



Axiomtek and Intel Jointly Help Bring the Global Retail Industry towards the Intelligence Era

Based on Intel® OPS/OPS+ and Intel® SDM-S/SDM-L architecture, Axiomtek has launched a digital signage player, which is capable of providing product and marketing information to consumers rapidly.

Axiomtek integrates the technology of various smart equipment to minimize the barriers for retailers to enter the smart retailing sector. By providing a total solution for large-scale supermarkets, shopping malls, airports, restaurants and other operators who want to transform into smart retailers, Axiomtek saves them from the trouble of searching for solutions in the market.

Axiomtek's current product includes touch panel tablet PCs, embedded computer systems, computer-on-module, and digital signage players. Axiomtek has preemptively resolved potential issues with hardware integration, which gives system integrators more time to understand what customers truly need. This helps retailers create a smart shopping environment that meets consumers' expectations.

As one of the world's main industrial computer suppliers, Axiomtek Co., Ltd. has an experienced R&D and manufacturing team that is capable of using advanced technologies to develop diverse embedded, industrial computer products, as well as computing platforms for modular design. Axiomtek's products include embedded boards, computer-on-module, industrial IoT gateways and digital signage. These technologies have been successfully applied in factory automation, smart rail transportation, smart energy, the robot industry, and smart healthcare, point of sale intelligence systems, interactive multimedia platforms, and retail vertical markets.

The endless stream of technological innovations has brought unprecedented change to the business model of the retail industry today, which is closely related to daily life and has developed for over a century. Under this trend, technological innovations have also brought the traditional retail industry towards smart retailing. For example, Amazon, a company that has dedicated years of effort in e-commerce, by integrating cloud computing, machine learning, computer vision, and sensor monitor technologies, has introduced the unmanned store – Amazon Go in 2018. Amazon Go gives consumers a whole new shopping experience and eliminates the wait in checkout lines.

However, this kind of advanced shopping concept will only exist in a few demonstration stores in the near future, due to the relatively high cost and technology requirements. It will be difficult to apply in the short term. Still, many retailers are starting to install digital signage and self-checkout systems in their stores in response to the changes in consumer behavior. They are trying to create a better shopping experience for consumers to enhance their market competitiveness. Some retailers are even using mobile devices to take inventory, thereby optimizing their overall business process to rapidly respond to consumer demand. However, as the majority of solutions in the market designed for smart retailing are using non-standardized hardware, and with the lack of customized services and technical support, recklessly adopting solutions may even affect the normal operation of retailers.

As a designer and manufacturer of industrial computers, Axiomtek has dedicated itself actively to the development of factory automation, smart transportation, smart retail, and smart energy in light of the trends of industrial IoT and Industry 4.0 in order to provide flexible and customized services for its partners. As smart retail gradually attracted global attention, the company also used Intel® OPS, Intel® OPS+, Intel® Smart Display Module (SDM) technologies to launch numerous highly popular products among customers around the world. These include digital signage players, integrated monitors, POS systems, and vending machines. This also shows Axiomtek's unique and precise insight.



Furthermore, the company also uses Intel® processors, which can support a wide range of temperatures in (-40-85°C) work environments. This allows the company's products to satisfy the special usage conditions of industrial computers. Axiomtek has also launched various embedded computer systems, computer-on-module, and touch panel tablet PCs. In response to the global trend of development in smart retailing, Axiomtek integrated its resources to establish a smart retail department. This department provides system integrators with the fastest, direct, and customized technical support and services, in hopes of seizing the unlimited business opportunities in the smart retail market with system integrators around the world.

Smart retail blueprint for large shopping malls

Axiomtek integrated smart equipment technologies to lower the threshold for retailers to engage in smart retailing. By providing total solutions for retailers from supermarkets, shopping malls, airports, and restaurants, who want to transform themselves into smart retailers, Axiomtek saves them from the trouble of searching for solutions in the market. Axiomtek's current products designed for smart retailers include touch panel tablet PCs, embedded computer systems, computer-on-module, and digital signage players. Axiomtek has preemptively resolved potential issues with hardware integration, giving system integrators more time to understand what customers truly need. This helps retailers create a smart shopping environment that meets consumers' expectations.

