

PUZZLE-IN004

1U Rackmount Network Appliance with Intel® Xeon® D Processor support 8 x GbE, 4 x 10GbE SFP+ and 1 PCIe x8 slot



Features

» [Intel® Select Solutions for uCPE for CentOS and ADVA for Ensemble Harmony Ecosystem](#)

» Intel® Xeon D-2100 series processor (Skylake-D) with optional Intel® QAT

» Support eight GbE RJ-45 via Intel® I211-AT, four 10 GbE SFP+ and IEI networking module

» 8 x 288-pin RDIMM DDR4 2666MHz, RDIMM up to 256GB / LRDIMM up to 512GB

» 1 x RJ-45 Console, 1 x USB 3.2 Gen 1 (5Gb/s), 1 x USB 2.0, LCM

» 2 x 2.5" SATA drive bay, 2 x M.2 M key for nVME, 1 x PCIe Mini with SIM card

» Support one PCIe 3.0 x8 slot, one PuIM module slot

» Redundant PSUs

» Support open source software, such as [pfSense®](#) and [OPNsense®](#).

[Learn more about PUZZLE series network appliances](#)

[Read Solution Brief: IEI's PUZZLE-IN004-XD1 verified as Intel® Select Solutions for uCPE for CentOS](#)

Specifications

Form Factor	
Form Factor	1U
System	
CPU	Intel® Xeon® D-2145NT processor 8-core, 11M cache, 1.90 GHz Intel® Xeon® D-2146NT processor 8-core, 11M cache, 2.30 GHz Intel® Xeon® D-2166NT processor 12-core, 16.5M cache, 2.00 GHz Intel® Xeon® D-2177NT Processor 14-core, 19.25M Cache, 1.90 GHz Intel® Xeon® D-2187NT processor 16-core, 22M cache, 2.00 GHz
Chipset	Integrated in CPU
Memory	8 x DDR4 2133/2400MHz ECC DDR4 RDIMM/LRDIMM
Memory Max.	RDIMM up to 256GB LRDIMM up to 512GB
Cooling method / System Fan	4 x Cooling fans with smart fan
Physical Characteristics	
Dimensions (LxWxH) (mm)	426x430x44.2
Net Weight	7 kg
Storage	
Storage	2 x 2.5" SSD/HDD Bay Support SATA 3.0 (6 Gbps)
I/O Interface	
Ethernet	4 x SFP+ 10 GbE (Intel® X722 integrated in CPU) 8 x LAN GbE RJ-45 (NIC: Intel I211-AT)
I/O Interface	1 x External RS-232 Console 1 x External USB 2.0 1 x External USB 3.2 Gen1x1
Expansion	1 x PCIe x8 double width

	1 x PCIe mini Card Slot (PCIe + USB 2.0) with SIM card
	2 x M.2(NGFF) M.2 B Key (3042/2260) (SATA 3.0 and USB 3.2 Gen 1) Support SATA SSD or 4G LTE module (USB signal)
Other Features	
TPM	1 x TPM 2.0 pin header
Power	
Power Supply	300W, 100V~240V (Redundant power)
Environment	
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 75°C (-4°F ~ 167°F)
Humidity	Relative humidity: 5% ~ 90% non-condensing
Certifications	
Safety & EMC	CE / FCC
OS Support	
OS Support	Linux Ubuntu 18.04.04
	CentOS 7/ Red Hat/ Fedora EPEL
	Microsoft Windows 10

Ordering Information

PUZZLE-IN004-XD5/64G/R-R10	1U Rackmount Network Appliance with Intel® Xeon® D-2187NT Processor, four 16GB DDR4, two 480GB SSD, eight 1GbE, four 10 GbE, one PulM module and one PCIe expansion, RoHS
PUZZLE-IN004-XD4/64G/R-R10	1U Rackmount Network Appliance with Intel® Xeon® D-2177NT Processor, four 16GB DDR4, two 480GB SSD, eight 1GbE, four 10 GbE, one PulM module and one PCIe expansion, RoHS
PUZZLE-IN004-XD3/32G/R-R10	1U Rackmount Network Appliance with Intel® Xeon® D-2166NT Processor, four 8GB DDR4, two 240GB SSD, eight 1GbE, four 10 GbE, one PulM module and one PCIe expansion, RoHS
PUZZLE-IN004-XD2/32G/R-R10	1U Rackmount Network Appliance with Intel® Xeon® D-2146NT Processor, four 8GB DDR4, two 240GB SSD, eight 1GbE, four 10 GbE, one PulM module and one PCIe expansion, RoHS
PUZZLE-IN004-XD1/32G/R-R10	1U Rackmount Network Appliance with Intel® Xeon® D-2145NT Processor, four 8GB DDR4, two 240GB SSD, eight 1GbE, four 10 GbE, one PulM module and one PCIe expansion, RoHS

Packing List

» 2 x Power cord	» 2 x Rack mounting ears
» 6 x Screws for rack mounting ears	» USB to console cable (Option)
» RS-232 to console cable (Option)	» Slide rail (Option)