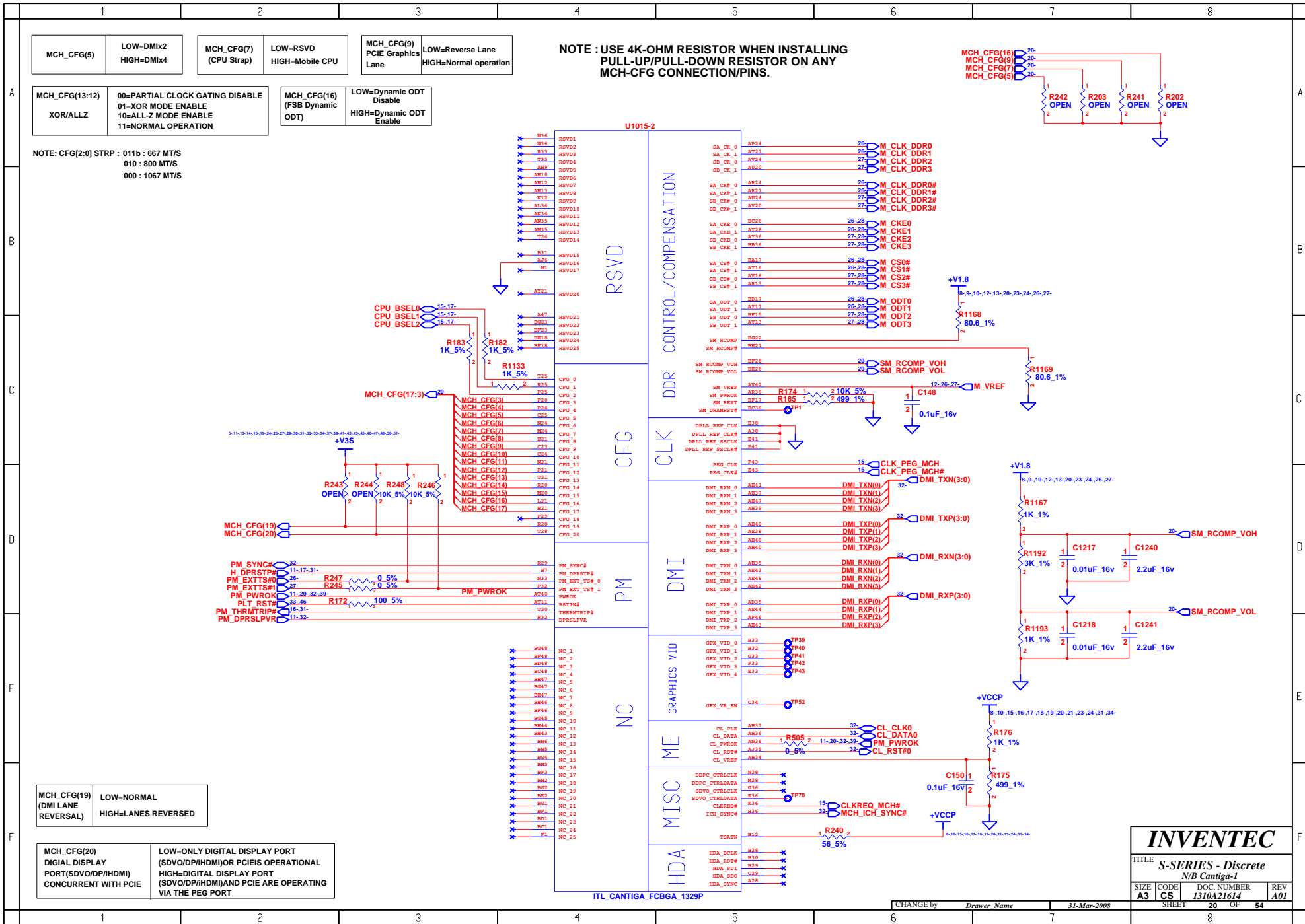
LAYOUT NOTE: PLACE C2461 NEAR PIN B26

LAYOUT NOTE: ROUTE VCCSENSE AND VSSSENSE TRACE AT 24.7 OHM WITH 50 MIL SPACING PLACE PU AND PD WITHIN 1 INCH OF CPU

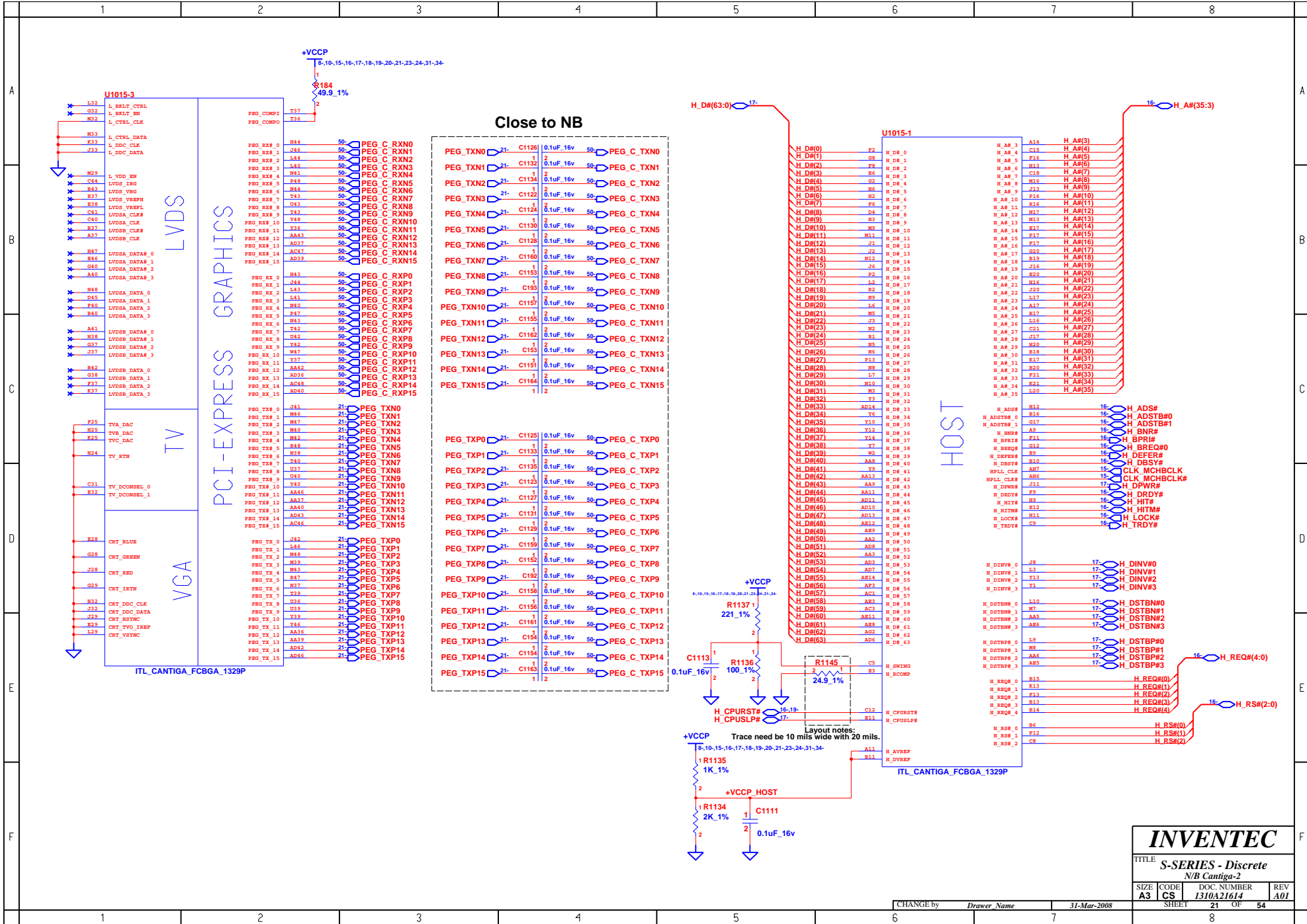
INVENTEC			
TITLE: S-SERIES - Discrete			
CPU Penryn-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A21614	A01



INVENTEC			
TITLE S-SERIES - Discrete XDP & Thermal & Fan			
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
CHANGE by <i>Drawer Name</i>		31-Mar-2008	
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INVENTEC
 TITLE: S-SERIES - Discrete
 N/B Cantiga-1
 SIZE CODE DOC. NUMBER REV
 A3 CS 1310A21614 A01
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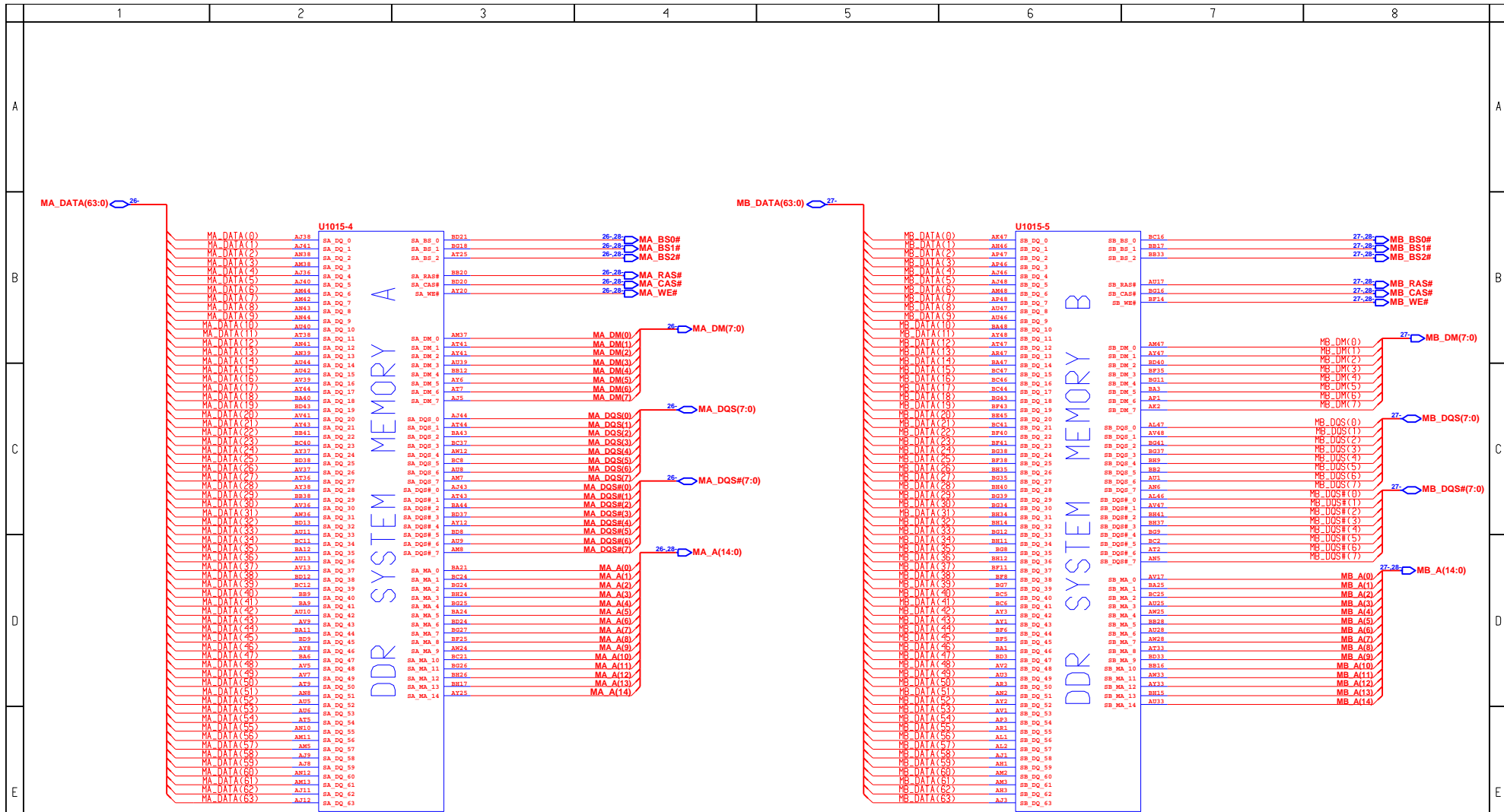
INVENTEC

TITLE
S-SERIES - Discrete
N/B Cantiga-2

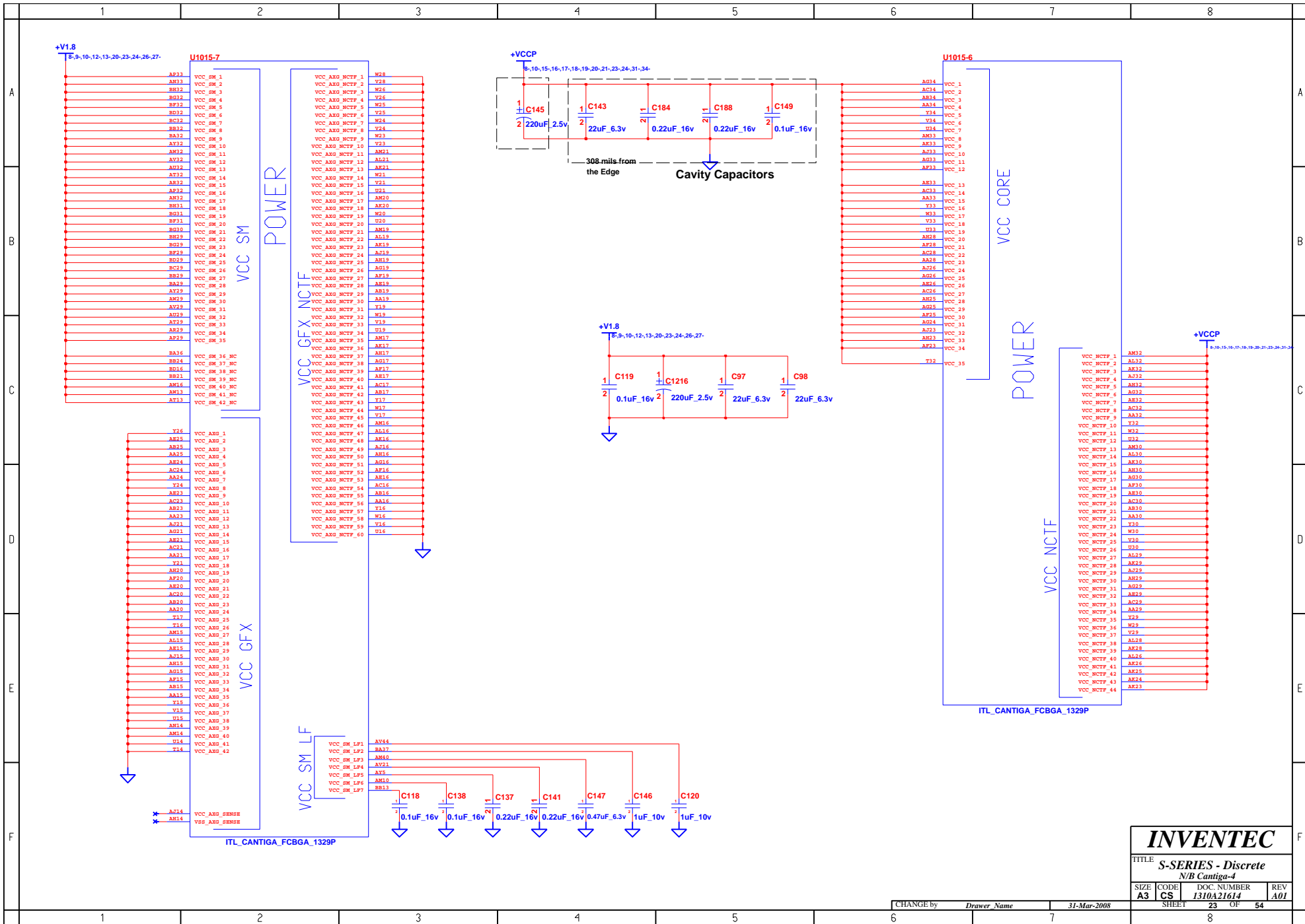
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

