



# Vehicle Agnostic Self-Driving Robot Kit for Agricultural Farms

*“This processor helps us overcome all the limitations”*

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## The Product

Retrofit kit for tractors and other mobile farming equipment, converting them to fully autonomous vehicles. This allows expanding the productivity and ROI of existing heavy-duty equipment. In addition, it addresses the labor scarcity challenges, it allows non-professional workers to participate in the labor force, and it promotes a safer working environment.

## Why AI?

- Heavy duty vehicles need to apply safety-first approach to navigate safely in a terrain that cannot be mapped in advance and is constantly changing during the day and throughout the year
- Vehicles need to respond in real-time to hazards and avoid incidents with property and human labor in the vicinity of the machine
- The vehicle can be equipped with robotic tools which need to be controlled autonomously
- All this inferencing and computing needs to be done in an existing power and thermal envelope and operate at very harsh conditions, avoiding the need for water cooling

## Industries & Applications

- Autonomous driving
- Off-road vehicles
- Heavy machinery
- Robotics

## Tasks

- Object detection
- Semantic segmentation
- Lane detection
- Pickup object orientation

## Why Hailo?



Support the required AI workload of >10 TOPS, covering object detection and semantic segmentation needed for the driving mission.



High accuracy and low latency for real-time response.



Automotive grade (AEC-Q100 grade 2).



High power efficiency and low heat dissipation of up to 5W.



Hailo empowered ECU