

Jetson Introduction



EXPLORE THE FUTURE OF EMBEDDED COMPUTING

NVIDIA Jetson™ is the world's leading platform for autonomous machines and other embedded applications. It includes Jetson modules, which are small form-factor, high-performance computers, the NVIDIA JetPack™ SDK for accelerating software, and an ecosystem with sensors, SDKs, services, and products to speed up development. Jetson is compatible with the same AI software and cloud-native workflows used across other NVIDIA platforms, and delivers the performance and power-efficiency customers need to build software-defined autonomous machines.



SCALABLE, FLEXIBLE EMBEDDED HARDWARE SOLUTION

Each NVIDIA Jetson is a complete System on Module (SOM) including CPU, GPU, memory, power management, high-speed interfaces, and more. Jetson modules are available in various combinations of performance, power-efficiency, and form factor so they can be used by medical customers across medical AI application. Jetson ecosystem partners such as Onyx-healthcare providing software, hardware design services, and off-the-shelf compatible products from carrier boards to full systems, so you can get to market faster with medical AI embedded and edge device

JS500 INTRODUCTION Compact AI computing unit

NVIDIA Jetson AGX Xavier Platform

- 512 NVIDIA CUDA Cores
- 64 Tensor Cores
- 22 TOPS (INT8)

Support Multi-Storage Interface

- 32GB eMMC
- M.2 NVMe 2280
- Micro SD Card Slot

Support Optional

- 3G & 12G SDI

Support Optional

- Built-in Internal Speaker

Power Efficiency

- 10W
- 15W
- 30W

Optional Wi-Fi + BT Support

Optional Wi-Fi + BT Support

Smart Fan Design

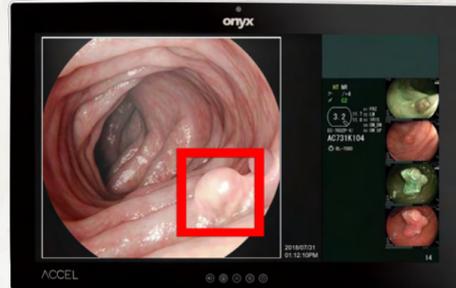
Medical Certification

- CE
- FCC
- UL



APPLICATION

ENTEROSCOPY POLYP IDENTIFICATION



An important concern for doctors and patients during the endoscope exam would be relating to the polyps hidden in the folds of an intestinal wall that can be overlooked, and are not easy to detect. With the help of **AI, real-time results can be more accurate in finding any problem areas.** However, AI requires high-performance hardware in order to operate. **The Onyx Accel series is compatible with a variety of major AI computing models.** So that medical personnel will not be affected by fatigue or environmental factors and can **always provide the best medical service to their patients.**

MINIMALLY INVASIVE SPINAL SURGERY ROBOT-ASSIST SYSTEM



Due to the spine has many nerves, patients are often worried about accidental injury caused during the operation. Surgeons have to be 100% attention and make sure their hand are steady during the spinal operations lasting three hours, on average. With a **robotic arm**, surgeons have the benefit of a tool that **can be positioned to aid the physician** while performing an operation and help with fatigue. **Onyx Accel series all have medically certified and includes high-resolution image output and real-time image recognition** by the combination of a variety of **high performance AI modules.** Our solution enables the AI system to immediately warn when the surgeon's operating range is slightly shifted to **reduce the dangers to patients** during spinal operations and to assist orthopedic physicians in performing **higher-quality medical treatment.**



