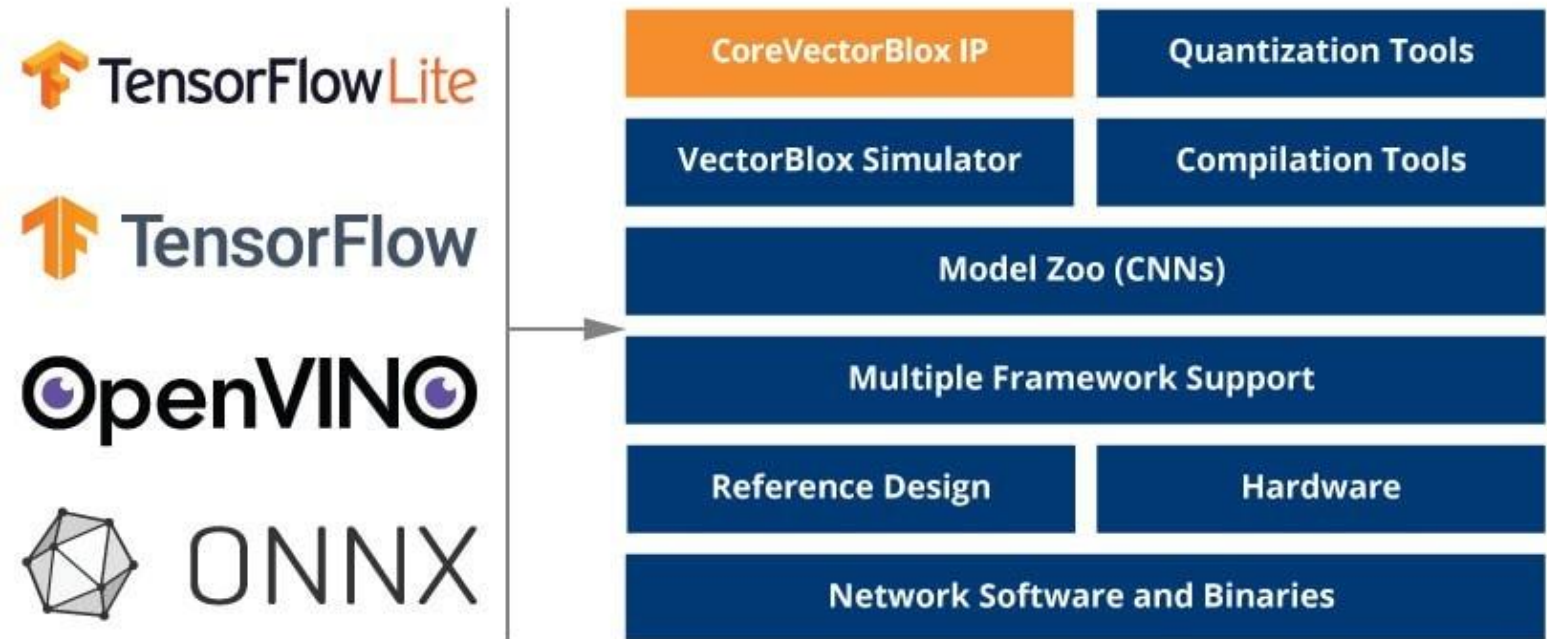


VectorBlox™ 2.0 - Intro

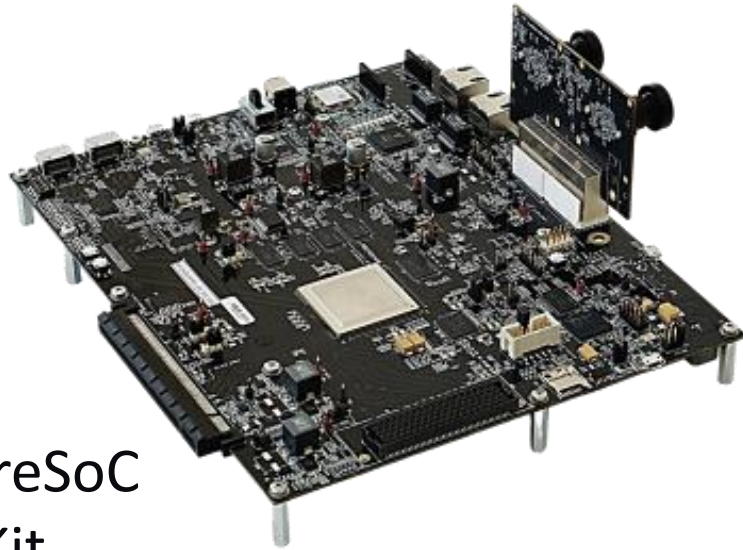
La démo VectorBlox sur le PolarFire SoC Video Kit a pour objectif d'illustrer l'accélération hardware de l'inférence AI/ML sur FPGA, via le SDK VectorBlox. Cette solution permet l'exécution de réseaux de neurones convolutifs (CNN) optimisés, avec l'intégration de modèles tels que