

Automotive Solutions

Micron is powering the automotive industry with leading, comprehensive automotive-qualified memory.



Memory-Driven

As a leading automotive memory supplier for over 28 years, Micron's state-of-the-art automotive-compliant memory solutions have been on the road for millions of miles—enabling the automotive industry to realize their most innovative ideas. Our wealth of experience and dedicated automotive team bring an essential in-depth understanding of the industry. We are the market leader in the development of automotive practices and methodologies.

Micron's comprehensive automotive product portfolio provides a single source for volatile and nonvolatile memory, meeting automotive compliance through:

- IATF 16949/AEC-Q100
- Continuous improvements
- 8D for non-conformities

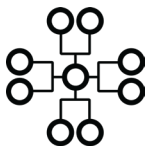
A long-term partner, dedicated to our customers' success

Micron continuously invests in expanding our market knowledge and its requirements through close customer relationships, ensuring current and future products align with demanding industry needs.

Our dedicated automotive architecture team stays abreast of the most advanced automotive application trends to ensure the right technology is available to our customers at the right time.

Our customer labs provide proactive design support from concept through prototype and production. The labs are stocked with advanced test and measurement equipment, and are strategically located to foster collaboration throughout the product lifecycle.

Our strong partnerships and close collaboration with chipset vendors ensures a total, fully validated solution that is optimized for automotive manufacturers.



For fast time-to-market and low risk, design with Micron.

Applications

Advanced Driving Assistance Systems

- Driving lane assistance
- Adaptive cruise control
- Collision avoidance
- Pedestrian avoidance
- Fog vision, night vision
- Parking assistance
- Lane-keeping warning
- Drowsy driver detection
- Surround view
- Auto pilot
- Hands-free driving

Cluster/Dashboard

- Digital instrument gauges
- Heads-up display
- Automotive gateway

Infotainment/In-Vehicle Experience

- Navigation systems
- Radio, satellite radio, DVD
- E-call, voice recognition
- Gesture recognition
- Driver state awareness
- Rear seat entertainment

Powertrain

- Engine control unit



Continuous innovation to meet automotive needs

With a comprehensive suite of volatile and nonvolatile memories for all automotive segments, Micron's worldwide fabs are optimized for automotive product production. Quality is a key factor in major purchasing decisions for this market, and all of our products are manufactured to the highest quality and reliability standards. Selected devices, targeting power train and driver assistance applications, are tested with an extended temperature range of -40°C up to 125°C. Our products have been qualified per AEC-Q100 requirements and are manufactured in ISO/TS-certified locations.

Unwavering commitment to the automotive market

Micron is expanding its Manassas, U.S. fabrication site to support the rapidly growing need for high-quality, high-reliability memory solutions. This site manufactures our long-lifecycle products to ensure supply continuity for the industrial and automotive markets. Delivering a leading-edge, state-of-the-art auto- and industrial-qualified memory portfolio with the associated lifecycle support places Micron in a class by itself and further underscores our continued commitment to these markets.

Optimized Memory and Storage Solutions for Automotive

Product Family	Series	Bus Width	Density Range	Supply Voltage	IT Temp Ranges	Automotive Grade Temp Ranges	Package Options
DRAM							
GDDR6	MT61	x32	8–16Gb	1.25V	–	–40/105°C	FBGA
DDR4	MT40	x8, x16	4–16Gb	1.2V	–40/95°C	–40/125°C	FBGA
DDR3 ²	MT41	x8, x16	1–8Gb	1.35V, 1.5V	–40/95°C	–40/125°C	FBGA
DDR2 ²	MT47	x8, x16	512Mb–2Gb	1.8V	–40/95°C	–40/105°C	FBGA
DDR	MT46	x8, x16	256–512Mb	2.5V	–40/85°C	–40/105°C	FBGA, TSOP
SDR	MT48	x8, x16, x32	64–256Mb ¹	3V	–40/85°C	–40/105°C	FBGA, TSOP
LPDDR5	MT62	x32, x64	16–128Gb	0.5V	–40/95°C	–40/125°C	BGA
LPDDR4 ²	MT53	x16, x32, x64	2–64Gb	0.6, 1.1V	–40/95°C	–40/125°C	FBGA, PoP
LPDDR2 ²	MT42	x16, x32	512Mb–4Gb	1.2V	–40/85°C	–40/125°C	FBGA, PoP
LPDDR	MT46	x16, x32	128Mb–4Gb	1.8V	–40/85°C	–40/105°C	FBGA
LPSDR	MT48	x16, x32	128–512Mb	1.8V	–40/85°C	–40/105°C	FBGA
NAND							
NAND SLC	MT29F	x8, x16	128Mb–16Gb	1.8V, 3.3V	–40/85°C	–40/105°C	VFBGA, TSOP
e.MMC	MTFC	x8	4–128GB	3.3V	–40/85°C	–40/105°C	LBGA, TFBGA, VFBGA
NOR							
Xccla™ Flash	MT35X	x1, x8	256Mb–2Gb	1.8V, 3V	–	–40/125°C	TPBGA
Serial	MT25Q	x1, x2, x4	128Mb–2Gb	1.8V, 3V	–	–40/125°C	SOIC, TPBGA
Twin-Quad Serial	MT25T	x1, x2, x4, x8	256Mb–1Gb	3V	–	–40/105°C	SO16W, TPBGA
Parallel SLC	MT28EW/ MT28FW	x8, x16	512Mb–2Gb	3V	–	–40/105°C	LBGA, TSOP
MCP							
SLC NAND + LPDDR2	MT29A	NAND: x16 LP2: x32	4Gb+2Gb, 4Gb+4Gb	1.8V	–40/85°C	–40/105°C	FBGA
SLC NAND + LPDDR4x	MT29G	NAND: x8 LP2: x16	4Gb+2Gb, 4Gb+4Gb, 8Gb+8Gb	0.6V/1.1V	–40/95°C	–40/105°C	FBGA
SSD							
PCIe Gen3	2100AI, 2100AT	x4	64GB–1TB	3.3/1.2/9V (BGA), 3.3V (M.2)	–40/95°C	–40/105°C	BGA, M.2 2230
UFS							
UFS	MTFC	x2	32–256GB	1.8V/3.3V	–40/95°C	–40/105°C	TFBGA
Notes: ¹ 256Mb SDR, x8 and x16 only. ² Ultra temperature availability based upon newest process node. Please contact your local sales representative with questions. For automotive usage cases only.							