



LAND



SEA



AIR

# AV800-027-2A45

IP65 Military IceLake D-2796NT,  
Dual MXM-GPU Server



- Design to meet MIL-810, MIL-461 EMC/EMI
- Intel® Xeon D-2796NT 20 Cores 2.1GHz Max Turbo 3.2GHz
- Dual Nvidia RTX A4500 5888 CUDA cores PCIe Gen 4.0 x16
- 2x 25GbE SFP28 LAN Port + 2x RJ45 10 GbE base-T ports
- 2x NVMe M.2 (R/W, 7150/5250 MB/sec)
- 2x NVMe U.3 (R/W, 7150/5250 MB/sec)
- Hardware Secure Erase(AES) button, Swappable CMOS battery
- Extreme Temperature -20°C to 60°C
- Size: 455mm x 316mm x 204.8mm (W x L x H)
- IP65 Sealed with External Cooling Blade
- MIL-STD-810G Thermal, Shock, Vibration, Humidity
- Power 18V~36V DC Input

# Specifications

## System

CPU	Intel® XEON™ D-2796NT, 20 Core, 2.0GHz Max Turbo 3.10GHz
Memory type	256GB RDIMM ECC DDR4-2933/512G LRDIMM DDR4-2933 in 4 DIMM Slot
Chipset	Intel® SoC Integrated
GPU	NVidia® RTX A4500 5888 CUDA Cores PCIe Gen4.0 x16
25GbE	MPO SFP connector with 2x 25GBase SFP28
LAN	2x 1GBase-T , 2 x 10GBase-T LAN, 2x 25GBase SFP28
Storage	2x 2TB 2.5" SSD with AES function
Power Type	18V~36V EMI DC Input
Operating Temperature	-20° to +60° C
Dimension	455mm x 316mm x 204.8mm (W x L x H)

## Front I/O

X1	1x 10GBase-T M20 RJ45 CAT6A connector
X2	2x 25GBase MPO SFP, with D38999 connector
X3	1x 10GBase-T M20 RJ45 CAT6A connector
X4	DC In connector
X5	4x RS232/422/485 with D38999 connector
X6	1x USB3.0 Amphenol USB3FTV7AZNF312 connector
X7	1x 1GBase-T TV07RW-13-98S connector
X8	1x USB3.0 Amphenol USB3FTV7AZNF312 connector
X9	D-sub 15 VGA connector with waterproof cap

