METIS® PCIe SYSTEM

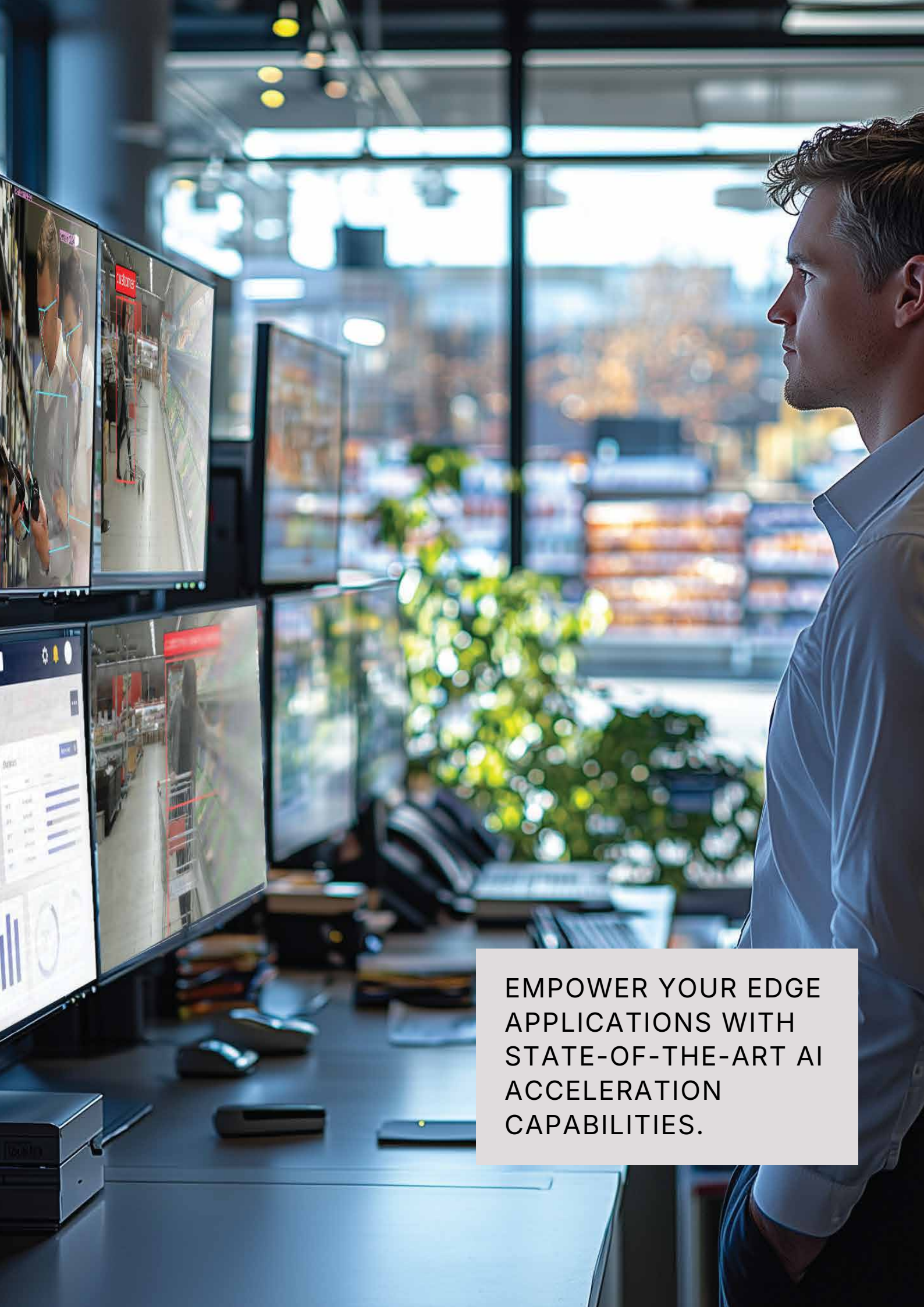
with Dell Pro Slim Plus XE5

METIS

- Security
- Industry 4.0
- Retail
- Mobility
- Logistics
- Robotics
- Medical
- Hospitality
- Utilities
- Agritech

AXELERA® ARTIFICIAL INTELLIGENCE

DELL Technologies



EMPOWER YOUR EDGE APPLICATIONS WITH STATE-OF-THE-ART AI ACCELERATION CAPABILITIES.

