The CHIPS Program Office Vision for Success: Two Years Later
APPENDIX

CHIPS Program Office Awards

ABSOLICS
Direct Funding: Up to $75 million
Covington, Georgia

The U.S. Department of Commerce awarded Absolics, a subsidiary of the Korea-based SKC, up to $75 million in direct funding which supports the construction of a 120,000 square-foot facility in Covington, Georgia, and the development of substrates technology for use in semiconductor advanced packaging. This investment in Absolics commercial facility will support the U.S. semiconductor supply chain by manufacturing a new advanced material.

AMKOR TECHNOLOGY
Direct Funding: Up to $407 million
Peoria, Arizona

The U.S. Department of Commerce awarded Amkor Technology Arizona, Inc., a subsidiary of Amkor Technology, Inc., up to $407 million in direct funding to support the construction of a new advanced packaging and test facility. Upon completion, the facility is expected to produce approximately 14,500 wafers per month and 3,700,000 units per month processed through its assembly and test equipment in Peoria, Arizona.

BAE SYSTEMS, INC.
Direct Funding: Up to $35.5 million
Nashua, New Hampshire

The U.S. Department of Commerce awarded BAE Systems Electronic Systems, a business unit of BAE Systems, Inc., up to $35.5 million in direct funding to support the modernization of the company's Microelectronics Center in Nashua, New Hampshire, which is designated as a Trusted Foundry by the U.S. Department of Defense. The investment will contribute to a more resilient semiconductor supply chain in the United States and bolster the company's ability to serve mission-critical U.S. defense programs.

CORNING
Direct Funding: Up to $32 million
Canton New York

The U.S. Department of Commerce awarded up to $32 million to enable Corning, one of the largest industrial employers in New York's North Country region, to increase production of Corning HPFS Fused Silica (High Purity Fused Silica) (HPFS) and EXTREME ULE Glass (Ultra Low Expansion Glass) and scale a novel technology manufacturing process in Canton. HFPS and ULE materials are key components of deep ultraviolet (DUV) and extreme ultraviolet (EUV) lithography machines and photomasks, which are important for the manufacturing of leading-edge semiconductors, and this new technology would improve EUV performance with a lower carbon footprint.

EDWARDS VACUUM
Direct Funding: Up to $18 million
Genesee County, New York

The U.S. Department of Commerce awarded Edwards Vacuum up to $18 million to support the construction of a greenfield state-of-the-art manufacturing facility in Genesee County, New York and production of dry vacuum pumps, which are needed for semiconductor production. The investment will helpful a reliable domestic supply of important equipment for semiconductor manufacturing and is a meaningful step towards strengthening U.S. economic and national security, as currently, there is no domestic production of semiconductor-grade dry vacuum pumps. These pumps are essential for both advanced and legacy semiconductor fabrication: installed beneath the fab, they maintain the chamber environment where wafers are processed by evacuating toxic fumes and chemicals.

ENTEGRIS
Direct Funding: Up to $77 million
Colorado Springs, Colorado

The U.S. Department of Commerce awarded Entegris up to $77 million in direct funding to support the construction of a state-of-the-art manufacturing center in Colorado Springs, Colorado. The center is being built in multiple phases: the first phase will support the production of Front Opening Unified Pods (FOUPs) and liquid filter membranes, and the second phase is expected to support the production of advanced liquid filters and fluid handling solutions. This investment will onshore critical semiconductor supply chain materials and solutions for leading-edge chip production.

GLOBALFOUNDRIES
Direct Funding: Up to $1.575 billion
Malta, New York and Burlington, Vermont

The U.S. Department of Commerce awarded GlobalFoundries (GF) up to $1.575 billion in direct funding under the CHIPS and Science Act. The award will bolster U.S. competitiveness in current-generation and mature-node (C&M) semiconductor production by supporting the company's total investment of approximately $13 billion in its U.S manufacturing sites in New York and Vermont, which produce essential automotive, communications, and defense semiconductor technologies. The investment includes a new state-of-the-art facility in New York, the capacity expansion and modernization of an existing facility in New York, an additional expansion to provide advanced packaging technology, and the complete modernization of the company's operations in Vermont.

