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Marvell to Acquire Celestial AI, Accelerating Scale-up Connectivity for Next-Generation Data Centers

Celestial AI's breakthrough Photonic Fabric™ technology platform enables optical I/O for package, system and rack-level connectivity for the next-generation of data center infrastructure

SANTA CLARA, Calif.--(BUSINESS WIRE)-- Marvell Technology, Inc. (NASDAQ: MRVL), a leader in data infrastructure semiconductor solutions, today announced it has entered into a definitive agreement to acquire Celestial AI, a pioneer of a disruptive Photonic Fabric technology platform purpose-built for scale-up optical interconnect. This strategic acquisition represents a transformational milestone in accelerating the company's connectivity strategy for next-generation AI and cloud data centers.

AI is reshaping data center architectures at unprecedented speed. Next-generation accelerated systems are no longer confined to a single rack – they are evolving into multi-rack configurations connecting hundreds of XPUs with an integrated high-bandwidth, ultra-low latency, any-to-any scale-up fabric. This architecture allows each XPU to access the memory of every other XPU directly. These advanced fabrics demand purpose-built switches and protocols such as UALink, engineered to deliver the performance and efficiency required at scale.

Given the power, bandwidth, latency, and reach requirements of multi-rack scale-up fabrics, interconnects will increasingly transition to all-optical connections. This acquisition positions Marvell to lead this technology shift and capture a brand-new semiconductor TAM for optical interconnects.

Combined with existing leadership in scale-out and scale-across connectivity, Marvell expects this expanded portfolio will result in the industry's most comprehensive provider of high-bandwidth, low-power, low-latency solutions for next-generation data center connectivity.

"The acquisition of Celestial AI is a transformative step in Marvell's evolution and expands our leadership in AI connectivity, as scale-up becomes the next frontier in AI infrastructure," said Matt Murphy, Chairman and CEO of Marvell. "This builds on our technology leadership, broadens our addressable market in scale-up connectivity, and accelerates our roadmap to deliver the industry's most complete connectivity platform for AI and cloud customers."

"AI infrastructure is transforming faster than ever, and the future demands scale-up fabrics that deliver unprecedented bandwidth, power efficiency, and reach," said Sandeep Bharathi, President, Data Center Group. "By combining our UALink scale-up switch roadmap and Celestial AI's breakthrough optical scale-up interconnect, we will enable customers to build

AI systems that scale beyond the limits of copper and redefine what's possible in AI data center architecture."

"At AWS, we aim to be at the forefront of major technology inflections, and we believe optical interconnects will play an important role in the future of AI infrastructure. Building a scalable, high-performance, and power-efficient cloud starts with an approach built upon differentiated technologies," said Dave Brown, Vice President of Compute and Machine Learning Services at AWS. "Celestial AI has made impressive progress, and we expect their combination with a large-scale semiconductor company like Marvell will help further accelerate optical scale-up innovation for next-generation AI deployments."

Celestial AI: Breakthrough Photonic Fabric Technology Platform for Scale-Up Interconnect

As bandwidth and reach continue to increase, every connection point in the data center must move from copper to optical. For rack-to-rack scale-out and data-center to data-center DCI connections this transition has already taken place. The next inflection point is within the rack, within the system, and even within a package – where electrical connections must now give way to optics.

Celestial AI's Photonic Fabric technology platform was purpose-built for this inflection. It enables large AI clusters to scale both within and across racks using a high-bandwidth, low latency, low power and cost-effective optical fabric. This breakthrough delivers a true optical solution with more than two times the power efficiency of copper interconnects, along with far longer reach and significantly higher bandwidth. Compared to alternative photonic technologies, Celestial AI's solution provides exceptionally low power consumption, nano-second-class latency and excellent thermal stability – enabling deeper levels of optical interconnectivity into XPUs and switch systems.

The thermal stability of Celestial AI's Photonic Fabric technology is a significant competitive differentiator. It enables reliable operation in the extreme thermal environments created by large, multi-kilowatt XPUs and switches. This allows the photonics technology to be co-packaged vertically with high-power XPUs and switches in a 3D package, enabling the photonic connection to be made directly into the XPU, rather than from the edge of the die. Celestial AI's approach results in a more compact and integrated solution, while freeing up highly valuable die edge beachfront, which can be repurposed to significantly increase the amount of HBM within the XPU package.

The first application of this technology platform will be all-optical scale-up interconnects, as high-speed XPU links transition from copper to optics to meet the reach and bandwidth demands of next-generation rack-scale architectures. Celestial AI's first-generation Photonic Fabric chiplet for scale-up interconnect integrates all the required electrical and optical components into a compact form factor. It is the industry's first scale-up optical solution delivering an unprecedented 16 terabits per second of bandwidth in a single chiplet – 10 times the capacity of today's state-of-the-art 1.6T ports used in scale-out applications. Its compact form factor allows multiple PF chiplets to be co-packaged with XPUs and the scale-up switches on the opposite side of the link, enabling substantial increases in total system bandwidth.

