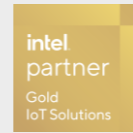


FUTURE ROBOT
未来机器人



Introduction of Products and Services

深圳市卓信创驰技术有限公司
Future Robot Technology Co., Limited

CATALOG

CONTENTS

- Company Profile 3
- Core Business 4-6
- Product Description 7
 - Embedded Industrial Computer 8-10
 - Vision Controller 11-12
 - All-in-one IPC 13-14
 - Grab Card & Expansion Card 15
 - Single Board Computer 16-19

Company Profile

Future Robot Technology Co., Ltd. is located in Shenzhen, China. It is a national high-tech enterprise focusing on intelligent manufacturing and artificial intelligence. The company integrates R&D, production, system integration and sales services. With superb R&D strength as the core and market demand as the guide, the company provides embedded products for global enterprises and individual users. Products are mainly used in industrial automation, robotics, machine vision, medical, intelligent transportation, finance, education, Internet of Things (IoT) and other fields.

The company's technical team consists of X86, FPGA software and hardware engineers, algorithm engineers, system engineers and test engineers. The core team members have more than 15 years of industry experience and have rich project experience in the fields of industrial computer, machine vision and control; have Appearance design and structural design engineers can provide various complex and multi-board appearance design, model design and product open-mould mass production services.

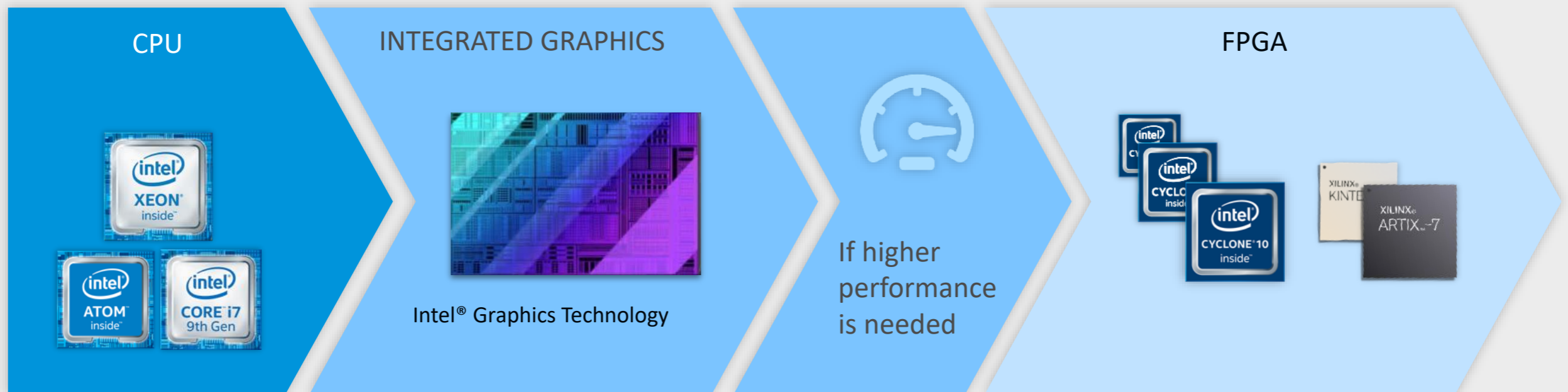
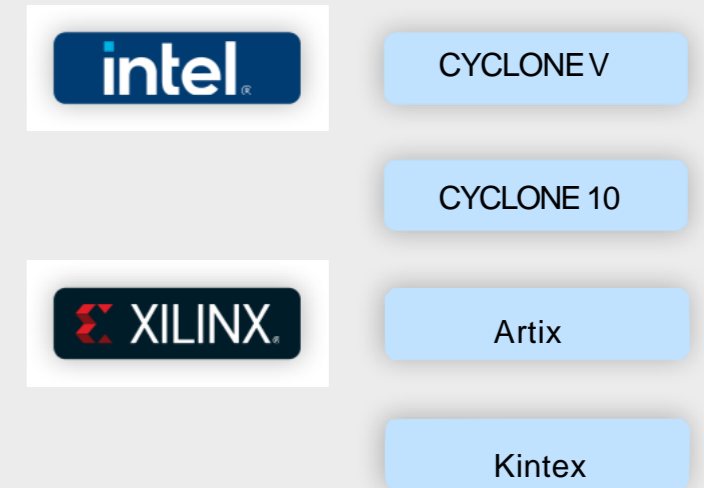
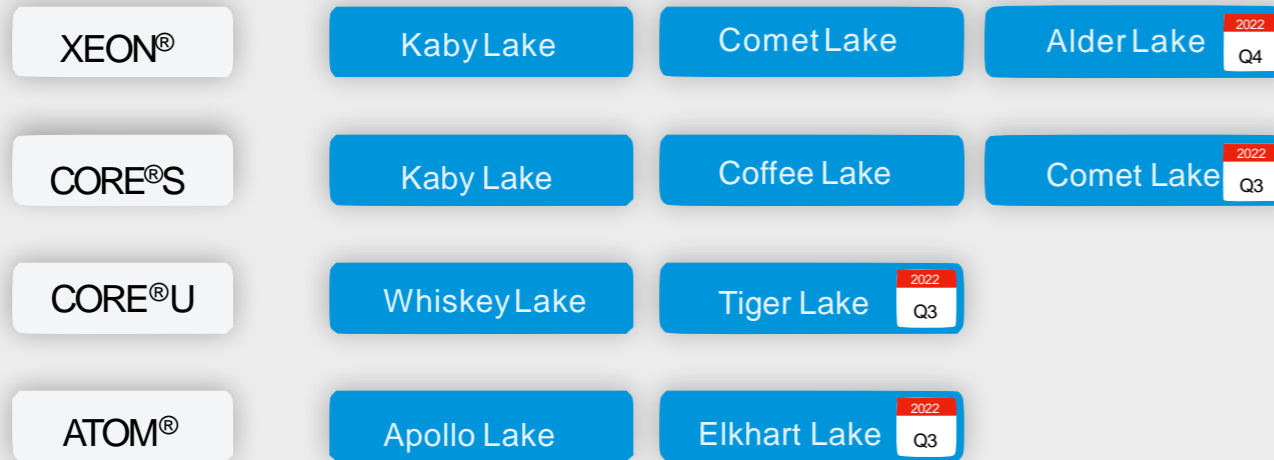
Future Robot Technology Co., Ltd. is a member of Intel® IoT Solutions Alliance and a supplier of Intel® IoT RFP Ready Kits. Based on advanced technical capabilities and excellent operation management, we are committed to providing reliable, convenient and competitive hardware and system solutions for partners in the fields of intelligent manufacturing and artificial intelligence.

