Partner Presentation

E098 Edge AI Box for Video Analytics

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JWIPC

JWIPC profile

JWIPC, founded in 2011, is headquartered in Futian District, Shenzhen, who is the national high-tech enterprises, JWIPC group has consumer products business group, internet of things business group, server business group, communication business group and manufacturing center.

As an Associate member of the IOT Solution Alliance, JWIPC is a solution provider, specializing in product R&D, and manufacture with large scale of procurement.

Today, JWIPC provides competitive quality products in different industries, such as OPS, digital signage, point of sales, industrial PC in IoT; AIO, Mini-PC, PC motherboard in consumer PC; server, storage, and network security in Data Center. With rich product portfolio, JWIPC provides end-to-end hardware solution to our customers including OEMs, SIs and ISV all over the world.

Wechat Official Account

JWIPC Official Website

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High Quality Service

01

120+ professional Engineers，Most perfect test equipment and lab，strictly verification process

02

20000㎡;1000+ People;12SMT lines ; 8 ASS lines;;IMES tracking system; Professional equipments

03

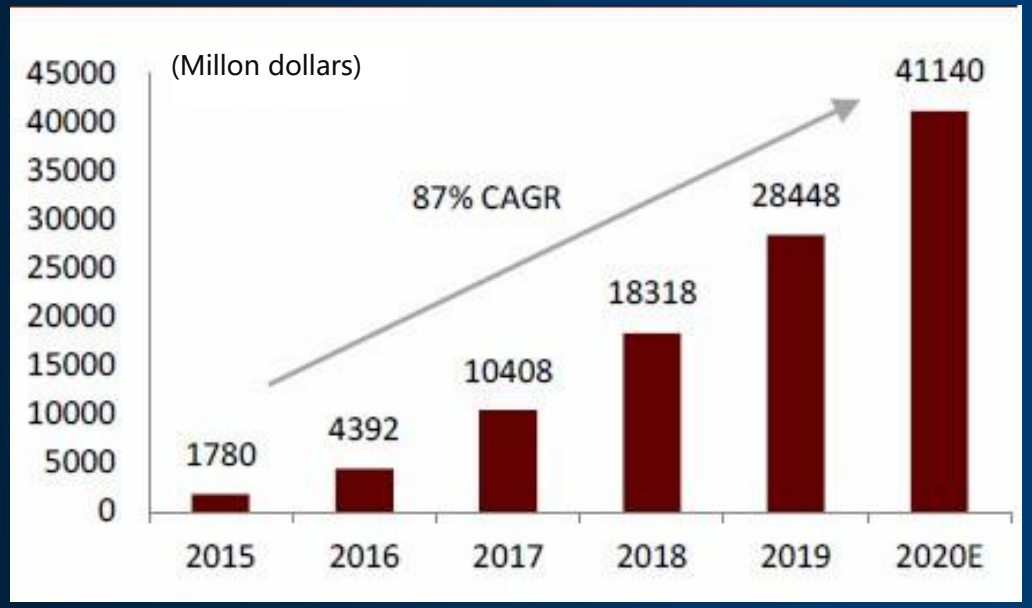
nQuality control System Professional QA team ISO/OHSAS18001 certification ； CE, CB, FCC certification

