Solution Showcase

⬡ NVIDIA®

Allxon Empowers Immersive Technology in Smart Cities

> "It has been thrilling to see how the integration of Allxon's remote device management solutions in ADLINK's NVIDIA Jetson systems have streamlined and enabled the brilliance of Osense Technology's immersive smart displays that can be found from railway platforms to innovative exhibitions around the country."

Alex Liu, Allxon CEO

In 2022, Osense Technology launched the 5G OMO Multi-Functional Interactive System Project throughout Taiwan. This interactive system includes smart digital signage and AI cameras with a "floating touch" experience that allows users to seamlessly navigate on a smart screen without the need to touch the display.

The rollout extends to railway kiosks with smart displays across train stations in Kaoshiung and the city's LRT Software Technology Station–changing how the public interacts with technology.

Allxon made it possible for Osense Technology to remotely monitor and manage their ADLINK Jetson NX and Jetson Nano-based devices. With tools such as remote Tegrastats and performance tuning, operators can monitor device health and manage clock frequencies in real time, setting up device alerts and temperature thresholds to help prevent operating systems from overheating. Osense Technology also made great use of Allxon's "take screenshot" feature to ensure their immersive displays played the correct information and information throughout their project lifecycle.

The ADLINK DLAP-211 NVIDIA Jetson platform is a high-performance, low-power consumption and small form factor edge-computing device. Connected to a camera, the device allows users to view the virtual scene in augmented reality(AR). The NVDEC accelerated image decoding, TensorRT optimized deep learning program, and DeepStream help to provide comprehensive and high-quality AI content through the DLAP-211 Jetson platform.

The NVIDIA Jetson Xavier NX-based ADLINK EOS-JNX AI-vision platform features compact design, high integration, PoE technology, and proven thermal and electrical stability. It offers better AI computing power to deal with pose detection and people flow analysis. This makes it ideal for stable edge-AI inference operations in space-constraint integrations such as kiosks.

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Allxon Remote Edge AI Device Management Services

Summary

Allxon remote edge-AI device management solutions integrated on world-class NVIDIA® Jetson™ -based ADLINK devices let Osense Technology create groundbreaking technological experiences in smart cities across Taiwan.

Challenges

> Maintenance and monitoring of scattered edge-AI devices in harsh environments

> Smart kiosk digital display errors

> Smart kiosk OS system overheating

> Project based in Kaohsiung, but company headquarters in Taipei

NVIDIA Solutions

> High AI-computing performance for GPU-accelerated processing

> Integrated ARM® and NVIDIA® Jetson Nano™/Xavier NX SOM for quick deployment

> NVIDIA JetPack™ and DeepStream support for ease of AI development

Business Impact and Results

The integration of Allxon remote device management solutions on all of ADLINK's NVIDIA Jetson edge-AI devices made it possible for Osense Technology to successfully maintain operational fluency throughout their smart city projects. Allxon's solutions effectively help to cut CO2 emissions caused by traveling on-site for technical support, contributing to a greener, smarter world.

With Allxon's solutions integrated to streamline technical operations, Osense Technology successfully elevated technological experiences throughout Taiwan using their 5G OMO multifunctional interactive systems and Oexpo Smart Exhibition systems. This has helped take smart city applications to greater heights.

Remote Edge AI Device Mgmt.	Allxon Cloud Service Portal	**Key features** • 24/7 Remote Monitoring • Tegrastats & Performance Tuning • Take Screen Shot
Edge AI Device	ADLINK EOS-JNX Series DLAP-211-JNX	
Smart City Application	ENSE Smart digital signage Smart Kiosk	

About Allxon

Allxon envisions a world of open and optimized business operations. Partnering with key IHV and ISV leaders, Allxon rolls out seamless edge device management solutions for top SI and MSP enterprises. With years of deep industry experience, Allxon has pioneered "SaaS-In-Chip" for customizable out-of-band management to make remote device management more open and inclusive. Allxon stands as an industry-first in providing exceptional SaaS solutions, with full hardware and software integration, for powerful remote edge device management services.

Results

> Achieve 24/7 remote monitoring

> Effectively reduce the frequencies of onsite traveling for technical support

> Streamline the technical operation by using over-the-air update and 5G network

Products Used

> NVIDIA® Jetson™ Xavier NX (ADLINK EOS-JNX-I)

> NVIDIA® Jetson™ Nano (ADLINK DLAP-211-Nano)

Processing Engines Used

> GPU for neural networks and video processing

> NVENC/NVDEC for encode and decode

Software Used

> Allxon remote edge-AI device management solution

> Allxon remote Tegrastats and performance tuning

> NVIDIA DeepStream

> NVIDIA Tensor RT

Ready to Get Started?

Contact us: **jetson@nvidia.com**

To learn more, visit **www.nvidia.com/robotics**

To learn more about Allxon, visit **www.allxon.com**