



MEX: Flexible building blocks

<http://www.pmn.co.uk/20050728sandbridge.shtml>
www.mobileuserexperience.com
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28 July 2005 -- *PMN* -- For many years handset development has proceeded along two tracks: devices designed for GSM and devices designed for CDMA. One of the most basic design choices is the baseband processor where these functions are handled and, since these have always been done in hardware, there is relatively little flexibility. In some ways, you could say the user experience starts with this choice.

However, it appears the rules may be about to change. Sandbridge Technologies, which has been operating in start-up mode since 2001, has this week announced the first processor to handle both baseband and multimedia functions entirely in software. The company claims its SB3010 is the first completely flexible baseband processor, supporting all major radio protocols (including GSM/GPRS, EDGE, W-CDMA, CDMA2000, 1xEV-DO, TDSCDMA, WiFi and GPS) and multimedia formats such as MPEG-4 H.264, MP-3 and WMA.

This has major implications for the industry. Manufacturers will be able to use a single processor for advanced radio and multimedia functions, reducing power consumption and cutting the overall bill of materials. Sandbridge's SB3010 uses an industry-standard ARM 926 core.

Most significantly, manufacturers will be able to re-configure the processor using simple software updates. In theory, it will be possible to update the way the processor handles a radio protocol or even add support for an entirely new protocol over-the-air (OTA) and ex-factory.

The ability to change a chipset post-manufacture has always been against the rules; it appears Sandbridge may be about to re-write those rules. The SB3010 may be the first truly flexible building block of the mobile experience.