

## **Samsung Licenses NexMod Technology from HCD for Networking and Telecommunications Markets**

### **Innovative Memory Solution Combines Small Form Factor with Low Cost and High Performance**

SAN JOSE, Calif.--Oct. 7, 2002--Samsung Semiconductor, Inc., the world's leading manufacturer of advanced memory technology, today announced that it has licensed the NexMod™ technology from High Connection Density, Inc. (HCD), which provides a small footprint module for RDRAM® memory. The Samsung RDRAM NexMod memory module solution provides scalable, high-speed memory in space-constrained applications for networking, communications and other markets.

"RDRAM NexMod technology is a great addition to our broad portfolio of leading-edge memory solutions," said Tom Quinn, vice president of marketing for Samsung Semiconductor. "It demonstrates Samsung's commitment to the networking market and proves that high performance RDRAM can be used not only in the PC market, but also for any demanding memory application."

The multi-tiered NexMod module, with a small footprint that measures 1.1 inches by 2.0 inches and is under 0.5 inches in height, offers all the circuitry for an entire Rambus channel in a single module. The small form factor and module construction create a situation similar to a "short channel" Rambus design, allowing for potentially higher clock frequencies and better system electrical margins.

The NexMod technology, as well as the RDRAM NexMod product, was initially pioneered by HCD to solve the memory needs of applications using network processors that require high-performance packet buffer memory. "HCD is excited to be working together with Samsung Semiconductor to jointly provide an innovative solution that will enable the ever-increasing memory needs of today's networking applications," said Dirk Brown, executive vice president of business development at HCD.

The RDRAM NexMod solution has a number of features that distinguish it from traditional SO-RIMM and RIMM solutions. In addition to placing all the supporting Rambus channel components on one module, it uses demountable area array connectors with lower parasitic impedances, delays and cross talk to improve electrical performance.

The NexMod module can either be attached to the main board with pin grid array (PGA) connectors or soldered with ball grid array (BGA) technology. The small footprint module incorporates termination resistors, the Direct Rambus Clock Generator (DRCG), and a Voltage Regulator Module (VRM) on the same modular subsystem as the memory chips.

Available memory configurations range from 64MB to 288MB utilizing 288Mb-based RDRAM. Samsung will be sampling the new product in December 2002. Mass production will begin in early 2003.



HIGH CONNECTION DENSITY, INC.

[www.hcdcorp.com](http://www.hcdcorp.com)

**About Samsung Semiconductor, Inc.**

Samsung Semiconductor, Inc. is a wholly owned US subsidiary of Samsung Electronics Co., Ltd. Headquartered in Seoul, Korea, Samsung Electronics is a mainstay of the global electronics industry. It is the world's leader in DRAM memory, SRAM memory, and TFT-LCD display products for industrial, mobile and desktop computing applications. Samsung Electronics is one of the world's largest semiconductor companies overall with a full line of semiconductor products including Flash memory, microprocessor and custom ASIC components. Samsung Semiconductor, Inc. is located in San Jose, California. For more information, please visit our website: <http://www.usa.samsungsemi.com>.

**About High Connection Density, Inc.**

High Connection Density, Inc. (HCD) develops advanced electronics packaging and connection technologies to provide high frequency and high current, form factor optimized solutions to its customers and licensees. These innovative solutions enable increased performance and reliability of our customers' products. To learn more about HCD products and services, visit the website at [www.hcdcorp.com](http://www.hcdcorp.com).

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