CHANNEL TALK



FEBRUARY 2023

VISIT LAIRD'S KNOWLEDGE CENTER



During academic studies and continuing education, learning about challenges facing electronic design and designers is necessary, regardless of age or experience. The online

Knowledge Center introduced by Laird is your resource. It lists frequent questions and provides in-depth yet understandable answers covering five areas: Electromagnetic Compatibility (EMC), EMI Shielding, Multi-functional Solutions/Integrated Solutions, Inductive Components/Wireless Charging, and Thermal Interface Materials. For example, in the EMC section, Laird answers questions like: What is EMC? Why is EMC important? The fundamentals of EMC. How electromagnetism works. Main industries leveraging the concept of electromagnetism. What is an EMI shield? Key products that use electromagnetic compatibility. Differences between EMI and EMC. And, how Laird™ EMC components are different. The section concludes by listing Laird EMI solutions. In the EMI Shielding section, we answer what is shielding, why it works, and how it works, list common applications, and conclude with the differences and benefits of Laird shields. In each section, the discussion flows similarly with the emphasis placed on design issues, why those issues need to be resolved, and materials usually applied to improve performance. Again, each section concludes with why Laird products stand out. Learn more. Learn by browsing and benefitting from Laird's **Knowledge Center.**

PORTFOLIO OVERVIEW: AUTOMOTIVE

Advancements in electric vehicles, ADAS and other innovative electronic features can be slowed by performance and reliability issues. Laird is responding by working closely with you and customer teams. We seek to assist with quickly resolving the often-interrelated heat and EMI issues affecting the performance of components. One way to help you is offering our significantly expanded Solutions for Automotive Component Designs website destination. It is an information hub intended to quickly

access potential solutions listed on a single page. There you and customer contacts can read concise commentaries on design issues and click on data links pointing to more than 40 design-engineered Laird



innovations. You will see how your customers can benefit from a bevy of new and established Laird products in five areas: EV Powertrain Electronics, LED Component Systems, EV/PHEV Battery Packs, ADAS/Autonomous Driving Systems, and Infotainment/Cluster Systems. We welcome your thoughts about our expanded automotive solutions component **hub** and encourage you to regularly visit, learn from, and pass along this helpful all-in-one destination.

STUTTGART TO HIGHLIGHT LAIRD, DUPONT

Germany's Messe Stuttgart exhibit hall will welcome Laird Performance Materials and DuPont throughout The Battery Show Europe, May 23-25. Thousands will see



solutions to their application needs including Laird's broad range of thermal and EMI

products offered through distributors globally. More than 10,000 attendees are expected from the advanced battery and electric and hybrid vehicle technology community. Visit Laird and DuPont in booth 8-E10 and contact our team.

SHORT VIDEOS EXPLORE EMI ROADBLOCKS

Constant innovations and improvements in electronic designs and their expected performance demand that design engineers also address and overcome growing EMI issues. The challenge to mitigate EMI is increasingly complex - from ensuring autonomous vehicle radar display



accuracy to thwarting high-frequency noise in 5G devices. To help, Laird has launched a series of expert-level discussions featuring field application engineers. We first look

at mitigating disruptive EMI in extremely sensitive product applications in **consumer electronics**. Next, a Laird expert discusses the effective handling of this growing problem in <u>automotive</u> applications where long-term reliability is imperative. Last, we explore managing radiated emissions in **telecom**-related applications. Watch these three short videos and gain added insight.

CUTTING-EDGE DISPENSABLE ABSORBER

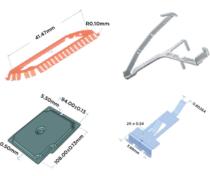
The exciting introduction of dispensable RobZorb^{TI} MCS and GDS - for suppressing cavity resonance EMI and enhancing assembly automation - makes them the industry's first self-levelling, dispensable, and



cure-in-place microwave and mm Wave absorbers. Ideal for difficult-to-reach cavity fill tasks, these products are high loss and magnetically loaded two-part dispensable elastomer absorbers. RobZorb™ MCS is designed for the 800 MHz to 18 GHz frequency range. RobZorb™ GDS is developed for the 18 to 40 GHz frequency range. Both exhibit self-levelling characteristics (see recent application video). Robotic motion control smoothly fills cavities. Both products become solid elastomers after curing at room or accelerated heat temperatures, creating intimate contact with the substrate, and thus enhancing reliability.

PROFILING METALS PROTOTYPING SKILLS

In an informative new folder, Laird describes our U.S. facility with significant capabilities in metals design, prototyping, and short run production. The Schaumburg site outside Chicago is a Laird Center of Excellence for metals prototyping. We



illustrated renderings of more than 40 innovative designs where the Schaumburg team overcame hurdles, engaged its in-house tooling designers, and capitalized on its extensive tooling capabilities. Results included quicker turnaround time on prototypes of designs which are smaller, thinner, and lighter and with extremely tight tolerances. See this new **folder** and its examples or for print copies, use Salesforce document part number D369100030.