FUTURE ROBOT

未来机器人



Technical Features



Heterogeneous

Computing Platform

30+

Independent R&D and customized development solutions

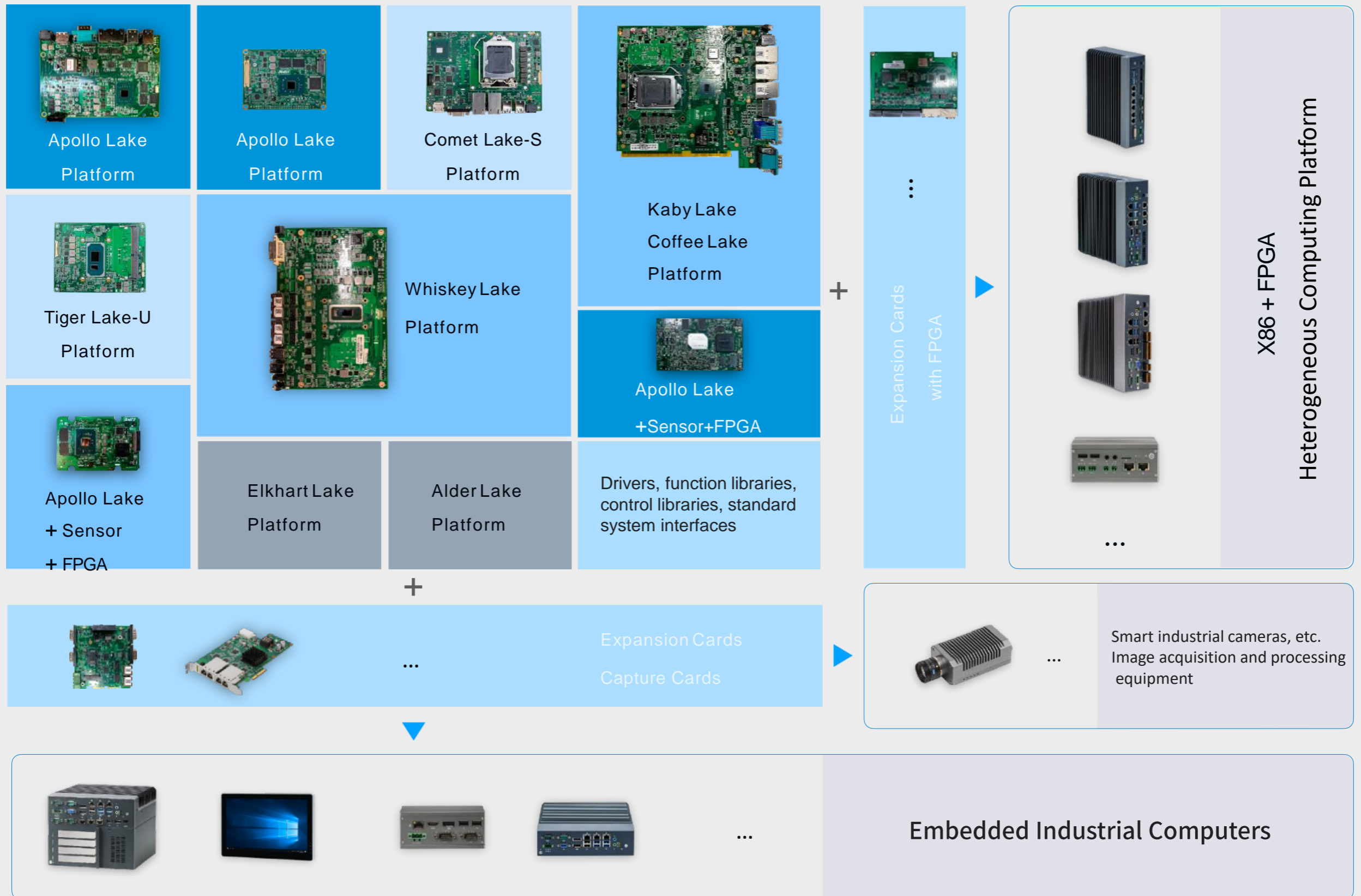
10+

Apollo Lake Platform Solutions

80% +

Applied in the field of control

Technology Platform



Customization services

Fast

Commercialized

Bottom Layer

Software and hardware support

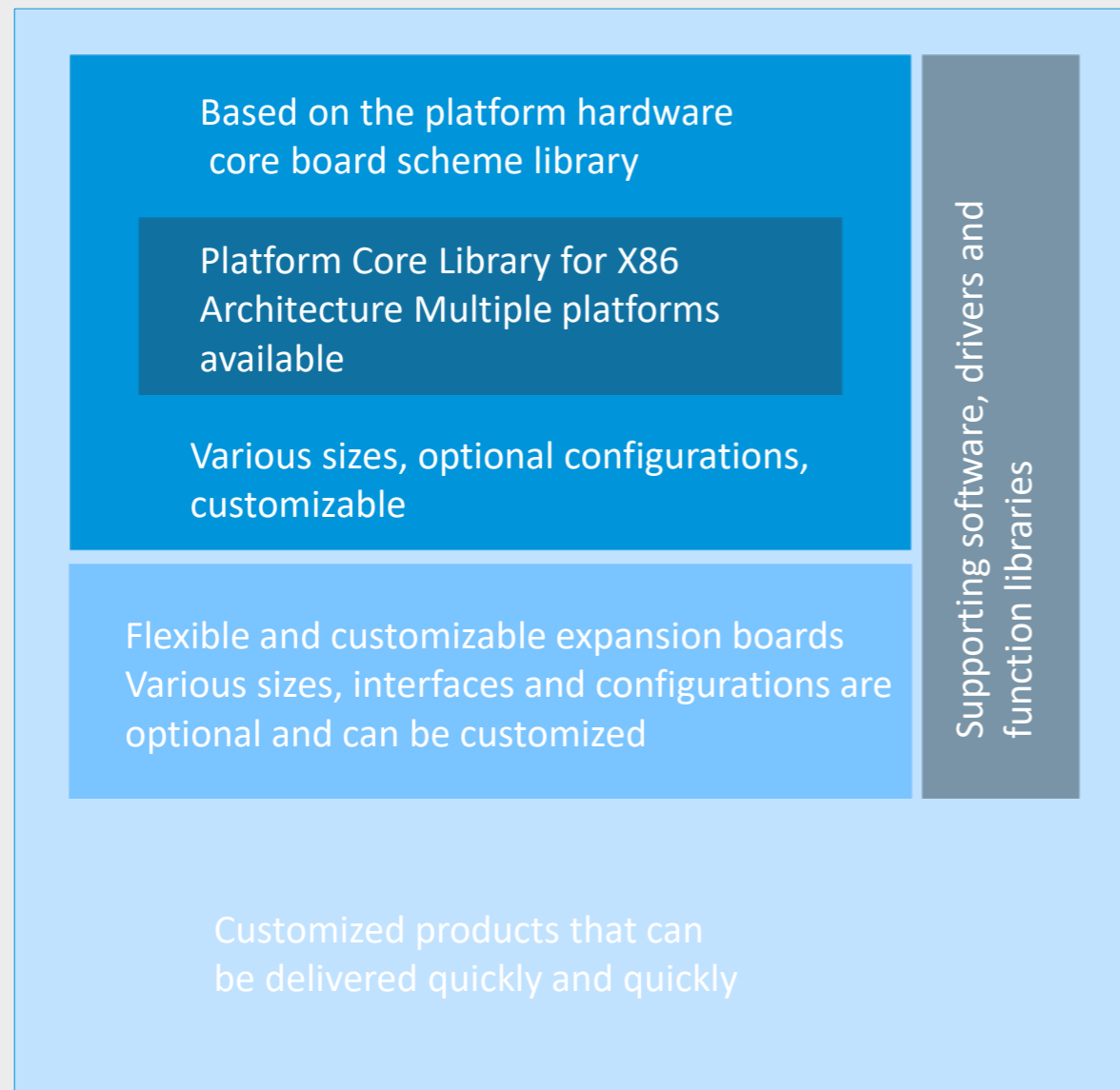
Three Levels

Supply Guarantee System

Optimize

Cost Structure

Various customizable solution libraries and hardware libraries

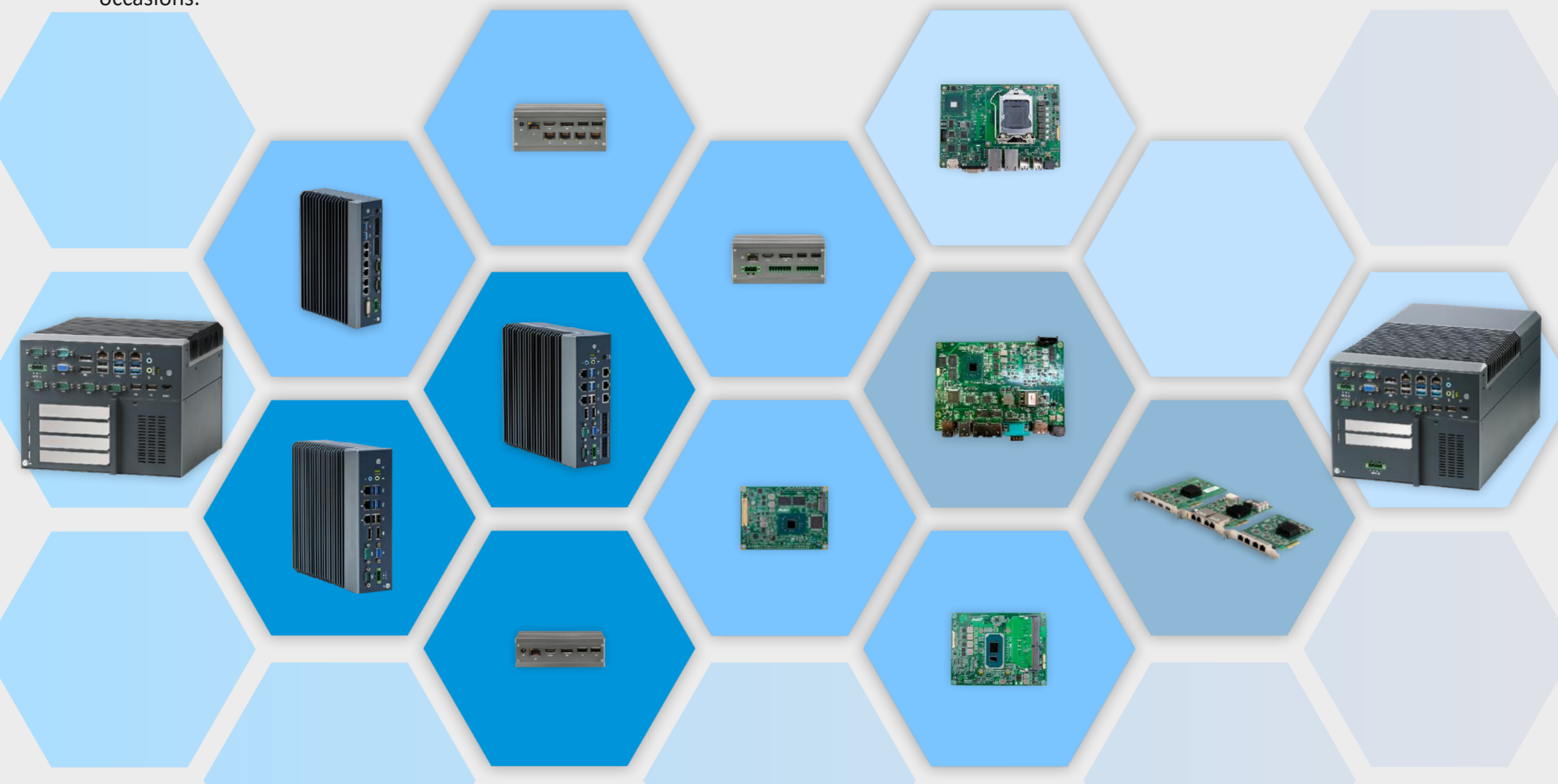


ODM/OEM service process of non-standard design



Product Description

The embedded industrial computer of Future Robot has the characteristics of high stability, high integration, dustproof and shock resistance, compact, small and durable, suitable for various application requirements. Modular computer, multi-network launched according to