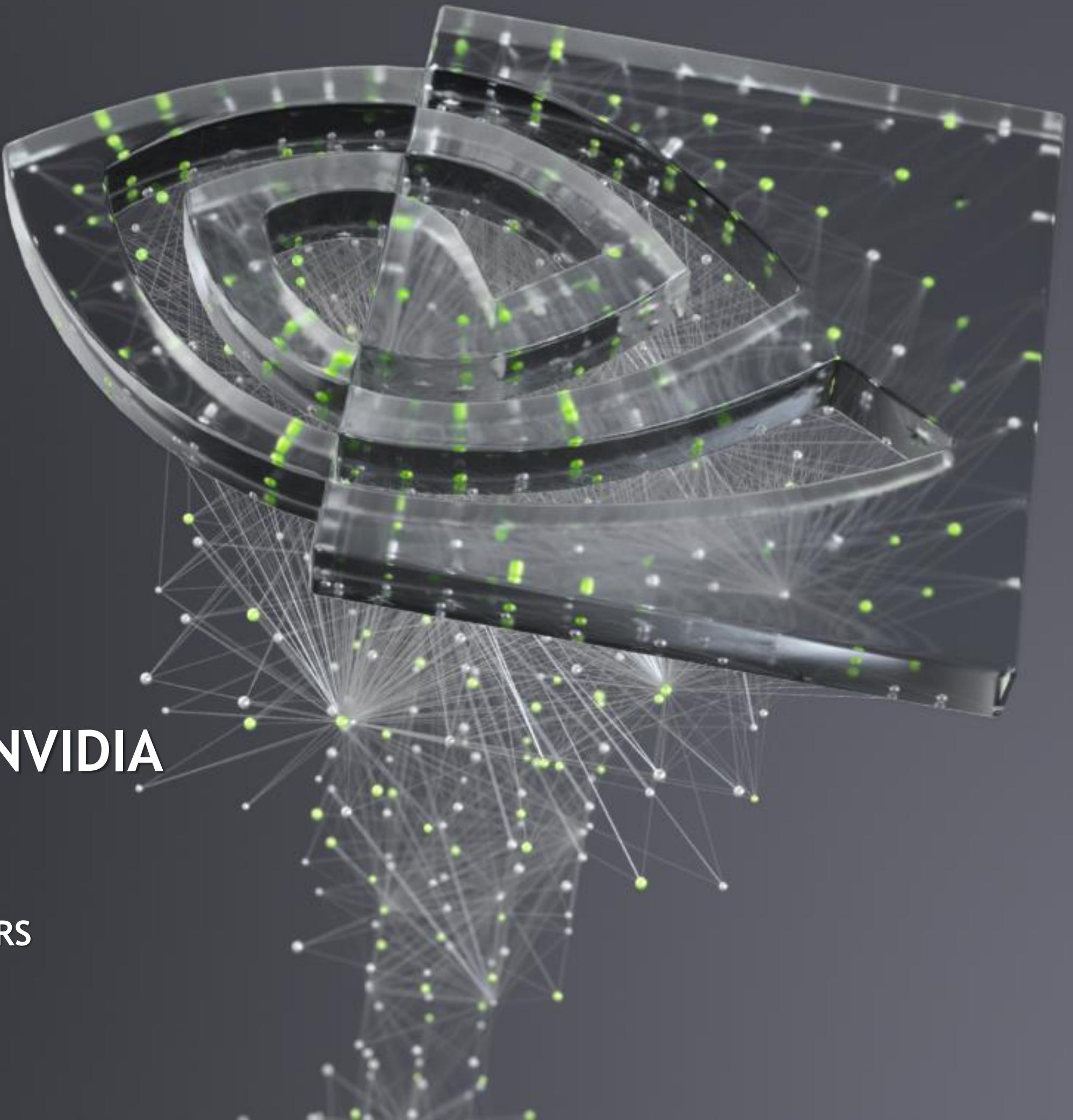


GETTING STARTED WITH THE NVIDIA DRIVE AGX ORIN DevKit

FOR DRIVE AGX SDK DEVELOPER PROGRAM MEMBERS

October 2022



WELCOME TO DRIVE AGX

Covers:

- ▶ Intro to the NVIDIA DRIVE AGX Orin™ platform
 - ▶ Step by step guide to register your device
 - ▶ Instructions on how to join the NVIDIA DRIVE AGX™ SDK Developer program
 - ▶ A navigation through the Start page

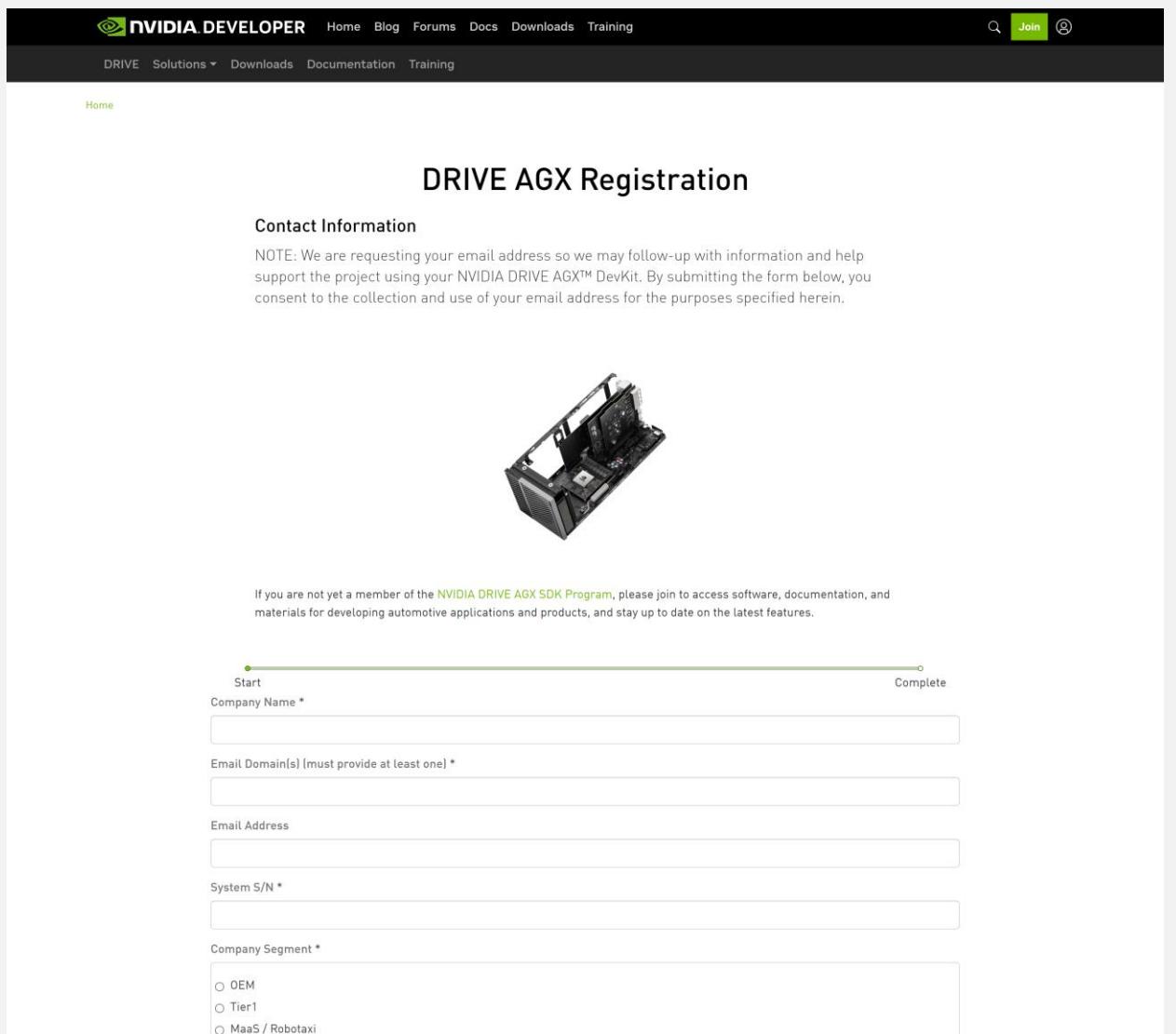
[Link to Welcome to the DRIVE AGX Platform](#)



A screenshot of a computer monitor displaying a software interface titled "Point Cloud Processor Sample". The interface shows a 3D point cloud visualization of a scene, likely a car driving through a tunnel or parking garage, with various colored clusters representing different objects. A small 2D top-down grid is overlaid on the point cloud. The background of the application window is dark. To the left of the application window, there is a terminal window showing command-line logs related to the project's build and configuration. The logs include paths like "/usr/local/driveworks/data", file names like "driveworks_datapath.txt", and compiler commands like "g++ -fopenmp -std=c++11 -O3 -DNDEBUG -I/usr/include/nvidia -I/usr/include/nvidia_sdk/DRIVE/linux/5.1.1". The overall environment suggests a development setup for a self-driving vehicle or similar automotive application.

REGISTRATION

First things first - register your DevKit on the Registration Page. This will ensure an optimal experience for you and help us to provide support.

