



kontron

The Power of IoT

Press Conference @ SPS 2024

Hannes Niederhauser
CEO Kontron AG

November 12, 2024
Nuremberg, Germany

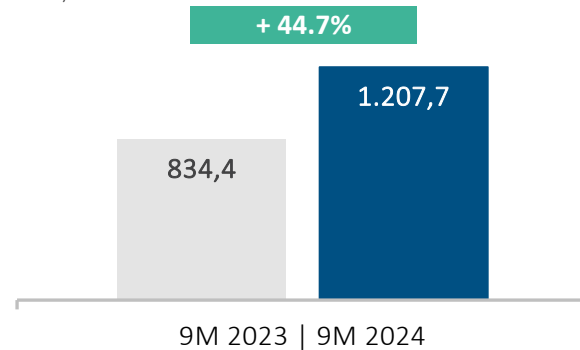


Kontron: KPIs 9M 2024

Continuing on growth path

Revenues

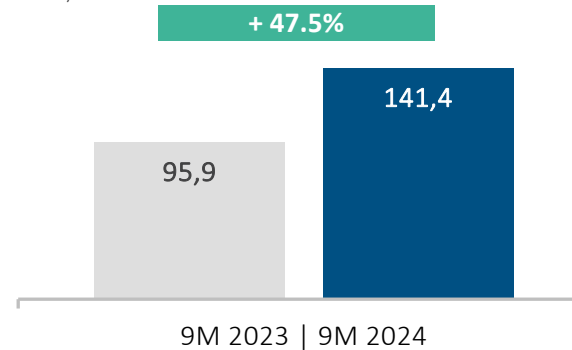
(in EUR m)



Adjustment of H1 23 revenues due to changed assessment of principal/agent status

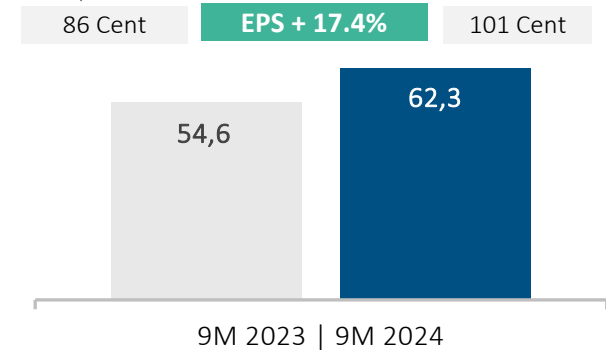
EBITDA

(in EUR m)



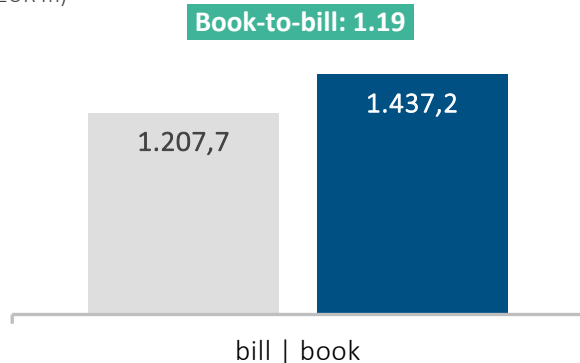
Net Result after NCI

(in EUR m)



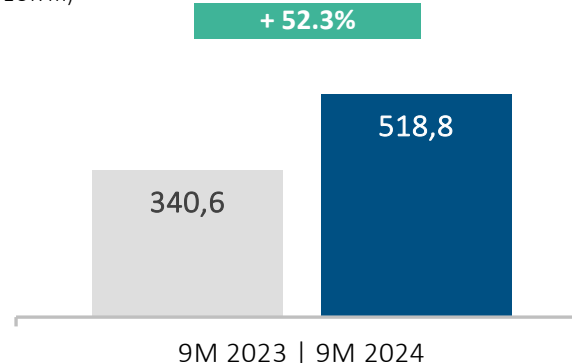
Order Entry vs. Revenues

(in EUR m)



