

Advanced Video Analytics with Qualcomm Insight Platform (QIP) and Sysgration Edge AI



The Qualcomm Insight Platform (QIP) is a comprehensive surveillance solution that integrates Generative AI and edge computing to deliver advanced security analytics. It features an end-to-end architecture supporting both new deployments and legacy camera systems through Edge AI boxes and cloud-based management.

Sysgration enhances this ecosystem with the AIX-8000, its advanced Edge AI Box powered by the QCS8550. This model fully supports QIP for real-world applications across a wide range of industries. In smart cities, it enables illegal parking detection, traffic pattern analysis, and crowd monitoring. In retail, it supports threat detection, heatmaps, and customer counting. For industrial and manufacturing environments, it provides PPE detection, fire/smoke alerts, defect inspection, and restricted area monitoring.

The Role of GenAI and "Merlin"

A critical component across all these use cases is the GenAI-based Intelligent Assistant, known as "Merlin." This LLM-based assistant (using Llama 3.1) allows users to interact with the system using natural language queries. Instead of manually searching hours of footage, operators can ask the system to find specific events, such as "people holding hands" or "carrying bags," and generate complex operational reports automatically.

Deployment Context

These use cases are supported in both greenfield (new AI-enabled cameras) and brownfield (legacy cameras connected via an Edge AI Box) environments. This flexibility ensures that industrial or city-wide operations can upgrade to intelligent video analytics without necessarily replacing their entire existing camera infrastructure.

