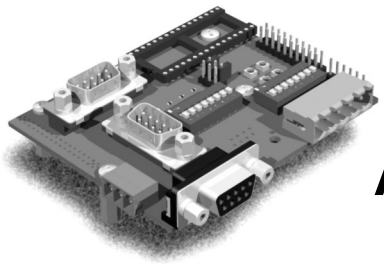

Quickstart
AnyBus-IC PDP with PDP-SIM

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Table of Contents

About This Manual

How To Use This Manual

This document describes how to configure and set up a Profibus-DP connection between the HMS Profibus Master Simulation Tool (PDP-SIM) and the AnyBus-IC Starter Kit (ABIC-STK).

Previous knowledge about the Profibus-DP fieldbus system is not required, however it is recommended to read some of the technical guides available at the Profibus User Organisation website; 'www.profibus.com'

Important user information

The data and illustrations found in this document are not binding. We reserve the right to modify our products in line with our policy of continuous product development. The information in this document is subject to change without notice and should not be considered as a commitment by HMS Industrial Networks AB. HMS Industrial Networks AB assumes no responsibility for any errors that may appear in this document.

Related Documentation

Document name	Author	Web Page
AnyBus-IC Design Guide	HMS	www.hms-networks.com
Anybus-IC DeviceNet Fieldbus Appendix	HMS	www.hms-networks.com
Anybus-IC Profibus DP Fieldbus Appendix	HMS	www.hms-networks.com
Anybus IC Starterkit Startup Manual	HMS	www.hms-networks.com

Revision list

Revision	Date	Author	Chapter	Description
1.00	2002-11-12	LMA/PeP	All	First version

Conventions used in this manual

The following conventions are used throughout this document:

- The terms 'ABIC' and 'module' are used when referring to the AnyBus-IC module
- The term 'PDP-SIM' is used when referring to the Profibus Simulation Tool

Support

Before contacting the HMS support department, please make sure consult the AnyBus-IC Design Guide, the relevant AnyBus-IC Fieldbus Appendix and the ABIC starter kit manual.

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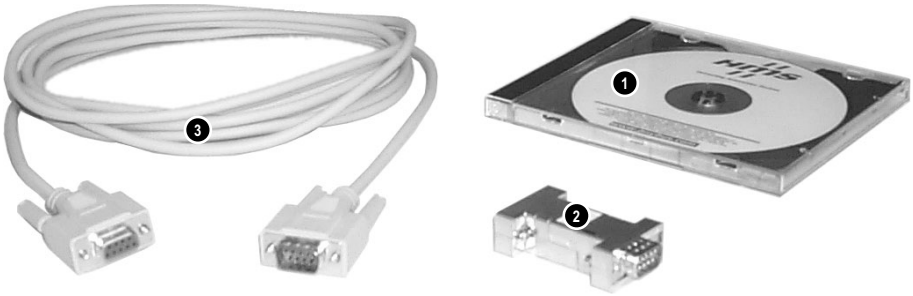
About the HMS Profibus Simulation Tool

The HMS Profibus Simulation Tool (PDP-SIM) provides an easy way to configure and run a Profibus connection towards the AnyBus-IC. The package contains a serial<>Profibus adapter, as well as the necessary cables and software.

Package Contents

The HMS Profibus Simulation Tool package (PDP-SIM) concists of the following items:



1. CD containing the HMS Profibus Simulation Tool software
2. Serial <> Profibus adapter
3. Serial cable

More Information, Manuals Etc.

- The latest manuals and GSD file for the AnyBus-IC PDP is available for download at the HMS website, 'www.hms.networks.com'
- Technical information about the Profibus fieldbus system is available on the Profibus User Organisation web page, 'www.profibus.com'

Installation

Required Items

The following items are required to be able to install and use the PDP-SIM with the ABIC-STK PDP.

