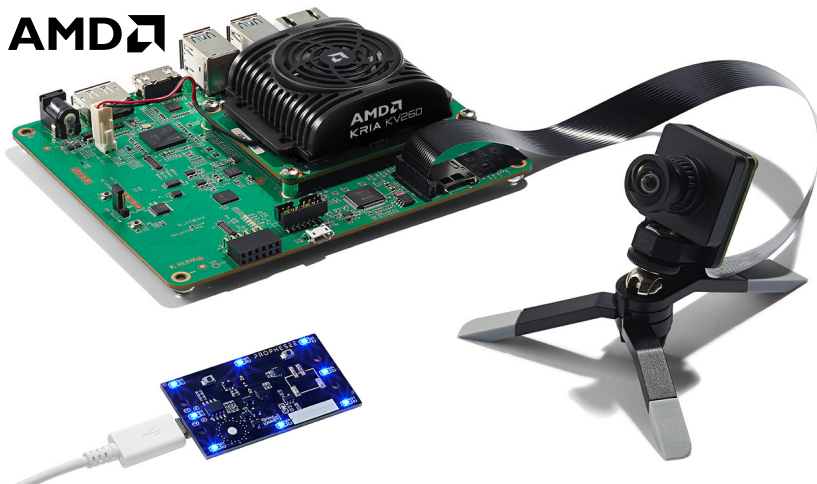ULTRA HIGH-SPEED, LOW LATENCY EMBEDDED VISION SYSTEMS BUILT ON AMD KRIA KV260
AND PROPHESEE'S GENX320 EVS

PROPHESEE

METAVISION® STARTER KIT - AMD KRIA KV260

CAMERA		
GenX320 EVS Pixel		320 x 320
Latency at 1,000 lux	µs	‹150
Latency at 5 lux	µs	‹1,000
Dynamic range	dB	›120
Data Interface		MIPI CSI-2 D-PHY

FEATURES

CAMERA – GenX320 CCAM5 (Sensor board with S-mount optics) and interconnect
- Complete lensed camera with event streaming over MIPI output
- GenX320: 100K pixels event sensor: 320 (H) x 320 (V)
- Flex cable (20cm) to connect to the RBPi interface on the KRIA KV260 development board

HARDWARE (AMD) – available on AMD Kria store KV260 development board
- Zynq™ UltraScale+™ MPSoC
- SOM + Carrier Card + Thermal Solution

SOFTWARE (Prophesee) - RTL project sources
- Zynq-video-driver
- Test benches
- Linux-sensors-driver
- Yocto recipe (Petalinux)
- Metavision Demo Application
  - Active Markers (with included active markers LED board) for 3D pose estimation, factory/construction site safety systems, or constellation tracking for gaming/animation

SUPPORT (Prophesee)
- Technical Reference Manual and Quickstart Guide
- 2 hours of premium support

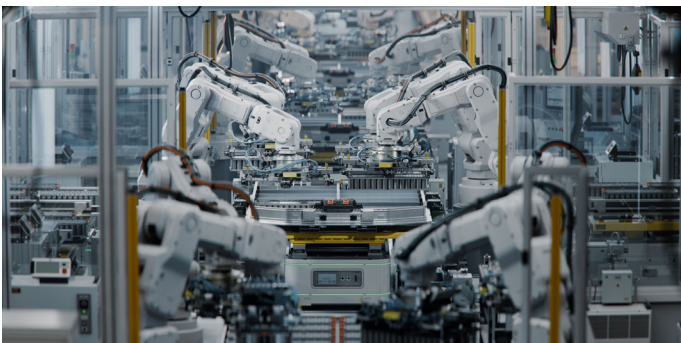# PROPHESEE - METAVISION® STARTER KIT - KRIA KV260 - GENX320

APPLICATIONS

Industrial Automation:
- Logistics Barcode Label Tracking
- Robot/AMR guidance
- Machine Learning
- Active marker-based 3D pose estimation

IoT edge devices and Smart Cities:
- People counting and tracking
- Speed/Trajectory measurement
- AI on-the-edge cameras
- Human Presence Detection
- Intelligent Traffic Systems
- Fall Detection Cameras

DESCRIPTION

The KRIA STARTER KIT hardware is based on the GenX320 event-based vision sensor, mounted in a CCAM5 lensed module on flex, to be connected to the KV260 development platform for Kria K26 SOMs. Software drivers and source code is provided by Prophesee. The Kria KV260 Vision AI Starter Kit is an evaluation platform for the K26 SOM focused on machine learning (ML) acceleration in vision applications. The kit brings together a Zynq UltraScale+ MPSoC based SOM with user selectable, vision focused peripherals and a set of pre-built accelerated applications. While the SOM itself has broad AI/ML applicability across markets and applications, target applications for the KRIA-GenX320 STARTER KIT include smart city and machine vision, security cameras, on-the-edge smart cameras and other industrial applications. The integrated combination of hardware, platform, and software provides a quick out-of-box experience for developers that can then be leveraged for new product designs with rapid time to market.

ORDERING CODES

PSKX320MPKV260 - KRIA STARTER KIT/SOFTWARE TO BE PURCHASED FROM PROPHESEE:
https://www.prophesee.ai/event-based-metavision-amd-kria-starter-kit/#GenX320

SK-KV260-G: MUST BE ORDERED DIRECTLY FROM THE AMD KRIA STORE:
https://www.amd.com/en/products/system-on-modules/kria/k26/kv260-vision-starter-kit.html