



# Unleash Edge Applications. Accelerate Time to Market.

Deliver efficient performance for digital signal processing (DSP)-intensive applications at the edge.

The small-form-factor AMD Kria™ K24 SOM and KD240 Drives Starter Kit offer a power-, performance-, and cost-optimized solution within the Kria SOM portfolio.



## Capture the SOM Advantage



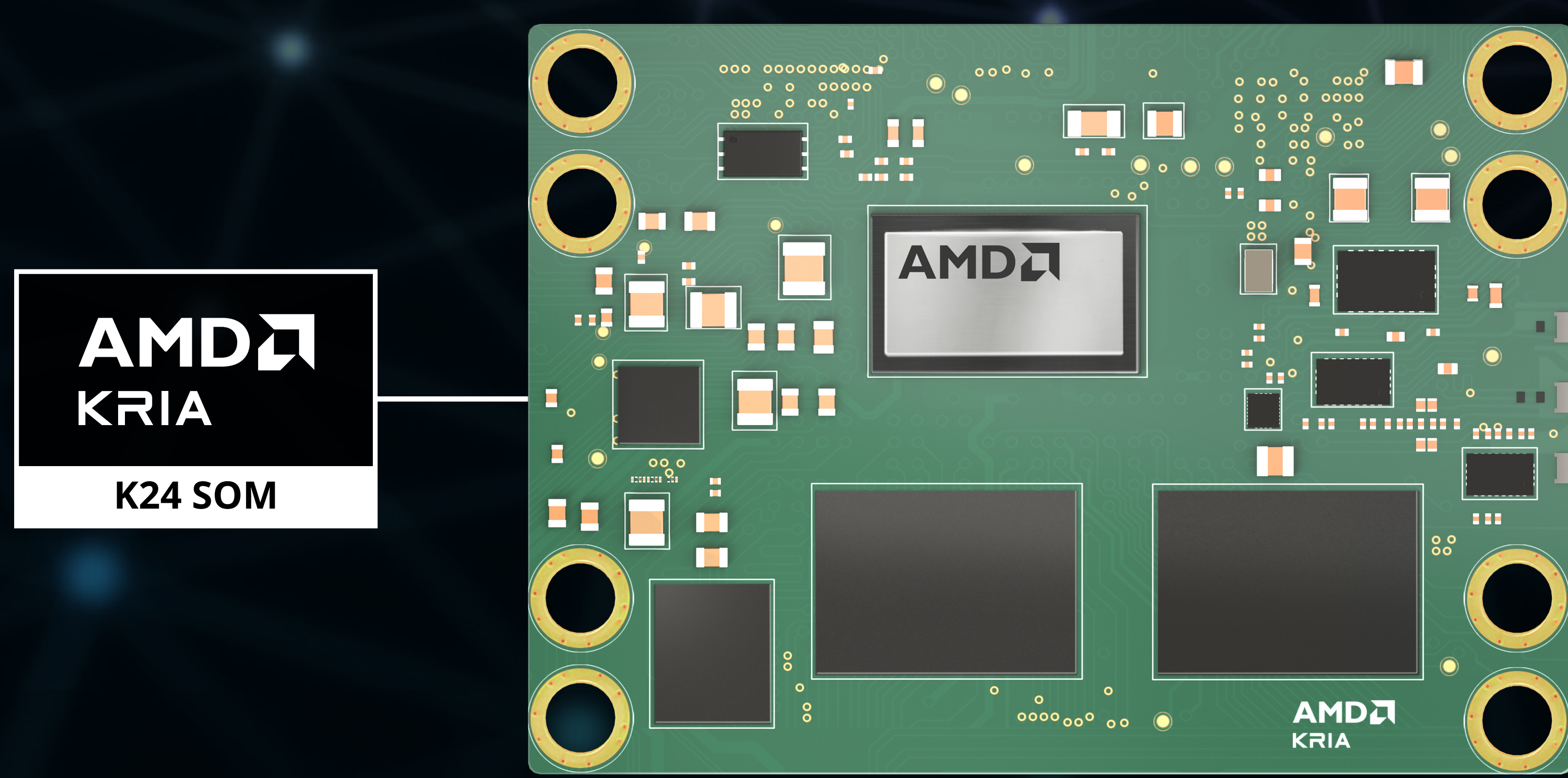
### What is a System-on-Module?

