



ROG200-RH



Key Feature

- MIL-STD 810 Thermal, Shock, Vibration, Humidity
- COM Express Type 6 Support 13th Raptor Lake-H, 12th Alder Lake-H, 11th Tiger Lake-H Processor
- Standard MXM Type 3.1 Support NVIDIA® GTX® / RTX® GPU
- PCI/104 Express Expansion Slot for Modular Open Structure
- DDR5 SO-DIMM for 13th Raptor lake, up to 64GB
- DDR4 SO-DIMM for 12th , 11th Porcessor, up to 128GB
- Extreme Temperature Support -20°C to 55°C
- 9V~36V DC-IN

Specifications

System

COM Express CPU Options(Type6)	Intel® Core™ i7-13800HRE 45W Raptor Lake 13 th Gen, 14C, 2.5 /5.0 GHz, 24MB cache Intel® Core™ i7-13800HE 45W Raptor Lake 13 th Gen, 14C, 2.5 /5.0 GHz, 24MB cache Intel® Core™ i7-11850HE 45W Tiger Lake 11 th Gen, 8C, 2.6 /4.7 GHz, 24MB cache Intel® Xeon® W-11865MLE 45W Coffee Lake 11 th Gen, 8C, 1.5 /4.5 GHz, 12MB cache
GPU Module Options	NVIDIA® Ampere RTX A1000, 60W, 4GB GDDR6, 2,048 CUDA Cores NVIDIA® Ampere RTX A2000, 60W, 8GB GDDR6, 2,560 CUDA Cores NVIDIA® Ampere RTX A4500, 80W/115W, 16GB GDDR6, 5,888 CUDA Cores NVIDIA® Ada Lovelace RTX 3500 Ada, 115W, 12GB GDDR6, 5,120 CUDA Cores NVIDIA® Ada Lovelace RTX 5000 Ada, 115W, 16GB GDDR6, 9,728 CUDA Cores
Compatibility	COM Express® TYPE 6

Display

DP	2x Display Port outputs from GPU
VGA	1x output from COM Express (option)

Storage

M.2	1x 2280 M-key (SATA only)
SATA	2x SATA III

Ethernet

Ethernet	2 x 10/100/1000/2.5G Ethernet Ports(One from CPU module) 2x 10GbE SFP+ (option) 4x 1GbE T-base RJ45 (option)
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Front I/O

USB	4x USB 3.0
Serial Port	1x RS232/422/485
Audio	1x MIC-in, 1x Line-out
LAN	2x 2.5GbE RJ45
Display	2x DP ports

Power switch	1x Power Button with LED back light
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LED	1x HDD/SSD LED
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Rear I/O

Serial port	2x RS232/422/485 (option)
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LAN	4x 1GbE RJ45 (option)
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	2x 10GbE SFP+ (option)
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Power in	1x 4P Terminal jack
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Power System

Input Power:	9~36V (4P Terminal Block)
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SYS

Input Power:	12V (ATX 4P)
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MXM

Power	Varies per COM Express /MXM with different CPU and GPU models
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Consumption

RTC Battery	3V CR2032
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Mechanical and Environmental

Dimension	220 x 300 x 88 mm
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Operating Temp	-20°C to 55°C
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Storage Temp	-40°C to 85°C
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Relative	10% to 90%, non-condensing
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Humidity

