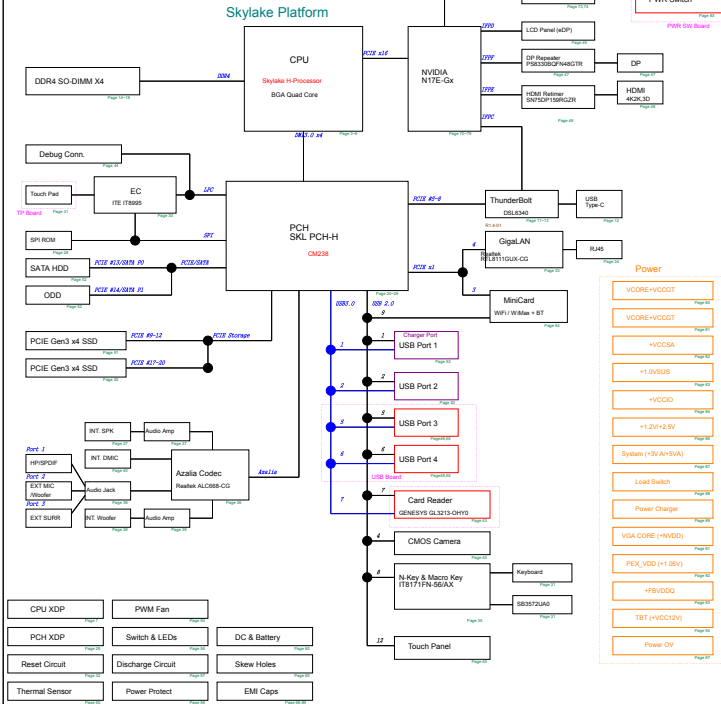


- [illegible]

### G752VSK Block Diagram



| Sl. No. | Name of the Candidate | Roll No. | Grade | Section | Score | Remarks |
|---------|-----------------------|----------|-------|---------|-------|---------|
| 1       | ABHIRAM K             | 101      | 10    | A       | 85    |         |
| 2       | ADARSH K              | 102      | 10    | A       | 78    |         |
| 3       | ADITHYAN K            | 103      | 10    | A       | 92    |         |
| 4       | ADITHYAN K            | 104      | 10    | A       | 88    |         |
| 5       | ADITHYAN K            | 105      | 10    | A       | 75    |         |
| 6       | ADITHYAN K            | 106      | 10    | A       | 82    |         |
| 7       | ADITHYAN K            | 107      | 10    | A       | 79    |         |
| 8       | ADITHYAN K            | 108      | 10    | A       | 86    |         |
| 9       | ADITHYAN K            | 109      | 10    | A       | 81    |         |
| 10      | ADITHYAN K            | 110      | 10    | A       | 84    |         |
| 11      | ADITHYAN K            | 111      | 10    | A       | 87    |         |
| 12      | ADITHYAN K            | 112      | 10    | A       | 83    |         |
| 13      | ADITHYAN K            | 113      | 10    | A       | 80    |         |
| 14      | ADITHYAN K            | 114      | 10    | A       | 89    |         |
| 15      | ADITHYAN K            | 115      | 10    | A       | 85    |         |
| 16      | ADITHYAN K            | 116      | 10    | A       | 82    |         |
| 17      | ADITHYAN K            | 117      | 10    | A       | 86    |         |
| 18      | ADITHYAN K            | 118      | 10    | A       | 81    |         |
| 19      | ADITHYAN K            | 119      | 10    | A       | 84    |         |
| 20      | ADITHYAN K            | 120      | 10    | A       | 87    |         |
| 21      | ADITHYAN K            | 121      | 10    | A       | 83    |         |
| 22      | ADITHYAN K            | 122      | 10    | A       | 80    |         |
| 23      | ADITHYAN K            | 123      | 10    | A       | 89    |         |
| 24      | ADITHYAN K            | 124      | 10    | A       | 85    |         |
| 25      | ADITHYAN K            | 125      | 10    | A       | 82    |         |
| 26      | ADITHYAN K            | 126      | 10    | A       | 86    |         |
| 27      | ADITHYAN K            | 127      | 10    | A       | 81    |         |
| 28      | ADITHYAN K            | 128      | 10    | A       | 84    |         |
| 29      | ADITHYAN K            | 129      | 10    | A       | 87    |         |
| 30      | ADITHYAN K            | 130      | 10    | A       | 83    |         |
| 31      | ADITHYAN K            | 131      | 10    | A       | 80    |         |
| 32      | ADITHYAN K            | 132      | 10    | A       | 89    |         |
| 33      | ADITHYAN K            | 133      | 10    | A       | 85    |         |
| 34      | ADITHYAN K            | 134      | 10    | A       | 82    |         |
| 35      | ADITHYAN K            | 135      | 10    | A       | 86    |         |
| 36      | ADITHYAN K            | 136      | 10    | A       | 81    |         |
| 37      | ADITHYAN K            | 137      | 10    | A       | 84    |         |
| 38      | ADITHYAN K            | 138      | 10    | A       | 87    |         |
| 39      | ADITHYAN K            | 139      | 10    | A       | 83    |         |
| 40      | ADITHYAN K            | 140      | 10    | A       | 80    |         |
| 41      | ADITHYAN K            | 141      | 10    | A       | 89    |         |
| 42      | ADITHYAN K            | 142      | 10    | A       | 85    |         |
| 43      | ADITHYAN K            | 143      | 10    | A       | 82    |         |
| 44      | ADITHYAN K            | 144      | 10    | A       | 86    |         |
| 45      | ADITHYAN K            | 145      | 10    | A       | 81    |         |
| 46      | ADITHYAN K            | 146      | 10    | A       | 84    |         |
| 47      | ADITHYAN K            | 147      | 10    | A       | 87    |         |
| 48      | ADITHYAN K            | 148      | 10    | A       | 83    |         |
| 49      | ADITHYAN K            | 149      | 10    | A       | 80    |         |
| 50      | ADITHYAN K            | 150      | 10    | A       | 89    |         |
| 51      | ADITHYAN K            | 151      | 10    | A       | 85    |         |
| 52      | ADITHYAN K            | 152      | 10    | A       | 82    |         |
| 53      | ADITHYAN K            | 153      | 10    | A       | 86    |         |
| 54      | ADITHYAN K            | 154      | 10    | A       | 81    |         |
| 55      | ADITHYAN K            | 155      | 10    | A       | 84    |         |
| 56      | ADITHYAN K            | 156      | 10    | A       | 87    |         |
| 57      | ADITHYAN K            | 157      | 10    | A       | 83    |         |
| 58      | ADITHYAN K            | 158      | 10    | A       | 80    |         |
| 59      | ADITHYAN K            | 159      | 10    | A       | 89    |         |
| 60      | ADITHYAN K            | 160      | 10    | A       | 85    |         |
| 61      | ADITHYAN K            | 161      | 10    | A       | 82    |         |
| 62      | ADITHYAN K            | 162      | 10    | A       | 86    |         |
| 63      | ADITHYAN K            | 163      | 10    | A       | 81    |         |
| 64      | ADITHYAN K            | 164      | 10    | A       | 84    |         |
| 65      | ADITHYAN K            | 165      | 10    | A       | 87    |         |
| 66      | ADITHYAN K            | 166      | 10    | A       | 83    |         |
| 67      | ADITHYAN K            | 167      | 10    | A       | 80    |         |
| 68      | ADITHYAN K            | 168      | 10    | A       | 89    |         |
| 69      | ADITHYAN K            | 169      | 10    | A       | 85    |         |
| 70      | ADITHYAN K            | 170      | 10    | A       | 82    |         |
| 71      | ADITHYAN K            | 171      | 10    | A       | 86    |         |
| 72      | ADITHYAN K            | 172      | 10    | A       | 81    |         |
| 73      | ADITHYAN K            | 173      | 10    | A       | 84    |         |
| 74      | ADITHYAN K            | 174      | 10    | A       | 87    |         |
| 75      | ADITHYAN K            | 175      | 10    | A       | 83    |         |
| 76      | ADITHYAN K            | 176      | 10    | A       | 80    |         |
| 77      |                       |          |       |         |       |         |

| Sl. No. | Particulars    | Debit | Credit | Balance |
|---------|----------------|-------|--------|---------|
| 1       | Balance b/d    |       |        |         |
| 2       | By Cash        |       |        |         |
| 3       | To Cash        |       |        |         |
| 4       | By Bank        |       |        |         |
| 5       | To Bank        |       |        |         |
| 6       | By Debtors     |       |        |         |
| 7       | To Debtors     |       |        |         |
| 8       | By Creditors   |       |        |         |
| 9       | To Creditors   |       |        |         |
| 10      | By Income      |       |        |         |
| 11      | To Income      |       |        |         |
| 12      | By Expenses    |       |        |         |
| 13      | To Expenses    |       |        |         |
| 14      | By Balance c/d |       |        |         |
| 15      | To Balance c/d |       |        |         |

| Sl. No. | Particulars    | Debit | Credit | Balance |
|---------|----------------|-------|--------|---------|
| 1       | Balance b/d    |       |        |         |
| 2       | By Cash        |       |        |         |
| 3       | To Cash        |       |        |         |
| 4       | By Bank        |       |        |         |
| 5       | To Bank        |       |        |         |
| 6       | By Debtors     |       |        |         |
| 7       | To Debtors     |       |        |         |
| 8       | By Creditors   |       |        |         |
| 9       | To Creditors   |       |        |         |
| 10      | By Income      |       |        |         |
| 11      | To Income      |       |        |         |
| 12      | By Expenses    |       |        |         |
| 13      | To Expenses    |       |        |         |
| 14      | By Balance c/d |       |        |         |
| 15      | To Balance c/d |       |        |         |

| Sl. No. | Particulars    | Debit | Credit | Balance |
|---------|----------------|-------|--------|---------|
| 1       | Balance b/d    |       |        |         |
| 2       | By Cash        |       |        |         |
| 3       | To Cash        |       |        |         |
| 4       | By Bank        |       |        |         |
| 5       | To Bank        |       |        |         |
| 6       | By Debtors     |       |        |         |
| 7       | To Debtors     |       |        |         |
| 8       | By Creditors   |       |        |         |
| 9       | To Creditors   |       |        |         |
| 10      | By Income      |       |        |         |
| 11      | To Income      |       |        |         |
| 12      | By Expenses    |       |        |         |
| 13      | To Expenses    |       |        |         |
| 14      | By Balance c/d |       |        |         |
| 15      | To Balance c/d |       |        |         |

| Sl. No. | Particulars    | Debit | Credit | Balance |
|---------|----------------|-------|--------|---------|
| 1       | Balance b/d    |       |        |         |
| 2       | By Cash        |       |        |         |
| 3       | To Cash        |       |        |         |
| 4       | By Bank        |       |        |         |
| 5       | To Bank        |       |        |         |
| 6       | By Debtors     |       |        |         |
| 7       | To Debtors     |       |        |         |
| 8       | By Creditors   |       |        |         |
| 9       | To Creditors   |       |        |         |
| 10      | By Income      |       |        |         |
| 11      | To Income      |       |        |         |
| 12      | By Expenses    |       |        |         |
| 13      | To Expenses    |       |        |         |
| 14      | By Balance c/d |       |        |         |
| 15      | To Balance c/d |       |        |         |

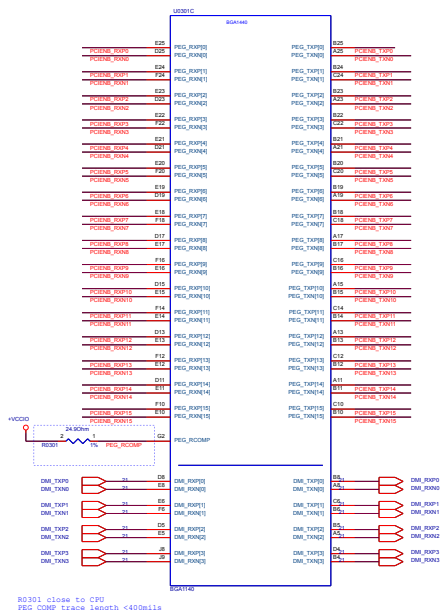
[illegible][illegible]

| Device Identification        |              |              |
|------------------------------|--------------|--------------|
| Device Identification Number |              |              |
| Lot                          | XXXXXXXXXXXX | XXXXXXXXXXXX |
| Date                         |              |              |
| Receiving Facility Name      |              |              |
| Facility Name                |              |              |
| Date                         |              |              |

| Case Study: Global Inc. |              |              |            |
|-------------------------|--------------|--------------|------------|
| Sales Summary           |              |              |            |
| Sales Region            | Sales Rep    | Sales Amount | Sales Date |
| North America           | John Doe     | \$120,000    | 2023-10-26 |
| Europe                  | Jane Smith   | \$85,000     | 2023-10-27 |
| Asia Pacific            | Michael Chen | \$95,000     | 2023-10-28 |
| South America           | Sarah Lopez  | \$70,000     | 2023-10-29 |
| Africa                  | David Kim    | \$60,000     | 2023-10-30 |
| Oceania                 | Emily White  | \$55,000     | 2023-10-31 |
| Grand Total: \$485,000  |              |              |            |

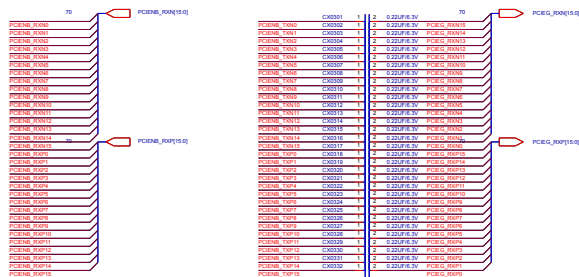


# DMI & PCIEG

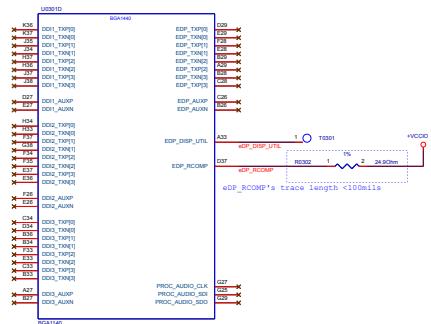


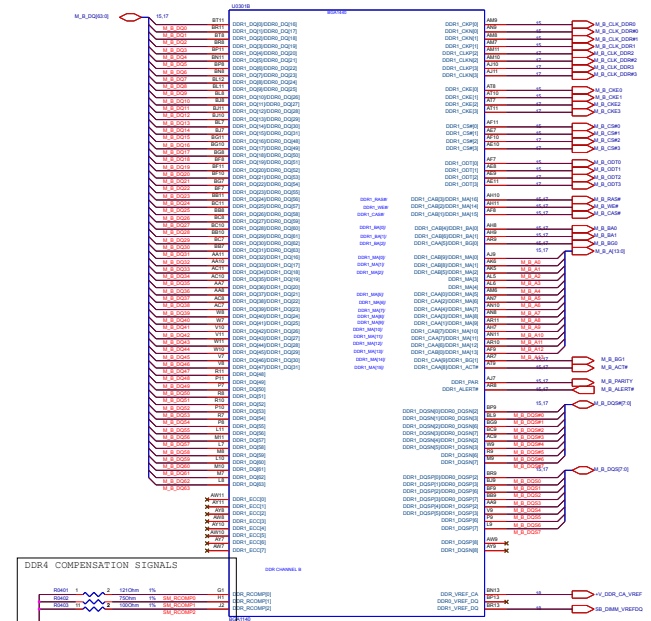
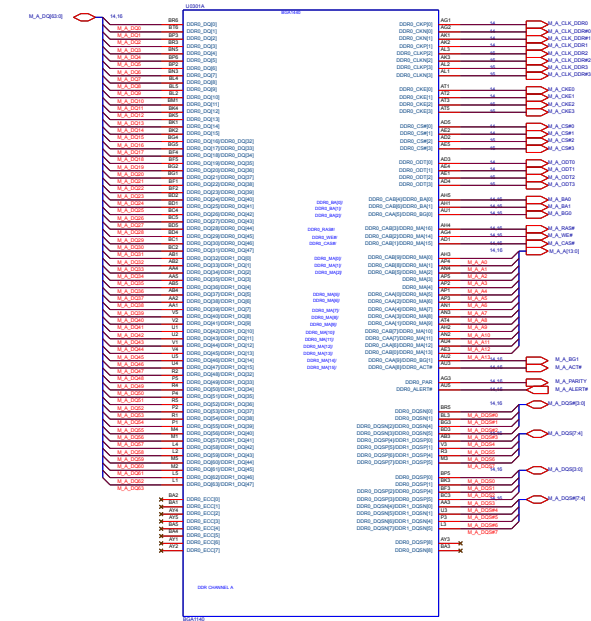
CX0301-CX0332 Change to 0201 size

