

TABLE OF CONTENTS

PAGE

1.COVER PAGE
2.INDEX
3.BLOCK DIAGRAM
4.POWER SEQUENCE BLOCK
5-12.SYSTEM POWER
13.CLOCK GENERATOR
14.PENRYN-1
15.PENRYN-2
16.PENRYN-3
17.PENRYN-4
18.FAN & THERMAL CONTROLLER
19.CANTIGA-1
20.CANTIGA-2
21.CANTIGA-3
22.CANTIGA-4
23.CANTIGA-5
24.CANTIGA-6
25.CANTIGA-7
26.DDR3 DIMM0
27.DDR3 DIMM1
28.
29.VGA-1
30.VGA-2

PAGE

31.VGA-3
32.VGA-4
33.VGA-5
34.VGA-6
35.VRAM_0
36.VRAM_1
37.3D Sensor
38.CRT CONN
39.LCM CONN
40.ICH9-1
41.ICH9-2
42.ICH9-3
43.ICH9-4
44.ICH9-5
45.SATA HDD CONN
46.ODD CONN
47.USB CONN
48.ESATA CONN
49.Camera
50.BLUE TOOTH CONN
51.KBC
52.K/B & TP/B CONN
53.Audio Codec
54.Audio AMP/MIC/Speaker

PAGE

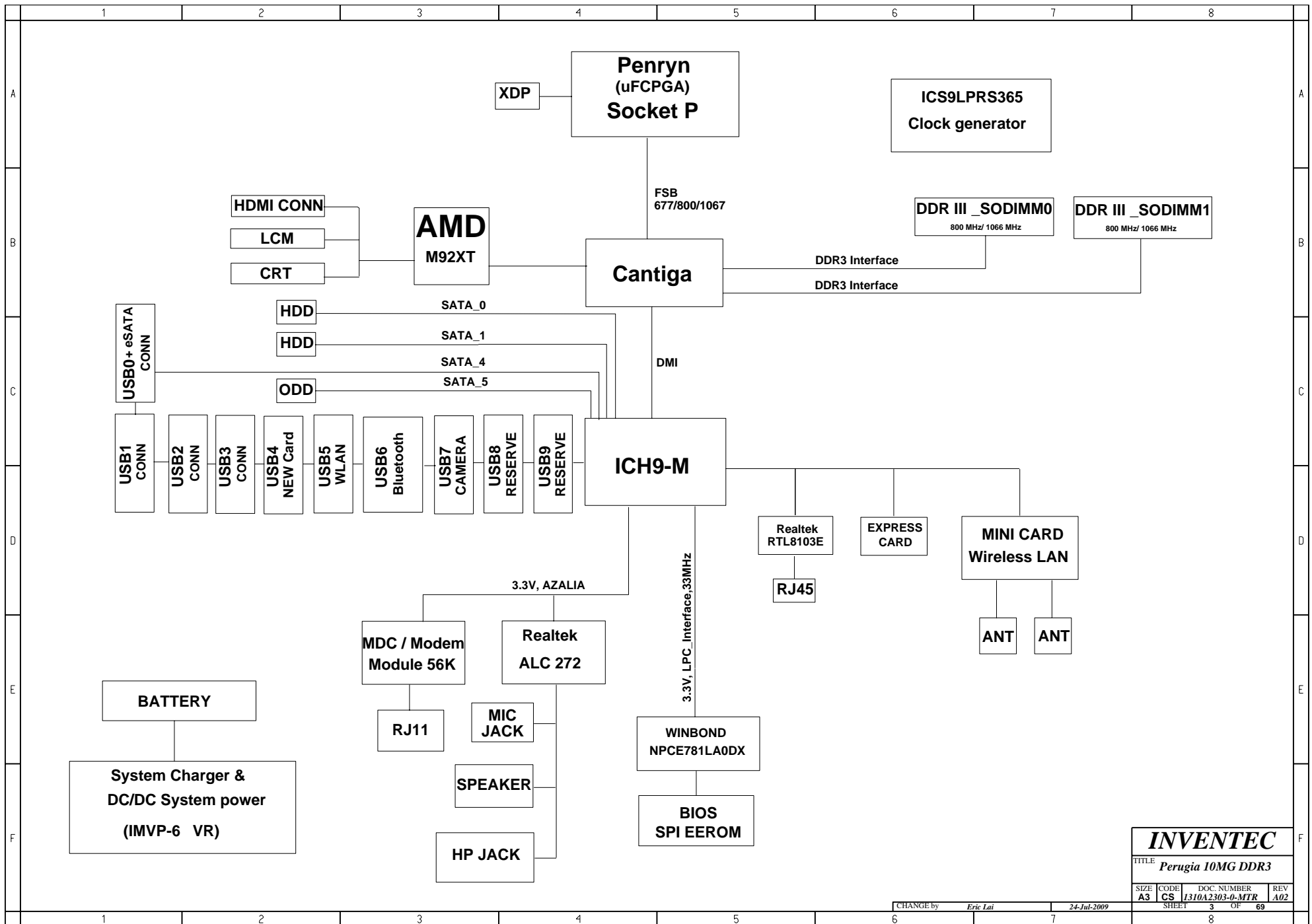
55.LAN CONTROLLER
56.RJ45 & TRANSFORMER
57.HDMI & CEC
58.HDMI CONN
59.USB Card Reader
60.Express Card
61.WLAN /Debug
62.MDC 1.5 CONN
63.LED(M/B) & HOTKEY/B CONN
64.KILL SWITCH& HALL SENSOR
65.Screw
66.EMI
67.Hotkey board
68.Touch pad board
69.Power board

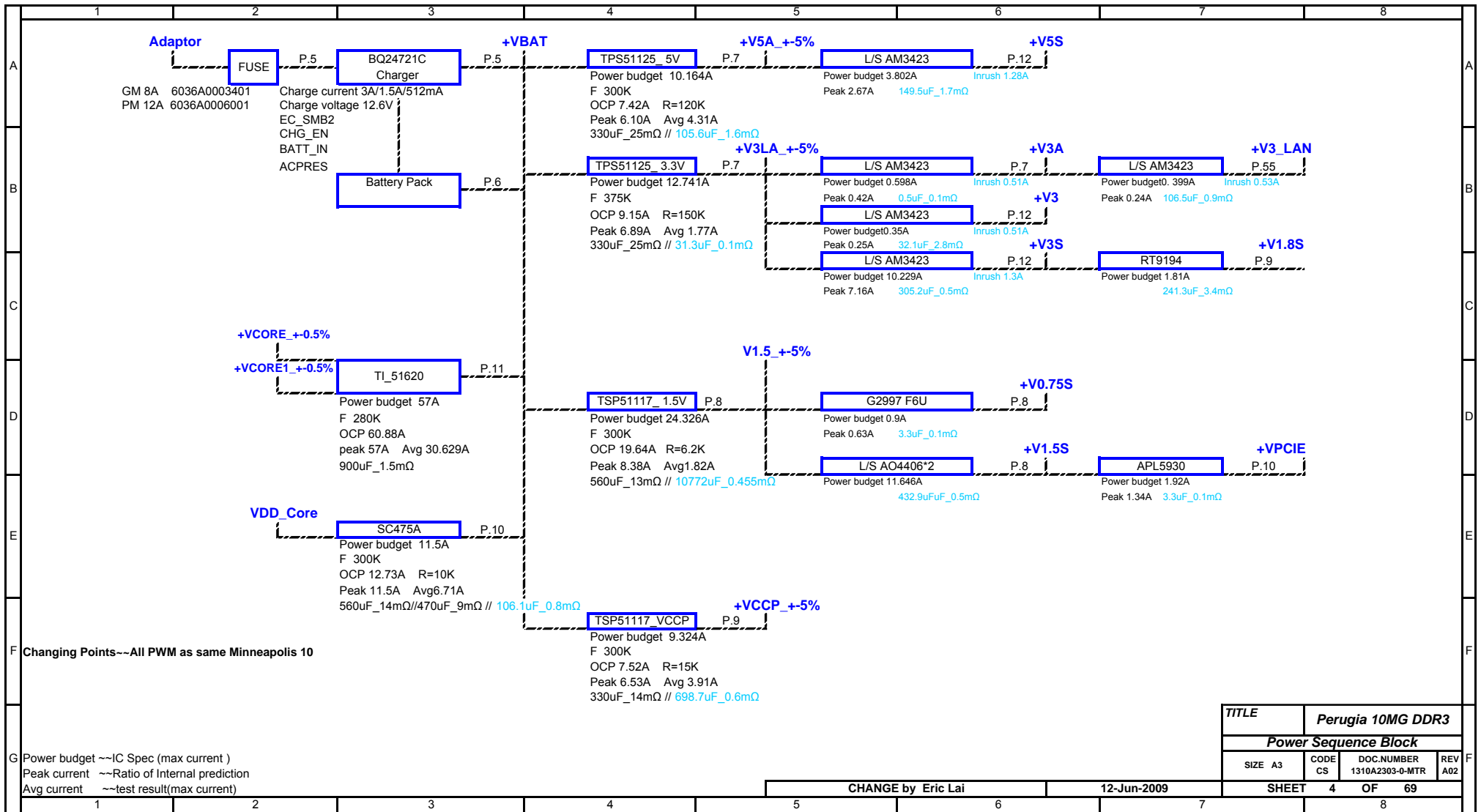
INVENTEC

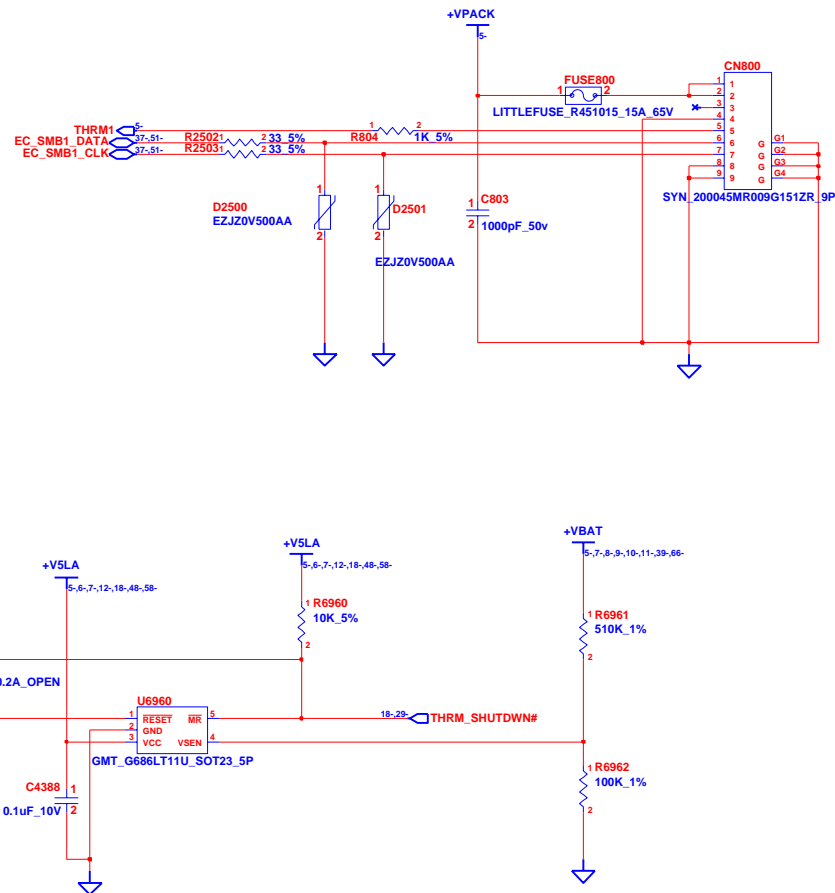
TITLE **Perugia 10MG DDR3**

SIZE A3	CODE CS	DOC. NUMBER U310A2303-0-MTR	REV A02
SHEET 2		OF 69	

CHANGE by **Eric Lai** **11-Aug-2009**



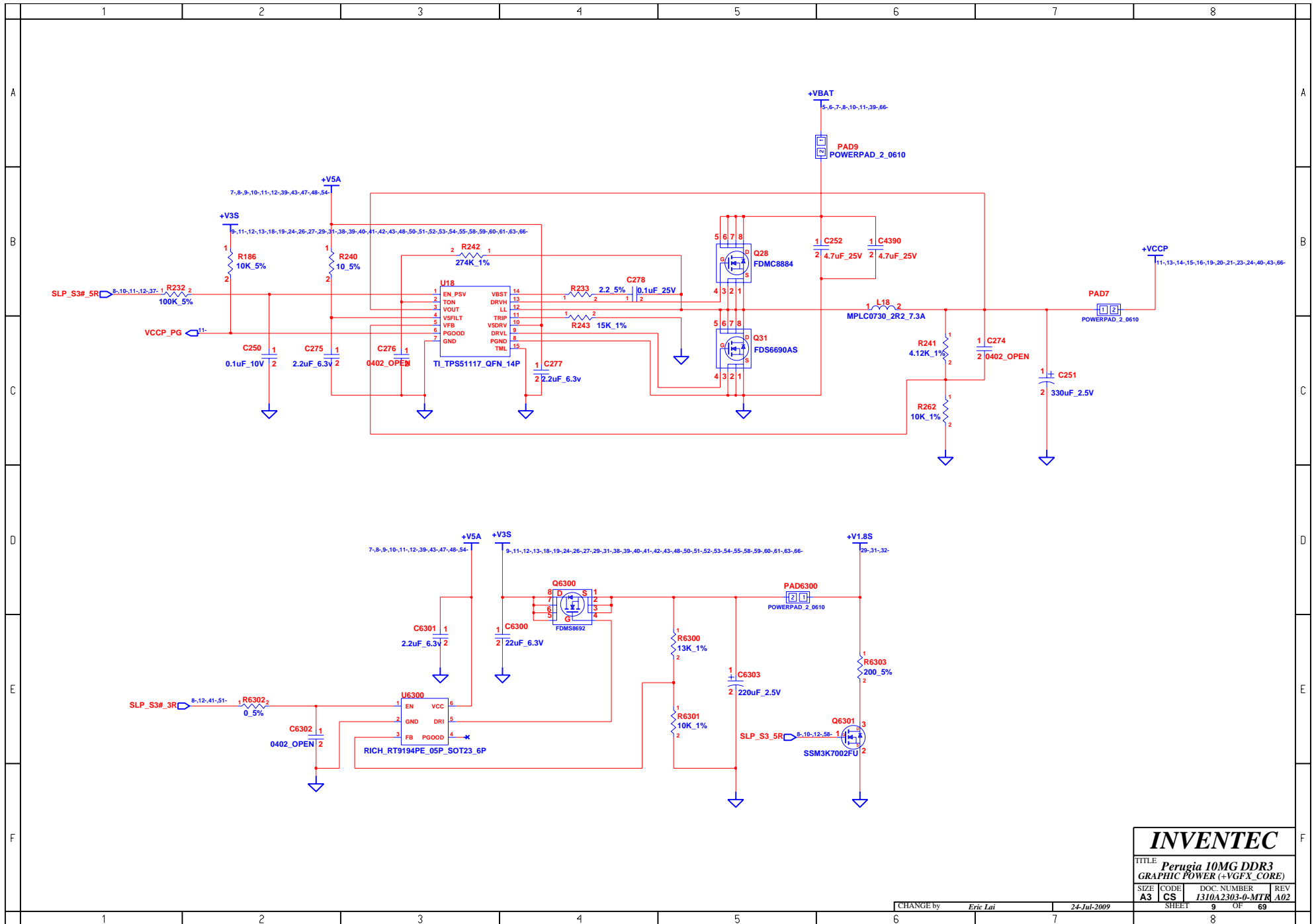




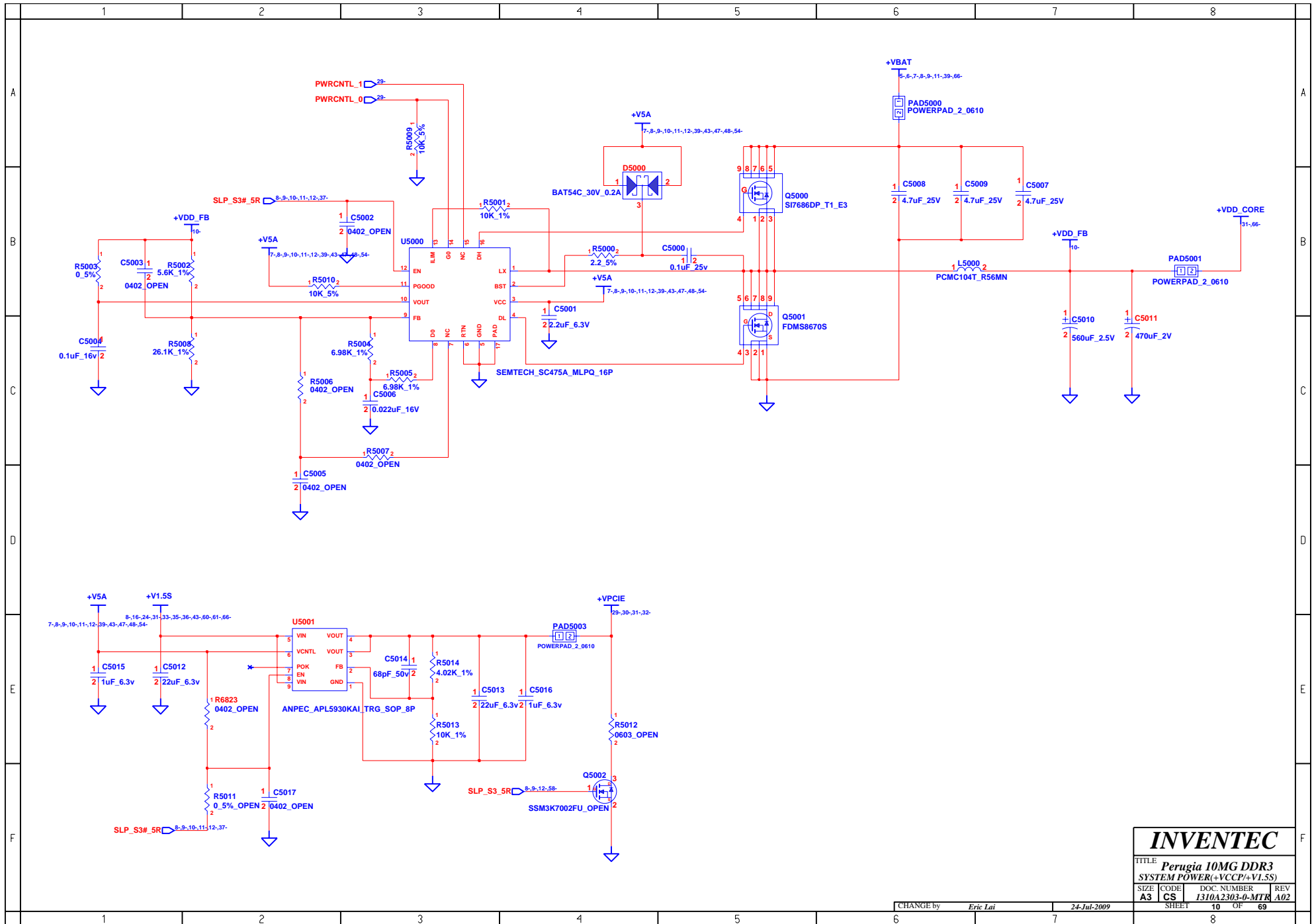
INVENTEC			
TITLE			
SELECT & BATTERY CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02
SHEET		6	OF 69

CHANGE by Eric Lai 24-Jul-2009





INVENTEC			
TITLE: Perugia 10MG DDR3 GRAPHIC POWER (+VGF_X_CORE)			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A2303-0-MTR	REV: A02
CHANGE by: Eric Lai		24-Jul-2009	SHEET 9 OF 69

