

BSP - JetPack SDK

This brochure is intended to introduce the hardware. For software installation and BSP steps, it is recommended to follow the official AVerMedia page.



Product Page:

<https://openzeka.com/urun/planet-super-active-ai-box-onx-16gb/>



BSP / Installation Wiki:

<https://professional.avermedia.com/product-detail/D131S#download>

Quick Start

- Connect the monitor via HDMI, and the keyboard/mouse via USB.
- Use an Ethernet cable or Wi-Fi for the network connection.
- Connect the power adapter to the appropriate DC jack port and turn on the device.
- If a system installation or re-installation is required, follow the BSP installation steps in the user manual.

(The product is shipped with BSP pre-installed. The default username and password are "nvidia")

Note

- The carrier board is compatible with NVIDIA® Jetson Orin NX / Orin Nano modules and offers Super Mode support.
- The steps for recovery, flashing, and SDK installation are explained in detail in the official documents.
- A Linux-based host system (Ubuntu) must be used during installation.

USER MANUAL

Planet Super Active AI Box (NVIDIA Jetson Orin NX 16GB)

Compatible with NVIDIA® Jetson Orin™ NX / Orin™ Nano modules, this platform is a high-performance and compact Edge AI solution. Thanks to its advanced GPU architecture, it delivers efficient performance in computationally intensive applications such as image processing, deep learning, and real-time data analysis.

Planet Super Active AI Box provides rich I/O options with 1x HDMI output, 4x USB 3.2, 1x GbE RJ-45 (with PoE option), 40-pin expansion header, CSI camera support, and USB 2.0 Type-C recovery port. Thanks to high-speed connectivity and an expandable structure, it offers easy integration possibilities with different systems.

The system, which is compatible with Linux-based JetPack SDK, is optimized for AI and machine learning applications with CUDA, TensorRT, and cuDNN support.



PACKAGE CONTENT

Hardware

- NVIDIA Jetson Orin NX 16GB Module
- AVerMedia D131S Carrier Board
- Heatsink and Fan Cooling System
- 19V 4.74A Power Adapter
- 500GB M.2 NVMe SSD
- WiFi Adapter

Optional

- ☐ BSP Installation (Pre-installed Software)

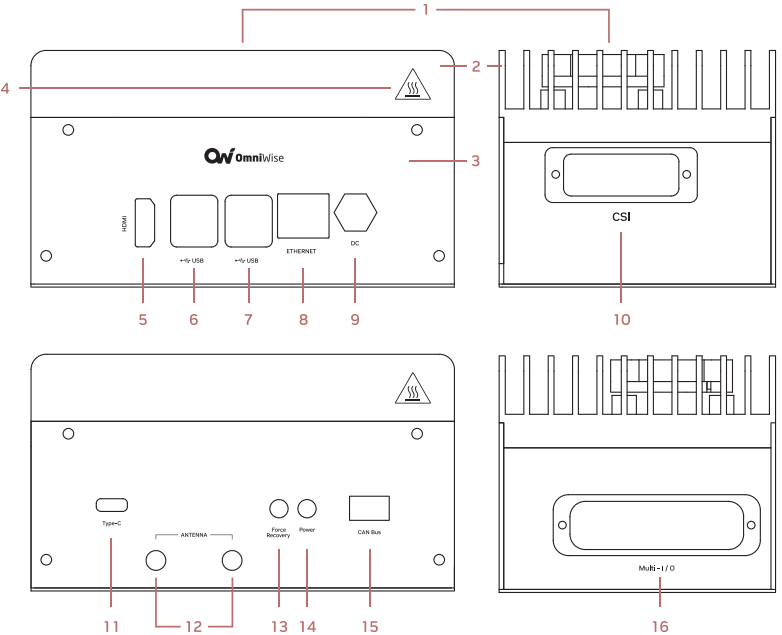
USAGE RECOMMENDATION

- It is highly recommended to use the manufacturer-approved power adapter for stable operation.
- Recommended Power Adapter:
19V / 4.74A power adapter.
- The power adapter used must have sufficient current capacity. Inadequate power adapters may cause unstable system operation or prevent the device from booting entirely.

Module	NVIDIA Jetson Orin NX 16GB
AI Performance	Up to 100 TOPS (Up to 157 TOPS with SUPER upgrade)
Storage	SSD support via M.2 Key M slot on the carrier board.
Use Case	AI, Edge Vision, Robotics and Embedded Development
Initial Setup	Requires a monitor, power adapter, and if necessary, a Type-C data connection.

Blanet Super Active AI Box Port Layout

You can check the layout of the connectors on the AI Box easily using the diagram below.



Number	Name	Description
1	Fan	Active Cooling Airflow
2	Heatsink	Active Heatsink
3	Case	139mm(L) x 110mm(W) x 83mm(H) - 1052g (Including Antenna)
4	Operating Temperature	0°C to +70°C
5	HDMI Port	HDMI (3840 x 2160 at 60Hz)
6 - 7	USB Port	4x USB3.2 type A
8	ETHERNET Port	GbE RJ-45
9	DC Port	Voltage Range 12V - 24V
10	CSI Port	2x 4 lane MIPI CSI-2, 22 pin FPC 0.5mm Pitch Connector
11	Type-C	1x USB 2.0 type C for recovery
12	Antenna Port	Antenna Port
13	Force Recovery Button	Button for Recovery Mode
14	Power Button	Button for Power
15	CAN Bus	CAN Bus 3-pin terminal block with transceiver
16	Multi - I / O Port	40-pin (1x UART, 2x SPI, 2x I2C, 1x I2S, 6x GPIO)