



KontronOS

susietec[®] KontronOS IoT-Bundle

The hardened Linux[®]-based operating system for the reliable operation of customer applications on edge devices

In critical environments, security is the top priority. The KontronOS IoT bundle provides maximum security and up-to-dateness of Linux[®]-based embedded hardware in the field – for reliable operation over the entire product lifecycle.

The hardened KontronOS operating system protects IoT solutions in critical environments from compromise, external access and uncontrolled updates, so that containerized or native applications can run securely and without interruption. Rely on KontronOS to maintain the stability and security of your embedded devices and experience the benefits of a hardened Linux[®]-based operating system.



Highest
operating time



Reduced
to the essentials



Tailored for
Customer Applications



Hardwareindependent
and easily
customizable

An operating system tailored to the smooth operation of Docker containers

Highest operating time

- › Two redundant partitions (active and passive) ensure maximum uptime in the event of a failure, an interruption or a failed update

Tailored for customer applications

- › Containerized applications are lightweight and ideal for connected devices, KontronOS creates a secure environment for them

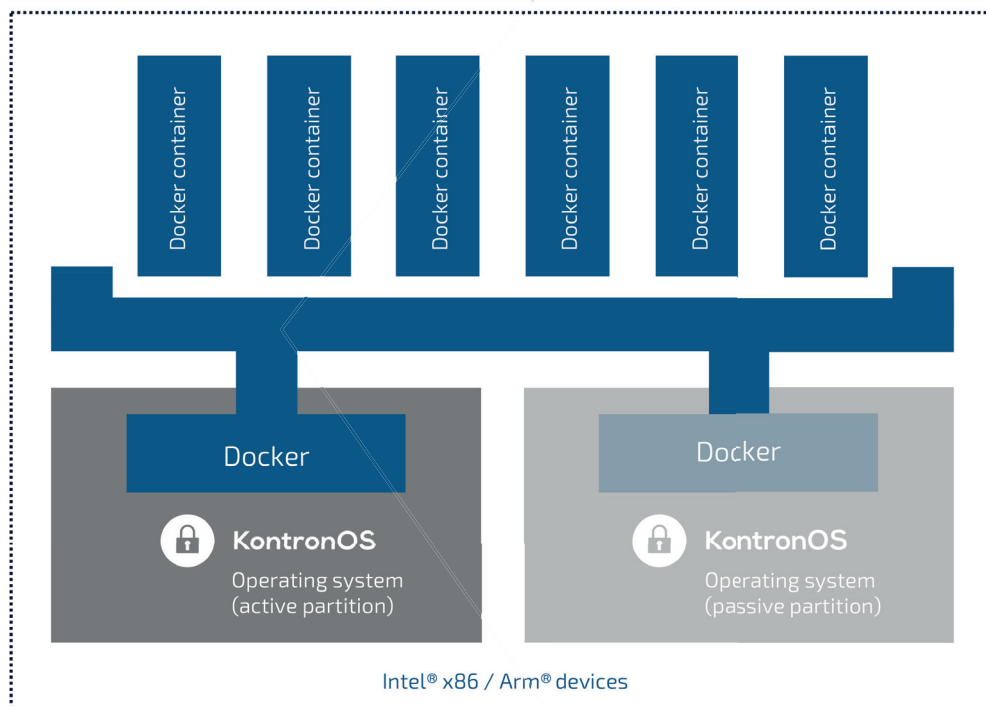
Hardware-independent and easily customizable

- › KontronOS on Yocto Linux® basis flexible for Intel® x86 & Arm® based devices applicable

Reduced to the essentials

- › A minimal Linux® operating system with all the necessary functions it needs to ensure a smooth operation

Standard IoT stack with pre-installed secure KontronOS operating system





Compatible hardware of the standard IoT stack

- › **AL i.MX8M Mini** – Compatible hardware of the standard IoT stack
- › **KBOX A-250** – industrial and high-performance IoT gateway based on Intel® x86
- › **KBox A-151-TGL** – Industrial computers for data-intensive IoT edge and AI applications
- › **KBox A-151-EKL** – Industrial computers for low-power IoT edge applications

