

FPC-8208-G1

Ruggedized Edge AI Computing Box PC with Intel® 14th Gen Core™ i9/i7/i5/i3
Supporting NVIDIA® 100W GPU



Features

- Intel® 14th/13th/12th Gen Core™ 35W/ 65W CPU
- Supports NVIDIA® GeForce® GTX 16 series GPU (up to 100W GPU)
- 9V to 36V DC Input with Power Turn-On/Off Delay & Ignition Power Management
- Supports four independent displays (1 x HDMI, 1 x VGA, 2 x DisplayPort)
- 1 x full-size mPCIe w/SIM slot for Wi-Fi/BT/LTE/GPS
- 1 x M.2 B-Key (2242/3042/3052) w/ SIM slot for 4G/5G/GPS
- 1 x M.2 E-Key (2230) for Wi-Fi / BT
- Front-accessible I/O interface for easy maintenance
- Support RAID 0/1 configurations
- Support dTPM2.0 & Windows® 11

System

CPU	Intel® 14 th /13 th /12 th Gen Core™ CPU (LGA1700 socket, 35W/ 65W)
Memory	2 x 262-pin DDR5 SO-DIMM sockets, supporting 5600 MHz SDRAM up to 96GB
Chipset	Intel® Q670E
Graphics	Integrated Intel® HD Graphics
SATA	2 x Serial ATA ports with 600MB/s HDD transfer rate
LAN Chipset	2 x Intel® WGI226LM 2.5GbE LAN 1 x Intel® WGI210AT GbE controller 1 x Intel® WGI219LM GbE controller w/ iAMT
Watchdog Timer	1~255 levels reset
TPM	Support dTPM2.0

I/O

Serial Port	2 x RS-232/422/485 by DB-9 connector (COM1~2) 2 x RS-232 by DB-9 connector (COM3~4)
USB Port	8 x USB-A 3.2 Gen2 (10Gbps) ports 2 x USB-A 3.2 Gen1 (5Gbps) ports
LAN	2 x RJ-45 GbE LAN ports 2 x RJ-45 2.5GbE LAN ports
Video Port	1 x VGA, resolution up to 1920 x 1200 2 x DP1.4a, resolution up to 7680 x 3840 @60Hz 1 x HDMI 2.1, resolution up to 7680 x 3840 @60Hz
Selectable Port	1 x DB25 connector for DIO (8 in/8 out) port or LPT port (either one, default is DIO)
Audio	2 x 3.5mm Audio Jack for Mic-in and Line-out
Expansion Bus	1 x full-size mini-PCIe (PCIe Gen3 x1 + USB2.0) w/ 1 x SIM slot for Wi-Fi/BT/LTE/GPS module 1 x M.2 B-Key 2242/3042/3052 (PCIe Gen3 x1 + USB3.0 + USB2.0) w/ 1 x SIM slot for 4G/5G/GPS module 1 x M.2 E-Key 2230 (PCIe Gen3 x1 + USB2.0) for Wireless 2 x PCIe x4 slot 1 x PCIe x16 slot (via x8 lanes) Support up to 100W GPU

Environmental

Operating Temp.	-20 ~ 70°C (-4 ~ 158°F), ambient w/ air flow (w/ 35W TDP CPU, fanless) -20 ~ 55°C (-4 ~ 131°F), ambient w/ air flow (w/ 65W TDP CPU, fanless) -20 ~ 45°C (-4 ~ 113°F), w/ GTX-1660 GPU
Storage Temp.	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10 ~ 95% @ 70°C (non-condensing)
Vibration	3 Grms/5~500Hz/random operation w/ SSD
Shock	Operating 40G (11ms), Non-operating 60G with SSD

Qualification

Certification	CE, FCC Class A
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Power Requirement

Power Input	DC 9 ~ 36V input Max. 16A/300W (w/ 4-pin DC input terminal block, combining remote power on/off switch)
Ignition Switch	2-pin terminal block: IGN, GND
Power Consumption	MAX 65W (w/35W TDP CPU, w/o I/O card) MAX 95W (w/65W TDP CPU, w/o I/O card)

Storage

Type	1 x M.2 M-Key 2242/2280 (PCIe Gen4 x4 + SATA) for storage 2 x 2.5" SATA HDD/ SSD; supports RAID 0/1
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Mechanical

Button	1 x Power Button with dual LED color (Red in standby, Green in Power-on)
Others	4 x Antenna holes
Construction	Aluminum alloy
Mounting	Wall-mount
Weight	7.35 kg (16.20 lb)
Dimension (W x H x D)	225 x 190 x 292 mm (8.86" x 7.48" x 11.50")

