

X221



Boot from SSD with NVIDIA Jetson AGX Xavier

X221 development systems

These systems let you dive into AI with ease. They allow you to explore AI applications like people detection, face masking and more. The full suite of NVIDIA SDKs may be installed. At your choice these systems can be equipped with the entire family of NVIDIA compute modules in the AGX Xavier form factor.

The X221 features an industrial strength design and is commercially deployable in any volume.

Features

- 128 GB SSD with large boot partition for Linux, Jetpack 4.x, SDKs (VisionWorks, DeepStream and more)
- requires Linux host PC and Internet connection to initially flash the system and install the software
- a large variety of add-on modules available from Auvideo
- industrial strength design

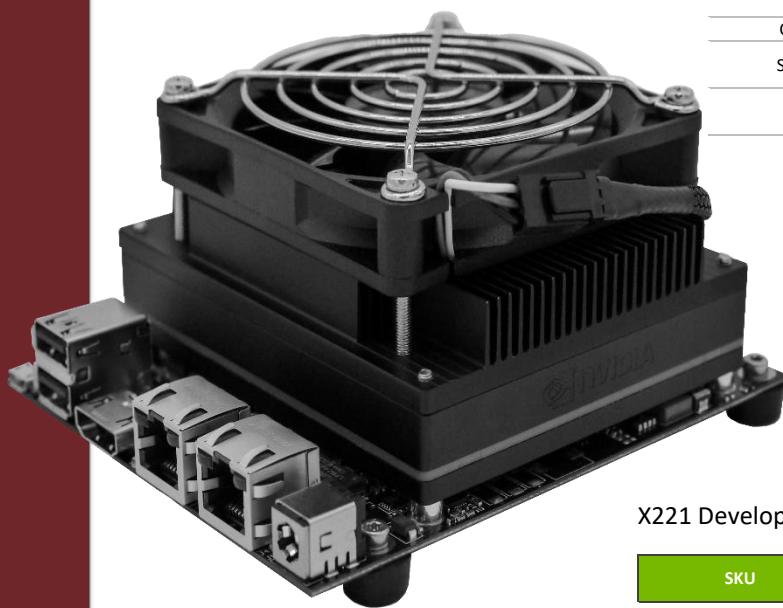


Photo shows prototype heatsink – production version in late Jan 2022

Description	X221
Power	6V - 19V (5.5/2.5mm barrel connector) Optional internal power connector: 4 pin Molex MicroFit 3mm
DP	no
HDMI	yes
Fan connector	yes
M.2 NVME Key M	yes
USB 3.1	2x USB 3.1 (native - full performance)
Micro USB	1x Micro USB (device mode only)
Auto Flashing	yes (plug in host cable and flash)
USB 2	no (3x with X221-AI)
Ethernet	2x Gigabit RJ45 (2 LEDs each) (RTL8111 PCIe to GbE)
RGB LED	controlled by 3 GPIOs
I2C	yes
PoE option	no
MIPI CSI-2	no (8x with X221-AI)
UART	no (yes with X221-AI)
Crypto chip	for software copy protection and licensing
Safety MCU	optional with X221-AI (enhanced safety features with AGX industrial)
Size	125x104.6mm flat bottom, no components on bottom side

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SKU	Kit	Compute module	SSD
70881-32-128	X221-AGX32-128GB	AGX 32GB	128GB
70881-AI-32-128	X221-AI-AGX32-128GB	AGX 32GB	128GB
70881-64-128	X221-AGX64-128GB	AGX64GB	128GB
70881-AI-64-128	X221-AI-AGX64-128GB	AGX64GB	128GB
70881-i32-128	X221-AGXi32-128GB	AGX32GB	128GB
70881-AI-i32-128	X221-AI-AGXi32-128GB	AGX32GB	128GB

Each system includes

- X221 carrier board
- compute module (AGX Xavier)
- 128GB Transcend NVME M.2 SSD (PCIe x4)
- custom designed heatsink and standard fan (80x80mm)
- 12V 60W power supply (FSP060-DHAN3)
- EU, US or UK power cable optional

Optional*

- fully populated variants available
- addon boards for more USB and Ethernet ports
- IMU
- board EEPROM
- extension port for PCIe x4/x1/USB/UART/I2C/GPIO
- LM823 WIFI modules (up to 2)
- 4-8 CSI-2 interfaces on extension port
- micro SD/UFS card
- RTC battery (rechargeable)
- over current protection
- UPS option for graceful power down
- on board MCU for watchdog and remote power cycle (LTE)

*available with fully populated X221-AI version

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