

**COMPUTER ARCHITECTURE :
A TECHNICAL APPROACH
TO
IMPROVE PERFORMANCE
USING
LIMITED POWER**

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P R E F A C E

This book is about the organization and utility of computers. Its purpose is to present the modern day computer system.


The intent of this book is to apply new techniques called limited power. In present day world every joule of energy is valuable because all aspects of our system are related to energy consumption. Energy has become an important aspect of life as the factors that generate power are on the edge of extinction.

Power aware compilation is technique by which we make every developer or user to know the amount of energy used by their codes. If it is reasonable our system reduces the consumption of energy. Performance is always plays major role in Computer Science. Most power reduction techniques focused on minimizing the static power consumption rather than system level dynamic power consumption.

This task is challenging for several reasons. Varieties of computers are developing every day with horizontally and vertically and depth and height of the Computer Architecture. Another one is continuous change in the developing the technology of integrated circuit technology used to construct the computer with minimizing the energy harvesting.

 *K. Suresh*

“God, our creator, has stored within our minds and personalities, great potential strength and ability. Prayer helps us tap and develop these powers.”

 Abdul Kalam

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