

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

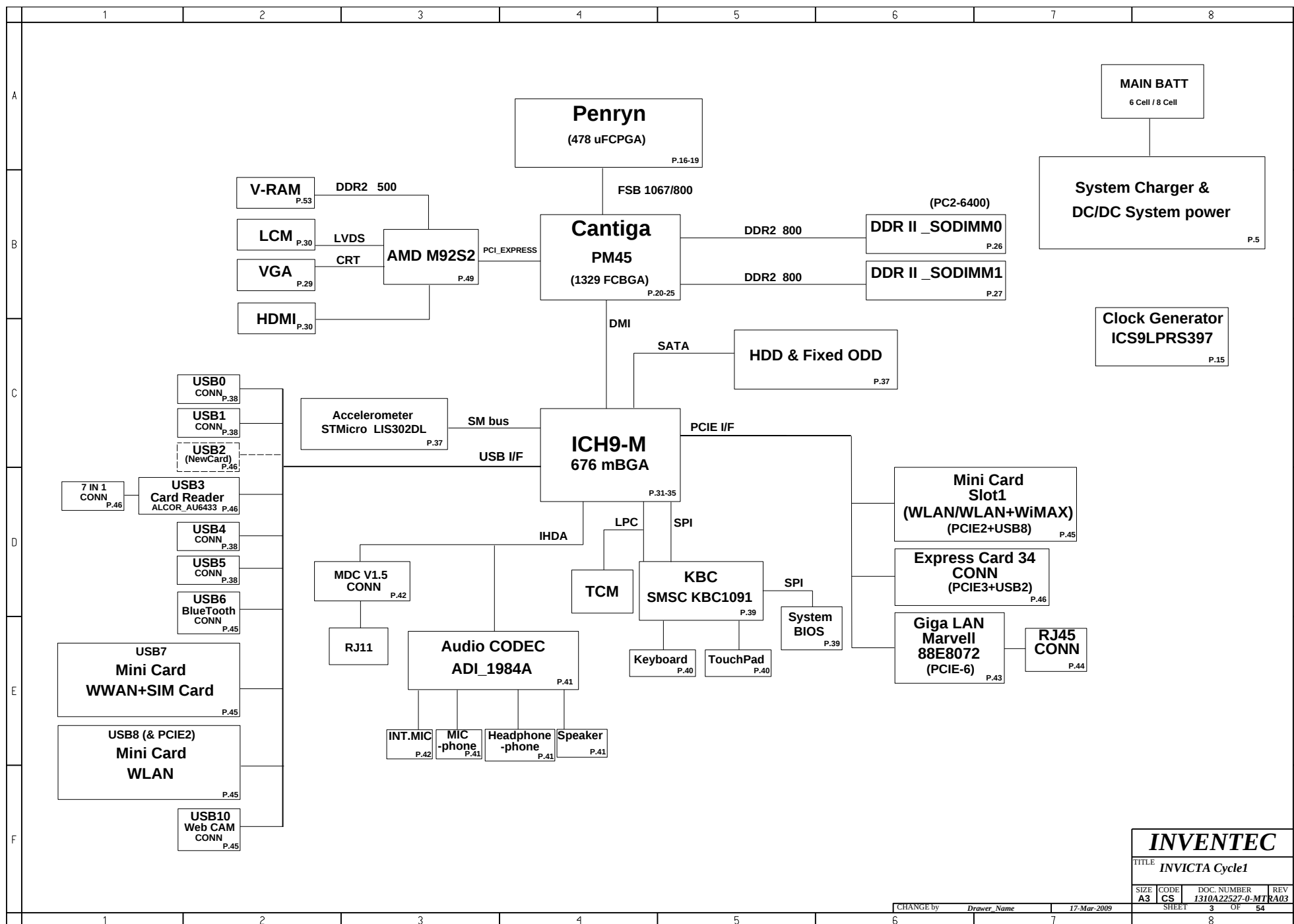
Table Of Contents

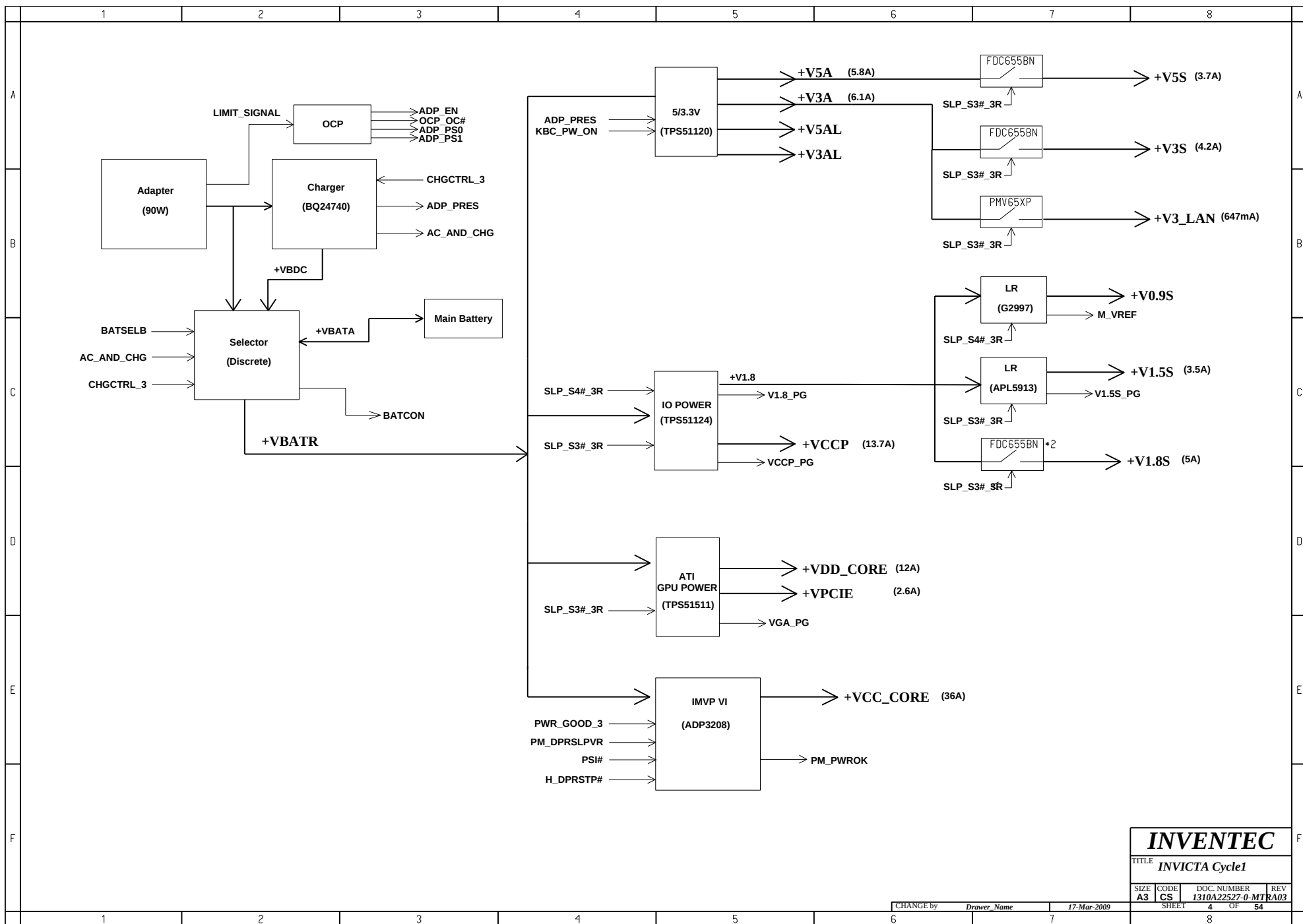
Page	Page	Page
5- DC & Battery Charger & OCP.	15- Clock Generator.	36- Power, LID, APP SW/B.
6- Select & Battery CONN.	16- CPU Penryn-1.	37- HDD & ODD,Accelerometer,15" ODD EXT/B.
7- System Power (+V3A/+V5A).	17- CPU Penryn-2.	38- USB CONN.
8- System Power (+V1.8/+VCCP) .	18- CPU Penryn-3.	39- KBC, BIOS 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.
	28- DDR2-Termination.	49- AMD M92S2-1.
	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.	

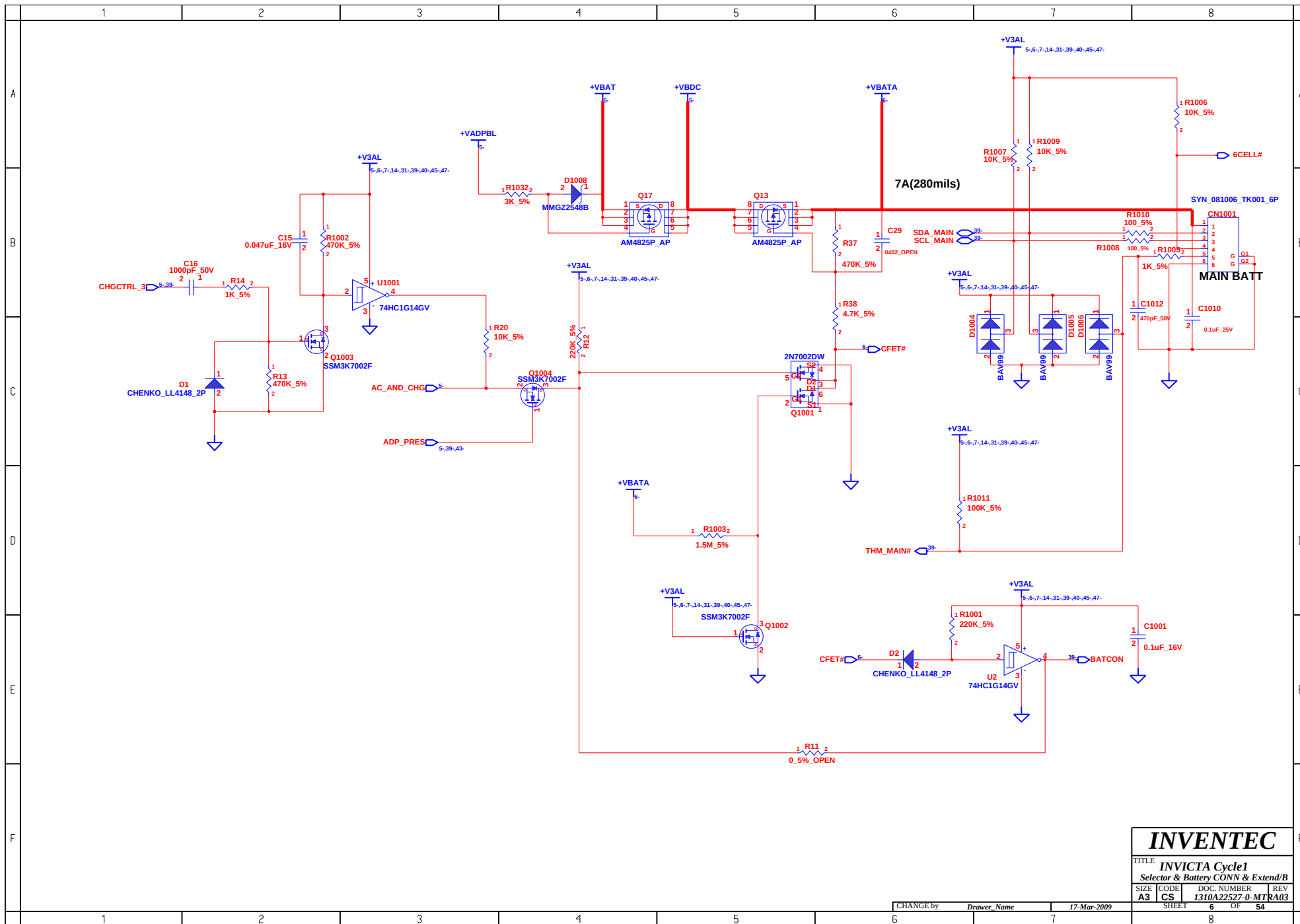
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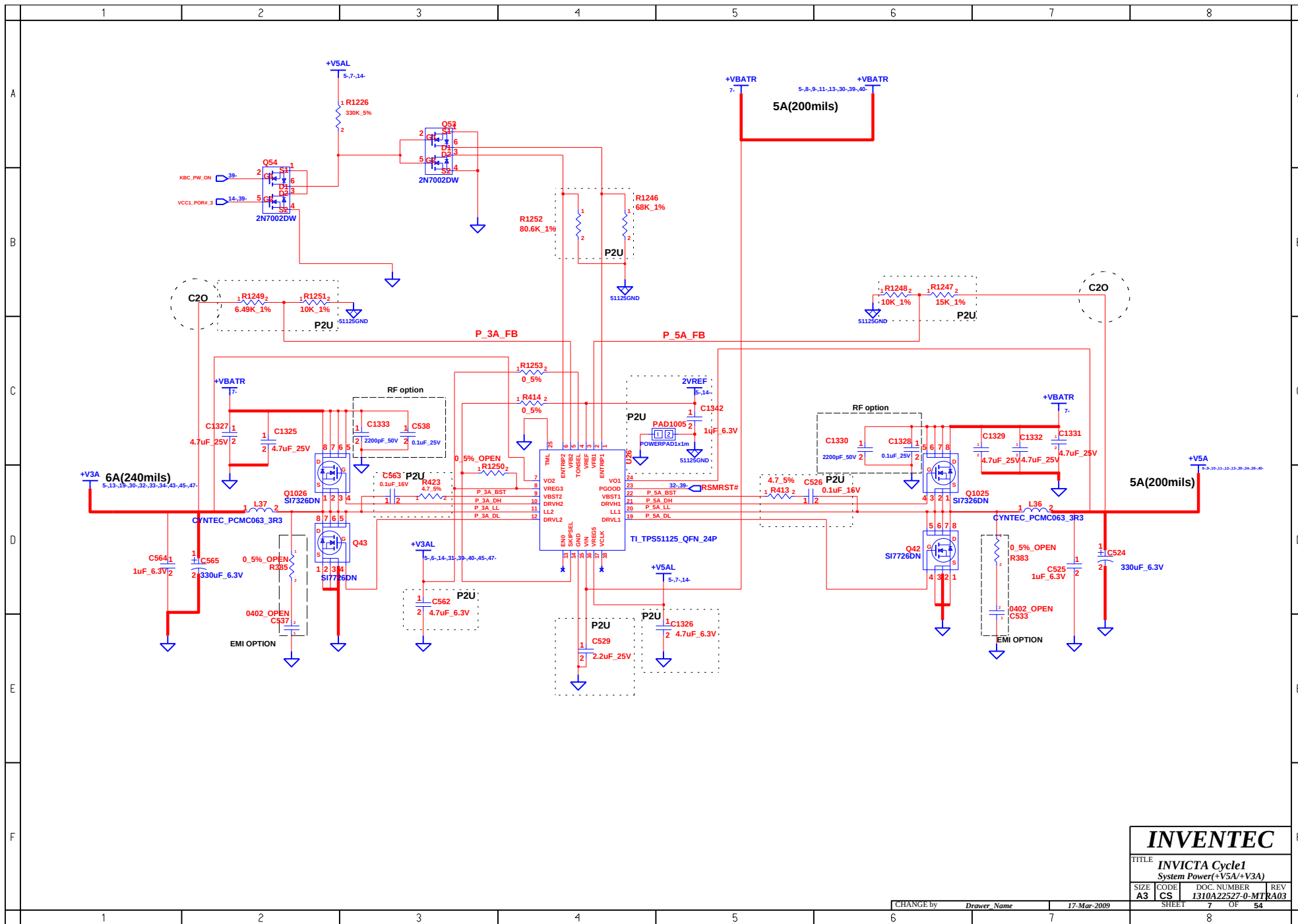
TITLE INVICTA Cycle1 Contents			
SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MTR	REV A03
SHEET 2		OF 54	

CHANGE by *Drawn Name* 17-Mar-2009







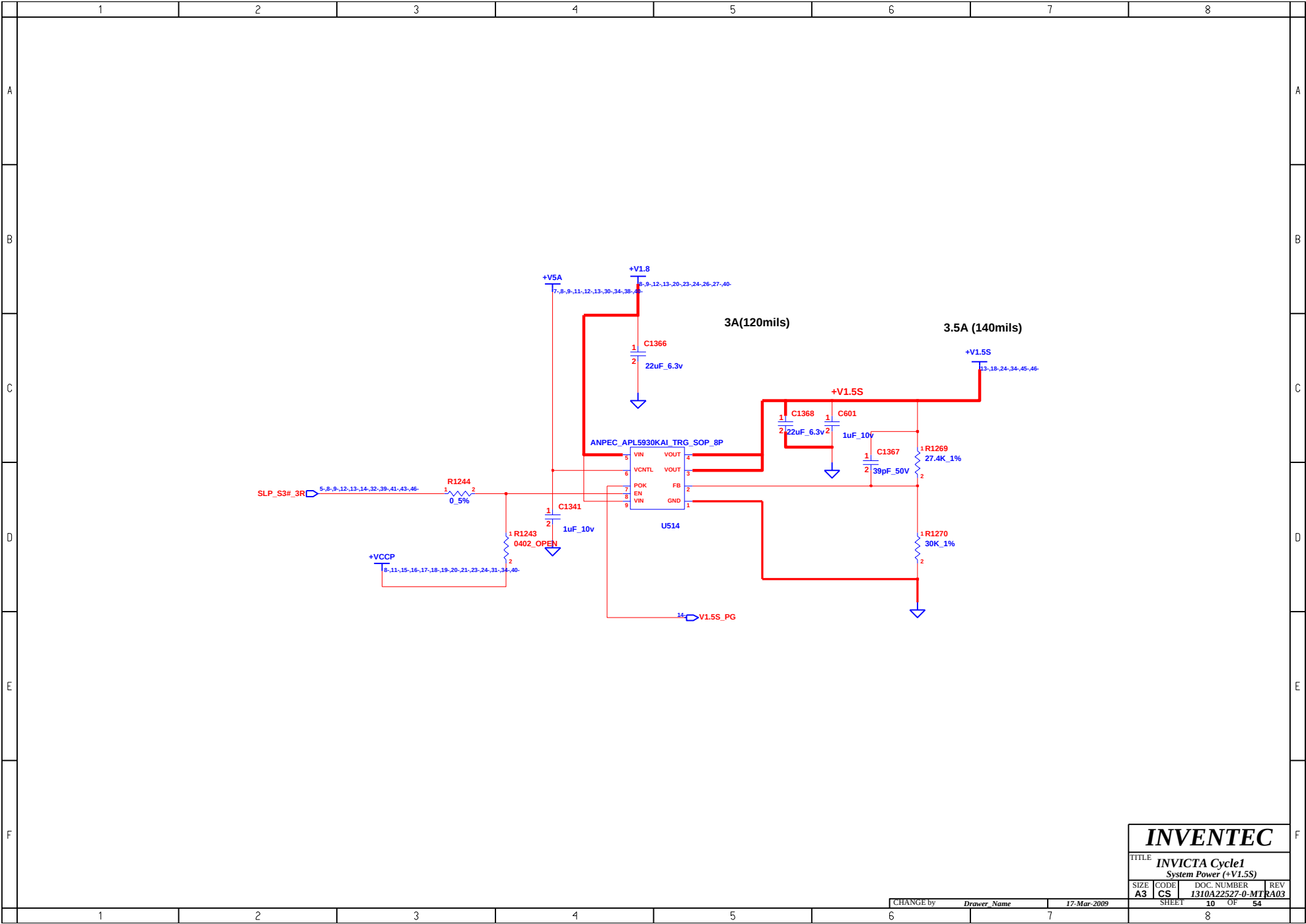


INVENTEC

TITLE			
INVICTA Cycle1			
System Power(+V5A/+V3A)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310AZ2527-0-MT	RA03

