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C	<div>Hublot-UMA PV_DDR3 (A01) 2009.04.21</div>																																																																							
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F	<table><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td>DATE</td><td>CHANGE NO.</td><td>REV</td></tr></table>																						DATE	CHANGE NO.	REV	<table><tr><td></td><td>EE</td><td>DATE</td><td>POWER</td><td>DATE</td></tr><tr><td>DRAWER</td><td></td><td></td><td></td><td></td></tr><tr><td>DESIGN</td><td></td><td></td><td></td><td></td></tr><tr><td>CHECK</td><td></td><td></td><td></td><td></td></tr><tr><td>RESPONSIBLE</td><td></td><td></td><td></td><td></td></tr><tr><td colspan="2">SIZE = 3</td><td colspan="3">VER :</td></tr><tr><td colspan="5">FILE NAME : XXXX-XXXXXX-XX</td></tr><tr><td>P/N</td><td colspan="4">XXXXXXXXXXXX</td></tr></table>								EE	DATE	POWER	DATE	DRAWER					DESIGN					CHECK					RESPONSIBLE					SIZE = 3		VER :			FILE NAME : XXXX-XXXXXX-XX					P/N	XXXXXXXXXXXX			
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INVENTEC			
TITLE Hublot_UMA			
SIZE A3	CODE CS	DOC. NUMBER I310A22592-0-MTR	REV A01
SHEET 1		OF 54	

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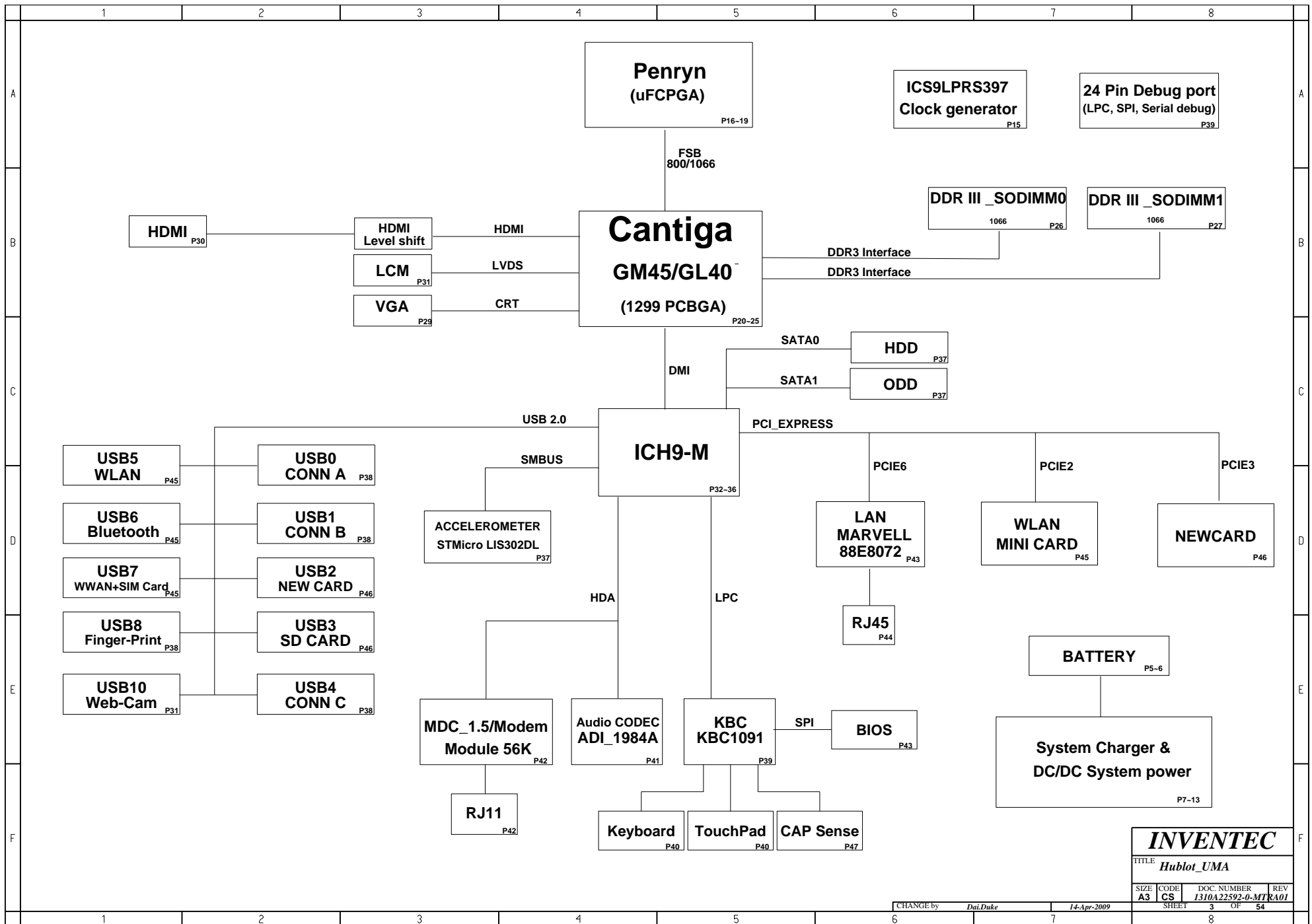
Page	Page	Page
5- DC & Battery Charger.	15- Clock Generator.	37- HDD & ODD CONN & Accelerometer.
6- Select & Battery connector.	16- CPU Penryn-1.	38- USB CONN & USB DB & FP CONN.
7- SYSTEM POWER(3V/5V)	17- CPU Penryn-2.	39- KBC & BIOS ROM.
8- SYSTEM POWER(+V1.8/+VCCP)	18- CPU Penryn-3.	40- Internal Keyboard & TouchPad CONN.
9- SYSTEM POWER(+VGFX)	19- Thermal & Fan.	41- Audio CODEC & Earphone & Speaker.
10- N/A	20- N/B Cantiga-1.	42- Audio MIC & MDC CONN.
11- CPU POWER(VCC_CORE)	21- N/B Cantiga-2.	43- Giga LAN controller.
12- DDR TERMINATION VOLTAGE(+V0.75)	22- N/B Cantiga-3.	44- Magnetic & RJ45 CONN.
13- Power (Sleep: +V5S/+V3S/+V1.5S)	23- N/B Cantiga-4.	45- Mini Card & BT CONN.
14- Power (Sequence)	24- N/B Cantiga-5.	46- New Card & 2 in 1 Card (SD/MMC).
	25- N/B Cantiga-6.	47- LEDs & Buttons & SW/B CONN.
	26- DDR2-DIMM0.	48- Screws & FixMask.
	27- DDR2-DIMM1.	49- DB - CAP Sense board
	28- DDR2-DAMPING.	50- DB - HDD Extend board
	29- CRT CONN.	51- DB - Finger Print board
	30- HDMI CONN.	52- DB - USB Extend board
	31- LCM CONN.	53- DB - Power Switch & Sim Card board
	32- S/B ICH9-1.	
	33- S/B ICH9-2.	
	34- S/B ICH9-3.	
	35- S/B ICH9-4.	
	36- S/B ICH9-5.	

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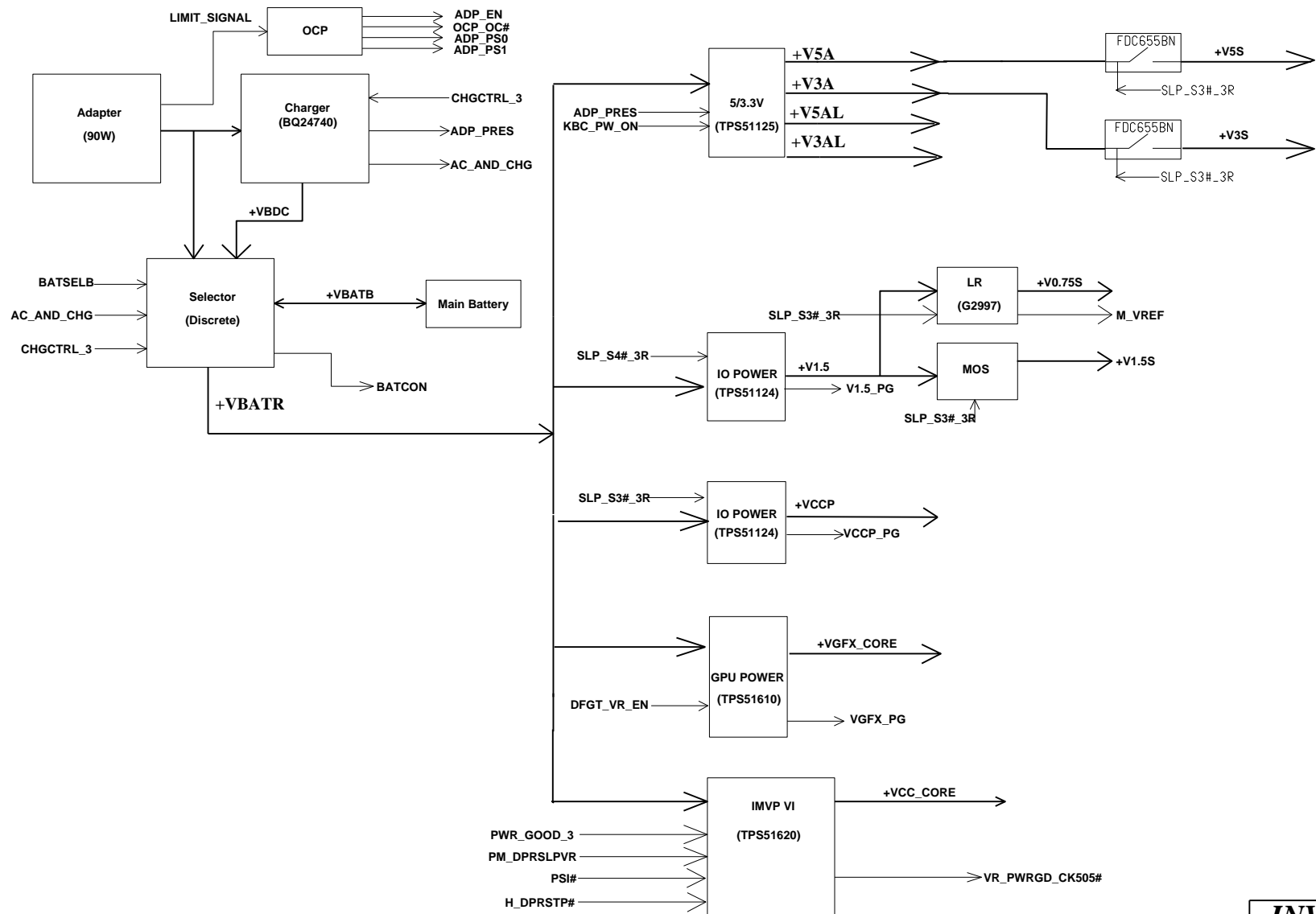
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SIZE A3	CODE CS	DOC. NUMBER I310A22592-0-MTR	REV A01
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CHANGE by **Dai.Duke** 14-Apr-2009



INVENTEC			
TITLE Hublot_UMA			
SIZE A3	CODE CS	DOC. NUMBER I310A22592-0-MTR	REV A01
CHANGE by Dai.Duke		14-Apr-2009	
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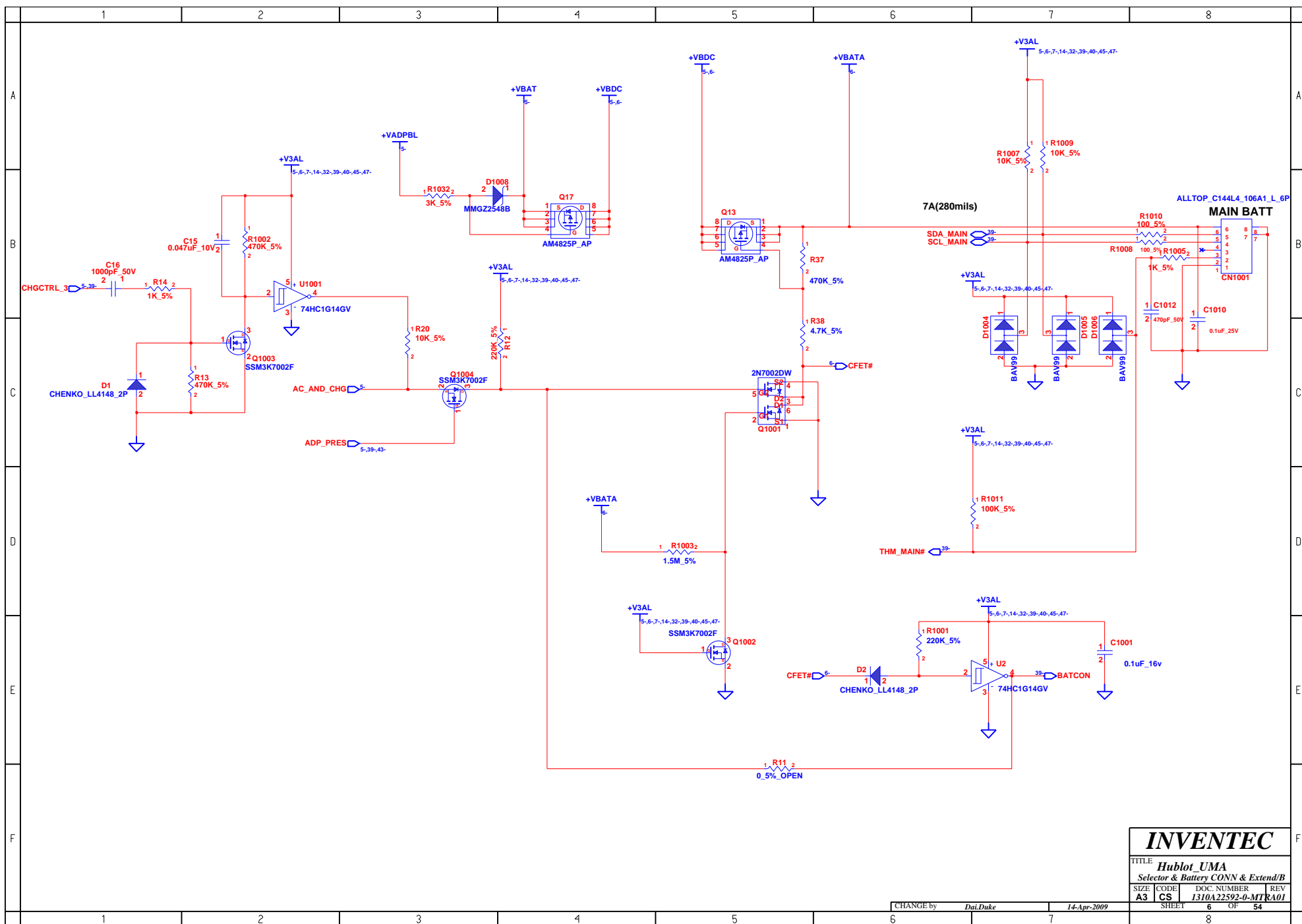
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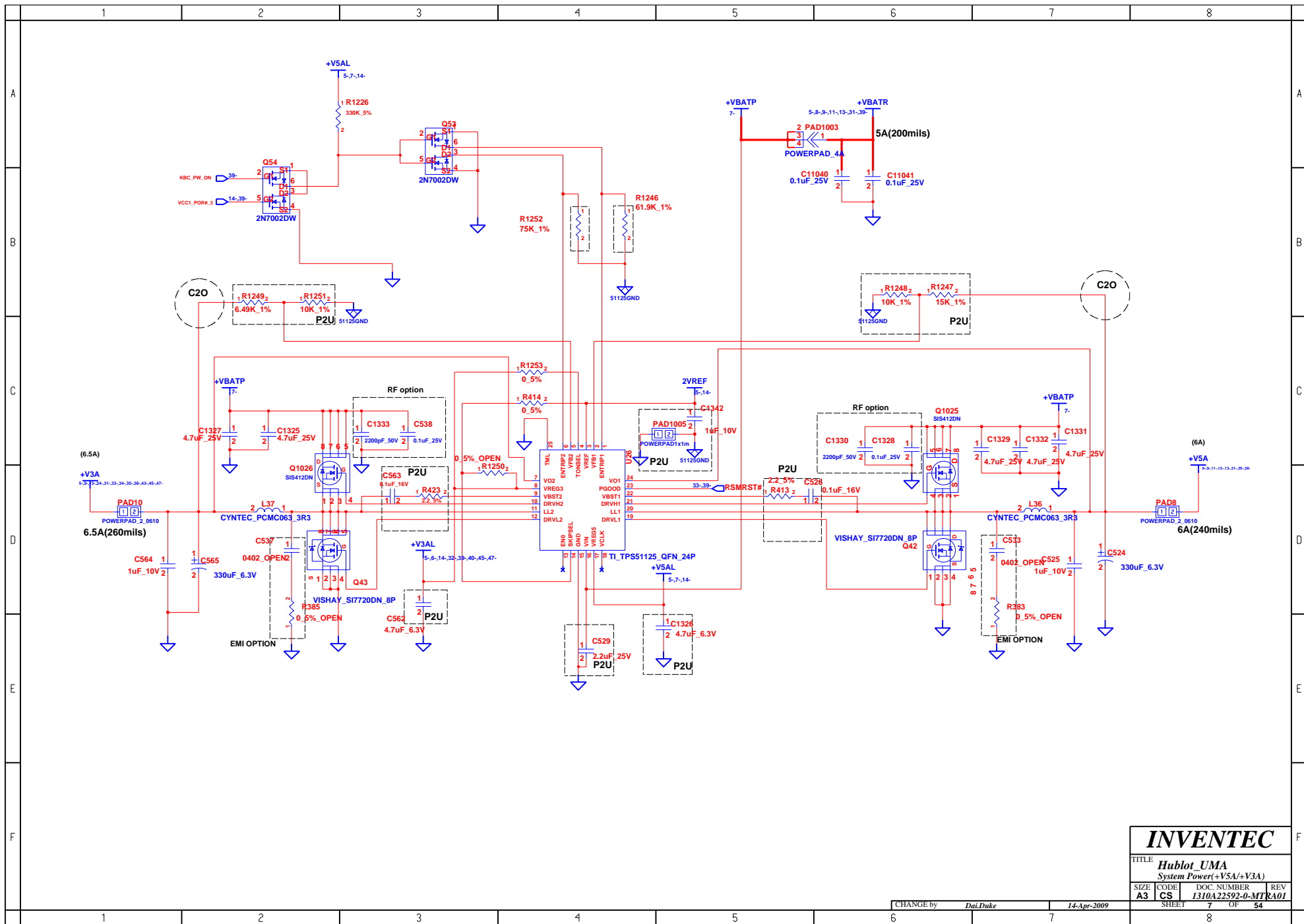
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Hublot_UMA

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A22592-0-MTR	RA01

CHANGE by *Dai.Duke* 14-Apr-2009

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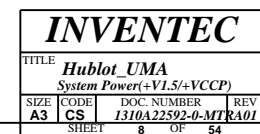