Celestial AI is deeply engaged with multiple hyperscalers and ecosystem partners that plan to use Celestial AI's Photonic Fabric technology in their next-generation scale-up architectures. Based on existing customer traction, Marvell expects Celestial AI's Photonic

Fabric chiplets to be co-packaged with custom XPUs and scale-up switches, enabling the industry's first large-scale commercial deployment of optical interconnect for scale-up connectivity.

Marvell expects meaningful revenue contributions from Celestial AI to begin in the second half of fiscal 2028, reaching a $500 million annualized run rate in the fourth quarter of fiscal 2028, doubling to a $1 billion dollar run rate by the fourth quarter of fiscal 2029.

Beyond connecting XPUs in scale-up networks, Celestial AI's Photonic Fabric technology platform can enable a wide range of transformational applications over time, including pooled memory appliances and optical replacements for traditional electrical die-to-die connections in multi-die packages.

"Marvell is the ideal home for our Photonic Fabric, with the scale, customer relationships, and connectivity leadership to take this platform into high-volume production," said David Lazovsky, Co-Founder and CEO of Celestial AI. "Together with Marvell's scale-up switching strategy, we're excited to accelerate the transition to optical scale-up interconnect and expand what next-generation AI infrastructure can achieve."

Transaction Structure and Terms

Marvell will acquire Celestial AI for upfront consideration valued at approximately $3.25 billion, consisting of $1.0 billion in cash, as well as approximately 27.2 million shares of Marvell common stock, having a value of $2.25 billion, based on the average volume weighted average price (VWAP) for the 10 trading days ending the second day prior to signing. In addition, Marvell will pay Celestial AI equityholders incremental contingent consideration of up to approximately 27.2 million shares of Marvell common stock, having a value of up to $2.25 billion, based on the same 10 trading day VWAP, upon satisfaction of certain revenue milestones. The first milestone, representing one-third of the earnout consideration, will be achieved if Celestial AI reaches cumulative revenue of at least $500 million by the end of Marvell's fiscal year 2029. The full earnout would be paid if Celestial AI's cumulative revenue by the end of Marvell's fiscal year 2029 exceeds $2.0 billion.

The transaction is expected to close in the first quarter of calendar 2026, subject to customary closing conditions and regulatory approvals.

Conference Call Information

Further discussion of this transaction will be included as part of Marvell's fiscal third quarter earnings conference call today at 1:45 p.m. Pacific Time. The call will be webcast and can be accessed at the Marvell Investor Relations website at http://investor.marvell.com/.

Advisors

Wilson Sonsini Goodrich & Rosati is serving as Marvell's legal advisor, and Citi is serving as exclusive financial advisor to Marvell. Latham & Watkins is serving as legal advisor to Celestial AI, and Morgan Stanley is serving as its exclusive financial advisor.

About Marvell

To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies for over 30 years, we move, store, process and secure the

world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud and carrier architectures transform—for the better.

About Celestial AI

Celestial AI is the creator of the Photonic Fabric, an optical interconnect technology platform for AI computing systems. The Photonic Fabric provides the foundational technology for data center computing, networking and memory systems to enable advancements in AI with sustainable and profitable business models. Celestial AI's Photonic Fabric delivers a transformative leap in AI system performance and energy efficiency. https://www.celestial.ai.

Celestial AI and Photonic Fabric are trademarks of Celestial AI, Inc., registered in the U.S. and other countries or regions.

This press release contains certain forward-looking statements within the meaning of the federal securities laws with respect to the proposed transaction between Marvell and Celestial AI, including statements regarding the benefits of the transaction and expected synergies, the anticipated timing of the closing of the transaction and the products and markets of each company. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. Many factors could cause actual future events to differ materially from the forward-looking statements in this press release, including but not limited to: (i) the risk that a transaction may not be completed in a timely manner or at all, (ii) the failure to satisfy the conditions to the consummation of a transaction, including the receipt of governmental and regulatory approvals, if required, (iii) the effect of the announcement or pendency of the transaction on the business relationships, operating results, and business generally of Celestial AI, (iv) potential difficulties in employee retention as a result of a transaction, (v) the ability of Marvell to successfully integrate Celestial AI's operations and product lines, and (vi) the ability of Marvell to implement its plans, forecasts, and other expectations with respect to a business after the completion of a transaction. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions that are difficult to predict, including those described in the "Risk Factors" section of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and other documents filed by us from time to time with the SEC. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and no person assumes any obligation to update or revise any such forward-looking statements, whether as a result of new information, future events or otherwise.

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