

Supernal Debuts eVTOL Product Concept at CES 2024

Vehicle and accompanying vertiport represent bold future of flight

LAS VEGAS, Jan. 9, 2024 – <u>Supernal LLC</u> – Hyundai Motor Group's Advanced Air Mobility (AAM) company – today unveiled S-A2, its electric vertical takeoff and landing (eVTOL) vehicle product concept at CES 2024. The pilot-plus-four-passenger vehicle marks the latest milestone in Supernal's roadmap to commercialize safe, efficient and affordable everyday passenger air travel.

S-A2 builds on the Company's vision concept, S-A1, which it debuted at CES 2020, bringing together the innovative aerospace engineering and Hyundai Motor Group automotive aesthetic design to create a new mode of transportation to get people in urban areas from point A to point B faster. Supernal will achieve commercial aviation safety levels and enable affordable manufacturing of its vehicles as it prepares to enter the market in 2028.

"From the beginning, Supernal has been on a mission to create the right product and the right market at the right time," said Jaiwon Shin, president of Hyundai Motor Group and CEO of Supernal. "The unveiling of S-A2 demonstrates our unwavering commitment to deliver on that mission with a safe, efficient vehicle design that provides a clear path to market entry. By leveraging our talented 600-person team, the vast technical and business capabilities of Hyundai Motor Group and trusted aviation suppliers around the world, Supernal is ready to deliver a new era of flight."

Technical Components

S-A2 is a V-tail aircraft designed to cruise 120 miles-per-hour at a 1,500-foot altitude to meet typical city operation needs of 25- to 40-mile trips, initially. It features a distributed electric propulsion architecture and has eight all-tilting rotors. At entry into service, Supernal's vehicle will operate as quietly as a dishwasher: 65 dB in vertical take-off and landing phases and 45 dB while cruising horizontally.

The vehicle is designed with a priority on safety and a focus on sustainability and passenger comfort. Engineered to achieve the global commercial aviation standard of safety, it has a robust airframe structure including redundant components in critical systems such as powertrain, flight controls and avionics. The all-tilting rotor configuration will power the vehicle through both the vertical-lift and horizontal-cruise phases of flight with unique efficiency. To maintain superior quality while also being cost-effective, the vehicle will be manufactured leveraging Hyundai's mass production capability.

"Supernal's product concept vehicle is the result of the creativity and hard work of our world-class team. S-A2 is designed to take full advantage of emerging electric powertrain advancements that will define the next generation of aviation," said Ben Diachun, chief technology officer, Supernal. "From here, we will develop this concept into a revolutionary commercial product."

As Supernal continues to optimize its vehicle for certification, mass production and expanded use cases, the Company is also focused on interior modularity and battery upgradability. This includes the ability to replace the battery module as technology advances.

Aesthetic Design

Supernal's engineering teams partnered with Hyundai Motor Group's automotive designers on S-A2's aesthetics – blending design with functionality – that will attract aviation operators and create the preferred AAM passenger experience. Different color palettes and materials delineate distinct pilot and passenger sections of the vehicle. Aviation-grade, energy-absorbing components are integrated into the seat frames, and contribute to the overall clean, minimalist design. Lighting transitions throughout phases of flight allow the cabin to feel larger and to provide visual cues, such as where to enter and exit the vehicle.



"S-A2 is a true representation of 'auto meets aero.' Drawing on the competence of Supernal's top aerospace engineers and Hyundai Motor Group's world-renowned automotive designers to create human-centric design that maximizes passenger experience and safety," said Luc Donckerwolke, president, chief design officer and chief creative officer, Hyundai Motor Group.

Drawing on experience from designing "smart cars" with similar efficient footprints and recent award-winning electric vehicles, Hyundai Motor Group's designers also incorporated the latest in passenger experience and automotive design best-practices into S-A2.

Supernal at CES 2024

S-A2 is on display within the <u>Supernal Vertiport exhibition at CES 2024</u>, located in the Diamond parking lot next to the West Hall of the Las Vegas Convention Center. The future "transportation hub" brings together Supernal's holistic vision for AAM, placing S-A2 in an operational setting. Attendees have the opportunity – under one roof – to see the vehicle product concept, take a simulated flight above the city of Los Angeles, learn about potential flight networks and the technology to support them, as well as understand how vertiports and other transportation modes will create quicker and easier metropolitan journeys.

Vertiports represent a key element for AAM commercialization, serving as the origin, transfer and destination points for eVTOL aircraft operations and existing modes of transportation. Quiet electric flight will enable vertiports to be in cities, at airports and elsewhere for seamless integration with existing transit options. Combined with air traffic control improvements and advanced micro-weather forecasting, S-A2 and vertiports will facilitate mobility far beyond what existing and projected ground infrastructure can deliver.

Click here for more information about Supernal's CES 2024 exhibition and S-A2 visuals.

– End –

About Supernal

Supernal (Su·per·nal) is an Advanced Air Mobility company that's developing an electric vertical take-off and landing (eVTOL) vehicle and the ground-to-air ecosystem to support the emerging industry. As part of Hyundai Motor Group, Supernal is harnessing world-class manufacturing, automation, supply chain and R&D expertise to make this new, efficient transportation option widely accessible in the coming decades. Simply put: Rather than being first to market, we're building the right product and right market, first. Visit <u>Supernal's newsroom site</u> for more information and follow us on <u>LinkedIn</u>.

Contact Jennifer Darland Supernal jennifer.darland@supernal.aero

Brock Martin Edelman – for Supernal brock.martin@edelman.com