TensorFlow, TensorFlow Lite, ONNX et OpenVINO. L'objectif est de fournir une solution basse consommation (<5W) avec du traitement vidéo en temps réel.

VectorBlox™ 2.0 SDK for PolarFire® SoC FPGAs

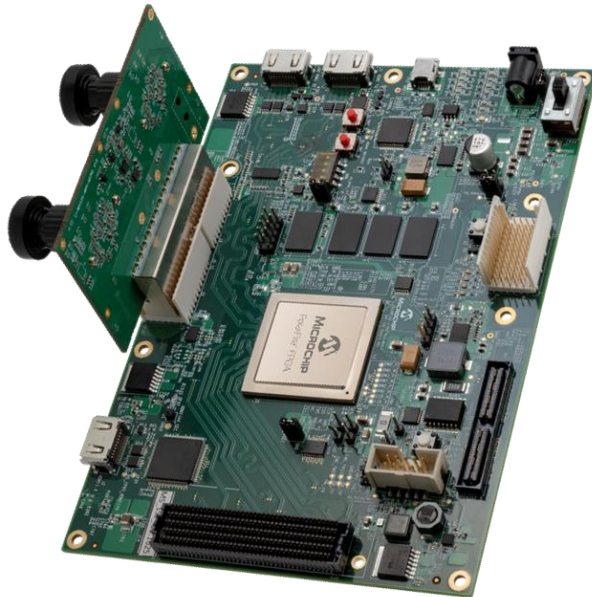
- C/C++ base demo flow
- Supports many frameworks
- Includes a bit accurate simulator
- Available with Model zoo and reference designs



What does VectorBlox Enable?