Main Board



## Display

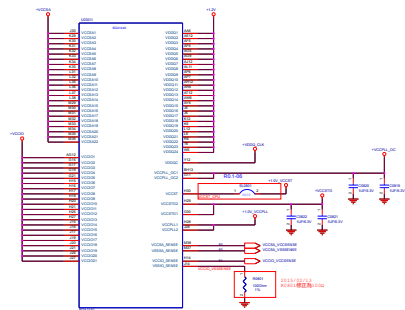




Main Board

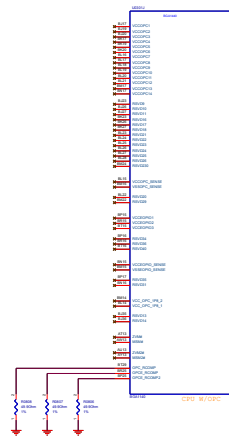
| U3031F  |        |        | U3031L  |        |        | U3031M  |        |        |
|---------|--------|--------|---------|--------|--------|---------|--------|--------|
| BGA1468 |        |        | BGA1468 |        |        | BGA1468 |        |        |
| Y39     | V55445 | V55370 | A1      | V55288 | V55262 | B8A     | V55150 | V55688 |
| Y4      | V55444 | V55367 | C13     | V55286 | V55261 | B8B     | V55148 | V55687 |
| Y5      | V55443 | V55366 | C9      | V55285 | V55260 | B8C     | V55146 | V55686 |
| Y6      | V55442 | V55365 | C17     | V55284 | V55259 | B8D     | V55144 | V55685 |
| Y10     | V55441 | V55364 | B124    | V55281 | V55258 | B8E     | V55139 | V55682 |
| Y11     | V55440 | V55363 | B125    | V55280 | V55257 | B8F     | V55138 | V55681 |
| Y5      | V55448 | V55362 | B126    | V55279 | V55256 | B8G     | V55137 | V55680 |
| Y5A     | V55447 | V55361 | B127    | V55278 | V55255 | B8H     | V55136 | V55679 |
| Y7      | V55446 | V55360 | B174    | V55277 | V55254 | B8I     | V55135 | V55678 |
| W39     | V55437 | V55359 | B175    | V55276 | V55253 | B8J     | V55134 | V55677 |
| W33     | V55436 | V55358 | B176    | V55275 | V55252 | B8K     | V55143 | V55676 |
| W12     | V55433 | V55357 | B178    | V55283 | V55221 | B8L     | V55141 | V55675 |
| W4      | V55438 | V55358 | B179    | V55274 | V55220 | B8M     | V55140 | V55674 |
| W3      | V55438 | V55357 | B180    | V55273 | V55219 | B8N     | V55139 | V55673 |
| W3      | V55435 | V55356 | B181    | V55272 | V55218 | B8P     | V55138 | V55672 |
| W1      | V55434 | V55355 | B182    | V55271 | V55217 | B8Q     | V55137 | V55671 |
| W39     | V55432 | V55354 | B183    | V55270 | V55216 | B8R     | V55136 | V55670 |
| W30     | V55430 | V55353 | B184    | V55269 | V55215 | B8S     | V55135 | V55669 |
| W28     | V55428 | V55352 | B185    | V55268 | V55214 | B8T     | V55134 | V55668 |
| W14     | V55441 | V55351 | B186    | V55267 | V55213 | B8U     | V55133 | V55667 |
| W15     | V55440 | V55350 | B187    | V55266 | V55212 | B8V     | V55132 | V55666 |
| W16     | V55439 | V55349 | B188    | V55265 | V55211 | B8W     | V55131 | V55665 |
| W17     | V55438 | V55348 | B189    | V55264 | V55210 | B8X     | V55130 | V55664 |
| W18     | V55437 | V55347 | B190    | V55263 | V55209 | B8Y     | V55129 | V55663 |
| W19     | V55436 | V55346 | B191    | V55262 | V55208 | B8Z     | V55128 | V55662 |
| W20     | V55435 | V55345 | B192    | V55261 | V55207 | B8A     | V55127 | V55661 |
| W21     | V55434 | V55344 | B193    | V55260 | V55206 | B8B     | V55126 | V55660 |
| W22     | V55433 | V55343 | B194    | V55259 | V55205 | B8C     | V55125 | V55659 |
| W23     | V55432 | V55342 | B195    | V55258 | V55204 | B8D     | V55124 | V55658 |
| W24     | V55431 | V55341 | B196    | V55257 | V55203 | B8E     | V55123 | V55657 |
| W25     | V55430 | V55340 | B197    | V55256 | V55202 | B8F     | V55122 | V55656 |
| W26     | V55429 | V55339 | B198    | V55255 | V55201 | B8G     | V55121 | V55655 |
| W27     | V55428 | V55338 | B199    | V55254 | V55200 | B8H     | V55120 | V55654 |
| W28     | V55427 | V55337 | B200    | V55253 | V55199 | B8I     | V55119 | V55653 |
| W29     | V55426 | V55336 | B201    | V55252 | V55198 | B8J     | V55118 | V55652 |
| W30     | V55425 | V55335 | B202    | V55251 | V55197 | B8K     | V55117 | V55651 |
| W31     | V55424 | V55334 | B203    | V55250 | V55196 | B8L     | V55116 | V55650 |
| W32     | V55423 | V55333 | B204    | V55249 | V55195 | B8M     | V55115 | V55649 |
| W33     | V55422 | V55332 | B205    | V55248 | V55194 | B8N     | V55114 | V55648 |
| W34     | V55421 | V55331 | B206    | V55247 | V55193 | B8P     | V55113 | V55647 |
| W35     | V55420 | V55330 | B207    | V55246 | V55192 | B8Q     | V55112 | V55646 |
| W36     | V55419 | V55329 | B208    | V55245 | V55191 | B8R     | V55111 | V55645 |
| W37     | V55418 | V55328 | B209    | V55244 | V55190 | B8S     | V55110 | V55644 |
| W38     | V55417 | V55327 | B210    | V55243 | V55189 | B8T     | V55109 | V55643 |
| W39     | V55416 | V55326 | B211    | V55242 | V55188 | B8U     | V55108 | V55642 |
| W40     | V55415 | V55325 | B212    | V55241 | V55187 | B8V     | V55107 | V55641 |
| W41     | V55414 | V55324 | B213    | V55240 | V55186 | B8W     | V55106 | V55640 |
| W42     | V55413 | V55323 | B214    | V55239 | V55185 | B8X     | V55105 | V55639 |
| W43     | V55412 | V55322 | B215    | V55238 | V55184 | B8Y     | V55104 | V55638 |
| W44     | V55411 | V55321 | B216    | V55237 | V55183 | B8Z     | V55103 | V55637 |
| W45     | V55410 | V55320 | B217    | V55236 | V55182 | B8A     | V55102 | V55636 |
| W46     | V55409 | V55319 | B218    | V55235 | V55181 | B8B     | V55101 | V55635 |
| W47     | V55408 | V55318 | B219    | V55234 | V55180 | B8C     | V55100 | V55634 |
| W48     | V55407 | V55317 | B220    | V55233 | V55179 | B8D     | V55099 | V55633 |
| W49     | V55406 | V55316 | B221    | V55232 | V55178 | B8E     | V55098 | V55632 |
| W50     | V55405 | V55315 | B222    | V55231 | V55177 | B8F     | V55097 | V55631 |
| W51     | V55404 | V55314 | B223    | V55230 | V55176 | B8G     | V55096 | V55630 |
| W52     | V55403 | V55313 | B224    | V55229 | V55175 | B8H     | V55095 | V55629 |
| W53     | V55402 | V55312 | B225    | V55228 | V55174 | B8I     | V55094 | V55628 |
| W54     | V55401 | V55311 | B226    | V55227 | V55173 | B8J     | V55093 | V55627 |
| W55     | V55400 | V55310 | B227    | V55226 | V55172 | B8K     | V55092 | V55626 |
| W56     | V55399 | V55309 | B228    | V55225 | V55171 | B8L     | V55091 | V55625 |
| W57     | V55398 | V55308 | B229    | V55224 | V55170 | B8M     | V55090 | V55624 |
| W58     | V55397 | V55307 | B230    | V55223 | V55169 | B8N     | V55089 | V55623 |
| W59     | V55396 | V55306 | B231    | V55222 | V55168 | B8P     | V55088 | V55622 |
| W60     | V55395 | V55305 | B232    | V55221 | V55167 | B8Q     | V55087 | V55621 |
| W61     | V55394 | V55304 | B233    | V55220 | V55166 | B8R     | V55086 | V55620 |
| W62     | V55393 | V55303 | B234    | V55219 | V55165 | B8S     | V55085 | V55619 |
| W63     | V55392 | V55302 | B235    | V55218 | V55164 | B8T     | V55084 | V55618 |
| W64     | V55391 | V55301 | B236    | V55217 | V55163 | B8U     | V55083 | V55617 |
| W65     | V55390 | V55300 | B237    | V55216 | V55162 | B8V     | V55082 | V55616 |
| W66     | V55389 | V55299 | B238    | V55215 | V55161 | B8W     | V55081 | V55615 |
| W67     | V55388 | V55298 | B239    | V55214 | V55160 | B8X     | V55080 | V55614 |
| W68     | V55387 | V55297 | B240    | V55213 | V55159 | B8Y     | V55079 | V55613 |
| W69     | V55386 | V55296 | B241    | V55212 | V55158 | B8Z     | V55078 | V55612 |
| W70     | V55385 | V55295 | B242    | V55211 | V55157 | B8A     | V55077 | V55611 |
| W71     | V55384 | V55294 | B243    | V55210 | V55156 | B8B     | V55076 | V55610 |
| W72     | V55383 | V55293 | B244    | V55209 | V55155 | B8C     | V55075 | V55609 |
| W73     | V55382 | V55292 | B245    | V55208 | V55154 | B8D     | V55074 | V55608 |
| W74     | V55381 | V55291 | B246    | V55207 | V55153 | B8E     | V55073 | V55607 |
| W75     | V55380 | V55290 | B247    | V55206 | V55152 | B8F     | V55072 | V55606 |
| W76     | V55379 | V55289 | B248    | V55205 | V55151 | B8G     | V55071 | V55605 |
| W77     | V55378 | V55288 | B249    | V55204 | V55150 | B8H     | V55070 | V55604 |
| W78     | V55377 | V55287 | B250    | V55203 | V55149 | B8I     | V55069 | V55603 |
| W79     | V55376 | V55286 | B251    | V55202 | V55148 | B8J     | V55068 | V55602 |
| W80     | V55375 | V55285 | B252    | V55201 | V55147 | B8K     | V55067 | V55601 |
| W81     | V55374 | V55284 | B253    | V55200 | V55146 | B8L     | V55066 | V55600 |
| W82     | V55373 | V55283 | B254    | V55199 | V55145 | B8M     | V55065 | V55599 |
| W83     | V55372 | V55282 | B255    | V55198 | V55144 | B8N     | V55064 | V55598 |
| W84     | V55371 | V55281 | B256    | V55197 | V55143 | B8P     | V55063 | V55597 |
| W85     | V55370 | V55280 | B257    | V55196 | V55142 | B8Q     | V55062 | V55596 |
| W86     | V55369 | V55279 | B258    | V55195 | V55141 | B8R     | V55061 | V55595 |
| W87     | V55368 | V55278 | B259    | V55194 | V55140 | B8S     | V55060 | V55594 |
| W88     | V55367 | V55277 | B260    | V55193 | V55139 | B8T     | V55059 | V55593 |
| W89     | V55366 | V55276 | B261    | V55192 | V55138 | B8U     | V55058 | V55592 |
| W90     | V55365 | V55275 | B262    | V55191 | V55137 | B8V     | V55057 | V55591 |
| W91     | V55364 | V55274 | B263    | V55190 | V55136 | B8W     | V55056 | V55590 |
| W92     | V55363 | V55273 | B264    | V55189 | V55135 | B8X     | V55055 | V55589 |
| W93     | V55362 | V55272 | B265    | V55188 | V55134 | B8Y     | V55054 | V55588 |
| W94     | V55361 | V55271 | B266    | V55187 | V55133 | B8Z     | V55053 | V55587 |
| W95     | V55360 | V55270 | B267    | V55186 | V55132 | B8A     | V55052 | V55586 |
| W96     | V55359 | V55269 | B268    | V55185 | V55131 | B8B     | V55051 | V55585 |
| W97     | V55358 | V55268 | B269    | V55184 | V55130 | B8C     | V55050 | V55584 |
| W98     | V55357 | V55267 | B270    | V55183 | V55129 | B8D     | V55049 | V55583 |
| W99     | V55356 | V55266 | B271    | V55182 | V55128 | B8E     | V55048 | V55582 |
| W100    | V55355 | V55265 | B272    | V55181 | V55127 | B8F     | V55047 | V55581 |
| W101    | V55354 | V55264 | B273    | V55180 | V55126 | B8G     | V55046 | V55580 |
| W102    | V55353 | V55263 | B274    | V55179 | V55125 | B8H     | V55045 | V55579 |
| W103    | V55352 | V55262 | B275    | V55178 | V55124 | B8I     | V55044 | V55578 |
| W104    | V55351 | V55261 | B276    | V55177 | V55123 | B8J     | V55043 | V55577 |
| W105    | V55350 | V55260 | B277    | V55176 | V55122 | B8K     | V55042 | V55576 |
| W106    | V55349 | V55259 | B278    | V55175 | V55121 | B8L     | V55041 | V55575 |
| W107    | V55348 | V55258 | B279    | V55174 | V55120 | B8M     | V55040 | V55574 |
| W108    | V55347 | V55257 | B280    | V55173 | V55119 | B8N     | V55039 | V55573 |
| W109    | V55346 | V55256 | B281    | V55172 | V55118 | B8P     | V55038 | V55572 |
| W110    | V55345 | V55255 | B282    | V55171 | V55117 | B8Q     | V55037 | V55571 |
| W111    | V55344 | V55254 | B283    | V55170 | V55116 | B8R     | V55036 | V55570 |
| W112    | V55343 | V55253 | B284    | V55169 | V55115 | B8S     | V55035 | V55569 |
| W113    | V55342 | V55252 | B285    | V55168 | V55114 | B8T     | V55034 | V55568 |
| W114    | V55341 | V55251 | B286    | V55167 | V55113 | B8U     | V55033 | V55567 |
| W115    | V55340 | V55250 | B287    | V55166 | V55112 | B8V     | V55032 | V55566 |
| W116    | V55339 | V55249 | B288    | V55165 | V55111 | B8W     | V55031 | V55565 |
| W117    | V55338 | V55248 | B289    | V55164 | V55110 | B8X     | V55030 | V55564 |
| W118    | V55337 | V55247 | B290    | V55163 | V55109 | B8Y     | V55029 | V55563 |
| W119    | V55336 | V55246 | B291    | V55162 | V55108 | B8Z     | V55028 | V55562 |
| W120    | V55335 | V55245 | B292    | V55161 | V55107 | B8A     | V55027 | V55561 |
| W121    | V55334 | V55244 | B293    | V55160 | V55106 | B8B     | V55026 | V55560 |
| W122    | V55333 | V55243 | B294    | V55159 | V55105 | B8C     | V55025 | V55559 |
| W123    | V55332 | V55242 | B295    | V55158 | V55104 | B8D     | V55024 | V55558 |
| W124    | V55331 | V55241 | B296    | V55157 | V55103 | B8E     | V55023 | V55557 |
| W125    | V55330 | V55240 | B297    | V55156 | V55102 | B8F     | V55022 | V55556 |
| W126    | V55329 | V55239 | B298    | V55155 | V55101 | B8G     | V55021 | V55555 |
| W127    | V55328 | V55238 | B299    | V55154 | V55100 | B8H     | V55020 | V55554 |
| W128    | V55327 | V55237 | B300    | V55153 | V55099 | B8I     | V55019 | V55553 |
| W129    | V55326 | V55236 | B301    | V55152 | V55098 | B8J     | V55018 | V55552 |
| W130    | V55325 | V55235 | B302    | V55151 | V55097 | B8K     | V55017 | V55551 |
| W131    | V55324 | V55234 | B303    | V55150 | V55096 | B8L     | V55016 | V55550 |
| W132    | V5532  |        |         |        |        |         |        |        |



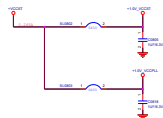


# OPC Power Rails

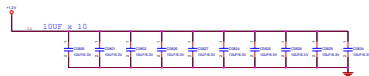
Main Board



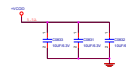
+1.0V\_VDDSET/+1.0V\_VDDPLL  
DECAPS Place Back Side (TOP)



+VDDQ DECAPS Place Back Side (TOP)



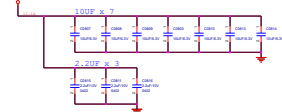
+VCCIO DECAPS Place Back Side (TOP)



+VDDQ\_CLK DECAPS Place Back Side (TOP)

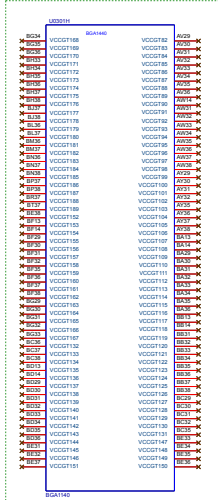


+VCCSA DECAPS Place Back Side (TOP)



Voltage Segment  
+VCCIO is supplied +1.0V2 (shared with +VCC3FG)

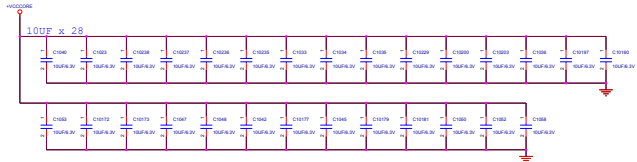
|            |
|------------|
| Main Board |
|------------|



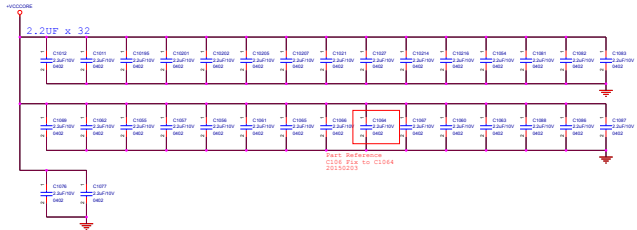


Main Board

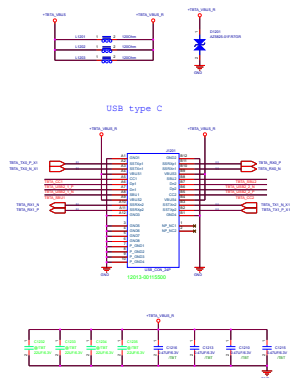
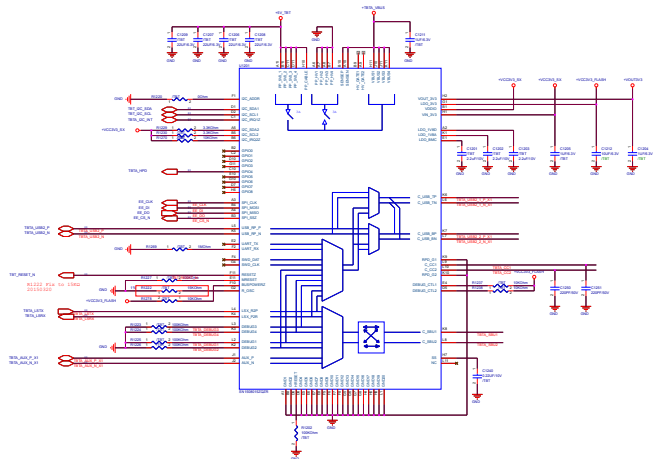
+VCCORE DECAPS Place Back Side (TOP)



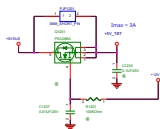
+VCCGT DECAPS Place Back Side (TOP)



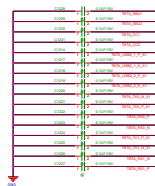




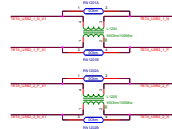
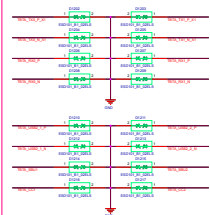
TBT 5V Power



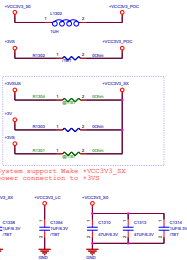
ESD-Protection



20161011 AGO ESD on high speed lines

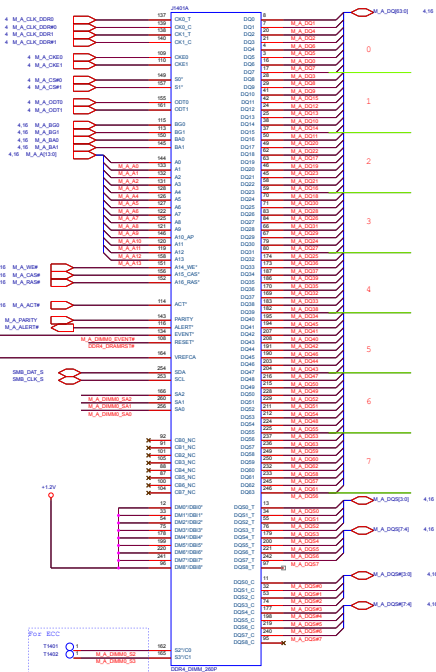


## Main Board



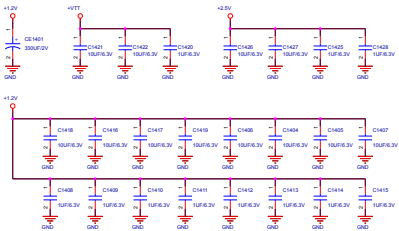
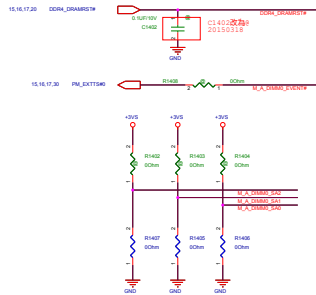
# SODIMM CHA-DIMMO TOP H4.0mm REV (J1401)

12002-00080600  
DDR4 DIMM 260P 4H REV



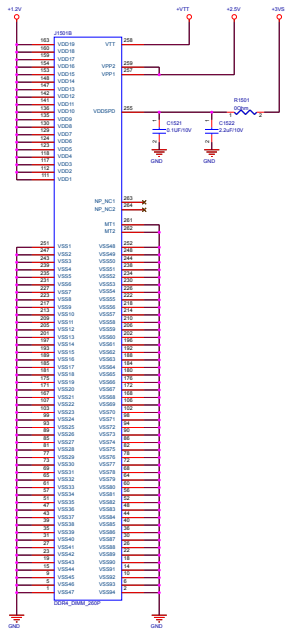
SO-DIMMs that do not support ECC (x64 only) will use the SPD with EVENT# not wired.  
SO-DIMMs that support ECC (x72) will use a combined SPD/Thermal Sensor with EVENT# wired.

