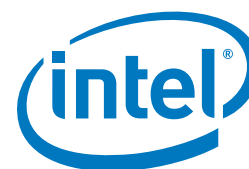


## CASE STUDY

Intel® Xeon® Processor E3 Family, Intel® Core™ i7 Processor,  
& Intel® Motherboards

Video Surveillance



# Powering intelligent security surveillance

**Intel® Architecture-based platforms enable GSF Solutions to deliver highly sophisticated network video surveillance solutions with self-healing capability**

GSF Solutions provides next generation network video surveillance solutions using Intel® Xeon® Processor E3 Family, Intel® Core™ i7 Processor, and Intel® Motherboards. GSF Solutions is a network surveillance solution provider that provides high definition CCTV solutions with a focus on providing video surveillance systems that transcend the capabilities of today's CCTV products.



"GSF Solutions believes in selling value, and our NVR ECA 3 powered by Intel® Architecture delivers a unique self-run, self-healing computer platform that just runs by itself, always..."

Sengfu  
Managing Director,  
GSF Solutions

## CHALLENGES

**An intelligent network video security system.** Creating a special-purpose intelligent, powerful and reliable video surveillance system with continuous monitoring ability and low-to-zero failure rate.

## SOLUTIONS

**Intel® products and technology.** Intel® Processors and Intel® Motherboards form the key components of a robust platform to build GSF Solutions' intelligent network video security system.

## IMPACT

**GSF Solutions' NVR ECA 3.** A range of highly reliable, high definition, and intelligent network video surveillance and security devices with the unique capability of quick self-recovery during system failure and 24x7 monitoring.

### The Need for a Highly Reliable & High Definition Digital Security System

Surveillance system has been rapidly adopted across a variety of market segments including retail stores, public, government and educational facilities, transportation hubs and factory/industrial/warehouse sites. These days customers are not only looking for a security system to guard against theft and security threats but also for a system which can act as a value-enhancing system like monitoring the actual footfall in their store, traffic patterns, preferred visit timings, etc.

Furthermore, businesses look for maximum reliability and efficient operation, where the surveillance system is flexible and fast enough to react to system failure or error almost instantaneously.

### Next Generation Intelligent & High Definition NVR Powered by Intel

With an experience of more than seven years in network surveillance solutions, especially HD surveillance, GSF Solutions created the NVR Engineered Computing Appliance (ECA) - a powerful range of Network Video Recording (NVR) devices that come with intelligent features for constant monitoring and uninterrupted availability. The ECA range of NVR devices is powered by Intel® Platforms that consist of Intel® Processors (Intel® Xeon™ Processor E3 Family & Intel® Core™ i7 Processor) and Intel® Motherboards.

Driven by Intel's high-performance processing platform that comes with built-in visuals<sup>1</sup> and advanced technologies like Intel® Hyper-Threading Technology<sup>2</sup>, Intel® Virtualization Technology<sup>3</sup>, etc. that are ideal for high definition and secure network video surveillance applications, GSF Solutions delivers a whole range of intelligent and high definition NVR ECA devices.



## GSF Solutions offers highly sophisticated network video surveillance solutions using reliable and trusted Intel® platforms

### Innovative Features Built In

The NVR ECA 3 is powered by Embedded Windows\* 7 OS, and is designed and built dedicated for video surveillance purpose. It comes with innovative features and technologies like triple layer embedded fast recovery, hardware guard, etc. to monitor the system 24x7 and ensure the systems are in optimum working condition all the time. In a nutshell, ECA 3 provides the functionality of a virtual on-site engineer that can resolve issues instantly and automatically.

**Heartbeat:** A round-the-clock hardware safeguard that overlooks the whole hardware platform ensuring continuous operation even in the event of a critical breakdown through a process of self-healing; therefore reducing the need for technical onsite assistance.

**Guardian:** Provides robust monitoring in the operating system for keeping the system working at all times. It checks NVR software health status, oversees video recording activity, and monitors CPU & memory usage.

**Triple layer ECA-OS:** Protects the system with triple layer security at each level and ensures that the system is in optimal working condition through efficient system management.

**Security Key:** Digital encryption paired exclusively with individual ECA that helps in performing the rescue and revival

process easily, and also assists in the ECA authorization process.

**TrueBlue™ Support:** All NVR ECA devices are backed by "TrueBlue™ Support", a team of professionals with deep expertise and complete understanding of the system.

### Delivering Great Benefits

GSF Solutions has been providing great benefits for their customers with their NVR ECA devices, which they have been delivering successfully to customers since 2005. Over the years, with the help of innovative technologies powered by Intel® Architecture, GSF Solutions has been providing customers with next-generation security surveillance systems for a completely secure and safe environment.

NVR ECA 3 offers customers the advantage of high quality and high definition surveillance for a more effective and beneficial security arrangement that ensures a high success rate by capturing high-definition vivid videos, which analog systems are not capable of.

NVR ECA 3's unique capability of providing high performance, stable and instant recovery computer-based security surveillance system gives customers the confidence of adopting a highly sophisticated PC-based network security surveillance system without worrying about the complexity generally associated with a security set-up.



### NVR ECA 3 Products

#### CX Series

- In-Vehicle NVR for transportation use
- Performance up to 12CH HDCCTV
- Up to 30 days of video storage

#### MX Series

- Essential NVR for small business and retail
- Performance up to 16CH HDCCTV
- Up to 30 days of video storage

#### EX Series

- Professional NVR for medium scale project like factories
- Performance up to 25CH HDCCTV
- Up to 30 days of video storage
- Network redundancy; highly scalable

#### HY Series

- Enterprise NVR for large scale deployment with redundancy
- Performance up to 64CH HDCCTV in Server Mode
- Up to 180 days of video storage
- Network, Power & Storage redundancy
- Failover support

### For More Information

To learn more about Intel's products, visit [www.intel.com](http://www.intel.com)

For more information on GSF Solutions, visit [www.gsf.com.my](http://www.gsf.com.my)

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1 (Built-in Visuals) Built-in visual features are not enabled on all PCs and optimized software may be required. Check with your system manufacturer. Learn more at <http://www.intel.com/go/biv>

2 Available on select Intel® processors. Requires an Intel® HT Technology-enabled system. Consult your PC manufacturer. Performance will vary depending on the specific hardware and software used. For more information, including details on which processors support HT Technology, visit <http://www.intel.com/info/hyperthreading>

3 Intel® Virtualization Technology (Intel® VT) requires a computer system with an enabled Intel® processor, BIOS, virtual machine monitor (VMM) and, for some uses, certain platform software enabled for it. Functionality, performance, or other benefits will vary depending on hardware and software configurations and may require a BIOS update. Software applications may not be compatible with all operating systems. Please check with your application vendor.

\*Other names and brands may be claimed as the property of others.