APPLICATION
SIGNING

NEXT GENERATION OF
HIGH PERFORMANCE COMPUTING

This new PLC gives you utmost flexibility while complying with safety and cybersecurity.

The new 94x family of vehicle control units revolutionizes the control architecture of modern rail vehicles.

For the first time, it is possible to virtually integrate several independent, freely programmable controllers (vPLCs) into one device. Different applications such as vehicle control, TCMS, traction, braking and diagnostics run simultaneously, independently, and non-interacting on a single certified vehicle control unit.

The new vPLC has been developed according to the highest standards for Safety (Safety Integrity Level 2) & Cybersecurity (Security Level 2) and thus offer maximum protection for people and the system. Safety-relevant and non-safety-relevant applications are clearly separated from each other and thus non-interacting.

SELECTRON

Convincing user benefits offer cost advantages

Generic and open programmable, qualified, highly flexible SIL-PLC shortens the approval process of new vehicles or for retrofits throughout the entire vehicle life cycle.

High computing power and **large memory** simplify IEC-application engineering.

Independent virtual PLC (hypervisors) offer multiple applications in one device.

Division into safety-related and non-safety-related applications in one device structures TCMS architectures and simplifies vehicle approvals.

Independent SIL applications on one control hardware that do not interact with each other reduce recurring equipment costs.

Security by Design and Defense in Depth provide protection against accidental and intentional data manipulation according to IEC 62443-4-2 Security Level 2 (SL2).

Optional DIN rail or 19" mounting (3 RU) simplified Control cabinet mounting.

Pre-certified, integrated toolchain and operating system simplify application engineering and vehicle approvals.

Maximum flexibility and efficient "just enough" ethernet architectures.

Easy integration into any TCMS.

The safety version (SCPU) comes with a **SIL 2** (Safety Integrity Level 2) certification according to EN 50129: 2018 as **standard.** Simply add a safe processor extension and **gain a SIL 4** which enables completely new application areas.

Technical data

- Quad Core 64-bit ARM®-based processor 1.6 GHz
- Hypervisor operating system
- 3 x Gigabit Ethernet
- 1 x USB device
- Electrical power supply 24 – 110 V DC
- 2 x rotary switches for configuration
- Memory card

Discover the entire range of Selectron solutions

Communication Technology

Invisible to the eye from the outside, train bus couplers, switches and converters perform indispensable functions in the safe operation of modern rail vehicles. The industry is currently in the midst of the transformation to Ethernet-based communication - with major challenges for train manufacturers and rail operators.

Our services - your success

Nothing is more important than responding to customer- and project-specific needs. We help projects achieve rapid success - with the right hardware architecture, reliable components, efficient software tools and overall knowledge transfer. Our job is to support you from the initial concept idea to the end of the lifecycle.

Holistic cybersecurity approach

The digitization of the railways is moving at high speed. The flip side of the coin: The rapid pace of technological development makes rail vehicles vulnerable to cybercrime. All the more important is that you can rely on someone who keeps an eye on the big picture. Selectron is on the spot with its forward-looking cybersecurity solutions.

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