

THE LAZARUS REPORT

PRODUCT END-OF-LIFE NEWS AND INSIGHTS

In the News

Intel CEO predicts chip shortage to last into 2024

In a recent interview with CNBC, Intel CEO Pat Gelsinger said the constrained availability of key manufacturing tools may extend the global chip crunch, challenging factory ramps at a time of elevated demand.

Intel chiplet SoC “Meteor Lake” up and running; will serve as basis for 14th gen processor, Intel’s first chiplet-based processor

With the company planning to use chiplet-style SoCs for its Core lineup permanently, Meteor Lake is a chance for the design and architecture teams to prove whether they can pull it off.

World-first security flaw ‘Augury’ found in Apple custom processors; researchers suggest the flaw does not pose a major threat, but may lead to more serious vulnerabilities

Although Augury hasn’t yet led to real issues, the fact that it can leak data that neither the core nor any instructions have read demonstrates that Apple silicon isn’t immune to vulnerabilities.

Microsoft discovers Linux vulnerability “Nimbuspwn”, which grants root access to users

The latest elevation of privileges flaw in the open source OS has come to light, through which people with a toehold on many Linux desktop systems can quickly gain root system rights.

Microsoft Edge passes Safari in total users; leads all browsers outside of Chrome

While Edge had been running neck and neck with both Safari and Firefox since late last year, it finally pulled ahead of both browsers in February—though Chrome maintains a solid lead.

“Businesses adopting Windows 11 more quickly than past versions,” says Microsoft

Although Microsoft’s CEO didn’t explain the rapid growth, observers speculate that it’s likely fueled by security-focused systems requirements in Windows 11 that are clearly geared to business needs.

Introducing the Lazarus Report

For many years, Dynamic has helped companies plan for and manage the inherent operational, financial, and reputational risks associated with hardware and software products and components that are no longer available or supported by manufacturers. Although these End-of-Life (EOL) issues are a critical part of product lifecycle management, the fragmented nature of supply chain dynamics continues to make it extremely challenging for any company—and for complex, highly regulated companies in particular—to obtain, track, and proactively apply EOL-related information.

Dynamic’s goal in publishing The Lazarus Report on a quarterly basis is twofold. First, we seek to raise awareness of the importance of effective EOL risk management, by sharing relevant news items as well as insights based on our own experience. Second, we hope to increase the collective level of EOL-related transparency, communication, and efficiency—involving product OEMs, distributors, and the businesses they serve—so that market disruption is reduced and market confidence in America’s supply chain is maintained.

More succinctly ... we believe that a rising tide floats all boats. A more serious, integrated, industry-wide approach to EOL management can be of tangible benefit to both the enterprise-level and consumer segments of our society.

— Farida Ali, CEO, Dynamic Technology Solutions

The PC ARMs Race: How the Shift from Intel’s x86 Is Redefining Technology Lifecycles

The move to an ARM platform gives medical device designers and engineers greater control over the lifecycle of the connected technologies they use.

In 2020, Apple and Microsoft made what may have seemed like a startling announcement: Going forward, they said, rather than rely on Intel’s x86 processor, they would embrace the notion of developing their own ARM-based platforms. Although Microsoft had been tied to the x86 for more than 30 years and Apple for at least half that time, both companies saw this change as an opportunity to increase flexibility while fostering quicker adoption of innovations in both hardware and software.

Continued on page 2

This sea change would prove critical for manufacturers because the ARM-based system allows them to make their own custom-designed ARM-based chips—including SoC chips—when, where, and as they need them. And it would prove important to consumers through a reduction in both costs and power requirements.

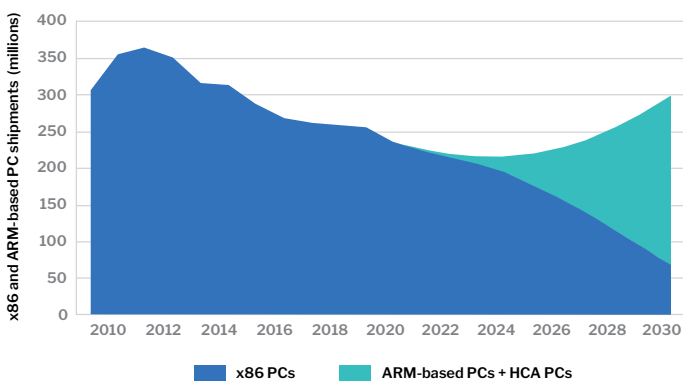
Two years later, both companies have made good on their promises. Apple, which had long used ARM-based chips in its phones and tablets, now uses these chips throughout its line of PCs and desktop models. Similarly, Microsoft—which recently hired Apple’s chip designer to produce custom ARM-based processors for its Azure cloud computing service—has begun to introduce ARM-based chips into many key products, most notably its hugely successful PC, the Surface.

PCs Swing Back Up

This shift has already driven an increase in the sale of PCs, which had been dropping in recent years—and that increase is likely to continue. According to an analysis by Wikibon Research (see chart), the dramatic decline of x86 PCs over the next decade will be overwhelmed by a rapid increase in the shipment of ARM-based PCs, which will bring PC sales close to the record achieved back in 2011. This will not only buoy the PC market—for a workforce that is more likely to use PCs in their daily tasks than tablets or phones—it will also bring PCs into alignment with the mobile market, allowing for more seamless interfaces between devices.

The ARM-based PC Will Enable PC Growth

Source: ©2020 Wikibon



While the drop in x86 platforms will continue, the increase in ARM-based processors will drive PC sales significantly.

Dynamic Technology Solutions maintains partnerships with more than 800 leading technology providers, and relies on those sources for product End-of-Life information. Dynamic makes every effort to ensure that the EOL information presented in this publication is timely and accurate, but cannot guarantee the accuracy of information obtained from any third party, or any information that has not been provided to us.

But the impact goes well beyond the PC itself. Consider:

- With more customized processors being built—and built for purpose—there are likely to be longer lifecycles, even as long as 15 years. This will allow for a level of stability in products that was previously unattainable.
- Combined with the fact that manufacturers will no longer be tied to Intel’s 18-month chip-release cycle, manufacturers will have greater control over product lifecycles—changing, in a sense, the definition of end of life.
- In particular, the move to an ARM platform gives designers and engineers producing medical instruments greater flexibility to not only choose which platform they want to build apps for but also to have more control over the lifecycle of connected technologies.
- ARM will also be used in new computing environments for Edge technology, mobile technology, AI, autonomous vehicles, and more—enabling more and faster innovations.
- And though, to date, the advantages of ARM have been less in the server space than in the endpoint space, that’s likely to change in the years to come.

Moving Forward—at a Measured Pace

Despite the push made by Apple and Microsoft over the past two years, the shift from Intel to ARM will not be overnight. Software developers will want to port their applications to work with ARM as well as with Windows, and that will take a long time, given that people who have already tested and validated their software in a certain environment will need to change it. A total switchover could take as long as 10 years.

On the other hand, if Intel were to decide not to compete in the market as much as they have, or if the market simply made the decision to adapt—much as we’ve seen with 5G and edge computing and all of the developments that will be necessary as we move to smart cities and autonomous vehicles—the changes wrought by the shift to ARM could be explosive.

Though it may not have seemed so significant back in 2020, developments over the past two years have shown that the move from x86 to ARM is hugely disruptive. As it becomes a more important tool in technological innovation, it’s incumbent upon companies—as well as upon Dynamic, on behalf of its customers—to watch carefully, seeing where ARM is applicable today and where it may be a game changer tomorrow.