CHANGE by *Drawn Name* 17-Mar-2009

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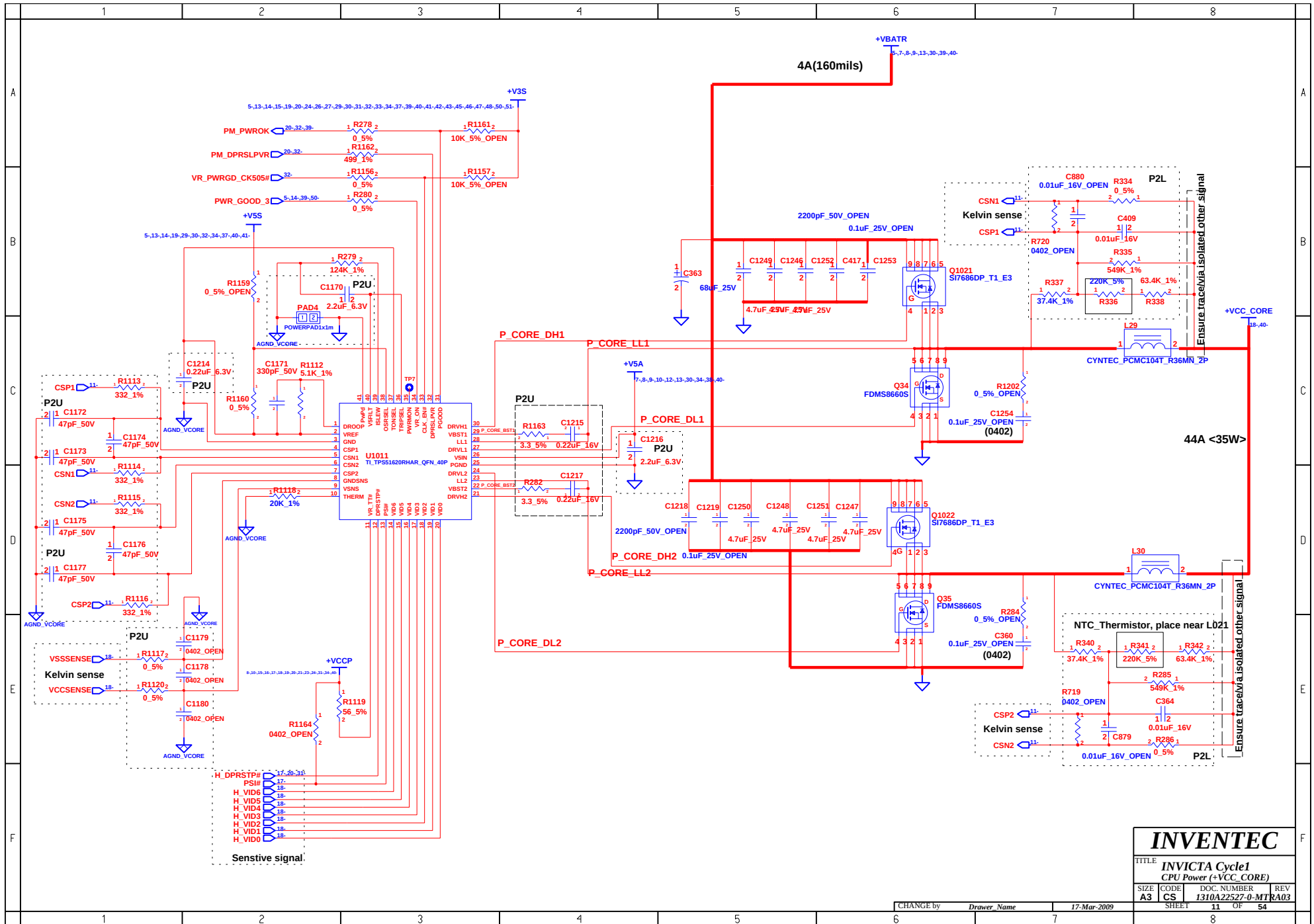
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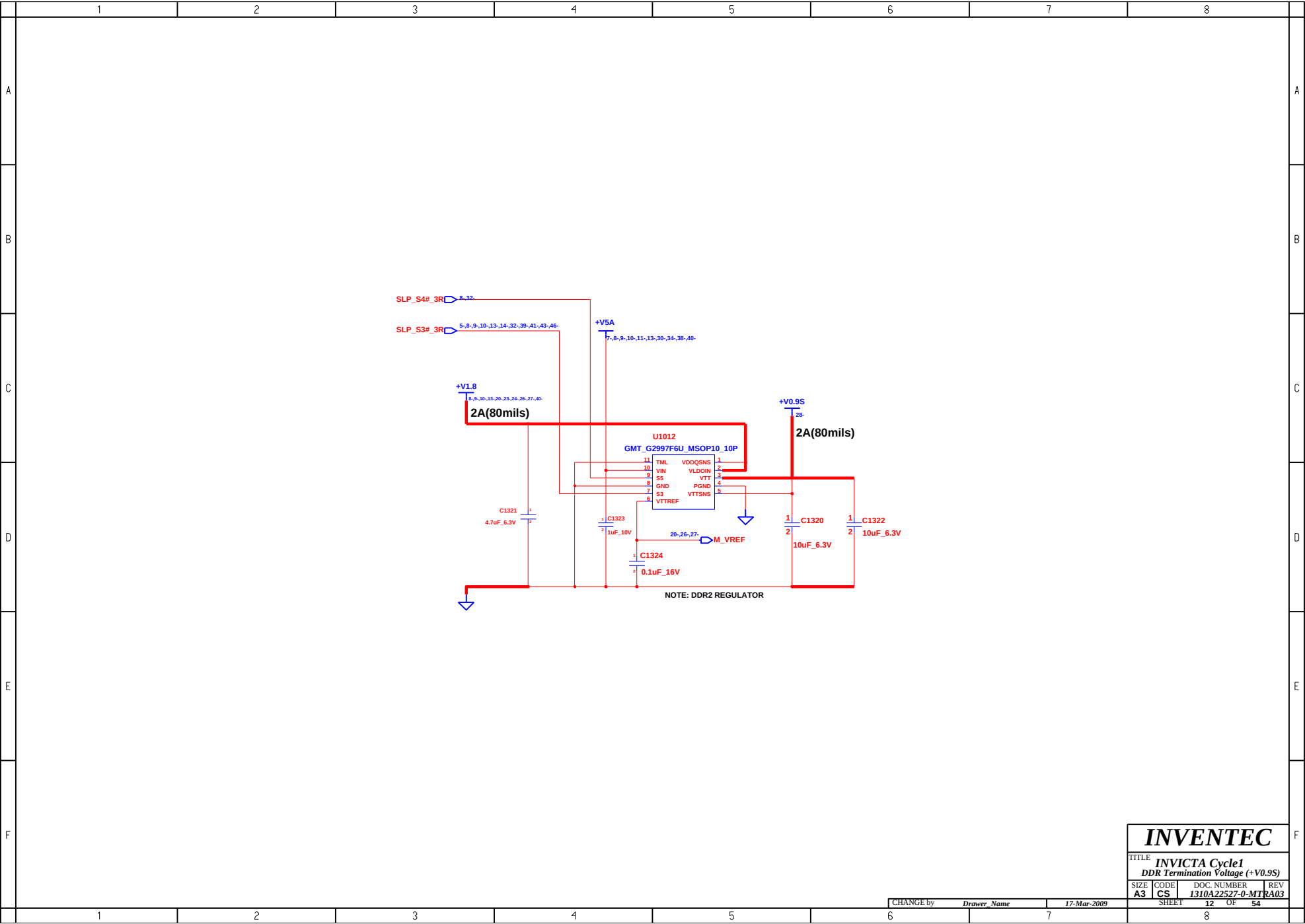
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INVICTA Cycle1
System Power (+V1.5S)

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A3	CS	I310AZ2527-0-MT	RA03

CHANGE by *Drawer Name* 17-Mar-2009

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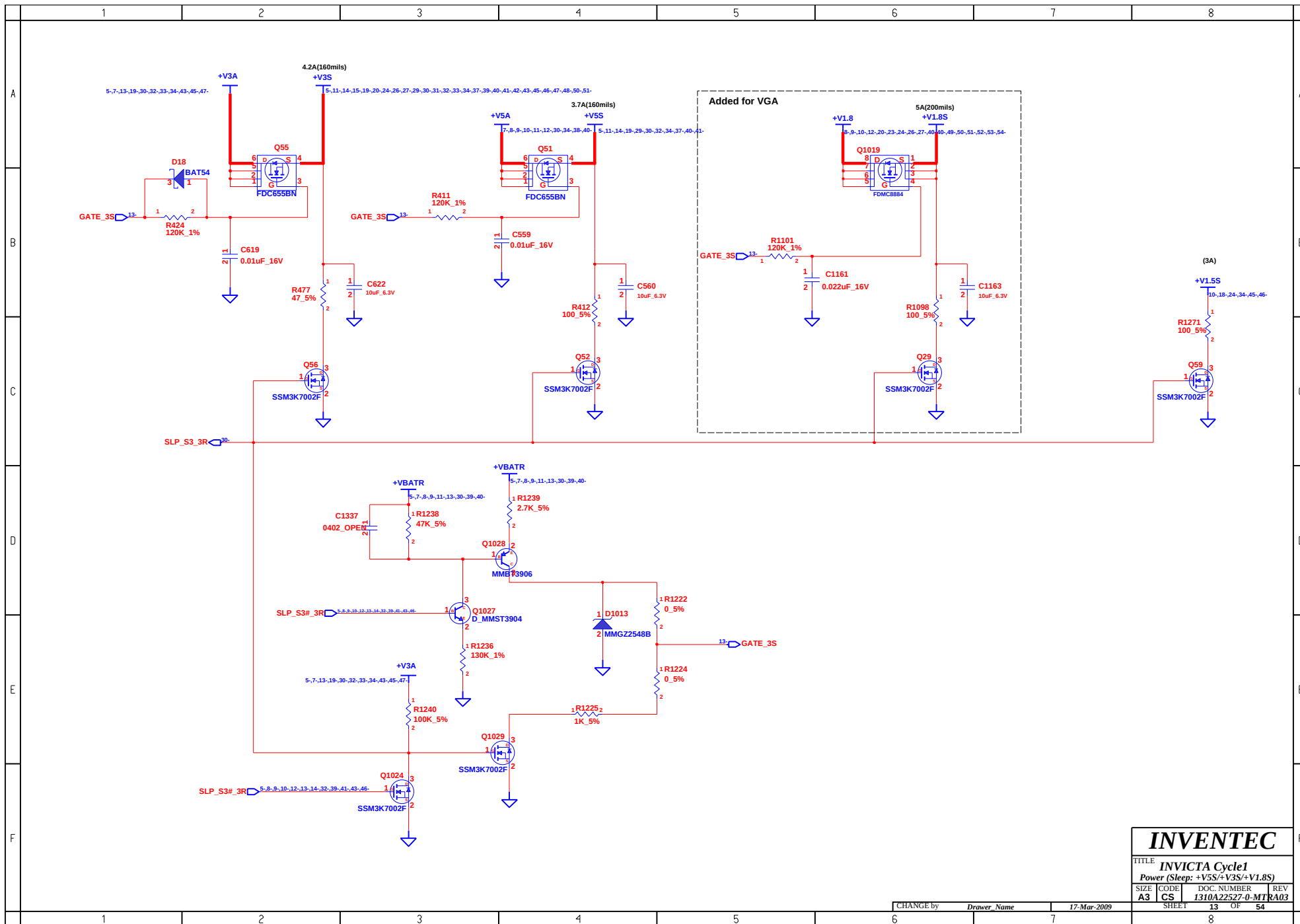
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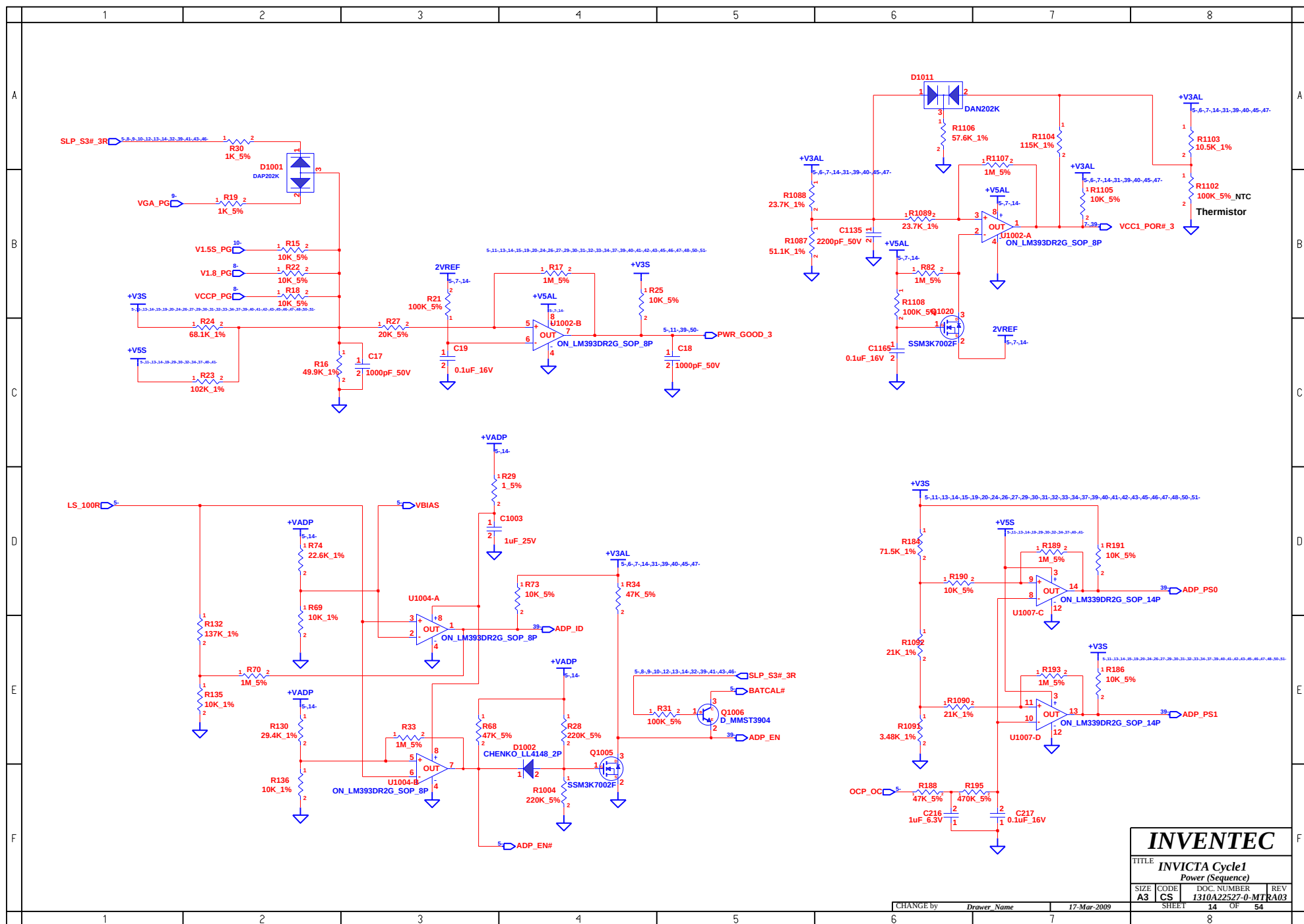
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DDR Termination Voltage (+V0.9S)

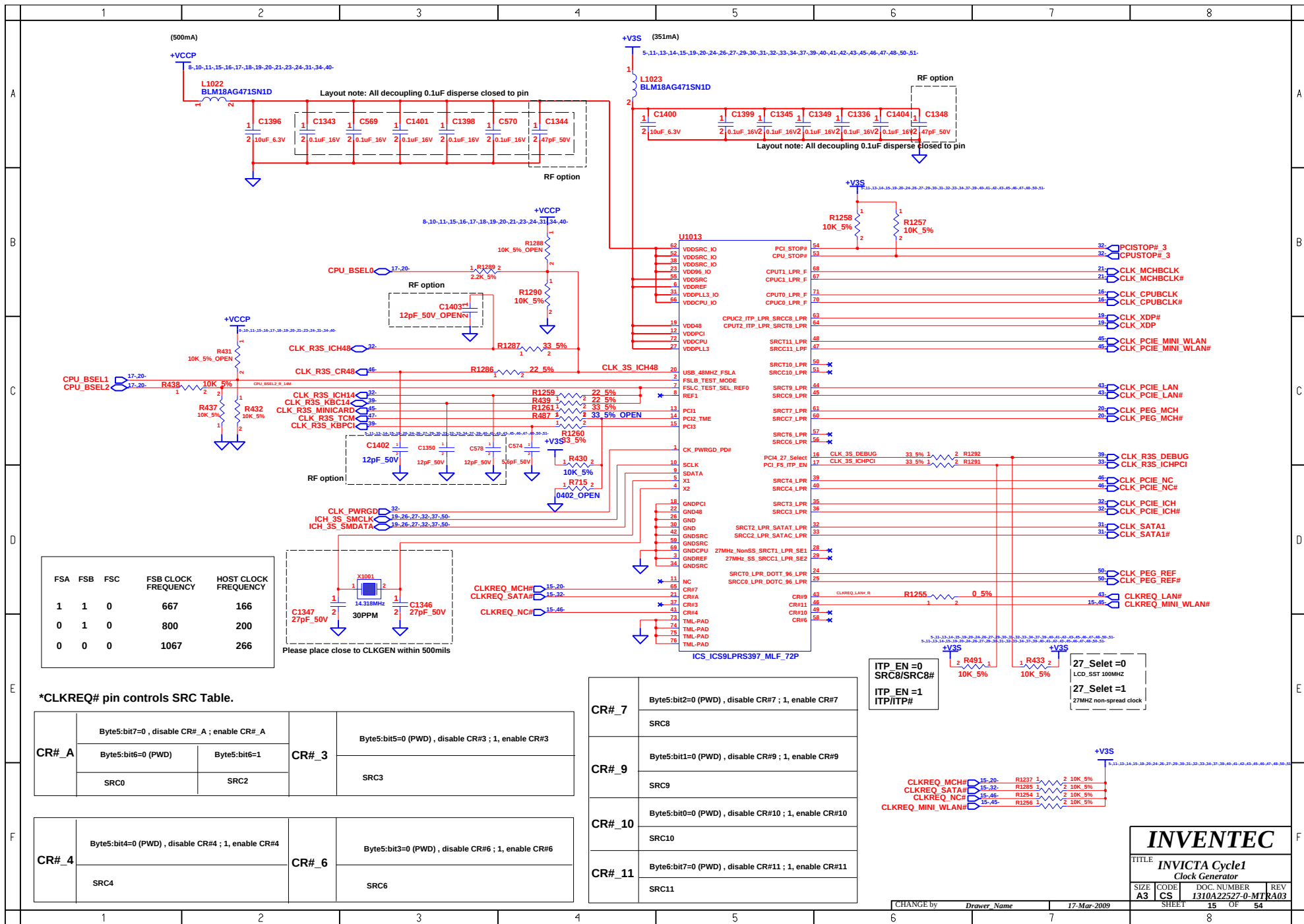
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A3	CS	1310A22527-0-MT	RA03

