

III. CHIPS Session

One Hundred Seventeenth Congress
of the
United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Monday,
the third day of January, two thousand and twenty-two*

An Act

Making appropriations for Legislative Branch for the fiscal year ending September 30, 2022, and for other purposes.

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

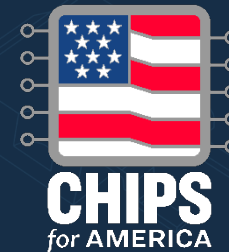
SECTION 1. TABLE OF CONTENTS.

The table of contents for this Act is as follows:

- Sec. 1. Table of contents.
- Sec. 2. References.

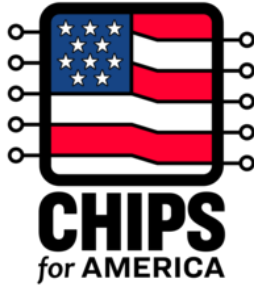
DIVISION A—CHIPS ACT OF 2022

- Sec. 101. Short title.
- Sec. 102. Creating helpful incentives to produce semiconductors (CHIPS) for America fund.
- Sec. 103. Semiconductor incentives.
- Sec. 104. Opportunity and inclusion.
- Sec. 105. Additional GAO reporting requirements.
- Sec. 106. Appropriations for wireless supply chain innovation.
- Sec. 107. Advanced manufacturing investment credit.



The CHIPS and
Science Act
of 2022

CHIPS for America Vision



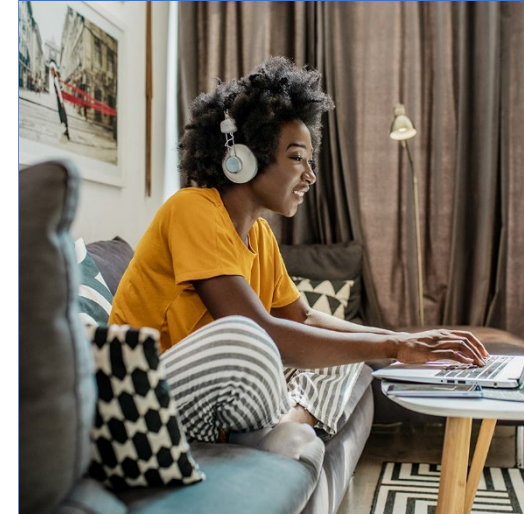
Economic Security

This act enables us to build more resilient supply chains for important components.



National Security

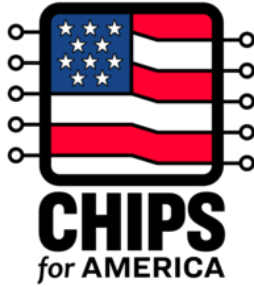
This act enables us to bring the most sophisticated technologies back to the U.S.



Future Innovation

Chips are key to the technologies and industries of the future, so we need to be at the forefront. This act will ensure long-term U.S. leadership in the sector.

CHIPS for America Incentives



\$39 billion for manufacturing

Two component programs:

