

March 31, 2022

Mr. Tim Cook
Chief Executive Officer
Apple Inc.
One Apple Park Way
Cupertino, CA 95014

Dear Mr. Cook:

I write to express serious concern with recent reports¹ that Apple is considering purchasing NAND chips, or other integral technological components, from Chinese chip manufacturer Yangtze Memory Technologies Co. (YMTC). YMTC is a rapidly expanding, state-owned company with extensive links to the Chinese Communist Party's (CCP) armed wing, the People's Liberation Army (PLA). It is unacceptable that sales of the next generation of iPhones would end up strengthening the Chinese military and put the lives of American service-members at risk as a result.

Founded in 2016, YMTC was created as a joint venture by several investment funds owned, directed, or otherwise administered by the CCP. Chief among those entities is Tsinghua Unigroup, a state company currently "spearheading China's push to develop a homegrown semiconductor sector in a do-or-die resistance against U.S. pressure in the global chip market."² In the six years since its founding, YMTC has enjoyed meteoric growth, thanks to the billions it receives in direct subsidies from Beijing. The bulk of that investment has come from the CCP's National Integrated Circuit Industry Fund, a massive, \$150-billion pool of government money³ intended to circumvent World Trade Organization rules and build up China's semiconductor industry by acquiring foreign competitors and equipment.⁴

After years of preparation, YMTC is working aggressively to expand its fabrication capacity and global market-share. A June 2021 White House report described YMTC as Beijing's "national champion memory chip producer" and warned that the company "may have the capacity to produce as many as 200,000 wafers per month by 2022, over twice Intel's current NAND production capacity, representing a potential low-cost threat to U.S.-based memory companies."⁵ If Beijing were to flood the market with YMTC chips and succeed with such plans, the results for American technological leadership and national security would be catastrophic. By facing a huge, state-subsidized competitor in China, U.S. chip manufacturers and those of our allies and partners are already competing in unfair circumstances – the same type of uneven playing field that has doomed American efforts in other advanced industries. Enriching CCP-backed competitors like YMTC would only force further consolidation, downsizing, and

¹ <https://www.lightreading.com/semiconductorsnetwork-platforms/apple-iphone-14-may-feature-chinese-chips-with-military-links/d/d-id/776350>

² <https://asia.nikkei.com/Business/China-tech/Inside-Tsinghua-Unigroup-a-key-player-in-China-s-chip-strategy>

³ <https://crsreports.congress.gov/product/pdf/R/R46767>

⁴ Mulvenon, James. "BLUE HERON: Yangtze Memory Technologies Co.." SOS International LLC. February 2021

⁵ <https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf>

market exits, posing a profound threat to American national defense and other critical sectors that rely on trustworthy chips.

Industry experts have repeatedly noted the deep connections between YMTC and the PLA. Reports have emerged of the shared affiliations between members of the firm’s corporate leadership and the CCP’s military modernization program, and Tsinghua Holdings, which founded and controls Tsinghua Unigroup, administers direct PLA suppliers.⁶ While the complex web of relationships among these Chinese entities is opaque by design, there should be no ambiguity regarding its end-goal: to realize Beijing’s Military-Civil Fusion aspirations and direct Chinese advanced manufacturing and technological efforts to build what the CCP terms a “world-class military.” Such a capacity would mean being able to “deter the United States and other leading military powers while coercing its neighbors into accepting Beijing’s expansive sovereignty claims and leadership position in the Indo-Pacific region,” according to the U.S.-China Economic and Security Review Commission.⁷

The success of YMTC is also integral to Beijing’s Made in China 2025 national strategy, which more broadly aims to supplant United States leadership in economic, military, and technological innovation – and necessarily erode American prosperity and economic security in the process. In past addresses speaking on behalf of Apple, you have said that “[w]e love this country. We’re patriots. This is our country. [We w]ant to create as many jobs in the U.S. as we can.”⁸ I take your words seriously, which is why I was surprised to learn that Apple was reportedly considering partnering with a malign, PLA-connected firm to supply chips for its hardware. Why a pro-America company would consider such a relationship with our key adversary – especially when market analysts have already raised flags about YMTC’s performance compared to peer competitors – is hard to comprehend.

In a more just world, the Biden Administration would have already added YMTC to its trade blacklists, including the U.S. Department of Commerce’s Entity List. This should occur immediately. But until that happens, America’s premier tech companies should recognize the tremendous risks – both to American national security and to their own ledgers, should any presidential administration update its export control listings in the near future – incurred by doing business with YMTC for its memory chips or any other products. No U.S. consumer should be made complicit in the PLA’s evils simply because he or she owns an iPhone.

Thank you for your attention to this matter. I look forward to your prompt response.

Sincerely,



Marco Rubio
U.S. Senator

⁶ <https://www.forbes.com/sites/roslynlayton/2021/05/13/commerce-allows-sales-to-memory-chip-maker-ymtc-despite-ties-to-chinese-military/?sh=4d9d7fa269c9>

⁷ <https://www.uscc.gov/sites/default/files/2019-11/Chapter%204%20Section%201%20-%20Beijing%E2%80%99s%20E2%80%9CWorld-Class%E2%80%9D%20Military%20Goal.pdf>

⁸ <https://www.vox.com/2018/3/28/17172204/tim-cook-revolution-apple-ceo-iphone-china-united-states-manufacturing>