ODYSSEY Blue J4125 v2 Mini PC(TELEC) - Mini PC with 128GB M.2 SATA, Linux and RP2040 Core, dual 2.5 Gigabit Ethernet NICs

SKU

110991825

ODYSSEY - X86J4125864 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, and fan heat dissipation, operated by multiple OS(pre-installed Win 11 Pro), 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.

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Feature

- **ODYSSEY Mini PC with Windows 11 Pro:** 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:** Onboard 64GB eMMC, 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

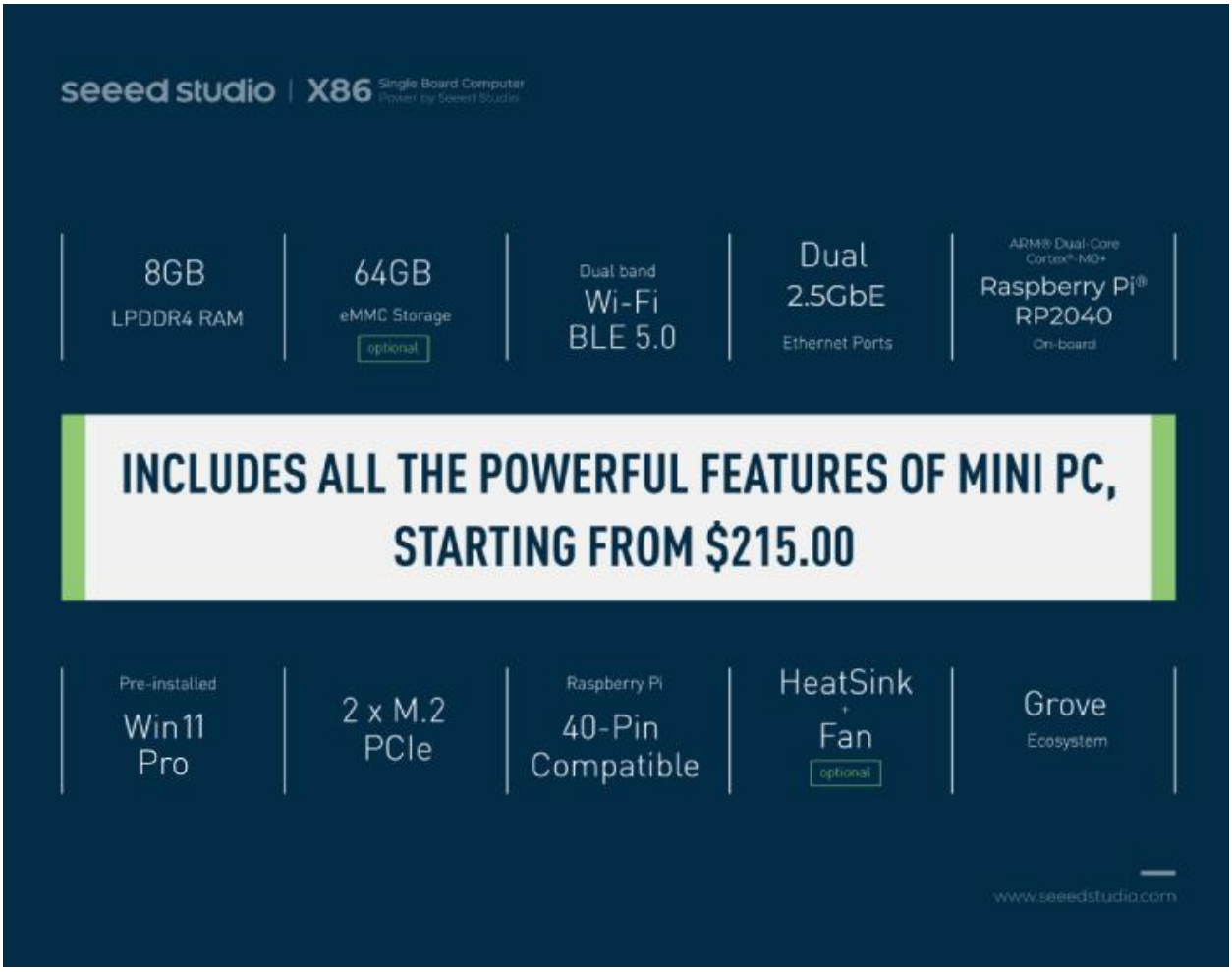
Description

ODYSSEY - X86J4125864 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.

