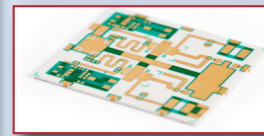


# FAB S and LAB S

## Remtec: The Power of Possible



The phrase “The power of possible” appears in Remtec marketing material. It encapsulates the ability to grow and shape the future. As the company celebrates the opening of a newly-renovated facility, it is worthwhile to see how Remtec is turning that phrase into reality.

Remtec was founded in 1990 to serve the electronics industry’s growing need for advanced ceramic packaging technology, primarily for applications requiring high power, high circuit density and a broad operating frequency range. The following year, engineers developed Remtec’s proprietary Plated Copper on Thick/Thin Film (PCTF®) ceramic metallization technology that is still central to the company’s product and capabilities portfolio. With that differentiating technology, Remtec established production and manufacturing capabilities to design and fabricate metallized ceramic substrates, surface-mountable hermetic and non-hermetic ceramic packages, chip carriers and specialty components for electronic applications.

Over time, Remtec realized that the “possible” was enabled by resources and capabilities. They acquired a plating company and moved to a new facility. As they turned “possible” into reality, the business grew and their target market applications expanded, necessitating an expansion of the footprint and capabilities of that facility.

That brings the story to the present and Remtec’s June 5 ribbon-cutting ceremony for its newly-renovated 55,000 sq. ft. facility in Canton, Mass. In the nearly 35 years that have transpired since its founding, Remtec has realized the power of being a U.S.-based, onshore supplier of ceramic substrates and packaging solutions for microelectronics, RF, high-power and high-density interconnects and circuits. The company points to studies showing a precipitous drop in the share for U.S.-based PCB, substrate and advanced packaging capabilities and production. Realizing the importance of onshore production for many core customers and markets, Remtec has

been ISO 9001:2015 registered since 2005. They have been RoHS-compliant since 2006, along with being ITAR-compliant and registered with the Directorate of Defense Trade Controls. This makes it possible to support and enable the needs of their most demanding customers.

From this new Massachusetts facility with enhanced capabilities, Remtec fabricates electronic circuits and component boards using screen printing, etching and firing techniques. They provide Ag, Au, Cu, ENIG and AuSn plating suitable for high-density circuits and high-power handling components. The company supplies alumina, aluminum nitride and beryllium oxide ceramic materials, along with high-DK barium titanate substrates, to a broad range of low-power, mixed-signal, high-power, RF and microwave applications.

With this impressive set of processes, material capabilities and more than 500 years of collective experience in the flow from design to manufacturing, Remtec is well-equipped to address challenging and novel packaging, substrate and interconnect solutions. They use a wide range of metallization techniques to offer ceramic/metal hermetic packages, leadless chip carriers, surface-mount hermetic packages, ceramic lids and interposers at the chip and PCB levels. All these packages and substrates can be engineered for high RF power, high voltage and challenging thermal dissipation applications.

This set of capabilities, products and experience is enabling current applications like MEMS, wireless TR modules, navigation systems, X-ray and scanning, UV curing, imaging systems, IoT and automotive systems. Remtec is clearly focused on the future, with activities in 2.5 and 3D heterogeneous integration and pushing the frequency capabilities of their products and processes well into the mmWave range. With the new facility, processes and expertise, coupled with the roadmap and vision to navigate that path, Remtec is enabling the “power of possible” for itself and the electronics industry.

<https://remtec.com/>