

# SXVPU

## Smart eXtensible Vision Processing Unit



### The Intelligent Solution for **Embedded Vision Applications** in Industrial Vehicle Technology

SXVPU is an AI-powered imaging platform designed to tackle challenges like object recognition and machine learning integration through its efficient real-time processing of high-resolution video streams up to 4K.

With its specialized AMD-based hardware architecture and support for multiple cameras and sensors, SXVPU is set up to use impeccable image data straight from the sensor for processing by neural networks or conventional algorithms before encoding the data for transmission via Ethernet.

The result is a perfect solution for viewing and vision applications in mobile automation.

**SXVPU**



**AMD**

## Modular Approach for Ample Flexibility



### System Performance

- + High computing power and efficiency of up to 10 TOPS per watt
- + H.264 / H.265 codec for up to 4K video streaming
- + Low latency for real-time processing of video streams

### Customizable HW

- + Flexibility on all interfaces for various environments
- + Scalable processing and versatile hardware acceleration
- + Easy configuration and simplified system integration

### Expandable SW

- + Seamless integration of neural networks and ML models
- + Fast and efficient development with Linux OS
- + Support for common frameworks and industry standards

### Intelligent Apps

- + Optimized for processing data from various sensors
- + High flexibility in the integration of neural networks
- + Tailored processing for industrial vehicle applications



## Application Examples:

- + Automation
- + Collision avoidance systems
- + Monitoring of construction sites
- + Machine control

## A Complete Solution for AI Vision Applications

### Features:

- + Flexibility, adaptability, robustness
- + 24/7 safeguarded operation
- + Low latency
- + AI-powered for seamless integration of neural networks
- + H.264/H.265 codec up to 4K video streaming via Ethernet
- + High performance and efficiency in processing visual data
- + Housing with IP65 protection

### AI Development Support:

- + AI model design
- + Application development
- + System implementation



## For Quick Results: The SXVPU Dev Kit

### Contents:

- + SXVPU
- + 4x HDR camera
  - IP69k protection
  - 3 MPix at 60 fps
  - Lens FOV H 118°
  - 2m cable
- + Ethernet cable
- + Power supply unit with cable
- + Rugged carrying case

