

UNLEASH

NEXT-LEVEL PERFORMANCE
FOR EMBEDDED APPLICATIONS

Embedded systems can be complex. Bringing them to market shouldn't be.
Meet the new family of **AMD Versal™ Prime Series Gen 2 adaptive SoCs**.

Expect more compute, faster memory, and higher definition

Up to

10X

scalar compute¹

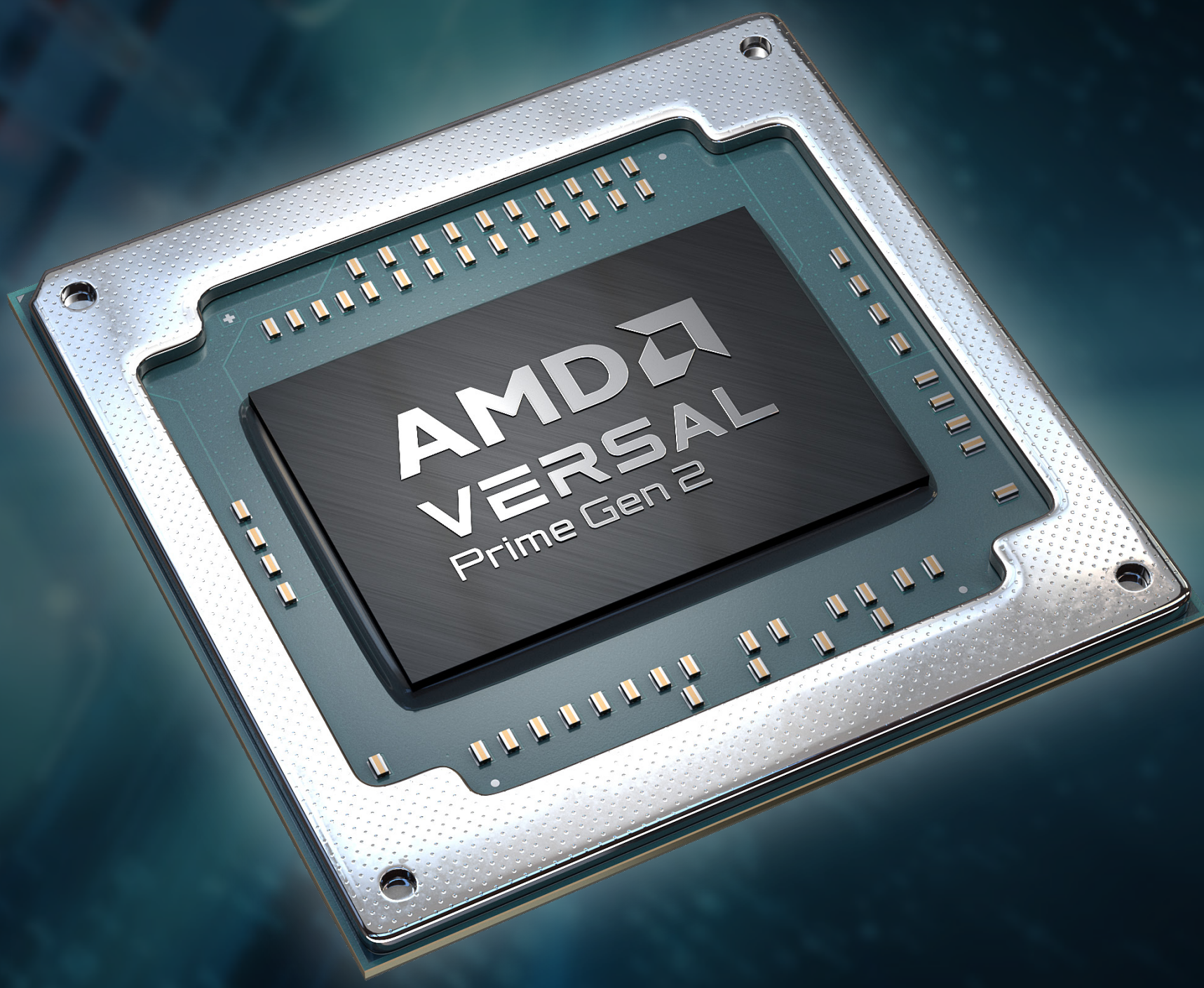
Up to

2X

memory data rates²

8K

video workflows



Projected performance vs. previous generation.

Performance and flexibility—all in one chip



REDUCE
DEVICE COUNT

Real-time sensor processing *and* high-performance compute—together on a single device.



