CHIPS for America
SEMI Membership Briefing
March 7, 2023
Today’s CHIPS Program Office Speakers

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The CHIPS Act will strengthen supply chain security and increase economic resilience in critical sectors.

The CHIPS Act will ensure that the U.S. can manufacture advanced technologies, including secure chips for the U.S. military.

The CHIPS Act will spur innovation, increase competitiveness, and ensure long-term U.S. leadership in the sector.
Funding Opportunities

1st Notice of Funding Opportunity
February 28, 2023
For commercial leading-edge, current, and mature node fabrication facilities

2nd Notice of Funding Opportunity
Late Spring 2023
For material suppliers and equipment manufacturers

3rd Notice of Funding Opportunity
Fall 2023
To support the construction of semiconductor R&D facilities

Focus of today’s webinar

Submission of Statements of Interest for all funding opportunities encouraged
Vision for Success

Leading-Edge Logic

✓ The U.S. will have at least two new large-scale clusters of leading-edge logic fabs
✓ U.S.-based engineers will develop the process technologies underlying the next gen of logic chips

Memory

✓ U.S.-based fabs will produce high-volume memory chips on economically competitive terms
✓ R&D for next-generation memory technologies critical to supercomputing and other advanced computing applications will be conducted in the U.S.

Advanced Packaging

✓ The U.S. will be home to multiple high-volume advanced packaging facilities
✓ The U.S. will be a global leader in commercial-scale advanced packaging technology

Current-Generation and Mature

✓ The U.S. will have strategically increased its production capacity for current-gen and mature chips
✓ Chipmakers will also be able to respond more nimbly to supply and demand shocks

By the end of the decade…
ACCOMPLISHING THESE OBJECTIVES REQUIRES:

Driving economic opportunity and inclusive economic growth

Engaging with U.S. partners and allies

Building a skilled and diverse workforce

Protecting taxpayer dollars

Catalyzing private investment
Funding Eligibility

For organizations that are...
- private
- non-profit
- consortia

that can substantially...
- construct
- expand
- modernize

a U.S. facility for...
- fabrication
- assembly
- testing
- packaging
- production

of...
- semiconductors

*More details available in the funding opportunity announcement*
PROJECTS THAT HAVE BEEN ANNOUNCED OR ARE UNDER CONSTRUCTION

• Funding must incentivize the applicant to make investments in facilities and equipment in the U.S. that would not occur in the absence of CHIPS incentives

• Relevant applicants must demonstrate that...
  • CHIPS Incentives requested will enable the applicant to meaningfully enhance the size, scope, speed, or technical ambition of the overall application

  OR

• This project would not occur without CHIPS funding
FABLESS COMPANIES

• Fabless companies play a critically important role in the success of the CHIPS program:
  • Can engage or partner with potential applicants
  • Support commercial viability of potential projects
  • Generate demand for domestic semiconductor industry
  • Beneficiaries of expanded domestic chip production

• Fabless companies not seeking to construct, expand, or modernize an eligible facility are not eligible for this NOFO, but there will be funding in the third NOFO for R&D facilities
# Program Priorities

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<th>Economic and national security objectives</th>
<th>Commercial viability</th>
<th>Financial strength</th>
<th>Technical feasibility and readiness</th>
<th>Workforce development</th>
<th>Broader impacts</th>
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**Economic Security**

SEEKING PROJECTS THAT

- Increase U.S. semiconductor production and align with U.S. strategic needs
- Create a more resilient semiconductor supply chain
- Build foundry or other capacity to serve many different customers
- Attract supplier, workforce, and other investments
- Contribute to a self-sustaining ecosystem and catalyze future upgrades

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<tr>
<th>Leading-edge</th>
<th>Current-generation and mature-node</th>
<th>Back-end production</th>
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| • Use the most advanced tech and produce products that are most critical to enhancing U.S. competitiveness
  • Commit to ongoing investment in U.S. | • Support production of chips vital to automobiles, aerospace and defense, and other critical infrastructure
  • Use processes that convert to make other types of chips in times of disruption | • Advanced packaging |
SEEKING PROJECTS THAT

Produce semiconductors that are relied upon by the Department of Defense, other government systems, or by critical infrastructure

Support U.S. government national security needs, such as by providing U.S. government access to facility output, or adapting commercial production for low-volume and high-mix national security components

Mitigate operational and cybersecurity risks

Strengthen supply chain resilience by analyzing and managing risks to their own supply chains

Ensure that foreign entities of concern will not pose undue risks

Produce mature-node semiconductors that are then supplied to critical manufacturing industries
Guardrails

• We plan to release a notice of proposed rulemaking implementing the guardrails in March
• Funds may not be provided to a foreign entity of concern
• Recipients will be required to agree to restrict their ability to expand semiconductor manufacturing capacity in foreign countries of concern for ten years
• Recipients must not knowingly engage in any joint research or technology licensing effort with a foreign entity of concern that involves sensitive technologies or products
• Failure by CHIPS incentives recipients to comply with these restrictions may result in recovery of the full amount of funding
Commercial Viability

- Demand for the product
- Size / diversity of customer base
- Existing and planned supply
- Expected volume and pricing dynamics
- Ability to counter potential technological obsolescence of the facility
- Stability and predictability of key supplies
Financial Strength

- Financial strength of the applicant / parent
- Financial strength of the project
- Commitment of private/third-party investment
- Reasonableness / suitability of CHIPS funding request
Eligibility Requirement:
- Applicants must be offered a state or local government incentive in the jurisdiction where the facility will be built, modernized, or expanded
- Letter from state or local government entity is required
- Incentives that create spillover benefits encouraged
- CPO will be providing resources to state and local governments
Technical Feasibility and Readiness

- Organizational readiness
- Technology and manufacturing processes
- Construction plan
- Environmental risk
Workforce Development (1/2)

Create good jobs

Recruit, hire, train, and retain a diverse and skilled construction and manufacturing workforce

Include women and economically disadvantaged individuals

Engage with community partners

Child care
Incentive funds may be used to support workforce development for a facility.