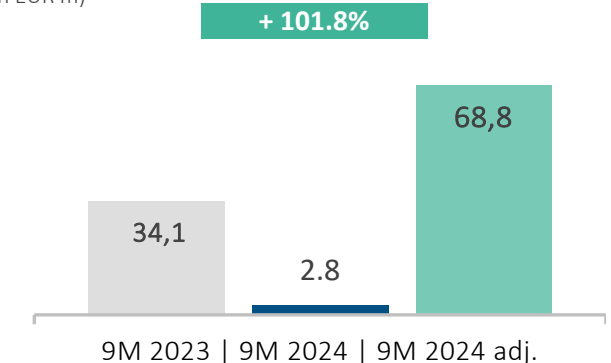
Gross Profit

(in EUR m)



Operating Cash Flow*

(in EUR m)



* adjusted for the reduced factoring and a deferral effect for 2023

Massive design win volume increases to EUR 6.22bn

Backlog rose to EUR 2.06bn driven by great order intake

Kontron announces new order for satellite communication

24.07.2024

Q3

E-mobility picks up speed: Another major order for intelligent wallboxes goes into production

03.07.2024

Q3

Kontron AG: Major order for smart wallboxes

21.05.2024

Kontron signs a contract over EUR 30m for optical network solutions

05.12.2023

Kontron AG: Strong growth in the avionics market - Kontron announces two design wins amounting to a total volume of EUR 100m

10.10.2023

Kontron wins a EUR 34 Mio. contract for a GSM-R system in the Czech Republic

13.03.2024

Contract wins - Kontron signs 3 major railway contracts worth exceeding EUR 100m

07.02.2024

Kontron AG: Kontron announces two design wins in the field of energy management amounting to a total of EUR 25 million

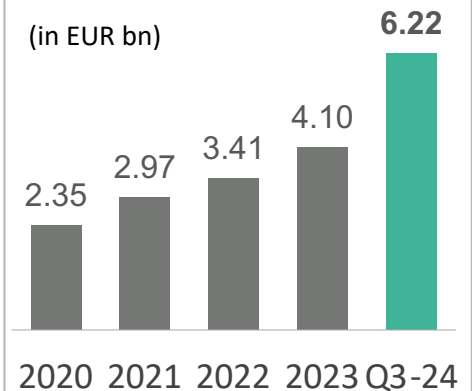
23.10.2023

Kontron: Another design win of over EUR 50 million from a heavy machinery manufacturer – Design win volume increases to EUR 3.7 billion

23.11.2023

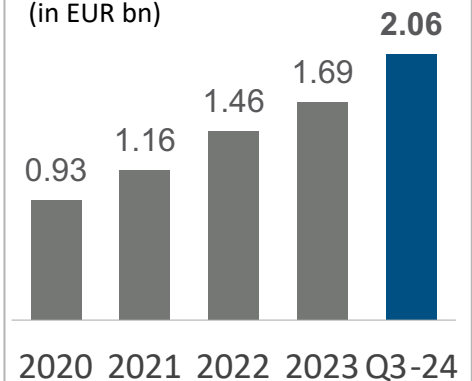
Design Wins

(in EUR bn)



