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AURIX KNOWLEDGE LAB 2024

ETAS

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 **imagimob**
An Infineon Technologies Company

 **infineon**

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Development Tools

TRUST  SOFT

Ready for the future with Edge AI

Sam Al-Attiyah, Head of Customer Success

 **imagimob**
An Infineon Technologies Company

Agenda

- Introduction to Imagimob
- Smart cars
- Imagimob's offering & Demo
- Imagimob and AURIX™

Our mission is to be the best, fastest way for customers to take their Edge AI models into production.

About Imagimob

Studio

Our state-of-the-art Edge AI/ML development platform is fully embedded into Infineon's solution ecosystem, making model development, training and optimization on target hardware easy and fast

Ready Models

Production ready, off-the-shelf Edge AI models. These require no ML development from customers, and are the fastest way to take AI/ML into production

AI Expertise

Our team has extensive AI/ML engineering experience from 50+ customer projects

An Infineon Company

Extended support for Infineon microcontrollers and sensors. Customers can leverage Infineon's expertise for manifold applications.

AI/ML for a wide range of sensors and use cases



Embedded AI enhances safety and real-time critical classical control and signal processing algorithms with data-driven Artificial Intelligence (AI) approaches – leading to smarter vehicles capable of more

eMobility / xEV



eMobility

On-board Charger and DC-DC Converter

Traction Inverter

Battery Management System

Autonomous Driving / ADAS



Autonomous driving

Trajectory Planning & Control (Vehicle Motion)

Radar & Audio

Sensor Fusion / Processing

Integration Platforms & Connectivity



Connectivity

Energy Consumption Prediction

Predictive Maintenance

HMI & Infotainment

Imagimob's offering

An end-to-end development platform

- Helps you collect data easily by tapping into any sensor in your system
- Manage all of your data in an easy way
- Guide you through the pre-processing and feature extraction
- Model wizard available for those without ML experience
- Packaging and optimising model for different target devices

- Lightweight Acoustic classification model
 - RAM: 60 kB
 - FLASH: 51 kB
 - Inference time: 23 ms
- Thoroughly tested out in the field
- Built using Imagimob Studio
- More ready models coming soon...



Imagimob and AURIX going forward

Working closely with the rest of Infineon to produce high quality automotive solutions

What's there:

- Platform ready for developing models and deploying them on the AURIX devices
- Existing integrations with TriCore™ 3xx
- Code examples
- Tutorials

What's coming:

- Integration with TriCore™ 4x and Parallel Processing Unit (PPU)
- More Ready Models
- More example applications



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Questions?

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