

S-SERIES 2009

INVICTA (Intel-Discrete)

MV Build (A03) - Final

2009.03.18

DATE	CHANGE NO.	REV

DRAWER	EE	DATE	POWER	DATE	INVENTEC TITLE <i>INVICTA Cycle1</i>
DESIGN					
CHECK					
RESPONSIBLE					
SIZE =	3		VER :		SIZE
FILE NAME :	XXXX-XXXXXX-XX				A3 CS
P/N	XXXXXXXXXXXX				DOC. NUMBER
					1310A22527-0-MTR
					REV
					A03
					SHEET
					1 OF 54

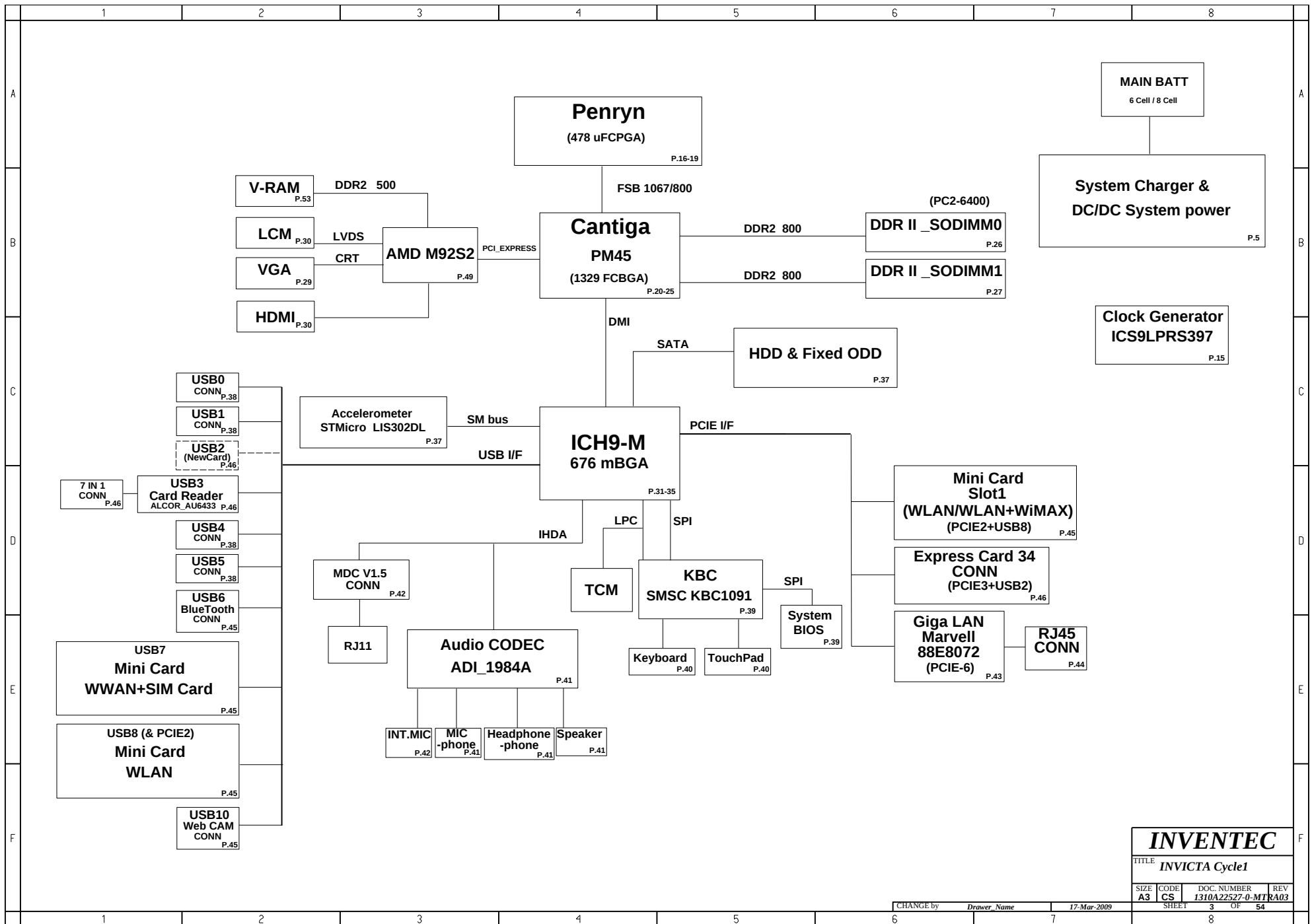
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6- Select & Battery CONN.	16- CPU Penryn-1.	37- HDD & ODD,Accelerometer,15" ODD EXT/B.
7- System Power (+V3A/+V5A).	17- CPU Penryn-2.	38- USB CONN.
8- System Power (+V1.8/+VCCP) .	18- CPU Penryn-3.	39- KBC, BIOS ROM, Debug Port.
9- Graphic Power (+VDD_CORE & +VPCIE).	19- XDP & Thermal & Fan.	40- Internal Keyboard & TouchPad CONN.
10- System Power (+V1.5S) .	20- N/B Cantiga-1.	41- Audio CODEC & Earphone & Speaker.
11- CPU Power (+VCC_CORE).	21- N/B Cantiga-2.	42- Audio MIC & MDC CONN.
12- DDR Termination Voltage(+V0.9S).	22- N/B Cantiga-3.	43- Giga LAN controller.
13- Power (Sleep: +V5S/+V3S/+V1.8S).	23- N/B Cantiga-4.	44- Magnetic & RJ45 CONN.
14- Power (Sequence).	24- N/B Cantiga-5.	45- Mini Card(WLAN/WWAN), BT.
	25- N/B Cantiga-6.	46- New Card & 4 in 1 Card (SD/MMC/MS/XD).
	26- DDR2-DIMM0.	47- LEDs, TCM CONN.
	27- DDR2-DIMM1.	48- Screws, Crack testing circuit.
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	29- VGA CONN.	50- AMD M92S2-2.
	30- LCD,WebCam,HDMI CONN.	51- AMD M92S2-3.
	31- S/B ICH9-1.	52- AMD M92S2-4.
	32- S/B ICH9-2.	53- Video RAM-1 (DDR2).
	33- S/B ICH9-3.	54- Video RAM-2 (DDR2).
	34- S/B ICH9-4.	
	35- S/B ICH9-5.	

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TITLE INVICTA Cycle1 Contents			
SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MTR	REV A03
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CHANGE by *Drawn Name* 17-Mar-2009



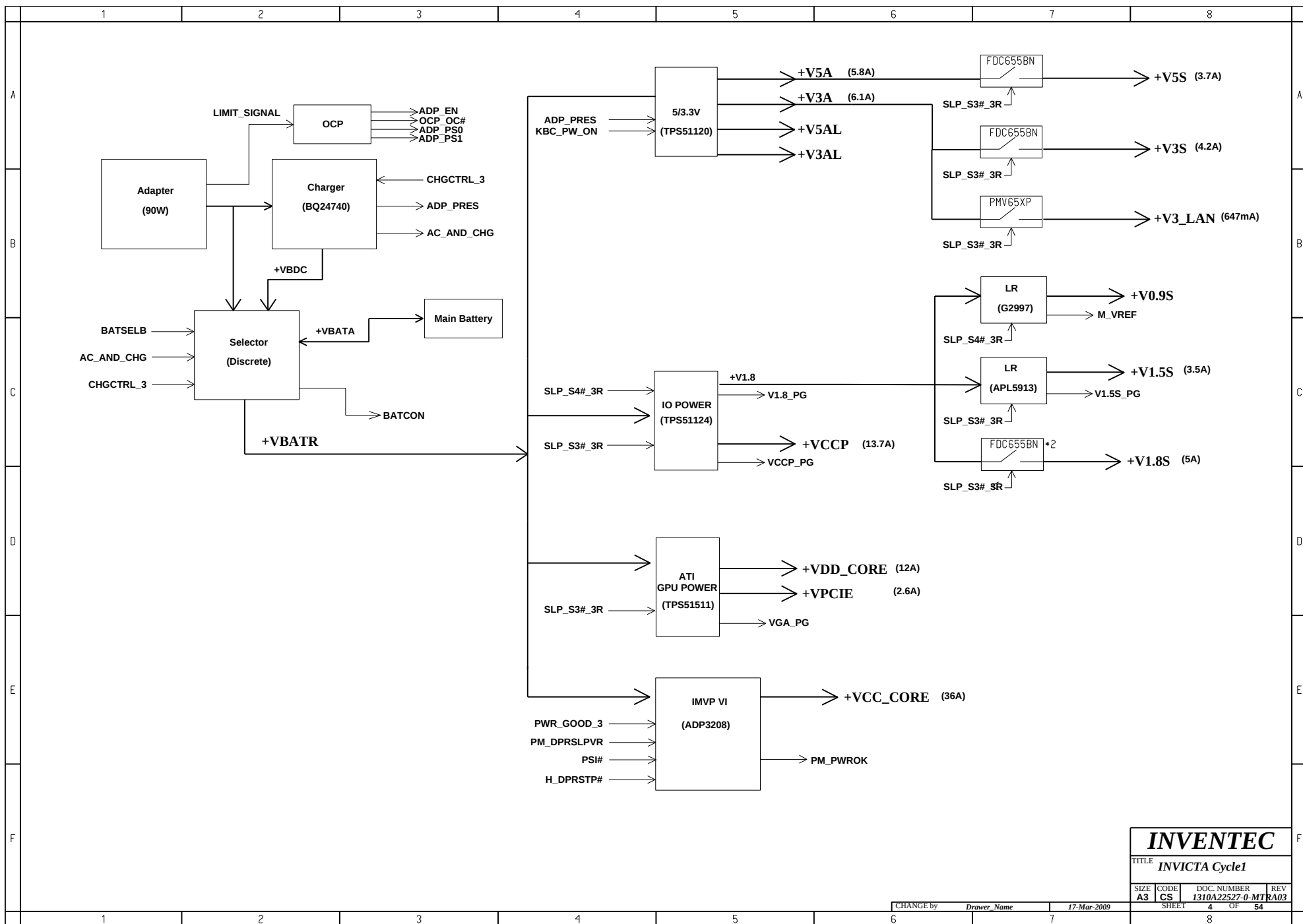
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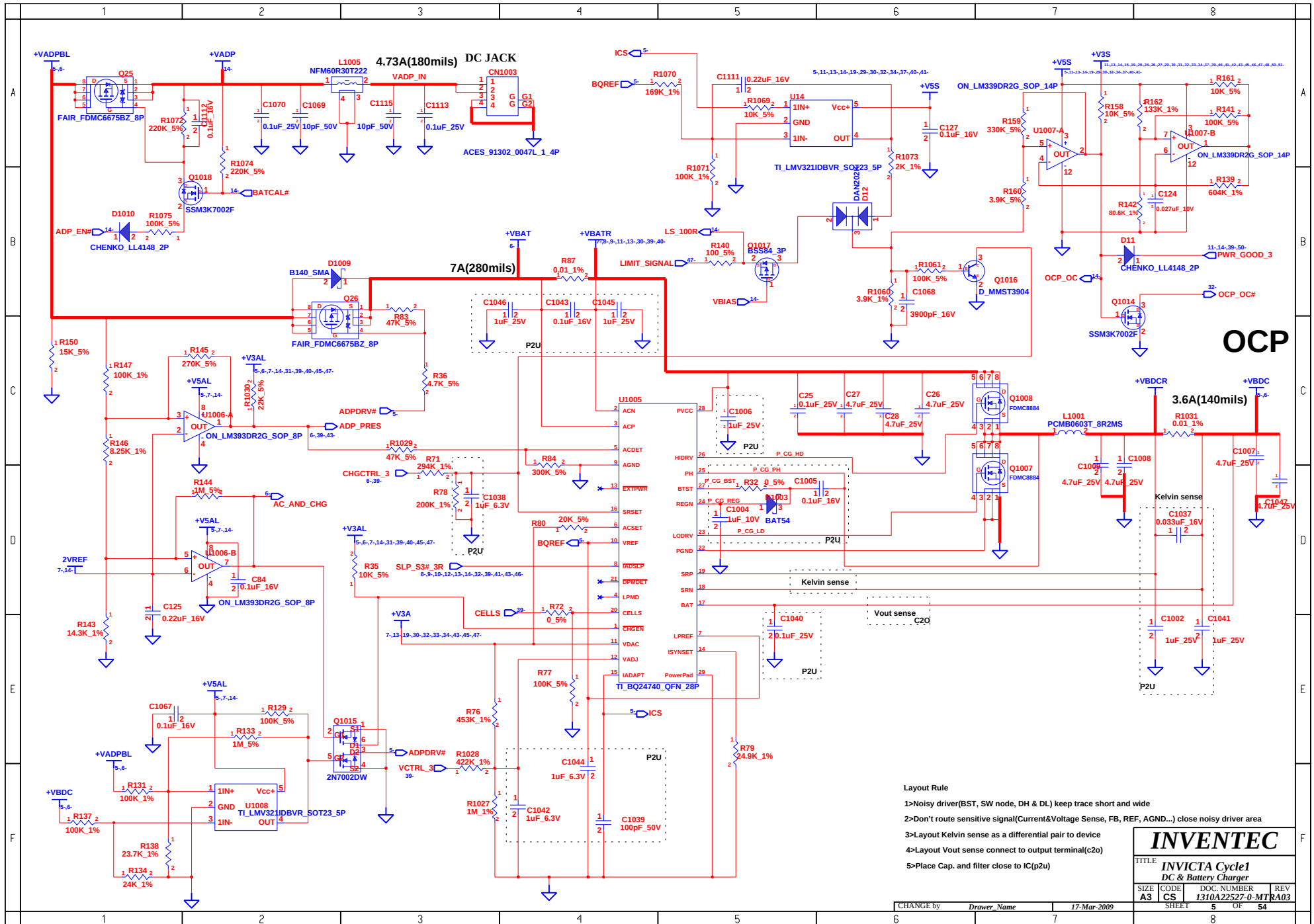
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INVICTA Cycle1