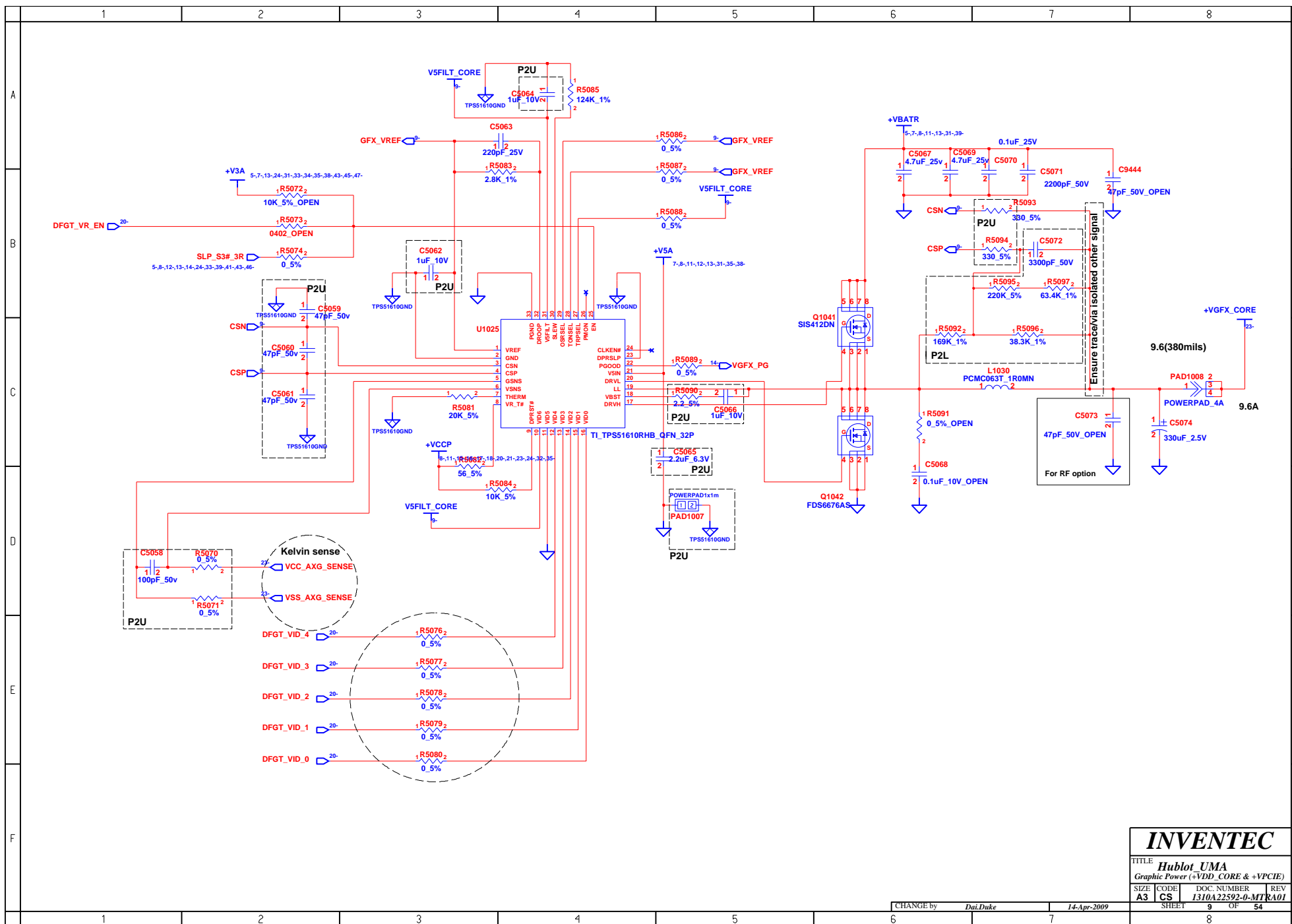
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SIZE A3	CODE CS	DOC. NUMBER I310A22592-0-MT	REV RA01

CHANGE by *Dai.Duke* 14-Apr-2009

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C									C
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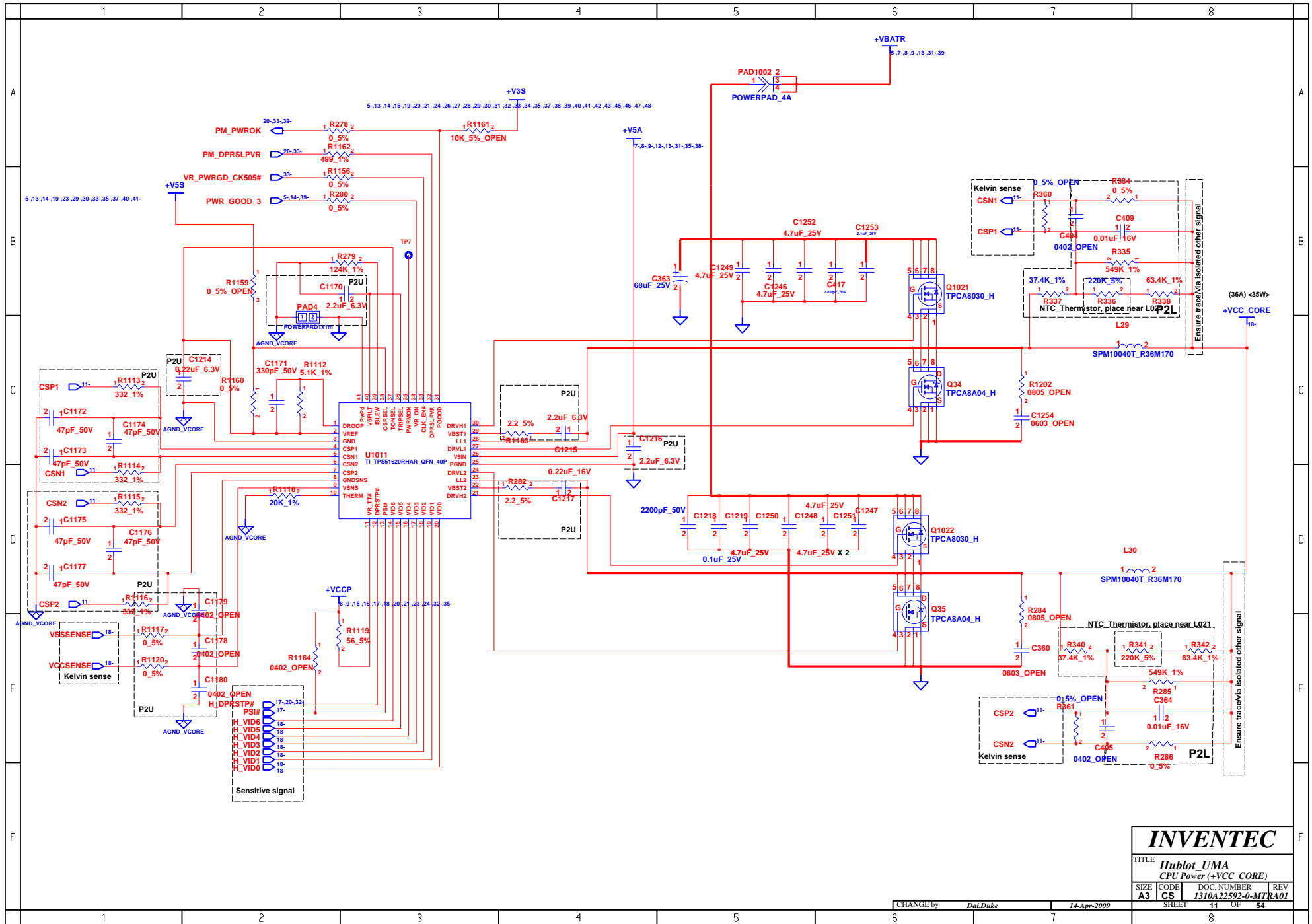
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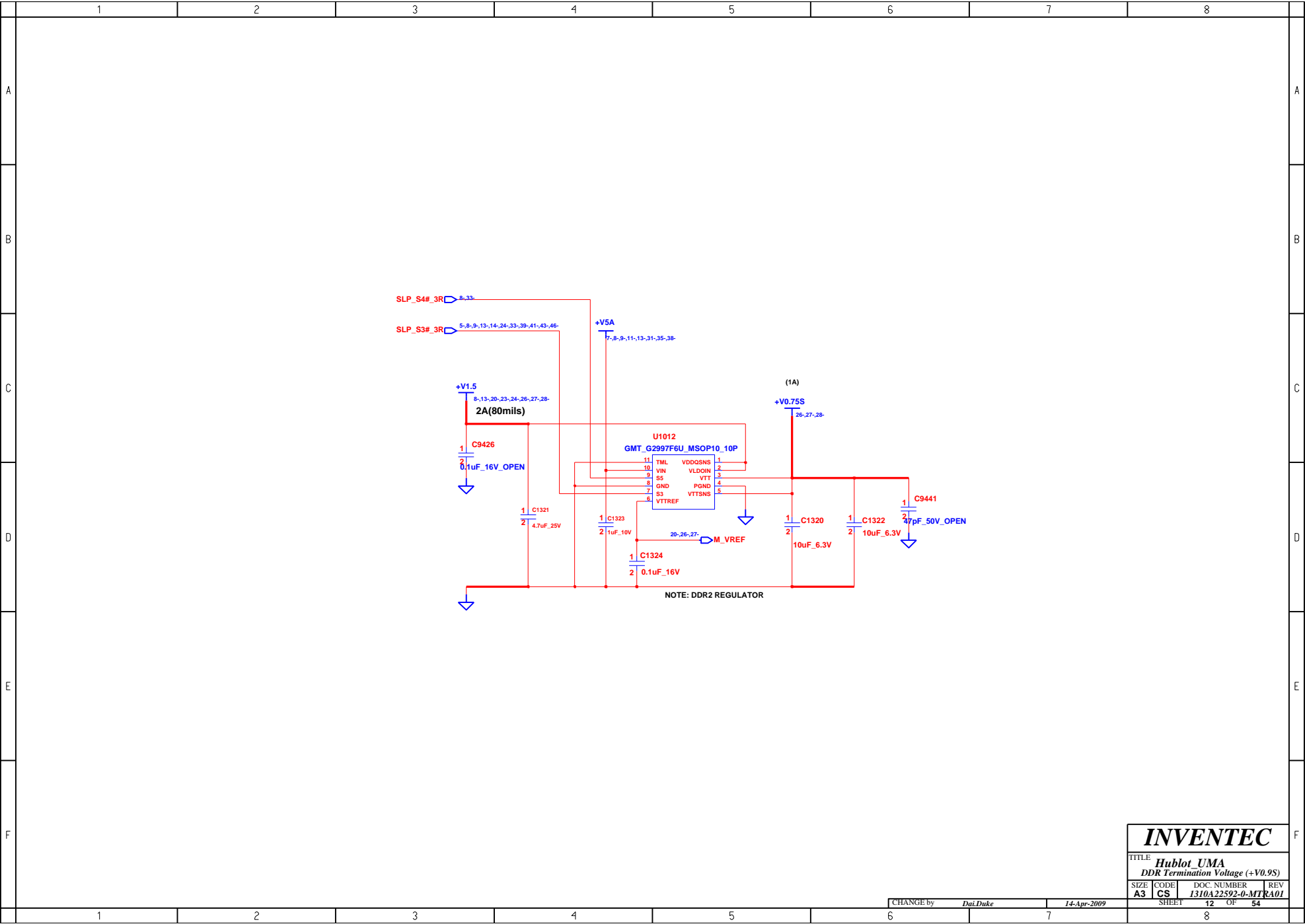
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SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A22592-0-MTR	A01

