Mitac MZ1-10ADP

Rugged GPU computing system mit Intel® Core™ i9/i7/i5/i3 13th/12th Gen. CPUs



Features

- Intel® Alder Lake Core™ i9 / i7 / i5 / i3 CPUs (up to 125W)
- 2x DDR5 4,800MHz SO-DIMM up to64GB
- Intel® R680E chipset
- MIL-STD-810H certification
- Operating temperature: -40 °C ~ 70 °C



Mitac MZ1-10ADP - Powerful Embedded PC for Versatile Edge AI Applications

The Mitac MZI-10ADP stands out as an outstanding solution in the realm of robust GPU computing systems, specifically designed for AI inference, machine learning, and deep learning applications. Driven by an Intel® 12th Gen. Alder Lake-S / Celeron® or Pentium processor, it delivers impressive performance and efficiency in the field of Artificial Intelligence.

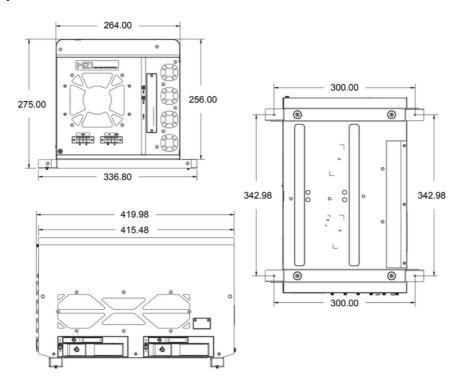
The system's housing and bezel are crafted from robust steel, with the top cover made of aluminum. This construction allows for optional wall mounting, facilitating adaptation to various environments. The Mitac MZI-10ADP thrives in a wide operating temperature range of -40°C to 70°C (with 35W CPU and without a graphics card). Additionally, the system holds MIL-STD-810H certification, emphasizing its robustness and reliability.

Al inference, machine learning, and deep learning made easy

The Mitac MZI-10ADP offers versatile connectivity with up to five PCIe expansion slots. Furthermore, it features a selection of interfaces, including 2x 2.5GbE LAN ports, 4x COM ports, as well as VGA, HDMI, and DisplayPorts. These comprehensive connection options support a broad range of applications in various industrial scenarios.

The powerful AI inference, machine learning, and deep learning capabilities of the MZI-10ADP make it an optimal solution for industries such as autonomous driving, automation, production lines, and logistics. The precise real-time processing of large data sets enables advanced applications and contributes to efficiency improvements in industrial processes.

Drawing (mm)



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Specifications	Product: Mitac MZ1-10ADP
SYSTEM	
CPU	Intel® 12th Gen. Alder Lake-S Core i9 / i7 / i5 / i3 / Celeron® / Pentium (up to 125W)
	Intel® R680E
Chipset	I/O chipset: Nuvoton NCT6126D
Graphics	Intel® UHD Graphics
RAM	2 x 262-pin DDR5 4,800MHz, SO-DIMM up to 64GB
Storage	1 x mSATA 1 x M.2 B-Key 2280/2260/2242 slot 2 x hot-swap 2.5" HDD tray (supports 7 – 9.5mm height); 2 x hot-swap 3.5" HDD tray 1 x CFast slot 1 x M.2 M-Key 2280/2262/2242 SSD slot
TPM	Nuvoton NPCT750AAAYX TPM 2.0
Expansion	Ix M.2 3052 / 3042 / 2242 / 2260 / 2280 B-Key (USB 3.0 , SATAIII, PCle x1) with SIM slot / Ix M.2 2230 / 2242 / 2260 / 2280 M-Key (PCle x4 NVMe, SATAIII) / Ix M.2 2230 E-Key (CNVi , PCle x1, USB 2.0) / Ix Mini PCle Full Size (USB 2.0 / SATAIII / PCle x1) / Ix Mini PCle Full Size (USB 2.0 / PCle x1) / #1: Ix PCle x16 (Gen4) or PCle x8 (Gen4) #2: Ix PCle x4 to PCle x16 physical connector (Gen4) #3: Ix PCle x4 into PCle x16 physical connector (Gen4) #4: Ix PCle x8 into PCle x16 physical connector (Gen4 x8 = Gen3 x16 bandwidth) #5: Ix PCle x1 open end connector (Gen3) 2x SIM slot to M.2 B-Key slot (rear) 2x SIM slot to mPCle slot (rear) Ix CFast slot (rear)
Operating System	Windows® 11 64-bit, Windows® 10 IoT LTSC 64-bit (LTSC 2021) Ubuntu 22.04
INTERFACE	
Ethernet	x Intel® 1225-LM 2.5GbE LAN x Intel® 1225-V 2.5GbE LAN
USB	4x USB 3.2 Gen2 / 4x USB 3.2 Gen1 (front) 1x USB 3.2 Gen1 type A / 1x USB 2.0 type A (internal)
СОМ	3x RS-232 / lx RS-232/422/485 (front)
Digital I/O	x DB-37 connector for 32-bit DIO
Video	lx HDMI 2.0b lx DisplayPort 1.4 lx VGA
Audio	Realtek® ALC888S Ix Mic-in and Ix Line-out (front) Ix Internal speaker
Power	2x 4-pin terminal block power input (rear)
Other	6 x SMA connectors with rubber cap
ENVIRONMENTAL	
Chassis	Material top cover: Aluminum Bezel and housing: Steel
Cooling	4x CPU fans 233CFM system fan
Power Supply	9 ~ 48V Wide Range DC Input with Dual Terminal Block Connection Optional 300W/1000W AC to DC PSU
Remote Control & LED	x 2-pin terminal block remote power on / off (front) x Power button x Power LED x HDD LED -40°C ~ 70°C (with 35W CPU, without GPU)
Operating Temperature	-40°C ~ 70°C (with 65W CPU, without GPU) -40°C ~ 60°C (with 80W CPU, without GPU) -40°C ~ 40°C (with 125W CPU, without GPU) -40°C ~ 40°C (with 125W CPU, without GPU) *Max OT Limit -10°C with Dual GPUs at 0.7m/s airflow and Wide Temperature RAM/Memory *Please check with your sales contact for operating temperature of GPU card configurations
Storage Temperature	-40° ~ 85°C
Vibration / Shock Resistance	Vibration: MIL-STD-810H, According to method 514.8C-I category 4 for trucks Shock: MIL-STD-810H 516.8 Procedure I – Functional Shock, Operation. 20G. 11ms (According to IEC 60068-2-27 half sine)
Humidity	10% ~ 95% @85°C non-condensing
Dimensions	264 (W) x 415 (D) x 256 (H) mm
Weight	13kg
Mounting	Wallmount
Certifications	CE / FCC Class A

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