

Partner Presentation

# Cross Platform for Edge Computer Module

(8th Gen , 11th Gen Intel® Core™ Processor)

Victor Wang, Maxtang

**Maxtang**<sup>®</sup>  
大唐计算机

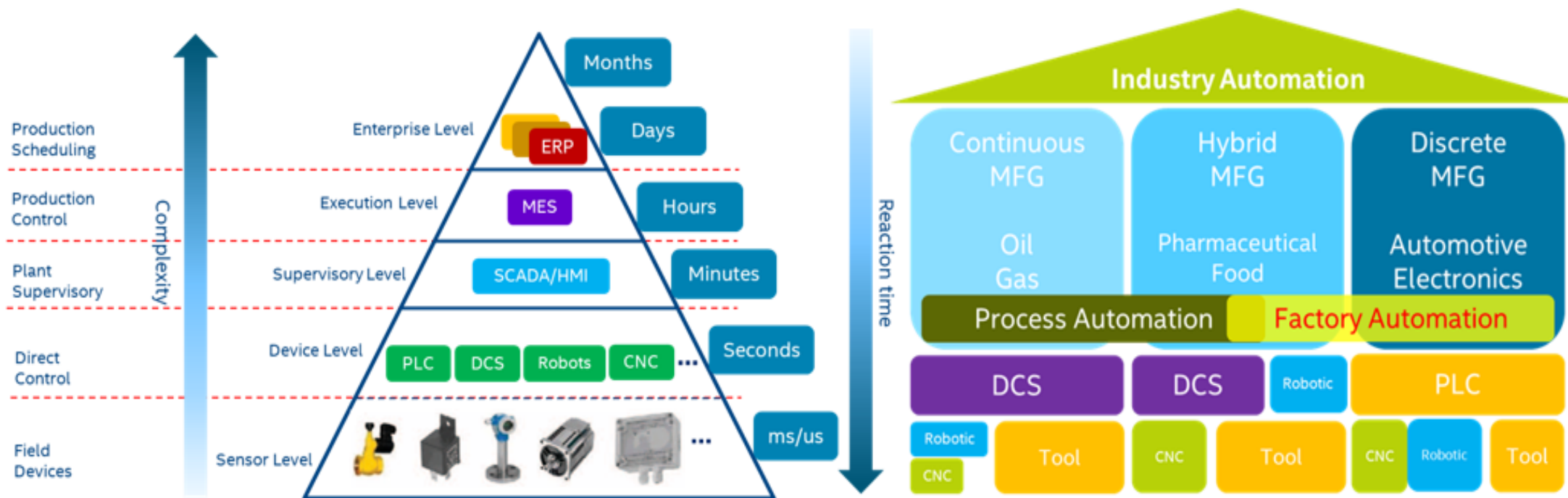
# Maxtang Overview



- Industrial Manufacturer combines R&D, manufacturing, Sales altogether
- Provides High Performance, Reliable Products and Services
- Support 1500+ customers worldwide in various industry
- 2020 Rev \$45M



