



Momentum and Ascent Solar Technologies Partner to Bring to Market Leading-Edge Solar Arrays

April 17, 2024

Innovative solar arrays to address burgeoning need

SAN JOSE, Calif.--(BUSINESS WIRE)--Apr. 17, 2024-- Momentum Inc. (NASDAQ: MNTS) ("Momentum") and Ascent Solar Technologies (Nasdaq: ASTI) ("ASTI") today announced a new partnership to jointly market leading-edge solar arrays utilizing the low-cost Tape Spring Solar Array (TASSA) being developed by Momentum and the high performance of Ascent's flexible, lightweight photovoltaic modules.

The rapid growth in the production and deployment of thousands of satellites in space has led to the burgeoning need for low-cost, reliable solar arrays with high performance. Momentum and Ascent are excited to partner to market a leading-edge solar array designed to provide key advantages to customers, such as low-cost, resiliency with less degradation in the harsh environment in space, flexibility, and the ability to efficiently generate large amounts of power.

Building off the successes of the pathfinder demonstration of TASSA that was launched to Low-Earth Orbit on the Vigoride-6 mission one year ago and tested in space for several months, Momentum plans to add a high-power photovoltaic array as a differentiated feature of the next iteration of the TASSA product under development. Last year's pathfinder TASSA demonstration validated solar blankets from Ascent Solar Technologies (Nasdaq: ASTI) ("ASTI") as a mass efficient and robust power generation solution. Momentum plans to incorporate in TASSA new higher efficiency solar blankets from ASTI composed of space industry optimized Titan Modules, providing even lower cost per kW of power.

TASSA will continue to utilize Vigoride hardware with spaceflight heritage to provide customers an entire array subsystem complete with solar array rotation actuators and controllers. This approach is oriented at streamlining mission schedules and minimizing clean room bottlenecks during spacecraft assembly integration and testing. TASSA is designed for responsive launch as well as more efficient flatpack configurations which allow for more satellites to fit within launch vehicle payload fairings.

"TASSA is designed to generate extensive power at very low cost while minimizing mass and volume," said Rob Schwarz, Momentum CTO. "TASSA is intended to allow Smallsats to generate kilowatts of power on orbit without breaking their mass, thermal, or cost budgets. This design optimization also facilitates improved satellite packing efficiencies and allows constellations to be fielded quicker and cheaper."

TASSA is also retractable and re-deployable, providing a means for the minimization of cross-sectional area and array exposure if notified of potential conjunction or other orbital hazards such as space weather. This could enable TASSA to facilitate longer mission durations and increased assurance of spacecraft operations on orbit.

"Ascent's flexible, lightweight photovoltaic modules are ideal for the space environment," says Paul Warley, ASTI CEO, "as our CIGS products are resilient to radiation and other drivers of degradation while operating in orbits between the Earth and the Moon. For those designing space missions, this equates to more end-of-life power with an order of magnitude less mass. We're excited to be the baseline power generation solution for TASSA and look forward to continuing to collaborate with the Momentum team to provide long-lived and sustainable solutions for proliferated space architectures."

ABOUT MOMENTUS

Momentum is a U.S. commercial space company that offers satellite buses and technologies, as well as space services including transportation, hosted payloads, and other in-orbit services.

ABOUT ASCENT SOLAR TECHNOLOGIES, INC.

Backed by 40 years of R&D, 15 years of manufacturing experience, numerous awards, and a comprehensive IP and patent portfolio, Ascent Solar Technologies, Inc. is a leading provider of innovative, high-performance, flexible thin-film solar panels for use in environments where mass, performance, reliability, and resilience matter. Ascent's photovoltaic (PV) modules have been deployed on space missions, multiple airborne vehicles, agrivoltaic installations, in industrial/commercial construction as well as an extensive range of consumer goods, revolutionizing the use cases and environments for solar power. Ascent Solar's research and development center and 5-MW nameplate production facility is in Thornton, Colorado. To learn more, visit <https://www.ascentsolar.com> or follow the Company on LinkedIn and X (formerly Twitter).

Forward-Looking Statements

This press release contains certain statements which may constitute "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, but are not limited to, statements regarding Momentum or its management team's expectations, hopes, beliefs, intentions or strategies regarding the future, projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, and are not guarantees of future performance. The words "may," "will," "anticipate," "believe," "expect," "continue," "could," "estimate," "future," "expect," "intends," "may," "might," "plan," "possible," "potential," "aim," "strive," "predict," "project," "should," "would" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions.

Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult

to predict and many of which are outside of Momentus' control. Many factors could cause actual future events to differ materially from the forward-looking statements in this press release, including but not limited to: the ability of the Company to generate revenue and raise capital in order to continue as a going concern; the ability of the Company to obtain licenses and government approvals for its missions, which are essential to its operations; the ability of the Company to effectively market and sell satellite transport services and planned in-orbit services; the ability of the Company to protect its intellectual property and trade secrets; the development of markets for satellite transport and in-orbit services; the ability of the Company to develop, test and validate its technology, including its water plasma propulsion technology; delays or impediments that the Company may face in the development, manufacture and deployment of next generation satellite transport systems; the ability of the Company to convert backlog or inbound inquiries into revenue; changes in applicable laws or regulations and extensive and evolving government regulations that impact operations and business, including export control license requirements; the ability to attract or maintain a qualified workforce with the required security clearances and requisite skills; product service or product or launch failures or delays that could lead customers to use competitors' services; investigations, claims, disputes, enforcement actions, litigation and/or other regulatory or legal proceedings; the Company's ability to comply with the terms of its National Security Agreement and any related compliance measures instituted by the director who was approved by the CFIUS Monitoring Agencies; the possibility that the Company may be adversely affected by other economic, business, and/or competitive factors; and/or other risks and uncertainties. These are only some of the factors that may affect the forward-looking statements contained in this press release. For a discussion identifying additional important factors that could cause actual results to differ materially from those anticipated in the forward-looking statements, see the company's filings with the U.S. Securities and Exchange Commission including, but not limited to, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2022. The Company's filings may be accessed through the Investor Relations page of its website, investors.momentus.space, or through the website maintained by the SEC at www.sec.gov. 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, except as required by law, the Company assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise.

View source version on [businesswire.com](https://www.businesswire.com/news/home/20240417134583/en/): <https://www.businesswire.com/news/home/20240417134583/en/>

Media: press@momentus.space

Investors: investors@momentus.space

Source: Momentus Inc.