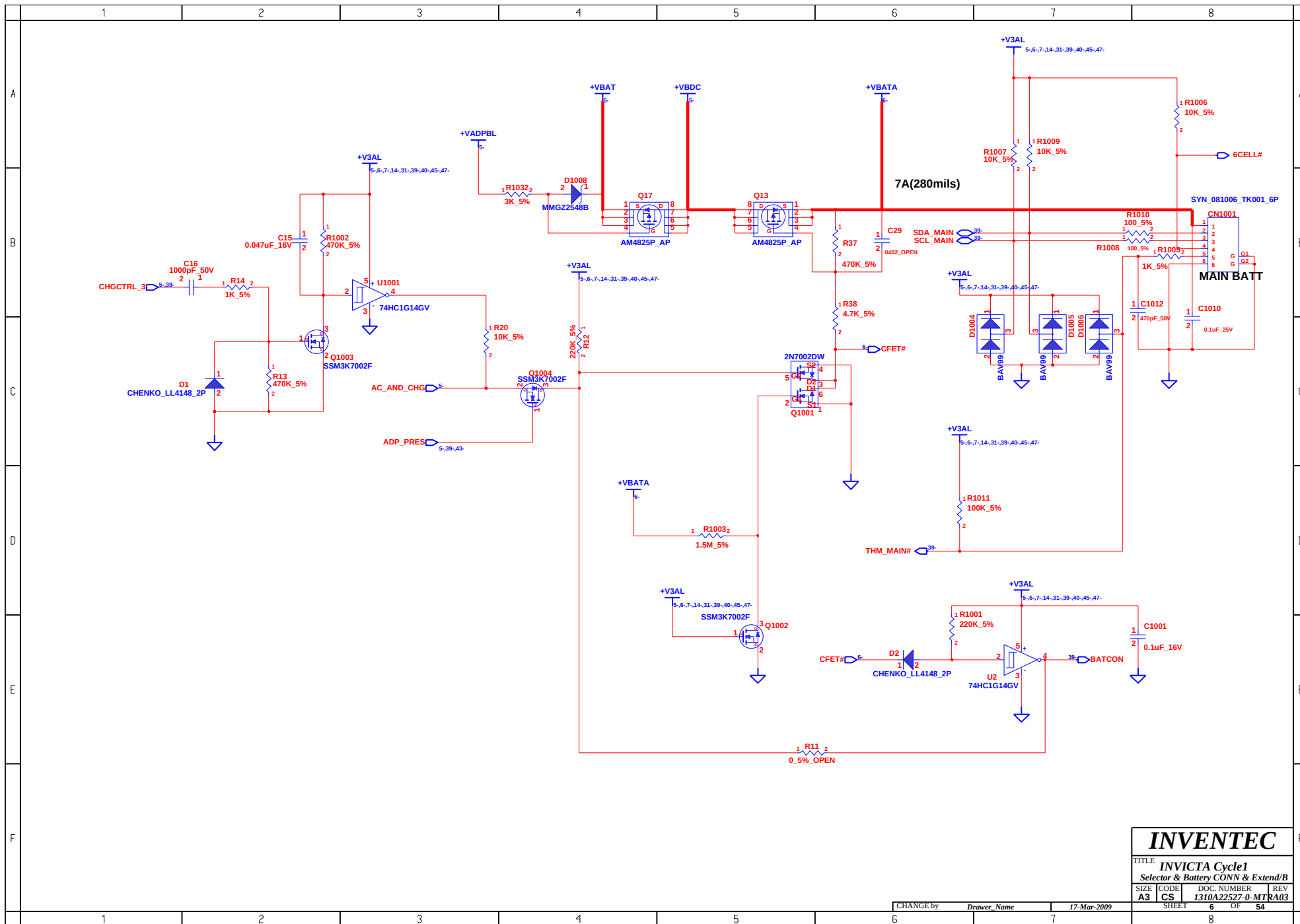
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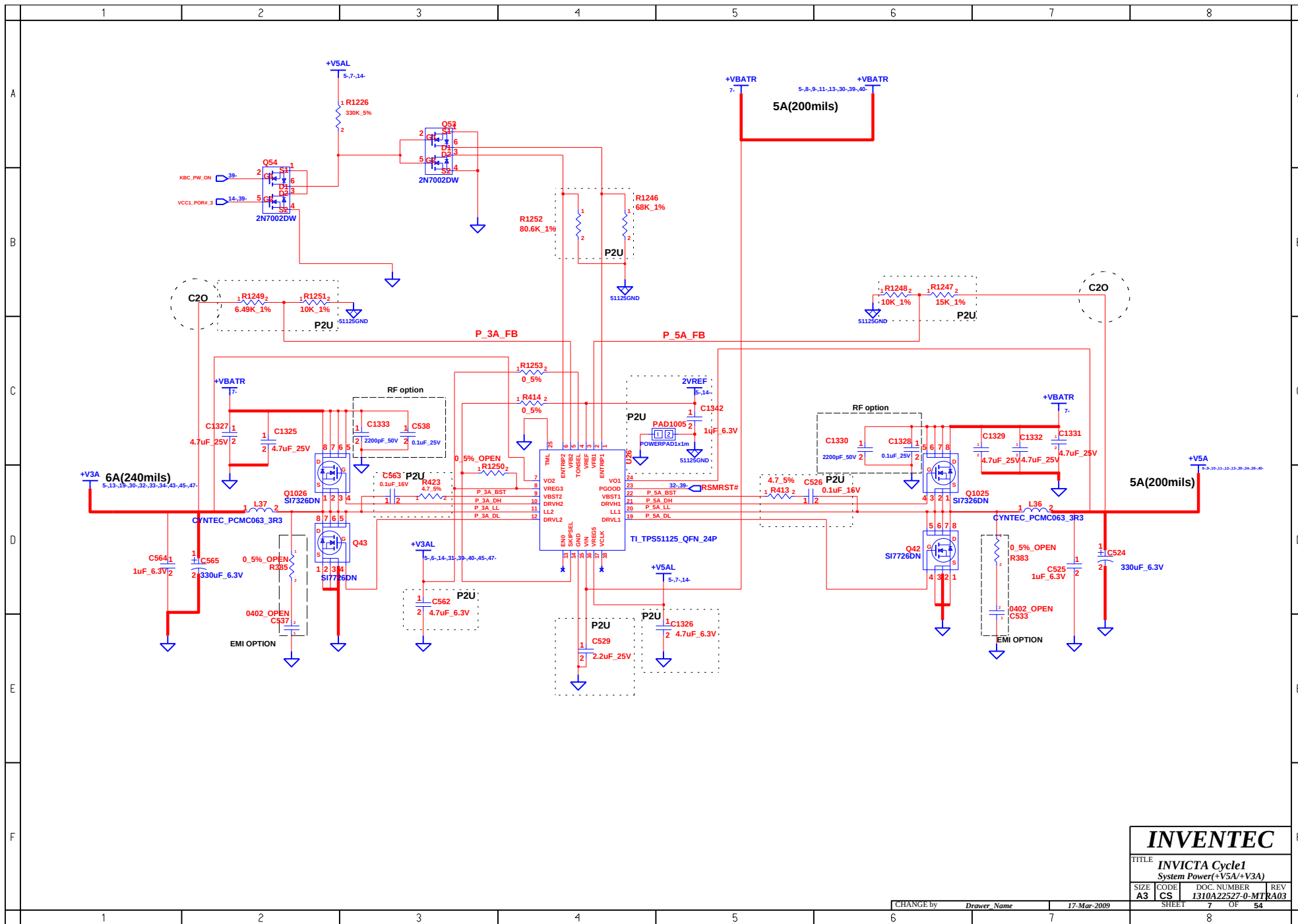
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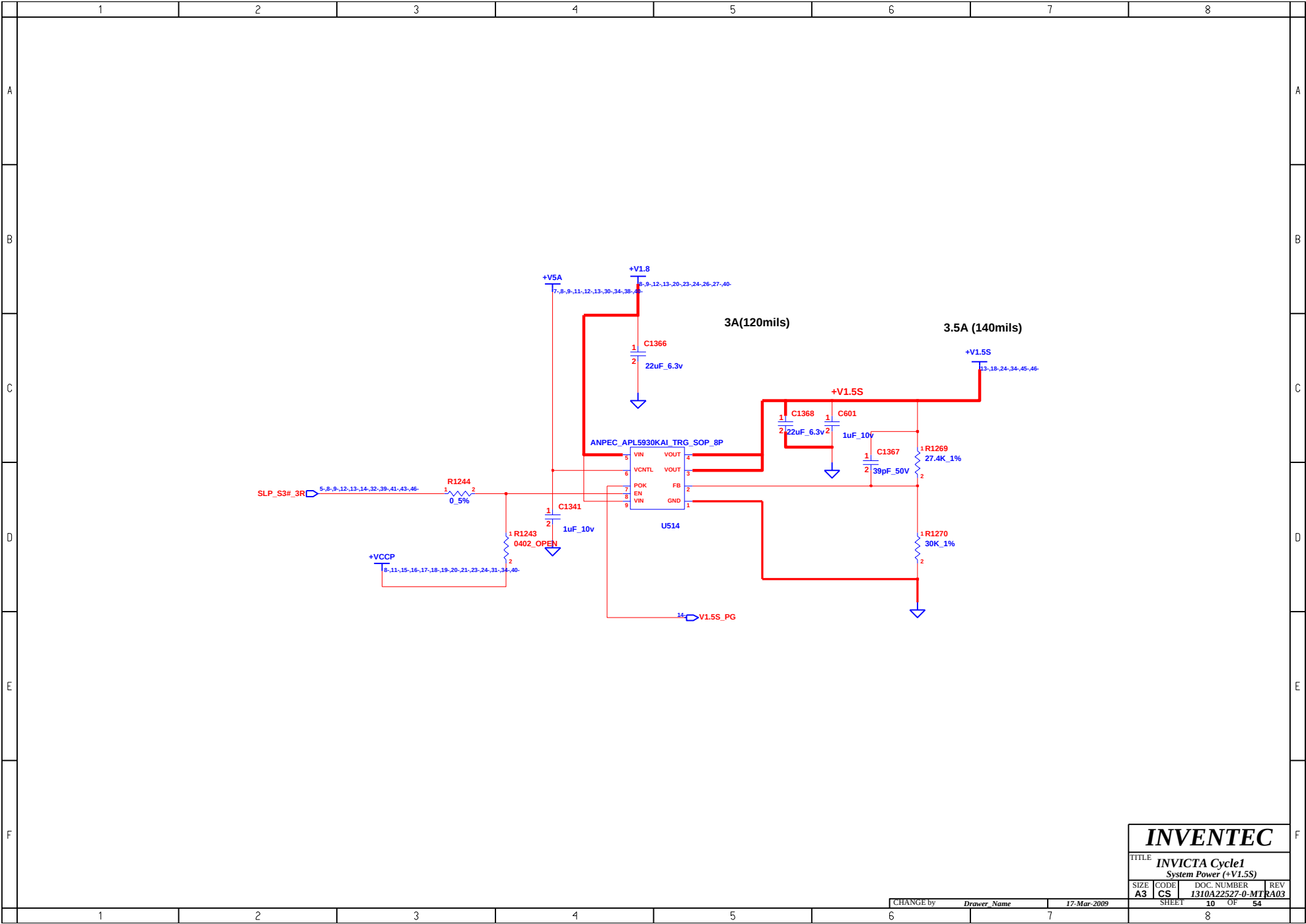
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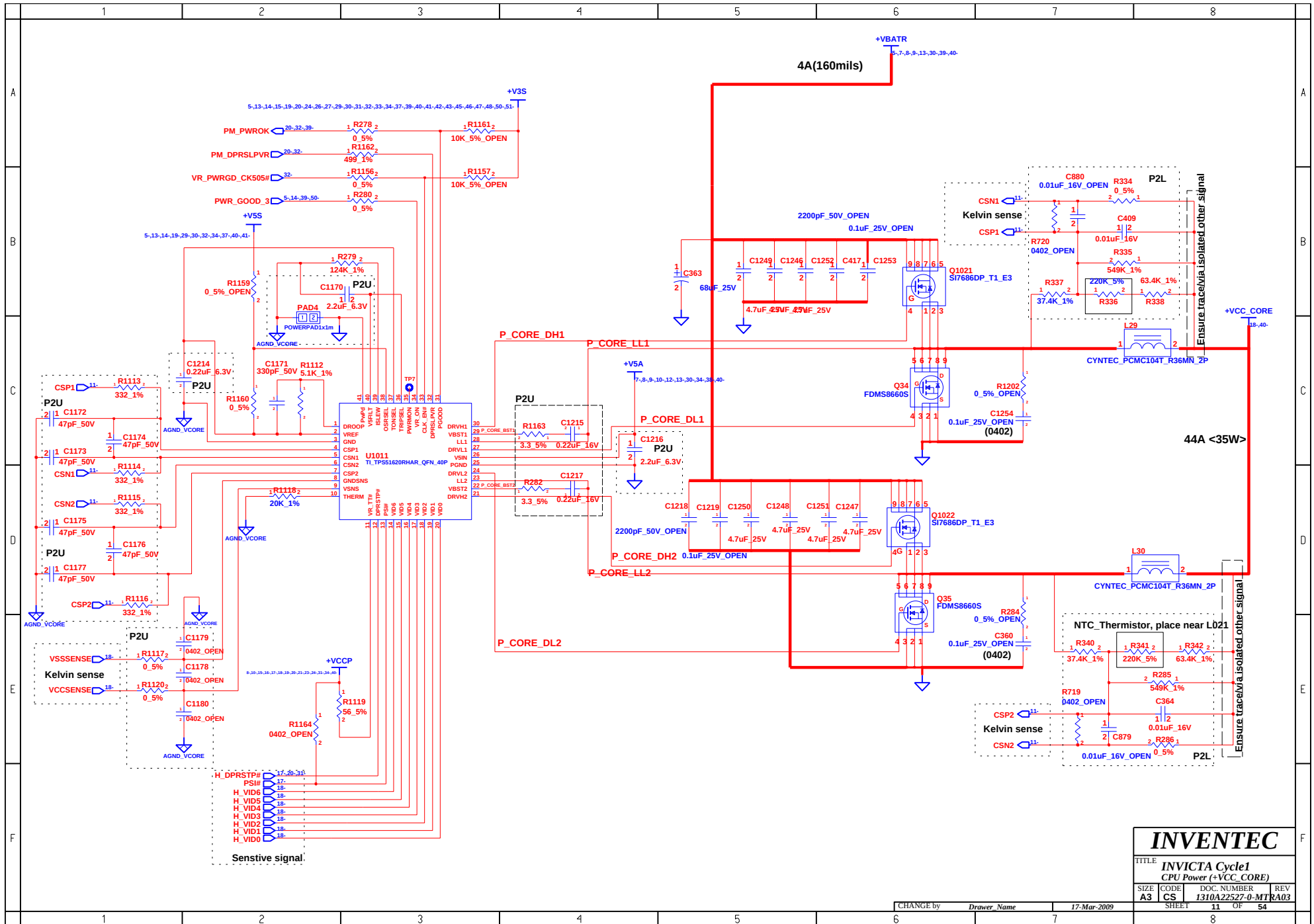
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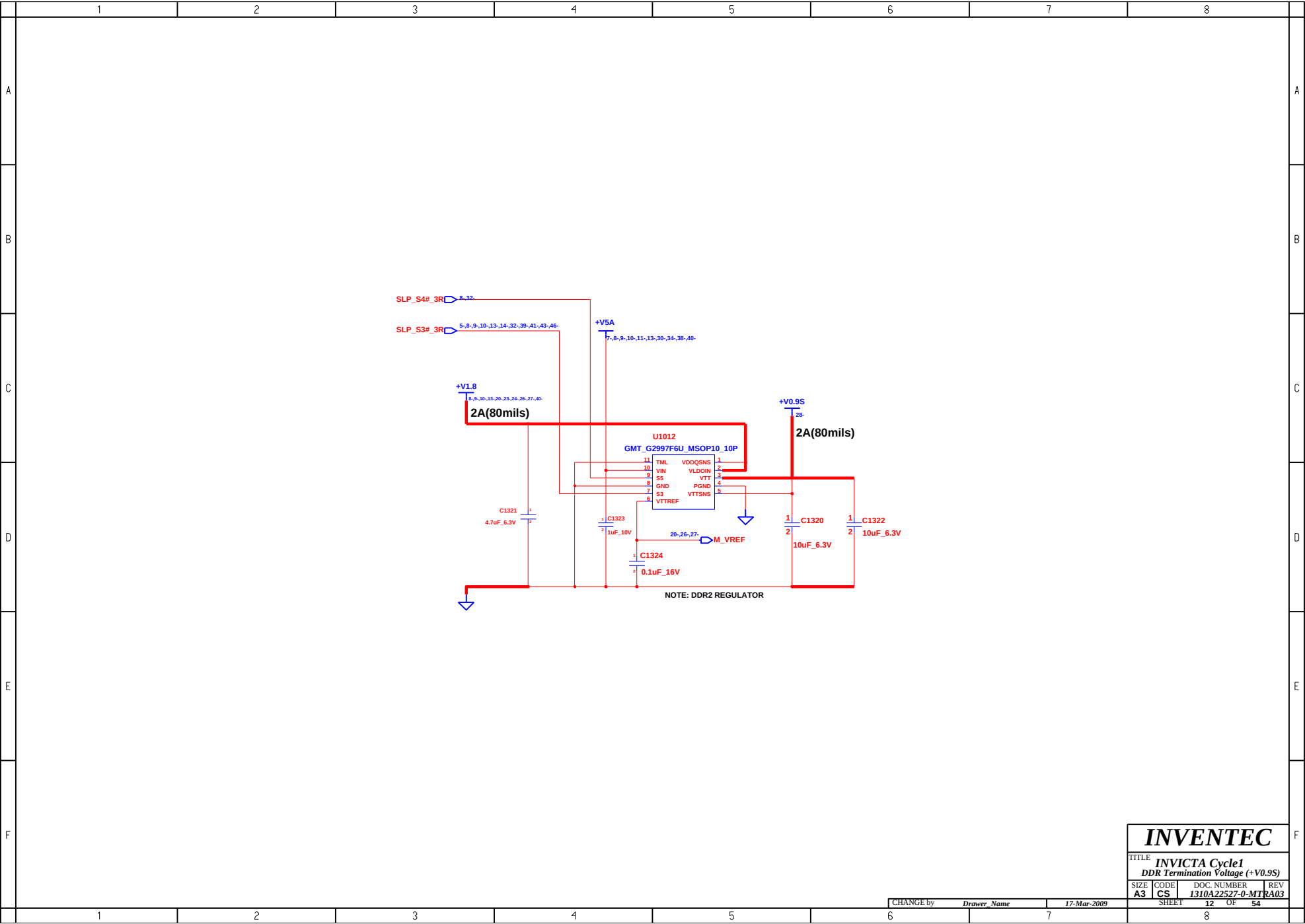
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INVICTA Cycle1
System Power (+V1.5S)

SIZE A3	CODE CS	DOC. NUMBER I310AZ2527-0-MTR	REV A03
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CHANGE by *Drawer Name* 17-Mar-2009

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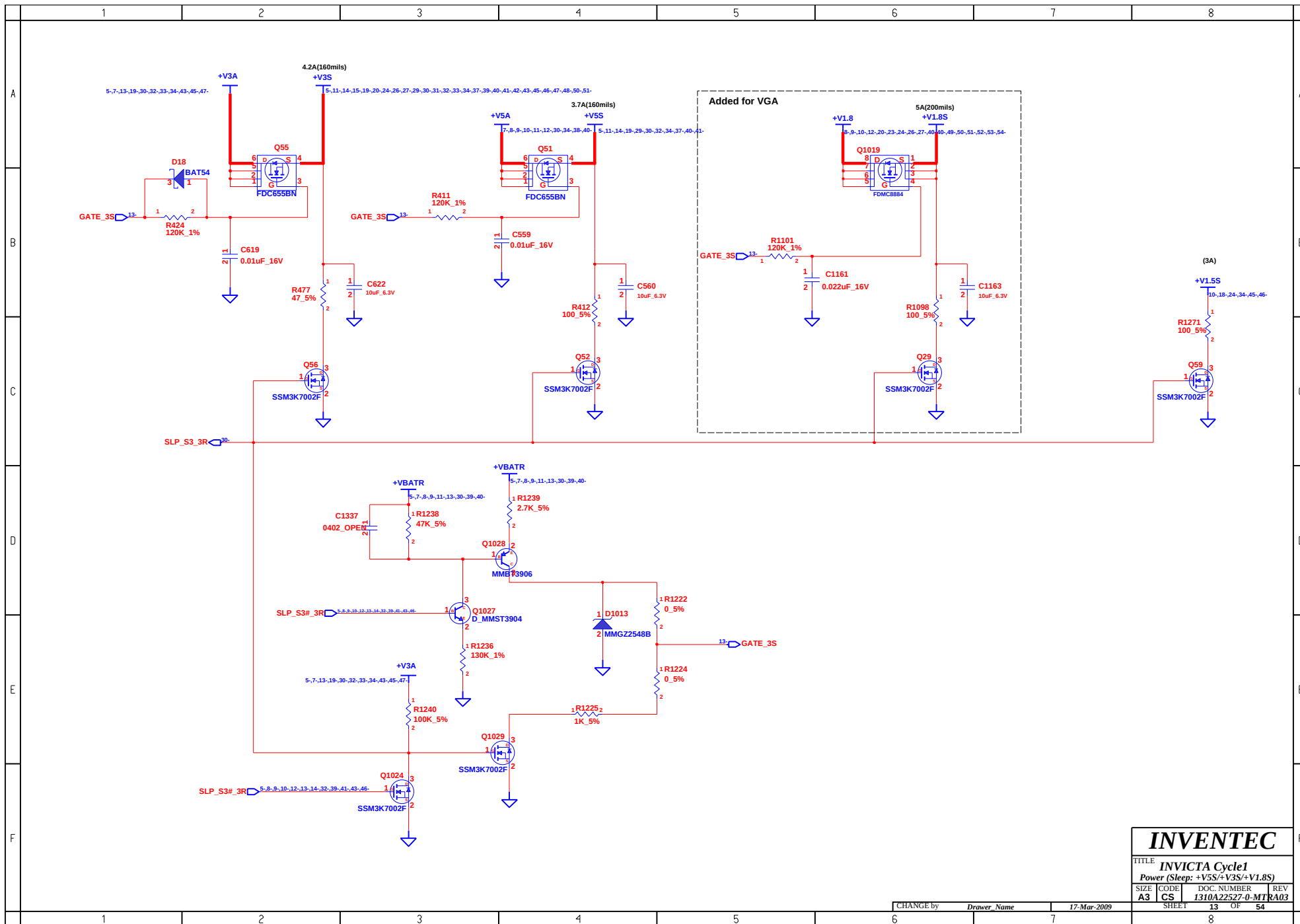
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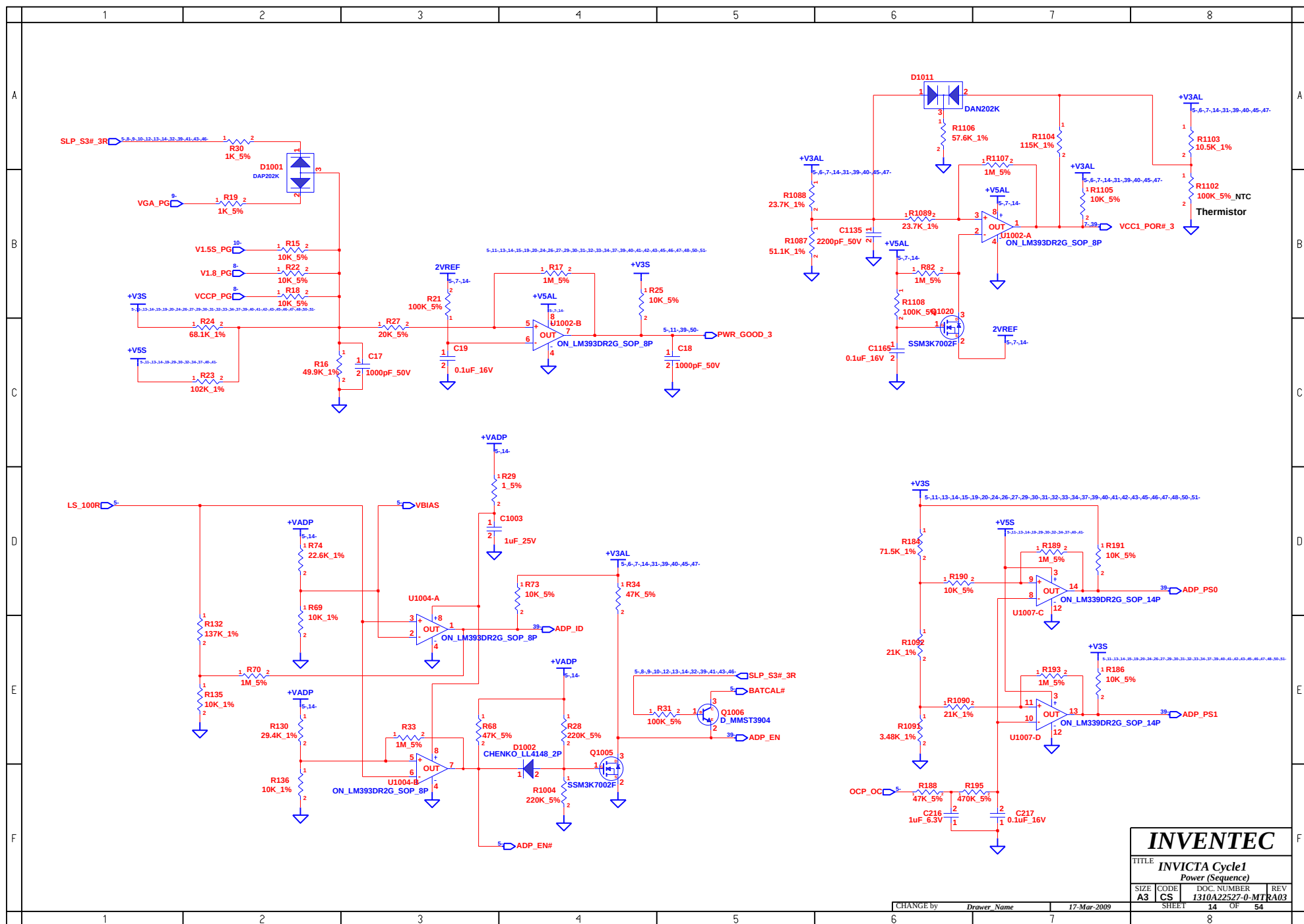
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DDR Termination Voltage (+V0.9S)

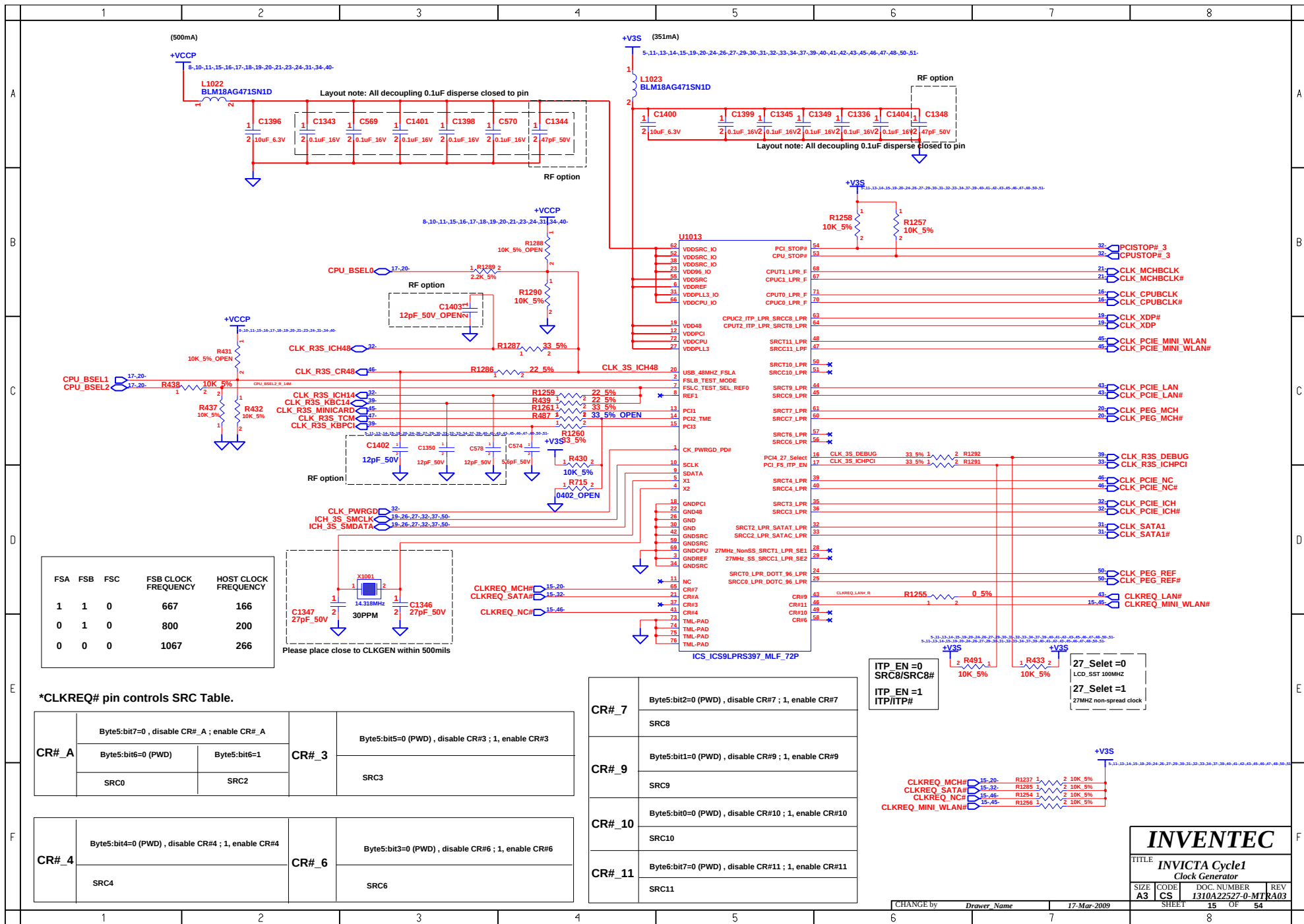
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22527-0-MT	RA03