CHANGE by	Dal.Duke	14-Apr-2009
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SHEET	10	OF	54
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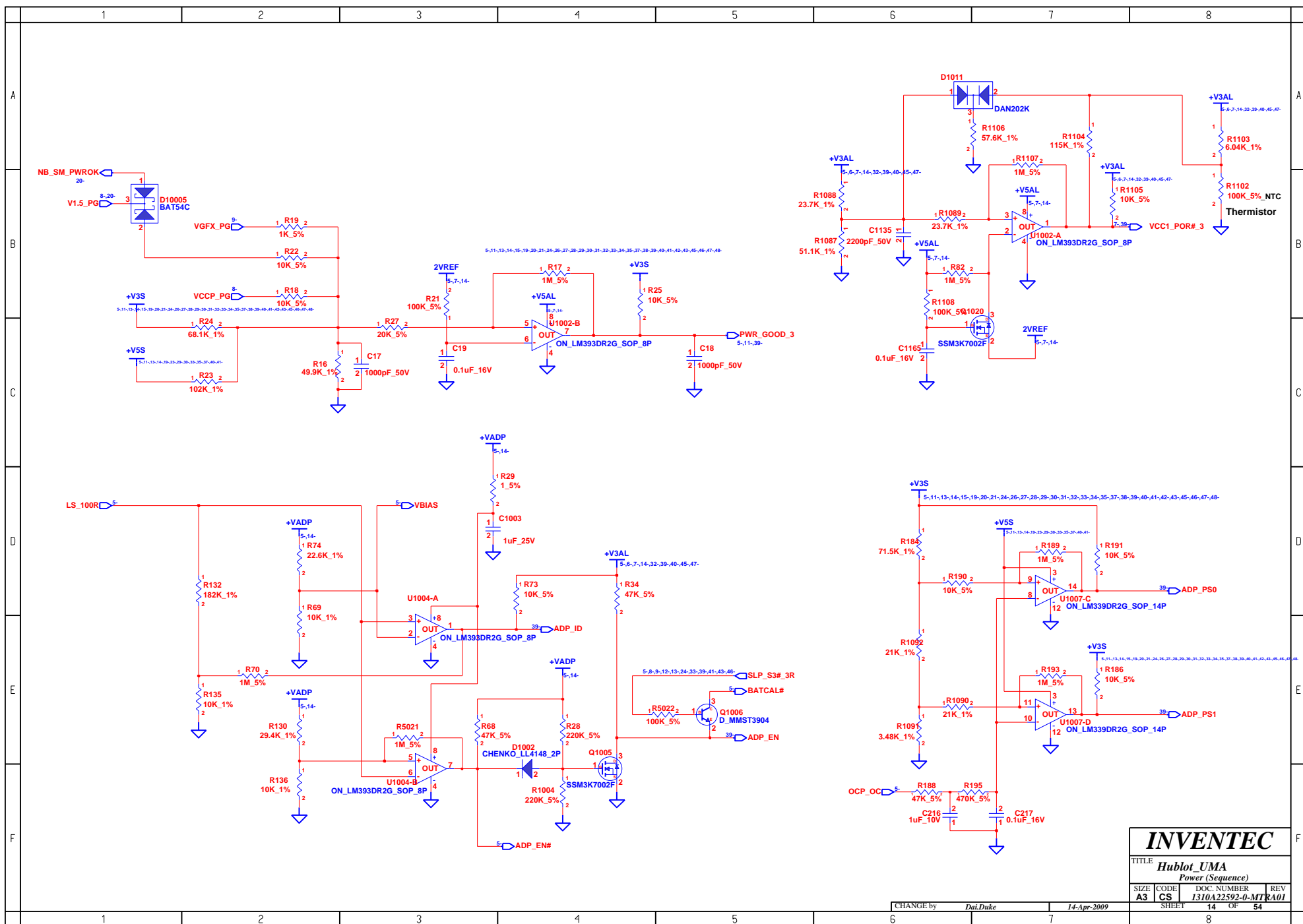
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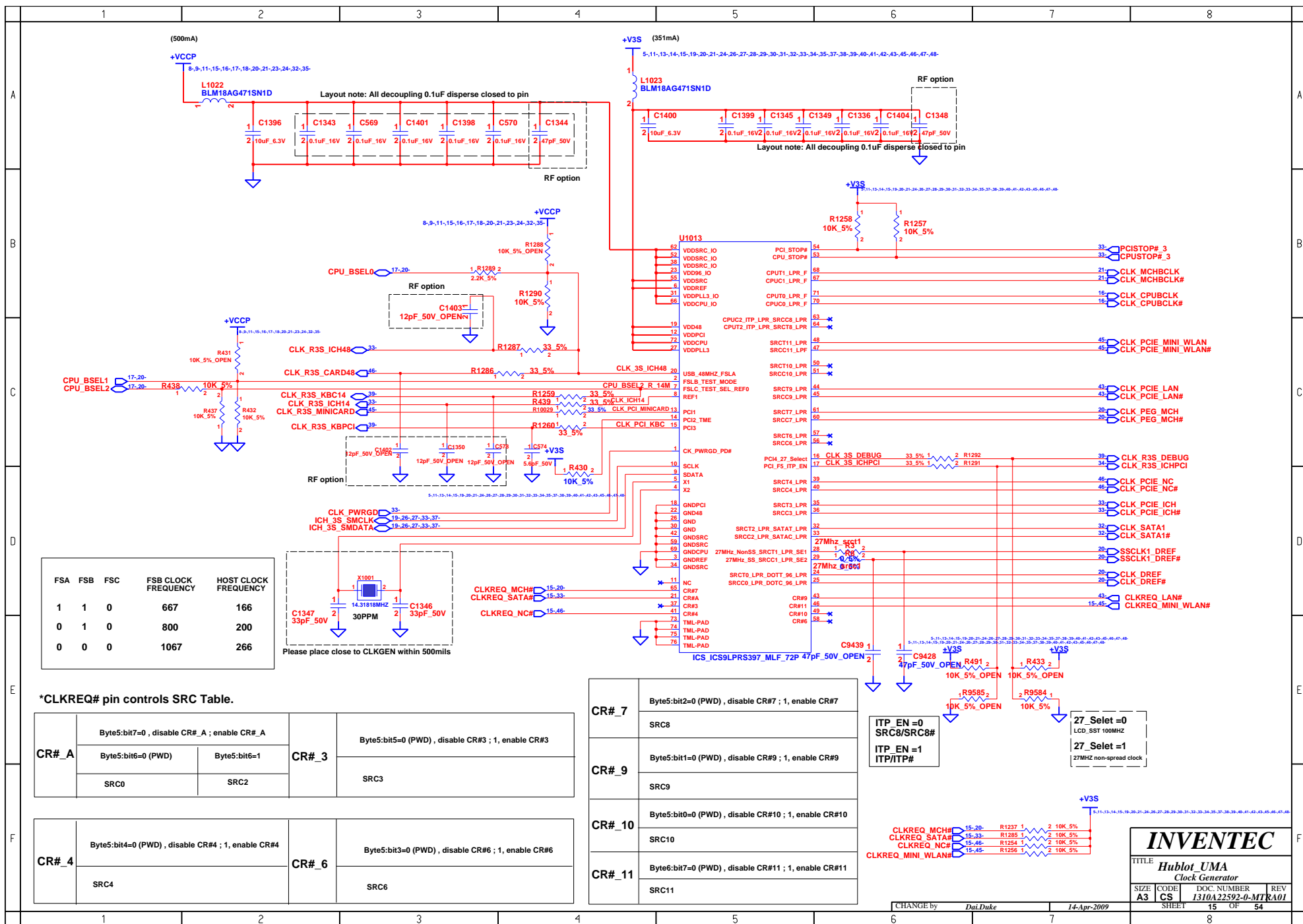
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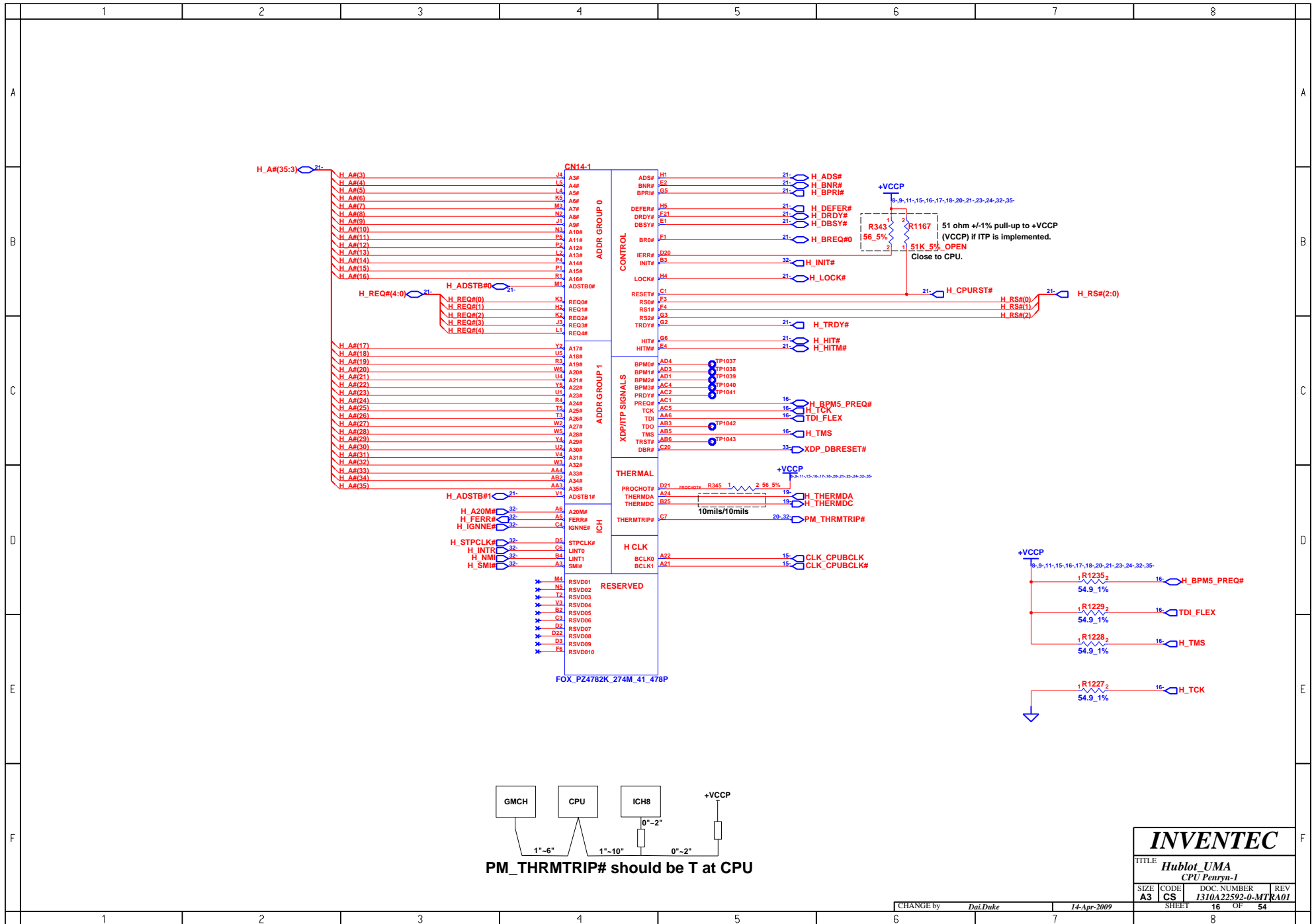
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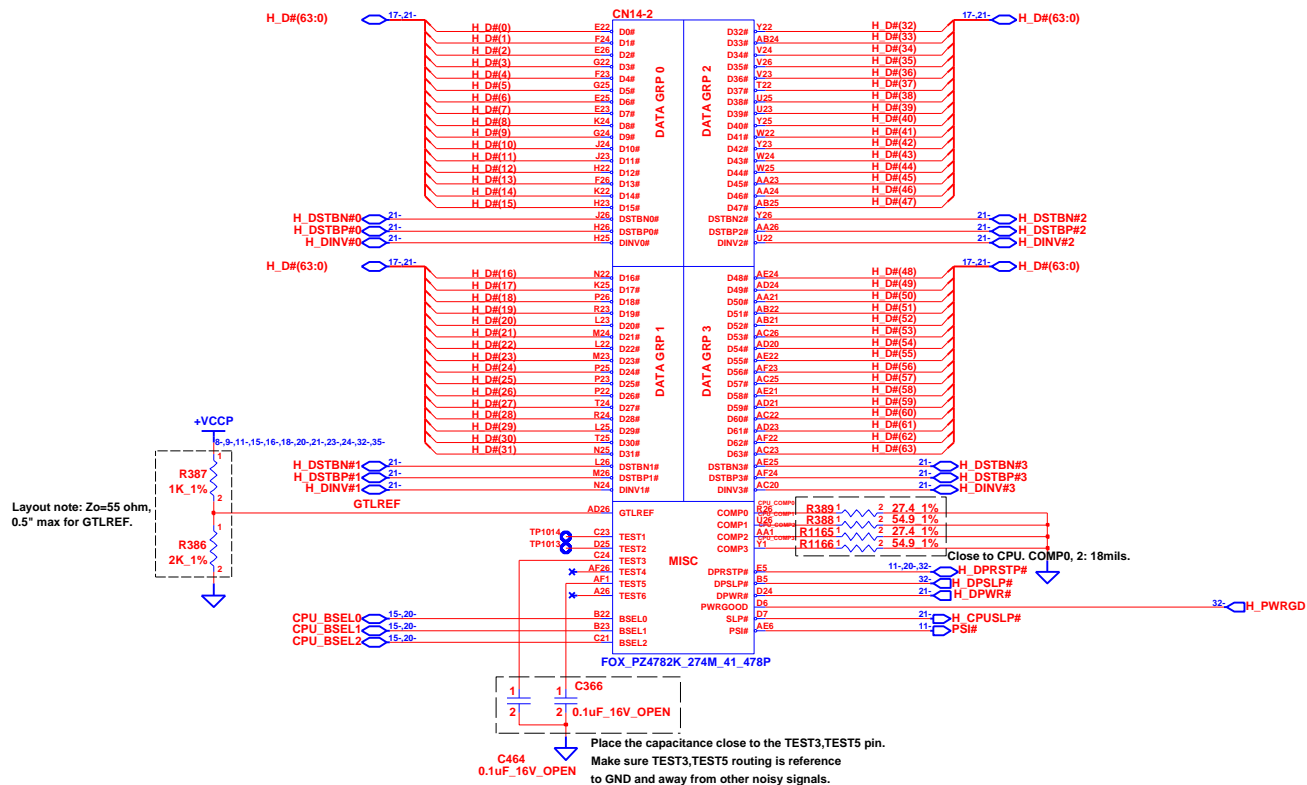
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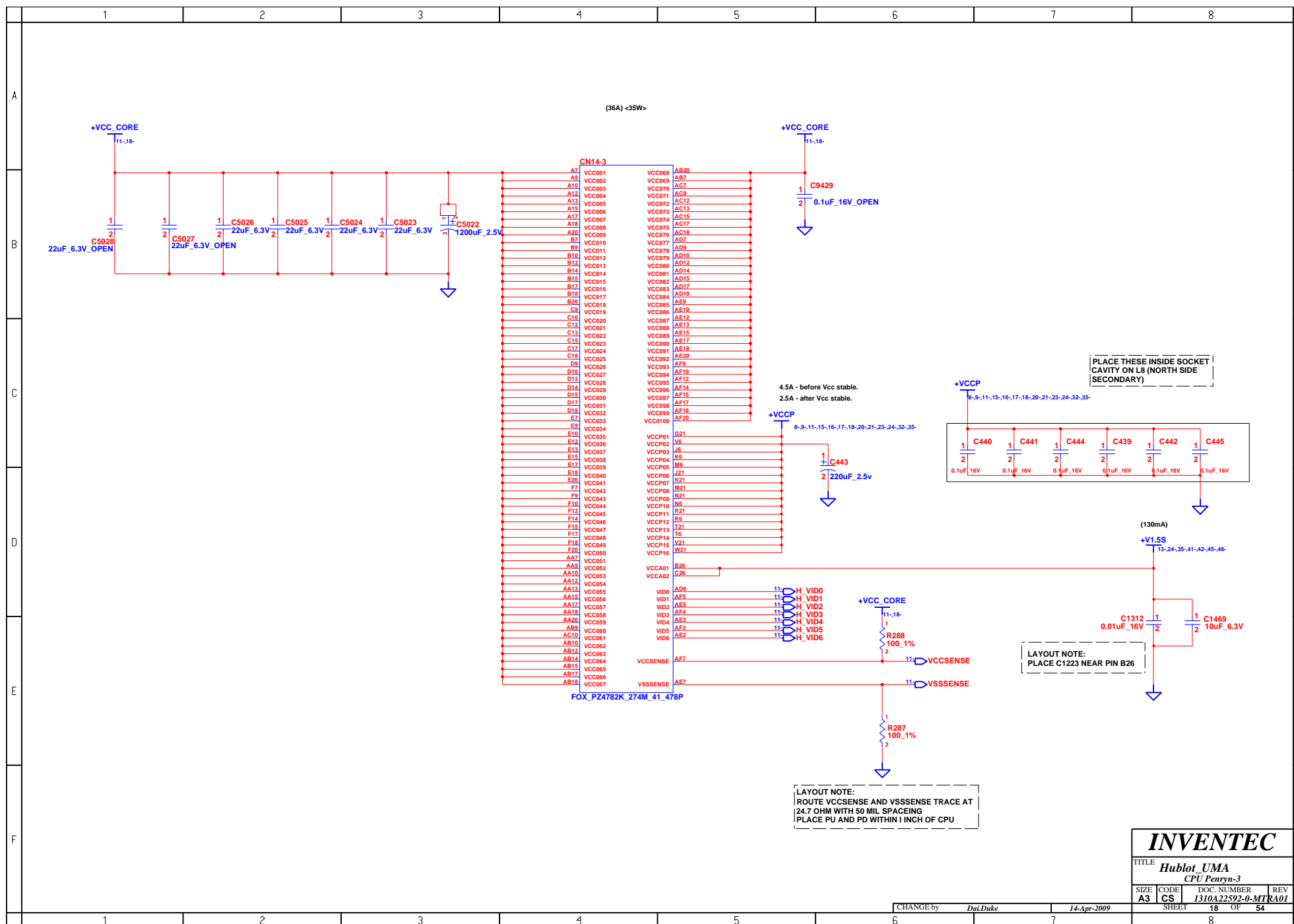
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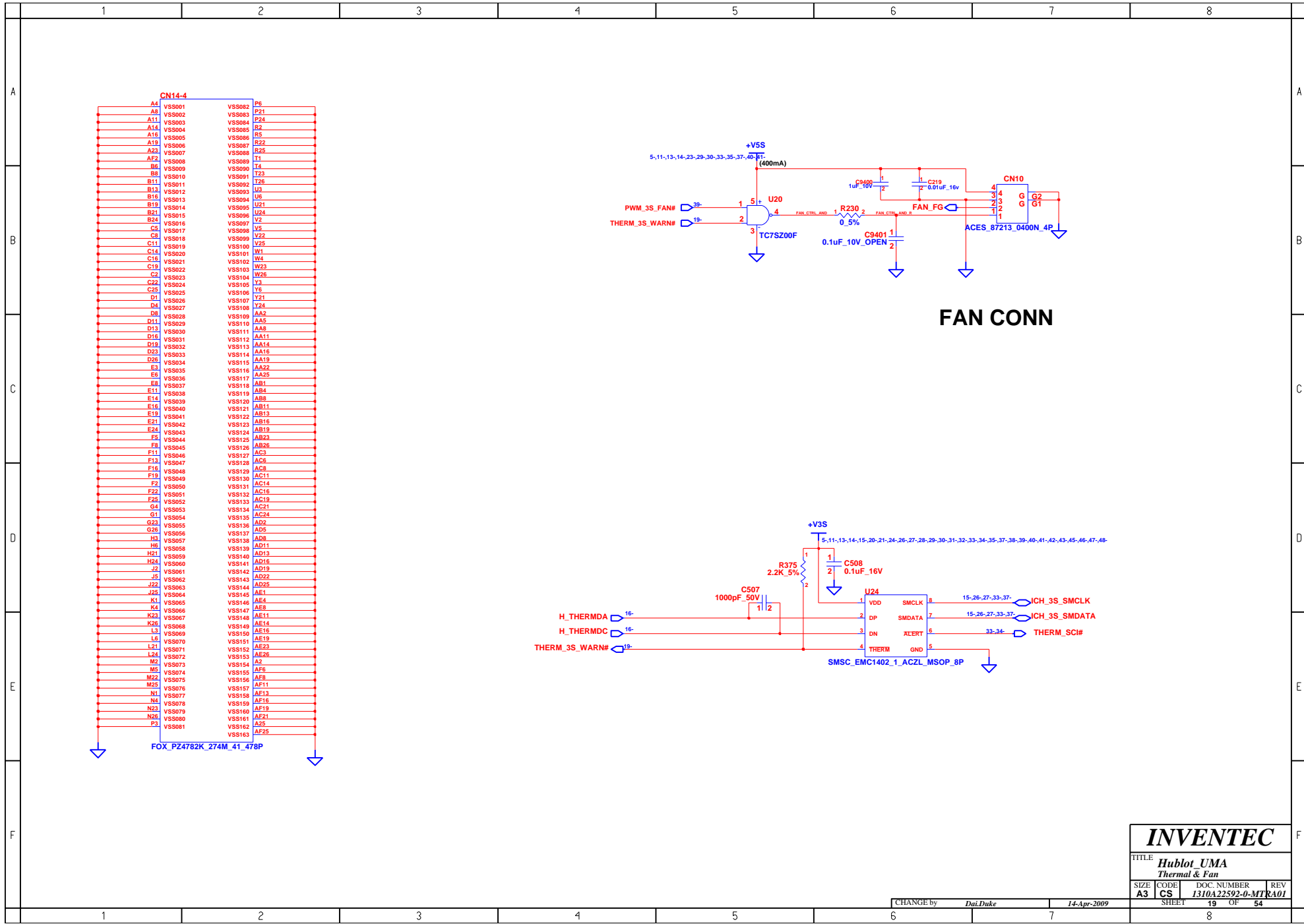
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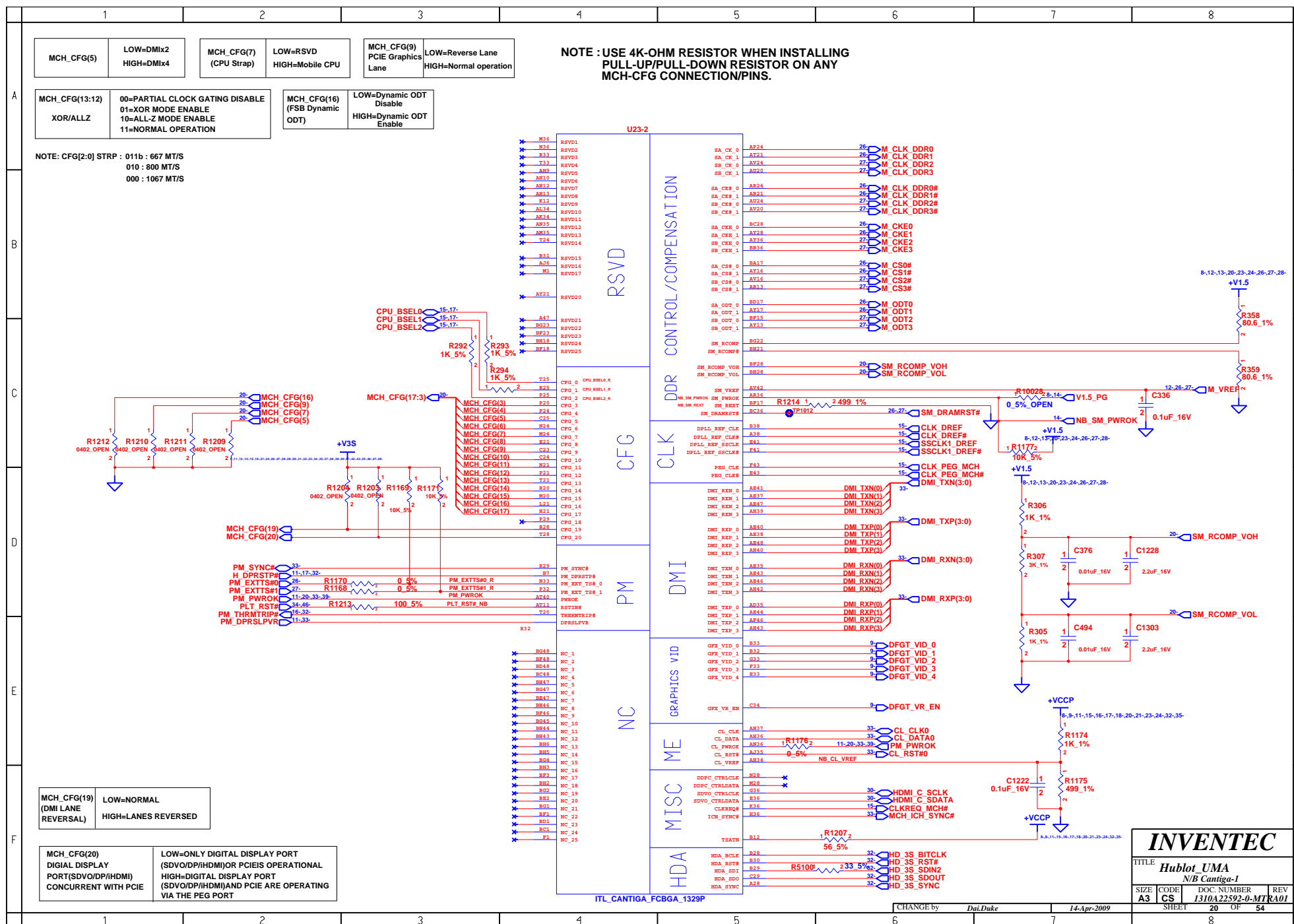
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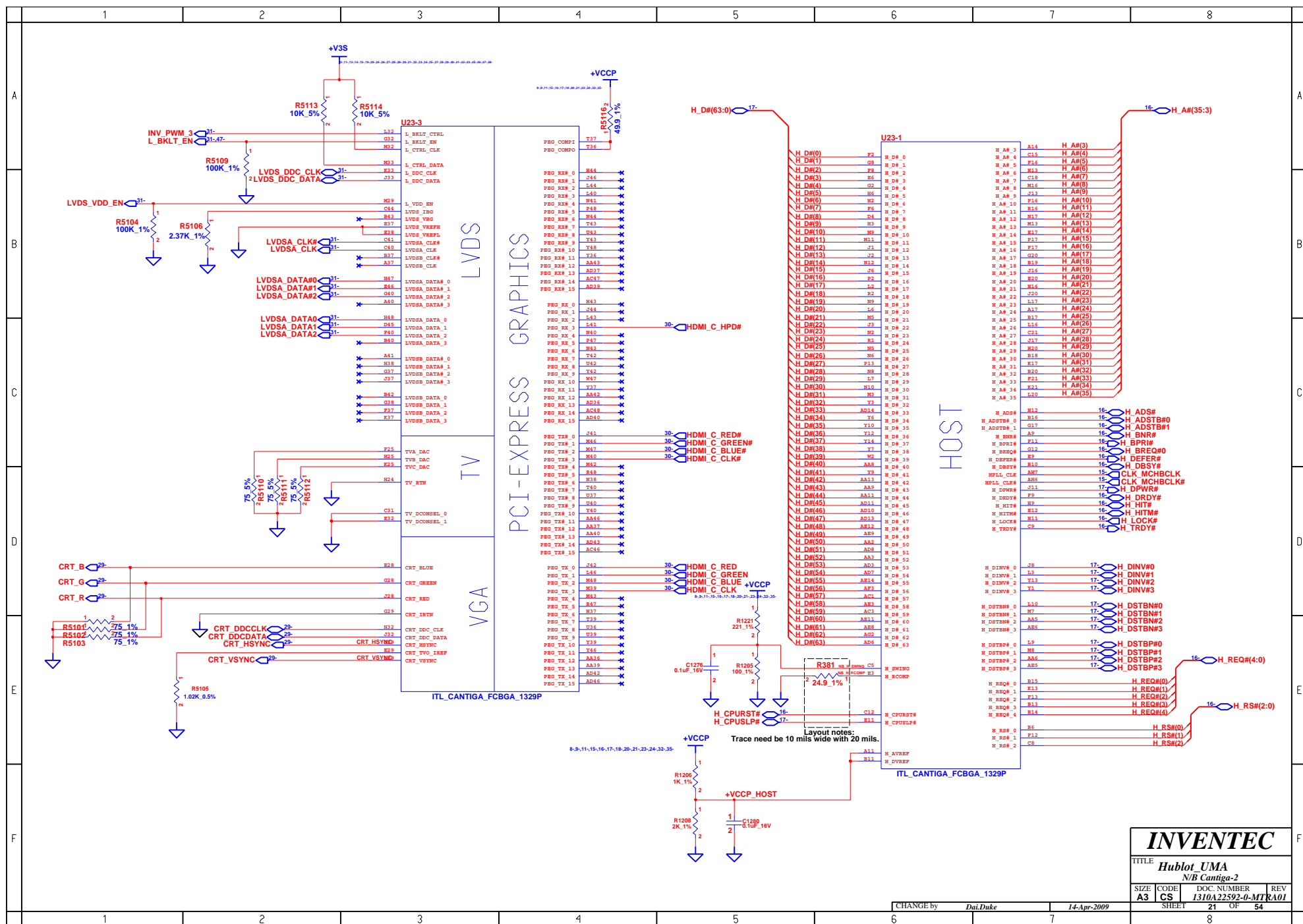
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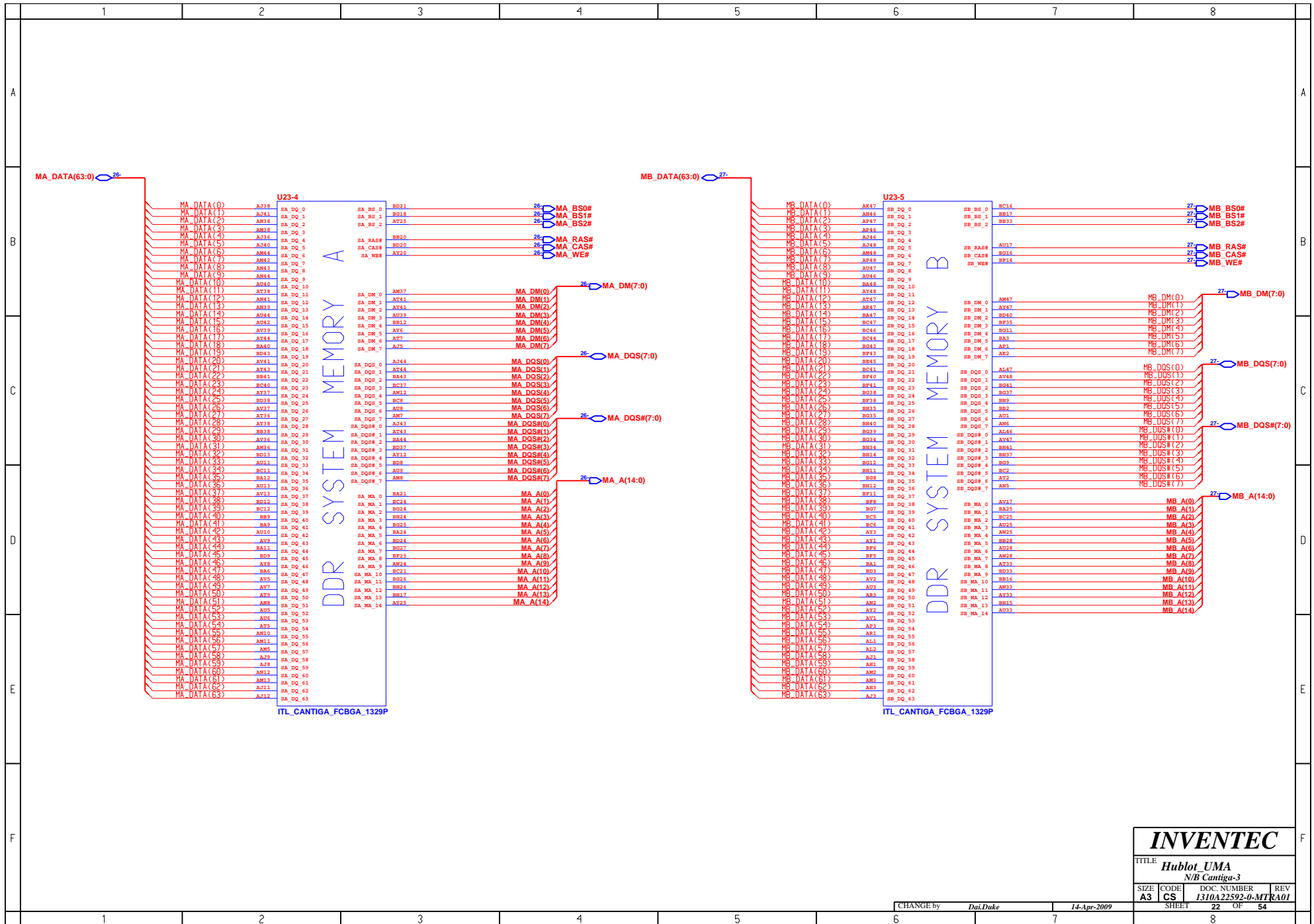
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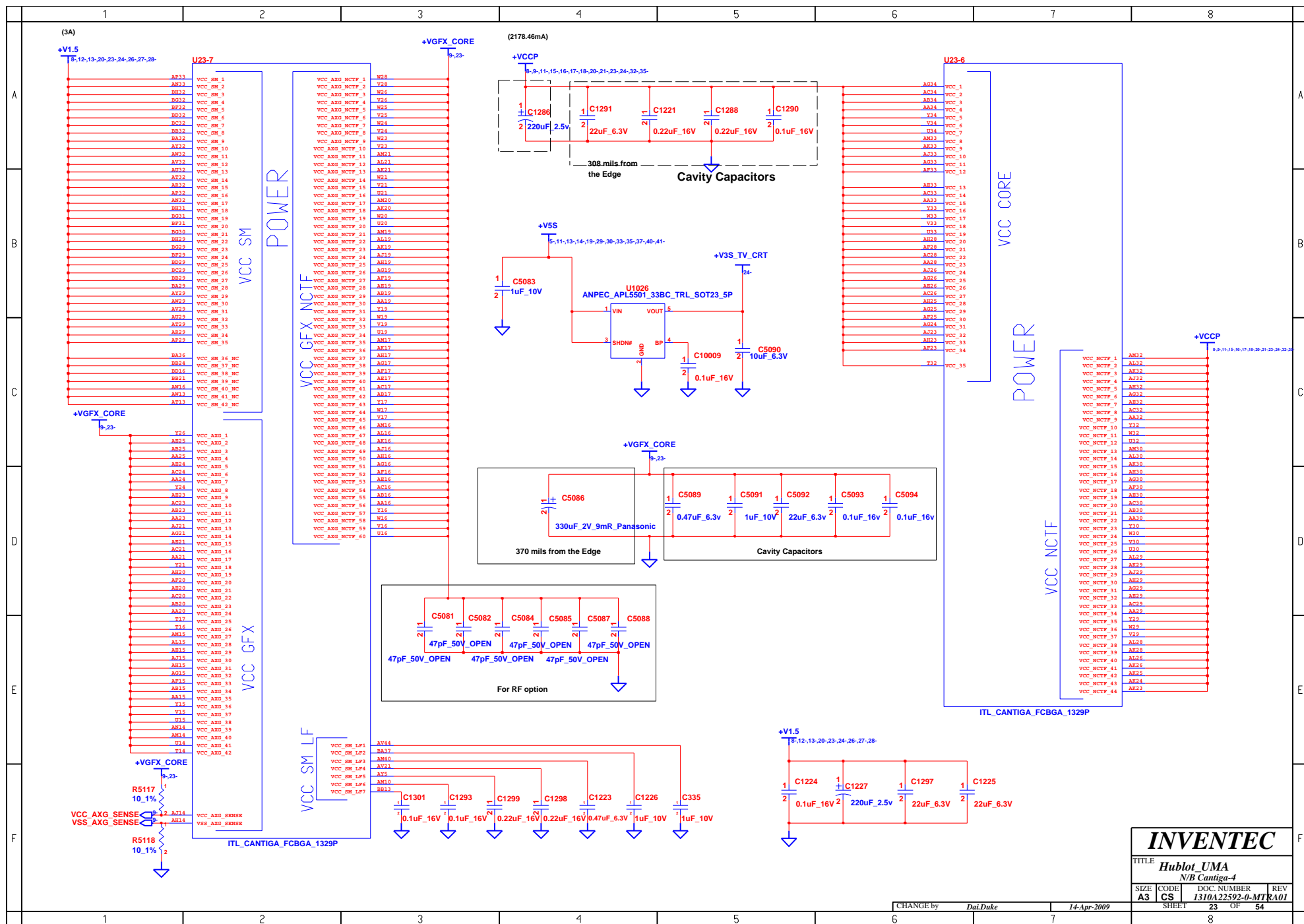


