

Foreword

The present book evolved from the idea to write a book regarding the programming language of S7 that offers the reader the possibility to immediately enter and simulate the given example programs to the PC.

The first book of this series was published in German under the title "STEP®5 Crashkurs". Here, the reader can as well enter the illustrated examples with the included simulation software "**WinSPS-S5**" by means of a PC and then simulate them without the use of any further hardware.

The great success of the book "STEP®5-Crashkurs" confirmed our idea.

In this book, this concept has been adapted to the programming language of STEP®7. By means of the included demo version of WinPLC-S7 V4 it is possible to enter and simulate almost all examples in this book.

The first German edition of this book was published in 1999. Due to the great readership, now the 7th edition of this book is available. It has been extended by the following important topics:

- Analog Value Processing
- Indirect Addressing
- Hardware Configuration
- Profibus DP Configuration
- Ethernet Communication
- Call Environment
- Diagnostic of DP Systems
- Application and Handling of Profibus CPs (e.g. CP342)
- Startup of CPUs Ethernet Interface
- SPEED7 Configuration
- Global Data Communication via MPI
- Data Exchange via Profibus DP (Master-Slave-Communication)
- Projected Connection via Ethernet
- Remote Maintenance of S7 Controllers via Analog/ISDN or Internet

The present book is a translation of the 7th German Edition of the book "STEP7-Crashkurs".

At this point, we would like to thank the following companies for providing graphical material:

- **SIEMENS-AG** Automation and Drive Technologies in Nürnberg
- **VIPA GmbH** in Herzogenaurach

We hope you will enjoy learning the programming language of STEP®7!

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July 2009