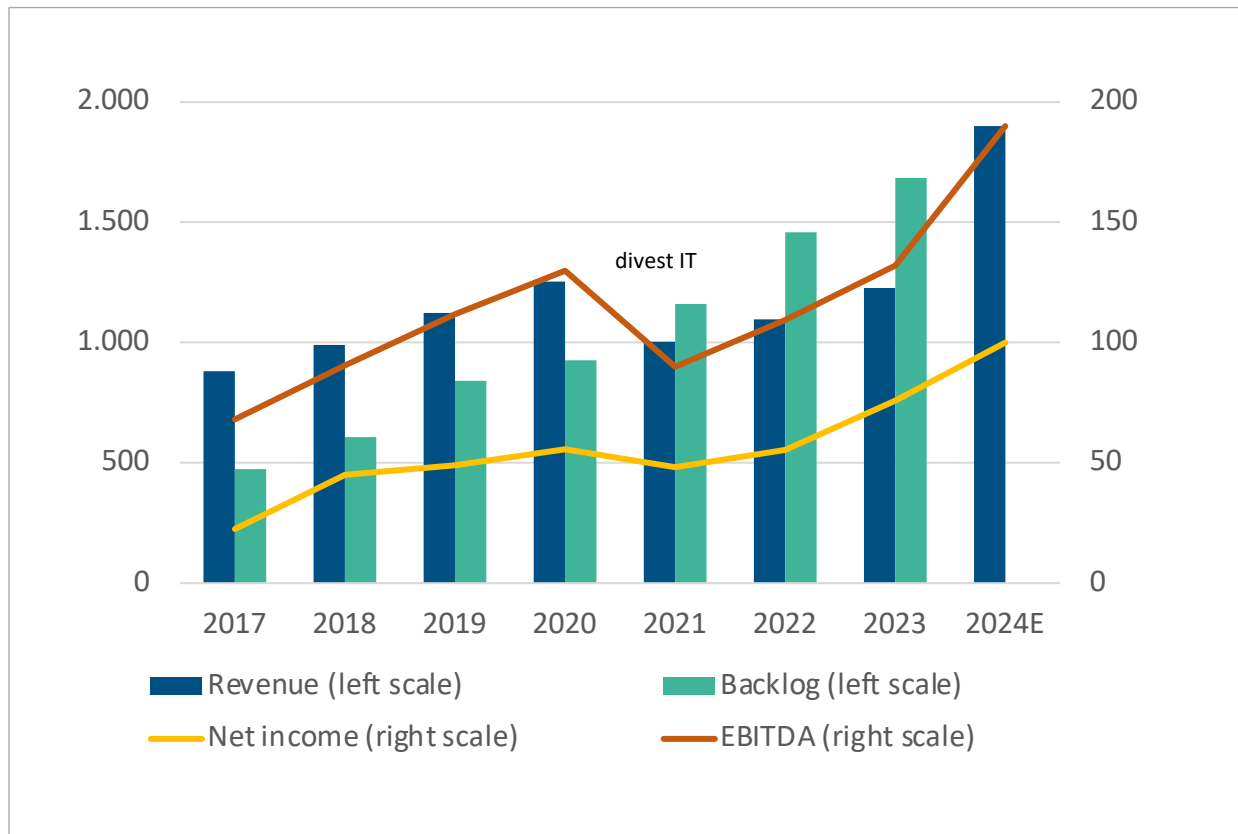
Backlog

(in EUR bn)



Kontron: History and 2024 forecast

Continuous strong growth – another leap in 2024 expected



(in EUR million)	Guidance 2024	Y-o-y growth
Revenue	1,800	~50%
EBITDA	190	50%
Net Income*	100	33%

Kontron: Mega technology drivers

Kontron has > 3,000 experienced engineers = #1 brainpower in IoT

Mega technologies for IoT end devices

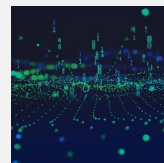
KontronOS Software for IoT devices



- › Current IoT networks do not comply to NIS2 requirements
- › Kontron OS offers security, remote control, remote maintenance to protect edge devices and the grid
- › Install 30 million licenses, main OS for machines
- › Expand by K-Grid and K-security

Artificial Intelligence

- › 75% of needed AI data are generated by IoT devices
- › AI will not work without connected IoT devices
- › AI needs higher IoT bandwidth e.g. FRMCS



Partnerships for IoT grids + end devices

Qualcomm

- › Joint development for 5G/6G/FRMCS radio modems
- › Design of IoT edge devices based on connected ARM chips
- › Use of AI functionality in embedded devices
- › IoT Software support toolset



Foxconn

- › Design Smart connected batteries
- › Cooperation in smart connected chargers
- › Implement K-OS in Foxconn products and factories
- › Marketing cooperation for CN, SEA and EU



Kontron @ SPS 2024

Everywhere. Everywhere secure. Everywhere connected.



