INTRODUCTION

LattePanda Mu is a micro x86 compute module featuring Intel N100 quadcore processor, 8GB LPDDR5 memory and 64GB storage. LattePanda Mu exposes extensive pins, including 3 HDMI/DisplayPort, 8 USB 2.0, up to 4 USB 3.2, up to 9 PCIe 3.0 lanes. These flexible ports and open-source carrier board files enable users to effortlessly design custom carrier boards to meet their unique requirements.



Small but Powerful

LattePanda Mu x86 compute module features Intel N100 quad-core processor with 3.4GHz turbo frequency, offering ample performance and multitasking capabilities for the majority of applications.

Equipped with an Intel Processor N100, LattePanda Mu compute module offers a multi-core score of 3115 and a single-core score of 1217 on Geekbench 6, outperforming the Raspberry Pi 5, Intel Celeron N5105, and Atom x5-Z8350. Its CPU performance doubles the Raspberry Pi 5.

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Card-Sized

Despite its small size of 69.6mm x 60mm, The pocket size of the LattePanda Mu N100 computer-on-module allows for integration into space-constrained devices, delivering powerful computation without occupying much space.



Flexibility in Performance and Energy

The processor's TDP can be adjusted from 6W to 35W, providing flexibility in power usage and heat output. The 6W setting enables efficient operation with minimal heat and silent passive cooling, while the 35W setting offers robust performance but requires active cooling.

DFRobot provides three distinct cooling solutions:

Aluminum Active Cooler

Aluminum Fanless Heatsink

Aluminum Passive Thin Heatsink



Flexible Expansion Pins

LattePanda Mu compute module exposes extensive pins, such as 3 HDMI/DisplayPort, 8 USB 2.0, up to 4 USB 3.2, 9 PCIe 3.0 lanes, 2 SATA 3.0 and 64 expandable GPIOs. This offers unparalleled flexibility and expandability, allowing you to create the specific solution.



Carrier Boards - Expanding Infinite Possibilities

DFRobot offers a <u>lite carrier board for the LattePanda Mu</u>, providing a comprehensive development platform with various interfaces for swift design

verification. Additionally, <u>a full-function evaluation carrier board</u> is available, exposing all pins of the LattePanda Mu for extensive hardware and software testing.

Note: The PCIe slot of the lite carrier is available only when using a 12V power supply.



Making Carrier Simpler and Easier

LattePanda Mu x86 compute module offers <u>open-source carrier board files</u> <u>and libraries</u> as reference materials, enabling you to fine-tune the carrier board design to meet your specific needs, significantly reducing development time.



Multi-System Support

LattePanda Mu x86 computer-on-module supports multiple operating systems, including Windows 10, Windows 11, Ubuntu, ensuring that there is always one that suits your needs.



Customized Solutions

LattePanda Team offers customized services, including customized carrier boards, boot screens, BIOS functionality, operating systems, etc. If you have any specific requirements, please feel free to contact us at <u>solution@lattepanda.com</u>.

The LattePanda Team is dedicated to providing timely and professional support to meet your customization needs.



FEATURES

- Intel Processor N100 (Up to 3.4GHz, 4-core, 4-thread)
- Onboard 8GB 4800MHz LPDDR5 memory with IBECC supported
- 64GB eMMC 5.1 storage
- Configurable TDP: 6W ~ 35W
- Multiple OS Support: Windows 10, Windows 11, Ubuntu

• Rich Expansion Pins, including: 3 HDMI/DisplayPort, 8 USB 2.0, up to 4 USB 3.2, 9 PCIe 3.0 lanes, 2 SATA 3.0, 64 expandable GPIOs, etc.

• Open-source Design Files (KiCAD) of Carrier Boards

APPLICATIONS



Handheld Device

Al Interaction Robot

SPECIFICATION

- Processor: Intel Processor N100 4 Cores up to 3.4GHz
- Memory: LPDDR5 4800MT/s 8GB with IBECC supported
- Storage: eMMC 5.1 64GB
- Display: 3 Ouputs; Max Resolution 4096 x 2160@60Hz
- I/O

PCIe 3.0: up to 9 lanes SATA 3.0: up to 2 ports USB 3.2 (10Gbps): up to 4 ports USB 2.0 (480Mbps): 8 ports I2C, UART and GPIOs

- Power: 9~20V
- Operating System: Windows, Ubuntu
- Environment: 0~60°C; 0~80% relative humidity
- Size: 69.6 x 60mm

PROJECTS

Review: <u>The New LattePanda MU Is The Smallest Windows 11 Mini PC!</u> <u>Hands On First Look</u>

Introduction: The All new LattePanda MU is here, its smaller than a credit card and supports a real Graphics card! In this video we see what this Mini X86 Compute module can do. We unboxing the latte panda MU, Go over the specs, Test Windows, Run some benchmarks and we even Test out an RTX Graphics card with this micro PC using the Lattepanda Carry Board Lite!

Review: LattePanda MU Full Review & Unboxing: Everything You Need to <u>Know!</u>

Introduction: Finally an x86 SBC! My full review of the LattePanda MU! Today, I unbox this beast, explore its specs, and put it to the test.

DOCUMENTS

- Official Website
- Open-source Repository

SHIPPING LIST

- LattePanda Mu Compute Module x1
- Product Manual x1