

UK Space Agency in partnership with ADS Group, Awards IceMOS Technology Part of £300,000 in Prestigious Funding for Advancements in Radiation Tolerant Power Electronics

- *IceMOS Technology Uniquely Positioned to Continue Developments in Radiation-Tolerant High-Voltage Superjunction MOSFET Transistors to Advance UK Space Exploration and Supply Chain Advantages*
- *Company Drives Next-Generation of Commercialized Products for Efficient Data Centers, EV Fast Charging and AI-enabled Cloud Services*

Paradise Valley, Arizona, June 14, 2023 - [IceMOS Technology Corporation](#) today announced the [UK Space Agency](#) in partnership with [ADS](#), awarded it a project to further develop a new breed of power transistors for space applications through the Space Technology Exploitation Programme (STEP). The IceMOS Technology manufacturing center of excellence located in Belfast, Northern Ireland, is one of only three companies selected to accelerate development in the UK space exploration and supply chain.



photovoltaic energy generation and more.

The IceMOS development program will focus on delivering an Advanced Engineered Substrate, enabling a radiation-tolerant, high-voltage silicon carbide engineered drain MOSFET for more efficient high power distribution electrical systems on spacecraft for Low Earth Orbit (LEO), Middle Earth Orbit (MEO) and deep space exploration. The merger of a Wide Band Gap (WBG) Power MOSFET drain structure that can be tailored to be robust in harsh space radiation environments, will create a new class of vertical power transistor. Commercial applications aim to address society's increasing demand for energy conservation in systems such as AI-enabled cloud services and data centers, fast-charging stations for electric vehicles,

"With this award IceMOS Technology is uniquely positioned to accelerate advances in the UK-space program by making dramatic improvements in high-voltage power radiation-tolerant transistors," said Samuel J. Anderson, IceMOS Technology founder and chairman. "It is an honor to be one of only three companies selected to participate in this prestigious program to enhance UK space capability by developing this leading-edge technology that can lower costs and significantly improve overall systems performance."

"Creative talent and technical space expertise can be found across the length and breadth of the UK. These projects, delivered in partnership with ADS, are brilliant examples of that from Northern Ireland's growing space sector. They will help catalyse investment, create jobs, and develop new capabilities within the space supply chain," said Dr. Paul Bate, Chief Executive at the UK Space Agency.

The IceMOS rad-tolerant power transistor will incorporate the silicon carbide engineered drain substrate to take advantage of the low on-resistance performance from WBG materials which have the potential to revolutionize semiconductor manufacturing for a broad set of applications from power electronics to quantum technology.