

THE PUBLISHER'S VIEW

Intel Bows to Microsoft, OEM Pressure

NSP Reference Platform Dropped, NSP Technologies Repositioned

The struggle between Intel and Microsoft to establish a next-generation PC platform is over. Bowing to pressure from Microsoft and the untenable position in which this put OEMs, Intel has backed off on efforts to establish its Native Signal Processing Reference Platform (NSPRP).

The conflict surfaced this spring when Intel began promoting the NSPRP (see *0906ED.PDF*), which rolled together a collection of hardware and software features. Intel's goal was to raise the baseline PC platform, giving software developers a more capable target system and increasing mainstream PC capabilities.

Unfortunately for Intel, this effort ran smack into the Windows 95 steamroller. Intel's NSP platform was based on Windows 3.1, although a Windows 95 follow-on was planned. Intel began rolling out the Windows 3.1 version of the NSPRP just as Microsoft was working to get the industry focused on developing for Windows 95. In addition, Microsoft saw several aspects of the NSPRP as being in conflict with its Windows 95 plans—especially the Direct-X extensions.

Apparently seeing the NSPRP as a threat to the Windows 95 rollout, Microsoft launched a quiet but aggressive attack, telling PC makers that Microsoft would not support some features of the NSPRP in future releases of Windows. This put the industry in an untenable position between Intel and Microsoft. As it became apparent that Microsoft was unwilling to accommodate Intel's initiative, Intel wisely decided to back off.

Intel is dropping the Reference Platform in favor of a new baseline platform that will focus on hardware features. The new platform definition will not include any software features on which Intel does not have agreement from Microsoft. This means that the IA-Spox kernel, which provides real-time services, and the Native Audio driver, which provides a shareable audio interface, are no longer part of the platform. Intel will also drop from the platform the Desktop Management Interface (DMI), which Microsoft at one time supported but has now backed away from. Other features, such as the Display Control Interface (DCI), will be replaced by Microsoft's Windows 95 extensions (Direct Draw, in this case). WinSock 2 (a communications interface) will be part of the new baseline platform, as will support for bus-master IDE and Universal Serial Bus.

This does not mean, however, that Intel is dropping the technologies that Microsoft hasn't bought into; it only changes how and when they will be delivered. Intel

remains committed to all the technologies that were in the NSPRP, but the Windows 3.1 beta version of IA-Spox and Native Audio will not be released. Instead, Intel will focus its efforts on versions to work with Windows 95, due to ship as part of applications to be delivered in the first quarter of 1996.

Those technologies not included in the baseline platform will be offered as part of applications from Intel and others. Spectron Microsystems will offer a software developers' kit (SDK) for IA-Spox and Native Audio. Intel expects applications using these features to be bundled with systems. But Intel's NSP effort has failed to establish these features as industry-wide standards, at least in the near term.

Software developers wishing to use IA-Spox capabilities can still do so, but the future of such efforts is unclear. At least one faction within Microsoft remains deeply opposed to IA-Spox and believes that it does not add significant value to Windows 95. In time, Microsoft will improve Windows' real-time capabilities, rendering IA-Spox superfluous. Intel is investing heavily in applications using IA-Spox and Native Audio and hopes that there will be a smooth migration path to a future version of Windows that won't require IA-Spox, but whether this will happen remains to be seen.

The concept of native signal processing remains as intact—and controversial—as ever. In the coming year, low-cost multimedia accelerator chips will deliver superior multimedia performance to NSP at a modest cost, and this is likely to be a popular solution for many users. NSP is destined to take a gradually increasing role, however, as host processors become faster in coming years.

Intel appears to have learned an important lesson: going around Microsoft and trying to independently set platform directions is a dangerous strategy. Intel and Microsoft share common goals; their differences are in how and when these goals can be achieved. By working together—as they have with the Telephony API (TAPI) and plug-and-play—they can be much more effective.

The onus is now on Microsoft to deliver the real-time capabilities and other features promised by the NSPRP. If Intel's efforts succeed in accelerating Microsoft's development of more powerful multimedia support, Intel will have achieved its real goal—if somewhat more slowly and painfully than the company hoped. ♦

