



# NVIDIA JETSON TX2 NX TX2 PERFORMANCE. NANO SIZE.

## Next-level performance for mass-market AI products

NVIDIA<sup>®</sup> Jetson<sup>™</sup> TX2 NX delivers the next step in AI performance for entry-level embedded and edge products. It provides up to 2.5X the performance of Jetson Nano, and shares form-factor and pin compatibility with Jetson Nano and Jetson Xavier<sup>™</sup> NX.

This small, lower-cost version of Jetson TX2 is perfect for creating mass-market Al products. Intelligent machine OEMs can scale their product offerings with pincompatible Jetson modules, while using cloud-native technologies to build, deploy, and manage the same software across all of them.

The Jetson TX2 NX system-on-module (SOM) packs hardware accelerators for the entire AI pipeline, including ISP, encoder, decoder, image compositor, and more. The NVIDIA JetPack<sup>™</sup> SDK includes libraries and samples for using these accelerators, as well as the latest NVIDIA tools for faster application development and optimization. All major AI frameworks are supported.

Pre-trained AI models from NVIDIA NGC<sup>™</sup> and the NVIDIA Transfer Learning Toolkit also give you a great way to accelerate time-to-market. You can now develop custom AI networks with less effort, and containerized deployments make updates flexible and seamless.

Ease of development and speed of deployment—plus a unique combination of formfactor, performance, and power advantage—make Jetson TX2 NX the ideal massmarket AI product platform to get to market and continuously update over the lifetime of a product.

### **KEY FEATURES**

#### **NVIDIA Jetson TX2 NX**

- > NVIDIA Pascal<sup>™</sup> architecture with 256 NVIDIA<sup>®</sup> CUDA<sup>®</sup> cores
- > Dual-core NVIDIA Denver 2 64-bit CPU and quad-core Arm<sup>®</sup> Cortex<sup>®</sup>-A57 MPCore processor complex
- > 4GB 128-bit LPDDR4
- > 16GB eMMC 5.1
- > 10/100/1000 Base-T Ethernet

#### Power

- > Voltage Input: 5V
- Module Power: 7.5W -15W

## NVIDIA JETSON TX2 NX MODULE TECHNICAL SPECIFICATIONS

Al Performance	1.33 TFLOPS
GPU	NVIDIA Pascal architecture with 256 NVIDIA CUDA cores
Max GPU Freq	1.3GHz
CPU	Dual-core NVIDIA Denver 2 64-bit CPU and quad-core Arm® Cortex®-A57 MPCore processor complex
CPU Max Freq	2.0GHz
Memory	4GB 128-bit LPDDR4 51.2GB/s
Storage	16GB eMMC 5.1
Power	7.5W   15W
PCIe	1 x1 + 1 x2, total 30GT/s (PCIe Gen2)
CSI Camera	Up to 5 cameras (12 via virtual channels) 12 lanes MIPI CSI-2 (3x4 or 5x2) D-PHY 1.2 (up to 30Gbps)
Video Encode	1x 4Kp60   3x 4Kp30   4x 1080p60   8x 1080p30 (H.265) 1x 4Kp60   3x 4Kp30   7x 1080p60   14x 1080p30 (H.264)
Video Decode	2x 4Kp60   4x 4Kp30   7x 1080p60   14x 1080p30 (H.265 & H.264)
Display	2 multi-mode DP 1.2/eDP 1.4/HDMI 2.0 1x 2 DSI (1.5Gbps/lane)
Networking	10/100/1000 Base-T Ethernet
USB	1x USB 3.1 (5Gbps)   3x USB 2.0
Other IOs	1x SDIO   2x SPI   3x UART   4x I2S   4x I2C   1x CAN   GPIOs
Mechanical	45 mm x 69.6 mm 260 pin SO-DIMM edge connector

#### Learn more at www.nvidia.com/Jetson

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