

A Letter from the Chairman & the CEO

SCSP is developing a series of National Action Plans to ensure U.S. leadership in key technology areas. This action plan addresses advanced compute and microelectronics, technologies which touch all areas of life in the digital age. Microelectronics, or chips, are found in every device that transmits an electrical signal, from smartphones to the world's most powerful supercomputers. Exponential gains in computational power – also known as compute – have underpinned the past decade of rapid progress in AI. As we enter the age of AI, these technologies will only grow in importance.

The national security imperative that the United States and its allies and partners lead the world in this critical technology sector cannot be overstated. Compute allows us to predict extreme weather events, manage our nuclear weapons stockpiles, and develop therapeutics for deadly pathogens like COVID-19. However, we are entering an era in which exponential gains in compute are no longer assured. Moore's Law, the prediction that available compute power would double every two years, is breaking down as the chip industry pushes up against the laws of physics.

For nearly the entire history of the chip industry, the United States has enjoyed a position as the global leader in microelectronics innovation. But continued leadership is not assured. As microelectronics became more costly to produce, firms outsourced much of their production capacity to East Asia, leaving the United States dependent. Against this backdrop, disruptive technologies are emerging that could change the nature of computation. Passage of the CHIPS & Science Act in August created a window for the United States to ensure long-term leadership in these technologies – but achieving leadership will require bold action.

Drawing on expertise from academia, the private sector, and government, this action plan combines bold technology “moonshots” with organizational changes and policies that would position the United States for durable advantage. Rather than address every aspect of these vast sectors, our action plan focuses on solving for U.S. advantage from a national security perspective. We invite you to join us in this effort to ensure that the United States, along with its democratic allies and partners, is positioned and organized to win the techno-economic competition between now and 2030, the critical window for shaping the future.



Eric Schmidt,
Chairman, SCSP



Ylli Bajraktari,
President & CEO, SCSP