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# THERMAL MANAGEMENT OF ELECTRONICS: A REVIEW OF LITERATURE

ABSTRACT

Due to rapid growth in semiconductor technology, there is a continuous increase of the system power and the shrinkage of size. This resulted in inevitable challenges in the field of thermal management of electronics to maintain the desirable operating temperature. The present paper reviews the literature dealing with various aspects of cooling methods. Included are papers on experimental work on analyzing cooling technique and its stability, numerical modeling, natural convection, and advanced cooling methods. The issues of thermal management of electronics, development of new effective cooling schemes by using advanced materials and manufacturing methods are also enumerated in this paper.

KEYWORDS

pin fins, liquid impingement, thermoelectric cooling, Peltier effect, phase change materials, heat pipes, cold plate, lasers

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