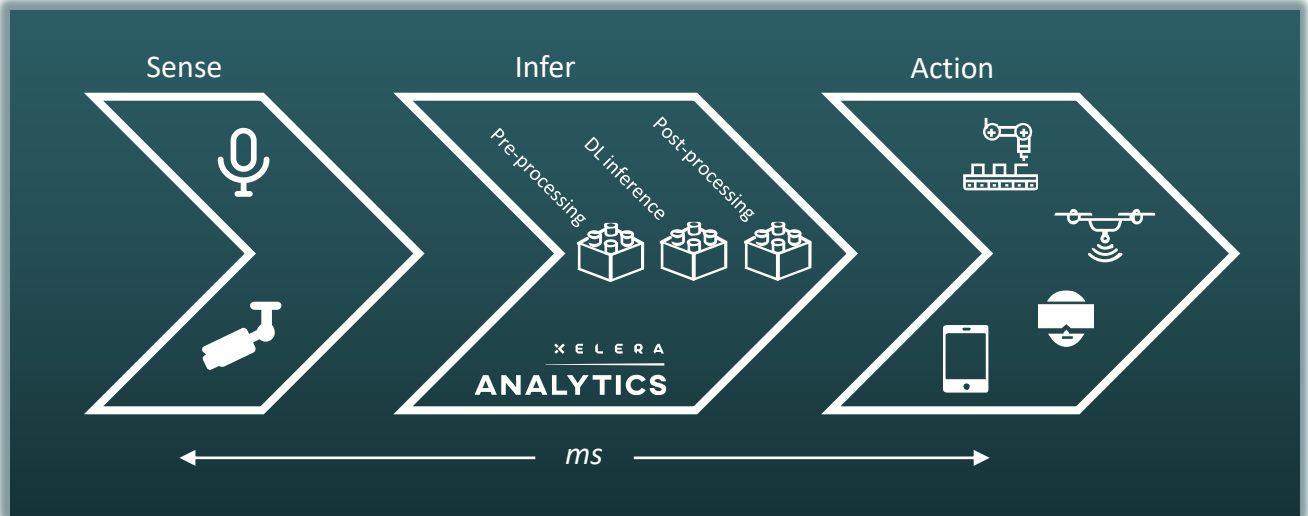


BUSINESS CONTEXT

Latency-sensitive applications, such as augmented reality, industrial automation, distributed gaming, real-time analytics and intelligent dialog systems are on the rise. One commonality of these applications is that they usually require video or audio streaming analytics. A second commonality is the requirement of a low execution latency and sub-ms latency variance to guarantee a genuine user experience. Xelera's **Video & Audio streaming acceleration plugin** satisfies these latency constraints when leveraging on FPGA-based accelerators. Carried by the upcoming 5G technology, a particular application area is Edge Computing.



PRODUCT OVERVIEW

- Low-latency Deep Learning inference engine (CNN, RNN)
- Video/Audio pre-processing and post-processing
- Video rendering, encoding and decoding
- Localization and mapping
- Supports Deep Learning networks from Keras, Tensorflow, PyTorch and Caffe

CUSTOMER BENEFITS

- Low and guaranteed response time enabling latency critical applications
- TCO savings by significantly reducing the number of required nodes

APPLICATION AREAS

- Factory Automation
- AR /VR
- Next-gen Digital Assistants
- Intelligent Transportation Systems
- Remote Gaming

EXAMPLE USE-CASES

- Speaker recognition
- Artificial Reality for maintenance workers
- Visual quality inspection system for production lines
- Video game streaming

REQUIREMENTS

- Xelera Suite and its respective hardware requirements