

## PARALLEL AND SERIAL PROCESSING EDGE COMPUTE POWER AVIONICS PLATFORM DETERMINISTIC AI

## **NEXTAGE MODULAR COMPUTER**

The NMC brings powerful, radiation-tolerant computing to space, robotics, and edge applications. Designed for affordability, reliability, and flexibility, it features in-situ reprogrammability and a modular 1U CubeSat form factor optimized for size, weight, and power.



## **KEY CAPABILITIES & ARCHITECTURE**

- TriCortexhybrid computing architecture coordinates on-chipRISC-V processors and the PolarFire® SOC FPGA (SEU-immune).
- On-chip incremental compiler/interpreter enables live code updates without interrupting functionality.
- Supports multicore, user-programmable data widths, relocatable code, deterministic AI, and edge computing.
- Software support: Linux / RTOS / Bare-Metal; RISC-V toolchain and C/C++ compatible.

## **FEATURES & BENEFITS**

- Massive parallel processing and modular stacking for additional I/O and driver boards.
- Over 90% FPGA resources available to user with substantial logic.
- Radiation tested in situ >30 krad (no shielding).
- Extremely low power draw and small mass for space applications.





