Apple Supply Chain: Foxconn, TSMC, and the Concentration Risks Hiding in Plain Sight

Supply chain - Supply Chain Analysis - October 7, 2026

Apple's SEC filings disclose a supply chain built almost entirely on Taiwanese and Chinese manufacturing - what the 10-K says and does not say about concentration risk

Apple generates more than $380 billion in annual revenue from products assembled almost entirely in China, using chips fabricated almost entirely in Taiwan, by a contract manufacturer that assembles approximately 70% of iPhone units worldwide. The company's 10-K filings disclose each of these dependencies - in language that is technically accurate, carefully constructed, and easy to underestimate if you read quickly.

Understanding Apple's supply chain risk means understanding what "outsourced manufacturing" actually looks like at scale, and why the SEC filing language matters even when it doesn't name specific companies.

Contract Manufacturing: Foxconn's Structural Position

Apple does not manufacture its own products. The company designs hardware, writes software, and manages supply chain relationships - manufacturing is entirely outsourced. The primary assembler is Hon Hai Precision Industry Co., Ltd., known globally as Foxconn.

Apple's 10-K does not name Foxconn. The filing uses language like: "Substantially all of the Company's hardware products are currently manufactured by outsourcing partners that are located primarily in China." The 10-K also states: "The Company's products are currently manufactured by a limited number of outsourcing partners."

The "limited number" language is SEC-speak for a concentration risk Apple is required to disclose. Foxconn's Zhengzhou facility alone - which employs up to 300,000 workers at peak iPhone production - handles a substantial share of iPhone final assembly. The 2022 Zhengzhou COVID lockdowns, which Foxconn managed under strict bubble conditions, demonstrated the operational fragility of concentration in a single facility: Apple warned of iPhone 14 Pro supply shortages directly traceable to the lockdown restrictions.

That supply disruption did not come from a natural disaster, a geopolitical event, or a contract termination. It came from a public health policy applied to a facility Apple's 10-K had already disclosed as a concentration risk. The 2022 episode is the clearest real-world example of a 10-K Risk Factor converting directly into a revenue miss.

TSMC: The Chip Foundry Behind Every Apple Silicon

Apple transitioned its Mac lineup from Intel to Apple Silicon starting in 2020 with the M1 chip. Every Apple Silicon chip - M1, M2, M3, M4, and the A-series iPhone chips - is fabricated at TSMC's advanced nodes. The A17 Pro in iPhone 15 Pro uses TSMC's N3B (3nm) process. The M4 uses TSMC's N3E. Apple is TSMC's largest customer, representing an estimated 20-25% of TSMC's total revenue.

Apple's 10-K Risk Factors address this: "The Company relies on single-source component suppliers for some components. Many of these components are standard, but some are customized or sole-sourced to the Company's specifications... We could be materially adversely affected if a supplier experienced production difficulties, a natural disaster, or failed to comply with our requirements."

The mention of "natural disaster" is not abstract in the context of Taiwan. A major earthquake near TSMC's Hsinchu Science Park, or military action affecting Taiwan, would not merely disrupt Apple's supply chain - it would eliminate the foundry capable of building Apple's custom silicon. No alternative foundry currently manufactures at N3 equivalent volumes. The transition time to qualify a new foundry for advanced node production is measured in years, not quarters.

What the filings show: TraderTools's Apple chain page maps every supplier, customer, and contract manufacturer relationship extracted from Apple's own 10-K filings and from counterparty filings - including TSMC's annual reports, which provide capacity allocation context Apple's own filing omits.

China Revenue Dependency: Both Sides of the Equation

Apple's exposure to China is bidirectional. China is both the primary manufacturing location and the third-largest geographic revenue segment. In fiscal year 2024, Greater China contributed approximately $67 billion - about 17% of total revenue. The 10-K segments this as "Greater China" and describes the risk plainly: "The Company has a significant number of retail stores in China, depends on manufacturing partners in China for many products, and has invested heavily in its China operations."

A deterioration in U.S.-China trade relations - tariffs, technology export restrictions, forced localization requirements - would affect Apple simultaneously as a manufacturer and a seller. This dual exposure is unusual among S&P 500 companies. Most large-cap companies have either manufacturing or revenue concentration in China, not both at scale.

Component-Level Concentration: Rare Earth Materials

Below the contract manufacturer level, Apple's supply chain depends on rare earth elements for magnets (in speakers, Taptic Engines, and MagSafe), display materials (yttrium in OLED), and battery chemistry (cobalt in lithium-ion cells). China controls approximately 85% of global rare earth processing capacity. Apple's 10-K addresses this: "We rely on various components that require rare earth minerals, and the supply of these materials may be subject to restrictions or volatility."

This risk interacts with the manufacturing concentration: rare earth materials are processed in China, fabricated into components by suppliers largely located in Asia, assembled by contract manufacturers in China, and sold in part back into China. The geographic concentration compounds at every tier.

What Apple Has Disclosed vs. What It's Done

Apple has been more transparent than most companies about its supply chain concentration, in part because the scale of its dependencies makes disclosure unavoidable. At the same time, the company has been actively working to diversify - Apple began manufacturing iPhone 14 units in India at Foxconn's Tamil Nadu facility in 2022, expanded India production to iPhone 15 and 16, and has supplier relationships with Pegatron and Luxshare in addition to Foxconn.

The 10-K language has evolved to reflect this: recent filings include language about India production alongside the China manufacturing disclosure. The structural shift is underway but incomplete - India currently represents a single-digit percentage of iPhone manufacturing capacity. The China concentration is real and the India diversification is real, and both are visible in the filings if you read them carefully.

For investors, the supply chain picture for Apple is one of acknowledged, well-disclosed, and slowly-improving concentration risk. The Apple supply chain map on TraderTools shows the current

state of disclosed relationships with filing citations - including the India facility expansion as it appears in recent 10-Q updates.

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