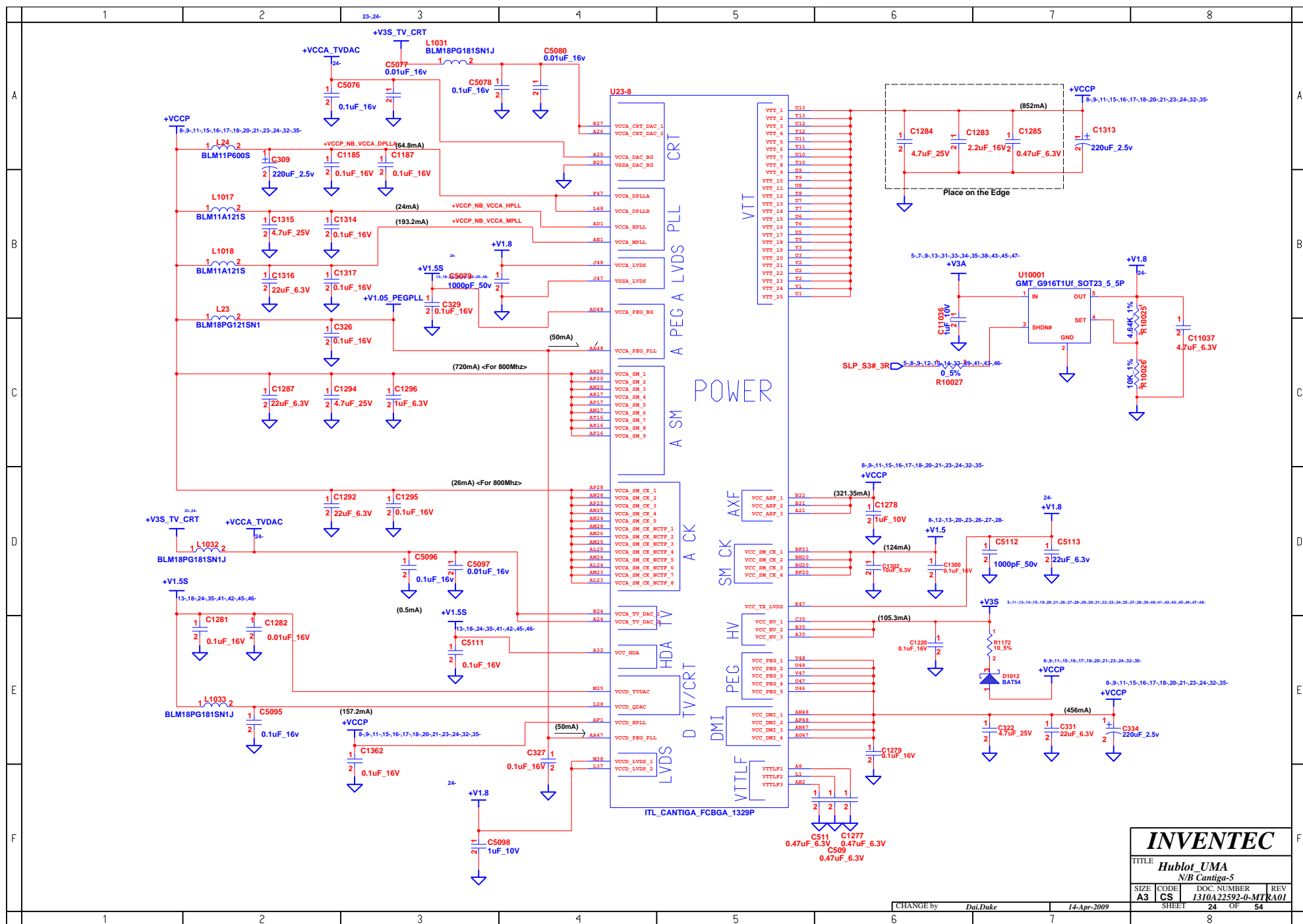


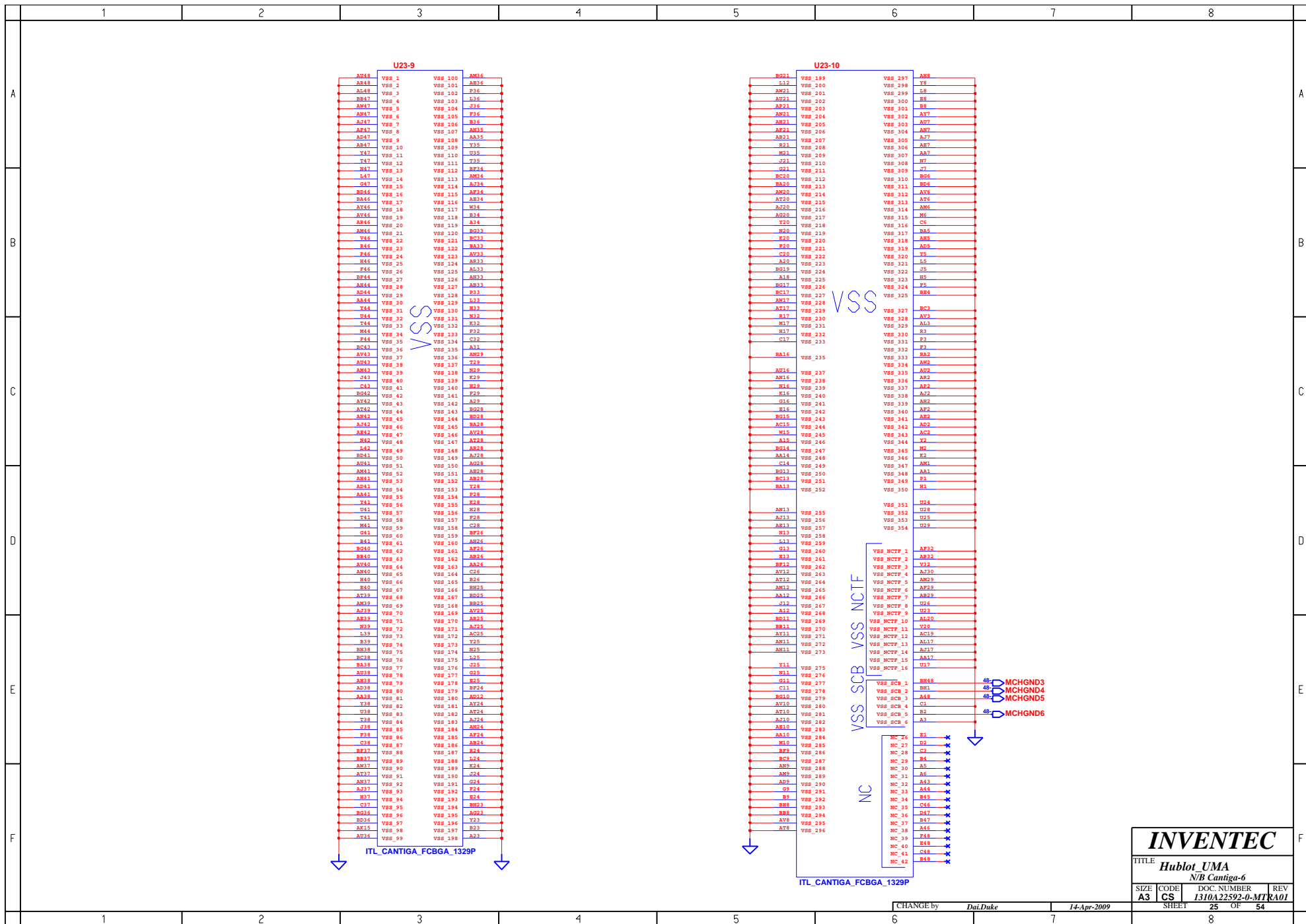
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TITLE			
Hublot_UMA			
N/B Cantiga-3			
SIZE	CODE	DOC. NUMBER	REV
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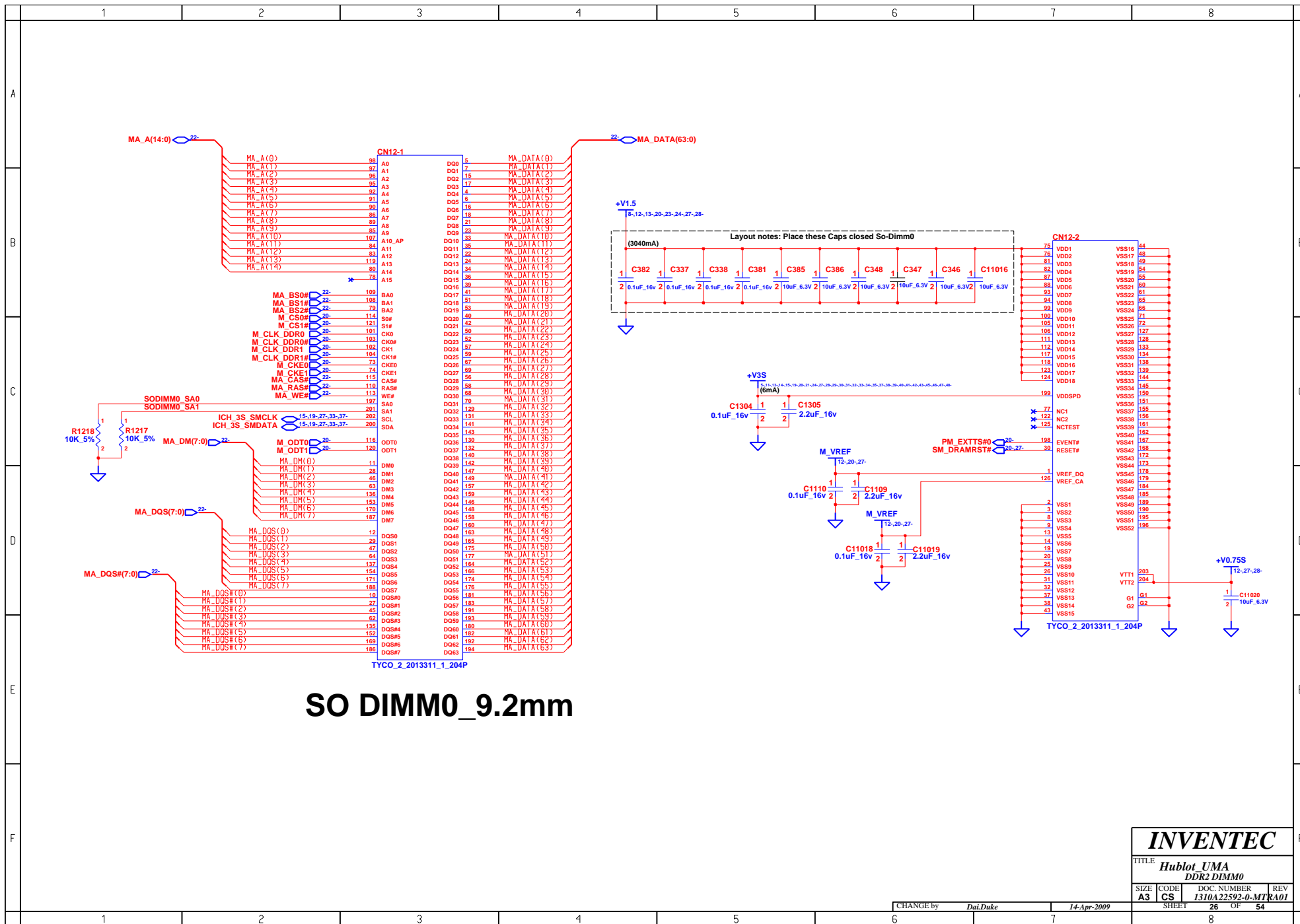
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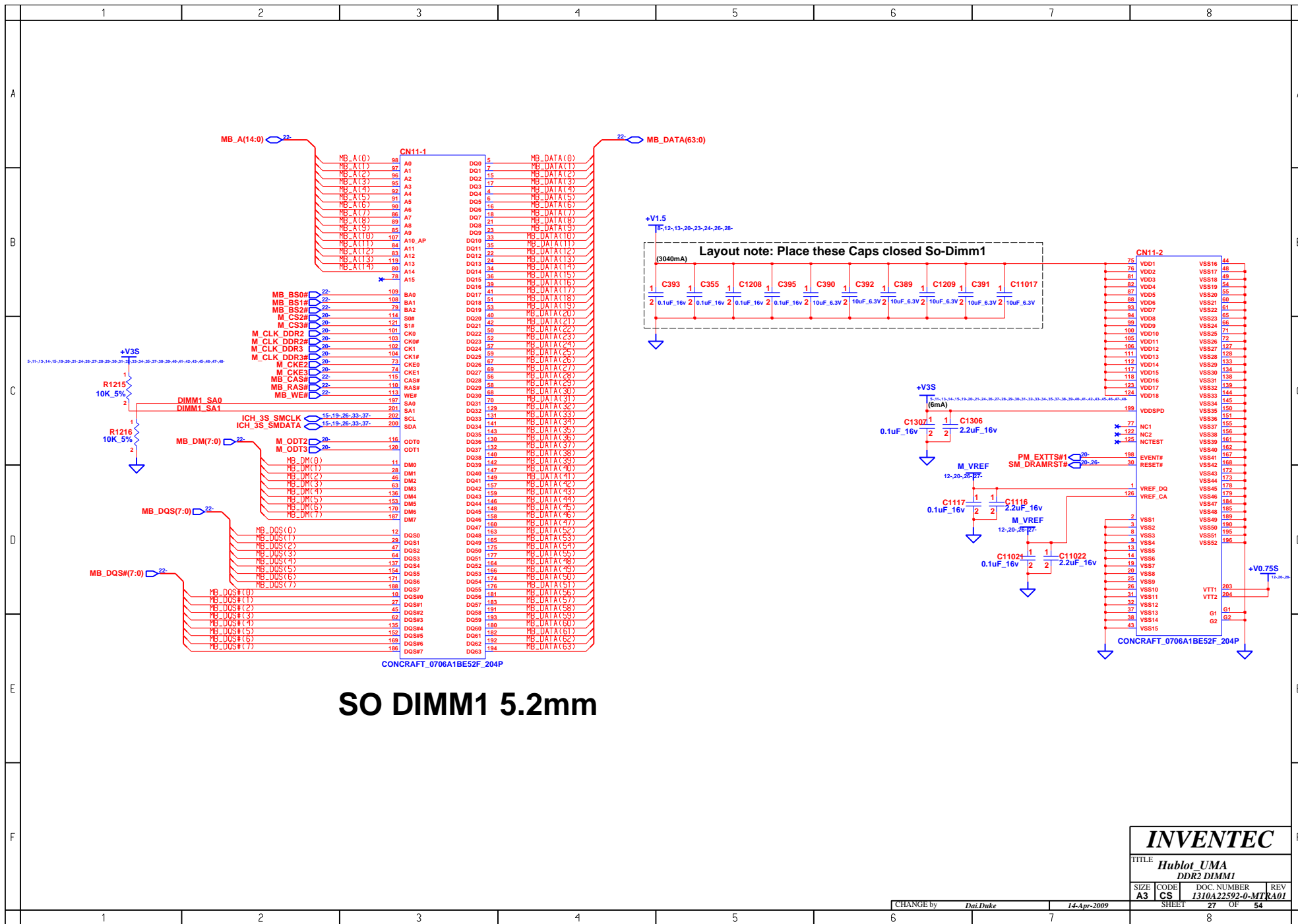