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#

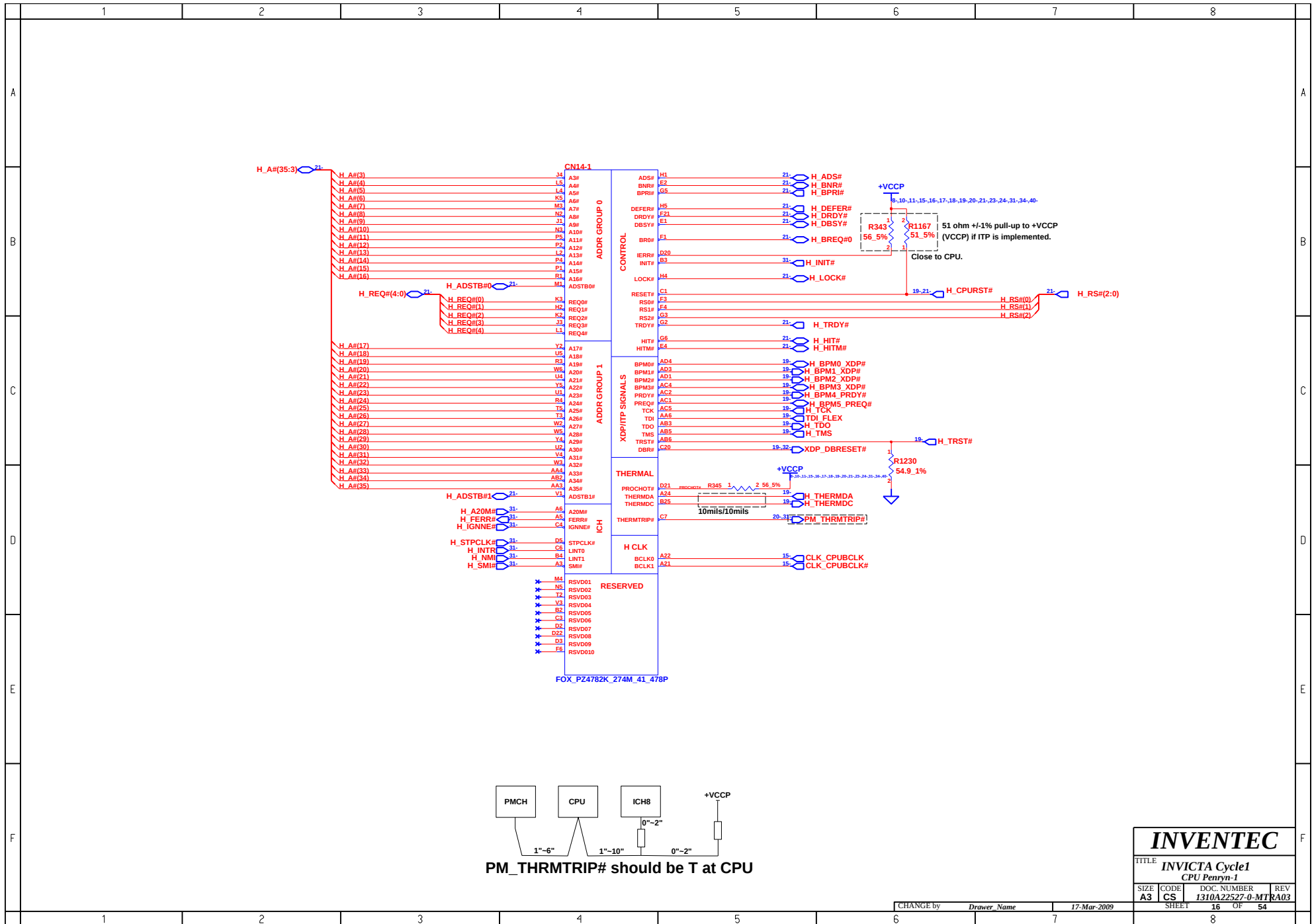
27_Select=0
LCD_SST 100MHz
27_Select=1
27MHz non-spread clock

INVENTEC

TITLE
INVICTA Cycle1
Clock Generator

SIZE CODE DOC. NUMBER REV
A3 CS I310AZ2527-0-MT RA03

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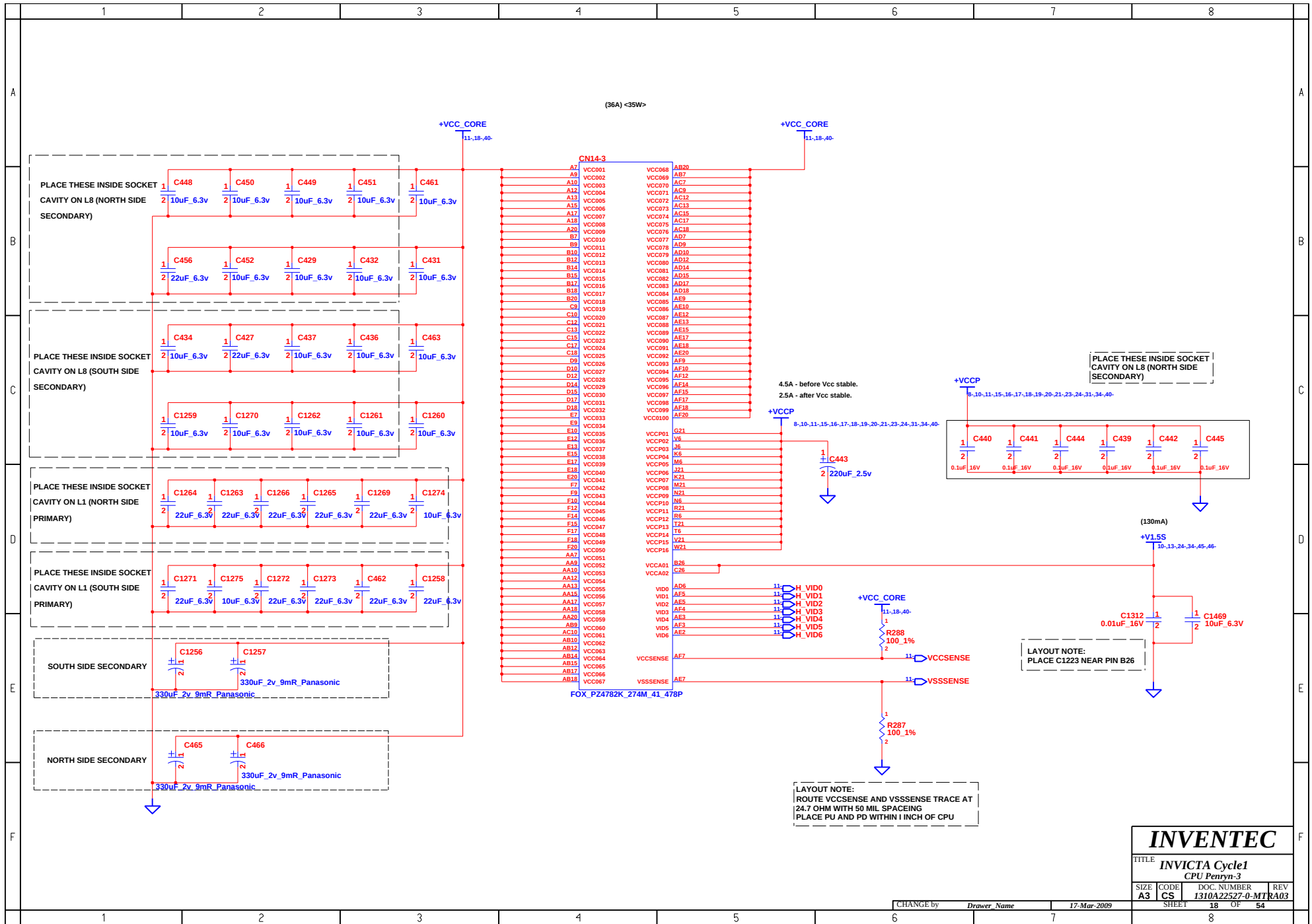
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TITLE
INVICTA Cycle1
CPU Penryn-1

SIZE	CODE	DOC. NUMBER	REV
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CHANGE by *Drawn Name* 17-Mar-2009

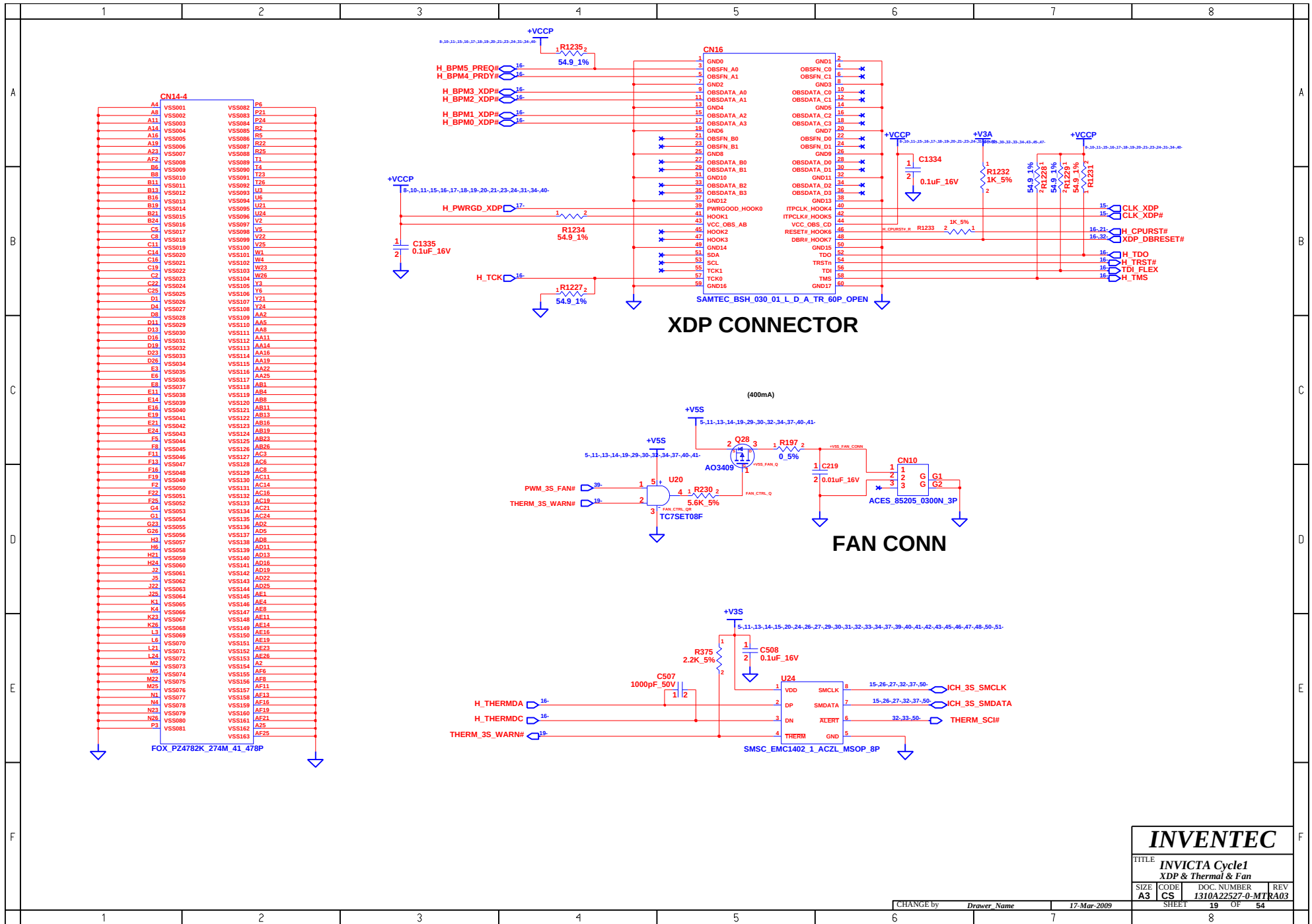
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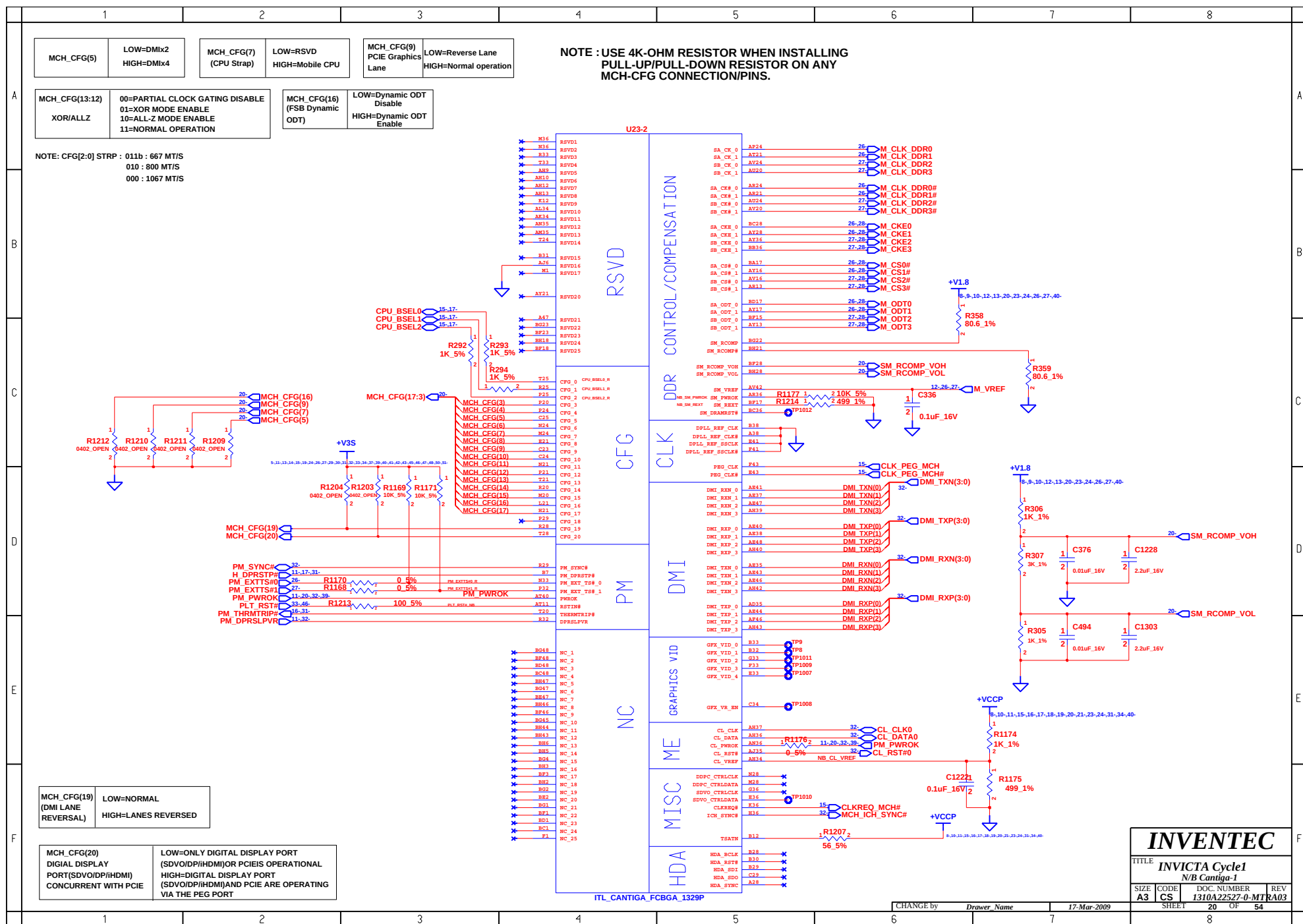