CHANGE by *Drawn Name* 17-Mar-2009

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

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	

ITP_EN=0
SRC8/SRC8#
ITP_EN=1
ITP/ITP#

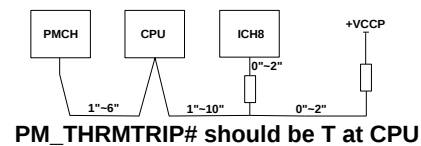
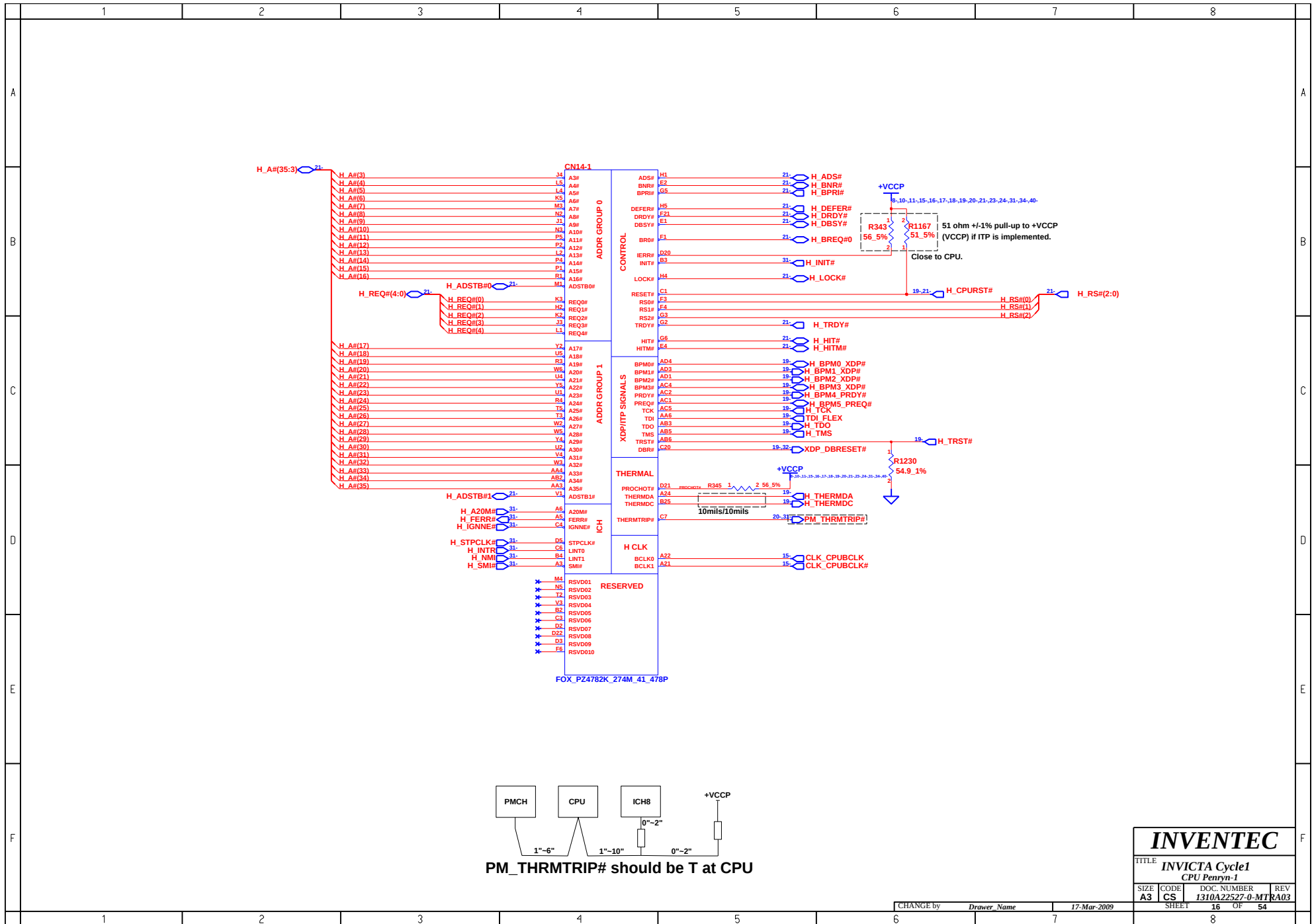
27_Select=0
LCD_SST 100MHz
27_Select=1
27MHz non-spread clock

INVENTEC

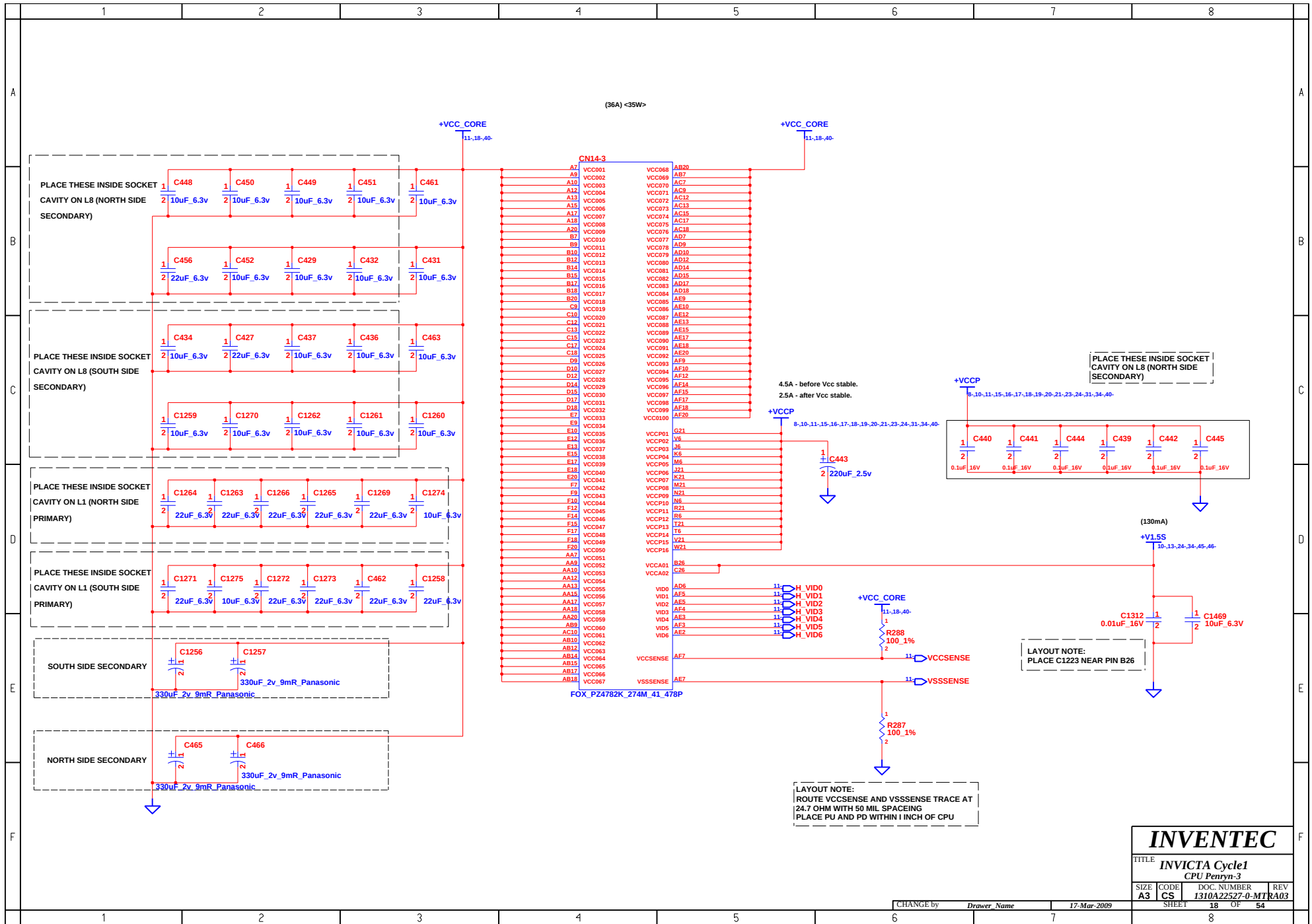
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INVICTA Cycle1
Clock Generator

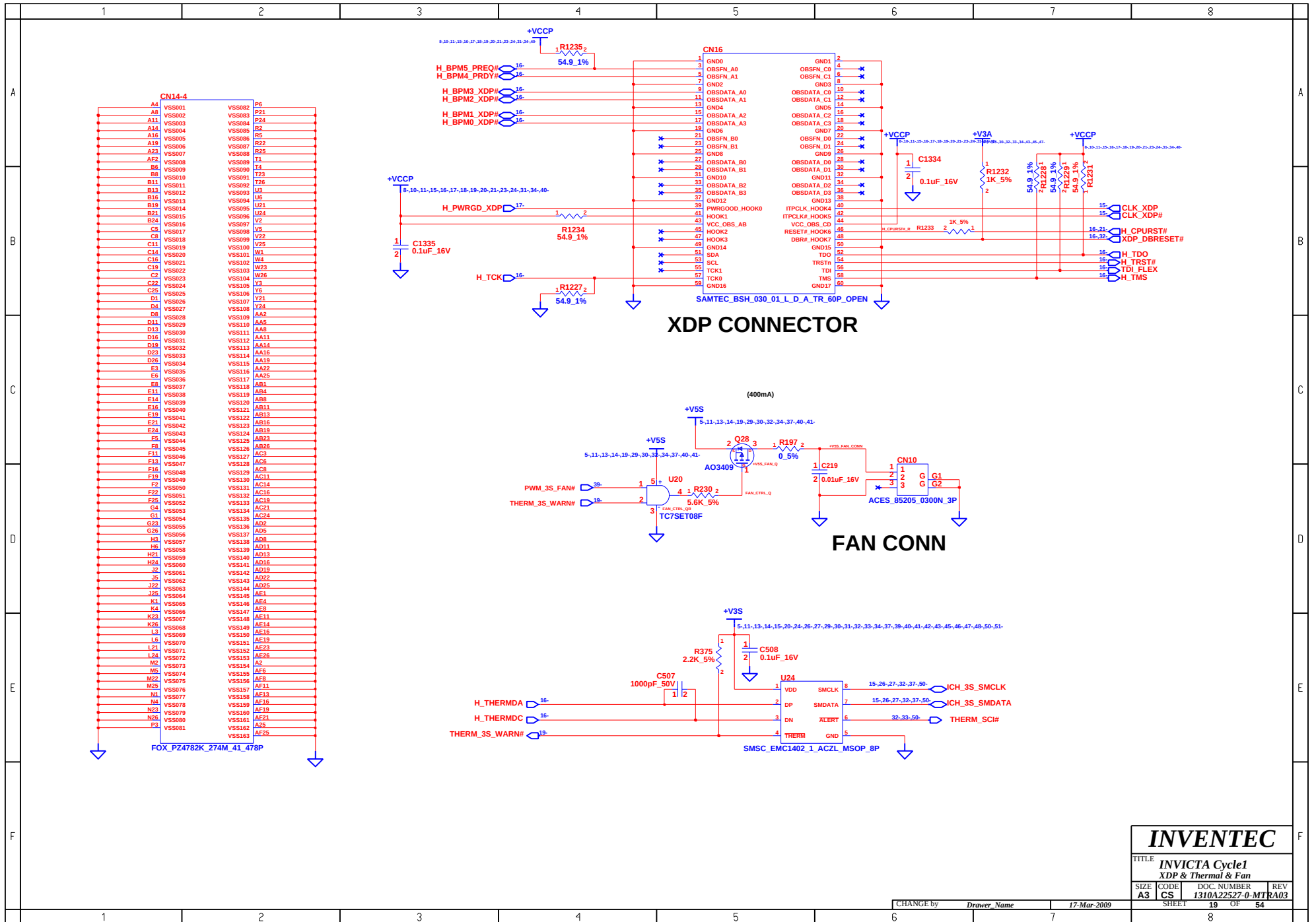
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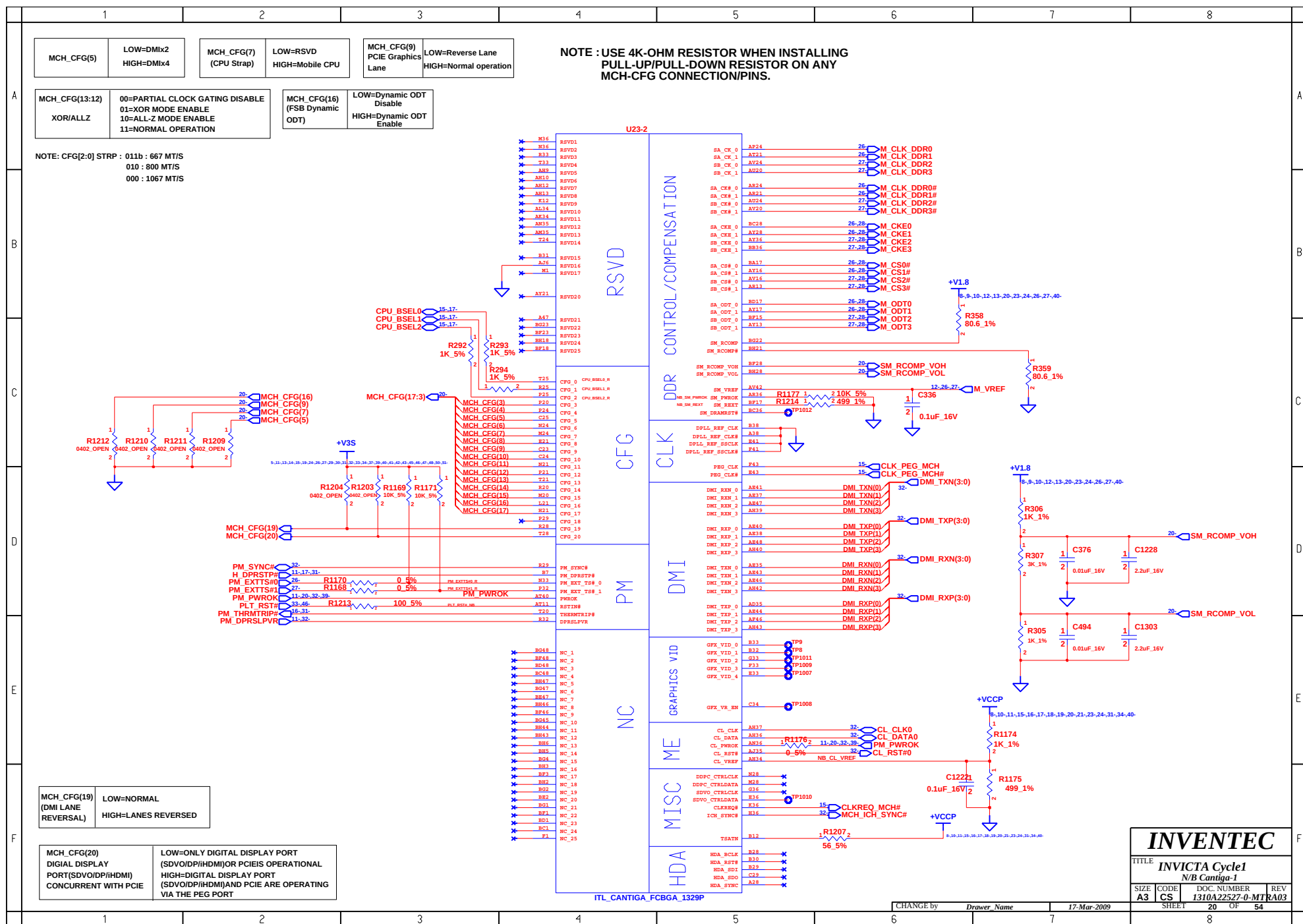
SHEET 15 OF 54