application in different fields. Multi-export computers and mini-computers provide users with a wide range of IoT solutions and help the development of edge computing. The capture card and expansion card have the characteristics of high performance, high compatibility and high stability, and are suitable for Expansion and access of connected devices. Products have been widely used in industrial automation, smart transportation, Internet of Things, industrial equipment management, power and energy, medical care, self-service terminals, digital signage, multimedia playback, high-definition entertainment, government and enterprise offices and other occasions.



High Performance Embedded Industrial Computer

Max. **6** Serial Ports
Optional RS232/RS485

Max. **6** GbE LANs
One Intel NIC chip per port

Max. **64** Road
DI/DO based on FPGA

Gen9 CPU

Multiple

Fanless

Customized



- Intel 6th to 9th generation desktop processors
- 2 DP and 1VGA, Max. 4K UHD dual independent display
- Max. 4 USB 3.0 and 4 USB 2.0
- 1 Remote interface (Excluding E500 series)
- DIO SDK available (E510 Series)
- Rugged and fanless design

Highly Scalable Embedded Industrial Computer

Max. **4** Slots

Supporting Full-size Pcle GPU Cards

Max. **6** GbE LANs

One Intel NIC chip per port.

Max. **6** Ports

3 RS-232 and 3 RS-485/RS-232.



Gen9 CPU

Scalable

High performance

Customized

- Intel 6th to 9th generation desktop processors
- 2DP and 1VGA, Max.4K UHD dual independent display
- Max. 4 USB 3.0 and 4 USB 2.0
- 1 Remote interface(ExcludingE500series)
- Supports full-size GPU cards* (E531Series only)
- Rugged and fanless design

■ Small and Compact Embedded IPC

3 Inches Ultra-compact design	Max. 4 Groups Isolated DI/DO	Max. 2 Groups Lights Control	Max. 5 GbE LANs One NIC chip per port	Max. 4 COMs Optional isolated RS485
---	--	--	---	---



