COMPUTER AIDED DESIGN OF DIGITAL SYSTEMS A BIBLIOGRAPHY VOLUME III 1976-77

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DIGITAL SYSTEMS LABORATORY

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Preface

In the third volume of this bibliography, publications in the field of computer-aided design of digital systems collected during the period May 1976 - October 1977 are listed. Furthermore, coverage of the bibliography has been expanded backwards for certain journals. A list of complete coverage of the various journals and conference proceedings is included in the appendices.

An attempt has been made to cover all major publications (books, papers in journals and published conference proceedings, research reports) in the main areas of computer-aided design of digital systems (Automated logic design, fault diagnosis and test generation, simulation and circuit layout).

A number of references on the mathematical and computer science aspects of computer-aided design have been included in Section J. Furthermore, some references on computer-aided circuit analysis and computer-aided manufacturing of digital systems have been selected on the basis of their usefulness to designers of digital systems. In these fields the bibliography is not intended to be complete but it contains a number of citations that are representative of the area.

This work consists of four major sections, The first section contains the citations, classified under 10 major subject headings:

A. General References on Design Automation
B. Automated Logic Design
C. Logic and Fault Simulation
D. Fault Diagnosis and Fault Test Generation
E. Layout of Printed and Integrated Circuits
F. Computer-Aided Circuit Analysis
G. Automated Documentation
H. Computer-Aided Manufacturing of Digital Systems
I. Software Design Automation
J. Mathematical and Computer Science Aids for Digital Design Automation

Within every subheading, citations are classified alphabetically by author and chronologically for every author. Every citation is numbered and both the author and subject indices refer to the citations in this section.

The numbering scheme used in the first and second volume has been followed, albeit with a few modifications, in this third volume. Within every subsection the numbering of the first and second volumes has been continued, e.g. where B2.861 was the last citation in Volume 2, B2.862 will be the first citation of Volume 3 for Section B2.

The second section is author index. This section allows quick access to all publications in the bibliography by an individual author. This author index is cumulative over the three volumes of the bibliography.

The third section is the subject and keyword index, organized alphabetically by subject. This index is also cumulative over the first and second volumes of the bibliography.

The fourth section is a research report index, which allows access to citations by their source of origin. For the purpose of this index, dissertations are treated as research reports.

The appendices contain a list of frequently used abbreviations and a list of journals and conference proceedings that were covered systematically.

W.M.vanCleemput.

December, 1977.

How to Use this bibliography

The citations in this bibliography are classified under 10 major headings:

A. General References on Design Automation
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D. Fault Diagnosis and Fault Test Generation
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F. Computer-Aided Circuit Analysis
G. Automated Documentation
H. Computer-Aided Manufacturing of Digital Systems
I. Software Design Automation
J. Mathematical and Computer Science Aids for Digital Design Automation

Each of these subject headings is in turn broken up into several subheadings.

An important publication may be listed more than once if it clearly belongs to more than one subject area.

Multiple listings of the same citation have been avoided as much as possible and only important references belonging clearly under more than one heading have been listed more than once.

The subject and keyword index provides easy access to all citations that belong to more than one subject area.

For many research reports, the NTIS (National Technical Information Service) accession number is given if the report is available through NTIS. Most doctoral dissertations are available from Xerox University Microfilms and when known,

the order number for these dissertations is given.

If the user is interested in a particular subject area such as Printed Circuit Layout, he may look up the subject heading that seems most appropriate.

However, some of the subheadings such as B2, Logic Design Algorithms and D2, Fault Diagnosis Techniques, are likely to contain too many citations for efficiently locating the relevant references. The subject and keyword index in Section 3 is the key to the full resources of this bibliography. For every citation, this index contains entries to significant keyword and subject classifications.

The author index allows the user quick access to all the publications by the same author, whether or not he is the primary author.

The research report index lists research reports and theses by the source of origin. This may be helpful in locating a particular item if only the affiliation of the author(s) is known.

Appendix 1 contains a list of the most frequently used abbreviations. A list of major journals that were covered systematically is given in Appendix 2. A similar list is provided for conference proceedings in Appendix 3.

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CITATIONS

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CITATIONS

A. General References on Design Automation

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