

From Reseller to Solutions Integrator: A Transformative Success Story

Partnering with Intel enabled Emdoor to grow its sales volume by expanding its product line to capitalize on the advanced power and capabilities of Intel's big-core processors



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This case study is part of a thought-leadership series on successful business transformations designed to help Intel's partners all over the world accelerate growth. Tomorrow starts together at the [Intel Partner Alliance](#).

The Challenge: Device Innovation Demands More Processing Power

Based in Shenzhen, China, Emdoor was founded in 2002 as a designer and manufacturer of handheld devices for the Chinese market. Since its inception, the company has been focused on R&D, with a commitment to the application and industrialization of new technologies.

Emdoor's original product line consisted of ruggedized ARM-processor-based tablets used by warehousing, logistics, manufacturing, energy, and utilities customers. Over the period from 2008 to 2012, the company recognized an opportunity to expand its product line to include consumer devices for a global market. The following market trends influenced a shift in Emdoor's strategic direction:

- **Mobile workforce expansion:** The trend toward a more mobile workforce was gaining momentum. Companies were increasingly adopting mobile technologies to empower field workers, improve productivity, and enhance communication.
- **Integration of advanced features:** Customers were seeking devices with advanced features and capabilities, such as barcode scanners, RFID readers, GPS functionality, cameras, and biometric sensors. The integration of these features into devices made them more versatile and suitable for a wide range of applications.
- **Emerging technologies:** The emergence of new technologies such as cloud computing, the Internet of Things (IoT), and mobile applications influenced device design and functionality. Customers expected devices that could seamlessly integrate with cloud services, IoT platforms, and enterprise software solutions.

To expand its product line to include a wider range of devices running on more powerful processors, Emdoor needed a technology partner with the expertise and capacity to help it innovate at speed and scale.



“Emdoor’s partnership with Intel has been transformational. They have provided us with the fullest support in terms of ecosystem development, industry-leading influence, strong technical support, and a powerful supply system. Our becoming part of the China Stock Exchange Market is the best and most concrete evidence for the power of Emdoor’s collaboration with Intel.”

— Zane Zhang
Chairman of Emdoor Group

The Solution: Partners on the Journey from Small-Core to Big-Core Processors

Emdoor embarked on a transformative journey aimed at extending its global reach, expanding product lines, and capitalizing on market shifts. In 2013, Intel was an early partner in this process, beginning with the launch of Intel’s China Tech Ecosystem (CTE) community, an alliance of fourteen local tablet manufacturers in Shenzhen, including Emdoor. Participating in Intel’s CTE community helped Emdoor access the resources and guidance needed to begin utilizing Intel® small-core processors such as Intel® Celeron®, Atom®, and Pentium® processors in its products. In the same year, Intel launched the Intel® LOEM Summit, an annual invite-only event where partners in the ecosystem, including Emdoor, could gather to interact with Intel executives, learn about the latest technologies, and exchange business ideas to drive mutual success.

In 2020 and 2021, Intel launched the Intel® ODM Growth Plan (now called Builder Growth Acceleration – ODM) and the Intel® Partner Alliance. The Intel ODM Growth Plan is a growth and scaling program designed to help valued partners expand into new market opportunities in an increasingly data-centric world. The Intel Partner Alliance provided Emdoor with an online marketplace to connect and matchmake with potential customers and ecosystem collaborators, along with incentives for adoption and technical and training support.

Emdoor’s participation in the Intel ODM Growth Plan and Intel Partner Alliance accelerated its efforts to move up to big-core processors such as Intel® Core™ processors, including the i3, i5, i7, and i9 series. The significantly higher performance levels provided by these processors met the needs of more powerful and versatile devices that are capable of handling demanding applications, advanced graphics, and multitasking scenarios. Utilizing Intel’s big-core processors has enabled Emdoor to offer a wider range of products with scalability and capacity for future innovation, ensuring that its devices remain relevant and competitive in the market for years to come.

Intel Offers Expertise and Resources for Innovation

The move from small-core to big-core designs is complex and challenging, requiring in-depth knowledge of hardware design, software optimization, and system integration. The Intel CTE supported Emdoor’s journey of innovation in a variety of ways:

- **Collaborative development:** Intel embedded engineers onsite with Emdoor to collaborate on creating customized solutions that fully utilized the capabilities of Intel’s processors. Intel engineers were instrumental in helping Emdoor to overcome challenges related to platform R&D, material selection, cooling issues, and device layout, among others.
- **Reference designs:** Emdoor benefited from Intel’s reference designs and guidelines, which served as templates for building products that are compatible with Intel processors. This helped ensure compatibility, reliability, and performance in Emdoor’s new solutions.
- **Technical expertise and training:** Intel® Partner University offered technical support and training programs tailored to Emdoor’s needs.
- **ODM Growth Plan (now Builder Growth Acceleration – ODM):** This integrated partner program drives growth into new markets and promotes global sales opportunities.
- **Virtual marketplace:** The Intel Partner Alliance offered Emdoor a virtual storefront in its online marketplace, where global customers could visit 24x7 to understand their latest Intel® architecture-based products, along with online matchmaking to establish connections between Emdoor and potential buyers.
- **Incentive points:** The Intel Partner Alliance Points Team created demand for Emdoor by offering original design manufacturers (ODMs) incentive points for designs based on Intel platforms.
- **Partner matchmaking:** Intel helped connect Emdoor with potential collaborators and new markets around the world through events like the Intel LOEM Summit.

Through these efforts, Intel empowered Emdoor to expand beyond its local market by creating innovative and compelling products that take advantage of the full range of Intel’s latest processor technologies.

