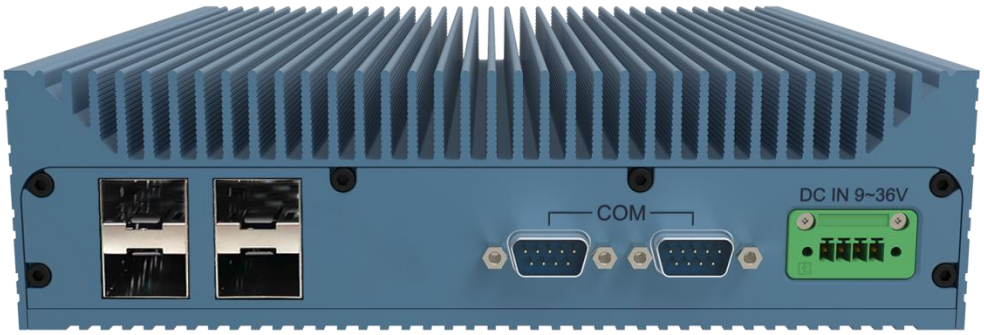
PERFECTRON

ROC200-DL



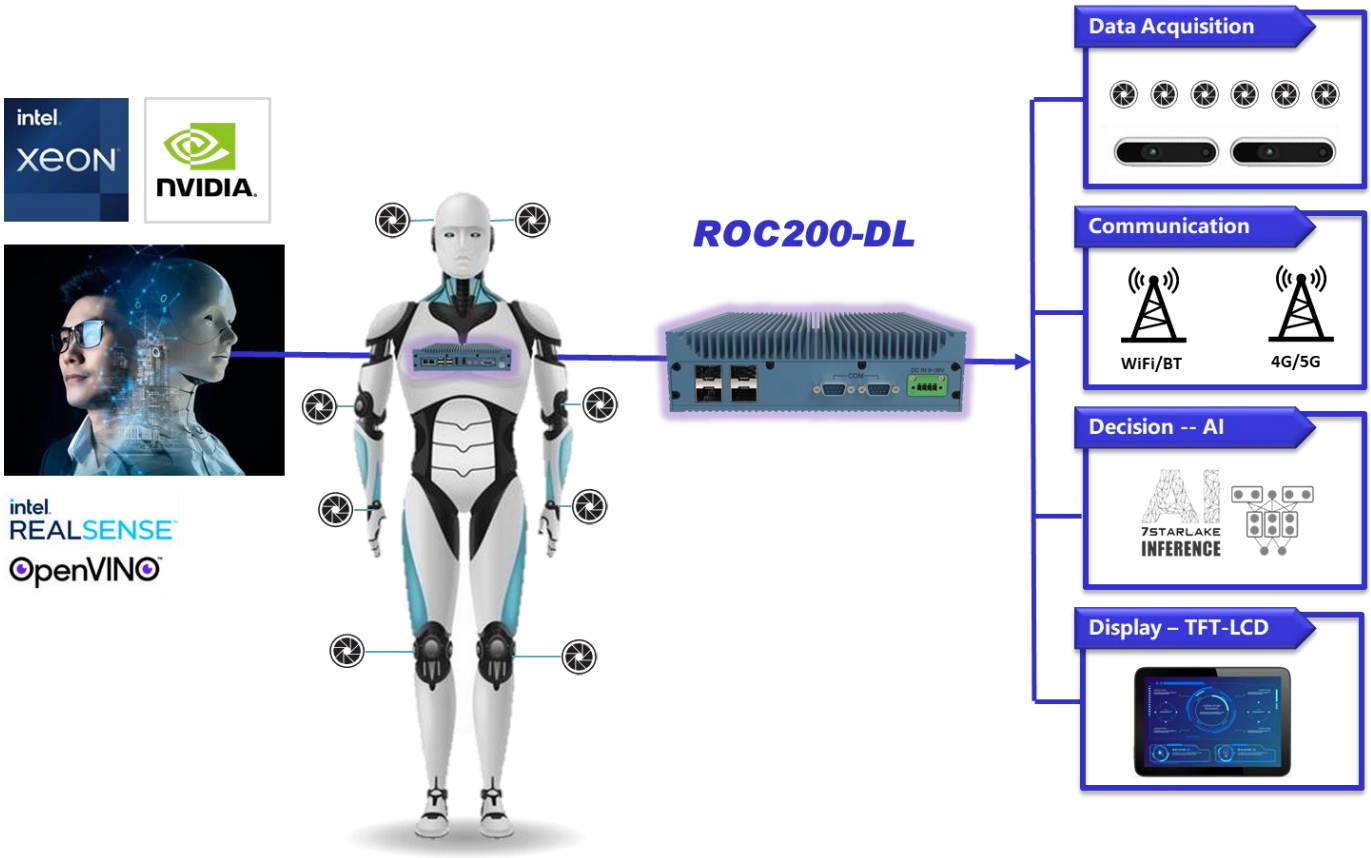
SFF Rugged GPU Computer

- MIL-STD 810 Thermal, Shock, Vibration, Humidity
- Intel® Xeon®Ice Lake-D LCC, D-1746TER, D-1732TE pr ocessor
- Nvidia MXM 5000Ada (9728 CUDA, 16GB GDDR6)
- Nvidia MXM 3500Ada (5120 CUDA, 12GB GDDR6)
- Up to 128GB DDR4 SO-DIMM
- COM Express Type 7 with MXM-GPU Expansions
- Extreme Temperature Support -20°C to 55°C
- 9V~36V DC-IN

Introduction

Unleashing the future of Intel Xeon-D LCC Robotics, the ROC200-DL goes beyond the ordinary, mastering the art of identifying, mapping, and resolving real-world scenarios with a human-like touch.

Fueled by the sheer prowess of the Intel® Xeon® D-1700 processor (Ice Lake-D LCC), Nvidia Quadro MXM 5000 Ada or RTX MXM A4500 Graphic(9728/5888 CUDA Cores), ROC200-DL isn't just an AI server – it's a Pint-sized powerhouse of dynamic sensor fusion marvel. Built on the robust foundation of Intel hardware, this solution rides the cutting edge with OpenVINO and REALSENSE technology, creating a symphony of innovation. Intel's open-source software-defined platform propels the ROC200-DL to not only perceive
