

Tablets help the hearing-impaired communicate

Intel® architecture-based tablets help people with hearing loss communicate with the world using sign language



"Smart Vizufon* is a product available not only for the hearing-impaired, but also for the general public. Its video-calling feature supports sign language interpretation to increase information accessibility for the hearing-impaired, and also increases their level of social participation. By breaking communication barriers for hearingimpaired people, it makes their daily routines more convenient and enhances their lives."

> Hyun Min Baek, President & CEO, Saem-mul Education Information Co., Ltd.

Company

Saem-mul Education Information Co. Ltd. (Vizufon), established in 2008, produces a wide variety of video-enabled multimedia devices such as information and communication assistive devices, video education systems, control systems, etc.

It focuses on providing smart devices to help the hearing-impaired communicate with the help and support of the Korean National Information Society Agency.

Challenge

Smart devices can help the daily lives of people with hearing loss, not only for communication with each other through video calling, but also for communication with non-hearing-impaired people through sign-language interpretation service. However, poor video quality and intermittent transmission greatly impact video communication using sign language. Smart devices also need enhanced security capabilities to help mitigate data and privacy risks.

All these issues need to be addressed to make smart devices an effective communication tool for the hearing-impaired.

Solution

Smart devices require powerful and energy-efficient processor performance to capture real-time hand movements and gestures and rapidly transmit the captured video over the Internet.

To create a device that can clearly capture real-time hand movements and gestures and rapidly transmit video over the Internet, Seam-mul Education Information needed a high-performance processor that also enables great battery life for the device.

It chose the Intel® Atom™ processor Z3745-based Smart Vizufon* SMV-3000 tablet for fast data processing and video transmission on the go with several hours of battery life. The tablet allows the people with hearing loss to freely communicate any time, anywhere with sign language and establish an environment for greater social activity.

Benefits

Smart Vizufon SMV-3000 is an Intel® Atom™ processor-based smart device that enables the hearingimpaired to freely communicate with sign language. Weighing just 320g with an 8-inch display, the tablet is easy to carry. It runs the Android* operating system, which allows the hearing-impaired to easily take advantage of the features offered in regular tablets including free Internet lectures, video services, Web services, and other content and apps.

The Wi-Fi feature of the device allows the hearing-impaired to use SeeTalk* (a telephone service exclusively for the hearing-impaired) to take advantage of free sign language interpretation service, even outside of the home. This gives the hearing-impaired easy access to doctors' offices, schools, and public and government organizations.

In 2014, the National Society Information Agency conducted an Information and Communication Assistive Device Project to enhance information accessibility for people with disabilities. The agency selected Saem-mul Education Information's Smart Vizufon as its communication-assistive device for the hearing-impaired. Plans are to continuously supply relevant devices in this field in the years to come.

Intel will continue to with work Saem-mul Education Information to develop technologies to improve the lives of people with hearing loss.

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