



Case Study: GORE® MEMS Protective Vents Style 200 in Top Selling Smartphone

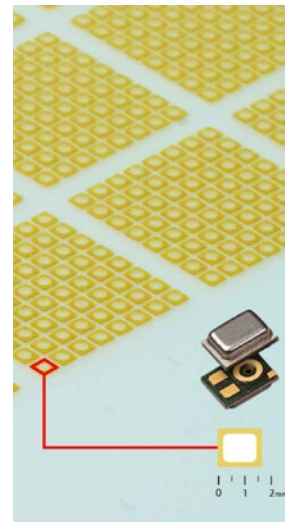
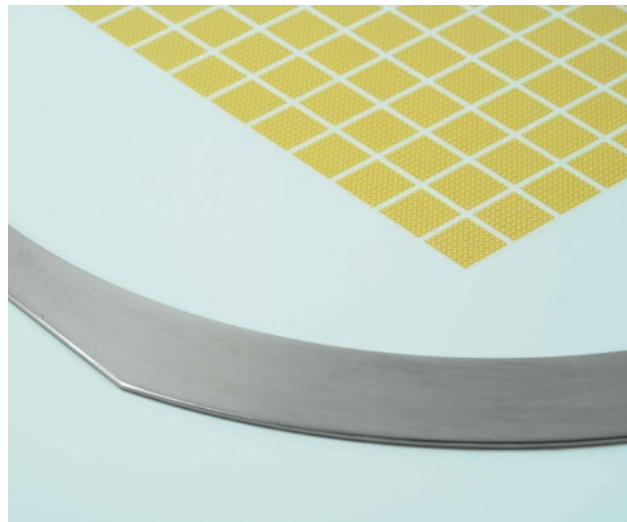
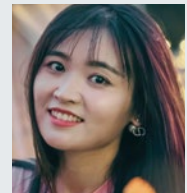
Unique MEMS Microphone Protection Averts Reputation Loss

? CHALLENGE

In 2018, the world's largest smartphone OEM found themselves in an unfortunate situation. In the months following the initially successful launch of a new addition to their top selling smartphone line, they received **numerous returns for the new product**: The microphones – an absolute core technology for every smartphone – didn't work properly. At the time, the extensive media coverage on the product failures intensified the pressure on the OEM. Their **good reputation was at stake**.

"When the smartphone OEM analyzed the problem, they quickly realized that the issue needed to be addressed by a MEMS microphone manufacturer since it was a contamination issue. One manufacturer saw the opportunity to become a supplier for the OEM by helping them solve this problem. Knowing that Gore, with all our acoustic engineering expertise, would be able to help them, the manufacturer immediately contacted us for support."

Sophia Y Zhang, Product Specialist



GORE® MEMS Protective Vents Style 200



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SOLUTION

In the beginning, Gore invested the necessary time to get to understand the customer needs. We knew that the solution needed to be perfect, as the OEM could not afford another slip-up.

We then found that **current methods used by manufacturers to protect MEMS microphones from particles can cause performance degradation** – leading to significant yield losses and higher manufacturing costs.

With these insights, Gore developed a yet-to-be-matched solution that provides industry-leading protection from particles, excellence acoustic performance and can be installed without any special handling during circuit board assembly:

GORE® MEMS Protective Vents Style 200.

THE TECHNOLOGY BEHIND THE SOLUTION: GORE® MEMS PROTECTIVE VENTS STYLE 200

The solution used to help the smartphone OEM in need was GORE® MEMS Protective Vents Style 200 for microphone manufacturers. Benefits of the product include:

- High protection against particles, high filtration efficiency
- High acoustic transparency with minimal transmission loss
- Can be auto-installed inside the MEMS microphone
- Compatibility with high-speed die attach equipment
- Accommodation of very small form factors to suit small components and devices

For specifications and more detailed information on installation, please visit this link on GORE® MEMS Protective Vents Style 200: gore.com/mems200

“After we introduced our solution to the MEMS manufacturer, we spent every week onsite to give extensive support. This way, if an unforeseen problem came up, we could solve it – calmly, quickly and efficiently.”