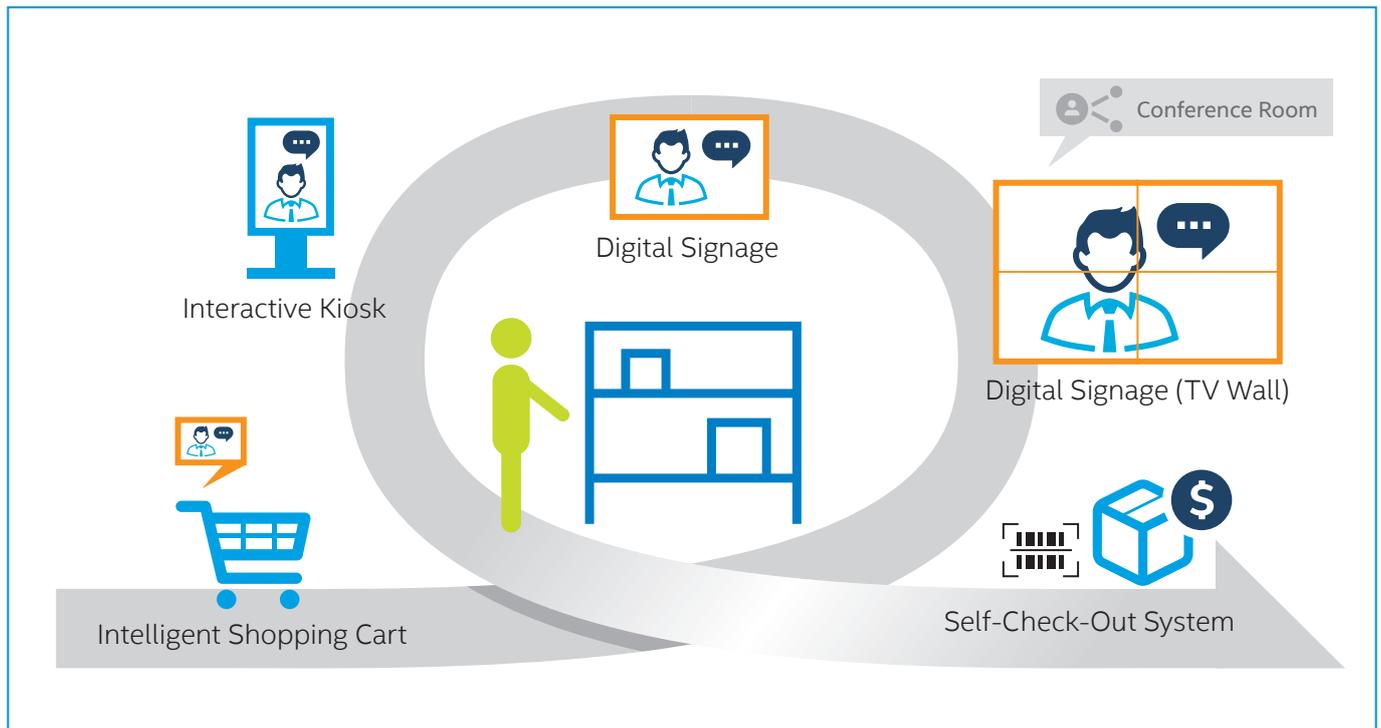


Figure 1. Axiomtek integrated smart equipment technologies and provides total solutions for the transformation of large supermarkets, shopping malls, airports, and restaurants, saving them the trouble of searching for solutions in the market.

Complete digital signage product line for ubiquitous marketing

The global business environment has been using digital signage for many years, thanks to the falling prices of large-size panels, and this has allowed the media player market to flourish. The lack of a unified hardware standard during early periods made subsequent maintenance difficult for system integrators, and this has greatly affected the willingness of retailers to use digital signage. Axiomtek specially launched a series of modular digital signage players using Intel® OPS/OPS+ and Intel® SDM-Small (SDM-S)/SDM-Large (SDM-L), therefore retailers can create a new smart retail environment without needing to worry about hardware maintenance cost. This allows retailers to collect information on customer purchase behavior and recommend the most suitable product or service.

Intelligent shopping cart combined with tablet PC

Shopping carts are important tools indispensable to consumers in supermarkets. Axiomtek's intelligent shopping cart with a tablet PC contains a high-performance Intel Atom® processor, GPS, and Wi-Fi module. Consumers can use the search function and indoor navigation function to search for products in the supermarket, saving them a significant amount of time when shopping and making shopping even more convenient.

