

VULCAIN UMA PV Build

2009.02.23

DATE	CHANGE NO.	REV

<http://hobi-elektronika.net>

DRAWER	EE	DATE	POWER	DATE	INVENTEC		
DESIGN							
CHECK					TITLE		
RESPONSIBLE					VV UMA SATA		
SIZE = 3					SIZE	CODE	DOC. NUMBER
FILE NAME: XXXX-XXXXXX-XX					D	CS	1310A22163-0-MTR
P/N	XXXXXXXXXXXX				SHEET	1	OF 50

TABLE OF CONTENTS

PAGE

5- DC& BATTERY CHARGER
 6- SELECT & BATTERY CONN
 7- SYSTEM POWER(3V/5V)
 8- SYSTEM POWER(+V1.8/+V1.25S)
 9- SYSTEM POWER(+VGFX/+VCCP)
 10- SYSTEM POWER(+V1.5S)
 11- CPU POWER(VCC_CORE)
 12- DDR TERMINATION VOLTAGE
 13- POWER(SLEEP)
 14- POWER(SEQUENCE)

PAGE

15- CLOCK_GENERATOR
 16- PENRYN-1
 17- PENRYN-2
 18- PENRYN-3
 19- THERMAL&FAN CONTROLLER
 20- Crestline-1
 21- Crestline-2
 22- Crestline-3
 23- Crestline-4
 24- Crestline-5
 25- Crestline-6
 26- DDR2-DIMM0
 27- DDR2-DIMM1
 28- DDR2-DAMPING
 29- VGA CONN
 30- LCM CONN
 31- ICH8-1
 32- ICH8-2
 33- ICH8-3
 34- ICH8-4
 35- ICH8-5

PAGE

36- SYSTEM BIOS
 37- HDD&ODD CONN
 38- USB CONN
 39- KBC
 40- KB&TP CONN
 41- AUDIO CODEC
 42- MDC CONN & AUDIO JACK
 43- NIC 10/100- CONTROLLER
 44- NIC 10/100- RJ45 CONN
 45- MINICARD & BT CONN
 46- NEW CARD & SD/MMC
 47- LED & BUTTON&LID SWITCH
 48- SCREW HOLE
 49- SWITCH Board
 50- ODD Extend Board

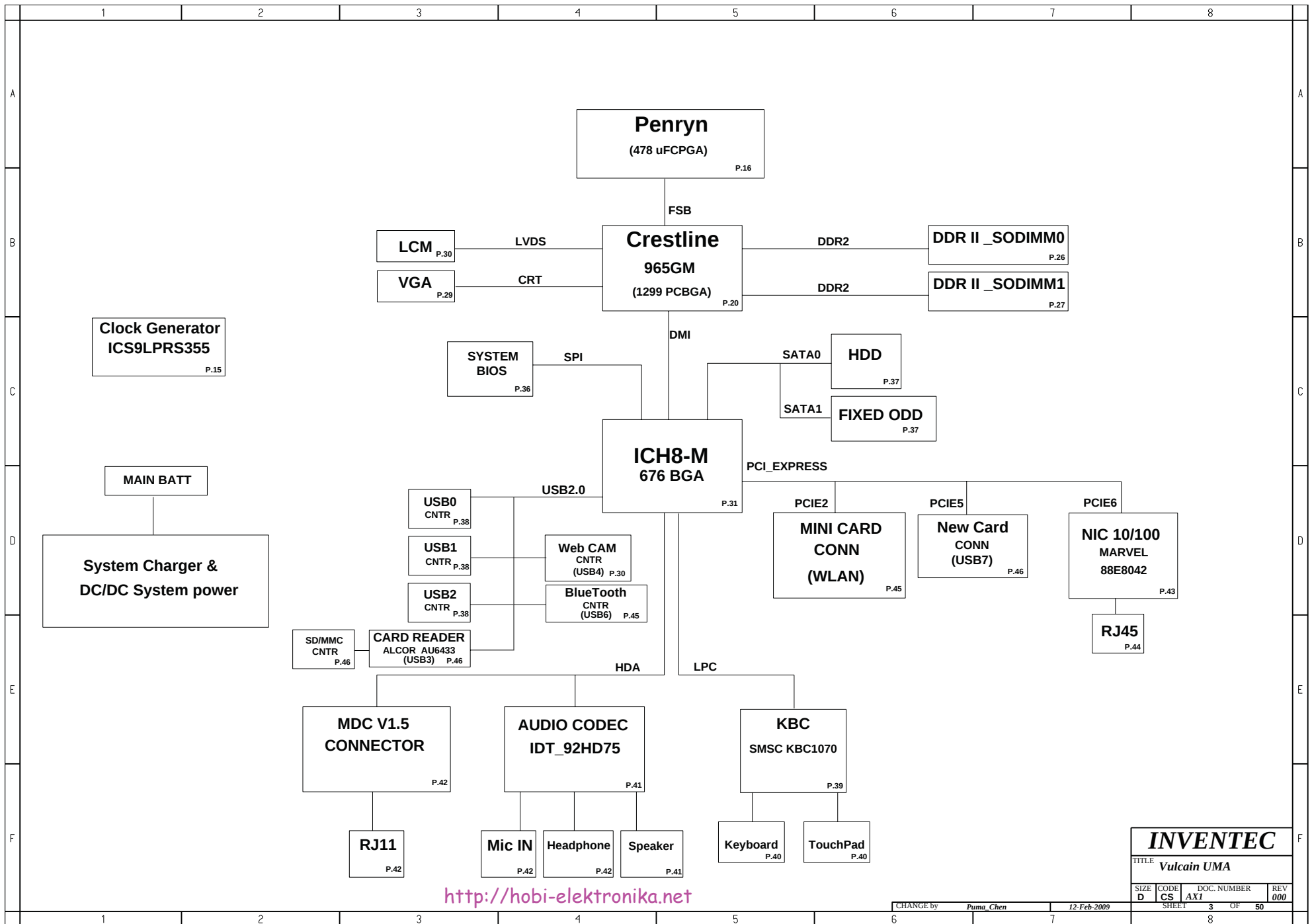
INVENTEC

TITLE **Vulcain UMA**

SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
SHEET		2 OF	50

<http://hobi-elektronika.net>

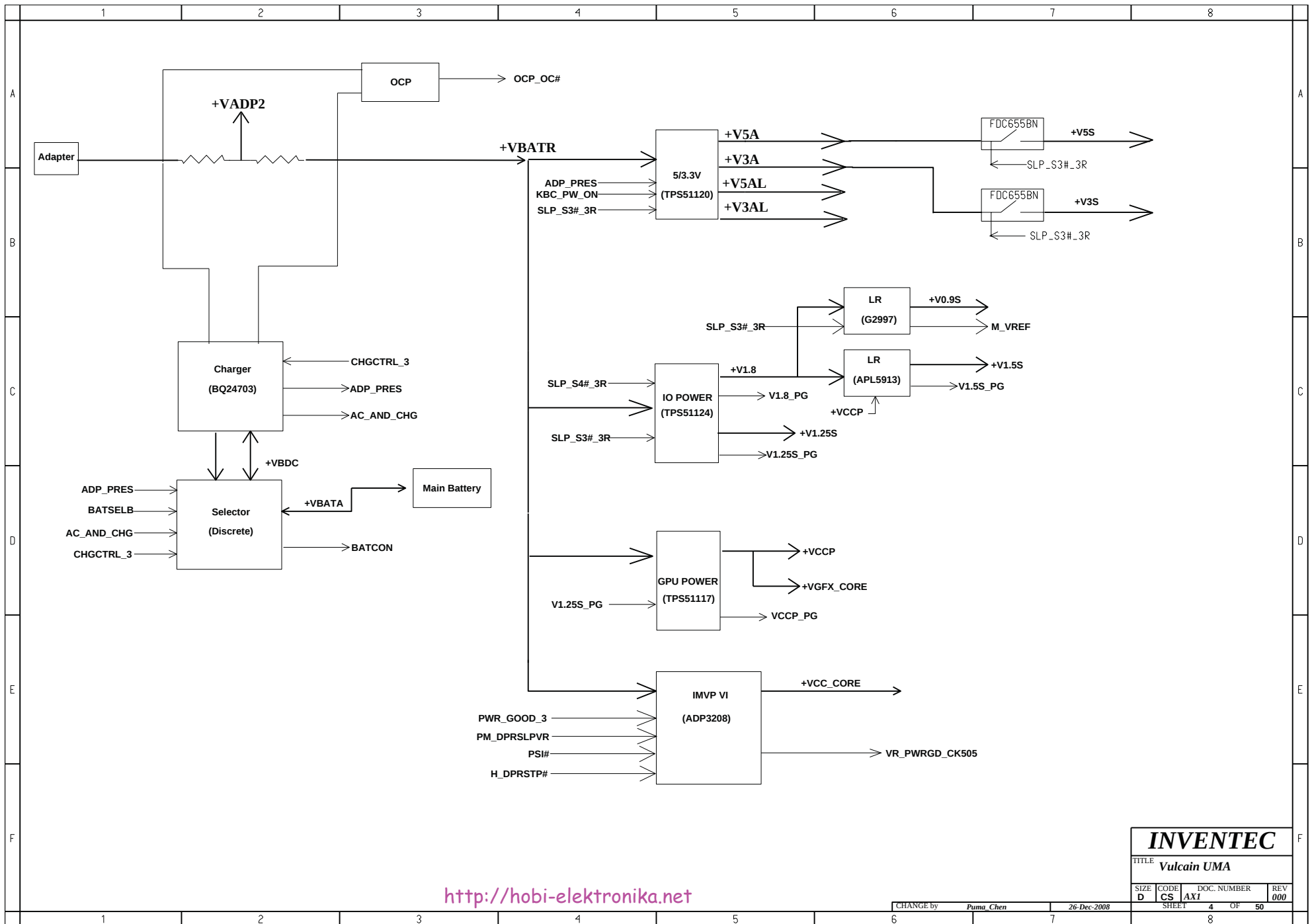
CHANGE by **Puma Chen** 26-Dec-2008



<http://hobi-elektronika.net>

INVENTEC				
TITLE Vulcain UMA				
SIZE D	CODE CS	DOC. NUMBER AXI	REV 000	
SHEET		3	OF	50

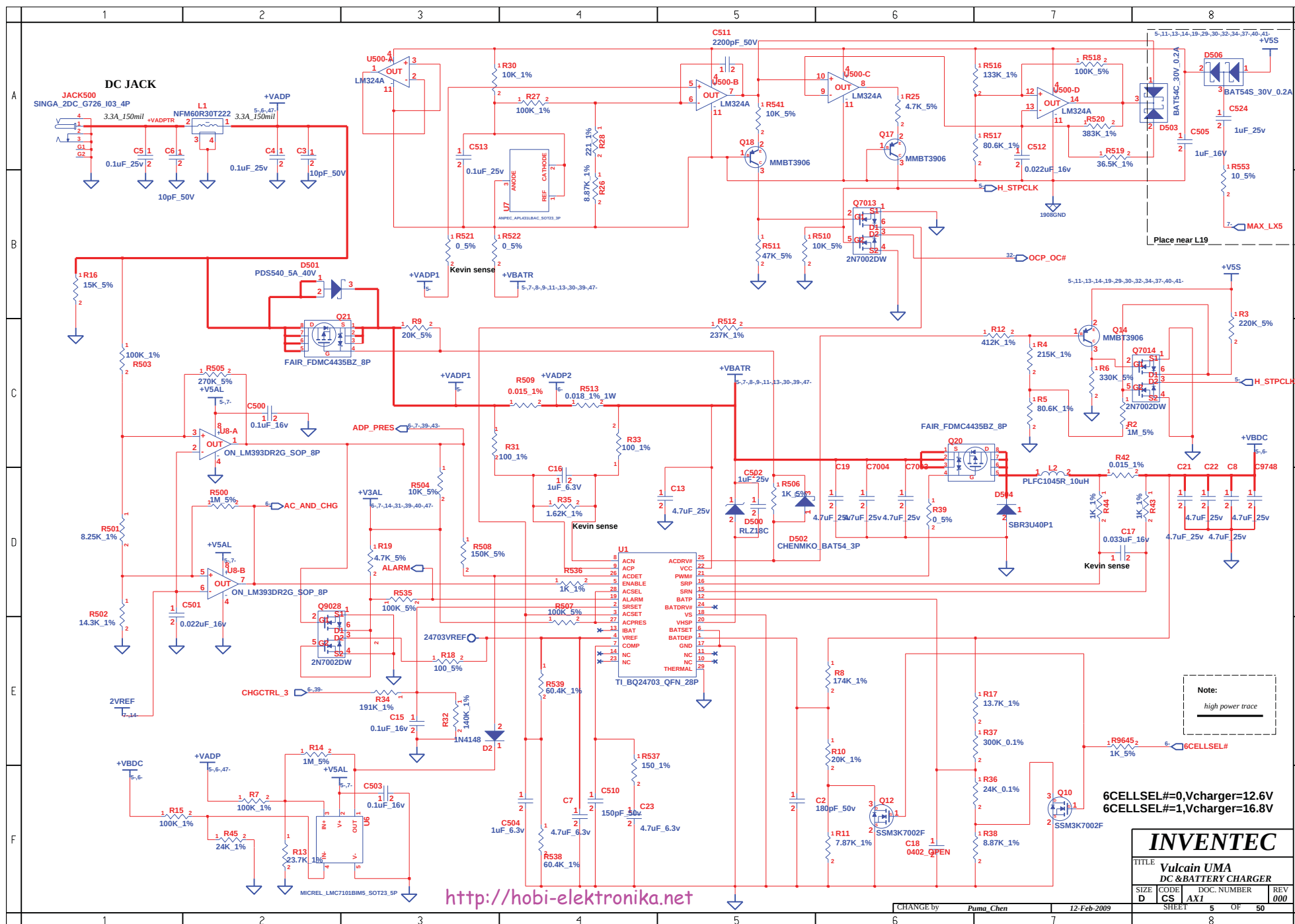
CHANGE by Puma_Chen 12-Feb-2009



<http://hobi-elektronika.net>

INVENTEC			
TITLE Vulcain UMA			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
SHEET 4		OF 50	

CHANGE by Puma Chen 26-Dec-2008



1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

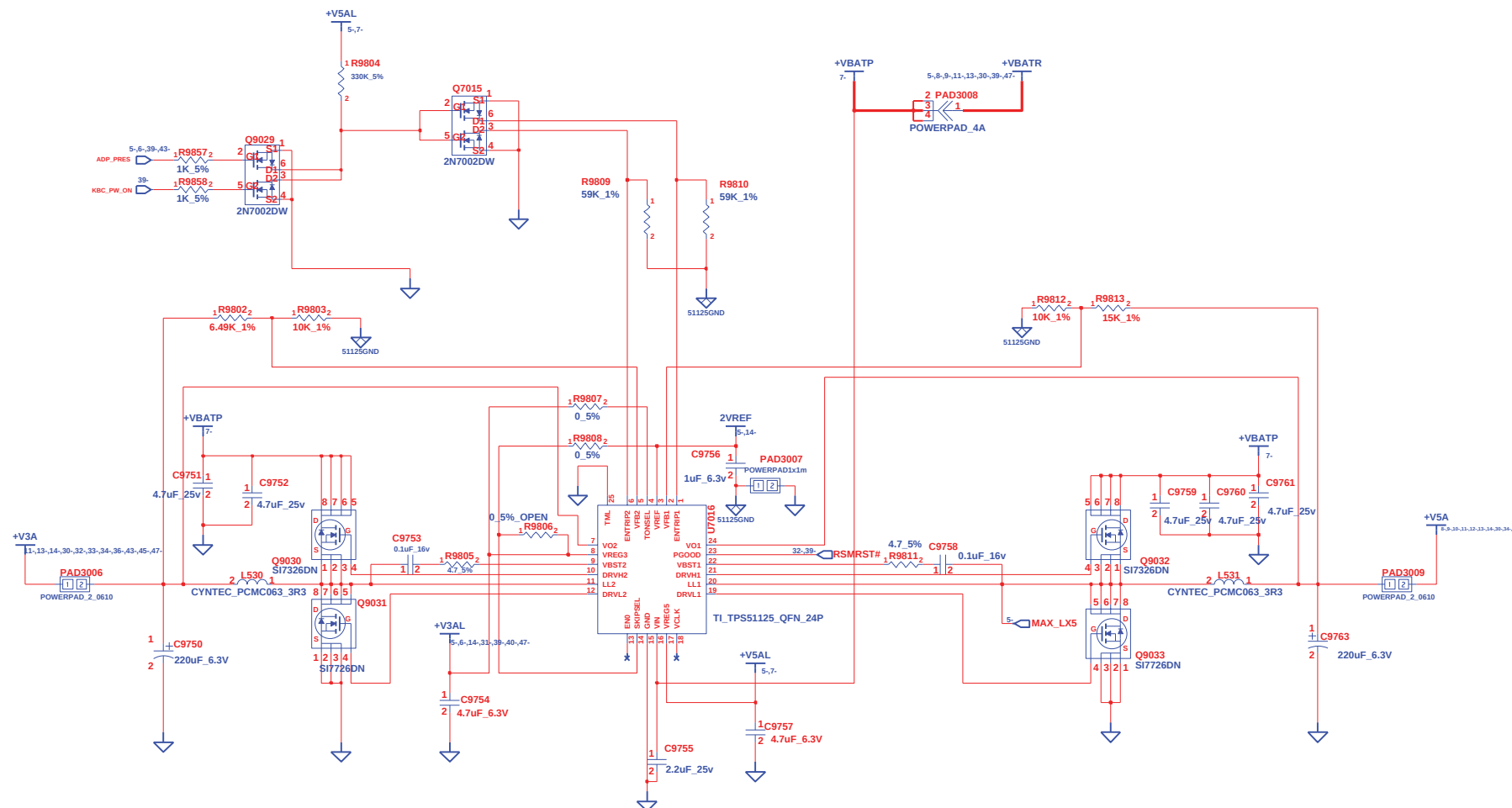
B

C

D

E

F



<http://hobi-elektronika.net>

INVENTEC			
TITLE Vulcain UMA SYSTEM POWER(3V/5V/12V)			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
SHEET 7 OF 50			

