

# CHIPS for America Research and Development Updates

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#### CHIPS R&D



#### **Vision**

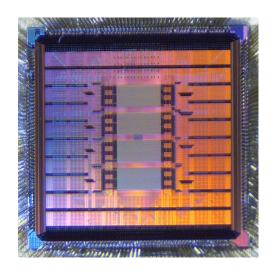
A vibrant and self-sustaining U.S. domestic semiconductor ecosystem that revitalizes American manufacturing, grows a skilled and diverse workforce, and leads the world in semiconductor research and innovation.

#### **Mission**

Accelerate the development and commercial deployment of foundational semiconductor technologies by establishing, connecting, and providing access to domestic tools, resources, workers, and facilities.

#### Vision for Success in 2030





U.S. Technology Leadership

The United States establishes the capacity to invent, develop, prototype, and deploy the foundational semiconductor technologies of the future.



Accelerated Ideas to Market

The best ideas achieve commercial scale as quickly and cost effectively as possible.



## Robust Semiconductor Workforce

Inventors, designers, researchers, developers, engineers, technicians, and staff meet evolving domestic government and commercial-sector needs.

## **CHIPS R&D Programs**



National Semiconductor Technology Center

**Metrology Program** 

National Advanced
Packaging Manufacturing
Program

Manufacturing USA institutes (up to three)

**Workforce Development** 

#### **CHIPS R&D Timeline**

Standards



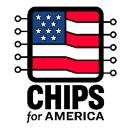
	SPRING 2023	SUMMER 2023	FALL 2023 WINTE	ER 2023/20
NSTC	Vision/strategy paper published	Selection Committee identifies Board of Trustees	Establish NSTC	
NAPMP				7
			NAPMP vision and strategy	7
Manufacturing USA institute(s)	RFI summary			
	published		Announce selected topic(s)	
Metrology				
	Metrology gaps report published	2 Grand Challenges Funded		

Interagency Semiconductor

Standards Group

**Standards Summit** 

## **Update: Leadership Team**





Eric Lin, Deputy Director



Neil Alderoty, Executive Officer



Richard-Duane Chambers, Associate Director for Integration and Policy



Marla Dowell, Director, CHIPS R&D Metrology Program



Subramanian Iyer, Director, National Advanced Packaging Manufacturing Program



Jay Lewis, Director, National Semiconductor Technology Center

## **Update: NSTC Board of Trustees**



#### **Inaugural Board of Trustees**

#### **Selection Committee**

- Janet Foutty
- John Hennessy
- Jason Matheny
- Donald Rosenberg
- Brenda Wilkerson

- Robin Abrams (past CEO Firefly Comm, VeriFone)
- Craig R. Barrett (retired CEO and chairman, Intel)
- Reggie Brothers (principal MIT Lincoln Labs)
- Nick Donofrio (44-yrs IBM, led technology, innov strategy)
- Donna Dubinsky (past CEO Palm Computing)
- Erica Fuchs (Professor, eng. and public policy, CMU)
- Jim Plummer (Professor, Past Dean Eng., Stanford)

### **Update: Standards Summit**



Goals:

Establish the CHIPS R&D standards effort as a partnership with industry & SDOs

Identify top standards priorities for the semiconductor community

Logistics: • Sept. 26-27 in Washington DC

Hybrid in-person (221 attendees) and virtual (409 attendees) event

Agenda:

Four topics:

Standards priorities 2) Standards innovation, including incubators and accelerators

Diverse standards-capable workforce 4) Pre-standards research

**Co-Hosts:** • 7 industry non-profit standards organizations/consortia, comprising > 4,000 corporate members:















Two interagency groups representing over 30 Federal agencies:





Outcomes: • Shared community standards goals

Foundations for community collaboration: CHIPS Standards Public Working Group & SDO Alliance

Aligned with National Strategy for Standards and Critical and Emerging Technologies (NSSCET)

## Next: IAC Meeting (November 8, 2023)



#### **Virtual Meeting**

Responses to previous recommendations

New recommendations to CHIPS R&D

IAC membership updates