KontronOS offers protection against compromise, external access and uncontrolled updates for use in critical environments

- › Two redundant partitions (active and passive) for redundancy and automated rollback to older versions in case of problems in the update process
- › Continuous CVE/CWE investigation
- › Support of the integrated security mechanism at boot level via TPM 2.0 on x86 and via HAB for Arm®
- › Configurable network zones of the integrated firewall
- › Clear separation between operating system and application level, Docker containers can be used independently

Further highlights

- › GPIO support for the use of digital signals as interfaces (inputs and outputs) to other systems, circuits or components
- › Support for CAN bus, RS485 and RS232
- › Integrated and intuitive web UI for configuring firewall and IP address as well as backing up and restoring the system configuration

” Since the introduction of KontronOS, the updates have worked flawlessly and remote access is reliable even over the distance to Canada. The dedicated Kontron team responds competently to our requirements. We finally have a complete solution from a single source – customized hardware combined with efficient device management. ”

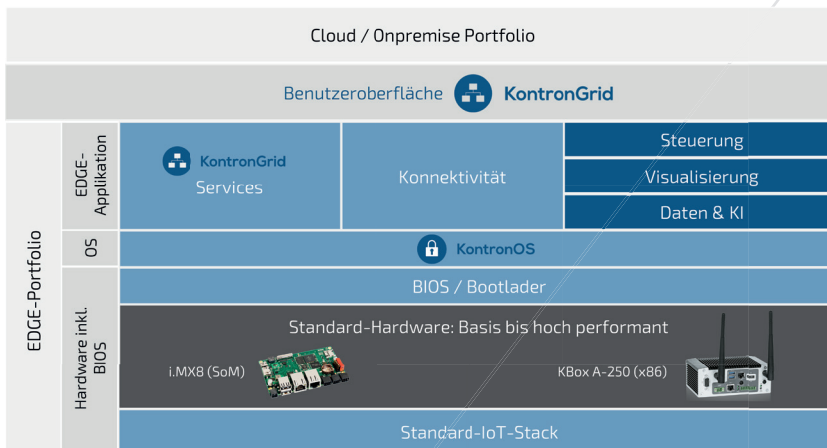


- Customer testimonial from a KontronOS user

Digital security for integrated devices

Digital security is critical for integrated devices: the growing number of autonomous devices without an operator represents a significant attack surface for companies. Different user groups have different needs and security requirements.

With KontronOS, we provide a customized, Linux®-based operating system that is geared to the individual requirements of your software and hardware. The automated update process ensures that the system is always up to date. Especially with a large number of devices, we ensure that all devices in the field are at the same update level, despite different schedules and threat scenarios.



Managed service for secure and customized hardware configurations

With KontronOS as a managed service, we cover a variety of hardware configurations for a wide range of requirements. We differentiate between modified standard and fully customized.

In both cases, various basic properties can be configured via a customizable web interface with the goal of minimizing service times. Automated pen tests ensure the necessary security.

In case of zero-day exploits, vulnerabilities or threats, the system updates itself within a very short time. To avoid downtimes in the event of problems, it is possible to revert to the last functioning version at any time. On this basis, the KontronOS IoT bundle creates a customized operating system for the business cases of your company.

The KontronOS IoT Bundle develops a customized operating system for your company that not only ensures the security of the operating system, but also that of the applications in the IoT environment.

With the comprehensive fleet management solution KontronGrid, not only can updates be provided and distributed, but thousands of devices can also be managed securely.

Benefits for users



Safe



Customizable



Reliable

About susietec®

We see digital transformation as a holistic approach. With the susietec® toolset, we support companies that know how to recognize the potential of IoT and digitalization: The combination of software, hardware and expertise enables functional and smart solutions for equipment suppliers, suppliers and manufacturers. This enables us to implement changes in a targeted and timely manner – with the aim of driving digitalization forward in the long term.

susietec® solutions can not only be used in an existing environment, but can also serve as the basis for the development of new machines, devices or production systems.

As part of the Kontron group of companies, we use our experience from numerous digitalization projects to help you take the right steps towards digital transformation.

More information can be found at:
www.susietec.com

**kontron**
The Power of IoT

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