

Enable a Safe Train Journey With Our Reliable Real-time Surveillance Solutions

Moxa's Products



V2406C

Railway Computers

- Intel® Celeron®/Intel® Core™ i3/i5/i7 high-performance network video recorder for rolling stock applications
- Compliant with EN 50155:2017 and EN 50121-4 standards
- IEC 61373 certified for shock and vibration resistance



Moxa Industrial Linux Debian-based industrial-grade stable Linux

- Debian-based distribution that can use all standard Debian packages
- Unified APIs to manage cross-vendor cellular connections
- Crash-free robust file system

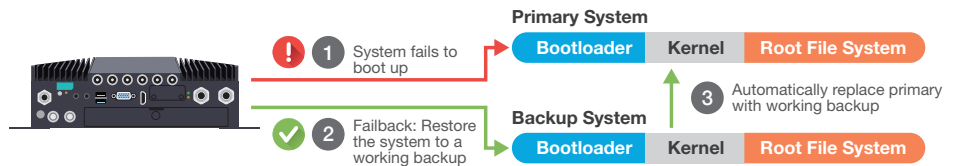
*MIL2 is currently available only with V2406C Series computers but without long-term support (LTS). For details, see [Moxa Industrial Linux Software Life Cycle Policy](#).

Background

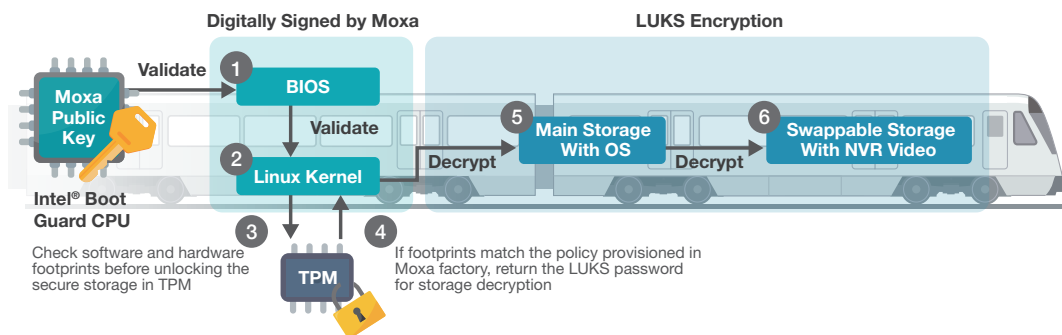
Nowadays, operational efficiency, fully autonomous driving, and passenger-oriented services are hot topics in rail applications globally. In addition, onboard entertainment, comfortable seating, and Internet services ensure passenger comfort. While convenience and comfort should be considered, we must also ensure that the journey is safe and free of incidents. For example, if we have video surveillance that can identify suspicious activity in and around trains and take timely actions, we can ensure a safe journey for passengers. Therefore, it is necessary to have IP cameras, NVR systems, and storage installed in the cabinets of each car, which the driver can control via a Video Management System (VMS). However, a power outage or an unstable power source can cause unplanned shutdown of equipment. Ensuring continuous operation of an NVR system in trains is also an important part of ensuring a safe and comfortable journey.

Why Moxa

Moxa's V2406C railway computers with Moxa Industrial Linux 2 (MIL2*) are a good fit for onboard applications. MIL2 provides the computers with a system fallback function, enabling automatic system recovery in case of a failure to maintain completeness of system data. MIL2 also offers system snapshot and backup functions, ensuring that the V2406C NVR can roll back to a designated backup when the system fails to boot, be it due to a power outage during critical updates or under other circumstances.



For comprehensive protection of system data from cyberattacks, the V2406C comes with an Intel® Boot Guard Authenticated Code Module (ACM) in the CPU, which acts as the Root of Trust and initiates a chain of validation sequences during bootup to ensure the authenticity and integrity of the BIOS and kernel before allowing them to access the root file system. In addition, you can protect the video data using LUKS encryption.



Furthermore, MIL2 provides a Moxa Connection Manager (MCM) function, which is a network management utility developed by Moxa to manage LAN and WAN connections including Wi-Fi, cellular, and Ethernet interfaces. With MCM, users can easily configure the network profile and connection priority via an easy-to-use GUI after which the system will automatically establish connections and keep connections alive using failover and fallback functions to deal with any unexpected events in real time.