

A Class-Based Clustering Static Compaction Technique For Combinational Circuits

El-Maleh, A.H. Osais, Y.E.; Dept. of Comput. Eng., King Fahd Univ. of Pet. & Miner.,
Dhahran, Saudi Arabia;

**Microelectronics, 2004. ICM 2004 Proceedings. The 16th International
conference; Publication Date: 6-8 Dec. 2004; ISBN: 0-7803-8656-6**

King Fahd University of Petroleum & Minerals

<http://www.kfupm.edu.sa>

Summary

Static compaction based on test vector merging is a very simple and efficient technique. However, for a highly incompatible test set, merging achieves little reduction. In this paper, we propose a new static compaction technique in which a test vector is decomposed into its atomic components before it is processed. In this way, a test vector that is originally incompatible with all other test vectors in a given test set can be eliminated if its components can be merged with other test vectors.

For pre-prints please write to: abstracts@kfupm.edu.sa