HIGH-PERFORMANCE EVENT-BASED VISION STARTER KIT FOR RASPBERRY PI 5



STARTER KIT GENX320 FOR RASPBERRY Pi 5



	SENSOR
Sensor	Prophesee GENX320
Resolution	320 x 320 px
Event Rate	~10,000 fps equivalent
Latency	<150 µs at 1,000 lux
Dynamic Range	>140 dB
Power Consumption	<50 mW (sensor only)
Interface	MIPI CSI-2 (D-PHY)

	CAMERA
Lens Mount	M6
Focal Length	1.11mm
Diagonal field of view	104°
Horizontal field of view	84°
Vertical field of view	84°
Aperture	f/2.4
IR Filter	No

^{*} Raspberry Pi 5 board needs to be purchased separately.

FEATURES

- M6 Mount, FOV 104° lens
- Complete event-based camera board with lens
- 20 cm flex cable MIPI Raspberry Pi compatible output
- 3D-printed camera module cover
- Raspberry Pi 5: sold separately at: raspberrypi.com

SOFTWARE

- V4L2 Driver
- Open EB: C++/ Python APIs https://github.com/prophesee-ai/openeb
 - Data recording, replay and visualization
 - Sensor settings (biases), ROI, ERC

COMPATIBLE WITH METAVISION® SDK5 PRO (OPTION AVAILABLE FOR PURCHASE)

Source code access including:

- · Real-time object tracking
- Vibration detection
- Optical flow
- · Active marker detection and tracking

Learn more: prophesee.ai/SDK5Pro

APPLICATIONS

This kit enables untethered, highspeed, low-latency event data collection on embedded platforms, serving as the foundation for developing advanced event-based applications:

DRONES:

- Detection and tracking
- Obstacle avoidance
- Real-time SLAM
- GPS-denied navigation

INDUSTRIAL & IoT:

- Vibration monitoring
- Spatter tracking
- High speed defect detection

SURVEILLANCE:

- Fall Detection
- Intrusion Monitoring

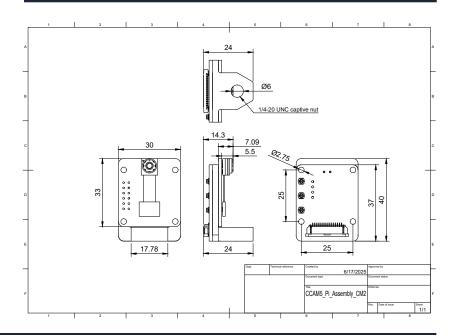
...and many others.







PHYSICAL SPECIFICATIONS



DESCRIPTION

The STARTER KIT GENX320 for Raspberry Pi 5 is a compact and powerful embedded vision development platform designed to unleash the capabilities of event-based sensing on the Raspberry Pi 5. Built around Prophesee's GENX320, the world's smallest and most power-efficient event-based vision sensor, this kit enables the development of real-time, ultra-low latency applications for robotics, drones, industrial automation, and more. It provides a streamlined path to rapidly develop, test, and prototype custom applications, making it an ideal solution for engineers and researchers looking to harness the benefits of neuromorphic vision.

RASPBERRY Pi 5: HOST PLATFORM REQUIREMENT

Recommended accessories for best performance:

RASPBERRY Pi 5 8GB/16GB - SC1432/SC1113: https://www.raspberrypi.com/products/raspberry-pi-5

ACTIVE COOLER - SC1148: https://www.raspberrypi.com/products/active-cooler/

27W POWER SUPPLY - SC1153: https://www.raspberrypi.com/products/27w-power-supply/

SSD KIT - SC1675: https://www.raspberrypi.com/products/ssd-kit/

ORDERING CODES

PSKX320MPCM2RPI5 - STARTER KIT - GENX320MP-CM2 RPI 5

https://www.prophesee.ai/event-based-starter-kit-genx320-raspberry-pi-5/

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