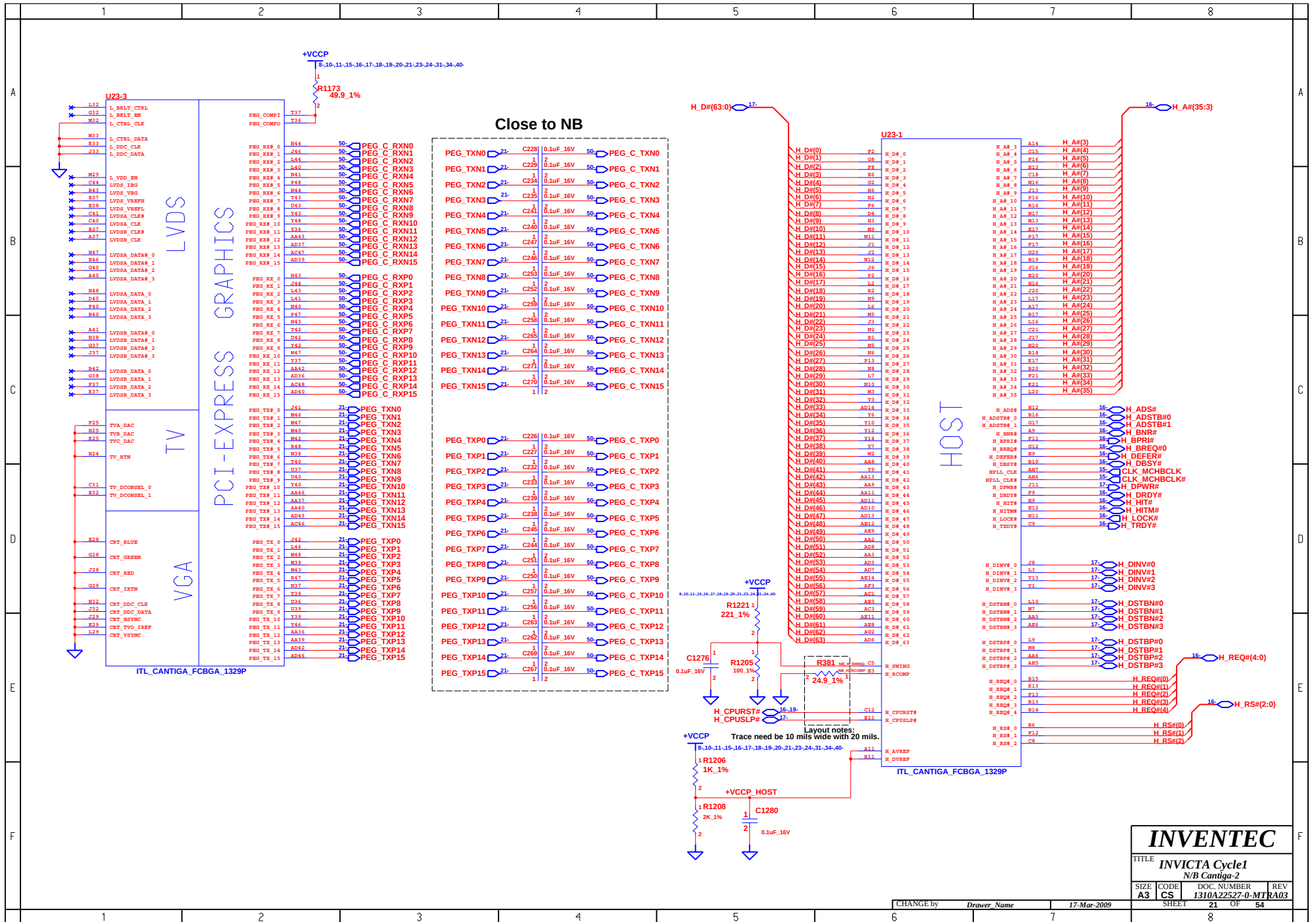


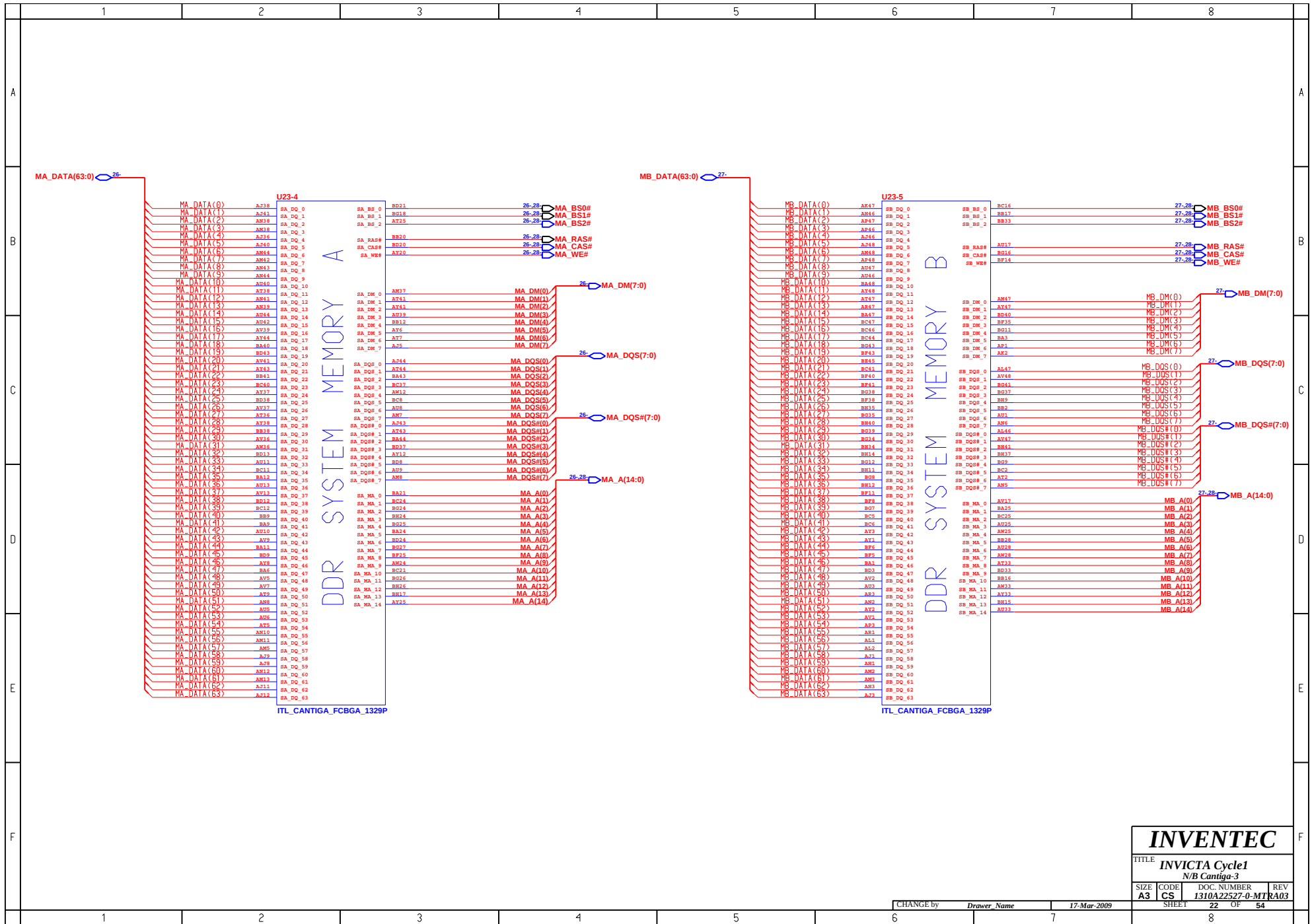
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TITLE INVICTA Cycle1 CPU Penryn-1			
SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MT	REV RA03
CHANGE by		17-Mar-2009	
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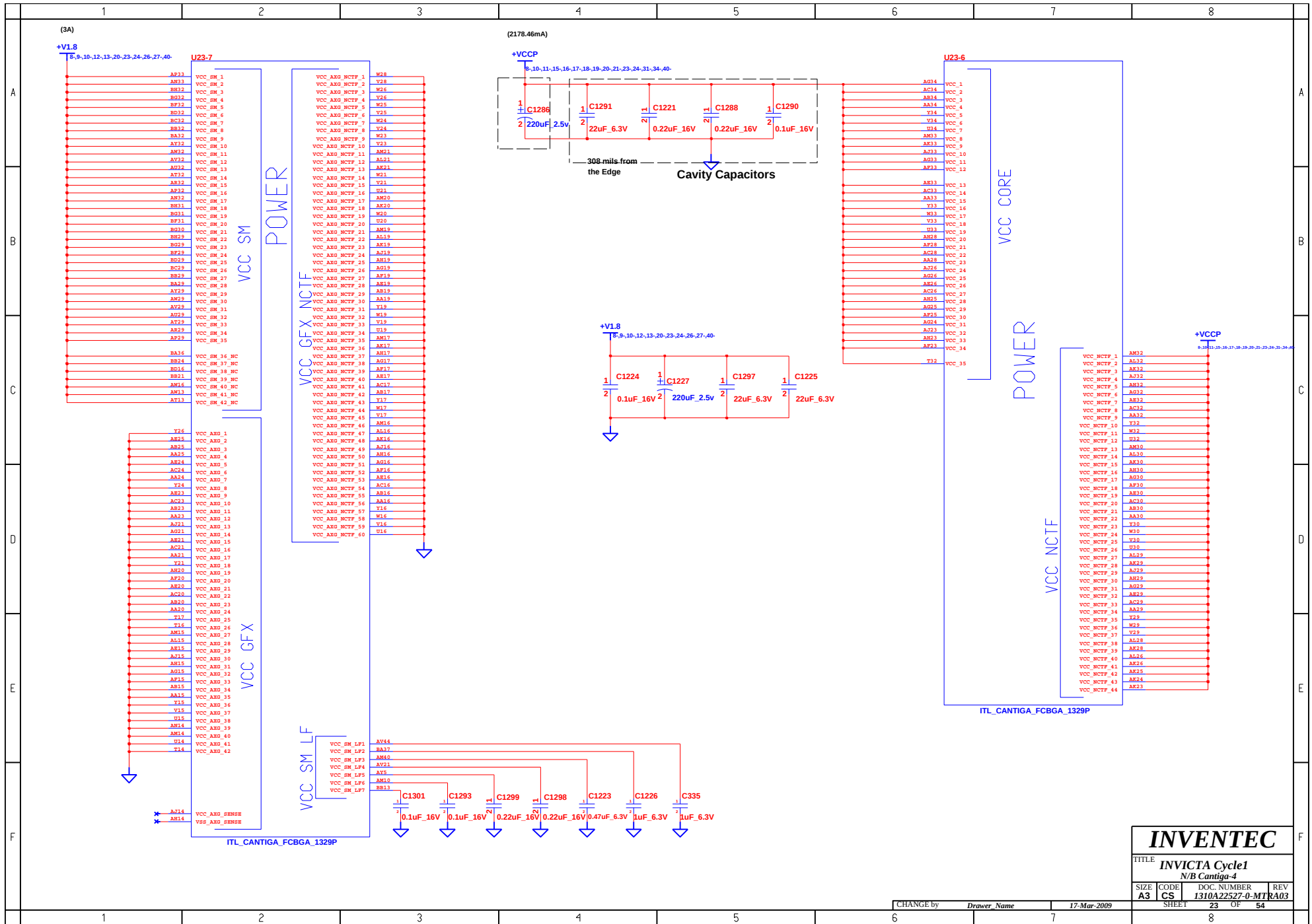




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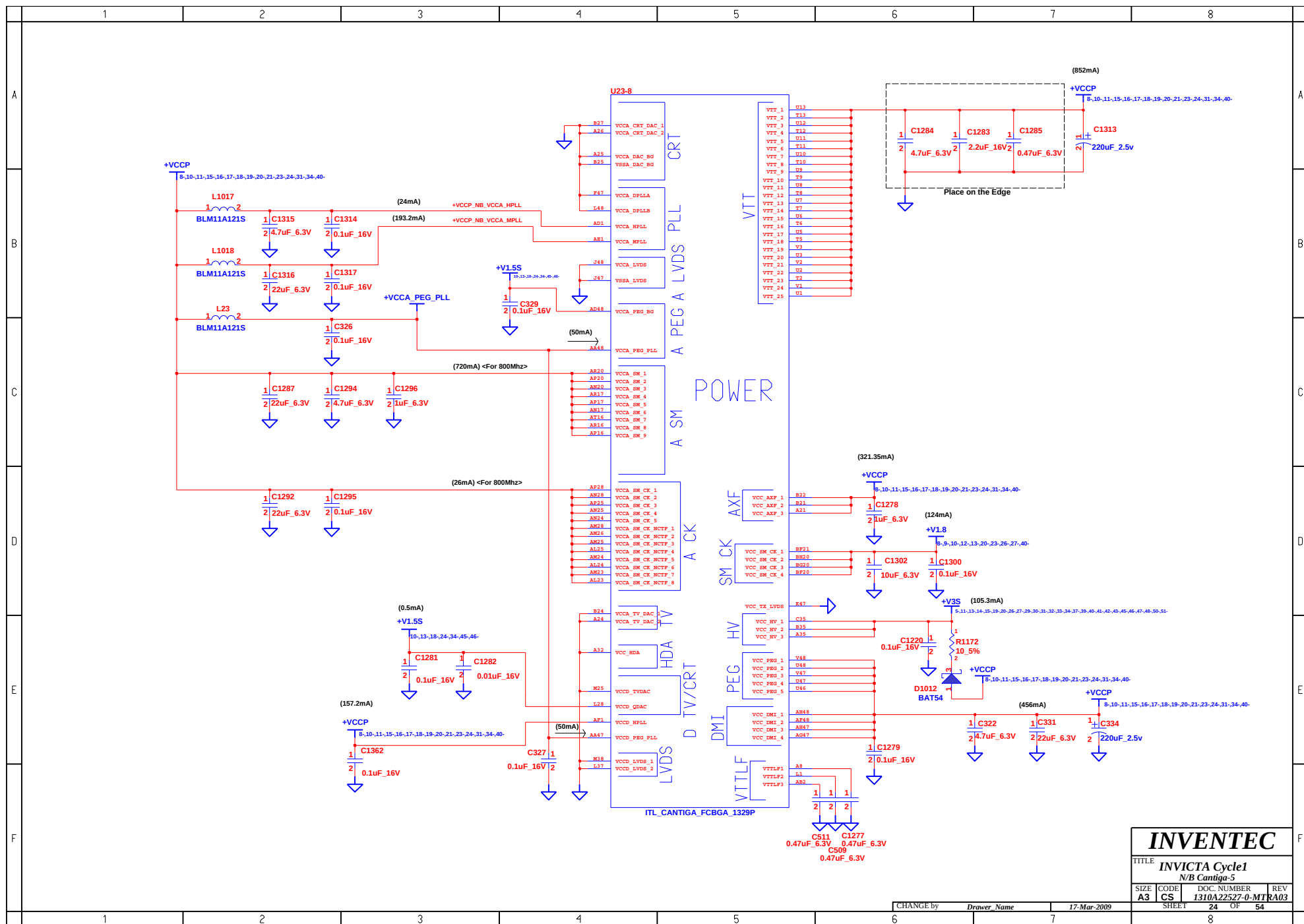
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SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MTR	REV A03

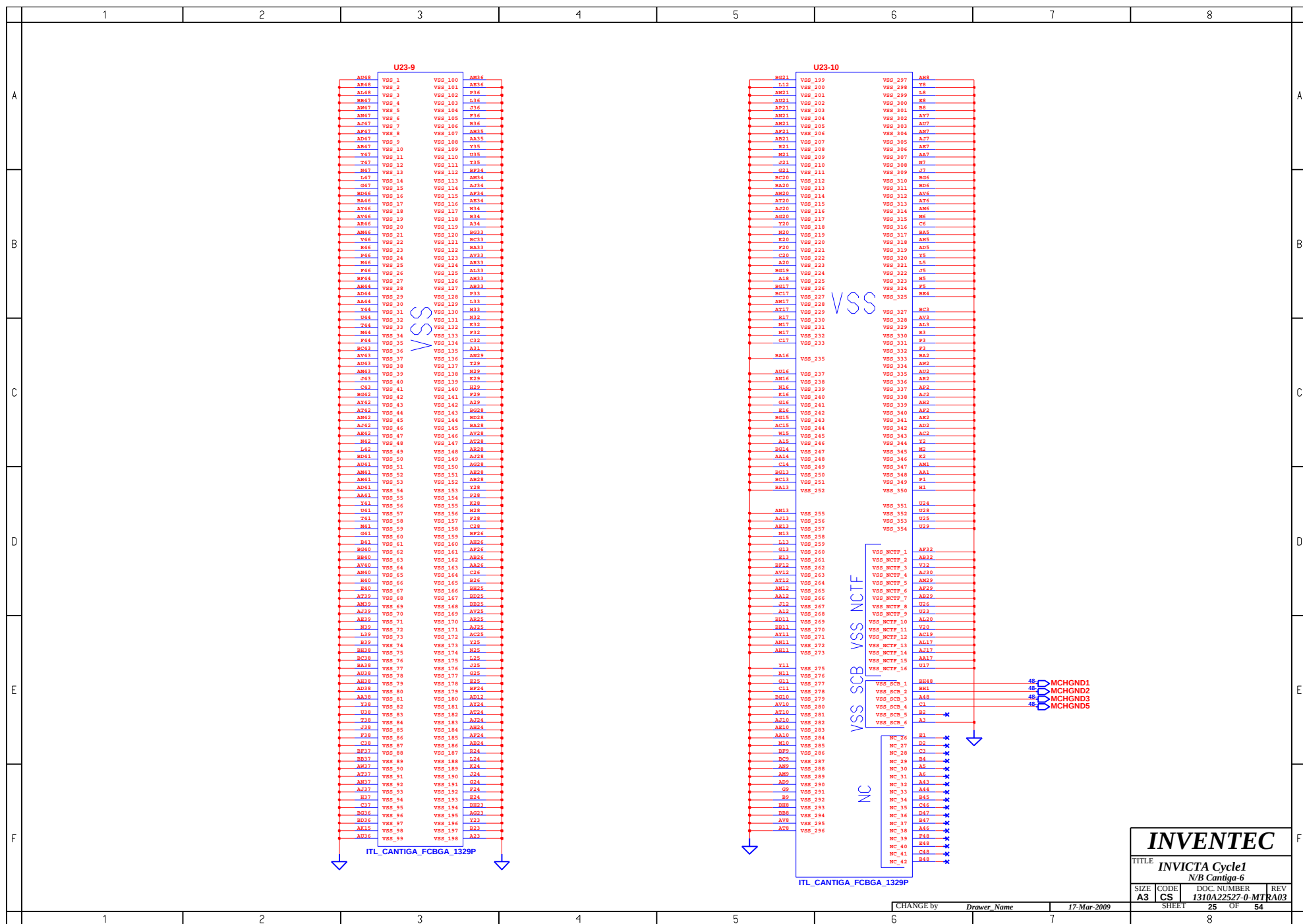
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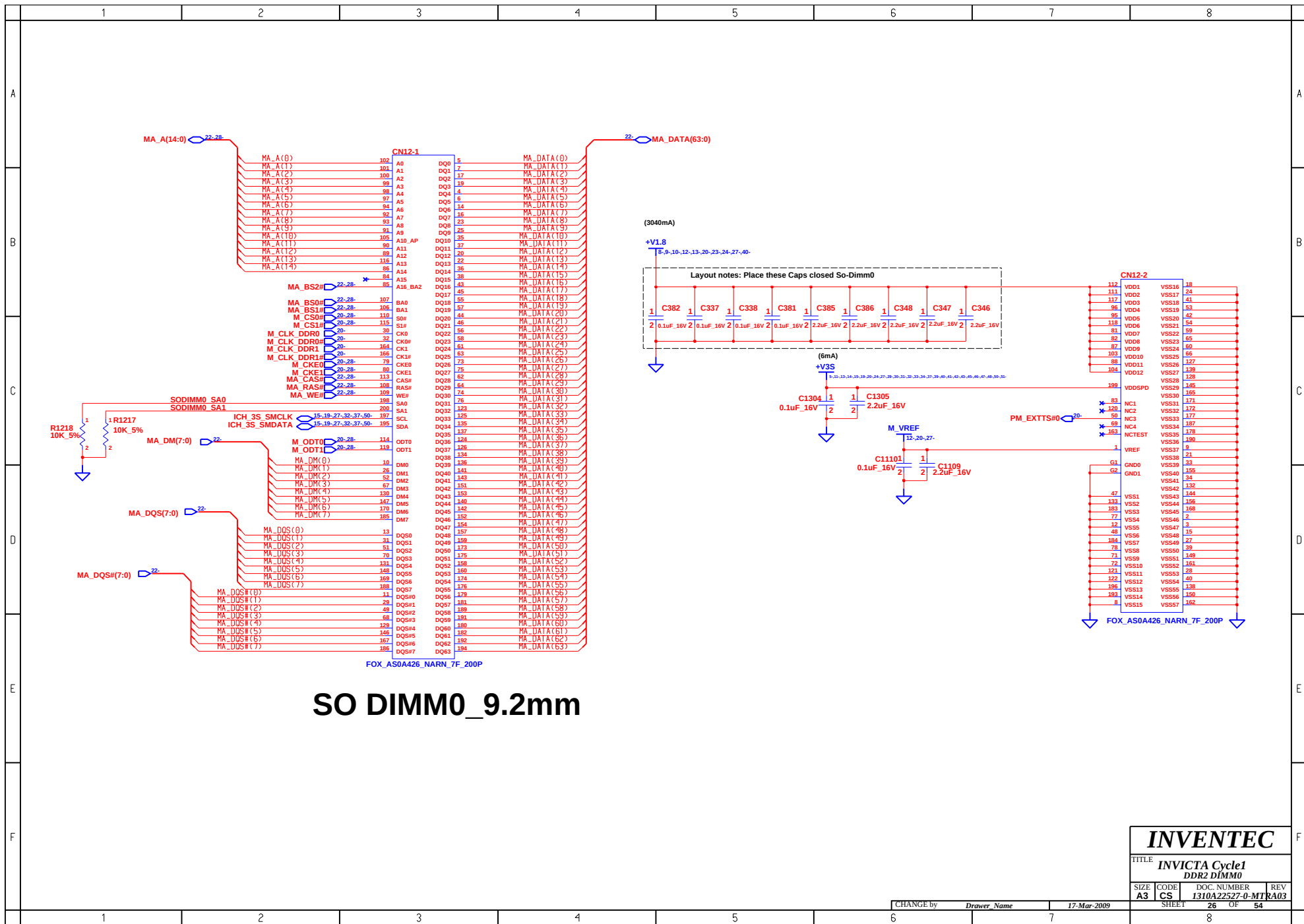


INVENTEC

TITLE			
INVICTA Cycle1			
N/B Cantiga-4			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22527-0-MT	RA03