GLOBALWAFERS
Direct Funding: Up to $406 million
Sherman, Texas and St. Peters, Missouri

The U.S. Department of Commerce awarded GlobalWafers America, LLC (GWA) and MEMC LLC (MEMC), subsidiaries of GlobalWafers Co., Ltd. (GlobalWafers), up to $406 million to support the construction of new wafer manufacturing facilities in Sherman, Texas and St. Peters, Missouri. The GWA facility in Texas will be the first advanced high-volume 300mm silicon wafer facility in the United States; silicon wafers from this facility will be used in the manufacturing of advanced leading-edge and memory devices. The MEMC facility in Missouri will serve as a key domestic production site for 300mm silicon-on-insulator (SOI) wafers; SOI wafers from this facility will be a key input for devices used across the defense and aerospace sectors.

HEMLOCK SEMICONDUCTOR
Direct Funding: Up to $325 million
Hemlock, Michigan

The U.S. Department of Commerce awarded Hemlock Semiconductor (HSC) up to $325 million in direct funding to support the construction of a new manufacturing facility on HSC's existing campus in Hemlock, Michigan, dedicated to the production of hyper-pure semiconductor-grade polysilicon. Polysilicon is the foundational material for microprocessors, artificial intelligence chips, memory, and power devices, and is the physical substance that gives chips their semiconductor properties. The

Department's investment in HSC will significantly expand U.S. production capacity of hyper-pure semiconductor grade polysilicon, supporting economic and national security. HSC is the only U.S.-owned manufacturer of hyper-pure polysilicon, and one of just five companies in the world producing it at the purity-level needed for leading-edge semiconductor production.

HP INC.
Direct Funding: Up to $53 million
Corvallis, Oregon

The U.S. Department of Commerce awarded up to $53 million in direct funding to HPI Federal LLC under the CHIPS and Science Act to support the expansion and modernization of the existing facility of HP Inc. ("HP") in Corvallis, Oregon, which is part of HP's "lab-to-fab" ecosystem in the region that spans from research and development ("R&D") activities to commercial manufacturing operations. Through this investment, the Department will help enhance U.S. technological leadership by driving innovation of groundbreaking semiconductor technologies that serve important end markets, notably including life sciences.

INFINERA
Direct Funding: Up to $93 million
San Jose, California and Bethlehem, Pennsylvania

The U.S. Department of Commerce awarded Infinera up to $93 million to support the construction of a new fab in San Jose, California, and a new advanced test and packaging facility in Bethlehem, Pennsylvania and is expected to increase Infinera's existing domestic manufacturing capacity by an estimated factor of 10. As the United States becomes more reliant on larger amounts of data driving increased energy usage, Infinera's indium phosphide-based photonic integrated circuits (InP PICs) are increasingly important, using light to transfer information with greater energy efficiency. The PICs and optical modules are key components in optical network communications and enable the fast, reliable transfer of large amounts of data communications, spanning short-to long-distance broadband networks; between AI and machine-learning clusters inside the data center; and between data centers.

INTEL CORPORATION
Direct Funding: Up to $7.865 billion
Chandler, Arizona; Rio Rancho, New Mexico; New Albany, Ohio; and Hillsboro, Oregon

The U.S. Department of Commerce awarded Intel up to $7.865 billion in direct funding under the CHIPS and Science Act. This funding will support Intel's expected U.S. investment of nearly $90 billion by the end of the decade, part of the company's overall $100+ billion expansion plan, to expand capacity and capabilities at its sites in Arizona, New Mexico, Ohio, and Oregon. With this funding, Intel plans to develop a robust domestic semiconductor ecosystem, advancing U.S.-based leading-edge production.

MICRON
Direct Funding: Up to $6.165 billion
Clay, New York and Boise, Idaho

The U.S. Department of Commerce awarded Micron Technology (Micron) up to $6.165 billion in direct funding under the CHIPS and Science Act. This funding will support Micron's two-decade vision to invest approximately $100 billion in New York and $25 billion in Idaho. With this funding, Micron plans to expand the development and production of the most advanced memory semiconductor technology in New York and Idaho.

