

SOLUTION BRIEF



Intelligent Video Analytics & Smart City Total Solution with Vitis AI

INTRODUCTION

In IoT era, hundreds of millions of cameras are being deployed in every house, cities, retail stores, manufacturing lines, big facilities and everywhere, but the ability to extract insights from this tremendous information has been more challenging than ever. Aupera, a Video AI innovator, has focused on providing highly efficient and most agile video AI solution based on Xilinx FPGA platforms, for your existing cameras instantly without changing your current set up, while achieving low power consumption, low latency and fast deployment adapting to vastly diversified AIoT user scenarios.

KEY BENEFITS

- Video processing + real-time AI within the single device
- Seamlessly integrate with existing IP cameras
- 80% reduced Latency on video analytics
- Total solution covering camera management--streaming--AI analytics--result output

Product Highlights :

- 16 x 1080P30 H.265/H.264 concurrent streams video AI analytics
- Management of 64 (max) cameras on one card
- Modular AI applications for instant deployment
- Video codec close coupling with Embedded AI reducing alarm latency by 80%
- Support all standard camera protocols
- Edge on-prem deployment ensuring privacy and data sovereignty
- Easy integration to cloud platform on demand only for centralized management when needed
- Lightweight VMS integrated for ease of use
- Standard API for 3rd Party VMS integration

Aupera Video AI Solution On Alveo U30 & U50



Aupera Edge AI Solution

Camera management + video processing + on prem edge video AI analytics--All In One device

- > 80% reduced Latency on video analytics
- > Deployment ready AI applications
- > Best-in-class accuracy on edge
- > Support 3rd party accelerator

SOLUTION OVERVIEW

Standard AI Application:

Provide hassle-free deployable AI application & support customized AI application (Available on all Aupera platforms and Xilinx U30 PCIe acceleration card)



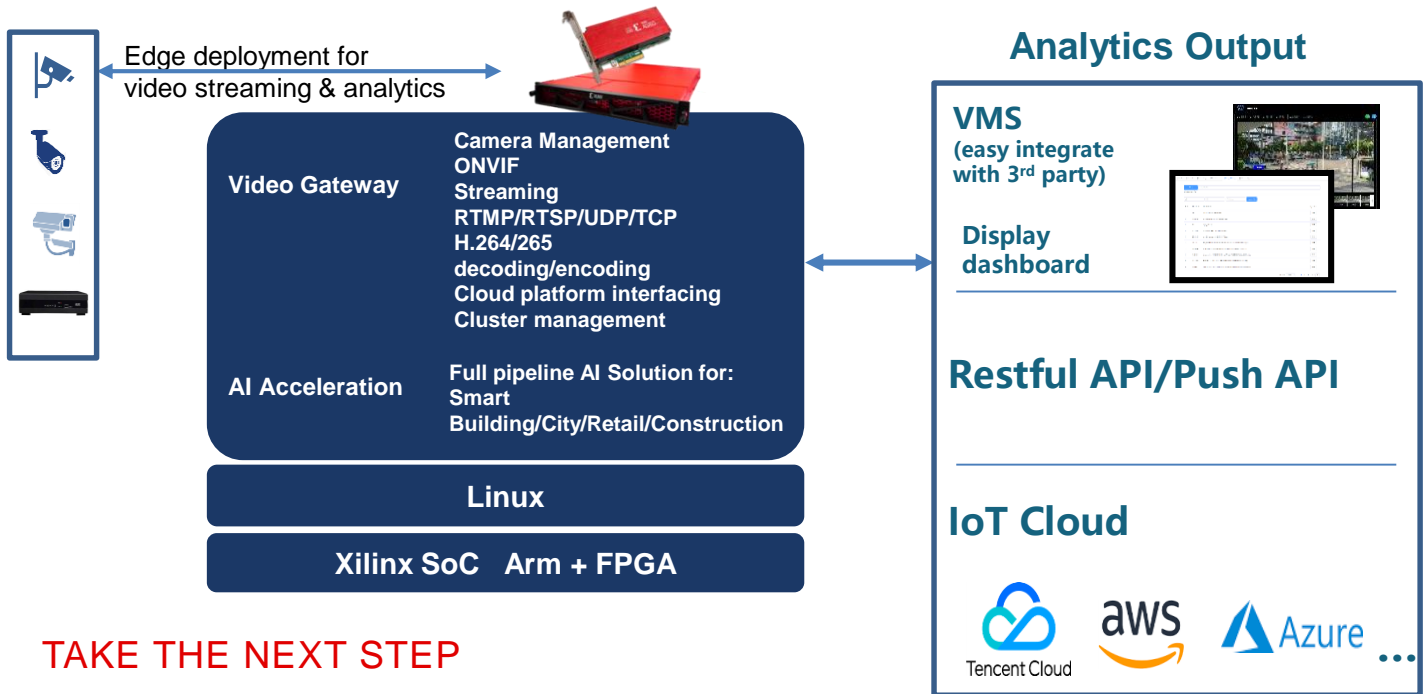
Industry Solutions:



Video processing and embedded real-time video analytics functions

- **Video AI Processing capacity:** 16 channels@1080P30
- **Energy efficiency:** 3.5W/stream@1080P
- **Video codec:** H.264/H.265 compatible
- **Applications:** Video De/Encode/Transcode/Stream mixing/AI analytics
- **Efficient acceleration engines:** JPEG, pre/post processing, scaling, rotation, watermark
- **Supported DL frameworks:** Caffe, Tensorflow, Darknet
- **Supported DL networks:** YoloV3, Densebox, Resnet, MobilenetV1-SSD, VGG16, InceptionV3/V4, and more
- **Supported DL models:** Face detection/recognition, Object detection, Video analytics, Pedestrian attributes, Pose Estimation, Segmentation, and more

DEPLOYMENT



TAKE THE NEXT STEP

Learn more about Aupera: www.auperatechnologies.com

Other form factors available, please reach out to Aupera sales for details— sales@auperatech.com

Tel: +1 604 563 1862