

## MASSACHUSETTS TECHNOLOGY COLLABORATIVE (MASSTECH)

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<u>The Massachusetts Technology Collaborative (MassTech)</u> is a statewide quasi-public agency focused on advancing technology statewide. The organization strengthens the competitiveness of the tech and innovation economy by driving strategic investments, partnerships and insights that harness the talent of Massachusetts. MassTech supports the state's tech sector with a strategic focus on talent, ecosystems and innovation infrastructure across its diverse divisions and programs.

MassTech is working to create and grow economic opportunity in the following areas:

- Advanced Manufacturing
- Artificial Intelligence (AI)
- Broadband
- Cybersecurity
- Digital Health
- Emerging Tech Sectors (e.g., Quantum)
- Microelectronics

### DIVISIONS

At the time of this publication, MassTech has seven divisions. Each division has its own programs and initiatives that support and foster growth in different sectors of the Massachusetts tech and innovation economy:

- Innovation Institute
- Massachusetts AI Hub (MA AI Hub)
- Massachusetts Broadband Institute (MBI)
- Massachusetts Center for Advanced Manufacturing (CAM)
- Massachusetts eHealth Institute (MeHI)
- MassCyberCenter (Cyber)
- Northeast Microelectronics Coalition (NEMC)















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<u>The Innovation Institute at MassTech</u> is focused on improving the conditions for economic growth among emerging and existing industry clusters in Massachusetts.

The Innovation Institute's objectives are to:

- Serve as a convener and key strategic broker among leaders from within industry, academia, nonprofit, finance and government sectors
- Conduct independent research providing accurate and reliable information, data and analysis to promote understanding and inform policymakers
- · Manage high-value programs and projects on behalf of the state
- · Make strategic investments from a range of public purpose investment funds

### **INITIATIVES AND PROGRAMS**

### **Entrepreneur Mentorship Program**

The Entrepreneur Mentorship program was established in the 2012 Jobs Act to expand access to assistance, mentoring and advice for startups and high-growth companies. Since its inception, the Innovation Institute has awarded over \$4.5 million to entrepreneur support organizations (ESOs) through the Mentorship program. These funds support community-based incubators and accelerators that develop local startups, fuel entrepreneurial ecosystems and drive entrepreneur-led economic development. In recent years, the Innovation Institute has run two entrepreneur mentorship grant programs: the Sector Spark Grant program which provided funding to Entrepreneur Support Organizations (ESOs) to develop specialized mentorship programs and critical infrastructure necessary to catalyze startup acceleration within strategically important sectors of the Massachusetts innovation economy; and the Strong Entrepreneur Ecosystems initiative, which supported entrepreneur-led economic strategies that put local founders at the heart of development initiatives to understand their unique needs and align community resources around a common mission of helping more local entrepreneurs succeed.

### **Massachusetts Quantum Initiative**

The Quantum initiative engages stakeholders to foster a collaborative quantum community in Massachusetts and to make strategic infrastructure investments that accelerate the development of emerging quantum technologies. The initiative also promotes quantum literacy among end users and cultivates a skilled, quantum-ready workforce to drive broader adoption and innovation.

### **Massachusetts Robotics Initiative**

The Robotics initiative provides ecosystem and investment support to advance the global leadership of the Massachusetts robotics industry cluster. This initiative supports a robotics startup accelerator in partnership with MassRobotics, along with other ecosystem support activities.

### Massachusetts Robotics Digital Twin Initiative (Pending)

The Massachusetts Robotics Digital Twin Initiative (pending) is a funding program that supports the development of a shared Digital Twin Library and the creation of physical robotic systems, with resulting tools made publicly available to advance research and commercialization.

### Massachusetts TechHubs Program

The MA TechHubs program is a place-based economic development initiative, established as part of

the state's 2024 economic development bill (the Mass Leads Act), to strengthen regional innovation ecosystems across Massachusetts. The program will designate regions across Massachusetts as "TechHubs" to recognize their capacity for leadership in key technology sectors and to enhance their visibility as centers of technological progress and opportunity. The TechHubs program provides up to \$5 million for regions ready to execute transformative large-scale projects aimed at enhancing their innovation ecosystems as well as \$100,000 for regions aiming to develop or refine their strategic plans for innovation-driven economic growth.

