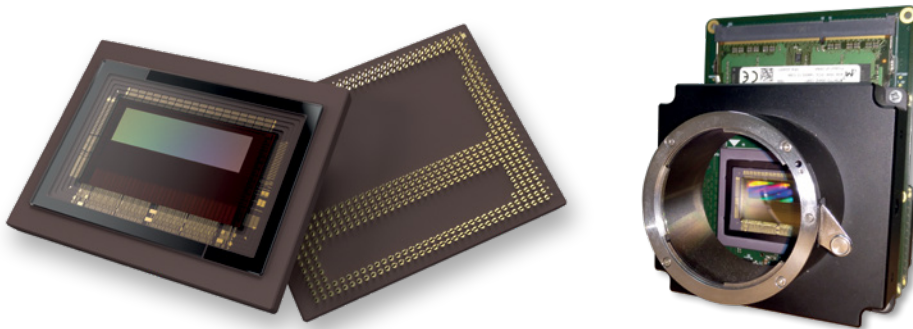


# The Flash Family EK & RD

The Evaluation Kit to assess the performance of the Flash sensors  
The Reference Design to improve your time-to-market



## THE FLASH EVALUATION KIT – DEMONSTRATE THE PERFORMANCE OF THE TECHNOLOGY

The Flash Evaluation Kit (EK) allows you to easily assess the electro-optical performances of the Flash sensors, with virtually any laptop or notebook, due to its USB 3 interface.

Its camera-like architecture also makes it the perfect solution for end-customer demos and proof of concepts. Trigger input and exposure enabled output are available through a Hirose connector in order to provide perfect synchronization with the other elements of a test or demo set-up e.g. motorized belts, illumination sources, etc.

MAIN CHARACTERISTICS AND PERFORMANCE OF THE FLASH EK			
Resolution – pixels	4,096 (H) x 1,080 (V)	Data format	8 bits
Max frame rate	75 fps* (live mode) 1,518 fps* (burst mode)	Lens mount	F-Mount
Image buffer	970 images (4Mpix) 1,940 images (2Mpix)	Data output	USB 3
I/O	Trigger input and exposure enabled output available in 12-pin Hirose connector	Data connector	USB Type C

\*Frame rate limited by Evaluation Kit (EK). Electro-optical performance delivered by the EK is fully representative of the maximum frame rate of the Flash sensors.

## THE EK PACKAGE CONTAINS

- » Flash Evaluation Kit (with no lens)
- » Power supply
- » USB 3 cable
- » Hirose cable

## HARDWARE & SOFTWARE REQUIREMENTS

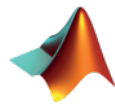
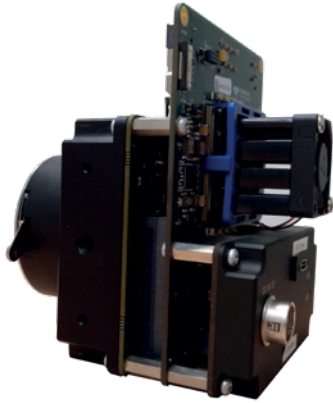
- » 64-bit Microsoft Windows 10 operating system
- » USB 3.0 port based on Intel® USB 3.0 eXtensible Host Controller
- » Graphics card with up-to-date drivers
- » Administrator privileges to run the installation



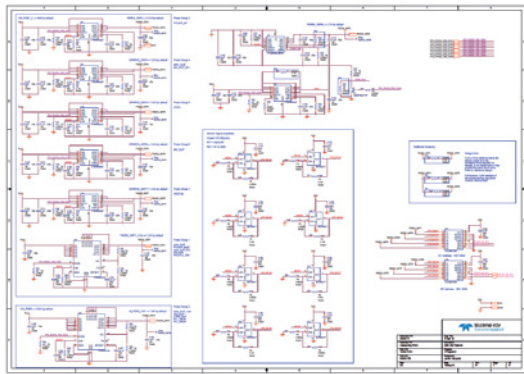
## THE REFERENCE DESIGN TO IMPROVE YOUR TIME-TO-MARKET

The Reference Design can be used as a working reference during the development of your camera, to save valuable time and resources and drastically reduce your time-to-market. It contains the source code of the Evaluation Kit, including PCB, FPGA code and embedded software.

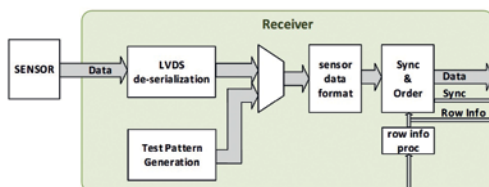
## WHAT IS INCLUDED IN THE REFERENCE DESIGN?



- » Evaluation Kit documentation
  - EK user manual (including architecture)
  - EK registers mapping
- » Sensor documentation
  - User manual
  - Programming guide
- » SDK software (C++, Matlab, Python)
  - Installer binaries
  - Documentation
- » GUI
  - Installer binaries
  - Documentation



- » Hardware PCB (Sensor + FPGA + Interface)
  - EK schematics in PDF
  - EK BOM
  - EK manufacturing files (ODB++)



- » Hardware FPGA
  - EK FPGA receiver source code (Xilinx)
  - EK embedded SW source code
    - Xilinx MicroBlaze CPU
  - Binary packages generator for platform upgrade

## ORDER CODE – FLASH EVALUATION KIT

- » EV3E4M0B-CU3FE00-U

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## ORDER CODE – FLASH REFERENCE DESIGN

- » N\_FULLREFFLASH