Applicants can partner with educational institutions, including universities and community colleges.

The Workforce Guide will be a key resource, available later this month.
Broader Impacts

- Commitments to future investment
- Support for semiconductor R&D
- Inclusive opportunities for businesses
- Climate and environmental responsibility
- Community investments
- Domestic content preferences
- Upside sharing
CPO will preference applications that credibly commit to investing in the domestic semiconductor industry as well as the extent of the applicant’s commitment to refrain from stock buybacks. Award recipients cannot use CHIPS funds for buybacks or dividends. Clawbacks can be triggered by a violation of program requirements.
Submit an environmental questionnaire with pre-app or app

CHIPS environmental review team will use the environmental questionnaire to ensure required information is available as soon as possible

Upcoming webinars will provide detailed information

National Environmental Policy Act (NEPA)
Funding Instruments

CHIPS Incentives Funding

- Direct funding
- Loan guarantees
- Loans

Other Funding Sources

- Private Investment
- Investment Tax Credit (26 U.S.C. § 48D)
- State & Local Incentives
# Funding Allocation

## Total funding

For CHIPS **Direct Funding**, up to $38.2B available in total.

For CHIPS **Loans** and **Loan Guarantees**, up to $75B in total in direct loan or guaranteed principal.

## Funding by project

Direct funding expected to be 5-15% of project capital expenditures.

Expected total amount of a CHIPS Incentives Award expected not to exceed 35% of project capital expenditures.

## Award

Appropriate level and type of support will be assessed on a project-specific basis.
Funding Restrictions

No funds may be used to construct, modify, or improve a facility outside of the U.S.

Funds may not be used to physically relocate existing facility infrastructure to another jurisdiction in the U.S., unless the project is in the national interest.

Funds to be returned if taxpayer funds are misused.

Public funds cannot be used for stock buybacks or dividend payments.
Application Overview

- Highly iterative and dynamic
- Substantial back and forth between the CPO and applicant
- Applications accepted on rolling basis
- Holistic review process
- Multiple projects can be on the same application; a single applicant can submit multiple applications
- CPO takes the importance of protecting confidential business information extremely seriously
Application Process

1. Statement of interest (open to all)
2. Pre-application (optional)  →  Feedback
3. Full application
4. Due diligence
5. Award preparation

Submissions accepted as of...

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<th>Leading-edge</th>
<th>Current-gen, mature-node, and back-end</th>
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<td>February 28, 2023</td>
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<tr>
<td>March 31, 2023</td>
<td>May 1, 2023</td>
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<tr>
<td>March 31, 2023</td>
<td>June 26, 2023</td>
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Statement of Interest (SOI)

Purpose
Help CPO gauge interest in the program and the types of projects and applicants applying, and prepare to review applications.

The SOI will not be evaluated for purposes of review and selection of awards.

What is needed?
• Applicant information
• Basic project information including nature of the project and potential scope
• Estimated timeline for next submission
• 1 SOI per application

All applicants eligible for funding across any funding opportunity

Earliest submission on February 28, 2023
Required 21 days before next submission

Submit an SOI via CHIPS.gov
Pre-Application

Purpose
Create an opportunity for dialogue between CPO and the potential applicant \textit{before preparation of full application} to ensure it is ready to meet program requirements and address program priorities

What is needed?
• More detailed description of proposed project(s)
• Summary financial information (refer to NOFO section IV.H.3)

Strongly recommended for current-generation, mature-node, or back-end production facilities

Earliest submission for leading edge applicants: March 31, 2023

Earliest submission for current-generation, mature-node or back-end production facilities: May 1, 2023
Purpose
Submit a full application to be officially considered for a CHIPS Incentive Award

What is needed?
• Detailed information on the proposed project(s) to enable evaluation of its merits
• Detailed financial modelling (refer to NOFO section IV.I.7)

Required for all applicants

Earliest submission for leading-edge applicants: March 31, 2023

Earliest submission for current-generation, mature-node or back-end production facilities: June 26, 2023
If CPO determines that a full application is reasonably likely to receive an award and there is, or likely will be, agreement on a Preliminary Memorandum of Terms, the application will enter the due diligence phase.

**What is needed?**
- Validation of national security, financial, and other information
- Possible engagement of outside advisors; applicants will be asked if they are willing to cover costs before moving to this stage

**When will these funds be disbursed?**
- Disbursements will be tied to project milestones
- Project milestones will be determined during the application process
- Milestones will vary by project

The Department will prepare and issue one or more CHIPS Incentive Awards for applications selected for funding. Specific terms and conditions will vary by award.
Next Steps

• Submit a Statement of Interest
• Visit CHIPS.gov for resources, including:
  • Applicant guides and templates
  • Notice of Funding Opportunity
  • Vision for Success paper
  • FAQs and fact sheets
  • Webinar schedule (and recordings of prior webinars)
• Join our mailing list
• Contact us
  • askchips@chips.gov – general inquiries
  • apply@chips.gov – application-related inquiries
Question and Answers
Thank you