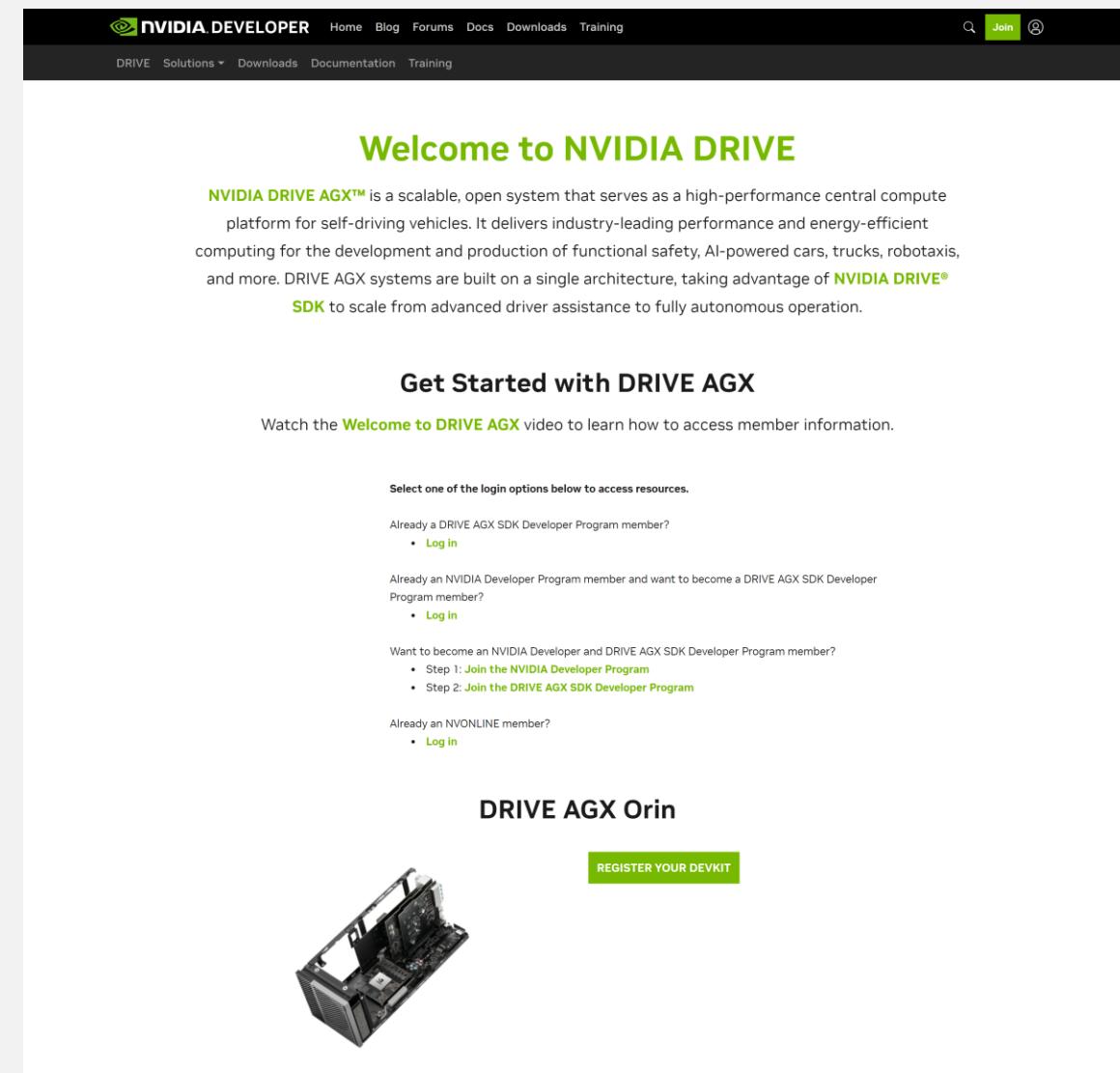


The screenshot shows the "DRIVE AGX Registration" page. At the top, there's a navigation bar with links for Home, Blog, Forums, Docs, Downloads, Training, and a search bar. Below the navigation is a secondary menu with DRIVE, Solutions, Downloads, Documentation, and Training. The main content area is titled "DRIVE AGX Registration" and includes a section for "Contact Information". It features a note about email consent and a small image of a DevKit board. A progress bar at the bottom indicates the registration process is starting. Below the progress bar are several input fields for Company Name, Email Domain(s), Email Address, System S/N, and Company Segment, each with a required asterisk.

[Link to Registration Page](#)

START PAGE

Up next, visit the Start Page. It is your gateway to explore the DRIVE AGX Platform.



The screenshot shows the "Welcome to DRIVE AGX" page. At the top, there's a navigation bar with links for Home, Blog, Forums, Docs, Downloads, Training, and a search bar. Below the navigation is a secondary menu with DRIVE, Solutions, Downloads, Documentation, and Training. The main content area is titled "Welcome to NVIDIA DRIVE" and includes a detailed description of the DRIVE AGX system. It also features a "Get Started with DRIVE AGX" section with a video link and a "DRIVE AGX Orion" section with an image of a DevKit board and a "REGISTER YOUR DEVKIT" button. The page uses green text and buttons to highlight key information.

[Link to Start Page](#)

KEY WEBSITES FOR DRIVE AGX ORIN

DevKit Register Page

Step by step guide to register your DevKit

developer.nvidia.com/drive/register

DevKit Start Page

How to Navigate DRIVE Developer Page

developer.nvidia.com/drive/start

DevKit Setup Page

Step by step guide to setup your DevKit

developer.nvidia.com/drive/setup

KEY WEBSITES FOR DRIVE AGX ORIN

Downloads

Link to access software releases

developer.nvidia.com/drive/downloads

Docs

Comprehensive documentation

developer.nvidia.com/drive/documentation

Forum

Ask questions or browse threads

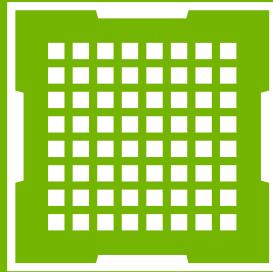
forums.developer.nvidia.com/c/autonomous-vehicles/drive-agx-orin/

Hyperion Sensors

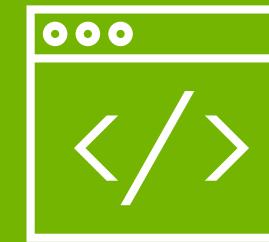
For additional supported sensors, please refer to
[DRIVE AGX Orin Sensors and Accessories](#)

developer.nvidia.com/drive/ecosystem-hw-sw

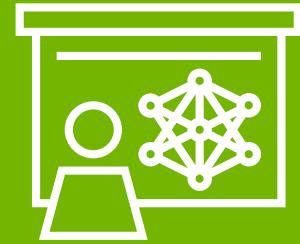
RESOURCE OVERVIEW



Hardware Setup



SDK



Training



Need Help?



HARDWARE SETUP

PRODUCT BRIEF

Covers:

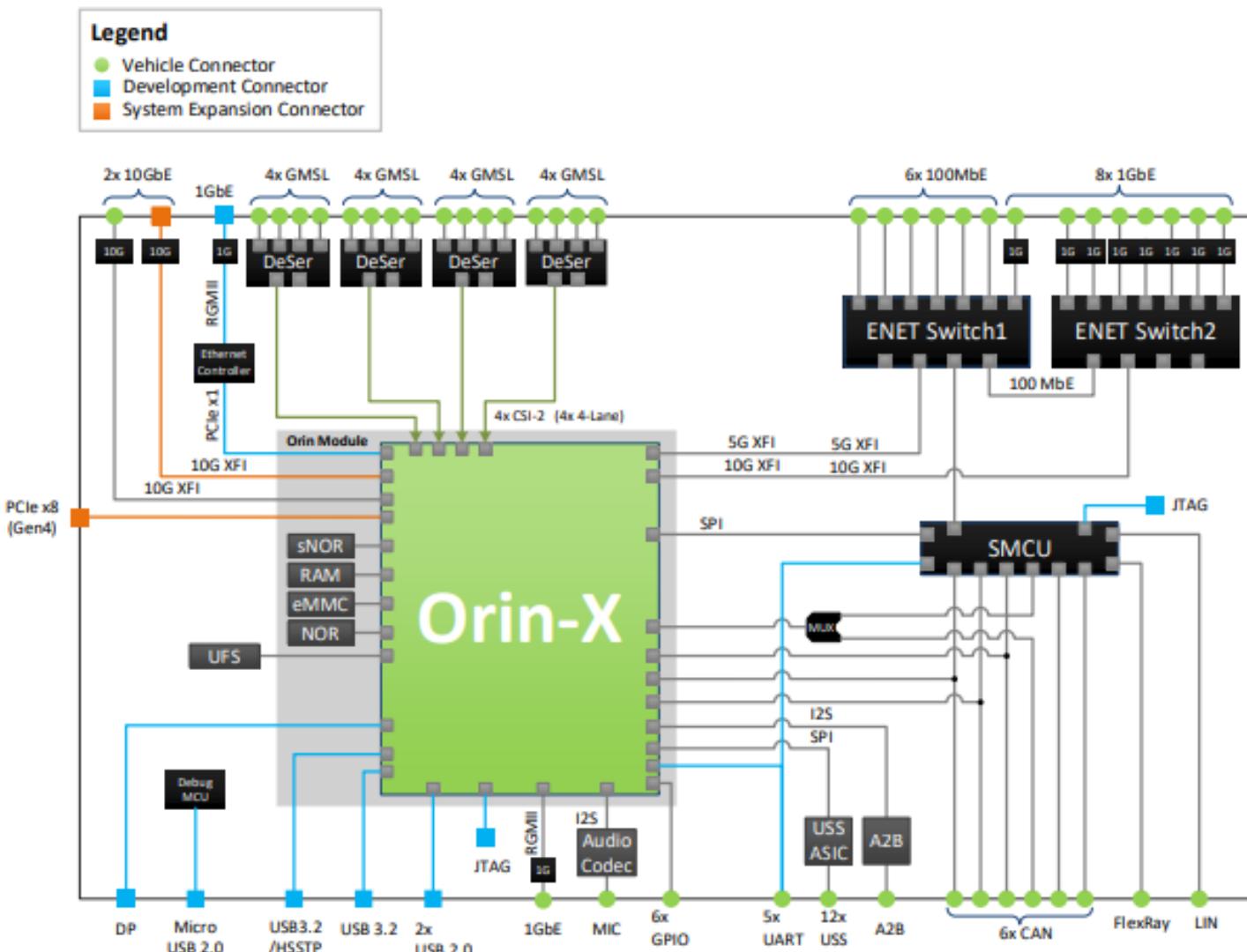
- ▶ Product features
- ▶ Highlights mechanical & electrical specification
- ▶ Provides list of hardware interfaces