04

provide high quality after-sale service guarantee

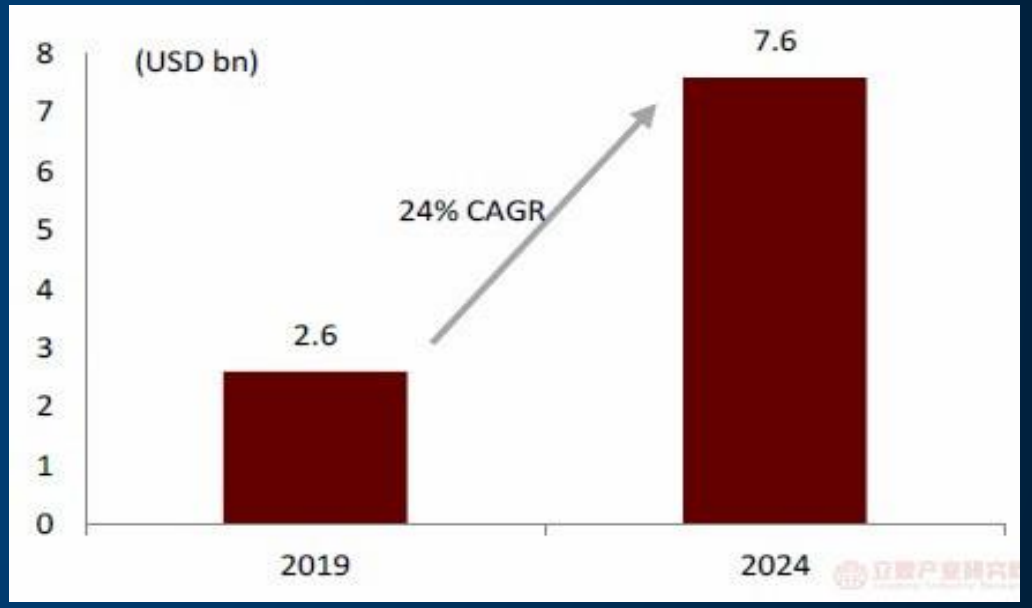
Edge Compute overview

Global edge computing market size



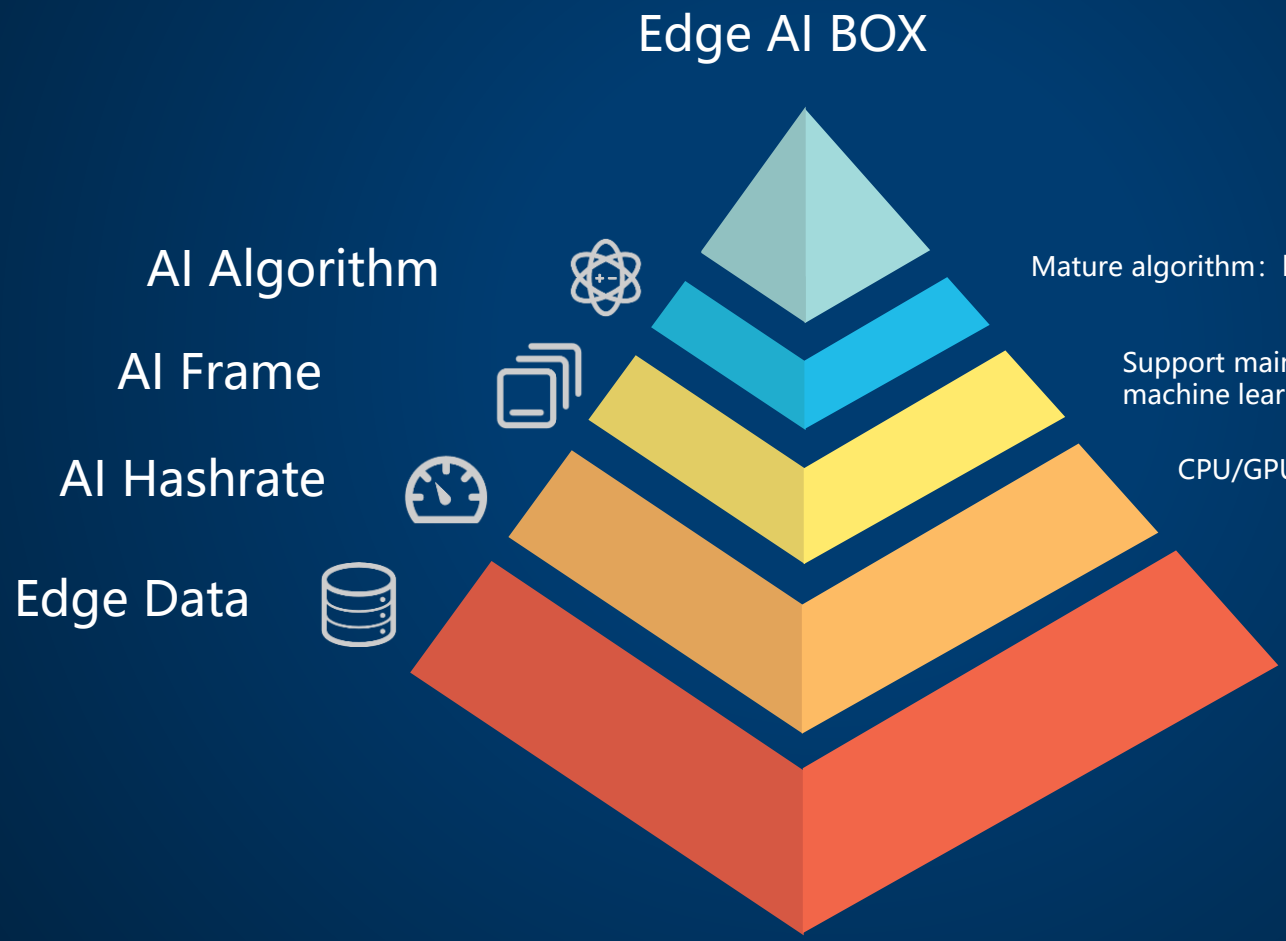
Source：Gartner

Global edge AI chip market size forecast



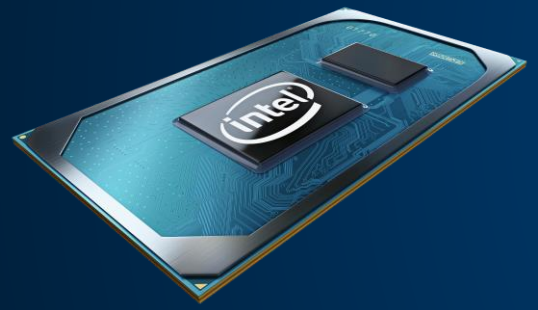
Source：ABI Research

Key elements of Edge AI box



11th gen Intel® Core™ Processor (Codename: Tiger Lake – UP3)

Platform highlights



11th gen Intel® Core™ Processor (Codename: Tiger Lake – UP3)

01 Compute Performance

New Willow Cove architecture
up to4Cores/8 Threads/4.8GHz
Hardware-assisted virtualization
10nm SuperFin

02 Media and Display

Intel® Iris® Xᵉ MAX Graphics up to96EU
Media Encoders up to 4K60 or 8K30
Display Pipes up to 1*8K60 or 4*4K60

03 AI Capability

Intel® Deep Learning Boost (Intel ® DL Boost)
Intel® Deep Learning Boost (Intel ® DL Boost) DP4a,
Intel® Gaussian & Neural Accelerator (Intel® GNA) 2.0
Support Intel® Movidius™ Myridad ™ X VPUs

04 Power Management

Scalable perormance 7W-28W
Low Power audio DSP
FIVR and DVFS

05 HW-Based Security

Total memory encryption
Key locker protection

06 High-Speed Connectivity

Integrated MACs to support GbE port,
Gigabit (1.73 Gbps) Wi-Fi 6 and BT5
Discrete 2.5GbE MAC/PHY LAN
Four Thunderbolt™ 4 universal ports
Four **Intel®** PCIe* 4.0 and 12 PCIe* 3.0

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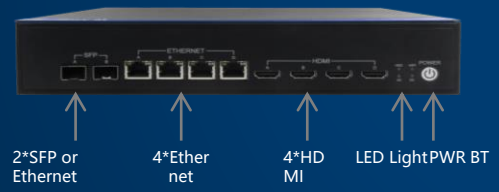
