

# 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® 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 IEL networking module
- 8 x 288-pin RDIMM, 2 x DDR4 2666MHz, UDIMM up to 128GB / 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 2280 (PCIe x4), 1 x PCIe Mini (PCIe + USB 2.0) with SIM card
- Support one PCIe x8 slot, one PuIM module slot
- Redundant PSUs

## Specifications

		PUZZLE-IN004-XD1	PUZZLE-IN004-XD2	PUZZLE-IN004-XD3	PUZZLE-IN004-XD4
Platform	Form Factor	1U			
	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-2187NT processor 16-core, 22M cache, 2.00 GHz
	Chipset	Integrated in CPU			
Memory	Memory Technology	DDR4 2666MHz ECC (by CPU) or non-ECC			
	Memory Capacity	UDIMM up to 128GB / RDIMM up to 256GB / LRDIMM up to 512GB			
	Memory Socket	8 x 288-pin DIMM			
Network and Security	Network Acceleration and Security Function	<ul style="list-style-type: none"> <li>• Intel® AES New Instructions</li> <li>• Intel® Software Guard Extensions (Intel® SGX)</li> <li>• Intel® Memory Protection Extensions (Intel® MPX)</li> <li>• Intel® Trusted Execution Technology</li> </ul>			
	TPM	1 x TPM 2.0 pin header			
Networking	Ethernet IC	1 GbE NIC: Intel® I211-AT			
	Ethernet Port	4 x 10 GbE SFP+ / 8 x 1GbE RJ-45 LAN ports			
	Network Module Slot	1 x PuIM module slot			
Expansion Slot	PCIe Slot	1 x FH/HL gen3 x8 slot			
	PCIe Mini Card Slot	1 x PCIe Mini (PCIe + USB 2.0) with SIM card			
	M.2	1 x M.2 A key (USB 2.0, PCIe x1)			
Storage	Storage	2 x 2.5" SATA HDD/SSD bay			
	eMMC	N/A			
	SD Card	N/A			
External I/O	USB	1 x USB 2.0 / 1 x USB 3.2 Gen 1			
	Console	1 x RJ-45			
Internal I/O	M.2	2 x M key 2260/2280 (PCIe x4)			
	HDMI	N/A			
	USB	USB DOM, Digital I/O 4in 4out			
Power and Mechanical	Power Switch	1 x Power switch			
	Reset Button	1 x Reset button			
	Power Input	100 V ~ 240 V			
	Type/Watt	Redundant power 300W, 90V~264V AC			
	Processor Cooling	1 x Passive CPU heatsink			
	System Cooling	3 x Cooling fans with smart fan			
	Antenna Port	1 x Antenna port			
Physical and Environmental	Storage Temperature	0 ~ 40°C			
	Operating Temperature	0 ~ 40°C (32 ~ 104°F)			
	Operating Humidity	Relative humidity: 5% ~ 90% non-condensing			
	Dimensions (W x L x H) (mm)	430 x 426 x 44.2			
	Weight	7 kg			
OS and Certifications	Certification	CE/FCC			
	Operating System	Linux Ubuntu 18.04.04			
Indicators	LCM	LCM, 2 buttons			
	LED	Power status, Storage status, Alert LED			

## Ordering Information

Part No.	Description
PUZZLE-IN004-XD1/32G/R-R10	1U Rackmount network appliance with Intel® Xeon® D-2145NT processor, 32GB DDR4, two 256GB SSD, eight 1GbE, four 10 GbE, one PuIM module slot and one PCIe expansion, RoHS
PUZZLE-IN004-XD2/32G/R-R10	1U Rackmount network appliance with Intel® Xeon® D-2146NT processor, 32GB DDR4, two 256GB SSD, eight 1GbE, four 10 GbE, one PuIM module slot and one PCIe expansion, RoHS
PUZZLE-IN004-XD3/32G/R-R10	1U Rackmount network appliance with Intel® Xeon® D-2166NT processor, 32GB DDR4, two 256GB SSD, eight 1GbE, four 10 GbE, one PuIM module slot and one PCIe expansion, RoHS
PUZZLE-IN004-XD4/32G/R-R10	1U Rackmount Network Appliance with Intel® Xeon® D-2187NT processor, 32GB DDR4, two 256GB SSD, eight 1GbE, four 10 GbE, one PuIM module slot and one PCIe expansion, RoHS

## Packing List

	PUZZLE-IN004-XD1/32G/R-R10	PUZZLE-IN004-XD2/32G/R-R10	PUZZLE-IN004-XD3/32G/R-R10	PUZZLE-IN004-XD4/32G/R-R10
Power cord	2	2	2	2
Rack mounting ears	2	2	2	2
Screws for rack mounting ears	6	6	6	6
USB to console cable	1	1	1	1
RS-232 to console cable	option	option	option	option
Slide rail	option	option	option	option

## Options

Item	Part No.	Description
Slide rail	RAIL-B02	New rail kit for new 1U & 2U NAS: TVS-471U, 1253U, etc
USB to console cable	32013-004000-100-RS	ROUND CABLE; LAN CABLE; FTDI Console Cable; 2; 1800MM; (A)USB A TYPE 4P MALE+PCB:FTDI_FT232RL; (B)RJ-45 8P8C; RoHS
RS-232 to console cable	32005-005100-100-RS	ROUND CABLE; RS-232/422/485; PUZZLE RS-232 Cable; 2; 500MM; 24AWG; (A) D-SUB 9P MALE+#4-40 Screw; (B)RJ-45 PLUG 8P8C; ONE PCS PKG; TC&C; RoHS

## Dimensions (Unit: mm)