### MassTech Internship Program (MTIP)

MassTech provides local technology startup companies with stipend support to hire college students for meaningful internship experiences in Massachusetts. One of the intents of this program is to expose these students to the potential for careers in the Massachusetts technology and innovation economy, increasing the likelihood that they stay in state after graduation. The Innovation Institute is aiming to expand participation to underrepresented communities through the Massachusetts Tech Connect Internship Program (see below).

### Massachusetts Tech Connect Internship Program (MA Tech Connect)

MA Tech Connect aims to stand up new tech-focused internship programs for community colleges and other associate degree granting institutions in Massachusetts. Tech and innovation sector internships offer students a concrete pathway into the industry and strengthen the state's tech talent pipeline.

### ADDITIONAL FUNDING PROGRAMS

### **Collaborative Research & Development Matching Grant Program**

The Collaborative Research Matching Grant program supports projects that bring together university researchers with representatives of the state's leading technology firms to address compelling research challenges that offer the potential to increase the state's dominance in key industry sectors.

### **Regional Priority Grant Program**

The Regional Priority Grant program represents a uniquely creative and comprehensive approach to supporting innovation-based economic development across Massachusetts. This program aims to solicit creative ideas from local and regional leaders, and to challenge them to collaborate in improving the conditions for economic growth. This program is committed to seeking out and supporting exceptional initiatives capable of benefitting underserved regions or ecosystems across the state.

### **Technology & Innovation Ecosystem Grant Program**

The Technology and Innovation Ecosystem Awards program is intended to advance tech and innovation projects that will contribute to a competitive advantage for existing and emerging industry clusters in Massachusetts, helping to drive workforce development, business expansion and job growth.

### RESOURCES

### Annual Index of the Innovation Economy 2023

Since 1997 MassTech has produced and published the Annual Index of the Massachusetts Innovation Economy, the state's tool for benchmarking the status and progress of the state's innovation economy.

### Massachusetts Quantum Computing Ecosystem Study - 2023

Quantum Computing enables solutions to problems beyond the reach of today's systems, with the potential to drive breakthroughs in fields such as medicine, cybersecurity, communications and clean energy.

### Massachusetts Robotics Ecosystem Map

A map of the robotics industry across the state.

### Massachusetts' Robotics Ecosystem Report - 2024

An assessment of the Massachusetts' robotics ecosystem.

### Reassessment of the FinTech industry - 2023

Commissioned by MassTech and authored by KPMG, this report shares key insights that solidify Boston as a strong fintech hub that attracts and retains top talent.

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<u>The Massachusetts AI Hub</u> was established in December 2024 based upon the recommendation of the Governor's Strategic AI Task Force Report to convene world class talent, cutting-edge research institutions and forward-thinking businesses in order to build an AI ecosystem that is both impactful and inclusive. The Hub ensures Massachusetts's competitiveness in a rapidly evolving global landscape while setting a standard for responsible AI development, positioning the state as a leader in ethical and impactful deployment of AI.

### PARTNERSHIPS

### **AI Startups Incubator**

The Massachusetts AI Hub is partnering with IBM and Red Hat to establish an incubator for Massachusetts-based AI startups. This partnership aims to create a space to support startups and complement the larger ecosystem.

### Artificial Intelligence Compute Resources (AICR)

Supported by a grant from the MassTech Collaborative, the Massachusetts Green High Performance Computing Center (MGHPCC) is creating an Artificial Intelligence Compute Resources (AICR) environment to supply the compute and data capacity necessary for AI innovation. AICR will allow public and private higher education institutions, startups and businesses in the innovation ecosystem, and the residents of Massachusetts to access vital AI infrastructure.

### PROGRAMS

### Future Ready: Bring Artificial Intelligence into the STEM Classroom

Launched in June 2025, in partnership with the Massachusetts STEM Advisory Council and Project Lead the Way (PLTW), is a groundbreaking 50-hour professional development pilot for high school STEM Educators. Pilot programs such as this one, align with the AI Task Force recommendations, by further positioning the MA AI Hub to be a resource for Massachusetts educators. It provides applied AI learning activities to inspire interest and reward problem solving efforts for the state's school-aged students as well as to position Massachusetts as a leader in responsible and applied AI education and career readiness. Designed and delivered in collaboration with PLTW, a nationally recognized leader in STEM curriculum and educator training, this initiative is a first -in -the -nation pilot of PLTW's AI curriculum.