[Link to Product Brief](#)

NVIDIA DRIVE AGX Orin Developer Kit

Product Brief

Figure 1-2. High-Level Block Diagram





HARDWARE QUICK START GUIDE

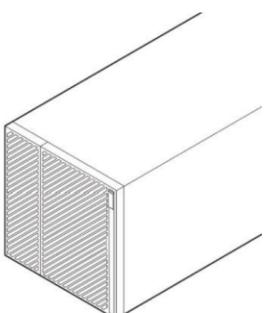
Covers:

- ▶ Components list
- ▶ System Connectors
- ▶ DevKit versions
- ▶ Steps required to run the DevKit for the first time

[Link to Hardware Quick Start Guide](#)

NVIDIA DRIVE AGX Orin Developer Kit

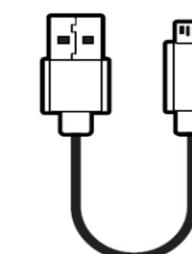
Hardware Quick Start Guide



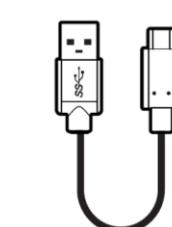
Developer System



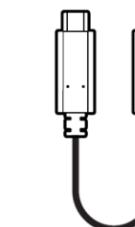
AC Power Cable



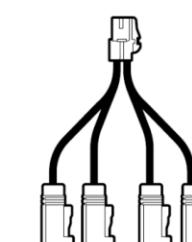
Micro USB Cable



Type A-to-C USB Cable



Type C-to-C USB Cable



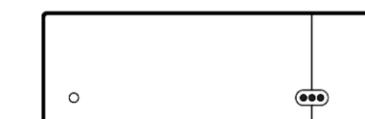
Camera Splitter Cable



Dual HMT-D Splitter



Quad HMT-D Splitter



NIC Adapter



MECHANICAL & INSTALLATION GUIDE

Covers:

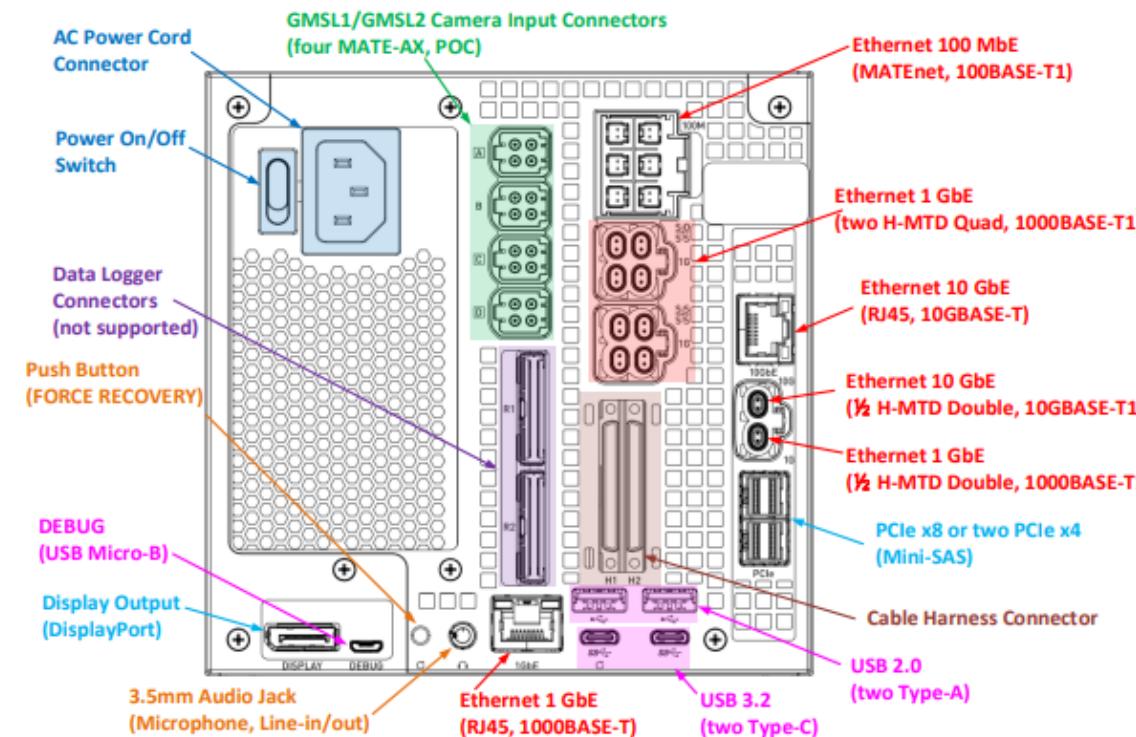
- ▶ Mechanical dimensions
- ▶ Mounting considerations
- ▶ Interface connections
- ▶ Environmental requirements
- ▶ Electrical installation

[Link to Mechanical and Installation guide](#)

NVIDIA DRIVE AGX Orin Developer Kit Mechanical and Installation Guide

Installation Guide

Figure 2-1. Rear Panel Connectors



- Assemble system to car rack
8 x M6

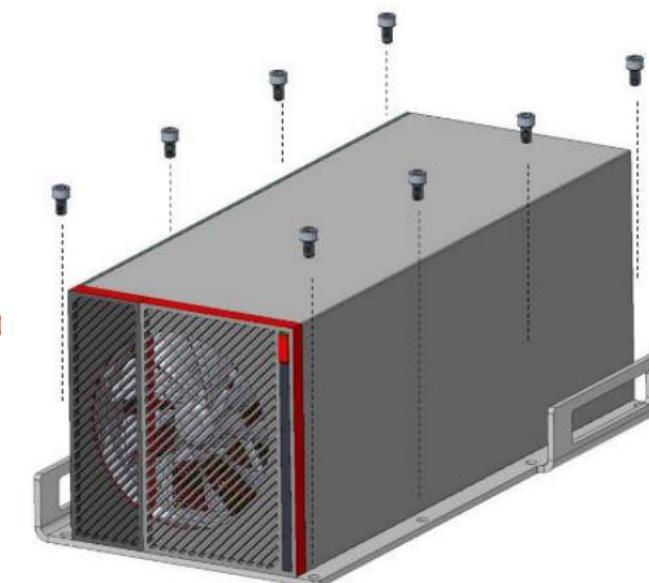
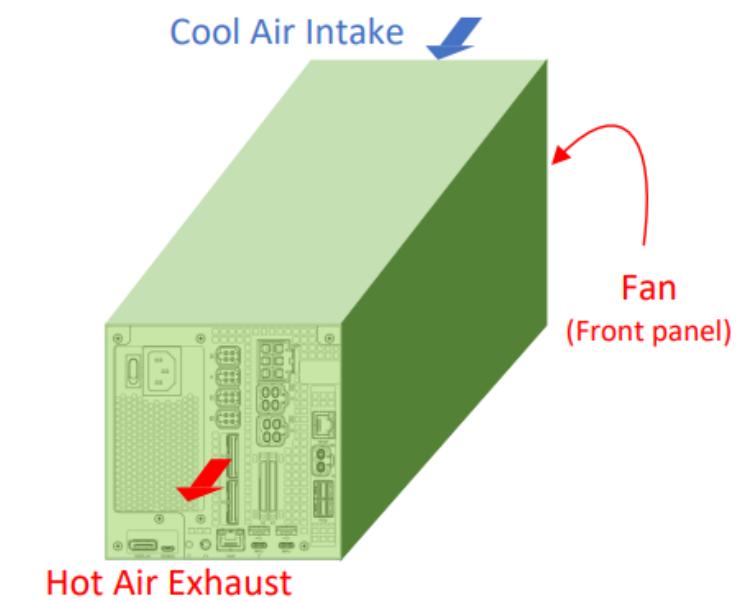


Figure 1-3. Airflow Direction



SUPPORTED SENSORS AND ACCESSORIES

Hardware for DRIVE AGX Orin that is supported by NVIDIA and our partners

Covers:

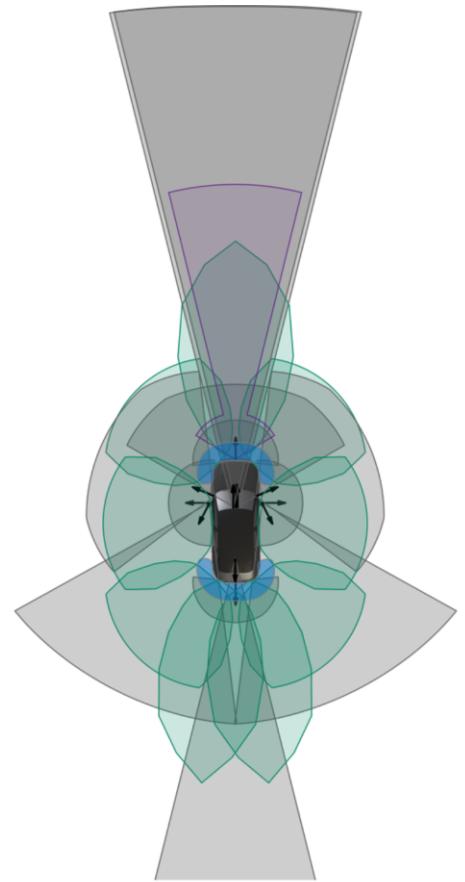
- ▶ Cameras
- ▶ Lidars
- ▶ Radars
- ▶ IMU / GNSS devices
- ▶ USS/RCS
- ▶ Hardware accessories

