

News Release

October 13, 2026

Headspring Inc.

Osamu Hoshino, President & CEO

Headspring Forms Capital and Business Alliance with Silicon & System

Joint Development with DTI of Next-Generation Power Supplies for AI Data Centers

Headspring Inc. (Head office: Shinagawa-ku, Tokyo; President & CEO: Osamu Hoshino; “Headspring”) has entered into a capital and business alliance agreement with Silicon & System CO., LIMITED (Head office: Hong Kong; Representative: Steven Chen; “S&S”). Under the alliance, Headspring will issue new shares to S&S through a third-party allotment and will begin joint development of next-generation power supplies for AI data centers with Devise Tech Inc. (“DTI”), in which S&S is a major shareholder.

The joint development will combine DTI’s power module design and development technology with Headspring’s power conversion and control technology, with the aim of commercializing power supplies for 800V-class DC power distribution.

Background and Purpose of the Alliance

The rapid spread of generative AI is driving a sharp rise in data center power consumption. To deliver power efficiently to GPU server racks, power architectures are shifting from conventional AC distribution to 800V-class DC distribution. Under this alliance, the companies will develop power supplies for the 800V-class DC distribution used to power AI data centers.

Over more than 12 years since its founding, and through more than 450 development projects, Headspring has built up expertise in SiC/GaN-based power conversion, high-speed control, and semiconductor evaluation. DTI has the technology and know-how to design, develop, and manufacture power modules. An affiliate of DTI has begun construction of a power module manufacturing plant (site area: 45,000 m²; total floor area: 70,600 m²). By combining the two companies’ technologies and linking power module design with hardware evaluation of the power supply, the companies aim to bring next-generation power supplies for AI data centers to market quickly.

Scope of the Joint Development

Power supplies for AI data centers must handle large amounts of power in limited space while keeping conversion losses and heat generation low. For power supplies that convert 800V-class DC to the voltage used in server racks, high efficiency and compact size are essential, along with insulation design for high voltage and the control and thermal design that support stable operation.

Data center power supplies have typically been built with discrete semiconductors, individual components placed on a circuit board. In this joint development, semiconductors that were previously placed individually will be integrated into a dedicated power module tailored to the power supply’s requirements. Designing the wiring and heat dissipation structure together with the power supply circuit is intended to reduce both size and power conversion losses.

DTI's proprietary manufacturing technology, EnerStack, effectively reduces impedance between circuits, thereby delivering performance advantages for power module products. The companies will combine the high-efficiency, high-reliability power modules this technology makes possible with Headspring's power conversion and control technology to improve the performance of the power supply system as a whole.

Headspring and DTI will conclude a joint development agreement and proceed with the following division of roles.

- DTI: Design, development, and production of the dedicated power modules
- Headspring: Design and development of the power supply systems that incorporate the power modules, and feedback to module design based on hardware evaluation

The companies will share the power supply's requirements from the module design stage and evaluate conversion efficiency, temperature rise, operating stability, and other characteristics on actual hardware. The results will be reflected in both companies' designs to achieve compact, highly efficient, and reliable power supplies.

Outlook

Headspring will first begin development of a DC-DC power supply for AI data center server racks, which converts 800V-class DC to approximately 50V. The company plans to carry out customer demonstrations with this initial product and then move in stages to a next-generation model equipped with the power module jointly developed with DTI.

Looking further ahead, Headspring also has in view the SST (solid-state transformer), which converts high-voltage AC from the power grid directly into DC for data centers.

Headspring will also bring the technology it has developed in semiconductor evaluation equipment and test systems to the AI data center field, with the aim of building a structure that can provide end-to-end support from development and evaluation through to maintenance after installation.

Executive Comments

Headspring Inc. President & CEO Osamu Hoshino

"To raise the performance of power supplies for AI data centers, it is important to design the power module and the power supply system as one. By combining DTI's module design and development technology with our power supply system technology, and feeding the results of hardware evaluation back into the design, we will accelerate commercialization. We see this capital and business alliance as the starting point for Headspring's full-scale entry into the AI data center field."

Silicon & System CO., LIMITED Managing Director Steven Chen

"Power supply system design is key to drawing out the performance of power semiconductors. We think highly of Headspring's track record in designing high-performance power circuits that make the most of the characteristics of SiC and GaN, and in verifying them on actual hardware. We concluded that Headspring is the ideal partner to bridge semiconductors and power supply systems. By combining DTI's power modules with Headspring's power supply technology, we will deliver next-generation power supplies from Japan to AI data centers around the world."

About Steven Chen

Steven Chen holds a master's degree in materials engineering from National Cheng Kung University in Taiwan. After working in technology development at semiconductor manufacturers including TSMC, he served at a major semiconductor foundry as head of technology development and as vice president responsible for marketing, finance, and business strategy. Since 2016 he has been active as an entrepreneur and investor. He founded an 8-inch power semiconductor fab, brought automotive chip production to volume within three years, and then sold the fab. He has also served as an investment advisor to Foxconn. He is a semiconductor entrepreneur with experience across technology, business, investment, and fab operations.

Company Profiles

Company	Headspring Inc.	Devise Tech Inc.
Location	Shinagawa-ku, Tokyo	Yonezawa, Yamagata
Representative	Osamu Hoshino	Steven Chen
Established	July 2014	March 2021
Business	Development, manufacture, and sale of power electronics products; contract development; semiconductor evaluation equipment; energy storage systems (ESS)	Research and development, manufacture, and sale of modularization technology in the power, analog, and wireless fields
URL	https://headspring.co.jp	https://www.devise-tech.com

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