

XENTHRA

XN-H311M-VH-PRO Motherboard Datasheet

Intel® LGA1151 Architecture | Intel® H110 Express Chipset | Micro-ATX Form Factor

1. SYSTEM OVERVIEW

Brand & Model	XENTHRA XN-H311M-VH-PRO
Form Factor	Micro-ATX (190 mm x 225 mm / 180 mm x 216 mm), 4-Layer PCB Structure
Chipset	Intel® H110 Chipset
OS Compatibility	Windows® 10 / 11 & Linux Compatible

2. PROCESSOR (CPU) SUPPORT

CPU Socket	LGA 1151 Socket
Supported Processors	Intel® 6th, 7th, 8th & 9th Generation Core™ i7 / i5 / i3, Pentium®, and Celeron® series
Validated CPUs	i3-6100, i3-8100, i5-8400, i5-9400, i7-9700, i7-9700K, etc.

3. MEMORY SUBSYSTEM

Memory Slots	2x DDR4 DIMM Slots
Channel Architecture	Dual-Channel DDR4 Support
Clock Speeds	Up to DDR4 2666 MHz
Maximum Capacity	Up to 64 GB system memory (Supports 2x 32GB or 16GB per single slot)

4. STORAGE INTERFACES

M.2 Slot	1x M.2 Slot (Supports NVMe PCIe 2.0 x4 mode)
SATA Ports	4x SATA 3.0 (6 Gbps) Ports

5. EXPANSION SLOTS

PCI Express Slots	1x PCIe 3.0 x16 Slot (PCIe 3.0 x16 signal) 1x PCIe 2.0 x1 Slot (PCIe 2.0 x1 signal)
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6. REAR PANEL I/O PORTS

Display Interfaces	1x HDMI Port, 1x VGA (D-Sub) Port
Legacy Ports	1x PS/2 Keyboard/Mouse Combo Port
USB Interfaces	2x USB 3.0 Ports, 4x USB 2.0 Ports
Network Interface	1x RJ45 Gigabit LAN Port (Realtek® Gigabit Controller)
Audio Jacks	3x Audio Jacks (Line Out, Mic In, Line In)

7. INTERNAL HEADERS & CONNECTORS

USB Expansion Headers	1x USB 3.0 Header (Supports 2x front USB 3.0 ports) 1x USB 2.0 Header (Supports 2x front USB 2.0 ports)
Serial Header	1x COM Header (Supports RS232 mode)
Fan Connectors	1x 4-Pin CPU Fan Header, 1x 4-Pin System Fan, 1x 3-Pin System Fan Header
Security & Diagnostics	Support for TPM 2.0, 2x 5-Pin Diagnostic Card Header, 1x JBAT Jumper Cap
System Headers	1x Panel Board Header, 1x Audio Built-in Plug Header

8. POWER, ENVIRONMENTAL & THERMAL SPECS

Power Connectors	24-Pin Main ATX Power + 8-Pin 12V CPU Power Socket
Audio Controller	Realtek® High-Definition Audio Chip
Power Dissipation	Standby Power: 20W – 45W Full Load Power: 80W – 130W (excluding discrete GPU)
Operating Range	Temperature: -10°C ~ 60°C Humidity: 10% ~ 90% (Non-condensing)
Storage Temperature	-25°C ~ 70°C