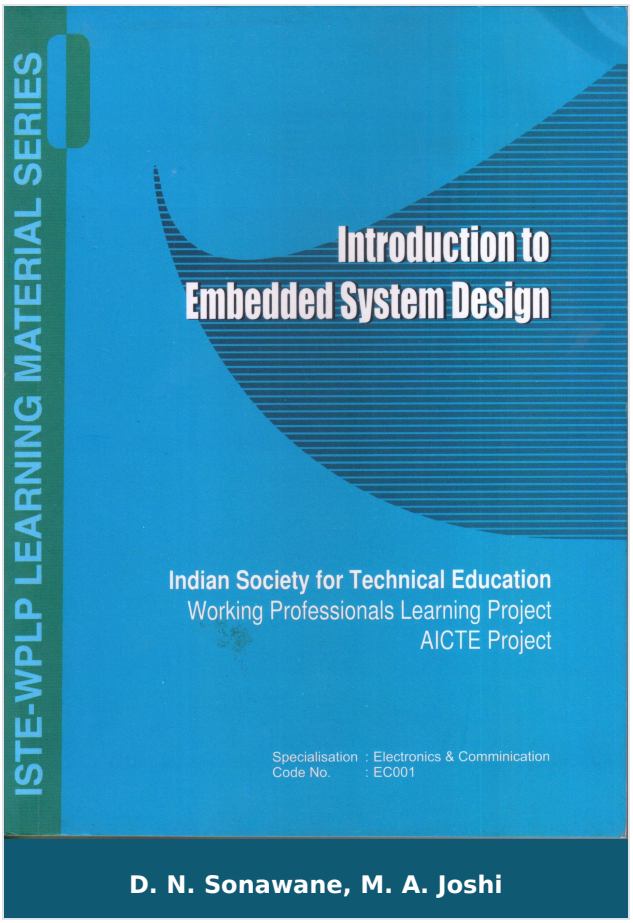


Introduction to Embedded System Design

Author :	D. N. Sonawane, M. A. Joshi
ISBN 13 :	978-93-55387-57-8
ISBN 10 :	9355387571
E-ISBN 13 :	978-93-55387-57-8
Edition :	1
Pages :	246
Type of book :	Physical
Year :	2010
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 345.00
Categories :	Electrical, Electronics & Communication Engineering, ISTE Series, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

This course material is a result of the dedication and encouragement of many individuals. Our sincere and heartfelt appreciation goes to all of them.

We are deeply indebted to Dr. B. S. Sonde, Ex.Vice Chancellor Goa University, who initially motivated and guided us for this work.

We also take this opportunity to thank our colleagues and students for their helpful suggestions during the course of this project.

The Teaching materials covers 14 chapters, 11 for Embedded systems part and 3 for Digital Signal Processing. Every slide gives points for teaching the contents accompanied by foot notes.

Embedded systems is a state of art subject having a number of Industrial applications. Starting form the basics of microcontrollers to real time operation and interfaces are the important topics covered. Digital signal processing is a subject, which deals with processing of signals. DSP processors can perform special signal processing functions in a fast and efficient manner.

It is essential to study the architecture of these processors and some basics of Signal processing.

We are sure that this material will definitely be useful as a teaching material for the teachers and new engineers in this field.

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Table Of Contents

- FOREWORD
- PREFACE
- ABOUT THE AUTHORS
- Overview of Embedded System Design
- Architecture of MCS-51 Family Microcontroller
- MCS-51 On-chip Peripherals: Timers/ Counters
- MCS-51 On-chip Peripherals: Serial Communication
- MCS-51: Interrupts
- Real Time Interfaces with MCS-51: ADC, DAC (Parallel)
- Display Devices: 7- segment LED and LCD Interfacing
- Embedded System Design Using PIC 16FX series
- PIC 16FX Series Microcontrollers: Timers/ Controllers
- PIC 16FX Series Microcontrollers: PWM/CCP Module
- PIC 16FX Series Microcontrollers: ADC, USART Module
- Overview of Digital Signal Processing
- DSP Fundamentals: DFT and FFT
- Architecture of TMS 320XX Series DSP

Author

D. N. Sonawane

Prof. D. N. Sonawane is presently working as Asst. Professor at the Department of Instrumentation and Control of College of Engineering, Pune. He has complete his master degree from University of Pune. He is currently pursuing his Ph.D. in Electronics Engineering from University of Pune. He teaches Microcontroller Techniques and its

applications at Undergraduate level and System on-Chip at Postgraduate level. He has guided 16 post graduate students for their dissertation. Prof. Madhuri Joshi, Ph.D. is presently working as Professor at Electronics and Telecommunication Department of College of Engineering, Pune. She has 31 years of teaching experience at U.G. and P.G. level. Her research specialization and teaching experience is in the field of Digital Signal Processor and its Applications and Image Processing. She is the author of the book Digital Image Processing, and algorithmic approach, published by Prentice Hall. She has over 68 papers published at the National and International level. She has guided 30 Post graduate and 7 students for their Ph.D. work.

M. A. Joshi

Prof. D. N. Sonawane is presently working as Asst. Professor at the Department of Instrumentation and Control of College of Engineering, Pune. He has complete his master degree from University of Pune. He is currently pursuing his Ph.D. in Electronics Engineering from University of Pune. He teaches Microcontroller Techniques and its applications at Undergraduate level and System on-Chip at Postgraduate level. He has guided 16 post graduate students for their dissertation. Prof. Madhuri Joshi, Ph.D. is presently working as Professor at Electronics and Telecommunication Department of College of Engineering, Pune. She has 31 years of teaching experience at U.G. and P.G. level. Her research specialization and teaching experience is in the field of Digital Signal Processor and its Applications and Image Processing. She is the author of the book Digital Image Processing, and algorithmic approach, published by Prentice Hall. She has over 68 papers published at the National and International level. She has guided 30 Post graduate and 7 students for their Ph.D. work.

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320