

September 21, 2022

The Honorable Avril Haines Director Office of the Director of National Intelligence 1500 Tysons McLean Drive McLean, VA 22102

Dear Director Haines:

We write to convey our extreme concern about the possibility that Apple Inc. will soon procure 3D NAND memory chips from the People's Republic of China (PRC) state-owned manufacturer Yangtze Memory Technologies Co. (YMTC). Such a decision would introduce significant privacy and security vulnerabilities to the global digital supply chain that Apple helps shape given YMTC's extensive, but often opaque, ties to the Chinese Communist Party (CCP) and concerning PRC-backed entities. In addition, we write to convey that any decision to partner with YMTC, no matter the intended market of the product offerings developed by such a partnership, would affirm and reward the PRC's distortive and unfair trade practices, which undermine U.S. companies globally by creating significant advantages to Chinese firms at the expense of foreign competitors. Last year, the Biden Administration described YMTC as China's "national champion memory chip producer," which supports the CCP's efforts to counter U.S. innovation and leadership in this space.

In July 2022, we wrote to Commerce Secretary Gina Raimondo to warn of the threat YMTC poses to U.S. national security and to request that it be added to the Bureau of Industry and Security's Entity List. We made these arguments based on the company's central role in CCP efforts to supplant U.S. technological leadership, including through unfair trade practices. YMTC also appears to have strong ties to the PRC's military-civil fusion program, as shown through its investors and partnerships; its parent company, Tsinghua Unigroup, allegedly supplies the PRC military.²

The PRC has heavily subsidized YMTC for several years, enabling the company to rapidly expand production and sales in China and internationally. Since its formation in 2016, YMTC's nearly \$24 billion in PRC subsidies³ triggered explosive growth, helping to prepare the company's plan to launch a second plant in Wuhan as early as the end of this year.⁴ At a time when overcapacity is potentially disrupting the market for chipmakers, these subsidies could enable YMTC to distort this often highly cyclical market, selling memory chips below cost in an

 $^{^{1}\,\}underline{\text{https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf}}$

² https://www.forbes.com/sites/roslynlayton/2021/01/04/china-aims-to-dominate-flash-memory/?sh=318918a42fd6

³ https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf

⁴ https://asia.nikkei.com/Business/Tech/Semiconductors/China-s-Yangtze-Memory-takes-on-rivals-with-new-chip-plant

effort to push out competitors.⁵ In addition, in April, reports alleged that YMTC may have breached the U.S.'s foreign direct product rule for supplying smartphone and electronics components to Huawei.⁶

For these reasons, we request that you coordinate among the relevant intelligence community (IC) components a comprehensive review and analysis of YMTC and the threat that a suppler partnership arrangement between it and Apple would pose to U.S. national and economic security. The review should consider, among other issues:

- How the CCP supports the YMTC as part of its plan to bolster and indigenize China's semiconductor industry and to displace chipmakers from the United States and allied and partnered nations;
- YMTC's role in assisting other Chinese firms, including Huawei, to evade U.S. sanctions;
- YMTC's role in the PRC's military-civil fusion program and its linkages to the People's Liberation Army; and
- The risks to U.S. national and economic security of this potential procurement.

Policymakers have for several years now conveyed to the American public the importance of a competitive semiconductor industry to U.S. national and economic security. A partnership between Apple and YMTC would endanger this critical sector and risk nullifying efforts to support it, jeopardizing the health of chipmakers in the U.S. and allied countries and advancing Beijing's goal of controlling the global semiconductor market. Buoyed by a major contract with a leading global equipment vendor such as Apple, YMTC's success would threaten the 24,000 American jobs that support memory chip production. More broadly, such a partnership would also threaten the opportunities this market provides for research at U.S. universities and further development of memory chips for civilian and military uses.⁷

We once again request that you convene the relevant IC components to review and assess YMTC's ties to the CCP and produce a comprehensive public report on YMTC, which can be used to inform federal agencies and the public as to the nature and risks associated with YMTC and similar companies. We look forward to your attention to this critical matter and request a response by October 1, 2022.

Sincerely,

Marco Rubio U.S. Senator

Mark R. Warner U.S. Senator

Mark R Wines

⁵ https://www.tomshardware.com/news/nand-prices-expected-to-drop-eight-to-thirteen-percent

⁶ https://www.ft.com/content/8078f71e-d115-43c1-8f68-e5b6ec6cfcda

⁷ https://chinatechthreat.com/wp-content/uploads/2022/06/Silicon-Sellout.-How-Apples-Partnership-With-Chinese-Military-Chip-Maker-YMTC-Threatens-National-Security.pdf

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Charles E. Schumer U.S. Senator

John Cornyn U.S. Senator