

Hardware

Router

- model NOAH4C V10 E3845
- [receipt 1](#) - [Direct From original manufacturer](#)
- [receipt 2](#) - [US distributor](#)
- Processor Intel Atom E3845 1.91 GHz 4 core 64bits AES-NI support, cache L2 2Mo
- Memory SODIMM DDR3L 1333MHz up to 8 GB
- Video 1 x HDMI maximum resolution: up to 2560x1600@60 Hz
- Ethernet 4 x RJ45 Gigabit (Intel i210AT)
- Stockage mSATA: 1 x full length mSATA
- Internal I/O up to 3 serial port: 1 x RS-232 , 2xTTL (transfer speed up to 1 Mbit/s)
 - USB: 4 x USB2.0
 - GPIO: 23 channels GPIOs
- Expansion MINI_PCIE1 (mSATA or 4G/LTE).
- MINI_PCIE2 (wifi or 4G/LTE).
 - mSATA: 1
 - M.2 B key connector for 4/5G modem
 - Header for TPM 2.0 module
- Power Power input 12V $\pm 10\%$ only
- Power Consumption (Typical, Minimum system) Noah with E3845: 0.5A @ 12V (5.28W) *
Power Consumption (Max, test in pfSense) Noah with E3845: 1A @ 12V (12W)
- Environment
 - Operating 0 ~ 60° C (32 ~ 140° F)
 - Humidity: 40° C @ 95% RH non-condensing
 - Non-Operating $\leq -40^{\circ}$ C ~ 85° C and $\geq 60^{\circ}$ C @ 95% RH non-condensing
- Physical Characteristics Dimensions (L x W): 160 x 152 mm (6.3" x 5.99")
 - Weight: 0.45 kg (0.99 lb) (with heatsink)
 - Total Height: (with cooler + PCB + Bottom) 33mm

Server ul

- mobo [Supermicro M12SWA-TF](#)
 - Newegg Desc: Supermicro MBD-M12SWA-TF-O AMD Ryzen Threadripper PRO Workstation 5000WX/3000WX Series EATX Motherboard
 - Newegg Item: N82E16813183726
 - \$700 Ordered: 2023-11-12

- [User manual](#)
 - AMD Ryzen Threadripper PRO 5000WX/3000WX Series Processor, up to 64 Cores
 - Socket: sWRX8 (4,094-pin LGA)
 - Up to 2TB (RDIMM) / 256GB (UDIMM), ECC/Non-ECC, Unbuffered, U-DIMM, R-DIMM, LRDIMM, and 3DS R-DIMM; 3200Mhz in 8 DIMM slots
 - 6 PCI-E 4.0 x16 slots
 - M.2 Interface: 4 PCI-E 4.0 x4 (Software RAID 0,1,5,10)
 - M.2 Form Factor: 2280, 22110
 - M.2 Key: M-key
 - U.2 Interface: 2 U.2 sockets (Software RAID 0,1)
 - 4 SATA 3.0 6Gbps (Software Raid 0,1,5 & 10)
 - 1x 10GBase-T LAN port,
 - 1 GbE LAN port (shared with IPMI)
 - ASPEED AST2600 BMC graphics
 - 1x USB 3.2 Gen2x2 port (Type C, 20Gbps),
 - 5x USB 3.2 Gen2 ports
 - 4x type A + 1 front type C headers
 - 5x USB 3.2 Gen1 ports * 3x type A + 2 via header
 - 2x USB 2.0 ports via header
 - 1x COM port (rear)
 - TPM 2.0 header
 - 7.1 Channel HD Audio
 - 10x fan header, 4-pin type fan header,
 - 112V-power header for liquid cooling
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- RAM

- 128GiB Registered ECC 8x16GiB 3200MHz
 - bank 0: "DIMMA1" Serial: 1C1038C4
 - bank 1: "DIMMB1" Serial: 1C1038C4
 - bank 2: "DIMMC1" Serial: 1C1038C4
 - bank 3: "DIMMD1" Serial: 1C1038C4
 - bank 4: "DIMME1" Serial: 1C1038C4
 - bank 5: "DIMMF1" Serial: 1C1038C4
 - bank 6: "DIMMG1" Serial: 1C1038C4
 - bank 7: "DIMMH1" Serial: 1C1038C4
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- CPU

- AMD Ryzen Threadripper PRO 5955WX
 - Chagall PRO (Zen 3) 16-Core
 - 4.0 GHz Socket sWRX8
 - 280W Desktop Processor
 - Newegg Item #: N82E16819113776
 - \$1,050.00
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Revision #4

Created 2026-09-05 13:12:55 UTC by luKe

Updated 2026-09-05 14:08:52 UTC by luKe