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New coalition launches to advance and scale optical connections for AI data centers

Multi-source agreement will accelerate open standards for optical connectivity

ST. PAUL, Minn., May 12, 2026 /PRNewswire/ -- 3M (NYSE: MMM) today announced it has joined a group of leading technology companies to establish a new multi-source agreement (MSA) focused on advancing open, interoperable specifications for expanded beam optical (EBO) connectivity in AI infrastructure. Expanded beam optical technology is increasingly seen as a critical enabler for AI infrastructure, offering advantages in reliability, ease of maintenance, and performance in high-density environments. As hyperscale and enterprise AI deployments grow, standardized approaches to optical connectivity are expected to play a key role in reducing complexity and accelerating time to deployment.

The MSA brings together industry leaders including 3M, Accelink, Aperion, AMD, Amphenol, Arista Networks, Cisco, Meta, Molex, Nexthop-ai, Oracle, Senko, Source Photonics, Sumitomo, TE Connectivity, viaPhoton, and Xscape Photonics to collaboratively develop standardized specifications for a range of EBO connector solutions. The effort is designed to accelerate deployment of high-performance optical interconnects required to support the rapid scaling of AI data centers.

"As AI workloads scale, the physical layer of data centers is being pushed to new limits — requiring optical connectivity solutions that are not only high-performance, but also interoperable and scalable across a growing ecosystem," said Alex An, vice president, 3M data center vertical. "By participating in this MSA, 3M is helping enable an open, standards-based approach that can accelerate adoption, improve reliability, and support the next generation of AI infrastructure."

The MSA will provide a collaborative framework for members to contribute to a shared specification covering multiple EBO connector configurations.

"The increasing bandwidth density and scale of AI networks are driving the need for a highly resilient Layer 1, which today relies on multi-fiber physical contact connectors," said Rajagopal Subramaniyan, senior vice president, OCI networking, Oracle. "Strict connector hygiene requirements slow network builds and add operational overhead for ongoing link triage. Expanded beam technology can overcome these bottlenecks, enabling more resilient cluster topologies and future rack-scale optical architectures. Reflecting Oracle's commitment to innovation and industry leadership, we are pleased to serve as co-chair in the formation of the EBO MSA, which is essential to establishing a diverse supplier ecosystem for hyperscale cloud and AI operators."

3M's participation in the MSA builds on its broader commitment to advancing data center innovation through materials science — including solutions that help enable reliable

connectivity, manage heat and power, and support resilient infrastructure at scale. As momentum builds across the ecosystem, additional contributors to the MSA are underscoring the importance of open, standardized approaches to expanded beam connectivity.

"As optical data networks scale and evolve rapidly, the industry faces increasing demand for solutions that deliver not only high performance, but also reliability and ease of deployment and operation," said Jim Hasegawa, president of the Optical Communications Division at SENKO Advanced Components, Inc. "Expanded beam optical technology directly addresses these needs, especially as the industry moves toward open, consistent standards that enable seamless integration across transceivers, backplanes, and cable assemblies."

The MSA is open to additional members across the data center and networking ecosystem. The initial technical working group has begun development of the first connector specification. More information can be found at www.ebomsa.org, or by contacting the EBO MSA administrator and co-chair, Richard Ward, at admin@ebomsa.org.

About 3M
3M (NYSE: MMM) is focused on transforming industries around the world by applying science and creating innovative, customer-focused solutions. Our multi-disciplinary team is working to solve tough customer problems by leveraging diverse technology platforms, differentiated capabilities, global footprint, and operational excellence. Discover how 3M is shaping the future at 3M.com/news.

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