CHANGE by Puma Chen 26-Dec-2008

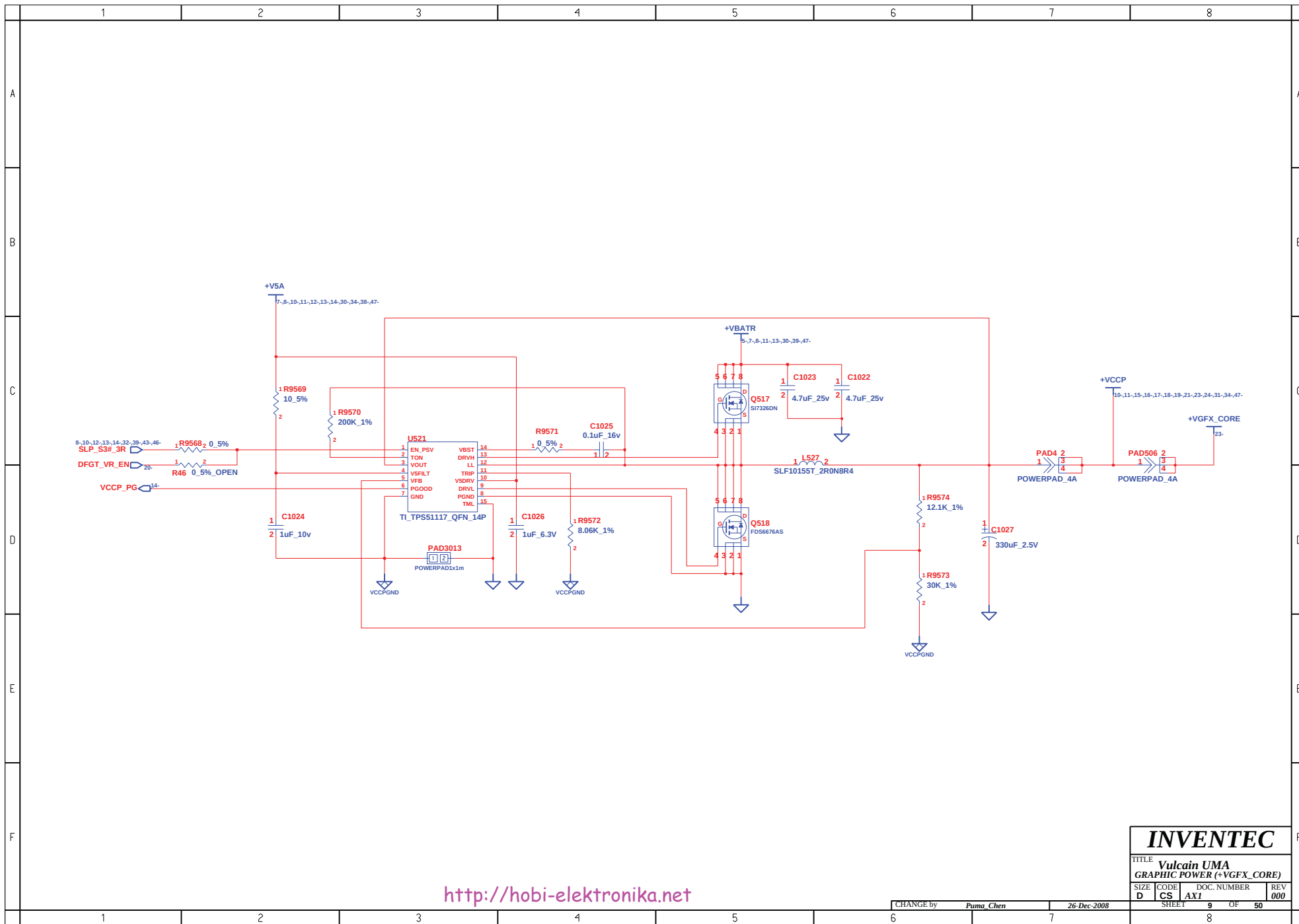
1 2 3 4 5 6 7 8



TITLE			
<i>Vulcain UMA</i>			
SYSTEM POWER(+V1.8/+V1.25S)			
SIZE	CODE	DOC. NUMBER	REV
D	CS	AX1	000

CHANGE by	<i>Puma Chen</i>	<i>16-Feb-2009</i>
-----------	------------------	--------------------

CS	AXI		
SHEET	8	OF	50



<http://hobi-elektronika.net>

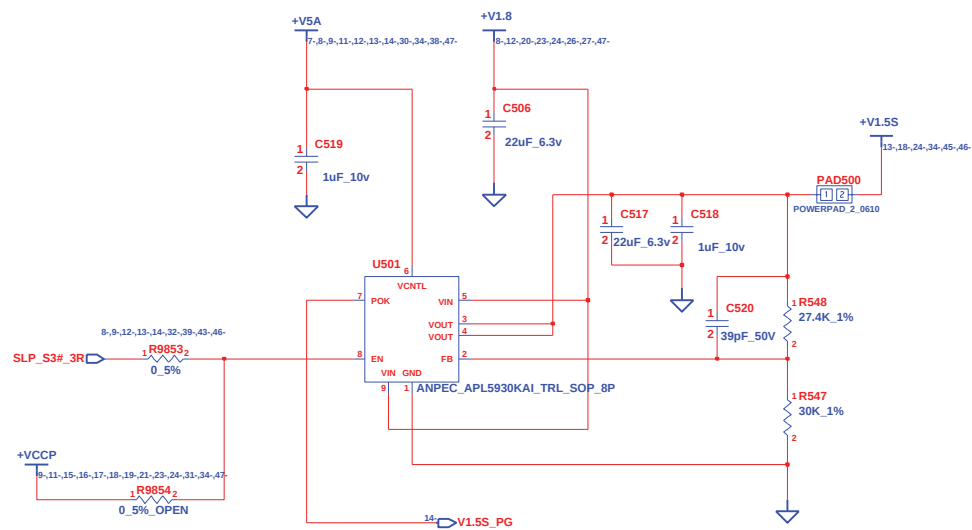
INVENTEC

TITLE **Vulcain UMA**
GRAPHIC POWER (+VGFX_CORE)

SIZE	CODE	DOC. NUMBER	REV
D	CS	AXI	000

CHANGE by *Puma_Chen* 26-Dec-2008

SHEET 9 OF 50

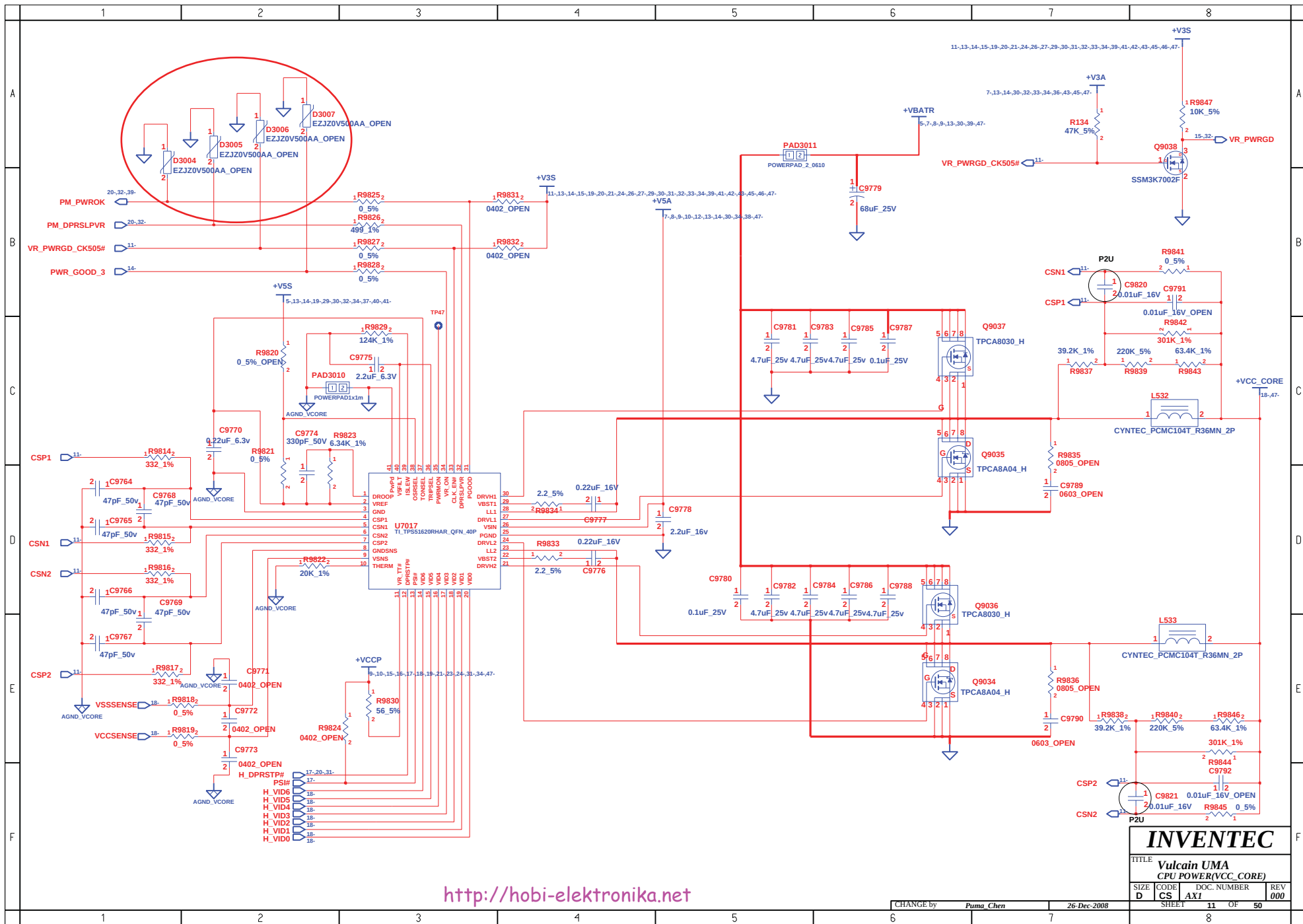


<http://hobi-elektronika.net>

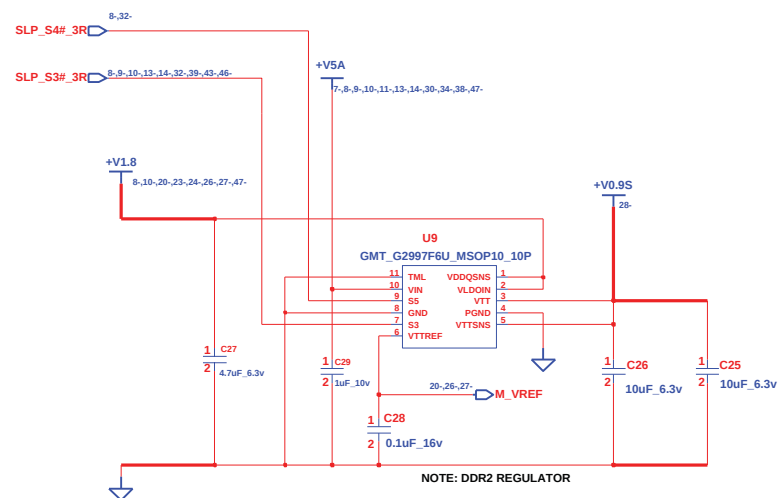
INVENTEC			
TITLE Vulcain UMA			
SYSTEM POWER(+VCCP/+V1.5S)			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
SHEET		10	OF 50

CHANGE by *Puma_Chen* 12-Feb-2009

8

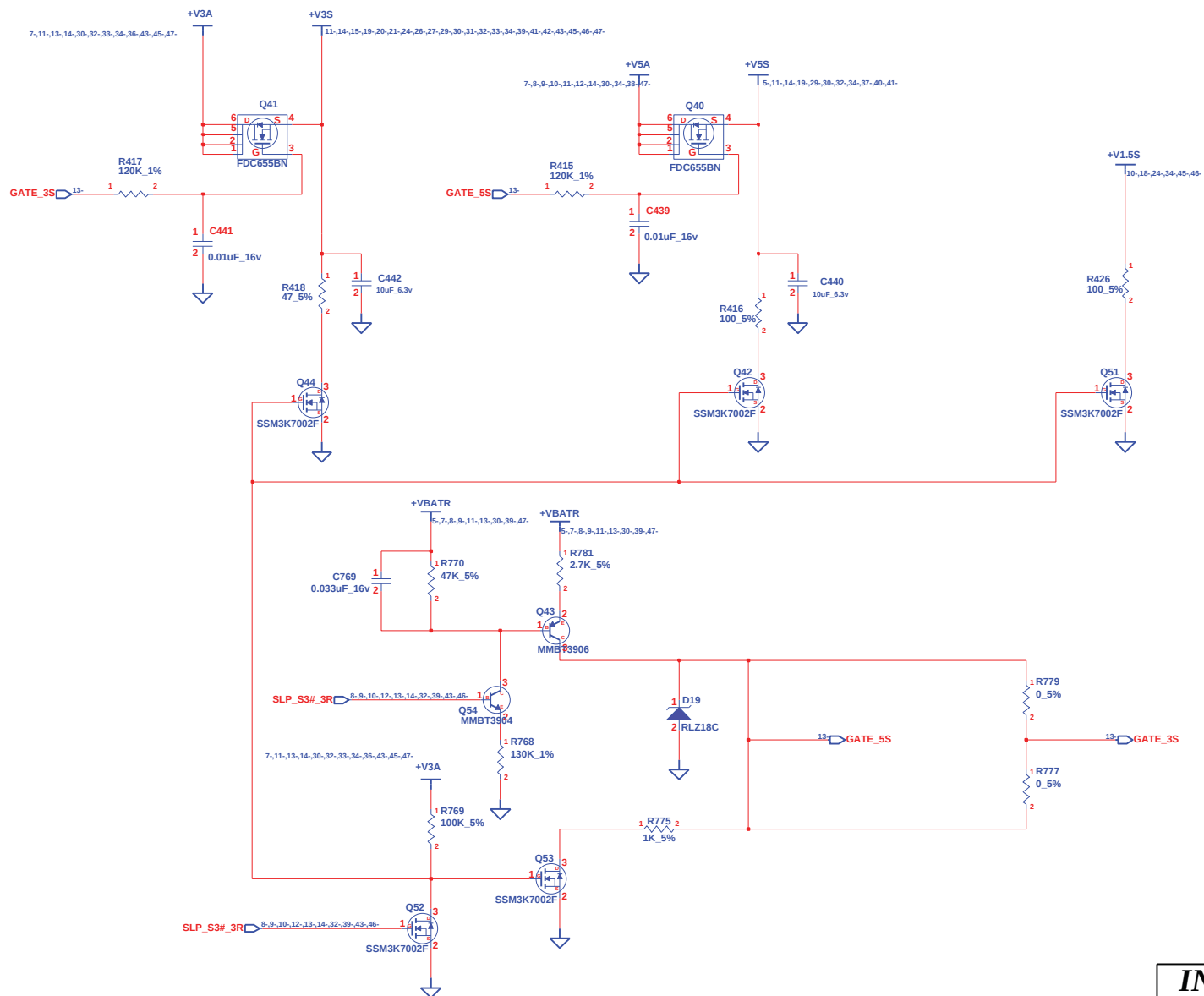


<http://hobi-elektronika.net>



<http://hobi-elektronika.net>

INVENTEC			
TITLE Vulcain UMA DDR TERMINATION VOLTAGE			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
CHANGE by <i>Puma Chen</i>		26-Dec-2008	
SHEET		12	OF 50
		8	



