Data Sheet POWERLINK Configuration Editor



This product allows the configuration of POWERLINK networks.

Product Description

Industrial Control Systems implementing CODESYS can easily be turned into a POWERLINK Master (Managing Node – MN). The integration of the free open source openPOWERLINK stack and the additional CODESYS Runtime components from BE.services allow full support of the POWERLINK technology.

The configuration of the POWERLINK network is available, fully integrated in CODESYS, with this package.

This package provides all necessary additional software components for unlimited use on Raspberry Pi and BeagleBone Black target platforms.

Features



CANopen over Ethernet

POWERLINK uses the same object dictionaries and communication mechanisms, including PDOs, SDOs and NMT as CANopen.

Modular CN support

Modular network architecture with Head Nodes and Child Nodes.

XDD / XDC Import

The configurator provides an import filter for direct use of XDD/XDC files in the editor, automatically reusing and displaying present parameters.

Diagnostics

Device diagnostics are supported and a direct display of nodes state facilitates startup and maintenance tasks.

Network Topology

Support of different technologies: star, tree, daisy chain or ring.

Asynchronous Data

Each POWERLINK cycle allows an asynchronous phase, following the time-critical payload transfer. This allows transfer of any type of data i.e. SDOs for device configuration, application data such as camera feeds, etc...

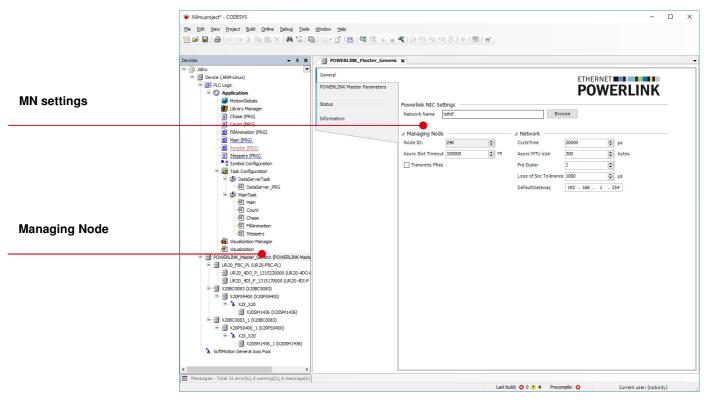
Poll Response Chaining

Instead of individual queries from the Managing Node, Controlled Nodes can be queried all at once by sending a PResMN frame as multicast. This increases performance in case connected CNs have a small amount of process data.

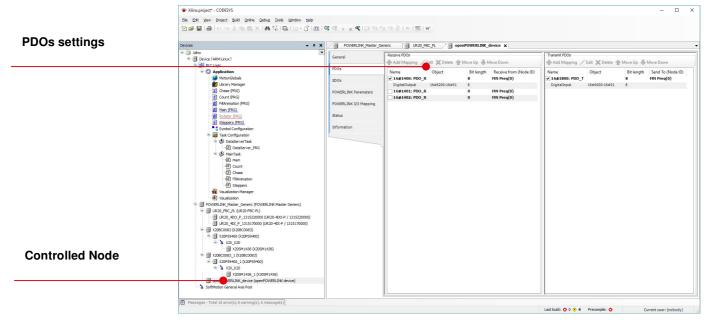
Direct Cross traffic

Every node is free to broadcast its own data across the network and every other node is able to receive these broadcasts. This allows direct cross communication among devices without being

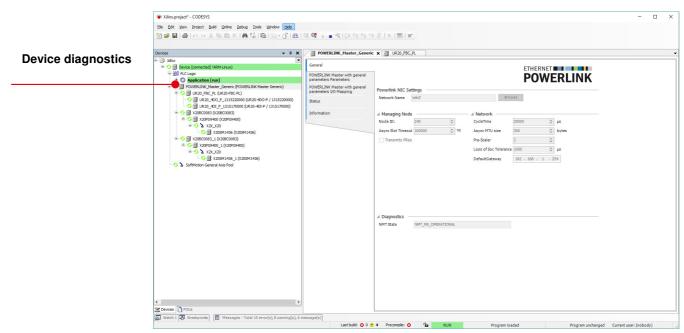
routed through a dedicated Managing Node, making it possible to i.e. synchronize rotary encoders on every drive with a master encoder.



Managing Node (MN) configuration



Controlled Node (CN) configuration



Built-in diagnostics

General Information



| Supplier | BE.services GmbH Heisinger Strasse 12 87437 Kempten Germany |
|-------------------|--|
| Support | Tel: +49 831 960 699 92 info@be-services.net |
| Product | POWERLINK Configuration Editor |
| Order Number | 000086 |
| Sales | CODESYS Store store.codesys.com |
| Scope of Delivery | CODESYS Package |

System Requirements and Restrictions

| Programming System | CODESYS Development System V3.5.9.0 and higher |
|-------------------------------|--|
| Target System | CODESYS Control V3.4.0.0 |
| Supported Platforms / Devices | All platforms compatible with openPOWERLINK and integrating the openPOWERLINK stack and the corresponding CODESYS I/O driver from BE.services. |
| | Evaluation target platforms: |
| | Raspberry Pi Model Model B / B+, Pi2 Model B, Pi3 Model B BeagleBone Black from Version C |
| Restrictions | The configuration can only be downloaded to a target device integrating the I/O driver for openPOWERLINK stack from BE.services. The editors require Microsoft .NET Framework 4.5 |
| Licensing | none |
| Required Accessory | none |