

Push for tablets, notebooks are on the way back with a new super chip

CHRIS GRIFFITH

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regain currency with consumers. They are the ultimate beneficiary, of course, and now stand to enjoy much better battery life.

How did Intel achieve this? Haswell is the latest generation of lightweight notebook chips announced in 2011, based on architecture developed in Israel starting in 2005.

Kamil Gurgun, distribution business and technical manager at Intel Australia, says the company has reduced the central processor's power rating from 35 watts in 2011 to 17 watts last year and to just six to seven watts with Haswell. The power leakage that saw many laptops run warm or even hot has been reduced. Meanwhile, better manufacturing processes and a move to so-called 3D transistors (horizontal and vertical lattices of tiny transistors) have reduced power consumption. Haswell chip sets also include a voltage regulator, which

manages power across the various chip components.

Haswell brings with it other improvements, such as more powerful graphics processing, which Gurgun says occupies a third of the processor surface.

Different manufacturers can adapt Haswell chips to perform in different ways. For example, if the chip is bumped back to 35 watts of power, you will achieve a more powerful laptop, but battery life savings will be compromised.

For the MacBook Air, Apple decided that increasing battery life was its overarching priority, so it opted for a slightly less powerful chip than in last year's Air, increased battery size, and didn't bump up screen re-

solution to quell battery drain.

Acer Australia's Andy Chang says the Taiwan-based manufacturer has not compromised on computing power, size, weight or thickness, but has still managed a 33 per cent increase with its Haswell-equipped Aspire S7, due here this month, to eight hours.

An HP spokesman says it is hard to compare successive-year devices, but cites a roughly 20 per cent power saving. The new HP Envy 15 notebook will have about 7½ hours of battery life with moderate use. HP's Haswell chips were optimised to improve battery life, speed and screen resolution — not battery life alone.

Sony, too, cites weight, display resolution and battery life for improvements it sought from Haswell chips in its new VAIO Pro 13. Battery life was up three hours to 8½ hours compared with last year and, with an optional extended battery, could hit 17 hours.

Dell says Haswell chips in its new M14, M17 and M18 Alienware laptops are optimised entirely for gamers. They offer higher performance and richer graphics with lower voltage requirements designed to increase battery life.

So Haswell could well shake up the laptop market. That is certainly Intel's hope.

Haswell, Colorado, is celebrating. "This is not exactly Silicon Valley," a resident told an online Denver publication. "But it's neat to see Haswell get recognised."



Haswell, Colorado, Post Office and Intel's Haswell processor



Consumers stand to enjoy much better battery life

CAFES ORANGE, in the Central West of NSW, is a coffee and cafe-obsessed regional city. The morning latte is a ritual fuelled by a collection of great cafes. But, if you need any more proof, just check out a place called **Factory Espresso**, the roasting/retail facility of the region's strongest brand, Bill's Beans. Here is a white-tiled industrial chic cafe right out of the inner city, with a **serious roasting** facility behind it. It services up to 80 wholesale customers, with hundreds of kilos roasted every week. The breakfasts are terrific, the style urbane and the roast... fresh as a daisy. billsbeans.com.au

JOHN LETHLEAN



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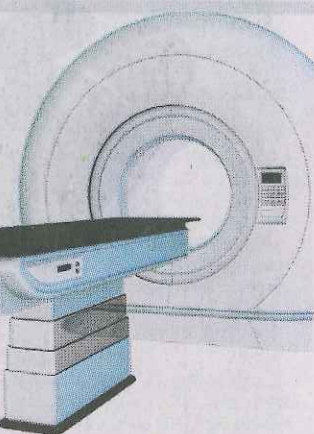
Sleep-deprived nation



VERMOUTH IF YOU haven't

tried **Maidenii Australian vermouth** yet — in a Negroni or on its own — at one of the many leading restaurants and bars currently pouring it, I urge you to track some down and give it a go (the Maidenii website has a complete list of stockists). It is produced by winemaker Gilles Lapalus (Sutton Grange) and mixologist Shaun Byrne (Gin Palace) using 34 botanicals, 12 of them Australian, and available in three styles — aperitif, dry and sweet. Maidenii is simply one of the most extraordinary and delicious new Australian drinks to emerge in years. In fact, can you please buy some to stop me drinking it all? Thanks. maidenii.com.au

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HEALTH PARENTS should not push doctors to have a child examined by CT scan, X-rays or MRI. A recent study that found **children given CT scans were at a slightly higher risk of cancer** has served to remind people that radiation is involved. "Medical imaging can be a very useful tool to help make or confirm a diagnosis or guide treatment decisions," says Dr Andrew Boyden from government-funded consumer information site NPS MedicineWise. "But it should only be considered if the benefits for your child are likely to outweigh the radiation risks or other potentially harmful effects."

SEAN PARNELL