<http://hobi-elektronika.net>

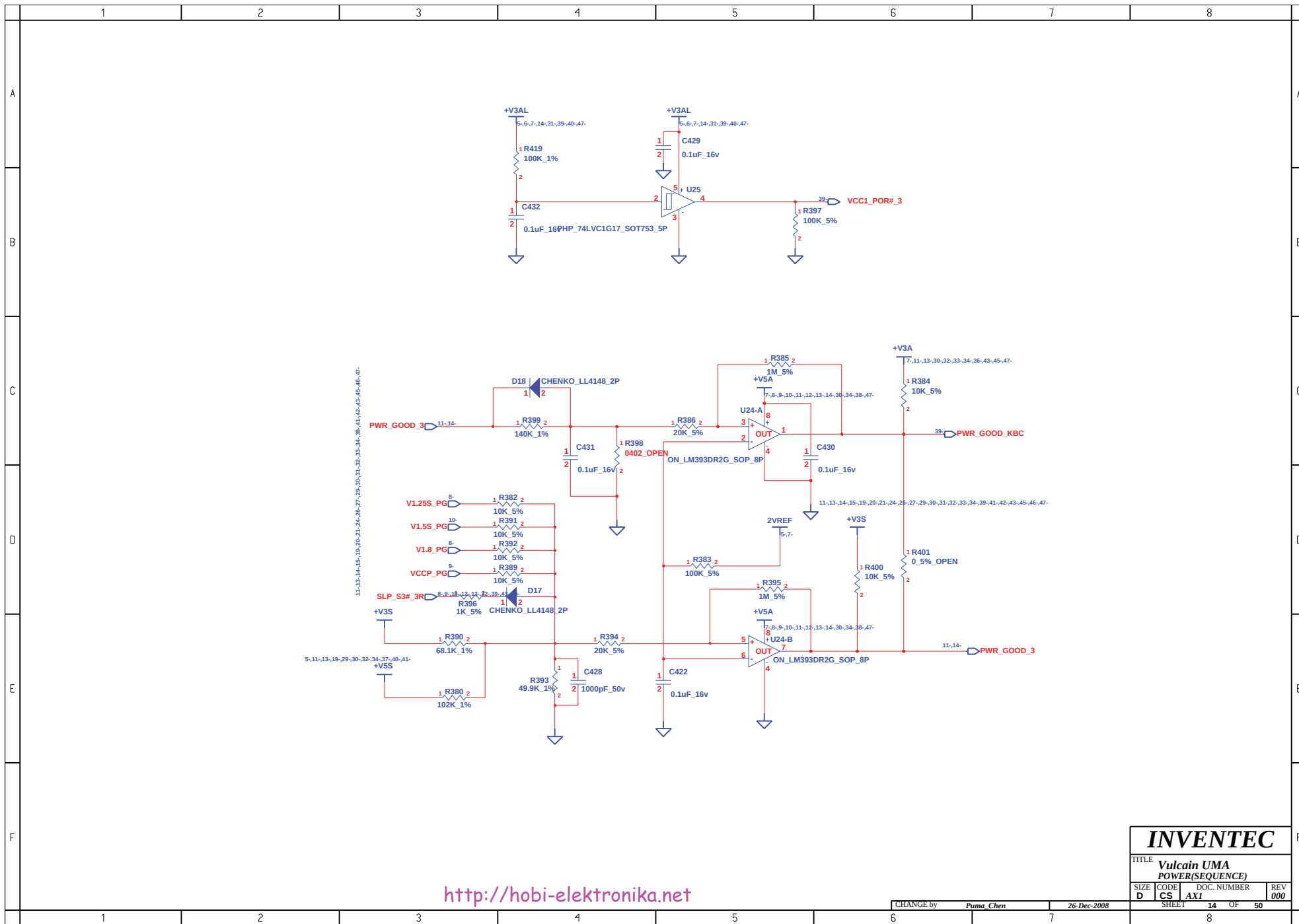
INVENTEC

TITLE			
Vulcain UMA POWER(SLEEP)			
SIZE	CODE	DOC. NUMBER	REV
D	CS	AX1	000

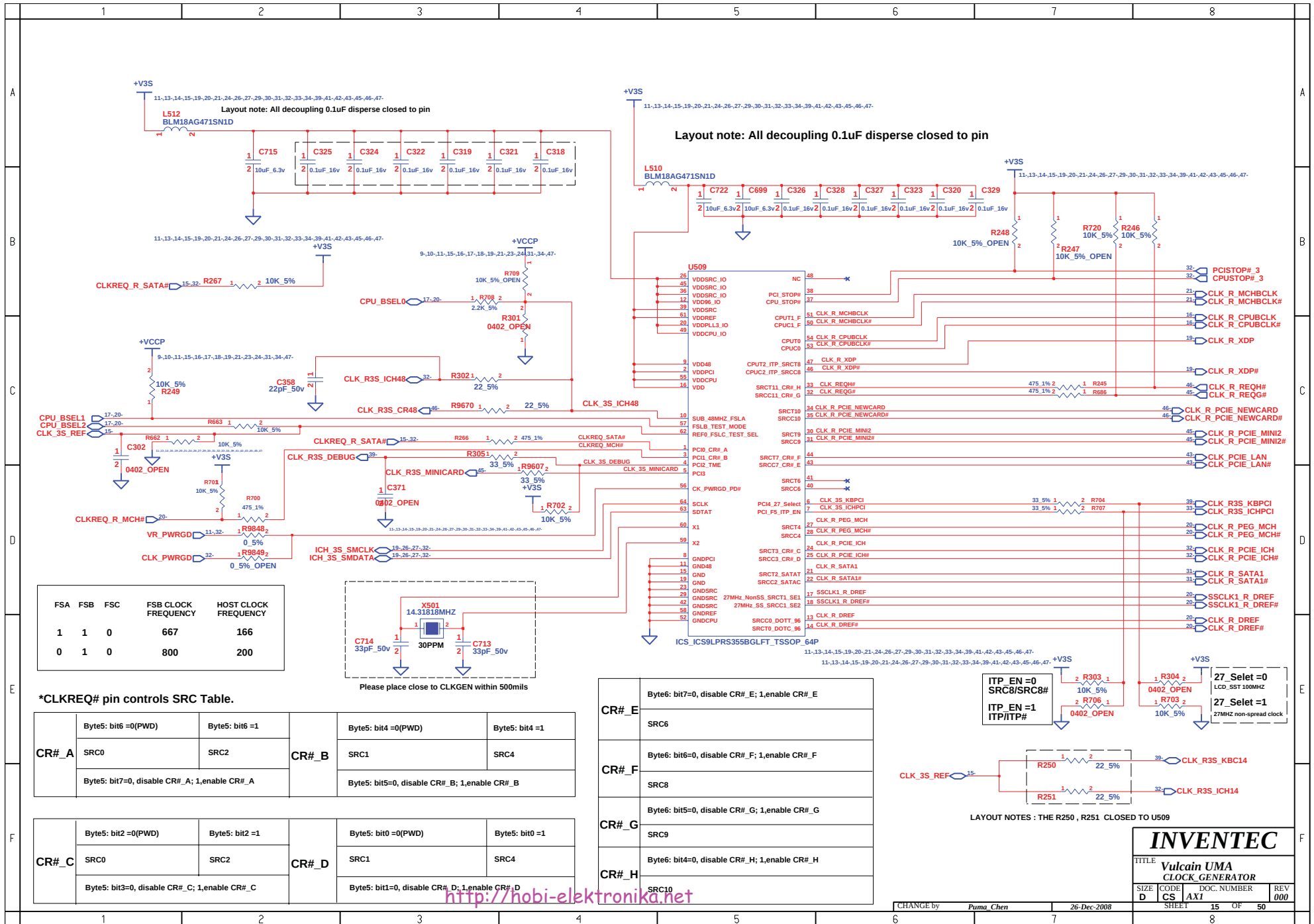
CHANGE by Puma Chen 26-Dec-2008

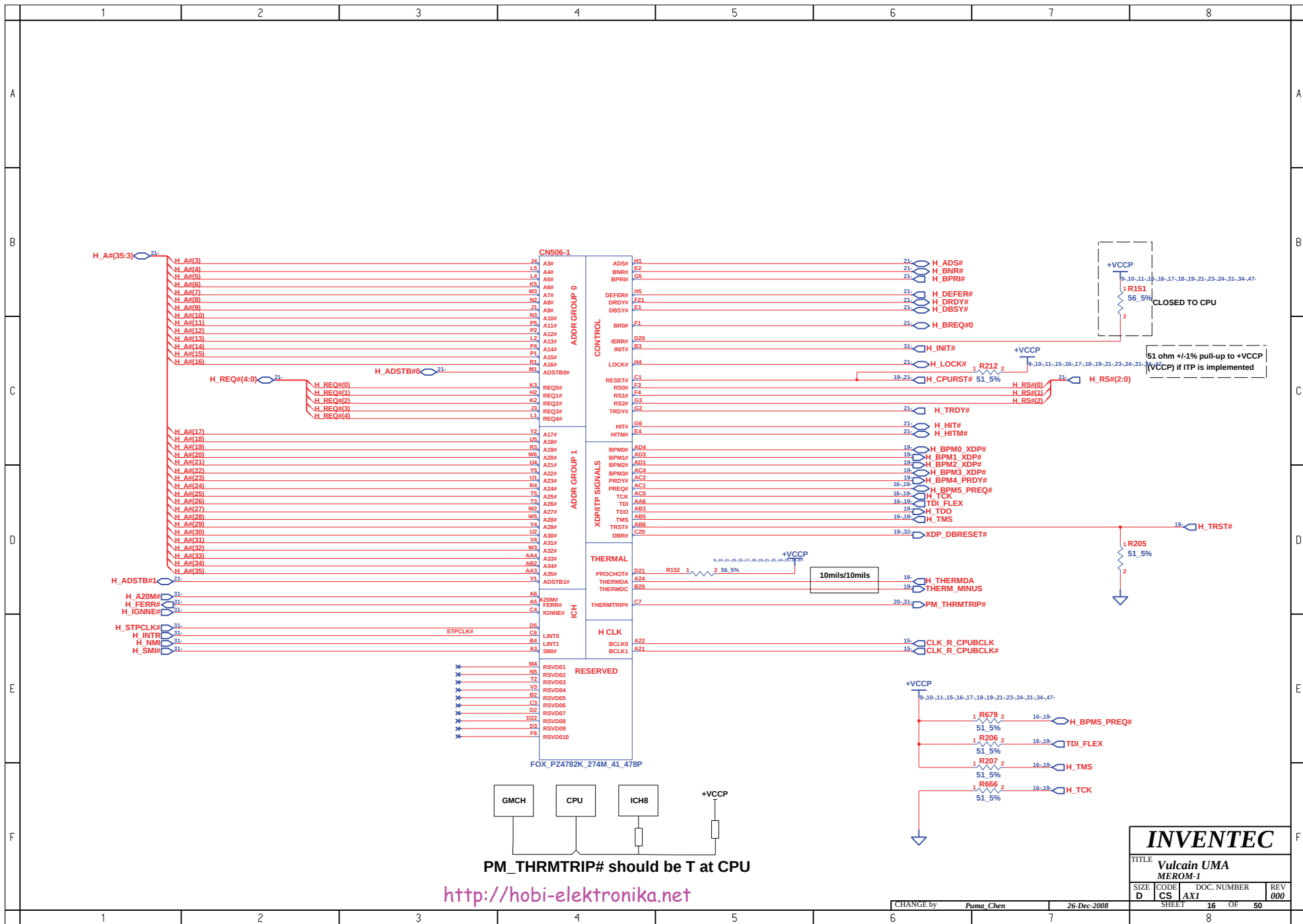
SHEET 13 OF 50

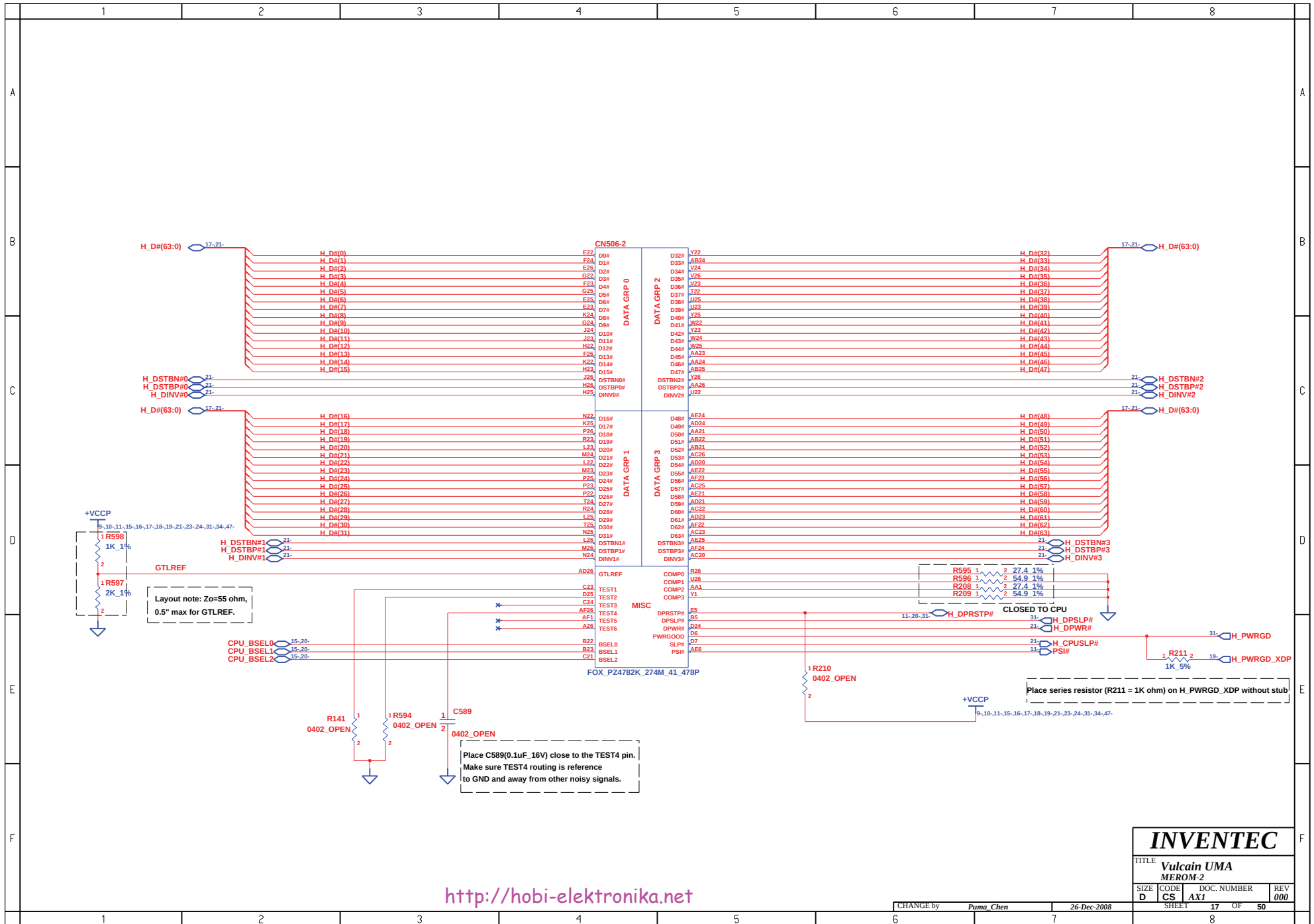
8



INVENTEC			
TITLE Vulcain UMA POWER(SEQUENCE)			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
CHANGE by Puma Chen		26-Dec-2008	
SHEET 14		OF 50	

