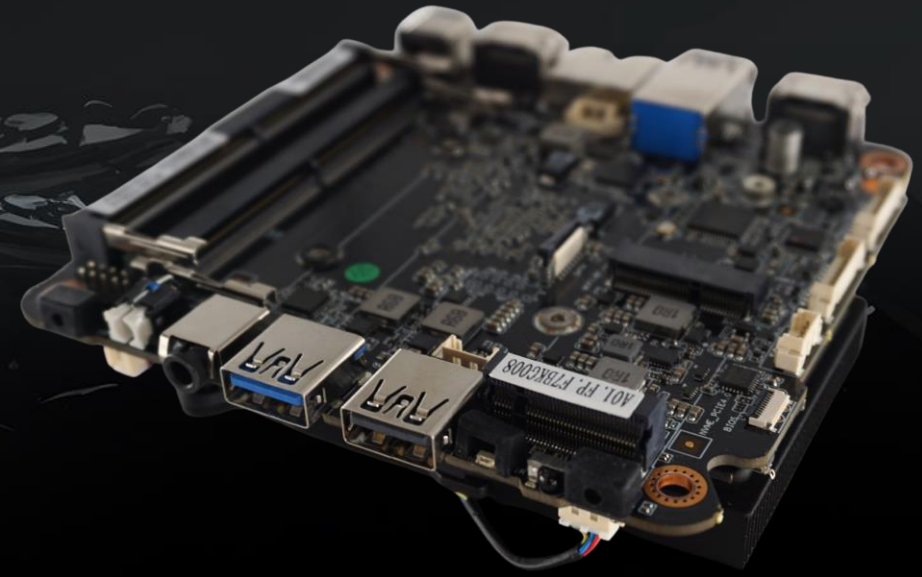


# Onyx

Simply NUC Business Motherboard – NUC130XBi5/v5



Simply NUC<sup>®</sup>

# Onyx i5/v5 Board

Simply NUC Business Motherboard – NUC130Xi5/v5



## Unmatched Performance for Modern Business

Onyx is the latest and greatest in ultra-small form factor compute power from Simply NUC, driving unmatched performance for modern business from the desk to the edge to the cloud and back. Powered by Intel's 13th Gen Raptor Lake 13500H processor and kept cool with Simply NUC's Dual Exhaust Cooling solution, Onyx has support for up to 96GB of DDR5-5200 memory, up to 16TB of storage, and off-the-charts benchmark results, delivering all the power, without the tower.

## Onyx - Defined by You, Built for You

Onyx may be a Simply NUC product, but it was defined by our customers, and built to meet your needs, with key features like dual HDMI 2.1, dual USB 4.0 Type-C, and a 2.5Gb Ethernet port to name a few. The Onyx motherboard gives you the flexibility to embed high performance compute power into any space. From office workstations, to on-prem heavy edge computing, to robotics and

sophisticated IoT networks, Onyx i7 has the flexibility and performance options to perfectly serve your usage requirements.

## Performance with Uncompromised Security and Reliability

Powered by Intel's 13th Gen Raptor Lake 13500H processor, featuring 12 cores and 16 threads, Onyx packs outsized performance into a small footprint. Raptor Lake processors feature Intel Thread Director, using machine learning to schedule tasks on the right core at the right time, preventing background tasks from slowing you down, and keeping the focus on the primary workload. Select Onyx SKUs also feature Intel vPro technology allowing for remote management of your 24x7 tested computer fleet and secure communications across networks. Upgrade to Onyx i5 today, and enjoy uncompromised and highly reliable processing power.

## Features

- Intel® Core™ i5-13500H Processor
  - (i5-13600H vPro Version)
- Intel® Iris® Xe Graphics
- 2x DDR5-5200 SO-DIMM Sockets
- 1x M.2 22x80 M-key supporting PCIe x4 Gen4 NVMe
- MicroSD card slot
- TPM (Infineon 2.0)
- 2x HDMI 2.1 TMDS
- 2x USB 4 Type-C (Alt-DP)
- Optional Intel® Wi-Fi 6E + Bluetooth 5.2
- 1x Intel 2.5Gb LAN
- 2x USB 4 Type-C
- 3x USB 3.2 Gen2 Type-A
- 1x USB 2.0 Type-A
- 3.5mm stereo headset jack
- Optional 19V, 120W power supply
- Extended service support (3-year)



## Customization

- Primary storage up to 8TB Gen4 NVMe
- Memory up to 96GB
- OS options: Windows 11 Home & Pro, Windows IoT, Ubuntu



# Technical Specification

<b>Processor</b>	Intel® Core™ i9-13500H Processor   4P+8E/16T   P-Cores: up to 4.7 GHz - E-Cores: up to 3.5 GHz   18MB Intel® Smart Cache   45W TDP OR Intel® Core™ i9-13600H Processor with vPro®   4P+8E/16T   P-Cores: up to 4.8 GHz - E-Cores: up to 3.6 GHz   18MB Intel® Smart Cache   45W TDP
<b>Graphics</b>	Intel® Iris Xe Graphics up to 1.45GHz (1.50GHz vPro Version)   4x 4K Displays Supported via: 2x HDMI 2.1 TMDS + 2x USB-C (Alt-DP) 1x 8K Display supported via USB-C (Alt-DP)
<b>Memory</b>	Dual DDR5-5200 SODIMMs 1.2V   96GB Max
<b>Storage</b>	1x M.2 22x80 socket supporting PCIe x4 Gen4 NVMe from 128GB to 8TB or SATA SSD from 128GB to 2TB
<b>Peripherals</b>	Optional Intel Wi-Fi 6E AX210 + Bluetooth 5.2   1x Intel 2.5Gb LAN (i225-V)   1x Front USB 3.2 Gen2 Type-A   1x Front USB 2.0 Type-A   2x Rear USB 4 Type-C   2x Rear USB 3.2 Gen2 Type-A
<b>Chassis</b>	117x112x25.5mm
<b>Expansion</b>	1x USB 2.0 header   1x USB 3.0 header   1x Front panel header
<b>Audio</b>	3.5mm Front Stereo Headset Jack
<b>Power</b>	12-24V <sub>DC</sub> Input Supply Range   Optional 19V <sub>DC</sub> , 120W Power Supply

# Certifications and Regulations

<b>Safety Regulations and Standards</b>	J62368-1 (2020)   GB 17625.1-2012   GB 4943.1-2011   GB/T 9254.1-2021 (Class A)   KCC   UL 62368-1: 2019   EN IEC 62368-1:2020
<b>EMC/RF Regulations &amp; Standards</b>	FCC CFR Title 47, Chapter I, Part15, Subparts B, C, E   ETSI EN 301 489-1 V2.2.3 (2019-11)   Draft ETSI EN 301 489-17 V3.2.5 (2022-08)   EN 55032:2015   EN 55035:2017   EN IEC 61000-3-2:2019   EN 61000-3-3:2013   ETSI EN 300 328 V2.2.2 (2019-07)   EN 61000-3-3:2013
<b>Environmental Regulations</b>	RoHS Compliant   REACH Compliant
<b>Certified Operating Systems</b>	Windows 11 (Pro and Home)   Windows IoT   Linux (Ubuntu)
<b>Environmental Operating Temp etc.</b>	0°C to +40°C   Non-Condensing Humidity