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SIZE: A3	CODE: CS	DOC. NUMBER: 1310A22592-0-MTR	REV: A01
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INVENTEC

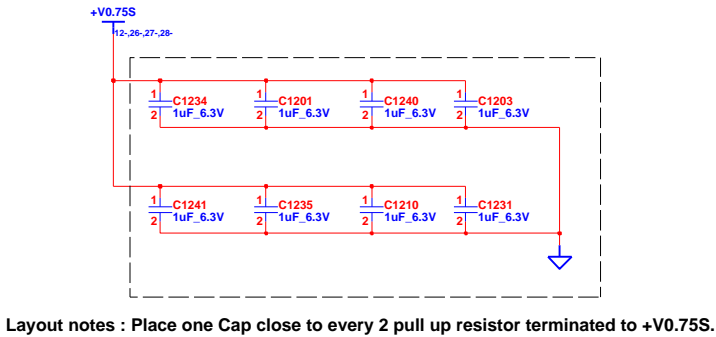
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DDR2 DIMM1

SIZE	CODE	DOC. NUMBER	REV
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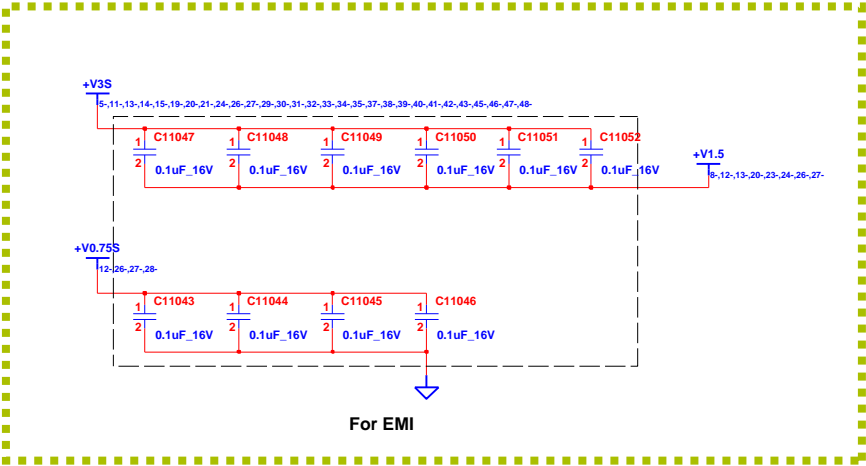
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B									B
C									C
D									D
E									E
F									F
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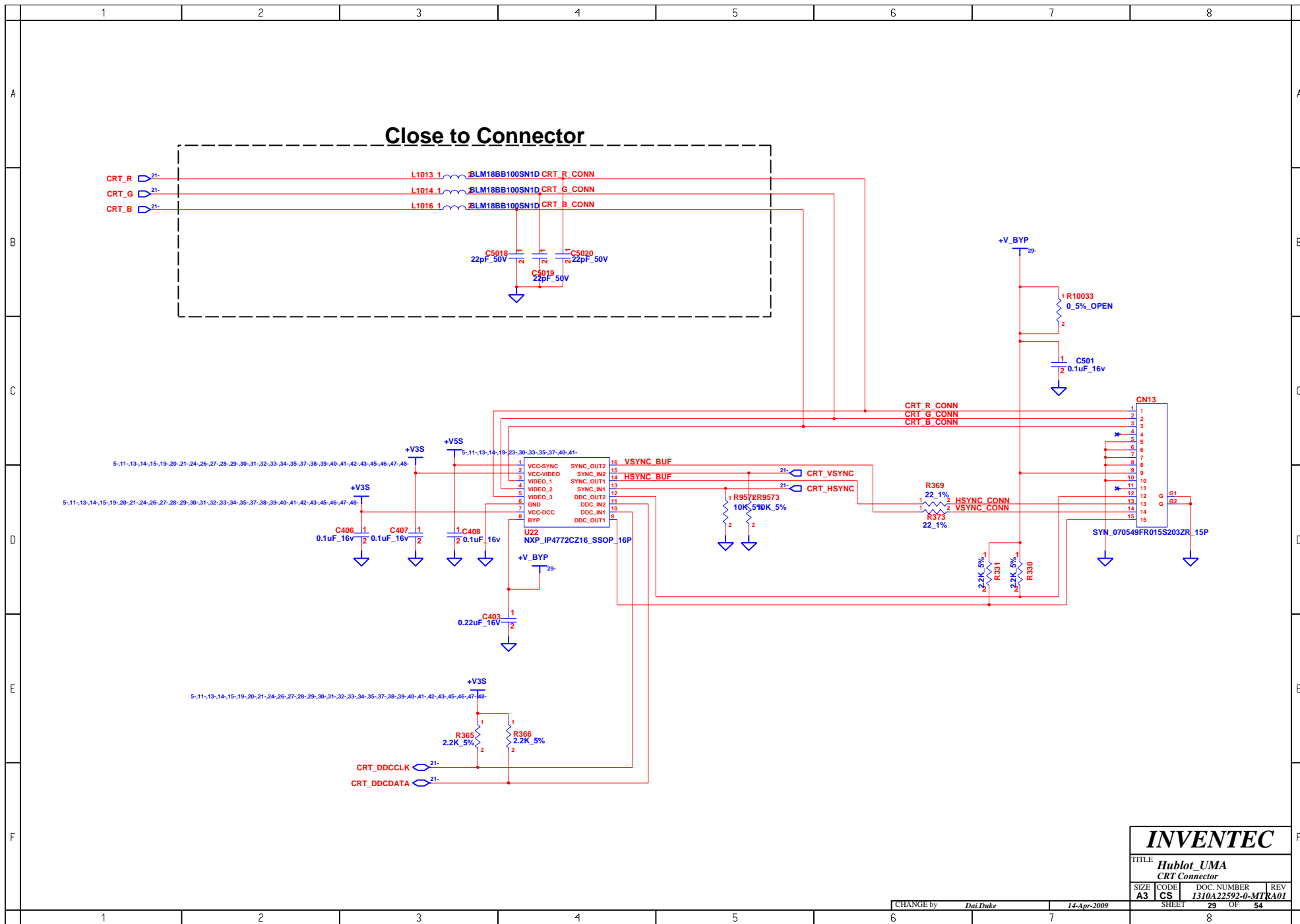


Layout notes : Place one Cap close to every 2 pull up resistor terminated to +V0.75S.



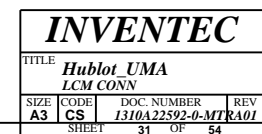
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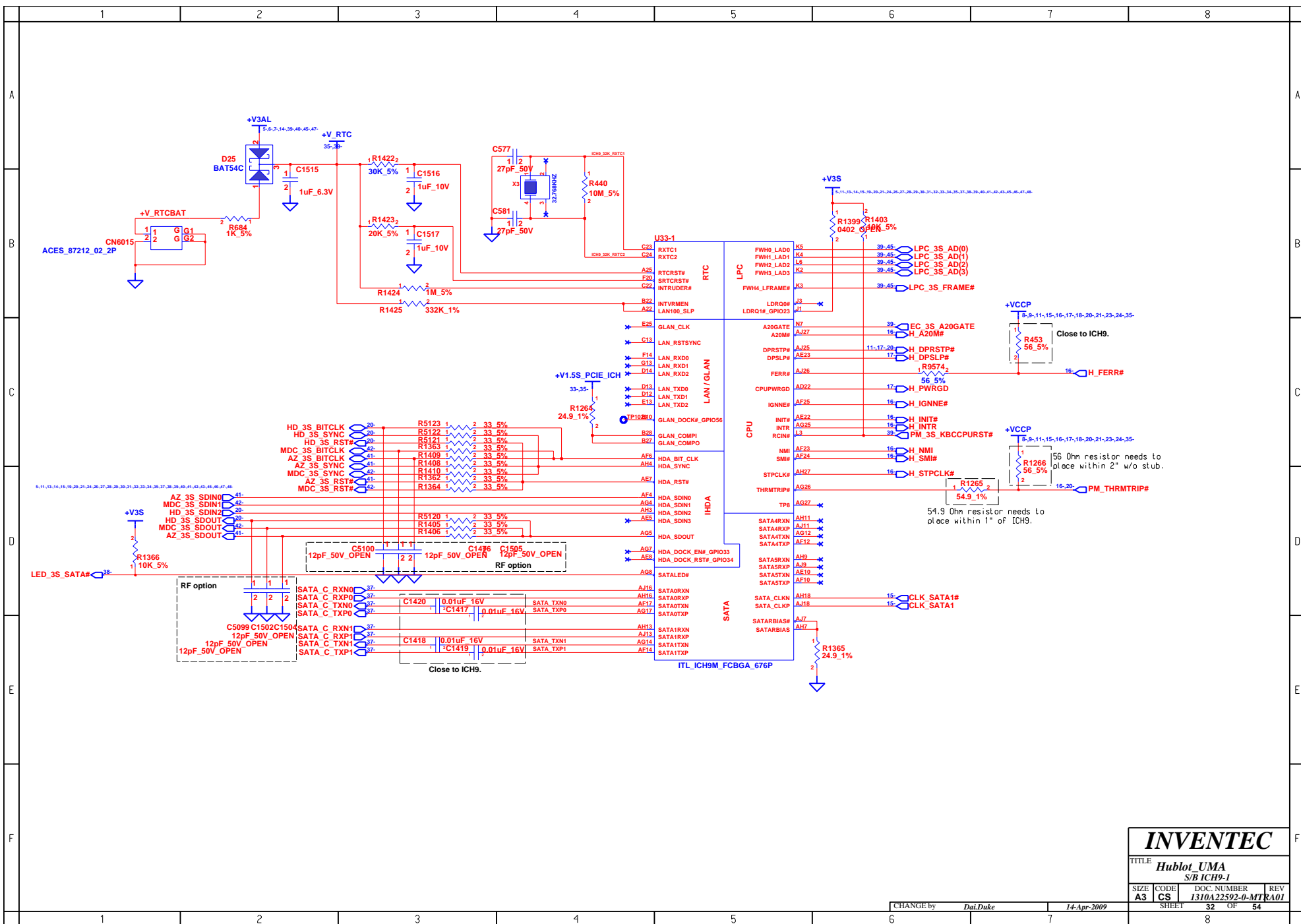
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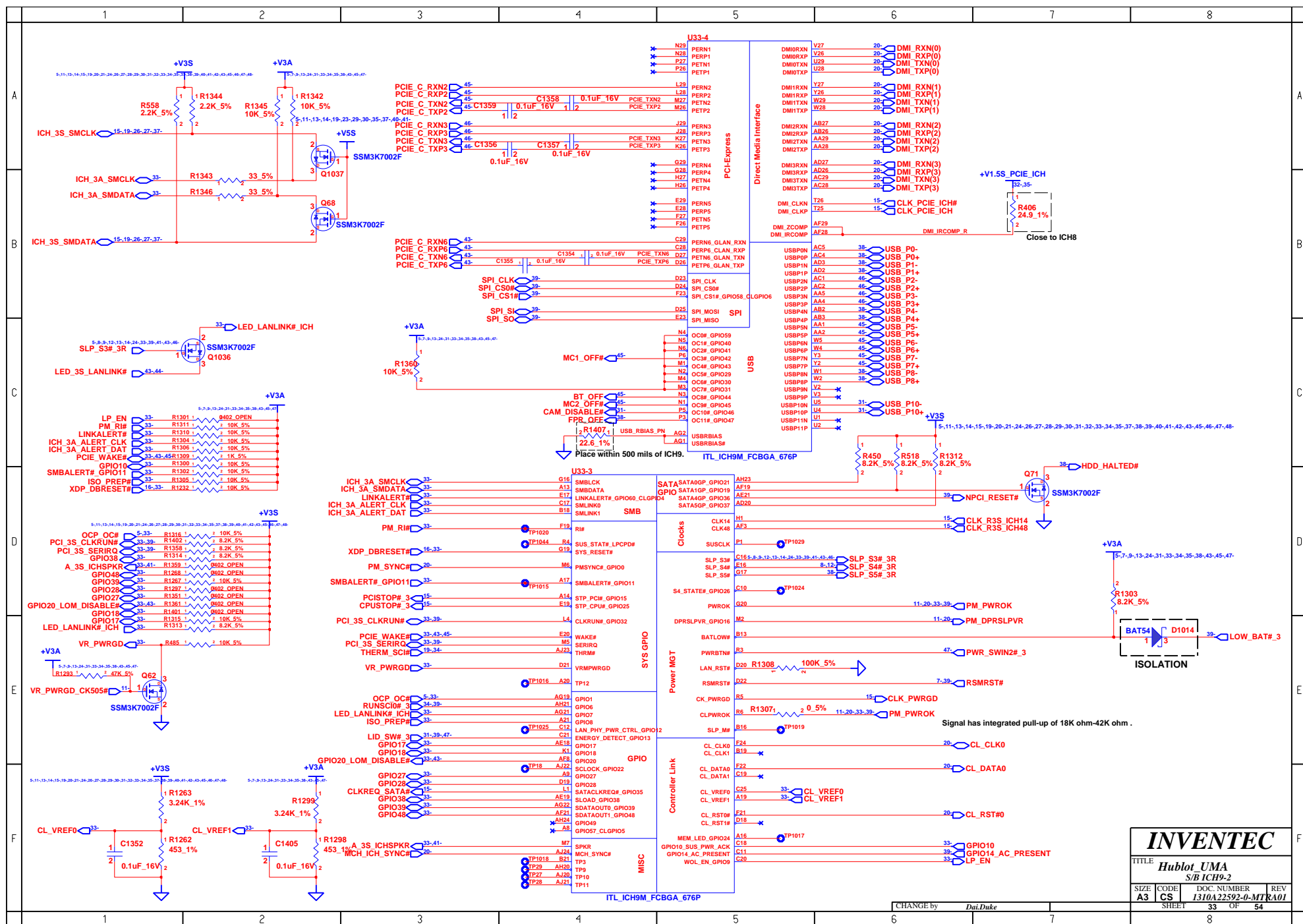


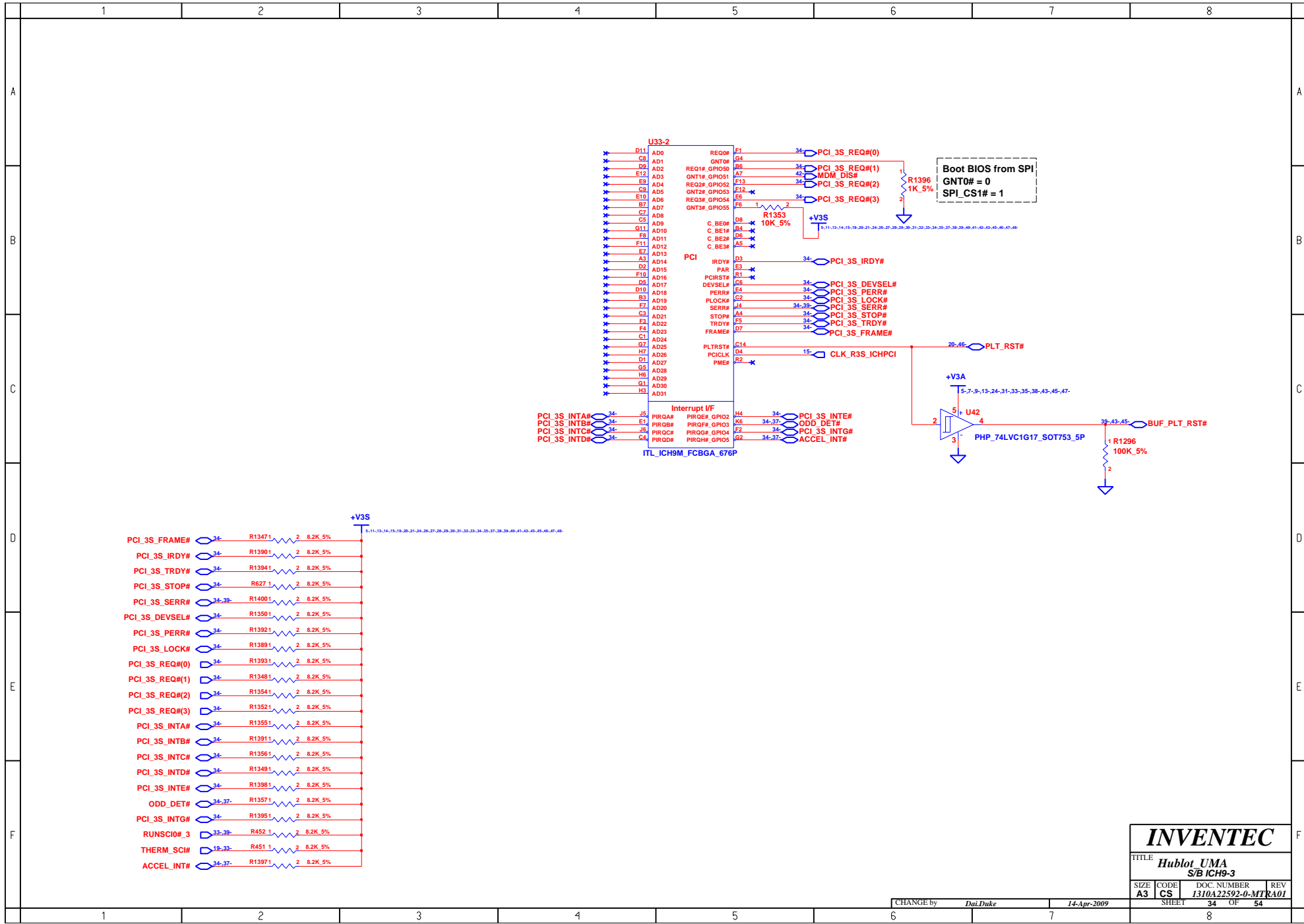
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SIZE A3	CODE CS	DOC. NUMBER I310A22592-0-MTR	REV A01
CHANGE by Dai.Duke		14-Apr-2009	
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Boot BIOS from SPI
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SPI_CS1# = 1

