SURVEY METHODOLOGY

SURVEY METHODOLOGYThis is the Subtitle

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FOREWORD

This is the foreword to the book.

PREFACE

This is an example preface. This is an example preface. This is an example preface. This is an example preface.

R. K. WATTS

Durham, North Carolina September, 2007

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To all these wonderful people I owe a deep sense of gratitude especially now that this project has been completed.

G. T. S.

ACRONYMS

ACGIH American Conference of Governmental Industrial Hygienists

AEC Atomic Energy Commission

OSHA Occupational Health and Safety Commission SAMA Scientific Apparatus Makers Association

GLOSSARY

NormGibbs Draw a sample from a posterior distribution of data with an un-

known mean and variance using Gibbs sampling.

pNull Test a one sided hypothesis from a numberically specified poste-

rior CDF or from a sample from the posterior

sintegral A numerical integration using Simpson's rule

SYMBOLS

- A Amplitude
- & Propositional logic symbol
- a Filter Coefficient
- B Number of Beats

INTRODUCTION

CATHERINE CLARK, PHD.

Harvard School of Public Health Boston, MA, USA

The era of modern began in 1958 with the invention of the integrated circuit by J. S. Kilby of Texas Instruments [1]. His first chip is shown in Fig. I. For comparison, Fig. I.2 shows a modern microprocessor chip, [4].

This is the introduction. This is the introduction. This is the introduction. This is the introduction. This is the introduction.

$$ABCD\mathcal{E}\mathcal{F}\alpha\beta\Gamma\Delta\sum_{def}^{abc}\tag{I.1}$$

REFERENCES

- 1. J. S. Kilby, "Invention of the Integrated Circuit," *IEEE Trans. Electron Devices*, **ED-23**, 648 (1976).
- 2. R. W. Hamming, *Numerical Methods for Scientists and Engineers*, Chapter N-1, McGraw-Hill, New York, 1962.
- 3. J. Lee, K. Mayaram, and C. Hu, "A Theoretical Study of Gate/Drain Offset in LDD MOSFETs" *IEEE Electron Device Lett.*, **EDL-7**(3). 152 (1986).

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SUBMICRON SEMICONDUCTOR MANUFACTURE

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MULTITHREADING

XML PROCESSING

GUI PROGRAMMING

FUTHER EXPRESSION

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- 1. J. S. Kilby, "Invention of the Integrated Circuit," *IEEE Trans. Electron Devices*, **ED-23**, 648 (1976).
- 2. R. W. Hamming, *Numerical Methods for Scientists and Engineers*, Chapter N-1, McGraw-Hill, New York, 1962.
- 3. J. Lee, K. Mayaram, and C. Hu, "A Theoretical Study of Gate/Drain Offset in LDD MOSFETs" *IEEE Electron Device Lett.*, **EDL-7**(3). 152 (1986).
- 4. A. Berenbaum, B. W. Colbry, D.R. Ditzel, R. D Freeman, and K.J. O'Connor, "A Pipelined 32b Microprocessor with 13 kb of Cache Memory," it Int. Solid State Circuit Conf., Dig. Tech. Pap., p. 34 (1987).

REFERENCES

- [Kil76] J. S. Kilby, "Invention of the Integrated Circuit," *IEEE Trans. Electron Devices*, **ED-23**, 648 (1976).
- [Ham62] R. W. Hamming, *Numerical Methods for Scientists and Engineers*, Chapter N-1, McGraw-Hill, New York, 1962.
- [Hu86] J. Lee, K. Mayaram, and C. Hu, "A Theoretical Study of Gate/Drain Offset in LDD MOSFETs" *IEEE Electron Device Lett.*, **EDL-7**(3). 152 (1986).
- [Ber87] A. Berenbaum, B. W. Colbry, D.R. Ditzel, R. D Freeman, and K.J. O'Connor, "A Pipelined 32b Microprocessor with 13 kb of Cache Memory," it Int. Solid State Circuit Conf., Dig. Tech. Pap., p. 34 (1987).