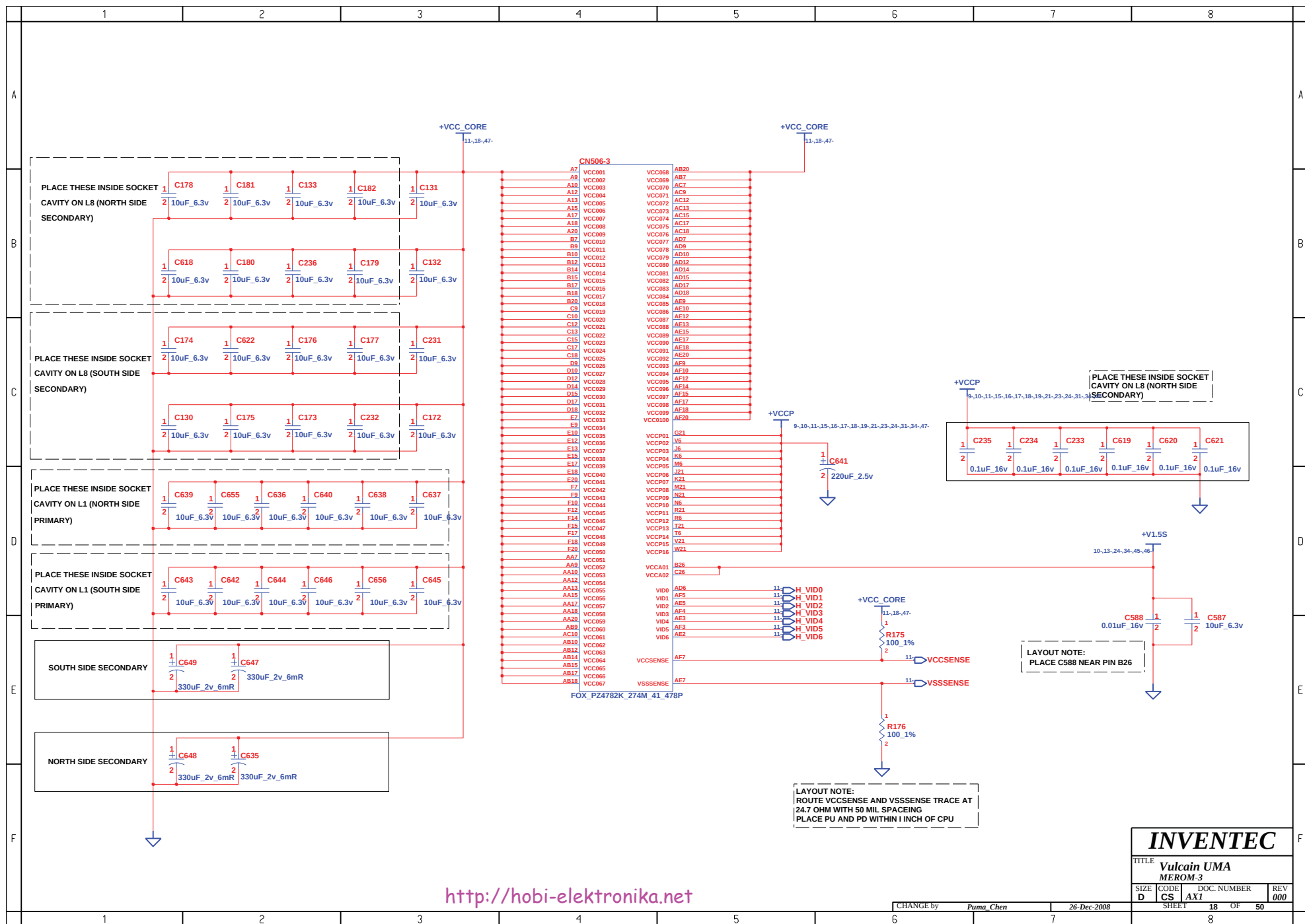


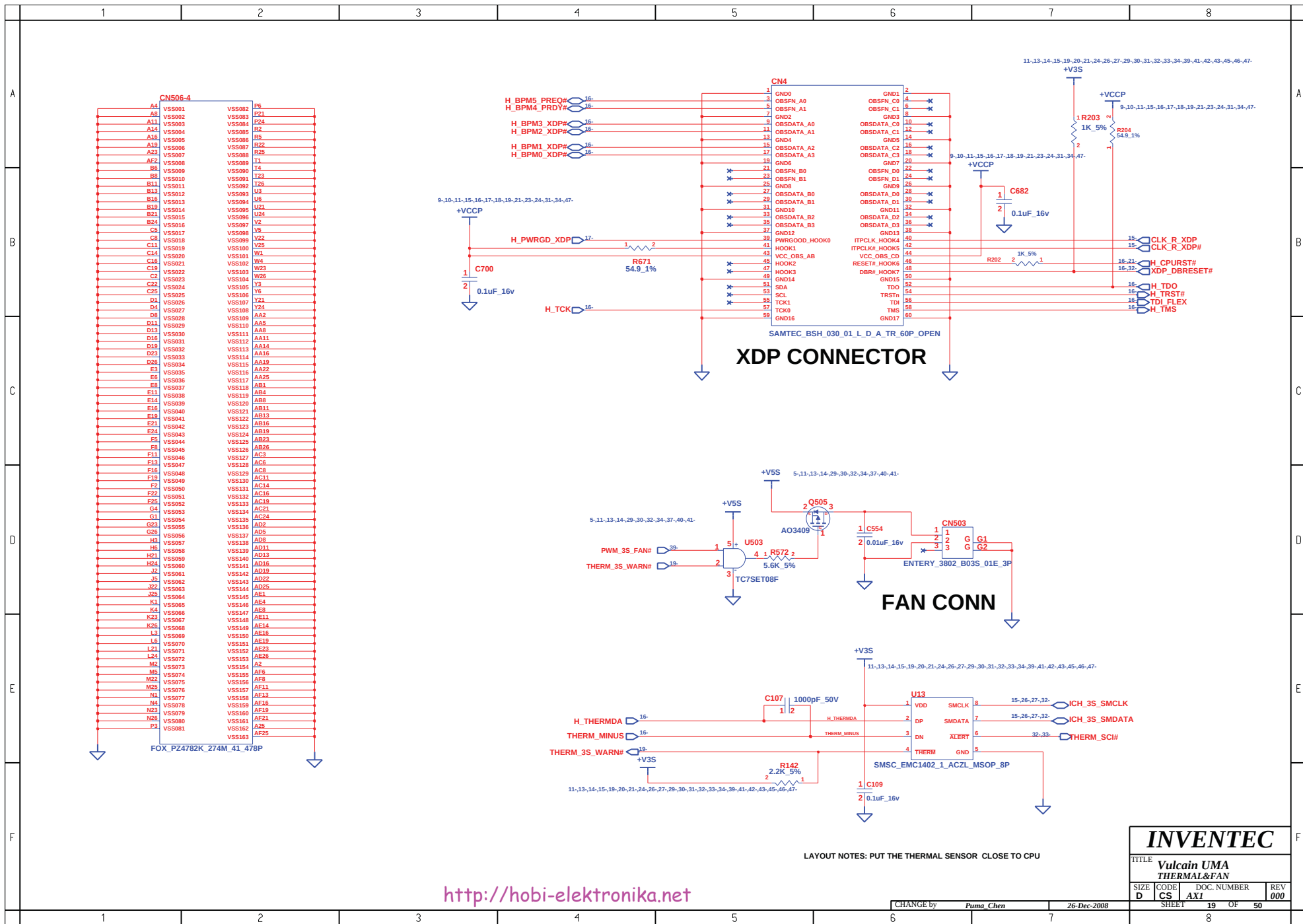




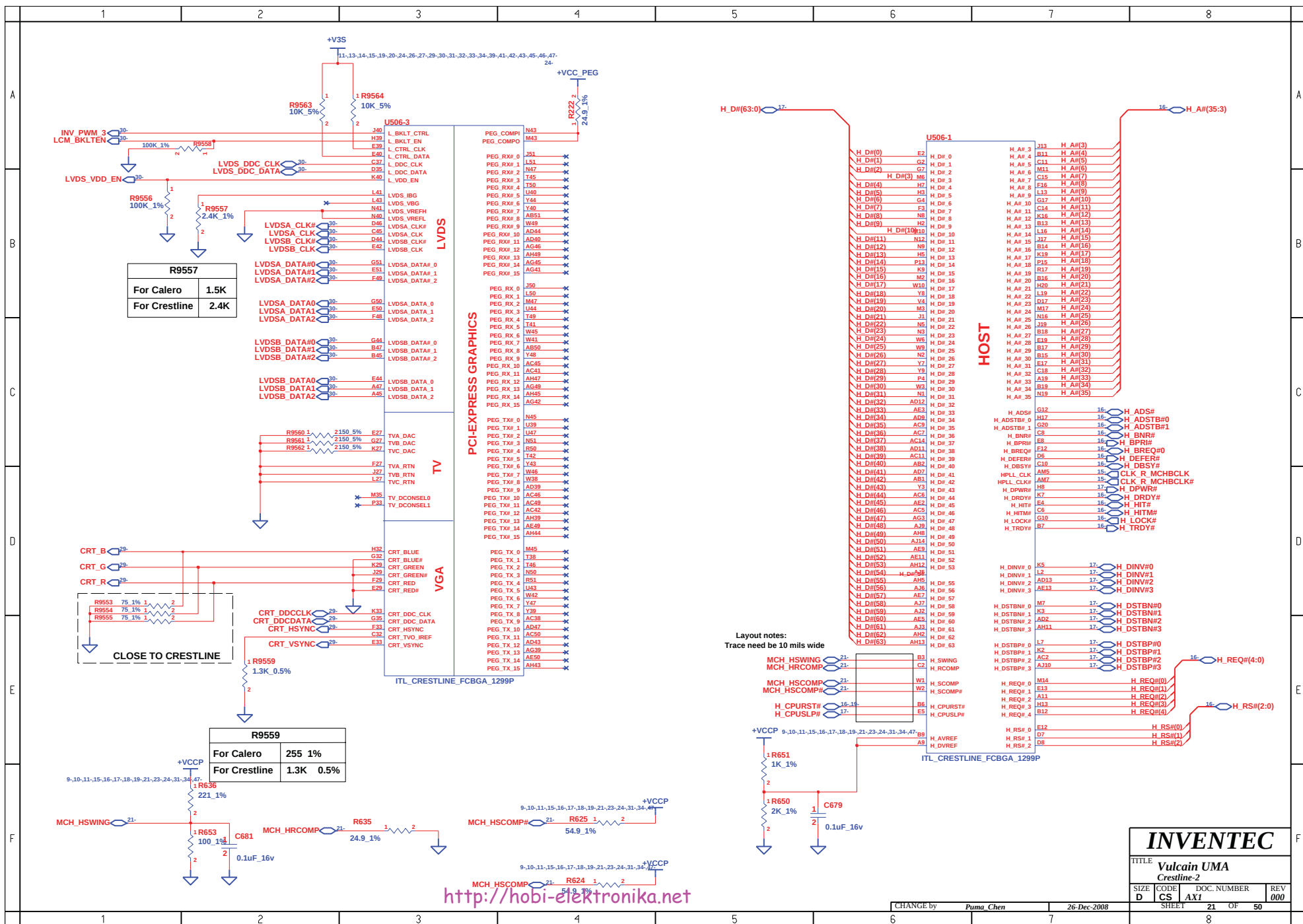
<http://hobi-elektronika.net>

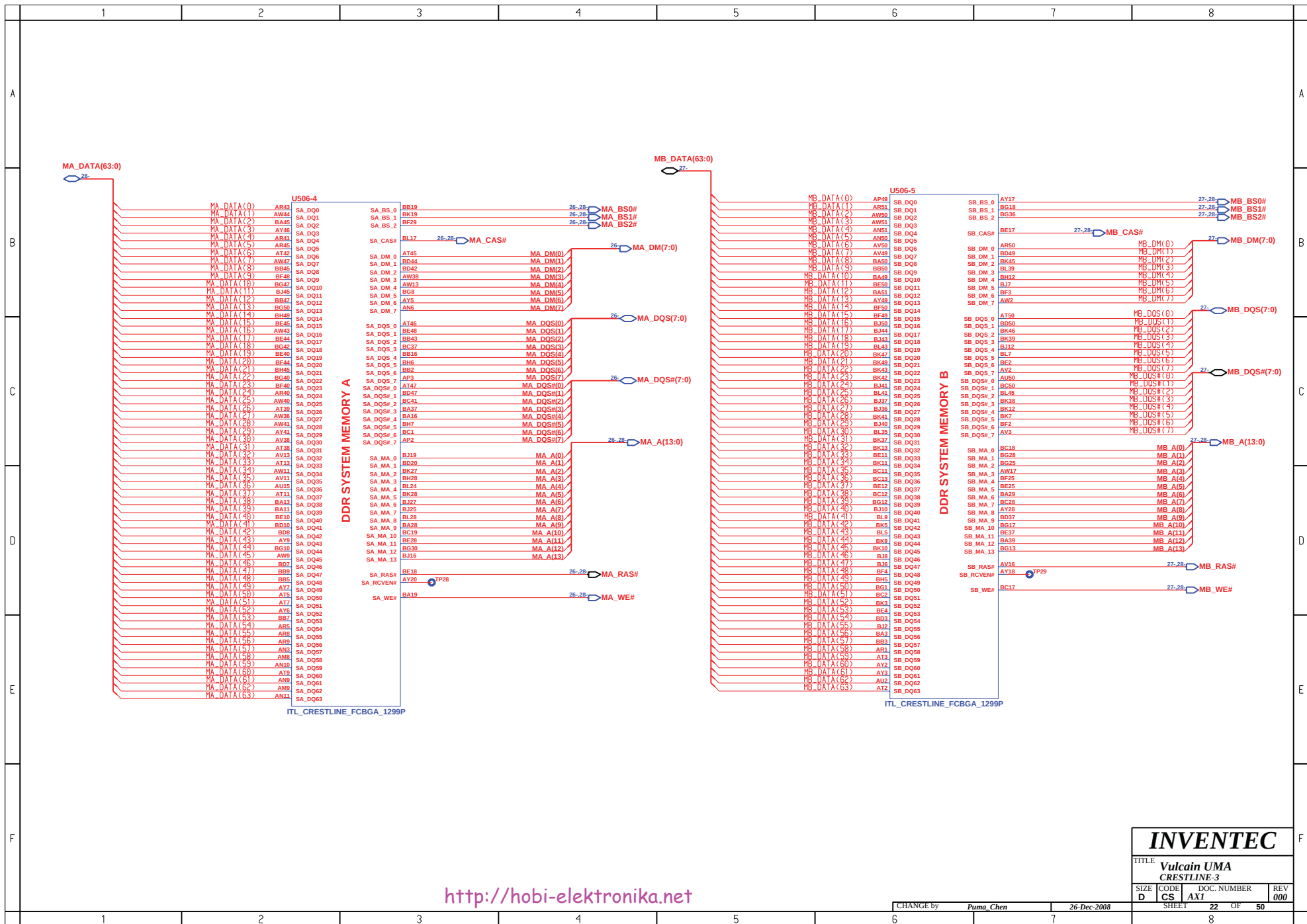
INVENTEC			
TITLE Vulcain UMA MEROM-2			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
CHANGE by Puma Chen		26-Dec-2008	
SHEET 17		OF 50	





<http://hobi-elektronika.net>





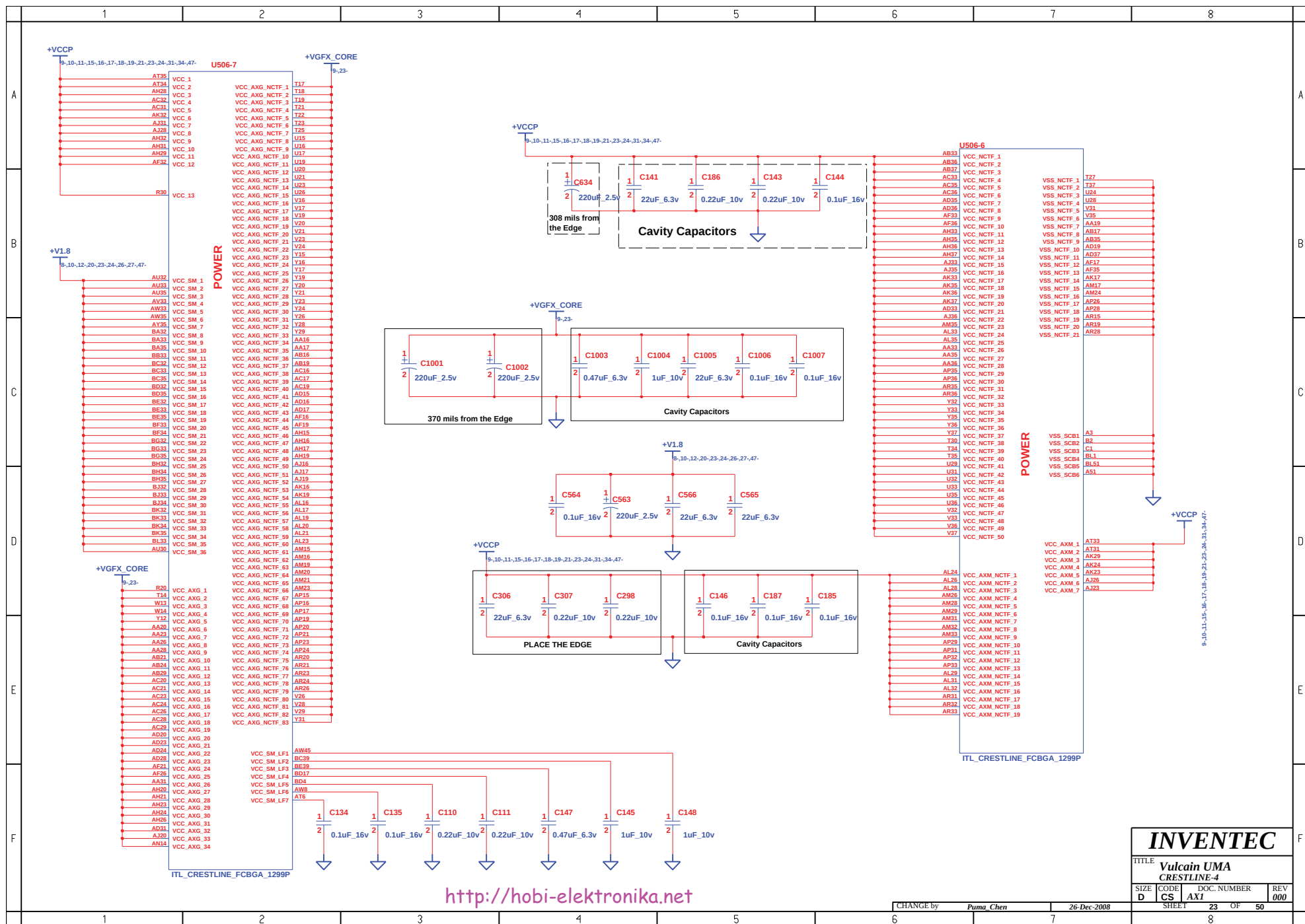
<http://hobi-elektronika.net>

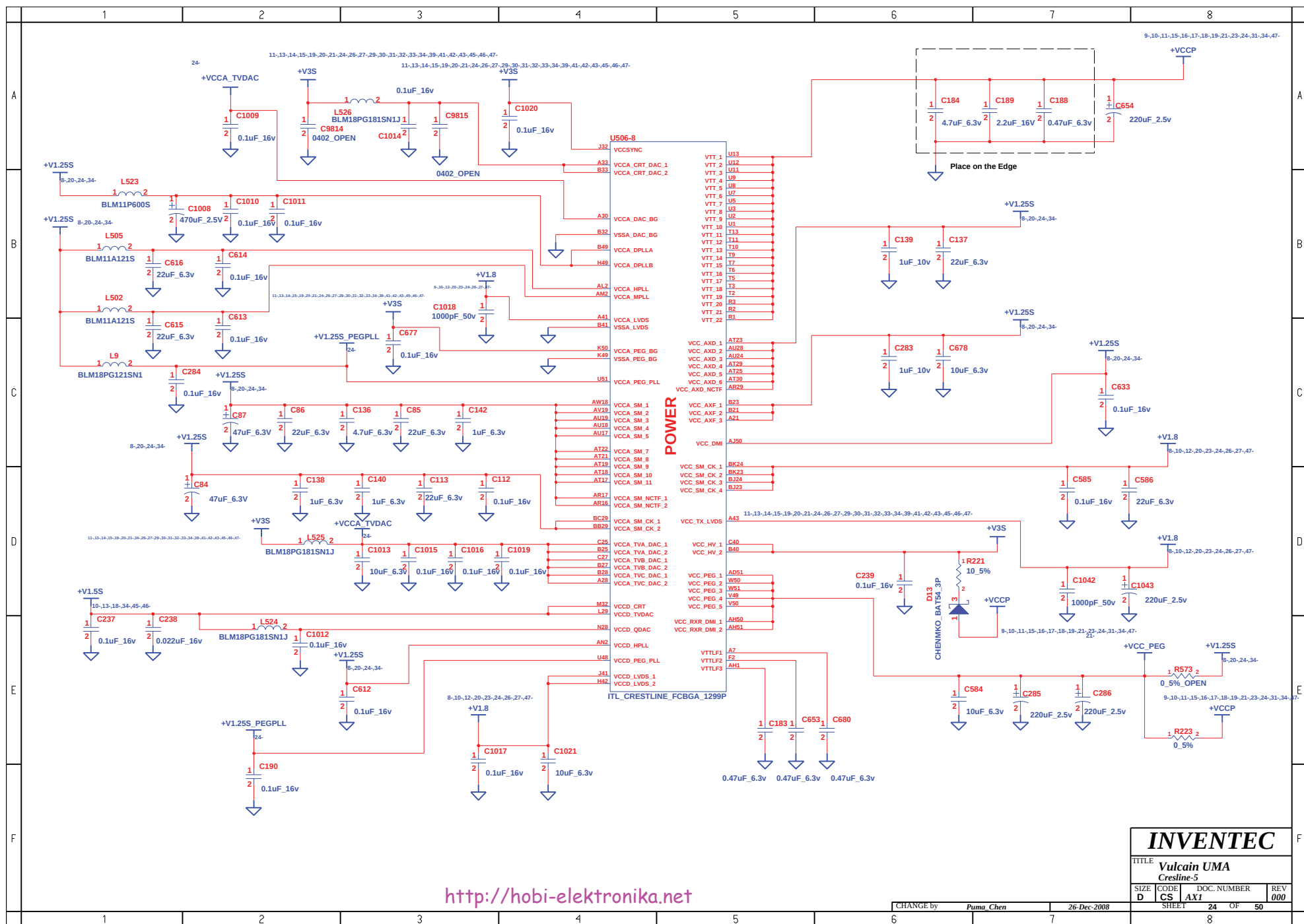
INVENTEC

TITLE Vulcain UMA CRESTLINE-3			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
SHEET		22 OF	50

CHANGE by Puna Chen 26-Dec-2008

8





	1	2	3	4	5	6	7	8			
A									A		
B									B		
C									C		
D									D		
E									E		
F									F		
		U506-9 VSS 1 VSS 2 VSS 3 VSS 4 VSS 5 VSS 6 VSS 7 VSS 8 VSS 9 VSS 10 VSS 11 VSS 12 VSS 13 VSS 14 VSS 15 VSS 16 VSS 17 VSS 18 VSS 19 VSS 20 VSS 21 VSS 22 VSS 23 VSS 24 VSS 25 VSS 26 VSS 27 VSS 28 VSS 29 VSS 30 VSS 31 VSS 32 VSS 33 VSS 34 VSS 35 VSS 36 VSS 37 VSS 38 VSS 39 VSS 40 VSS 41 VSS 42 VSS 43 VSS 44 VSS 45 VSS 46 VSS 47 VSS 48 VSS 49 VSS 50 VSS 51 VSS 52 VSS 53 VSS 54 VSS 55 VSS 56 VSS 57 VSS 58 VSS 59 VSS 60 VSS 61 VSS 62 VSS 63 VSS 64 VSS 65 VSS 66 VSS 67 VSS 68 VSS 69 VSS 70 VSS 71 VSS 72 VSS 73 VSS 74 VSS 75 VSS 76 VSS 77 VSS 78 VSS 79 VSS 80 VSS 81 VSS 82 VSS 83 VSS 84 VSS 85 VSS 86 VSS 87 VSS 88 VSS 89 VSS 90 VSS 91 VSS 92 VSS 93 VSS 94 VSS 95 VSS 96 VSS 97 VSS 98 VSS 99 VSS 100 VSS 101 VSS 102 VSS 103 VSS 104 VSS 105 VSS 106 VSS 107 VSS 108 VSS 109 VSS 110 VSS 111 VSS 112 VSS 113 VSS 114 VSS 115 VSS 116 VSS 117 VSS 118 VSS 119 VSS 120 VSS 121 VSS 122 VSS 123 VSS 124 VSS 125 VSS 126 VSS 127 VSS 128 VSS 129 VSS 130 VSS 131 VSS 132 VSS 133 VSS 134 VSS 135 VSS 136 VSS 137 VSS 138 VSS 139 VSS 140 VSS 141 VSS 142 VSS 143 VSS 144 VSS 145 VSS 146 VSS 147 VSS 148 VSS 149 VSS 150 VSS 151 VSS 152 VSS 153 VSS 154 VSS 155 VSS 156 VSS 157 VSS 158 VSS 159 VSS 160 VSS 161 VSS 162 VSS 163 VSS 164 VSS 165 VSS 166 VSS 167 VSS 168 VSS 169 VSS 170 VSS 171 VSS 172 VSS 173 VSS 174 VSS 175 VSS 176 VSS 177 VSS 178 VSS 179 VSS 180 VSS 181 VSS 182 VSS 183 VSS 184 VSS 185 VSS 186 VSS 187 VSS 188 VSS 189 VSS 190 VSS 191 VSS 192 VSS 193 VSS 194 VSS 195 VSS 196 VSS 197 VSS 198 AW24 AW29 AW32 AW5 AW7 AY10 AY24 AY37 AY42 AY43 AY45 AY47 AY99 B10 B24 B29 B30 B35 B38 B43 B46 B5 B8 BA1 BA17 BA18 BA2 BA24 BB12 BB25 BB40 BB44 BB8 BC16 BC24 BC25 BC36 BC40 BC31 BD13 BD2 BD28 BD45 BD48 BDS BE1 BE19 BE23 BE30 BE42 BE51 BE8 BF12 BF16 BF26 BG19 BG2 BG24 BG29 BG39 BG48 BG5 BG51 BH17 BH30 BH44 BH46 BH8 BJ11 BJ13 BJ4 BJ42 BJ48 BK15 BK17 BK25 BK29 BK36 BK40 BK44 BK6 BK8 BL11 BL13 BL19 BL22 BL28 BL37 C12 C16 C18 C28 C29 C33 C36 C41 U506-10 VSS 199 VSS 200 VSS 201 VSS 202 VSS 203 VSS 204 VSS 205 VSS 206 VSS 207 VSS 208 VSS 209 VSS 210 VSS 211 VSS 212 VSS 213 VSS 214 VSS 215 VSS 216 VSS 217 VSS 218 VSS 219 VSS 220 VSS 221 VSS 222 VSS 223 VSS 224 VSS 225 VSS 226 VSS 227 VSS 228 VSS 229 VSS 230 VSS 231 VSS 232 VSS 233 VSS 234 VSS 235 VSS 236 VSS 237 VSS 238 VSS 239 VSS 240 VSS 241 VSS 242 VSS 243 VSS 245 VSS 246 VSS 247 VSS 248 VSS 249 VSS 250 VSS 251 VSS 252 VSS 253 VSS 254 VSS 255 VSS 256 VSS 257 VSS 258 VSS 259 VSS 260 VSS 261 VSS 262 VSS 263 VSS 264 VSS 265 VSS 266 VSS 267 VSS 268 VSS 269 VSS 270 VSS 271 VSS 272 VSS 273 VSS 274 VSS 275 VSS 276 VSS 277 VSS 278 VSS 279 VSS 280 VSS 281 VSS 282 VSS 283 VSS 284 VSS 285 VSS 286 VSS 287 VSS 288 VSS 289 VSS 290 VSS 291 VSS 292 VSS 293 VSS 294 VSS 295 VSS 296 VSS 297 VSS 298 VSS 299 VSS 300 VSS 301 VSS 302 VSS 303 VSS 304 VSS 305 VSS 306 VSS 307 VSS 308 VSS 309 VSS 310 VSS 311 VSS 312 VSS 313 W11 W39 W43 W47 W5 W7 Y13 Y2 Y41 Y45 Y49 Y50 Y11 P29 T29 T31 T33 R28 AA32 AB32 AF28 AF29 AT27 AX25 HS0 ITL_CRESTLINE_FCBGA_1299P ITL_CRESTLINE_FCBGA_1299P									
	1	2	3	4	5	6	7	8			

