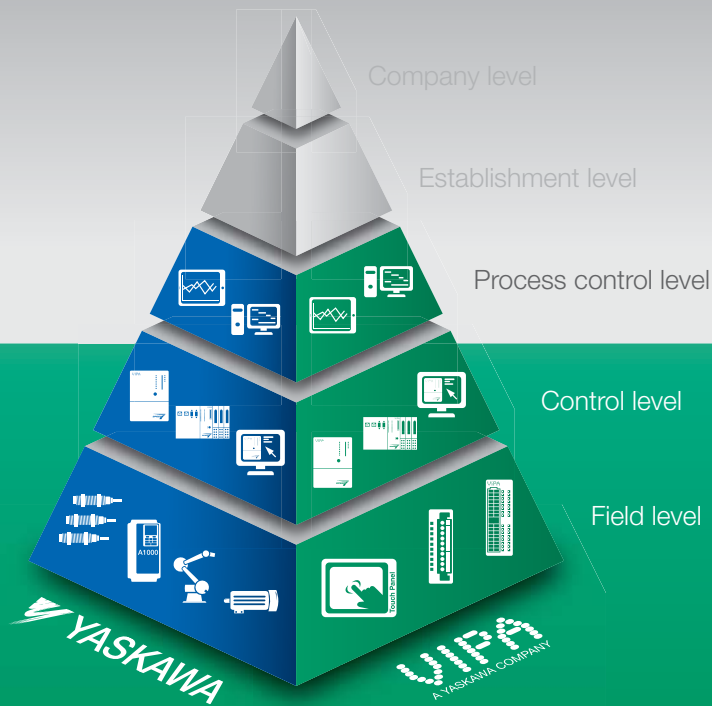




SPEED7 Studio

Engineering software by professionals for professionals

What is SPEED7 Studio?



SPEED7 Studio - the new VIPA engineering software that allows a more economic and efficient use of all SPEED7 controllers.



The new intelligence of the hardware configuration, the intuitive user interface and the system openness makes SPEED7 Studio a powerful and easy to handle tool. We want to optimize automation tasks, reduce the development effort to a minimum, and avoid time and cost intensive software training.

This allows the user to concentrate on his own engineering tasks.

SPEED7 Studio consistently puts the emphasis on user friendliness. The new concept includes

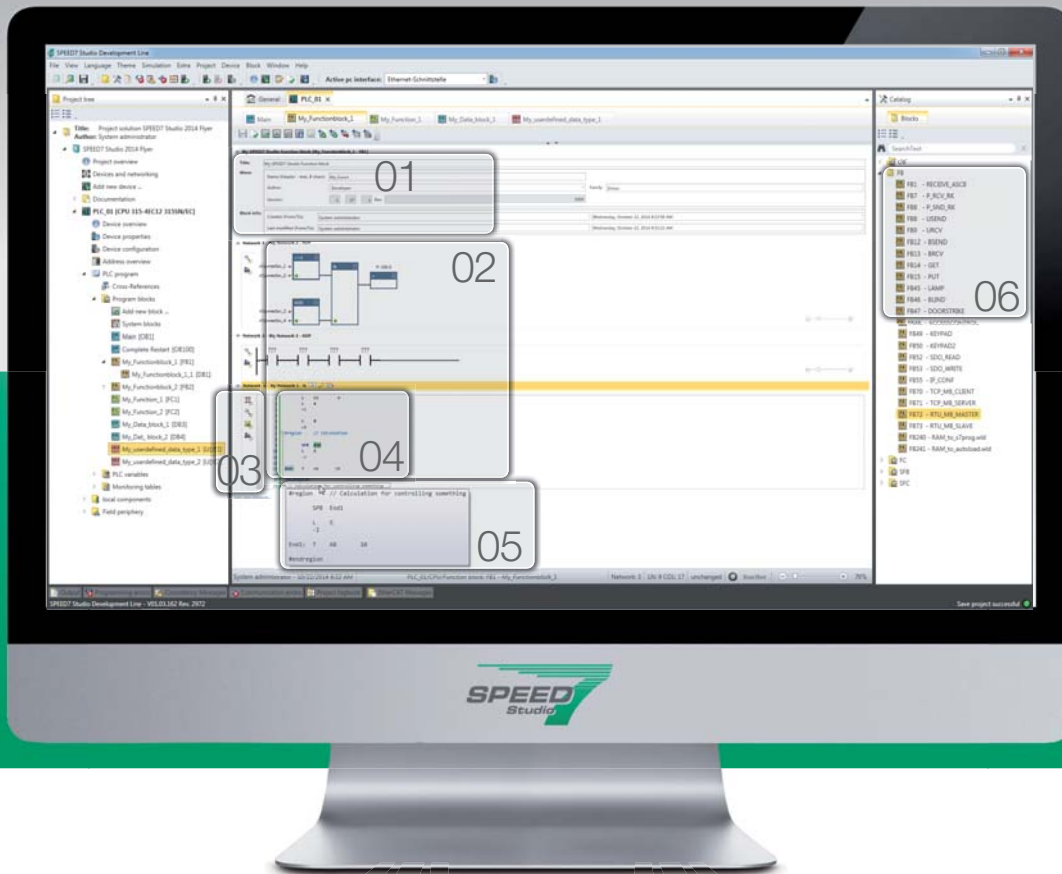
- Hardware configuration,
- Programming and networking,
- Parametrization of frequency converters and drives up to
- Visualization.

