

# ASRock X470D4U2/1N1, 1xSKT AM4, AMD Ryzen, X470, 6xSATA, 2xM.2, 2xGbE, IPMI

Part number: X470D4U2/1N1



CPU Socket	PGA 1331 (Socket AM4)
# of CPU's	1
Supported CPU's	AMD Ryzen
Memory Type	DDR4 ECC UDIMM DDR4 non-ECC UDIMM
# of DIMM's	4
Max Memory Size	128 GB
# of PCIe x16 3.0	1
# of PCIe x1 2.0	1
# of 1GbE LAN Ports	2 x RJ45

## X470D4U2/1N1

- Supports AMD AM4 Socket Ryzen™ PRO/ Ryzen™ 2nd and 3rd generation series processors
- Supports 4x DDR4 ECC and non-ECC UDIMM, max. 128 GB
- Supports up to 6x SATA3 6.0Gb/s(6x SATA3 6.0Gb/s from X470)
- Integrated IPMI 2.0 with KVM and Dedicated LAN (RTL8211E)
- Supports 2x GLAN by Intel I210AT

## Specifications

### Physical Status

Form Factor - mATX

Dimensions - 9.6" x 9.6" (24.4 cm x 24.4 cm)

### Processor System

CPU - AMD AM4 Socket Ryzen™ PRO/ Ryzen™ 2nd and 3rd generation series processors

Socket - AM4 PGA 1331

Chipset - AMD Promontory X470

### System Memory

Capacity - 4 x 288-pin DDR4 DIMM slots  
- Support up to 128GB DDR4 ECC/UDIMM

Type	- Dual Channel DDR4 memory technology - Support DDR4 ECC/UDIMM*  *Conditionally support ECC error reporting function *For Picasso Ridge and Raven Ridge CPUs, ECC is only supported with PRO CPUs.
DIMM Size Per DIMM	- ECC/UDIMM: 32GB, 16GB, 8GB
DIMM Frequency	- ECC/UDIMM: 3200/2933/2666/2400/2133 MHz *Different memory frequency support please refer our user manual P19.
Voltage	- 1.2V
<b>Expansion Slot</b>	
PCIe 3.0 x 16	- SLOT6: Gen3 x16 link (splittable in x4/4/4/4); auto switch to x8 link when SLOT4 is occupied. - SLOT4: Gen3 x8 link
PCIe 3.0 x 8	- SLOT5: Gen2 x1 link
<b>Storage</b>	
SATA Controller	- 6 x SATA3 6.0 Gb/s (1x SATA DOM port), support RAID 0, 1, 10
M.2 slot	- 2 (2242/2260/2280/22110, supports SATA3 or PCIe 3.0 x2 and supports PCIe 2.0 x4 only)
<b>Ethernet</b>	
Interface	- 1000 /100 /10 Mbps by Intel® i210AT
LAN Controller	- 2 x RJ45 GLAN by Intel® i210AT - 1 x RJ45 Dedicated IPMI LAN port  - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Dual LAN with Teaming function - Supports PXE - LAN1 supports NCSI
<b>Management</b>	
BMC Controller	- ASPEED AST2500
IPMI Dedicated GLAN	- 1 x Realtek RTL8211E for dedicated management GLAN
Features	- Watch Dog
<b>Graphics</b>	
Controller	- ASPEED AST2500
VRAM	- DDR4 16MB
<b>Rear Panel I/O</b>	
VGA Port	- 1 x D-Sub
USB 3.2 Gen1 Port	- 2
Lan Port	- 2 x RJ45 Gigabit Ethernet LAN ports - 1 x RJ45 Dedicated IPMI LAN port - LAN Ports with LED (ACT/LINK LED and SPEED LED)
Serial Port	- 1

UID Button/UID LED	- 1
<b>Internal Connector</b>	
COM Header	- N/A
SATA DOM	- 1
M.2	- 2(M2_1: 2242/2260/2280/22110, PCIE(X4); M2_2:2242/2260/2280/22110, SATA/PCIE(X2))
Auxiliary Panel Header	- 1 (include C_CASEOPEN# □SYSTEM_FAULT_LED □LAN1 & LAN2 LED, location button & LED,BMC alert )
TPM Header	- 1
IPMB Header	- 1
Buzzer	- 1
Fan Header	- 6 Fans x 4-pin (FAN1(CPU)/FAN2~FAN6(5Front))
ATX Power	- 1x (24-pin) + 1x (8-pin)
USB 3.2 (Gen1) Header	- 1 (supports 2 USB 3.1 Gen1 ports)
USB 2.0 Header	- N/A
Speaker Header	- N/A
BMC_SMB Header	- 1
ME/SPS Recovery	- N/A
Clear CMOS	- 1 (short pad)
PSU SMB Header	- 1
<b>Onboard LED</b>	
80 Debug Port LED	- 1
Fan Fail LED	- 6 (only Fan Fail LED)
<b>System BIOS</b>	
BIOS Type	- 16MB AMI UEFI Legal BIOS
BIOS Features	- Plug and Play (PnP) - ACPI 2.0 Compliance Wake Up Events - SMBIOS 2.8.0 Support - ASRock Rack Instant Flash
<b>Hardware Monitor</b>	
Temperature	- CPU/DDR temperature sensing - MB/Card side temperature sensing
Fan	- Fan Tachometer - Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - Fan Multi-Speed Control

Voltage - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore, DRAM,1.05V\_PCH, +BAT, 3VSB, 5VSB

## Support OS

OS

Microsoft® Windows:  
-Windows® 10 (64 bit)

Linux:  
- Ubuntu 16.04.4 (64 bit)  
- RedHat Enterprise Linux Server 7.3 (64bit) / 7.4 (64bit)

- \* Please refer to our website for the latest OS support list.
- \* On Linux system doesn't support Raid mode
- \* Support UEFI BOOT only

## Environment

Temperature Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C

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<https://www.superstorage.pl/asrock-x470d4u21n1-1xskt-am4-amd-ryzen-x470-6xsata-2xm2-2xgbe-ipmi-p-5674.html>