

P12R-I

Best Storage and High Density Computing Candidate



ASUS P12R-I is an Intel® Tatlow platform Mini-ITX server board based on Intel® C252 chipset. With the CPU and memory configured in a front parallel design that enables efficient airflow for excellent thermal performance, P12R-I is optimized for rack placement.

Target market

- Small form factor servers
- Data Center
- Front-end web server (web hosting), appliance

Rack-Optimized Mini-ITX compact form factor increases density

As a slim size server board, the 6.7" x 6.7" Mini ITX form factor of P12R-I fits for various small form factor appliance servers. P12R-I can be easily integrated in short depth chassis and also increases the density in a rack cabinet to provide higher computing power per rack.

Fruitful Storage I/O Expandability

- Native 6 SATA 6G onboard
- M.2 (NGFF, Gen4 x4) for independent OS drive
- PCI-E x16 Link enable extreme flexibility

M.2 unleash independent I/O for OS drive

Special edge design capable to increase. One M.2 support to 2280 PCIe Gen4 x4 Link for faster OS booting. It is the perfect choice for an operating system or application drive.

Comprehensive IT infrastructure management solution

- Bundle ASMB10-iKVM module available for 24/7 remote monitoring
- ASUS Control Center (ACC Classic)

Built-in Dual Intel® Gigabit Ethernet with teaming support

Multi-network connection made easy and convenient



FEATURE

- Intel Tatlow platform Mini-ITX server board
- Single LGA1200 socket
- PCI-E x16 Gen4 supported for graphic card
- 1 x M.2 (2280) Gen4 x2 support
- 1 x PCIe Expansion Slots
- Dual Intel NIC
- Rack-optimized Design
- Bundle ASMB10-iKVM

1. 4 x USB 3.2Gen1
2. 1 x VGA port
3. Dual Intel® server LAN , 1 x Management LAN
4. 1 x PCI-E x 16 (Gen4 x16 link)
5. 1 x M.2 (NGFF), 2280
6. Intel LGA1200 CPU socket
7. Bundle ASMB10-iKVM

P12R-I
6.7" x 6.7" (Mini-ITX)



P12R-I Rear View

P12R-I

SPECIFICATION

Processor Support		1 x Socket H5 (LGA1200) Intel® Xeon®E processors product family (95W) Intel® Pentium™ processors
Core Logic		Intel® C252 PCH
Memory	Total Slots	2 (2-channel per CPU)
	Capacity	Maximum up to 64GB
	Memory Type	DDR4 3200/2933/2666 ECC UDIMM *Refer to ASUS server AVL for the latest update
	Memory Size	32GB, 16GB, 8GB *Refer to ASUS server AVL for the latest update
Expansion Slots	Total PCI/PCI-X/PCI-E/PIKE Slots	1
	Slot Type	1 x PCI-E x16 (Gen4 x16 link)
	Audio	-
Disk Controller	SATA Controller	Intel® C252 6 x SATA 6Gb/s ports (4 by 1 mini-SAS Connector) 1 x M.2 connector(NGFF 2280, SATA or PCI-E Gen4 x4)
	SAS Controller	Optional kits: ASUS PIKE II 3008 8-port SAS HBA card ASUS PIKE II 3108 8-port SAS HW RAID card
Networking	LAN	1 x Dual Port Intel I210 Gigabit LAN Controller, 1 x Management Port
Graphic	VGA	Aspeed AST2600 64MB
Onboard I/O connectors	TPM header	1
	PSU connector	24-pin ATX power connector + 8-pin ATX 12V power connector
	Management Header	Onboard header for optional management card
	USB Connector/Header	4 x USB 3.2 Gen1(rear) 1 x USB3.2 Gen1 (header,2 ports)
	Fan Header	2 x 4pin
	SMBus	-
	Chassis Intruder	1
	Serial Port Header	1
	Device Power Connector	-
	VGA Header	-
Rear I/O Ports		4 x USB 3.1 Gen1(rear), 1 x VGA port, 2 x RJ-45 GbE LAN ports, 1 x RJ-45 Mgmt LAN port
Switch/LED		-
OS Support		Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html
Management Solution	Software	ASUS Control Center (Classic)
	Out of Band Remote Management	Bundle ASMB10-iKVM for KVM-over-IP
Dimension		6.7" x 6.7" (Mini-ITX)
Environment		Operation temperature: 10°C ~ 50°C* Non operation temperature: -40°C ~ 70°C Non operation humidity: 20% ~ 90% (Non condensing)

*The boundary condition above is based on 8.3W of PCH TDP spec . If the LFM estimate is higher than acceptable value from customer, ASUS can provide boundary condition with raw power for reference.