

MI225R6800 Series

Mini-ITX Embedded Motherboard support LGA1700 socket for the Intel® 13th/12th Gen (Raptor Lake-S/Alder Lake-S). Support Max. 65W TDPs under 180A, Support two DDR5 up to 64GB, four M.2 slot and one PCIe x16 slot

Features

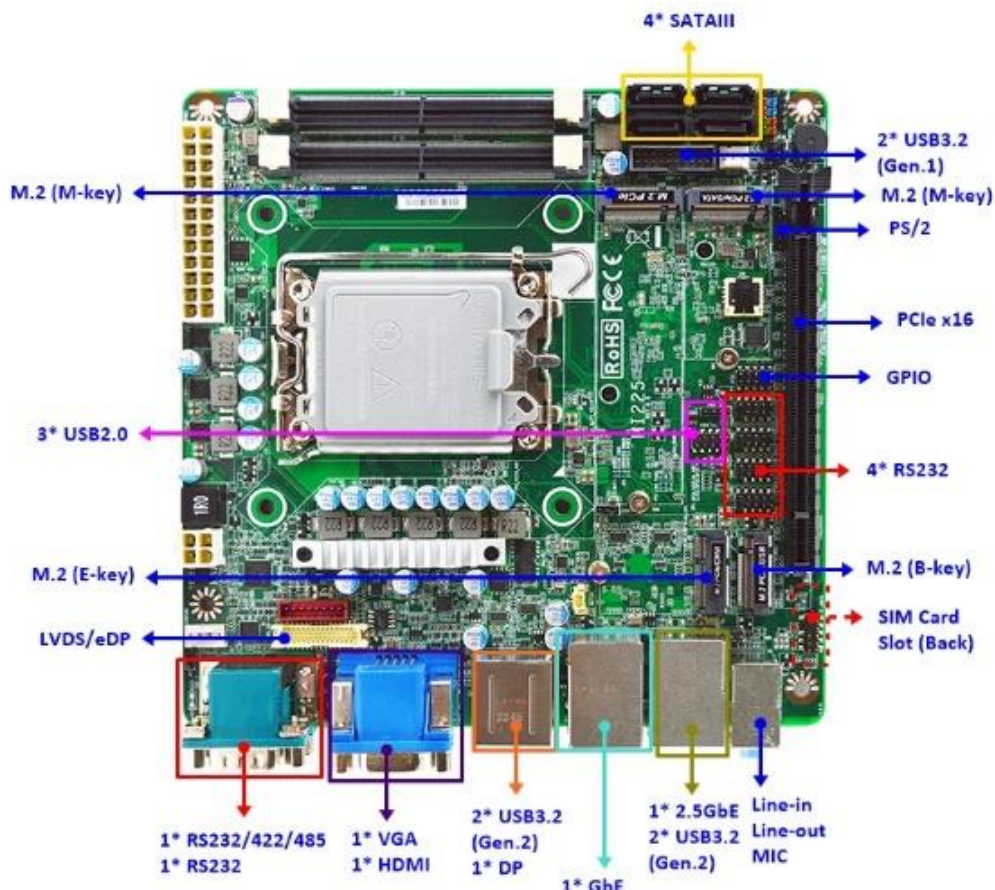
1. Intel® 13th/12th LGA1700 Socket Processor (Max. 65W TDPs under 180A)
2. Intel® R680E Chipset
3. 2* DDR5 5600MHz/4800MHz SO-DIMM up to 64GB support ECC
4. 1* 10/100/1000 Base-TX & 1* 10/100/1000/2500 Base-TX Ethernet Ports
5. 1* HDMI, 1* DP, 1* VGA, 1* LVDS/eDP
6. 6* COM (COM1 support RS232/422/485)
7. 6* USB3.2 Gen.2, 2* USB3.2 Gen.1, 3* USB2.0
8. 1* PCIe Gen.4 x16 slot, 1*M.2 M-Key (2280) support NVMe, 1*M.2 M-Key (2242) support NVMe, 1*M.2 E-Key (2230) support CNVi, 1*M.2 B-key (3042) support 4G Module
9. 4* SATAIII (6Gb/s) support RAID 0,1,5,10
10. Support JetBIOS SW back up tool
11. Support Onboard TPM2.0 (MI225R6802 only)



Applications

Edge Computing/ Digital Signage/ Industrial PCs/ Factory Automation/ Public Sector/ Digital Security/ Surveillance application

