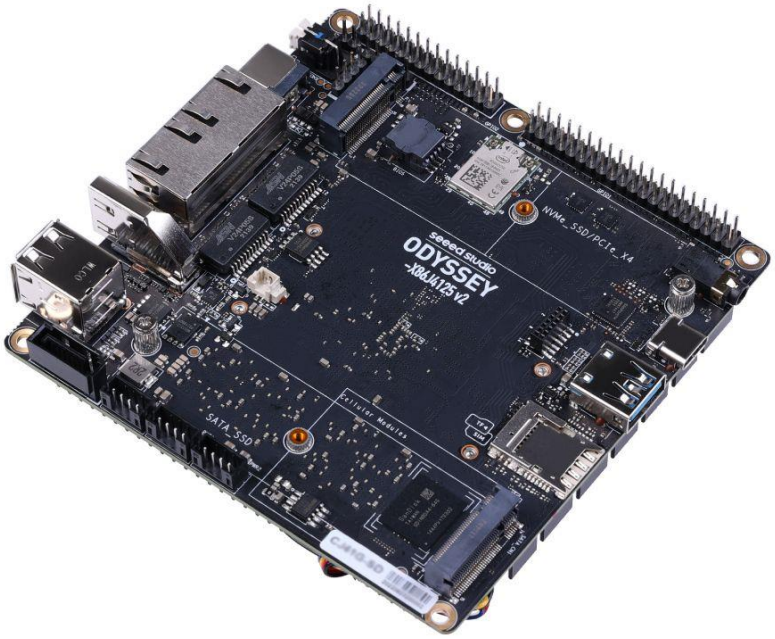
**ODYSSEY - X86J4125800 v2 - with Linux and RP2040 Core**

**SKU**

102110767

ODYSSEY - X86J4125800 v2 features Quad-core Intel® Celeron® J4125 and RP2040 co-processor, equipping dual 2.5GbE interfaces and multiple wireless connectivities, supporting 4K output, carrying sufficient storage capability, equipment expandability, operated by multiple OS, all of which indicate that it can be an ideal mini PC, a functional router, a media center or other development applications by your definition.