### High School Student Summer Career Academy in Al

The Massachusetts High School Summer Career Academy in AI is a pilot initiative designed to introduce 50 high school students from four sending districts with preference given to schools in Gateway Cities or to regional consortiums of districts in collaboration, to the fundamentals of artificial intelligence through hands-on learning, mentorship and real-world application.

The program aims to cultivate early interest in AI, expand access to high-quality STEM opportunities and develop a more inclusive pipeline of future AI talent. By engaging students in collaborative projects and exposing them to career pathways in AI and related fields, the program not only empowers the next generation of innovators but also strengthens the Massachusetts AI Hub's long-term goal of building a diverse, homegrown workforce to support the state's leadership in ethical and applied AI.

### **MA AI Models Innovation Challenge**

The MA AI Models Innovation Challenge program launched in January 2025. The initiative stemmed from the Governor's Strategic AI Task Force and was designed to encourage ethical, impactful and forward-looking applied AI advancements in Massachusetts.

The challenge invited AI researchers, developers and practitioners across academic and non-profit institutions based in Massachusetts to apply for up to \$1 million for model projects that have potential to unlock breakthroughs in priority industry sectors. The challenge focused on supporting projects at all stages of AI model development, from data acquisition to deployment. Key activities include high-quality data collection and preparation, training and fine-tuning of models and real-world testing.



### MASSACHUSETTS BROADBAND INSTITUTE (MBI)

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<u>The Massachusetts Broadband Institute (MBI)</u> is the official state broadband office. MBI was established in 2008 through the Broadband Act as a division of MassTech, with a mission to achieve Internet for All across Massachusetts. MBI recognizes that broadband is a modern necessity, much like electricity and phone service for earlier generations. High-speed internet is essential to the daily lives of Massachusetts residents, unlocking opportunities for employment, education, health care, civic engagement and social connections. MBI is committed to achieving Internet for All and expanding connectivity to strengthen the economy and society.

MBI's works to:

- Convene the Ecosystem: MBI collaborates with local governments, state agencies, internet service providers, businesses, non-profits and community-based organization across sectors to assess where broadband is lacking and develop actionable plans to expand access.
- Administer Funding: Through state and federal grant programs, MBI funds the deployment of broadband infrastructure in unserved and underserved areas, as well as activities to strengthen access, working with public and private partners to deliver high-speed internet and programs.
- Support Local Capacity Building: MBI provides technical assistance to help municipalities and nonprofit organizations navigate broadband planning, procurement, implementation and utilization, ensuring communities are equipped to access the internet for today's many uses.

### **GRANT PROGRAMS**

### **Objective: Achieving 100% Universal Coverage**

### **BEAD (Broadband Equity, Access & Deployment) Program**

The BEAD program allocates \$147 million to Massachusetts for broadband infrastructure projects to address unserved and underserved locations, aiming to provide universal high-speed internet access statewide.

### **Gap Networks Grant Program**

The Gap Networks Grant program expands broadband in unserved and underserved communities, focusing on low-income households, including those in rural areas, public housing and disadvantaged neighborhoods.

### Last Mile Program

The Last Mile program supports broadband expansion in 53 towns in Western and Central Massachusetts with a goal of at least 96% coverage in every town. Solutions include public-private partnerships and municipally owned broadband networks.

### MassBroadband 123 Middle Mile Network

The MassBroadband 123 Middle Mile Network supports a 1,200-fiber optic network across 123 cities and towns and represents foundational infrastructure to improve rural access. Approximately 500 community anchor institutions use the network.

### **Objective: Modernizing Public & Affordable Housing**

### **Residential Retrofit Program**

The Residential Retrofit program deploys state-of-the-art broadband infrastructure to public housing across Massachusetts. It improves in-unit connectivity by addressing deficient wiring through grants that fund fiber optic installations by qualified Internet Service Providers (ISPs), who install, own and maintain the equipment. The goal is to expand access to high-quality, reliable and affordable internet for low-income residents.