PolarFireSoC
Video Kit

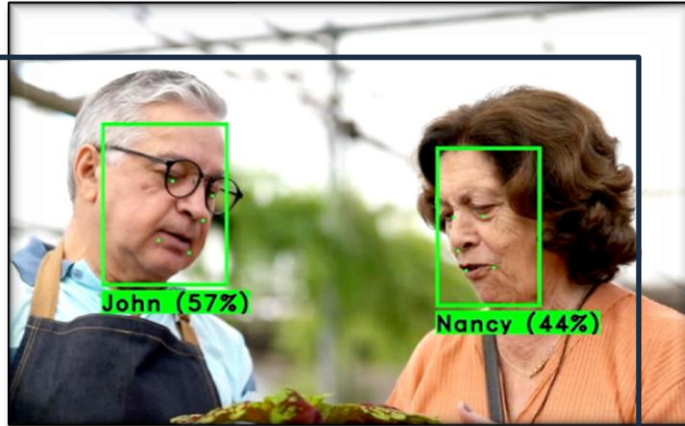


PolarFire
Video Kit



Smart Camera

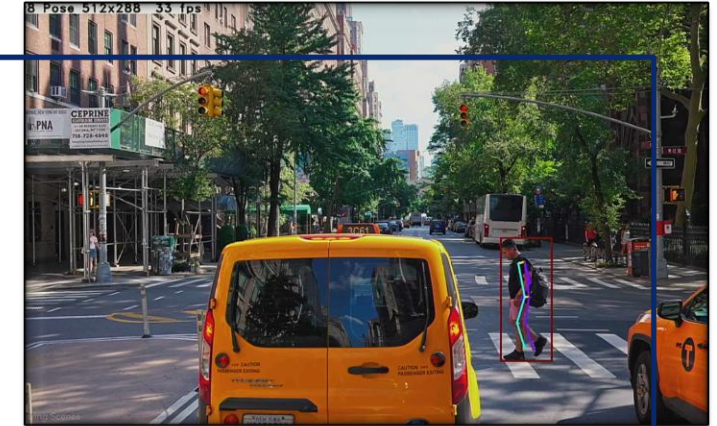
Available Demos With VectorBlox™ SDK



Facial Recognition



License Plate Recognition



Pose Estimation

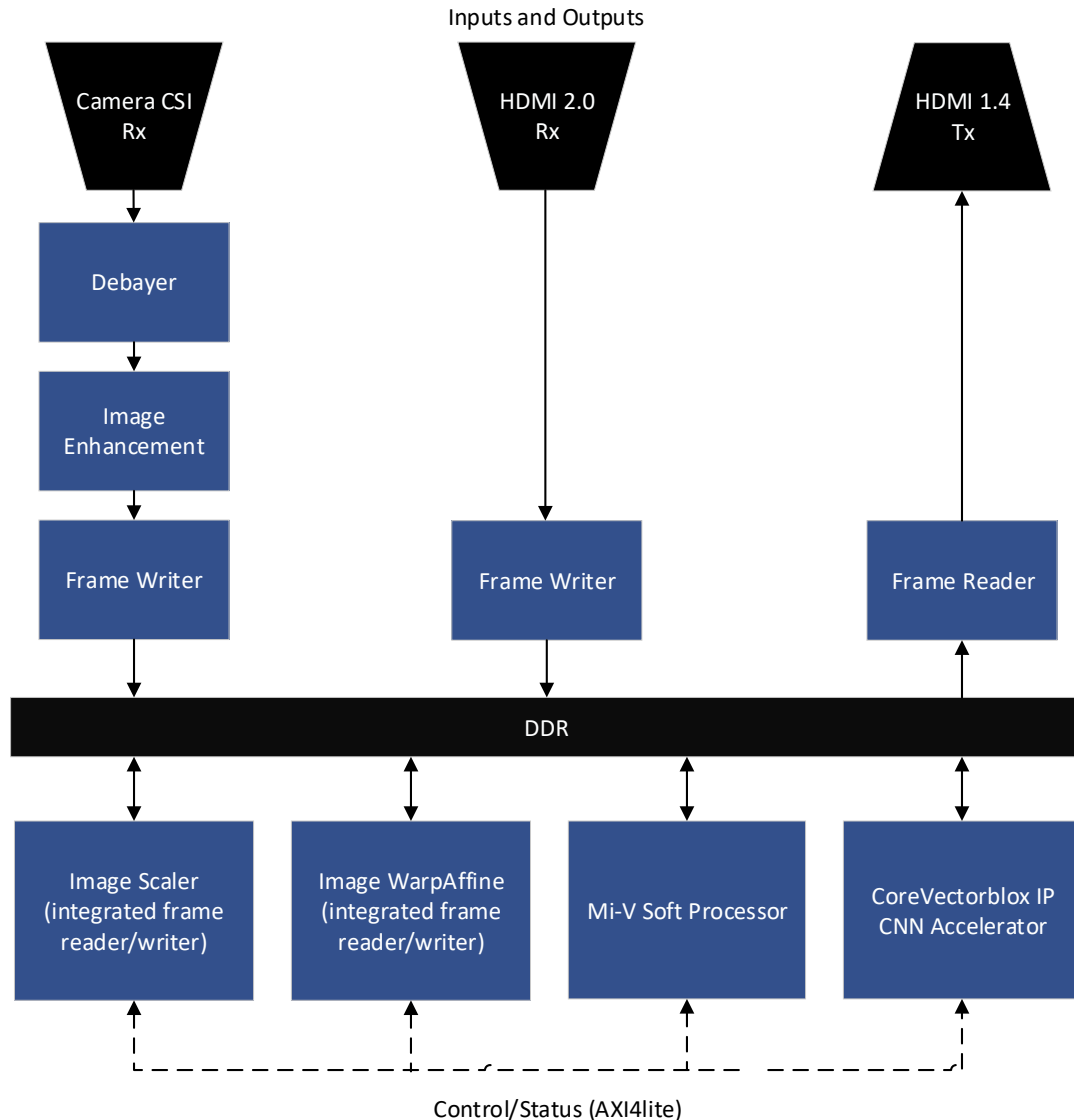


Segmentation



Depth Estimation

Reference Design



- **Inputs (1080p60)**
 - MIPI CSI-2 Camera
 - HDMI
- **Output (1080p60)**
 - HDMI
- **Supported in**
 - PolarFire Video Kit
 - PolarFire SoC Video Kit



