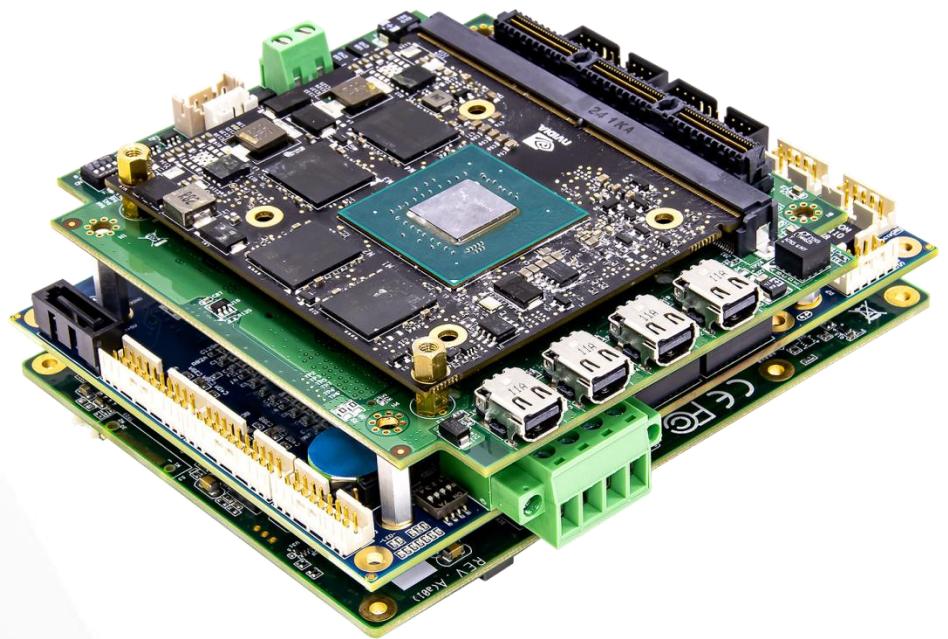




PCIe104 - RH

PCIe/104 Processing Unit Intel 13th Raptor Lake (H)



- **PCI/104 Express Type1 Slot for Open Modular Architecture**
- **Standard MXM Type 3.1 Support NVIDIA QUADRO®GPU**
- **Intel 13th Raptor Lake-H Core-I Processor**
- **Multi-Expansions include Dual Mini PCIe Express Slots**
- **GPU can be targeted for 4 Mini Display port outputs**
- **Extreme Temperature Support -40 to 85°C**

Specifications

System

CPU Options	Intel® Core™ i7-13800HRE 45W Raptor Lake 13th Gen, 14C , Freq. 2.5 /5.0 GHz, 24MB cache Intel® Core™ i7-13800HE 45W Raptor Lake 13th Gen, 14C , Freq. 2.5 /5.0 GHz, 24MB cache
GPU Options	NVIDIA® Ampere RTX A1000, 35W, 4GB GDDR6, 2,048 CUDA Cores NVIDIA® Ampere RTX A2000, 36W/80W, 8GB GDDR6, 2,560 CUDA Cores NVIDIA® Ampere RTX A4500, 80W/130W, 16GB GDDR6, 5,888 CUDA Cores
Memory	DDR5 4800MHz SO-DIMM up to 64GB
MXM Carrier	SK231(Type 1)

Expansion

MiniPCIe Expansion	2x Full-size mini PCIe/mSATA
PCIe/104 Expansion(Type1)	1x PCIe3.0 x16 ; 4x PCIe 2.0 x1 ; 2x USB2.0
SATAIII	1x SATAIII

Display

Mini DP	4x Mini Display Port outputs from GPU
DP/HDMI/DVI	DP/HDMI/DVI Switching
VGA	1x output from CPU 1x from GPU(option)
LVDS	1x Dual channel 18/24bit LVDS

Ethernet

Gigabit Ethernet	2x 10/100/1000 Ethernet Ports
------------------	-------------------------------

I/O

USB	4x USB 3.0
COM Port	2x RS232/422/485
Audio	1x Line-out, 1x Mic-In

Power System

Input Power	12V DC-IN for CPU 12V DC-IN for GPU
-------------	--

Mechanical and Environment

Dimensions	125mm x 95mm
Operating Temperature	-40 to 85°C
Storage Temperature	-40 to 85°C
Relative Humidity	10% to 90%, non-condensing

