

NVIDIA® JETSON™ TX2

SUPERCOMPUTER ON A MODULE FOR AI AT THE EDGE

TAKE REAL-TIME AI PERFORMANCE FARTHER WITH THE HIGH-PERFORMANCE, LOW-POWER JETSON TX2.

The most innovative technology for AI computing and visual computing comes in a supercomputer the size of a credit card. Its small form factor and power envelope make the Jetson TX2 module ideal for intelligent edge devices like robots, drones, smart cameras, and portable medical devices.

Jetson TX2 features a variety of standard hardware interfaces that make it easy to integrate it into a wide range of products and form factors. Plus, it comes with the complete Jetpack SDK, which includes the BSP, libraries for deep learning, computer vision, GPU computing, multimedia processing, and much more to accelerate your software development. And it's supported by the Jetson developer site, which includes documentation, tutorials, and an ecosystem of partners and developers. It's never been easier to get started with AI.

For detailed specifications, design guides, Jetpack, and everything else you need to develop with Jetson, go to developer.nvidia.com/embedded-computing.

KEY FEATURES

Jetson TX2 Module

- > NVIDIA Pascal™ architecture GPU
- > Dual-core Denver 2 64-bit CPU + quad-core ARM A57 Complex
- > 8 GB L128 bit LPDDR4
- > 32 GB eMMC 5.1

Power

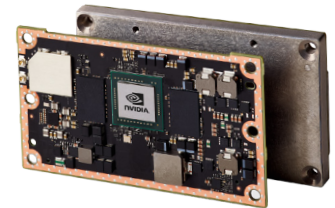
- > Voltage input: 5.5 V-19.6 V DC
- > Maximum module power: 7.5W – 15 W*

Software

- > Linux for NVIDIA Tegra® driver package, including Ubuntu-based sample file system
- > AI, Compute, Multimedia, and Graphics libraries and APIs

I/O

- > USB 3.0 Type A
- > USB 2.0 Micro AB (supports recovery and host mode)
- > HDMI
- > M.2 Key E
- > PCI-E x4
- > Gigabit Ethernet
- > Full-Size SD
- > SATA Data and Power
- > GPIOs, I2C, I2S, SPI, CAN**
- > TTL UART with Flow Control
- > Display Expansion Header**
- > Camera Expansion Header**



CONTENTS

- > NVIDIA Jetson TX2
- > Attached Thermal Transfer Plate (TTP)

TECHNICAL SPECIFICATIONS

FEATURES	JETSON TX2
Graphics	NVIDIA Pascal™, 256 NVIDIA CUDA® cores
CPU	HMP Dual Denver 2/2MB L2 + Quad ARM® A57/2MB L2
Video	4K x 2K 60 Hz Encode (HEVC) 4K x 2K 60 Hz Decode (12-bit support)
Memory	8 GB 128-bit LPDDR4 58.3 GB/s
Display	HDMI 2.0 / eDP 1.4 / 2x DSI / 2x DP 1.2
CSI	Up to 6 cameras (2 lane) CSI2 D-PHY 1.1 (2.5 Gbps/lane)
PCI-E	Gen 2 1x4 + 1x1 OR 2x1 + 1x2
Data Storage	32 GB eMMC, SDIO, SATA
Other	CAN, UART, SPI, I2C, I2S, GPIOs
USB	USB 3.0 + USB 2.0
Connectivity	1 Gigabit Ethernet, 802.11ac WLAN, Bluetooth
Power	7.5 W / 15 W*
Mechanical	50 mm x 87 mm (400-pin Compatible Board to Board Connector)

Visit www.nvidia.com/embedded to learn more.

* Power and thermal solution: refer to the OEM Product Design Guide and the Thermal Design Guide

** I/O expansion headers: refer to product documentation for header specification

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