



Rocket Lab Introduces Advanced Silicon Solar Arrays To Power Space-Based Data Centers

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As surging AI and compute demand pushes terrestrial data centers to their limit, space-based data centers can harness infinitely abundant solar energy in orbit thanks to Rocket Lab's rapidly scalable silicon solar arrays

LONG BEACH, Calif., Feb. 26, 2026 (GLOBE NEWSWIRE) -- Rocket Lab Corporation (Nasdaq: RKLB) ("Rocket Lab" or "the Company"), a global leader in launch services and space systems, today announced the introduction of advanced silicon solar arrays designed to power gigawatt-scale space-based data centers spanning kilometers in orbit.

Terrestrial-based data centers are power-constrained, land-intensive, and consume significant volumes of water for cooling. Space-based data centers are freed from these environmentally intensive and resource-heavy constraints by taking advantage of the abundant space in orbit, the cold space environment, and the limitless energy of the sun. Power is the gating factor to the scalability of data centers on orbit and Rocket Lab's silicon solar arrays deliver low cost per watt at industrial scale, enabling gigawatt-class power generation in space using mass-manufacturable, lightweight, and modular systems that can scale economically as orbital compute demand rises.

Space solar power explained: Solar cells capture energy from the sun to generate the electricity needed to power satellites on orbit. Typically, these cells have been made of gallium arsenide and germanium due to these materials' ability to withstand the harsh radiation environment of space. Both are critical minerals for which supply is constrained by evolving geopolitical challenges. The stark reality is that the satellite industry is projected to grow [seven times by 2035](#), space-based data centers are on the horizon, and solar power supply chains are at risk of failing to keep up. A new solution is needed now, not years or decades into the future, and silicon is the answer.

Rocket Lab already boasts the world's largest installed production capacity for gallium arsenide and germanium based solar arrays, and now the company has taken the future-proofing step of introducing silicon-based solar arrays to its production capabilities. Designed for constellation scale production, the arrays feature radiation hardened solar cell modules that are flexible and lightweight. This is crucial to supporting a variety of stowage and deployment methods tailored to any mission requirements. As the world's only fully vertically integrated space power supplier, Rocket Lab already streamlines production and delivers cost efficiencies by offering solar cells, solar cell assemblies, and solar modules, solar panel substrates, complete solar panels and entire solar array wings, all integrated under one roof. Adding a space-qualified silicon solution to the Rocket Lab portfolio reduces reliance on critical mineral supply chains, mitigates potential vulnerabilities, and enables the ambitious and revolutionary space capabilities of the future including mega constellations and data centers on orbit.

Rocket Lab has taken the additional step of developing a hybrid solar array solution that incorporates both high efficiency and silicon solar cells, an approach that leverages the benefits of both solar cell technologies and enables adaptable and scalable solutions for any mission. When size, weight, power or performance are at a premium, high efficiency cells are enabling. When cost, schedule or constellation scale are required, silicon cells can meet the demand. When these factors must be traded off and balanced, hybrid arrays enable a combination of the two to deliver optimum performance at a compelling value.

"Space-based data centers are the next frontier in computing infrastructure, and reliable solar power systems will form the backbone of this revolution," said Peter Beck, Rocket Lab Founder and CEO. "Rocket Lab's silicon solar arrays are designed to meet the unique challenges of operating in space while delivering the performance needed to support the growing demand for data processing and storage beyond Earth's atmosphere."

Brad Clevenger, President of Rocket Lab USA, said: "We are at a pivotal moment in space power capability and the time for leadership is now. Space infrastructure is now as critical to the economy, national security, and daily life as roads, electricity, and running water. Introducing silicon solar arrays at constellation scale is Rocket Lab taking an essential and industry-leading step toward ensuring the ongoing security and growth of America's space capabilities."

This strategic decision builds on Rocket Lab's semiconductor manufacturing expansion supported by the U.S. CHIPS and Science Act. In October 2025, Rocket Lab announced a \$23.9 million CHIPS award to expand semiconductor production capabilities in Albuquerque, New Mexico, further bolstering its mission to deliver secure, high-performance, and domestically produced technologies.

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+ About Rocket Lab

Rocket Lab is a leading space company that provides launch services, spacecraft, payloads and satellite components serving commercial, government, and national security markets. Rocket Lab's Electron rocket is the world's most frequently launched orbital small rocket; its HASTE rocket provides hypersonic test launch capability for the U.S. government and allied nations; and its Neutron launch vehicle in development will unlock medium launch for constellation deployment, national security and exploration missions. Rocket Lab's spacecraft and satellite components have enabled more than 1,700 missions spanning commercial, defense and national security missions including GPS, constellations, and exploration missions to the Moon, Mars, and Venus. Rocket Lab is a publicly listed company on the Nasdaq stock exchange (RKLB). Learn more at www.rocketlabcorp.com.

+ Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. We intend such forward-looking statements to be covered by the safe harbor provisions for forward looking statements contained in Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements contained in this press release other than statements of historical fact, including, without limitation, statements regarding our launch and space systems operations, launch schedule and window, safe and repeatable access to space, Neutron development, operational expansion and business strategy are forward-looking statements. The words "believe," "may," "will," "estimate," "potential," "continue," "anticipate," "intend," "expect," "strategy," "future," "could," "would," "project," "plan," "target," and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements use these words or expressions. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including but not limited to the factors, risks and uncertainties included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, as such factors may be updated from time to time in our other filings with the Securities and Exchange Commission (the "SEC"), accessible on the SEC's website at www.sec.gov and the Investor Relations section of our website at www.rocketlabcorp.com, which could cause our actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management's estimates as of the date of this press release. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change.