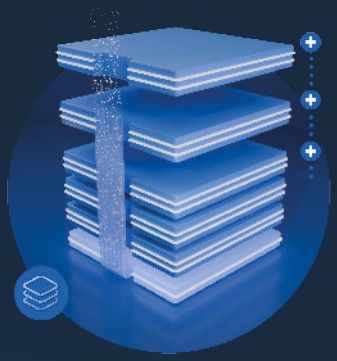
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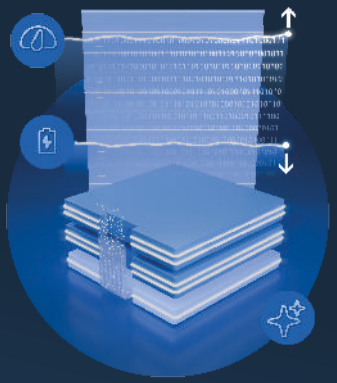
Enhance your missions with SkyAI™

SkyAI™ solutions enable on-board intelligence with scalable, power-efficient technology



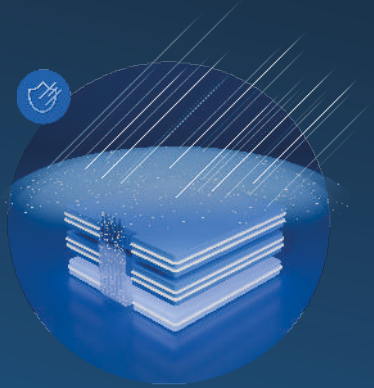
SCALABILTIY

SkyAI's scalable computing is driven by a robust architecture that employs redundant, high-speed gigabit Ethernet backhaul, enabling seamless expansion to accommodate increasing mission demands.



POWER EFFICIENCY

SkyAI™ solutions deliver an ideal balance between computational performance and power efficiency—empowering the new generation of compact, power-constrained satellite missions. This approach maximizes mission capabilities within limited power budgets, meeting the growing needs of next-generation satellite systems.



FAULT TOLERANCE

SkyAI™ solutions leverage flight-proven supervisory technologies to deliver fault-tolerant and robust AI operation in demanding space environments.



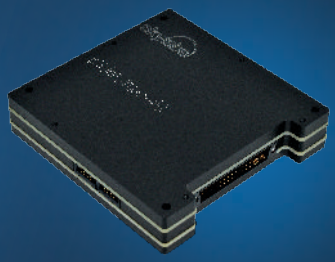
FASTER TIME TO SPACE

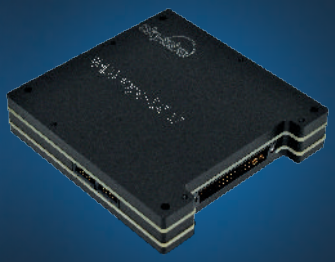
SkyAI™ Development Labs empower developers with seamless, intuitive remote access to SkyAI™-Nodes, unlocking rapid algorithm innovation at a fraction of traditional costs—enabling cutting-edge development and testing long before any equipment investment is needed.

SKYAI™

skylabs







	NANOhpc-obc High performance fault tolerant OBC	NANOhpc-AI High performance AI accelerator	NANOhpc-DPU High performance data processing unit
Technology	Quad-core CPU	AI Accelerator + Quad-core CPU	DSPs + Logic + Octo-core + Quad-core CPU
	4x RISC-V RV64GC	2x Hailo-8	Zynq™ UltraScale+™ MPSoC ZU7EV
Performance	6000 CoreMark	52 TOPS	29000 CoreMark + FPGA DSP&Fabric
Typical Power consumption	3 W	8 W	11 W
Frameworks	TensorFlow, TensorFlow Lite, Keras, PyTorch & ONNX	TensorFlow, TensorFlow Lite, Keras, PyTorch & ONNX	Vitis™ AI software support: PyTorch, TensorFlow, ONNX
Use cases	On-board data agnostics, situation awareness, cybersecurity, and autonomous operations.	AI inference, rendezvous and real-time navigation, image segmentation, image analytics and sensor fusion.	Accelerated real-time processing of high-volume data streams, such as SAR.

SkyAI™ Applications

Real-Time Insights

SkyAI™ transforms satellites into intelligent decision-making platforms. By processing data directly upon acquisition, it delivers actionable insights instantly — reducing latency and enabling autonomous operations in orbit. This real-time capability ensures faster responses and more efficient mission outcomes.

Optimised Bandwidth Efficiency

Satellite sensors generate immense volumes of data. Traditionally, this data was simply transmitted to the ground. SkyAI™ changes that. By applying onboard intelligence, it prioritises the most valuable information for downlink, ensuring optimal use of limited bandwidth and empowering faster, data-driven decision-making in space.

Adaptable and Future-Proof

Static onboard algorithms can become obsolete even before launch. SkyAI™ ensures long-term adaptability through continuous, high-speed in-flight algorithm updates. This keeps missions agile and relevant, enabling satellites to evolve dynamically with changing objectives and environments throughout their entire lifespan.

Satellite-as-a-Service Flexibility

SkyAI™ redefines space operations with multi-tenant, hot-swappable algorithms. Multiple customer applications can run concurrently on-board, adapting instantly based on geolocation or mission context. This creates an unprecedented level of flexibility — turning satellites into dynamic, service-oriented platforms for the New Space era.

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