[Link to DRIVE Hyperion 8.1 Sensors and Accessories](#)

[Link to DRIVE AGX Orin Sensors and Accessories](#)

Hyperion 8.1 Sensor Specifications

Sensor Qty & Type	Function	Details
8 exterior cameras	Wide & tele vision	Sony IMX728, 8.3Mpx
4 exterior cameras	Fisheye near vision	Sony IMX623, 3.0Mpx
6 radars	Corner & side sensing	Hella Short Range Radar
3 radars	Front & rear sensing	Continental 1x Imaging and 2x Long Range Radars
1 lidar	Front redundant sensing	Luminar
3 interior cameras	Driver monitoring system	1x OVT - OV2311, 2Mpx
	Occupant monitoring system	2x OVT - OX05B1S, 5Mpx
2 IMUs	Vehicle odometry detection	1x Continental SC13SI, 1x Bosch MMP
1 GNSS	Vehicle position detection	U-blox



	Cameras	A mix of wide-angle fisheye cameras for near vision, paired with high-fidelity wide and tele 8MP cameras for detecting longer distances.
	Lidars	Front center automotive-grade lidar for an additional layer of redundant vision, as well as a rooftop high-resolution lidar for ground-truth (GT) data collection.
	Radars	Multiple radars for overlapping front, side, and corner visibility and redundancy, with increased angular and vertical resolution for complex urban driving.
	IMU / GNSS	Vehicle position and odometry sensing for precise localization.
	USS / RCS	Ultrasonic sensors for parking space measurement and maneuvers. Road condition sensors for assessing road wetness to adapt vehicle dynamics control.
	Hardware Accessories	Hardware accessories for DRIVE AGX Orin Developer Kits.

A complex network graph is displayed against a dark gray background. The graph consists of numerous small, semi-transparent circular nodes scattered across the frame. These nodes are interconnected by a dense web of thin, light gray lines representing edges. Some nodes are highlighted with a bright lime green color, which are primarily located in the upper left and right quadrants, suggesting they are central or have a higher degree of connectivity within the network.

SDK

DRIVE OS AND DRIVEWORKS INTRO

The DRIVE SDK website shows architecture and major components of the SDK

The DRIVE OS website provides more details on the DRIVE OS modules and tools

The DRIVEWORKS website shares insights on each module under its architecture

[Link to DRIVE SDK](#)

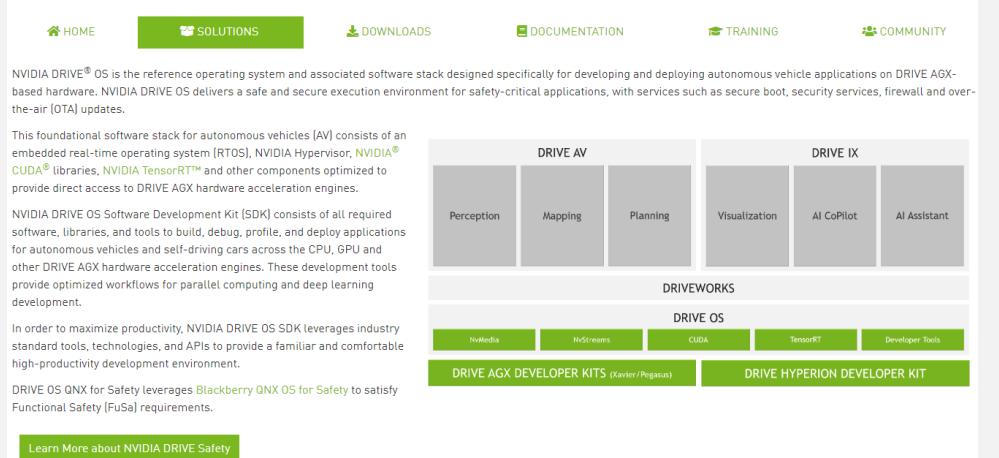
[Link to DRIVE OS](#)

[Link to DriveWorks](#)

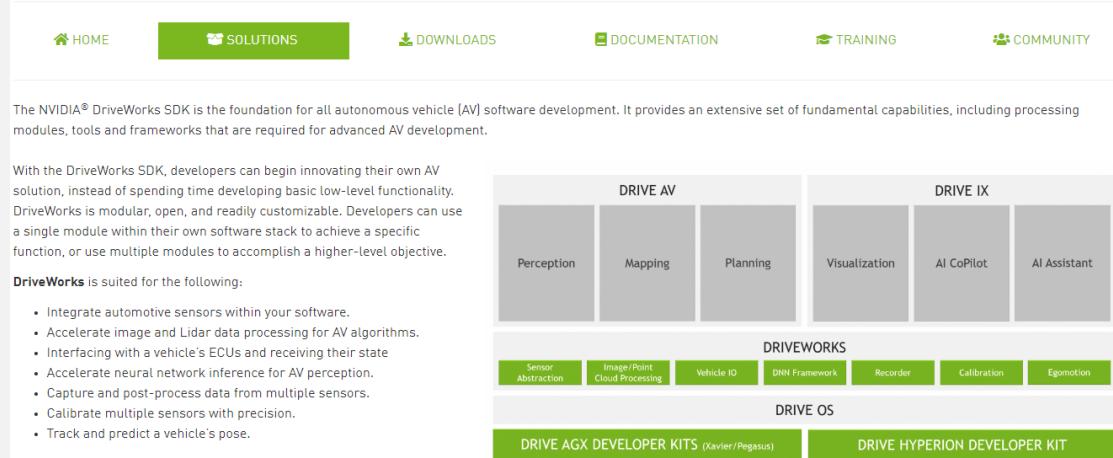
NVIDIA DRIVE SDK



NVIDIA DRIVE OS



NVIDIA DriveWorks



DOWNLOADS

Provides access to all relevant DRIVE SDK releases, including Release Summary, Installation Guides, Release Notes, etc.

Note: DRIVE OS 6.0.4 supports installation via Docker containers and SDK Manager.

[Link to DRIVE Downloads Site](#)

[Link to Details on NVIDIA DRIVE Platform Docker Containers](#)

[Link to Details on NVIDIA SDK Manager](#)

[Link to Details on DRIVE OS Docker](#)

NVIDIA DEVELOPER Home Blog Forums Docs Downloads Training

DRIVE Solutions ▾ Downloads Documentation Training

Home > DRIVE > NVIDIA DRIVE Downloads

NVIDIA DRIVE Downloads

This page provides access to DRIVE SDK for developers using NVIDIA DRIVE® hardware. See [Automotive Hardware](#) and [Automotive Software](#) for more details.

For support, please post any queries or issues in the [Forums](#).

Please note, download requires membership to the [NVIDIA DRIVE® AGX SDK Developer Program](#) for DRIVE Orin and DRIVE Xavier, and to the [NVIDIA DRIVE® PX 2 SDK Developer Program](#) for DRIVE PX 2.

Use the product filters below to select appropriate downloads for your hardware platform

Filter...

▼ PRODUCT

- DRIVE Orin
- DRIVE Xavier
- DRIVE PX 2
- DRIVE Sim

Showing 7 downloads.

Title	Version	Release Date
> DRIVE OS [DRIVE Orin Latest] <small>New</small>	6.0.4	2022/08/29
> DRIVE OS and DriveWorks [DRIVE Xavier Latest]	5.2.6	2021/10/20
> DRIVE OS and DriveWorks	5.2.0	2021/01/21
> DRIVE Software [DRIVE Xavier Latest]	10.0	2019/11/15
> DRIVE Software	9.0	2019/05/28
> DRIVE OS with DriveWorks [DRIVE PX 2]	5.0.10.3	2018/10/04
> DRIVE Sim	Early Access	Coming Soon

▼ DRIVE OS [DRIVE Orin Latest] New 6.0.4 2022/08/29

Update to NVIDIA DRIVE® OS 6.0.4 Linux SDK:
Either install with NVIDIA SDK Manager, **OR** NVIDIA DRIVE OS Docker Containers through NVIDIA GPU Cloud (NGC).

[Documentation](#) is publicly available under **DRIVE Orin**.

After updating your software, be sure to review [DRIVE OS 6.0.4 Installation Guide](#) to finalize your DRIVE AGX System Setup.

Supported hardware:

- NVIDIA DRIVE AGX Orin™

a. NVIDIA SDK Manager:

- Requires Ubuntu 20.04 on the host PC.
- Install the most up-to-date version of the [NVIDIA SDK Manager](#).

b. NVIDIA DRIVE OS Docker Containers:

- Requires Ubuntu 20.04 or Ubuntu 18.04 on the host PC.
- Learn more about [NVIDIA DRIVE Platform Docker Containers](#).
- Please activate your access to the NGC 'drive' organization by clicking through the NGC activation email you received.

Submit questions or feedback in the [DRIVE AGX Orin Forum](#). We want to hear from you!