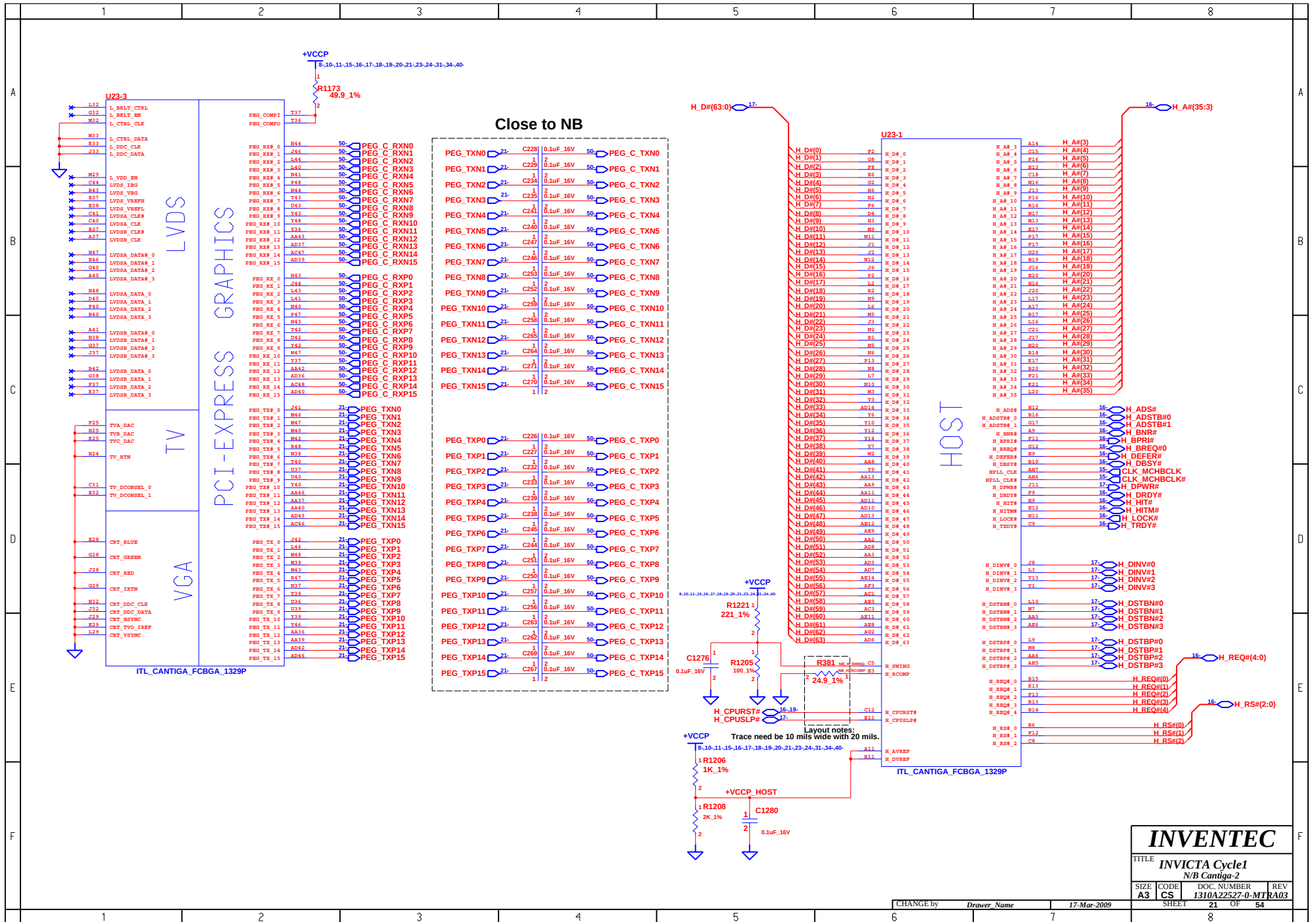
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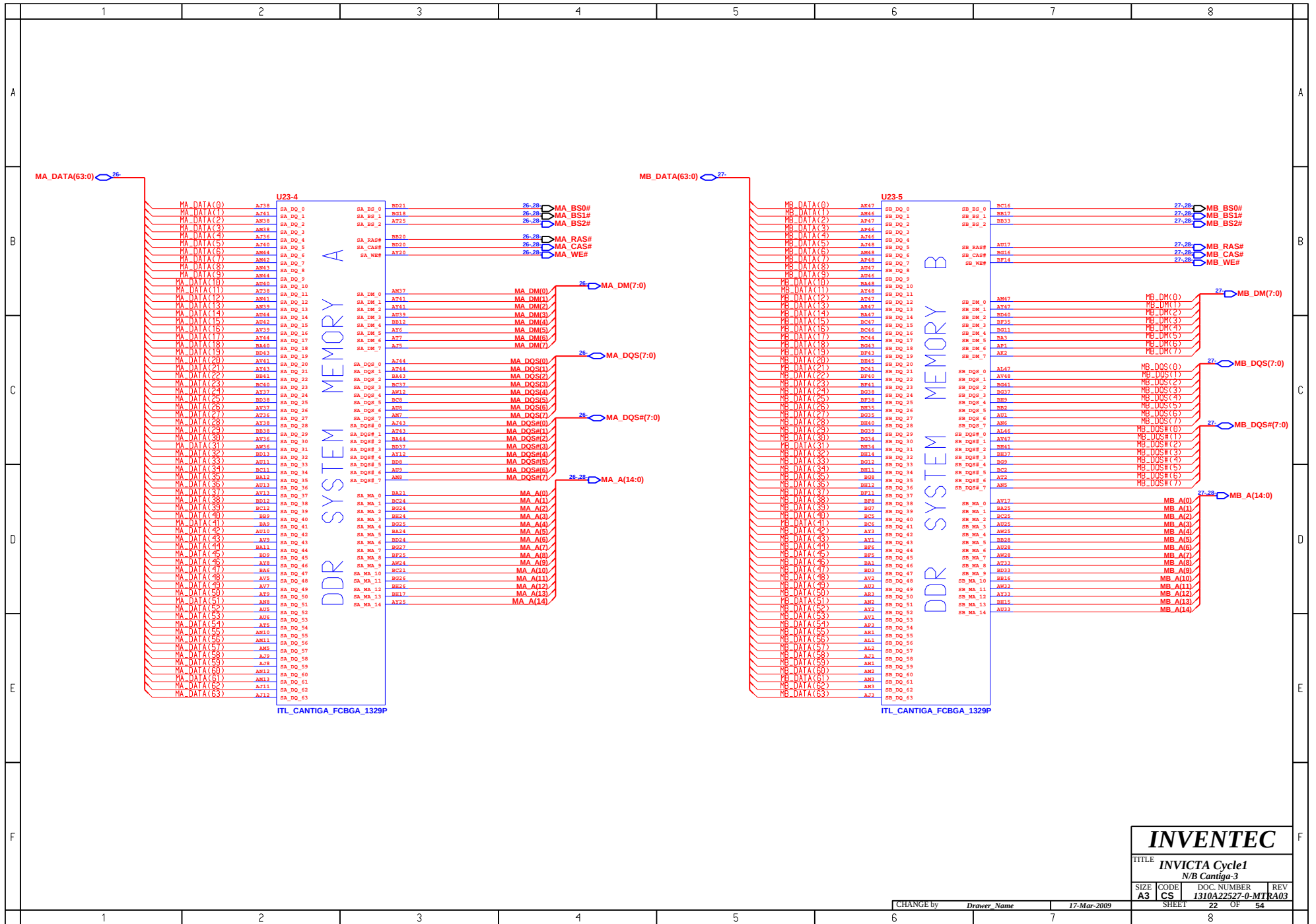
TITLE			
INVICTA Cycle1			
CPU Penryn-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22527-0-MTR	A03
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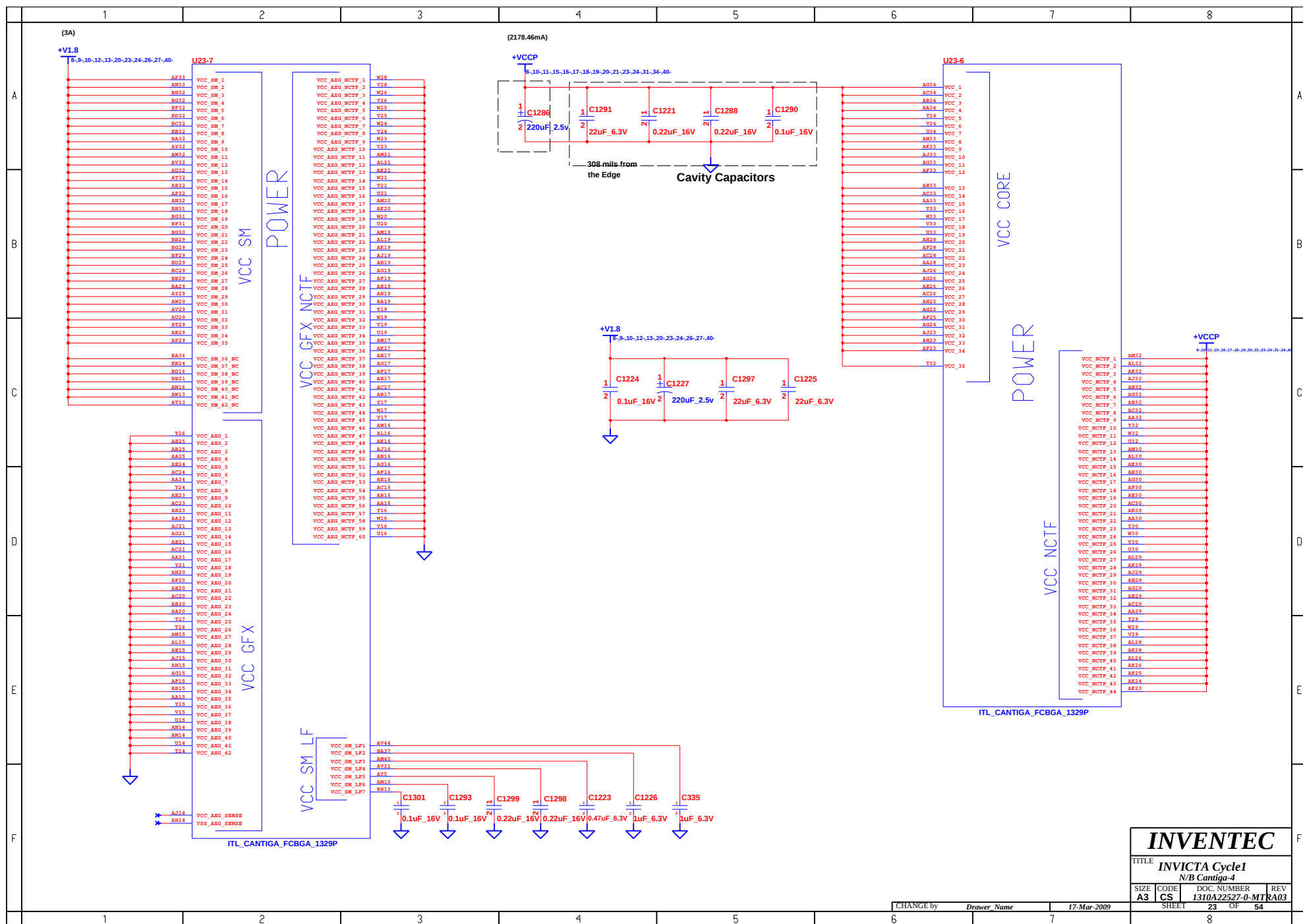


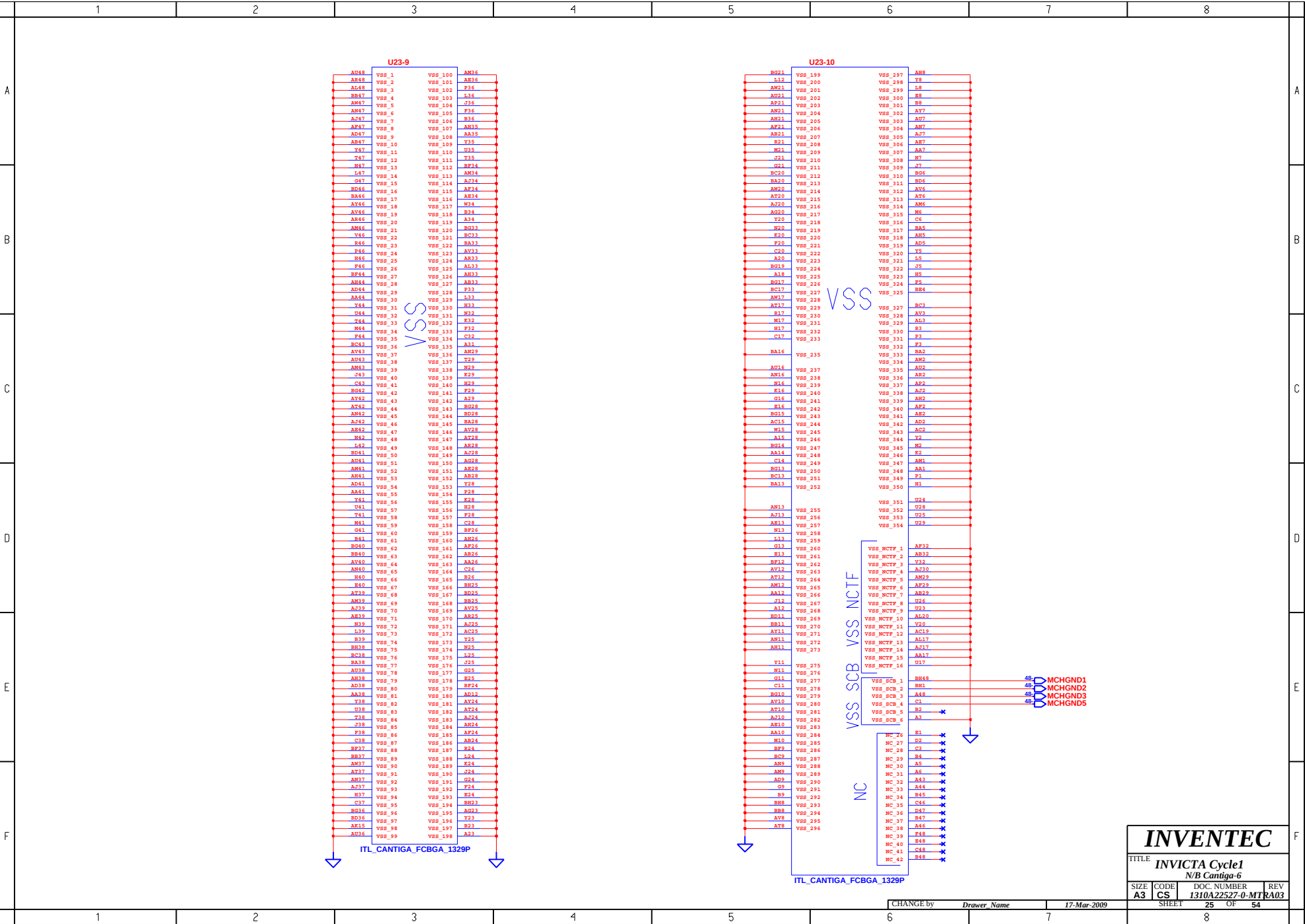


INVENTEC

TITLE INVICTA Cycle1 N/B Cantiga-3			
SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MTR	REV A03
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CHANGE by Dravner Name 17-Mar-2009





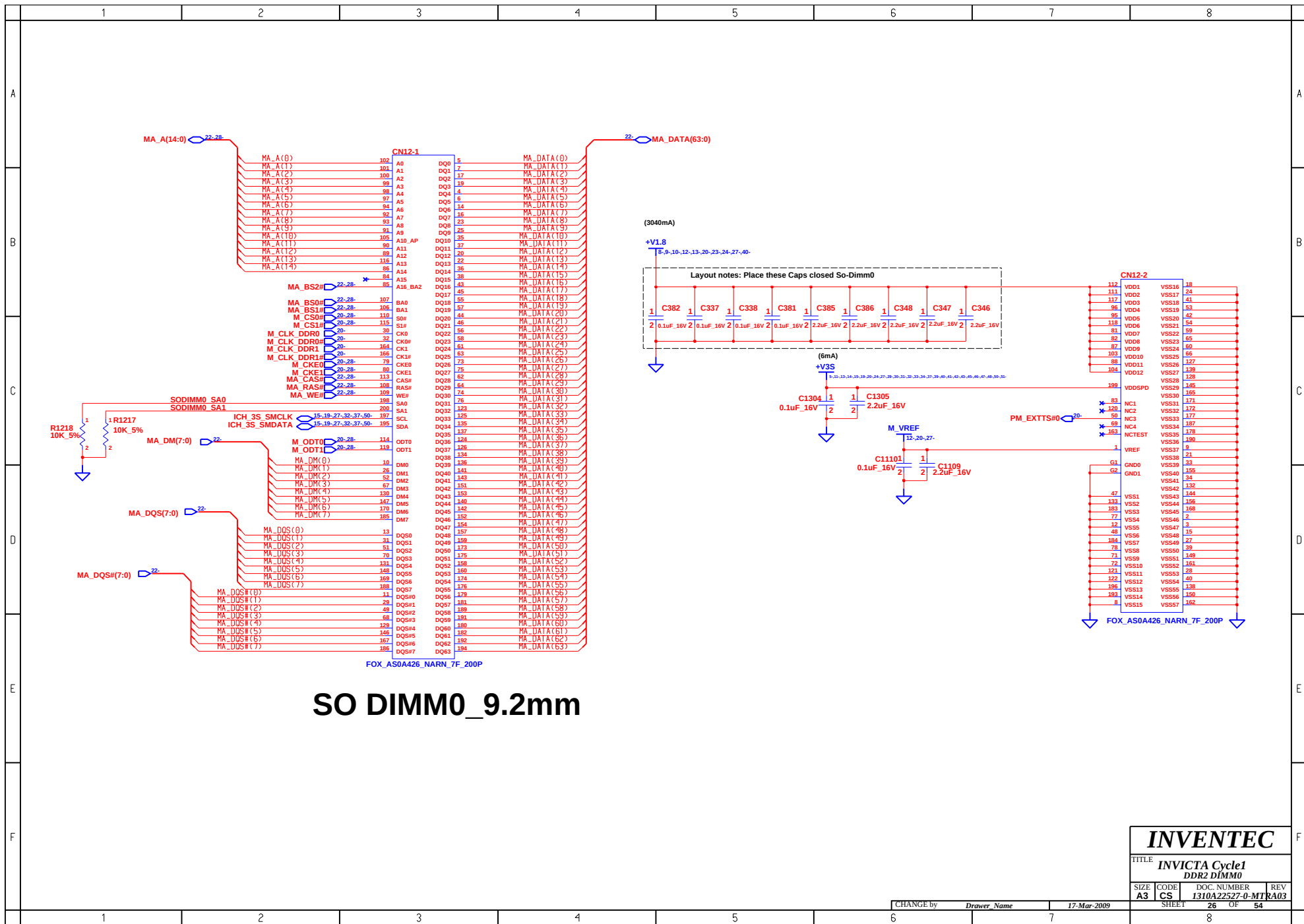
INVENTEC

TITLE
INVICTA Cycle1
N/B Cantiga-6

SIZE A3	CODE CS	DOC. NUMBER I310A22527-0-MTR	REV A03
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CHANGE by *Draver Name* 17-Mar-2009



SO DIMM0_9.2mm

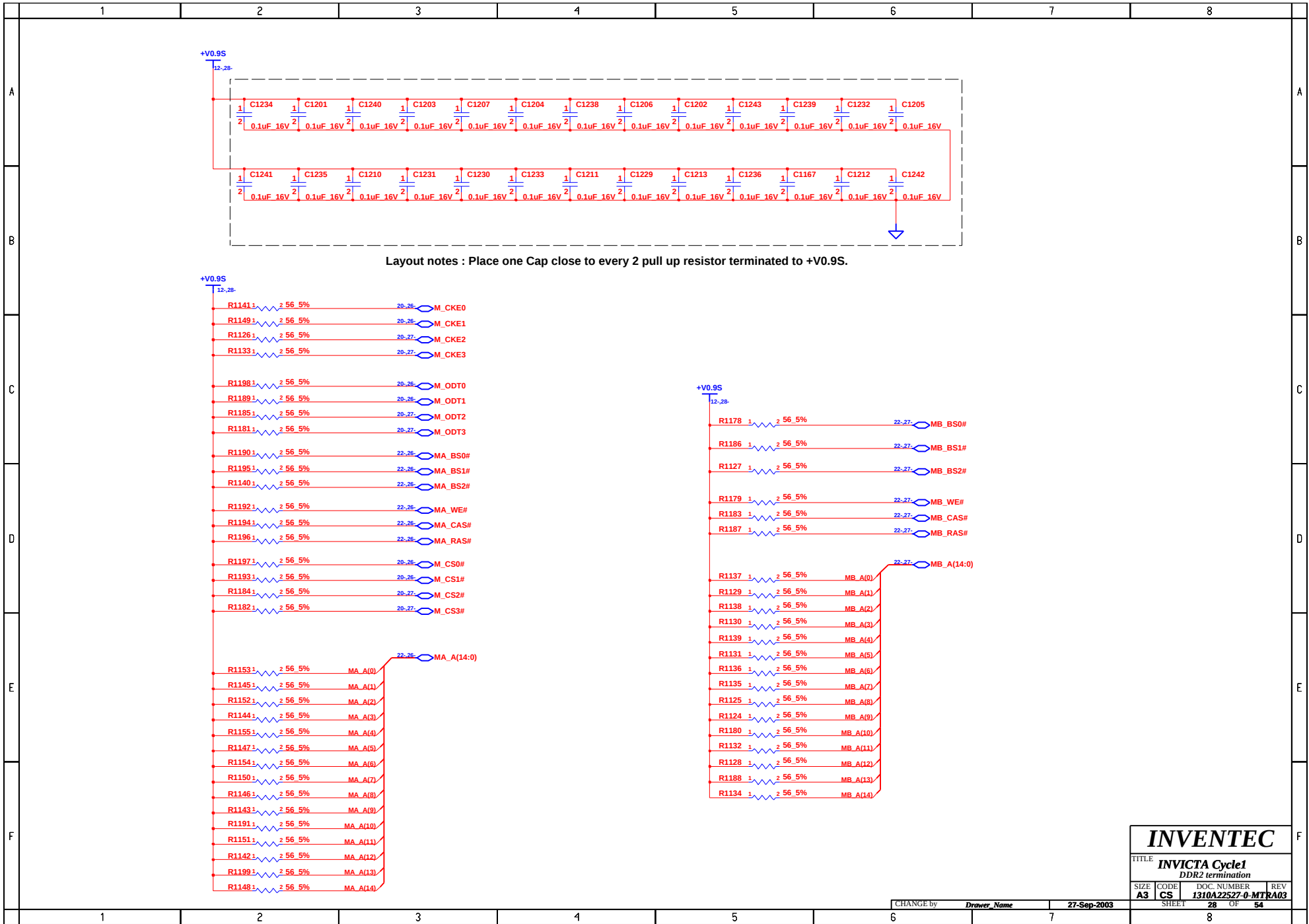
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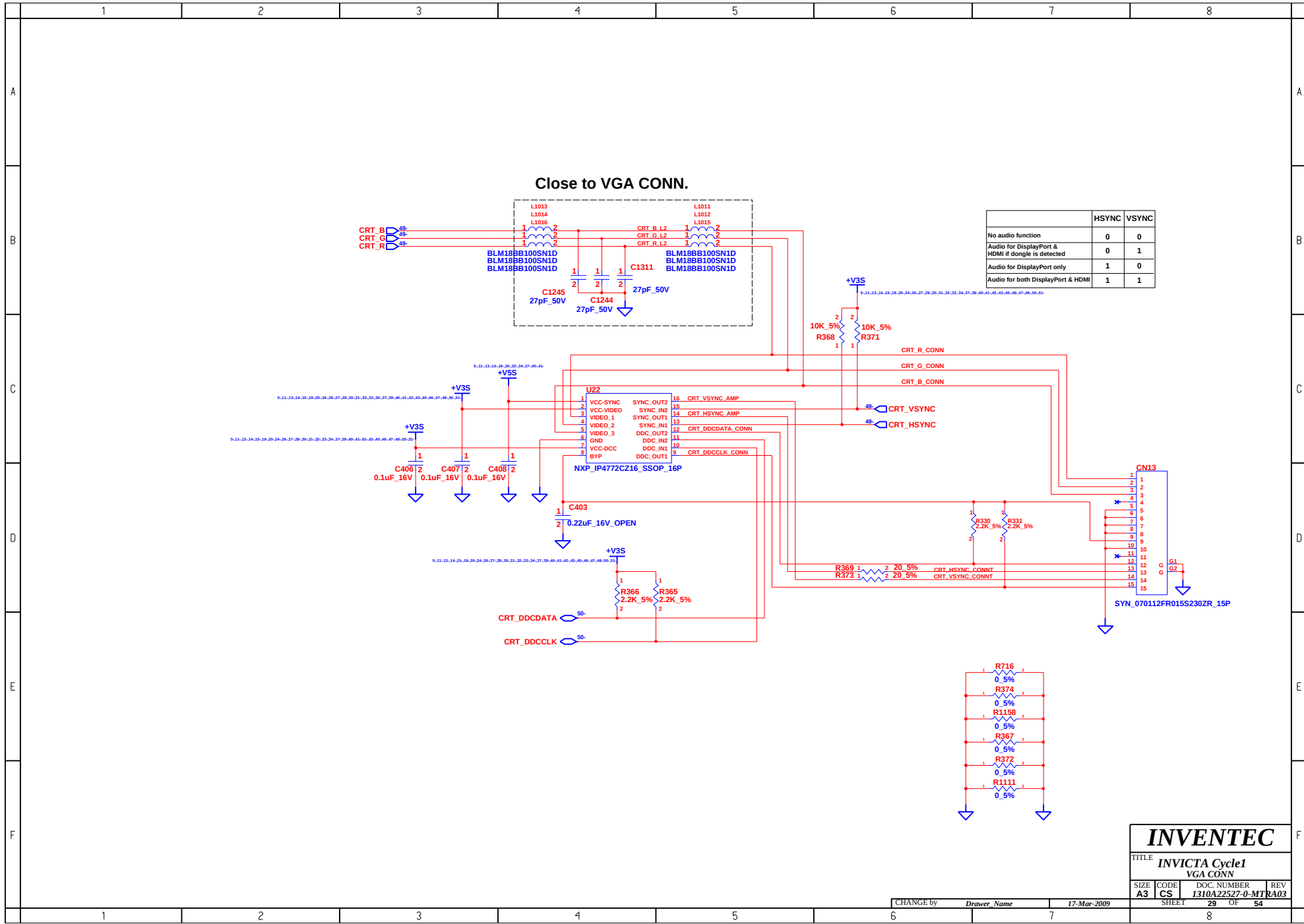
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**INVICTA Cycle1
DDR2 DIMM0**