EVENT# ON ECC DIMMs: KEEP A PULL UP ON THE PIN IN PCB

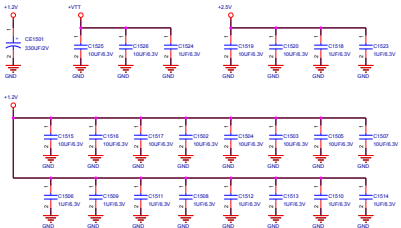


| Main Source | 1th FWR  | 2nd FWR                      |
|-------------|----------|------------------------------|
|             | +1.2V    | +VTT (0.6V From P08600)      |
|             |          | M_A_VREFCA (0.6V From +1.2V) |
| AC_BAT_SYS  | +3VA_DSW | +3VS                         |
|             |          | +2.5V                        |

12002-00080700  
DDR4 DIMM 260P 4H STD

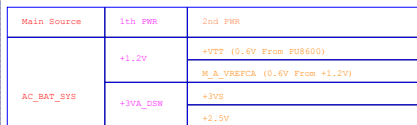
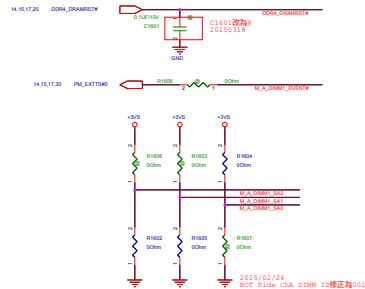
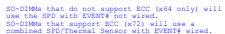


EVENT# ON ECC DIMM: KEEP A PULL UP IF NO PIN IN PCH

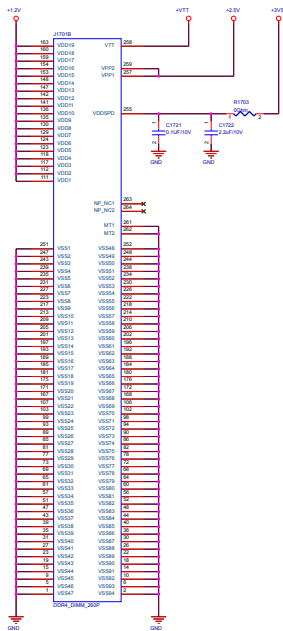


|  |                                     |                              |
|--|-------------------------------------|------------------------------|
|  Project Name: <b>G752VSK</b> |                                     | Rev: <b>R2.0</b>             |
| Title: <b>DIM_DDR4 SO-DIMM B1</b>  |                                     |                              |
| Size: <b>Custom</b>  | Dept.: <b>ASUSTek COMPUTER INC.</b> | Engineer: <b>Ashton_yang</b> |
| Drawn by: <b>ASUS-0010</b>   | Checked by: <b>ASUS-0010</b>        | Appr. by: <b>ASUS-0010</b>   |

12002-00080700  
DDR4 DIMM 260P 4H STD

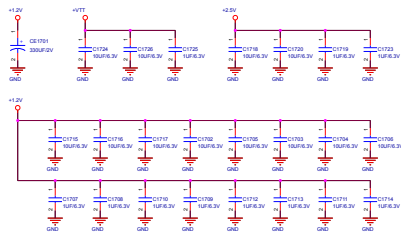


12002-00080500  
DDR4 DIMM 260P 8H STD



SO-DIMMs that do not support ECC (x64 only) will use the SPD with EVENT# not wired.  
SO-DIMMs that support ECC (x72) will use a combined SPD/Thermal Sensor with EVENT# wired.

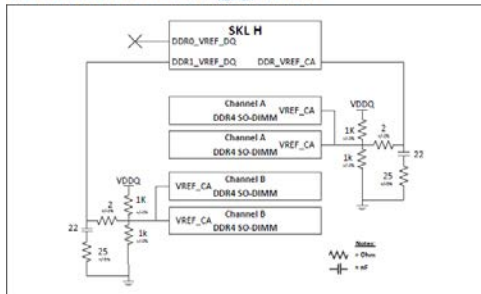
EVENTS ON ECC DIMM: KEEP A PULL UP IF NO PIN IN RCH



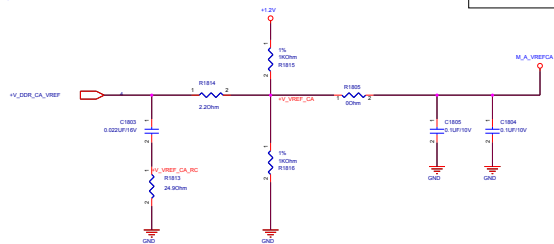
|   |       |                       |           |             |
|---|-------|-----------------------|-----------|-------------|
|  |       | Project Name          |           | Rev         |
|   |       | G752YSK               |           | R2.0        |
| Title : DIM_DDR4 SO-DIMM B0   |       |                       |           |             |
| Size  | Dept: | ASUSTek COMPUTER INC. | Engineer: | Ashton_yang |
| Customs   |       |                       |           |             |
| Date: Wednesday, October 12, 2016   |       | Sheet                 | 17        | of 102      |



# SKL H DDR4/DDR4-RS SO-DIMM V<sub>REF-CA</sub> Overview

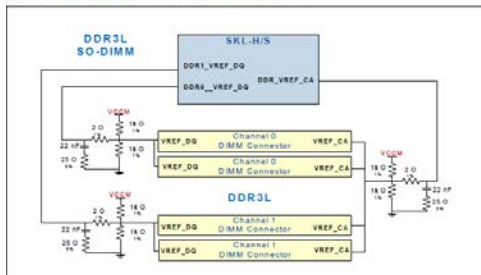


SO-DIMM0 Vref

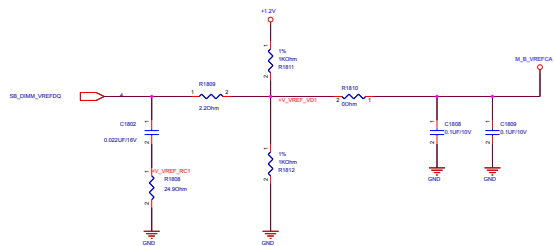


|             |         |                              |
|-------------|---------|------------------------------|
| Main Source | 1th PWR | 2nd PWR                      |
| AC_BAT_SYS  | +1.2V   | M_A_VREFCA (0.6V From +1.2V) |

# SKL H and SKL S DDR3L SODIMM VREF Overview

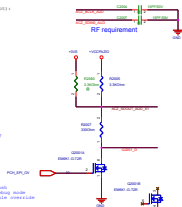


SO-DIMM1 Vref



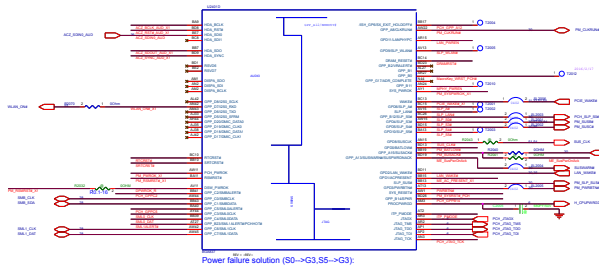
[illegible]

NIA\_FUNC(Co-Die PLL VR voltage select):  
Rising edge of NIMONTS pin  
High:1.5V, Low:1.8V (default)

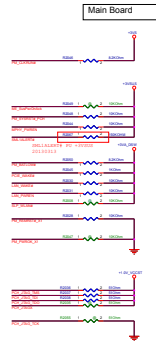


```
ACE SDOUT:
(1)FCH:
Internal PD 20k ohm,
VIL<0.35V,VIH=0.65-1.3V
(2)ALC269:
VIL<0.35*1.3V,VIH>0.65*1.3V
```

ACI\_SICOT is a signal used for Flash Descriptor security Oversight/NE Debug mode  
NICE : set overside, LOW : disable overside



Power failure solution (S0→G3,S5→G3):



| Main Source | 1st PWS   | 2nd PWS  | 3rd PWS     | etc.     |
|-------------|-----------|----------|-------------|----------|
| +R2C0A5     | +R2C1A05  | +R2C1A1C |             |          |
| AC_RAT_015  | +1_0V0010 | +0C015   | +1_0V_V0015 |          |
|             | +1_2V     |          |             |          |
|             | +0R01     | +10A     | +10A_0C     |          |
|             |           | +10R010  | +3Y010_P0A  | +0C01A10 |
|             | +0R0_00A  | +70A     |             |          |



|                                   |               |
|-----------------------------------|---------------|
| PCR_CPC1: weak internal pull down |               |
| P2                                | oSPI          |
| P0                                | LPC (default) |



|                                   |                   |
|-----------------------------------|-------------------|
| PCB_CPCI: weak internal pull down |                   |
| PU                                | Enable            |
| PD                                | Disable (Default) |



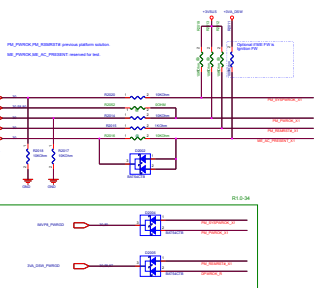
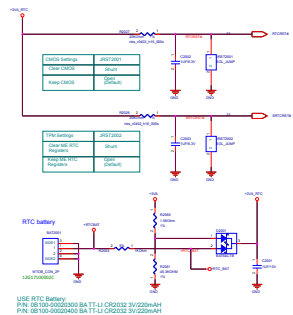
|                                       |                   |
|---------------------------------------|-------------------|
| PCB OFFSHOOT: send internal gull down |                   |
| PU                                    | Enable            |
| PD                                    | Disable (Default) |

Diagram illustrating a DNA microarray structure. The array consists of 10 probes (1-10) and their corresponding target sequences. The probes are labeled on the left, and the target sequences are labeled on the right. The target sequences are: 1. 5'-GATGAG-3', 2. 5'-GATGAG-3', 3. 5'-GATGAG-3', 4. 5'-GATGAG-3', 5. 5'-GATGAG-3', 6. 5'-GATGAG-3', 7. 5'-GATGAG-3', 8. 5'-GATGAG-3', 9. 5'-GATGAG-3', 10. 5'-GATGAG-3'.

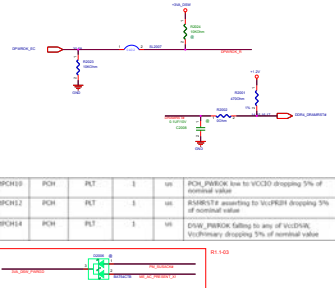
Boundary Scan TP (PCH) R0.1-37

| TP    | Pin Label     | Pin Label |                 |
|-------|---------------|-----------|-----------------|
| TP000 | PCH_T000_T002 | T2007     | TP_T2008        |
| TP001 | PCH_T003_T004 | T2011     | PCH_T2010_T2011 |
| TP002 | PCH_T005_T006 | T2013     | 3A              |
| TP003 | PCH_T007_T008 |           |                 |
| TP004 | PCH_T009_T010 | T2010     | PCH_T2012_T2013 |

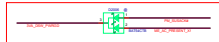
HEDGE\_PCH



Power failure solution ( $S5 \rightarrow C3, S5 \rightarrow C3$ )

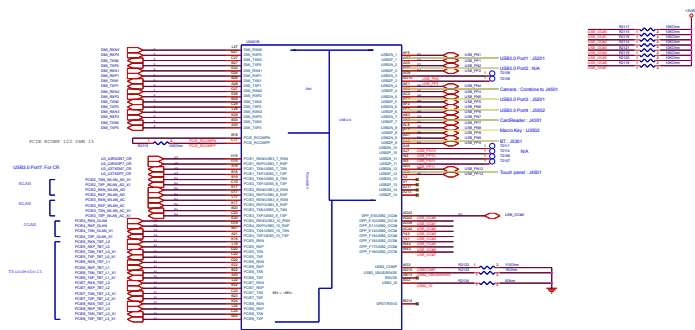


|        |     |     |   |    |   |
|--------|-----|-----|---|----|---|
| SPCH10 | POH | PLT | 1 | us | POH_PWRK low to VCCIO dropping 5% of nominal value                        |
| SPCH12 | POH | PLT | 1 | us | RMRST# asserting to VccPRST dropping 5% of nominal value                  |
| SPCH14 | POH | PLT | 1 | us | DSW_PWRK falling to any of VccDSW; VccHistry dropping 5% of nominal value |



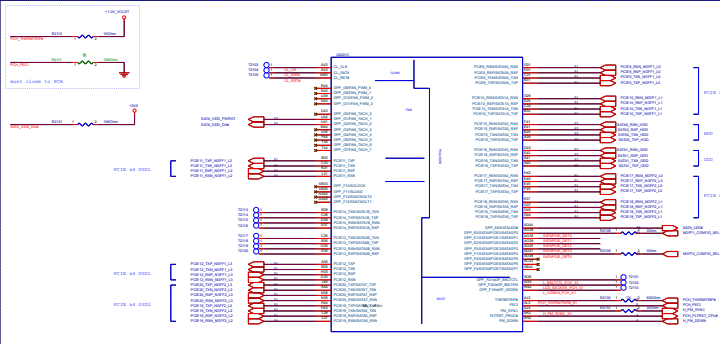
R1.9-03

| SKL, PCH-H C236 |                  |          |                 | SKL, G751VC PCIe CLK Define |  |          |  |
|-----------------|------------------|----------|-----------------|-----------------------------|--|----------|--|
| HSIO Detail     |                  | Function |                 | PCIe CLK SRC                |  | Function |  |
| 0               | PCI02 (From CPU) |          | iGPU            |                             |  | SRC0     |  |
| 1               | USB3 #1          |          | USB I/O(USB3_0) |                             |  |          |  |
| 2               | USB3 #2          | SSIC #1  |                 |                             |  |          |  |
| 3               | USB3 #3          | SSIC #2  |                 |                             |  |          |  |
| 4               | USB3 #4          |          |                 |                             |  |          |  |
| 5               | USB3 #5          |          | USB I/O(USB3_2) |                             |  |          |  |
| 6               | USB3 #6          |          | USB I/O(USB3_3) |                             |  |          |  |
| 7               | USB3 #7          | PCIe #1  |                 |                             |  | SRC1     |  |
| 8               | USB3 #8          | PCIe #2  |                 |                             |  |          |  |
| 9               | USB3 #9          | PCIe #3  |                 |                             |  | SRC3     |  |
| 10              | USB3 #10         | PCIe #4  | QoS             |                             |  | SRC4     |  |
| 11              | PCIe #5          | QoS      |                 |                             |  |          |  |
| 12              | PCIe #6          |          |                 |                             |  |          |  |
| 13              | PCIe #7          |          |                 |                             |  |          |  |
| 14              | PCIe #8          |          |                 |                             |  |          |  |
| 15              | PCIe #9          | SATA #0  | QoS             |                             |  |          |  |
| 16              | PCIe #10         | SATA #1  |                 |                             |  |          |  |
| 17              | PCIe #11         |          |                 |                             |  |          |  |
| 18              | PCIe #12         | QoS      |                 |                             |  |          |  |
| 19              | PCIe #13         | SATA #0* | QoS             |                             |  |          |  |
| 20              | PCIe #14         | SATA #1* |                 |                             |  |          |  |
| 21              | PCIe #15         | SATA #2  |                 |                             |  |          |  |
| 22              | PCIe #16         | SATA #3  |                 |                             |  |          |  |
| 23              | PCIe #17         | SATA #4  |                 |                             |  |          |  |
| 24              | PCIe #18         | SATA #5  |                 |                             |  |          |  |
| 25              | PCIe #19         | SATA #6  |                 |                             |  |          |  |
| 26              | PCIe #20         | SATA #7  |                 |                             |  |          |  |

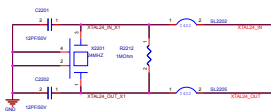


## USB Setting

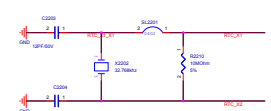
| SKL, G751VC USB2 & USB3 Define |                 |          |                 |
|--------------------------------|-----------------|----------|-----------------|
| USB2                           | Function        | USB2     | Function        |
| USB2 #1                        | USB I/O(USB3_0) | USB2 #1  | USB I/O(USB3_0) |
| USB2 #2                        |                 | USB2 #2  |                 |
| USB2 #3                        |                 | USB2 #3  |                 |
| USB2 #4                        | Camera          | USB2 #4  | 3D Camera       |
| USB2 #5                        | USB I/O(USB3_2) | USB2 #5  | USB I/O(USB3_2) |
| USB2 #6                        | USB I/O(USB3_3) | USB2 #6  | USB I/O(USB3_3) |
| USB2 #7                        | USB Card Reader | USB2 #7  | USB Card Reader |
| USB2 #8                        | Macro Key       | USB2 #8  |                 |
| USB2 #9                        | BT              | USB2 #9  |                 |
| USB2 #10                       |                 | USB2 #10 |                 |
| USB2 #11                       |                 |          |                 |
| USB2 #12                       | Touch Panel     |          |                 |
| USB2 #13                       |                 |          |                 |
| USB2 #14                       |                 |          |                 |



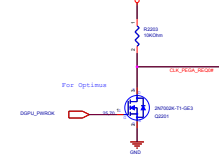
XTAL 24MHz



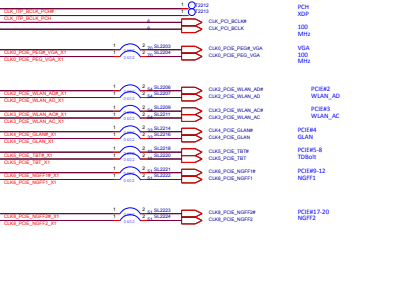
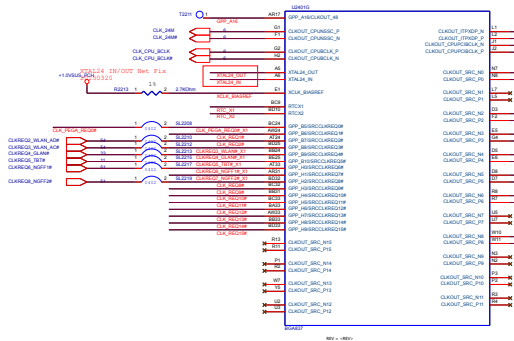
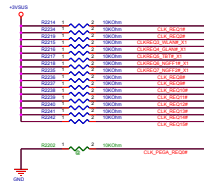
RTC CRYSTAL 32.768KHz



DGPU CLKReq#



PCH CLKREQ Setting:

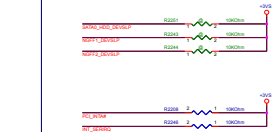
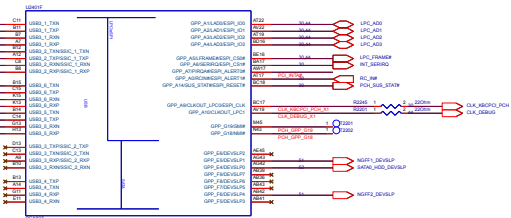


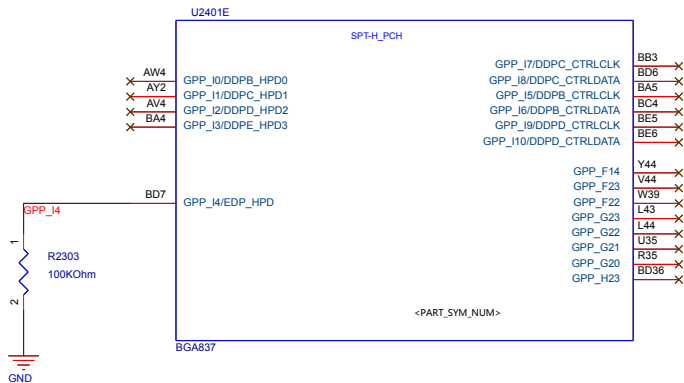
USB10 Port1 : J501

USB10 Port2 : N/A

USB10 Port4 : J502


USB10 Port3 : J501



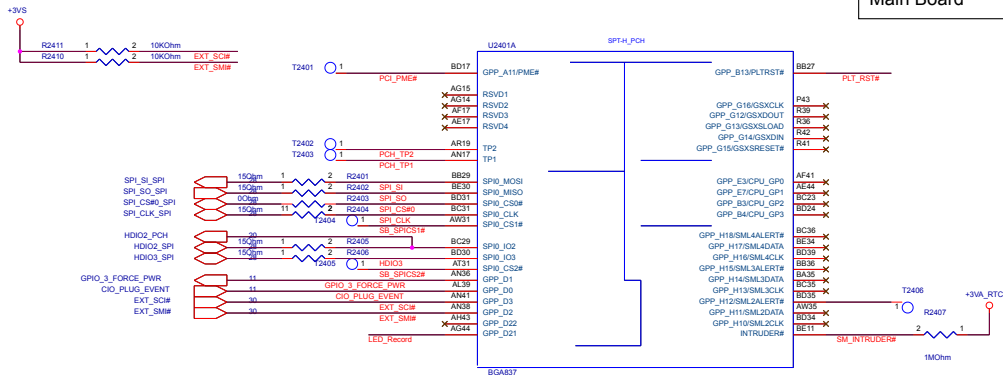


DDPD Strap Setting Update :  
 0 = Port D is not detected (Default)  
 1 = Port D is detected  
 20150309