CHANGE by *Drawer Name* 31-Mar-2008

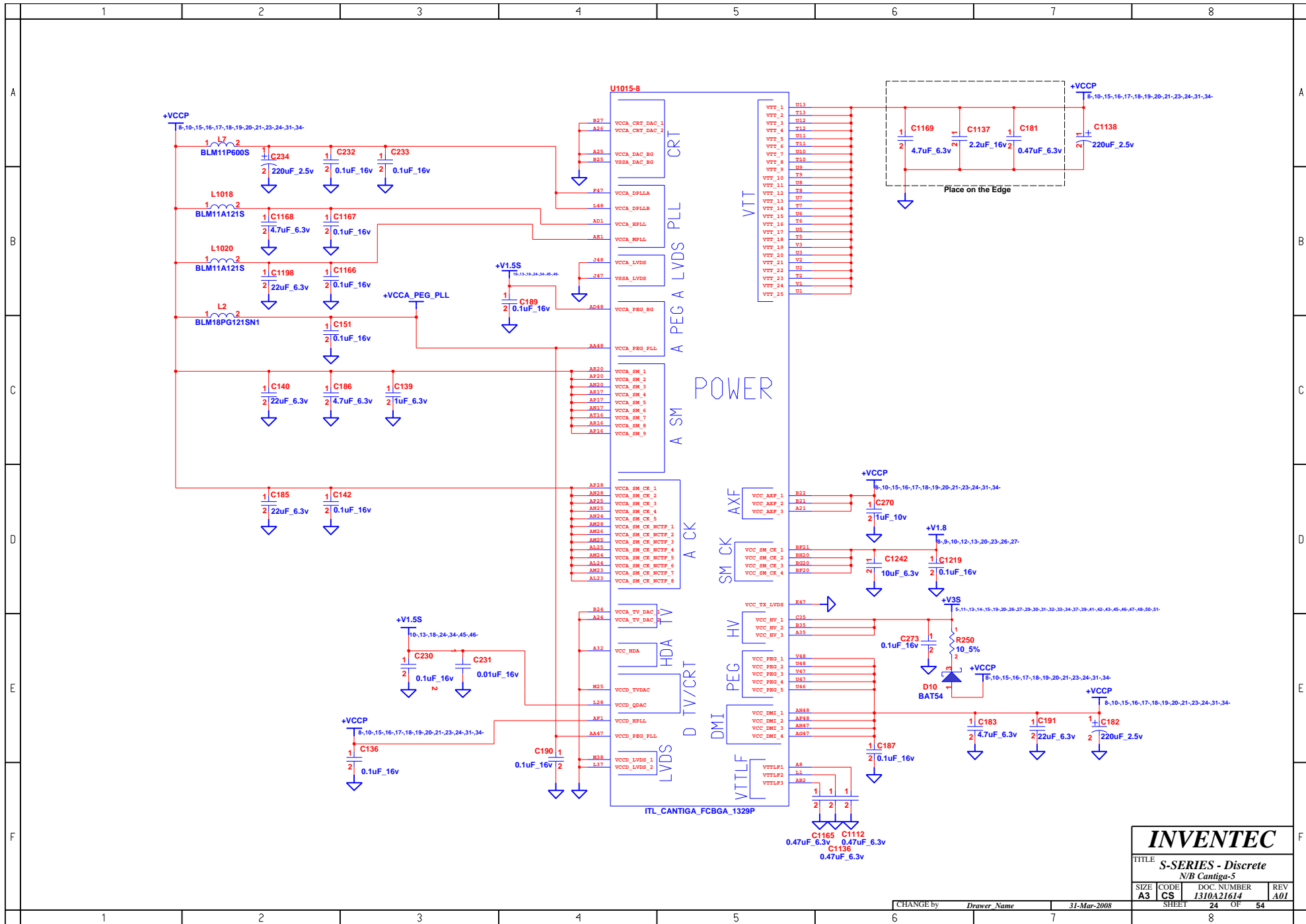
SHEET	21	OF	54
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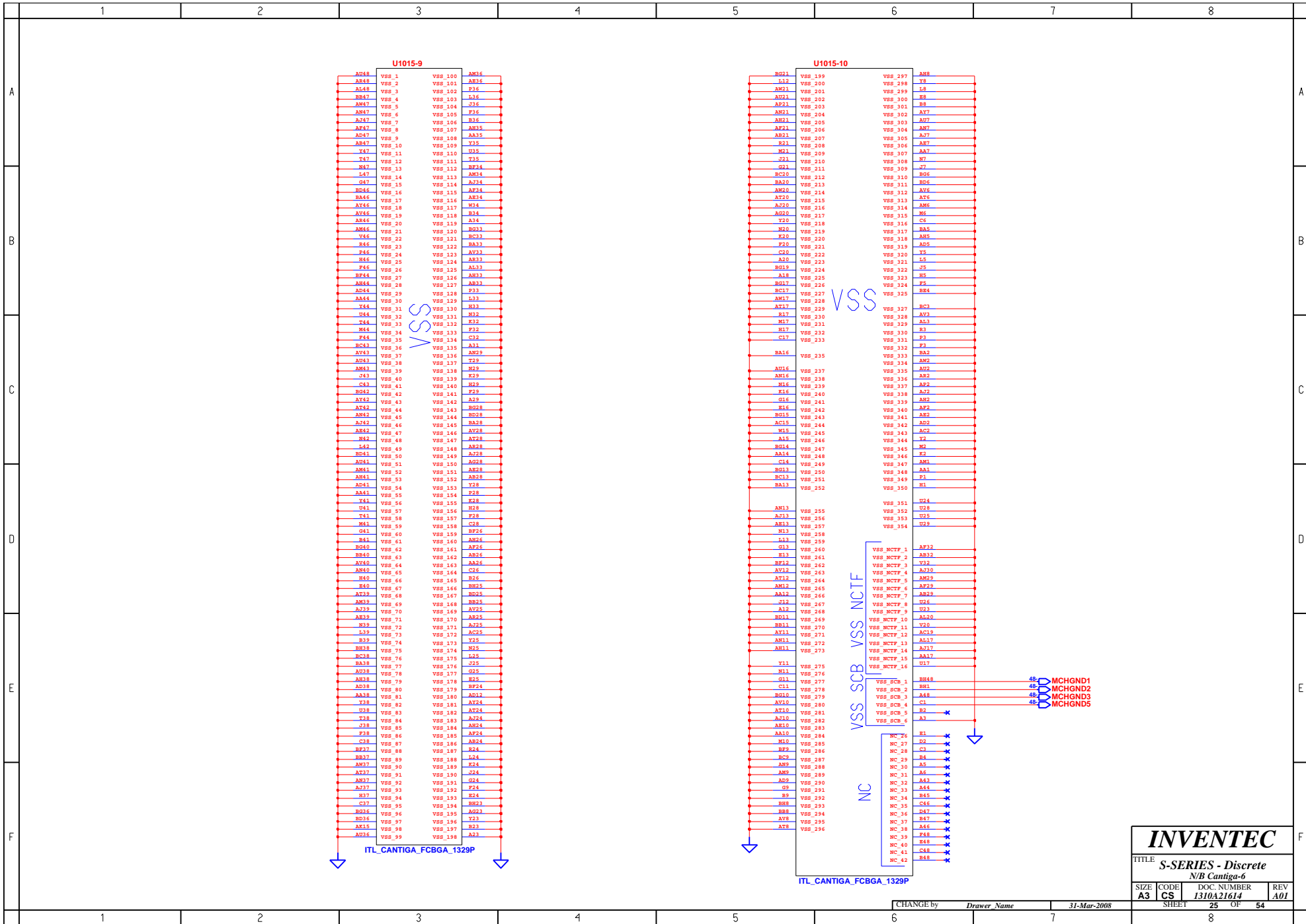
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TITLE S-SERIES - Discrete N/B Cantiga-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01
CHANGE by		Drawer Name	31-Mar-2008
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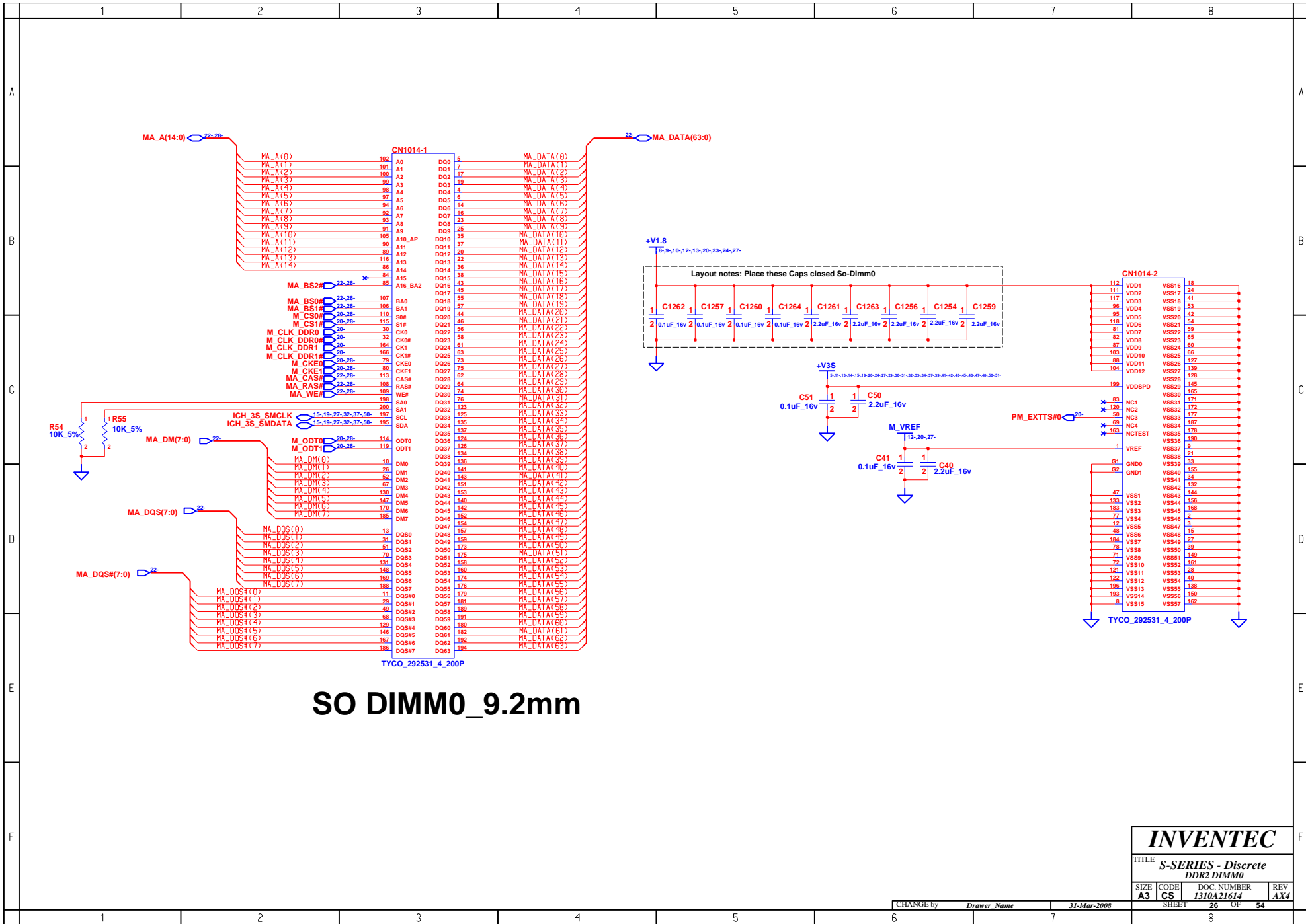


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TITLE S-SERIES - Discrete N/B Cantiga-4			
SIZE	CODE	DOC NUMBER	REV
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CHANGE by		Drawer Name	31-Mar-2008
SHEET		23	OF 54



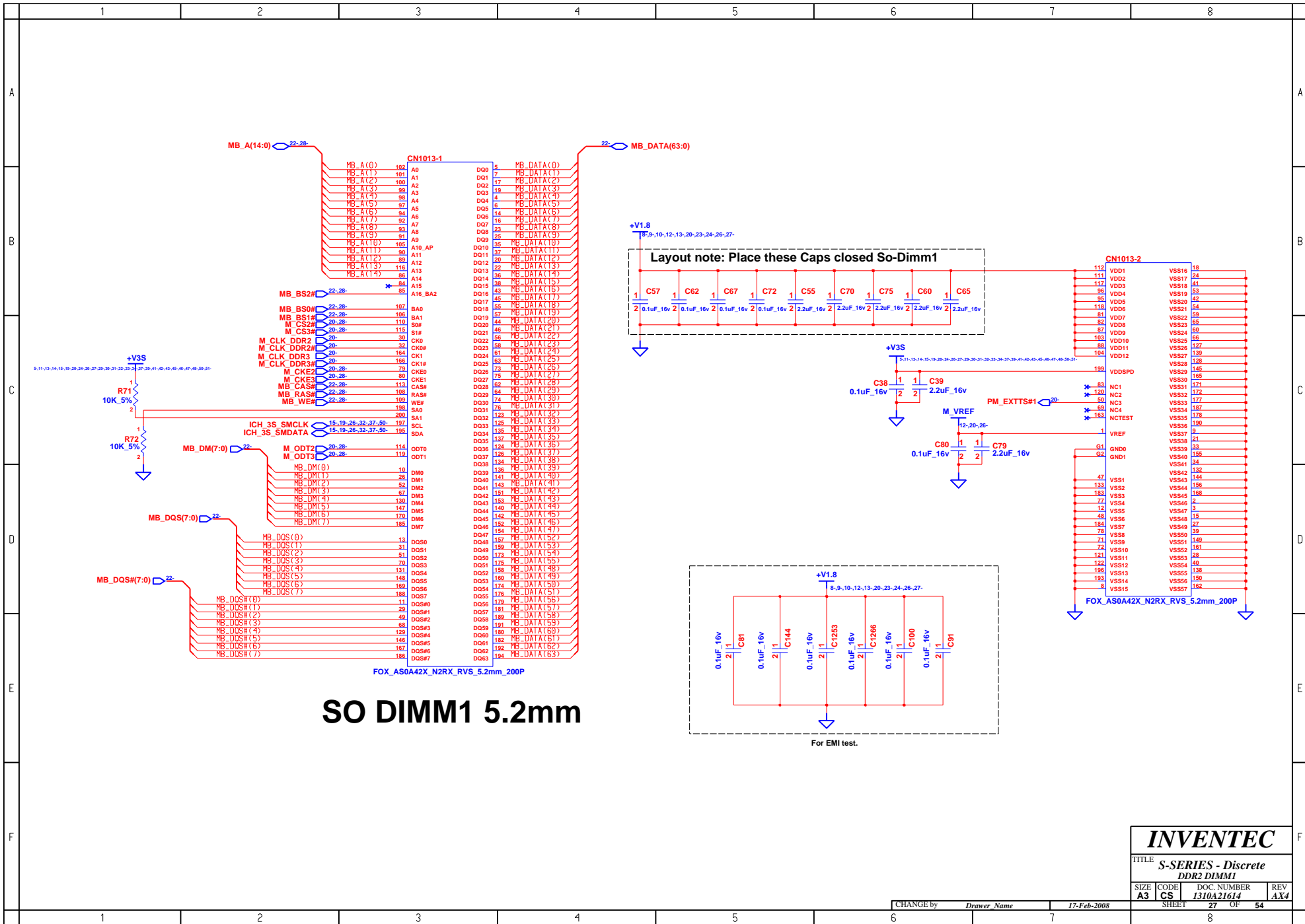
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TITLE S-SERIES - Discrete N/B Cantiga-S			
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
CHANGE by <i>Drawer Name</i>		31-Mar-2008	
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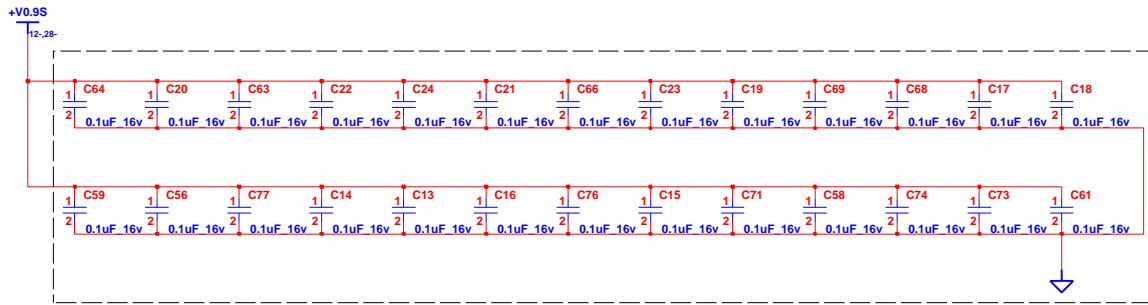


INVENTEC
 TITLE: S-SERIES - Discrete
 DDR2 DIMM0

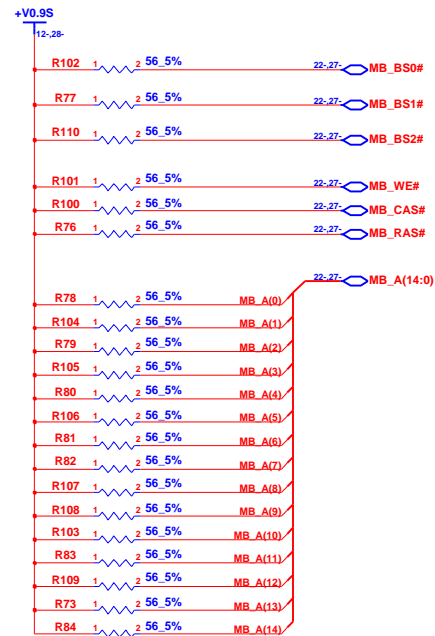
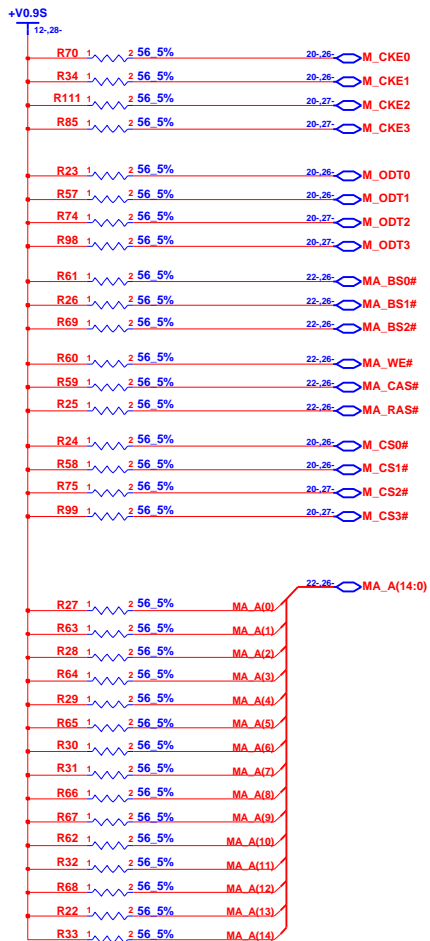
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	AX4



