

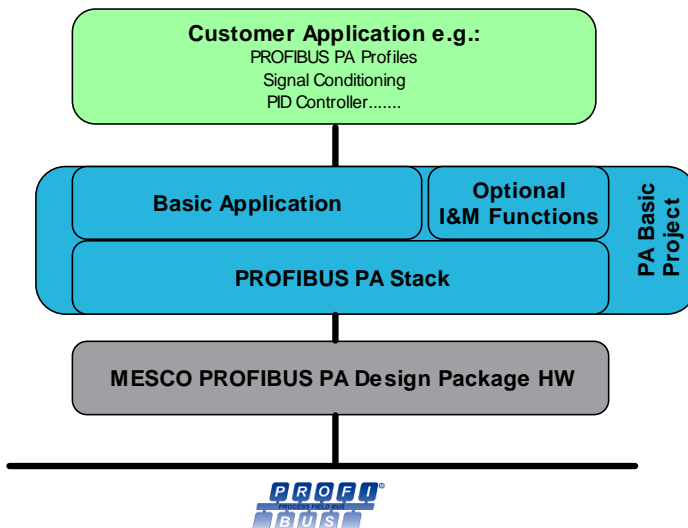
PROFIBUS PA Basic Project with Slave Protocol Stack

Overview

The PA basic application package is your quick start into embedded software development for PROFIBUS PA slaves. This package reduces your time for project setup and implementation and minimizes the project risk by factors.

The software is optimized for the MESCO PROFIBUS PA Hardware Design Package. The protocol stack is completely adapted to the hardware and integrated into an application shell with master class 1 cyclic and master class 2 acyclic services and the MESCO I&M library also is implemented. By using this package you are able to focus on the functionality of your device and do not need to take care of the PROFIBUS basics.

Block diagram



Technology

The package is based on a protocol stack with well documented interfaces. The basic application shows the user how to handle the PROFIBUS services like PRM and CFG telegrams, process data (cyclic) and implementation of a PROFIBUS PA profile. The firmware is optimized for the Renesas M16C62P platform running at min. 1 MHz CPU clock. No operating system required.

Delivery Content

- Basic application example project with source code
- Batch Files for Build Process
- Protocol Stack with source code
- GSD-File
- PLC project for Siemens S7-315

Related Services and Products

- Implementation of PA profiles
- FDT / DTM development
- PDM DD development
- Porting to customer specific hardware platform

Technical Data

- Standard PROFIBUS services for cyclic communication
- Extended acyclic PROFIBUS services DP-V1 for MSAC-C2
- PROFIBUS profile for process control devices V3.01 integrated:
 - Analog input Function Block
 - Physical Block
 - Transducer Block
 - Example for temperature and pressure devices
- Database with access functions
- I&M Function Access Library
- Runtime system with memory checks
- HW platform M16C62P family with SPC4-2 fieldbus ASIC
- Memory requirements: 10k Byte RAM, 87k Byte Flash, 1k Byte FRAM or EEPROM

Optional

- MESCO Fieldbus MAU
- Design Package PROFIBUS PA/FF Module

Order Information

No. 22000