Benefits for Drives, Encoder & Controller Manufacturers

- Significant reduction of cost for firmware development, testing and certification
- Correct implementation of the PROFIdrive & ENCODER profile standard
- Interoperability by using de facto standard code
- Various hardware platforms supported (reduced porting effort)
- Spreading of PROFIdrive technology & ENCODER profile for Devices & Controller

Facts at a glance:

- PROFIdrive & ENCODER profile available in source code, free of charge and free licence
- The implementation provides the basis for a flexible handling of the PROFIdrive parameters and includes the basic drive functions for
    - ... initialization and configuration
    - ... state machine of the drive
    - ... simple motion control frontend
- Easy adaptation and expansion to manufacturer-specific drive features
- Interface wrapper and encapsulated operating system calls secure porting to different hardware platforms (microcontroller) and operating systems (RTOS)
- Sample application, inclusive DC motor model for simulation purposes and Step7 integration with GSDML file
- Reference implementation on hardware platform NetX 100
- Precertified community sources, tested with PI PROFIdrive profile tester

The generated PROFIdrive Profile source code for Controller & Device is free of charge and free software.

PI
PROFIBUS • PROFINET

PROFIBUS Nutzerorganisation e. V. (PNO)
Member of PROFIBUS & PROFINET International (PI)
Haid-und-Neu-Str. 7 • 76131 Karlsruhe
Fon +49 721 96 58 590 • Fax +49 721 96 58 589
E-Mail info@profibus.com
www.profibus.com • www.profinet.com

Contact:

PI - Working Group Drives

Group Leader Marketing Drives:
heiko.hack@profibus.com

Group Leader PROFIdrive Technology:
andreas.uhl@profibus.com

Community Project:
www.profibus.com/technology/profidrive/community-project

PROFIBUS®   **PROFINET®**

Your Way to PROFIdrive & ENCODER

PROFIdrive
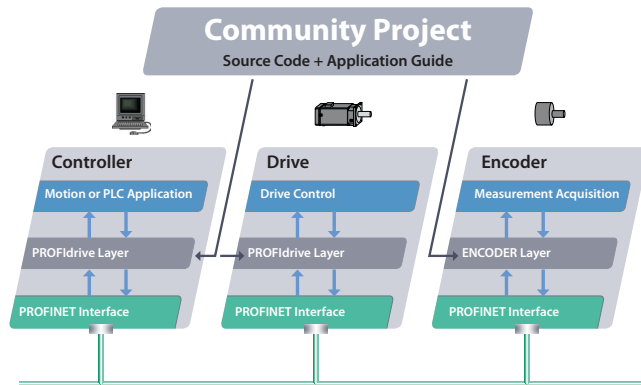
Community Project
http://www.profibus.com/technology/profidrive/community-project

On the basis of a so called „Community Project", the responsible Workinggroups offer a base implementation of the actual PROFIdrive Profile in Source Code, free of charge to all interested users and members of the community.

This development represents a de facto standard reference implementation in drive technology.

The first sample implementation was developed on a Hilscher NetX 100 hardware platform. Further implementations are in preparation and will be released soon.

Community Project
Source Code + Application Guide

Controller	Drive	Encoder
Motion or PLC Application	Drive Control	Measurement Acquisition
PROFIdrive Layer	PROFIdrive Layer	ENCODER Layer
PROFINET Interface	PROFINET Interface	PROFINET Interface

Currently Existing Hardware Platforms:

- NetX 100, Hilscher
- Starter Kit for TPS-1 (in preparation), Renesas Electronics
- PROFINET IO Development Kit (DevKit) for ERTEC 200 (in preparation), Siemens
- Altera and Xilinx FPGA, Softing
- Anybus CompactCom Drive Profile Module & Anybus NP40 network processor for licensing, HMS Industrial Networks

SIEMENS
RENESAS

Siemens & Renesas Electronics

- Development Kits for ERTEC, ASIC Solutions for Real-Time (RT) and Isochronous Real-Time (IRT)
- PROFINET Device stack
- Example for PROFIdrive
- Additional services by ComDeC
- PROFINET Competence Center
- PROFINET Test Laboratory

Your contact person at Siemens:
Heiko Hack,
heiko.hack@siemens.com

Your contact person at Renesas:
Ognen Basarovski
ognen.basarovski@renesas.com

PHŒNIX CONTACT
RENESAS

Phoenix Contact & Renesas Electronics

- Leading software technology supplier for IEC 61131 PLC, IEC 61508 Safety, and PROFINET
- PROFINET Controller/Device Stacks
- PROFIsafe Communication
- PROFINET Competence Center
- Customer-specific SW and HW engineering services
- Customer-specific solution support for TPS-1 Single-Chip Device Interface
- Starter Kit for detailed TPS-1 evaluation

Your contact person at Phoenix Contact
Lutz Herrmann,
lherrmann@phoenixcontact.com

Your contact person at Renesas:
Ognen Basarovski
ognen.basarovski@renesas.com

optimize!
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Softing

- Altera and Xilinx FPGA solution with PROFINET support
- Portable PROFINET stacks
- Hardware and Software integration services
- Certification support
- Training and Consulting

Your contact person at Softing:
Frank Iwanitz,
frank.iwanitz@softing.com

hilscher
COMPETENCE IN COMMUNICATION

Hilscher

- netX ASIC solution
- PROFINET Device and Controller solutions
- PC cards, embedded modules, gateways for PROFINET/PROFIBUS and other systems
- Customer specific communication module
- Customer specific implementation of PROFIdrive on basis of community source

Your contact person at Hilscher:
Yuriy Zavgorodniy,
yzavgorodniy@hilscher.com

HMS

HMS Industrial Networks

- PROFINET, PROFIdrive, PROFIsafe & PROFIenergy connectivity solutions
- Ready-to-use Anybus modules
- Anybus NP 30 and NP40 Chips
- Xilinx FPGA IP-cores & stacks
- Custom specific designs

Your contact person at HMS:
Thomas Welsch,
twe@hms-networks.de