### Retrofit Ancillary Grantee (RANGE) Program

The RANGE program provides grants to housing operators already participating in the Residential Retrofit Program to help residents fully benefit from broadband access. RANGE supports digital navigation, digital literacy training, public space connectivity upgrades and device distribution.

### **Objective: Enabling Municipalities to Access Broadband**

### **Municipal Digital Equity Implementation Program**

The Municipal Digital Equity Implementation program supports the execution of strategies developed through the planning program by funding projects that directly improve internet access, adoption and digital literacy at the local level.

### Municipal Digital Equity Planning Program

The Municipal Digital Equity Planning program supports municipalities to develop plans to address gaps in internet access. These plans guide local decision-making and prepare municipalities to implement strategies. Planning efforts prioritize the increase of access, adoption and usage, especially for populations most impacted by the digital divide.

### **Objective: Expanding the Ecosystem through Partnerships**

### **Digital Equity Partnerships Program**

The Digital Equity Partnerships program provides funding and technical assistance to nine partners to implement six statewide initiatives that expand digital access across Massachusetts. These initiatives focus on digital literacy, public Wi-Fi, modernizing internet in public spaces, connectivity for residents facing economic hardship, device distribution and refurbishment, and education, outreach and adoption.

### **RESOURCES**

### **The Asset Inventory**

The Asset Inventory was created to provide a comprehensive and accessible database for the public to learn about the growing Digital Access Ecosystem in Massachusetts. This tool offers a searchable database of available resources and programs offered by organizations currently engaged in digital empowerment.

### The Massachusetts Internet for All Plan

The Massachusetts Internet for All Plan documents gaps and recommended implementation strategies to close the digital divide for all residents.



# MASSACHUSETTS CENTER FOR ADVANCED MANUFACTURING (CAM)

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<u>The Massachusetts Center for Advanced Manufacturing (CAM)</u> aims to build the most complete, connected and fastest manufacturing ecosystem, from innovation through production, in Massachusetts.

CAM's approach:

- Technology Innovation: Support the innovation, development and commercialization of nextgeneration advanced manufacturing technologies.
- Supply Chain Resilience: Help small and medium-sized enterprises (SMEs) adopt advanced technologies to strengthen Massachusetts' manufacturing supply chain.
- Workforce Development: Attract, train and retain the next generation of skilled talent, from technicians to Ph.D.s, to meet current and future industry needs.

### **GRANT PROGRAMS**

CAM offers a vast number of grant opportunities and programs for manufacturers looking to innovate and scale in Massachusetts.

### The Massachusetts Manufacturing Accelerate Program (MMAP)

- Offers up to \$200,000 for capital equipment purchases.
- Aims to enhance productivity, technology adoption and workforce upskilling.

### The Massachusetts Manufacturing Innovation Initiative (M2I2)

- Supports the transition of innovative technologies into commercial manufacturing.
- Provides capital grants for sectors like electronics, robotics, climate tech and additive manufacturing.

### WORKFORCE DEVELOPMENT PROGRAMS

### Adult Workforce

- Advanced Manufacturing Training Program funds manufacturing training providers across the state to deliver programs teaching high-demand skills such as CNC machining, welding and advanced manufacturing technologies.
- MassMakes marketing initiative drives interest in manufacturing careers and participation in manufacturing training programs across the state.

### **Community College**

- DOD-funded MassBridge program aligns skill outcomes of manufacturing training programs across eight different Massachusetts community colleges to align with industry needs.
- New England Regional Defense Industry Collaboration (NERDIC) participation allows promotion of successful Massachusetts programs and collaboration on future workforce training models.

### **Colleges and Universities**

• Facilitation of collaborations between higher education institutions and ecosystem partners and

industry through MassBridge, NERDIC and M2I2.

### K-12

- Makers of a Better Future curriculum overlay promotes manufacturing career opportunities to high school and middle school students.
- MassMakes Innovation Challenges convene hundreds of K-12 students for hands-on manufacturing and engineering projects and Q&A sessions with industry leaders.

### RESOURCES

### **Manufacturers Resources**

Online list of resources for grant programs, business development and partnerships, hiring and recruiting, workforce training and workplace safety.