# Industrial Market Focus



### Vision

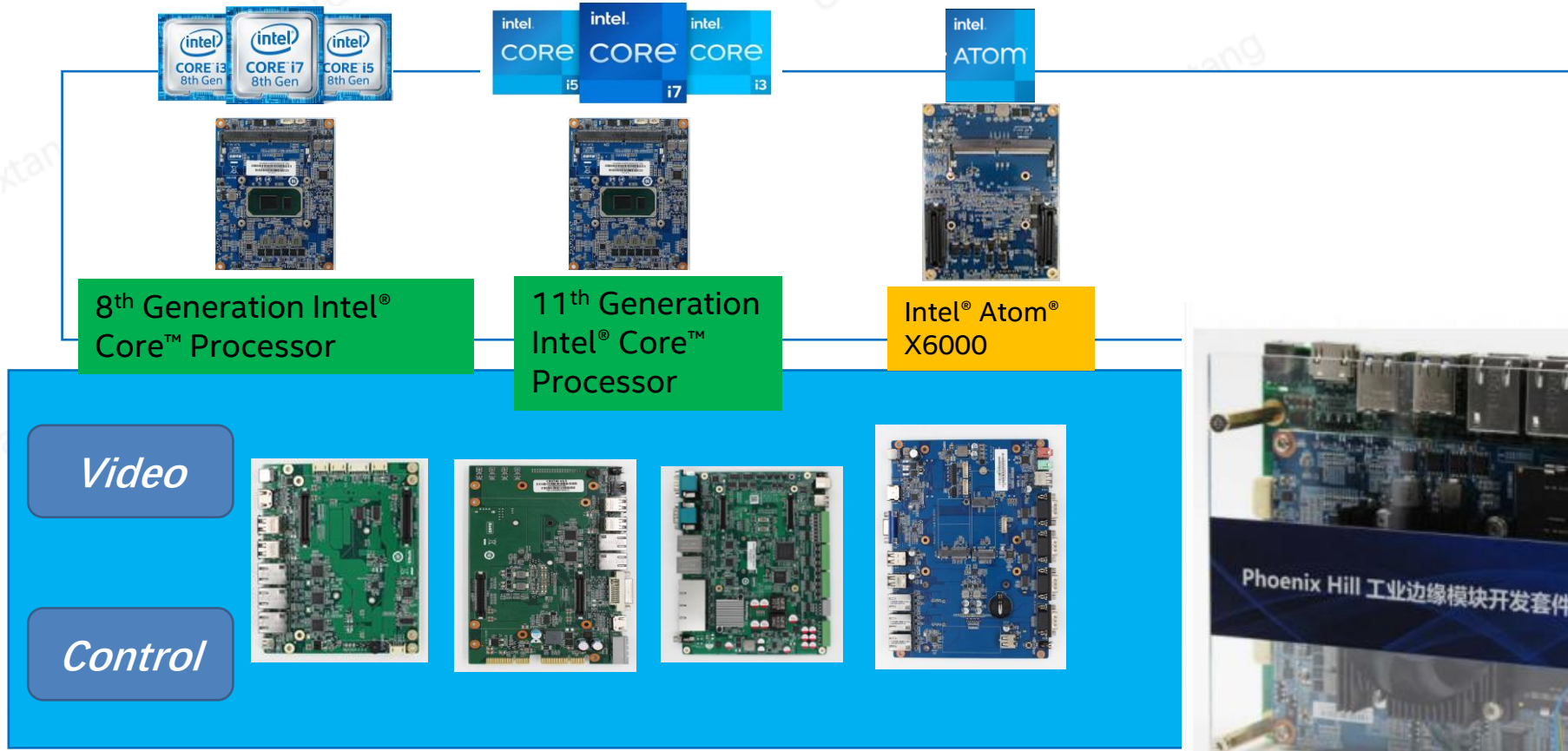
IPC	Smart camera	AI platform
85%	35%	??%

### Motion

PLC	HMI	Robotics	CNC
25%	85%	37%	12%

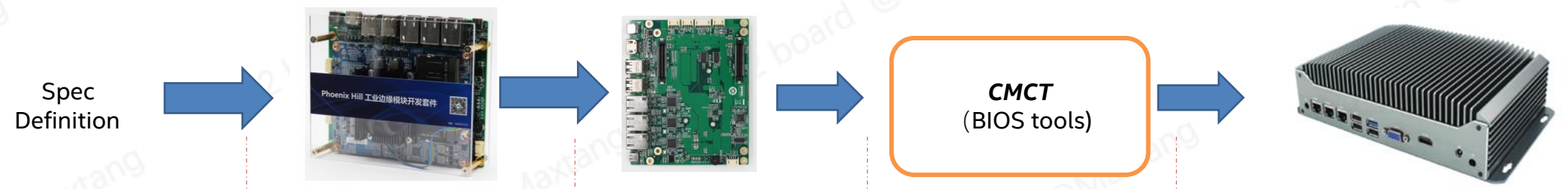


# U2's Ecosystem



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# UDD0 Design Flow (Edge computing)



	Software Evaluation	Interface Confirmation Product Types	Base Structure and Design	Structure Verification
<ul style="list-style-type: none"> <li>Product Definition</li> <li>Software Ecology</li> </ul>	<ul style="list-style-type: none"> <li>UDD0 ( Dev kit )</li> <li>App evaluation</li> <li>Algorithm evaluation.</li> <li>Performance evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Interface frozen</li> <li>Platform frozen</li> </ul>	<ul style="list-style-type: none"> <li>Carry board design.</li> <li>BIOS &amp; firmware customization</li> <li>Thermo simulation</li> </ul>	<ul style="list-style-type: none"> <li>HW &amp; SW Tunning</li> <li>EMC · EMI</li> <li>Robustness</li> </ul>
	<ul style="list-style-type: none"> <li>Linux RT Optimize</li> <li>ECI,EII</li> </ul>		<ul style="list-style-type: none"> <li>CMCT</li> <li>Flotherm</li> </ul>	

