

Toshiba and **NEC** are to co-develop nextgeneration chips in a bid to share development costs and cut time to market.

The aim is to work on narrower circuitry that decreases the size of a chip and cuts production costs. It will also help the chips to process data more quickly.

Current advanced chip plants use circuitry widths of 90-nanometres, but semiconductor makers are expected to move to 65-nanometre circuitry before making 45-nanometre microchips available.



UNDER

P4 Chip above Motherboard below

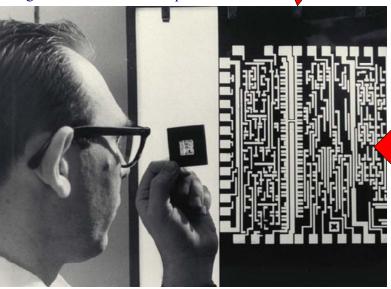


Valve radio with dial



Valve radio

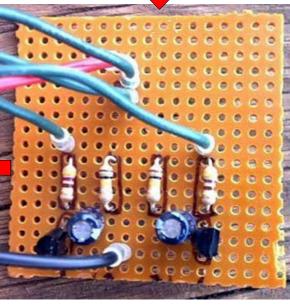
with speaker



The beginnings of the microchip. Circuits are designed using computer, then photographed and placed layer by layer on a silicon chip



A more complex circuit board of transistors. This is how the name, 'transistor radio' originated.



A simple circuit board showing transistors. This circuit board lights an LED