



**EVOKING TRUST**



**RACK MOUNT DUAL SOCKET  
2 U SERVER**

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# Specification

## WAVESYS RACK MOUNT DUAL SOCKET 2U SERVER

### IP-03R-NVR12B2U-50/100/150



2U FRONT



2U BACK

1. 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s
2. Intel® C621
3. 16 DIMM slots. Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz Or 2TB DCPMM, DDR42666MHz. Up to 2TB Intel® Optane DC Persistent Memory in memory mode (Cascade Lake only);
4. 3 PCI-E 3.0 x16,  
4 PCI-E 3.0 x8  
M.2 Interface: 2 PCI-E 3.0 x4  
M.2 Form Factor: 2242/2260/2280/22110  
M.2 Key: M-Key (RAID 0,1 support)
5. 1 VGA port
6. 12x3.5" Hot Swap Drive Slots
7. Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
8. Dual LAN with 1GbE with Intel® X722+ Marvell 88E1512
9. Dual/Quad Display

# Specification



|                  |                          |   |
|------------------|--------------------------|---|
| Physical Stats   | Form Factor              | 2U Rackmount  |
|                  | Dimensions               | 26.04" x 17.00" x 3.47"   |
| Processor/ Cache | CPU                      | IP-03RNVR72H/IP-03RNVR100:2 <sup>nd</sup> Gen Intel® Xeon® Silver 4208 Scalable Processor 8 core (11M Cache, 2.10 GHz)  |
|                  | Note                     | <ul style="list-style-type: none"> <li>•BIOS version 3.0a or above is required to support 2nd Generation Intel® Xeon® Scalable Processors-SP</li> </ul>   |
| System Memory    | Memory Capacity          | <ul style="list-style-type: none"> <li>•BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)</li> <li>•Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz</li> <li>•Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots,</li> </ul> |
|                  | Memory Type              | <ul style="list-style-type: none"> <li>•Up to 2TB Intel Optane™ DC Persistent Memory in memory mode (Cascade Lake Only)</li> </ul>  |
|                  | DIMM Sizes               | 2933/2666/2400/2133MHz ECC DDR4 RDIMM, LRDIMM   |
|                  |                          | <ul style="list-style-type: none"> <li>•RDIMM: 64GB</li> <li>•LRDIMM: 64GB</li> <li>•3DS LRDIMM: 128GB, 256GB</li> </ul>  |
|                  |                          |   |
| On-Board         | Memory Voltage           | 1.2V  |
|                  | Error Detection          | Corrects single-bit errors<br>Detects double-bit errors (using ECC memory)  |
|                  | Chipset                  | Intel® C621   |
|                  | SATA                     | Intel® C621 controller for 12 SATA3 (6 Gbps) ports<br>RAID 0,1,5,10   |
|                  | IPMI                     | ASPEED AST2500  |
|                  | Network Controllers      | Dual LAN with 1GbE with Intel® X722+ Marvell 88E1512  |
|                  | Graphics                 | Nvidia Quadro RTX 4000 16GB DDR6  |
|                  | LAN                      | 2 x1GbE LAN ports   |
|                  | USB                      | 7 USB 3.0 ports (4 rear + 2 headers + 1 Type A)   |
|                  | Video Output             | 1 VGA port ,1 HDMI port   |
|                  | Serial Port/Header       | 1 COM Port (1 rear )  |
|                  | TPM                      | 1 TPM Header  |
|                  | Storage and Power Supply | Drive Slots   |
| Power Supply     |                          | 1+1 800W Redundant Power supply   |



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|                       |  |   |
|-----------------------|--|---|
| Expansion Slots       | PCI-E  | 3 PCIE 3.0 x16,<br>4 PCI-E 3.0 x8   |
|                       | M.2  | M.2 Interface: PCIE 3.0 x4<br>Form Factor: 2242/2260/2280/22110<br>Key: M-Key (RAID 0,1 support)  |
| Management            | Software   | Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog   |
| PC Health Monitoring  | Voltage  | +18V, +12V,+3.3V,+5V,+5V standby, 1.05 (PCH).<br>Chipset Voltage, Memory Voltages, Monitors CPU voltages  |
|                       | FAN  | 8x 4-pin fan headers (up to 8 fans), PWM fan speed control  |
|                       | Temperature  | CPU thermal trip support, Monitoring for CPU and chassis environment, Thermal Control for 8 Fan Connectors  |
|                       | LED  | Power LED, UID/Remote UID, BMC/IPMI Heartbeat LED   |
|                       | Other Features                                     | 8-pin 12v DC power connector, ACPI power management, ATX Power connector, Chassis intrusion detection, Chassis intrusion header, CPU thermal trip support for processor protection, NCSI header, ROHS, SDDC, UID, WOL               |
| Operating Environment | Operating Temperature Range                        | 10°C ~ 35°C (50°F ~ 95°F)   |
|                       | Non-Operating Temperature Range                    | -40°C ~ 70°C (-40°F ~ 158°F)  |
|                       | Operating Relative Humidity Range                  | 8% ~ 95% (non-condensing)   |
|                       | Non-Operating Humidity Range                       | 5% ~ 95% (non-condensing)   |
| Application software  | Optional Application Software Preloaded at Factory | <ol style="list-style-type: none"> <li>1. Video Management software-WVMS</li> <li>2. Video Content Analytics-WVCA</li> <li>3. Face recognition Software- WVMS-FR</li> <li>4. Licence Plate Recognition Software-WVMS-LPR</li> </ol> |