



Global Laptop Restructuring Series – Part I

One World, Two Supply Chains: How China Still Anchors the Laptop Industry

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As global technology supply chains reorganize under geopolitical pressure, China+1 is often framed as an exit strategy—companies abandoning China for Southeast Asia or India. In reality, it's not an exit but the emergence of two parallel supply chain systems.

While production for the U.S. and European markets is increasingly shifting out of China, China itself is consolidating a self-sustaining laptop ecosystem, anchored by domestic brands and a rapidly maturing white-label supply chain. This article focuses on how China's system was built—not overnight, but through two decades of policy layering, industrial clustering, and capability accumulation that enabled the rise of white-label manufacturing.

China+1 in Reality: Not an Exit, but a Rebalance

Most discussions today focus on how brands protect U.S. market share by shifting production capacity out of China. Yet China+1 does not mean “China-free”—rather, it is about retaining part of China-based capacity while reducing over-concentration risks. China still accounts for roughly 12-13% of global laptop

sales, smaller than the U.S. market (about 27%) and Europe (around 23%), but large enough that global brands cannot afford to exit entirely. The strategy, in practice, is not abandonment but balance.

Thus, brands must navigate two competing systems simultaneously—ensuring non-China production for U.S. markets while still competing in China's domestic environment.

Beyond high-end commercial laptops and AI notebooks for enterprise refresh cycles, brands also deploy models targeted at education, gaming, and regional needs.

Yet rising costs and tariff risks are prompting brands to rethink—rather than abandon—the advantages China has built over the past two decades: an industrial web of factories, component suppliers, and policy support that turned “Made in China” into a global manufacturing default.

Reform & Opening: The Birth of China’s Laptop Supply Chain

China was not always the world’s factory.

In the early 1990s, laptops were still largely built in Taiwan and Japan. But as Beijing opened its doors—reforming state enterprises, welcoming foreign capital, and carving out Special Economic Zones along the coast—the Pearl and Yangtze River Deltas transformed into manufacturing powerhouses, turning a planned economy into a market-driven engine for global electronics.

China’s rise in laptop manufacturing did not happen overnight. It evolved from an economy in transition—repurposing decades of home-appliance assembly expertise into computer production as TV and radio demand waned. Backed by subsidies and industrial restructuring, factories upgraded, supply chains deepened, and China stepped onto the global PC stage with remarkable speed.

State-backed enterprises were commercialized, creating early PC manufacturers **Lenovo**, **Founder**, and **Great Wall**. At the same time, China’s cost advantages attracted foreign and Taiwanese ODMs to build facilities in Shanghai, Kunshan, Chongqing, and others, forming dense laptop clusters.

From the 2000s through the 2010s, China extended beyond assembly into components—

displays, motherboards, keyboards, casings, batteries—evolving from OEM to ODM.

Huaqin and **Luxshare** became representative players. Yet China still depended on U.S. and Taiwan for CPUs, chipsets, OS integration, and motherboard architecture.

Intel’s CTE Program: The Accelerator of China’s White-Label Ecosystem

The turning point stemmed not from Chinese policy alone, but from Intel’s strategic pivot during the mobile-device boom.

By 2013, the PC market was declining while mobile and tablets—driven by ARM-based chips from Qualcomm and MediaTek—were booming. Feeling pressure, Intel launched the **CTE (China Technique Ecosystem)** to push x86 into China’s fast-growing tablet market. It partnered with Shenzhen manufacturers, offered free application processors, and set up a USD 200 million innovation fund to support local development.

In 2014, Intel further established the Smart Device Innovation Center in Shenzhen, providing reference designs, development tools, and supply chain support—effectively lowering entry barriers for Chinese OEM and ODM players. Another USD 100 million fund followed, accelerating hardware innovation.

CTE helped expand China’s capabilities beyond assembly, strengthening China’s “red” supply chain and enabling large-scale notebook production. Although Intel halted subsidies and exited the tablet SoC market in 2016, CTE nurtured a generation of Chinese ODMs skilled in fast tooling, modular design, and rapid shipment cycles, laying the foundation for the Chinese white-label ecosystem — including **Bitland**, **Longcheer**, **Tongfang**, **Colorful**, **Great Wall**, and other companies.

China’s white-label ecosystem is built around cost efficiency and turnkey system integration. By sourcing from lower-cost local or second-

tier component suppliers and using shared tooling and standardized reference designs, white-label makers shorten development and production cycles significantly. This capability enables rapid rollout of affordable entry models that meet price-performance demand in China and emerging markets—becoming a cornerstone of China's notebook industry.

One World, Two Systems: Brands Did Not Exit China—They Split Strategies

The post-2018 geopolitical environment accelerated this divergence.

Escalating U.S.-China trade and tech friction pushed American brands toward China+1 production, while Trump's 2025 tariff wave further imposed high duties on China-made goods. To avoid import penalties for U.S.-bound laptops, brands rapidly shifted capacity to Vietnam, Thailand, and Mexico, despite higher operating costs, as the U.S. market still accounts for around one-quarter of global shipments.

Meanwhile, China faced a contrasting dynamic. A property downturn, deflationary pressure, and weak consumer electronics spending persisted despite 2024-2025 subsidy programs. In parallel, U.S. export controls on AI chips drove China to pursue localization and technology self-reliance, emphasized further in the 15th Five-Year Plan (2026-2030) under the “AI+” strategy. Investments in semiconductors, chip design and manufacturing strengthened domestic supply capacity, forming a manufacturing ecosystem increasingly oriented toward internal demand.

For China and emerging markets, **local supply chains and white-label partnerships became indispensable**. These forces led to a dual-system supply chain structure:

Market	Strategy
U.S. & Western markets	Non-China production via China+1 hubs (Mexico and Southeast Asia)
China & emerging markets	Local supply chain + white-label ecosystem

As a result, the global PC landscape is increasingly shaped by **one world operating under two systems**. In the U.S. market, brands pursue China+1 or non-China manufacturing to comply with policy pressures, while in China, companies lean harder on domestic supply chains and homegrown brands. The challenge for global notebook makers is no longer just where to produce, but how to compete across two parallel ecosystems.

This isn't decoupling—it's strategic bifurcation.

China's Closed-Loop System Is Becoming a New Competitive Baseline

China's white-label ecosystem offers scale, rapid customization, and aggressive cost advantages. Domestic brands such as Lenovo, Mechrevo, and Thunderobot, along with numerous smaller players, leverage this structure to target high price-performance segments and provide products across wide price bands. In doing so, many have quickly expanded market share in China, even outcompeting U.S. and Taiwanese brands in cost-sensitive markets.

This is the first half of a broader story. The next article examines how this split reshapes global competition, why white-label manufacturing is rising under geopolitical tensions, and how Taiwan and global brands must reposition to defend high-value segments in a divided supply chain landscape.



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Nora Chen specializes in notebook PC industry research and in advancing net-zero and low-carbon transition strategies for the information technology sector. She has been involved in several key initiatives commissioned by Taiwan's Ministry of Economic Affairs (MOEA), including the Low-Carbon Transformation Program for the Electronics and Information Industry and the Net-Zero Carbon Emission Promotion Program for the Printed Circuit Board (PCB) Industry, both overseen by the Industrial Development Bureau (IDB). Chen holds a Master's degree in Communication and Technology from National Yang Ming Chiao Tung University, Taiwan.