- › We are THE IoT solution provider with software, hardware and expertise along the entire value chain
- › New market drivers are
 - › Technical trends such as wireless communication
 - › Government requirements such as NIS2 / CRA
- › This year we present ourselves with:
 - › Our well-known & enhanced Kontron products
 - › Two cubic presentations for
 - › Software & Security
 - › Connectivity & 5G

Software & Security Cube

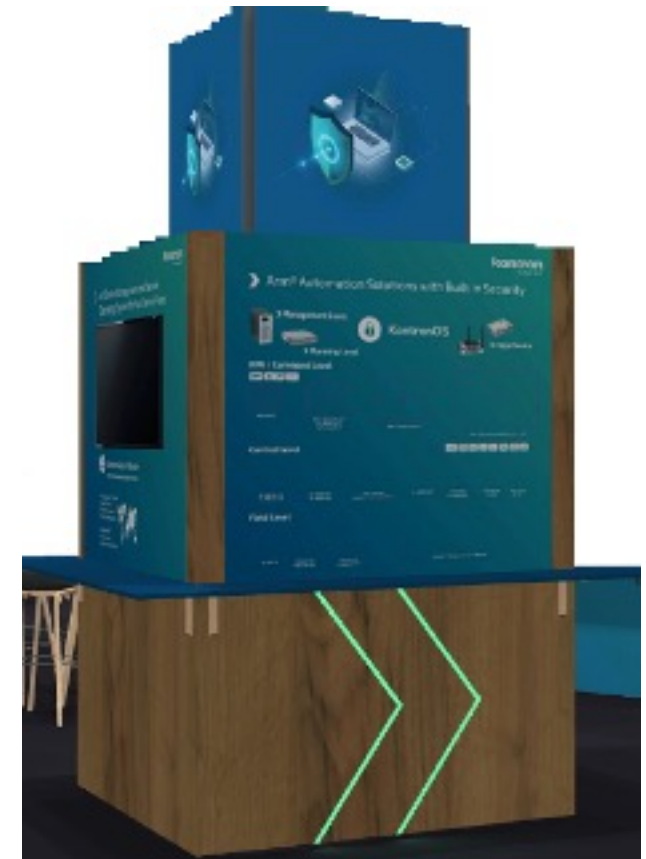
Ready for Cyber Resilience Act & NIS2 Kontron as trusted partner



- › KontronGrid IoT-Bundle & FabeEagle®Connect IoT-Bundle
 - › For Industrial Automation

- › KontronOS on ARM
 - › Automation & Board Line

- › Modified Standard Solutions
 - › Hardware & Software
 - › Kontron Software Toolbox



KontronGrid IoT Bundle

susietec®

IoT Device Management and secure Operating System for your Device Fleets

Use Cases

- › Manage and monitor embedded devices globally and remotely
- › Automate and Update Device Fleets: Over the Air & Bulk Updates
- › Secure operating system for running applications

Bundle Components

- › IoT Device Management & Fleet Management
- › Secure Linux based Operating System
- › Box PCs for different applications: compact to data intensive and low power applications

NEW functionalities

- › Docker Compose Integration
- › REST APIs to trigger mass updates via templates automatically
- › Smooth Onboarding & Update functionality for native applications

Trade Fair Demo: Vehicle Fleet



- Three Edge Devices
- KontronGrid cloud-based web application
- Edge Devices: pre-installed with KontronOS and KontronGrid Agent



KontronOS

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



Highest operating time



Reduced to the essentials



Tailor-made for Customer applications

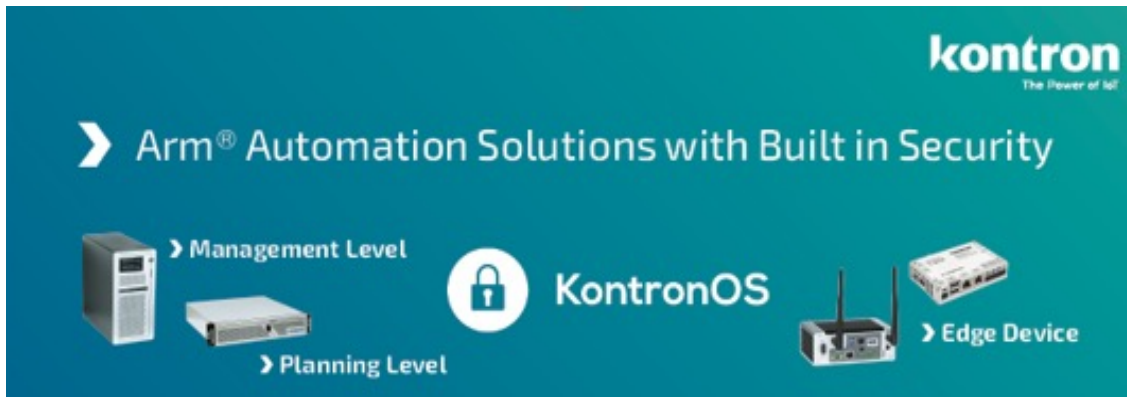
- › Tailored and hardened to the application operating system
- › All connections are encrypted
- › Automatic fallback process
- › Signature check of all updates
- › Redundant boot loader and OS partition
- › Delta updates for low bandwidth transmission