Additional links:

- [DRIVE OS 6.0.4 Blog Post](#)

[More Information ▾](#)

DOCUMENTATION OVERVIEW

A collection of documentation that helps you to develop with your DRIVE AGX Orin DevKit, includes:

- ▶ Developer Kit documents
- ▶ Sensors & Accessories
- ▶ DRIVE OS software documentation
- ▶ Developer Tools
- ▶ Licenses

[Link to DRIVE Documentation](#)

DRIVE Orin

DRIVE AGX Orin Developer Kit

- [DRIVE AGX Orin Product Brief](#)
- [DRIVE AGX Orin Developer Kit Hardware Quick Start Guide](#)
- [DRIVE AGX Orin Mechanical and Installation Guide](#)
- [DRIVE AGX Orin Regulatory Compliance and Safety Guide](#)

Sensors & Accessories

[DRIVE Hyperion 8.1 Sensors and Accessories](#)

Sensors for DRIVE Hyperion 8.1 and DRIVE AGX Orin. Accessories for DRIVE AGX Orin.

DRIVE OS 6.0.4 Linux SDK

- [DRIVE OS 6.0.4 Linux Release Notes](#)
- [DRIVE OS 6.0 Installation Guide for NVIDIA Developers](#)
- [DRIVE OS 5.x to 6.0 SDK Migration Guide](#)
- [DRIVE OS 6.0 Linux SDK Developer Guide](#)
- [DriveWorks 5.6 SDK Reference Documentation](#)
- [DriveWorks 5.6 System Task Manager \(STM\) User Guide](#)
- [DriveWorks 5.6 Compute Graph Framework SDK Reference Documentation](#)
- [CUDA Toolkit 11.4](#)
- [TensorRT 8.4.11](#)
- [cuDNN 8.3.3](#)

Developer Tools

- [Nsight Systems](#)
- [Nsight Graphics](#)
- [SDK Manager](#)

Licenses

- [DRIVE OS 6.0 Linux Third-Party Software Licenses](#)
- [DriveWorks 5.x Third-Party Software Licenses](#)

DRIVE OS 6.0 INSTALLATION GUIDE

A step-by-step guide introducing the Drive OS 6.0

A guide for how to download the DRIVE OS using either SDK Manager or Docker

Some tips for building & Running sample applications for DRIVE OS 6.x on linux

[Link to DRIVE OS 6.0 Installation Guide](#)

The screenshot shows the top navigation bar with the title "DRIVE OS 6.0 Installation Guide for NVIDIA Developer". Below it is a search bar with a magnifying glass icon. The main content area has a green header "Welcome to NVIDIA DRIVE OS 6.0". A vertical sidebar on the left contains a list of sections with plus and minus icons:

- + Introduction
- + Requirements for Your Development Environment
- Installation Methods
 - NVIDIA SDK Manager
 - Download and Install DRIVE OS Docker
 - Setting Up DRIVE OS Linux
- + Finalize DRIVE AGX Orin System Setup
- + Build and Run Sample Applications for DRIVE OS 6.x Linux
- + Appendix. DRIVE Platform Supported Boards
- + Additional Resources

Below the sidebar, there is a block of text about DRIVE OS 6.0's purpose and features.

NVIDIA DRIVE® OS 6.0 is the reference operating system and associated software stack designed specifically for developing and deploying autonomous applications on DRIVE AGX-based hardware. NVIDIA DRIVE® OS delivers a safe and secure execution environment for safety-critical applications, providing services such as secure boot, security services, firewall, and over-the-air updates.

SDK MANAGER

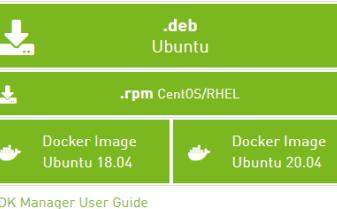
Provides an end-to-end development environment setup solution for NVIDIA DRIVE®

NVIDIA SDK Manager

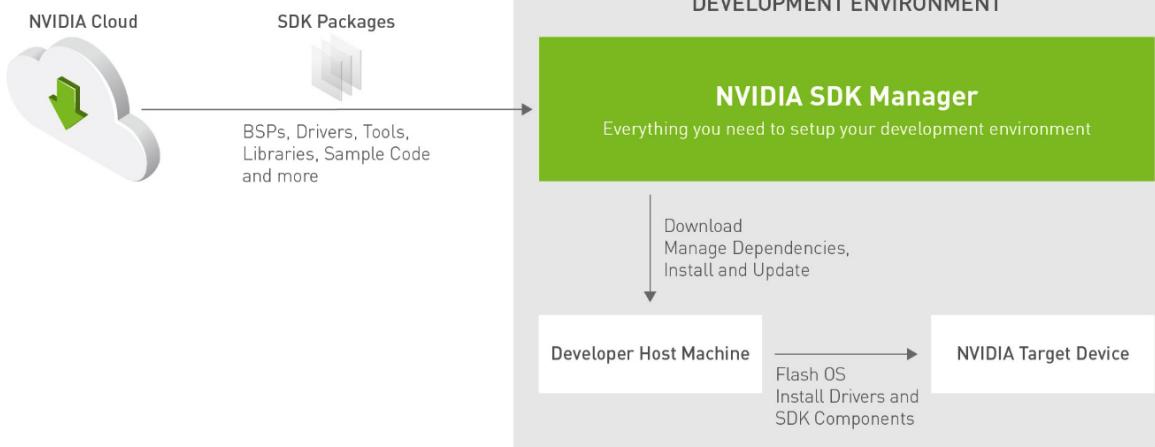
Everything You Need to Set Up Your Development Environment

NVIDIA SDK Manager provides an end-to-end development environment setup solution for NVIDIA's DRIVE, Jetson, Clara Holoscan, Rivermax, DOCA and Ethernet Switch SDKs for both host and target devices.

Download NVIDIA SDK Manager 1.8.1



SDK Manager User Guide



[Link to NVIDIA SDK Manager](#)

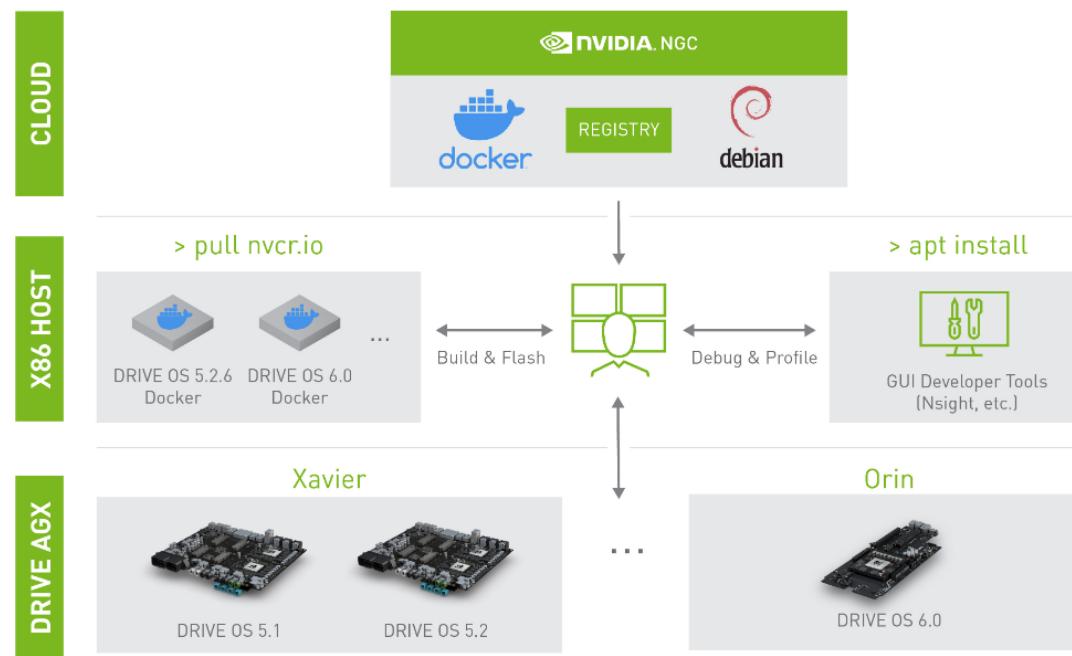
[Link to DRIVE SDK Manager download & Run](#)

NGC DOCKER

A quick intro to the NVIDIA Docker Containers concept

NVIDIA DRIVE Platform Docker Containers

Docker containers encapsulate an executable package that is intended to accomplish a specific task or set of tasks. These tasks can range from flashing a connected embedded device to a complete embedded development environment. Docker simplifies and accelerates development workflows, freeing developers to focus on application development instead of environment configuration and setup. Any host with the Docker runtime installed, such as a developer's or a public cloud instance, can run a Docker container.



[Link to NVIDIA DRIVE Platform Docker Containers](#)

DRIVE OS 6.0 DEVELOPER GUIDE

NVIDIA DRIVE OS is the reference operating system and software stack for developing and deploying AV applications on DRIVE AGX

Important documentation sections:



[Link to DRIVE OS 6 Linux SDK Developer Guide](#)

NVIDIA DRIVE OS 6.0 Linux SDK Developer Guide

Search Search

Welcome to NVIDIA DRIVE OS 6.0

NVIDIA DRIVE® OS 6.0 is the reference operating system and associated software stack designed specifically for developing and deploying autonomous applications on DRIVE AGX-based hardware. NVIDIA DRIVE® OS delivers a safe and secure execution environment for safety-critical applications, providing services such as secure boot, security services, firewall, and over-the-air updates.