Sophia Y Zhang, Product Specialist





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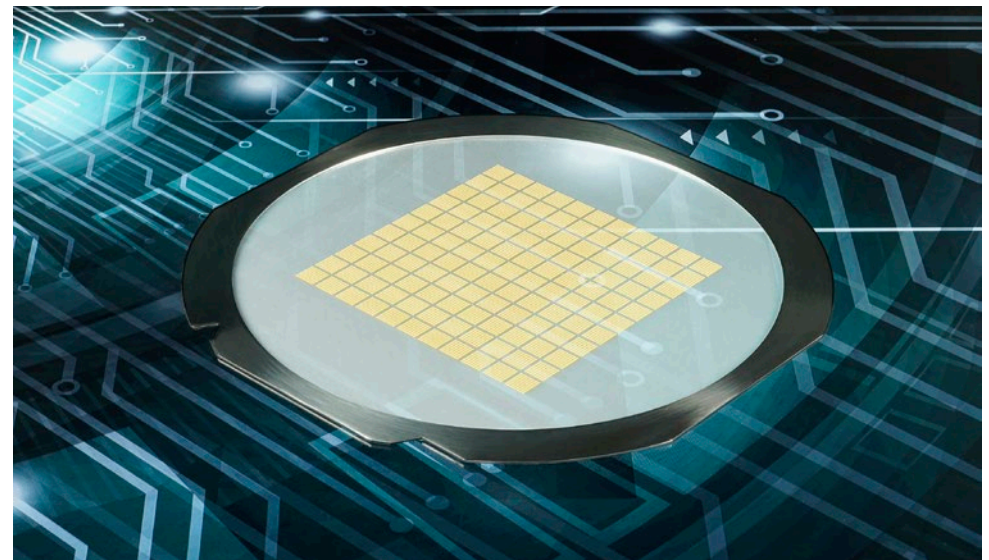
RESULTS

With the help of the Gore team, the OEM's MEMS microphone manufacturer was able to present a suitable solution to the smartphone company. The OEM chose to implement the GORE® MEMS Protective Vents Style 200. Here are the wins:

- The return rate of the respective smartphone model dropped
- Potential reputational damage was averted
- The MEMS manufacturer boosted their reputation and became a qualified supplier in this OEM account
- Yield loss was minimized from thousands PPM to almost 0
- Gore's expertise and stable quality have laid the foundation for successful long-term cooperation

"We've cultivated a great relationship with the manufacturer we developed GORE® MEMS Protective Vents with. We continue to develop new solutions and improve our products together."

Sophia Y Zhang, Product Specialist



WANT TO KNOW MORE?

To learn more, visit our website: gore.com/mems

Or find out more about our experience from exciting projects:
gore.com/mestories



Why Choose GORE® Protective Vents for Your Electronic Devices?

Leading OEMs have specified over 5 billion GORE® Portable Electronic Vents because they know our products and services can help accelerate their development of innovative and differentiated devices in fast-paced, highly competitive markets.

PRODUCT AND APPLICATION LEADERSHIP

Grounded in a deep understanding of material science and acoustics, Gore can provide the optimum venting solution. We balance trade-offs between diverse problems such as adverse operating environments, immersion events and acoustic performance.

RELIABLE PERFORMANCE

To ensure products are “fit for use”, every Gore product must adhere to the highest standards of quality, performance and reliability. Through a comprehensive understanding of end-use applications and requirements, our products do what they say they will do.

FAST DEVELOPMENT

The mobile electronics industry develops and releases new products quickly. Our fast response to customer requests during the development process sets us apart. Gore supports this need for quickness with designs and prototypes to ensure engineering teams can meet their project timelines and their application requirements.

SUPPLY SECURITY

Leading OEMs specify Gore because we have consistently proven our ability to quickly ramp up to supply vents for projects of over 10 million devices per year and to continue to supply high quality products on-time without disruption.

MATERIAL SCIENCE

Gore is a global materials science company dedicated to transforming industries and improving lives. Gore develops materials with microporous structures that provide desirable attributes and performance characteristics to engineer vents and other products used in a variety of markets and industries.

GLOBAL SUPPORT

Our global teams of sales associates, application engineers, manufacturing engineers, and research personnel enable us to provide agile and robust support to customers around the world.

Interested in Testing our Products or Talking to our Experts?

For additional assistance, please contact a Gore representative.

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