Arm® based Automation Solutions

With Built in Security

The entire Automation World secured
with Kontron HW & SW



Device Management with KontronGrid

- › **KontronOS:**
On Edge Devices and in the Control and Command Level
- › **HMI/Command Level:**
Web & Control Panels. HMI SW solutions: CODESYS, QIWI, SpiderControl
7" Display-Line: Based on NXP or Pi-Tron
- › **Control Level:**
CODESYS-capable solutions Control Unit with new i.MX8M Plus
Customized Baseboards based on SoM
- › **Field Level:**
Cost saving I/O
Off the shelf / ready for customizing

Connectivity / 5G Cube

Communication made easy



- › 5G private network
 - › 5G infrastructure solutions
- › 4G / 5G modules
 - › Portfolio and services
- › TSN over 5G
 - › KBox & KSwitch in 5G environment
- › Custom Solutions
 - › Hardware, Software & Communication



5G MPN Offering

5G All-in-one portable/demo box



- › **Single-server 5GC** deployment with integrated switch with an **all-in-one** 5G gNB packaged in a portable case or for on-prem installation.
- › Ideal for 5G technology in a compact, transportable manner, suitable for field and **temporary deployments** or **small on-site installations**.

5G MPN standard



- › **Highly available 3-server 5GC** setup with various indoor and outdoor radio deployment options and redundant switches.
- › Ideal for **mission-critical** and **business-critical** applications with enhanced reliability.
- › Simplified deployment and streamlined operations designed for **high throughput, low-latency industrial use cases**.

