

# Micron powering robotics and humanoids

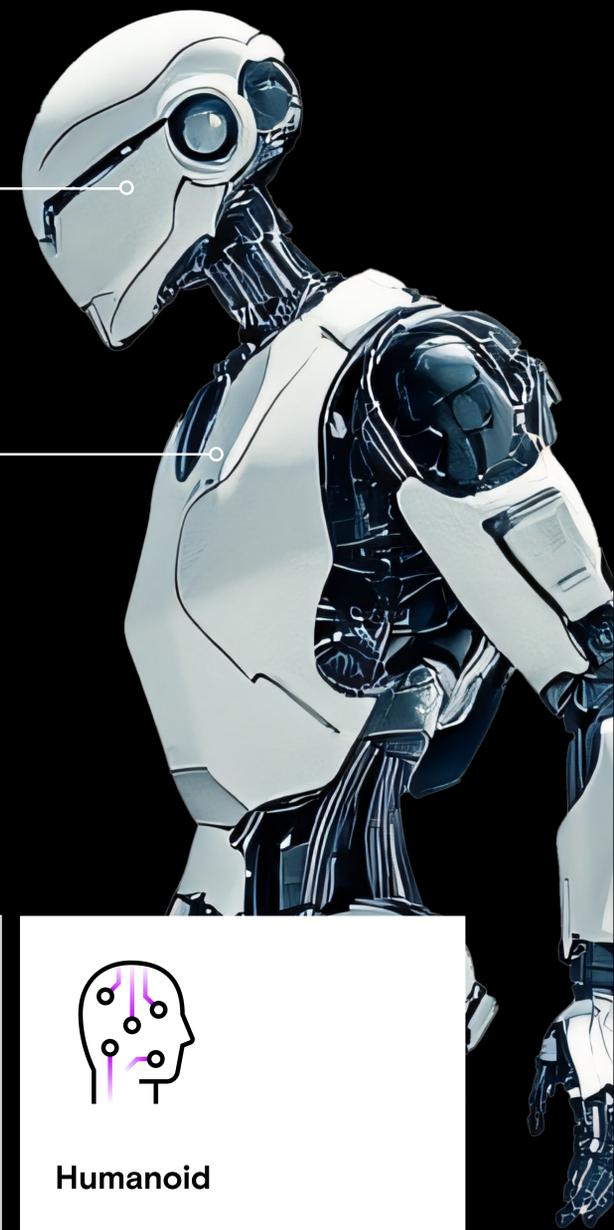
Memory and storage platforms that help provide autonomy, machine vision, and safe, always-on operation

## Memory and storage

Volatile memory (DRAM) supports fast, real-time perception and decision-making, while non-volatile memory (flash/SSD) retains learned models, skills, and identity data across power cycles.

## Small memory content

Power and battery control systems manage energy storage, distribution, charging, and safety - regulating power delivery to all subsystems while monitoring battery health, thermal limits, and fault conditions.



### Industrial/Collaborative

#### What is it?

High-precision, fixed-function manipulators for repetitive tasks; designed for safe human co-work

#### Use case examples

High-speed pick and place; welding; assembly, packaging, palletizing; medical lab use

#### Memory and storage highlights\*

- 8-64GB DDR4/5
- 4-16GB LPDDR4/5
- 8-32GB eMMC/UFS
- 1-2Gb NOR

#### What's driving memory and storage needs?

Deterministic control; stable firmware; reliable operation in harsh environments; fast sensor fusion; real-time responsive interaction



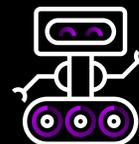
### Mobile

Autonomous robots that navigate dynamic environments using SLAM, mapping, and sensor fusion

Factory logistics; warehouse transport; delivery

- 4-64GB LPDDR4/5/5X
- NVMe™ SSD
- 64GB+ eMMC/UFS

Compute-heavy navigation; map retention; multi-camera and LiDAR fusion



### Service

Basic robots with collision avoidance and object recognition

Food serving; security; valet; retail; cleaning

- 2-8GB DDR3/4
- 4GB LPDDR4/5
- 32GB eMMC
- 1-2Gb NOR

Navigation; object detection and collision avoidance



### Humanoid

Human-form robots using advanced AI, perception, and dexterous actuation to perform general-purpose tasks

Patient aid in clinical environments; inspections in hazardous conditions; disaster response; performing routine, repetitive tasks; assisting with everyday household activities

- 16-128GB LPDDR5/5X
- 1-4TB NVMe SSD
- 128GB+ UFS

Heavy AI inference; multi-actuator coordination; high-bandwidth sensing (multi-cam, IMU, tactile)

\*Typical BoM for memory and storage based on Micron estimates



## Why Micron?

Micron offers a broad portfolio of energy-efficient memory and storage optimized for AI

**micron**