- [Overview](#)
- [Installation](#)
- [Setup and Configuration](#)
- [Flashing](#)
- [Embedded Software Components](#)
- [System Software Components and Interfaces](#)
- [Understanding Security](#)
- [System Programming](#)
- [Bootloader Programming](#)
- [Mass Storage Partition Configuration](#)
- [NVIDIA DRIVE Utilities](#)
- [Manifest](#)
- [API Reference](#)
- [NVIDIA DRIVE OS 6.0 Third-Party Software Licenses](#)
- [Legal Information](#)

DRIVEWORKS DOCUMENTATION

The DriveWorks SDK provides an extensive set of fundamental capabilities, including processing modules, tools and frameworks for advanced AV development

Important documentation sections:

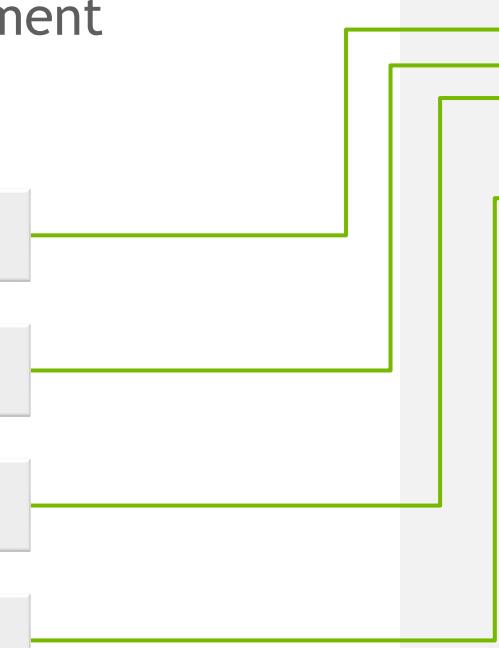
Getting Started

Modules: Functional Components

Sample Code

Guide for porting from previous releases

[Link to DriveWorks Documentation](#)



The screenshot shows the DriveWorks SDK Reference Documentation page. At the top, there's a navigation bar with the NVIDIA logo, the title 'DriveWorks SDK Reference 5.4.5418 Release For Test and Development only', and links for Welcome, Getting Started With the NVIDIA DriveWorks SDK, Modules, Samples, Tools, Tutorials, SDK Porting Guide, DriveWorks API, and More. A search bar is also present. The main content area is titled 'DriveWorks SDK Reference Documentation'. It includes a note about the test and development nature of the release, a diagram of the software pipeline, and sections for Modules, Samples, Tools, and Tutorials. The 'TUTORIALS' section contains a list of requirements for achieving full throughput and a note about the modular design philosophy.

DRIVEWORKS

Sensor Abstraction Image/Point Cloud Processing Vehicle IO DNN Framework Recorder Calibration Egomotion

DriveWorks SDK Reference

5.4.5418 Release

For Test and Development only

Welcome Getting Started With the NVIDIA DriveWorks SDK Modules ▾ Samples ▾ Tools ▾ Tutorials ▾ SDK Porting Guide ▾ DriveWorks API More ▾

Search

DriveWorks SDK Reference Documentation

Welcome to the NVIDIA® DriveWorks SDK Reference.

The NVIDIA® DriveWorks Software Development Kit (SDK) enables developers to implement autonomous vehicle (AV) solutions by providing a comprehensive [library of modules](#), [developer tools](#), and [reference applications](#) that take advantage of the computing power of the NVIDIA DRIVE™ platform.

Note

This DriveWorks SDK release may only be used for test and development.

The following diagram describes the DriveWorks SDK. Click on different points to jump to specific sections.

MODULES
Open, modularized library of functions | Optimized for DRIVE AGX

SAMPLES
Samples for developing, porting, and optimizing applications

TOOLS
Software development tools for Sensors, Data Capture, Calibration, and more

TUTORIALS
In-depth tutorials for basic, intermediate, and advanced SDK use cases

The DriveWorks SDK is designed to achieve the full throughput limits of the computer, enabling real-time self-driving applications. This requires careful architecture of the end-to-end software pipeline to do the following:

- Efficiently utilize the many processors inside the NVIDIA DRIVE® platform.
- Optimize data communication formats between hardware engines.
- Minimize data copies (zero copy exchange of buffers).
- Implement and utilize the most efficient algorithms.

The DriveWorks SDK design philosophy is modular, optimized, and flexible. You can use it out of the box, or enhance it with your own code to create your own AV solution.



TRAINING

NVIDIA TRAINING

NVIDIA provides a wide list of learning tools to help in your development journey

NVIDIA has the following verticals that can help you,

- ▶ GTC talks
- ▶ DRIVE Videos / DRIVE Labs
- ▶ Webinars
- ▶ Deep Learning institute courses

[Link to DRIVE Training](#)



GTC SESSIONS

- ▶ Throughout the GPU Technology Conference (GTC)
- ▶ Relevant research such as state-of-the-art algorithms are showcased
- ▶ Customers show their work on top of the DRIVE platform
- ▶ The NVIDIA DRIVE team provides update on the DRIVE hardware and software

[Link to GTC22 March DRIVE Developer Day](#)

[Link to GTC22 March Automotive](#)

GTC

GPU Technology Conference (GTC)

Register for the GPU Technology Conference (GTC), which highlights the latest breakthroughs in autonomous vehicles, AI, HPC, accelerated data science, healthcare, graphics, and more.

Additionally, you may view our DRIVE Developer Day sessions, which offer deep dives into safe and robust autonomous vehicle development by clicking below.

[DRIVE Developer Days 2022](#)

Finally, you can view the extensive catalog of recorded presentations on the future of self-driving technology through NVIDIA On Demand by clicking below.

[Explore On-Demand](#)

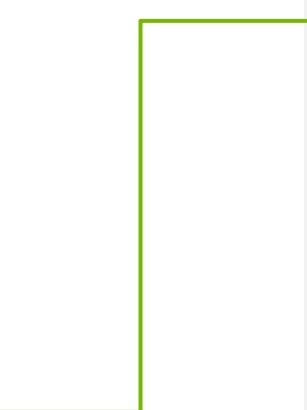
DRIVE WEBINARS

A comprehensive list to increase your learning

35+ Video-Webinars all focused on DRIVE

Requires NVIDIA Developer Login

[Link to DRIVE Webinars](#)



NVIDIA On-Demand Featured Playlists FAQ Advanced Search Login EN

All DRIVE Webinars

29 sessions

Integrating Custom Sensors Using NVIDIA DriveWorks

January 2020
Hope Allen, Product Manager, DriveWorks, NVIDIA
Aaraadhy Narra, Senior Solutions Architect and Deep Learning Institute certified instructor, NVIDIA

In this webinar, we will cover how to implement and use the sensor plugins for different sensor types such as radar, lidar, and camera. Such plugins will make it possible for developers to bring new sensors into the DriveWorks SAL and to implement the transport and protocol layers necessary to communicate with the...

Developing a Camera Pipeline Using NVIDIA DriveWorks

January 2020
Hope Allen, Product Manager, DriveWorks, NVIDIA
Rajani Janardhana, Senior Systems Engineer, NVIDIA

This webinar covers the steps to develop camera image processing software on the DriveWorks SDK. Using this platform, developers can implement a range of capabilities seamlessly and with high performance. This webinar includes DriveWorks image basics, low-level Computer Vision modules, and Feature Tracking and...

Integrating DNN Inference into Autonomous Vehicle Applications with NVIDIA DriveWorks SDK

May 2020
Hope Allen, Product Manager, DriveWorks, NVIDIA
Shay Alon, Automotive Software Solution Architect, NVIDIA

The NVIDIA DriveWorks SDK can significantly speed autonomous vehicle development time. It provides the framework and tooling to import, optimize and infer networks for AV applications that use deep neural networks (DNNs). DriveWorks encapsulates NVIDIA TensorRT to provide a modular, standardized and...

DRIVE VIDEOS

There are numerous videos that showcase applications that can be developed on top of the DRIVE platform

- ▶ **DRIVE Labs videos** are short-form videos that dive into specific self-driving algorithms
- ▶ **DRIVE Dispatch videos** provide brief updates from our AV fleet, highlighting new breakthroughs

[Link to DRIVE Videos](#)



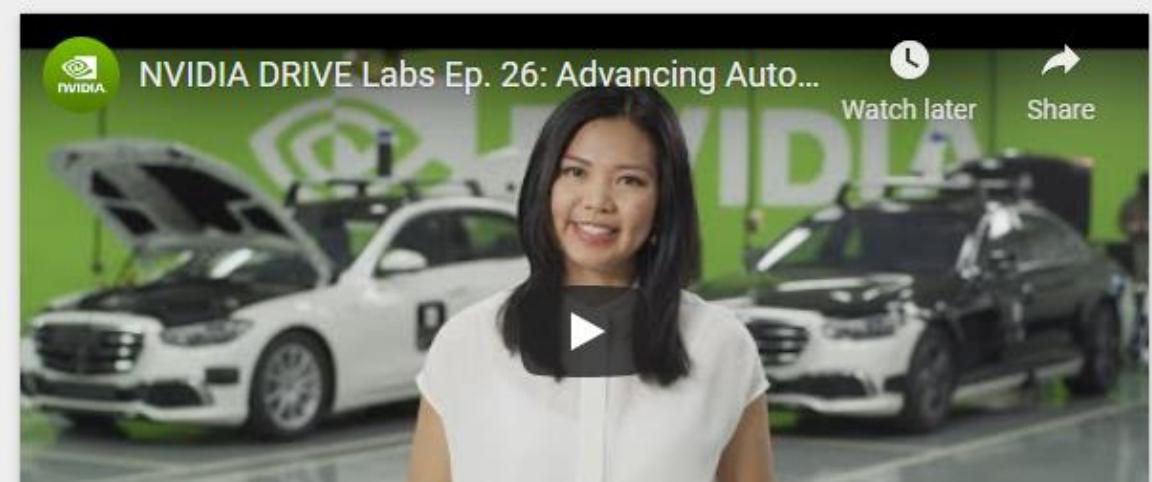
The NVIDIA DRIVE® team is constantly innovating, developing redundant and diverse deep neural networks for safe and robust self-driving systems that are transforming the industry.

