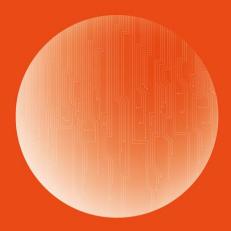


# Seavo Edge Computing Platfrom GNS-V40 Introduction





## SEAVO - Leading AloT Computing Platform Provider

- Focus on computing platform for **30** years, since developed the **first** Intel x86 M/B of Mainland China.
- Developed **700+** different Boards, Systems based on Intel from Atom to Xeon.
- Annual sales **1M+** pcs, holding largest market share in PRC, **10M+** deployed worldwide.
- Serving 100+ industry-leading companies in 10+ AIoT market segments.
- Intel Partner Alliance Titanium Member.

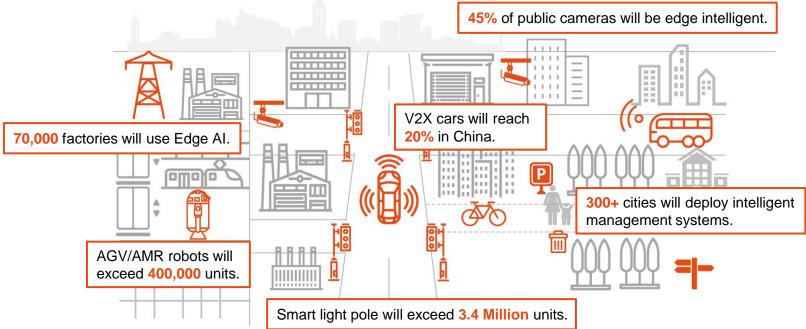


intel



### **Opportunities in Edge AI & Computing**

in 2025...





### Seavo Edge AI & Computing Solution





### Seavo GNS-V40 Edge AI Computing Platform

Officially designated hardware platform of Intel Cup Undergraduate Electronic Design Contest – Embedded System Design Invitational Contest





### **High Performance**

11<sup>th</sup> Gen Intel<sup>®</sup> Core<sup>™</sup> i5 CPU (Tiger Lake -UP3), Intel<sup>®</sup> Iris<sup>®</sup> Xe Graphics



### Compact Design

Slim and compact size for flexible deployment



2\*GbE LAN, 6\*USB 3.0, 2\*USB 2.0, 6\*COM, 2\*HDMI, 8\*GPIO, Audio Line-out



Support Intel<sup>®</sup> OpenVINO Toolkit to accelerate AI







### Seavo GNS-V40 Edge AI Computing Platform

#### GNS-V40-1359 Specification

CPU	Intel <sup>®</sup> Core <sup>™</sup> i5-1135G7 CPU, 4 Cores, up to 4.2 GHz, TDP 12-28W Intel <sup>®</sup> Iris <sup>®</sup> Xe Graphics, 1.30 GHz, 80 EU		
Memory	16GB, DDR4, 2666 MHz		
Storage	128G M.2 SSD		
System	Windows 10 64-bit, Linux		
Wifi/ BT	Intel AC 7260, 2.4GHz/ 5GHz, Bluetooth 4.0		
LAN	2*Intel GbE LAN (10/100/1000 Mbps, RJ45)		
USB	6*USB 3.0, 2*USB 2.0		
СОМ	COM1/2/3 (R232, Full lanes), COM4/5/6 (R232, 3 lanes)		
Display	2*HDMI, max resolution up to 4096*2160@30Hz		
Audio	5.1 Channel HDA Codec, 1 * Line-Out + MIC 2in1 3.5mm Jack		
Others	8*GPIO, 1*Power Button, 1*GND Hole		
Power Supply	DC 12V-10A adapter		
Dimension	258*150*56mm		









### Al Performance Test Result

Processor		Core i5	Core i7
TDP		28 W	28 W
GPU Freq		1.3 GHz	1.35 GHz
OpenVINO AI (OpenVINO Inference) (INT8)	Yolo-v3-tf	47 FPS	59 FPS
	Resnet-50-tf	263 FPS	327 FPS
	Mobilenet	1860 FPS	2114 FPS
	Shufflenet	392 FPS	425 FPS
	Rep-vgg-a0	1319 FPS	1572 FPS
	Yolov5s	106 FPS	129 FPS
	Yolox-s	83 FPS	102 FPS
Decode 1080P@30FPS	H.264	64 ch	66 ch
	H.265	112 ch	116 ch
Encode with quality Decode 1080P@30FPS	H.264	16 ch	16 ch
	H.265	20 ch	20 ch



