Samsung Announced ATSC Digital TV Receiver with Unprecedented Performance

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Samsung Electronics today announced an improved digital TV receiver chip, the S5H1411, that boasts a 30 percent higher reception success rate than the company's previous generation digital TV receiver chip released in 2005, the S5H1409. The chip enables digital TVs designed for the North American market to receive both vestigial sideband (VSB) broadcasts and quadrature amplitude modulation (QAM) cable signals.

Currently broadcasters around the world are quickly making the transition from analog to digital format, and demand for digital TVs is soaring. Samsung's development of a high-performance digital TV receiver chip is expected to accelerate the expansion of the digital

broadcasting base and household adoption of digital TV in North America.

The S5H1411 offers a higher reception success rate than other devices in multi-path environments where signal interference is high, such as densely populated urban areas; dynamic environments with serious signal distortion among many moving vehicles; environments with major signal phase errors because of cable retransmission and remote areas where reception is generally poor.

Samsung is the first in the world to adopt 65nm process technology to broadcast TV receiver chip circuitry, demonstrating its industry leading technology and price and performance competitiveness to the market.

Moreover, the S5H1411 operates on 20 percent less power than competing devices on the market today, making it well suited for portable products such as the USB Dongle or USB box.

“Our development of a digital TV receiver chip that boasts the industry’s best performance demonstrates Samsung’s leadership in ushering in the digital TV era,” said Dr. Do Jun Rhee, vice president, channel development team, System LSI Business Division, Samsung Electronics. “From the third quarter of this year, we expect to install the new device in digital TVs bound for the American market, strengthening our competitiveness and standing there.”

The new S5H1411 digital TV receiver chip is available in the 100-pin thin quad flat pack (14mm x 14mm) or 100-ball fine-pitch ball grid array (8mm x 8mm) packages. The footprint on the print circuit board can be reduced by as much as 40 percent. In addition to digital TVs, the device can be used in digital broadcast set-top boxes with terrestrial and cable reception, TV reception cards for PCs, USB Dongles and USB boxes.

The market research firm Display Search estimates world digital TV demand to reach 87 million units this year and to climb to 147 million units by 2010, for an annual growth rate of 25 percent.

Source: Samsung Electronics