

A new range of radar chips will change the way cars and industrial equipment see the world around them, according to maker Texas Instruments. Radar systems in vehicles are presently an integral part of attempts to build self-driving systems. Typically, they are boxes measuring multiple centimetres on a side; housing multiple components, and require watts of power. TI's new chips, nine years in development, present the whole system in a part the size of a postage stamp.



The new radar chips combine the functions of many components and are configurable, says TI SVP Greg Delagi, who regards them as "a new product category that is going to have a revolutionary impact". For instance, a sensor can focus on nearby items during a low-speed parking manoeuvre, then switch to looking hundreds of metres away when the car reaches highway speed—all without requiring multiple components as today's systems do.

The parts, which Delagi says will sell for the "low tens of dollars" apiece, will provide tough competition for rival technologies such as pressure sensors and lidar. TI have a 6.9 percent stake of the market for automotive chips, according to data compiled by Bloomberg.

In addition to self-driving uses, the chips could be deployed inside a car to detect whether it's occupied, something that could then be used to automatically prevent small children or pets being locked in by mistake or even as door sensors to stop impacts with nearby walls or other vehicles in a parkade.