5G MPN custom

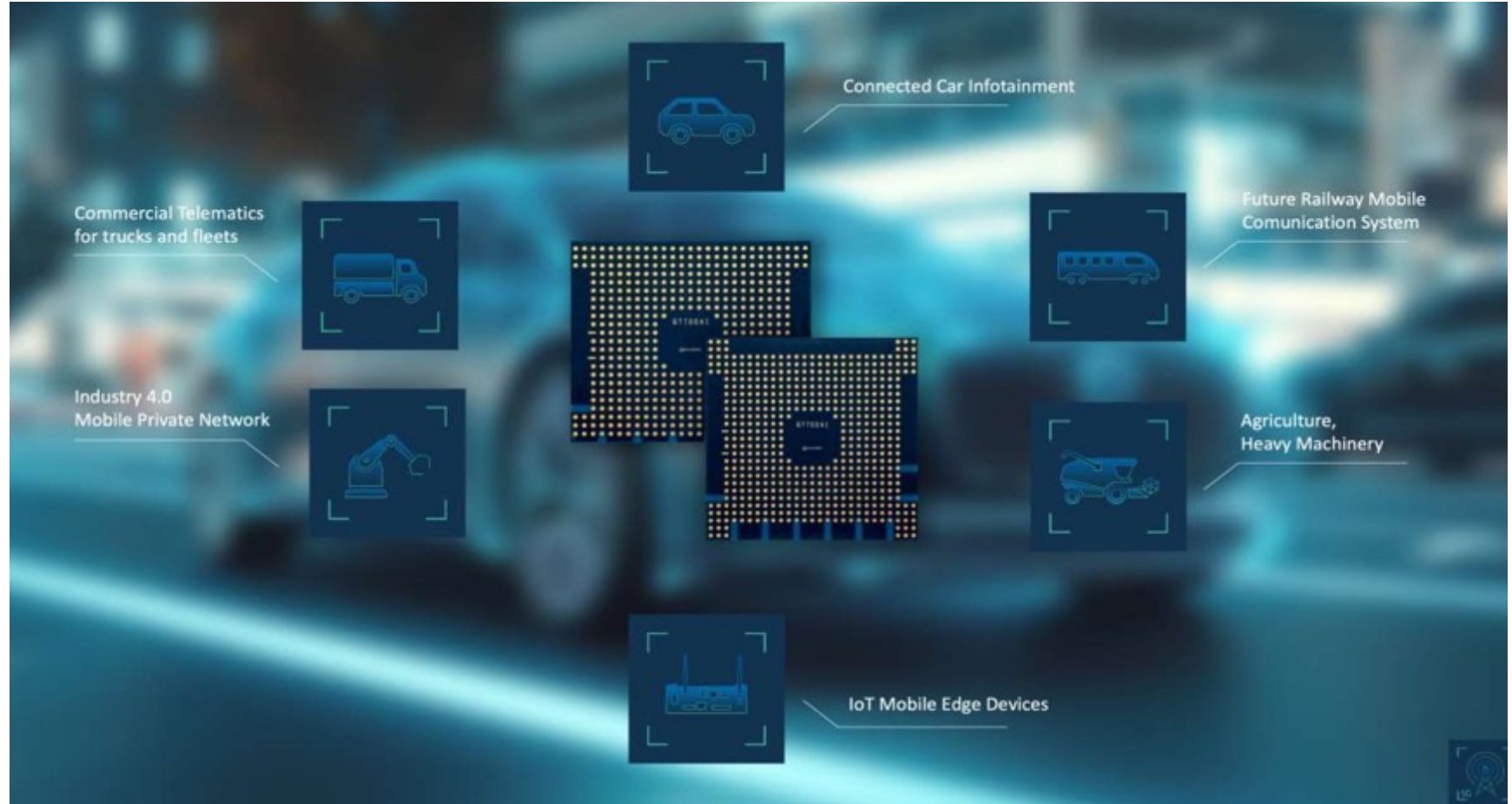


- › **Custom project** quote dimensioned on specific customer requirements.
- › Optional additional services:
 - › integration, development, and managed services.

Mobile Solutions

Trusted 4G/5G Modules, developed in Berlin, Germany

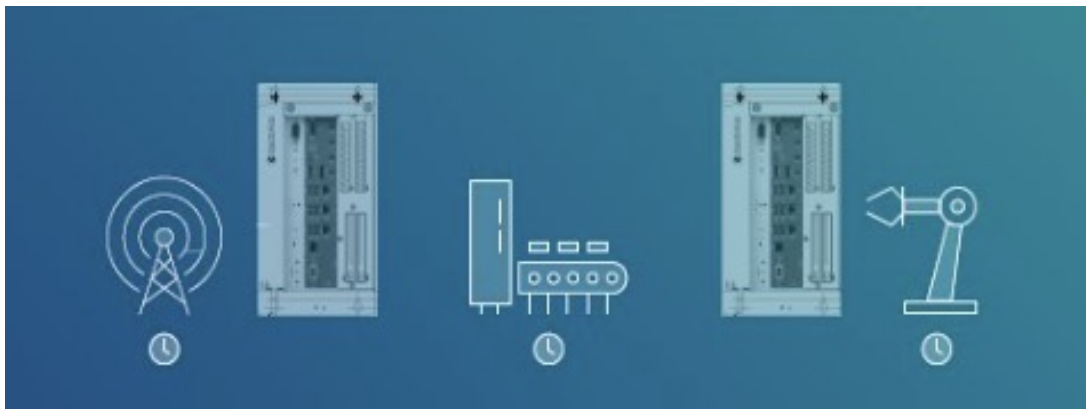
- › 5G – MPN
- › 5G – FRMCS
- › 4G/5G – Automotive
- › 4G/5G embedded in Kontron



