

Micron aerospace and defense memory and storage solutions

The aerospace and defense (A&D) industry is a large, diverse sector that serves both military and commercial markets, with 2022 global memory and processor revenues of \$6.2B growing to \$16.6B in 2032 (source: Market Research Future).

Micron, a U.S.-based manufacturer, is the leading memory market supplier to automotive and industrial markets (AIMM). Micron supports AIMM markets with the broadest product portfolio and cutting-edge solutions that are well aligned to the A&D market. Micron memory and storage solutions support verticals across A&D like commercial and military aerospace, defense and space-based platforms.

Micron's focus, investment and experience in supporting AIMM markets for 30+ years drive innovation and leadership, providing a solid foundation for commercial off-the-shelf (COTS) market requirements critical to A&D. We understand the unique needs of this market, and we bring a mindset to deliver sustainable value to our customers — because we believe that IQ matters to our customers' success in A&D.

What is Micron's industrial quotient (IQ)?

We bring to market a mindset and portfolio that deliver sustainable value to our customers.

Product longevity

Extended lifecycle support for eligible products via our product longevity program, which goes a step beyond standard lifecycle support to suit long-life applications.

Ruggedized products

Product enhancements that enable consistent performance across extreme environments: extended temperature, thermal cycling, shock and humidity.

High reliability

Design and testing processes that add a high level of endurance and reliability to align with the needs of long-lifecycle embedded applications.

Extensive quality testing

Rigorous testing to deliver the consistent performance across products and processes necessary in embedded and mission-critical applications.

Application-specific tuning

Extensive collaboration with global customers to develop in-depth understanding of application use cases and deliver products and features to meet those unique application needs.



Micron memory for industrial multimarket applications

Product family	Voltage	Bus width	Performance	Density range	Temp range	Package options
DRAM components ¹ and modules ²						
DDR5 SDRAM (MT60)	1.1V ¹	x8, x16¹	4800-7200 MT/s ¹	16-24Gb ¹ ; 8-128GB ²	(IT, AT, CT) ¹ , CT ²	(BGA, FBGA) ¹ ; (ECC/SODIMN ECC/UDIMM, RDIMM) ²
DDR4 SDRAM (MT4O)	1.2V1	x8, x16¹	2133-3200 MT/s ¹	8-32Gb ¹ ; 4-64GB ²	(IT, AT, CT) ¹ , CT ²	(BGA, FBGA) ¹ ; (ECC/SODIMI ECC/UDIMM, RDIMM) ²
DDR3 SDRAM (MT41)	1.35V ¹	x8, x16¹	1600-2133 MT/s ¹	1-8Gb ¹ ; 2-8GB ²	IT, AT, UT, CT ²	(BGA, FBGA) ¹ ; (ECC/SODIMI ECC/UDIMM, RDIMM) ²
DDR2 SDRAM (MT47)	1.8V1	x8, x16¹	800 MT/s ¹	512Mb-2Gb ¹	(IT, AT) ¹ , CT ²	BGA, VFBGA ¹
SDRAM (MT48)	3.3V ¹	x8, x16¹	266-333 MT/s ¹	64Mb-256Mb ¹	IT ¹ , CT ²	TSOP, VFBGA ¹
Low-power DRAM						
LPDDR5 (MT62)	1.05V, 1.8V	x16, x32, x64	Up to 8.5 Gbps	16-128Gb	WT, IT, AI, AT, UT	BGA, PoP
LPDDR4 (MT53)	1.1V	x16, x32, x64	Up to 4.2 Gbps	4-128Gb	WT, IT, AT	BGA, PoP
LPDDR3	1.2V	x32, x64	Up to 2.3 Gbps	8-32Gb	WT	BGA, PoP
LPDDR2	1.2V	x32	533 MHz	512Mb-2Gb	IT, AT	BGA
SLC NAND						
Serial SLC NAND LP/VLP	1.8V, 3V	x1, x2, x4	Up to 133 MHz, on-die (zero) ECC	1-32Gb SPI NAND SLC	IT, AT, CT	DFN, BGA, wafer
Parallel SLC NAND LP/VLP	1.8V, 3V	x8, x16	8-bit or on-die (zero) ECC	1-256Gb P-NAND SLC	IT, AT, CT	TSOP, BGA, wafer
NOR flash						
Octal NOR (MT35X)	1.8V, 3V	x1, x8	200 MHz DDR	256Mb-2Gb	IT, AT, UT	BGA
Serial NOR (MT25Q)	1.8V, 3V	x1, x2, x4	133-166 MHz	128Mb-2Gb	IT, AT, UT	BGA, CSP, DFN, KGD, SOIC
Parallel NOR (MT28EW)	3V	x8, x16	Async	128Mb-2Gb	IT, AT	TSOP, BGA
eMCPs and MCPs						
e.MMC + LPDDR4 eMCP	3.3V	x8 e.MMC, x32 LPDDR4	v5.1 (e.MMC); 2133 MHz (LPDDR4)	32GB e.MMC + 16Gb LPDDR4	IT	BGA
NAND + LPDDR4 MCP	1.8V	x8 NAND, x16, x32 LPDDR4	100K P/E SLC NAND; 1866-2133 MHz (LPDDR4)	4-16Gb SLC NAND + 4-16Gb LPDDR4	IT	BGA
NAND + LPDDR2 MCP	1.8V	x8 NAND, x32 LPDDR2	100K P/E SLC NAND; 533 MHz (LPDDR2)	4Gb SLC NAND + 2-4Gb LPDDR2	IT	BGA
Storage						
SSD (2100 AI)	3.3V/1.2V/ 0.9V	x4	PCle Gen3	64GB-1TB	Al	BGA, M.2 (Type 2230)
Memory cards	3.3V	x4	SD3.0 UHS-I, U1/U3, Class 10	32GB-1.5TB	WT	microSD
e.MMC	3V	x1, x4, x8	e.MMC v5.0, e.MMC v5.1	32GB-256GB	WT, IT	BGA
UFS	1.2/3.3V	x1, x2	JESD22OC 2.1, JESD22OD 3.1	32GB-256GB	IT, AT	TFBGA, LFBGA

^{1.} This table contains design-in products only.

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Products are warranted only to meet Micron's product data sheet specifications. Products, programs, and specifications are subject to change without notice. Dates are estimates only.



^{2.} Typical temperature range: IT = -40°C to 85°C; AI = -40°C to 95°C; WT = -25°C to 85°C; AT = -40°C to 105°C; UT = -40°C to 125°C