Real Time Microcomputer Control of Industrial Processes

edited by

SPYROS G. TZAFESTAS and J. K. PAL

MICROPROCESSOR-BASED SYSTEMS ENGINEERING

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SPYROS G. TZAFESTAS

Department of Electrical Engineering,
National Technical University of Athens,
Athens, Greece

and

J. K. PAL

Engineering Technology and Development Division
Engineers India Limited,
New Delhi, India

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SECTION II REAL TIME APPLICATIONS

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The introduction of the microprocessor in computer and systems engineering has motivated the development of many new concepts and has simplified the design of many modern industrial systems. During the first decade of their life, microprocessors have shown a tremendous evolution in all possible directions (technology, power, functionality, I/O handling, etc). Of course putting the microprocessors and their associated devices to work in properly operating systems is a complex and difficult task requiring great skill in the blending and integrating of hardware, software and systemic components.

This book provides a good coverage of modern industrial applications of microprocessor-based real time control, together with latest advanced methodological issues. It is appropriate for the senior undergraduate and the postgraduate student, but it is mainly intended for the researcher or professional who wants to see how microcomputer-based control was applied in specific modern-life processes. It reflects the experience and background of twenty experts working in academia and industry. All chapters contain sufficient back-ground material for independent reading. The reader can find advanced methodological concepts and techniques, in addition to the various practical implementation issues presented in the application chapters.

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