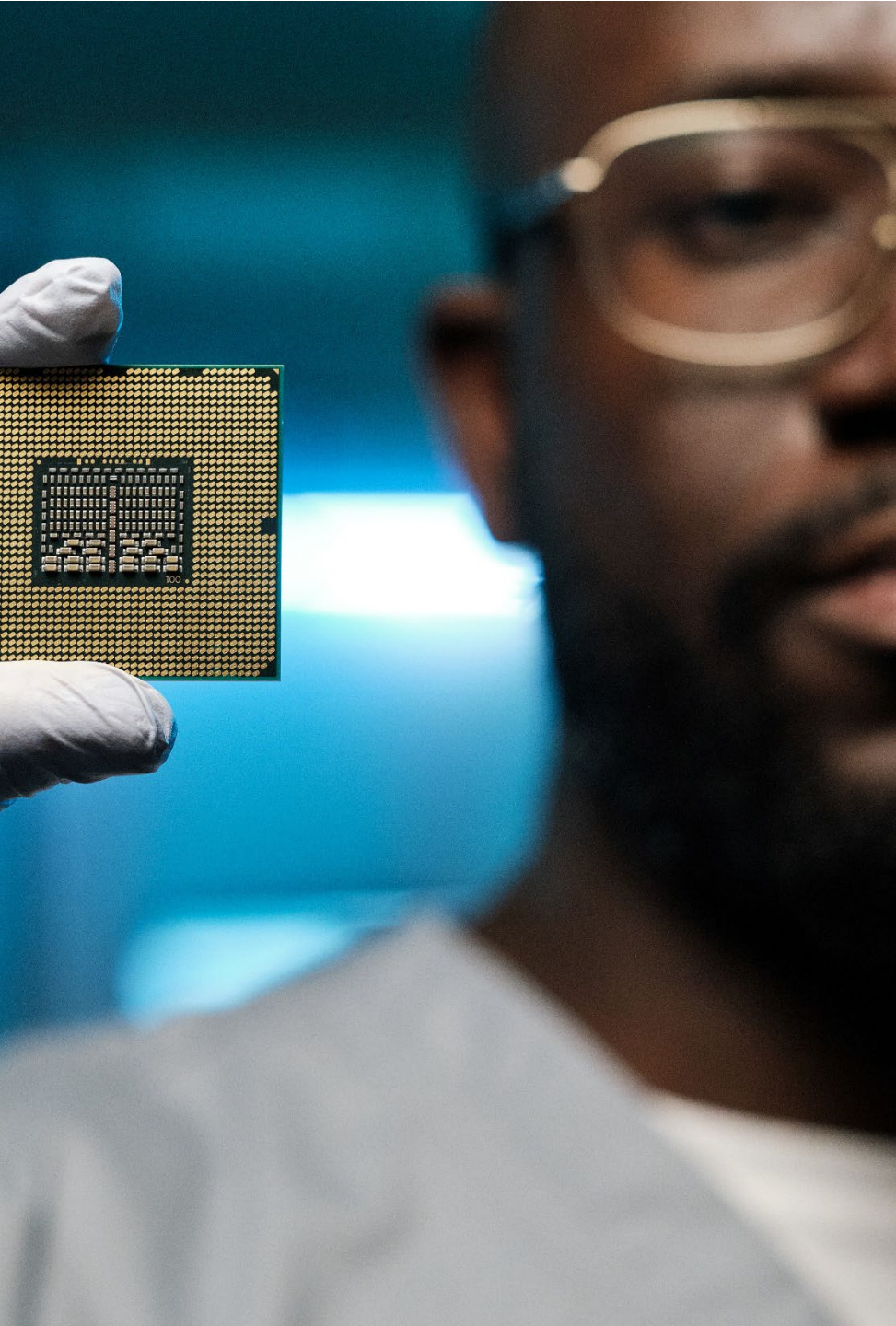
1. Attract large-scale investments in advanced technologies such as leading-edge logic and memory
2. Incentivize expansion of manufacturing capacity for mature and other types of semiconductors

\$11 billion for R&D

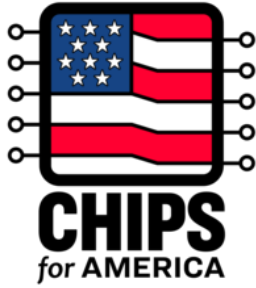
- National Semiconductor Technology Center
- National Advanced Packaging Manufacturing Program
- Manufacturing USA institute(s)
- National Institute of Standards and Technology measurement science

Together with CHIPS initiatives from other agencies, including DOD, State, NSF, and Treasury

Workforce development



Manufacturing incentives will spur:



Large-scale investments in
leading-edge logic and memory
manufacturing clusters

Manufacturing capacity for

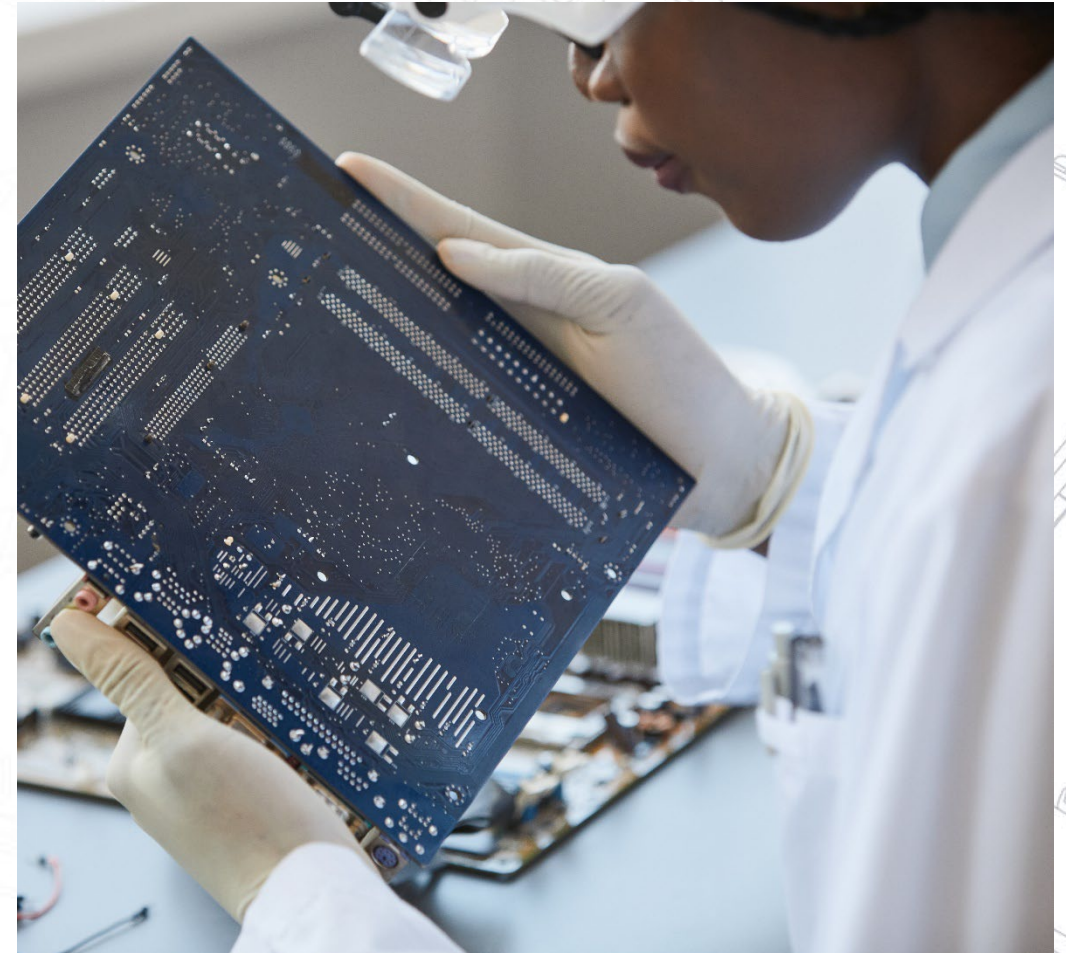
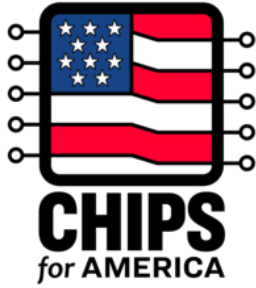
- Mature and current-gen chips
- New and specialty technologies
- Suppliers to the industry

R&D funding will spur:

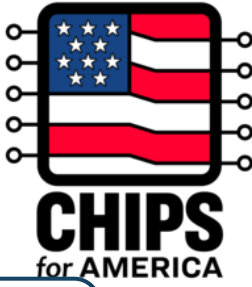
A national focus on transformative innovations in semiconductor technology

A domestic infrastructure for research and prototyping innovations

Workforce development and training

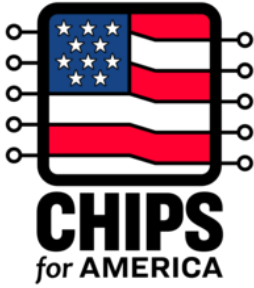


Guiding Principles



- 1 Meet economic and national security needs
- 2 Ensure long-term leadership in the sector
- 3 Strengthen and expand regional clusters
- 4 Catalyze private sector investment
- 5 Generate benefits for a range of stakeholders and communities
- 6 Protect taxpayer dollars

