



# MX2-10ADP

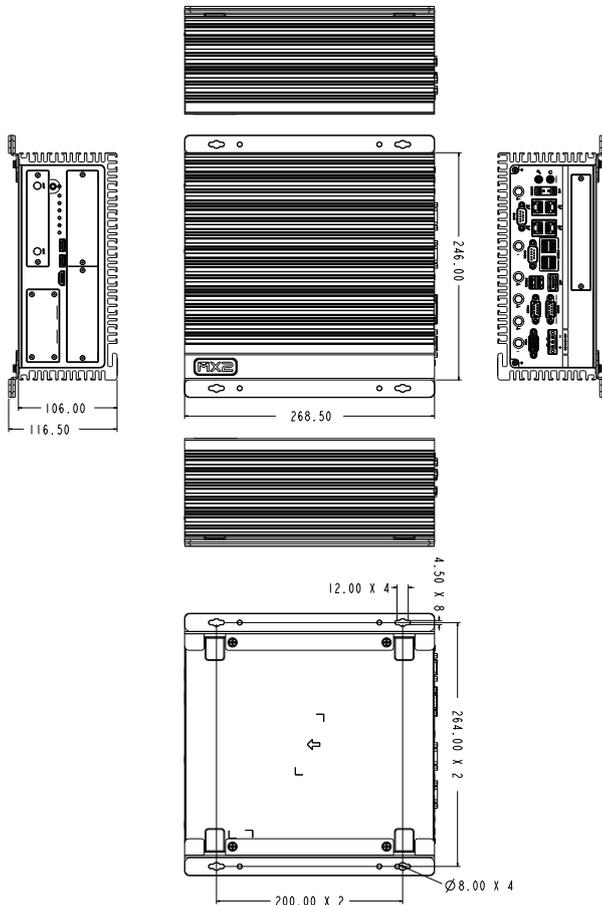
Rugged Fanless Embedded System  
Supports Intel® Raptor Lake-S Refresh Core-i Processor up to 65W

## Introduction

- AI Inference
- Intel® Raptor Lake-S Refresh 14th/Raptor Lake-S
- 13th/Alder Lake-S 12th Core-i processor (Up to 65W)
- Supports 2 x DDR5 SO-DIMM (Up to 96GB)
- HDMI, DisplayPort, VGA, 4 x 2.5G LAN (PoE Option)
- Supports 8 x USB, 3 x COM, and 8-bit DIO
- Supports PCIe Gen4 x16 Slot
- 9~48V Wide Power Range



## Dimension (mm)



## Optional Peripheral

Model Number	Description
MS-48CDN-DT10	Xpansion Module with 4 x RS232 / 422 / 485, 8-bit Isolated DIDO (4 x DI, 4 x DO)
MS-04LAN-R10	Xpansion Module with 4 x Intel i210-IT Giga LAN, RJ45 Port
MS-04LAN-M10	Xpansion Module with 4 x Intel i210-IT Giga LAN, M12 Port
MS-04POE-R10	Xpansion Module with 4 x PoE+, Intel i210-IT Giga LAN, RJ45 Port
MS-04POE-M10	Xpansion Module with 4 x PoE+, Intel i210-IT Giga LAN, M12 Port
ME-02POE-R10	Xpansion Module with 2 x PoE+, Intel i210-IT Giga LAN, RJ45 Port
MS-26CAD-T10	Xpansion Module with 2 x CANBus 2.0B and 8-bit Isolated DIDO