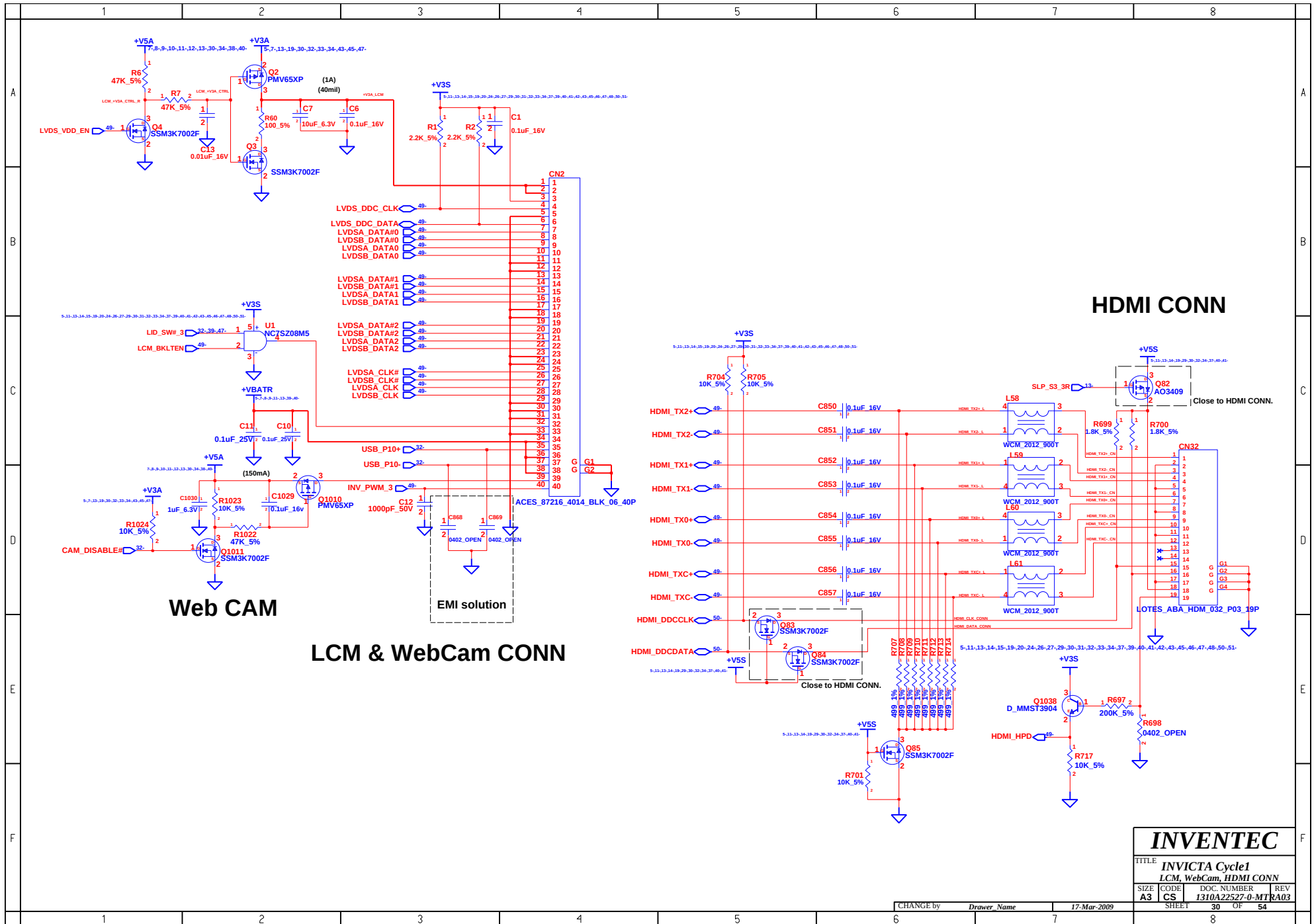
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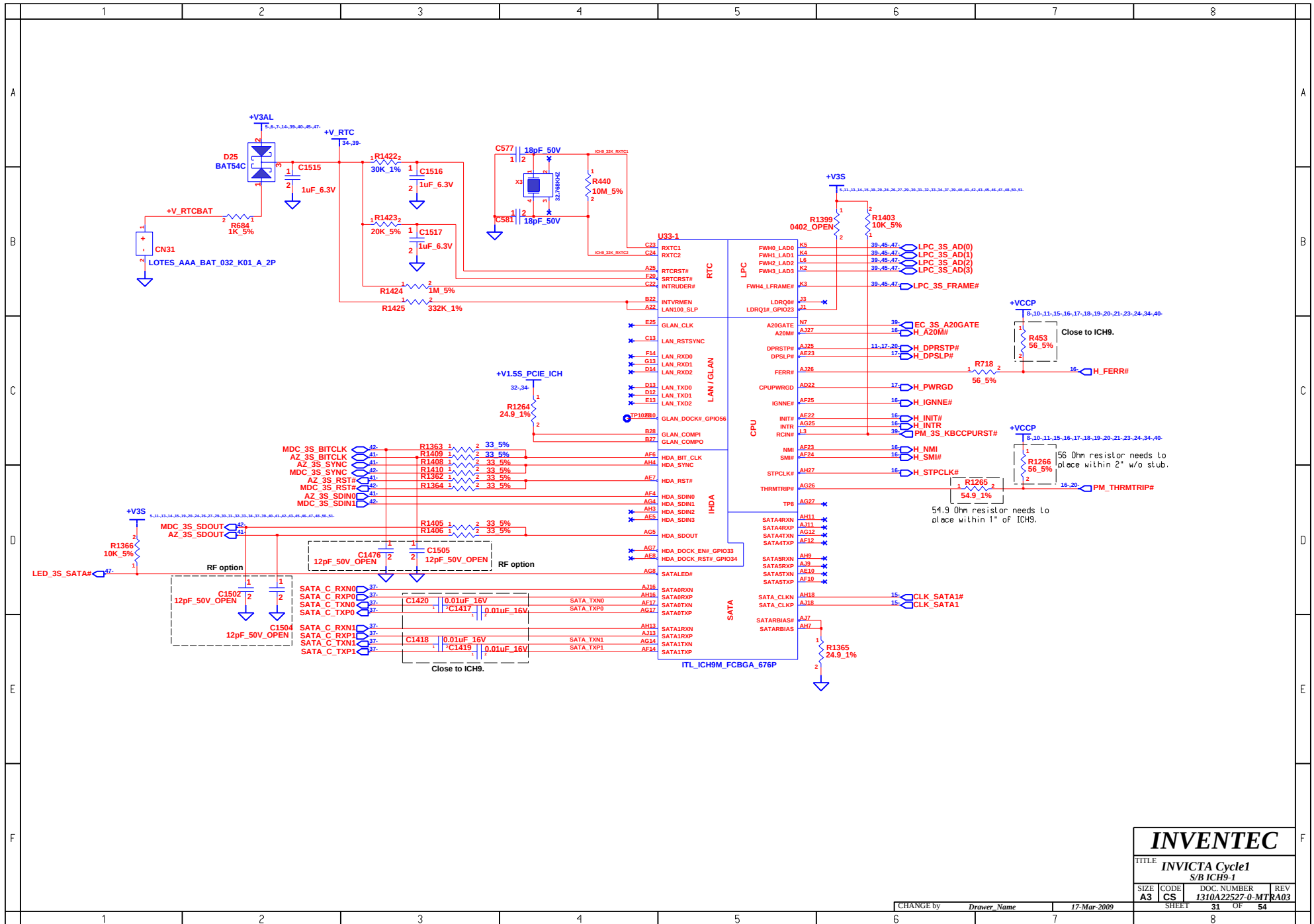
CHANGE by *Drawn Name* 17-Mar-2009

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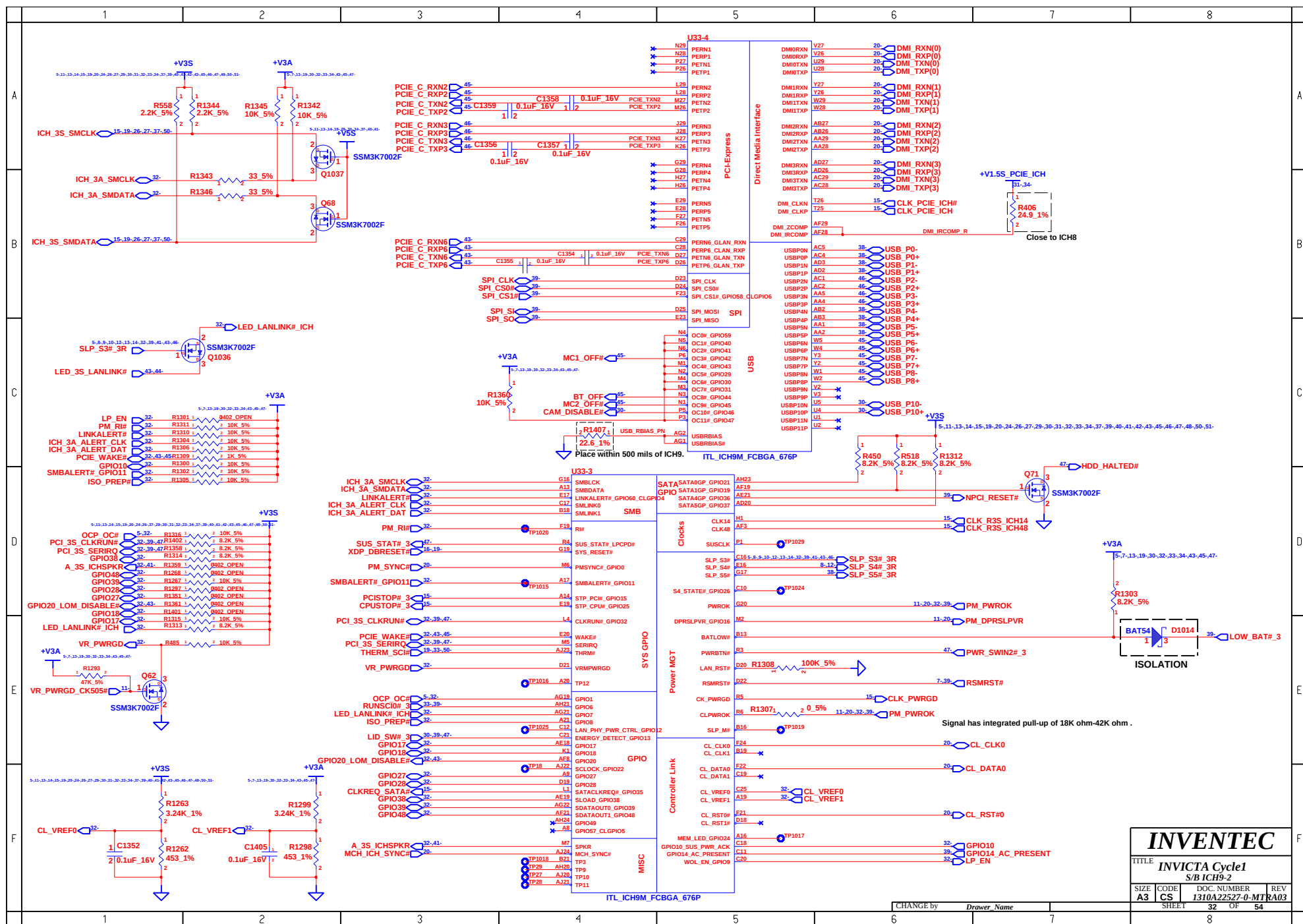


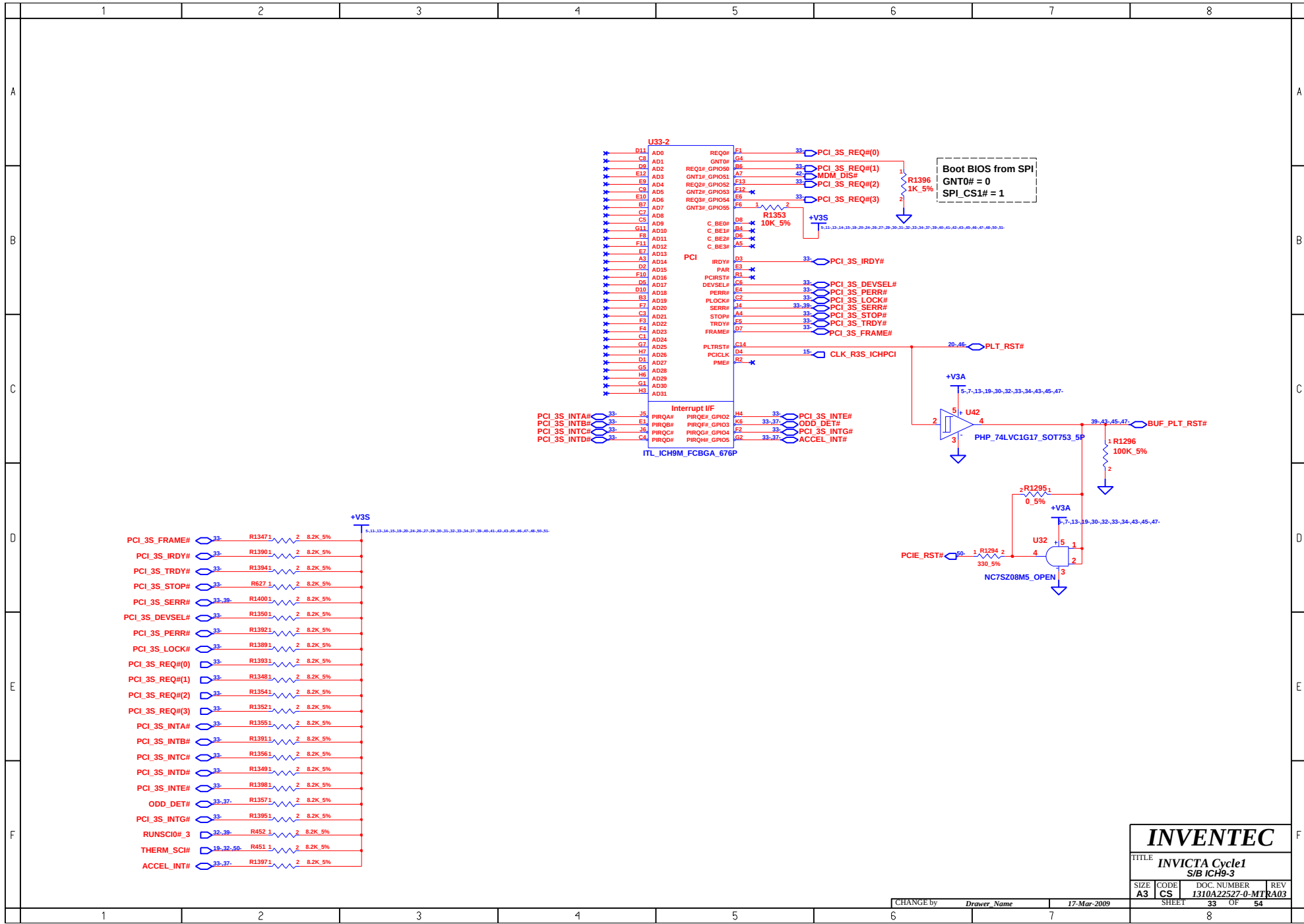




INVENTEC

TITLE INVICTA Cycle1 S/B ICH9-1			
SIZE A3	CODE CS	DOC. NUMBER 1310A22527-0-MT	REV A03
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INVENTEC

TITLE
INVICTA Cycle1
S/B ICH9-3

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

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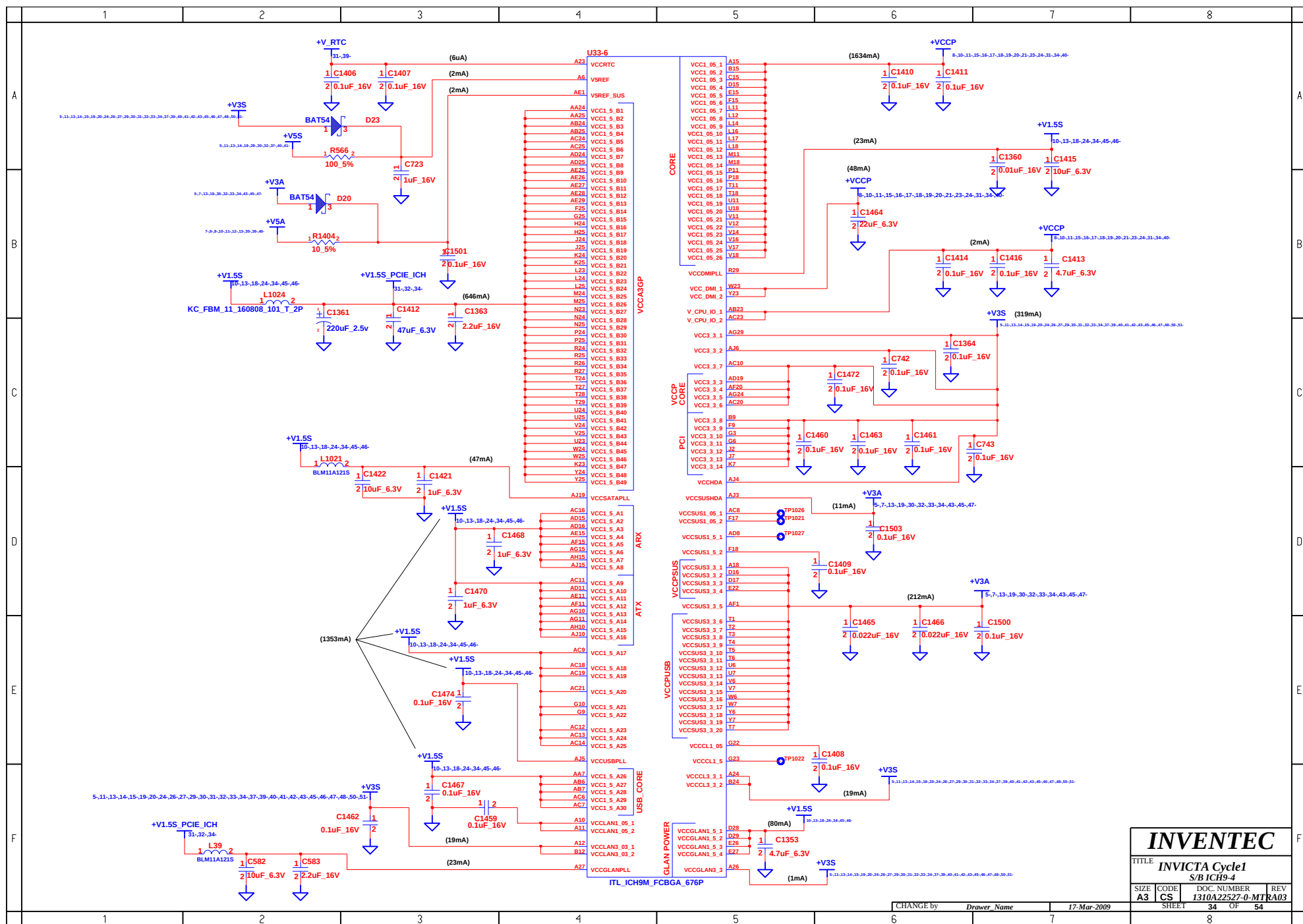


Diagram showing the pinout of the ICH9M FCBGA 676P package, organized into columns 1 through 8. The package is labeled U33-5.

