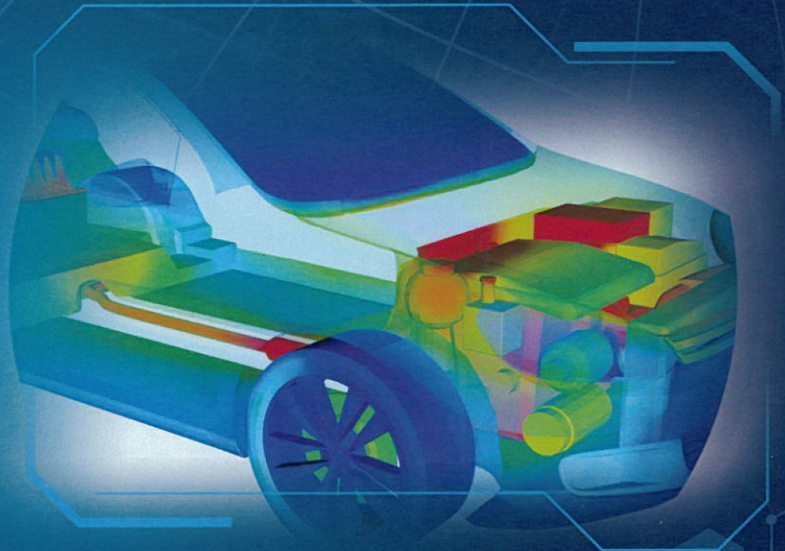


## Enhanced Thermal Performance in Electronic Vehicles

This invention enhances the thermal performance in various power systems, thus increasing the reliability and durability of high-current and high-power platforms, such as Electronic Vehicles, AI computing systems, Data Centres, Power Grids, and many more.



### INNOVATION

1. Thermal-enhanced interposers: multiple functions as power input and output, signal I/O interface, localised heatsinks and stand-offs or spacers.
2. A novel structure to integrate the electrical and thermal path into a single design and to offer design optimisation in a compact form factor.
3. Cooperation with the existing liquid/air cooling solution in the system to providing better thermal management and heat dissipation.

### KEY IMPACT

- 1. Optimal power density and compact design**  
Thermally-enhanced interposers enable optimal power density and compact designs for EV electronics, providing more efficient use of space and resources within the limited confines of an EV.
- 2. Enhanced product reliability**  
Better heat dissipation improves the reliability of hardware, ensuring consistent performance and minimising component failures in EV power conversion/inversion.
- 3. Extended product lifespan**  
Thermally enhanced interposers prevent overheating and reduce stress on key power components, leading to longer-lasting electronic devices and reducing electronic waste.