

Sandbridge demos SDR-based processor in multimedia handsets

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<http://www.eetimes.com/news/semi/rss/showArticle.jhtml?articleID=166402040>

Monday, July 25, 2005, 8:12 AM EDT

LONDON — Wireless chip designer Sandbridge Technologies, Inc. has demonstrated a complete software-radio based multimedia terminal design using its baseband processor.

The SB3010 processor, which uses the company's Sandblaster DSPs with an ARM926, performs all the necessary baseband and multimedia functions in software.

Sandbridge (White Plains, N.Y.) has been working on the concept for several years and has recently started sampling the part to selected handset manufacturers.

The company says its flexible baseband processing promises to free handset manufacturers from a host of hardware-based design constraints and will allow network operators to upgrade services via simple OTA (over-the-air) updates.

Wilf Strauss, principal analysts at Forward Concepts, said the development has "broad and potentially disruptive implications for the wireless industry".

The SB3010 platform departs significantly from traditional hardware by allowing manufacturers to create, test, modify and execute their designs entirely in software. Coupled with intuitive programming tools and a supercomputer class "C" compiler, the device reduces risk, cost, complexity and time-to-market but also facilitates swift and easy adaptation to multiplying and evolving standards; emerging network requirements like MIMO; and diverse audio and video formats.

"The importance of this achievement cannot be overstated," said Guenter Weinberger, Sandbridge President and CEO. "It proves that there is a solution to provide 100 percent flexibility for multimode/multimedia wireless handhelds."

The processor can run virtually any radio protocol as well as multimedia formats such as MPEG-4, H264 and MP-3. The company said it is developing upgrades to include WiMAX, HSDPA and DMB/DVB.