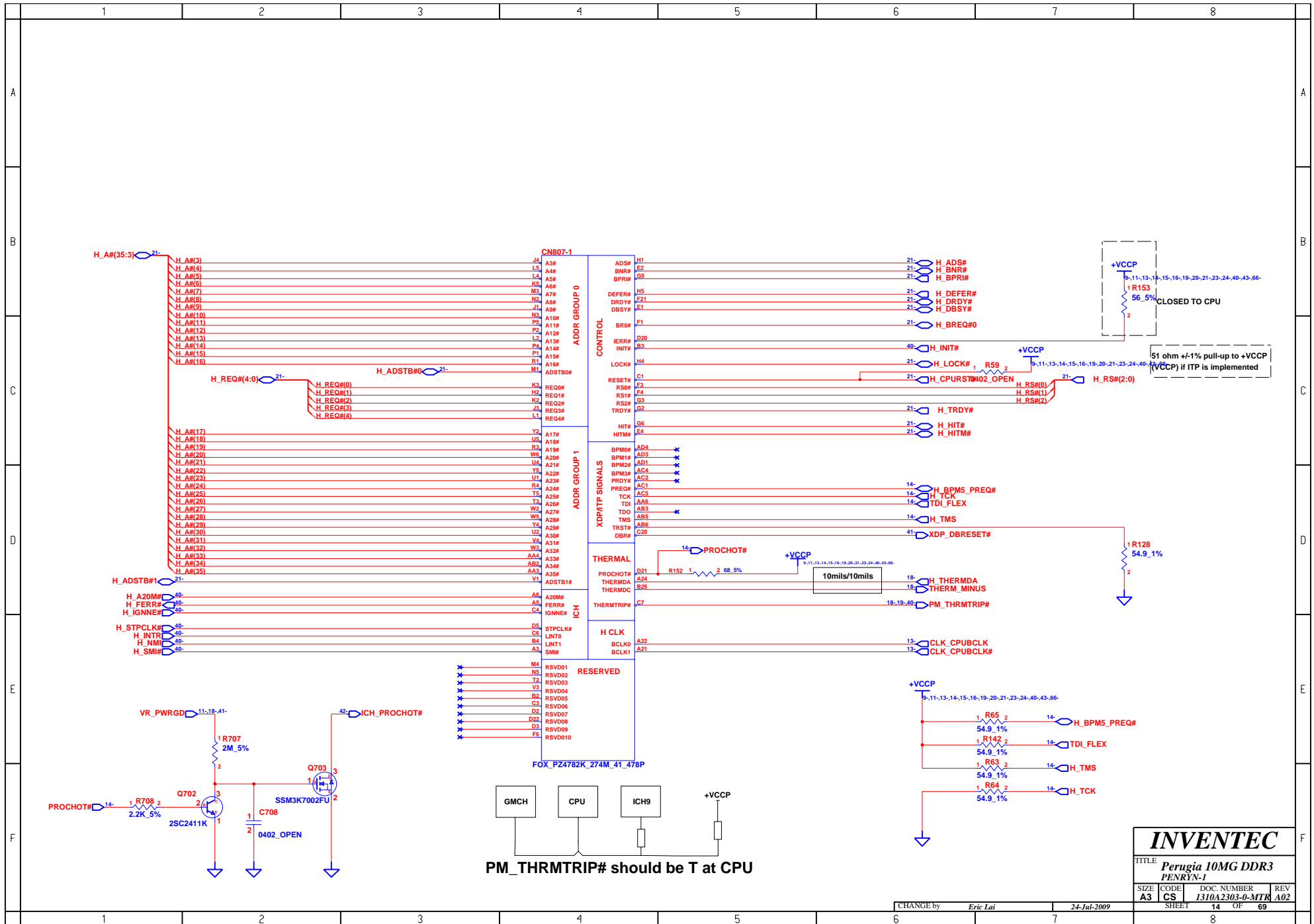


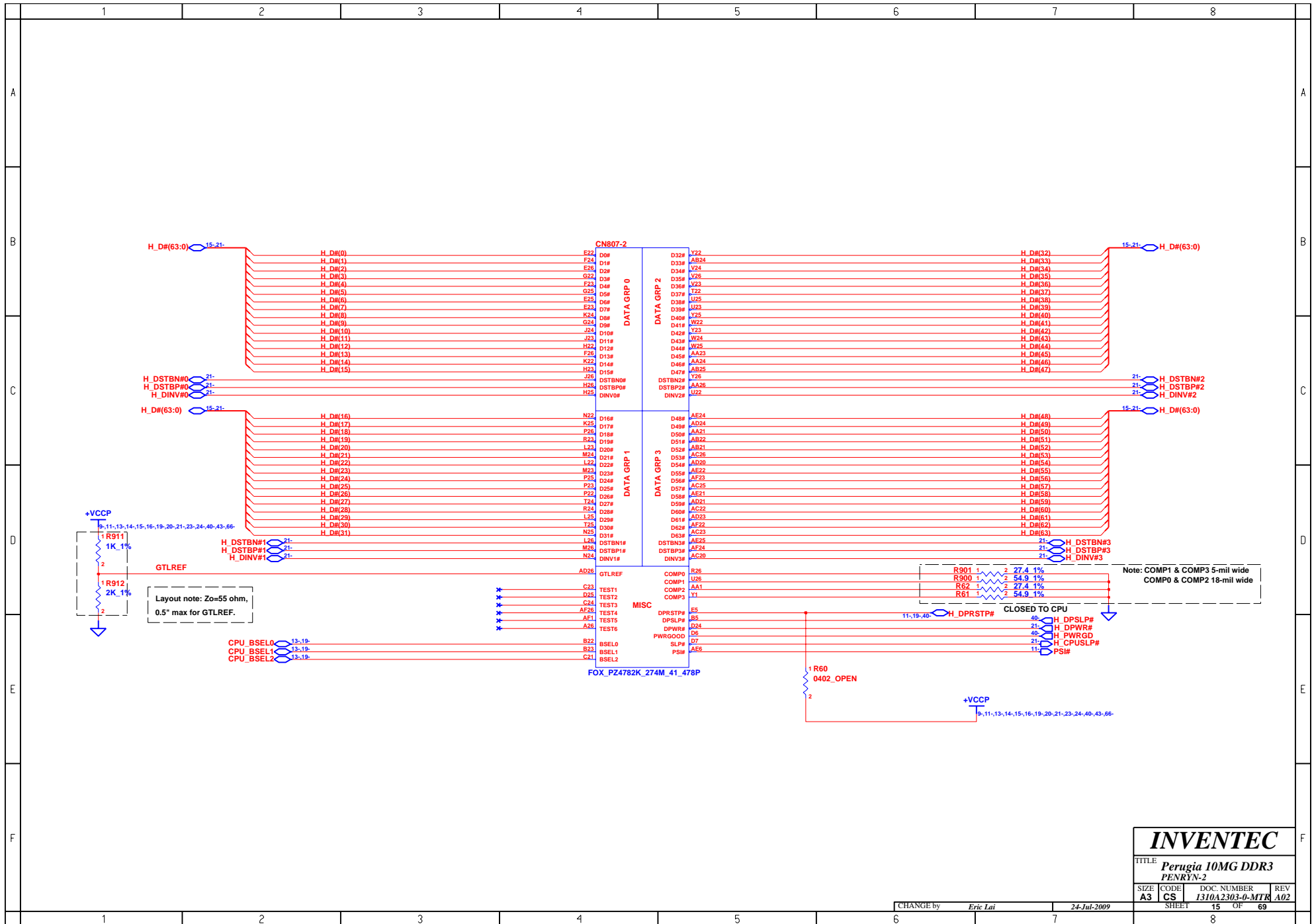
INVENTEC

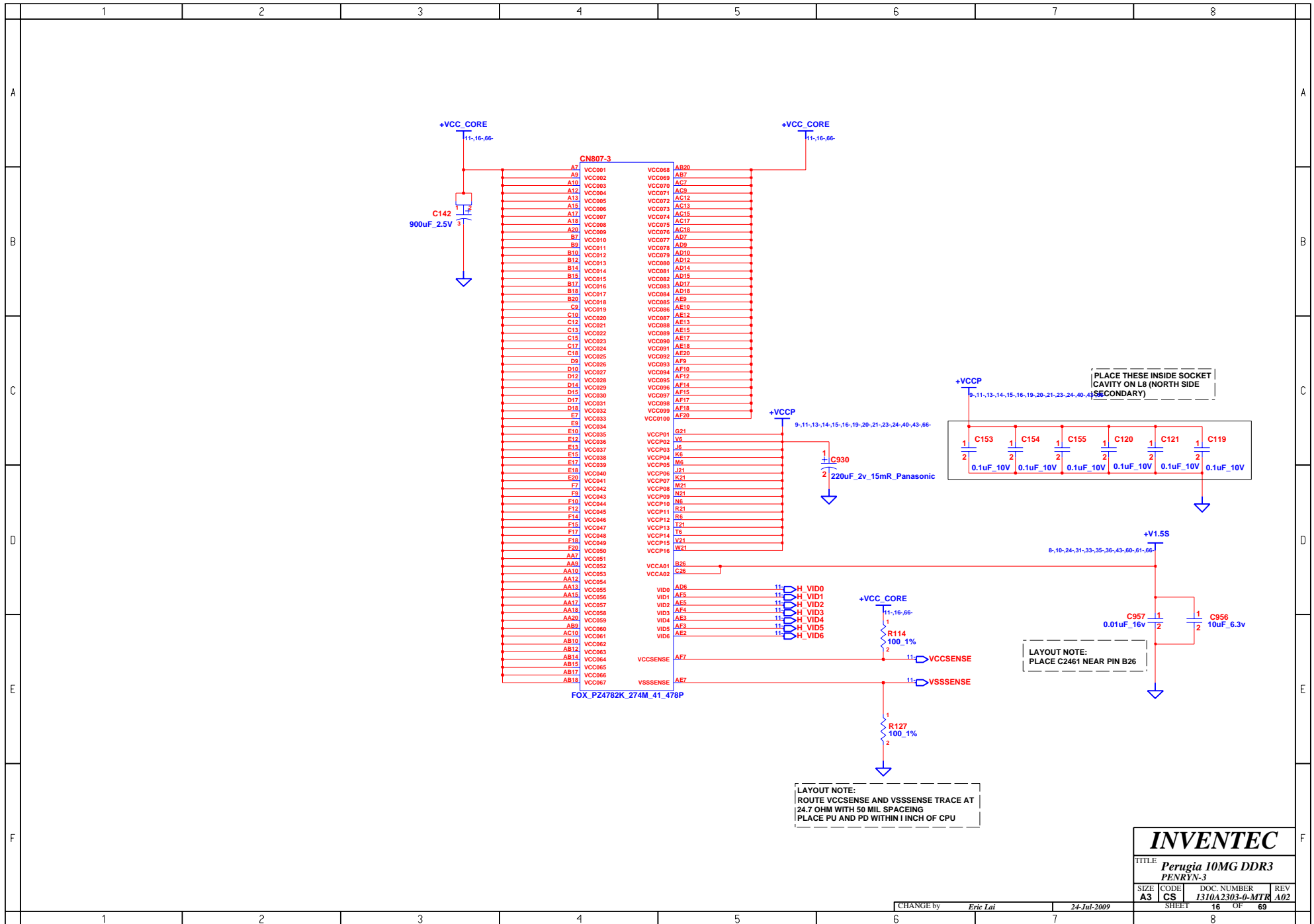
TITLE			
Perugia 10MG DDR3			
SYSTEM POWER(+VCCP/+V1.5S)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 10 OF 69



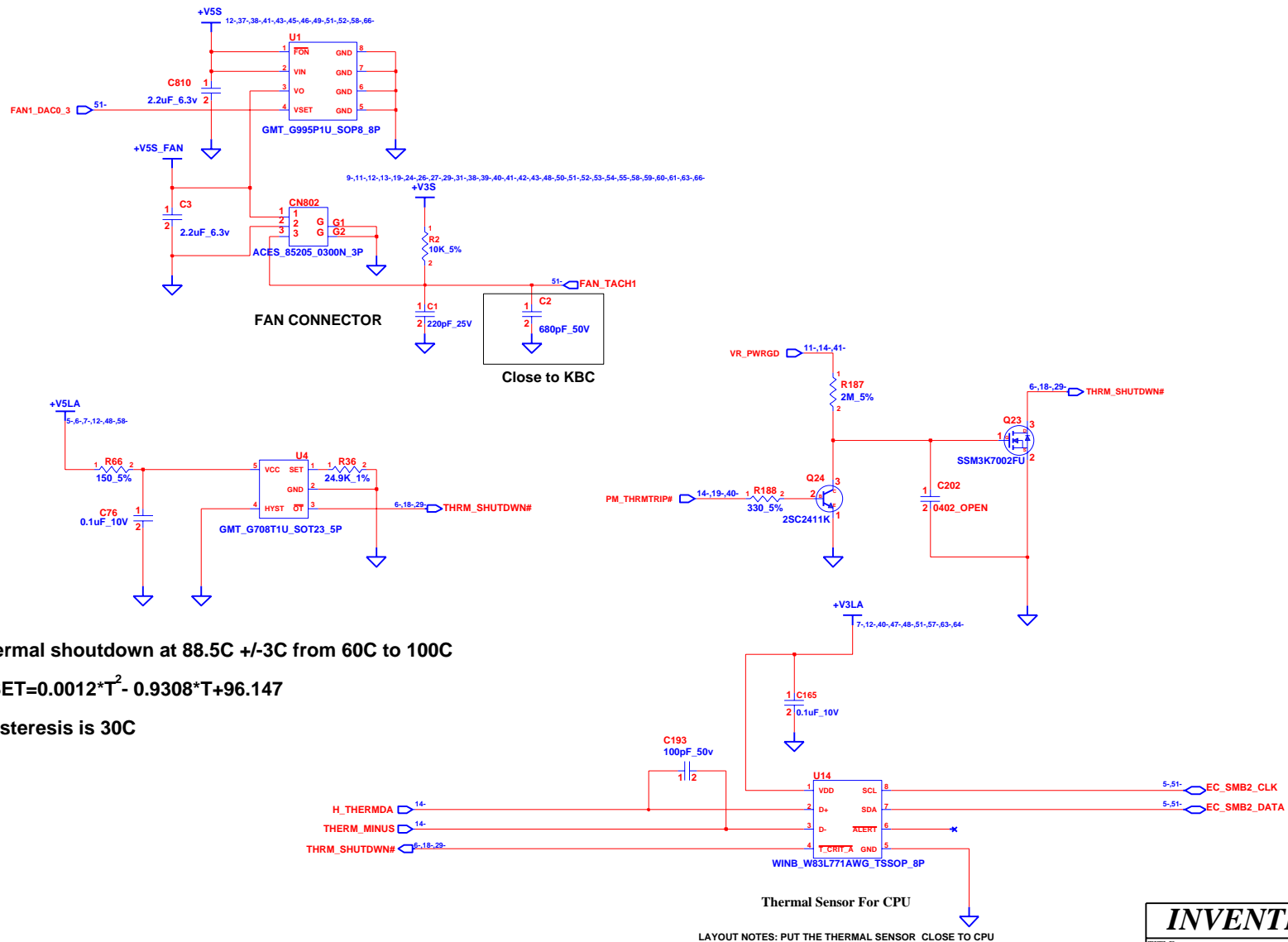




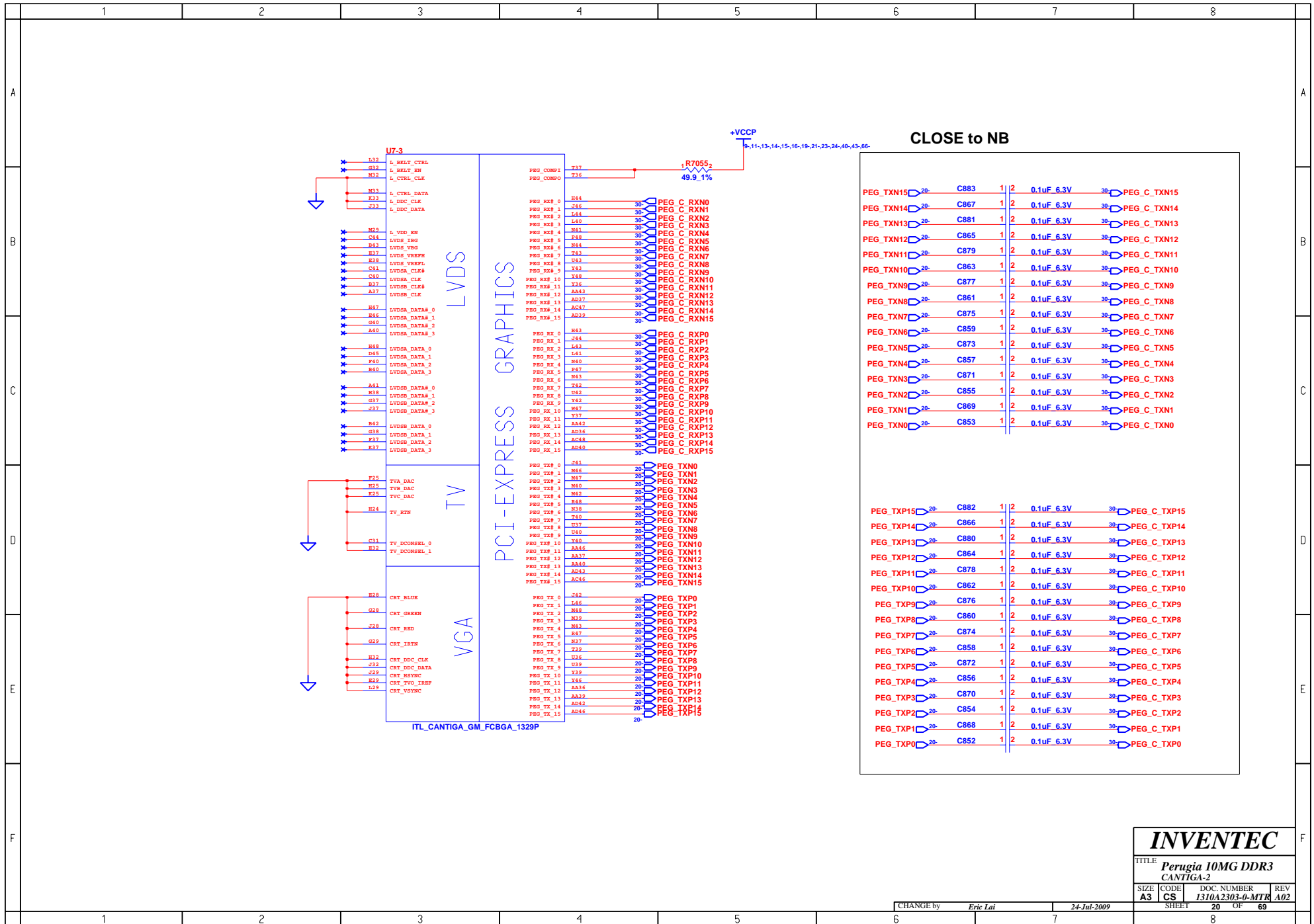
	1	2	3	4	5	6	7	8
A								
B								
C								
D								
E								
F								

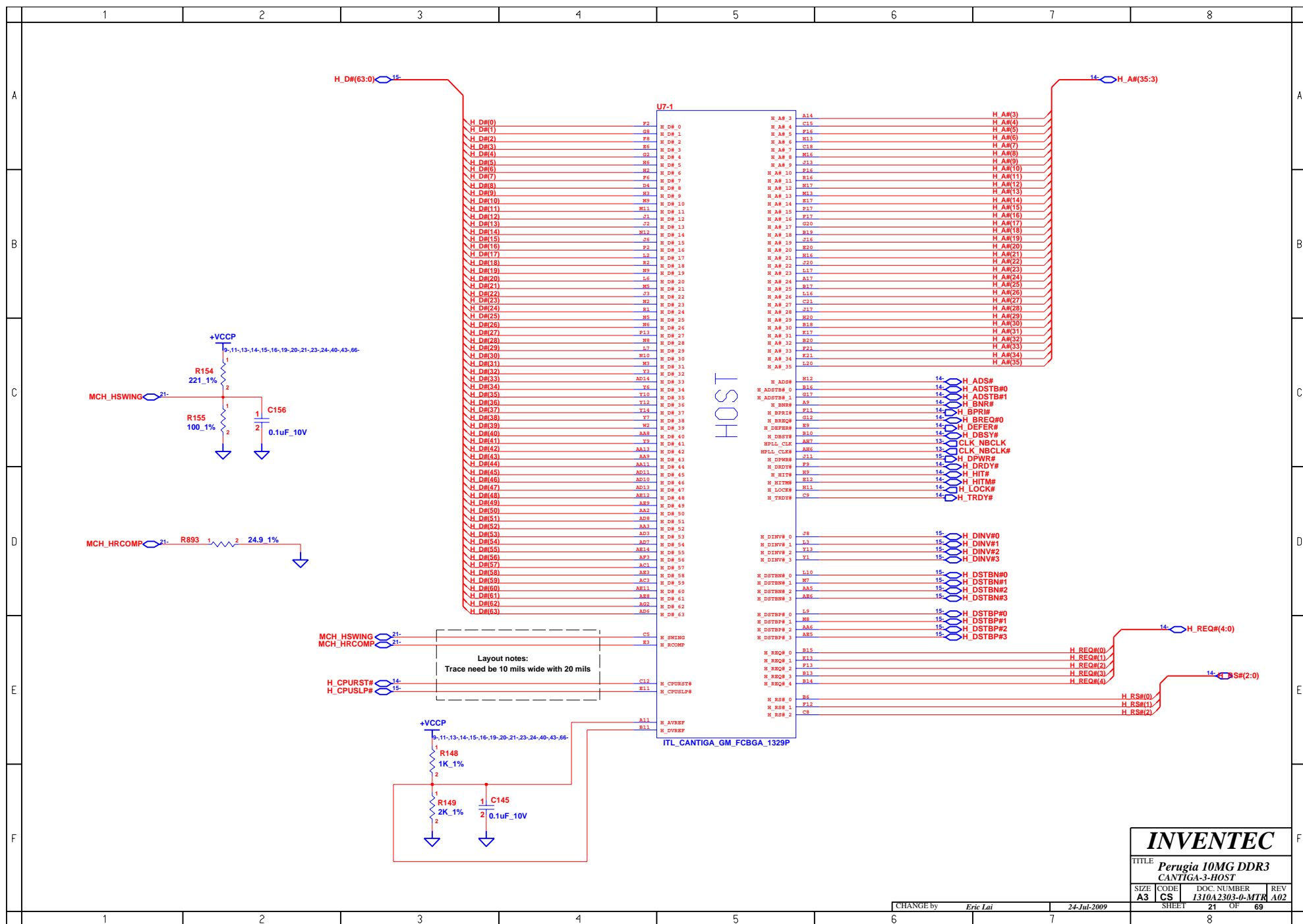
INVENTEC			
TITLE Perugia 10MG DDR3 PENRYN-4			
SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02

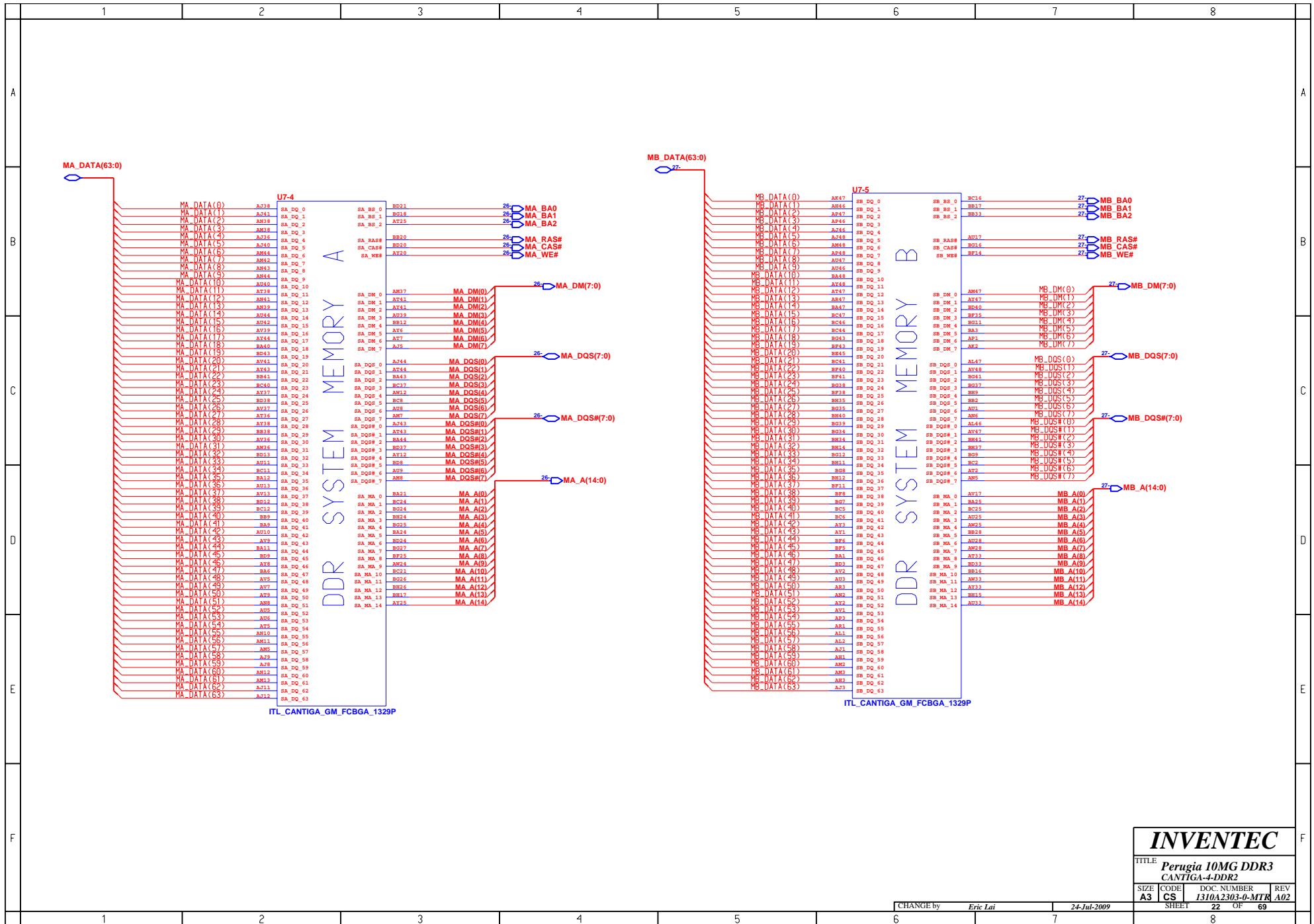
CHANGE by	Eric Lai	24-Jul-2009
SHEET		17 OF 69