### MassMakes

MassMakes is an initiative helping Massachusetts residents prepare for and connect to jobs in advanced manufacturing. Access to resources for manufacturing businesses, job seekers and students can be found at massmakes.org.



## MASSACHUSETTS eHEALTH INSTITUTE (MeHI)

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The mission of the <u>Massachusetts eHealth Institute (MeHI)</u> is to catalyze health care innovation, technology, and competitiveness, and accelerate the adoption and utilization of health technologies across provider settings to improve the safety, quality and efficiency of health care in Massachusetts. MeHI is also the designated state agency for growing the digital health ecosystem in Massachusetts, driving economic impact and improving health care costs and quality.

### PROGRAMS

### Health IT Mentorship Program

- Pairs professionals currently working in the health IT field with college students interested in entering the health IT workforce.
- Student mentees work on a health IT-focused project with the guidance of their mentor.
- Students who complete the program are eligible for a \$250 stipend.

### Sandbox Challenge Grant Program

- Identifies and accelerates digital health solutions that address key health care challenges in Massachusetts.
- Three-month virtual program that connects startups to stakeholders in the Massachusetts digital health ecosystem.
- Grants up to \$75,000 for program winners to be used to fund validation projects with organizations in MeHI's Sandbox Network.

### Sandbox Rolling Grant Program

- Connects Massachusetts-based digital health companies with research and development partners at universities, health systems and other research institutions to support their product development and validation.
- Provides grants up to \$50,000 to be used to fund validation projects with organizations in MeHI's Sandbox Network.

### RESOURCES

### **Digital Health Jobs Board**

Free jobs board promoting all open positions at Massachusetts-based digital health companies.

### **Ecosystem Events**

Online calendar capturing the virtual and in-person health tech events taking place across Massachusetts.

### Health Care Cybersecurity Calls

Monthly calls for health care cybersecurity professionals that include updates on recent cyber threats and trends and a presentation on a monthly topic of interest.

### Health IT Jobs Board

Free jobs board promoting open IT positions at Massachusetts-based health care organizations.

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<u>The MassCyberCenter's</u> mission is to improve cybersecurity resiliency and create cybersecurity workforce development opportunities in Massachusetts by building public awareness, creating cutting edge programs, organizing engaging events and leading collaborative working groups.

### CYBERSECURITY RESILIENCY PROGRAMS

### Cyber Resilient Massachusetts Grant Program

Municipalities, small businesses and non-profits in Massachusetts are eligible to receive grants under the Cyber Resilient Massachusetts grant program to fund Managed Detection and Response (MDR) services from CyberTrust Massachusetts. Grants provide up to \$25,000 to fund MDR for up to three years.

### Cyber Resilient Massachusetts Working Group (CRMWG)

The CRMWG brings together public and private sector leaders from across Massachusetts to identify ways the state's innovative technology ecosystem can help Massachusetts municipalities and critical institutions protect sensitive data, increase cybersecurity awareness and respond to emerging threats.

### Minimum Baseline of Cybersecurity

Technology plays a vital role in Massachusetts and in the lives of its citizens. The Minimum Baseline framework is made up of four foundational goals to help organizations improve their cybersecurity posture and protect against cyberattacks using people, process and technology. A set of learning modules and listing of free and low-cost federal and state resources is provided for each goal.

### WORKFORCE DEVELOPMENT PROGRAMS

### Alternative Cyber Career Education (ACE) Grant Program

The ACE Grant program supports cybersecurity training initiatives across Massachusetts that serve as alternatives to traditional degree programs. Grants are available for Massachusetts-based organizations that train young adults and retrain existing professionals to enter the cybersecurity workforce.

### **Cybersecurity Mentorship Program**

The Cybersecurity Mentorship program matches diverse cybersecurity undergraduate students with a mentor from the cybersecurity industry for a project-based mentorship experience. The goal of this program is to promote the development of a diverse cybersecurity talent pool in Massachusetts.

### Cybersecurity Training & Education Working Group (CTEWG)

CTEWG's mission is to support the training and education of cybersecurity students and professionals in Massachusetts through collaboration and partnerships. The group meets quarterly to discuss initiatives and requirements that support cybersecurity education and training programs.