ADAPT
QUICKLY

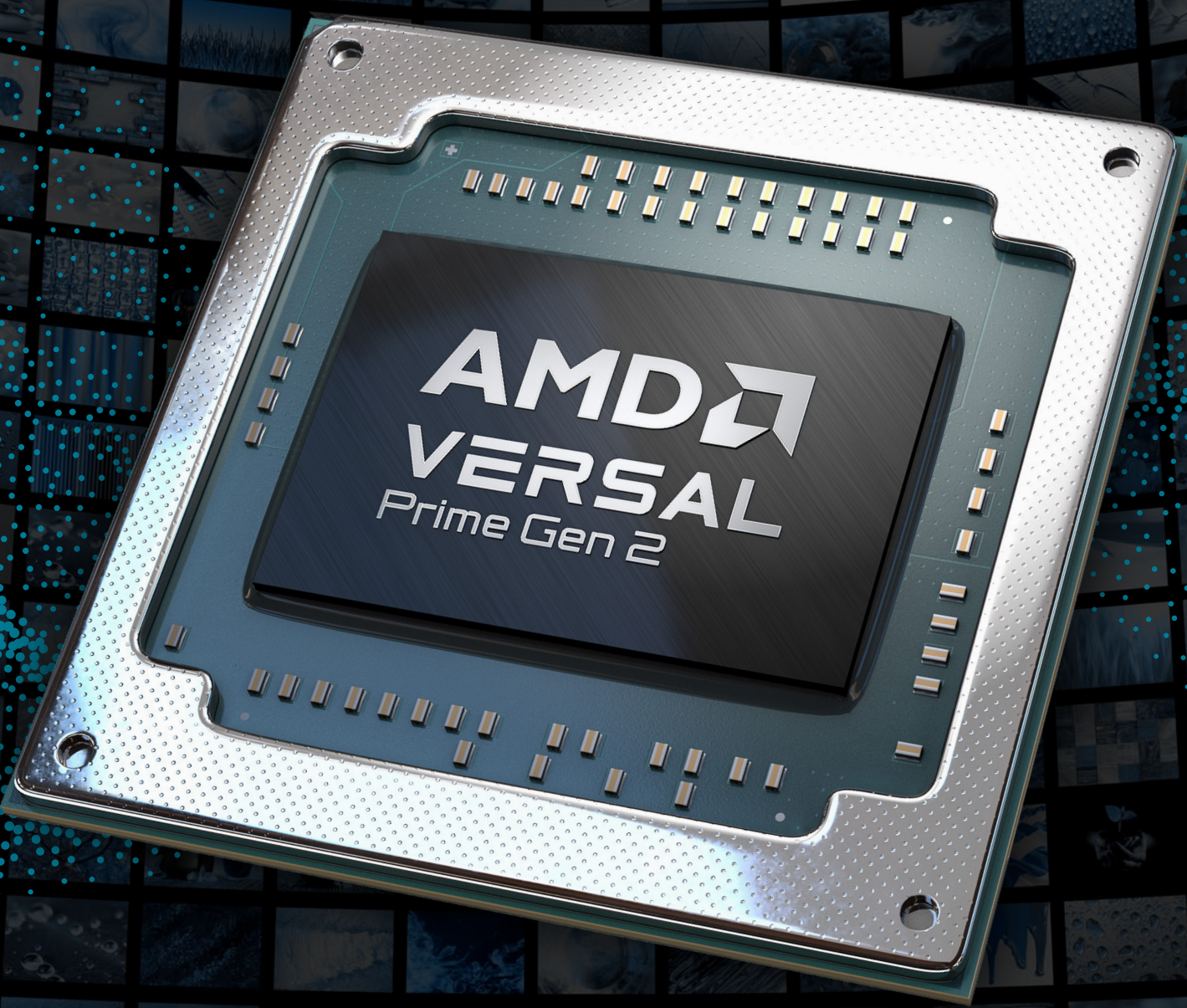
Integrated, world-class programmable logic supports changing algorithms and requirements.



SAVE SPACE
AND POWER³

Hardened IP optimizes standard interfaces while safety features reduce the need for external microprocessors.