REV = <REV>

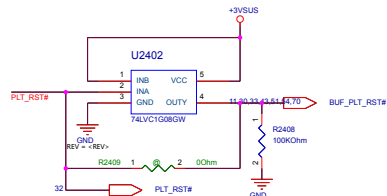
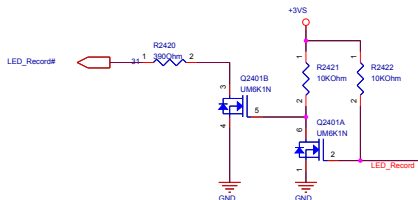
|   |  |              |      |
|---|--|--------------|------|
|  |  | Project Name | Rev  |
|   |  | G752VSK      | R2.0 |
| Title : PCH-CPT(4)_CPT,PCI,DP   |  |              |      |
| Size<br>A   | Dept.: ASUSTeK COMPUTER INC. Engineer: Ashton_yang |              |      |
| Date: Wednesday, October 12, 2016   | Sheet 23 of 102                                    |              |      |

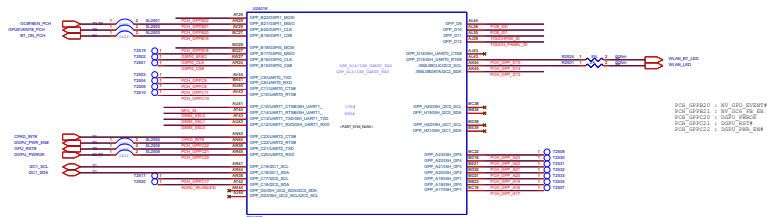
## Main Board



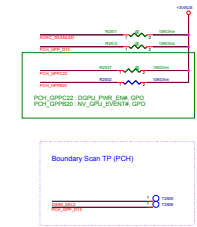
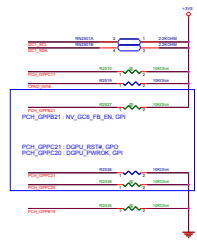
### Record Key LED Control Circuit

LED Record# of Current :  
 $(5 - 2.35) / 390 = 6.8\text{mA}$



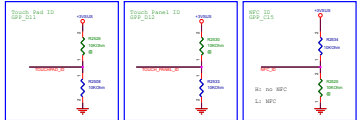
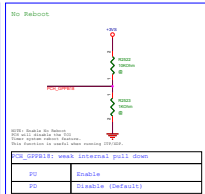
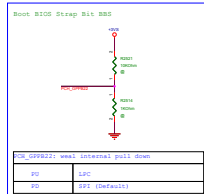
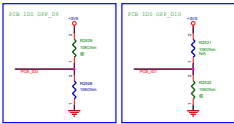


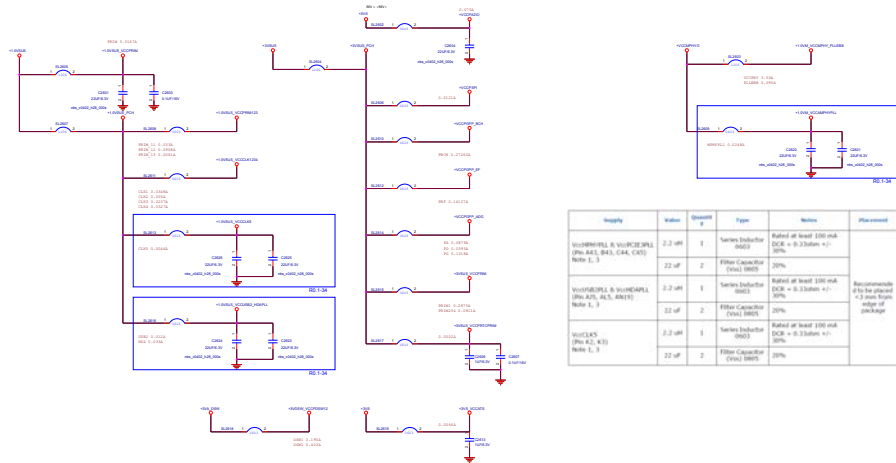
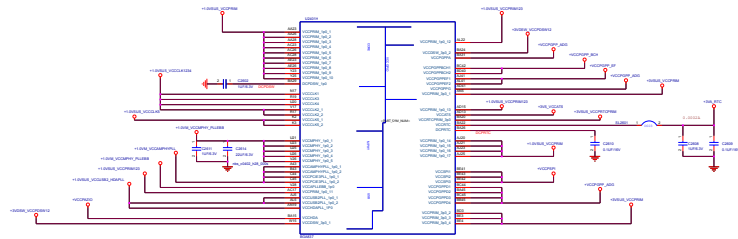
# Main Board



|      |  |  |  |
|------|--|--|--|
| ROM0 |  |  |  |
| ROM1 |  |  |  |
| ROM2 |  |  |  |

|            | ROM0 | ROM1 |
|------------|------|------|
| Enable ROM | L    | L    |
| Enable ROM | L    | N    |

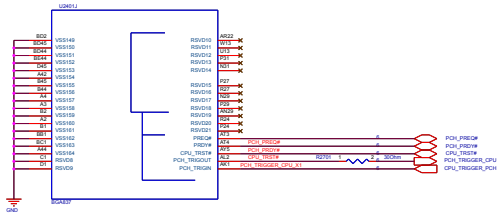
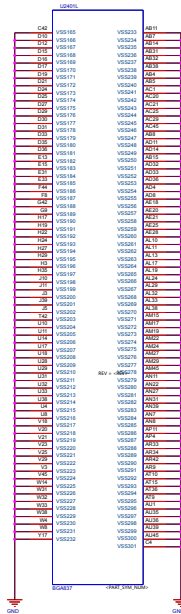
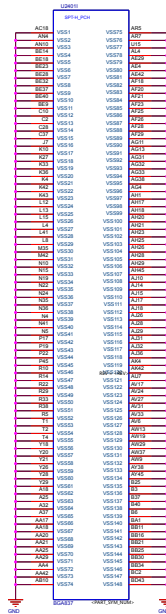




| Supply  | Values   | Quantity | Type                   | Notes   | Plan covered  |  |
|---|----------|----------|------------------------|---|---|--|
| VOIRPDR1L & VOIRPDR1L<br>(Pins 041, 043, C04, C05)<br>Note 1, 3 | 2.2-0.01 | 1        | Series Inductor (D04)  | Rated at least 100 mW<br>DCR = 0.3 Ohms +/- 10% | Recommended to be placed on the same order of package |  |
|   | 22-0.2   | 2        | Filter Capacitor (C04) | 20%   |   |  |
| VOIRPDR1L & VOIRPDR1L<br>(Pins A01, A02, A03B1)                 | 2.2-0.01 | 1        | Series Inductor (D05)  | Rated at least 100 mW<br>DCR = 0.3 Ohms +/- 10% |   |  |
|   | 22-0.2   | 2        | Filter Capacitor (C04) | 20%   |   |  |
| VOIRLCK3<br>(Pins K2, K3)<br>Note 1, 3                          | 2.2-0.01 | 1        | Series Inductor (D06)  | Rated at least 100 mW<br>DCR = 0.3 Ohms +/- 10% |   |  |
|   | 22-0.2   | 2        | Filter Capacitor (C04) | 20%   |   |  |



## Main Board

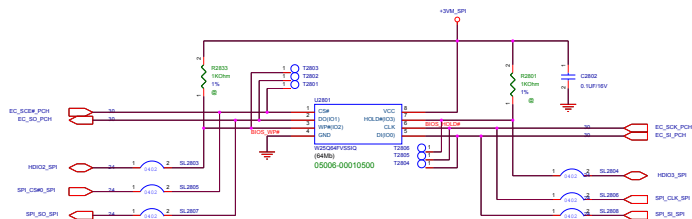


## SPI Power

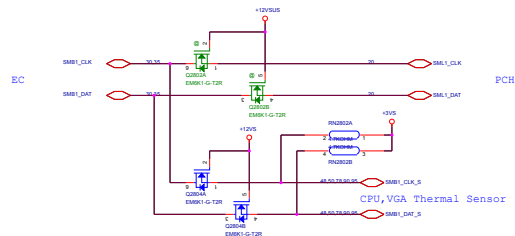


## 1st SPI ROM

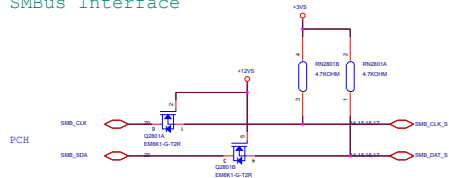
Main: 05006-00010500 (fixed quad bit)



## System Management Interface



## SMBus Interface



## Main Board

## EC 8995

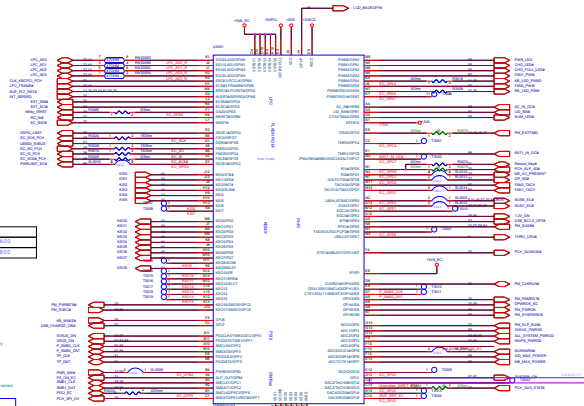
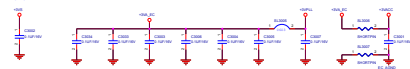
```
Only 3V Torlence
GPR[0,1,2,3,4,5,6]
GPC[3,4,5,6,7]
GPD[0,4,6,7]
GPE[4]
GPF[6,7]
GPH[7]
GPI [0 :7]
GPJ[0:7]
```

Can be adjusted to  
Open-Drain for port:

GPB3-GPB3  
GPB3-GPB7  
GPB3-GPB7  
GPB3-GPB7  
GPB3-GPB7  
GPB3-GPB6  
GPB3-GPB5

EC Require

## Power



| ITE Version     | AGUS P/N       |
|-----------------|----------------|
| IT8995VG-128/CX | 04037-00050600 |
| IT8995VG-128/DX | 04037-00050800 |

## Battery

### Thermal sensor

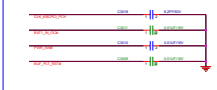
For EMI



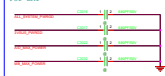
## For EMI



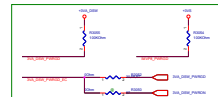
|  |  |
|--|--|
|  |  |
|--|--|



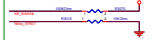
## For ENI



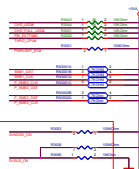
## R10-34



## N key

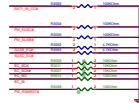
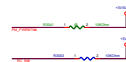


## PU/PD

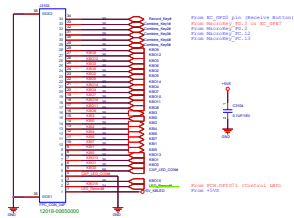


## for load code

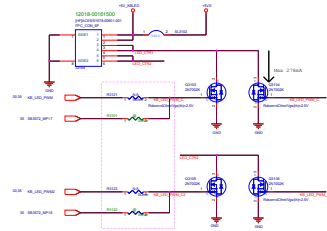
### Click-Pad Schematic



### Keyboard Connector

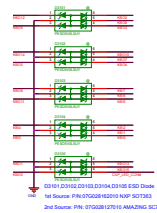


## Keyboard LED Connector



For Keyboard LED Hot Zone Function, PWM\_LED controlled by XT 20161011

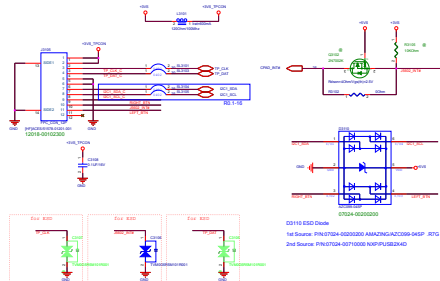
Reserved for EMI



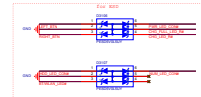
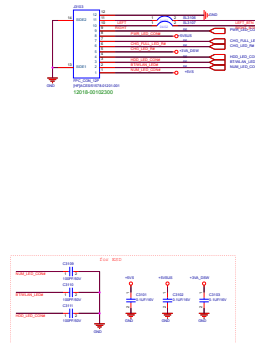
| Macro Key                 | IR Backlight                 | Macro Key LED Behavior |
|---------------------------|------------------------------|------------------------|
| 23104_PwrM<br>LED_Combine | IR_1424_PwrM<br>IR_1424_PwrM | Combine_Key(1,2,3,4)   |
| No Set (0)                | No Set (0)                   | LED OFF (0)            |
| No Set (0)                | Set (1)                      | LED OFF (0)            |
| Set (1)                   | No Set (0)                   | Flash, then LED OFF(0) |
| Set (1)                   | No Set (0)                   | Flash, then LED ON(1)  |

To Touchpad

[ClickPad Schematic](#)



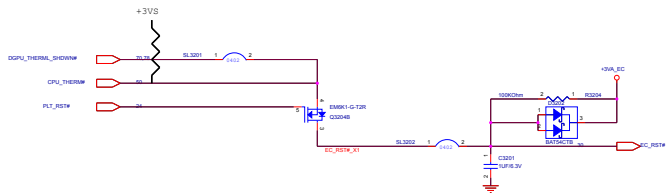
## To Touchpad Button



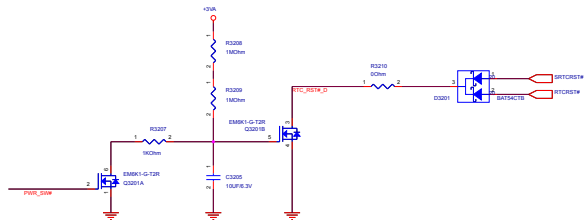
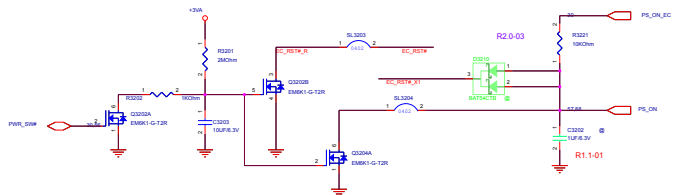
1st Source: P/N: 07G028162010 NXP SOT363  
2nd Source: P/N: 07G028127010 AMAZING SC70-GL

# EC Reset Circuit

Main Board



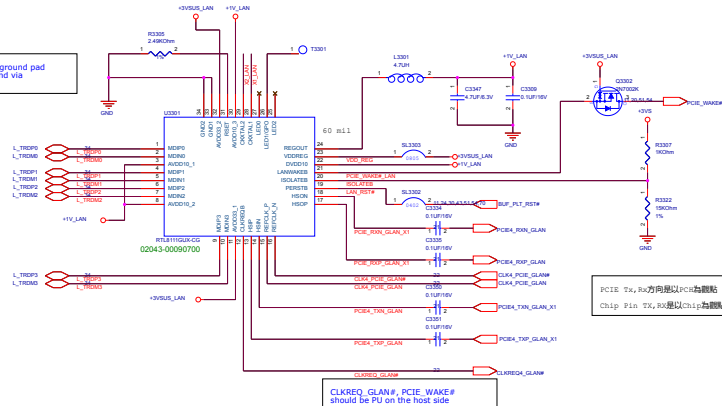
battery embedded (press pwr\_sw 10sec, then reset ec )



## Main Board

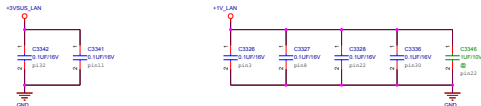
The distance from U3301.24 to L3301 within 200 mil.  
The distance from L3301 to C3347 within 200 mil.

33/34 pin ground pad  
need ground via

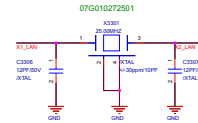


PCIE Tx, Rx方向是以PCH為觀點  
Chip Pin TX, RX是以Chip為觀點

CLKREQ\_GLAN#, PCIE\_WAKE# should be PU on the host side

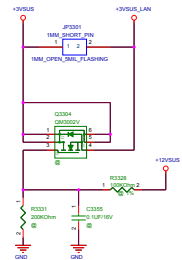


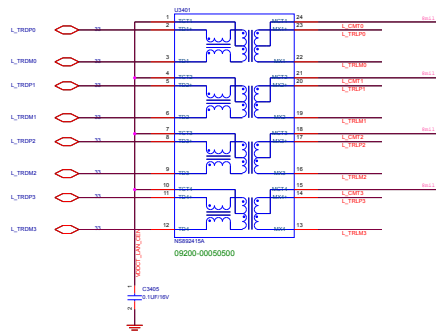
C3348, C3310 close to pin 23 reserved for SWR mode



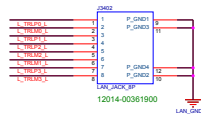
X3301: 25MHZ +/-30ppm/10pF (3225)  
1st: P/N:07G010272501 TXC/7V2500001 1  
2nd: P/N:07G010952500 HOSONIC/E3FB25

Realtek suggests 3V\_LAN raise time >1ms





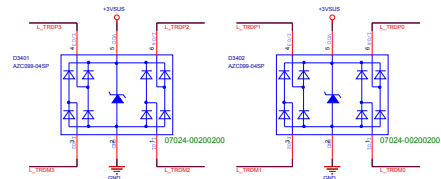
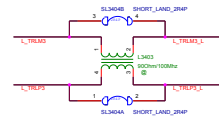
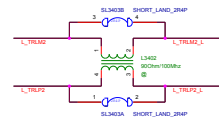
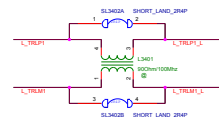
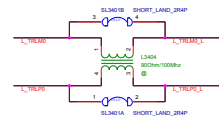
## LAN Connector