its surroundings with unparalleled efficiency but also respond in real-time to the dynamic demands of the modern landscape. With AI workloads meticulously optimized, the ROC200-DL is your gateway to a future where responsiveness meets intelligence, seamlessly shaping the landscape of innovation.



Specifications

Proscessor & System

COM Express (Type 7)	CPU	Intel® Xeon® D-1700 processor (Ice Lake-D LCC)
COM Express (Type 7)	CPU Options	Intel® Xeon® D-1700 processor (Ice Lake-D LCC) • Xeon® D-1746TER 2.0/3.1GHz, 15MB, 67W, 10C • Xeon® D-1732TE 1.9/3.0GHz, 15MB, 52W, 8C
GPU Module Options		NVIDIA® Quadro® 5000Ada, 115W, 16GB GDDR6, 9728 CUDA Cores NVIDIA® Quadro® MXM A4500, 80/115W, 16GB GDDR6, 5888 CUDA Cores NVIDIA® Quadro® 3500Ada, 115W, 12GB GDDR6, 5120 CUDA Cores NVIDIA® Quadro® MXM A2000, 60W, 8GB GDDR6, 2560 CUDA Cores
Memory type		DDR4, up to 128GB
Chipset		Base On CPU module
Watchdog Base		Base On CPU module

Display

Internal Display Port	2x Display Port outputs from MXM GPU

Ethernet

10GbE SFP+	4x (Intel C827 10G Retimer)