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ACCELERATE INFERENCE

ACCEL PRESENTS HIGHLY COMPATIBLE AI READY SOLUTION



www.onyx-healthcare.com

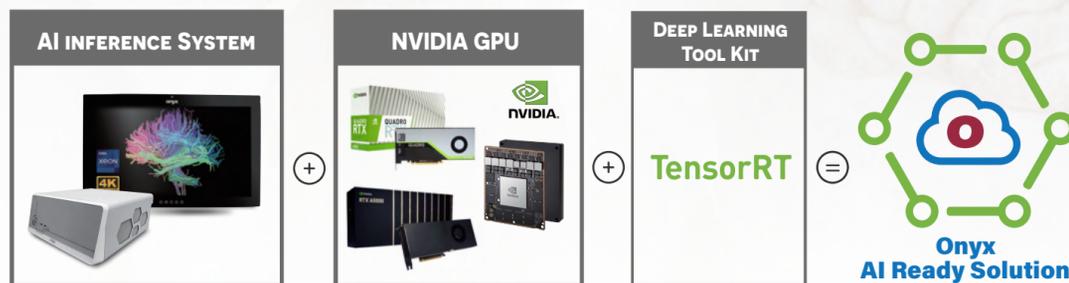


Onyx Joins Nvidia Partner Network for Medical AI Ecosystem Solutions



Nvidia is a global leader in AI development and provides a wide range of solutions and tools for AI developers, with diverse product applications ranging from uses with drones, to smart factories, self-driving cars, as well as the healthcare industry. In order to provide a complete range of medical AI solutions, Onyx Healthcare has joined the Nvidia Partner Network as a hardware manufacturing partner for their medical AI ecosystem solutions. Nvidia and Onyx Healthcare are dedicated to working together with medical customers to speed up the implementation of AI technology to make significant contributions to improving healthcare for people everywhere.

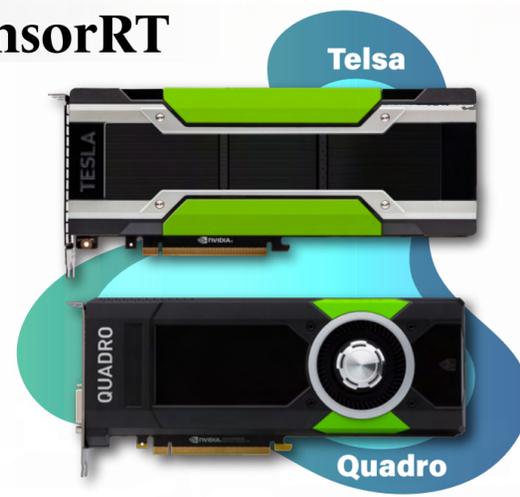
Onyx AI Inference Platform



NVIDIA GPU with TensorRT

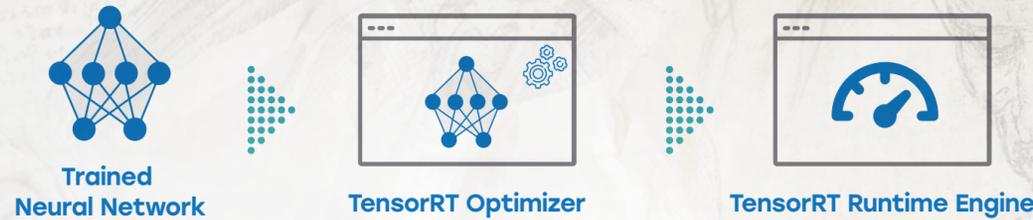
NVIDIA AI Accelerator: Telsa/Quadro GPU

NVIDIA GPU provides an immediate path to greater deep learning performance. GPUs had evolved into highly parallel multi-core systems, allowing very efficient manipulation of large blocks of data. This design is more effective than general-purpose central processing unit (CPUs) for algorithms in situations where processing large blocks of data is done in parallel. Processing large blocks of data is basically what deep learning does.



NVIDIA TensorRT™ - PROGRAMMABLE INFERENCE ACCELERATOR

NVIDIA TensorRT™ is an SDK for high-performance deep learning inference. It includes a deep learning inference optimizer and runtime that delivers low latency and high-throughput for deep learning inference applications. TensorRT-based applications perform up to 40x faster than CPU-only platforms during inference. With TensorRT, you can optimize neural network models trained in all major frameworks, calibrate for lower precision with high accuracy, and finally deploy to your product platforms.



Onyx AI Ready Platform



ACCEL-A3201/2701/2401/2203 FEATURES

- Intel Xeon/Core i7 Processor
- One PCI Express[x16], one PCI Express[x4] and one PCI Express[x1] slots for NVIDIA GPU and I/O cards(ACCEL-A3201/A2701/A2401)
- One MXM slot and one PCI Express[x4] slot for NVIDIA GPU and I/O card(ACCEL-A2203)
- 4x USB 3.0 / 2 x Gigabit LAN

ACCEL-VM500 / VM1000 is a Bridge of Human and Computer

VM1000 INTRODUCTION Dual Graphic card AI computing unit

ACCEL-VM1000 leverage Nvidia Technology to provide two high end GPU solution with equipping 12th Generation i9 Intel processor and up to 128GB ECC or Non-ECC memory and provides four expansion slots to integrate 2 graphic card and 1 excellent thermal solution to ensure reliability of the system, it makes ACCEL-VM1000 to be the best solution for AI Medical image computing platform



VM500 INTRODUCTION Powerful AI computing unit

ACCEL-VM500 has dual-slot PCI Express [x16] for high end graphic card integration with up to 250W. Onyx has pre-selected high end NVIDIA Quadro RTX A4000 and RTX A5000, so the customer can choose either one for installation