Design Cycle : **90day ( From ideal to EVT )**

# UDD0 Brief For Industrial Scenario

## Product Appearance



## Promotion Application

Recommendation:

As an early design tool for

1. Industrial controller
2. AGV, Robotics
3. Abroad Edge Computer
4. AI boxes

## Brief Specification

Model	UDD0-XXX-A0	UDD0-XXX-A1
CPU	Intel® Celeron® Processor 4000 Series / Intel® Celeron® Processor 6000 Series / 8 <sup>th</sup> Generation Intel® Core i7 Processor / 11 <sup>th</sup> Generation Intel® Core i7 Processor	
Max memory	8G/16G 2 Channel SODIMM	
Display	HDMI 1.4	
Storage	64G/128G	
USB	6	
Mini PCIe	1	
M.2	1 2280 SSD /2242 SSD& 4G /	
Expansion	Customized TYPE-C	
Lan port	3	
Power	DC 12V	
Dimension	144mm*120mm	
Cooling	Fan	

## Order Information

CPU	Order
Intel® Core™ i7-8665UE Processor	UDD0-8665
Intel® Celeron® Processor 4205U	UDD0-4205
Intel® Core™ i7-1185G7E Processor	UDD0-1185G7
Intel® Celeron® 6305E Processor	UDD0-6305

## Accessory

SSD (64G,128G)

DDR (4G, 8G, 16G)

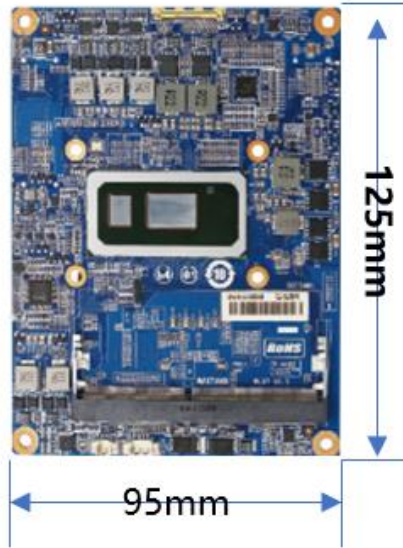
A0 version (bare metal)

A1 version (RT patch)

Customized cable

# U2 Edge Computer Module

## Product Appearance



## Promotion Application

Recommendation:

1. Industrial controller.
2. AGV, Robotics .
3. Abroad Edge Computer.
4. AI boxes.

## Brief Specification

<b>Model</b>	UBWL/ UBTL
<b>CPU</b>	Intel® Celeron® Processor 4000 Series / Intel® Celeron® Processor 6000 Series / 8 <sup>th</sup> Generation Intel® Core i3/i5/i7 Processor / 11 <sup>th</sup> Generation Intel® Core i3/i5/i7 Processor
<b>Memory</b>	Up to 64G dual channel
<b>Display</b>	1*eDP integrated Graphics
<b>Interface</b>	2* 12o connect compatibility IEM TYPEB standards compatible UBWL-xxx
<b>Power</b>	12V power input from CONN1 and CONN2
<b>Dimension</b>	125mm* 95mm
<b>Temperature</b>	-20C~60C

## Order Information

CPU	Order
Intel® Core™ i7-8665UE Processor	UBWL-8665
Intel® Core™ i5-8265U Processor	UBWL-8265
Intel® Core™ i3-8145UE Processor	UBWL-8145
Intel® Celeron® Processor 4205U	UBWL-4205
Intel® Core™ i7-1185G7E Processor	UBTL-1185G7E
Intel® Core™ i5-1145G7E Processor	UBTL-1145G7E
Intel® Core™ i3-1115G4E Processor	UBTL-1115G4E
Intel® Celeron® 6305E Processor	UBTL-6305