INVENTEC

TITLE

Vulcain UMA

CRESTLINE-6

SIZE

D

CODE

CS

DOC. NUMBER

AX1

REV

000

SHEET

25

OF

50

CHANGE by

Puma Chen

26-Dec-2008

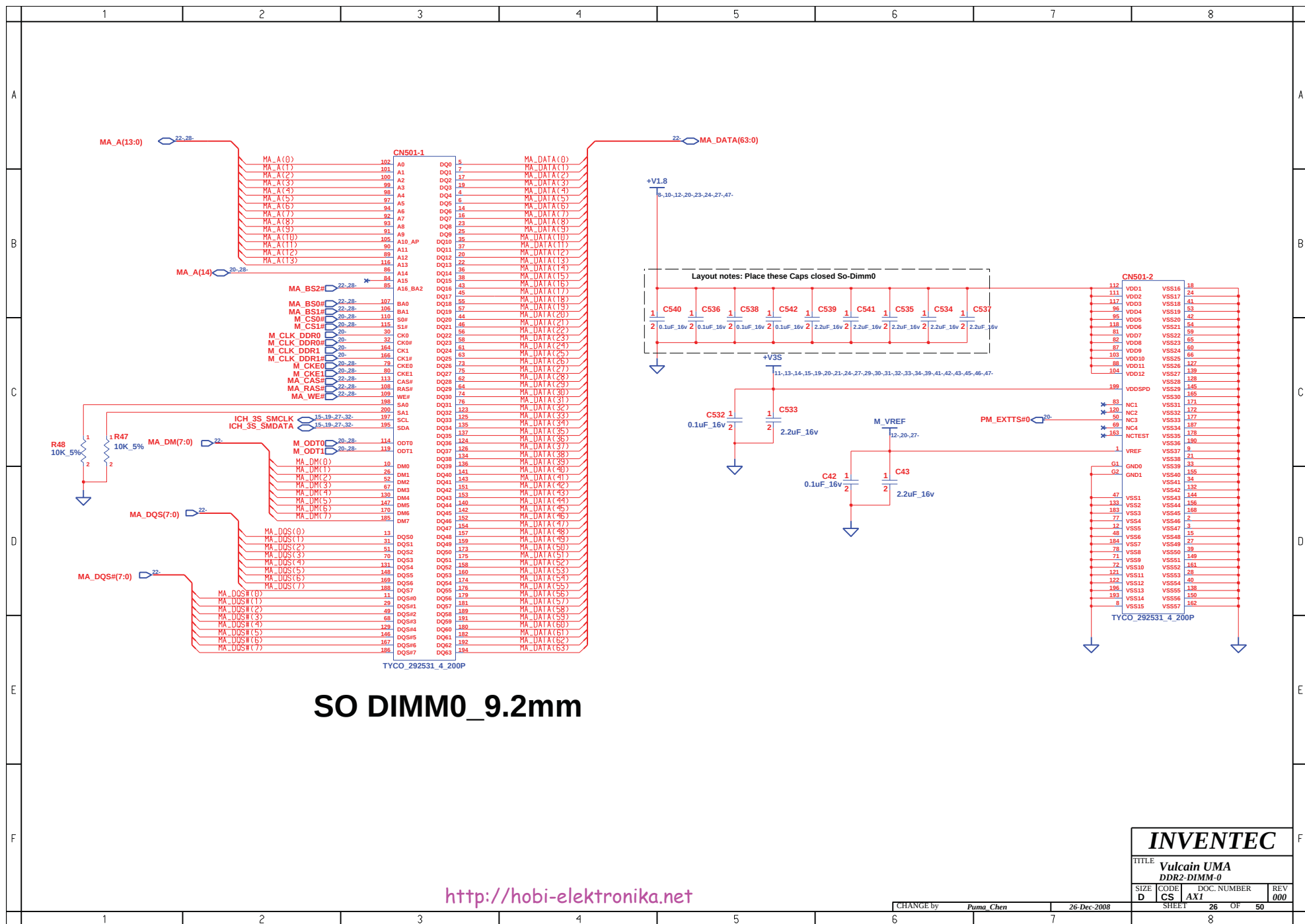
http://hobi-elektronika.net

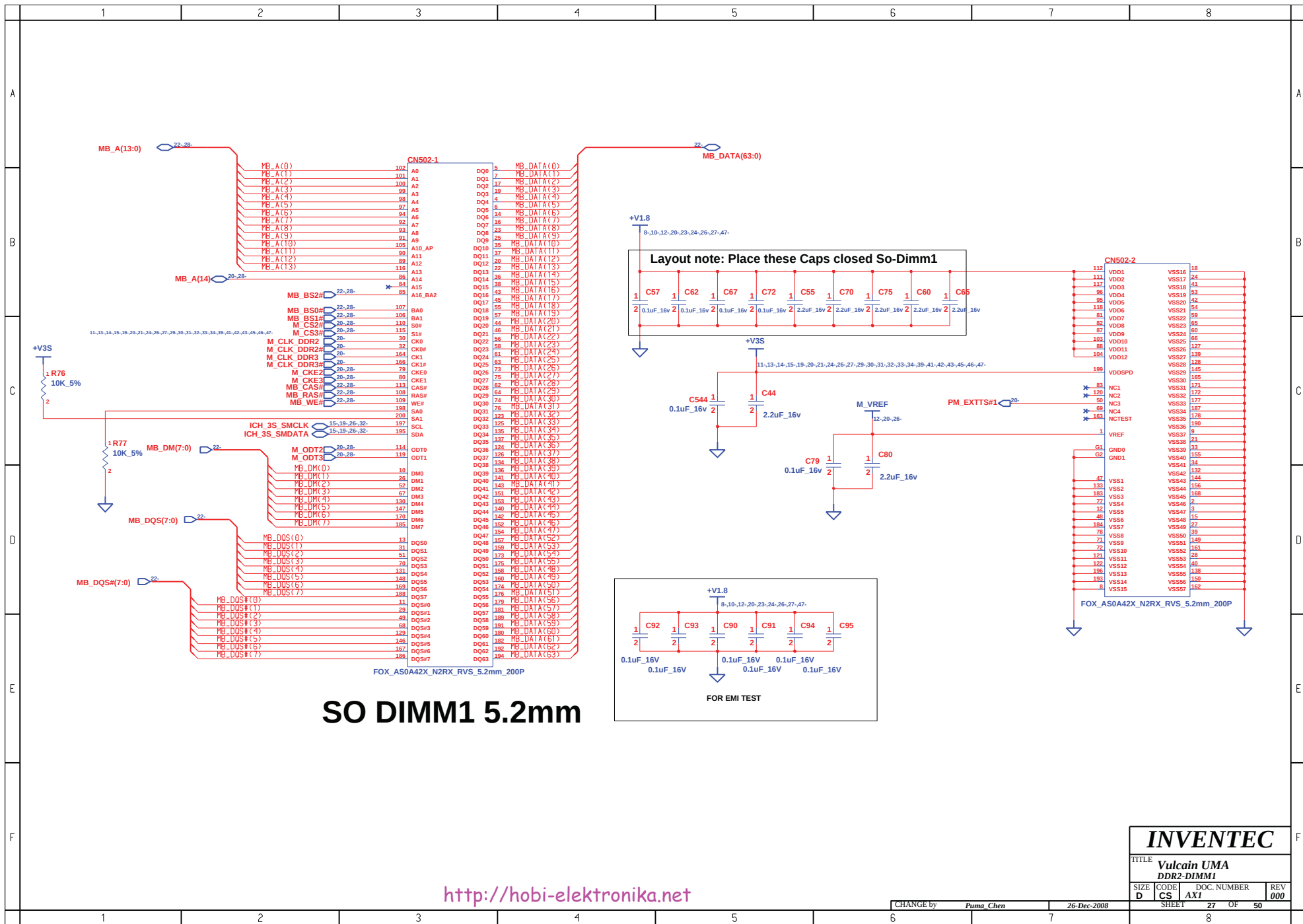
<http://hobi-elektronika.net>

INVENTEC

TITLE			
Vulcain UMA			
CRESTLINE-6			
SIZE	CODE	DOC. NUMBER	REV
D	CS	AX1	000
SHEET		25	OF 50

CHANGE by Puma Chen 26-Dec-2008







INVENTEC			
TITLE Vulcain UMA DDR2-DAMPING			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
SHEET		28 OF 50	

CHANGE by **Puma Chen** 27-Sep-2003

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

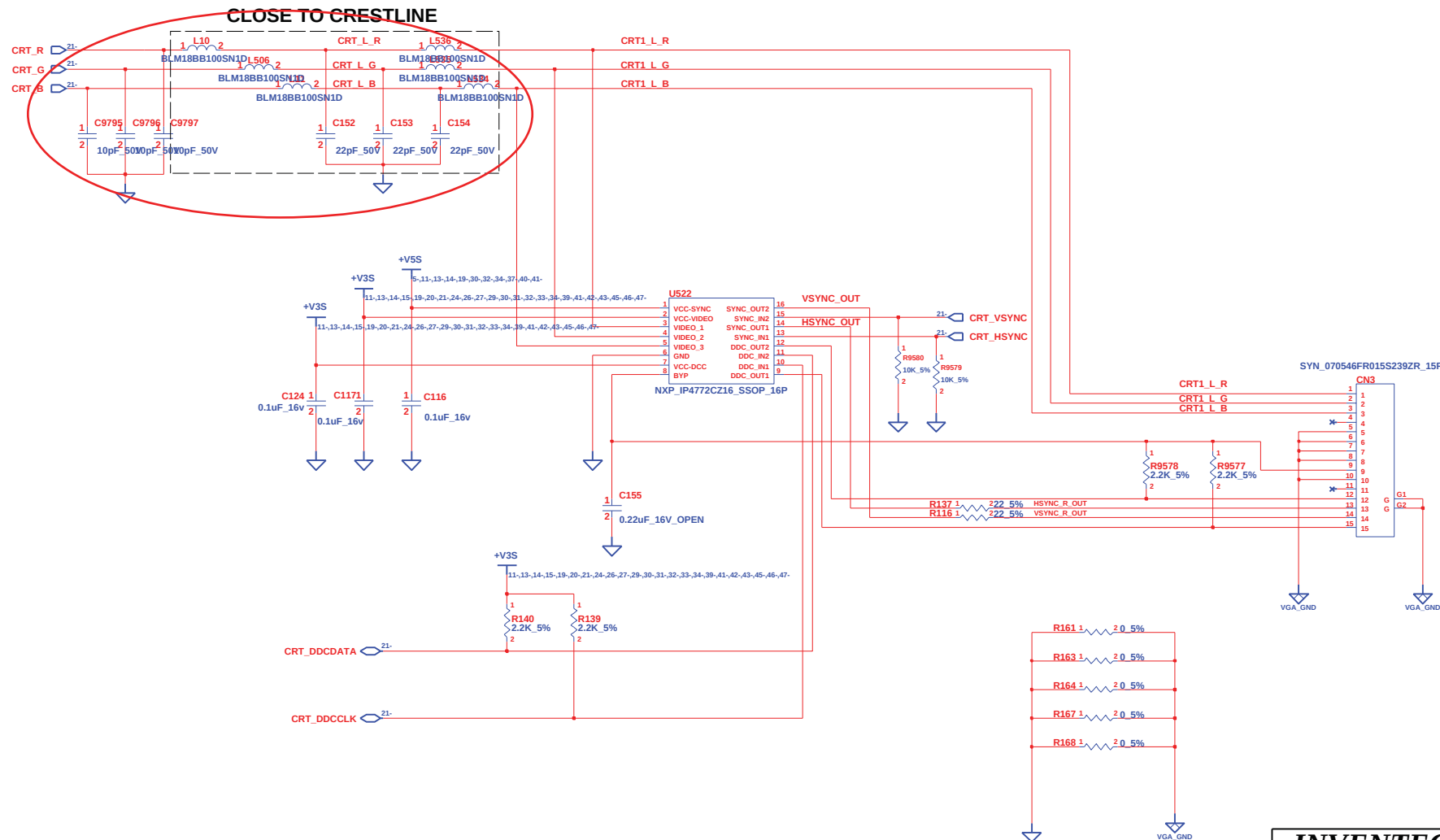
B

C

D

E

F

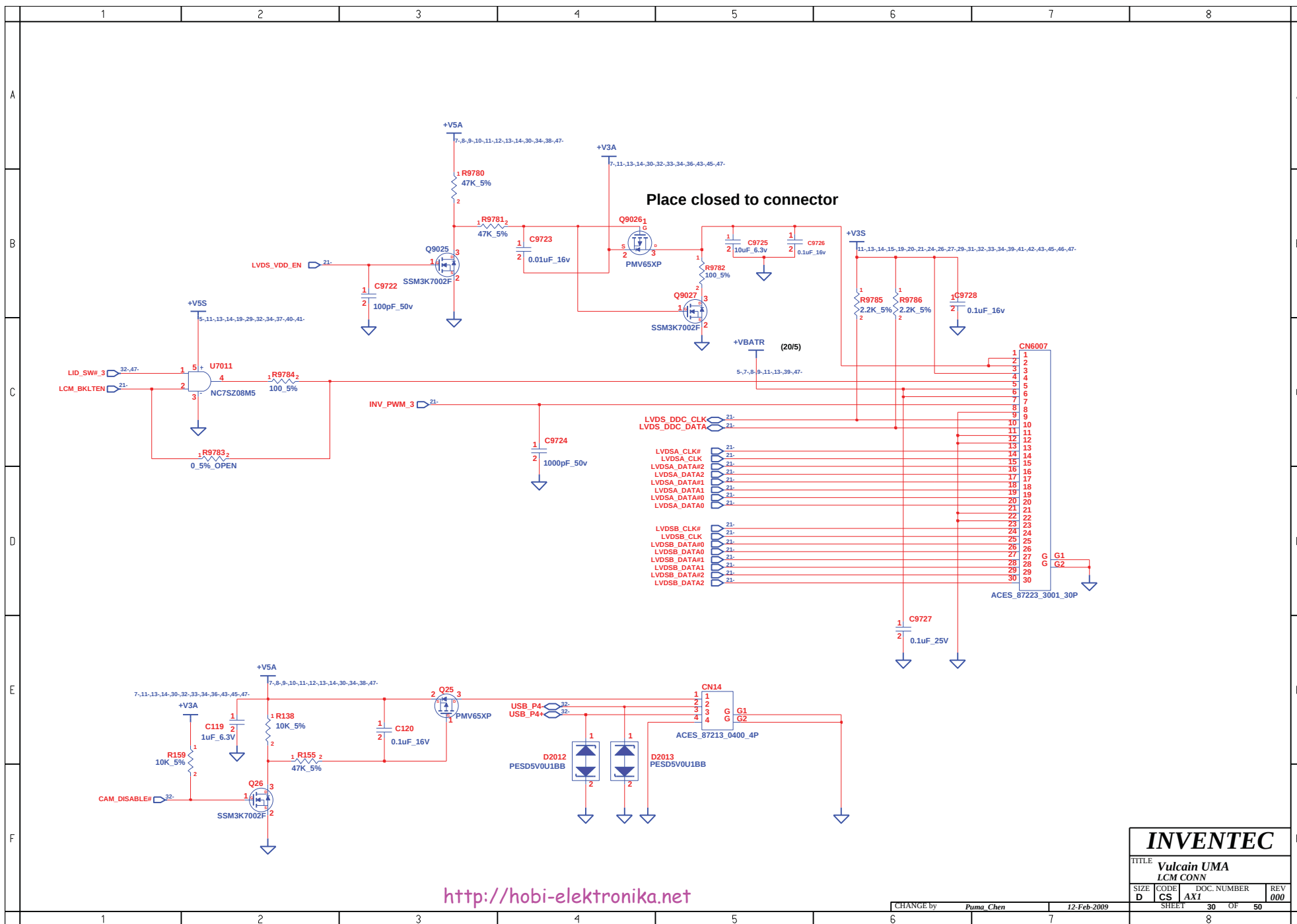


<http://hobi-elektronika.net>

CHANGE by Puma Chen 24-Feb-2009

INVENTEC			
TITLE Vulcain UMA VGA CONN			
SIZE D	CODE CS	DOC. NUMBER AXI	REV 000
SHEET 29		OF 50	

1 2 3 4 5 6 7 8



<http://hobi-elektronika.net>

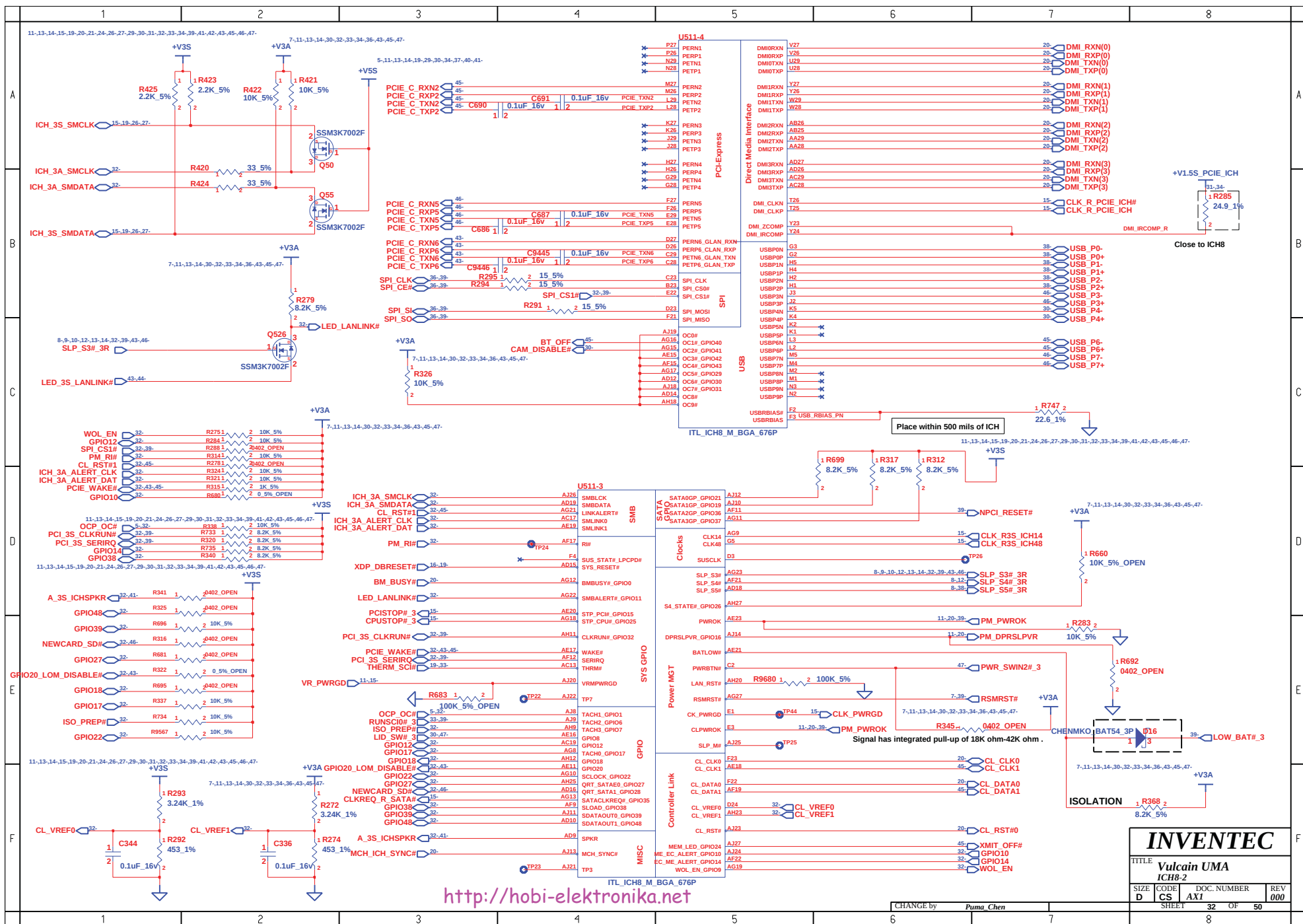
INVENTEC

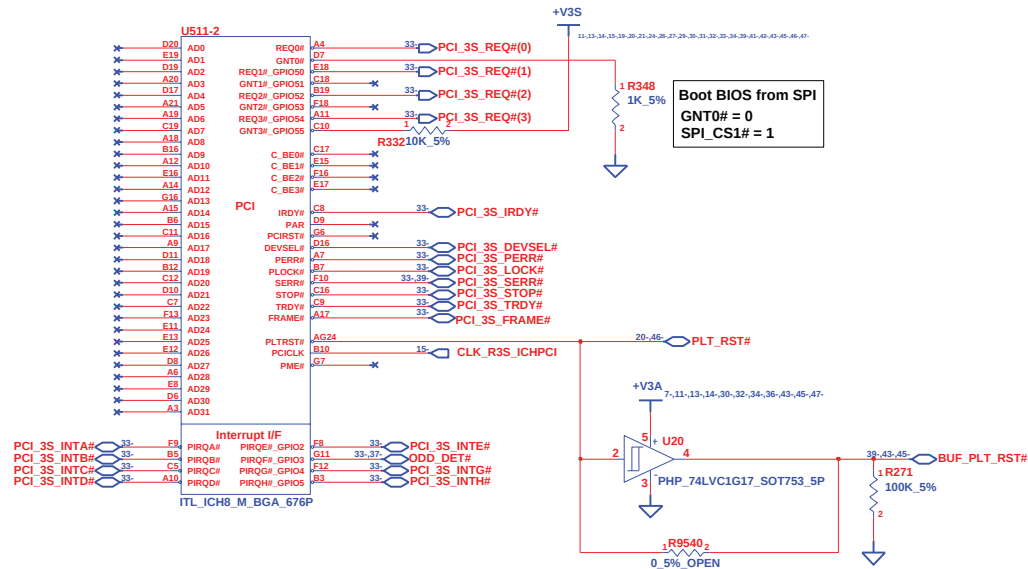
TITLE Vulcain UMA LCM CONN			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000

