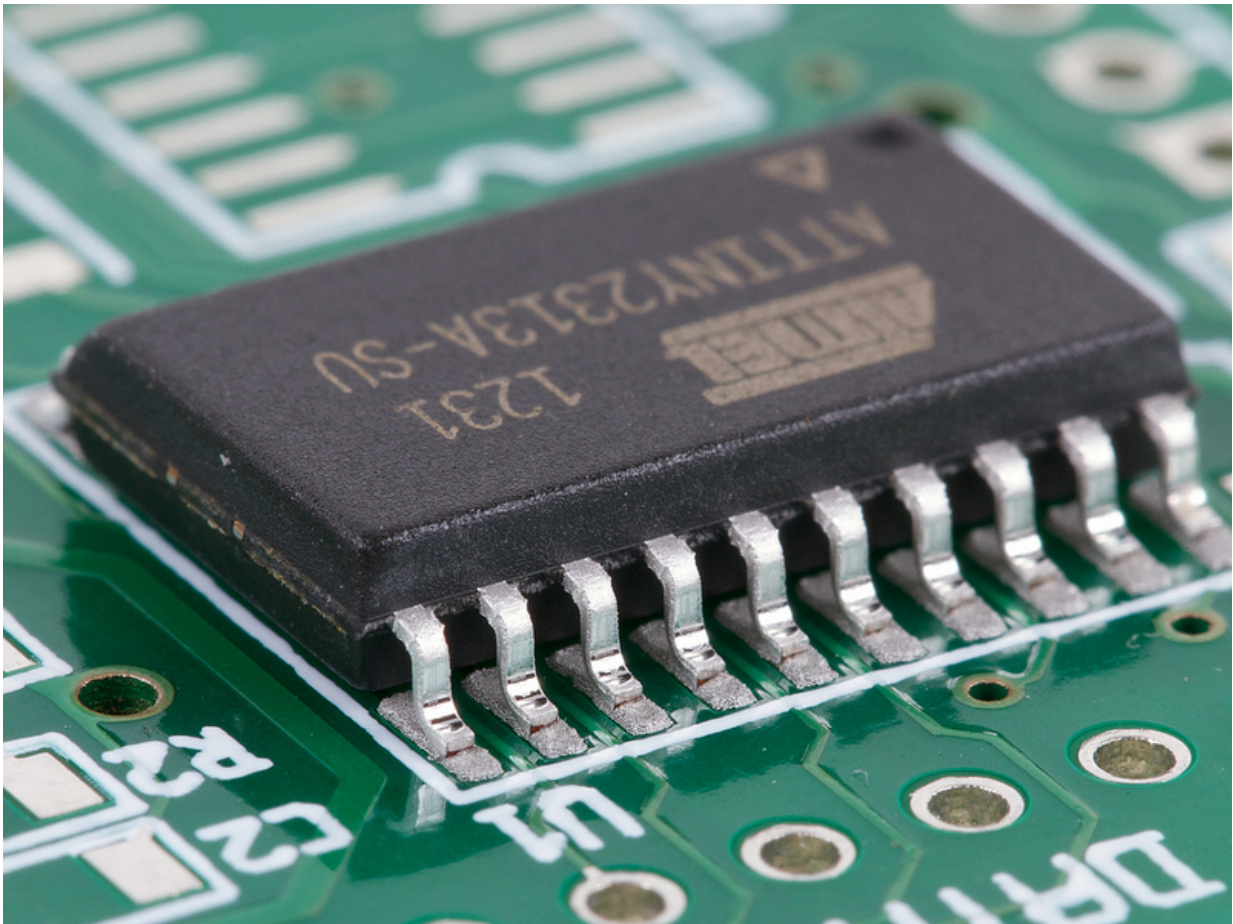


The brains behind the chip that works like a brain

June 23 2015, by Tony Malkovic



BrainChip is aiming at the global wide semiconductor market involving almost anything that involves a microprocessor. Credit: Windell Oskay

A company that started in Perth several years ago is poised to revolutionize the world-wide computer industry with a computer chip that aims to mimic the operations of the human brain.

BrainChip was invented and developed over several years by Peter van der Made while based at the Innovation Centre of WA (ICWA), the start-up incubator in Technology Park, Bentley.

Mr Van der Made and the [company](#), also called BrainChip, are now based in Silicon Valley in California and he returned to Perth last month as part of the company's recent merger and listing on the Australian Stock Exchange.

He says BrainChip has the ability to learn autonomously, evolve and associate information and respond to stimuli like a brain.

Mr Van der Made says it could be used in applications including robotics, voice recognition, [driverless cars](#), drones and smartphones.

"So your mobile phone would be able to recognise your voice," he says.

"This is very handy if you're doing banking on your [mobile phone](#), for instance."

Mr Van der Made says the company's chip [technology](#) is more than 5,000 faster than other technologies, yet uses only 1/1,000th of the power.

"It's a hardware only solution, there is no software to slow things down," he says.

"It doesn't execute instructions, it learns and supplies what it has learnt to new information.

"This provides an enormous speed advantage over software, using a lot less power.

Engineering efforts moves to front and centre

He says ICWA provided "the backdrop to develop from where we were four years ago, with a science project" to a product on the verge of production.

"The science is done, from here onwards it's engineering," he says.

Although tech giants such as IBM, Intel and Qualcomm are developing chips that work like a brain, Mr Van der Made believes his technology has the edge.

"BrainChip is on the road to position itself at the forefront of artificial intelligence," he says.

"We have a clear advantage, at least 10 years, over anybody else in the market, that includes IBM."

[BrainChip](#) is aiming at the global semiconductor market involving almost anything that involves a microprocessor.

"The semiconductor industry is a multi-trillion dollar market," he says.

BrainChip intends licensing its technology to companies to enable them to make their own chips, as well as being paid royalties.

The company is undergoing a merger via a back door listing on the Australian Stock Exchange with mining company Aziana.

Provided by Science Network WA

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