# 11<sup>th</sup> Generation Intel® Core™ Processors

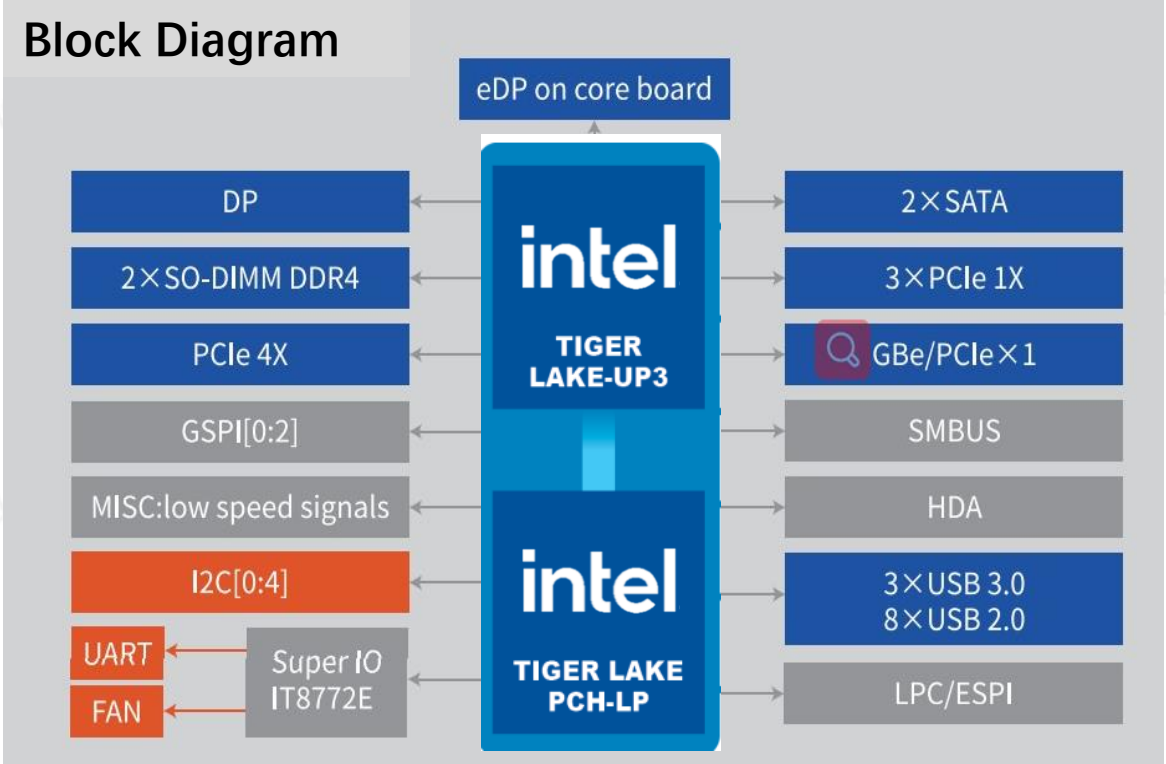


	I/O	Display & Media	Memory	Cores/TDP	Feature
11 <sup>th</sup> Generation Intel® Core™ Tiger Lake	PCIe 4.0(CPU) 3.0 (PCH)	Gen12 Gfx4 Display Pipes2 VDBOXMIPI CSI/DSI & IPU	DDR4-3200LPDDR4	Up to 4 Core12/15/28W	Support TCC,TSN, Fusa
8 <sup>th</sup> Generation Intel® Core™ Whisky Lake	PCIe 3.0 (PCH)	Gen9 Gfx3 Display Pipes1 VDBOX	DDR4-2400LPDDR3-2133	Up to 4 Core12.5/15/25W	N/A

## Highlights

- High performance/low latency PCIe 4.0 off CPU
- Media/display: greatly enhanced with up to 4x4K or 1x8K
- Faster memory and in-band ECC available
- Performance scales with TDP.
- High performance RT\*
- Support Fusa and iTemp\*

\* Need special industrial SKUs support



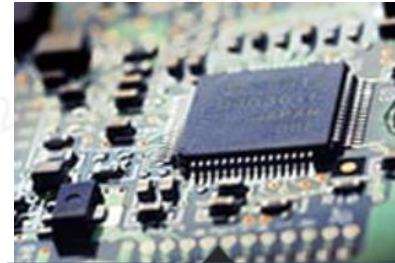


# UMMV06-C Application



11<sup>th</sup> Generation Intel® Core™ i5-1145G7E Processor

Intel® Edge Insights for Industrial (Intel® EII)  
Intel® Edge Control for Industrial (Intel® ECI)