Storage

M.2	1x M.2 2280 M-Key Slot (PCIe x4 GEN3, NVMe)
SATA	2x SATA III

Rear I/O

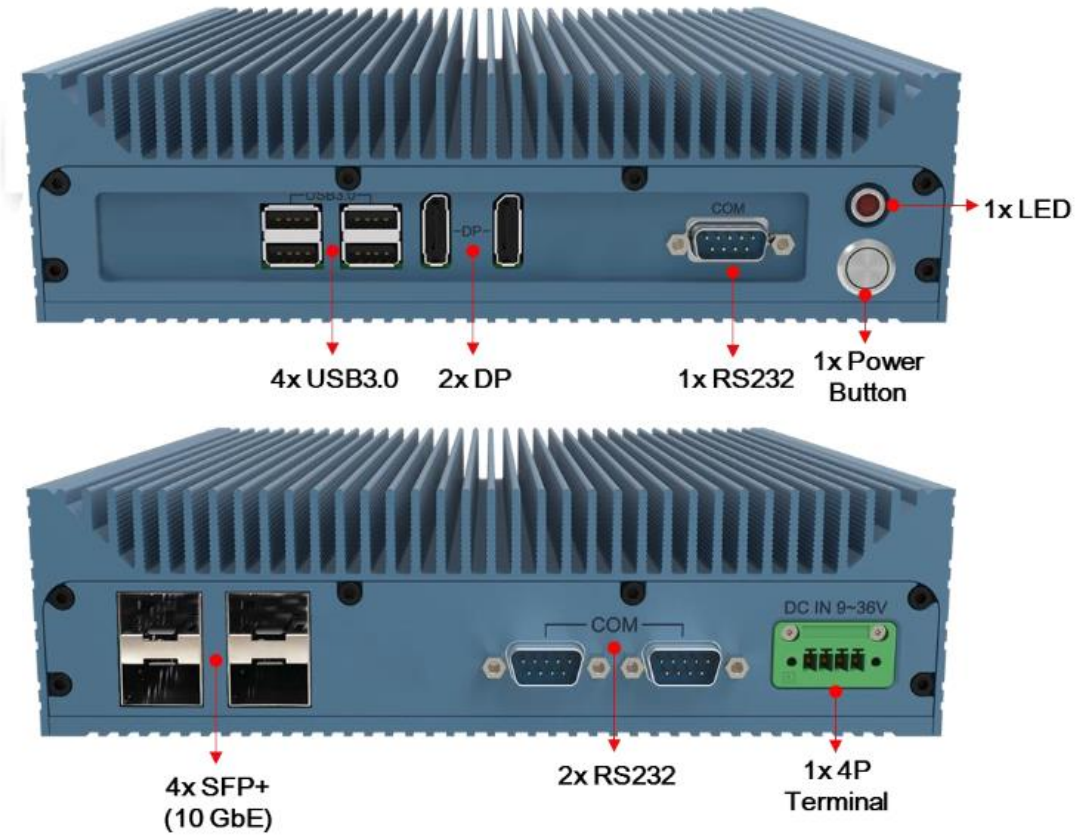
10GbE SFP+	4x
Terminal Block DIP 1x4P	1x (Vin: 2PIN; GND: 2PIN)
COM	2x RS232

Front I/O

USB	4x USB3.0
Display port	2x DP
COM	1x RS232

Power button	1x
LED	1x HDD/SSD LED
Power Management	
Input Power:	Wide Voltage DC-IN 9V~36V (Support AT/ATX mode)
Mechanical and Environmental	
Dimension	220 x 300 x 88 mm
Operating Temp	-20°C to 55°C
Storage Temp	-40°C to 85°C
Relative Humidity	10% to 90%, non-condensing