I/O Diagram



Specifications

Model	<ul style="list-style-type: none"> MI225R6800 MI225R6802 (onboard TPM2.0)
Form Factor	<ul style="list-style-type: none"> Mini-ITX (170 * 170mm)
Processor System	<ul style="list-style-type: none"> Intel® 13th/12th Gen (Raptor Lake-S/Alder Lake-S) LGA1700 Socket Core i7/i5/i3/Pentium/Celeron Processor (Max. 65W TDPs under 180A) Intel® R680E Express Chipset AMI 256Mb Flash ROM BIOS
Memory	<ul style="list-style-type: none"> Intel® 13th CPU support 2* Dual CH ECC DDR5 5600MHz SDRAM SO-DIMM up to 64GB Intel® 12th CPU support 2* Dual CH ECC DDR5 4800MHz SDRAM SO-DIMM up to 64GB
Storage	<ul style="list-style-type: none"> 4* SATAIII (6 Gb/s) support RAID 0, 1, 5, 10 1* M.2 M-Key (2280, PCIe Gen.3 x4 interface) support NVMe 1* M.2 M-Key (2242, PCIe Gen.4 x4/SATA interface) support NVMe
Expansion	<ul style="list-style-type: none"> 1* M.2 E-Key (2230, USB2.0/PCIe Gen.3 x1 interface) support CNVi 1*M.2 B-key (3042, PCIe Gen.3 x1/USB3.2 Gen.2/USB2.0 interface) 1* PCIe Gen.4 x16
Ethernet	<ul style="list-style-type: none"> 1* Intel® i219-LM GbE 1* Intel® i225-V 2.5GbE
Graphics	<ul style="list-style-type: none"> Intel® UHD Graphics, shared memory 1* DP 1.4a (Max Resolution: 8K@60Hz) 1* HDMI 2.0b (Max Resolution: 4096x2160@60Hz) 1* LVDS/eDP (Max Resolution: 1920x1200@60Hz) 1* VGA (Max Resolution: 1920x1080@60Hz) Support Quad Displays
Audio	<ul style="list-style-type: none"> HD audio: Realtek ALC888S
Watchdog Timer	<ul style="list-style-type: none"> From Super I/O to drag RESETCON# 256 segments (10sec ~ 255min)
Internal I/O	<ul style="list-style-type: none"> 2* USB3.2 (Gen.1) 3* USB2.0 1* LVDS/eDP 4* SATAIII 4* COM (RS232) 1* M.2 M-Key (2280, PCIe Gen.3 x4 interface) support NVMe 1* M.2 M-Key (2242, PCIe Gen.4 x4/SATA interface) support NVMe 1* M.2 E-Key (2230, USB2.0/PCIe Gen.3 x1 interface) support CNVi 1* M.2 B-key (3042, PCIe Gen.3 x1/USB3.2 Gen.2/USB2.0 interface) support 4G Module 1* SIM slot 1* PS/2 1* GPIO (8 bit) 1* Chassis intrusion 1* Audio Header 1* SMBUS 1* AT mode Support onboard TPM2.0 (MI225R6802)
External I/O	<ul style="list-style-type: none"> 1* HDMI 1* DP 1* VGA 2* RJ45 Ethernet 6* USB3.2 (Gen.2) 1* COM (RS232/422/485) 1* COM (RS232) Line-in, Line-out, MIC
Power	<p>ATX PWR (4+24 pin), AT/ATX Supported</p> <ul style="list-style-type: none"> - AT: Directly PWR on as Power input ready - ATX: Press Button to PWR on after Power input ready
Compliance	CE, FCC, LVD, RoHS, REACH
Temperature	<ul style="list-style-type: none"> Operating Temperature: 0 ~ 60° C Storage Temperature: -20 ~ 85° C Humidity: 10% ~ 90% RH @40°C (non-condensing)
OS Support	Windows 10, Windows 11, Linux
Warranty	<ul style="list-style-type: none"> 2 Years limited warranty

* Specifications subject to change without notice, not responsible for typographical errors. Does not include HDD or OS.

Standard Accessories

Part Number	Description
-----	MI225R6800 Series M/B
F04-MB-073-1F	MI225 I/O shield
G01-SATA3-BL-1F	1* SATA cable

Mechanical Drawings (Unit=mm)