SO DIMM0_9.2mm

INVENTEC

TITLE
INVICTA Cycle1
DDR2 DIMM0

SIZE
A3

CODE
CS

DOC. NUMBER
1310A22527-0-MT

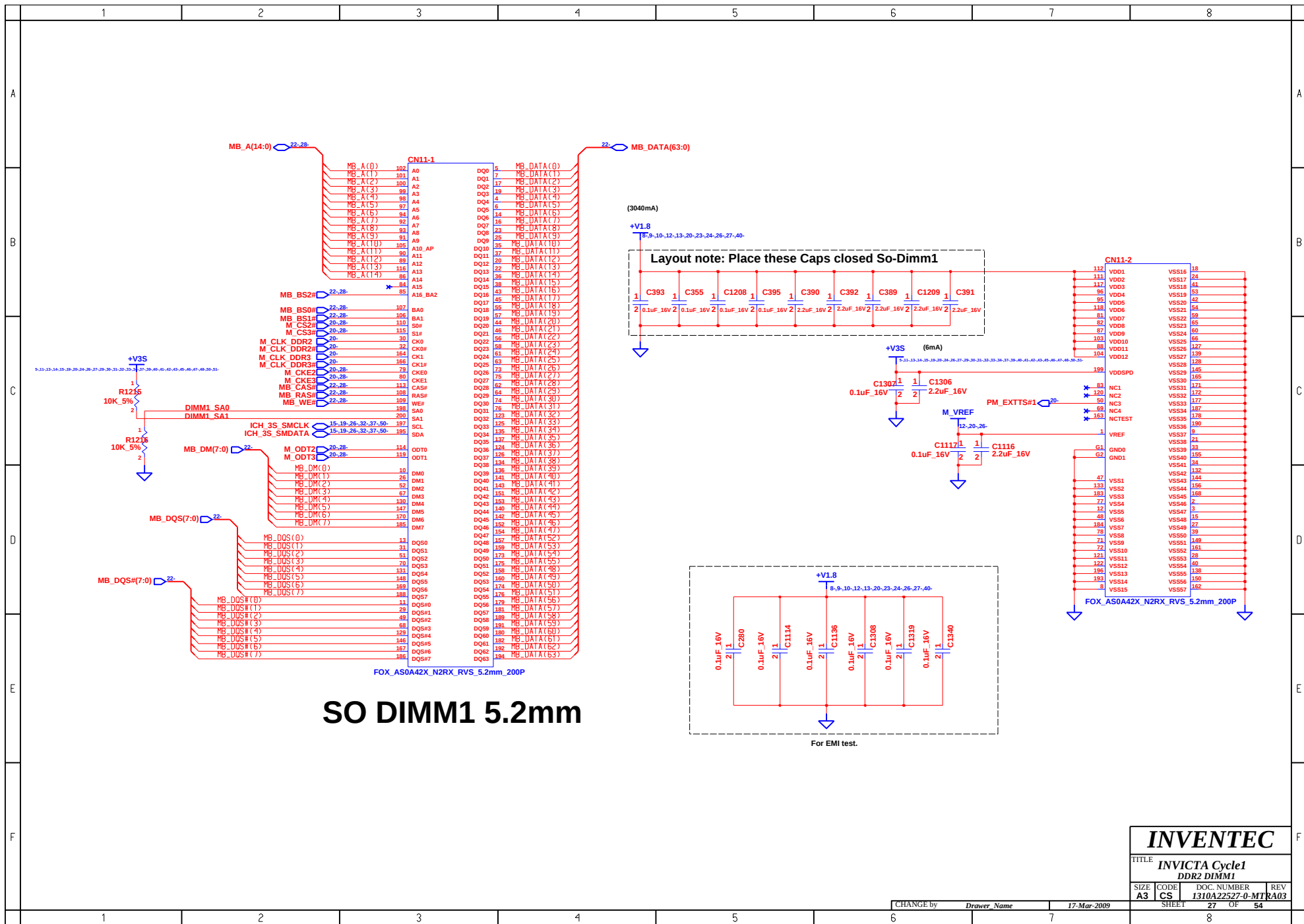
REV
RA03

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Drawer Name

17-Mar-2009

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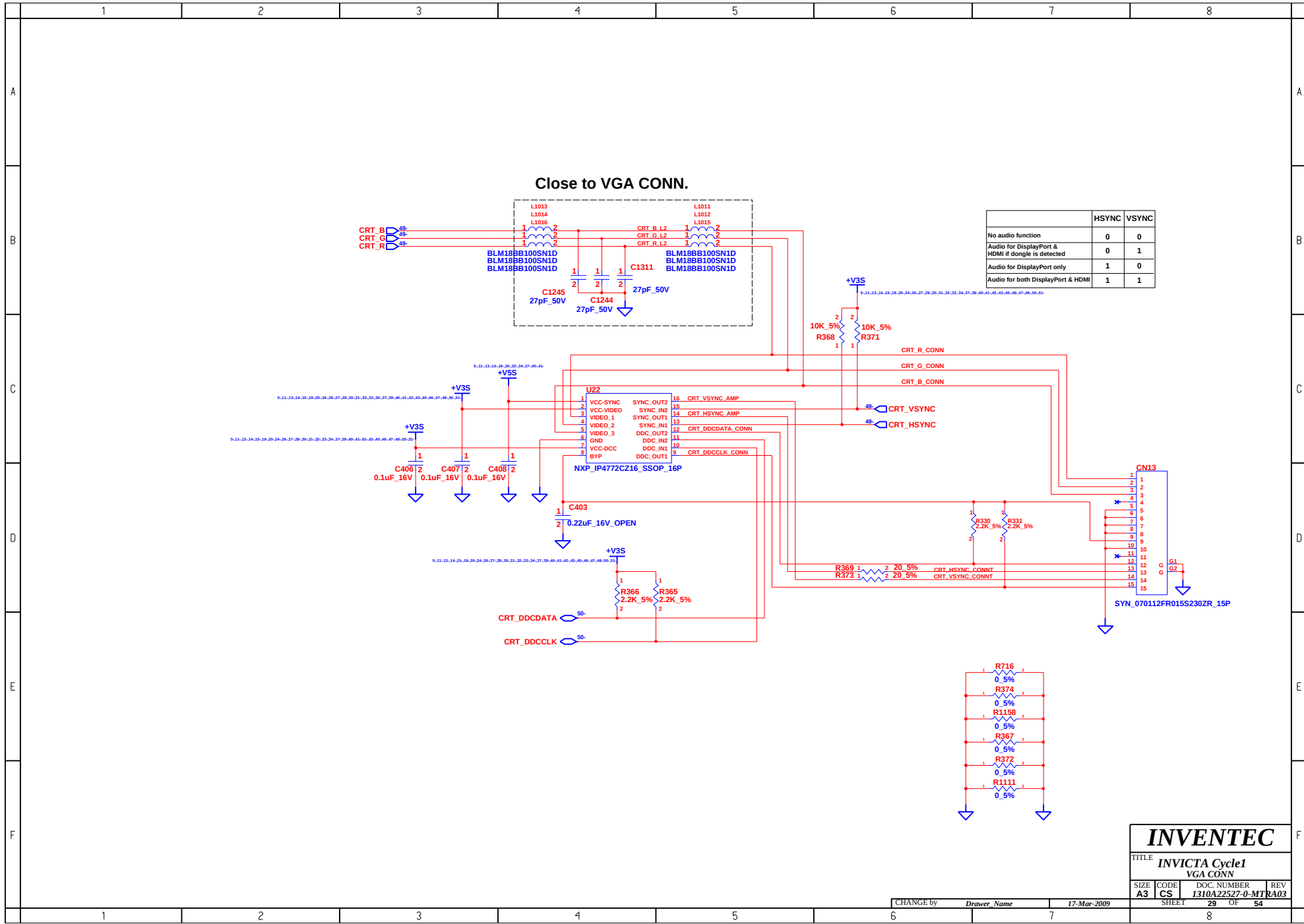
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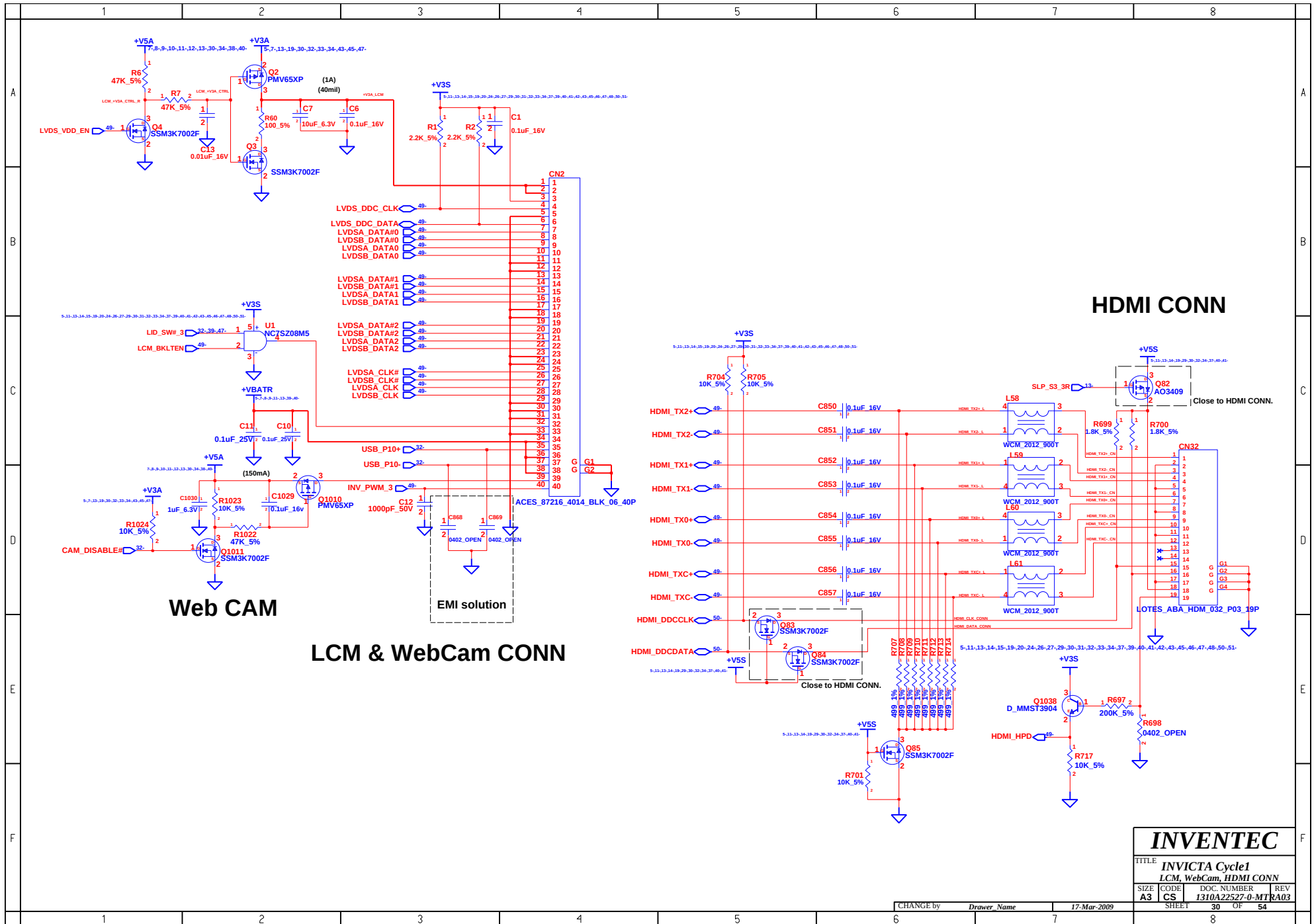
TITLE INVICTA Cycle1 DDR2 DIMM1			
SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MT	REV RA03

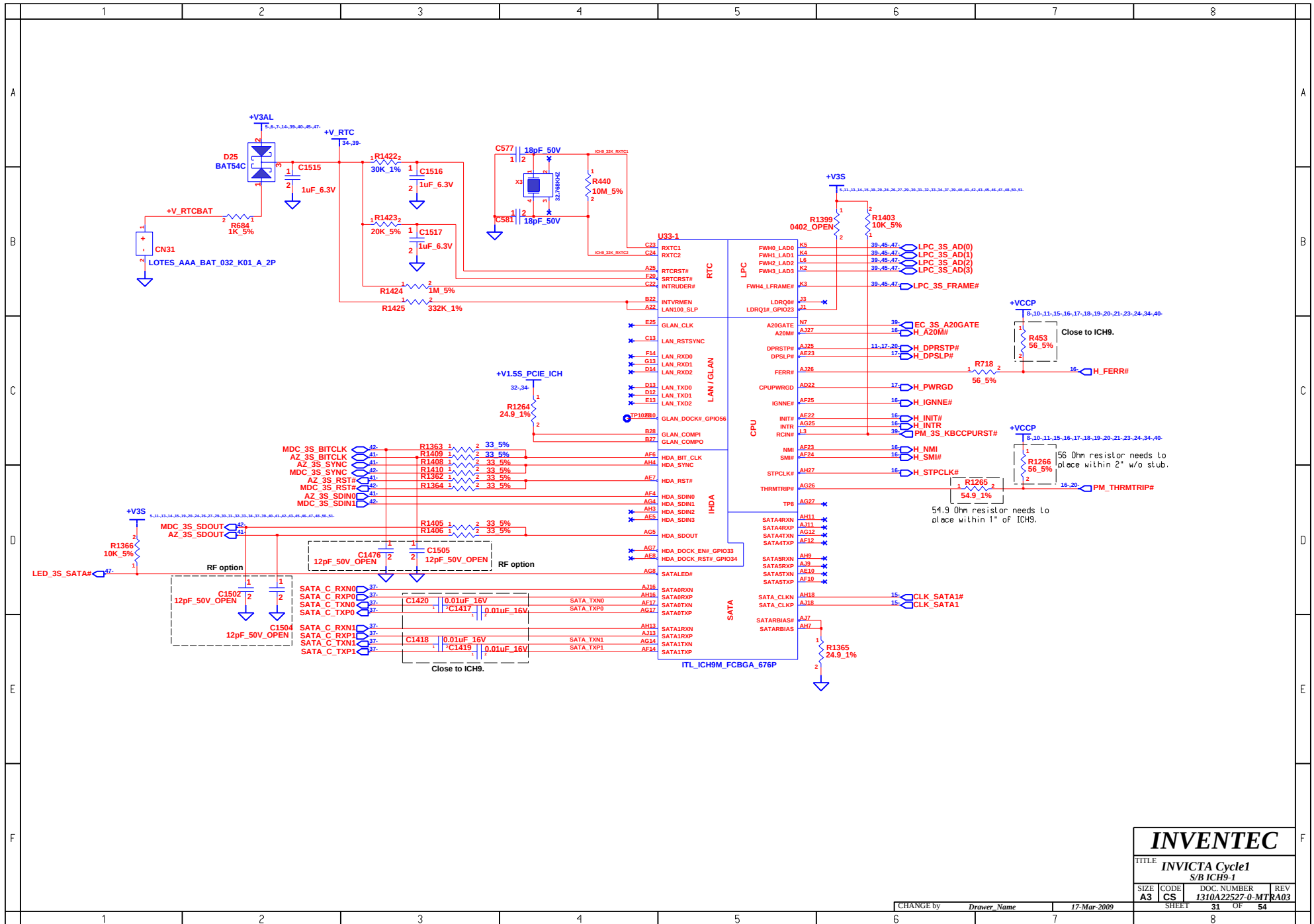
CHANGE by *Drawn Name* 17-Mar-2009

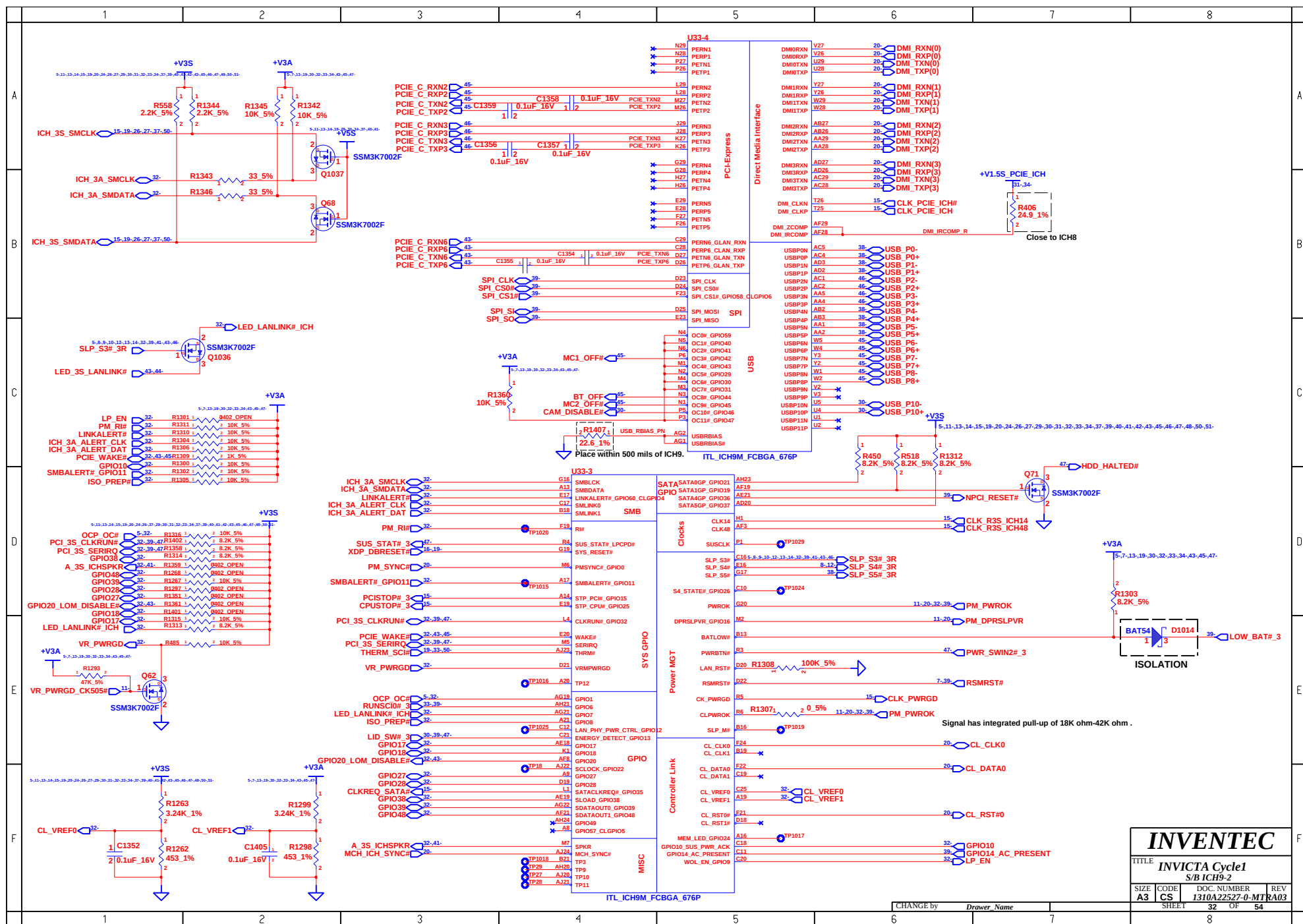
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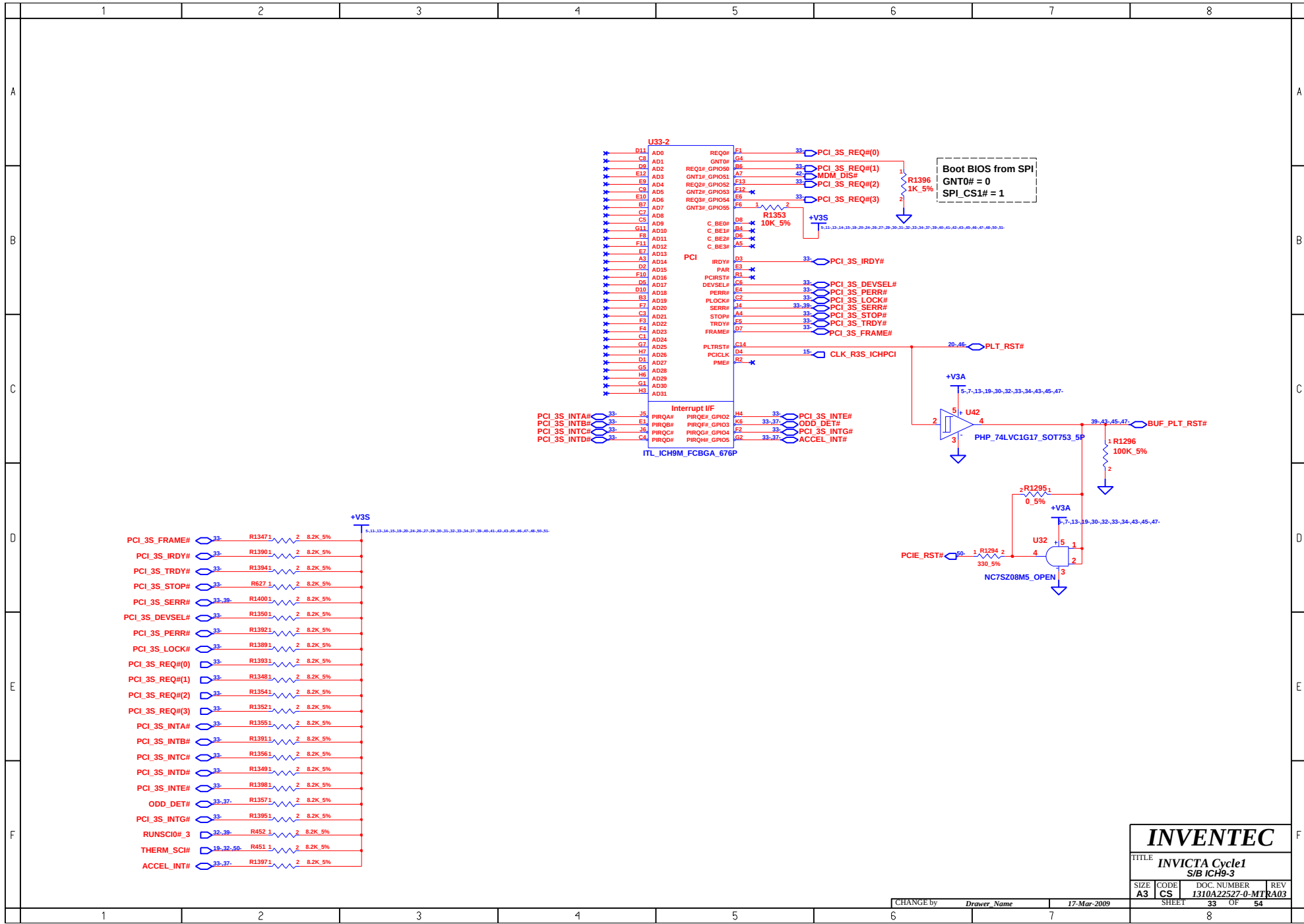












INVENTEC

TITLE
INVICTA Cycle1
S/B ICH9-3

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22527-0-MTR	RA03

CHANGE by Drafter Name 17-Mar-2009

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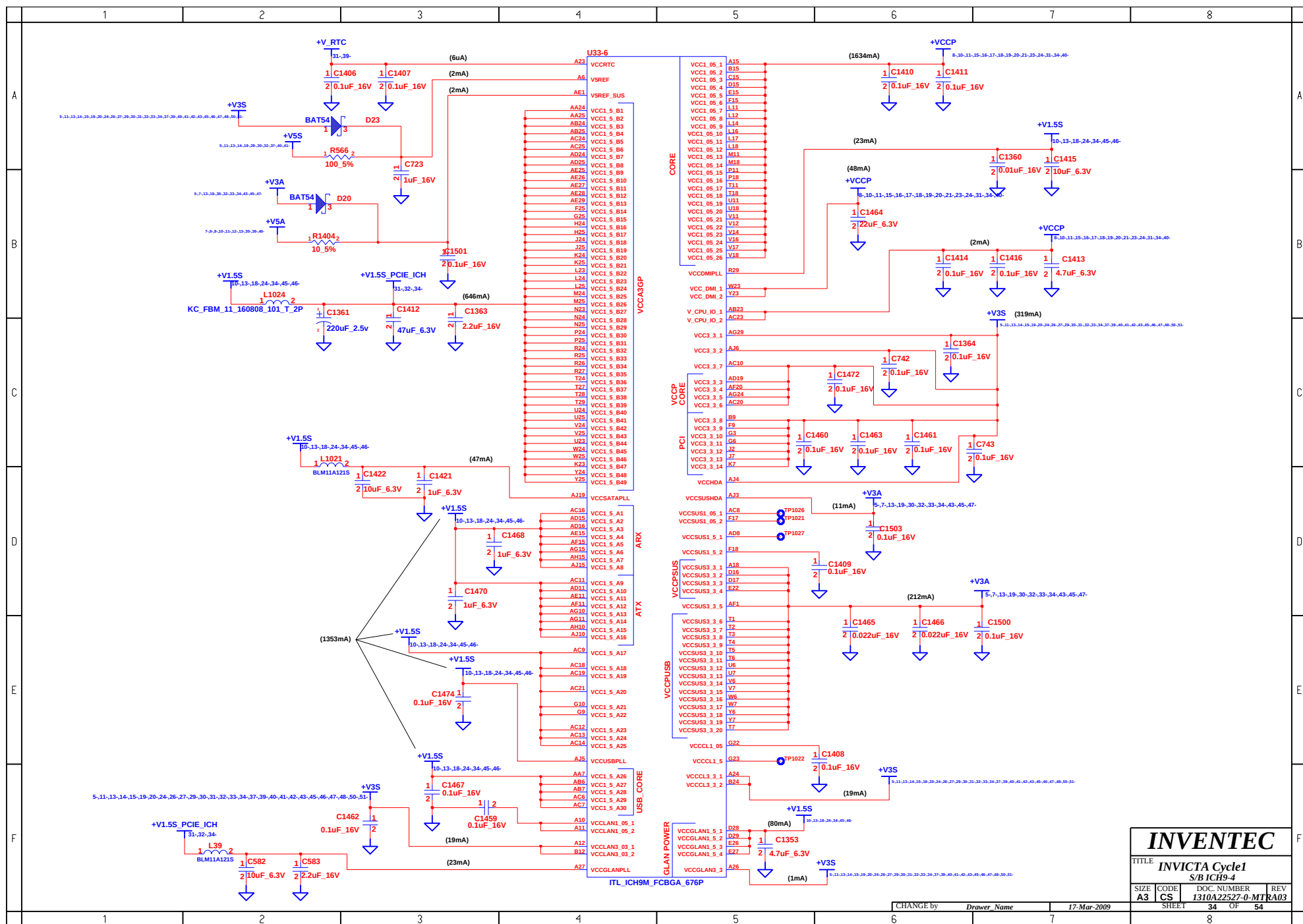


Diagram showing the pinout of the ICH9M FCBGA 676P package, organized into columns 1 through 8. The package is labeled U33-5.