Supply Chain Improvements

Joining the CTE and gaining access to Intel reference designs helped Emdoor to build out a new supply chain for products beyond tablets. Reference designs provide a standardized blueprint or template for product development, which helps streamline the design and manufacturing processes, reducing complexity and accelerating time to market (TTM).

To prevent issues with supply and production, Intel recommended that Emdoor use Collaborative Planning, Forecasting, and Replenishment (CPFR), a supply chain model that involves practices like cooperative inventory management and replenishment throughout the supply chain. CPFR combines the knowledge of multiple trading partners to plan and fulfill customer demand. It aims to improve supply chain efficiency and integration by establishing common metrics, processes, and language to help supply chain partners achieve these goals.

Intel guided Emdoor in its adoption of CPFR, establishing a working system involving Emdoor sales, manufacturers, distributors, and customers. These supply chain improvements enabled inventories to be moved more efficiently, in the correct quantities, and to the correct locations to meet customer demand (see Figure 1).

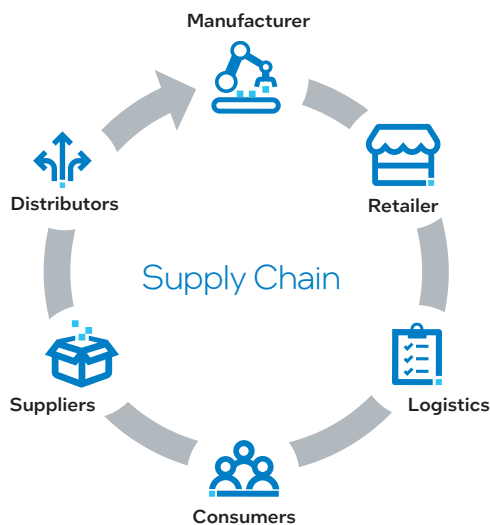


Figure 1. Elements of Emdoor’s integrated supply chain.

Intel Helped Emdoor Grow to Meet Pandemic Demand

Intel helped Emdoor anticipate and prepare for the impacts of the COVID pandemic, such as increased demand for devices to support remote workers and supply chain slowdowns in the pandemic’s wake.

Expanded Product Offerings

Working with Intel enabled Emdoor to expand its line of devices to include a much wider range of form factors:

- **Small form-factor devices:** Notebooks, tablets, and 2-in-1s (convertible devices).
- **Small PCs:** Desktop devices suitable for space-constrained environments, such as mini PCs and all-in-one PCs (AI PCs and AIOs).
- **Gaming PCs:** High-performance desktop computers optimized for gaming, with powerful processors, dedicated graphics cards, and advanced cooling systems.
- **Network-attached storage (NAS):** Storage devices that connect to a network, allowing multiple users to access and share files, media, and backups.
- **Workstations:** High-end desktop computers designed for professional tasks like engineering and scientific computing, featuring powerful CPUs, GPUs, and extensive memory and storage options.
- **Servers:** Computers designed to provide services, resources, and data to multiple clients or users over a network, commonly used in data centers and enterprise environments.

Increased Sales Volume

This expansion in product form factors helped drive increases in sales volume. In 2021, Emdoor shipped over 1.7 million units—more than doubling its volume from the previous year.

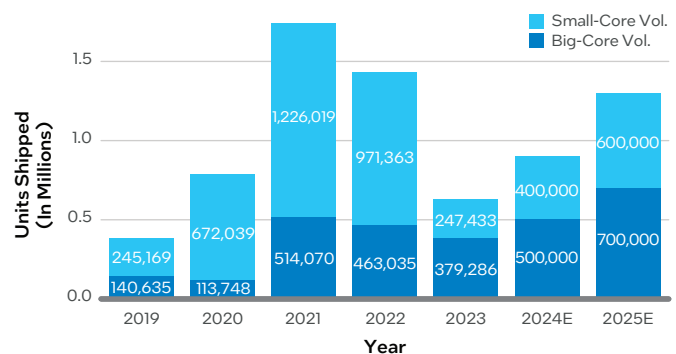


Figure 2. Units shipped from 2019 to 2025 (2024 and 2025 are estimated).

As reflected in Figure 2 on the previous page, Emdoor's partnership with Intel helped it meet the spike in demand for consumer devices from 2020–2022 and to weather the global market downturn in 2023. Emdoor's sales forecast shows strong growth, with big-core processors continuing to grow as a percentage of sales.

Company Growth and Recognition

Over the course of its partnership with Intel, the number of countries where Emdoor customers are located has exploded from just one (China) to over 80 worldwide. The number of employees increased from 86 to 860 as the company moved from a single floor to an entire office park. And in 2023, Emdoor was listed in the China Stock Exchange Market as further evidence of strong growth.

Learn More

You may find the following resources useful:

- [Emdoor website](#)
- [Intel press release on China Technology Ecosystem \(2014\)](#)

Visit the [Intel Partner Alliance](#) to become an Intel partner.

Spotlight on Emdoor

Emdoor, founded in 2002, is a designer and manufacturer of handhelds, tablets, notebooks, and PCs, as well as a provider of customized hardware and software solutions. Emdoor is one of China's largest and most experienced provider of computing systems and serves as ODM and OEM partner to many Tier 1 companies.

Emdoor excels at providing efficient industrial solutions in warehouse logistics, industrial automation, health care, petroleum exploration, outdoor mapping, automotive inspection, road enforcement, education, border patrol, retail services, self-service terminals, machine vision, smart home, intelligent transportation, and more.

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