- Intel Apollo Lake SoC
- M.2 and 2.5" SATA* Slots (*E310 only)
- Dual independent display with HDMI and DP
- 1M.2 E-Key slot, Wi-Fi modules available
- 1 Mini-PCIe Slot, 4G LTE available
- Rugged and fanless design

Apollo Lake

Compact

fanless

Customized

■ Vision Controller

Max. **16** Road
DIO Powered By FPGA

Max. **6** GbE LANs
One Intel NIC chip per port

4 Ports
802.3af PoE available



Multiple network ports

PoE

fanless

customized

- Intel whiskey Lake-U CPUs SoC
- 1 DVI-I
- Max. 32GB DDR4 2400MT/s RAM
- 1RS-232,1 RS-485
- 4 USB 3.0
- OS: Windows 10 IoT LTSCLinux

■ Vision Contoller-V510

Max. **32** Groups

Dry and wet compatible DIO

Max. **6** GbE LANs

One Intel NIC chip per port

6 Groups

Light control interfaces.



- Intel 6th to 9th generation desktop processors
- 2 DP and 1VGA, Max.4KUHD dual independent display
- Max. 4 USB 3.0 and 4 USB 2.0
- 1 Remote interface (Excluding E500 series)
- DIO SDK available
- Rugged and fanless design

High performance

Rich interfaces

fanless

customized

All-in-one IPC

12~20 Inches

HD Industrial Display

10 Points

Capacitive multi-touch screen

IP 65

Screen Protection Level

Max. 6 GbE LANs

One Intel NIC chip per port.

Rich interfaces

fanless

customized

Apollo Lake

Whiskey Lake

Tiger Lake



- Intel® Apollo lake/Whiskey lake/Tiger lake-U SoC
- Multiple screen resolutions available
- 10 points capacitive multi-touch screen
- Max.32GB DDR4 2400MT/s RAM
- DIO SDK available with DIO models
- Multiple screen sizes available
- OS: Windows 10 IoT LTSC, Linux

All-in-one IPC- X150

15.6 Inches

HD Industrial Display

10 Points

Capacitive multi-touch screen

Max. 6 GbE LANs

One Intel NIC chip per port

IP 65

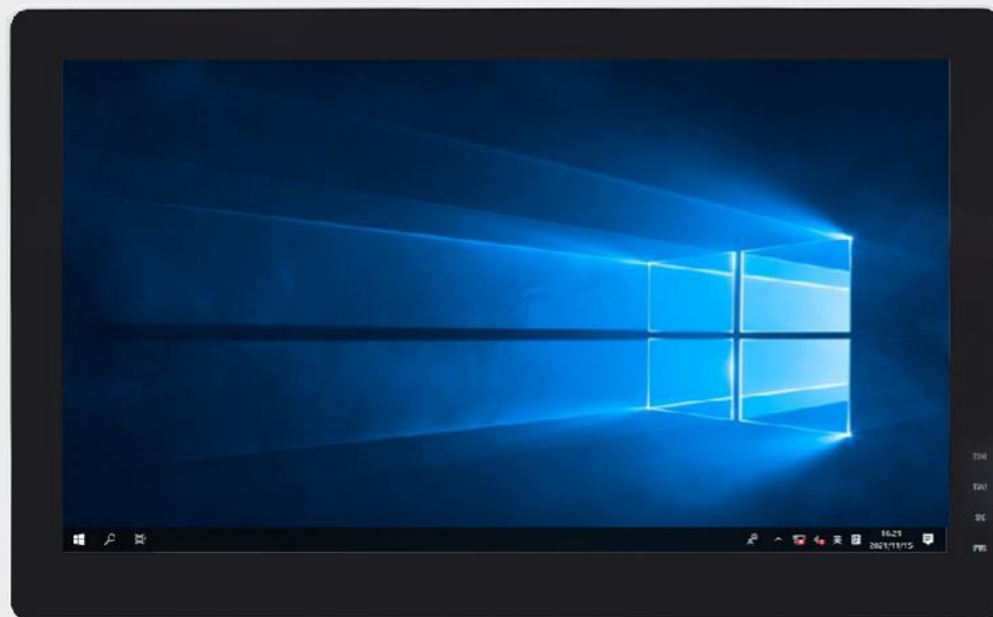
Screen Protection Level

Apollo Lake

Rich interfaces

fanless

customized



- Intel® Apollo lake Celeron ® J3355/3455 or Pentium ® J4205 CPU
- 15.6-inch 1366x768 high-resolution industrial high-brightness TFT LCD screen
- 10 points capacitive multi-touch screen
- Optional minute-level UPS uninterruptible power protection
- Max.32GB DDR4 2400MT/s RAM
- DIO SDK available with DIO models
- Multiple screen sizes available
- OS: Windows 10 IoT LTSC, Linux