Appearance



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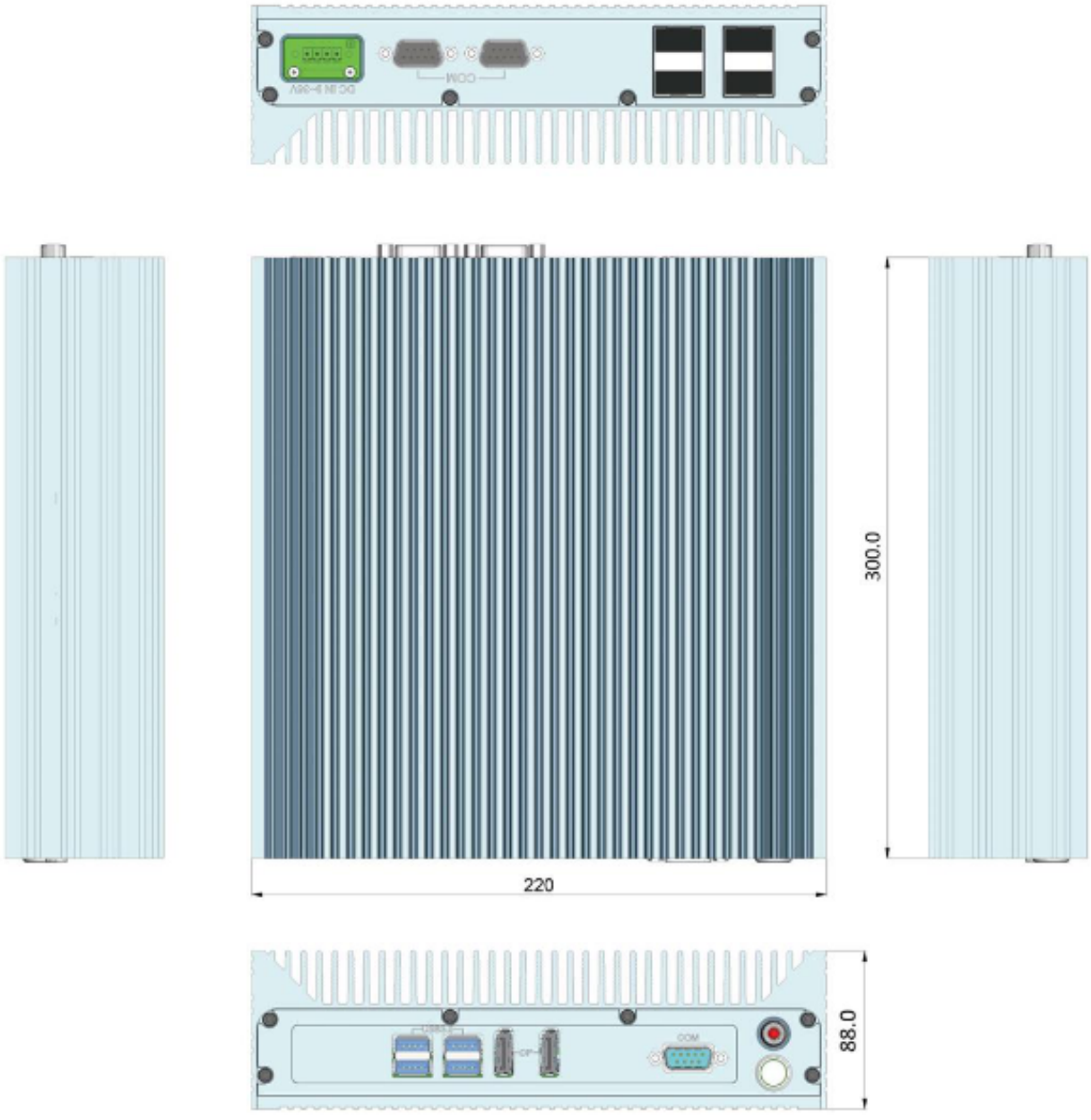
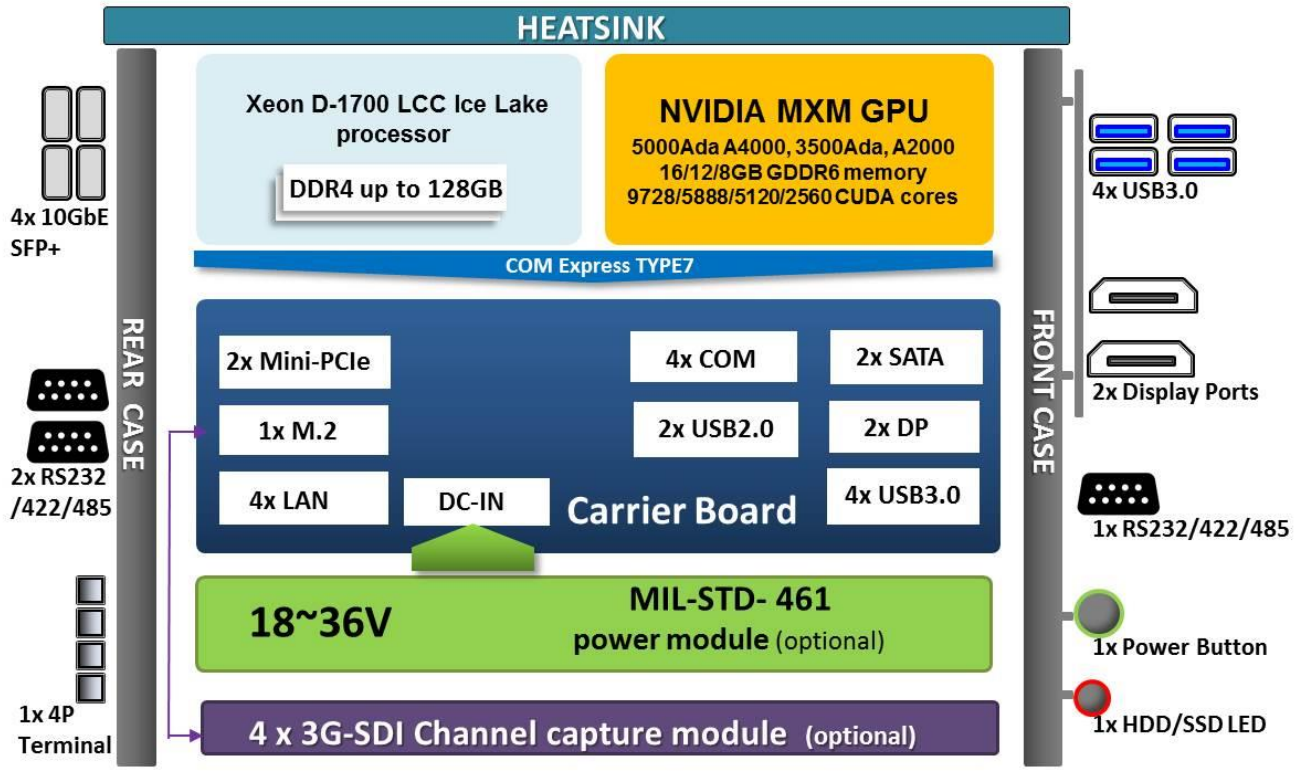


