

J4105NHU Motherboard



- Supports Intel J4105
- Supports 2-DIMM DDR4-1866 /2133 /2400 up to 8GB maximum capacity
- Supports PCIe 2.0
- Supports PCIe M.2
- Supports USB 3.2 Gen1
- Support HDMI 4K resolution
- Supports GbE LAN

J4105NHU Specification

CPU SUPPORT	Intel Celeron J4105 processor
MEMORY	Supports Dual Channel DDR4-1866/ 2133/ 2400 2 x DDR4 DIMM Memory Slots, Max. Supports up to 8 GB Memory Each DIMM supports non-ECC 4GB DDR4 module * Please refer to www.biostar.com.tw for Memory support list.
INTEGRATED VIDEO	By CPU model Supports DX12
STORAGE	2 x SATA III (6Gb/s) : Supports AHCI 1 x M Key - M.2_10Gb/s (PCIe2.0) : Supports PCIe & SATA SSD
LAN	RTL8111H 10/ 100/ 1000 Mb/s auto negotiation, Half / Full duplex capability
AUDIO CODEC	ALC887 7.1 Channels, High Definition Audio
USB	2 x USB 3.2(Gen1) ports (2 on rear I/Os) 6 x USB 2.0 ports (2 on rear I/Os and 4 via internal headers)

EXPANSION SLOT	1 x PCIe 2.0 x16 Slot 1 x E Key - M.2 Slot (Optional)
REAR I/O	1 x PS/2 Keyboard/ Mouse Port 1 x HDMI Port 1 x VGA Port 2 x USB 3.2(Gen1) Ports 2 x USB 2.0 Ports 1 x LAN port 3 x Audio Jack
INTERNAL I/O	2 x SATA III - 6Gb/s Connectors 2 x USB 2.0 Headers (each header supports 2 USB 2.0 ports) 1 x 4-Pin Power Connector 1 x 24-Pin Power Connector 2 x System Fan Connectors 1 x Front Panel Header 1 x Front Audio Header 2 x COM Serial Headers 1 x Printer Port Header 1 x Clear CMOS Header 1 x TPM Header (Optional)
H/W MONITORING	CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU Fan Control System Voltage Monitoring
DIMENSION	Mini ITX Form Factor Dimension: 17cm x 17cm (W x L)
OS SUPPORT	Supports Windows 10(64bit) ※Biostar reserves the right to add or remove support for any OS with or without notice.
BUNDLE SOFTWARE	BullGuard
ACCESSORIES	2 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x Quick Guide
FEATURES	BIOS-Flasher

J4105NHU OVERVIEW

CPU-Chipset



Intel Celeron J4105

The Intel® Celeron J4105(4M Cache, up to 2.5 GHz) is a dual-core processor. The Processor base Frequency from 1.5Hz to 2.5GHz Burst Frequency. The maximum GPU frequency was also increased on the J4105 to 750 MHz, while the base GPU speed stayed at 250 MHz. It supports DDR4-2400 memory and fit into 6 Watt thermal envelope.

Audio+



Hi-Fi

A combination of exclusive hardware & software design including "ground-isolation circuit design", "an independent audio power", and "a built-on-board amplifier", with all these hardware features gives you the best audio quality and performance. As for software, we offer you a free bundle utility "Multi-Channel Calibration" which normally you'll find in high level sound systems; this feature allows you to auto detect your location; with a user friendly interface, you can easily adjust the volume of every speakers to make a well balanced surround sound. And of course, the built-on-board amplifier always gives you a super powerful sound comparing to other motherboards.



HD Audio

Provides high quality sound with minimal loss of audio fidelity.

Video+



HDMI 4K2K

The new 4K2K resolution enables high-definition image display with four times the resolution of full HD, 4K2K display is faithfully express bright, highly detailed content that fills the entire screen with lifelike images. Connectivity with PCs via a single HDMI cable for displaying 4K2K data.



DX12

DirectX 12 introduces the next version of Direct3D, the graphics API at the heart of DirectX. Direct3D is one of the most critical pieces of a game or game engine, and we've redesigned it to be faster and more efficient than ever before. Direct3D 12 enables richer scenes, more objects, and full utilization of modern GPU hardware.

Speed+



PCIe M.2 (10Gb/s)

The latest storage interface, it delivers faster performance compared with SATA interface 6Gb/s.



Dual DDR4

The primary advantages of DDR4 over DDR3, include higher module density, lower voltage requirements, coupled with higher data transfer rate.



USB 3.2 Gen1 Type-A

USB 3.2 Gen1 delivers a compelling performance boosts and can be used to connect multiple devices without worrying about compatibility. It is capable of data transfer speeds up to 5Gbps and backwards compatible with all existing USB products.

Durable+



Super Durable Solid Caps

The best quality solid state capacitors with ultra low ESR design, the Super Durable Solid Caps doubles the lifespan.



Moistureproof PCB

The PCB will be oxidizing easily by damp or absorbed moisture, and ionic migration or CAF (Conductive Anodic Filament) will be generated. Moistureproof PCB meets high density and high reliability requirements for moisture proof.

Protection+



Super Anti-Surge Protection

BIOSTAR exclusive Anti-Surge design provides the best protection of board and extends the product life. Having the latest model of "Transient Voltage Suppressor" on-board can effectively protect the board circuit, reducing the shocks caused by ESD as well as other damages arising from overvoltage transients to enhance system durability.



Super LAN Surge Protection

Super LAN Surge Protection, providing LAN port with more advanced antistatic protection capabilities by adding an integrated chip to strengthen electrical stability and prevent damage from lightning strikes and electrical surges. SLSP (Super LAN Surge Protection) series motherboard upgrades the existing system protection standards with maximum 4X protection comparing to other board makers.



ESD Protection

ESD (Electrostatic Discharge) is the major factor to destroy the PC by electrical overstress (EOS) condition. ESD occurred by PC users when touch any devices connect to a PC, which may result in damage to the motherboard or parts. ESD protection is designed to protect the motherboard and equipment from damage by EOS.

DIY+



UEFI BIOS

Unified Extensible Firmware Interface (UEFI) is a brand new framework that provides a revolutionary interface. It is a modern clear and easy-to-use graphical user interface. The UEFI comes with a colorful easy-understand icons leads users into the setup layer directly.

***The specification and pictures are subject to change without notice and the package contents may differ by area or your motherboard version!**

BIOSSTAR