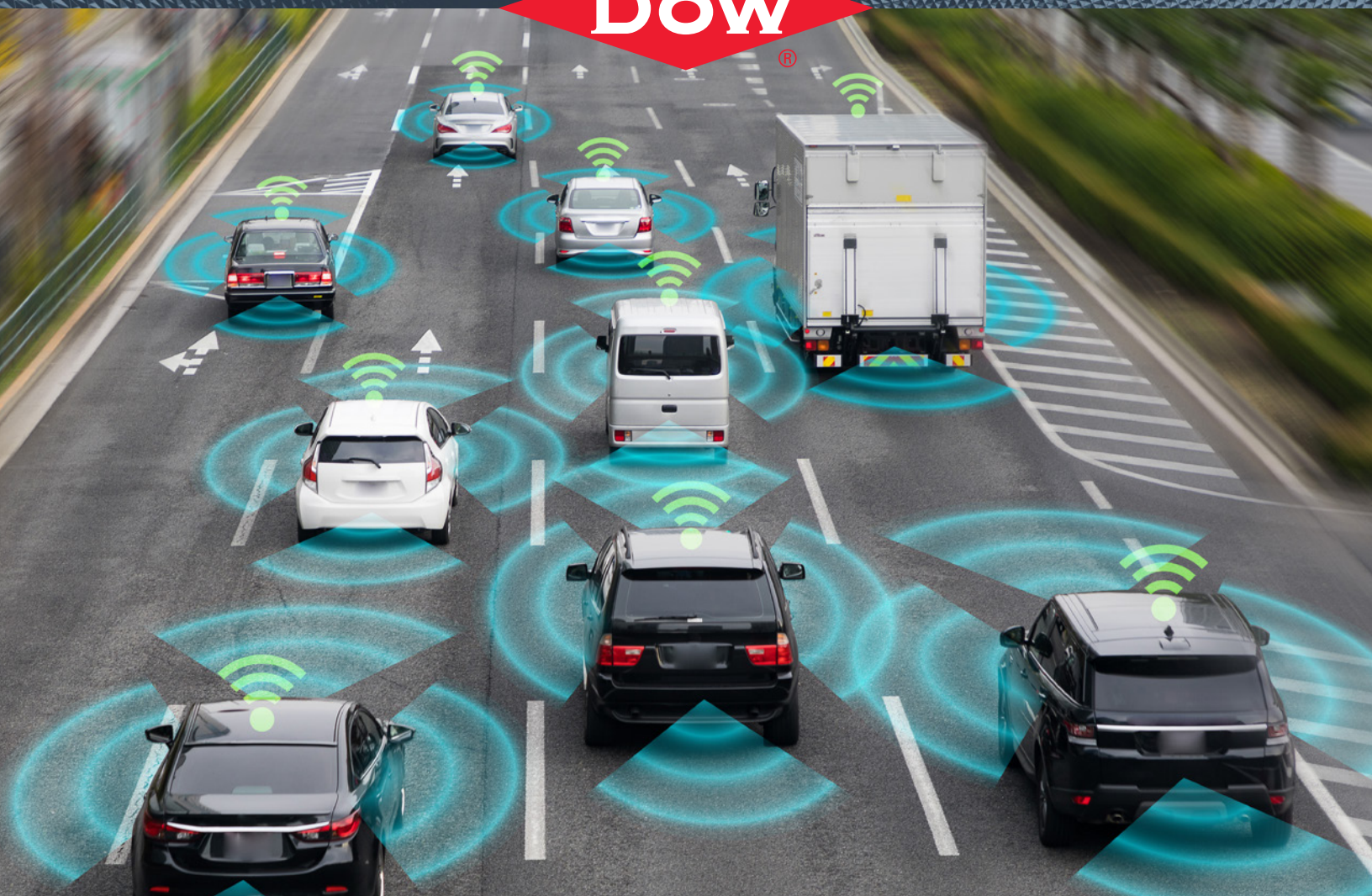


# Can smart technology make vehicles safer?

**Silicone solutions for safer, more reliable  
advanced driver-assistance systems**

**DOW**





# Enable the future of autonomous driving and vehicle design.

Safer mobility is the promise of autonomous driving. Like additional sets of eyes that are watching out for us, advanced driver-assistance systems (ADAS) help drivers maneuver in both challenging and everyday road conditions, warn drivers about obstacles and emergencies, and improve the vehicle's handling. Various sensors feed critical data to ADAS devices and need to be protected from the harsh environments where vehicles exist.