Product Profile

JWIPC E098 is an AI Box for Edge AI Box for Video Analytics, based on 11th gen Intel® Core™ Processor (Codename: Tiger Lake – UP3).This product can be widely used in different vertical industries, such as Public Safety and Security, Smart retail, Smart manufacturing, Enterprise Information, Smart medical and so on. The following are the main features of the product.

Product SPEC

Dimensions

Front/rear IO



Processor	**Intel® Celeron®** **11th gen Intel® Core™ Processor (Codename: Tiger Lake – UP3)**
Memory	2 x DDR4 SO-DIMM
Storage	2 x M.2 2280，SATA
Display	4 x HDMI1.4b，support 2*2 or 1*4 splicing
Audio	3.5mm Line out(Green)，3.5mm Mic in(Pink)
Ethernet/SFP	2 x Gigabit SFP(Ethernet,optional)+4*Gigabit Ethernet(POE,optional)
Wireless Network	1 x M.2 2230，WIFI6 (optional) 1 x M.2 3042，4G/5G (optional) 1 x MINI PCIE，LoRa/Zegbee/Bluetooth (optional)
AI accelerator	1 x M.2 2280，accelerator card，max 16 TOPS(optional)； 1 x SO-DIMM，NVIDIA JETSON NX module (optional);
USB	IO: 2 x USB3.0 Type-A，2 x USB2.0 Type-A；
COM	2*RS232/RS485(DB9)+4*RS232(Phoenix，2*6pin)；
TCM/TPM	OnBoard TCM ； TPM (via built-in USB interface)
Expension	16 x GPIO(Phoenix，2*10pin)
POWER	DC IN 12V ~19V
Dimension	268(L) x 200(W) x 53.7(H)mm
Operate System	WIN10/Linux
Environment Temperature	Operating Temperature 0~50℃， Storage Temperature -20~70℃
Environment Humidity	RH 10%~90% （non-condensing）