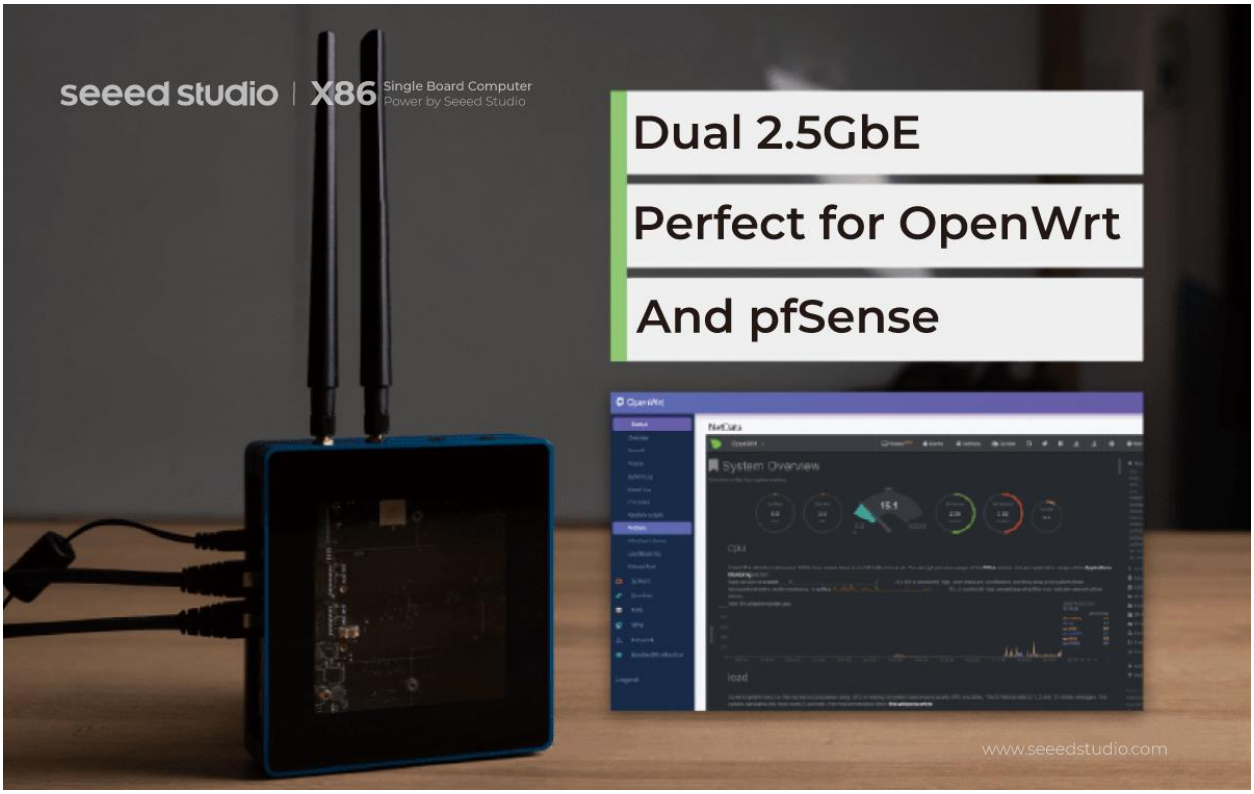
Today we wanna share a super cool open-source project to help you build up an NVR system with AI detection, and everything will be processed locally! Frigate is a completely open source and local NVR designed for Home Assistant with AI-powered object detection(Kudos sent to Frigate team!). It uses OpenCV and Tensorflow to perform real-time object detection locally for IP cameras. It brings a rich set of features

including **video recording, re-streaming, motion detection, and supports multiprocessing.**

Noted: Odyssey Blue is not pre-installed with Frigate, please follow up our wiki and Frigate docs for installation