■ USB or LAN Interfaces Expansion Cards

x4 Slots

Based on PCIe Gen2.0

4 Ports

PoE/PoE+(C100)

4 Ports

GbE LAN or USB 3.1



- One intel® i210/i211 NIC Chip per port for C100/C110
- One USB card with 2 independent host controller chips
- NIC support full-duplex, half-duplex intelligent detection of adaptive
- On-board 5V DC regulated power supply design, no additional power supply required
- NIC supports 9KB jumbo frames
- Stable on Linux and Windows 10

Single Board Computer RXE-5100

Max. **65** W
Standard TDP Design

64 Mbit SPI
AMI UEFI BIOS

4 GbE LANs
Controlled by Intel chip



Gen10 CPU

Rich interfaces

Edge node

High Performance

Compact

Customized

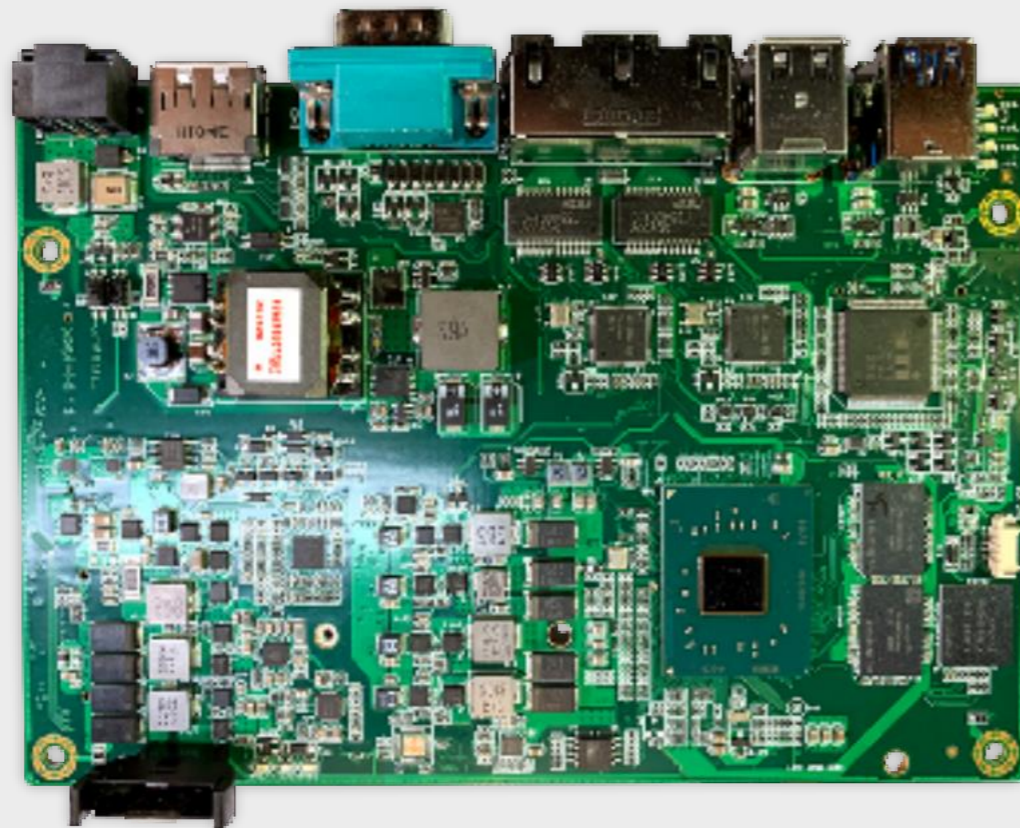
- Support Intel® Core i9-10900E, i7-10700E, i5-10500E, i3-10100E, Pentium® Gold G6400E, Celeron® Processor G5900E CPU
- Intel H420 Chipset
- Max. 32G 2933 MT/s DDR4 Dual Channel SO-DIMM
- 1 x VGA & 1 x DP
- 1 x PCIE x4 Gen3 slot on board
- 1 x USB3.0/PCIE x2 slot on board, 2 x M.2
- 2 x USB 3.1 Gen 2 & 2 x USB 3.1 Gen1

