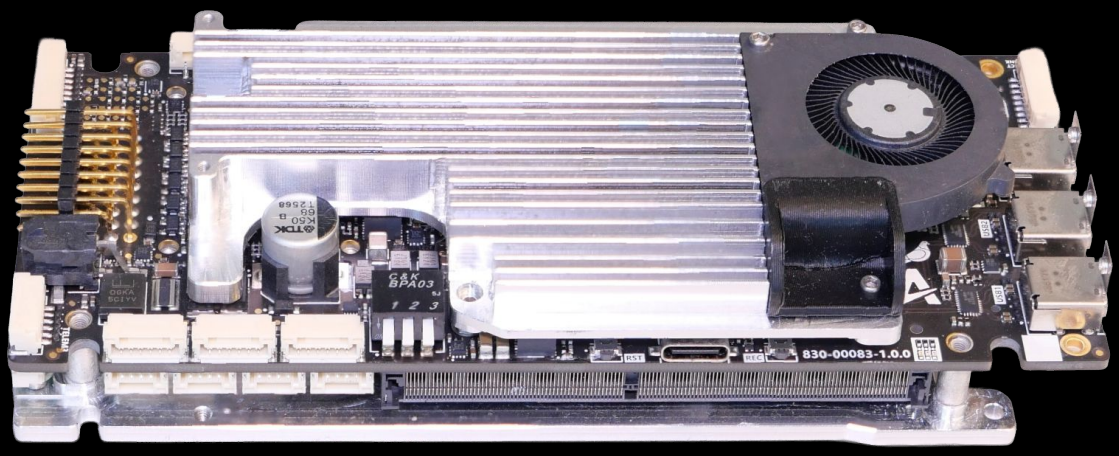
Auterion

— SKYNODE N

AI compute and flight control for advanced autonomous systems



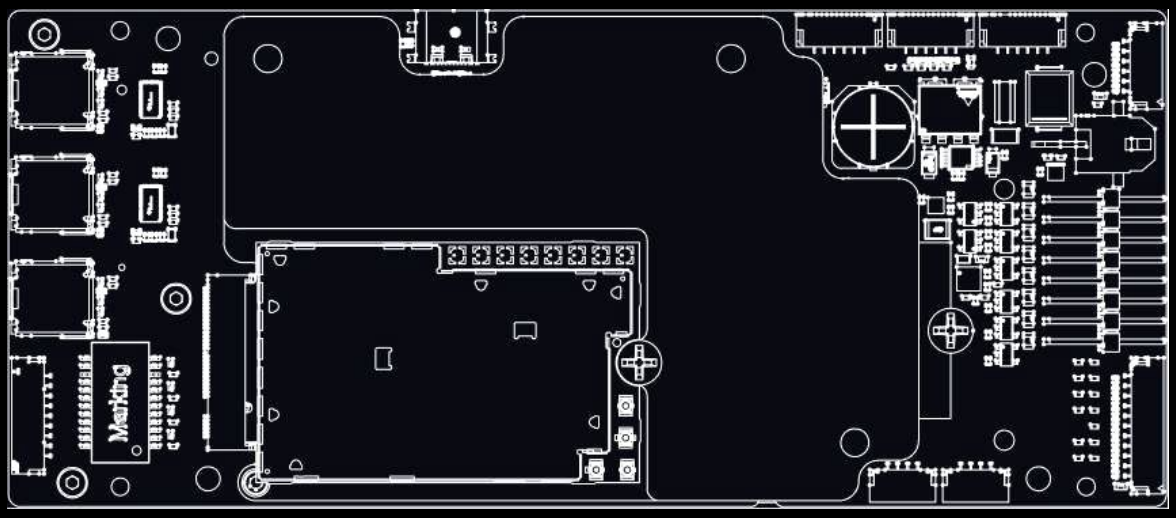
Skynode N is Auterion's high-performance avionics and AI compute platform for autonomous systems requiring onboard perception and AI workloads.

Running AuterionOS and powered by the NVIDIA Jetson Orin NX, Skynode N integrates AI acceleration, real-time flight control, and high-bandwidth sensor interfaces into a single system, enabling advanced autonomy directly onboard autonomous vehicles.

BENEFITS

- Enables advanced autonomy workloads including computer vision, perception, and sensor fusion
- Combines AI compute and flight control in a single integrated avionics platform
- Designed for complex autonomous systems across air, land, and maritime vehicles
- Seamlessly integrates with the AuterionOS platform and autonomy ecosystem

Specifications



Core Hardware

- NVIDIA Jetson Orin NX system-on-module
- Ampere GPU with 1024 CUDA cores and Tensor acceleration
- 16 GB LPDDR5 memory
- NVMe storage (PCIe)
- Hardware acceleration for H.265, H.264, and AV1 video encoding/decoding
- Integrated Pixhawk FMUv6X flight controller

These interfaces enable integration with cameras, radios, sensors, and mission payloads required for advanced autonomous systems.

Key Interfaces

- Multiple camera interfaces supporting MIPI CSI and GMSL configurations
- Dual Gigabit Ethernet for networking and payload connectivity
- USB 3.2 Gen 2 and USB-C high-speed peripheral support
- 6 PWM outputs for motor or servo control
- CAN, TELEM, SPI, and I²C interfaces for avionics and payload systems
- Dual GPS support with safety switch integration
- 2x MIPI CSI with image processing unit