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



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



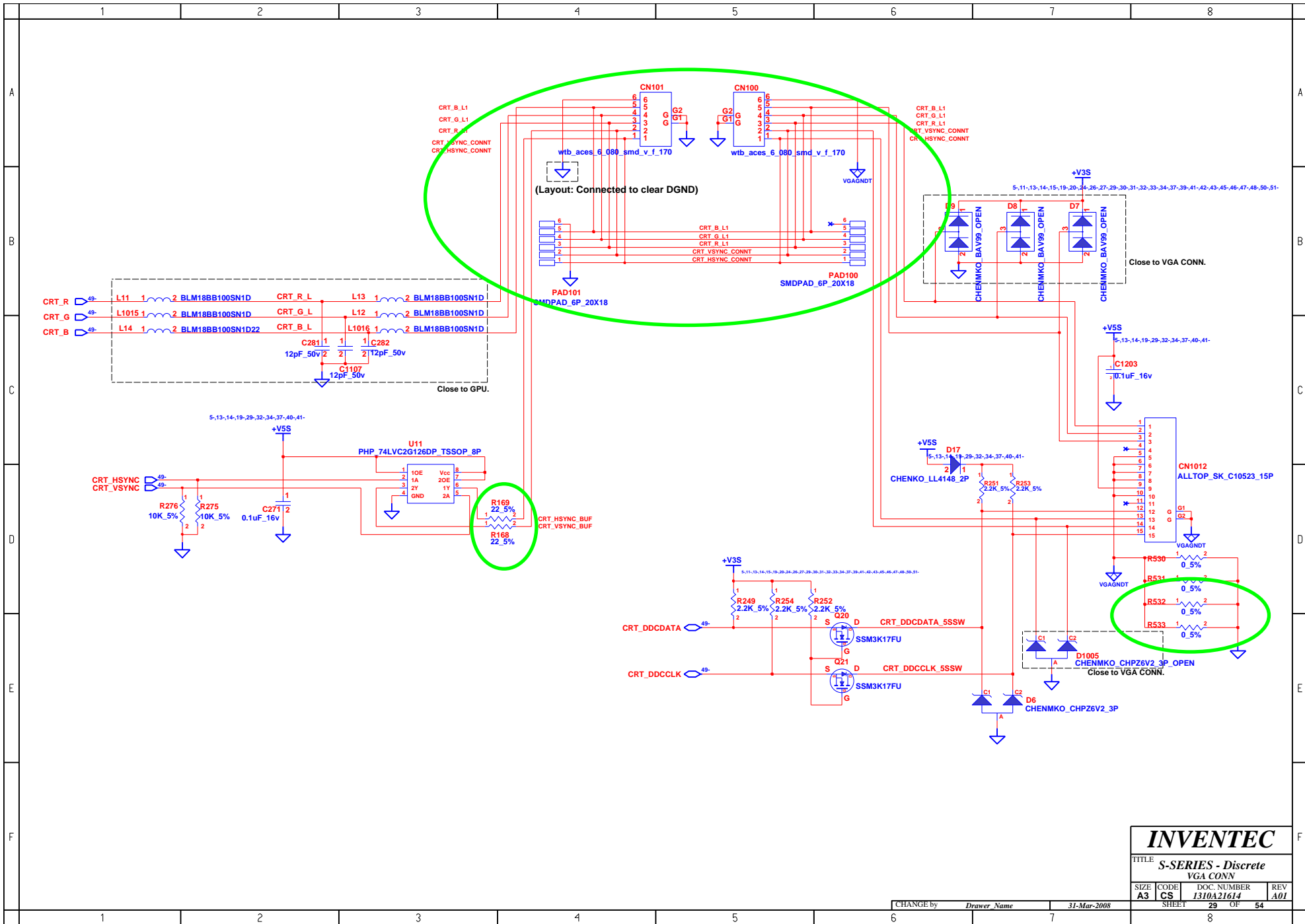
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TITLE
S-SERIES - Discrete
DDR2 Damping

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

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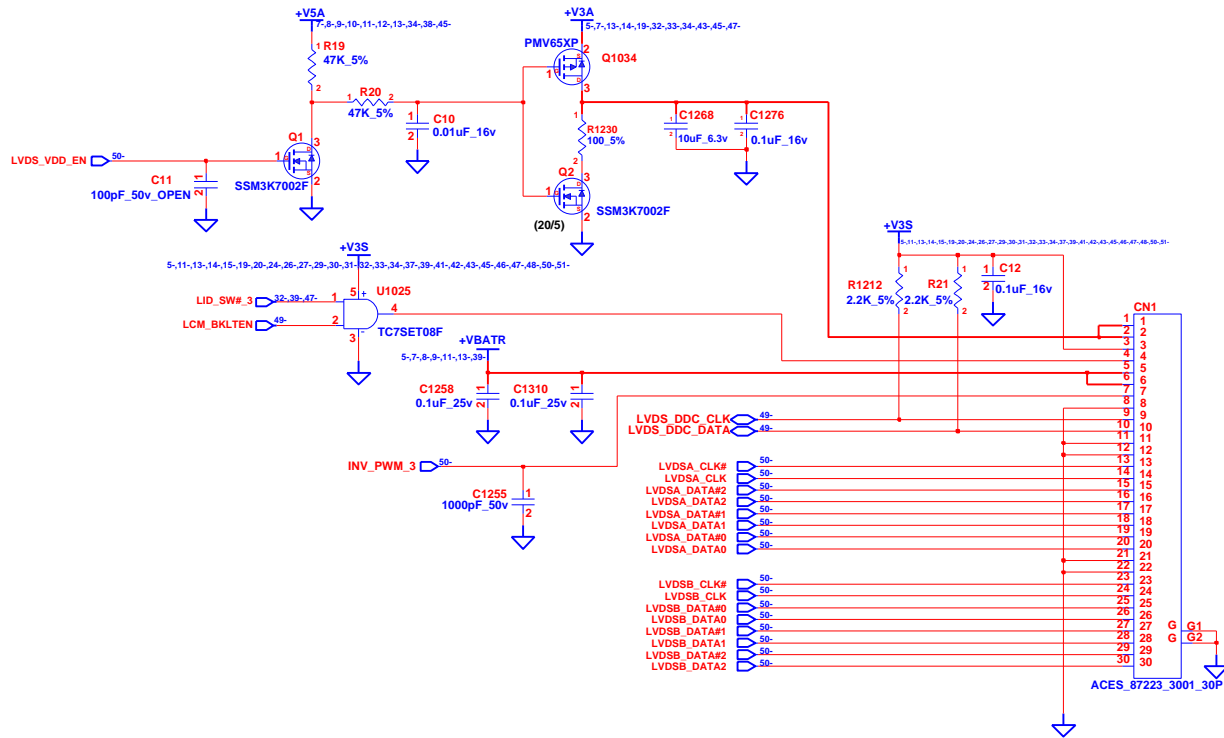


INVENTEC

TITLE
S-SERIES - Discrete
 VGA CONN

SIZE CODE CS DOC. NUMBER REV
A3 CS 1310A21614 A01

Place closed to connector



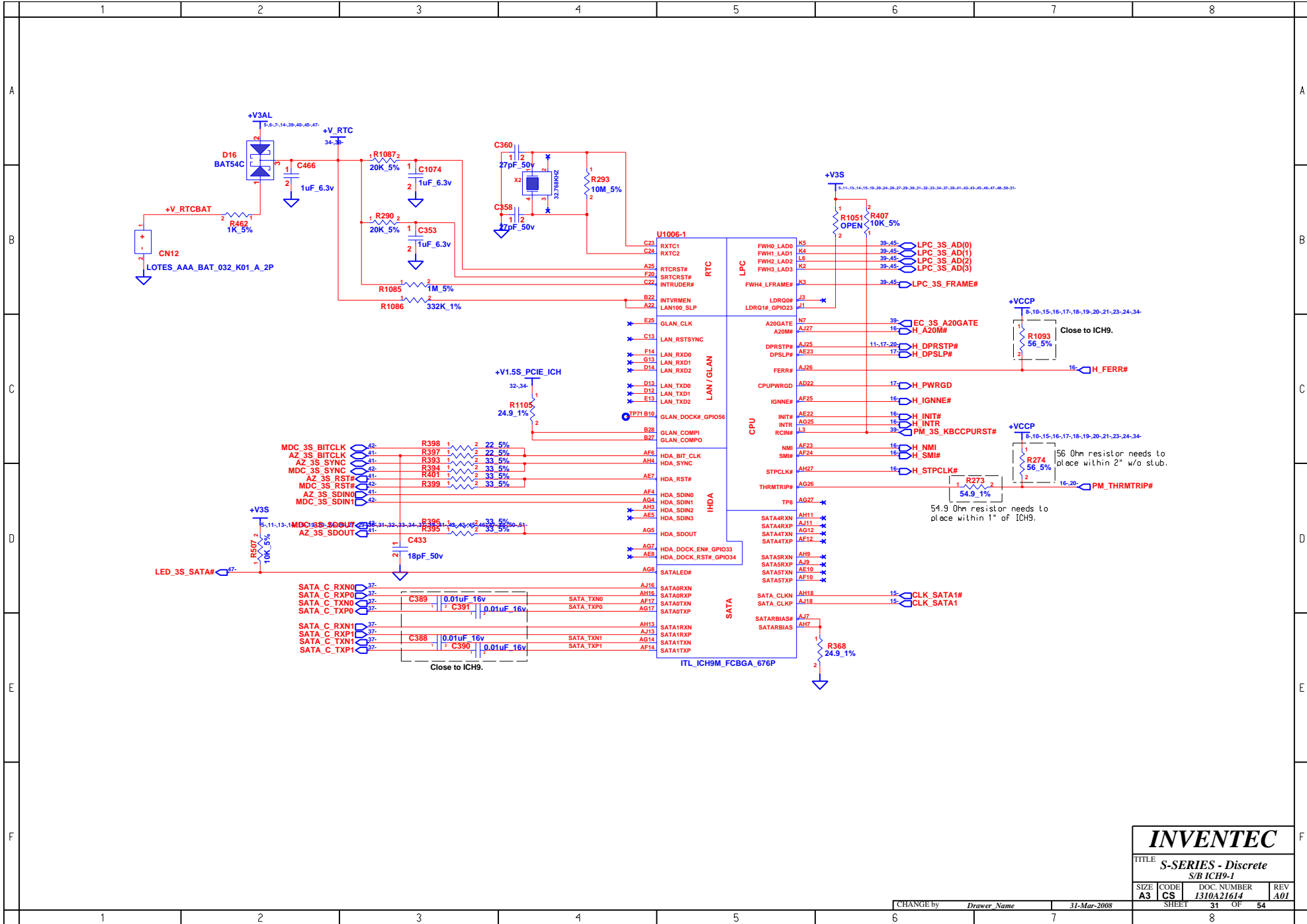
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TITLE
S-SERIES - Discrete
LCM CONN

SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
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CHANGE by *Drawer Name* 31-Mar-2008

