

Dutch move on Nexperia triggers nervousness among auto suppliers and OEMs

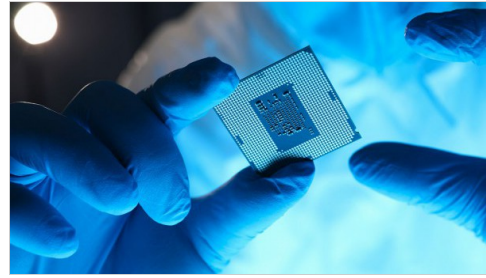
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According to Wingtech Chairman Yang Mu, as of mid-2025, about 80% of Nexperia's total end-product capacity resides in mainland China, 70% of which originates from Dongguan alone



Source: Getty image/ Ivan balvan

On Monday, Oct. 13, the Dutch government took a decisive step to assume control of Nexperia, the Nijmegen-based semiconductor manufacturer owned by mainland China's Wingtech. Officials described the intervention as "highly exceptional," citing governance shortcomings, national security risks and the need to safeguard critical technological capabilities for the Netherlands and Europe.

Nexperia, headquartered in Nijmegen, the Netherlands, has been owned by Wingtech since 2018. Wingtech is a major electronics conglomerate. It has faced increasing scrutiny in the US for its alleged access to sensitive semiconductor technologies. In December 2024, Wingtech was added to the US' entity list, subjecting it to export restrictions. More recently, on Sept. 29, 2025, the US Commerce Department's Bureau of Industry and Security (BIS) issued new regulations that extend export control restrictions to subsidiaries that are more than 50% owned by entities in the US entity list, which adds Nexperia to export restrictions. The Dutch authorities expressed concern that in a crisis, Nexperia's finished and unfinished products might become unavailable if operational control were compromised.

The Dutch government invoked the Goods Availability Act (*Wet beschikbaarheid goederen*), a rarely used law granting the state special powers when national economic or security interests are threatened. Under this authority, the Ministry of Economic Affairs can now overturn or block company decisions deemed harmful to national interests. Nexperia had also suspended its mainland Chinese CEO and appointed Stegan Tilger (the CFO) as interim CEO, while allowing day-to-day production to continue. The Dutch government's aim is to ensure strategic decisions respect European interests and prevent the transfer of sensitive assets or intellectual property.

Why is there a chip alarm in the auto industry?

The intervention triggered alarms across the automotive industry because Nexperia supplies silicon discrete and standard logic components that underpin nearly every electronic control unit (ECU) in modern vehicles. While not headline-grabbing, such as microcontrollers or advanced systems-on-chip (SoCs), these parts are essential for modules ranging from lighting and body electronics to airbag systems and powertrain controllers.

Concerns have intensified due to new export regulations in mainland China. On Oct. 4, 2025, the Chinese Ministry of Commerce issued an export control notice prohibiting Nexperia China and its subcontractors from exporting certain finished components and assemblies without explicit licenses. Nexperia confirmed it is actively engaging with mainland Chinese authorities to obtain exemptions and has deployed all available resources to mitigate disruptions. Nevertheless, the notice immediately raised concerns among original equipment manufacturers and tier 1 suppliers.

While its roots and research and development leadership remain in Europe, Nexperia's manufacturing balance has gradually shifted toward mainland China. The company operates front-end fabs in Hamburg, Germany, and Manchester, UK, both legacy 200-mm sites inherited from NXP. However, a 300-mm wafer fab in Shanghai, ramped in 2024, has become a pivotal part of its growth strategy for discrete devices.

Even more critical is the assembly and test facility in Dongguan, mainland China, Nexperia's largest back-end site worldwide. According to Wingtech Chairman Yang Mu, as of mid-2025, about 80% of Nexperia's total end-product capacity resides in mainland China, 70% of which originates from Dongguan alone. Mainland China also accounts for 48% of the company's total revenue, reflecting its production and customer base concentration. This geographic concentration exposes the automotive supply chain to potential export restrictions, particularly affecting low- and mid-complexity components such as diodes, small-signal transistors and logic integrated circuits (ICs).