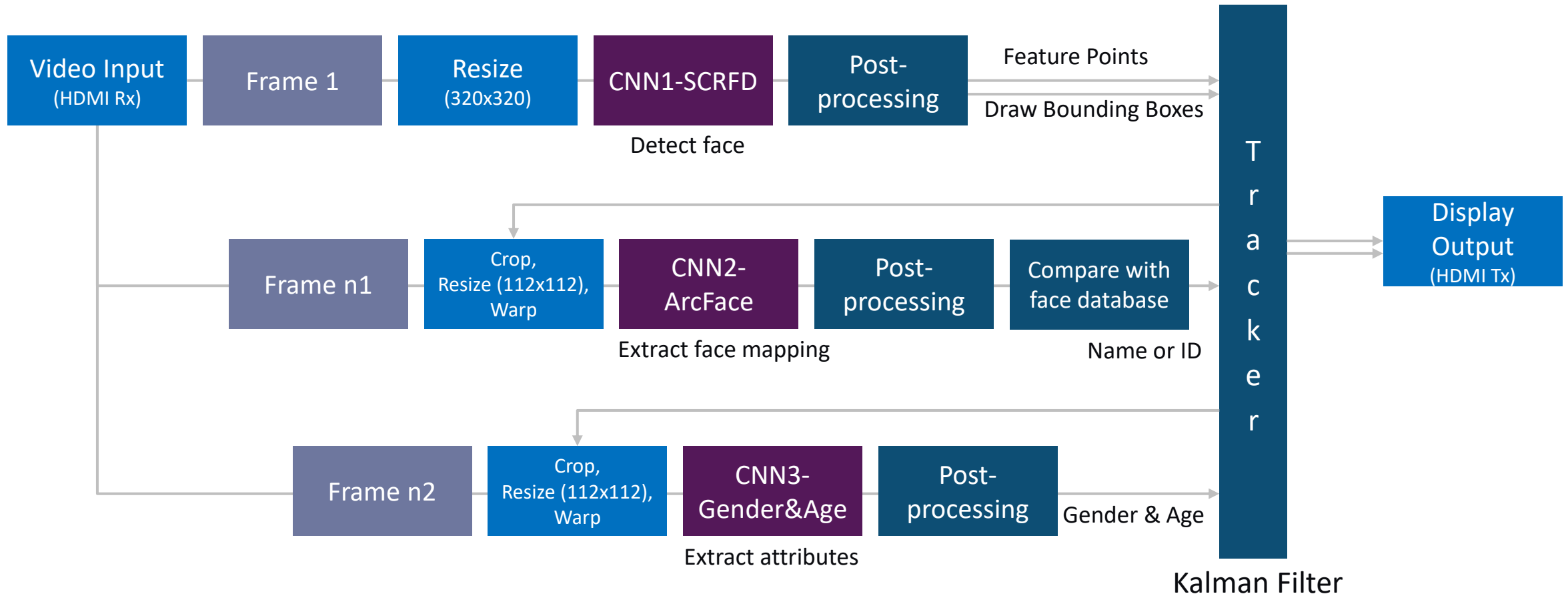
PolarFire Video Kit



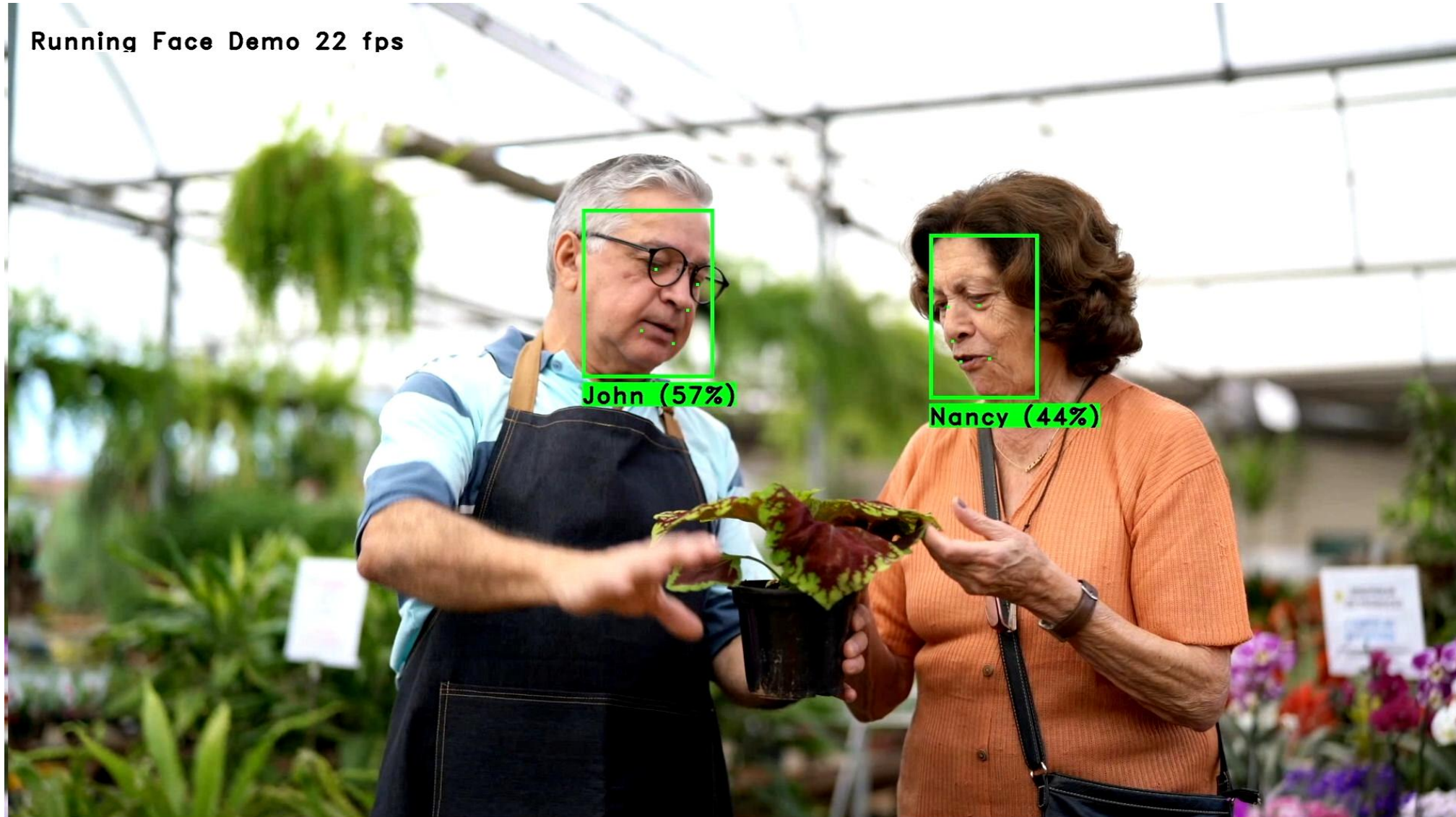
PolarFire SoC Video Kit