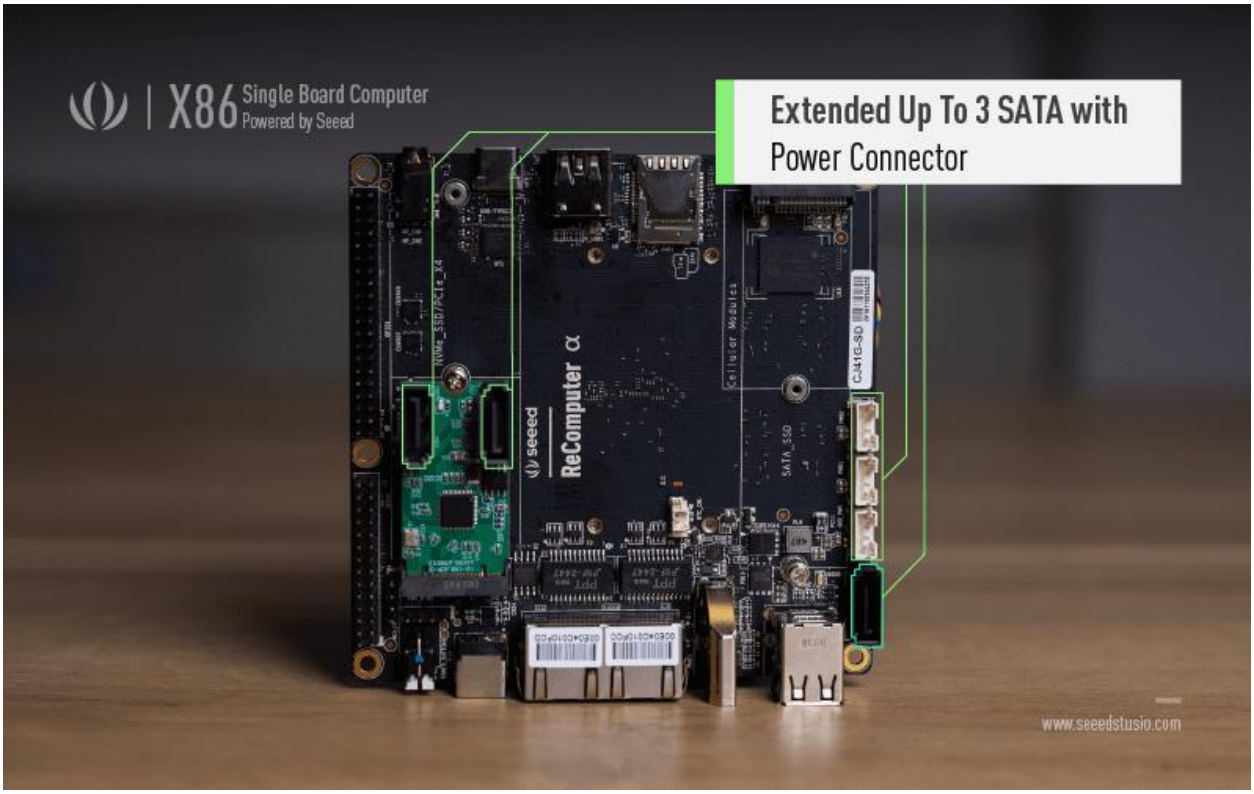


You can access fast speed network with equipped dual **2.5GbE interfaces** which increases the network performance and helps you with daily work efficiency. Meanwhile, there is dual-band Wi-Fi onboard which improves throughput capability and connection flexibility. This board also supports 4G LTE communication 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.

It equips one SATA and dual M.2 PCIe(B Key and M Key) interfaces for high storage extension. Not only with onboard 64GB eMMC, but you can also 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 drivers. 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.

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 - X86J4125864 v2
Processor	Intel® Celeron® J4125 (Frequency: 2.0 - 2.7GHz)
Coprocessor	Raspberry Pi ® RP2040 32bit ARM® Dual-Core Cortex® M0+
Graphics	Intel® UHD Graphics 600 (Frequency: 250 – 750MHz)
Memory	LPDDR4 8GB
Wireless	Wi-Fi 802.11 a/b/g/n/ac @ 2.4/5 GHz HT160
Networking	

	Intel® I226-V PCIe 2.5GbE LAN, Supports Wake-On-LAN, Supports PXE
Audio	Microphone + headphone Combo Connector
Headers	1 × 40-Pin header compatible with Raspberry Pi 1 x 28-Pin header (RP2040) 1 × Front Panel Audio Connector 1 × 4-Pin header (UART function from RP2040) 1 × Fan Port (4 pins 1.25mm PWM 5V） 3 × 4-Pin SATA Power Connector 1 × 4-Pin header (Power and Switch)
USB	USB 2.0 Type-A x2, USB 3.1 Type-A x1, USB 3.1 Type-C x1
Video Interfaces	HDMI2.0a: Up to 4096x2160 @ 60Hz 24bpp / DP1.2a: Up to 4096x2160 @ 60Hz 24bpp
Expansion Slots	M.2(Key B, 2242/2280): SATA III, USB2.0, UIM; M.2 (Key M, 2242/2280): PCIe 2.0 ×4; Micro SD card Socket; SIM Card Socket; SATA III
RTC	JST 1.0 CR2032 3V

