

X-bit Laboratories

More Memory Makers to Manufacture CellularRAM.
Hynix, NanoAmp, Winbond Join CellularRAM Work Group
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The CellularRAM work group announced the addition of Hynix Semiconductor, NanoAmp Solutions and Winbond Electronics Corporation to its membership. The new members will join existing members to create common specifications for high-performance pseudo-SRAM (PSRAM) devices designed to meet the growing memory density and bandwidth demands of future 2.5G and 3G handset designs.

"We are pleased to welcome Hynix, NanoAmp, and Winbond to the CellularRAM work group and look forward to their system expertise and product direction contributions. Through their participation, these companies strengthen our objective to provide customers with a standardized solution that meets multi-sourced, low power, and high performance requirements," the CellularRAM work group said in a joint statement.

The CellularRAM work group has developed three generations of specifications for high-bandwidth devices ranging in densities of 16Mb to 256Mb. Continuing to elevate the standard for performance and low power in diverse mobile applications, the group is currently working on a fourth generation specification to further enhance suitability of CellularRAM architecture-based products for use with high bandwidth baseband and application processors.

Based on a DRAM cell, the CellularRAM architecture provides significant advantages over traditional SRAMs and six-transistor (6T) SRAM cells by leveraging the technology and reduced size of a DRAM cell. The 32Mb CellularRAM samples currently available operate at up to 104MHz clock-rates with low initial latency of 70ns and can achieve up to 208MB/s of peak bandwidth. These devices emulate popular standard burst READ and WRITE modes including the Intel W18 and Micron Flash Burst-compatible protocol with various I/O voltage options.

"With Hynix, Winbond and NanoAmp Solutions joining Cypress, Infineon, and Micron, all of the major semiconductor manufacturing regions are now represented by co-developers of the CellularRAM specification," said Adrienne Downey, Senior Analyst at Semico Research Corp. "This is significant because it clearly shows that the CellularRAM specification has gained strong momentum as the ubiquitous solution for PSRAMs in mobile phones."