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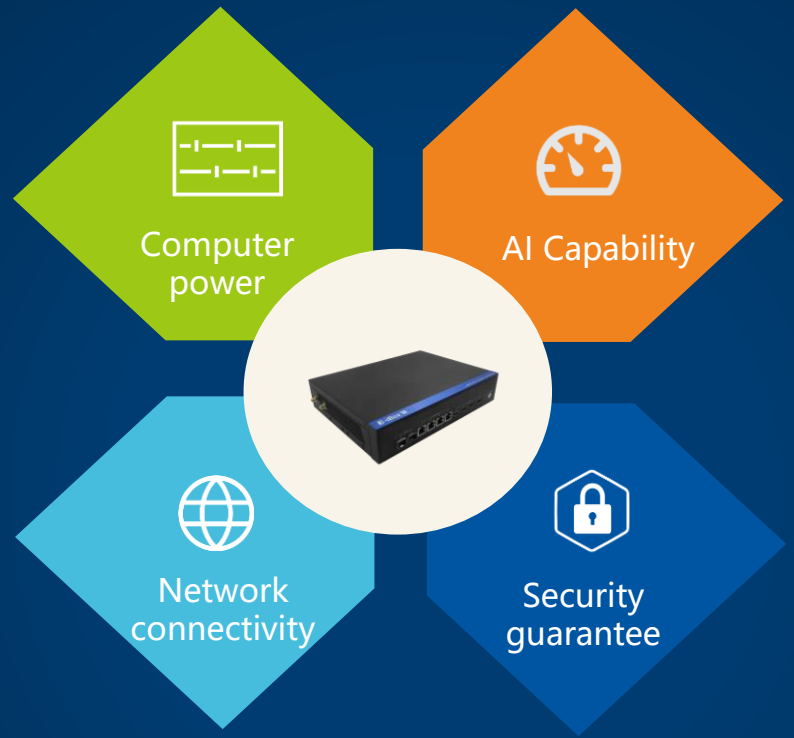
Product Features

Entry level , Intel® Celeron® processors
Main force, Core i3/i5/i7processors



11th gen Intel® Core™ Processor (Codename: Tiger Lake – U). chip AI computing power
Support M.2 AI accelerator card
Support SODIMM GPU graphics card

Gigabit Ethernet or SFP optional
4G/5G, WIFI5/6 optional
LoRa, Zigbee, BT optional

memory encryption and Key locker
TPM (via built-in USB interface)
OnBoard TCM

4 x HDMI1.4b,
support 2*2 or 1*4 splicing screen

2 x Gigabit SFP+4*Gigabit Ethernet(POE)
or 6*Gigabit Ethernet supoort IPC

6 x COM, 16 x GPIO
Support smoke alarm or other peripheral signal input and output

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Use Case

Smart store and restaurants

JWIPC Smart Restaurants

- Intelligent marketing, digital advertising, games before dinner
- Intelligent kitchen display system, dish delivery display system
- Intelligent layout to enhance dining experience;
- Intelligent cashier equipment, data statistical analysis;

Use Case

Intelligent transportation

JWIPC Transportation industry

- Smart city traffic brain
- V2x solution
- Signal lamp control solution

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Use Case

Safety Monitoring

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- construction sites,
- warehousing and logistics,
- ports,
- community parks,
- campus scenic spots,
- petroleum and petrochemical,
- power industry,
- mines

Helmet identification

work clothes identification

oil leakage identification

smoke and flame identification

Additional Information

E098 Edge AI Box for Video Analytics

- Powerful and rich computing power options
- Powerful video processing
- Rich network processing functions
- AI computing power to realize the intelligentization of industry scenarios
- Ensure data privacy and security

Create smart restaurants, smart transportation, safety monitoring applications.

Contact Us

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Thank you
for watching!

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