

Drone Application Breakdown



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LAIRD PERFORMANCE
MATERIALS DELIVERS DESIGN
ENGINEERING ANSWERS
EARLY – THAT EFFECTIVELY
KEEP EMI AND HEAT AT BAY.



PERFORMANCE
MATERIALS

Performance
Materials
That Protect
Electronics

Drone Assembly

Thermal Interface Material
Tflex/Tpcm/Tgrease/Tputty

Absorbers

EMI Shielding Gasket
CF/EcE/FOF

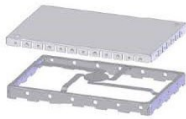
Board Level Shields
Precision Metals

Magnetic Ceramic Products (MCP)

Board Level Shield Frames
Precision Metals



Precision Metals



Thermal Interface Materials



Magnetic Ceramic
Product (MCP)



Conductive Foam (CF) and
Fabric Over Foam (FOF)
Seals/Gasketing



EcE and NCE Elastomer
Seals/Gasketing



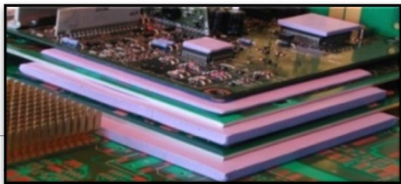
Performance Materials Products



Thermal Interface Materials

- As an industry leader in high-performance thermal interface materials, with new products released this year, Laird offers the following categories:
 - **Gap filler pads** now up to 34 W/mK thermal conductivity.
 - **Thermal putties** with dispensing options.
 - **Phase change materials** now up to 7.5 W/mK.
 - **Thermal greases** ranging from 1-4 W/mK.
 - **Thermally-conductive insulators.**
- Additionally, Laird has the capabilities to die cut materials and offer dispensing options.

<https://www.laird.com/products/gap-fillers-thermal-interface-materials>



Laird Co



Precision Metals

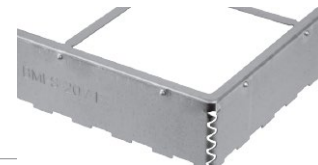
- Laird Performance Materials offers many different standard and custom lightweight precision metals such as:
 - **Board Level Shields** with lightweight and ultra low board level shields.
 - **Fingerstock and Spring Contacts.**
 - **Custom Metals** for structural support and/or EMI shielding.
- Added value capabilities with state-of-the-art software simulations to ensure product reliability.

<https://www.laird.com/products/enclosure-solutions/board-level-shielding-bls>

<https://www.laird.com/capabilities/precision-metals>



Recover Shield



Rigid Corner Patent



Removable Pick Bridge

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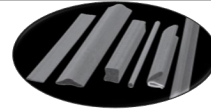
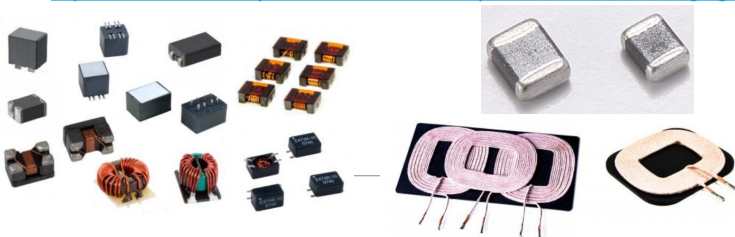
Performance Materials Products



Magnetic Ceramic Product

- There is a wide assortment of products within the Laird MCP line, our line includes:
 - Power inductors.
 - Common mode chokes.
 - Wireless charging coils & flexible ferrite sheets.
 - Ferrite chip beads.
 - Ferrite Cable Cores.
 - Baluns & Toroids.