TSN Over 5G

Deterministic TSN Solutions from Wired (Ethernet) to Wireless TSN

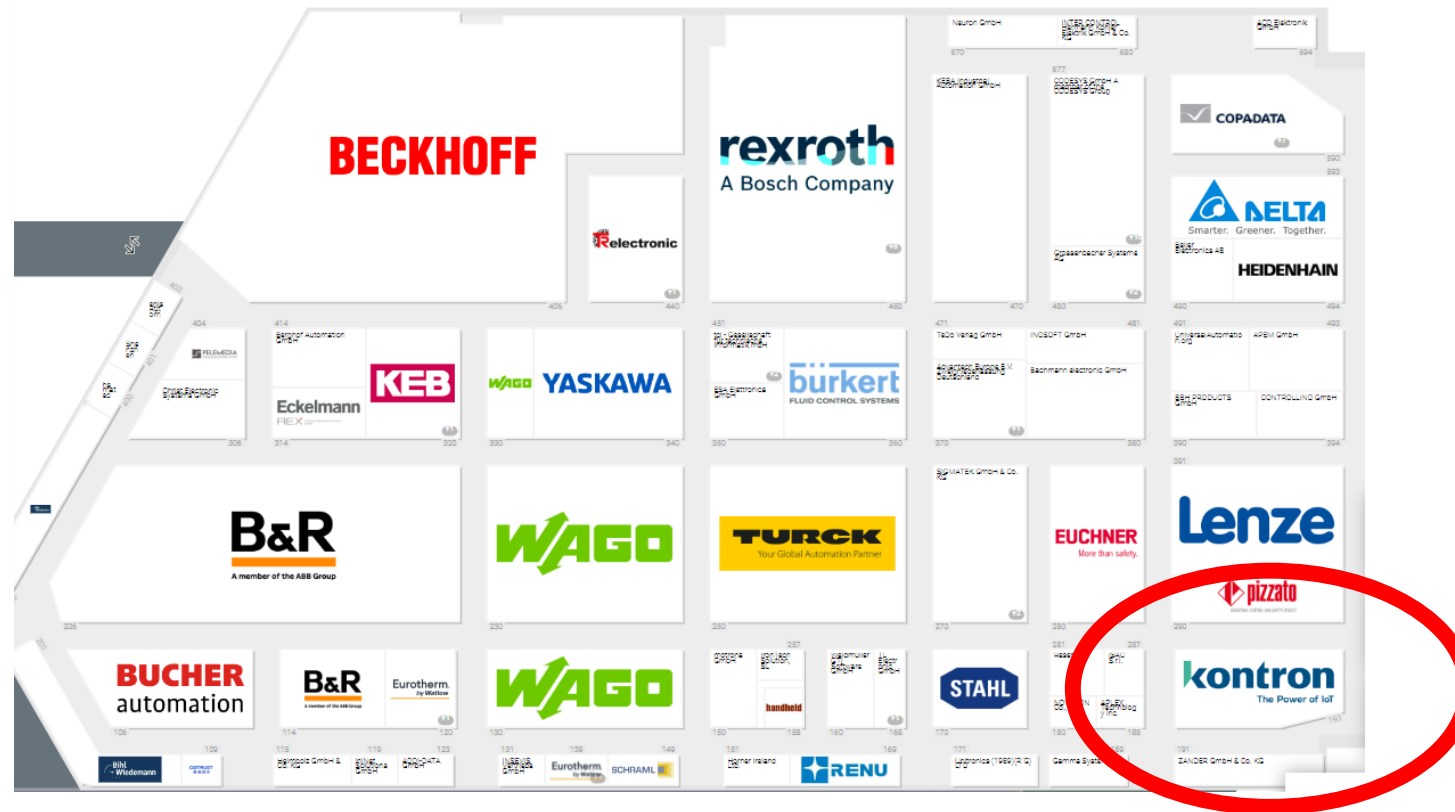
Next-Gen Industrial Connectivity!
Orchestrating the Future of Industrial Automation



- › Learn @ SPS more about our featured Stories und Use Cases
- › **KBox Industrial Box PC**
 - › Integration with 5G modem
 - › TSN over 5G Gateway (DS-TT Software Stack with Intel)
 - › Programmable Logic Controller
- › **KSwitch D10 and KSwitch R20**
 - › TSN enabled Industrial Ethernet Switch
 - › Rugged TSN Ethernet Switch for harsh environments
 - › Extends the 5G network on the wired side on the factory floor

Visit us @ Kontron Booth – Hall 7, #193

PR Contact: pr-group@kontron.com





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The Power of IoT

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