

For Immediate Release

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Nantero, Inc. Creates an Array of Ten Billion Nanotube Bits on Single Wafer Standard Semiconductor Processes Used

Woburn, MA – May 2003: Nantero, Inc., a company that is currently developing **NRAM™** –a high-density nonvolatile random access memory chip using nanotechnology --, announced today it had created an array of ten billion suspended nanotube junctions on a single silicon wafer. Nantero's design for NRAM involves the use of suspended nanotube junctions as memory bits, with the "up" position representing bit zero and the "down" position representing bit one. Bits are switched between states through the application of electrical fields. The wafer was produced using only standard semiconductor processes, maximizing compatibility with existing semiconductor factories.

Nantero's patent-pending method for achieving this result involves depositing a very thin layer of carbon nanotubes over the entire surface of the wafer, and then using lithography and etching to remove the nanotubes that are not in the correct position to serve as elements in the array.

Dr. Thomas Rueckes, Chief Scientific Officer and Co-Founder said, "This gets around the problem that nanotubes cannot reliably be grown in large arrays. At the end of our process only the nanotubes in the correct positions are remaining. This process was used to make a 10Gb array now, but could easily be used to make even larger arrays-- the main variable now controlling the size is the resolution of the lithography equipment."

Nantero's process, for which multiple patent applications have been filed, also results in substantial redundancy for the memory, because each memory bit depends not on one single nanotube, but upon a large number of nanotubes that resemble a fabric. Notes Dr. Brent Segal, COO and Co-Founder, "These highly-conductive single-layer nanotube fabrics have a wide range of applications even beyond memory, especially since they can be made on a large scale and in mass production volumes."

"We are thrilled with these developments", noted Greg Schmergel, CEO and Co-Founder. "When we announced that we intended to make a universal memory chip using carbon nanotubes (NRAM), the primary concern held by most observers was that carbon nanotubes grow indiscriminately and it's extremely difficult to align them. Creating this enormous array of suspended nanotubes using standard semiconductor processes brings us much closer to our end goal of mass producing NRAM chips."

Nantero has also added Dr. Mohan Rao to its Scientific Advisory Board. He is one of the world's leading VLSI chip designers and has previously served as Senior Vice President, Semiconductor, Group, at Texas Instruments. He holds over 100 patents worldwide on various aspects of memory, including SRAM, DRAM, and system-on-chip.

About Nantero, Inc.

Nantero is currently developing **NRAM™** –a high-density nonvolatile random access memory chip using nanotechnology. The company expects to deliver a product that will replace all existing forms of memory, such as DRAM, SRAM and flash memory, with a high-density nonvolatile RAM – ‘universal memory.’ The potential applications for the nonvolatile RAM Nantero is developing add up to over \$100B in revenue potential, including the ability to enable instant-on computers and to replace flash memory in devices such as MP3 players, digital cameras, and PDAs, as well as applications in the networking arena. For more information on Nantero, Inc. please visit www.nantero.com