

# PUZZLE-IN001

1U Rackmount Network Appliance with Intel® Xeon® E and 8th & 9th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, two PuIM module slots and two PCIe slots



## Features

- Intel® Xeon® E, 8th & 9th Generation Intel® Core™/ Pentium®/Celeron® processor
- 8 x GbE RJ-45 via Intel® I211
- 2 x 288-pin DIMM, DDR4 2400MHz ECC & non ECC, up to 32GB
- 1 x RJ-45 Console, 2 x USB 3.2 Gen 1 (5Gb/s), LCM
- 2 x 2.5" SATA drive bay, 1 x M.2 B-Key (SATA, USB 3.2 Gen 1 (5Gb/s)), 1 x PCIe Mini
- Support PCIe x4, PCIe x8 slot and two PuIM module slots
- Redundant PSUs

## Specifications

		PUZZLE-IN001-XE	PUZZLE-IN001-i3T
Platform	Form Factor	1U	
	CPU	Intel® Xeon® E-2136 processor, 6C/12T, up to 4.50 GHz	8th Generation Intel® Core™ i3-8100T processor, 4C/4T, up to 3.10 GHz
	Chipset	Intel® C246	
Memory	Memory Technology	2 x DDR4 2400MHz ECC/Non-ECC/RDIMM	
	Memory Capacity	Up to 32GB	
	Memory Socket	2 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	8 x 1GbE RJ-45 LAN ports	
	Network Module Slot	2 x PuIM module slots	
Expansion Slot	PCIe Slot	1 x PCIe 3.0 x8 (FHHL) slot, 1 x PCIe 3.0 x4 (FHHL) slots	
	PCIe Mini Card Slot	1 x PCIe Mini card (PCIe 3.0 & SATA 3.0, USB 2.0)	
	M.2	1 x 3042/2260 M.2 B key (SATA 3.0 / USB 3.2 Gen1) Support SATA SSD and 4G LTE module	
Storage	Storage	2 x 2.5" SATA HDD/SSD bay support SATA 3.0 (6 Gbps) (RAID 0/1 support)	
	eMMC	N/A	
	SD Card	N/A	
External I/O	USB	2 x USB 3.2 Gen 1 (5Gb/s)	
	Console	1 x RJ-45	
Internal I/O	HDMI	N/A	1 x HDMI connector (optional)
	USB	4 x USB 2.0 (pin header)	
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	4 x Cooling fans with smart fan	
Antenna Hole	1 x Antenna hole		
Physical and Environmental	Storage Temperature	-20°C ~ 75°C (-4°F ~ 167°F)	
	Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	
	Operating Humidity	5% ~ 90% non-condensing	
	Dimensions (W x L x H) (mm)	430 x 426 x 44.2	
	Weight	7kg	
OS and Certifications	Certification	CE / FCC	
	Operating System	Linux Ubuntu 18.04.04 CentOS 7 / Red Hat / Fedora EPEL Microsoft Windows 10	
Indicators	LCM	LCM, 2 buttons	
	LED	1 x Power LED, 1 x Storage LED, 1 x Alert LED	

## Ordering Information

Part No.	Description
PUZZLE-IN001-R-R11*	1U Rackmount Network Appliance support Intel® Gen8 Xeon®E3, Core™ i3, Pentium® or Celeron® processor, two DDR4 slots, two SSD slots and eight 1GbE, two PuIM, two PCIe expansion without heatsink, Redundant Power, RoHS
PUZZLE-IN001-XE/R-R11	1U Rackmount Network Appliance with Intel® Gen8 Xeon® E-2136 processor, two DDR4 slots, and eight 1GbE, two PuIM module slots, two PCIe expansion, Redundant Power, RoHS
PUZZLE-IN001-i3T/R-R11	1U Rackmount Network Appliance with Intel® Gen8 Core™ i3-8100T processor, two DDR4 slots, and eight 1GbE, two PuIM module slots, two PCIe expansion, Redundant Power, RoHS
PUZZLE-IN001-XE/16G/R-R11	1U Rackmount Network Appliance with Intel® Gen8 Xeon® E-2136 processor, two 8GB DDR4, two 256GB SSD, and eight 1GbE, two PuIM module slots, two PCIe expansion, Redundant Power, RoHS
PUZZLE-IN001-i3T/16G/R-R11	1U Rackmount Network Appliance with Intel® Gen8 Core™ i3-8100T processor, two 8GB DDR4, two 256GB SSD, and eight 1GbE, two PuIM module slots, two PCIe expansion, Redundant Power, RoHS

\* A CPU heatsink must be purchased separately

## Packing List

	PUZZLE-IN001-R	PUZZLE-IN001-XE/R	PUZZLE-IN001-i3T/R	PUZZLE-IN001-XE/16G/R	PUZZLE-IN001-i3T/16G/R
Power cord	2	2	2	2	2
Rack mounting ears	2	2	2	2	2
Screws for rack mounting ears	6	6	6	6	6
USB to console cable	Option	Option	Option	1	1
RS-232 to console cable	1	1	1	Option	Option
Slide rail	Option	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
HDMI cable	19B00-000403-00-RS	Z532; Accessory module; PUZZLE series HDMI cable assembly (only processor support graphics model ); standard; 00, RoHS
Heatsink (TDP: 35W)	34000-000731-RS	HEATSINK; 90*90*27MM, GREASE:35*35mm_K=6.5; Washer*4+SPING SCREW Set*4, for CPU TDP 35W; RoHS
Heatsink (TDP: 80W)	34000-000722-RS	HEATSINK/Heat Pipe; FIN:89.5X88.4X20MM+Ø6 Heat Pipe*1, Copper Block:40*36*3MM + Aluminum Block:90*90*4.0MM; SCREW+SPRING+E-RING+WASHER*4, GREASE:X23-7762for CPU TDP 80W; RoHS

## Dimensions (Unit: mm)

