Samsung to bundle Soleus with app processor

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Intrinsyc has announced a distribution win for its Windows CE-based software stack. Soleus will be bundled later this year with an application processor by Samsung Semiconductor's System LSI division, part of an "integrated hardware and software platform for its ODM and OEM customers," according to Intrinsyc.

Yiwan Wong, vice president of marketing for Samsung's System LSI Division, said, "By bundling Soleus with our application processors, we expect to deliver a compelling hardware/software solution for next-generation consumer multimedia devices." The companies provided no further details of the bundle, but said it will ship in the second half of this year.

The Soleus software stack runs on top of a Windows CE 5.0 or 6.0 core. It was originally conceived as an alternative for "feature phones" that did not have the power to run Windows Mobile. Ironically, however, it has begun to appear even on high-end phones, such as the MSI 5608 announced earlier this month. Itself featuring a Samsung processor (the SC36400 running at 667MHz), that device boasts a two megapixel camera, GPS, and digital TV reception in T-DMB, DVB-H, and ISDVT formats, according to MSI.
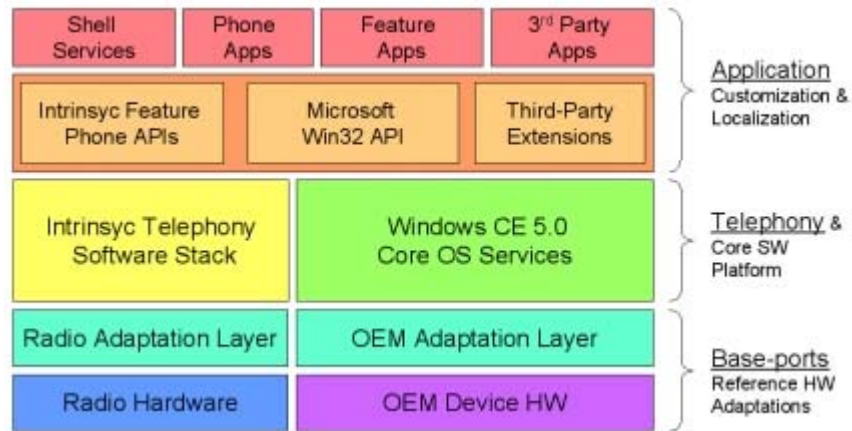
The market for Soleus has also moved beyond phones to other types of devices. In December, for example, the company announced that "a leading Japan-based OEM of consumer electronics products" will adopt Soleus for a "new generation of connected consumer electronics and wireless devices." As part of that agreement, Soleus will be extended to use W3C Scalable Vector Graphics (SVG) and SVG-Tiny (SVG-T) programming languages, for "device GUIs, 2D games, and panable/zoomable document viewing," according to Intrinsyc.

In November 2007, Intrinsync announced that Soleus will also be used by Quanta to create a 3G HSDPA-enabled (high-speed downlink packet access) product. Touted as "a breakthrough in design concept," and expected to ship in the third quarter of 2008, the "mobile device" will be upgradeable from Windows CE 5.0 to Windows CE 6.0.

Other Soleus design wins cited by Intrinsyc last year included deals with Cellon International, Ginwave Technologies, Wistron, and several unnamed licensees.

Soleus

First announced in 2006, Soleus comprises a suite of development tools, along with software and telephony elements said to be "pre-certified" for specific hardware. Third-party options currently include handwriting recognition, voice dialing, and a "comprehensive list" of optimized audio and video codecs for multimedia playback, according to Intrinsyc.

Soleus software architecture
(Click image for larger view)

According to Intrinsyc, the Soleus OS kernel -- labeled "Windows CE 5.0 Core OS Services" in the 2006 diagram above, though now compatible with Windows CE 6.0 as well -- is about one-third the size of a standard Windows CE kernel. Device hardware resource requirements vary, but have been as minimal as a 100MHz CPU equipped with 12MB of flash (8MB used for Soleus image) plus 12MB of RAM, Intrinsyc claims. Soleus supports ARM, MIPS, SHx, XScale, and x86 architectures.