April 13, 2021

The Honorable Joseph R. Biden President of the United States The White House 1600 Pennsylvania Ave., NW Washington, D.C. 20500

Dear Mr. President,

We write to express our strong support for your Build Back Better agenda to prioritize domestic research, investment, and manufacturing incentives for key technology areas as a means to revitalize our national and economic security and to reduce the national dependency for critical items from the People's Republic of China, which is a concerning vulnerability for key supply chains.

Throughout our careers we have often focused on military investment, intelligence, and diplomacy as frontline tools to pursue our country's interests in the world. Assured access is much more than a military funding issue. Our future national security posture is completely linked to maintaining strong research, development, and manufacturing capabilities. These traditional national security capabilities will remain critical for our government as we seek to compete with China, but we also acknowledge that the real center of gravity in our competition will be technology. Regaining our position as a global technology and manufacturing leader will require bold government action.

Who leads in future technology developments, standards, and the means of secure production and supply will be the true decider of the type of world we build with our allies and partners. The strategic funding plan put forward today will create a great economic return and improved resilience for generations.

Given this, we encourage your administration to begin a process that will require a whole of nation focused investment to ensure successful execution in furthering our technological and industrial competitive advantages while building resilient supply chains by utilizing a future funding vehicle to resource three key pieces of legislation: the CHIPS for America Act, the USA Telecommunications Act, and the Endless Frontier Act.

1. Fund the CHIPs for America Act to ensure America continues to lead the world in microelectronics technologies

As you begin your 100-day supply chain review, we wish to underscore that a self-sustaining microelectronics ecosystem must be established to ensure access to next generation microelectronics technology and manufacturing. This will mean the difference between the U.S. setting global technology standards, accepting someone else's, or depending on foreign countries for access to advanced microelectronics. The U.S. must adopt an offensive strategy to build out domestic manufacturing capabilities to reduce supply chain vulnerabilities while increasing investment in semiconductor manufacturing and research and development.

Inclusion of the bipartisan "Creating Helpful Incentives to Produce Semiconductors for America Act" in the FY2021 National Defense Authorization Act (NDAA) was an important first step. Going forward, we implore you to work with Congress to appropriate resources to robustly fund this legislation over the next five years. This should include at least \$20 billion for a new partnership initiative between the U.S.

government, industry, and private capital to build a long-term sustainable national security and economic imperative; a federal grant program to incentivize and strengthen advanced U.S. domestic manufacturing capacity; up to \$20 billion for investment tax credits to promote semiconductor manufacturing and related research; and \$14 billion over 10 years for research and the establishment of a National Semiconductor Technology Center to promote and prioritize advancements in U.S. microelectronic capabilities.

2. Promote the rollout of Open RAN and 5G technologies and fund the USA Telecommunications Act Accelerating the rollout of secure 5G technologies is essential to unlocking future U.S. economic growth. The U.S. needs to provide robust federal support for development and deployment of next-generation wireless networks which will require microelectronics. The promised \$300 billion in research and development funding for breakthrough technologies, including for 5G in the Build Back Better plan, is an excellent starting point.

Furthermore, efforts by foreign adversaries to dominate the global 5G sector through government-backed "national champion" firms have brought the challenge of secure supply chains into sharp focus. It is critical to build on the progress of the **USA Telecommunications Act**, which was passed into law as part of the FY2021 NDAA. Fully funding this bipartisan legislation at \$750 million will support the Public Wireless Supply Chain Innovation Fund, administrated by the National Telecommunications and Information Administration (NTIA), which targets the use and advancement of innovative technologies to upgrade wireless networks.

We must also work collaboratively with international partners who share our concerns over 5G security. Continuing the current leadership vacuum will only embolden our competitors, leaving our allies vulnerable to untrusted equipment and threatening the security of allied intelligence sharing. Funding the State Department-led Multilateral Fund at \$750 million will provide grants to allies and partners as we, as a consortium, build out and upgrade our telecommunications footprint with trusted vendors.

3. Support implementation and funding of the Endless Frontier Act

U.S. dominance in critical and emerging technologies hinges on our ability to invest in and cultivate a domestic, scientific environment with appropriate federal funding.

Therefore, we strongly encourage your administration to support the **Endless Frontier Act**, a bipartisan piece of legislation which calls for increased investment in domestic technologies and innovation. More specifically, the bill would increase federal funding by \$100 billion over a period of five years to focus on research in artificial intelligence (AI), high-performance computing, robotics, automation, and advanced manufacturing. Ultimately, funding legislation like the Endless Frontier Act will help your administration realize the fundamental goals of the Build Back Better plan and allow the U.S. to confront the challenges posed by China's technological advancements. An additional \$10 billion would support regional technology hubs throughout the country to strengthen the innovation ecosystem. This would include a focus on entrepreneurship, training and education, and supply chain development to develop the U.S. technologies that emerge from research.

As we did during the time of the Space Race when the U.S. government encouraged and marshalled U.S. technology to overcome an existential threat, we must similarly embark on a path to self-reliance for our national needs, securing our nation's many strengths for future generations.

Sincerely,

General Keith Alexander

Former Director, National Security Agency

John Brennan

Former Director, Central Intelligence Agency

Robert Cardillo

Former Director, National Geospatial-

Intelligence Agency

James Clapper

Former Director of National Intelligence

Michèle Flournoy

Former Under Secretary of Defense for Policy

Stephen Hadley

Former National Security Advisor

Jane Harman

Former Ranking Member, House Intelligence

Committee

General Michael Hayden

Former Director, National Security Agency

Former Principal Deputy Director of National

Intelligence

Former Director, Central Intelligence Agency

John McLaughlin

Former Acting Director and Deputy Director,

Central Intelligence Agency

Michael Morell

Former Acting Director and Deputy Director,

Central Intelligence Agency

Leon E. Panetta

Former Secretary of Defense

Former Director, Central Intelligence Agency

Matthew Pottinger

Former Deputy National Security Advisor

Eric Schmidt

Commissioner, National Security Commission on

Artificial Intelligence

Former Chief Executive Officer, Google

George Tenet

Former Director, Central Intelligence Agency

Frances Townsend

Former Assistant to the President for

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Dr. Michael Vickers

Former Undersecretary of Defense for

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Admiral James "Sandy" Winnefeld Jr.

Former Vice Chairman of the Joint Chiefs of Staff

Robert O. Work

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Former Deputy Secretary of Defense