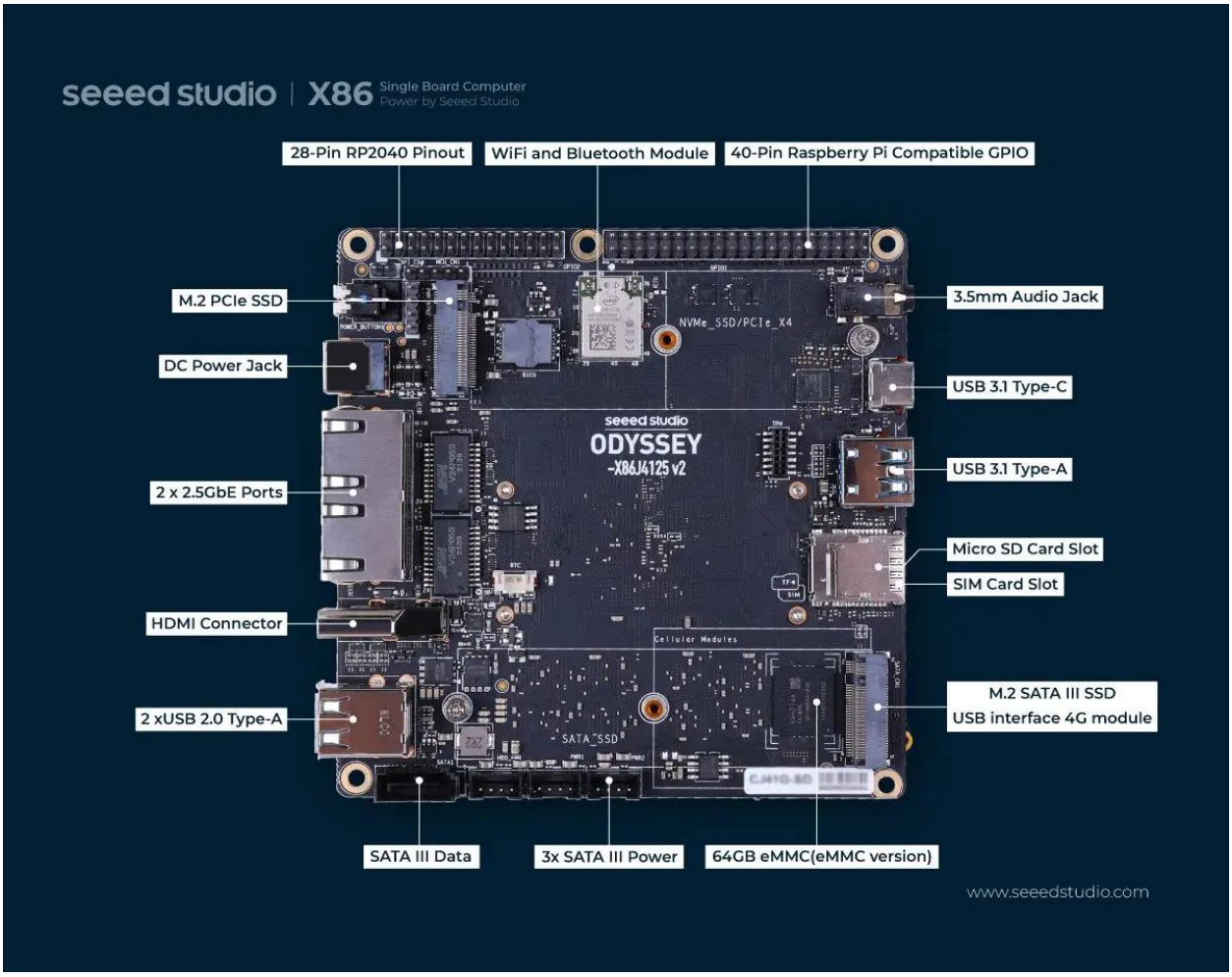
TPM	Built-in fTPM (2.0), optional external TPM 2.0
Power	DC Jack 5.5/2.1mm or Type-C PD DC Jack input: 12-19V DC Type-C input: 15V DC
Dimensions	130x120x50mm
Certifications	FCC, CE, TELEC, UKCA
Operating temperature	0°C~75°C

Different Types of Version of ODYSSEY - X86J4125 Comparison Table

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

ODYSSEY - X86J4125864 v2 (Win11Pro 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
ODYSSEY - X86J4125800 v2(TELEC)					
ODYSSEY Blue J4125 v2	Intel Celeron J4125	Windows 11 Pro (Unactivated)	N/A	Built-in	128GB
ODYSSEY Blue J4125 v2(TELEC)					

Hardware Overview


seeed studio | X86 Single Board Computer
Power by Seeed Studio
28-Pin RP2040 Pinout
WiFi and Bluetooth Module
40-Pin Raspberry Pi Compatible GPIO
M.2 PCIe SSD
DC Power Jack
2 x 2.5GbE Ports
HDMI Connector
2 xUSB 2.0 Type-A
3.5mm Audio Jack
USB 3.1 Type-C
USB 3.1 Type-A
Micro SD Card Slot
SIM Card Slot
M.2 SATA III SSD
USB interface 4G module
SATA III Data
3x SATA III Power
64GB eMMC(eMMC version)
NVMe_SSD/PCIe_X4
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-X86J4125 v2
Cellular Modules
SATA_SSD
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