Pinout List:

Pin	Signal	Pin	Signal
AA26	VSS001	VSS107	H5
AA27	VSS002	VSS108	J23
AA3	VSS003	VSS109	J26
AA6	VSS004	VSS110	J27
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	L7
AC3	VSS014	VSS120	M12
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	P12
AE2	VSS035	VSS141	P13
AE20	VSS036	VSS142	P14
AE24	VSS037	VSS143	P15
AE3	VSS038	VSS144	P16
AE4	VSS039	VSS145	P17
AE6	VSS040	VSS146	P2
AE9	VSS041	VSS147	P23
AF13	VSS042	VSS148	P28
AF16	VSS043	VSS149	P29
AF18	VSS044	VSS150	P4
AF22	VSS045	VSS151	P7
AH26	VSS046	VSS152	R11
AF26	VSS047	VSS153	R12
AF27	VSS048	VSS154	R13
AF5	VSS049	VSS155	R14
AF7	VSS050	VSS156	R15
AF9	VSS051	VSS157	R16
AG11	VSS052	VSS158	R17
AG16	VSS053	VSS159	R18
AG18	VSS054	VSS160	R28
AG20	VSS055	VSS161	T12
AG23	VSS056	VSS162	T13
AG3	VSS057	VSS163	T14
AG6	VSS058	VSS164	T15
AG9	VSS059	VSS165	T16
AH12	VSS060	VSS166	T17
AH14	VSS061	VSS167	T23
AH17	VSS062	VSS168	B26
AH18	VSS063	VSS169	U13
AH2	VSS064	VSS170	U14
AH22	VSS065	VSS171	U14
AH29	VSS066	VSS172	U15
AH28	VSS067	VSS173	U16
AH5	VSS068	VSS174	U17
AH8	VSS069	VSS175	AD23
AJ12	VSS070	VSS176	U26
AJ14	VSS071	VSS177	U27
AJ17	VSS072	VSS178	U3
AJ8	VSS073	VSS179	V1
B11	VSS074	VSS180	V13
B14	VSS075	VSS181	V15
B17	VSS076	VSS182	V23
B2	VSS077	VSS183	V28
B20	VSS078	VSS184	V29
B23	VSS079	VSS185	V4
B5	VSS080	VSS186	V5
B8	VSS081	VSS187	W26
C26	VSS082	VSS188	W27
C27	VSS083	VSS189	W2
E11	VSS084	VSS190	V1
E14	VSS085	VSS191	V28
E18	VSS086	VSS192	V29
E2	VSS087	VSS193	V4
E21	VSS088	VSS194	Y5
E24	VSS089	VSS195	AG28
E3	VSS090	VSS196	AH6
E8	VSS091	VSS197	AF2
F16	VSS092	VSS198	B25
F28	VSS093	VSS199	A1
F29	VSS094	VSS200	A2
G12	VSS095	VSS201	A28
G14	VSS096	VSS202	A29
G18	VSS097	VSS203	AH1
G21	VSS098	VSS204	AH29
G24	VSS099	VSS205	A31
G26	VSS100	VSS206	A32
G27	VSS101	VSS207	A328
G8	VSS102	VSS208	A329
H2	VSS103	VSS209	B1
H23	VSS104	VSS210	B29
H28	VSS105	VSS211	
H29	VSS106	VSS212	

Package Label: U33-5

Pinout Legend:

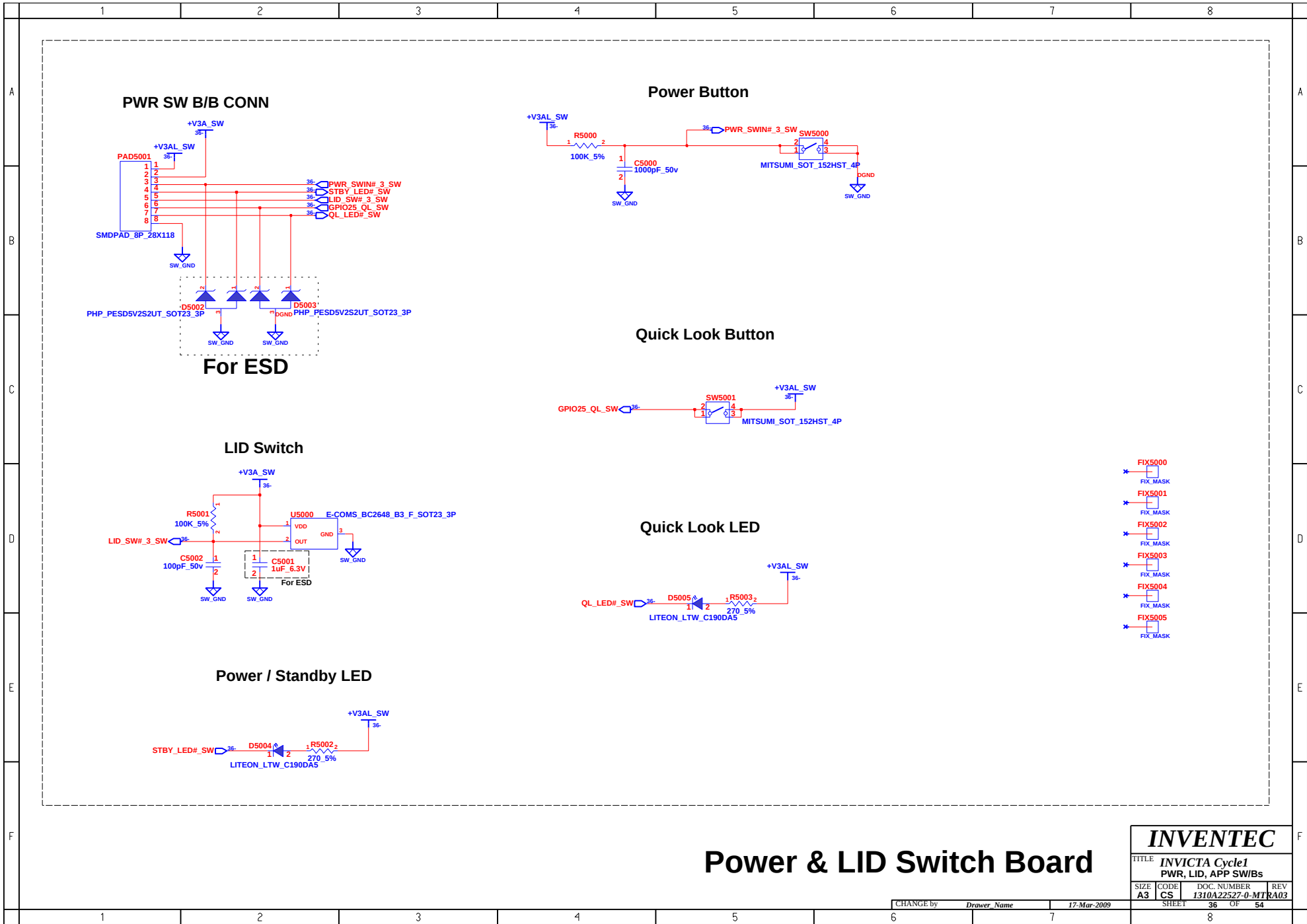
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- ICHGND4
- ICHGND7
- ICHGND10

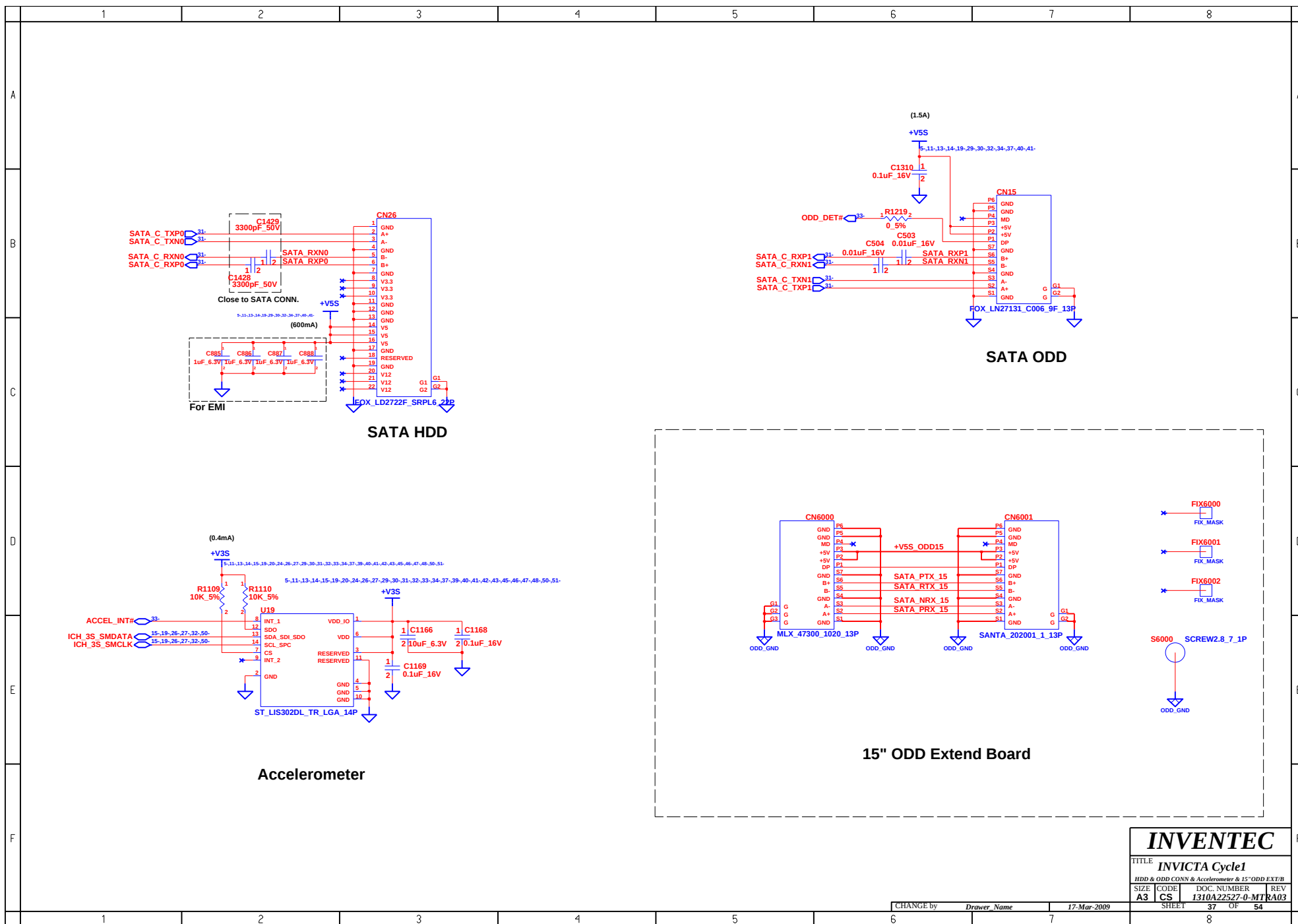
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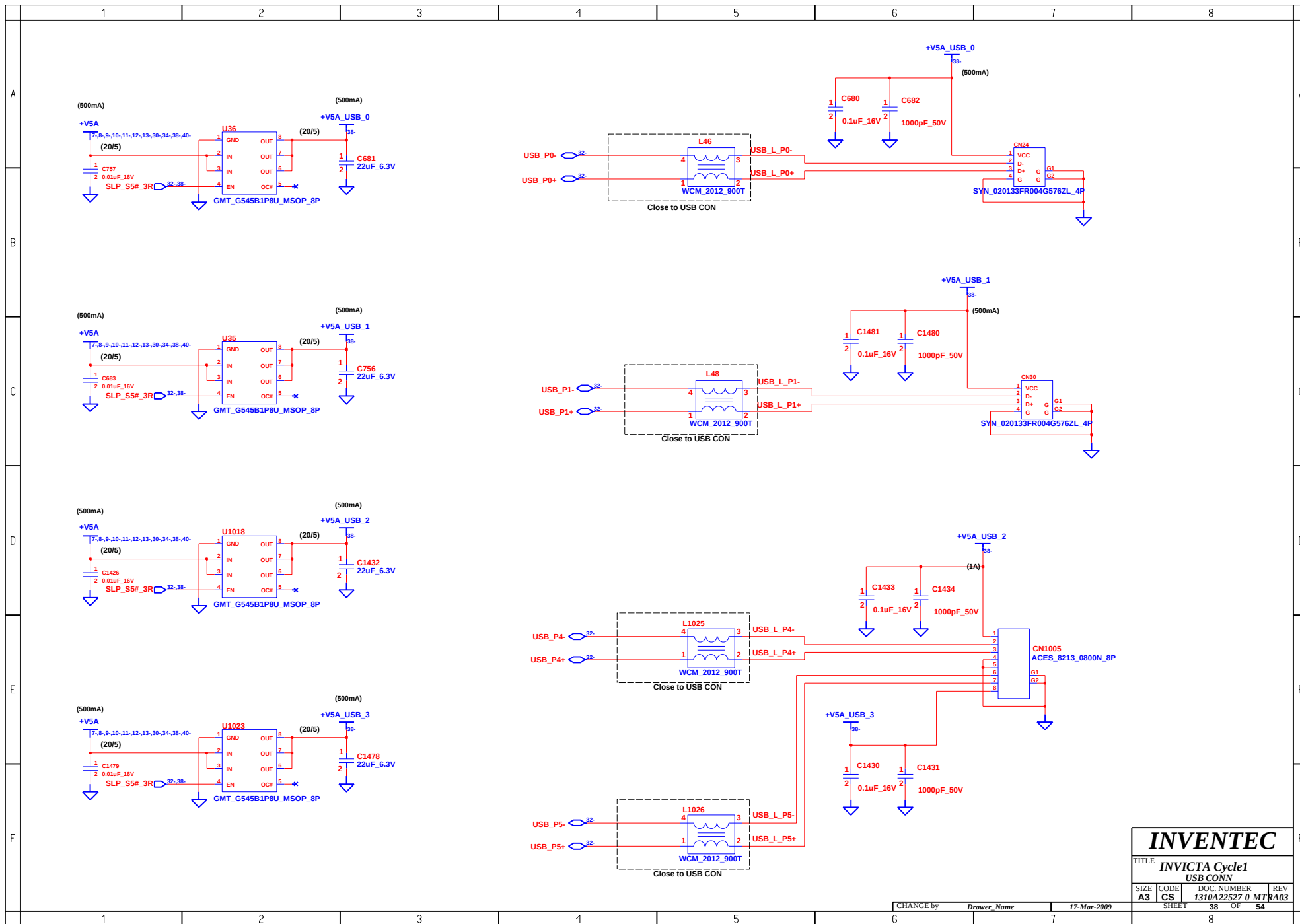
INVENTEC

INVICTA Cycle1

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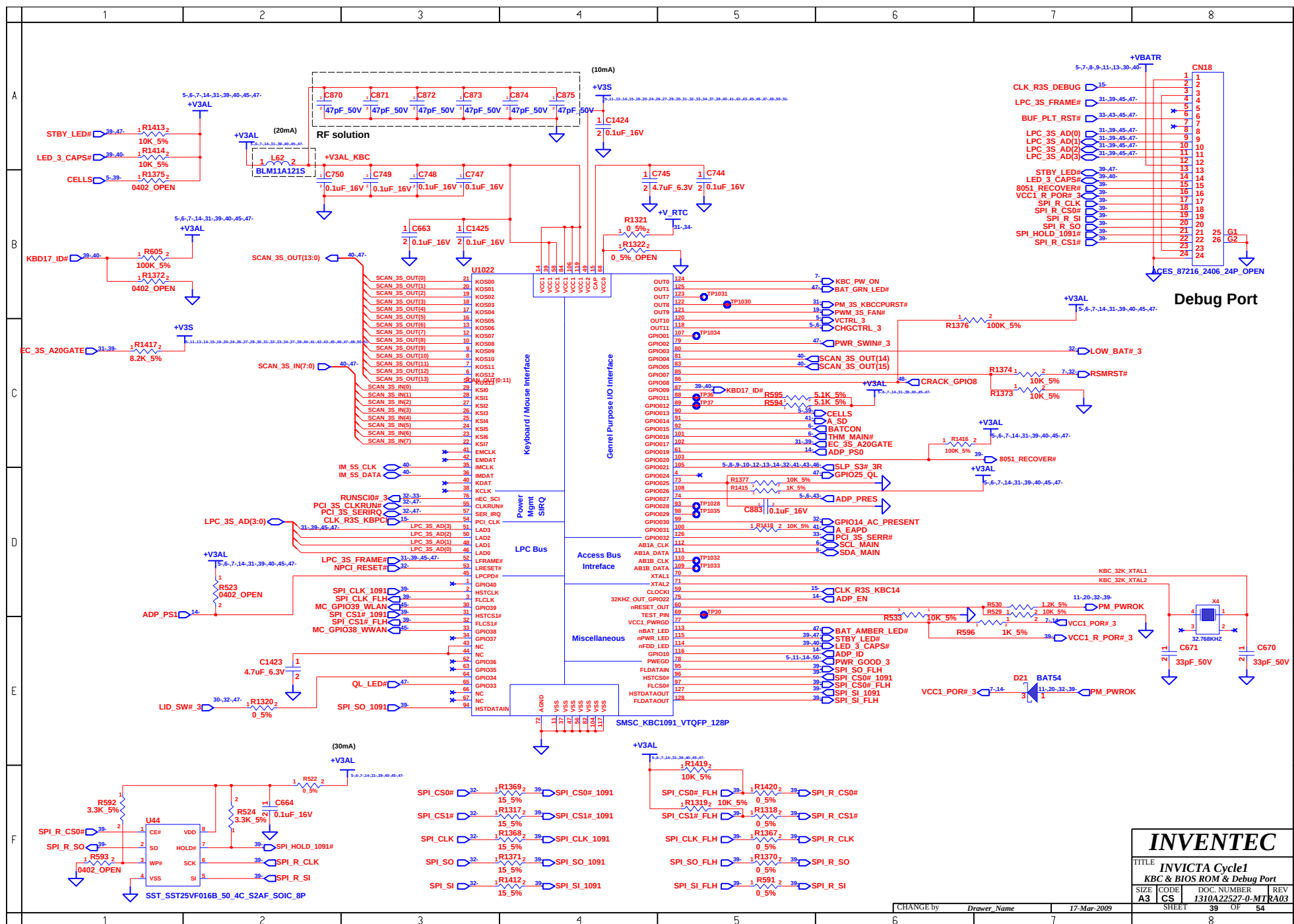


