Pairwise Testing

# Petameters having maximum number of choices

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| Parameter having max choice (x) | Parameters having next lower number of choice(Y) | …so on  (Z) |  |
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Total number of test cases=X\*Y

If X=33, Y=15, then total testcases= 33\*15=495, plus extra amount equals to Y.

Z=2, then 33\*15+15=510

**The pairwise testing technique has some limitations as well.**

* It fails when the values selected for testing are incorrect.
* It fails when highly probable combinations get too little attention.
* It fails when interactions between the variables are not understood well.

When making combinations we should be careful about above limitations and make proper testcases.

# Considerations

1. This approach does not consider 33 or 36 combinations to bested, instead it considers 3 types of board to be tested in any combinations/parker products. That means all these testcases to be repeated in each combination except that if any board doesn’t exist in any combinations (product) then those testcases to be removed from testing that products.
2. Result of pairs of parameters not known and not considered.

# Concern:

* Are these combinations reasonable and testable realistic/practically feasible?
* Are we missing any points?
* Are we considering best cases scenarios?
* Are we considering worst case scenarios?
* Are these can be replicated in all 4-protocols?
* Are these applicable to all 33/36 boards? There should be removal of those which are not applicable such as Board-B all pin2 and Board-X first two ports which has limitations.
* How to determine test results to test these testcases – because all these are random combinations and results seems will be difficult to predict. What is to verify when results are not known for some combinations.