

Moonstone

Simply NUC Business Motherboard – CBM3r7MSB



AMD
RYZEN
7000 SERIES **7**

AMD
RADEON
GRAPHICS

7000 SERIES **7**

GRAPHICS

Simply **NUC**[®]

Moonstone R7 Board

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The New Standard of Innovation-Driven Performance

Moonstone is a 4x4 motherboard packed with features, from its AMD Ryzen™ 7735U processor to its RDNA2-based Radeon™ 680M Graphics, whether you are working, gaming or relaxing, Moonstone will give you top-tier performance, all day long. Moonstone supports up to 96GB of DDR5-4800 high-speed RAM and up to 16TB of storage, helping you increase your computing output while keeping a minimal footprint on both your desk and your energy bill. AMD's new 7735U processor with Simply NUC's new Dual Exhaust Cooling solution will keep your Moonstone motherboard at its maximum potential with minimal thermals, no matter the task.

Enhanced I/O and Crystal Clear Graphics

Moonstone harnesses the Radeon™ 680M graphics to give you the best visual experience possible from a small form factor motherboard, with features like DirectX® 12 Ultimate allowing things like ray tracing and AMD FidelityFX, an open-source image quality toolkit, both to expand and enhance both

your graphics-heavy workloads and gaming experiences. Moonstone also features dual HDMI 2.1 ports and dual USB-C with Alt-DP ports, allowing crystal clear graphics on up to four 4K displays or a single 8K display to get the most out of your system. Connect all your peripherals to your Moonstone system with its four USB-A ports, 2.5Gb LAN port and dual USB-C ports.

Launching your PC Performance to the Moon

AMD's Zen3+ architecture offers you 8 cores with 16 threads of computing power, without drawing too much energy thanks to the new from the ground up power management redesign, allowing Moonstone to put unused cores to sleep to prevent excess power draw. These cores can then be booted back up within a millisecond, allowing an uninterrupted experience while keeping your energy costs down. Upgrade your compute power today and enjoy earth-shattering results, with Moonstone.

Features

- AMD Ryzen™ 7-7735U
- AMD Radeon™ 680M Graphics
- TPM (Infineon 2.0)
- 2x DDR5-4800 SO-DIMM Sockets
- 1x M.2 22x80 M-key supporting PCIe x4 Gen4 NVMe
- MicroSD card slot
- 2x HDMI 2.1 TMDS
- 2x USB 4 Type-C (Alt-DP)
- Optional Intel® Wi-Fi 6E + Bluetooth 5.2
- 1x Intel 2.5Gb LAN
- 2x USB 4 Type-C
- 3x USB 3.2 Gen2 Type-A
- 1x USB 2.0 Type-A
- 3.5mm stereo headset jack
- Optional 19V, 90W power supply
- Extended service support (3-year)



Customization

- Primary storage up to 8TB Gen4 NVMe
- Memory up to 96GB
- OS options: Windows 11 Home & Pro, Windows IoT, Ubuntu



THINK BIG, go mini

Technical Specification

Processor	AMD Ryzen™ 7-7735U 8C/16T 2.7GHz-4.75GHz Boost 16MB L3 Cache 28W TDP
Graphics	AMD Radeon™ 680M Graphics up to 2.2GHz 4x 4K Displays Supported via: 2x HDMI 2.1 TMDS + 2x USB-C (Alt-DP) 1x 8K Display supported via USB-C (Alt-DP)
Memory	Dual DDR5-4800 SODIMMs 1.2V 96GB Max
Storage	1x M.2 22x80 socket supporting PCIe x4 Gen4 NVMe from 128GB to 8TB or SATA SSD from 128GB to 2TB
Peripherals	Optional Intel Wi-Fi 6E AX210 + Bluetooth 5.2 1x Intel 2.5Gb LAN (i225-V) 1x Front USB 3.2 Gen2 Type-A 1x Front USB 2.0 Type-A 2x Rear USB 4 Type-C 2x Rear USB 3.2 Gen2 Type-A
Board	117x112x25.5mm
Expansion	1x USB 2.0 header 1x USB 3.0 header 1x Front panel header 1x SATA header
Audio	3.5mm Front Stereo Headset Jack
Power	12-24V _{DC} Input Supply Range Optional 19V _{DC} , 90W Power Supply

Certifications and Regulations

Safety Regulations and Standards	J62368-1 (2020) GB 17625.1-2012 GB 4943.1-2011 GB/T 9254.1-2021 (Class A) KCC UL 62368-1: 2019 EN IEC 62368-1:2020
EMC/RF Regulations & Standards	FCC CFR Title 47, Chapter I, Part15, Subparts B, C, E ETSI EN 301 489-1 V2.2.3 (2019-11) Draft ETSI EN 301 489-17 V3.2.5 (2022-08) EN 55032:2015 EN 55035:2017 EN IEC 61000-3-2:2019 EN 61000-3-3:2013 ETSI EN 300 328 V2.2.2 (2019-07) EN 61000-3-3:2013
Environmental Regulations	RoHS Compliant REACH Compliant
Certified Operating Systems	Windows 11 (Pro and Home) Windows IoT Linux (Ubuntu)
Environmental Operating Temp etc.	0°C to +40°C Non-Condensing Humidity