

PROFINET IO-Controller Toolkit

Item number: 1121065005

The PROFINET IO-Controller Software Development Kit (protocol stack) is open, powerful and cost-effective solution for embedding PROFINET into industrial controllers. Promoted by PROFIBUS & PROFINET International, it lets you build IO-Controller (master) products - PLC couplers, interface cards, robot controllers. Fully hardware and OS independent, it supports 32-bit and 64-bit microprocessors under real-time or standard OS and ship as ANSI C source code with sample applications, reference guide and GSDML samples



PROFINET protocol stack

Features and benefits

- ✓ **IO-Controller**
Addresses manufacturers who want to implement PROFINET master in their products.
- ✓ **Your own Engineering Console**
Create configuration files, commission and diagnose connected devices. This Windows based program could be customizable to your brand and interfaced with its software suite.
- ✓ **Delivered samples**
Delivered with sample applications in source code (FreeRTOS) plus a Windows-based simulator to accelerate development.
- ✓ **Hardware & OS independent**
No hardware or OS dependencies; easily implemented on a wide range of platforms and operating systems.
- ✓ **PI conformance tested**
Stacks are successfully tested with PROFIBUS & PROFINET International (PI) conformance test tools.
- ✓ **Expert engineering support**
Stack training, technical support and engineering development for both hardware and software design.



General

Content of Delivery

Windows 11; generates IO-Controller config files (XML); GSD[BH1.1][MM1.2] library management; device commissioning (auto-detection, Set Name, blinking); online diagnostics; OEM customization.

Identification and Status

Product ID

1121065005

HS Code

Not Applicable

Dual Usage

No

Physical Features

Contains Battery

No

PROFINET Features

PROFINET Mode

Compliant to the latest PROFINET specification. CC-A/B ; RT (Class-1), no IRT; Context Management; IP configuration DCP / Local

PROFINET Supported Functionality

Asyclic data exchange in multiple formats (Bit, Byte, Word, Dword, Float); up to 128 IO-devices with 1440 input + 1440 output bytes each.

PROFINET I&M Records

Manufacturer Data (I&M0), Tag Information (I&M1), Date/Time (I&M2), Description (I&M3)

PROFINET Conformance Class

Class A, Class B, Pre-conformance

PROFINET Bandwidth

LLDP (PROFINET mandatory MIB), MRP Media Redundancy (Client), FSU. 32-bit and 64-bit microprocessors; portable on any real-time or standard multi-thread OS.

PROFINET Input Data Size

Up to Full Ethernet payload

PROFINET Output Data Size

Up to Full Ethernet payload

Certifications and Standards

UNSPSC

Latest PI certification test suite