The assembly and integration of sensor systems and modules require mechanical fixing, thermal management, vibration damping, electromagnetic shielding and more. Using decades of experience in automotive electronics, our world-class R&D scientists provide you with a broad portfolio of innovative, proven silicone materials developed for ADAS applications.

## Why silicones perform well in sensor applications.

- Thermal stability
- Tunable modulus, hardness and cure chemistries
- Thermal management performance
- Electromagnetic interference (EMI) protection
- Light-weighting
- Protection
- Hydrophobicity
- Adhesion
- Processing

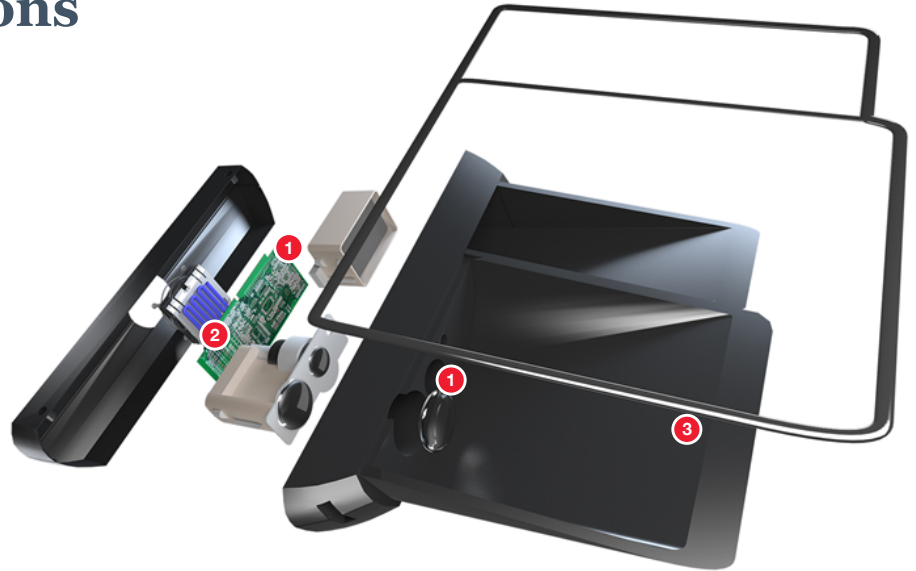
**DOWSIL™**  
silicones by 



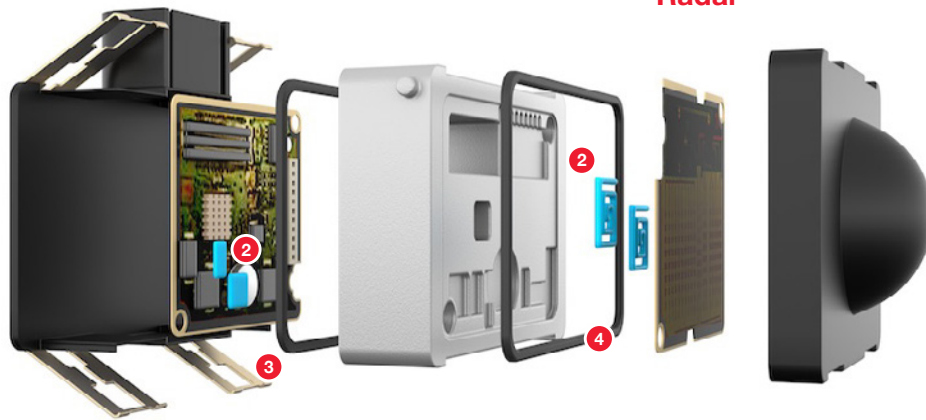
# Silicones in ADAS sensor assembly applications

