

# The PMS StandOS Operating System

Universal Programming Studio – your complete system solution for the embedded software development

*The flexible standard operating system for all embedded microcontrollers*



Standard operating systems for all popular microprocessors and controllers

PC with MS-Windows

## 1 – An overview over the PMS StandOS Operating Systems and the PC tools

### **All PMS StandOS operating systems react similar to the outer world**

The standard operating system StandOS is applied in many industrial controllers for many years. The newest release of StandOS offers numerous of new powerful features for all microprocessors and controllers, both for CISC, RISC and DSPs.

Because of the unique interface of the StandOS operating systems all kinds of controllers can be configured, programmed, tested and monitored by the same PMS PC tools. The configuration tools PMS StandOS Configurator and PMS Diagnostic Configurator can configure all the different controllers equipped with PMS StandOS.

### **Forget HAL and PAL**

Now you don't need to implement the Hardware Abstraction Layer (HAL) and Processor Abstraction Layer (PAL) for your applications anymore. Because now StandOS is your HAL and PAL. In this way you can reduce your programming effort by up to 50%. Your microcontroller system is now faster on the market and is running more secure. StandOS offers the diagnostic services via Ethernet and field busses not only for development and testing, but also for data acquisition, security and quality monitoring throughout the lifetime of your products.

### **Easy interfacing to all kinds of events**

All kinds of timer interrupts, external and internal interrupts, all kinds of events and the idle loop can easily be configured in the organisation explorer of the PMS StandOS Configurator. And all digital and analog inputs and outputs can now just as easy be accessed by process variables for both reading and writing. Not only by your application but also via networks for other remote controllers and by the PMS diagnostic, debugging and testing tools. Because all IOs are globally accessible, the application software can run anywhere in the network. The messages, which enables this, are interactively created by the PMS Messenger.

### **The largest number of graphical editors**

PMS UNIVERSAL PROGRAMMING STUDIO offers the largest number of graphical editors:

<b>Function block editor</b>	<b>Structogram editor</b>
<b>Flow chart editor</b>	<b>State diagram editor</b>
<b>Decision table editor</b>	<b>Sequence chart editor</b>

The graphical programming offers the huge advantage of a target independent programming and *modeling*. The target independency is possible due to the unified StandOS interfaces to the outer world.

### **Diagnose and error memory**

The PMS diagnose and error memory applications are running on all StandOS operating systems and can be configured by the PMS Diagnostic Configurator. The PMS Diagnoser features all UDS diagnosis and error memory communication between the PC and your targets.

### **Proces monitoring and control**

The PC tool PMS Monitor enables you to monitor and control all kinds of distributed industrial controllers. Even cascaded networks as Internet - Ethernet - CAN - LIN can be monitored. The user can set up his individual monitor screens with tables, track bars, bar displays, analog displays and oscilloscopes.

### **Interpreters offer target independency**

Java, C# and PLCs make the advantage of hardware independency due to interpreters obvious to everybody. This advantage is now also available for embedded systems by the PMS Siemens S7 PLC compatible compilers and interpreters. The graphics editors create automatically a standard ANSI-C code or a IEC-61131 interpreter code. Both software PLC, interpreter PLC and C programming are offered. The interpreters can run parallel on all StandOS operating systems.



PRAHM Microcomputer Systeme  
Gätgensstrasse 6  
D-22587 Hamburg

Dipl. Ing. Fred Uwe Prahm  
info@prahm-ms.de  
www.prahm-ms.de

Tel: ++49-(0)40-86 62 98 75  
Mob ++49-(0)171-28 52 405  
page 1 of 1