

## elQ<sup>®</sup> Auto Machine Learning (ML) Toolkit

## elQ-AUTO-ML-TOOLKIT

Last Updated: Apr 16, 2024

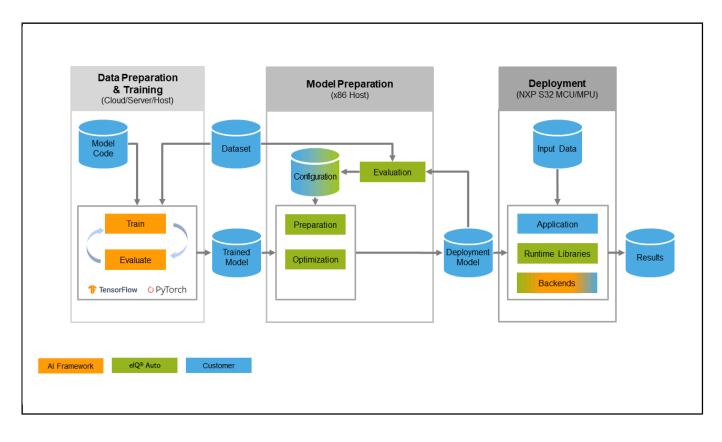
This page contains information on a preproduction product. Specifications and information herein are subject to change without notice. For additional information contact support or your sales representative.

eIQ Auto ML Toolkit provides high performance and fast deployment of ML algorithms on NXP automotive MCUs and MPUs including S32G vehicle network processors, S32Z and S32E real-time processors, and S32K general-purpose microcontrollers.

The toolkit offers large compatibility of AI container format from a diverse popular AI training frameworks. It features a wide range of Model Zoo and numerous model preparation services for model optimization. The Toolkit supports a variety of AI backends including an Automotive Quality compliant option and a fully user-customable path.

Application integration happens through eIQ Auto Runtime API agnostic to the model, backend and hardware while providing full control on where and how the execution takes place.





elQ Auto ML Toolkit Block Diagram

Al Training Frameworks PyTorch® TensorFlow®/Keras® MATLAB® Al Container Formats ONNX® Protobuf® Keras H5 Saved Model ONNX® Protobuf® Keras H5 Saved Model Model Zoo Battery Management Predictive Maintenance Driver Identification Anomaly Detection and more AutoML	Ecosystem	Al Runtimes elQ Auto Runtime Al Backends elQ Auto ONNX Runtime TFLite TFLite Micro Custom Backend Services and Libraries Optimized Libraries Optimized Libraries Accelerator drivers SoC drivers
Neural Architecture Search         Model Preparation Services         Optimization Tools         Stats Collection       Graph Tools         Simulation Support       Glow         Build Tools       C/C++ Compilers         Operating System       Ubuntu®	Host Ec	Accelerator drivers SoC drivers Operating System Linux® BareMetal Zephyr® FreeRTOS® AUTOSAR® QNX® Processors and Accelerators Arm® Cortex.®-A53, Cortex.R52, Cortex.R52, Cortex.R52, Cortex.R52, S32Z/E DSP/ML Accelerator External Accelerator: Hailo-8™ Silicon Platforms S32G2/G3 S32K344 S32Z1 S32Z2/E2

## View additional information for eIQ® Auto Machine Learning (ML) Toolkit.

Note: The information on this document is subject to change without notice.

## www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.