DeepView Vision SDK for NXP i.MX 8 Series





IMMEDIATE



- Instantly deploy standard or custom AI models on EVK, Maivin or your own hardware.
- Fully compatible with elQ Toolkit graphical development environment for no-code model training and deployment.
- ✓ Integration with multiple frameworks to deploy your AI application the way you want.

HARDWARE ACCELERATED

- ✓ Utilize VisionPacks' field proven Vision AI Acceleration Library (VAAL) to achieve industry leading performance.
- Avoid common pitfalls of integrating and optimizing image capture & processing, model inference & decoding, and visualization.
- We've optimized runtime so you can focus on your vision application.

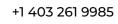
BEST IN CLASS **PERFORMANCE**

- Achieve industry leading performance with DeepViewRT Inference Engine and DeepView VisionPack.
- Ship your product with confidence knowing your vision pipeline is fully optimized for AI compute at the edge.

COMMERCIALLY SUPPORTED

- ✓ Build your EdgeFirst AI solution with confidence.
- ✓ Long Term Support and stability.
- ✓ Documented code provenance.
- ✓ Field proven reliability.

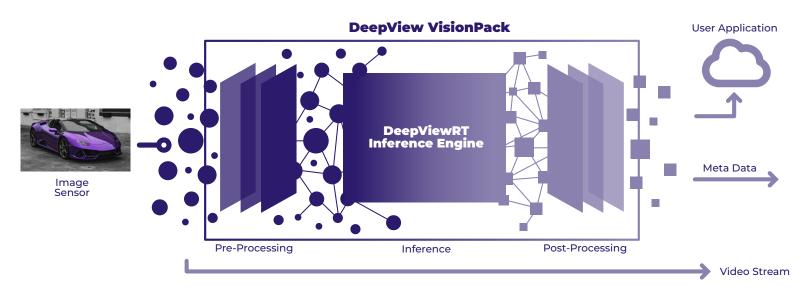






DeepView VisionPack





Features

Description

Supported Processors	NXP i.MX 8M Plus with Neural Processing Unit NXP i.MX 8 Family - CPU, GPU NXP i.MX 6 Family - CPU, GPU
Supported Platforms	NXP EVKs, Maivin Al Vision Starter Kit, Custom Hardware
MIPI Image Sensors	OV5640, OV10633, AR0521, IMX327, IMX296, Others upon request
Pre-Processing	VisionPack provides zero-copy and DMA from camera to NPU with hardware accelerated scaling, cropping, colour conversion, and normalization.
Post-Processing	Highly-optimized model post-processing such as box decoding and non- maximum suprression reduces the end-to-end latency.
Programming Interface	C/C++ or Python with integration into GStreamer, OpenCV, and Qt ensures easy integration with user applications.
No-Code/Low-Code	GStreamer integration for no-code and low-code vision pipeline creation. Easily stream from pre-recorded videos, local cameras, remote cameras, etc.
Sample Applications	Classification, Detection, Head Pose, Human Pose, Segmentation
Model Concurrency	Low-Latency Model Switching, Cascaded Model Architectures
Models Zoos	DeepView ModelPack, eIQ Toolkit, TensorFlow, ONNX, YOLOv5