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ASUS PRIME Z790-P D4 Intel Z790 LGA 1700 ATX

Brand : ASUS

Product name : PRIME Z790-P D4

Product code: 90MB1CV0-M0EAY0

- Intel® LGA 1700 socket: Ready for 12th and 13th Gen Intel® processors
- Enhanced power solution: 14+1 DrMOS, 6-layer PCB, ProCool connectors, alloy chokes and durable capacitors for stable power delivery
- Next-gen connectivity: PCIe® 5.0, Realtek 2.5Gb Ethernet, USB 3.2 Gen2x2 Type-C®, front panel USB 3.2 Gen 2 Type-C®, Thunderbolt™ (USB4®) header support, 3 PCIe® 4.0 M.2
- ASUS OptiMem II: Careful routing of traces and vias, plus ground layer optimizations to preserve signal integrity for improved memory overclocking
- Comprehensive cooling: Large VRM heatsinks, flexible M.2 heatsink, PCH heatsink, hybrid fan headers and Fan Xpert 4 with AI Cooling II

ASUS Prime Z790-P D4, an Intel Z790 LGA 1700 ATX motherboard with PCIe® 5.0, three M.2 slots, 14+1 DrMOS, DDR4, Realtek 2.5 Gb LAN, HDMI®, DP, USB 3.2 Gen 2x2 Type-C®, front USB 3.2 Gen 2 Type-C, Thunderbolt™ (USB4®) support, Aura Sync

Processor

Processor manufacturer *	Intel
Processor socket *	LGA 1700
Compatible processor series *	Intel® Celeron®, Intel® Core™ i3, Intel® Core™ i5, Intel® Core™ i7, Intel® Core™ i9, Intel® Pentium® Gold
Supported processor sockets	LGA 1700

Memory

Supported memory types *	DDR4-SDRAM
Number of memory slots *	4
Memory slots type	DIMM
Memory channels	Dual-channel
ECC compatibility	Non-ECC
Supported memory clock speeds	2133,2400,2666,2800,2933,3000,3200,3333,3400,3466,3600,3733,3866,4000,4133,4266,4400,4500,4600,4700,4800,5000,5066,5133,5333 MHz
Supported memory clock speed (max)	5333 MHz
Maximum internal memory *	128 GB
Unbuffered memory	✓

Storage controllers

Supported storage drive types	HDD & SSD
Supported storage drive interfaces *	M.2, SATA III
RAID support	✓
RAID levels	0, 1, 5, 10

Graphics

Parallel processing technology support *	Not supported

Internal I/O

USB 2.0 connectors *	2
USB 3.2 Gen 1 (3.1 Gen 1) connectors *	2
USB 3.2 Gen 2 (3.1 Gen 2) connectors *	1
Number of SATA III connectors *	4
S/PDIF out connector	✓
Front panel audio connector	✓
ATX Power connector (24-pin)	✓
CPU fan connector	✓
Number of chassis fan connectors	3

Rear panel I/O ports

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2
USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity *	1
USB 3.2 Gen 2x2 Type-C ports quantity	1
Ethernet LAN (RJ-45) ports *	1
PS/2 ports quantity	1
HDMI ports quantity *	1
DisplayPorts quantity	1
Headphone outputs	1
Line-in	✓
Microphone in	✓

Network

Ethernet LAN	✓
Ethernet interface type	2.5 Gigabit Ethernet
Wi-Fi *	✓

Features

Motherboard chipset *	Intel Z790
Audio output channels *	7.1 channels
Component for *	PC
Motherboard form factor *	ATX
Motherboard chipset family *	Intel
Power source type	ATX
Windows operating systems supported	Windows 10 x64, Windows 11

Expansion slots

PCI Express x1 (Gen 3.x) slots	1
PCI Express x16 (Gen 4.x) slots	3
PCI Express x16 (Gen 5.x) slots	1
Number of M.2 (M) slots	3

Internal I/O

Peripheral (Molex) power connectors (4-pin)	1
EPS power connector (8-pin)	✓
Number of COM connectors	1
TPM connector	✓
Thunderbolt headers	1
12V power connector	✓
RGB LED pin header	✓

Rear panel I/O ports

USB 2.0 ports quantity *	4

BIOS

BIOS type *	UEFI AMI
BIOS memory size	192 Mbit
Clear CMOS button	✓

Packaging data

Package width	338 mm
Package depth	273 mm
Package height	68 mm
Package weight	1.58 kg

Weight & dimensions

Width	305 mm
Depth	234 mm

Packaging content

Cables included	SATA
Drivers included	✓

Other features

Number of M.2 (E) slots	1

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