Five centers to get nanoelectronic boost

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In a push to accelerate nanoelectronics, the National Science Foundation and an industry consortium is providing $2 million to five university centers.

Purdue University's Network for Computational Nanotechnology will share the $2 million with Harvard, the University of Virginia, the University of California, Santa Barbara, and Columbia University.

The money is coming from the NSF and the Nanoelectronics Research Corp., an industry consortium that designed to provide a competitive advantage to its member companies by delivering technical talent and early research findings from universities, Purdue said.

The money will be used to help tackle a critical question related to the inevitable demise of Moore's Law -- the yearly increase in transister density on integrated circuits -- a general rule that is central to the evolution and success of the computer industry.

Some observers have predicted Moore's Law will hit a brick wall in about a decade. At that point, conventional computer chips, called "CMOS," for complementary metal oxide semiconductor chips, will have to be replaced with a new technology.

"The big question in electronics today is: What lies beyond Moore's Law?" said NCN director Mark Lundstrom.