

China's Semiconductor Expansion Is Creating a New Localization Challenge

China's integrated circuit production reached **451.4 billion units** in 2024 -up 22.2% year over year. As the industry grows, so does the complexity of communicating technical content effectively across Chinese markets.

AUTHOR: YANA DINCHIYSKA



A Market Growing at Remarkable Speed

451.4B

IC Units Produced

China's 2024 integrated circuit output, up
22.2% YoY

\$791.7B

Global Semiconductor Sales

Reached in 2025, up 25.6% from 2024

23%

Global 300mm Fab Capacity

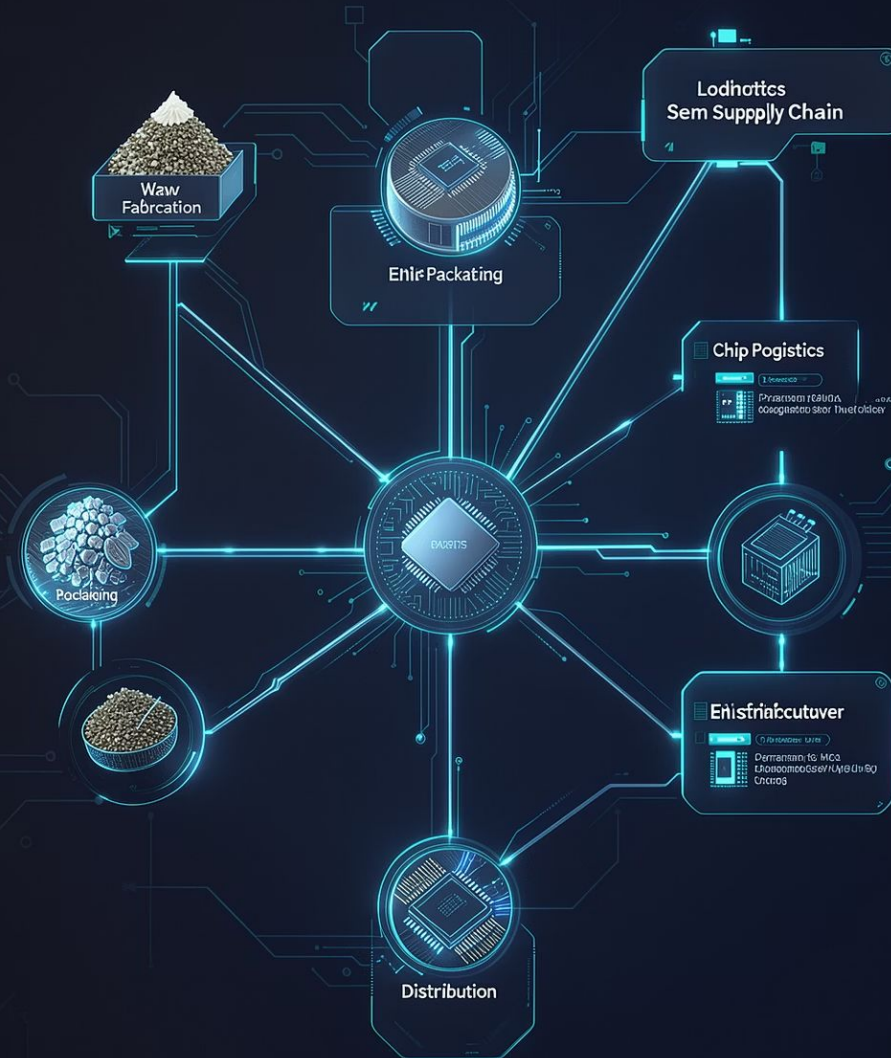
China's projected share by 2025, up from
19% in 2021

What This Means for Your Business

China's expansion spans fabs, equipment suppliers, research institutions, and distributors. For any company in this ecosystem, content must work effectively in Chinese markets - from process specs and equipment manuals to safety procedures, regulatory filings, and marketing materials.

The Localization Complexity Behind the Growth

China's semiconductor expansion is not concentrated in one company or region. It spans a broad network of fabs, suppliers, distributors, and research institutions - each with distinct terminology preferences, regulatory requirements, and communication expectations.



Engineering Teams

Process specs, equipment manuals, HMI interfaces

Manufacturing Personnel

Safety documentation, quality management

Compliance Teams

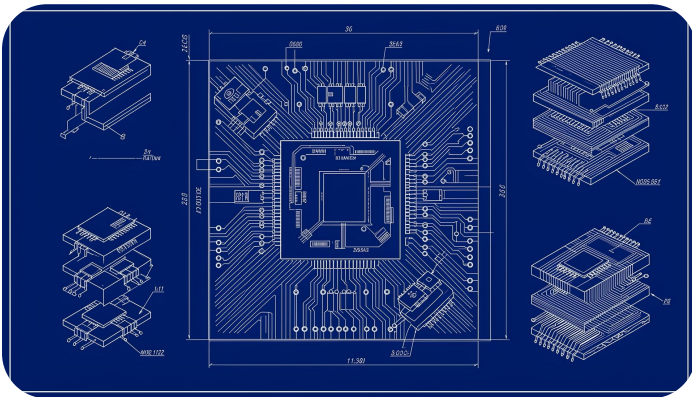
Regulatory materials, export-control documentation

Distributors & Customers

Product content, sales materials, training

CHALLENGE 1

Technical Terminology Requires Strict Control



Semiconductor content covers highly specialized terminology across wafer fabrication, lithography, deposition, etching, packaging, testing, and process control. A translation can be grammatically correct and still cause serious problems if a term conflicts with what engineers already use.

