

EIBA Handbook Series

Release 3.0

Volume 3: System Specifications

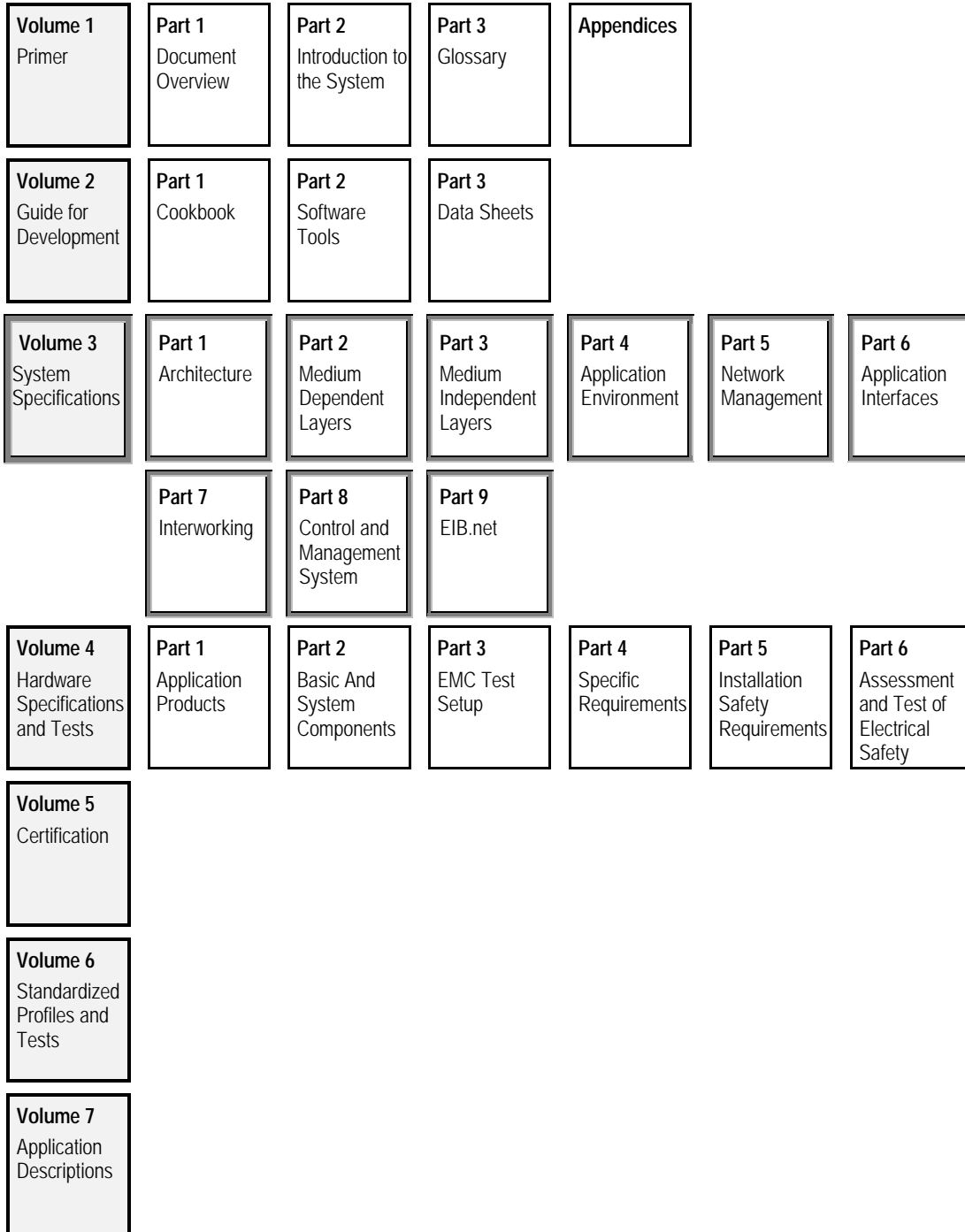
Overview

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1. Overview Handbook Structure



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2. Overview of Volume 3: System Specifications

3/1 Architecture

An overall view of the EIB system with an explanation of the key features and structure.

3/2 Medium Dependent Layers

EIB is implemented on various media. For each medium, the specific requirements for the Physical Layer and Data Link Layer are specified, referring to the OSI-model for communication.

3/3 Medium Independent Layers

These are the common specifications for all media and the specifications for the medium independent layers, referring to the OSI-model for communication.

3/4 Application Environment

This part contains only one chapter, being the User Layer, which forms the interface between the Application Layer and the application. It implements communication relevant tasks and thus eases the communication task of the application by offering a communication interface that abstracts from many application layer details. The User Layer contains the EIB Communication Objects for group communication and the EIB Interface Objects.

3/5 Network Management

Based on the Application Layer Services for Network- and Device Management, this chapter describes the correct standard use and the exception- and error handling, with a link to the various existing implementations.

3/6 Application Interfaces

For the existing mask versions implemented in Bus Coupling Units, the Application Programmer's Interface is a standardized component of the EIB system, which allows easy implementation of new application programs and porting between compatible firmware versions. These routines are listed with call address, input and output.

3/7 Interworking

The standardized data types for format, encoding, range and unit are listed, together with their specific use in certain applications and even standardized distributed control mechanisms (like dimming, blinds control, ...)

3/8 Control and Management System

This part describes the standardized architecture and components which are implemented for the use of the EIB-system in systems for home- and building control and management other than the run-time interworking.

3/9 EIB.net

These are the specifications for EIB on Automation Level, for all media with a logical link layer according to ISO/IEC 802-2, including 10 Mbit Ethernet. Not limited to high-speed backbones, EIB.net also allows management or automation level devices to be directly connected!