POLAR SEMICONDUCTOR
Direct Funding: Up to $123 million
Bloomington, Minnesota

The U.S. Department of Commerce awarded Polar Semiconductor (Polar) up to $123 million in total direct funding under the CHIPS and Science Act to expand and modernize the company's manufacturing facility in Bloomington, Minnesota, which is expected to almost double its U.S. production capacity of sensor and power chips within two years. The CHIPS award catalyzes an investment of more than $525 million from private, state, and federal sources to transform Polar from a majority foreign-owned in-house manufacturer to a majority U.S.-owned commercial foundry, expanding opportunities for U.S. chip designers to innovate and produce technologies domestically.

ROCKET LAB
Direct Funding: Up to $23.9 million
Albuquerque, New Mexico

The U.S. Department of Commerce awarded Rocket Lab, the parent company of space power subsidiary provider SolAero Technologies Corp., up to $23.9 million in direct funding to create a more robust and resilient supply of space-grade solar cells that power spacecrafts and satellites. The investment will support a modernization and expansion of Rocket Lab's solar cell facility in Albuquerque, New Mexico, to increase its production capacity by 50%.

SAMSUNG ELECTRONICS
Direct Funding: Up to $4.745 billion
Austin, Texas and Taylor, Texas

The U.S. Department of Commerce awarded Samsung Austin Semiconductor, LLC, a subsidiary of Samsung Electronics (Samsung), up to $4.745 billion in direct funding under the CHIPS and Science Act to turn Samsung's existing presence in Central Texas into a comprehensive ecosystem for the development and production of leading-edge, current generation, and mature node logic chips in the United States, including two new leading-edge logic fabs and an R&D fab in Taylor, as well as an expansion to the company's existing Austin facility. Samsung – the only leading-edge semiconductor company that is a leader in both advanced memory and advanced logic technologies – is expected to invest over $37 billion dollars in the region in the coming years.

SK HYNIX
Direct Funding: Up to $458 million
Available Loan: $500 million
West Lafayette, Indiana

The U.S. Department of Commerce awarded SK hynix up to $458 million in direct funding under the CHIPS and Science Act to establish a high-bandwidth memory (HBM) advanced packaging fabrication and research and development (R&D) facility. This funding will support and build upon SK hynix's investment of approximately $3.87 billion in West Lafayette, Indiana, to build a memory packaging plant for artificial intelligence (AI) products and an advanced packaging R&D facility.

TEXAS INSTRUMENTS
Direct Funding: Up to $1.61 billion
Sherman, Texas and Lehi, Utah

The U.S. Department of Commerce awarded Texas Instruments (TI) up to $1.61 billion in direct funding under the CHIPS and Science Act to strengthen domestic supply chain resilience, advance our national security, and bolster U.S. competitiveness in current-generation and mature-node semiconductor production. The funding would support TI's investment of more than $18 billion through the end of decade for the construction of three state-of-the-art fabrication facilities, including two in Texas and one in Utah.

TSMC ARIZONA
Direct Funding: Up to $6.565 billion
Phoenix, Arizona

The U.S. Department of Commerce awarded TSMC Arizona up to $6.6 billion in direct funding under the CHIPS and Science Act. This funding will support TSMC's investment of more than $65 billion in three greenfield leading-edge fabs in Phoenix, Arizona, which will manufacture the world's most advanced semiconductors. With this funding, TSMC Arizona plans to construct a scaled leading-edge cluster in Arizona, bringing some of the most-advanced process technologies to the United States.

CHIPS Program Office Proposed Investments

AKASH SYSTEMS
Proposed Direct Funding: Up to $18.2 million
West Oakland, California

The U.S. Department of Commerce and Akash Systems signed a non-binding preliminary memorandum of terms (PMT) to provide up to $18.2 million in proposed direct funding to support the construction of a 40,000 square foot cleanroom space within an existing building to transform it into a facility for semiconductor manufacturing. This proposed CHIPS funding, together with funding from Akash, venture capital firms, and other private investors, would support a $121 million investment and enable the company to leverage its intellectual property and experience of developing semiconductor technologies that serve important end markets, such as communications and the defense industrial base.

