

Leetop A203 Carrier Board

Nvidia Jetson Nano / Xavier NX

Take supercomputer performance to the edge.

Small Size. Small Price. Big AI Discoveries.

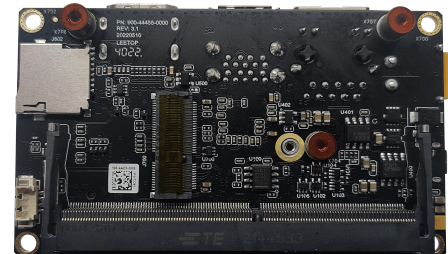
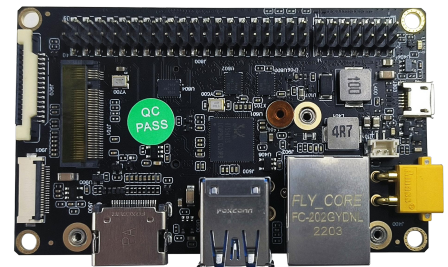
Leetop A203, based on discover the power of AI and robotics with NVIDIA® Jetson . It's small, powerful, and priced for everyone . This means educators, students, and other enthusiasts can now easily create projects with fast and efficient AI using the entire GPU-accelerated NVIDIA software stack.

The Leetop A203 benefits from new cloud-native support across the entire Jetson platform line-up, making it easier to build, manage, and deploy AI at the edge.

Pre-trained AI models from NVIDIA NGC together with the NVIDIA Transfer Learning Toolkit, provides a faster path to trained and optimized AI networks. Containerized deployment to Jetson devices also allows flexible and seamless updates.

NVIDIA JetPack™ SDK enables multi-modal AI application development for Leetop A203 with accelerated libraries supporting all major AI frameworks, as well as computer vision, computer graphics, multimedia, and more. Together with the latest NVIDIA tools for application development and optimization, JetPack ensures fast time to market and reduced development costs.

Designed for ease of development and speed of deployment, Leetop is the most flexible and scalable platform to get to market and continuously update AI software over the lifetime of a product.



Interface

Interface	Specification
Network	1 x Gigabit Ethernet Connector (10/100/1000)
Video Output	1x HDMI
USB	2x USB 3.0 Type A (Integrated USB 2.0) ; 1x USB 3.0 0.5mm pitch 20P ZIF ; 1x USB 2.0 15 Pin/1x USB 2.0 Micro-AB
M.2 KEY E PCIE	1x PCIE 2230 SIZE
M.2 KEY M	1x M.2 KEY M (NVMe SIZE 2242 SSD)
Serial	1x CAN
Camera	1x CSI CAMERA
I2S	1x I2S(3.3V Level)
Misc.	2x I2C Link (+3.3V I/O) ;6x GPIO ; 1x UART ; 2x SPI
Power Requirements	+9V to +19V DC Input @ 3A

KEY FEATURES

Processor	NVIDIA Jetson Xavier NX	NVIDIA Jetson Nano
AI Performance	21 TOPS (INT8)	472 GFLOPs
GPU	384-core NVIDIA Volta™ GPU with 48 Tensor Cores	128-core NVIDIA Maxwell™ GPU
GPU Max Freq	1.1GHz	
CPU	6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6MB L2 + 4MB L3	Quad-core ARM Cortex-A57 MPCore processor
CPU Max Freq	1.4Ghz	
Memory	16 GB 128-bit LPDDR4x 59.7GB/s	4 GB 64-bit LPDDR4 25.6GB/s/
Storage	16 GB eMMC 5.1	16 GB eMMC 5.1
Power	10W 15W 20W	5W 10W
PCIe	1x1(PCIe Gen3, Root Port)+ 1x4(PCIe Gen4, Root Port & Endpoint)	1 x4 (PCIe Gen2)
CSI Camera	Up to 6 cameras (24 via virtual channels) 14 lanes MIPI CSI-2D-PHY 1.2 (up to 30 Gbps)	Up to 4 cameras 12 lanes MIPI CSI-2 D-PHY 1.1 (up to 18 Gbps)
Video Encode	2x 4K60 4x 4K30 10x 1080p60 22x 1080p30 (H.265) 2x 4K60 4x 4K30 10x 1080p60 20x 108p30 (H.264)	1x 4K30 2x1080p60 4x1080p30 4x720p60 9x720p30 (H.265 & H.264)
Video Decode	2x 8K30 6x 4K60 12x 4K30 22x 1080p60 44x 1080p30 (H.265) 2x 4K60 6x 4K30 10x 1080p60 22x 1080p30 (H.264)	1x 4K60 2x 4K30 4x 1080p60 8x 1080p30 9x 720p60 (H.265 & H.264)
Display	2 multi-mode DP 1.4/eDP 1.4/HDMI 2.0	2 multi-mode DP 1.2/eDP 1.4/HDMI 2.0
DL Accelerator	2x NVDLA v1	
Vision Accelerator	2x PVA v1	
Networking	10/100/1000 BASE-T Ethernet	10/100/1000 BASE-T Ethernet