Experience Our Latest AV Innovations

Select tab below for an inside look at the process.

NVIDIA DRIVE LABS NVIDIA DRIVE DISPATCH

Short-form videos that dive into specific self-driving algorithms.

A video player interface for a NVIDIA DRIVE Labs episode. The title 'NVIDIA DRIVE Labs Ep. 26: Advancing Auto...' is shown. The video frame features a woman in a white shirt standing in front of several self-driving cars with their hoods open, revealing internal components. The video player includes standard controls like play, pause, and volume, along with options to 'Watch later' and 'Share'.

DEEP LEARNING INSTITUTE (DLI) COURSES

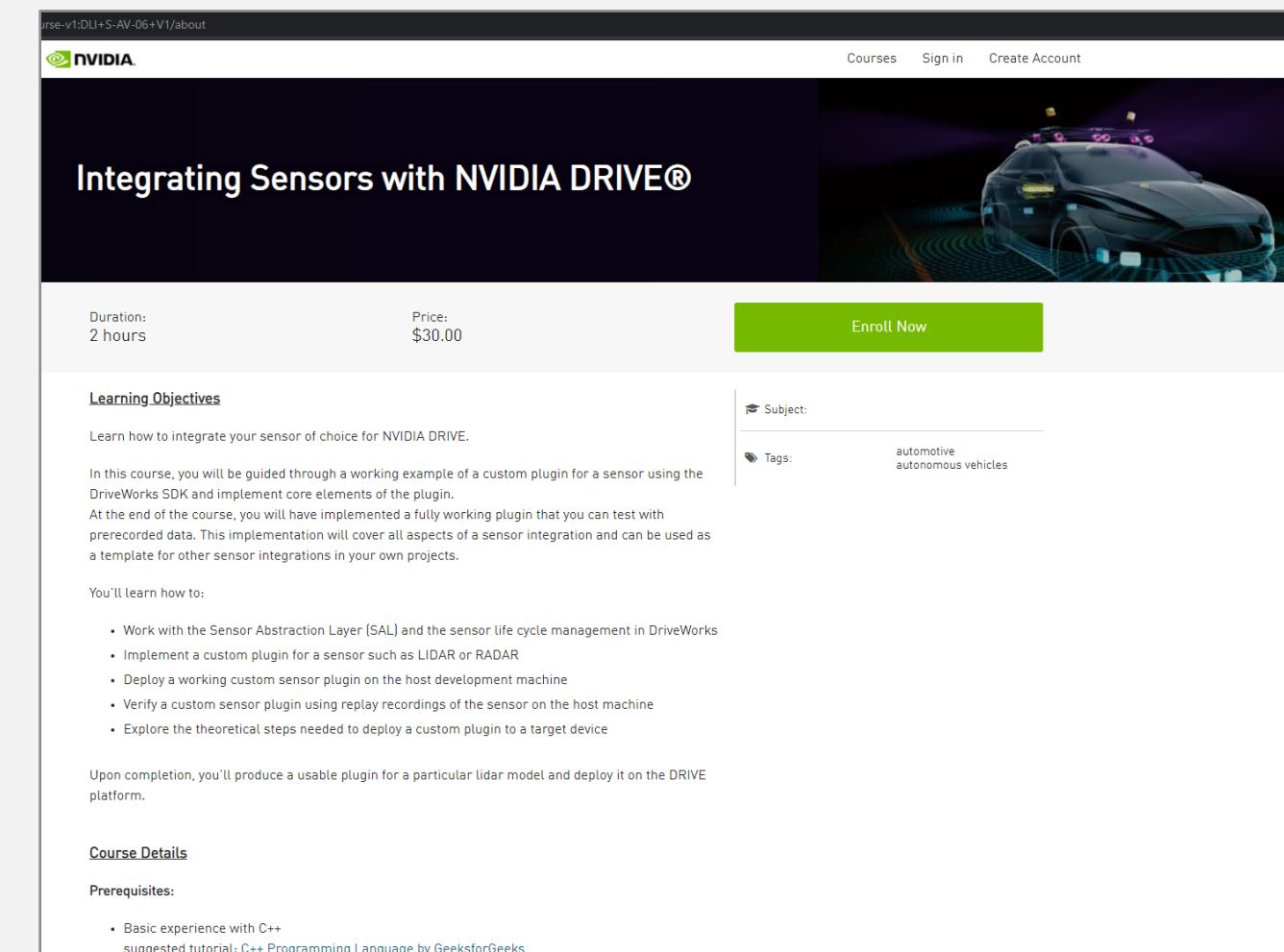
Numerous self-paced and instructor-led courses,
Some recommendations:

- ▶ [Integrating Sensors with NVIDIA DRIVE](#)
- ▶ [Fundamentals of Accelerated Computing with CUDA C/C++](#)
- ▶ [Optimization and Deployment of TensorFlow Models with TensorRT](#)
- ▶ [Deep Learning at Scale with Horovod](#)

[Link to Deep Learning Institute](#)
[Link to Course Catalog PDF](#)



The banner features the text "DEEP LEARNING INSTITUTE" at the top left and a three-line menu icon at the top right. Below this is the heading "Explore DLI Solutions". Two images are shown: one of a person wearing headphones and writing in a notebook, and another of a person sitting at a desk looking at a laptop. Below each image is a green link: "Self-Paced, Online Courses" and "Live Instructor-Led Workshops". At the bottom right is a link "Explore live workshop offerings >".



This screenshot shows a course page for "Integrating Sensors with NVIDIA DRIVE®". The page includes the NVIDIA logo, a "Courses" link, and a "Sign in" link. The main title is "Integrating Sensors with NVIDIA DRIVE®" with a subtitle "Duration: 2 hours Price: \$30.00 Enroll Now". Below the title are sections for "Learning Objectives" (describing how to integrate a sensor for DRIVE), "What you'll learn" (a bulleted list of tasks like working with SAL and implementing custom plugins), and "Upon completion" (mentioning a producible plugin). The page also lists "Subject: automotive autonomous vehicles" and "Tags: automotive autonomous vehicles".

A complex network graph is displayed against a dark gray background. The graph consists of numerous small white dots representing nodes, interconnected by thin, light gray lines representing edges. Approximately one-third of the nodes are highlighted with a bright green color. These green nodes are primarily located in the upper half of the image, forming several distinct clusters. One large cluster is situated in the upper left, another in the upper center, and a third in the upper right. A few isolated green nodes are scattered in the lower half. The overall effect is a visual metaphor for a social network or a complex system of connections.

NEED HELP?

GOT STUCK? TRY TO...



Check Out the [DRIVE OS](#) and [DriveWorks](#) Documentation

Comprehensive documentation that includes many samples that illustrate how to leverage the DRIVE SDK



Browse the [Support Forum](#)

The Forum contains 1000+ experiences of other users with answers by our support team. If your question is not already covered – [feel free to raise it](#)



Submit a Bug

Raise a bug if suggested by the Forum Support team or via [NVONLINE](#) if applicable.
Our tech teams will support with information and guidance



Contact your Distributor or NVIDIA Representative

The issue persists? Contact your Developer Relations Manager or Account Manager



SUPPORT FORUM

The Forum contains an ever-evolving collection of customer questions and answers by our support team.

If your question is not already covered
— feel free to raise it

The Forum team usually **replies within 24h**

Raising questions in the Forum requires Developer Login

[Link to DRIVE AGX Orin Forum](#)

NVIDIA DEVELOPER Home Blog Forums Docs Downloads Training
DRIVE Solutions Downloads Documentation Training
Home > DRIVE > NVIDIA DRIVE - Autonomous Vehicle Development Platforms

