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***Harsh-environment, Low-cost Sensor  
Technology for Engine and After-  
treatment Systems***

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# Novel Sensor Technology for Engine and After-treatment Systems

## ➤ Silicon-carbide (SiC) as a Material Platform

- equivalent or superior performance compared to quartz and high-performance metals currently used for harsh environment applications

## ➤ Micro-fabrication Technology

- potential for miniaturization of existing harsh environment pressure sensor technology
- economies of scale for low-cost sensors

## ➤ Pressure Sensor Development Milestones

- operating pressure: up to 1500 psi @ RT
- operating temperature: up to 400°C
- stable temperature performance