Interactive Kiosk satisfies consumers' search requirements

Following the rapid changes in consumers' shopping habits, the interactive Kiosk, which can provide information search, has become an important promotion tool to retailers, and is also the best platform for them to maintain interactions with customers. Axiomtek offered numerous multi-touch tablet PCs with Intel® Core™, Intel Atom® processors for different customers, making it convenient for system integrators to develop interactive Kiosk suitable for customers. In this way, retailers can use the assistance of the backstage management to replace multimedia images or deploy contents to a designated interactive Kiosk easily, and rapidly send promotion or product information to consumers.

Self-checkout system optimizes the user experience

Most millennial consumers are looking for higher speed, and they dislike wasting time in checkout lines. This led to the development of self-checkout system. In an era with rising labor costs, the self-checkout system allows consumers to quickly checkout without the help of service personnel. Thereby, retailers can significantly improve overall service quality. This result also makes the self-checkout system an indispensably important tool to a retailer in the transformation period. Therefore, Axiomtek launched numerous embedded computers with Intel® Core™ or Atom® processor that can be applied to the management software of companies, providing customers with further functions.

Assisting Small Retailers and Fast Food Restaurants Rapidly Transition to Smart Retailing

In an era dominated by large shopping malls, small retailers and fast food restaurants which are closely related to our daily

life, are also under great pressure to transform. Therefore, Axiomtek offers a cost-effective and practical smart solution for the special operation needs of small retailers and fast food restaurants, allowing vendors to achieve smart retailing with a limited budget.



Figure 2. Axiomtek offers cost effective, practical smart solutions for the business requirements of small retailers and fast food restaurants, allowing vendors to achieve smart retailing with a limited budget.

Mobile POS

Most traditional fixed POS systems in the market can only provide checkout services, without further practical functions.

By applying Intel Atom® processors, Axiomtek launched its mobile POS, which is a smart tablet PC with a built-in Internet connection. Apart from providing rapid checkout services, Axiomtek's mobile POS also can be installed with remote surveillance software and inventory management systems. Therefore, system integrators can help small retailers to control the business operation in different units and provide rapid responses to consumer demand.

ePOS System

Axiomtek also launched a brand new smart POS solution for larger retailers. By using Intel® Core™ and Intel Atom® processors, the ePOS system can provide customized solutions by collaborating with system integrators, integrating the dependent-operate POS system and tablet into one device. This helps retailers create a smart retailing environment step by step.

New Generation Vending Machine

Traditional vending machines are quite ubiquitous. However, it is hard for the stereotypical design, which lacks interactive functions, to attract a new generation of consumers to make a purchase. Axiomtek's new generation vending machine comes with an interactive display panel with a high-performance Intel® Core™ or Intel Atom® processor. The display panel actively shows marketing information based on the characteristics of customers when they pass by. This innovative model can attract customers to make a purchase and even attract advertisers to purchase advertisements, making retailers even more profitable.

AXView Offers Complete Functions for Rapidly Monitoring Equipment Status

As described above, Axiomtek's smart retail solutions have been well-received by users around the world, because customers' needs are taken into consideration during the early stages of the design process.

