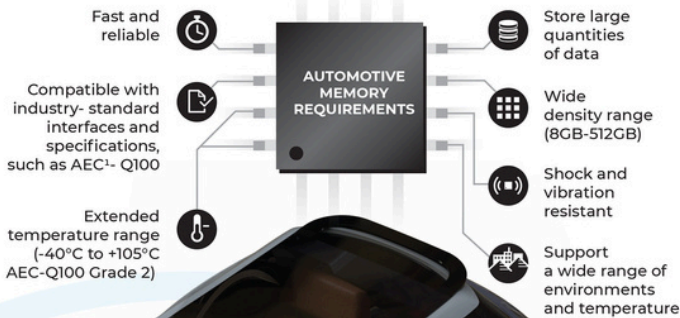
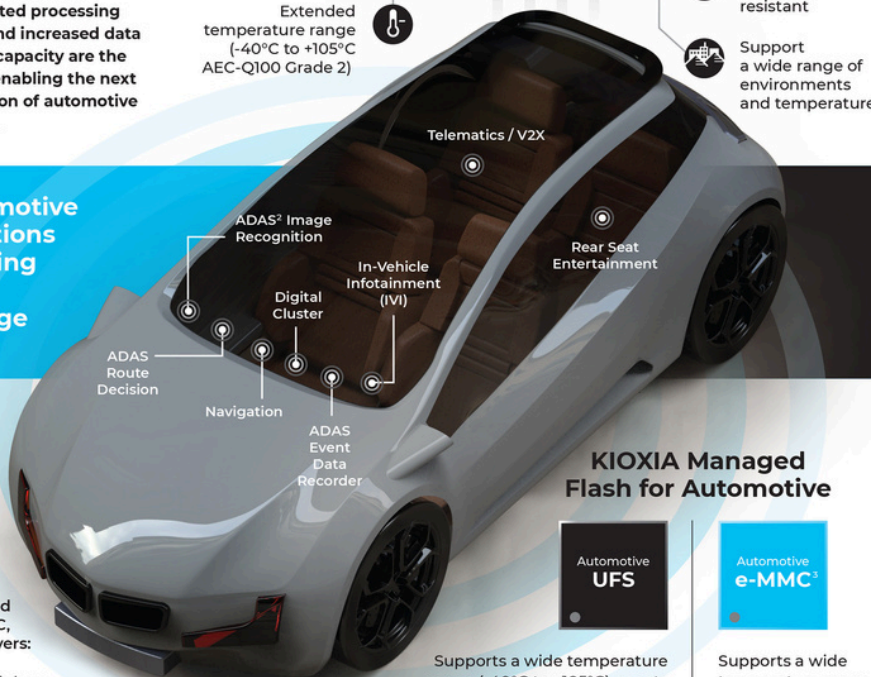


### DRIVING THE FUTURE OF AUTOMOTIVE APPLICATIONS

Anytime, anywhere connectivity has extended to the vehicle. Advanced driver assist features and infotainment systems enhance the experience but place a greater demand for in-vehicle memory solutions. Accelerated processing power and increased data storage capacity are the keys to enabling the next generation of automotive systems.



#### Automotive Functions Needing Flash Storage



#### Why UFS?

When compared to e-MMC, UFS delivers:

- Higher performance for reads and writes<sup>[4]</sup>
- Faster boot times
- Support for full duplexing
- Higher density offerings
- Better power efficiency
- Added functions such as thermal control, extended diagnostics
- An improved user experience

#### KIOXIA Managed Flash for Automotive



Supports a wide temperature range (-40°C to +105°C), meets AEC-Q100 Grade2 requirements, contains advanced features such as Refresh, Thermal Control and Extended Diagnosis, and offers enhanced reliability capabilities.

Supports a wide temperature range (up to 105°C), meets AEC-Q100 Grade2 requirements and features enhanced reliability.

#### DENSITIES<sup>5</sup>

16GB	32GB	64GB	8GB	16GB
128GB	256GB	512GB	32GB	64GB

# KIOXIA

When you think about in-cabin entertainment systems in your vehicle do you think flash memory for making it possible? Don't worry, you're not alone - most consumers have no idea that flash memory makes so much possible in their vehicle. KIOXIA asked us to help design engineers with a tool that steers them in the right direction when choosing the best flash memory technology for their automotive designs. The infographic we developed was engaging and comprehensive – outlining the two best flash memory solutions – e-MMC and UFS - and their advantages.

[1] Advanced Driving Assistant System  
 [2] Electrical component qualification requirements defined by the AEC (Automotive Electronics Council).  
 [3] e-MMC is a product category for a class of embedded memory products built to the JEDEC e-MMC Standard specification and is a trademark of the JEDEC Solid State Technology Association.  
 [4] Read and write speed may vary depending on the host device, read and write conditions, and file size.  
 [5] Product density is identified based on the density of memory chips within the Product, not the amount of memory capacity available for data storage by the end user. Consumer-usable capacity will be less due to overhead data areas, formatting, bad blocks, and other constraints, and may also vary based on the host device and application. For details, please refer to applicable product specifications. The definition of 1GB = 2<sup>30</sup> bytes = 1,073,741,824 bytes. The definition of 1GB = 2<sup>30</sup> bytes = 1,073,741,824 bytes.