

UMIF Series

Intel® 8th Gen/11th Gen based Industrial Edge Computer

High-Performance Edge Computing for Precision Control and Factory Automation



IoT Solutions
Alliance
Industrial Solution
Builders Specialist

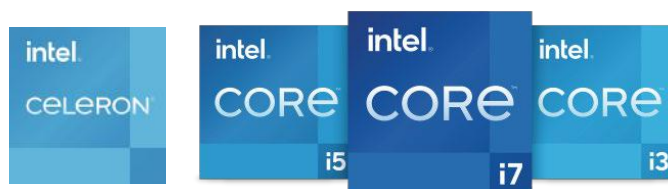
Key Features

- Modular design for flexible interface expansion(CAN, RS232, RS485, LAN, 5G, WiFi)
- Powered by the 8th Gen(Whisky Lake) /11th Gen(Tiger Lake) Intel Celeron, Core i3/i5/i7 CPU
- DIN-rail mounting configurations for more flexibility
- High-speed isolated digital I/O(4x DI, 4x DO). 128KB built-in ferroelectric memory
- Built-in Mini PCIe and internal USB for secure software integration
- System imaging functionality for easier deployment and maintenance
- TSN(Time-Sensitive Networking) support for time-critical applications

Introduction

The Maxtang UMIF series edge computers are designed with a modular approach and built for high-performance edge computing and seamless integration into DIN-rail industrial control systems. This flexibility feature allows users to customize configurations based on specific application needs, powered by the 8th Gen(Whiskey Lake Platform) and 11th Gen (Tiger Lake Platform) Intel Celeron, Core i3/i5/i7 processors for versatile computing power and increased productivity.

The UMIF series offers robust connectivity with a built-in Mini PCIe interface for multiple peripheral support, while the internal USB Dongle interface ensures enhanced software security. Additionally, it includes 128KB built-in ferroelectric memory with high-speed isolated digital I/O (4x DI, 4x DO) and support for TSN (Time-Sensitive Networking) technology to provide the high real-time performance necessary for reliable industrial control.



Application Scenarios

High Real-Time Edge Computing Control

- Ideal for low-latency, high-performance edge computing in critical industrial environments.
- Processes data instantly at the edge, reducing cloud dependency and delays.

Industrial Robots

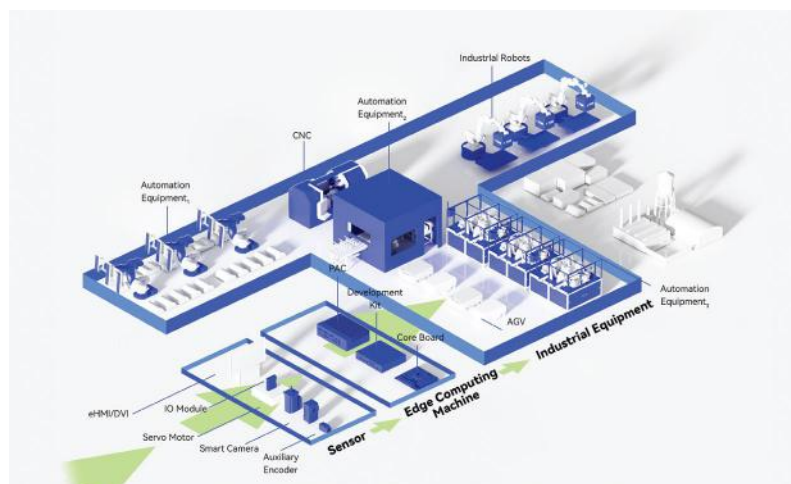
- Ensures precise, real-time control of robotic systems.
- High-speed I/O and modular interfaces enable smooth communication between components.

PLC Industrial Control Systems

- Integrates easily with PLC systems using modular design and DIN-rail mounting.
- Enhances real-time monitoring and control of industrial processes.

Autonomous Guided Vehicles (AGV), Automated Guided Carts (AGC), and Autonomous Mobile Robots (AMR)

- Provides real-time, low-latency computing for autonomous navigation.
- Modular interfaces (5G, WiFi) support seamless communication and operational efficiency.



