Railway Focused Solutions

Building Blocks for Transform, Embrace and Adapt to the Era of Digitalization

![micromax technology](micromax technology logo)

INFORMATION, ANALYSIS, AND SAFETY
CRITICAL FOR TODAY'S RAILWAY SYSTEMS

There's far more to running a 21st century rail system than moving people from one stop to another. Information, analysis, and safety now sit at the heart of everything a successful railway must provide. Customers require data and security. Operators demand more effective automation and diverse ways to enhance profitability. Rail systems integrators need proven, validated computing platforms able to deliver the performance demanded by high-bandwidth applications and the reliability to exceed long service life goals even under harsh daily conditions.

ADLINK railway systems supply all this and much more for railway deployments that can benefit from a high-value, industrial-caliber backbone able to surpass tomorrow's IT demands.

Accurate information requires reliable systems located in trains feeding constant data streams back to the operations control center, which in turn manages train monitoring and coordination throughout the railway network. Dynamically updated reports are instantly available to every customer through in-terminal signage and Web-based apps. The same control center systems also leverage data from the entire railway system to assess live conditions and many possible outcomes that impact keeping all trains on schedule. The more effective the railway's IT system is at computing conditions and outcomes, the more passengers can count on arriving on-time.

In addition to these requirements, modern passengers also put increasing value on broadband connectivity. Wi-Fi availability is essential for mobile productivity and entertainment. Railways that can reliably supply this service can count on increased patronage and happier customers. Once these technologies are in place for the benefit of passengers, railway operators can reap their own rewards.

TRAFFIC MANAGEMENT SYSTEMS, TRAIN CONTROL SYSTEMS & AUTOMATIC TRAIN OPERATIONS ARE IN DEMAND

The same on-train systems that supply position and conditions to central operations for scheduling also enable the monitoring of a host of additional data, ranging from the status of environmental controls to real-time power consumption. Centralized analytics can then process all of this data to produce more accurate and actionable business intelligence that will yield more dependable railway operations and higher long-term returns in all areas of the enterprise.

Some of these returns also result from increased automation. For instance, having more effective IT means that dispatchers get more information and assistance in making their routing decisions, which can reduce mistakes and enable fewer people to handle higher traffic loads.

FOCUSED ON RELIABLE RAILWAY SOLUTIONS

Taken together, all this railway technology forms a finely tuned web of components and systems. Simply put, quality railway IT results require quality equipment, and that's where ADLINK enters the picture. ADLINK offer an extensive portfolio of application-optimized solutions built to take the constant strain of rail operation and deliver flawless results around the clock, year after year.

A key part of modern rail systems is the Automatic Train Operation (ATO) system. ADLINK provides a variety of 3U CompactPCI platforms for ATO applications, covering a wide selection of ADLINK CPU blades, I/O modules, gigabit Ethernet switches, power supplies, chassis, and more. Designed from the ground up for rugged reliability, ADLINK delivers the durable high-performance that next-generation trains require.

Integrated with the ATO, ADLINK's Driver Machine Interface provides a localized, touch-based command center for monitoring and controlling train systems while staying in contact with the operation center's Traffic Control system. Inside each rail car, you'll find an ADLINK control system. These rugged fanless embedded computers pack surprising compute and storage density into power-efficient form factors able to take the pounding of non-stop railway travel. Applications enabled by these in-cabin systems can include video surveillance, passenger Wi-Fi, and playback of multimedia content to the Passenger Information System.

RUGGED MODULAR,
CUSTOM BUILT PLATFORMS

ADLINK's robust platforms already lead in several European markets, such as automation and defense. The same quality and performance behind this success is now available to railways around the world, validated with compliances such as EN 50155 for the ranges of temperature, humidity, shock, and vibration trains must endure. Centralized Traffic Control, Radio Block Centers, and wayside signaling applications benefit from ADLINK's modular platforms, custom built for the rigid demands of daily railway management.

ADLINK works with clients to maximize the value of their railway IT deployments. For one worldwide railway infrastructure provider, ADLINK customized the rear I/O panel of its media displays. For another rail control system solution provider, ADLINK customized the I/O architecture of a processor blade to meet the ATO system's specific requirements.

ADLINK IS COMMITTED TO HELPING RAILWAY CUSTOMERS TRANSFORM, EMBRACE AND ADAPT TO THE ERA OF DIGITALIZATION

ADLINK is able to supply reliable customized solutions that support multiple operating systems, provide signal integrity testing, apply component-level conformal coating, and much more. Support at every step of the solution makes ADLINK the manufacturer of choice for operators and integrators alike. ADLINK's exceptional flexibility in customized design and manufacturing services have been utilized by top embedded and vertical market providers worldwide.

micromax

«technology»

1300 906 911
micromaxtechnology.com
info@micromaxtechnology.com

SUSTAINABLE
CERTIFICATION
✔ ISO 9001
✔ AS/NZS 4801
✔ ISO 14001

JAS-ANZ

ADLINK
Leading **EDGE COMPUTING**