In the SPEED7 Studio editor design all functions, features and libraries are prepared and monitored automatically.

Unique SPEED7 tools make the software attractive and efficient.

High-Speed applications are compiled more ergonomically in the SPEED-Bus functions. EtherCAT and other field-busses are fully integrated. Applications are projected quickly and safely, loaded automatically and named with common symbolism in the EtherCAT configurator. Integrated SLIO functionalities, such as automatic current consumption calculation and integrated process image calculation makes SPEED7 Studio a highly efficient tool that holistically integrates the products of the SPEED7 world.

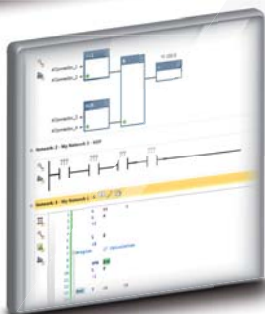
Programming



01

Module header

Modular expandable component and network information for optimal overview of change history, version management, etc..



02

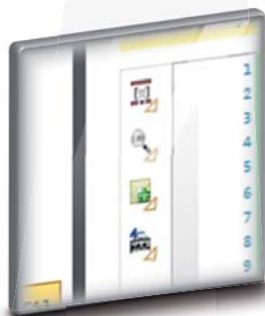
Free selection of the syntax language

IL, FBD and LAD usable within the same module and flexibly switchable, depending on the network

03

Network adjustments

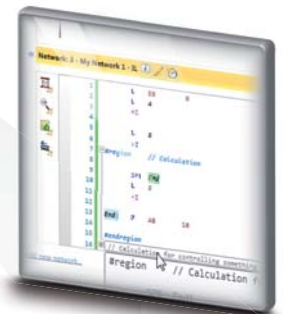
Fast access in single networks for optimized format adjustments such as zoom, syntax language, note function



04

Coloured syntax emphasis

Fast and clear orientation by means of colored subdivision of the programming surfaces and structure



05

Preview function

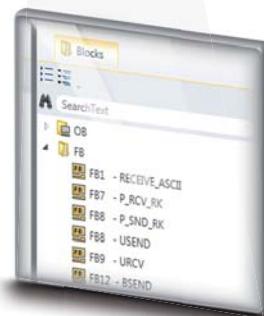
Tooltip allows fast and clear preview of the network code, also in closed networks



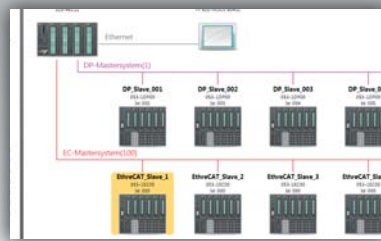
06

Component library

STEP7 and VIPA Modbus RTU modules completely integrated



Project engineering



```

My FunctionBlock [MyFunctionBlock01 - FB5]
Network: 1
1 // Check IN1 == TRUE
2 0 #In1
3 SPBN End
4
5 // read inputs ...
6 // #Region // Calculation
7
8
9 #Region // Calculation
10
11 L #ValueIn
12 L 35
13 #D
14 L 2
15 /D
16 T #ValueOut
17
    
```



Hardware configuration

SPEED7 Studio already simplifies and facilitates the work during hardware configuration. Straightaway you avoid time-intensive training with:

- clever Drag & Drop functions
- tooltips
- photo realistic display of the modules.

Numerous features support you during project engineering like the following examples from a large range of features:

- the automatic calculation of the electricity demand in the SLIO system,
- the integrated SPEED bus modules,
- the online monitoring of the digital I/O's.



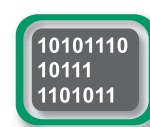
Networking

SPEED7 Studio carries the networking via:

- PROFIBUS,
- PROFINET,
- EtherCAT and
- Standard-Ethernet

consistently logical.

