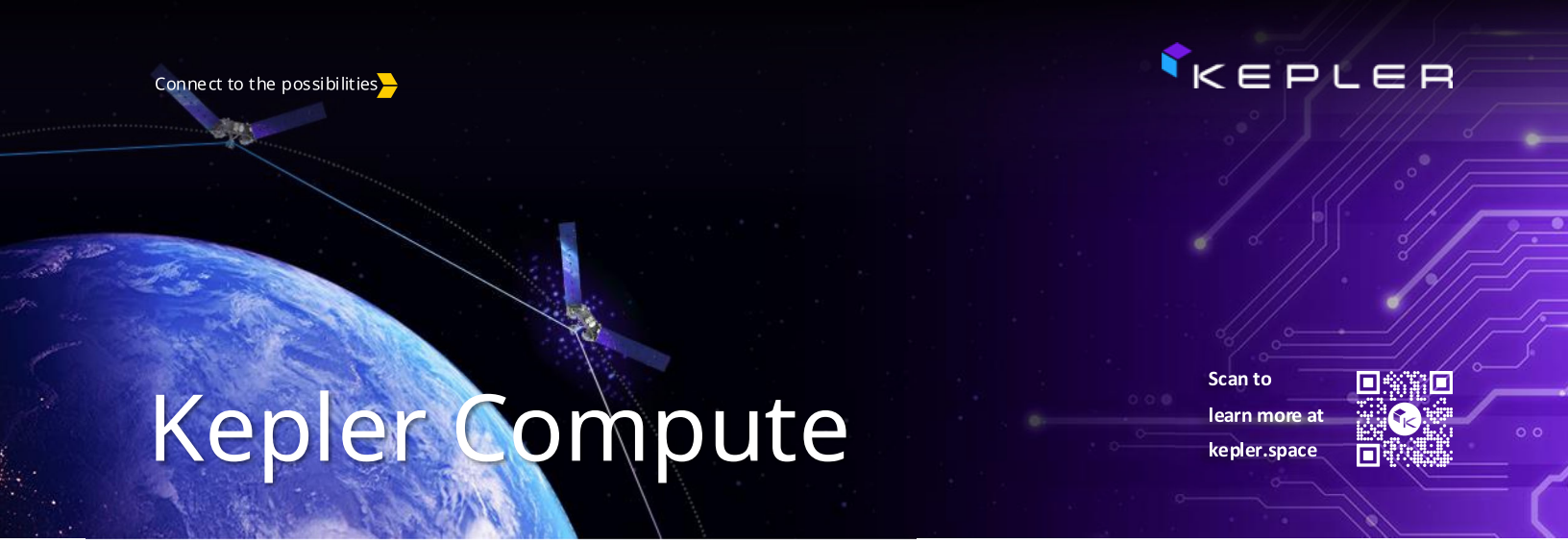
Connect to the possibilities

KEPLER



Kepler Compute

Scan to learn more at kepler.space

Delivering Real-Time Intelligence from Space

Enabling Action at the Source

Kepler is advancing on-orbit intelligence through high-performance edge computing. Our high-performance payloads enable data to be processed, analyzed, and acted upon directly onboard satellites—minimizing dependence on ground infrastructure.

This capability supports autonomous mission operations, accelerates decision timelines, and reduces both latency and data downlink requirements. By embedding compute at the edge, Kepler transforms satellites into adaptive, mission-critical assets capable of real-time insight, analysis, and response.

Connect to the Possibilities

Kepler's edge compute payloads are accessible from orbit and the Earth, when the space asset is connected to the Kepler Network. Customers can push updates, monitor performance, and manage workloads in orbit, just as they would on Earth.

Built for High-Impact Missions

Earth Observation: Run real-time tipping and cueing, object and change detection, automate sensor data classification, and reduce downlink volume.
Government & Defense: Real-time ISR support, host sovereign data in orbit, and reduce SWaP burdens on spacecraft.
Human Spaceflight: Support onboard data center applications.
Terrestrial Markets: Explore ultra-low-latency computing opportunities for financial or telecom use cases.

- Enhanced mission autonomy
- Low-latency data processing
- Advanced imaging and AI insights
- Scalable and flexible architecture

