Earlier this year, Governor Andrew M. Cuomo announced that the Department of Defense (DoD) Manufacturing USA Institute, AIM Photonics, plans to begin construction this summer on the institute’s Testing, Assembly and Packaging (TAP) facility. Tool installation will follow this fall. The Empire State Development’s (ESD) Board of Directors also approved an $81 million grant to equip and operate AIM Photonics’s TAP facility. AIM Photonics is part of the overall Finger Lakes Forward revitalization effort—the region’s strategic plan for economic growth, focused on the industry cluster of optics, photonics, and imaging.

"By attracting new investment in this burgeoning industry and convening leading photonics leaders from across the country, this federally-designated AIM Photonics facility will accelerate the growth of Rochester and across the region," Governor Cuomo said. "As we continue to invest in the future of the Finger Lakes and move the economy and business community forward—this investment is critical to the completion of AIM Photonics' cutting-edge TAP facility that will create new jobs and new opportunities for the community."

Announced by the Governor in December 2016, the TAP facility will be located at a portion of a former Kodak building now owned by ON Semiconductor. An $81 million grant will be used for the cost of machinery, tools and other equipment, and operating costs for the federally-designated institute’s TAP facility. The tooling portion will include the industry’s first and only open-access 300mm test. Various assembly tools and equipment, packaging, and installation functions will also be located at the facility, including Wafer Fab and Multiple Project Wafer assembly tools and equipment, and a test, assembly and packaging Manufacturing Execution System.

"AIM Photonics has already positioned Rochester as a national leader in the emerging nanotech sector, and with the addition of this critical $81 million investment, the Finger Lakes region will continue to move forward. That’s why the project is central to the Finger Lakes Forward regional plan," said Photonics Board Chairman John Maggiore. "The completion of this next generation TAP facility will attract industry leaders from across the globe, provide men and women the high-tech, well-paying jobs they deserve, and ensure a strong, sustainable future for communities across the region."

New York has committed $250 million to support AIM Photonics, leveraging the $110 million DoD award and $250 million in private support for a total investment of more than $600 million. In July 2016, the ESD Board approved an initial $78 million for tooling, equipment, technology licenses and operations. In January 2017, the ESD Board approved an additional $28 million for the project to renovate, equip and operate the TAP facility.

Senator Joseph E. Robach said, "I am pleased to see that the final planning stages of the AIM Photonics project will begin this summer. The installation at the institute’s Testing, Assembly and Packaging facility means jobs for members of our community in the innovative fields of optics, photonics and imaging. I am excited for the future of this project, as well as for positive impact photonics will have for our region."

AIM Photonics CEO and SUNY Poly Vice President of Research Dr. Michael Liehr said, "With this latest news, the AIM Photonics initiative is proud to pave the way for strong growth in this innovative area to promote research into next-generation integrated photonics manufacturing technologies and business growth. It is exciting to see the progress taking place which is allowing this initiative to hit its stride."

For more information, visit AIM Photonics’ website here.
In June 2017, Department of Defense Manufacturing USA Institute, The Digital Manufacturing and Design Innovation Institute (DMDII), a UI LABS collaboration, and McKinsey & Company announced the launch of the North American Digital Capability Center (DCC). This unique digital manufacturing learning center offers company leaders and their workforce hands-on experience and workshops in next generation technology to help them advance their operations, design, and productivity.

The North American DCC brings DMDII’s and McKinsey’s deep expertise in digital manufacturing, automation, and business transformation to Chicago, at the crossroads of America’s manufacturing base. It aims to help America’s leading manufacturers adapt to new technologies while helping the next generation grow – preparing smaller and mid-size companies to innovate, while nurturing start-ups.

“Access to the necessary tools and training is essential for U.S. manufacturers to benefit from the rapid technological change currently underway,” said Thomas McDermott, Executive Director of DMDII. “Housing the North American Digital Capability Center at DMDII – a neutral collaboration platform – ensures companies of all sizes can tap into the resources they need to adopt advanced manufacturing technologies and remain competitive on the global stage.”

The technologies featured at the DCCs are provided by a growing list of technology partners that bring to life the benefits of digital manufacturing through a functioning production line that makes refrigerator compressors.

The Chicago-based DMDII and McKinsey partnership benefits from the collaboration of more than 300 manufacturers, technology companies, academic institutions, and other organizations dedicated to bringing manufacturing enterprises into the 21st century.

DMDII and its partners are currently engaged in more than 50 technical projects along with workforce development initiatives to prepare U.S. workers with the skills required for digital manufacturing jobs. Leaders from 50 DMDII partner organizations are participating in training at the North American DCC this month alone. DMDII also plans to engage small and medium-sized manufacturers within the DCC to ensure that organizations across the supply chain can access the tools and training needed to adopt digital manufacturing technologies.

For more information visit DMDII’s website here.

The Digital Capability Center (DCC) facility housed at DMDII offers:

- **Digital showcases:** Over time, companies will be able to explore more than 20 themes related to digital manufacturing, including showcases dedicated to digital performance management, digital standard work, predictive maintenance, and wearables and augmented reality.

- **Experiential capability-building workshops:** Leaders from companies of all sizes can sign up for one-day workshops designed to build awareness of digital manufacturing, and managers and their teams can take advantage of multi-day workshops to equip them with necessary skills to undertake digital transformations within their organizations.

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**AFFOA FDC GRAND OPENING**

On June 19, 2017, Advanced Functional Fabrics of America (AFFOA) celebrated the opening of its national headquarters and first of its kind advanced fabric prototyping facility. Attendees were given an exclusive opportunity to participate in AFFOA’s inaugural product platform launch and experience advanced fabrics first-hand.


For more information visit AFFOA’s website here.

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**ADVANCING EDUCATION AND WORKFORCE DEVELOPMENT**

AIM Photonics Academy, an initiative of the AIM Photonics Institute, will host a Summer Academy program in July 2017 on the Fundamentals of Integrated Photonics at MIT. Attendees will learn about foundational principles of device and circuit design, integrated process flow, and manufacturing control; network with colleagues from academia and industry; meet leading Electronic Photonic Design Automation vendors and review their software tools; and participate in a preliminary introduction to packaging and testing principles in MIT’s flagship Education and Practice Factory.

Throughout the week, collaborative teams will design a project that synthesizes the program’s learning objectives. Attendance options are a 3-day focus on design or a full week, which includes the manufacturing component.

“The program is an intensive introduction; one that gives our participants a core competency in understanding the new paradigm of fabless silicon photonics,” says AIM Photonics Academy Education Director, Sajan Saini, “in addition [to] providing them the requisite expertise to investigate on their own the benefits of electronic-photic integration, and to critically evaluate the different applications currently driving integrated photonics.”

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**KUDOS**

Congratulations to G. Brynt Parmeter, the Director of Workforce Development for NextFlex, America’s Flexible Hybrid Electronics’ Institute. On the July 20 at the Pentagon, the Honorable Robert Speer, the Acting Secretary of the Army, swore in Mr. Parmeter as a civilian aide to the Civilian Aide to the Secretary of the Army (CASA) for the California (Silicon Valley) area. Mr. Parmeter joins the 96 members across the country that support the Secretary of the Army in this voluntary position.

The Hon. Robert Speer (Left) & Brynt Parmeter (Right)