

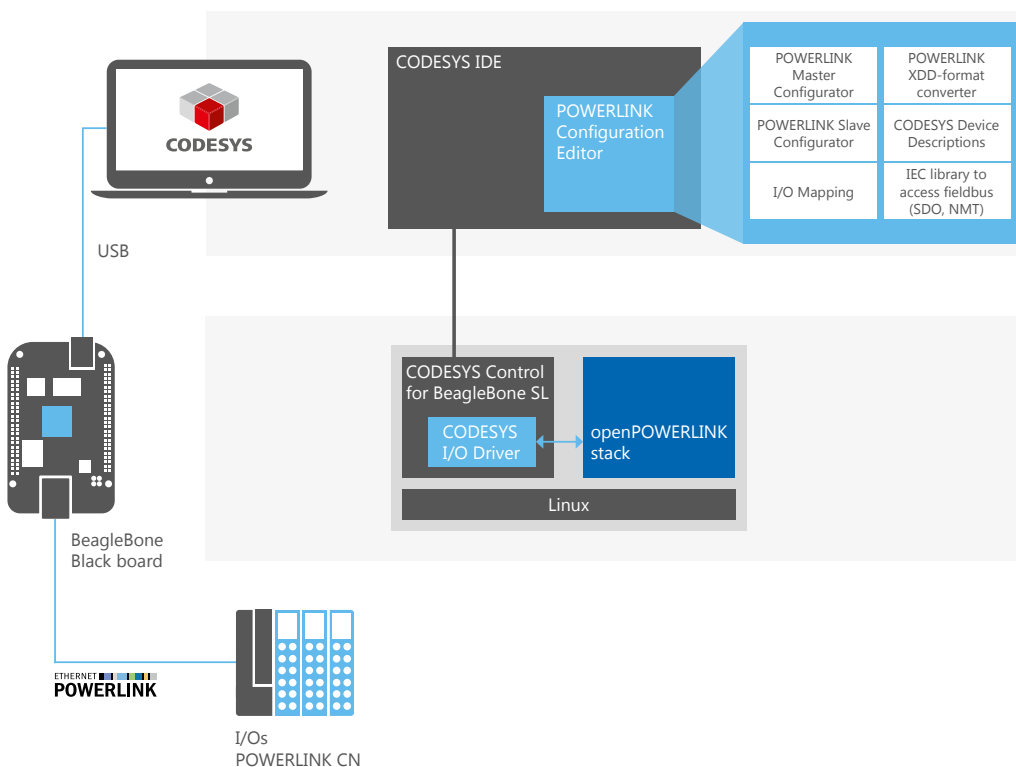
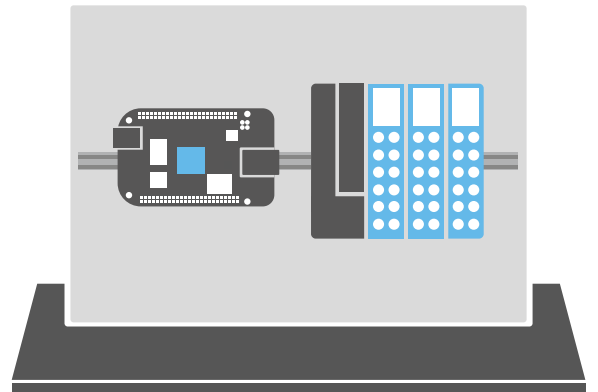
## Scope

This demo system was designed to allow the evaluation and test of POWERLINK for CODESYS, an extension to the CODESYS SoftPLC technology to control I/O systems over the POWERLINK Ethernet protocol.

## Functionality

The Industrial Control System is based on a BeagleBone Black board on which the CODESYS Control Runtime System for BeagleBone SL and the openPOWERLINK stack have been installed, turning the board into a CODESYS programmable POWERLINK Managing Node.

The programming of the ICS is done with CODESYS V3. The configuration of the POWERLINK bus is done with the POWERLINK Configuration Editor, a CODESYS plug-in editor.



Integration of the POWERLINK stack and editor.

## Included in the demokit:

### Hardware

- BeagleBone Black board from element14: [➔LINK](#)
- POWERLINK I/O modules (X20 BC 0083, X20 PS 9400, X20 DI 9371, X20 DO 9322) from B&R: [➔LINK](#)
- USB stick with CODESYS project and all documentation

### Software

- CODESYS Control for BeagleBone SL license [➔LINK](#)
- openPOWERLINK stack [➔LINK](#)
- POWERLINK for CODESYS (CODESYS runtime I/O driver)
- 1 license POWERLINK e-learning on BE.educated® [➔LINK](#)

### Documentation

- System Information POWERLINK for CODESYS
- Datasheet POWERLINK for CODESYS
- Documentation from Texas Instruments

## First steps:

- Power the system
- On your PC, install the following:
  - CODESYS Development System V3 ([store.codesys.com/codesys.html](http://store.codesys.com/codesys.html))
  - POWERLINK Configuration Editor ([store.codesys.com/powerlink-configuration-editor.html](http://store.codesys.com/powerlink-configuration-editor.html))
- Open project provided on USB stick
- Go through the e-learning course for POWERLINK on BE.educated® ([www.be-educated.net](http://www.be-educated.net)) following instructions as provided on the USB stick
- A complete training on CODESYS is available on BE.educated® ([www.be-services.net/education/courses.html#c486](http://www.be-services.net/education/courses.html#c486)) – not included in this demokit

## Engagement model

One stop shopping, support and optional integration services are provided by BE.services.

How to get?

Technology	Manufacturer	Part No.	Sales Contact	Price
Demokit - POWERLINK for CODESYS	BE.services GmbH <a href="http://www.be-services.net">www.be-services.net</a>	0230004	<a href="mailto:info@be-services.net">info@be-services.net</a>	249 EUR + VAT

## Featured Manufacturers



## Support

Please contact [info@be-services.net](mailto:info@be-services.net)

Usefull links for POWERLINK: [www.ethernet-powerlink.com](http://www.ethernet-powerlink.com)

Usefull links for CODESYS: [www.codesys.com](http://www.codesys.com)