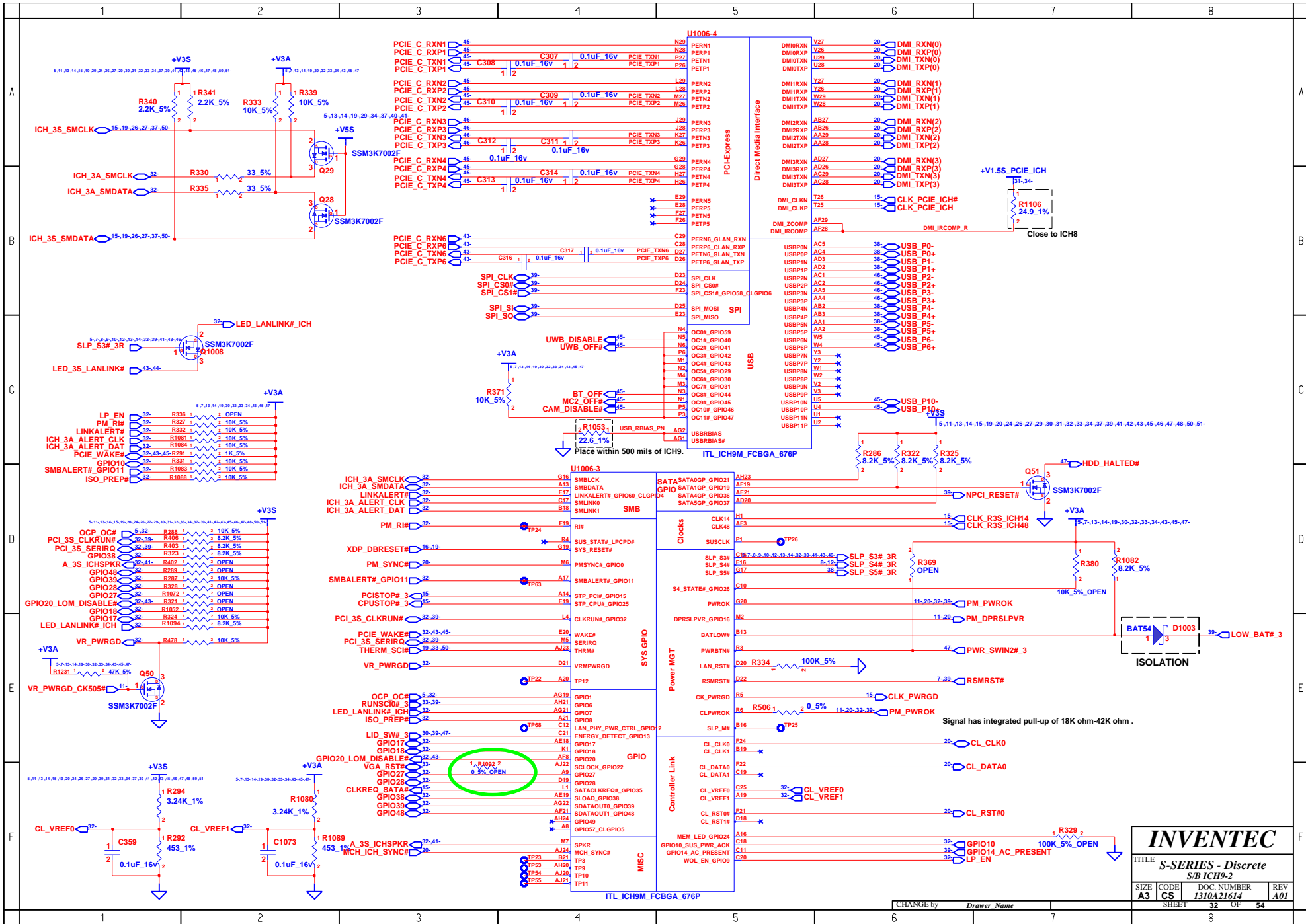
SHEET 30 OF 54



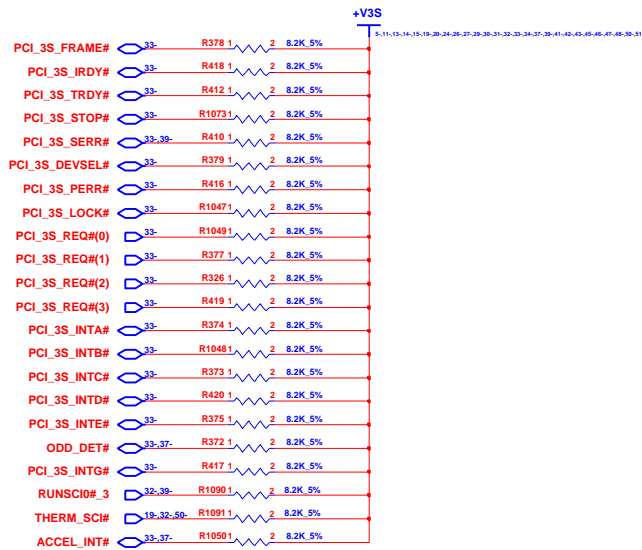
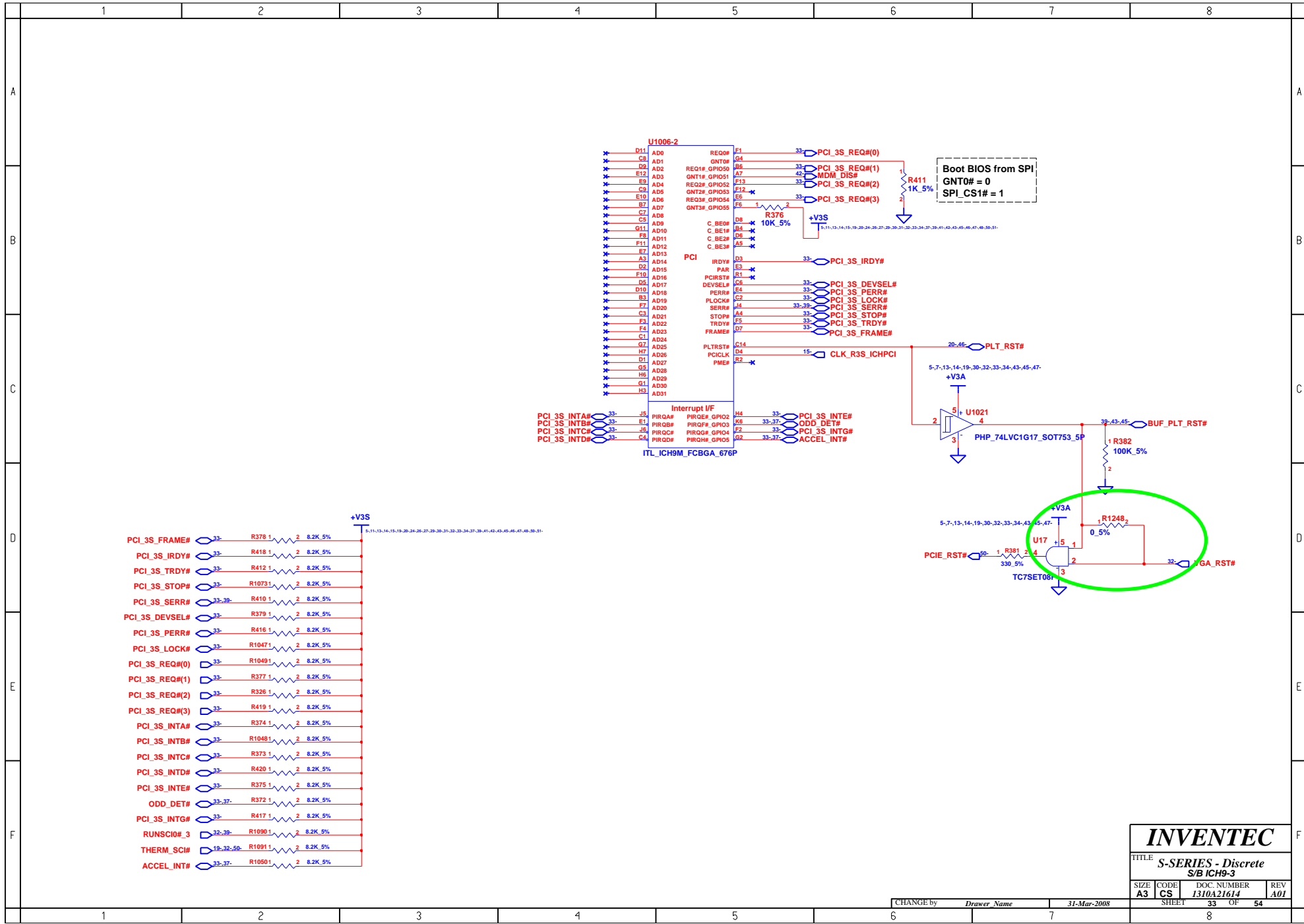
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TITLE **S-SERIES - Discrete**
S/B ICH9-1

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01



INVENTEC			
TITLE S-SERIES - Discrete S/B ICH9-2			
SIZE A3	CODE CS	DOC NUMBER 1310A21614	REV A01
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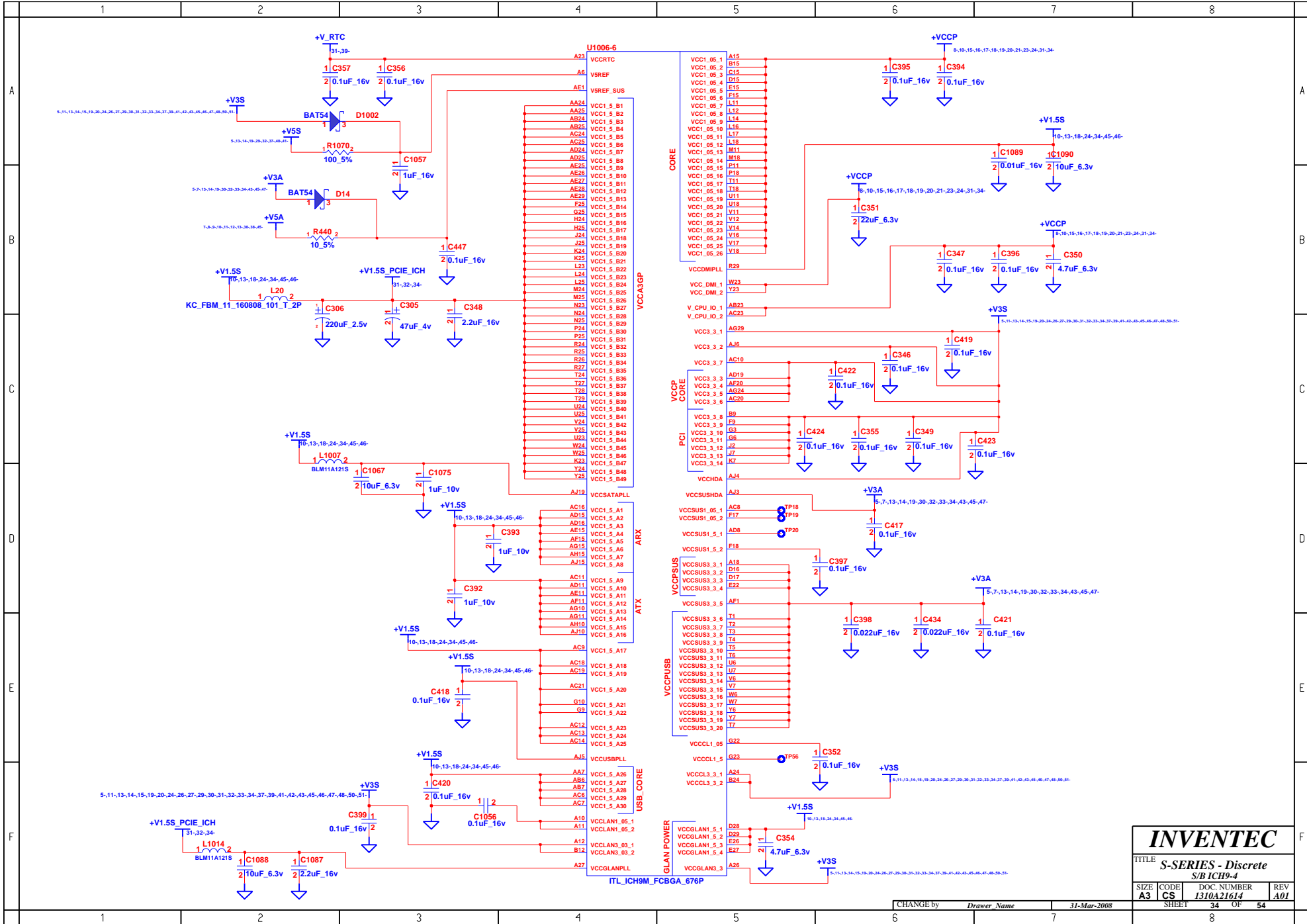
Boot BIOS from SPI
 GNT0# = 0
 SPI_CS1# = 1

+V3A
 5-7-13-14-19-30-32-33-34-43-45-47-

+V3A
 5-7-13-14-19-30-32-33-34-43-45-47-

INVENTEC
 TITLE S-SERIES - Discrete
 S/B ICH9-3

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01



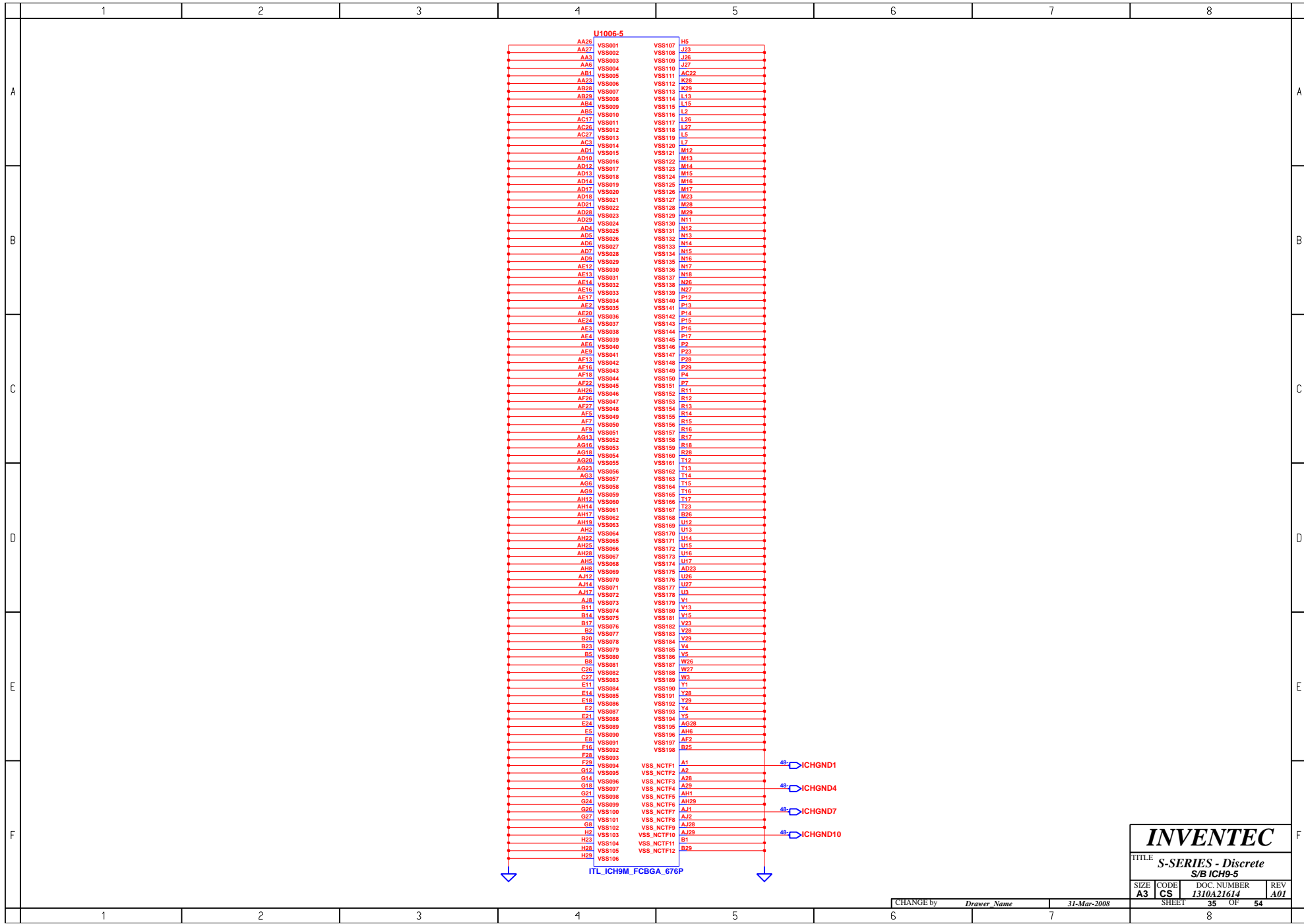
INVENTEC

TITLE
S-SERIES - Discrete
 S/B ICH9-d

SIZE CODE DOC. NUMBER REV
A3 CS 1310A21614 A01

CHANGE by *Drawer Name* 31-Mar-2008

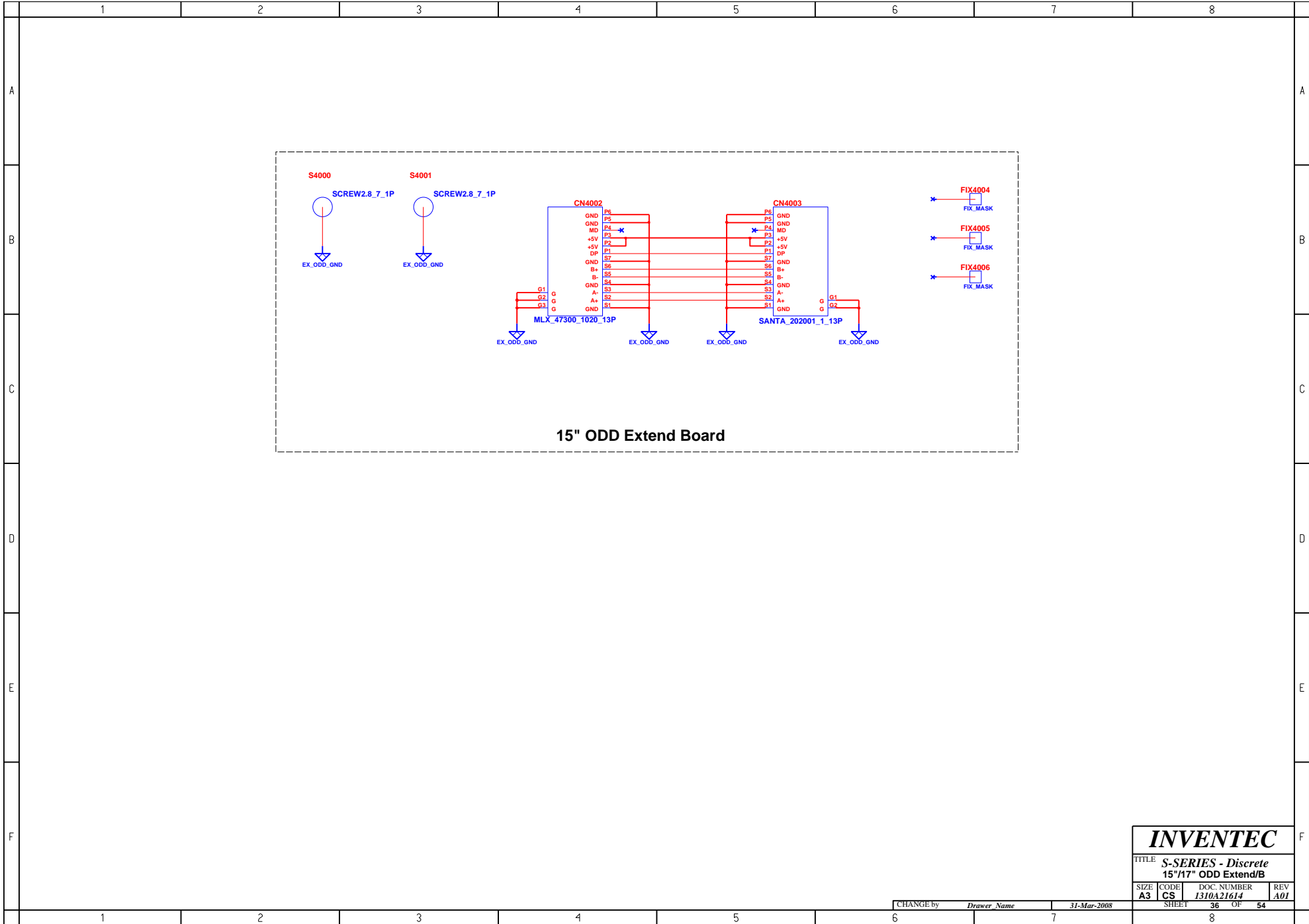
SHEET 34 OF 54



INVENTEC

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

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01



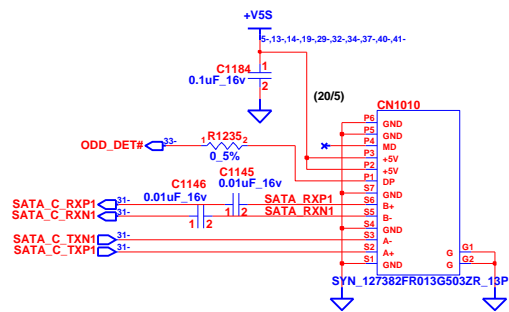
15" ODD Extend Board

INVENTEC

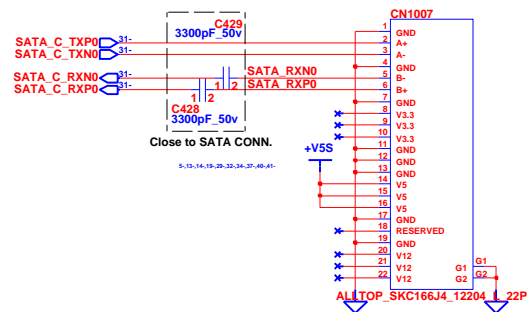
TITLE *S-SERIES - Discrete*
15"17" ODD Extend/B

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

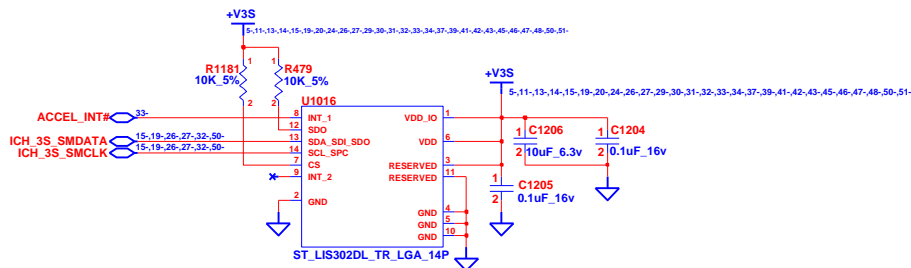
CHANGE by	Drawer Name	31-Mar-2008	SHEET	36	OF	54
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SATA ODD



