

## Stretchy Silicon means unbreakable circuit boards are not far

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A team of scientists at the University of Illinois, Urbana Champaign, and Northwestern University, in Evanston, IL have demoed silicon circuits that can be twisted, bended and deformed and still performed like the ordinary type built the traditional way.

This feat was accomplished by combining the elastic features of rubber or plastic with silicon, which means that these stretchy silicon circuits could find their way very soon in your parka, your coat or even in your brain according to some suggestions.

↕ **A** Text size

In a report that will be published in the journal Science, the US researchers say that the chip performance will be comparable to conventional electronics - without the fragility - and added that they had found out how to make circuits

wafer thin, which is a mandatory feature to make circuits flexible.

The thickness of the entire circuit system is 1.5 microns - that 1/50 the thickness of a human hair, while the silicon ribbon that is overlaid on it is even thinner at a fraction of a micron.

Combining Silicon with rubber could also allow 3-dimensional, more flexible circuit designs (even antennas) and since rubber is a heat and electrical insulator, this breakthrough could also provide with some interesting avenues.

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