Minutes

Attendees:
Secretary Michael Kennealy, EOHED
Michael Tamasi, AccuRounds
Mark Fuller, MOBD
Eric Lesser, MA Senate
Jeffrey Roy, MA House of Representatives
Robby Bitting, MassChallenge, Boston
John Regan, AIM
Amy Barad, MassCEC
Robby Bitting, MassChallenge
Stephen Boyd, Boyd Technologies
Winston Soboyejo, WPI
Allen Brown, General Dynamics
Carlo Canetta, MITRE
Julie Chen, UMassLowell
David Cruise, MassHire, Hampden County
Leslie Greis, Kinefac
Israel Soibelman, Lincoln Labs
Joseph Kunze, Si2
Megan Marszalek, MassTech
Vinit Nijhawan, Mass Technology Transfer Center

Absent:
Rosalin Acosta, EOLWD
Steve Pike, MassCEC
Jim Heppelman, PTC
Dan Rivera, MassDevelopment
Emily Reichert, Greentown Labs
Carla Reimold, Mass Life Sci. Center
Kenneth Turner, MLSC

Guests:
Laura Teicher, Forge
Susan Feindt, Analog Devices
Brian Norris, MassHire MVWB
Deborah Meggison, MassHire GNBWB
Judy Silva, MassMEP

Staff:
Farhad Vazehgoo, MassTech
Meghan Abella-Bowen, MassTech
Christine Nolan, MassTech
Brianna Wehrs, MassTech
Ben Linville-Engler, MassTech
Adam Couturier, MassTech

Introduction, roll call, approval of past minutes

Roll call was taken and a motion was made by Leslie Greis to approve the September 8, 2021 minutes. Ken Warnock seconded, minutes were approved unanimously.

Welcome remarks from Co-Chair Michael Tamasi

Mr. Tamasi opened the meeting and welcomed everyone.

Welcome remarks from Secretary Kennealy
Sec. Kennealy welcomed the AMC. He provided an overview of ARPA dollars and his recent visit to the NEXUS Center in Burlington, MA

AMC Working Group Updates

Innovation Ecosystem


Innovation:

- Ms. Nolan shared an update on the work being done to support the defense manufacturing ecosystem in MA. Business development efforts will be taking place in areas where Massachusetts has a “right-to-win”; missile defense and CSISR (networks and connectivity)
- Ben Linville-Engler gave an overview of the December 8th event at the new NEXUS Center. The center and event are focused on helping to accelerate the adoption and operationalization of emerging technologies for national defense.
- Ms. Nolan and Vinit Nijahawan provided an update on how to support the commercialization of technology and IP from our FFRDCs, Labs, Academics and Start-ups. The goal is to maximize the share of IP that results in MA-based manufacturing. A group will convene stakeholders to help address this gap.
- The M2I2 program continues to stimulate innovation across the state.
  - $82M of $93M invested to date.
  - FY’22 Q1, 6 new grants, ~ 6.3M
  - FY’22, Q2, 14 new applications submitted totaling $4.8M
  - Over $100M leveraged from other sources.
    - Two key investment examples were shared: Specialty Materials and Solvus Global.
- Farhad Vazehgoo and Susan Feindt provided an update on the progress of the MA Semiconductor coalition.
- The MMAP program
  - Program launched in June with applications due by July 29, 2021.
  - Received 51 applications for the program representing manufacturers from across the state.
  - Winners will be announced, pending scheduling with EOHED.

Talent

Ms. Abella-Bowen provided an update on talent and workforce training programs.

- MassBridge has launched its first pilot to test its new curriculum. 176 students are currently enrolled at 5 community colleges with updated curriculum in 9 classes that includes content to address key gaps identified by industry. Awareness videos are being constructed to introduce high schools students to manufacturing career opportunities.
- Ms. Nolan shared a case study of effective use of advanced manufacturing training dollars.
- Ms. Nolan gave an overview of state training funds and programs available through ARPA funding.

Closing Remarks

The next AMC working group meeting is scheduled for March 10, 2022. Working group meetings will take place in mid February.
Materials and Exhibits Used at this Meeting:
1. Draft Minutes – September 8, 2021 Advanced Manufacturing Collaborative meeting minutes
2. Presentation – Advanced Manufacturing Collaborative, December 9, 2021
Proposed Approach

Element #1: Evolutionary Development
- "Other" microelectronics (RF/Mixed, Power, Integrated Photonics, Imagers, etc.)

Thematic "List" of Near-term Industry Needs

Approach
- New England companies provide individual needs (new infrastructure, facilities, etc.) creating a list of "asks"
- List collated to one or more significant themes containing the specific "asks"

Element #2: Disruptive Development
- "Other" microelectronics (RF/Mixed, Power, Integrated Photonics, Imagers, etc.)
- Mainstream computing substantially beyond or exceeding ITRS Roadmap

Plan for Creation of an Ecosystem to Better Support Disruptive Semiconductor Development

Approach
- Identify impediments to translation of high impact nascent concepts to commercial realization
- Develop a plan for addressing each impediment which better leverages organic New England strengths, and which proposes key investments

CLOUD
- Big Data Processing
- Business Logic
- Data Warehousing

EDGE
- Edge Devices
- Realtime Data Processing
- At source/on premises
- Data Visualization
- Basic Analytics
- Data Caching, Buffering
- more...

SENSORS AND CONTROLLERS
- Vital Signs
- Video Capture
- Location Detection
- Battery Monitoring
- Rotation
- Ads Detection
- pH
- Humidity
- Temperature
- Pressure
- more...

- INDUSTRIAL AUTOMATION
- HEALTHCARE
- AUTOMOTIVE
- CONSUMER
- COMMUNICATIONS
- AEROSPACE & DEFENSE
- INSTRUMENTATION & MEASUREMENT