MARKET OVERVIEW
Intel® Embedded Design Center

Powering your DSS Designs

Intelligent Systems Are Driving Digital Security Surveillance (DSS) Growth

Digital security and surveillance (DSS) is a $40 billion industry with a compound annual growth rate of 9–12 percent. (Source: The World Market for CCTV and Video Surveillance Equipment, IMS Research 2010). The industry is rapidly shifting from legacy analog systems to networked intelligent DSS solutions designed to support multiple streams of high-definition IP video. Intelligent DSS systems can support advanced video management applications and real-time software-based analytics that enable event-triggered alerts, intelligent traffic control, mobile surveillance, and business intelligence.

Transforming Real-Time Video into Actionable Business Intelligence
In today’s world, digital surveillance is about more than just security. Today’s surveillance solutions are intelligent and designed to help drive business decisions. These decisions affect a variety of things including staffing requirements, where to place promotional products and traffic flow conditions, just to name a few.

Security and Loss Prevention
• Reduce theft and fraud
• Limit property damages
• Minimize safety threats
• Immediately identify emergencies
• Monitor personnel
• Support safety audits

Optimize Business Operations
• Maximize daily operations (for example: calculate appropriate staffing level)
• Optimize store layout (for example: in-store heat map analysis)
• Automate access control activities

Grow Your Business by Understanding Your Customers
• Know your clients (for example: real-time customer shopping behavioral analysis)
• Track marketing efforts (for example: customer shopping behavior analysis vs. sales out data)

Upgrade from Analog to IP
• Improve reliability and manageability
• Simplify resources for monitoring activities
• Consolidate traditionally separate systems for greater cost-efficiency
• Leverage customizable video-generated data analytics
• Provide a scalable solution

How Intelligent Systems Transform DSS

Networked IP Cameras
IP network cameras can provide up to 16 times the resolution of traditional analog cameras with high dynamic range for areas of variable illumination. The falling price curve of HD network cameras and the increasing adoption of open standards are accelerating the migration to IP network video surveillance.

Video Management Software (VMS)
The advent of open-platform software in video surveillance is transforming the market segment. Open VMS applications include external APIs that allow developers to add functionality and versatility to DSS, giving users the advantages of choice, flexibility, and scalability.

Video Content Analytics
Video content analysis provides real-time alert and response without the need for human intervention, resulting in more efficient operations, increased business intelligence, and informed decision making.

Systems Integration
Integration with facility systems has many use cases. In a building security application, an intelligent DSS system capable of identifying an unauthorized visitor can send a SMS message to security, while locking adjacent doors and controlling overhead cameras to follow the intruder.

The Cloud
The cloud is creating new business models, including video surveillance as a service (VaaS), which can be deployed to either manage video, host video, or both. Cloud-based offerings can meet the needs of small, and mid-sized businesses with cost-effective plug-and-play deployment and simplified management.