

Ensuring Safe and Secure Carriages on Public Transportation Networks

High-performance Memory and Storage for Train Surveillance



Introduction

An Australian national IT company partnered with Innodisk for high-performance storage and memory that fulfilled AIoT surveillance requirements.

Australia requires heavy-duty rail transportation services across its vast 7-million-kilometer terrain to support their industrial and commercial needs. With an insurmountable burden on public services, police protecting the daily activity on each coach is impossible and financially stressful on an already strained government service.

Theft and assaults occur regularly on trains and to ensure public safety, authorities have installed DVR systems with IP cameras to monitor carriages and activity. These reliable AIoT enabled devices require storage and fast memory to capture video streams and analytics without hindrance to speed and data capture. Innodisk's storage and DRAM solution met the requirement in delivering quality, easy storage integration, and secure data management.

Our Roadmap to Success

Industrial-grade DRAM

- 2GB capacity
- 1333MT/s DDR3
- Compact SODIMM form factor

3TG6-P 2.5" SSD

- 4TB of High-performance 3D TLC
 - Innodisk proprietary, high-quality NAND Flash
 - RECLine™ FW optimization for surveillance applications
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Challenges

- Fulfill high capacity SSD requirements for several connected IP cameras
- Resolve high resolution camera file sizes on SSD to deliver high & stable write speeds avoiding frame loss
- Deliver rugged, robust, compact components to withstand vibrations and tension

Solutions

- High performance Toshiba TLC industrial-grade 3D NAND
- Firmware optimization for surveillance applications providing high and stable write speeds
- Small form factor DRAM modules designed for tough onboard vehicle conditions

Result

The Australian IT partner provided a DVR security system with Innodisk's SSD and DRAM solution inside to deliver unmatched read & write speeds from several 5MP (2560x1960) connected IP cameras. The overall performance, reliability, and durability meant all cameras were able to produce stable video data feeds and steady video analytics to the installed DVR system via Innodisk's solution. Not only did this fulfill the AI applications in a difficult IoT environment, it also solved the transportation hurdles encountered when mixing IT requirements for rugged terrains.

Our Promise

We at Innodisk believe that through cooperation we can overcome any challenge. By maintaining a strong line of communication all the way from inquiry to implementation, we ensure a tailor-made solution that fits your application. We remain committed to innovation with our continual focus on hardware, firmware and software integration.