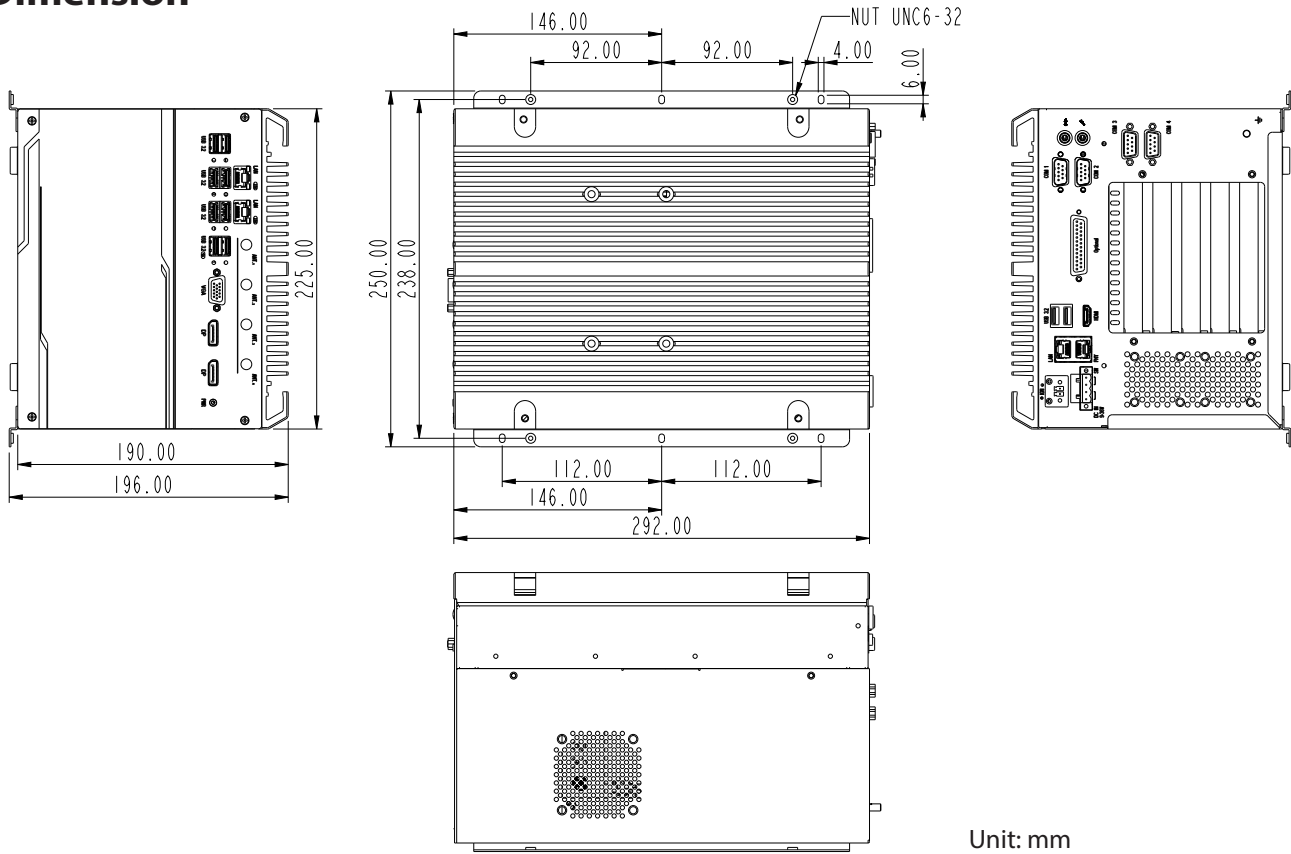
OS Support

Windows 10 IoT / Windows 11 IoT Linux (Ubuntu 22.04)

Ordering Information

FPC-8208-G1	Ruggedized Edge AI Computing Box PC with Intel® 14 th Gen Core™ i9/i7/i5/i3 w/ expansion fan and PEG 8-pin power cable Supporting NVIDIA® 100W GPU
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Dimension



Optional Accessories

WMK-7000	Wall-mount kit for FPC-7XXX Series
PAC-120W6B-FSP-ES	120W AC/DC 19V adapter kit w/ 2-pin/ 3-pin/ 4-pin block
PAC-180W6C-FSP-ES	180W AC/DC 19V adapter kit w/ 2-pin/ 3-pin/ 4-pin block
PAC-280W6C-MW	280W AC/DC 24V adapter kit w/ 2-pin/ 3-pin/ 4-pin block



Optional Configuration (CTOS* Kit)

WiFi-RT1550	Realtek RTL8852CE M.2 2230 Wi-Fi 6E + BT 5.4 Module Kit (w/ 2 x 30cm RF Cable)
ANT-T15	1 x Wi-Fi 6E Tri-band 2.4G/5G/6G Dipole Antenna Kit
Core™ i9-14900	Intel® 14 th Gen Core™ i9-14900 processor, 36M, 2G
Core™ i9-14900T	Intel® 14 th Gen Core™ i9-14900T processor, 36M, 1.1G
Core™ i7-14700	Intel® 14 th Gen Core™ i7-14700 processor, 33M, 2.1G
Core™ i7-14700T	Intel® 14 th Gen Core™ i7-14700T processor, 33M, 1.3G
Core™ i5-14500	Intel® 14 th Gen Core™ i5-14500 processor, 11.5M, 2.6G
Core™ i5-14500T	Intel® 14 th Gen Core™ i5-14500T processor, 24M, 1.7G
Core™ i3-14100	Intel® 14 th Gen Core™ i3-14100 processor, 12M, 3.5G
Core™ i3-14100T	Intel® 14 th Gen Core™ i3-14100T processor, 12M, 2.7G



MK-5C-8G/16G/32G/48G	DDR5-4800/5600 8GB/16GB/32GB/48GB SDRAM DIMM kit
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FAN-4020	Fan kit (40 x 40 x 20 mm, L=250mm, 2P)
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*CTOS means Configure-to-Order Service.