J3402 LAN Jack

1st Source: P/N:12014-00161700 FOXCONN/JM361 1-NS640003-7H

2nd Source: P/N:12014-00035500 SINGA TRON/2RJ1648-000111F

TEST POINT LAN  
Follow Factory ATS test

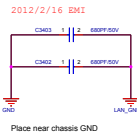
D3401, D3402 ESD Diode

1st Source: P/N:07024-00200200 AMAZING/AZC09-04SP\_R7G

2nd Source: P/N:07024-00710000 NXP/PUSB2X4D

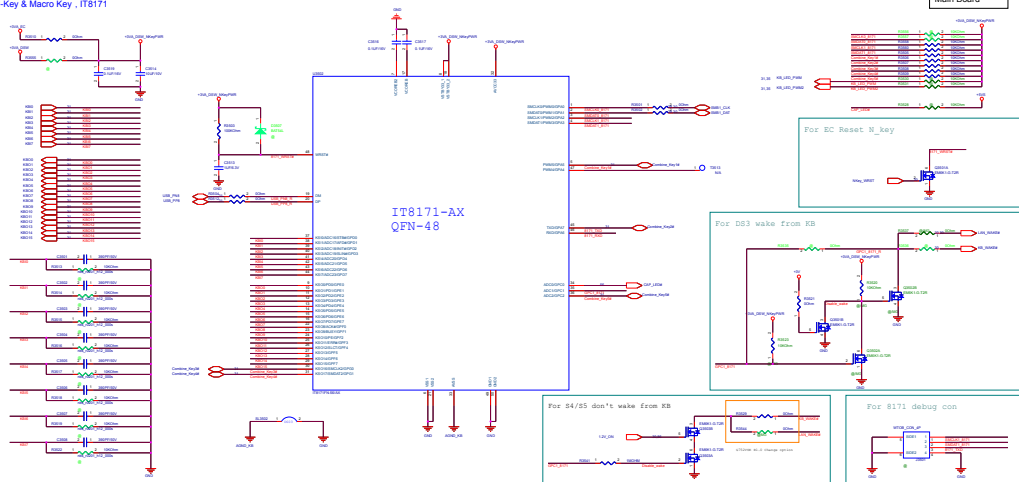


GND\_LAN\_T 上禁止加任何零件

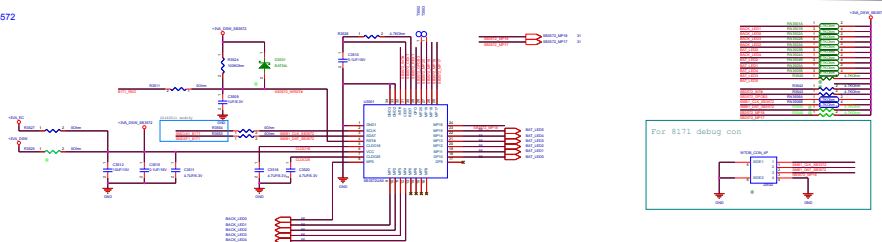


Place near chassis GND

# N-Key & Macro Key , IT8171

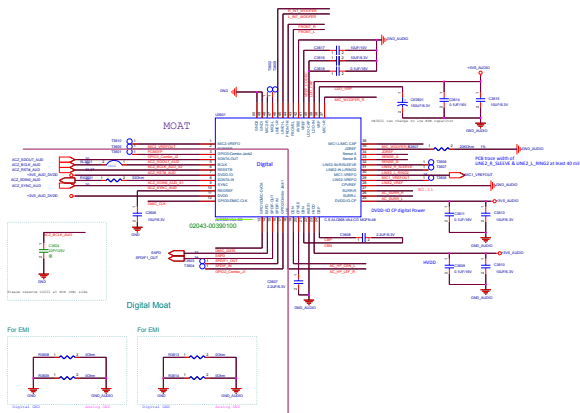


## Light Bar , SB3572



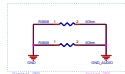


## Analog Moat



## Digital Moat

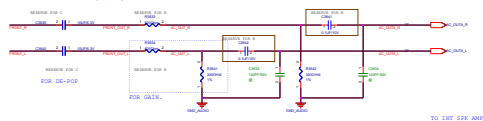
For EMI



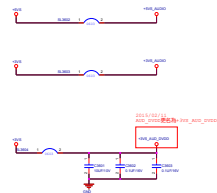
For EMI



## TO INTERNAL SPEAKER (Port-D)

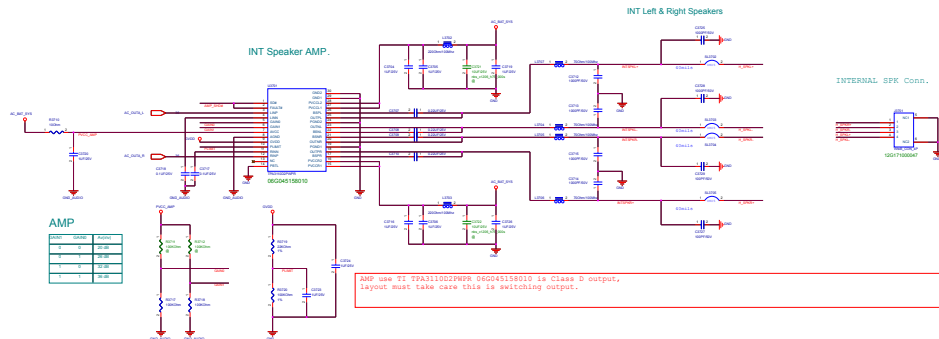


TO INT SPE AMP

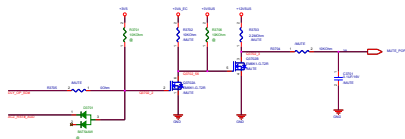


## DETECTION

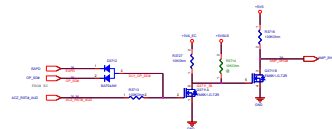




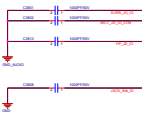
EXT JACK MUTE CONTROL



INT SPK MUTE CONTROL



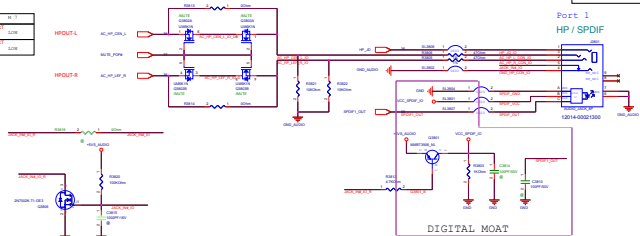
For EMI



#### HP & SPDIF DETECT RULE

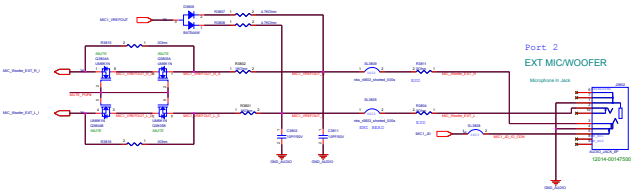
|                 | IN  | OUT | IN  | OUT |
|-----------------|-----|-----|-----|-----|
| HP/SPDIF DETECT | LOW | LOW | LOW | LOW |
| HP/SPDIF DETECT | LOW | LOW | LOW | LOW |

For EMI



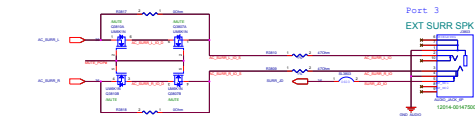
2013/01/18 NAKSOLUR  
Fix HP PDP Noise Issue in Response S3  
Change Power plan from >35G to >3V A

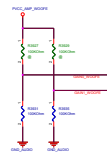
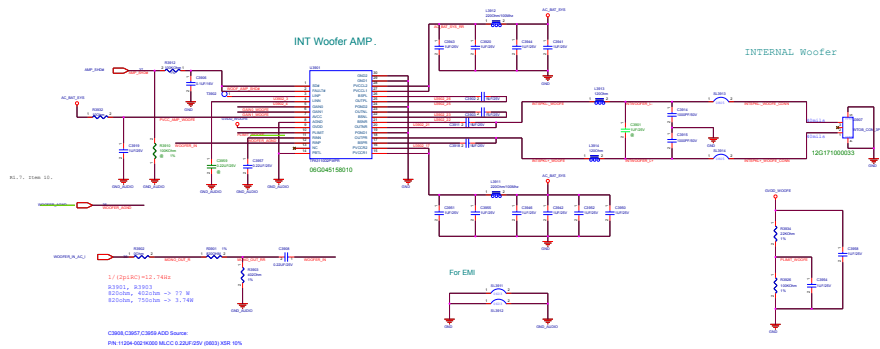
For EMI



2013/01/18 NAKSOLUR  
Fix HP PDP Noise Issue in Response S3  
Change Power plan from >35G to >3V A

For EMI

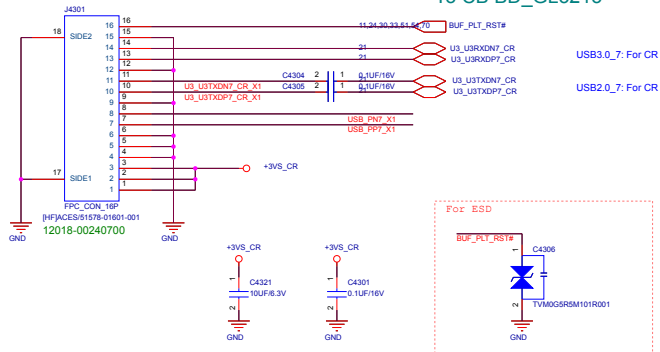




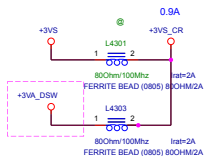
## AMP

| GAIND1 | GAIND2 | Av(pn) |
|--------|--------|--------|
| 0      | 0      | 20 dB  |
| 0      | 1      | 26 dB  |
| 1      | 0      | 22 dB  |
| 1      | 1      | 26 dB  |

To CB BD\_GL3213

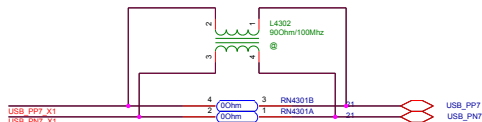


CardReader PWR



Change to +3VSUS in PR

For EMI



ASUS

Project Name  
G752VSKRev  
R2.0

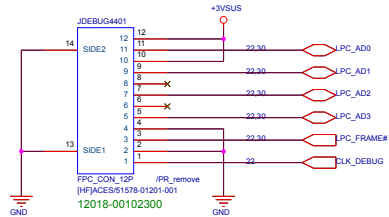
Title : CB IO CON

Size  
A Dept.: ASUSTek COMPUTER INC. Engineer: Ashton\_yang

Date: Wednesday, October 12, 2016

Sheet 43 of 102

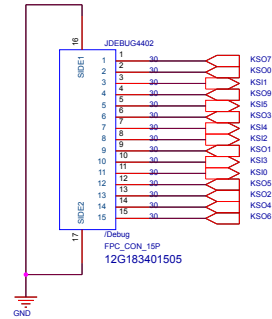
## LPC Debug Port



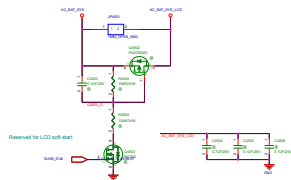
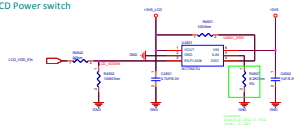
JDEB4401 Connector (MP USE)

1st Source: P/N:12018-00102300 ACES/51578-01201-001

2nd Source: P/N:12018-00102100 ENTER Y/6705K-Y12N-00L

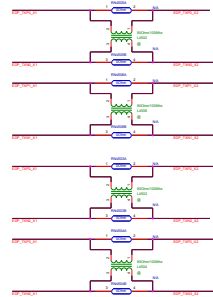


# LCD Power switch

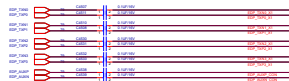


Main Board

For EMI



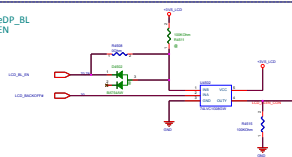
## eDP circuit



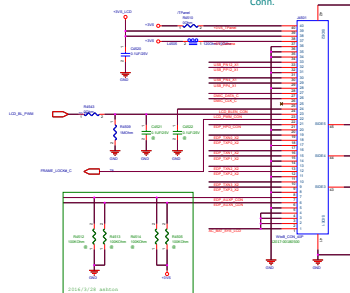
## eDP\_HPD



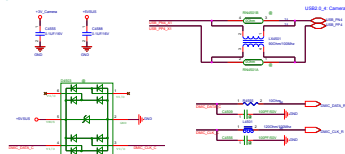
## eDP\_BL EN



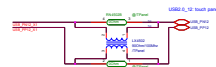
## eDP Panel Conn.

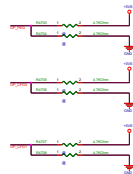


## Camera & D-MIC

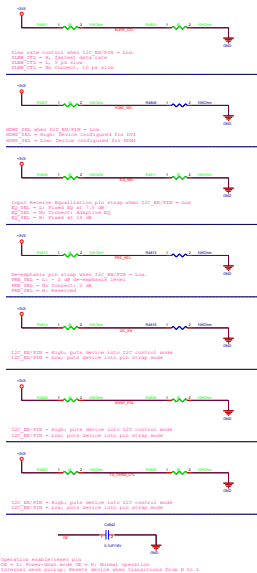


## Touch Panel

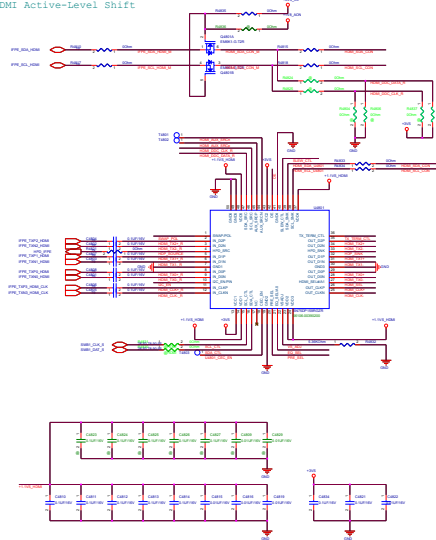




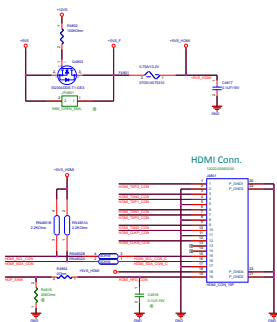




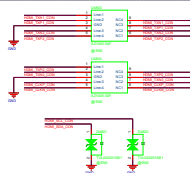
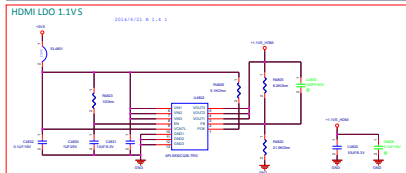
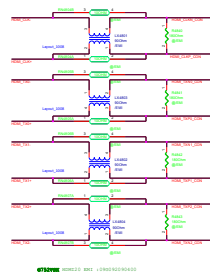
## HDMI Active-Level Shift



## HDMI PWR\_+5VS\_HDMI



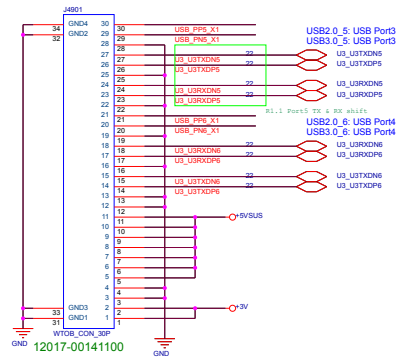
## HDMI EMI



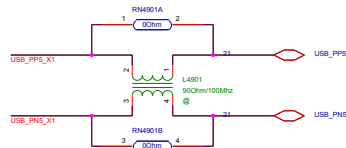
## Main Board

Main Board

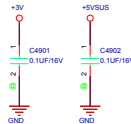
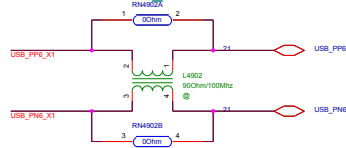
To USB3.0 I/O Board (PAGE55)



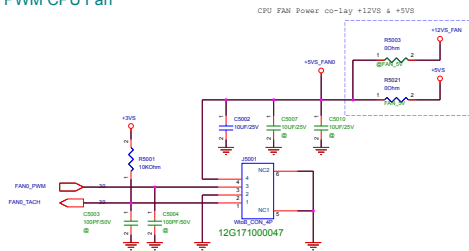
USB3.0 Port3\_J5501



USB3.0 Port4\_J5502

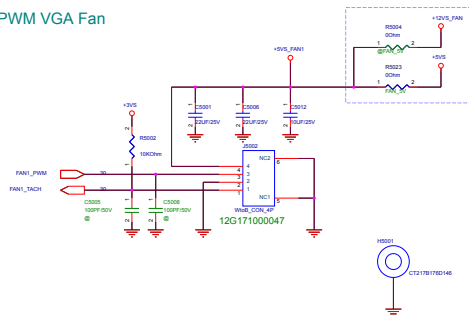


## PWM CPU Fan

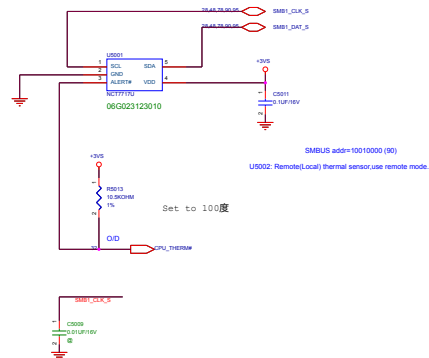


GPU FAN Power co-lay +12VS &amp; +5VS

## PWM VGA Fan

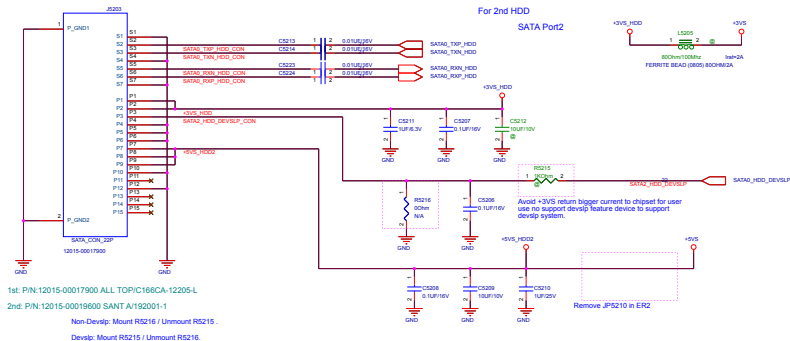


## CPU Thermal Sensor





## 2nd HDD



## EMI Request

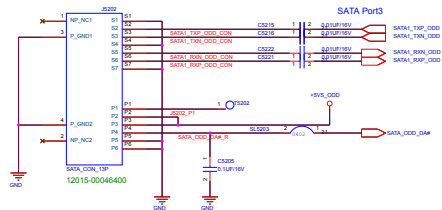


## For RF requirement

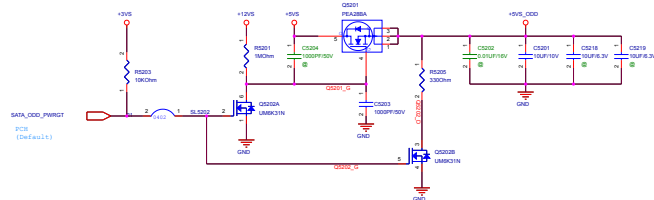
EMI Request0520



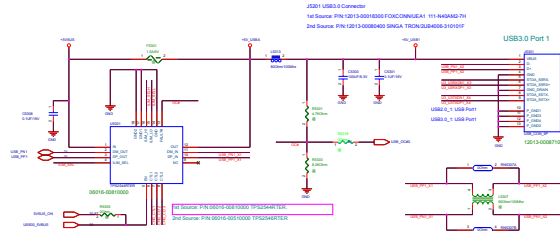
## ODD



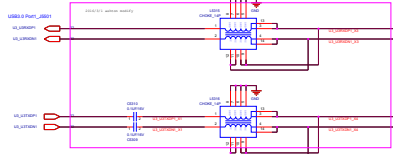
## ODD Power



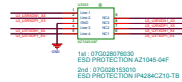
## USB3.0\_PORT1 ( Support USB Charge Circuit )



## USB3.0 EMI-Protection



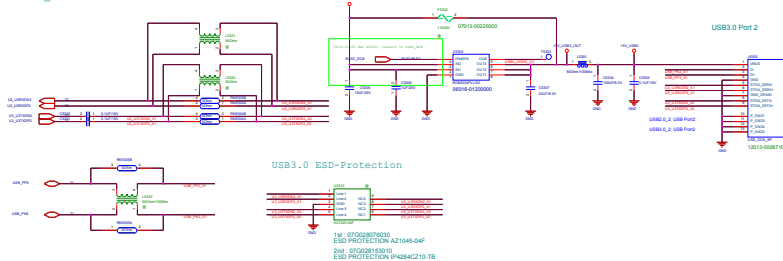
## USB3.0 ESD-Protection



## BC1.2 Charger Disable

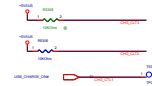


## USB3.0\_PORT2



## Main Board

## USB Charge Circuit (For PORT 1)

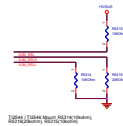


Chief River Platform: Mount R2008

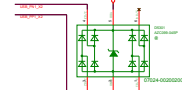
USB, 620V Platform: Unmount R2008

|           | 11 | 12 | 13 | 14 |
|-----------|----|----|----|----|
| USB_CHRG1 | 0  | 0  | 1  | 1  |
| USB_CHRG2 | 1  | 1  | 1  | 1  |
| USB_CHRG3 | 0  | 1  | 1  | 0  |

## Current Limit



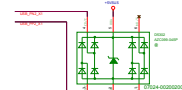
## USB2.0 ESD-Protection



DESIGN ESD Protection

1st Source: P/N 07014-00200000 AMAZINGAZ1045-04F RTG

2nd Source: P/N 07014-00210000 NXP/USB2X4D

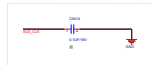
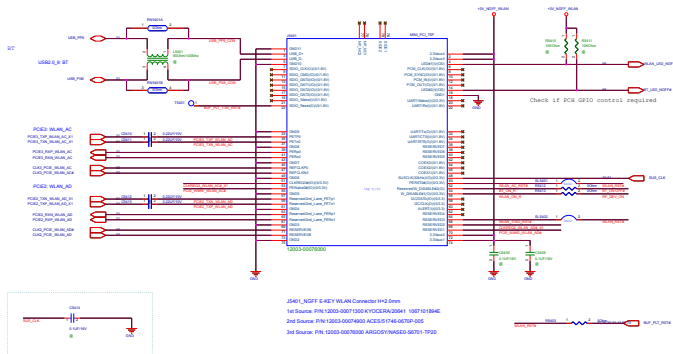


DESIGN ESD Protection

1st Source: P/N 07014-00200000 AMAZINGAZ1045-04F RTG

2nd Source: P/N 07014-00210000 NXP/USB2X4D

## NGFF M.2 TYPE\_E-KEY WIFI

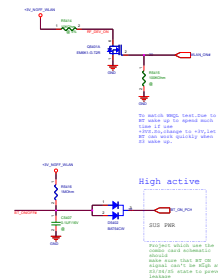


J5401\_NGFF E-KEY WLAN Connector H=2.5mm  
1st Source: P/N:12003-00071300 KYOCERA/20641 1067101894E  
2nd Source: P/N:12003-00074900 ACES/51746-0670P-005  
3rd Source: P/N:12003-00070000 ARGOSY/NA50-56701-1P20

4th Source: P.91-12003-00022-000 JAC:SM37505712-5AC

[illegible]

## WLAN &amp; BT ON



WLAN NUT

PRGGE:

ST 21 07 17 00 46  
13GNB210M025-1

LOCAN WLAN CARD NUT  
wlan\_nut\_240

CHASS

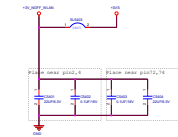
To match WQL test. Due to RT wake up to spend much time if use +JVS.20, change to +JVS, let RT can work quickly when RT wake up.

