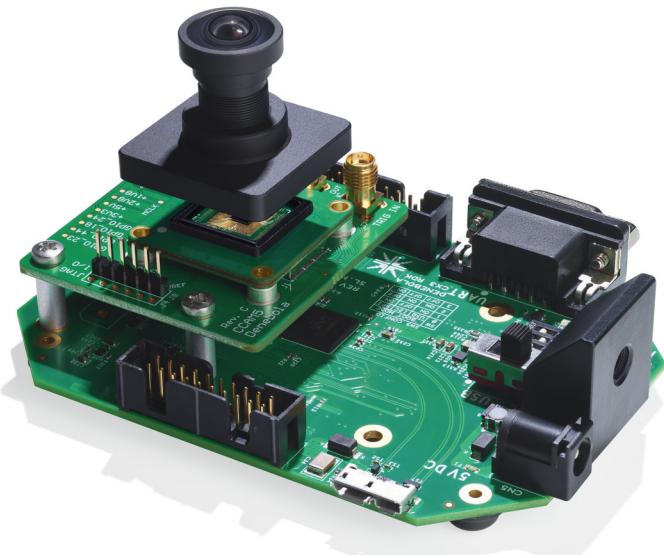PROPHESEE'S EVK IS A FLEXIBLE USB VISION SYSTEM THAT ALLOWS FOR EXPERIMENTING WITH THE POWER OF HIGH-SPEED AND ROBUST EVENT-BASED VISION

PROPHESEE

EVALUATION KIT 3 GENX320

PARAMETER	UNIT	SPECIFICATION
Sensor Model		GenX320ES
Kit dimension	mm	108 x 76 x 45
Case		PCBs only
Power		Via USB
Synchronization connectors		SMA
Optics model		SND2636A1SD-8M
Lens Mount		M12 S-Mount
Aperture		f/2.8 Fixed Iris
Focal Length		1.8 mm
HFoV/VFoV	deg	58
DFoV	deg	76
IR cut filter		No
Integrated EEPROM		Yes (256Kbit)

FEATURES

- Integrates Prophesee GenX320 1/5" format 320x320 event-based vision sensor:
  - 320x320 array of 6.3μm contrast detection pixels
  - High-speed event data output (equivalent to >10kfps time resolution) with row-level 1μs-precision time stamping
  - 0.05 lux Low light cutoff with high dynamic range >120dB
- USB3.0 Bus powered with Micro-B connector
- Provided with 1 x Tripod + 1 x USB3 Micro-B to USB-A cable
- Compatible with Prophesee Metavision Intelligence Suite 4.4 and onward

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- Free access to the most comprehensive Event-Based Vision software suite: Metavision Intelligence 4.4 onward
- Knowledge Center access (Technical app notes, Advanced hardware manuals, Personal ticketing tool, Community Forum and more)
- 2 Hours premium support included

APPLICATIONS

- AR/VR/XR
- Eye tracking
- Gesture recognition
- IoT
- AI on the edge and Machine Learning
- Always on cameras
- Healthcare (privacy) cameras
- Wearables
- Smart Home

DESCRIPTION

Metavision® EVK3 GenX320 is your perfect entry point to Event-based Vision, by the inventors of the world's most advanced neuromorphic vision systems. This full-featured platform is compatible with Metavision® Intelligence software Suite. This evaluation kit features at its core the revolutionary GenX320 Event-based Vision sensor, with its USB-3.0 Micro-B and SMA connectors, it is the ideal flexible tool for your advanced experiments. At the heart the GenX320 is a 320x320 6.3Qm pixel BSI stacked event-based Metavision® sensor, designed for embedded vision and many power-sensitive applications. The GenX320 was designed with the explicit goal to improve integrability and usability in at-the-edge vision systems. This includes event data pre-processing and formatting, data interface compatibility and low-latency connectivity to different processing platforms including latest low-power, neuromorphic processors. The sensor has been optimized for very low power operation, featuring a hierarchy of application-specific power modes. The GenX320 contains an integrated Event Signal Processing (ESP) pipeline which includes timestamping, filtering, throughput regulation and data formatting functions. An Event Rate Controller (ERC) allows to cap the output event rate to a programmable limit. A Spatio-Temporal Contrast filter (STC) detects and removes redundant bursts and trails of events triggered by high contrast features in the scene. An Anti-Flicker (AFK) filter detects and filters events generated by flickering lights. The stop-band frequency can be set in the range of 50-500 Hz with arbitrary spans.

ORDERING CODES AND BRIEF DESCRIPTION

PEK3X320CDES: EVALUATION KITV3 - GENX320 CD ENGINEERING SAMPLE