CHANGE by **Puma Chen** 12-Feb-2009

SHEET 30 OF 50

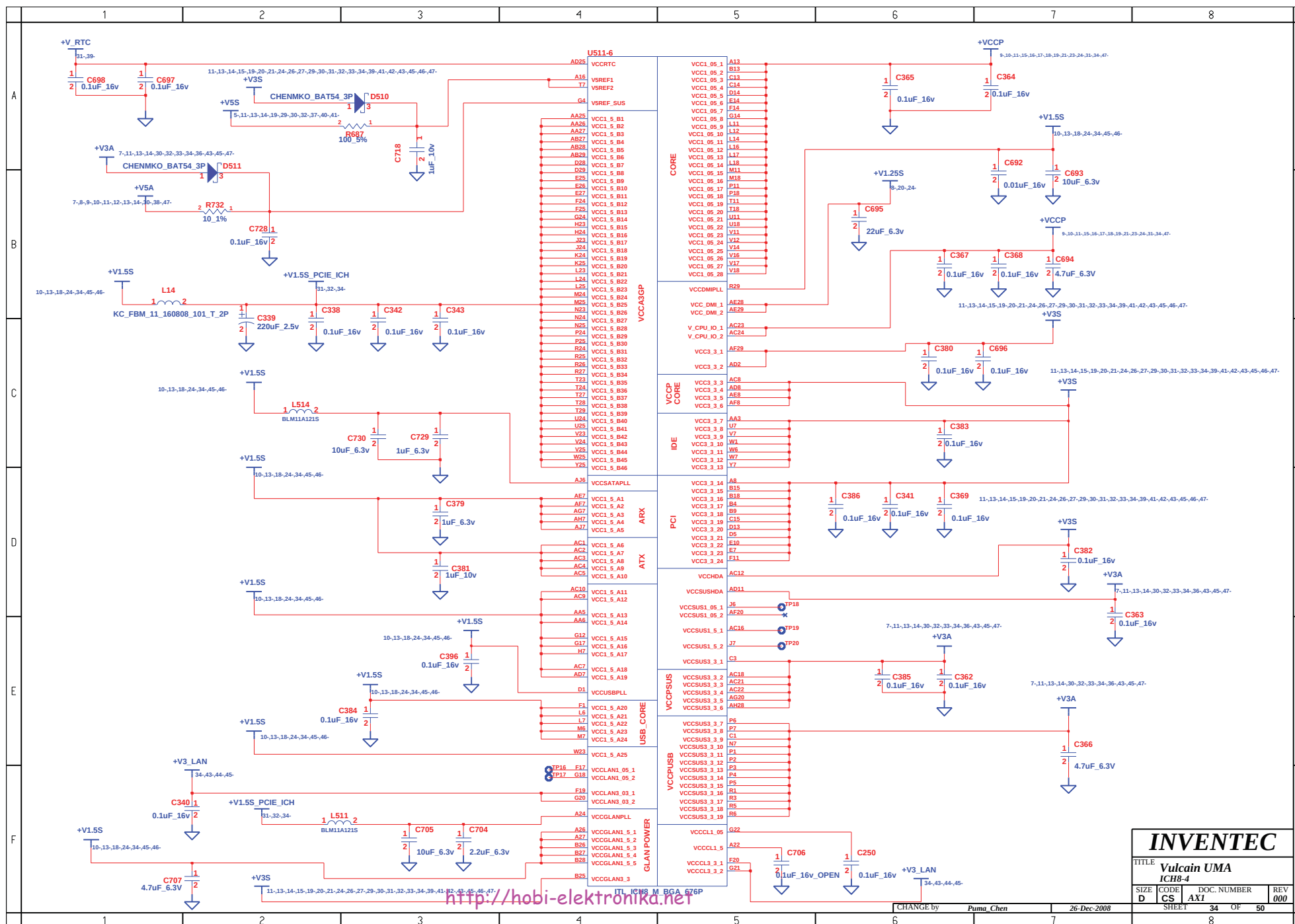
8



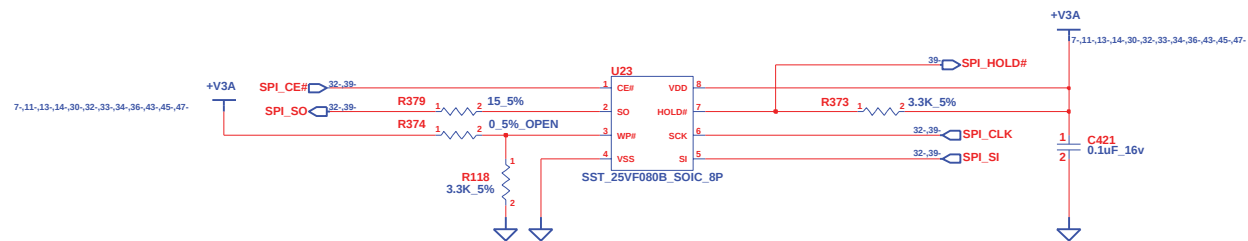


<http://hobi-elektronika.net>

INVENTEC			
TITLE Vulcain UMA ICH8-3			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
CHANGE by Puna Chen		26-Dec-2008	
SHEET 33		OF 50	
8			

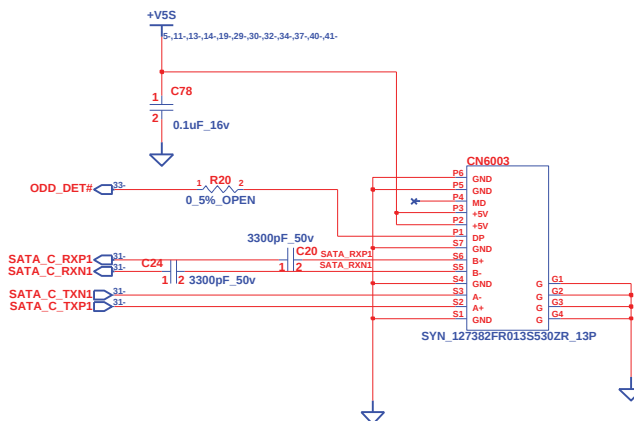
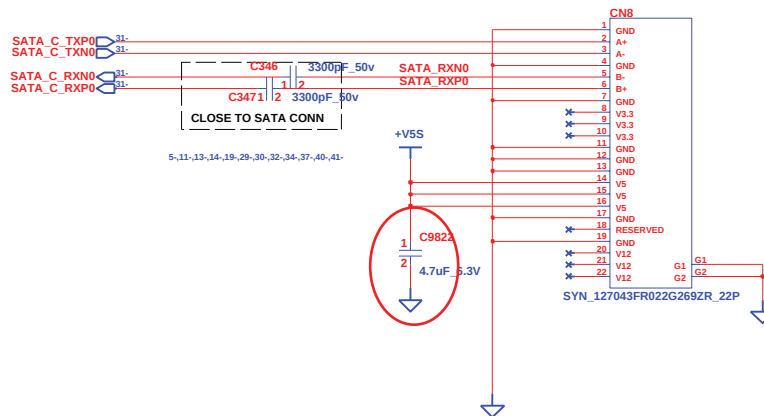


	1	2	3	4	5	6	7	8
A				U511-5				
				A23 VSS001 VSS099 K7				
				A5 VSS002 VSS100 L1				
				AA2 VSS003 VSS101 L12				
				AA7 VSS004 VSS102 L15				
				A25 VSS005 VSS103 L26				
				AB1 VSS006 VSS104 L27				
				AB24 VSS007 VSS105 L4				
				AC11 VSS008 VSS106 L5				
				AC14 VSS009 VSS107 M12				
				AC25 VSS010 VSS108 M13				
				AC26 VSS011 VSS109 M14				
				AC27 VSS012 VSS110 M15				
				AD17 VSS013 VSS111 M16				
				AD26 VSS014 VSS112 M17				
				AD28 VSS015 VSS113 M23				
				AD29 VSS016 VSS114 M28				
				AD3 VSS017 VSS115 M29				
				AD4 VSS018 VSS116 M3				
				AD6 VSS019 VSS117 N1				
				AE1 VSS020 VSS118 N11				
				AE12 VSS021 VSS119 N12				
				AE22 VSS022 VSS120 N13				
				AD1 VSS023 VSS121 N14				
				AD1 VSS024 VSS122 N15				
				AE25 VSS025 VSS123 N16				
				AE5 VSS026 VSS124 N17				
				AE6 VSS027 VSS125 N18				
				AE8 VSS028 VSS126 N26				
				AF14 VSS029 VSS127 N27				
				AF16 VSS030 VSS128 N4				
				AF18 VSS031 VSS129 N5				
				AF3 VSS032 VSS130 N6				
				AF4 VSS033 VSS131 P12				
				AG5 VSS034 VSS132 P13				
				AG6 VSS035 VSS133 P14				
				AH10 VSS036 VSS134 P15				
				AH13 VSS037 VSS135 P16				
				AH15 VSS038 VSS136 P17				
				AH18 VSS039 VSS137 P23				
				AH2 VSS040 VSS138 P28				
				AF28 VSS041 VSS139 P29				
				AH22 VSS042 VSS140 R11				
				AH24 VSS043 VSS141 R12				
				AH25 VSS044 VSS142 R13				
				AH3 VSS045 VSS143 R14				
				AH4 VSS046 VSS144 R15				
				AH8 VSS047 VSS145 R16				
				A35 VSS048 VSS146 R17				
				B11 VSS049 VSS147 R18				
				B14 VSS050 VSS148 R28				
				B17 VSS051 VSS149 R4				
				B2 VSS052 VSS150 T12				
				B20 VSS053 VSS151 T13				
				B22 VSS054 VSS152 T14				
				B8 VSS055 VSS153 T15				
				C24 VSS056 VSS154 T16				
				C26 VSS057 VSS155 T17				
				C27 VSS058 VSS156 T2				
				C6 VSS059 VSS157 U12				
				D12 VSS060 VSS158 U13				
				D15 VSS061 VSS159 U14				
				D18 VSS062 VSS160 U15				
				D2 VSS063 VSS161 U16				
				D4 VSS064 VSS162 U17				
				E21 VSS065 VSS163 U23				
				E24 VSS066 VSS164 U26				
				E4 VSS067 VSS165 U27				
				E9 VSS068 VSS166 U3				
				F15 VSS069 VSS167 U5				
				E23 VSS070 VSS168 V13				
				F28 VSS071 VSS169 V15				
				F24 VSS072 VSS170 V28				
				F7 VSS073 VSS171 V29				
				G1 VSS074 VSS172 W2				
				F2 VSS075 VSS173 W26				
				G10 VSS076 VSS174 W27				
				G13 VSS077 VSS175 V28				
				G18 VSS078 VSS176 V29				
				G24 VSS079 VSS177 V4				
				G26 VSS080 VSS178 AB4				
				G26 VSS081 VSS179 AB23				
				G27 VSS082 VSS180 AB5				
				H25 VSS083 VSS181 AB6				
				H29 VSS084 VSS182 AD5				
				H29 VSS085 VSS183 U4				
				H3 VSS086 VSS184 W24				
				H6 VSS087 VSS_NCTF_01 A1				
				J1 VSS088 VSS_NCTF_02 A2				
				J25 VSS089 VSS_NCTF_03 A28				
				J26 VSS090 VSS_NCTF_04 A29				
				J27 VSS091 VSS_NCTF_05 AH1				
				J4 VSS092 VSS_NCTF_06 AH29				
				J5 VSS093 VSS_NCTF_07 A31				
				K24 VSS094 VSS_NCTF_08 A32				
				K28 VSS095 VSS_NCTF_09 A329				
				K28 VSS096 VSS_NCTF_010 A329				
				K3 VSS097 VSS_NCTF_011 B1				
				K8 VSS098 VSS_NCTF_012 B29				
				ITL_ICH8_M_BGA_676P				



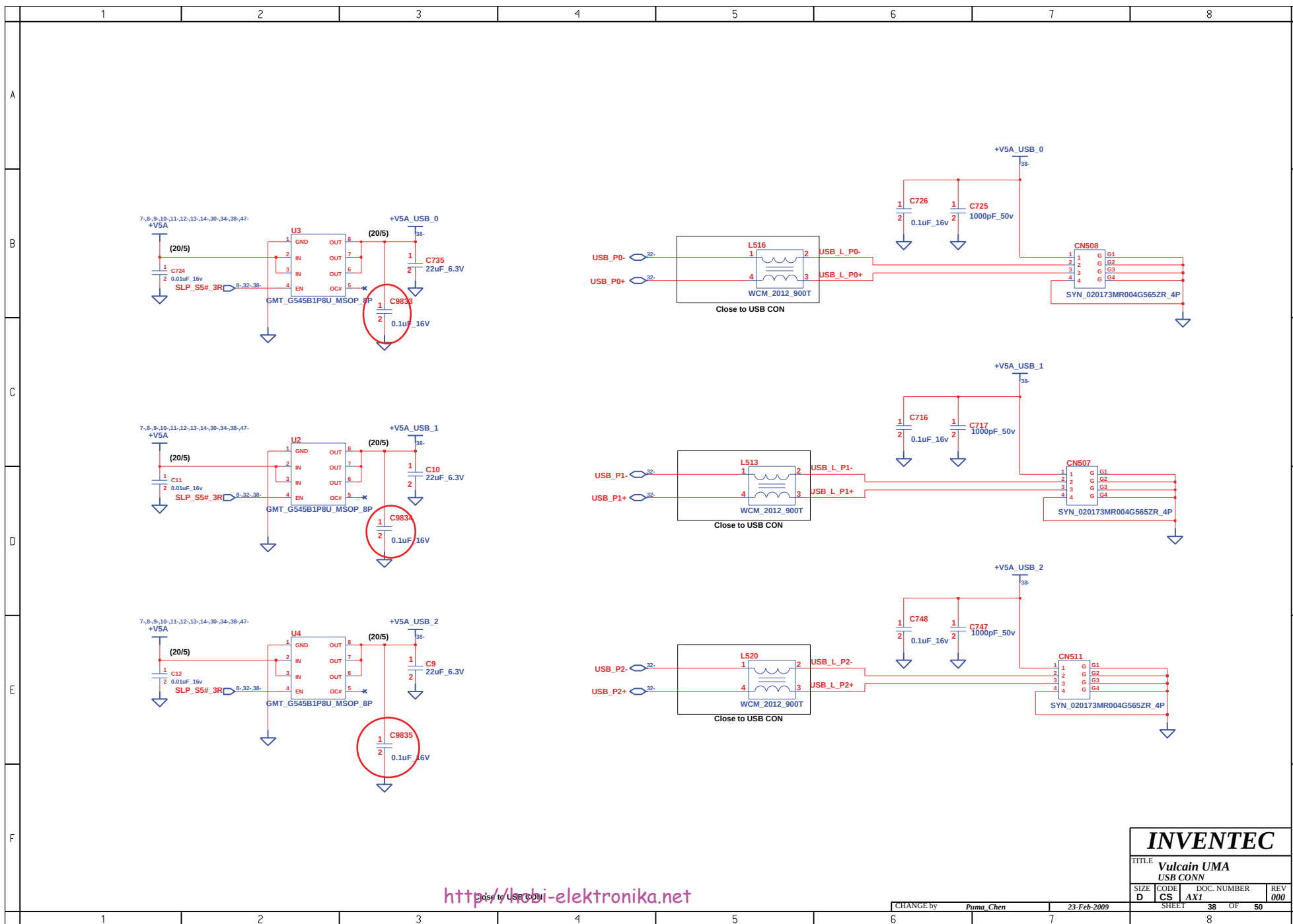
<http://hobi-elektronika.net>

INVENTEC			
TITLE Vulcain UMA			
SYSTEM BIOS&ODD EXT/B			
SIZE D	CODE CS	DOC. NUMBER AXI	REV 000
CHANGE by <i>Puma Chen</i>		26-Dec-2008	
SHEET		36	OF 50
		8	



<http://hobi-elektronika.net>

INVENTEC			
TITLE Vulcain UMA HDD & ODD CONN			
SIZE D	CODE CS	DOC. NUMBER AX1	REV 000
CHANGE by Puma Chen		12-Feb-2009	
SHEET 37		OF 50	
8			