Semiconductor



Mick & Drug



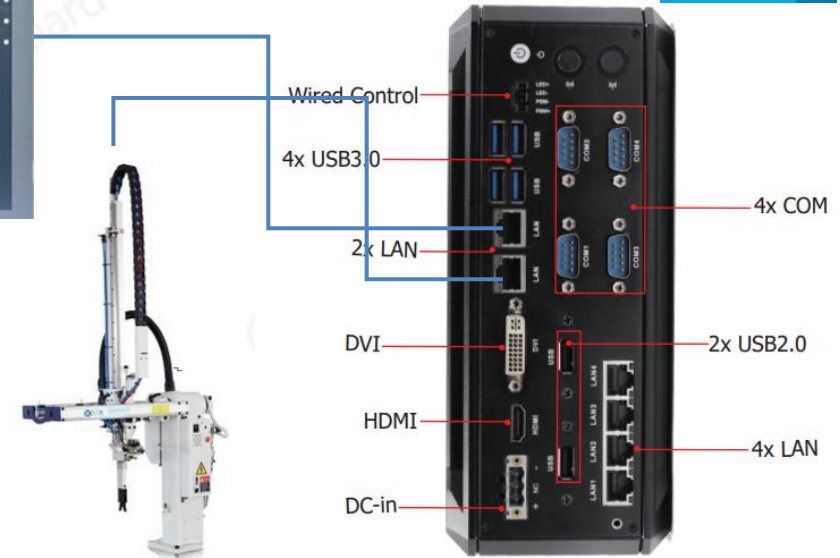
Mechanical

## Intel® Core™ i5-1145G7E Processor 4C8T @2.4GHz

Precision	Throughput(FPS)	RT	Jitter(us)
FP32	5.52	RT(xenomai3)	<10us
FP16	5.16	RT(Premi-RT)	<20us
INT8	22.2		
FP16-GPU	27.38		
INT8-GPU	40		



OpenVINO™



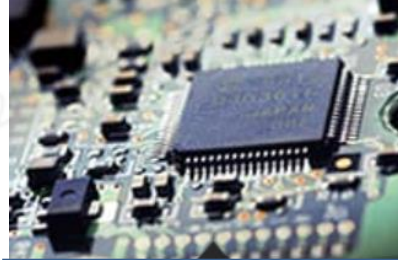
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# UMMV06-C Application



11th Generation Intel® Core™ i5 Processors Intel® Core™ i5-1145G7E Processor Intel® Edge

Insights for Industrial (Intel® EII) Intel® Edge Control for Industrial (Intel® ECI)



Semiconductor



Food & Drug

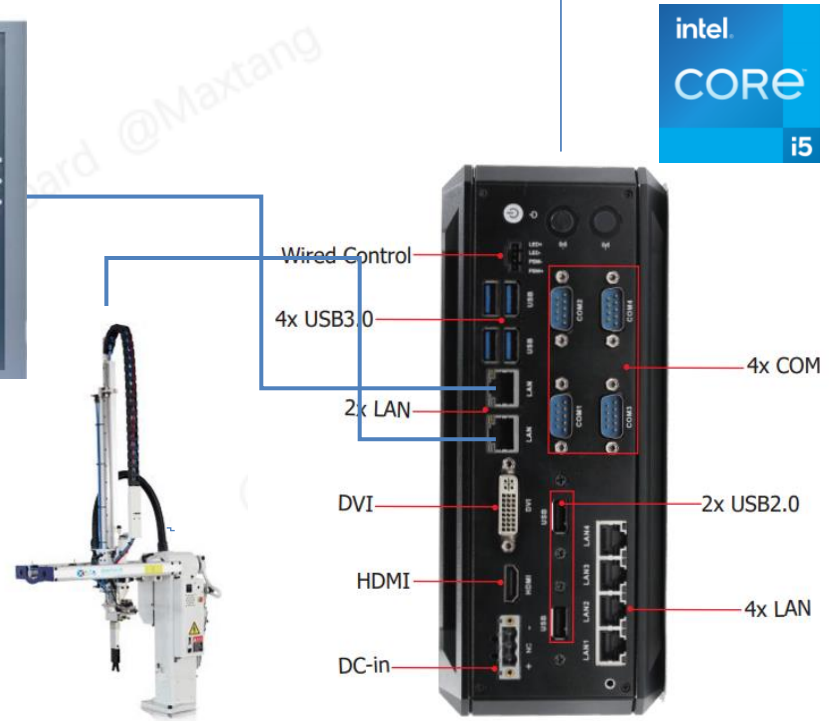


Mechanical

Intel® Core™ i5-1145G7E Processor 4C8T @2.4GHz			
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INT8	22.2		
FP16-GPU	27.38		
INT8-GPU	40		



OpenVINO™



# UMMV06C's Advantages



Feature
11th Generation Intel® Core™ i5-1145G7E Processor
6x GbE LAN (4x support PoE af)
Dual display
4x DB9 com 232/485



Application
Communication gateway
Traffic Control V2X MEC
Industrial AI & Machaon vision

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# Smart Connect, Intelligent Control Reliable & Stable



For Any Questions  
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The background features a complex, abstract pattern of thin, overlapping lines in shades of blue, purple, and yellow, creating a sense of motion and depth. A solid red rectangular box is positioned on the left side of the image, containing the text.

Thank you  
for watching!