Powering multi-channel 8K60 video

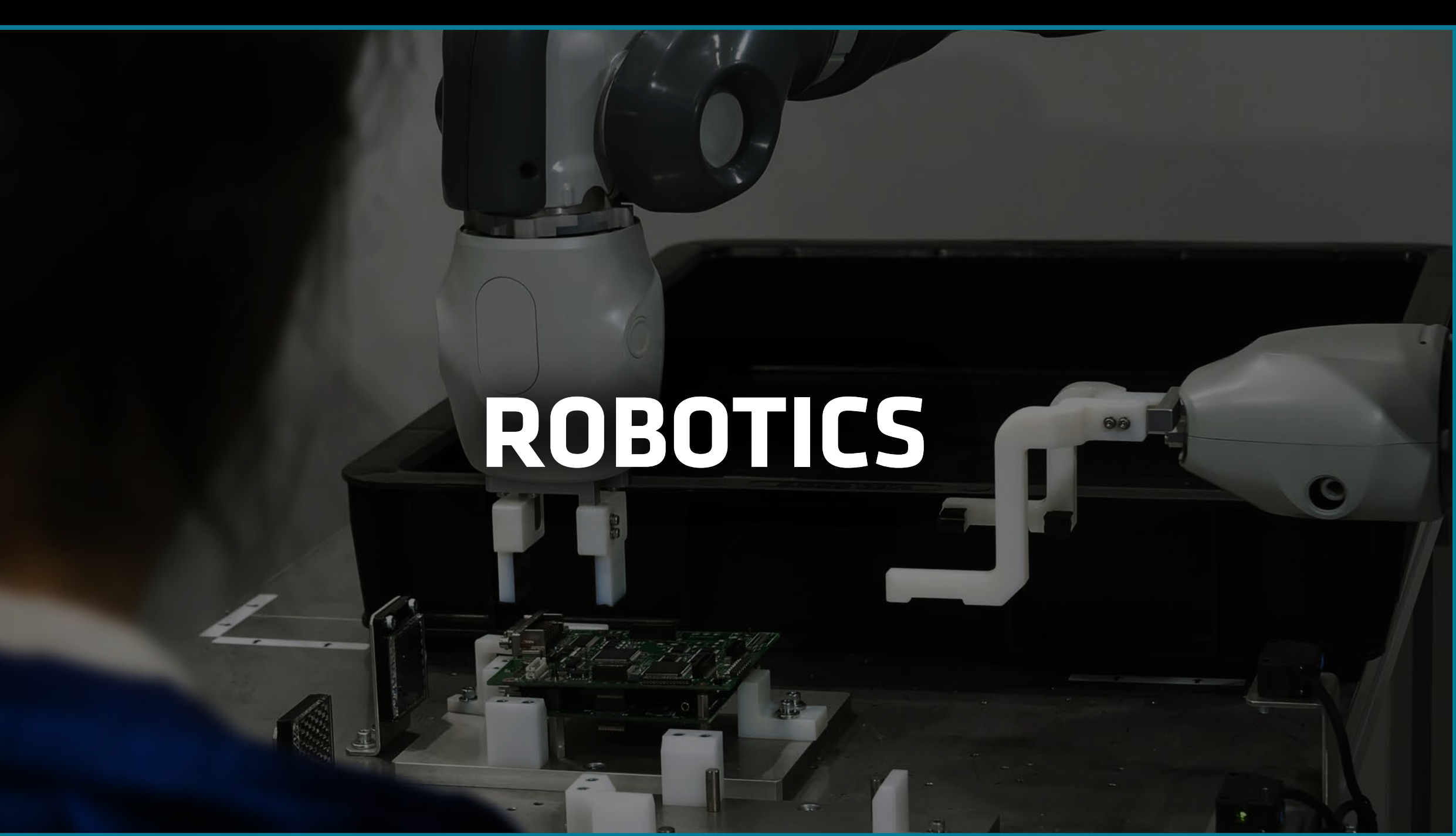


UHD capture, processing, and distribution

Hardened encoding, decoding, and DDR5/LPDDR5X⁴

100 Gigabit Ethernet MACs to support AV-over-IP

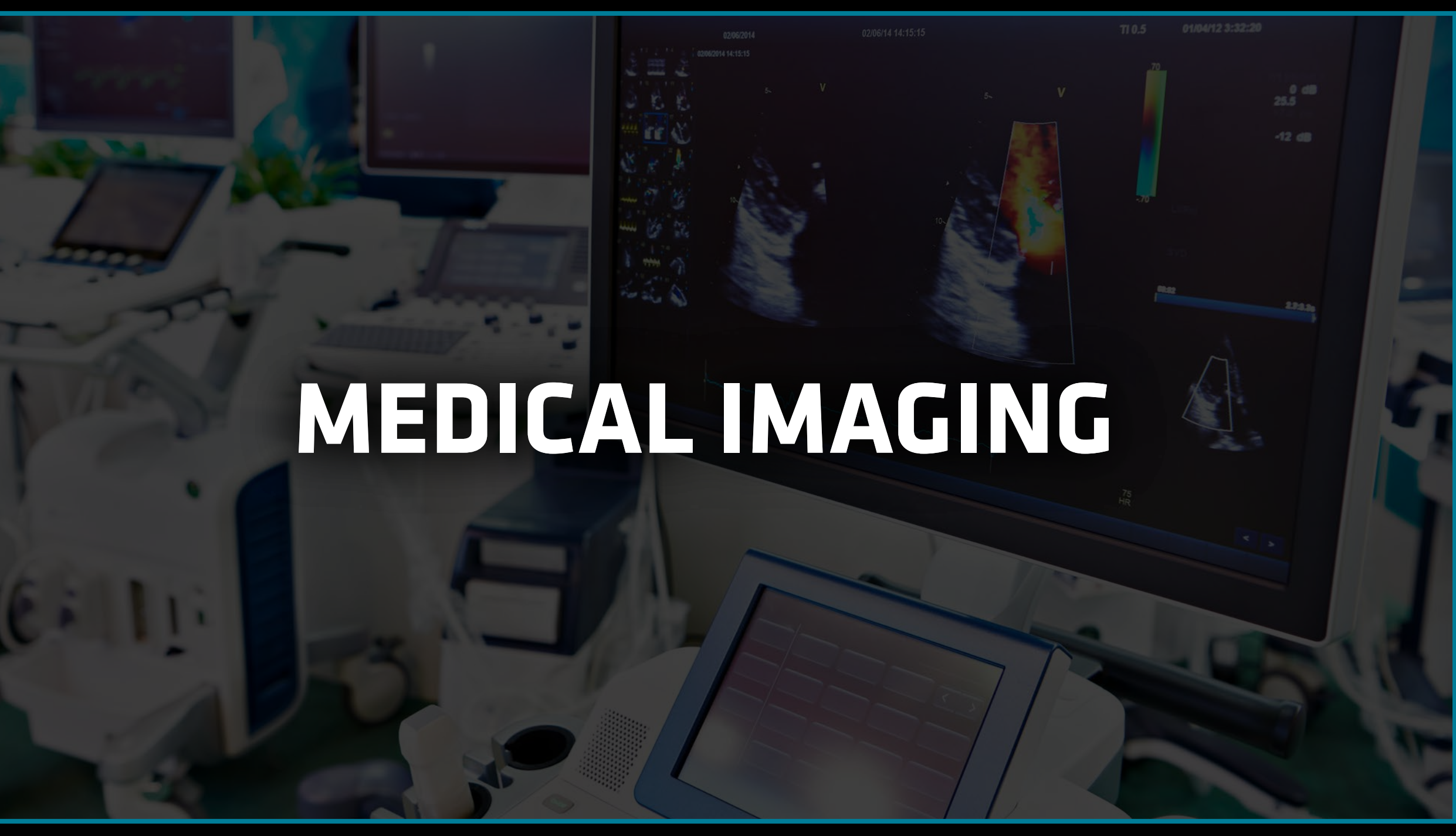
Equipped to support complex workloads



ROBOTICS



FLIGHT COMPUTERS



MEDICAL IMAGING



INDUSTRIAL PCs

AMD Versal Prime Series Gen 2

Advance your embedded systems with adaptive SoCs from AMD built to optimize performance and efficiency.

Learn More

1. Based on pre-silicon estimates for combined total DMIPs of the Versal™ AI Edge Series Gen 2 and Versal Prime Series Gen 2 processing systems, when configured with 8 Arm® Cortex®-A78AE application cores at 2.2 GHz and 10 Arm Cortex-R52 real-time cores at 1.05 GHz, compared to the combined total DMIPs in the first-generation Versal AI Edge Series and Versal Prime Series. Versal AI Edge Series Gen 2 and Versal Prime Series Gen 2 operating conditions: Highest available speed grade, 0.88V PS operating voltage, split-mode operation, and maximum supported operating frequency. First-generation Versal AI Edge Series and Versal Prime Series operating conditions: Highest available speed grade, 0.88V PS operating voltage, and maximum supported operating frequency. Actual DMIPs performance will vary when final products are released in market. (VER-027)

2. Based on AMD internal analysis of the expected supported memory data rates of the Versal™ AI Edge Series Gen 2 and Versal Prime Series Gen 2 vs. published supported memory rates of the previous generation products, respectively. Memory data rates for the Versal Gen 2 products are subject to change when final products are released in market. (VER-032)

3. Based on AMD internal pre-silicon performance estimates for the AMD Versal™ Prime Series Gen 2 2VM3658 device compared to AMD internal system performance projections and power estimates for the Zynq™ UltraScale+ ZU7EV MPSoC device, assuming the smallest available package sizes. Actual performance will vary when final products are released in market. Performance projections as of March 2024. (VER-042)

4. Video codec acceleration (including at least the HEVC [H.265], H.264, VP9, and AV1 codecs) is subject to and not operable without inclusion/installation of compatible media players. (GD-176)