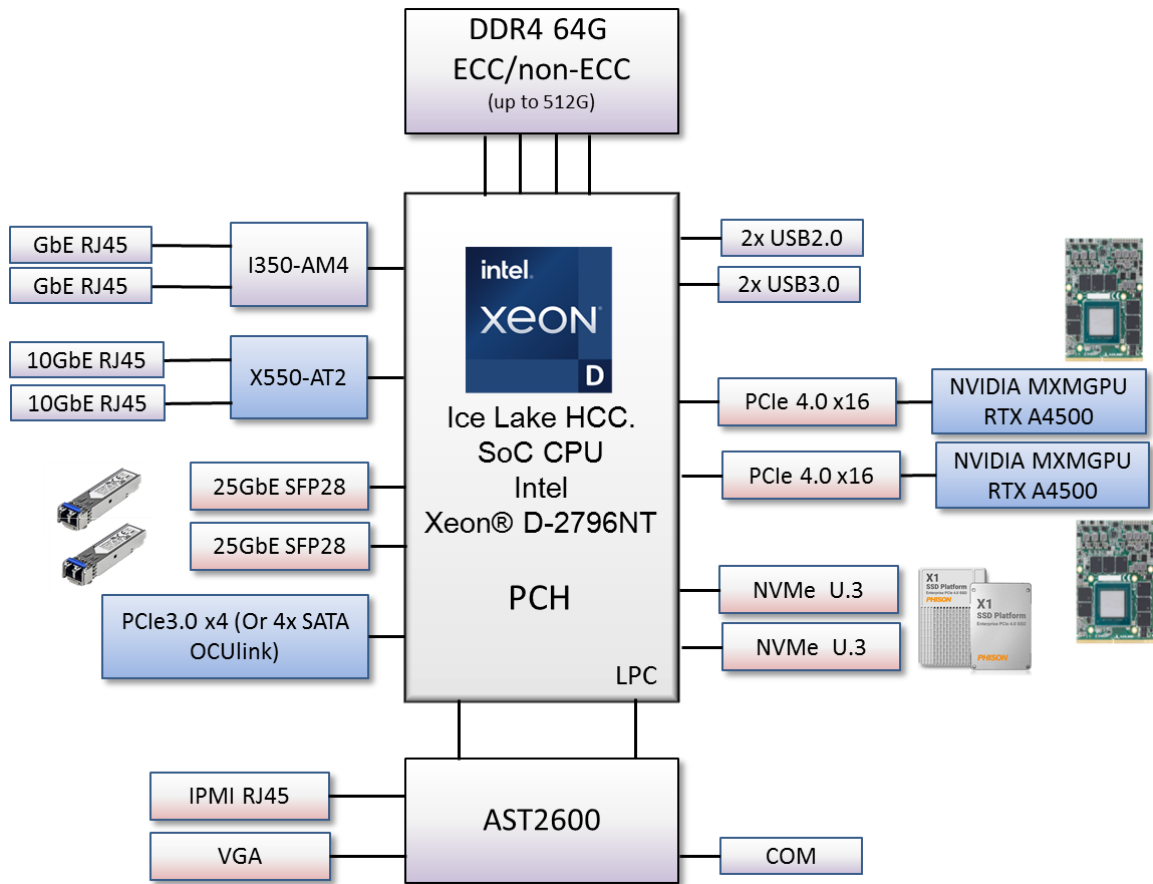
## Environmental

MIL-STD-810 Test	Method 500.5, Procedures I and II (Altitude, Operation): 12,192M, (40,000 ft) for the initial cabin altitude (18.8Kpa or 2.73 Psia) Method 500.5, Procedures III and IV (Altitude, Non-Operation): 15,240, (50,000 ft) for the initial cabin altitude (14.9Kpa or 2.16 Psia) Method 501.5, Procedure I (Storage/High Temperature) Method 501.5, Procedure II (Operation/High Temperature) Method 502.5, Procedure I (Storage/Low Temperature) Method 502.5, Procedure II (Operation/Low Temperature) Method 503.5, Procedure I (Temperature shock) Method 507.5, Procedure II (Temperature & Humidity) Method 509.7 Salt Spray (50±5)g/L Method 514.6, Vibration Category 24/Non-Operating (Category 20 & 24,Vibration) Method 514.6, Vibration Category 20/Operating (Category 20 &
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	<p>24,Vibration)  Method 516.6, Shock-Procedure V Non-Operating (Mechanical Shock)  Method 516.6, Shock-Procedure I Operating (Mechanical Shock)</p>
Reliability	<p>Conduction Cooling.  Designed &amp; Manufactured using ISO 9001 Certified Quality Program.</p>
MIL-STD-461	<p>CE102 basic curve, 10kHz - 30 MHz  RE102-4, (1.5 MHz) -30 MHz - 5 GHz  RS103, 200 MHz - 3.2 GHz, 50 V/m equal for all frequencies  EN 61000-4-2: Air discharge: 8 kV, Contact discharge: 6kV  EN 61000-4-3: 10V/m  EN 61000-4-4: Signal and DC-Net: 1 kV  EN 61000-4-5: Leads vs. ground potential 1kV, Signal und DC-Net: 0.5 kV  CE and FCC</p>
MIL-STD-1275	<p>Steady State – 20V~33V,  Surge Low – 18V/500ms,  Surge High – 100V/500ms  Emitted spikes  Injected Voltage surges  Emitted voltage surges  Voltage ripple (2V)  Voltage spikes  Starting Operation  Reverse polarity</p>
Operating Temp.	-20 to +60°C
Storage Temp.	-40 to +85°C
Relative Humidity	5% to 95%, non-condensing.

\*All specifications and photos are subject to change without notice.

## Diagram Block



## Order Information

Model	AV800-D27-2A45	PER800-D27
Type	Rugged	Industrial
CPU	Intel Xeon D-2796NT	
Memory	256GB RDIMM ECC DDR4-2933 MHz	
GPU	2x MXM Embedded NVIDIA RTX A4500	
RAM	Up to 256GB DDR4 RDIMM 2666/2400 MHz	
Storage	M.2(2TB) and 2x 2.5" U.3(16TB)	
NIC	2x 25GbE SFP + 2x 10GbE +4x GbE + IPMI	
Power	18V ~36V DC input	
Dimension	455mm x 316mm x 204.8mm (W x L x H)	416mm x 301mm x 106mm (W x L x H)



## Appearance



## Dimension

