

Turnkey Accelerator System

Design Gateway's Turnkey Accelerator Systems is Workstations and Servers built and validated to deliver unparalleled performance for AI inference, Networking, Video coding and Accelerated Big Data Computing.



AI Inference & Computing Workstations

TKAS-D2101: Professional Workstations paired with Xilinx's Alveo accelerator card provides unique advantage feature for re-programmed and adaptive accelerator application to meet constantly changing needs of modern data center, providing capability of accelerating workload without changing hardware. The systems built for quiet performance, reliability, and ready to use out of the box by preinstalled with Xilinx ML Suite for implementing AI & ML software (TensorFlow, Caffe, MxNet) to run on Alveo Card.

- Machine learning inference
- Video transcoding
- Database search & analytics
- Computational Storage

TKAS-D2101 Specification

Intel Gen 11th Core i7 Rocket Lake-S Processor with Deep Learning Boost AI acceleration and AVX-512 instruction set
 DDR4 3200MHz Memory up to 128GB
 Supports up to 1 x double slot Xilinx Alveo Accelerator card

- Standard model: Alveo U50
- Changeable to U25, U30, U200, U250 and U280 as an option

PCIe Gen4 support
 Total support 3 x M.2 slots and 5 x SATA ports
 Tower Case with Thermaltake CPU Cooling Systems
 Pre-installed and ready to use

- Ubuntu 20.04 LTS Server
- Xilinx Machine Learning Suite
- Xilinx's Vitis AI Docker container



Large Scale Deep Learning Servers

TKAS-S2101: 2U Rack server has been tested and validated across intensive workloads to deliver high levels of performance for large scale deep learning training and high-performance computing (HPC) with Dual NVIDIA's A100 Tensor Core GPU and 3rd Gen. Intel's Xeon Processors. Enabling data scientists, researchers, and engineers to accelerate their pace of innovation on wide range of Intelligent applications, solving challenges that previously thought impossible.

- Large Scale Deep Learning Training
- Up to 312 TFLOPS TensorFloat-32 per GPU
- Support large scale models and data sets
- Suitable for building AI infrastructure

TKAS-S2101 Specification

Dual 2nd Generation Intel® Xeon Processor with Deep Learning Boost AI acceleration and AVX-512 instruction set
 24 x DDR4 DIMM Slot up to 3TB
 Supports up to 2 x double slot NVIDIA A100(80GB) Cards
 8 x PCIe Gen3 expansion slots
 Total support up to 14 x SATA ports
 Dual 1200W 80 PLUS Platinum redundant power supply
 2U Rack Server with NVIDIA validated platform
 Pre-installed and ready to use upon request