Description

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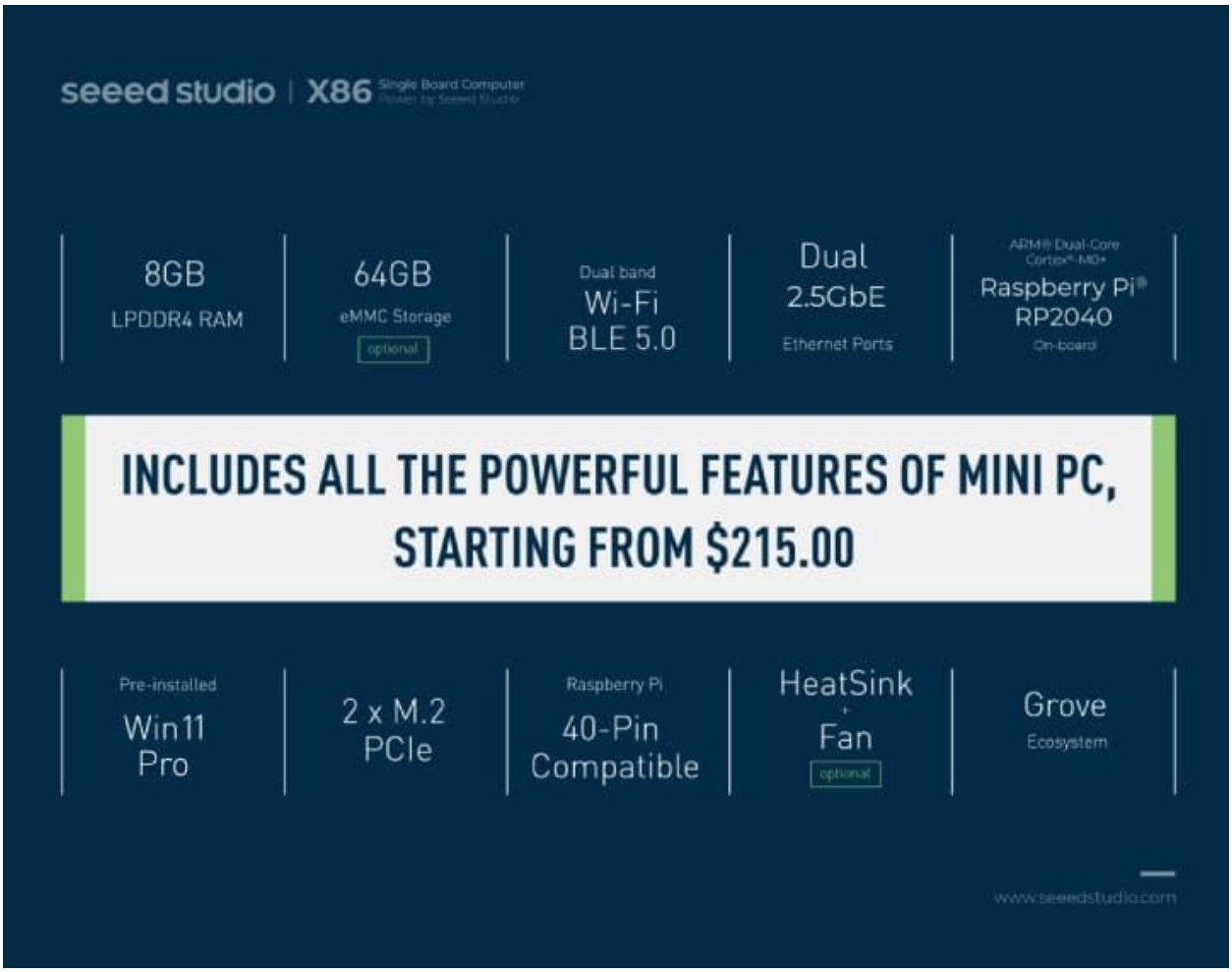
Feature

