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Width hierarchy for k-OBDD of small width

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Abstract

© 2015, Pleiades Publishing, Ltd. In this paper was explored well known model k-OBDD. There are proven width based hierarchy of classes of boolean functions which computed by k-OBDD. The proof of hierarchy is based on sufficient condition of Boolean function's non representation as k-OBDD and complexity properties of Boolean function SAF. This function is modification of known Pointer Jumping (PJ) and Indirect Storage Access (ISA) functions.

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Keywords

Binary decision diagrams, Branching programs, complexity classes, k-OBDD, OBDD