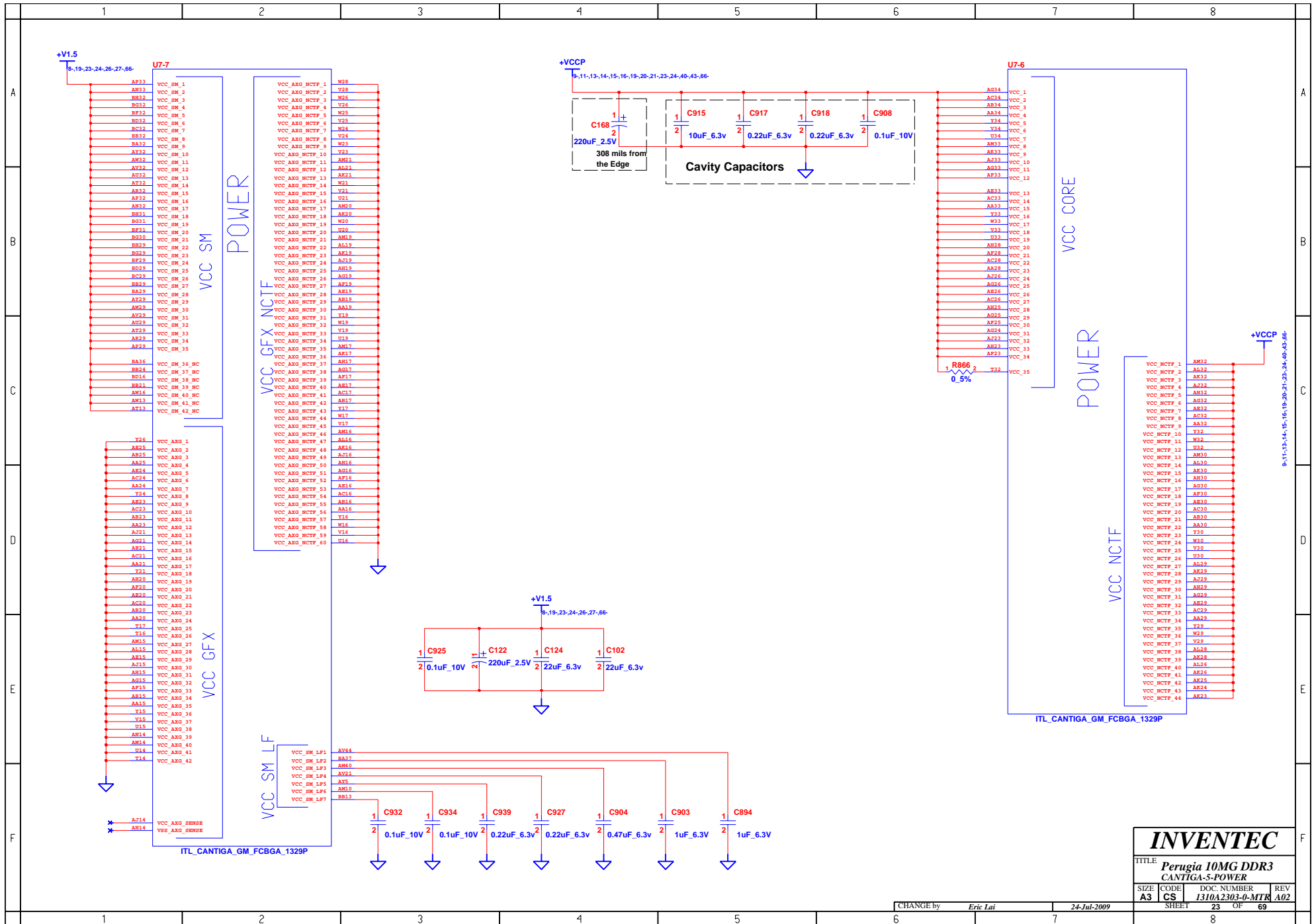


INVENTEC			
TITLE: Perugia 10MG DDR3 THERMAL&FAN CONTROLLER			
SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
CHANGE by Eric Lai		24-Jul-2009	SHEET 18 OF 69

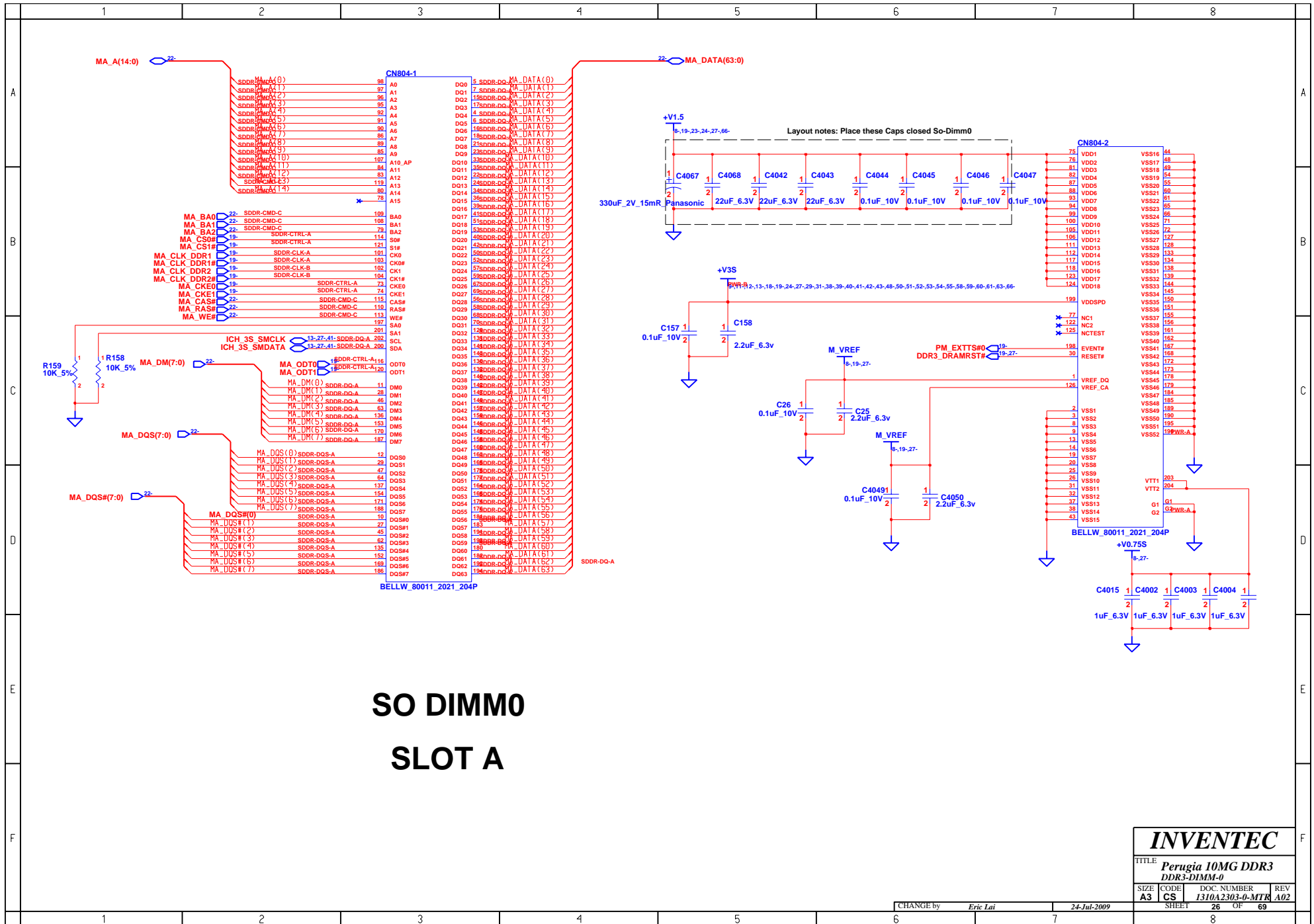








	1	2	3	4	5	6	7	8
A		<div><div>U7-9</div><div><div>AD48</div><div>VSS 1</div><div>VSS 100</div></div><div><div>AR48</div><div>VSS 2</div><div>VSS 101</div></div><div><div>AL48</div><div>VSS 3</div><div>VSS 102</div></div><div><div>BR47</div><div>VSS 4</div><div>VSS 103</div></div><div><div>AR47</div><div>VSS 5</div><div>VSS 104</div></div><div><div>AR47</div><div>VSS 6</div><div>VSS 105</div></div><div><div>AR47</div><div>VSS 7</div><div>VSS 106</div></div><div><div>AP47</div><div>VSS 8</div><div>VSS 107</div></div><div><div>AP47</div><div>VSS 9</div><div>VSS 108</div></div><div><div>AR47</div><div>VSS 10</div><div>VSS 109</div></div><div><div>V47</div><div>VSS 11</div><div>VSS 110</div></div><div><div>V47</div><div>VSS 12</div><div>VSS 111</div></div><div><div>V47</div><div>VSS 13</div><div>VSS 112</div></div><div><div>V47</div><div>VSS 14</div><div>VSS 113</div></div><div><div>V47</div><div>VSS 15</div><div>VSS 114</div></div><div><div>BR46</div><div>VSS 16</div><div>VSS 115</div></div><div><div>BR46</div><div>VSS 17</div><div>VSS 116</div></div><div><div>AV46</div><div>VSS 18</div><div>VSS 117</div></div><div><div>AV46</div><div>VSS 19</div><div>VSS 118</div></div><div><div>AR46</div><div>VSS 20</div><div>VSS 119</div></div><div><div>AR46</div><div>VSS 21</div><div>VSS 120</div></div><div><div>V46</div><div>VSS 22</div><div>VSS 121</div></div><div><div>R46</div><div>VSS 23</div><div>VSS 122</div></div><div><div>R46</div><div>VSS 24</div><div>VSS 123</div></div><div><div>R46</div><div>VSS 25</div><div>VSS 124</div></div><div><div>R46</div><div>VSS 26</div><div>VSS 125</div></div><div><div>AR44</div><div>VSS 27</div><div>VSS 126</div></div><div><div>AR44</div><div>VSS 28</div><div>VSS 127</div></div><div><div>AR44</div><div>VSS 29</div><div>VSS 128</div></div><div><div>AR44</div><div>VSS 30</div><div>VSS 129</div></div><div><div>V44</div><div>VSS 31</div><div>VSS 130</div></div><div><div>V44</div><div>VSS 32</div><div>VSS 131</div></div><div><div>V44</div><div>VSS 33</div><div>VSS 132</div></div><div><div>V44</div><div>VSS 34</div><div>VSS 133</div></div><div><div>R44</div><div>VSS 35</div><div>VSS 134</div></div><div><div>R44</div><div>VSS 36</div><div>VSS 135</div></div><div><div>R44</div><div>VSS 37</div><div>VSS 136</div></div><div><div>AR43</div><div>VSS 38</div><div>VSS 137</div></div><div><div>AR43</div><div>VSS 39</div><div>VSS 138</div></div><div><div>V43</div><div>VSS 40</div><div>VSS 139</div></div><div><div>V43</div><div>VSS 41</div><div>VSS 140</div></div><div><div>R43</div><div>VSS 42</div><div>VSS 141</div></div><div><div>AR42</div><div>VSS 43</div><div>VSS 142</div></div><div><div>AR42</div><div>VSS 44</div><div>VSS 143</div></div><div><div>AR42</div><div>VSS 45</div><div>VSS 144</div></div><div><div>AR42</div><div>VSS 46</div><div>VSS 145</div></div><div><div>AR42</div><div>VSS 47</div><div>VSS 146</div></div><div><div>R42</div><div>VSS 48</div><div>VSS 147</div></div><div><div>R42</div><div>VSS 49</div><div>VSS 148</div></div><div><div>R42</div><div>VSS 50</div><div>VSS 149</div></div><div><div>AR41</div><div>VSS 51</div><div>VSS 150</div></div><div><div>AR41</div><div>VSS 52</div><div>VSS 151</div></div><div><div>AR41</div><div>VSS 53</div><div>VSS 152</div></div><div><div>AR41</div><div>VSS 54</div><div>VSS 153</div></div><div><div>AR41</div><div>VSS 55</div><div>VSS 154</div></div><div><div>V41</div><div>VSS 56</div><div>VSS 155</div></div><div><div>V41</div><div>VSS 57</div><div>VSS 156</div></div><div><div>V41</div><div>VSS 58</div><div>VSS 157</div></div><div><div>V41</div><div>VSS 59</div><div>VSS 158</div></div><div><div>V41</div><div>VSS 60</div><div>VSS 159</div></div><div><div>R41</div><div>VSS 61</div><div>VSS 160</div></div><div><div>R41</div><div>VSS 62</div><div>VSS 161</div></div><div><div>BR40</div><div>VSS 63</div><div>VSS 162</div></div><div><div>AR40</div><div>VSS 64</div><div>VSS 163</div></div><div><div>AR40</div><div>VSS 65</div><div>VSS 164</div></div><div><div>R40</div><div>VSS 66</div><div>VSS 165</div></div><div><div>R40</div><div>VSS 67</div><div>VSS 166</div></div><div><div>AR39</div><div>VSS 68</div><div>VSS 167</div></div><div><div>AR39</div><div>VSS 69</div><div>VSS 168</div></div><div><div>AR39</div><div>VSS 70</div><div>VSS 169</div></div><div><div>AR39</div><div>VSS 71</div><div>VSS 170</div></div><div><div>R39</div><div>VSS 72</div><div>VSS 171</div></div><div><div>R39</div><div>VSS 73</div><div>VSS 172</div></div><div><div>R39</div><div>VSS 74</div><div>VSS 173</div></div><div><div>BR38</div><div>VSS 75</div><div>VSS 174</div></div><div><div>BR38</div><div>VSS 76</div><div>VSS 175</div></div><div><div>AR38</div><div>VSS 77</div><div>VSS 176</div></div><div><div>AR38</div><div>VSS 78</div><div>VSS 177</div></div><div><div>AR38</div><div>VSS 79</div><div>VSS 178</div></div><div><div>AR38</div><div>VSS 80</div><div>VSS 179</div></div><div><div>AR38</div><div>VSS 81</div><div>VSS 180</div></div><div><div>V38</div><div>VSS 82</div><div>VSS 181</div></div><div><div>V38</div><div>VSS 83</div><div>VSS 182</div></div><div><div>V38</div><div>VSS 84</div><div>VSS 183</div></div><div><div>V38</div><div>VSS 85</div><div>VSS 184</div></div><div><div>V38</div><div>VSS 86</div><div>VSS 185</div></div><div><div>V38</div><div>VSS 87</div><div>VSS 186</div></div><div><div>R37</div><div>VSS 88</div><div>VSS 187</div></div><div><div>R37</div><div>VSS 89</div><div>VSS 188</div></div><div><div>AR37</div><div>VSS 90</div><div>VSS 189</div></div><div><div>AR37</div><div>VSS 91</div><div>VSS 190</div></div><div><div>AR37</div><div>VSS 92</div><div>VSS 191</div></div><div><div>AR37</div><div>VSS 93</div><div>VSS 192</div></div><div><div>R37</div><div>VSS 94</div><div>VSS 193</div></div><div><div>R37</div><div>VSS 95</div><div>VSS 194</div></div><div><div>R37</div><div>VSS 96</div><div>VSS 195</div></div><div><div>R37</div><div>VSS 97</div><div>VSS 196</div></div><div><div>AR36</div><div>VSS 98</div><div>VSS 197</div></div><div><div>AR36</div><div>VSS 99</div><div>VSS 198</div></div></div> <div><div>ITL_CANTIGA_GM_FCBGA_1329P</div></div>		<div><div>U7-10</div><div><div>R021</div><div>VSS 199</div><div>VSS 297</div></div><div><div>L12</div><div>VSS 200</div><div>VSS 298</div></div><div><div>AR21</div><div>VSS 201</div><div>VSS 299</div></div><div><div>AR21</div><div>VSS 202</div><div>VSS 300</div></div><div><div>AR21</div><div>VSS 203</div><div>VSS 301</div></div><div><div>AR21</div><div>VSS 204</div><div>VSS 302</div></div><div><div>AR21</div><div>VSS 205</div><div>VSS 303</div></div><div><div>AR21</div><div>VSS 206</div><div>VSS 304</div></div><div><div>AR21</div><div>VSS 207</div><div>VSS 305</div></div><div><div>AR21</div><div>VSS 208</div><div>VSS 306</div></div><div><div>R21</div><div>VSS 209</div><div>VSS 307</div></div><div><div>R21</div><div>VSS 210</div><div>VSS 308</div></div><div><div>R21</div><div>VSS 211</div><div>VSS 309</div></div><div><div>R21</div><div>VSS 212</div><div>VSS 310</div></div><div><div>RA20</div><div>VSS 213</div><div>VSS 311</div></div><div><div>AR20</div><div>VSS 214</div><div>VSS 312</div></div><div><div>AR20</div><div>VSS 215</div><div>VSS 313</div></div><div><div>AR20</div><div>VSS 216</div><div>VSS 314</div></div><div><div>AG20</div><div>VSS 217</div><div>VSS 315</div></div><div><div>R20</div><div>VSS 218</div><div>VSS 316</div></div><div><div>R20</div><div>VSS 219</div><div>VSS 317</div></div><div><div>R20</div><div>VSS 220</div><div>VSS 318</div></div><div><div>R20</div><div>VSS 221</div><div>VSS 319</div></div><div><div>R20</div><div>VSS 222</div><div>VSS 320</div></div><div><div>R20</div><div>VSS 223</div><div>VSS 321</div></div><div><div>R019</div><div>VSS 224</div><div>VSS 322</div></div><div><div>RA18</div><div>VSS 225</div><div>VSS 323</div></div><div><div>AR17</div><div>VSS 226</div><div>VSS 324</div></div><div><div>AR17</div><div>VSS 227</div><div>VSS 325</div></div><div><div>AR17</div><div>VSS 228</div><div>VSS 326</div></div><div><div>AR17</div><div>VSS 229</div><div>VSS 327</div></div><div><div>R17</div><div>VSS 230</div><div>VSS 328</div></div><div><div>R17</div><div>VSS 231</div><div>VSS 329</div></div><div><div>R17</div><div>VSS 232</div><div>VSS 330</div></div><div><div>R17</div><div>VSS 233</div><div>VSS 331</div></div><div><div>R16</div><div>VSS 234</div><div>VSS 332</div></div><div><div>R29</div><div>VSS 235</div><div>VSS 333</div></div><div><div>AR16</div><div>VSS 236</div><div>VSS 334</div></div><div><div>R29</div><div>VSS 237</div><div>VSS 335</div></div><div><div>AR16</div><div>VSS 238</div><div>VSS 336</div></div><div><div>R16</div><div>VSS 239</div><div>VSS 337</div></div><div><div>R16</div><div>VSS 240</div><div>VSS 338</div></div><div><div>RA9</div><div>VSS 241</div><div>VSS 339</div></div><div><div>R16</div><div>VSS 242</div><div>VSS 340</div></div><div><div>R015</div><div>VSS 243</div><div>VSS 341</div></div><div><div>AC15</div><div>VSS 244</div><div>VSS 342</div></div><div><div>AR15</div><div>VSS 245</div><div>VSS 343</div></div><div><div>AR15</div><div>VSS 246</div><div>VSS 344</div></div><div><div>AR15</div><div>VSS 247</div><div>VSS 345</div></div><div><div>AR14</div><div>VSS 248</div><div>VSS 346</div></div><div><div>AR14</div><div>VSS 249</div><div>VSS 347</div></div><div><div>AR14</div><div>VSS 250</div><div>VSS 348</div></div><div><div>BC13</div><div>VSS 251</div><div>VSS 349</div></div><div><div>RA13</div><div>VSS 252</div><div>VSS 350</div></div><div><div>AR13</div><div>VSS 253</div><div>VSS 351</div></div><div><div>AR13</div><div>VSS 254</div><div>VSS 352</div></div><div><div>AR13</div><div>VSS 255</div><div>VSS 353</div></div><div><div>AR13</div><div>VSS 256</div><div>VSS 354</div></div><div><div>AR13</div><div>VSS 257</div><div>VSS 355</div></div><div><div>AR13</div><div>VSS 258</div><div>VSS 356</div></div><div><div>AR13</div><div>VSS 259</div><div>VSS 357</div></div><div><div>AR13</div><div>VSS 260</div><div>VSS 358</div></div><div><div>AR13</div><div>VSS 261</div><div>VSS 359</div></div><div><div>AR13</div><div>VSS 262</div><div>VSS 360</div></div><div><div>AR13</div><div>VSS 263</div><div>VSS 361</div></div><div><div>AR13</div><div>VSS 264</div><div>VSS 362</div></div><div><div>AR13</div><div>VSS 265</div><div>VSS 363</div></div><div><div>AR13</div><div>VSS 266</div><div>VSS 364</div></div><div><div>AR13</div><div>VSS 267</div><div>VSS 365</div></div><div><div>AR13</div><div>VSS 268</div><div>VSS 366</div></div><div><div>AR13</div><div>VSS 269</div><div>VSS 367</div></div><div><div>AR13</div><div>VSS 270</div><div>VSS 368</div></div><div><div>AR13</div><div>VSS 271</div><div>VSS 369</div></div><div><div>AR13</div><div>VSS 272</div><div>VSS 370</div></div><div><div>AR13</div><div>VSS 273</div><div>VSS 371</div></div><div><div>AR13</div><div>VSS 274</div><div>VSS 372</div></div><div><div>AR13</div><div>VSS 275</div><div>VSS 373</div></div><div><div>AR13</div><div>VSS 276</div><div>VSS 374</div></div><div><div>AR13</div><div>VSS 277</div><div>VSS 375</div></div><div><div>AR13</div><div>VSS 278</div><div>VSS 376</div></div><div><div>AR13</div><div>VSS 279</div><div>VSS 377</div></div><div><div>AR13</div><div>VSS 280</div><div>VSS 378</div></div><div><div>AR13</div><div>VSS 281</div><div>VSS 379</div></div><div><div>AR13</div><div>VSS 282</div><div>VSS 380</div></div><div><div>AR13</div><div>VSS 283</div><div>VSS 381</div></div><div><div>AR13</div><div>VSS 284</div><div>VSS 382</div></div><div><div>AR13</div><div>VSS 285</div><div>VSS 383</div></div><div><div>AR13</div><div>VSS 286</div><div>VSS 384</div></div><div><div>AR13</div><div>VSS 287</div><div>VSS 385</div></div><div><div>AR13</div><div>VSS 288</div><div>VSS 386</div></div><div><div>AR13</div><div>VSS 289</div><div>VSS 387</div></div><div><div>AR13</div><div>VSS 290</div><div>VSS 388</div></div><div><div>AR13</div><div>VSS 291</div><div>VSS 389</div></div><div><div>AR13</div><div>VSS 292</div><div>VSS 390</div></div><div><div>AR13</div><div>VSS 293</div><div>VSS 391</div></div><div><div>AR13</div><div>VSS 294</div><div>VSS 392</div></div><div><div>AR13</div><div>VSS 