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FOREWORD

by Sheldon B. Akers

The development of switching circuit theory over the past three decades has mirrored the varying concerns of the logic designers who have had to confront the many problems presented by constantly changing circuit technologies. All too often, yesterday's elegant solution has been rendered obsolete by today's technological breakthrough. It is not surprising, therefore, that the accepted techniques and procedures of present day switching circuit theory too often tend to stand as distinct entities rather than as part of a cohesive whole.

Accordingly, it is a great pleasure to be able to recommend a book which not only provides a much needed historical perspective to these many developments but, even more importantly, does so within the framework of a single comprehensive structure. Starting with the basic definitions of Boolean algebra and the Boolean difference, the author carefully and systematically develops and extends these concepts to subsume such diverse areas as two-level minimization, hazard detection, unate functions, fault diagnosis, functional decomposition, and many others. A significant part of this theory derives directly from previous work by the author and his colleagues at the Philips Research Laboratory.

The elegance of the underlying theory, together with its breadth of coverage and the clarity of the author's presentation, is destined to make this book a classic in its field.

Syracuse, New York, U.S.A. Sheldon B. Akers.

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