



Case Study:
Multimedia Digital Signage
Advertising Industry



CUSTOMER:

Cloud Vision Group (Beijing / Xiamen / Hong Kong)

INDUSTRY:

Digital signage, multimedia, communications

CHALLENGES:

Facing the challenges of development, cost and updating, Cloud Vision Group needed a high-quality, affordable, manageable and technically sustainable embedded APU platform solution upon which to build their fourth-generation multimedia digital signage terminal platform and lay the foundation for the future fifth-generation smart cloud media.

SOLUTION:

AMD provides a high-performance, yet power-efficient embedded APU solution. Through an open platform, AMD enabled the customer to quickly complete development and better support large-format screens and multi-screen displays. Through an efficient design, AMD integrates parallel processing capabilities for high-end graphics with power-efficient CPU capabilities on a single chip, helping enable high-definition intensive applications. With a wide-range of processing options, AMD can help customers bring their innovations of the future to life.

BENEFITS:

Cloud Vision Group has quickly accelerated business development, supported multi-screen high-definition video display, strengthened interactive operations. According to Cloud Vision, they have reduced TCO and enhanced development efficiency.

AMD TECHNOLOGY AT A GLANCE:

AMD Embedded R-Series APU

AMD APUs Help Customer Revolutionize Multimedia Advertising

AMD Embedded R-Series APUs Help Cloud Vision Group Establish an Advanced Interactive Digital Signage Terminal Display Platform for their Latest Smart Cloud Media

As a facet of the information and advertising multimedia communication industry, digital signage has evolved from CD/USB player and web player to multimedia interactive service over the past decade. Cloud Vision Group (“Cloud Vision”), one of China’s leading providers for fourth-generation multimedia interactive services, has achieved fast growth and played a significant role in new multimedia interactive service models for chain stores and retail markets throughout the country.

During its successful transformation from third generation to fourth generation multimedia interactive services, Cloud Vision established an important relationship with AMD to help support the following areas of value:

Creating advertising value: As supermarkets and shopping malls are geographically scattered, Cloud Vision leveraged AMD APU (Accelerated Processing Unit) technology to promote the application and popularization of remote broadcasting technology and directly deliver business information to users.

Creating service value: In today’s ever-changing business world, Cloud Vision innovated modes of advertising based on AMD technology, and launched the integrated services of spot, live, carousel, on-demand and radio broadcastings.

Creating business value: Through continuous improvement of embedded hardware and software systems, Cloud Vision established a customer-centric advertising information transmission mode and an intensive platform management mode to help their customers better manage their digital signage systems at a low cost.

Along with these significant achievements, Cloud Vision needed to realize fast business growth to converge more user resources and become the leading provider in the fifth-generation smart cloud media service sector. However, Cloud Vision faced the following three technical challenges:

- ▲ They needed to enhance the display quality to help them lead the digital signage market via high-quality media services.
- ▲ They were seeking to reduce the Total Cost of Ownership (TCO) of their digital signage terminal system platform, by lowering the development cost through the use of a more standardized APU platform. They also targeted decreasing the operating costs via power savings of the APU, as well as reducing the technical support cost through remote management.
- ▲ They needed to work with AMD to build a cooperative relationship to consistently provide technical innovation services.

These challenges were the toughest and most important issues addressed by Cloud Vision. To that end, the AMD Embedded R-Series APU helped Cloud Vision deal with the challenges of quality, cost and development.

AMD Embedded R-Series APU Platform Solution Enables Digital Signage Business to Grow Rapidly

According to Mr. Li Yuelong, Executive Director of Cloud Vision, the company introduced the AMD Embedded APU solution because they wanted to enhance the user experience, strengthen the competitiveness of their product and reduce the cost of operations.