295</div><div>VSS 393</div></div><div><div>AR13</div><div>VSS 296</div><div>VSS 394</div></div></div> <div><div>ITL_CANTIGA_GM_FCBGA_1329P</div></div>		<div><div>U7-9</div><div><div>AR9</div><div>VSS 297</div><div>VSS 395</div></div><div><div>V9</div><div>VSS 298</div><div>VSS 396</div></div><div><div>V9</div><div>VSS 299</div><div>VSS 397</div></div><div><div>V9</div><div>VSS 300</div><div>VSS 398</div></div><div><div>V9</div><div>VSS 301</div><div>VSS 399</div></div><div><div>V9</div><div>VSS 302</div><div>VSS 400</div></div><div><div>V9</div><div>VSS 303</div><div>VSS 401</div></div><div><div>V9</div><div>VSS 304</div><div>VSS 402</div></div><div><div>V9</div><div>VSS 305</div><div>VSS 403</div></div><div><div>V9</div><div>VSS 306</div><div>VSS 404</div></div><div><div>V9</div><div>VSS 307</div><div>VSS 405</div></div><div><div>V9</div><div>VSS 308</div><div>VSS 406</div></div><div><div>V9</div><div>VSS 309</div><div>VSS 407</div></div><div><div>V9</div><div>VSS 310</div><div>VSS 408</div></div><div><div>V9</div><div>VSS 311</div><div>VSS 409</div></div><div><div>V9</div><div>VSS 312</div><div>VSS 410</div></div><div><div>V9</div><div>VSS 313</div><div>VSS 411</div></div><div><div>V9</div><div>VSS 314</div><div>VSS 412</div></div><div><div>V9</div><div>VSS 315</div><div>VSS 413</div></div><div><div>V9</div><div>VSS 316</div><div>VSS 414</div></div><div><div>V9</div><div>VSS 317</div><div>VSS 415</div></div><div><div>V9</div><div>VSS 318</div><div>VSS 416</div></div><div><div>V9</div><div>VSS 319</div><div>VSS 417</div></div><div><div>V9</div><div>VSS 320</div><div>VSS 418</div></div><div><div>V9</div><div>VSS 321</div><div>VSS 419</div></div><div><div>V9</div><div>VSS 322</div><div>VSS 420</div></div><div><div>V9</div><div>VSS 323</div><div>VSS 421</div></div><div><div>V9</div><div>VSS 324</div><div>VSS 422</div></div><div><div>V9</div><div>VSS 325</div><div>VSS 423</div></div><div><div>V9</div><div>VSS 326</div><div>VSS 424</div></div><div><div>V9</div><div>VSS 327</div><div>VSS 425</div></div><div><div>V9</div><div>VSS 328</div><div>VSS 426</div></div><div><div>V9</div><div>VSS 329</div><div>VSS 427</div></div><div><div>V9</div><div>VSS 330</div><div>VSS 428</div></div><div><div>V9</div><div>VSS 331</div><div>VSS 429</div></div><div><div>V9</div><div>VSS 332</div><div>VSS 430</div></div><div><div>V9</div><div>VSS 333</div><div>VSS 431</div></div><div><div>V9</div><div>VSS 334</div><div>VSS 432</div></div><div><div>V9</div><div>VSS 335</div><div>VSS 433</div></div><div><div>V9</div><div>VSS 336</div><div>VSS 434</div></div><div><div>V9</div><div>VSS 337</div><div>VSS 435</div></div><div><div>V9</div><div>VSS 338</div><div>VSS 436</div></div><div><div>V9</div><div>VSS 339</div><div>VSS 437</div></div><div><div>V9</div><div>VSS 340</div><div>VSS 438</div></div><div><div>V9</div><div>VSS 341</div><div>VSS 439</div></div><div><div>V9</div><div>VSS 342</div><div>VSS 440</div></div><div><div>V9</div><div>VSS 343</div><div>VSS 441</div></div><div><div>V9</div><div>VSS 344</div><div>VSS 442</div></div><div><div>V9</div><div>VSS 345</div><div>VSS 443</div></div><div><div>V9</div><div>VSS 346</div><div>VSS 444</div></div><div><div>V9</div><div>VSS 347</div><div>VSS 445</div></div><div><div>V9</div><div>VSS 348</div><div>VSS 446</div></div><div><div>V9</div><div>VSS 349</div><div>VSS 447</div></div><div><div>V9</div><div>VSS 350</div><div>VSS 448</div></div><div><div>V9</div><div>VSS 351</div><div>VSS 449</div></div><div><div>V9</div><div>VSS 352</div><div>VSS 450</div></div><div><div>V9</div><div>VSS 353</div><div>VSS 451</div></div><div><div>V9</div><div>VSS 354</div><div>VSS 452</div></div><div><div>V9</div><div>VSS 355</div><div>VSS 453</div></div><div><div>V9</div><div>VSS 356</div><div>VSS 454</div></div><div><div>V9</div><div>VSS 357</div><div>VSS 455</div></div><div><div>V9</div><div>VSS 358</div><div>VSS 456</div></div><div><div>V9</div><div>VSS 359</div><div>VSS 457</div></div><div><div>V9</div><div>VSS 360</div><div>VSS 458</div></div><div><div>V9</div><div>VSS 361</div><div>VSS 459</div></div><div><div>V9</div><div>VSS 362</div><div>VSS 460</div></div><div><div>V9</div><div>VSS 363</div><div>VSS 461</div></div><div><div>V9</div><div>VSS 364</div><div>VSS 462</div></div><div><div>V9</div><div>VSS 365</div><div>VSS 463</div></div><div><div>V9</div><div>VSS 366</div><div>VSS 464</div></div><div><div>V9</div><div>VSS 367</div><div>VSS 465</div></div><div><div>V9</div><div>VSS 368</div><div>VSS 466</div></div><div><div>V9</div><div>VSS 369</div><div>VSS 467</div></div><div><div>V9</div><div>VSS 370</div><div>VSS 468</div></div><div><div>V9</div><div>VSS 371</div><div>VSS 469</div></div><div><div>V9</div><div>VSS 372</div><div>VSS 470</div></div><div><div>V9</div><div>VSS 373</div><div>VSS 471</div></div><div><div>V9</div><div>VSS 374</div><div>VSS 472</div></div><div><div>V9</div><div>VSS 375</div><div>VSS 473</div></div><div><div>V9</div><div>VSS 376</div><div>VSS 474</div></div><div><div>V9</div><div>VSS 377</div><div>VSS 475</div></div><div><div>V9</div><div>VSS 378</div><div>VSS 476</div></div><div><div>V9</div><div>VSS 379</div><div>VSS 477</div></div><div><div>V9</div><div>VSS 380</div><div>VSS 478</div></div><div><div>V9</div><div>VSS 381</div><div>VSS 479</div></div><div><div>V9</div><div>VSS 382</div><div>VSS 480</div></div><div><div>V9</div><div>VSS 383</div><div>VSS 481</div></div><div><div>V9</div><div>VSS 384</div><div>VSS 482</div></div><div><div>V9</div><div>VSS 385</div><div>VSS 483</div></div><div><div>V9</div><div>VSS 386</div><div>VSS 484</div></div><div><div>V9</div><div>VSS 387</div><div>VSS 485</div></div><div><div>V9</div><div>VSS 388</div><div>VSS 486</div></div><div><div>V9</div><div>VSS 389</div><div>VSS 487</div></div><div><div>V9</div><div>VSS 390</div><div>VSS 488</div></div><div><div>V9</div><div>VSS 391</div><div>VSS 489</div></div><div><div>V9</div><div>VSS 392</div><div>VSS 490</div></div><div><div>V9</div><div>VSS 393</div><div>VSS 491</div></div><div><div>V9</div><div>VSS 394</div><div>VSS 492</div></div><div><div>V9</div><div>VSS 395</div><div>VSS 493</div></div><div><div>V9</div><div>VSS 396</div><div>VSS 494</div></div><div><div>V9</div><div>VSS 397</div><div>VSS 495</div></div><div><div>V9</div><div>VSS 398</div><div>VSS 496</div></div><div><div>V9</div><div>VSS 399</div><div>VSS 497</div></div></div> <div><div>ITL_CANTIGA_GM_FCBGA_1329P</div></div>		<div><div>U7-10</div><div><div>AR9</div><div>VSS 297</div><div>VSS 395</div></div><div><div>V9</div><div>VSS 298</div><div>VSS 396</div></div><div><div>V9</div><div>VSS 299</div><div>VSS 397</div></div><div><div>V9</div><div>VSS 300</div><div>VSS 398</div></div><div><div>V9</div><div>VSS 301</div><div>VSS 399</div></div><div><div>V9</div><div>VSS 302</div><div>VSS 400</div></div><div><div>V9</div><div>VSS 303</div><div>VSS 401</div></div><div><div>V9</div><div>VSS 304</div><div>VSS 402</div></div><div><div>V9</div><div>VSS 305</div><div>VSS 403</div></div><div><div>V9</div><div>VSS 306</div><div>VSS 404</div></div><div><div>V9</div><div>VSS 307</div><div>VSS 405</div></div><div><div>V9</div><div>VSS 308</div><div>VSS 406</div></div><div><div>V9</div><div>VSS 309</div><div>VSS 407</div></div><div><div>V9</div><div>VSS 310</div><div>VSS 408</div></div><div><div>V9</div><div>VSS 311</div><div>VSS 409</div></div><div><div>V9</div><div>VSS 312</div><div>VSS 410</div></div><div><div>V9</div><div>VSS 313</div><div>VSS 411</div></div><div><div>V9</div><div>VSS 314</div><div>VSS 412</div></div><div><div>V9</div><div>VSS 315</div><div>VSS 413</div></div><div><div>V9</div><div>VSS 316</div><div>VSS 414</div></div><div><div>V9</div><div>VSS 317</div><div>VSS 415</div></div><div><div>V9</div><div>VSS 318</div><div>VSS 416</div></div><div><div>V9</div><div>VSS 319</div><div>VSS 417</div></div><div><div>V9</div><div>VSS 320</div><div>VSS 418</div></div><div><div>V9</div><div>VSS 321</div><div>VSS 419</div></div><div><div>V9</div><div>VSS 322</div><div>VSS 420</div></div><div><div>V9</div><div>VSS 323</div><div>VSS 421</div></div><div><div>V9</div><div>VSS 324</div><div>VSS 422</div></div><div><div>V9</div><div>VSS 325</div><div>VSS 423</div></div><div><div>V9</div><div>VSS 326</div><div>VSS 424</div></div><div><div>V9</div><div>VSS 327</div><div>VSS 425</div></div><div><div>V9</div><div>VSS 328</div><div>VSS 426</div></div><div><div>V9</div><div>VSS 329</div><div>VSS 427</div></div><div><div>V9</div><div>VSS 330</div><div>VSS 428</div></div><div><div>V9</div><div>VSS 331</div><div>VSS 429</div></div><div><div>V9</div><div>VSS 332</div><div>VSS 430</div></div><div><div>V9</div><div>VSS 333</div><div>VSS 431</div></div><div><div>V9</div><div>VSS 334</div><div>VSS 432</div></div><div><div>V9</div><div>VSS 335</div><div>VSS 433</div></div><div><div>V9</div><div>VSS 336</div><div>VSS 434</div></div><div><div>V9</div><div>VSS 337</div><div>VSS 435</div></div><div><div>V9</div><div>VSS 338</div><div>VSS 436</div></div><div><div>V9</div><div>VSS 339</div><div>VSS 437</div></div><div><div>V9</div><div>VSS 340</div><div>VSS 438</div></div><div><div>V9</div><div>VSS 341</div><div>VSS 439</div></div><div><div>V9</div><div>VSS 342</div><div>VSS 440</div></div><div><div>V9</div><div>VSS 343</div><div>VSS 441</div></div><div><div>V9</div><div>VSS 344</div><div>VSS 442</div></div><div><div>V9</div><div>VSS 345</div><div>VSS 443</div></div><div><div>V9</div><div>VSS 346</div><div>VSS 444</div></div><div><div>V9</div><div>VSS 347</div><div>VSS 445</div></div><div><div>V9</div><div>VSS 348</div><div>VSS 446</div></div><div><div>V9</div><div>VSS 349</div><div>VSS 447</div></div><div><div>V9</div><div>VSS 350</div><div>VSS 448</div></div><div><div>V9</div><div>VSS 351</div><div>VSS 449</div></div><div><div>V9</div><div>VSS 352</div><div>VSS 450</div></div><div><div>V9</div><div>VSS 353</div><div>VSS 451</div></div><div><div>V9</div><div>VSS 354</div><div>VSS 452</div></div><div><div>V9</div><div>VSS 355</div><div>VSS 453</div></div><div><div>V9</div><div>VSS 356</div><div>VSS 454</div></div><div><div>V9</div><div>VSS 357</div><div>VSS 455</div></div><div><div>V9</div><div>VSS 358</div><div>VSS 456</div></div><div><div>V9</div><div>VSS 359</div><div>VSS 457</div></div><div><div>V9</div><div>VSS 360</div><div>VSS 458</div></div><div><div>V9</div><div>VSS 361</div><div>VSS 459</div></div><div><div>V9</div><div>VSS 362</div><div>VSS 460</div></div><div><div>V9</div><div>VSS 363</div><div>VSS 461</div></div><div><div>V9</div><div>VSS 364</div><div>VSS 462</div></div><div><div>V9</div><div>VSS 365</div><div>VSS 463</div></div><div><div>V9</div><div>VSS 366</div><div>VSS 464</div></div><div><div>V9</div><div>VSS 367</div><div>VSS 465</div></div><div><div>V9</div><div>VSS 368</div><div>VSS 466</div></div><div><div>V9</div><div>VSS 369</div><div>VSS 467</div></div><div><div>V9</div><div>VSS 370</div><div>VSS 468</div></div><div><div>V9</div><div>VSS 371</div><div>VSS 469</div></div><div><div>V9</div><div>VSS 372</div><div>VSS 470</div></div><div><div>V9</div><div>VSS 373</div><div>VSS 471</div></div><div><div>V9</div><div>VSS 374</div><div>VSS 472</div></div><div><div>V9</div><div>VSS 375</div><div>VSS 473</div></div><div><div>V9</div><div>VSS 376</div><div>VSS 474</div></div><div><div>V9</div><div>VSS 377</div><div>VSS 475</div></div><div><div>V9</div><div>VSS 378</div><div>VSS 476</div></div><div><div>V9</div><div>VSS 379</div><div>VSS 477</div></div><div><div>V9</div><div>VSS 380</div><div>VSS 478</div></div><div><div>V9</div><div>VSS 381</div><div>VSS 479</div></div><div><div>V9</div><div>VSS 382</div><div>VSS 480</div></div><div><div>V9</div><div>VSS 383</div><div>VSS 481</div></div><div><div>V9</div><div>VSS 384</div><div>VSS 482</div></div><div><div>V9</div><div>VSS 385</div><div>VSS 483</div></div><div><div>V9</div><div>VSS 386</div><div>VSS 484</div></div><div><div>V9</div><div>VSS 387</div><div>VSS 485</div></div><div><div>V9</div><div>VSS 388</div><div>VSS 486</div></div><div><div>V9</div><div>VSS 389</div><div>VSS 487</div></div><div><div>V9</div><div>VSS 390</div><div>VSS 488</div></div><div><div>V9</div><div>VSS 391</div><div>VSS 489</div></div><div><div>V9</div><div>VSS 392</div><div>VSS 490</div></div><div><div>V9</div><div>VSS 393</div><div>VSS 491</div></div><div><div>V9</div><div>VSS 394</div><div>VSS 492</div></div></div>



