Innovating Robotics with Integrated Design of AI Computing and Motion Control



SEAVO Embedded Computer HB03

Promoting Large-Scale Application of Embodied Intelligence

The SEAVO Embedded Computer HB03 addresses the critical challenges of high-performance AI computing in constrained robotic environments. Its pioneering modular architecture combines Intel® Core™ Ultra processors (Series 2), with integrated NPU and iGPU (up to 96 TOPS) and expandable MXM GPU support (Intel® Arc™ B570, total 300 TOPS), enabling robotics for complex tasks like large language models, vision recognition, and motion control. HB03 has dual-size designs (150×142×53mm/78mm) and thin/thick versions, which is suitable for various forms of robots. With wide-voltage input (12V/48V), ruggedized I/O, and dual-fan cooling, it also ensures high reliability in dynamic scenarios.

The SEAVO Embedded Computer HB03 integrates CPU and GPU/NPU on a single motherboard, solves computing power bottlenecks and system redundancy, and enables large-scale practical application of embodied intelligence with strong performance, compact size, and high cost-effectiveness.

HB03 integrates
CPU/GPU/NPU on
one board to
eliminate
bottlenecks and
scale embodied Al
with compact, costeffective power.

Intel Products and Technologies

Accelerating Al and Analytics at the Edge



Intel® Core™
Ultra Processors



OpenVINO™ Toolkit



Intel® Ethernet
Controller



Key Features

Empowered by Intel.



Modular Design



Compact Form Factor



Powerful Al Computing Capabilities



High Reliability

SEAVO Embedded Computer HB03







Product Specifications

CPU	Intel® Core™ Ultra processors (Series 2), with NPU and iGPU, up to 96TOPS
Graphics	Intel® Arc™ B570 Graphics
Memory	LPDDR5X-7467, 4*SDRAM, up to 64GB
Storage	1*M.2 M-Key 2280, PCIe4.0 x4
Wireless Network	1*M.2 E-Key 2230, PCIe x1 + USB2.0, support WiFi+BT 1*M.2 E-Key 3042/3052, USB3.0 + USB2.0, support 5G/4G module 1*Nano SIM
LAN	4*Intel® Ethernet Controller I210-AT NICs with EtherCAT Protocol, Type-C
Operating/Storage Temp.	0~60°C/-20~75°C
Dimension $(W \times D \times H)$	max: 150mm x 142mm x 78mm / min: 150mm x 142mm x 53mm
OS	Windows 10/11 64bit, Linux

Learn More

SEAVO Embedded Computer HB03

Intel technologies may require enabled hardware, software or service activation. // No product or component can be absolutely secure. // Your costs and results may vary. // Performance varies by use, configuration and other factors. // See our complete legal Notices and Disclaimers. // Intel is committed to respecting human rights and avoiding causing or contributing to adverse impacts on human rights. See Intel's Global Human Rights Principles. Intel's products and software are intended only to be used in applications that do not cause or contribute to adverse impacts on human rights.

© Intel Corporation. Intel, the Intel logo and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others.

11/25