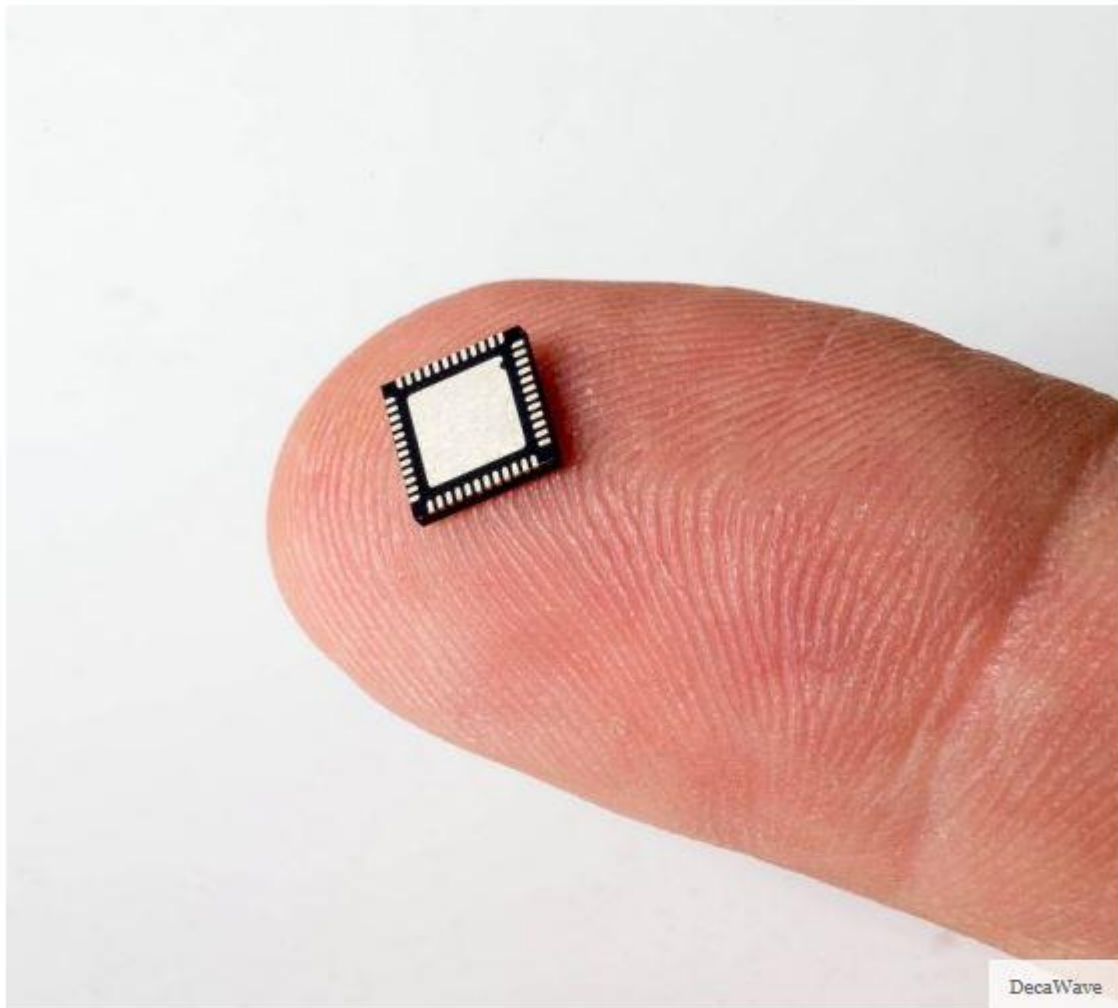


DecaWave launches indoor location chip that can accurately fix your position to within 10 centimeters



DecaWave

DecaWave's indoor location chip is tiny.

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If you're trying to find your way through a giant Las Vegas casino or a maze-like airport, that could come in very handy. But if you're the unlucky target of a smart bomb, then this is going to be a bad thing.

The company says applications for the ScenSor wireless chip family will be launched for the healthcare, factory automation, warehouse, and agriculture industries. Eventually, thanks to its small size and low price, the chip could make its way into automotive and mobile applications. The first model is the DW1000, which makes indoor location and communications more accurate, lower cost, and power efficient.

"Until now, 10-centimeter location communications across close distances was not possible, and current systems with meter-level accuracy have limited reliability," said Ciaran Connell, chief executive of DecaWave. "Signals would be lost, and there was a high risk for error. Customers ask for more than average accuracy most of the time. Our new ScenSor chip changes all that, it provides unprecedented accuracy all the time."

Connell is a former executive at Motorola and Freescale. Chairman Jim O'Hara formerly worked at Intel Ireland, while chief technology officer Michael McLaughlin was a key contributor to the IEEE 802.15.4a wireless standard, which is used in the tiny DecaWave chip.

ScenSor works by transmitting wireless signals to readers that use them to locate a tagged object to within 10 centimeters. The chip can operate for several years on a battery, allowing it to be embedded in places like warehouses. It can either replace or complement radio frequency identification (RFID) and WiFi chips currently used for indoor tracking where satellite navigation signals are not available. It allows for more specific, minute-to-minute location information for high-value goods, such as warehouse pallets, over short range and through obstructions.

"The ScenSor chip commences a new era in the world of [location positioning] by providing excellent performance along with a flexible architecture and very rich functionality," said Daniel Aljedef, vice president of emerging technologies and intellectual property at Stanley Healthcare (AeroScout). "I believe that the ScenSor chip will empower new solutions for many of the most demanding applications."

Serge Hethuin, head of secured wireless products at Thales Communications & Security, called the performance of the DecaWave chip "exceptional and undisputable."

More than 1,800 firms and institutes have expressed interest in using the technology, Connell said.