	1	2	3	4	5	6	7	8	
A									A
B									B
C									C
D									D
E									E
F									F
						CHANGE by <i>Erie Lal</i>		27-Sep-2003	
1	2	3	4	5	6	7	8		

INVENTEC

TITLE
Perugia 10MG DDR3
DDR2-DAMPING

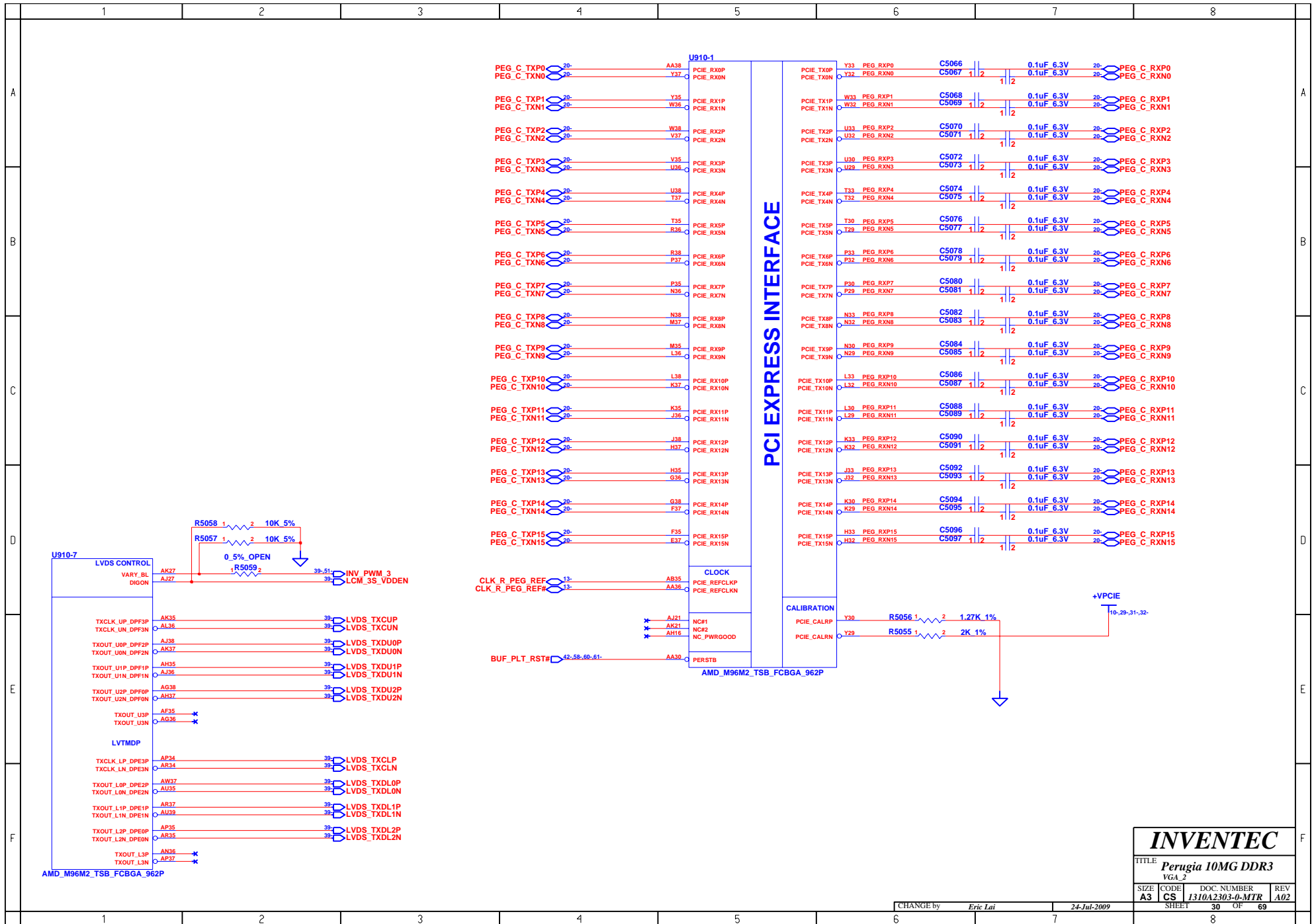
SIZE
A3

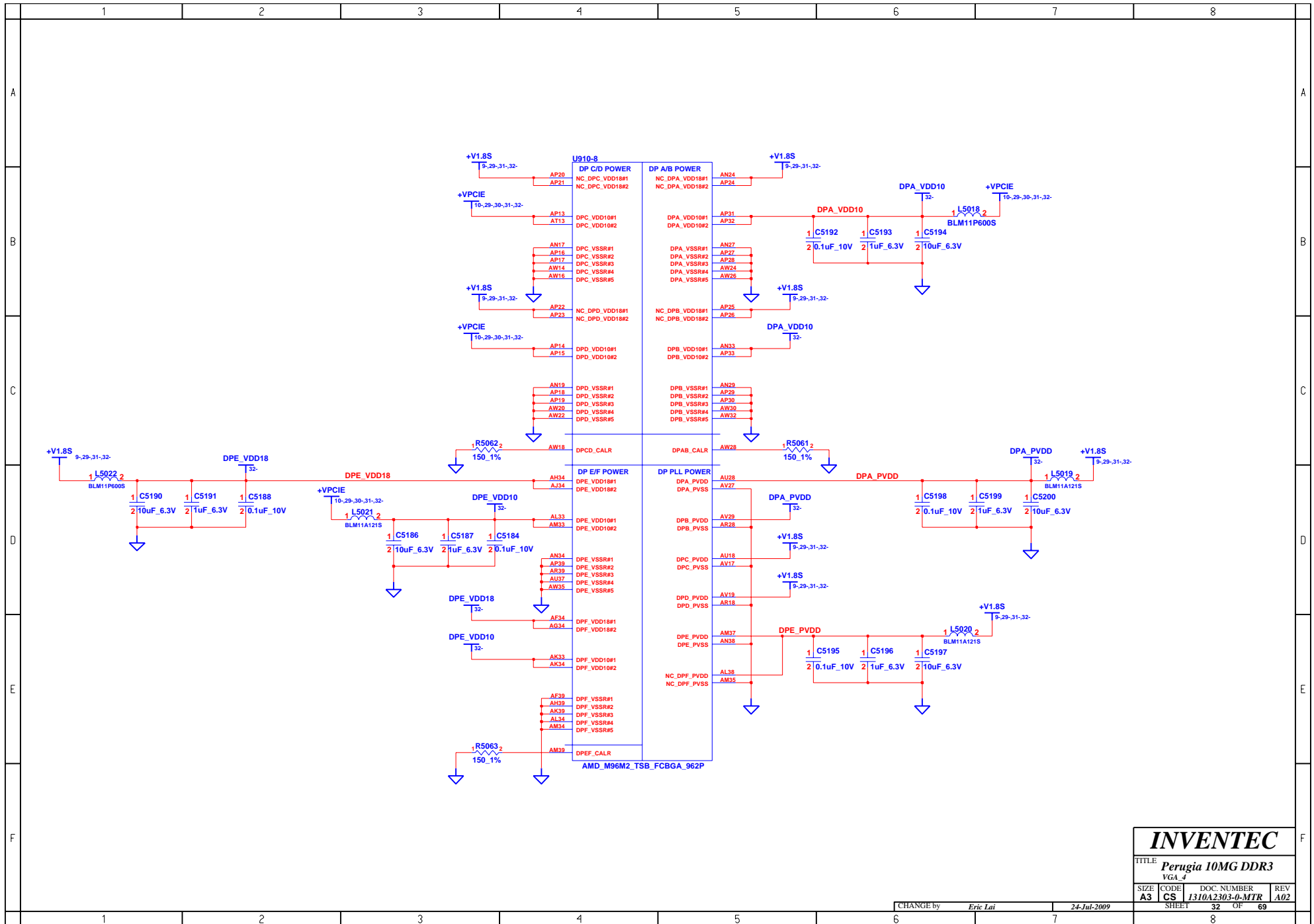
CODE
CS

DOC. NUMBER
I310A2303-0-MTR

REV
A02

SHEET 28 OF 69



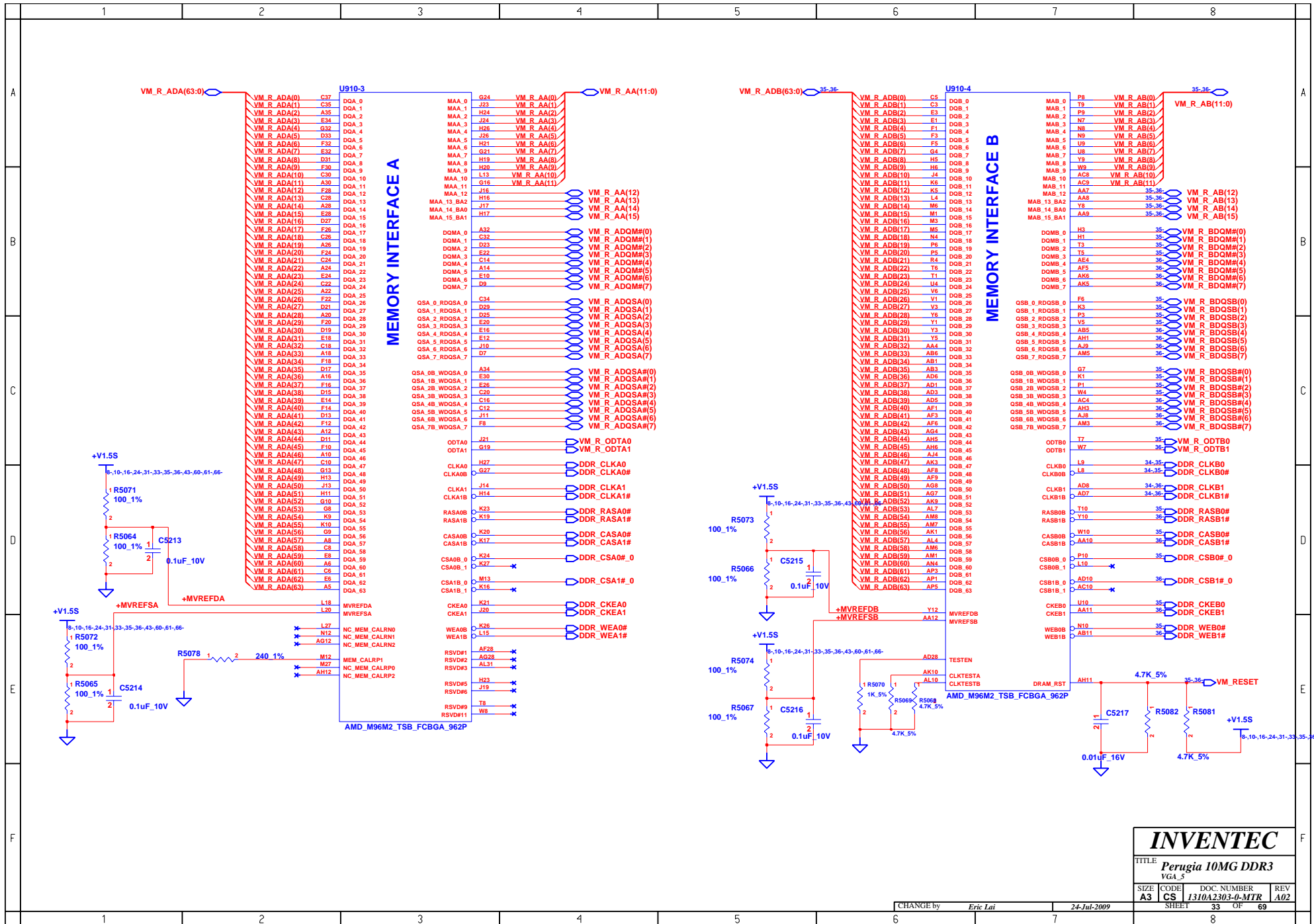


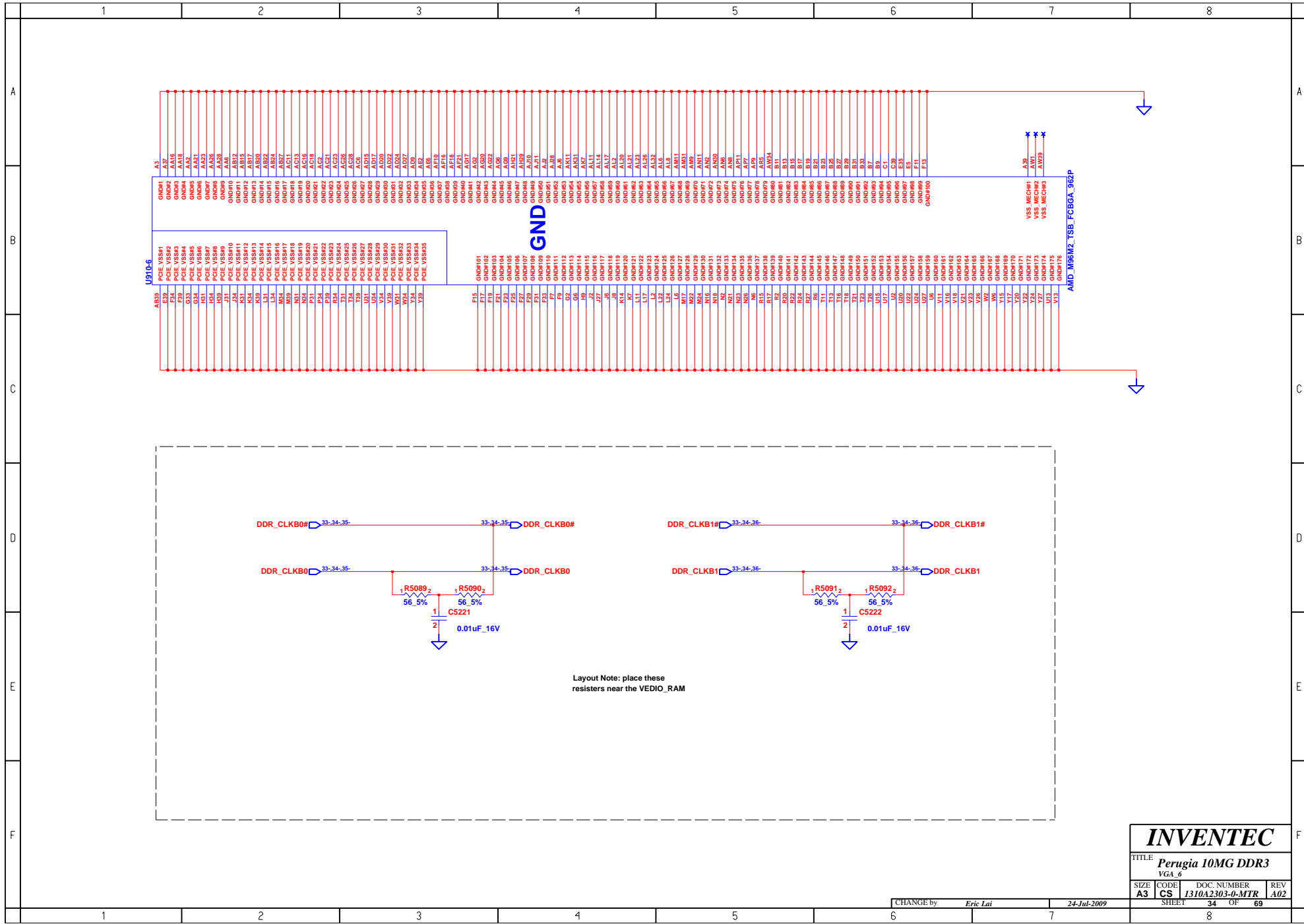
INVENTEC

TITLE			
VGA_4			
Perugia 10MG DDR3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 32 OF 69





INVENTEC

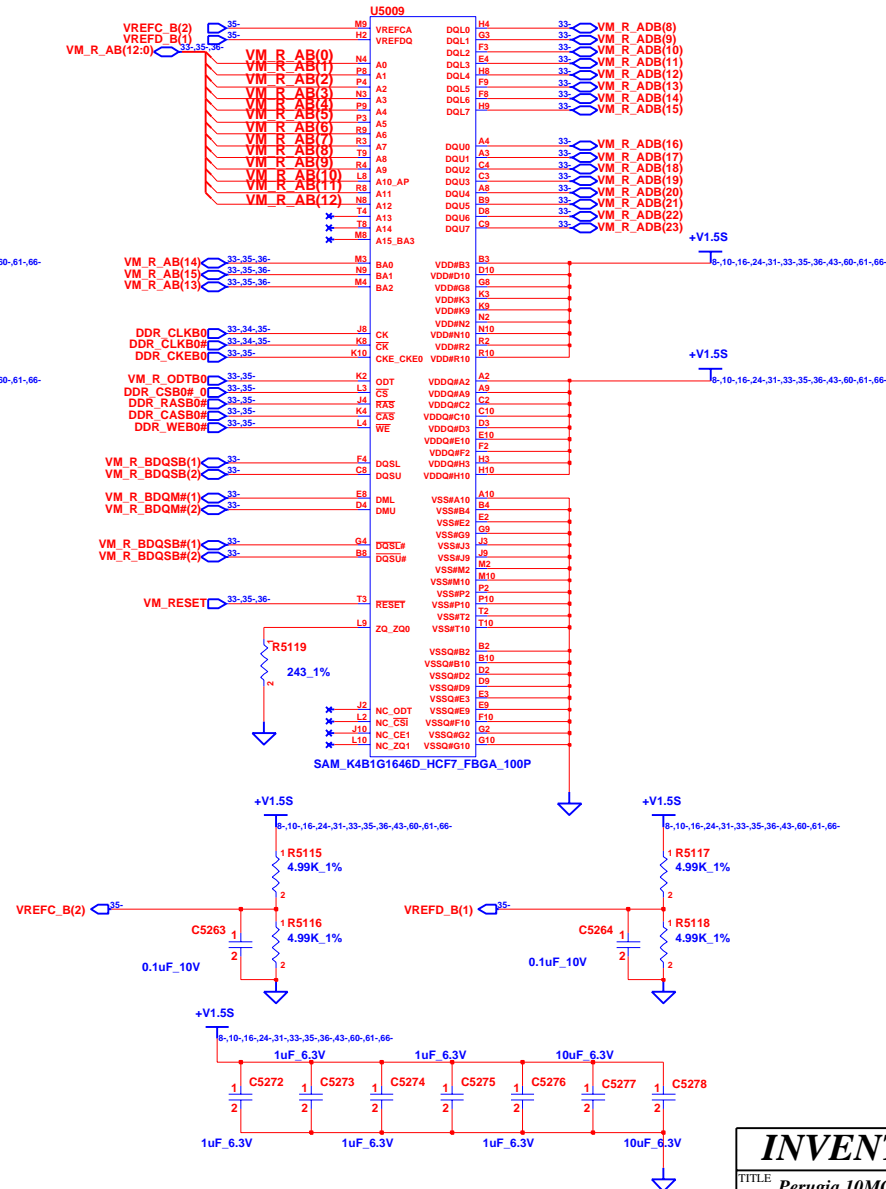
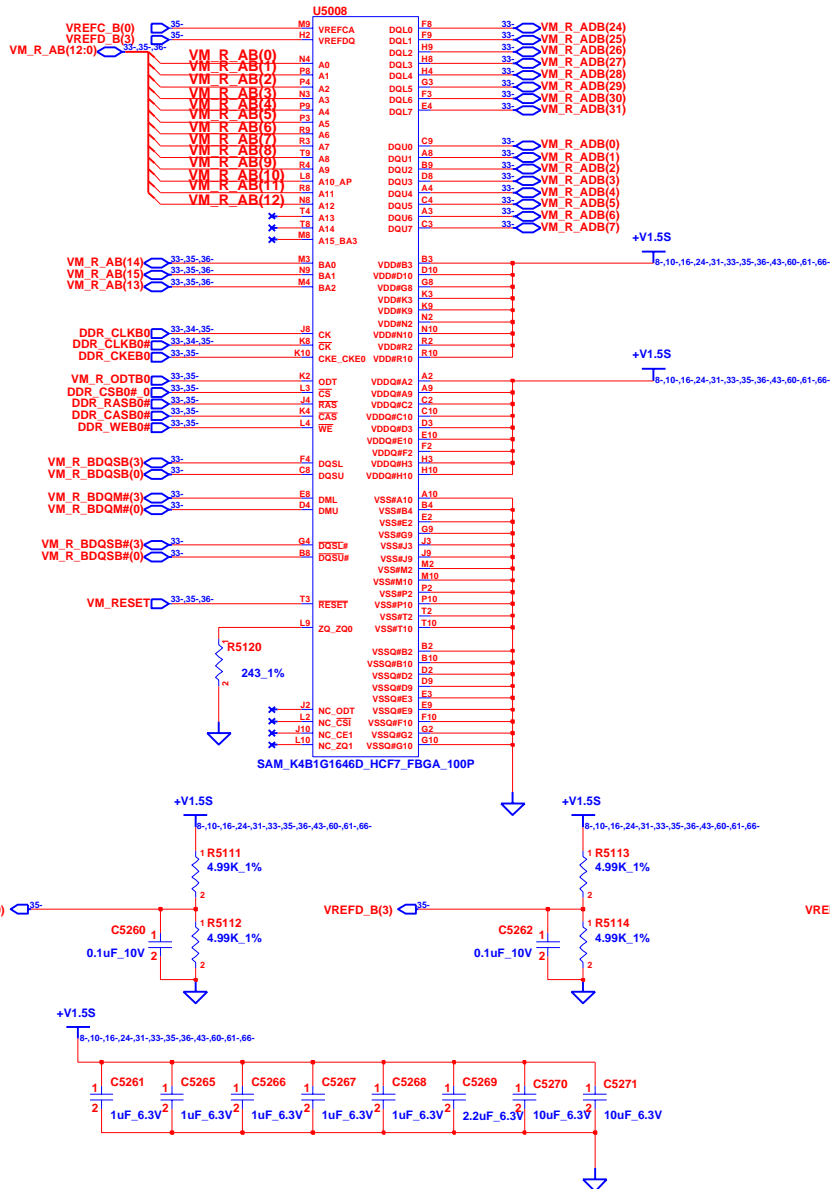
TITLE
Perugia 10MG DDR3
VGA_6

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 34 OF 69

M92 Use channel B



INVENTEC

TITLE: **Perugia 10MG DDR3**

VRAM_0

SIZE CODE DOC. NUMBER REV
A3 CS 1310A2303-0-MTR A02

CHANGE by Eric Lai 24-Jul-2009

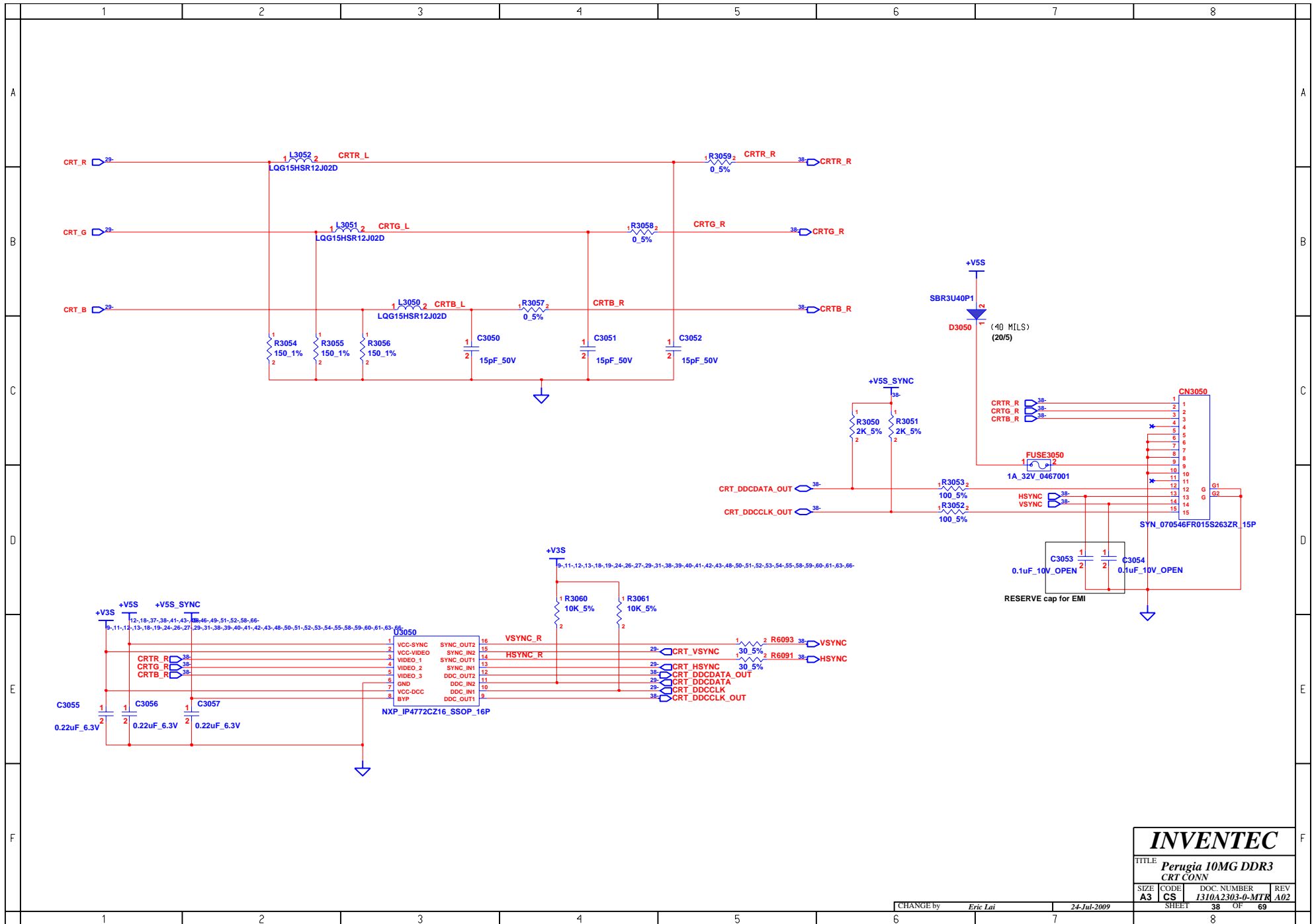
SHEET 35 OF 69

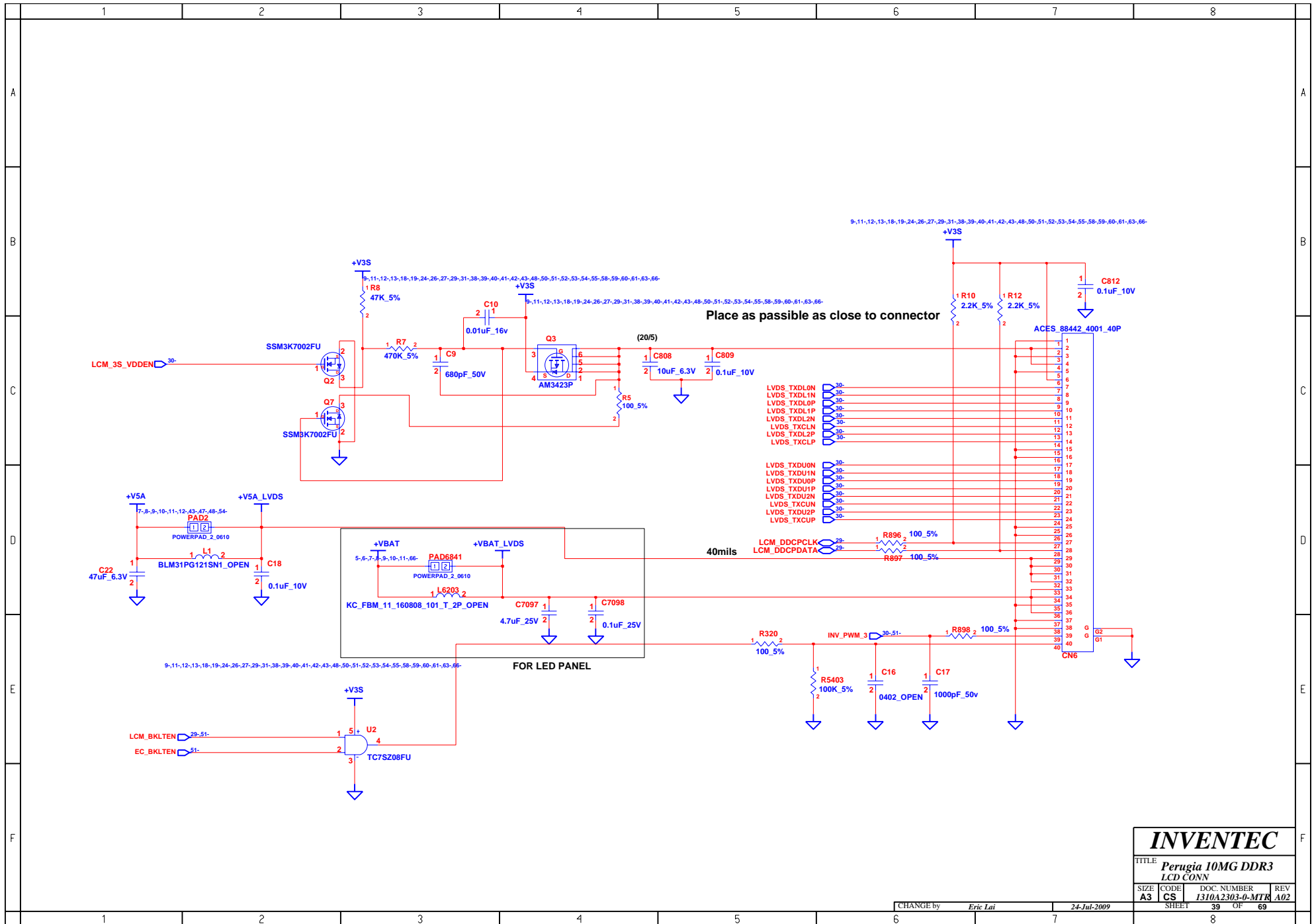
M92 Use channel B

The diagram illustrates the PCB layout for the M92 Use channel B, featuring two channels, U5010 and U5011. Each channel includes a connector (M92) and a series of components (resistors, capacitors, and connectors) connected to the board. The layout is organized into two main sections, one for each channel, with a central area for common components and power planes.

