

## **Tabu Search Based Circuit Optimization**

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### **Summary**

In this paper we address the problem of optimizing mixed CMOS/BiCMOS circuits. The problem is formulated as a constrained combinatorial optimization problem and solved using an tabu search algorithm. Only gates on the critical sensitizable paths are considered for optimization. Such a strategy leads to sizable circuit speed improvement with minimum increase in the overall circuit capacitance. Compared to earlier approaches, the presented technique produces circuits with remarkable increase in speed (greater than 20%) for very small increase in overall circuit capacitance (less than 3%)

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