KEY FEATURES

- **Extreme-Temp Ready:** Reliable AI inference at 45°C in warehouses and factories where GPU-based solutions fail.
- **Lower TCO vs. Discrete GPU:** No discrete NVIDIA card needed. Lower power, BOM cost, and cooling without sacrificing inference performance.
- **Performance Results:** 2x Perf/$, 9x Perf/W, and 16 streams vs 10 on standard GPU @1080p/25FPS.
- **Voyager SDK:** Purpose-built for edge inference with intelligent quantization, 4K/8K support, and YOLO at launch.

KEY TECHNICAL SPECIFICATIONS

Metis	1x Metis PCIe Card with 16 GB memory
Processor	Intel® Core™ Ultra 7 265 (13 TOPS NPU, 20 cores, up to 5.3GHz)
Memory	32GB: 2 x 16GB, DDR5, up to 5600 MT/s
Storage	512GB SSD TLC
Operating System	Linux Ubuntu 24.04
PCIe	Half-height Gen 3 PCIe x4 slot (Metis AIPU PCIe card)

For more information, please visit or scan the QR code:
https://www.dell.com/support/product-details/en-us/product/dell-pro-qbs1250-xe5-plus-slim-desktop/overview

PROVEN IN KEY MARKETS

Companies in multiple market segments have already adopted Metis PCIe-based AI acceleration for different applications such as:

Security: reducing the time to detect and resolve incidents (abandoned baggage, intrusion, fall) thanks to high resolution, high throughput processing of tens of camera feeds.

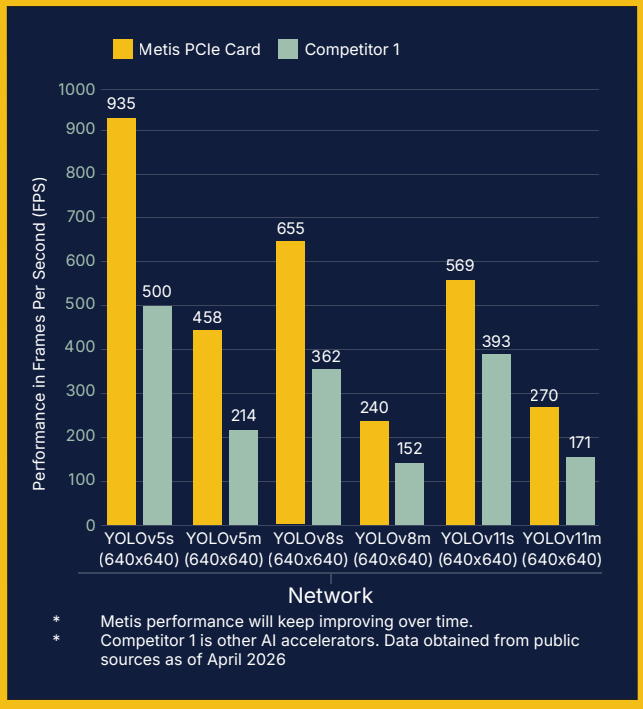
Industry 4.0: improve accuracy and speed in defect detection and quality control. Increase worker safety with automated PPE control.

Retail: improve operational efficiency and customer experience with in-store customer behavior, stock monitoring and automated checkout systems.

Mobility: real time vehicle detection, identification and tracking from multiple traffic cameras to enhances tolling, enforcement and parking management.

Logistics: monitor the movement of goods and personnel to improve operational efficiency and safety of logistic centers by improving resource allocation and detecting safety hazards.

PERFORMANCE BENCHMARK (FPS). HIGHER IS BETTER



* Metis performance will keep improving over time.
* Competitor 1 is other AI accelerators. Data obtained from public sources as of April 2026

EASY TO INTEGRATE

Axelera® AI's Metis technology integrates seamlessly with host CPUs based on both x86 and ARM architectures. Our team actively tests different systems from vendors making it easy for embedded developers to prototype AI applications.