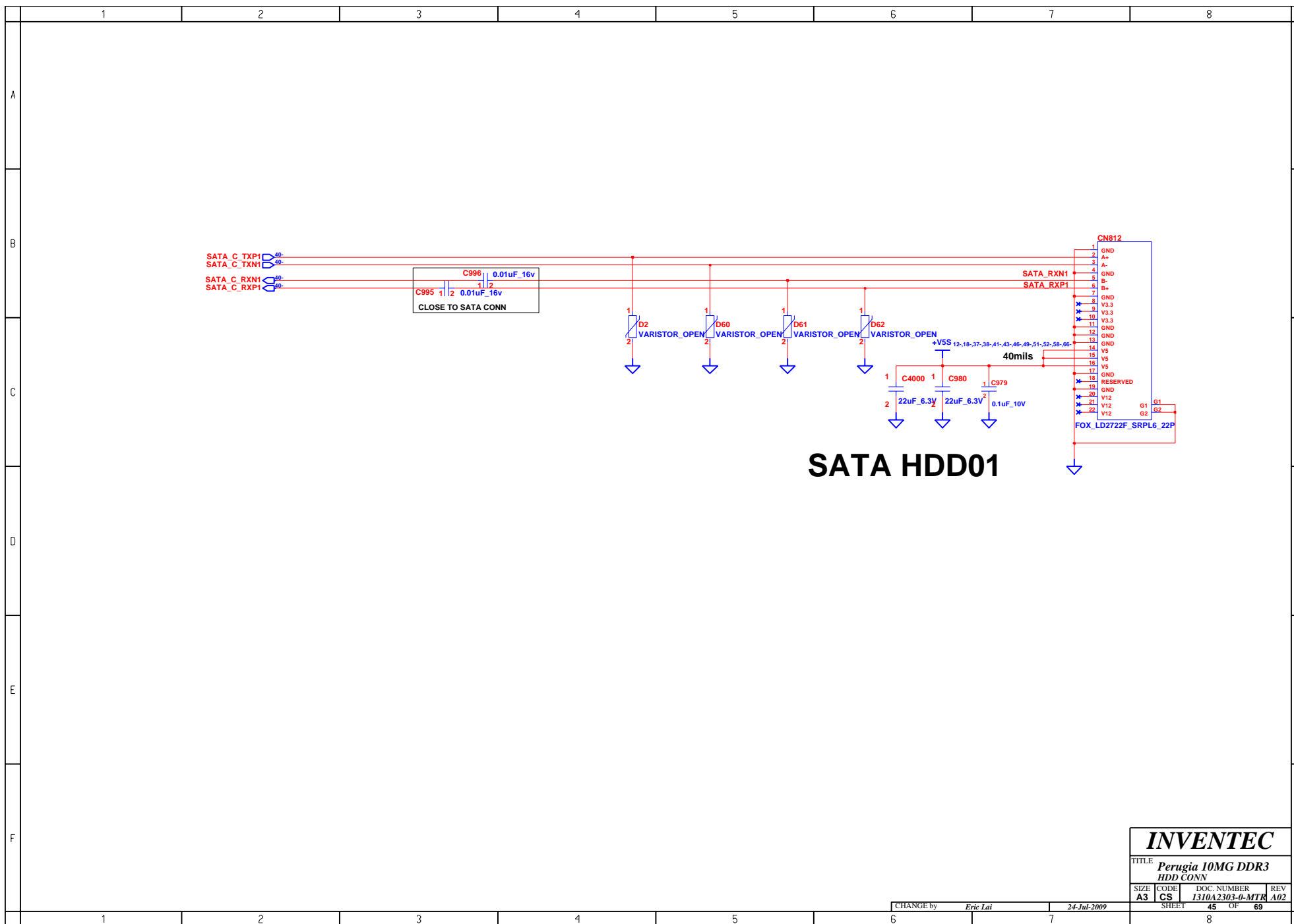
Channel U5010:

- Connector: M92 (33-35-36)
- Resistors: R5121, R5122, R5123, R5124, R5125, R5126, R5127, R5128, R5129, R5130, R5131, R5132, R5133, R5134, R5135, R5136, R5137, R5138, R5139, R5140, R5141, R5142, R5143, R5144, R5145, R5146, R5147, R5148, R5149, R5150, R5151, R5152, R5153, R5154, R5155, R5156, R5157, R5158, R5159, R5160, R5161, R5162, R5163, R5164, R5165, R5166, R5167, R5168, R5169, R5170, R5171, R5172, R5173, R5174, R5175, R5176, R5177, R5178, R5179, R5180, R5181, R5182, R5183, R5184, R5185, R5186, R5187, R5188, R5189, R5190, R5191, R5192, R5193, R5194, R5195, R5196, R5197, R5198, R5199, R5200, R5201, R5202, R5203, R5204, R5205, R5206, R5207, R5208, R5209, R5210, R5211, R5212, R5213, R5214, R5215, R5216, R5217, R5218, R5219, R5220, R5221, R5222, R5223, R5224, R5225, R5226, R5227, R5228, R5229, R5230, R5231, R5232, R5233, R5234, R5235, R5236, R5237, R5238, R5239, R5240, R5241, R5242, R5243, R5244, R5245, R5246, R5247, R5248, R5249, R5250, R5251, R5252, R5253, R5254, R5255, R5256, R5257, R5258, R5259, R5260, R5261, R5262, R5263, R5264, R5265, R5266, R5267, R5268, R5269, R5270, R5271, R5272, R5273, R5274, R5275, R5276, R5277, R5278, R5279, R5280, R5281, R5282, R5283, R5284, R5285, R5286, R5287, R5288, R5289, R5290, R5291, R5292, R5293, R5294, R5295, R5296, R5297, R5298, R5299, R5300, R5301, R5302, R5303, R5304, R5305, R5306, R5307, R5308, R5309, R5310, R5311, R5312, R5313, R5314, R5315, R5316, R5317, R5318, R5319, R5320, R5321, R5322, R5323, R5324, R5325, R5326, R5327, R5328, R5329, R5330, R5331, R5332, R5333, R5334, R5335, R5336, R5337, R5338, R5339, R5340, R5341, R5342, R5343, R5344, R5345, R5346, R5347, R5348, R5349, R5350, R5351, R5352, R5353, R5354, R5355, R5356, R5357, R5358, R5359, R5360, R5361, R5362, R5363, R5364, R5365, R5366, R5367, R5368, R5369, R5370, R5371, R5372, R5373, R5374, R5375, R5376, R5377, R5378, R5379, R5380, R5381, R5382, R5383, R5384, R5385, R5386, R5387, R5388, R5389, R5390, R5391, R5392, R5393, R5394, R5395, R5396, R5397, R5398, R5399, R5400, R5401, R5402, R5403, R5404, R5405, R5406, R5407, R5408, R5409, R5410, R5411, R5412, R5413, R5414, R5415, R5416, R5417, R5418, R5419, R5420, R5421, R5422, R5423, R5424, R5425, R5426, R5427, R5428, R5429, R5430, R5431, R5432, R5433, R5434, R5435, R5436, R5437, R5438, R5439, R5440, R5441, R5442, R5443, R5444, R5445, R5446, R5447, R5448, R5449, R5450, R5451, R5452, R5453, R5454, R5455, R5456, R5457, R5458, R5459, R5460, R5461, R5462, R5463, R5464, R5465, R5466, R5467, R5468, R5469, R5470, R5471, R5472, R5473, R5474, R5475, R5476, R5477, R5478, R5479, R5480, R5481, R5482, R5483, R5484, R5485, R5486, R5487, R5488, R5489, R5490, R5491, R5492, R5493, R5494, R5495, R5496, R5497, R5498, R5499, R5500, R5501, R5502, R5503, R5504, R5505, R5506, R5507, R5508, R5509, R5510, R5511, R5512, R5513, R5514, R5515, R5516, R5517, R5518, R5519, R5520, R5521, R5522, R5523, R5524, R5525, R5526, R5527, R5528, R5529, R5530, R5531, R5532, R5533, R5534, R5535, R5536, R5537, R5538, R5539, R5540, R5541, R5542, R5543, R5544, R5545, R5546, R5547, R5548, R5549, R5550, R5551, R5552, R5553, R5554, R5555, R5556, R5557, R5558, R5559, R5560, R5561, R5562, R5563, R5564, R5565, R5566, R5567, R5568, R5569, R5570, R5571, R5572, R5573, R5574, R5575, R5576, R5577, R5578, R5579, R5580, R5581, R5582, R5583, R5584, R5585, R5586, R5587, R5588, R5589, R5590, R5591, R5592, R5593, R5594, R5595, R5596, R5597, R5598, R5599, R5600, R5601, R5602, R5603, R5604, R5605, R5606, R5607, R5608, R5609, R5610, R5611, R5612, R5613, R5614, R5615, R5616, R5617, R5618, R5619, R5620, R5621, R5622, R5623, R5624, R5625, R5626, R5627, R5628, R5629, R5630, R5631, R5632, R5633, R5634, R5635, R5636, R5637, R5638, R5639, R5640, R5641, R5642, R5643, R5644, R5645, R5646, R5647, R5648, R5649, R5650, R5651, R5652, R5653, R5654, R5655, R5656, R5657, R5658, R5659, R5660, R5661, R5662, R5663, R5664, R5665, R5666, R5667, R5668, R5669, R5670, R5671, R5672, R5673, R5674, R5675, R5676, R5677, R5678, R5679, R5680, R5681, R5682, R5683, R5684, R5685, R5686, R5687, R5688, R5689, R5690, R5691, R5692, R5693, R5694, R5695, R5696, R5697, R5698, R5699, R5700, R5701, R5702, R5703, R5704, R5705, R5706, R5707, R5708, R5709, R5710, R5711, R5712, R5713, R5714, R5715, R5716, R5717, R5718, R5719, R5720, R5721, R5722, R5723, R5724, R5725, R5726, R5727, R5728, R5729, R5730, R5731, R5732, R5733, R5734, R5735, R5736, R5737, R5738, R5739, R5740, R5741, R5742, R5743, R5744, R5745, R5746, R5747, R5748, R5749, R5750, R5751, R5752, R5753, R5754, R5755, R5756, R5757, R5758, R5759, R5760, R5761, R5762, R5763, R5764, R5765, R5766, R5767, R5768, R5769, R5770, R5771, R5

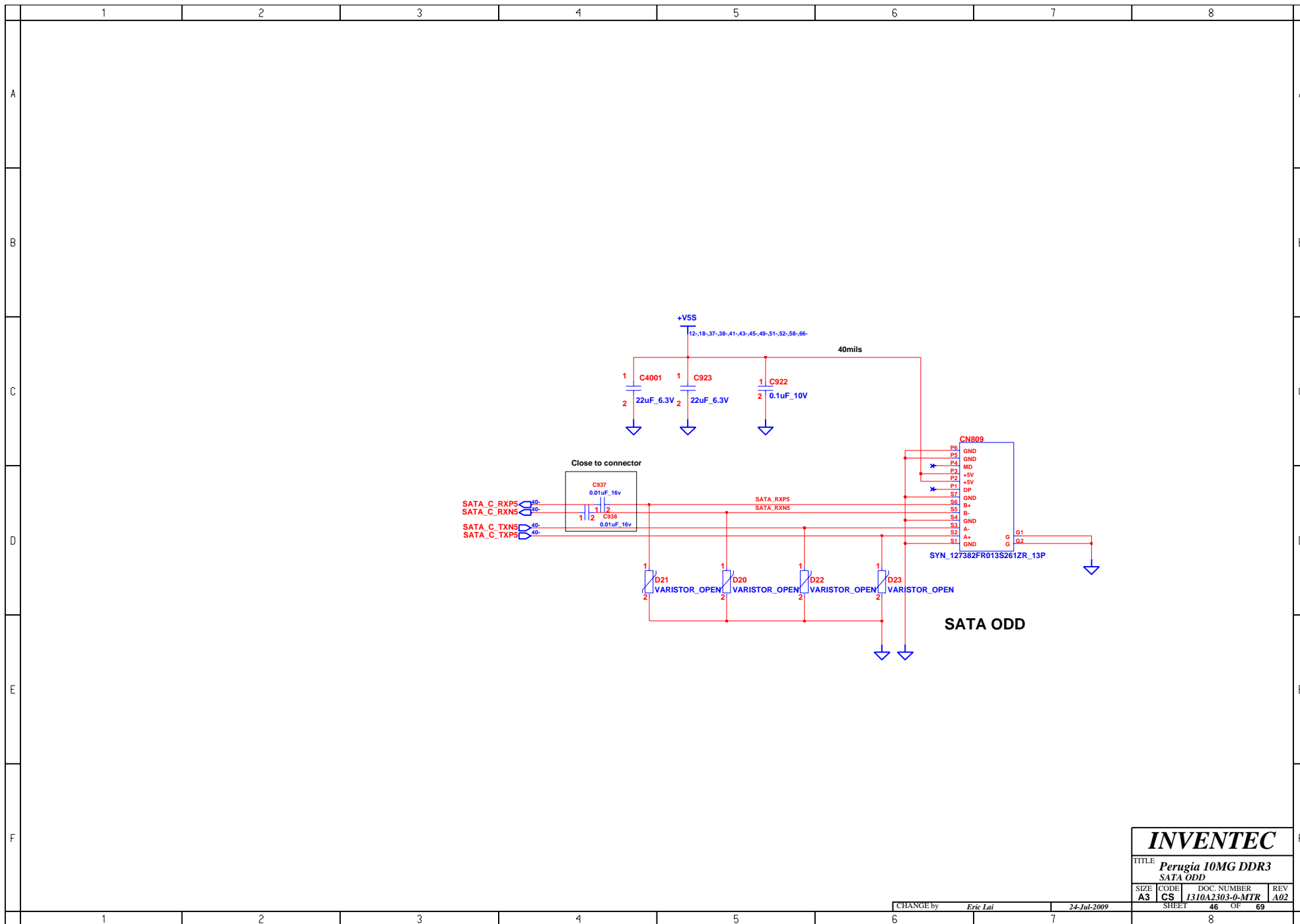




	1	2	3	4	5	6	7	8
A								

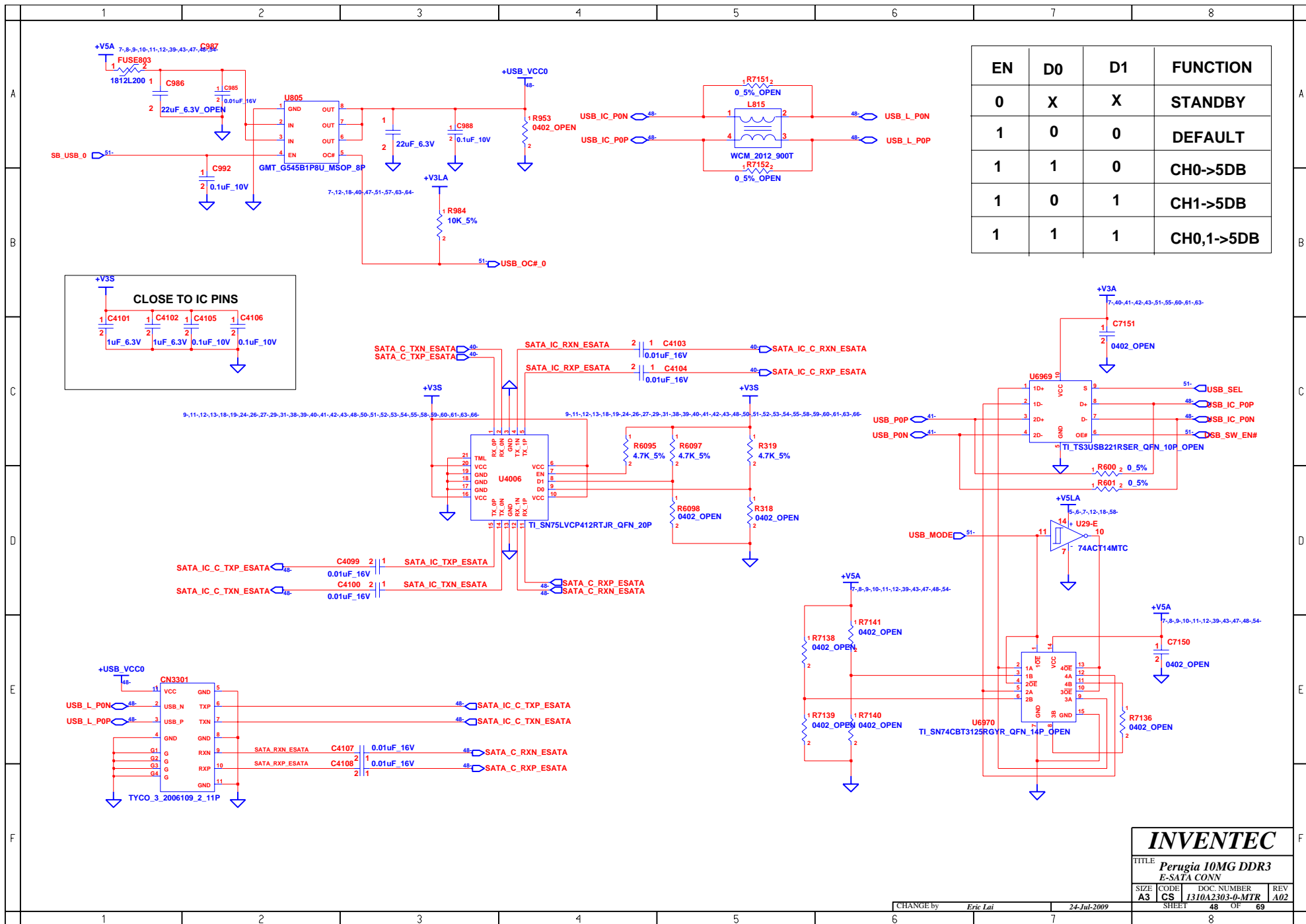


INVENTEC			
TITLE: Perugia 10MG DDR3 HDD CONN			
SIZE: A3	CODE: CS	DOC. NUMBER: I310A2303-0-MTR	REV: A02
CHANGE by: Eric Lai		24-Jul-2009	
SHEET: 45		OF: 69	

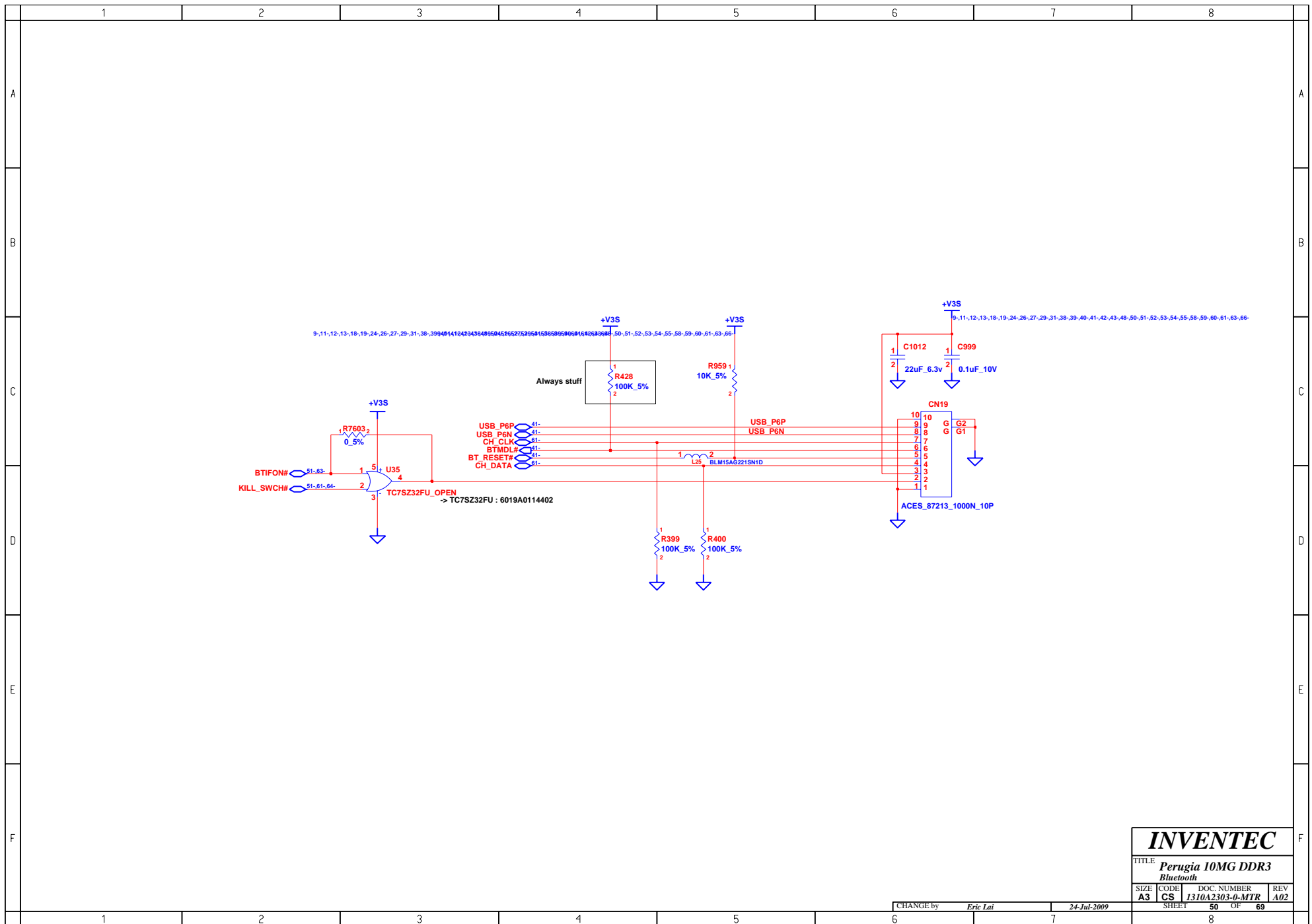


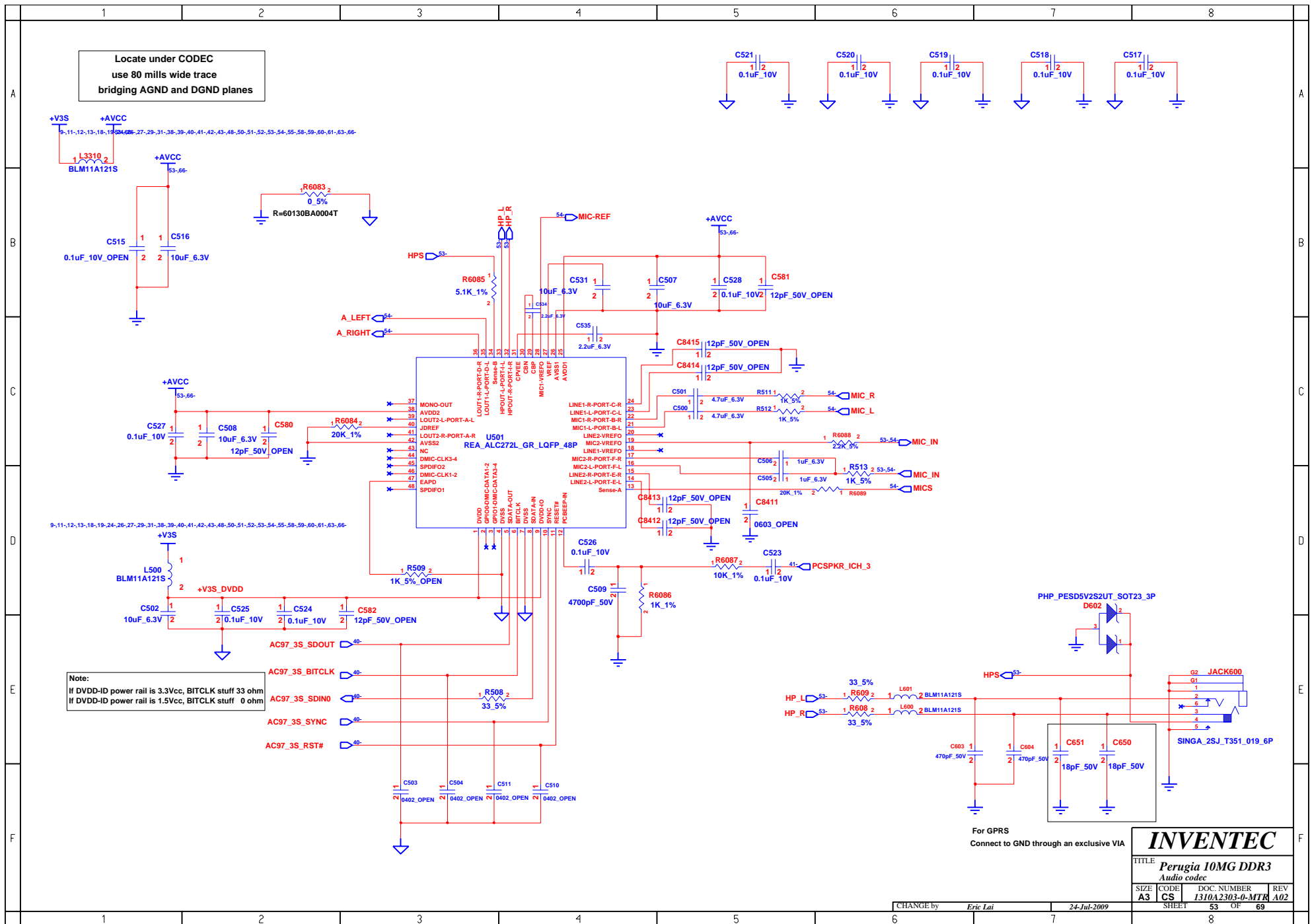
INVENTEC			
TITLE Perugia 10MG DDR3 SATA ODD			
SIZE A3	CODE CS	DOC. NUMBER 1310A2303-0-MTR	REV A02
CHANGE by Eric Lai		24-Jul-2009	
SHEET 46		OF 69	