<https://www.laird.com/products/inductive-components-emc-components-and-ferrite-cores>
<https://www.laird.com/products/inductive-components-inductors-power-and-signal-lines>
<https://www.laird.com/products/inductive-components-wireless-charging-coils>



EMI Gasketing

- Laird offers EMI gasketing solutions for almost any application with high shielding effectiveness, our product line offers:
 - Conductive Foams (CF).
 - Fabric Over Foams (FOF).
 - Conductive Fabrics.
 - Electrically Conductive Elastomers (ECE).
 - Form In Place (FIP).
- There are many options for Laird gaskets from ultra soft materials (silicone or silicone free) to wire mesh materials.
 - All of which can come in custom profiles, die cut parts, or standard solutions.

<https://www.laird.com/sites/default/files/emi-cat-ece-080615.pdf>



Performance Materials Products



RF & Microwave Absorbers

- Laird offers many different absorber solutions spanning across a wide frequency range from cavity resonance to free space applications:
 - Injection Molded, Cast Liquids, and Thermoplastics.
 - Low Loss Dielectrics.
 - Elastomers and Films.
 - Absorbing Foams.
 - Gap Fillers.
 - Custom Magnetic Absorbers.

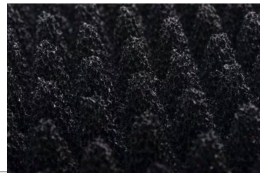
<https://www.laird.com/products/microwave-absorbers>



Eccosorb



Softzorb



Absorbing Foams



Radomes

- Laird offers radome materials to enhance antenna signal performance and provide better impact resistance:
 - Radome5 LS.
 - Radome5 TP.
 - Radome5 Unity.
 - Radome Auto.
 - Rezorb.
- From injection molded material to custom made parts to fit an application, Laird has the capabilities to provide a solution for almost any antenna application.

<https://www.laird.com/products/multi-function-solutions-mfs-ise-integrated-solutions-engineered/structur-ise>



Radome5 Unity



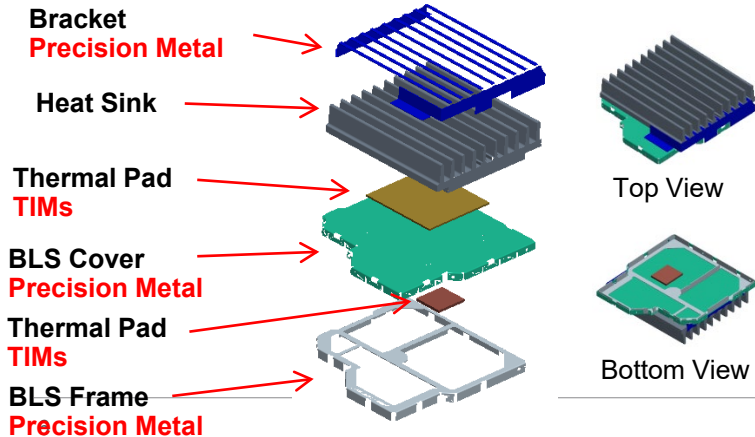
Radome5 LS

Performance Materials Products

Multi-Functional Solution (MFS)

Laird offers MFS, showcased below, that combine multiple different product lines together to create a single package.

- **BLS + Insulation Layer** (Dielectric Coating).
- **BLS + Absorber.**
- **BLS + Graphite Heat Spreader.**
- **BLS + Thermal Interface Material.**
- **BLS + Black Paint** (aesthetic purposes).
- **BLS + Several Laird Components Combined.**



Other Laird Product Offerings

Laird offers many different product spanning all electronic industries. Other product offerings that have not been discussed are listed below:

- **RF & Microwave Absorbers** with newly released products. Example imbedded below.
- **Radome Materials.**
- **EMI Tapes.**
- **Thermal Heat spreaders.**
- **Coolzorb** combines characteristics of our thermal and Absorber product lines into one.



New Release:
NS1000 Datasheet



Radome5 TP
Material



Radome5 TP



Graphite Over Foam
(GOF)



NPI: NS1000 Series

LairdTM

The logo features the word "Laird" in a bold, sans-serif font. A trademark symbol (TM) is positioned to the upper right of the letter "d". Below the text is a thick, dark gray swoosh that starts under the "L", curves under the "i", "a", and "r", and then curves upwards and to the right, ending under the "d".