User experience and image resolution are key in the digital signage industry. Now Cloud Vision has developed an industry-leading information content display management system, allowing users to interact with digital signage, enlarge or reduce the display scale of advertising products, and easily inquire about prices and other product information. In these processes, superior display quality is the primary means to enhance the user experience, and is also a feature which empowers the AMD R-Series APU platform to distinguish itself from competitors. With excellent performance, the AMD R-Series APU platform provides 4K high-definition support and multi-screen (2-4-screen) display and computing services, while the two-module quad-core processor architecture integrates Radeon™ HD 7000G graphics and two 64-bit DDR3 memory controllers that offer users high-definition display support. The platform features dedicated UVD 3.2 video decoding engine and VCE 1.1 video encoding compression engine, and supports DirectX® 11, OpenGL 4.2, OpenCL™ 1.1 and DirectCompute 3D acceleration. As a result, Cloud Vision has significantly boosted the business through these best-of-breed technologies.

“With the aid of AMD, we have quickly accelerated business development, and brought the solution and system quality to a new level. The digital signage solution has not only supported the video display on large format screens and multiple screens, but also strengthened the interactive operations. In addition, we estimate that the new digital signage system will improve the development efficiency and reduce TCO.”

Li Yuelong, Executive Director of
Cloud Vision International Limited

Meanwhile, Cloud Vision also focuses on the control of operating cost. For example, it seeks to extend the lifecycle of digital signage, and reduce software development cost and energy consumption. Fortunately, the AMD Embedded R-Series APU platform is specially designed to meet those requirements. With a lifecycle of up to ten years, the AMD R-Series APU platform continuously facilitates the enterprise's development, supports Windows® OS as well as Linux® and RTOS platforms to broaden and reinforce the development infrastructure, decrease the technical difficulty and effectively control the development cost. The AMD Embedded R-Series APU platform is designed to consume less power, support configurable thermal design power, optimize the processor with lower thermal design power, and effectively decrease the TCO.

AMD's Sustainable Innovations Assist Cloud Vision in Strategic Upgrading

Cloud Vision has estimated that the AMD R-Series APU platform helps them to reduce the TCO of their digital signage terminal platform and increase the development efficiency. Relying on multi-screen high-definition video display support, Cloud Vision has strengthened interactive operations and greatly accelerated business growth.

AMD provides Cloud Vision with both APU hardware and comprehensive technical support services, and effectively shares its unique innovation power to achieve win-win outcomes. Through the standard DASH 1.1 management specification, AMD processors help Cloud Vision innovate in the management mode, establish chip-level remote management architecture, and enhance platform reliability and operational stability of digital signage at a low maintenance cost. Through the advanced parallel processing capabilities provided by the AMD processors, Cloud Vision is able to implement digital signage analytics to better provide tailored media content to users. By implementing an AMD technology-based solution, Cloud Vision has taken a crucial and strategic step towards becoming the “fifth-generation smart cloud media service provider”.

ABOUT CLOUD VISION

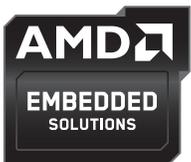
Cloud Vision Technologies Co., Ltd. leads in building new innovative and personalized platform management systems powered by cloud technologies, i.e. Intelligent Cloud-based Multimedia Interconnected Platforms. These platforms are essentially multimedia systems across various regions, endpoints, systems and platforms that enable seamless interconnections between Internet of Things and the Internet/Mobile Internet, among the first around the globe. Harnessing cloud platform big data and Industry 4.0 trends, the company creates versatile cloud-based business platforms that connect people and people, people and machines, machines and machines, as well as services and services, so as to provide customers with one-stop-shop services covering information, applications and infrastructure.

For more information, visit www.cldvision.com

ABOUT AMD

AMD is a semiconductor design innovator leading the next era of vivid digital experiences with its groundbreaking AMD Accelerated Processing Units (APUs) that power a wide range of computing devices. AMD Embedded Solutions give designers ample flexibility to design scalable, x86-based, low-cost and feature-rich products, and drive energy conservation into their systems without compromising application performance or compatibility, graphics performance or features.

For more information, visit www.amd.com/embedded.



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