Pinout List:

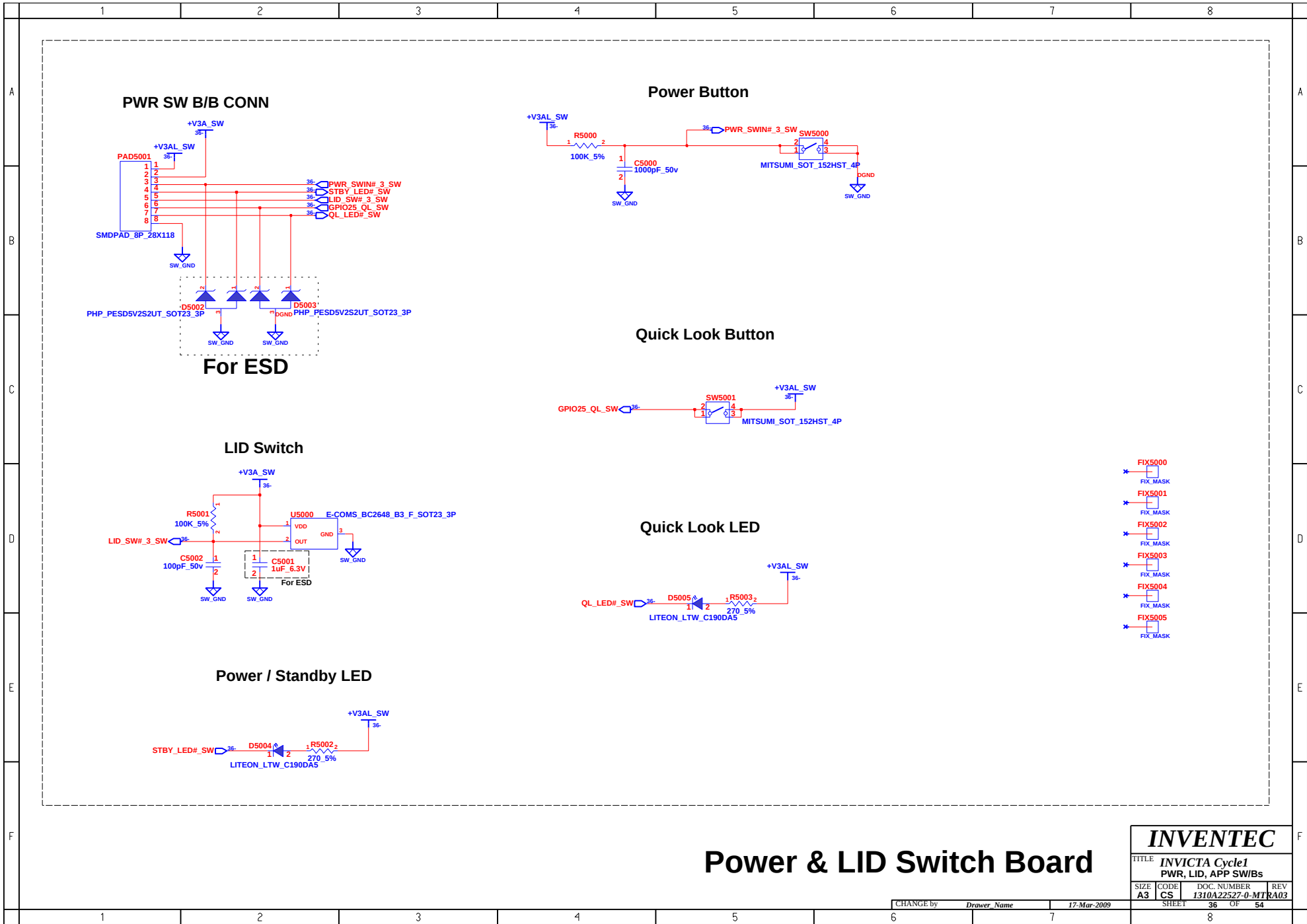
Pin	Signal	Pin	Signal
AA26	VSS001	VSS107	M5
AA27	VSS002	VSS108	M23
AA3	VSS003	VSS109	M26
AA6	VSS004	VSS110	M27
AB1	VSS005	VSS111	AC22
AB2	VSS006	VSS112	K28
AB28	VSS007	VSS113	K29
AB29	VSS008	VSS114	L13
AB4	VSS009	VSS115	L15
AB5	VSS010	VSS116	L2
AC17	VSS011	VSS117	L26
AC26	VSS012	VSS118	L27
AC27	VSS013	VSS119	L5
AC3	VSS014	VSS120	L7
AD1	VSS015	VSS121	M12
AD10	VSS016	VSS122	M13
AD12	VSS017	VSS123	M14
AD13	VSS018	VSS124	M15
AD14	VSS019	VSS125	M16
AD17	VSS020	VSS126	M17
AD18	VSS021	VSS127	M23
AD21	VSS022	VSS128	M28
AD28	VSS023	VSS129	M29
AD29	VSS024	VSS130	N11
AD4	VSS025	VSS131	N12
AD5	VSS026	VSS132	N13
AD6	VSS027	VSS133	N14
AD7	VSS028	VSS134	N15
AD9	VSS029	VSS135	N16
AE12	VSS030	VSS136	N17
AE13	VSS031	VSS137	N18
AE14	VSS032	VSS138	N27
AE16	VSS033	VSS139	P12
AE17	VSS034	VSS140	P13
AE2	VSS035	VSS141	P14
AE20	VSS036	VSS142	P15
AE24	VSS037	VSS143	P16
AE3	VSS038	VSS144	P17
AE4	VSS039	VSS145	P2
AE6	VSS040	VSS146	P23
AE9	VSS041	VSS147	P28
AF13	VSS042	VSS148	P29
AF16	VSS043	VSS149	P4
AF18	VSS044	VSS150	P7
AF22	VSS045	VSS151	R11
AH26	VSS046	VSS152	R12
AF26	VSS047	VSS153	R13
AF27	VSS048	VSS154	R14
AF5	VSS049	VSS155	R15
AF7	VSS050	VSS156	R16
AF9	VSS051	VSS157	R17
AG11	VSS052	VSS158	R18
AG16	VSS053	VSS159	R28
AG18	VSS054	VSS160	T12
AG20	VSS055	VSS161	T13
AG23	VSS056	VSS162	T14
AG3	VSS057	VSS163	T15
AG6	VSS058	VSS164	T16
AG9	VSS059	VSS165	T17
AH12	VSS060	VSS166	T23
AH14	VSS061	VSS167	U12
AH17	VSS062	VSS168	U13
AH18	VSS063	VSS169	U14
AH2	VSS064	VSS170	U15
AH22	VSS065	VSS171	U16
AH29	VSS066	VSS172	U17
AH28	VSS067	VSS173	AD23
AH5	VSS068	VSS174	U26
AH8	VSS069	VSS175	U27
AJ12	VSS070	VSS176	U3
AJ14	VSS071	VSS177	V1
AJ17	VSS072	VSS178	V13
AJ8	VSS073	VSS179	V15
B11	VSS074	VSS180	V23
B14	VSS075	VSS181	V26
B17	VSS076	VSS182	V28
B2	VSS077	VSS183	V4
B20	VSS078	VSS184	V5
B23	VSS079	VSS185	W26
B5	VSS080	VSS186	W27
B8	VSS081	VSS187	W2
C26	VSS082	VSS188	Y1
C27	VSS083	VSS189	Y2
E11	VSS084	VSS190	Y5
E14	VSS085	VSS191	AG28
E18	VSS086	VSS192	AH6
E2	VSS087	VSS193	AF2
E21	VSS088	VSS194	B25
E24	VSS089	VSS195	A1
E3	VSS090	VSS196	A2
E8	VSS091	VSS197	A28
F16	VSS092	VSS198	A29
F28	VSS093	VSS199	AH29
F29	VSS094	VSS200	A31
G12	VSS095	VSS201	A32
G14	VSS096	VSS202	A32B
G18	VSS097	VSS203	A329
G21	VSS098	VSS204	B1
G24	VSS099	VSS205	B29
G26	VSS100	VSS206	
G27	VSS101	VSS207	
G8	VSS102	VSS208	
H2	VSS103	VSS209	
H23	VSS104	VSS210	
H28	VSS105	VSS211	
H29	VSS106	VSS212	

Package Labels:

- U33-5
- ITL_ICH9M_FCBGA_676P

Pinout Groups:

- ICHGND1 (Pins: AA26, AA27, AA3, AA6, AB1, AB2, AB28, AB29, AB4, AB5, AC17, AC26, AC27, AC3, AD1, AD10, AD12, AD13, AD14, AD1



Power & LID Switch Board

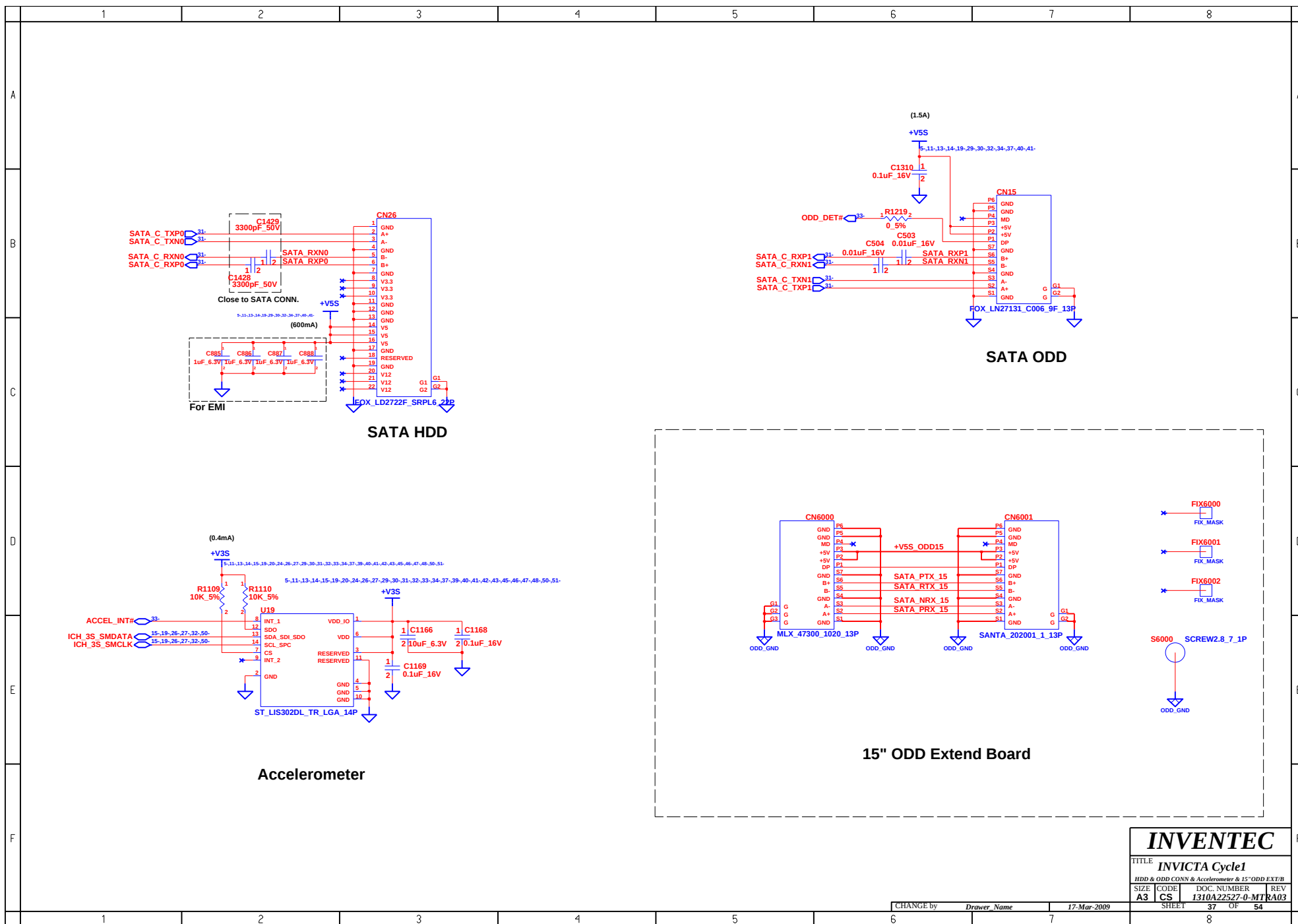
INVENTEC

TITLE **INVICTA Cycle1**
PWR, LID, APP SW/BS

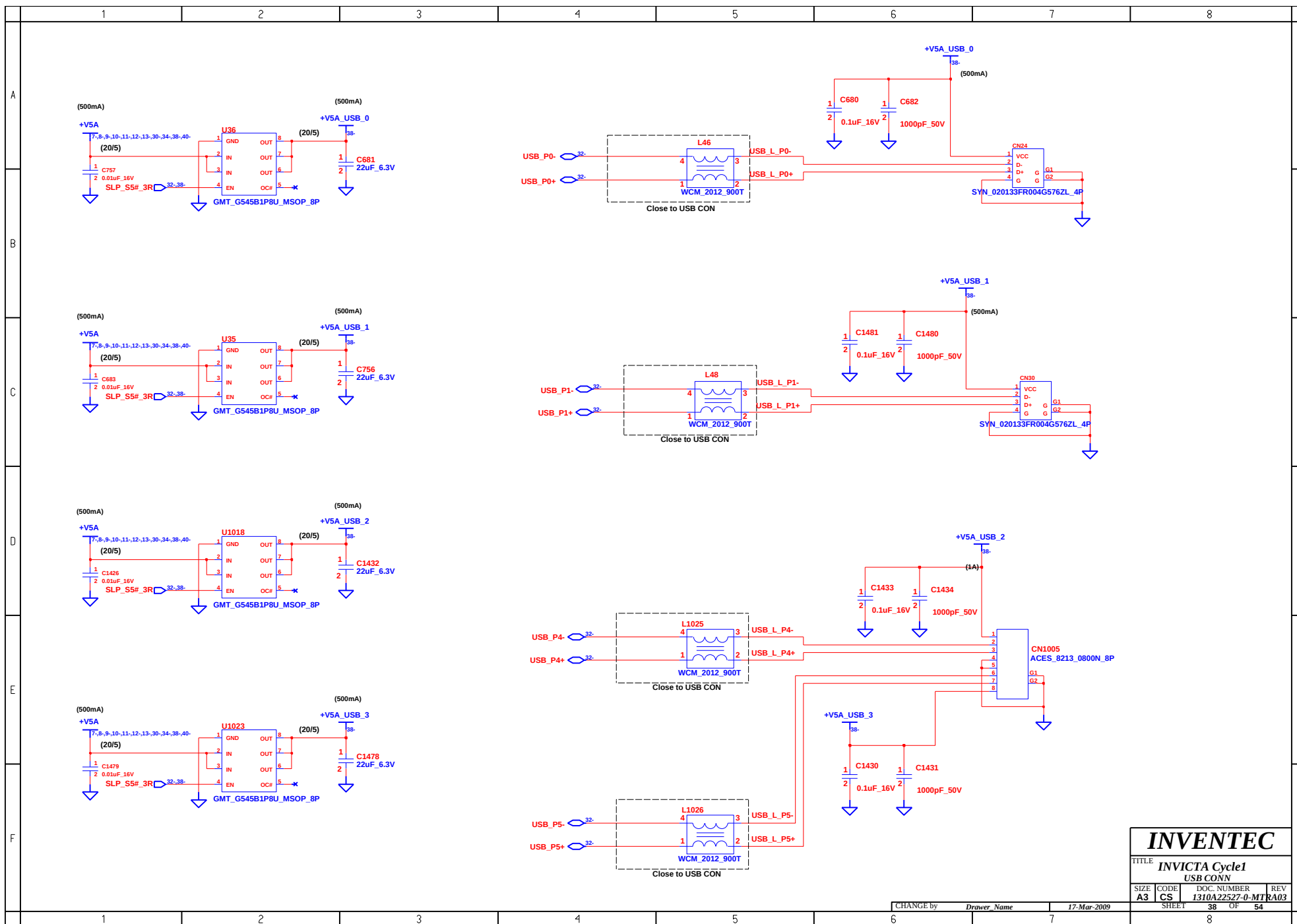
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A22527-0-MTR	A03

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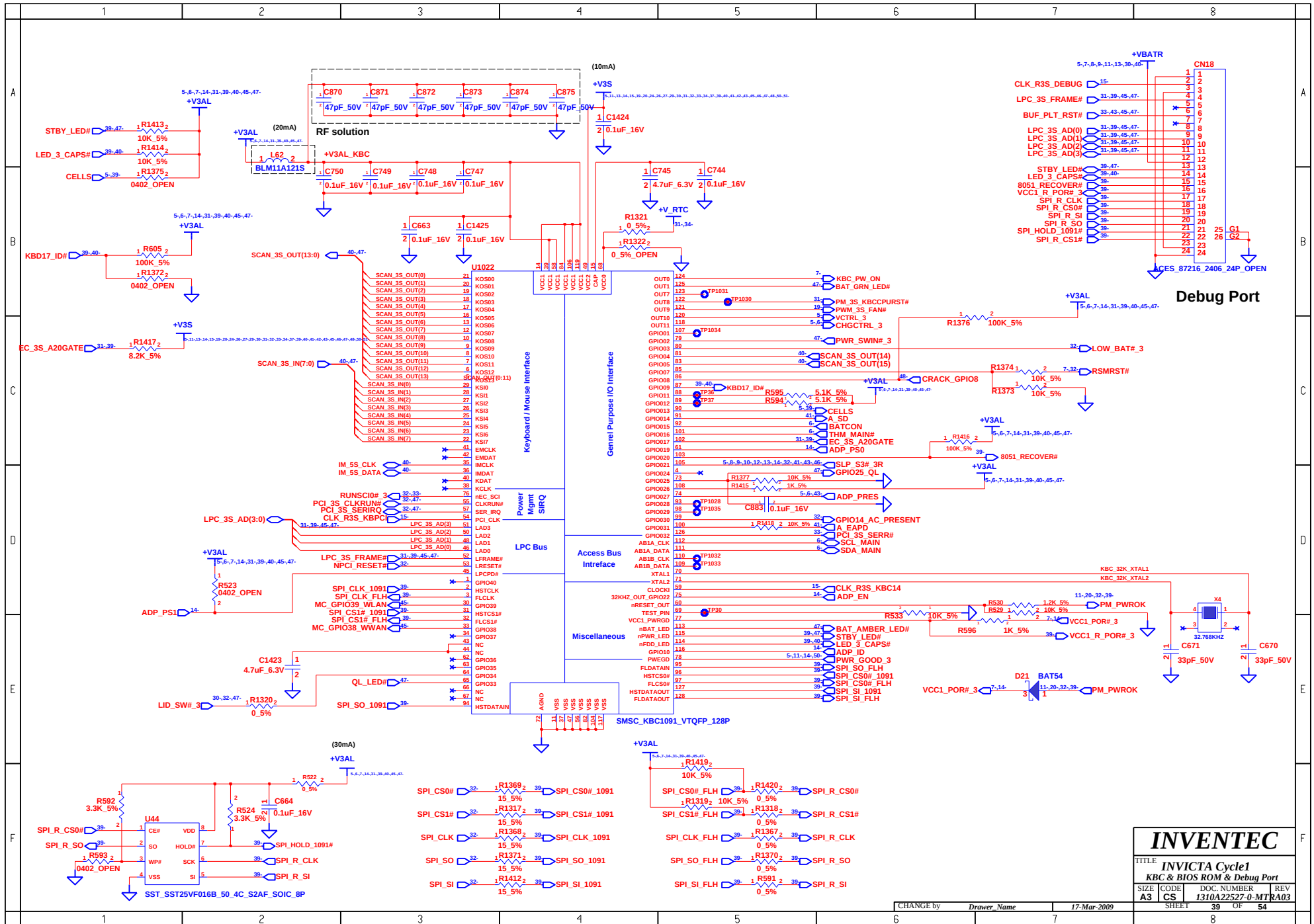