SATA HDD



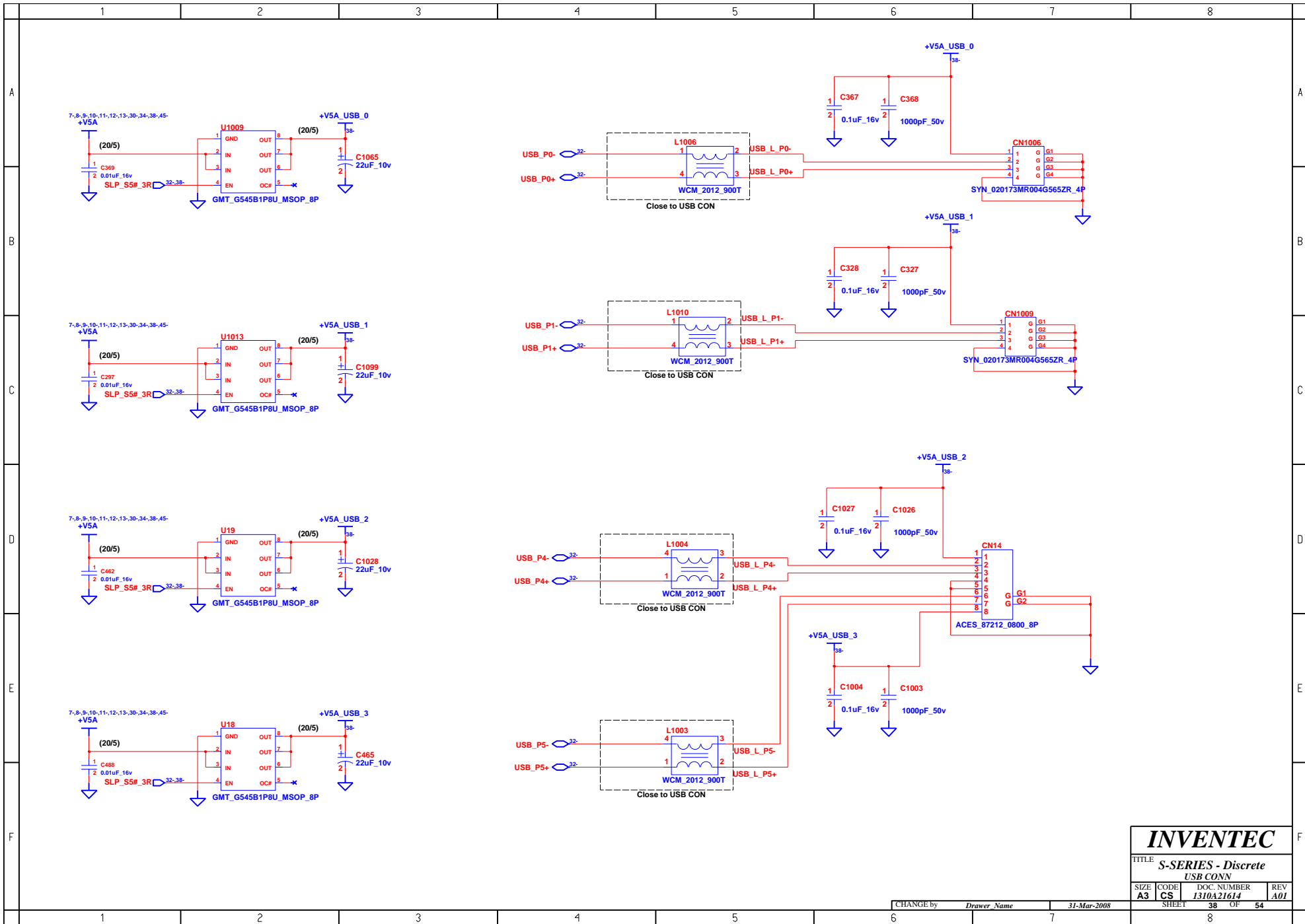
Accelerometer

INVENTEC

TITLE			
S-SERIES - Discrete			
HDD & ODD CONN & Accelerometer			
SIZE	CODE	DOC NUMBER	REV
A3	CS	1310A21614	A01

CHANGE by *Drawer Name* 31-Mar-2008

SHEET 37 OF 54



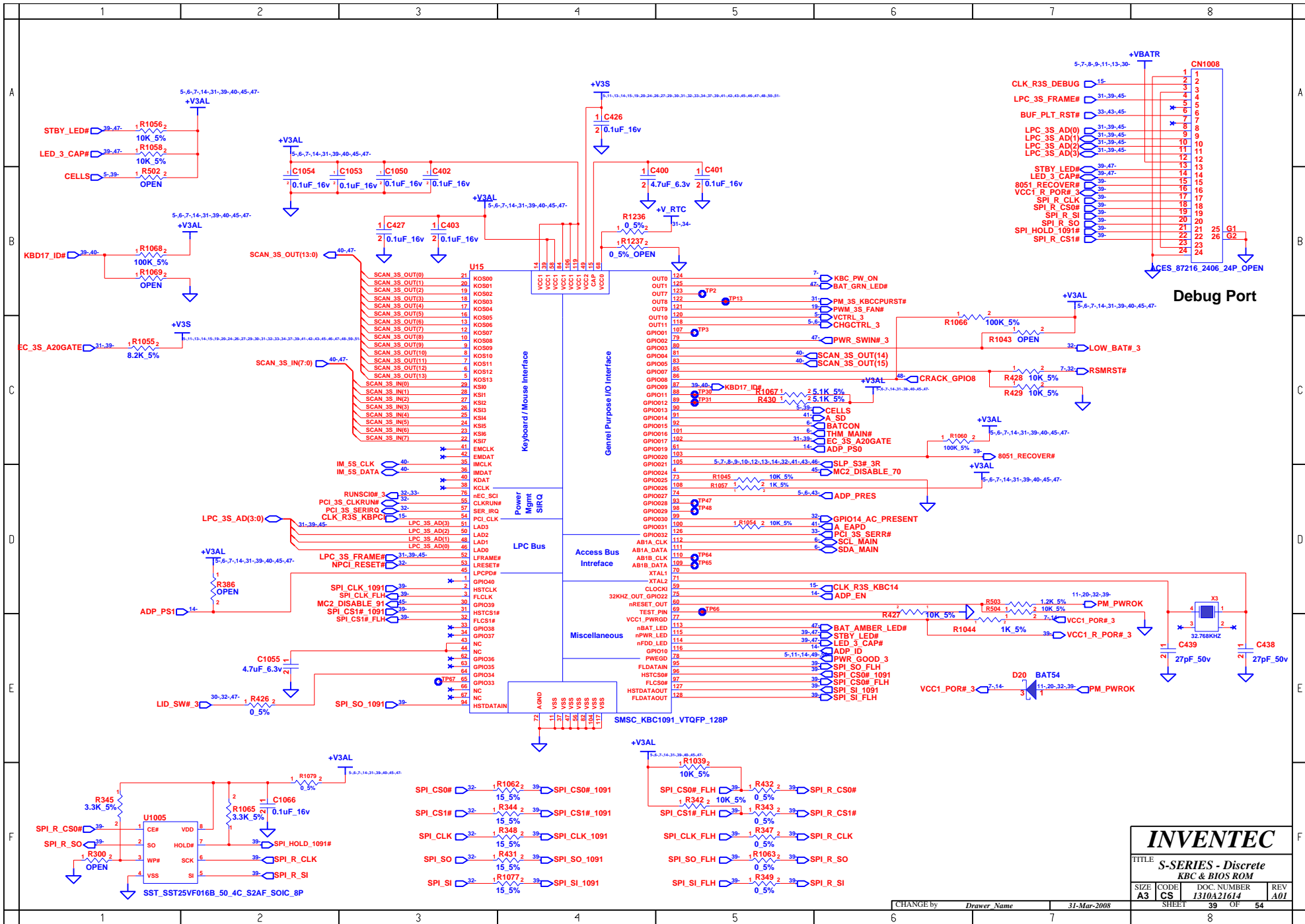
INVENTEC

TITLE
S-SERIES - Discrete
 USB CONN

SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
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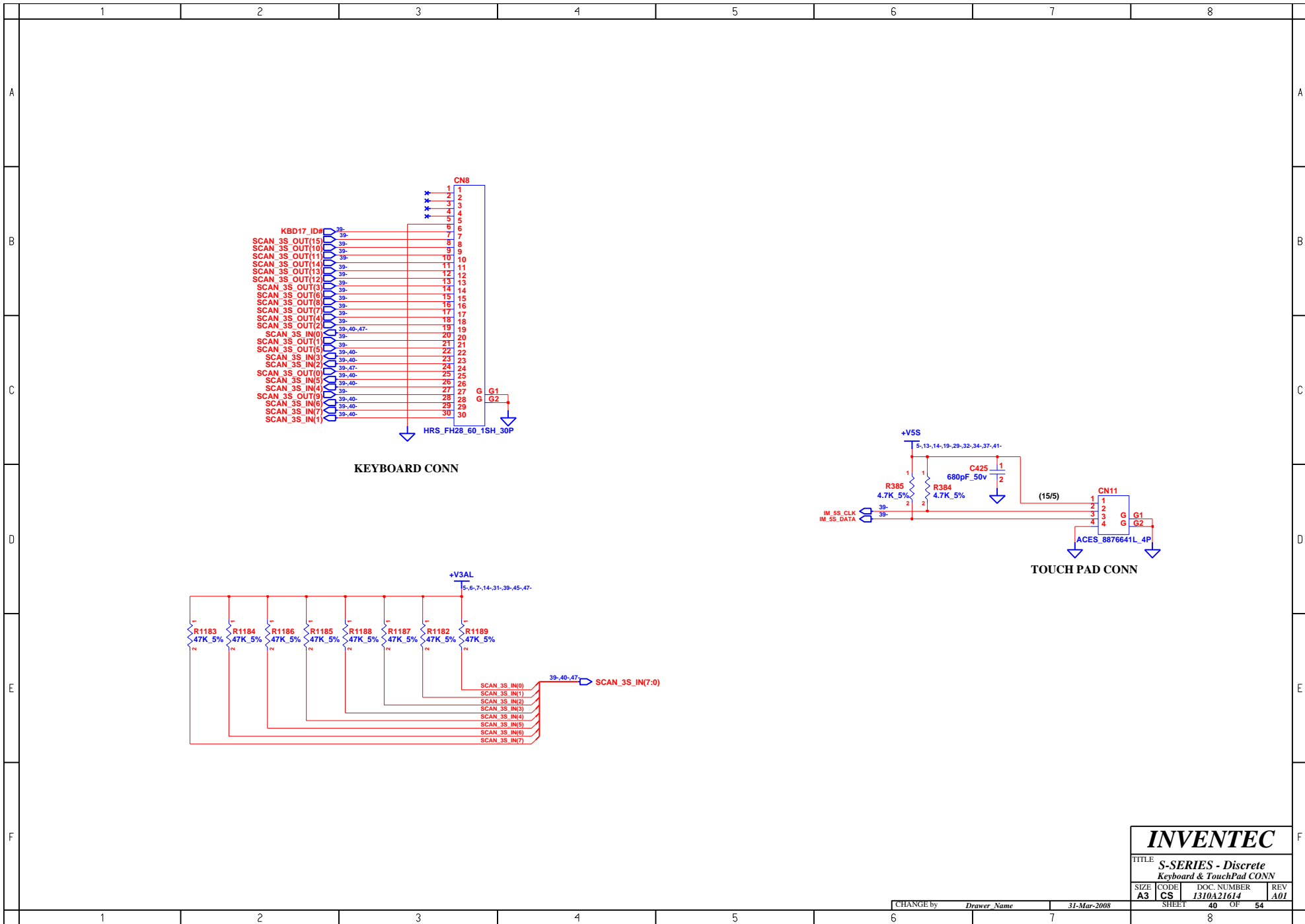
CHANGE by *Drawer Name* 31-Mar-2008

SHEET 38 OF 54



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

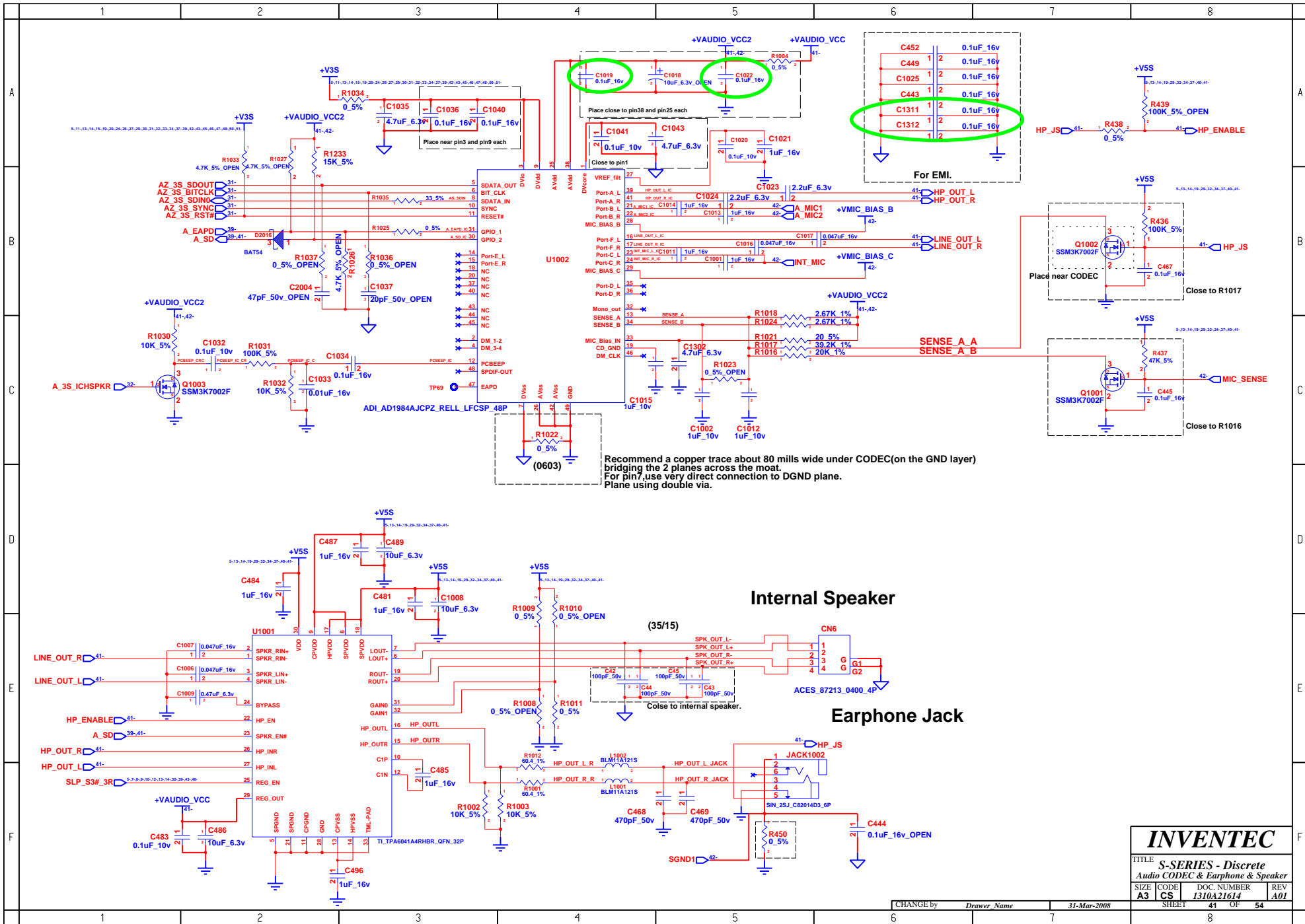
SIZE: A3 CS DOC NUMBER: 1310A21614 REV: A01