## MX2-10ADP Fanless Embedded System

SYSTEM	
CPU	14th/13th/12th Gen Intel® Raptor Lake-S Refresh/Raptor Lake-S/Alder Lake-S Core i9/i7/i5/i3/Celeron/Pentium (Up to 65W) / *Please see the CPU Options in Docs / Manuals
Chipset	Intel® R680E
System Memory	DDR5 4800 MHz, 2 x 262-pin SO-DIMM, Max. 96 GB (Non-ECC/ECC)
Graphics	Intel® UHD Graphics
Display Interface	VGA, DisplayPort 1.4, HDMI 1.4
Storage Slot	2 x 2.5 HDD / SSD (1 w/ Removable HDD Bay, 1 w/ Internal HDD Bracket)
	1 x M.2 2280/2260/2242 NVMe / SATA SSD 1 x M.2 2242/2260 SATA SSD, 1 x mSATA
Ethernet	4 x Intel® I226-LM 2.5G LAN *Optional 4 x PoE 802.3at Xpansion "MS-01PON-S10"
Audio	Realtek® ALC888
I/O Chipset	Nuvoton NCT6126D
TPM	Nuvoton NPCT760AABYX TPM2.0
Expansion Slot	1 x M.2 2230/ 2242 / 2260 / 2280 M key (PCIeX4 NVME, SATAIII)
	1 x M.2 3052 / 3042 / 2242 / 2260 B key (USB3.0 , SATAIII, PCIeX1) w/ 2 x SIM slot
	1 x M.2 2230 E key (CNVi , PCIeX1, USB 2.0) 1 x mPCIe Full / Half size (USB2.0 / PCIeX1 / SATAIII) 1 x PCIe 4.0 X16 slot
Internal Speaker	1 x Buzzer
Indicator	DIO, LAN1~4 ACT, Power LED, HDD LED
Front I/O	1 x HDMI 1.4
	2 x USB 3.2 Gen2 2 x SIM Card Slot w/ Cover 1 x 2.5" SATAIII HDD / SSD Bay 4 x RJ-45
Rear I/O	6 x USB 3.2 Gen 2 (10 Gbps)
	3 x RS232 / 422 / 485 (Support Power 5V / 12V)
	1 x 8-bit GPIO (in DB9 Connector)
	1 x DisplayPort 1.2
	1 x VGA
	1 x Mic-in & 1 x Line-out
	1 x PCIe x16 slot 1 x 2-pin Terminal Block Remote Power Reset 1 x 2-pin Terminal Block Remote Power on / off 1 x 3-pin Terminal Block Power Input 6 x SMA Antenna (Optional for WiFi/LTE function)
Hardware Monitor	Temperature Monitor, Voltage Monitor
Watchdog Timer	1~255 steps by software program
POWER REQUIREMENT	
Power Input	9~48V Wide Range DC Input w/ Terminal Block Connectivity
Power Adapter	Optional 24V, 300W AC adapter (For AC SKU)
MECHANICAL	
Thermal Design	Fanless
Mounting	Wallmount
Dimensions (W x D x H)	10.6" x 9.7" x 4.3" (268 x 246 x 108 mm)
Weight	6.9kg (15.2 lb)
ENVIRONMENTAL	
Operating Temperature	35W TDP Processor: -40°C to 70°C, with 0.7m/s Air Flow and Wide Temperature Memory/Storage 65W TDP Processor: -40°C to 50°C, with 0.7m/s Air Flow and Wide Temperature Memory/Storage
Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10% ~ 90% R/H (Non-condensing)
Vibration Resistance	Operating: 5Hz~500Hz / 5Grms / 3Axis (w/ SSD, according to IEC60068-2-64)
Shock Resistance	Operating: 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
Certification	CE / FCC Class A
OS	
OS Support	Windows® 11 64bit, Windows® 10 64-bit, Linux (support by request)

### Ordering Information

Model Number	Chipset	Thermal	Power	AC Adaptor
MX2-10ADP	R680E	Fanless	9~48V Wide Range DC Input w/ Terminal Block Connectivity	None
MX2-10ADP-AC300	R680E	Fanless	9~48V Wide Range DC Input w/ Terminal Block Connectivity	300W AC to DC Adaptor

### Packing List

Packing	
<ul style="list-style-type: none"> <li>1 x Embedded System</li> <li>2 x 2 pin Terminal Block Male Connector</li> </ul>	<ul style="list-style-type: none"> <li>1 x CPU Cooler (passive)</li> <li>1 x 30 cm SATA &amp; SATA PWR Y Cable (3rd SSD/HDD needs optional SATA Y cable)</li> </ul>