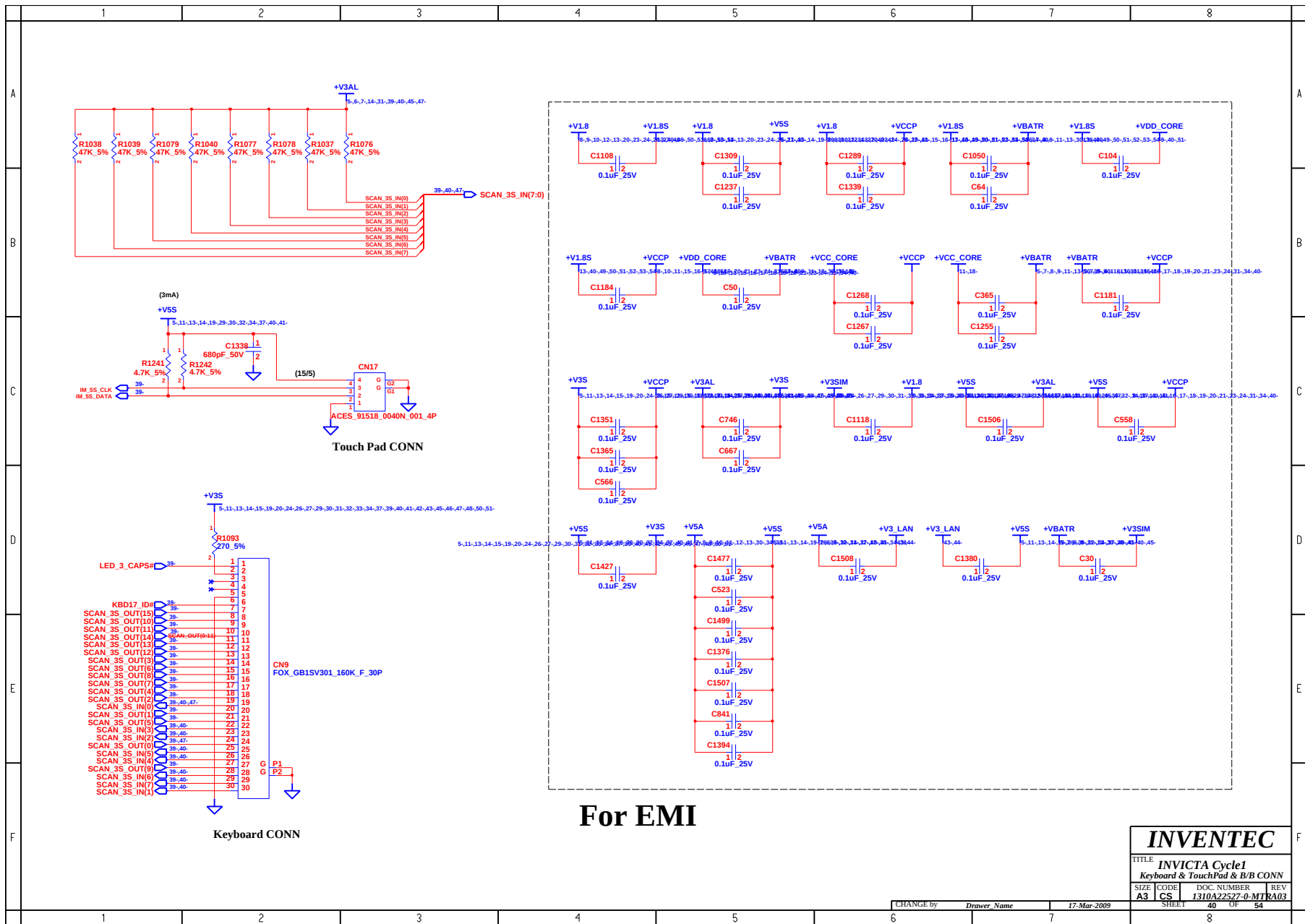
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TITLE INVICTA Cycle1			
HDD & ODD CONN & Accelerometer & 15" ODD EXT/B			
SIZE A3	CODE CS	DOC NUMBER 1310A22527-0-MT	REV A03
CHANGE by		Drawer Name	17-Mar-2009
SHEET		37	OF 54

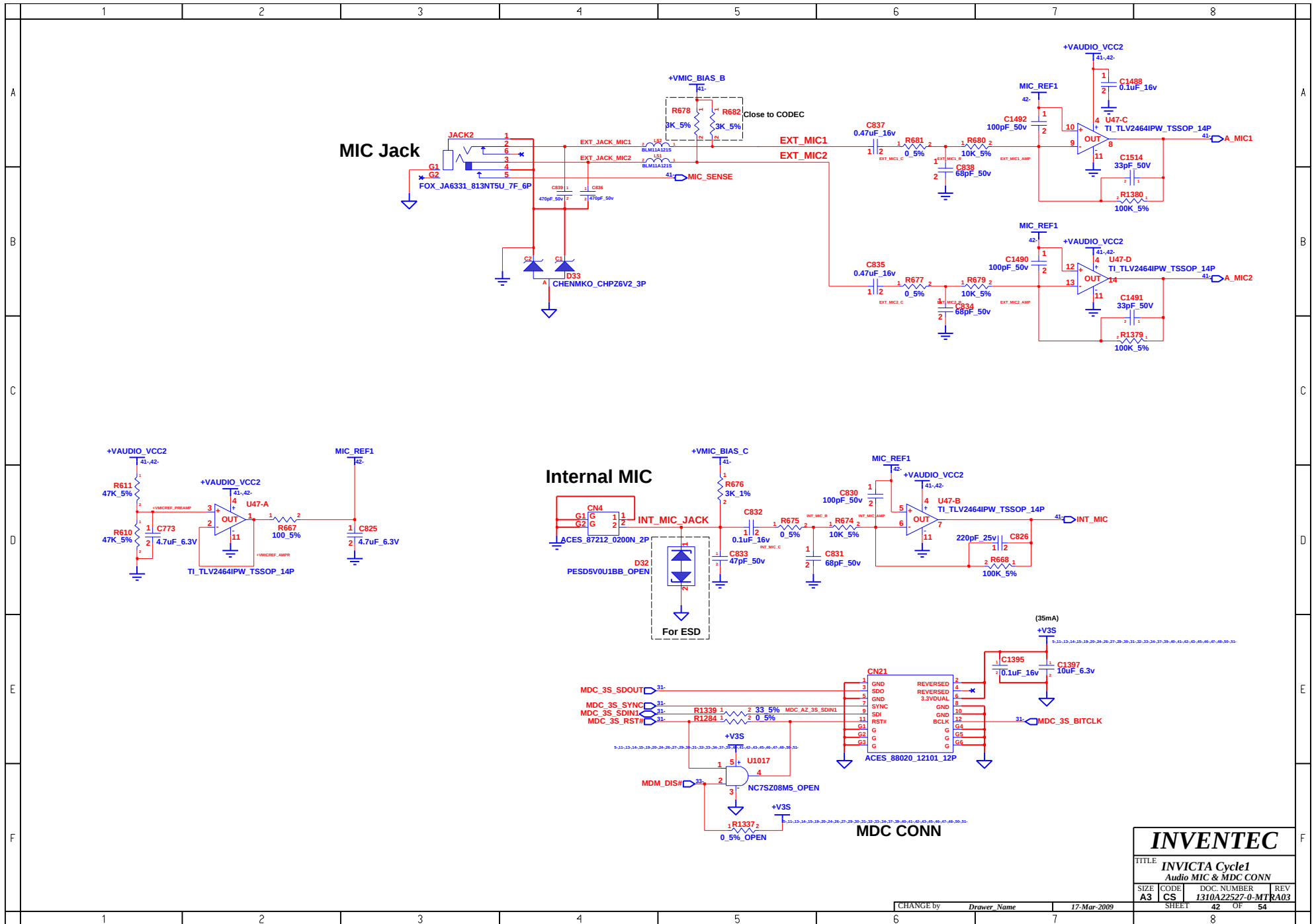


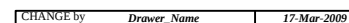
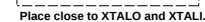
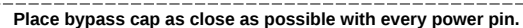
INVENTEC			
TITLE INVICTA Cycle1 USB CONN			
SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MTR	REV A03
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CHANGE by *Drawn Name* 17-Mar-2009

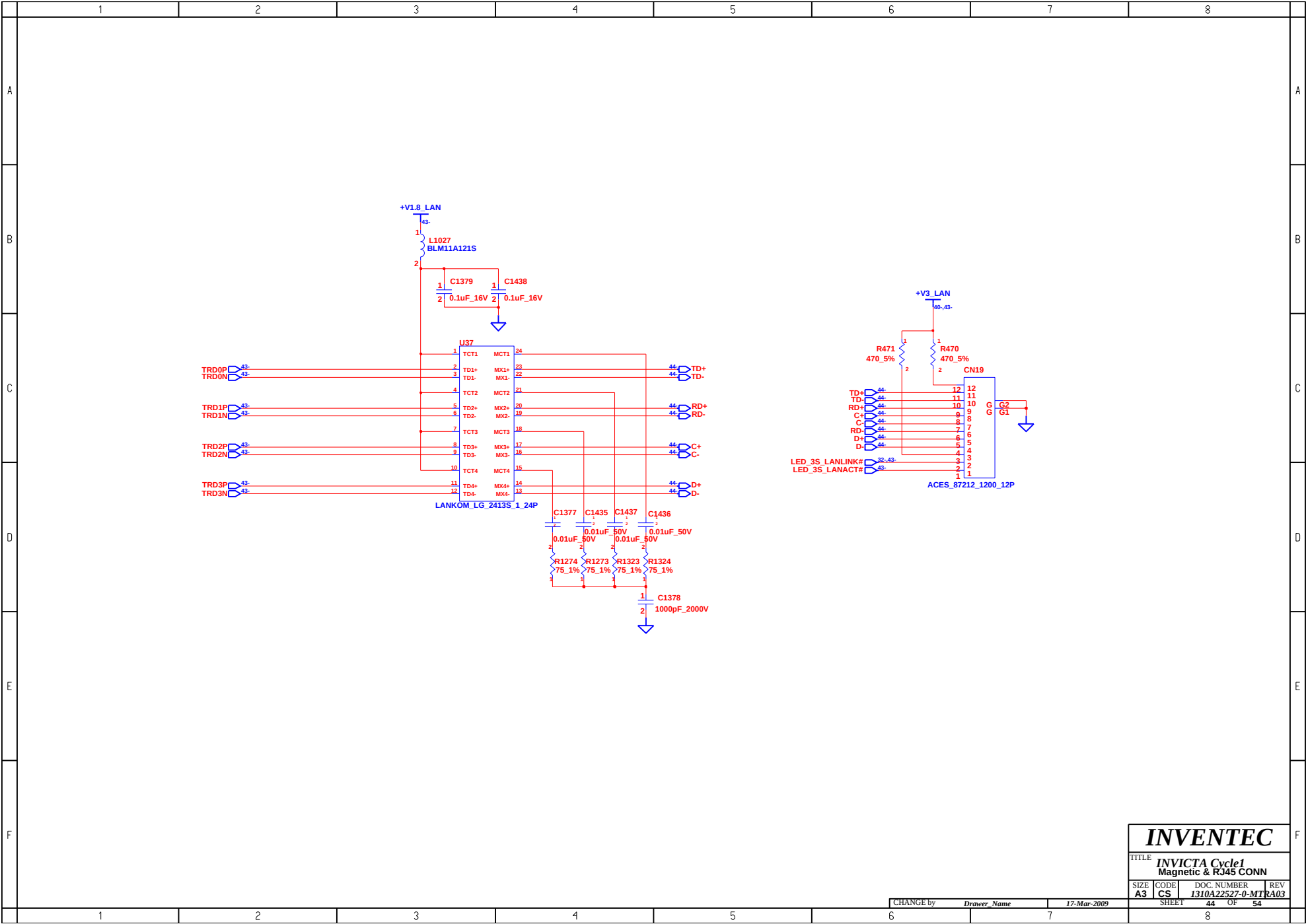








CHANGE by			Drawer Name	17-Mar-2009	A3	CS	1310A22527-0-M1RA03
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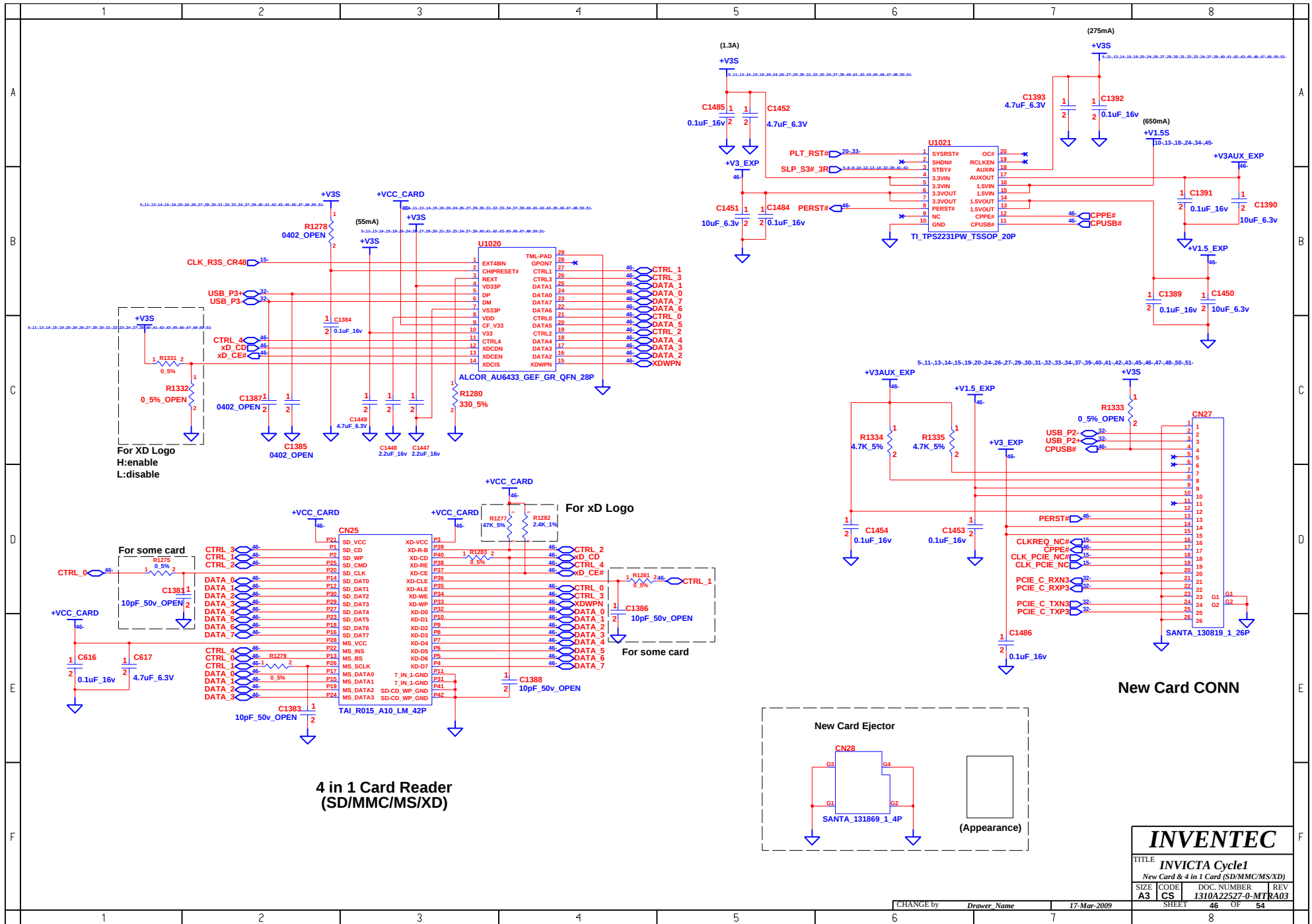
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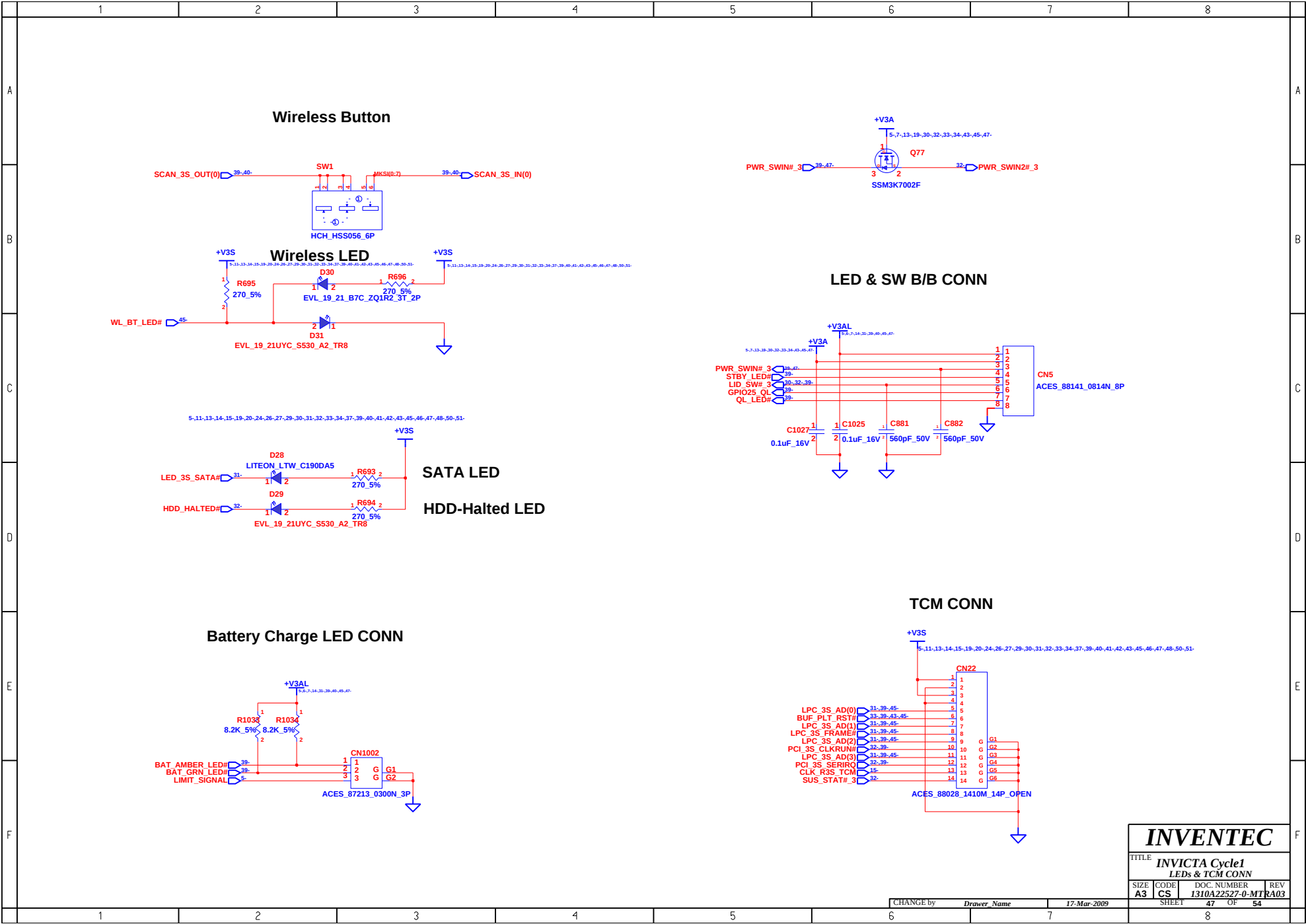
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Magnetic & RJ45 CONN

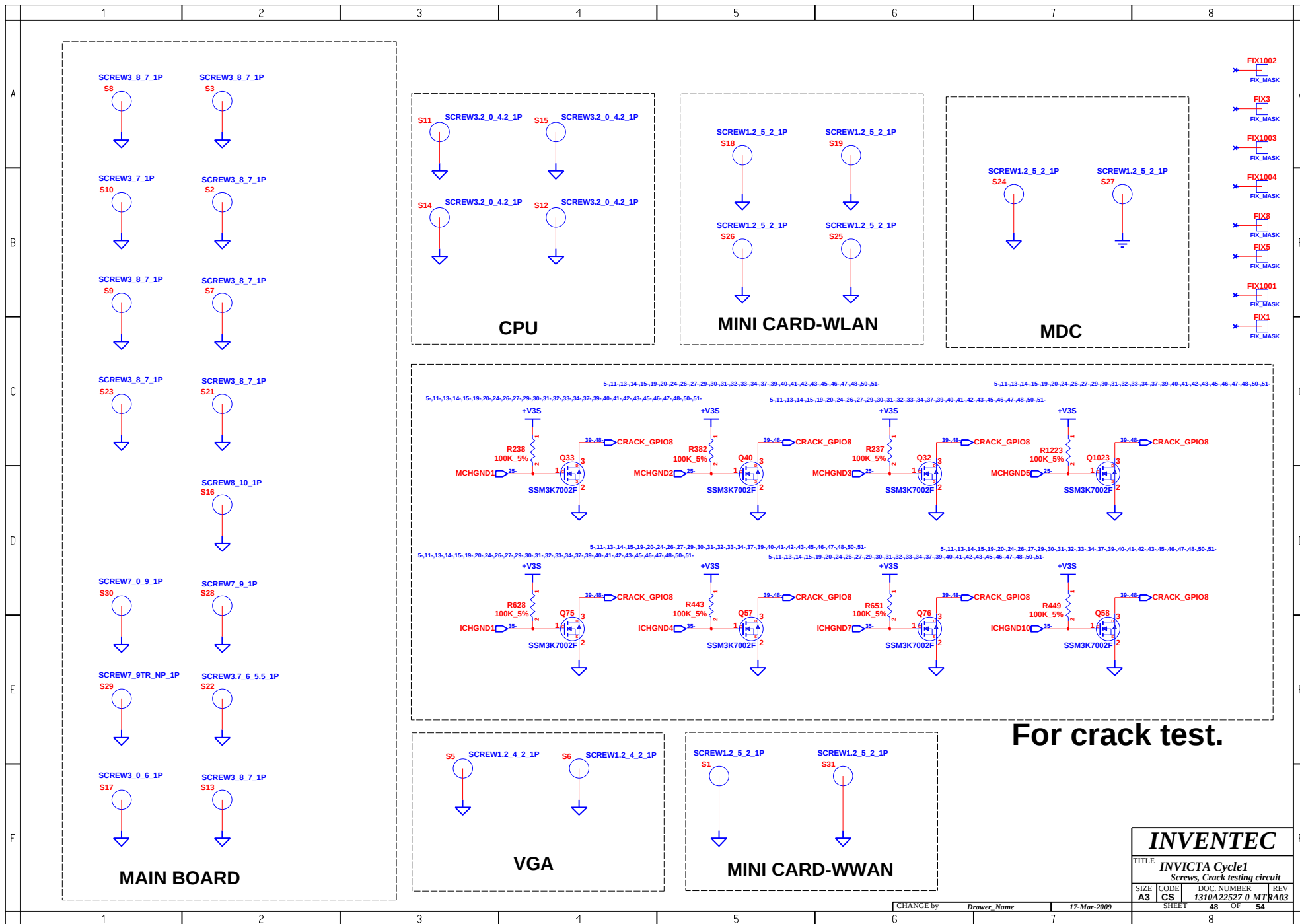
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A3	CS	1310A22527-0-MTR	RA03