## High active

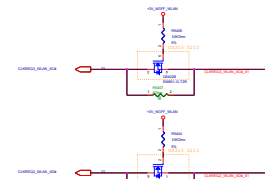
Project which use the common GSNV schematic should make sure that ST\_ON signal can't be High at R13/R15 state to prevent lockup.

[illegible]

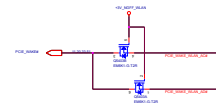
## Main Board

WLAN PWR\_+3V\_NGFF\_WLAN  
(Non-ISCT)

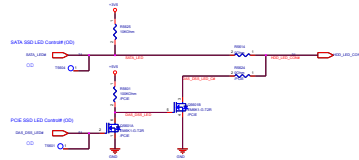
## WLAN CLKREQ#



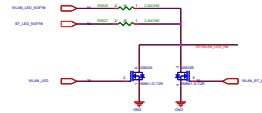
## WLAN\_Wake# Control



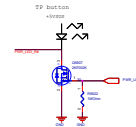
## HDD LED & PCIE SSD LED



## BT/WLAN LED Control

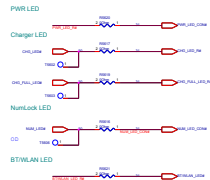


## PWR LED Control

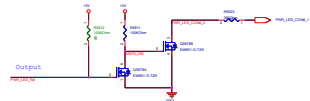


Main Board

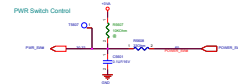
## To TP Button CONN



## OS LED Control



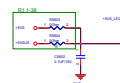
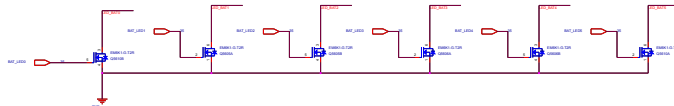
## To Power Button IO BD



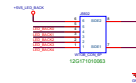
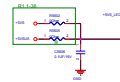
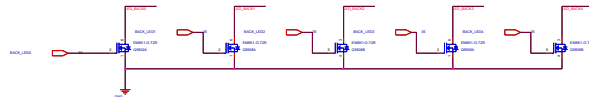
## To Keyboard CONN CapsLock LED



## To LED BAT BAR

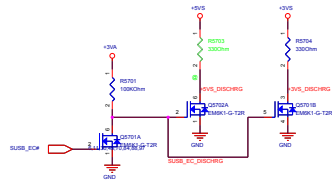


## To LED BACK BAR

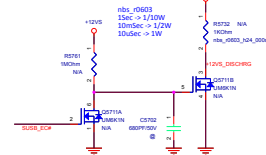
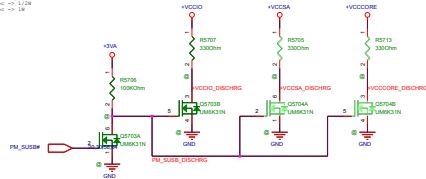




# Main Board



sta\_r0403  
15mSec -> 1/10W  
10mSec -> 1/2W  
10uSec -> 1W

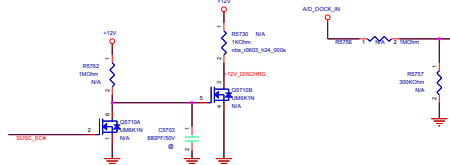
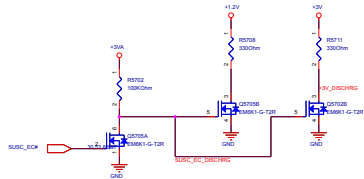


nbs\_r0603  
15mSec -> 1/10W  
10mSec -> 1/2W  
10uSec -> 1W

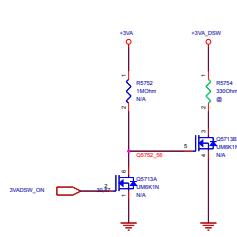
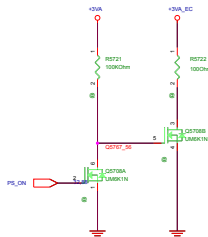
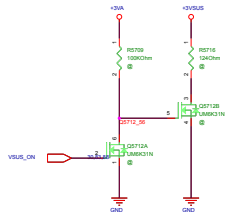
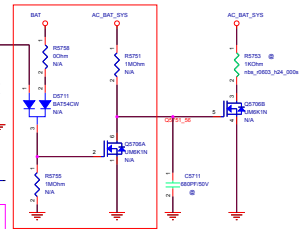
+12V & +12V5 需轉解+12V500m Load switch 應才能啟動

sta\_r0403  
15mSec -> 1/10W  
10mSec -> 1/2W  
10uSec -> 1W

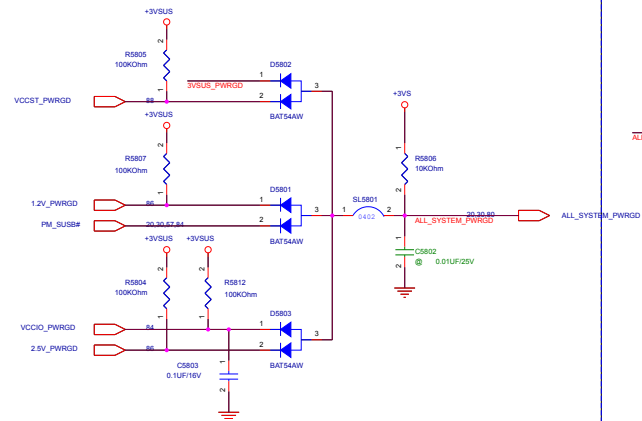
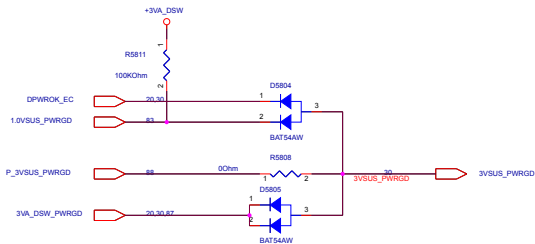
SUSC\_EC# turn off discharge before +12V ON  
+12V turn on discharge after SUSC\_EC# OFF



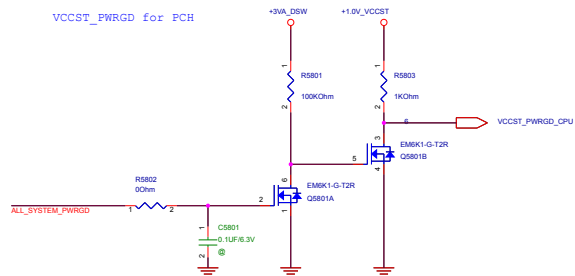
每小時耗 0.45mW  
每個月耗 324mW  
0.45mW=(15X15/1M)x2



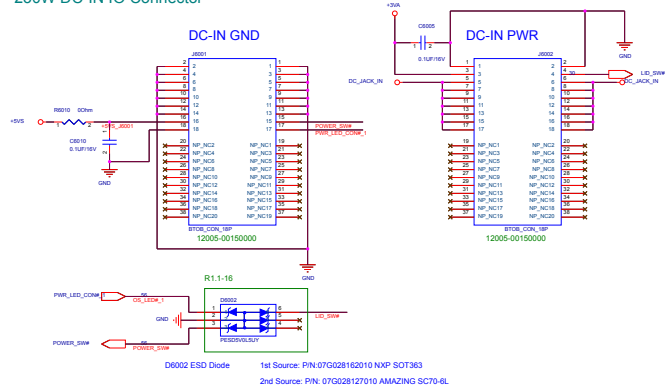
# Main Board



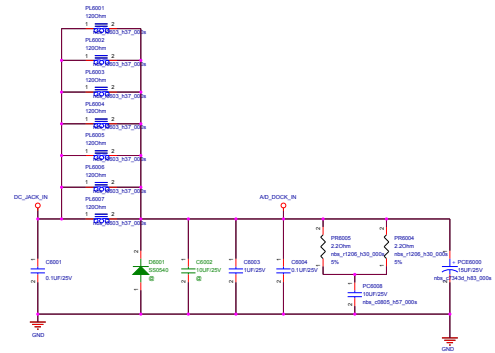
## VCCST\_PWRGD for PCH



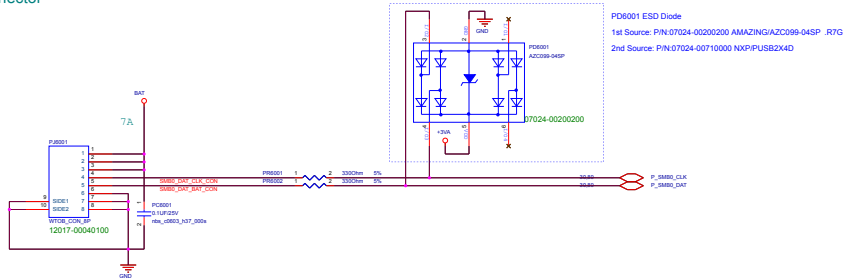
## 230W DC-IN IO Connector



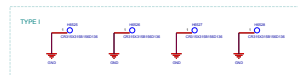
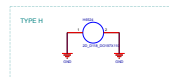
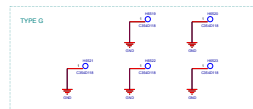
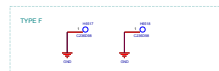
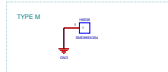
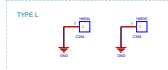
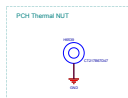
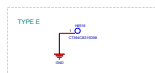
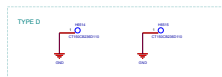
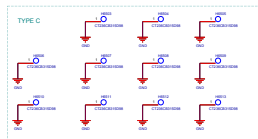
## Main Board



## Battery Connector



## TOP Component

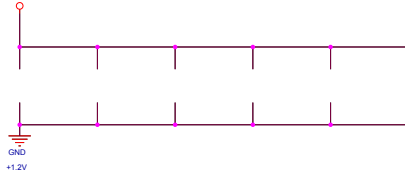


Main Board

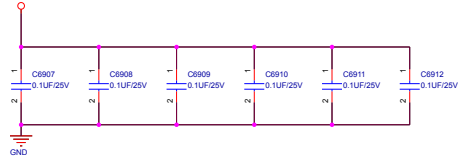
## BOT Component

## EMI

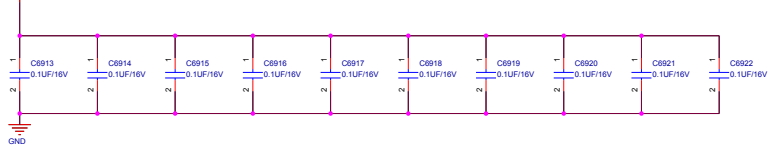
G\_PWR\_SRC\_NVVDD

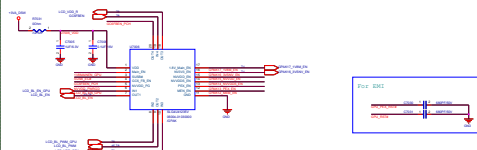
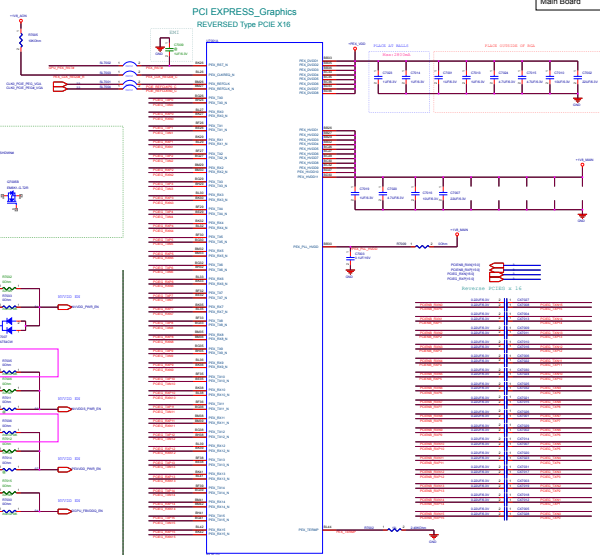
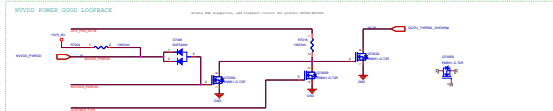


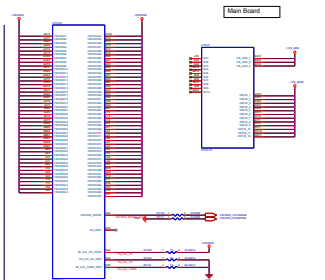
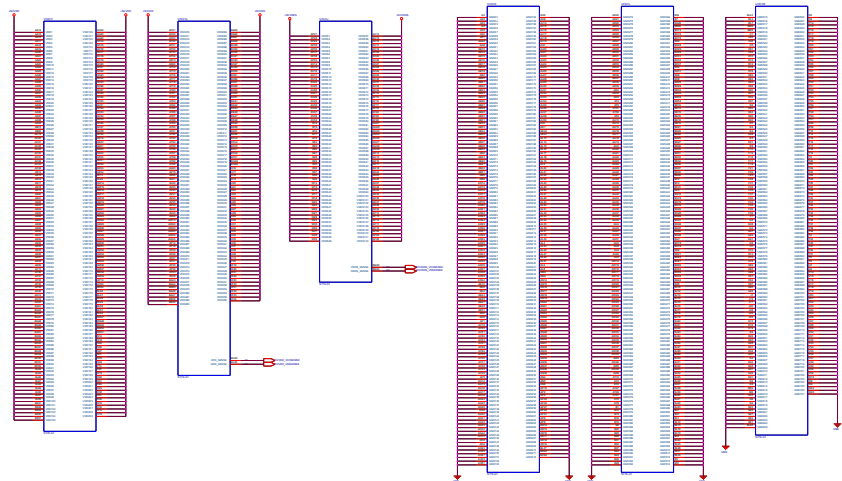
P\_IMVP8\_VCORE\_VIN\_S



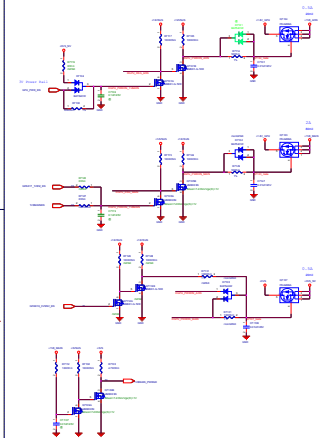
+1.2V



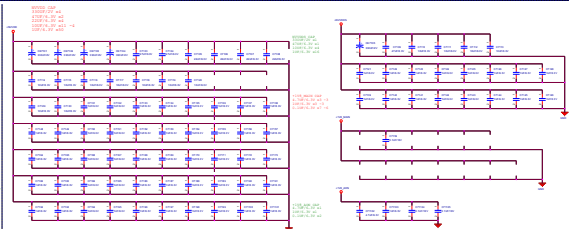
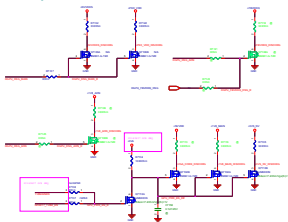


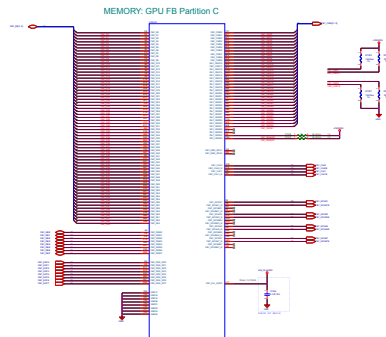
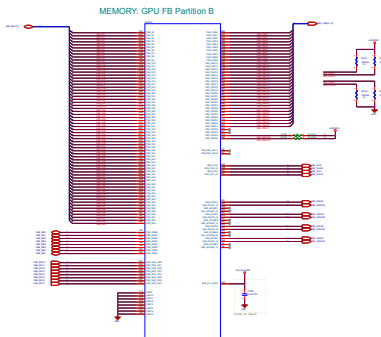
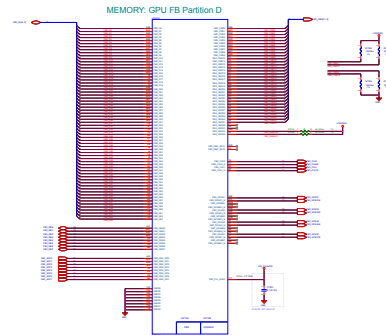
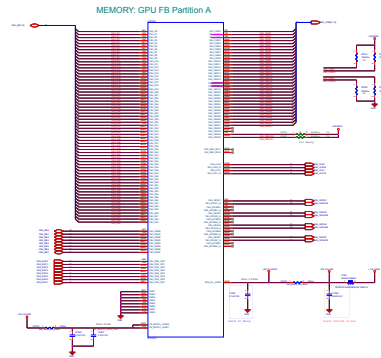


100 & 200 Power Control



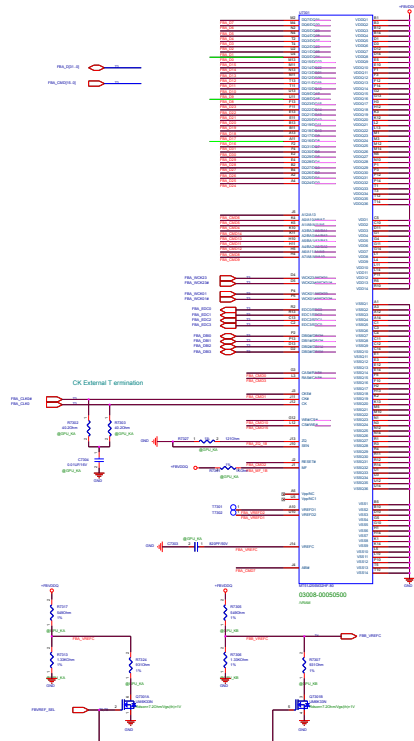
Discharge





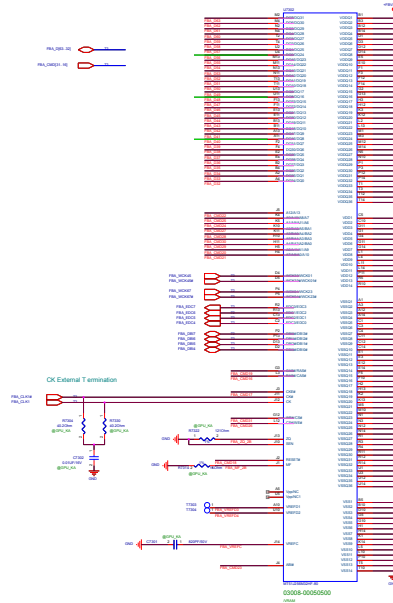


## FBA Partition Memory (1 of 2)



## FBA Partition Memory (2 of 2)

MF=0 Normal



R1.3-02 R1.2-05

USE GOOD5 VRAM 128Mb x 32 (\$128Mb)

fat: P/N:03008-00030100 HYNIX:H5GC4H24MFR-T2C (M-die) ,Strap: 0 x2

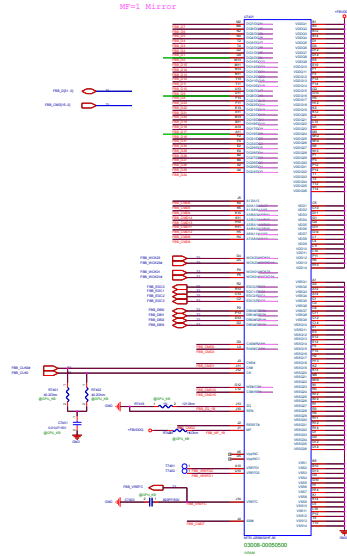
2nd: P/N:03008-00030200 SAMSUNG-K4G41325FC-HC03 ,Strap: 0x3