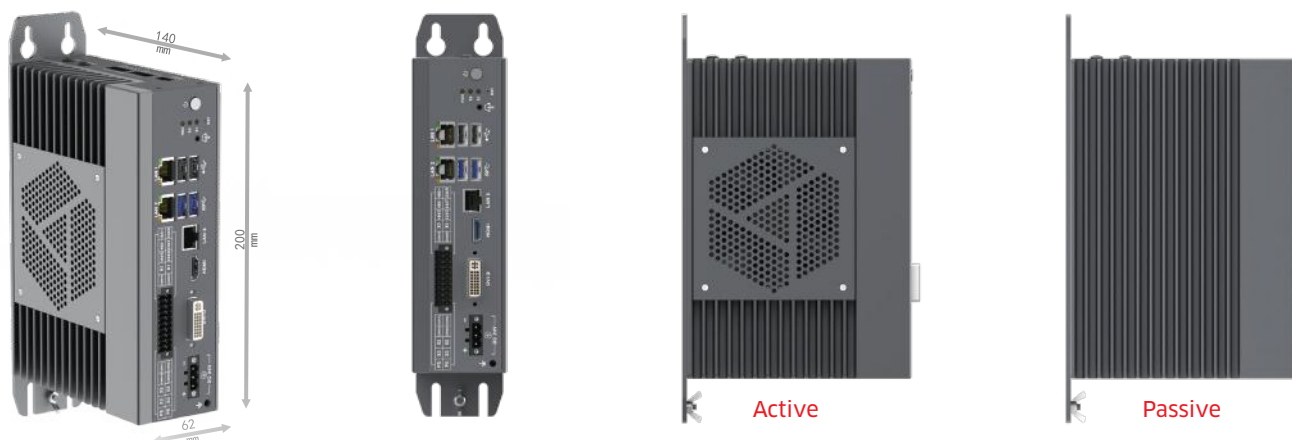
*Image for reference only actual scenarios may look different.

Technical Specifications

Model No.		UMIF Series
Processor	Whiskey Lake	8th Gen Intel Celeron, Core i3/i5/i7
	Tiger Lake	11th Gen Intel Celeron, Core i3/i5/i7
Display	BIOS	AMI Real-time BIOS
	GPU	Integrated Intel Graphics
Memory	Interface	DVI-D, HDMI
	Type	2x SO-DIMM DDR4
Ethernet	Max.Capacity	64GB
	Controller	1x Intel i226
Storage		2x Intel i210
	Interface	3x RJ45
LED Indicators	M.2	1x M.2 Key M slot, supports 2242/2280 SSD (SATA protocol)
	mSATA	1x mSATA Interface, built-in 1M ferroelectric memory (optional)
I/O Interfaces		1x Power LED
		1x HDD LED
Expansion		2x Programmable LEDs
	Rear	2x USB 3.2 Gen1
Power Supply		2x USB 2.0
	Internal	1x USB 2.0
Working Environment		1x RS232
		1x RS485
Certifications	Mini PCIe	1x Mini PCIe
	M.2	1x M.2_E slot for Wi-Fi
		1x M.2_W slot for 4G/5G modules
		24V DC-IN (3-pin 5.08 power connector)
	Cooling Method	Passive/Active
	Operating Temperature	-20°C to 60°C
	Storage Temperature	-40°C to 85°C
	Operating Humidity	5% to 95% (non-condensing)
	Protection Level	IP20
	Vibration Testing	with SSD, 5Grms / 5~500Hz Random
	Shock Testing	with SSD, 50G / half-sine / duration 20ms
	ESD (EN61000-4-2)	±8kV Air Discharge for all surfaces
		±6kV Contact Discharge for exposed conductive surfaces
		CE/FCC

*All specifications and photos are subject to change without notice.

Product Details



Order Info

Model No.	CPU	Base Freq.	Core/Thread	GPU	RAM	SSD	Cooling
UMIF-WC22	4205U	1.8 GHz	2C/2T	UHD Graphic(8th Gen)	2x4G	64G	Passive
UMIF-W322	i3-8145	2.1 GHz	2C/4T	UHD Graphic(8th Gen)	2x4G	64G	Passive
UMIF-W533	i5-8265U	1.6 GHz	4C/8T	UHD Graphic(8th Gen)	2x8G	128G	Passive
UMIF-W733	i7-8665U	1.9 GHz	4C/8T	UHD Graphic(8th Gen)	2x8G	128G	Passive
UMIF-TC22	6305	1.8 GHz	2C/2T	UHD Graphic(11th Gen)	2x4G	64G	Passive
UMIF-T322	i3-1115G4	3.0 GHz	2C/4T	UHD Graphic(11th Gen)	2x4G	64G	Active
UMIF-T533	i5-1145G7	2.6 GHz	4C/8T	Iris Xe Graphic	2x8G	128G	Active
UMIF-T733	i7-1185G7	3.0 GHz	4C/8T	Iris Xe Graphic	2x8G	128G	Active

Important Notes!!!

Listed models are part of our standard inventory.

For any custom configurations or differences between models, please consult with our customer service team for confirmation.
For specific system installation requirements across different models, please reach out to our customer service team for further assistance.