

# EasyMVC - Versatile Machine Vision Camera Development Kit

Comprehensive evaluation kit for Sony image sensors

This kit provides a smart and easy way to develop machine vision systems for high-performance Sony image sensors with multiple video interface options supported by Intel® Cyclone® FPGAs. The software suite supports Generic Interface for Cameras (GenIcam) applications to make it easy to test sensors and grabber boards.



## Solution Overview

Easy Machine Vision Camera (EasyMVC) is designed to eliminate the hurdles on development of machine vision system, which requires numerous individual pieces to set up, configure, and test interoperability with sensors and grabber boards. The kit has the following features:

- Supports cutting-edge CMOS image sensors from Sony (IMX420: 2.8 Mpixel and IMX421: 7.1 Mpixel)
- SLVS-EC intellectual property (IP) core supports up to eight lanes
- Maximum 8b / pixel @409 frames per second (fps)
- Modular design with various video interfaces: HDMI 2.0, USB3 Vision, CoaXpress 1.1.1 / 2.0, and 10GigE Vision with 1588
- Software suite supporting GenIcam applications to control sensors and grabber boards
- Documentation: Product manual, board reference manual, getting started guide, and reference design manual

## Customer Benefits

- Provides a complete solution, which includes the hardware, IP core, and software
- Facilitates IP demonstration to build customized camera functions
- Provides a modular, easily configurable kit to build machine vision prototype in the form factor of a real smart camera
- Enables you to evaluate latest CMOS sensors from Sony
- Includes all the necessary IP licenses for evaluation
- Enables FPGA designers to customize design to meet new requirements

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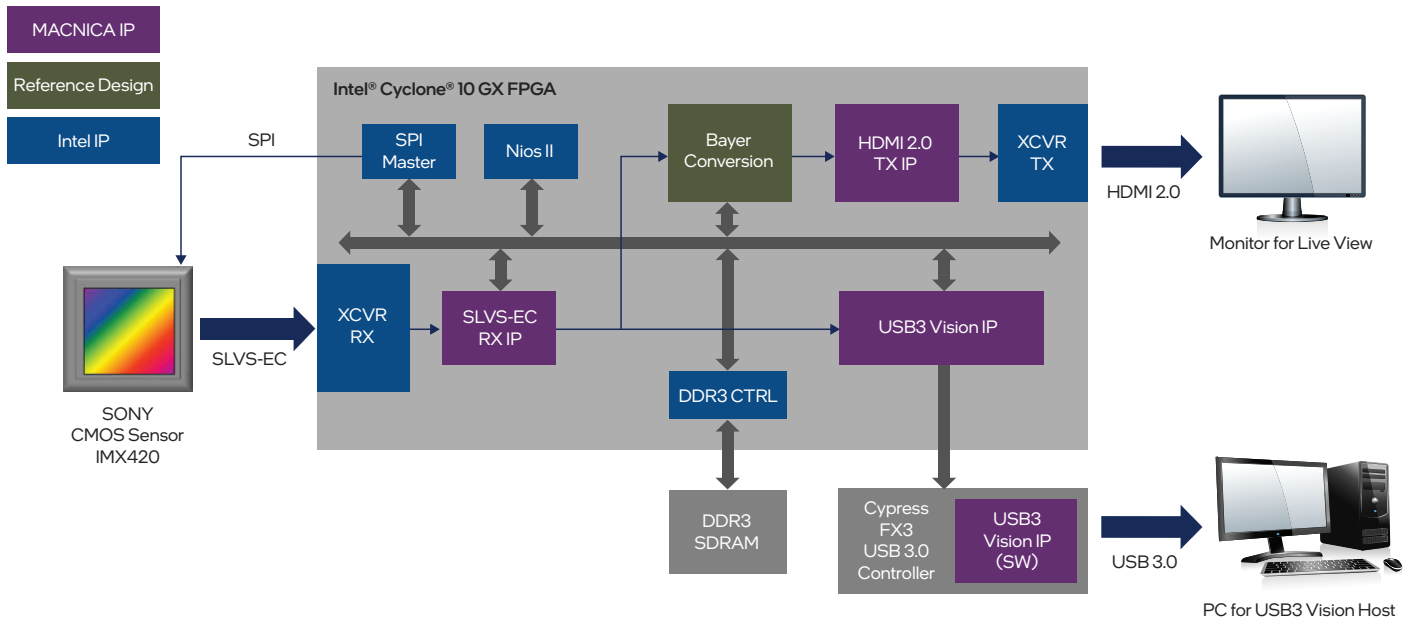
## Target Application

- Machine vision for quality inspection in manufacturing
- Smart city infrastructure and surveillance
- Medical devices for real-time monitoring and diagnosis
- Video and vision system using Sony sensors

## Learn More

- [Edge-Centric Overview Page](#)
- [Webcast: Enabling Intelligent Video/Vision Applications on the Edge with Intel® FPGAs](#)
- [EasyMVC Development Kit](#)
- [Macnica Inquiry Form](#)

## Block Diagram (USB3.0 version)



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