Glossaries & Translation Memory

Approved terminology reused consistently across updates

Subject-Matter Review

Technical experts validate phrasing and meaning

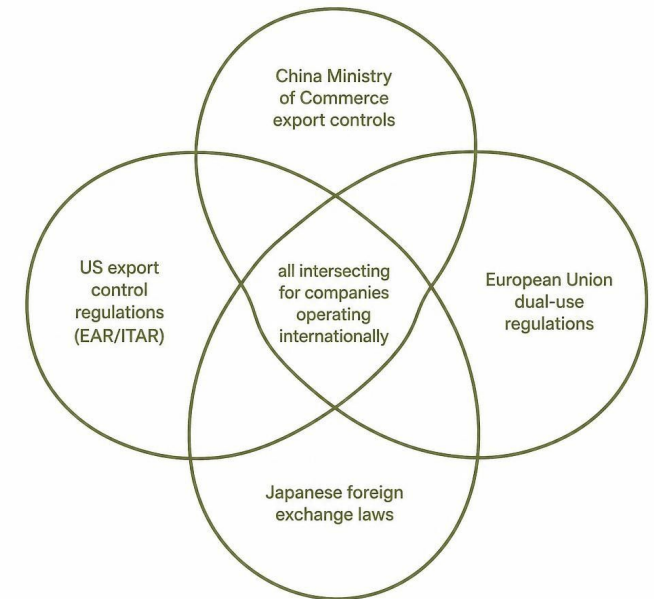
CHALLENGE 2

Regulatory Language Adds Another Layer of Risk

A Multi-Jurisdictional Environment

Semiconductor companies operate within overlapping export-control frameworks - China's Ministry of Commerce, U.S. regulations, European and Japanese requirements. Some applications require formal Chinese-language licensing documentation.

Small differences in terminology, scope, or wording can affect how documentation is understood by compliance teams and business partners. Regulatory localization is a **controlled technical task**, not a simple language exercise.



CHALLENGE 3

Cultural Context Affects Commercial Communication

1

Technical Documentation

Demands precision, consistency, and engineering accuracy above all else

2

Product & Marketing Content

Requires clarity, cultural relevance, and natural phrasing for local audiences

3

Sales Presentations

Must communicate value in a way that resonates with Chinese business culture

A Better Approach: Technical Accuracy + Market Knowledge

Effective semiconductor localization starts before the first sentence is translated. Content must be categorized by risk level, and each category receives a workflow matched to its requirements.

- **Assess & Categorize**

Separate content by risk: engineering docs, safety, regulatory, marketing

- **Align Terminology**

Build client-specific glossaries, translation memories, and approved term lists

- **Assign & Translate**

Linguists with relevant technical expertise handle each content category

- **Review & Validate**

Linguistic review, QA checks, and SME validation ensure consistency

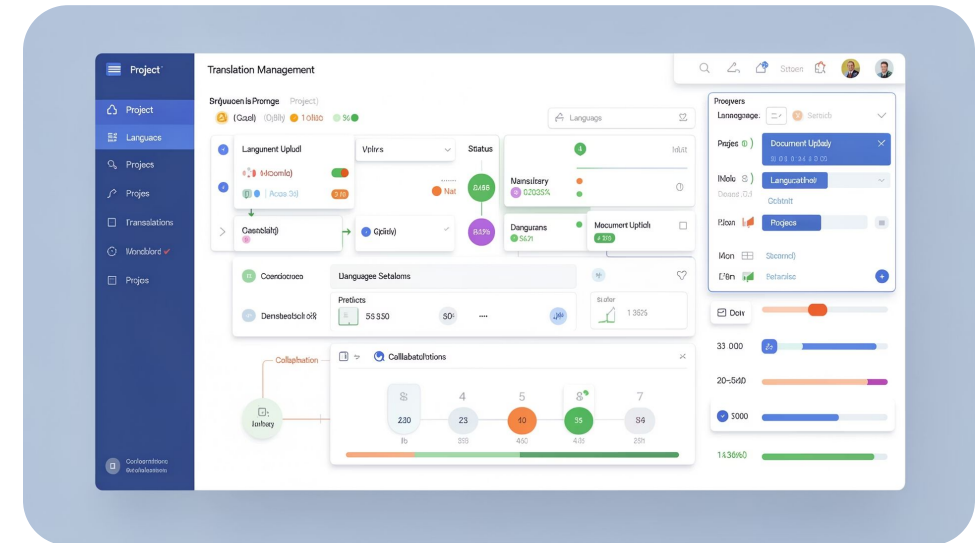


Localization Must Fit Your Existing Technology Environment

Workflow Flexibility Matters

Many semiconductor companies already operate established localization infrastructure - translation management systems, CAT tools, terminology databases, and internal review processes. A language partner must integrate into that structure, not disrupt it.

1-StopAsia supports major CAT tools and TMS environments with configurable workflows:



Human-led translation & editing



Machine translation post-editing



AI-assisted validation

Make Localization Part of Your China Market Strategy

Capturing China's semiconductor opportunity requires more than translating documents. Three capabilities must work together from the start:



Market Understanding

Industry dynamics, regional nuances, and supply chain context across China and Asia



Technical & Regulatory Accuracy

Precise terminology control, export-control compliance, and engineering fidelity



Local Language Adaptation

Content that reads naturally and appropriately for Chinese buyers and technical teams

Ready to review your localization workflow?

Contact Us