



# NVIDIA JETSON AGX XAVIER DEVELOPER KIT POWERING AI IN AUTONOMOUS MACHINES.

## Usher in a new era of autonomous machines with the NVIDIA Jetson AGX Xavier Developer Kit.

Now, you can develop and deploy autonomous machines at scale with the powerful NVIDIA® Jetson AGX Xavier™ Developer Kit. It's capable of running modern, advanced neural networks and other AI workloads to solve problems in manufacturing, logistics, retail, service, agriculture, smart cities, and portable medical devices. Plus, it delivers up to 32 TOPS and can operate in as little as 10 W.

The Jetson AGX Xavier Developer Kit helps you speed innovation. As part of NVIDIA's world-leading AI platform, it's integrated with NVIDIA tools and workflows that let you train neural networks faster, which means more iterations and better accuracy.

It's also supported by NVIDIA CUDA®, cuDNN, and TensorRT™ software libraries, as well as our JetPack™ and DeepStream SDKs. This helps you boost performance while reducing development cost and effort.

Learn more about the Jetson AGX Xavier Developer Kit and get access to documentation, training, and tutorials at [www.developer.nvidia.com/jetson-agx-xavier](http://www.developer.nvidia.com/jetson-agx-xavier).



### KEY FEATURES

#### Module

- > 512-Core NVIDIA Volta™ GPU with Tensor Cores
- > (2x) NVDLA Engines
- > 8-Core ARM® v8.2 64-Bit CPU
- > 32 GB 256-Bit LPDDR4x
- > 32 GB eMMC 5.1 Flash Storage
- > 7-Way VLIW Vision Accelerator Processor

#### Buttons

- > Power On/Off
- > Force Recovery
- > Reset

#### > Power Options

- > External 19 V AC Adapter

#### I/O

- > (2x) USB 3.1 Type C (10 GT/s)
- > PCIe x8/SLVS-EC x8
- > Gigabit Ethernet
- > (1x) Hybrid eSATA/USB 3.0 Type A
- > (3x) eDP/DP/HDMI at 4K @ 60 | HDMI 2.0, DP1.4
- > (16x) CSI-2 Lanes
- > M.2 Key E, M.2 Key M
- > Micro SD/UFS
- > UART, SPI, CAN, I<sup>2</sup>C, I<sup>2</sup>S, DMIC, GPIOs

# NVIDIA JETSON AGX XAVIER

## TECHNICAL SPECIFICATIONS

### DEVELOPER KIT

|                    |  |
|--------------------|--|
| GPU                | <b>512-Core Volta GPU with Tensor Cores</b>          |
| CPU                | <b>8-Core ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3</b> |
| Memory             | <b>32 GB 256-Bit LPDDR4x   137 GB/s</b>              |
| Storage            | <b>32 GB eMMC 5.1</b>                                |
| DL Accelerator     | <b>(2x) NVDLA Engines</b>                            |
| Vision Accelerator | <b>7-Way VLIW Vision Processor</b>                   |
| Encoder/Decoder    | <b>(2x) 4K @ 60   12-Bit Support</b>                 |
| Size               | <b>105mm x 105mm x 65mm</b>                          |
| Deployment         | <b>Module (Jetson AGX Xavier)</b>                    |

### DEVELOPER KIT I/Os      JETSON AGX XAVIER MODULE INTERFACE

|                        |   |
|------------------------|---|
| PCIe X16               | <b>x8 PCIe Gen4/x8 SLVS-EC</b>  |
| RJ45                   | <b>Gigabit Ethernet</b>   |
| USB-C                  | <b>2x USB 3.1, DP (Optional), PD (Optional)<br/>Close-System Debug and Flashing Support on 1 Port</b> |
| Camera Connector       | <b>(16x) CSI-2 Lanes</b>  |
| M.2 Key M              | <b>NVMe</b>   |
| M.2 Key E              | <b>PCIe x1 + USB 2.0 + UART (for Wi-Fi/LTE) / I<sup>2</sup>S/PCM</b>                                  |
| 40-Pin Header          | <b>UART + SPI + CAN + I<sup>2</sup>C + I<sup>2</sup>S + DMIC + GPIOs</b>                              |
| HD Audio Header        | <b>High-Definition Audio</b>  |
| eSATAp + USB3.0 Type A | <b>SATA Through PCIe x1 Bridge + USB 3.0<br/>(PD + Data for 2.5-inch SATA)</b>                        |
| HDMI Type A/DP         | <b>HDMI 2.0, DP 1.4</b>   |
| uSD/UFS Card Socket    | <b>SD/UFS</b>   |

Visit [www.developer.nvidia.com/jetson-agx-xavier](http://www.developer.nvidia.com/jetson-agx-xavier) to learn more.

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