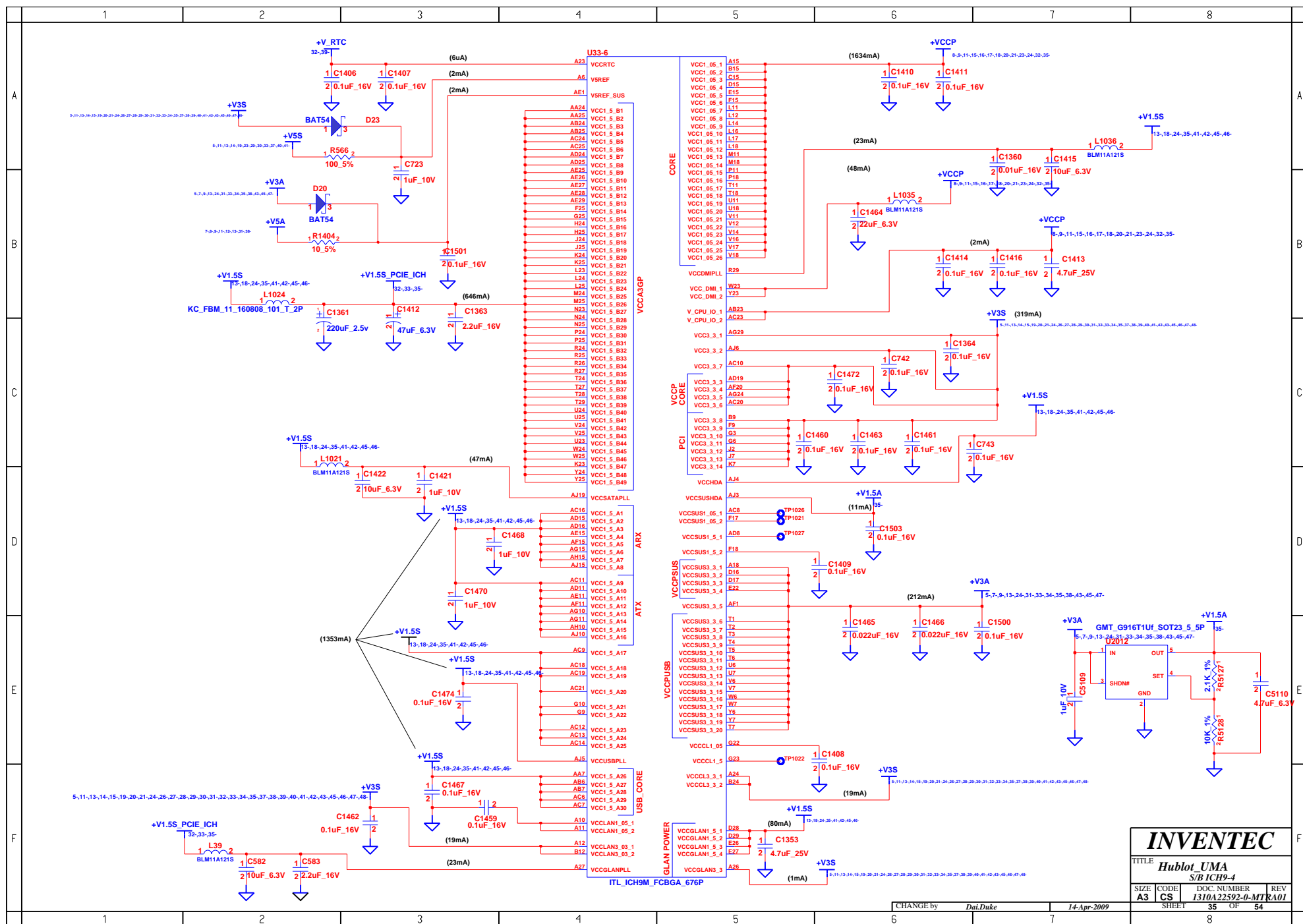
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TITLE
Hublot UMA
S/B ICH9-3

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22592-0-MTR	RA01

CHANGE by *Dai.Duke* 14-Apr-2009

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	1	2	3	4	5	6	7	8				
A				<div>U33-5</div> <div>AA26 VSS001 VSS107 H5</div> <div>AA27 VSS002 VSS108 J23</div> <div>AA3 VSS003 VSS109 J26</div> <div>AA6 VSS004 VSS110 J27</div> <div>AB1 VSS005 VSS111 AC22</div> <div>AA23 VSS006 VSS112 K28</div> <div>AB28 VSS007 VSS113 K29</div> <div>AB29 VSS008 VSS114 L13</div> <div>AB4 VSS009 VSS115 L15</div> <div>AB5 VSS010 VSS116 L2</div> <div>AC17 VSS011 VSS117 L26</div> <div>AC26 VSS012 VSS118 L27</div> <div>AC27 VSS013 VSS119 L5</div> <div>AC3 VSS014 VSS120 L7</div> <div>AD1 VSS015 VSS121 M12</div> <div>AD10 VSS016 VSS122 M13</div> <div>AD12 VSS017 VSS123 M14</div> <div>AD13 VSS018 VSS124 M15</div> <div>AD14 VSS019 VSS125 M16</div> <div>AD17 VSS020 VSS126 M17</div> <div>AD18 VSS021 VSS127 M23</div> <div>AD21 VSS022 VSS128 M28</div> <div>AD28 VSS023 VSS129 M29</div> <div>AD29 VSS024 VSS130 N11</div> <div>AD4 VSS025 VSS131 N12</div> <div>AD5 VSS026 VSS132 N13</div> <div>AD6 VSS027 VSS133 N14</div> <div>AD7 VSS028 VSS134 N15</div> <div>AD9 VSS029 VSS135 N16</div> <div>AE12 VSS030 VSS136 N17</div> <div>AE13 VSS031 VSS137 N18</div> <div>AE14 VSS032 VSS138 N26</div> <div>AE16 VSS033 VSS139 N27</div> <div>AE17 VSS034 VSS140 P12</div> <div>AE2 VSS035 VSS141 P13</div> <div>AE20 VSS036 VSS142 P14</div> <div>AE24 VSS037 VSS143 P15</div> <div>AE3 VSS038 VSS144 P16</div> <div>AE4 VSS039 VSS145 P17</div> <div>AE6 VSS040 VSS146 P2</div> <div>AE9 VSS041 VSS147 P23</div> <div>AF13 VSS042 VSS148 P28</div> <div>AF16 VSS043 VSS149 P29</div> <div>AF18 VSS044 VSS150 P4</div> <div>AF22 VSS045 VSS151 P7</div> <div>AH26 VSS046 VSS152 R11</div> <div>AF26 VSS047 VSS153 R12</div> <div>AF27 VSS048 VSS154 R13</div> <div>AF5 VSS049 VSS155 R14</div> <div>AF7 VSS050 VSS156 R15</div> <div>AF9 VSS051 VSS157 R16</div> <div>AG13 VSS052 VSS158 R17</div> <div>AG16 VSS053 VSS159 R18</div> <div>AG18 VSS054 VSS160 R28</div> <div>AG20 VSS055 VSS161 T12</div> <div>AG23 VSS056 VSS162 T13</div> <div>AG3 VSS057 VSS163 T14</div> <div>AG6 VSS058 VSS164 T15</div> <div>AG9 VSS059 VSS165 T16</div> <div>AH12 VSS060 VSS166 T17</div> <div>AH14 VSS061 VSS167 T23</div> <div>AH17 VSS062 VSS168 U12</div> <div>AH19 VSS063 VSS169 U13</div> <div>AH2 VSS064 VSS170 U14</div> <div>AH22 VSS065 VSS171 U15</div> <div>AH23 VSS066 VSS172 U16</div> <div>AH28 VSS067 VSS173 U17</div> <div>AH5 VSS068 VSS174 AD23</div> <div>AH8 VSS069 VSS176 U27</div> <div>AJ12 VSS070 VSS177 U3</div> <div>AJ14 VSS071 VSS179 V1</div> <div>AJ17 VSS072 VSS180 V13</div> <div>AJ8 VSS073 VSS181 V15</div> <div>B11 VSS074 VSS182 V23</div> <div>B14 VSS075 VSS183 V28</div> <div>B17 VSS076 VSS184 V29</div> <div>B2 VSS077 VSS185 V4</div> <div>B20 VSS078 VSS186 V5</div> <div>B23 VSS079 VSS187 W26</div> <div>B6 VSS080 VSS188 W3</div> <div>B8 VSS081 VSS189 Y1</div> <div>C26 VSS082 VSS191 Y28</div> <div>C27 VSS083 VSS192 Y29</div> <div>E11 VSS084 VSS193 Y4</div> <div>E14 VSS085 VSS194 Y5</div> <div>E18 VSS086 VSS195 AG28</div> <div>E2 VSS087 VSS196 AH6</div> <div>E21 VSS088 VSS197 AF2</div> <div>E24 VSS089 VSS198 B25</div> <div>E4 VSS090</div> <div>E5 VSS091</div> <div>E8 VSS092</div> <div>F16 VSS093</div> <div>F28 VSS094</div> <div>F29 VSS095</div> <div>G12 VSS096</div> <div>G14 VSS097</div> <div>G18 VSS098</div> <div>G21 VSS099</div> <div>G24 VSS100</div> <div>G26 VSS101</div> <div>G27 VSS102</div> <div>G8 VSS103</div> <div>H2 VSS104</div> <div>H23 VSS105</div> <div>H28 VSS106</div> <div>H29 VSS106</div>								
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C												
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ITL_ICH9M_FCBGA_676P

48-1 ICHGND1

48-1 ICHGND4

48-1 ICHGND7

48-1 ICHGND10

INVENTEC

TITLE Hublot_UMA

S/B ICH9-5

SIZE A3 CODE CS DOC. NUMBER 1310A22592-0-MTR REV 1

14-Apr-2009

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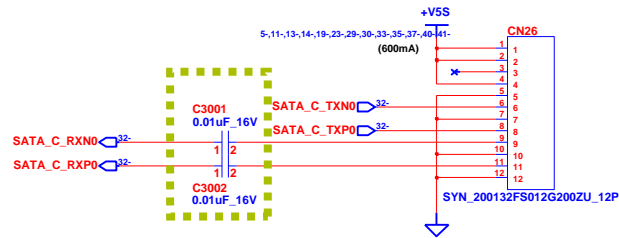
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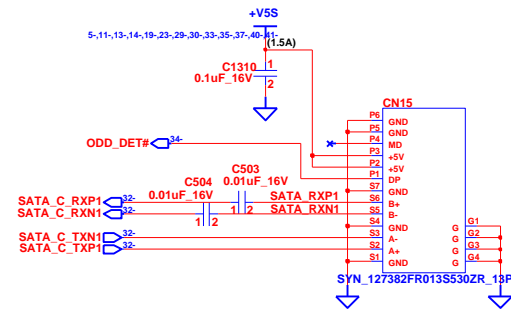
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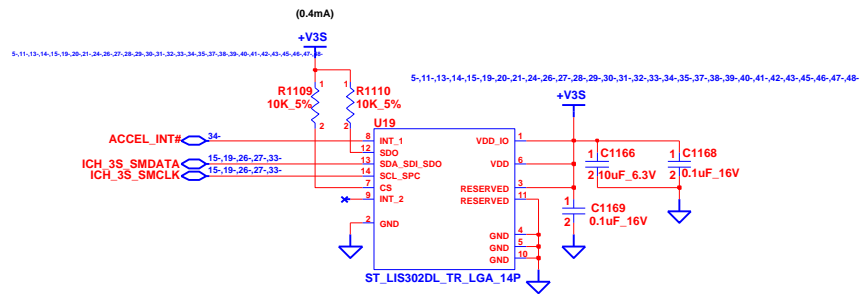
SHEET 36 OF 54



SATA HDD



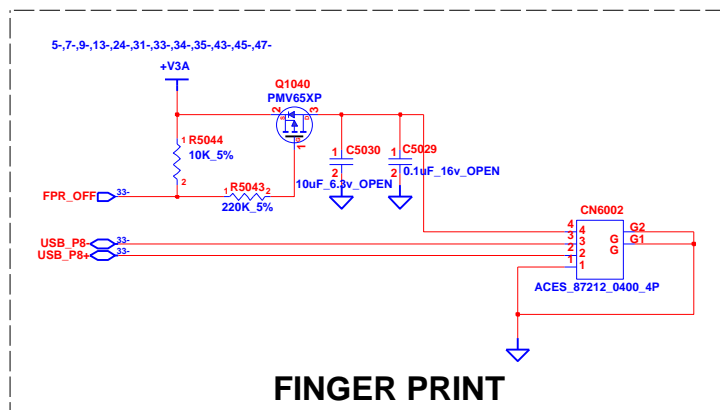
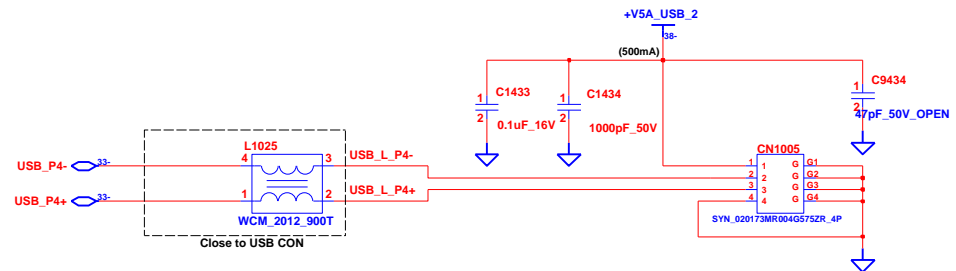
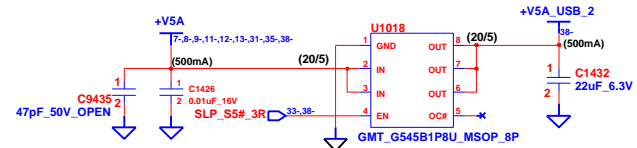
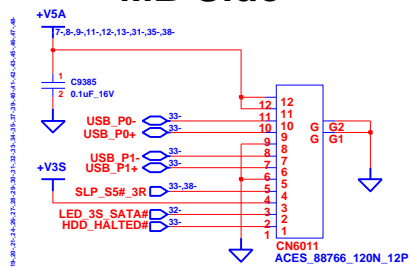
SATA ODD



Accelerometer

INVENTEC			
TITLE			
Hublot_UMA			
HDD & ODD CONN & Accelerometer			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22592-0-MTR	RA01
CHANGE by		Doc.Duke	14-Apr-2009
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MB Side

