

PARTNER SOLUTION BRIEF

Streamline and Accelerate Edge Deployments with OnLogic Powered by ZEDEDA

OnLogic and ZEDEDA have partnered to seamlessly integrate industrial-grade hardware with cloud-native edge orchestration software, helping customers overcome the complexities of deploying and managing distributed edge infrastructure at scale.

ZEDEDA

ONLOGIC

Introduction



Driven by the growing demand for real-time data processing and the rapid advancement of AI technologies, deploying and managing applications at the edge is increasingly becoming a necessity for large enterprises. The requirement to process data closer to its source, which reduces latency, protects data sovereignty, and enhances overall system efficiency is becoming the standard for distributed infrastructure

However, traditional orchestration solutions designed for datacenters and legacy environments fall short when it comes to the specific challenges of edge computing. These legacy platforms are not designed to handle the diverse and distributed nature of edge environments, which include challenges such as intermittent connectivity, adverse environmental conditions, large scale, lack of local IT resources, and geographically distributed deployments.

Edge adopters have to play the role of system integrator, pulling together the right hardware and software components into a bespoke solution for a unique challenge. OnLogic Powered by ZEDEDA provides a simple to use, integrated solution engineered for today's edge environments.

The OnLogic + ZEDEDA solution, integrates industrial-grade hardware and software built specifically for edge environments to ensure effective coordination and management of edge computing. It is a comprehensive edge orchestration solution specifically tailored for the unique challenges of the edge. OnLogic + ZEDEDA allows customers to easily deploy, manage, monitor, and update edge devices and application workloads, as well as quickly stand up orchestration at the edge on secure and reliable edge compute platforms.

An Orchestration Solution from the Edge Computing Experts

OnLogic designs and manufactures advanced industrial computer solutions. Their highly configurable systems are engineered to excel in demanding edge environments. Incorporating over two decades of input from their global user base, OnLogic's compact but powerful systems deliver unmatched reliability and performance across the spectrum of industrial automation, data aggregation, and other modern computing workloads. With a focus on the user experience and real-world deployment, OnLogic provides hardware and expert guidance to help users turn their innovative ideas into tangible business value, wherever their edge deployments take them.

ZEDEDA delivers an edge orchestration platform, simplifying the security and remote management of edge infrastructure and applications at scale. ZEDEDA leverages an open architecture built on EVE-OS allowing any application to be deployed. EVE-OS delivers an industry leading identity and software attestation workflow that ensures the device can be trusted and that the entire software stack deploys consistently.

Benefits

Secure

- **Zero Trust Security Model:** Trusted computing in untrusted environments that make security teams happy and allows you to confidently deploy enterprise workloads and protect valuable IP, as well as mission critical systems, at the edge.
- **Simplified Edge Management & Orchestration:** Remotely configure, monitor, secure, and update hardware and applications with centralized management and orchestration of edge devices.

Simple

- **Zero Touch Onboarding:** Removes the requirement to send resources to remote locations, providing massive cost savings and ultimate flexibility.
- **Extensive Application Support:** Deploy virtual machines and containers on the same device and evolve over time. Build the best solutions for your desired business outcomes, and future-proof your digital transformation journey.
- **Application Marketplace:** Pre-validated applications accelerate solution deployments providing faster time to value and lower internal integration efforts.
- **Platform Services for Kubernetes, Remote Access, Configuration Management & More:** Avoid having to lay down parallel infrastructure for remote access, Kubernetes clusters, or application management workflows. Lower costs and complexity via a consolidated set of services with the flexibility to choose which services you need.

Capable

- **Industrialized Platforms & Configurations:** Engineered for use in today's most challenging edge computing environments outside the datacenter. Fanless cooling helps prevent damage or failure due to dust, debris and vibration.
- **Hardware Certification:** Significant environmental and industry-specific hardware testing for railway, medical, maritime and heavy industry has already been completed, saving you time and expense when deploying solutions in the field.
- **Engineered for the Edge:** Purpose built to address unique edge requirements including scale, offline operations, disconnected networks and distributed deployments. Access to centralized management, regardless of node availability, removes the overhead of IT windows and orphaned configurations.

OnLogic Powered by ZEDEDA



Helix 310

Fanless Industrial Edge Computer



Karbon 410

Rugged Edge Computer



Helix 401

Fanless Hybrid-Core Industrial Edge Computer



Helix 511

High-Performance Fanless Industrial Edge Computer

Technology Overview

OnLogic Powered by ZEDEDA offers a turnkey enablement solution for enterprise customers to orchestrate edge workloads on top of industrial hardware. Making large scale deployments much easier, OnLogic + ZEDEDA integrates industrial-grade hardware with cloud-native edge management software, ensuring effective edge orchestration. This comprehensive solution reduces the cost of operating distributed edge infrastructure while increasing visibility, security, and control. It supports a wide range of device types, from compact devices like Raspberry Pi to powerful x86 systems equipped with GPUs, with more devices being added regularly. This extensive compatibility ensures support for a wide range of applications and the ability to easily scale as needed. In-factory device measurements with edge environment attestation helps ensure devices are secure and no in-transit tampering has occurred.

OnLogic industrial computers are specifically engineered for use in demanding environments. Industrial-grade components and ruggedized enclosures ensure exceptional reliability and data integrity, even in extreme operating temperatures or when exposed to vibration or impact forces. Fanless cooling eliminates dust and debris accumulation within the system, reducing maintenance and extending equipment life. With a focus on regulatory and certification requirements, OnLogic computers meet stringent industry standards, ensuring compatibility and performance wherever they're needed. Diverse connectivity options allow for seamless integration with both new and legacy systems and complex infrastructure. Their energy efficiency and low-power consumption also helps to optimize performance while minimizing environmental impact.

ZEDEDA leverages EVE-OS, from the Linux Foundation. EVE-OS is a lightweight, open source Linux-based edge operating system, with open orchestration APIs. As part of OnLogic Powered by ZEDEDA, EVE-OS comes factory pre-installed on OnLogic hardware, providing customers the flexibility to choose the ideal configuration for every workload.

Use Cases

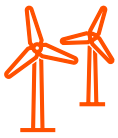
OnLogic Powered by ZEDEDA , is suitable across diverse industries, use cases, and environments. A few sample use cases and industries include:



Manufacturing



Oil and Gas



Energy



Transportation



Logistics



Edge AI

Customers

The OnLogic Powered by ZEDEDA solution is currently deployed by a growing number of customers. One example is PV Hardware, one of the world's largest solar tracker manufacturers.

Ready to Learn More?

Contact your OnLogic or ZEDEDA sales rep, reach out to sales@zededa.com or info@onlogic.com, or visit www.onlogic.com/zededa.