SOMs integrate the core components of an embedded processing system on a single production-ready printed circuit board.

### The benefits vs. chip-down solutions

- Reduce manufacturing time and materials cost
- Simplify product life cycle management
- Alleviate design complexity and speed development
- Save valuable engineering resources
- Streamline operational flows and manage inventory costs

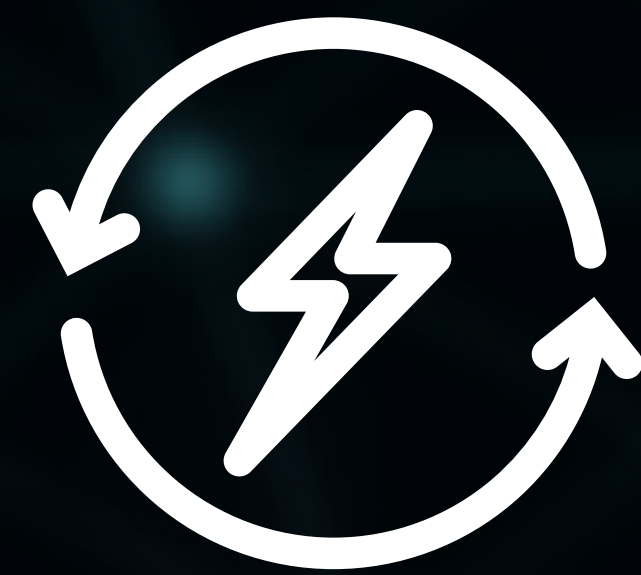
## Develop Efficient Systems—Fast



**1/2**  
the size of a credit card

**2X**  
lower latency<sup>1</sup>

## Design, Deploy, and Scale With Ease



### Build reliable, power-efficient solutions

- Connects to multiple motors
- 10-year industrial life cycle with ECC-protected memory
- Deterministic processing



### Deploy flexible and scalable adaptive systems

- Support for a variety of sensors and peripherals
- Connector compatibility with Kria K26 SOM
- Over-the-air software updates and adaptable hardware



### Take the seamless path to volume deployment

- Ready-to-use KD240 Drives Starter Kit
- AMD Vitis™ accelerated libraries: motor control and more
- Development flows: HDL, C++, ROS 2, AI frameworks, Python, Matlab® / Simulink®

## Save Power and Be Energy Efficient

Deliver edge solutions that are:

- High-performance • Power-efficient • Small in physical size • Long-lasting

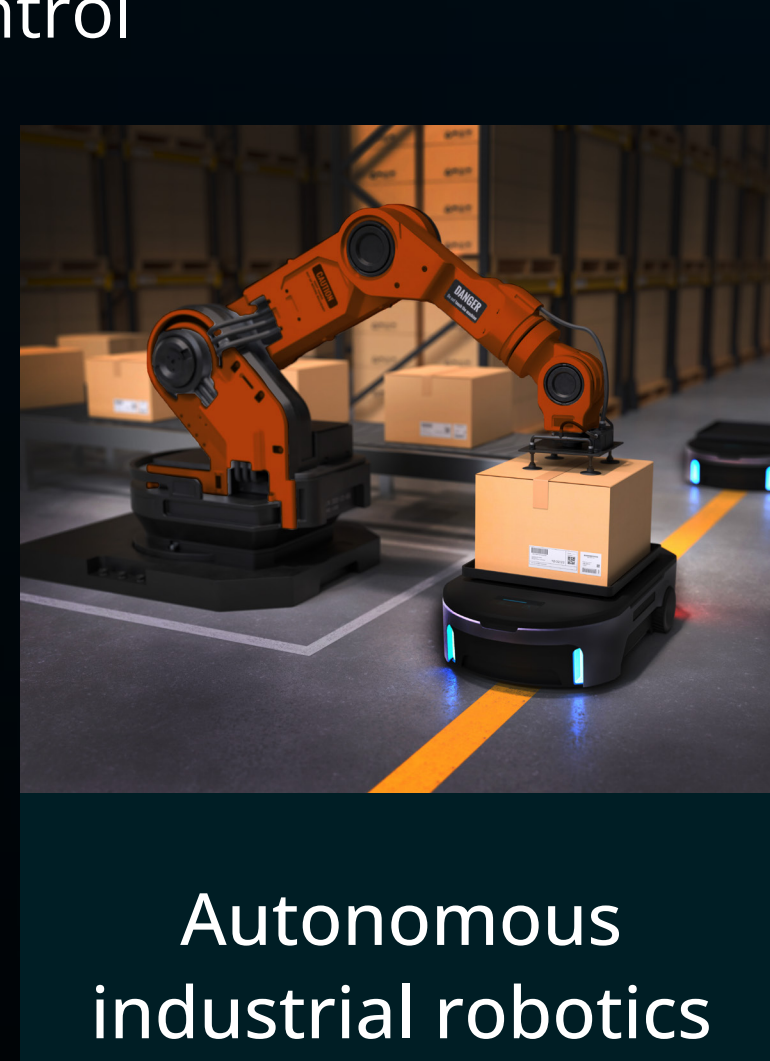
### Motor control



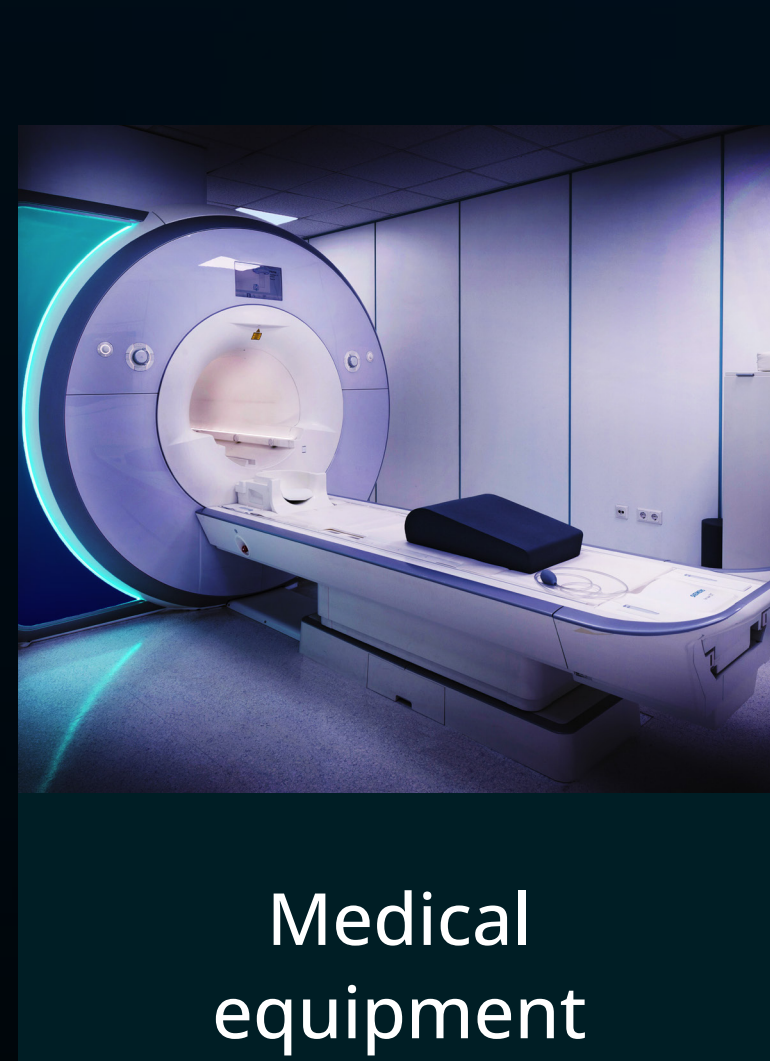
Power generation systems



Public transportation



Autonomous industrial robotics



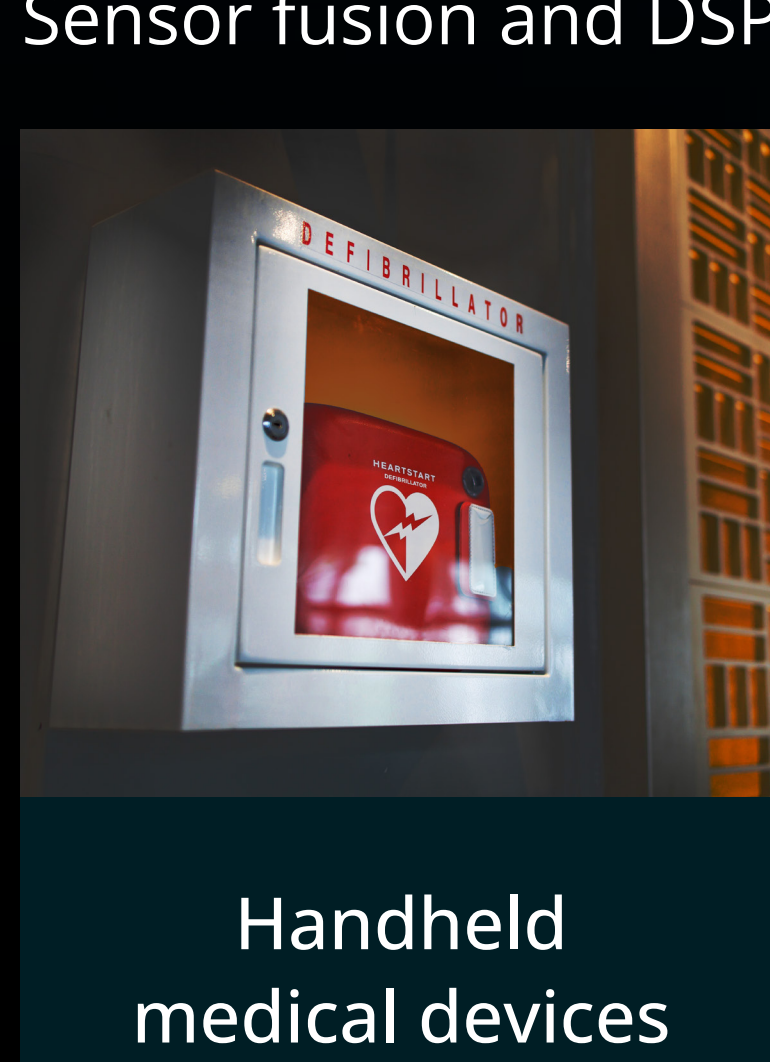
Medical equipment

### Inverter control



Electric vehicle charging stations

### Sensor fusion and DSP



Handheld medical devices

## AMD Kria K24 SOM

Advancing solution development, deployment, and performance

[Discover Kria K24 SOMs](#)

[Explore the KD240 Starter Kit](#)

1. Based on AMD internal analysis in August 2023, using the latency results reported by TI for a full control loop implementation on a Texas Instruments AM64xx standard SOC using a Texas Instruments benchmark vs. the latency results of a full control loop implementation using a Field Oriented Control algorithm designed by Qdesys. System configuration for the TI AM64xx SOC system: TMD564EVM board; configuration for the Kria K24 SOM system: KD240 starter kit. The latency advantage improves up to 7X as the number of motor axes increases. Actual results will vary. (SOM-003)

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