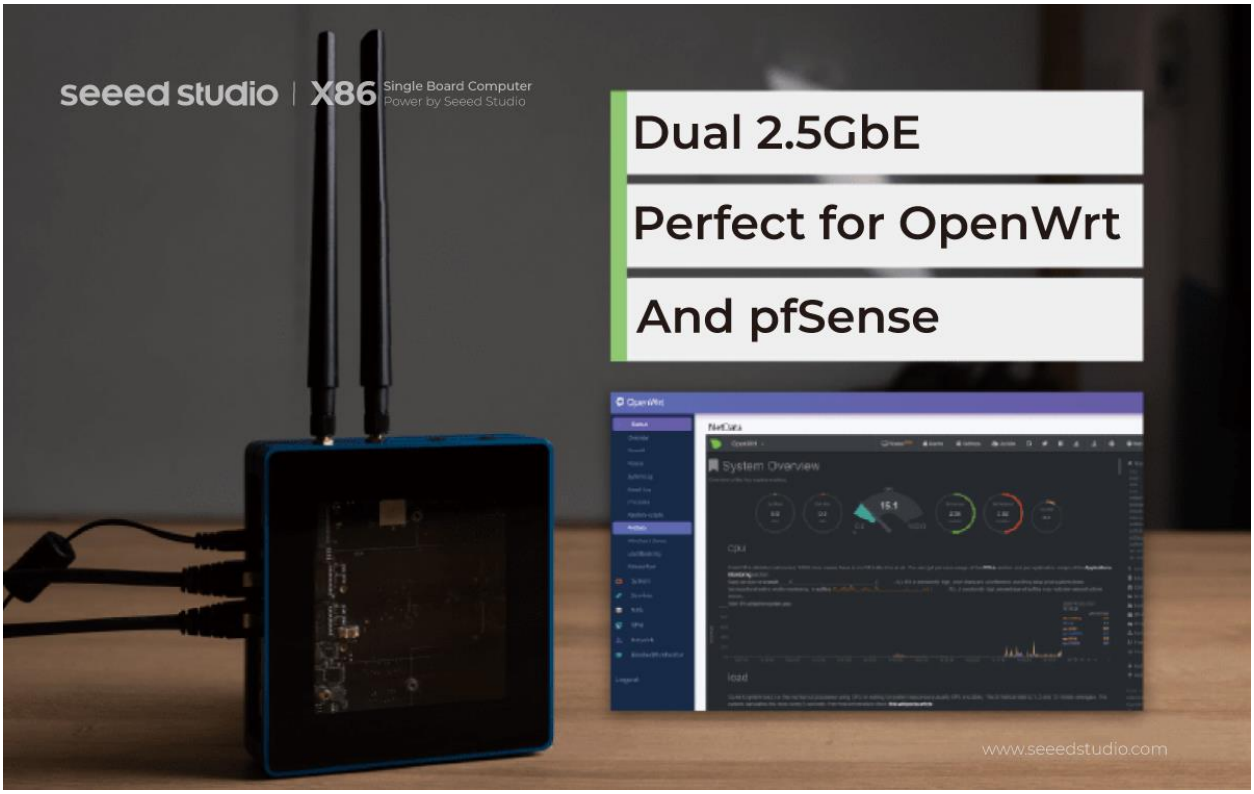
- **ODYSSEY Mini PC:** Quad-core Intel® Celeron® J4125, 8GB LPDDR4 RAM, tiny and portable, four threads decent processing power realize multitasking and edge computing
- **Hybrid & Fast Network Access:** Equip dual 2.5GbE interfaces, dual-band Wi-Fi, support 4G LTE(module not included) with sim card slot
- **High-defination 4K Video Output:** Intel® UHD Graphics 600, provide an HDMI 2.0a port and a Type-C USB3.1 port(DP 1.2a) for 4096x2160 @ 60Hz exhibition, which supports displaying at the same time
- **Sufficient Capability and Expandability:** Provide 1x SATA, 2x M.2 interfaces, 1x SD card slot, 1x audio Jack, 1x USB 3.1 and 2x USB 2.0 ports for extension
- **High Development Design:** RP2040 co-processor, compatible with Raspberry Pi 40-Pin and RP2040 28-Pin, support by Windows, Linux, OpenWRT OS, and the entire Grove ecosystem

Description

ODYSSEY - X86J4125800 v2 features Quad-core Intel® Celeron® J4125, assembling multiple functions in this SBC(Single Board Computer). It offers dual 2.5GbE interfaces and multiple wireless connectivities, supporting two displays for 4K output, carrying sufficient storage capability and equipment expandables, operated by Windows, Linux, and OpenWRT OS, connected through the entire Grove ecosystem, all of which indicate that it can be an ideal mini PC, a functional router, a media center or other development applications by your definition.

