

SUCCESS STORY

Spectrum Control's Amplifiers Assist Perseverance Mars Landing

Our Amplifiers helped steer and guide "Percy's" descent onto the red planet

NASA's Perseverance (Percy) rover is the first mission attempting to collect rock samples for return to Earth; its manifold mission includes the search for signs of ancient life, launching the first helicopter on the red planet, and using microphones to capture Mars's sounds for the first time. Perseverance was able to descend on the red planet with the help of Spectrum Control's amplifiers.

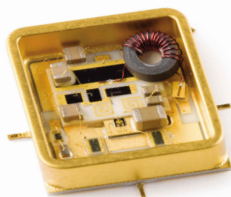
Spectrum Control's Multi-Decade Space Heritage

Perseverance uses an entry, descent, and landing navigation system to handle the shortest and most intense phase of the Mars 2020 mission. Known as the "seven minutes of terror," this is where the Terrain-Relative Navigation enables Percy to find a safe and secure spot to land. Spectrum Control's amplifiers are a key microelectronic component and helped the spacecraft through its landing phase. The amplifiers are a critical part of the system that uses radar which helped steer and guide Percy in landing on the planet's surface.

*Spectrum Control provides better phase noise and guarantees ultra-low phase noise in its amplifiers based on its **design techniques, material selection, and in-house testing***

Spectrum Control is a world-class leader in amplifier technology. We design both broadband, high linearity amplifiers, as well as high frequency, narrow-band, higher power amplifiers to 1000 watts with strict attention to size and value.

Utilizing both hybrid thick film and surface mount (SMT) technology, our selection of Silicon, MOS-FET, LDMOS, GaAs and GaN transistors technology enables our designs to achieve high performance in a compact, surface mount package, and offer many standard features not normally found at this level.



High Performance in a compact amplifier design package



Design & Technical Superiority

Spectrum Control builds high performance amplifier designs. We have more than 1000 standard, ultra-low phase noise amplifier designs available that support demanding military and space applications.

Spectrum Control's amplifiers are designed and tested to meet MIL-PRF-38534 and MIL-STD-883. Nearly all designs can be screened to MIL-PRF-38534 Class K to meet demanding space/flight applications. Units are tested multiple times during the production cycle to ensure that all delivered units exceed expectations for performance and reliability.

Leader in Amplifier Technology

- Guaranteed ultra low phase noise performance
- Ultra high linearity
- Superior phase noise performance
- Low noise figure
- Customizable with no NRE