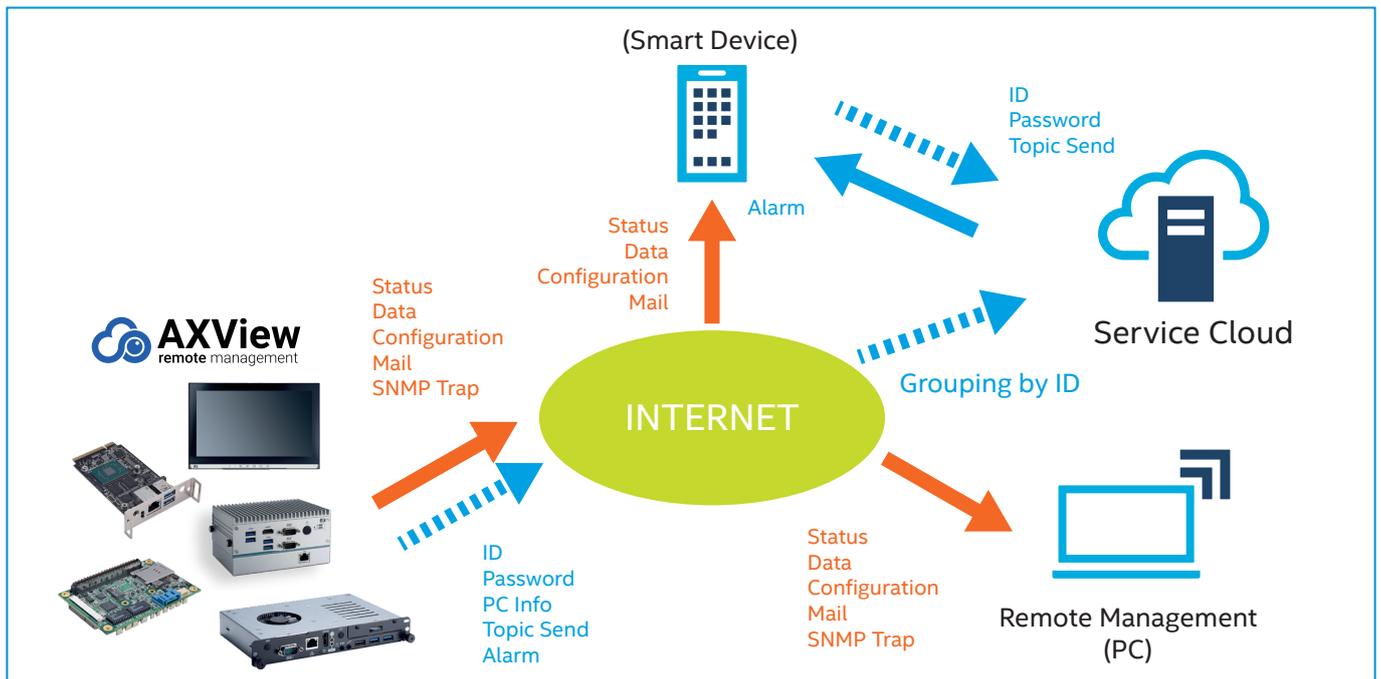


Figure 3. Features of AXView 2.0 include remote monitoring, malfunction reporting, one key recovery, and supports EAPI. Administrators can use their PC or mobile device to monitor the status of equipment, and can also receive warning messages sent by Axiomtek products.

As such, Axiomtek's solutions allow users to focus on developing their own businesses without having to worry about anything else. In light of the increasingly frequent use of digital signage players, Axiomtek also introduced its own smart remote monitoring software, AXView 2.0, which can help information personnel rapidly monitor the status of Axiomtek's smart equipment. This allows personnel to respond immediately when a problem occurs, and ensure the continued stable operation of the business.

Features of AXView 2.0 include remote monitoring, malfunction reporting, one key recovery, and EAPI support. Administrators can use their PC or mobile device to monitor the status of equipment, and can also receive warning messages sent by Axiomtek products. When a malfunction occurs, administrators can use AXView 2.0 to rapidly restore the product to the system's default state. This significantly reduces the burden

on personnel and labor costs because it is no longer necessary to personally repair the equipment. System integrators can integrate their own management tools with AXView 2.0 and create even greater brand value, or build long-term partnerships with customers.

Smart retail is drawing global attention. Axiomtek provides a variety of flexible solutions based on its understanding of customer needs and further meets these needs. The user interface can be customized based on the actual situation at a store, and Axiomtek works together with system integrators in helping customers improve their overall retail system. Axiomtek has accumulated many success cases around the world with its consideration for customers and its experienced and highly competent technical team. Hence, it is worthy of its reputation as the best partner for companies to achieve retail information system upgrade and innovation.

About Axiomtek Co., Ltd.

Axiomtek Co., Ltd. is a leading designer and manufacturer of industrial computers, and has dedicated active efforts to factory automation, smart transportation, and smart energy in light of the trends of industrial IoT and Industry 4.0. Axiomtek is developing towards more profitable industries through its embedded computer technical capabilities and promotion of the brand's core values, creating win-win scenarios for business partners and shareholders.

For more information about Axiomtek Co., Ltd., please visit: www.axiomtek.com.tw

To find suitable solutions, please contact Intel or refer to the information online: www.intel.com/content/www/us/en/internet-of-things/overview



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