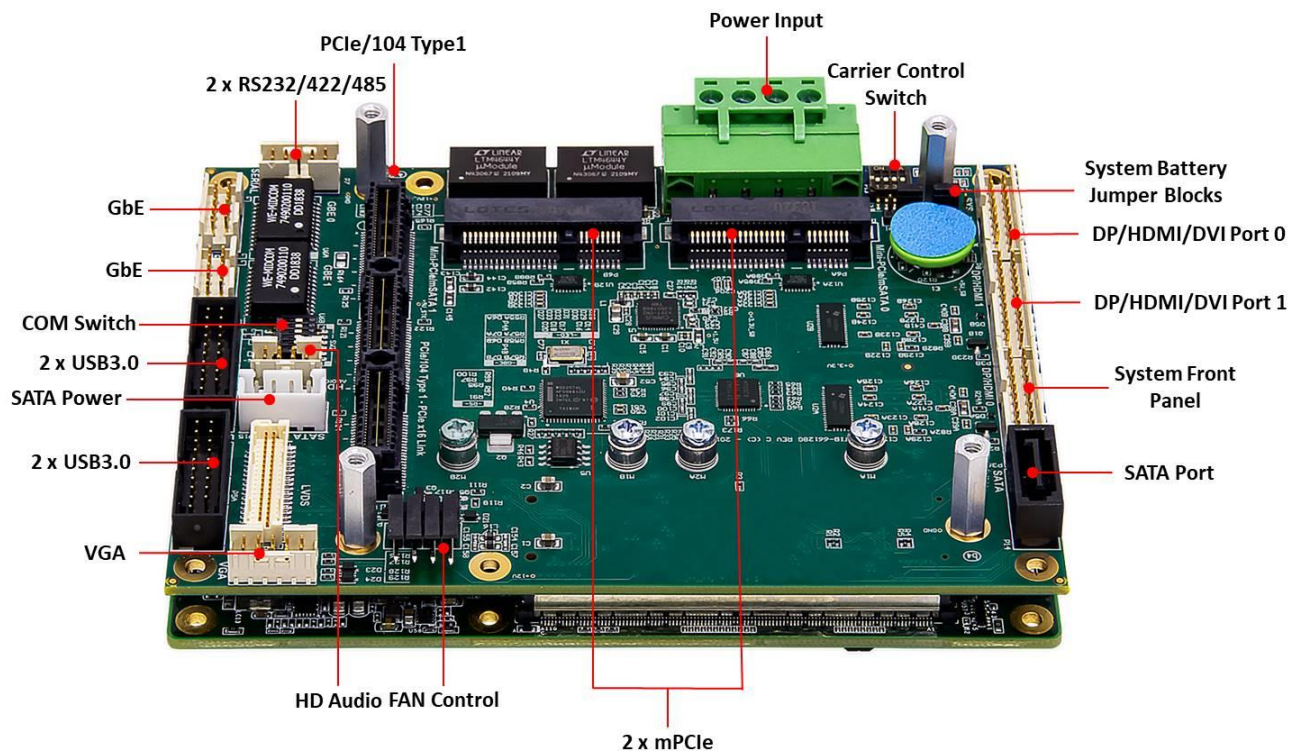
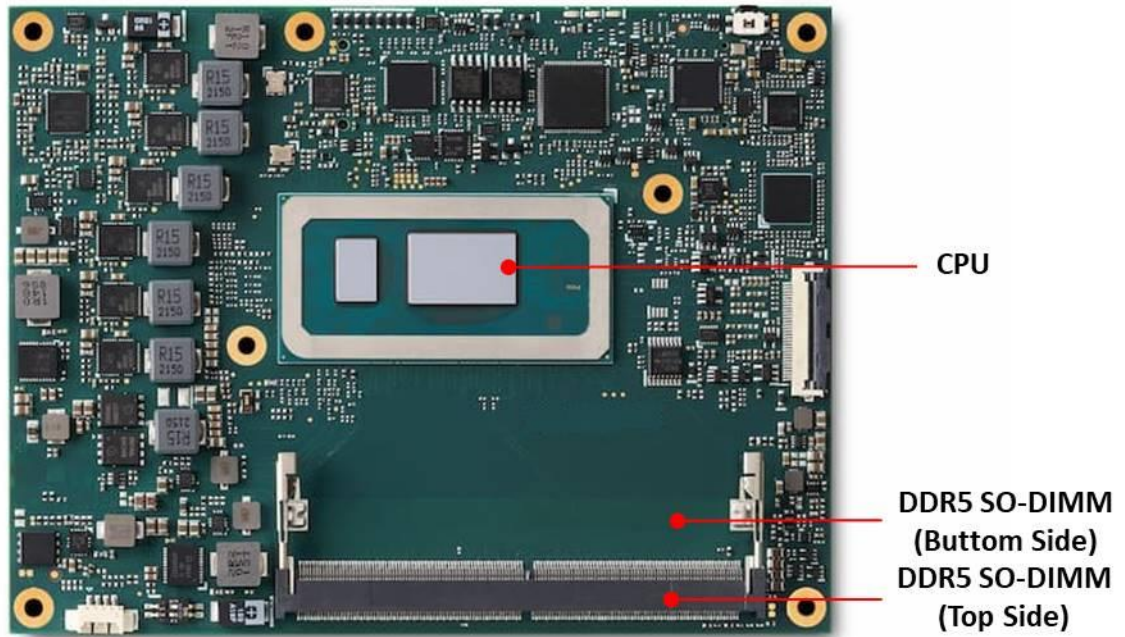
Standard Compliance