Regardless of the bus protocol the topology view is always the same. In this way the network configurations and the user allocation can be done easily and quickly. The combination of the standard STEP7 world and the EtherCAT world offers an overview never before seen and enormously reduces the work load.

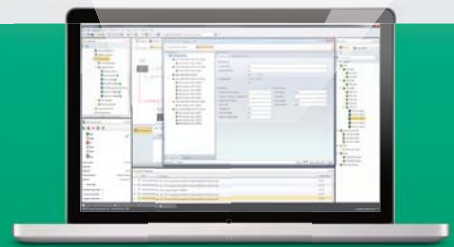
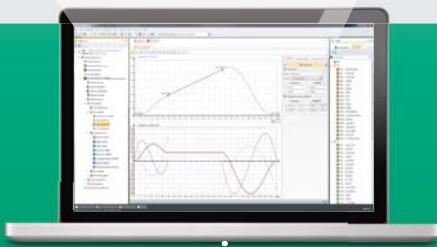
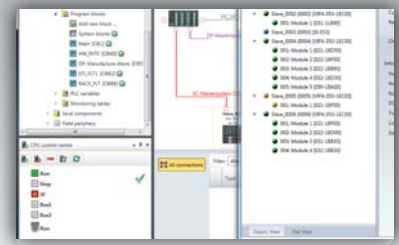
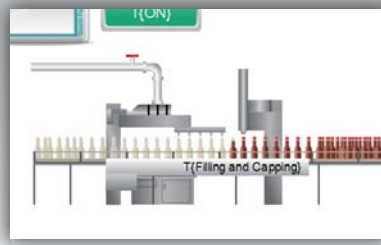
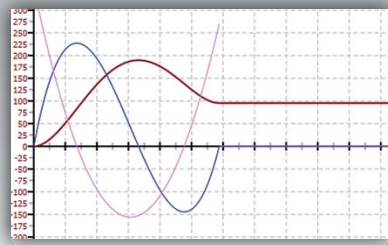


Programming

Editors and Debug tools for IL, FBD, LAD and SCL are the instruments for programming with SPEED7 Studio. Particularly clear programming by means of:

- clearly structured colour scheme,
- clearly identified hierarchical levels,
- a cross-reference list
- and many more features.

Diagnosis by means of **module status** and **the monitoring table** is possible - even with history and trend display.



Motion Control

SPEED7 Studio opens up a new, highly efficient type of **drive configuration**. System functions can also be planned without special knowledge with the Motion Control library. The best of the VIPA PLC and the YASKAWA drive world can now be found in a single tool.

The newly developed cam tool editor is available for **multi-axial applications**. With this the **law of motion of VDI 2143** can be graphically designed for the electronic cam disk. Mechanical cam disks are recreated exactly and can easily be developed. Motion axes can be positioned optimally and exactly by means of the **high performance clock synchronism**.



Visualization

Two visualization options allow the choice of:

- the **web based** version with the **vector oriented graphic** for access to your systems and plants independent of location and runtime via panel, laptop, smartphone and tablet PC;
- the second version with the possibility of extensive visualizations via the **SCADA interface**.

Because of the number of common variables all project variables can be used for the visualization with SPEED7 Studio without interface loss.



Test & Diagnosis

Considerable test and diagnosis functions for PROFIBUS, PROFINET and EtherCAT allow for efficient and target oriented error diagnostics in SPEED7 Studio. Considerably simplified access in EtherCAT by:

- automatic reading of connected EtherCAT hardware
- fast and clear project engineering and parametrization
- complete network diagnosis.

The integrated **PLC and HMI simulations** bring the following improvements:

- a clear and structured testing of complex systems in advance
- extrem simplification of error diagnosis by means of the newly developed **realtime recording of datapoints** from the PLC - even in the case of intermittent errors.

All benefits at a glance



- ✓ **Profitability**
Intelligent features for greater overview and less effort
- ✓ **Consistency**
Engineering from hardware configuration, communication, programming and Motion Control right up to visualization
- ✓ **Multi-lingual**
Change language easily even during the programming process
- ✓ **Motion Control**
No special previous knowledge required through function modules
- ✓ **Multi-axes applications**
Cam disk editor with laws of motion according to VDI 2143
- ✓ **Quality management**
Many integrated and efficient test and diagnostic functions



Easy to Start

Access into the entire project planning of hardware and network configuration can scarcely be faster. STEP7 programming, standard Motion Control functions, visualization and diagnosis have never been so easy. Benefit from this bridge-building and the wide product range of hardware including comprehensive accessories.

