



SYSTEMS & SOFTWARE

ST's Pocket Multimedia platform resurrected as MEDEA+ project

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PARIS — Reports of the death of STMicroelectronics' Pocket Multimedia (PMM) platform have been greatly exaggerated.

The company said Monday (March 3) the project that was thought to have been cancelled has instead been folded into MEDEA+, the pan-European technology effort.

The company confirmed that it did cancel the 3D graphics project last year, but only as part of its SuperH, Inc.'s lower-power RISC core-based PMM platform. It also acknowledged that to spin out a dedicated portable gaming device from the platform is no longer a part of its strategy.

ST, however, insisted that it is still pursuing the multimedia platform for battery-powered imaging devices, such as digital still cameras (DSCs), camcorders and possibly portable audio players. Further, PMM development efforts have morphed into a part of the MEDEA+ projects under Europe's Eureka program. Partners include Philips Consumer Electronics, Thomson and Cambridge Display Technology, said Philippe Quinio, director of marketing & product strategy with ST's Imaging Division.

Right platform, apps

The tale of how the scope and nature of the PMM project has been so dramatically altered over the last few years offers a behind-the-scenes glimpse at the scramble among semiconductor and system vendors. All are struggling to find the right platform for the right applications.

ST's Quinio acknowledged that when ST first launched the PMM platform nearly four years ago the scope of the project was "much larger than it was today." The platform was supposed to cover everything from portable audio and video to imaging and gaming. While testing the concept, exploring ideas and fielding feedback from its lead customers, ST concluded that dedicated gaming devices were "for a closed market that cannot be penetrated so easily."

Meanwhile, cell phones have emerged as an attractive platform for adding more multimedia capabilities, including 3D graphics capabilities. But Quinio said it remains unclear to what extent multimedia integration is needed on a mobile phone.

As a result, ST "reduced the scope of PMM," by having the platform's development re-focused on imaging, "which is a booming market where we've found a much more attractive business opportunity," Quinio added.

Although camera phones are becoming increasingly popular among European mobile handset users, the PMM platform would focus on imaging "not for a cell phone, but for a high-end digital still camera integrated with a larger Organic LED (OLED) display," said Quinio.

Independent of PMM, ST is pushing an ARM-based Nomadik processor platform to attack the application processor market for cell phones. A PMM-related 3D graphics project ST started through partnerships with Imagination Technologies which was subsequently cancelled is now most likely to be transferred to the Nomadik platform. ST insisted as late as last week that "We are in the process of selecting a 3D graphics technology partner" for the Nomadik platform.

The PMM platform, meanwhile, will give digital still camera manufacturers various options to add audio/video playback capabilities, including MP3 and MPEG-4, along with the ability to record and store moving images as a camcorder. The idea is to turn the PMM into a "multi-mega pixel" camera platform upon which many IP and basic multimedia building blocks could be added.

ST's strategy is similar to what Texas Instruments has long done with its DSP-based DSC platform. Quinio said PMM, by integrating a still imaging processing block in hardware, is designed to address the needs of higher-resolution digital cameras. "We are not talking about two-million pixel processing, but 10-million pixel processing," he said.

Under the Eureka [MEDEA+ program](#), ST is a leader in its Pocket Multimedia project. Partners include: Cambridge Display Technology; Coding Technologies; Centre de Morphologie Mathématique, an image processing laboratory that is part of the Ecole des Mines de Paris; Philips Consumer Electronics; Thomson; and URMET.

By turning over its own PMM development efforts to the MEDEA+ project, ST hopes to build momentum behind PMM by working with partners armed with a range of software and hardware expertise.

Under the MEDEA+ PMM project, the platform is still in "the architectural development phase," according to Quinio. The group hopes to freeze its implementation in June. While the ST-proposed SH-5-based platform remains a leading contender, proposals for other, different architectures remain alive while the group investigates performance.

"We will decide on one or two architectures by May," Quinio added. The first test silicon is expected to be ready in early 2005.