Book Reviews

Modern Digital Circuits. By Samuel Weber. Published by McGraw-Hill Book Company, Inc., New York, N. Y. Published 1964. 355 pages. $9.50.

This book is a compilation of previously published articles from *Electronics*. Mr. Weber states in his preface that the book is intended primarily to provide the design engineer with convenient access to the accumulated experience of others in the field.

The compiled articles, 109 in all, have been grouped into nine chapters covering design techniques, pulse and switching circuits, storage, digital logic, counting circuits, conversion, digital communications, digital measurements and testing and miscellaneous applications.

The best chapters are probably chapters one, two and four. They contain circuit design articles that, in general, are less limited in their application than some of the system-oriented articles. In particular, the articles on tunnel diode circuits offer an interesting insight into the potential of this device. The articles in these chapters are well-illustrated and most of the circuit discussions include examples.

In chapter seven, there are eleven articles on digital communication. Five of them are devoted to modulation techniques that provide the reader with a quick comparison of some of the newer techniques.

Chapter eight, covering digital measurements and testing, presents some rather nonconventional approaches to a series of specific testing problems. As a consequence much of the value of the chapter is restricted to those engineers or technicians with very similar problems.

Of the remaining digital arts covered by the book, the best survey of a subject is presented on storage, in chapter three. The articles cover specific applications of conventional core, thin film, ceramic and twistor memory devices. Judicious use of the data presented, however, will permit a cursory state-of-the-art comparison of these storage elements. Highlight of the chapter is a series of articles on the use and specification of magnetostrictive delay lines.

Over-all, the book is less rigorous in its treatment of design problems than one might wish; however, it does meet Mr. Weber's stated intent.

While not a textbook in any sense, *Modern Digital Circuits* covers a very wide range of interesting topics. It is a practical, 'Cook Book' reference that will likely find application in bridging the gap between the classroom and industry for the neophyte engineer or technician.

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About the Reviewer: D. L. McMillin graduated from the University of Miami with B.S. degrees in electrical and mechanical engineering in 1953. In that same year he joined Bell Telephone Laboratories and became engaged in the development of airborne radar systems. In 1958 he joined a group developing high speed, special-purpose computers for military applications.

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The Two-Nucleon Interaction. By Michael J. Moravcsik. Clarendon Press Oxford - Oxford Library of the Physical Sciences. (1963) 154 pages, $2.90.

Central to the study of the nuclei is the hope that their structure and their interactions can be explained in terms of the elementary forces which act between the neutrons and protons which make up a nucleus. It was this goal which provided the impetus for the early investigations of nuclear forces. But by now this provides only part of the motivation, for the nucleon-nucleon interaction has become an independent area of study. Indeed the desire for a more complete understanding of nuclear force and its origin led to the high-energy experiments which revealed the new world of elementary physics with its 'strange' particles, and its boson systems and its excited baryons.

In parallel with these remarks this volume is divided into two parts. In the first of these the various required experiments and their summary in terms of various potential models is discussed while in the second the attempts to relate the