3rd: P/N:03008-00030400 Micron/EDW4032SAG-80-F (B-die), Strap: 0x4

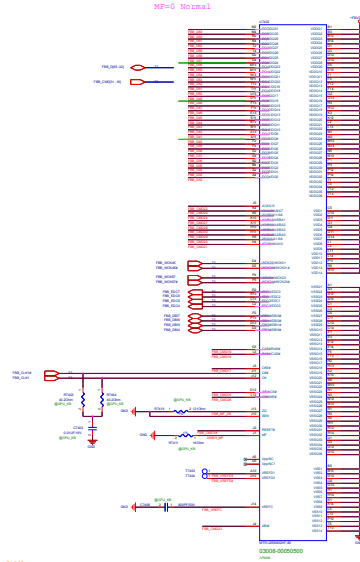
## GDD5 MODE SELECTION

| model         | inf  | base | base |
|---------------|------|------|------|
| 110           | 0    | 0    | 0000 |
| 612           | 0    | 0000 | 0000 |
| 110 increased | 0000 | 0000 | 0    |
| 612 increased | 0000 | 0000 | 0000 |

## FBB Partition Memory (1 of 2)



## FBB Partition Memory (2 of 2)



03-00 03-00

03008-00050000

1st PIN 03008-00050000 HYPERMAGNETIC T2C (8-day) (Step: 0.4)

2nd PIN 03008-00050000 SAMSUNG MAGNETIC T2C (8-day) (Step: 0.4)

3rd PIN 03008-00050000 MURATA MAGNETIC T2C (8-day) (Step: 0.4)

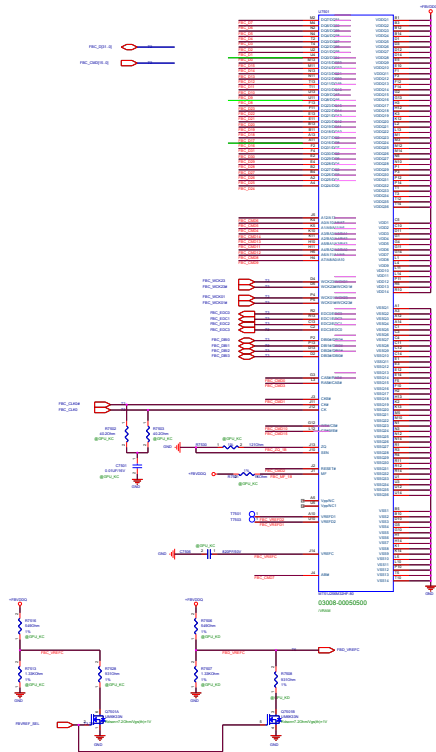
### GDD5 MODE SELECTION

| MODE | MF | MODE | MODE |
|------|----|------|------|
| 0    | 0  | 0    | 0    |
| 1    | 1  | 1    | 1    |
| 2    | 2  | 2    | 2    |
| 3    | 3  | 3    | 3    |

Main Board

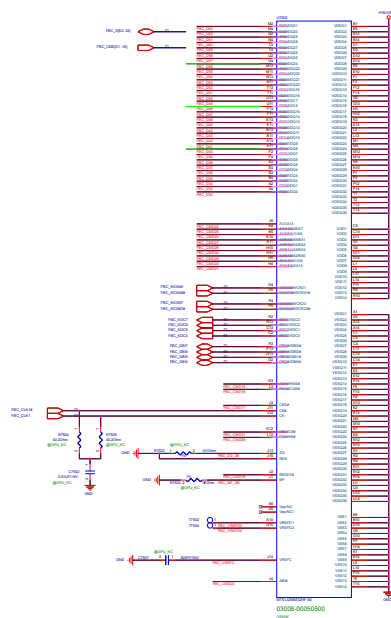
# FBC Partition Memory (1 of 2)

MF=1 Mirror



# FBC Partition Memory (2 of 2)

MF=0 Normal



PH 3-00 PH 3-05

USE GDDR5 VRAM (2GB x 32 (128MB))

1st PIN 0308-00030100 HYUNDAI H5GQ4H4MTR-T2C (M-die) (Strap 0 x2)

2nd PIN 0308-00030200 SAMSUNG K4G41322FC H2CS (Strap 0x3)

3rd PIN 0308-00030400 Micron EDVH432BAG-60-F (B-die) (Strap 0x4)

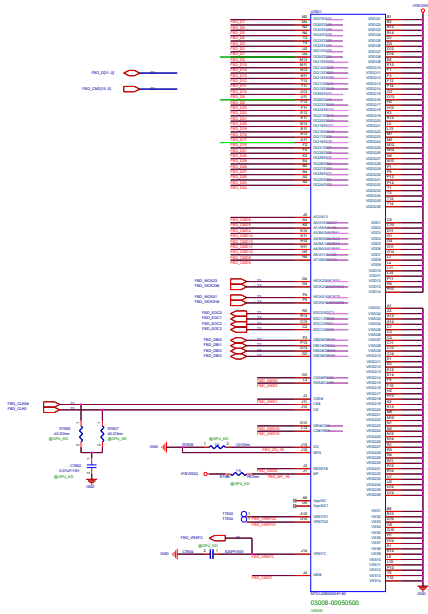
## GDDR5 MODE SELECTION

| VRAM | REF | MODE1 | MODE2 |
|------|-----|-------|-------|
| 0    | 0   | 0000  | 0000  |
| 1    | 1   | 0001  | 0001  |
| 2    | 2   | 0010  | 0010  |
| 3    | 3   | 0011  | 0011  |
| 4    | 4   | 0100  | 0100  |
| 5    | 5   | 0101  | 0101  |
| 6    | 6   | 0110  | 0110  |
| 7    | 7   | 0111  | 0111  |

Main Board

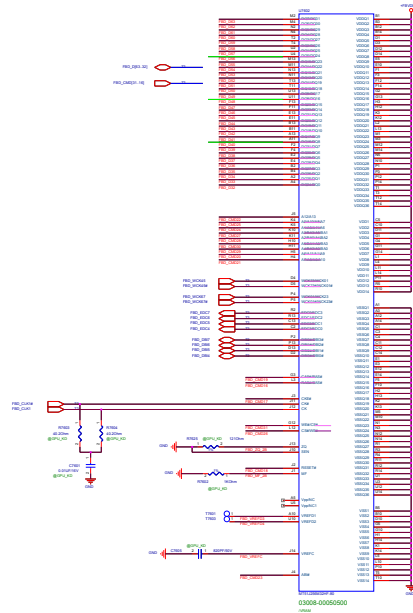
# FBD Partition Memory (1 of 2)

MF=1 Mirror



# FBD Partition Memory (2 of 2)

MF=0 Normal



R1 3.00 R1 2.25

USE GDDR5 VRAM 128M x 32 (128M)

1st PIN:0308-0003000 HYUNDAI-H1G4M19-T2C (M-die) 5tag 0 x2

2nd PIN:0308-0003000 SAMSUNG-K4G41320FC-HC3C (M-die) 5tag 0x3

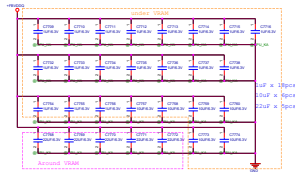
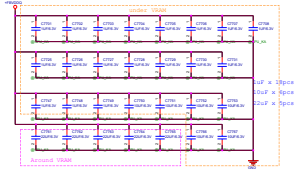
3rd PIN:0308-0003000 Micron-EDW4032BAG-65-F (R-die) 5tag 0x4

## GDD5 MODE SELECTION

| MODE | MF | MF0 | MF1 |
|------|----|-----|-----|
| 0    | 0  | 0   | 0   |
| 1    | 0  | 0   | 1   |
| 2    | 0  | 1   | 0   |
| 3    | 0  | 1   | 1   |
| 4    | 1  | 0   | 0   |
| 5    | 1  | 0   | 1   |
| 6    | 1  | 1   | 0   |
| 7    | 1  | 1   | 1   |

Main Board

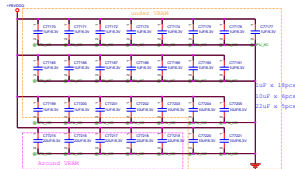
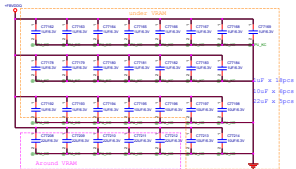
Channel A



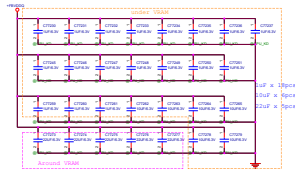
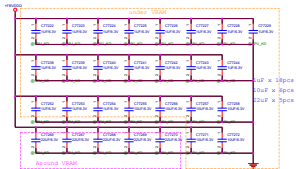
Channel B



Channel C

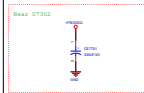
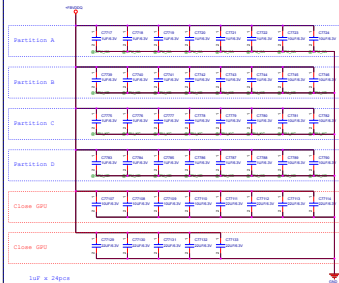


Channel D



VRAM\_FWR\_FBVDQ

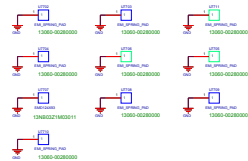
Main Board



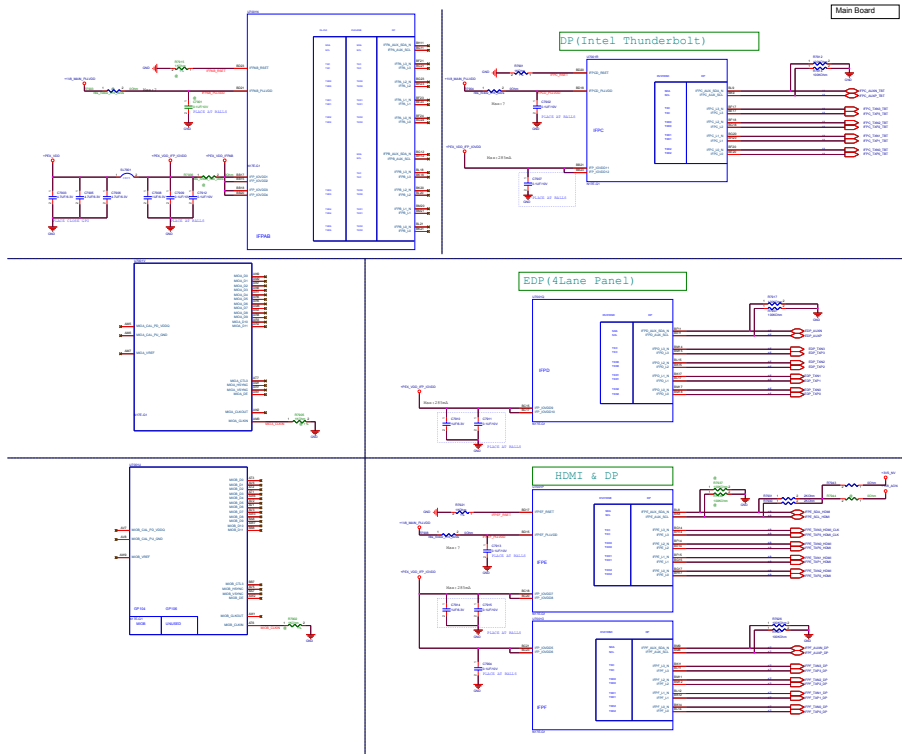
DGPU EMI GND Pad

EMI

EMI DGPU Spring



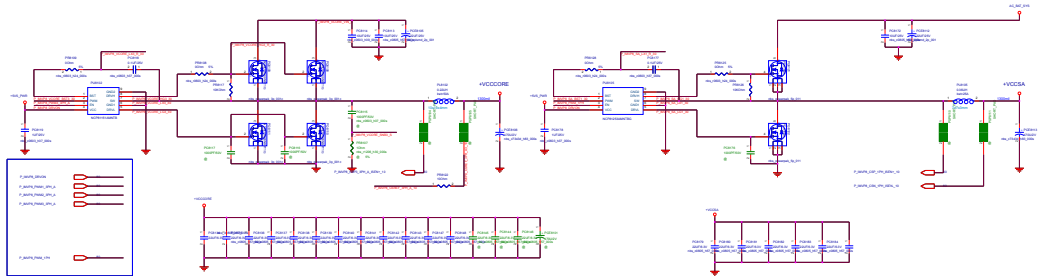
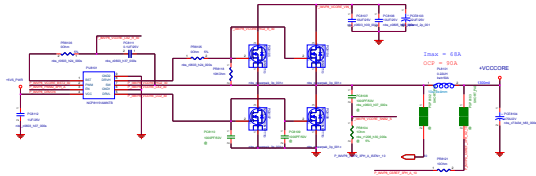
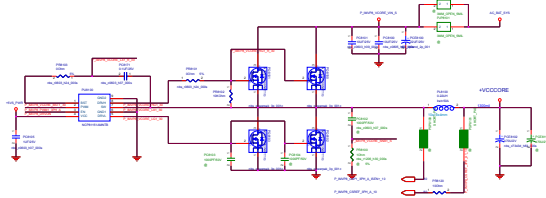




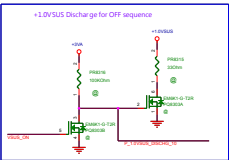
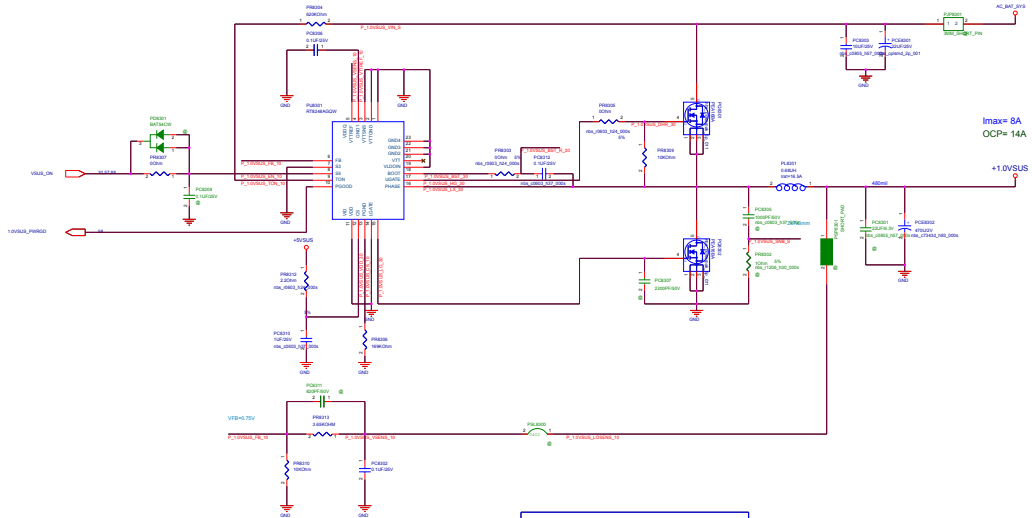




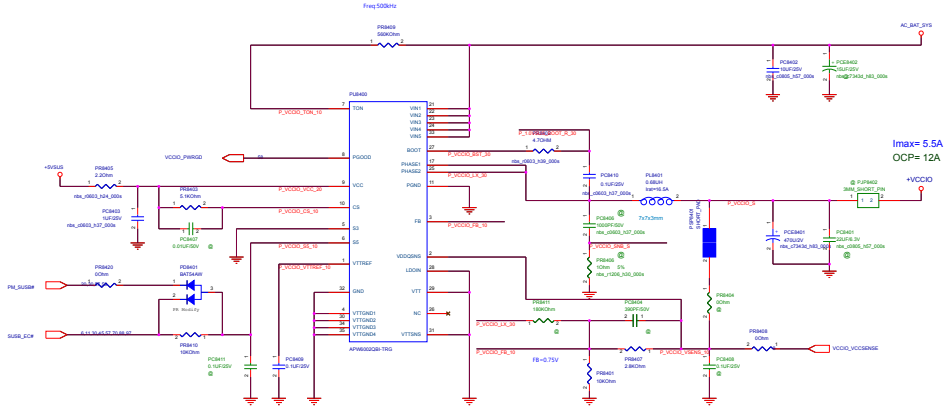
### Skylake IMVP8 Power [For CPU]



# +1.0VSUS [For PCH]

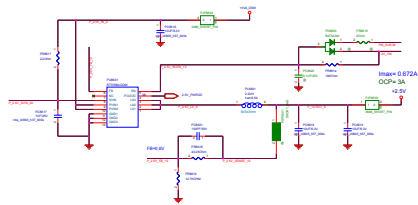
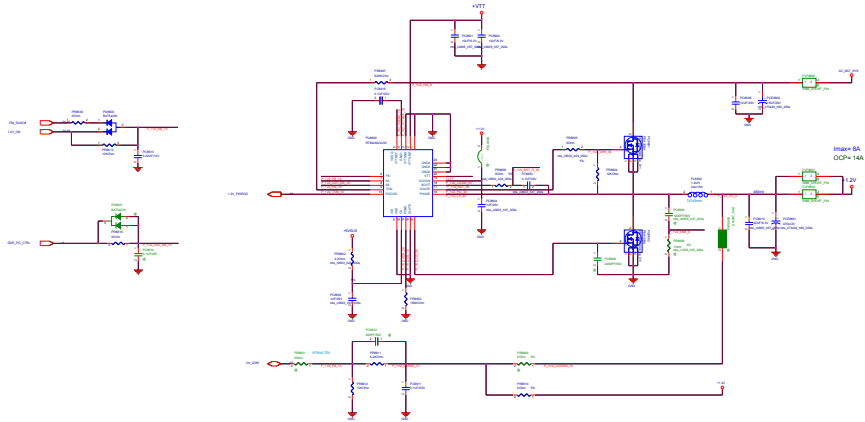


*+VCCIO [For CPU]*



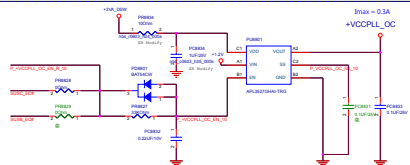
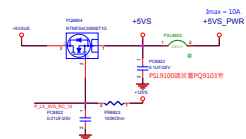
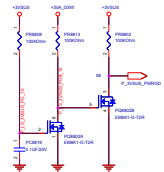
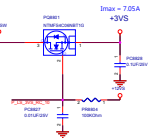
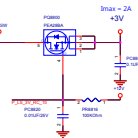
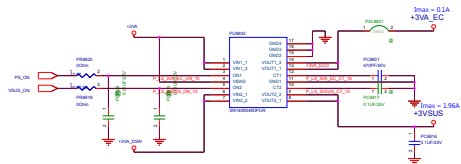
«Core Design»

+1.2V / VTT / 2.5V[For Memory]

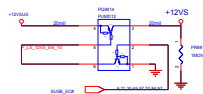
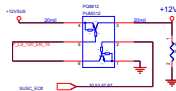
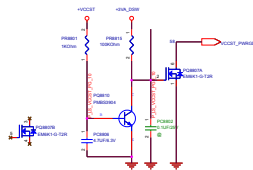
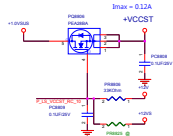
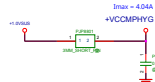




## Main Board



PJP8801 需開銅板

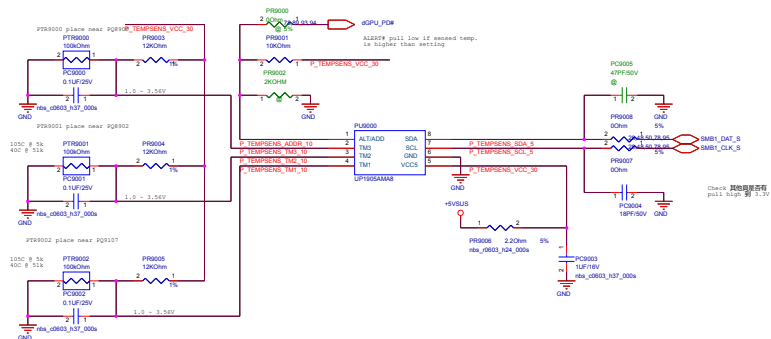




| Address | 0x7E | 0x7C | 0x7A | 0x78 | 0x76 | 0x74 | 0x72 | 0x70 |
|---------|------|------|------|------|------|------|------|------|
| PR0001  | 10k  | 1.5k | 2k   | 3.6k | 3.9k | 4.3k | 5.1k | 6k   |
| PR0002  | Open | 8.2k | 6.2k | 6.8k | 4.7k | 3.6k | 2.7k | 2k   |

