

Renesas Ready Ecosystem Partner Solution

NVIDIA TAO

RENESAS

PARTNER
NETWORK

READY

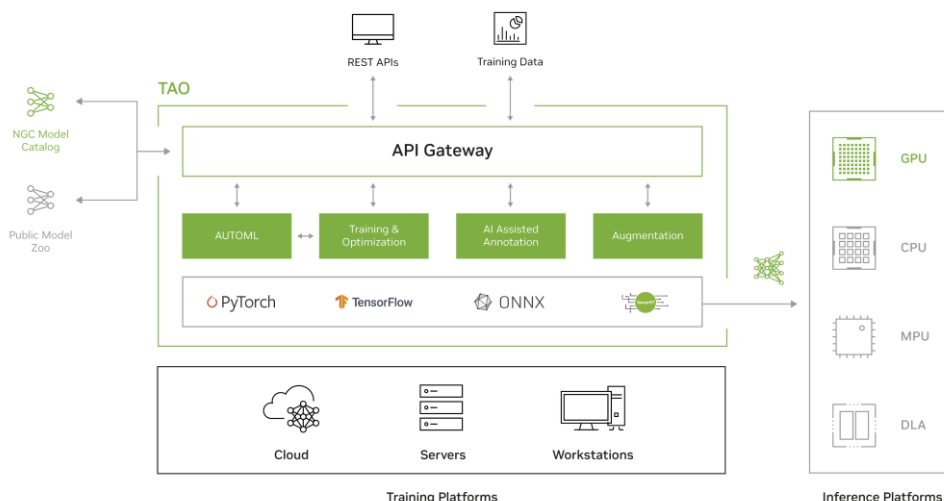
Solution Summary

The open-source TAO for AI training and optimization delivers everything you need, putting the power of the world's best Vision Transformers (ViTs) in the hands of every developer and service provider. Users can create state-of-the-art computer vision models and deploy them on any device—GPUs, CPUs, and MCUs—whether at the edge or in the cloud. NVIDIA TAO, built on TensorFlow and PyTorch, uses the power of transfer learning while simultaneously simplifying the model training process and optimizing the model for inference throughput on practically any platform. NVIDIA TAO deployable on [RZ/V2H](#), [RZ/V2L](#) and [RA8D1](#) by leveraging Renesas' built-in intuitive GUI tool to accelerate development with best practices.

Features/Benefits

- **Train Models Efficiently:** Use TAO's AutoML capability to eliminate the need for manual tuning and get to your solutions faster.
- **Build Highly Accurate AI:** Use SOTA Vision Transformer and NVIDIA pretrained models to create highly accurate and custom AI models for your use case.
- **Optimize for Inference:** Go beyond customization and achieve up to 4X performance by optimizing the model for inference.
- **Deploy on Any Device:** Deploy optimized models on GPUs, CPUs, MCUs, and more.

Diagrams/Graphics



Target Markets and Applications

- AI-powered security cameras
- Smart factory automation systems
- AI-driven consumer electronics

www.developer.nvidia.com/tao-toolkit



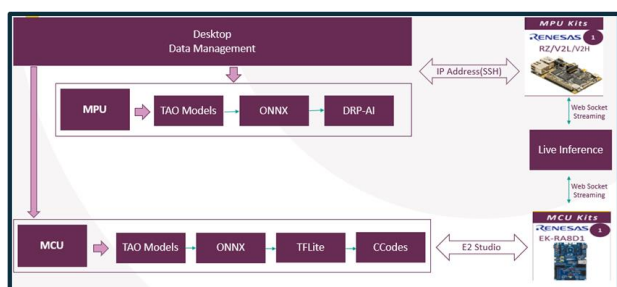
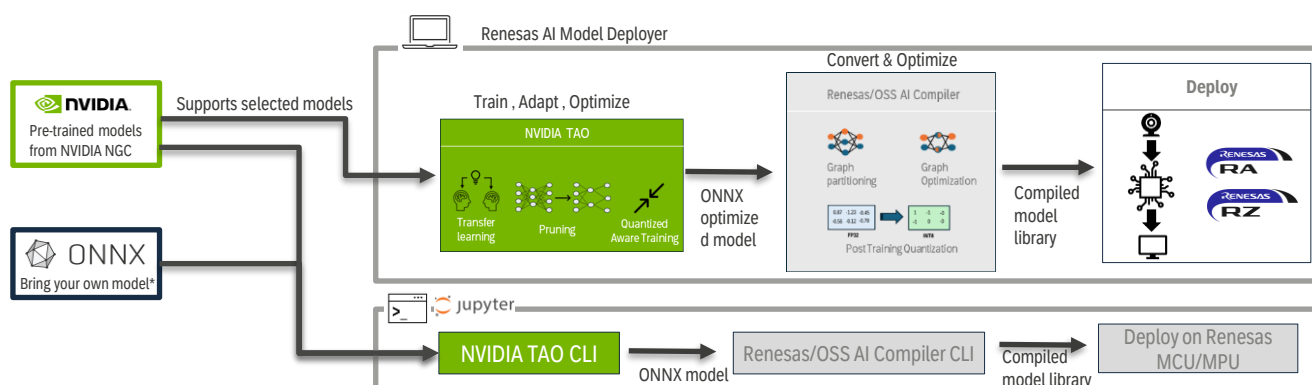
What is the Renesas AI Model Deployer powered by NVIDIA TAO?

The Renesas AI Model Deployer powered by NVIDIA TAO offers an end-to-end, low-code vision AI pipeline for embedded developers—covering setup, training, evaluation, and deployment. It supports live camera inference and USB streaming. For advanced use, Jupyter notebooks enable custom workflows, hyperparameter tuning, and BYOM strategies, making it a flexible, production-ready AI development platform.

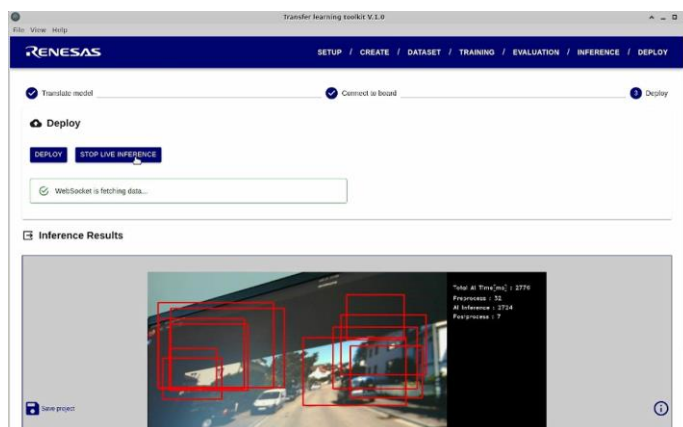
Key Benefits

- **Guided AI Workflow:** Provides step-by-step support for project setup, training, evaluation, and deployment.
- **Zero-Hassle Setup:** Pre-integrated toolchains eliminate environment setup and library mismatch issues.-
- **Lower Learning Curve:** Designed for embedded teams without deep AI expertise.

NVIDIA TAO x Renesas integration



Overall Renesas AI Model Deployer powered by NVIDIA TAO and mapping to functionality



www.renesas.com/renesas-ai-model-deployer-vision-ai