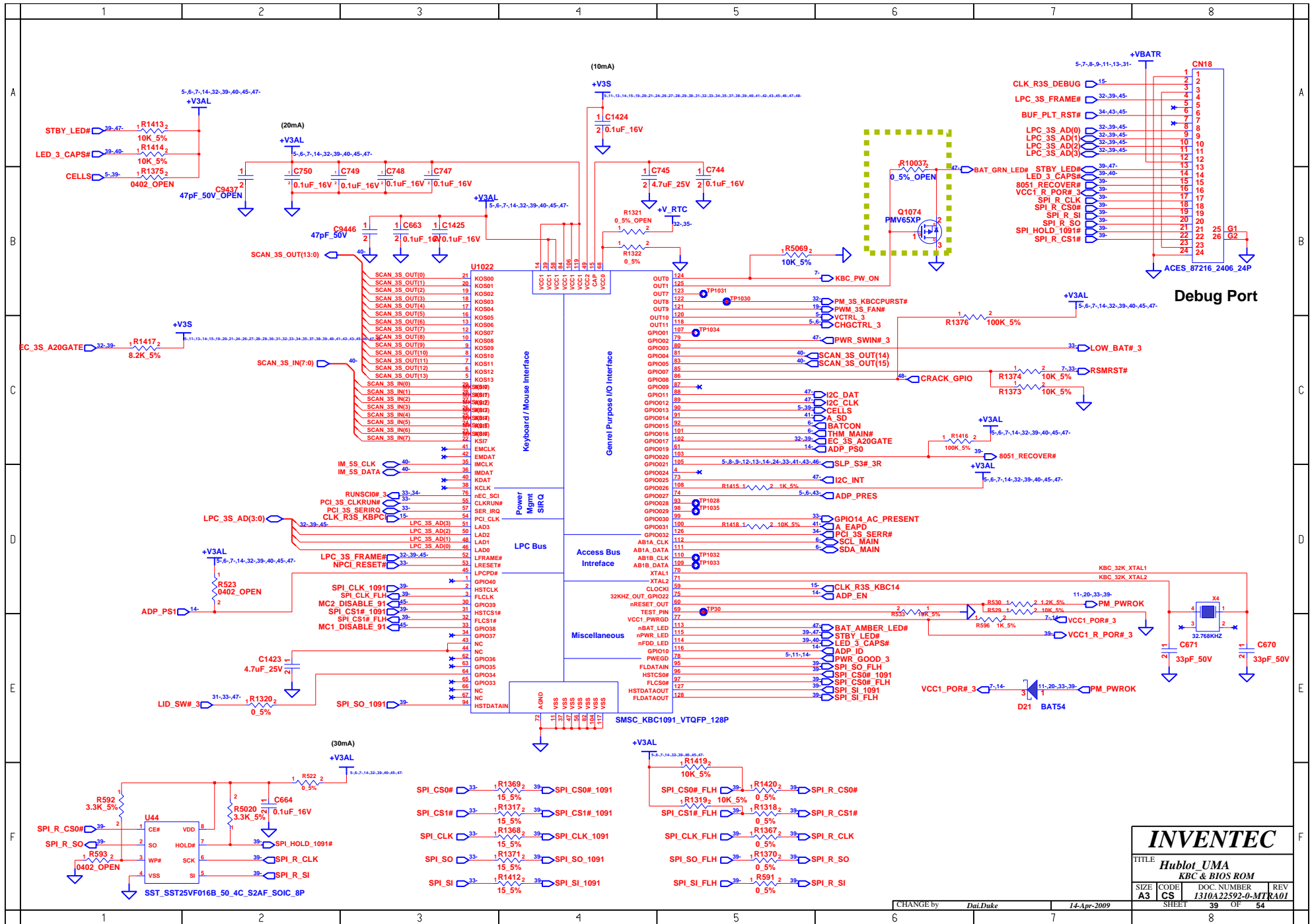


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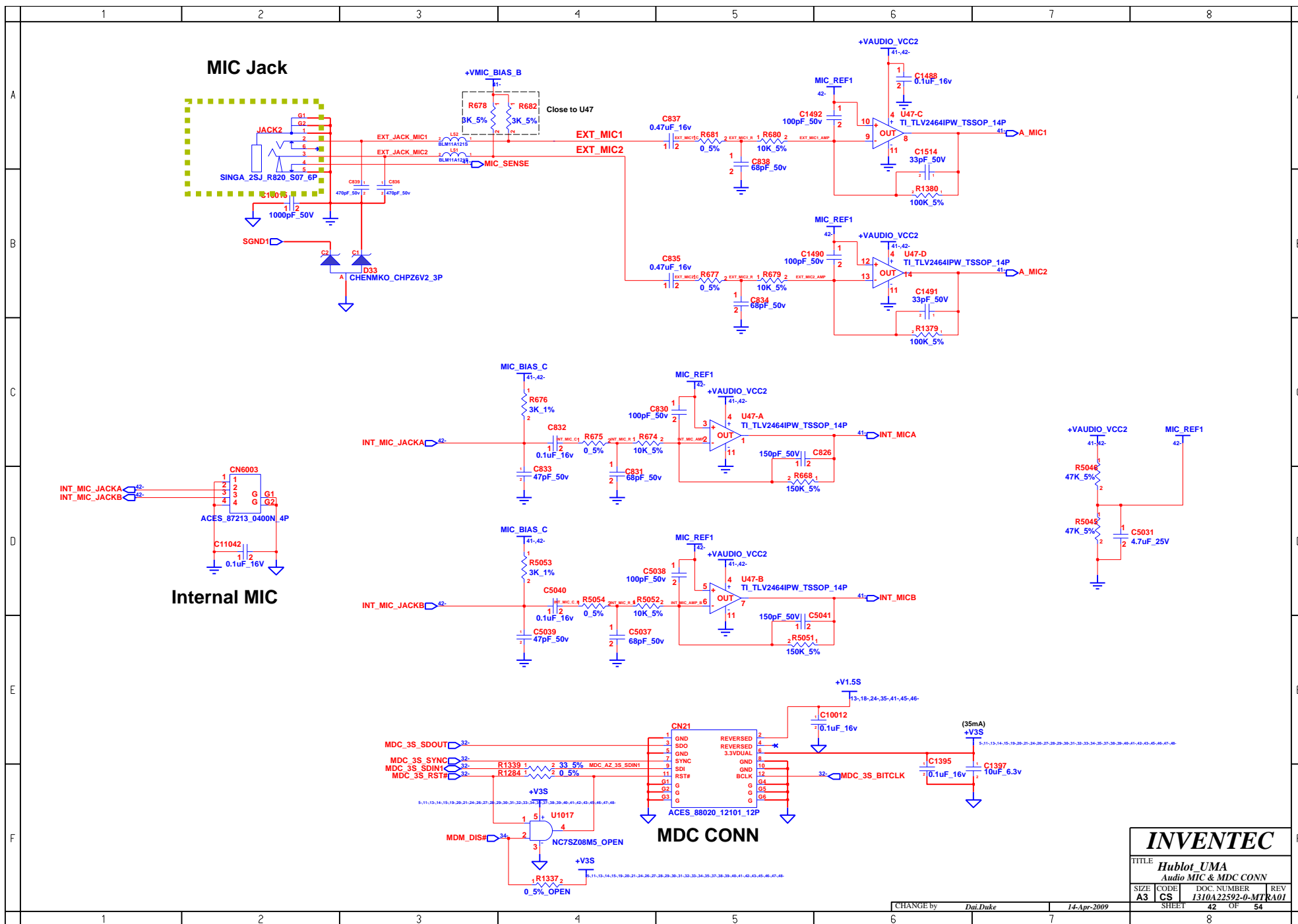
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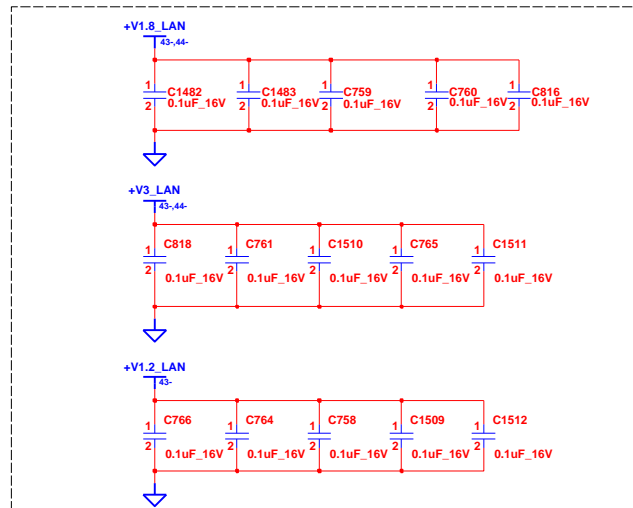
CHANGE by *DalDuke* 14-Apr-2009



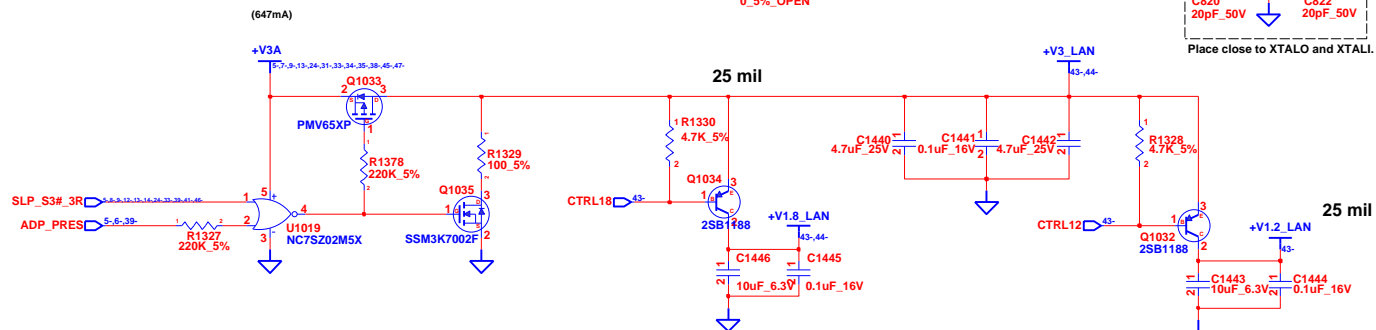
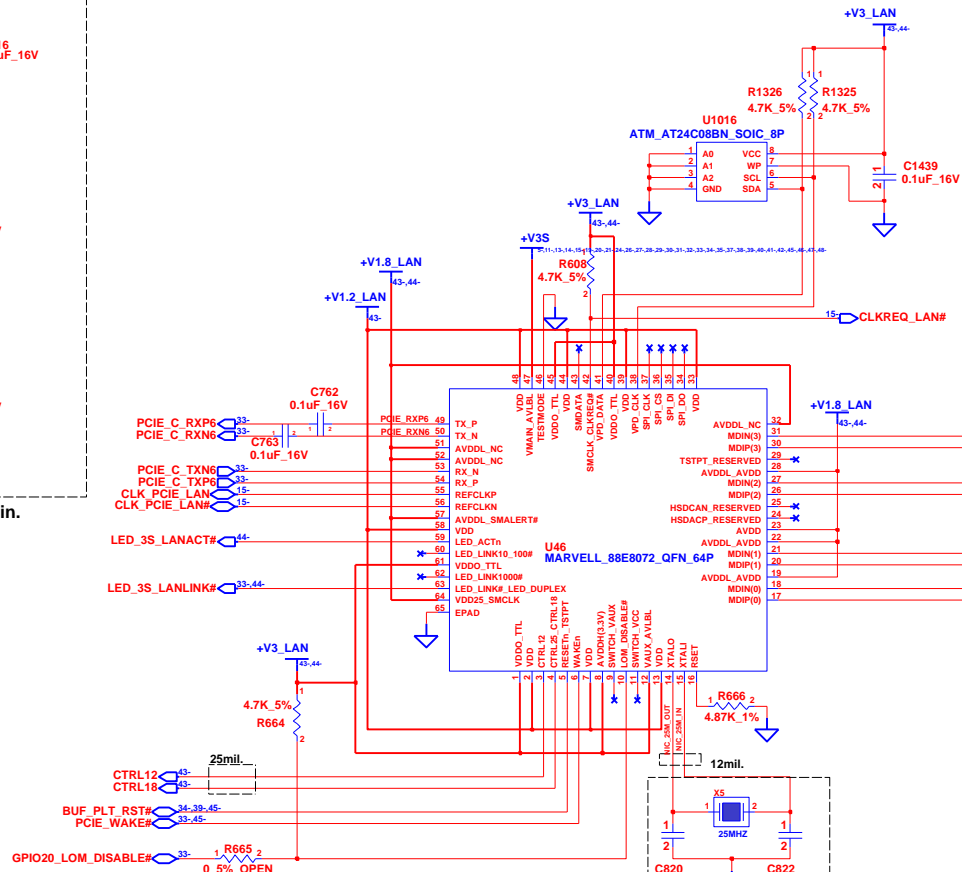
INVENTEC			
TITLE: Hublot_UMA KBC & BIOS ROM			
SIZE: A3	CODE: CS	DOC. NUMBER: 1310A22592-0-MT	REV: RA01
SHEET: 39		OF: 54	

CHANGE by: DalDuke 14-Apr-2009





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



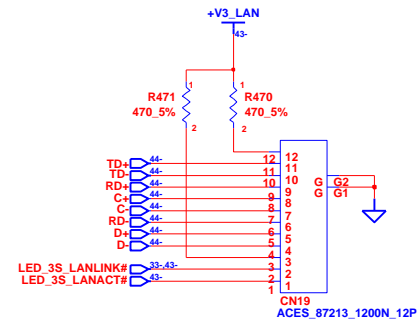
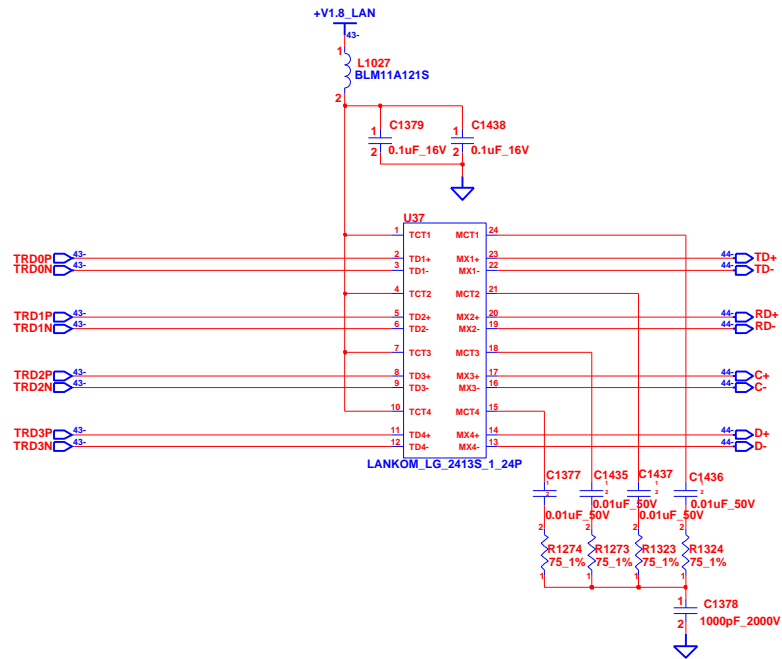
INVENTEC

TITLE: Hublot_UMA
Giga LAN Controller

SIZE: A3 CODE: CS DOC. NUMBER: 1310A22592-0-MTR REV: A01

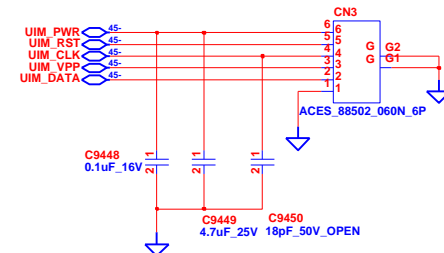
CHANGE by: Dai.Duke 14-Apr-2009

SHEET 43 OF 54

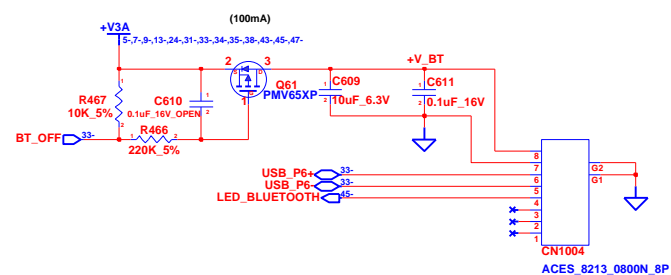


INVENTEC			
TITLE: Hublot_UMA Magnetic & RJ45 CONN			
SIZE A3	CODE CS	DOC. NUMBER 1310A22592-0-MTR A01	REV 44
CHANGE by: DalDuke		14-Apr-2009	
SHEET 44		OF 54	

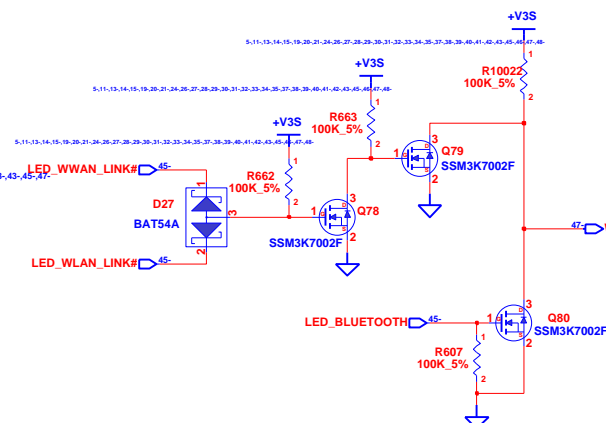
Close pin2 and pin52 for RF option



SIM Card Connector



BlueTooth CONN



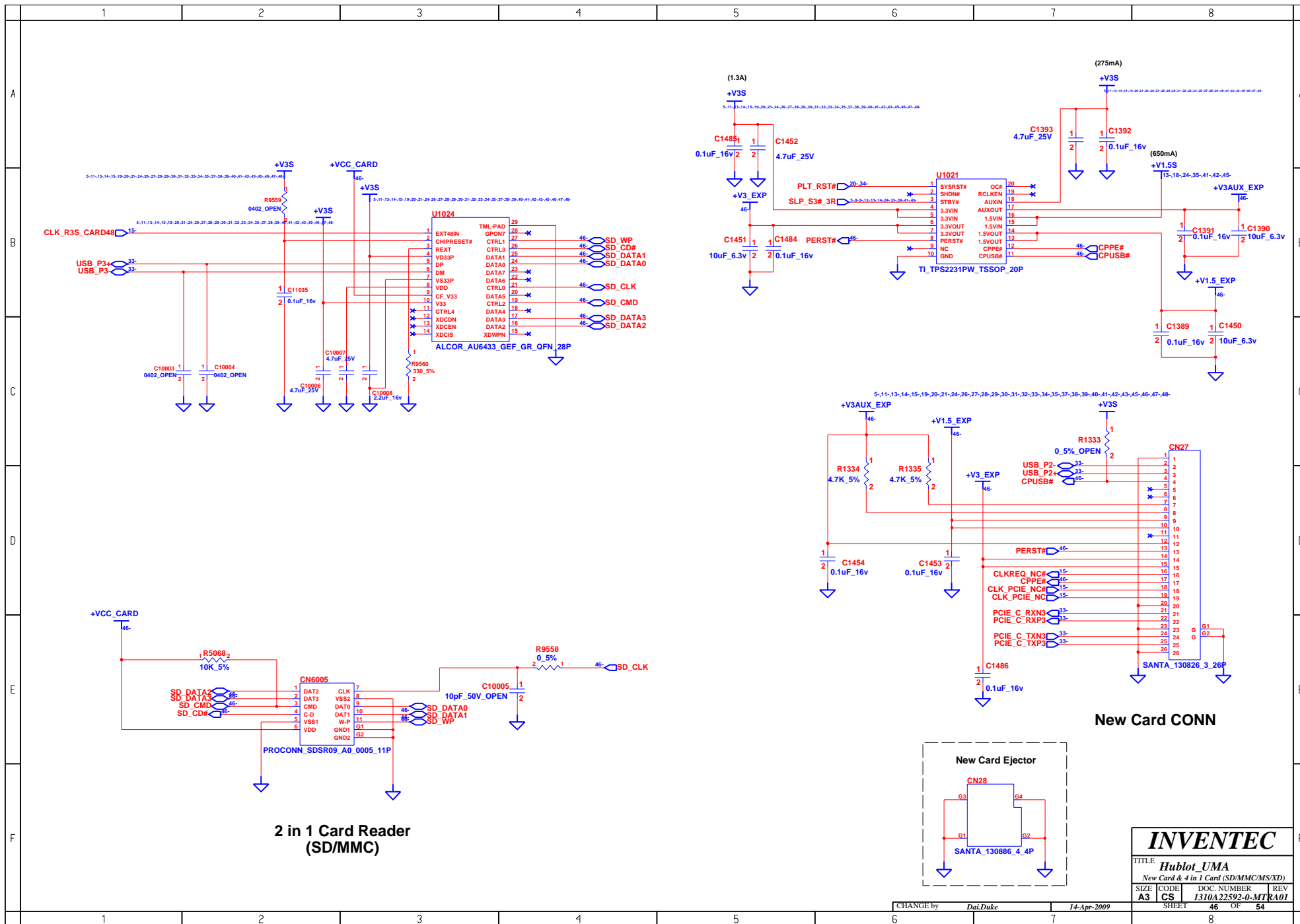
Close pin2 and pin52 for RF option

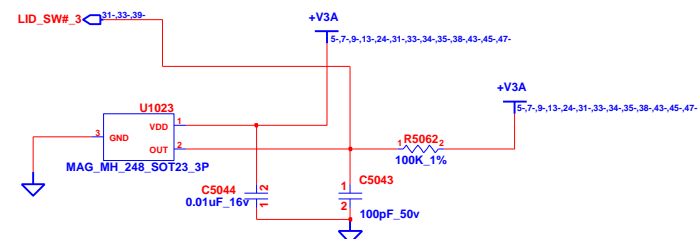
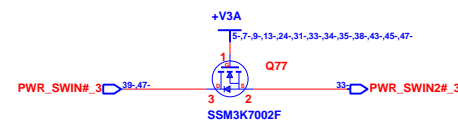
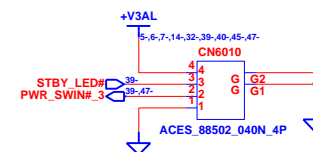
Mini Card-WLAN