Although these components are technically replaceable, they require ECU requalification and functional safety verification, which introduces operational risk and potential production delays. The alarm is, therefore, less about Nexperia's products' inherent technical complexity and more about the scale of integration across vehicle systems and the potential for logistical bottlenecks.

How exposed is the automotive industry?

The automotive industry's exposure to Nexperia is real but nuanced. According to S&P Global Mobility's data, Nexperia accounts for approximately 5% of the global automotive silicon discrete market in terms of revenue, its share is much higher in terms of discrete chip volume. Its portfolio consists mainly of standard parts rather than application-specific ICs or microcontrollers, making alternatives available from Infineon, STMicroelectronics, ON Semiconductor, ROHM or Renesas.

This is a key difference from the 2020–2021 Covid-related supply crisis, which was systemic and affected microcontrollers, analog ICs and foundry capacity across multiple suppliers. In contrast, the current disruption is localized to a single supplier, and the affected products are commodity-type, standards-based components rather than application-specific chips. Standard silicon discretely are interchangeable across JEDEC- and AEC-Q101-qualified suppliers, allowing tier 1 suppliers and OEMs to substitute equivalent devices without extensive redesigns.

Even so, the scale of Nexperia's presence across vehicle systems means no OEM can claim complete insulation. These components are pervasive in the hundreds per car. While individual device substitution may be straightforward, the sheer scale of requalification, procurement coordination and functional safety verification introduces short-term operational challenges.

Electronics tier 1 suppliers such as Bosch, AUMOVIO and DENSO play a critical role in mitigating exposure. Many maintain dual-sourcing strategies for high-volume components and are actively assessing inventories and alternate suppliers. Stockpiles exist in distribution channels, providing a buffer against immediate disruption. While these inventories were not intended as strategic reserves, they offer OEMs critical breathing room to identify alternative sources, qualify replacement components and adjust production schedules as needed. Nexperia's situation highlights how geopolitical tensions like Dutch–China relations can unsettle automakers.

German carmakers monitor Nexperia situation for potential supply bottlenecks

German OEMs are among the most sensitive to Nexperia-related disruptions due to their reliance on domestic tier 1 suppliers and production facilities. The situation has created heightened nervousness among German automakers and their suppliers. According to a *Manager Magazin's* report on Oct. 14, one high-ranking industry insider was quoted as saying, "There's an alarm here," reflecting widespread nervousness about the availability of Nexperia's semiconductors, which are used in applications such as LED lighting and airbag electronics. The report also mentioned warning letters being circulated between manufacturers and suppliers, signaling proactive risk management. German OEMs have also activated internal risk-assessment protocols to map dependencies across multiple vehicle platforms.

The OEMs seem particularly concerned, likely in anticipation of several major launches scheduled for late 2025 and early 2026, including BMW's Neue Klasse platform, Mercedes-Benz's next-generation CLA, and Volkswagen's all-electric T-Cross. Any delay from a shortage of Nexperia's chips could significantly disrupt these rollout timelines. While dual-sourcing is commonly employed for low-cost, standardized components to ensure supply continuity and price competitiveness, many high-value or technically complex devices remain single-sourced due to stringent qualification requirements and proprietary designs, thereby increasing operational vulnerability.

Conclusion

While Nexperia represents only a small portion of the overall automotive semiconductor supply, about 5% of the silicon discrete market, its situation highlights how geopolitical frictions can still cause anxiety among automakers. The company's product mix, focused mainly on standard logic and discrete devices, makes substitution relatively straightforward, with several viable alternatives available from Infineon, Onsemi, Renesas, STMicroelectronics and ROHM, among others. Moreover, the inventory levels of standard silicon components should provide a short-term buffer while tier 1 suppliers and OEMs transition to alternate sources.

Nonetheless, the exposure remains, given that approximately 80% of Nexperia's assembly and test capacity is based in mainland China, with nearly half its revenue generated from this market. At the same time, the remainder is exported from the region. This geographic concentration, coupled with export control pressures from the US and mainland China, amplifies uncertainty around supply continuity. German OEMs appear particularly concerned, likely due to their upcoming vehicle programs scheduled for late 2025 and early 2026, for which any disruption in component availability could jeopardize launch timelines.

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