### Seavo GNS-V40 Precautions

- Since the integrated heat dissipation design, the temperature of the chassis is high under long-term or high-load operation. Please ensure no coverings and adequate ventilation when it is running, and avoid touching the surface of the chassis directly with your hands.
- Do not change the BIOS settings, otherwise it may cause problems.
- Do not disassemble the chassis. If you need technical support, please contact the FAE directly.
- Make sure to use the included adapter, using other adapter may damage the machine.
- Shut down the system normally after using and then unplug the power supply, do not directly cut off the power, so as not to damage the system.



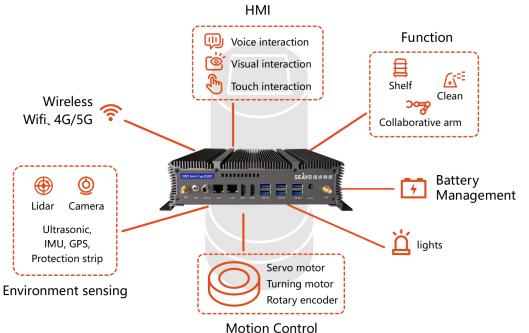
Contact Seavo FAE Jay Wang Email: Wangjh@seavo.com

www.seavo.com



With features of high performance, low power, compact design, rich I/O, SEAVO ADI can easily meet the requirements of service robots, AMR in hospitals, restaurants, hotels, factories, etc.



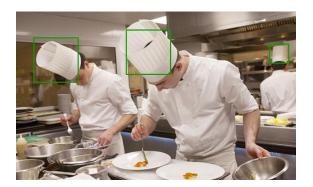


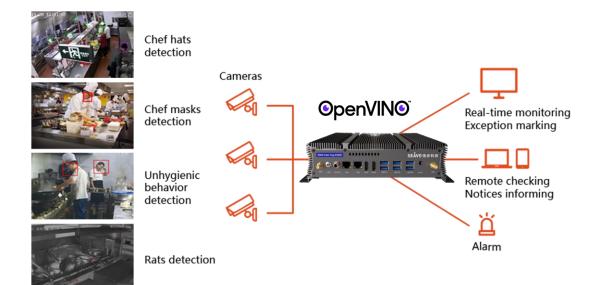
**SEÁVO** 



## Solution - "Bright Kitchen"

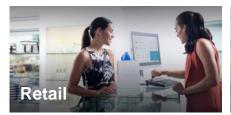
The "Bright Kitchen" solution is to use AI vision to help restaurant managers better supervise the kitchen and enhance customers' confidence in food safety.







### Vertical Markets of Edge Al



- Customer behavior analysis
- Facial recognition payment
- Shelf inspection & Inventory management



- Machine vision
- Product defect detection
- Equipment anomaly inspection



- Service robots for delivery, cleaning, access control
- AGVs/ AMRs in Production, warehouse and logistics



- Public surveillance
- Employee behavior detection
- Smoke and fire detection



- Autonomous driving, V2X
- ETC/ EPTC car plate detection
- Smart light pole



- AI medical imaging diagnosis
- IVDs, HMI, Intelligent nursing
- Telemedicine



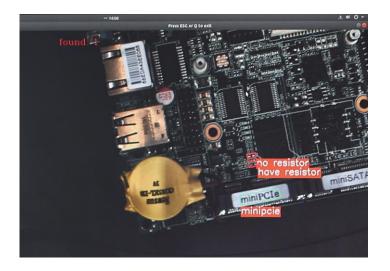
- Power consumption optimize
- Energy management
- Smart livestock & agriculture



### Demo: PCBA Defect Detection & OCR

Using Seavo edge AI computing platform GNS-V40, with Intel<sup>®</sup> OpenVINO Toolkit, the demo processes image at the edge and works better at defect detecting and OCR.





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# Seavo GNS-V40 Al Hands On Demo