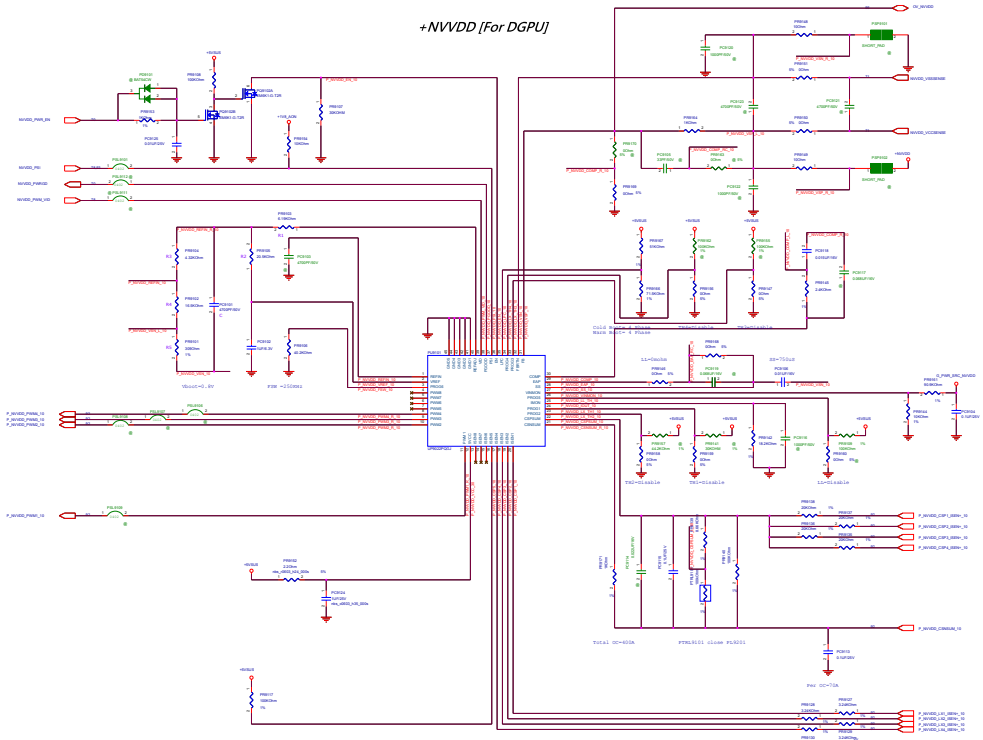
| Address  | Gx05                          | Gx01 | Gx02 | Gx03              | Gx04 | Gx05 | Gx06   |
|----------|-------------------------------|------|------|-------------------|------|------|--|
| R/W      | W                             | W    | W    | R                 | R    | R    | R  |
| Function | Temp. alert threshold setting |      |      | Sensed temp. data |      |      | bit 4 = 0<br>bit 5 = 0<br>bit 6 = 0<br>When ALERT#<br>assert |

Main Board

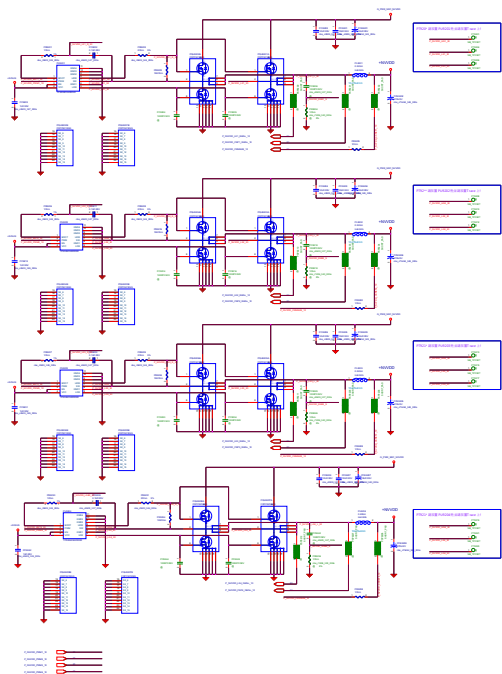




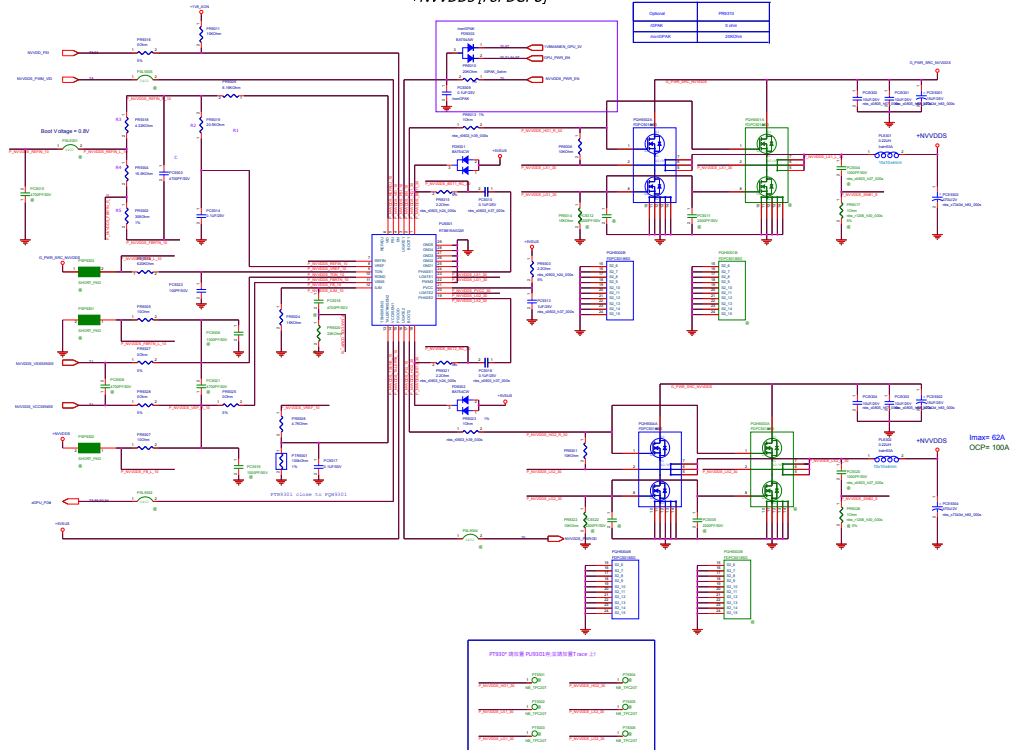
+NVVDD [For DGPU]



+NVVDD [For DGPU]

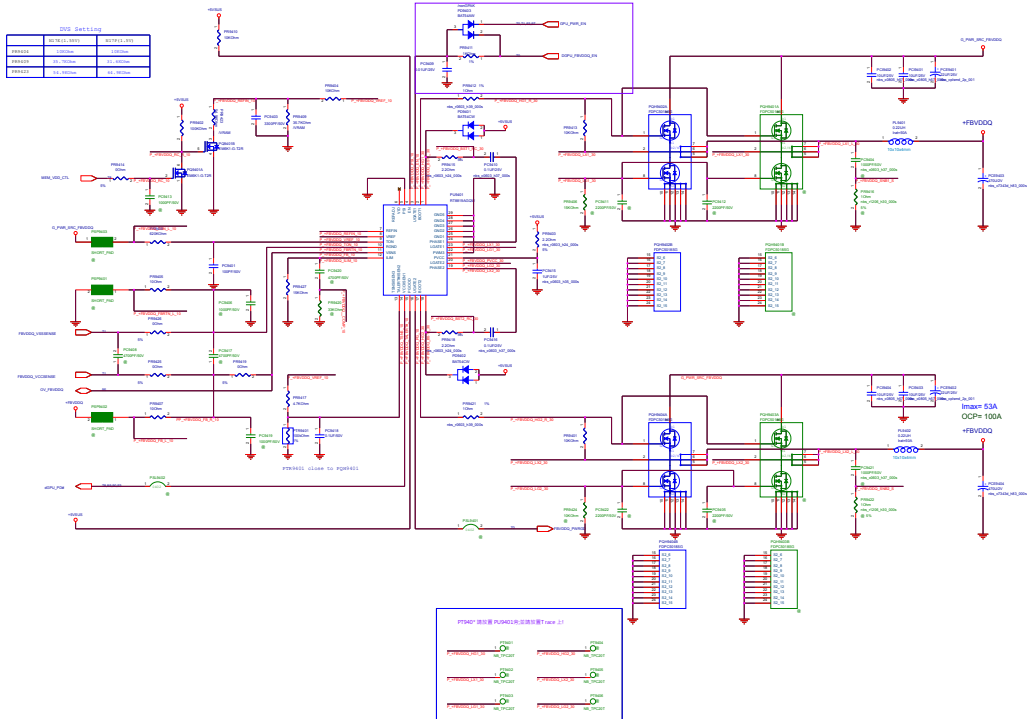


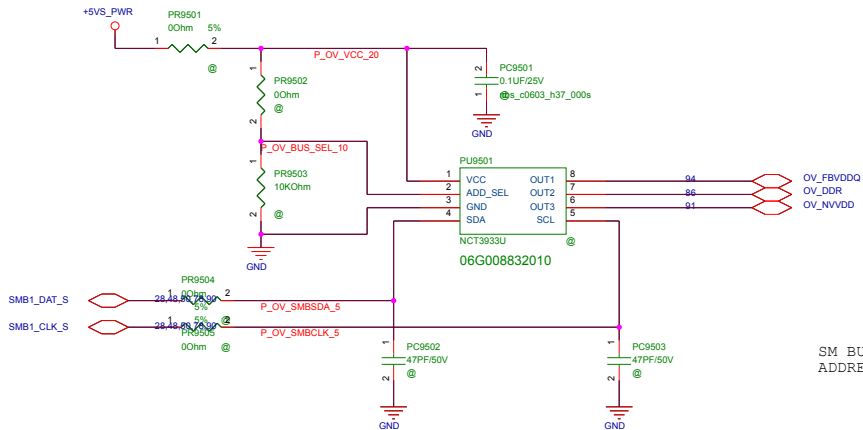
# +NVVDD5 [For DGPU]



# +FBVDDQ [For VRAM]


| DQS Setting  |              |        |
|--------------|--------------|--------|
| DS1E(L1,DS1) | DS1F(L1,DS1) |        |
| DS1E2E       | DS1E2F       | DS1E2F |
| DS1E3E       | DS1E3F       | DS1E3F |
| DS1E4E       | DS1E4F       | DS1E4F |





SM BUS SLAVE  
ADDRESS:0X2A

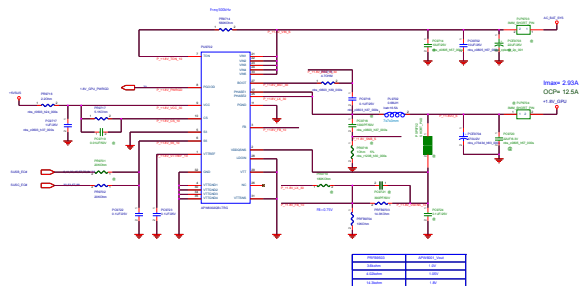
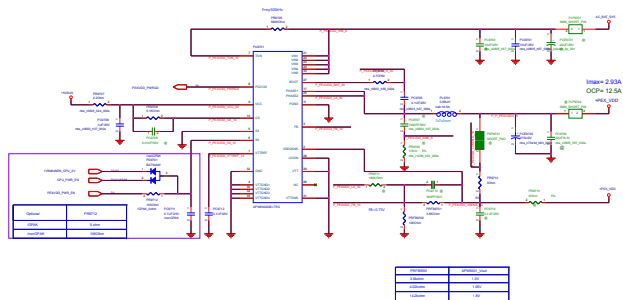
<Core Design>

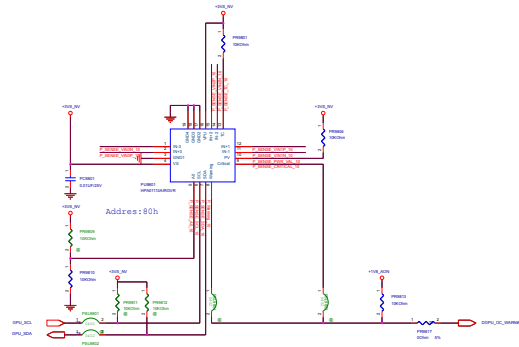
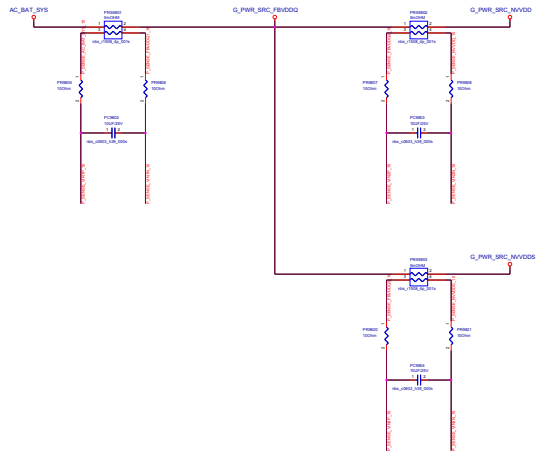
|   |                      |              |                  |           |
|---|----------------------|--------------|------------------|-----------|
|  |                      | Project Name |                  | Rev       |
|   |                      | G752VSK      |                  | R2.0      |
| Title : PW_OV   |                      |              |                  |           |
| Size  | Dept.: NB Power team |              | Engineer: Benson |           |
| A   |                      |              |                  |           |
| Date: Wednesday, October 12, 2016   |                      |              | Sheet            | 95 of 102 |



PT5001  
1  
P\_+12V5\_FAN\_DRV\_30  
NB\_TPC20T

PT5002  
1  
P\_+12V5\_FAN\_ISW\_10  
NB\_TPC20T



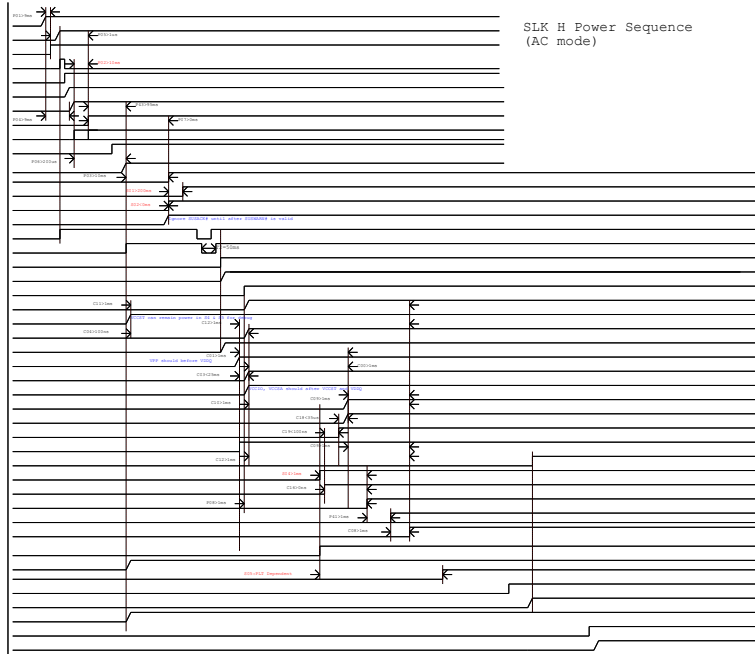




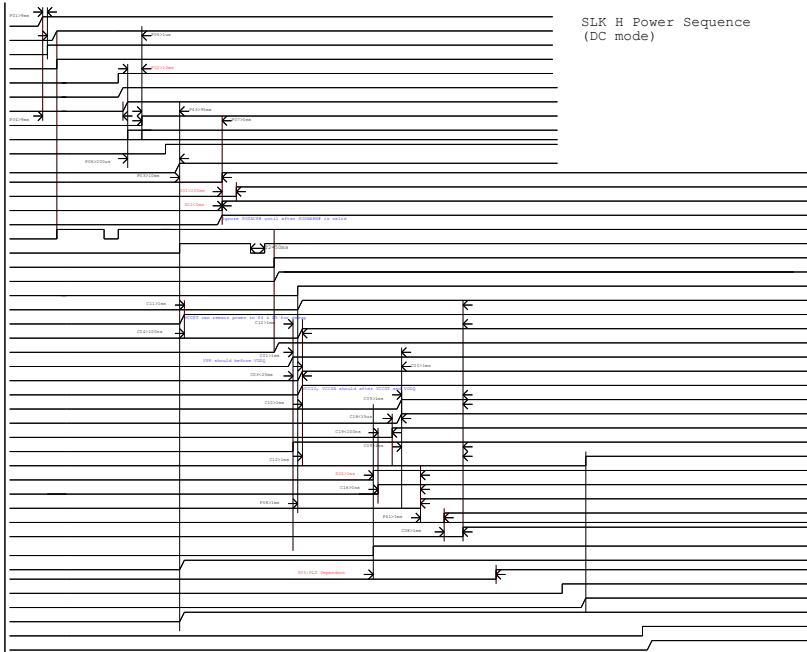


# AC-IN Mode

C: CPU (+PFCBATT) +30A\_RTC  
 P: PCH (AC\_BAT\_STRT) +30A/+30A  
 S: SMT (+30A\_RTC) PFCBATT (PCH)  
 Power (Power) AC\_IN\_OCH (EC)  
 Signal (EC) PS\_ON (+30A\_EC)  
 (PS\_ON) +30A\_EC (EC)  
 (30A20M\_ON) +30A\_DOW (30A\_DOW\_PWRGD)  
 (EC) DPMON\_EC (PCH)  
 (+30A\_DOW) PM\_BATLON (PCH)  
 (PCH) PM\_SLP\_STS (EC)  
 (VDSO\_ON) +1.0VDSO\_VCCPWR (1.0VDSO\_PWRGD)  
 (EC) PM\_BSMSTP\_PCH (PCH)  
 (PCH) SUSWRAP (EC)  
 (EC) ME\_AC\_PRESENT\_PCH (PCH)  
 (EC) PCH\_SUSACK (PCH)  
 (PWR\_Switch) PWR\_SW (EC)  
 (EC) PM\_PWRSTP (PCH)  
 (EC) SUSO\_EC (Power)  
 (SUSO\_EC) +1.2V/+5V/+3V  
 (EC) SUSO\_EC (Power)  
 (SUSO\_EC) +1.2V/+5V/+3V  
 (VDSO\_ON) +1.0V\_VCCST\_VCCPLL (VCCST\_PWRGD)  
 (+VCCIO) +VCCSTO  
 (1.2V\_ON) +2.5V (2.5V\_PWRGD)  
 (1.2V\_ON) +VDSO\_CPU (1.2V\_PWRGD)  
 (+1.2V) +VCCPLL\_OC  
 (SUSO\_EC) +VCCIO (VCCIO\_PWRGD)  
 (ALL\_SYSTEM\_PWRGD) +VCCSA (IMVPS\_PWRGD)  
 (DDR\_VTT\_CTRL) +0.6V  
 (CPU) DDR\_VTT\_CTRL (Power)  
 (Power) 1.2V\_PWRGD (AMD)  
 (Power) IMVPS\_PWRGD  
 (AMD) ALL\_SYSTEM\_PWRGD (CPU/PCH/EC/Power)  
 (ALL\_SYSTEM\_PWRGD) VCCST\_PWRGD\_CPU (CPU)  
 (EC) PM\_PWROR\_PCH (PCH)  
 (PCH) CLK\_PCH\_CLK (CPU)  
 (PCH) R\_CPU\_PWRGD (CPU)  
 (ALL\_SYSTEM\_PWRGD) P\_IMVPS\_R10 (Power)  
 (CPU) P\_SVID\_DATA\_R2 (Power)  
 (EC) PM\_STSPWR\_PCH (PCH)  
 (PCH) FLT\_RST (CPU/EC/Device)  
 (P\_IMVPS\_DRVOR) +VCCOBE (IMVPS\_PWRGD)  
 (CPU) H\_THERMTRIP (PCH)  
 (PCH) DDR4\_DRAMSTP (Memory)  
 +VCCOBT



SLK H Power Sequence  
(AC mode)

[illegible]SLK H Power Sequence  
(DC mode)