

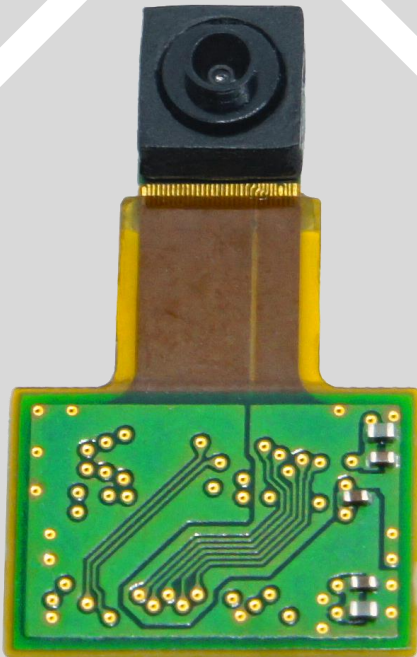
Application Areas

AR/VR/XR

- Eye-tracking
- Gesture recognition

IoT : Edge AI & Machine learning

- Smart home
- Nursing care
- Security
- Wearable device



Ultra-low power consumption

Event-based vision Camera module SilkyEvCam[®] series

GenX320 4x5

The GenX320 4x5 module is a very small event-based vision camera module (head: 4x5 mm) equipped with the GenX320 event-based vision sensor developed by PROPHESEE in France. It has the features of high-speed sensing and wide dynamic range of the event-based vision sensor and implements an ultra-low power consumption mode for IoT devices.

The addition of this product to the SilkyEvCam[®] series of event-based vision cameras will bring innovation to the field of eye detection required for AR/VR/XR and edge processing of AI requiring low power consumption, as well as to the wearable device market.

1 μ sec

>120dB

Low Power

320 x 320

Min temporal resolution

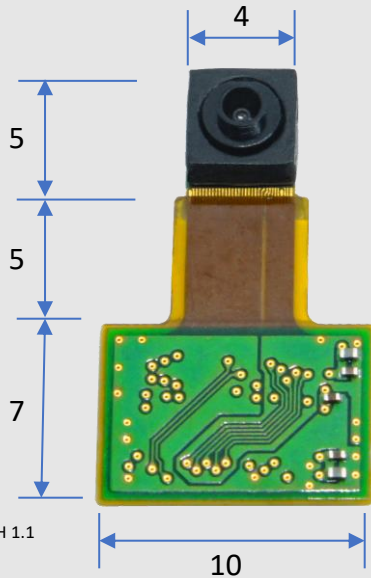
Dynamic range

Data volume compared to frame-based camera

Resolution

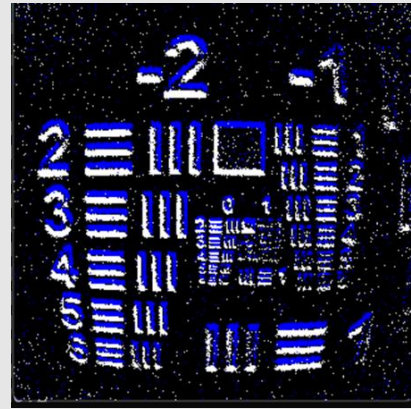
An event-based vision sensor is designed to emulate how the human eye senses light. The sensor detects the luminance changes in each pixel and extracts only those that exceed the preset threshold value then outputs the event "coordinate, polarity, and time". This operation is performed independently and asynchronously for each pixel.

The module size is minimized with Flip Chip mounting technology. We offer customization for embedded lenses and flexible lengths to meet customers' needs.



Head: H 3.5 Connector: H 1.1
(Unit: mm)

Shooting a USAF chart displayed on the LCD



In a 30 msec period, areas that changed brightly are displayed in white, and areas that changed darkly are displayed in blue.

SilkyEvCam® GenX320 4x5

Event-based vision sensor	Model	GenX320 (PROPHESSEE) https://www.prophesee.ai/event-based-sensor-genx320/
	Image size	Type 1/5 " (Diagonal 2.85mm)
	Resolution	320(H) x 320(V)
	Pixel size	6.3μm x 6.3μm
Output	Interface	Configurable 8-bit parallel output interface
		I ² C and Four-wire serial peripheral interface
Camera	Power supply	2.5V / 1.8V / 1.1V
	Dynamic range	>120dB
	Operating temperature	0 ~ +60 °C
	Storage temperature	-20 ~ +85 °C
	Current consumption	Approx. 3~5mA (Active.) ※provisional figure
	Dimensions/Weight	4x5x3.5mm (head), 7x10x1.1mm (connector) / 0.13g
	Raw formats	EVT2.1/EVT3.0
Lens (Sample module)	Focal length	1.498mm
	Aperture	F3.2
	Image circle	2.4mm
	FOV (D)	65deg
	Threads	Without threads (Fixed lens focus position)



Software toolkit

The software toolkit "Metavision® SDK" provided by PROPHESSEE is available for processing the data acquired with this camera module (raw data). The Metavision® SDK includes a wide range of basic libraries, algorithms, and practical sample programs for working with event-based vision camera data.

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