Facial Recognition

Solving Complex Problems with CNN Pipelining

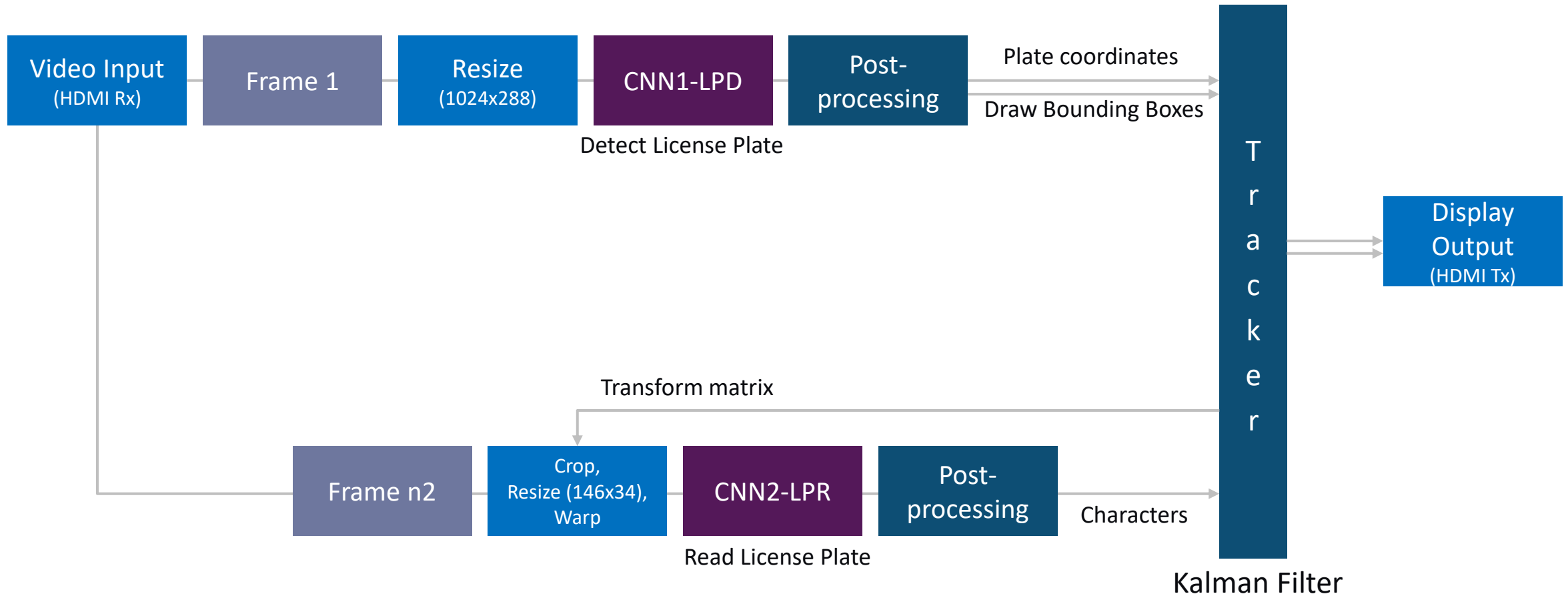


Face Recognition - SCRFD, ArcFace



License Plate Reading

Solving Complex Problems with CNN Pipelining



License Plate Recognition