- ❑ HMS Profibus Simulation Tool (This package, PDP-SIM)
- ❑ AnyBus-IC Starter Kit (ABIC STK PDP), part no. 018110
- ❑ PC running Microsoft Windows 95/98/ME/NT/2000 or XP
- ❑ A free serial (COM) port
- ❑ A regulated 5VDC power supply

AnyBus-IC Starter Kit

Install the AnyBus-IC evaluation board and the AnyBus-IC PDP according to the AnyBus-IC Starter Kit Start Up Manual (Included in the ABIC-STK PDP package. Can also be downloaded from the HMS website, 'www.hms-networks.com').

Configure the module for 'Automatic Initialisation' (follow the example in the AnyBus-IC Starter Kit Start Up Manual). This will configure the ABIC-STK to act as a Profibus slave with 1 Input byte and 1 Output byte.

HMS Profibus Master Simulation software

Insert the CD containing the HMS Profibus Simulation Tool software. The installation program should start automatically and guide you through the installation process.

If the installation program for some reason does not start automatically, double click on SETUP.EXE in the root directory of the CD to start the installation program manually.

Serial <> Profibus Adapter

- Connect the serial cable to a free COM port on the PC
- Connect the serial<>Profibus adapter between the Profibus connector on the AnyBus-IC Evaluation board and the other end of the serial cable.

Communication Setup

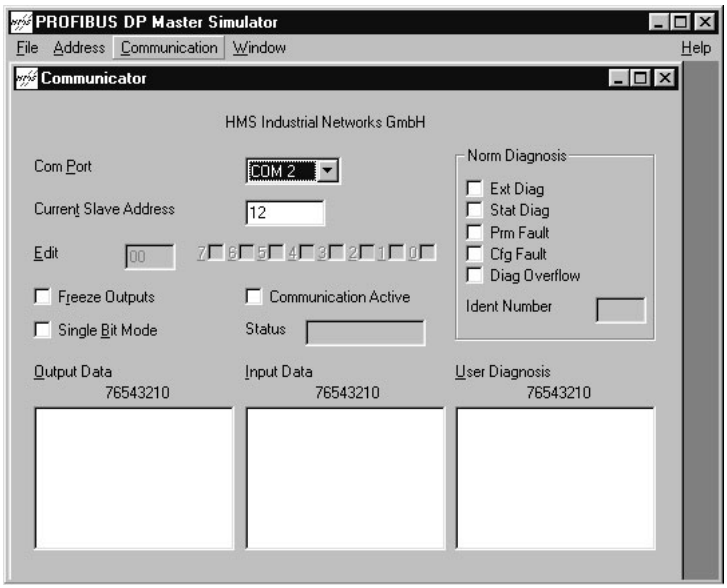
The following section describes how to do the following:

- Set up the necessary communication parameters
- Read Input Byte 1
- Write to Output Byte 1

Before proceeding, set the Profibus slave address using the Node Address switches on the AnyBus-IC Evaluation board. These switches represents the binary value of the node address. (ON=logic 1, OFF=logic 0). Please note that the new node address will become valid only after a power cycle.

Perform the following steps:

- Start the HMS Profibus DP Master Simulator software
- Select the COM port connected to the serial<> Profibus adapter.



- Select the 'Current Slave Address'. This setting should be set to match the Node Address switches on the evaluation board
- Apply power to the evaluation board
- Select 'Easy start' from the 'Communications' menu
- The system is now ready to start communicating

The HMS Profibus Master Simulator now initiates the communication with the AnyBus-IC PDP, and the status field should indicate 'Connected'. The 'Fieldbus Status' LED on the evaluation board should turn green to indicate a successful connection towards the Profibus master. The software will detect the AnyBus-IC module as a 1 byte IN and 1 byte OUT slave on the Profibus network.

The field 'Output Data' contains the actual fieldbus output data. This data is represents on the evaluation board via 8 onboard. To alter the contents of this field, just enter a new value.

The field 'Input Data' contains the actual fieldbus input data. The contents of this field reflects the settings on the "Input Byte"- switches on the evaluation board.