Future mobile phones may have 100GB memory

September 12 2005

Mobile phones might one day have the memory capacity of a desktop computer thanks to a microchip that mimics the functioning of the brain.

British researchers say their new computer chip will enable large amounts of data to be stored in small volumes by using a complex interconnected network of nanowires in a way similar to how neurons and axons function in the human brain.

Currently mobile phone memory chips have a very limited capacity.

The latest research, however, has the potential to develop a chip that combines the storage capability of a hard drive with the low cost of memory cards, potentially increasing memory capacity from about 500 megabytes to around 100 gigabytes.

Lead researcher Russell Cowburn, professor of nanotechnology at Imperial College London, said: "The new video mobile phones are very popular, but they desperately need more memory so that people can take longer videos and store them. This technology has the potential to transform mobiles into fully functioning video cameras, in addition to a range of other applications."

The scientists from Imperial College London, Durham University and the University of Sheffield reported their findings in the journal Science.