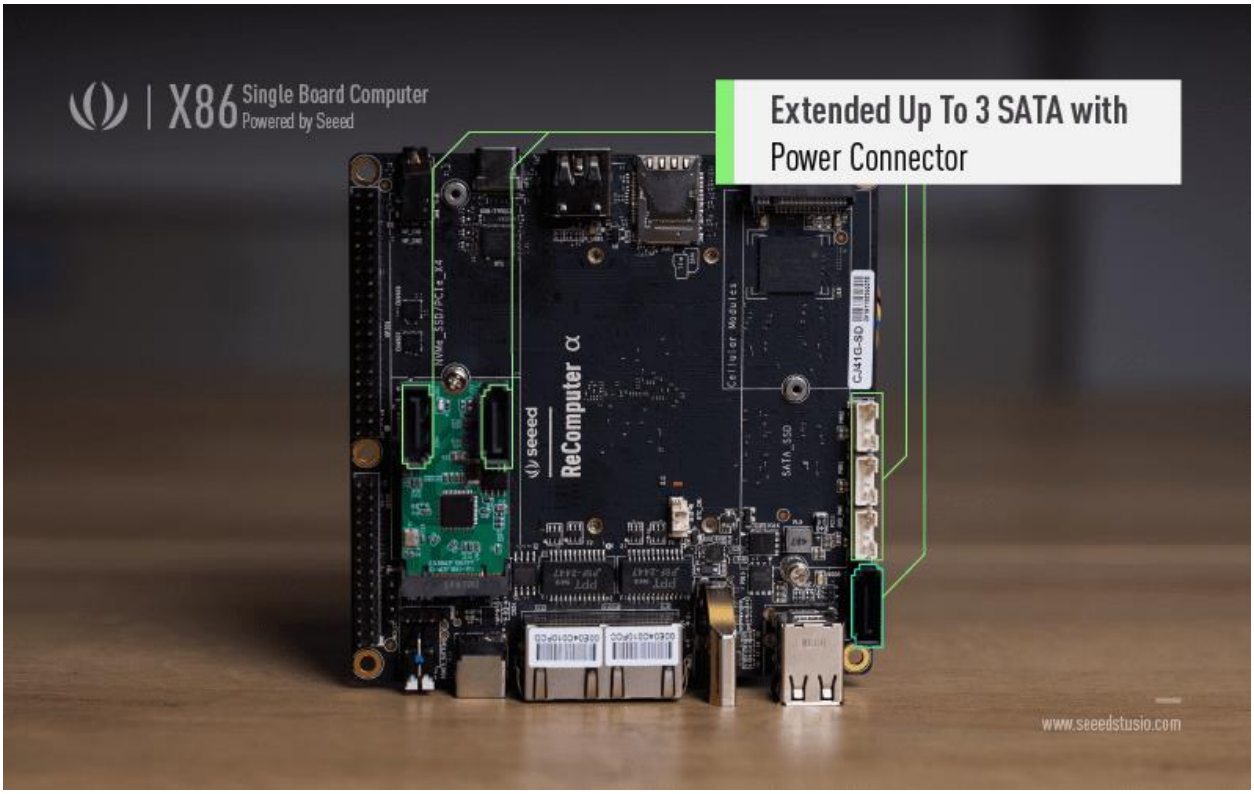



You can access fast speed network with equipped dual **2.5GbE interfaces** which increases the network performance and helps you with daily work efficiency. Meanwhile, there is dual-band Wi-Fi onboard which improves throughput capability and connection flexibility. This board also supports 4G LTE communication where you can insert a Micro-SIM card and input a 4G module. With enhanced interconnectivity, this little box can implement the function of a high-speed router and IoT gateway.




This mini desktop PC comes with Intel® UHD Graphics 600, and an HDMI 2.0a interface which offers 4K@60Hz immersive visual output. Furthermore, the USB3.1 Type-C also supports media stream which means it can be converted to a DP interface. You can connect two monitors at the same time and perform different tasks. It can be utilized to realize a home theater for entertainment or a conferencing video for business trips, functioning well both indoors and outdoors.


There equips one SATA and dual M.2 PCIe(B Key and M Key) interfaces for high storage extension. You can input NVME SSD(M.2 M-Key) or use an M.2 to SATA Converter to enable the computer to connect with up to three hard drives. It even provides 1x SD card slot, 1x 3.5mm audio Jack, 1x USB 3.1, and 2x USB 2.0 ports for equipment expandability. You can utilize it to build a NAS(Network-Attached Storage) or an NVR(Network Video Recorder).




Seeed Studio elaborates and establishes this development board by inserting the RP2040 co-processor, presenting compatible Raspberry Pi 40-Pin and compatible RP2040 28-Pin for high standards of operation of the development. Supported by Seeed Studio's entire electronics Grove ecosystem and enhanced SenseCAP platform, you are able to manage hundreds of sensors in your projects.