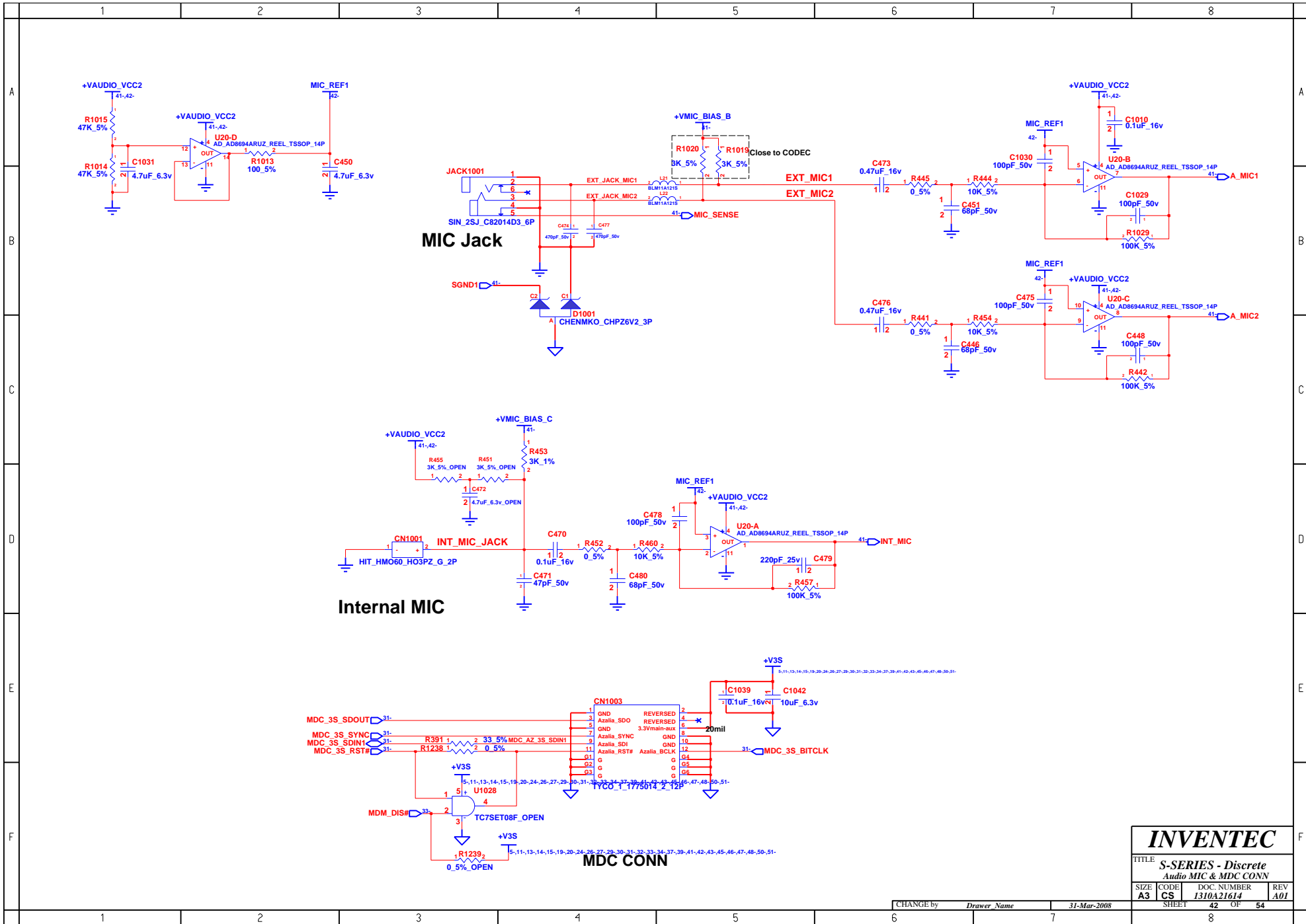
INVENTEC

TITLE
S-SERIES - Discrete
 Keyboard & TouchPad CONN

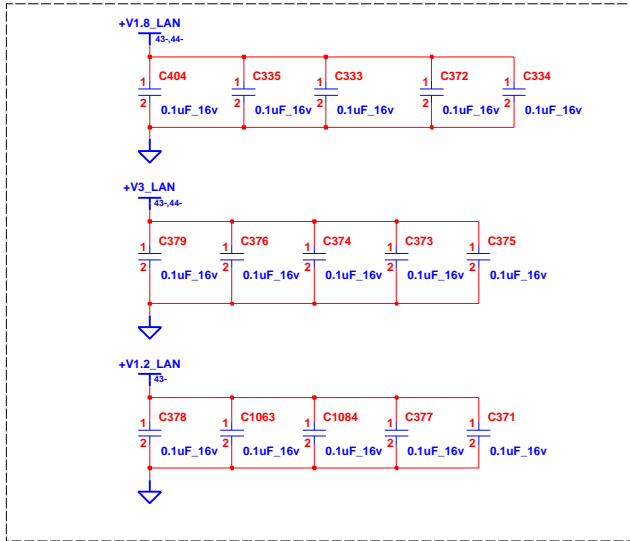
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
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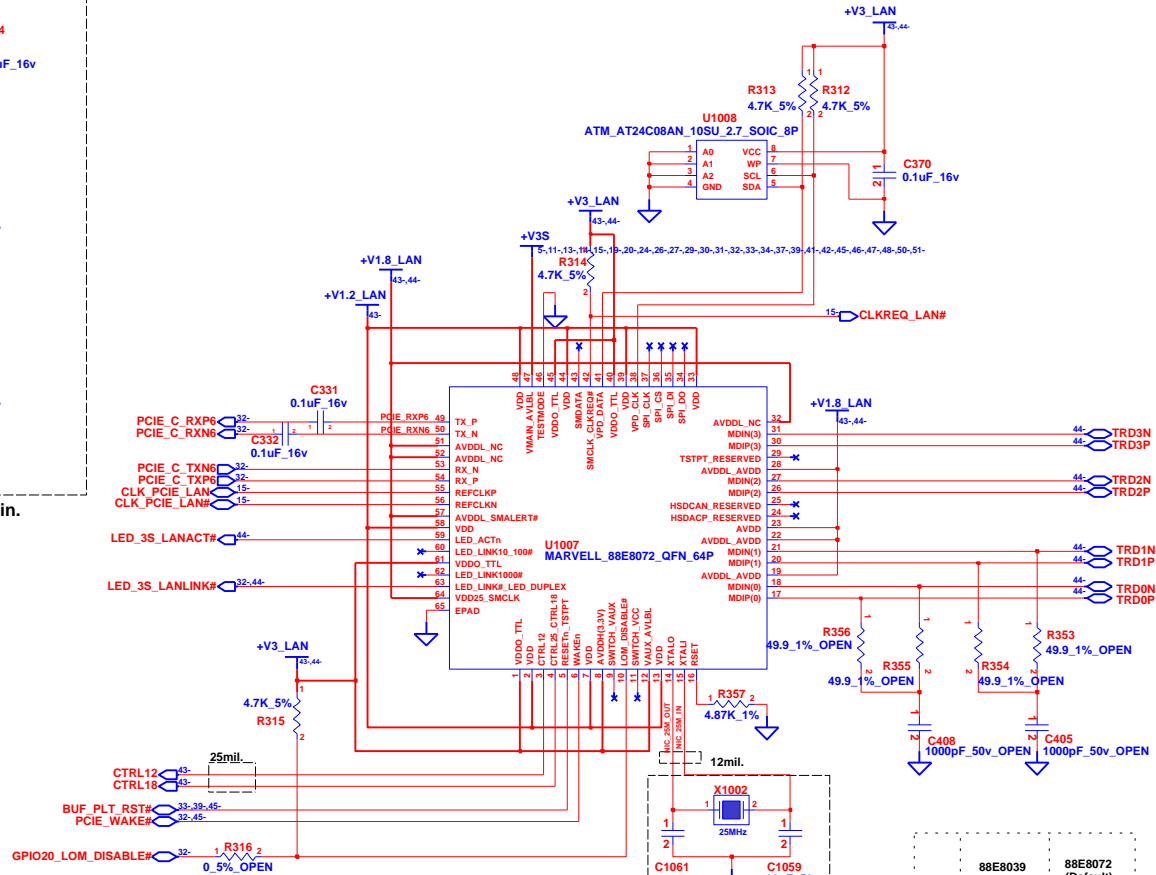
INVENTEC			
TITLE S-SERIES - Discrete Audio CODEC & Earphone & Speaker			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01
CHANGE by		Drawer Name	31-Mar-2008
SHEET		41	OF 54



INVENTEC			
TITLE S-SERIES - Discrete Audio MIC & MDC CONN			
SIZE A3	CODE CS	DOC NUMBER I310A21614	REV A01
CHANGE by <i>Drawer Name</i>		31-Mar-2008	
SHEET		42 OF 54	

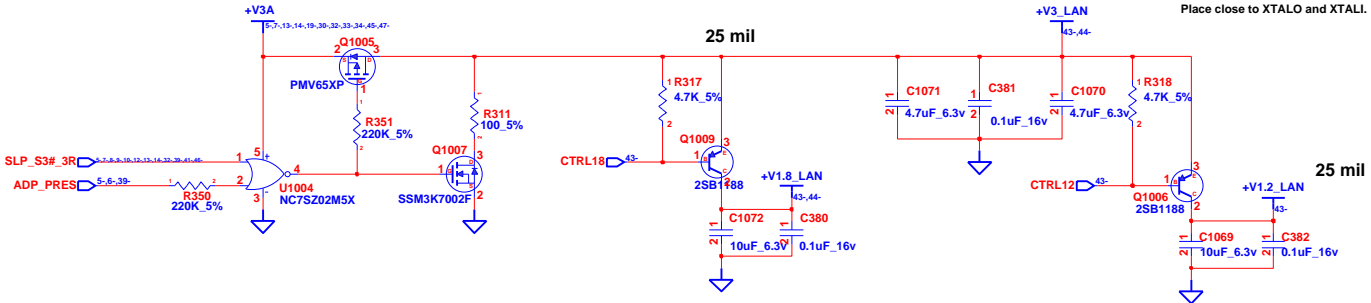


Place bypass cap as close as possible with every power pin.



Place close to XTALO and XTALI.

	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%



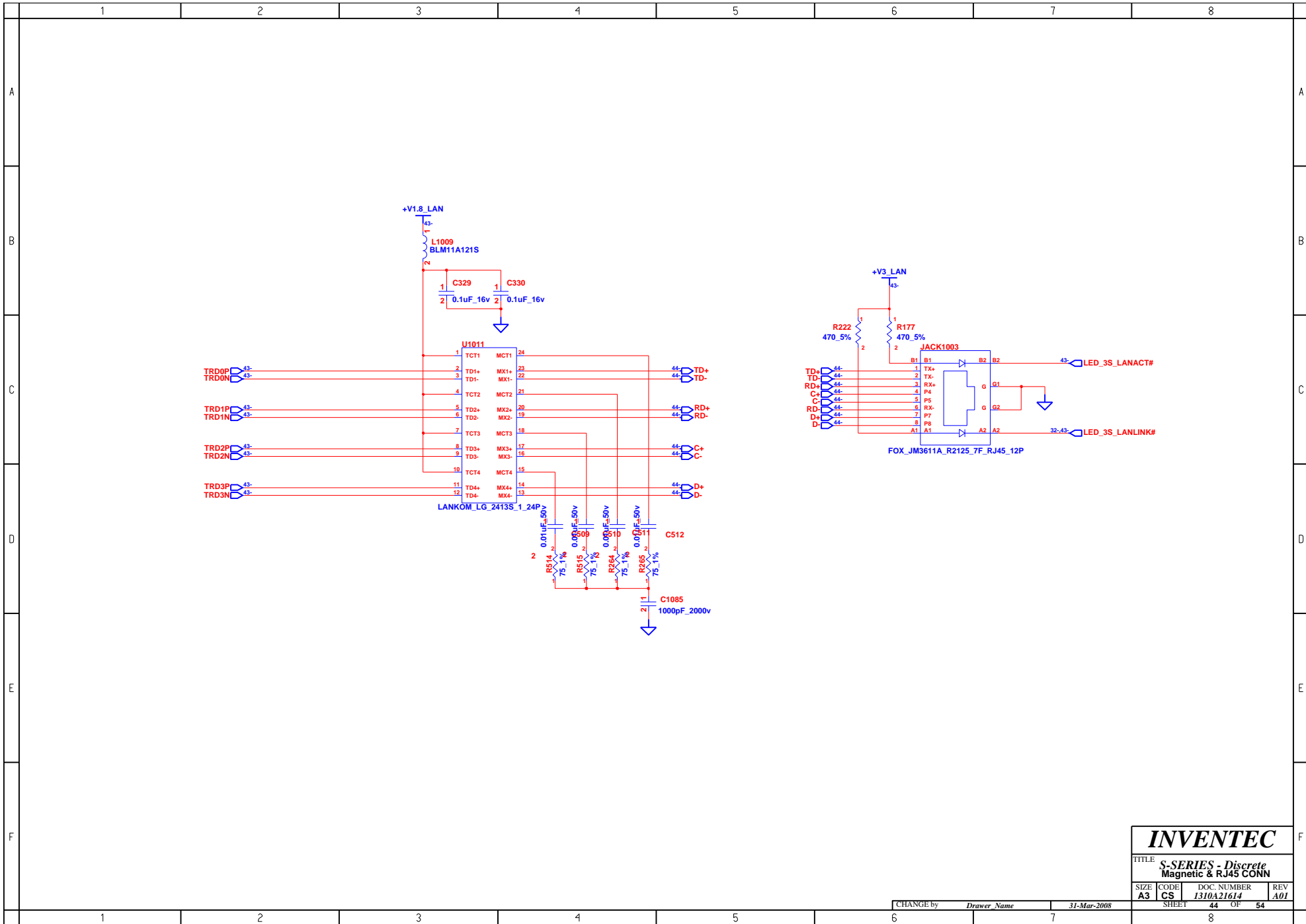
INVENTEC

TITLE: S-SERIES - Discrete
Giga LAN Controller

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

CHANGE by: Drawer Name 31-Mar-2008

SHEET 43 OF 54



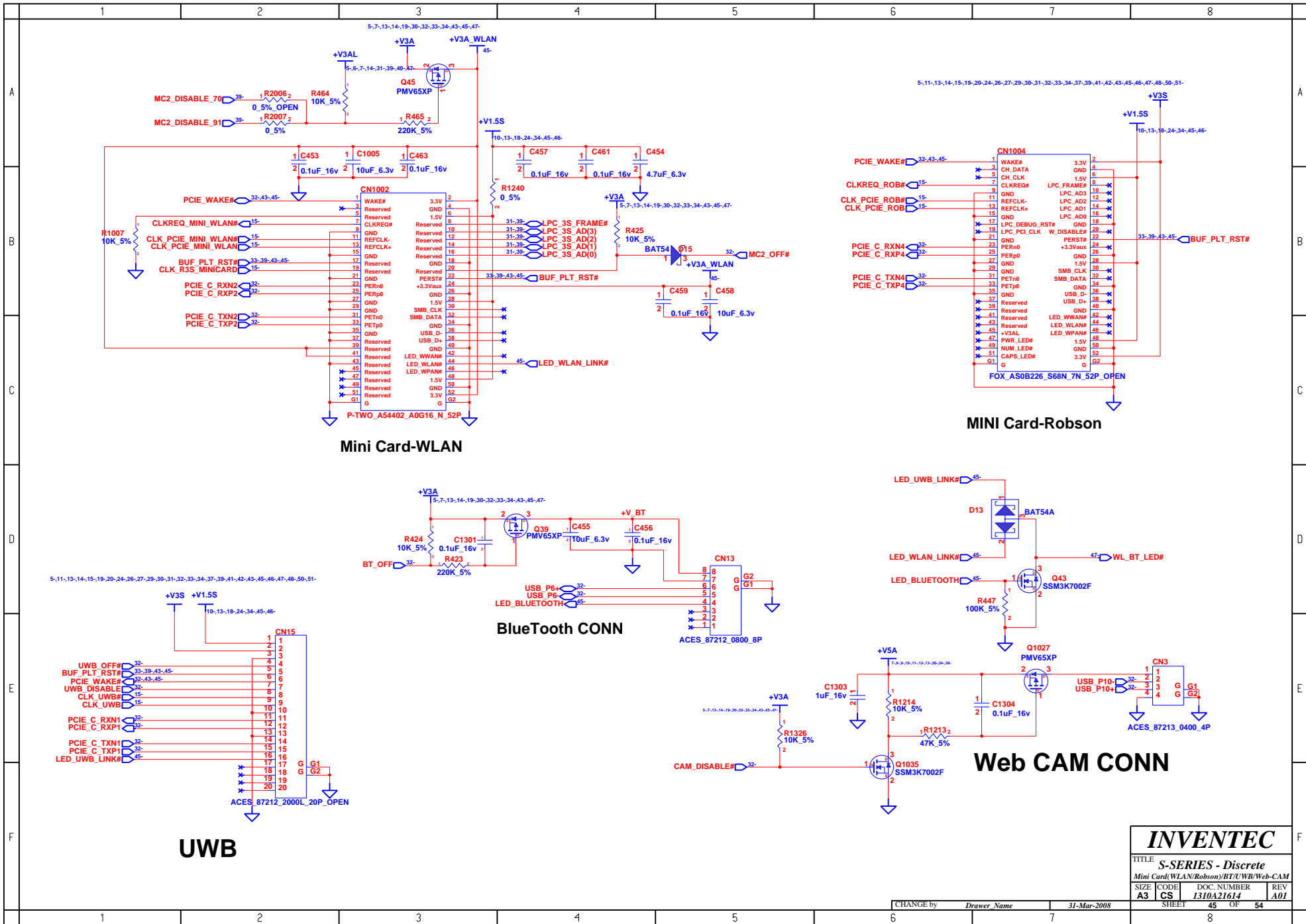
INVENTEC

TITLE
S-SERIES - Discrete
Magnetic & RJ45 CONN

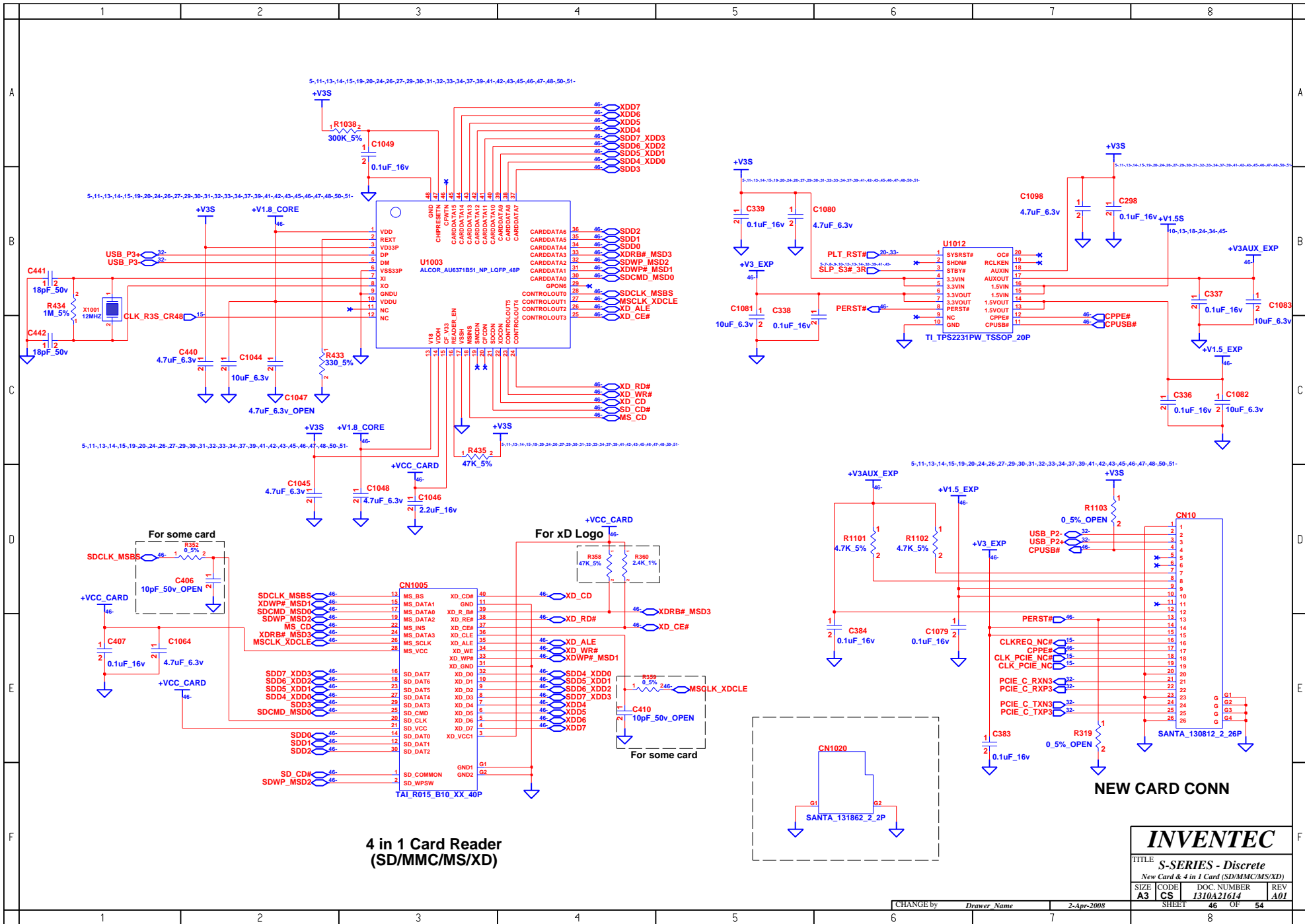
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
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CHANGE by *Drawer Name* 31-Mar-2008