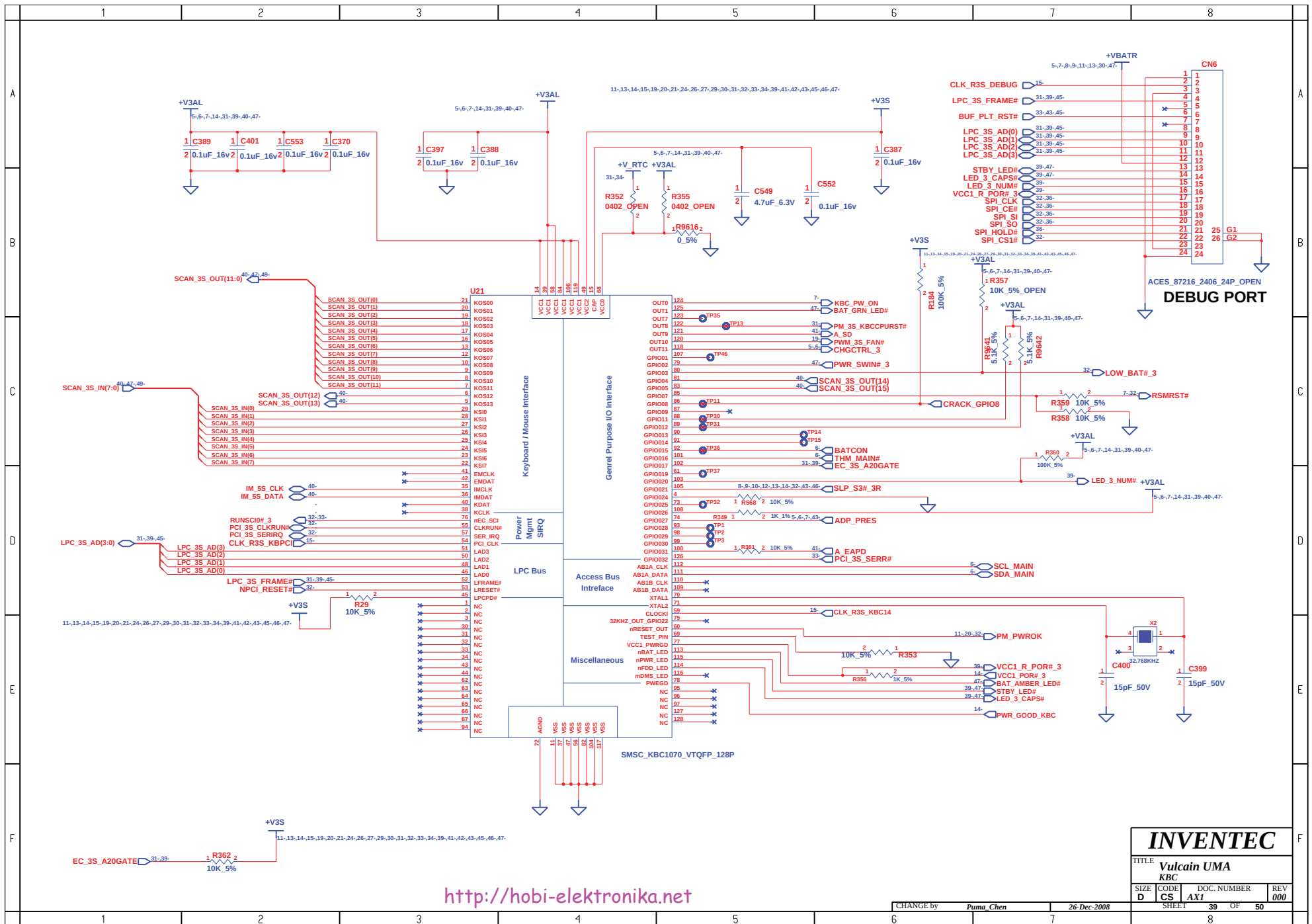
<http://kobi-elektronika.net>

INVENTEC

TITLE			
Vulcain UMA			
USB CONN			
SIZE	CODE	DOC. NUMBER	REV
D	CS	AX1	000

CHANGE by Puma Chen 23-Feb-2009

SHEET 38 OF 50



<http://hobi-elektronika.net>

INVENTEC

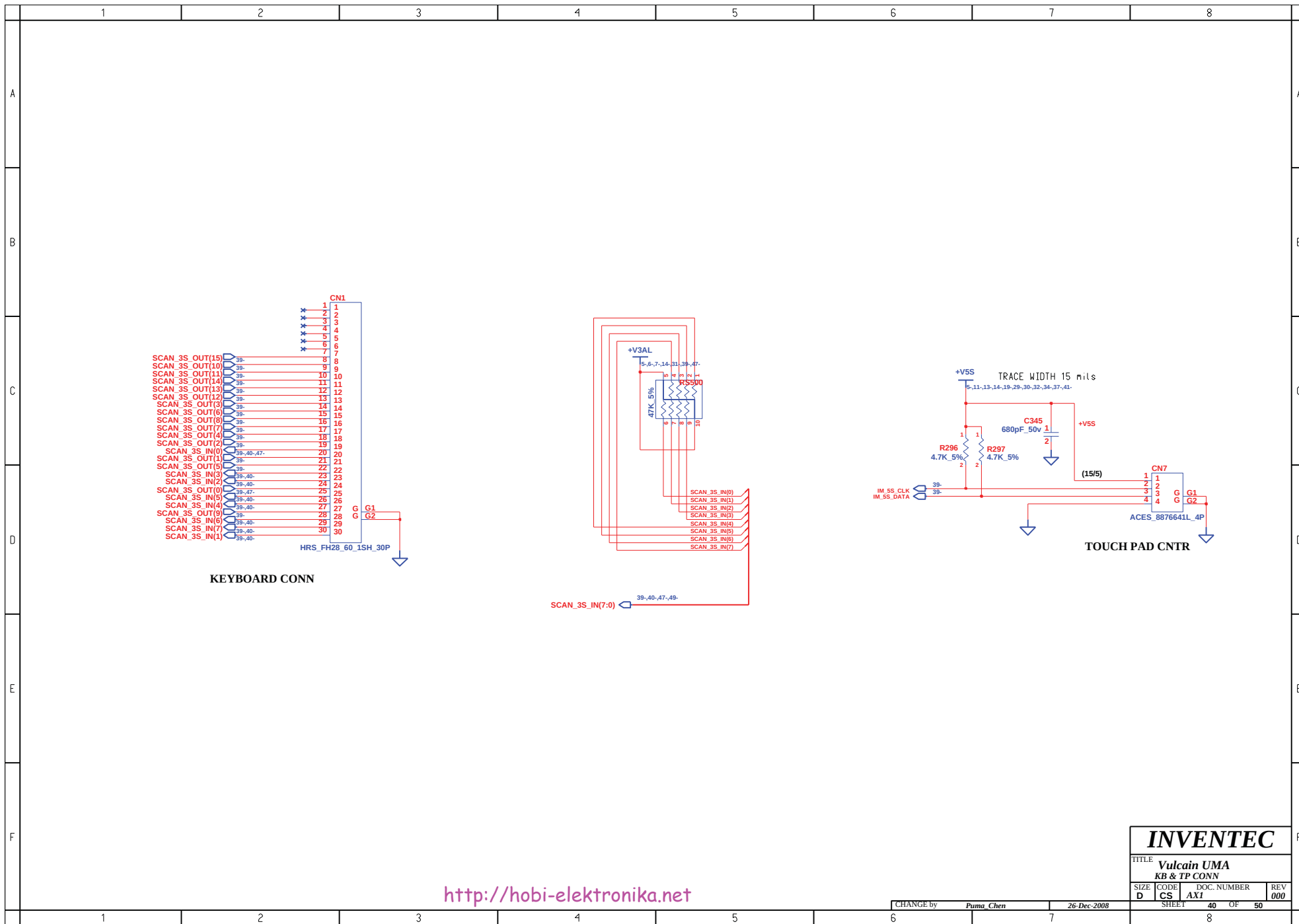
TITLE **Vulcain UMA**

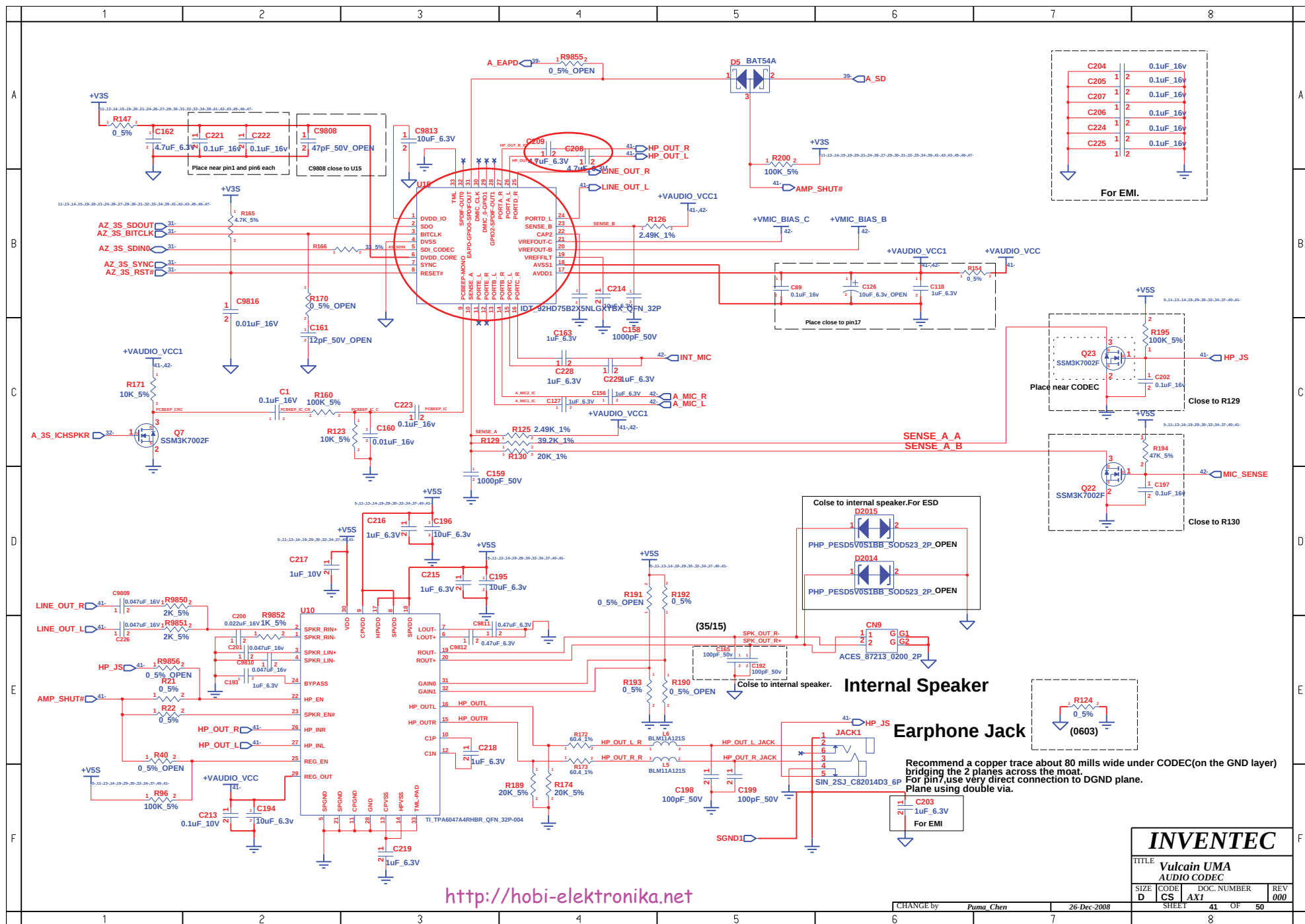
SIZE **D** CODE **CS** AXI DOC. NUMBER REV **000**

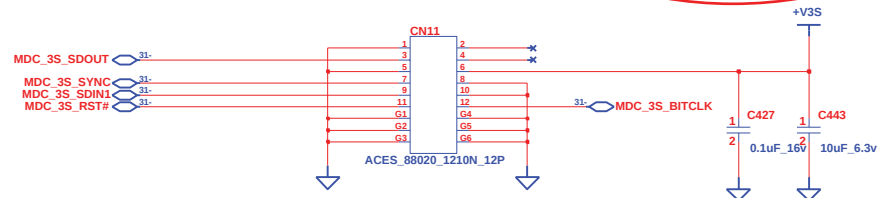
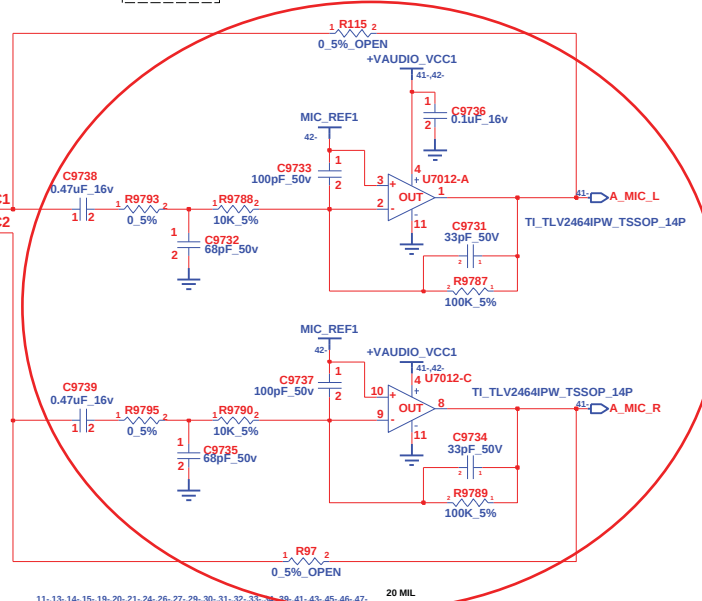
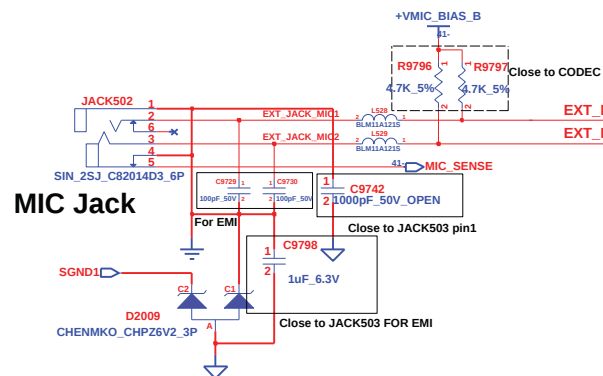
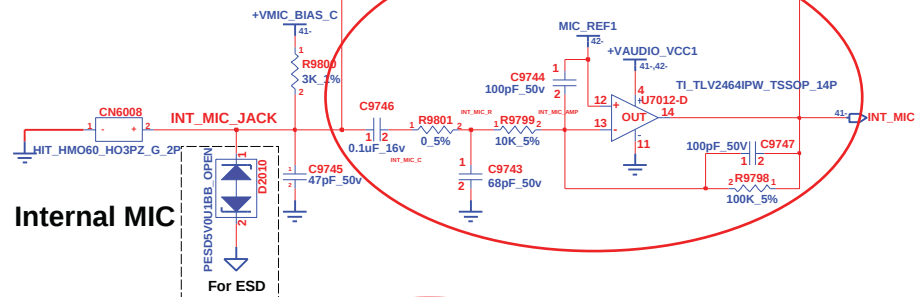
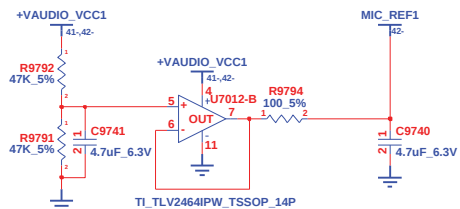
SHEET **39** OF **50**