Block Diagram



Ordering Information

	ROC200-DL-A10	ROC200-DL-A20	ROC200-DL-35A	ROC200-DL-A45	ROC200-DL-50A	ROC200-DL-R	ROC200-DL-4S
CPU	Xeon D-1718T, 4C	Xeon-D-1732TE, 8C	Xeon D-1746TER, 10C	Xeon D-1746TER, 10C	Xeon D-1746TER, 10C	Xeon-D-1732TE, 8C	Xeon D-1746TER, 10C
GPU	MXM A1000	MXM A2000	MXM 3500Ada	MXM A4500	MXM 5000Ada	MXM A2000	MXM A3500Ada
RAM	DDR4 up to 128GB RDIMM	DDR4 up to 128GB SO-DIMM					
Storage	1x M.2 2280 M-key, 4x SATA SSD RAID 0,1, 5, 10	1x M.2 2280 M-key, 2x SATA SSD				2x SATA (Option HW Raid 0/1)	
PSU	12V DC-IN	9V~36V DC-IN					
I/O	2x 25GbE SFP28 2x 10GbE T-base	4x 10GbE LAN					
	2x USB3.0 + 2x USB2.0						
	1x VGA	2x DP ports					
	Power Switch + HDD/SSD LED						
OS	Win10/11 IoT, Enterprise. Win Server 2019,2022 Ubuntu21.1, VMWare ESXi 7.0	Win10, Win server 2019, Win10 LTSC					
IPMI	Yes	NA					