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 A01
CHANGE by		Drawer Name	31-Mar-2008
SHEET 45		OF 54	



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

NEW CARD CONN

INVENTEC

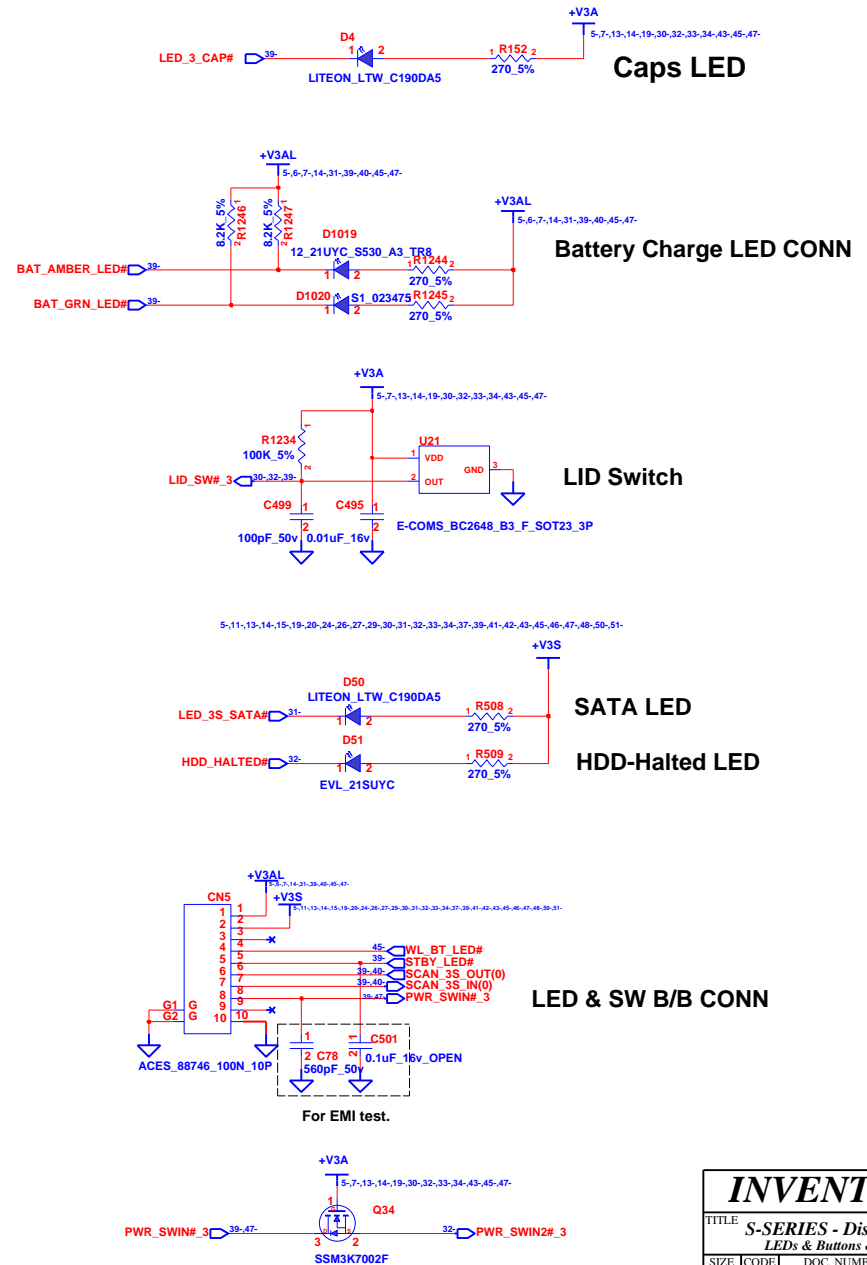
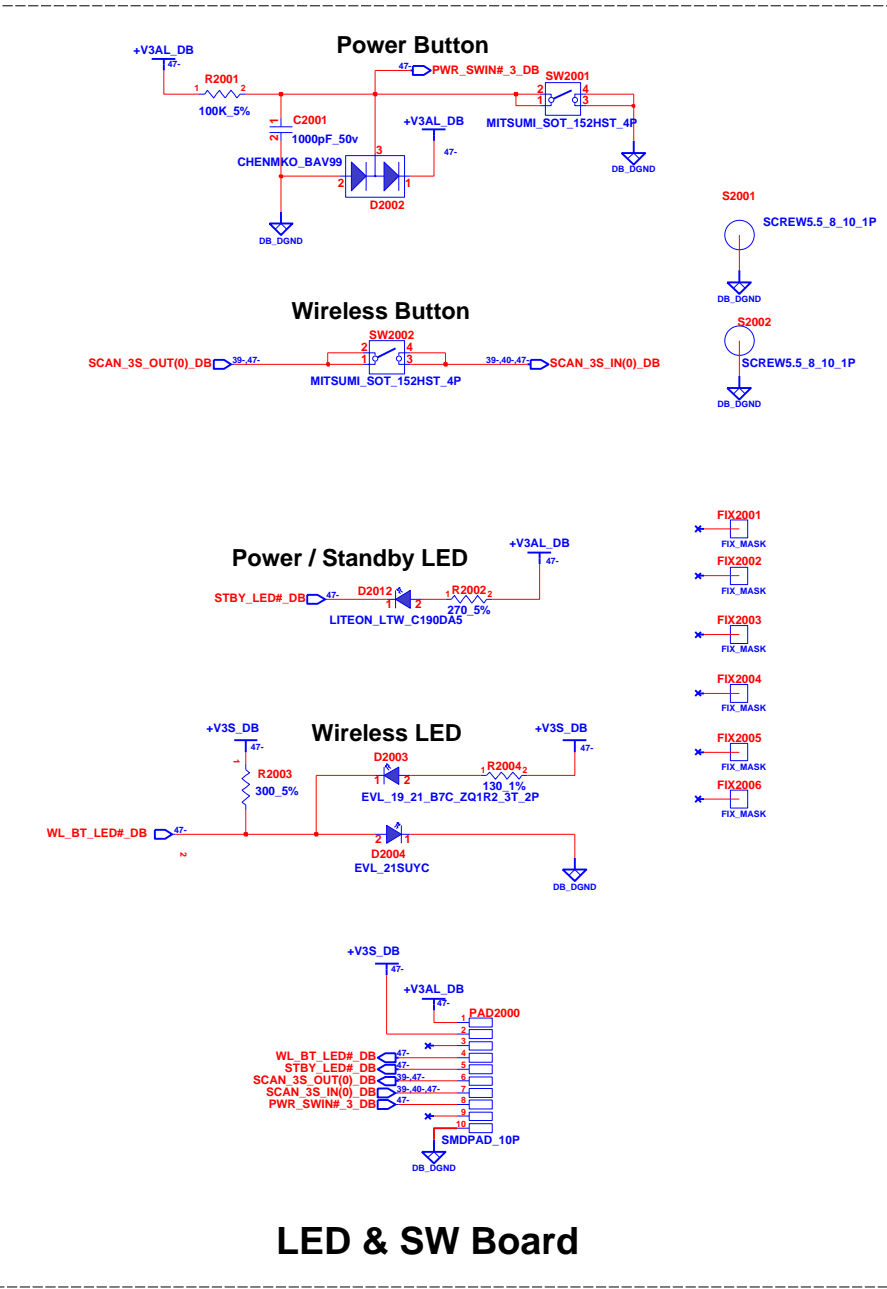
TITLE **S-SERIES - Discrete**

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

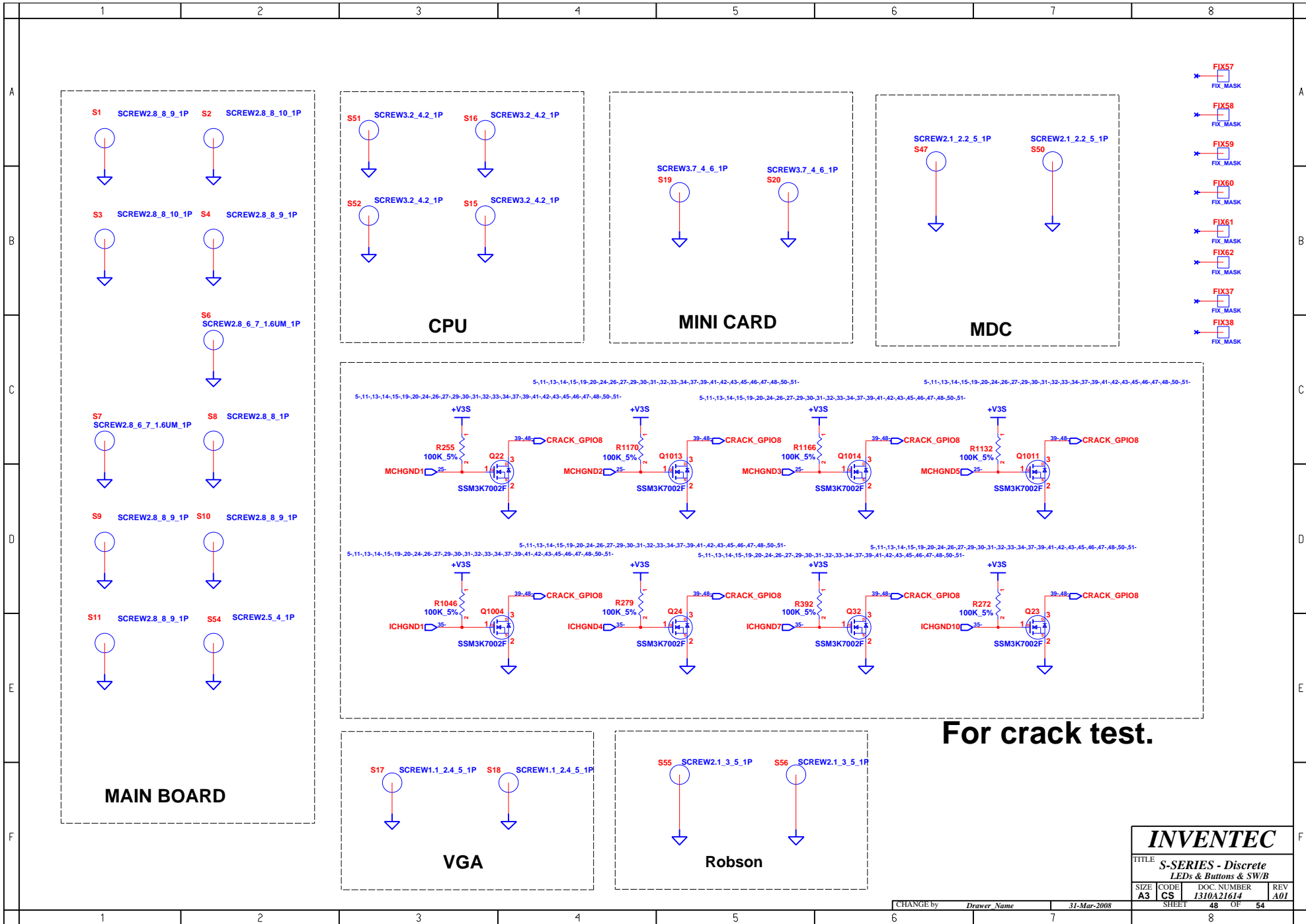
SIZE **A3** CODE **CS** DOC. NUMBER **1310A21614** REV **A01**

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

CHANGE by *Drawer Name* 2-Apr-2008



INVENTEC			
TITLE: S-SERIES - Discrete LEDs & Buttons & SW/B			
SIZE: A3	CODE: CS	DOC NUMBER: 1310A21614	REV: A01
CHANGE by: Drawer Name		31-Mar-2008	
SHEET: 47		OF: 54	



- 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 A01
CHANGE by <i>Drawer Name</i>		31-Mar-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

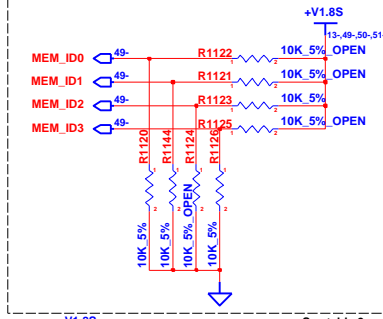
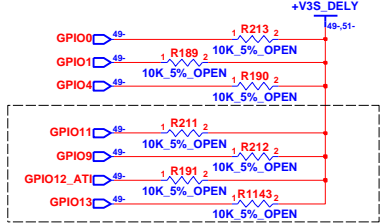
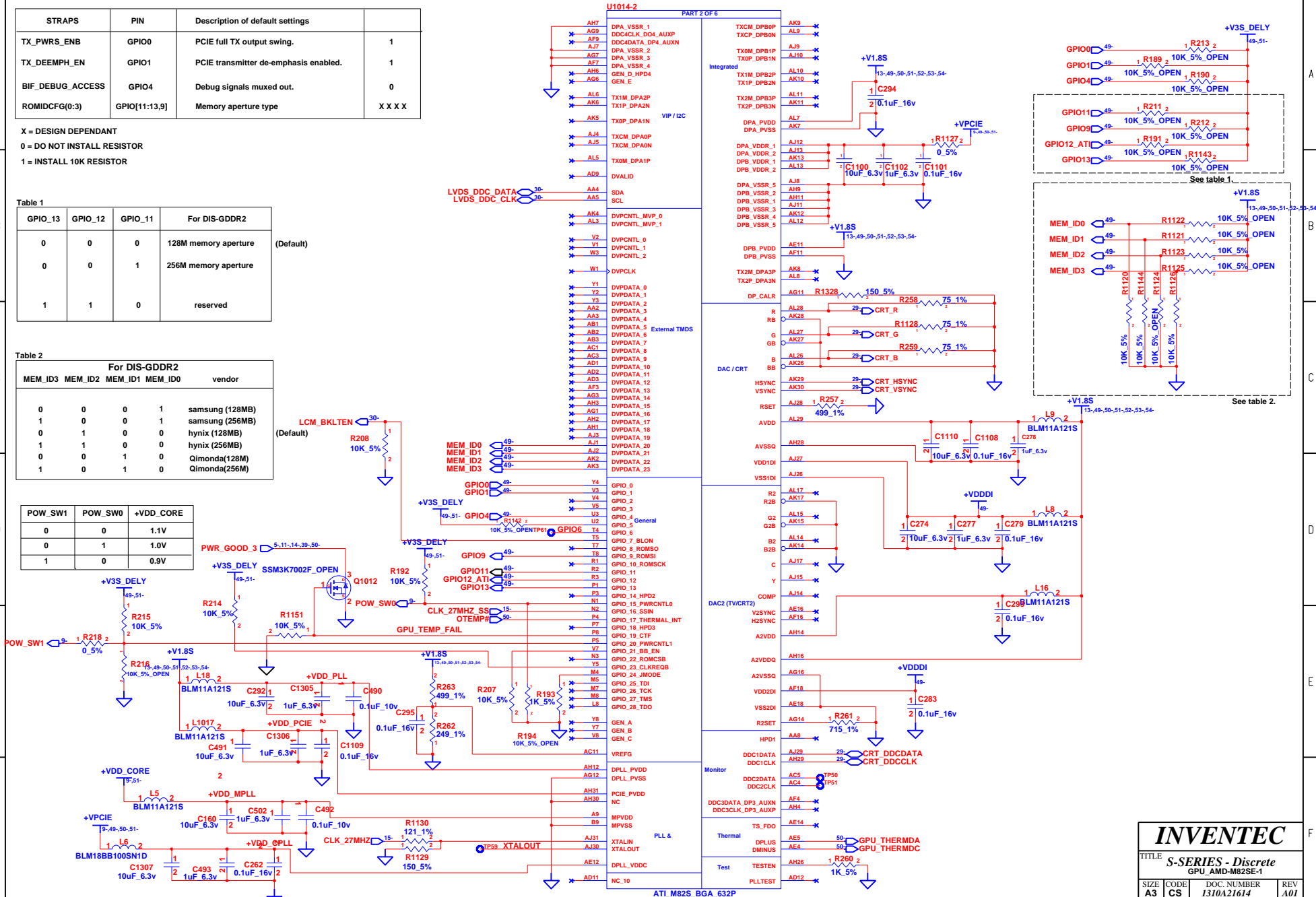
Table 1

