

# RAILWAY EMBEDDED COMPUTING

Already in operation worldwide, Kontron TRACe™ products address a broad range of transportation system requirements through easily customizable, EN50155 pre-certified (EMC, EMI, climatic, shock, and vibrations), application-oriented computer profiles.

## EN50155 CERTIFIED COMPUTERS FOR ONBOARD APPLICATIONS

### Generic Box Computer



#### TRACe-B40x-TR

Rugged fanless compact computer with easy customization and modularity to match any rolling-stock applications.

### Network Video Recorder (NVR)



#### TRACe-V40x-TR

Fanless box computer for video-surveillance applications with 2x LAN for IP cameras video recording and up to 4x hot-pluggable drive bays with key locks.

### Train Control & Communications



#### TRACe-RM40x-TR

19" 1.5U fanless computer compliant to EN60297-3-100 for easy installation into existing cabinets on trains.

### Multipurpose Fanless Edge computer

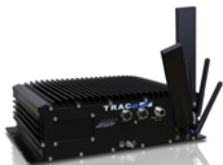


#### TRACe-B104-TR/IV

5G-ready rugged multipurpose IoT computer for rail (EN50155 certification) and road (designed to meet ITxPT specifications).

## SOLUTION-READY PLATFORMS

### Edge Data Processing Gateway



#### SR-TRACe-G40x-TR

Fanless Server/Router Gateway, uniquely combining a multi-network (LTE, Wi-Fi, GNSS, Wired Ethernet) EN50155 rail-certified computer with SEC-Line (hardened OpenWRT with QEMU hypervisor), Kontron's innovative approach to enabling 'all-in-one' secure edge data processing and networking.



#### Remote Management Tool

### LoRa to MQTT Gateway



#### TRACe-LP1

EN50155 Fanless IoT Gateway featuring Semtech's LoRa® Wireless RF IC solution. A private network based on LoRaWAN™ can be instantaneously built without subscribing to a telecom operator network. When needed, the gateway can be installed on a moving platform (train, ship, vehicle, ...) creating a mobile LoRaWAN™ network.



#### TRACe Cloud Server

### Video Management System (VMS)

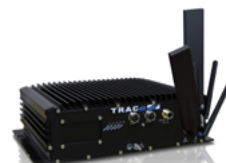


#### TRACe-V40x-TR

Kontron TRACe™ V40x platform and Genetec™ Security Center providing an all-in-one solution ready platform for onboard surveillance with real-time detection and digital security.



### On-board Entertainment



#### SR-TRACe-G40x



#### TRACe-NET



#### TRACe-RWAP

Entertainment-ready platform combining Kontron's standards-based COTS computing building block with content, digital rights and delivery management software solutions providers.

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## SAFETY-CRITICAL SYSTEMS IN ROLLING-STOCK AND WAYSIDE APPLICATIONS

Kontron customizes COTS solutions to provide critical safety and performance, and uses its expertise to address vital transportation infrastructure needs, and thus helps its customers meet their goals of faster deployment, reduced cost and advanced system development.



### Turnkey-ready Development Platform

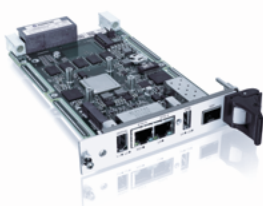
#### SAFe-VX

Compact half 19" 4U platform based on Kontron VPX 3U building blocks designed for safety critical applications and SYSGO's real-time SIL 4 certified operating system PikeOS to enable users to quickly switch to a SIL-certified system according to EN5012x railway standards.



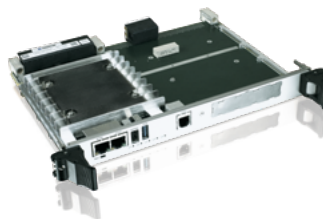
## MODULAR VPX OPEN-ARCHITECTURE FOR REDUNDANT PLATFORMS

Kontron's modular open-architecture approach in designing its VPX redundant platforms makes them highly scalable and secure with the ability to adapt to any type of transportation application.



#### VX3106

General Purpose ARM Computer for Networking and Safety Applications featuring the NXP Layerscape LS1046. any rolling-stock applications.



#### VX6124

6U VPX 200k+ DMIPS processing blade featuring NXP Layerscape LX2160A processor and 40G/100G Ethernet connectivity.



#### VX3054

Quad Core™ Intel® Xeon® Processor D-1500 VPX Single Board Computer supporting dual Gigabit and 10 Gigabit Ethernet and designed for real-time applications and secure & safety systems.

Learn more on [www.kontron.com/railway](http://www.kontron.com/railway)  
View and try live demos in our e-showroom at [kfrlabs.kontron.com](http://kfrlabs.kontron.com)

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