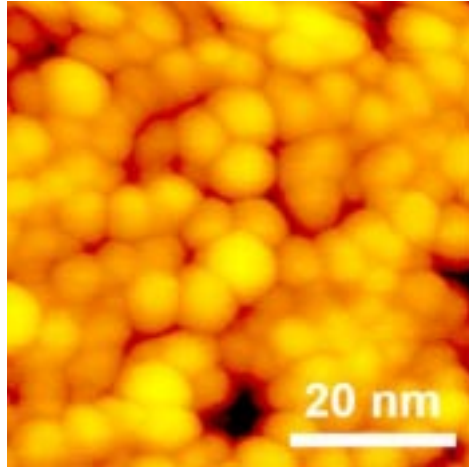
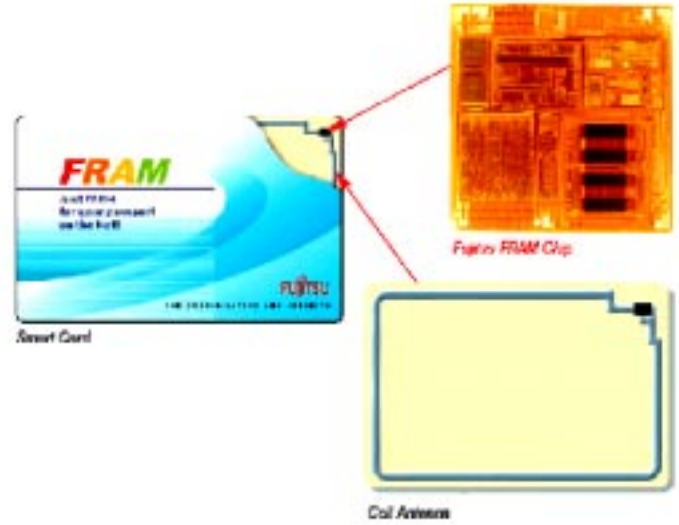
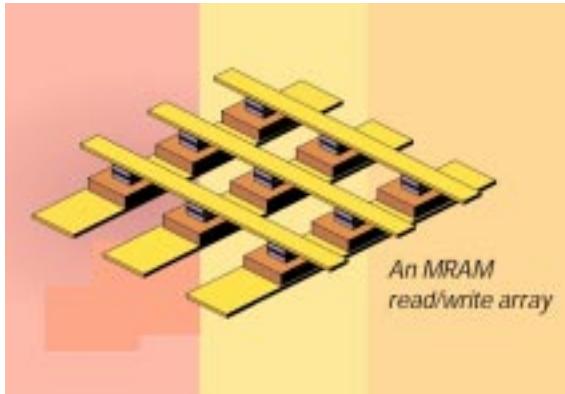




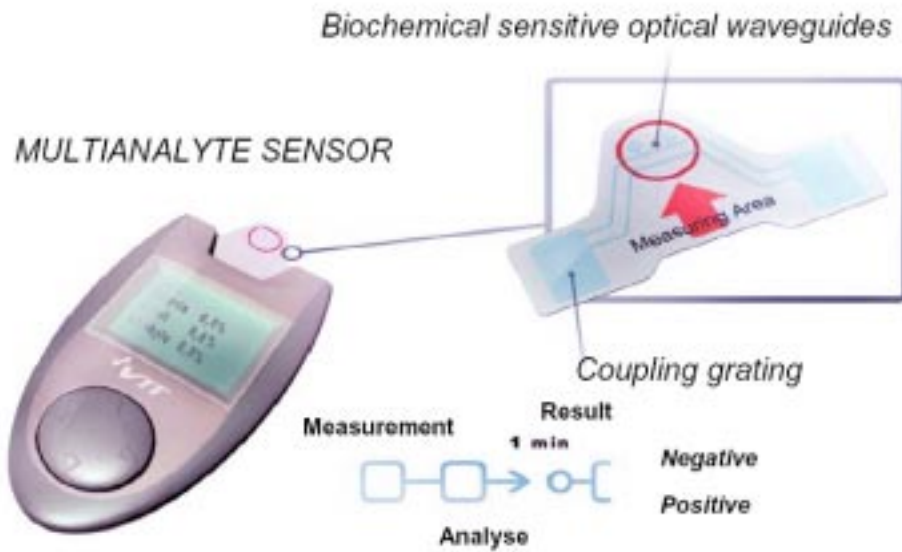
An electronic game printed onto a cereal box by VTT in Finland. We don't really know how this technology will be used but believe we will be able to make such displays and systems for a few cents each.



This image shows gold nanoparticles, each just a few atoms across, taken by an atomic force microscope. Nanotechnology should allow us to use such fine particles to make very small electronic circuits.



Two coming alternatives to silicon memory chips are MRAM based on magnetic thin films and FRAM based on ferroelectric films. Each should consume much less power than silicon “flash” memory and should store data when the power is off.



This kind of biochemical sensor is already available but we want to incorporate biochemical sensors into clothing to give a continuous readout of your sugar and salt balance, at least, for use in training and exercise.



A big part of the future for printable electronics is being able to print the power supply also so there is no need for wires. This is a solar cell printed onto plastic at Konarka in Lowell.



A Kodak 2-inch OLED display. We expect these Organic Light Emitting Diodes to replace liquid crystal displays but still have problems with the lifetime of the blue emitter. Expect flexible displays in a few years. See Kodak, NUVUE OLEDs