- 1 Encapsulants/gels protect electronic units and sensors
- 2 Thermally conductive silicones dissipate the heat generated by the PCB
- 3 Fast assembly adhesives/foams seal and assemble ADAS modules
- 4 Award-winning electrically conductive sealant for grounding and shielding against EMI
- 5 Encapsulants/gels for potting connectors
- 6 Conformal coatings to protect from abrasion

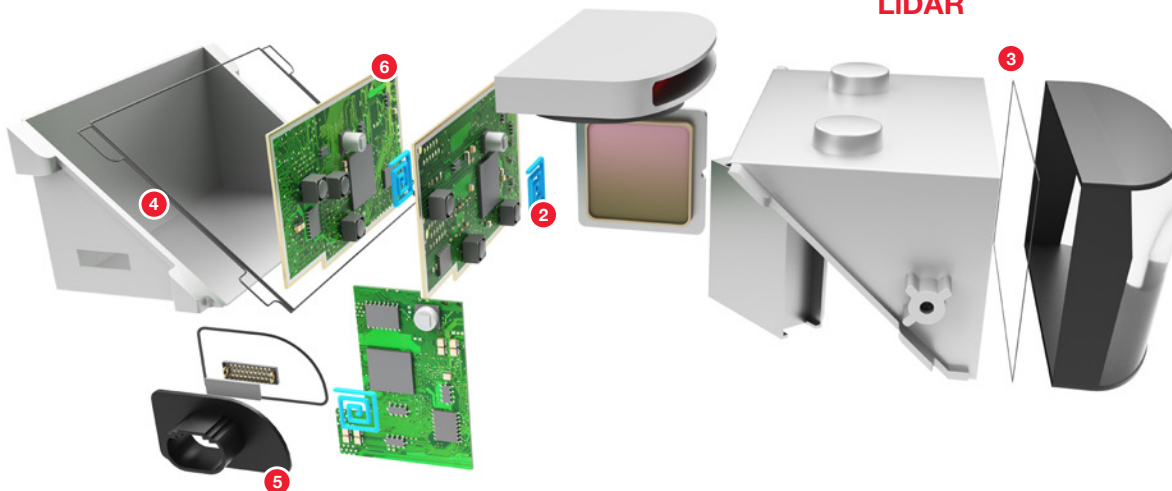
## Cameras



## Radar



## LiDAR







# MobilityScience™

## Addressing mobility megatrends with material science innovation

MobilityScience™ combines technologies, products and services from across Dow businesses to meet the challenges in the transportation industry. Leveraging our best-in-class innovation and proven solutions, let's work together to keep you moving. Learn more at [dow.com/mobilityscience](https://dow.com/mobilityscience)

### Drive towards low-carbon mobility

Our goal is to be your first-choice specialty chemical supplier, offering innovative solutions to enable low-carbon mobility. In addition to driving innovation, performance, durability and sustainability in advanced driver-assistance systems, silicone materials from Dow are proven, effective solutions for a diverse range of applications in other vehicle systems. Our smart science in silicone elastomers, adhesives, sealants and more helps to meet your challenging automotive design needs. For more information visit [dow.com/auto](https://dow.com/auto).



## Be part of the conversation

Learn more about Dow's industry-leading portfolio of advanced silicone-based materials that support design innovations for ADAS sensor systems. Meet your process and application requirements with DOWSIL™ encapsulants, conformal coatings, sealants, adhesives, gaskets, gap fillers, printable pads and more. Contact your Dow technical representative or visit [dow.com/ADAS](https://dow.com/ADAS).



Images: 193235378, 158554025, 56231040698, 206320965, 154170081

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

®™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

© 2024 The Dow Chemical Company. All rights reserved.

2000024825-7788

Form No. 80-8493-01-0624 S2D