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

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ISBN-13: 978-81-931580-6-7
FIRST EDITION, MARCH 2016, INDIA

Typeset, Printed & Published by:
VSRD Academic Publishing (*A Division of Visual Soft (India) Pvt. Ltd.*)

Printed & Bound in India

VSRD ACADEMIC PUBLISHING
A Division of Visual Soft (India) Pvt. Ltd.

REGISTERED OFFICE
154, Tezabmill Campus, Anwarganj, KANPUR – 208 003 (UP) (IN)
Mob.: +91 99561 27040, Ph.: +91 512 6553705
Web.: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

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Basement-2, Villa-10, Block-V, Charmwood Village, FARIDABAD–121009 (HY)(IN)
Mob.: +91 98999 36803, Ph.: +91 129 4036803
Web.: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

MARKETING OFFICE (SOUTH INDIA)
340, FF, Adarsh Nagar, Oshiwara, Andheri(W), MUMBAI–400053 (MH)(IN)
Mob.: +91 9956127040
Web.: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

PREFACE

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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