NVIDIA DRIVE End-to-End Solutions for Autonomous Vehicles

Resources

- Downloads
- Forums
- Training
- DRIVE Videos
- Technical Blog
- Corporate Blog

NVIDIA HOME BLOG FORUMS DOCS DOWNLOADS TRAINING Log In Q ≡

AUTONOMOUS VEHICLES ▾ DRIVE AGX ORIN ▾ ALL TAGS ▾ ALL ▾ LATEST

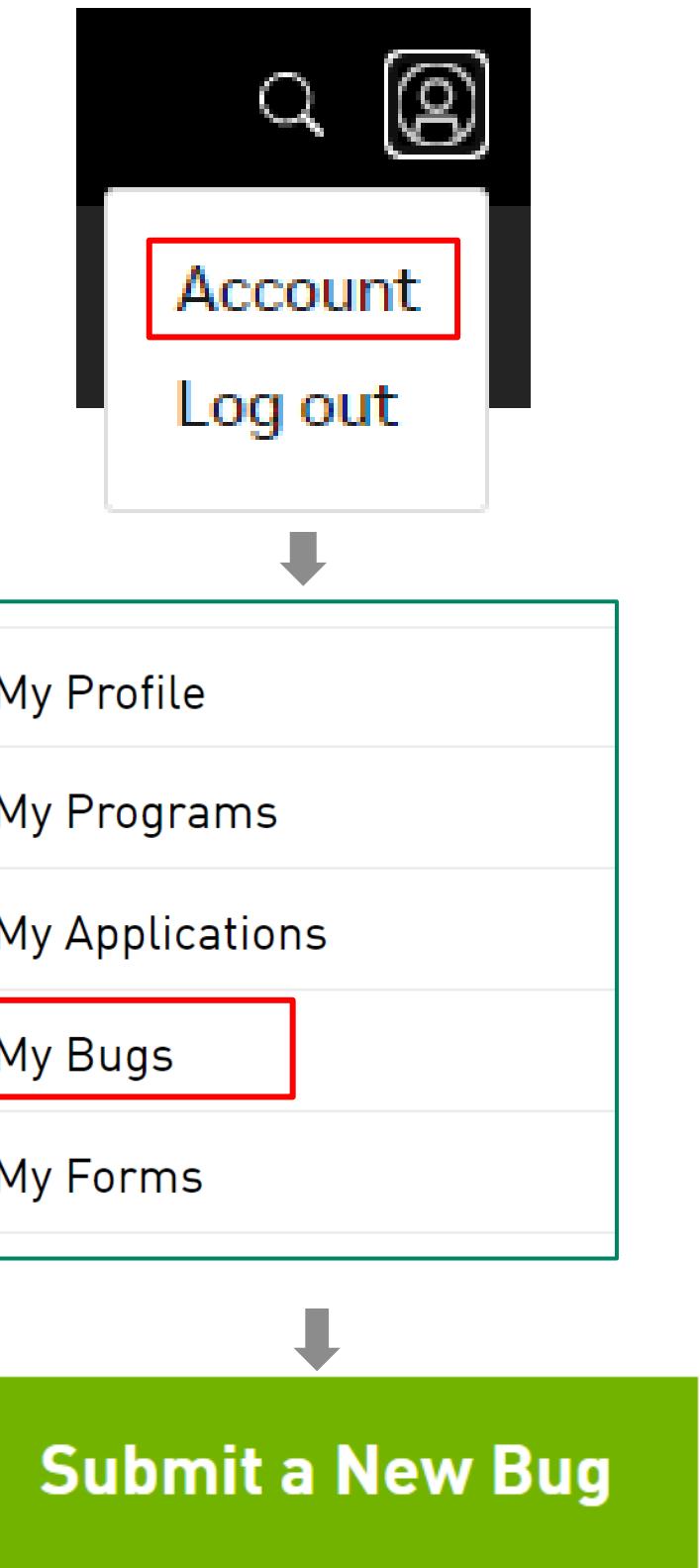
Topic	Replies	Views	Activity
DRIVE Orin DevKit bootburn Upgrade failed from 6.0.2 to 6.0.3 drive-platform-setup	7	275	Jun 2
Does Orin, Xavier, PX2 support OpenMP? drive-applications	1	256	May 12
TensorRT context consume mush memory on Orin tensorrt python	3	219	May 12
🔒 How to use hw encoder in drive Orin driveos-nvmedia	6	231	May 11



IF FORUM CAN'T HELP

Report a Bug

- ▶ Reporting a Bug on NVIDIA Developer (aka DevZone) for confidential content
- ▶ Login to <https://developer.nvidia.com/drive>
- ▶ In upper right user picture, click the down arrow
- ▶ Select “Account”
- ▶ In the left navigation menu, select “My Bugs”
- ▶ Select “Submit a New Bug” (in upper right green box, or within text of bounded green box)
- ▶ Fill in the details of your feedback, request or issue
- ▶ **IMPORTANT:**
 - ▶ When Filing a Bug, be sure to include the Platform Name – e.g. [DRIVE AGX Orin] in the summary, and
 - ▶ Select DRIVE [Autonomous Driving] for Relevant Area
- ▶ If you have any issues, please contact InfoDRIVEPX@nvidia.com
- ▶ Request: Create one bug per issue: do not file multiple issues in the same report

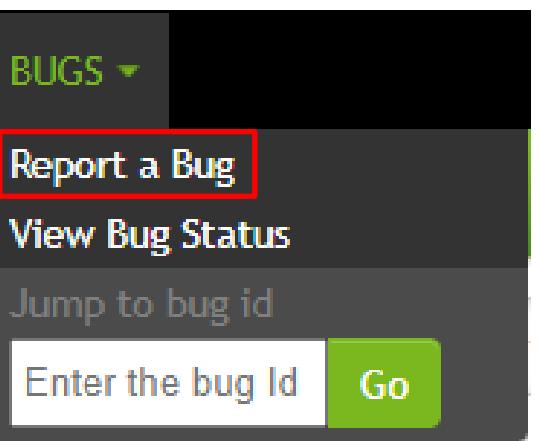




NVONLINE

Report a Bug

- ▶ Report a Bug on NVONLINE
- ▶ Login to <https://partners.nvidia.com/>
- ▶ In upper left, select BUGS > Report a Bug
- ▶ Fill in the details of your feedback, request or issue
- ▶ IMPORTANT: When filing Bug, under Project
 - ▶ Click Project
 - ▶ Select DRIVE
 - ▶ If you do not have this project, please contact InfoDRIVEPX@nvidia.com
- ▶ Request: Create one bug per issue; do not file multiple issues in the same report
- ▶ Tracking a Bug (track status, provide additional information)
- ▶ In upper left, select BUGS > View Bug Status





FILE A NVBUG – DETAILS

(1/2)

The screenshot shows the 'REPORT A BUG' page on the NVIDIA NVONLINE website. The page has a dark header with the NVIDIA logo and 'NVONLINE'. Below it, a navigation bar includes 'HOME' and 'BUGS'. The main section is titled 'REPORT A BUG' with a sub-instruction: 'Please provide as much information as possible so we can quickly process the issue. Thank You.'.

The form fields are as follows:

- Problem Type:** Radio buttons for Software Issue (selected), Hardware Issue (Dev), Hardware Quality Issue (Post Prod), and Operations Quality Issue.
- Synopsis:** Text area for a brief description of the issue.
- Description:** Three numbered steps for reproducing the issue:
 1. Please describe the issue:
 2. Detailed steps on how to reproduce the issue:
 3. Observed vs Expected Behavior:
- Division Name:** Drop-down menu with '- Select Any -' option.
- Project:** Text input field with a note: '(select from list or create new)' followed by links to 'Project' or 'new project'.
- Site:** Drop-down menu.
- Product:** Drop-down menu with options: AP20H, AP25, AP30.
- Operating System:** Drop-down menu with options: N/A, .Net Server, Android, Android - cupcake.
- Computer Type:** Radio buttons for PC (selected), Mobile, and Mac.
- Driver version:** Text input field.
- Cust. Severity:** Drop-down menu with 'Low' selected.
- Cust. Priority:** Drop-down menu with '3 - Low' selected.
- Fix Needed in Production By:** Text input field with a calendar icon.

Callout boxes with arrows point to specific fields:

- An arrow points from the 'Problem Type' text to the 'Problem Type' radio buttons.
- An arrow points from the 'Synopsis' field to the 'Synopsis' text area.
- An arrow points from the 'Description' text area to the 'Description' steps.
- An arrow points from the 'Division Name' dropdown to the 'Division Name' dropdown.
- An arrow points from the 'Project' text input to the 'Project' link.
- An arrow points from the 'Site' dropdown to the 'Site' dropdown.
- An arrow points from the 'Product' dropdown to the 'Product' dropdown.
- An arrow points from the 'Operating System' dropdown to the 'Operating System' dropdown.
- An arrow points from the 'Computer Type' radio buttons to the 'Computer Type' radio buttons.
- An arrow points from the 'Driver version' text input to the 'Driver version' text input.
- An arrow points from the 'Cust. Severity' dropdown to the 'Cust. Severity' dropdown.
- An arrow points from the 'Cust. Priority' dropdown to the 'Cust. Priority' dropdown.
- An arrow points from the 'Fix Needed in Production By' text input to the 'Fix Needed in Production By' text input.

Callout boxes with descriptive text:

- Problem Type:** select either Software Issue or Hardware Issue (Dev) - not others!
- Product:** select Parker if you are using DRIVE PX 2 (AutoChasseur, AutoCruise, G3) or DRIVE CX 2; select Xavier if you are using DRIVE Development Platform.
- Operating System:** select Linux, Android or QNX.
- Computer Type:** select Mobile.
- Driver version:** Enter version # of release, e.g. 4.1.2.0 (as displayed on release files).
- Cust. Severity:** select severity.
Cust. Priority: select priority.
- Division Name:** select Customer / Partner Name from drop down list.
Project Name: Click Project and select DRIVE.



FILE A NVBUG – DETAILS

(2/2)

NVIDIA NVONLINE

HOME BUGS ▾

REPORT A BUG

Please provide as much information as possible so we can quickly process the issue. Thank You.

* Problem Type:

Software Issue Hardware Issue (Dev)
 Hardware Quality Issue (Post Prod) Operations Quality Issue

* Synopsis:

* Description:

1. Please describe the issue:
2. Detailed steps on how to reproduce the issue:
3. Observed vs Expected Behavior:

* Division Name:

- Select Any -

* Project (select from list or create new):
[Project](#) or [new project](#)

* Product:

AP20H
AP25
AP30

* Operating System:

N/A
.Net Server
Android
Android - cupcake

* Computer Type:

PC Mobile Mac

* Driver version:

Cust. Severity:

Low

Cust. Priority:

3 - Low

Fix Needed in Production By:

Synopsis: enter the bug title using [PartnerName][Platform][SW] <Short Description>, e.g. [MyCmpny][DRIVE PX 2 AutoChauffeur][V4.1L] Camera not responding.

Description: describe your issue with as much details as possible. For e.g. and if applicable:

- SDK/PDK version used on the host and target:
Example - V4.1L Alpha 2.0 4.1.2.0
- Target Platform: DRIVE PX 2 AutoChauffeur, DRIVE PX 2 AutoCruise, DRIVE PX 2 - G3 (dGPU), DRIVE AGX Xavier or Pegasus
- Detailed description of the issue with step-by-step instructions to reproduce the failure
- Repeatability (<10% / 30% / 50% /100%)
- Impact of issue: e.g., how this is affecting your project
- Attach log files (under Attach file:)

Remember to SUBMIT your report!