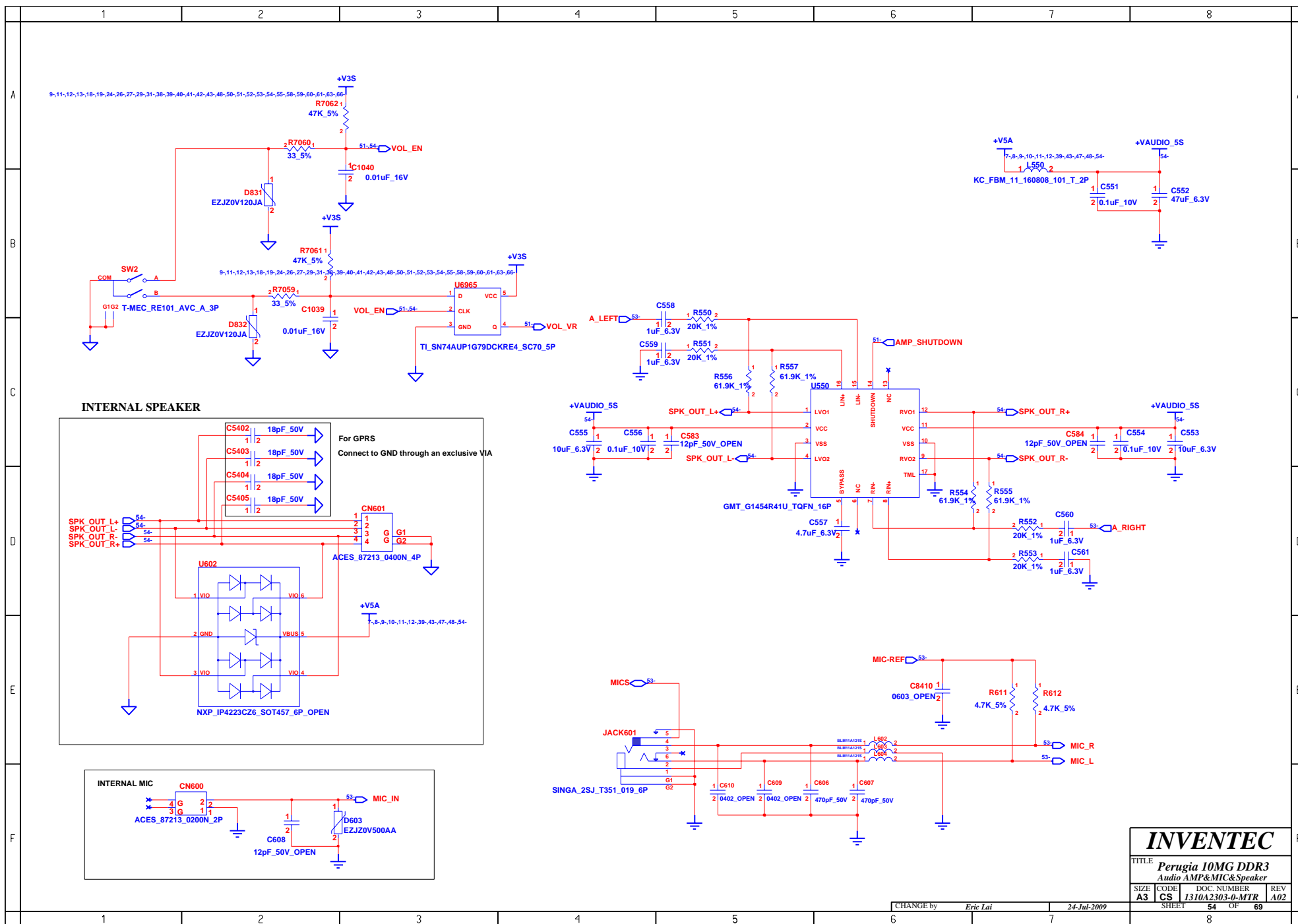


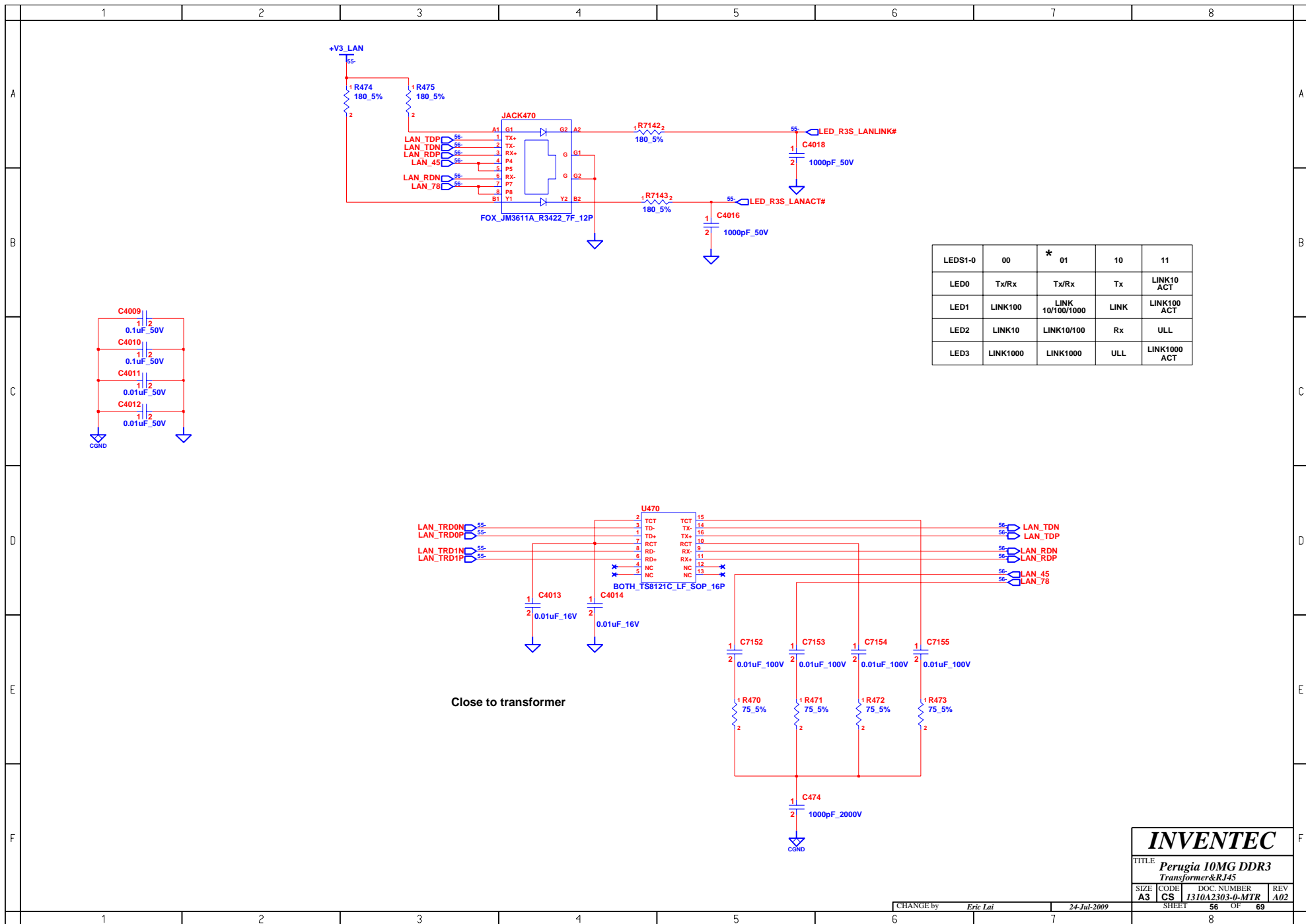


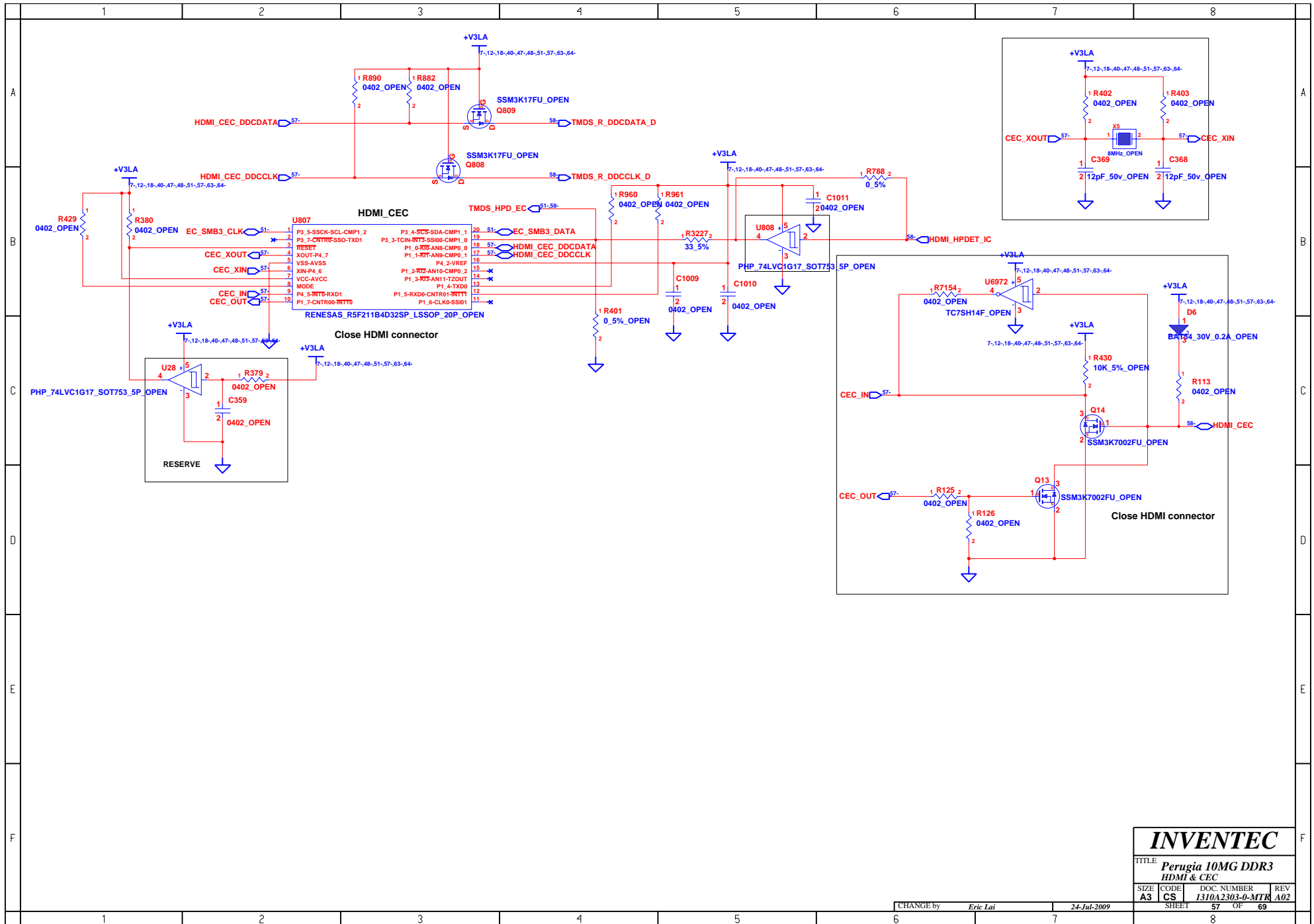


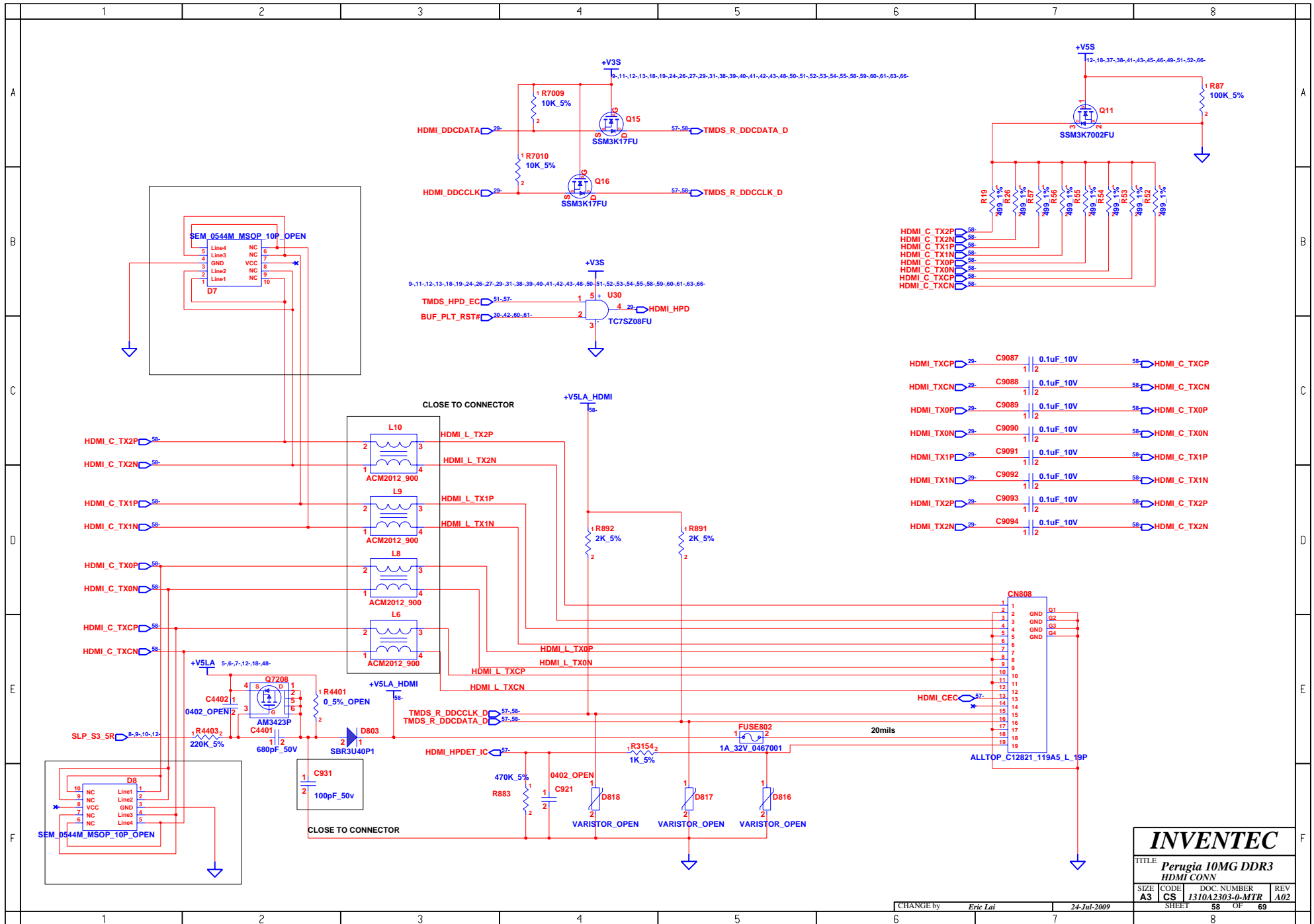


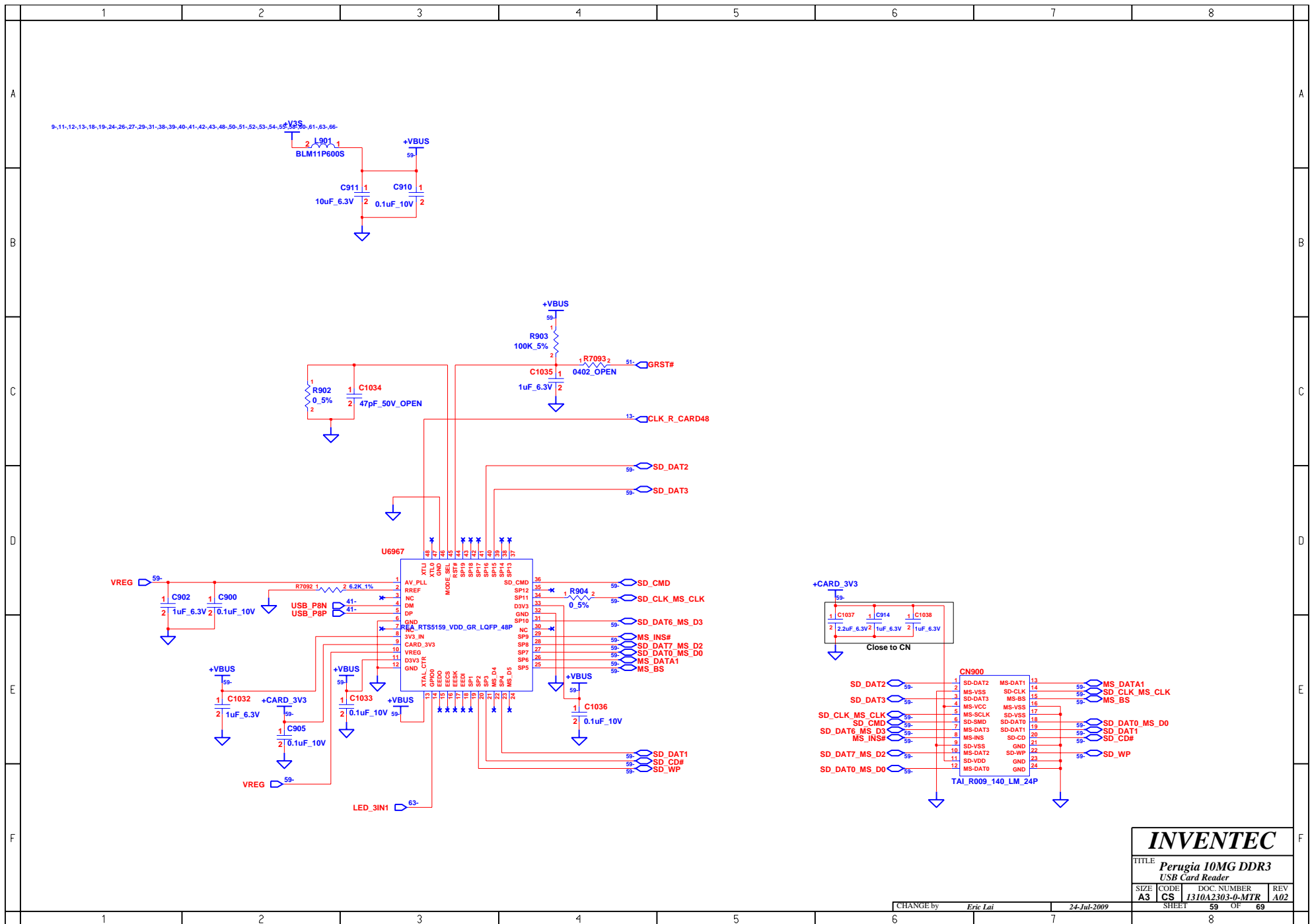


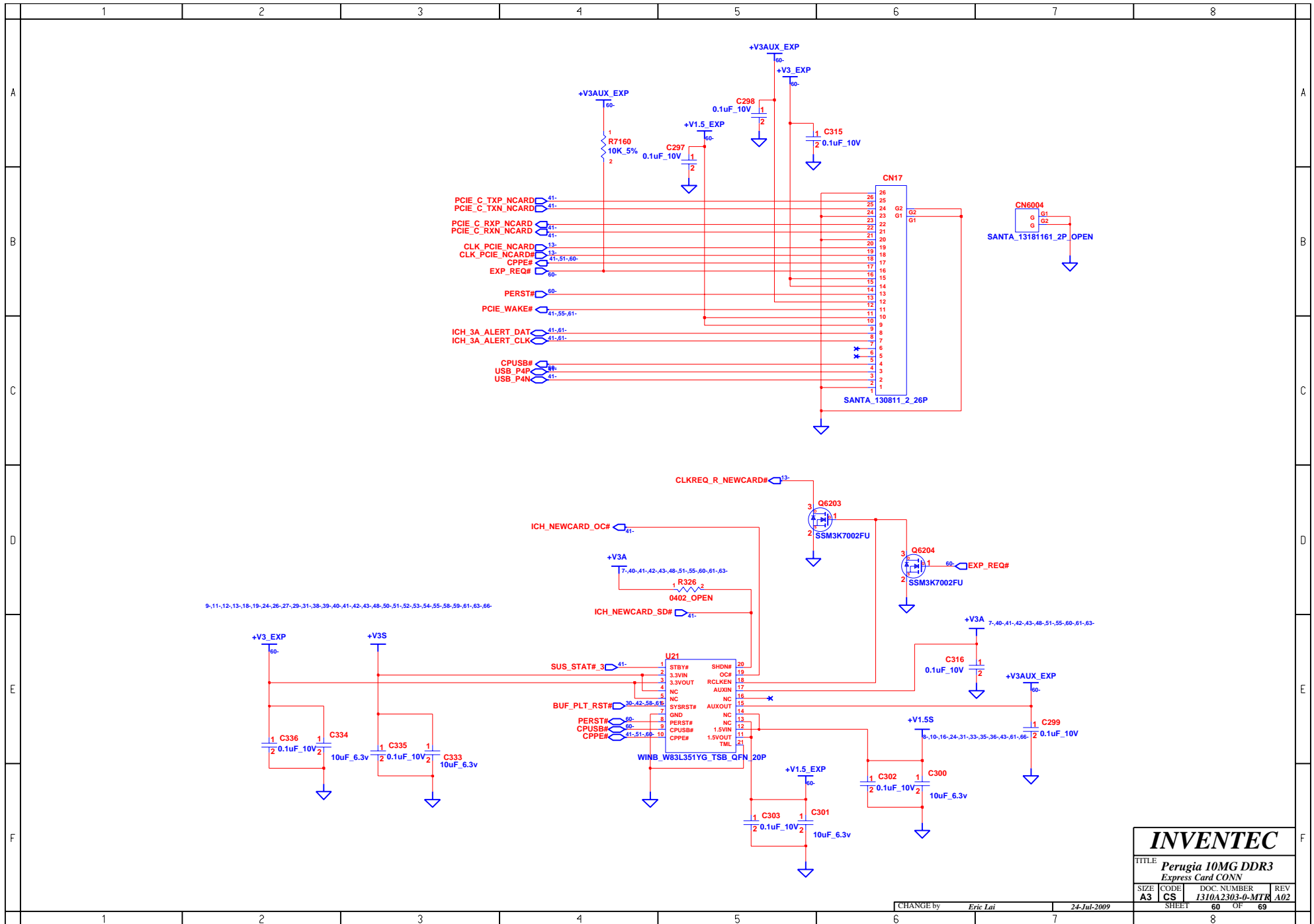




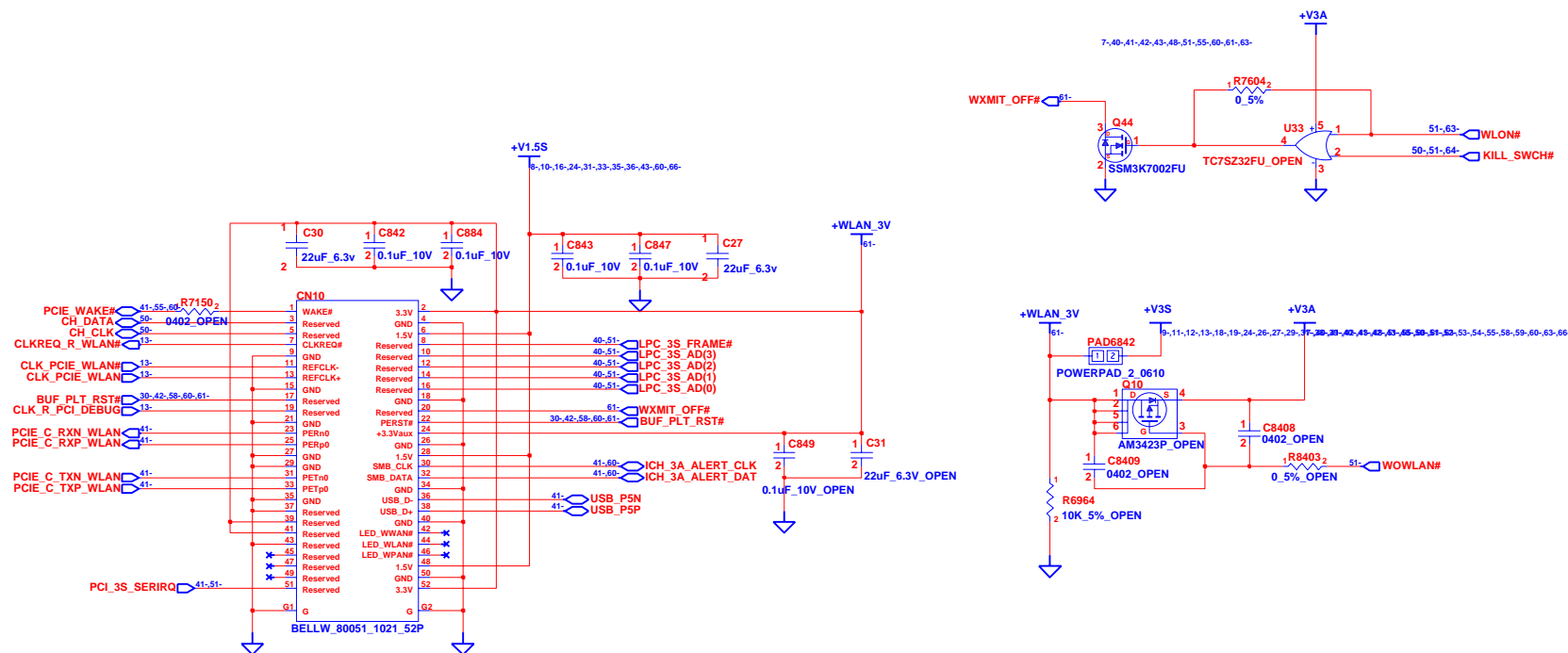








Wireless & Debug card



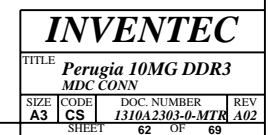
INVENTEC

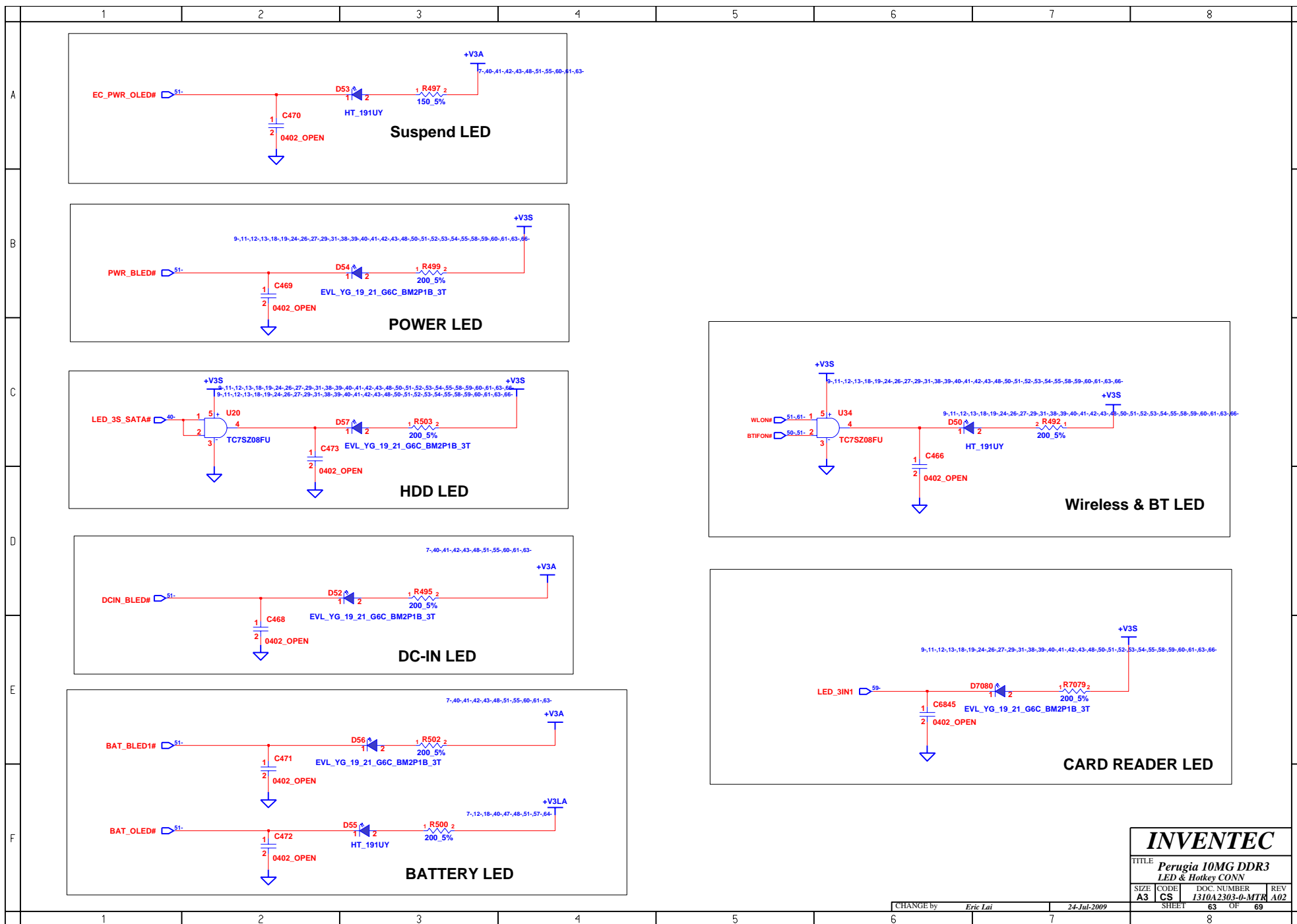
TITLE
Perugia 10MG DDR3
Wireless & debug card

SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02

CHANGE by Eric Lai 24-Jul-2009

SHEET 61 OF 69





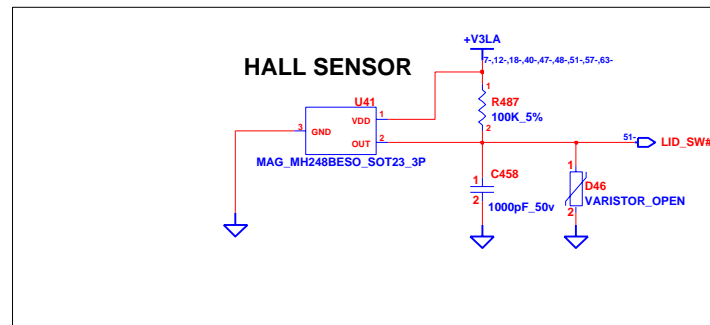
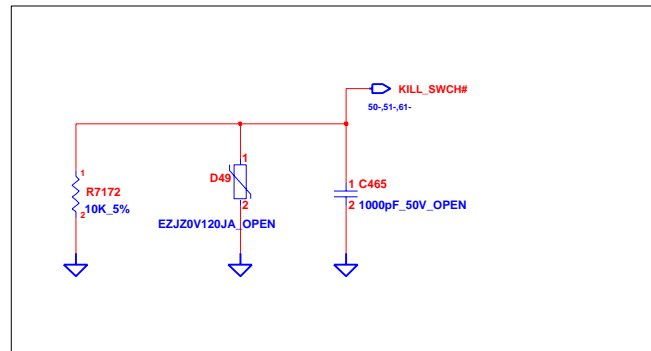
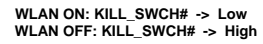
INVENTEC