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

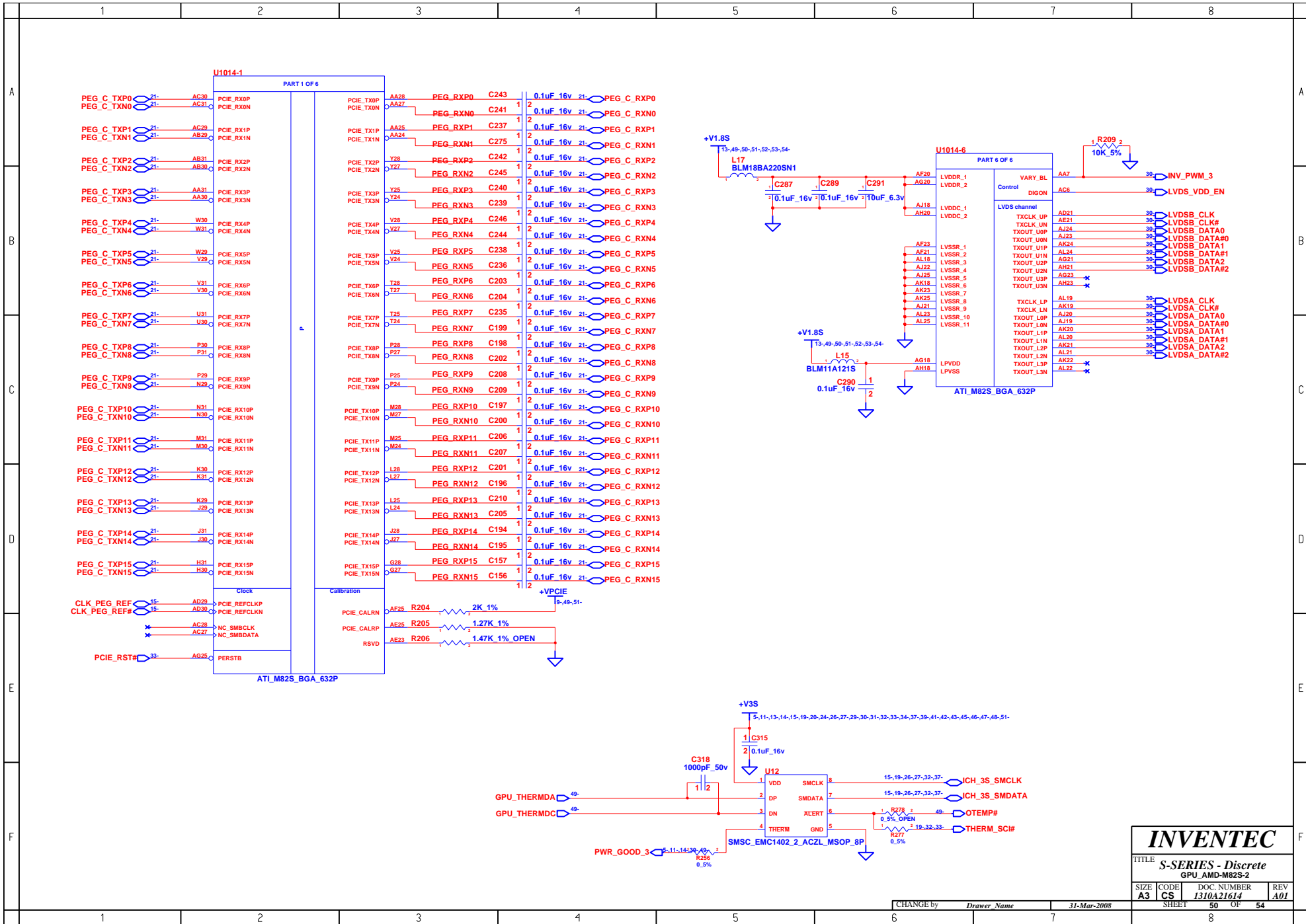


INVENTEC

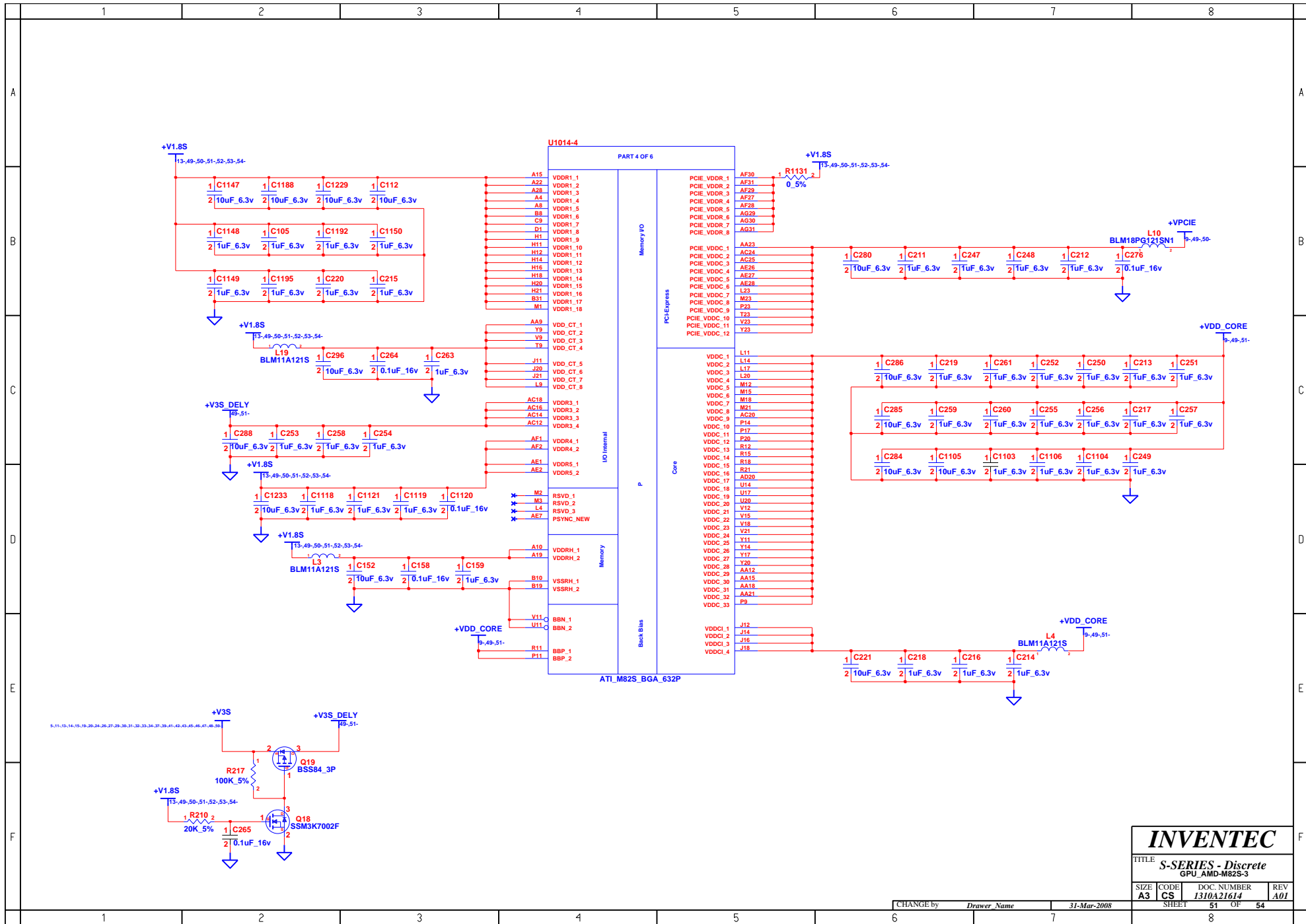
TITLE: **S-SERIES - Discrete GPU_AMD-M82SE-1**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01

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INVENTEC			
TITLE S-SERIES - Discrete GPU_AMD-M825-2			
SIZE A3	CODE CS	DOC NUMBER 1310A21614	REV A01
CHANGE by <i>Drawer Name</i>		31-Mar-2008	
SHEET 50		OF 54	

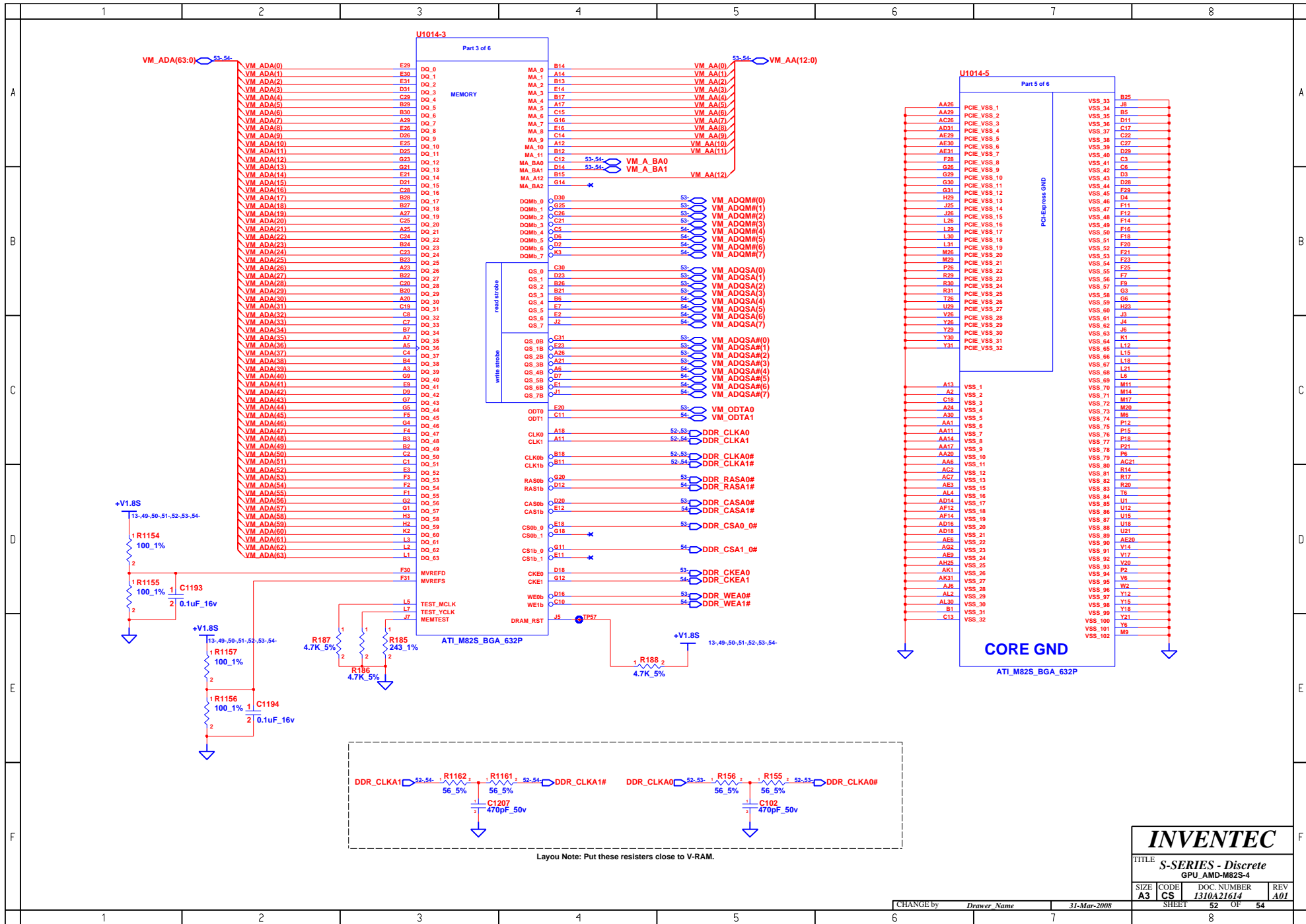


INVENTEC

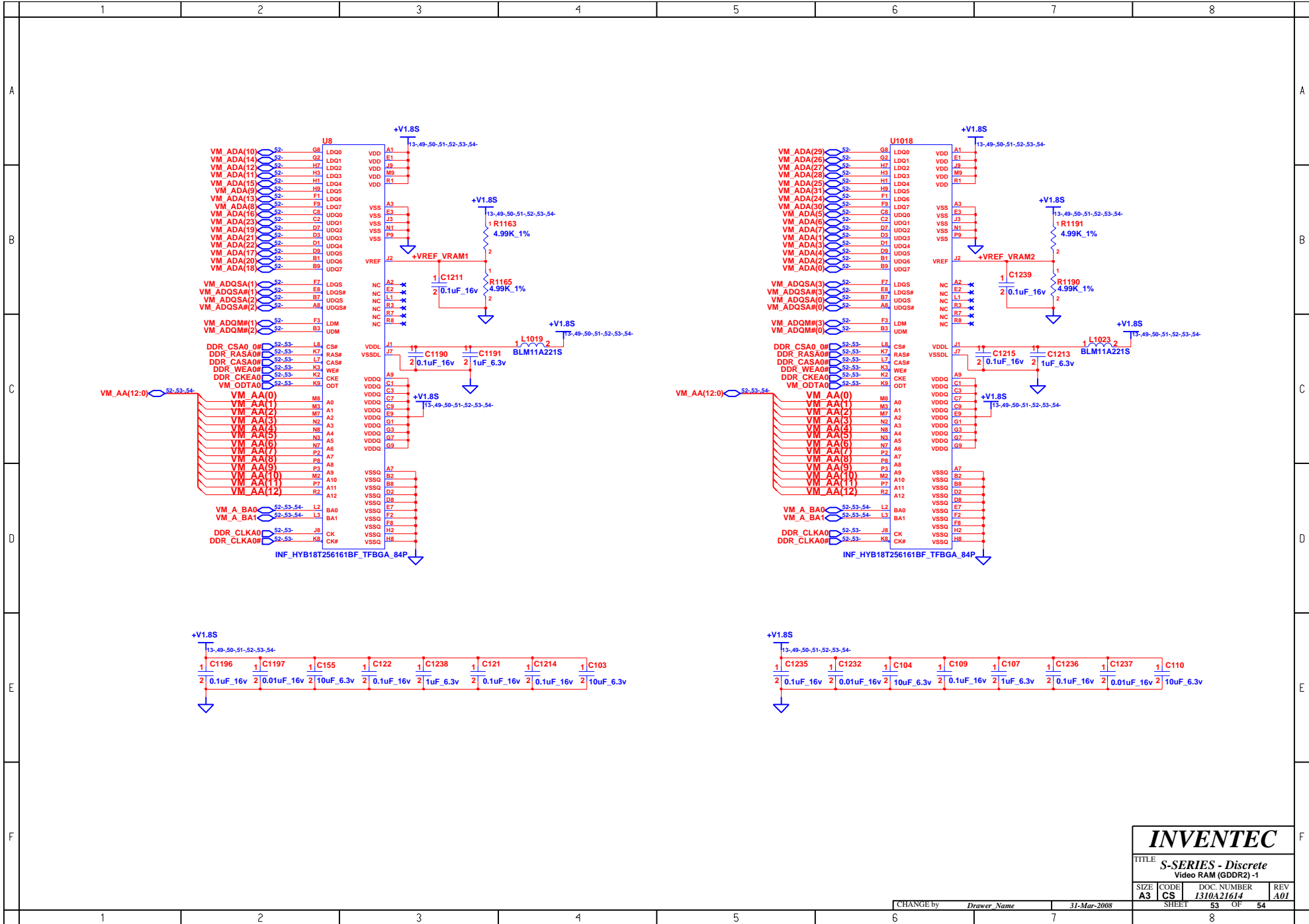
TITLE
S-SERIES - Discrete
 GPU_AMD-M82S-3

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A21614	A01

CHANGE by	Drawer Name	31-Mar-2008	SHEET	51	OF	54
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INVENTEC			
TITLE S-SERIES - Discrete GPU_AMD-M82S-4			
SIZE A3	CODE CS	DOC. NUMBER 1310A21614	REV A01
CHANGE by <i>Drawer Name</i>		31-Mar-2008	
SHEET		52 OF 54	



INVENTEC			
TITLE S-SERIES - Discrete			
Video RAM (GDDR2) -1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A21614	A01
CHANGE by		Drawer Name	31-Mar-2008
SHEET		53	OF 54