### **Security Operations Center & Cyber Range Initiative**

The MassCyberCenter supports the launch of statewide programs to promote the development of a diverse cybersecurity workforce and improve local cyber resiliency in the state through the establishment of Security Operations Centers (SOCs) and Cyber Ranges at colleges and universities.

### **EVENTS**

### Massachusetts Cybersecurity Forum

The annual Massachusetts Cybersecurity Forum brings together cybersecurity leaders from across the state to showcase the vibrant cybersecurity ecosystem, promote public and private partnerships and highlight Massachusetts as a national leader for cybersecurity.

### Massachusetts Cybersecurity Month

Massachusetts Cybersecurity Month highlights broad audiences such as educational institutions, businesses, R&D centers, policy leaders, investors and technology groups that come together in the Massachusetts cybersecurity ecosystem. This ecosystem makes Massachusetts a national cybersecurity leader and enables the state's citizens and economy to thrive in the face of growing threats. Massachusetts Cybersecurity Month is held concurrently with National Cybersecurity Awareness Month.

### Massachusetts Municipal Cybersecurity Summit

A free annual cybersecurity training event where attendees learn how to recognize emerging threats, bolster defenses and respond to various cybersecurity challenges.

### RESOURCES

### **Cyber Resiliency Support**

Online list of resources from national, state, local and nonprofit partners.

### **Cybersecurity Jobs Board**

The Cybersecurity Jobs Board lists open cybersecurity jobs and internships in Massachusetts and remote roles linked to Massachusetts organizations.

### Health Care Cybersecurity Calls

Monthly calls for health care cybersecurity professionals that include updates on recent cyber threats and trends and a presentation on a monthly topic of interest.

### **Workforce Development Resources**

Online list of resources for students and job seekers interested in cybersecurity careers.



# NORTHEAST MICROELECTRONICS COALITION (NEMC)

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<u>The Northeast Microelectronics Coalition (NEMC)</u> supports the development of foundational technologies by connecting commercial and defense companies, leading academic institutions, federally funded R&D centers and startups across the Northeast to accelerate advances across the entire technology stack, expand the nation's global leadership in semiconductors and microelectronics, and boost workforce development. In 2023 NEMC was awarded funding from the U.S. Department of Defense, to create the NEMC Hub, one of eight regional Microelectronics Commons hubs acting on a shared mission to expand the nation's global leadership in microelectronics and accelerate domestic semiconductor prototyping.

### **GRANT PROGRAMS**

### The Powering Regional Opportunities for Prototyping Microelectronics (PROPEL) Program

The PROPEL program provides funding and support to help startups and small companies accelerate technology transition from laboratory to fabrication, streamline operations and grow a pipeline of semiconductor talent throughout the Northeast region and beyond.

### The Supporting Chip Advancement from Lab to Enterprise (SCALE) Capital Program

The SCALE Capital program invests \$10 million to strengthen Massachusetts' microelectronics ecosystem. Designed to bridge the gap from lab to market, this initiative will fund capital expenses for ecosystem connectivity, expand workforce capabilities and advance cutting-edge technologies.

### WORKFORCE DEVELOPMENT PROGRAMS

### e-Capture the Flag

Embedded Capture the Flag is an embedded security competition run by MITRE that puts high school through grad students through the experience of creating, and then attacking, secure embedded systems.

### Makers of a Better Future

Makers of a Better Future, NEMC and MassTech's flexible, free 12-hour awareness curriculum overlay, introduces high school students to cutting-edge technologies such as microelectronics and photonics—and the exciting careers associated with them. The lessons are Common Core- and World-Class Instructional Design & Assessment (WIDA)-aligned and provide differentiation strategies for diverse learning needs.

### **Microelectronics Internship Program**

The Northeast Microelectronics Internship Program (NMIP) effort led by MIT connects first and second-year students with paid industry internships, fostering early exposure to the microelectronics ecosystem.

### **SkillBridge Fellowships**

HeadLamp, a SkillBridge provider, prepares veterans for microelectronics careers by providing training and connecting them with microelectronics companies.

### MEMBERSHIP

NEMC has a rapidly growing member base including 128 Massachusetts partners driving microelectronics innovation across the nation with groundbreaking initiatives anchored by the NEMC Hub. Learn about NEMC's 250+ member organizations and how to join at nemicroelectronics.org/ membership.





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