Install Dimension

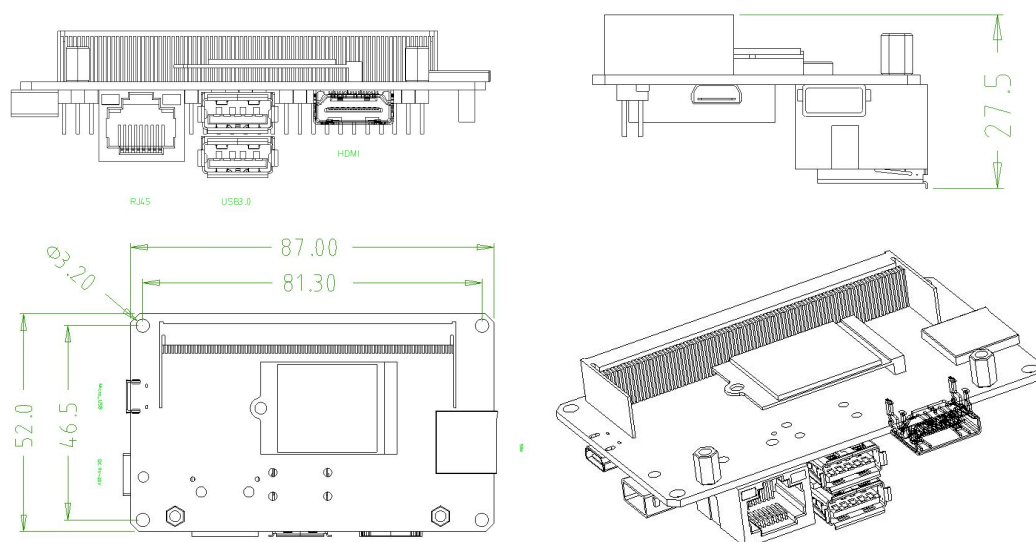


Figure 1

Ordering Information

Product name	Description
A203-NANO/XAVIER NX	A203 Carrier with Nvidia Jetson NANO/XAVIER NX
A203-NANO/XAVIER NX	A203 Carrier +Nvidia Jetson NANO/XAVIER NX + Passive Heat Sink
A203-NANO/XAVIER NX	A203 Carrier +Nvidia Jetson NANO/XAVIER NX + Active Heat Sink
A203-NANO/XAVIER NX	A203 Carrier +Nvidia Jetson NANO/XAVIER NX + Active Heat Sink + Extension Boards

Accessories (Optional)

Model	Specification
171-44496-0001	4g communication and keypad
171-44496-0002	Interface boards
LF01.007.0022	Active Heat Sink For Xavier NX (Leaf spring +Shoulder screw.)
LF01.007.0023	Active Heat Sink For Nano (Leaf spring +Shoulder screw.)
LF01.007.0024	Active Heat Sink For Tx2 NX (Leaf spring +Shoulder screw.)
LF01.001.0008	100-240V 45W 15V 3A Adapter
LF01.001.0004	Power Cord (Be careful to inform the country of use when selecting the option.)
LS01.020.0026	VX30-DC5521
LF01.009.0001	IMX219 Camera Mipi
LF01.008.0001kit	WiFi + Bluetooth + Antennae
LF01.002.0005	SSD 128G



Passive Heat Sink



Passive Heat Sink



Power Cord



Adapte



Power Adapter Cable