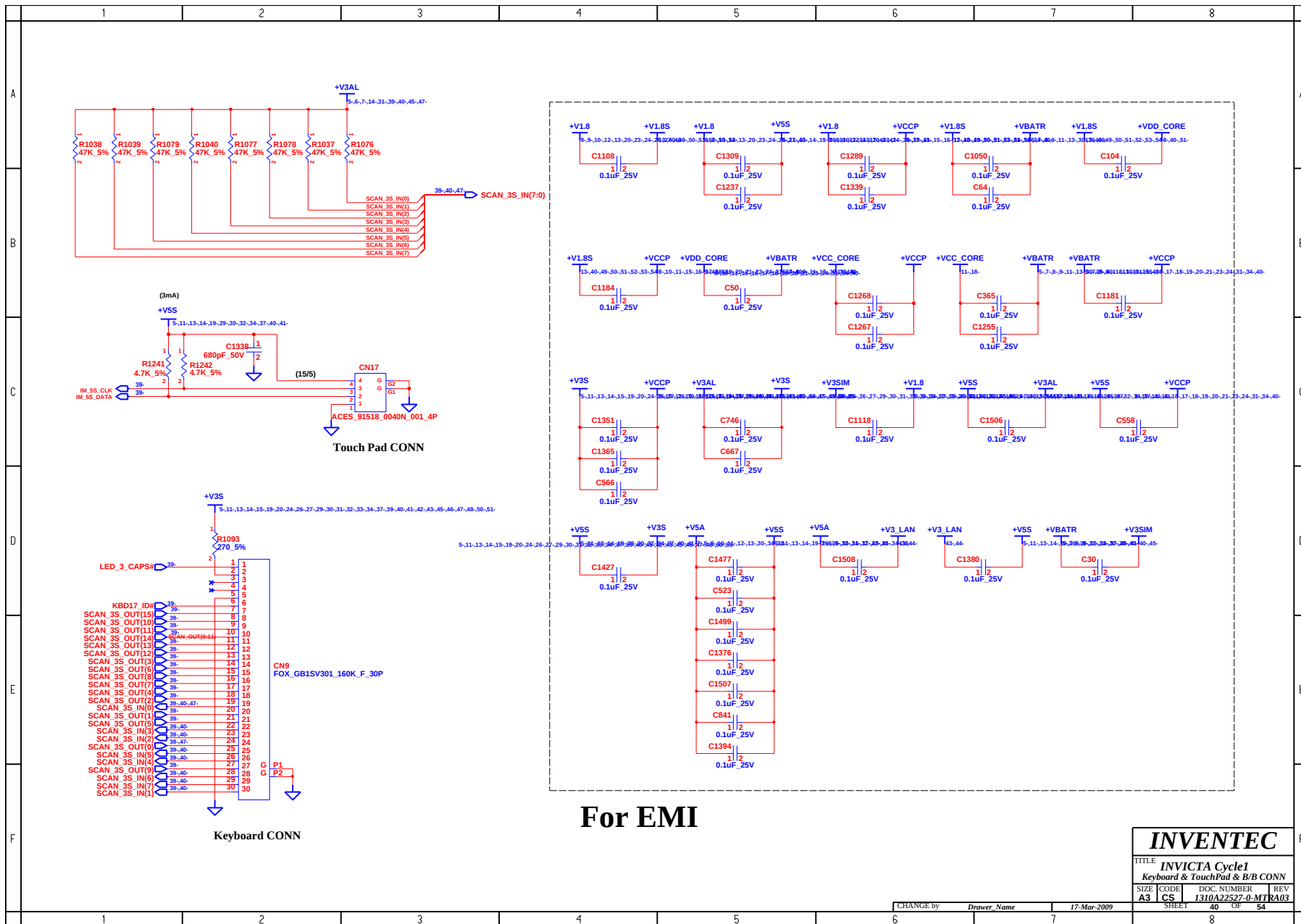


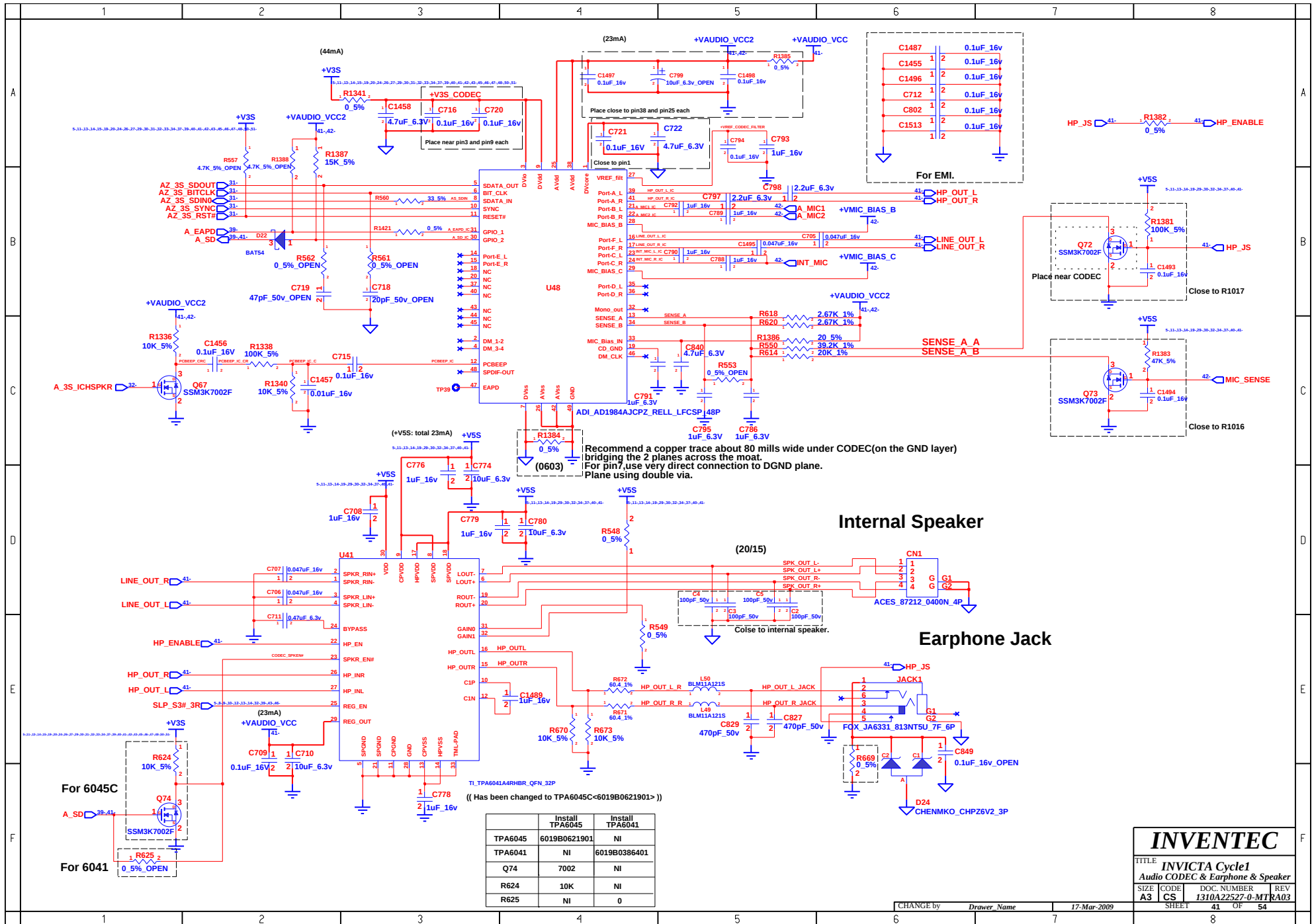


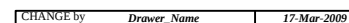
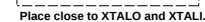
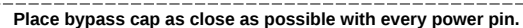
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TITLE INVICTA Cycle1			
USB CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22527-0-MT	RA03
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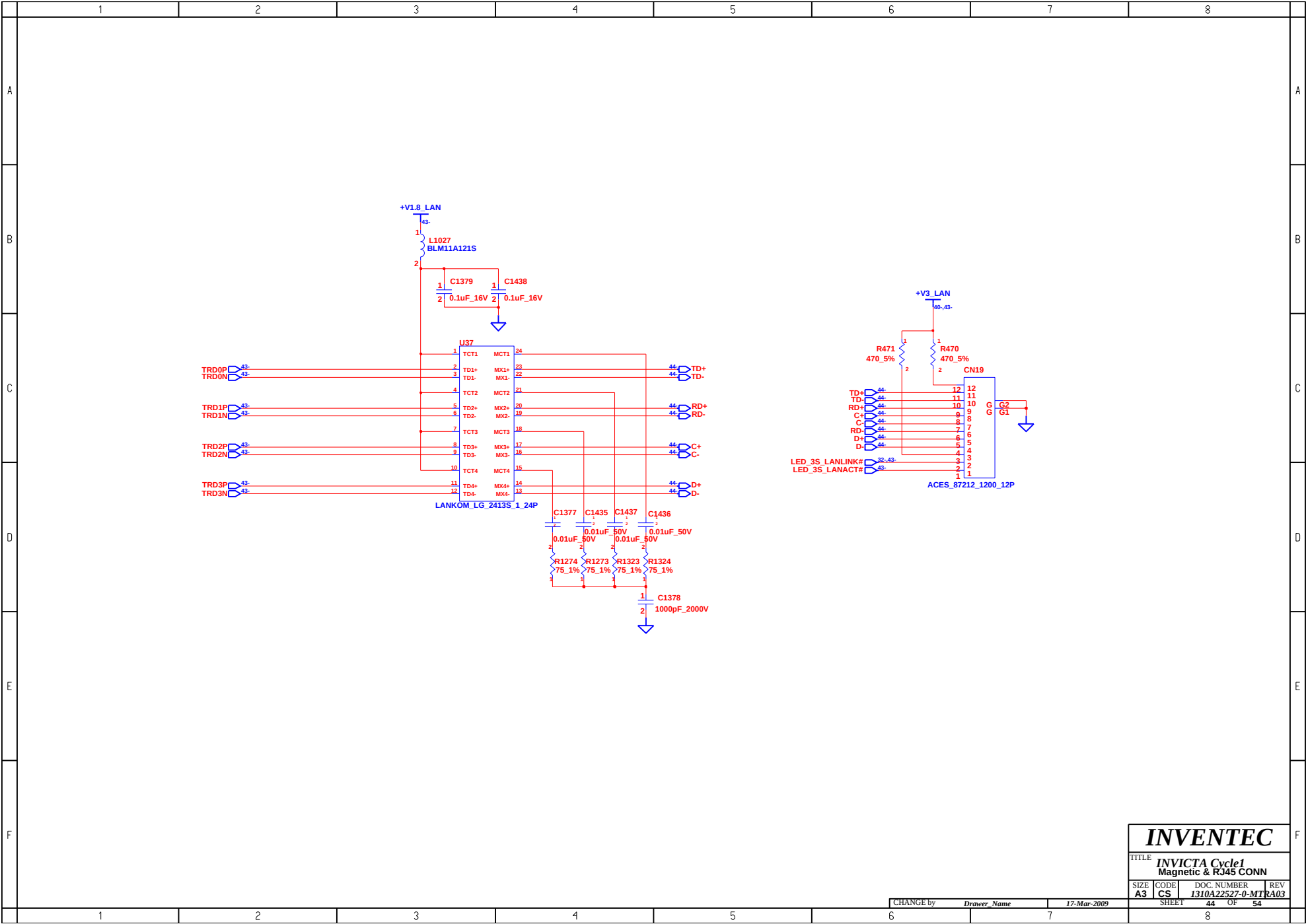








CHANGE by			Drawer Name	17-Mar-2009	A3	CS	1310A22527-0-M1RA03
					SHEET 43 OF 54		



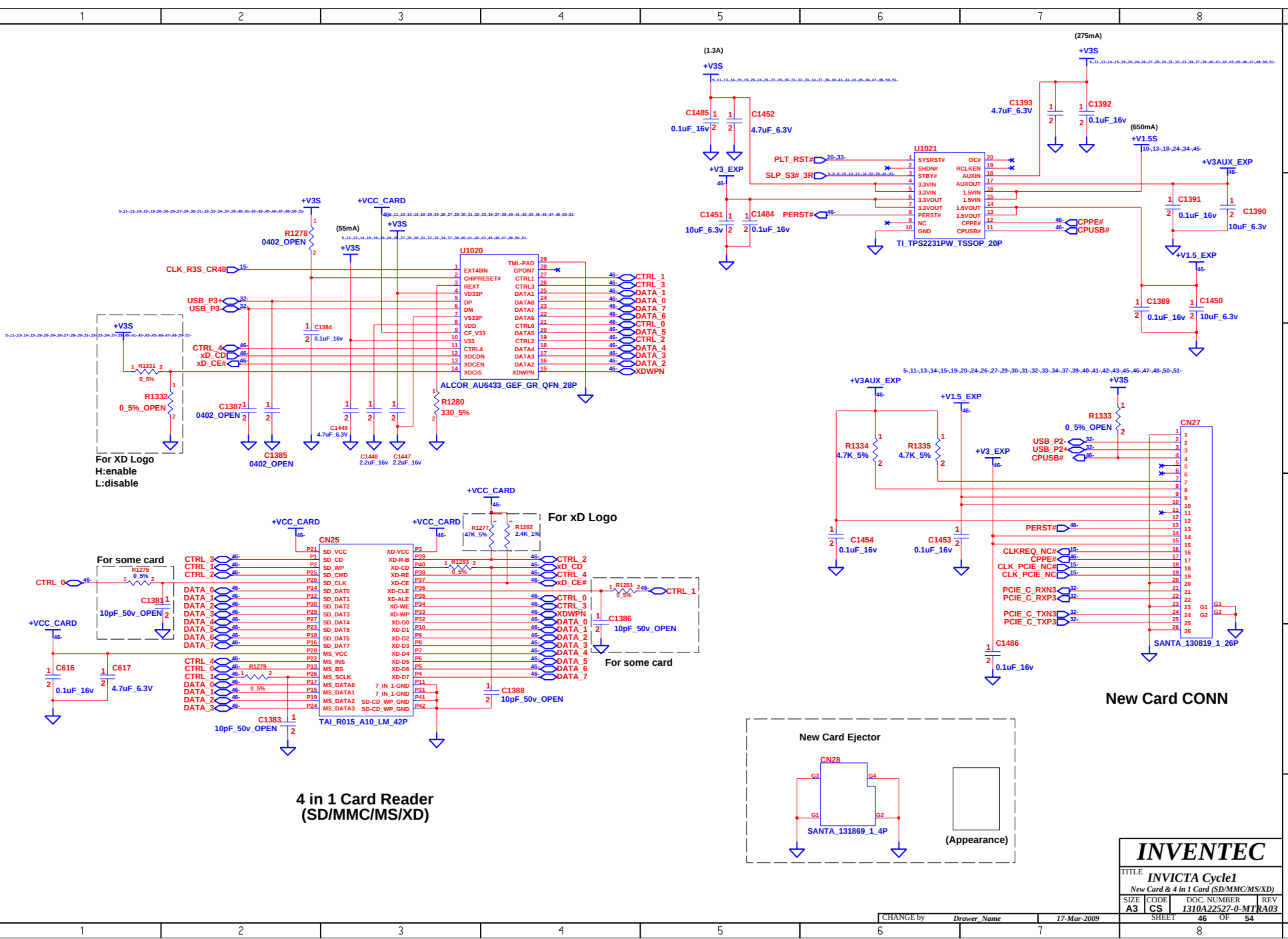
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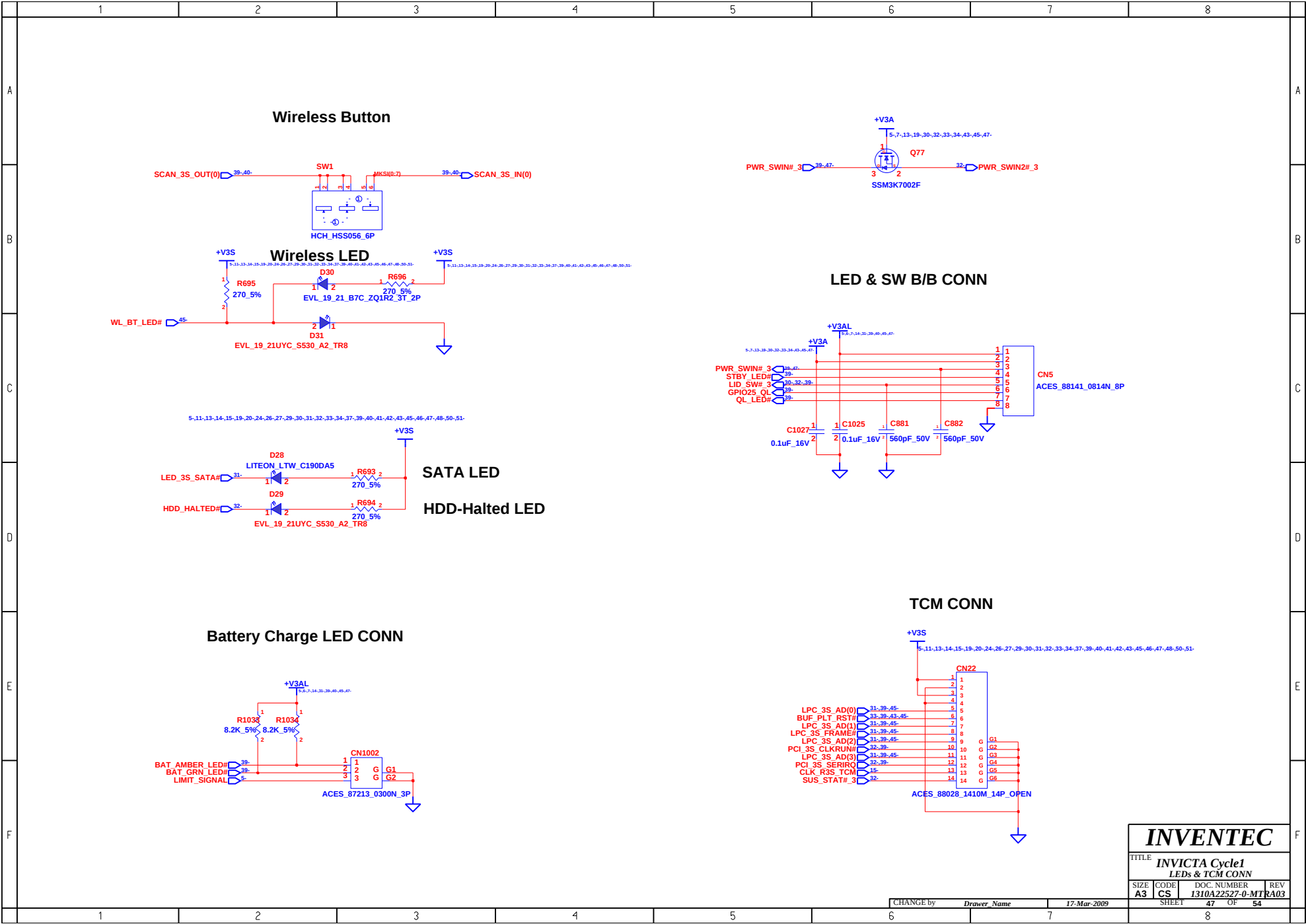
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Magnetic & RJ45 CONN