Standard Compliance	CE/FCC
---------------------	--------

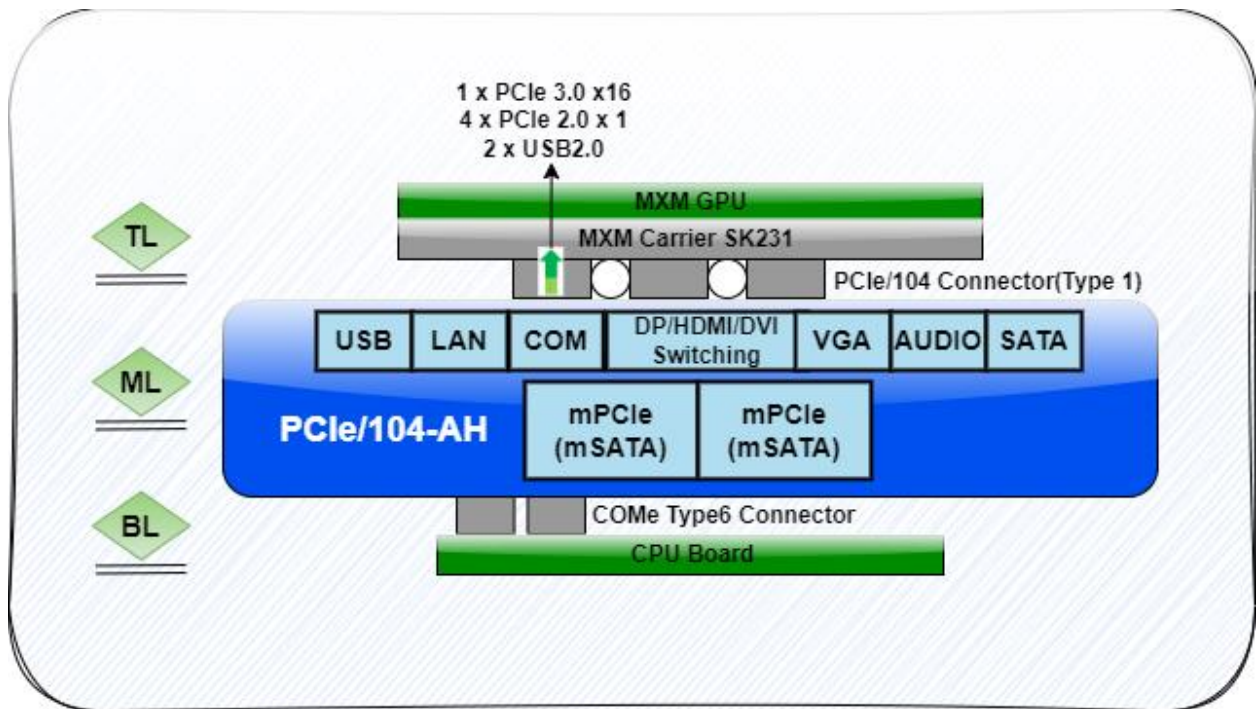
OS

OS Support	Windows®10 64bit Linux(Support by request)
------------	---

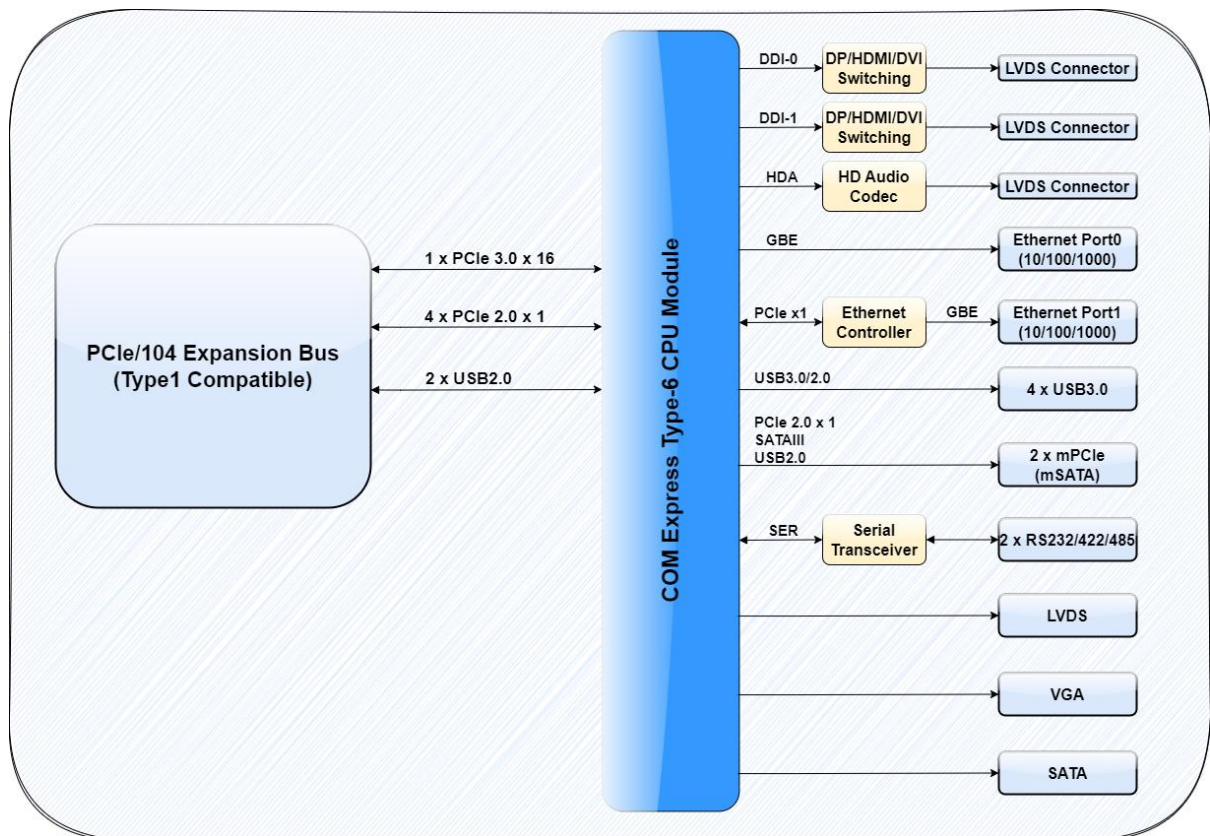
I/O Placement



Stack Concept



Block Diagram



Ordering Information

Model Name Spec	PCIe104-RH01A10	PCIe104-RH01A20	PCIe104-RH01A45
PCIe/104 Form Factor	Type1		
CPU	13 th i7-13800HRE(45W)		
RAM	DDR5 SO-DIMM up to 64GB		
LAN	2x GbE		
GPU	RTX A1000	RTX A2000	RTX A4500
DP/HDMI/DVI Switching	2x DP/HDMI/DVI Switching		
LVDS	1x LVDS		
VGA	1x VGA from CPU 1x VGA from GPU(Optional)		
SATA	1x SATAIII		
COM	2x RS232/422/485		
Power	CPU : 12V DC-IN GPU : 12V DC-IN		
Operation Temp	-40 to +85°C		