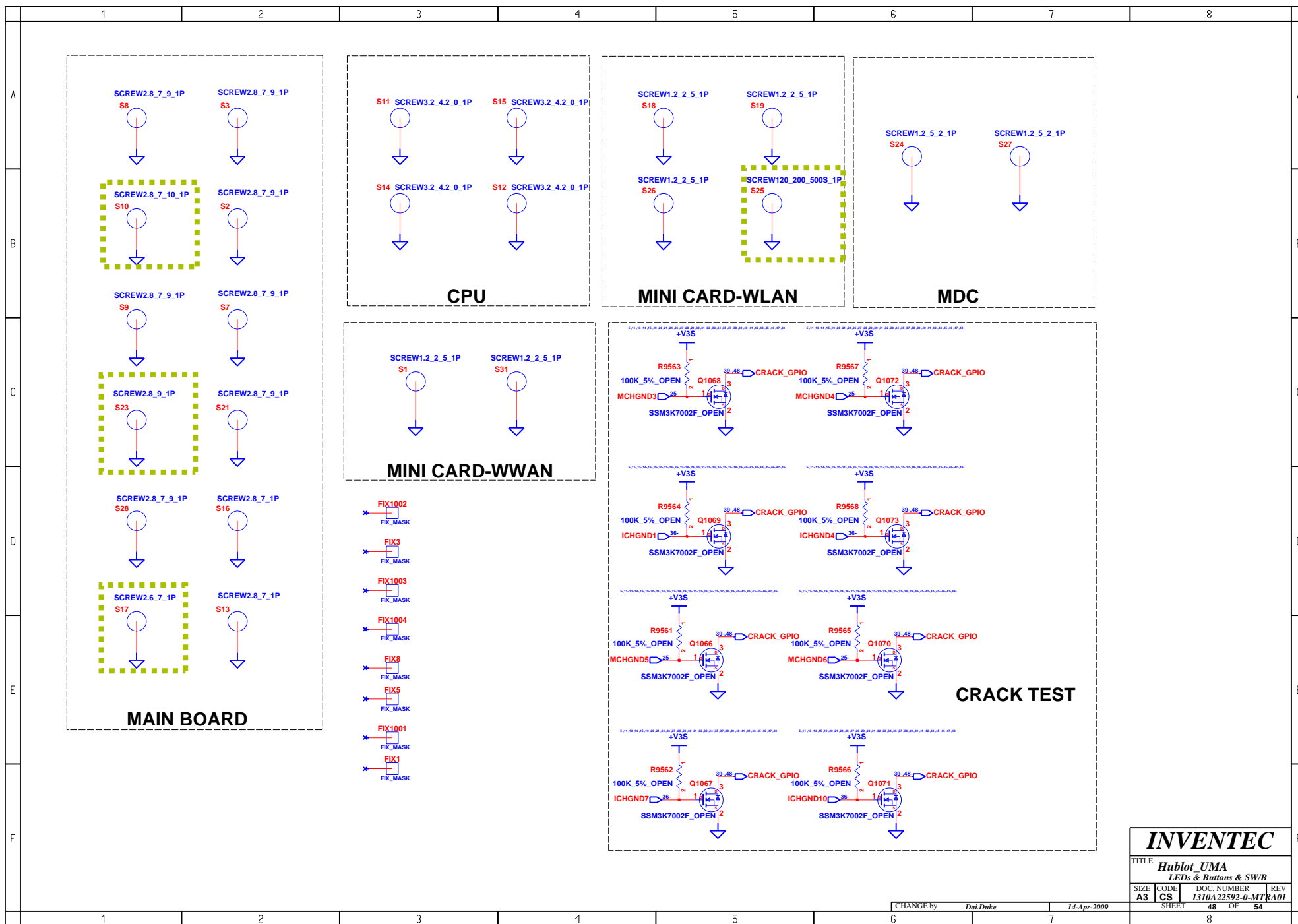
BELLW 80003_4021_52P

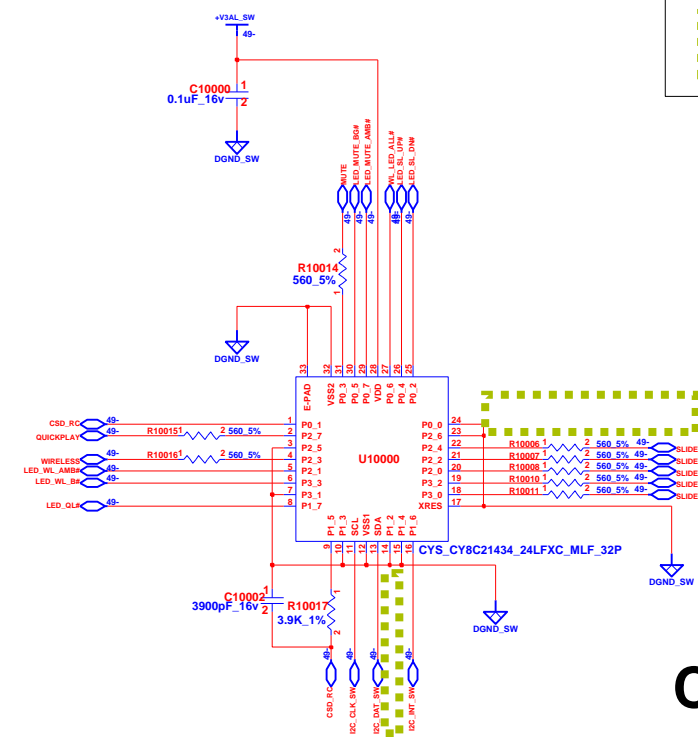
Close pin2 and pin52 for RF option

INVENTEC			
TITLE Hublot_UMA			
Mini Card(WLAN/Robson)/BT/UWB/Web-CAM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22592-0-MTRA01	
SHEET		45	OF 54





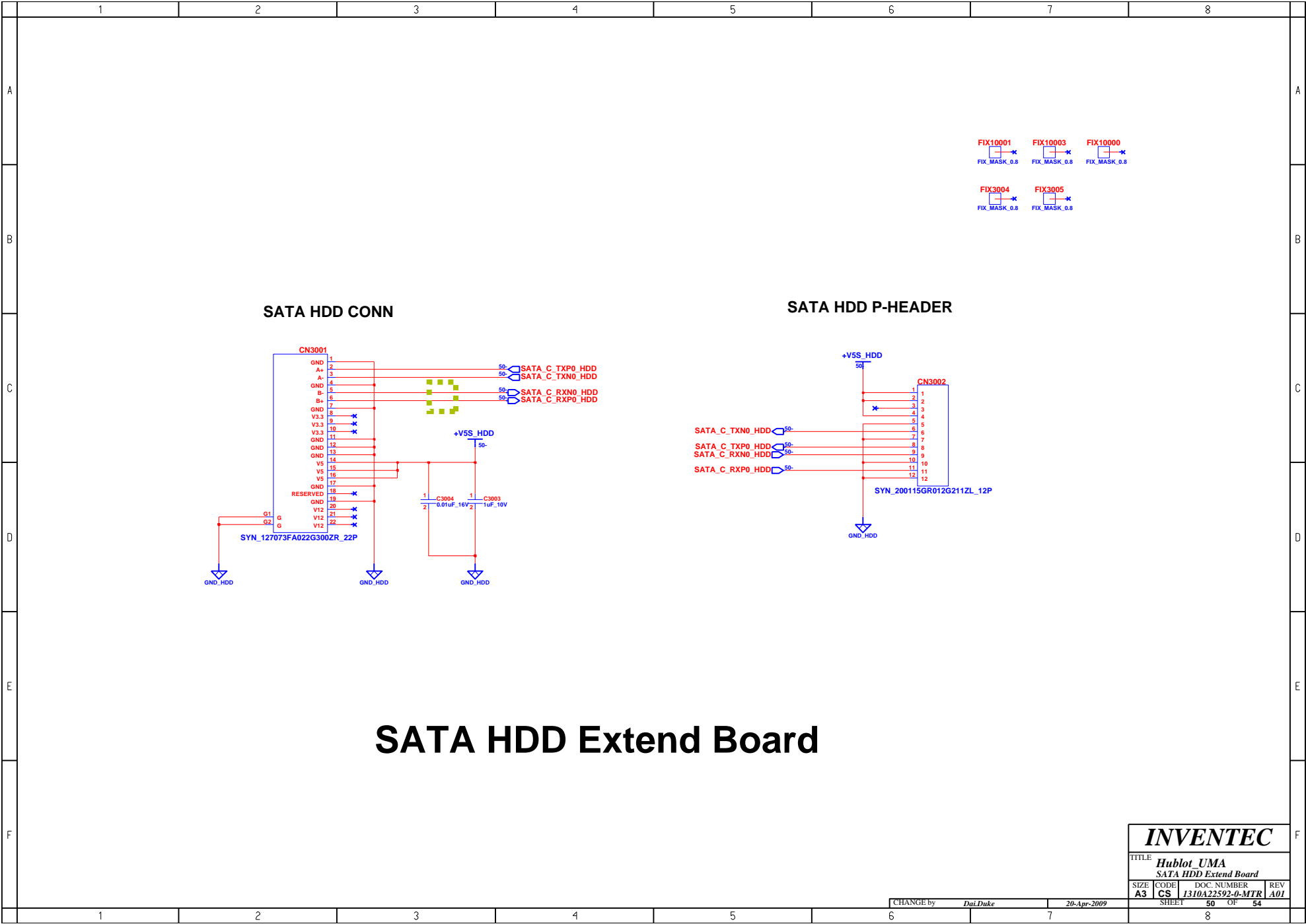




CAP Sense Board

INVENTEC			
TITLE <i>Hublot_UMA</i> <i>Cap Sense Board</i>			
SIZE A3	CODE CS	DOC. NUMBER <i>1310A22592-0-MTR</i>	REV <i>A01</i>
SHEET		49 OF	54

CHANGE by	<i>Dai.Duke</i>	<i>14-Apr-2009</i>
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Layout notes :

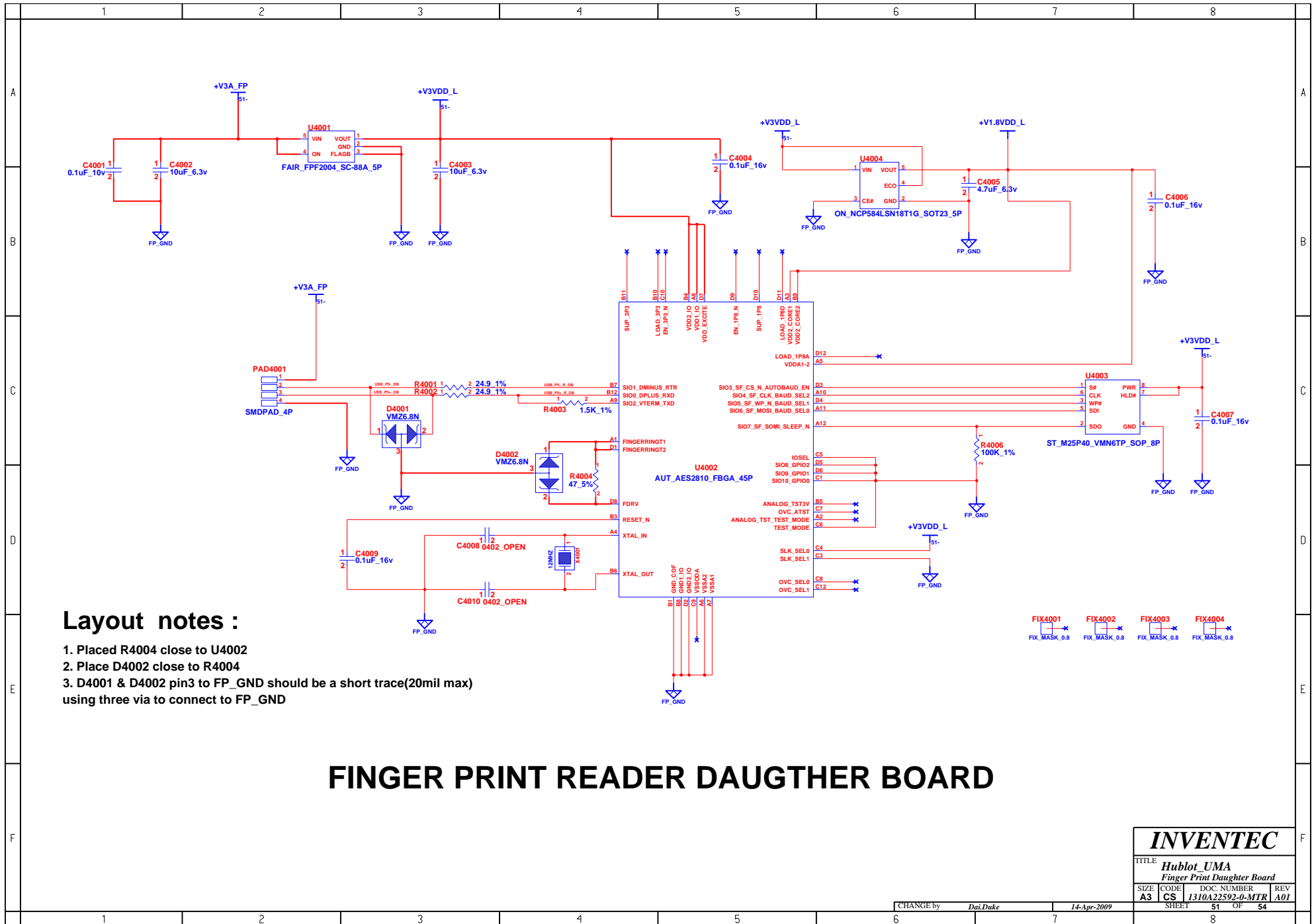
1. Placed R4004 close to U4002
2. Place D4002 close to R4004
3. D4001 & D4002 pin3 to FP_GND should be a short trace(20mil max) using three via to connect to FP_GND

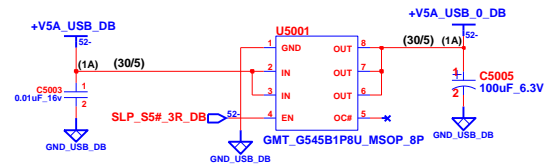
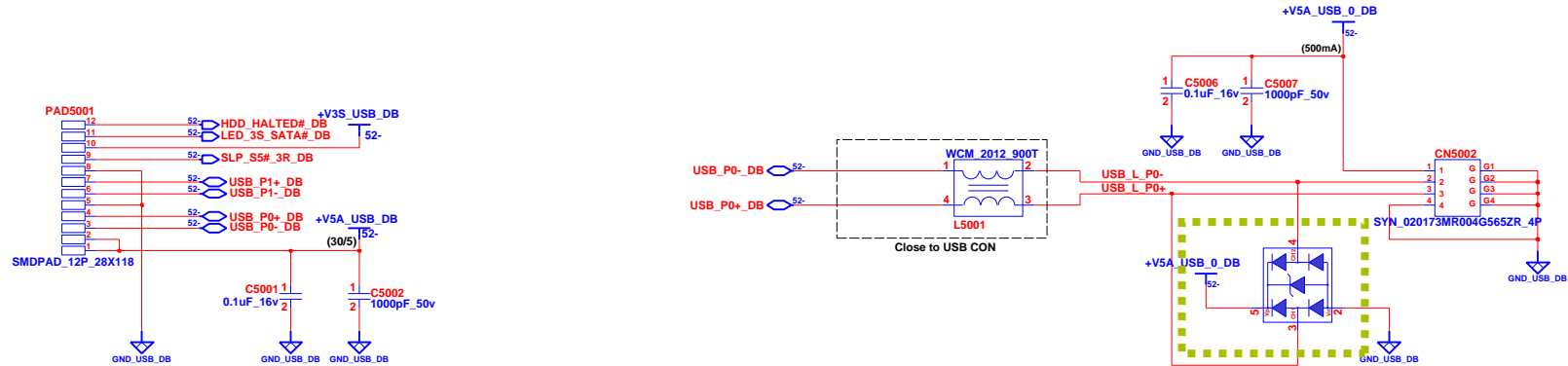
FINGER PRINT READER DAUGHTER BOARD

INVENTEC

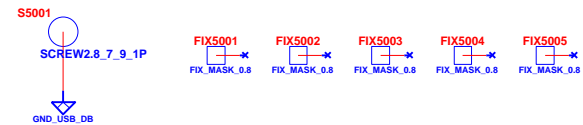
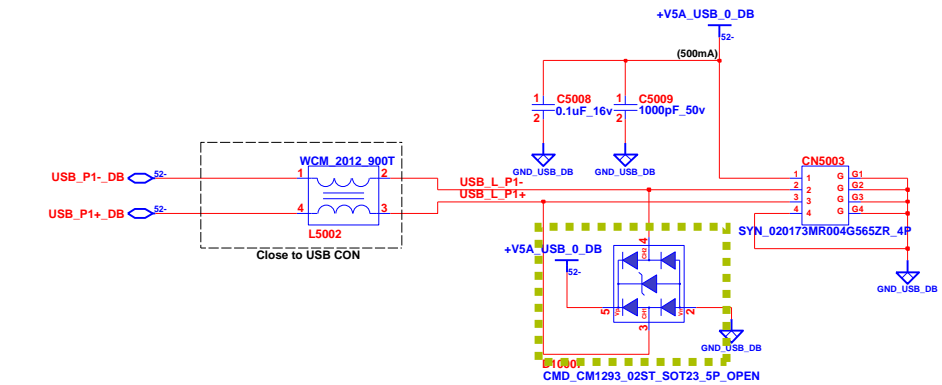
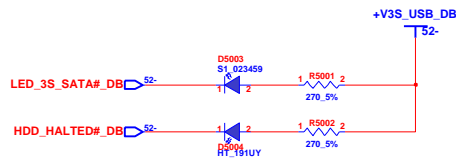
TITLE			
Hublot_UMA Finger Print Daughter Board			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22592-0-MTR	A01
SHEET		51	OF 54

CHANGE by *Dai.Duke* 14-Apr-2009





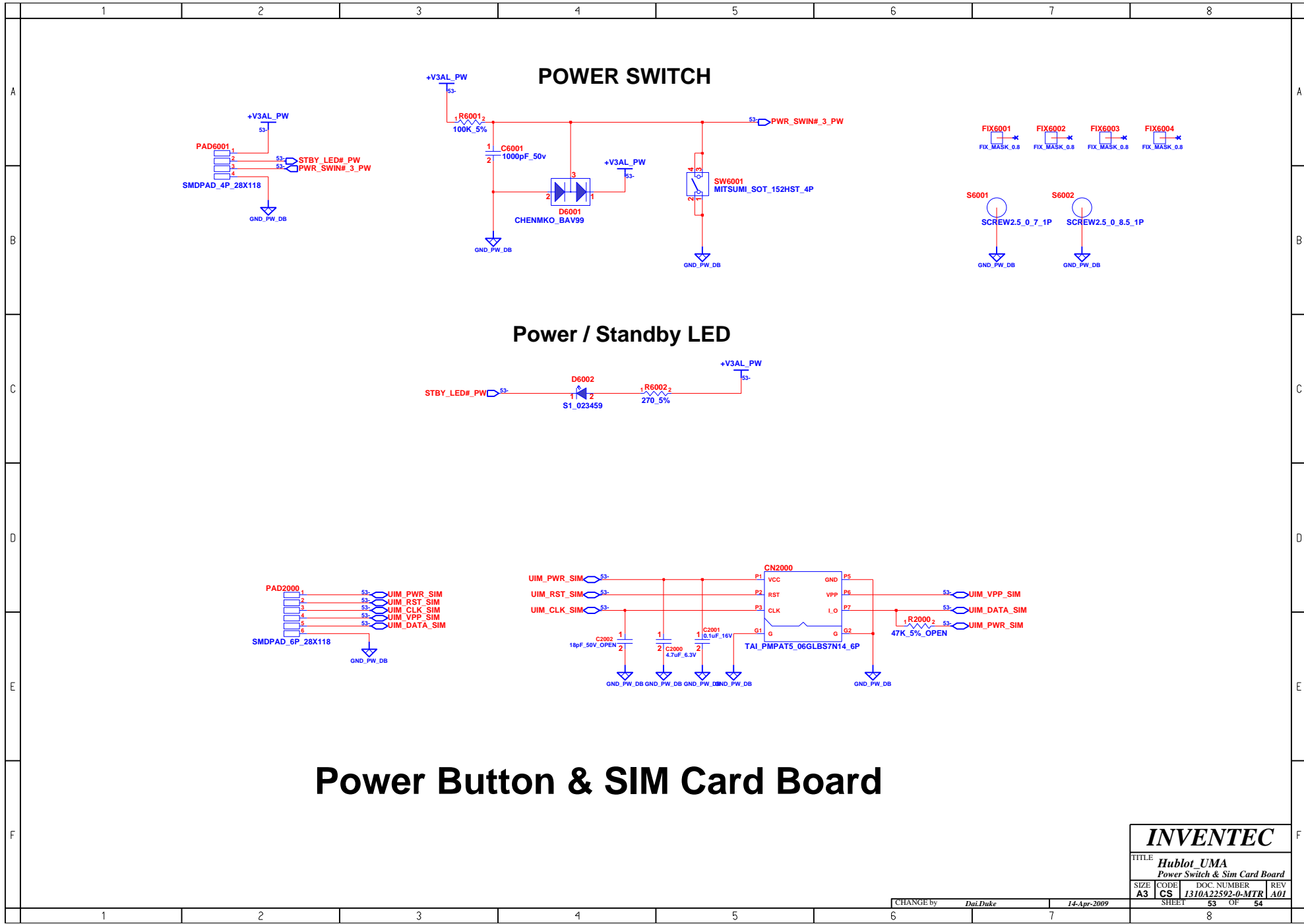
SATA & HDD-Halted LED



USB Daughter Board

INVENTEC

TITLE Hublot_UMA USB Daughter Board			
SIZE A3	CODE CS	DOC. NUMBER 1310A22592-0-MTR	REV A01
CHANGE by Dai.Duke		14-Apr-2009	
SHEET		52	OF 54



Power Button & SIM Card Board

INVENTEC

TITLE			
Hublot_UMA			
Power Switch & Sim Card Board			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A22592-0-MTR	A01

CHANGE by Dal Duke 14-Apr-2009

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