Standard Compliance

Standard	CE/FCC
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Compliance

OS Support	Windows®10 64bit, Linux(Support by request)
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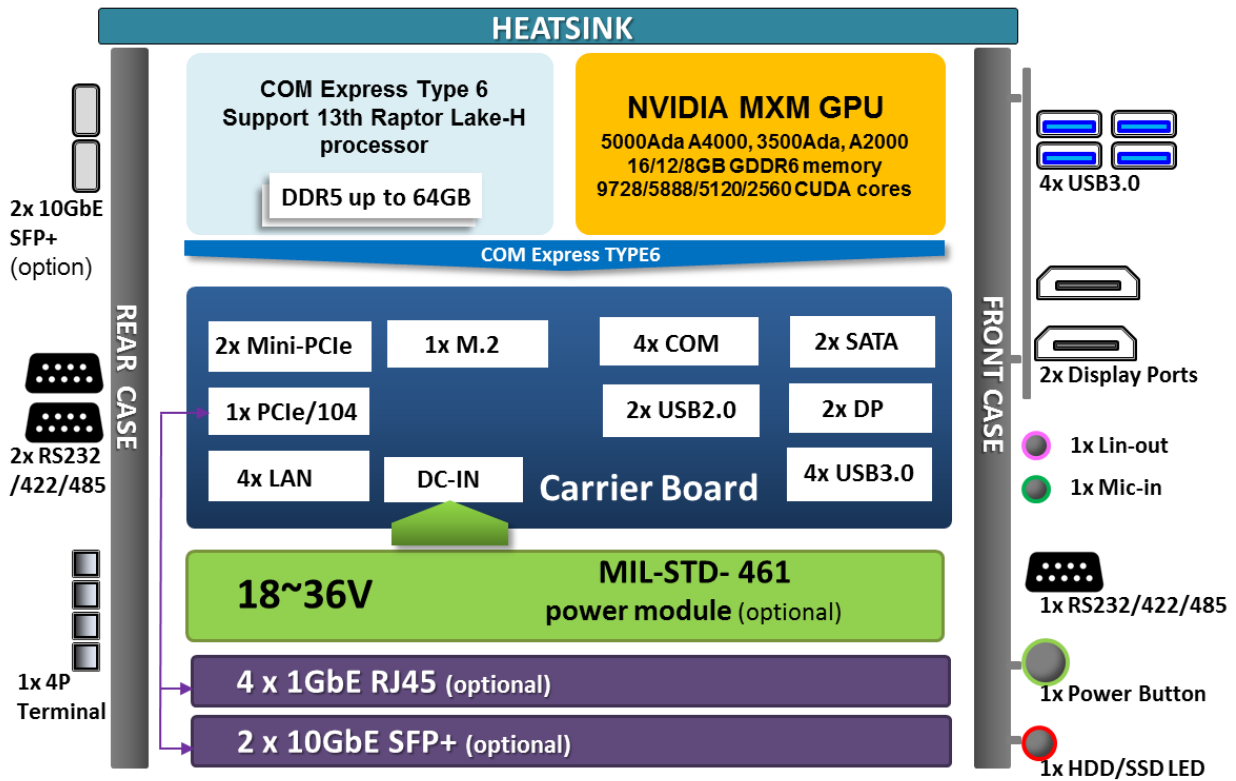
*All specifications and photos are subject to change without notice.

Appearance



4x 1GbE RJ45 (option)

Block Diagram



Ordering Information

CPU/GPU Table

All Operating Temperature meet from 0°C to +55°C.
 Could Customize the Operating Temperature from -20°C to +55°C.

CPU Products List

Type	CPU	Power	SPEC
13 th CPU	Intel® Core™ i7-13800HRE	45W	Raptor Lake 13 th Gen, 14C, Freq. 2.5/5.0GHz, 24MB cache
13 th CPU	Intel® Core™ i7-13800HE	45W	Raptor Lake 13 th Gen, 14C, Freq. 2.5/5.0GHz, 24MB cache
12 th CPU	Intel® Core™ i7-12800HE	45W	Alder Lake 12th Gen, 14C, Freq. 3.5/4.6 GHz, 24MB cache
11 th CPU	Intel® Core™ i7-11850HE	45W	Tiger Lake 11th Gen, 8C, Freq. 2.6/4.7 GHz, 24MB cache
11 th CPU	Intel® Xeon® W-11865MLE	25W	Tiger Lake 11th Gen, 8C, Freq. 1.5/4.5 GHz, 12MB cache

GPU Products List

GPU	CUDA Cores	Max power	UL Benchmarks
NVIDIA® Ampere RTX A2000	2,560 CUDA Cores	80W	5952
NVIDIA® Ampere RTX A4500	5,888 CUDA Cores	130W	12835
NVIDIA® Ada Lovelace RTX 3500 Ada,	5,120 CUDA Cores	115W	TBC
NVIDIA® Ada Lovelace RTX 5000 Ada	9,728 CUDA Cores	115W	TBC

Model No. List

COMe Type	Model Name	Configuration
Type6	ROC200-RHR-A45	CPU Board: i7-13800HRE / MXM GPU: Quadro A4500
	ROC200-RHE-A45	CPU Board: i7-13800HE / MXM GPU: Quadro A4500
	ROC200-RHR-50A	CPU Board: i7-13800HRE / MXM GPU: Quadro 5000Ada
	ROC200-RHR-35A	CPU Board: i7-13800HRE / MXM GPU: Quadro 3500Ada
	ROC200-AHE-A45	CPU Board: i7-12800HE / MXM GPU: Quadro A4500
	ROC200-AHE-A20	CPU Board: i7-12800HE / MXM GPU: Quadro A2000
	ROC200-THE-A20	CPU Board: i7-11850HE / MXM GPU: Quadro A2000
	ROC200-THM-A45	CPU Board: i7-11865MLE / MXM GPU: Quadro A4500
	ROC200-THM-A20	CPU Board: i7-11865MLE / MXM GPU: Quadro A2000