

Moore's law is not dead, says Intel boss



Intel boss Brian Krzanich CREDIT: GETTY IMAGES

- [Cara McGoogan](#), las vegas

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Intel founder Gordon Moore declared half a century ago that computer power would roughly double every two years as the silicon chips powering them developed.

The maxim, which became known as Moore's law, directed technology companies for five decades before [reaching a crunch point last year](#). Physicists and technology giants alike said transistors had reached a point where it was [no longer economically viable](#) to make them smaller, bringing about the end of the law.

But Intel's chief executive Brian Krzanich has put an end to such fears with news the company will release a 10 nanometre chip in 2017. The tiny chip will be cheaper than its predecessor, Intel said, keeping Moore's law alive.

"I've heard the death of Moore's law more times than anything else in my 34-year career and I'm here today to really show you and tell you that Moore's law is alive and well and flourishing," Krzanich said.



Brian Krzanich said Moore's law was not over CREDIT: GETTY IMAGES

The news came as Intel opened the doors on its virtual reality project, which includes applications for the technology, content production and a headset. For Krzanich, VR is one of the most exciting uses of the faster processor coming this year.

"Imagine in your living room being able to walk around the next hotel you're going to visit, or visiting the event you're going to," said Krzanich in a demonstration of the VR uses Intel is working on at the Consumer Electronics Show in Las Vegas.

Some of the applications Intel is developing include live sports games in VR and monitoring remote areas, such as solar panel farms, through a live 360 video stream from a drone and a VR headset.

The chipmaker has teamed up with La Liga to fit three stadiums with 360-degree cameras that will stream to 38 channels this year.

"From the comfort of your home you could be transported to your favourite seat," said Krzanich. "This is the future of how you'll view sports. You'll have the opportunity to go to games you've never been to before."

He dismissed concerns that VR will never take off, and said Intel has "a lot more coming in the next few years" that will convert the sceptics.

"It can save lives, it can save money, and it can save time," he said.

As well as creating content that works across VR headsets already on the market such as the Oculus Rift, HTC Vive and Samsung's Gear VR, Intel has also developed its own hardware called Project Alloy. A wireless VR headset that doesn't require any extra hardware to work, Alloy will be licensed to other companies and go into production by the end of this year.

About | Moore's Law

Moore's Law is based on Intel co-founder Gordon Moore's 1975 observation that the number of transistors able to be fitted to an integrated circuit doubles roughly every two years – an effect he'd first noted in 1965.

This was then extrapolated to the power of microchips doubling roughly every 18 months, due to the transistors themselves increasing in speed.

Rather than a law of nature, however, Moore's "Law" is simply an observation and projection of existing trends. Moore himself originally saw his projection as only remaining accurate into the 1980s.

Moore's Law today

Computing performance increases have slowed since the mid-2000s, despite the chips themselves becoming more powerful. This is due to slower software and various limiting factors associated with working at miniature scale, such as the breakdown of Dennard scaling.