Single Board Computer RXE-5200

Max. **32**
DI/DO

64 Mbit SPI
AMI UEFI BIOS

4 GbE LANs
Controlled by Intel chip



Scalable

customized

fanless

Apollo Lake

rich interfaces

Edge node

- Intel Pentium J4205/Pentium N4200/Celeron J3455/Celeron J3355 Processors
- AMI UEFI BIOS at 64 Mb
- Max.16 GB LPDDR4-2400MT/S RAM
- Intel Gen9 Graphic Engine
- Support DP1.2a(4096x2160 @60Hz)
- 4 Intel i211-AT GbE LAN
- 16xDI,16x DO
- Support Windows 10 IoT LTSC, Linux

Single Board Computer R X E - 6 1 0 0

Max. **15** W
Standard TDP Design

128 Mbit SPI
AMI UEFI BIOS

2 CONN
B2B Expansion Connector

Gen11 CPU

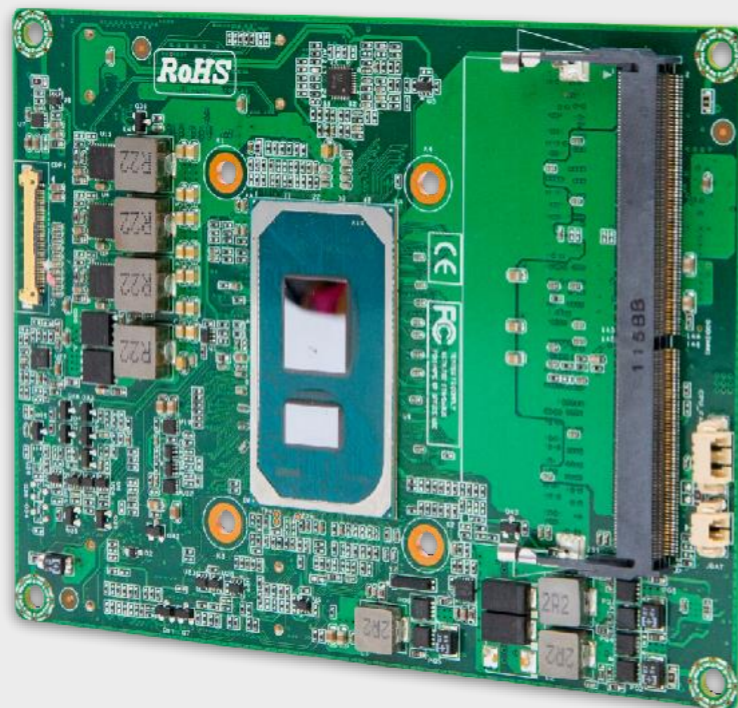
B2B connector

Edge node

AI computing

Scalable

Customized



- Support Intel Core i7-1185G7E, Intel Core i5-1145G7E, Intel Core i3-1115G4E, Intel Celeron 6305E
- Max. 32G 3200 MT/s DDR4
- 2x B2B CONN
- 1x eDP
- Support Windows 10 IoT LTSC, Linux
- Support Fanless Design
- 125x 95mm (Lx H)

Single Board Computer-IEM2160 Series

2.5" Pico-ITX Industrial Single Board Computer



Scalable

Customized

fanless

Apollo Lake

rich interfaces

A M R

- Intel Apollo Lake N3350/N4200/J3355/J3455/J4205 SoC
- Up to 8G LPDDR4 Soldered RAM Support
- Intel Gen 7 DirectX 11.1
- Dual Independent Display: 48-bit LVDSVGA,DP/HDMI
- 1x Full-size Mini-PCle, ·1xMicro-SIM
- 2 COM, 1 SATA, 1 M.2, 5 USB, 1 GbE
- 1 x Board to Board Connector
- 2 x 64 Pin Connectors
- Support Watch Dog
- Windows 10 IoT、Linux Os
- Dimensions:100x72 mm