

FOR IMMEDIATE RELEASE

Calumet Electronics and SCHMID Group Collaborate to Establish First-Ever US Advanced Substrate Facility

Freudenstadt, Germany, February 13, 2024. Calumet Electronics (Calumet), a leading American printed circuit board manufacturer is pioneering the domestic production of advanced packaging substrates. The current development and onshoring of this technology are the direct result of a strategic partnership with SCHMID Group (SCHMID), a top global solutions provider for the high-tech electronic, photovoltaics, glass, and energy systems industries. This collaboration marks a significant step in advancing substrate technology within the United States (US) and complements the recent government grant awarded to Calumet by the US Department of Defense under DPA Title III.

Through this strategic partnership, Calumet and SCHMID are working collaboratively to scale domestic production capacity for advanced substrates. SCHMID is providing innovative equipment, while Calumet is taking the lead in expanding its manufacturing capabilities. Together, they are aligning their efforts with construction milestones to establish the first-ever US-based advanced substrate facility.

Key Highlights:

1. **Dedicated US-Based Advanced Technologies Facility:** Calumet is currently standing up a **60,000 sq. ft. state-of-the-art manufacturing facility** dedicated to advanced substrate production. This landmark facility represents a significant milestone as the first of its kind in the US, poised to advance substrate technology and enhancing the nation's capabilities in advanced packaging.
2. **Enabling Next-Gen Technology:** The project will implement cutting-edge process and production technology, enabling the production of mSAP, SAP and embedded trace (ET) on a single versatile platform.
3. **Environmental and Fiscal Responsibility:** Calumet and SCHMID's R&D teams are collaborating across enterprises to develop a modular, space-efficient approach that **maximizes environmental conservation, process efficiency, and cost savings** while minimizing costly cleanroom footprints.
4. **Substantial Capital Investment:** The project is projected to attract a total capital investment of nearly **\$50 million**. This substantial investment underscores the dedication to strengthening the US supply chain for microelectronics and printed circuit boards.
5. **Government Support:** Calumet received a significant investment from the US Department of Defense, which awarded them **\$39.9 million** via the DPA Title III Program. This grant empowers Calumet, in collaboration with SCHMID, to enhance manufacturing capabilities and contribute to national security.
6. **Workforce Development:** The partnership between Calumet and SCHMID is driving technological advancements while focusing on upskilling the US workforce. By establishing advanced packaging and substrate manufacturing within the US, this collaboration creates sustainable jobs and strengthens domestic expertise.

At the forefront of the next-gen technology, advanced packaging and substrates are driving advancements in miniaturization, integration, performance, thermal management, high frequency capabilities, speed, and energy efficient components and systems. Engineered to cater to the specific requirements of high-performance systems, advanced substrates play a pivotal role in enhancing functionality and efficiency. This is poised to shape the future of advanced packaging technology in the US, uniting these two industry leaders for this purpose.

“The partnership between Calumet and SCHMID signals a significant leap forward in advanced packaging and substrate technology, further enhancing the United States’ competitive position in the global market”, affirmed Stephen Vairo, President, and Chief Executive Officer of Calumet Electronics.

Christian Schmid, SCHMID Group Chief Executive Officer, added “We are pleased to partner with Calumet to streamline the traditional lab-to-fab transition, in alignment with our shared mission as innovators and sustainable partners to the industry. We will create a lighthouse project in Calumet for the reshoring of technology and production to the US”.

For more information: www.schmid-group.com; www.calumetelectronics.com

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About SCHMID Group

The SCHMID Group is a world-leading global solutions provider for the high-tech electronic, photovoltaics, glass, and energy systems industries, with its parent company Gebr. SCHMID GmbH based in Freudenstadt, Germany. Founded in 1864, today it employs more than 800 staff members worldwide, and has technology centers and manufacturing sites in multiple locations including Germany and China, in addition to several sales and service locations globally. The Group focuses on developing customized equipment and process solutions for multiple industries including electronics, renewables, and energy storage. Our system and process solutions for the manufacture of substrates, printed circuit boards and other electrical components ensure the highest technology levels, high yields with low production costs, maximized efficiency, quality, and sustainability in green production processes. www.schmid-group.com

About Calumet Electronics

Calumet Electronics is a leading commercial and non-traditional defense contractor specializing in the research, design, engineering, and manufacturing of high-quality printed circuit boards (PCBs) and, more recently, organic substrates. As an award-winning American-owned and operated company, Calumet is known for its thought leadership and innovative engineering and manufacturing. Calumet is an SBA HUBZone certified small business which conducts all its operations domestically. Calumet has established itself as a pure play manufacturer with a focus to support and grow its local economy and surrounding

communities in Michigan's rural Upper Peninsula. Calumet is proficient at identifying customer needs, establishing initial low-rate production with R&D, engineering, then scaling production capacity. Calumet takes on difficult industry challenges, enabling domestic innovation and competing with manufacturing capability in Asia. www.calumetelectronics.com