Whether applying it as an HTPC(Home Theater Personal Computer) for home entertainment, or a travel PC for outdoor and business trips, you can choose to install Windows, Linux, and OpenWRT OS and define this board in your way.

OpenWrt®
WIRELESS FREEDOM

Applications

- Mini PC
- NAS (Network-Attached Storage)
- Edge Computing

- Router
- Robotics
- Industrial Applications
- Media Center
- IT Industry
- Educational Fields
- Thin Client
- Server Cluster
- IoT Gateway

Specification

| | |
|---|---|
| Components | ODYSSEY - X86J4125800 v2 |
| Processor | Intel® Celeron® J4125 (Frequency: 2.0 - |
| Coprocessor | Raspberry Pi ® RP2040 32bit ARM® Dua M0+ |
| Graphics | Intel® UHD Graphics 600 (Frequency: 25 |
| Memory | LPDDR4 8GB |
| Wireless | Wi-Fi 802.11 a/b/g/n/ac @ 2.4/5 GHz HT1 |

| | |
|---|---|
| Networking | Intel® I226-V PCIe G 2.5GbE LAN, Suppo<br>Supports PXE |
| Audio | Microphone + headphone Combo Connec |
| Headers | 1 × 40-Pin header compatible with Raspb<br>1 x 28-Pin header (RP2040)<br>1 × Front Panel Audio Connector<br>1 × 4-Pin header (UART function from RP<br>1 × Fan Port (4 pins 1.25mm PWM 5V）<br>3 × 4-Pin SATA Power Connector<br>1 × 4-Pin header (Power and Switch) |
| USB | USB 2.0 Type-A x2, USB 3.1 Type-A x1, U |
| Video Interfaces | HDMI2.0a: Up to 4096x2160 @ 60Hz 24b<br>4096x2160 @ 60Hz 24bpp |
| Expansion Slots | M.2(Key B, 2242/2280): SATA III, USB2.0<br>2242/2280): PCIe 2.0 ×4; Micro SD card S<br>Socket; SATA III |
| RTC | JST 1.0 CR2032 3V |
| | |

| | |
|---|---|
| TPM | Built-in fTPM (2.0), optional external TPM |
| Power | DC Jack 5.5/2.1mm or Type-C PD<br>DC Jack input: 12-19V DC<br>Type-C input: 15V DC |
| Dimensions | 110x110mm |
| Certifications | FCC, CE, TELEC, UKCA |
| Operating temperature | 0°C~75°C |

