HOPE FOR THE **FUTURE**

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LEARN FROM THE **PAST**

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MEMPHIS MEMORY ESSENTIALS

Everything you need to know about the semiconductor memory industry, from legacy technologies to latest innovations.

Brought to you by MEMPHIS Electronic, your Memory Competence Center and DRAM module configurator.
We are posting similar stories regularly on LinkedIn, so follow us there to stay on top of the news.

Learn from Yesterday, Live for Today, Hope for Tomorrow

2024 has been a turbulent year for the semiconductor industry, especially memory semiconductors. We have seen high growth rates in high-bandwidth memory and high-performance SSDs, but a decline in most other areas.

So, you must forgive us if we won't be parting from 2024 heavy-heartedly. However, we see hope smiling from the threshold of the year to come, as we stick to Albert Einstein's motto: "Learn from yesterday, live for today, hope for tomorrow."

In the spirit of living for today, we celebrate a key milestone in our industry, the 40th anniversary of Flash memory. During the IEEE Design Conference from Dec 9-12, 1984, Fujio Masuoka unveiled the groundbreaking technology he and his team worked on for almost four years: a non-volatile storage medium capable of retaining data without constant power.

The rest is history! But if you want to catch up on some of the milestones, check out our overview article and the contributions from our manufacturers!

And speaking of learning – we have just the right Christmas present for all hardware designers out there: Get the know-how you need to design successful products in the seminar "Open the Black Box of Memory".

Hope you enjoy our newsletter and see you in 2025!

NAND Flash Memory 2025: Supply, Demand, and Geopolitical Influences

The NAND Flash memory market, which forms the backbone of data storage across smartphones, laptops, and large-scale enterprise data centers, is at a pivotal moment as we approach 2025. After navigating a period of price volatility, supply chain disruptions, and fluctuating demand, the NAND market faces a mixture of short-term price declines and long-term stabilization driven by strategic production cuts and evolving global trends.

Read more here.

SSD Market Grows 28.6% in 3Q24

According to TrendForce, the enterprise SSD market experienced significant growth in 3Q24, driven by robust demand from AI-related applications. Prices surged as suppliers struggled to keep pace with market needs, increasing overall industry revenue by an impressive 28.6% Quarter-on-Quarter. Looking ahead to 4Q24, TrendForce forecasts a slowdown in enterprise SSD revenue as procurement demand begins to cool.

Read more here.

40 Years Flash Memory: A Journey of Innovation and Transformation

40 years ago, Fujio Masuoka unveiled a groundbreaking technology that would forever change data storage: Flash memory. Fast forward 40 years and Flash memory is now an indispensable component of everything from smartphones to enterprise data centers, embedded systems, and beyond. MEMPHIS Electronic honors this milestone with a reflection of how far we have come and a brief outlook on what is next.

Read more here.

Samsung: Content Growth Drives Flash Demand

Samsung is a pioneer in Flash Memory, and with its development of 3D NAND continues to drive innovation. In celebration of the 40th anniversary of its invention, we spoke with Samsung about key milestones in Flash and what to expect next.

Read more here.

Winbond: Security and Low Power

Did you know that Winbond started in Flash in 2003? Since then it has advanced the technology, and is now focusing on 1.2V NOR Flash and advanced processes in SoCs tend to use lower voltages. Apart from power control, Winbond is driving Flash Security forward.

Read more here.

Intelligent Memory: The Future in View While Keeping Legacy Alive

In celebration of the 40th Flash memory anniversary Intelligent Memory shares the journey it has seen since it entered the flash market in 2014. A latecomer you might say. But Intelligent Memory took a look at the market and identified the gaps that other vendors leave in their portfolio, and addresses this with extended temperature ranges and low-density flash and security solutions.

Read more here.

Smart Flash Memory from SkyHigh Memory

Flash Memory turned 40 and we take this occasion to highlight some of the vendors in our linecard that offer flash memory, like SkyHigh Memory, a joint venture between Sk hynix and Infineon. Since its inception in 2019, Skyhigh Memory has made significant progress in advanced flash memory solutions and even introduced a SLC NAND-based MCP (Multi-Chip Package).

Read more here.

Hone Your Design Skills

The memory interface is becoming something like a "black box", where it's hard to know what's happening inside. With every new memory generation, the design requirements are increasing, and deviating from the design guide can have an impact. Get the know-how you need for designing successful products in the seminar: Open the Black Box of Memory. Sign up for the training in Copenhagen (Feb 25-27) or Munich (March 3-5).

More information & registration here.

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