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Sommario/riassunto	<p>Power efficient design of real-time embedded systems based on programmable processors becomes more important as system functionality is increasingly realized through software. This paper presents a power optimization method for real-time embedded applications on a variable speed processor. The method combines off-line and on-line components. The off-line component determines the lowest possible maximum processor speed while guaranteeing deadlines of all tasks. The on-line component dynamically varies the processor speed or brings a processor into a power-down mode according to the status of task set in order to exploit execution time variations and idle intervals. Experimental results show that the proposed method obtains a significant power reduction across several kinds of applications.</p>