ANALOG DEVICES
Proposed Direct Funding: Up to $105 million
Chelmsford, Massachusetts; Beaverton, Oregon; and Camas, Washington

The U.S. Department of Commerce and Analog Devices, Inc. signed a non-binding preliminary memorandum of terms (PMT) to provide up to $105 million in proposed direct funding to support the company's projects in Massachusetts and the Pacific Northwest. The investment in Massachusetts would enable the company to increase module production output for its packaging and test facility, which would expand the capacity of a backend packaging and test facility for defense, commercial and space applications and also provide new commercial phased array antenna and sensor solutions. The proposed investment in Oregon and Washington would support the expansion of front-end mature node semiconductor manufacturing for devices used in a wide variety of applications, including but not limited to defense applications such as radar and electronic warfare.

BOSCH
Proposed Direct Funding: Up to $225 million
Roseville, California

The U.S. Department of Commerce and Bosch signed a non-binding preliminary memorandum of terms (PMT) to provide up to $225 million in proposed direct funding to support the expansion of Bosch's largest SiC device factory globally and increase the company's production capacity which could comprise more than 40% of all U.S.-based SiC device manufacturing capacity.

COHERENT
Proposed Direct Funding: Up to $112 million
Sherman, Texas and Easton Pennsylvania

The U.S. Department of Commerce and Coherent signed a non-binding preliminary memorandum of terms (PMT) to provide up to $112 million in proposed direct funding to support the modernization and expansion of a state-of-the-art manufacturing cleanroom in Coherent's existing 700,000 square-foot facility in Sherman, Texas to establish the world's first 150mm indium phosphide (InP) manufacturing line by adding advanced wafer fabrication equipment to produce InP devices at scale. The proposed funding would also support the expansion of Coherent's existing manufacturing facility in Easton, Pennsylvania to increase production capacity of 150mm and 200mm Silicon Carbide (SiC) substrates.

INTELLIEPI
Proposed Direct Funding: Up to $10.3 million
Allen, Texas

The U.S. Department of Commerce and IntelliEPI signed a non-binding preliminary memorandum of terms to provide up to $10.3 million in proposed direct funding to support the expansion and modernization of IntelliEPI's existing manufacturing facility in Allen, Texas. IntelliEPI is a leading provider of epitaxy wafers for advanced compound semiconductor applications. The company specializes in the growth of high-quality epitaxy material on Indium Phosphide ("InP"), Gallium Arsenide ("GaAs"), Gallium Antimonide ("GaSb"), and Gallium Nitride ("GaN") compound semiconductor wafers based on an advanced production Molecular Beam Epitaxy (MBE) technology platform. IntelliEPI serves a global clientele in markets spanning defense, AI/datacenters, telecommunications, automotive, and more.

MACOM
Proposed Direct Funding: Up to $70 million
Lowell, Massachusetts and Durham, North Carolina

The U.S. Department of Commerce and MACOM Technology Solutions, Inc., (MACOM) signed a non-binding preliminary memorandum of terms (PMT) to provide up to $70 million in proposed direct funding to support the expansion and modernization of MACOM's facilities in Lowell, Massachusetts, and Durham, North Carolina. Both of MACOM's facilities that would be supported by the proposed CHIPS investment are Category 1A Trusted Foundries with the U.S. Department of Defense (DoD) and produce compound semiconductors that are important to the proper functioning of defense systems operating at high frequencies, including airborne and ground-based radar systems, as well as commercial applications such as telecommunications.

MICROCHIP TECHNOLOGY
Proposed Direct Funding: Up to $162 million
Colorado Springs, Colorado and Gresham, Oregon

The U.S. Department of Commerce and Microchip Technology Inc. signed a non-binding preliminary memorandum of terms (PMT) to provide up to $162 million in proposed direct funding to support the onshoring of the company's semiconductor supply chain. This investment would enable Microchip to significantly increase its U.S. production of microcontroller units (MCUs) and other specialty semiconductors built on mature-nodes critical to America's automotive, commercial, industrial, defense, and aerospace industries.