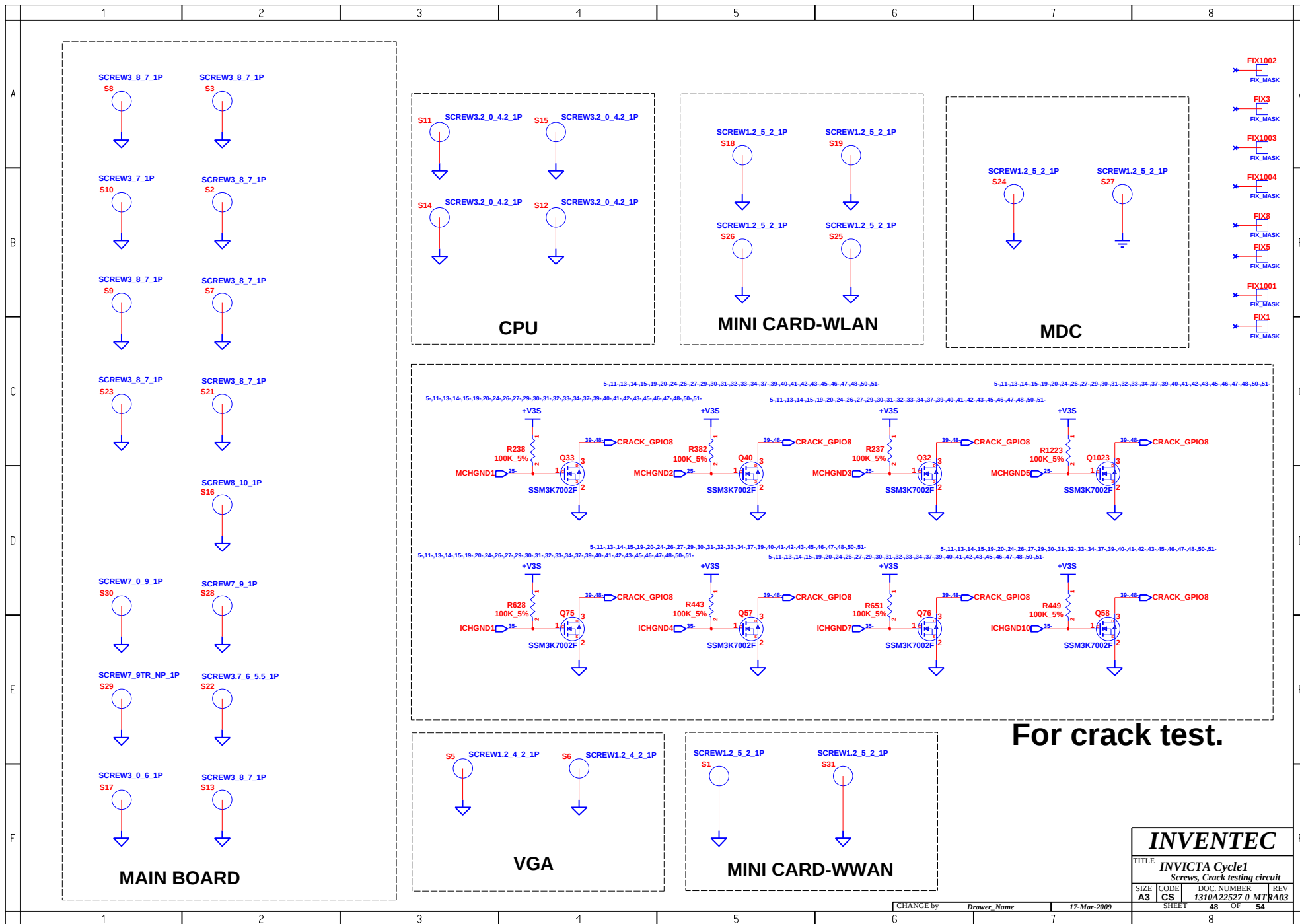
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CHANGE by *Drawer Name* 17-Mar-2009

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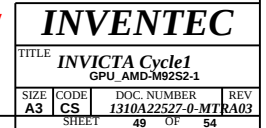


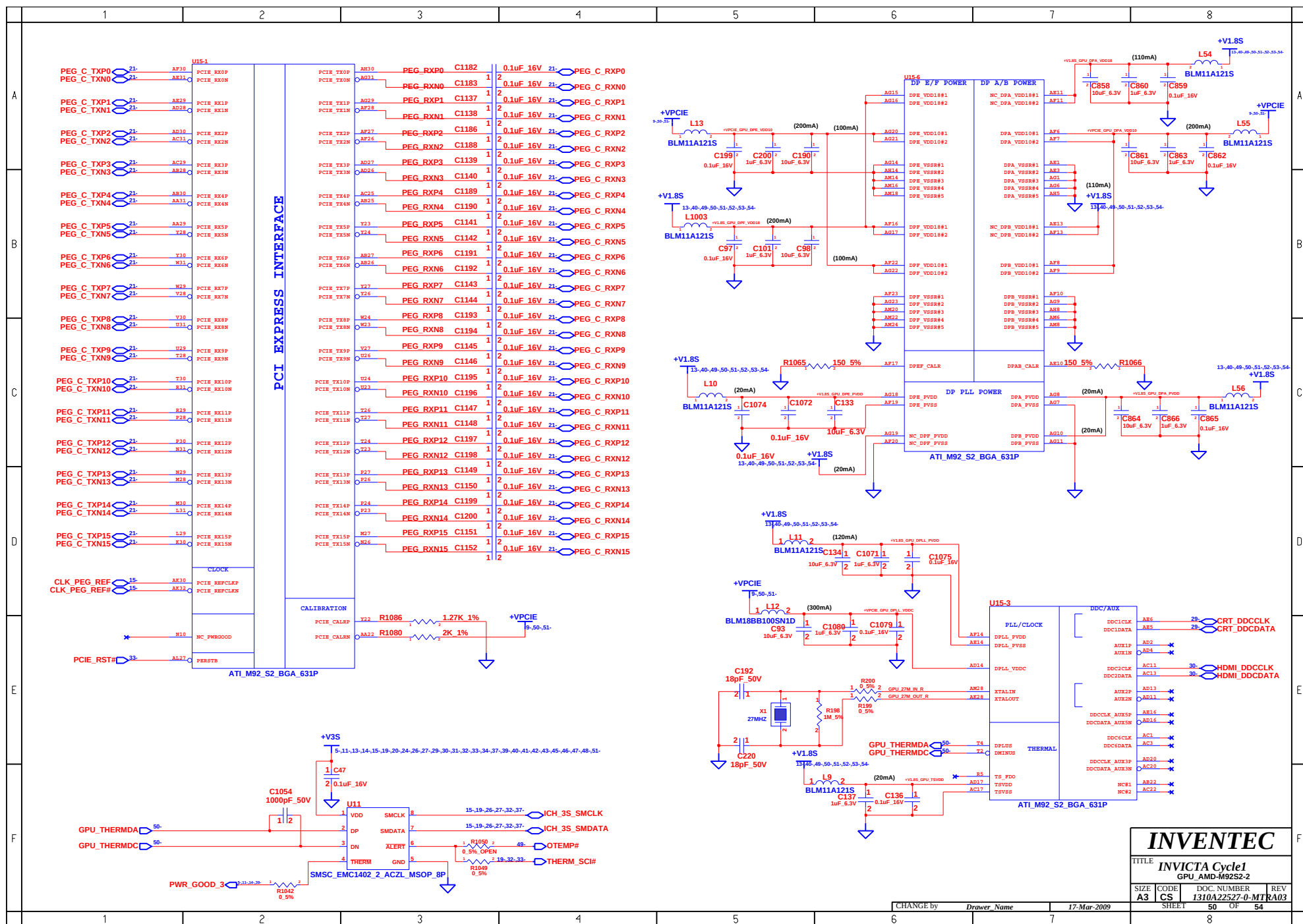


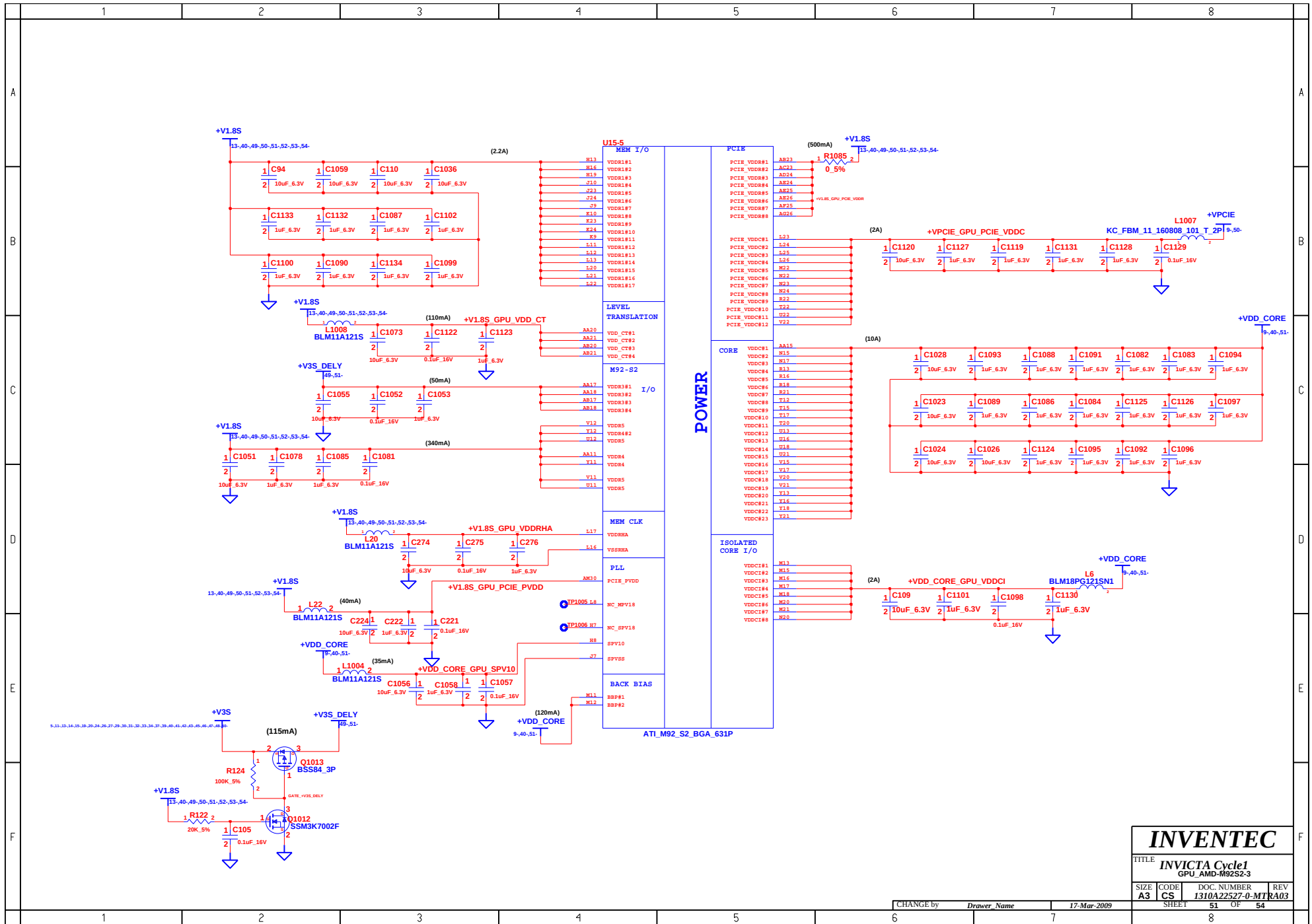


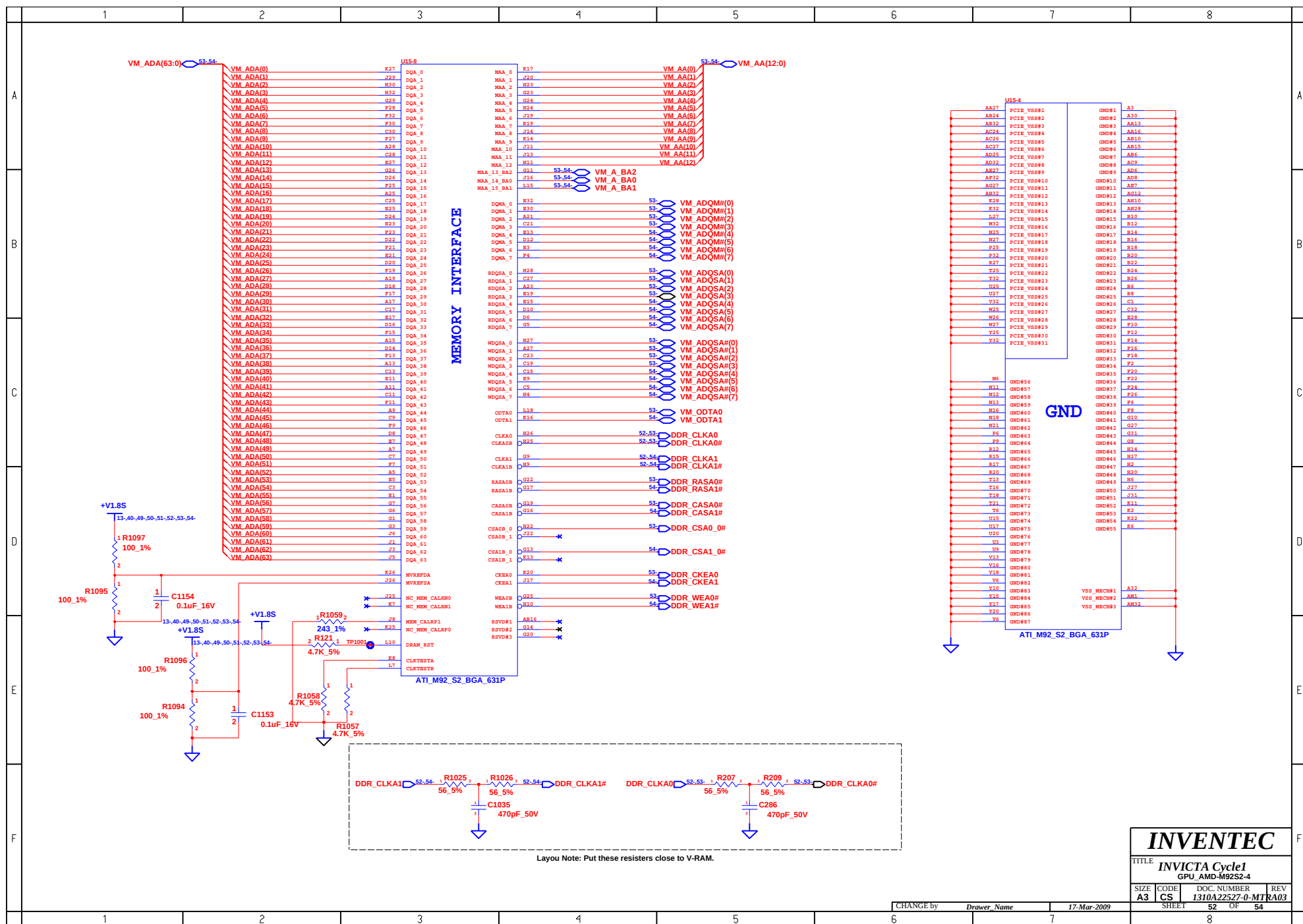
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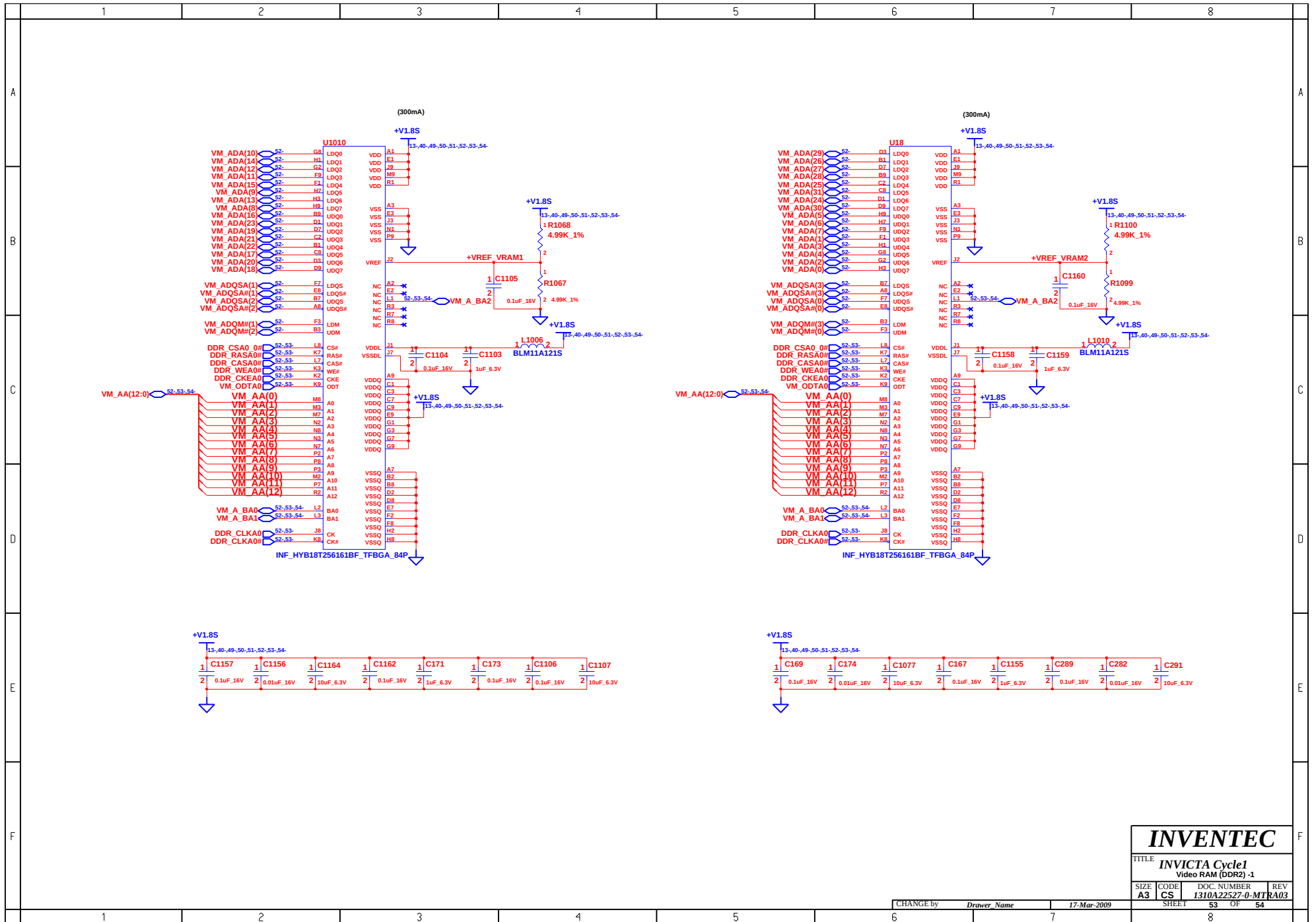
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CDE









INVENTEC

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