CHANGE by **Puna Chen** 26-Dec-2008

8







MDC CNTR

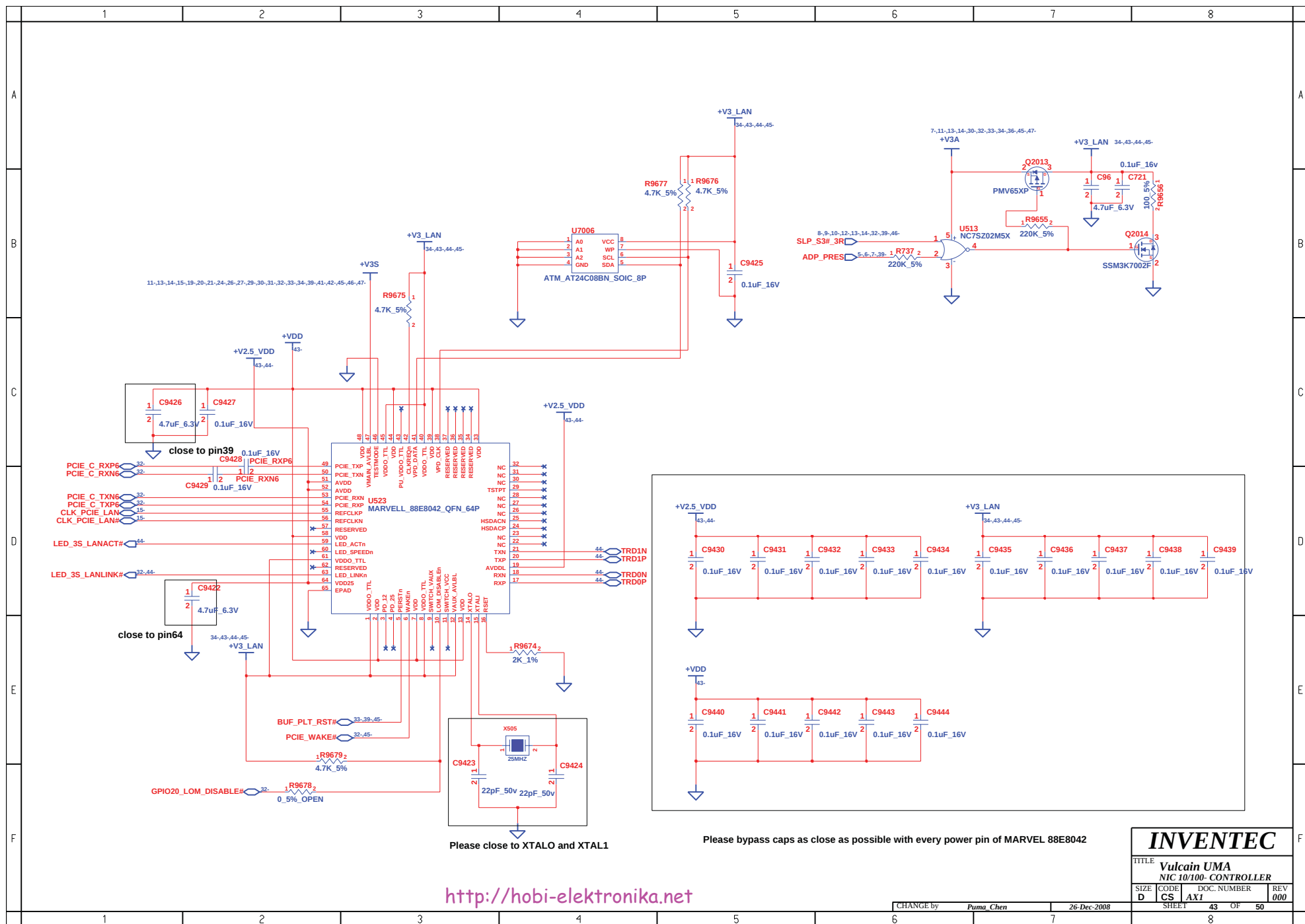
<http://hobi-elektronika.net>

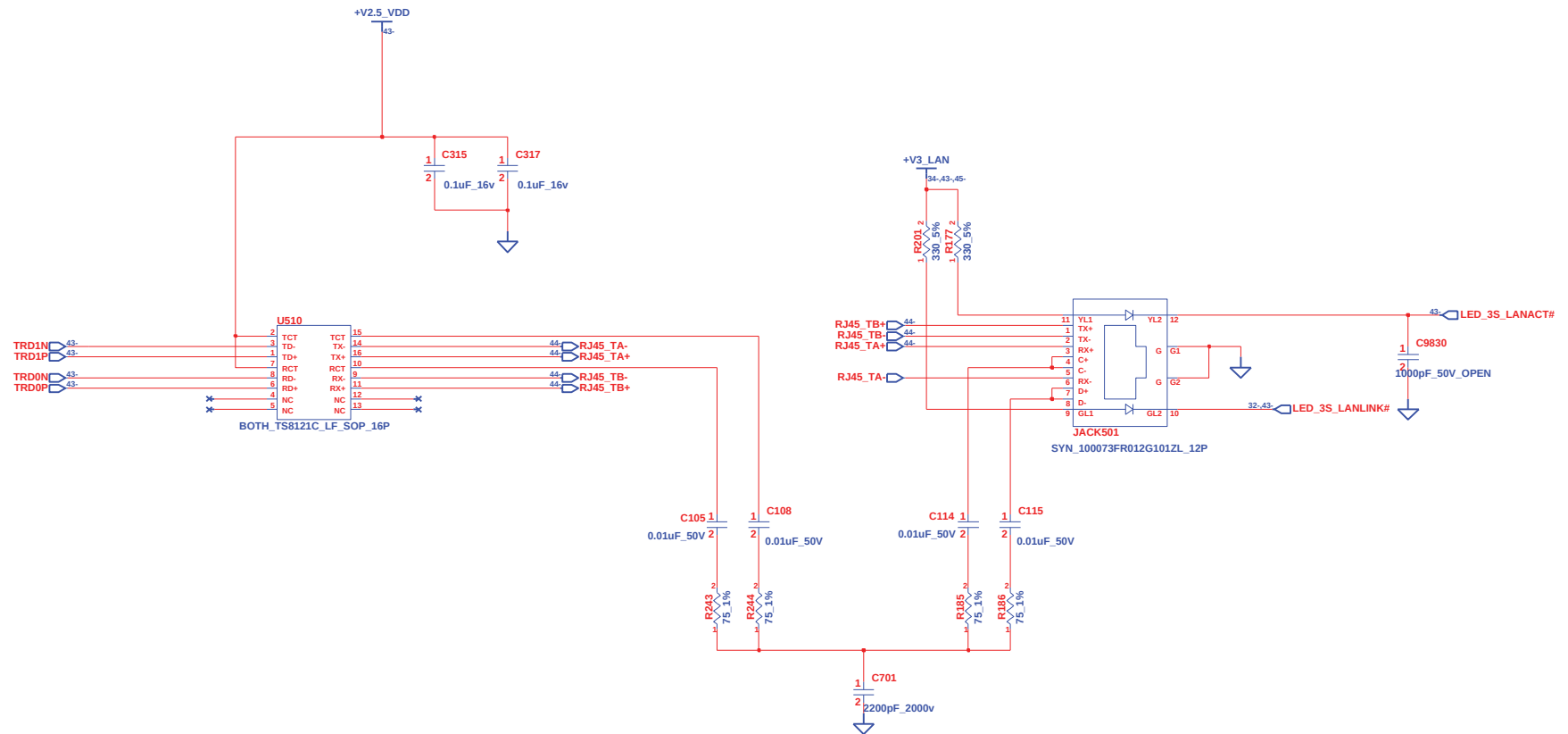
INVENTEC

TITLE			
Vulcain UMA			
MDC CNTR			
SIZE	CODE	DOC. NUMBER	REV
D	CS	AX1	000

CHANGE by Puma Chen 26-Dec-2008

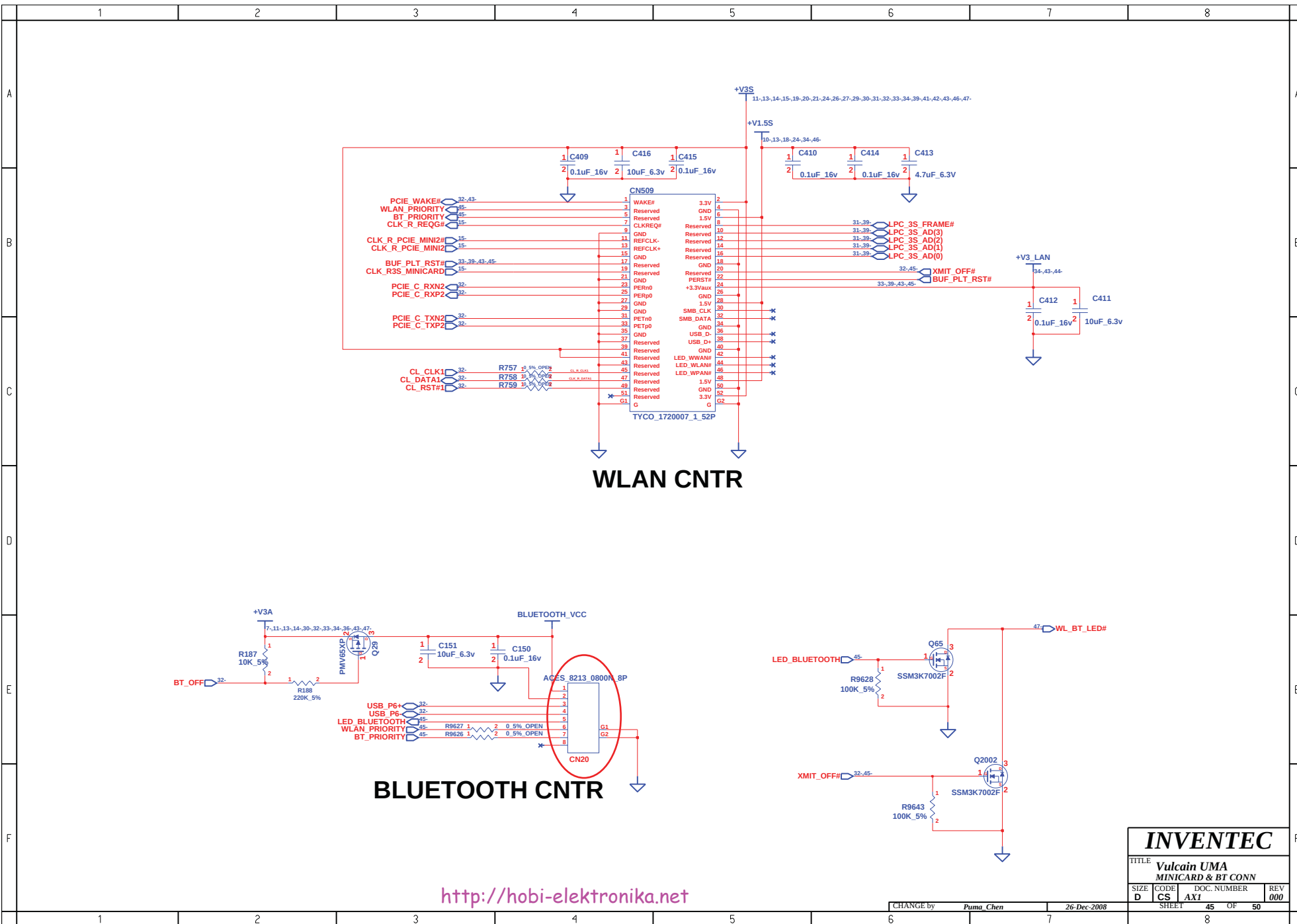
SHEET 42 OF 50



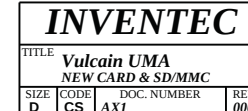
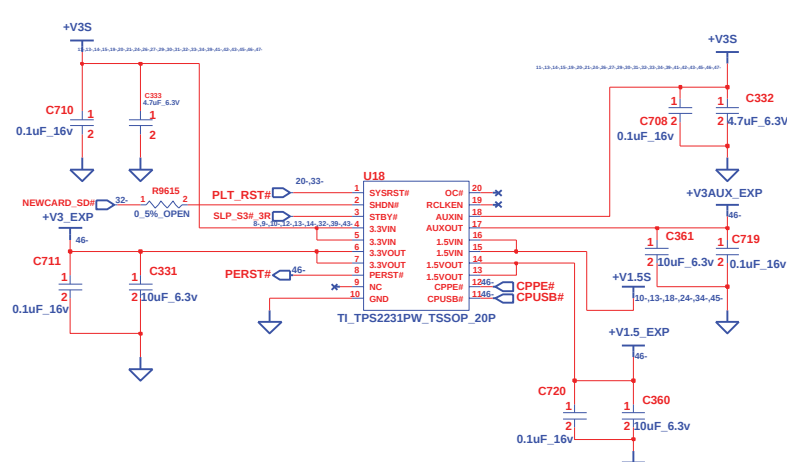


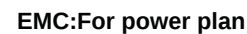
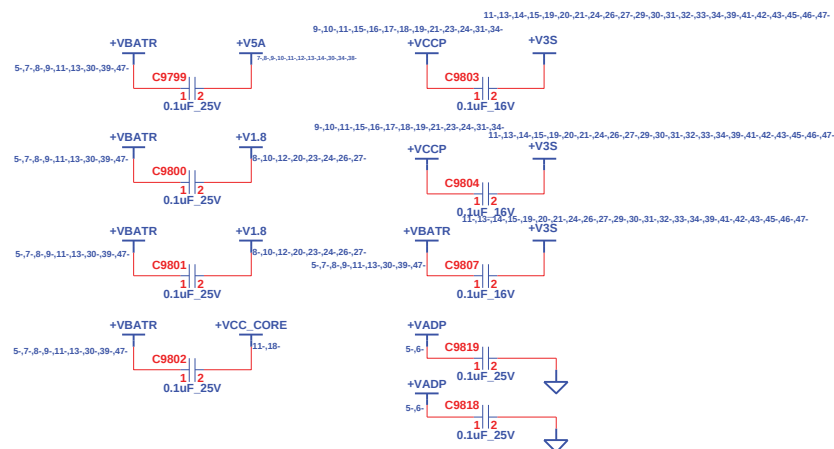
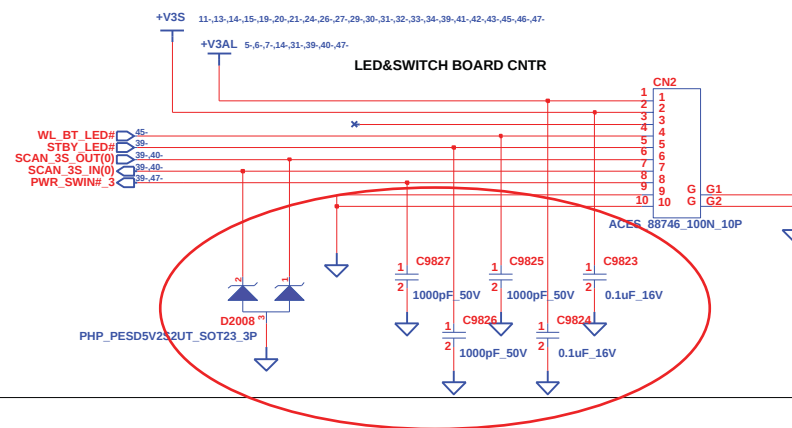
<http://hobi-elektronika.net>

INVENTEC			
TITLE Vulcain UMA			
NIC 10/100 - RJ45			
SIZE	CODE	DOC. NUMBER	REV
D	CS	AXI	000
CHANGE by		SHEET	OF
Puma Chen		44	50
23-Feb-2009		8	



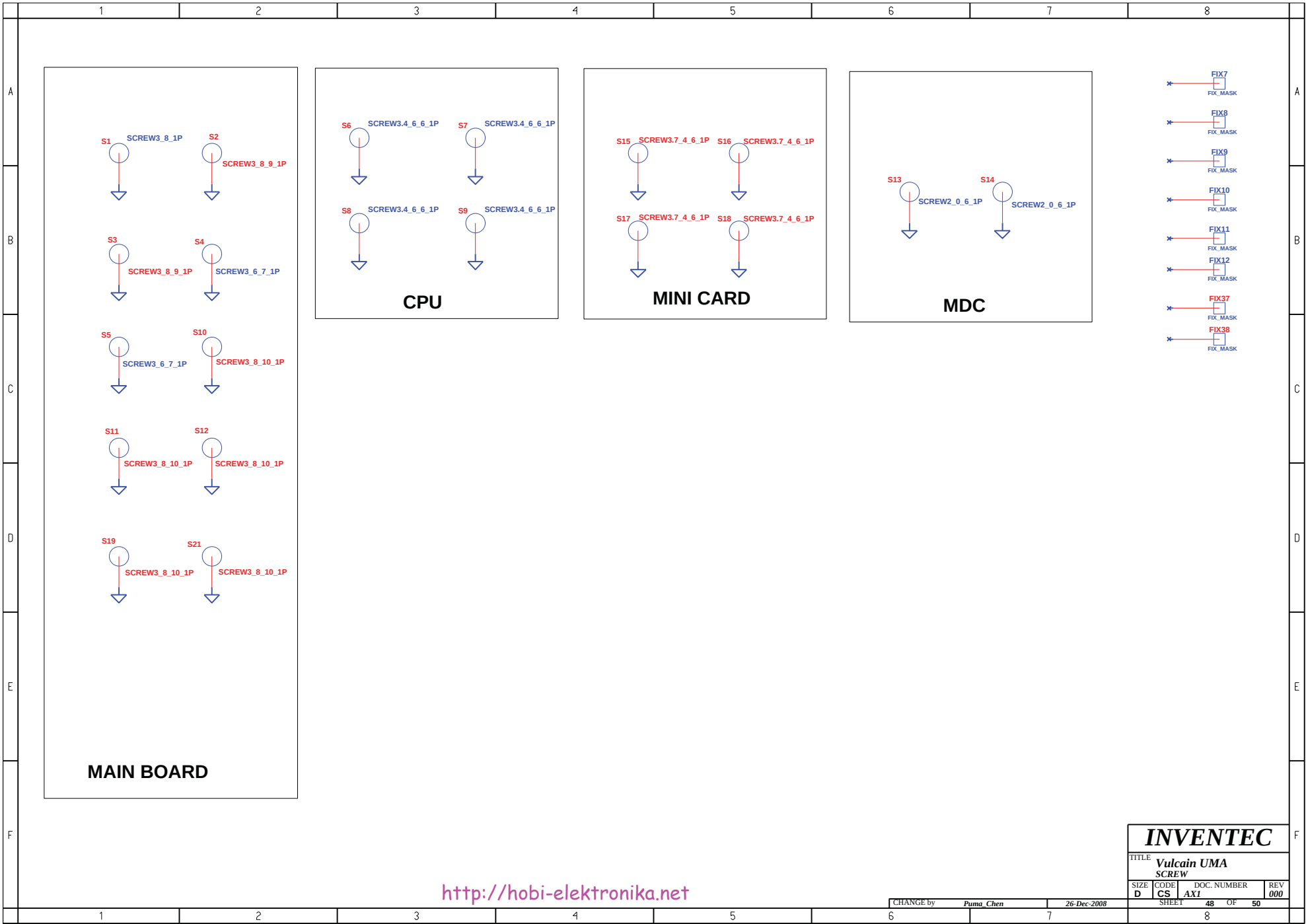
<http://hobi-elektronika.net>





INVENTEC

CHANGE by	<i>Puma Chen</i>	24-Feb-2009
-----------	------------------	-------------



MAIN BOARD

S6

SCREW3.4_6_6_1P

S7

SCREW3.4_6_6_1P

S8

SCREW3.4_6_6_1P

S9

SCREW3.4_6_6_1P

CPU

S15

SCREW3.7_4_6_1P

S16

SCREW3.7_4_6_1P

S17

SCREW3.7_4_6_1P

S18

SCREW3.7_4_6_1P

MINI CARD

S13

SCREW2_0_6_1P

S14

SCREW2_0_6_1P

MDC

FIX7

FIX_MASK

FIX8

FIX_MASK

FIX9

FIX_MASK

FIX10

FIX_MASK

FIX11

FIX_MASK

FIX12

FIX_MASK

FIX37

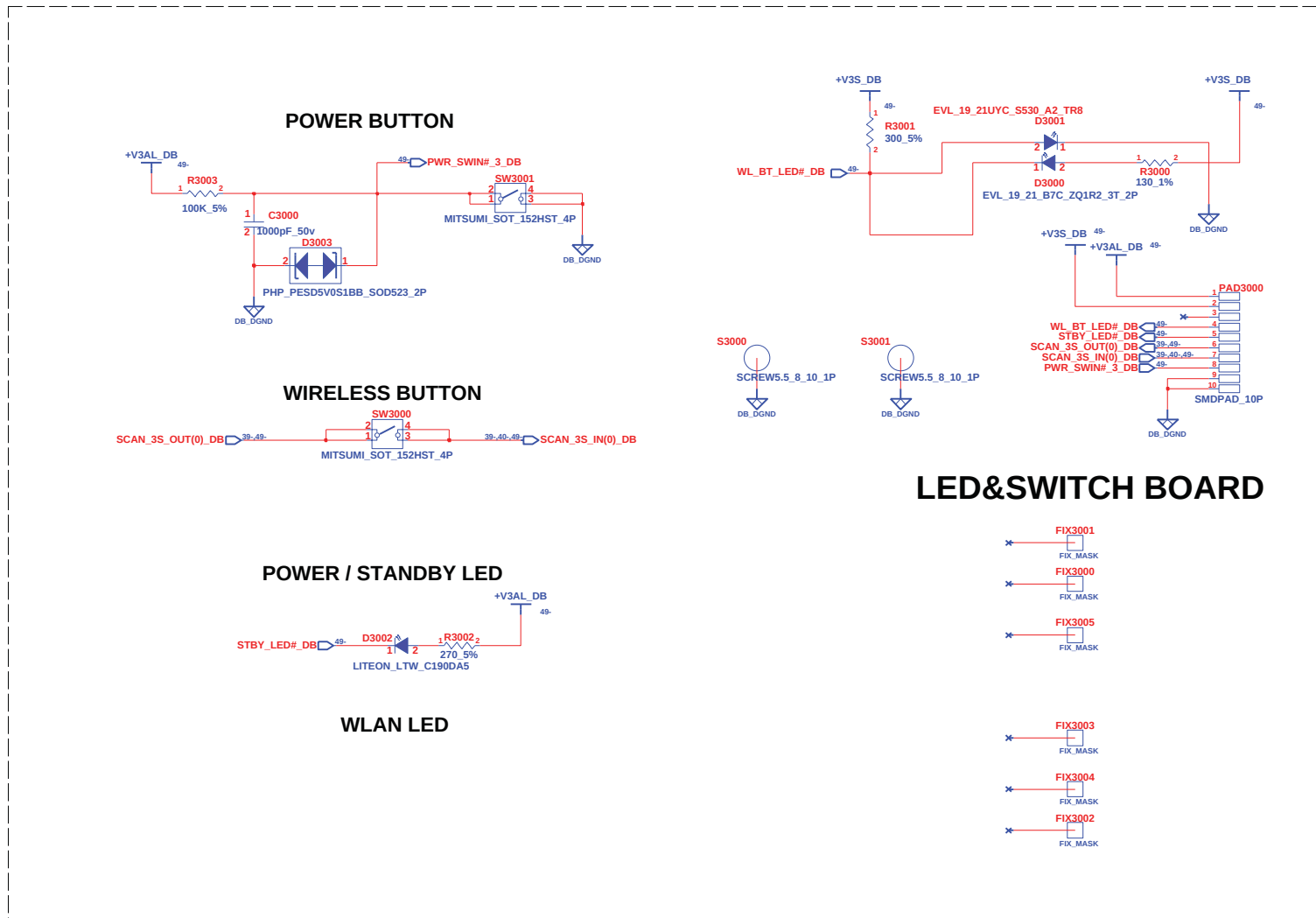
FIX_MASK

FIX38

FIX_MASK

<http://hobi-elektronika.net>

INVENTEC			
TITLE Vulcain UMA			
SCREW			
SIZE D	CODE CS	DOC. NUMBER AXI	REV 000
CHANGE by Puma Chen		26-Dec-2008	
SHEET		48 OF 50	
		8	



SWITCH DAUGHTER BOARD

<http://hobi-elektronika.net>

INVENTEC

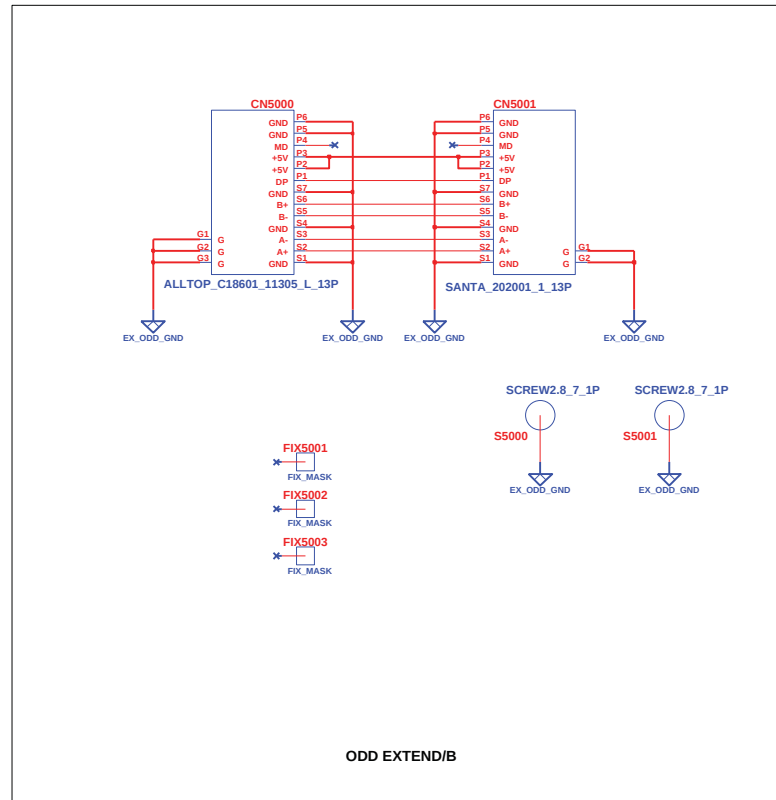
TITLE
**Vulcain UMA
SWITCH Board**

SIZE	CODE	DOC. NUMBER	REV
D	CS	AXI	000

CHANGE by *Puma Chen* 26-Dec-2008

SHEET 49 OF 50

8



<http://hobi-elektronika.net>

INVENTEC			
TITLE			
Vulcain UMA			
15.4" W ODD Extend Board			
SIZE	CODE	DOC. NUMBER	REV
D	CS	AX1	000
CHANGE by		12-Feb-2009	
Puma Chen			
SHEET		50	OF 50
		8	