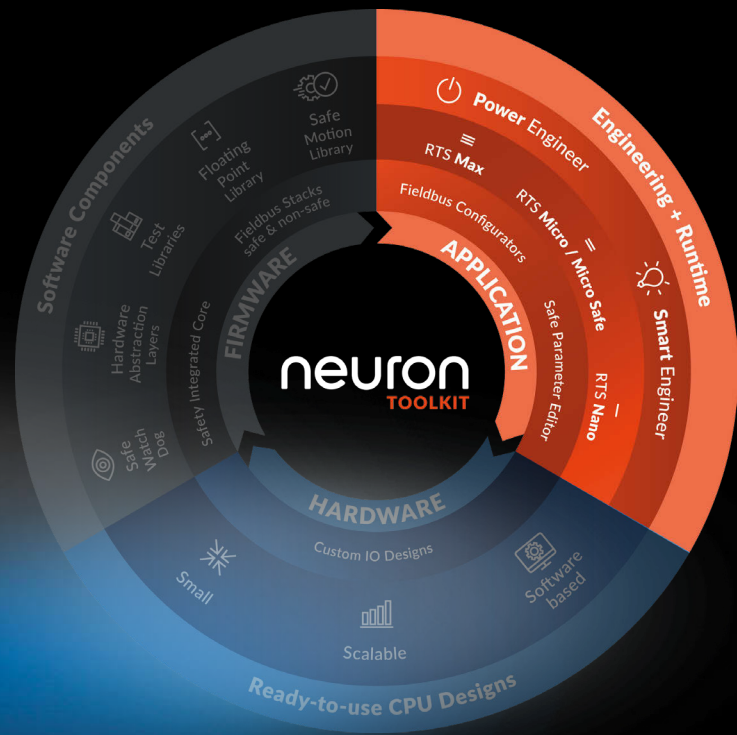




RTS max



Summary

To build the bridge between our Engineering Tools and the PLC hardware Neuron also offers a variety of runtimes. Neuron RTS max is a full featured PLC runtime system. It is completely hardware independent and typically combined with a realtime operating system to provide hard realtime performance. A data exchange layer allows integration with other applications, e.g. fieldbus systems or custom I/O boards or 3rd party applications.

Main benefits at one glance

-  Running on target
-  Easy to integrate into new and existing systems
-  Flexible and highly scalable
-  Open connectivity and extensive usability for plug-in interfaces and system services
-  Virtualization from the controller to the cloud

Scalable and hardware independent

Hardware independence and scalable performance from ARM processors to IPCs

Can be combined with different host operating systems (Linux, VxWorks, Windows)

Can be containerized to run as virtual PLC

Extensible through API:

- Integrator can add easily additional functionality via add-on concept
- Integrator can interact with the system via an API

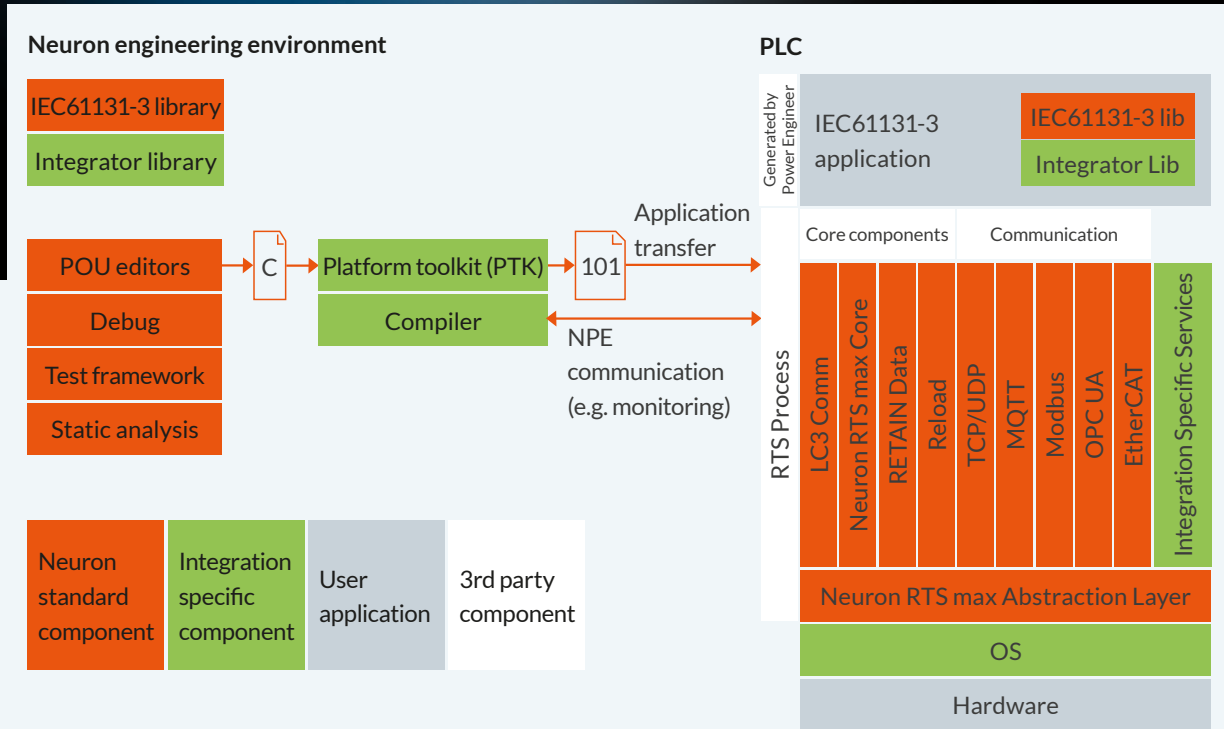
Integrated communication protocols (EtherCAT, Modbus, OPC UA, MQTT)

Additional custom fieldbus solutions can be integrated

Mapping of communication data to PLC variables can be configured at runtime through data exchange layer

Your Solution Partner for Functional Safety, Engineering Tools & Runtimes

Architecture



Specifications

Multi-tasking runtime for safe and non-safe PLC programs created with Neuron Power or Smart Engineer

Multiple resources within a runtime for added flexibility of having multiple PLCs within a single runtime

Hardware independence and scalable performance from ARM processors to industrial PCs

Can be containerized to run on servers

Data exchange layer for connection between variables in the PLC runtime and fieldbus systems, data mapping through text file can be changed at runtime

EtherCAT host, Modbus client and server, OPC UA server functionality included

MQTT and TCP/UDP communication for custom protocols

Additional custom fieldbus solutions can be integrated

API to create add-on extensions

Bumpless transfer and install of new application software

Fast cycle times down to 250 µs

Supported HW platforms:

- Linux x86/x64
- Linux ARM (v5, v6, v7)
- Linux ARM64
- VxWorks x86
- Windows x86/x64