



David Grant
Chief Technical Officer
davidg@apogeesemi.com

SOLSTICE lightning pitch
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Apogee Semiconductor is a US based fabless semiconductor company that designs manufactures, tests and sells products and technologies for space and other extreme environments.

We are focused on making the frontier of space more accessible by bridging the technology gap between commercial and high-reliability technologies at a lower cost. We provide optimized products and infrastructure that give you the best in reliability and value.

Our products and services are targeted towards enabling small-satellites and large constellations that require high performance, a small form factor and radiation resilience at a lower cost.

Working in partnership with state-of-the art semiconductor foundries, Apogee Semiconductor develops radiation hardened processes and components that serve as the foundation for our cutting-edge integrated circuits and IP blocks.

We strive to be the premier supplier of radiation hardened digital, power, analog and mixed signal ICs.

Why We Are Interested in This Opportunity

We have a successful track record of performance of NASA, Air Force, Space Force and NSF rad-hard silicon development contracts.

We have patented technology that will benefit the mission and will allow us to perform successfully.

We have experience in both high performance commercial and high reliability integrated circuit design.

Supporting our country is important to us.

Our Tech Specific to Opportunity

Patented rad-hard in bulk commercial CMOS technology. Functioning devices that include processors, analog and digital in a functioning mixed signal power management ASIC that was design commissioned by NASA. In partnership with University of Texas at Austin, successfully developed a novel non-linear control system enabling high reliability lunar/mars high voltage systems, also funded by NASA. Patent pending technology to dramatically improve board level reliability with greatly reduced mass and board area, funded by NSF.

Understanding of advanced power topologies, rad hard with lower cost, volume and mass.

Pain Points Our Technology Addresses

Ability to design create mixed signal and power management Integrated Circuits devices with 300krad Tid, 75MeV SEE in bulk CMOS.

Developed tool chain that enables development of state of the commercial art mixed signal integrated circuits with state of the art radiation performance. Experience in enabling state-of-the art power management architectures.

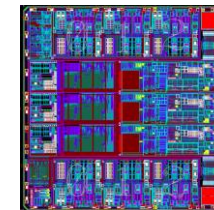
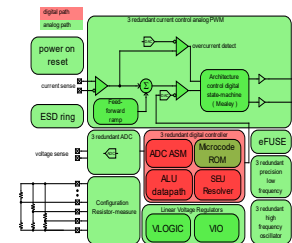
Experience in design of high board level reliability packaging solutions.

Examples of/Results with Tech in Use

Our publicly available product lines.

[Products | Apogee Semiconductor](#)

Our in-development power conversion device for NASA, a DSP based multi-topology GaN FET buck PWM converter.



Thanks to our product sponsor



Key Differentiators of Partnering with Us

What we design and manufacture:

High reliability semiconductors for space. Digital, and mixed signal power management

Why our technology is important:

Patented RadHard process to 300krad and beyond . World Class Single Event performance. State of the art electrical performance. Ability to scale to lower costs in higher volumes enabling advanced architectures.

Why are we different:

Very technically capable, comparable to large firms, but focused on high reliability. Multi-disciplinary knowledge. Understanding of leading edge power conversion topologies and implementation in silicon Integrated Circuits.

Who do we wish to partner with:

A partner or partners with experience in multi-junction cell design, and solar panel design.



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