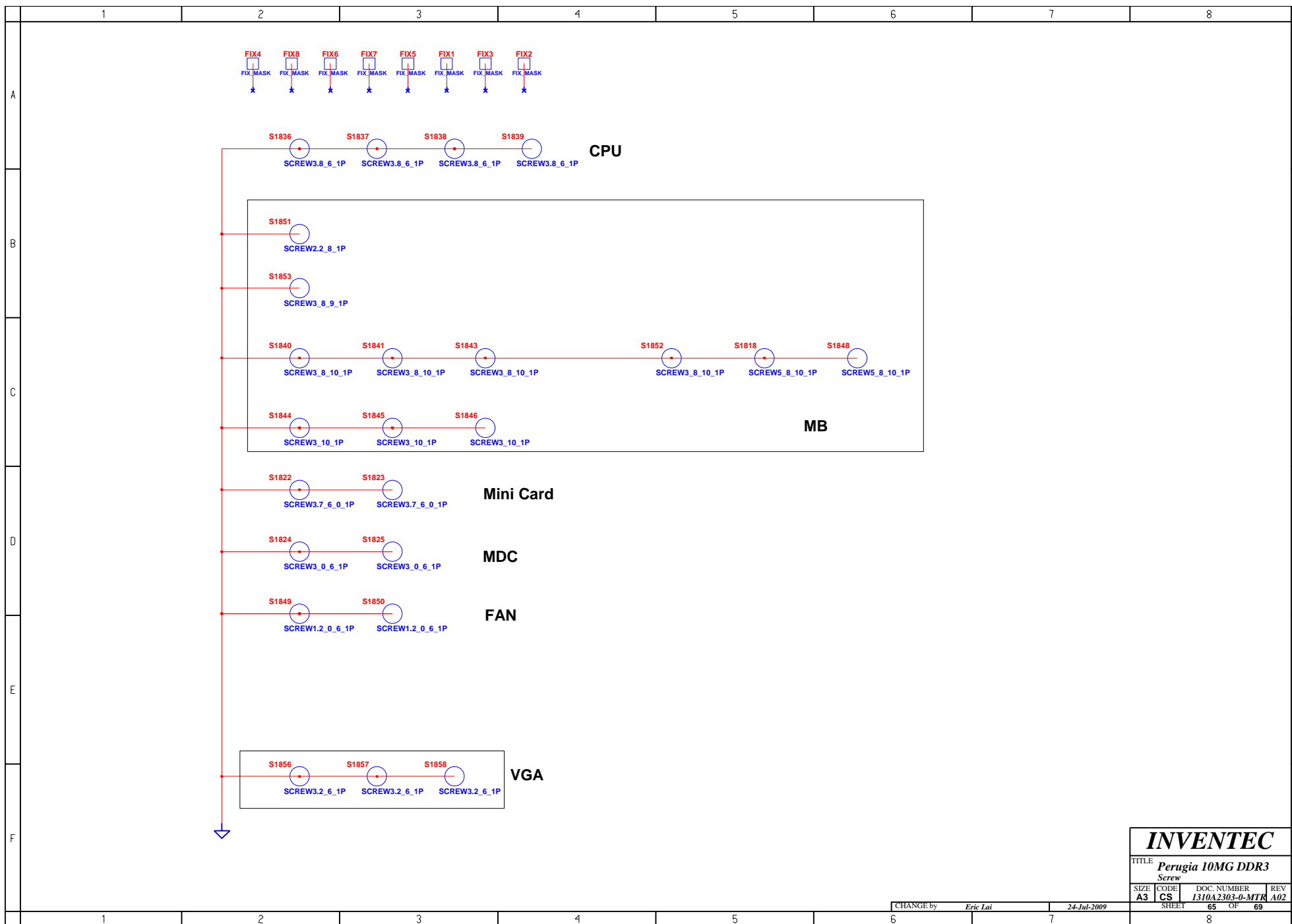
TITLE
**Perugia 10MG DDR3
LED & Hotkey CONN**

SIZE A3	CODE CS	DOC. NUMBER I310A2303-0-MTR	REV A02
-------------------	-------------------	---------------------------------------	-------------------

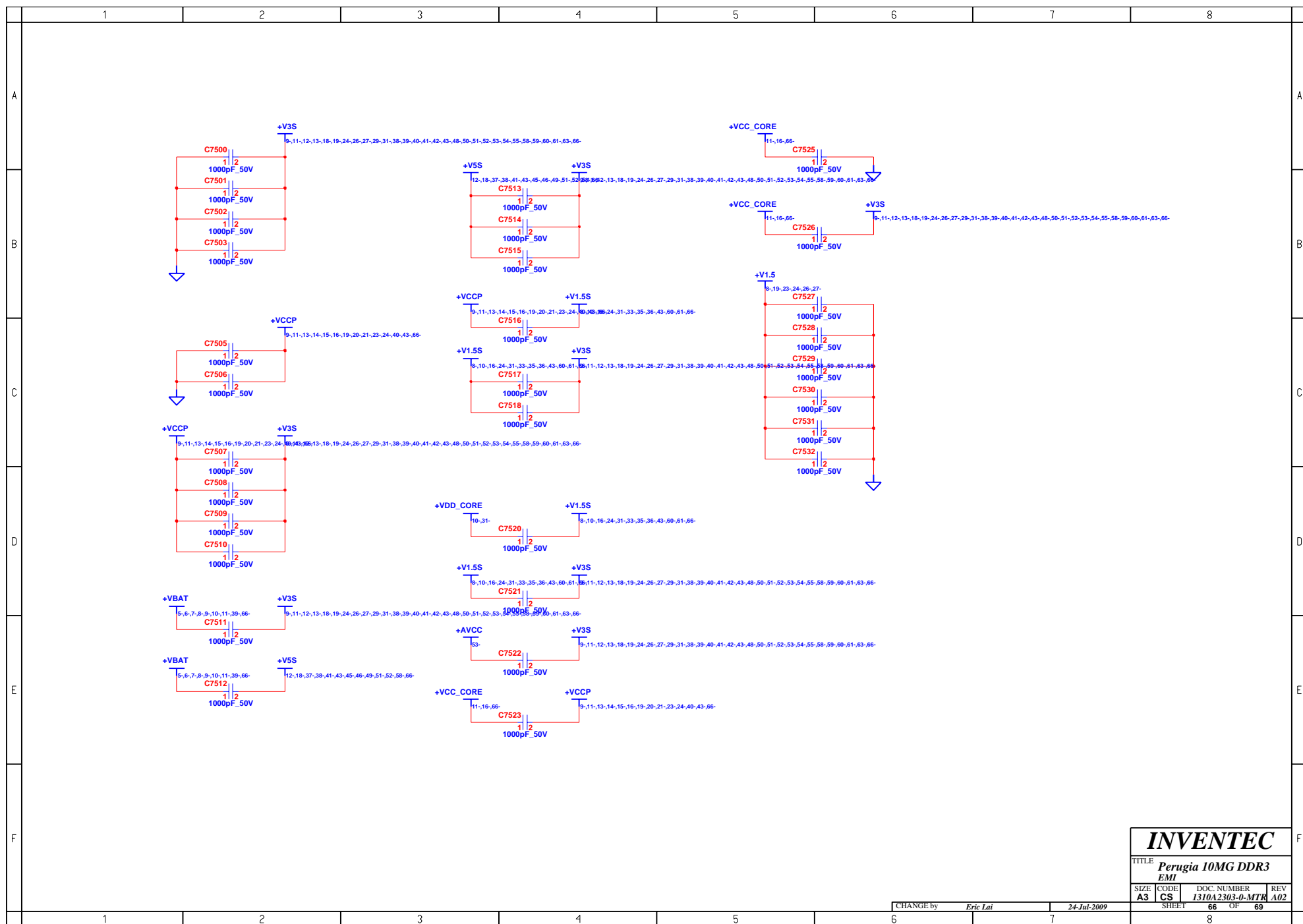
CHANGE by *Eric Lai* 24-Jul-2009

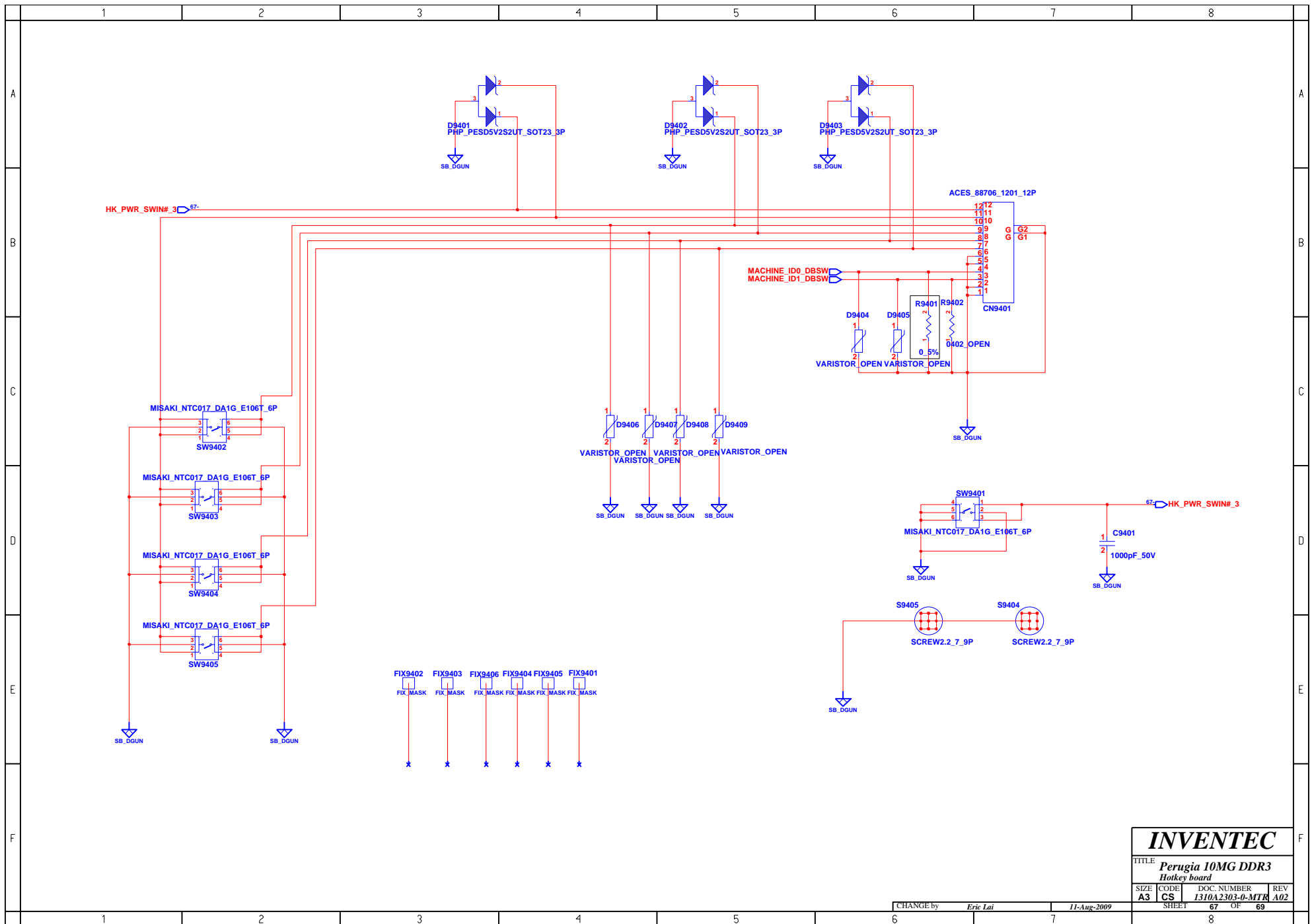
SHEET 63 OF 69

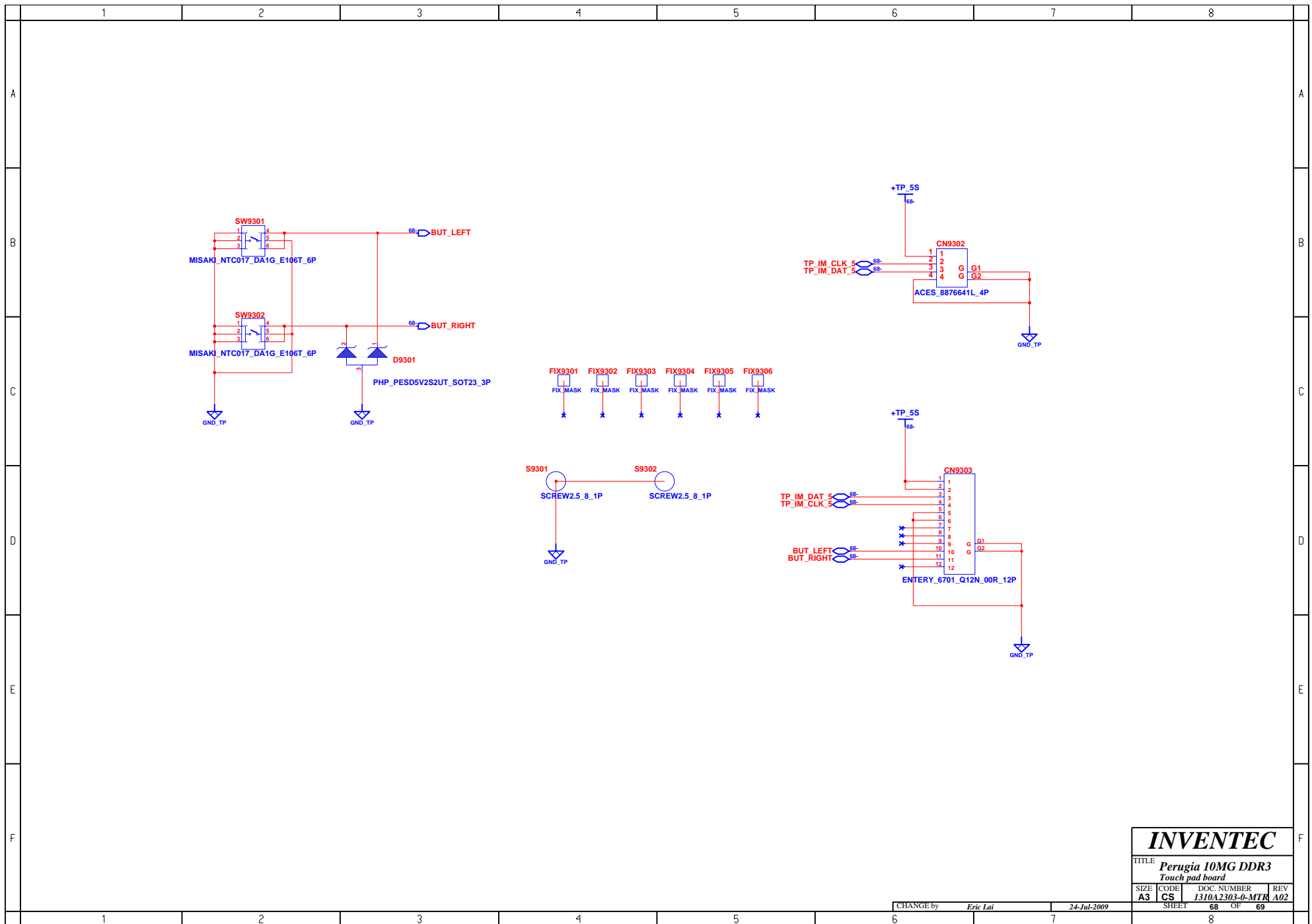




INVENTEC			
TITLE			
Perugia 10MG DDR3			
Screw			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02
CHANGE by		Eric Lai	24-Jul-2009
SHEET		65	OF 69







INVENTEC			
TITLE			
Perugia 10MG DDR3			
Touch pad board			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2303-0-MTR	A02
CHANGE by		Eric Lai	24-Jul-2009
SHEET		68	OF 69

