

## Fraunhofer IIS and KeyStone Introduce World's First Journaline on Android Phones by Bluetooth Radio Wizard Technology

*Fraunhofer IIS and KeyStone Demonstrate Digital Radio Advanced Text Service Journaline on  
Android Phones by Employing KeyStone's Bluetooth Radio Wizard Technology at IFA and IBC 2012*

**Hsinchu, Taiwan** – KeyStone Semiconductor Corp. (KeyStone), a fabless semiconductor developer of advanced digital radio turn-key technology announces that a joined project between Fraunhofer IIS, the world's renowned source for digital radio and audio technologies, and KeyStone has come to a fruitful success to enable popular Journaline service with live news information shown on Android phones based on Keystone's patent-awarded Bluetooth Radio Wizard technology (BRW).

Journaline, the standardized advanced text application for digital radio, offers mass live information available on digital radio receivers, easily accessible to the listener by browsing the broadcaster-defined categories while listening to his preferred station. This broadcasted text information can be further hyperlinked to online web pages for more details, to phone numbers for direct call-ins to talk shows, or to SMS messages to easily participate in polls or to order the featured song. Using KeyStone's BRW technology, Journaline content can now be browsed conveniently on Bluetooth enabled smart phones and tablets, even if the digital radio receiver itself only provides a minimalistic text screen or no screen at all. BRW supports multiple radio standards such as AM, FM, DAB/DAB+, DRM (DRM30/DRM+), HD Radio, etc.

Thanks to the BRW App, it allows users to interact with Bluetooth radio speakers and to receive live DAB slide show (SLS), radio channel list, emergency data, and now Journaline services on a smart phone or tablet screen. Through BRW technology, Journaline information can not only easily be read and browsed on a smart phone's large color display but can also be hyperlinked to web pages, phone calls, SMS messages, etc. on phones and tables equipped with Internet access and/or 3G, respectively. This exciting hybrid radio option enables digital radio broadcasters and advertisers to interact with and energize their listeners in a completely new way.

Live demonstration of Journaline via BRW technology on Android platforms will be held at Fraunhofer's booth (Booth 10 Hall 11.1) and at KeyStone's meeting room (Room #402 Hall 27) at

IFA 2012 in Berlin, Germany, and at Fraunhofer's booth (Booth B80 Hall 8) at IBC Show 2012 in Amsterdam, The Netherlands.

BRW is a novel wireless audio technology that allows smart phones to interact with Bluetooth radio speakers. By downloading Apps such as *DAB GO!* from iTunes, one can remotely control home Bluetooth micro systems, Bluetooth docking stations, Bluetooth radio speakers, etc. This patent-awarded technology simplifies Bluetooth radio speaker design as all of the radio and audio functions can be enabled by smart phones' Apps.

To apply BRW technology to popular analog and digital radio standards, KeyStone develops a series of FISH modules to enable traditional radio receivers to interact with smart phones as follows:

1. SmallFish module: support FM with Bluetooth ,
2. SnowFish module: support AM/FM with Bluetooth,
3. BigFish module: support FM/DAB/DAB+ with Bluetooth, and
4. GoldFish module: support AM/FM/DAB/DAB+ with Bluetooth.

Live demonstration of world's first BRW speaker with a 2.4" TFT panel which can display color DAB SLS will be held at KeyStone's meeting room at IFA 2012.

KeyStone is a Bluetooth SIG member and its FISH modules are certified by Apple MFi. Products employing BigFish are available at Apple Store. Samples and demo units are available for ordering. For more information on KeyStone's digital radio single-chip modules and BRW technology, please contact KeyStone at [contact@keystonesemi.com](mailto:contact@keystonesemi.com).

## About KeyStone

KeyStone Semiconductor Corp. is a technical innovator and leader in wireless digital radio semiconductor. Company is dedicated to providing a series of low-power and low-cost digital radio IC family for today's multimedia broadcasting market demands. Newly introduced FISH modules with patent-awarded Bluetooth Radio Wizard technology work across all radio platforms such as AM, FM, DAB, DAB+ and HD Radio, with upcoming support for the international Digital Radio Mondiale standard (DRM30/DRM+).

KeyStone products enable the delivery of the enriched analog and digital multimedia contents to home and mobile environments. Company provides the industry with the lowest-cost system-on-a-chip turn-key solutions to manufacturers of analog and digital broadcasting access products and portable devices.

Company is headquartered in the Science-Based Industrial Park, Taiwan, and has offices and facilities in North America and in China. KeyStone can be contacted at +886.3.666.2756 or at [contact@keystonesemi.com](mailto:contact@keystonesemi.com).

### ***Press Inquiries:***

#### ***KeyStone Semiconductor Corp.***

*2<sup>nd</sup> Floor, 62 Park Avenue 2,*

*Science-Based Industrial Park,*

*Hsinchu, Taiwan 300*

*Office: +886-3-666-2756*

*Fax: +886-3-666-2758*

*Email: [Contact@Keystonesemi.com](mailto:Contact@Keystonesemi.com)*

*Web: <http://www.KeyStonesemi.com>*

## About Fraunhofer IIS

Founded in 1985 the Fraunhofer Institute for Integrated Circuits IIS in Erlangen, today with more than 750 staff members, ranks first among the Fraunhofer Institutes concerning headcount and revenues. As the main inventor of mp3 and universally credited with the co-development of AAC audio coding standard, Fraunhofer IIS has reached worldwide recognition. It provides research services on contract basis and technology licensing.

The research topics are: Audio and video source coding, multimedia realtime systems, digital radio broadcasting and digital cinema systems, integrated circuits and sensor systems, design automation, wireless, wired and optical networks, localization and navigation, imaging systems and nanofocus X-ray technology, high- speed cameras, medical sensor solutions and supply chain services. The budget of more than 95 million Euro is mainly financed by projects from industry, the service sector and public authorities. Less than 25 percent of the budget is subsidized by federal and state funds.