VOYAGER SDK

Thanks to Voyager® Software Development Kit (SDK), users have a simple software integration path for AI inference at the edge:

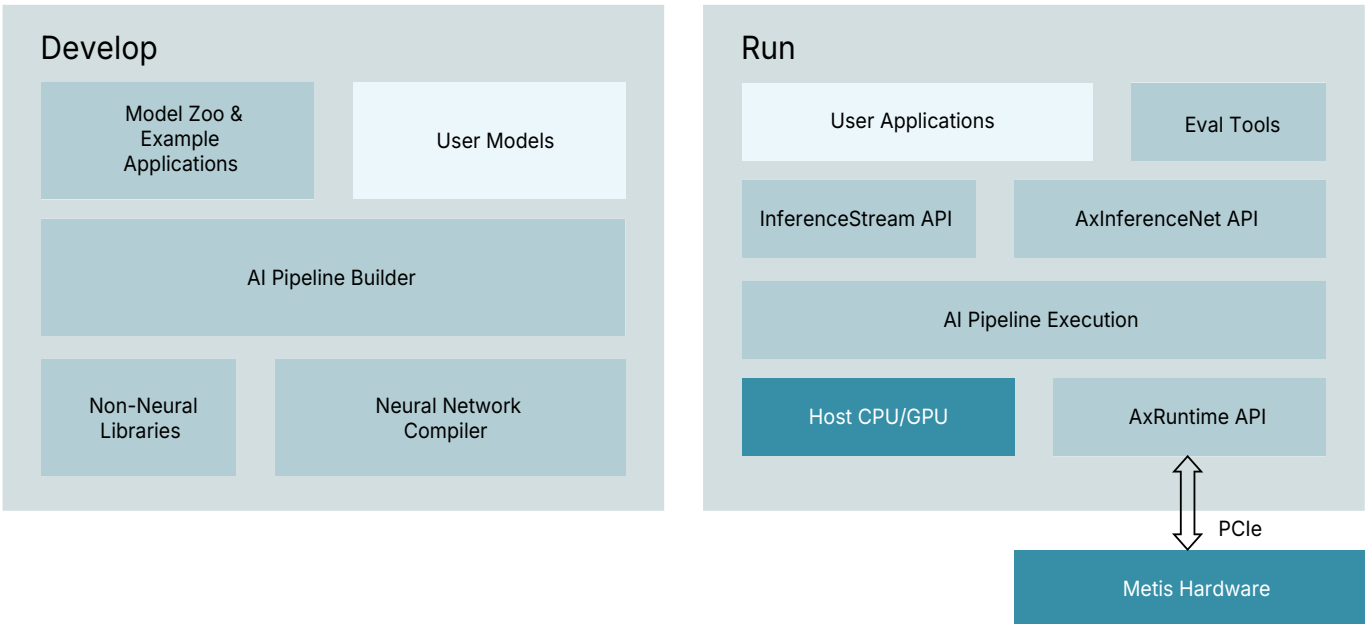
- **Great out-of-the-box experience:** The SDK's built-in tools and models allows evaluating Metis® performance, accuracy and power consumption in a few minutes.
- **Fast end-to-end integration path:** The SDK provides a high-level pipeline description framework that allows building optimized end-to-end AI applications with custom inputs, datasets, models and business logic with very few lines of code.
- **Low-level knobs and APIs:** For users that have their own pipelines and software infrastructure, the SDK includes low-level APIs to directly control the inference hardware.

Voyager is a simple yet feature rich SDK:

- Large Model Zoo supporting, among others:
  - Small Language Models (Phi3-mini, Llama-3.1 8B etc.)
  - Image Classification (EfficientNet, RestNet etc.)
  - Object Detection (YOLO models, RetinaFace etc.)
  - Semantic Segmentation (U-Net FCN)
  - Instance Segmentation (YOLO models)
  - Keypoint Detection (YOLO models)
- Compiler support for models from Pytorch and ONNX. The compiler automatically manages quantization and graph optimization without user intervention and achieves optimal performance and accuracy.

PyTorch ONNX

- Libraries including all pre- and post-processing required to run end-to-end pipelines: scaling; cropping; normalization; format conversion; non-maximal suppression (NMS) and more.
- A YAML description file is used to automatically generate the AI pipelines. The pipeline can then be run as a plugin to GStreamer or within an inference server.
- Built-in tools to test accuracy and performance of models running on Metis AIPU.



SCAN ME

Ordering information

To order the Metis PCIe System with Dell XE5 Pro Slim Plus, please visit: store.axelera.ai/products

Part Number: AXE-SAXDE020
Description: Dell Pro Slim Plus XE5 using Metis 1-chip PCIe Rev 1.1 card with 16GB of memory. Rev1

AXELERA ARTIFICIAL INTELLIGENCE