

INTEL DEFINES THE FUTURE OF EDUCATION AND CREATES SMART SHARING “CLOUD CLASSROOM”

Nov. 19, 2016, Nanning, China – Themed “Smart Education Starts with Intel Inside”, the 71st China Education Equipment Show was held in Nanning. Intel and its educational ecosystem partners gathered together to discuss development trends in the China’s education industry and future education models, and to brainstorm ideas on how to promote cloud solutions in classrooms and share education resources. During the summit, Intel and its partners announced the new ZoneKey Video Record Broadcasting Application, based on Intel Visual Data Reference Design Specification. The application will drive digital transformation of the education industry and close the gap among various regional in education resources.



The new ZoneKey Video Record Broadcasting Application integrates record broadcasting systems and interactive whiteboards and enables real-time response based on big data backhaul analysis and provides massive media and education content resources. The solution fully supports online and offline education for seamless learning and communication between students and

teachers and enable true “cloud classroom”. Unlike the traditional teacher-led model, the “cloud classroom” encourages students to be active and autonomous, drives cooperation and interaction among students, and truly enables remote education through real-time record broadcasting. After classes, it can release curriculums, campus notifications, news, emergent events, security notices and more. The new ZoneKey Video Record Broadcasting Application can provide key support; demonstrate the future of education in enabling remote education and education resource sharing; shift traditional education models and philosophies, and solve problems like the lack of education resources in remote areas.

“The new ZoneKey Video Record Broadcasting Application based on–Intel Visual Data Reference Design Specification breaks the bottleneck of smart education devices and fundamentally solves problems like hard-to-deploy, high-cost and inconsistent interfaces. Intel’s record broadcasting solution and ZoneKey’s frontend devices are able to make education smarter and classrooms more interesting,” said Raj Maini, Worldwide Marketing Director of Visual Retail, Intel Internet of Things Group. “Intel is committed to providing powerful computing platforms for education devices like white boards and developing interoperable, secure, reliable and controllable solutions, from data centers to frontend devices, to fully support the product development of our ecosystem partners and help them to expand online promotion and finally create joyful learning experiences for students and teachers.”



“As one of Intel’s smart education partners, Zonekey has been working in this area for nearly 20 years. With Intel’s solutions and Gen6 Core processors, the easy-to-deploy, affordable and powerful broadcasting application can enable smart education,” said Chen Yue, the R&D director of Zonekey.

As IOT has becoming a hot trend, where ‘things’ is driving volumes of content & data that needs to be captured and analyze or it needs to access rich media/video content, the market needs a on premise, high compute power computing unit to provide that processing capabilities for real time insight, low latency and enhanced user experience. Intel Visual Data Reference Design Specification is to bring server capabilities to be used at edge (on premise) for Audio/Video processing with optimized form factor that does not requires operational conditions of data center.

Intel provides reference platform to our OEM/ODM partners and service providers with a viable open architecture that delivers flexible services options and allows our partners to maintain control of the data generated by edge services. This platform will allow third party services to provide additional value to the end consumer and the OEMs, ODMs and Service Providers. Usage model examples include:

- Video-based products used for customer engagements, AV streaming (uncompressed raw data), video analytics, teaching, presentation, student engagement, education intelligence, based VR applications
- Audio-Video processing and recording visual retail products used for digital signage, video wall, kiosks and interactive whiteboard
- Content processing and analytic products used for data aggregation at the edge
- Consolidate back-end/cloud workload at edge and create service enabler platform for DSaaS and EducationaaS solutions

The Chinese education industry is transforming towards smart, digital and sharing, and traditional blackboard-based education is being replaced by smart education in our smart and connected era. Smart education goes beyond connected education, it is about transformation of things like organizational structure and basic content for smart education and efficient management. Interactive whiteboards (IWB) are also an important media for enabling smart classrooms. With features like smart, high visibility, rich functions and easy remote management, IWBs have grown rapidly in China. With superior CPU and GPU performance, integrated software capabilities, and advanced technologies including RealSense and remote management technologies, Intel is helping to deliver smarter interactive education experiences. By creating unified pluggable specifications with industry leaders and introducing it into China, Intel can provide mature solutions with higher computing power, and more competitive performance and cost to ecosystem partners, based on customer feedback and the unique demands of the Chinese market.

Intel's world leading technologies and extensive experience supports the upgrade to smart classrooms:

- Intel® Virtualization Technology (Intel® VT): Divides hardware resources and allocates them to multiple independent OS environments, allowing them to support multiple “virtual” platforms on a single hardware platform. Virtualization supports for multiple OS’ on a single device.
- Intel® Active Management Technology (Intel® AMT): A hardware and software solution for platforms based on non-volatile memory which provides superior “out-of-band” capabilities. It allows support departments to remotely discover, repair and protect connected computing assets.
- Intel interactive rich-media experiences: Intel products have powerful GPU and CPU resources to support multi-tread operations as well as the decoding and display of multiple media streams. Intel Core and Atom platforms can support 4K UHD decoding and display and asynchronous output to three screens.
- Intel® RealSense™ Technology: RealSense technology allows devices to know detect a person’s intentions and enables more natural interactions between human and devices through various senses such as vision, hearing, touch, speech and even emotion and contextual-awareness.

Intel is trying to abstract more value from the massive data generated by devices in digital classrooms, and accelerate Intel’s virtuous circle of growth through storage and analysis. In the future, Intel IOT will continue to build and upgrade smart and cloud classrooms, solve the lack of education resources in remote areas, shift education models, create a new normal of active and autonomous learning, and define the future of education.

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