Platform Capabilities

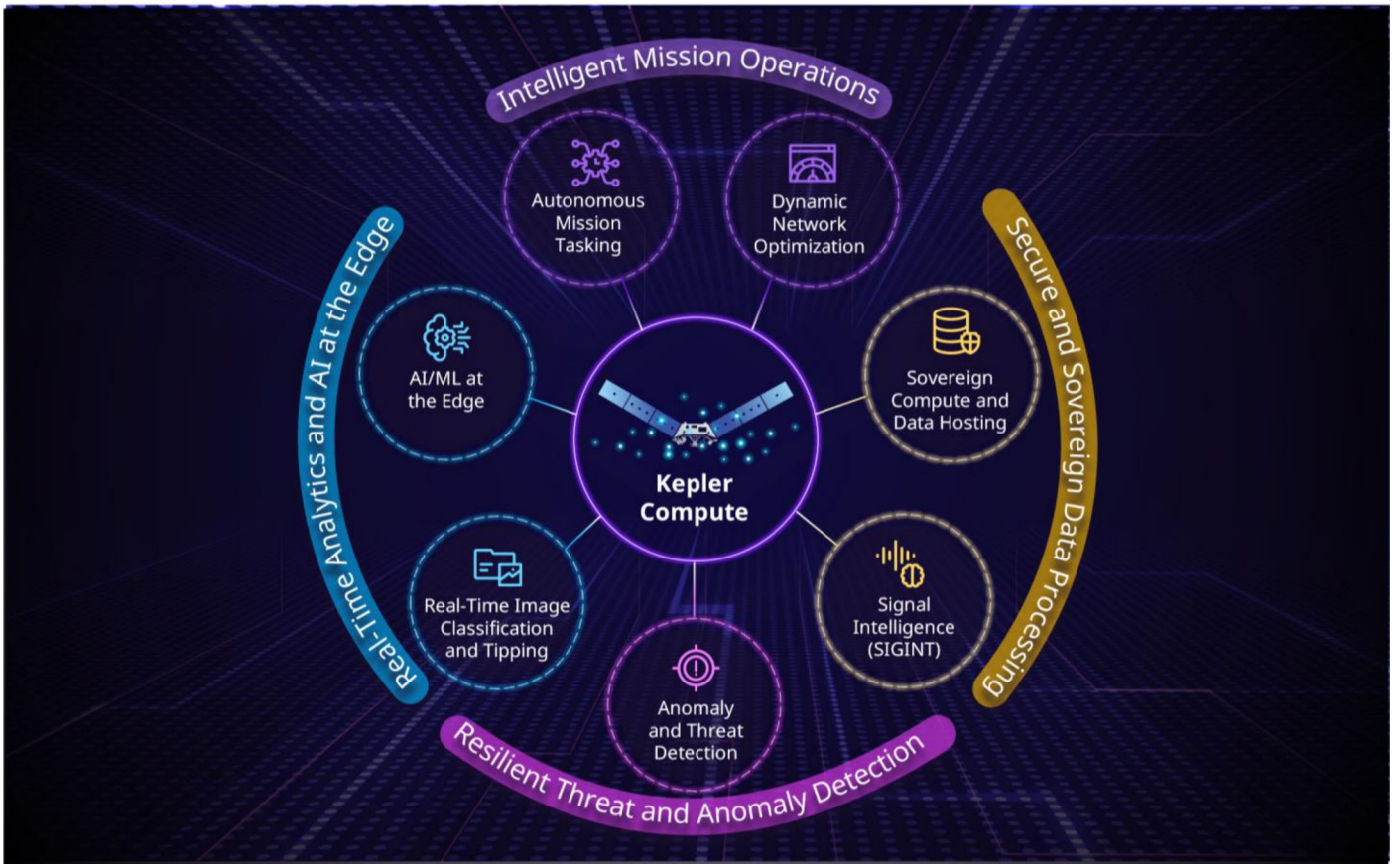
Hardware

- Multi-core CPUs with hardware acceleration for AI/ML inference
- Space-grade storage for mission data
- Interfaces for hosted payloads and Kepler's optical relay network
- Optimized for low power, high throughput
- Leading-edge GPU technology

Software

- Secure, containerized environments
- Remote orchestration and deployment
- Real-time edge ML frameworks
- Cloud-native interfaces with terrestrial integration

Contact Us: sales@kepler.space



Enabling the Future of Autonomous Space Systems

Enabling the Future of Autonomous Space Systems

Kepler's orbital compute platform transforms satellites into intelligent nodes within a distributed cloud network. With in-orbit edge processing, customers can execute real-time analytics, autonomous decision-making, and mission-critical applications directly in space, reducing latency, bandwidth use, and reliance on ground operations.

Processing and Storage in Orbit

Each satellite hosts multiple edge compute units that perform AI modeling, data fusion, and analytics locally. Together, they create scalable compute and storage capacity across the constellation, allowing complex workloads to be processed where data is generated, in orbit.

Decentralized Resource Allocation

Compute and storage resources are dynamically shared across the network. Tasks can run on a single node, distributed across multiple nodes, or be replicated for redundancy. This distributed model ensures efficient use of resources and high system availability.

Resilient and Scalable Architecture

With several edge nodes per satellite and a constellation of interconnected satellites, the system offers built-in resiliency. If one node or satellite becomes unavailable, others automatically assume the workload to maintain continuous operation and data access.

Cloud-Like Processing in Space

Kepler's platform supports containerized workloads, allowing users to deploy, manage, and scale applications across orbiting compute resources much like a terrestrial cloud. Developers can bring their existing software frameworks to space with minimal adaptation.

Network Connected Intelligence

All nodes are part of Kepler's high-bandwidth inter-satellite and ground network, enabling real-time coordination, data sharing, and workload migration. This allows distributed applications to operate seamlessly across multiple satellites and ground systems.