

## Embedded PC Series

## Industrial PCs

## Industrial Components



Front

High-performance industrial PC designed for peripheral applications in the Industrial Internet of Things (IIoT). It features an 11th generation Intel® Tiger Lake U SoC CPU i5-1135G7 processor and a wide variety of input/output (I/O) ports, highlighted by its **16** optoisolated digital inputs/outputs (8 inputs / 8 outputs **DIO**). Its design includes a wide voltage input range of **9V-36V**, an excellent heat dissipation structure, and a reinforced mechanical design, ensuring reliability and stability in demanding environments..



## TECHNICAL SPECIFICATIONS

Intel® Tiger lake U Soc CPU **i5 1135G7**  
**1\*DDR4** 3200MHz SODIMM, up to 32GB  
**2\*HDMI** 4K display output  
**3\*1210AT** Gigabit Ethernet port,  
**4\*USB3.2, 2\*USB2.0**  
**16bit Iso. DIO, 2\*RS232/485, 2\*RS232, 2\*RS485,**  
**2\*CAN,** Audio out + Mic  
 1\*M.2 2280 M-Key, supports NVME storage  
 1\*Mini PCIe, with SIM card slot, supports 4G wireless module  
 1\*Mini PCIe, supports functional cards such as CAN, optional switch to mSATA  
 1\* Full Size mSATA for storage  
**DC 9~36V**, with short circuit, over voltage and over current protection.  
**Operating temperature:** -20~60°C, wide temp SSD, airflow: **Storage temperature:** -40°C~85°C  
**Storage humidity:** 10~95%@40°C, Non-condensing  
**Vibration:** 5grms/5~500Hz

## OTHER TECHNICAL DATA

**LED:** 1\*Power LED, 3\*CPU temp LED (Red is warning, Yellow is high, Green is normal)  
**Control SW:** 1\*Power button w/LED.  
**1\*Remote SW,** 1\*AT/ATX SW, 1\*Clear CMOS SW, RS232/485 mode conversion switch for COM5/6  
**Power supply:** DC 9-36V, 1\*3-pin phoenix term, with short circuit, over voltage and over current protection.  
**Graphics:** Intel UHD Graphics or iRIS® Xe Graphics, DirectX12.1, OpenGL 4.6 and OpenCL 3.0, HDMI max res. 4096x2304@60Hz  
**Audio:** Realtek ALC897 Audio chip, support 5.1 channels, Audio out + Mic  
**LAN:** 3\*Intel I210AT, 10/100/1000Mbps adaptive, supports WOL  
**TDP:** TBD  
**Watchdog timer:** Watchdog timeout programmable via software 1 to 255 second  
**OS Support:** Windows 11\*IoT enterprise, Windows 10\*IoT enterprise, Android, SUSE, Ubuntu, Wind River, Red Hat\*Enterprise, Wind River VxWorks\*7, Yocto  
**Mechanical:** Aluminum rectangular profile cooling housing, SGCC chassis  
**Color:** Silver Gray  
**Mounting:** Desk mounting with anti-vibration non-slip foot pads, opt Din-Rail mounting  
**Dimension:** (W\*D\*H): 201.4\*112\*73.5mm (With tabletop mounting bracket) ; 170\*112\*65mm (Without mounting bracket)

## I/O PORTS



## CONNECTIVITY OPTIONS

**WiFi Module:** Intel AC 9560  
**WiFi Antenna:** Yes  
**Connection Cable:** Yes  
**SMA Extension Cable:** Optional

**GPS Module:** u-Blox pci-5s-1-500  
**GPS Antenna:** Yes  
**Connection Cable:** Yes  
**SMA Extension Cable:** Optional

**4G/GPS Module:** Quectel EC25-E  
**4G/GPS Antennas:** Yes  
**Connection Cable:** Yes

## PRODUCT VALUES

- > Wide voltage range 9V-36V DC
- > 4 x RJ45 1000 Mbps Ethernet network ports
- > GPIO inputs and outputs
- > 8 x USB ports
- > 12th Generation processor
- > Resistant to harsh environments: dust, grease, and vibrations
- > Resistant to extreme temperatures and humidity

## MOST COMMON APPLICATIONS

- > Machine vision
- > Automation
- > Robot guidance
- > Industrial Control Systems (ICS)
- > Metrology
- > Distributed Control Systems / SCADA
- > Data Acquisition Systems (DAQs)
- > Product sorting
- > Factory floor assembly lines
- > Installation in transport vehicles
- > Wireless station (Wi-Fi/4G/GPS)

## APPLICATION SECTORS

- > Artificial Intelligence
- > Aerospace
- > Automotive
- > Data Centers
- > Distribution
- > Naval / Marine Sector
- > Pharmaceutical Industry
- > Transport and Logistics
- > Meat Industry
- > Fishing vessels
- > Shipyards

## SOME SUCCESS STORIES

- > PLC and vision camera
- > External lighting
- > Machine vision system

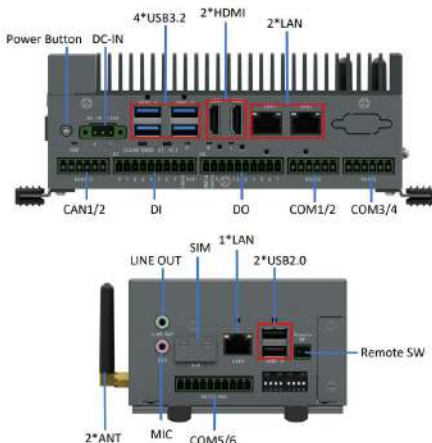
## ALTERNATIVE REFERENCES

- > Industrial PC eNX i5 1235U
- > industrial PC eRX TH Modular

## CERTIFICATIONS



## PACKING



## CONNECTIONS AND DIMENSIONS