CHANGE by *Drawer Name* 17-Mar-2009

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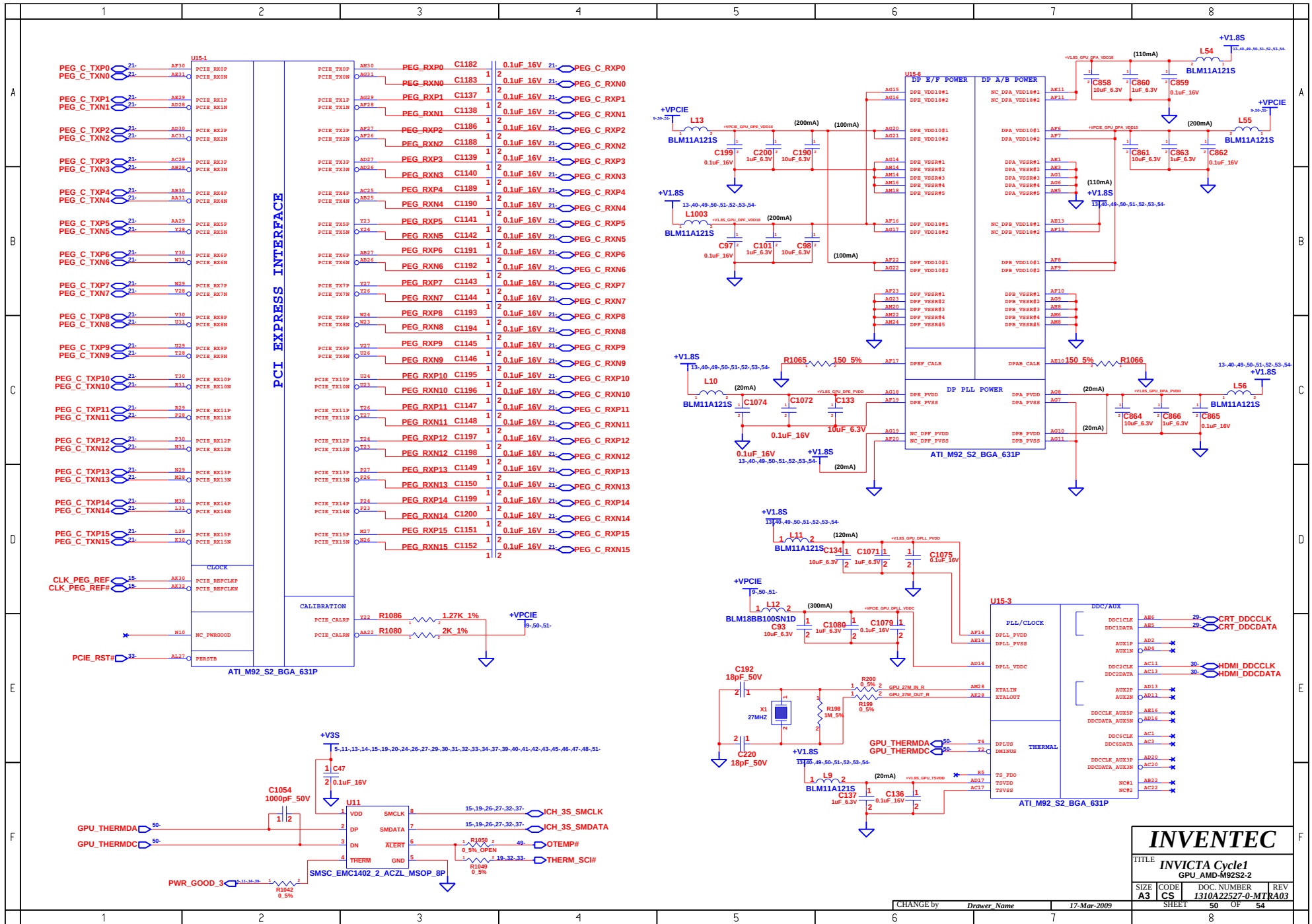


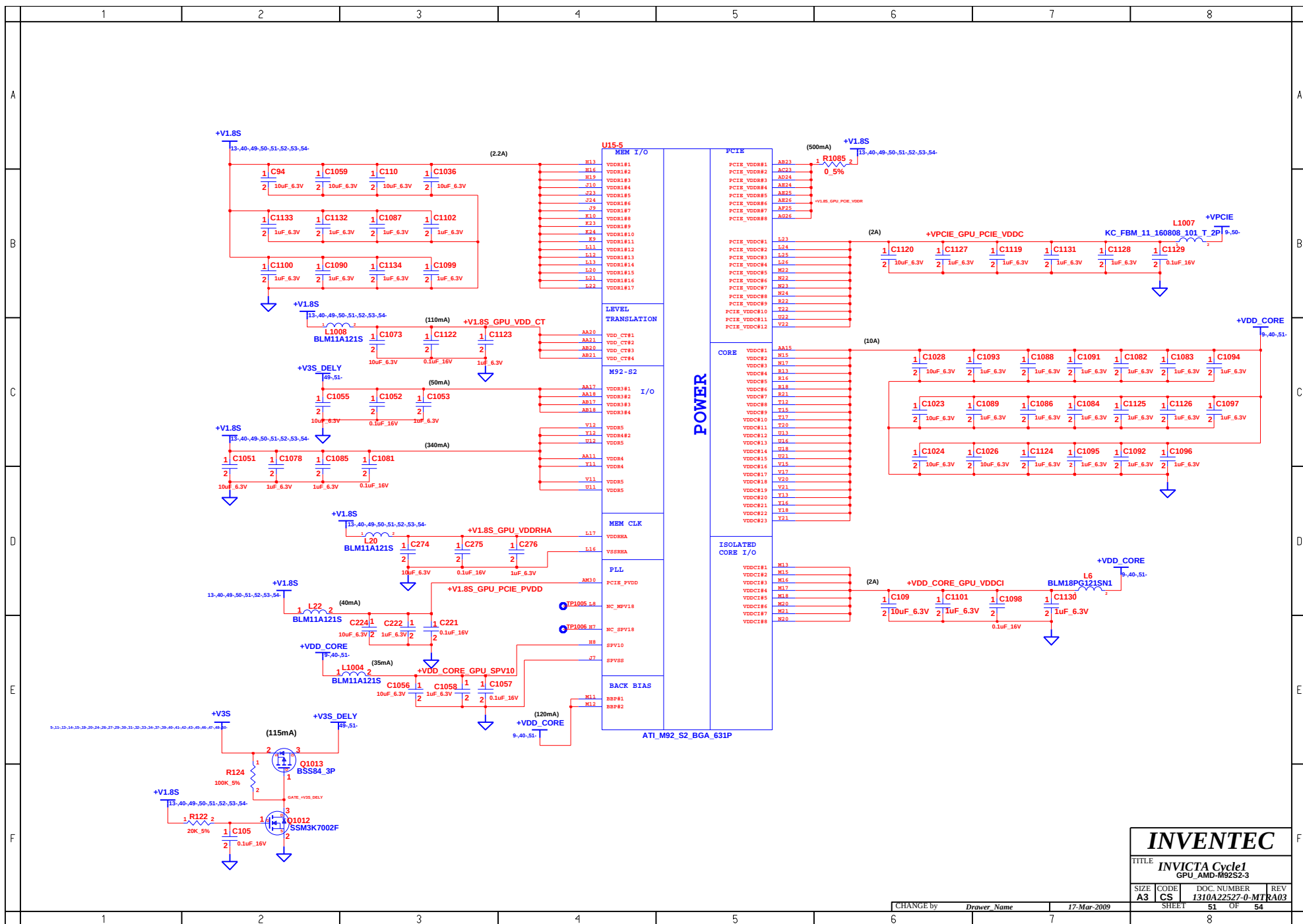


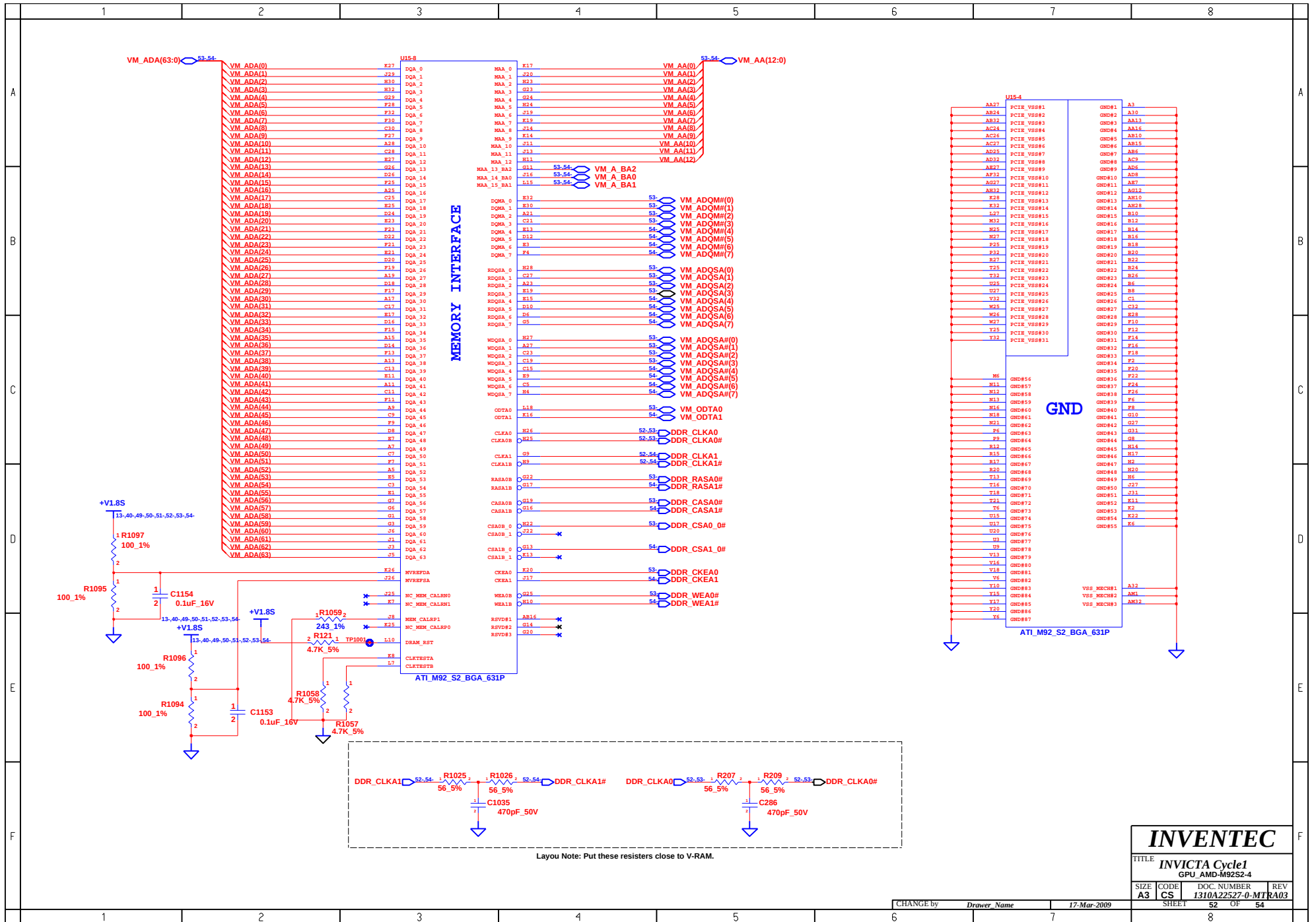


INVENTEC			
TITLE INVICTA Cycle1			
Screws, Crack testing circuit			
SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MTR	REV A03
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CHANGE by Drafter Name 17-Mar-2009



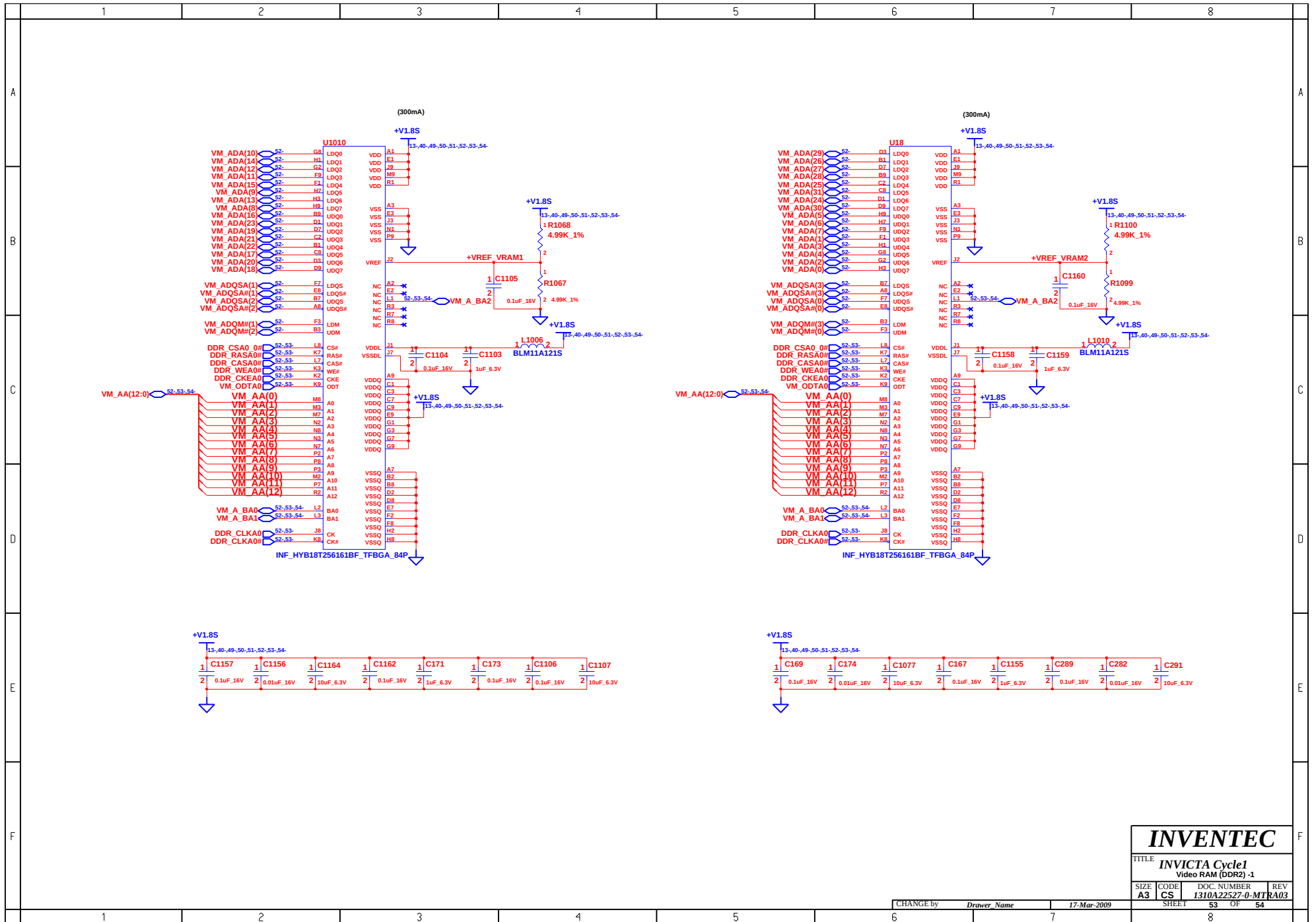




INVENTEC

TITLE INVICTA Cycle1 GPU_AMD-M92S2-4			
SIZE A3	CODE CS	DOC. NUMBER I310AZ2527-0-MT	REV A03
SHEET 52 OF 54			

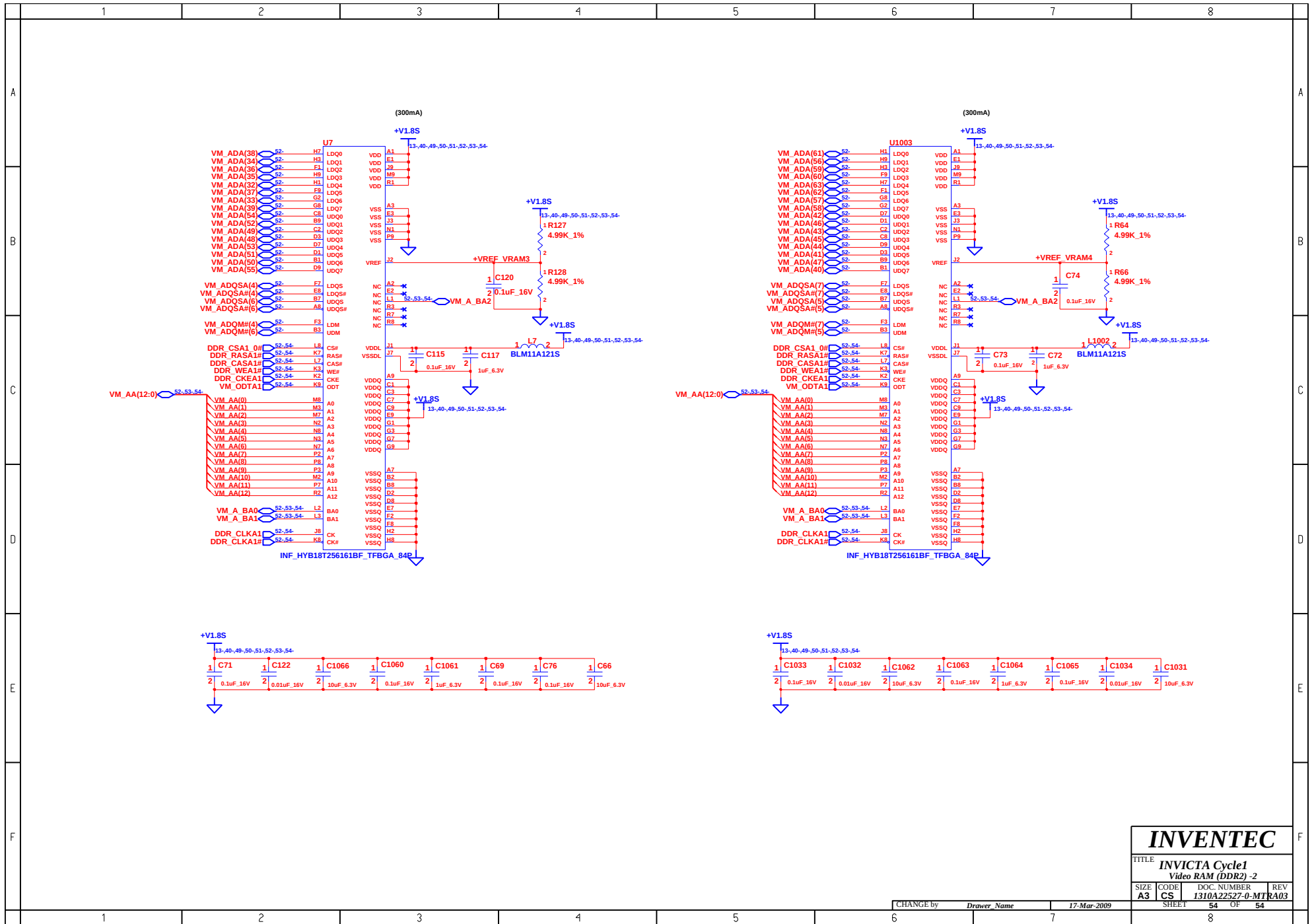
CHANGE by *Drawn Name* 17-Mar-2009



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TITLE			
INVICTA Cycle1			
Video RAM (DDR2) -1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A22527-0-MTR	A03
SHEET		53	OF 54

CHANGE by *Drawn Name* 17-Mar-2009



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TITLE
INVICTA Cycle1
Video RAM (DDR2) -2

SIZE CODE DOC. NUMBER REV
A3 CS 1310A22527-0-MT RA03

CHANGE by Drawer Name 17-Mar-2009

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