SEEED-110061402

PRODUCT DETAILS

reComputer J2022 is a hand-size edge AI box built with Jetson Xavier NX 16GB module which delivers up to 21 TOPs AI performance, a rich set of IOs including USB 3.1 ports(4x), M.2 key E for WIFI, M.2 Key M for SSD, RTC, CAN, Raspberry Pi GPIO 40-pin, and so on, aluminum case, cooling fan, pre-installed JetPack System, as NVIDIA Jetson Xavier NX Dev Kit alternative, ready for your next AI application development and deployment.

Features

- **Hand-size edge AI device:** built with Jetson Xavier NX 16GB Production Module, delivering 384 NVIDIA CUDA® cores delivers up to 21 TOPs AI performance with a small form factor of 130mm x120mm x 50mm.

- **NVIDIA Jetson Xavier NX Dev Kit alternative:** the carrier board brings rich IOs including a Gigabit Ethernet port, 4 USB 3.1 ports, an HDMI port, and a DP port

- **Pre-installed NVIDIA JetPack:** support the entire Jetson software stack and various developer tools for building fast and robust AI application provided by Seeed Edge AI partners, helps develop innovative AI solution for manufacturing, logistics, retail, service, agriculture, smart city, healthcare, and life sciences, etc

- **Expandable with the onboard interfaces and reComputer case**, able to mount on the wall with mounting holes on the back.

Description

reComputer series for Jetson are compact edge computers built with NVIDIA advanced AI embedded systems: J10 (Nano 4GB) and J20 (Jetson Xavier NX 8GB and Jetson Xavier 16GB), where the reComputer J2022 is the Jetson Xavier NX 16GB module carried by reComputer J202 carrier board. With rich extension modules, industrial peripherals, and thermal management, reComputer for Jetson is ready to help you accelerate and scale the next-gen AI product by deploying popular DNN models and ML frameworks to the edge and inferencing with high performance, for tasks like real-time classification and object detection, pose estimation, semantic segmentation, and natural language processing (NLP).

At Seeed Studio, you will find everything you want to work with the NVIDIA Jetson Platform – official NVIDIA Jetson Dev Kits, Seeed-designed carrier boards, edge devices, as well as accessories. Welcome to check out our free Edge AI partner program. We are looking forward to leveraging local and global resources to accelerate next-gen AI products together with you.

Comparison among reComputer J20 series and Official Dev Kits

Product	NVIDIA Jetson Xavier NX Developer Kit	reComputer J2012	reComputer J2021	reComputer J2022
Module	Xavier NX (not the production version)	Xavier NX 16GB (production version)	Jetson Xavier NX 8 GB	Jetson Xavier NX 16GB
AI Perf	21 TOPS			
GPU	384-core NVIDIA Volta™ GPU			
CPU	6-core NVIDIA Carmel ARM®v8.2 64-bit CPU 6 MB L2 + 4 MB L3			
Memory	8 GB 128-bit LPDDR4x @ 51.2GB/s	16 GB 128-bit LPDDR4x @ 59.7GB/s	8 GB 128-bit LPDDR4x @ 59.7GB/s	16 GB 128-bit LPDDR4x 59.7GB/s
Storage	MicroSD (Card not included)	16 GB eMMC 5.1		
Video encoder	2x 4K @ 30 | 6x 1080p @ 60 | 14x 1080p @ 30 (H.265/H.264)	2x 4K60 | 4x 4K30 | 10x 1080p60 | 22x 1080p30 (H.265) 2x 4K60 | 4x 4K30 | 10x 1080p60 | 20x 108p30 (H.264)		

Video decoder	2x 4K @ 60 | 4x 4K @ 30 | 12x 1080p @ 60 | 32x 1080p @ 30 (H.265) 2x 4K @ 30 | 6x 1080p @ 60 | 16x 1080p @ 30 (H.264)	2x 8K30 | 6x 4K60 | 12x 4K30 | 22x 1080p60 | 44x 1080p30 (H.265) 2x 4K60 | 6x 4K30 | 10x 1080p60 | 22x 1080p30 (H.264)	
Gigabit Ethernet	1*RJ45 Gigabit Ethernet Connector (10/100/1000)		
USB	4 * USB 3.1 Type A Connector; 1 * Micro-USB port for Device mode;	4 * USB 3.0 Type A Connector; 1 * Micro-USB port for Device mode;	4 * USB 3.1 Type A Connector; 1* USB Type-C (Device mode)
CSI Camera Connect	2*CSI Camera (15 pos, 1mm pitch, MIPI CSI-2)		
Display	1*HDMI Type A; 1*DP		
FAN	1* FAN connector(5V PWM)		

M.2 KEY E	1*M.2 Key E(WiFi/BT included)	1*M.2 Key E	
M.2 KEY M	1*M.2 Key M		
RTC	-	1*RTC Socket	RTC 2-pin RTC socket
Multifunctional port	1* 40-Pin header		
Power Requirements	DC Jack 19V 4.74A (MAX 90W)	12V/5A(Barrel Jack 5.5/2.5mm)	
Mechanical	103 mm x 90.5 mm x 31 mm	130mm x120mm x 50mm	