Different Types of Version of ODYSSEY - X86J4125 Comparison Table

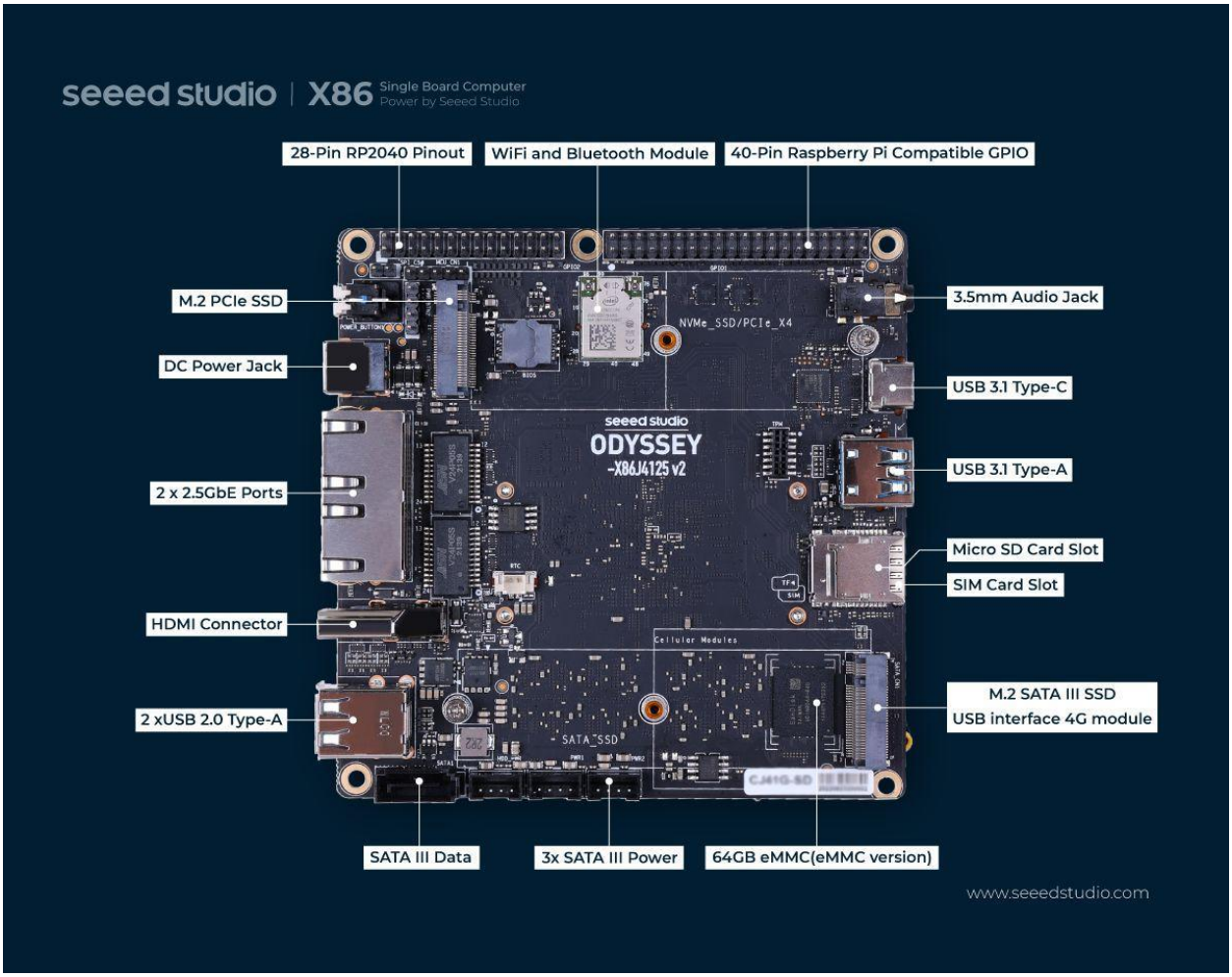
| Version | CPU | Operating System | Memory | Fan | SATA Storage | Cas |
|---|---|---|---|---|---|---|
| ODYSSEY - X86J4125864 v2 | Intel Celeron J4125 | Windows 11 Pro(Unactivated) | 64GB eMMC | Built-in | N/A | N/A |
| ODYSSEY - X86J4125864 v2(TELEC) | | | | | | |
| | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| ODYSSEY - X86J4125864 v2 (Win11 Pro Activated) | | Windows 11 Pro(Activated) | | | | |
| ODYSSEY - X86J4125864 v2(Win11 Pro Activated)(TELEC) | | | | | | |
| ODYSSEY - X86J4125800 v2 | Intel Celeron J4125 | N/A | N/A | N/A | N/A | N/A |
| ODYSSEY - X86J4125800 v2(TELEC) | | | | | | |
| ODYSSEY Blue J4125 v2 | Intel Celeron J4125 | Windows 11 Pro(Unactivated) | N/A | Built-in | 128GB | Ass |
| ODYSSEY Blue J4125 v2(TELEC) | | | | | | |

**Note**

- For Win11 Pro Activated Version, the operating system Windows 11 Pro will be activated.
- For TELEC Version, the power adaptor will be not included in the part list.

Hardware Overview




## Part List

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|---|
| ODYSSEY - X86J4125800 v2 |
| User Manual |
| SATA Cable |
| |

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|---|
| Antenna |
| RTC Battery |
| Heat Sink(Assembled) |