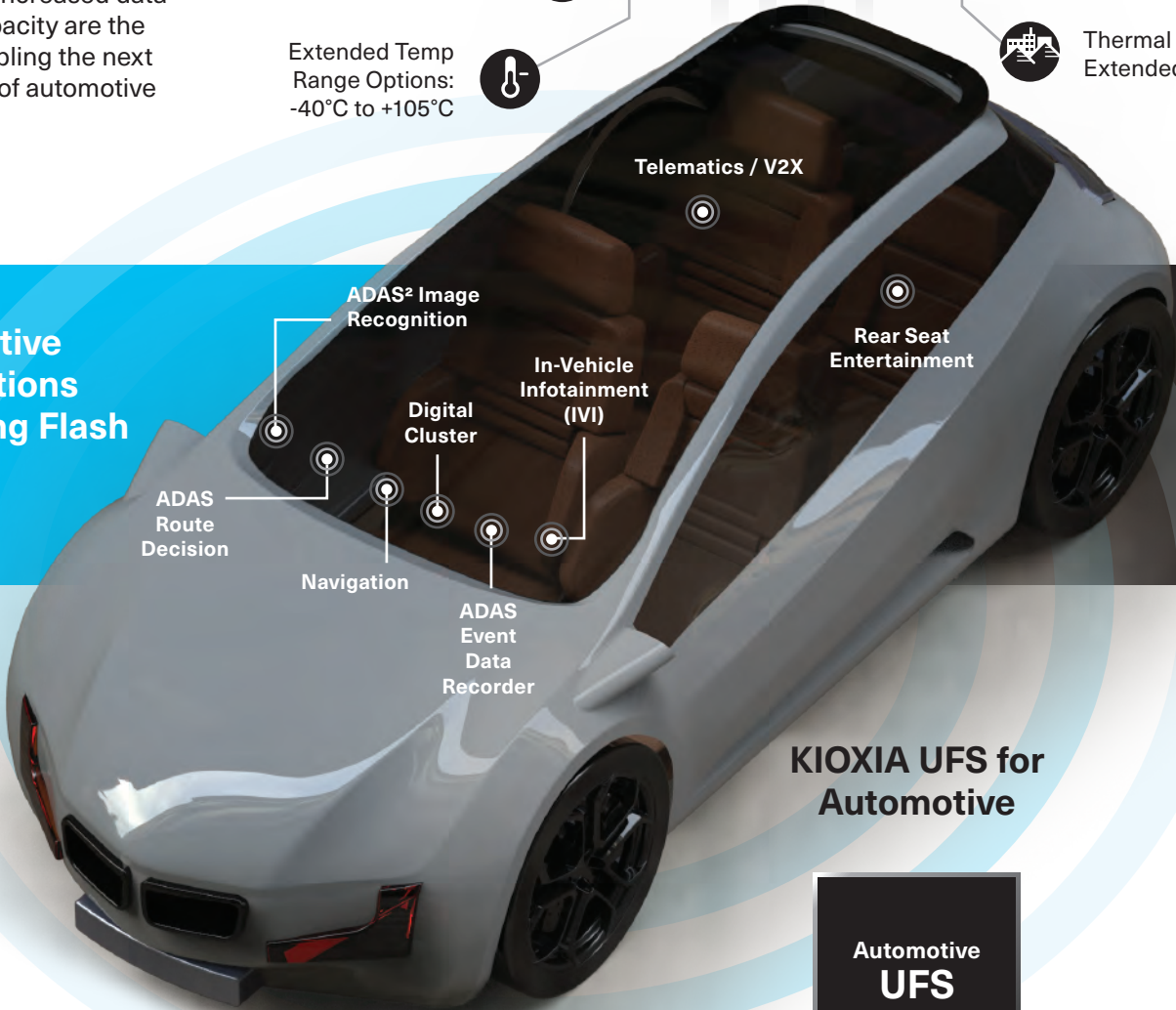# DRIVING THE FUTURE OF AUTOMOTIVE APPLICATIONS

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 MEMORY REQUIREMENTS

- Supports UFS[3] 4.0
- High Performance and Enhanced Reliability
- Industry Standard AEC-Q100[1], PPAP[5]
- High Quality Process Flow
- Extended Temp Range Options: -40°C to +105°C
- Store Large Quantities of Data
- High Capacity Range (128GB-512GB)
- Thermal Cycling Resistance
- Thermal Control, Extended Diagnostics

Automotive Applications Requiring Flash Storage

- Telematics / V2X
- ADAS[2] Image Recognition
- Rear Seat Entertainment
- In-Vehicle Infotainment (IVI)
- Digital Cluster
- ADAS Route Decision
- Navigation
- ADAS Event Data Recorder

KIOXIA UFS for Automotive

Automotive UFS

Why UFS?

- High performance
- Fast boot times
- Better power efficiency
- Supports full duplexing
- High density offerings
- Industry Standard Support
- Thermal control, extended diagnostic functions

The first to introduce UFS technology[6], KIOXIA continues to move the technology forward with the industry's first UFS 4.0 for Automotive applications[7]. UFS 4.0 devices integrate the company's BiCS FLASH™ 3D flash memory and a controller in a JEDEC-standard package. UFS 4.0 incorporates MIPI® M-PHY® 5.0 and UniPro® 2.0 and supports theoretical interface speeds of up to 23.2 gigabits per second (Gbps) per lane or 46.4 Gbps per storage device. UFS 4.0 is backward compatible with UFS 3.1.

UFS 4.0 CAPACITIES[4]

128GB	256GB	512GB

KIOXIA delivers flash-based products for next-generation storage applications. Having invented NAND flash over 35 years ago, KIOXIA is now one of the world's largest flash memory suppliers – and continues to move the technology forward.