MICRON (VIRGINIA)
Proposed Direct Funding: Up to $275 million
Manassas, Virginia

The U.S. Department of Commerce and Micron signed a non-binding preliminary memorandum of terms (PMT) to provide up to $275 million in proposed direct funding to expand and modernize its facility in Manassas, Virginia. The proposed project would onshore Micron's 1-alpha technology to its Manassas facility, significantly increasing monthly wafer output. Micron's 1-alpha node, an advanced DRAM process technology, offers meaningful improvements in bit density, power efficiency, and performance capability. Supporting a stable supply of Micron's 1-alpha technology would advance U.S. supply chain resiliency because the legacy DRAM memory chips that would be made in Virginia are important components for the automotive and industrial markets.

POWEREX
Proposed Direct Funding: Up to $3 million
Youngwood, Pennsylvania

The U.S. Department of Commerce and Powerex signed a non-binding preliminary memorandum of terms (PMT) to provide up to $3 million in proposed direct funding to support Powerex's total investment of $15 million to modernize and expand its production facility in Youngwood. This facility packages semiconductor power modules for important defense applications including the F-35, as well as

commercial and industrial applications. The proposed funding would be expected to nearly double capacity and modernize key equipment.

ROGUE VALLEY MICRODEVICES
Proposed Direct Funding: Up to $6.7 million
Palm Bay, Florida

The U.S. Department of Commerce and Rogue Valley Microdevices (RVM) signed a non-binding preliminary memorandum of terms (PMT) to provide up to $6.7 million in proposed direct funding to support the construction of RVM's pure play microelectromechanical systems (MEMS) and sensor foundry facility in Palm Bay, Florida, and is estimated to nearly triple RVM's manufacturing capacity. MEMS are microscale devices that integrate electrical and mechanical components; their integration with semiconductor components across a wide range of applications enables technology advancements and improved performance. With this proposed investment, the Department would support a reliable domestic supply of MEMS devices manufactured on 300mm wafers.

SKYWATER TECHNOLOGY
Proposed Direct Funding: Up to $16 million
Bloomington, Minnesota

The U.S. Department of Commerce and SkyWater Technology Foundry signed a non-binding preliminary memorandum of terms (PMT) to provide up to $16 million in proposed direct funding to support the modernization of its existing facility in Bloomington, Minnesota to improve the quality of production and wafer services by replacing equipment, upgrading the facility's cleanroom and space and IT systems, and increase overall production capacity of 90nm and 130nm wafers by approximately 30%. The proposed CHIPS investment would build upon the company's 40-year history in Bloomington, Minnesota.

SUMIKA
Proposed Direct Funding: Up to $52.1 million
Baytown, Texas

The U.S. Department of Commerce and Sumika Semiconductor Materials Texas, Inc., signed a non-binding preliminary memorandum of terms to provide up to $52.1 million in proposed direct funding to support the construction of a greenfield factory in Baytown, Texas to manufacture ultra-high purity (UHP) isopropyl alcohol (IPA) used in advanced logic and memory chip production. Sumika is a subsidiary of the Japan-based Sumitomo Chemical Co., LTD, the largest global producer of high-purity chemicals for the semiconductor industry. The proposed investment represents the company's first major investment in high-purity chemicals production in the U.S. UHP IPA production is almost entirely concentrated in East Asia.

WOLFSPEED, INC.
Direct Funding: $750 million
Siler City, North Carolina and Marcy, New York

The U.S. Department of Commerce and Wolfspeed, Inc. signed a non-binding preliminary memorandum of terms (PMT) to provide up to $750 million in proposed direct funding to support the construction of a new silicon carbide wafer manufacturing facility in Siler City, North Carolina, helping to secure a reliable domestic supply of the semiconductors that will underpin the future energy economy and AI boom. In addition to Wolfspeed's North Carolina project, the proposed CHIPS investment is expected to catalyze its planned expansion of its device manufacturing facility in Marcy, New York.

X-FAB
Proposed Direct Funding: Up to $50 million
Lubbock, Texas

The U.S. Department of Commerce and X-Fab signed a non-binding preliminary memorandum of terms (PMT) to provide up to $50 million in proposed direct funding to support the expansion and modernization of X-Fab's Silicon Carbide (SiC) foundry facility, the only high-volume SiC foundry in the United States. SiC technology is key to the global decarbonization efforts in the automotive and industrial sectors and offers multiple advantages over conventional silicon-based technologies for high-power applications.