Timeline



★ CHIPS & Science Act of 2022 passed into law and signed by President Biden

A Strategy for the CHIPS for America Fund released

CHIPS for America launched

IAC members announced, first meeting

NSTC white paper released

Manufacturing USA RFI

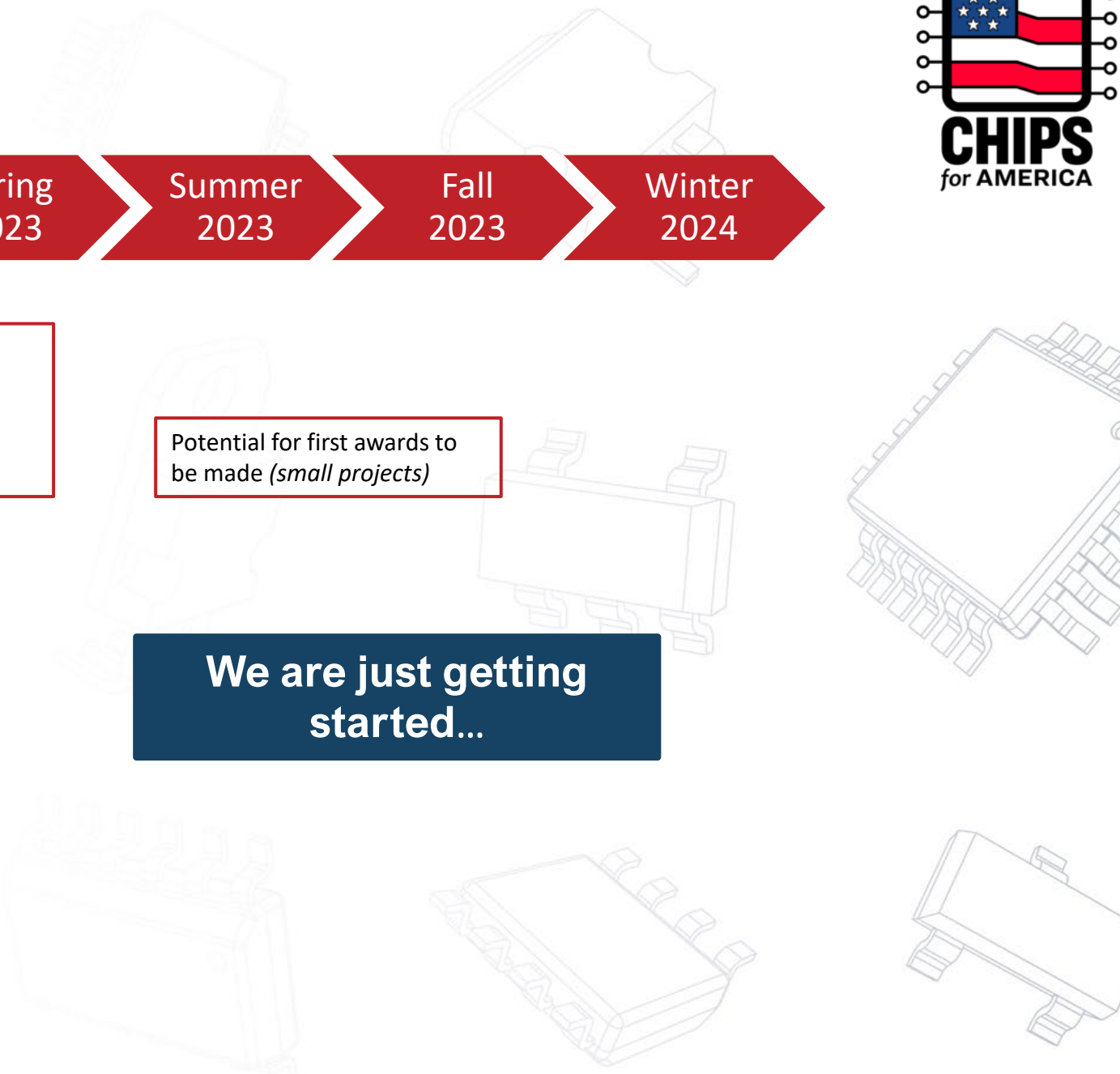
CHIPS webinars and briefings

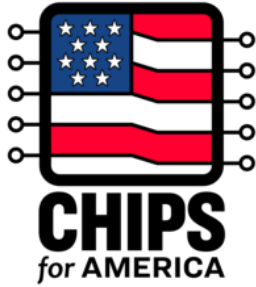
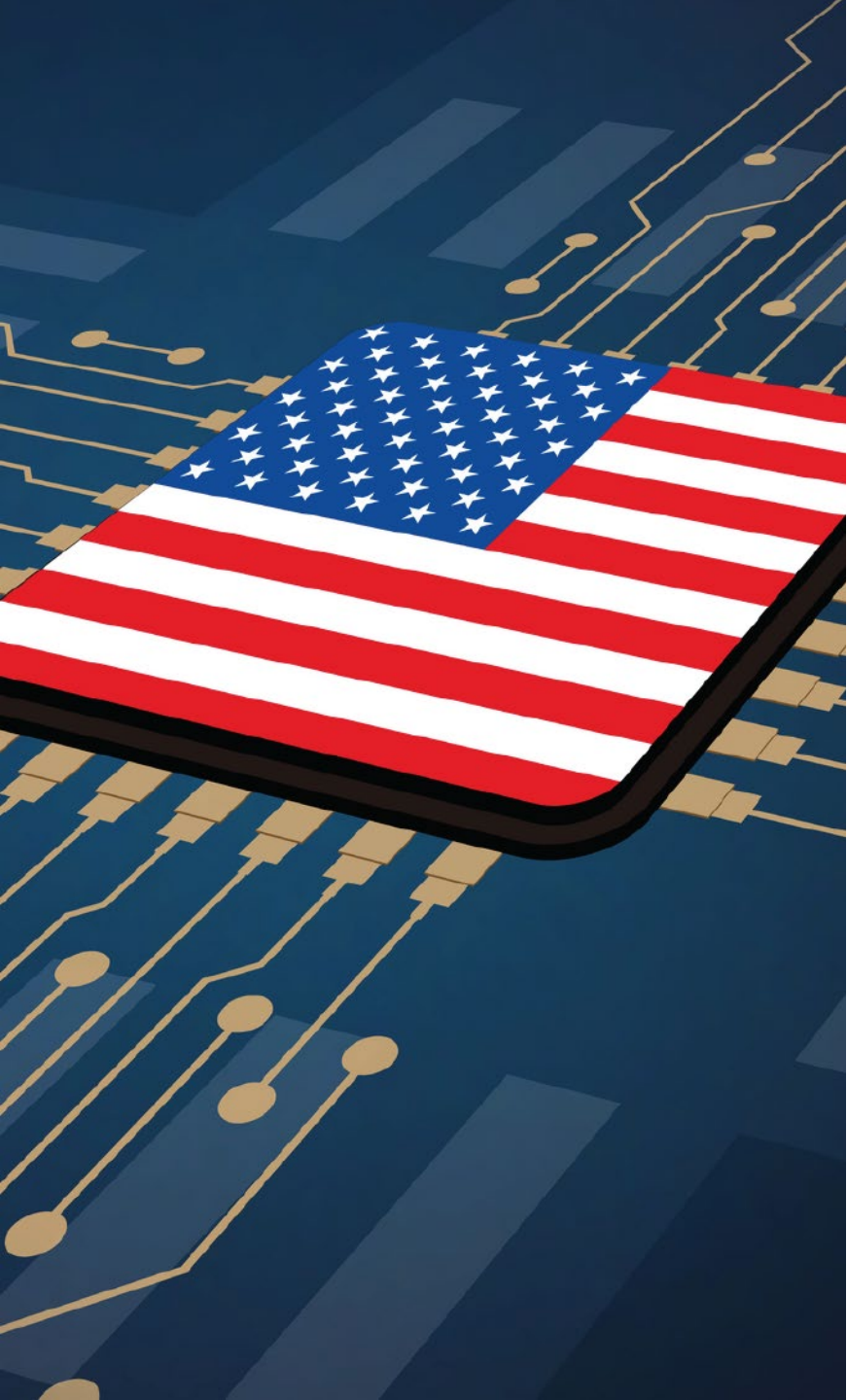
CHIPS Program and R&D Offices founded, senior leadership announced

Manufacturing Incentives Funding application process released; Rolling applications begin

Potential for first awards to be made (*small projects*)

We are just getting started...





Stay Engaged

- R&D next steps
 - NSTC White Paper expected no sooner than February 2023 (6 months from enactment)
 - Additional steps to be shared after that
- Learn more
 - Visit [CHIPS.gov](https://www.chips.gov)
 - Read the Implementation Strategy
 - Join our mailing list

NIST's Role in CHIPS Implementation



- NIST's reputation for rigor, integrity, and excellence is why we are playing a central role
- There will be change, but it comes with real opportunities
- CHIPS will help our work expand into exciting new areas
- We will rise to the challenge



Questions for VCAT



- Do you have advice on managing organizational health of NIST overall in context of CHIPS?
- What are the key lessons learned about balancing an organization's core mission with a high priority, high visibility new program?
- What are the top practices for organizational change that NIST should adopt?

Discussion