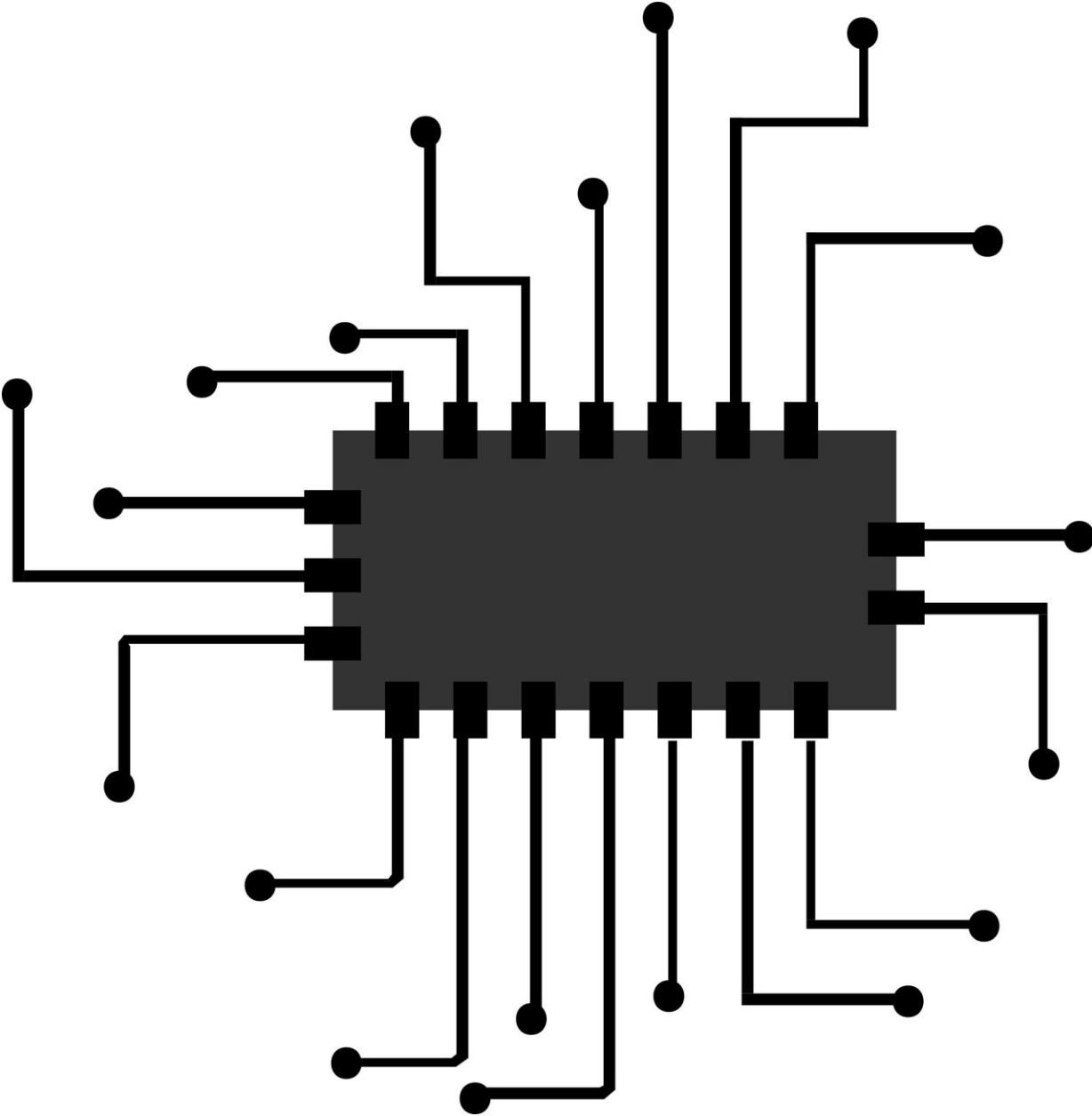


Five things to know about British chip champion Arm

September 14 2023



Credit: CC0 Public Domain

Here are five things to know about British chip designing giant Arm, which [will launch](#) a blockbuster listing on Wall Street on Thursday.

The company, owned by Japan's SoftBank, is targeting a valuation of more than \$52 billion on the Nasdaq stock exchange for its [initial public offering](#) (IPO), the largest New York has seen for almost two years.

Nearly all smartphones

Rather than making chips itself, Arm licenses designs for the essential component that enables devices to function.

Founded in 1990, it dominates the [global market](#) for chips for smartphones. Its processors were found in more than 99 percent of all the world's smartphones in 2022.

Arm technology is also found in the majority of tablets and digital TV screens, as well as sensors, [cloud services](#) and chips with integrated processors.

About 70 percent of the [global population](#) uses products based on Arm technology, according to the company's own estimates.

More than 30 billion chips with Arm design were shipped in the financial year to March 31, an increase of around 70 percent since 2016.

Arm earns royalties for nearly all the chips designed and produced using its technology.

A British success story

Arm is based in Cambridge, a city renowned for cutting-edge UK science and home to pharmaceutical giant AstraZeneca as well as one of the world's leading universities.

The announcement in March that Arm, a strategic British success story, was planning to list in New York, was a blow to the UK government.

Prime Minister Rishi Sunak had sought for months to persuade it to list in London, where the top-tier FTSE 100 shares index is seeking to remain a strong global force amid increased competition from European rivals following Brexit.

US chip giant Nvidia in February scrapped a blockbuster \$40-billion takeover of Arm, after objections from competition regulators in Britain, the European Union and the United States.

The failure of the bid was a financial blow for SoftBank, which had purchased Arm in 2016 for \$32 billion.

The UK government was particularly alarmed by the [takeover bid](#), given what it said was Arm's vital role in Britain's technology sector.

Artificial intelligence

Arm hopes to play a strategic role in generative artificial intelligence (AI), which is capable of learning from data to create new content such as text, music, speech, video and code.

The company says its microprocessors already make modern smartphones compatible with AI and machine learning.

Future generations of Arm chips could contribute to the emergence of algorithms for use in new applications, particularly in AI.

Open Source competition

One key challenge for Arm has been fierce competition from so-called "open source" technology that requires no royalty payments, hitting demand for its own products.

RISC-V is a freely-available standard which companies can deploy to design chips.

US chipmaker Qualcomm—locked in a [legal dispute](#) with Arm since 2022 over intellectual property issues—is a key RISC-V customer and wants the global industry to embrace it.

"The growing adoption of RISC-V chip architecture is the biggest risk for Arm," noted Third Bridge analyst Albie Amankona, highlighting its lower cost.

Dependence on China

Nearly 25 percent of Arm's turnover is generated by a single client—Arm China.

Despite its name, the latter is neither controlled by Arm nor by SoftBank, which indirectly owns a minority share.

"We depend on our commercial relationship with Arm China to access the (Chinese) market," said Arm in its pre-IPO documents.

"If that commercial relationship no longer existed or deteriorates, our

ability to compete in the (Chinese) market could be materially and adversely affected," it warned.

The company is particularly susceptible to the rising international tensions around the strategic [chip](#) sector, particularly between the United States and China.

© 2023 AFP

Citation: Five things to know about British chip champion Arm (2023, September 14) retrieved 27 April 2024 from <https://techxplore.com/news/2023-09-british-chip-champion-arm.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.